M3-PN1100119
September 27, 2012
Effective Date:
September 10, 2012

El Gallo Complex Phase II Project

NI 43-101 Technical Report

Feasibility Study

Mocorito Municipality, Sinaloa, Mexico

Prepared For:

McEWEN MINING

Qualified Persons:
Stanley F. Timler, P.E.
John Read, C.P.G.
Michael G. Hester, FAusIMM
Dawn H. Garcia, P.G., C.P.G.
Richard J. Kehmeier, C.P.G.
Brian Hartman, P.Geo.
Aaron M. McMahon, P.G.

DATE AND SIGNATURES PAGES

The Qualified Persons contributing to this report are noted below. The Certificates and Consent forms of the qualified persons are located in Appendix A, Certificate of Qualified Persons (QP) and Consent of Authors.

- Mr. Stanley F. Timler, P.E., Process Engineer with M3 Engineering & Technology Corporation; principal author of this technical report and responsible for Sections 1 through 3, Section 13, Sections 17 through 19, Sections 21 through 22, and Sections 24 through 27.
- Mr. John Read, C.P.G., Senior Consultant with McEwen Mining Inc.; responsible for Sections 4 through 12, Section 14.1.15 through 14.1.16, 14.2, 14.4, 14.5, 14.6 and Section 23.
- Mr. Michael G. Hester, FAusIMM, Vice President & Principal Mining Engineer with Independent Mining Consultants, Inc.; responsible for Sections 15 and 16.
- Ms. Dawn H. Garcia, P.G., C.P.G., Principal Consultant with SRK; responsible for Section 20.
- Mr. Richard J. Kehmeier, C.P.G., Chief Geologist with Pincock, Allen & Holt; responsible for Section 14.1.1 through 14.1.14.
- Mr. Brian Hartman, P.Geo., Senior Geologist with Pincock, Allen & Holt; responsible for Section 14.1.1 through 14.1.14.
- Mr. Aaron M. McMahon, P.G., formerly Senior Geologist with Pincock, Allen & Holt; responsible for Section 14.3.

Effective Date: September 10, 2012.

(Signed) (Sealed) "Stanley F. Timler"	September 27, 2012
Stanley F. Timler, P.E.	Date
(Signed) (Sealed) "John Read"	September 27, 2012
John Read, C.P.G.	Date
(Signed) "Michael G. Hester"	September 27, 2012
Michael G. Hester, FAusIMM	Date
(Signed) (Sealed) "Dawn H. Garcia"	September 27, 2012
Dawn H. Garcia, P.G., C.P.G.	Date

(Signed) (Sealed) "Richard J. Kehmeier"	September 27, 2012
Richard J. Kehmeier, C.P.G.	Date
(Signed) (Sealed) "Brian Hartman"	September 27, 2012
Brian Hartman, P.Geo.	Date
(Signed) (Sealed) "Aaron M. McMahon"	September 27, 2012
Aaron M. McMahon, P.G.	Date

EL GALLO COMPLEX PHASE II PROJECT

FORM 43-101F1 TECHNICAL REPORT

TABLE OF CONTENTS

LIST OF FIGURES AND ILLUSTRATIONS

LIST OF TABLES

LIST OF APPENDICES

APPENDIX	DESCRIPTION
A	Feasibility Study Contributors and Professional Qualifications • Certificate of Qualified Person ("QP") and Consent of Author
B	Opinion of Legal Title • Legal Opinion. Titles of Mining Claims and Ownership of "Palmarito" and "El Gallo" Plots of Land for the Production of Comañía Minera Pangea S.A. de C.V. • Title opinion of Compañía Minera Pangea, S.A. de C.V. mining concessions (Project "El Palmarito" and "El Gallo".

1 SUMMARY

1.1 LOCATION

McEwen Mining Inc. ("McEwen") El Gallo Complex, is located in north-western Mexico, in Sinaloa state, Mocorito Municipality. The El Gallo Complex is located approximately 60 miles (100 kilometers) by air northwest of the Sinaloa state capital city of Culiacan in the western foothills of the Sierra Madre Occidental mountain range. The concession area is located approximately 20 miles (32 kilometers) by road from the village of Mocorito, approximately 30 miles (48.5 kilometers) from the town of Guamuchil. The approximate co-ordinates for the center of the district are longitude 25°38'N and latitude 107°51'W.

1.2 OWNERSHIP

McEwen owns its interest in the concessions through its 100 percent ownership of Nevada Pacific Gold Ltd., which owns 100 percent of Pangea Resources, Inc. Through Pangea Resources' 100 percent ownership of Compania Minera Pangea, S.A. de C.V. ("Minera Pangea"), McEwen owns the concessions.

The concessions consist of 454,114 acres of land. Concession titles are granted under Mexican mining law and are issued by Secretaria de Economia, Coordinacion General de Minera, Direccion General de Minas ("Direccion de Minas").

1.3 GEOLOGY

The geology of north-western Mexico is dominated by the volcanic plateau of the Sierra Madre Occidental (SMO), an 800 mile long (1,200 kilometers) northwest-trending mountainous region that roughly parallels the west coast of Mexico. The volcanic rocks of the SMO and surrounding regions can be broadly grouped into two principal units: the Lower Volcanic Series and Upper Volcanic Series. The Lower Volcanic Series is comprised dominantly of volcanic rocks of andesitic composition which range in age from Late Cretaceous to Eocene and attain thicknesses of 0.7 to 1 mile (1 to 1.5 kilometers). The Upper Volcanic Series rests unconformably on the Lower Volcanic Series and is dominated by rhyodacitic to rhyolitic ignimbrites of Oligocene-Miocene age. It is 0.7 to 1.3 mile (1 to 2 kilometers) in thickness. Coeval granitic plutons are observed intruding the Lower Volcanic Series extrusive rocks. These intrusives are best exposed in the lower-lying coastal regions.

Geographically, McEwen's concessions lie in the Pie de la Sierra physiographic province west of the SMO. The geology of the region is dominated by the presence of the same groups of Late Cretaceous-Tertiary volcanic rocks as occur in the SMO as well as occurrences of the Sinaloa Batholith. McEwen's concessions are all underlain by volcanic rocks of the Lower Volcanic Series and are dominated by andesitic flows, tuffs and intrusions. Rhyolitic and sedimentary rocks are also present but are subordinate. Intrusive rocks of the Sinaloa Batholith occur throughout the region and are exposed in close proximity to El Gallo and Magistral deposits. Tertiary intrusive rocks also occur.

Faults of northwest, east-northeast, northeast and north-south trend dominate the structural geology of the region. These structures appear to be instrumental in the localization of the silver and gold deposits outlined herein.

El Gallo: Silver mineralization is hosted in siliceous breccia zones and quartz stockwork zones within the dominantly andesitic rock package. These zones often occur at lithologic contacts, particularly contacts of Tertiary porphyry intrusions. Multi-lithologic breccias zones are often adjacent to these contacts and these breccias are locally mineralized. Mineral zones commonly have gently-dipping tabular geometry. Often, these zones reflect control by sill contacts of the Tertiary intrusives.

Palmarito: Silver mineralization at Palmarito occurs along or near the contact of andesitic-dacitic volcanic country rocks and a Tertiary rhyolite intrusive forming a horseshoe-shaped zone which wraps around the margin of the intrusive. The strongest mineralization in the main Palmarito orebody occurs along a northeast-trending zone which appears to represent the intersection of two contact structures.

Generally, mineralization occurs in a breccia zone and is associated with strong silicification in the form of siliceous breccia, stockwork veining and silica flooding.

Magistral: Gold mineralization in the Magistral mine area occurs in four deposits along two distinct structural trends. A northwest trend hosts the San Rafael and Samaniego deposits and it is the most important in terms of contained ounces of gold. The second structural trend is northeast-striking and includes the Sagrado Corazón, and Lupita deposits. Along these structural trends the mineralization is located within numerous sub-structures that may be parallel, oblique or even perpendicular to the principal trends.

Mineralization among the various deposits of the Magistral area is generally very similar, with the individual structural zones consisting of quartz stockwork, breccia, and local quartz vein mineralization occurring within propylitically altered andesitic volcanic rocks.

Chapotillo: Au-Ag mineralization occurs in a hydrothermal breccia associated with footwall quartz stockwork and pervasive silicification. This zone strikes N45W and generally dips 30-45˚ to the northeast, dips up to 60˚ occur at depth. Width of the mineralized zone varies from 3 to 20 m. Mineralization is associated with white-grey quartz ± calcite and pervasive silicification. Galena and sphalerite are associated minerals.

Haciendita & Mina Grande: The principal mineralized structures strike N40-45W and dip 20-50˚ NE. These occur as multiple parallel zones. At Mina Grande, northeast-striking mineralized structures are also present and trend N40-50E and dip roughly 60˚ SE. These structures are narrower than the NW-striking structures, generally achieving widths slightly greater than 1m, but can contain high-grade gold. Mineralization comprises strong hydrothermal breccia development cemented by quartz. Quartz stockwork zones are developed in the hanging wall and footwall of the zones at Mina Grande; at Haciendita stockwork generally occurs in the hangingwall. Mineralization is accompanied by galena, sphalerite (both high and low iron varieties), traces of acanthite and copper oxide minerals. Mineralization also occurs in the shallow oxidized portions of the deposits associated with iron oxides.

San Dimas: Polymetallic mineralization occurs primarily in a fault-vein which strikes N30-40W and dips 40-55˚ to the southwest. This zone has a known strike extent of about 250m with widths of about 5-8m on surface and up to 18m locally at depth. Mineralization is characterized by quartz veinlets and stockwork and strong fracturing/brecciation. Abundant chalcopyrite, galena and sphalerite are present, commonly as massive or semi-massive concentrations. Concentrations of up to several percent Cu or Pb-Zn occur; Au and Ag values are variable within the zone. A secondary mineralized zone occurs above the principal zone and is characterized by generally lower precious metal values.

Los Mautos: Silver mineralization comprises weak hydrothermal breccia with incipient quartz stockwork development in the hangingwall and footwall. The mineralized zone strikes N45W, dipping 55˚NE and varies in width from 1 to 12m. Sulfide minerals occur but in minor amounts and consist of galena and sphalerite.

San Jose del Alamo: Generally a single narrow gold-mineralized zone is present which strikes N-S to N30W and dips 65˚ to the west. Widths are generally around 1m, although the zone attains a maximum thickness of 12m locally. Mineralization is characterized by weak development of hydrothermal breccias with grey quartz cement. Abundant cavities filled with iron oxide (hematite-jarosite) are present. Massive patches of galena, sphalerite or specularite occur locally. Intense red hematite and disseminated oxidized pyrite are also associated with mineralization.

Las Milpas: Silver mineralization occurs as a vein-breccia structure that varies in strike from N-S to N30W. In the immediate resource area mineralization strikes N-S and dips steeply to the west. The breccia varies from 2 to 4m in thickness with partial quartz stockwork development which can be up to 12m thick. Acanthite is the principal silver mineral and is accompanied by galena and minor chalcopyrite and malachite. Leached boxwork texture is common with precious metals presumably hosted in iron oxide minerals.

CSX: Silver mineralization occurs in a near surface low-angle zone that strikes roughly E-W and dips to the south at 20-25˚. Thickness of this zone is variable ranging from 3m to as much as 25m. Mineralization is characterized by quartz stockwork and breccias associated with silicification. As much of the mineralization occurs at or near surface and is usually oxide; Ag, Pb, Zn sulfides are seen below the oxide zone. Apart from the principal low-angle zone, other mineralization occurs in less well-defined structures.

1.4 RESOURCE ESTIMATE

The estimated mineral resources for El Gallo Complex are detailed in Table 1-1. Note that these are not reserve estimates. The total combined El Gallo and Palmarito Measured and Indicated silver resource equals 53.1 million ounces. Inferred silver resources equal 31.0 million ounces. The total Measured and Indicated gold resources equals 566,508 ounces. Inferred gold resources equal 271,081 ounces.

Table 1-1: Technical Report, El Gallo Complex, Summary Resource Estimates

Resource		Tonnage ('000 tonnes)	Silver (oz.)	Silver Grade (gpt)	Gold (oz.)	Gold Grade (gpt)
El Gallo	(Cut-off Grade 12 gpt Ag)					
	Measured	17,134	35,966,692	65.3	28,937	0.05
	Indicated	2,356	3,307,711	43.7	2,286	0.03
	Inferred	6,072	4,564,947	23.4	3,539	0.02
Magistral	(Cutoff Grade 0.30 gpt Au)					
	Measured	6,692	-	-	354,887	1.59
	Indicated	3,435	-	-	147,580	1.34
	Inferred	223	-	-	8,167	1.14
Palmarito	(Cut-off Grade 30 gpt Ag Eq.)					
	Measured	4,069	12,045,234	92.1	30,089	0.23
	Indicated	129	219,948	53.2	794	0.19
	Inferred	10,302	15,562,152	47.0	74,991	0.23
Palmarito Tailings	(Cut-off Grade 44 gpt Ag Eq.)					
	Measured	147	763,761	162.0	638	0.14
Palmarito Dumps	(Cut-off Grade 26 gpt Ag Eq.)					
	Indicated	145	805,556	172.5	1,298	0.28
Chapotillo	(Cut-off Grade 0.44 gpt Au Eq.)					
	Inferred	1,475	1,740,941	36.7	21,905	0.46
Haciendita	(Cut-off Grade 0.44 gpt Au Eq.)					
	Inferred	1,649	1,244,510	23.5	42,083	0.79
Mina Grande	(Cut-off Grade 0.44 gpt Au Eq.)					
	Inferred	3,801	2,883,040	23.6	74,179	0.61
Mina Grande Tailings	(Cut-off Grade 0.58 gpt Au Eq.)					
	Inferred	463	804,333	54.1	7,523	0.51
San Dimas	(Cut-off Grade 0.41 gpt Au Eq.)					
	Inferred	846	576,580	21.2	19,325	0.71
Los Mautos	(Cut-off Grade 24 gpt Ag Eq.)					
	Inferred	965	1,323,642	42.7	3,637	0.12
San Jose del Alamo	(Cut-off Grade 0.38 gpt Au Eq.)					
	Inferred	501	35,539	2.2	13,162	0.82
Las Milpas	(Cut-off Grade 24 gpt Ag Eq.)					
	Inferred	678	964,316	44.2	1,724	0.08
CSX	(Cut-off Grade 27 gpt Ag Eq.)					
	Inferred	672	1,262,048	58.4	846	0.04

1.5 MINERAL RESERVES AND MINE SCHEDULE

The mineral reserve estimates presented in this report were prepared by Independent Mining Consultants and assumes that the measured mineral resource inside the reserve pit is converted to proven mineral reserves and the indicated mineral resource inside the reserve pit is converted to probable mineral reserves. The combined proven and probable mineral reserves for the El Gallo and Palmarito deposits total 11.719 million tonnes containing 101.3 g/t silver and 0.123 g/t gold. The reserves include approximately 215,000 tonnes of historic Palmarito dumps and 147,000 tonnes of historic Palmarito tailings, for a total of 38.176 million ounces of contained silver and 46,102 ounces of contained gold.

The mine plan developed for the El Gallo and Palmarito mineral deposits is based on delivering ore to the El Gallo mill at the rate of 5,000 tonnes per day, or 1.825 million tons per year. On an annual basis, about 80% of the mill feed is from El Gallo and 20% from Palmarito. The life of mine is approximately 6.5 years.

Table 1-2: El Gallo/Palmarito Mineral Reserve

Reserve Class	Ktonnes	Silver (g/t)	Gold (g/t)	Eq Ag (g/t)	Total Silver (000' oz)	Total Gold (oz)
Proven Mineral Reserve						
El Gallo Mill Ore	9,063	94.2	0.076	97.8	27,449	22,145
Palmarito Mill Ore	1,818	122.5	0.350	147.0	7,160	20,458
Palmarito Historic Dumps	157	191.1	0.312	206.9	965	1,575
Palmarito Historic Tails	147	161.2	0.135	169.9	762	638
Total Proven Mineral Reserve	11,185	101.0	0.125	108.3	36,336	44,816
Probable Mineral Reserve						
El Gallo Mill Ore	465	99.2	0.048	101.5	1,483	718
Palmarito Mill Ore	11	142.8	0.235	159.2	51	83
Palmarito Historic Dumps	58	163.9	0.260	177.1	306	485
Palmarito Historic Tails						1,286
Total Probable Mineral Reserve	534	107.2	0.075	110.9	1,840	22,863
Proven/ Probable Mineral Reserve						
El Gallo Mill Ore	9,528	94.4	0.075	98.0	28,932	22,863
Palmarito Mill Ore	1,829	122.6	0.350	147.1	7,211	20,541
Palmarito Historic Dumps	215	183.8	0.298	198.9	1,271	2,060
Palmarito Historic Tails	147	161.2	0.135	169.9	762	638
Total Proven and Probable Mineral Reserve	11,719	101.3	0.123	108.4	38,176	46,102

1.6 STATUS OF EXPLORATION

McEwen Mining is actively exploring its mineral concessions. The objective of the ongoing exploration program is to expand the current resources outlined in this Technical Report and to identify new mineralized structures away from the resource where no previous drilling has occurred.

1.7 METALLURGY

Leach tests were conducted by SGS de Mexico, S.A. de C.V. in Durango, Mexico and METCON Research in Tucson, Arizona. The various ores within the El Gallo and Palmarito deposits responded well to a common process flow sheet. The flow sheet selected for the project consists of 3 stage crushing to a product size of P_{80} of 10 mm, grinding in a ball mill to a product size of P_{80} of 75 µm, cyanide leaching in agitated tanks, thickening and washing in counter current decant (CCD) thickeners, and recovering of dissolved silver by the Merrill-Crowe process. Detoxified tailings will be filtered and transported to the tailings impoundment area by truck for storage. Detoxification of dissolved cyanide will be by the INCO SO_2 process using sodium metabisulfite, copper sulfate and lime.

The metallurgical test work indicated the overall life of mine metal recovery for El Gallo ore is 87.6% for silver and 79.2% for gold. The overall life of mine recovery for Palmarito ore is 74.1% for silver and 87.2% for gold. The combined life of mine recovery averages 84.3% for silver and 83.2% for gold.

1.8 ENVIRONMENTAL PERMITTING

The El Gallo project is located in a rural area of Sinaloa state in an agricultural area that has a low population density. Potential environmental impacts to surface soils, water, the ecology and air quality will be mitigated as part of the mining operations.

Permanent impacts will be the mine open pit, waste dumps, and material placed in the tailings facility. The effects of mining are irreversible, although through planned restoration and reforestation methods, some effects will be improved.

Surface preservation and mitigation measures planned are impermeable retention areas where chemical substances or process solutions are handled, implementation of a hazardous and nonhazardous waste handling program, monitoring of surface water quality, and storm water diversion around disturbed areas where required.

Prevention and mitigation measures contemplated to protect groundwater quality include using a low permeability clay liner beneath the dry stacked tailings facility. The groundwater quality would be monitored on a routine basis using monitor wells located upgradient and downgradient of the mining facilities.

Actions that are planned to mitigate vegetation impacts include compensation payments to the forest fund for land use rights, organic topsoil recovery during clearing and reuse of this material in the closure phase, and implementation of a flora and fauna species protection program during all stages of the project.

Waste generated during development and mining operations will be handled according to the provisions of the General Law for Prevention and Integrated Waste Management (Ley General para la Prevencion y Gestion Integral de los Residuos, last revised May 3, 2012).

There are three SEMARNAT permits required prior to construction: Environmental Impact Statement (MIA), Change of Land Use (ETJ) and Risk Analysis (RA). A construction permit is required from the local municipality and an archaeological release letter is required from the National Institute of Anthropology and History (INAH). An explosives permit is required from the Ministry of Defense (SEDENA) before construction begins. The key permits and the stages at which they are required are summarized below in Table 1-3.

McEwen will build a dry stacked tailings facility versus a wet impoundment. Tailings material will first be dewatered into a dry-cake like substance (~20% material moisture content) and then trucked and dumped into the impoundment. Key test work such as filtration and numerous geotechnical stability analyses proved this to be a viable design option. Dry stacked tailings will significantly mitigate environmental risks commonly associated with wet tailings such as:

- Groundwater contamination through seepage is virtually removed
- Catastrophic tailings breach is eliminated
- Reduces footprint and construction material required for facility construction
- Recycling of process water and other reagents (eg. cyanide) reduces operational costs
- Closure and reclamation costs significantly reduced as rehabilitation process is simplified

Table 1-3: Permitting Requirements

Key Environmental Permits		
Permit	**Mining Stage**	**Agency**
Environmental Impact Statement – MIA	Construction/Operation/Post-operation	SEMARNAT
Land Use Change – ETJ	Construction/Operation	SEMARNAT
Risk Analysis – RA	Construction/Operation	SEMARNAT
Construction Permit	Construction	Municipality
Explosive & Storage Permits	Construction/Operation	SEDENA
Archaeological Release	Construction	INAH
Water Use Concession	Construction/Operation	CNA
Water Discharge Permit	Operation	CNA
Unique License	Operation	SEMARNAT
Accident Prevention Plan	Operation	SEMARNAT

In accordance with the general work schedule of the El Gallo Project, should no additional mineralization be found, abandonment phase will begin in year seven. In compliance with permitting regulations, McEwen Mining Inc. will prepare a detailed Closure and Reclamation Plan that will be concurrently developed during the operation phase and completed during the abandonment phase.

1.9 ECONOMIC ANALYSIS

The total capital cost for the mine and process facilities was estimated to be $186.9 million and consists of $169.3 million for the process facilities, $6.7 million for the mine pre-production, $8.8 million for Owner's cost, and $2.1 million for sustaining capital.

The overall life of mine operating cost for the facilities is $28.74 / tonne of ore processed and includes mining, processing, refining, royalties, general and administrative expenses and a gold by-product credit.

The Net Present Value (NPV) was calculated for the pre-tax case and after tax based on metal prices of $25 per ounce of silver and $1,415 per ounce of gold. The project will generate a pre-tax NPV of $190 million at a 5% discount rate with an Internal Rate of Return (IRR) of 37% and a payback period of 2 years. The after tax NPV at the same metal prices and 5% discount rate is $118 million with an IRR of 26% and a payback period of 2.6 years.

1.10 CONCLUSIONS AND RECOMMENDATIONS

The economic indicators calculated for the El Gallo Complex Phase II project have demonstrated the potential for development of the El Gallo Complex Phase II Project. The following additional work is recommended to advance the project.

a) Continued expansion drilling and infill drilling to increase the resource and convert existing Measured and Indicated resources to Proven and Probable reserves.

b) Continue with the permitting effort.

c) Additional metallurgical tests and trade-off studies to determine the leaching characteristics with increased solids loading (from 33% to 45%). Increasing the solids loading will reduce the number of leach tanks and agitators.

d) Prepare samples of tailing material for filter vendors to confirm the performance of their filters.

e) Develop production water wells on the property to confirm availability and quality of fresh water for the project.

f) Secure a right of way corridor for a new south access route to the mine truck shop to avoid the expense of the proposed south access road east of the mine.

g) Advance engineering to the basic engineering phase to develop site specific material take-offs for construction materials.

h) Review the strategy of stockpiling the heap leach ore for potential treatment. The probability of processing this material is less if it has to be re-handled.

i) Consider delaying El Gallo phase 5 until after completion of phase 1. The phase 5 waste could then be short-hauled to the phase 1 pit. Note, however, that the phase 5 grades are attractive for early extraction.

2 INTRODUCTION

2.1 GENERAL

McEwen Mining Inc. is a gold and silver producer with headquarters located in Toronto, Ontario, Canada and is traded on the New York Stock Exchange (NYSE) and Toronto Stock Exchange (TSX) under the symbol "MUX". The company has:

- a producing mine in Argentina;
- a second operation that is being commissioned (El Gallo Phase I) in Mexico;
- El gallo Phase II, which is subject to this Technical Report; and
- a development project in Nevada that is currently being permitted for construction .

McEwen Mining requested a number of consultants to provide a feasibility study Technical Report, compliant with Canadian National Instrument (NI) 43-101 Standards of Disclosure for Mineral Projects, for the El Gallo Complex Phase II Project located in the Municipality of Mocorito, Sinaloa, Mexico. SRK Consulting (USA), Inc. of Reno Nevada and Tucson, Arizona were commissioned to provide the design of the dry stack tailing impoundment facility and storm water storage reservoir as well providing a review of the environmental and permitting section of the Technical Report. Independent Mining Consultants of Tucson, Arizona was commissioned to provide the mining reserve estimates, the mining methods, and the mine operating and capital cost estimates for the project. Pincock, Allen & Holt of Lakewood, Colorado was commissioned to provide the mineral resource estimate for the El Gallo and Magistral deposits. The resource estimate for the Palmarito deposit was prepared by McEwen Mining Inc. M3 Engineering & Technology Corporation of Tucson, Arizona was commissioned to provide the process and infrastructure, capital and operating cost estimates, the economic assessment and integrating the work of the other consultants into the final Technical Report.

2.2 PURPOSE OF THE REPORT

The purpose of this report is to present mineral resource estimates, mine reserve estimates, mine production plans, metallurgical testing information, process and infrastructure, capital and operating costs, an economic assessment and other relevant data for the El Gallo and the Palmarito deposits.

The effective date of this report is September 10, 2012.

2.3 SOURCES OF INFORMATION

This report is based on data supplied by McEwen Mining and information developed during the feasibility study period by M3 and other third party consultants. The source documents are summarized in Section 27 of this report.

2.4 CONSULTANTS AND QUALIFIED PERSONS

McEwen Mining contracted a number of consultants, including M3 Engineering & Technology Corporation, to provide a review of prior and new work on the project and conduct a feasibility study of the development of the El Gallo and Palmarito deposits. M3 was responsible for defining the process and infrastructure facilities and preparing the capital cost estimate, operating cost estimate, economic analysis and integrating the work by other consultants into a final Technical Report compliant with NI 43-101 standards.

Mr. Stanley Timler, P.E., of M3 Engineering & Technology Corporation is the principal author and Qualified Person responsible for preparation of this report. Mr. Timler visited the site on January 24th and 25th, 2012. In addition, Mr. Rex Henderson, P.E., Project Manager and Mr. Justin Nail, P. E., Civil Lead, visited the site with Mr. Timler on the same dates.

Other contributing authors and Qualified Persons responsible for preparing this Technical Report include; Mr. Michael Hester of Independent Mining Consultants, Ms. Dawn Garcia of SRK Consultants (USA) Inc., Mr. Richard Kehmeier and Mr. Brian Hartman of Pincock, Allen & Holt, and Mr. John Read of McEwen Mining Inc.

Mr. Michel Hester of IMC was responsible for preparation of the mine reserve estimate (Section 15), and the mining methods and mine plan (Section 16), and the mine capital and operating costs included in Section 21. Mr. Michael Hester visited the site on January 24th and 25th, 2012.

Ms. Dawn Garcia of SRK Consultants (USA) Inc. was responsible for review of the environmental, permitting and social or community impact (Section 20) prepared by Heuristica Ambiental and is the Qualified Person for this section.

Mr. Richard Kehmeier and Mr. Brian Hartman of Pincock, Allen & Holt were responsible for the in-pit mineral resource estimate (Section 14) for the El Gallo Deposit and are the Qualified Persons for this estimate. Mr. John Read of McEwen Mining Inc. was the Qualified Person responsible for the out-of-pit mineral resources for the El Gallo deposit and the mineral resource estimate for the Palmarito deposit (Section 14). Mr. Read was responsible for all of the mineral resource estimates excluding the El Gallo in-pit and Magistral estimates. Mr. John Read is also the Qualified Person responsible for the property description and location (Section 4); accessibility, climate, local resources, infrastructure, and physiography (Section 5); history (Section 6); geological setting and mineralization (Section 7); deposit types (Section 8); exploration (Section 9); drilling (Section 10); sample preparation, analysis and security (Section 11); data verification (Section 12); and adjacent properties (Section 23). Mr. Aaron McMahon formerly of Pincock, Allen & Holt was responsible for the Magistral resource estimate (Section 14).

2.5 DEFINITION OF TERMS USED IN THIS REPORT

All measurements in this report are in the International System of Units (SI) unless noted otherwise. Currency is expressed in US Dollars unless noted otherwise. Metal values are reported in grams per tonne (gpt) or ounces per tonne (opt). Ounces, when used, refer to Troy Ounces.

Acronyms and abbreviations used in this report are noted below:

AAND	Aphanitic Andesite
ABGPS	Airborne GPS
ADR	Adsorption, Desorption and Recover
Ag	Silver
AND	Andesite
ANDP	Andesite Porphyry
Au	Gold
Chemex	ALS Chemex
CIM	The Canadian Institute of Mining, Metallurgy and Petroleum
Cu	Copper
Direccion de Minas	Secretaria de Economia, Coordinacion General de Minera, Direccion General de Minas
gpt	Grams Per Tonne
E	East
E-W	East West
ID	Inverse Distance
kg	Kilograms
km	Kilometers
m	Meters
McEwen	McEwen Mining Inc.
Minera Pangea	Compania Minera Pangea, S.A. de C.V.
ML	Mojonera de Localizacion/Location Point
N	North
NE	North East
NN	Nearest Neighbor
NI 43-101	Canadian National Instrument 43-101
N-S	North-South
NSR	Net Smelter Return
OK	Ordinary Kriging
opt	Troy Ounces Per Tonne
oz	Troy Ounce
PAH	Pincock, Allen and Holt
Pb	Lead
QEM SCAN	Qualitative Evaluation of Materials by Scanning Electron Microscopy
QFP	Quartz Feldspar Porphyry
QM	Quartz Monzonite
QP	Qualified Person
RHY	Rhyolite
S	South
SEMARNAT	Secretariat of Environmental and Natural Resources
SGM	Consejo de Recursos Minerales
SGS	SGS Mineral Services
SMO	Sierra Madre Occidental
Tonne	Metric Ton (2205 Pounds)
TTAND	Turkey Track Andesite
US Gold	US Gold Corporation
VSED	Volcaniclastic Sediment Package
W	West
WAD	Weak Acid Dissociated
Zn	Zinc

3 RELIANCE ON OTHER EXPERTS

M3 Engineering & Technology Corporation has relied on information provided by additional sources.

Investigacion y Desarrollo de Acuiferos y Ambiental (IDEAS) of Hermosillo, Sonora, Mexico was responsible for preparing a hydrology ground water study, location and construction of piezometer wells, and ground water studies at El Gallo and Palmarito sites. IDEAS also conducted studies of the wind direction and frequency at El Gallo.

Heuristica Ambiental Consultoria of Hermosillo, Sonora, Mexico was responsible for conducting environmental studies, permitting support, and preparation of the environmental section of this report. Ms. Dawn Garcia of SRK Consulting (U. S.), Inc. reviewed and translated the report and is the Qualified Person for the section.

Mr Sergio Bonfiglio, Agrarian Lawyer; "*Legal Opinion. Titles of Mining Claims and Ownership of Palmarito and El Gallo Plots of Land for the Production of Compania Minera Pangea S.A. DE C.V.,*" dated August 18, 2012.

Diaz, Bouchot & Raya Abogados; *"Title Opinion of Compania Minera Pangea S.A. de C.V. Mining Concessions (Project "El Palmarito" and "El Gallo")",* dated August 2, 2012.

4 PROPERTY DESCRIPTION AND LOCATION

The El Gallo Complex consists of 454,114 acres of land located in the Sinaloa state, of north-western Mexico. There are ten resource areas located inside of McEwen's property position that are the basis of the resource estimate reported in this Technical Report. Figure 4-1 shows the general location of the El Gallo Complex. Figure 4-2 shows the claim boundaries and project locations that make up the El Gallo Complex.

El Gallo: This is a new discovery made by McEwen's (then US Gold) geologists in November 2008. Historical mining in the immediate area is believed to be limited based on field observations. Known areas of mineralization that make up the resource estimate are contained within this Technical Report. There are additional exploration targets contained within the immediate project area. Ell Gallo is included in the reserve section of this Technical Report. See Figure 4-3 and Figure 4-4 for a general sense of the landscape.

Palmarito: This is a historic silver producing area. The mineral resource estimate is made up of three separate sources that includes in situ mineralization, historic mill tailings, and dump material. Production is believed to have ceased in 1950. Palmarito is included in the reserve portion in this Technical Report. See Figure 4-5 for general sense of landscape.

Magistral: This is a former gold open pit mining operation that is currently being placed back into production and is referred to as Phase I of the El Gallo Complex. Known deposits include San Rafael, Samaniego Hill, Sagrado Corazón, and Lupita. Past production has come from San Rafael and Samaniego Hill. The original production ceased in 2005. Magistral is not included in the reserve section in the Technical Report. See Figure 4-6 for general overview of the landscape.

Chapotillo: This is a former gold and silver producing area that operated on a limited scale until the late 1990's. Chapotillo is not part of the reserve section in this Technical Report.

Haciendita: This is a new gold and silver discovery made by McEwen during the 2011 field season. Haciendita is located east of the Mina Grande area below and is believed to be a part of the same mineral system. Haciendita is not part of the reserve section in this Technical Report.

Mina Grande: This is a former gold and silver producing area that operated on a limited scale until the late 1990's. Mina Grande is not part of the reserve section in this Technical Report.

San Dimas: This is a former gold and silver producing area that operated on a limited scale until the late 1990's. San Dimas is not part of the reserve section in this Technical Report.

Los Mautos: This is a new silver discovery made by McEwen during the 2010-2011 field season. Los Mautos is not part of the reserve section in this Technical Report.

San Jose del Alamo: This is a former gold producing area that operated on a limited scale. No production records exist for San Jose del Alamo. San Jose del Alamo is not part of the reserve section in this Technical Report.

Las Milpas: This is a former silver producing area that operated on a limited scale. No production records exist for Las Milpas. Las Milpas is not part of the reserve section in this Technical Report.

CSX: This is a new silver discovery made by McEwen during the 2012 field season. CSX is not part of the reserve section in this Technical Report.

4.1 LOCATION

McEwen's property position is located in north-western Mexico, within Sinaloa state, Mocorito Municipality. It is situated approximately 60 miles (100 kilometers) by air northwest of the Sinaloa state capital city of Culiacan in the western foothills of the Sierra Madre Occidental mountain range. The concessions are located approximately 2.5 miles (4.0 kilometres) by road from the village of Mocorito, approximately 10 miles (48.5 kilometers) from the town of Guamuchil. Access is either by paved or well maintained, two-way, dirt roads. The general co-ordinates for the center of the concessions are longitude 25°38'N and latitude 107°51'W.

4.2 PROJECT OWNERSHIP

McEwen owns its interest in the concessions through its 100 percent ownership of Nevada Pacific Gold Ltd. which in turn has 100 percent ownership of Pangea Resources Inc. and which in turn owns 100 percent of Minera Pangea.

All mining concessions in Mexico are required to be surveyed and located in the area with a location point (mojonera de localizacion or "ML"), which is related to a permanent topographic feature, in addition to corner points indicated by concrete monuments. The ML must show the concession's registration data and coverage. The ML may represent one or various concessions within the area. Titles are granted under Mexican mining law and are issued by Secretaria de Economia, Coordinacion General de Mineria, Direccion General de Minas (Direccion de Minas). Table 4-1 gives a description of the claims controlled by McEwen. All known mineralized reserves and resources for the project are located within the bounds of the claims listed in Table 4-1and Figure 4-2. Title opinions for the surface rights and mineral rights are in Appendix B.

Table 4-1: McEwen Mining Inc. Technical Report, El Gallo Complex Claim Position

Name	Title Number	Expiration Date	Ownership (%)	Surface (Acres)
Unificación Magistral	214502	28/10/2033	100%	3,275
Lucy	213070	1/3/2051	100%	153
Lucy	217037	13/06/2052	100%	15,385
El Valle Fracción 1	220297	2/7/2053	100%	102
El Valle Fracción 2	220298	23/07/2053	100%	32
Cariño Fracción B	220399	23/07/2053	100%	1
Pangea	221204	10/12/2053	100%	3,942
Anaibis	209604	2/8/2049	100%	25
San Gabriel	214852	3/12/2051	100%	201
Alex	217429	8/7/2052	100%	865
El Palmarito	182598	11/8/2038	100%	64
La Palma	218401	4/11/2052	100%	1,711
Rocio Fracción A	223492	10/1/2055	100%	86,486
Rocio Fracción B	223493	10/1/2055	100%	172
Rocio 2 Fracción A	223494	10/1/2055	100%	579
Rocio 2 Fracción B	223495	10/1/2055	100%	101
Shakira Fracción A	223496	10/1/2055	100%	217,200
Shakira Fracción B	223497	10/1/2055	100%	11
Shakira II	229715	7/6/2057	100%	12
Shakira III	229044	27/2/2057	100%	228
Shakira II Fracc 2	229716	7/6/2057	100%	359
Shakira II Fracc 3	229717	7/6/2057	100%	0
Shakira II Fracc 4	229718	7/6/2057	100%	59,941
Shakira IV	229708	5/6/2057	100%	22
Shakira V	238138	28/7/2061	100%	259
La Esperanza	211897	27/07/2050	100%	49
Rocio 3	230899	25/10/2057	100%	2,207
Pangea II	234558	9/7/2059	100%	3,480
Pangea II Fracc 1	234559	9/7/2059	100%	3,905
Pangea II Fracc 2	234560	9/7/2059	100%	337
Magistral II	235312	5/11/2059	100%	49,208
Hallomeck	203318	27/06/2046	100%	104

Old Parker	202914	1/4/2046	100%	103
La Revancha	199003	10/2/2044	100%	22
El Rial	212197	21/09/2050	Option for 100%	282
El Real del Oro	224617	23/05/2055	Option for 100%	741
El Real del Oro II	224649	24/05/2055	Option for 100%	494
San Dimas	187621	16/09/2040	Option for 100%	259
Mina Grande	191762	18/12/2041	Option for 100%	152
La Copete Colorado	195791	21/09/2042	100%	247
Maria de Jesus	195869	22/09/2042	100%	94
#2 Bioleta	195925	22/09/2042	100%	227
Cerro Colorado	196057	22/09/2042	100%	378
Bioleta	195719	22/09/2042	100%	699
Total				454,114

4.3 ROYALTIES

El Gallo, Magistral, San Dimas, CSX: Global Royalty Corp., a private Canadian company, holds a sliding scale NSR on gold or gold equivalent recovered from the El Gallo, Magistral, San Dimas, and CSX reserve and resource areas. The royalty is calculated at a rate of 1 percent of net smelter returns on the initial 30,000 ounces of gold equivalent production, at a rate of 3.5 percent of net smelter returns on the next 350,000 ounces of gold equivalent production, and thereafter, at a rate of 1 percent of net smelter returns on gold recovered from the area, in perpetuity. To date, the resource areas have produced approximately 70,000 ounces of gold.

Palmarito: A 2 percent NSR royalty exists on certain claims around Palmarito that were optioned from a third party. The NSR affects strike extensions and down-dip portions of the in situ resource and the majority of historic tailings. Figure 4-7 shows the areas where the NSR exists at Palmarito.

San Dimas, Mina Grande: In addition to the noted NSR above, one additional royalty applies to the San Dimas resource and also to portion of the Mina Grande resource. This royalty equals an NSR of 1 percent and is payable to the original claim owners from which the property was optioned. McEwen can buy 0.5% of the NSR for $500,000.

Figure 4-1: General Location Map

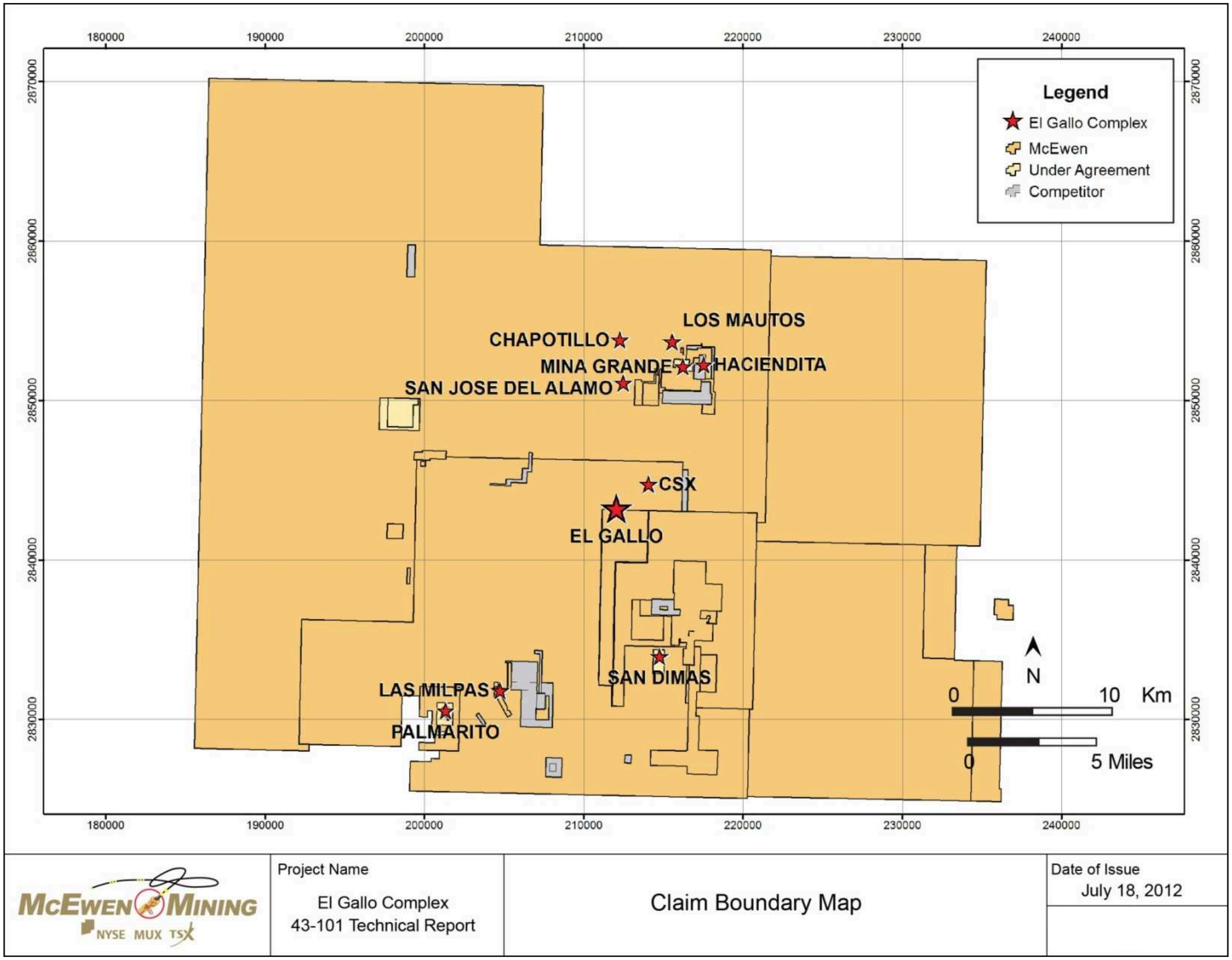
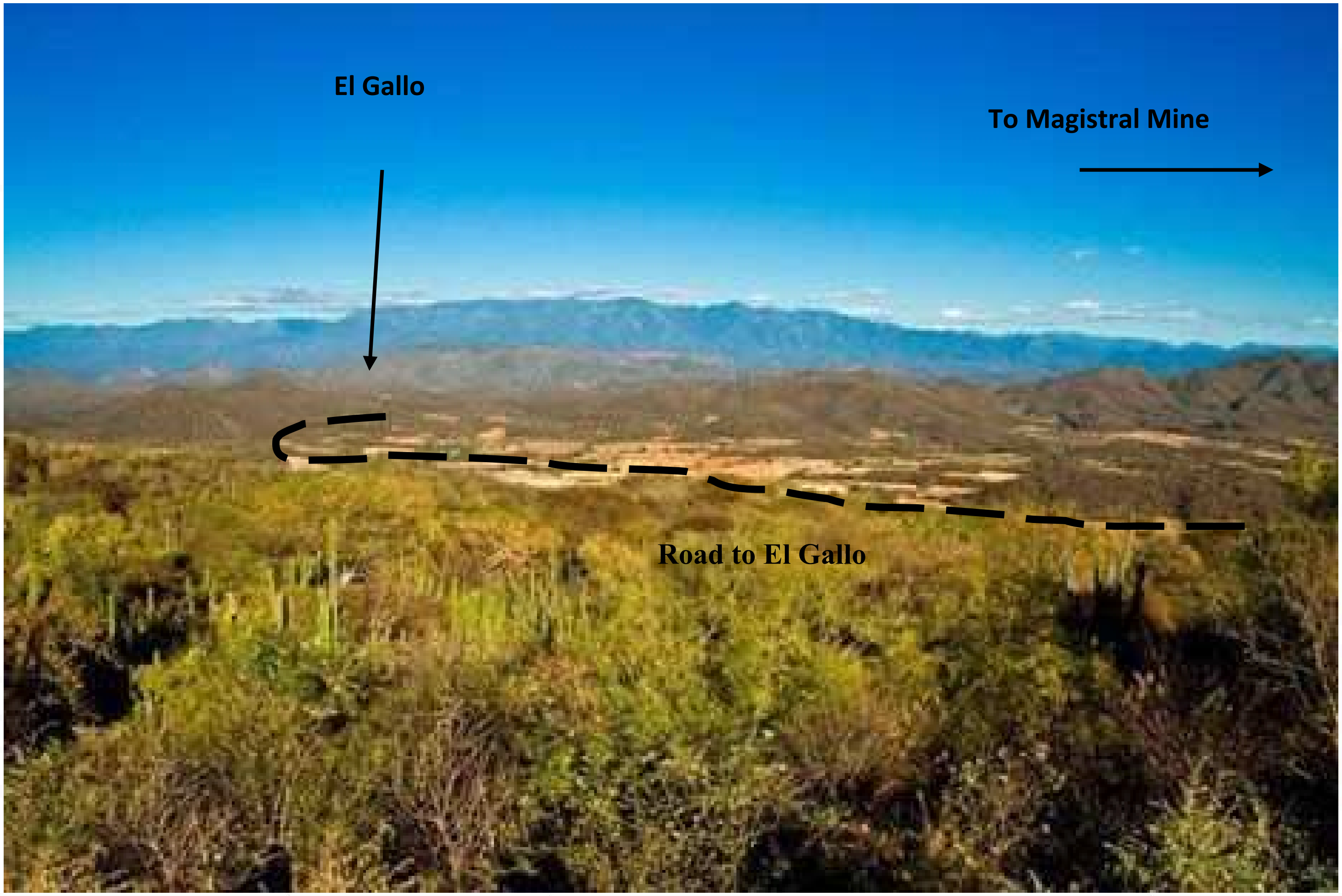


Figure 4-2: Claim Boundary Map



McEwen Mining NYSE MUX TSX	Project Name El Gallo Complex 43-101 Technical Report	El Gallo Site Photograph	Date of Issue July 18, 2012

Figure 4-3: El Gallo Site Photograph

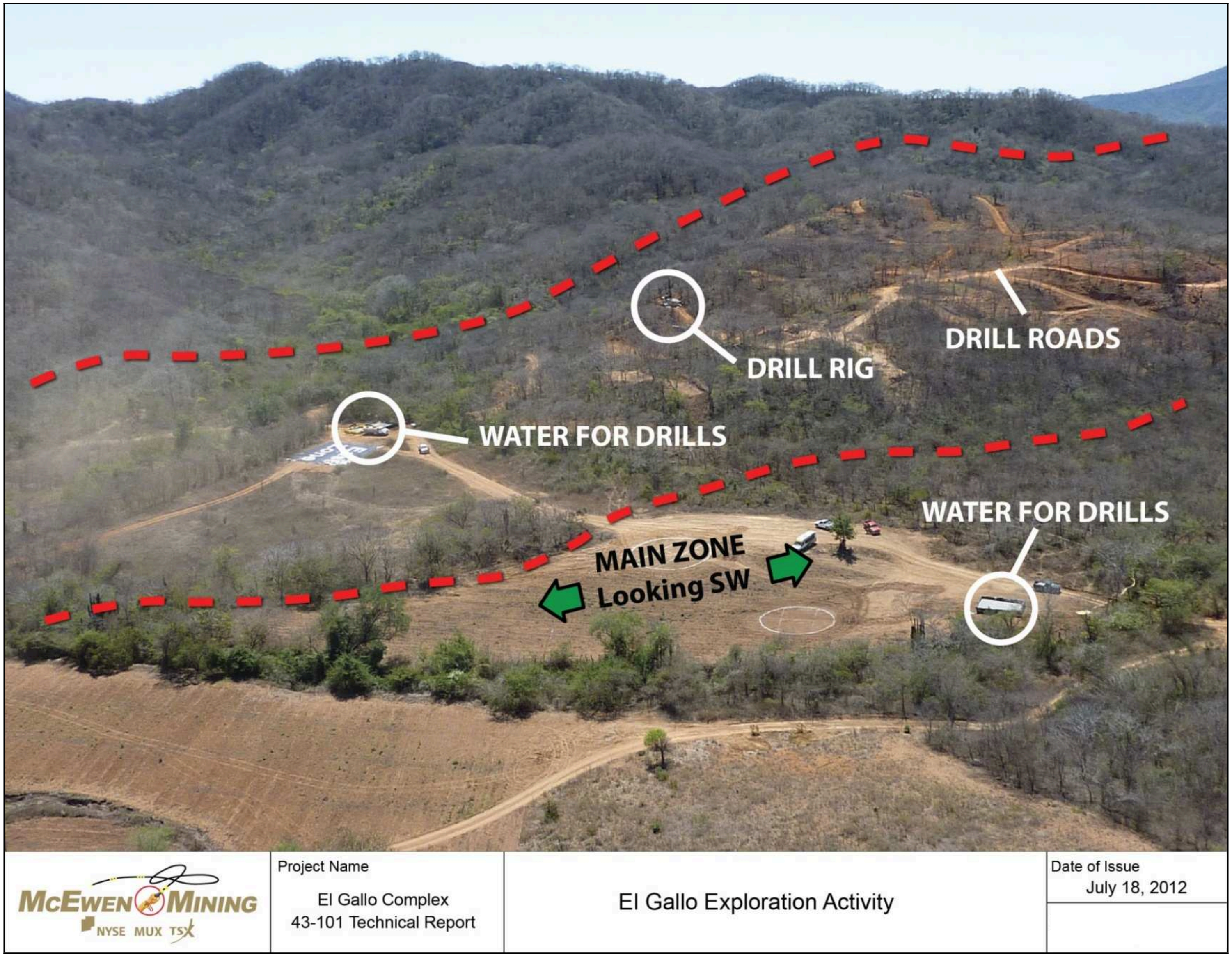


Figure 4-4: El Gallo Exploration Activity

	Project Name		Date of Issue
McEwen Mining NYSE MUX TSX	El Gallo Complex 43-101 Technical Report	Palmarito Site Photograph	July 18, 2012

Figure 4-5: Palmarito Site Photograph

Project Name		Date of Issue
El Gallo Complex 43-101 Technical Report	Magistral Site Photograph	July 18, 2012

Figure 4-6: Magistral Site Photograph

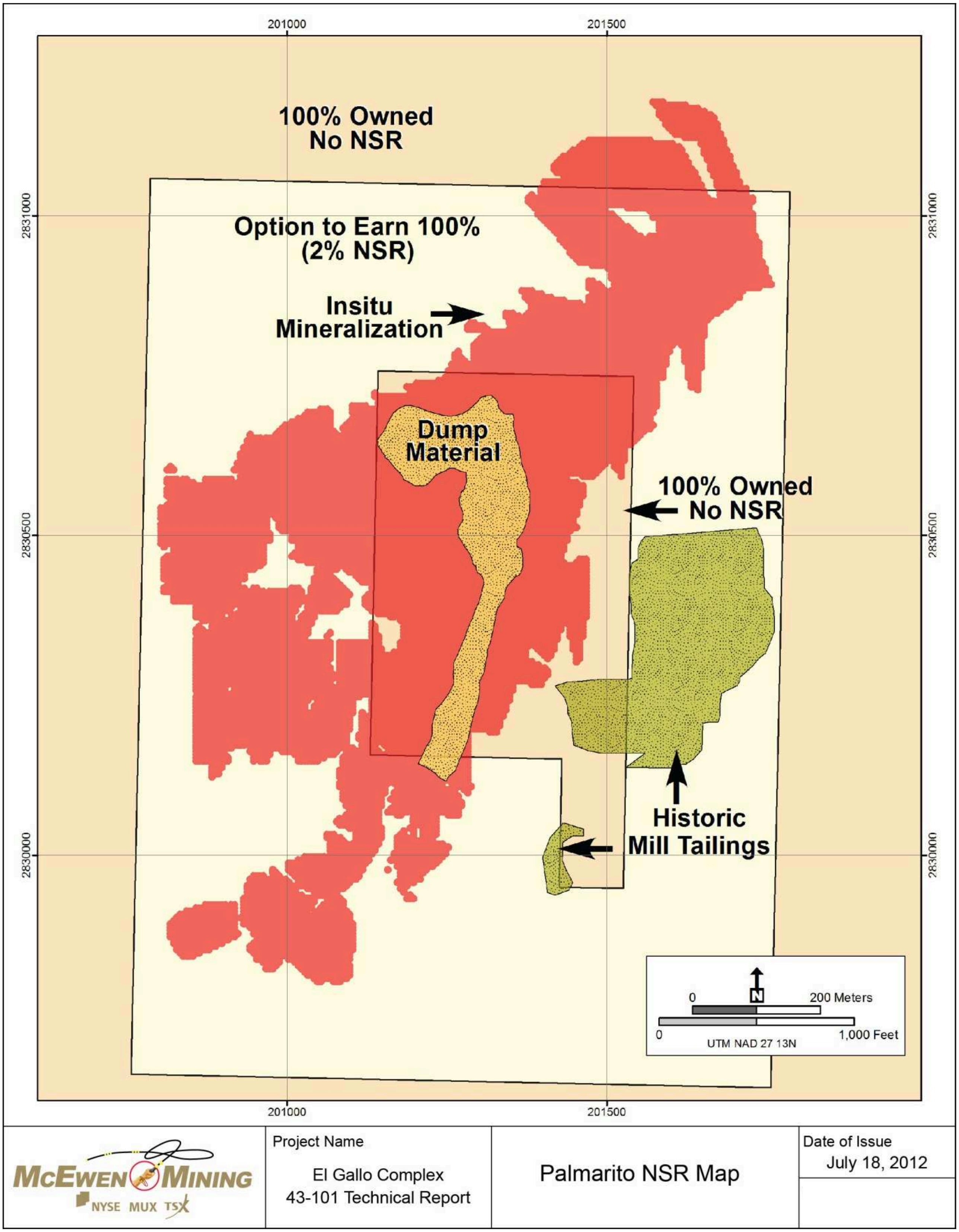


Figure 4-7: Palmarito NSR Map

5 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

5.1 ACCESSIBILITY

Access to the El Gallo Complex from the city of Culiacan is via the paved four-lane Pacific Highway (Highway 15) for a distance of 60 miles (100 kilometers) to the city of Guamuchil. From Guamuchil a local paved road extends 12.5 miles (20 kilometers) to the east toward Mocorito. McEwen's concessions are located approximately 2.5 miles (4.0 kilometers) north of Mocorito, via a paved and dirt road. Within McEwen's land position, several paved and dirt roads that provide access between the properties. Figure 5-1 shows general road conditions and location.

5.2 LOCAL RESOURCES AND INFRASTRUCTURE

The El Gallo Complex has well developed infrastructure and a local work force that is familiar with mining operations. Guamuchil is the largest population center near the project, with approximately 80,000 inhabitants. Guamuchil is connected to the south by a four-lane freeway to the State Capital City of Culiacan (60 miles or 100 kilometers) and to the Port City of Mazatlan (130 miles or 210 kilometers) further south. Both of these cities have international airports with daily flights to numerous cities in the US, Canada, and major cities within Mexico. To the north, Guamuchil is connected to the city of Los Mochis with an international airport and main railroad station for the Pacific and Chihuahua-Pacific railroads. Mocorito, founded in 1548, has a population of about 5,000 and is the nearest town to the projects. Guamuchil has banking, education and other modern facilities. Most of the people living in the villages of the area depend on small scale farming and raising livestock.

Access road: McEwen's concessions are about 2.5 miles (4.0 kilometers) from the town of Mocorito. The road from Mocorito to the project area is a good quality two-lane paved road that turns into dirt road halfway. Single or double lane dirt road provides access between many of the resource areas.

Buildings: At Magistral, significant infrastructure is present from the Phase I production that is expected to commence during the second half of 2012. At Magistral, there is a truck shop that consists of a large steel-frame building with an overhead crane and four bays for servicing heavy mobile equipment. There is also a laboratory, three stage crushing plant and an ADR process plant. The laboratory is equipped to process all assays (core, chips, soil) and incorporates fire assaying and atomic adsorption equipment. However, none of the assays from this facility have been used in this resource estimate (not an accredited laboratory). Magistral also includes a warehouse, two core logging facilities and a heap leach pad and process ponds. See Figure 5-2 for Magistral core facility.

Communications: Cell phone coverage throughout McEwen's concession area is considered good. McEwen has connection to the local phone network and also Internet access at El Gallo and Magistral. Supervisory staff and most vehicles are equipped with two-way radios.

Services: Medical service is currently available from a nurse who is present on the day shift and Magistral is equipped with an ambulance. Fire protection is provided by hand-held extinguishers and a water truck is equipped with a fire-water monitor. Employee transportation is provided by buses.

5.3 CLIMATE AND PHYSIOGRAPHY

McEwen's land position is characterized by moderate to steep topography with elevations ranging from 1,000 to 1,500 ft (300 to 450 m). It is located in the "Pie de la Sierra" physiographic province, near the boundary with the "Llanura Costera y Deltas de Sonora y Sinaloa" province. During most of the year, the area experiences arid to semi-arid climatic conditions, with almost all of the approximately 825 millimeters of annual precipitation coming from storm events during July to September (shown on Figure 5-3). During the strong storm events, flooding occurs along the river beds. The project area is enclosed by the Mocorito hydrologic basin. The moderately dense vegetation on the hill slopes consists of bushes and shrubs with widely-spaced deciduous trees. The average yearly temperature in the area is approximately (25 degrees Celsius) (See Figure 5-4).

5.4 WATER SUPPLY

McEwen Mining is not required to obtain water rights. According to the National Water Commission (CNA), the project is located in Sinaloa River Aquifer (Rio Sinaloa Basin) and is termed "Zona de Libre Alumbramiento", meaning a free zone because of excess capacity. The concept of "free" means water users can legally pump water from subsoil for use. Upon completion of a water well, the user must register their company name with Organismo de Cuenca, Pacifico Norte (CONAGUA), before consumption can begin. Water usage will cost $.40 per cubic meter.

El Gallo: Primary water supply will come from three locally drilled water wells. Two are complete and the third is in progress. Each well is located within 2 km of the proposed El Gallo process facility. Similar to Phase 1, wells will be powered by a generator that will pump water into a raw water storage tank for usage. Phase II average water demand will be 14 liters/second, and maximize at 17 liters/second. McEwen has received a water feasibility study from *Investigacion y Desarrollo de Acuiferos y Ambiente* (IDEAS) confirming it will have sufficient water supply for Phase II production.

Magistral: Primary water supply come from two currently operating water wells located 1.5 km from the process facility. Wells are powered by a generator that pumps water into a raw water pond, and it is then used for operations. Phase I average water demand will be 5.5 liters/second, and maximize at 11.38 liters/second. Combining Sinaloa's annual precipitation (~830 mm) with the sites current water well production capacity, McEwen has sufficient supply for Phase I production. It is assumed that water from the San Rafael pit will also be used when the mine resumes production.

5.5 POWER SUPPLY

The local power grid is situated approximately 4.7 miles (7.5 kilometers) from the El Gallo deposit.

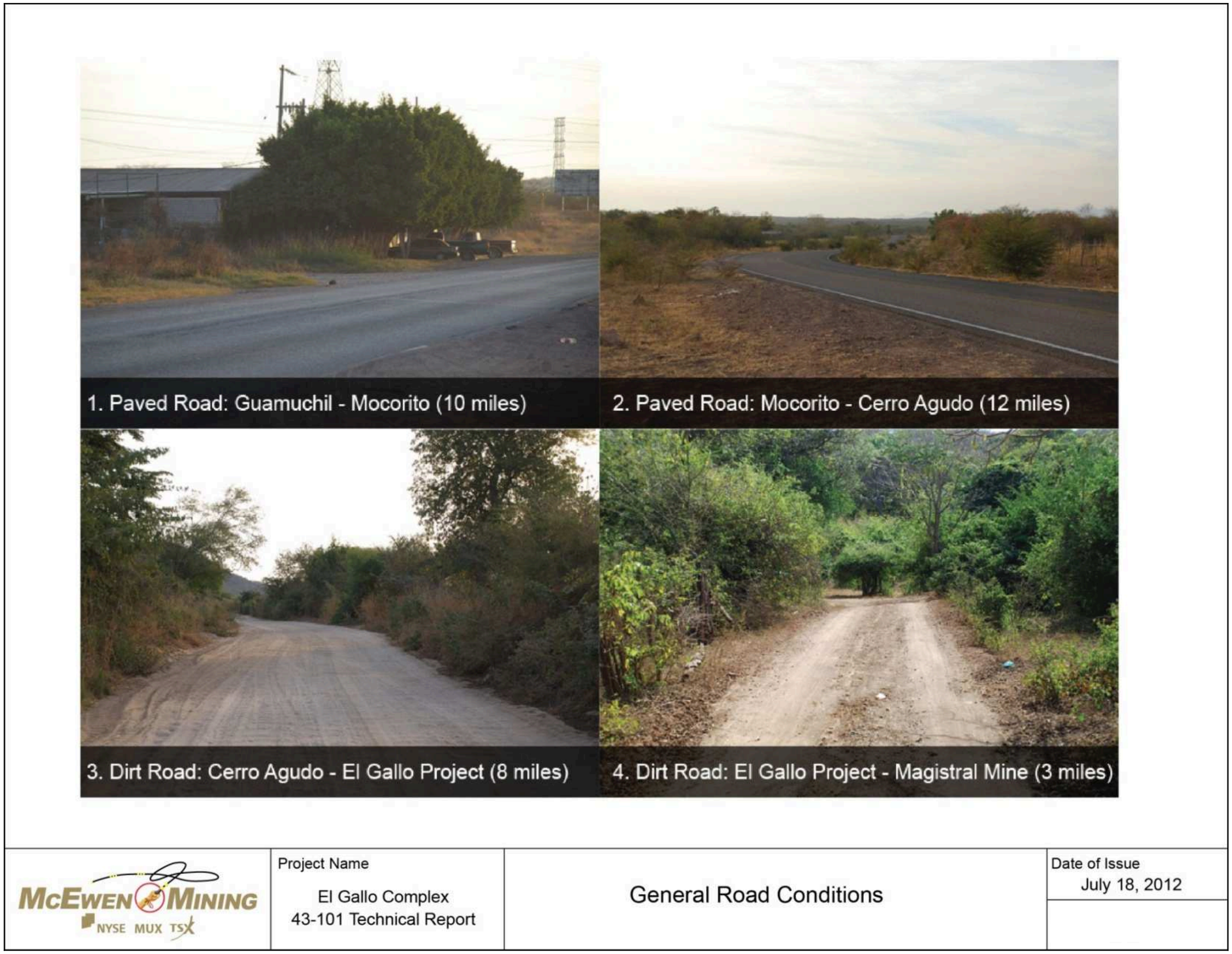


Figure 5-1: General Road Conditions

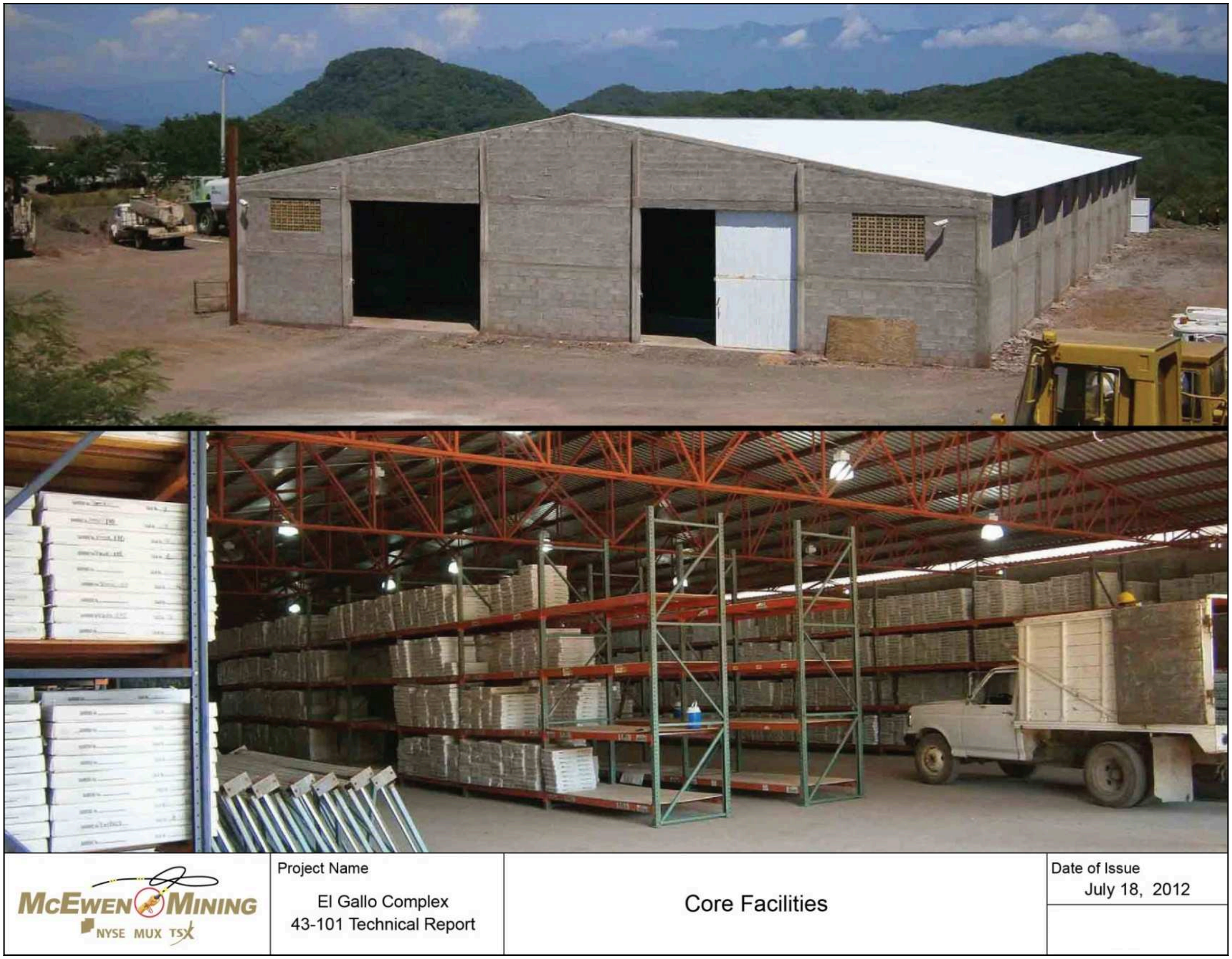


Figure 5-2: Core Facilities

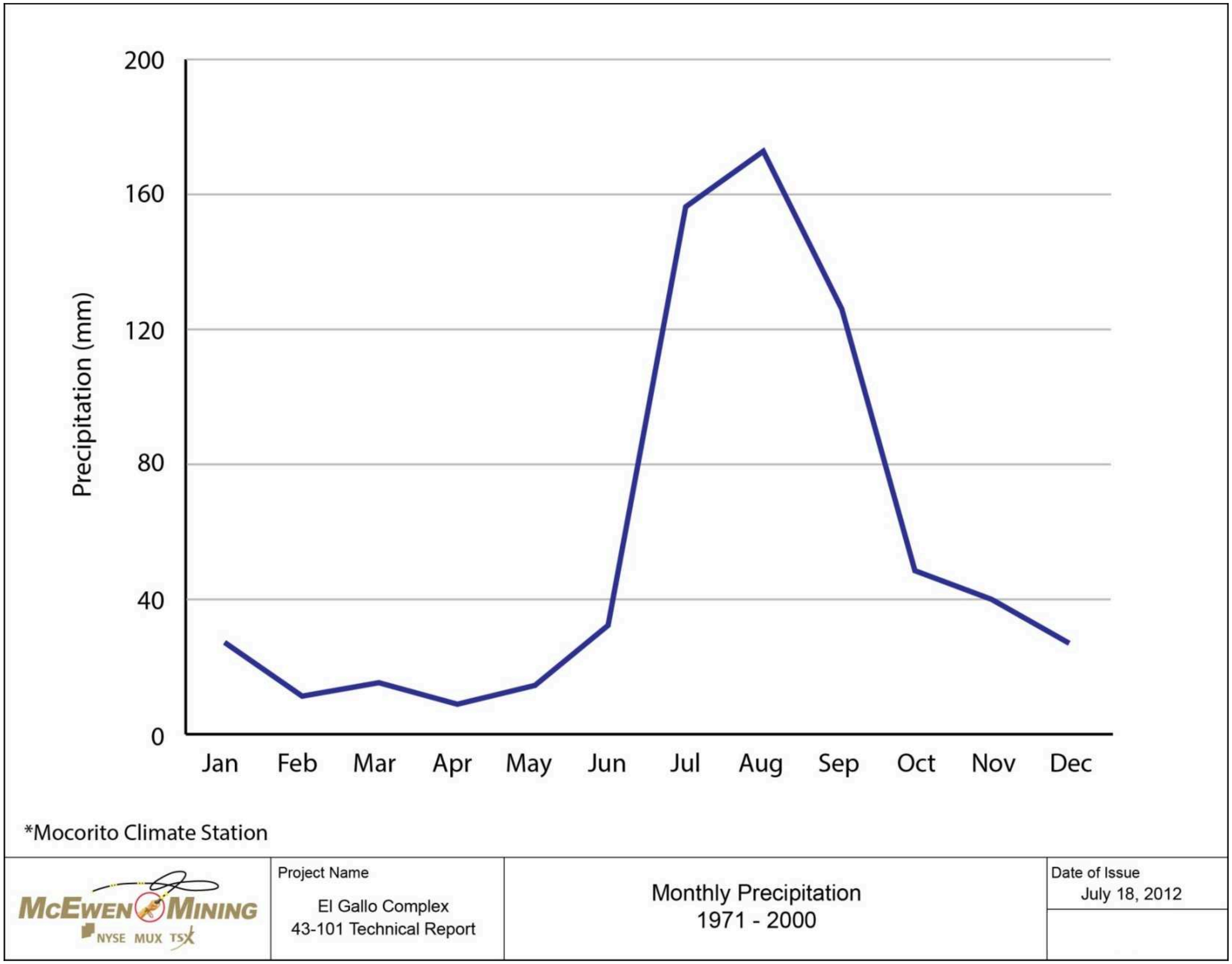
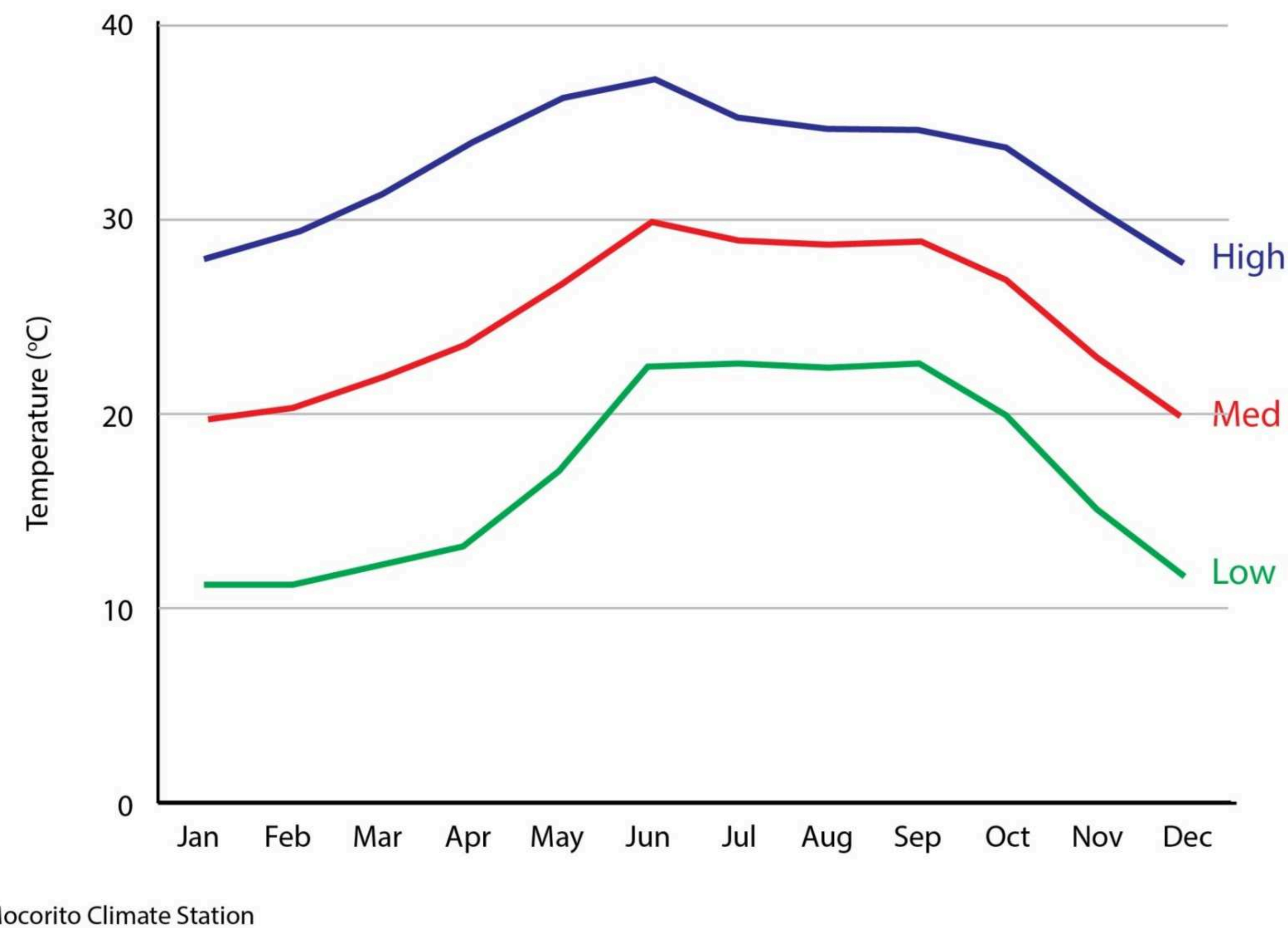


Figure 5-3: Monthly Precipitation



McEwen Mining NYSE MUX TSX	Project Name El Gallo Complex 43-101 Technical Report	Monthly Temperatures 1971 - 2000	Date of Issue July 18, 2012

Figure 5-4: Monthly Temperatures

6 HISTORY

The nearby city of Mocorito originated from mining activity, beginning with Palmarito in the mid-1500s. A historical breakdown for each of the three projects is summarized below:

El Gallo: Although there is a long history of mining in the area only minimal amount of mining appears to have occurred at El Gallo based on field observations. There is no recorded history of prior exploration having occurred at El Gallo. Geologists from Nevada Pacific Gold (the concessions previous owner) first visited the area in 2007 as part of a reconnaissance program, but no recorded samples were taken.

McEwen (then US Gold) acquired El Gallo and the surrounding mineral concessions when it completed its takeover of Nevada Pacific Gold in 2007. McEwen initiated exploration in the district in January 2008. The first evidence of mineralization at El Gallo occurred in the summer of 2008 when rock samples from surface outcropping returned encouraging silver values.

Initial rotary drilling occurred at El Gallo during October 2008 in order to test for the continuation of mineralization at depth (results from the rotary drilling are not included in the resource estimate contained within this Technical Report). Initial drilling returned some encouraging results. The El Gallo discovery came from rotary drill hole number 38. McEwen successfully confirmed the grade and thickness of rotary hole 38 with core drilling that started in January 2009.

Palmarito: The project has an estimated historical production of 15,300,000 ounces of silver and 49,250 ounces of gold from open pit and underground workings before mining ceased in 1950. Palmarito is considered to be one of Sinaloa's major historical producers of silver.

In 1969 and 1970, Barranca Corporation Ltd. carried out an exploration program that consisted of surface and underground mapping and sampling along with 24 core and 11 percussion holes (not included in the current database). This work resulted in a reported non-compliant NI 43-101 resource estimate.

In 1996 a second non-compliant NI 43-101 resource estimate was completed by Computer Aided Geoscience Pty based on work that included 74 reverse circulation (RC) drill holes completed by Lluvia de Oro Inc. in the 1990s.

In 2006 and 2007 Nevada Pacific Gold completed a core drilling program at Palmarito that consisted of 19 holes. The objective of the program was to confirm the integrity of the geologic model and database collected from a number of RC drill holes that were completed by Lluvia de Oro.

Magistral: Gold mining at Magistral began in the late 1800s with production continuing sporadically until the 1950s. This mining effort was focused on narrow, high-grade quartz veins, locally present in the structural zones. Underground mine plans and production records are limited. The consulting firm Computer Aided Geoscience, Pty. Ltd. (CAG) previously estimated that the historic mill tailings contained 274,000 tonnes of material processed from Magistral.

Later, exploration was conducted by Materias Minerales de Lampazos S.A. de C.V. (a subsidiary of Vitro Industrias Básicas) and by Minera Tormex (a subsidiary of the Lacana/Corona group). Exploration by both companies consisted of geologic mapping and geochemical sampling. Additionally, Vitro drilled 36 holes (not included in the current database).

More recently, Minera Pangea began exploring the project in early 1995, initially for Mogul Mining NL and subsequently for Santa Cruz Gold Inc. From mid-1995 through early 1997 drilling was conducted by Minera Pangea/Santa Cruz Gold on the San Rafael, Samaniego Hill, Lupita, Central and Sagrado Corazón deposit areas. Santa Cruz subsequently took control of all exploration activities on the project and in 1998 conducted a limited amount of additional drilling. This drilling consisted of four core holes for metallurgical testing and thirty reverse circulation holes for verification, in-fill and condemnation purposes.

In 1999, after a merger with Santa Cruz Gold, Queenstake conducted a further limited drilling program to step-out/in-fill drill in the Samaniego Hill deposit (13 reverse circulation and two core holes) and to obtain pit-slope geotechnical samples from both the San Rafael (two core holes) and Samaniego Hill (four core holes) deposits. In 2002, additional drilling (45 reverse circulation holes) was conducted in La Prieta zone of the Samaniego Hill deposit.

Queenstake began production at Magistral in July 2002. They continued to operate the mine until near the end of January 2004. In February 2004, Nevada Pacific Gold purchased the mine and continued to operate it until July 2005 when the operations were placed on care and maintenance. A total of 70,000 ounces of gold was recovered by Queenstake and Nevada Pacific Gold.

Chapotillo: This vein was mined until the late 1990's by local operators. The company was informed that the claim was released by the previous owners due to the hardness of the rock and the complications that subsequently resulted during mining. McEwen began sampling the underground workings in 2009. The first phase of drilling targeted deeper extensions of the vein. Although the structure was encountered, the vein was narrow and contained low grades of gold and silver. Subsequent drilling focused on mineralization adjacent to the previously mined portion of the vein, which lead to the resource estimate contained within this Technical Report.

Haciendita & Mina Grande: These two resource areas are located adjacent to one another and appear to be part of the same mineral structure. Mina Grande was mined until the late 1990's. Mining ceased due to low precious metal prices. The majority of the mineralization was processed through a small mill located on site. The foundation for the mill, assay lab and the tailings impoundment remain. Due to the low precious metal prices a portion of the Mina Grande claim was relinquished and subsequently staked by Nevada Pacific Gold, which was acquired by McEwen. The remaining portion of the Mina Grande claim was optioned by McEwen from the owners. Drilling by McEwen started in 2010. A portion of the Mina Grande resource is the extension of the vein that was mined on the property. However, a large portion of the resource is comprised of new parallel veins.

Although Haciendita is believed to be part of the Mina Grande mineral structure, there is no previously recorded mining. McEwen identified the mineralization through surface rock samples. Follow-up drilling proved successful at defining a shallow dipping zone of gold mineralization.

San Dimas: This vein was mined until the late 1990's. It was considered to be one of the larger, more productive mines that operated in the region during this time period. The mine was closed due to the previous owner's belief that the vein had been mined out. The vein was mined primarily for silver, zinc, lead and copper. McEwen optioned the concession from the owners with the belief that vein contained additional mineralization, although at a lower grade. The lower grade mineralization could potentially be made economic by mining the vein by open pit versus underground methods and also due to higher precious metal prices. McEwen began drilling on the project in 2011.

Los Mautos: This resource area was a new discovery made by McEwen in 2010. There is no recorded history of prior exploration having occurred at Los Mautos.

San Jose del Alamo: Although no production records exist for San Jose del Alamo, underground mining occurred along the vein. The vein was "rediscovered" by McEwen after reviewing historical mineral claim maps of the area. Sampling of the underground and subsequent drilling by McEwen began in 2010.

Las Milpas: Although limited, small scale mining has occurred at Las Milpas, no production records exist. McEwen located the vein through members of the local community that were familiar with the past mining activities. Drilling by McEwen started in 2010.

CSX: This resource area was a new discovery made by McEwen in 2011. There is no recorded history of prior exploration having occurred at CSX.

6.1 RESOURCE ESTIMATE HISTORY

6.1.1 El Gallo

The current resource estimate for El Gallo is an update from the initial resource published in July 2010 and subsequently updated in December 2010. Both Technical Reports were filed on SEDAR (www.sedar.com). Both estimates were modelled by PAH for US Gold Corporation (now McEwen). These two resource estimates are listed in Table 6-1 and Table 6-2.

Table 6-1: July 2010 Resource Estimate for El Gallo - OBSOLETE

Resources			Measured and Indicated				
Class	Group	Grade Range	Tonnage x 1000	Ag ppm	Au ppm	Ounces of Ag	Ounces of Au
Measured	Low Grade Oxide	25-40 Ag ppm	216	31.3	0.05	217,360	347
	High Grade	>40 Ag ppm	3,802	119	0.1	14,545,882	12,223
Indicated	Low Grade Oxide	25-40 Ag ppm	269	31.4	0.07	271,558	605
	High Grade	>40 Ag ppm	3,106	100.8	0.08	10,065,676	7,989
Measured + Indicated	Low Grade Oxide	25-40 ppm	485	31.4	0.06	488,918	953
	High Grade	>40 Ag ppm	6,908	110.8	0.09	24,611,558	20,212
	Total Measured + Indicated		7,393	106	0.09	25,100,476	21,165
Class	Group	Grade Range	Tonnage x 1000	Ag ppm	Au ppm	Ounces of Ag	Ounces of Au
Inferred	Low Grade Oxide	25-40 Ag ppm	590	32	0.03	606,992	569
	High Grade	>40 Ag ppm	3,900	92.2	0.07	11,560,497	8,777
		Total Inferred	4,490	84	0.06	12,167,489	9,346

Table 6-2: December 2010 Resource Estimate for El Gallo - OBSOLETE

Measured and Indicated Resources							
Class	Group	Grade Range	Tonnage x 1000	Ag ppm	Au ppm	Ounces of Ag	Ounces of Au
Measured	Low Grade	25-40 Ag ppm	2,519	28.7	0.03	2,321,320	2,537
	High Grade	>40 Ag ppm	4,437	120.5	0.09	17,194,342	13,275
Indicated	Low Grade	25-40 Ag ppm	2,618	28.3	0.02	22,385,463	1,874
	High Grade	>40 Ag ppm	3,024	96.1	0.07	9,342,119	7,195
Measured + Indicated	Low Grade	25-40 ppm	5,136	28.5	0.03	488,918	4,411
	High Grade	>40 Ag ppm	7,461	110.6	0.09	24,611,558	20,470
	Total Measured + Indicated		12,598	77	0.09	25,100,476	24,881
Class	Group	Grade Range	Tonnage x 1000	Ag ppm	Au ppm	Ounces of Ag	Ounces of Au
Inferred	Low Grade	25-40 Ag ppm	6,285	27.4	0.01	5,721,391	2,972
	High Grade	>40 Ag ppm	3,525	97.2	0.06	11,012,828	7,326
		Total Inferred	10,010	52	0.03	16,734,220	10,298

6.1.2 Palmarito

In 1996 a non-compliant NI 43-101 resource estimate was completed by Computer Aided Geoscience Pty based on work that included 74 RC drill holes completed by Lluvia de Oro Inc. in the 1990s (Table 6-3). The historical mineral resources at Palmarito were estimated using undefined methods for classifying resources. As such, they do not comply with NI 43-101.

The first compliant NI 43-101 Technical Report was completed by PAH and filed on SEDAR in December 2008 (Table 6-4). This estimate included previous drilling completed by Lluvia de Oro, Nevada Pacific Gold and drilling and sampling by McEwen (then US Gold) during 2008.

In 2009 and 2010, US Gold conducted additional drilling at Palmarito. This drilling extended the limits of known mineralization and also discovered the new "Southwest Zone." Additional waste dump and tailings sampling was also undertaken to in order to more accurately reflect the tonnes and grade associated with this material. Consequently, the 2010 resource model was updated to reflect this data. US Gold filed this report on SEDAR in July 2010. The 2010 resource is contained in Table 6-5, Table 6-6 and Table 6-7. These three tables break the resource out by in-situ, dumps and tailings material. Additional drilling data have rendered this estimate obsolete.

Table 6-3: Technical Report, El Gallo Complex, 1996 Resource Estimate for Palmarito

Cut-off Grade (Au Eq* gpt)	Tonnage (millions)	Au Eq. Grade (gpt)	Au Grade (gpt)	Ag Grade (gpt)	Contained Au Eq. ('000 oz)	Contained Au ('000 oz)	Contained Ag (million oz)
Drill Indicated Historical Resource							
2	0.659	2.85	0.5	179	60	11	3.8
1.8	0.828	2.66	0.5	165	71	13	4.4
1.6	1.05	2.45	0.46	151	83	16	5.1
1.4	1.29	2.27	0.44	140	94	18	5.8
1.2	1.55	2.11	0.41	129	105	21	6.4
1	1.83	1.96	0.39	119	115	23	7
0.8	2.1	1.82	0.37	111	123	25	7.5
0.6	2.38	1.69	0.35	102	129	27	7.8
0.4	3.11	1.4	0.28	86	140	28	8.5
0.2	5.12	0.97	0.18	60	160	30	10
0	5.75	0.87	0.16	54	162	29	10.1
Dumps							
0	0.242	3.53	0.45	235	27	3	1.8
Tailings**							
0	0.2	2.05		158	13		1

*Gold equivalent (Au Eq.) 76 ounces of silver =1 ounce of gold

**Tailings were not assayed for gold

Table 6-4: Technical Report, El Gallo Complex, 2008 Resource Estimate for Palmarito

Class	Cutoff Grade (grams Ag/tonne)	Tonnage ('000)	Ag Grade (grams/tonne)	Contained Ag (grams)	Contained Ag (troy ounces)	Au Grade (grams/tonne)	Contained Au (grams)	Contained Au (troy ounces)
Measured	40	2,654.4	70.2	186,366,104.1	5,991,521	0.14	370,194.9	11,901
Indicated	40	1,102.80	70.0	77,156,710.8	2,480,527	0.13	142,530.0	4,582
M+I	40	3,757.2	70.1	263,522,815.0	8,472,048	0.14	512,724.8	16,494
Inferred	40	1,591.10	65.5	104,178,079.3	3,349,242	0.11	179443.6	5,769

Table 6-5: Technical Report, El Gallo Complex, 2010 Resource Estimate for Plamarito Insitu

Class	Cutoff Grade (grams Ag/tonne)	Tonnage ('000)	Ag Grade (grams/tonne)	Contained Ag (grams)	Contained Ag (troy ounces)	Au Grade (grams/tonne)	Contained Au (grams)	Contained Au (troy ounces)
Measured	40	2,424	65	157,731,111	5,071,055	0.14	337,872	10,863
Indicated	40	1,023	62	63,021,502	2,026,141	0.12	124,811	4,013
M+I	40	3,447	64	220,752,613	7,097,196	0.13	462,684	14,875
Inferred	40	1,604	58	92,770,185	2,982,561	0.10	164,830	5,299

Table 6-6: Technical Report, El Gallo Complex, 2010 Resource Estimate for Palmarito Dump

Class	Cutoff Grade (grams Ag/tonne)	Tonnage ('000)	Ag Grade (grams/tonne)	Contained Ag (grams)	Contained Ag (troy ounces)	Au Grade (grams/tonne)	Contained Au (grams)	Contained Au (troy ounces)
Measured	40	48	195	9,284,146	298,485	0.28	13,368	430
Indicated	40	72	162	11,578,509	372,249	0.21	14,924	480
M+I	40	119	175	20,862,655	670,734	0.24	28,292	910

Table 6-7: Technical Report, El Gallo Complex, 2010 Resource Estimate for Palmarito Tailings

Class	Cutoff Grade (grams Ag/tonne)	Tonnage ('000)	Ag Grade (grams/tonne)	Contained Ag (grams)	Contained Ag (troy ounces)	Au Grade (grams/tonne)	Contained Au (grams)	Contained Au (troy ounces)
Measured	40	148	158	23,403,320	752,417	0.12	18,533	596
Indicated	-	-	-	-	-	-	-	-
M+I	40	148	158	23,403,320	752,417	0.12	18,533	596

6.1.3 Magistral

The current resource estimate for Magistral is the culmination of over ten years of modeling effort by PAH spanning three different property owners (Queenstake, Nevada Pacific Gold, and US Gold). The following discussion of historical resource estimates provides a brief history of the modeling evolution.

The first iteration of the Magistral resource model constructed by PAH was for the 2000 Feasibility report prepared for Queenstake. As a joint effort between PAH and Queenstake, mineralization was delineated with structural zone boundaries interpreted along north-south and southwest-northwest cross sections.

These boundaries were drawn at a nominal grade of 0.2 gpt. The structural zone interpreted shapes were then digitized and projected to 16.5 ft (5 m) bench plans. Three block models (Samaniego/San Rafael, Lupita/Central and Sagrado Corazón) were constructed around these structural zones with 16.5 x 16.5 x 16.5 ft (5 x 5 x 5 m) block sizes. Gold grades were interpreted for blocks within the structural zones using an inverse distance cubed method. These resource estimates for the 2000 Feasibility Study are listed in Table 6-8. In 2003, this resource estimate was incorporated into a NI 43-101 Technical Report and filed on SEDAR by Queenstake. Additional drilling data and production have rendered this estimate obsolete.

In late 2001 and early 2002, Queenstake conducted additional drilling in the Samaniego Hill deposit. This drilling extended the limits of known mineralization within the La Prieta structural zone. Consequently, the 2000 resource model was updated to reflect this data. The modeling approach and parameters used for this update were similar to those used originally for the 2000 Feasibility Study. Table 6-9 reproduces the 2003 resource estimate. This estimate did not report inferred resource and no explanation is given for this omission. In 2003, this resource estimate was incorporated into a NI 43-101 Technical Report and filed on SEDAR by Queenstake. Additional drilling data and production have rendered this estimate obsolete.

Following its acquisition of Magistral from Queenstake, Nevada Pacific Gold issued an amended NI 43-101 Technical Report. These amendments did not pertain to the resource estimate. As such, the included resource estimate in this Technical Report did not deviate from Table 6-9.

While the owner of Magistral, Nevada Pacific Gold generated additional drilling data and production data sufficient to warrant an updated resource estimate in 2006. The Lupita structural zone interpretation was modified as a result of the additional drilling. The production data was reconciled against the 2003 resource estimate and significant discrepancies were noted. PAH found that altering the grade interpolation method from inverse distance cubed to inverse distance 6th yielded a better representation of the production data. As a result, this interpolation method was applied to all models and a new resource estimate was submitted. Table 6-9 reproduces the 2006 resource estimate. Nevada Pacific filed a NI 43-101 Technical Report on SEDAR stating this resource estimate in 2006.

In 2009, the prior resource estimate was revisited and a problem was discovered. PAH observed that portions of resource within the La Prieta structural zone were tabulated improperly in 2006.

Consequently, the resource estimate in Table 6-10 overestimated measured and indicated gold ounces by approximately 18 percent. This issue and additional drilling data have rendered this estimate obsolete.

Table 6-8: 2000 Resource Estimate for Magistral

Resource Area	Measured			Indicated			Measured and Indicated			Inferred		
	Tonnes (x1000)	Au (gpt)	Cont. Au (oz.)	Tonnes (x1000)	Au (gpt)	Cont. Au (oz.)	Tonnes (x1000)	Au (gpt)	Cont. Au (oz.)	Tonnes (x1000)	Au (gpt)	Cont. Au (oz.)
San Rafael	2,072	1.77	117,900	447	1.24	17,900	2,519	1.68	135,800	10	1.02	300
Samaniego	3,495	1.63	183,000	1,031	1.85	61,200	4,526	1.68	244,200	32	1.28	13,000
Sagrado Corazon	978	1.08	33,900	238	0.82	6,300	1,216	1.03	40,200	6	0.80	200
Lupita	1,257	1.11	44,900	842	1.00	27,000	2,099	1.07	71,900	58	1.63	3,000
Tailings	167	2.17	11,700	65	0.68	1,400	232	1.76	13,100	-	-	-
Total	7,969	1.53	391,400	2,623	1.35	113,800	10,592	1.48	505,200	106	1.42	16,500

Table 6-9: Technical Report Phase I El Gallo Complex, 2003 Resource Estimate for Magistral

	Measured			Indicated			Measured and Indicated			Inferred		
Resource Area	Tonnes (x1000)	Au (gpt)	Cont. Au (oz.)	Tonnes (x1000)	Au (gpt)	Cont. Au (oz.)	Tonnes (x1000)	Au (gpt)	Cont. Au (oz.)	Tonnes (x1000)	Au (gpt)	Cont. Au (oz.)
San Rafael	2,133	1.75	120,100	449	1.23	17,800	2,582	1.66	137,900	-	-	-
Samaniego	4,596	1.93	284,900	1,163	1.87	69,900	5,759	1.92	354,800	-	-	-
Sagrado Corazon	978	1.08	33,900	238	0.82	6,300	1,216	1.03	40,200	-	-	-
Lupita	1,257	1.11	44,900	842	1.00	27,000	2,099	1.07	71,900	-	-	-
Tailings	166	2.10	11,200	-	-	-	166	2.10	11,200	-	-	-
Total	9,130	1.69	495,000	2,692	1.40	121,000	11,822	1.62	616,000	-	-	-

Table 6-10: Technical Report Phase I El Gallo Complex, 2006 Resource Estimate for Magistral

	Measured			Indicated			Measured and Indicated			Inferred		
Resource Area	Tonnes (x1000)	Au (gpt)	Cont. Au (oz.)	Tonnes (x1000)	Au (gpt)	Cont. Au (oz.)	Tonnes (x1000)	Au (gpt)	Cont. Au (oz.)	Tonnes (x1000)	Au (gpt)	Cont. Au (oz.)
San Rafael/ Samaniego	4,699	2.09	315,665	1,378	1.79	79,290	6,077	2.02	394,955	-	-	-
Sagrado Corazon	862	1.28	35,528	170	0.94	5,144	1,032	1.22	40,672	-	-	-
Lupita	1,245	1.55	61,937	832	1.36	36,305	2,077	1.47	98,242	-	-	-
Tailings	118	1.89	7,147	-	-	-	118	1.89	7,147	-	-	-
Total	6,924	1.89	420,277	2,380	1.58	120,739	9,304	1.81	541,016	-	-	-

7 GEOLOGICAL SETTING AND MINERALIZATION

7.1 REGIONAL GEOLOGY

The geology of north-western Mexico is dominated by the volcanic plateau of the SMO, an 800 mile (1,200 kilometer) long northwest-trending mountainous region that roughly parallels the west coast of Mexico. The SMO is thought to be one of the largest accumulations of calc-alkaline volcanic rocks in the world, and is considered to be related to magmatism associated with subduction off the west coast of Mexico from Late Cretaceous to Mid-Tertiary time (e.g. Sedlock et al, 1993; Clark et al., 1982; McDowell and Clabaugh, 1981). The volcanic rocks of the SMO and surrounding regions can be broadly grouped into two principal units: the Lower Volcanic Series and Upper Volcanic Series (Clark et al, 1982) (or Lower Volcanic Complex and Upper Volcanic Supergroup, McDowell and Keizer, 1977).

The Lower Volcanic Series is comprised dominantly of volcanic rocks of andesitic composition which range in age from Late Cretaceous to Eocene and attain thicknesses of 0.7 to 1 mile (1 to 1.5 kilometres). The Upper Volcanic Series rests unconformably on the Lower Volcanic Series and is dominated by rhyodacitic to rhyolitic ignimbrites of Oligocene-Miocene age. It is 0.7 to 1.3 miles (1 to 2 kilometres) in thickness. Granitic plutons are observed intruding the Lower Volcanic Series extrusive rocks. These intrusives are best exposed in the lower-lying coastal regions and age determinations from exposures in southern Sinaloa range from Late Cretaceous to Early Tertiary (Henry, 1975) and, hence, are co-eval with Lower Volcanic Series rocks. The plutonic rocks, ranging in composition from granodiorite to monzonite and quartz-monzonite, occur throughout the state of Sinaloa and have been termed “Sinaloa Batholith” by Henry (2003).

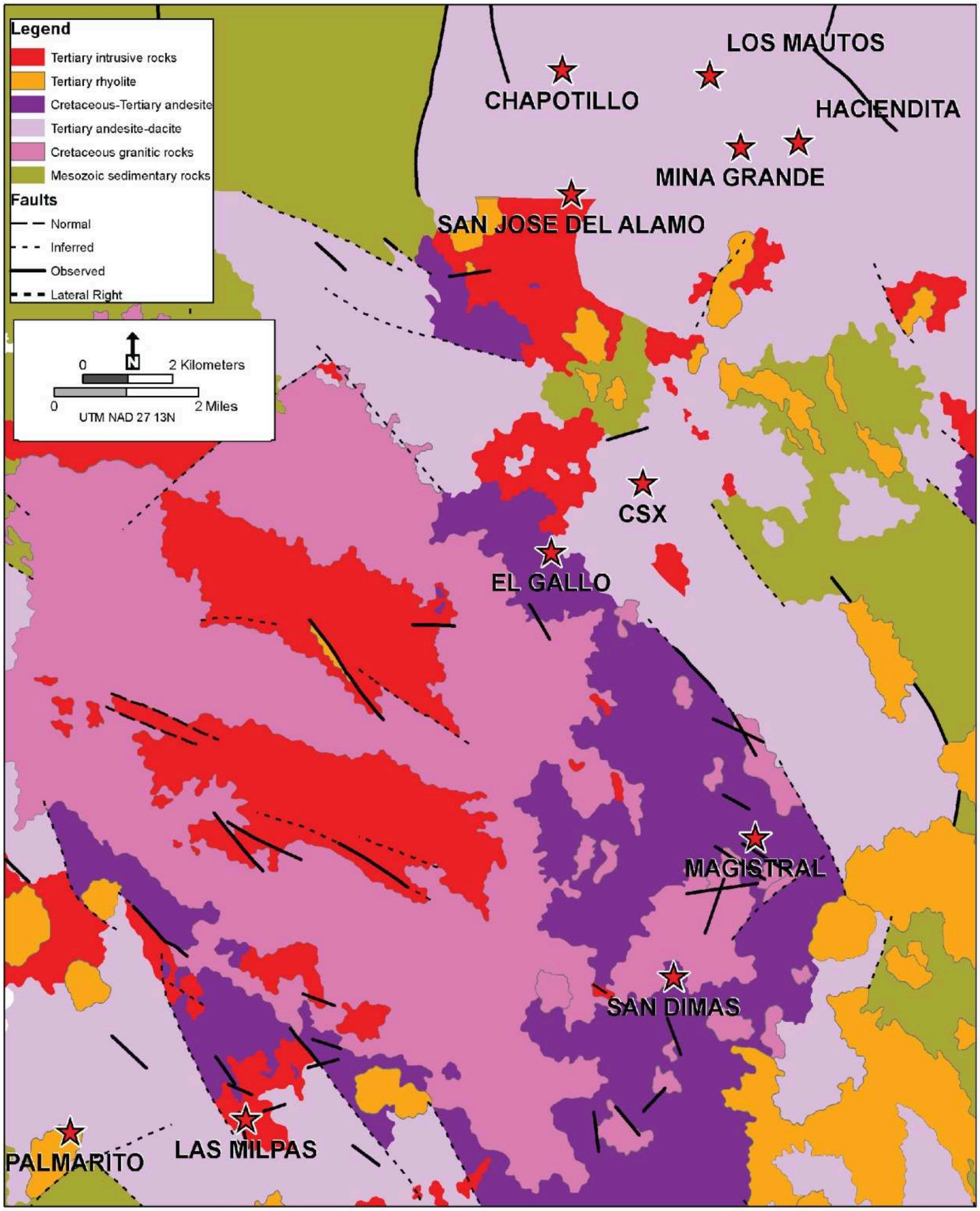
Geographically, McEwen’s concessions lie in the Pie de la Sierra physiographic province of north-western Mexico and, as such, occur west of the SMO. The geology of the region is dominated by the presence of the same groups of Late Cretaceous-Tertiary volcanic rocks as occur in the SMO as well as occurrences of the Sinaloa Batholith. Older rocks, however, also occur (Figure 7-1).

The oldest known rocks in Sinaloa are gneisses tentatively considered to be of Precambrian(?) age which occur in limited exposures in northern Sinaloa (Consejo de Recursos Minerales (SGM), 1992) Paleozoic meta-sedimentary rocks occur throughout the state, with relatively extensive exposures near San Jose de Gracia in north-eastern Sinaloa. Mesozoic rocks are dominated by Lower Cretaceous limestone which occurs as isolated exposures, mainly as erosional remnants. Less extensive, Jurassic and Lower Cretaceous meta-volcanic and sedimentary rocks have been mapped. In the Bacubarito area, approximately 12.5 miles (20 kilometers) north of McEwen’s concessions, foliated and folded metavolcanic rock and limestone occur. Good exposures of thin-bedded fine-grained calcareous mudstone, limestone and radiolarian cherts overlying pillow basalts and gabbros of a presumed ophiolitic complex have been mapped near the Gustavo Diaz dam in this area.

Late Cretaceous-Tertiary volcanic and volcaniclastic rocks as well as granitic rocks of the Sinaloa Batholith are dominant in the region. Most of the region is underlain by dark green andesitic flows, tuffs and agglomerates. Minor volcaniclastic mudstone and sandstone and rhyolitic tuff also occur intercalated with the andesitic units. Capping the higher hills and mountains are distinctive light-colored, cliff-forming rhyolitic-rhyodacitic tuffs of the Upper Volcanic Series.

Regional structures are dominated by NW and NE trends. Major faults of these trends have been mapped regionally by the Servicio Geologico Mexicano and others and are often observable in satellite imagery. Less commonly, E-W striking structures have been mapped, notably in the Tayoltita-San Dimas district on the Sinaloa-Durango border where they host gold-silver mineralization (Horner and Enriquez, 1999; Conrad et al., 1992). Northwest-striking faults are generally normal faults of variable displacement but some larger faults of this set have documented displacements of >1km in southern Sinaloa (Henry, 1989). This fault set is believed to represent Basin and Range extension in north-western Mexico (McDowell and Clabaugh, 1981; Henry, 1989). East-northeast to northeast-striking faults of limited strikeslip displacement have been interpreted in some locations by Henry (1989) as representing “accommodation” zones between the NW-striking extensional faults and, as such, are also a component of Basin and Range tectonism.

Structural study in the Magistral area has shown strike-slip and oblique-slip movement on NW striking (mineralized) structures (Nelson, 2008). Similarly, Horner and Enriquez (1999) have documented lateral slip on mineralized structures in the Tayoltita district and have interpreted a strike slip corridor there that served as host for at least part of the mineralization. Conceivably, however, it is possible that strike-slip movement is a later overprint due to transform tectonics associated with opening of the Gulf of California in the Late Tertiary.



McEwen Mining NYSE MUX TSX	Project Name El Gallo Complex 43-101 Technical Report	El Gallo Complex Geological Map (Taken from Servicio Geologico Mexicano, 2002)	Date of Issue July 18, 2012

Figure 7-1: El Gallo Complex Geological Map

7.2 LOCAL GEOLOGY

7.2.1 El Gallo Local Geology

The El Gallo project lies within a region dominated by Late Cretaceous-Early Tertiary andesitic volcanic rocks of the Lower Volcanic Series. It is situated near the north-eastern margin of a large exposure of Sinaloa Batholith that outcrops between the town of El Gallo and Magistral and further to the southeast Figure 7-1.

Local rock units in the project area are described below in order from stratigraphically/ structurally lower to higher.

Cretaceous(?) Sedimentary Rocks. Calcareous sedimentary rocks occur on the periphery of the El Gallo project. Exposures of thin-bedded, weakly folded hornfels occur on the main road north of the project and broad exposures of hornfelsed/skarned sedimentary rocks occur on Calera Hill north of the project near the village of Agua Blanca. Outcrops of garnetized sedimentary rocks also occur 200m north of the deposit. A thick sequence of fine-grained black mudstone has been intersected at depth, south of the deposit. The sedimentary package underlies the volcanic rocks and have locally been observed to be cut by rhyolitic dikes. The age of these rocks is unknown but presumed to be Cretaceous based on their lithologic similarity to Cretaceous rocks in the region. Though calc-silicate alteration occurs locally, mineralization has not been found in these rocks.

Quartz Monzonite (QM). Intrusive rocks dominantly of quartz monzonitic composition underlie the rest of the local stratigraphy and constitutes "basement" rock throughout the principal part of the El Gallo deposit. This unit is similar to exposures of Sinaloa batholith in the region including exposures in the nearby village of El Gallo. It is variable in color, ranging from white to tan to mottled green-white. It is comprised dominantly of K-feldspar and lesser plagioclase with quartz usually intergrown with K-feldspar; true quartz phenocrysts are rare. Although commonly the rock is observed devoid of mafic minerals, locally biotite and hornblende (usually chloritized) are present in amounts up to ~10 percent. Near its contact with the overlying units, the QM commonly, but not always, displays disruption, brecciation and rough foliation. Locally, the QM is cut by dikes or sills of fine-grained andesite, porphyritic andesite, rhyolite or quartz feldpsar porphyry. Petrographic study reveals the presence of microbrecciation in some samples of QM and quartz feldspar porphryry dike. QM commonly displays weak propylitic alteration (chlorite and epidote). Though economic mineralization has not been encountered within the QM, one occurrence of sphalerite associated with brecciated QM near a rhyolite dike has been observed.

In the project area the upper contact of the QM is sub horizontal or gently east-dipping and usually underlies all other units in the project area, although drilling south of the deposit has not encountered QM basement. Contacts with the overlying units are commonly marked by a multi-lithic breccia, locally up to a few tens of meters thick, that has been interpreted as either tectonic or sedimentary in origin.

Tuff/Volcaniclastic Sediment Package

Tuffaceous rocks, locally accompanied by volcaniclastic sedimentary rocks, occur below the andesite package. The tuffaceous rocks are andesitic (ANDTUFF) and rhyolitic (RHY) in composition. The tuffs range in color from light grey-green to white and are generally soft, less competent rocks with a grainy texture, locally exhibiting eutaxitic textures. Commonly they contain lithic fragments.

Very fine-grained light green to beige volcaniclastic(?) sedimentary rocks locally are locally present intercalated with the tuff package. They are usually fairly strongly brecciated and can occur interbedded with the multi-lithic breccia which often lies immediately above the QM basement. A probable interpretation is that this package represents basal deposition in small quiet-water sub-basins in a volcano-sedimentary basin.

Rhyolite Porphyry (RHYP). A white rhyolite porphyry outcrops southwest of the main resource area, in a northwest trending outcrop pattern. This has been interpreted as a shallow-level intrusive. Where mapped, its margins are fault contacts with the andesite package.

White to pinkish or orange-pink rhyolite dikes have been observed cutting all lithologies and so are the youngest unit. These appear to be more abundant in the vicinity of the rhyolite porphyry intrusive.

None of the rhyolite units are significant hosts to mineralization although minor silver occurrences have been encountered on surface in the rhyolite porphyry intrusive.

Quartz Feldspar Porphyry (QFP). Dikes and intrusive bodies of tan-brown porphyry of quartz monzonitic composition cut all other units except the younger rhyolite dikes. The rock is porphyritic with sub equal amounts of plagioclase and K-feldspar phenocrysts and lesser phenocrysts of quartz and biotite. Its main occurrence is as an irregular intrusive body with a general E-W trend in the eastern portion of the main resource area. It extends to the west from there with laccolithic or sill-like geometry. Its composition is similar to the QM basement and maybe co-genetic with it but is clearly younger as it has been observed cutting the basement rocks.

A similar porphyry that contains minor to no quartz phenocrysts has been observed and termed FP. This may be a separate intrusive unit or possibly a variant of QFP.

During initial drilling, it was thought that the QFP was barren and post-mineral. Subsequently, mineralization was encountered within it, most notably in the eastern portion of the main zone. Here, lengthy intercepts of strong silver mineralization have been intersected in brecciated QFP. Elsewhere, mineralization tends to occur along sill-like contacts of the QFP.

Multi-lithic Breccia. Irregular bodies of breccia with mixed clasts of various lithology occur throughout the deposit. Generally, the breccias consist of subangular fragments supported by a matrix of pulverized rock(?). Locally, the matrix is a distinctive red (hematitic) clay. Fragment compositions vary locally and include every rock type in the section. Fragment lithology is often dominated by nearby units although these breccias can contain fragments from more distal units.

Clasts of garnetized rock have been observed with a probable origin deeper in the stratigraphic section. The multi-lithic breccias have a complex history. Altered (propylitized and/or silicified), quartz veined clasts occur in the breccias. Very commonly, re-brecciated clasts are present. At least three stages of brecciation have been observed in the multi-lithic breccias. Locally, these breccias have a quartz ± calcite matrix where the hydrothermal event has been superimposed on the breccia.

The multi-lithic breccias are a common host to silver mineralization, particularly the red-matrix breccias and where silicification and/or quartz stockwork veining has been superposed on them.

As mentioned above, a multi-lithic breccia occurs above the QM basement. This commonly has a dark brown or black muddy matrix and locally exhibits bedding(?) foliation, suggesting a sedimentary origin. This unit is not a host to mineralization. The other multi-lithic breccias occur in irregular geometries that may be less than 1 meter in thickness to tens of meters thick. The most abundant of these breccias encountered to date occurs along the margins of the QFP intrusive in the eastern portion of the deposit. They are currently interpreted as having either a tectonic and/or explosive (phreatic, phreatomagmatic) origin.

Andesite Package

The dominant rock type at El Gallo and principal host rock for El Gallo mineralization is andesite (AND). A 150-m thick sequence dominated by dark green andesitic flows and intrusives overlies the Tuff package throughout the project area. Several different textural variations are present. Internal stratigraphy of the andesite package appears to be complex and attempts to correlate subunits between sections (or between drill holes on section) are often difficult. All units are generally propylitically altered to varying degrees ranging from exhibiting a greenish hue to the occurrence of abundant clots, veins and pervasive epidote. All of these units can be strongly brecciated, particularly near their contacts.

Aphanitic Andesite (AAND). Very fine grained, massive andesitic volcanic rock occurs intermittently throughout andesite package. It is generally less common than other textural variations of andesite.

Andesite Porphyry (ANDP). Andesite with white to tan plagioclase>>Kspar phenocrysts in an aphanitic or fine-grained phaneritic groundmass. The most dominant variety of porphyritic andesite has uniformly sized equant phenocrysts in a fine-grained phaneritic groundmass and has been interpreted as a hypabyssal intrusive, probably co-genetic with the rest of the andesitic package. This unit is usually fairly strongly epidotized giving the rock a lime-green color. Although correlating between sections can be difficult, the overall geometry of the ANDP is mostly sub horizontal lenses that occur in multiple horizons. These are interpreted as laccolithic or sill-like intrusive bodies, often with no obvious roots on a given cross-section. The ANDP is the single most abundant host to silver mineralization at El Gallo, often along and near its brecciated margins.

Turkey Track Andesite (TTAND). Field term given to andesite with distinctive lathy porhyritic texture defined by phenocrysts of coarse-grained plagioclase feldspar laths in a dark grey-green aphanitic matrix. The grain size of this unit varies considerably, from fine-grained porphyritic with aphanitic groundmass to coarse porhyritic with phaneritic groundmass. The latter textural variation suggests it is possibly intrusive. It often occurs as a sub horizontal unit near the top of the andesite package and is interbedded (or intruded by) ANDP. Locally, centimeter-scale or larger inclusions of TTAND occur within ANDP indicating it's relatively older age. TTAND is a host to mineralization, usually along contacts.

El Gallo Structural Geology

The dominant structural pattern in the El Gallo deposit area consists of NW- and ENE-striking structures. These are evident in the trend of mineralization and in field observations. The overall trend of the El Gallo mineral deposit is ENE and is presumably controlled by a structure(s) of this strike although to date no clear, single major fault has been delineated. The most readily observable structures in the field are NW-striking and many appear to offset silicified zones. The later age of these NW-striking faults is consistent with the regional structural setting. It should be mentioned that some mineralization at El Gallo occurs within NW-trending zones which seem to be controlled by structures of this set. Although minor post-mineral offsets of several meters are noted on surface and on cross-section, no post-mineral structures of major offset have been delineated. As previously mentioned, mineralized zones commonly exhibit pre-, syn- and post-mineral brecciation which is indicative of long-lived tectonic or explosive activity.

7.2.2 Palmarito Local Geology

The dominant rock type in the Palmarito project area is a dark grey to purple andesite with texture that varies from aphanitic to porphyritic with plagioclase phenocrysts. A very siliceous andesitic (rhyolitic?) tuff is also present. This package is overlain (intruded?) by a quartz-diorite porphyry, generally presenting a brown hematitic groundmass. The contact between this porphyry and the underlying andesite package is commonly a tectonized breccia. Physiographically, the Palmarito area is comprised by a topographic high which was thought to be underlain by a rhyolite flow dome. It is not clear if this very siliceous rock represents a hypabyssal intrusive or the siliceous andesitic (rhyolitic?) tuff.

7.2.3 Magistral Local Geology

As at El Gallo, the local geology in the Magistral mine area is dominated by the same Late Cretaceous- Early Tertiary Lower Volcanic Series rocks of dominantly andesitic composition. The andesite package is intruded by a phaneritic granodiorite to quartz-monzonite body thought to represent the Sinaloa Batholith. As such, it would be equivalent to that which occurs at El Gallo (QM unit). In addition, a fine grained monzodiorite intrusive of unknown age is present in the southern portion of the magistral area. Dikes of rhyolitic composition are a minor component of the local geology.

At Magistral, the andesitic package has been divided into four units based on textural variation: Andesite, Porphyritic andesite, Agglomeratic andesite, and "Turkey Track" andesite. With the exception of the texturally distinctive Turkey Track andesite, exact correlation of individual units between the El Gallo and Magistral projects is difficult.

Andesite. Massive to aphanitic dark green andesite. The color is due to weak to moderate propylitic alteration which is ubiquitous in the district.

Porphyritic andesite. Comprised of plagioclase phenocrysts in fine grained green groundmass. This unit can be of similar appearance to ANDP at El Gallo and may represent a comparable intrusive. Andesite porphyry has been observed with subvertical contacts in the wall of the Samaniego pit.

Agglomeratic Andesite. Green andesite with rounded to subrounded clasts of various volcanic rocks, dominantly andesite. This unit can be on the order of tens of meters thick and generally overlies the andesites.

Turkey Track Andesite. This is the same unit as occurs at El Gallo. At Magistral it occurs as a thick sequence underlying the andesite and agglomeratic andesite. In the deep La Prieta zone at Samaniego, the Turkey Track andesite forms the floor of the flat-lying mineralized zone.

Magistral Structural Geology

Two dominant structural trends are present in the Magistral area: northwest and northeast. Structures of both of these structural sets are host to gold mineralization. The northwest-striking structures dip moderately to the southwest. The northeast-striking fault set dips steeply southeast to vertical (Sagrado Corazón/Lupita area). Fault kinematic data suggest a dominance of oblique-slip reverse faulting (Nelson, 2008). Dip-slip normal faults are also present. There is an abundance of strike-slip faults, although some of this movement may be post-mineral, related to Late Tertiary regional transform tectonics. Local low dip angles suggest thrust faulting and this is consistent with the abundance of reverse faults. The deep low-angle La Prieta zone may have formed in a dilational zone along a thrust fault. Mineralized veins are often brecciated, indicating some post (and syn-) mineral structural movement.

7.2.4 Other Resource Areas

Chapotillo: Local geology is dominated by an intercalated package of green-grey porphyritic andesite and fragmental-textured agglomeratic andesite. Rocks immediately adjacent to the mineralized zone at Chapotillo consist of porphyritic andesite overlying the agglomeratic andesite with the mineralized zone sometimes occurring at the contact. Minor amounts of quartz-feldspar porphyry similar to that seen at El Gallo are present locally, usually spatially associated with mineralization. The principal structural features are the NW-striking, NE-dipping mineralized vein and a few steeply-dipping faults of minor offset.

Mina Grande & Haciendita A mixed package of andesite, aphanitic andesite and agglomeratic andesite comprise the local geology. As at Chapotillo, minor amounts of quartz-feldspar porphyry have been observed. Principal structural features are the series of stacked NW-striking, shallowly NE-dipping stockwork and breccia zones which comprise the mineralization. A northeast trending structural pattern is also present, manifested by silicified trends and some mineralized veins.

San Dimas: Host rocks are predominantly grey andesite with texture ranging from aphanitic to porphyritic and andesitic tuff. A phaneritic textured hornblende monzonite is also present, usually below the mineralized zone. The above units are locally intruded by a fine-grained porphyritic diorite with phenocrysts of plagioclase, biotite and hornblende. Thin dikes of dark green to black aphanitic andesite occur spatially associated with the mineralized structure. Quartz-monzonite intrusive similar to the basement rock at El Gallo underlies the San Dimas area.

Los Mautos: Similar host rocks to Chapotillo and Mina Grande/Haciendita occur at Los Mautos and are dominated by agglomeratic andesite and andesitic tuffs.

San Josel del Alamo: Host rocks are predominantly porphyritic andesite. The principal structural feature is the N-S to N30W striking mineralized structure.

Las Milpas: Host rocks are dominated by andesite with porphyritic texture and intercalated tuffs of dacitic composition.

CSX: The CSX area is characterized by the many of the same lithologic units as are present at El Gallo. Apparently, the units present at CSX are dominantly from the lower part of the stratigraphy comprising andesite (aphanitic and porphyritic), andesitic tuffs and volcaniclastic sediments. Rhyolitic tuff occurs in minor amounts. Also present are dikes of QFP, sometimes spatially associated with mineralization. The area is bordered on the north and south by faults that strike roughly E-W.

7.3 MINERALIZATION

7.3.1 El Gallo

Mineralization is hosted in siliceous breccia zones and quartz stockwork zones. These zones often occur at lithologic contacts, particularly contacts of the porphyry intrusions (ANDP, QFP). Contacts are usually brecciated and often have adjacent multi-lithic breccia zones. This brecciation is thought to be pre-, syn-, and post-mineral with mineralizing hydrothermal fluids locally using these zones as a conduit and host. At least one other brecciation event occurred after mineralization as evidenced by many of the breccias containing mineralized clasts. Zones of quartz stockwork veining usually occur adjacent to these breccias.

Mineral zones commonly have tabular geometry oriented sub horizontally or gently dipping (20 to 30º) both to the north and to the south and often occur stacked. Often, these zones reflect control by sill-like contacts of ANDP or QFP but may also reflect shallow-dipping structures. Tabular zones vary in width up to about 165 ft (50 m) thick but average about 50 ft (15 m). Their lateral extent in a north-south sense (across strike) is also variable but is often on the order of 655 ft (200 m). An at-or near-surface sub-horizontal mineralized zone averaging about 50 ft (15 m) thick is dominant in many portions of the resource. This near-surface mineralization constitutes a significant portion of the resource. In the central part of the resource, this near-surface mineralization is continuous for up to 1,300 ft (400m) north-south. Throughout the deposit, mineral zone geometry is locally irregular probably reflecting control by higher angle intrusive contacts or irregularly-shaped pre-existing breccia zones.

Overall dimensions of the El Gallo resource measures approximately 1075m x 940m.

Propylitic alteration is the most widespread alteration type in and around El Gallo. Almost all rocks within the resource area exhibit at least weak chloritization. Epidote is generally ubiquitous but varies greatly in intensity from minor veinlets or partial phenocryst replacement to complete phenocryst replacement and abundant masses or patches. Sericite occurs in minor to moderate amounts, generally replacing plagioclase phenocrysts. The dominant alteration type directly associated with mineralization is silicification in the form of breccia cement, pervasively silicified breccia clasts and, locally, pervasively silicified wallrock and quartz stockwork veining. Stockwork veining occurs as veins and veinlets up to a few centimeters thick usually with no preferred orientation. No through-going, thick quartz veins have been identified. Multiple generations of quartz are present and veins and veinlets are often banded, generally with milky white quartz margins and clearer or amethystine quartz centers. Adularia usually accompanies quartz but in lesser amounts, usually identified in thin-section.

Multiple stages of silver deposition are present. Mineralization most often occurs in white or grey quartz and, although paragenetic stages have not yet been fully defined, mineralization has been observed in relatively early stage veins and as later veinlets cutting amethyst. Mineralization has been observed both restricted to breccia clasts and in the matrix of siliceous-matrix breccias. Figure 7-2 to Figure 7-4 illustrate some of the high grade silver mineralization encountered in El Gallo core.

Silver occurs as acanthite with lesser native silver (and possibly silver-sulfosalts) associated with variable pyrite, sphalerite and galena commonly accompanied by minor chalcopyrite. In mineralized zones in core, silver mineralization is usually observed as dark grey metallic pencil-point size grains of acanthite intergrown with sphalerite, ± galena ± chalcopyrite. In high-grade intervals, acanthite can occur in clots up to 0.8 to 1.2 inches (2 to 3 cm), usually intergrown with galena. Pyrite is present more or less throughout propylitically altered rocks but tends to be stronger near mineralized zones, though this is not always the case. Besides pyrite, sphalerite is the most common sulfide mineral associated with silver mineralization. Sphalerite is light to honey brown color, reflecting a weak to moderate iron content. Petrographic study shows sphalerite and pyrite to be earlier than chalcopyrite, galena and silver minerals. Another common opaque phase associated with mineralization is very fine-grained hematite which occurs late in the paragenesis. Hematite is very often observed as red wisps or vein selvages at all depths throughout the deposit.

El Gallo is a silver-dominant system with low gold values. However, minor local zones of high grade gold (in the 1 opt range) occur associated with strong silver values. These zones are quite restricted in size and do not contribute significantly to the overall gold content of the deposit. It is not known if the high-grade gold reflects a separate mineralizing stage. A separate mineralized zone called the Gold Zone located approximately 100 ft. (300m) southeast of the eastern portion of the El Gallo deposit hosts gold mineralization with no associated silver. Alteration here is dissimilar to the El Gallo deposit, comprising weak to moderate argillization and bleaching. This zone is of insignificant size, consisting of a small area of narrow, near-surface mineralization but can host high-grade gold (up to 180 oz/t in rock chip samples).

Interestingly, the lower mineralized horizon from the eastern portion of the El Gallo Main Zone has been intercepted at depth in the Gold Zone area.

Reflecting the ore mineralogy, elements most strongly associated with El Gallo mineralization are Zn>Pb>Cu. Overall, the mineralization contains <1 percent concentration of these elements. There is a general correlation of base metal values with silver values. For samples that contain >1,000 gpt silver, zinc averages 1.5 percent, lead averages 0.7 percent. Elements typically associated with shallow-level epithermal deposits are generally not significantly elevated in El Gallo mineralization. Arsenic is typically in the tens to low hundreds of ppm, antimony in the low to mid tens of ppm (although can be in the hundreds of ppm in high silver zones, reflecting the probable presence of silver sulfosalts). The bulk of El Gallo geochemical data do not include mercury but analyses done in conjunction with metallurgical testing show mercury concentrations below limits of detection.

7.3.2 Palmarito

The principal mineralized zone at Palmarito is siliceous hydrothermal breccia and quartz stockwork which forms a zone that "wraps" around the siliceous rocks of the previously mentioned topographic high, giving a horseshoe-shape in map view. Because of this morphology, the strike of the mineralized zone varies from N-S to almost E-W and dips from 40-50˚ to the east and to the north. This zone can achieve widths of 65 ft. (~20m). Thinner 1-30 ft. (1-10m) parallel structures occur locally in the footwall of the main zone. The principal zone consists of subrounded andesite fragments, commonly strongly silicified to white quartz which often obliterates primary textures. Cockade texture is common. In some parts of the deposit, silicification is less intense and alteration is dominated by pervasive calcite. Locally, amythestine quartz and fine-grained specular hematite are observed. Mineralization occurs either as oxide or as sphalerite with lesser galena and acanthite. Base metal values can commonly range up to several percent combined lead and zinc. Petrographic studies indicate that acanthite is the principal silver-bearing mineral. Lesser native silver and chlorargyrite (AgCl) have also been observed, as have been minor copper-bearing phases. Mineralization is commonly also associated with iron-oxides. The tectonic breccia mentioned above also hosts silver mineralization and is dominated by soft red hematitic clay.

Strong argillization and oxidation occurs near surface and locally in structural zones. Generally, surface oxidation reaches depths of 60 to 70 ft (20 to 22 meters). The degree of supergene leaching is unknown.

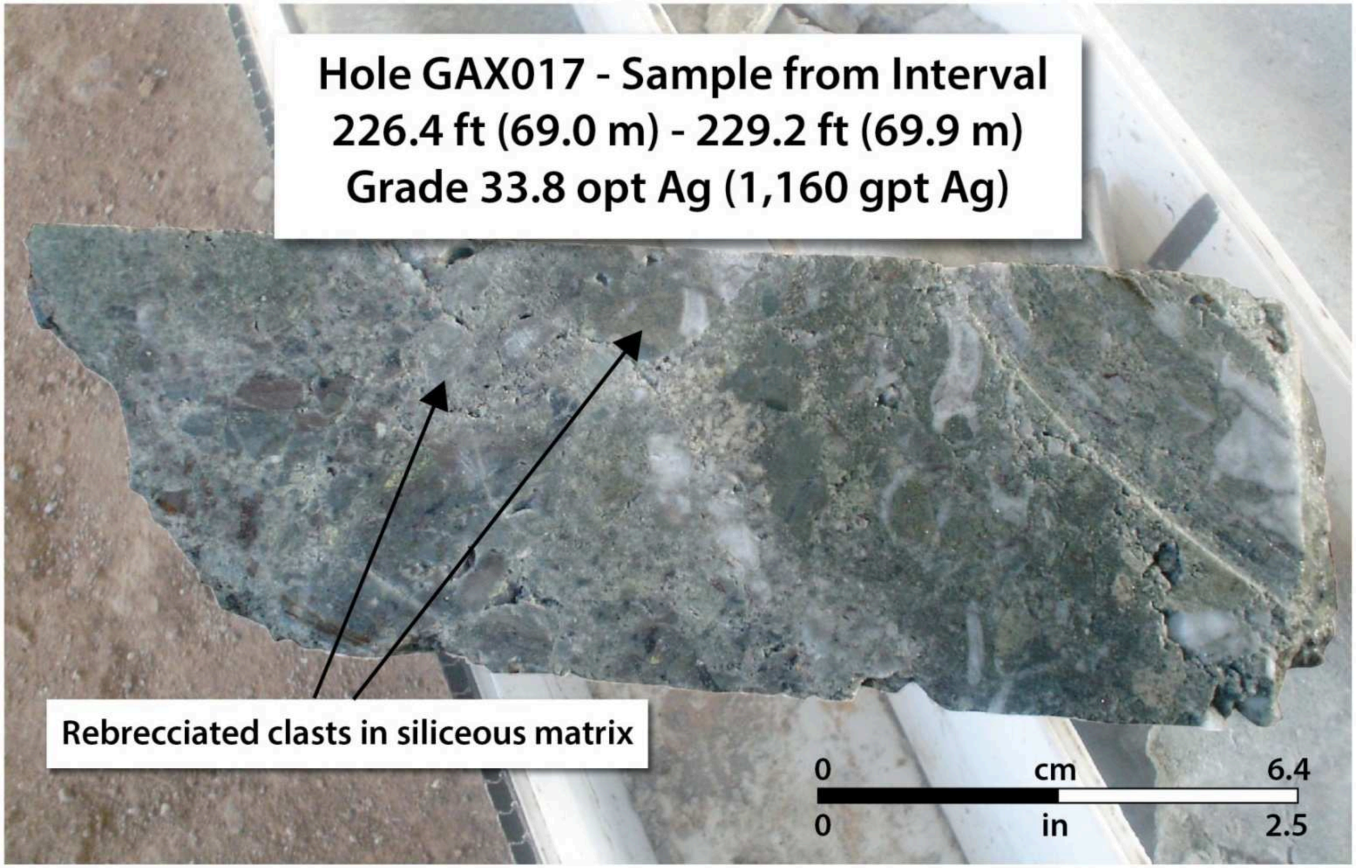
Silver grades within the mineralized zone range from about 0.30 opt to +30 opt (10 gpt to 1,025 gpt). The mineralization is silver-dominant, with gold grades usually less than 0.02 opt (0.5 gpt) and rarely exceeding 0.03 opt (1 gpt). In the mineralized zone silver-gold ratios are generally >100 and are commonly several thousand. Silver mineralogy is predominantly argentite (Ag_2S) and lesser native silver. Chlorargyrite (AgCl) occurs locally in minor amounts. Other sulfides present include pyrite, sphalerite, galena and chalcopyrite. Total sulfide content is generally less than 1 percent. Locally, however, lead and zinc concentrations are in excess of 1 percent, particularly in areas of higher silver grade.

7.3.3 Magistral

Gold mineralization in the Magistral mine area occurs along two distinct structural trends. A northwest trend hosts the San Rafael and Samaniego deposits and it is the most important in terms of contained ounces of gold. The second structural trend is northeast-striking and includes the Sagrado Corazón and Lupita ore deposits. Along these structural trends the mineralization is located within numerous substructures that may be parallel, oblique or even perpendicular to the principal trends. These structural trends consist of one or more individual structural zones of sheared and brecciated rock resulting from faulting of generally limited displacement.

Within these structures the mineralization occurs as pods that pinch and swell both along strike and down dip. These pods may reach a strike length of up to 325 ft (100 m) and widths of up to 100 ft (30 m). Contacts between ore and barren rocks are typically sharp and well defined, and they often correspond with faults that show minor post-mineral movement. These structures have been shown to flatten at depth in some instances, as is the case with the La Prieta vein at the southern (down dip) extension of the Samaniego deposit.

Mineralization among the various deposits of the Magistral area is generally very similar, with the individual structural zones consisting of stockwork, breccia, and locally quartz vein mineralization occurring within propylitically altered volcanic rocks. The main alteration assemblage consists of quartzchlorite/ biotite-hematite, and minor sulphides (mostly pyrite and chalcopyrite). Quartz with minor calcite open-space filling of stockworks and breccias is ubiquitous. Typical mineralization consists of banded and brecciated quartz vein material with well-formed colliform bands of prismatic quartz, alternating with dark green chlorite and earthy red hematite bands. Wallrock in proximity to the mineralized structure is pervasively altered to red hematite-specularite-chlorite/biotite, with a sequence of veining including finely banded quartz-chlorite-hematite veins which are locally cut by hematite-rich veins. Potassium feldspar alteration has been observed in thin-section. Silicification of the volcanic host rock is variable and limited to the structural zones. The presence of biotite and K-feldspar, the lack of clay minerals, and the overprint of biotite by chlorite indicate that the mineralization formed relatively deep in the epithermal system. Petrographic study and field evidence indicate that gold typically occurs as micron-sized particles of native gold and electrum in quartz. Petrographic study and field evidence indicate that gold typically occurs as micron-sized particles of native gold and electrum in quartz. Petrographic evidence indicates that the gold is not complexed with or in sulfide minerals. Pyrite averages less than one percent of the vein volume. Chalcopyrite is present in minor to moderate amounts, but locally has been found in excess of one percent. Copper grades can reach several percent locally. Silver/gold ratios are highly variable and range from 130:1 in mineral petrographic analysis, while in production blast hole sampling it reaches a ratio of 4:1. It appears that most silver minerals are associated with the sulfide-rich veins. The upper portions of one of the mineralized structures in the Samaniego zone have a distinctly different mineralized character, at least locally, consisting of a quartz-cemented breccia with up to several percent chalcopyrite, sphalerite, and galena. Overall, because of the strong association of gold with copper (in the form of chalcopyrite) and iron (red hematite and specularite), the Magistral deposits can be considered to be a variety of the IOCG (iron-oxide-copper-gold) deposit type.



	Project Name		Date of Issue
McEwen Mining NYSE MUX TSX	El Gallo Complex 43-101 Technical Report	El Gallo High-Grade Core Samples April 2009 - Multi-stage Breccia with Siliceous Matrix	July 18, 2012

Figure 7-2: El Gallo High-Grade Core Samples April 2009 – Multi-stage Breccia with Siliceous Matrix

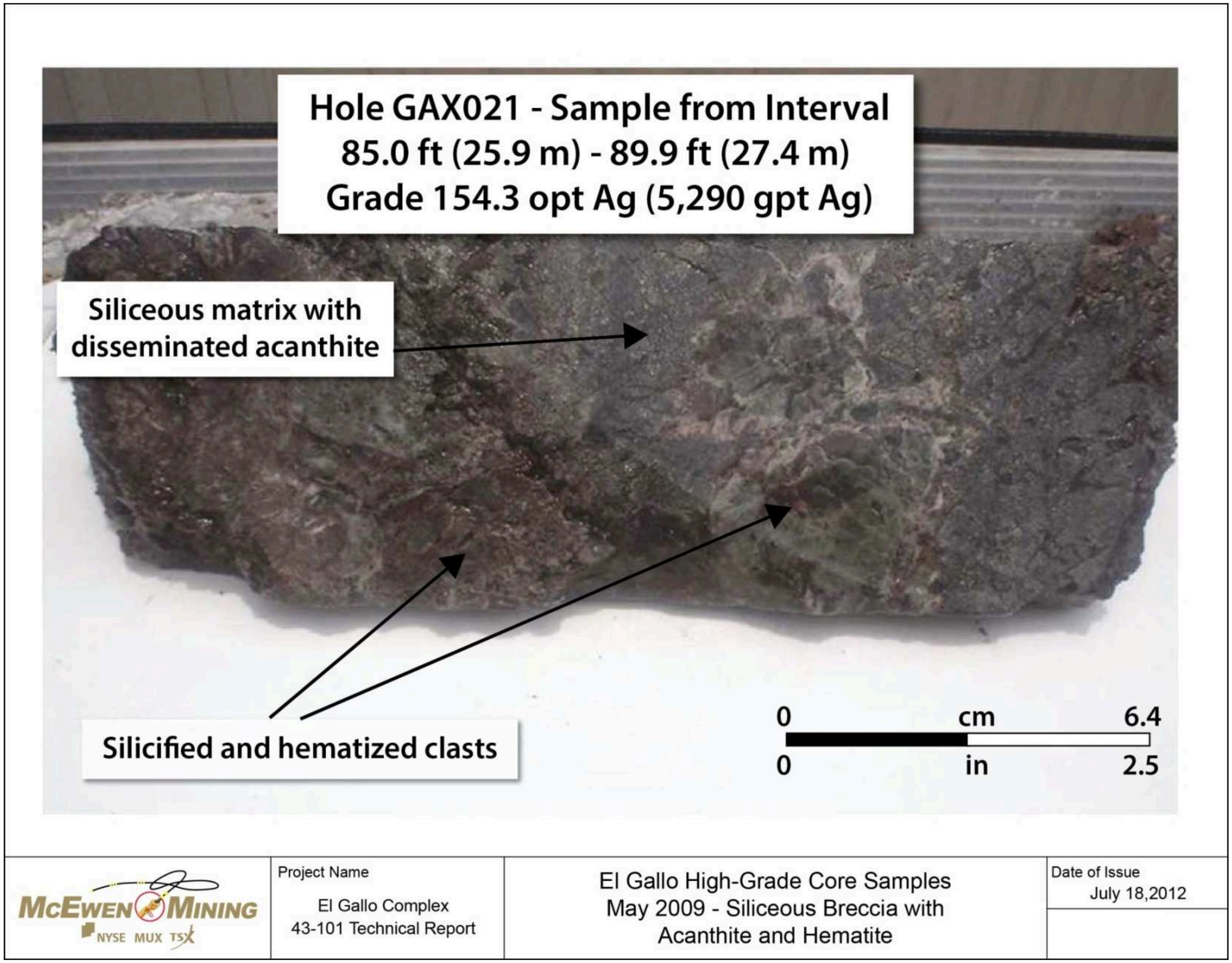
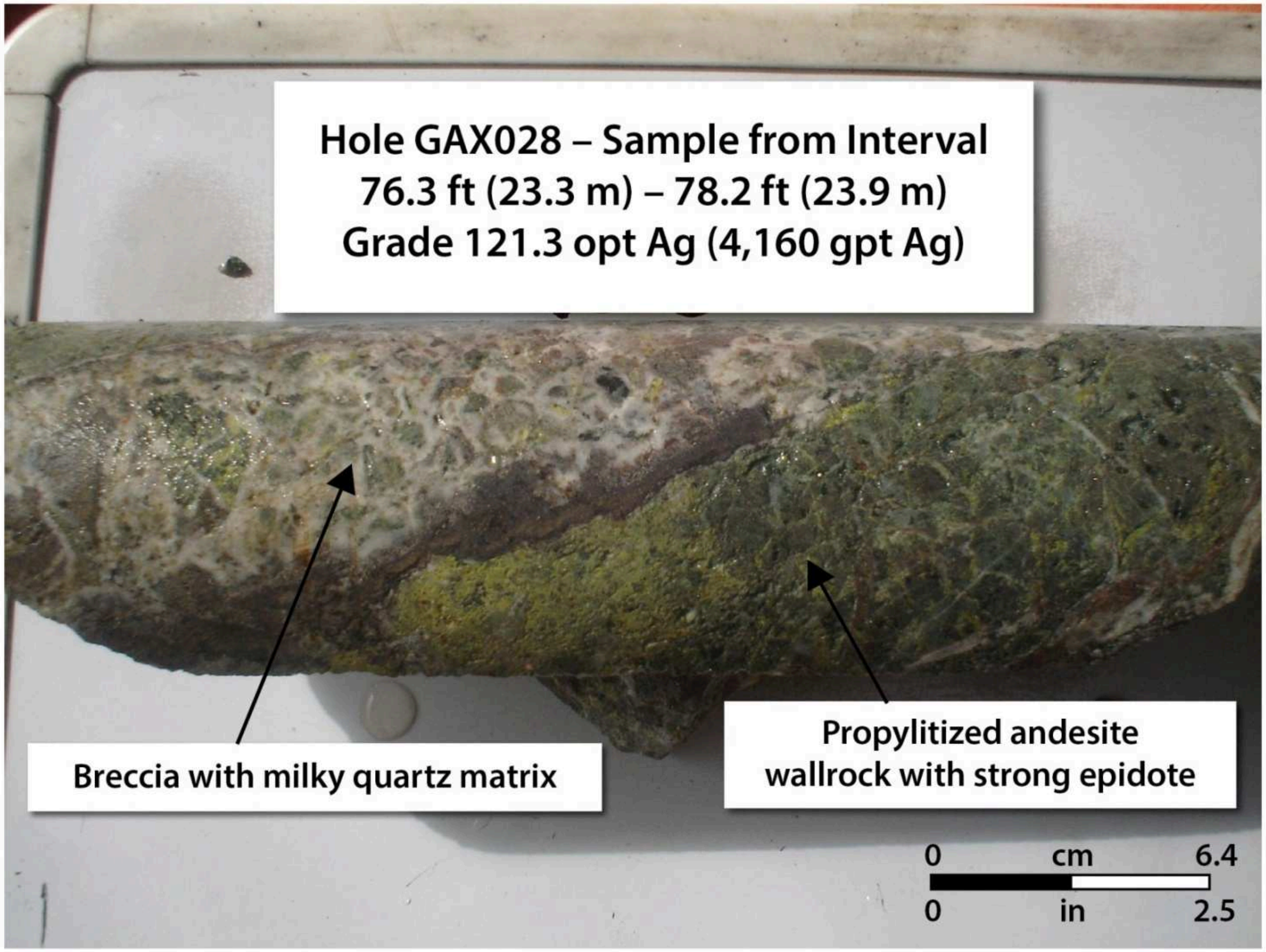


Figure 7-3: El Gallo High-Grade Core Samples



	Project Name		Date of Issue
McEwen Mining NYSE MUX TSX	El Gallo Complex 43-101 Technical Report	El Gallo High-Grade Core Samples July 2009 - Quartz Breccia Vein Cutting Andesite with Strong Propylitic Alteration	July 18, 2012

Figure 7-4: El Gallo High-Grade Core Samples July 2009 – Quartz Breccia Vein Cutting Andesite with Strong Propylitic Alteration

In the structural zones, surface oxidation has variably transformed the original sulfides into oxides at variable depths, ranging from a few meters to many tens of meters below surface. Minor copper mineralization was variably leached from shallow depths and was locally re-precipitated at depth as minor chalcocite and covellite.

Magistral consists of four main gold deposits: San Rafael, Samaniego, Sagrado Corazón and Lupita. Past open pit production has come from two separate pits on the San Rafael and Samaniego deposits. Currently mining has restarted (December 2011) on Samaniego and Sagrado Corazón.

San Rafael: Gold mineralization occurs on an east-west main structure dipping 45 degrees to the south, with several other minor zones developed. This mineralization has largely been mined out. The main zone tended to occur at or near a contact between underlying andesite flows and tuffs (footwall volcanics) and overlying andesitic agglomerate (hanging-wall volcanics) that dip at a moderate angle to the southwest. The San Rafael deposit was about 1,315 ft (400 m) along strike and gradually weakens to the east beyond the intersection with the southeast-striking La Vaca zone. The San Rafael zone extended approximately 820 ft (250 m) down dip where, below an elevation of 1,070 ft (325 m), it was no longer significantly mineralized. The mined out portion of the deposit ranged from a few meters to several tens of meters in thickness. The San Rafael deposit was best developed at and to the west of the structural intersection with the La Vaca zone.

Samaniego: Consists of a complex north- to northwest-trending structural system that dips about 50 degrees to the southwest and has a strike extent of about 1,970 ft (600 m). Samaniego mineralization is continuous for up to nearly 1,315 ft (400 m) down dip. Four main mineralized vein zones, Upper Samaniego Hill, La Prieta, Lower Samaniego Hill, and High Angle occur within the Samaniego deposit. The deposit appears to be connected structurally to the south to the San Rafael deposits, though mineralization is weakly developed in the area between the two pits. The mineralized structures tend to occur at or above the contact between underlying andesite flows and tuffs and overlying agglomeratic andesite. Individual zones can merge with each other or eventually pinch out laterally. The veins range from a few meters to a few tens of meters in thickness. To the northwest, the Samaniego structural trend is truncated by an east-west fault, with the possible structural offset of the Samaniego trend occurring to the east. Along the down dip extent of the La Prieta vein within the Samaniego deposit, the structure flattens and swells to roughly 100 ft (30 m) thick. Gold grades in this pod, which has an aerial extent of approximately 160 x 330 ft (50 x 100 m), average roughly 0.1 oz/t (4 g/t) Au, higher than average for the Magistral deposits.

Sagrado Corazón-Central-Lupita: Is a northeast-striking mineralized trend on the south end of the Magistral mine area. It consists of one main structural zone that is laterally continuous over a distance in excess of 5,900 ft (1,800 m), from Sagrado Corazón in the southwest through Central to Lupita in the northeast. These deposits remain undeveloped, except for pre-stripping at Sagrado Corazón. This zone has a steep dip of approximately 85 degrees to the southeast. The structural trend occurs at or near the irregular contact between granite/granodiorite to the northwest and volcanic tuffs and flows to the southeast. Locally along the trend, the mineralized zone splits into one or two sub parallel zones. Strong silicification associated with the mineralization is resistant to erosion and because of this the mineralized zone forms a prominent ridge. The mineralization gradually weakens to the southwest and northeast along the trend until it is no longer traceable. On the southwest end of the trend (Sagrado Corazón), the steeply dipping mineralized zone is generally a few tens of meters thick and extends down dip in excess of 410 ft (125 m) where it weakens but is not completely drilled off in some locations. In the Central part of the trend, mineralization is weak and generally is 3 ft (1 m) to 33 ft (10 m) thick. It extends down dip in excess of 330 ft (100 m), where it is weak but not completely drilled off. On the northeast (Lupita) part of the trend, the steeply dipping mineralization is more complex, consisting of one to three sub parallel zones, with a combined thickness generally of a few tens of meters. Mineralization extends down dip in excess of 330 ft (100 m), where it appears open.

7.3.4 Other Resource Areas

Chapotillo: Au-Ag mineralization occurs in a hydrothermal breccias associated with footwall quartz stockwork and pervasive silicification. This zone strikes N45W and generally dips 30-45˚ to the northeast, dips up to 60˚ occur at depth. Width of the mineralized zone varies from 3 to 20m. Mineralization is associated with white-grey quartz ± calcite and pervasive silicification. Galena and sphalerite are associated minerals.

Mina Grande & Haciendita: At Mina Grande the principal mineralized structure (Veta Arturo, Los Registros) strikes N40-45W and dips 45-50˚ NE. Mineralized widths on this structure are up to 14m. Northeast striking mineralized structures (Reyna de Oro, Nochebuena) trend N40E and dip roughly 60˚ SE. These structures are narrower than the NW-striking structures, generally achieving widths slightly greater than 1m, but can contain high-grade gold. Mineralization comprises strong hydrothermal breccia development cemented by white to grey quartz. Quartz stockwork zones are developed in the hanging wall and footwall of the zones at Mina Grande; at Haciendita stockwork generally occurs in the hangingwall. Mineralization is accompanied by galena, sphalerite (both high and low iron varieties), traces of acanthite and copper oxide minerals. Mineralization also occurs in the shallow oxidized portions of the deposits associated with iron oxides.

San Dimas: Polymetallic mineralization occurs primarily in one fault-vein which strikes N30-40W and dips 40-55˚ to the southwest. This zone has a known strike extent of about 250m with widths of about 5-8m on surface and up to 18m locally at depth. Mineralization is characterized by quartz veinlets and stockwork and strong fracturing/brecciation. Abundant chalcopyrite, galena and sphalerite are present, commonly as massive or semi-massive concentrations. Occasionally oxides of the above are present. Concentrations of up to several percent Cu or Pb-Zn occur; Au and Ag values are variable within the zone. A secondary mineralized zone occurs above the principal zone and is characterized by generally lower precious metal values.

Los Mautos: Silver mineralization comprises weak hydrothermal breccia with incipient quartz stockwork development in the hangingwall and footwall. The mineralized zone strikes N45W, dipping 55˚NE and varies in width from 1 to 12m. Sulfide minerals occur but in minor amounts and consist of galena and sphalerite.

San Josel del Alamo: Generally a single narrow gold-mineralized zone is present which strikes N-S to N30W and dips 65˚ to the west. Widths are generally around 1m, although the zone attains a maximum thickness of 12m locally. Mineralization is characterized by weak development of hydrothermal breccias with grey quartz cement. Abundant cavities filled with iron oxide (hematite-jarosite) are present. Massive patches of galena, sphalerite or specularite occur locally. Intense red hematite and disseminated oxidized pyrite are also associated with mineralization.

Las Milpas: Silver mineralization occurs as a vein-breccia structure that varies in strike from N-S to N30W. In the immediate resource area mineralization strikes N-S and dips steeply to the west. The breccias varies from 2 to 4m in thickness with partial quartz stockwork development which can be up to 12m thick. Acanthite is the principal silver mineral and is accompanied by galena and minor chalcopyrite and malachite. Leached boxwork texture is common with precious metals presumably hosted in iron oxide minerals. Las Milpas occurs near the southern end of a N-S trend of mineral occurrences that has been referred to as the Rocio Trend.

CSX: Silver mineralization occurs in a near surface low-angle zone that strikes roughly E-W and dips to the south at 20-25˚. Thickness of this zone is variable ranging from 3m to as much as 25m. Mineralization is characterized by quartz stockwork and breccias associated with silicification. As much of the mineralization occurs at or near surface, it is usually oxide; Ag, Pb, Zn sulfides are seen below the oxide zone. Apart from the principal low-angle zone, other mineralization occurs in less well-defined structures. Some low grade silver mineralization appears to be localized near the E-W fault on the north end of the deposit.

8 DEPOSIT TYPES

The resource areas within the El Gallo Complex can all be classified as low- to intermediate-sulfidation epithermal precious metals deposits. Deposits of this type are common throughout the world and are very common throughout the Sierra Madre province of Mexico. The different deposits in the El Gallo Complex range from being silver dominate (El Gallo, Palmarito, Los Mautos, Las Milpas and CSX) gold dominate (Magistral, Haciendita and San Jose del Alamo) and a mixture between the two (San Dimas, Chapotillo, Mine Grande). Although the resource areas differ from each other in terms of mineralogy and morphology, all deposits described here are associated with quartz stockwork and quartz breccia as the dominant alteration types.

El Gallo: Represents a low-to-medium sulfidation silver-dominant epithermal precious metal deposit. Silver mineralization is associated with minor gold as well as lead and zinc. Deposits of this type are common throughout the world and very common in the Sierra Madre province of Mexico. Certain features of the El Gallo deposit distinguish it from many other typical Mexican deposits of this type. Mineralization at El Gallo is not hosted in through-going fault veins as is fairly typical of many epithermal gold-silver deposits. El Gallo mineralization is hosted in breccias and quartz stockwork zones associated with hypabyssal intrusions and pre-existing breccia zones. Often, the mineralized zones are shallowly-dipping, controlled by sill-like intrusive contacts and other lithologic contacts or subhorizontal structures.

Palmarito: Is a low-sulfidation, epithermal silver deposit. Silver mineralization is accompanied by minor gold as well as lead and zinc. Mineralization is hosted in strongly silicified breccias and quartz stockwork and, to a lesser extent, in a hematitic clay-ricj tectonic breccia.

Magistral: Consists of low- to intermediate-sulfidation epithermal gold and silver mineralization. Magistral is gold dominant and lead and zinc are not generally present. The mineralization locally contains strongly anomalous copper. Mineralized zones at Magistral occur as tabular veins, sometimes occurring as parallel sets. Because of the strong association of gold with copper and iron, Magistral mineralization can be considered to be of the IOCG (iron-oxide-copper-gold) type.

Chapotillo: Epithermal gold-silver deposit with variable lead and zinc content, ranging from anomalous to >1%.

Haciendita & Mina Grande: Epithermal gold ± silver deposits with base metals. Lead and zinc contents range from very strongly anomalous to several percent within the mineralized zones. Copper is locally moderately anomalous.

San Dimas: Of the defined resource areas, the San Dimas deposit is one that can be considered a true polymetallic deposit with variable precious metal contents and strong copper (to several percent), lead and zinc (often >1%).

Los Mautos: Epithermal silver deposit. Base metal (lead and zinc) contents are weakly anomalous.

San Josel del Alamo: Epithermal gold deposit with base metals. Zinc (to several percent)> lead.

Las Milpas: Epithermal silver deposit with base metals. Zinc contents (to a few percent) are greater than lead.

CSX: Epithermal silver deposit exactly similar to El Gallo in terms of alteration/mineralization style and geochemistry

9 EXPLORATION

Work on the project areas throughout the various phases of exploration has consisted of geologic mapping, rock chip and soil sampling, rotary, reverse circulation and core drilling. A regional stream sediment sampling program has also been conducted. Three geophysical surveys have been undertaken: 1) an induced-polarization (IP) survey was conducted by Nevada Pacific Gold to cover the Deep La Prieta target and northwest extension of the Samaniego deposit in the Magistral area; 2) a ground-based magnetic survey covering the El Gallo deposit area was undertaken by McEwen in 2010; and, 3) a regional scale airborne magnetic survey was flown by McEwen in 2011. Some satellite image interpretation (ASTER, LandSat) was done by McEwen in the region. McEwen has been the sole operator of El Gallo, Chapotillo, Haciendita, Mina Grande, San Dimas, Los Mautos, San Jose del Alamo, Las Milpas and CSX. Although some of these resource areas have seen prior historic exploration efforts including minor production on some, the information relied upon herein has been generated by US Gold/McEwen. Exploration drilling at Magistral has been conducted by five companies: 1) Mogul Mining, 2) Santa Cruz Gold, 3) Queenstake Resources, 4) Nevada Pacific Gold and 5) McEwen. Exploration drilling used in this resource and reserve estimate at Palmarito was conducted by two companies: 1) Nevada Pacific Gold and 2) McEwen.

9.1 GEOLOGIC MAPPING

El Gallo: Outcrop geologic mapping was undertaken at a scale of 1:1,000 and delineated lithology, structure and alteration. Current mapping covers an area of roughly 1.0 x 1.5 mile (1.5 x 2.5 km²) (see Figure 9-1).

Palmarito: Geologic mapping of the area of the Palmarito deposit was undertaken in 1976 by Minerales Prisma S.A. de C.V and again in 1994 to 1995 by Lluvia del Oro. The mapping was of a general nature, breaking out andesitic rocks and the rhyolite intrusive (see Figure 9-2). Local follow-up geologic mapping has been undertaken by US Gold/McEwen on the mineralized zone.

Magistral: Geologic mapping was undertaken by previous companies. The various lithologic units were delineated on surface. In addition to lithologic units, quartz-bearing structural zones were also mapped. These include the mineralized zones of the known resource as well as numerous other zones peripheral to the main deposits (see Figure 9-3).

Other Resource Areas (Chapotillo, Haciendita, Mina Grande, San Dimas, Los Mautos, San Josel del Alamo, Las Milpas, CSX): Project-scale geologic mapping has been undertaken at each of the project areas generally at a scale of 1:1000. Primary emphasis was put on delineating mineralized zones and nearby host rock lithology.

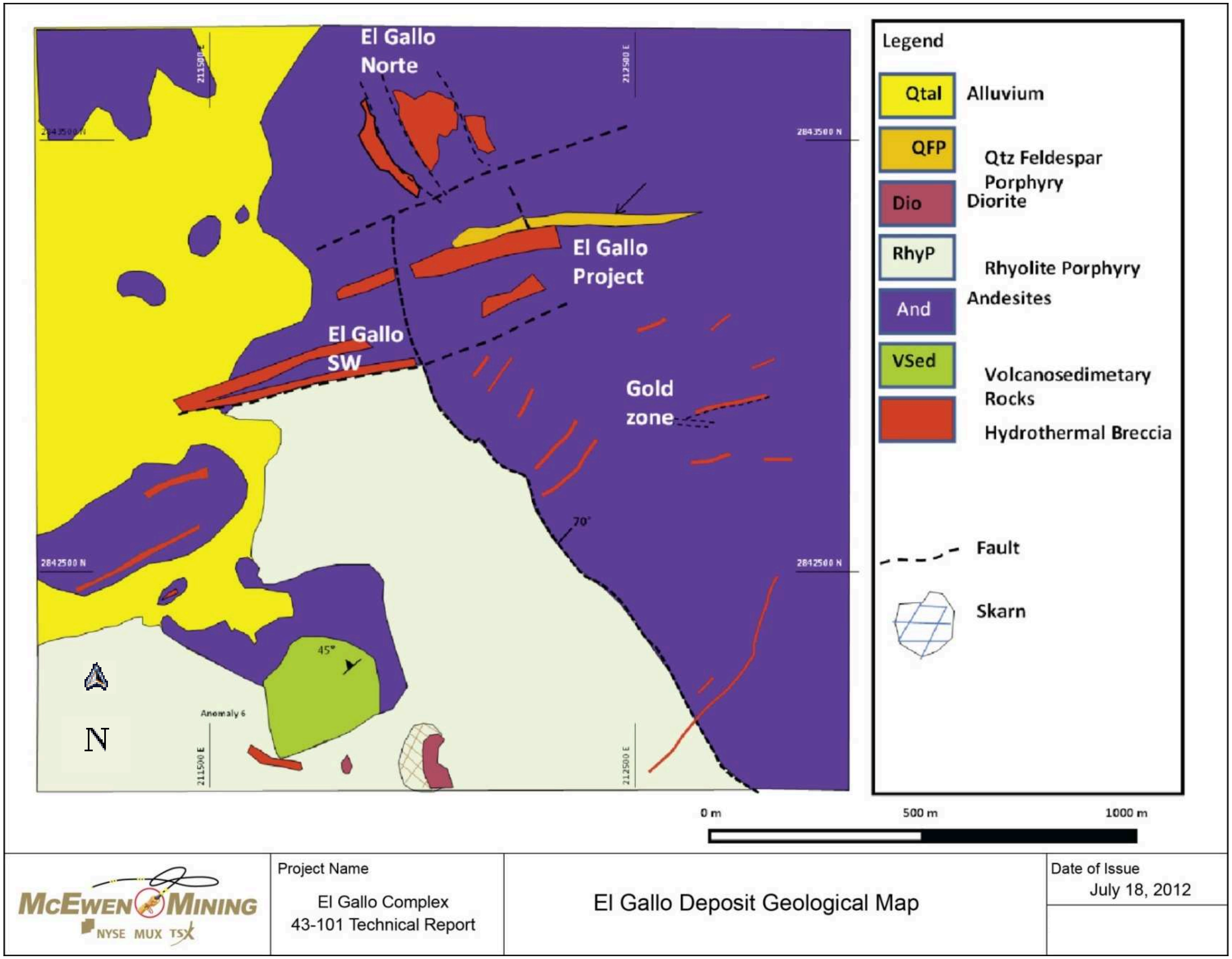


Figure 9-1: El Gallo Deposit Geological Map

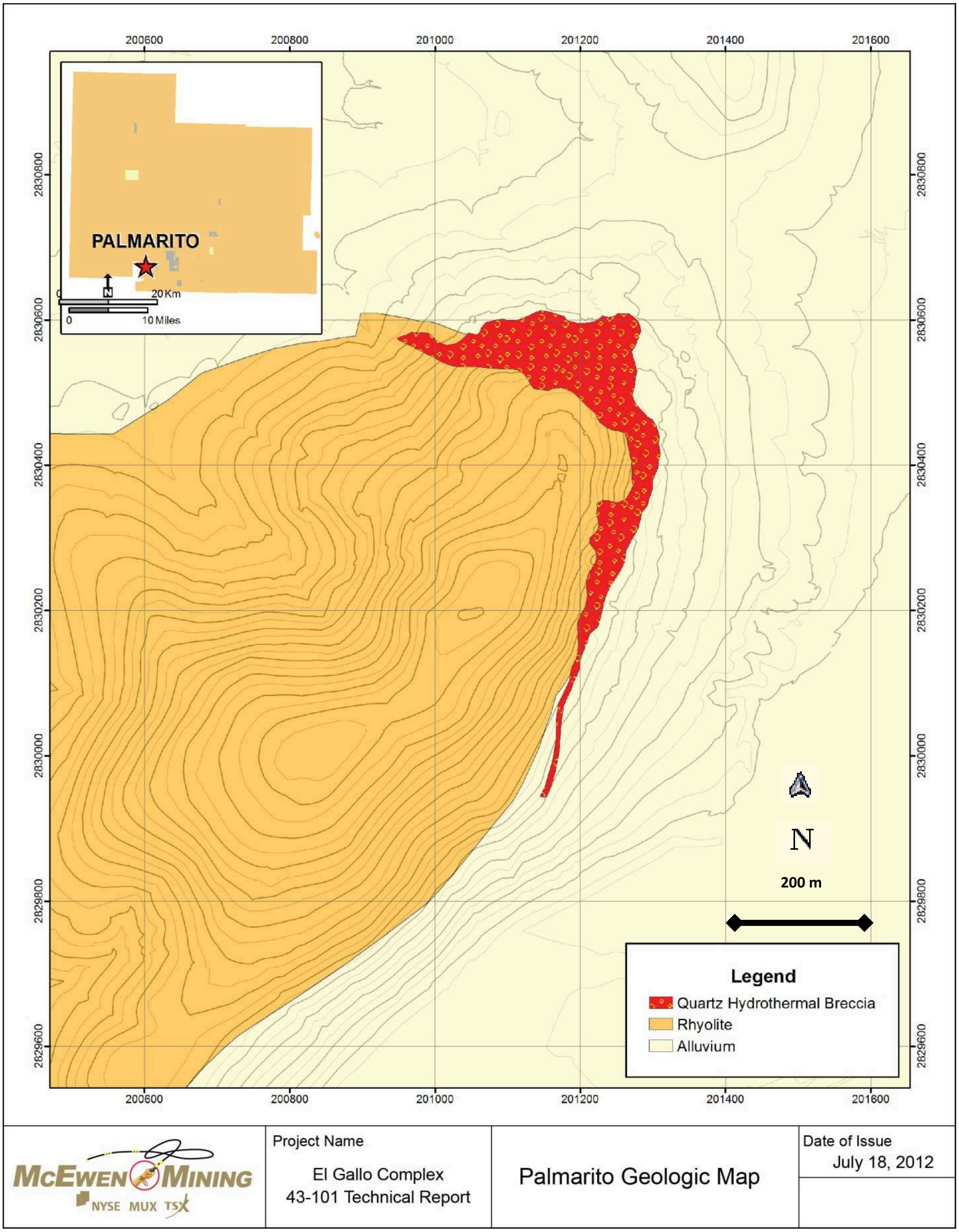


Figure 9-2: Palmarito Geologic Map

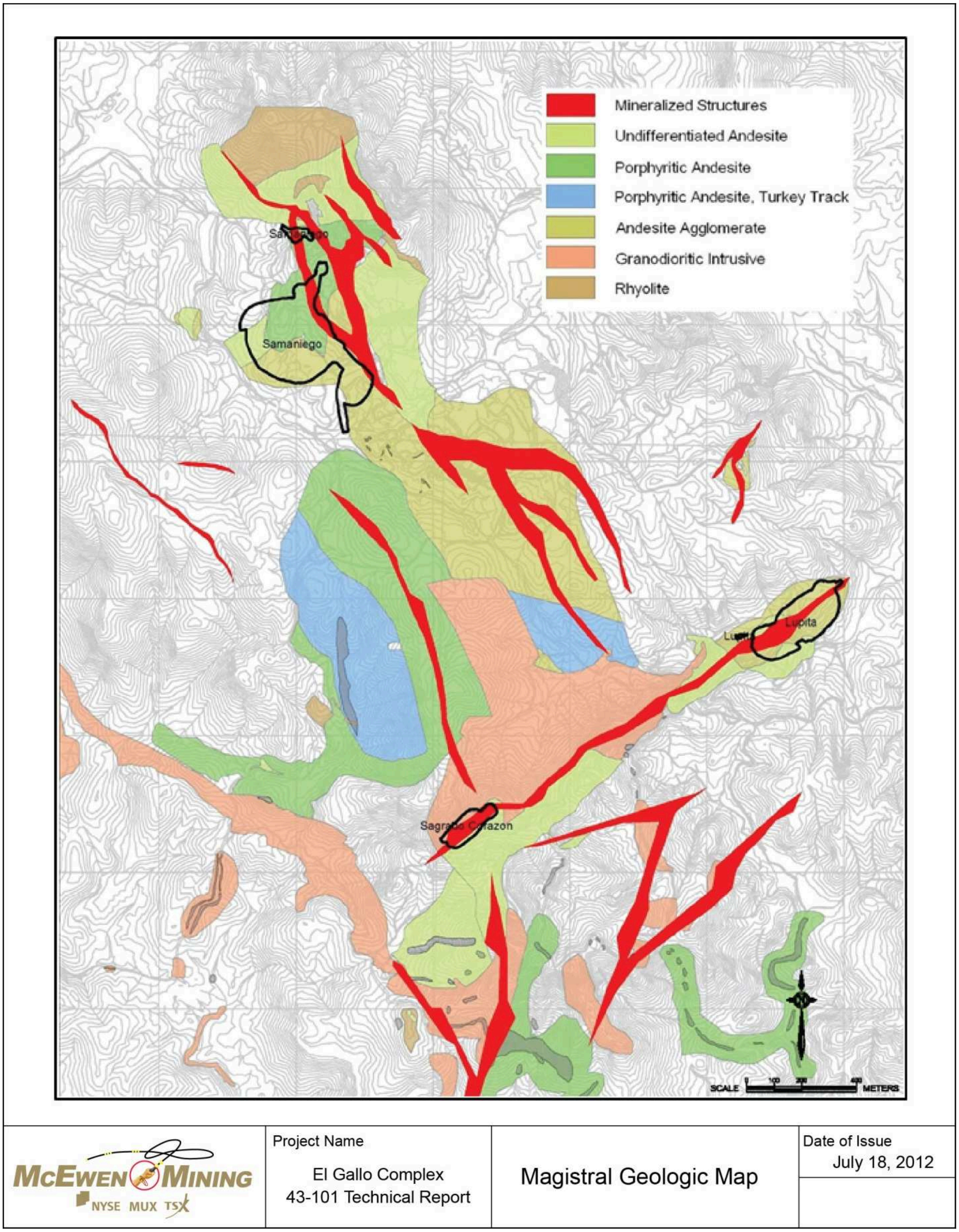


Figure 9-3: Magistral Geologic Map

9.2 GEOCHEMISTRY

El Gallo: A total of 6,847 rock and 17,604 soil samples have been collected over the immediate El Gallo area by McEwen. The majority of samples were analyzed only for gold, silver and copper by McEwen's Magistral assay lab using cyanide leach followed by atomic absorption assay method. Select samples were sent to ALS Chemex laboratories (Chemex) in Hermosillo, Mexico for analysis of gold plus a 33 element suit. Silver in rock chip samples range from less than detection to 2,600 ppm. Gold values range from less than detection to 281 ppm. Anomalies outside the area of existing mineral resource are present. The goal of these geochemical analyses was to delineate prospective areas as well as evaluate possible zoning of major and trace elements of the mineralization at El Gallo. None of the rock or soil samples have been used in the resource included within this Technical Report. Figure 9-4 and Figure 9-5 are maps of the silver geochemistry from rock and soil samples, respectively.

Palmarito: A total of 1,502 rock samples have been collected over the property by US Gold and previous owners. Most samples were analyzed only for gold and silver. Silver values range from less than detection to 2,986 ppm. The high gold value is 8.5 ppm. Anomalies outside the area of existing mineral resource envelopes are present. Surface rock samples are shown graphically in Figure 9-6.

Magistral: A total of 5,500 rock samples have been collected over the property by McEwen and previous owners. Most samples were analyzed only for gold and silver. Gold values range from less than detection to 72.4 ppm. The highest silver value is 422 ppm. Anomalies outside the area of existing mineral resource envelopes are present. Surface rock samples are shown graphically in Figure 9-7Figure 9-7.

Chapotillo: A total of 1,764 rock samples have been collected over the property by McEwen. Most samples were analyzed only for gold and silver. Gold values range from less than detection to 57 ppm. The highest silver value is 1,790 ppm. Anomalies outside the area of existing mineral resource envelopes are present. Surface rock samples are shown graphically in Figure 9-8.

Haciendita: A total of 1,654 rock samples have been collected over the property by McEwen. Most samples were analyzed only for gold and silver. Gold values range from less than detection to 43.3 ppm. The highest silver value is 858 ppm. Anomalies outside the area of existing mineral resource envelopes are present. Surface rock samples are shown graphically in Figure 9-9.

Mina Grande: A total of 2,486 rock samples have been collected over the property by McEwen. Most samples were analyzed only for gold and silver. Gold values range from less than detection to 104 ppm. The highest silver value is 3,150 ppm. Anomalies outside the area of existing mineral resource envelopes are present. Surface rock samples are shown graphically in Figure 9-10.

San Dimas: A total of 216 rock samples have been collected over the property by McEwen. Most samples were analyzed only for gold and silver. Gold values range from less than detection to 8.93 ppm. The highest silver value is 197 ppm. Anomalies outside the area of existing mineral resource envelopes are present. Surface rock samples are shown graphically in Figure 9-11.

Los Mautos: A total of 1,178 rock samples have been collected over the property by McEwen. Most samples were analyzed only for silver and gold. Silver values range from less than detection to 1,710 ppm. The highest gold value is 15.65 ppm. Anomalies outside the area of existing mineral resource envelopes are present. Surface rock samples are shown graphically in Figure 9-12.

San Jose del Alamo: A total of 506 rock samples have been collected over the property by McEwen. Most samples were analyzed only for gold and silver. Gold values range from less than detection to 13.68 ppm. The highest silver value is 710 ppm. Anomalies outside the area of existing mineral resource envelopes are present. Surface rock samples are shown graphically in Figure 9-13.

Las Milpas: A total of 1,549 rock samples have been collected over the property by McEwen. Most samples were analyzed only for silver and gold. Silver values range from less than detection to 8,210 ppm. The highest gold value is 42.8 ppm. Anomalies outside the area of existing mineral resource envelopes are present. Surface rock samples are shown graphically in Figure 9-14.

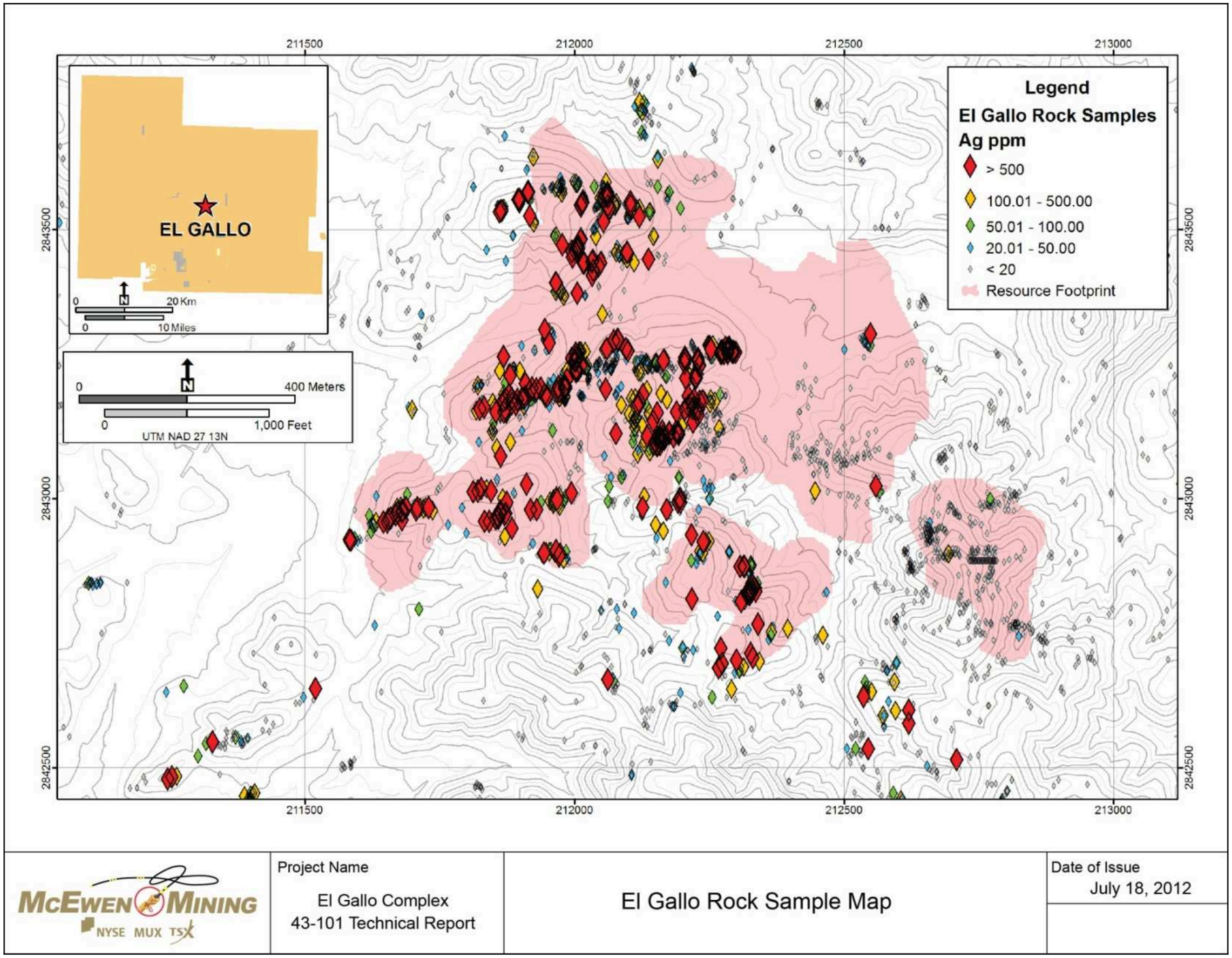


Figure 9-4: El Gallo Rock Sample Map

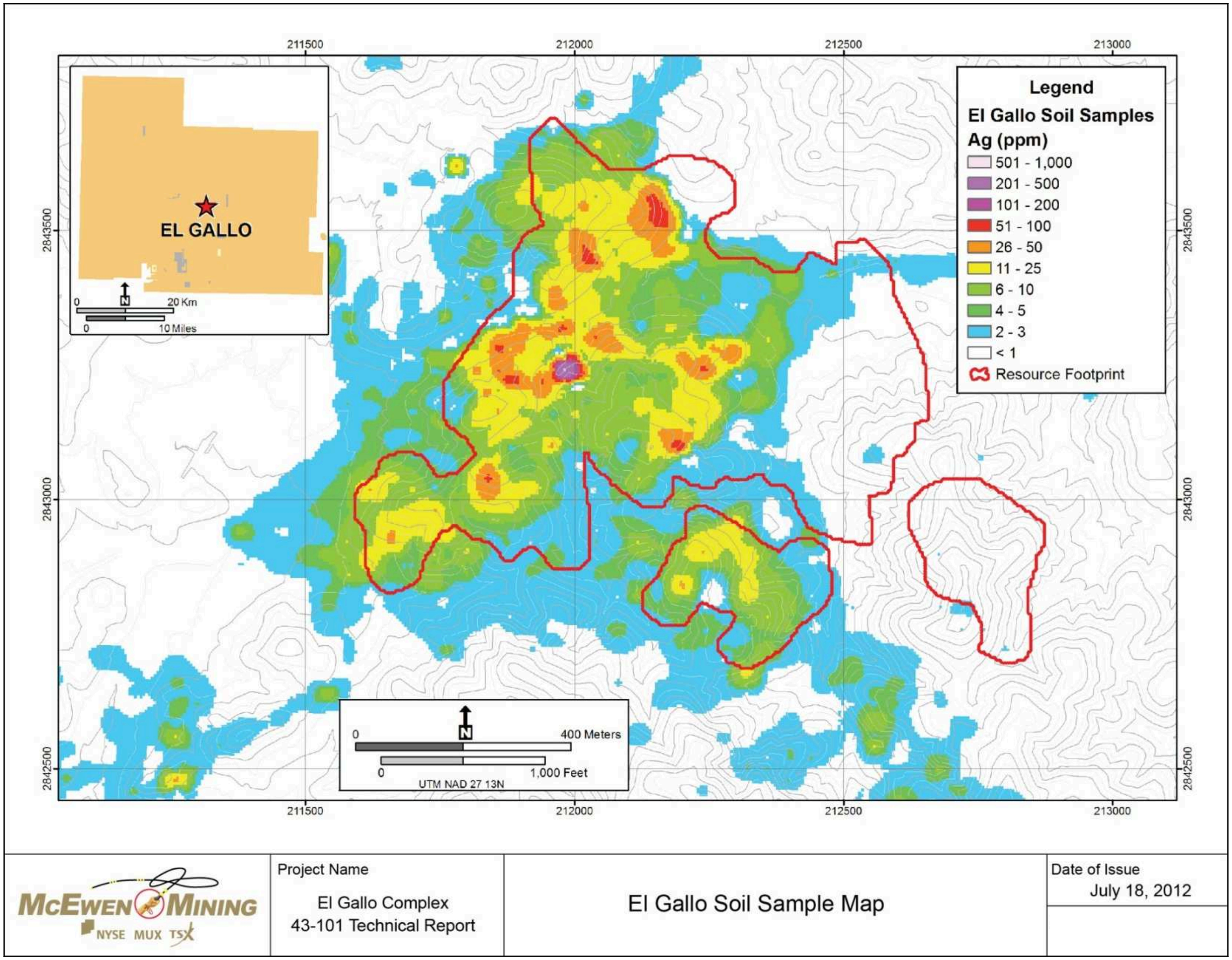


Figure 9-5: El Gallo Soil Sample Map

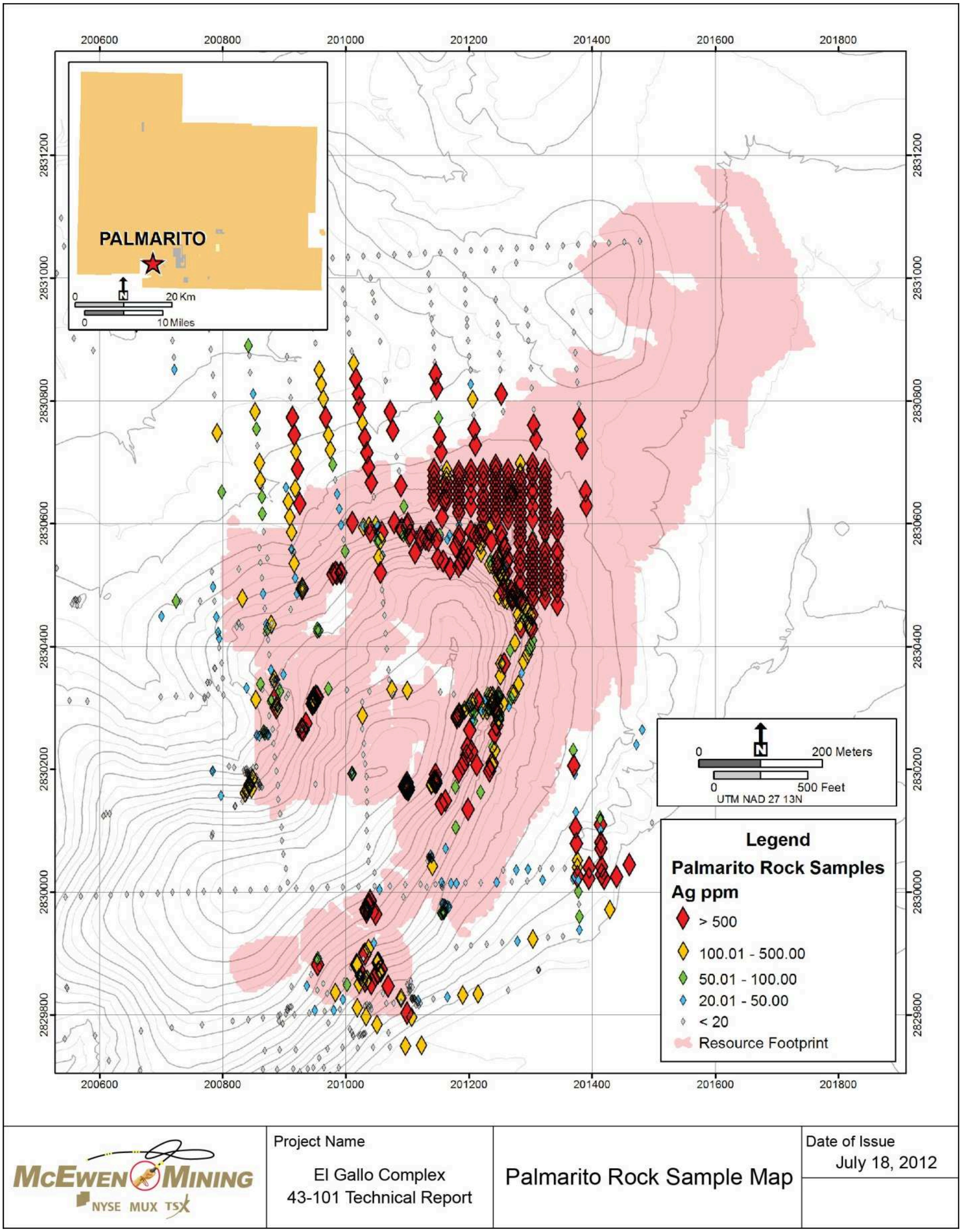


Figure 9-6: Palmarito Rock Sample Map

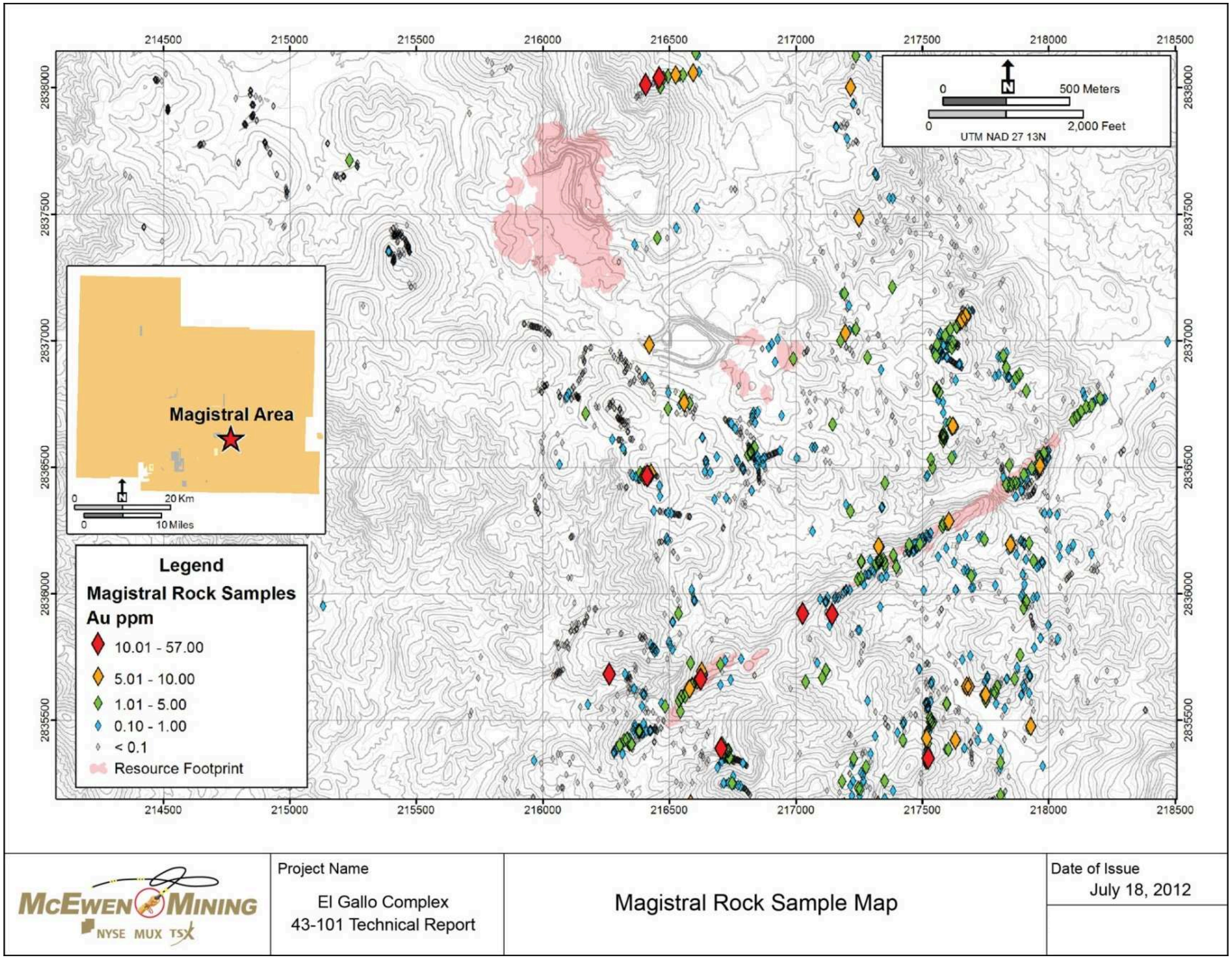


Figure 9-7: Magistral Rock Sample Map

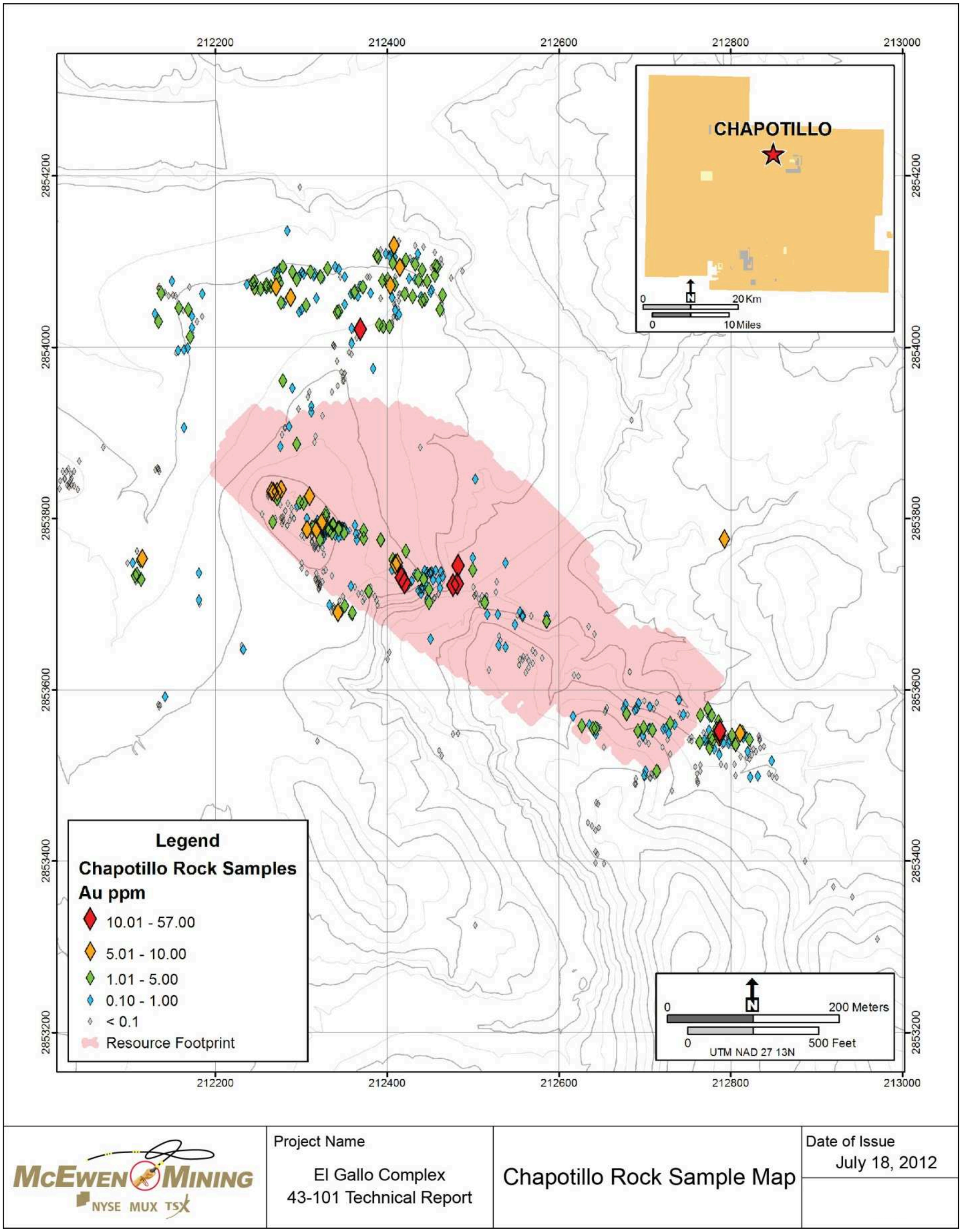


Figure 9-8: Chapotillo Rock Sample Map

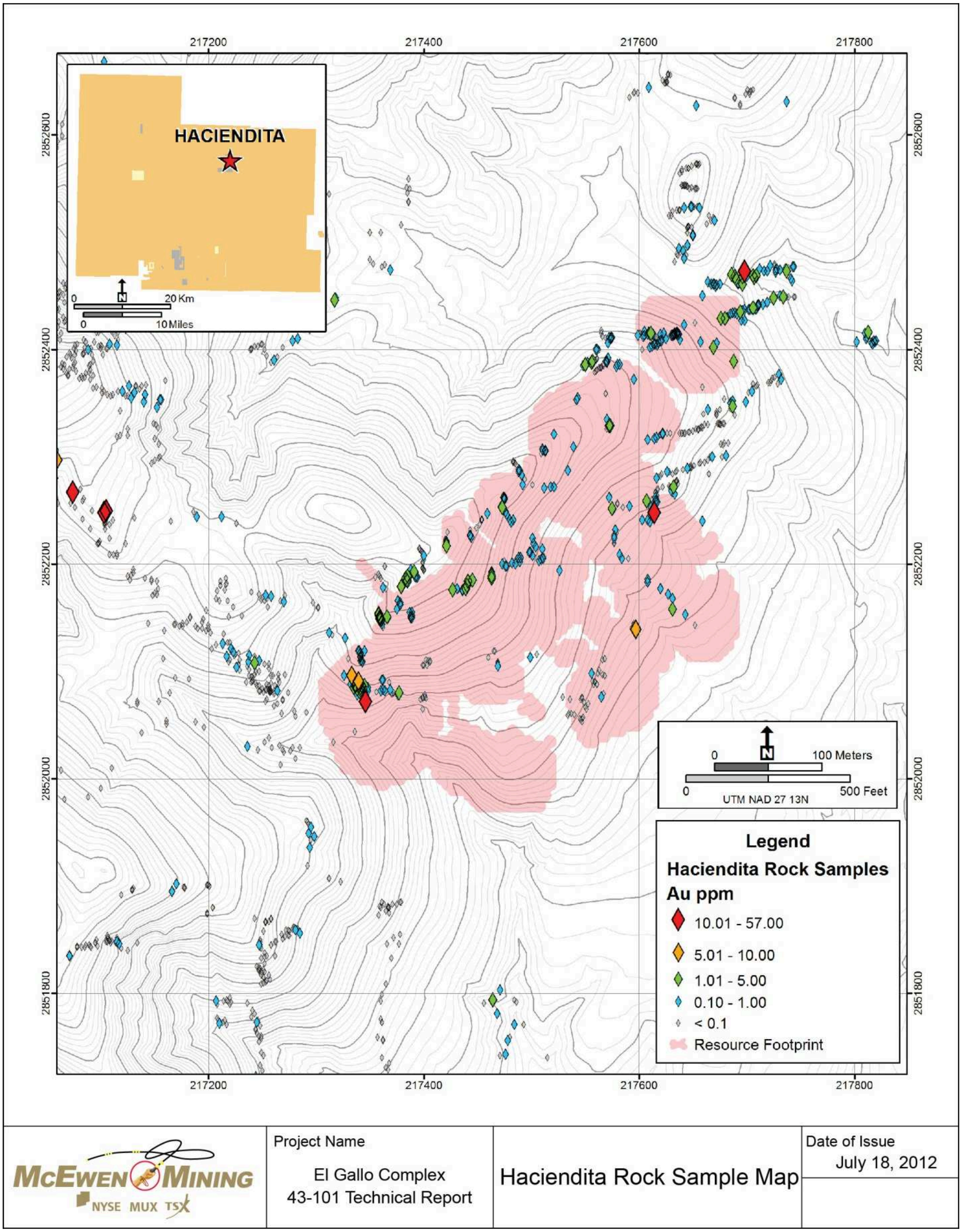


Figure 9-9: Haciendita Rock Sample Map

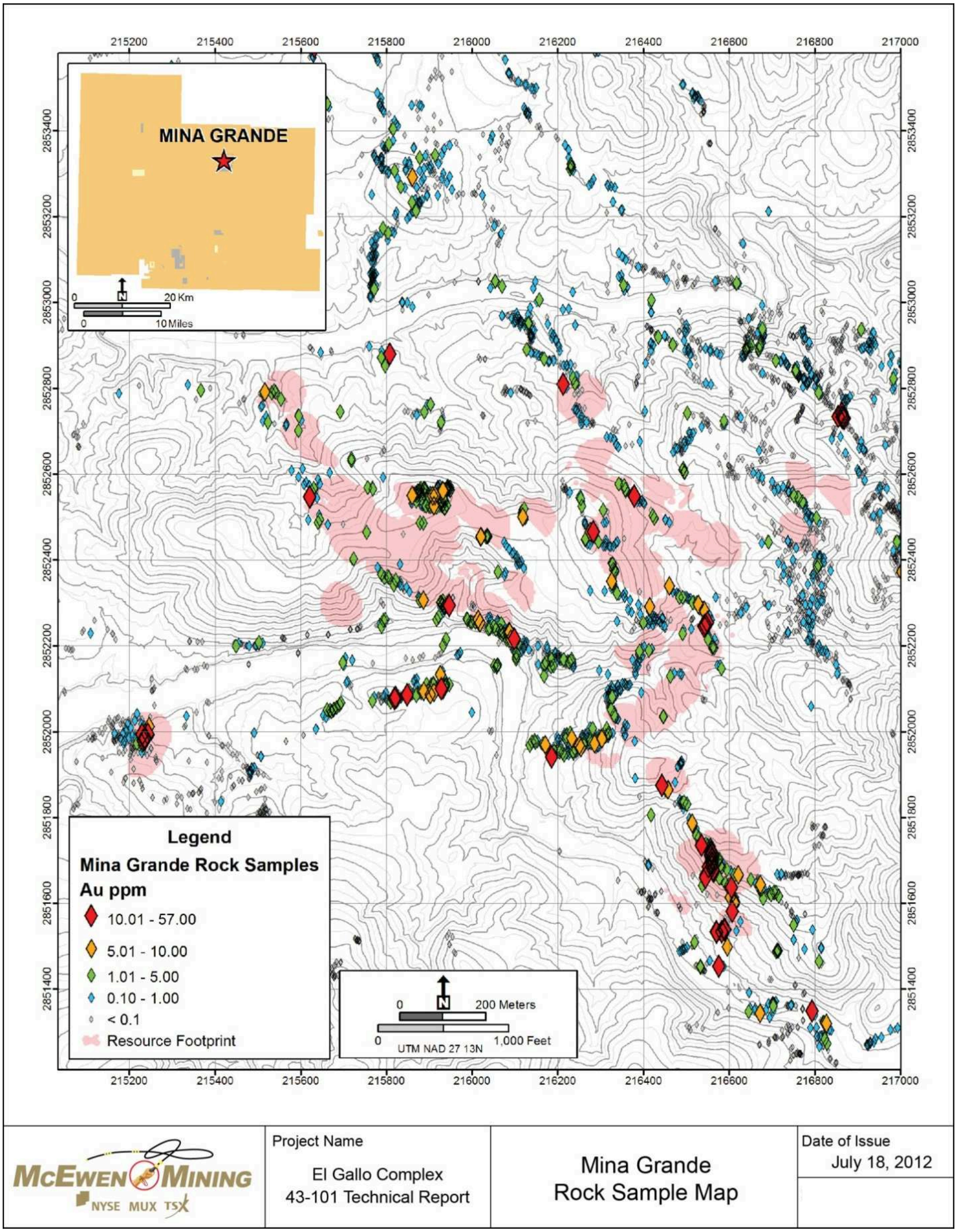


Figure 9-10: Mina Grande Rock Sample Map

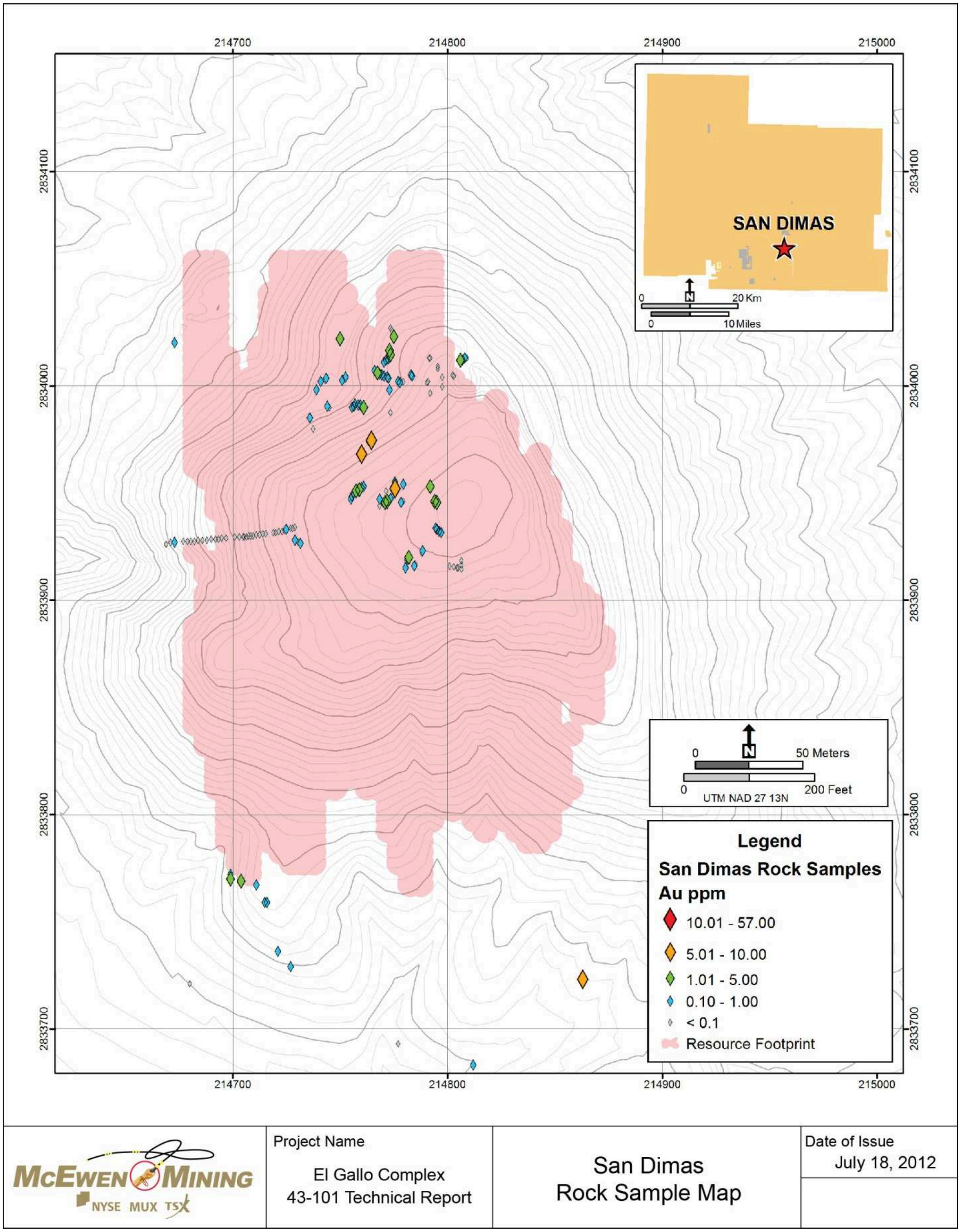


Figure 9-11: San Dimas Rock Sample Map

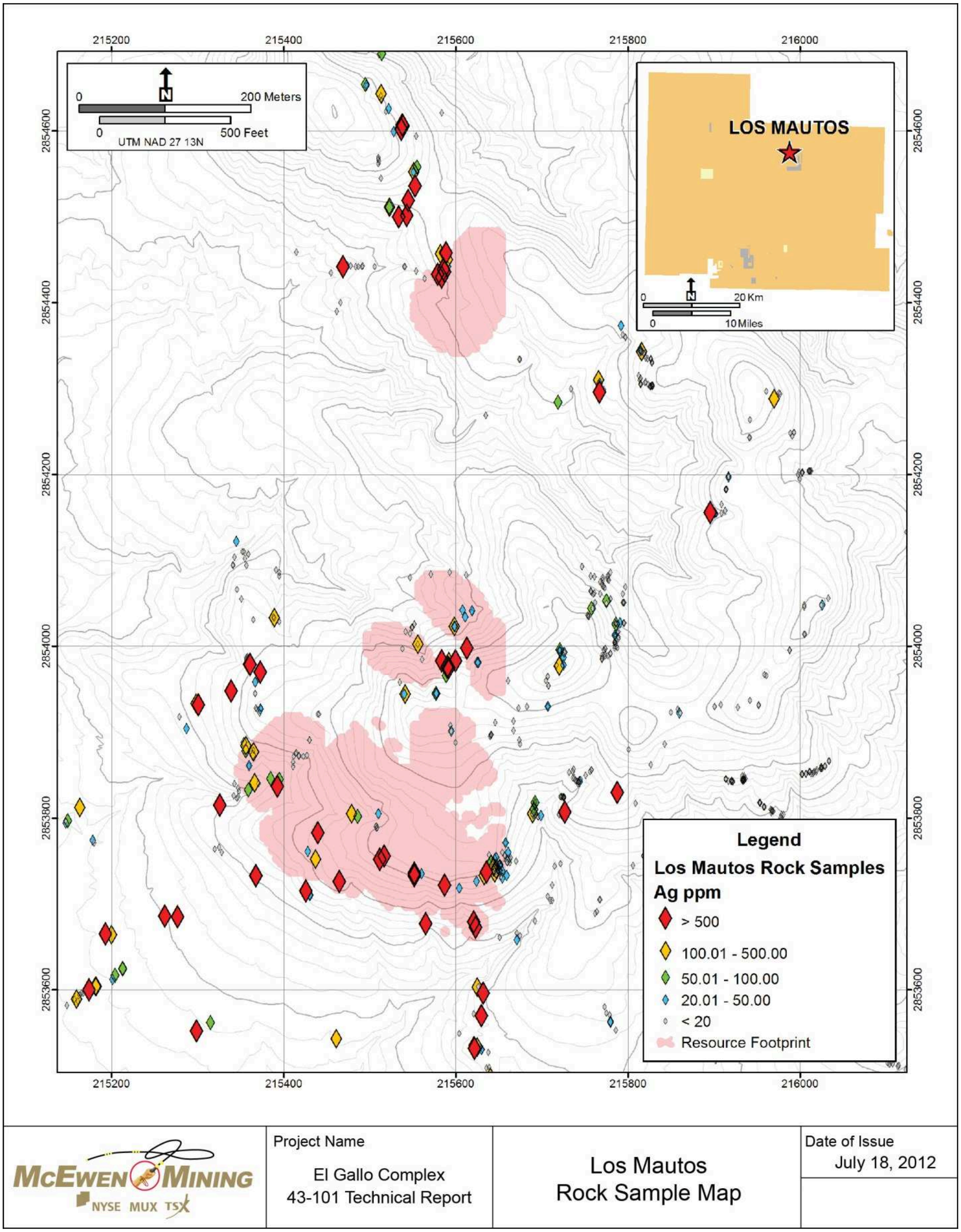


Figure 9-12: Los Mautos Rock Sample Map

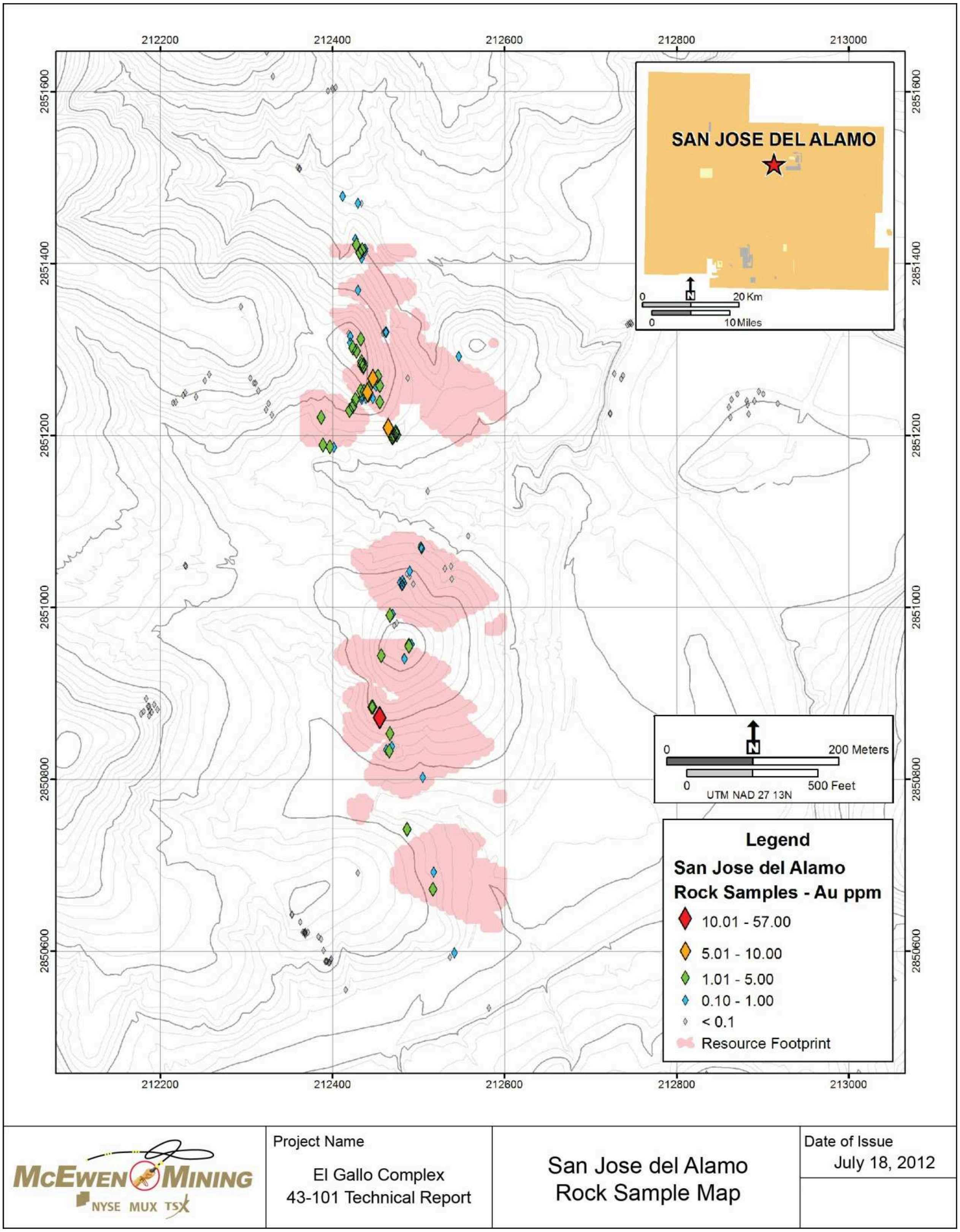


Figure 9-13: San Jose del Alamo Rock Sample Map

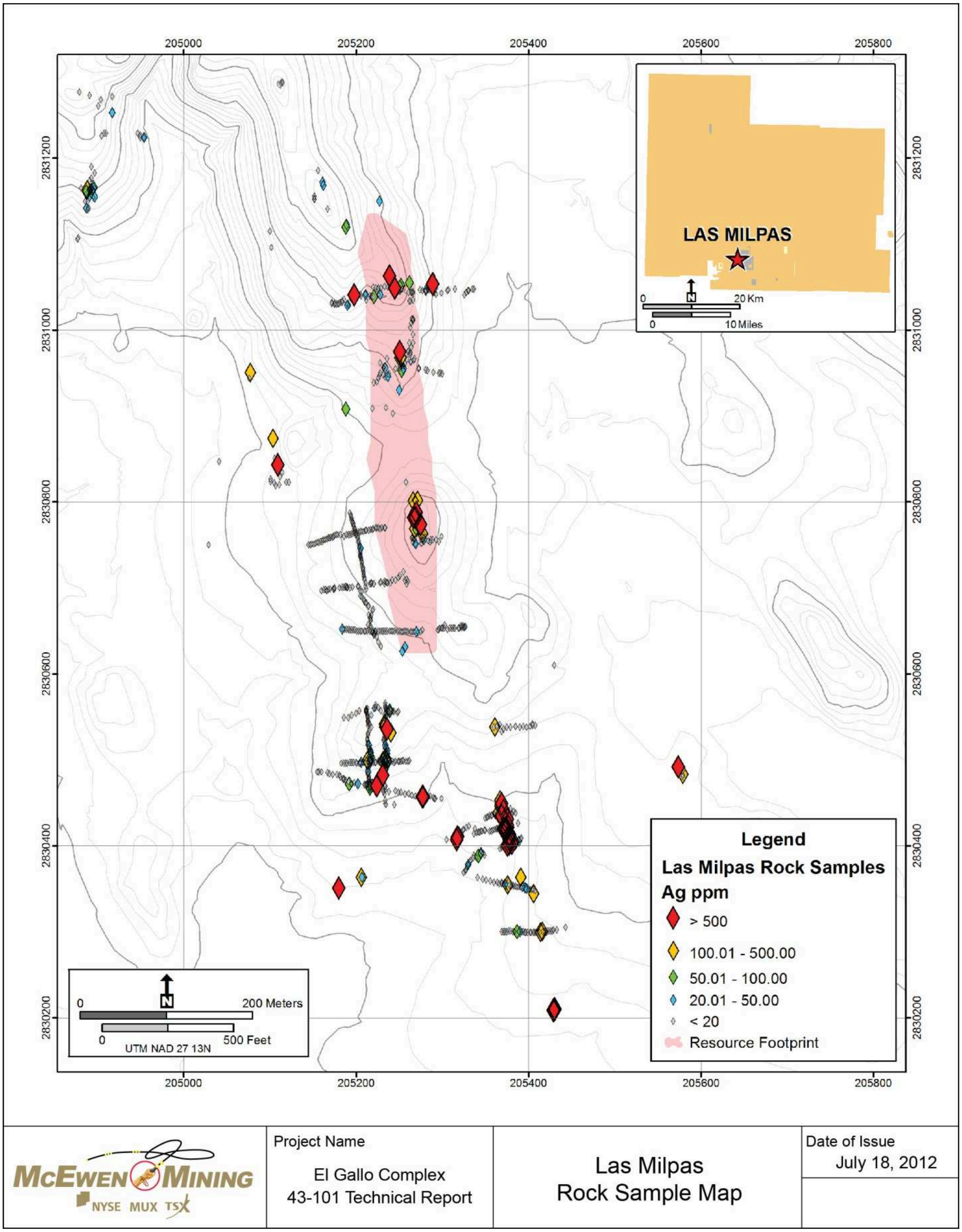


Figure 9-14: Las Milpas Rock Sample Map

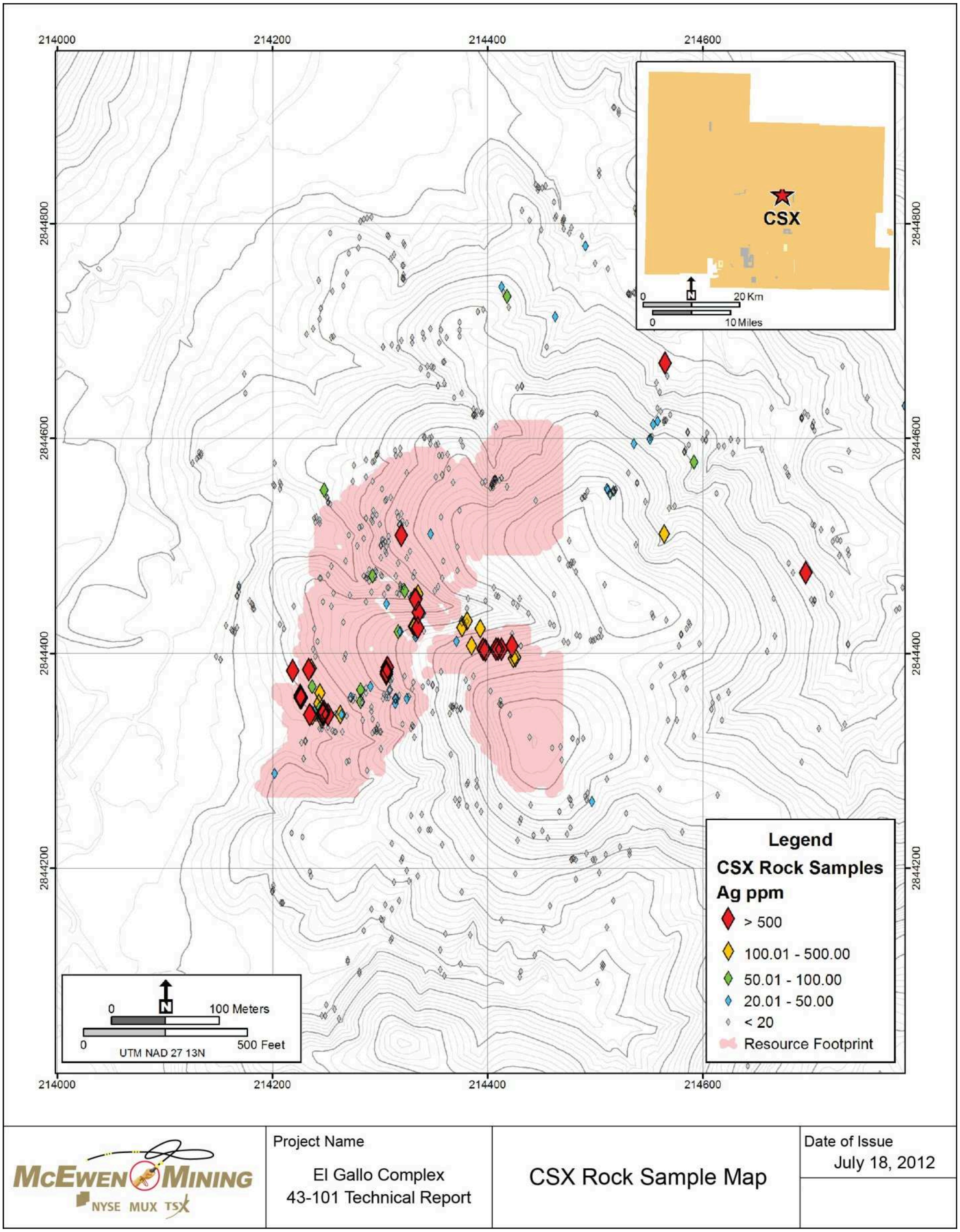


Figure 9-15: CSX Rock Sample Map

10 DRILLING

Drilling has been carried out using either diamond core drilling or reverse-circulation (RC) drilling; at some project areas both methods were used. McEwen has been the sole operator for all drilling programs undertaken since 2008 and drilling was done by contractors under supervision of McEwen personnel. Prior to 2008 some of the projects (described below) had drilling managed by other operators.

The following is a synopsis of drilling methodology and protocols employed by McEwen.

Diamond Drilling. Core drilling was undertaken using HQ or NQ size bits, generally utilizing 10-foot (3.05m) core barrels. Core is removed from the core barrel by the drillers and placed in plastic core boxes. Individual drill runs are identified with small wooden blocks, where the depth (in meters) and length of drill run are recorded.

Upon arrival at the core logging facilities the core is subject to the following procedures:

- Quick review of the core.
- Core recovery and RQD are measured and recorded.
- Geological logging: this is completed by geologists on paper logging forms in accordance with company protocol which includes header information, lithology description and lith code, graphic log, and numerically coded mineralization and alteration attributes. Core logging data are entered digitally into the companies' database.
- Based on visual alteration/mineralization and lithology, the geologist decides where the sample intervals should be placed. Sample intervals are delimited using orange-colored wood blocks labelled with the depth in meters (representing the end depth of the sample interval).
- Core photography with box interval and core hole number written on a white board. This is done after the core is logged and sample blocks inserted.
- Core cutting and sample collection is discussed in Section 12.

Reverse Circulation Drilling. RC drilling was carried out by contractors under the supervision of a McEwen/Minera Pangea geologist. Samples were collected at the drill rig on 5 ft (1.5 m) intervals using a cyclone and rotating wet splitter. Field duplicate sample splits were also obtained. All samples were collected by Minera Pangea personnel. Samples were collected in tyvex bags and labelled with sample footage and hole number. Chip samples are collected for each interval, rinsed and placed into chip trays. Labelled with hole number and depth. Logging of the chip trays was conducted by McEwen/Minera Pangea geologists at the Magistral mine site.

Neither core nor RC chips are ever left unattended at the drill rig. Samples are transported daily to McEwen's core logging facility at Magistral under a geologist's or manager's supervision. Core is transported in closed boxes by company truck. RC chip trays are closed and typically transported inside a vehicle. McEwen has established a written policy that outlines who is authorized to handle and transport samples. Each employee in Mexico is required to read this policy and any future versions. Failure to comply with the policy results in automatic dismissal.

All core and RC chips are stored at the Magistral Mine. Core boxes and chip trays are stacked on industrial steel racks to an approximate height of 10 ft (3 m).

Collars for holes done by McEwen were marked with PVC tubing, labeled with a metal tag and a cement monument placed around the collar (Figure 10-2). All holes have been surveyed by a contract surveyor.

10.1 EL GALLO

McEwen (2009 to 2012): Core drill holes are the sole source of geological and grade data for the El Gallo portion of the reserve and resource estimates. McEwen has been the sole operator of the El Gallo project since drilling started. The first core drilling on the property commenced in January 2009 by McEwen. Core drilling was continuous until June 2009 when the company ceased drilling. During this time 43 core holes were completed for a total of 23,204 ft (7,073 m). Core drilling resumed in January 2010 and was completed on September 2011. As of that date, a combined total of 293,769 ft (89,540.8 m) of core drilling has been completed. Drilling has been conducted throughout the El Gallo project area including condemnation drilling that was done for planned mine facilities and infrastructure peripheral to the resource. All core drilling was completed using either HQ and NQ core size. Both vertical and inclined holes have been drilled. A total of 480 of the 510 holes were surveyed down-hole. Because of variation in the orientation of, and irregular geometry within, some of the mineralized zones, it should not be assumed that drilled intercept represent true widths. Core logging, recovery/RQD (rock quality designation) measurement and core splitting were done on site at Magistral (These procedures are described above and in section 12.0). Core drilling has been completed by Layne de Mexico, S.A. de C.V., a subsidiary of Layne Christensen Company, based in Hermosillo, Sonora, Mexico; Energold de Mexico, S.A. de C.V., a subsidiary of Energold Drilling Corp, based in Mexico City, Mexico; or Landrill S.A. de RL de C.V. based in Durango, Mexico.

Table 10-1 summarizes the El Gallo drill hole database. Figure 10-1 illustrates the location of these holes on the property.

Table 10-1: Technical Report, El Gallo Complex, El Gallo Exploration Database Summary – Through Sept 2011

Items	Value
Number of Core Drill Holes	510
Total Length (meters)	89,540.8
Average Length (meters)	175.57
Meters Sampled and Assayed (by Chemex)	81,843.98
Numbers of Drill Hole Sample Assayed (by Chemex)	508
Holes With Down-Hole Surveys	480

*No RC holes have been drilled at El Gallo

Table 10-2: Technical Report, El Gallo Complex, El Gallo Drill Hole Database Sample Statistics

Number of Samples	63,464
Average Interval Widths (meters)	1.41
Average Silver Grade (gpt)	21.13
Minimum Silver Grade (gpt)	<0.5 (Detection limit)
Maximum Silver Grade (gpt)	18,244.5
Average Gold Grade (gpt)	0.026
Minimum Gold Grade (gpt)	<0.005 (Detection Limit)
Maximum Gold Grade (gpt)	71.6

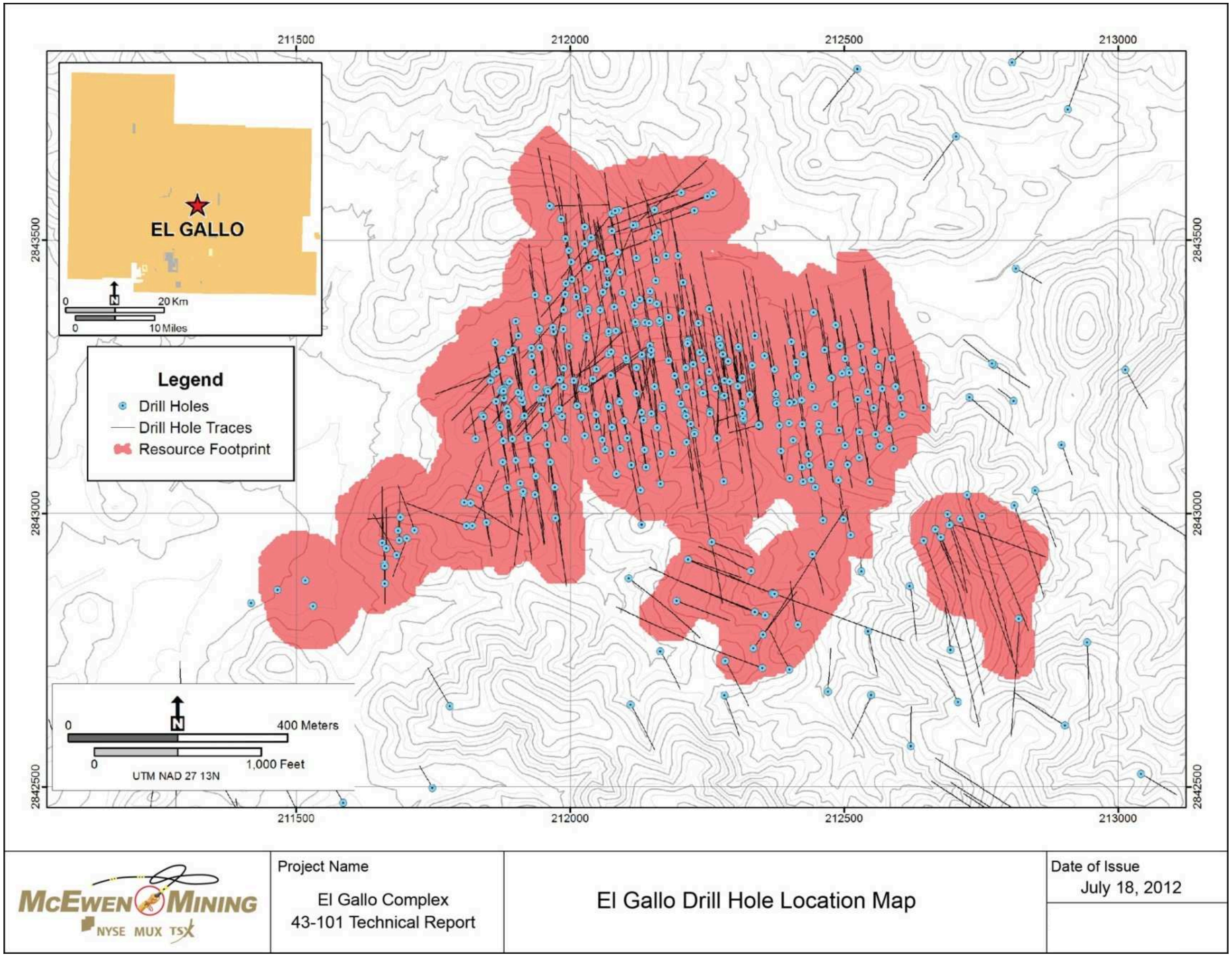


Figure 10-1: El Gallo Drill Hole Location Map

10.2 PALMARITO

A total of 294 drill holes (263 core and 31 reverse-circulation) and 10 underground channels were used in the reserve and resource estimates. Approximately 69 percent of these holes were drilled at an angle normal to the dipping ore body, 28 percent of the holes were drilled vertically, and the underground channels are horizontal. Drill hole collar locations were surveyed. Drill collars were monumented and most can be found in the field.

Nevada Pacific Gold (2006 to 2007): A total of 19 core holes were completed by Can Rock Drilling based in San Luis Potosi State, Mexico. Core holes were drilled using HQ core, with several holes reduced to NQ where drilling conditions necessitated. Fifteen of the nineteen holes were surveyed down-hole.

McEwen (2008 to 2012): Both RC and core drilling were completed by Major de Mexico S.A. de C.V. Additional core drilling was completed by Layne de Mexico, S.A. de C.V., Energold de Mexico, S.A. de C.V. or HD Drilling S.A. de RL de C.V. Hole diameter for the RC drilling was 5-¾ inch (14.6 cm). Core holes were drilled using HQ core, with several holes reduced to NQ where drilling conditions necessitated. Collars for the McEwen holes were collared with plastic tubing, marked with a metal plate and surveyed. Two hundred and thirty one of the three hundred and thirteen holes were surveyed down-hole. Figure 10-3 illustrates the location for all of the Palmarito drill holes.

10.3 MAGISTRAL

McEwen has conducted exploration drilling intermittently from 2008, to the present. This was carried out primarily around the known resources areas of the project. All other exploration drilling was conducted by previous operators. Table 10-3 summarizes the Magistral drill hole database as of October 2010. Figure 10-4 and Figure 10-5 illustrate the location of these holes on the property.

Table 10-3: Phase I El Gallo Complex, Exploration Drill Hole Summary – Through October 2010

Deposit Area	No. of Core Holes	No. of RC Holes	No. of Blast Holes	Total No. of Holes	Total Meters
San Rafael	7	294	704	1,005	43,172.77
Samaniego	55	339	629	1,023	66,696.89
Sagrado Corazon	5	64	-	69	5,913.75
Lupita	2	95	-	97	8,409.13
Total	69	792	1,331	2,194	124,192.54

Queenstake, Santa Cruz and Mogul Mining (1994 to 2002): Of all the drill holes included in the database for the Magistral resource estimate that is the subject of this Technical Report, the vast majority is derived from Queenstake and its predecessors. Core and RC drilling was conducted in the Samaniego, San Rafael, Lupita-Central and Sagrado Corazón areas. RC drilling was conducted within historical tailings piles.

RC drilling consisted of drilling 140 millimeter diameter holes, with samples collected at 4.9 ft (1.5 m) intervals. Exploration drilling was conducted using air to circulate cuttings out of the hole, until damp or wet conditions required water circulation. Limited groundwater measurements (17 in 1999) show that the groundwater table tends to parallel topography at a depth of 165 to 195 ft (50 to 60 m) on the hillsides and can be very close to the surface in the valleys.

Core drilling consisted of holes that were drilled with NQ (48 millimeters), with samples collected at 4.9 ft (1.5 m) intervals. The lithology, alteration, and mineralization were recorded on site for each sample.

Fifty-two core and 633 RC holes were drilled in the Samaniego and San Rafael areas totalling 360,465 ft (109,870 m). These holes were drilled both vertically and inclined to intercept the mineralized structures approximately perpendicular to their local dip. As a result, the mineralized intercepts of these holes closely approximate true thicknesses of the mineralization.

Seven core and 159 RC holes were drilled along the Lupita-Central-Sagrado Corazón trend totalling 36,991 ft (14,323 m). These holes were inclined to intercept the nearly vertical structures. Consequently, the mineralized intercepts of these holes do not approximate the true thicknesses of the mineralization.

Collars for these core and RC holes were cemented, monumented and surveyed. The azimuth and dip of the collars were recorded. These holes were not surveyed down-hole.

This drilling largely identified the known mineralization at Magistral. Subsequent drilling campaigns offer slight adjustments to this interpretation.

McEWEN MINING NYSE MUX TSX	Project Name El Gallo Complex 43-101 Technical Report	Drill Hole Collar	Date of Issue July 18, 2012

Figure 10-2: Drill Hole Collar

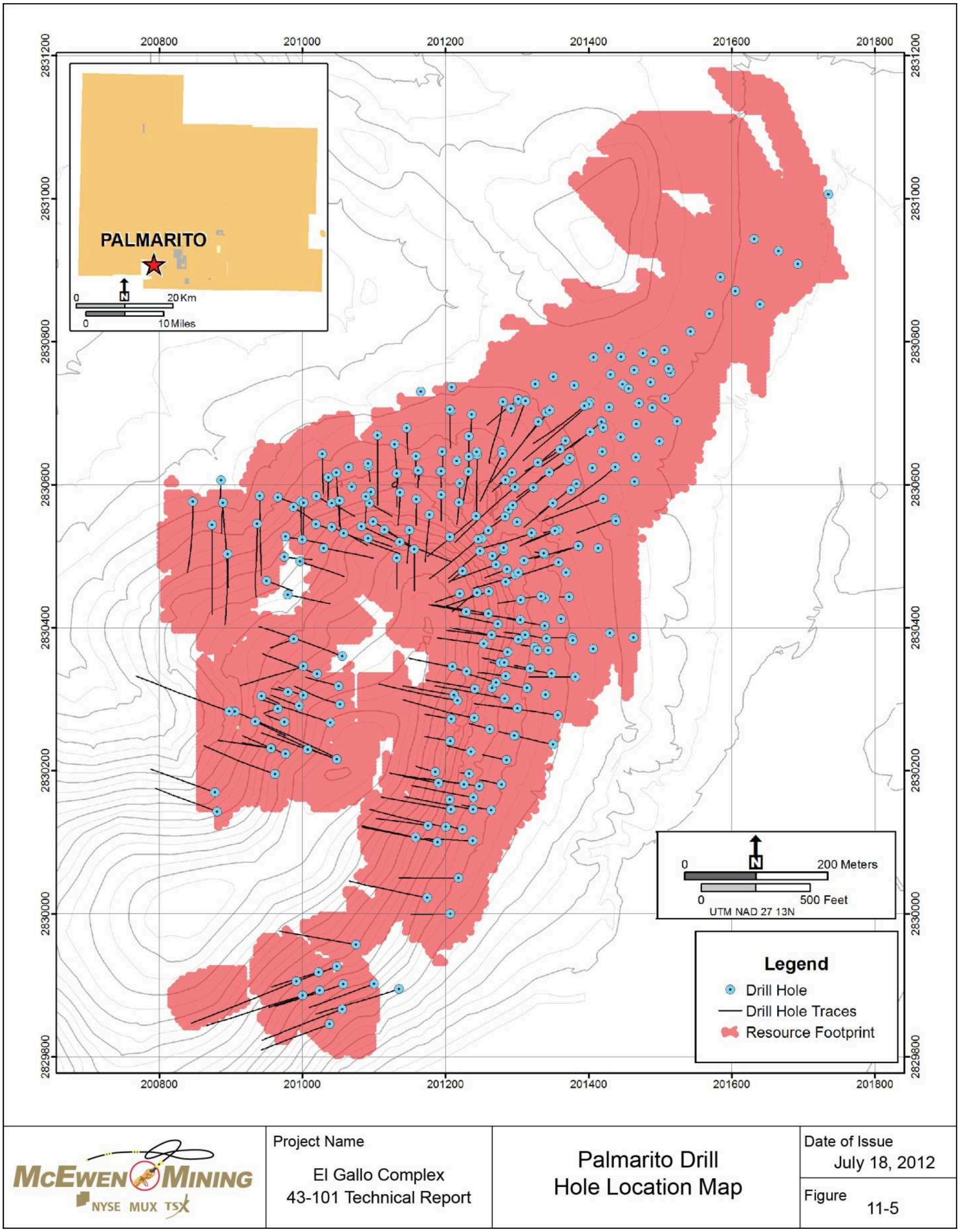


Figure 10-3: Palmarito Drill Hole Location Map

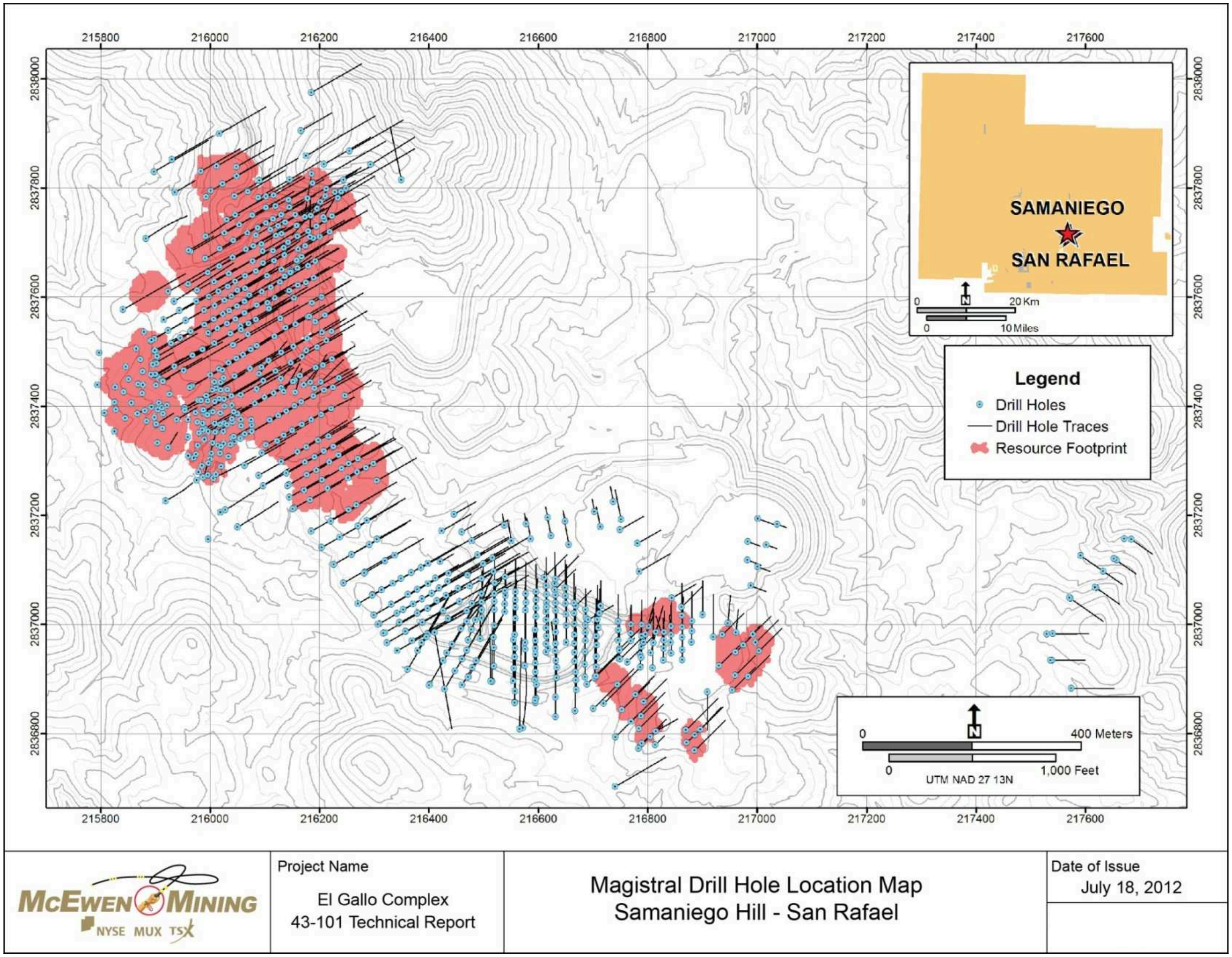


Figure 10-4: Magistral Drill Hole Location Map Samaniego Hill – San Rafael

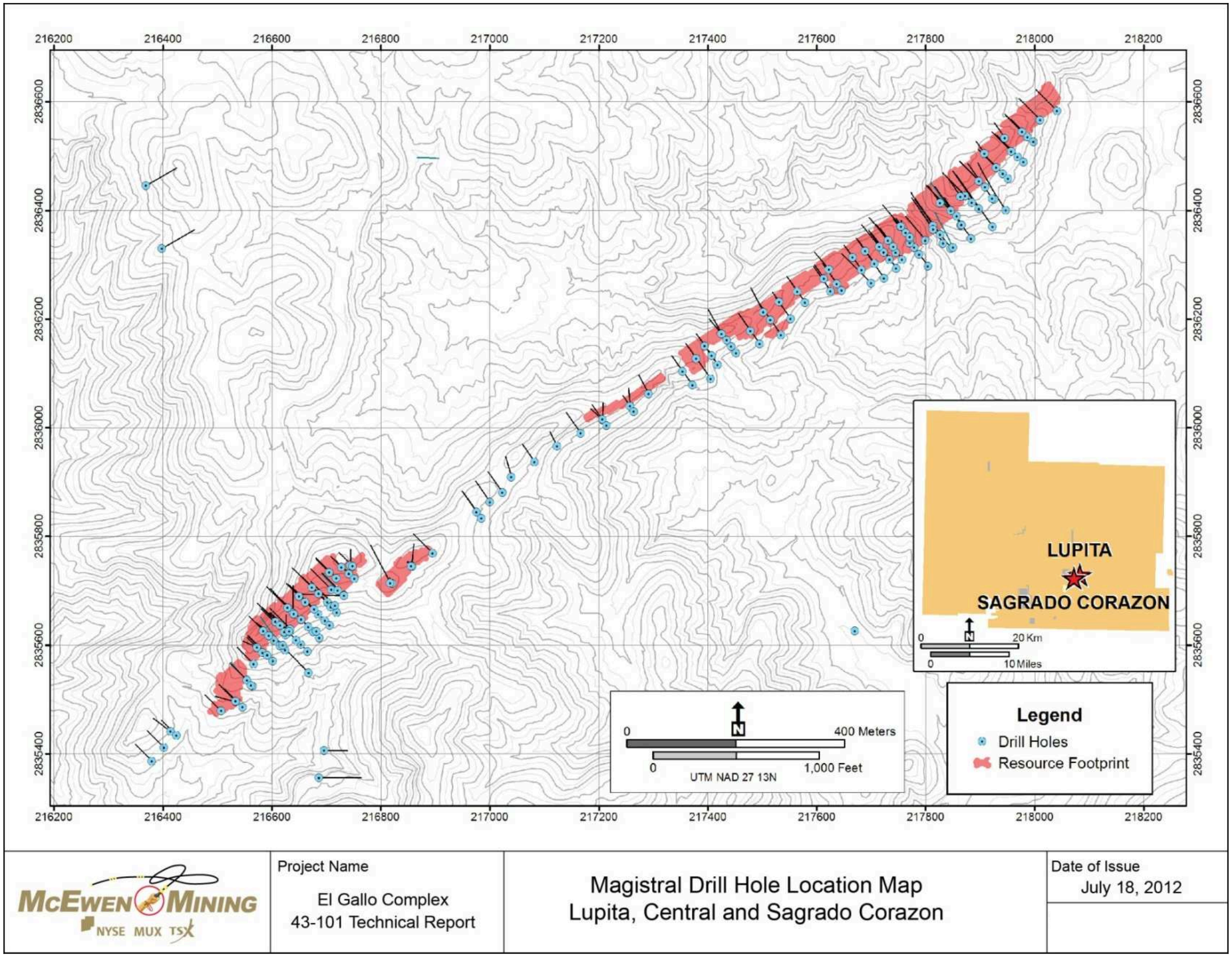


Figure 10-5: Magistral Drill Hole Location Map Lupita, Central and Sagrado Corazon

Nevada Pacific Gold (2004 to 2005): Drilled a small number of RC and core holes within the Samaniego Hill, San Rafael and Lupita-Central-Sagrado Corazón areas.

Two core and five RC holes were drilled in the Samaniego and San Rafael areas totalling 3,800 ft (1,160 m). These holes were drilled both vertically and inclined to intercept the mineralized structures approximately perpendicular to their local dip. As a result, the mineralized intercepts of these holes closely approximate true thicknesses of the mineralization.

Twenty-five RC holes were drilled along the Lupita-Central-Sagrado Corazón trend totalling 9,825 ft (2,995 m). These holes were inclined to intercept the nearly vertical structures. Consequently, the mineralized intercepts of these holes do not approximate the true thicknesses of the mineralization.

Collars for the Nevada Pacific Gold holes were cemented, monumented and surveyed. The azimuth and dip of the collars were recorded. These holes were not surveyed down hole.

Mineralized intercepts within these holes allowed Nevada Pacific Gold to reinterpret the Lupita envelope. Nevada Pacific Gold's reinterpretation expanded the envelope at depth to the Southeast.

McEwen (2008 to 2010): Core and RC drilling was conducted primarily in the Samaniego Hill and Lupita areas. All reverse circulation drilling was completed by Major de Mexico S.A. de C.V., a subsidiary of Major Drilling International, based in Sonora state, Mexico. Core drilling was completed by Britton Bros. (acquired by Boart Longyear during the drilling program. Boart Longyear maintains its global headquarters in South Jordan, Utah), Layne de Mexico, S.A. de C.V., Energold Drilling and Landdrill.

For core drilling, HQ core size was used and reduced to NQ where necessary. Core logging, recovery/RQD measurement and core splitting were done on site at the Magistral Project.

Twenty-four reverse circulation holes and six core holes were drilled in the Samaniego area totalling 21,325 ft (6,500 m). These holes were drilled both vertically and inclined to intercept the mineralized structures approximately perpendicular to their local dip. As a result, most mineralized intercepts of these holes closely approximate true thickness of the mineralization.

Four reverse circulation holes and two core holes were drilled at Lupita totalling 3,280 ft (1,000 m). These holes were inclined to intercept the nearly vertical structures. Consequently, the mineralized intercepts of these holes do not approximate the true thicknesses of the mineralization.

Four core holes were drilled at Sagrado Corazón totalling 2,043 ft (623 m). These holes were inclined to intercept the nearly vertical structures. Consequently, the mineralized intercepts of these holes do not approximate the true thicknesses of the mineralization.

Two core holes were drilled at San Rafael totalling 1,775 ft (541 m). These holes were inclined to intercept the nearly vertical structures. These holes were inclined to intercept the mineralized structures approximately perpendicular to their local dip. As a result, most mineralized intercepts of these holes closely approximate true thickness of the mineralization.

Twenty-two of the forty-two holes were surveyed down-hole.

Mineralized intercepts within these holes show continued down dip extension of the Lupita Zone, Sagrado Corazón, extension of the Lower La Prieta Zone to the south and down dip extension of the Upper Samaniego Zone.

10.4 OTHER RESOURCE AREAS

All other resource areas contained within this Technical Report were drilled exclusively by McEwen, using Layne de Mexico, S.A. de C.V., Energold de Mexico, S.A. de C.V. or HD Drilling S.A. de RL de C.V.; except for Las Milpas Project, where 14 RC holes were drilled by Nevada Pacific Gold. Core holes were drilled using HQ core, with several holes reduced to NQ where drilling conditions necessitated. Two hundred and seventy seven of the three hundred and thirteen holes were surveyed down-hole. Figure 10-6 to Figure 10-13 illustrates the location for drill holes at the other resource areas.

10.5 DOWN HOLE SURVEYS

McEwen drilling contractors undertake down-hole surveying of holes upon their completion. After reaching final drill depth, a Reflex tool is inserted down-hole. Deviation measurements are taken at the hole bottom and nominally every 165 ft (50 m) up the hole to a depth about 20 ft (6 m) below surface casing. The Reflex tool uses magnetic methods to measure azimuth and care must be taken that the tool extends below the drill rod or casing while measurements are taken. The instrument records various data including dip, azimuth, temperature and magnetic field strength and these data are recorded by hand by the driller for each measured depth.

Magnetic declination (11°) is added to the raw azimuth measurement as it is entered into the database. Any spurious-looking measurements are checked by reviewing the magnetic field strength to see if the tool was inside drill rod at the time of reading. This was the case for some measurements. For these, as well as occasions where it appeared the driller incorrectly noted the data (inverted numbers), the specific measurements were not used in the drill hole survey table in the database.

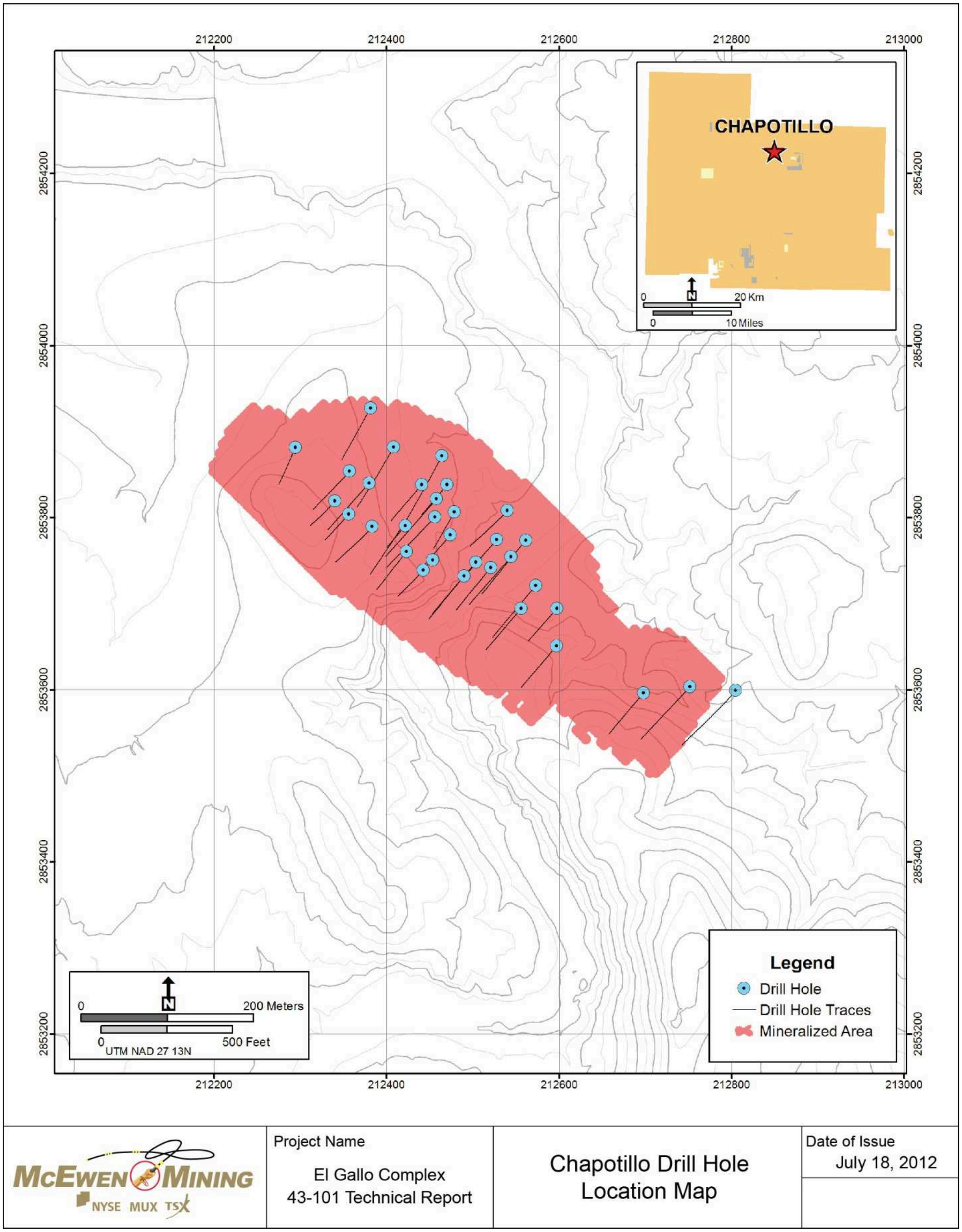


Figure 10-6: Chapotillo Drill Hole Location Map

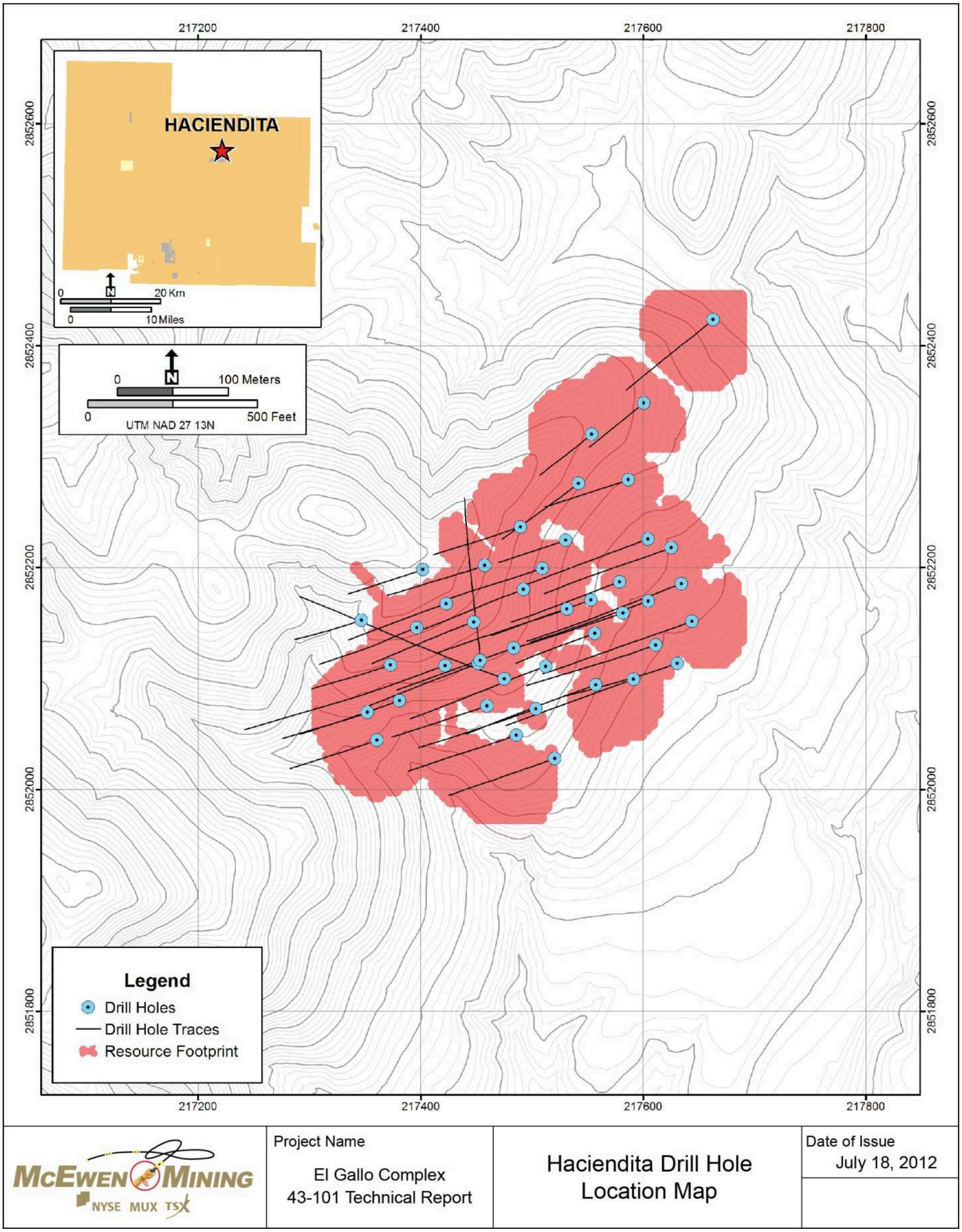


Figure 10-7: Haciendita Drill Hole Location Map

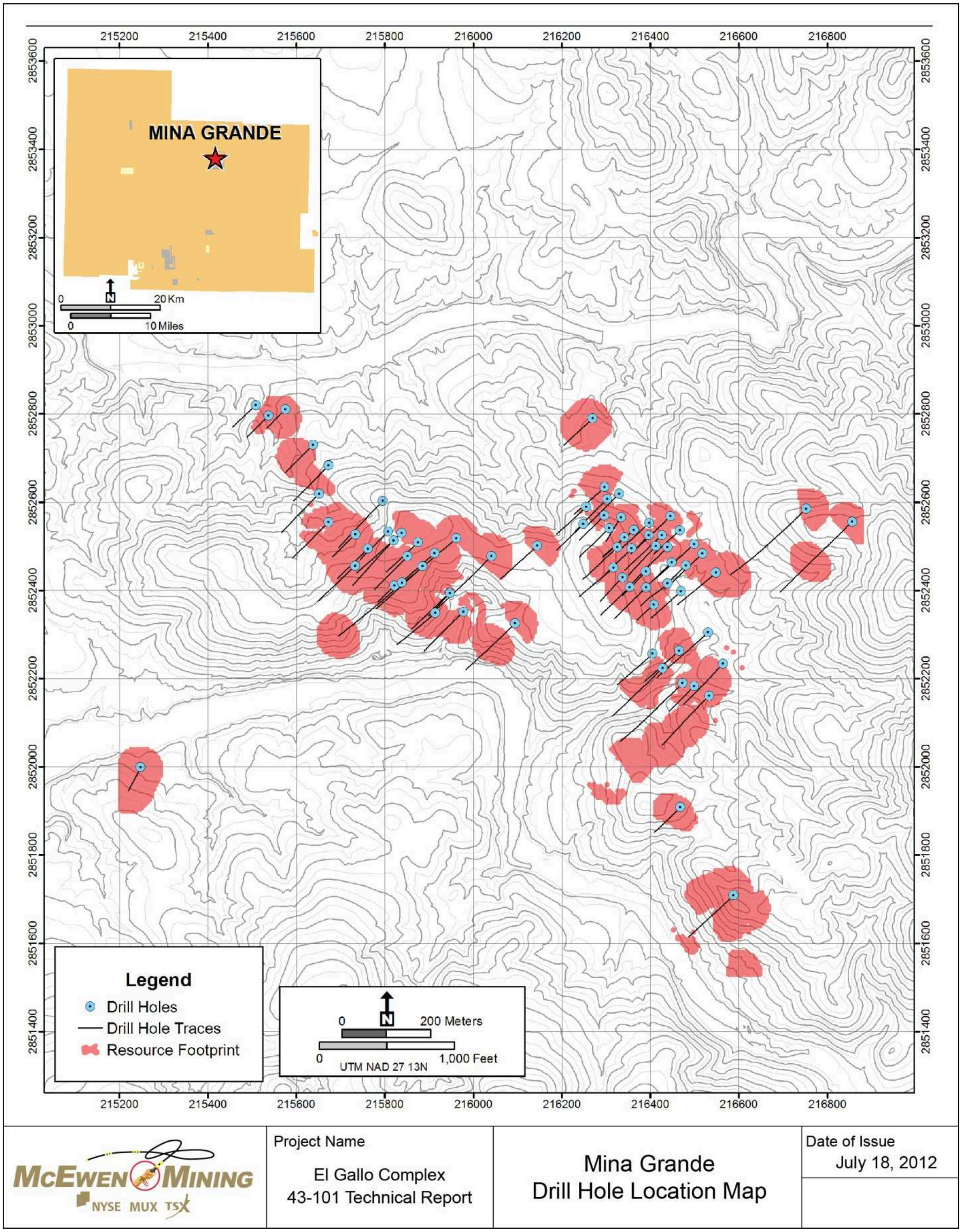


Figure 10-8: Mina Grande Drill Hole Location Map

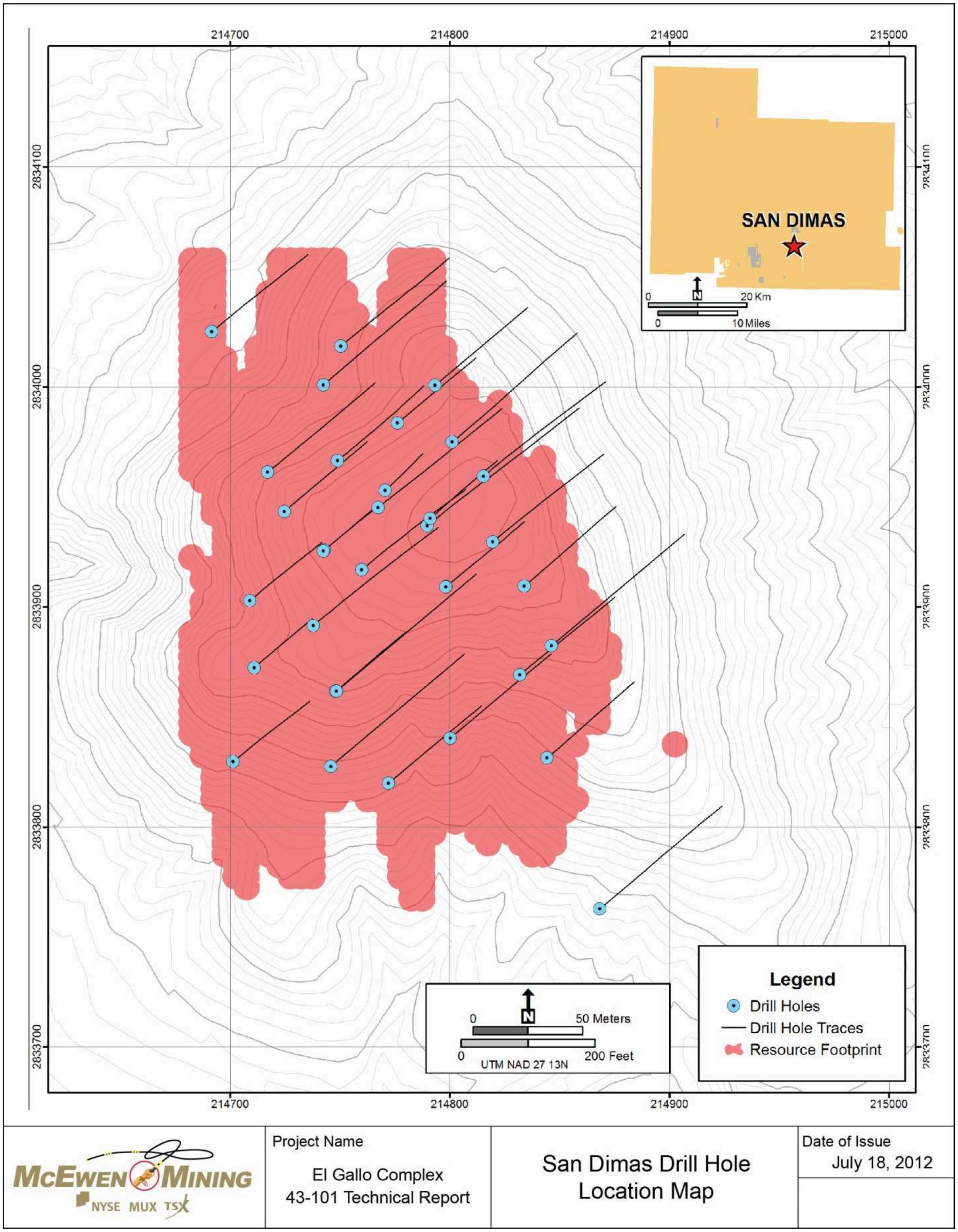


Figure 10-9: San Dimas Drill Hole Location Map

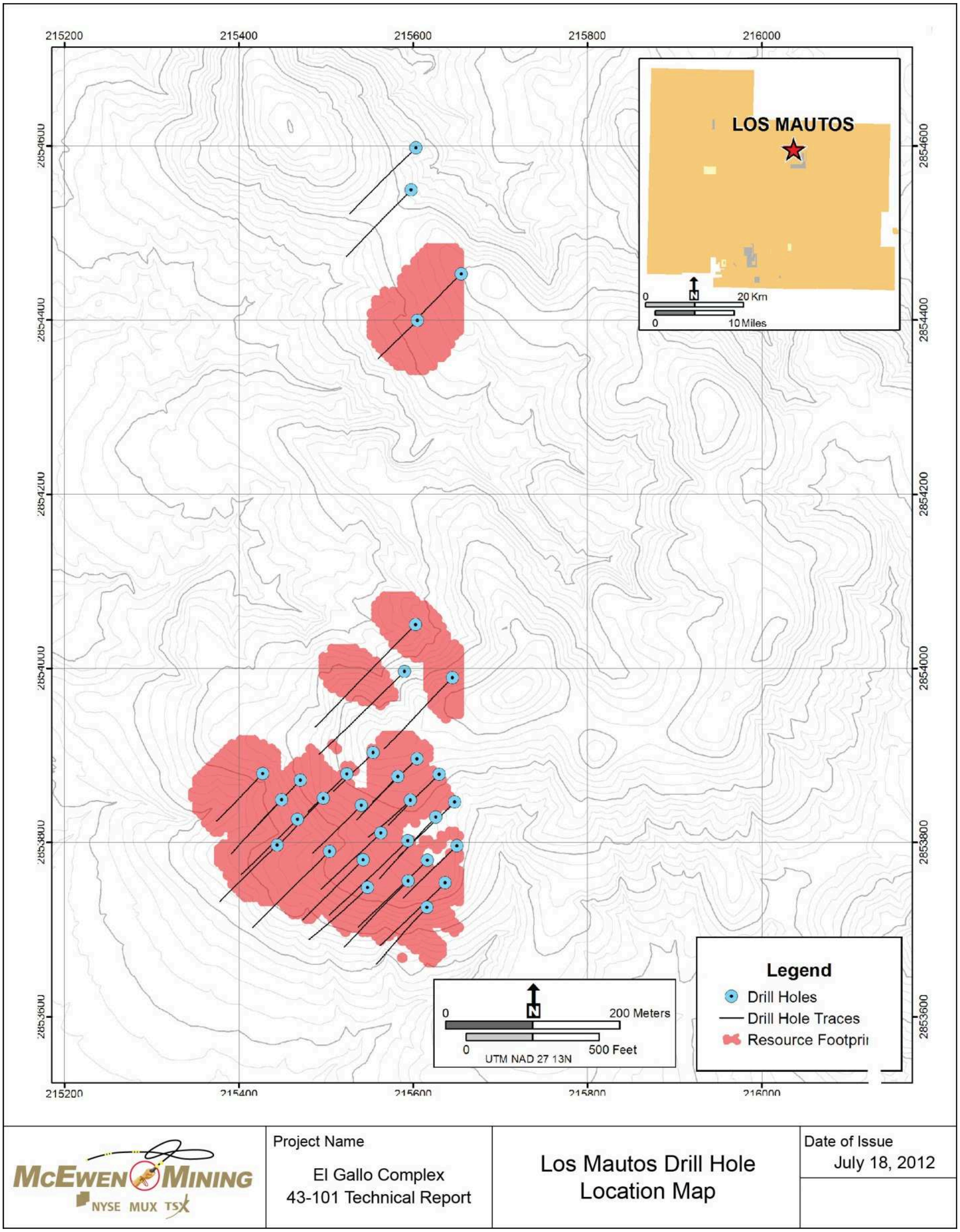


Figure 10-10: Los Mautos Drill Hole Location Map

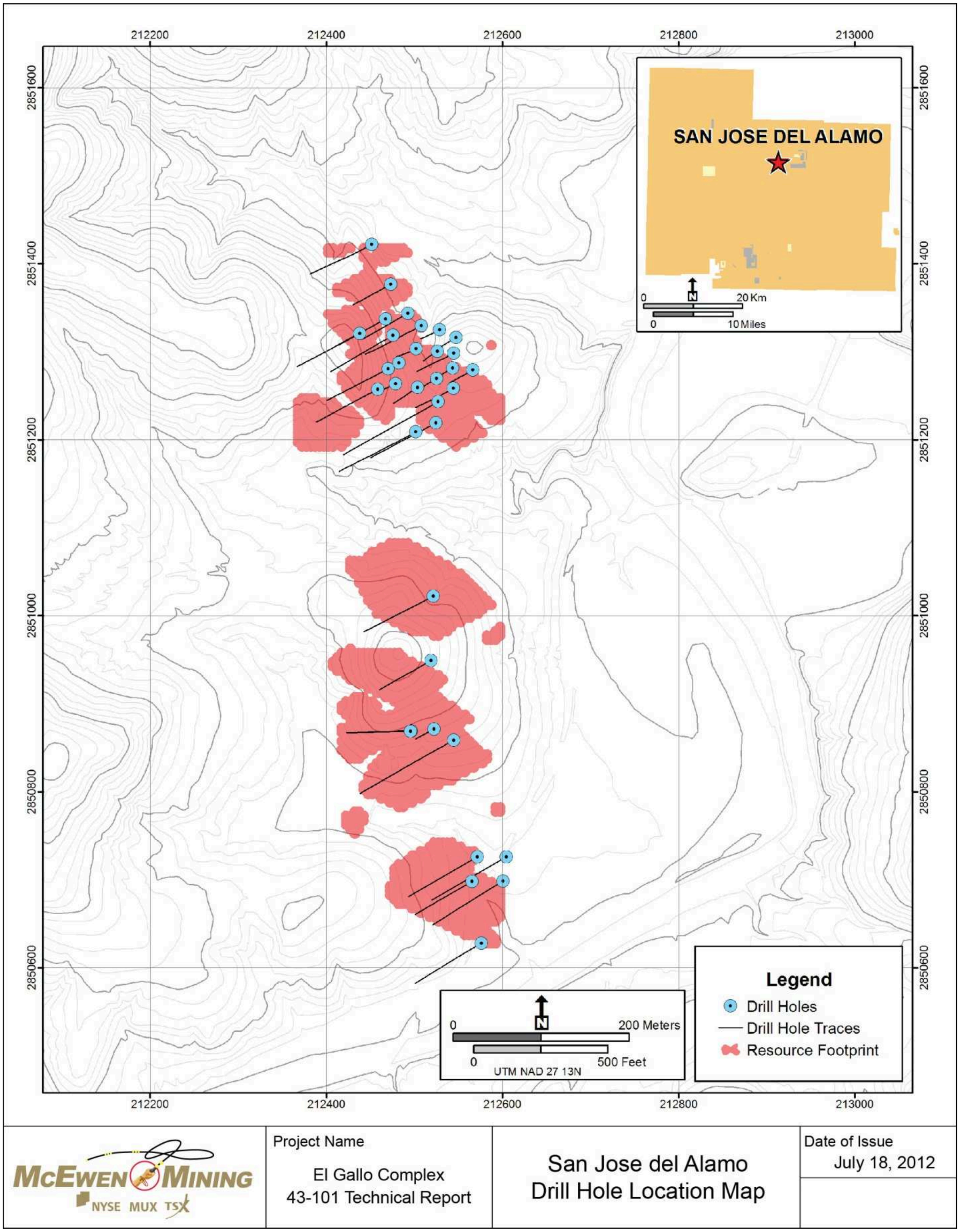


Figure 10-11: San Jose del Alamo Drill Hole Location Map

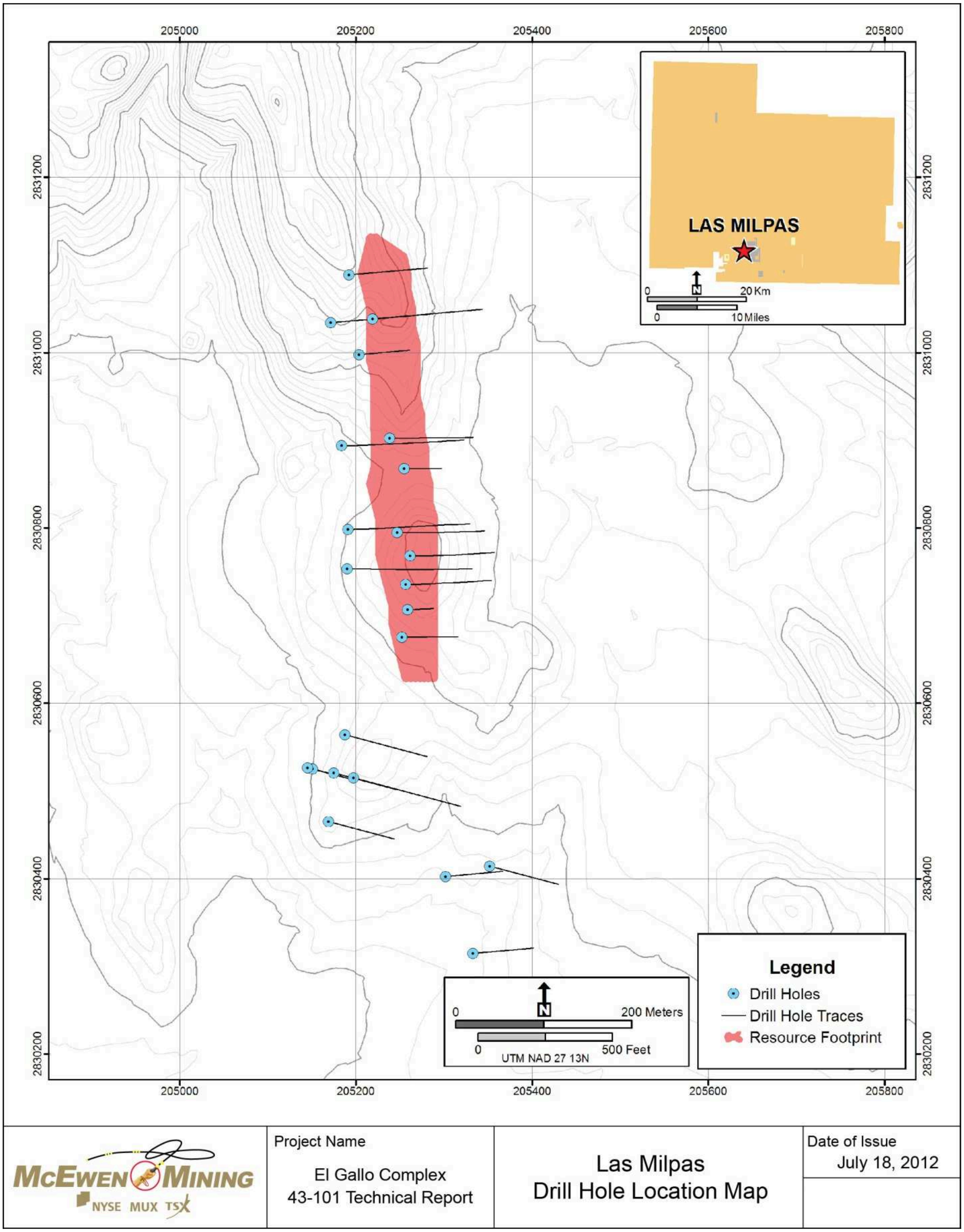


Figure 10-12: Las Milpas Drill Hole Location Map

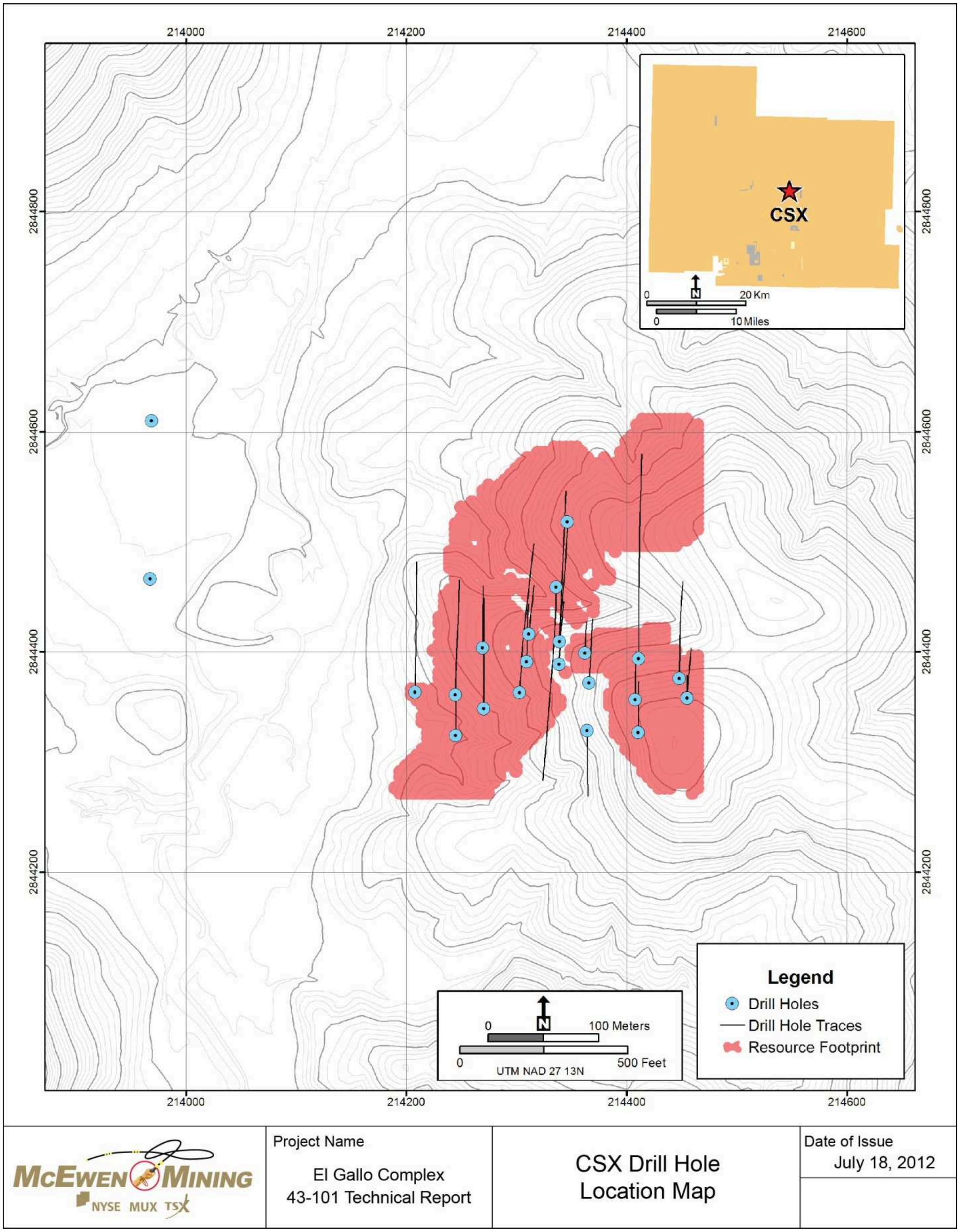


Figure 10-13: CSX Drill Hole Location Map

10.6 CORE RECOVERY AND RQD

Core recovery and RQD are measured at the core logging facility by McEwen's geologists where the following measures are recorded:

- Block interval
- Drill run (meters)
- Measured length (meters)
- Calculated recovery (%)
- RQD measured length (meters)
- Calculated RQD (%)

Recovery and RQD measurements are recorded in the company's database. The methodology used for measuring recovery was reviewed by John Read, co-author of this Technical Report and is standard industry practice.

Generally speaking, for all projects core recoveries are good, generally >90 percent, and often >95 percent. Locally, in fault zones or in alluvial material at the tops of some holes, recoveries can be significantly worse. These occasions constitute a relatively minor occurrence overall. For example, some El Gallo holes were collared in drill pad fill or in dry creek beds where core recovery was difficult. In the worst of these situations, recoveries could be near 0% over short intervals.

As is generally common, there is a tendency for slightly lower core recoveries in the broken rock in the weathered zone at the tops of holes. In some cases at El Gallo this constitutes mineralized material because many holes were collared on surface mineralization. For the most part, however, mineralized zones at El Gallo exhibit good core recovery.

A strong fault zone at depth in the northeast, down dip extension of the Palmarito deposit was encountered in a few core holes. In this zone core recoveries were low and, in 3 cases (one Nevada Pacific hole and two McEwen holes), the holes had to be abandoned. Other areas of difficult core recovery include the mineralized zone at San Jose del Alamo. Here, due to the broken, vuggy nature of the vein, core recoveries as low as 15-20% have been recorded in some drill runs. Taken as a whole, however, mineralized intercepts at San Jose del Alamo exhibited moderate recoveries.

11 SAMPLE PREPARATION, ANALYSES AND SECURITY

11.1 SAMPLING METHOD AND APPROACH

11.1.1 Introduction

Sampling programs on the different resource areas has included stream sediment, soil, rock chip, rotary and core samples. All of the sampling conducted by McEwen was carried out by company personnel or contractors. Core and RC drill samples form the basis of the resource estimate for the in-situ material for each of the areas. (Results from a minor amount of underground channel sampling was used at Palmarito). A third sample method was used to estimate the historic waste dumps and tailings located at Palmarito and Mina Grande.

11.1.2 El Gallo

McEwen (2009 to 2012): Sampling for resource estimation purposes at El Gallo has been conducted solely through drill core obtained by McEwen between January 2009 and September 2012. The current core cutting protocol is as follows:

- The core boxes are transferred from the logging station to the cutting station (approximately 75 ft (25 m)).
- Core is cut with a diamond saw. The core is typically cut into three separate parts that includes one half and two quarters of the core.
- Either a quarter or half of the core is collected and bagged and properly identified by labelling the bag as well as inserting a tag inside the bag. The bagged samples are transferred to ALS Chemex in Hermosillo, Mexico for sample preparation. All core samples except those from GAX026 were prepared by Chemex. Samples for hole GAX026 were prepared by McEwen at its Magistral lab and pulps were sent to Chemex. All samples sent to Chemex are transferred by Chemex personnel or sent by courier.
- For select holes, aquarter-core sample is prepared and assayed at McEwen's Magistral lab. McEwen sometimes assays core samples internally to obtain quick turn-around of results in order to better plan its exploration program. Assay results from McEwen's Magistral lab (not an accredited lab) have not been included in the resource estimate).
- The un-sampled portion of the core remains in the box, in its original orientation, as a permanent record. Certain sections of core no longer exist in their entirety since they were used to perform metallurgical test work. In these cases, the intervals have been "skeletonised," keeping some representative pieces in the core box.

11.1.3 Palmarito

Nevada Pacific Gold (2006 to 2007): Drilling was completed using a core drill and NQ core. Drill hole sampling attempted to correlate the sample intervals completed by Lluvia de Oro. In some zones internal intervals were assigned based on the geological characteristics of the rock.

The core sample was halved with a rock saw with one half retained and the other bagged and sealed to form an assay sample.

McEwen (2008 to 2012): Procedures for core and RC samples are similar to those described for El Gallo under section 11.1.2 and Magistral 11.1.4. For Palmarito core samples, the vast majority were shipped to Chemex as ½-core samples.

In addition to drilling, ten historic underground adits located in the updip portions of the Palmarito deposit were mapped and sampled and used for resource estimation purposes.

Underground sampling. Channel sampling of the underground adits was carried out with the idea to approximate the size of a typical HQ core sample. Sampling was done in the following manner: After an initial cleaning of the adit rib (wall), two parallel horizontal cuts were made with a separation of 10cm using a diamond disc cutter. The cuts were made about 5cm deep. The adit wall was then washed down with water to eliminate any rock powder generated from the sawing. Mapping at a scale of 1:500 was done utilizing tape and compass to map the trend of the adit as well as the geology. Samples were marked on the wall with paint using a nominal 1m interval although they varied somewhat based on alteration contacts. A tarp was placed on the floor of the adit to catch rock chips and the for each sample interval the material between the parallel cuts was collected using hammer and chisel. Rock chips were collected and bagged and sent to ALS Chemex for analysis.

Sample intervals (from-to) were based on a marked initial point at the adit portal (taken as zero) and were recorded by the geologist in charge. Sample intervals as well as the azimuth trend of the adit were databased as drillholes. All adits are horizontal with lengths ranging from 7 – 35m.

The historic tailings at Palmarito were sampled by backhoe trench using the following procedure: Under supervision of a company geologist or technician, trenches were excavated to a nominal 1 to 2 ft (0.3 to 0.6 m) below the bottom of tailings material. This was determined visually. Samples were collected vertically along the trench wall with a shovel and placed in plastic bags labelled with trench number and sample number. Sample thicknesses varied from 0.6 ft (0.2 m) to 8.5 ft (2.6 m) depending on the visual characteristics of the tailings material. Only tailings material was sampled; soil or bedrock below the level of tailings was not sampled. Generally, one sample was collected per trench; two or three samples were collected from some trenches. In the cases where more than one sample was obtained, they were vertically contiguous. Field notes were recorded describing the tailings material, underlying material, depth of trench and tailings thickness. A total of fifty-two trenches were excavated and sampled. Samples were sent directly to ALS Chemex for analysis.

Sixty-four samples from the historic mine dumps were collected. An excavator was utilized to dig pits on approximately 65.5 ft (20 m) centers on the accessible portions of the surface of the dump. Pit depths ranging from 13 to 16.5 ft (4 to 5 m) were determined by tape. Taking care to avoid sloughed material, the excavator bucket was drawn up along the pit wall from the bottom of the pit to the surface. A representative portion of this bulk sample was then taken by shovel to obtain samples of approximately 30.5 lbs (14 kg). These samples were bagged in rice bags and transported to the Magistral mine laboratory for splitting. After splitting to approximately 10kg, samples were sent to ALS Chemex for analysis.

11.1.4 Magistral

Santa Cruz Gold and Queenstake Resources (1994 to 2002): Sampling methods for RC holes varied by drilling conditions (wet or dry). Table 11-1 shows a summary of the drilling conditions encountered through the 1999 drilling program. Dry samples were collected from the cyclone into collection buckets and then split using a Jones riffle splitter. Wet samples were collected from a rotary wet splitter and then further split with a Jones riffle splitter. One-quarter sample splits (10 to 15 kg) were collected for both an analytical sample and a field duplicate. The lithology, alteration, and mineralization were recorded on site for each sample.

Table 11-1: Phase I El Gallo Complex, Matistral Drill Hole Water Intercept Summary

Deposit	Dry Holes	Wet Holes	Depth to Start Wet Drilling (Avg. Depth)
	Percent Dry Drilling	Percent Wet Drilling	
San Rafael	41%	59%	1-128 (50)
Samaniego	39%	61%	9-156 (50)
Sagrado Corazon - Lupita	91%	9%	26-80

RC and core samples were collected at 4.9 ft (1.5 m) intervals. Core samples were often collected at geologic intervals determined by the geologist based on visual evaluation of the core.

Nevada Pacific Gold (2004 to 2005): Nevada Pacific Gold's sampling protocols were similar to those indicated by Queenstake.

McEwen (2008 to 2010): RC drill holes were sampled and logged on 5 ft (1.5 m) intervals. Samples were collected using a cyclone and rotating wet splitter. Samples were split at the rig to obtain one assay sample and one field duplicate. Procedures for core samples are the same as described for El Gallo under section 11.1.2.

11.1.5 Other Resource Areas

McEwen (2010 to 2012): Procedures for core drilling and tailings sampling (Mina Grande) are similar to those described for El Gallo under section 11.1.2 and Palmarito 11.1.3, respectively.

11.2 SAMPLE PREPARATION, ANALYSES AND SECURITY

11.2.1 El Gallo

McEwen (2009 to 2012): Currently all routine sample preparation (excluding preparation of samples from hole GAX026) and analyses of the El Gallo core samples are carried out by Chemex, at their sample preparation facility in Hermosillo, Mexico.

Chemex is an internationally-recognized organization that operates laboratories worldwide and has obtained ISO 9001:2000 certification at all locations. Since McEwen began exploring El Gallo, SGS Laboratories in Durango, Mexico has been designated as the secondary (check) laboratory. All sampling and QA/QC work is overseen on behalf of McEwen by John Read, co-author of this Technical Report.

El Gallo Sample Preparation and Shipment: Upon receiving the split core samples, Chemex undertakes the following procedure for sample preparation. All geochemical and assay analyses are done at Chemex's laboratory in Vancouver, BC, Canada.

- Coding: An internal laboratory barcode is assigned to each sample at reception.
- Drying: Samples are dried by oven at 100º to 110ºC.
- Crushing: The entire sample is crushed to obtain nominal 90 percent at 2 mm.
- Splitting: The sample passes through a nominal 1 inch (2.5 cm) Jones Splitter, to obtain a split of approximately 250 g. The coarse reject is stored.
- Pulverization: A 250 g pulp is prepared to achieve nominal 95 percent passing at 106 microns. A 100 to 120g aliquot is taken from the master pulp for analysis. The remaining master pulp is stored on site.
- Shipping: The pulps are shipped to Chemex's analytical facility in Vancouver, Canada for analysis.
- All equipment is blasted with compressed air between each sample that is processed. Random screen tests are done on crushed and pulverized material to ensure that sample preparation specifications are being met.

All samples submitted to Chemex are analyzed using Chemex method Au-AA23 for gold, and for 33 other elements (including silver) by method ME-ICP61. ME-ICP61 uses a 4-acid digestion followed by ICP determination. The detection limit for silver is 0.5 gpt. Gold is determined using a 30g fire assay fusion, cupelled to obtain a bead and digested with Aqua Regia, followed by an AAS finish, with a detection limit of 0.005 gpt. Samples returning greater than 1,500 gpt silver or 10 gpt gold are re-analyzed using gravimetric fire assay.

11.2.2 Palmarito

Nevada Pacific Gold (2006 to 2007): The core was halved with a saw with one half retained and the other bagged and sealed before being shipped to the ALS Chemex sample preparation facility in Hermosillo, Mexico and assayed at Chemex's facility in Vancouver. All samples were fire assayed for gold and analyzed for 41 additional elements using a partial digestion ICP method. Selected anomalous silver intervals were analyzed for silver using a 4-acid leach total digestion method.

McEwen (2008 to 2012): Procedures for core samples are similar to those described under El Gallo in section 11.2.1. Procedures for RC samples are similar to those described under Magistral section 11.2.3.

Tailings samples collected in backhoe trenches were bagged and labelled at the sampling site and sent directly to Chemex for analysis.

Dump rock samples were crushed at the mine laboratory by jaw crusher and split for submittal to Chemex.

11.2.3 Magistral

Santa Cruz Gold & Queenstake Resources (1994 to 2005): Samples were delivered to Chemex in Hermosillo, Mexico for sample preparation pre-2001, while 2001 and 2002 drilling samples were picked up by Chemex at the site. At Chemex, the entire sample (10 to 15 kg) was crushed to 60 percent passing minus 10 mesh, using jaw and cone crushers. A representative 250- to 300-gram split of the crushed sample was obtained using a Jones riffle splitter. The split was then pulverized to 90 percent passing minus 150 mesh using a ring and puck pulverizer. The resultant pulverized sample was then shipped to Chemex's Reno, Nevada laboratory to assay for gold. A one-assay tonne fire assay (29.17 grams) was used, with analysis by atomic absorption. If the atomic absorption value exceeded 10 gpt Au, then it was re-assayed with a gravimetric finish.

Nevada Pacific Gold (2004 to 2005): Nevada Pacific Gold continued to apply the same protocol with respect to the sample preparation, analyses and security as Santa Cruz Gold and Queenstake Resources.

McEwen (2008 to 2010): All samples (RC and core) were transported from the field to McEwen's Magistral lab for staging. Samples were picked up on site by Chemex or couriered to their sample preparation facility in Hermosillo. Analyses for gold and a multi-element package were done by the Chemex laboratory in Vancouver, Canada using the same methodology as Santa Cruz, Queenstake and Nevada Pacific.

11.2.4 Other Resource Areas

McEwen (2008 to 2012): Procedures for core samples are similar to those described under El Gallo in section 11.2.1. Procedures for tailings (Mina Grande) samples are similar to those described under Palmarito section 11.2.2.

For McEwen-managed projects all samples were picked up at the mine site by ALS Chemex and trucked to their sample preparation facility in Hermosillo, Sonora, Mexico or were shipped by courier. After drying, samples were crushed to 70 percent passing 2 mm, then a split was taken and pulverized to 85 percent passing 75 microns utilizing a ring-and-puck pulverizer to obtain a 250 grams pulp. An aliquot of this pulp was sent to Chemex's Vancouver laboratory for analysis. Samples were assayed for gold by fire assay with atomic absorption finish and for silver and 32 other elements by ICP using a 4-acid leach total digestion method.

Chemex reports the results digitally to McEwen via e-mail and submits signed paper certificates. General turnaround is between 14 to 21 days. Results are uploaded electronically into the company's database at the office in Reno, Nevada. All hard copy certificates are stored in a well organized manner at that office.

It is believed that the analytical laboratory is using procedures and equipment that are consistent with industry "Best Practices" and therefore can be used for resource estimating purposes.\

11.2.5 QA/QC Program

McEwen's quality assurance/quality control (QAQC) program includes the following procedures: blank/standard analysis, duplicate sample analysis, and check assay analysis. These particular analyses were conducted on the following eleven projects: El Gallo, Magistral, Palmarito, Chapotillo, Haciendita, Mina Grande, San Dimas, Los Mautos, San Jose del Alamo, Las Milpas, and CSX. All original drill samples were sent to ALS Chemex (Chemex) in Hermosillo for sample preparation. Once prepared, the samples are shipped to the Chemex analytical lab in Vancouver, British Columbia where they are assayed for gold and silver. In addition, two check assays laboratories were used during the drilling programs: SGS Laboratories located in Durango, Mexico and Inspectorate Laboratories in Hermosillo, Mexico.

Blanks and standards were purchased from CDN Resource Laboratories and Shea Clark Smith, Minerals Exploration & Environmental Geochemistry then inserted into the sample stream at regular intervals (a minimum of one for every 20 samples). The analytical statistics for these standards are provided by the manufacturer and gives McEwen the means to determine the accuracy/precision of the analytical techniques being used.

The duplicate sample analysis program involves the collection/analysis of two samples from the same interval on reverse-circulation drilling programs at regular intervals, and two ¼ core samples from opposite sides of the same interval on core drilling programs. These duplicate samples are analyzed with respect to the original to determine the precision of the analysis.

The check assay program utilizes an alternate analytical laboratory (SGS and Inspectorate) to check for precision in the analytical techniques. Approximately 5% of the assays are selected at random, and then a list is given to ALS Chemex where they package the pulps and send them to Inspectorate or SGS to be assayed. These samples are analyzed with respect to the original assay to determine the degree of deviation from the mean and the degree of bias in the dataset. It should be noted that the initial selection process is random, but the final list is reviewed to ensure that all drill holes and a wide array of gold and silver grades are represented. These extra measures ensure that the dataset is not biased.

In the case of a standard, blank, or check sample out of control (for blanks and standards defined as outside of three standard deviations from the mean and for check samples defined as a deviation of greater than 30%) , the data are first reviewed to identify any labeling/archiving errors; oftentimes issues with standards and blanks are resolved by this. If the issue cannot be resolved in this manner and occurs within or near a mineralized interval a select batch of samples is reanalyzed by Chemex, including the problematic standard/blank. In every case where this was done the re-analyses were not materially different from the original. In the case of check sample out of control, the same pulp is sent to a second check assay laboratory to determine which lab is causing the issue. In some instances, new pulps may also be generated from the bulk reject and analyzed by ALS Chemex. All of the new data are analyzed to identify the source of the problem, and eliminate systematic error from future assays.

11.2.5.1 Blanks and Standards El Gallo

One standard reference material pulp and one barren blank pulp were inserted into the sample shipments on regular intervals (every 25 samples for holes GAX-001 through GAX-043 and every 20 samples for holes drilled after GAX-043). In some instances, standards and blanks were inserted more frequently so as to be placed within visually mineralized intervals. Certified standard reference material pulps and blank pulps were purchased from either CDN Resource Laboratories or Shea Clark Smith/MEG Labs. Silver values for the standards ranged from 0.248 to 2684 ppm.

On minor occasions it was noted that Chemex results did not match the accepted values of the standard or blank. For most of these cases, based on similarity of assay results to accepted values for other standards, it was determined that the incorrect standard number had been entered into the database. In some cases, Chemex assays for the lowest grade standard (0.248 ppm) yielded values above the accepted range for this standard. Reruns by Chemex were usually consistent with their first analyses and it was concluded that analytical consistency was difficult at these levels. Since these values are considerably lower than values of economic or exploration interest, the issue was considered resolved and the use of this standard was discontinued. On a few occasions a blank was determined to have some minor carry-over from a previous high-grade sample (a standard). In one of these cases this carry-over resulted in the blank assaying 1.7 ppm Ag, or 0.06 percent of the previous samples' assay.

11.2.5.2 Sample Duplicates El Gallo

Duplicate core samples were analyzed for 90 mineralized intervals. For these 90 samples, the opposite half of the ¼-core was collected from the core box and submitted to Chemex.

11.2.5.3 Check Assay Program El Gallo

McEwen's Check assay procedure involves sending sample pulps directly from Chemex's Hermosillo facility to SGS Laboratories in Durango, Mexico. SGS performs gold and silver analyses by fire assay with AAS finish for gold and gravimetric finish for silver.

For the first phase of drilling (GAX-001 through 043), samples for check assay were chosen systematically with a minimum of one check sample every 25 samples with occasional additional samples in mineralized intervals. For holes drilled after GAX-043, the database was filtered for samples with Chemex results >10 ppm Ag and check samples were chosen from this population so as to obtain check assays for a nominal 10 percent of these, and including checks for all holes with mineralized intervals.

11.2.5.4 Blanks and Standards Palmarito

Nevada Pacific: Other than standards being used internally by Chemex as part of their routine QA/QC procedures, no evidence exists for blanks and standards being introduced during drill campaigns conducted by previous operators.

McEwen: Blanks and standards were included in sample shipments to Chemex. Most Palmarito drill holes had blanks and standards inserted. Blanks and standards are in the form of pulps and consisted of one standard followed by one blank being inserted nominally every 25 samples (every 20 samples for holes drilled through 2010-2012). McEwen uses a variety of standards with a range of known gold and silver values. Certified standard reference material pulps and blank pulps were purchased from either Sonora Naturals, CDN Resource Laboratories, or Shea Clark Smith/MEG Labs.

11.2.5.5 Sample Duplicates Palmarito

Nevada Pacific: No duplicate samples were apparently collected from the core drilling conducted by Nevada Pacific.

McEwen: Field duplicate splits for reverse circulation samples were collected at the drill rig. These duplicate samples were utilized for internal laboratory assaying and therefore were not subject to third party analysis. Duplicate samples were not collected from core drilling undertaken at Palmarito.

11.2.5.6 Check Assay Program Palmarito

Nevada Pacific: No evidence exists as to a check assay program employed by Nevada Pacific.

McEwen: Second-laboratory check assays were done by SGS Laboratories in Durango, Mexico for select drill samples. These were done by sending pulps directly from Chemex to SGS. This consisted of check assays for gold and silver being conducted for nominally every 25 samples. SGS utilized a fire assay/atomic absorption finish for gold and fire assay/gravimetric finish for silver.

11.2.5.7 Blanks and Standards Magistral

Santa Cruz, Queenstake, Nevada Pacific: Other than standards being used internally by Chemex as part of their routine QA/QC procedures, no evidence exists for blanks and standards being introduced during drill campaigns conducted by previous operators.

McEwen: Blanks and standards were included in most sample shipments to Chemex. Some exploratory holes did not have blanks and standards. Blanks and standards are in the form of pulps and consisted of one standard followed by one blank being inserted nominally every 25 samples (every 20 samples for holes drilled in 2010). McEwen uses a variety of standards with a range of known gold and silver values. Certified standard reference material pulps and blank pulps were purchased from Sonora Naturals, CDN Resource Laboratories or Shea Clark Smith/MEG Labs.

11.2.5.8 Sample Duplicates Magistral

Santa Cruz: For reverse circulation drilling field duplicate samples were collected at the drill rig. Some of these samples were sent to Chemex as a check for assay repeatability for given sample intervals. PAH review of these data (Magistral Gold Project, Sinaloa Mexico, Resource and Reserve Update Technical Report, PAH, January 2003) did not indicate any sample repeatability problems. No evidence exists for duplicate samples being taken from core drilling.

Queenstake: Field duplicate split samples were apparently collected at the drill rig for Queenstake conducted reverse circulation drilling; however, no evidence exists for analyses of these field duplicates. No evidence exists for duplicate samples being taken from core drilling.

Nevada Pacific: No evidence exists for the collection of duplicate samples from their reverse circulation or core drilling.

McEwen: Field duplicate splits for reverse circulation samples were collected at the drill rig. These duplicate samples were utilized for internal laboratory assaying and therefore were not subject to third party analysis. Duplicate samples were not collected from core drilling undertaken at Magistral.

11.2.5.9 Check Assay Program Magistral

Santa Cruz: In addition to the Chemex analyses of field duplicate samples described above, Chemex also did re-run analyses for select pulps to give indication of assay repeatability of prepared material. Second laboratory check assays by Bondar-Clegg laboratories, Vancouver, British Columbia were conducted on both coarse rejects and pulps sent directly from Chemex. PAH review of these data indicated no problems associates with the Chemex re-runs or field duplicate analyses. PAH concluded that there was some bias for analyses by Bondar-Clegg of bulk rejects and, to a lesser extent, pulps. For both, Bondar- Clegg yielded lower gold values. For the Bondar-Clegg pulp re-assays the difference was considered minor and within acceptable limits. For the bulk reject check there is an average difference of -10% between Chemex and Bondar-Clegg. PAH believed that this was likely the result of ineffective preparation of the bulk reject by Chemex and therefore does not represent an analytical problem.

Queenstake: No evidence exists as to a check assay program employed by Queenstake.

Nevada Pacific: No evidence exists as to a check assay program employed by Nevada Pacific.

McEwen: Second-laboratory check assays were done by SGS Laboratories in Durango, Mexico for select drill samples. These were done by sending pulps directly from Chemex to SGS where check assays for gold and silver were conducted for nominally every 25 samples. SGS utilized a fire assay/atomic absorption finish for gold and fire assay/gravimetric finish for silver. Some exploratory drill holes (MPX- 018 through MPX-030) did not have check assays done.

11.2.5.10 Blanks and Standards Chapotillo

McEwen: Blanks and standards were included in sample shipments to Chemex. Most Chapotillo drill holes had blanks and standards inserted. Blanks and standards are in the form of pulps and consisted of one standard followed by one blank being inserted nominally every 25 samples. McEwen uses a variety of standards with a range of known gold and silver values. Certified standard reference material pulps and blank pulps were purchased from either CDN Resource Laboratories, or Shea Clark Smith/MEG Labs.

11.2.5.11 Sample Duplicates Chapotillo

McEwen: Duplicate samples were not collected from core drilling undertaken at Chapotillo.

11.2.5.12 Check Assay Program Chapotillo

McEwen: Second-laboratory check assays were done by SGS Laboratories in Durango, Mexico for select drill samples. These were done by sending pulps directly from Chemex to SGS. This consisted of check assays for gold and silver being conducted for nominally every 25 samples. SGS utilized a fire assay/atomic absorption finish for gold and fire assay/gravimetric finish for silver.

11.2.5.13 Blanks and Standards Haciendita

McEwen: Blanks and standards were included in sample shipments to Chemex. Most Haciendita drill holes had blanks and standards inserted. Blanks and standards are in the form of pulps and consisted of one standard followed by one blank being inserted nominally every 25 samples. McEwen uses a variety of standards with a range of known gold and silver values. Certified standard reference material pulps and blank pulps were purchased from either CDN Resource Laboratories, or Shea Clark Smith/MEG Labs.

11.2.5.14 Sample Duplicates Haciendita

McEwen: Duplicate samples were not collected from core drilling undertaken at Haciendita.

11.2.5.15 Check Assay Program Haciendita

McEwen: Second-laboratory check assays were done by SGS Laboratories in Durango, Mexico and Inspectorate in Hermosillo, Mexico for select drill samples. These were done by sending pulps directly from Chemex to SGS or Inspectorate. This consisted of check assays for gold and silver being conducted for nominally every 25 samples. SGS utilized a fire assay/atomic absorption finish for gold and fire assay/gravimetric finish for silver. Inspectorate utilized a fire assay with atomic absorption/gravimetric finish for over limit samples, and 4-acid digestion atomic absorption/gravimetric finish for over limit samples.

11.2.5.16 Blanks and Standards Mina Grande

McEwen: Blanks and standards were included in sample shipments to Chemex. Most Mina Grande drill holes had blanks and standards inserted. Blanks and standards are in the form of pulps and consisted of one standard followed by one blank being inserted nominally every 25 samples. McEwen uses a variety of standards with a range of known gold and silver values. Certified standard reference material pulps and blank pulps were purchased from either CDN Resource Laboratories, or Shea Clark Smith/MEG Labs.

11.2.5.17 Sample Duplicates Mina Grande

McEwen: Duplicate samples were not collected from core drilling undertaken at Mina Grande.

11.2.5.18 Check Assay Program Mina Grande

McEwen: Second-laboratory check assays were done by SGS Laboratories in Durango, Mexico and Inspectorate in Hermosillo, Mexico for select drill samples. These were done by sending pulps directly from Chemex to SGS or Inspectorate. This consisted of check assays for gold and silver being conducted for nominally every 25 samples. SGS utilized a fire assay/atomic absorption finish for gold and fire assay/gravimetric finish for silver. Inspectorate utilized a fire assay with atomic absorption/gravimetric finish for over limit samples, and 4-acid digestion atomic absorption/gravimetric finish for over limit samples.

11.2.5.19 Blanks and Standards San Dimas

McEwen: Blanks and standards were included in sample shipments to Chemex. Most San Dimas drill holes had blanks and standards inserted. Blanks and standards are in the form of pulps and consisted of one standard followed by one blank being inserted nominally every 25 samples. McEwen uses a variety of standards with a range of known gold and silver values. Certified standard reference material pulps and blank pulps were purchased from either Sonora Naturals, CDN Resource Laboratories, or Shea Clark Smith/MEG Labs.

11.2.5.20 Sample Duplicates San Dimas

McEwen: Duplicate samples were not collected from core drilling undertaken at San Dimas.

11.2.5.21 Check Assay Program San Dimas

McEwen: Second-laboratory check assays were done by InspectorateLaboratories in Hermosillo, Mexico for select drill samples. These were done by sending pulps directly from Chemex to SGS. This consisted of check assays for gold and silver being conducted for nominally every 25 samples. SGS utilized a fire assay/atomic absorption finish for gold and fire assay/gravimetric finish for silver.

11.2.5.22 Blanks and Standards Los Mautos

McEwen: Blanks and standards were included in sample shipments to Chemex. Most Los Mautos drill holes had blanks and standards inserted. Blanks and standards are in the form of pulps and consisted of one standard followed by one blank being inserted nominally every 25 samples. McEwen uses a variety of standards with a range of known gold and silver values. Certified standard reference material pulps and blank pulps were purchased from either CDN Resource Laboratories, or Shea Clark Smith/MEG Labs.

11.2.5.23 Sample Duplicates Los Mautos

McEwen: Duplicate samples were not collected from core drilling undertaken at Los Mautos.

11.2.5.24 Check Assay Program Los Mautos

McEwen: Second-laboratory check assays were done by SGS Laboratories in Durango, Mexico for select drill samples. These were done by sending pulps directly from Chemex to SGS. This consisted of check assays for gold and silver being conducted for nominally every 25 samples. SGS utilized a fire assay/atomic absorption finish for gold and fire assay/gravimetric finish for silver.

11.2.5.25 Blanks and Standards San Jose del Alamo

McEwen: Blanks and standards were included in sample shipments to Chemex. Most San Jose del Alamo drill holes had blanks and standards inserted. Blanks and standards are in the form of pulps and consisted of one standard followed by one blank being inserted nominally every 25 samples. McEwen uses a variety of standards with a range of known gold and silver values. Certified standard reference material pulps and blank pulps were purchased from either CDN Resource Laboratories, or Shea Clark Smith/MEG Labs.

11.2.5.26 Sample Duplicates San Jose del Alamo

McEwen: Duplicate samples were not collected from core drilling undertaken at San Jose del Alamo.

11.2.5.27 Check Assay Program San Jose del Alamo

McEwen: Second-laboratory check assays were done by SGS Laboratories in Durango, Mexico for select drill samples. These were done by sending pulps directly from Chemex to SGS. This consisted of check assays for gold and silver being conducted for nominally every 25 samples. SGS utilized a fire assay/atomic absorption finish for gold and fire assay/gravimetric finish for silver.

11.2.5.28 Blanks and Standards Las Milpas

McEwen: Blanks and standards were included in sample shipments to Chemex. Most Las Milpas drill holes had blanks and standards inserted. Blanks and standards are in the form of pulps and consisted of one standard followed by one blank being inserted nominally every 25 samples. McEwen uses a variety of standards with a range of known gold and silver values. Certified standard reference material pulps and blank pulps were purchased from either CDN Resource Laboratories, or Shea Clark Smith/MEG Labs.

11.2.5.29 Sample Duplicates Las Milpas

McEwen: Duplicate samples were not collected from core drilling undertaken at Las Milpas.

11.2.5.30 Check Assay Program Las Milpas

McEwen: Second-laboratory check assays were done by SGS Laboratories in Durango, Mexico for select drill samples. These were done by sending pulps directly from Chemex to SGS. This consisted of check assays for gold and silver being conducted for nominally every 25 samples. SGS utilized a fire assay/atomic absorption finish for gold and fire assay/gravimetric finish for silver.

11.2.5.31 Blanks and Standards CSX

McEwen: Blanks and standards were included in sample shipments to Chemex. Most CSX drill holes had blanks and standards inserted. Blanks and standards are in the form of pulps and consisted of one standard followed by one blank being inserted nominally every 25 samples. McEwen uses a variety of standards with a range of known gold and silver values. Certified standard reference material pulps and blank pulps were purchased from either Resource Laboratories, or Shea Clark Smith/MEG Labs.

11.2.5.32 Sample Duplicates CSX

McEwen: Duplicate samples were collected from the opposite half of the core for 2 samples in CSX-001 and 1 sample in CSX-003.

11.2.5.33 Check Assay Program CSX

McEwen: Second-laboratory check assays were done by SGS Laboratories in Durango, Mexico for select drill samples. These were done by sending pulps directly from Chemex to SGS. This consisted of check assays for gold and silver being conducted for nominally every 25 samples. SGS utilized a fire assay/atomic absorption finish for gold and fire assay/gravimetric finish for silver.

11.3 DENSITY ANALYSIS

11.3.1 El Gallo

Density determinations were carried out on 67 mineralized and 79 non-mineralized (wall rock) core samples by SGS Laboratories. The samples were of HQ core generally 5-8 inches (16-26cm) in length and were collected from various parts of the deposit. The samples were sealed with wax followed by immersion in distilled water and measuring displacement. The average density of the 67 mineralized samples is 2.46 g/cm³.

11.3.2 Palmarito

Density determinations were carried out by McEwen for mineralized rock (drill core), tailings material, and dump material. Procedures for these determinations are outlined below.

Drill Core: Density determinations were carried out on 39 mineralized samples and 21 non-mineralized (wall rock) samples. Similar to El Gallo, samples were taken throughout the deposit and density determinations were done by SGS Durango using wax immersion method. The average density of mineralized samples was 2.55 g/cm³.

Tailings: Density determinations were made from three different sample sites in the Palmarito tailings pile. For each site, a level location was created and a hole approximately 1.3 ft x 1.3 ft x 0.5 ft (40 cm x 40 cm x 15 cm) was excavated and all material carefully removed and collected in plastic sample bags. The hole was then lined with thin plastic and filled with water to the level top of the hole. The plastic containing the water was lifted from the hole and the water carefully transferred to 20 liter plastic bottles. The tailings material and water were then transported to the mine laboratory at Magistral where the water volume was measured to 0.1 liter precision utilizing a laboratory beaker. The tailings material was fully dried in the sample prep oven and then weighed. During the process, care was taken in the field to capture all of the tailings material from the hole and to ensure that the plastic liner lined the entire hole with no gaps along the walls and corners of the hole.

Density is given by: wt of tailings material in grams / water volume in ml (=cm³).

The three sites yielded density values of 1.51, 1.56, and 1.45 g/cm³ (7.6% spread). Average density is 1.51 g/cm³.

Dumps: A bulk density determination was made by extracting and weighing material of known volume from seven different locations on the lower and middle lifts of the Palmarito dumps.

Because it was suspected that the degree of compaction might vary with depth in the dump, samples were obtained from the dump surface (3.2 ft (1m) depth) and at a depth of (9.8 to 13.1 ft (3 to 4m) depth). In both cases, care was taken to remove any loose, fallen material before obtaining the sample from the in-situ floor or wall of the sample pit. Three shallow samples and two deeper samples were obtained in the middle dump, and one of each was obtained from the lower dump.

It was observed that the deeper samples contained more fines and that the fine material was wet so the resulting density must be a considered a wet density. Results of this bulk test yielded a density of 1.20 g/cm³.

11.3.3 Magistral

Density measurements on the mineralized zones were made on large diameter core holes (PQ size) submitted to Kappes, Cassiday & Associates for metallurgical testing purposes. A wax immersion method was used for this testing. Density measurements were made on 127 samples from San Rafael, 36 samples from Samaniego Hill, and 32 samples from Sagrado Corazón-Lupita, from mineralized intercepts in the core. The mineralized zone density results on these core samples ranged from 2.25 to 3.09 grams per cubic centimeter, and averaged 2.59 grams per cubic-centimeter (equivalent to tonnes per cubic meter).

During 1999, additional core samples of volcanic overburden (waste) drilled for geotechnical purposes (NQ size) were submitted to Kappes, Cassiday & Associates for density testing. Material consisted of volcanic agglomerate and andesite porphyry rock types. A wax immersion method (ASTM C914-95) was used. The density results on these core samples ranged from 2.44 to 2.80 grams per cubic centimeter, and averaged 2.63 grams per cubic centimeter (equivalent to tonnes per cubic-meter). Additional density tests were conducted in 1999 on 14 overburden core samples as part of the geotechnical work conducted at the University of British Columbia rock mechanics laboratory and ranged from 2.45 to 2.73 grams per cubic centimeter, and averaged 2.59 grams per cubic centimeter (equivalent to tonnes per cubic-meter).

The subsequent San Rafael, Samaniego Hill, Sagrado Corazón-Lupita resource is calculated on the basis of a 2.60 tonnes per cubic-meter density factor for both mineralized zones and host rock (waste) material. This represents the measured average densities rounded to the nearest tenth, which is in line with the density factor that has been used previously on the project.

11.3.4 Chapotillo

Ten core samples of mineralized material were tested using the same protocol and methods as for El Gallo and Palmarito. Average density of these ten samples is 2.49 g/cm³.

11.3.5 Haciendita

Eleven core samples of mineralized material were tested using the same protocol and methods as for El Gallo and Palmarito. Average density of these eleven samples is 2.58 g/cm³.

11.3.6 Mina Grande

Thirty-five core samples of mineralized material and 28 samples of non-mineralized material were tested using the same protocol and methods as for El Gallo and Palmarito. Average density of the mineralized samples is 2.59 g/cm³.

Density determinations were also made for the historic Mina Grande tailings pile. Procedures were similar to those undertaken for the Palmarito tailings pile (see section 13.6.3). Using three sample sites the average density is 1.47 g/cm³.

11.3.7 San Dimas

Twenty-six core samples of mineralized material and 29 samples of non-mineralized material were tested using the same protocol and methods as for El Gallo and Palmarito. Average density of the mineralized samples is 2.56 g/cm³.

11.3.8 Los Mautos

Twelve core samples of mineralized material were tested using the same protocol and methods as for El Gallo and Palmarito. Average density of these 12 samples is 2.47 g/cm³.

11.3.9 San Jose del Alamo

Seven core samples of mineralized material were tested using the same protocol and methods as for El Gallo and Palmarito. Average density of these 7 samples is 2.49 g/cm³.

11.3.10 Las Milpas

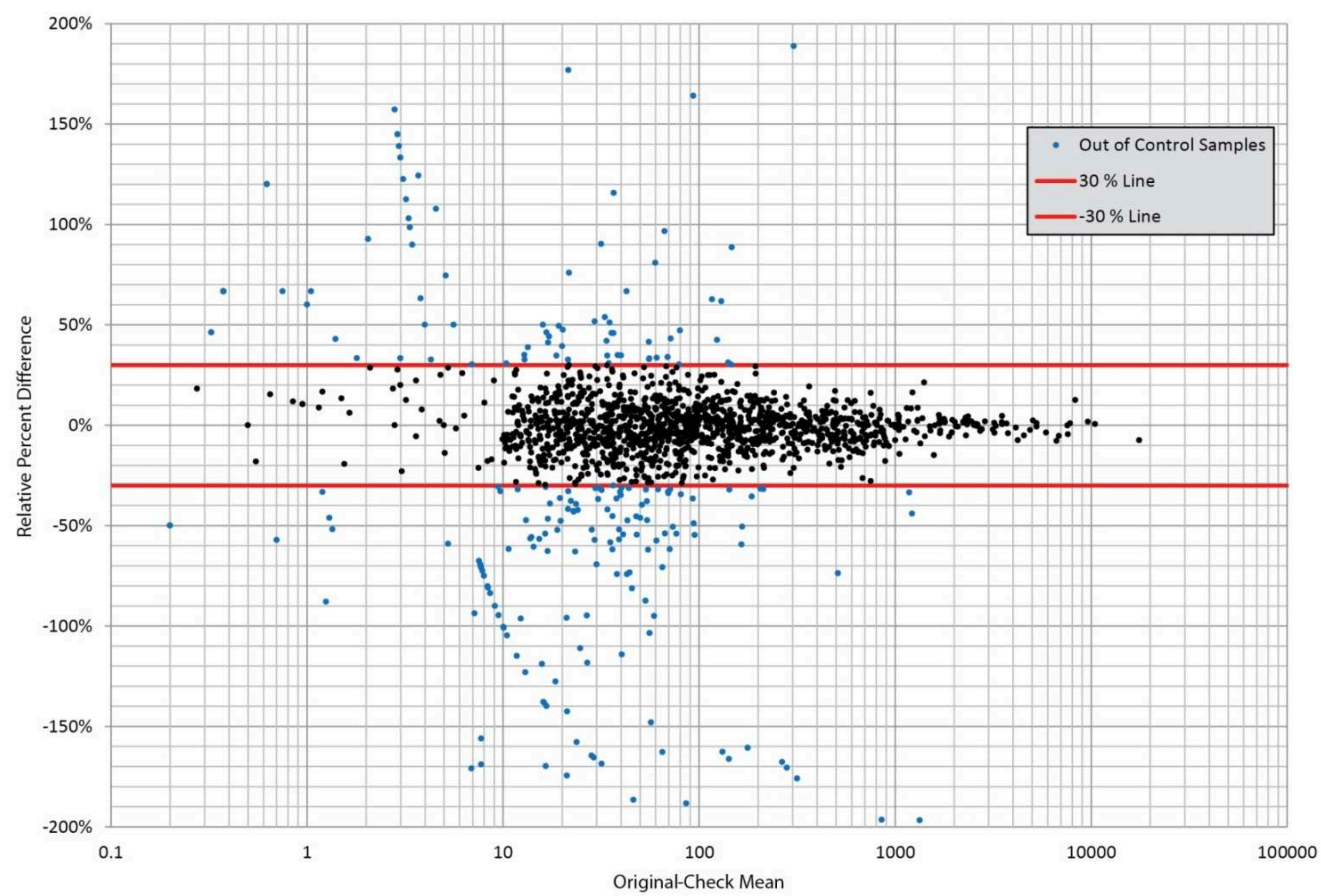
Eight core samples of mineralized material were tested using the same protocol and methods as for El Gallo and Palmarito. Average density of these 8 samples is 2.51 g/cm³.

11.3.11 CSX

Twelve core samples of mineralized material and 35 samples of non-mineralized material were tested using the same protocol and methods as for El Gallo and Palmarito. Average density of the mineralized samples is 2.36 g/cm³.

11.4 SAMPLE PROCEDURE ADEQUACY

The authors are of the opinion that McEwen's current preparation, analytical and QA/QC procedures and the sample security measures in place are strictly followed and adhere to industry standards and that the samples are acceptable for resource estimation purposes.



Project Name		Date of Issue
El Gallo Complex 43-101 Technical Report	El Gallo Silver Percent Difference vs. Check Mean Graph	July 18, 2012

Figure 11-1: El Gallo Silver Percent Difference vs. Check Mean Graph

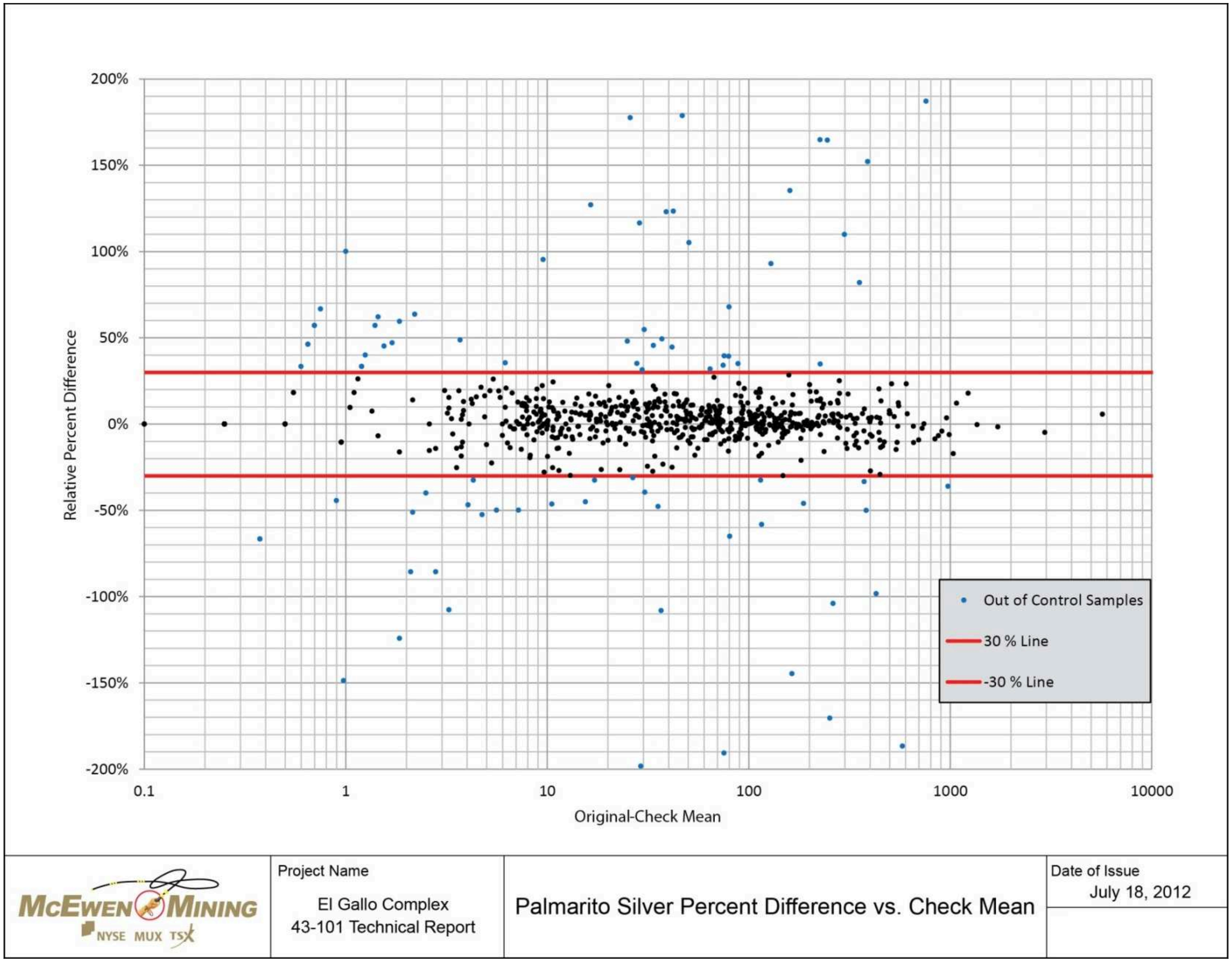
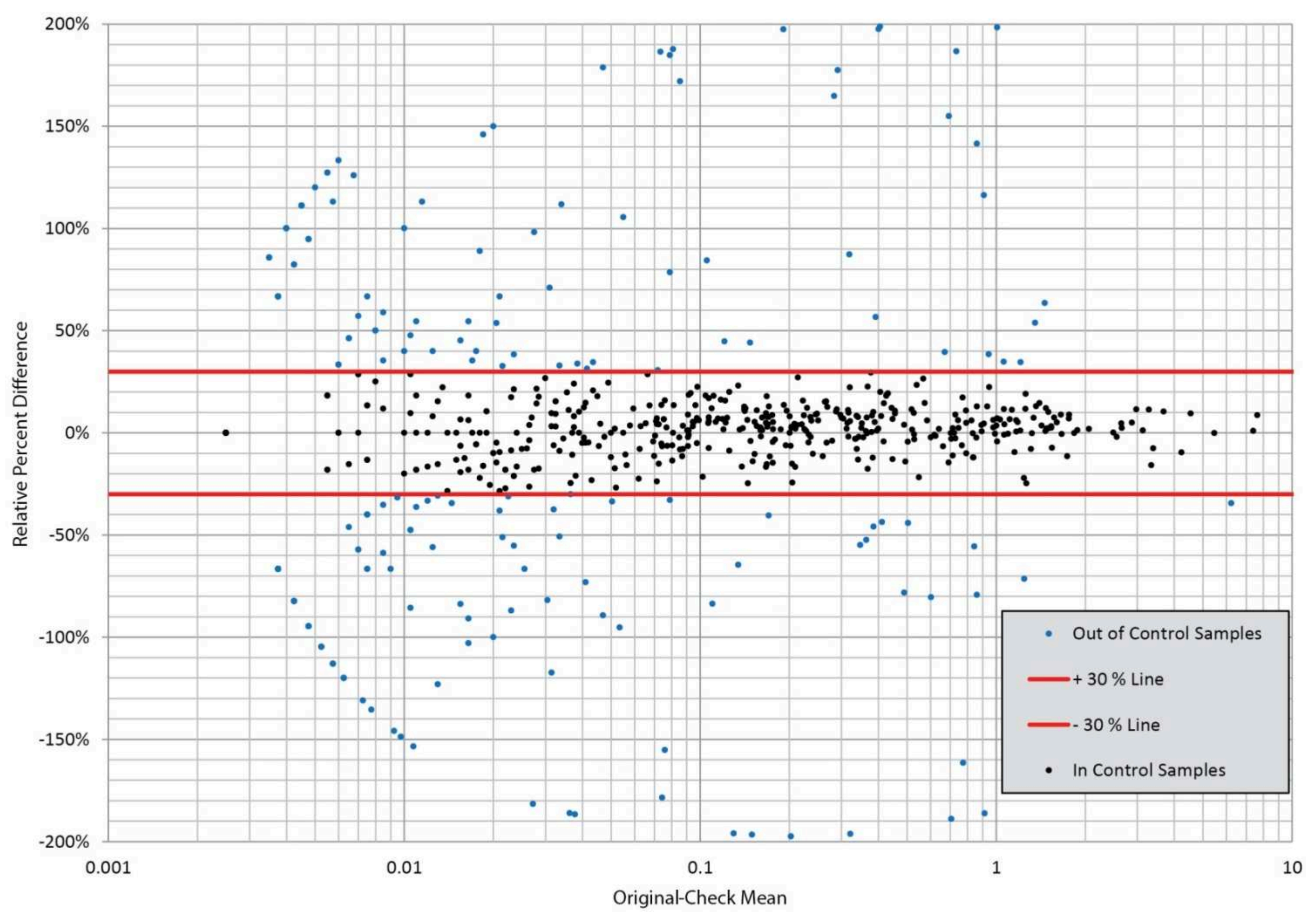
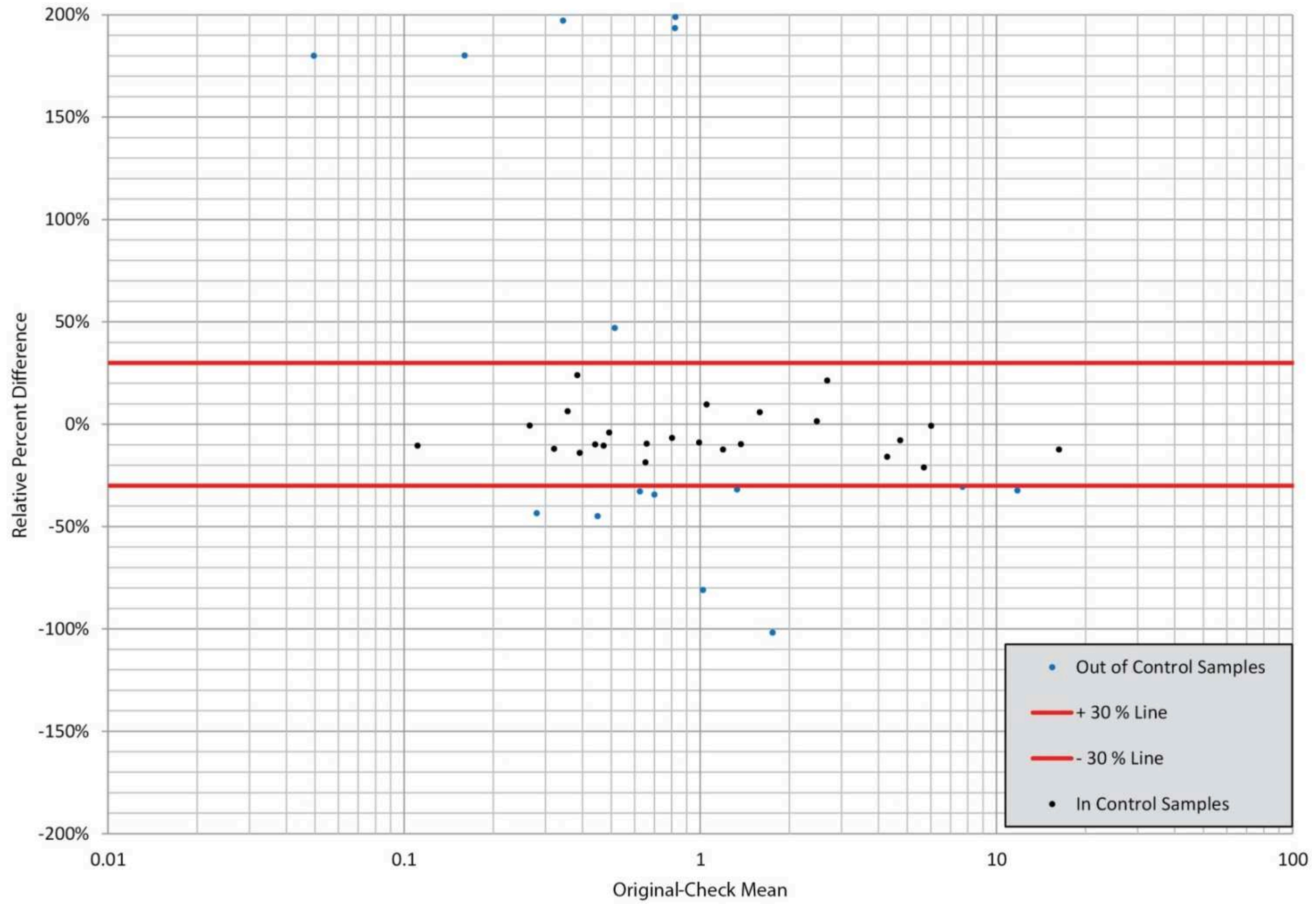


Figure 11-2: Palmarito Silver Percent Difference vs. Check Mean



McEWEN MINING NYSE MUX TSX	Project Name El Gallo Complex 43-101 Technical Report	Palmarito Gold Percent vs. Check Mean	Date of Issue July 18, 2012

Figure 11-3: Palmarito Gold Percent vs. Check Mean



	Project Name		Date of Issue
McEWEN MINING NYSE MUX TSX	El Gallo Complex 43-101 Technical Report	Chapotillo Gold Percent Deviation vs. Check Mean	July 18, 2012

Figure 11-4: Chapotillo Gold Percent Deviation vs. Check Mean

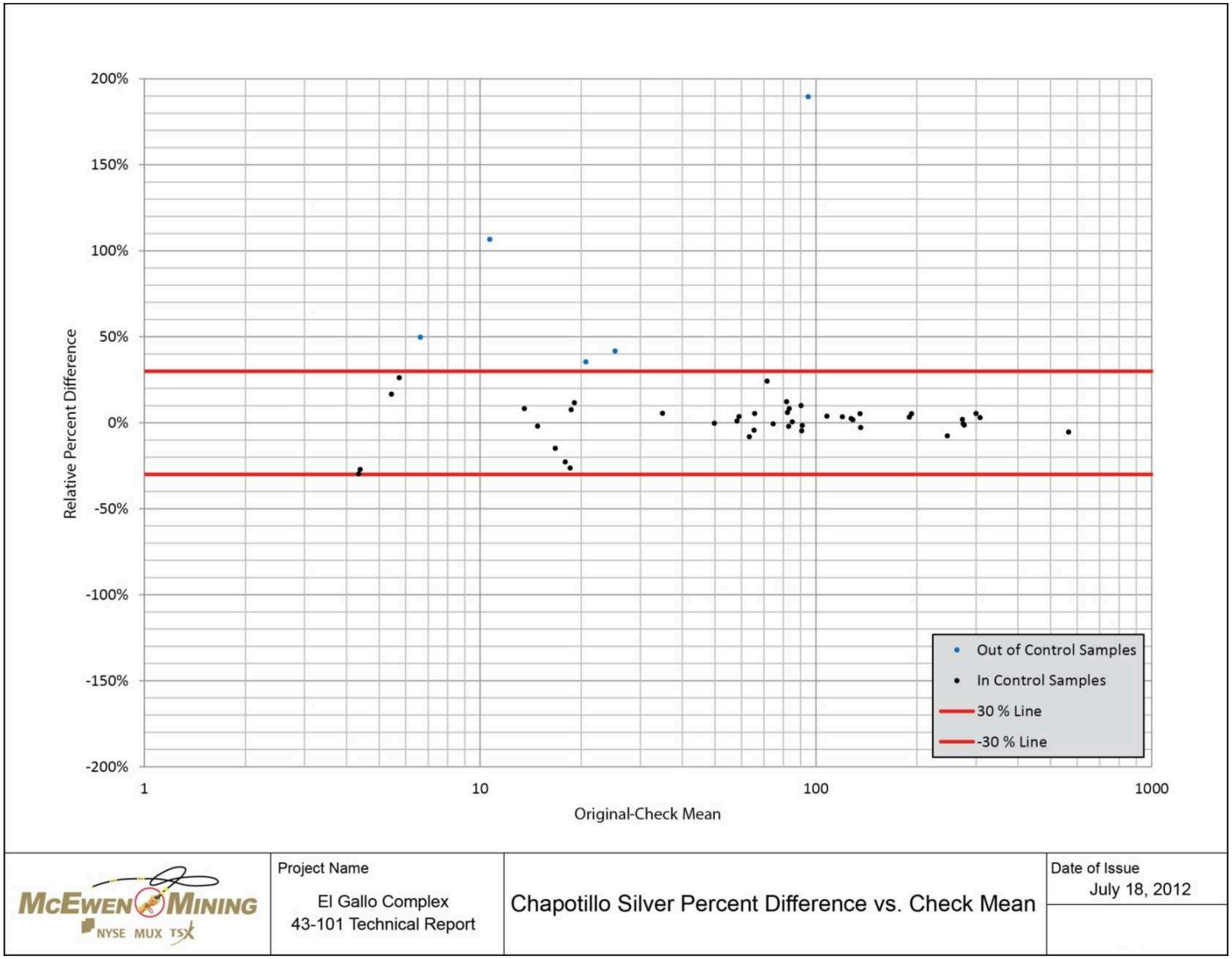
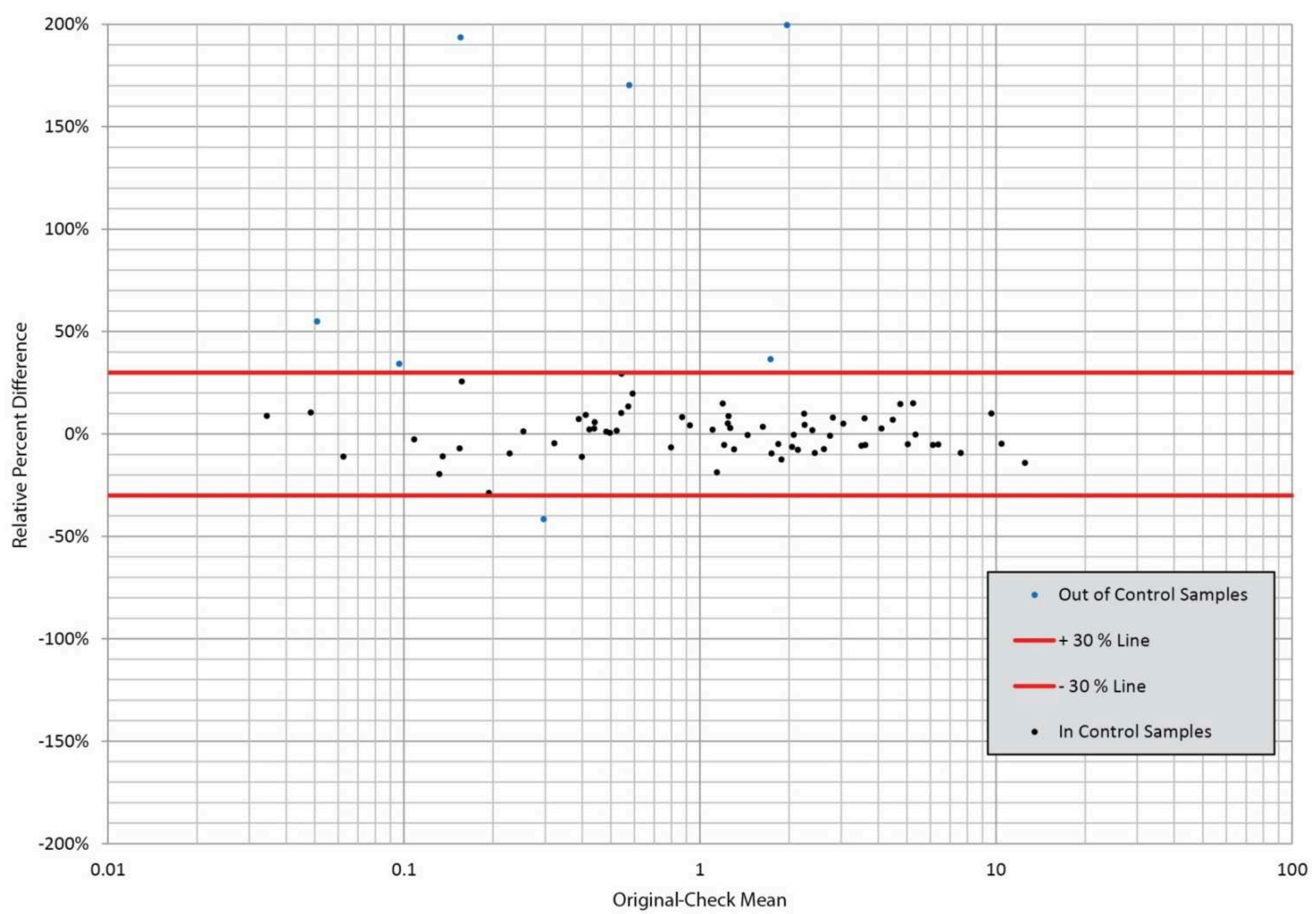
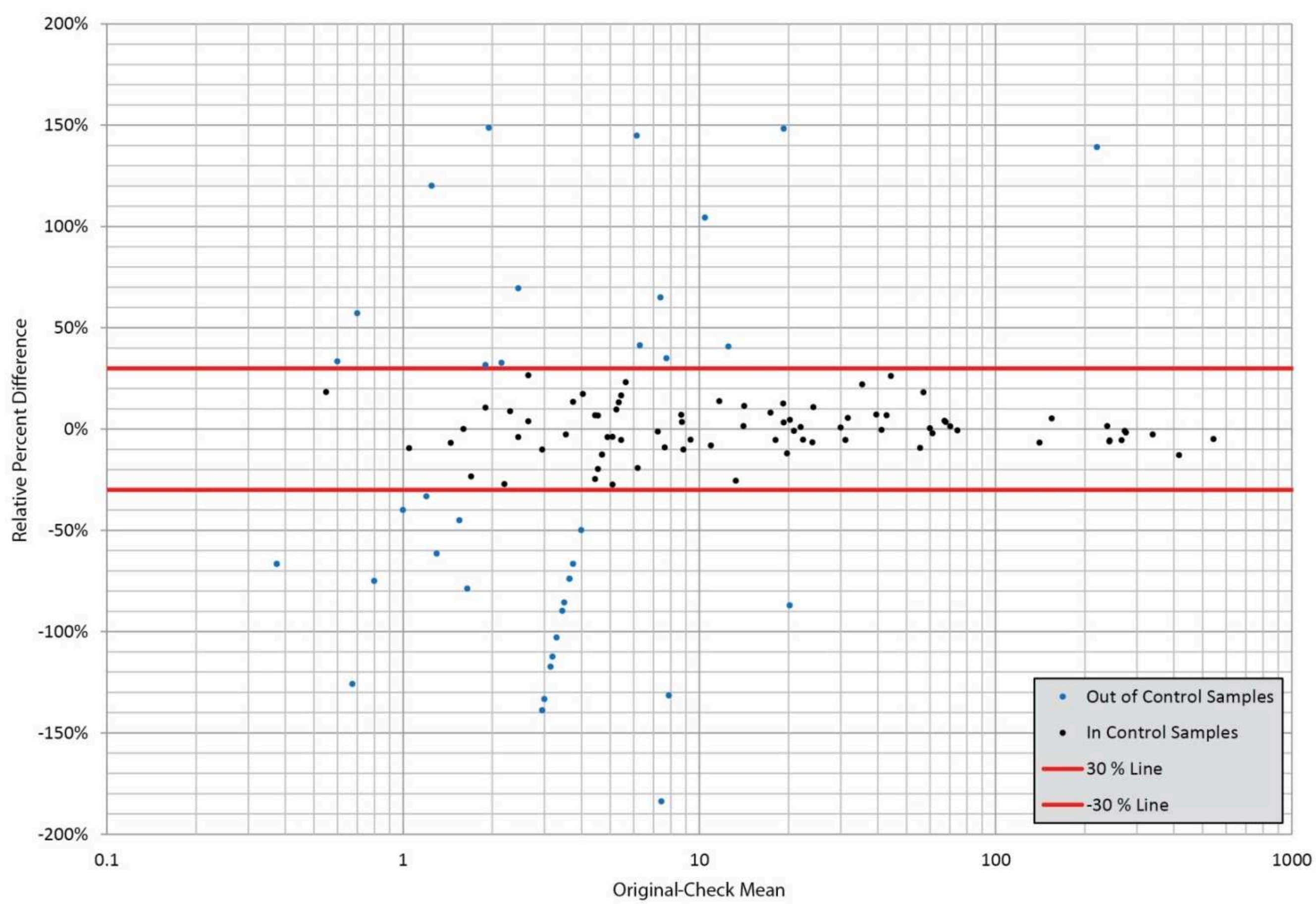


Figure 11-5: Chapotillo Silver Percent Difference vs. Check Mean



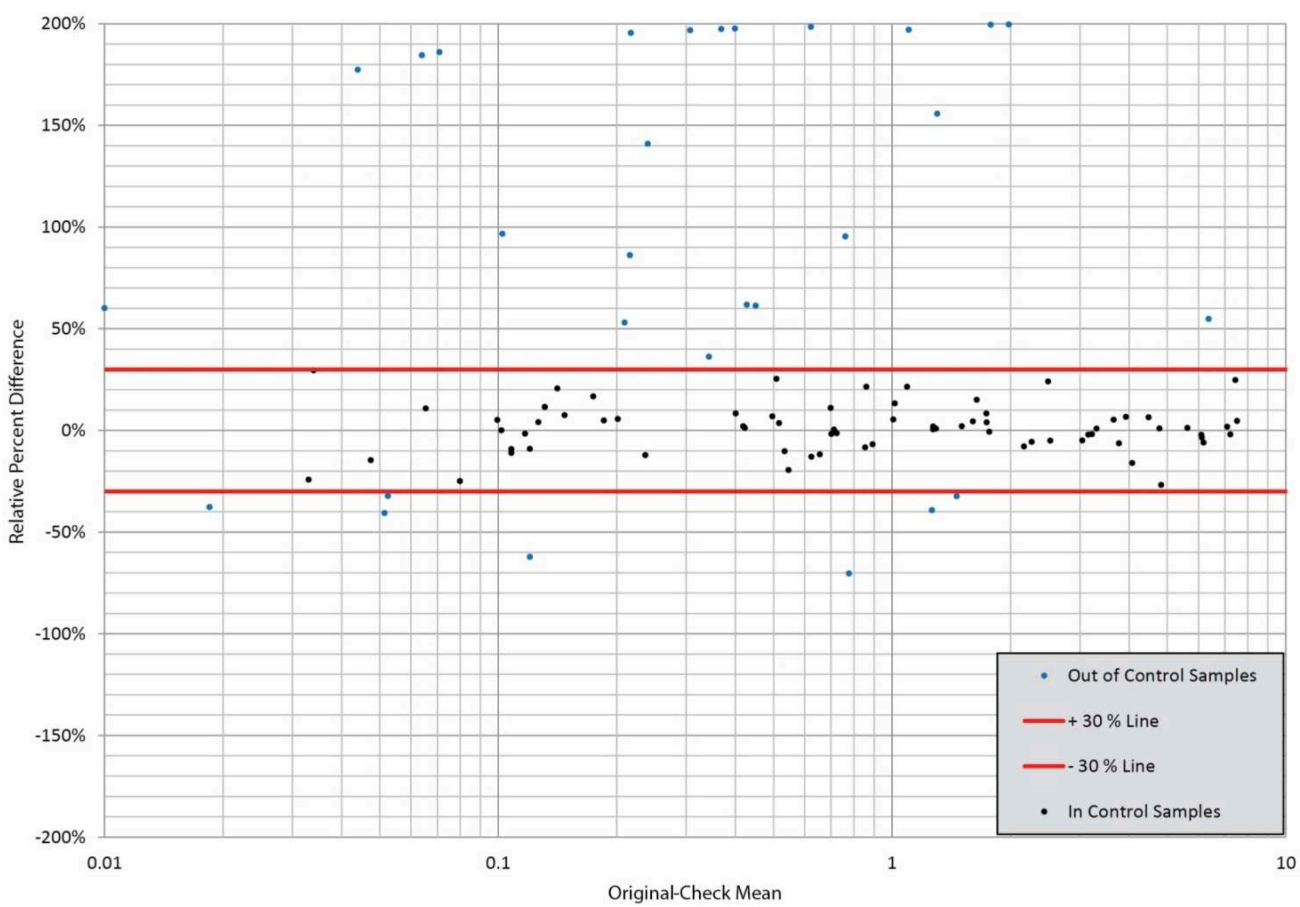
Project Name		Date of Issue
El Gallo Complex 43-101 Technical Report	Haciendita Gold Percent vs. Check Mean	July 18, 2012

Figure 11-6: Haciendita Gold Percent vs. Check Mean



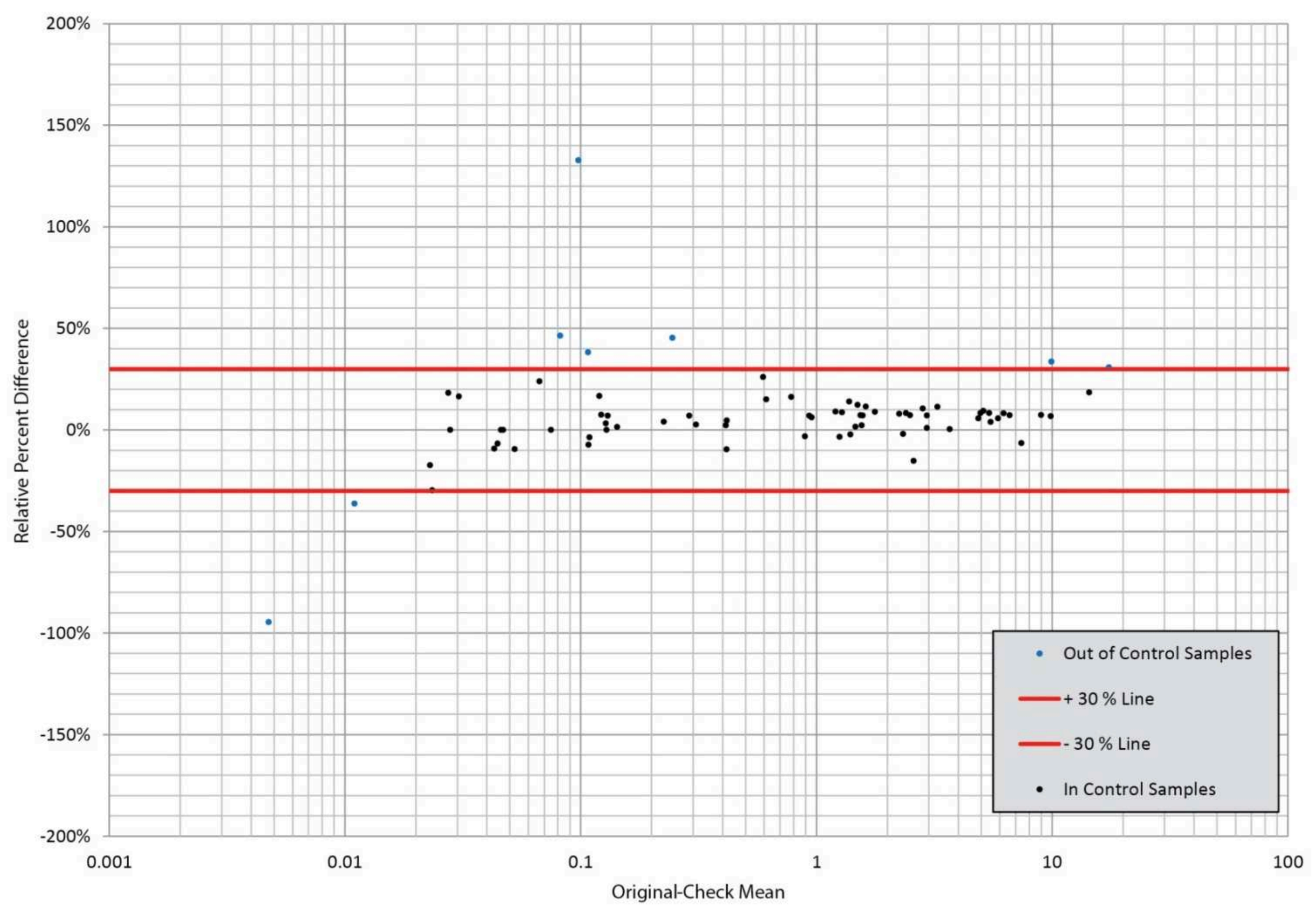
Project Name		Date of Issue
El Gallo Complex 43-101 Technical Report	Mina Grande Silver Percent Difference vs. Check Mean	July 18, 2012

Figure 11-7: Mina Grande Silver Percent Difference vs. Check Mean



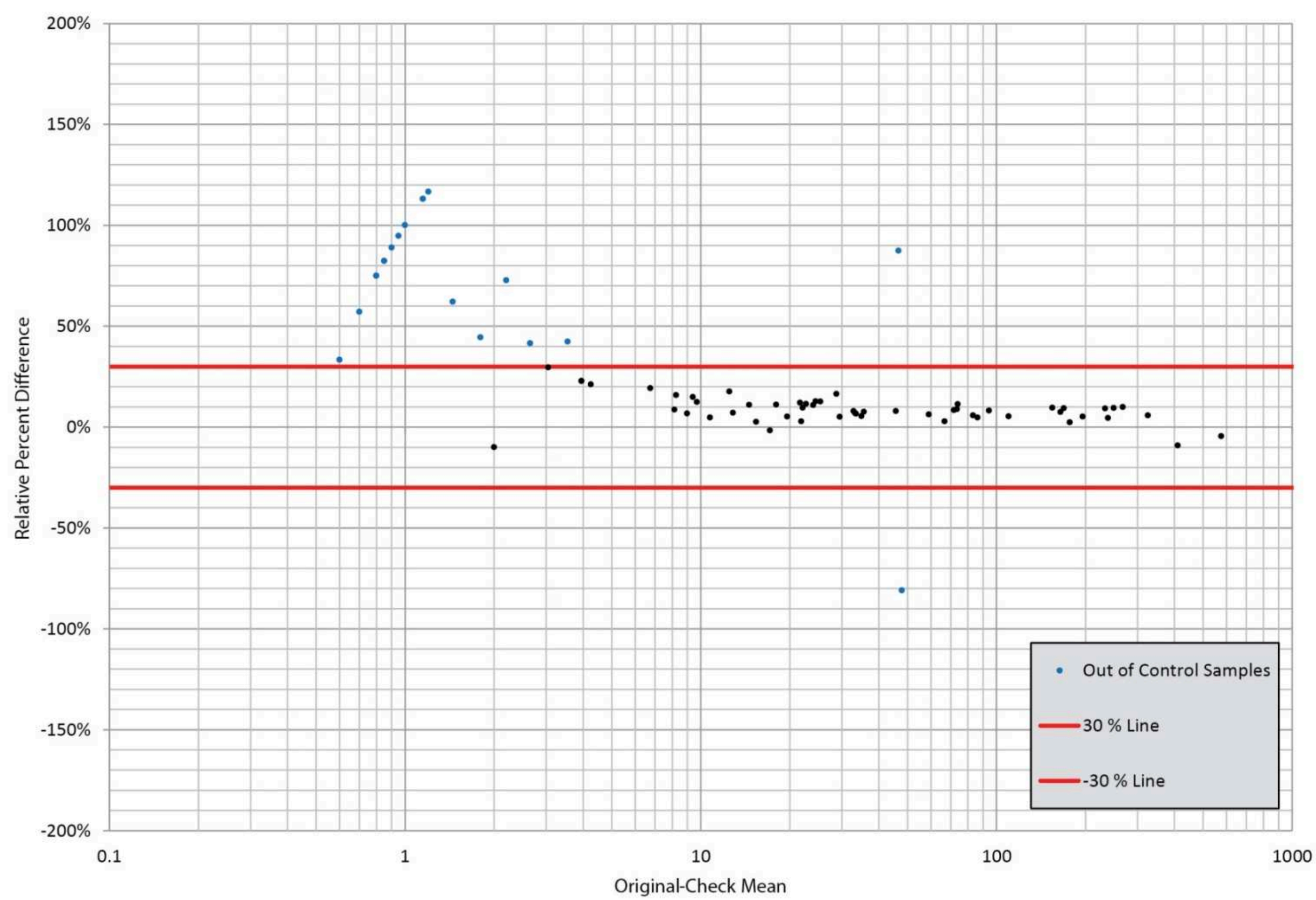
Project Name		Date of Issue
El Gallo Complex 43-101 Technical Report	Mina Grande Gold Percent Deviation vs. Check Mean	July 18, 2012

Figure 11-8: Mina Grande Gold Percent Deviation vs. Check Mean



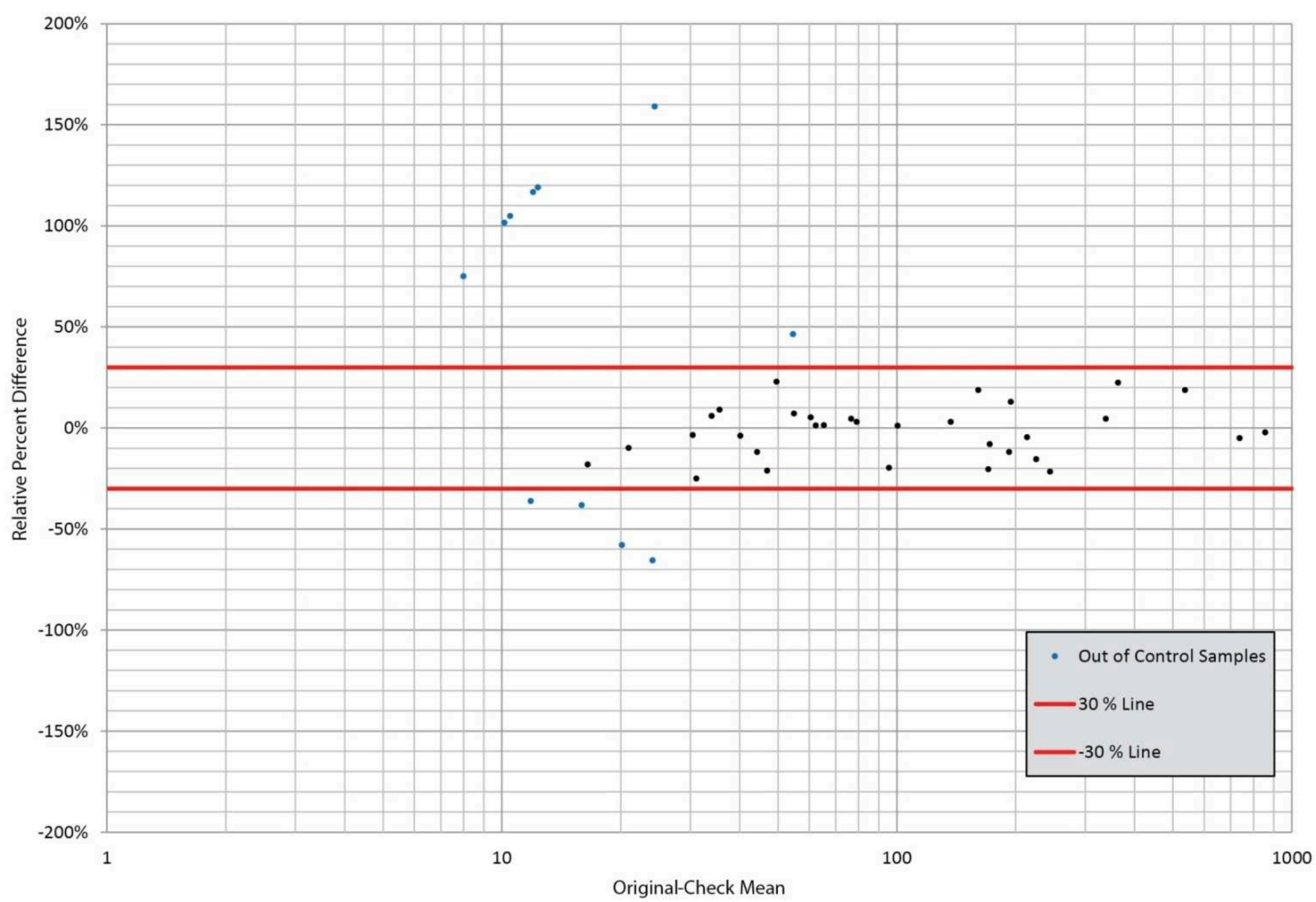
McEwen Mining NYSE MUX TSX	Project Name El Gallo Complex 43-101 Technical Report	San Dimas Gold Percent vs. Check Mean	Date of Issue July 18, 2012

Figure 11-9: San Dimas Gold Percent vs. Check Mean



Project Name		Date of Issue
El Gallo Complex 43-101 Technical Report	San Dimas Silver Percent Difference vs. Check Mean	July 18, 2012

Figure 11-10: San Dimas Silver Percent Difference vs. Check Mean



Project Name		Date of Issue
El Gallo Complex 43-101 Technical Report	Los Mautos Silver Percent Difference vs. Check Mean	July 18, 2012

Figure 11-11: Los Mautos Silver Percent Difference vs. Check Mean

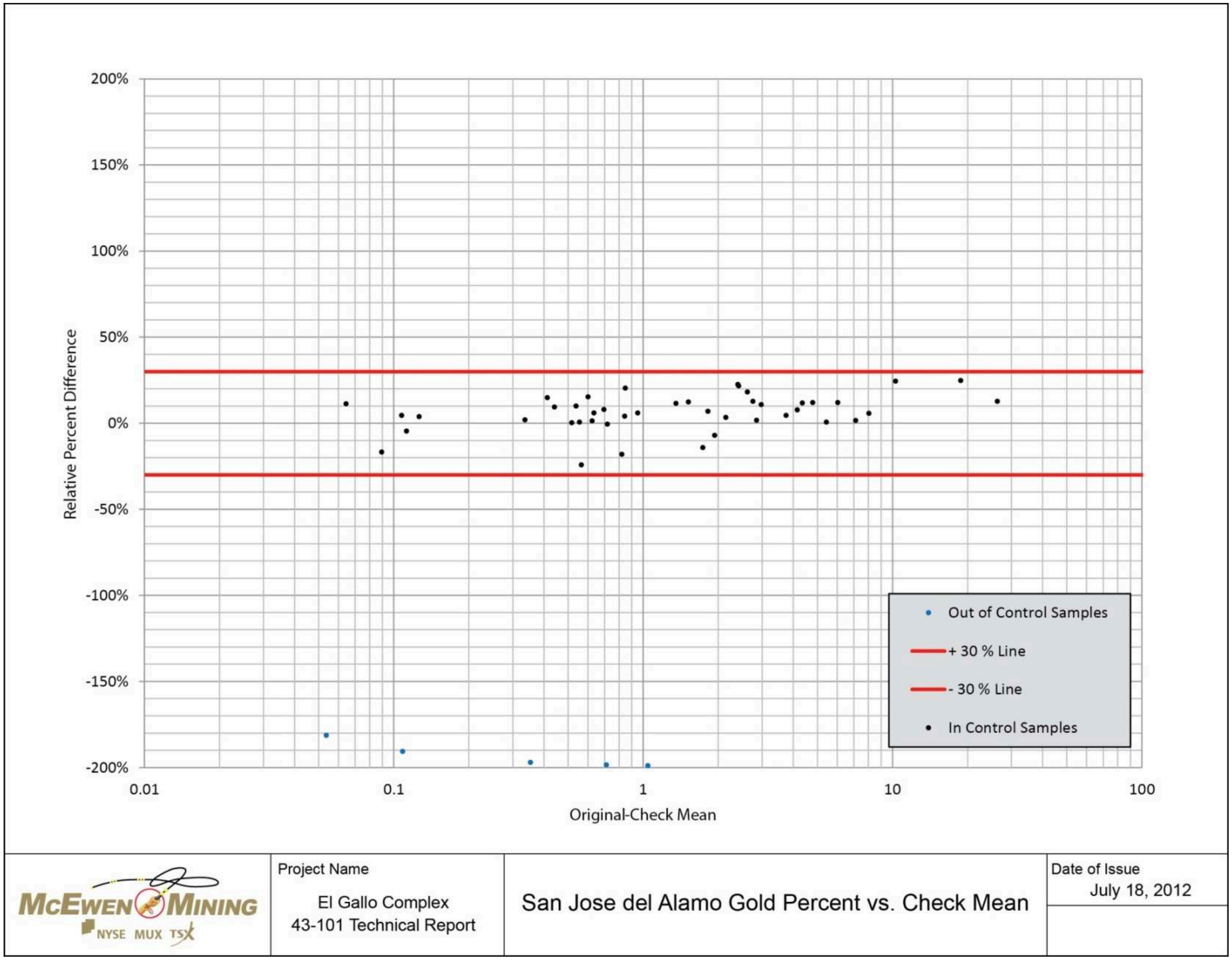
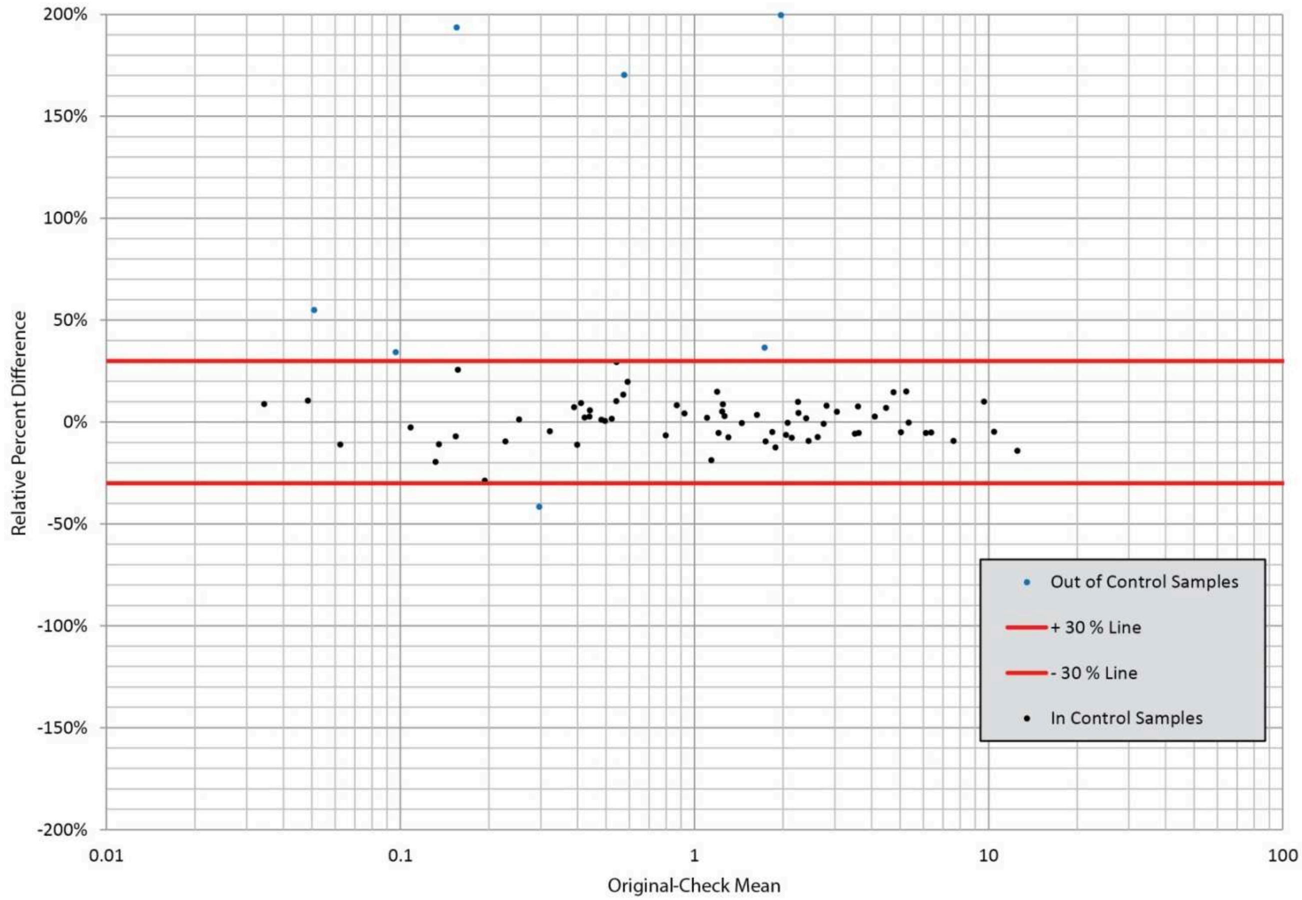
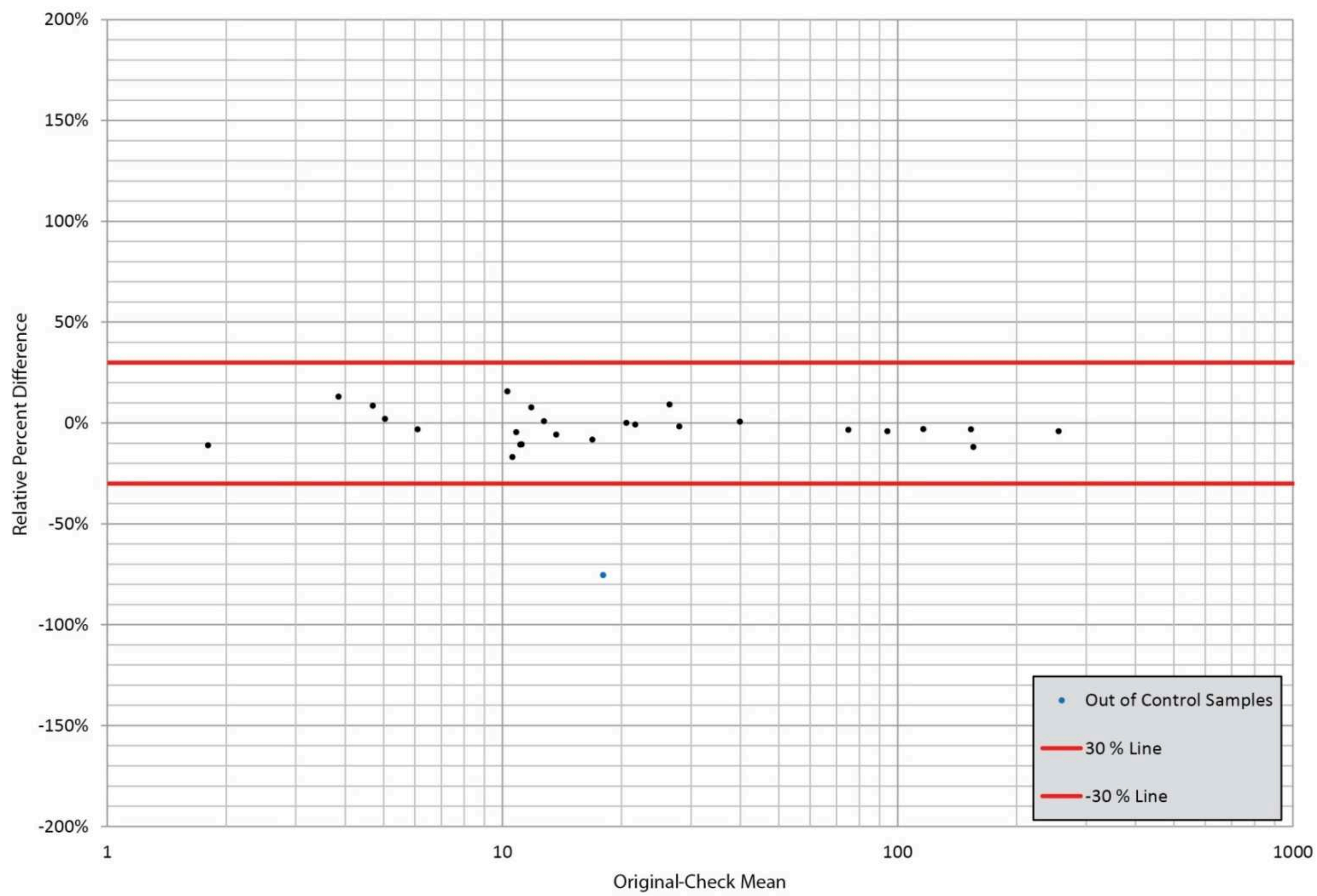


Figure 11-12: San Jose del Alamo Gold Percent vs. Check Mean



McEWEN MINING NYSE MUX TSX	Project Name El Gallo Complex 43-101 Technical Report	Las Milpas Silver Percent Difference vs. Check Mean	Date of Issue July 18, 2012

Figure 11-13: Las Milpas Silver Percent Difference vs. Check Mean



Project Name		Date of Issue
El Gallo Complex 43-101 Technical Report	CSX Silver Percent Difference vs. Check Mean	July 18, 2012

Figure 11-14: CSX Silver Percent Difference vs. Check Mean

12 DATA VERIFICATION

John Read has validated a sample of the data relied upon for this resource estimate. The validation process was designed to investigate the drill hole collar locations, core hole lithology, down-hole deviation, assay values and data entry.

12.1 DRILL COLLAR SURVEYS

For McEwen-managed projects, at the time of initiating a drill hole, the drill site is located and marked using a handheld GPS receiver. After the hole is completed the collar is surveyed by a contract surveyor. This is done with precise methods, usually utilizing a differential GPS. Generally there is good agreement between the planned location and the surveyed location. In the event of large discrepancies (>10m) between the planned location and the final survey, the hole location is re-checked and usually re-surveyed. In addition, drill holes are plotted on topographic maps and holes that appear to have spurious locations are re-checked and often re-surveyed. Drill holes are also plotted on cross-section and collars checked for elevation discrepancy. If a discrepancy is noted, the collar is re-surveyed.

For drilling not managed by McEwen (i.e. earlier drilling at Palmarito and Magistral), methods employed by the previous operators is generally assumed to be adequate. A number of historic hole locations have been checked at Palmarito and Magistral.

12.2 LITHOLOGY

During numerous site visits, John Read has reviewed much of the core drilled by McEwen for El Gallo, Palmarito and Magistral and the other resource areas. The core was compared against lithological logs and assay data with general good agreement.

12.3 DOWN-HOLE SURVEY

Down-hole surveys have been completed at each of the projects to different degrees. McEwen has examined the records of down-hole surveys for core holes at El Gallo and compared them to the digital drill hole database. Mr. Read observed excellent agreement for this comparison.

At Palmarito and Magistral two hundred and thirty one and twenty-seven holes, respectively, have been surveyed. The deviations in these holes were examined to estimate the potential for deviations in the un-surveyed holes and assess the potential impact on the resource estimate. On average, these holes deviate three degrees on azimuth and six degrees on dip over a depth of 500 ft (150 m) at Magistral. The assessment of these deviations indicates that unknown deviations in the un-surveyed holes will not materially affect the resource estimate.

For the remaining resource areas, downhole surveys for two hundred and seventy seven holes were also examined. and compared to the digital drill hole database. Excellent agreement was observed for this comparison.

12.4 ASSAY DATA ENTRY

Assay certificates from ALS Chemex are imported directly into the database without altering or manipulating the datasheets. Prior to the certificate import, the intervals for the different core holes were entered, carefully controlling the depths of the intervals with the samples marked by geologists in core photos and logs. The original certificates from Chemex were compared randomly against the reported values in the digital drill hole database for approximately 10 percent of the drill holes (for El Gallo, such a comparison was completed by PAH). This comparison did not indicate any data entry errors.

12.5 QA/QC ANALYSIS

The quality assurance/quality control (QAQC) statistics are calculated for all eight resource areas. Each resource is analyzed based on their check assays, standards, and blanks. Check assays are analyzed for deviation from the original assay and any bias towards a particular analytical laboratory. The check assay deviation is calculated by finding the difference between the original and check assay ($\Delta_{original-check} = Au_{original}(gpt) - Au_{check}(gpt)$) . The difference is converted to a percent deviation by normalizing the difference by the mean of the original and check:

$$\Delta_{original-check}(\%) = ((\Delta_{original-check} / (\frac{[Au]_{original} + [Au]_{check}}{2})) * 100),$$

30% deviation was used as the upper control limit for the check assay datasets and any sample exceeding that limit is considered out of control. The percentage of samples out of control in a particular dataset is calculated and used to report the overall deviation.

The bias of the check assay datasets is calculated in this report using two methods: the first is by calculating the percentage of the dataset biased towards ALS Chemex/SGS/Inspectorate, and the second is by calculating the Bias Coefficient of the dataset. The Percentage of the dataset biased towards a particular lab is calculated using the following equation (using ALS Chemex Bias Percent as an example):

$$B_{ALS\text{ Chemex}}(\%) = \frac{n_{\Delta>0}}{n_{total}} \times 100\%,$$

where $B_{\text{ALS Chemex}}$ (%) is the percent bias for ALS Chemex, $n_{\Delta>0}$ is the number of samples that have a difference greater than 0 (indicative of a bias towards ALS Chemex according to the equation: $\Delta_{\text{original-check}} = [X]_{\text{ALS Chemex}} - [X]_{\text{Check}}$), and n_{total} is the sample population. The Bias Coefficient is defined as the mean difference of the dataset and can be illustrated using the following equation:

$$\beta = \frac{\sum_{n=1}^{\infty} \Delta_{original-check}}{n},$$

where β is the bias coefficient, $\Delta_{\text{original-check}}$ is the difference between the original assay and the check assay ((+) bias towards ALS Chemex, (-) bias towards the check laboratory), and n is the sample population. Positive values are indicative of a bias towards ALS Chemex and negative values are indicative of a bias towards the check lab (SGS or Inspectorate). The magnitude of this coefficient indicates the magnitude of the bias.

Each standard and blank has a particular standard mean and standard deviation provided by the manufacturer. The deviation of a particular sample from the standard/blank mean is calculated and any deviation exceeding three standard deviations is out of control.

The reporting date ranges starting, from the beginning of the first hole to the end of the last hole, for each project are as follows:

- El Gallo = January 18, 2009 – March 9, 2012
- Palmarito = March 22, 2008 – April 30, 2012
- Magistral = 2008 – 2012
- Chapotillo = May 31, 2009 – April 27, 2011
- Haciendita = December 5, 2010 – May 30, 2012
- Mina Grande = November 5, 2010 – May 12, 2012
- San Dimas = August 11, 2011 – June 9, 2012
- Los Mautos = November 19, 2010 – June 9, 2011
- San Jose del Alamo = October 12, 2010 – September 13, 2011
- Las Milpas = May 7, 2010 – August 20, 2010
- CSX = November 23, 2011 – March 17, 2012

12.5.1 El Gallo

The percent deviations for gold check assays are above normal limits, but the analysis of bias, standards, and blanks are all within normal limits (Table 12-1). It has been observed that the reliability of the analytical techniques is directly proportional to the grades being analyzed. Also the same pulp was re-analyzed on a few large outliers (labeled RR) by multiple labs to determine the nature of the apparent error. In addition to follow up analyses, the inconsistency related to the low levels of gold at El Gallo coupled with the high degree of accuracy/precision in the standards/blanks reinforces the reliability of the dataset.

The silver check assays are within normal limits for El Gallo which reinforces the hypothesis that the low levels of gold are affecting the accuracy/precision of the assays. Similar to the gold standards and blanks, the standards and blanks for silver display a very high degree of accuracy/precision. Due to the sizeable sample population for El Gallo; the amount of discrepancies in the standard/blank data is higher than in any other dataset. Inspection of the out of control samples supports the conclusion that the vast majority can be explained by human error (mixing up a standard and blank in the sample stream).

12.5.2 Palmarito

The percent deviation and bias of the gold check assays are above normal limits, but the entirety of the silver check assay dataset is within normal limits (Table 12-1). The error in the standards and blanks for this project is insignificant. As previously stated, the reliability of the analytical techniques is directly proportional to the grades being analyzed which explains the elevation in percent deviation for the gold check assays. Also follow up assays (labeled RR), are used to rule out systematic error in the analytical laboratories. The few outliers in the standards/blanks dataset that are out of control can be explained by human error.

12.5.3 Magistral

The assay data for the standard and blank samples was evaluated for Magistral. Gold values from the assay were compared against their known values. No systematic bias was observed in the assay grades. Duplicate gold assays for 57 samples were compared against their original assay values. Statistical analysis of these duplicate gold assays indicates that they are biased low relative to the original values. On average this bias is 0.017 grams gold. This bias is not considered to have a material effect on the resource estimate.

12.5.4 Chapotillo

The percent deviation and bias of the gold check assays are above normal limits and slightly biased (Table 12-1). Conversely, the error in the standards and blanks for this project is within normal limits. Follow up assaying (labeled RR) of out of control checks revealed no systematic error in the dataset. It is hypothesized that minor analytical and human error are the primary causes for the elevation in accuracy and bias. The lack of error in the standards and blanks, heterogeneity of the mineralization, and the low levels of gold are all hypothesized as causes for the lack of precision in the gold check assays. Silver check assays are significantly more precise than the gold check assays which supports the previous hypotheses. The few outliers in the standards/blanks dataset that are out of control can be explained by human error.

12.5.5 Haciendita

The gold check assays are within normal limits and the bias is insignificant (Table 12-1). The bias for the silver check assays is also insignificant, but the accuracy of the check assays requires further investigation. The mean grade of the out of control samples is sufficiently low as to attribute the high deviation to common analytical error. This hypothesis is validated by the accuracy and precision of the standards and blanks. The few outliers in the standards/blanks dataset that are out of control can be explained by human error.

12.5.6 Mina Grande

The percent deviation and bias of both the gold and silver check assays are slightly above normal limits (Table 12-1). Conversely, the error in the standards and blanks for this project is insignificant. The lack of error in the standards and blanks coupled with the small sample population (105 and 119 for gold and silver, respectively) indicates that the apparently high degree of error in the check assay data can be attributed to normal analytical error and heterogeneity of the mineralization in the core. The bias in this particular dataset was inspected by using a second check laboratory (Inspectorate). The degree of bias is lowered in the data from Inspectorate which indicates that the check assay deviation may be attributed to differences in analytical procedures. The few outliers in the standards/blanks dataset that are out of control can be explained by human error.

12.5.7 San Dimas

The percent deviations of both the gold and silver check assays are within the normal range of analytical error (Table 12-1). Conversely, the bias in the dataset is high and needs further investigation. San Dimas was analyzed solely using Inspectorate, and the bias will be tested by rerunning a few samples with a second check assay laboratory (SGS). Despite the abnormally high bias in the dataset; the checks, standards, and blanks are all within the normal range of analytical error. It can therefore be concluded that the dataset is accurate and the odds of serious analytical error is significantly low. The few outliers in the standards/blanks dataset that are out of control can be explained by human error.

12.5.8 Los Mautos

The percent deviation and bias of the gold and silver check assays are within normal limits, and the precision/accuracy of the standards and blanks is favorable (Table 12-1). The lack of error in the standards and blanks coupled with the small sample population (43 samples each for both gold and silver) negate any slight elevation in the percent differences of the check assays. Normal analytical error related to analyzing low level elemental constituents, and sample heterogeneity (nugget effect) account for the out of control samples. The few outliers in the standards/blanks dataset that are out of control can be explained by human error.

12.5.9 San Jose del Alamo

The percent deviation and bias of the gold and silver check assays are slightly above normal limits (Table 12-1). Conversely, the error in the standards and blanks for this project is insignificant. It can be hypothesized that minor analytical error and human error are the primary causes for the elevation in accuracy and bias. The lack of error in the standards and blanks, and heterogeneity in mineralization validate the aforementioned hypothesis. The bias on the other hand needs to be investigated further. Despite the abnormally high bias in the dataset; the standards and blanks are all within the normal range of analytical error. It can therefore be concluded that the dataset is accurate and the odds of serious analytical error is insignificantly low. The few outliers in the standards/blanks dataset that are out of control can be explained by human error.

12.5.10 Las Milpas

The percent deviation and bias of the gold and silver check assays are within normal limits, and the precision/accuracy of the standards and blanks is favorable (Table 12-1). The lack of error in the standards and blanks coupled with the small sample population (43 samples each for both gold and silver) negate any slight elevation in the percent differences of the check assays. Normal analytical error related to analyzing low level elemental constituents, and sample heterogeneity (nugget effect) account for the out of control samples. The few outliers in the standards/blanks dataset that are out of control can be explained by human error.

12.5.11 CSX

The percent deviations for the gold check assays at Carrisalejo are abnormally high, but have a mean grade (gpt) that is statistically insignificant (Table 12-1). The effects of insufficient homogenization and sample heterogeneity (nugget effect) in assays from the same pulps (especially in low-grade gold deposits) can adversely affect the precision of the dataset. It has also been observed that the relative precision of an analytical method becomes increasingly inconsistent as the concentration of the chemical constituent approaches zero. In the case of the majority of deposits in the complex; the mean gold grade of the deposit is sufficiently low for analytical inconsistency to become an issue. In terms of silver, the check assays are within the normal range of deviation, which can be attributed to the high levels of silver relative to gold. The standards and blanks indicate a high level of accuracy and reliability in the dataset. It should be noted that there is a small number of standards and blanks out of control (Table 12-1). The few outliers in the standards/blanks dataset that are out of control can be explained by human error.

12.5.12 Sample Duplicates

Several intervals from core samples from the following projects were chosen as internal duplicates (both sample and duplicate were both analyzed by ALS Chemex): El Gallo, Palmarito, and CSX. These duplicates are used to test the precision of the particular analytical technique and/or the heterogeneity of a particular sample interval. Out of the 71 duplicates in the database about 50% of the samples are out of control (greater than 30% deviation). Interpreting the results of this dataset in conjunction with the standards, blanks and checks assays, it is hypothesized that the high deviation between opposite halves of drill core is a function of sample heterogeneity rather than the precision of the analytical technique.

12.5.13 QAQC Analysis Summary

QA/QC investigation was carried out during the course of exploration on all eleven of the project areas discussed herein. This was done by means of analyses of standards and blanks, check assays and core sample duplicates. Some areas of the statistical analysis exhibit less than expected levels of accuracy and precision. Any section of the dataset that appears to be out of control has been analyzed to mitigate the issue. The most prominent divergence occurs in the analyses of duplicate samples (sample of the opposite half of a core sample). This can be attributed to normal sample heterogeneity. Another divergence from the expected levels of accuracy and precision are in the check assays (analysis of the original pulp by a second laboratory). In the case of the check assays, some of the datasets have upwards of 50% of the checks classified as out of control (defined as deviation of greater than 30% from the original assay) but the majority of these cases involve samples with low grade. Hence, the majority of the, out of control check samples can be attributed to a degeneration of accuracy/precision with low grade material, or in some cases, labeling/archiving errors, or possibly sample pulp heterogeneity. Any large outliers with significant grade have had the pulps reanalyzed by multiple laboratories as well as new pulps created and analyzed from the bulk reject for the sample interval. In all of the large outliers the problem has been identified and rectified.

The analysis of the standards and blanks provides a way of monitoring the true accuracy of the analytical method by analyzing a sample of a standard reference material with a known standard mean and standard deviation. The analysis of the standard/blank datasets for each project indicate a high level of accuracy/precision in the analytical techniques used by ALS Chemex. The majority of standards or blanks deemed out of control (defined as a deviation greater than three standard deviations from the mean assay) can be attributed to human error (mixing up a standard and blank in the sample stream). In cases where out of control standards or blanks were found within or near mineralized intervals re-analyses of surrounding samples yielded results that were not materially different from the original analyses. These particular analyses alleviate any concerns over the accuracy of the dataset that may have been generated from the check assay statistics. In summation, it is considered based on QA/QC analyses that the drill assay datasets for these eleven projects are suitable for use in resource estimation.

Table 12-1: El Gallo Complex Technical Report QAQC Summary for Resource Areas

Project	Drillholes	Gold									
		Check Assays						Standards		Blanks	
		#	Out of Control** (%)	Mean Grade* (gpt)	Chemex Bias (%)	Check Bias (%)	Bias Coefficient ****	#	Out of Control*** (%)	#	Out of Control*** (%)
El Gallo	531	1391	34%	0.051	33%	43%	-0.003	2294	10%	2295	6%
Palmarito	285	737	28%	0.158	45%	35%	0.061	1046	4%	999	5%
Chapotillo	38	39	39%	1.893	31%	69%	-0.250	105	5%	110	7%
Haciendita	43	74	9%	0.698	54%	43%	0.061	262	1%	262	5%
Mina Grande	82	105	29%	0.705	60%	37%	0.222	294	3%	292	4%
San Dimas	39	74	11%	3.488	72%	22%	0.247	106	5%	110	4%
Los Mautos	32	43	16%	0.220	58%	40%	0.045	116	7%	111	5%
San Jose del Alamo	36	49	10%	0.455	75%	25%	0.061	147	3%	146	3%
Las Milpas	10	28	12%	0.163	32%	68%	-0.011	27	0%	27	4%
CSX	22	22	62%	0.017	27%	69%	0.001	66	6%	78	5%
Project	Drillholes	Silver									
		Check Assays						Standards		Blanks	
		#	Out of Control** (%)	Mean Grade* (gpt)	Chemex Bias (%)	Check Bias (%)	Bias Coefficient ****	#	Out of Control*** (%)	#	Out of Control*** (%)
El Gallo	531	1570	14%	61.960	55%	44%	9.282	2279	2%	2258	1%
Palmarito	285	737	11%	95.330	54%	36%	2.287	1070	7%	1006	2%
Chapotillo	38	48	12%	31.650	62%	38%	5.225	105	3%	110	3%
Haciendita	43	101	22%	10.580	52%	45%	-0.376	258	2%	262	< 1%
Mina Grande	82	119	33%	9.896	44%	54%	1.876	296	1%	295	1%
San Dimas	39	74	26%	6.168	93%	7%	-0.376	114	1%	113	1%
Los Mautos	32	43	26%	18.560	53%	47%	2.119	116	3%	111	0%
San Jose del Alamo	36	58	50%	5.141	51%	45%	0.010	147	1%	146	1%
Las Milpas	10	28	8%	35.175	61%	36%	1.861	27	0%	27	0%
CSX	22	22	4%	18.000	65%	31%	-2.296	58	2%	79	0%
* The sample population is composed of all the out of control samples											
** The upper control limit for check assays is set to 30% deviation from the original sample											
*** The upper control limit for standards and blanks is 3 standard deviations according to the standard specs.											
**** Positive bias coefficient = bias towards original lab; Negative bias coefficient = bias towards check lab											

*Table 12-1: Table of the summary statistics for the entire QAQC dataset compiled from the McEwen Mining Inc. drill database. * = The sample population is composed of all the out of control samples, ** = the upper control limit for check assays is set to 30% deviation from the original sample, *** = the upper control limit for standards and blanks is 3 standard deviations according to the specifications given by the standard manufacturer, and **** = positive bias coefficient = bias towards the original lab; negative bias coefficient = bias towards the check lab.*

12.6 LIMITS OF VALIDATION

Only a sample of the data has been completely validated. The process was aimed at identifying systematic errors or bias in the database. Consequently, some errors may exist in the database that this validation process did not identify.

13 MINERAL PROCESSING AND METALLURGICAL TESTING

13.1 GENERAL

Sample preparation and characterization, grinding studies, gravity concentration tests, flotation tests, whole ore leach tests, column leach tests and environmental tests were completed to determine the metallurgical response of the ore. Samples of ore were collected by McEwen Mining Inc. for metallurgical testing. A series of metallurgical testing programs were completed by independent commercial metallurgical laboratories. METCON Research of Tucson, Arizona was responsible for column leach tests and WAD cyanide determination tests. SGS Lakefield Research Ltd. of Lakefield, Ontario, Canada performed QEMSCAN mineralogy tests on El Gallo and Palmarito ore. SGS de Mexico, S.A. de C.V. of Durango, Mexico conducted column leach tests by cyanide, bottle roll leach tests by cyanide, cyanide destruction tests and comminution tests. Pocock Industrial, Inc. of Salt Lake City, Utah conducted thickening tests, pulp rheology tests and pressure filter tests for the mill tailing. FLSM Dawson Metallurgical Laboratories of Midvale, Utah conducted gravity concentration and flotation of gravity tailings. The test work indicated the ore will respond to direct agitated cyanide leaching technology to extract silver and gold. The results of the test programs are available in the following reports listed below.

1. SGS Canada Inc.; "*An Investigation by High Definition Mineralogy into The Mineralogical Characteristics of Five Composites from the El Gallo Silver Deposit, Mexico*"; May 23, 2012.

2. SGS Lakefield Research Limited; "*An Investigation into QEMSCAN Mineralogy of Five Silver Samples, for the Palmarito Deposit, Mexico"*; January 9, 2009.

3. SGS de Mexico, S.A. de C.V.; email Rodolfo Polanco to Stanley Timler, "*Grindability Test for El Gallo Project.xls*"; February 22, 2012.

4. SGS Mineral Services / Durango; *Grindability Characteristics of Seven Samples from El Gallo Project*; June 12, 2012.

5. FLSmidth – Dawson Metallurgical Laboratories; "*Results of Gravity Flotation and Cyanidation Leaching Test Work on Gold from El Gallo and Palmarito Samples",* February 28, 2012.

6. SGS Mineral Services/Durango, *Determination of the Sensitivity to the Leaching and Flotation Processes of Two Ore Deposit Samples Called Magistral and Palmarito*; October 20, 2008.

7. SGS de Mexico, S.A. de C.V., memo Juvencio Mireles Ortiz to Stefan Spears; "*Metallurgical Results*"; August 21, 2009.

8. SGS Mineral Services / Durango; "*An Investigation to Evaluate the Amenability of the US Gold Drill Hole Samples to Cyanide Leaching Process"*; October 8, 2009.

9. SGS de Mexico – Durango; Maria Alvarado, Bottle Roll 20 Core Samples GAX049, GAX051, GAX052, GAX053, GAX054, GAX055, GAX056; March 30, 2010.

10. SGS de Mexico – Durango; Maria Alvarado, Bottle Roll 8 Core Samples GAX044, GAX045, GAX046, GAX048; February 16, 2010.

11. SGS de Mexico – Durango; Virgina Estrada, DU13054 Bottle Roll 15 Core Samples GAX063, GAX067, GAX076, GAX126, GAX136, GAX137, GAX140, GAX179, GAX241, GAX247, GAXM002; January 6, 2010.

12. SGS de Mexico – Durango, Maria Alvarado, Bottle Roll 20 Core Samples GAX057, GAX058, GAX059, GAX060, GAX061, GAX062, GAX063, GAX064, GAX065; June 25, 2010.

13. SGS de Mexico – Durango; Maria Alvarado, Palmarito Historic Dump and Historic Tails; May 18, 2010.

14. SGS de Mexico – Durango; German Alarcon, Bottle Roll 10 Core Samples PMC-06-03, PMC-06-04, PMC-06-08, PMX-028; January 11, 2011.

15. SGS de Mexico; Ivan Lopez: "*Resumen LIX 7 Muestras.xls*"; May 24, 2012.

16. SGS Mineral Services; "*An Investigation of the Sensitivity of Three Ore Samples to the Cyanide Leaching Process"*; June 13, 2010.

17. SGS de Mexico/Durango; email from Virginia Estrada to Stanley Timler; "*Summary EGTC 1 through 9"*; January 11, 2012.

18. METCON Research; "*El Gallo Project Column Leach Study, Phase II Progress Reports 1 through 6"*; April 18 2012, May 7 2012, May 15 2012, June 7 2012, June 19 2012, June 22, 2012.

19. Pocock Industrial Inc.; "*Sample Characterization & PSA Flocculant Screening, Gravity Sedimentation, Pulp Rheology and Pressure Filtration Studies Conducted For: US Gold El Gallo Project"*; February 2012.

20. METCON Research; "*Cyanidation Study on Composite Samples El Gallo Project"*; July 27, 2012.

21. SGS de Mexico, S.A. de C.V.; "*An Investigation into Cyanide Destruction Tests for Samples El Gallo, Palmarito and Magistral Project"*; February 9, 2012.

22. McEwen Mining Inc.; email from Ian Ball to Stanley Timler, "*Figures Met Section*", August 10, 2012.

23. McEwen Mining Inc., email from Ian Ball to Stanley Timler, "*Last Met Image*", August 13, 2012.

24. McEwen Mining Inc.; "*Resource Estimate for the El Gallo Complex, Sinaloa State, Mexico*"; Section 16, July 18, 2012.

The metallurgical test results were used to develop the process design criteria and the process flow sheet.

13.2 METALLURGICAL TESTING

13.2.1 Ore Types and Samples

McEwen Mining selected samples that represented the geographical and mineralogical composition of the El Gallo and Palmarito ore bodies.

From 2009, McEwen collected samples and arranged testing of the El Gallo ore body to select the processing technology. McEwen classified the mill feed material as high grade silver (El Gallo) and low grade silver (El Gallo Low Grade Stockpile). Some of the material that was below mill grade feed had the potential for silver recovery by heap leaching (El Gallo Potential Heap Leach).

McEwen sampled and tested the Palmarito ore body since 2009 and identified mill feed material (Palmarito In-situ). The property also has tails (Palmarito Historic Tails) and waste rock (Palmarito Historic Dump) that will be processed through the mill.

13.2.2 Mineral Characterization

SGS Lakefield conducted Quantitative Evaluation of Materials by Scanning Electron Microscopy (QEMSCAN) of El Gallo (Report 1) and Palmarito samples (Report 2).

The El Gallo mineralization was characterized by very fine silver grains between 2 and 40 microns across of which 22% to 71 % were less than 10 microns. Between 1 to 12 percent of the silver minerals were locked and not recoverable. The silver occurred as sulfides in 65 to 92 percent of the mineral grains and in trace amounts as halides. Leaching at 5,000 ppm sodium cyanide recovered 89 to 95 % of the silver. The other minerals present were silicates, carbonates, iron oxides and trace amounts of copper sulfides, sphalerite and galena. Table 13-1 shows the recovery rate, particle size and amount of silver present as sulfides.

Table 13-1: El Gallo Silver Recovery, Mineral size and Silver Sulfide Content

Sample	GAXM-003	GAXM-004	GAXM-005	GAXM-006	GAXM-007
Ag recovered by cyanide leaching, %	90.4	93.3	93.8	89.2	94.7
Mineral size, mid-point of size distribution	<15 µm	<15 µm	<15 µm	<10 µm	<10µm
Ag as sulfides, %	91.6	75.2	65.7	84.8	89.8

The Palmarito mineralization was characterized by very fine grains, of which approximately 85% were less than 10 microns. Silver occurred mainly as sulfides with lesser amounts of native silver and small amounts of silver chloride. The other minerals were mainly quartz and iron oxides. Table 13-2 shows the silver mineral size and silver sulfide content.

Table 13-2: Palmarito Mineral Size and Silver Sulfide Content

Sample	PMC06-02	PMC06-05	PMC06-09	PMC06-10
Mineral size (mid-point of size distribution)	85% <10 µm	NA	92% <5 µm	87% <5 µm
Ag as sulfides %	92.	99.98	74.35	89.478
Native Ag %	11	---	23.75	7.23

13.2.3 Comminution

SGS Durango determined the Abrasion Index, Bond Crusher Work Index, Bond Rod Mill Work Index, Bond Ball Mill Work Index and specific gravity (Report 3 and 4). The results are listed in Table 13-3.

Table 13-3: Comminution Data

	Abrasion Index	Bond Crusher Work Index	Bond Rod Mill Work Index	Bond Ball Mill Work Index	Specific Gravity
	Ai	CWi	RWi	BWi	SG
		(kWh/tonne)	(kWh/tonne)	(kWh/tonne)	
El Gallo					
GAXM-003	0.303	9.91	15.20	17.8	2.50
GAXM-004	0.185	11.56	10.10	18.6	2.41
GAXM-005	0.34	7.24	15.00	15.0	2.57
GAXM-006	0.15	7.89	11.80	15.6	2.38
GAXM-007	0.041	6.66	11.40	14.5	2.40
El Gallo Average Values	0.204	8.65	12.70	16.3	2.45
Palmarito					
PMXM-001	0.534	9.67	16.20	17.1	2.59
PMXM-002	0.533	10.80	13.00	17.2	2.56
Palmarito Average Values	0.534	10.24	14.6	17.2	2.58

The Bond Rod Mill Work Index (RWI) results indicate that the El Gallo materials are considered soft to medium hard and the Palmarito materials are considered moderately hard to hard.

The process flow sheet selected 3-stage crushing and ball mill grinding for simplicity, ease of operation and control. The circuit is easier to control than a crushing and SAG mill circuit. A High Pressure Grinding Roll (HPGR) circuit was not selected because it required a complicated crushing and conveying circuit.

13.2.4 Gravity Separation and Flotation of Gravity Tailings

FLSmidth conducted a scoping study to examine silver and gold recoveries by gravity separation followed by flotation of the gravity tailings (Report 5). The results are shown in Table 13-4. Further testing would be required to improve recoveries and simplify FLSmidth's proposed process flow sheet.

Table 13-4: Gravity Separation and Flotation of Gravity Tailings

Test No. 7	Total Gold Recovery (%)	Total Silver Recovery (%)
Gravity Con + Cleaner Flotation	81.7	73.9

13.2.5 Direct Agitated Cyanide Leaching Technology

SGS –Durango performed agitated cyanide leaching tests on the El Gallo and Palmarito samples (Report 6-15). The extraction of precious metals and reagent consumption for the 1,000 ppm sodium cyanide, 33 percent solids, pH 11-11.5 for 144 hour leach conditions are shown in Table 13-5. Table 13-5 shows that the Life-of-Mine (LOM) weighted average recoveries of silver and gold are 84.3% and 83.2% respectively. The proportions of the five feed materials reporting to the mill will vary throughout life of the mine therefore it is expected that leaching will operate at the cyanide and lime addition rates of 1.52 and 4.38 kg/tonne of ore instead of the weighted average of the samples submitted to the lab.

Table 13-5: Cyanide Leaching Recoveries and Reagent Consumptions

Ore Body	Number of Samples	Average Ag Recovery (%)	Average Au Recovery (%	Cyanide (Kg/tonne)	Lime (Kg/tonne)
El Gallo (high grade)	180	87.6	79.2	2.03	4.38
El Gallo Low Grade Stockpile	8	86.4	Not Available-	1.02	4.32
Palmarito In-situ	20	73.6	88.4	1.36	2.67
Palmarito Historic Dumps	12	88.8	82.4	1.17	2.74
Palmarito Historic Tails	9	54.2	63.9	1.06	3.08
LOM Weighted Average Silver and Gold Recoveries		84.3	83.2		
Reagents in leaching				1.52	4.38

The plant will consume quicklime at a rate of 6.77 kg/tonne of ore with 4.38 kg/tonne used at leaching and 2.39 kg/tonne used at cyanide destruction. (See Table 13-9 in Section 13.2.8).

13.2.6 Cyanide Heap Leaching Technology

SGS – Durango and METCON conducted column leach tests on samples of El Gallo Potential Heap Leach Material (Report 16-18). Several bottle roll scoping studies were performed to test the amenability of the material to heap leaching. SGS performed a scoping study using ¼ inch material and a 14-day leach while METCON performed a scoping study using -100 mesh material and a 3-day leach. The scoping studies showed that the samples had the potential of high silver recovery under column test conditions. Several column tests were performed at different crush sizes, agglomeration conditions and cure times. Additional tests are needed to optimize leaching. The El Gallo Potential Heap Leach Material bottle roll and column test results are shown for Table 13-6.

Table 13-6: Column Tests of El Gallo Potential Heap Leach Material

Samples	Bottle Roll	Bottle Roll	Column Test	Colum Test
	¼", 14 day	100 M, 3 day	180-day leach	89-day leach
	(% Ag Extracted)	(% Ag Extracted)	(% Ag Extracted)	(% Ag Extracted)
EGCT-1	42.0		53.5	
EGCT-2	51.1		61.5 (1)	
EGCT-3	33.3		44.7 (1)	
EGCT-4			65.9	
EGCT-5			54.4	
EGCT-6			49.5	
EGCT-7			62.9	
EGCT-8			51.0 (2)	
EGCT-10		82.9		47.0 (3)
EGCT-11		74.8		26.3 (3)
EGCT-12		87.8		15.6 (3)

Note: (1) 160-day leach
(2) 140-day leach
(3) Tests ongoing during the preparation of this Technical Report

13.2.7 Thickening and Filtration of Leach Tailings

Pocock Industrial conducted thickening and filtering tests (Report 19) on the leach tailings. The thickening test results are summarized in Table 13-7.

There was a significant difference in the settling properties of the two materials tested, the El Gallo tails settled at a slower rate and operated at a lower underflow density. The El Gallo properties were selected for the thickener design. A high rate thickener was selected to reduce required floor area and maximize the density of the underflow.

Table 13-7: Thickening Leach Tailings

<table>
<tr><th>Tails</th><th>Thickener Type</th><th>Floc Dose

(HyChem AF 304)</th><th>Max Thickener Feed Solids</th><th>Min Unit Area for Conventional Thickener</th><th>Average Hydraulic Rate for High Rate Thickener</th><th>Estimated U'Flow Density for Standard Thickener</th></tr>
<tr><td></td><td></td><td>(g/MT)</td><td>(%)</td><td>(m^2/MTPD)</td><td>(m^3/m^2/hr)</td><td>(%)</td></tr>
<tr><td>El Gallo</td><td>Conventional</td><td>20 CCD Stage 1</td><td>15 – 25</td><td>0.2- 0.3</td><td>---</td><td rowspan="2">51 – 55</td></tr>
<tr><td>El Gallo</td><td>High Rate</td><td>12-16 Stage 2-n</td><td>14 – 18</td><td>---</td><td>3.50</td></tr>
<tr><td>Palmarito</td><td>Conventional</td><td>15-20 CCD Stage 1</td><td>15 – 25</td><td>0.125</td><td>---</td><td rowspan="2">69 – 73</td></tr>
<tr><td>Palmarito</td><td>High Rate</td><td>10-15 CCD Stage 2-n</td><td>15 – 20</td><td>---</td><td>5.50</td></tr>
</table>

Pocock Industrial conducted pressure filtering tests. The Palmarito material filtered faster and drier than the El Gallo material. The filtration test results are summarized in Table 13-8 below.

Table 13-8: Pressure Filtering Tests

	Filter Feed solids	Dry Cake Bulk Density	Filter Cake Moisture	Filtration Rate (15 mm cake form time + dry time)
	(%)	(Kg/m^3)	(%)	(Kg/m^2/h)
El Gallo Tails	51.8	0.821	17.6	272.0
Palmarito Tails	70.9	0.730	12.5	395.2

13.2.8 Environmental

METCON determined the concentration of Weak Acid Dissociable (WAD) cyanide that will be entering the Detoxification reactors. The results are shown in Table 13-9 (Report 20). Detoxification will by the well-established continuous INCO – SO_2 process which uses sulfur, copper, lime and oxygen to oxidize the WAD metal cyanide complexes.

Table 13-9 also shows the lime requirements for the El Gallo (high grade) and Palmarito In-situ samples. The weighted average for these samples was 2.39 kg/tonne of ore. (See section 13.2.5 for the total lime requirements).

Table 13-9: WAD Cyanide to Detoxification Reactors and Lime Consumption

Sample	Initial WAD Cyanide (mg/L)	Lime Consumption (kg/tonne ore)
GAXM-003	88	1.9
GAXM-004	89	1.68
GAXM-005	110	1.81
GAXM-006	94	2.87
GAXM-007	64	4.94
PMXM-001	210	1.32
PMXM-002	44	1.43
Weighted Average of El Gallo (high grade) and Palmarito In-situ samples		2.39

SGS Durango demonstrated that the INCO – SO_2 process reduced solutions containing 1,000 mg/L of free cyanide to less than 2 mg/L using sodium metabisulfite, copper sulfate and lime (Report 21). The detoxification test results are shown in Table 13-10.

Table 13-10: Final Free Cyanide in Detoxification

Sample	Final Free Cyanide (mg/L)
GAXM-003	0.17
GAXM-004	0.43
GAXM-005	1
GAXM-006	0.2
GAXM-007	0.5
PMXM-001	1
PMXM-002	0.3

SGS-Durango detected mercury in the samples (Report 15) listed in Table 13-11.

Table 13-11: Mercury in Mineral Samples

Sample	Hg (g/tonne)
GAXM-003	<5
GAXM-005	<5
GAXM-007	<5
PMXM-001	<5
PMXM-002	<5

13.2.9 Recovery

The average silver and gold recoveries vary with the ore body as shown in Table 13-5.

In general, the Palmarito material had low silver recoveries from the transitional material located at a depth of 50 to 100 meters below surface. Higher recoveries came from near surface material. Deeper material below the transitional zone had improved recoveries. Table 13-12 shows the results of 23 bottle roll tests. Figure 13-2 to Figure 13-5 illustrate that the recovery changes with depth (Reports 22, 23, 24).

Recoveries do not vary with depth at the El Gallo ore body as shown in Figure 13-1.

Table 13-12: Palmarito Silver Recovery vs. Depth

Depth (m)	Material Type	Palmarito Silver Recovery (%)
< ~50	Shallow	72.8
~50 - ~100	Transitional	35.2
> ~100	Deep	68.2

The terms "Shallow," "Transitional," and "Deep" are descriptions that pertain to the general depth of the mineralization. "Shallow" is mineralization located from surface to an approximate depth of 50 meters and is contained within the reserve pit. "Transitional" mineralization is generally assumed to be below the reserve pit, located more than 50 meters below surface. "Deep" ore is mineralization that could only be accessed via underground mining methods.

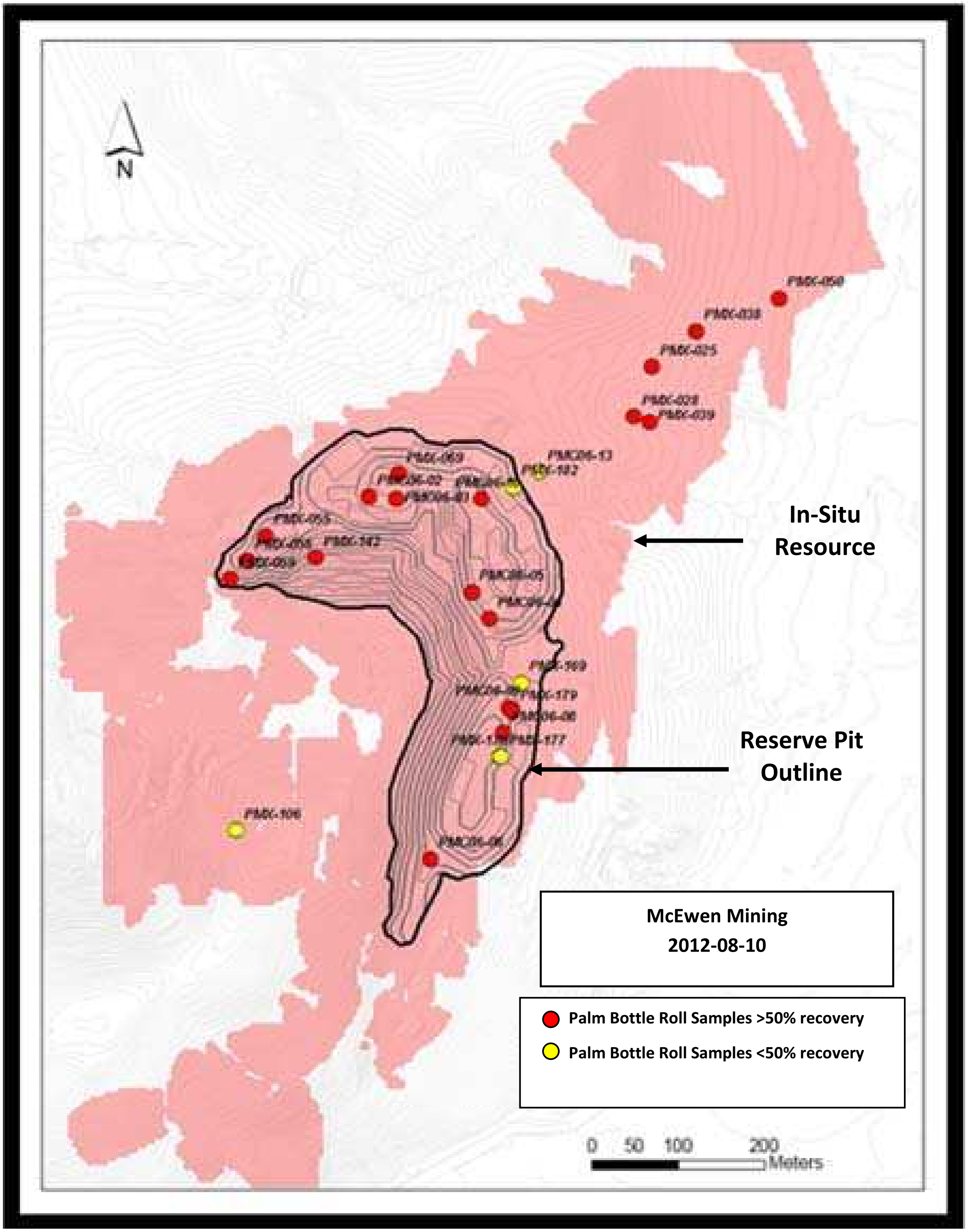


Figure 13-2: Palmarito Bottle Roll Locations

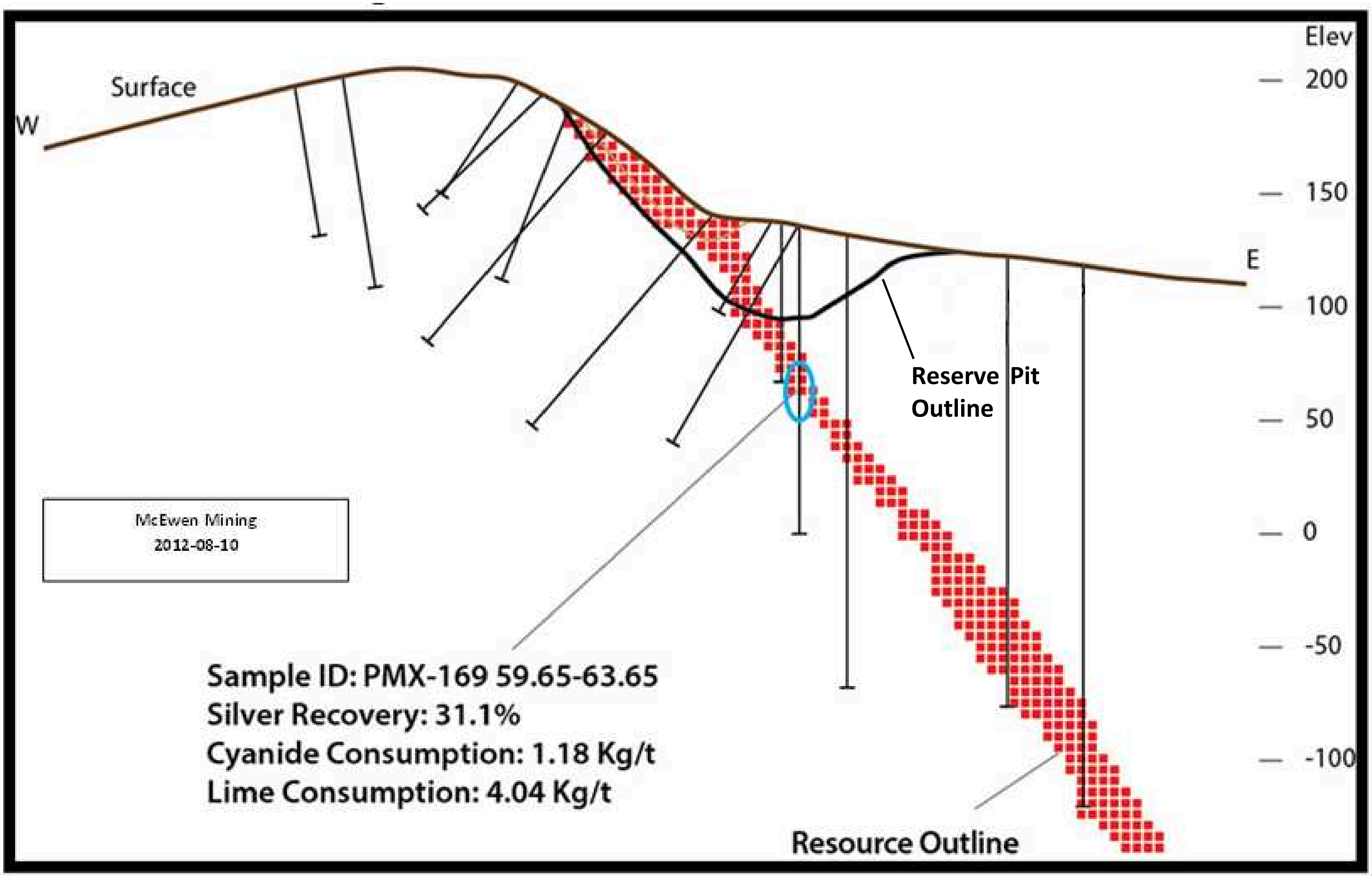


Figure 13-3: Palmarito Section PAL North 05, "Transitional Material"

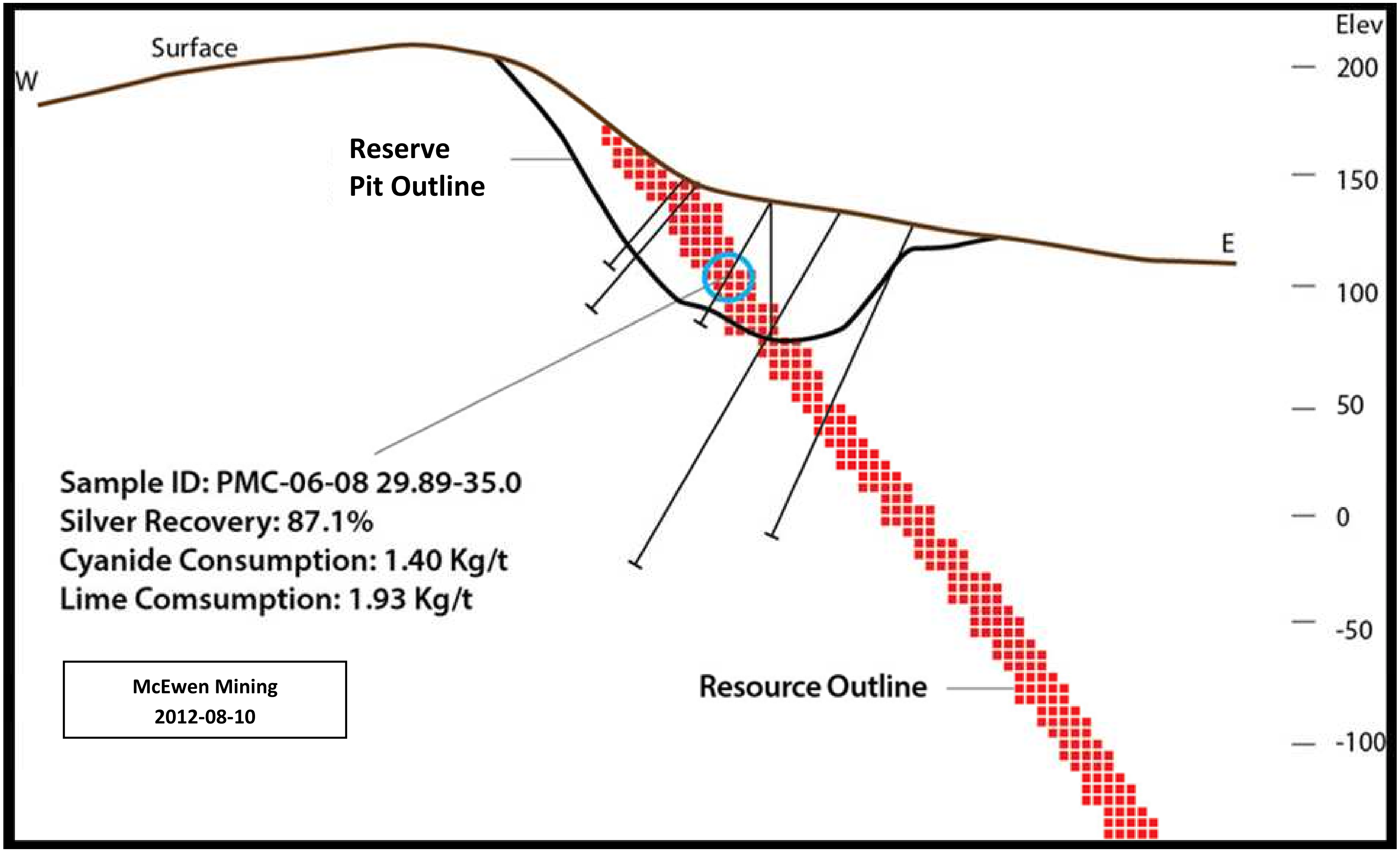


Figure 13-4: Palmarito Section PAL East 16, "Oxide Material"

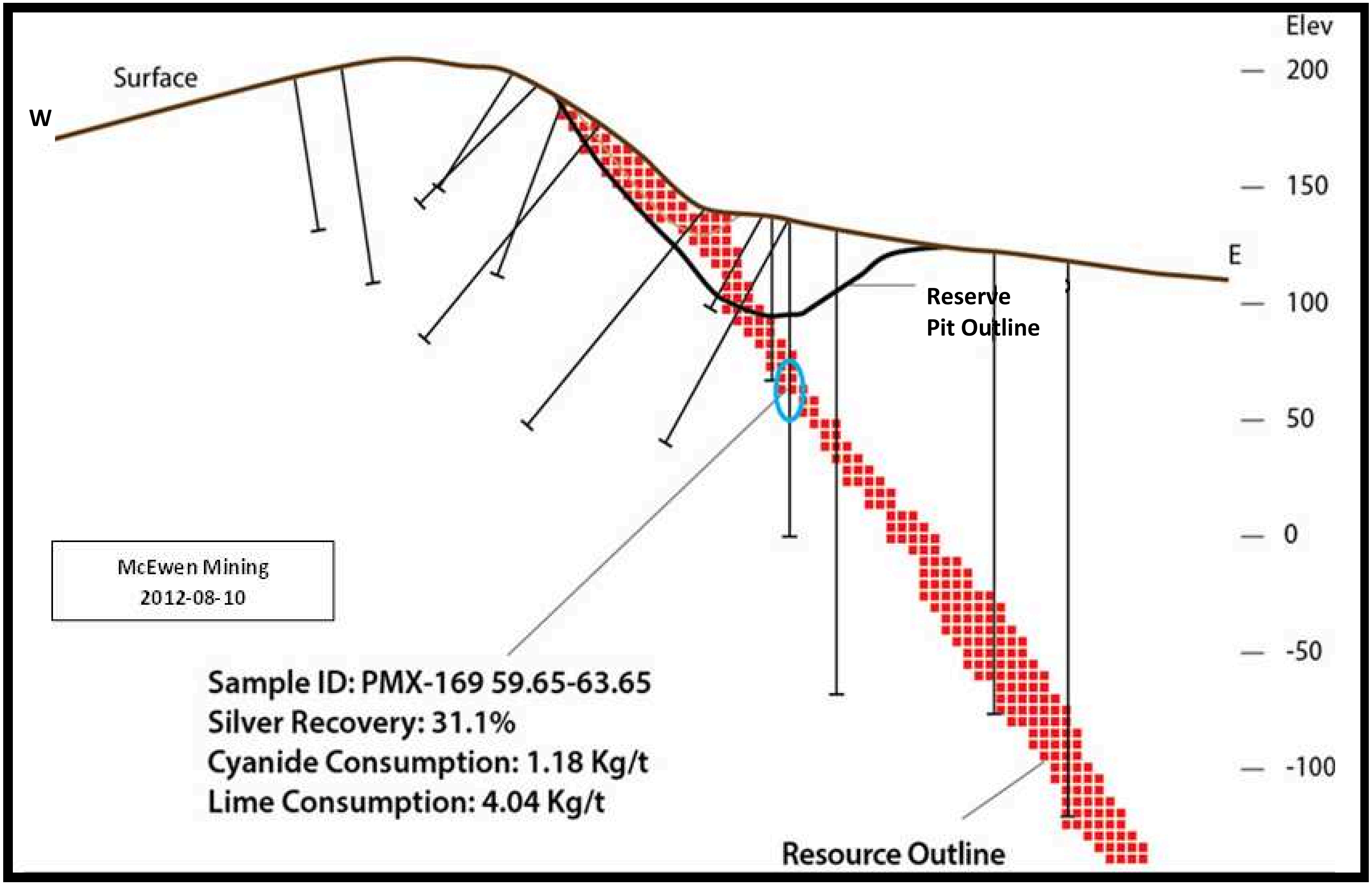


Figure 13-5: Palmarito Section PAL East 19, "Transitional Material"

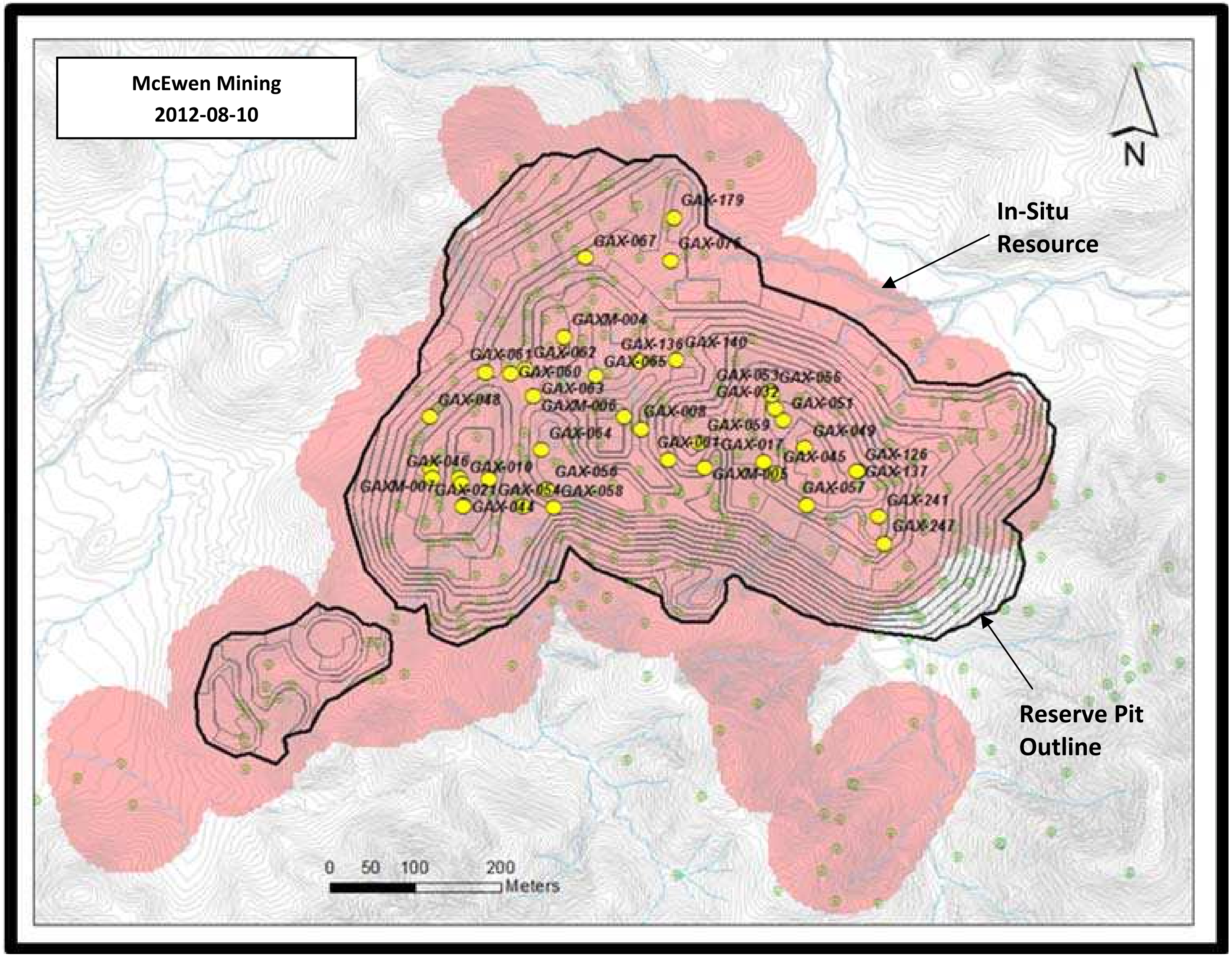


Figure 13-6: El Gallo Bottle Roll Locations

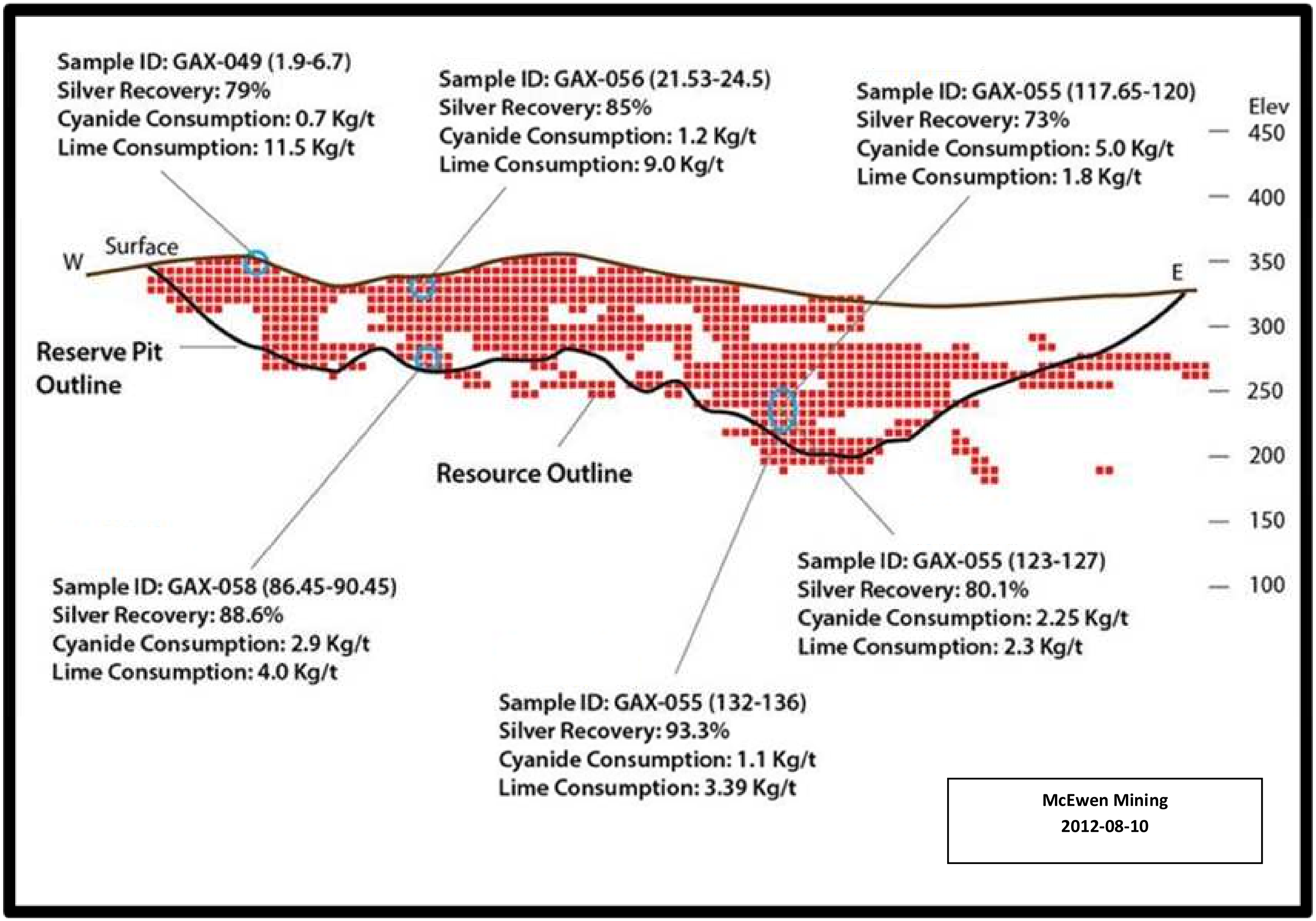


Figure 13-7: El Gallo Long Section

The silver recovery increase slightly as head grade increases as shown in Figure 13-8.

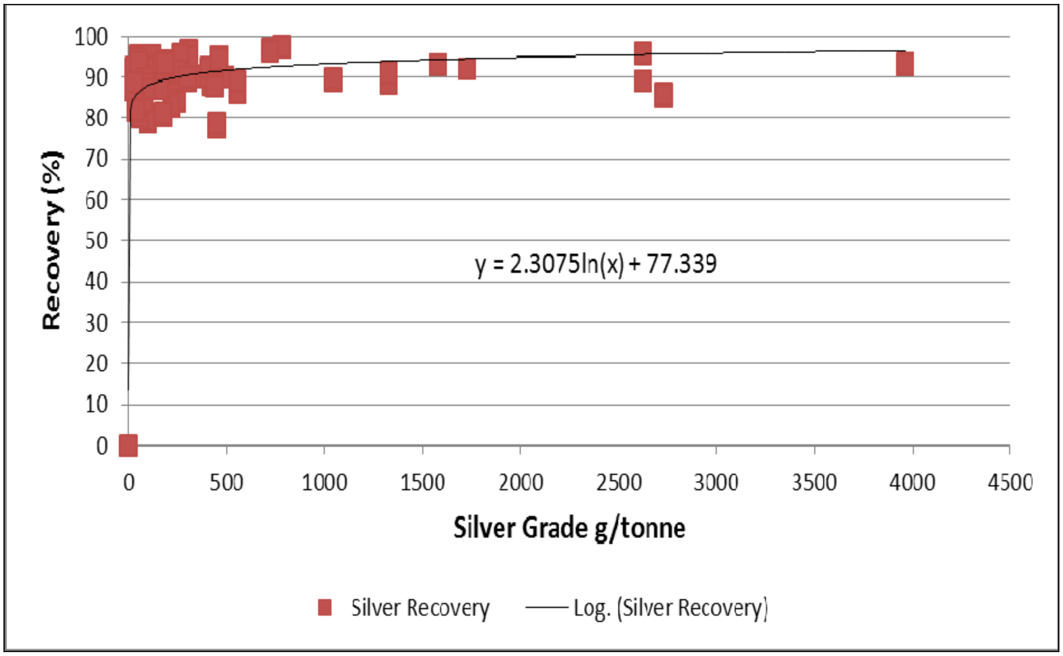


Figure 13-8: El Gallo Ore-Silver Recovery versus Head Grade

13.2.10 Recommendations

M3 recommends additional tests and trade-off studies to determine whether the number and size of the leach tanks and agitators can be reduced by increasing the solids loading from 33 percent to between 40 and 45 percent. The solids loading can be increased by selecting cyclones with higher solids in the overflow and/or by using a pre-leach thickener.

M3 recommends additional tests on the El Gallo Potential Heap Leach material to determine the optimum economic recovery conditions.

M3 recommends preparing samples for filter equipment vendors. Several vendors indicated that they will prepare firm bids and offer equipment performance guarantees after they test the samples at their own laboratories.

Although bottle roll testing throughout the Palmarito deposit does a good job covering the aerial extent and depths associated with the mineralization, it is recommended that McEwen's in house metallurgical lab (located at Magistral), continuously test the different zones for recoveries from samples obtained during blast hole drilling. Bottle roll samples, like drill holes, can be spread +50 meters apart and testing on closer intervals will better help determine recoveries, which are more variable than at the El Gallo deposit, especially between the oxide and transitional zones.

14 MINERAL RESOURCE ESTIMATES

14.1 EL GALLO

The in pit mineral resources for the El Gallo deposit, was prepared by Brian Hartman P.Geo and signed by Richard J. Kehmeier, CPG of PAH, each an independent Qualified Person in accordance with NI 43-101. The out of pit resource was prepared by McEwen Mining and signed by John Read CPG, Senior Geological Consultant. Mr. Read is not considered independent of the company.

14.1.1 El Gallo In-Pit Mineral Resource Summary

Two lithological boundaries were interpreted for use in block modeling. These are: 1) top of volcanic sediments/tuff ("Vsed") boundary, and 2) top of intrusive basement (basement) boundary. An example of this interpretation is found in Figure 4-1.

The El Gallo in-pit mineral resource estimate was prepared by Brian Hartman, M.S., P.Geo., Senior Geologist, of PAH and signed by Richard J. Kehmeier, CPG of PAH, each an independent Qualified Person in accordance with NI 43-101. The estimate was completed using Minesight 7.0-3 software. The block model was constrained by interpreted 3D wireframes for the andesite domain and volcaniclastic sediment domain. The andesite domain was further delineated into several separate breccia or contact zones of higher silver grade. Silver and gold grades were estimated into blocks using Ordinary Kriging interpolation.

At a 12 g/t Ag cutoff, the El Gallo deposit contains a measured plus indicated resource of 19.49 million tonnes grading 62.7 g/t silver and 0.05 g/t gold and an inferred resource of 0.170 million tonnes grading 79.8 g/t silver and 0.02 g/t gold.

Notes:

1. CIM definitions were followed for the estimation of mineral resources.

2. Mineral resources are estimated at a Ag cutoff of 12 g/t for blocks lying within a Whittle pit

3. Reasonable $US metal prices of $28.50/ounce silver and $1500/ounce gold were used for the Whittle pit. Milling recovery assumptions of 85% silver and 75% gold and heap leach recovery assumptions of 60% silver and 60% gold were used. Mining costs of $1.75/tonne ore and $1.65/tonne waste, processing costs of $18.50/tonne milled and $6.50/tonne leached were used

4. SG was assumed to be 2.5 for all blocks

14.1.2 Database

A digital database was provided to PAH by McEwen that included collar, survey, assay, and lithology information. The database included 510 drill holes and 63,462 assay intervals. A portion of these holes were condemnation holes and lie on the fringes of the drilling area. A total of 442 holes containing 52,327 assay intervals were used in the block model interpolation.

14.1.3 Geologic Model

A detailed description of the geological units can be found in Section 7 of this report. PAH constructed geology solids based on a sectional review of drill hole intercepts. Lithologic groups were defined by the logged geology and were grouped into three main units:

- Andesite Package
- Tuff/Volcaniclastic Sediment Package
- Quartz Monzonite Basement

The tenure of mineralization for the volcanic sediment and tuff units is different than that of the andesite suite. Therefore, from a grade modeling perspective, defining the boundary between these groups of lithologies is important. This boundary has been interpreted as two-dimensional polylines on vertical, west-facing sections on which were plotted lithological interpretations of the core holes. These vertical sections run through the entire length of the deposit evenly spaced every 25m. These lines were then used to generate a three-dimensional surface.

Interpretation of this boundary is subjective in places. The nature of this contact is characterized by successive andesite bodies intruding the older volcanic sediments and tuff units. Dikes of andesite are often encountered in the volcanic sediments and tuff units. Additionally, xenoliths of volcanic sediments and tuff are often found within the larger andesite body. The approach to these challenges to interpreting this boundary was to first, consider the dominant rock type and second, consider the tenure of mineralization. In other words, where the boundary is ambiguous the boundary has been interpreted where the dominant rock type ceases to be andesite and transitions to volcanic sediments and tuff. If this method yields an unacceptably subjective result, the tenure of silver mineralization is then considered, such that higher grade material is included with the andesites and the lower grade material is isolated to the volcanic sediments and tuff.

The andesite package is the dominant rock type at El Gallo and the principle host rock for the El Gallo mineralization. Nine ‘high-grade’ zones were further delineated within the andesite package based on an approximate 10 g/t Ag cutoff as well as loose lithological constraints such as siliceous breccia zones and porphyry intrusive contact zones that appear to host the higher grade mineralization. PAH believes that the current geology interpretation is of a reasonable completeness to support a mineral resource estimation. Further work to define the controls on mineralization is warranted. This should incorporate mineralogical, structural, and alteration studies and data should be used to refine the ‘high-grade’ zones.

The wireframe volume and drilling information for all domains is shown in Table 14-1.Table 14-1 Figure 14-1 thru Figure 14-3 show the property geology as mineralized solids and the drill holes used to complete the interpolation.

Table 14-1: Technical Report, El Gallo Complex, Wireframe Volume and Drilling Information for all Domains

Domain	Volume (m^3)	Number of Drill Holes	Assayed Length of Drill Core (m)
Andesite	-	440	43,239.40
HG11	227,438	25	212.70
HG12	677,249	62	989.10
HG13	275,513	22	184.95
HG14	695,567	55	722.08
HG151	1,212,570	108	1,946.91
HG152	1,128,988	107	2,496.53
HG16	277,894	50	476.28
HG17	428,159	46	788.05
HG18	143,565	19	318.70
Volc Sed	-	370	18,580.43

McEwen contracted IntraSearch Inc., a division of MapMart, to do an aerial survey of the project area and obtain topographic contours. The area was flown on April 24, 2010 by Keystone Aerial Surveys using a Cessna 206 aircraft equipped with a TracAir flight management system and airborne GPS equipment.

The flight was originally designed by IntraSearch and refined by Keystone AS. Four flight strips were flown to encompass the desired mapping area, obtaining 40 color stereo exposures at a scale of 1:9900 (1” = 825’). The flight design and scale of photography are suitable to compile and capture photogrammetrically 3 ft (1 m) contours and planimetrics at a 1:1000 scale by typical mapping industry standards. The film-based aerial camera used is a newer highly equipped Wild RC-30 camera with the latest technologies including ABGPS. Kodak 2444 Aerial film was the color negative roll film used.

Eight suitable ground targeted photo control points were requested and supplied by Terra Group, a surveyor company based in Hermosillo, Mexico. Differential Airborne GPS (ABGPS) techniques were used to increase photo control accuracy for each exposure. Onboard GPS satellite and universal base station recordings were made during the flight mission. Upon film processing and receipt of ABGPS postprocessing reports, aero-triangulation was used to tie and adjust all exposure positions as well as calculate relative tip, tilt, and swing of all images. Upon this model, relative GPS and drift corrections for all aerials were made set to the ground control point values from our aero-triangulation software. All accuracy reports show the mission was within standard deviations for a typical 3 ft (1 m) contour mapping effort.

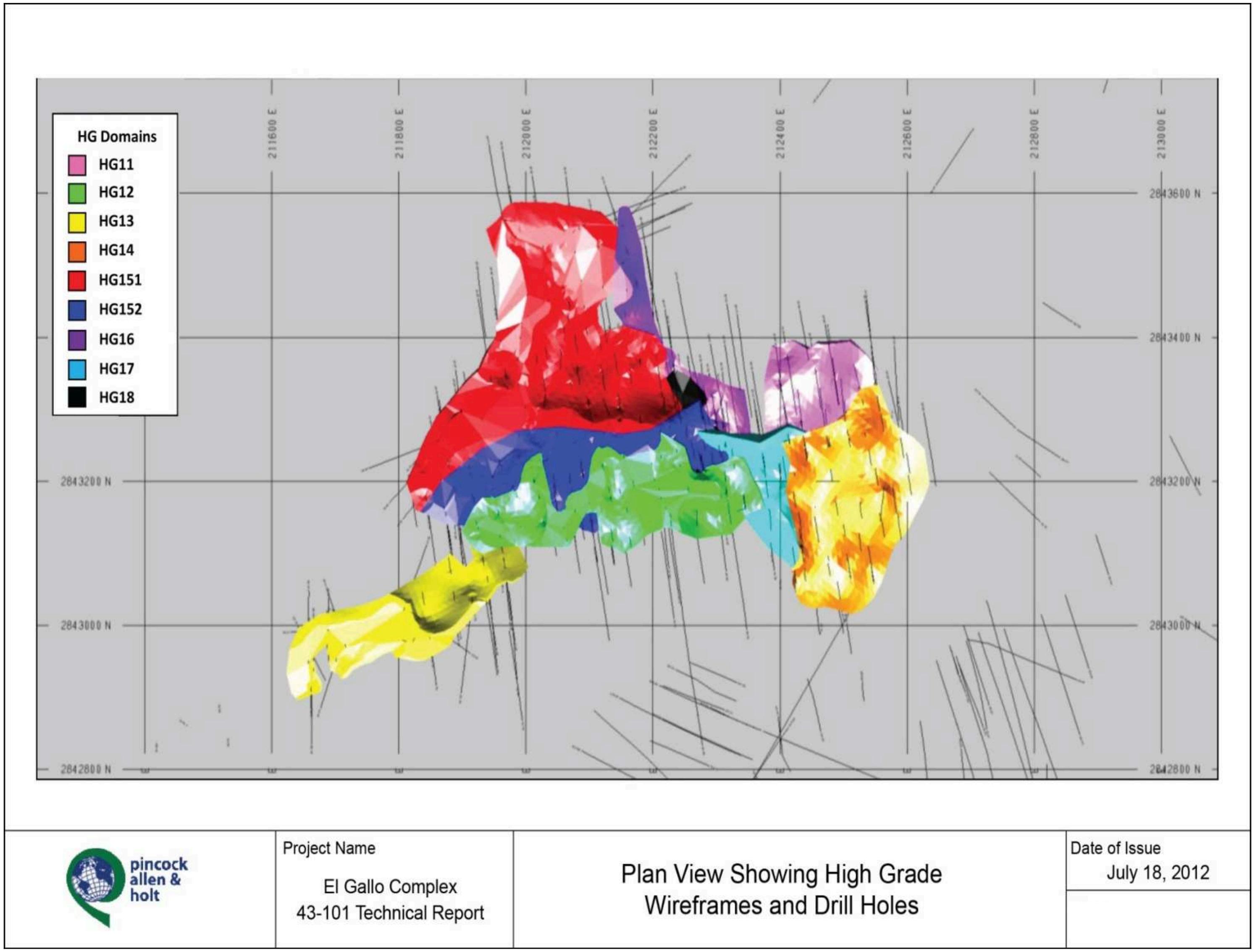
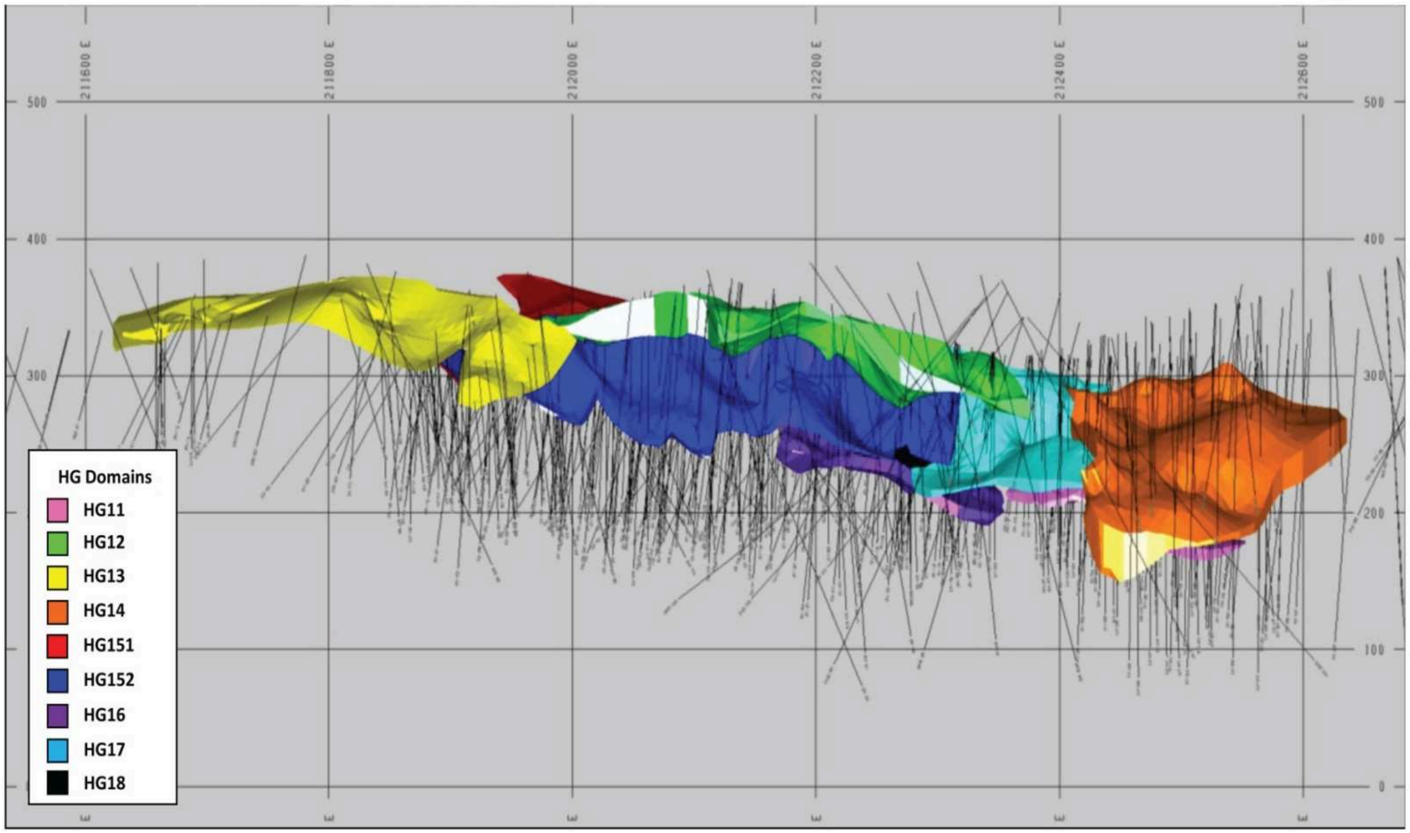


Figure 14-1: Plan View Showing High Grade Wireframes and Drill Holes



	Project Name		Date of Issue
pincock allen & holt	El Gallo Complex 43-101 Technical Report	3D Sectional View Looking North Showing High Grade Wireframes and Drill Holes	July 18, 2012

Figure 14-2: 3D Sectional View Looking North Showing High Grade Wireframes and Drill Holes

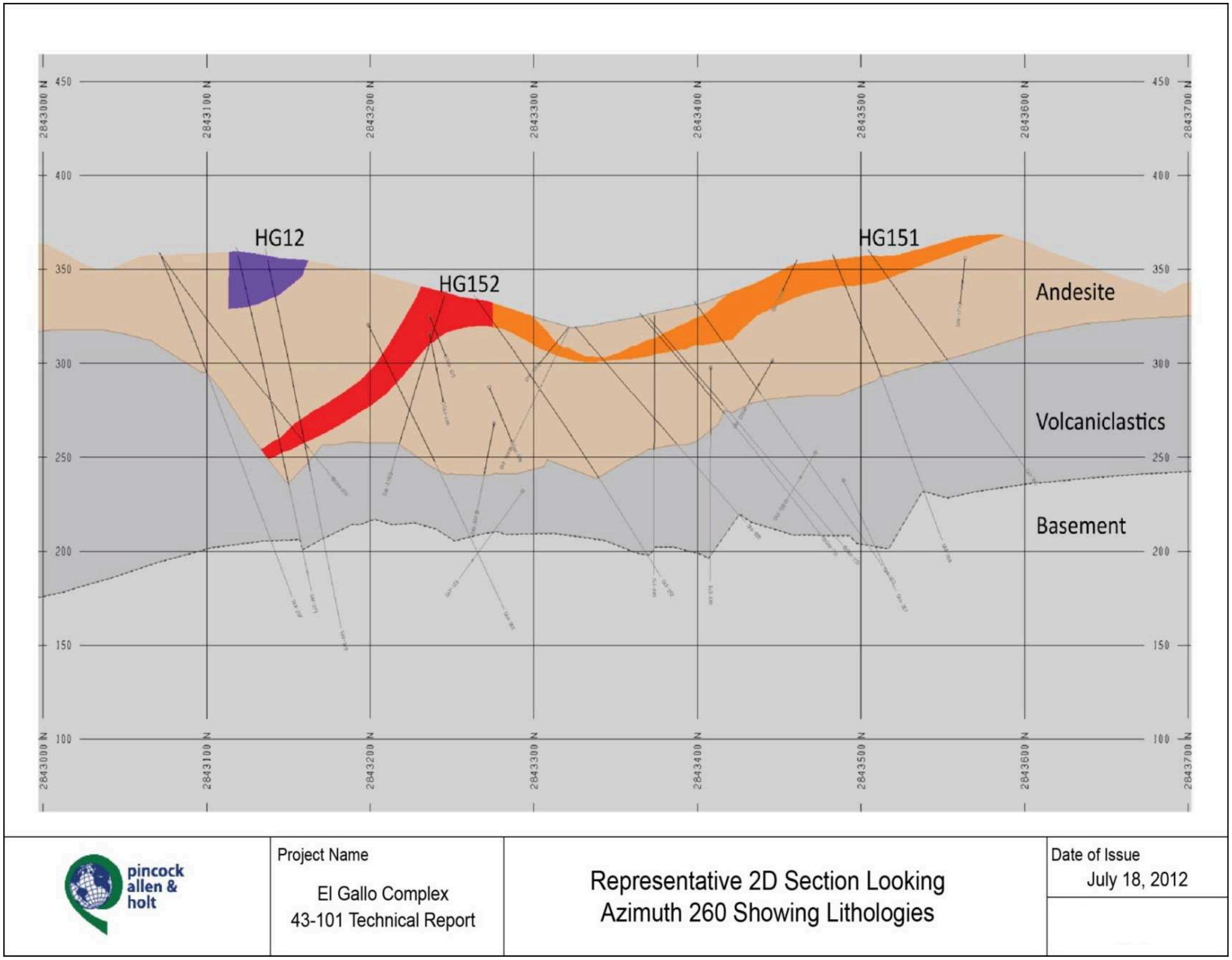


Figure 14-3: Representative 2D Section Looking Azimuth 260 Showing Lithologies

14.1.4 Bulk Density

Density determinations were carried out on 48 mineralized core samples by SGS Laboratories. The samples were sealed with wax followed by immersion in distilled water and measuring displacement. The average density of the 48 samples is 2.50 g/cm^3. An average SG of 2.5 was applied to all blocks in the El Gallo resource model.

14.1.5 Assay Statistics

Assay intervals were coded by wireframe. Assay statistics by domain are shown in Table 14-2. Data analysis was performed by creating cumulative probability and histogram plots of the data.

Table 14-2: Technical Report, El Gallo Complex, Assay Statistics by Domain

Assay Statistics - Ag g/t						
Zone	**Number of Records**	**Minimum**	**Maximum**	**Mean**	**Standard Deviation**	**Coefficient of Variation**
Andesite	32,228	0.00	18244.50	11.72	154.00	13.14
Andesite >10 g/t	4,108	10.00	18244.50	77.86	425.12	5.46
All HG Zones	7,642	0.00	10461.00	109.50	370.11	3.38
HG11	215	0.25	3510.00	102.63	277.10	2.70
HG12	869	0.00	1755.00	53.80	122.13	2.27
HG13	168	0.50	2310.00	93.56	244.19	2.61
HG14	716	0.25	2260.00	60.49	130.66	2.16
HG151	1,712	0.00	6000.00	97.35	268.69	2.76
HG152	2,427	0.00	10461.00	122.87	465.68	3.79
HG16	472	0.25	7590.00	160.40	481.20	3.00
HG17	731	0.25	7790.00	155.05	494.61	3.19
HG18	332	0.25	4390.00	165.74	387.83	2.34
Volc Sed	12,457	0.01	3280.00	3.65	56.06	15.36
Assay Statistics - Au g/t						
Zone	**Number of Records**	**Minimum**	**Maximum**	**Mean**	**Standard Deviation**	**Coefficient of Variation**
Andesite	32,228	0.00	29.30	0.02	0.34	18.12
Andesite >10 g/t	4,108	0.00	29.30	0.06	0.82	13.28
All HG Zones	7,642	0.00	71.60	0.11	1.38	13.19
HG11	215	0.00	3.09	0.07	0.31	4.26
HG12	869	0.00	18.95	0.10	0.80	8.32
HG13	168	0.00	0.54	0.03	0.05	1.92
HG14	716	0.00	16.20	0.08	0.64	8.55
HG151	1,712	0.00	6.97	0.05	0.22	4.79
HG152	2,427	0.00	71.60	0.19	2.32	12.48
HG16	472	0.00	21.50	0.11	1.03	9.79
HG17	731	0.00	4.17	0.06	0.18	3.16
HG18	332	0.00	1.01	0.06	0.14	2.39
Volc Sed	12,457	0.00	0.40	0.01	0.01	1.89

14.1.6 Capping of High-Grades

A combination of decile analysis and review of cumulative probability plots were used to determine the potential risk of grade distortion from higher-grade assays. PAH also took into consideration reconciliation information from McEwen's other operating properties, where grade capping is not implemented in model interpolations. PAH decided not to apply grade capping at this time.

14.1.7 Composites

The assays were averaged into 2 m composites down the hole while respecting the boundaries of the various domains described above. This results in some composites that are shorter than 2 m. Those that are longer than 1.0 m are left as is, while those that are shorter than 1.0 m are merged with the previous 2 m composite. Table 14-3 shows the composite statistics summary information by domain used in the mineral resource.

Table 14-3: Technical Report, El Gallo Complex, Composite Statistics by Domain

Composite Statistics (2m) - Ag g/t						
Domain	**Number of Records**	**Minimum**	**Maximum**	**Mean**	**Standard Deviation**	**Coefficient of Variation**
Andesite	21,648	0.00	6,020.75	8.57	73.96	8.63
Andesite >10 g/t	2,888	10.00	6,020.75	50.42	197.14	3.91
All HG Zones	4,080	0.00	7,735.10	97.06	265.94	2.74
HG11	108	3.10	1,392.40	93.51	165.51	1.77
HG12	496	0.00	759.31	47.51	80.29	1.69
HG13	93	0.56	1,960.00	94.05	239.83	2.55
HG14	359	0.43	907.90	53.91	81.40	1.51
HG151	977	0.00	2,031.87	85.52	160.78	1.88
HG152	1,255	0.00	7,735.10	107.75	355.58	3.30
HG16	240	0.60	2,138.93	141.58	253.43	1.79
HG17	392	1.10	4,564.35	153.03	405.53	2.65
HG18	160	0.25	1,562.26	134.34	202.85	1.51
Volc Sed	9,297	0.01	2,460.25	2.89	37.51	12.98
Composite Statistics (2m) - Au g/t						
Domain	**Number of Records**	**Minimum**	**Maximum**	**Mean**	**Standard Deviation**	**Coefficient of Variation**
Andesite	21,648	0.00	16.92	0.02	0.22	14.49
Andesite >10 g/t	2,888	0.00	16.92	0.04	0.44	10.97
All HG Zones	4,080	0.00	52.20	0.10	1.15	12.08
HG11	108	0.00	1.97	0.06	0.21	3.24
HG12	496	0.00	6.63	0.07	0.43	6.11
HG13	93	0.00	0.14	0.02	0.02	1.06
HG14	359	0.00	6.50	0.07	0.38	5.71
HG151	977	0.00	3.78	0.05	0.18	4.00
HG152	1,255	0.00	52.20	0.18	2.02	11.34
HG16	240	0.00	10.77	0.10	0.72	7.24
HG17	392	0.00	0.95	0.05	0.09	1.79
HG18	160	0.00	0.74	0.06	0.13	2.13
Volc Sed	9,297	0.00	0.28	0.01	0.01	1.40

14.1.8 High-Grade Composite Restriction

Composited data was used to generate cumulative probability and histogram plots. A review of the results showed that some high-grade outliers were spatially discontinuous from the remainder of the data set and that there was justification for restricting their range of influence. The high-grade composite values were defined as being greater than approximately three standard deviations above the mean. For the andesite zone, only data greater than 10 g/t silver was used to define the outliers. Outliers for all high-grade zones were defined by using combined data from all high-grade zones and the same threshold was applied to all high-grade zones. A summary of the composite restriction is shown in Table 14-4.

Table 14-4: Technical Report, El Gallo Complex, Composite Restriction Summary

Restricting High Grade Composites - Ag g/t					
Zone	**Number of Records**	**Restricted Value Ag g/t**	**Number of Composites Affected**	**Percent of Composites Affected**	**Restricted Influence (m)**
Andesite	21,648	640	22	0.10%	15
Andesite >10 g/t	2,888	640	22	0.76%	15
All HG Zones	4,080	895	50	1.23%	-
HG11	108	895	1	0.93%	20
HG12	496	895	0	0.00%	25
HG13	93	895	2	2.15%	20*
HG14	359	895	1	0.28%	20
HG151	977	895	9	0.92%	15
HG152	1,255	895	17	1.35%	20
HG16	240	895	6	2.50%	25
HG17	392	895	12	3.06%	20
HG18	160	895	2	1.25%	20
Volc Sed	9,297	115	21	0.23%	15
*Restricted Distance set to 30m in first pass only					
Restricting High Grade Composites - Au g/t					
Zone	**Number of Records**	**Restricted Value Au g/t**	**Number of Composites Affected**	**Percent of Composites Affected**	**Restricted Influence (m)**
Andesite	21,648	1.35	21	0.10%	15
Andesite >10 g/t	2,888	1.35	21	0.73%	15
All HG Zones	4,080	3.50	12	0.29%	-
HG11	108	3.50	0	0.00%	20
HG12	496	3.50	2	0.40%	25
HG13	93	3.50	0	0.00%	20
HG14	359	3.50	1	0.28%	20
HG151	977	3.50	1	0.10%	15
HG152	1,255	3.50	7	0.56%	20
HG16	240	3.50	1	0.42%	25
HG17	392	3.50	0	0.00%	20
HG18	160	3.50	0	0.00%	20
Volc Sed	9,297	0.03	72	0.77%	15

14.1.9 Spatial Analysis

Correlograms, using MineSight software, were completed on the silver and gold composites to determine the orientation and spatial continuity of the composited mineralization. A summary of the results is shown in Table 14-5 and Table 14-6.

Table 14-5: Technical Report, El Gallo Complex, Downhole Variography Parameters

Downhole Variography Parameters				
Metal	**Zone**	**Nugget**	**Sill**	**Range (m)**
Ag	Andesite	0.421	0.975	9.23
	HG11	0.774	1.061	3.03
	HG12	0.359	0.862	11.19
	HG13	0.034	0.984	5.22
	HG14	0.411	0.977	6.89
	HG151	0.362	1.005	7.37
	HG152	0.242	0.970	5.45
	HG16	0.290	0.996	5.50
	HG17	0.286	0.918	10.33
	HG18	0.418	1.103	9.41
	Volc Sed	0.294	0.995	5.15
Au	Andesite	0.457	0.990	7.52
	HG11	0.725	1.038	5.00
	HG12	0.294	1.033	9.77
	HG13	0.088	1.021	8.86
	HG14	0.429	1.021	6.48
	HG151	0.490	1.020	13.19
	HG152	0.019	1.003	6.65
	HG16	0.603	0.983	3.28
	HG17	0.456	0.989	9.29
	HG18	0.169	0.906	12.05
	Volc Sed	0.402	0.849	11.32

Table 14-6: Technical Report, El Gallo Complex 3D Variography Parameters

3D Variography Parameters				
		Downhole	3D Global	
Metal	**Zone**	**Nugget**	**Sill**	**Range (m)**
Ag	Andesite	0.421	0.982	20.92
	HG11	0.774	0.995	50.23
	HG12	0.359	1.013	59.64
	HG13	0.034	1.181	45.72
	HG14	0.411	0.980	30.20
	HG151	0.362	1.000	31.75
	HG152	0.242	1.026	37.26
	HG16	0.290	1.012	59.30
	HG17	0.286	1.029	36.96
	HG18	0.418	1.088	43.70
	Volc Sed	0.294	1.000	20.00
Au	Andesite	0.457	0.979	29.37
	HG11	0.725	1.013	32.08
	HG12	0.294	0.992	22.42
	HG13	0.088	1.009	26.53
	HG14	0.429	1.009	21.16
	HG151	0.490	0.969	25.79
	HG152	0.019	0.997	21.46
	HG16	0.603	1.019	37.38
	HG17	0.456	0.997	32.32
	HG18	0.169	1.021	29.37
	Volc Sed	0.402	0.944	27.48

14.1.10 Resource Block Model

The resource block model was created using Minesight 7.0-3. Table 14-7 provides the block model limits and size. All blocks were coded to match the geological and high-grade domain wireframes. Each block stores the percent of the block that intersects any particular domain.

Table 14-7: Technical Report, El Gallo Complex, Block Model Limits

	Minimum	Maximum	Block Size
Easting	211,000	213,000	5
Northing	2,842,300	2,844,000	5
Elevation	-20	450	5

14.1.11 Interpolation Plan

The interpolation plan for the El Gallo in-pit resource estimation model was completed using Ordinary Kriging (OK). Search ellipses were created to approximate the general orientation of the local geology and high grade zones. Search distances were defined based on the variography and drill hole spacing. The OK estimations were completed in three iterations with the search parameters shown in Table 14-8 and Table 14-9. The OK estimation method used a weighting by length of composite. The first pass was designed to fill blocks throughout the interpolation area and only required one drill hole in the andesite and volcaniclastic sediment domains and two drill holes for the high-grade domains. The second and third passes narrowed both the search distances and maximum number of composites used while increasing the number of drill holes required. The high-grade composite restriction was applied in all three passes.

All contacts between lithological domains and the high-grade domains are treated as hard-boundaries, meaning that only composites tagged to each domain are used to estimate the grade within that domain.

Table 14-8: Technical Report, El Gallo Complex, Ellipse Rotation

Domain	Rotation	Dip North	Dip East
Andesite	135	-20	0
HG11	110	-17	0
HG12	85	-7	0
HG13	245	0	-10
HG14	80	0	-25
HG151	70	0	0
HG152	80	0	-30
HG16	45	0	-20
HG17	110	0	-30
HG18	50	0	-20
Volc Sed	135	-20	0

Table 14-9: Technical Report, El Gallo Complex, Search Parameters

		Search Ellipse Distances (m)			Number of Composites		
Domain	**Pass**	**Major**	**Minor**	**Vertical**	**Minimum**	**Maximum**	**Per Drill Hole**
Andesite	**1**	60	40	24	3	15	3
	2	30	20	12	7	12	3
	3	15	10	6	5	8	2
HG11	**1**	80	80	28	4	15	3
	2	40	40	14	7	12	3
	3	20	20	7	5	8	2
HG12	**1**	100	100	40	4	15	3
	2	50	50	20	7	12	3
	3	25	25	10	5	8	2
HG13	**1**	80	80	28	4	15	3
	2	40	40	14	7	12	3
	3	20	20	7	5	8	2
HG14	**1**	80	80	50	4	15	3
	2	40	40	25	7	12	3
	3	20	20	12.5	5	8	2
HG151	**1**	70	70	24	4	15	3
	2	30	30	12	7	12	3
	3	15	15	6	5	8	2
HG152	**1**	80	80	28	4	15	3
	2	40	40	14	7	12	3
	3	20	20	6	5	8	2
HG16	**1**	100	100	32	4	15	3
	2	50	50	16	7	12	3
	3	25	25	8	5	8	2
HG17	**1**	80	80	28	4	15	3
	2	40	40	14	7	12	3
	3	20	20	7	5	8	2
HG18	**1**	80	80	28	4	15	3
	2	40	40	14	7	12	3
	3	20	20	7	5	8	2
Volc Sed	**1**	50	50	24	3	15	3
	2	25	25	12	7	12	3
	3	15	15	6	5	8	2

14.1.12 Block Model Validation

The El Gallo block model was validated by the following methods:

- Visual comparison of the color coded block grades to drill hole assay grades in section view
- Comparison of kriged block model grades to a nearest neighbor model at zero cutoff
- Swath plot comparisons of nearest neighbor block grades to the kriged block grades

14.1.12.1 Visual Grade Comparison

The visual comparison of block model grades with assay grades for silver and gold show a good correlation between values. Figure 14-4 and Figure 14-5 show the color coded OK block model silver grade with the drill hole assay grades in section view looking north. The visual comparisons show a good correlation between the values and no significant discrepancies are apparent.

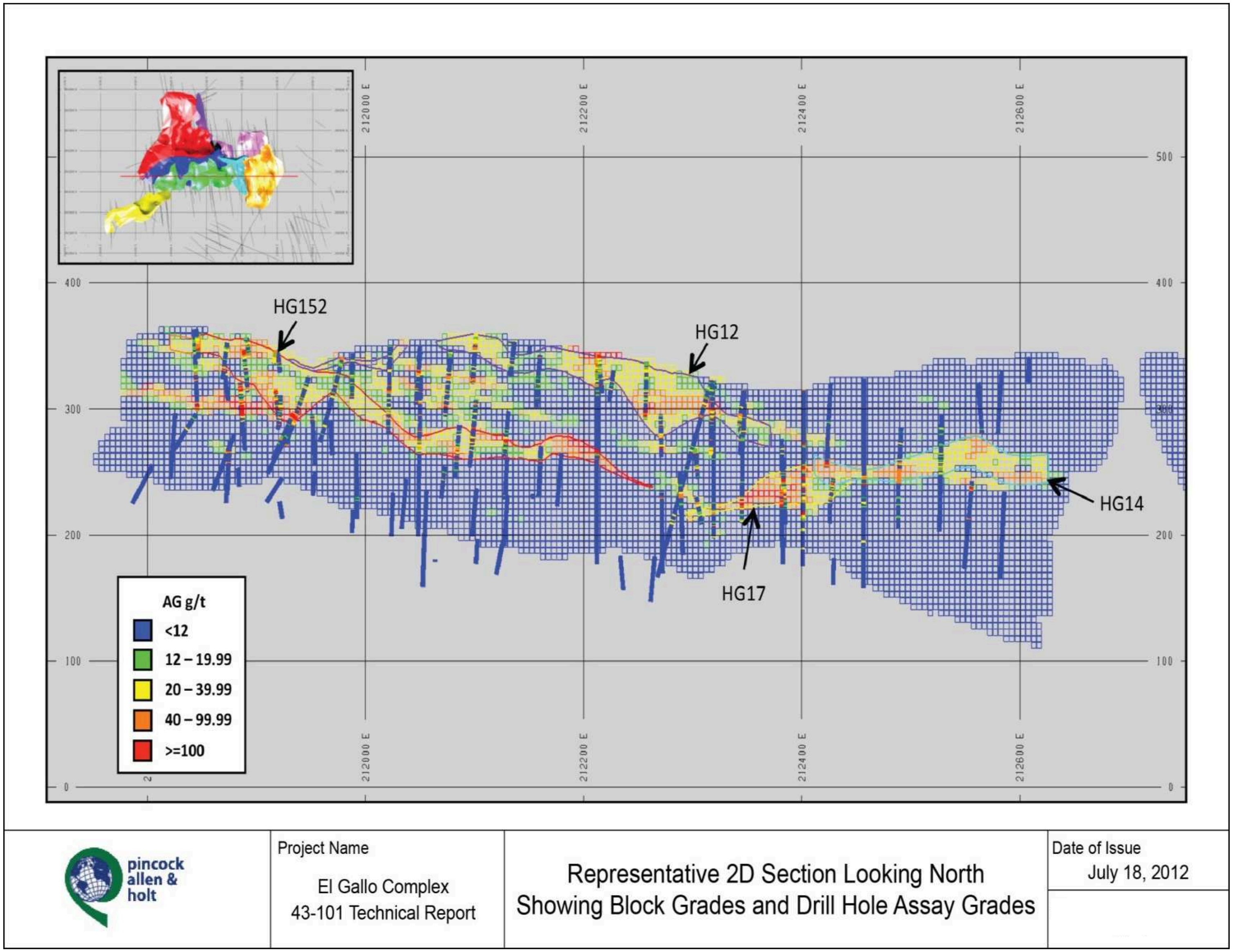
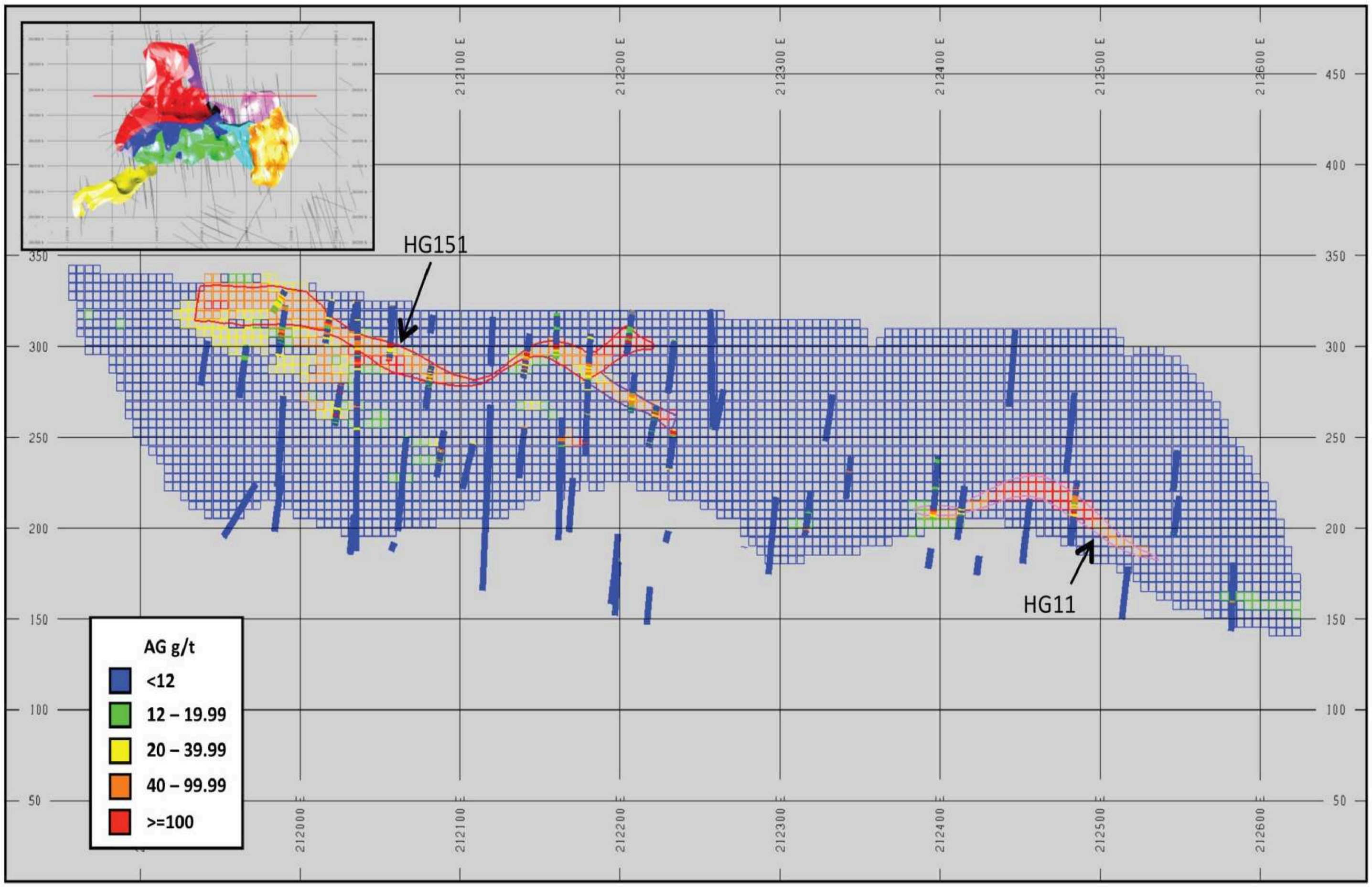


Figure 14-4: Representative 2D Section Looking North Showing Block Grades and Drill Hole Assay Grades



Project Name		Date of Issue
El Gallo Complex 43-101 Technical Report	Representative 2D Section Looking North Showing Block Grades and Drill Hole Assay Grades	July 18, 2012

Figure 14-5: Representative 2D Section Looking North Showing Block Grades and Drill Hole Assay Grades

14.1.12.2 Comparison to Nearest Neighbor Model Grades

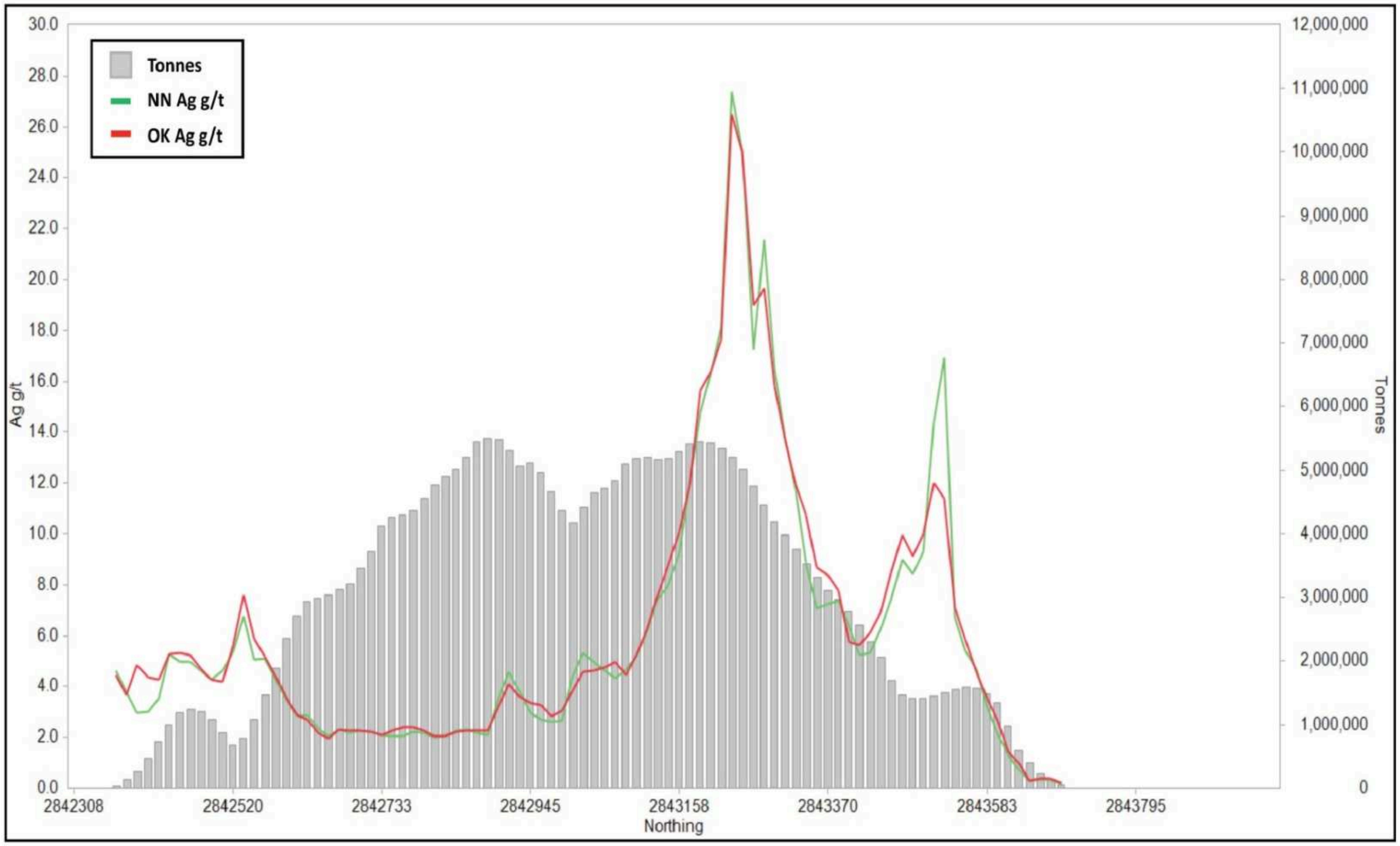
PAH generated a Nearest Neighbor (NN) model for silver and gold to serve as a check against the finalized resource model. The NN interpolation method simply assigns a block the same grade as its closest composite. These models are intended to represent a theoretical unbiased estimate of the average grade when no cutoff grade is imposed and is a good basis for checking the performance of different estimation methods. The NN model utilized the same search criteria as the OK model. A comparison of NN grades to OK grades was made for all estimated blocks at a zero cutoff and is summarized in Table 14-10. The andesite and high grade domains demonstrate minimal bias. The volcanic sediment domain shows a larger bias. This domain has much wider drill hole spacing, is not the main host to the El Gallo mineralization, and makes no significant contribution to the measured and indicated resource of the El Gallo deposit. The conservative bias shown for the OK grades in this domain are deemed to be non-material.

Table 14-10: Technical Report, El Gallo Complex, Comparison of NN and OK block Grades by Domain at a Zero Cutoff

Domain	Estimation Method	Ag g/t	Au g/t
Andesite	NN	1.24	0.003
	OK	1.25	0.003
All HG Domains	NN	77.86	0.069
	OK	78.51	0.068
Volc Sed	NN	0.34	0.001
	OK	0.30	0.001

14.1.12.3 Swath Plots

Swath plots by northing and easting are shown in Figure 14-6 and Figure 14-7. Swath plots compare the OK and NN grade estimates in 15m swaths across the model. The swaths show good agreement with the OK estimate being slightly smoothed versus the NN estimate.



pincock allen & holt	Project Name El Gallo Complex 43-101 Technical Report	Swath Plot by Northing of NN and OK Block Grades and Tonnes	Date of Issue July 18, 2012

Figure 14-6: Swath Plot by Northing of NN and OK block Grades and Tonnes

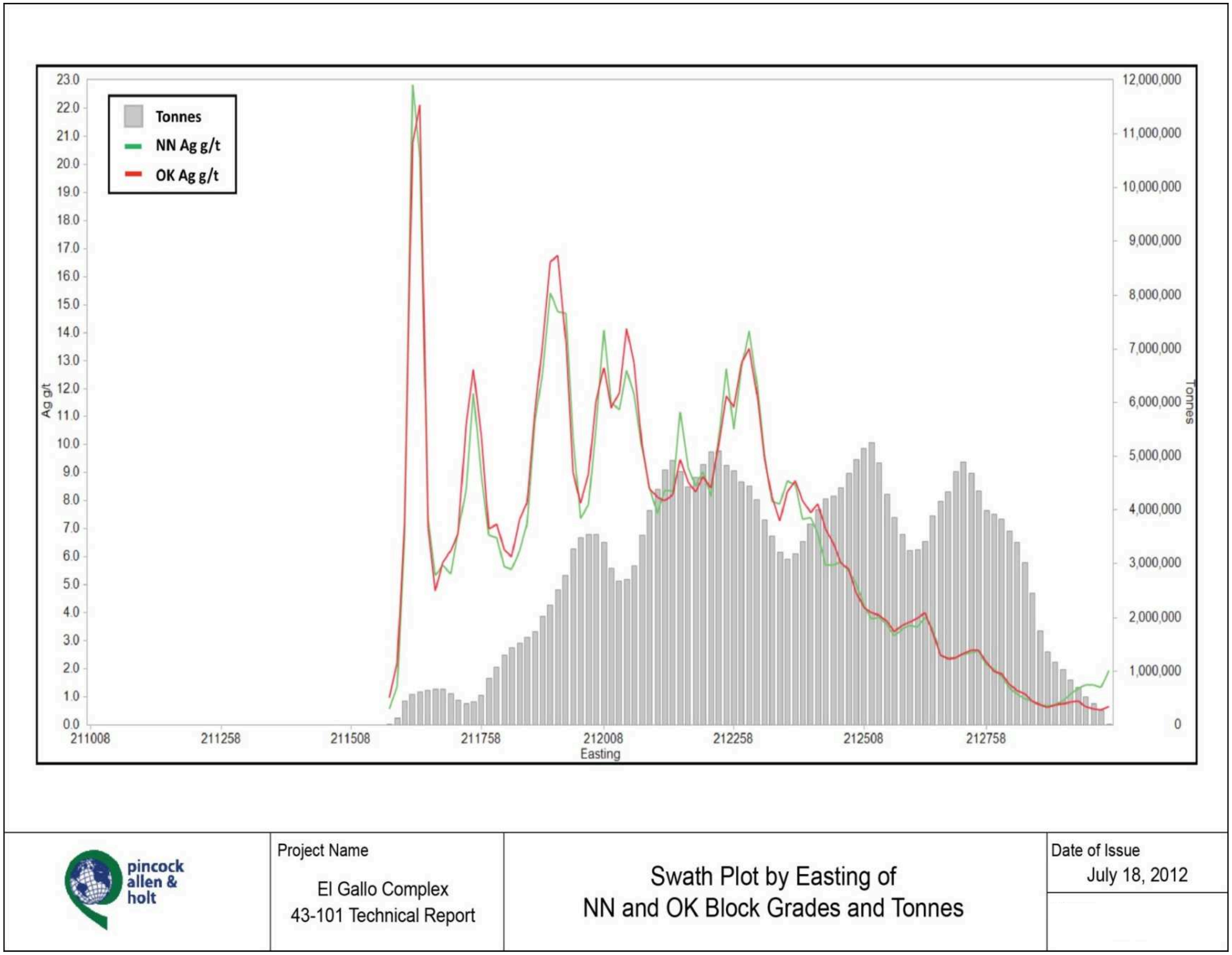


Figure 14-7: Swath Plot by Easting of NN and OK Block Grades and Tonnes

14.1.13 Mineral Resource Classification

Mineral Resources are sub-divided, in order of increasing geological confidence, into Inferred, Indicated and Measured categories. An Indicated Mineral Resource has a higher level of confidence than an Inferred Mineral Resource but has a lower level of confidence than a Measured Mineral Resource.

A Mineral Resource is a concentration or occurrence of diamonds, natural solid inorganic material, or natural solid fossilized organic material including base and precious metals, coal, and industrial minerals in or on the Earth's crust in such form and quantity and of such a grade or quality that it has reasonable prospects for economic extraction. The location, quantity, grade, geological characteristics and continuity of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge.

The term Mineral Resource covers mineralization and natural material of intrinsic economic interest which has been identified and estimated through exploration and sampling and within which Mineral Reserves may subsequently be defined by the consideration and application of technical, economic, legal, environmental, socio-economic and governmental factors. The phrase "reasonable prospects for economic extraction" implies a judgment by the Qualified Person in respect of the technical and economic factors likely to influence the prospect of economic extraction. A Mineral Resource is an inventory of mineralization that under realistically assumed and justifiable technical and economic conditions might become economically extractable. These assumptions must be presented explicitly in both public and technical reports.

An "Inferred Mineral Resource" is that part of a Mineral Resource for which quantity and grade or quality can be estimated on the basis of geological evidence and limited sampling and reasonably assumed, but not verified, geological and grade continuity. The estimate is based on limited information and sampling gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes.

Due to the uncertainty that may be attached to Inferred Mineral Resources, it cannot be assumed that all or any part of an Inferred Mineral Resource will be upgraded to an Indicated or Measured Mineral Resource as a result of continued exploration. Confidence in the estimate is insufficient to allow the meaningful application of technical and economic parameters or to enable an evaluation of economic viability worthy of public disclosure. Inferred Mineral Resources must be excluded from estimates forming the basis of feasibility or other economic studies.

An "Indicated Mineral Resource" is that part of a Mineral Resource for which quantity, grade or quality, densities, shape, and physical characteristics can be estimated with a level of confidence sufficient to allow the appropriate application of technical and economic parameters, to support mine planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough for geological and grade continuity to be reasonably assumed.

Mineralization may be classified as an Indicated Mineral Resource by the Qualified Person when the nature, quality, quantity and distribution of data are such as to allow confident interpretation of the geological framework and to reasonably assume the continuity of mineralization. The Qualified Person must recognize the importance of the Indicated Mineral Resource category to the advancement of the feasibility of the project. An Indicated Mineral Resource estimate is of sufficient quality to support a Preliminary Feasibility Study which can serve as the basis for major development decisions.

A "Measured Mineral Resource" is that part of a Mineral Resource for which quantity, grade or quality, densities, shape, and physical characteristics are so well established that they can be estimated with confidence sufficient to allow the appropriate application of technical and economic parameters, to support production planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough to confirm both geological and grade continuity.

Mineralization or other natural material of economic interest may be classified as a Measured Mineral Resource by the Qualified Person when the nature, quality, quantity and distribution of data are such that the tonnage and grade of the mineralization can be estimated to within close limits and that variation from the estimate would not significantly affect potential economic viability. This category requires a high level of confidence in, and understanding of, the geology and controls of the mineral deposit.

PAH generated the following classification scheme based on drill hole spacing and number of drill holes used. This classification scheme was used as a first-pass guide and then adjusted visually to reduce the occurrence of isolated blocks.

Measured = Block was calculated in the second pass, used at least 3 holes, closest hole <25m

Indicated = Block used at least 2 holes, closest hole <50m

Inferred = Block used at least 2 holes

Further, because NI 43-101 and CIM guidelines stipulate that a resource exists "in such form and quantity and of such a grade or quality that it has reasonable prospects for economic extraction," PAH is reporting the resource within a Whittle pit that uses reasonable metal prices and reasonable mining and processing costs for deposits of this nature and for the expected mining conditions and methods and metallurgical extraction. Table 14-11 shows the price and cost assumptions for the Whittle runs.

For a block to be classified as a resource, the block must fall within the Whittle pit.

Table 14-11: Technical Report, El Gallo Complex, Whittle Parameters El Gallo Deposit

Ag Price	\$28.50/oz
Au Price	\$1500/oz
Mining Cost - Ore	\$1.75/tonne
Mining Cost - Waste	\$1.65/tonne
Processing Cost - Mill	\$18.50/tonne
Processing Cost - Leach	\$6.50/tonne
Silver Recovery - Mill	85%
Silver Recovery - Heap Leach	60%
Gold Recovery - Mill	75%
Gold Recovery - Heap Leach	60%

14.1.14 Mineral Resource

The in-pit mineral resource estimate for the El Gallo deposit is tabulated in Table 14-12.

Table 14-12: Technical Report, El Gallo Complex, Summary of Mineral Resource (12 g/t Ag Cutoff)

Ag Cutoff	Category	Tonnes (x1000)	Ag oz.	Ag g/t	Au oz.	Au g/t
12 g/t	**Measured**	17,134	35,966,692	65.3	28,937	0.05
	Indicated	2,356	3,307,711	43.7	2,286	0.03
	Measured + Indicated	19,490	39,274,403	62.7	31,223	0.05
	Inferred	170	436,216	79.8	107	0.02

Notes:

1. CIM definitions were followed for the estimation of mineral resources.
2. Mineral resources are estimated at a Ag cutoff of 12 g/t for blocks lying within a Whittle pit
3. Reasonable \$US metal prices of \$28.50/ounce silver and \$1500/ounce gold were used for the Whittle pit. Milling recovery assumptions of 85% silver and 75% gold and heap leach recovery assumptions of 60% silver and 60% gold were used. Mining costs of \$1.75/tonne ore and \$1.65/tonne waste, processing costs of \$18.50/tonne milled and \$6.50/tonne leached were used
4. SG was assumed to be 2.5 for all blocks

Mineral resource estimates by domain are tabulated in Table 14-13. Total in pit mineral resource at various cutoffs are shown in Table 14-14.

Table 14-13: Technical Report, El Gallo Complex, Mineral Resource by Domain

	MEASURED			INDICATED			MEASURED + INDICATED			INFERRED		
Zone	**Tonnes (x1000)**	**Ag g/t**	**Au g/t**	**Tonnes (x1000)**	**Ag g/t**	**Au g/t**	**Tonnes (x1000)**	**Ag g/t**	**Au g/t**	**Tonnes (x1000)**	**Ag g/t**	**Au g/t**
Andesite	6,596	32.9	0.02	1,602	29.0	0.03	8,199	32.2	0.02	79	30.9	0.02
HG11	375	102.7	0.07	40	97.7	0.04	415	102.2	0.06	3	77.8	0.08
HG12	1,444	46.4	0.05	31	31.2	0.04	1,475	46.1	0.05	0		
HG13	103	106.2	0.03	466	88.1	0.02	569	91.4	0.02	2	415.8	0.03
HHG14	1,081	59.6	0.06	25	86.5	0.05	1,106	60.2	0.06	0		
HG151	2,827	77.6	0.05	179	41.9	0.04	3,006	75.4	0.05	0		
HG152	2,657	100.9	0.14	0			2,657	100.9	0.14	1	90.3	0.01
HG16	641	121.9	0.07	7	48.1	0.03	648	121.1	0.06	7	123.2	0.05
HG17	1,045	102.7	0.05	6	73.7	0.03	1,051	102.6	0.05	0		
HG18	358	130.6	0.07	0			358	130.6	0.07	0		
Volc Sed	7	106.9	0.01	0			7	106.9	0.01	78	116.8	0.01
Total	**17,134**	**65.3**	**0.05**	**2,356**	**43.7**	**0.03**	**19,490**	**62.7**	**0.05**	**170**	**79.8**	**0.02**

Table 14-14: Technical Report, El Gallo Complex, El Gallo In-Pit Mineral Resource at Various Ag Cutoffs

Ag Cutoff	Category	Tonnes (x1000)	Ag oz.	Ag g/t	Au oz.	Au g/t
12 g/t	Measured	17,134	35,966,692	65.3	28,937	0.05
	Indicated	2,356	3,307,711	43.7	2,286	0.03
	Measured + Indicated	19,490	39,274,403	62.7	31,223	0.05
	Inferred	170	436,216	79.8	107	0.02
Ag Cutoff	**Category**	**Tonnes (x1000)**	**Ag oz.**	**Ag g/t**	**Au oz.**	**Au g/t**
20 g/t	Measured	13,284	34,033,372	79.7	26,879	0.06
	Indicated	1,638	2,935,712	55.8	1,795	0.03
	Measured + Indicated	14,922	36,969,084	77.1	28,674	0.06
	Inferred	135	414,439	96.6	66	0.02
Ag Cutoff	**Category**	**Tonnes (x1000)**	**Ag oz.**	**Ag g/t**	**Au oz.**	**Au g/t**
40 g/t	Measured	8,434	29,522,668	109.1	22,464	0.08
	Indicated	644	2,037,257	98.4	1,013	0.05
	Measured + Indicated	9,078		108.3		0.08
	Inferred	75	367,533	152.7	48	0.02

14.1.15 El Gallo Out of Pit Mineral Resource Summary

The El Gallo out of pit mineral resource estimate was prepared by McEwen Mining and signed by John Read CPG, Senior Consultant. Mr. Read is considered a Qualified Person in accordance with NI 43-101, but is not considered independent of McEwen Mining. The estimate was completed using the same parameters as the in-pit resource estimate, which is described in the above subsections, including the metals prices, metallurgical recoveries, mining and processing costs in order to establish “reasonable prospects for economic extraction”.

14.1.15.1 Mineral Resource Classification

All Resource blocks outside of the Whittle pit were assigned an Inferred Classification.

14.1.16 Mineral Resource

The out of pit mineral resource estimate for the El Gallo deposit is tabulated in Table 14-15. The in and out of pit mineral resource estimate is tabulated in Table 14-16.

Table 14-15: Technical Report, El Gallo Complex, Out of Pit El Gallo Resource Summary Estimate

	Tonnage ('000 tonnes)	Silver (oz.)	Silver Grade (gpt)	Gold (oz.)	Gold Grade (gpt)
(Cut-off Grade 12 gpt Ag)					
Inferred	5,902	4,128,732	21.8	3,432	0.02

Table 14-16: Technical Report, El Gallo Complex, In and Out of Pit El Gallo Resource Summary Estimate

	Tonnage ('000 tonnes)	Silver (oz.)	Silver Grade (gpt)	Gold (oz.)	Gold Grade (gpt)
(Cut-off Grade 12 gpt Ag)					
Measured	17,134	35,966,692	65.3	28,937	0.05
Indicated	2,356	3,307,711	43.7	2,286	0.03
Inferred	6,072	4,564,947	23.4	3,539	0.02

14.2 PALMARITO

The Palmarito resources are partitioned into three categories: 1) In Situ, 2) Dump, and 3) Tailings. The in situ resources consist of the material undisturbed by past mining activity. The Dump resources consist of material that was mined in the past, but not processed. This material currently resides in waste piles proximal to the old mine workings at Palmarito. The Tailings resources are the mill tailings from the previous processing operations at Palmarito. This material currently resides in a dry tailings pond south of the old mine workings.

The geologic resource model and estimate was prepared by McEwen and overseen by John Read CPG, Senior Geological Consultant. Mr. Read is not considered independent of the company. Where appropriate, the following discussion of the resource estimate for Palmarito will address the in situ, dump and tailings resources separately.

14.2.1 Topography

There are two sources of topographic data used to estimate the resources for Palmarito. The first is an aerial survey of the entire project site. The second is a ground survey of the waste dumps.

Aerial photography and photogrammetry of the project area was completed by Intrasearch Inc. in April 2011 using fixed stations as control points for the aerial survey.

The dumps were surveyed in August 2008 and March 2011 by Geotopografia y Construcción (Guasave, Sinaloa, Mexico). A total of 646 points were surveyed using a geodesic Trimble 5800 GPS.

14.2.2 Drill Hole Database

The in situ, dump and tailings resource estimates are based on two drill hole and sampling databases established and maintained by McEwen. . The core and reverse circulation holes were used mostly for the in situ resource estimate; however, some were collared in the dump material. As a result, the dump intercepts of these holes were used to model the Dump material. The second database contains data for pits excavated within the dump and tailings resources. Consequently, this data was used exclusively for the Dump and Tailings resource estimates.

Table 14-17, Table 14-18 and Table 14-19 summarize the drill hole statistics for the data used to model the in situ, dump and tailings resources, respectively.

14.2.3 Definition of Model Domains

For the in situ, dump and tailings material, McEwen has defined finite volumes which restrict the bounds of the resource estimates. These finite volumes are referred to as domains. The following is a description of McEwen's methods for defining these domains in each material type.

In Situ Domains

There are two separate zones of mineralization identified at Palmarito. The first is the Main Zone, which has a tabular form and takes the shape of a folded antiform that plunges to the northeast. The second, called the Southwest Zone, is a tabular zone that strikes to the north/northeast and dips to the east at 60 degrees. Because of the "antiform-like" morphology of the Main Zone, three distinct but contiguous domains were created (these domains are referred to as North Limb, Nose and South Limb). A separate domain was created for the Southwest Zone. Figure 14-8 illustrates the domains for Palmarito. A three-dimensional wireframe was generated for each of these domains. The contacts for these domains were drawn to approximate the 10 grams (0.32 troy ounces) silver per tonne limit of the mineralized zone. The grade limit of 10 grams (0.32 troy ounces) silver per tonne was chosen for two reasons: It represents a natural statistical break in the drill hole data, and it is just below those grades thought to be of economic interest. Where the deposit is open (typically down-dip), the domain has been extrapolated up to 492.1 ft (150 m) beyond the drill hole data. Further constraints are applied to the extrapolation of the resource estimate by the search ellipse. This is described below.

As in previous estimates, variography and grade interpolation were done separately for each domain (see below). In addition to resource estimation within the wireframes, McEwen has also done resource estimation for in-situ material that resides outside these wireframes.

Underground Workings

The historic underground workings (consisting of an open "glory-hole" leading into a cross-cut adit at depth) were modeled based on drill holes that intersected the workings. A three-dimensional wireframe was created representing the shape of the workings. During block modeling of the in-situ domains, blocks that fell within the workings were removed from the model.

Table 14-17: Technical Report, El Gallo Complex, Palmarito In Situ Drill Hole Data - Basic Statistics

Number of Holes	294
Average Hole Length (m)	134.15
Minimum Depth	20
Maximum Depth (m)	506
Meters of Total Drilling	40,781.73
Underground Channel Samples	10
Average Sample Length (m)	1.47
Number of Sampled Intervals	27085
Total Meters Sampled	39747.54
Average Silver Grade (gpt)	12.17
Minimum Silver Grade (gpt)	<0.5 (Detection limit)
Maximum Silver Grade	5,870
Average Gold Grade (gpt)	0.04
Minimum Gold Grade (gpt)	<0.005 (Detection limit)
Maximum Gold Grade (gpt)	7.97

Note: Sample statistics exclude intercepts within the Dump
*weighted by sample length

Table 14-18: Technical Report, El Gallo Complex, Palmarito Dump Drill Hole Data – Basic Statistics

Number of Dump Holes	64
Average Hole Length (m)	2.15
Minimum Depth	0.6
Maximum Depth (m)	4.2
Average Silver Grade (gpt)	187.93
Minimum Silver Grade (gpt)	3.2
Maximum Silver Grade	654
Average Gold Grade (gpt)	0.28
Minimum Gold Grade (gpt)	0.007
Maximum Gold Grade (gpt)	0.935

Note: Sample statistics exclude intercepts within the in situ material
*weighted by sample length

Table 14-19: Technical Report, El Gallo Complex, Palmarito Tailings Sample Data – Basic Statistics

Number of Trenches	52
Total Meters	71.68
Average Trench Length	1.38
Minimum Depth (m)	0.2
Maximum Depth (m)	2.6
Number of Sampled Intervals	66
Total Meters Sampled	71.68
Average Silver Grade (gpt)	164.52
Minimum Silver Grade (gpt)	3
Maximum Silver Grade	249
Average Gold Grade (gpt)	0.16
Minimum Gold Grade (gpt)	0.013
Maximum Gold Grade (gpt)	0.52

*weighted by sample length

Dump Domains

As described above, a detailed survey of the Dump material was conducted in 2008 and a topographic map was produced from this survey. After studying this topographic map, PAH previously concluded that the dump material was deposited in a series of six lifts. PAH deemed it likely that each lift represents waste material from a discreet episode of historic mining. Another possibility is that these lifts were used to segregate different grades of material. In either case, it was concluded that the silver and gold content of one lift is representative of the others. As a result, the domain around each individual lift was constructed as shown in Figure 14-9.

Aside from the boundaries between lifts, PAH previously established the top, bottom and the horizontal boundaries of the Dump material. The top of the Dump is defined by the topographic map referenced in the previous paragraph. The horizontal limits of the Dump material are defined by the limits of the survey. The bottom of the Dump was previously interpreted by PAH and used in this estimate. This was done using information from the drill hole database and the topographic map of the greater project area. In general, the Dump bottom accounted for the dimensions of the pits and drill holes that intercepted the dump material. Also the overall shape of the Dump bottom was designed to mimic the natural grade of the surrounding hillside.

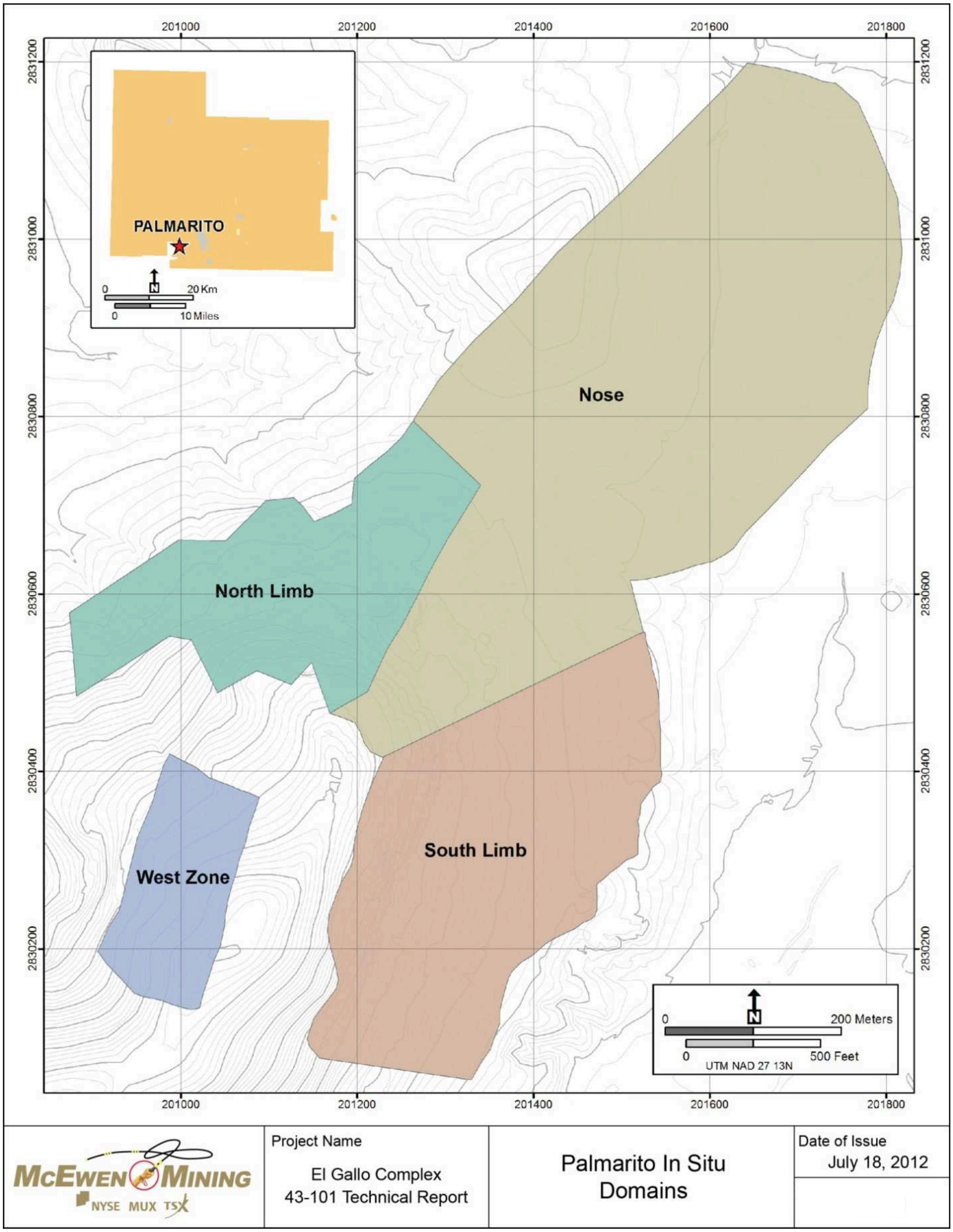


Figure 14-8: Palmarito In Situ Domains

Tailings Domains

One domain was defined for the Tailings material (see Figure 14-10). PAH also previously established the top, bottom and horizontal boundaries of the Tailings material. The top of the Tailings material is defined by the project topographic map. The bottom of the tailings material was interpreted as a surface triangulation connecting the bottoms of the sample trenches. The horizontal boundary was also interpreted by PAH during the previous modelling process through analysis of the project topography.

14.2.4 Compositing

Prior to grade modeling, the silver and gold assay sample data from drill hole intercepts of in situ material were composited. This was done to normalize the sample lengths. The compositing logic is as follows:

1. Composite length is 16.4 ft (5 m).
2. Composite lengths are measured down-the-hole.
3. truncated composites at the bottom of holes containing less than 50% of the composite length were not used.
4. Composite grades are calculated as the weighted average by volume of samples within the composite interval.

Dump Composites

Drill holes and sample pits provide the assay information for the Dump material. For each pit, a single composite sample was taken representing the grade of the full depth of the excavation. For these samples, no further compositing was done. The drill hole samples were composited to the full length of the dump intercept for each hole. This was done to remain consistent with the pit samples. As with the in situ composites, the composite grades for these drill holes were calculated as the weighted average by volume of samples within the composite interval.

Tailings Composites

Trench samples for the Tailings material were not composited.

14.2.5 Block Models

Each material type (in-situ, dumps, tailings) was modeled separately. Furthermore, the four domain wireframes for the in-situ material were interpolated separately and then combined to estimate a total resource within the wireframes. A global in-situ model was also created to estimate mineralized resource both within and outside of the 4 wireframes. Care was taken to insure that there was no overlap in models where the in-situ resource is proximal to the dump or tailings resource. The geometry of these block models is detailed in Table 14-20.

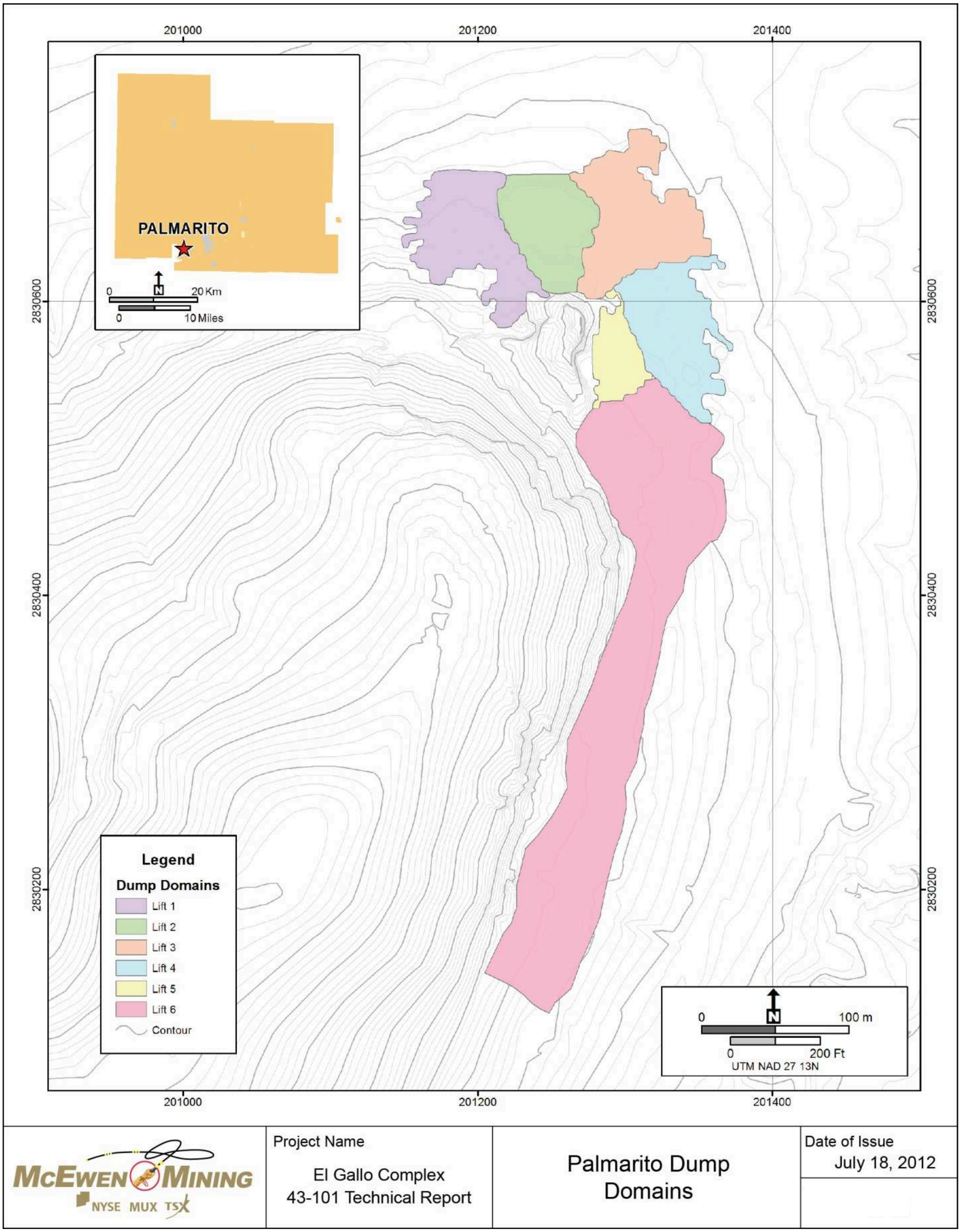
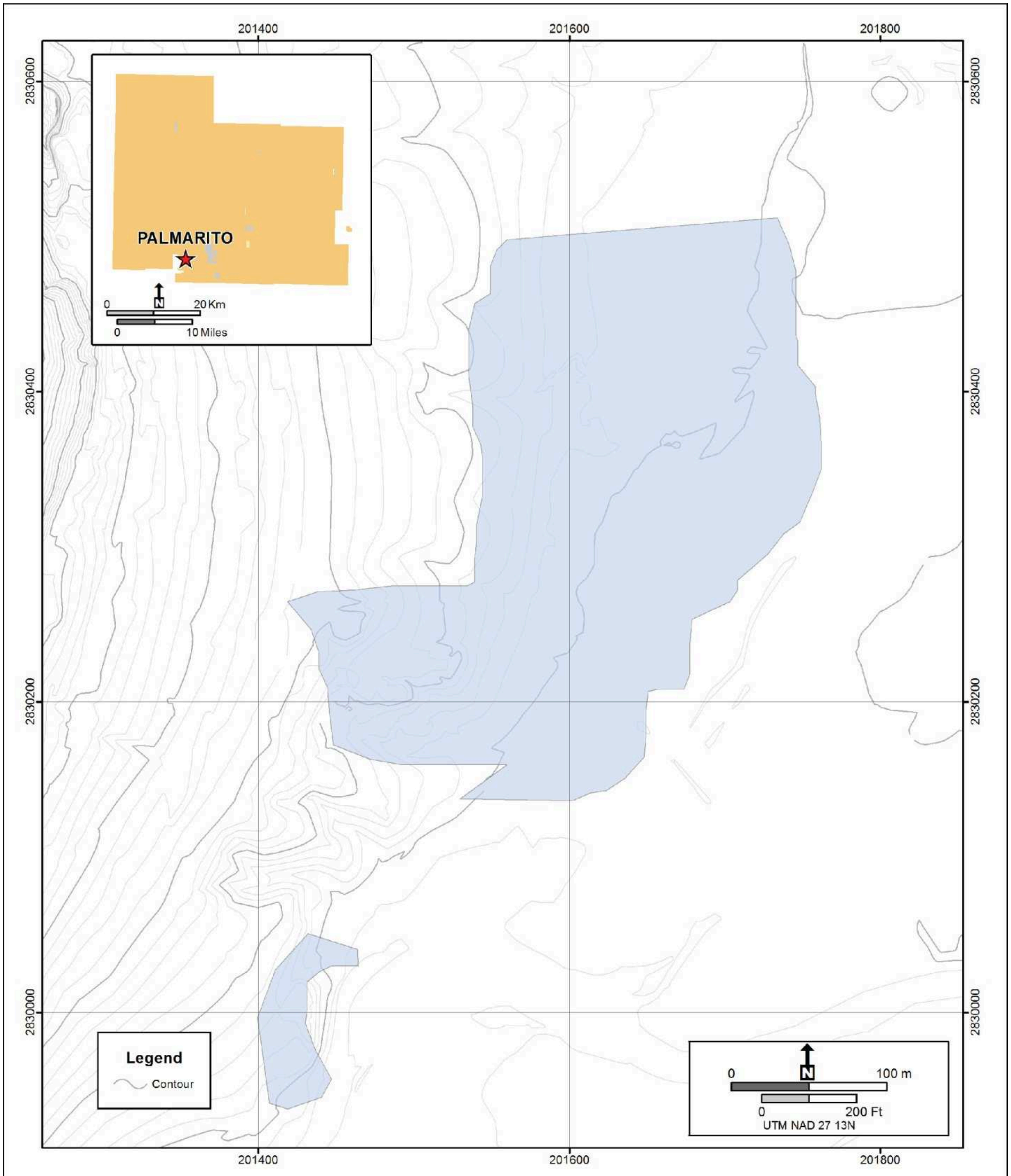


Figure 14-9: Palmarito Dump Domains



McEwen Mining NYSE MUX TSX	Project Name El Gallo Complex 43-101 Technical Report	Palmarito Tailing Domains	Date of Issue July 18, 2012

Figure 14-10: Palmarito Tailing Domains

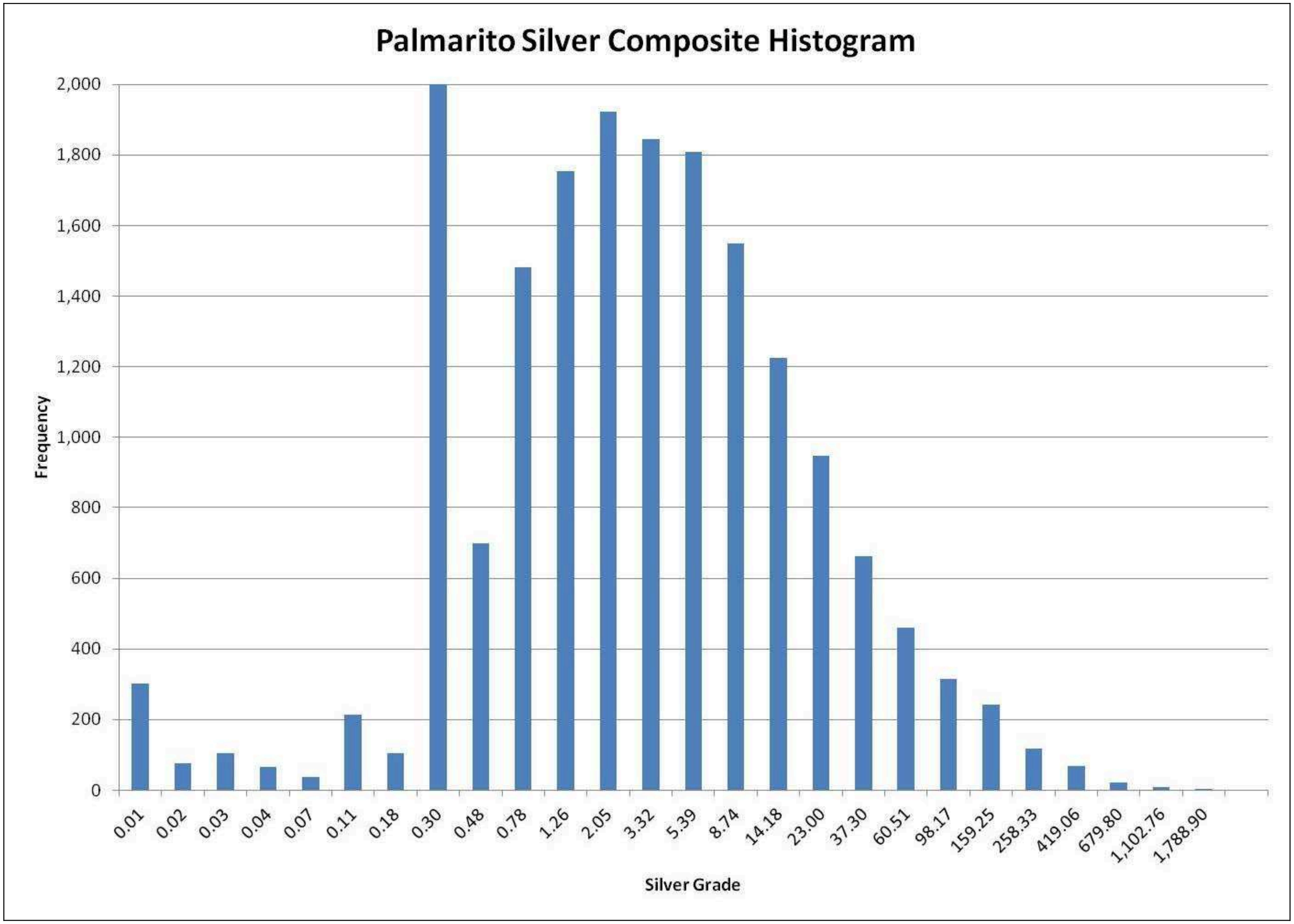


Figure 14-11: Palmarito Silver Composite Histogram

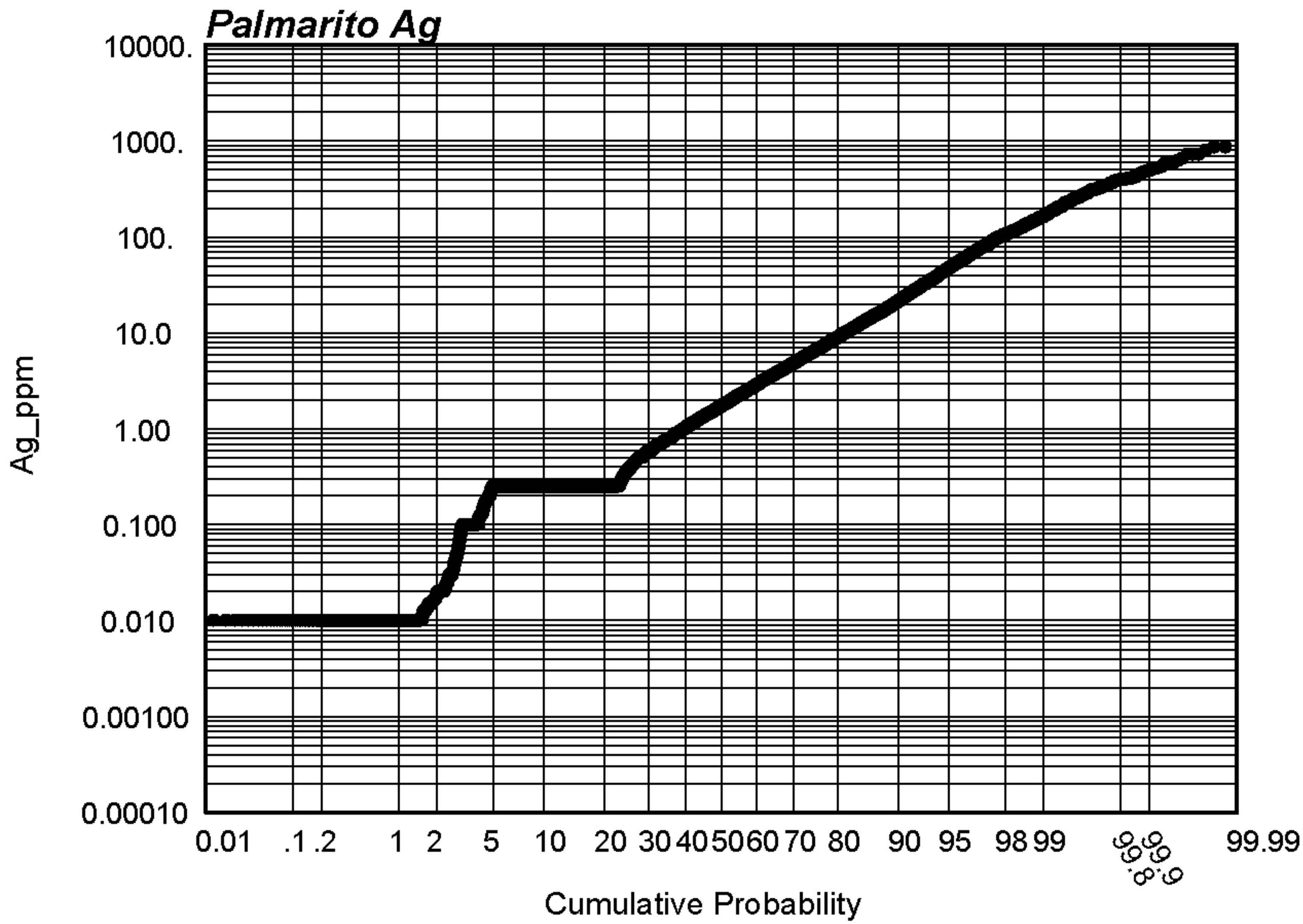


Figure 14-12: Cumulative Probability

Table 14-20: Technical Report, El Gallo Complex, Palmarito Block Model Geometries

4-Domain In Situ Model (wireframes combined)	**X**	**Y**	**Z**
Origin	200.882.5	2,829,802.5	-439.5
Block Size	5	5	5
Rotation	No Rotation		
Number of Columns Number of Rows Number of Levels	195 296 128		
Global In Situ Model (material in and out of wireframes)			
Origin (UTM NAD 27)	200,797.5	2,829,797.5	-439.5
Block Size, m	5	5	5
Rotation	No Rotation		
Number of Columns Number of Rows Number of Levels	212 295 134		
Dump Model	X	Y	Z
Origin	201,138	2,830,412	150
Block Size	5	5	2
Rotation	No Rotation		
Number of Columns Number of Rows Number of Levels	50 65 127		
Tailings Model	X	Y	Z
Origin	201,335	2,829,892	130
Block Size	20	20	0.5
Rotation	No Rotation		
Number of Columns Number of Rows Number of Levels	25 40 100		

14.2.6 Grade Modeling

The composited assay data were used to populate the block models with silver and gold grades. In-situ material modeling utilized drill holes and 9 underground workings. The Dumps model used drill holes (some of which were collared in dump material) and sample pits. Tailings model used the data from the sample pits excavated in the historic tailings pile.

14.2.7 Grade Capping

No grade capping or restriction was applied to assays or composites prior to interpolation. In general, Palmarito mineralization exhibits good grade consistency with few high-grade assays. McEwen investigated the possibility of grade capping by analyzing composite histograms and cumulative frequency plots to identify outliers in the population (Figure 14-11 and Figure 14-12). It was concluded that such outliers were not present and that there was low risk of unreasonable stretching of high grades during interpolation. Grade capping was thus deemed not necessary. McEwen also took into consideration reconciliation information from other operating properties within the company (principally Magistral, where generally no grade capping is used and grade reconciliation has been within acceptable limits).

Variography of In Situ Data

McEwen conducted variography analysis of the silver grades in the in situ material. This was done to assess the possibility of using ordinary kriging for modeling silver grades, define semi-variogram models to be used with ordinary kriging and establish search ellipse parameters to be used during modeling.

Within each domain, McEwen generated directional semi-variograms along several orientations. From these, a primary axis of continuity was picked for each domain. The semi-variograms for the primary axes all showed sufficient structure that they could be modeled for use in ordinary kriging. Semi-variograms were then generated in several directions normal to the primary axes, from which the secondary axes of continuity were picked. The structures of the semi-variograms for the secondary axes were less pronounced. By default the tertiary axis of continuity is normal to both the primary and secondary axes. As should be expected, this axis is normal to the orientation of the tabular ore body. Silver variogram parameters for the dominant structure for each domain are listed in Table 14-21.

Table 14-21: Technical Report, El Gallo Complex, In Situ Search Parameters, Silver

Parameter	In-Situ Domain			
	North Limb	South Limb	Nose	West Zone
nugget	0.119	0.167	0.246	0.027
sill	0.649	0.515	0.375	0.029
rotation about Z axis	-61.5	32.5	-22.7	-58.1
rotation about X axis	1.4	-52.1	34.5	-6.1
rotation about Y axis	20.5	7.9	12.6	31.5
range along Z axis, m	11.8	5.3	22.8	3.9
range along X axis, m	47.1	24.1	99.1	18.9
range along Y axis, m	28.7	238.3	360.5	138.9

Note: All rotations are according to the GSLIB conventions (Deutsch & Journel, 1998). First, rotate around the Z axis according to the left hand rule. Second, rotate around the rotated X axis according to the right hand rule. Third, rotate around the rotated Y axis according to the right hand rule

In Situ Grade Modeling

McEwen interpolated the silver grade for qualifying blocks using ordinary kriging. Gold was interpolated separately. Interpolations used a minimum of 2 and a maximum of 4 composites to assign grades to a block. A 250 m omnidirectional search was used with weighting assigned according to the variography. Because the domains are not treated as hard boundaries, composites outside of the bounds of a given domain may influence the grade of a block within those bounds. Grade modeling for each of the four domains was restricted to those blocks that were at least 50% within the defined wireframe representing that domain. As mentioned above, blocks that fell within the underground workings wireframe were omitted from the model. The block model was also trimmed to topography by removing any block from the model whose midpoint extended above the topographic surface.

Dump Grade Modeling

The Dumps model is restricted to those blocks that are within the mineralized dump domains. Only blocks that have at least 50 percent of their volume contained within a domain qualify to receive an interpolated silver and gold grade.

Blocks were then tagged with a code representing in which of the six domains they are found. These domains are treated as hard boundaries during the interpolation process. Consequently, the interpolated grades for a block within a given domain will only be influenced by composites of the same domain.

Both silver and gold grades were interpolated using the same methods. Blocks grades were calculated using the ID2 interpolation algorithm and a spherical search radius of 985 ft (300 m).

Any qualifying block with at least one composite in its search ellipse receives a grade. A block is limited to only the closest 12 composites during interpolation.

Tailings Grade Modeling

All blocks in the domain qualify to receive an interpolated silver and gold grade. However, during the tabulation of resources, only volumes of a block below topography and above the interpreted bottom of the tailings pile are included in the resource.

Both silver and gold grades were interpolated using the same methods. Blocks grades were calculated using the ID2 interpolation algorithm and a spherical search radius of 300 ft (100 m). Any qualifying block with at least one composite in its search ellipse receives a grade. A block is limited to only the closest 12 composites during interpolation.

14.2.8 Grade Model Validation

The modeling methods described above are the result of iterative modeling undertaken over the last two years. Original grade modeling by PAH in 2010 and 2011 explored several interpolation methods. In addition, PAH had undertaken a validation of the 2010 in-situ, Dumps and Tailings models by comparing the kriged models to nearest neighbor models and concluded that ordinary kriging was a reasonable representation. Furthermore, all the block models created over the last two years were reviewed by McEwen on cross-section. Such reviews were designed to determine if the block grades are a fair and reasonable representation of both the composite data and McEwen's understanding of the deposit geology. The current model was also subjected to such a cross-section review. It is McEwen's conclusion that the current model is a reasonable representation of the deposit.

14.2.9 Specific Gravity

Three specific gravity values were used while generating the resource estimate for Palmarito. The values below are used for the in situ, dump and tailings material:

In Situ Material – 2.58

Dump Material – 1.20

Tailings Material – 1.51

These values are consistent with the average specific gravities calculated from the density determinations described in Section 13.

14.2.10 Mineral Resource Classification

Blocks in the in-situ model were classified according to the following scheme:

For blocks contained within the four domain wireframes:

Measured: used minimum of 3 drill holes with the closest hole less than 25m

- Indicated: used a minimum 2 holes with the closest hole less than 50m
- Inferred: used a minimum of 2 holes

Blocks located outside of the four domain wireframes were classed as inferred. Also, a conceptual pit shell was generated by SRK Consulting, Denver using Whittle pit optimization. Blocks that fell outside of this pit shell were also classified as inferred (most of these blocks would have also been located outside of the four domain wireframes).

Dump Classification Scheme

All blocks within the Dumps model are assigned a classification of indicated.

Tailings Classification Scheme

All blocks within the Tailings model are classified as measured.

In order to determine what blocks would fall inside of a conceptual open pit and also to determine the block that had a "reasonable prospects for economic extraction" the following parameters were used,

Table 14-22: Technical Report, El Gallo Complex, Whittle Parameters Palmarito Deposit

Ag Price	$28.50/oz
Au Price	$1500/oz
Mining Cost - Ore	$1.75/tonne
Mining Cost - Waste	$1.65/tonne
Processing Cost - Mill	$18.50/tonne
Insitu Silver Recovery	68%
Insitu Gold Recovery	88%
Dumps Silver Recovery	85%
Dumps Gold Recovery	80%
Tailings Silver Recovery	50%
Tailings Gold Recovery	60%

14.2.11 Mineral Resource Estimate

The estimated mineral resource for the in situ, dump, and tailings material at Palmarito are detailed in Table 14-23. Table 14-23 includes material both within and out of the conceptual Whittle pit shell; Table 14-24 represents material within the Whittle pit. Note that these are not reserve estimates. Currently, these resources do not have demonstrated economic viability.

Table 14-23: Technical Report, El Gallo Complex, Palmartio In and Out of Pit Resource Estimate

Resource		Tonnage ('000 tonnes)	Silver (oz.)	Silver Grade (gpt)	Gold (oz.)	Gold Grade (gpt)
Palmarito	(Cut-off Grade 30 gpt Ag Eq.)					
	Measured	4,069	12,045,234	92.1	30,089	0.23
	Indicated	129	219,948	53.2	794	0.19
	Inferred	10,302	15,562,152	47.0	74,991	0.23
Palmarito Tailings	(Cut-off Grade 44 gpt Ag Eq.)					
	Measured	147	763,761	162.0	638	0.14
Palmarito Dumps	(Cut-off Grade 26 gpt Ag Eq.)					
	Indicated	145	805,556	172.5	1,298	0.28

Table 14-24: Technical Report, El Gallo Complex, Palmarito In-Pit Resource Estimate

Resource		Tonnage ('000 tonnes)	Silver (oz.)	Silver Grade (gpt)	Gold (oz.)	Gold Grade (gpt)
Palmarito	(Cut-off Grade 30 gpt Ag Eq.)					
	Measured	4,069	12,045,234	92.1	30,089	0.23
	Indicated	129	219,948	53.2	794	0.19
	Inferred	2,980	6,258,456	65.3	18,491	0.19
Palmarito Tailings	(Cut-off Grade 44 gpt Ag Eq.)					
	Measured	147	763,761	162.0	638	0.14
Palmarito Dumps	(Cut-off Grade 33 gpt Ag Eq.)					
	Indicated	145	805,556	172.5	1,298	0.28

14.3 MAGISTRAL

The mineral resources for Magistral are reported for five distinct areas and remains unchanged from the November 2010 Technical Report titled "Resource Estimate for the El Gallo District, Sinaloa, Mexico,", authored by Aaron McMahon P.G. McEwen believes no material changes have occurred to this resource to warrant an update. No conceptual pit was created for these resources when they were filed on Sedar.

The areas that makeup the resource for Magistral include San Rafael, Samaniego Hill, Lupita/Central, Sagrado Corazon and Mill Tailings. The vast majority of the resources are composed of in situ material that is undisturbed by previous mining activity. The balance of the resources is located in tailings piles from past mining and processing activity.

14.3.1 Coordinate Conversion

As part of the resource model, all of the spatial data was converted, structural zone interpretations and block models from the local grid system historically used at Magistral to the Universal Transverse Mercator Zone 13, using North American Datum 27.

14.3.2 Topography

Topographic survey control points were surveyed in by Duran Surveying of Hermosillo, Mexico. Aerial photography and photogrammetry was completed by Cooper Aerial Survey of Tucson, Arizona in June 1995 that has since been subsequently updated to reflect the mining activity that occurred at Magistral. The resulting project topography was provided at a 16 ft (5 m) contour interval.

14.3.3 Drill Hole Database

The drill hole database for Magistral consists largely of reverse circulation and a lesser number of core holes. Table 14-25 shows the contents of the sample database. Drill holes were sampled at 5 ft (1.5 m) intervals. Database sample intervals consistently include data for gold and sporadically for silver and copper. Samples with less than detectable gold values are recorded in the database at the detection limit or at a percentage of this limit, depending on when the work was done. Earlier threshold results that constitute the bulk of the database are recorded at 40 percent of the detection limit (40 percent of 0.030 gpt or 0.012 gpt). It is noted that locally these 0.012 gpt values have been rounded to 0.010 gpt. Subsequent drilling has been recorded at the analytical threshold (0.005 gpt).

Table 14-25: Technical Report, El Gallo Complex, Magistral DrillHole Database

Deposit	Number of Holes	Total Meters	Number of Samples
Samaniego/San Rafael	791	92,597	56,274
Sagrado Corazon	64	5,217	3,215
Lupita	98	8,433	5,251

14.3.4 Compositing Procedures

Samples were composited to a consistent 16 ft (5 m) length down the hole, starting at the drill hole collar. As with the samples, composite statistics for the San Rafael and Samaniego Hill structural zones are similar and show relatively lognormal populations. Again, the Upper Samaniego Zone (Zone 9) shows similar gold grade distribution, but atypical silver and copper distributions.

14.3.5 Definition of Model Domains

Three distinct types of model domains were created representing in situ mineralization, underground workings and surface tailings piles. The in situ and tailings domains are illustrated in Figure 14-13 and Figure 14-14.

In Situ Domains

Geological interpretations of the structural zone trends were conducted on the geologic cross sections. Zone boundaries were delineated at a nominal 0.2 gpt Au grade in concert with other geologic considerations. Generally, one sample-interval points were not included in the zone boundary unless directly along the trend of a specific mineralized zone and even then a minimum of three consecutive sample intervals were generally included. Longer mineralized intervals were not included if they could not be correlated to at least one adjacent drill hole. The structural zone interpreted shapes were then digitized and projected to 16 ft (5 m) bench plans. A further geologic interpretation was made on the bench plans, guided by the projections from the cross sections. The resulting structural zone shapes from the bench plans were used to build the block model representations of the structural zones. Table 14-26 lists all domains by name and code.

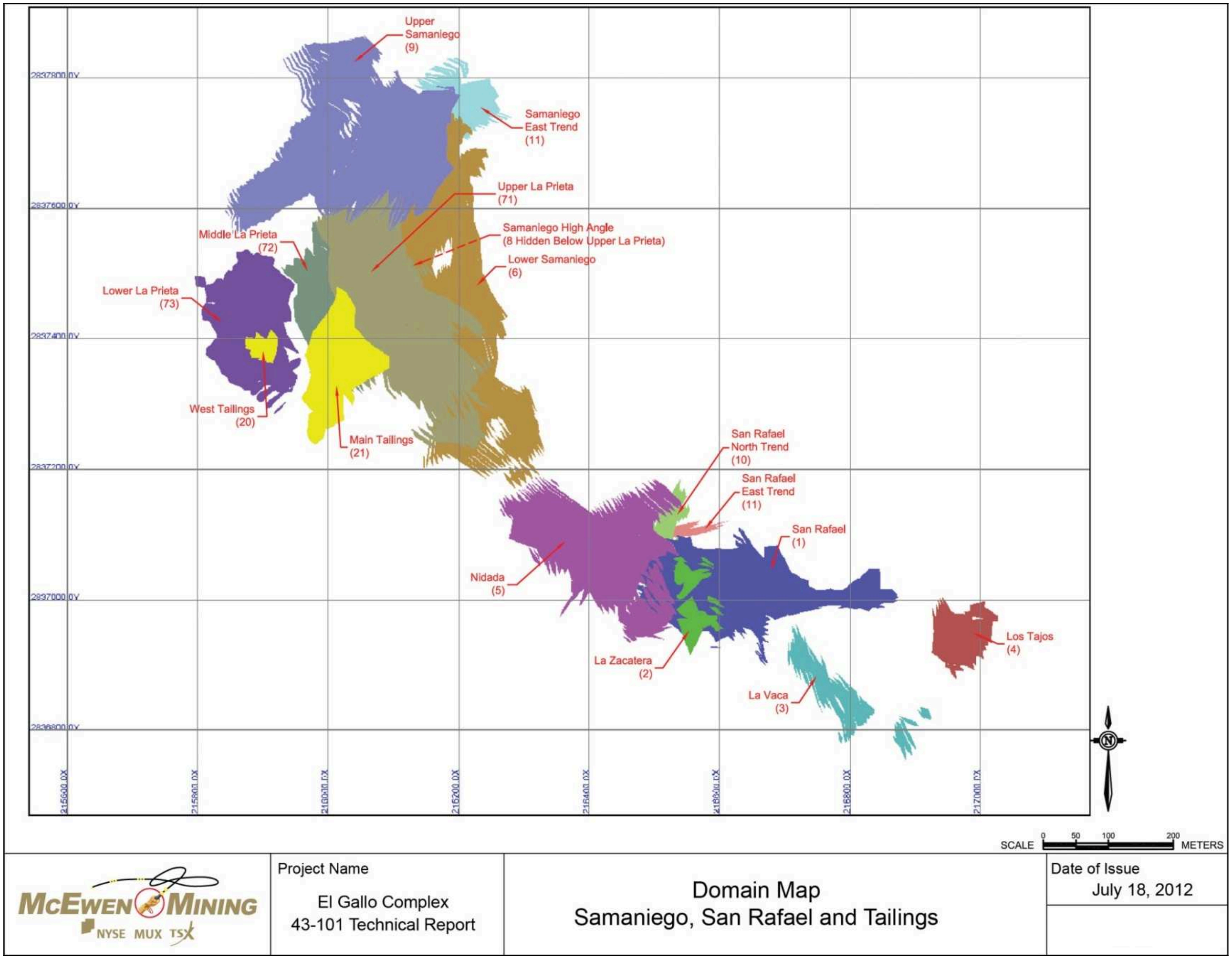


Figure 14-13: Domain Map Samaniego, San Rafael and Tailings

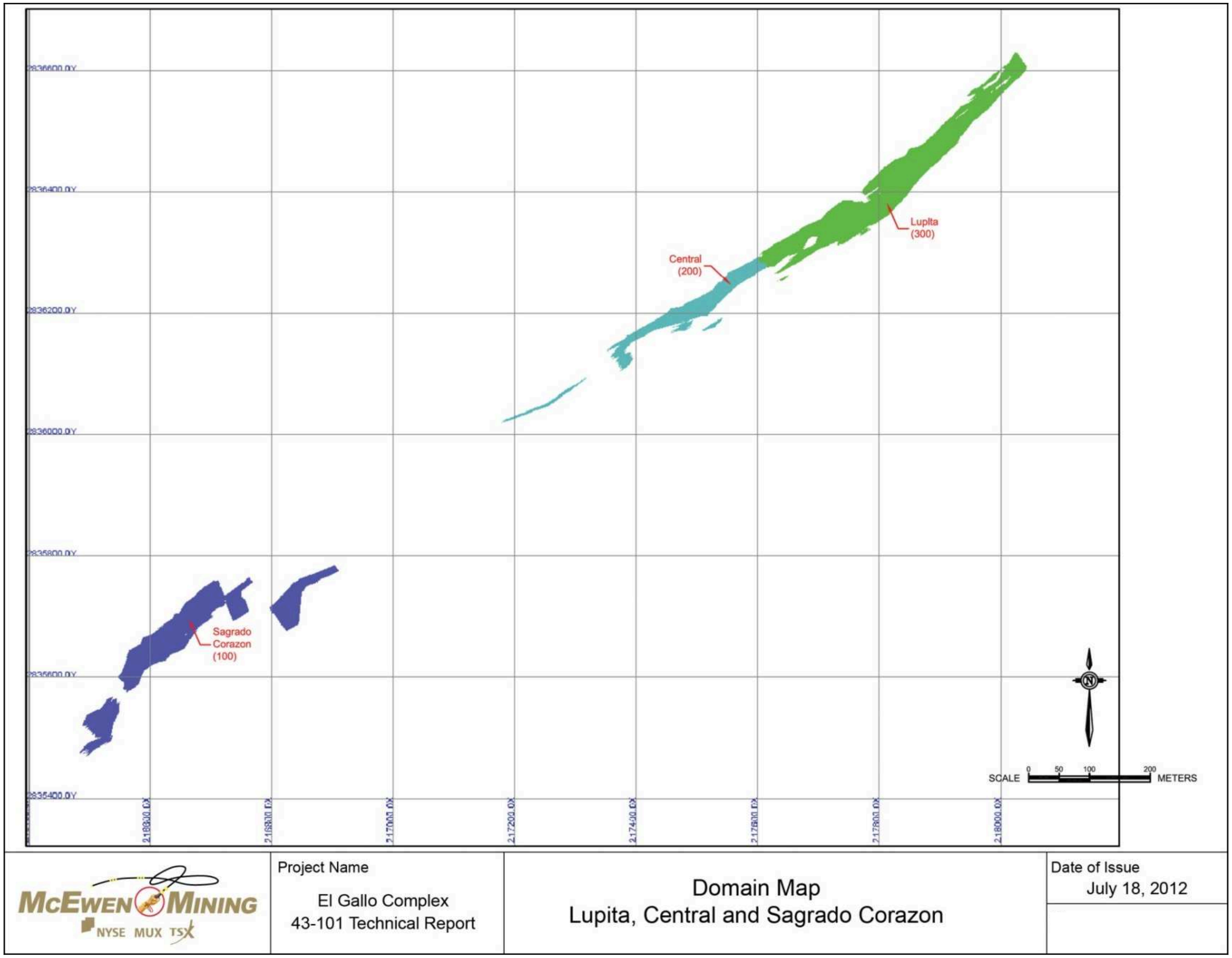


Figure 14-14: Domain Map Lupita, Central and Sagrado Corazon

Table 14-26: Technical Report, El Gallo Complex, Magistral Domain Codes

Domain	Domain Code
San Rafael	1
La Zacatera	2
La Vaca	3
Los Tajos	4
Nidada	5
Lower Samaniego	6
Sam. High Angle	8
Upper Samaniego	9
S.R. North Trend	10
Sam. East Trend	11
S.R. East Trend	12
West Tailings	20
Main Tailings	21
La Prieta	
Upper	71
Middle	72
Lower	73
Sagrado Corazon	100
Central	200
Lupita	300

Underground Workings Domains

Although records from previous underground mining at San Rafael/Samaniego Hill are limited, underground workings have been noted through mapping and drilling activities on the property. The location of known workings were included in the sectional and bench plan interpretations for the deposits and were subsequently incorporated into the block model along with the structural zones in which they occurred. It is believed that the large percentage of the historic underground workings are accounted for in the model and are not a significant part of the tonnage being considered by McEwen. It is noted that the underground workings are locally backfilled with mineralized material that has not been included in this resource tabulation due to its variable nature, but constitutes potential additional mineralized tonnage.

Tailings Piles Domains

Domains were constructed representing two tailings piles located southwest of Samaniego Hill. These domains were interpreted along vertical sections then digitized and projected to 16 ft (5 m) bench plans. The top limits of these domains are truncated by current topography.

14.3.6 Block Model

Three block models were constructed representing three different areas of known mineralization on the property. These models are referred to as Samaniego/San Rafael, Lupita/Central and Sagrado Corazon. The geometry of these three block models is detailed in Table 14-27.

Block Domain Codes, Percents and Density

Blocks are assigned domain codes reflecting the structural zone or tailings pile domain, if any, that each block is in contact with. Frequently, only a fraction of a given block is located within a domain, so each block has been assigned a percent value representing the percentage of a block within a domain.

All blocks at least 50 percent below topography were assigned a density of 2.6 tonnes per cubic meter, with one exception: Blocks that are also identified with a tailings pile domain code are assigned a density of 1.5 tonnes per cubic meter. All blocks at least 50 percent above topography were assigned a density of 0.

Block Grade Modeling

Gold grades were assigned to blocks based on the surrounding drill hole composite grades using an inverse distance to the 6_{th} power method. Blocks of a given domain code were only assigned grade based on composites within the same domain. Search ellipses were used to limit the maximum distance between a block and the composites used to interpolate that block's grade. These search ellipses vary by domain and are listed in Table 14-28. For the in situ material, a block must have at least two composites within its search ellipse before receiving a grade and use no more than the closest 12 composites. For the tailings material, these limits are set to one and six composites, respectively.

Table 14-27: Technical Report, El Gallo Complex, Magistral Block Model Geometries

Samaniego/San Rafael	X	Y	Z
Origin *	2,155,301,608	28,365,869,541	655
Block Size (meters)	5	5	5
Rotation	358.85 degrees anti-clockwise		
Number of Columns	320		
Number of Rows	300		
Number of Levels	84		
Number of Blocks	8,064,000		
Lupita/Central	X	Y	Z
Origin *	2,167,841,686	28,360,366,734	585
Block Size (meters)	5	5	5
Rotation	358.85 degrees anti-clockwise		
Number of Columns	100		
Number of Rows	280		
Number of Levels	73		
Number of Blocks	2,044,000		
Sagrado Corazon	X	Y	Z
Origin *	216,207.94	2,835,483.13	585
Block Size (meters)	5	5	5
Rotation	358.85 degrees anti-clockwise		
Number of Columns	100		
Number of Rows	180		
Number of Levels	50		
Number of Blocks	900,000		

*Origin is minimum X, minimum Y and MAXIMUM Z prior to rotation

Table 14-28: Technical Report, El Gallo Complex, Magistral Domain Search Elipses

Domain	Domain Code	Primary Axis Ax. (deg)	Primary Axis Dip Degress	Primary Axis Radius (meters)	Secondary Axis Radius (meters)	Tertiary Axis Radius (meters)
San Rafael	1	205	45	45	45	15
La Zacatera	2	0	0	45	45	15
La Vaca	3	245	40	45	45	15
Los Tajos	4	240	30	45	45	15
Nidada	5	235	40	45	45	15
Lower Samaniego	6	250	50	45	45	15
Sam. High Angle	8	250	60	45	45	15
Upper Samaniego	9	255	40	45	45	15
S.R. North Trend	10	280	75	45	45	15
Sam. East Trend	11	190	40	45	45	15
S.R. East Trend	12	340	75	45	45	15
West Tailings	20	0	0	40	40	20
Main Tailings	21	0	0	40	40	20
La Prieta						
Upper	71	240	50	45	45	15
Middle	72	240	50	45	45	15
Lower	73	0	0	45	45	15
Sagrado Corazon	100	135	80	45	45	15
Central	200	145	85	45	45	15
Lupita	300	145	85	45	45	15

Resource Classification

All tailings material is classified as Measured. The in situ material is classified by block based on the distance between the block's center and the nearest composite used to assign the block's grade. Blocks within 50 ft (15 m) of the nearest composite are classified as measured, 50 ft to 100 ft (15 to 30 m) for indicated and 100 ft to 150 ft (30 to 45 m) for inferred.

14.3.7 Grade Model Validation

PAH compared the composite gold grades with the block model on vertical sections oriented approximately perpendicular to the structures. This sectional review attempts to locate discrepancies between composite and block grades as well as ensure the block model results are consistent with PAH's understanding of the deposit. The final sectional review did not raise any problematic issues.

PAH generated nearest neighbor (NN) gold grade models for each domain to compare against the ID models. The average gold grades for both the NN and ID models are compared for each domain in Table 14-29. Four domains show a discrepancy of greater than five percent. PAH conducted a more detailed sectional review of these domains. Following this review, PAH is satisfied with the ID interpretation of gold grade.

PAH compared the model results against production data generated by Nevada Pacific Gold for the volume of material mined from 2002 to July 2005 using a cut-off grade of 0.4 gpt. This comparison shows the current model reports four percent more ounces than indicated by the production data for the same volume. Additionally, the current model reports 8 percent fewer ore tonnes than the production data. PAH considers the magnitude of these variances to be acceptable.

Table 14-29: Technical Report, El Gallo Complex, Magistral Grade Statistical Comparison

Domain	Domain Code	Composite Count	Inverse Distance			Nearest Neighbor			Percent Difference
			Mean (g Au/t)	Std. dev.	Std. Error	Mean (g Au/t)	Std. dev.	Std. Error	
San Rafael	1	485	1.39	1.49	0.07	1.39	1.82	0.08	0.00%
La Zacatera	2	22	0.77	0.72	0.15	0.77	0.84	0.18	0.00%
La Vaca	3	15	0.84	0.93	0.24	0.82	1.07	0.28	2.40%
Los Tajos	4	16	0.31	0.18	0.05	0.31	0.22	0.06	0.00%
Nidada	5	145	1.2	1.86	0.15	1.22	2.38	0.2	-1.60%
Lower Samaniego	6	343	0.81	1.16	0.06	0.79	1.38	0.07	2.50%
Sam. High Angle	8	77	0.54	0.52	0.06	0.54	0.65	0.07	0.00%
Upper Samaniego	9	203	1.23	1.52	0.11	1.24	1.89	0.13	-0.80%
S.R. North Trend	10	39	0.29	0.26	0.04	0.28	0.33	0.05	3.60%
Sam. East Trend	11	100	0.79	1.25	0.13	0.75	1.61	0.16	5.30%
S.R. East Trend	12	42	0.35	0.42	0.06	0.31	0.54	0.08	12.90%
West Tailings	20	13	1.51	0.36	0.1	1.67	0.52	0.14	-9.60%
Main Tailings	21	128	2.18	0.9	0.08	2.16	1.51	0.13	0.90%
La Prieta									
Upper	71	285	1.07	1.28	0.08	1.06	1.5	0.09	0.90%
Middle	72	74	3.07	3	0.35	2.87	3.87	0.45	7.00%
Lower	73	143	2.4	2.74	0.23	2.31	3.25	0.27	3.90%
Sagrado Corazon	100	297	0.82	1.08	0.06	0.82	1.42	0.08	0.00%
Central	200	49	0.5	0.34	0.05	0.51	0.44	0.06	-2.00%
Lupita	300	348	1.04	1.33	0.07	1.03	1.82	0.1	1.00%

14.3.8 Mineral Resource Statement

The mineral resource estimate for Magistral includes all material defined in the three block models with a reasonable prospect for being mined. For this report, material with a "reasonable prospect for being mined" is considered to have a grade of 0.3 grams gold per tonne or higher. This cutoff grade represents an estimate of the internal cutoff grade for an open pit cyanide leach operation assuming a US$950 per troy ounce gold price, US$6 processing cost and a process recovery of 65 percent.

The resource estimate for Magistral is summarized in Table 14-30. Using a cutoff grade of 0.30 grams gold per tonne, the measured and indicated resources for the Property are 10.4 million tonnes averaging 1.50 grams gold per tonne for a total of 502,466 contained ounces of gold. PAH also estimated an inferred resource of 223 thousand tonnes averaging 1.14 grams gold per tonne for a total of 8,167 contained ounces of gold. Note that mineral resources that are not mineral reserves do not have demonstrated economic viability.

Table 14-30: Technical Report, El Gallo Complex, Magistral Resource Estimate

Resource Area	Measured			Indicated			M + I			Inferred		
	Tonnes (x1000)	Au (gpt)	Cont. Au Oz.	Tonnes (x1000)	Au (gpt)	Cont. Au Oz.	Tonnes (x1000)	Au (gpt)	Cont. Au Oz.	Tonnes (x1000)	Au (gpt)	Cont. Au Oz.
San Rafael	806	1.02	26,431	381	0.89	10,901	1,187	0.98	37,332	21	0.75	506
Samaniego	3,565	1.94	222,347	1,415	1.70	77,335	4,980	1.87	299,682	106	1.41	4,805
Sagrado Corazon	1,000	1.13	36,329	276	0.91	8,075	1,276	1.08	44,403	7	0.61	137
Lupita	1,463	1.32	62,085	1,363	1.17	51,269	2,826	1.25	113,354	89	0.95	2,718
Tailings	128	1.87	7,695	-	-	-	128	1.87	7,695	-	-	-
Total	**6,962**	**1.59**	**354,887**	**3,435**	**1.34**	**147,580**	**10,397**	**1.50**	**502,466**	**223**	**1.14**	**8,167**

14.4 OTHER RESOURCE AREAS

14.4.1 Approach and Methodology

Block models for the other resource areas except Chapotillo and Las Milpas were created by McEwen (Chapotillo and Las Milpas were modeled by Aaron McMahon, P.G. of PAH). All of the other resource areas were signed off by John Read. Prior to block modeling, drill hole assay data were composited. All projects used 2 m composites which were generated downhole starting at the top of the hole. Composites which contained less than 50% material (>1m) which sometimes occurred at the bottoms of drill holes were discarded. Composite statistics were then reviewed and variography done to determine orientations that best represented the mineralization. Variograms at various orientations were examined and a dominant (first structure) and second structure were ascertained. Variography and grade interpolations were done separately for gold and silver (and for copper in the case of San Dimas). Grade interpolations were done by ordinary kriging, usually with a precursor stage of indicator kriging as described below. During the process of model creation often multiple iterations were done to get the model which showed the best representation of the deposit based on McEwen's understanding of that deposits geology and morphology. During this process as well as after the final model was produced, each model was subjected to a thorough review in cross-section to ensure that the model reasonably represented the deposit. For each block model blocks were clipped to the topographic surface (topography generated by IntraSearch as described in section 14.1.2). Blocks whose midpoint is located above the topographic surface were removed from the models. Some of the resource areas have historic underground workings. These workings were surveyed by a contract surveyor and three-dimensional wireframe models were constructed of the underground voids. Blocks that fell inside of the underground workings were removed from the models.

Specific modeling methodology is described for each deposit below.

14.4.1.1 Chapotillo

Modeling was done by first creating three domains based on composite silver grades greater than 18 gpt. Three-dimensional wireframes were produced for these domains and grade interpolation was done inside of these wireframes as well as for the lower grade material outside of the domains. Grade interpolation was done by ordinary kriging. For gold interpolation a minimum and maximum of 3 composites were used and for silver interpolation a minimum of 3 and maximum of 32 composites were used. Search distances varied somewhat according to the domain but generally were 100 x 100 x 5 m corresponding to the major, intermediate and minor axes of the search ellipse. The search ellipses correspond to the variography detailed in Table 14-31. The Chapotillo deposit contains historic underground workings. A three-dimensional wireframe of the underground void space was created and blocks that fell within this wireframe were removed from the model. The model was trimmed to topography.

Block model geometry is listed in Table 14-32.

14.4.1.2 Grade Model Validation

The block model was reviewed in cross-section by McEwen and determined that it reasonably represented the deposit based on McEwen's understanding of deposit geology and morphology.

14.4.1.3 Mineral Resource Classification

All Chapotillo resources are classified as inferred.

Table 14-31: Technical Report, El Gallo Complex, Chapotillo Variography, Gold

Parameter	Domain1	Domain 2	Domain 3	Low-grade
nugget	0.03	0.03	0.03	0.03
sill	0.19	0.19	0.19	0.19
major axis azimuth	99	26	6	35
major axis dip	-22.7	-43	-50	-44
intermediate axis azimuth	354	116	96	125
range, major axis	110	110	110	110
range, intermediate axis	41	41	41	41
range, minor axis	5	5	5	5

Table 14-32: Technical Report, El Gallo Complex, Chapotillo Block Model Geometry

Parameter	X	Y	Z
Origin (UTM NAD 27)	212,677	2,853,372	0.0
Block Size, m	5	5	5
Number of Columns	50		
Number of Rows	140		
Number of Levels	60		
Model rotation	45 degrees anticlockwise		

14.4.1.4 Haciendita

Resource modeling was carried out in two stages. The first stage was performing an indicator kriging (IK) in an attempt to delineate areas that approximated the deposits mineralized zones. The second stage was to perform grade interpolation within the domains generated by the IK model.

Indicator kriging was done using a cut-off grade of 0.100 gpt Au which was thought appropriate to encompass the mineralization. A 75 m omnidirectional search using a minimum of 2 and maximum of 6 closest composites was used. IK models were generated at a variety of probability levels (the estimated probability that a given block will be at or above the chosen cutoff grade) and these models were reviewed in cross-section to determine which most faithfully represented the known mineralization based on McEwen's understanding of deposit geology and morphology. The 20% probability level IK model was chosen and grade interpolation by ordinary kriging was then undertaken for only those blocks which had a IK probability of greater than or equal to 20%.

Variography was done for both gold and silver and kriging was carried out separately for each using the dominant structures identified in the variography. Variographic parameters for gold are tabulated in Table 14-33. Block model geometry is detailed in Table 14-34.

Table 14-33: Technical Report, El Gallo Complex, Haciendita Variography, Gold

Parameter	First structure
nugget	0.223
sill	0.453
rotation about Z axis	17.8
rotation about X axis	-46.0
rotation about Y axis	4.1
range along Z axis, m	83.9
range along X axis, m	28.8
range along Y axis, m	83.9

Note: All rotations are according to the GSLIB conventions (Deutsch & Journel, 1998). First, rotate around the Z axis according to the left hand rule. Second, rotate around the rotated X axis according to the right hand rule. Third, rotate around the rotated Y axis according to the right hand rule.

Table 14-34: Technical Report, El Gallo Complex, Haciendita Block Model Geometry

Parameter	X	Y	Z
Origin (UTM NAD 27)	217.222.5	2,851,974.5	89.0
Block Size, m	5	5	2
Number of Columns	94		
Number of Rows	95		
Number of Levels	144		

Ordinary kriging used a minimum of 3 and maximum of 6 closest composites and a directional search radii (Y, X, Z) of 100 x 50 x 100 m using the variogram's first structure rotations. Search distances greater than those obtained by variography were used in order to help ensure that blocks would be assigned grade in areas where drilling was sparse. The model was clipped to topography by removing any block whose midpoint was located above the topographic surface.

14.4.1.5 Grade Model Validation

The final kriged model was reviewed in cross-section to ensure that block grades reasonably represented nearby drill hole composites and that, overall, the model was representative of the deposit based on McEwen's understanding of deposit geology.

14.4.1.6 Mineral Resource Classification

All Haciendita resources have been classified as inferred.

14.4.1.7 Mina Grande

Methodology for modeling Mina Grande utilized the two-stage approach used for Haciendita, described above. Indicator kriging was done using a 0.100 gpt Au cutoff, minimum of 2/maximum 6 composites and an omnidirectional search distance of 75 m. The 20% probability level IK model was chosen as being best representative of the deposit. Ordinary kriging within the blocks chosen by the IK model was performed using minimum 3/maximum 4 composites and an omnidirectional 150 m search. Weighting was determined orientation of the dominant structure defined by variography (Table 14-35). Block model geometry is detailed in Table 14-36.

The Mina Grande resource area contains a minor amount of underground workings. Blocks that fell inside of these workings were removed from the model as described above. The model was clipped to topography using the parameters described above.

14.4.1.8 Grade Model Validation

The Mina Grande model was reviewed in cross-section to ensure that blocks reasonably represented nearby drill holes and that the model was representative of the deposit.

14.4.1.9 Mineral Resource Classification

All Mina Grande resources are classified as inferred.

Table 14-35: Technical Report, El Gallo Complex, Mina Grande Bariography, Gold

Parameter	First structure
nugget	0.600
sill	0.400
rotation about Z axis	-1.6
rotation about X axis	4.0
rotation about Y axis	7.0
range along Z axis, m	8.7
range along X axis, m	174.7
range along Y axis, m	31.6

Note: All rotations are according to the GSLIB conventions (Deutsch & Journel, 1998). First, rotate around the Z axis according to the left hand rule. Second, rotate around the rotated X axis according to the right hand rule. Third, rotate around the rotated Y axis according to the right hand rule.

Table 14-36: Technical Report, El Gallo Complex, Mina Grande Block Model Geometry

Parameter	X	Y	Z
Origin (UTM NAD 27)	215,202.5	2,851,529.5	29.0
Block Size, m	5	5	2
Number of Columns	336		
Number of Rows	262		
Number of Levels	162		

Mina Grande Historic Tailings: Mill tailings from the limited historic production at Mina Grande are located in a tailings impoundment at Iripa, approximately 4 km southwest of the Mina Grande resource area. A block model for this tailings pile was previously created by PAH based on sampling from 17 pits excavated in the tailings material. A lower surface for the tailings was extrapolated using the sample pit bottoms. The upper surface was the topographic surface. Grade interpolation for gold and silver was performed using inverse distance squared (ID2) and an omnidirectional search with 50 m radius. A minimum of 2 and maximum of 12 closest samples were considered for each block in the interpolation. Geometric parameters of this model area detailed in Table 14-37.

Table 14-37: Technical Report, El Gallo Complex, Mina Grande Tailings Block Model Geometry

Parameter	X	Y	Z
Origin (UTM NAD 27)	213,040	2,849,945	278
Block Size, m	15	15	1.5
Number of Columns	11		
Number of Rows	12		
Number of Levels	10		
Model rotation	15 degrees anticlockwise		

14.4.1.10 San Dimas

After performing variography for gold, silver and copper, ordinary kriging was performed for these elements based on the first structure in their respective variograms (Table 14-38 shows the gold variography). (Indicator kriging was not used in modeling the San Dimas deposit because it was determined by cross-section review that ordinary kriging by itself did a good job of representing the mineralized zones based on McEwen's understanding of the deposit). Block model geometry is given in Table 14-39.

For gold, kriging utilized minimum 4/maximum 6 composites and directional search radii (Y, X, Z) of 100, 20, 45 m respectively using weighting given by the orientation of the dominant structure in the variogram.

The San Dimas deposit contains historic underground workings. These workings were surveyed by a contract surveyor and a wireframe model was produced. All blocks that fell inside of this wireframe were omitted from the model. The model was clipped to topography.

14.4.1.11 Grade Model Validation

After kriging, the model was subjected to a cross-section review where it was determined that the model accurately represented the deposit.

14.4.1.12 Mineral Resource Classification

All San Dimas resources have been classified as inferred.

Table 14-38: Technical Report, El Gallo Complex, San Dimas Variography, Gold

Parameter	First structure
nugget	0.366
sill	0.634
rotation about Z axis	-22.8
rotation about X axis	41.5
rotation about Y axis	14.4
range along Z axis, m	91.9
range along X axis, m	19.5
range along Y axis, m	43.4

Note: All rotations are according to the GSLIB conventions (Deutsch & Journel, 1998). First, rotate around the Z axis according to the left hand rule. Second, rotate around the rotated X axis according to the right hand rule. Third, rotate around the rotated Y axis according to the right hand rule.

Table 14-39: Technical Report, El Gallo Complex, San Dimas Block Model Geometry

Parameter	X	Y	Z
Origin (UTM NAD 27)	214,692.5	2,833,762.5	187
Block Size, m	5	5	2
Number of Columns	47		
Number of Rows	60		
Number of Levels	72		

14.4.1.13 Los Mautos

Methodology for modeling Los Mautos utilized the two-stage approach used for Haciendita, described above. Since Los Mautos is primarily a silver deposit with minor gold content, indicator kriging was done using a 10 gpt Ag cutoff, minimum of 4/maximum 6 composites. The 20% probability level IK model was chosen as being best representative of the deposit. Ordinary kriging for silver and gold was performed within the blocks chosen by the IK model. For silver grade interpolation a minimum 2/maximum 6 composites were used with directional search radii (Y, X, Z) of 100, 100, 30 m weighted by the orientation of the silver variograms dominant structure (Table 14-40). Block model geometry is detailed in Table 14-41.

Blocks were trimmed to topography. The block model was reviewed in cross-section and determined that it reasonably represents the deposit.

14.4.1.14 Grade Model Validation

The model was subjected to a cross-section review where it was determined that the model accurately represented the deposit.

14.4.1.15 Mineral Resource Classification

All Los Mautos resources are classified as inferred.

Table 14-40: Technical Report, El Gallo Complex, Los Mautos Variography, Silver

Parameter	First structure
nugget	0.250
sill	0.117
rotation about Z axis	-40.1
rotation about X axis	-28.8
rotation about Y axis	44.7
range along Z axis, m	100.4
range along X axis, m	10.5
range along Y axis, m	47.7

Note: All rotations are according to the GSLIB conventions (Deutsch & Journel, 1998). First, rotate around the Z axis according to the left hand rule. Second, rotate around the rotated X axis according to the right hand rule. Third, rotate around the rotated Y axis according to the right hand rule.

Table 14-41: Technical Report, El Gallo Complex, Los Mautos Block Model Geometry

Parameter	X	Y	Z
Origin (UTM NAD 27)	215,347.5	2,853,662.5	108
Block Size, m	5	5	2
Number of Columns	62		
Number of Rows	188		
Number of Levels	86		

14.4.1.16 San Jose del Alamo

An initial indicator kriging model similar to those described for Haciendita, etc. was performed using a gold cutoff of 0.100 gpt. This IK model used a minimum of 4 and maximum of 8 composites. The 40% probability level IK model was chosen as being the most representative of the deposits geometry. Grade interpolation was done for gold and silver based on their respective variograms. Variogram parameters for gold area shown in Table 14-42 and block model geometry is shown in Table 14-43. Ordinary kriging for gold used a minimum 2 and maximum 6 closest composites and an omnidirectional search of 100 m weighted by the dominant structure orientation in the variogram.

The model was trimmed to topography and was reviewed in cross-section for accuracy and representativeness.

14.4.1.17 Grade Model Validation

The model was subjected to a cross-section review where it was determined that the model accurately represented the deposit.

14.4.1.18 Mineral Resource Classification

All San Jose del Alamo resources are classified as inferred.

Table 14-42: Technical Report, El Gallo Complex, San Jose del Alamo Variography, Gold

Parameter	First structure
nugget	0.516
sill	0.465
rotation about Z axis	-39.8
rotation about X axis	-47.3
rotation about Y axis	29.1
range along Z axis, m	85.7
range along X axis, m	9.7
range along Y axis, m	86.4

Note: All rotations are according to the GSLIB conventions (Deutsch & Journel, 1998). First, rotate around the Z axis according to the left hand rule. Second, rotate around the rotated X axis according to the right hand rule. Third, rotate around the rotated Y axis according to the right hand rule.

Table 14-43: Technical Report, El Gallo Complex, San Jose del Alamo Block Model Geometry

Parameter	X	Y	Z
Origin (UTM NAD 27)	212,367.5	2,850,552.5	48.0
Block Size, m	5	5	2
Number of Columns	47		
Number of Rows	174		
Number of Levels	102		

14.4.1.19 Las Milpas

A block model for Las Milpas was originally created by PAH. Modeling was done by first creating two grade shell domains based on silver grade, a higher grade domain targeting grades above 20 gpt Ag (Domain 1) and a lower grade envelope encompassing grades of 4 gpt Ag and greater (Domain 2). Three-dimensional wireframes were produced for these two domains and grade interpolation done inside of these wireframes. For each domain grade interpolation was done by ordinary kriging using a minimum and maximum of 4 composites and search distances of 100, 100, 20 m corresponding to the major, intermediate and minor axes of the search ellipse. The search ellipse corresponds to the variography detailed in Table 14-44.

14.4.1.20 Grade Validation Model

The block model was reviewed in cross-section by McEwen and determined that it reasonably represented the deposit based on McEwen's understanding of deposit geology and morphology. The block model was trimmed to topography.

14.4.1.21 Mineral Resource Classification

All Las Milpas resources are classified as inferred.

Table 14-44: Technical Report, El Gallo Complex, Las Milpas Variography, Silver

Parameter	Domain1	Domain 2
nugget	0.21	0.1
sill	0.21	0.7
major axis azimuth	84	84
major axis dip	80	80
intermediate axis azimuth	174	174
range, major axis	100	100
range, intermediate axis	100	100
range, minor axis	100	6

Table 14-45: Technical Report, El Gallo Complex, Las Milpas Block Model Geometry

Parameter	X	Y	Z
Origin (UTM NAD 27)	205,100	2,830,500	0.0
Block Size, m	5	20	5
Number of Columns	60		
Number of Rows	35		
Number of Levels	40		

14.4.1.22 CSX

Indicator kriging was again used as a first stage to the modeling process to delineate blocks that reasonably represented the mineralized zones at CSX. As CSX is primarily a silver deposit with little gold, IK was done using a 10 gpt silver cutoff. Search was 75 m omnidirectional using minimum 2, maximum 6 closest composites. The 30% probability level IK model was selected as being representative of CSX mineralization.

Silver grade interpolation used ordinary kriging utilizing a minimum of 3 and maximum of 6 composites. Search radii (Y, X, Z) were 200, 100, 100 m using the orientation of the dominant structure from the silver variogram (shown in Table 14-46). Search distances used were generally greater than the ranges from the variogram to ensure that blocks within the IK model would be assigned grade in areas of sparse drilling.

The model was clipped to topography and reviewed in cross-section to ensure it was representative of the deposit.

14.4.1.23 Grade Validation Model

The block model was reviewed in cross-section by McEwen and determined that it reasonably represented the deposit based on McEwen's understanding of deposit geology and morphology. The block model was trimmed to topography.

14.4.1.24 Mineral Resource Classification

All CSX resources have been classified as inferred.

Table 17-Y details the CSX block model geometry.

Table 14-46: Technical Report, El Gallo Complex, CSX Variography, Silver

Parameter	First structure
nugget	0.033
sill	0.539
rotation about Z axis	45.5
rotation about X axis	-19.5
rotation about Y axis	-0.4
range along Z axis, m	8.6
range along X axis, m	83.3
range along Y axis, m	242.8

Note: All rotations are according to the GSLIB conventions (Deutsch & Journel, 1998). First, rotate around the Z axis according to the left hand rule. Second, rotate around the rotated X axis according to the right hand rule. Third, rotate around the rotated Y axis according to the right hand rule.

Table 14-47: Technical Report, El Gallo Complex, CSX Block Model Geometry

Parameter	X	Y	Z
Origin (UTM NAD 27)	213,969.5	2,844,271.5	-49.0
Block Size, m	5	5	2
Number of Columns	100		
Number of Rows	69		
Number of Levels	201		

14.5 MINERAL RESOURCE ESTIMATES

The estimated mineral resources for the deposits described in this section are tabulated in Table 14-48 and Table 14-49. Table 14-49 lists the resources contained within a conceptual pit shell (described in Section 14.6) and Table 14-48 tabulates global resources both within and outside of the conceptual pit shell. Note that these are not reserve estimates. Currently, these resources do not have demonstrated economic viability.

Table 14-48: Technical Report, El Gallo Complex, In and Out of Pit Summary Resource Estimates

Resource		Tonnage ('000 tonnes)	Silver (oz.)	Silver Grade (gpt)	Gold (oz.)	Gold Grade (gpt)
Chapotillo	(Cut-off Grade 0.44 gpt Au Eq.) Inferred	1,475	1,740,941	36.7	21,905	0.46
Haciendita	(Cut-off Grade 0.44 gpt Au Eq.) Inferred	1,649	1,244,510	23.5	42,083	0.79
Mina Grande	(Cut-off Grade 0.44 gpt Au Eq.) Inferred	3,801	2,883,040	23.6	74,179	0.61
Mina Grande Tailings	(Cut-off Grade 0.58 gpt Au Eq.) Inferred	463	804,333	54.1	7,523	0.51
San Dimas	(Cut-off Grade 0.41 gpt Au Eq.) Inferred	846	576,580	21.2	19,325	0.71
Los Mautos	(Cut-off Grade 24 gpt Ag Eq.) Inferred	965	1,323,642	42.7	3,637	0.12
San Jose del Alamo	(Cut-off Grade 0.38 gpt Au Eq.) Inferred	501	35,539	2.2	13,162	0.82
Las Milpas	(Cut-off Grade 24 gpt Ag Eq.) Inferred	678	964,316	44.2	1,724	0.08
CSX	(Cut-off Grade 27 gpt Ag Eq.) Inferred	672	1,262,048	58.4	846	0.04

Table 14-49: Technical Report, El Gallo Complex, In-Pit Summary Resource Estimates

Resource	Tonnage ('000 tonnes)	Silver (oz.)	Silver Grade (gpt)	Gold (oz.)	Gold Grade (gpt)
Chapotillo (Cut-off Grade 0.44 gpt Au Eq.) Inferred	845	1,388,412	51.1	15,652	0.58
Haciendita (Cut-off Grade 0.44 gpt Au Eq.) Inferred	1,252	1,055,983	26.2	36,421	0.91
Mina Grande (Cut-off Grade 0.44 gpt Au Eq.) Inferred	2,713	2,514,179	28.8	61,130	0.70
Mina Grande Tailings (Cut-off Grade 0.58 gpt Au Eq.) Inferred	462	804,333	54.1	7,523	0.51
San Dimas (Cut-off Grade 0.41 gpt Au Eq.) Inferred	788	548,322	21.7	18,700	0.74
Los Mautos (Cut-off Grade 24 gpt Ag Eq.) Inferred	767	1,170,406	47.5	3,026	0.12
San Jose del Alamo (Cut-off Grade 0.38 gpt Au Eq.) Inferred	167	10,842	2.0	6,636	1.24
Las Milpas (Cut-off Grade 24 gpt Ag Eq.) Inferred	399	620,467	48.4	1,157	0.09
CSX (Cut-off Grade 27 gpt Ag Eq.) Inferred	438	1,017,155	72.2	417	0.03

14.6 IN-PIT AND OUT-OF-PIT PARAMETERS

In order to estimate the amount of mineralization contained in and out of a conceptual open pit design, the resource models were assigned various mining parameters such as mining costs, processing costs, silver and gold recoveries and slope angles. Using these parameters, pit shells were created using Whittle pit optimization software. The parameters used are as follows:

- A US$28.50 oz. silver and US$1500 oz. gold price.
- Mining costs for mineralized material were estimated at $1.75 per tonne and $1.65 per tonne for waste material. These costs are based on actual mining costs at Magistral during the initial production phase.
- Silver and gold processing costs for milling where estimated at $18.50 per tonne. Silver heap leaching costs were $6.50 per tonne. Gold heap leaching costs were $13.20 per tonne. Milling and silver heap leaching costs are based on estimates used to establish a reserve estimate in the upcoming El Gallo Feasibility study. Gold heap leach costs are based on estimates being used for the production scheduled at Magistral.
- The maximum overall slope angles used to establish the in-pit resource was 60 degrees based on feasibility level geotechnical studies and current mining experience.
- Additional parameters used to create the conceptual pits are located in Table 14-50.

Table 14-50: Technical Report, El Gallo Complex, Additional In and Out of Pit Parameters

Resource	Silver Recovery (%)	Gold Recovery (%)	Process Method
El Gallo Milling	85%	75%	Mill
El Gallo Heap Leach	60%	60%	Heap Leach
Palmarito	68%	88%	Mill
Palmarito Tailings	50%	60%	Mill
Palmarito Dumps	85%	80%	Mill
Chapotillo	85%	88%	Mill
Haciendita	85%	88%	Mill
Mina Grande	85%	88%	Mill
Mina Grande Tailings	80%	73%	Mill
San Dimas	80%	94%	Mill
Los Mautos	85%	85%	Mill
San Jose del Alamo	72%	25%	Heap Leach
Las Milpas	85%	75%	Mill
CSX	75%	85%	Mill

15 MINERAL RESERVE ESTIMATES

15.1 MINERAL RESERVE

It is the opinion of IMC that the mine/plant production schedules define the mineral reserve for a property. Table 15-1 shows the mineral reserve for the El Gallo/Palmarito properties based on the current production schedules. The below reserve is based on the measured mineral resource inside the reserve pit having converted to proven mineral reserve and the indicated mineral resource inside the reserve pit having converted to probable mineral reserve.

The reserve table also shows that a portion of the Palmarito mineral reserve is historic dump and tails material that will be mined and processed in the El Gallo mill.

The El Gallo potential heap leach material will remain as a mineral resource since the Feasibility Study excludes processing this material.

Table 15-1: El Gallo/Palmarito Mineral Reserve

Reserve Class	Ktonnes	Silver (g/t)	Gold (g/t)	Eq Ag (g/t)	Total Silver (000' oz)	Total Gold (oz)
Proven Mineral Reserve						
El Gallo Mill Ore	9,063	94.2	0.076	97.8	27,449	22,145
Palmarito Mill Ore	1,818	122.5	0.350	147.0	7,160	20,458
Palmarito Historic Dumps	157	191.1	0.312	206.9	965	1,575
Palmarito Historic Taiils	147	161.2	0.135	169.9	762	638
Total Proven Mineral Reserve	11,185	101.0	0.125	108.3	36,336	44,816
Probable Mineral Reserve						
El Gallo Mill Ore	465	99.2	0.048	101.5	1,483	718
Palmarito Mill Ore	11	142.8	0.235	159.2	51	83
Palmarito Historic Dumps	58	163.9	0.260	177.1	306	485
Palmarito Historic Taiils						1,286
Total Probable Mineral Reserve	534	107.2	0.075	110.9	1,840	22,863
Proven/ Probable Mineral Reserve						
El Gallo Mill Ore	9,528	94.4	0.075	98.0	28,932	22,863
Palmarito Mill Ore	1,829	122.6	0.350	147.1	7,211	20,541
Palmarito Historic Dumps	215	183.8	0.298	198.9	1,271	2,060
Palmarito Historic Taiils	147	161.2	0.135	169.9	762	638
Total Proven and Probable Mineral Reserve	11,719	101.3	0.123	108.4	38,176	46,102

IMC does not know of any mining, metallurgical, infrastructure, or other factors that might materially affect the mineral reserve. It is also the opinion of IMC that the resource block model was developed in such a way as to account for potential ore loss and mining dilution, so these mining factors have been accounted for. The mineral reserve is consistent with current CIM and NI 43-101 guidelines.

15.2 DESIGN ECONOMICS

15.2.1 El Gallo

A floating cone analysis was conducted for El Gallo to guide final pit design and mine phase designs. Table 15-2 presents the preliminary economic parameters used in the design. Recovery and cost parameters are included for mill ore and heap leach ore. Though the heap leach process option has been excluded from this study the economics were developed to determine cutoff grades to stockpile potential ore. The cost and recovery parameters were provided to IMC by McEwen personnel and appear to be reasonable and are within industry norms. It is reported to IMC that the mining cost estimate is based on contract mining rates at the company's Magistral operation in the area. The design is also based on $25 per ounce silver and $1300 per ounce gold.

Mining cutoff grades are based on silver equivalent. The silver equivalent calculations for mill ore are as follows:

Silver NSR Factor = ($25-$1.05)(0.85)(0.99)(0.99)/31.103 = 0.6415

Gold NSR Factor = ($1300-$17)(0.75)(0.9975)(0.99)/31.103 = 30.552

Gold Factor = 30.552 / 0.6415 = 47.626

Or

Silver Equivalent (Mill) = Silver + 47.626 x Gold

And for the heap leach:

Silver NSR Factor = ($25-$1.05)(0.60)(0.99)(0.99)/31.103 = 0.4528

Gold NSR Factor = ($1300-$17)(0.60)(0.9975)(0.99)/31.103 = 24.441

Gold Factor = 24.441 / 0.4528 = 53.976

Or

Silver Equivalent (Leach) = Silver + 53.976 x Gold

The table also shows internal silver equivalent cutoff grades for mill ore and leach ore as 32.7 and 14.4 g/t respectively. Internal cutoff grade is the ore grade that will pay for processing and G&A cost and applies to blocks that must be removed from the pit, i.e. ore versus waste routing is at the pit rim. Breakeven cutoffs are 35.5 g/t and 18.2 g/t equivalent silver respectively. Breakeven cutoff grade is the ore grade that pays for processing, G&A, and mining the ore block, but does not pay for additional waste stripping.

Table 15-2: Economic Parameters – El Gallo

Parameter	Units	Mill Ore	Leach Ore
Commodity Prices			
Silver	(US$)	25	25
Gold	(US$)	1300	1300
Mining Cost Per Total Tonne			
Ore	(US$)	1.75	1.75
Waste	(US$)	1.65	1.65
Process Cost Per Ore Tonne	(US$)	18.50	-
G&A Cost Per Ore Tonne	(US$)	2.50	0.00
Plant Recovery			
Silver	(%)	85.0	60.0
Gold	(%)	75.0	60.0
NSR Terms			
Payable Silver	(%)	99.0	99.0
Payable Gold	(%)	99.75	99.75
Silver Refining/Transport	(US$)	1.05	1.05
Gold Refining/Transport	(US$)	17.00	17.00
Royalty	(%)	1.0	1.0
Silver Equivalent Cutoff Grades			
Silver NSR Factor	($/g)	0.6415	0.4528
Gold NSR Factor	($/g)	30.552	24.441
Gold Factor for Ag Eq Calc	(none)	47.626	53.976
Internal Ag Eq Cutoff	(g/t)	32.7	14.4
Breakeven Ag Eq Cutoff	(g/t)	35.5	18.2

15.2.2 Palmarito

A floating cone analysis was conducted for Palmarito to guide final pit design and mine phase designs. Table 15-3 presents the preliminary economic parameters used in the design. The first column of Table 15-3 (Open Pit) applies to mine design. In addition, there is historic dump material and historic tails at Palmarito that will be transported to the El Gallo mill for processing. The cost and recovery parameters were provided to IMC by McEwen personnel and appear to be reasonable and are within industry norms. It is reported to IMC that the mining cost estimate is based on contract mining rates at the company's Magistral operation in the area and also a contractor quote to haul Palmarito ore to the El Gallo mill. The design is based on $25 per ounce silver and $1300 per ounce gold.

Mining cutoff grades are based on silver equivalent. The silver equivalent calculation for open pit mill ore is as follows:

Silver NSR Factor = ($25-$1.05)(0.675)(0.99)/31.103 = 0.5146

Gold NSR Factor = ($1300-$17)(0.875)(0.9975)/31.103 = 36.00

Gold Factor = 36.0 / 0.515 = 70

Or

Silver Equivalent = Silver + 70 x Gold

The internal silver equivalent cutoff grade is about 48 g/t. Internal cutoff grade is the ore grade that will pay for processing, G&A, and the incremental ore haulage cost i.e. ore versus waste routing is at the pit rim. Breakeven cutoff is 51.5 g/t equivalent silver. Breakeven cutoff grade is the ore grade that pays for processing, G&A, and mining the ore block, but does not pay for additional waste stripping.

The Palmarito historic tails are located in a shallow pile east of the planned open pit and amount to 147 ktonnes at 161.2 g/t silver and 0.135 g/t gold. This is based on a 66 g/t silver equivalent cutoff grade, based on the parameters in Table 15-3, and

Silver Equivalent = Silver + 64.77 x Gold

According to the resource model of the tails, all the material is above this cutoff grade.

The Palmarito historic dump material is also located in a shallow pile east of the planned open pit and amounts to 214.5 ktonnes at 183.8 g/t silver and 0.298 g/t gold. This is based on a 38 g/t silver equivalent cutoff grade, based on the parameters in Table 15-3, and

Silver Equivalent = Silver + 50.8 x Gold

Table 15-3: Palmarito Economic Parameters

Parameter	Units	Open Pit (In-situ)	Historic Dump	Historic Tails
Commodity Prices				
Silver	(US$)	25	25	25
Gold	(US$)	1300	1300	1300
Mining Cost Per Total Tonne				
Ore	(US$)	5.50	5.50	5.50
Waste	(US$)	1.65	1.65	1.65
Process Cost Per Ore Tonne	(US$)	18.50	18.50	18.50
G&A Cost Per Ore Tonne	(US$)	2.50	2.50	2.50
Plant Recovery				
Silver	(%)	67.5%	85.0%	50.0%
Gold	(%)	87.5%	80.0%	60.0%
NSR Terms				
Payable Silver	(%)	99.0%	99.0%	99.0%
Payable Gold	(%)	99.75%	99.75%	99.75%
Silver Refining/Transport	(US$)	1.05	1.05	1.05
Gold Refining/Transport	(US$)	17.00	17.00	17.00
Royalty	(%)	0.0%	0.0%	2.0%
Silver Equivalent Cutoff Grades				
Silver NSR Factor	($/g)	0.515	0.648	0.374
Gold NSR Factor	($/g)	36.00	32.92	24.19
Gold Factor for Ag Eq Calc	(none)	69.97	50.80	64.77
Internal Ag Eq Cutoff	(g/t)	48.3	38.4	66.5
Breakeven Ag Eq Cutoff	(g/t)	51.5	40.9	70.9

16 MINING METHODS

16.1 OPERATING PARAMETERS AND CRITERIA

Mine plans were developed for the El Gallo and Palmarito mineral deposits based on delivering ore to the El Gallo mill at the rate of 5,000 tonnes per day, or 1,825 ktonnes per year (ktpy). On an annual basis, about 80% of the mill feed is from El Gallo (1,460 ktpy) and 20% from Palmarito (365 ktpy) so the two deposits will have approximately the same life. The Palmarito ore will be trucked about 20km or so over public roads to El Gallo.

The El Gallo mining will also produce about 5.9 million tonnes of potential heap leach material over the project life. This will be stockpiled in a location so that it may be processed in the future, but is not scheduled to be processed for this study.

El Gallo mining will be conducted two 10 hour shifts per day for 350 days per year. This will required three mining crews. Palmarito mining will be conducted two 10 hour shifts per day for 250 days per year (5 days per week) and will require two mining crews.

With the current mine production schedule the commercial project life is about 6½ years after a brief preproduction period.

16.2 PIT AND MINING PHASE DESIGN

16.2.1 El Gallo

Five mining phases were designed for El Gallo. Figure 16-1 shows the final pit design. The final pit is based on commodity prices of $25 silver and $1300 floating cone.

Inter-ramp slope angles are based on a study conducted by Itasca S.A. and documented in the report "El Gallo Open Pit Preliminary Stability Analysis", dated February 2012. The Itasca analysis was based on dividing a preliminary El Gallo pit design into nine design sectors, based on the dip direction of the pit wall. The study presented various graphs of estimated inter-ramp angles versus bench face angles for each sector.

Haul roads were designed 25m wide at a maximum grade of 10% to accommodate trucks of about 90 metric tonnes such as the Caterpillar 777 class trucks. The designs are also based on double benching two five meter benches so there are 10m between catch benches.

Table 16-1 shows the phase tonnages by mill ore and potential heap leach material based on the economics and cutoff grades described in Section 15.2. Mill ore is 9.5 million tonnes at 94.4 g/t silver and 0.075 g/t gold. Potential leach material is 5.9 million tonnes at 21.2 g/t silver and 0.023 g/t gold. Total material in the pit design is 36.1 million tonnes. This is a waste to ore ratio of 1.35 to 1 with leach material or 2.79 to 1 with leach material as waste. The total ore and material are consistent with the floating cone results for the base case cone. The phase tonnages compare well with the base case cone tonnages.

Table 16-1: Mining Phase Summary – El Gallo

	Potential Mill Ore (+32 g/t Eq Ag)				Potential Leach Material (14 to 32 g/t Eq Ag)						
Phase	Ktonnes	Ag Eq (g/t)	Silver (g/t)	Gold (g/t)	Ktonnes	Ag Eq (g/t)	Silver (g/t)	Gold (g/t)	Waste Ktonnes	Total Ktonnes	Waste: Ore
1	1,863	109.2	107.4	0.038	1,202	22.4	21.4	0.019	3,446	6,511	1.12
2	3,073	100.4	93.7	0.140	2,192	22.3	20.7	0.031	4,916	10,181	0.93
3	2,810	99.2	96.5	0.057	1,458	22.1	21.1	0.019	10,054	14,322	2.36
4	1,523	72.0	70.5	0.031	887	23.1	22.3	0.015	2,005	4,415	0.83
5	261	129.3	128.4	0.021	120	24.6	23.7	0.016	290	671	0.76
TOTAL	9,530	98.0	94.4	0.075	5,859	22.4	21.2	0.023	20,711	36,100	1.35

16.2.2 Palmarito

Three mining phases were designed to mine the Palmarito pit (in-situ resource). Figure 16-2 shows the final pit design. The final pit is based on commodity prices of $25 silver and $1300 gold.

Inter-ramp slope angles are based on a study conducted by Itasca S.A. and documented in the report “El Palmarito Open Pit Preliminary Stability Analysis”, dated February 2012. The Itasca analysis was based on dividing a preliminary Palmarito pit design into six design sectors, based on the dip direction of the pit wall.

As an additional constraint on the floating cone evaluation, deep ores below about the 100m elevation in the northeast pit area were marked as sulfide blocks and excluded from the analysis. Metallurgical testing indicated low recovery in this area.

The roads are 15m wide to accommodate 35 to 40 tonne trucks that may also travel public roads. All roads are at a maximum grade of 10%.

Table 16-2 shows the phase tonnages of mill ore based on the 48 g/t equivalent silver cutoff grade. Ore tonnage is 1.83 million tonnes at 147.1 g/t silver equivalent, 122.6 g/t silver, and 0.350 g/t gold. Total material is 5.82 million tonnes for a 2.18 to 1 waste to ore ratio.

Table 16-2 shows only the material net of the historic dump and tails, i.e. this material is assumed to be removed before mining the in-situ resource commences. The dump and tails within the pit limits amounted to 234 total ktonnes. A small amount (14 ktonnes) of potential in-situ resource was also contained in blocks designated as dump resource and was also excluded from the Table 16-2. As previously discussed, the historic dump and tailing material is incorporated into separate block models.

Table 16-2: Palmarito Mining Phase Summary

Phase	Potential Mill Ore (+48 g/t Eq Ag) Ktonnes	Ag Eq (g/t)	Silver (g/t)	Gold (g/t)	Waste Ktonnes	Total Ktonnes	Waste: Ore
1	580	187.2	157.7	0.421	810	1,390	1.40
2	703	125.2	104.4	0.298	1,577	2,280	2.24
3	546	132.6	108.8	0.340	1,604	2,150	2.94
TOTAL	1,829	147.1	122.6	0.350	3,991	5,820	2.18

For production scheduling purposes IMC divided the tailings area into five areas, or phases, from north to south, the likely direction of mining. Table 16-3 shows potential ore by these phases. Total mill ore is 147 ktonnes at 161.2 g/t silver and 0.135 g/t gold.

Also, IMC divided the dump area into six areas, or phases, from north to south, the likely direction of mining. Table 16-4 shows potential ore by these phases. There is a small amount of waste that will be re-handled to the new waste storage area. Total mill ore is 214.5 ktonnes at 183.8 g/t silver and 0.298 g/t gold.

Table 16-3: Palmarito Historic Tails

	Units	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	TOTAL
Ktonnes	(kt)	56	30	30	28	3		147
Silver Equivalent	(g/t)	172.9	151.8	175.9	169.4	240		169.9
Silver	(g/t)	167.6	143.1	165.3	157	220.4		161.2
Gold	(g/t)	0.082	0.134	0.164	0.191	0.304		0.135

Table 16-4: Palmarito Historic Dump

	Units	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	TOTAL
Ktonnes	(kt)	28	47	43	75	11.5	10	214.5
Silver Equivalent	(g/t)	232.2	219	189.3	202.5	61.2	184.3	198.9
Silver	(g/t)	209.8	200.2	176.2	188.8	55.3	176.3	183.8
Gold	(g/t)	0.442	0.371	0.257	0.27	0.116	0.157	0.298
Waste Ktonnes	(kt)	0	0	0	0.5	16	0	16.5
Total Ktonnes	(kt)	28	47	43	75.5	27.5	10	231

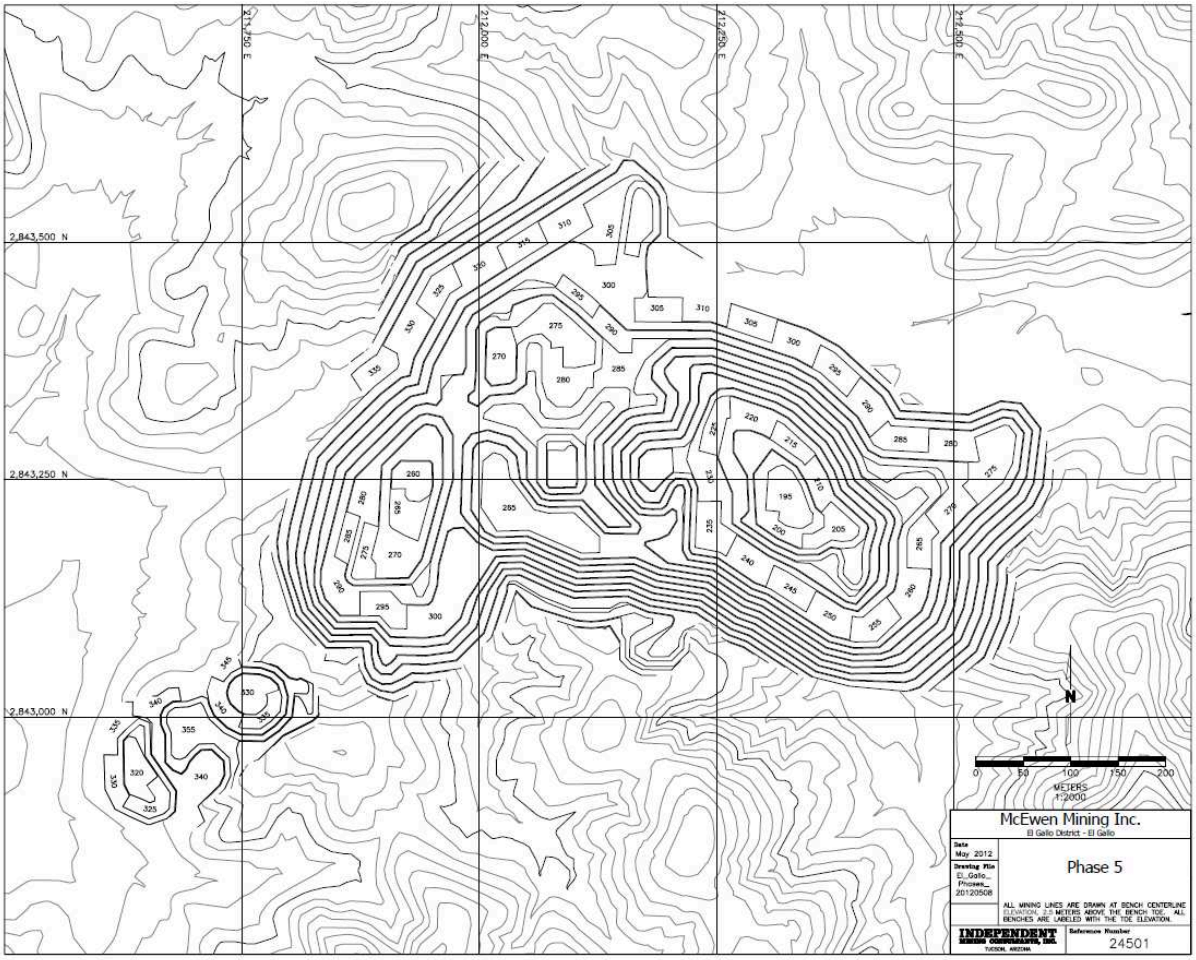


Figure 16-1: El Gallo Final Pit

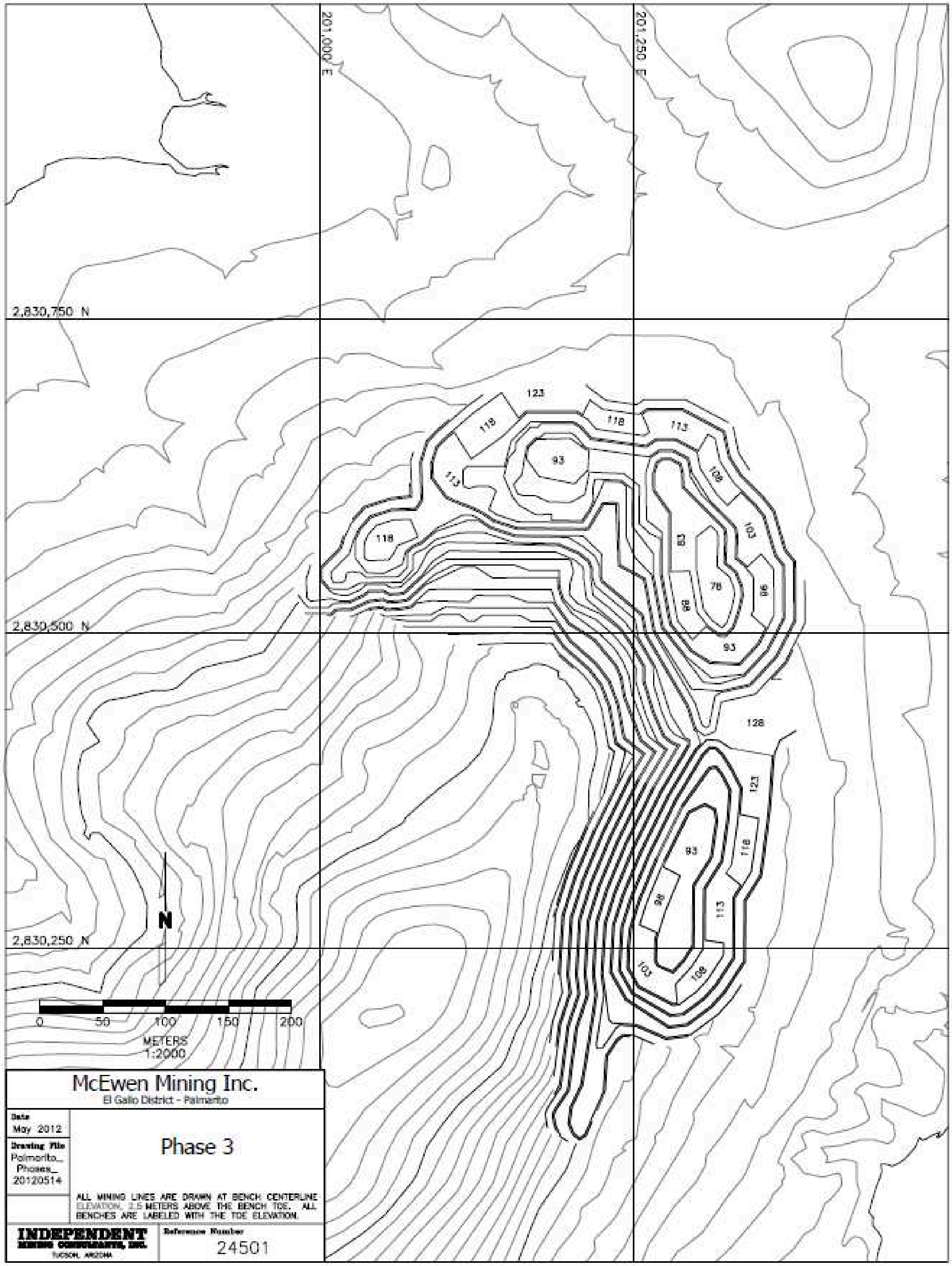


Figure 16-2: Palmarito Final Pit

16.3 COMBINED MINING PRODUCTION SCHEDULE

The mine production schedule is based on delivering ore to a mill at the rate of 5,000 tonnes per day or 1,825 ktonnes per year. About 80% of the mill feed is from El Gallo (1,460 ktpy) and 20% from Palmarito (365 ktpy).

Table 16-5 shows the proposed mine production schedule. The top portion of the table shows El Gallo mill ore by time period. Year 1 is shown by quarter year periods; the rest of the time periods are by year. Yr1 Q1 mill ore feed is the 58 ktonnes of ore mined during preproduction plus the 182 ktonnes mined during Yr1 Q1. This is 240 ktonnes of ore, about 66% of full El Gallo production to reflect ramp-up during the first quarter. Yr1 Q2 and later the El Gallo mill is scheduled at full production. Under Total Tonnes and Waste near the bottom of Table 16-5 the peak material movement at El Gallo is about 6.7 million tonnes per year during Years 2, 3, and 4.

El Gallo preproduction is 1,331 ktonnes. This is more than is strictly needed to open up the mine. This amount allows about 1,125 ktonnes of waste for tailings embankment construction. This barrow material is from the southeast corner of mining phase 3, mostly up on a hill. It is anticipated that the preproduction period will be about 6 to 9 months or so, depending on the embankment construction schedule.

Mill cutoff grades for El Gallo start at 43 g/t equivalent silver for preproduction and most quarters of Year 1 then decline over the mine life to internal cutoff of 32 g/t equivalent silver. This results in the stockpiling of 675 ktonnes of low grade mill ore, ore between 32 g/t equivalent silver and the operating cutoff for each year. The low grade stockpile is north of the pit and is re-handled and processed at the end of the mine life.

Potential heap leach material mined with El Gallo mill ore amounts to 5.86 million tonnes. Table 16-5 shows schedule for mine production of this material. This material is at a cutoff grade of 14 g/t silver equivalent based on the heap leach economics. In the current plan this is stockpiled northeast of the pit for potential processing.

Table 16-5 also shows the schedule for Palmarito in-situ mill ore. Total mill ore is 1,829 ktonnes. This is 23 ktonnes during Yr1 Q4, 314 ktonnes during Year 2 and 365 ktonnes per year during Years 3 through 5. The peak material movement at Palmarito is 1,185 ktonnes during Year 5. During Year 1 and the first quarter of Year 2 the historic Palmarito dump and tails material is the main Palmarito mill ore source. As discussed in the previous section, these were divided into six and five mining "phases" respectively for scheduling purposes.

Table 16-6 shows the proposed mill production schedule and the various sources for the ore. As previous mentioned, El Gallo Yr1 Q1 includes mill ore mined during preproduction.

Table 16-5: Mine Production Schedule

MINE PRODUCTION SCHEDULE:	Units	PP	Yr1 Q1	Yr1 Q2	Yr1 Q3	Yr1 Q4	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	TOTAL
El Gallo Mill Ore:													
Silver Equivalent Cutoff Grade	(g/t)	43	43	33	43	43	40	38	32	32	32	32	
Ore Ktonnes	(kt)	58	182	365	365	365	1,460	1,460	1,460	1,460	1,460	218	8,853
Silver Equivalent	(g/t)	74.8	106.6	154.7	140.2	105.9	115.8	106.1	86.0	90.1	99.0	62.0	102.7
Silver	(g/t)	65.3	103.4	152.2	136.8	104.5	104.7	104.2	83.7	88.1	96.6	61.1	99.0
Gold	(g/t)	0.201	0.066	0.051	0.071	0.03	0.233	0.040	0.049	0.042	0.05	0.018	0.078
Palmarito Mill Ore:													
Silver Equivalent Cutoff Grade	(g/t)					48	48	48	48	48	48	48	
Ore Ktonnes	(kt)					10	327	365	365	365	266	131	1,829
Silver Equivalent	(g/t)					219.7	169.4	182.9	118.4	142.8	132.9	106.5	147.1
Silver	(g/t)					200.6	147.0	151.1	95.0	119.8	112.1	82.2	122.6
Gold	(g/t)					0.273	0.32	0.455	0.334	0.328	0.297	0.346	0.350
Palmarito Historic Dumps to Mill:													
Silver Equivalent Cutoff Grade	(g/t)		38	38	38	38	38						
Ore Ktonnes	(kt)		36	55	55	55	13.5						214.5
Silver Equivalent	(g/t)		229.3	210.4	196.0	181.9	152.4						198.9
Silver	(g/t)		207.7	193.2	182.6	169.4	144.9						183.8
Gold	(g/t)		0.426	0.338	0.264	0.248	0.146						0.298
Palmarito Historic Tails to Mill:													
Silver Equivalent Cutoff Grade	(g/t)		66	66	66	66	66						
Ore Ktonnes	(kt)		25	36	36	26	24						147
Silver Equivalent	(g/t)		172.9	170.0	159.2	174.2	178.2						169.9
Silver	(g/t)		167.6	164.2	149.9	163.1	164.9						161.2
Gold	(g/t)		0.082	0.089	0.143	0.171	0.205						0.135
El Gallo Low Grade Mill Stockpile:													
Silver Equivalent Cutoff Grade	(g/t)	32	32	32	32	32	32	32					
Ore Ktonnes	(kt)	38	69	3	68	89	242	166					675
Silver Equivalent	(g/t)	37.6	37.4	32.9	37.8	37.6	36.3	35.3					36.6
Silver	(g/t)	36.0	36.1	31.0	36.3	36.4	33.7	34.1					34.8
Gold	(g/t)	0.034	0.028	0.039	0.032	0.027	0.055	0.024					0.037
El Gallo Potential Heap Leach Ore:													
Silver Equivalent Cutoff Grade	(g/t)	14	14	14	14	14	14	14	14	14	14	14	
Ore Ktonnes	(kt)	110	162	215	270	339	1,149	995	985	864	657	115	5,861
Silver Equivalent	(g/t)	21.8	23.1	23.0	21.8	22.9	22.2	22.6	22.3	22.3	22.7	23.4	22.4
Silver	(g/t)	20.4	21.8	21.8	20.3	21.4	20.2	21.6	21.1	21.5	22.0	22.6	21.2
Gold	(g/t)	0.025	0.024	0.022	0.028	0.028	0.037	0.018	0.022	0.016	0.014	0.015	0.023
Total Tonnes and Waste:													
El Gallo Mill Ore	(kt)	58	182	365	365	365	1,460	1,460	1,460	1,460	1,460	218	8,853
El Gallo Potential Leach Ore	(kt)	110	162	215	270	339	1,149	995	985	864	657	115	5,861
El Gallo Low Grade	(kt)	38	69	3	68	89	242	166	0	0	0	0	675
Total El Gallo Ore	(kt)	206	413	583	703	793	2,851	2,621	2,445	2,324	2,117	333	15,389
El Gallo Total Ktonnes	(kt)	1,331	905	1,141	1,400	1,675	6,700	6,700	6,700	5,252	3,767	528	36,099
El Gallo Waste Ktonnes	(kt)	1,125	492	558	697	882	3,849	4,079	4,255	2,928	1,650	195	20,710
El Gallo Waste to Ore Ratio (w/o Leach)	(none)	12.86	2.61	2.10	2.23	2.69	2.94	3.12	3.59	2.60	1.58	1.42	2.79
Palmarito In-Situ Ore	(kt)					10	327	365	365	365	266	131	1,829
Palmarito Historic Dump Ore	(kt)		36	55	55	55	14						215
Palmarito Historic Tails Ore	(kt)		25	36	36	26	24						147
Palmarito Total Ore	(kt)		61	91	91	91	365	365	365	365	266	131	2,191
Palmarito In-situ Total Ktonnes	(kt)					50	795	1,049	1,009	1,185	1,134	596	5,818
Palmarito Historic Dump Total Ktonnes	(kt)		36	55	55	67	19						231
Palmarito Historic Tails Total Ktonnes	(kt)		25	36	36	26	24						147
Palmarito Total Ktonnes	(kt)		61	91	91	143	838	1,049	1,009	1,185	1,134	596	6,196
Palmarito Waste Ktonnes	(kt)		0	0	0	52	473	684	644	820	868	465	4,006
Palmarito Waste to Ore Ratio	(none)		0.00	0.00	0.00	0.57	1.30	1.87	1.76	2.25	3.26	3.55	1.83
Total Ore (Excluding Leach)	(kt)	96	312	459	524	545	2,067	1,991	1,825	1,825	1,726	349	11,719
Total Material	(kt)	1,331	966	1,232	1,491	1,818	7,538	7,749	7,709	6,437	4,901	1,124	42,295
Total Waste	(kt)	1,235	654	773	967	1,273	5,471	5,758	5,884	4,612	3,175	775	30,577
Waste:Ore Ratio (Leach as Waste)	(kt)	12.86	2.10	1.68	1.85	2.33	2.65	2.89	3.22	2.53	1.84	2.22	2.61
Stockpile Rehandle	(kt)		58								99	576	733

Table 16-6: Mill Production Schedule

MILL PRODUCTION SCHEDULE:	Units	PP	Yr1 Q1	Yr1 Q2	Yr1 Q3	Yr1 Q4	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	TOTAL
Ore Ktonnes	(kt)		301	456	456	456	1,825	1,825	1,825	1,825	1,825	925	11,719
Silver Equivalent	(g/t)		120.6	162.6	148.4	121.5	126.5	121.5	92.5	100.6	100.5	52.6	108.4
Silver	(g/t)		113.9	158.1	143.4	117.8	113.4	113.6	86.0	94.4	95.5	47.8	101.3
Gold	(g/t)		0.136	0.089	0.100	0.070	0.248	0.123	0.106	0.099	0.085	0.078	0.123
From El Gallo:													
Ore Ktonnes	(kt)		240	365	365	365	1,460	1,460	1,460	1,460	1,460	218	8,853
Silver Equivalent	(g/t)		98.9	154.7	140.2	105.9	115.8	106.1	86.0	90.1	99.0	62.0	102.7
Silver	(g/t)		94.2	152.2	136.8	104.5	104.7	104.2	83.7	88.1	96.6	61.1	99.0
Gold	(g/t)		0.099	0.051	0.071	0.030	0.233	0.040	0.049	0.042	0.050	0.018	0.078
From Palmarito In-situ:													
Ore Ktonnes	(kt)					10	327	365	365	365	266	131	1,829
Silver Equivalent	(g/t)					219.7	169.4	182.9	118.4	142.8	132.9	106.5	147.1
Silver	(g/t)					200.6	147.0	151.1	95.0	119.8	112.1	82.2	122.6
Gold	(g/t)					0.273	0.320	0.455	0.334	0.328	0.297	0.346	0.350
From Palmarito Historic Dumps:													
Ore Ktonnes	(kt)		36	55	55	55	13.5						214.5
Silver Equivalent	(g/t)		229.3	210.4	196.0	181.9	152.4						198.9
Silver	(g/t)		207.7	193.2	182.6	169.4	144.9						183.8
Gold	(g/t)		0.426	0.338	0.264	0.248	0.146						0.298
From Palmarito Historic Tails:													
Ore Ktonnes	(kt)		25	36	36	26	24						147
Silver Equivalent	(g/t)		172.9	170.0	159.2	174.2	178.2						169.9
Silver	(g/t)		167.6	164.2	149.9	163.1	164.9						161.2
Gold	(g/t)		0.082	0.089	0.143	0.171	0.205						0.135
From Low Grade Stockpile:													
Ore Ktonnes	(kt)										99	576	675
Silver Equivalent	(g/t)										35.3	36.8	36.6
Silver	(g/t)										34.1	34.9	34.8
Gold	(g/t)										0.024	0.040	0.037

16.4 WASTE ROCK AND STOCKPILE STORAGE AREAS

16.4.1 El Gallo Waste Rock and Stockpile Storage

Several waste rock storage areas and stockpiles were designed to manage El Gallo waste and low grade materials. Figure 16-3 shows these various facilities at the end of open pit operations. Waste storage facilities are as follows:

- The Southeast waste storage facility contains 13.7 million tonnes of waste and is active most of the project life.
- The phase 5 pit is mined during the first two quarters of Year 1 and backfilled to original contour the last two quarters of Year 1.
- During Years 4, 5, and 7 about 5.1 million tonnes of waste are placed into the west side of the main pit (phase 1 and 2 areas) as backfill.
- Also during the mine life about 1.4 million tonnes of waste is used as construction material, mostly in the tailings embankment.

Two stockpiles were also designed:

- Potential leach material is stored in a stockpile northeast of the pit. This amounts to 5.9 million tonnes.
- A low grade mill ore stockpile north of the pit was designed to hold about 675,000 tonnes. This stockpile is reclaimed, and the ore processed through the mill, at the end of mining.

The southeast waste storage facility and leach stockpile are designed in 15m lifts at angle of repose with a set-back between lifts so the overall slope angle is at 2.5H:1V. This is amenable to long term stability and reclamation.

The low grade mill stockpile is designed in 5m lifts at angle of repose; this is not a permanent facility.

16.4.2 Palmarito Waste Rock Storage Areas

Mine waste is stored in two facilities for Palmarito. Figure 16-4 shows the facilities at the end of mining:

- The main waste storage facility is east of the main pit. At the end of mining it contains 3.5 million tonnes of waste.
- During Year 7 about 465,000 tonnes of waste from mining phase 3 will be placed in the phase 2 pit as backfill.

The east waste storage facility is designed in 15m lifts at angle of repose with a set-back between lifts so the overall slope angle is at 3H:1V. This is amenable to long term stability and reclamation.

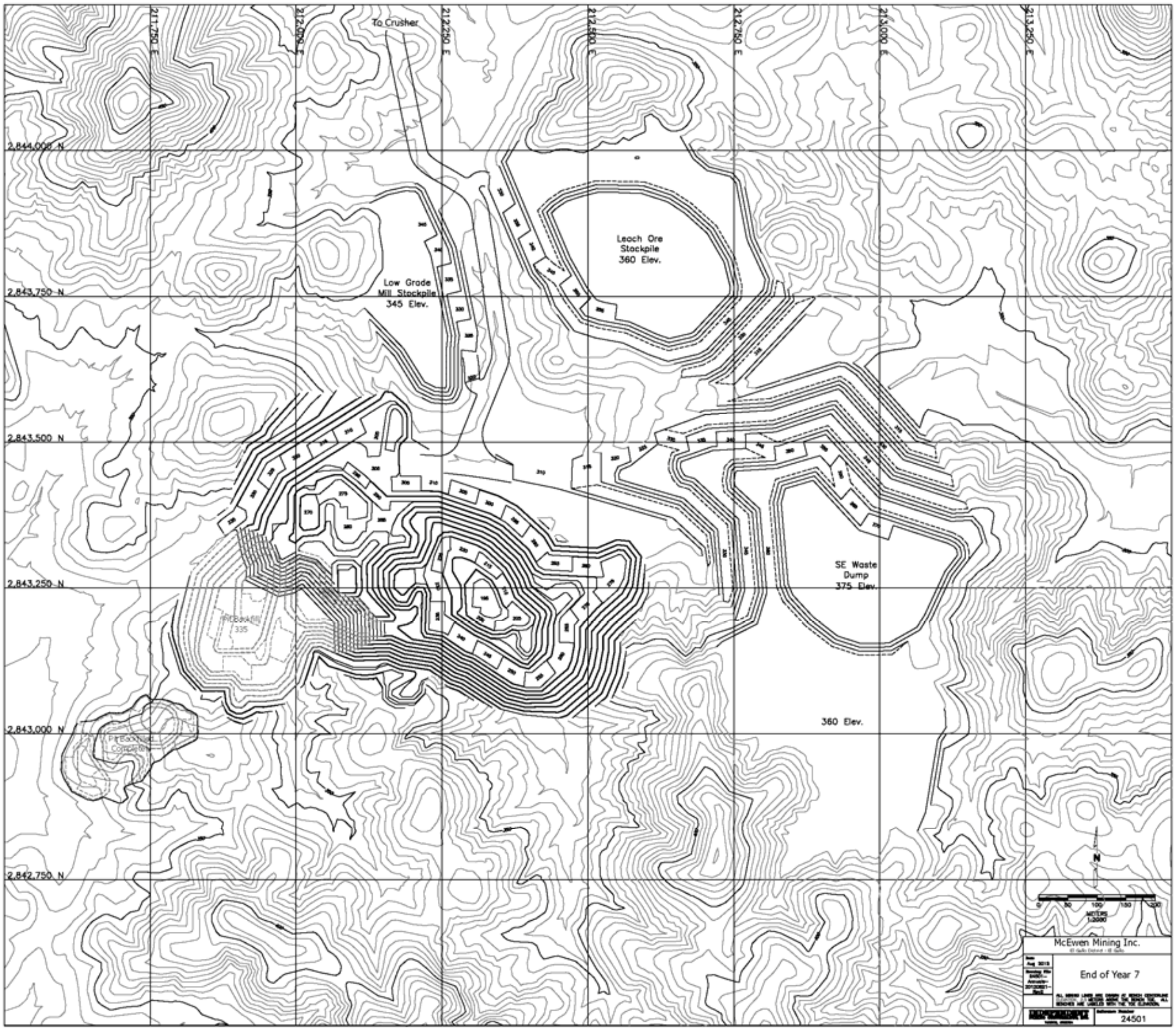


Figure 16-3: El Gallo Waste and Stockpile Areas

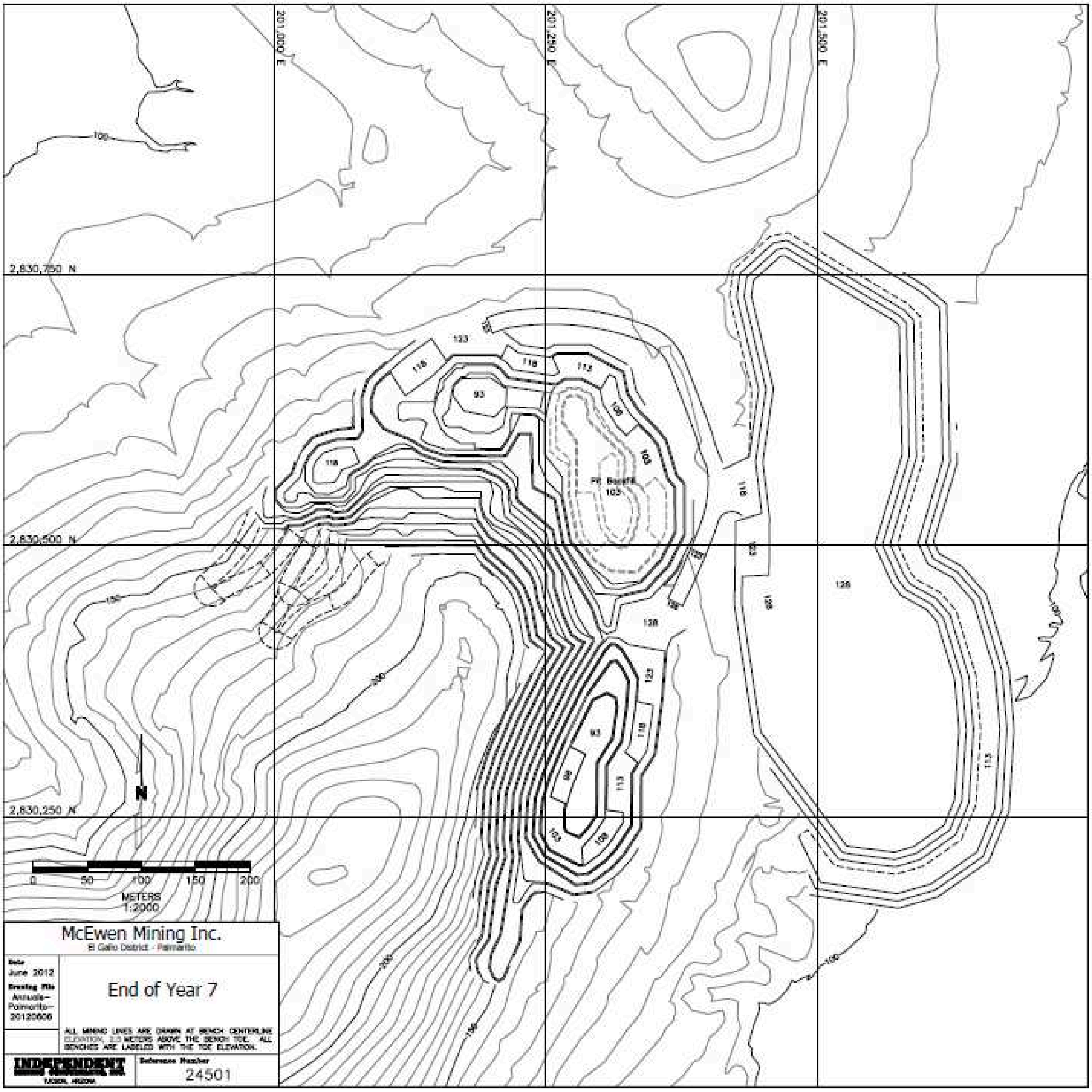


Figure 16-4: Palmarito Waste Storage Areas

16.5 MINING EQUIPMENT

16.5.1 El Gallo Mining Equipment

Mine major equipment requirements for the El Gallo mine were sized and estimated on a first principles basis based on the mine production schedule, the mine work schedule, and estimated equipment productivity rates. The work schedule is based on two 10-hour shifts per day for 350 days per year. The mine equipment estimate is based on owner operation and assumes a well-managed mining operation with a well-trained labor pool, and that all the equipment is new at the start of mining.

Table 16-7 shows major equipment requirements by time period for El Gallo.

Table 16-7: Mine Major Equipment Fleet Requirement – El Gallo

	Capacity/	Time Period											
Equipment Type	Power	PP	Y1Q1	Y1Q2	Y1Q3	Y1Q4	2	3	4	5	6	7	8
Caterpillar MD6240 Drill	(210 mm)	1	1	2	2	2	2	2	2	2	1	1	0
Cat 992K Wheel Loader	(10.7 cu m)	1	1	1	1	2	2	2	2	1	1	1	0
Cat 777F Truck	(90 mt)	2	2	3	3	4	4	4	4	4	3	2	0
Cat D9T Track Dozer	(306 kw)	3	3	3	3	3	3	3	3	3	3	2	0
Cat 824H Wheel Dozer	(264 kw)	1	1	1	1	1	1	1	1	1	1	1	0
Cat 14M Motor Grader	(193 kw)	1	1	1	1	1	1	1	1	1	1	1	0
Water Truck - 8,000 gal	(30,000 l)	1	1	1	1	1	1	1	1	1	1	1	0
Cat 321D Excavator	(1.7 cum)	1	1	1	1	1	1	1	1	1	1	1	0
Atlas Copco ECM 590RC Drill	(102 mm)	1	1	1	1	1	1	1	1	1	1	0	0
TOTAL		12	12	14	14	16	16	16	16	15	13	10	0

16.5.2 Palmarito Mining Equipment

Mine major equipment requirements for the Palmarito mine were sized and estimated on a first principles basis based on the mine production schedule, the mine work schedule, and estimated equipment productivity rates. The work schedule is based on two 10-hour shifts per day for 250 days per year (5 days per week). Ore will be hauled to the El Gallo mill by a contractor since this will be over public roads. Other than ore haulage, the mine equipment estimate is based on owner operation and assumes a well-managed mining operation with a well-trained labor pool, and that all the equipment is new at the start of mining.

Table 16-8 shows major equipment requirements by time period for Palmarito.

Table 16-8: Mine Major Equipment Fleet Requirement - Palmarito

	Capacity/	Time Period											
Equipment Type	Power	PP	Y1Q1	Y1Q2	Y1Q3	Y1Q4	2	3	4	5	6	7	8
Atlas Copco ECM 720 Drill	(121 mm)	0	0	0	0	1	1	1	1	1	1	1	0
Komatsu PC2000 Hyd Shovel	(11 cu m)	0	0	0	0	0	0	0	0	0	0	0	0
Cat 988H Wheel Loader	(6.1 cu m)	0	1	1	1	1	1	1	1	1	1	1	0
Cat 770 Truck	(36 mt)	0	0	0	0	1	1	1	1	2	2	2	0
Cat D8T Track Dozer	(231 kw)	0	1	1	1	1	1	1	1	1	1	1	0
Cat 824H Wheel Dozer	(264 kw)	0	1	1	1	1	1	1	1	1	1	1	0
Cat 12M Motor Grader	(118 kw)	0	1	1	1	1	1	1	1	1	1	1	0
Water Truck - 5,000 gal	(19,000 l)	0	1	1	1	1	1	1	1	1	1	1	0
Cat 321D Excavator	(1.7 cum)	0	0	0	0	1	1	1	1	1	1	1	0
TOTAL		0	5	5	5	8	8	8	8	9	9	9	0

Only two mining trucks are required since ore haulage is by contractor over public roads. The mining trucks will be used for waste and site development activities. There is also only one loader and drill in the equipment list. It is assumed if either is down for repair for a prolonged period of time a replacement unit will be brought from El Gallo or Magistral.

This represents the equipment required to perform the following duties:

- Developing access roads from the mine to the crusher and waste dumps,
- Mining and transporting ore to the crusher,
- Mining and transporting potential leach material to the leach stockpile,
- Mining and transporting waste to the various waste storage facilities,
- Maintaining the haul roads and dumps.

The equipment list does not include equipment required for construction or operation of the plant and tailings facilities other than delivering some waste material to a location near the tailings facility to use in construction.

17 RECOVERY METHODS

The following items summarize the process operations required to extract silver and gold from the El Gallo and Palmarito materials.

- Reducing the ore size from run-of-mine (ROM) to minus 166 mm (6.5 inches) by the primary jaw crusher.
- Screening and crushing the primary crusher product in a secondary crusher to 40 mm (1.5 inches).
- Screening and crushing the secondary crusher product in a tertiary crusher to 10 mm (3/8 inches).
- Stockpiling crushed material in the mill ore stockpile (also called fine ore stockpile) and then reclaiming by feeders and conveyor belt.
- Grinding the material in a ball mill circuit prior to processing in a leach circuit. The ball mill will operate in closed circuit with hydrocyclones to produce the desired grinding product size of 80% passing 200 mesh (74 microns).
- Leaching the material in air-sparged agitated leach tanks operating at 1000 ppm sodium cyanide and 33% solids for 144 hours. After leaching the slurry is sent to the Counter Current Decantation thickeners.
- Thickening and washing the leach residue to recover the dissolved silver and gold in four counter current decantation (CCD) thickeners. The thickener overflow is sent to the Merrill-Crowe process for recovery of precious metals. The thickener underflow is sent to the cyanide recovery thickener.
- Thickening and washing the leach tail stream in the cyanide recovery thickener underflow with process water to recover cyanide.
- Detoxifying the residual cyanide in the leached tail stream using sulfur and oxygen, with copper sulfate as a catalyst.
- Filtering the detoxified leach tailing and then transporting and storing it in an impoundment area. Recovering the detoxified filtrate and recycling it to the process.
- Recovering precious metals as a precipitate in the Merrill-Crowe process.
- Mixing Merrill-Crowe precipitate with fluxes and melting the mixture to produce silver-gold doré bars, which are the final product of the ore processing facility.
- Water from the filters will be recycled for reuse in the process. Plant water stream types include: process water, fresh water, and potable water.

- Storing, preparing and distributing the reagents to be used in the process. Reagents which require storage and distribution include: sodium cyanide, caustic soda, lime, flocculant, diatomaceous earth, zinc powder, copper sulfate, sodium metabisulfite, antiscalant and flux.

The overall process flow sheet is shown in Figure 17-1.

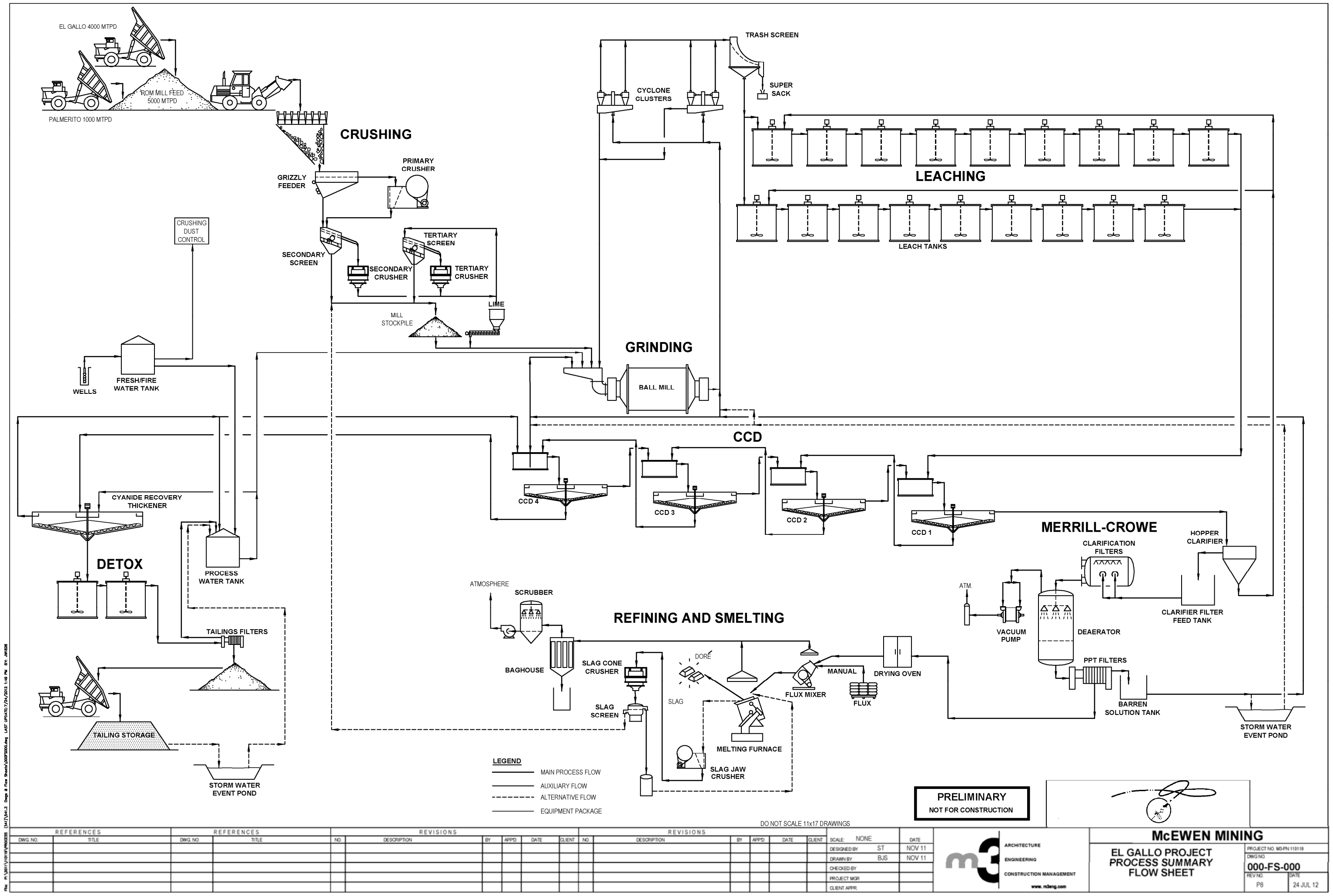


Figure 17-1: El Gallo Project Process Summary Flow Sheet

18 PROJECT INFRASTRUCTURE

18.1 SITE LOCATION

McEwen Mining Inc. (McEwen) El Gallo Complex is located in north-western Mexico, in Sinaloa state, Mocorito Municipality. The property is located approximately 60 miles (100 kilometers) by air northwest of the Sinaloa state capital city of Cuilican in the western foothills of the Sierra Madre Occidental mountain range. The concession area is located approximately 20 miles (32 kilometers) by road from the village of Mocorito, approximately 30 miles (48.5 kilometers) from the town of Guamuchil. The approximate co-ordinates for the center of the district are longitude 25°38′and latitude 107°51′W.

The topography of the general area is moderate to steep. The elevation in the El Gallo Project area ranges from 300 to 350 meters above mean sea level.

The process facilities are located north of the ore body and north of the roads to Mocorito. The process facilities and mine site are shown on Figure 18-1 and Figure 18-2 at the end of this section.

18.2 PROCESS BUILDINGS AND AREA

The equipment and machinery are housed in several buildings and structures on the site. The process buildings house the filtering, silver recovery and refining equipment. Open structures support crushing, grinding, and leaching equipment.

Run-of-mine ore is delivered by truck and loader to an open-walled multi-story structure measuring 20-meters tall, 11-meters wide and 19-meters long, containing the feed bin, primary crusher, primary discharge feeder and the secondary screen feed conveyor and a control room. After primary crushing, the ore is conveyed to a another multi-story open-walled structure measuring 20-meters tall, 31-meters wide and 28 meters long housing the secondary and tertiary crushers and screens.

After crushing the fine ore is stockpiled on a flat concrete pad measuring 41-meters in diameter. Ore is passes through the floor of the stockpile through two drawholes onto the fine ore reclaim belt feeders and conveyor. The conveyor moves the ore through a tunnel to the grinding area.

The grinding operation occurs in an open structure that supports the ball mill, cyclone and pumps. The 38 by 16 meter open structure and equipment sit on a concrete slab with containment walls. Next to the ball mill there is a two story 11 by 10 meter enclosed building which houses for the control room, change-house facilities, and offices. The electrical equipment motor control center is located in a building nearby.

Following grinding, the ore is pumped to the leach tanks. The leach tanks are located outdoors. The leach tanks are supported on an open-steel structure and built on a 194 by 42-meter concrete pad with containment walls.

After leaching the ore is pumped to the CCD thickeners, cyanide recovery thickener and cyanide destruction tanks. The thickeners and tanks are located outdoors and rest on concrete pads surrounded by containment walls. The CCD concrete pad measures 126 by 31.5 meters. The cyanide recovery thickener and cyanide destruction tanks sit on an irregularly shaped pad approximately 39 by 54 meters in size.

After cyanide destruction, the ore is pumped to the filter building. The building has a roof and open walls and it contains filters and conveyors. The filter building is 20 meters tall and covers an area of 27.5 by 34.5 meters.

The leach solution containing precious metals is pumped from the CCD thickeners to the Merrill-Crowe area. The precipitation portion of the plant is in located outdoors on concrete pads with an approximate area of 37 by 63 meters. The refinery is an enclosed building with a security system. It is 11 meters high and approximately 29 by 24 meters.

18.3 ANCILLARY BUILDINGS

Ancillary buildings necessary to support the El Gallo project include a building with warehouse / maintenance / medical facilities, an analytical laboratory, a mine truck shop, a change house, a main gatehouse with truck scale and fuel storage and dispensing facilities. The general administration functions will be conducted at the recently constructed Magistral administration building.

18.3.1 Warehouse / Plant Maintenance Building / Medical Facility.

A newly constructed two story building covers 594 square meters. It will provide warehousing, mill maintenance and first aid services. The lower floor will be partitioned to provide 198 square meter for the warehouse, 198 square meters for the mill mechanical maintenance, and 25 square meters for electrical / instrumentation and a two room for first aid facility. Maintenance offices are located on the mezzanine floor. The building is of steel construction with corrugated roofing and siding. Metal shelves will be provided in the warehouse.

18.3.2 Analytical Laboratory

A newly constructed 256 square meter laboratory will provide analytical services for the plant. The facilities will be furnished with sample preparation equipment, wet chemistry and analytical instrumentation, ventilation and offices. The building is of steel construction with corrugated roofing and siding. The newly refurbished laboratory at Magistral will provide fire assaying and other services for the mine.

18.3.3 Mine Truck Shop

A newly constructed mine truck shop will provide maintenance services for the mine haul trucks. The enclosed building has a 365 square meter area for vehicle maintenance and a 216 square meter area for the warehouse and offices. The building is of steel construction with corrugated roofing and siding. Tire changing and truck washing are performed in a covered 235 square meter open-sided structure.

18.3.4 Change House

A new change house facility will be provided. The change house occupies 56 square meters of the first level of the grinding area control building.

18.3.5 Main Gatehouse at South Entrance

A new modular building will be provided at the main gate to control access to the process facilities. The building is approximately 13 square meters. A truck scale is provided at the main plant entrance to weigh all receipts of reagents and silver production.

18.3.6 Fuel Storage and Dispensing Facilities

Fuel storage and dispensing facilities will be provided for mine trucks and in-plant vehicles. One 20,000 gallon tank will be provided to service the mine trucks and mining equipment. One 10,000 gallon storage tank will be provided to service small trucks and gasoline powered equipment. Fuel will be received by tank trucks from a nearby source.

18.4 ACCESS ROADS

Road access to the site is for 255 miles from Culiacan to Guamuchil along Highway 15D, then 11 miles to Mocorito along paved roads, then 15 miles north to the El Gallo Project site. Some of the roads connecting Palmarito, Mocorito and El Gallo are being paved and widened. Sonora-Mexico Federal Highway 15 is part of the CANAMEX Corridor linking Canada to Mexico through the United States of America.

18.5 RAIL ROAD FACILITIES

The mine site does not require rail services. The Ferrocarril Chihuahua al Pacifico (Chihuahua-Pacific Railway) known as El Chepe (CHP) connects Sinaloa with the rest of Mexico and key cities in the United States of America.

18.6 POWER SUPPLY AND DISTRIBUTION

Electrical power will be supplied from the Comision Federal de Electicacidad (CFE) power grid. A 115 KV transmission line will run for 7.5 km from the grid to the main substation on the property. CFE has confirmed power availability.

18.7 WATER SUPPLY AND DISTRIBUTION

A hydrological study was conducted by Investigacion y Desarrollo de Acuiferos y Ambiente (IDEAS) based out of Hermosillo, Mexico. The project currently has three constructed wells that yield approximately 10 lps all located within 2 km of the process facilities. McEwen is currently in the process of completing two additional water wells to make up the remaining water balance.

The total water entering/leaving the process is 70 cubic meters per hour (311 gpm). During the dry months of October to June, the fresh water wells will supply all of the make-up water totaling 59.1 cubic meters per hour (260 gpm). During the rainy season of July to September, the water from the storm ponds will supplement fresh water consumption and reduce the demand from the wells to 7.7 cubic meters per hour (33.7 gpm).

Fresh water from the site will be pumped from the wells and stored in a 1,100 cubic meter (300,000 gallon) fire/fresh water tank. The lower 454 cubic meters of the tank are reserved for the fire water system. The upper portion of the tank is available for the potable water system, mine dust control, and make-up water for the process water tank.

18.8 WASTE MANAGEMENT

It is assumed that a private landfill will be provided on the property for non-hazardous solid waste. This facility will not accept any off-site wastes and will be used primarily for construction debris, non-putrescible materials and waste from maintenance and operations meeting the definition of inert or non-hazardous materials; such as air filters, gloves, boxes, non-recyclable packaging materials, hoses, piping, etc.

Recyclable materials that are non-hazardous, such as scrap metal, paper, used oil, batteries, wood products, etc., will be collected in suitable containers and disposed of through recyclers.

Hazardous materials such as contaminated greases, chemicals, paint, reagents, etc. will be collected, shipped off-site for destruction or disposal. Some hazardous materials may also be recycled through appropriate recyclers.

18.9 SURFACE WATER CONTROL

The plant site has zero discharge.

Rainfall that contacts the plant roads and areas without containment walls is collected in the storm-water event pond and returned to the process.

Seepage and runoff from the tailing storage area is collected and pumped to the storm water pond. The pond is large enough to contain runoff from a 100-year, 24-hour storm event. The water in the pond will supplement the fresh water required by the plant.

18.10 TRANSPORTATION AND SHIPPING

Sinaloa state has three international airports: Mazatlan, Culiacan, and Los Mochis. There are 16,335 kilometers (10,146) miles of roads. Culiacan has a highly developed highway network, including a four-lane highway direct to the United States. The railroad network links Sinaloa with the rest of Mexico. There are 1,234 kilometers (766 miles) of railway. There are major ports at Mazatlan and Topolobampo.

18.11 COMMUNICATIONS

It is assumed that the telecommunications system will be integrated with the onsite data network system utilizing a voice over I/P (VoIP) phone system. A dedicated server will be provided for setup and maintenance of the VoIP system and for accounting of all phone calls. Handsets will plug into any network connection in the system for telecommunications. The Office Ethernet network will support accounting, payroll, maintenance and other servers as well as individual user computers. High bandwidth routers and switches will be used to logically segment the system and provide the ability to monitor and control traffic over the network.

A process control system Ethernet network will support the screen, historian and alarm servers connected to the control room computers as well as Programmable Logic Controllers (PLC). This system will incorporate redundancy and a gateway between the office system and control system to allow business accounting systems to retrieve production data from the control system. No phone or compute will be connected to this system.

Internal communications within the plant will utilize the same VoIP phone system, which will provide direct dial to other phones throughout the plant site, Mobile radios and cell phones will also be used by operating and maintenance personnel for daily communications while outside the office.

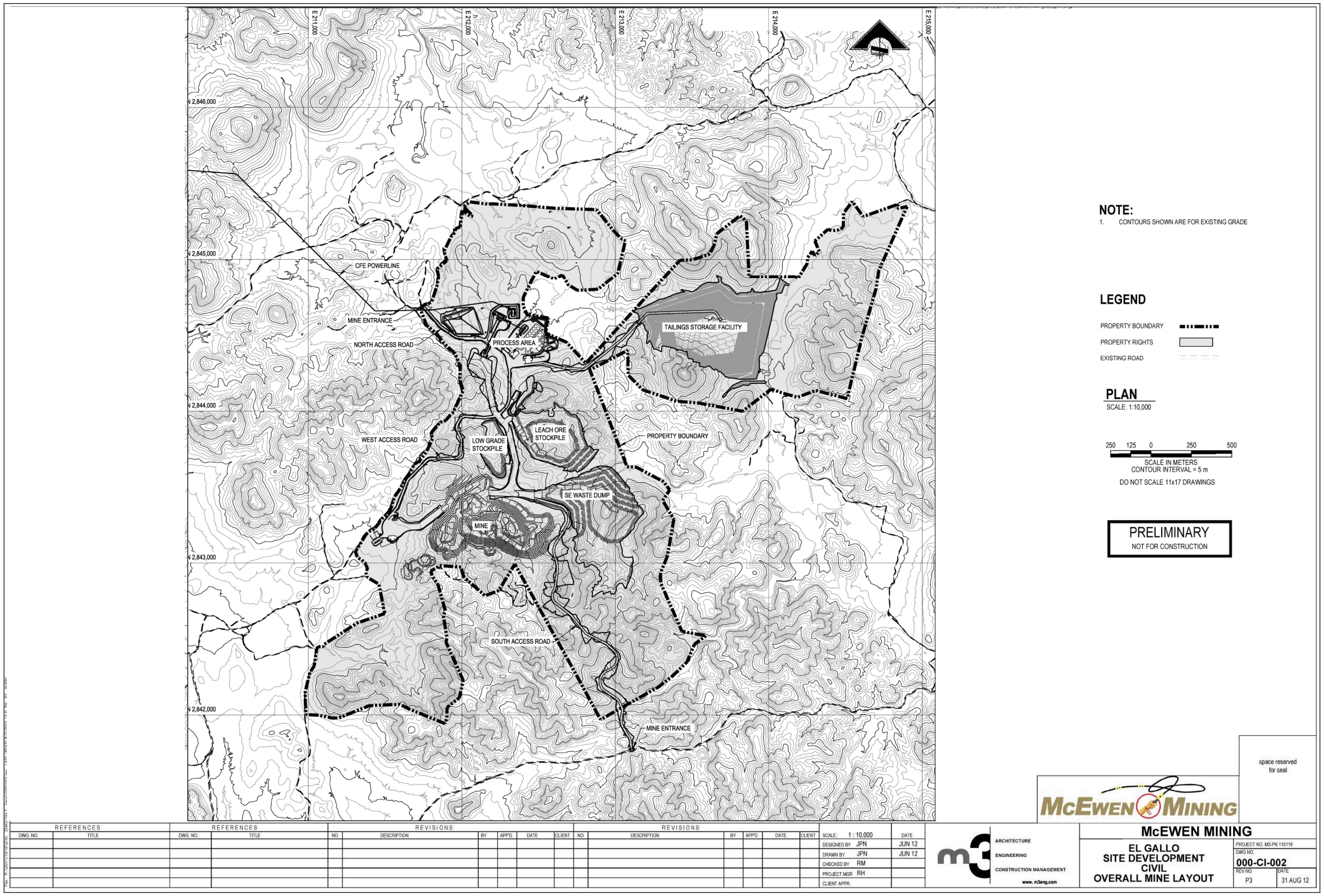


Figure 18-1: El Gallo Site Development Civil Overall Mine Layout

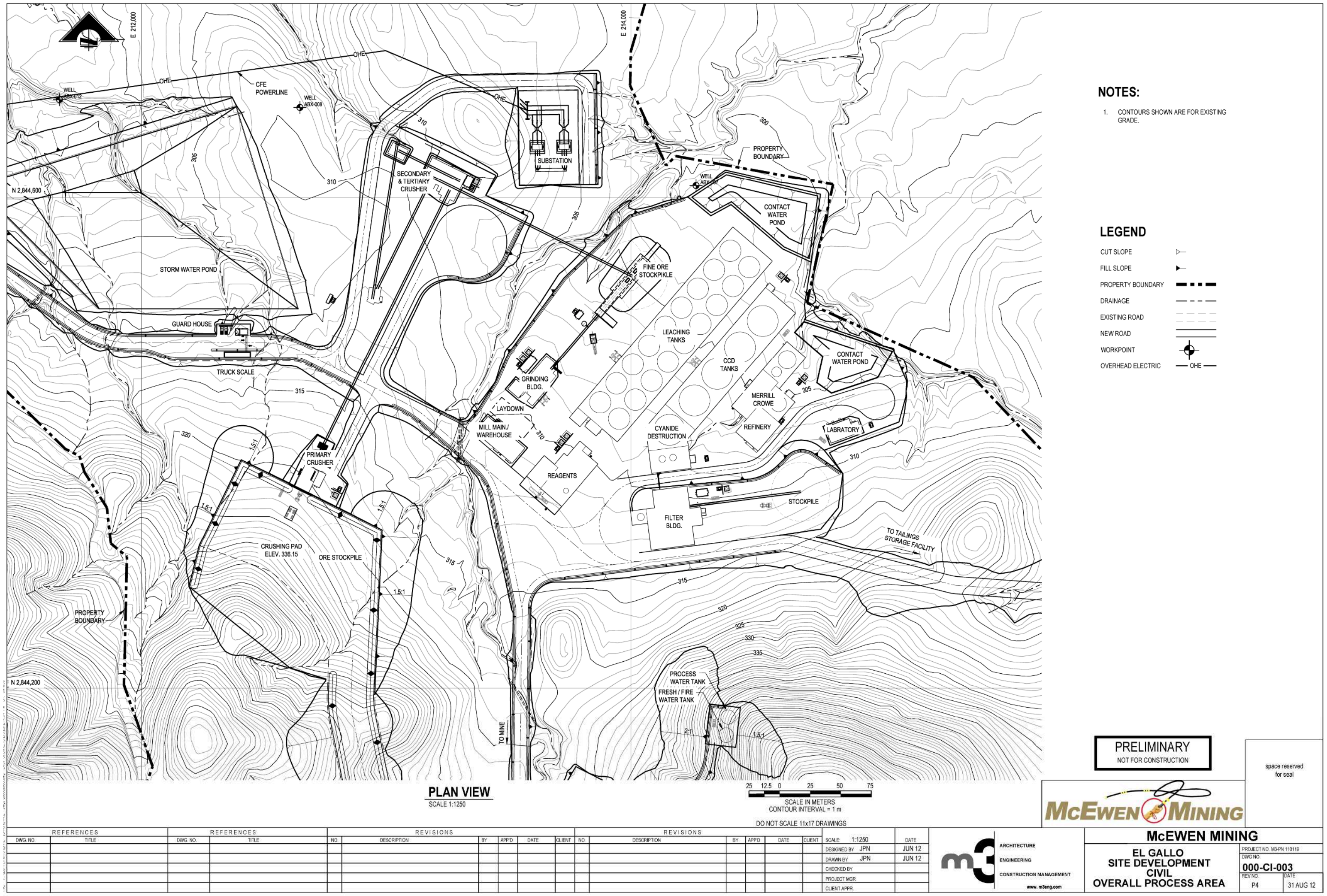


Figure 18-2: El Gallo Site Development Civil Overall Process Area

19 MARKET STUDIES AND CONTRACTS

The primary economic product of the El Gallo and Palmarito deposits will be doré consisting of silver and gold. There is a well-developed, mature market for doré throughout the world at favorable refining rates. The entrance of new producers to the global silver and gold market does not materially impact metal prices.

McEwen is currently planning to ship gold and silver doré from its Magistral mine in Mexico to Johnson Matthey in Brampton, Ontario. It is expected that the doré product from El Gallo and Palmarito deposits will also be shipped to Johnson Matthey in Salt Lake City, Utah. Based on meetings between McEwen and Johnson Matthey, McEwen can expect to receive 99.50% per financial model and 99.70% per financial model of the silver and gold revenues payable. Additional charges such as shipping and insurance total $0.50 per financial model per ounce silver and $17.00 per ounce gold. There are no current contracts in place regarding sale of the doré product.

20 ENVIRONMENTAL STUDIES, PERMITTING AND SOCIAL OR COMMUNITY IMPACT

20.1 GENERAL DESCRIPTION OF ENVIRONMENTAL CONSIDERATIONS

The El Gallo project is located in a rural area of Sinaloa state in an agricultural area that has a low population density. Potential environmental impacts to surface soils, water, the ecology and air quality will be mitigated as part of the mining operations. The mining operations will comply with Mexican environmental regulations. The environmental setting and the proposed environmental monitoring plans are discussed below.

The area of the proposed El Gallo mine is characterized by moderate to steep topography with elevations ranging from 1,000 to 1,500 ft (300 to 450 m). It is located in the "Pie de la Sierra" physiographic province, near the boundary with the "Llanura Costera y Deltas de Sonora y Sinaloa" province. During most of the year, the area experiences arid to semi-arid climatic conditions, with almost all of the approximately 825 millimeters of annual precipitation coming from storm events during July to September.

The proposed mine site is not located within any areas designated by the regulatory agency or government for environmental protection, and all related mining work is considered as an acceptable risk to the environment due to the environmental controls that will be in place. Appropriate controls measures have been studied and will be implemented to maintain environmental system integrity for all flora and fauna species identified at the site.

Landscape has been affected initially by clearing and grubbing, road construction activities, and by construction of mining facilities. Ultimately, permanent impacts will be the mine open pit, waste dumps, and material placed in the tailings facility, all of which will remain at the end of the mine life. The effects of mining are irreversible, although through planned restoration and reforestation methods, some effects will be improved.

20.1.1 Soils

SRK Consulting (U.S.) Inc. (SRK) completed a geotechnical site investigation (August 29, 2011) to support the feasibility-level design for locating a tailings storage facility and waste rock disposal areas for the El Gallo Project: *Geotechnical Site Characterization Report: El Gallo Feasibility Study*. Report objectives included: 1) obtain and analyze onsite soil lithology characteristics; 2) identify depths to bedrock and groundwater table and 3) identify and quantify onsite available construction material. All stated objectives were satisfied.

Soils at the site are residual soils developed from the in situ weathering of andesite or volcanic sediment host rock. The predominate soil types are high-plasticity clays and clayey sands. Sampled soil borrow material exhibits low permeability characteristics suitable for compacted clay liner construction material.

In order to avoid adverse effects to the surface during mining, a series of prevention and mitigation measures will be implemented including spill prevention, proper waste collection and disposal, and routine equipment maintenance. Surface water quality will be monitored throughout the mine life for impacts from mine operations that could impact the surficial or shallow subsurface soils.

20.1.2 Surface Hydrology

During most of the year, the area experiences arid to semi-arid climatic conditions, with almost all of the approximately 825 millimeters of annual precipitation coming from storm events during July to September. The Sinaloa River is the main hydrological water resource in the area. The two principal creek tributaries are Corralejo and El Palmar. The hydrometeorological balance shows a potential infiltration of 2.21 hm3/year.

Surface preservation and mitigation measures planned will include secondary containment areas where chemical substances or process solutions are handled, implementation of a hazardous and nonhazardous waste handling program, monitoring of surface water quality, and storm water diversions around disturbed areas where required.

20.1.3 Subsurface Hydrology

There is an existing unconfined aquifer located near the project boundary with functioning wells (approx. depth 8-17 meters), however, insufficient for mine operations. Water extraction around El Gallo (15 km radius) is done from 28 different sources estimated at 605m3 per year. Ground water quality will be monitored throughout mine life by monitor wells located upgradient and downgradient of the major process and waste facilities. The project area is enclosed by the Mocorito hydrologic basin.

20.1.4 Vegetation

The moderately dense vegetation on the hill slopes consists of bushes and shrubs with widely-spaced deciduous trees averaging approximately 12-15 meters in height. Much of the flat area in the region is used for agriculture.

Based on from the field surveys and samples collection, the area has 97 perennial species dominated by the arboretum with 40 species; followed by shrubs with 34 species; and 23 herbaceous and climbing species.

20.1.5 Fauna

An independent regional survey found 139 species of fauna in the project area, none of which will have an impact on planned operations in the area.

20.1.6 Other Baseline Collection

In addition to various biological baseline collections, noise, air quality, and an archeological investigation were completed. This information is mandatory and must be included into the three major permits required for construction and operation to begin. No artifacts or other historical sites were found during the archeological investigation and all necessary background information regarding noise and air quality was accurately collected.

20.2 WASTE MANAGEMENT, SITE MONITORING AND WATER

20.2.1 Waste Management

Waste generated during development and mining operations will be handled according to the provisions of the General Law for Prevention and Integrated Waste Management (Ley General para la Prevencion y Gestion Integral de los Residuos, last revised May 3, 2012). Proper waste management practices will be implemented onsite through various disposal techniques to prevent any soil or water contamination in full compliance with NOM-052-SEMARNAT-2003, NOM-053-SEMARNAT-1995, and NOM-054-SEMARNAT-1995. Solid waste material will be placed into onsite containers and transported offsite to designated recycling or waste facilities.

Testing of waste rock by ALS Chemex, Monterey, Mexico, per the specifications of NOM-157-SEMARNAT-2003 confirmed that the site waste material overall is not acid generating. Isolated and insignificant quantities of waste material exceeded regulatory limits; however, the waste material will be mitigated through proper disposal techniques.

Noise and other pollutants caused by emissions from operating machinery will be mitigated. All machinery will be subject to routine maintenance services to ensure optimal operating performance. Additionally, the use of noise-protection equipment will be employed where possible.

Reagent and fuel storage areas will be built in compliance set forth in various Mexico regulations. Waterproof buildings will be constructed and have protection levees capable of catching entire storage volume in case of spill or severe leak.

20.2.2 Monitoring Requirements

Mexican laws require that mandatory monitoring programs are implemented under the Environmental Protection Agency SEMARNAT. For El Gallo, the following monitoring programs have been established by SEMARNAT for the life of mine (Table 20-1).

Table 20-1: Established Monitoring Programs for El Gallo

Action	Criteria/Variables to Consider	Applicable Norms	Monitoring Point	Frequency
Groundwater quality monitoring	Parameters stated by applicable norm	NOM-127-SSA1-1994 Compared with baseline	Monitoring wells	Quarterly
Surface water quality monitoring	In accordance with quality criteria which depend on the use of receiving body of water	NOM-001-SEMARNAT - 1996	Several monitoring sites, sampling during wet & dry season	Biannual
Creek sediment quality monitoring	Total metals (As, Cu, Ni, Cd, Pb, Au, Ag, Se, Hg, Cr)	Baseline conditions	Various sediment sampling	Annual
Air quality monitoring	SO_2, SO_3, H_2SO_4 fog particles	NOM-039-SEMARNAT-1993 NOM-043-SEMARNAT-1993	Various locations	Annual (COA)
Perimetral noise	Decibels	NOM-081-SEMARNAT-1994	Project boundaries	Annual
Fauna registry	Species and amount	Compensation commitment	All project areas	Annual
Flora species rescue records and nursery plant production	% of survival, amount and type of plants produced	Compensation/restoration commitment	Replanting and safeguard areas	Annual
Soil	Collection and safeguard of organic soils Application of remediation techniques on polluted soils. Erosion control works	Compensation commitment	Soil safeguard areas. Remediation sites. Roads and banks	Annual
Cleared surface and restores/reforested registry	Surface (hectares)	Compensation/restoration commitment		Biannual or when needed

20.3 PROJECT PERMITTING REQUIREMENTS AND STATUS

20.3.1 Permitting Requirements

There are a number of permitting requirements that must be satisfied before construction and operations can commence. Most mining regulations in Mexico are promulgated at the federal level, however several permits are subject to state and local jurisdiction. Authority concerning water and its supply, and its effects is handled by the CNA (National Water Commission).

Three main permits required before construction are Environmental Impact Statement (MIA, per the abbreviation in Spanish), Land Use Change (ETJ), and Risk Analysis (RA). A construction permit is required from the local municipality and an archaeological release letter from the National Institute of Anthropology and History (INAH). An explosives permit is required from the ministry of defense before construction can begin. Key permits and the stage at which the permit is required are summarized below in Table 20-2.

Table 20-2: Permitting Requirements

Key Environmental Permits		
Permit	**Mining Stage**	**Agency**
Environmental Impact Statement – MIA	Construction/Operation/Post-operation	SEMARNAT
Land Use Change – ETJ	Construction/Operation	SEMARNAT
Risk Analysis – RA	Construction/Operation	SEMARNAT
Construction Permit	Construction	Municipality
Explosive & Storage Permits	Construction/Operation	SEDENA
Archaeological Release	Construction	INAH
Water Use Concession	Construction/Operation	CNA
Water Discharge Permit	Operation	CNA
Unique License	Operation	SEMARNAT
Accident Prevention Plan	Operation	SEMARNAT

Environmental Impact Statement (MIA) – Regulations within Mexico require that a MIA (Manifesto de Impacto Ambiental) be prepared by a third-party contractor and submitted to SEMARNAT. The MIA must include a detailed analysis of climate, air quality, water, soil, vegetation, wildlife, cultural resources, and socio-economic impacts.

Risk Analysis (RA) – A second required permit is the Risk Analysis. This study identifies potential environmental releases of hazardous substances and evaluates the risks in order to establish methods to prevent, respond to, and control environmental emergencies.

Land Use Change (ETJ) – The third permit required is a Change of Land Use (Cambio de Uso de Suelo) based upon a technical study (Estudio Técnico Justificativo, or ETJ). In Mexico, all land has a designated use. The project area is comprised of different uses such as cattle grazing, agriculture, and forestland. The ETJ is the formal instrument for modifying specific land designations to allow mining on these areas. The ETJ is based on the Forestry Law and its regulations. It requires that an evaluation be made of the existing conditions of the land, including a plant and wild life study (sourced from the MIA & specific to the ETJ study), an evaluation of the current and proposed use of the land, impacts to naturally occurring resources, and an evaluation of reclamation/re-vegetation plans.

The El Gallo Project is in the process of obtaining its environmental permits. Some permits applications are pending application, as shown in Table 20-3. Agreements with all potentially impacted landowners are required and complete for the El Gallo Project.

Table 20-3: Permit Status and Estimated Response Time

REQUIRED PERMIT	MINING STAGE	AGENCY	ESTIMATED RESPONSE TIME	ACTUAL STATUS (August 27, 2012)
Environmental Impact Statement - mine	Construction/operation /post operation	SEMARNAT- Federal Offices Mexico DF	60-120 work days	Complete by Nov. 1, 2012
Land use change study - mine	Construction/operation	SEMARNAT- DGGFS-Federal offices	60-120 work days	Complete by Nov. 1, 2012
Risk analysis study - mine	Construction/operation	SEMARNAT (Mexico City office)	60-120 work days	Complete by Nov. 1, 2012
Environmental Impact Manifest – power line	Construction/operation /post operation	SEMARNAT – State offices	60-120 work days	Complete by Nov. 1, 2012
Land use change study – power line	Construction/operation	SEMARNAT - DGGFS – Federal offices	60-120 work days	Complete by Nov. 1, 2012
Land use license	Construction	Mocorito municipality	2 months	Complete by Nov. 1, 2012
Explosive handling and store permits	Construction/operation	SEDENA (Also requires state and local approvals)	4 months	Application to be submitted when final design is complete. Environmental Impact authorization required.
Archaeological release letter	Construction	INAH (State offices)	3 to 4 months	The mine authorization is in place but not so for the power line. Still pending
Water use concession title	Construction/operation	CNA (State offices)	60 working days	Pending well completion
Water discharge permit	Operation	CNA (State offices)	60 working days	Application to be submitted when final design is complete
Operation license	Operation	SEMARNAT – State offices	70 working days	Not required for construction and start-up, application will be submitted once mine is in operation
Accident prevention plan	Operation	SEMARNAT – State offices	3 months	Not required for construction and start-up, application will be submitted once mine is in operation.

20.4 RECLAMATION AND CLOSURE

20.4.1 Overview

In accordance with the general work schedule of the El Gallo Project, should no additional mineralization be found, abandonment phase will begin in year seven. In compliance with permitting regulations, McEwen Mining Inc. will prepare a detailed Closure and Reclamation Plan that will be concurrently developed during the operation phase and completed during the abandonment phase.

Conditions of the final closure plan will depend on land use once mining is complete. It is expected that site land will be used in one or more of the following ways after operations:

- Natural habitat for wild flora and fauna.
- Livestock activities.
- Tourist and or recreational activities.

The closure strategy involves returning the mine site and affected areas to viable and, wherever practicable, self-sustaining ecosystems that are compatible with a healthy environment and human activities. Key activities of closure will be decommissioning equipment and waste management; demolition of physical structures and management of infrastructure; characterization and mitigation of contaminated soils; regrading and contouring to allow for stormwater drainage; and revegetation of disturbed land. Typical guidelines for closure and reclamation for specific facilities are as follows:

20.4.2 Open Pit

Pit banks must be structurally stable and barriers will be constructed around the parameter of the pit for safety. Proper signs will be installed warning of risky areas while driving throughout pit area. Relevant restoration activities will be detouring or channeling water towards pit, and reclaiming or proper grading of access roads for proper cultivation promoting native flora growth.

20.4.3 Dry Stack Tailings Facility

The tailings facility will be re-sloped and contoured to achieve a more natural looking slope and to provide for surface water drainage. The design of the tailings facility will minimize leachate due to the low permeability liner. No additional measures will be required to protect groundwater from leachate. Surface water diversions will be placed around the tailings impoundment to minimize erosion and to reduce infiltration into the tailings. The top of the tailings impoundment will be covered with a low permeability cover, plus either a soil or rock cover and revegetated. The side slopes will be covered with a soil layer and rock armor.

20.4.4 Waste Rock Dumps

Acid base accounting (ABA) testing results show that waste rock will not generate acid mine drainage and thus, is not considered hazardous waste. No special treatment or isolation during closure will be required.

Waste rock dumps will be smoothed and graded to prevent ponding. Current designs have mitigated any potential for blocking drainage waterways; however, earthworks will be done should this become a problem. Final waste dumps will be covered with topsoil and planted with native seeds where possible.

20.4.5 Process Plant and Other Related Facilities

All plant and related facilities will be dismantled or demolished. All useful major equipment and material will be salvaged and sold to third parties. Foundations will be removed and excavated areas will be filled with native topsoil to restore naturally slopping topography where feasible.

20.4.6 Roads

Several roads will remain to access the property for closure and environmental monitoring procedures. Internal roads will be leveled and graded to facilitate plant and other vegetation growth. Topsoil will be applied along with proper seeding and cultivation techniques.

20.4.7 Environmental Monitoring

Surface water and groundwater quality will be monitored after closure for evidence of environmental impacts through annual sampling events. Physical inspections will be conducted to monitor the physical stability of remaining facilities and the condition of the closure covers and revegetation. It is anticipated that physical inspections will take place quarterly and after significant storm events.

Environmental monitoring will be conducted for 20 years post mine operation or until non-hazardous conditions are achieved for any discharge from the remaining facilities and the groundwater and surface water quality meets applicable regulatory standards. Monitoring records will be maintained at El Gallo.

20.4.8 Community Impact

McEwen hired a third party consultant to complete a social baseline study throughout the El Gallo Project and surrounding villages that included 28 separate communities over three different municipalities. Information was gathered from 973 houses (3,650 inhabitants) over a 30-day period. The goal of this report was to determine socioeconomic characteristics of the population; to assess the perceptions and views of the residents regarding mining and the company; and to evaluate/quantify a potential workforce. These objectives were completed.

Community feedback highlights include the following:

- Mine operation will promote community development.
- Local population is enthusiastic for increased employment opportunities.
- Increased water availability from locally drilled wells is a major benefit.

20.4.9 Reclamation and Closure

An allowance of $4.073 million for the final cost of reclamation and closure of the property has been included in the cash flow projection; continual concurrent reclamation is done throughout the life of the mine. Refer to Section 21.1.4, Reclamation Costs.

21 CAPITAL AND OPERATING COSTS

21.1 INITIAL CAPITAL COSTS

21.1.1 General

The Capital cost for the El Gallo Phase II Project is based on a process facility at El Gallo consisting of crushers, a ball mill, agitated cyanide leach tanks with counter current decant thickeners, and a Merrill-Crowe facility to produce a final doré product. Feed for the facility will come from open pit mines at El Gallo and Palmarito with additional material consisting of historic waste dumps and tailings at Palmarito.

Mine capital and operating costs were provided by Independent Mining Consultants (IMC) for both the El Gallo and Palmarito properties. The mine operation in each location is based on a contract mining approach; therefore, there are no initial capital costs incurred for mining. Mine pre-production costs for each mining location were estimated by IMC at $6.6 million for El Gallo and $157,000 for Palmarito. The pre-production costs are carried as line items in the financial model and therefore, are not included with the initial capital costs for the process facilities.

The initial capital cost for the process facility was estimated by M3 Engineering & Technology Corporation to be approximately $178 million, based on third quarter 2012 US Dollars and is considered to be at a ± 15% level of accuracy. Actual costs could, therefore, range from 15% above the estimate amount to 15% below the estimate amount. The estimate accuracy is separate from contingency; which accounts for costs that are expected to be incurred, but which cannot be quantified with the level of information available at this time. No allowances have been provided for escalation, interest, hedging, or financing during construction. Taxes and IVA (value added tax) have not been included.

The construction labor rate was based on recent in-house labor rates for similar projects in Mexico. Budget quotes were obtained for major equipment and materials from vendors in the US and Mexico. Indirect capital costs were developed from the direct field costs based on in-house factors. Indirect field mobilization costs were based on 0.5% of the total direct cost, temporary construction facilities at 0.5% of the total direct cost, and construction utilities at 0.1% of the total direct cost. Transportation is included to bus construction workers from Guamuchil to El Gallo at $0.375 per hour worked, as provided by McEwen Mining.

Engineering, Procurement, and Construction Management (EPCM) is based on an in-house factor of 15.75% of the total direct cost.

Other indirect costs include supervision of specialty construction at 1.0% of plant equipment, contractor commissioning and field representatives during construction at 0.6% of plant equipment, long led capital spare parts at 2% of plant equipment cost and commissioning spares at 0.5% of plant equipment costs. Owner's costs were provided by McEwen. Initial fills of reagents and lubricants were determined by M3 based on 10 day consumption rates and included in the Owner's cost.

The summary of the initial capital cost estimate is shown in Table 21-1 below.

Table 21-1: Initial Capital Cost

	Direct Field Cost	$000
000	Site General	$3,867
100	Primary/Secondary/Tertiary Crushing	$15,686
200	Intermediate Ore Storage	$3,435
300	Grinding	$12,836
450	Agitated Leaching and CCD Thickening	$28,552
500	Merrill-Crowe	$9,688
520	Smelting and Refining	$4,168
600	Tailing Thickening, Cyanide Detox, Filtration, & Stockpile	$20,195
650	Water systems	$4,765
700	Main Substation	$5,335
750	Power Transmission Line	$3,046
800	Reagents	$3,570
900	Ancillary Facilities	$2,632
	Material & Equipment Freight	$8,590
	Sub-Total Direct Field Cost	**$126,365**
	Indirect Field Costs	
	Mobilization, Temporary Facilities, Construction Utilities	$1,856
	Engineering, Procurement & Construction Management	$19,903
	Commissioning & Spares	$2,345
	Owner's Cost	$8,766
	Contingency	$18,813
	Sub-Total Indirect Capital Cost	**$51,683**
	Total Initial Capital	**$178,048**

21.1.2 Scope of Facilities

The scope of facilities is described below by area and represents the basis for the area direct capital costs noted in Table 21-1.

21.1.2.1 Site General (Area 000)

This area consists of facilities that cross multiple areas of the plant and includes overall site excavation, access roads, in-plant roads, fencing, site storm water diversions, and the storm water ponds for the tailing storm water runoff and the process area storm water event pond. Also included is the fiber optic plant backbone system, software licenses and instrumentation programming for the plant. A plant mobile maintenance crane is also included.

21.1.2.2 Mine (Area 050)

This area includes the mine pit, haul roads, and mining equipment. The mine is based on a contract mining approach and will, therefore, not require capital for mining equipment. The mine pre-production cost is not included in the initial capital cost estimate, but is included in the financial model. The mine truck shop, truck wash facilities, and mine maintenance facilities are included in Area 900 with the ancillary facilities.

21.1.2.3 Mine Waste Stockpiles

This area consists of the mine waste stockpiles. There is no capital expenses in this area. The clearing and site preparation of the stockpile area is included in the mine pre-production cost.

21.1.2.4 Primary /Secondary / Tertiary Crushing (Area 100)

This area consists of the primary, secondary and tertiary crushing facilities and associated equipment; including the crushers, grizzly feeder, vibrating screens, and interconnecting conveyors. The area starts at the feed hopper to the primary crusher and ends at the discharge of the fine ore stockpile conveyor.

21.1.2.5 Intermediate Fine Ore Stockpile (Area 200)

This area includes the intermediate fine ore stockpile between the crushers and the mill. The conveyor feeding the stockpile is in Area 100; however, the stockpile, reclaim feeders, and conveyors feeding the mill are in Area 200. Also included in Area 200 is the lime storage silo and feeding system for lime to the mill.

21.1.2.6 Grinding (Area 300)

This area consists of the grinding mill, cyclone clusters, and trash screens. The ball loading system at the ball mill feed conveyor is also included in Area 300. This area also includes a mill control room and offices.

21.1.2.7 Agitated Leach and CCD Thickening (Area 450)

This area consists of the agitated leach tanks and the CCD thickeners and associated equipment.

21.1.2.8 Merrill-Crowe (Area 500)

This area consists of the Merrill-Crowe facility and includes the hopper clarifier, clarification filters, deaerator, precipitate filters and barren solution tank. In the event the downstream facilities cannot receive the barren solution, it will be diverted to the process area storm water event pond in Area 000.

21.1.2.9 Smelting and Refining (Area 520)

This area consists of the drying ovens, mercury retorts, and refining and smelting equipment to produce the final Dore product.

21.1.2.10 Tailing Detox, Filtering and Stockpile (Area 600)

This area consists of the cyanide recovery thickeners, detoxification tanks, tailing filters and conveyors to an intermediate tailing stockpile. From the intermediate tailing stockpile, the tailing will be transferred to the final storage facility by truck. Transfer of the tailing from the intermediate stockpile to the final impoundment area will contracted, therefore, no equipment for loading and hauling is included in the estimate.

21.1.2.11 Water Systems (Area 650)

The water systems consist of fresh water storage and distribution, fire water storage and distribution, potable water storage and distribution, and process water storage and distribution. Specialty fire systems (sprinklers in buildings) are included in the area with the associated building.

21.1.2.12 Electrical Substation (Area 700)

This area consists of the main electrical substation and electrical distribution from the main substation to the electrical equipment rooms in the various areas of the plant. The distribution from the area electrical equipment rooms (MCCs) to the area process equipment is included in the individual areas of the plant.

21.1.2.13 Power Transmission Line (Area 750)

This area includes the overhead high voltage transmission line from the connection to a local grid to the main substation at the property. Also included are any modifications or new equipment required at the connection to the CFE main line.

21.1.2.14 Reagents (Area 800)

This area consists of the receiving, storage and distribution of the reagents used in the mill and leaching circuits.

21.1.2.15 Ancillary Facilities (Area 900)

The ancillary facilities include support facilities to the process plant. Included are the maintenance / warehouse building, analytical laboratory, mine truck shop with truck wash facilities, a guard shack, mine fuel storage and distribution, and light vehicle fuel storage and distribution. The explosive and cap magazines are being provided by the explosives vendor or contractor.

21.1.3 Sustaining Capital

Since the life of mine is relatively short, the sustaining capital cost will be minimal and consist only of the cost for the exterior armoring of the dry stack tailing stockpile each lift during the life of the mine. There will be six (6) lifts during the life of the mine, as shown in the sustaining capital cost Table 21-2 below.

Table 21-2: Sustaining Capital

Exterior Armoring of Dry Stack Tailing Stockpile		
Raise	Year	Cost
1	1.5	$1,416,000
2	3.0	$164,000
3	4.2	$161,000
4	5.2	$144,000
5	6.2	$122,000
6	7.1	$67,500
		$2,074,500

21.1.4 Reclamation Cost

Reclamation costs were provided by McEwen Mining and include the dismantling of all buildings and equipment and removal from site. Above ground concrete will be demolished and removed from site or buried on site. Below ground concrete will remain and will be covered. Lined ponds will be drained and the lining removed. Any leaks detected in the ground will be remediated before back filling the ponds. The liners can be folded over and buried in the pond. The pits at both El Gallo and Palmarito will have perimeter berms constructed to divert surface water from the pits and perimeter fencing installed. Flat surfaces in the pits will be scarified, re-vegetated and seeded. The dry stack tailing area and mine waste dumps will be graded to a 3:1 side slope and top soil added. The slopes will then be re-vegetated, and seeded.

A monitoring program is also included in the reclamation cost which consists of surface runoff monitoring and assaying, ground water monitoring and assaying and re-vegetation monitoring. The pits will be monitored for condition of pit water, pit slope stability, and safety berms and fences. The process area will be monitored quarterly for 2 years and the pits, mine waste dumps and dry stack tailing will be monitored quarterly for 5 years.

The reclamation estimate is $4.07 million as shown in Table 21-3 below.

Table 21-3: Reclamation Cost Estimate

Open Pits	$138,225
Dry Stack Tailing Stockpile	$895,620
Waste Dumps	$1,071,053
Process Plant Area	$80,000
Crushing Plant	$80,000
Ancillary Facilities	$80,000
Monitoring & Consulting	$208,000
Final Permit Study Cost	$20,000
Change of Land Use	$1,500,000
	$4,072,898

21.2 OPERATING COSTS

21.2.1 Mine Operating Costs

The mine operating costs provided by IMC are based on a contract mining approach. The mine operating costs for drilling, loading, hauling, and roads and dumps are based on contractor quotes. Blasting cost is based on the explosives vendor supplying the product and loading the holes. Engineering and geology labor is based on an assumed staffing plan and the cost of engineering and geology supplies is based on 40% of the labor cost.

IMC included an allowance of 5% of the annual contractor cost for owner requested work the contractor does not consider in his scope of work. This will either be billed by the hour or the contractor will prepare specific quotes for any special work. This item is specific to the mine operation and does not include work done in support of the process plant or tailing impoundment area.

The average life of mine operating cost for the El Gallo mine operation is $7.15 / tonne of ore ($1.92 / tonne of total material mined) and $8.51 / tonne of ore ($3.01 / ton of total material mined) for the Palmarito mine operation. The average annual life of mine operating cost for El Gallo and Palmarito is summarized in Table 21-4 below.

Table 21-4: Average Annual Life of Mine Operating Cost

	El Gallo		Palmarito		Total	
	LOM Cost	Unit Cost	LOM Cost	Unit Cost	LOM Cost	Unit Cost
Blasting	$11,474	$1.20	$2,076	$0.95	$13,550	$1.16
Drilling	$7,997	$0.84	$1,342	$0.61	$9,339	$0.80
Loading	$11,147	$1.17	$1,946	$0.89	$13,093	$1.12
Hauling	$26,678	$2.80	$10,161	$4.64	$36,839	$3.14
Roads & Dumps	$6,674	$0.70	$1,237	$0.56	$7,911	$0.68
Owner Requests	$2,624	$0.28	$734	$0.34	$3,358	$0.29
Contractor Loan Repayment	($1,798)	($0.19)	$0	$0.00	($1,798)	($0.15)
Engineering & Geology	$3,302	$0.35	$1,148	$0.52	$4,450	$0.38
	$68,098	$7.15	$18,644	$8.51	$86,742	$7.40
Processd Ore Tonnes	9,528		2,191		11,719	

21.2.2 Process Plant Operating Costs

The process plant operating costs were developed by M3 Engineering & Technology Corporation. The cost centers include the crushing and fine ore stockpile, grinding mill, agitated leach and CCD thickeners, Merrill-Crowe and refining, tailings detox and disposal, and ancillary services. The operating costs are further distributed by the cost elements of labor, electrical power, reagents, grinding media and wear parts, maintenance parts and services, and supplies and services.

The life of mine total operating costs and cost per tonne of ore processed ore are summarized below in Table 21-5 and 21-6 for the process areas and cost elements.

Table 21-5: Operating Cost by Process Area

By Process Area	LOM Operating Cost ($000)	$/Tonne Ore Processed
Crushing & Fine Ore Stockpile	$17,384	$1.48
Grinding	$60,529	$5.17
Agitated Leach & CCD Thickeners	$93,249	$7.96
Merrill-Crowe and Refinery	$22,343	$1.91
Tailings Detox, filtering & Stockpile	$49,161	$4.20
Ancillary Services	$7,729	$0.66
	$250,396	$21.37

Table 21-6: Operating Cost by Cost Element

By Cost Code	LOM Operating Cost ($000)	$/tonne Ore Processed
Manpower	$12,911	$1.10
Power	$52,151	$4.45
Reagents	$112,687	$9.62
Grinding Media & Wear Parts	$31,540	$2.69
Maintenance Parts & Services	$20,358	$1.74
Supplies & Services	$20,749	$1.77
	$250,396	$21.37

On an average annual cost basis, the labor cost for the process plant is $1.84 million based on a staffing plan of 117 operating and maintenance personnel. The staffing plan consists of 21 supervisory and technical personnel, 72 operators, and 24 maintenance personnel. The average wage rate across all positions is approximately $15,764 per year plus 30% for fringe benefits.

The average annual power cost is $7.4 million and is based on a total power consumption of 8,950 kWh at a cost of power of $0.10 / kWh.

The typical annual reagent cost is $17.55 million, which is based on the reagent consumption rate and unit cost noted on Table 21-7 below.

Table 21-7: Reagent Consumption and Cost (typical year)

Average Annual Ore Tonnes 1,825,000	Consumption kg/t Ore	Unit Rate $/ Kg	Total Consumption kg/year	Annual Cost
Leaching				
Lime	4.380	$0.16	7,993,500	$1,254,980
Sodium Cyanide	1.520	$3.58	2,774,000	$9,930,920
Flocculant	0.020	$3.83	36,500	$139,795
Caustic Soda	0.020	$1.38	37,048	$51,126
Tailings & Detox				
Lime	2.390	$0.16	4,361,750	$684,795
Copper Sulfate	0.240	$4.16	438,000	$1,822,080
Sodium Metabisulfite	0.580	$1.38	1,058,500	$1,460,730
Flocculant	0.020	$3.83	36,500	$139,795
Merrill Crowe & Refinery				
Zinc Dust	0.091	$5.13	166,075	$851,965
Diatomaceous Earth	0.050	$0.96	91,250	$87,600
Fluxes	0.724	$0.84	1,321,300	$1,107,975
Ancilliary				
Antiscalent	0.003	$3.23	5,475	$17,684
Total Reagents				$17,549,444

21.2.3 General and Administrative Cost

The average annual life of mine General and Administrative (G&A) cost for the facility is $25.3 million or $2.16 per tonne of ore processed. The G&A labor is the largest component at $11.76 million per year. The G&A labor staffing is based on 22 people in the first 3 years of operation, increasing to 45 people in year 4 through 7. In the early years, some G&A functions are shared with the Magistral operation. After year 3, El Gallo will pick up all the G&A costs. Allowances are provided for non-labor components of the G&A expenses; including office supplies, fuels, communications, small vehicle maintenance, claims assessments, legal and auditing, insurance, travel, meals and expenses, and janitorial services. The breakdown of G&A costs and labor detail are shown in Table 21-7 G&A Cost Summary, Table 21-8 G & A Labor Summary (Years 1-3) and Table 21-9 G & A Labor Summary (Years 4-7).

Table 21-8: General & Administrative Cost Summary

Total Life of Mine G&A Cost	Annual Cost $	$/tonne ore Processed
Labor & Fringes	$11,764,610	$1.00
Accounting (excluding labor)	$84,000	$0.01
Safety/Environmental (excluding labor)	$84,000	$0.01
Human Resources (excluding labor)	$84,000	$0.01
Security (excluding labor)	$70,000	$0.01
Janitorial Services (contract)	$350,000	$0.03
Office Operating Supplies and Postage	$350,000	$0.03
Maintenance Supplies	$70,000	$0.01
Maintenance Labor, Fringes, and Allocations	$98,000	$0.01
Propane	$35,000	$0.00
Communications/Computers	$700,000	$0.06
Licenses, Fees, and Vehicle Taxes	$105,000	$0.01
Claims Assessment	$34,440	$0.00
Consultants, Legal, Environmental, Audits	$1,400,000	$0.12
Insurances	$2,527,658	$0.22
Subs, Dues, PR, and Donations	$4,200,000	$0.36
Light Vehicles	$1,400,000	$0.12
Camp Services	$0	$0.00
Travel, Lodging, and Meals	$975,000	$0.08
Training	$975,000	$0.08
Total General & Administrative Cost	$25,306,708	$2.16

Table 21-9: General & Administrative Labor Summary (Years 1-3)

	No. of Personnel	Total Annual Direct Salary	Benefits 30%	Total Annual Salary
General Manager	0		$0	$0
Assistant Genral Manager	1	$110,600	$33,180	$143,780
Administration Assistant	1	$10,500	$3,150	$13,650
Receptionist	1	$7,500	$2,250	$9,750
Accounting Manager	0		$0	$0
Senior Accountant	1	$70,000	$21,000	$91,000
IT Technician	1	$35,000	$10,500	$45,500
Payroll Clerk	1	$9,600	$2,880	$12,480
Accounts Clerk	1	$7,500	$2,250	$9,750
			$0	
Purchasing Manager	1	$96,200	$28,860	$125,060
Purchasing Agent	1	$60,000	$18,000	$78,000
Warehouseman	4	$9,600	$2,880	$49,920
Administration Assistant	0		$0	$0
HR Manager	0		$0	$0
Administration Assistant	0		$0	$0
Community Relation Manager	1	$85,000	$25,500	$110,500
Community Relation Assistant	1	$35,000	$10,500	$45,500
Safety Manager	0		$0	$0
Safety Trainer	1	$60,000	$18,000	$78,000
Doctor	0		$0	$0
Nurse	2	$35,000	$10,500	$91,000
Environmental Manger	0		$0	$0
Environmental Engineer	1	$60,000	$18,000	$78,000
Environmental Technician	2	$35,000	$10,500	$91,000
Security Manager	1	$96,200	$28,860	$125,060
Security Officer - contracted	0		$0	$0
Janitor/Laundry	0		$0	$0
	22	$822,700	$246,810	$1,197,950

Table 21-9 General & Administrative Labor Summary (Years 4-7)

	No. of Personnel	Total Annual Direct Salary	Benefits 30%	Total Annual Salary
General Manager	1	$130,000	$39,000	$169,000
Assistant Genral Manager	1	$110,600	$33,180	$143,780
Administration Assistant	1	$10,500	$3,150	$13,650
Receptionist	1	$7,500	$2,250	$9,750
Accounting Manager	1	$96,200	$28,860	$125,060
Senior Accountant	1	$70,000	$21,000	$91,000
IT Technician	1	$35,000	$10,500	$45,500
Payroll Clerk	1	$9,600	$2,880	$12,480
Accounts Clerk	1	$7,500	$2,250	$9,750
Purchasing Manager	1	$96,200	$28,860	$125,060
Purchasing Agent	1	$60,000	$18,000	$78,000
Warehouseman	4	$9,600	$2,880	$49,920
Administration Assistant	1	$7,500	$2,250	$9,750
HR Manager	1	$96,200	$28,860	$125,060
Administration Assistant	1	$7,500	$2,250	$9,750
Community Relation Manager	1	$85,000	$25,500	$110,500
Community Relation Assistant	1	$35,000	$10,500	$45,500
Safety Manager	1	$96,200	$28,860	$125,060
Safety Trainer	1	$60,000	$18,000	$78,000
Doctor	0		$0	$0
Nurse	2	$35,000	$10,500	$91,000
Environmental Manger	1	$96,200	$28,860	$125,060
Environmental Engineer	1	$60,000	$18,000	$78,000
Environmental Technician	2	$35,000	$10,500	$91,000
Security Manager	1	$96,200	$28,860	$125,060
Security Officer - contracted	16	$7,500	$2,250	$156,000
Janitor/Laundry	0	$5,900	$1,770	$0
	45	$1,365,900	$409,770	$2,042,690

22 ECONOMIC ANALYSIS

22.1 INTRODUCTION

The financial evaluation presents the determination of the Net Present Value (NPV), payback period (time in years to recapture the initial capital investment), and the Internal Rate of Return (IRR) for the project. Annual cash flow projections were estimated over the life of the mine based on the estimates of capital expenditures and production cost and sales revenue. The sales revenue is based on the production of a gold/silver doré. The estimates of capital expenditures and site production costs have been developed specifically for this project and have been presented in earlier sections of this report.

22.2 MINE PRODUCTION STATISTICS

Mine production is reported as ore and overburden from the mining operation. The annual production figures were obtained from El Gallo and the Palmarito mine plans.

The life of mine ore quantities and ore grades are presented in the Table 22-1.

Table 22-1: Life of Mine Ore, Waste Quantities, and Ore Grade with Sulfide Ore

	El Gallo Mill Ore	El Gallo Low Grade Ore	Palmarito Mill Ore	Palmarito Historic Dumps	Palmarito Historic Tails
Ore Tonnes (k)	8,853	675	1,829	215	147
Gold (g/t)	0.08	0.04	0.35	0.30	0.14
Silver (g/t)	99.00	34.78	122.59	183.77	161.19
Waste Tonnes (k)	26,571		4,006		
Total Tonnes (k)	35,424	675	5,835	215	147

22.3 PROCESS PLANT PRODUCTION STATISTICS

The ore will be crushed and then leached and the metal bearing solution will be processed in a Merrill Crowe plant to produce a silver/gold doré. Table 22-2 shows the average life of mine gold and silver recoveries.

Table 22-2: Gold and Silver Recoveries

	El Gallo Ore	Palmarito Ore	Total
Gold	79.2%	87.2%	83.2%
Silver	87.6%	74.1%	84.3%

Table 22-3 shows the estimated life of mine metal production:

Table 22-3: Life of Mine Gold and Silver Production

	El Gallo Ore	Palmarito Ore	Total
Gold (kozs)	18	20	38
Silver (kozs)	25,336	6,844	32,180

22.4 CAPITAL EXPENDITURE

22.4.1 Initial Capital

The financial indicators have been determined with 100% equity financing of the initial capital. Any acquisition cost or expenditures prior to start of the full project period have been treated as "sunk" cost and have not been included in the analysis.

The total initial capital carried in the financial model for new construction is expended over a three year period. The initial capital includes Owner's costs and contingency. The cash flow will be expended in the years before production and a small amount carried over into the first production year.

Table 22-4: Initial Capital

	Initial Capital ($000)
Mine (preproduction)	$6,769
Process Plant	$169,282
Owner's Cost	$8,766
Total Initial Capital	$184,817

22.4.2 Sustaining Capital

Approximately $2.1 million is shown as sustaining capital being expended in years 1 - 6 for the dry stack tailings facility.

22.4.3 Working Capital

A 15 day delay of receipt of revenue from sales is used for accounts receivables. A delay of payment for accounts payable of 30 days is also incorporated into the financial model. In addition, working capital allowance of $3.0 million for plant consumable inventory is estimated in year -1 and year 1. All the working capital is recaptured at the end of the mine life and the final value of these accounts is $0.

22.4.4 Salvage Value

An allowance of $5.7 million has been made for salvage value of the capital equipment for this analysis based on 10% of the capital cost of equipment.

22.4.5 Revenue

Annual revenue is determined by applying estimated gold and silver prices to the annual payable metal estimated for each operating year. These prices have been applied to all life of mine production without escalation or hedging. The revenue is the gross value of payable metals sold before refining charges and transportation charges. The gold and silver sale prices used in the evaluation is as follows:

Table 22-5: Gold and Silver Prices

Gold ($/oz)	$1,415.00
Silver ($/oz)	$25.00

22.5 SHIPPING AND REFINING

The gold and silver doré will be shipped to a precious metal refinery and the refining charges are negotiable at the time of agreement. Table 22-6 shows the terms that are included in the financial analysis:

Table 22-6: Doré Refining Terms

Payable Gold	99.7%
Payable Silver	99.5 %
Gold Refining ($/oz.)	$17.00
Silver Refining ($/oz)	$0.50

22.6 OPERATING COST

The average Cash Operating Cost over the life of the mine is presented below included in the cash operating cost is mining cost, process plant, general administration and refining & transportation, excluding the cost of the capitalized pre-stripping.

Table 22-7: Life of Mine Operating Cost

	LOM
	$/ ore tonne
Mine	$7.40
Process Plant	$21.37
General Administration	$2.16
Refining/Transportation	$1.43
Total Cash Operating Cost	$32.36

In addition to the cash operating cost an allowance for reclamation and closure at the end of the mine life of $4.1 million was estimated for each option.

22.6.1 Royalty

There is a royalty for both the El Gallo and Palmarito and it is estimated to be $11.8 million.

22.6.2 Depreciation

Depreciation is calculated using the straight line method starting with first year of production. The initial capital and sustaining capital used an 8 year life. The last year of production is the catch-up year if the assets are not fully depreciated by that time.

22.7 TAXATION

22.7.1 Corporate Income Tax (ISR)

Income tax is calculated at a 28% flat rate applied to the net taxable income, which is computed by subtracting the allowable deductions and carry forward losses from revenues. The estimated taxes paid are $91.4 million.

22.8 PROJECT FINANCING

The project was evaluated on an unleveraged and un-inflated basis.

22.9 NET INCOME AFTER TAX

The net income after tax is $187.0 million.

22.10 NPV AND IRR

The financial analysis results after taxes are 25.7% IRR and a payback of 2.6 years. Table 22-8 presents the NPV values.

Table 22-8: Economic Indicators

	Economic Indicators
NPV @ 0% ($000)	$184,025
NPV @ 5% ($000)	$118,115
NPV @ 10% ($000)	$72,519
IRR	25.7%
Payback (yrs	2.6

22.11 SENSITIVITIES

The following table compares the economic indicators for each option when different variables are applied in addition a case using spot prices for gold and silver of $1,700.00 $32.00 per ounce, respectively was also done.

Table 22-9: Sensitivity Analysis

	NPV @ 0%	NPV @ 5%	NPV @ 10%	IRR %	Payback (yrs)
Base Case	$184,025	$118,115	$72,519	25.7%	2.6
Spot Price	$353,500	$247,756	$173,700	44.0%	1.8
Metal Prices +20%	$307,159	$212,302	$146,024	39.3%	2.0
Metal Prices -20%	$60,892	$23,929	-$986	9.8%	4.1
Initial Capital +20%	$154,824	$90,438	$46,428	18.6%	3.0
Initial Capital -20%	$213,226	$145,792	$98,610	35.7%	2.1
Operating Cost +20%	$129,975	$77,711	$41,645	19.6%	2.9
Operating Cost -20%	$238,075	$158,519	$103,393	31.2%	2.3

22.12 DETAIL FINANCIAL MODEL

Table 22-10: Detail Financial Model

		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Base Case	Total	-3	-2	-1	1	2	3	4	5	6	7	8	9	10	11	12
Mining Operations																
El Gallo Mill Ore																
Beginning Inventory (kt)	8,853	8,853	8,853	8,853	8,795	7,518	6,058	4,598	3,138	1,678	218	-	-	-	-	-
Mined (kt)	8,853	-	-	58	1,277	1,460	1,460	1,460	1,460	1,460	218	-	-	-	-	-
Ending Inventory (kt)	-	8,853	8,853	8,795	7,518	6,058	4,598	3,138	1,678	218	-	-	-	-	-	-
Gold Grade (g/t)	0.078	-	-	0.201	0.053	0.233	0.040	0.049	0.042	0.050	0.018	-	-	-	-	-
Silver Grade (g/t)	99.000	-	-	65.250	127.225	104.710	104.210	83.700	88.050	96.640	61.100	-	-	-	-	-
Contained Gold (kozs)	22	-	-	0	2	11	2	2	2	2	0	-	-	-	-	-
Contained Silver (kozs)	28,178	-	-	122	5,223	4,915	4,892	3,929	4,133	4,536	428	-	-	-	-	-
El Gallo Low Grade Mill Stockpile																
Beginning Inventory (kt)	675	675	675	675	637	408	166	-	-	-	-	-	-	-	-	-
Mined (kt)	675	-	-	38	229	242	166	-	-	-	-	-	-	-	-	-
Ending Inventory (kt)	-	675	675	637	408	166	-	-	-	-	-	-	-	-	-	-
Gold Grade (g/t)	0.037	-	-	0.034	0.029	0.055	0.024	-	-	-	-	-	-	-	-	-
Silver Grade (g/t)	34.784	-	-	35.960	36.180	33.720	34.140	-	-	-	-	-	-	-	-	-
Contained Gold (kozs)	1	-	-	0	0	0	0	-	-	-	-	-	-	-	-	-
Contained Silver (kozs)	755	-	-	44	266	262	182	-	-	-	-	-	-	-	-	-
El Gallo Heap Leach Ore																
Beginning Inventory (kt)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Mined (kt)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ending Inventory (kt)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gold Grade (g/t)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Silver Grade (g/t)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Contained Gold (kozs)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Contained Silver (kozs)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Waste																
Beginning Inventory(kt)	26,571	26,571	26,571	26,571	25,336	21,721	16,723	11,649	6,409	2,617	310	-	-	-	-	-
Mined (kt)	26,571	-	-	1,235	3,615	4,998	5,074	5,240	3,792	2,307	310	-	-	-	-	-
Ending Inventory (kt)	-	26,571	26,571	25,336	21,721	16,723	11,649	6,409	2,617	310	-	-	-	-	-	-
El Gallo Total Material Mined (kt)	36,099	-	-	1,331	5,121	6,700	6,700	6,700	5,252	3,767	528	-	-	-	-	-
Palmarito Mill Ore																
Beginning Inventory (kt)	1,829	1,829	1,829	1,829	1,829	1,819	1,492	1,127	762	397	131	-	-	-	-	-
Mined (kt)	1,829	-	-	-	10	327	365	365	365	266	131	-	-	-	-	-
Ending Inventory (kt)	-	1,829	1,829	1,829	1,819	1,492	1,127	762	397	131	-	-	-	-	-	-
Gold Grade (g/t)	0.350	-	-	-	0.273	0.320	0.455	0.334	0.328	0.297	0.346	-	-	-	-	-
Silver Grade (g/t)	122.589	-	-	-	200.600	147.000	151.100	95.000	119.800	112.100	82.200	-	-	-	-	-
Contained Gold (kozs)	21	-	-	-	0	3	5	4	4	3	1	-	-	-	-	-
Contained Silver (kozs)	7,209	-	-	-	64	1,545	1,773	1,115	1,406	959	346	-	-	-	-	-
Palmarito Historic Dumps																
Beginning Inventory (kt)	215	215	215	215	215	14	-	-	-	-	-	-	-	-	-	-
Mined (kt)	215	-	-	-	201	14	-	-	-	-	-	-	-	-	-	-
Ending Inventory (kt)	-	215	215	215	14	-	-	-	-	-	-	-	-	-	-	-
Gold Grade (g/t)	0.298	-	-	-	0.309	0.146	-	-	-	-	-	-	-	-	-	-
Silver Grade (g/t)	183.773	-	-	-	186.382	144.930	-	-	-	-	-	-	-	-	-	-
Contained Gold (kozs)	2	-	-	-	2	0	-	-	-	-	-	-	-	-	-	-
Contained Silver (kozs)	1,267	-	-	-	1,204	63	-	-	-	-	-	-	-	-	-	-
Palmarito Historic Tails																
Beginning Inventory (kt)	147	147	147	147	147	24	-	-	-	-	-	-	-	-	-	-
Mined (kt)	147	-	-	-	123	24	-	-	-	-	-	-	-	-	-	-
Ending Inventory (kt)	-	147	147	147	24	-	-	-	-	-	-	-	-	-	-	-
Gold Grade (g/t)	0.135	-	-	-	0.121	0.205	-	-	-	-	-	-	-	-	-	-
Silver Grade (g/t)	161.189	-	-	-	160.460	164.925	-	-	-	-	-	-	-	-	-	-
Contained Gold (kozs)	1	-	-	-	0	0	-	-	-	-	-	-	-	-	-	-
Contained Silver (kozs)	762	-	-	-	635	127	-	-	-	-	-	-	-	-	-	-
Waste																
Beginning Inventory(kt)	4,006	4,006	4,006	4,006	4,006	3,954	3,481	2,797	2,153	1,333	465	-	-	-	-	-
Mined (kt)	4,006	-	-	-	52	473	684	644	820	868	465	-	-	-	-	-

Base Case	Total	2012 -3	2013 -2	2014 -1	2015 1	2016 2	2017 3	2018 4	2019 5	2020 6	2021 7	2022 8	2023 9	2024 10	2025 11	2026 12
Ending Inventory (kt)	-	4,006	4,006	4,006	3,954	3,481	2,797	2,153	1,333	465	-	-	-	-	-	-
Palmarito Total Material Mined (kt)	6,196	-	-	-	386	838	1,049	1,009	1,185	1,134	596	-	-	-	-	-
Process Plant Operations																
El Gallo Mill Ore - Processed (kt)	8,853	-	-	-	1,335	1,460	1,460	1,460	1,460	1,460	218	-	-	-	-	-
Gold Grade (g/t)	0.078	-	-	-	0.059	0.233	0.040	0.049	0.042	0.050	0.018	-	-	-	-	-
Silver Grade (g/t)	98.999	-	-	-	124.532	104.710	104.210	83.700	88.050	96.640	61.100	-	-	-	-	-
Contained Gold (kozs)	22	-	-	-	3	11	2	2	2	2	0	-	-	-	-	-
Contained Silver (kozs)	28,178	-	-	-	5,345	4,915	4,892	3,929	4,133	4,536	428	-	-	-	-	-
Recovery Gold (%)	79.20%	0.00%	0.00%	0.00%	79.20%	79.20%	79.20%	79.20%	79.20%	79.20%	79.20%	0.00%	0.00%	0.00%	0.00%	0.00%
Recovery Silver (%)	87.60%	0.00%	0.00%	0.00%	87.60%	87.60%	87.60%	87.60%	87.60%	87.60%	87.60%	0.00%	0.00%	0.00%	0.00%	0.00%
Recovered Gold (kozs)	18	-	-	-	2	9	1	2	2	2	0	-	-	-	-	-
Recovered Silver (kozs)	24,684	-	-	-	4,682	4,306	4,285	3,442	3,621	3,974	375	-	-	-	-	-
El Gallo Low Grade Ore - Processed (kt)	675	-	-	-	-	-	-	-	-	99	576	-	-	-	-	-
Gold Grade (g/t)	0.037	-	-	-	-	-	-	-	-	0.024	0.040	-	-	-	-	-
Silver Grade (g/t)	34.784	-	-	-	-	-	-	-	-	34.140	34.894	-	-	-	-	-
Contained Gold (kozs)	1	-	-	-	-	-	-	-	-	0	1	-	-	-	-	-
Contained Silver (kozs)	755	-	-	-	-	-	-	-	-	109	646	-	-	-	-	-
Recovery Gold (%)	79.20%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	79.20%	79.20%	0.00%	0.00%	0.00%	0.00%	0.00%
Recovery Silver (%)	86.40%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	86.40%	86.40%	0.00%	0.00%	0.00%	0.00%	0.00%
Recovered Gold (kozs)	1	-	-	-	-	-	-	-	-	0	1	-	-	-	-	-
Recovered Silver (kozs)	652	-	-	-	-	-	-	-	-	94	558	-	-	-	-	-
El Gallo Low Heap Leach Ore - Processed (kt)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gold Grade (g/t)	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Silver Grade (g/t)	0.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Contained Gold (kozs)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Contained Silver (kozs)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Recovery Gold (%)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Recovery Silver (%)	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Recovered Gold (kozs)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Recovered Silver (kozs)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Palmarito Mill Ore - Processed (kt)	1,829	-	-	-	10	327	365	365	365	266	131	-	-	-	-	-
Gold Grade (g/t)	0.350	-	-	-	0.273	0.320	0.455	0.334	0.328	0.297	0.346	-	-	-	-	-
Silver Grade (g/t)	122.589	-	-	-	200.600	147.000	151.100	95.000	119.800	112.100	82.200	-	-	-	-	-
Contained Gold (kozs)	21	-	-	-	0	3	5	4	4	3	1	-	-	-	-	-
Contained Silver (kozs)	7,209	-	-	-	64	1,545	1,773	1,115	1,406	959	346	-	-	-	-	-
Recovery Gold (%)	88.40%	0.00%	0.00%	0.00%	88.40%	88.40%	88.40%	88.40%	88.40%	88.40%	88.40%	0.00%	0.00%	0.00%	0.00%	0.00%
Recovery Silver (%)	73.60%	0.00%	0.00%	0.00%	73.60%	73.60%	73.60%	73.60%	73.60%	73.60%	73.60%	0.00%	0.00%	0.00%	0.00%	0.00%
Recovered Gold (kozs)	18	-	-	-	0	3	5	3	3	2	1	-	-	-	-	-
Recovered Silver (kozs)	5,306	-	-	-	47	1,137	1,305	821	1,035	706	255	-	-	-	-	-
Palmarito Historic Dumps - Processed (kt)	215	-	-	-	201	14	-	-	-	-	-	-	-	-	-	-
Gold Grade (g/t)	0.298	-	-	-	0.309	0.146	-	-	-	-	-	-	-	-	-	-
Silver Grade (g/t)	183.773	-	-	-	186.382	144.930	-	-	-	-	-	-	-	-	-	-
Contained Gold (kozs)	2	-	-	-	2	0	-	-	-	-	-	-	-	-	-	-
Contained Silver (kozs)	1,267	-	-	-	1,204	63	-	-	-	-	-	-	-	-	-	-
Recovery Gold (%)	82.40%	0.00%	0.00%	0.00%	82.40%	82.40%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Recovery Silver (%)	88.80%	0.00%	0.00%	0.00%	88.80%	88.80%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Recovered Gold (kozs)	2	-	-	-	2	0	-	-	-	-	-	-	-	-	-	-
Recovered Silver (kozs)	1,125	-	-	-	1,070	56	-	-	-	-	-	-	-	-	-	-
Palmarito Historic Tails - Processed (kt)	147	-	-	-	123	24	-	-	-	-	-	-	-	-	-	-
Gold Grade (g/t)	0.135	-	-	-	0.121	0.205	-	-	-	-	-	-	-	-	-	-
Silver Grade (g/t)	161.189	-	-	-	160.460	164.925	-	-	-	-	-	-	-	-	-	-
Contained Gold (kozs)	1	-	-	-	0	0	-	-	-	-	-	-	-	-	-	-
Contained Silver (kozs)	762	-	-	-	635	127	-	-	-	-	-	-	-	-	-	-

		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Base Case	Total	-3	-2	-1	1	2	3	4	5	6	7	8	9	10	11	12
Recovery Gold (%)	63.90%	0.00%	0.00%	0.00%	63.90%	63.90%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Recovery Silver (%)	54.20%	0.00%	0.00%	0.00%	54.20%	54.20%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Recovered Gold (kozs)	0	-	-	-	0	0	-	-	-	-	-	-	-	-	-	-
Recovered Silver (kozs)	413	-	-	-	344	69	-	-	-	-	-	-	-	-	-	-
Payable Metals																
El Gallo Mill Ore - Payable Gold (kozs)	17	-	-	-	2	9	1	2	2	2	0	-	-	-	-	-
El Gallo Low Grade Ore - Payable Gold (kozs)	1	-	-	-	-	-	-	-	-	0	1	-	-	-	-	-
El Gallo Heap Leach Ore - Payable Gold (kozs)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total El Gallo - Payable Gold (kozs)	18	-	-	-	2	9	1	2	2	2	1	-	-	-	-	-
El Gallo Mill Ore - Payable Silver (kozs)	24,561	-	-	-	4,659	4,284	4,264	3,424	3,602	3,954	373	-	-	-	-	-
El Gallo Low Grade Ore - Payable Silver (kozs)	649	-	-	-	-	-	-	-	-	93	556	-	-	-	-	-
El Gallo Heap Leach Ore - Payable Silver (kozs)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total El Gallo - Payable Silver (kozs)	25,210	-	-	-	4,659	4,284	4,264	3,424	3,602	4,047	929	-	-	-	-	-
Palmarito Mill Ore - Payable Gold (kozs)	18	-	-	-	0	3	5	3	3	2	1	-	-	-	-	-
Palmarito Historic Dumps - Payable Gold (kozs)	2	-	-	-	2	0	-	-	-	-	-	-	-	-	-	-
Palmarito Historic Tails - Payable Gold (kozs)	0	-	-	-	0	0	-	-	-	-	-	-	-	-	-	-
Total Palmarito - Payable Gold (kozs)	20	-	-	-	2	3	5	3	3	2	1	-	-	-	-	-
Palmarito Mill Ore - Payable Silver (kozs)	5,279	-	-	-	47	1,132	1,299	816	1,030	702	254	-	-	-	-	-
Palmarito Historic Dumps - Payable Silver (kozs)	1,120	-	-	-	1,064	56	-	-	-	-	-	-	-	-	-	-
Palmarito Historic Tails - Payable Silver (kozs)	411	-	-	-	342	69	-	-	-	-	-	-	-	-	-	-
Total Palmarito - Payable Silver (kozs)	6,810	-	-	-	1,454	1,256	1,299	816	1,030	702	254	-	-	-	-	-
Income Statement ($000)																
Metal Prices																
Gold ($/oz)	$ 1,415.00		$ -	$ 1,415.00	$ 1,415.00	$ 1,415.00	$ 1,415.00	$ 1,415.00	$ 1,415.00	$ 1,415.00	$ 1,415.00	$ -	$ -	$ -	$ -	$ -
Silver ($/oz)	$ 25.00		$ -	$ 25.00	$ 25.00	$ 25.00	$ 25.00	$ 25.00	$ 25.00	$ 25.00	$ 25.00	$ -	$ -	$ -	$ -	$ -
Revenues																
El Gallo Mill Ore - Gold ($000)	$ 24,697	-	-	-	2,843	12,220	2,098	2,570	2,203	2,622	141	-	-	-	-	-
El Gallo Low Grade Ore - Gold ($000)	$ 906	-	-	-	-	-	-	-	-	85	820	-	-	-	-	-
El Gallo Heap Leach Ore - Gold ($000)	$ -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
El Gallo Mill Ore - Silver ($000)	$ 614,019	-	-	-	116,472	107,102	106,591	85,612	90,062	98,848	9,332	-	-	-	-	-
El Gallo Low Grade Ore - Silver ($000)	$ 16,224	-	-	-	-	-	-	-	-	2,335	13,888	-	-	-	-	-
El Gallo Heap Leach Ore - Silver ($000)	$ -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Palmarito Mill Ore - Gold ($000)	$ 25,637	-	-	-	109	4,196	6,659	4,888	4,800	3,168	1,817	-	-	-	-	-
Palmarito Historic Dumps - Gold ($000)	$ 2,393	-	-	-	2,319	74	-	-	-	-	-	-	-	-	-	-
Palmarito Historic Tails - Gold ($000)	$ 574	-	-	-	431	143	-	-	-	-	-	-	-	-	-	-
Palmarito Mill Ore - Silver ($000)	$ 131,977	-	-	-	1,181	28,294	32,463	20,410	25,738	17,552	6,338	-	-	-	-	-
Palmarito Historic Dumps - Silver ($000)	$ 27,995	-	-	-	26,605	1,389	-	-	-	-	-	-	-	-	-	-
Palmarito Historic Tails - Silver ($000)	$ 10,271	-	-	-	8,555	1,716	-	-	-	-	-	-	-	-	-	-
Total Revenues	$ 854,692		$ -	$ -	$ 158,516	$ 155,134	$ 147,811	$ 113,481	$ 122,803	$ 124,610	$ 32,337	$ -	$ -	$ -	$ -	$ -
Operating Cost																
El Gallo Mining	$ 68,098		$ -	$ -	$ 9,386	$ 12,038	$ 13,067	$ 13,159	$ 10,636	$ 7,815	$ 1,997	$ -	$ -	$ -	$ -	$ -
Palmarito Mining	$ 18,644		$ -	$ -	$ 1,689	$ 2,729	$ 3,150	$ 3,075	$ 3,403	$ 3,033	$ 1,565	$ -	$ -	$ -	$ -	$ -
Process Plant (mill)	$ 250,396		$ -	$ -	$ 36,135	$ 37,723	$ 37,730	$ 37,730	$ 37,730	$ 37,730	$ 25,618	$ -	$ -	$ -	$ -	$ -
Heap Leach	$ -		$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
General Administration	$ 25,307		$ -	$ -	$ 3,004	$ 3,154	$ 3,154	$ 3,999	$ 3,999	$ 3,999	$ 3,999	$ -	$ -	$ -	$ -	$ -
El Gallo Refining																
El Gallo Mill Ore - Gold Refining	$ 298	-	-	-	34	147	25	31	27	32	2	-	-	-	-	-
El Gallo Low Grade Ore - Gold Refining	$ 11	-	-	-	-	-	-	-	-	1	10	-	-	-	-	-
El Gallo Heap Leach Ore - Gold Refining	$ -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
El Gallo Mill Ore - Silver Refining	$ 12,342	-	-	-	2,341	2,153	2,143	1,721	1,810	1,987	188	-	-	-	-	-
El Gallo Low Grade Ore - Silver Refining	$ 326	-	-	-	-	-	-	-	-	47	279	-	-	-	-	-
El Gallo Heap Leach Ore - Silver Refining	$ -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Palmarito Refining																
Palmarito Mill Ore - Gold Refining	$ 309	-	-	-	1	51	80	59	58	38	22	-	-	-	-	-
Palmarito Historic Dumps - Gold Refining	$ 29	-	-	-	28	1	-	-	-	-	-	-	-	-	-	-
Palmarito Historic Tails - Gold Refining	$ 7	-	-	-	5	2	-	-	-	-	-	-	-	-	-	-
Palmarito Mill Ore - Silver Refining	$ 2,653	-	-	-	24	569	653	410	517	353	127	-	-	-	-	-
Palmarito Historic Dumps - Silver Refining	$ 563	-	-	-	535	28	-	-	-	-	-	-	-	-	-	-
Palmarito Historic Tails - Silver Refining	$ 206	-	-	-	172	34	-	-	-	-	-	-	-	-	-	-
Total Operating Cost	$ 379,188		-	-	53,354	58,629	60,001	60,184	58,180	55,034	33,806	-	-	-	-	-
Royalty - El Gallo	$ 11,840				4,093	3,658	1,065	864	904	1,018	237	-	-	-	-	-
Royalty - Palmarito	$ -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Salvage Value	$ (5,685)			$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ (2,843)	$ (2,843)	$ -	$ -	$ -	$ -

McEWEN MINING

		2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Base Case	Total	-3	-2	-1	1	2	3	4	5	6	7	8	9	10	11	12
Reclamation & Closure	4,073			-	-	-	-	-	-	-	1,932	1,979	46	38	38	38
Total Production Cost	389,416	-	-	-	57,447	62,287	61,067	61,048	59,084	56,052	33,133	(864)	46	38	38	38
Operating Income	465,276	-	-	-	101,069	92,847	86,744	52,433	63,719	68,558	(796)	864	(46)	(38)	(38)	(38)
Initial Capital Depreciation	184,817			-	23,102	23,102	23,102	23,102	23,102	23,102	46,204	-	-	-	-	-
Sustaining Capital Depreciation	2,075				177	198	218	236	251	259	737	-	-	-	-	-
Total Depreciation	186,891	-	-	-	23,279	23,300	23,320	23,338	23,353	23,361	46,941	-	-	-	-	-
Net Income After Depreciation	278,385	-	-	-	77,790	69,548	63,424	29,095	40,366	45,197	(47,737)	864	(46)	(38)	(38)	(38)
Income Taxes	91,359	-	-	-	21,781	19,473	17,759	8,147	11,303	12,655	-	242	-	-	-	-
Net Income After Taxes	187,025	-	-	-	56,008	50,074	45,666	20,948	29,064	32,542	(47,737)	622	(46)	(38)	(38)	(38)
Cash Flow																
Operating Income	465,276	-	-	-	101,069	92,847	86,744	52,433	63,719	68,558	(796)	864	(46)	(38)	(38)	(38)
Working Capital																
Account Recievable (15 days)	-	-	-	-	(6,514)	139	301	1,411	(383)	(74)	3,792	1,329	-	-	-	-
Accounts Payable (30 days)	-	-	-	-	4,385	434	113	15	(165)	(259)	(1,745)	(2,779)	-	-	-	-
Inventory - Parts, Supplies	(3,000)	-	-	(1,500)	(1,500)	-	-	-	-	-	-	-	-	-	-	-
Total Working Capital	(3,000)	-	-	(1,500)	(3,629)	572	414	1,426	(548)	(333)	2,047	(1,450)	-	-	-	-
Capital Expenditures																
Initial Capital																
Pre-production	6,769	-	-	6,769	-	-	-	-	-	-	-	-	-	-	-	-
Process Plant	169,282	-	16,928	143,889	8,464	-	-	-	-	-	-	-	-	-	-	-
Owners Cost	8,766	13	2,789	5,964	-	-	-	-	-	-	-	-	-	-	-	-
Sustaining Capital																
Mine	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Process Plant	2,075	-	-	-	1,416	164	161	144	122	68	-	-	-	-	-	-
Total Capital Expenditures	186,891	13	19,717	156,622	9,880	164	161	144	122	68	-	-	-	-	-	-
Cash Flow before Taxes	275,385	(13)	(19,717)	(158,122)	87,559	93,256	86,997	53,714	63,049	68,158	1,251	(586)	(46)	(38)	(38)	(38)
Cummulative Cash Flow before Taxes		(13)	(19,730)	(177,853)	(90,293)	2,963	89,959	143,674	206,723	274,881	276,132	275,546	275,500	275,462	275,423	275,385
					1.0	1.0	-	-	-	-	-	-	-	-	-	-
Taxes																
Income Taxes	91,359	-	-	-	21,781	19,473	17,759	8,147	11,303	12,655	-	242	-	-	-	-
Cash Flow after Taxes	184,025	(13)	(19,717)	(158,122)	65,778	73,782	69,238	45,568	51,747	55,503	1,251	(828)	(46)	(38)	(38)	(38)
Cummulative Cash Flow after Taxes		(13)	(19,730)	(177,853)	(112,074)	(38,292)	30,946	76,514	128,261	183,764	185,015	184,187	184,141	184,102	184,064	184,025
					1.0	1.0	0.6	-	-	-	-	-	-	-	-	-

Economic Indicators before Taxes		
NPV @ 0%	0%	$275,385
NPV @ 5%	5%	$189,691
NPV @ 10%	10%	$129,606
IRR		37.3%
Payback	Years	2.0
Economic Indicators after Taxes		
NPV @ 0%	0%	$184,025
NPV @ 5%	5%	$118,115
NPV @ 10%	10%	$72,519
IRR		25.7%
Payback	Years	2.6

23 ADJACENT PROPERTIES

There are no other adjacent properties to the El Gallo Complex as defined by NI 43-101.

24 OTHER RELEVANT DATA AND INFORMATION

At the time of this Technical Report, construction at El Gallo Phase 1 (Magistral deposits) for a 3,000 tonne per day heap leach operation had just been completed. The construction and economics associated with the intended production are not within the scope of this Technical Report. The information below has been provided by McEwen and is being disclosed so readers have a full scope of the activities currently ongoing within the El Gallo Complex.

The construction was completed in August 2012. Capital costs to complete the construction totaled US$15 million. Phase 1 production is expected to average 30,000 ounces of gold per year.

The new mining fleet for Phase 1, which is owned by a contractor, is onsite and operating. Since December, 240,000 tonnes of material at an average grade of 1.27 gpt gold has been mined for a total of 9,700 ounces of gold. Approximately 80,000 tonnes of this material has been crushed and placed onto the heap leach pad.

The crushing plant utilizes three-stage crushing in order to achieve optimum gold recovery. Gold recoveries from the heap leach pad are expected to average 65% over the mine life.

The ADR process plant will produce gold and silver doré and is currently being commissioned. The company expects its first production during the fall (2012).

25 INTERPRETATION AND CONCLUSIONS

The intent of this Technical Report is to incorporate previous resource information prepared earlier with mine reserve estimates, metallurgical testing and cost information to advance the project to a feasibility study level. The results of this Feasibility Study suggests that development of the El Gallo and Plamarito Deposits is technically feasible utilizing agitated cyanide leaching technology to extract silver and gold and is economically viable based on today's metal prices and the mine reserves, grade, and recovery information presented to date.

25.1 MINE RESERVES

Based on a combined mine production schedule of 5,000 t/d, the proven and probable mineral reserve for the El Gallo and Palmarito deposits total 11.7 million tonnes at 101.3 g/t silver and 0.12 g/t gold. This mineral reserve includes the Palmarito historic tailings and waste dumps. The mineral reserve assumes that the measured mineral resource inside the reserve pit is converted to proven mineral reserve and the indicated mineral resource inside the reserve pit is converted to probable mineral reserve.

25.2 MINING METHODS

The mine production schedule is based on delivering 5,000 tonnes per day of ore to the mill, or 1.825 million tonnes per year. Approximately 80% of the feed (1.46 million tonnes per year) is from the El Gallo Deposit and 20% of the feed (.365 million tonnes per year) is from Palmarito. The life of mine is approximately 6.5 years. Total combined life of mine material mined total approximately 42.3 million tonnes giving a waste to ore ratio of 2.61. It was assumed that the mining operation would be contract mining as is currently employed at the El Gallo Phase I (Magistral) operation.

Pre-production for El Gallo is 1.33 million tonnes, of which approximately 1.12 million tonnes will be used for the construction of the tailings embankment. The pre-production period will be about 6 to 9 months, depending on the tailing embankment construction schedule.

Potential heap leach material from the El Gallo pit, totaling about 5.86 million tonnes, will be stockpiled northeast of the pit for potential processing. This material is considered waste for this Feasibility Study.

25.3 METALLURGY

Sample preparation and characterization, grinding studies, gravity concentration tests, flotation tests, whole ore leach tests, column leach tests, and environmental tests were completed by independent commercial metallurgical laboratories to determine the metallurgical response of the ore. The test work indicated that the ore will respond to direct agitated leaching technology to extract silver and gold.

Based on the metallurgical test work, the process parameters selected for the design included a cyanide leach in agitated tanks at 33% solids, 1000 ppm sodium cyanide, and a pH between 11 and 11.5 for 144 hours. Other parameters included detoxification of the dissolved cyanide using the INCO SO_2 process and recovering the dissolved silver using the Merrill-Crowe process.

The metallurgical test work indicated the overall life of mine metal recovery for El Gallo ore is 87.6% for silver and 79.2% for gold. The overall life of mine recovery for Palmarito ore is 74.1% for silver and 87.2% for gold. The combined life of mine recovery averages 84.3% for silver and 83.2% for gold.

25.4 ECONOMIC ASSESSMENT

The economic assessment was based on a total capital cost for the mine and process facilities of $186.9 million, including the sustaining capital. The overall life of mine operating cost of $28.74 / tonne of ore processed, including refining charges, royalties and a by-product credit for gold.

The Net Present Value (NPV) was calculated for the pre-tax case and after tax based on metal prices of $25 per ounce of silver and $1,415 per ounce of gold. The project will generate a pre-tax NPV of $190 million at a 5% discount rate with an Internal Rate of Return (IRR) of 37% and a payback period of 2 years. The after tax NPV at the same metal prices and 5% discount rate is $118 million with an IRR of 26% and a payback period of 2.6 years.

M3 has concluded that the economic indicators for the El Gallo Complex Phase II Project have demonstrated the potential for development of the El Gallo Complex Phase II Project. Further optimization of the process is recommended with additional metallurgical testing to confirm recoveries and reagent consumptions.

25.5 RISKS

The potential risks to the project identified at this time are noted below. Using a staged approach to advance the project to full production will allow McEwen Mining Inc. to adequately assess the risks and associated costs and develop mitigation strategies.

a) The risk of not achieving the recoveries noted in this report will result in lower revenues and economic indicators. Additional metallurgical testing at different operating conditions will increase the level of confidence in the metal recoveries.

b) The risk of increased operating costs will result in lower economic indicators. Confirmation of labor rates, labor staffing plans, and reagent consumption rates will increase the level of confidence in the operating costs.

c) The risk of increased capital costs will result in lower economic indicators for the project. Additional engineering to quantify materials of construction will increase the level of confidence in the capital cost estimate.

d) The risk of lower metal prices at time of operation will reduce revenues and lower the economic indicators. The El Gallo Complex Phase II Project has a relatively short operating horizon for projecting metal prices.

e) Design slope angles are steep and will require specialty blasting and attention to detail to maintain them. If the angles are not achieved there will be ore shortfalls or significant additional costs/delays in ore extraction.

f) The placing of waste into the El Gallo phase 1 pit as backfill will require considerable dozing activity and may prove to be more expensive than estimated to conduct this in a safe manner.

g) The low mining rate at Palmarito could make it a challenge to control the fixed costs such as supervision, road/dump maintenance, etc., resulting in higher mining costs than estimated.

h) Palmarito ore haulage will be a considerable disturbance to local communities along the haulage route.

26 RECOMMENDATIONS

The following recommendations are made for McEwen Mining Inc. consideration as the project progresses to the next phase.

a) M3 recommends McEwen continue with the current process of submitting applications for the operating permits.

b) M3 recommended additional laboratory test work to determine whether the amount of solids in leaching can be increased from 33 % to 45%. The higher solids loading allows the potential to reduce the number and size of leach tanks, agitators and pumps. Additional tests and trade-off studies will determine whether cyclones or a pre-leach thickener is required.

c) M3 recommends that the El Gallo potential heap leach material be tested to determine the optimum recovery conditions.

d) M3 recommends that samples be prepared for filtration tests at vendors' laboratories. The vendors will perform tests to confirm equipment selection and guarantee the equipment performance.

e) Although bottle roll testing throughout the Palmarito deposit does a good job covering the aerial extent and depths associated with the mineralization, it is recommended that McEwen's in house metallurgical lab (located at Magistral), continuously test the different zones for recoveries from samples obtained during blast hole drilling. Bottle roll samples, like drill holes, can be spread +50 meters apart and testing on closer intervals will better help determine recoveries, which are more variable than at the El Gallo deposit, especially between the oxide and transitional ore zones.

f) M3 recommends McEwen continue development of production water wells on the property to confirm availability and quality of fresh water for the project.

g) M3 recommends McEwen investigate an alternate route for the south access road to avoid the rugged terrain between the pit and the mine waste dump. A right of way corridor may need to be purchased from private land owners.

h) M3 Recommends McEwen advance the engineering for the project to the level of basic engineering to develop detailed material quantities for construction and a higher level of accuracy in the capital cost estimate.

A preliminary budget for the recommended work is estimated to be approximately $7.4 million as shown in Table 26-1 below.

Table 26-1: Estimated Cost for Proposed Work

Description	Cost
Expansion and Infill Drilling, (10,000 meters)	$1,600,000
Operating Permit Applications (2013)	$1,650,000
Additional Metallurgical Testing	$100,000
Samples of Tailings for Vendor Filter Test	$10,000
Develop Production Water Wells	$20,000
Right of Way for Alternate South Access Road	$500,000
Advance Engineering to Basic Level (30% Engineering)	$3,500,000
Total	$7,380,000

27 REFERENCES

1. Asamera Oil Corporation Ltd. *"Report on the Palmarito Silver Prospect, Sinaloa Province, Mexico,"* dated April 1976.

2. Canadian Barranca Corporation Ltd. *"Ore Reserves: Palmarito Mine, Mexico,"* dated October 1970.

3. Clark, Kenneth F., Foster, C. Thomas, and Damon, Paul E., 1982, *Cenozoic Mineral Deposits and subduction-related magmatic arcs in Mexico*, Geol. Soc. Amer. Bull., v. 93.

4. Conrad, M.E., Peterson, U., and O'Neil, J.R., 1992, *Evolution of an Au-Ag producing hydrothermal system*: The Tayoltita mine, Durango, Mexico: Econ. Geol., v. 87, p. 1451-1474.

5. Consejo de Recursos Minerales, 1992, *Geological-Mining monograph of the state of Sinaloa*.

6. FLSmidth – Dawson Metallurgical Laboratories; "*Results of Gravity Flotation and Cyanidation Leaching Test Work on Gold from El Gallo and Palmarito Samples",* February 28, 2012.

7. Henry, C.D., 1989, *Late Cenozoic Basin and Range structure in western Mexico adjacent to the Gulf of California*: Geol. Soc. Amer. Bull., v. 101, p. 1147-1156.

8. Henry, C.D., 1975, *Geology and geochronology of the granitic batholithic complex, Sinaloa, Mexico*: Univ. Texas at Austin, PhD. dissertation (unpublished).

9. Henry, C.D., McDowell, F.W., and Silver, L.T., 2003, *Geology and geochronology of granitic batholithic complex, Sinaloa, México*: Implications for Cordilleran magmatism and tectonics, in Johnson, S.E., Paterson, S.R., Fletcher, J.M., Girty, G.H., Kimbrough, D.L., and Martin-Barajas, A., eds., Tectonic evolution of northwestern México and the southwestern USA: Boulder, Colorado, Geological Society of America Special Paper 374, p. 237-274.

10. Horner, J.T., and Enriquez, E., 1999, *Epithermal precious metal mineralization in a strike-slip corridor; the San Dimas District, Durango, Mexico*: Econ. Geol., v. 94, p. 1375-1380.

11. Independent Mining Consultants, Inc., "El Gallo Silver Project, Sinaloa, Mexico, Phase 2 Feasibility Study Mining", dated August 24, 2012.

12. Investigación Desarrollo de Acuíferos y Ambiente, "*Instalación de Piezometros, Pruebas Airlifting y Muestreo Fisicoquímico para el Proyecto Minero Palmarito, Municipio de Mocorito, Sinaloa*"; July, 2011.

13. Investigación Desarrollo de Acuíferos y Ambiente, "*Condiciones de Velocidad, Dirección y Frecuencia de los Vientos en el Proyecto El Gallo*"; January, 2012.

14. Investigación Desarrollo de Acuíferos y Ambiente, "*Resultados de Pruebas Airlifting, en el Área del Patio de Lixiviación y Presa de Jales Proyecto Minero El Gallo, Mpio. Mocorito, Sin.*"; February, 2012.

15. Investigación Desarrollo de Acuíferos y Ambiente, "*Prospección para la Localización y Construcción de Pozos y Piezómetros en el Área de la Mina El Gallo, Municipio de Mocorito, Sinaloa*"; February, 2012.

16. Investigación Desarrollo de Acuíferos y Ambiente, "*Estudio Hidrológico para el Proyecto Minero El Gallo, Municipio de Mocorito, Sinaloa*"; January, 2012.

17. Hudson, Donald M., 2003, *Epithermal Alteration and Mineralization in the Comstock District, Nevada*: Econ Geol., vol. 98, p. 367-385.

18. Itasca S.A., *"El Gallo Open Pit Preliminary Stability Analysis"*, dated February 2012

19. Itasca S.A., *"El Palmarito Open Pit Preliminary Stability Analysis"*, dated February 2012

20. Kappes, Cassidy and Associates, May 2000, *Magistral Project Feasibility Study*.

21. Leahey, T.A., 1996, *Preliminary Resource Analysis for the Palmarito Silver-Gold Project Sinaloa, Mexico*, Prepared for Lluvia de Oro Inc., by Computer Aided Geoscience Pty, Ltd., June 1996.

22. Lyntek Inc. *"Characterization Study for Palmarito Silver-Gold Deposit,"* dated November 1996.

23. McDowell, F. W., and Clabaugh, S.E., 1981, *The Igneous History of the Sierra Madre Occidental and its Relation to the Tectonic Evolution of Western Mexico*: Revista Inst. Geologia, Univ. Nac. Auton. Mexico, v. 5, p. 195-206.

24. McDowell, F.W., and Keizer, R.P., 1977, *Timing of mid-Tertiary volcanism in the Sierra Madre Occidental between Durango City and Mazatlan, Mexico*: Geol. Soc. Amer. Bull., v. 88, p. 1479-1486.

25. McEwen Mining Inc.; "*Resource Estimate for the El Gallo Complex, Sinaloa State, Mexico"*; Section 16, July 18, 2012.

26. METCON Research; "*El Gallo Project Column Leach Study, Phase II Progress Reports 1 through 6"*; April 18 2012, May 7 2012, May 15 2012, June 7 2012, June 19 2012, June 22, 2012.

27. METCON Research; "*Cyanidation Study on Composite Samples El Gallo Project"*; July 27, 2012.

28. Nelson, Eric P, Jun 10, 2008, *Structural Geological Analysis of Magistral district, Sinaloa, Mexico*. Private company report.

29. Petruk, W. and Owens D., 1974, *Some Mineralogical Characteristics of the Silver Deposits in the Guanajuato Mining District, Mexico*: Econ. Geol, vol. 69, p 1078-1085.

30. Pincock, Allen & Holt, July 3, 2002, *Magistral Project Resource Update*.

31. Pincock, Allen & Holt, January 16, 2003, *Magistral Gold Project Sinaloa, Mexico Resource and Reserve Update Technical Report*.

32. Pincock, Allen & Holt, January 6, 2005, *Amended Technical Report for Magistral Gold Project, Sinaloa State, México*.

33. Pincock, Allen & Holt, September 13, 2006, *Technical Report of the Magistral Gold Mine, Sinaloa State, Mexico*.

34. Pocock Industrial Inc.; "*Sample Characterization & PSA Flocculant Screening, Gravity Sedimentation, Pulp Rheology and Pressure Filtration Studies Conducted For: US Gold El Gallo Project"*; February 2012.

35. *Production records and operating data provided by Nevada Pacific Gold, Ltd.* Private company data.

36. Sedlock, R.L., Ortega-Gutierrez, F., and Speed, R.C., 1993, T*ectonostratigraphic terrains and tectonic evolution of Mexico:* Geol. Soc. Amer. Spec. Paper 278.

37. US Gold Corporation, *Report on the Core Drilling Program at the Palmarito Silver-Gold Prospect located in Sinaloa, Mexico:* Internal Report, April 2007.

38. Pincock, Allen & Holt, December 23, 2010, *Resource Estimate for the El Gallo District, Sinaloa State, Mexico*.

39. Pincock, Allen & Holt, February 11, 2011, *Preliminary Economic Assessment for the El Gallo District, Sinaloa State, Mexico*.

40. SGS Canada Inc.; "*An Investigation by High Definition Mineralogy into The Mineralogical Characteristics of Five Composites from the El Gallo Silver Deposit, Mexico*"; May 23, 2012.

41. SGS Lakefield Research Limited; "*An Investigation into QEMSCAN Mineralogy of Five Silver Samples, for the Palmarito Deposit, Mexico"*; January 9, 2009.

42. SGS de Mexico, S.A. de C.V.; email Rodolfo Polanco to Stanley Timler, "*Grindability Test for El Gallo Project.xls*"; February 22, 2012.

43. SGS Mineral Services / Durango; *Grindability Characteristics of Seven Samples from El Gallo Project*; June 12, 2012.

44. SGS Mineral Services/Durango, *Determination of the Sensitivity to the Leaching and Flotation Processes of Two Ore Deposit Samples Called Magistral and Palmarito*; October 20, 2008.

45. SGS Mineral Services / Durango; "*An Investigation to Evaluate the Amenability of the US Gold Drill Hole Samples to Cyanide Leaching Process"*; October 8, 2009.

46. SGS de Mexico; Ivan Lopez: "*Resumen LIX 7 Muestras.xls*"; May 24, 2012.

47. SGS Mineral Services; "*An Investigation of the Sensitivity of Three Ore Samples to the Cyanide Leaching Process"*; June 13, 2010.

48. SGS de Mexico, S.A. de C.V.; "*An Investigation into Cyanide Destruction Tests for Samples El Gallo, Palmarito and Magistral Project"*; February 9, 2012.

49. SRK Consulting (U.S.), Inc.; "*Geotechnical Site Characterization Report, El Gallo Feasibility Study, Municipio de Mocorito, Sinaloa*", Preliminary dated January 17, 2012.

APPENDIX A: FEASIBILITY STUDY CONTRIBUTORS AND PROFESSIONAL QUALIFICATIONS

CERTIFICATE of QUALIFIED PERSON

Stanley F. Timler, P.E.

I, Stanley F. Timler, P.E., do certify that:

1. I am currently employed as a Process Engineer by M3 Engineering and Technology Corporation, located at 2051 W. Sunset Road, Suite 101, Tucson, Arizona, USA, phone number 520-293-1488.

2. I graduated with a Bachelor of Engineering degree in Metallurgical Engineering from McMaster University in 1974.

3. I am a Registered Professional Engineer in good standing in the State of Nevada as a Metallurgical Engineer (No. 020895).

4. I have worked as an engineer for a total of 32 years since my graduation from the McMaster University. My work experience includes 5 years with engineering companies serving the mining industry and 23 years with operating companies in the mining/metallurgical industry and 4 years in the petrochemical industry.

5. I have read the definition of "Qualified Person" set out in Canadian National Instrument 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 the principal author for the preparation of the Technical Report titled "El Gallo Complex Phase II Project, NI 43-101 Technical Report Feasibility Study, Mocorito Municipality, Sinaloa, Mexico" (the "Technical Report"), dated September 27, 2012, prepared for McEwen Mining Inc.; and am responsible for Sections 1 through 3, Section 13, Sections 17 through 19, Sections 21 and 22, and Sections 24 through 27. I visited the project site January 24 and 25, 2012.

7. I have not had prior involvement with the property that is the subject of the Technical Report.

8. As of the date of this certificate, 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 the issuers applying all the tests in Section 1.5 of National Instrument 43-101.

10. I have read National Instrument 43-101 and Form 43-101F1, and believe that the Technical Report has been prepared in compliance with NI 43-101 and Form 43 -101F1.

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

Signed and dated this 27th day of September 2012, at Tucson, Arizona.

(Signed)(Sealed) "*Stanley F. Timler*"_
Signature of Qualified Person

Stanley F. Timler, P.E. (No. 020895)
Printed Name of Qualified Person

CONSENT OF QUALIFIED PERSON

I, Stanley F. Timler, P.E., consent to public filing of the technical report entitled "El Gallo Complex Phase II Project, NI 43-101 Technical Report Feasibility Study, Mocorito Municipality, Sinaloa, Mexico" (the "Technical Report") dated September 27, 2012 by McEwen Mining Inc.

I also consent to any extracts from or a summary of the Technical Report in the News Release dated September 10, 2012 by McEwen Mining, Inc.

I certify that I have read the News Release dated September 10, 2012 filed by McEwen Mining, Inc. and that it fairly and accurately represents the information in the section of the Technical Report for which I am responsible.

Dated September 27, 2012

(Signed)(Sealed) "*Stanley F. Timler*"
Stanley F. Timler, P.E.

CERTIFICATE of QUALIFIED PERSON

John Read, C.P.G.

I, John Read, C.P.G., do certify that:

1. I am presently a Senior Consultant with McEwen Mining Inc. and have been involved with this company since 2006. McEwen Mining Inc. is located at 181 Bay Street, Bay Wellington Tower, Suite 4750, P.O. Box 792, Toronto, Ontario, Canada M5J 2T3. Phone number 647-258-0395.
2. I graduated with a Bachelor of Science degree in Geology from the University of Minnesota in 1982 and a Master of Science degree in Geology from Washington State University in 1985.
3. I am a Certified Professional Geologist and a member in good standing with the American Institute of Professional Geologists (No. 10722).
4. I have practiced my profession continuously for a total of 26 years since my graduation from university.
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 the principal author of Sections 4 through 12, Sections 14.1.15 through 14.1.16, 14.2, 14.4, 14.5, 14.6 and Section 23 for the Technical Report titled "El Gallo Complex Phase II Project, NI 43-101 Technical Report Feasibility Study, Mocorito Municipality, Sinaloa, Mexico" (the "Technical Report"), dated September 27, 2012. I lasted visited the property in January 23 through 27, 2012.
7. Prior to the preparation of the Technical Report, I have been involved in the ongoing exploration at El Gallo Complex since January 2008.
8. As of the date of the certificate, to the best of my knowledge, information and belief, the Technical rReport contains all scientific and technical information that is required to disclose to make the Technical Report not misleading.
9. I am not independent of McEwen Mining in accordance with Section 1.5 of NI 43-101.
10. I have read National Instrument 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with NI 43-101 and Form 43-101F1.

11. As of the effective date of the Technical Report, to the best of my knowledge, information and belief, the sections of the Technical Report for which I am responsible, contain all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

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

Signed and dated this 27th day of September 2012 in Lakewood, Colorado.

(Signed)(Sealed) *"John Read"*
Signature of Qualified Person

John Read, C.P.G. (No. 10722)
Printed Name of Qualified Person

CONSENT OF QUALIFIED PERSON

I, John Read, C.P.G, consent to public filing of the Technical Report entitled "El Gallo Complex Phase II Project, NI 43-101 Technical Report Feasibility Study, Mocorito Municipality, Sinaloa, Mexico" (the "Technical Report") dated September 27, 2012 by McEwen Mining Inc.

I also consent to any extracts from or a summary of the Technical Report in the News Release dated September 10, 2012 by McEwen Mining, Inc.

I certify that I have read the News Release dated September 10, 2012 filed by McEwen Mining, Inc. and that it fairly and accurately represents the information in the section of the Technical Report for which I am responsible.

Dated September 27, 2012

(Signed)(Sealed) "*John Read*"
John Read, C.P.G.

CERTIFICATE of QUALIFIED PERSON

Michael G. Hester, FAusIMM

I, Michael G. Hester, FAusIMM, do certify that:

1. I am currently employed as Vice President and Principal Mining Engineer at Independent Mining Consultants (IMC), located at 3560 E. Gas Road, Tucson, Arizona 85714. Phone number 520-294-9861.
2. I graduated with a Bachelor of Science degree in Mining Engineering from University of Arizona in 1979 and a Master of Science degree in Mining Engineering from University of Arizona in 1982.
3. I am a Fellow of the Australian Institute of Mining and Metallurgy (No. 221108) a professional association defined by National Instrument 43-101 – Standards of Disclosure for Mineral Projects. I am a member in good standing with the Society for Mining, Metallurgy, and Exploration, Inc. (No. 1423200) and the Canadian Institute of Mining, Metallurgy and Petroleum (No. 100809).
4. I have practiced as an engineer continuously since 1979, a period of 33 years. I am a founding partner, Vice President, and Principal Mining Engineer for Independent Mining Consultants, Inc. (IMC) a position I have held since 1983. I have also been employed as an Adjunct Lecturer at the University of Arizona (1997-1998) where I taught classes in open pit mine planning and mine economic analysis. I was also employed as a staff engineer for Pincock, Allen & Holt, Inc. from 1979 to 1983.
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 the principal author of Sections 15 and 16 for the Technical Report titled "El Gallo Complex Phase II Project, NI 43-101 Technical Report Feasibility Study, Mocorito Municipality, Sinaloa, Mexico" (the "Technical Report"), dated September 27, 2012. I last visited the property on January 24 and 25, 2012.
7. I have not had prior involvement with the El Gallo Complex that is the subject of the Technical Report.
8. As of the date of the certificate, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to disclose to make the Technical Report not misleading.

9. I am independent of the Issuer in accordance with Section 1.5 of NI 43-101.
10. I have read National Instrument 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with NI 43-101 and Form 43-101F1.
11. I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them, including electronic publication in the public company files on their websites accessible by the public.

Signed and dated this 27th day of September 2012 in Tucson, Arizona.

(Signed) "*Michael G. Hester*"
Signature of Qualified Person

Michael G. Hester, FAusIMM, (No. 221108)
Printed Name of Qualified Person

CONSENT OF QUALIFIED PERSON

I, Michael G. Hester, FAusIMM, consent to public filing of the Technical Report entitled "El Gallo Complex Phase II Project, NI 43-101 Technical Report Feasibility Study, Mocorito Municipality, Sinaloa, Mexico" (the "Technical Report") dated September 27, 2012 by McEwen Mining Inc.

I also consent to any extracts from or a summary of the Technical Report in the News Release dated September 10, 2012 by McEwen Mining, Inc.

I certify that I have read the News Release dated September 10, 2012 filed by McEwen Mining, Inc. and that it fairly and accurately represents the information in the section of the Technical Report for which I am responsible.

Dated September 27, 2012

(Signed)(Sealed) "*Michael G. Hester*"
Michael G. Hester, FAusIMM

CERTIFICATE of QUALIFIED PERSON

Dawn H. Garcia, P.G., C.P.G.

I, Dawn H. Garcia, P.G., C.P.G., do certify that:

1. I am currently Principal Hydrogeologist at SRK Consulting (U.S) Inc., located at 3275 W. Ina Road, Suite 240, Tucson, Arizona 85741. Phone number 520-954-3688.
2. I graduated with a Bachelor of Science degree in Geological Sciences Bradley University in 1982 and a Master of Science degree in Geology from California State University Long Beach in 1995.
3. I am a Certified Professional Geologist in good standing with the Association of American Institute of Professional Geologists (No. 08313) and am a Registered Member of the Society of Mining, Metallurgy and Exploration, Inc. (No. 4135993).
4. I have practiced as a geologist/hydrogeologist for a total of 28 years since my graduation from university. My relevant experience includes environmental compliance permitting, hydrogeological studies and geotechnical studies at mining and processing operations.
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 the principal author of Section 20 for the Technical Report titled "El Gallo Complex Phase II Project, NI 43-101 Technical Report Feasibility Study, Mocorito Municipality, Sinaloa, Mexico" (the "Technical Report"), dated September 27, 2012. I last visited the property on September 8 through September 13, 2011.
7. I have not had prior involvement with the El Gallo Complex that is the subject of the Technical Report.
8. As of the date of the certificate, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to disclose to make the Technical Report not misleading.
9. I am independent of the Issuer in accordance with Section 1.5 of NI 43-101.
10. I have read National Instrument 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with NI 43-101 and Form 43-101F1.

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

Signed and dated this 27th day of September 2012 in Tucson, Arizona.

(Signed)(Sealed) "*Dawn H. Garcia*"
Signature of Qualified Person

Dawn H. Garcia, P.G., C.P.G. (No. 08313)
Printed Name of Qualified Person

CONSENT OF QUALIFIED PERSON

I, Dawn H. Garcia, P.G., C.P.G., consent to public filing of the Technical Report entitled "El Gallo Complex Phase II Project, NI 43-101 Technical Report Feasibility Study, Mocorito Municipality, Sinaloa, Mexico" (the "Technical Report") dated September 27, 2012 by McEwen Mining Inc.

I also consent to any extracts from or a summary of the Technical Report in the News Release dated September 10, 2012 by McEwen Mining, Inc.

I certify that I have read the News Release dated September 10, 2012 filed by McEwen Mining, Inc. and that it fairly and accurately represents the information in the section of the Technical Report for which I am responsible.

Dated September 27, 2012

(Signed)(Sealed) "*Dawn H. Garcia*"
Dawn H. Garcia, P.G., C.P.G.

CERTIFICATE of QUALIFIED PERSON

Richard J. Kehmeier, C.P.G.

I, Richard J. Kehmeier, C.P.G., do certify that:

1. I am currently employed as Chief Geologist by Pincock, Allen & Holt, Inc., located at 165 S. Union Boulevard, Suite 950, Lakewood, Colorado, USA. Phone number 303-986-6950.
2. I graduated with a Bachelor of Science degree in Geological Engineering from the Colorado School of Mines in 1970 and a Master of Science degree in Geology from the Colorado School of Mines in 1973.
3. I am a designated Certified Professional Geologist by the American Institute of Professional Geologists (No. 10879).
4. I have practiced my profession for a total of 42 years since graduation form college and have been involved in the evaluation and/or operation of mineral properties for copper, gold, iron, lead, pyrite, silver, tin, tungsten, uranium, zinc fluorite, perlite, and zircon in Argentina, Bolivia, Brazil, Canada, Chile, Costa Rica, Ecuador, Greenland, Guyana, Mexico, Nicaragua, Peru, the United States of America, and Venezuela.
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 have reviewed the preparation of Section 14.1.1 through 14.1.14 for the Technical Report titled "El Gallo Complex Phase II Project, NI 43-101 Technical Report Feasibility Study, Mocorito Municipality, Sinaloa, Mexico" (the "Technical Report"), dated September 27, 2012.
7. I have not had prior involvement with the El Gallo Complex that is the subject of the Technical Report.
8. As of the date of the certificate, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to disclose to make the Technical Report not misleading.
9. I am independent of the Issuer in accordance with Section 1.5 of NI 43-101.
10. I have read National Instrument 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with NI 43-101 and Form 43-101F1.

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

Signed and dated this 27th day of September 2012 in Lakewood, Colorado.

(Signed)(Sealed) "*Richard J. Kehmeier*"
Signature of Qualified Person

Richard J. Kehmeier, C.P.G. (No. 10879)
Printed Name of Qualified Person

CONSENT OF QUALIFIED PERSON

I, Richard J. Kehmeier, C.P.G., consent to public filing of the Technical Report entitled "El Gallo Complex Phase II Project, NI 43-101 Technical Report Feasibility Study, Mocorito Municipality, Sinaloa, Mexico" (the "Technical Report") dated September 27, 2012 by McEwen Mining Inc.

I also consent to any extracts from or a summary of the Technical Report in the News Release dated September 10, 2012 by McEwen Mining, Inc.

I certify that I have read the News Release dated September 10, 2012 filed by McEwen Mining, Inc. and that it fairly and accurately represents the information in the section of the Technical Report for which I am responsible.

Dated September 27, 2012

(Signed)(Sealed) "*Richard J. Kehmeier*"
Richard J. Kehmeier, C.P.G.

CERTIFICATE of QUALIFIED PERSON

Brian S. Hartman, P.Geo.

I, Brian Hartman, P.Geo., do certify that:

1. I am currently employed as a Senior Geologist by Pincock, Allen & Holt, Inc., located at 165 S. Union Boulevard, Suite 950, Lakewood, Colorado, USA. Phone number 303-986-6950.
2. I graduated with a Bachelor of Science degree in Geoscience from the University of Iowa in 2001 and a Master of Science degree in Geoscience from the University of Iowa in 2004.
3. I am a registered Professional Geoscientist in good standing with the Association of Professional Engineers and Geoscientists of the Province of Manitoba, (No. 33158) and am a Registered Member of the Society for Mining, Metallurgy & Exploration, (No. 4175655RM).
4. I have practiced by profession continuously for over seven years and have been involved in mineral exploration, mine site geology and mineral resource estimation for gold, silver, copper, zinc, nickel, and iron ore deposits in Canada, the United States of America, Mexico, Chile, and Botswana.
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 the principal author of Section 14.1.1 through 14.1.14 for the Technical Report titled "El Gallo Complex Phase II Project, NI 43-101 Technical Report Feasibility Study, Mocorito Municipality, Sinaloa, Mexico" (the "Technical Report"), dated September 27, 2012.
7. I have not had prior involvement with the El Gallo Complex that is the subject of the Technical Report.
8. As of the date of the certificate, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to disclose to make the Technical Report not misleading.
9. I am independent of the Issuer in accordance with Section 1.5 of NI 43-101.
10. I have read National Instrument 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with NI 43-101 and Form 43-101F1.

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

Signed and dated this 27th day of September 2012 in Lakewood, Colorado.

(Signed)(Sealed) "*Brian S. Hartman*"
Signature of Qualified Person

Brian S. Hartman P.Geo. (No. 33158)
Printed Name of Qualified Person

CONSENT OF QUALIFIED PERSON

I, Brian Hartman, P.Geo., consent to public filing of the Technical Report entitled "El Gallo Complex Phase II Project, NI 43-101 Technical Report Feasibility Study, Mocorito Municipality, Sinaloa, Mexico" (the "Technical Report") dated September 27, 2012 by McEwen Mining Inc.

I also consent to any extracts from or a summary of the Technical Report in the News Release dated September 10, 2012 by McEwen Mining, Inc.

I certify that I have read the News Release dated September 10, 2012 filed by McEwen Mining, Inc. and that it fairly and accurately represents the information in the section of the Technical Report for which I am responsible.

Dated September 27, 2012

(Signed)(Sealed) "*Brian Hartman*"
Brian Hartman, P.Geo.

CERTIFICATE of QUALIFIED PERSON

Aaron M. McMahon, P.G.

I, Aaron M. McMahon, P.G., do certify that:

1. I was formerly with Pincock, Allen & Holt, Inc., located at 165 S. Union Boulevard, Suite 950, Lakewood, Colorado, USA. Phone number 303-986-6950.
2. I graduated with a Bachelor of Science degree in Geology from James Madison University in 1998 and a Master of Science degree in Geology from Arizona University in 2001.
3. I am a Professional Geologist in good standing with the State of California (No. 7963) and am a registered member in good standing of the Society of Mining, Metallurgy, and Exploration, Inc. (No. 4133264).
4. I have worked as a geologist for a total of 10 years since my graduation from university.
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 the principal author of Section 14.3 for the Technical Report titled "El Gallo Complex Phase II Project, NI 43-101 Technical Report Feasibility Study, Mocorito Municipality, Sinaloa, Mexico" (the "Technical Report"), dated September 27, 2012. I visited the property in December 2008 and March 2010.
7. I have not had prior involvement with the El Gallo Complex that is the subject of the Technical Report.
8. As of the date of the certificate, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to disclose to make the technical report not misleading.
9. I am independent of the Issuer in accordance with Section 1.5 of NI 43-101.
10. I have read National Instrument 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with NI 43-101 and Form 43-101F1.
11. I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them, including electronic publication in the public company files on their websites accessible by the public.

Signed and dated this 27th day of September 2012 in Denver, Colorado.

(Signed)(Sealed) "*Aaron M. McMahon*"
Signature of Qualified Person

Aaron M. McMahon, P.G. (No. 08313)
Printed Name of Qualified Person

CONSENT OF QUALIFIED PERSON

I, Aaron M. McMahon, P.G., consent to public filing of the Technical Report entitled "El Gallo Complex Phase II Project, NI 43-101 Technical Report Feasibility Study, Mocorito Municipality, Sinaloa, Mexico" (the "Technical Report") dated September 27, 2012 by McEwen Mining Inc.

I also consent to any extracts from or a summary of the Technical Report in the News Release dated September 10, 2012 by McEwen Mining, Inc.

I certify that I have read the News Release dated September 10, 2012 filed by McEwen Mining, Inc. and that it fairly and accurately represents the information in the section of the Technical Report for which I am responsible.

Dated September 27, 2012

(Signed)(Sealed) "*Aaron M. McMahon*"
Aaron M. McMahon, P.G.

APPENDIX B: OPINION OF LEGAL TITLE

LEGAL OPINION. TITLES OF MINING CLAIMS AND OWNERSHIP OF “PALMARITO” AND “EL GALLO” PLOTS OF LAND FOR THE PRODUCTION OF COMPAÑÍA MINERA PANGEA S.A. DE C.V.

The present opinion is structured in the following manner:

1. **Analyses of Mining Claim Titles and Plans**

   a) Mining claim title 212197 (RIAL) 114 hectares
   b) Mining claim title 182598 (PALMARITO) 26 hectares
   c) Mining claim title 221204 (PANGEA) 1596.18 hectares
   d) Mining claim title 223492 (ROCÍO FRACC. A) 34,999.71 hectares

   - **MAP of Palmarito mining claims (where Rial and Palmarito are included)**

   - **MAP of El Gallo mining claims (where Pangea and Rocío Fracc. A is included)**

2. **Analysis** of background and procedures where the plots of land that Compañía Minera Pangea, S.A. de C.V. acquired in property as well as through temporary-occupation contracts in the zones known as “Palmarito” and “el Gallo” are involved.

   The procedures being analysed were the following:

   a) **ACQUISITION OF PLOTS OF LAND** by Eurídice Salomé González Robles and Antemio López Melendres, who are located in **EL TULE, CAHUINAHUATO, POTRERO DE LAS PERDICIES, BACAMOPA and NACIMIENTO** communities, **and which are part of “EL GALLO”, “PALMARITO” and “EL MAGISTRAL” projects.**

   b) **TEMPORARY-OCCUPATION CONTRACTS** held by Compañía Minera Pangea, S.A. de C.V. through its legal representative

Eurídice Salomé González Robles with various owners and occupants of cooperative-land parcels at the zone known as Palmarito and which is part of "Palmarito" project.

c) **TEMPORARY-OCCUPATION CONTRACTS** held by Compañía Minera Pangea, S.A. de C.V. through its legal representative Eurídice Salomé González Robles with the Commission of Cooperative Real Estate of **PALMARITO** cooperative land and the Commission of **EL TULE** Communal Real Estate.

d) **TEMPORARY-OCCUPATION CONTRACTS** held by MINERA PANGEA S.A. DE C.V. with Eurídice Salomé González Robles and Antemio López Melendres, and which are part of "EL GALLO, "PALMARITO" and "EL MAGISTRAL" projects.

3. REMARKS BY PROJECT

4. GENERAL CONCLUSION

1.- ANALYSIS OF MINING CLAIMS TITLES AND MAPS

Inside the analysis of mining claim titles 212197 (RIAL) 114 hectares; 182598 (PALMARITO) 26 hectares; 221204 (PANGEA) 1596.18 hectares; 223492 (ROCÍO FRACC. A) 34,999.71 hectares.

Such titles match those expressed on the corresponding maps with Palmarito (where Rial and Palmarito are included) as well as the expressed in corresponding maps with El Gallo (where Pangea AND Rocío Fracc. A are included).

Analysed claim titles do not represent any remarks needed to be clarified or corrected as well as any upcoming due date to be renewed.

2.- ANALYSIS OF BACKGROUND AND PROCEDURES WHERE THE PLOTS OF LAND THAT MINERA PANGEA S.A. DE C.V. ACQUIRED IN PROPERTY AS WELL AS THROUGH TEMPORARY-OCCUPATION CONTRACTS IN THE ZONES KNOWN AS "PALMARITO" AND "EL GALLO" ARE INVOLVED AT.

a) ACQUISITION OF PLOTS OF LAND by Eurídice Salomé González Robles and Antemio López Melendres, who are located at **EL TULE, CAHUINAHUATO, POTRERO DE LAS PERDICIES, BACAMOPA, NACIMIENTO AND AGUABLANCA** communities**.**

- Files of each and every record being carried out for the **acquisition of plots of land** by Compañía Minera Pangea, S.A. de C.V. through its legal representatives Eurídice Salomé González Robles and Antemio López Melendres were reviewed.

- Based upon this, an inventory-like list was elaborated by separating **per project** providing the following results in remarks:

"EL GALLO" PROJECT

LAND PARCEL NUMBER AND COMMUNITY	OWNER	PARCEL CERTIFICATE	AREA HECTARES	CLAIM
1.- **165 Z2 P1/1** (“El Tule” community)	EURÍDICE	15887	0-91-83.98	**CLAIM: PANGEA**
2.- **164 Z2 P1/1** (“El Tule” community)	EURÍDICE	16055	0-83-10.12	**CLAIM: PANGEA**
3.- **163 Z2 P1/1** (“El Tule” community)	ANTEMIO	15690	0-73-92.94	**CLAIM: PANGEA AND ROCÍO FRACCIÓN A**
4.-**160 Z2 P1/1** (“El Tule” community)	EURÍDICE	16056	1-03-65.95	**CLAIM: PANGEA AND ROCÍO FRACCIÓN A**
5.- **159 Z2 P1/1** (“El Tule” community)	EURÍDICE	15888	0-85-04.86	**CLAIM: PANGEA AND ROCÍO FRACCIÓN A**
6.-**157 Z2 P1/1** (“El Tule” community)	EURÍDICE	16204	0-79-09.77	**CLAIM: ROCÍO FRACC. A**
7.- **155 Z2 P1/1** (“El Tule” community)	EURÍDICE	15889	1-30-77.50	**CLAIM: ROCÍO FRACC. A**
8.- **169 Z2 P1/1** (“El Tule” community)	ANTEMIO	15689	1-39-03.61	**CLAIM: PANGEA**
9.- **156 Z2 P1/1** (“El Tule” community)	ANTEMIO	15691	21-37-05.7	**CLAIM: PANGEA AND ROCÍO FRACCIÓN A**
10.- **144 Z2 P1/1** (“El Tule” community)	ANTEMIO	15727	1-89-81.40	**CLAIM: ROCÍO FRACCIÓN A**
11.- **146 Z2 P1/1** (“El Tule” community)	ANTEMIO	15747	3-31-93.42	**CLAIM: ROCÍO FRACCIÓN A**
12.-**182 Z2 P1/1** (“El Tule” community)	ANTEMIO	16343	18-50-93.27	**CLAIM: PANGEA**
13.-**158 Z2 P1/1**	EURÍDICE	15803	1-52-31.87	**CLAIM: PANGEA AND ROCÍO FRACCIÓN A**
14.-**162 Z2 P1/1** (“El Tule” community)	EURÍDICE	15890	0-26-67.73	**CLAIM: PANGEA**
15.- **161 Z2 P1/1** (“El Tule” community)	EURÍDICE	16050	4-30-79.03	**CLAIM: PANGEA**
16.- **143 Z2 P1/1**	EURÍDICE	16347	10-97-96.37	**CLAIM: ROCÍO FRACC. A**

("El Tule" community)				
17.- **168 Z2 P1/1** ("El Tule" community)	EURÍDICE	16348	11-74-93.86	**CLAIM: PANGEA**
18. **175 Z2 P1/1** ("El Tule" community)	EURÍDICE	16344	15-39-34.08	**CLAIM: ROCÍO FRACC. A AND PANGEA**
19. **181 Z2 P1/1** ("El Tule" community)	EURÍDICE	16342	20-36-88.89	**CLAIM: ROCÍO FRACC. A AND PANGEA**
20. **145 Z2 P1/1** ("El Tule" community)	EURÍDICE	16057	2-14-58.86	**CLAIM: ROCÍO FRACC. A**

LAND PARCEL NUMBER AND COMMUNITY	OWNER	CERTIFICATE	AREA HECTARES	CLAIM
1. **198 Z1 P1/1** ("Cahuinahuato" community)	EURÍDICE	12458/**03** 12458/**04**	75-60-99.57 75-60-99.57	**CLAIM: ROCÍO FRACC. A AND PANGEA**
2. **191 Z1 P1/1** ("Cahuinahuato" community)	EURÍDICE	16326	45-71-15.97	**CLAIM: ROCÍO FRACC. A AND PANGEA**
3. **125 Z1 P1/1** ("Cahuinahuato" community)	EURÍDICE	12460/0003 12460/0004	49-21-84.13 49-21-84.13	**CLAIM: ROCÍO FRACC. A**
4. **92 Z1 P1/1** ("Cahuinahuato" community)	EURÍDICE	16507	91-10-06.76	**CLAIM: ROCÍO FRACC. A**
5. **109 Z1 P1/1** ("Cahuinahuato" community)	EURÍDICE	16431	17-25-81.11	**CLAIM: ROCÍO FRACC. A**
6. **126 Z1 P1/1** ("Cahuinahuato" community)	EURÍDICE	16442	0-41-82.09	**CLAIM: ROCÍO FRACC. A**
7. **144 Z1 P1/1** ("Cahuinahuato" community)	EURÍDICE	16506	44-72-19.27	**CLAIM: ROCÍO FRACC. A**

8. **197 Z1 P1/1** ("Cahuinahuato" community)	EURÍDICE	16266	2-98-71.53	**CLAIM: ROCÍO FRACC. A AND PANGEA**

COMMUNITY	**PREVIOUS OWNER**	**CURRENT OWNER**	**AREA HECTARES**	**CLAIM**
1.-**AGUA BLANCA**	**ALEJANDRA ARCE CUEVAS**	MINERA PANGEA (EURÍDICE)	04-39-26	**CLAIM: ROCÍO FRACC. A**
2.-**AGUA BLANCA**	**ÓSCAR MIREY CUEVAS SALAZAR**	MINERA PANGEA (EURÍDICE)	19-90-40.00	**CLAIM: ROCÍO FRACC. A**
3.-**AGUA BLANCA**	**MARGARITO CUEVAS ARCE**	MINERA PANGEA (EURÍDICE)	05-82-06.00	**CLAIM: ROCÍO FRACC. A**
4.-**AGUA BLANCA**	**JOSÉ LUIS ARCE HIGUERA**	MINERA PANGEA (EURÍDICE)	12-81-05.5	**CLAIM: ROCÍO FRACC. A**
5.-**AGUA BLANCA**	**JOSÉ PABLO ALCALÁ CABRERA**	MINERA PANGEA (EURÍDICE)	11-97-28.00	**CLAIM: ROCÍO FRACC. A**
6.-**AGUA BLANCA**	**JOSÉ ROSARIO ALCALÁ CABRERA**	MINERA PANGEA (EURÍDICE)	4-74-14.5	**CLAIM: ROCÍO FRACC. A**
7.-**AGUA BLANCA**	**LORENZO LÓPEZ SOTO**	MINERA PANGEA (EURÍDICE)	7-25-99.5	**CLAIM: ROCÍO FRACC. A**
8.-**AGUA BLANCA**	**MAGDALENO HIGUERA SALAZAR**	MINERA PANGEA (EURÍDICE)	2-67-55	**CLAIM: ROCÍO FRACC. A**
9.-**AGUA BLANCA**	**ALEJANDRINA ARCE CUEVAS**	MINERA PANGEA (EURÍDICE)	01-54-32.5	**CLAIM: ROCÍO FRACC. A**
10.-**AGUA BLANCA**	**BUENAVENTURA MORENO**	MINERA PANGEA	06-67-33.5	**CLAIM: ROCÍO FRACC. A**

	CASTRO	(EURÍDICE)		
11.-**AGUA BLANCA**	**ALEJANDRINA ARCE CUEVAS**	MINERA PANGEA (EURÍDICE)	01-54-32.5	**CLAIM: ROCÍO FRACC. A**
12.-**AGUA BLANCA**	**IGNACIO MORENO LÓPEZ**	MINERA PANGEA (EURÍDICE)	08-51-23.50	**CLAIM: ROCÍO FRACC. A**
13.-**AGUA BLANCA**	**SOCORRO CASTRO**	MINERA PANGEA (EURÍDICE)	00-86-80.62	**CLAIM: ROCÍO FRACC. A**
14.-**AGUA BLANCA**	**GENARO CASTRO ALCALÁ**	MINERA PANGEA (EURÍDICE)	91-71-94	**CLAIM: ROCÍO FRACC. A**
15.-**AGUA BLANCA**	**PORFIRIO CABRERA HIGUERA**	MINERA PANGEA (EURÍDICE)	69-11.616	**CLAIM: ROCÍO FRACC. A**
16.-**AGUA BLANCA**	**EMILIANO CASTRO CUEVAS**	MINERA PANGEA (EURÍDICE)	10-18-08.05	**CLAIM: ROCÍO FRACC. A** **CLAIM: ROCÍO FRACC. A**
17.-**AGUA BLANCA**	**MAGDALENO HIGUERA SALAZAR**	MINERA PANGEA (EURÍDICE)	00-20-19-101	**CLAIM: ROCÍO FRACC. A**

EL MAGISTRAL PROJECT

LAND PARCEL NUMBER AND COMMUNITY	**OWNER**	**PARCEL CERTIFICATE**	**AREA** **HECTARES**	**CLAIM**
1.- **25 Z1 P1/1** **(PROTERO DE LAS PERDICES)**	ANTEMIO	15646	18-94-35.27	**CLAIM: MAGISTRAL**
2.- **60 Z1 P1/1** **NACIMIENTO**	ANTEMIO	15650	6-30-80.09	**CLAIM: MAGISTRAL**
3.- **102 Z5 P1/1**	ANTEMIO	15645	66-27-71.53	**CLAIM: MAGISTRAL**

BACAMOPA				
4.-**32 Z1 P1/1** **(PROTERO DE LAS PERDICES)**	ANTEMIO	15644	12-85-11.02	**CLAIM: MAGISTRAL**

b) TEMPORARY-OCCUPATION CONTRACTS held by Compañía Minera Pangea, S.A. de C.V. through its legal representative Eurídice Salomé González Robles with various owners and occupants of cooperative land parcels at the zone known as Palmarito.

- Files of each and every record being carried out for the **signing of the temporary-occupation contracts** by Compañía Minera Pangea, S.A. de C.V. through its legal representative Eurídice Salomé González Robles were reviewed.

- Based upon this, an inventory-like list of El Palmarito project was elaborated providing the following listing with remarks:

"PALMARITO" PROJECT

LAND PARCEL NUMBER	OWNER	CONTRACT TYPE	AREA HECTARES	CLAIM
1.-137 Z1 P1/1	**Antonio Casto Heraldez**	Temporary occupation for exploration and exploitation (**15 years**)	11-79-75.91	**CLAIMS: PALMARITO**
2.- N/A **HOLDER**	**Julián Arnoldo Duarte**	Temporary occupation for exploration and exploitation (**15**	3-26-31.59	**CLAIM: PALMARITO**

		years)		
3.-183 Z1 P1/1	**Julián Arnoldo Duarte**	Temporary occupation for exploration and exploitation (**15 years**)	02-02-18.29	**CLAIM: PALMARITO**
4.- N/A **HOLDER**	**Celedonio Heraldez Cabrera**	Temporary occupation for exploration and exploitation (**15 years**)	1-13-25.58	**CLAIM: PALMARITO**
5. N/A **HOLDER**	**Francisco Javier Sánchez Lopez**	Temporary occupation for exploration and exploitation (**15 years**)	00-68-77.52	**CLAIM: PALMARITO**
6.-144 Z1 P1/1	Irene Fuentes Carrazco	Temporary occupation for exploration and exploitation (**15 years**)	18-01-16.87	**CLAIMS: PALMARITO**
7. N/A **HOLDER**	**Luis Heraldez Cabrera**	Temporary occupation for exploration and exploitation (**15 years**)	0-56-93.20	**CLAIM: PALMARITO**
8. 181 Z1 P1/1	**María Carmen López González**	Temporary occupation for exploration and exploitation (**15 years**)	1-27-72.17	**CLAIM: PALMARITO**
9. N/A **HOLDER**	**Margarito López Osuna**	Temporary occupation for exploration and exploitation (**15 years**)	2-74-16.08	**CLAIM: PALMARITO**
10. N/A	**Ramón López**	Temporary occupation for	1-46-04.93	**CLAIM: PALMARITO**

HOLDER	**González**	exploration and exploitation (**15 years**)		
11.136 Z1 P1/1	**Rufina López González**	Temporary occupation for exploration and exploitation (**15 years**)	8-57-46.88	**CLAIM: PALMARITO**
12.182 Z1 P1/1	**Rufina López González**	Temporary occupation for exploration and exploitation (**15 years**)	03-00-23.21	**CLAIM: PALMARITO**

C) TEMPORARY-OCCUPATION CONTRACTS held by Compañía Minera Pangea, S.A. de C.V. through its legal representative Eurídice Salomé González Robles with the Commission of Cooperative Real Estate of **PALMARITO** cooperative land and the Commission of **EL TULE** Communal Real Estate.

- Each and every record being carried out for the Temporary-Occupation-Contract form in lands of common use through its legal representative Eurídice Salomé González Robles was reviewed in files.

- Based upon this, a list of the following results in remarks was elaborated:

"PALMARITO" COOPERATIVE LAND (Palmarito Project)

COMMON USE LAND NUMBER	OWNER	CONTRACT TYPE	AREA HECTARES	CLAIMS IT COVERS AND REMARKS
Common Use Land 5	**Palmarito Cooperative Land**	Temporary occupation for exploration and exploitation (**15 years**)	15-76-86.18	**CLAIMS: PALMARITO, RIAL AND LA PALMA**

"EL TULE" COMMUNITY (El Gallo Project)

COMMON USE LAND NUMBER	OWNER	CONTRACT TYPE	AREA HECTARES	CLAIMS IT COVERS AND REMARKS
Common Use Land	El Tule Community	Temporary occupation for exploration and exploitation (10 years) March 22nd, 2011	44-41-10	CLAIMS: ROCÍO FRACC. A, PANGEA AND EL VALLE FRACC. 1

d) TEMPORARY-OCCUPATION CONTRACTS held by MINERA PANGEA S.A. DE C.V. with Eurídice Salomé González Robles and Antemio López Melendres of "El Gallo" and "Palmarito" projects.

The signing of contracts held between Eurídice Salomé González Robles and Compañía Minera Pangea, S.A. de C.V. was performed on July 1st, 2012

CERTIFICATE NUMBER	AREA	CLAIMS IT COVERS
15803	1-52-31.87	ROCÍO FRACC. A AND PANGEA
15888	0-85-04.86	ROCÍO FRACC. A AND PANGEA
15889	1-30-77.50	ROCÍO FRACCIÓN A
15887	0-91-83.98	PANGEA
15890	0-26-67.73	PANGEA
16056	1-03-65.95	ROCÍO FRACC. A AND PANGEA
16050	4-30-79.03	PANGEA
16055	0-83-10.12	PANGEA
12458/0003	50%75-60-99.57	ROCÍO FRACC. A AND PANGEA
12458/0004	50%75-60-99.57	ROCÍO FRACC. A AND PANGEA
16057	2-14-50.86	ROCÍO FRACC. A
16266	2-98-71.53	ROCÍO FRACC. A AND PANGEA
16204	0-79-09.77	ROCÍO FRACC. A
16326	45-71-15.97	ROCÍO FRACC. A AND PANGEA
16347	10-97-96.37	ROCÍO FRACC. A
16348	11-74-93.86	PANGEA
16344	15-39-34.08	ROCÍO FRACC. A AND PANGEA
16342	20-36-88.89	ROCÍO FRACC. A AND

		PANGEA
12460/0003	50%49-21-84.13	ROCÍO FRACC. A
12460/0004	50%49-21-84.13	ROCÍO FRACC. A
16507	91-10-06.76	ROCÍO FRACC. A
16431	17-25-81.11	ROCÍO FRACC. A
16442	0-41-82.09	ROCÍO FRACC. A
16506	44-72-19.27	ROCÍO FRACC. A

The signing of contracts held between Antemio López Melendrez and Compañía Minera Pangea, S.A. de C.V. was performed on July 30th, 2012.

PARCEL CERTIFICATE NUMBER	PARCEL LAND NUMBER	AREA HECTARES	CLAIMS IT COVERS
16343	182 Z2 P1/1	18-50-93.27	PANGEA
15747	146 Z2 P1/1	3-31-93.42	ROCÍO FRACCIÓN A
15727	144 Z2 P1/1	1-89-81.40	ROCÍO FRACCIÓN A
15691	156 Z2 P1/1	21-37-05.76	PANGEA AND ROCÍO FRACCIÓN A
15690	163 Z2 P1/1	0-73-92.94	PANGEA AND ROCÍO FRACCIÓN A
15689	169 Z2 P1/1	1-39-03.61	PANGEA
15646	25 Z1 P1/1	18-94-35.27	MAGISTRAL
15650	60 Z1 P1/1	6-30-80.09	MAGISTRAL
15645	102 Z5 P1/2	66-27-71.53	MAGISTRAL
15644	32 Z1 P1/1	12-85-11.02	MAGISTRAL

Regarding the previous review and analysis, the following:

GENERAL REMARKS OF EACH PROJECT

Are made:

"EL GALLO" PROJECT

- **Each and every plot-of-land acquisition contract of Eurídice González Robles was reviewed, which does not represent any remarks since they comply with the stated in the Law of Agriculture.**
- **The Temporary Occupation Contracts were already signed for 20 years (with extension to 10 more years) between Eurídice and Minera Pangea, which were reviewed in each of their clauses and**

they do not exhibit any additional remarks to be made, since they comply with the stated in the Law of Agriculture.

- It shall be necessary to register the temporary-occupation contracts signed between Eurídice and Minera Pangea in the Sinaloa Delegation's Agricultural Registry to comply with legal formalities.
- Regarding the plots of land acquired by Minera Pangea in Agua Blanca Community, they do not represent any relevant remarks to be made, only the arrangements for title issuance in favour of Minera Pangea were found to be pending, such arrangements are taking their time (in due course).

"EL MAGISTRAL" PROJECT

- Plot-of-land acquisition contracts of Antemio López M. were reviewed, which do not represent any remarks since they comply with the stated in the Law of Agriculture.
- Temporary-Occupation contracts were already signed for 20 years (with extension to 10 more years) between Antemio and Minera Pangea, which were reviewed in each of their clauses and they do not exhibit any additional remarks to be made, since they comply with the stated in the Law of Agriculture.
- It shall be necessary to register the Temporary-Occupation contracts signed between Antemio and Minera Pangea in Sinaloa Delegation's Agricultural Registry to comply with legal formalities.

"PALMARITO" PROJECT

Regarding the various temporary-occupation contracts being signed, a total of 12 contracts were reviewed within which 6 contracts were found in favour of:

- Julián Arnoldo Duarte Heraldez **03-26-31.59 hectares**
- Margarito López Osuna **02-74-16.08 hectares**
- Ramon López González **01-46-04.93 hectares**
- Luis Heraldez Cabrera **00-56-93.20 hectares**
- Francisco Javier Sánchez López **00-68-77.52 hectares**
- Celedonio Heraldez Cabrera 01-13-25.58 **hectares**

Out of these contracts, the following was observed:

There is a contract registered in RAN (its legal qualification is pending since it is necessary to determine whether the piece of land is located within the area of Palmarito cooperative land). Its accurate location is in process.

It is necessary to arrange the registration in the Mining Public Registry, Mines Directorate, in order to provide Minera Pangea with legal certainty.

The contract complies with all the requirements of the Law of Agriculture.

The following was observed in the other Temporary-Occupation contracts:

The contract is registered in RAN (there is an agreement of qualification in Culiacan Delegation's Agricultural Registry).

The contract meets all the requirements of the Law of Agriculture.

REMARKS IN THE TEMPORARY-OCCUPATION CONTRACTS IN COMMON-USE PLOTS OF LAND PER PROJECT

"EL GALLO" PROJECT

Regarding **EL TULE COMMUNITY**:

It is necessary to start communication with El Tule Community to determine whether such a community is keen to solve the problem with regard to the assembly dated on June 26th, 2011 (where some joint tenants express they do not agree with the contents of the contracted dated on March 22nd (but such an assembly is not registered).

"PALMARITO" PROJECT

Regarding **PALMARITO COOPERATIVE LAND**:

The contract is registered in RAN (there is an agreement of qualification in Culiacan Delegation's Agricultural Registry).

The contract complies with all the requirements of the Law of Agriculture.

General Conclusion

It is important to mention that no problem on the review and analysis was detected, representing a situation that pose the acquisition of plots of land performed by Minera Pangea, S.A. de C.V. a risk at this time inside the projects called EL GALLO, PALMARITO and EL MAGISTRAL; nevertheless, in order to have legal certainty, it shall be necessary to take care of these remarks.

Sincerely,
Mr. Sergio Bonfiglio MacBeath

DBR
Díaz, Bouchot & Raya
ABOGADOS

August 2, 2012

Independent Mining Consultants, Inc.
3560 East Gas Road
Tucson, Arizona 85714
USA

Attention: Mr. Mike Hester

Re: **Title opinion of Compañía Minera Pangea, S.A. de C.V. mining concessions (Project "El Palmarito" and "El Gallo").**

Dear Sirs:

Pursuant to your request, we are providing you with our title opinion on the Concessions, that cover the mining claims mentioned herein-below, and upon which Compañía Minera Pangea, S.A. de C.V. has rights (the "Concessions").

The information provided with respect to the Concessions is based on a research done for that purpose, during the fourth week of July, 2012, at the General Bureau of Mines ("GBM") and the Public Registry of Mining (the "Registry") within the Ministry of Economy.

Validity and ownership in record.

As a result of our research in the Registry, we were able to obtain the following information regarding the mining concessions listed herein below:

1

DBR
Díaz, Bouchot & Raya
ABOGADOS

A. The Concessions.

Compañía Minera Pangea, S.A. de C.V. is duly recorded in the Registry as a legal holder of the rights derived from the concessions, covering the following mining claims:

Name of the Mining Claim	Original Title Date	Title Claim Number	Surface Area (Ha.)
El Palmarito	August 12, 1988	182598	26.00
El Rial	September 21, 2000	212197	114.00
Pangea	December 10, 2003	221204	1,595.1811
Rocio Fraccion A	January 10, 2005	223492	34,999.7108

The following data was also obtained at the Registry:

i) "El Palmarito" (title 182598)

1. Location: Mocorito, State of Sinaloa, Mexico;
2. Original concessionaire: Minera Prisma, S.A. de C.V., as recorded on August 12, 1988, under Entry 698, at Pages 175, Volume 247 of the Mining Concessions Book of the Registry;
3. Present Concessionaire: Compañia Minera Pangea, S.A. de C.V. as recorded on December 19, 2005 under Entry 73, Pages 41, Volume 19 of the Mining Acts, Contracts and Agreements Book of the Registry.
4. Effective period: August 12, 1988 through August 11, 2038; and
5. Status: In force, and free of any liens, charges or encumbrances.

2

DBR
Díaz, Bouchot & Raya
ABOGADOS

ii) "El Rial" (title 212197)

1. Location: Mocorito, State of Sinaloa, Mexico;
2. Original concessionaire: Consorcio Minero Latinoamericano, S.A. de C.V., as recorded on September 21, 2000, under Entry 217, at Pages 109, Volume 315 of the Mining Concessions Book of the Registry;
3. Present Concessionaire: Compañia Minera Pangea, S.A. de C.V. as recorded on October 28, 2011 under Entry 129, Pages 73, Volume 31 of the Mining Acts, Contracts and Agreements Book of the Registry.
4. Effective period: September 21, 2000 through September 21, 2050; and
5. Status: In force, and free of any liens, charges or encumbrances.

iii) "Pangea" (title 221204)

1. Location: Mororito, State of Sinaloa, Mexico;
2. Original concessionaire: Compañia Minera Pangea, S.A. de C.V., as recorded on December 10, 2003, under Entry 224, at Pages 112, Volume 340 of the Mining Concessions Book of the Registry;
3. Effective period: December 10, 2003 through December 10, 2053; and
4. Status: In force, and free of any liens, charges or encumbrances.

iv) "Rocio Fraccion A" (title 223492)

1. Location: Mocorito, State of Sinaloa, Mexico;
2. Original concessionaire: Compañia Minera Pangea, S.A. de C.V., as recorded on January 10, 2005, under Entry 352, at Pages 176, Volume 346 of the Mining Concessions Book of the Registry;

DBR
Díaz, Bouchot & Raya
ABOGADOS

3. Effective period: January 10, 2005 through January 10, 2055; and

4. Status: In force, and free of any liens, charges or encumbrances.

B. Mining Obligations.

Classification. The obligations which the holders of mining concessions must comply in order to maintain their concessions in full force and effect, pursuant to the Mexican Mining Legislation and the Federal Fees Law are as follows:

i. **Assessment of Work Report.** During the month of May of each year, the concessionaire must file with the GBM, the Work Assessment Reports made on each concession or group of concessions for the immediately preceding calendar year. The Regulations of the Mining Law establish the tables containing the minimum investment amounts that must be made on a concession. The amount will be updated annually in accordance with the variation of the Consumer Price Index;

ii. **Mining Duties.** During the months of January and July of each year, the concessionaries must pay the mining duties for the areas that pertain to each concession (on a per hectare basis), and file before the GBM an evidence of the payment during the months of February and August of each year; and

iii. **Production Report.** During the first 21 working days of each year, the concessionaire must file before the GBM, the Production Reports made on each concession or group of concessions for the immediately preceding calendar year.

Assessment Work Report.

Regarding the Assessment Work Reports, at this moment and pursuant to the Mining Legislation and its Regulations, the concessions referenced in this opinion are in good standing.

4

DBR
Díaz, Bouchot & Raya
ABOGADOS

Mining Duties.

In accordance with the GBM records and regarding the Mining Duties Payments, the Mining Concessions are in good standing.

C. Opinion.

The Concessions: Based on our research done at the GBM and the Registry we inform you of the following:

- **i)** **Compañia Minera Pangea, S.A. de C.V.** is the legal owner of the Concessions described in this opinion;
- **ii)** The Concessions are free and clear of any lien or encumbrance;
- **iii)** The Concessions are in good standing; and
- **iv)** The Concessions are not located in protected natural areas.

This opinion is given in relation to the laws of Mexico in force at this date and solely for the benefit of the addressees, and no other entity or personal shall be entitle to rely on its contents without the express written consent of the addressees and/or Díaz, Bouchot y Raya.

Should you have any questions with respect to this matter, please do not hesitate to call on us.

Very truly yours,

Díaz, Bouchot y Raya

Per: Laura Díaz

5