UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

FORM 6-K

REPORT OF FOREIGN ISSUER
PURSUANT TO RULE 13a-16 OR 15b-16 OF
THE SECURITIES EXCHANGE ACT OF 1934

For the month of February 2011

Commission File Number: 000-52509

Argonaut Gold, Inc.

(formerly Pediment Gold Corp.)
(Translation of Registrant's name into English)

9604 Prototype Court
Reno, NV 89521
(Address of principal executive office)

1. Exhibit 99.1 - El Castillo N43-101 Technical Report, February 24, 2011
2. Exhibit 99.2 - Consent of Expert
3. Exhibit 99.3 - Consent of Expert
4. Exhibit 99.4 - Consent of Expert

Indicate by check mark whether the registrant files or will file annual reports under cover Form 20-F or Form 40-F.
Form 20-F ☐ Form 40-F ☒

Indicate by check mark if the Registrant is submitting this Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1): Yes ☐ No ☒

Indicate by check mark if the Registrant is submitting this Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7): Yes ☐ No ☒

Indicate by check mark whether the registrant by furnishing the information contained in this Form 6-K is also thereby furnishing the information to the Commission pursuant to Rule 12g3-2(b) under the Securities Exchange Act of 1934: Yes ☐ No ☒

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

ARGONAUT GOLD, INC.

By: /s/ Barry Dahl

February 24, 2011

Name: Barry Dahl
Title: Chief Financial Officer

Exhibit 99.1

NI 43-101 Technical Report on Resources and Reserves
Argonaut Gold Inc.
El Castillo Mine
Durango State, Mexico

Prepared for:

Argonaut Gold Inc.
9604 Prototype Ct.
Reno, NV 89521
775-284-4422

SRK Project Number: 203600.010

Prepared by:

SRK Consulting
Engineers and Scientists

7175 W. Jefferson Ave.
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Effective Date: November 6, 2010
Report Date: February 24, 2011

Contributors:
Tom Burkhart BSc
Steve Jones MSc

Endorsed by QP:
Bart Stryhas, C.P.G., Ph.D.
Bret Swanson BE Mining, MAusIMM
Eric Olin, MAusIMM

Summary (Item 3)

Introduction

At the request of Mr. Thomas Burkhart, Vice President of Exploration for Argonaut Gold Inc. (Argonaut), SRK Consulting (U.S.), Inc. (SRK) has been retained to prepare an updated Technical Report (the Report) which estimates the mineral resources and mineral reserves of the El Castillo Gold Mine located in Durango State, Mexico (the Project). This updated report incorporates significant additional drilling, additional metallurgical studies, increased production rates and increases in gold prices subsequent to the previous, Howe (2008) Technical Report. This report incorporates the results of an updated National Instrument 43-101 compliant mineral resource and reserve estimate based on additional geoscientific and development work that has been completed at the Project by Argonaut. The updated technical report is prepared according to the standards dictated by NI 43-101 and Form 43-101F (Standards of Disclosure for Mineral Projects).

A.C.A. Howe International Ltd previously prepared two Pre-Feasibility Level Technical Reports. The first was dated September, 2002 (Howe 2002, report # 845) and the second dated January, 2003 (Howe 2003, Report # 850) for the El Castillo project. At those times, the Project was known as the El Cairo Project. In addition, Howe completed a Pre-Feasibility Level Technical Report dated October, 2006 (Howe 2006, Report # 896) and an updated Technical Report dated July, 2008 (Howe 2008, Report 920). These reports were utilized to varying degrees by SRK in preparing this report. SRK understands that Argonaut will use this updated Technical Report for reporting purposes.

Property Description and Location

The Project, which consists of an open pit gold mine, a crushing facility, a cyanide heap leach pad, a gold recovery plant, and all support infrastructure, is located on four contiguous mining concessions totaling approximately 216.05 hectares (ha), and/or on land where the surface rights are owned by Argonaut.

The mining concessions are located in the municipality of San Juan del Rio in the central part of the State of Durango, Mexico approximately 100km north of the city of Durango. They are centered about UTM coordinates of 2,751,115N and 547,460 (24°52’27” latitude and 104°31’48” longitude).

Ownership

Argonaut owns four mineral concessions. The El Cairo I concession (title number 220073) was originally acquired from the Mexican government in a lottery. The larger El Cairo II concession (title number 220075) was acquired on June 12, 2004 from Exploминerals S.A. de C.V. for a one-time payment of US$20,000 cash, 500,000 shares in Castle Gold and a 2.0% Net Smelter Royalty (NSR). The El Oro and Justicia concessions were acquired on November 5, 2004 from private parties. Argonaut reports that they now own all concessions outright, subject to the 2% NSR on the larger El Cairo II concession (title number 220075).

Argonaut also controls 1,285ha of surface rights in the El Castillo area. This land package is substantially larger than the area covered by Argonaut’s mineral rights and overlaps onto mineral rights controlled by Compañía Minera La Parreña S.A. de C.V., a subsidiary of Industrias

Peñoles. Argonaut plans to continue to install mine infrastructure on this land for which they control the surface rights but not the mineral rights.

History

The El Castillo Project was a grass roots discovery that resulted from a regional exploration program initiated by Battle Mountain Gold (BMG) in 1995 while exploring for low-grade, high-tonnage targets. Stream sediment geochemical surveys conducted by BMG outlined a significant gold geochemical anomaly in the El Castillo area. This led to a drill program which resulted in the discovery and partial delineation of the El Castillo gold deposit. Castle Gold (Castle) acquired the property from BMG in 2002 thru its subsidiary, Minera Real de Oro and Argonaut purchased Castle in December of 2009.

Recent Exploration and Metallurgical Testing

Argonaut has completed 308, reverse circulation (RC) drill holes totaling 35,444m. The drilling, was divided into two phases. Phase I consisted of RC drilling at a 100m grid spacing to define the approximate limits of the gold system as it projected south and east from the original pit limits. This program was completed in mid-April, 2010 and consisted of 136 drill holes totaling 15,851m. A second, Phase II drilling program immediately followed to in-fill and better define mineralized areas previously delineated. This program included 172 RC drillholes totaling 19,594m andbrought the drill spacing in mineralized areas to approximate 50m. These drill results, combined with historic drilling, form the basis supporting the updated resource estimate as part of this Technical Report.

In early November, Argonaut also completed a core-drilling program to obtain material for metallurgical testing of transition and sulfide material. This program consists of seven holes totaling 802m. Core samples from six holes representing transition and sulfide mineralization were shipped to Kappas Cassidy and Associates (KCA) in Reno, Nevada for cyanide column leach testing. This work complements three previous column tests of RC cuttings. The results of this test work show good gold recovery within the partially oxidized transition mineralization.

SRK has reviewed the metallurgical testwork conducted on El Castillo Oxide ore documented in the Technical Report on the El Castillo Project, ACA Howe International Limited, July 31, 2008 and on El Castillo Transition Ore conducted by Kappis Cassiday & Associates (KCA) during the fourth quarter 2010. The results of these studies are briefly discussed here.

Several metallurgical tests on mineralized oxide ore from El Castillo were conducted during the period from 2004 - 2006. The tests were designed to assess the leaching characteristics of the oxidized material and consisted of:

- Bottle roll leach tests in 2004 and later column leach tests in 2006 by KCA; and
- Two onsite bulk heap leach tests conducted by Castle Gold in 2005, followed by analysis of the leach residues by Metcon Research (Metcon) in 2006.

KCA conducted an initial metallurgical investigation of transition ore with El Castillo RC drill cuttings. This work included the formulation of three separate test composites, composite characterization, bottle roll cyanidation tests and column cyanidation tests.

In order to further assess potential heap leach gold extraction from El Castillo transition ore, test composites were formulated from four drill core holes for additional column testing by KCA. The gold content of the four composites ranged from 0.260g/t Au to 0.889g/t Au. Of particular note is the relatively high sulfide to sulfate sulfur ratio for composites DCA-2 and DCA-4, indicating oxidation in the range of 17 - 26%. Whereas, composites DCA-1 and DCA-5 have a low sulfide to sulfate ratio, indicating oxidation in the range of 83 - 98%. Also of note is the relatively low carbon and copper content in these composites, which would indicate minimal problems with preg-robbing or high cyanide consumption due to copper solubilization.

Geology and Mineralization

The El Castillo Mine property lies in the Altiplano Subprovince of the Sierra Madre Occidental (SMO) region of Central Mexico. The SMO represents an island arc assemblage of early Mesozoic age comprised of metamorphosed, deep-water sediments, and island arc volcanics. The Altiplano Subprovince lies on the east flank of the SMO and is comprised of Jurassic to Late Tertiary sedimentary and volcanic rocks. The oldest rocks in the El Castillo Mine area are Cretaceous flysch-sequence sediments that correspond to the upper member of the Mezcalera Group. These consist of arenites, shales, and thin-bedded limestone dipping moderate to steeply to the northeast with local zone of tight folding.

Regionally, the SMO is characterized by a thick sequence of lower Tertiary volcanic rocks comprised of an older andesite series overlain by younger pyroclastic dominated rhyolite series. These two series of volcanic rocks are referred to as the Lower Volcanic Series (LVS) and Upper Volcanic Series (UVS) respectively. The LVS can attain thicknesses of 1,000m and is dominated by Paleocene to Eocene andesitic lavas with intercalated pyroclastics rocks. These rocks are not exposed in the El Castillo Mine area, but are well exposed to the southwest, in the San Agustin and San Lucas mining districts, where they have been age dated at 38.8Ma. The UVS unconformably overlies the LVS rocks and can also be up to 1,000m thick. The LVS is typically composed of Oligocene to Miocene rhyolite-dacite pyroclastic volcanics. Within the mine area, an UVS rhyolite, ignimbrite caps the northern most portion of the mineral deposit.

Overlying the rhyolite is a thick sequence of Tertiary conglomerate that is extensively exposed to the west and south of the mine area. The conglomerate and rhyolite have been drilled extensively to the west of the existing El Castillo pit and have been found to be unaltered, unmineralized, and exist as post mineral cover to underlying gold mineralization.

Within the El Castillo Mine area, Cretaceous Mezcalera Group flysch sediments are intruded by probable Oligocene porphyries of granodiorite to diorite composition. Petrographic studies indicate that most of the fine to medium grained porphyry found within the mineral system is granodiorite. This granodiorite corresponds to what was previously mapped as dacite or trachyandesite. It is thought to be of similar composition and age to the intrusive rocks mapped in the San Agustin and San Lucas mining districts situated approximately 15km to the southeast of El Castillo. Similar intrusive rocks have been mapped by the Mexican Geological Survey (Consejo) to the north in the mining district of La Gotera located in the municipality of Rodeo, Durango where they were dated at 26Ma and are considered Oligocene in age. The granodiorite porphyry does not intrude the rhyolites in the mine area.

El Castillo is being studied as a telescoped porphyry copper-gold mineral system that is related to Oligocene granodiorite porphyry and hosted in thin-bedded Cretaceous sediments and the intruding granodiorite porphyry sills. Within the mine area, these rock form an alternating sequence of variably, metamporphosed sediments with intrusive sills that generally strike to the northwest and dip moderately to the northeast. The porphyry intrusion created a prograde metamorphic aureole with a classic potassic-propylitic alteration assemblage in the upper portions of the porphyry and localized hornfels-skarn contact metamorphism in the Cretaceous sediments. Associated with prograde potassic alteration and contact metamorphism was zoned auriferous pyrite and relatively minor chalcopyrite-sphalerite-galena-arsenopyrite-tetrahedrite mineralization that is generally associated with quartz veins. Probable late-stage collapse of the magmatic-hydrothermal system resulted in structurally controlled quartz-sericite-pyrite alteration and auriferous pyrite mineralization. Later supergene oxidation of this pyrite dominated mineralization resulted in an, on average, 80 to 100m thick oxide blanket and an underlying partially oxidized (transition) zone averaging approximately 25m thick. The combined oxide and transition portions of the mineral system are amenable to heap leach extraction and form the current low-grade minable gold resource in the El Castillo Mine. Below the oxide and transition zones, the mineralization is associated with sulfides consisting mainly of pyrite. Drilling has shown this sulfide zone continues to depths of up to 400m below surface. The majority of Argonaut's resource drilling continued into the sulfide mineralization a minimum of 30 to 50m below the oxide-transition resource. Argonaut considers the sulfide mineralization a potential economic resource and will continue to assess its economic potential in 2011.

Mineral Resource Estimation

The resource estimation is based on information from 512 holes totaling of 83,817m. The average drillhole spacing is 50m. The geologic model consists of six rock types, four of which are mineralized and two that are post mineralization. The primary host rocks consist of dacite and meta-sediments including meta-argilite, hornfels and limestone-marbles. The model blocks are 10m x 10m x 6m in the x,y,z directions, respectively. All block grade estimates were made using 6m bench composites. An Ordinary Kriging algorithm was employed to generate a categorical indicator grade shell based on a 0.125ppm Au threshold. Ordinary Kriging was also used for the gold grade estimation. The results of the resource estimation provided a Canadian Institute of Mining, Metallurgy and Petroleum (CIM) classified Measured and Indicated Mineral Resource. The quality of the drilling and data is very good and the Mineral Resource was classified mainly according to the general drillhole spacing.

The results of the Mineral Resource estimation inclusive of Mineral Reserves is presented below in Table 1.

Table 1: Mineral Resource Estimation Inclusive of Mineral Reserves

Cut-off Grade Au (ppm)	Material Type	Resource Category	Average Au Grade (ppm)	Tonnes (M)	Ounces (k)
0.15	Oxide (in pit)	Measured	0.293	114.3	1,220.1
		Indicated	0.293	4.9	45.7
		M & I	0.331	119.2	1,268.0
0.15	Transition (in pit)	Measured	0.295	44.6	423.2
		Indicated	0.278	1.9	17.1
		M & I	0.294	46.5	439.9
0.15	Oxide & Transition (in pit)	Measured	0.322	158.9	1,645.3
		Indicated	0.289	6.8	62.9
		M & I	0.320	165.7	1,704.7
0.15	Sulfide (global)	Measured	0.328	70.6	744.8
		Indicated	0.272	91.2	797.5
		M & I	0.296	161.8	1,540.0

Mine Reserves

The long-term gold price used by El Castillo in the CoG calculation is US$1,000/oz. In the opinion of SRK, this gold value is reasonable and appropriate for ore reserve estimation. Please refer to Table 17.1.2 for detailed cost, recovery and production stream information. Table 2 illustrates the El Castillo reserves.

Table 2: Summary of Proven and Probable El Castillo Reserves (As of November 8, 2010)

Classification	Rock Type	Gold Grade (g/t)	Ore Tonnes (000's)	Gold Ounces (000's)
Proven				
	Oxide	0.36	84,470	994
	Transition	0.37	19,180	228
	Sub Total	0.36	104,650	1,222
Probable				
	Oxide	0.33	772	8
	Transition	0.35	73	1
	Sub Total	0.33	844	9
Proven and Probable		**0.36**	**105,494**	**1,231**

Reserves are based on a gold price of US$1,000/oz Au;
Full mining recovery is assumed;
Mine reserves are not diluted;
An internal CoG of 0.15g/t Au was used on Oxide rock within the pit design;
An internal CoG of 0.175g/t Au was used on Transition rock within the pit design;
In-situ Au ounces do not include metallurgical recovery losses;
Internal CoG determination includes metallurgical gold recoveries of 70% for oxide if ore is crushed, 50% if not;
Internal CoG determination includes metallurgical gold recoveries of 60% for Transition if ore is crushed, 0% if not;
Oxide and Transition rock types are interpreted from drill logs to estimate changes in weathering profile of the orebody; and
In Situ reserves based on end of month survey dated November 8th, 2010.

Development and Operations

The El Castillo mine is a relatively low grade gold deposit that benefits from low strip ratio, disseminated mineralization that is complimentary to bulk mining activities and good heap leach recoveries. Situated in a semi-arid environment surrounded by moderate topography, the operation is currently investing in capital and operating enhancements to significantly increase mine production from 2011 onwards.

The ore body consists of gold grade with an oxidation profile that decreases with depth thus effecting estimated recoveries. There also appears to be an east and west geotechnical zone that relates to frequency of joints sets and rock hardness that has an effect on blasted ore fragmentation.

The final pit design is approximately 1.5km wide (east-west) by 1.3km long (north-south) and up to 170m deep. The pit contains approximately 106Mt of ore and 93Mt of waste for an overall strip ratio of 0.88 (waste:ore). Production is expected to be limited to 11Mt for ore and 24Mt/y in total over the course of the mine life. As a result, it is expected that 115koz will be placed on the heap leach pad per year from 2011 through the end of 2022 for a mine life of 11 years.

The mining method employed at El Castillo consists of traditional drill and blast operations followed by loading of rigid body haul trucks for ore transport to heap leach pad or crusher. Waste is transported to designated dump locations. Contractors are used for bulk earthworks and crusher operations with Argonaut staff acting as mine owners.

Approximately 35Mm^3 of waste dump space has been defined with the potential for more dumps to the east, northeast and south of the site with recent land purchases.

Project Economics

Table 3: Capital Cost Summary

Description	LoM Value ($000s)
Mining	$0
Process Facility & Infrastructure	$2,900
Heap Leach Pads	$23,561
Owners	$700
Mine Closure	$4,000
Subtotal	**$31,161**
Contingency	$0
Total	**$31,161**

Table 4: Operating Cost Summary

Description	LoM Value (000s)	Unit Cost ($/t-ore)
Mining	$238,467	$2.26
Process- Heap Leach	$168,087	$1.59
G&A	$26,049	$0.25
Total	**$432,603**	**$4.10**

Table 5: Technical-Economic Results

Description		LoM Value ($000s)
Gross Revenue		**$809,346**
	Refinery	($8,093)
	Transportation & Insurance	($0)
	NSR	**$801,252**
	Royalty	($2,943)
	Net Revenue	**$798,309**
Operating Costs		
	Mining	$238,467
	Process- Heap Leach	$168,087
	G&A	$26,049
	Operating Margin	**$432,603**
Capital Costs		
	Mining	$0
	Process Facility & Infrastructure	$2,900
	Heap Leach Pads	$23,561
	Owners, Loan Repayment	$4,950
	Mine Closure	$4,000
	Contingency	$0
	Cash Flow (Pre-Tax)	**$330,296**
	NPV5%	**$257,388**

Conclusions and Recommendations

Exploration and Development

Between December 2009 and October 2010 Argonaut completed a 308 hole drilling program totaling 35,444m. The drilling was mainly targeted south and east of the current open pit to establish the resource potential within areas known to have mineral potential. The drilling program adequately defines the zone of gold mineralization to support the resource estimation of this report.

Density measurements must be obtained for each of the major lithic types in each of the three oxidation zones. SRK recommends that approximately 100 measurements should be taken for each lithology in each oxidation zone.

Mining and Process

Mining operations at El Castillo are undergoing a significant production ramp up from 2010 productions levels through 2011. With the infrastructure upgrades to the crushing plant and heap leach circuits, the proposed mining cost, process recovery and production rates should be achievable. As a result, 115k of gold can be placed on the heap leach pads per year within the 24Mt production limit.

As part of ongoing operational enhancements, SRK recommends the following work programs be performed going forward.

Rock Fragmentation Model

The fragmentation of blasted ore at El Castillo varies depending on what area of the pit and what rock type is encountered. This is problematic for RoM ore size placed on the heap (recovery prediction) and meeting expected undersize through the crusher circuit. To optimize crusher performance a "fragmentation blend" in addition to ore grade should be considered in the absence of blasting optimization. This would entail classifying the fragmentation of ore by rock type and including the tonnages into the life of mine production schedule. Based on this expected production, short term scheduling can provide crusher operators with a blend of soft and hard rock (with associated lump size) to maximize crusher throughput.

Geotechnical analysis and prediction of inter-ramp angle.

The North pit wall is artificially constrained by the existing pregnant solution ponds, plant and north heap leach pad. No detailed geotechnical work has been carried out to optimize the inter-ramp wall angle from the default 450. A steeper wall angle in this area would allow currently sterilized ore to be exploited. Further geotechnical studies are planned for 2011.

Detailed haul route and contract cost prediction.

SRK did not perform an integrated haul profile evaluation of ore haulage from the pit face to the crusher or crusher to the heap leach pad. Haul profiles for RoM ore and waste were also not calculated. As the final crusher locations are determined, the pit deepens, waste hauls get longer and final heap leach pads sized and located, it will be necessary to determine tonnes hauled by distance to accurately predict mine contract payments over time. SRK suggests this level of detail be incorporated into future mine planning after the potential sulfide resource has been defined.

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1 Introduction (Item 4)

1.1 Terms of Reference and Purpose of the Report

SRK Consulting (U.S.), Inc. (SRK) has been commissioned by Argonaut Gold Inc. (Argonaut), to prepare a Canadian National Instrument 43-101 (NI 43-101) compliant Technical Report for the El Castillo Property located in Durango, Mexico (the Project). Argonaut is a junior gold producer whose principal asset is the El Castillo Gold Mine. The mine includes an open pit, a crushing facility, a cyanide heap leach, a gold recovery plant, all support infrastructure and approximately 216.05ha of mineral claims. This document discloses the current resources and reserves for the Project within a Technical Report, prepared according to NI 43-101 guidelines. Form NI 43-101F1 was used as the format for this report. The intent of this Technical Report is to provide the reader with a comprehensive review of the exploration activities and a current SRK resource and reserve estimate based 512 holes totaling of 83,817m with 43,168 samples.

The El Castillo Project was a grass roots discovery that resulted from a regional exploration program initiated by Battle Mountain Gold in 1995. Castle Gold acquired the property in 2002 and subsequently built an open pit, heap leach gold mine. Argonaut purchased Castle Gold and the El Castillo mine in December of 2009 (Figure 1-1).

This Technical Report is prepared using the industry accepted Canadian Institute of Mining, Metallurgy and Petroleum (CIM) “Best Practices and Reporting Guidelines” for disclosing mineral exploration information, the Canadian Securities Administrators revised regulations in NI 43-101 (Standards of Disclosure For Mineral Projects) and Companion Policy 43-101CP, and CIM Definition Standards for Mineral Resources and Mineral Reserves (December 11, 2005).

1.2 Reliance on Other Experts (Item 5)

The Qualified Person (QP) of the resource estimation, Dr. Bart Stryhas, has examined the current data for the Project provided by Argonaut, and has relied upon that basic data to support the statements and opinions presented in this Technical Report with respect to the resources. In the opinion of this QP, the data is present in sufficient detail, is credible and verifiable in the field, and is an accurate representation of the Project.

This Technical Report includes technical information, which requires subsequent calculations to derive sub-totals, totals, and weighted averages. Such calculations inherently involve a degree of rounding and consequently can introduce a margin of error. Where these rounding errors occur, SRK does not consider them to be material.

SRK has relied upon the work of Argonaut to describe the land tenure and land title, referring specifically to information in Sections 2.2 and 2.4 and to describe the environmental permitting and compliance in Sections 2.5 and 5.2. The QP’s of this Technical Report and SRK are not insiders, associates, or affiliates of Argonaut. The results of this Technical Report are not dependent upon prior agreements concerning conclusions to be reached, nor are there any undisclosed understandings concerning future business dealings between Argonaut and the QP’s. SRK will receive a fee for its work in accordance with normal professional consulting practice.

1.2.1 Sources of Information

Standard professional review procedures were used in the preparation of this report. SRK reviewed data provided by Argonaut, conducted a site visit to confirm the data and mineralization, and reviewed the project site. Most of the drill core and the RC cuttings from the various drilling campaigns remain on site and are organized for easy access. Some of the project data is from previous operators, primarily dating from 1995-2009. All exploration data since December 2009 has been generated by Argonaut. Additional sources of information are presented throughout the body of the text and in Section 20 References. Production history, contract agreements, strategic vision, operating and capital costs supplied by Argonaut and reviewed by SRK for their appropriateness.

1.3 Qualifications of Consultants (SRK)

Bart Stryhas, C.P.G., Ph.D.

Dr. Bart Stryhas is responsible for quality assurance on all sections of the report. He conducted an onsite review of the property, reviewed the QA/QC analysis of the analytical program, constructed the geologic and resource model, database verification, resource estimation methodology, the resource statement and provided the final editing for the report. He visited the property on April 15, 2009 for one day. Dr. Stryhas is responsible for Sections 1-13, 15.1, 16 and 18-21 of this Technical Report. Dr. Stryhas is a QP as defined by NI 43-101.

Bret Swanson BE Mining, MAusIMM

Bret Swanson is an Australian mining engineer with 16 years of global mining experience. His recent work has involved contributions to numerous feasibility, pre-feasibility, preliminary assessment and competent person reports while employed with SRK, Denver. . He visited the site once in September 2010 and a second time in January 2011. Bret is responsible for Sections 15.2, and all parts of Section 17. Mr. Swanson is a QP as defined by NI 43-101.

Eric Olin MAusIMM

Eric Olin has more than 29 years experience in the minerals industry with extensive consulting, plant operations, process development, project management and research & development experience with base metals, precious metals, ferrous metals and industrial minerals, and has served as the plant superintendent for several gold and base metal mining operations. Additionally, Mr. Olin has been involved with numerous third-party due-diligence audits, and preparation of project conceptual, pre-feasibility and full-feasibility studies. Mr. Olin is responsible for Section 14.

1.3.1 Site Visit

On April 15, 2009, Dr. Stryhas conducted a site visit of the El Castillo Mine. At the time the project was still owned and operated by Castle Gold Corp. Castle's VP of Operations, Federico Alvarez was the primary contact during the site visit. It was a clear day with minimal wind and moderate temperature. A total of eight hours were spent on site.

The site visit focused on review of mine geology, mineralization and field inspection of the various areas production and exploration. Approximately three hours were spent reviewing mine geology. The remaining time was spent visiting specific areas of mineralization, exploration and mining. The project has significant impact from the active mining operation. Mineralized outcrops were seen in the open pit. The administration, geologic and mine planning offices were fully-staffed at the time. The assay lab, open pit mine, crusher and plant were fully operational. Approximately 50 people were working at the site during the visit.

During September 2010 and January 2011, Mr. Swanson conducted a site visit of the El Castillo mine. During the site visit, Mr. Swanson reviewed mine contractor operations, waste, heap, pit and crusher locations, operating costs, management work flow, crusher operations and grade control programs. A total of 24 hours were spent on site.

1.4 Effective Date

The effective date of this report is November 8, 2010.

1.5 Units of Measure

All units of measure in this report are metric, unless otherwise stated.

SRK Consulting Engineers and Scientists	El Castillo Mine, Durango State, Mexico	Ariel View of the El Castillo Project
SRK Project No.: 203900.01	Source: SRK Consulting	
File Name: Figure_1-1		Date: 2-16-11 / Approved: BS / Figure: 1-1

2 Property Description and Location (Item 6)

2.1 Property Location

The Project is located in the State of Durango, Mexico approximately 100km north of the city of Durango at the approximate UTM coordinates of 2,751,115N and 547,460 (24°52'27" latitude and 104°31'48" longitude) (Figure 2-1). The elevation of the area containing the bulk of the known mineralization ranges from 1,720m to 1,800mamsl.

2.2 Mineral Titles

Argonaut reports that the Project consists of 216ha of mining concessions and 1,285ha of surface rights. Mining concession information is detailed in Table 2.2.1 and as shown in Figure 2-2.

Table 2.2.1: El Castillo Project Mineral Concessions

Name of Concession	Title Number	Area (ha)	Title Date	Owner
El Cairo I	220073	25.00	June 5, 2003	Minera Real Del Oro S.A. de C.V.
Justicia	220074	20.90	June 5, 2003	Minera Real Del Oro S.A. de C.V.
El Cairo II	220075	95.15	June 5, 2003	Minera Real Del Oro S.A. de C.V.
El Oro	220076	75.00	June 5, 2003	Minera Real Del Oro S.A. de C.V.

2.3 Location of Mineralization

The gold-bearing zones of the El Castillo project are located within altered granodiorite, argillites and hornfel units spatially correlated with the current El Castillo mining area. The known mineralization is all located within mineral concessions owned by Argonaut (Figure 2-2).

2.4 Royalties, Agreements and Encumbrances

Argonaut owns all four of the mining concessions outright. The smaller of the two El Cairo concessions, (title number 220073) was originally acquired from the Mexican government in a lottery. The larger El Cairo II concession (title number 220075) was acquired on June 12, 2004 from Explominerals S.A. de C.V. for a one-time payment of US$ 20,000 cash, 500,000 shares in Castle Gold and a 2.0% Net Smelter Royalty. This concession covers the eastern portion of the mineral system. To date no mining has occurred on the El Cairo II concession and the royalty has yet to apply.

The El Oro and Justicia concessions were originally acquired on November 5, 2004 from a group of private individuals. Argonaut reports that all concessions are owned outright, subject to the 2% NSR on the El Cairo II concession (title number 220075).

2.5 Environmental Liabilities and Permitting

2.5.1 Required Permits and Status

The El Castillo Project is subject to Mexican environmental law, more specifically defined by the General Law of Ecological Balance and Protection to the Environment, effective March 1, 1988. Ley General de Equilibrio Ecologico y Proteccion al Ambiente (LGEEPA) establishes:

- The need to preserve natural reserves and ecological reserves including a description of the regulation and limitations to their utilization;

- The regulations to promote a more sensible use of natural resources and their protection (Specific references to water, atmosphere, and soil are made. It is in Title No. 3 that the LGEEPA specifically addresses exploration and mining activities);
- The regulations for an active participation of the general public in the protection of the environment; and
- The procedures for control and assurance, including sanctions on those not complying with the Law.

The legal framework for environmental regulations is based in Article 27 of Mexico's Constitution, from which the LGEEPA is derived. The regulations include general guidelines, standards (Mexican Official Norms, or NOM's), technical standards, and ecologic criteria (CE).

Regulations and standards provide specific controls for environmental impact, air pollution, noise pollution, hazardous residues, and transportation of hazardous residues (April 1993). Specific guidelines for the mining industry include MIA Guidelines (Particular) and those for tailings dam construction.

Mine operations and new projects must abide by other laws and regulations, including but not limited to the Mining Law, National Waters Law, Forestry Law, and Firearms and Explosives Law.

Exploration activities are currently regulated by Regulation NOM-120 establishing allowable activities, the size of areas to be affected, and specific exploration conditions to be observed.

2.5.2 Compliance Evaluation

Minera Real del Oro has the following authorizations for projects "Unidad El Castillo" and "Ampliacion Unidad El Castillo":

A resolution approving the Environmental Impact Statement and Environmental Risk Study for the project "Unidad El Castillo" (for a surface area of 108ha) which authorizes the preparation of the site; construction of mining facilities; operations and reclamation; construction of the processing plant, primary and secondary infrastructure; exploration; mining; heap leaching; use of gravels, clays and sands; drilling of water wells and extraction of ground water; and the use of sodium cyanide by Official Authorization dated March 13, 2007 with term of twenty-four months for site preparation and construction of the infrastructure and ten years for operations and maintenance with the ability to extend the original authorization for as many times as necessary with a term for each period of one half the original period authorized.

The specifications in the authorization allows for the depth of the pit to 70m and daily production of 8000t; and the operation of leach pads with an area of 33ha and a capacity of 10Mt.

A resolution approving the Change of Use of Land for the project "Unidad El Castillo" (a surface area of 108ha) by Official Authorization dated March 20, 2007 which allows clearing of the land for construction of the primary and secondary infrastructure, operation of the project (mining and leaching among other activities) with a period of 15 years which can be extended.

A resolution approving the Program for the Prevention of Accidents for the project "Unidad El Castillo" for the safe use and management of dangerous substances by an official document dated 25th of August, 2008 which authorizes actions and methods taken for the prevention of accidents while using sodium cyanide.

A resolution approving the Environmental Impact Statement and Environmental Risk Study for the project "Ampliacion Unidad El Castillo" (for a surface area of 358ha) which authorizes preparation of the site; construction of mining facilities; operations and reclamation; construction of the processing plant, primary and secondary infrastructure;, exploration; mining; heap leaching; use of gravels, clays and sands; drilling of water wells and extraction of ground water; and the use of sodium cyanide, by Official Authorization dated February 5 2010, with term of 13 years for site preparation and construction of the infrastructure, operations, and maintenance; and two years for the reclamation of the site with the ability to extend the original authorization for as many times as necessary with a term for each period of one half the original period authorized.

The specifications in the authorization allows for the depth of the pit to 136m and daily mining production of 60,000t; and the operation of leach pads with an area 104ha with a capacity of 45Mt.

A resolution approving the Change of Use of Land for the project "Amplicion Unided El Castillo" (a surface area of 345ha) by Official Document dated 2nd of March 2010 that permits the clearing of the land for the construction of the primary and secondary infrastructure, mining and ore processing operations, among other activities, for a period of 12 years which can be extended.

A resolution approving the Program for the Prevention of Accidents for the project "Ampliacion Unidad El Castillo" for the safe use and management of dangerous substances by an official document dated 30th of June 2010 which authorizes actions and methods taken for the prevention of accidents while using sodium cyanide.

A Unique Environmental License dated 22nd of May 2009 which establishes the conditions in the authorizations integrated into a sole document the environmental impact on air water and land; risk and other studies before Semarnat. This license is given once.

A License as generator of hazardous wastes, used oil, used filters, ground contaminated with oil, industrial garbage and sawdust contaminated with used oil.

The Annual License of Operation was processed on the 13th of January 2011 for the operation of the projects "Unidad el Castillo" and Ampliacion Unidad El Castillo".

Reclamation and closure plans have been prepared for both projects "Undidad el Castillo" and "Ampliacion El Castillo" with cost estimates for each.

SRK Consulting
Engineers and Scientists

El Castillo Mine,
Durango State, Mexico

Project Location Map

SRK Project No.: 203900.01

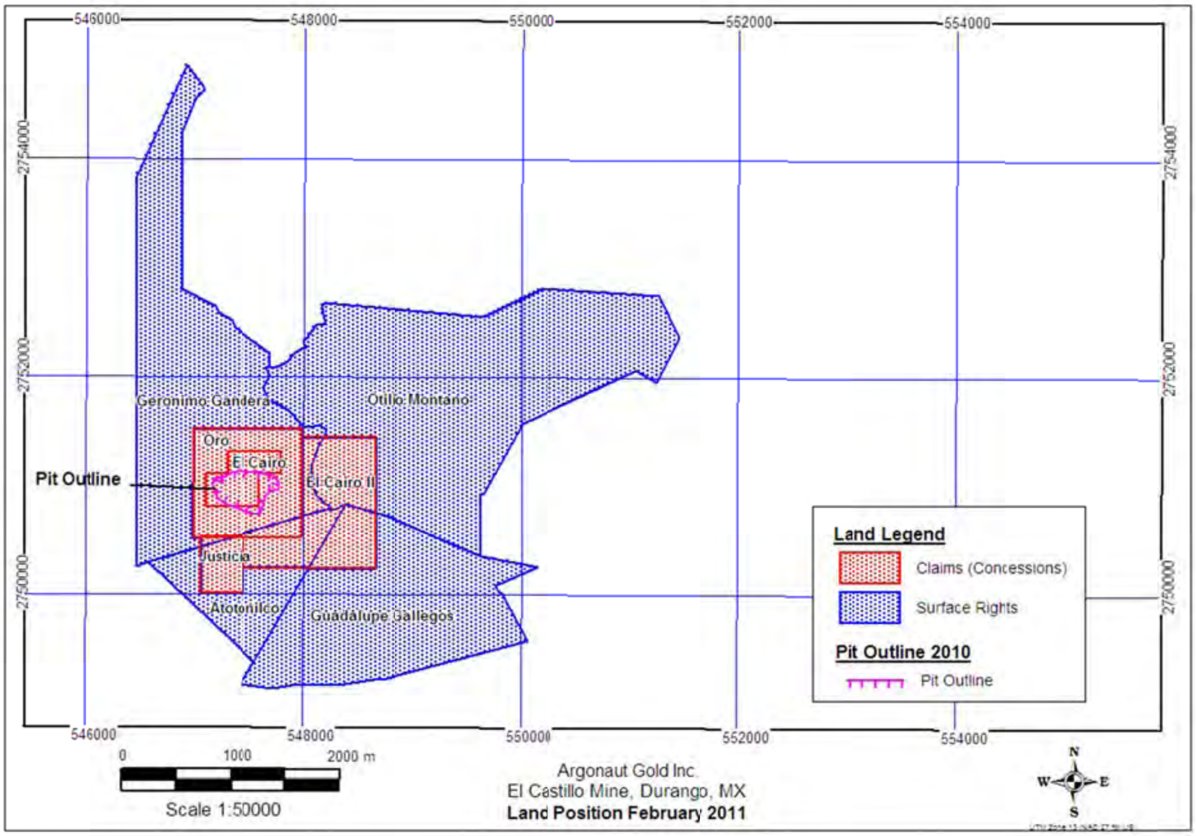
Source: SRK Consulting

File Name: Figure_2-1

Date: 1-25-11

Approved: BS

Figure: 2-1



SRK Consulting Engineers and Scientists	El Castillo Mine, Durango State, Mexico	Mineral Concession Map		
SRK Project No.: 203900.01	Source: SRK Consulting			
File Name: Figure_2-2		Date: 2-16-11	Approved: BS	**Figure: 2-2**

3 Accessibility, Climate, Local Resources, Infrastructure and Physiography (Item 7)

3.1 Topography, Elevation and Vegetation

The project area is characterized by terraced topography with relatively flat mesas dissected by strongly incised drainages. Typical relief is in the range of 300 to 500m. Elevation at the project area averages 1,700masl. Vegetation consists of typical Mexican dessert species composed primarily of various cacti, shrubs and brush.

3.2 Climate and Length of Operating Season

El Castillo is situated in a zone classified as semi-dry and receives an average annual rainfall of 550.5mm. The climate is temperate with an average annual temperature of 18° and maximum temperatures reach 35°C and minimum temperatures 2°C (CNEMSG, 1988). The region averages 17 frost events per year beginning in October and extending to April. Dominant wind direction is from northwest to southeast and the rainy season is from June through to August, minimal rainfall occurs from September to May.

Table 3.2.1 provides rainfall information for the climatological station at San Juan del Rio located 15km east of the project. Maximum rainfall (in millimeters) during a 24-hour period is broken down on a monthly basis for the period 1948-2009.

Table 3.2.1: Annual Rainfall at San Juan del Rio

Year	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	MAX
1985	35	4.5	0	0	16	35	20	22	50	10.5	0	14	50
1986	0	3	0	10.5	16	25	13	20	45	8.5	10.5	14.5	45
1987	0	8	0	8	13	28	31	60	20	0	0	5	60
1988	0	0	0	0	0	20	31	25	11	4	0	15	31
1989	0	0	0	0	11	2	1.9	12	19	8	31	6	31
1990	9	0	1	0	2	11	29	29	34	20	0	0	34
1991	0	4	0	0	0	7	32	44	22	17	33	14	44
1992	21	7		1.4	14	8	7	29	6	3	1	0	29
1993	0.1	0	0	0	0.5	7	20	10	30	25	12	0	30
1994	0	0	7	1	0	20	15	16	9	32	3	6	32
1995	0	0	0	0	0	14	30	40	8	0	2	0	40
1996	5	0	0	0	10	24	13	40	35	56	0	6	56
1997	9	0	15	15.5			11	15	13	12	3	0	15.5
1998	0	0	0	0	0	24	34	40	14.5	15	1.5	0	40
1999	0	0	0	1	0	46.5	40	10.5	14.5	0	0.5	1	46.5
2000	0	1	0	2	20	50	16.5	25.5	47.1	12	7.5	0	50
2001	1.6	0.4	11.6	11.9	8.8	27.6	70.8	61.3	32.6	16.9	2.8	4.8	70.8
2002	2.1	13.7	0	3.1	25.3	31.7	78.1	94.2	83	34.3	23.7	,3	94.2
2003	7	11.7	0.1	2	10.8	61.5	101.2	64.2	129.4	46.9	1.7	0	129.4
2004	43.5	6.7	30.1	7.4	9.1	78.9	136.4	130.3	140.1	26.9	33.2	2.1	136.4
2005	16.8	20.5	2.2	0.3	3.8	4.7	145.1	108.3	38.6	30.5	2.5	0.5	145.1
2006	13.3	0	0.7	1.3	20	94	103.8	169.1	123.1	36.5	0.2	19.9	169.1
2007	11.7	0	0	0.2	2.9	112.5	124.7	57.3	74	9.4	4.3	2.6	124.7
2008	0.3	1.2	0.1	2.1	9	35.3	166	232.2	161.8	34.2	0.1	0.3	232.2
2009	2.3	0.3	2.4	1.8	31.3	76.5	88.8	121.3	123.9	54.6	4.6	11.6	123.9
MAX	43.5	24	30.1	17	40	112.5	166	232.2	161.8	80	34	40	

3.3 Physiography

The project area is characterized by terraced topography with relatively flat mesas dissected by strongly incised drainages. Typical relief is in the range of 300 to 500m. Elevation at the project area averages 1,700masl.

3.4 Access to Property

Access to the property is good with total driving time from Durango City varying between 1.5 and 2.0 hours depending on traffic. Driving distance to the property is 117km (measured from the center of Durango). The first 111km are paved and the final 6km consist of well-maintained gravel road.

3.5 Surface Rights

Argonaut also controls 1285ha of surface rights in the El Castillo area (Table 3.5.1) (Figure 3-1). This is substantially larger than the area covered by Argonaut Gold's mineral rights and overlaps onto mineral rights controlled by Compañía Minera La Parreña S.A. de C.V., a subsidiary of Industrias Peñoles. At the present time, Argonaut Gold is installing mine infrastructure (including leach pads) on ground for which they control the surface rights but not the mineral rights.

Argonaut is within their rights to do this since they control the surface, but potential conflicts could arise at a later date if the owner of the mineral rights were to discover economic quantities of gold in the area occupied by the process facilities.

Ejido Atotonilco

Argonaut holds a lease on 108ha from the Ejido Atotonilco dated June 20 2005 for a period of 15 years. All land payments have been completed on this lease agreement to hold the ground for the full lease term.

Ejido Otillo Moñtano

Argonaut held a lease on 200ha from the Ejido Otillo Moñtano dated March 10, 2005 for a period of 15 years. In June of 2010, the Company acquired an additional 300ha from the Ejido and renegotiated the original lease for an additional 5 years. This brings the surface rights from the Ejido to 500ha. The term is for 15 years beginning in 2010. The terms for the original 200 Ha were also re-negotiated for an additional 5 years. Both surface rights will be terminated in 2025. The total cost was 5,000,000MxPs plus IVA (in the order of US$420,000 plus IVA).

Gerónimo Gandara Gandara

Argonaut is leasing 377ha from Señor Gandara through a lease dated February 23, 2005. This lease has a term of 15 years. From 2009 through 2019, Argonaut Gold is required to make payments of MX$1,300,000 (adjusted for inflation) on March 1st of each year. Argonaut Gold has the right to terminate the agreement at any time.

José Guadalupe Gallegos

Argonaut Gold controlled a lease of 150ha from Señor Gallegos dated March 10, 2005. The lease had a term of 15 years. In March 2010 this lease was renegotiated for an additional 5 years and at the same time Argonaut obtained an additional 150ha of surface rights from Sr. Gallegos. These surface rights represent an increase in surface rights from what was already held through the same owner to a total of 300ha. The term is for 15 years beginning in 2010 and this term also applies to the original 150ha. Both surface rights will be terminated in 2025. The total cost was 2,540,000MxPs plus IVA (in the order of USD$212,000 plus IVA).

Table 3.5.1: Surface Rights

Surface Owner	Area Under Lease (ha)	Effective Period	Date Effective	Expiration Date
Ejido Atotonilco	108	15 Years	June 20, 2005	June 19, 2020
Ejido Otillo Moñtano	500	15 Years	June 10, 2010	June 10, 2025
Gerónimo Gandara	377	15 Years	March 23, 2005	March 22, 2020
José Guadalupe	300	15 Years	March 10, 2010	March 10, 2025
TOTAL	**1285**			

3.6 Local Resources and Infrastructure

The village of Atotonilco, is located about 6km from the property and has a small supply of unskilled labor (±150 inhabitants). The town of San Juan del Rio is located approximately 15km from the Property and it has a slightly larger supply of unskilled labor (±2,500 inhabitants) as well as a limited supply of housing. Some basic supplies are available in San Juan del Rio while most supplies and some contractors for construction and mining are available in Durango. Durango is a major regional population center with approximately 500,000 inhabitants. There are daily flights to Durango from Mexico. Mexico City has daily air connections to major cities in North America. The local resources and infrastructure are adequate to support the current mining operation.

3.6.1 Power Supply

All power requirements for process, crushing, laboratory, security and office facilities are provided by diesel powered generators.

Power is provided to the chemical laboratory, administrative offices, and water wells by four Cummins generators of 250KW, 175KW, 60KW and 30KW ratings.

The west and east crushing plants are powered by 800KW and 1000KW rated Caterpillar generators.

The West carbon plant has four generators with two 500KW Cummins, one 200KW Cummins and one 185KW Cummins. The East carbon plant has two Caterpillar 1750KW generators, one of which is standby. The east carbon plant electrical system was determined by power requirements for the process plant with both five tonne carbon trains operating in this location, peak demands for barren and PLS pumping systems, and demands for a one million tonne per month full recovery plant and fire assay laboratory.

3.6.2 Water Supply

Water supply is predominately for process and minor volumes for dust control, construction and potable uses and is provided by two wells with a combined capacity of 46 liters per second. One well is located 6.3km from the site and the other is several kilometers closer to the site. Increasing mining production will increase the current demand of 17 liters per second to 34 to 40 liters per second. Golder has recommended specific monitoring tasks to evaluate well and acquifer performance to determine if there are needs for well modification or well replacement prior to loss of groundwater production. The area in which El Castillo is located is designated as

Libre Alumbramiento. After a well is drilled, it must be registered before the National Commission of Water who will supply a water guage and meter to assess monthly payments of MX$6.94 per cubic meter

3.6.3 Buildings and Ancillary Facilities

The Project is an operating mine and currently has the following facilities:

- An early stage open pit mine;
- A crushing plant;
- A cyanide heap leach pad;
- A carbon gold recovery plant;
- A waste dump;
- A truck shop and warehouse;
- A sample preparation lab and Atomic Absorption gold analysis lab;
- A mine panning office;
- A geology office; and
- Various Project Access Roads.

3.6.4 Camp Site

There is no camp site at the project, all employees and contractor live off site at nearby towns or in Durango City.

3.6.5 Tailings Storage Area

The current processing method is a heap leach operation and no tailings storage area is required. If the project were to convert over to a conventional milling operation, adequate tailings storage areas are available in the vicinity of the project.

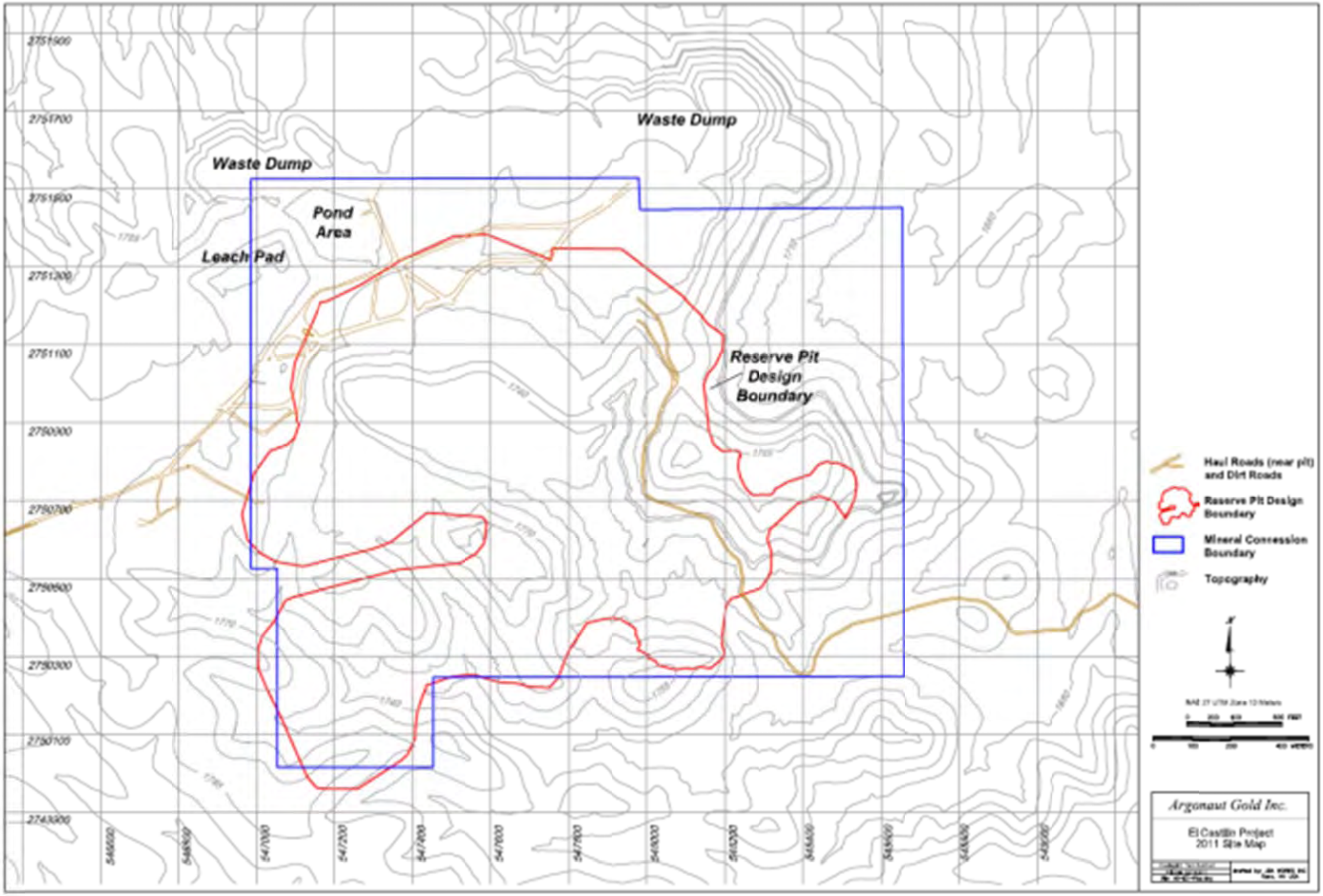
3.6.6 Waste Disposal Area

The mine currently has two waste disposal areas as discussed in Section 17.

3.6.7 Manpower

MRO has a mining contractor, a contractor who provides labor for crushing and also crushes higher grade ore, and a security contactor.

At year-end 2011, there were 101 direct MRO employees in safety and environment, administration and management, purchasing and accounting, engineering and contract management, maintenance, laboratory, exploration and geology, and process operations. More than 90% of the employees are from local communities. Employees are bussed each shift to and from the mine.



SRK Consulting
Engineers and Scientists

SRK Project No.: 203900.01

File Name: Figure_3-1

El Castillo Mine, Durango State, Mexico

Source: SRK Consulting

El Castillo Site Map

Date: 2-22-11 | Approved: BS | **Figure: 3-1**

4 History (Item 8)

4.1 Ownership

Argonaut currently owns four mining concessions. Concession title 220073 (El Cairo I) was originally acquired from the Mexican government. Concession title 220075 (El Cairo II) was acquired from Explominerals S.A. de C.V. The El Oro (title number 220076) and Justicia (title number 220074) concessions were acquired from several private individuals.

The Project was first optioned by Battle Mountain Gold Corporation (BMG) in 1995. Battle Mountain was acquired in 2000 by Newmont Mining who decided that the project did not meet their corporate size criteria and divested the property back to the Mexican government. Morgain Minerals Inc. (Morgain) took over ownership in 2002. In 2007, Morgain merged with Aurogin Resources to form Castle Gold Corporation (Castle). Argonaut purchased the Project from Castle in December of 2009.

4.2 Past Exploration and Development

The Project, which was formerly called El Cairo, was a grass roots discovery that resulted from a regional exploration program initiated by BMG in 1995 while exploring for bulk tonnage, disseminated gold deposits. Initial regional work by Battle Mountain reportedly involved interpretation of satellite imagery, regional geophysical data, and regional geological mapping. A number of areas were selected on the basis of the regional studies, one of which was the El Castillo project area. Battle Mountain's follow up work included a stream sediment geochemical survey that outlined a significant gold geochemical anomaly associated with El Castillo. Further mapping and sampling led to a successful drilling program delineating a potentially economic gold resource. Much of the initial satellite imagery, regional geophysical, geochemical, and exploration data completed by Battle Mountain has not survived and was not available for review as part of this report.

Between 1995 and 1998 Battle Mountain completed 207 RC drillholes and six diamond core holes (drilled as twins to six of the RC holes) within the El Castillo project area. Battle Mountain completed a resource estimate, scoping study, preliminary mine plan and reserve estimate that indicated the potential for a viable mining operation with operational similarities to Hecla's La Choya deposit in Northern Sonora, Mexico.

Morgain took over the Project in 2002. Their exploration work included completion of six twin diamond drill holes, and 136 RC drill holes. The core drilling was designed to test and verify the continuity, shape and thickness of gold mineralization identified by BMG with the twinning of selected RC drill-holes. In addition, the core samples were utilized for geotechnical studies and bulk metallurgical testing.

Castle, as successor to Morgain began their work in 2007 and changed the name from El Cairo to El Castillo in reference to a nearby rock monument of the same name. Castle's work included additional sampling and completion of 21 shallow, close-spaced air-track drill holes in the mining area to up-grade the near surface gold resource. Castle's work combined with previous work by Morgain and Battle Mountain was the basis for a preliminary reserve estimate by A.C.A. Howe International Limited dated January 31, 2008 and titled "Technical Report on the El Castillo Gold Project, Durango, Mexico"(Howe 2008). This report incorporated the results of an updated NI 43-101 compliant mineral resource and reserve estimate based on the additional geoscience and pre-production development work completed to date.

The El Castillo Project sold its first gold in September 2007 from heap leaching begun the previous July. The El Castillo Mine completed the commissioning of commercial production in July 2008 as an open pit/heap leaching operation.

4.3 Historic Mineral Resource and Reserve Estimates

The historical mineral resource estimate that was reported by Howe in 2008 and determined on drilling as of October 2007 is shown in Table 4.3.1.

Table 4.3.1: Historic Mineral Resource Estimate

Cut-off Au (ppm)	Classification	Tonnes (M)	Au Grade ppm	Au Ounces (000s)
0.15	Measured	65.4	0.43	899.9
	Indicated	28.9	0.30	277.4
	Measured and Indicated	94.3	0.39	1,177.3
	Inferred	4.5	0.38	54.7

4.4 Historic Production

Since the beginning of operations through the third quarter of 2010, the El Castillo Mine has produced an estimated 98,000oz of gold. Argonaut has produced 51,324oz of gold since taking ownership of the mine.

5 Geological Setting (Item 9)

5.1 Regional Geology

The El Castillo Mine property lies in the Altiplano Subprovince of the Sierra Madre Occidental (SMO) region of Central Mexico. The SMO represents an island arc assemblage of early Mesozoic age comprised of metamorphosed, deep-water sediments, and island arc volcanics. The Altiplano Subprovince lies on the east flank of the SMO and is comprised of Jurassic to Late Tertiary sedimentary and volcanic rocks. The oldest rocks in the El Castillo Mine area are Cretaceous flysch-sequence sediments that correspond to the upper member of the Mezcalera Group. These consist of arenites, shales, and thin-bedded limestone. In the mine area these units generally strike to the northwest and dip moderately to steeply to the northeast.

Regionally, the SMO is characterized by a thick sequence of lower Tertiary volcanic rocks comprised of an older andesite series overlain by younger pyroclastic dominated rhyolite series. These two series of volcanic rocks are referred to as the Lower Volcanic Series (LVS) and Upper Volcanic Series (UVS) respectively. The LVS can attain thicknesses of 1,000m and is dominated by Paleocene to Eocene andesitic lavas with intercalated pyroclastics rocks. These rocks are not exposed in the El Castillo Mine area, but are well exposed to the southwest, in the San Agustin and San Lucas mining districts, where they have been age dated at 38.8Ma. The UVS unconformably overlies the LVS rocks and can also be up to 1,000m thick. The LVS is typically composed of Oligocene to Miocene rhyolite-dacite pyroclastic volcanics. Within the mine area, an UVS rhyolite, ignimbrite caps the northern edge of the mineral deposit.

Within the El Castillo Mine area, Cretaceous Mezcalera Group flysch sediments are intruded by probable Oligocene porphyries of granodiorite to diorite composition. Petrographic studies indicate that most of the fine to medium grained porphyry found within the mineral system is granodiorite. This granodiorite corresponds to what was previously mapped as dacite or trachyandesite. It is thought to be of similar composition and age to the intrusive rocks mapped in the San Agustin and San Lucas mining districts immediately south of El Castillo. Similar intrusive rocks have been mapped by the Mexican Geological Survey (Consejo) to the immediate north in the mining district of La Gotera located in the municipality of Rodeo, Durango where they were dated at 26Ma and are hereby considered Oligocene in age. The granodiorite porphyry does not intrude the rhyolites in the mine area.

The El Castillo Mine property is located within the Basin Range Province of Central Mexico which is characterized by northwest-trending basin and range extensional tectonics and related structures. Within the district, structure is dominated by a northwest striking range front fault along the west side of the mine and younger northeast striking dextral faulting throughout the district. A northeast to easterly-striking post-mineral fault system (North Fault) along the northern margin of the present pit forms the northern limit to mineralization. It appears that the North Fault has cut-off and down-dropped a northern portion of the ore zone as much as 135m (in drill hole CA-31) as drilling in the hanging wall of the north fault has encountered significant thicknesses of post mineral cover.

5.2 Local Geology

El Castillo is being studied as a telescoped porphyry copper-gold mineral system that is related to Oligocene granodiorite porphyry and hosted in thin-bedded Cretaceous sediments and the intruding granodiorite porphyry sills. Within the mine area, these rock types form an alternating sequence of variably, metamporphosed sediments and intrusive sills that strike mainly to the northwest and dip moderately to the northeast. The porphyry intrusion created a prograde metamorphic aureole with a classic potassic-propylitic alteration assemblage in the upper portions of the porphyry and localized hornfels-skarn contact metamorphism in the Cretaceous sediments. Associated with prograde potassic alteration and contact metamorphism was zoned auriferous pyrite and relatively minor chalcopyrite-sphalerite-galena-arsenopyrite-tetrahedrite mineralization that is generally associated with quartz veins. Probable late-stage collapse of the magmatic-hydrothermal system resulted in structurally controlled quartz-sericite-pyrite alteration and auriferous pyrite mineralization. Later supergene oxidation of this pyrite dominated mineralization resulted in an, on average, 80 to 100m-thick oxide blanket and an underlying partially oxidized (transition) zone averaging approximately 25m thick. The combined oxide/transition mineralization is amenable to heap leach extraction and form the current low-grade minable gold resource in the El Castillo Mine.

5.2.1 Local Lithology

The oldest rocks exposed on the El Castillo property are thin bedded Cretaceous, flysch-sequence clastics and carbonates assigned to the upper Mezcalera Formation (Consejo, 1993). The rocks generally consist of intercalations of argillites, hornfels and thin bedded limestone. The limestone appears to be more common within the deeper portions of the drilled sequence. The Mezcalera sediments have undergone at least one pre-mineral compressive event probably related to Laramide deformation in the region that resulted in tight folding. The sediments were metamorphosed by both the regional compressive event and local intrusion of Oligocene granodiorite porphyry sills. The metamorphic mineral assemblage indicates a lower to middle greenschist facies event.

The Cretaceous meta-sediments are intruded by probable Oligocene granodiorite to diorite porphyry that is generally altered throughout the studied area. The porphyritic rocks are hereby described based on petrographic work by Carson (1998) for Battle Mountain Gold during the early phases of exploration work on El Castillo and samples were from both drilling and outcrop. Both the granodiorite porphyry and diorite porphyry described by Carson are identified by Argonaut personnel as dacite porphyry and the dacite terminology is used with their property surface mapping and drill hole logging. Granodiorite is medium grained, porphyritic with plagioclase, K-feldspar, hornblende, biotite, and minor quartz phenocrysts. Within the granodiorite porphyry (GP) all biotite phenocrysts are altered to clay-carbonate-sericite-hematite and the GP is the dominant intrusive rock to host gold mineralization. The diorite porphyry (DP) is only weakly altered and generally found below the gold mineralization where it locally contains unaltered hornblende.

The GP from the property has not been age dated, but is considered by the Consejo (1993) to possibly be of similar age to the intrusive rocks in the La Gotera District, 38km to the north, which is 26Ma. The intrusive rocks in the La Gotera District are mapped as diorite and are considered as coeval with intrusive rhyolite within the same district.

The El Castillo Property provides an erosional window to the Cretaceous meta-sediments intruded by Oligocene porphyry and covered with rhyolites thought to be the upper volcanic series (UVS) of the Sierra Madre Occidental. Regional mapping by the Consejo (1993) and El Castillo Mine geologists has identified rhyolite ignimbrites as the dominant volcanic rock that forms the cover to the Cretaceous window. Drilling has also identified a felsic volcanic tuff unit that occurs locally below the ignimbrite that is also post mineral. This tuff unit, where exposed in the open pit mining operation is up to 20m thick and lies unconformably on the once outcropping mineralized zone and locally contains lenses and irregular beds of fragmental debris derived from the eroded ore zone. The tuff unite, is not exposed on surface in the mine area but occurs extensively north of the mine where it forms distinct hills and mesas protruding above the valley floor. The most distinctive of these is called El Castillo that lies 5km northeast of the mine. The mapped rhyolite ignimbrite is not known to be altered or mineralized within the Mine area. The ignimbrite is known from regional mapping to be as thick as 300m, in the El Castillo area drilling has shown this unit to be approximately 90m thick.

Overlying rhyolite ignimbrite is a continental, polymictic conglomerate that is the major valley cover to the west and south of the Property. Regionally, the conglomerate is up to 200m thick and is up to 109m thick in drilling. The mine area geology is shown in Figure 5-1.

5.2.2 Alteration

Gold related alteration at El Castillo is dominated by early potassic and propylitic alteration of porphyry and meta-sediments and younger, overprinting phyllic alteration that is probably related to the collapse of the magmatic-hydrothermal system. There is petrographic evidence that the phyllic alteration is in some places overprinted by late-stage epithermal alteration that is related to a major gold mineralizing event. Descriptions of alteration mineralogy and assemblages are again taken from Carson (1998).

Most of the copper-gold bearing granodiorite porphyry underwent moderate to strong potassic alteration consisting of medium-grained brown biotite replacing primary hornblende phenocrysts and occurring as veinletts and patches in the matrix. Minor K-feldspar and tourmaline are also present. Weaker potassic alteration is found at the margins of strong alteration centers and consists of fine-grained biotite. Concurrent with potassic alteration within the porphyry phases was contact metamorphism within the Cretaceous sediments resulting in hornfels from siltstones and lesser skarn and marble from limestone.

Overprinting much of the potassic alteration is moderate to strong phyllic-argillic alteration expressed as sericite-quartz-clay. The phyllic-argillic alteration was strongest in the vicinity of permeable structural zones and decreases outward from the center of the gold system in a similar fashion as the potassic alteration. Sericite-rich alteration is commonly observed within zones of copper-gold mineralization, but is not known within the area of later phyllic-argillic alteration associated with the majority of mined alteration.

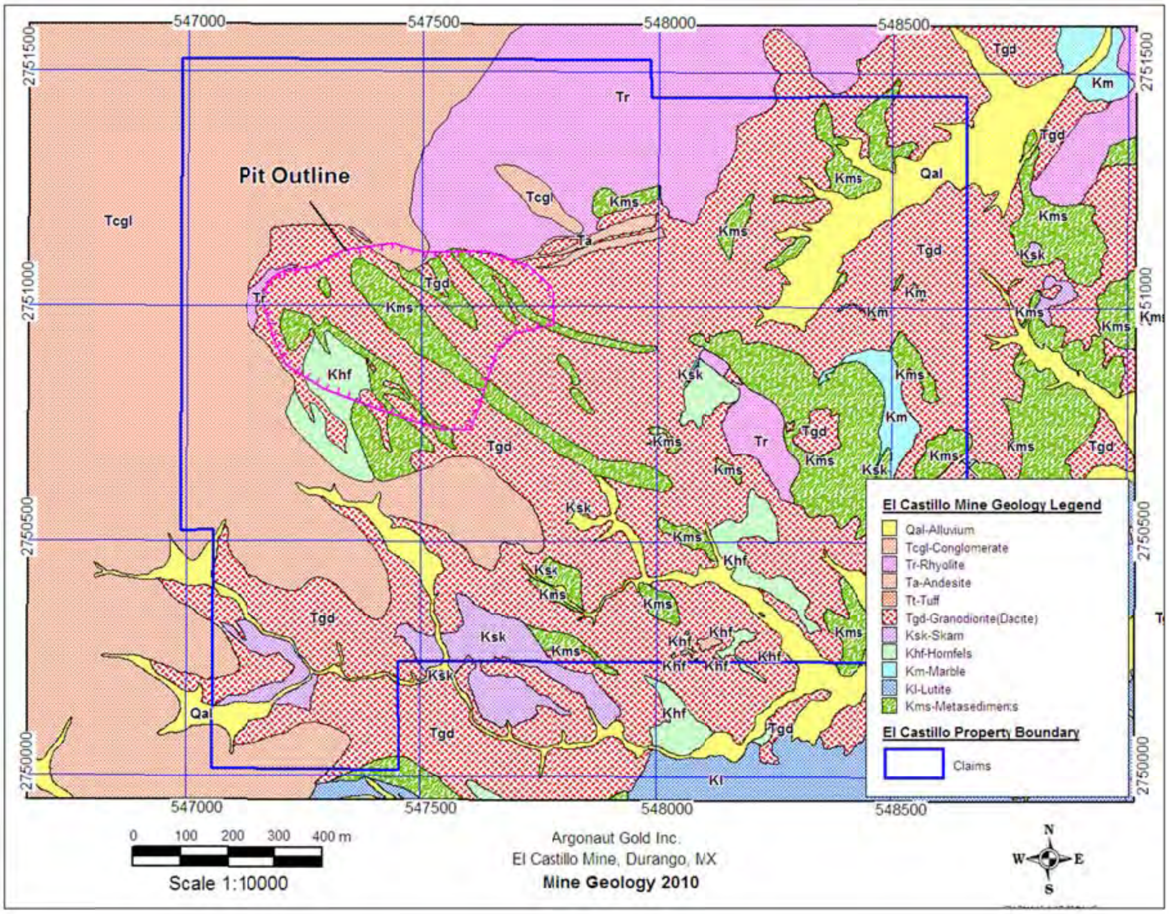
Late argillic alteration along with localized structurally controlled chalcedonic quartz is a characteristic alteration type within the central mined area of the El Castillo gold deposit (Figure 5-2). The Cretaceous siltstones appear to be particularly susceptible to late argillic-quartz alteration. No attempt was made to differentiate between hydrothermal clay assemblages and those associated with surface oxidation of pyrite; however, the late argillic-quartz alteration is known from drilling to extend below the zone of surface oxidation into the reduced zone of pyrite mineralization. Silicification was an important component along with argillization and formed in the shallow epithermal environment to deeper levels in the hydrothermal system. Shallow-formed silica was chalcedonic in nature with vuggy texture and appears to have been more massive at greater depths. Associated with much of the chalcedonic silica is fine grained crystalline hematite that is locked within the silica matrix and believed to be hydrothermal in origin. Surface oxidation of pyrite and hypogene sulfides occurred to depths of 100 to 120m within the main zone of mineralization at El Castillo and resulted in replacement of the original respective sulfides by iron oxides with lesser chalcocite-covellite and malachite.

Hypogene mineralization within the El Castillo District was coeval with the three main alteration events and consisted of early localized pyrite-chalcopyrite-sphalerite-galena-busmuthinite-arsenopyrite-gold followed by later and more pervasive pyrite-gold and lastly the secondary copper sulfide-oxide sequence. The dominant gold event is considered the middle pyrite-gold mineralization associated with late stage argillic-chalcedonic quartz alteration. Early hypogene mineralization appears to have been zoned with a central pyrite-chalcopyrite-bismuthinite-gold core zoned outward and perhaps to deeper levels in the system to a pyrite-sphalerite-galena-gold halo. Throughout the mineralizing events, gold appears to have been largely associated with sulfides (dominated by pyrite) as there is little evidence of gold being locked into quartz species and where seen petrographically (Carson, 1998), gold is generally found on quartz grain boundaries.

Supergene oxidation within the El Castillo resource area is of critical importance due to its relationship with heap leach characteristics and potentialities and consisted largely of amorphous hematite to depths of 100 to 120m of the exposed mineral system. Deeper oxidation along structures and porous zones are known from drilling to depths of at least 249m (drill hole CA-78).

5.2.3 Structure

The El Castillo Mine property is located within the Basin Range Province of Central Mexico characterized by northwest-trending basin and range extensional tectonics and related structures. Within the district, structure is dominated by a northwest striking range front fault along the west side of the mine and younger northeast striking dextral faulting throughout the district. A northeast to easterly-striking post-mineral fault system (North Fault) along the northern margin of the present pit forms the northern limit to mineralization. It appears that the North Fault has cut-off and down-dropped a northern portion of the ore zone as much as 135m (in drill hole CA-31) as drilling in the hanging wall of the north fault has encountered significant thicknesses of post mineral cover.



SRK Consulting Engineers and Scientists

El Castillo Mine,
Durango State, Mexico

Mine Area Lithologies

SRK Project No.: 203900.01

File Name: Figure_5-1

Source: SRK Consulting

Date: 1-25-11 | Approved: BS | **Figure: 5-1**

SRK Consulting
Engineers and Scientists

SRK Project No.: 203900.01

File Name: Figure_5-2

El Castillo Mine,
Durango State, Mexico

Source: SRK Consulting

Highly Oxidized Quartz Stockwork in Altered Intrusive

Date: 2-16-11 | Approved: BS | **Figure: 5-2**

6 Deposit Type (Item 10)

6.1 Geological Model

El Castillo is thought to be a porphyry-style gold system related to Oligocene granodiorite-diorite porphyries that intrude Cretaceous clastic and carbonate sediments in an extensional tectonic setting. Gold mineralization occurs throughout the magmatic-hydrothermal system in space and time and is related to sulfide mineralization associated with early potassic, phyllic-argillic, and late argillic-quartz alteration assemblages. The main gold event is believed to be associated with late, epithermal argillic-quartz alteration. This event is in contrast with the earlier potassic alteration, typically associated with deeper porphyry copper-gold mineralization. This change in alteration style from early porphyry-related magmatic fluids to later phyllic-argillic and lastly argillic-quartz alteration is believed to be a result of a collapsing magmatic-hydrothermal system that probably became meteoric water dominated. The late argillic-quartz alteration assemblage is dominated by vuggy chalcedonic quartz with clay-carbonate and possible adularia which is indicative of a low sulfidation epithermal environment.

The El Castillo gold system is similar to that found at Andacollo, Chile (Reyes, 1991 and Oyarzun, et, al, 1996) which is also a porphyry-related copper-gold system with distal gold-in-manto mineralization. Andacollo is thought to be a Cretaceous diorite to granodiorite porphyry copper-gold system with central porphyry copper-gold mineralization related to a classic porphyry alteration assemblage with a distal sediment-hosted (manto) low sulfidation and epithermal-level gold satellite system. Fluid inclusion work by Oyarzun, et, al, (1996) indicates that the manto epithermal gold deposits may in fact be related to another intrusive that has not been recognized at the surface due to high temperature fluid inclusions (about 365ºC) that are found about 5km from the porphyry center.

The El Castillo gold mine, and its dominantly argillic-quartz alteration, is situated 1.5km west of the center of known potassic alteration. Gold mineralization is known to be associated with early potassic, argillic-phyllic, and late argillic-quartz alteration assemblages and in all cases is hosted in or spatially related to granodiorite intrusions.

Supergene oxidation of shallow (<200m) pyrite-gold mineralization is the most important factor affecting mine viability at El Castillo. At present only oxidized or partially oxidized, transition material located relatively near surface is considered ore within the resource and reserve. The depth of oxidation has been strongly influenced by the density and depth of natural rock fracturing, total pyrite content of hypogene mineralization and the thickness of post-mineral cover. The deeper sulfide portion of the mineral system remains open at depth.

7 Mineralization (Item 11)

7.1 Mineralized Zones

The moderately dipping granodiorite-diorite sills, siltites and argillites are the best host materials at El Castillo. Argillic-quartz alteration is often closely associated with the intrusive contacts and can be indicative of higher grade zones of mineralization. The drillhole location map is shown in Figure 9-1.

7.2 Surrounding Rock Types

The Tertiary age, Upper Volcanic Sequence represented locally by the rhyolite ignimbrite is a continental, polymictic conglomerate. This unit is un-mineralized and unconformably overlies the mineralized units at El Castillo.

7.3 Relevant Geological Controls

The dominant controls of gold mineralization include structural channeling along contacts between intrusive sills and metasedimentary units and a broad zone of northeast striking steeply dipping faults and fractures. Gold precipitation may be somewhat dependent on a chemically favorable environment within the sediments but does not appear to be strongly influenced by rock composition. The fluids, and their contained metals are believed to have been derived from a magmatic source and are related to a collapsing hydrothermal system possibly active during the later phases of the Laramide Orogeny.

7.4 Type, Character and Distribution of Mineralization

At El Castillo, gold is mainly associated with pyrite occurring as fracture fillings or stockworks and occurring within areas of hydrothermal brecciation. Pyrite with gold also occurs as disseminations, especially within intrusive rocks. Within the mine the host environment for gold mineralization is dominated by an alternating pattern of sediments and parallel intrusive sills that strike to the northwest and dip steeply to the northeast. The sedimentary units generally vary from 20 to 40m wide as do the intrusive sills. Many of the sills appear to have intruded along bedding planes by splitting the tabular sedimentary blocks into their present positions. This geologic event resulted in the unique alternating pattern of sediments and intrusive sills that are observed throughout the mine area. Extensive fracturing of the sedimentary blocks created favorable secondary permeability for the deposition of gold mineralization predominately associated with pyrite. As a result, the northwest striking sediments are often better mineralized than the surrounding intrusive rocks.

There is typically a transition zone of partially oxidized mineralization that lies between the fully oxidizeded material and lower non-oxidized, sulfide material. The transition zone varies from 5 - 50m thick and is generally influenced by degree of fracturing and level of erosion.

The sulfide zone is generally identified by the presence of pyrite mineralization. The occurrence of sulfides, either fracture-related or disseminated, is usually a good indicator of gold mineralization. The sulphide veinlets are most commonly 0.5 to 4.0cm wide.

There are two preferred trends to mineralization. The most obvious of these reflects the generally stronger mineralization within the sedimentary units. The favored permeability related to increased fracturing within the sediments enhanced the distribution and broader geometry of mineralization. The second trend to mineralization is to the northeast and reflects structurally controlled zones of sulfide mineralization that may have served as feeders to the mineral system. The combination of these geologic controls resulted in a northeast elongated gold zone that measures approximately 1,600m by 1,300m.

8 Exploration (Item 12)

8.1 Surveys and Investigations

Between December 2009 and October 2010 Argonaut completed a 308-hole drilling program totaling 35,444m. The drilling was mainly targeted south and east of the current open pit to establish the resource potential within areas known to have mineral potential. The drilling program was divided into two phases. Phase I consisted of the completion of an approximate 100m drill-grid to define the approximate limits of the gold system. A second phase of drilling was designed to fill-in and step out from mineralization identified during Phase I. This Phase II program brought the drill spacing to an approximate 50m spacing.

During 2010, Argonaut also completed seven HQ core holes specifically to obtain samples for the metallurgical testing of transition mineralization (partially oxidized material) and sulfide material. This core was shipped to Kappes Cassidy and Associates (KCA) in Reno Nevada where it underwent a series of column tests to determine its viability for the heap-leach recovery of gold from transition and sulfide mineralization.

8.1.1 Procedures and Parameters

Recent and relevant exploration work at El Castillo consists of grid drilling 308 reverse circulation holes (35,444m), seven core holes (802m), geochemically analyzing 583 drill samples, magnetic interpretation of public domain airborne magnetics, and ongoing pit and property surface geologic mapping.

Five reverse circulation drill holes that are dispersed around the El Castillo property were analyzed over their entire length by cyanide soluble gold and multi-element geochemistry. The samples were prepared and analysed by ALS-Chemex Labs in Zacatecas, Mexico (Chemex). The assay method for gold was by cyanide leach with atomic absorption finish (Chemex internal code Au-AA13). Analysis for trace elements was by aqua regia digestion (partial extraction) and induced coupled plasma (ICP) analysis for the 35 element Chemex package (ME-ICP41).

Airborne magnetics used to model the El Castillo Property were flown by the Mexican government in 1980 and are a public domain source of geophysical information that was downloaded from the government website (SGM). The specifics of the data include 800m flight line spacings, 120m altitude above the surface bird height, Gulf MK magnetometers for airborne survey and ground base station data reduction, and radar control for bird height and flight navigation. The direction of flight is not known, but appears to be north-south.

8.2 Interpretation

The down-hole geochemistry was run to determine trace element zonation and gold-trace element relationships across the El Castillo property and as such, the data was analyzed using a comparison of element means and Pearson coefficients from each drillhole. Samples were not classified on the basis of host rock, alteration, or sulfide content, but rather all samples within each hole were given equal weight for the hole statistics. No standardization of geochemical values was performed and the relatively few gold and silver values that were below detection were set at detection values.

El Castillo is found to be associated with a relatively large intrusive source as indicated on the regional magnetic map for the San Juan del Rio 50,000 map sheet. This source has a pronounced east-west elongation with the El Castillo Mine located at its western apex. There are no high frequency sources near the Mine area possibly indicating that there are no volcanic sources associated with the mineral system which appears to be solely a function of the intrusive source. The intrusive source is consistent with the known mine geology.

9 Drilling (Item 13)

9.1 Type and Extent of Drilling

During the 2009-2010 field seasons Argonaut has drilled a total of 308 reverse circulation (RC) holes totaling 35,444m, and seven core holes totaling 802m. The RC holes were drilled on an approximate grid of 50m with this drill spacing deemed adequate to define the extent of mineralization within the concession boundaries. Most of the RC holes were drilled on a -60 angle from horizontal on a 220º azimuth from true north which is generally normal to the strike and dip of Cretaceous sediments in the mine area. The core holes were drilled for metallurgical testing of the transition and sulfide mineralization and were located to test varied portions of the known mineralized system.

The RC drilling was performed by Layne de Mexico, S.A. de C.V. which is a subsidiary company of Layne Christensen Company of Chandler, Arizona. Layne de Mexico (Layne) is headquartered in Hermosillo, Mexico. Layne performed the RC drilling with a buggy-mounted reverse circulation drill and a track mounted reverse circulation drill with both machines utilizing dual-wall drill pipe and a down-hole percussion hammer. The reverse circulation method of drilling delivers a continuous sample with minimal contamination.

9.1.1 Procedures

A drill location is first laid out by the mine surveyors with a specified easting and northing and a drill pad is constructed if necessary. After the pad is completed, the collar point is re-established. Typically, the overburden in the resource area is very thin and only a short section of casing is required. Drilling is conducted under dry conditions and all sample material passes through a cyclone prior to collection. There is no hole-abandonment remediation required in Mexico. Drill hole collars are covered and marked by a square concrete slab with the hole number etched in the concrete.

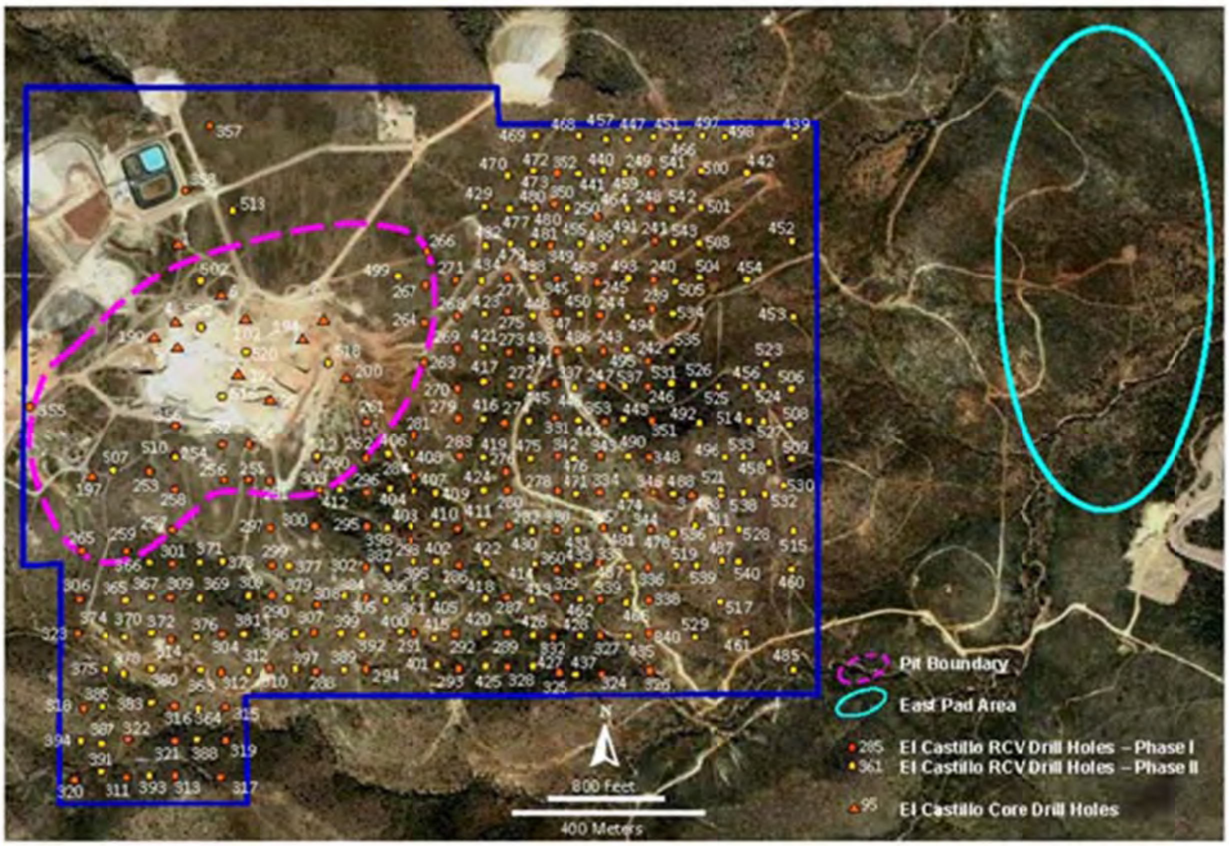
9.2 Results

Reputable contractors using industry standard techniques and procedures have conducted the drilling. This work has defined a large zone of anomalous gold mineralization within the sedimentary rocks and fault zones.

The mineralization is interpreted to follow several orientations controlled by fault planes, en-echelon veins, vein stockworks and favored stratigraphy. Mineralization is also disseminated in certain rock types. The majority of drill-holes are angled at 60 degrees to the northeast to cross the area stratigraphy that is often preferentially mineralized. Based on the range of mineralization environments and orientations, there is no guarantee that drill sample lengths represent a true thickness of mineralization.

9.2.1 Interpretation

SRK is of the opinion that the drilling operations were conducted by professionals, the RC chips and core were handled, logged and sampled in an acceptable manner by professional geologists, and the results are suitable for support of a NI 43-101 compliant resource estimation.



SRK Consulting Engineers and Scientists	**El Castillo Mine, Durango State, Mexico**	**Drillhole Location Map**		
SRK Project No.: 203900.01	**Source: SRK Consulting**			
File Name: Figure_9-1		Date: 2-16-11	Approved: BS	**Figure: 9-1**

10 Sampling Method and Approach (Item 14)

10.1 Sampling Methods and Chain of Custody

All RC drill samples were collected by El Castillo Mine personnel including the company's exploration geologists and trained mine technicians.

RC drill samples were collected every 1.5m in two 5gal buckets. The entire sample is then weighed (typically 125kg). The sample is first split in half using a single Jones-type splitter. The one-half split is further reduced, through the Jones splitter with one-half of the split (one quarter of original sample) bagged for analysis with Chemex. The remaining sample is then split one more time and the remaining half (one-eighth of original sample) sample bagged for storage in the project warehouse. Bagged samples for analysis are picked-up at the mine site by Chemex and transported by secured locked truck to Zacatecas, Mexico to the Chemex sample preparation facility for standard sample preparation and eventual fire assay analysis.

10.2 Factors Impacting Accuracy of Results

The various drilling and sampling program were conducted by professional drillers and geologists who undoubtedly performed to the standards of the mining industry. The sample recovery as recorded on the drill logs, shows that nearly all of the mineralized intervals produce very good recovery. Since the entire hole is sampled, all of the potentially mineralized material is tested. Such thorough sampling ensures that both mineralized and un-mineralized material is adequately characterized. Based on the good recovery, proper chain of custody, and thorough sampling methods, the factors impacting accuracy of results are positive.

10.3 Sample Quality

The drilling, logging and sampling procedures described above combined with good recovery ensure that sample quality of the El Castillo drilling is very good. The sample length is appropriate to accurately characterize the mineralization and to distinguish any zones internal to the mineralization which may have anomalously high or low-grades.

10.4 Relevant Samples

The relevant samples are the mineralized intervals of the drillholes.

11 Sample Preparation, Analyses and Security (Item 15)

11.1 Sample Preparation and Assaying Methods

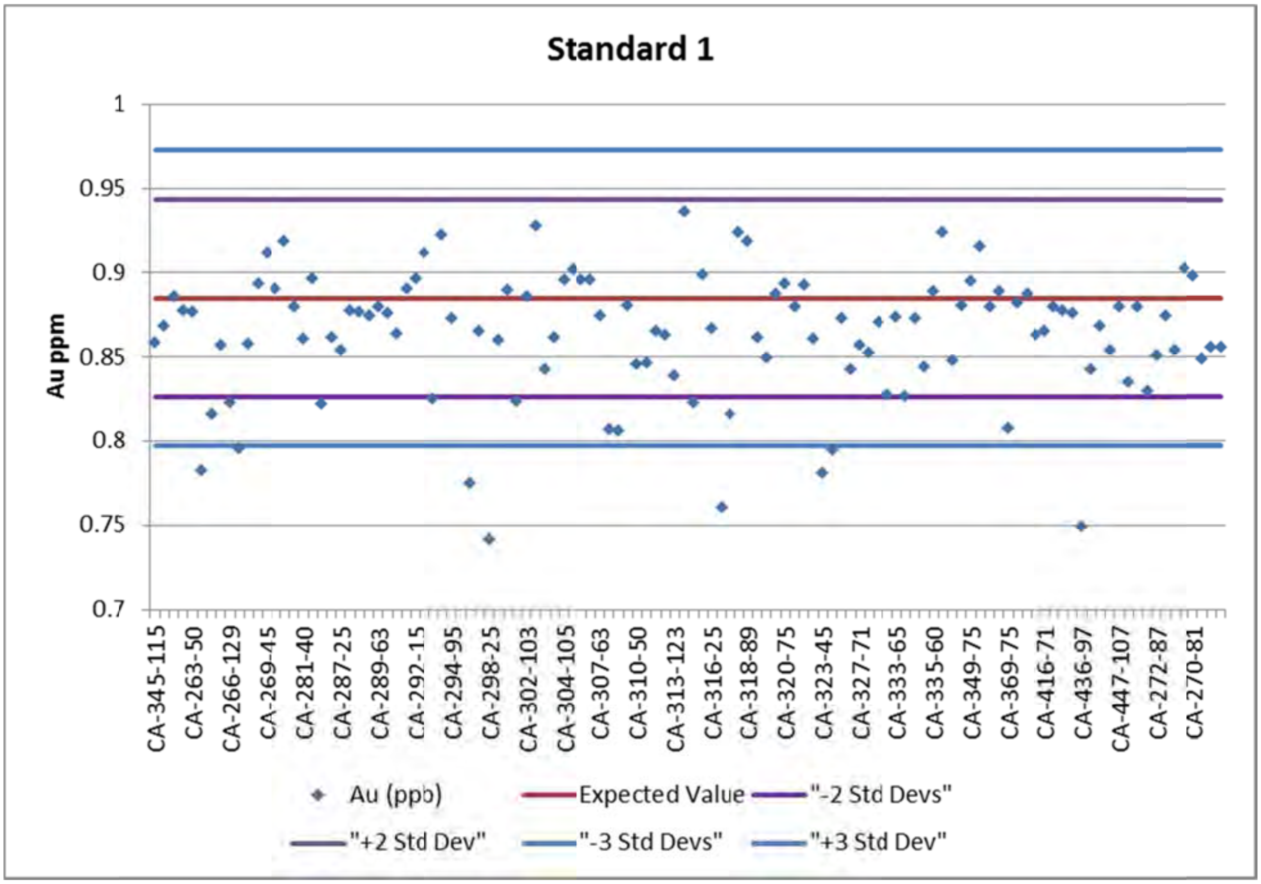
At the Chemex sample preparation facility in Zacatecas, the samples undergo a standard sample preparation in which the samples are first weighed (reported with analytical results) and the entire sample dried. The entire sample is then crushed to at least 70% minus 10 mesh and then split with a riffle splitter to a 250g sub-sample. The entire 250g sub-sample is then pulverized to at least 85% passing a minus 200 mesh. Approximately 150g of the pulverized sample is packaged and sent to the Chemex assay facility in Vancouver, BC, Canada via United Parcel Service for a 50g fire assay (FA) with an Atomic Absorption (AA) finish for gold. The remaining 100g pulverized sample is stored with Chemex in Zacatecas.

11.2 Quality Assurance and Quality Controls (QA/QC)

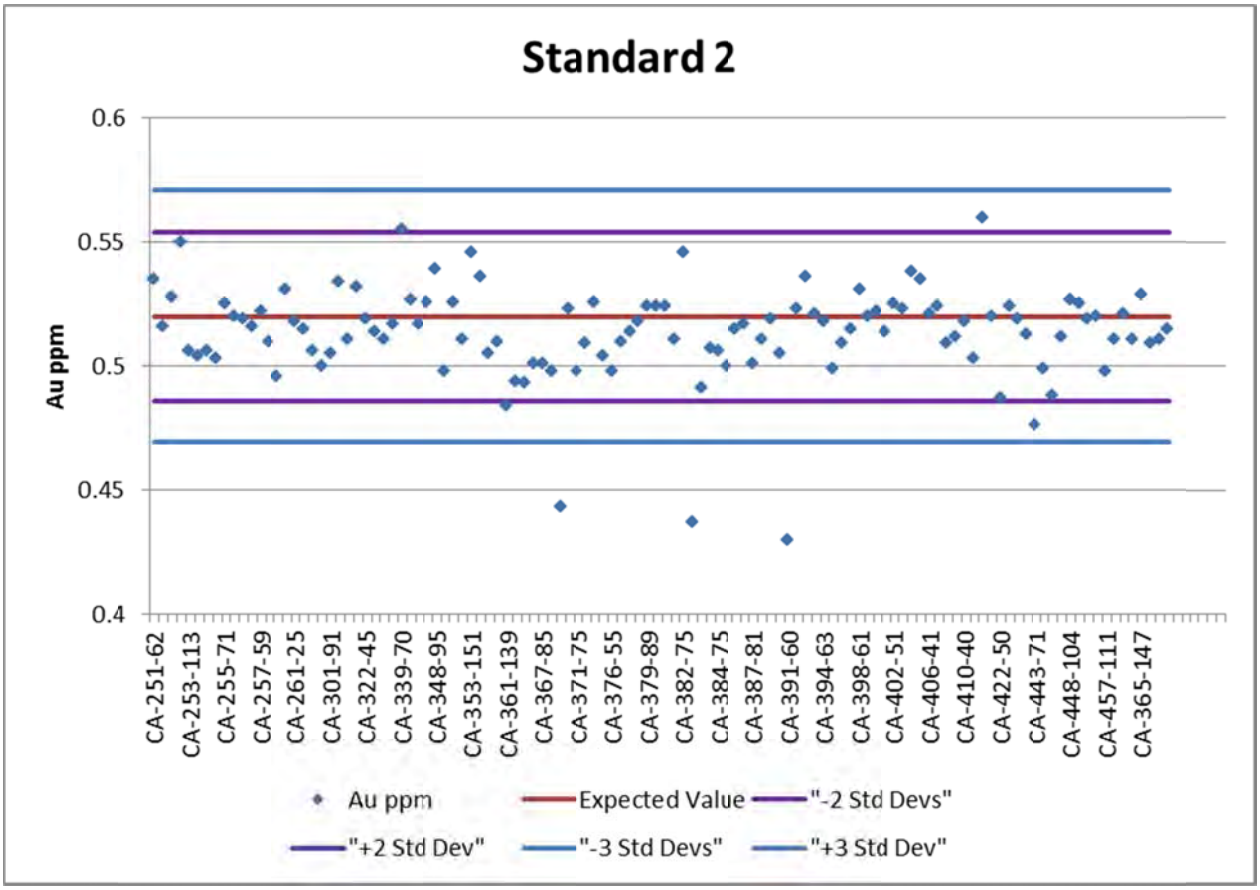
Argonaut has conducted a modern QA/QC program in conjunction with its exploration drilling program. This program includes standard reference materials, field duplicate samples and blank samples. In general, at least one and in many cases two, standard reference samples and blank samples were included with each of the 308 drillholes completed by Argonaut. During the second phase of drilling, field duplicate samples were also collected. In total there are 445 standards, 558 blanks and 150 field duplicates. The results of the standard analysis are presented in Figures 11-1 through 11-4. The distribution of results shows that the vast majority of the samples plot within two standard deviations of the expected value. There are several failures which are attributed to sample mix ups. The blank samples all plot within expected tolerances. The field duplicate data is shown in Figure 11-5 and displays expected reproducibility for the type of duplicate. The laboratory duplicate data is shown in Figure 11-6 and displays good reproducibility.

11.3 Interpretation

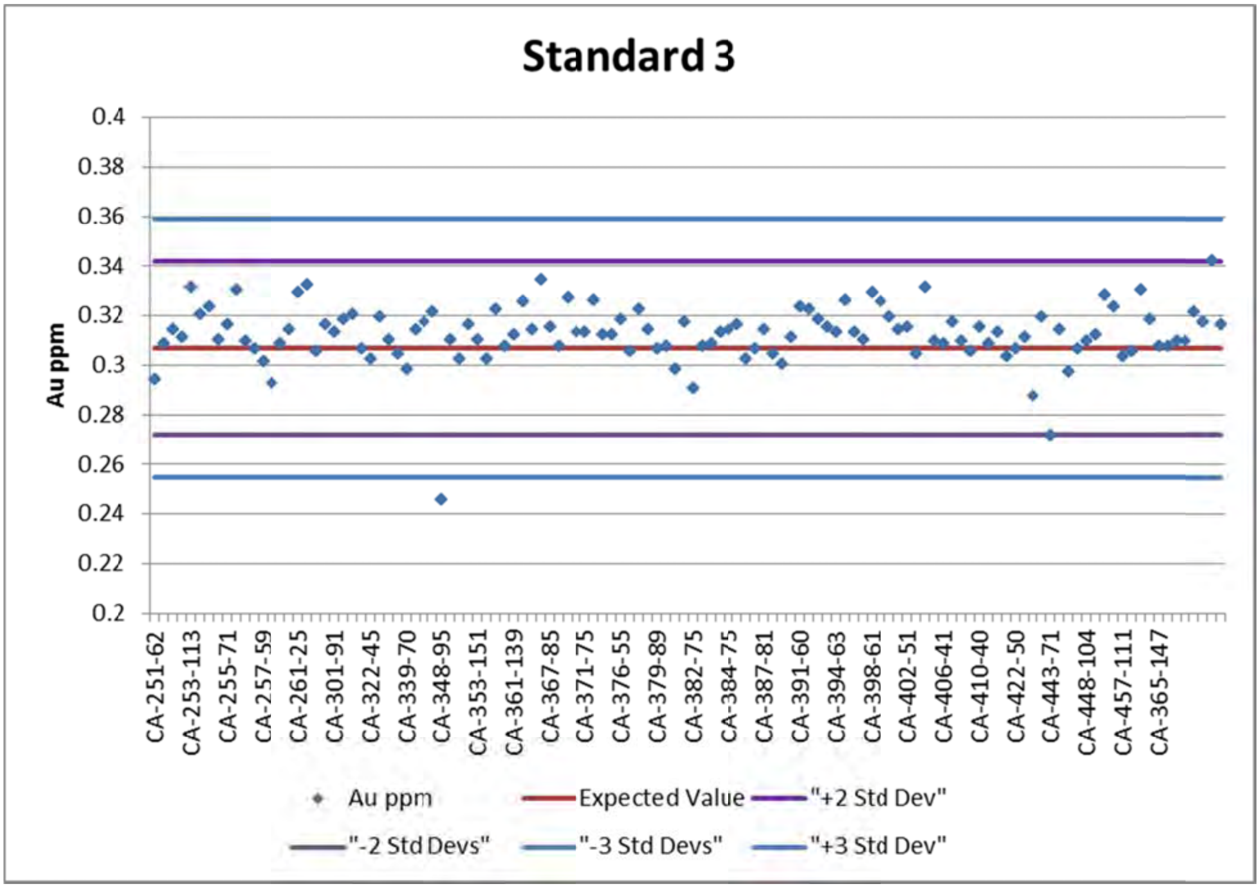
Argonaut has included adequate QA/QC control to validate the primary laboratories analyses. The results of the QA/QC study verified the original assay analyses and indicated no assay bias. The analytical results within the current drillhole database meet current industry standards to support the Mineral resource estimation of this report.



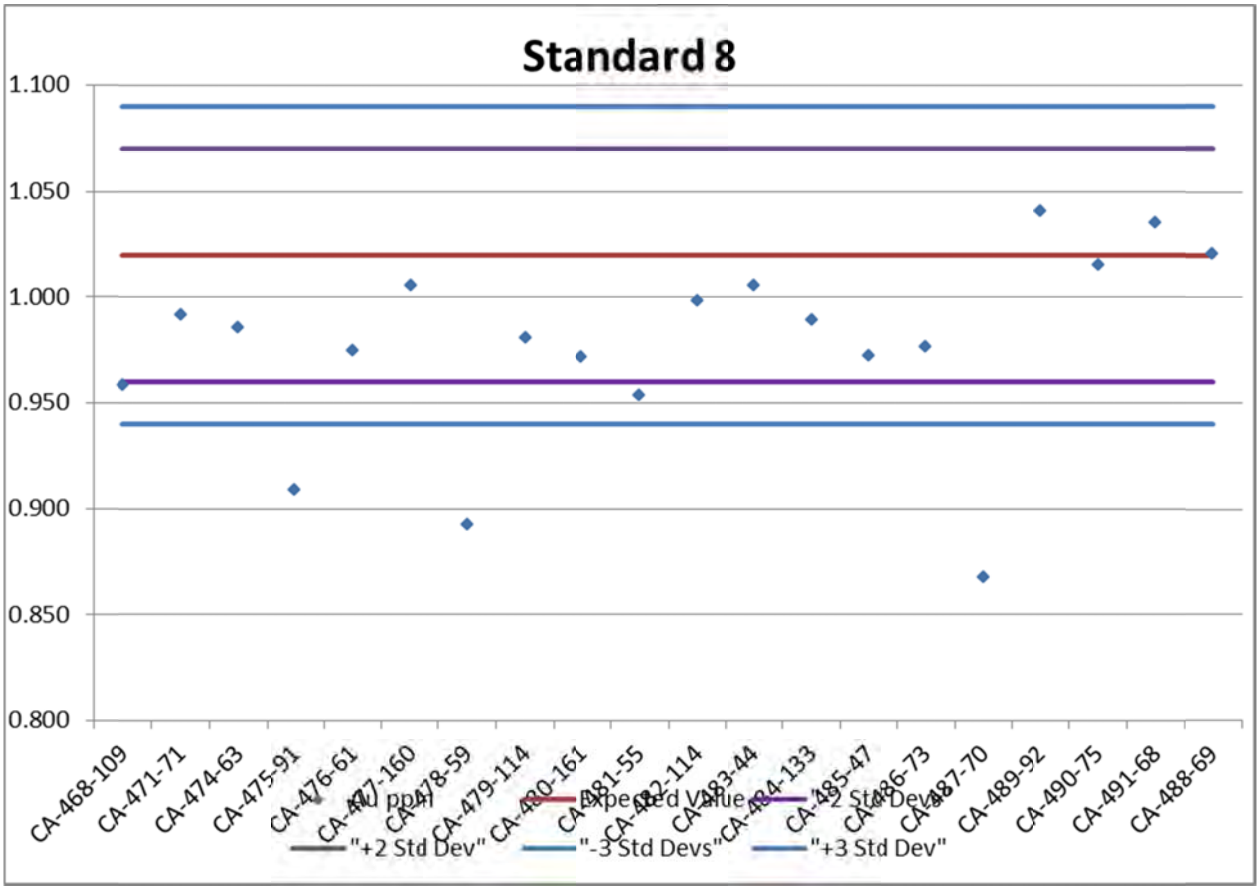
SRK Consulting Engineers and Scientists	El Castillo Mine, Durango State, Mexico	Analyses of Certified Standard 1		
SRK Project No.: 203900.01	Source: SRK Consulting			
File Name: Figure_11-1		Date: 2-16-11	Approved: BS	Figure: 11-1



SRK Consulting Engineers and Scientists	El Castillo Mine, Durango State, Mexico	Analyses of Certified Standard 2		
SRK Project No.: 203900.01	Source: SRK Consulting			
File Name: Figure_11-2		Date: 2-16-11	Approved: BS	**Figure: 11-2**



SRK Consulting Engineers and Scientists	**El Castillo Mine, Durango State, Mexico**	**Analyses of Certified Standard 3**	
SRK Project No.: 203900.01	**Source: SRK Consulting**		
File Name: Figure_11-3		Date: 2-16-11 Approved: BS	**Figure: 11-3**



SRK Consulting
Engineers and Scientists

SRK Project No.: 203900.01

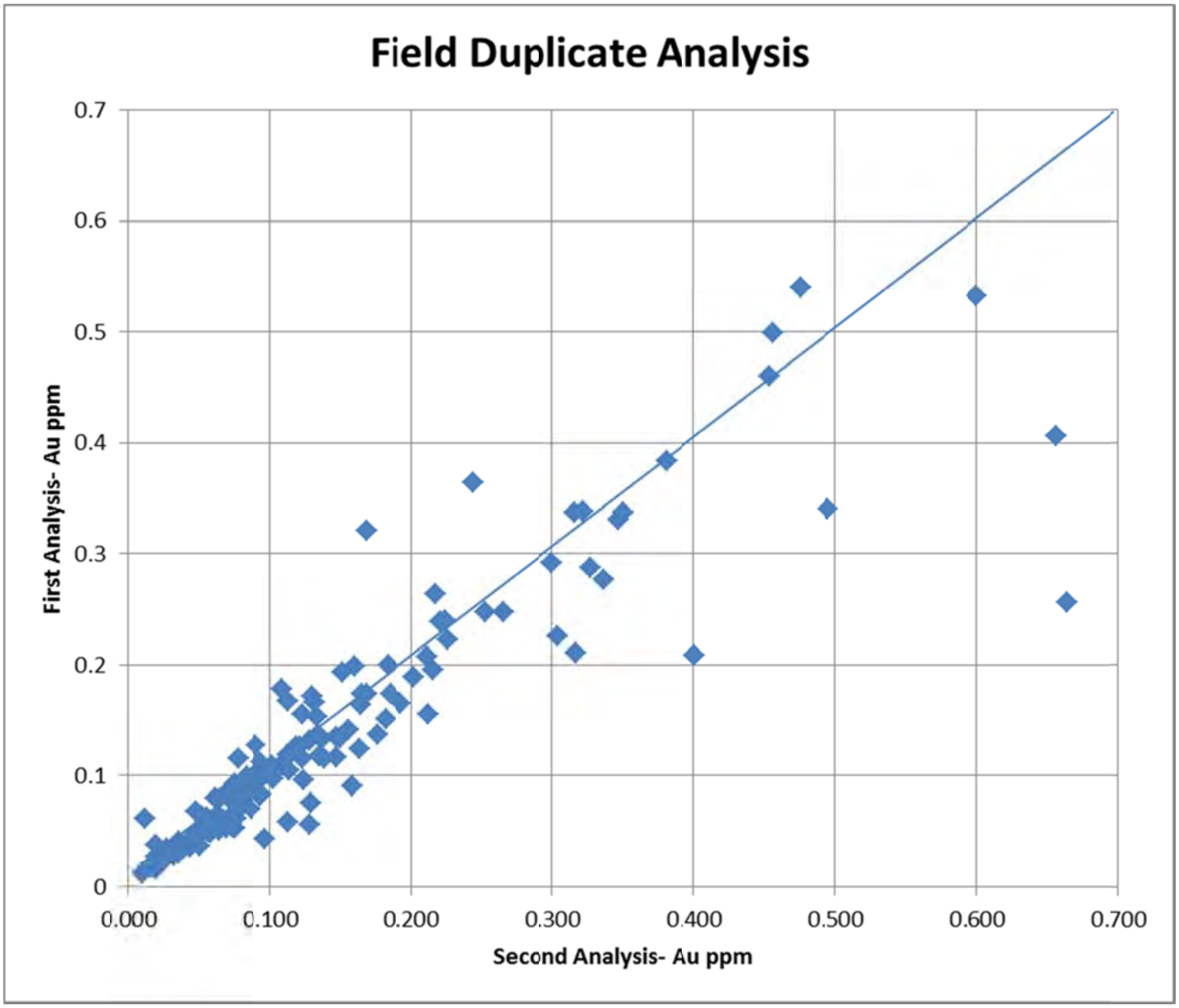
File Name: Figure_11-4

El Castillo Mine,
Durango State, Mexico

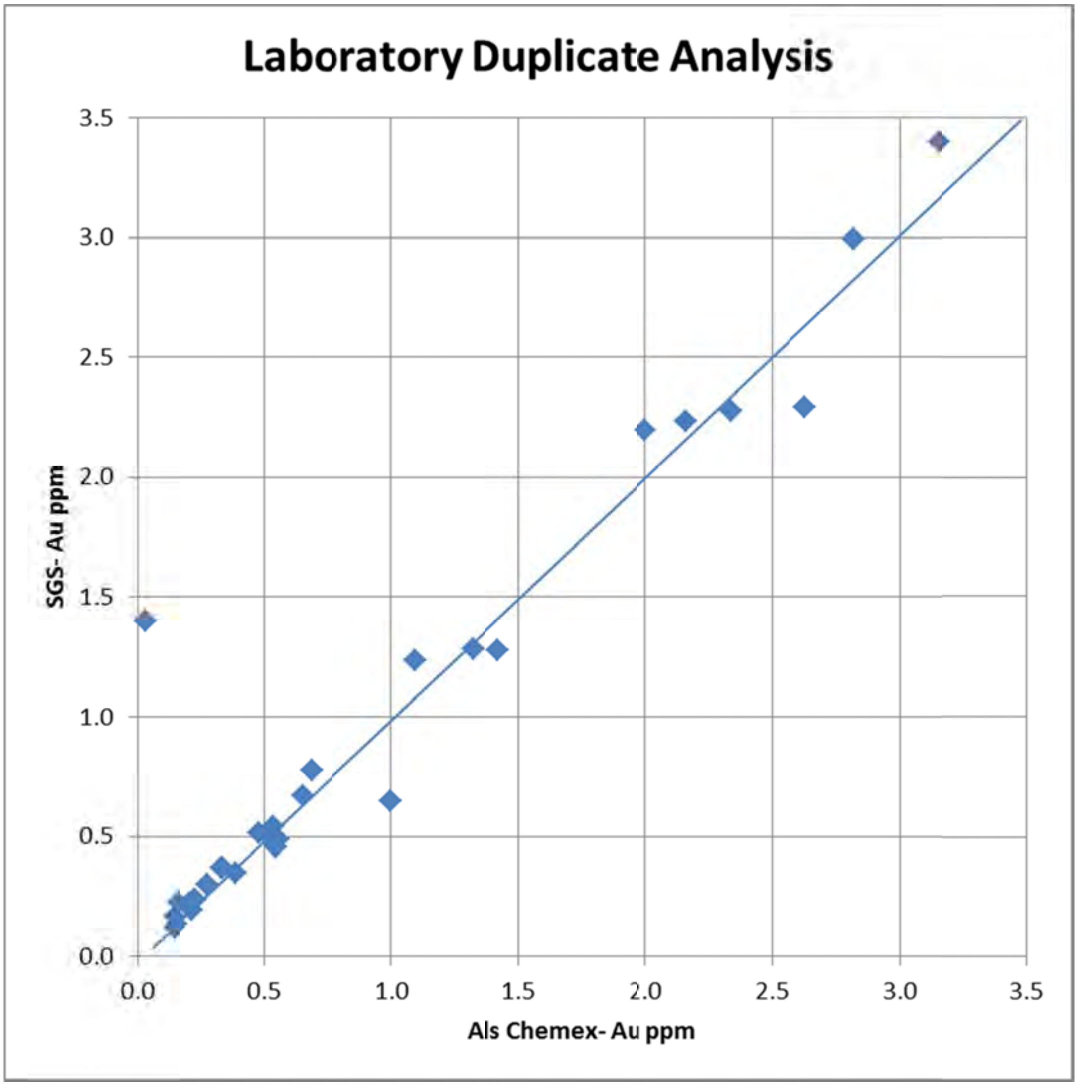
Source: SRK Consulting

Analyses of
Certified Standard 8

Date: 2-16-11 | Approved: BS | **Figure: 11-4**



SRK Consulting Engineers and Scientists	El Castillo Mine, Durango State, Mexico	Field Duplicate Results		
SRK Project No.: 203900.01	Source: SRK Consulting			
File Name: Figure_11-5		Date: 1-25-11	Approved: BS	**Figure: 11-5**



SRK Consulting Engineers and Scientists	El Castillo Mine, Durango State, Mexico	Laboratory Duplicate Results		
SRK Project No.: 203900.01	Source: SRK Consulting			
File Name: Figure_11-6		Date: 1-25-11	Approved: BS	Figure: 11-6

12 Data Verification (Item 16)

12.1 Quality Control Measures and Procedures

The electronic database has been verified to original source data by several qualified personnel over the past eight years. The first verification was done by Howe in 2002 as part of the original resource estimations. In 2006, Howe conducted further validation to support its revised resource estimation.

For the current study, the original Howe verified electronic database was augmented with the 2009 and 2010 drilling results. This database was compiled by Argonaut staff and their consultants. Argonaut's electronic database was verified by SRK against pdf copies of the original signed Chemex assay certificates. No errors were found.

12.2 Limitations

The database prepared by previous qualified persons relies on the industry professional of information supplied by Howe, Argonaut and from various professional assayers. SRK has handled the data with utmost regards to accurate transfer and preservation, but does not take responsibility for the quality of the source data.

13 Adjacent Properties (Item 17)

The San Agustin Mining District lies 12km to the southwest of the El Castillo Mine. The San Agustin Property is owned by Silver Standard Resources Inc. and hosts Ag-Au-Zn-Pb mineralization. Mineralization is hosted in Lower Volcanic Series (LVS) dacite porphyry, Cretaceous siltstones, and Upper Volcanic Series rhyolites and is characterized by quartz-sericite-pyrite alteration and pyrite-base metal sulfide stockworks. Mineralization is hosted in two northeast striking flat lying zones of up to 200m thick and is thought related to a dacite flow-dome complex. Mineralization appears to be Oligocene to Miocene in age and is possibly contemporaneous with El Castillo. Silver Standard reports an NI 43-101 compliant indicated resource of 121Mt with 0.41g/t Au, 12.3g/t Ag, 0.49% Zn, and 0.06% Pb based on 240 RC and core holes drilled in the past ten years.

The San Lucas de Ocampo Mining District is located 19km southwest of the El Castillo Mine. The San Lucas Property is owned by Ormex Resoures Inc.(Ormex) and hosts Ag-Au-Pb mineralization. Ormex reports sporadic gold-silver mineralization with gold values up to 1.68g/t and hosted in a N55E vertical zone associated with the historic Veta Grande quartz vein. Oremex collected 220 rock geochemical samples along +2km of the Veta Grande trend which is hosted in LVS dacitic and andesite porphyry rocks. Ormex considers San Lucas a low sulfidation epithermal mineral system. San Lucas had been studied in 2003 and reported as a technical report written by Peter Christopher for Blackhorn Gold Mines Ltd. in which it is reported that the property had been previously sampled underground by Luismin who encountered 0.55m that assayed 256g/t Au and 391g/t Ag within a possible boiling zone. The Christopher Report states that the Veta Grande zone consists of near vertical quartz veins and stockworks that are 0.5 to 1.5m wide over 2km of N55E strike.

14 Mineral Processing and Metallurgical Testing (Item 18)

14.1 Metallurgy

SRK has reviewed the metallurgical testwork conducted on El Castillo Oxide ore documented in the Technical Report on the El Castillo Project, ACA Howe International Limited, July 31, 2008 and on El Castillo Transition Ore conducted by Kappis Cassiday & Associates (KCA) during the fourth quarter 2010. The results of these studies are briefly discussed in this section.

14.1.1 El Castillo Oxide Ore

Several metallurgical tests on mineralized oxide ore from El Castillo were conducted during the period from 2004-2006. The tests were designed to assess the leaching characteristics of the oxidized material and consisted of:

- Bottle roll leach tests in 2004 and later column leach tests in 2006 by KCA; and
- Two onsite bulk heap leach tests conducted by Castle Gold in 2005, followed by analysis of the leach residues by Metcon Research (Metcon) in 2006.

Bottle Roll Tests – KCA (2004)

In early December 2003, 15 boxes of core samples from the El Castillo Project were shipped to KCA for cyanide bottle roll tests. All samples were split and pulverized to minus 75µm (200 mesh), analyzed for gold and silver and pulped with water to approximately 40% solids for bottle roll cyanidation tests. Cyanidation was performed at pH 11 with 1g/L sodium cyanide for 48 hours. The results of these tests indicated the following:

- Head Grade:
  - Gold: 1.42g/t (range 0.22 to 6.17g/t);
  - Silver: 2.60g/t (range 1.3 to 10.6g/t).
- Metal Recoveries after 48 hours of leaching:
  - Gold: 88% (range 73 to 98%);
  - Silver: 34% (range 4 to 83%).

Bottle roll tests serve to determine the amenability of the ore to cyanidation, and not gold extraction rates achievable in a heap leach. These tests served to indicate that the ore was readily amenable to cyanidation, and that cyanide consumption would likely be low (averaging 0.31kg/t), indicating the absence of deleterious elements such as copper. Additionally, the majority of the gold was extracted early in the leach cycle, indicating that gold at El Castillo is likely fined grained.

Column Leach Test – KCA (2006)

In 2006, 1,870kg of diamond drill core from Castle Gold's hole twinning program were sent to KCA for column leach testing, which was composited to formulate a test sample that reportedly assayed 1g/t Au. The test composite was crushed to minus 12.5mm (1/2in) and loaded into a 0.6m (24in) diameter x 5.6m (18ft) high column. The column was irrigated at the rate of 10L/hr/m^2 (0.004g/m-ft^2) with a leach solution containing 0.3 to 0.4g/L free cyanide. The results of this test indicated that a 72% ultimate gold recovery was achievable after 90 days of leaching, and that about 60% gold extraction was achieved after only 35 days of leaching. Overall cyanide consumption was 0.79kg/t, which was considerably higher than would have been indicated by earlier studies, but there was some comment that the pH of the leach solution may have declined to about 9.5, which may have contributed to higher cyanide consumption (NaCN begins to volatilize to HCN gas at this pH). Total silver recovery was 7%, which is consistent with previous work and confirms that silver will have only negligible impact on overall project economics.

Heap Leach Tests - Castle Gold (2005)

In 2005 Castle Gold conducted two separate heap leach tests on oxidized run-of-mine (RoM) ore taken from two separate test pits. The majority of the ore was reported to be less than 2in in size. Pit-1 was located near the east side of the mineralized area and Pit-2 was located near the west side of the mineralized area. Heap-1 was constructed as a single 3m high lift containing 18,200t of low-grade (averaging 0.25g/t Au) from Pit-1. Heap-2 was constructed as a single 3m high lift containing 8,370t of high grade ore (averaging 1.78g/t Au) from Pit-2.

Heap-1 was leached for 45 days with cyanide solutions that typically contained 400ppm sodium cyanide and gold extraction was reported at 51.7%, with most of the gold extraction occurring within the first 25 days. Cyanide consumption was reported at 0.16kg/t and lime consumption was reported at 7.2kg/t.

Heap-2 was leached for 40 days with cyanide solutions that typically contained 300ppm sodium cyanide and gold extraction was reported at 52.5%. Cyanide consumption was reported at 0.12kg/t and lime consumption was reported at 7.3kg/t.

14.1.2 El Castillo Transition Ore

Metallurgical Studies on RC Drill Cuttings – KCA (2010)

KCA conducted an initial metallurgical investigation of transition ore with El Castillo RC drill cuttings, which is documented in their report "El Castillo Transition Drill Cutting Samples, Report of Metallurgical Test Work", November 2010. This work included the formulation of three separate test composites, composite characterization, bottle roll cyanidation tests and column cyanidation tests. As shown in Table 14.1.2.1, the gold content of the three composites ranged from 0.237g/t Au to 0.463g/t Au. Of particular note is the relatively high sulfide sulfur content of composite 45702 (indicating that this composite was significantly less oxidized than the other two composites).

Table 14.1.2.1: Head Analyses for El Castillo Transition Ore Drill Cutting Test Composites

Item Composite	Au g/t	Ag g/t	Carbon (T) %	Sulfur (T) %	Sulfide Sulfur %	Sulfate Sulfur %
LT-CA-01	0.237	0.9	0.03	0.13	0.03	0.10
LT-CA-02	0.615	4.8	0.38	1.70	1.22	0.47
LT-CA-03	0.463	5.1	0.46	0.04	<.01	0.04

Bottle roll tests were conducted on 1,000g test samples ground to P80 75µm and leached for 96 hours in a 1g/L sodium cyanide solution at pH 11.0. As shown in Table 14.1.2.2, these tests resulted in gold extractions ranging 78 to 93% with an average gold extraction of 87%. The lowest gold extraction (78%) was from composite 45702, which also represented the lowest level of oxidation of the composites tested. This relatively high gold extraction from relatively unoxidized ore indicates that the gold is most likely not intimately associated with the sulfide mineralization and is readily available to leaching by standard cyanidation.

Table 14.1.2.2: Summary of Bottle Roll Cyanidation Leach Tests on El Castillo Transition Ore Drill Cutting Test Composites

Composite	Crush Size P80 Microns	Calc. Au g/t	Au Extraction %	Leach Time days	NaCN Consumption kg/t	Ca(OH)2 kg/t
LT-CA-01	75	0.223	93	4	0.87	1.00
LT-CA-02	75	0.414	78	4	1.04	1.30
LT-CA-03	75	0.410	89	4	0.20	1.20

Column leach tests were conducted on each of the test composites using the following test conditions:

- Crush size: 100% passing 19mm;
- Column size: 6in diameter x 6ft high;
- Leach Cycle: 42 days;
- Agglomeration: 6-10kg/t cement;
- pH 10 – 11.

Due to the high fines content of the test composites, the material was agglomerated with cement and allowed to cure for three days prior to column testing. The results of the column tests are summarized in Table 14.1.2.3. Gold extractions ranged from 70 to 83% with an overall average gold extraction of 79% after 42 days of leaching.

Table 14.1.2.3: Summary of Column Leach Tests on El Castillo Transition Ore Drill Cutting Test Composites

Composite	Crush Size P80 mm	Calc. Au g/t	Au Extraction %	Leach Time days	NaCN Consumption kg/t	Cement kg/t
LT-CA-01	19	0.224	83	42	1.02	10.0
LT-CA-02	19	0.445	70	42	0.66	6.0
LT-CA-03	19	0.459	83	42	0.61	6.0

SRK would note that due to the high distribution of fines in these test composites, reported gold extractions are most likely higher than what could be achieved in an actual heap leach operation. Subsequent column testing was conducted on test composites generated from drill core to better assess gold extractions that can be anticipated from transition ore. Reference KCA Report.

<u>Metallurgical Studies on Drill Core – KCA (2010)</u>

In order to further assess potential heap leach gold extraction from El Castillo transition ore, test composites were formulated from four drill core holes for additional column testing by KCA. The gold content of the four composites ranged from 0.260g/t Au to 0.889g/t Au. Of particular note is the relatively high sulfide to sulfate sulfur ratio for composites DCA-2 and DCA-4, indicating oxidation in the range of 17-26%. Whereas, composites DCA-1 and DCA-5 have a low sulfide to sulfate ratio, indicating oxidation in the range of 83 - 98%. Also of note is the relatively low carbon and copper content in these composites, which would indicate minimal problems with preg-robbing or high cyanide consumption due to copper solubilization.

14.2 Process Description

El Castillo currently processes oxide gold ore through a conventional heap leaching operation that includes processing of both RoM ore and crushing of higher grade ore, truck transport to multi-lift heap leach pads, irrigation with cyanide solution, and gold recovery through carbon-in-column (CIC) gold recovery circuits. Loaded carbon is transported offsite for further processing to a final dore. The process flowsheet is shown in Figures 14-1 and 14-2 and a list of major equipment and key operating parameters are provided in Table 14.2 and Table 14.2.1

The current cut-off grade is 0.15g/t Au. Ore with grades from 0.15g/t to 0.5g/t Au is classified as RoM ore and is delivered directly to the leach pads. Ore with grades greater than 0.5g/t Au is classified as higher grade ore and is crushed to -3/4in before it is delivered to the leach pad by truck. Lime is added to all ore before delivery to the pad in order to maintain protective alkalinity and a leach solution pH of 10.0.

Heap leaching is presently conducted on the West Side heap leach pads, which provides 440,000m^2 of pad area lined with 60 mil High Density Polyethylene. The final two West Side leach pads were constructed in 2010. Future heap leach operations will be conducted at the East Side heap leach pads, which are presently under construction. The East Side leach pads will be divided into three stages and five cells with a total lined area of 900,000 to 1,000,000m^2 and will have a total capacity of greater than 30Mt.

The West Side crushing plant consists of a 30in x 55in primary jaw crusher and a single K400 cone crusher that is operated in closed circuit with a triple-deck Combo screen to produce a -3/4in final crushed product. During the last quarter of 2010, the West Side crushing plant averaged 5,300t/d (162,700t/m). The East Side crushing plant, which is currently under construction, will consist of a 30in x 55in primary jaw crusher and two K400 cone crushers, each operated in closed-circuit with a triple-deck Combo screens to produce a -3/4in final product. The West Side heap leach pad has limited remaining capacity, and eventually both the West and East crushing plants will be operated to provide crushed ore to the East Side heap leach pad.

Crushed ore is stockpiled with radial stackers and then loaded into haul trucks for transport to the heap pads, where both RoM and crushed ore are leached together in 5m high lifts. After a new lift has been completed the drip irrigation system is installed and ore is put under leach at an initial solution application rate of 14 to 18L/h/m^2 for the first two weeks with a leach solution containing 400ppm sodium cyanide. After two weeks the application rate is dropped to 8 to 10L/h/m^2 for the remainder of the 60 day leach cycle.

Gold contained in the pregnant leach solution (PLS) from the West Side heap leach pads, is recovered from solution in a standard CIC circuit that consists of a train of five cascade-type carbon columns designed to handle a nominal PLS flowrate of 700m^3/hr. Each carbon column has capacity for 5t of carbon. The CIC circuit for the East Side heap leach operations will be similar to the West side CIC circuit and will also consist of a train of 5 carbon columns, each with a capacity for 5t of carbon, and have a nominal flow capacity of 700m^3/hr. El Castillo has elected not to strip their loaded carbon at site. Instead, the loaded carbon is sampled and sent to Mineral Research in Idaho for offsite stripping and gold refining.

Table 14.2: El Castillo Major Equipment

Area	Quantity	Size	HP	Comment
WEST SIDE				
Crushing Plant				
Jaw Crusher	1	30in x 55in	200	
Cone Crusher	1	K400	400	Closed Circuit
Triple-Deck Screen	1	8ft x 20ft		3/4in bottom deck
Carbon Plant				
Carbon Column	5	5t ea.		700m^3/hr
PLS Pump	1	6 x 813	70	
PLS Pump	2	4 x 613	40	
Barren Pump	1	6 x 813	75	
Barren Pump	2	4 x 613	50	
Booster Pump	1	6 x 817	200	
Booster Pump	2	4 x 617	125	
Solution Ponds				
PLS	1	3,359m^3		double lined
PLS	1	7,705m^3		double lined
Barren	1	12,850m^3		double lined
Storm Water	1	53,000m^3		double lined
Storm Water	1	58,000m^3		double lined
Power Generation				
Crushing Plant	1	800kW		
Carbon Plant	2	500kW		
Carbon Plant	1	200kW		
Carbon Plant	1	185kW		
EAST SIDE				
Crushing Plant				
Jaw Crusher	1	30in x 55in	200	
Cone Crusher	2	K400	400	Closed Circuit
Triple-Deck Screen	2	8ft x 20ft		3/4in bottom deck
Carbon Plant				
Carbon Column	5	5t ea.		700m^3/hr
PLS Pump	2			350m^3/hr
Barren Pump	2			350m^3/hr
Soluntion Ponds				
PLS	1	16,400m^3		double lined
Barren	1	15,776m^3		double lined
Storm Water	1	116,50 m^3		double lined
Power Generation				
Crushing Plant	1	1,000kW		
Carbon Plant	2	1,750kW		one as standby

Table 14.2.1: El Castillo Key Operating Parameters

Parameter Ore Grade	Units	Criteria	Comment
RoM Ore	Au g/t	0.15 to 0.5	
Crushed Ore	Au g/t	>0.5 g/t	
Ore Size			
RoM Ore	inch	20	top size
Crushed Ore	inch	P_{80} -3/4	
Leach Cycle	days	60	
Irrigation Rate	$L/hr/m^2$	14 to 18	first 2 weeks
Irrigation Rate	$L/hr/m^2$	8 to 10	final 6 weeks
Leach Solution			
pH		10	
NaCN	ppm	400	
Lime Consumption	kg/t	4.2	
Gold Loading	Au oz/t carbon	260	

14.3 Recoverability

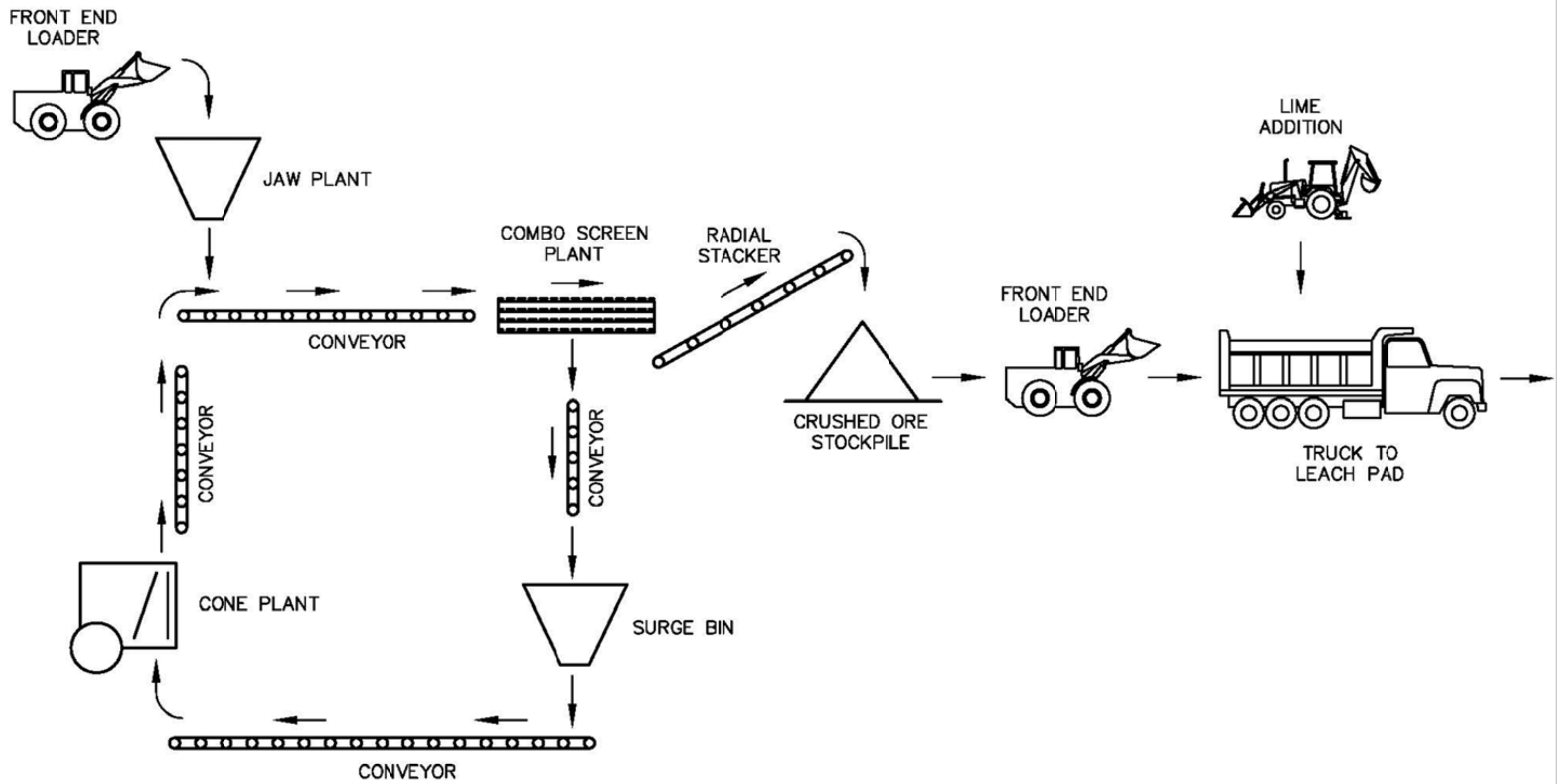
14.3.1 Oxide Ore

SRK has reviewed El Castillo's monthly production reports for the three year period from January 2008 through December 2010 during which time only oxide ore has been mined and processed. These production reports provide RoM and crushed ore tonnes and gold grade, as well as gold recovered to carbon. RoM and crushed ore tonnes mined, are based on truck counts and a monthly in pit survey reconciliation. Ore grade is based on blast hole drill pulps, and ore control techniques to flag and differentially mine RoM ore, higher grade ore and waste. Gold recovered on carbon is based on continuous sampling of both the PLS and barren solutions entering and leaving the carbon column train.

In order to assess cumulative gold recovery, SRK has summarized production during this period in Table 14.3.1. This table shows cumulative gold recovery since inception both with and without a two month lag. Without a two month lag cumulative gold recovery since inception has been about 53%. However, SRK believes that cumulative gold recovery based on a two month lag provides the best estimate of gold recovery as it takes into consideration ore tonnes that have been placed on the pad but have not yet been placed under leach. As such, SRK estimates total cumulative gold recovery at about 60%. It should be recognized, however, that this represents an average of the gold recovery obtained from both RoM ore and crushed ore. By assuming a 70% gold recovery from crushed ore (consistent with the results of column tests on crushed oxide ore), gold recovery from RoM ore is calculated at about 50%. This is in close agreement with the results of RoM heap leach tests that were conducted by Castle Gold in 2005 (Section 14.1.1).

Table 14.3.1: El Castillo Production Summary and Gold Recovery Assessment for the period 2008-2010

ROM Ore	Jan_08	Feb_08	Mar_08	Apr_08	May_08	Jun_08	Jul_08	Aug_08	Sep_08	Oct_08	Nov_08	Dec_08	Jan_09	Feb_09	Mar_09	Apr_09	May_09	Jun_09	Jul_09	Aug_09	Sep_09	Oct_09	Nov_09	Dec_09	Jan_10	Feb_10	Mar_10	Apr_10	May_10	Jun_10	Jul_10	Aug_10	Sep_10	Oct_10	Nov_10	Dec_10
Tonnes	95,131	116,934	139,586	119,995	115,228	81,459	117,889	93,520	132,469	131,824	134,350	137,408	151,238	153,091	148,554	194,683	176,893	201,651	249,626	252,180	281,115	262,050	288,346	382,402	353,557	284,031	361,533	485,494	592,161	485,252	489,661	516,468	669,375	686,129	644,660	614,463
Au, g/t	0.30	0.33	0.35	0.33	0.36	0.34	0.31	0.31	0.36	0.32	0.30	0.28	0.32	0.39	0.31	0.32	0.31	0.29	0.29	0.28	0.28	0.25	0.26	0.25	0.25	0.24	0.23	0.24	0.30	0.30	0.34	0.29	0.28	0.31	0.28	0.31
Au, grams	28,539	38,588	48,436	39,838	41,367	27,615	36,428	28,898	47,689	41,788	39,902	38,749	47,640	59,859	46,349	61,715	55,544	59,084	71,643	70,106	77,307	64,202	74,682	94,453	89,096	68,736	81,345	114,091	174,687	145,090	164,526	147,193	187,425	213,386	182,439	189,869
Cum. Tonnes	95,131	212,065	351,651	471,646	586,874	668,333	786,222	879,742	1,012,211	1,144,034	1,278,384	1,415,792	1,567,030	1,720,121	1,868,675	2,063,358	2,240,251	2,441,902	2,691,528	2,943,708	3,224,823	3,486,873	3,775,219	4,157,621	4,511,178	4,795,209	5,156,742	5,642,236	6,234,397	6,719,649	7,209,310	7,725,778	8,395,153	9,081,282	9,725,942	10,340,405
Cum. Au g/t	0.30	0.32	0.33	0.33	0.34	0.34	0.33	0.33	0.33	0.33	0.33	0.32	0.32	0.33	0.33	0.33	0.33	0.32	0.32	0.32	0.31	0.31	0.30	0.30	0.29	0.29	0.29	0.28	0.28	0.28	0.29	0.29	0.29	0.29	0.29	0.29
Cum. Au grams	28,539	67,127	115,564	155,402	196,769	224,384	260,811	289,709	337,398	379,186	419,088	457,837	505,477	565,335	611,684	673,399	728,943	788,027	859,670	929,776	1,007,082	1,071,285	1,145,966	1,240,419	1,329,516	1,398,251	1,479,596	1,593,687	1,768,375	1,913,465	2,077,991	2,225,185	2,412,610	2,625,996	2,808,435	2,998,304
Crushed Ore																																				
Tonnes	34,452	40,240	32,560	48,728	44,317	60,314	42,351	58,731	41,588	46,228	66,102	56,711	72,782	64,082	61,680	54,017	69,160	78,733	81,536	90,308	96,496	110,820	90,800	91,983	93,475	112,767	108,163	76,122	78,633	116,124	116,231	140,906	112,138	131,767	212,319	143,919
Au, g/t	0.70	0.78	0.72	0.99	0.87	0.84	0.99	0.82	0.97	1.01	0.94	1.31	1.00	1.19	1.15	1.12	0.83	0.90	0.83	0.81	0.83	0.82	0.89	0.71	0.82	0.89	0.88	0.61	0.53	0.89	0.65	0.68	0.74	0.58	0.74	0.78
Au, grams	24,013	31,387	23,443	48,095	38,556	50,724	41,758	47,866	40,340	46,690	62,070	74,405	72,927	76,001	70,685	60,337	57,679	70,860	67,919	72,698	80,092	91,316	80,539	65,308	76,837	99,911	95,075	46,739	41,597	103,350	75,434	95,393	82,758	76,952	156,692	112,832
Cum. Tonnes	34,452	74,692	107,252	155,980	200,297	260,611	302,963	361,694	403,282	449,510	515,612	572,323	645,105	709,187	770,867	824,884	894,044	972,777	1,054,313	1,144,621	1,241,118	1,351,938	1,442,737	1,534,720	1,628,195	1,740,962	1,849,125	1,925,247	2,003,879	2,120,003	2,236,234	2,377,140	2,489,278	2,621,045	2,833,364	2,977,283
Cum. Au g/t	0.70	0.74	0.74	0.81	0.83	0.83	0.85	0.85	0.86	0.87	0.88	0.92	0.93	0.96	0.97	0.98	0.97	0.96	0.95	0.94	0.93	0.92	0.92	0.91	0.90	0.90	0.90	0.89	0.88	0.88	0.87	0.85	0.85	0.84	0.83	0.83
Cum. Au grams	24,013	55,400	78,843	126,938	165,494	216,218	257,977	305,843	346,183	392,873	454,943	529,348	602,275	678,277	748,962	809,299	866,978	937,838	1,005,758	1,078,456	1,158,548	1,249,863	1,330,403	1,395,711	1,472,547	1,572,459	1,667,533	1,714,272	1,755,869	1,859,219	1,934,653	2,030,046	2,112,804	2,189,756	2,346,448	2,459,280
Gold to Carbon																																				
Grams	14,382	13,039	15,237	30,564	29,034	34,884	34,799	35,572	67,394	61,124	50,872	63,262	67,253	61,811	56,553	82,317	65,016	52,396	86,513	81,407	70,166	81,948	100,055	89,356	107,361	96,850	114,324	99,140	115,429	98,515	153,151	100,965	141,643	174,408	184,892	193,647
Cum. Grams	14,382	27,421	42,657	73,221	102,255	137,139	171,937	207,509	274,903	336,027	386,899	450,162	517,415	579,226	635,779	718,096	783,112	835,508	922,021	1,003,429	1,073,594	1,155,542	1,255,597	1,344,953	1,452,314	1,549,164	1,663,488	1,762,628	1,878,057	1,976,572	2,129,723	2,230,688	2,372,331	2,546,739	2,731,631	2,925,278
Cum. Percent Au Recovered	27.4	22.4	21.9	25.9	28.2	31.1	33.1	34.8	40.2	43.5	44.3	45.6	46.7	46.6	46.7	48.4	49.1	48.4	49.4	50.0	49.6	49.8	50.7	51.0	51.8	52.1	52.9	53.3	53.3	52.4	53.1	52.4	52.4	52.9	53.0	53.6
Cum. Au Recovery (Lagged 2 mo)				59.8	52.6	48.6	47.5	47.1	53.0	56.4	56.6	58.3	59.2	58.7	57.4	57.7	57.6	56.4	57.8	58.1	57.6	57.5	58.0	57.9	58.6	58.8	59.4	59.3	59.7	59.8	60.4	59.1	59.1	59.8	60.4	60.7
Assumed Crushed Ore Recovery				70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0	70.0
Calc. ROM Ore Recovery				51.3	40.7	31.1	28.5	25.0	36.2	42.1	42.8	46.2	47.5	45.6	42.4	43.0	42.3	39.9	43.2	44.0	43.0	43.1	44.1	43.9	45.5	46.1	47.6	47.3	48.0	48.7	50.9	48.6	49.0	50.6	51.9	53.0



SRK Consulting
Engineers and Scientists

SRK Project No.: 203900.01

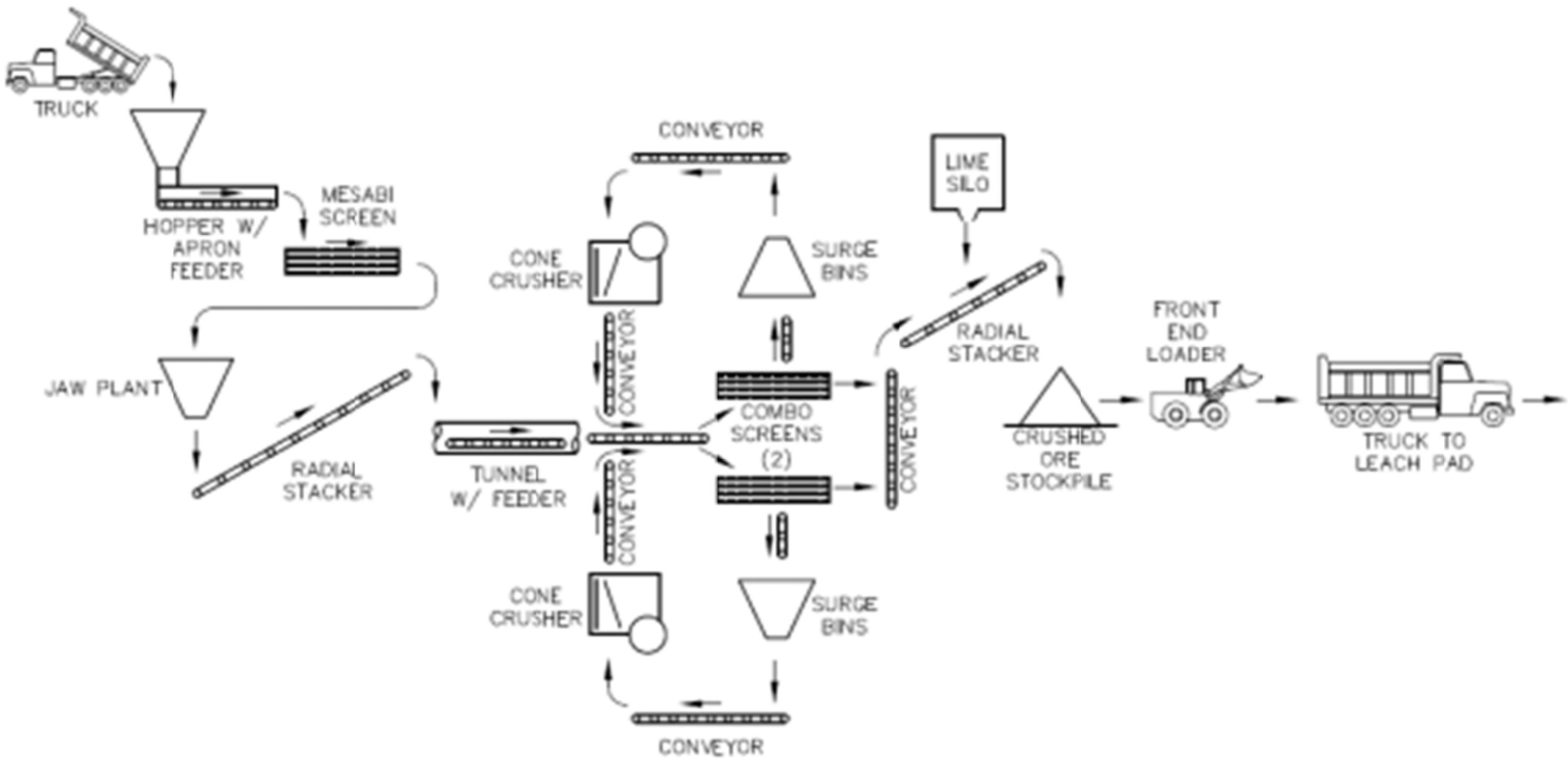
File Name: Figure_14-1

El Castillo Mine, Durango State, Mexico

Source: SRK Consulting

West Side Crushing Plant Flow Chart

Date: 2-21-11 | Approved: BS | **Figure: 14-1**



SRK Consulting Engineers and Scientists	El Castillo Mine, Durango State, Mexico	East Side Crushing Plant Flow Chart		
SRK Project No.: 203900.01	Source: SRK Consulting			
File Name: Figure_14-2		Date: 2-21-11	Approved: BS	Figure: 14-2

15 Mineral Resources and Mineral Reserve Estimates (Item 19)

15.1 Resource Estimation

15.1.1 Qualified Person for the Mineral Resource Estimate

Dr. Bart Stryhas constructed the geologic and resource model discussed below. He is responsible for the resource estimation methodology and the resource statement. Dr. Stryhas is independent of the issuer applying all of the tests in Section 1.4 of NI 43-101.

15.1.2 Drillhole Database

The drillhole database was compiled by Argonaut and is determined to be of good quality. The database consists of four, Microsoft Excel® spreadsheets containing collar locations surveyed in UTM NAD27 coordinates, drillhole orientations with down hole deviation surveys, assay intervals with gold analyses and geologic intervals with rock types. The appropriate codes for missing samples and no recovery were used during the modeling procedures.

The drillhole database contains information from 512 holes totaling of 83,817m. All of the drilling supporting the resource estimation is reverse circulation type. The drillholes are generally oriented along sections at azimuth 220° and plunge at -60°. The drillholes have an averge spacing of 55m. The maximum drillhole depth is 390m and the average is 164m. None of the drillholes have down hole deviations surveys.

15.1.3 Geology

The resource estimation is based on a generalized geologic model consisting of six rock types, four of which are mineralized and two that are post mineralization. The primary host rocks consist of granodiorite-diorite and meta-sediments including meta-argilite, hornfels and limestone-marbles. The mineralized lithologies are overlain by barren volcaniclastics which are overlain by unconsolidated gravels. The intrusive granodiorite-diorite form sills emplaced along the metamorphic fabric of the metasedimants. Overall, the mineralized country rock is about 50/50 intrusive/metasediments. These lithologic contacts have a general strike at azimuth 315° dipping -50°NE. Due to the extremely complex geometry of the intrusive contacts, a classic approach of wireframe modeling of each lithology was not used. Lithology was assigned in the resource block model using a categorical indicator method. This technique estimates all lithologies into all model blocks and then assigns the final block lithology based on the estimated lithic type with the highest probability. The procedure first creates four variables in the composite database, one for each of the mineralized lithic types. Next, the lithology of each sample interval is flagged into the four variables with a one if it matches and a zero if it does not. The four composite variables are then estimated into four unique block model variables using the general strike and dip. Each block model variable is estimated to between zero and one, correlating to the probability of that lithologies occurrence. For example if a blocks lithic variable is estimated to be 0.3, it represents a 30% probability, if the blocks lithic variable it is estimated to be 1.0, it is 100% probability. Once the estimation is completed, each block is queried to determine which of the four variables has the highest probability and that lithology is then assigned to the block. The model results are then verified visually to be sure the estimation is producing the desired results. Any un-estimated blocks, located deep in the block model or distant from a drillhole were then assigned a lithic type of dacite. Figure 15-1 illustrates a typical cross-section showing the drillhole versus block model lithologies.

The resource area is also described by three levels of oxidation including, fully oxidized, transitional oxide/sulfide and predominantly sulfide materials. The Argonaut staff have re-logged all of the historic drilling to bring it into conformity with the more recent drilling and compiled all the descriptions of oxidation into the drillhole database. Two wire frame surfaces were constructed, an upper surface marks the base of oxide material and a lower surface marks the base of the transitional material. Figure 15-2 illustrates a typical cross-section showing the three, oxidation zones.

15.1.4 Block Model

A block model was constructed within the UTM NAD27 grid coordinate limits listed in Table 15.1.4.1. A 10m x 10m x 6m (x, y, z) block size was chosen as an appropriate dimension based on the current drillhole spacing and the open pit smallest mining unit. A topographic surface generated from 1m contours was provided by Argonaut and was used to flag the top of original topography in the block model. In addition, a pit area asbuilt topographic surface was also provided which was used to flag the top of asbuilt topography in the block model.

Table 15.1.4.1: Block Model Limits

Orientation	Minimum (m)	Maximum (m)	Block Dimension (m)
Easting	546,980	548,660	10
Northing	2,750,010	2,751,530	10
Elevation	1,440	1,812	6

15.1.5 Compositing

The raw assay gold data was first plotted on histogram and cumulative distribution graphs to understand its basic statistical distribution. The histogram shows a strongly negative skewed distribution, typical for most gold deposits. The cumulative distribution curve illustrates a continuous population set with a distinct break in slope and continuity at 7.2ppm. The raw assay data was capped at 7.2ppm which resulted in 22 assays ranging from 7.3ppm to 26.6 being reduced to 7.2ppm prior to compositing. The original assay sample lengths range from 0.5m to 1.53m with an average of 1.51m. For the modeling, these were composited into 6m bench lengths. This length was chosen mainly so that one composite would comprise each 6m block height. The cumulative distribution plot of the composited data showed no outlier points.

15.1.6 Density

The density database supporting the current resource estimation is a compilation of historical data used by Howe, standard rock densities and direct density measurements taken by Argonaut. The project lacks a good density database for two reasons. Prior to the current resource estimate, the mineralized lithology were all lumped together and were assigned density based only on oxidation state. Hence no specific rock types were identified for density measurements. Additionally, since the vast majority of the drilling was completed by RC methods, direct density measurements have been difficult to obtain. Argonaut now intends to augment its density database in order to quantify the density of each rock type in the current model within each of the oxidation zones of the current model. Density values used in the current resource estimation are presented in Table 15.1.6.1.below. These are assigned in the block model based on each block's majority lithic type regardless of oxidation state.

Table 15.1.6.1: Density Values by Rock Type

Rock Types	Density
Alluvium	2.46
Volcanics	2.52
Hornfels	2.60
Meta-Argilite	2.50
Limestone-Marble	2.55
Intrusive	2.52

15.1.7 Variogram Analysis and Modeling

The resource model utilizes a categorical indicator technique to define the grade shell within which to confine the resource estimation. For this reason, variogram analysis was performed on both the categorical indicators and the composited Au data filtered to include only the sample located within the grade shell. Two semi-variograms of the indicator variable were constructed, one for the meta-sediments and another for the dacite. Both variograms were constructed within all directions along the predominate plane of mineralization at azimuth 315° dipping -50°NE. Two semi-variograms of the composited gold values located within the indicator grade shell were also constructed. One characterized the meta-sediments and another for the dacite. Both variograms were constructed within all directions along the predominate plane of mineralization at azimuth 315° dipping -50°NE. The results of the variograms are presented in Table 15.1.7.1

Table 15.1.7.1: Semivariogram Model Results

Data	Range (m)	Nugget	C1 Sill Differential
Dacite Indicators	75	0.100	0.092
Meta-sediments Indicators	125	0.074	0.084
Intrusive Au Composites	50	0.081	0.030
Meta-sediments Au Composites	50	0.143	0.119

15.1.8 Grade Estimation

The El Castillo Deposit was modeled only for Au. All block grade estimates were made using the 6.0m bench composites.

Due to the intermittent nature of the mineralization, it was necessary to create hard boundaries within which to confine the grade estimation. This was achieved by using a categorical indicator approach. This method first separates the composite data into lower grade and higher-grade groups based on an appropriate cut-off value which is below the anticipated mining cut-off. In this case, a 0.125ppm Au cut-off was used. The composite values below 0.125ppm Au are flagged with a 0 and those above are flagged with a 1. The composite indicators values (0 or 1) are then interpolated into the block model thus creating indicator block values between 0 and 1. The indicator values were interpolated using an Ordinary Kriging algorithm since valid variograms could be generated from the data. The indicator estimation procedure utilized a two-pass strategy within each of the four mineralized rock types. The first searched within a 10m x 10m x 6m box allowing only one composite to assign an indicator value to that block. This pass was designed to assign the indicator value to any block that hosted a 6m bench composite. The second pass searched within a 75m x 75m x 10m ellipsoid allowing a minimum of one and maximum of three composites to assign an indicator value to that block. The ellipsoid was oriented parallel to the predominate plane of mineralization at azimuth 315° dipping -50°NE.

The estimation of the indicator values effectively assigns a probability to each block as to whether it would be above the 0.125ppm Au cut-off. Blocks assigned with a value of 0.1 have a 10% probability, a 0.5 have 50% probability and those with a 1.0 have a 100% probability.

The next step was to run Au grade interpolations using an Ordinary Kriging algorithm since valid variograms could be generated from the data. Numerous grade estimations were carried out within the mined out portions of the pit in order to determine which probability threshold and sample selection criteria produced the best reconciliation to the production blastholes. In each run, the composites are flagged with the interpolated block indicator values so that only composites within the estimated blocks are selected during the grade interpolation. The final grade estimation considered all blocks with a categorical indicator value of 0.50 and above to be within the 0.125ppm Au grade shell. The grade estimation procedure utilized a three-pass strategy within each of the four mineralized rock types. The first searched within a 10m x 10m x 6m box allowing only one composite to assign grade to that block. This pass was designed to assign grades to all block that hosted a 6m bench composite the same way a blasthole would be used during mining. The second pass searched within a 75m x 75m x 25m ellipsoid allowing a minimum of three and maximum of eight composites to assign grade to that block. An octant restriction was used allowing a maximum of two samples from any single octant. In this pass the argillite was subdivide into oxidized, transition and sulfide and each material type was estimated independently due to grade variations between each material type. The third pass also searched within a 75m x 75m x 25m ellipsoid but allowing a minimum of two and maximum of 8 composites to assign grade to that block. No octant restriction was used and the argillite was subdivide as in the second pass. The search ellipsoid in the later two estimation passes was oriented parallel to the predominate plane of mineralization at azimuth 315° dipping -50°NE. The search ranges are based on the results of the variography, the production reconciliation tests and on the author’s evaluation of what is appropriate for the deposit.

In addition to the estimation within the indicator grade shell, four wireframe grade shells were also defined in the pit area based on the blasthole analysis and pit mapping of higher grade zones. In this case, 0.5ppm grade shells were constructed. Each of the wireframe grade shell were estimated using only the composite data within them regardless of the rock type or oxidation state. A single pass estimation was used which searched along the planer orientations detailed in Table 15.1.8.1. The estimation required a minimum of three and maximum of eight composites, no octant restrictions were used.

In all of the estimation runs described above, composite length weighting was used. The number of composites, number of drillholes and average distance to the composites was stored for each block. Analysis of this data shows the following. An average of six composites were used for all blocks and 86% of the blocks were estimated by four or more samples. An average of three drillholes were used for all blocks and 68% of the blocks were estimated by two or more drillholes. The average distance to the composites used is 34m and 66% of the blocks have an average distance of 50m or less.

A representative cross section of the interpolated block model grades is shown in the Figure 15-3.

Table 15.1.8.1: Search Orientations of Wireframe Grade Shells

Shell Number	Strike Azimuth	Dip and Direction
1	90°	-65°N
2	53°	-60°NW
3	73°	-80°NW
4	66°	-70°NW

15.1.9 Model Validation

Five techniques were used to evaluate the validity of the block model. First, the interpolated block grades were visually checked on sections and bench plans for comparison to the composite assay grades. Second, mean grade comparisons were made between the Kriged block grades and the production blastholes for only those blocks which are located within the pit. These results are presented in Table 15.1.9.1 below and show slightly lower block grades in the Kriged estimation than in the production blastholes. Third, a nearest neighbor estimation was run using a single composite to estimate each block within the same parameters used for the final inverse distance cubed model. The total contained gold ounces, at a zero cut-off grade in the nearest neighbor model were compared to the Kriged estimation at the same cut-off. The final model contained 7.4% less metal than the nearest neighbor estimation, indicating that metal is not manufactured during the modeling process. Fourth, statistical analyses were made comparing the estimated block grades from the Kriged estimation to a nearest neighbor estimation and the composite drillhole data. Table 15.1.9.2 below shows block grades by lithology which are slightly less or nearly equal to the composite grades as desired. Fifth, swath plots were generated to compare model blocks and composite grades at regular 50m swath intervals through the deposit. The results are presented in Figure 15-4. The swaths show an acceptable amount of grade smoothing with the majority of the block grades very close to or below the composite grades. All five model validation tests described above, provided good confidence in the resource estimation.

Table 15.1.9.1: Model Validation Pit Reconciliation

Estimation	Au Grade (ppm)
Blast Hole Nearest Neighbor	0.343
Block Model Kriged	0.332

Table 15.1.9.2: Model Validation Statistical Results

Rock Type	Data Group	Mean
Intrusive	6m Composites	0.266
	NN Blocks	0.260
	Kriged Blocks	0.262
Hornfels	6m Composites	0.335
	NN Blocks	0.330
	Kriged Blocks	0.328
Meta-sediment Argillite Oxide	6m Composites	0.420
	NN Blocks	0.426
	Kriged Blocks	0.421
Meta-sediment Argillite Transitional	6m Composites	0.308
	NN Blocks	0.304
	Kriged Blocks	0.308
Meta-sediment Argillite Sulfide	6m Composites	0.223
	NN Blocks	0.223
	Kriged Blocks	0.208
Limestone-marble	6m Composites	0.255
	NN Blocks	0.474
	Kriged Blocks	0.248

15.1.10 Resource Classification

Mineral Resources are classified under the categories of Measured, Indicated and Inferred according to CIM guidelines. Classification of the resources reflects the relative confidence of the grade estimates and the continuity of the mineralization. This classification is based on several factors including; sample spacing relative to geological and geo-statistical observations regarding the continuity of mineralization, data verification to original sources, specific gravity determinations, accuracy of drill collar locations, accuracy of topographic surface, quality of the assay data and many other factors, which influence the confidence of the mineral estimation. No single factor controls the resource classification rather each factor influences the result. Generally, most of the factors influencing the resource classification at El Castillo are positive. The lack of direct density measurements has a negative impact on the resource classification. The history of mining and resource reconciliation adds a high level of confidence to the grade estimation and continuity of the mineralization.

The resources at El Castillo are classified as Measured and Indicated based primarily on sample spacing as indicated by drilling density. Measured Resources were classified by constructing a wireframe shape around the core of the deposit where most drillholes are spaced 50m or less apart. The wireframe was limited at depth to the base of where the drillholes remained closely spaced. All blocks located outside or below the Measured Resource wireframe, about the periphery of the deposit, are classified as Indicated Resource. The Measured and Indicated Resource blocks are shown below in Figure 15-5.

15.1.11 Mineral Resource Statement

The El Castillo Mineral Resource statement is presented below in Table 15.1.11.1 as inclusive of Mineral Reserves. A 0.15ppm Au cut-off grade was chosen for resource reporting based on the current mine plans described in Section 15.2. The 0.15ppm Au cut-off is slightly below the optimized, in pit cut-off grade of 0.2ppm Au. The results reported in the resource statement have been rounded to reflect the approximation of grade and quantity, which can be achieved at this level of resource estimation. The resources are included within a pit design based on a US$1,300 gold price and the same design parameters as the reserve pit described below in Section 15.2.

Table 15.1.11.1: Mineral Resource Statement

Cut-off Grade Au (ppm)	Material Type	Resource Category	Average Au Grade (ppm)	Tonnes (M)	Ounces (k)
0.15	Oxide (in pit)	Measured	0.293	114.3	1,220.1
		Indicated	0.293	4.9	45.7
		M & I	0.331	119.2	1,268.0
0.15	Transition (in pit)	Measured	0.295	44.6	423.2
		Indicated	0.278	1.9	17.1
		M & I	0.294	46.5	439.9
0.15	Oxide & Transition (in pit)	Measured	0.322	158.9	1,645.3
		Indicated	0.289	6.8	62.9
		M & I	0.320	165.7	1,704.7
0.15	Sulfide (global)	Measured	0.328	70.6	744.8
		Indicated	0.272	91.2	797.5
		M & I	0.296	161.8	1,540.0

15.1.12 Mineral Resource Sensitivity

The grade versus tonnage distributions of the Measured Resource, oxide and transition material types inclusive of Mineral Reserves are presented in Tables 15.1.12.1 and 15.1.12.2, and Figures 15-6 and 15-7.

Table 15.1.12.1: Measured Oxide In Pit Mineral Resource Sensitivity

Au ppm Cut-off	Total (Mt)	Au Grade (ppm)	Contained Au (Moz)
0.10	119	0.325	1.24
0.15	114	0.332	1.22
0.20	87	0.381	1.06
0.25	61	0.450	0.88
0.30	43	0.520	0.72
0.35	32	0.587	0.61

Table 15.1.12.2: Measured Transition In Pit Mineral Resource Sensitivity

Au ppm Cut-off	Total (Mt)	Au Grade (ppm)	Contained Au (Moz)
0.10	46	0.291	0.43
0.15	45	0.295	0.42
0.20	32	0.341	0.35
0.25	20	0.413	0.26
0.30	13	0.485	0.20
0.35	10	0.539	0.17

15.1.13 Material Affects on Mineral Resources

The mineral resources described in Section 15.1 above, constitute contained metal in the ground. There are no known material issues related to environmental, permitting, legal, title, taxation, socio-economic, marketing, political or other relevant issues which may affect the mineral resources. Additionally, there are no known material issues related to mining, metallurgy, infrastructure and other relevant issues which may affect the mineral resources.

15.2 Reserve Estimation

LoM plans and resulting reserves are determined based on a gold price of US$1,000/oz for the El Castillo open pit project. Reserves stated in this report are as of November 8, 2010 that correspond to the September, 2010 end-of-month topographical survey of the pit.

The ore material is converted from resource to reserve based primarily on positive cash flow pit optimization results, pit design and geological classification of measured and indicated resources. The in-situ value is derived from the estimated grade and various modifying factors. The previous section discusses the procedures used to estimate gold trade.

15.2.1 Conversion of Mineral Resources to Mineral Reserves

Modifying Factors

Ore reserves are based on the economic balance between the value per tonne of rock and the cost to mine and process each tonne of rock. The value is based on estimated metal concentration, estimated metal value and leach recovery. The costs include development, mining, processing, and operating overhead.

To define the value per tonne of rock, the estimated concentration of gold is factored by and estimated long-term value. The long-term gold price used by El Castillo in the CoG calculation is US$1,000/oz. In the opinion of SRK, this gold value is reasonable and appropriate for ore reserve estimation.

The second factor is the process recovery, which is based on heap leach head grade, recovered metal and tail grade. The reserve uses a heap leach recovery value of 70% for oxide ore that is crushed, 50% for oxide that is run-of-mine and 60% for transition ore that is crushed.

In addition to cut-off calculations and pit optimization, open pit modifying factors include:

Slope angle. Directly affects stripping ratio and thus what can be considered a minable resource.

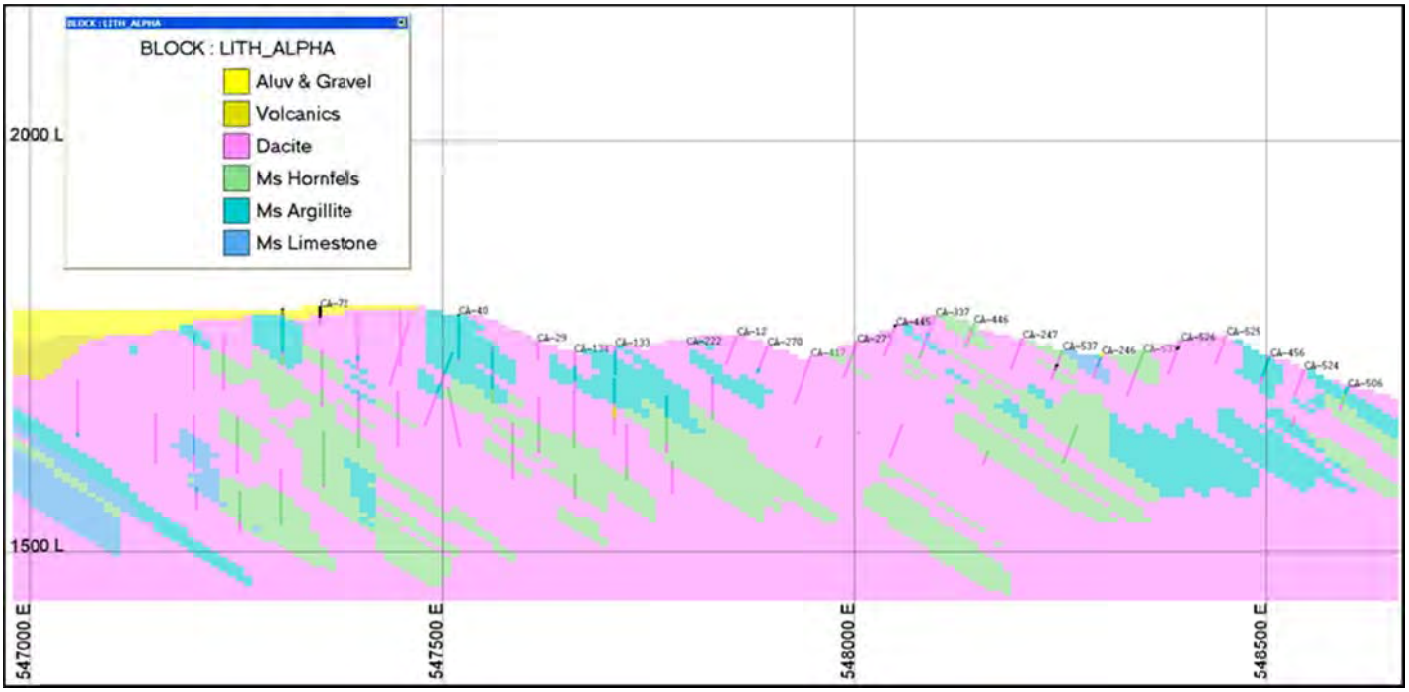
Pit design. The conversion from a theoretical pit optimization to actual pit design acts as dilution and in most cases increases overburden production.

Indicated and Inferred Classification. Inferred material is excluded from optimization calculation, thus the classification determined by the geologist directly affects the minable reserve. Table 15.2.1.1 illustrates the El Castillo reserve statement valid for November 8, 2010.

Table 15.2.1.1: Summary of Proven and Probable El Castillo Reserves (As of November 8, 2010)

Classification	Rock Type	Gold Grade (g/t)	Ore Tonnes (000's)	Gold ounces (000's)
Proven				
	Oxide	0.36	84,470	994
	Transition	0.37	19,180	228
	Sub Total	0.36	104,650	1,222
Probable				
	Oxide	0.33	772	8
	Transition	0.35	73	1
	Sub Total	0.33	844	9
Proven and Probable		**0.36**	**105,494**	**1,231**

Reserves are based on a gold price of US$1,000/oz Au;
Full mining recovery is assumed;
Mine reserves are not diluted;
An internal CoG of 0.15g/t Au was used on Oxide rock within the pit design;
An internal CoG of 0.175g/t Au was used on Transition rock within the pit design;
In-situ Au ounces do not include metallurgical recovery losses;
Internal CoG determination includes metallurgical gold recoveries of 70% for oxide if ore is crushed, 50% if not;
Internal CoG determination includes metallurgical gold recoveries of 60% for Transition if ore is crushed, 0% if not;
Oxide and Transition rock types are interpreted from drill logs to estimate changes in weathering profile of the orebody; and
In Situ reserves based on end of month survey dated November 8th, 2010.



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SRK Project No.: 203900.01

File Name: Figure_15-1

El Castillo Mine,
Durango State, Mexico

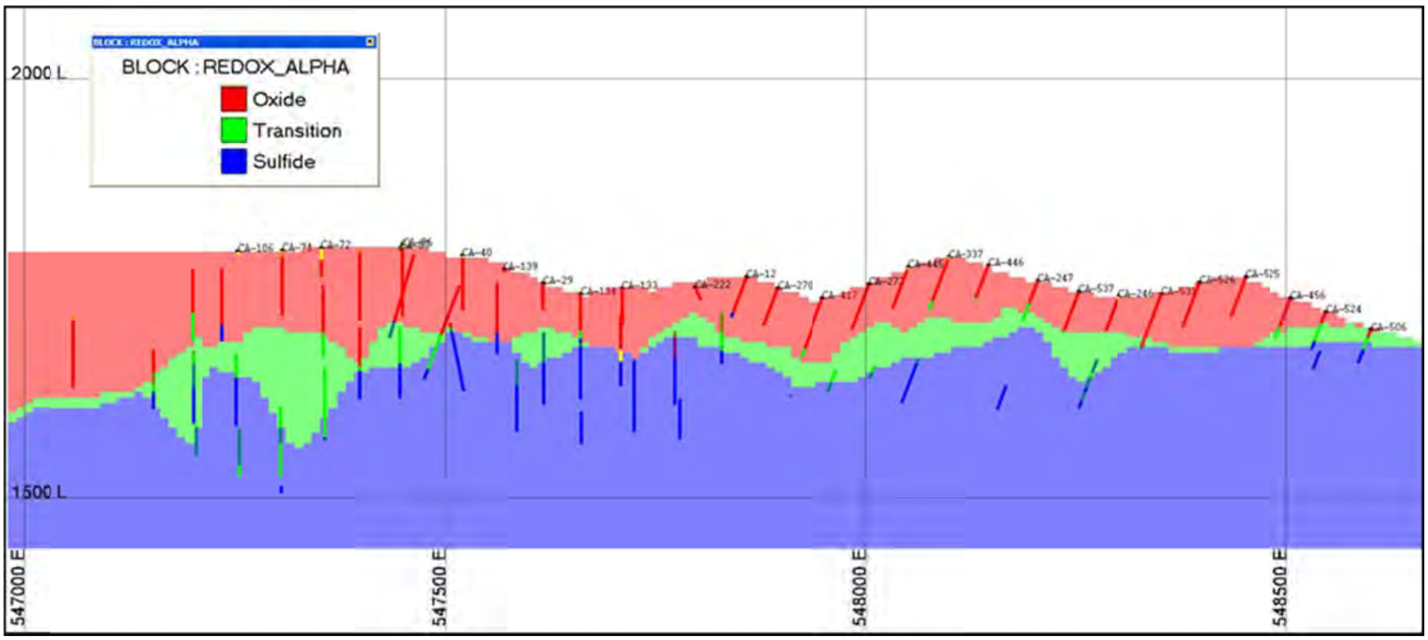
Source: SRK Consulting

Cross-Section 2,750,900N Showing Drillhole and Block Model Lithologies

Date: 1-25-11

Approved: BS

Figure: 15-1



SRK Consulting
Engineers and Scientists

SRK Project No.: 203900.01

File Name: Figure_15-2

El Castillo Mine,
Durango State, Mexico

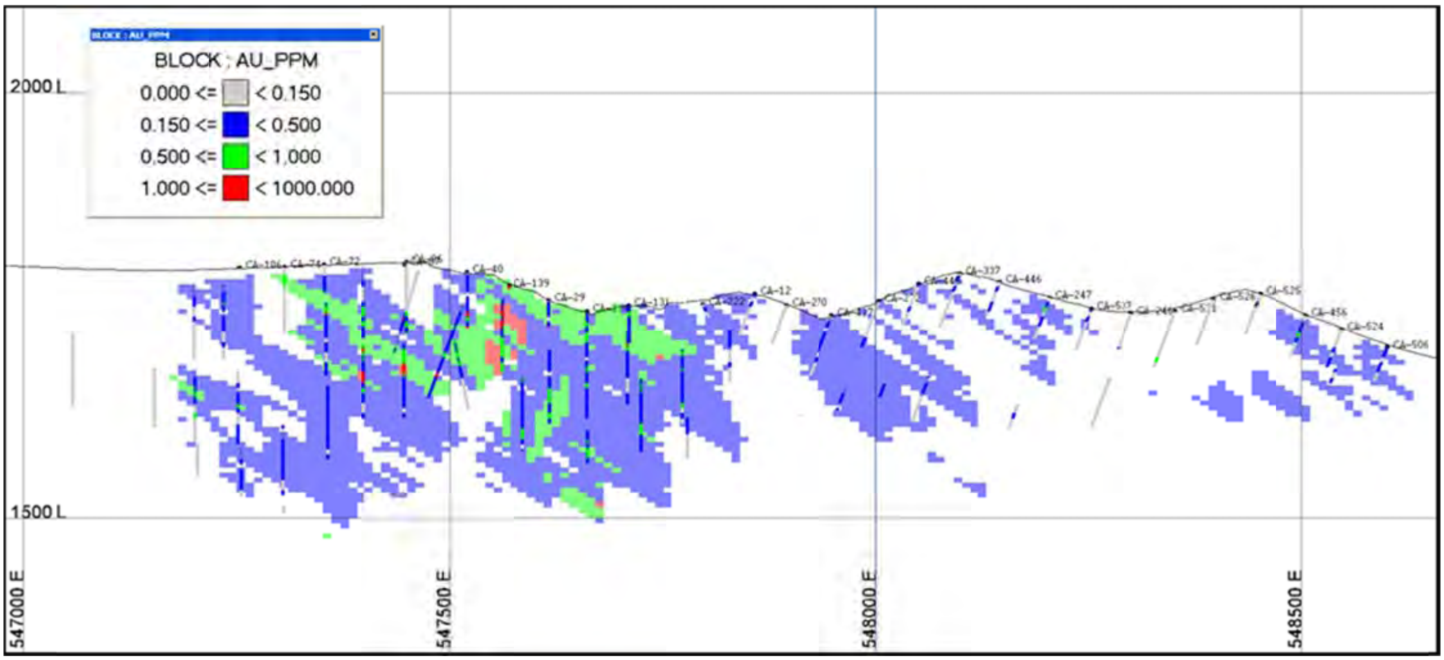
Source: SRK Consulting

Cross-Section 2,750,900N Showing Drillhole and Block Model Oxidation Zones

Date: 1-25-11

Approved: BS

Figure: 15-2



SRK Consulting
Engineers and Scientists

SRK Project No.: 203900.01

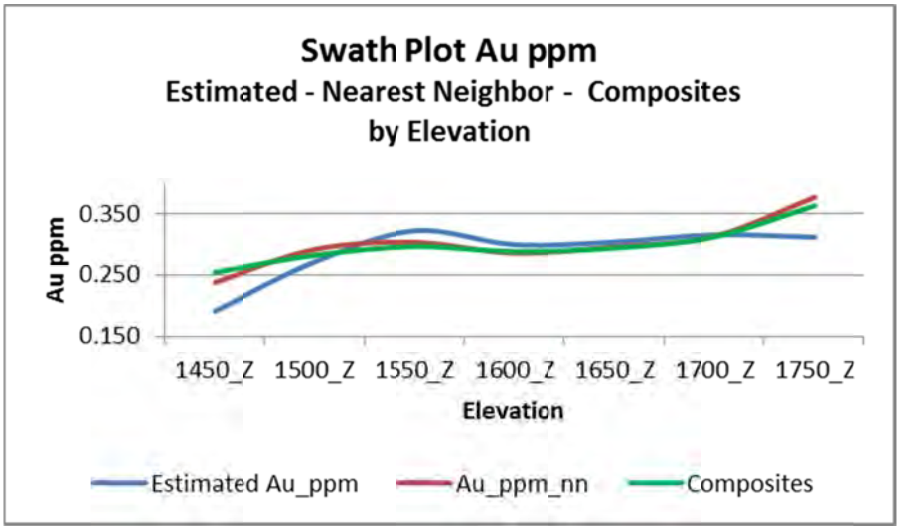
File Name: Figure_15-3

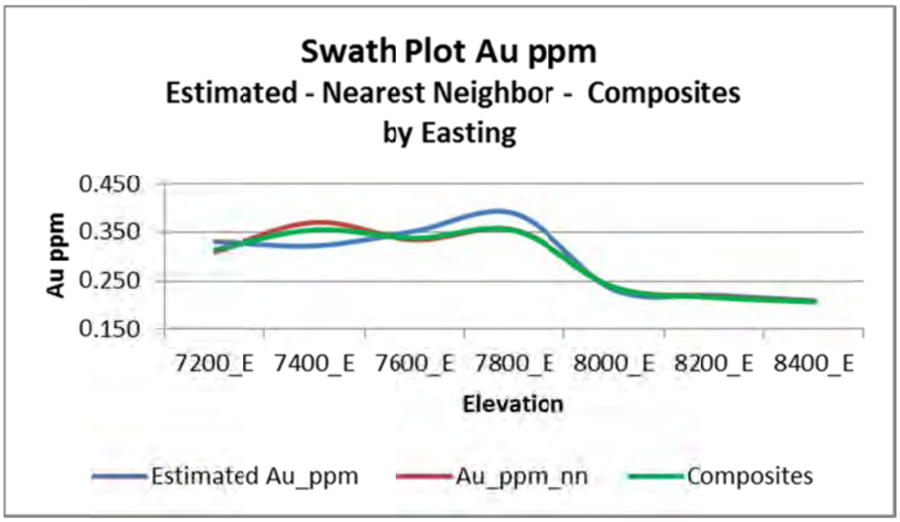
El Castillo Mine,
Durango State, Mexico

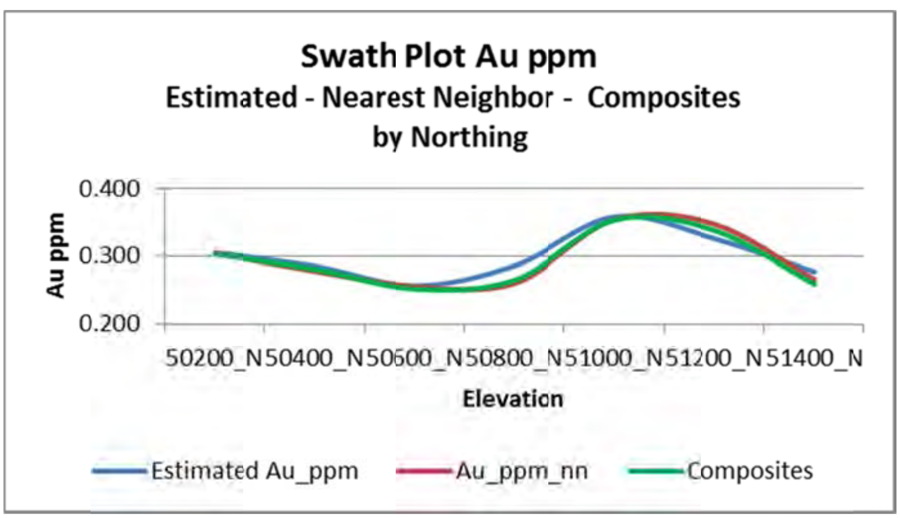
Source: SRK Consulting

Cross-Section 2,750,900N Showing Composite and Block Model Au Grades

Date: 1-25-11 | Approved: BS | **Figure: 15-3**







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SRK Project No.: 203900.01

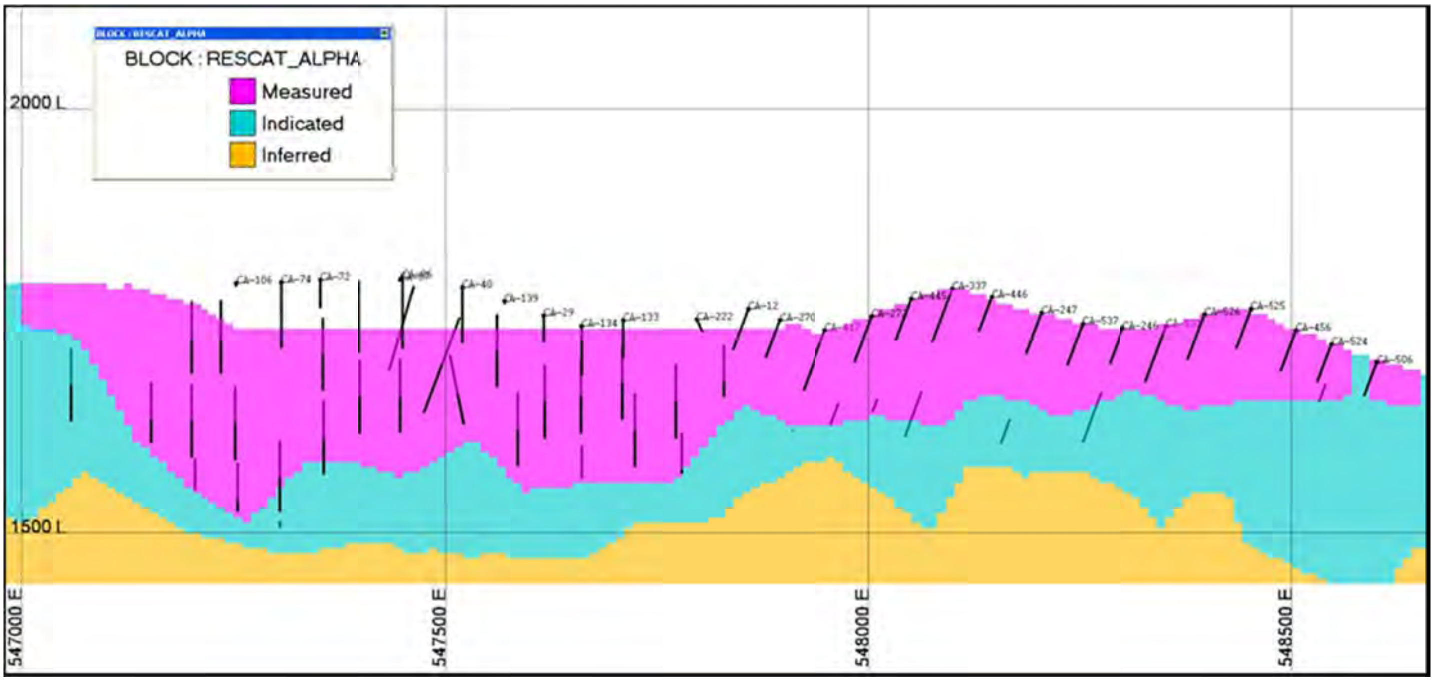
File Name: Figure_15-4

El Castillo Mine,
Durango State, Mexico

Source: SRK Consulting

Swath Plots of Kriged Blocks, Nearest Neighbor Blocks and 6m Composites

Date: 1-25-11 | Approved: BS | **Figure: 15-4**



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SRK Project No.: 203900.01

File Name: Figure_15-5

El Castillo Mine,
Durango State, Mexico

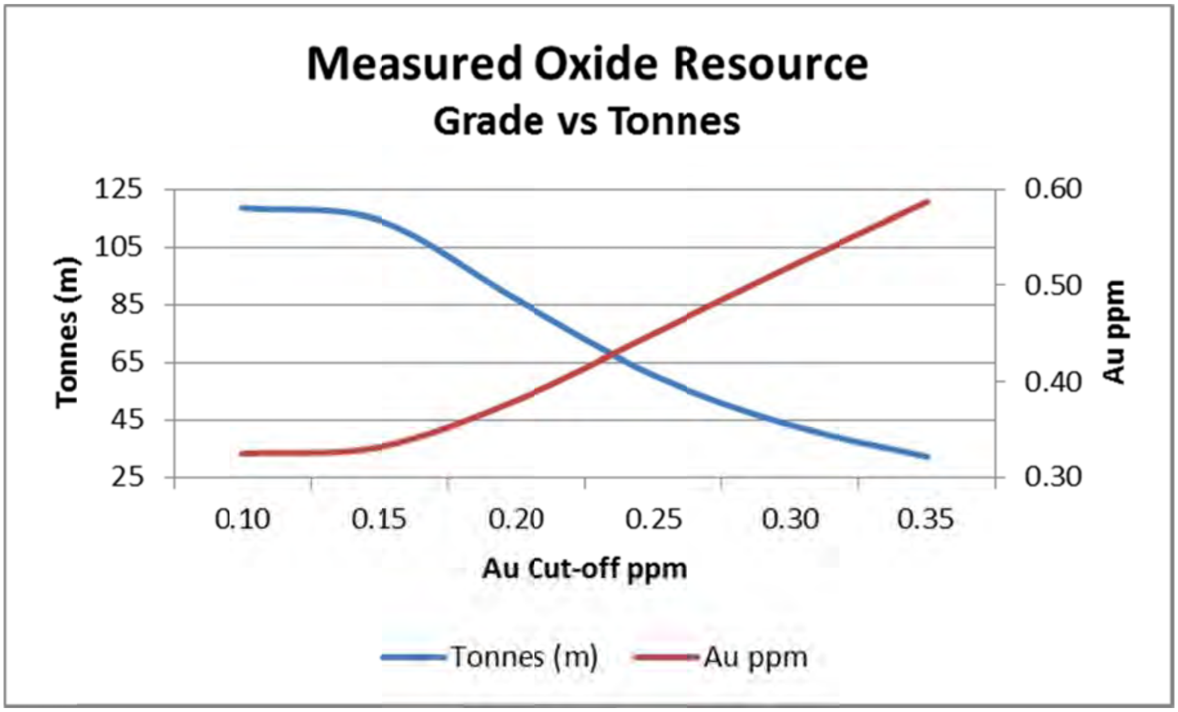
Source: SRK Consulting

Cross-Section 2,750,900N Showing Block Model Resource Classification

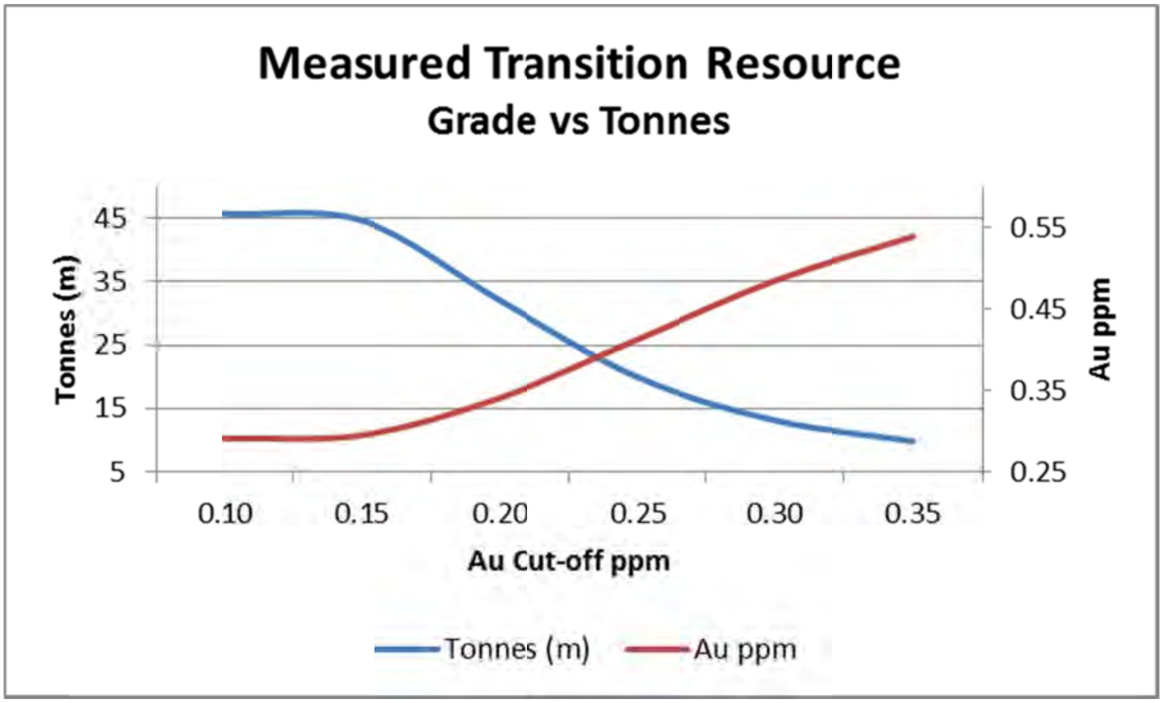
Date: 1-25-11

Approved: BS

Figure: 15-5



SRK Consulting Engineers and Scientists	El Castillo Mine, Durango State, Mexico	Measured Resources Oxide Material Grade Tonnage Curves
SRK Project No.: 203900.01	Source: SRK Consulting	
File Name: Figure_15-6		Date: 1-25-11 / Approved: BS / **Figure: 15-6**



SRK Consulting Engineers and Scientists	El Castillo Mine, Durango State, Mexico	**Measured Resources Transition Grade Tonnage Curves**
SRK Project No.: 203900.01	**Source: SRK Consulting**	Date: 1-25-11 / Approved: BS / **Figure: 15-7**
File Name: Figure_15-7		

16 Other Relevant Data and Information (Item 20)

There is no other relevant data and information that is not already contained within this Technical Report.

17 Additional Requirements for Development Properties and Production (Item 25)

17.1 Mining Operations

The El Castillo mine is a relatively low grade gold deposit that benefits from low strip ratio, disseminated mineralization that is complimentary to bulk mining activities and good heap leach recoveries. Situated in a semi-arid environment surrounded by moderate topography, the operation is currently investing in capital and operating enhancements to double mine production from 2011 onwards.

The ore body consists of gold grade with an oxidation profile that decreases with depth thus effecting estimated recoveries. There also appears to be an east and west geotechnical zone that relates to frequency of joints sets and rock hardness that has an effect on blasted ore fragmentation.

The block model consists of oxidized material (Oxide) which may be sent the crusher or straight to the heap leach pad (Oxide RoM) followed by higher grade transition material which is only sent to the crusher. Sulfide material is considered to be waste until future definitive recovery studies determine economic viability. Based on estimated life of mine costs and recoveries, the higher grade oxide that is crushed, possesses an estimated recovery of 70% that results in internal cut-of-grade (CoG) of 0.15g/t. RoM oxide recovery is estimated at 50% and has a higher cut-off than crushed oxide so the lower cut is used and ore segregated after scheduling. Crushed transition ore with a recovery of 60% is sent to the crusher if the grade is above 0.175g/t.

The final pit design is approximately 1.5km wide (east-west) by 1.3km long (north-south) and up to 170m deep. The pit contains approximately 106Mt of ore and 93Mt of waste for an overall strip ratio of 0.88 (waste:ore). Production is expected to be limited to 11Mt for ore and 24Mt/y in total over the course of the mine life. As a result, it is expected that 115koz will be placed on the heap leach pad from 2011 through the end of 2022 for a mine life of 11 years.

The mining method employed at El Castillo consists of traditional drill and blast operations followed by excavator loading of rigid body haul trucks for ore transport to heap leach pad or crusher and waste transportation to designated dump locations. Contractors are used for bulk earthworks and crusher operations with Argonaut staff acting as mine owners.

Approximately 35Mm^3 of waste dump space has been defined with the potential for more dumps to the east, northeast and south of the site with recent land purchases.

17.1.1 Introduction

As the El Castillo operation is a producing mine going through a complete company wide optimization of mine and processing performance, the costs used in pit optimization are based on historical performance and estimated costs once the mine reaches full production. Additional capital items for heap leaching and crushing have been commissioned to achieve these targets.

The ramp-up from total material moved from approximately 1Mt total to 1.5 to 2Mt began in June 2010. With the increase in ore and waste mining, the cost for processing has trended downward, mainly due to lower effective general and administration costs.

Historical production costs from November through August 2010 have been detailed in Table 17.1.1.1. It should be noted that during this period Argonaut mining gained control of mining operations and began optimization programs and tonnage ramp up.

Table 17.1.1.1: Historical Mine Production and Operating Cost

Cost	Units	Totals	Nov-09	Dec-09	Jan-10	Feb-10	Mar-10	Apr-10	May-10	Jun-10	Jul-10	Aug-10
Rom	t	4,238,965	288,346	382,402	353,557	284,031	361,533	485,494	592,221	485,252	489,661	516,468
Crush	t	1,038,261	96,066	86,763	106,093	102,616	108,717	153,783	45,663	104,838	93,945	139,777
Waste	t	6,012,164	529,412	485,380	486,750	546,435	543,602	451,673	510,319	621,389	918,002	919,202
Total	t	11,289,390	913,824	954,545	946,400	933,082	1,013,852	1,090,950	1,148,203	1,211,479	1,501,608	1,575,447
Total Mining Cost	$/t	1.18	1.19	1.17	1.15	1.16	1.17	1.20	1.16	1.19	1.17	1.21
Total Crushing Cost	$/t.crushed	2.32	4.91	5.65	1.56	1.91	1.73	0.86	2.97	1.96	2.15	1.58
Leaching	$/ore.t	1.17	1.18	1.13	1.16	1.28	1.28	0.98	1.10	1.10	1.29	1.25
G&A	$/ore.t	0.41	0.48	0.58	0.41	0.72	0.41	0.31	0.33	0.42	0.39	0.26
Total Cost	$/ore.t	2.03	2.88	2.76	1.93	2.50	2.10	1.49	1.64	1.86	2.02	1.85
Mining	$	13,303,925	1,083,506	1,118,918	1,091,831	1,086,466	1,184,765	1,309,701	1,327,165	1,436,779	1,753,423	1,911,370
Crushing	$	2,408,274	471,704	490,611	165,719	195,702	188,181	132,937	135,606	205,260	201,578	220,977
Leaching	$	6,157,426	452,711	531,492	531,816	493,388	602,788	625,903	699,570	647,084	751,576	821,099
G&A	$	2,166,467	183,097	273,054	187,790	276,847	194,921	196,098	213,690	246,541	225,625	168,804
Total	$	24,036,092	2,191,018	2,414,076	1,977,155	2,052,402	2,170,656	2,264,638	2,376,032	2,535,664	2,932,202	3,122,250
Selling Cost	$	334,302	17,078	37,240	47,926	19,376	37,161	36,608	38,688	44,007	35,479	20,738
Ounces	oz	33,122	2,907	2,947	2,917	3,452	3,114	3,676	3,187	3,711	3,167	4,044
Selling Cost	$/oz	10.09	5.87	12.64	16.43	5.61	11.93	9.96	12.14	11.86	11.20	5.13

As of August 2010, the mining rate is approximately 1,500,000t per month combined for ore and waste and the strip ratio during 2010 was 1.06:1. The mining fleet consists of two Caterpillar 777 trucks and eleven Terex TR 100 ton trucks, three 992 front end loaders, four Atlas Copco ECM-590 blast hole drilling rigs, one Atlas Copco ECM-585 blast hole drilling rig and one IR ECM-590 blast hole drilling rig, and the necessary support equipment such as motor graders, dozers, water trucks, and excavators. The fleet of 100t trucks and 992 loaders were new in July of 2010.

The average tonnes per day of ore mined since the new 100t truck fleet has been operational was 29,685t/d. The average tonnes per day of RoM ore mined since the new 100t truck fleet has been operational during the fourth quarter of 2010 was 24,209t/d. Mining operations are planned eight hours per shift, three shifts per day and six days per week. The mining contract stipulates a maximum top size of twenty inches.

The current cut-of-grade is 0.15g/t for ore and waste. Ore grades between 0.15g/t and 0.5g/t is classified as Run-of-Mine ore and delivered directly to the leach pad. Ore with grades greater than 0.5g/t is classified as higher grade and is crushed to ¾" minus before it is delivered to the pad by trucks for leaching. Lime is added to all ore before delivery to the pad. Material with grades less than 0.15g/t is delivered to overburden disposal sites.

17.1.2 Pit Optimization

Pit optimization was carried out on the El Castillo deposit using Whittle™ v4.2 pit optimization software in conjunction with Maptek's Vulcan™ (v8) general-purpose mine planning package. The optimization evaluated potential pit shells to the maximum cash-flow pit using a US$1,000/oz Au price. Measured and Indicated ore reserves were used for different oxidation types with appropriate recoveries. Oxidation types with an Inferred classification did not contribute to pit optimization with the Au grade set to zero (and thus treated as waste).

Table 17.1.2.1 indicates the parameters used for pit optimization, which are based on the SRK resource block model dated October 2010. The block model density was modified to include topographical influence on regular block sizes and honor end of month (September 2010) survey data. Cost estimates are valid at the time of optimization and may vary from those presented in the economic model.

Table 17.1.2.1: El Castillo Whittle Economic Parameters

Whittle Parameter	Type		Value
Base Units			
Measured, Indicated	Au		grams
Block Model Dimensions			
	Geological		
	X		10
	Y		10
	Z		6
	No. X		200
	No. Y		200
	No. Z		62
Slope	Bearing		Slope Angle
All Walls	0		45
Mining Cost			
Price	**Reference Mining Cost**		**1.2**
	Mining Recovery Fraction		1
	Mining Dilution Factor		1
Processing Cost			
Rock Type	Process Name		Heap
	Rocktype 1		WAST
	Rocktype 2 (Transition)		TR
	Rocktype 3 (Oxide)		OX
Process Cost ($/ore.t)	Ore Selection Method		Cash Flow
	Leach Cost ($/ore t)		**1.10**
	General and Administration		**0.20**
	Crushing Cost (HG Types)		**0.80**
Recoveries	Au Recovery (Crush/Transition)		0.60
	Au Recovery (Crush/Oxide)		0.70
	Au Recovery (ROM/Oxide)		0.50
Revenue and Selling Cost	Au Units		t.oz
	Au Price		**1,000**
Royalty, Refining, Transport etc	Au Selling Cost		10
Optimization	Revenue factor range		0.3-2 86 factors
Operational Scenario - Time Costs	Initial Capital Cost	$	20,000,000
	Discount Rate Per Period		8
Operational Scenario - Limits	Mining Limit		24,000,000
	Crushing Limit (HG)		6,000,000
	ROM Limit		5,000,000

17.1.3 Whittle Results

Whittle® results are theoretical and provide guidance for a benched pit design with ramps. With reference to Figure 17-1, the relationship of ore to waste and associated cash flow shows a classic whittle pit chart. Pit 36 represents maximum cash flow at US$1,000/oz and pit 30 represents a pit with a slightly better stripping ratio using the same revenue of US$1,000/oz. The result is approximately 50Mt of waste does not get mined with only a small relative hit to the potential reserve quantum. In co-ordinate space and illustrated in the site layout plot Figure 17-2, the pit walls between 30 and 36 are almost identical except for the north east of the ore body where low grade material can be found under moderate overburden.

17.1.4 Pit Design

SRK produced a detailed pit design for the construction of mining blocks. Figure 17-2 illustrates the final pit design within the site layout. Where possible, pit walls are straightened and bench noses reduced.

Pit design considerations include:

- Ramps placed on eastern walls to allow direct access to heap leach pads and waste dump locations;
- Each bench contains at least one ramp or "flat section" to allow truck access;
- Ramps split north and south from main ramp access and following oxidation limit;
- Haul roads are 30m wide with max grade of 10% (shortest distance) suitable for CAT 777 trucks or equivalent;
- A bench face angle of 72^0, bench height at 12m with a 8m berm provide an inter-ramp angle of 45^0; and
- The bottom of the pit is currently limited to the transition zone. If sulfide ore is deemed to be economic it is likely that the undulating floor geometry will smooth.

17.1.5 Phase Design

The final pit design volume was segregated into seven phases for scheduling purposes. Each phase triangulation is shelled on 12m lifts to produce bench triangulations that form the basis of the production schedule inventory. Detailed phase design allows for control of bench sinking rates and flexibility in managing the stripping profile.

The design criteria for each phase are as follows:

- Phase 1 – Allows for continued pit sinking of current central zone with ramp access on the east wall starting at elevation 1740;
- Phase 2 – Is an extension of current pit excavation to the west of the central zone;
- Phase 3 – Is a floating phase that does not require any pre-strip and is located to the south east of the central zone;
- Phase 4 – Another floating phase to the south of phase 2. No pre-stripping required for excavation;
- Phase 5 - Is a phase that deepens the pit from the central zone half way to the final pit limit. This phase reduces excessive bench widths that prevent desired sinking rate from being achieved;
- Phase 6 - Mines the remainder of the north ore zone (including central zone) to final pit limits; and
- Phase 7 - Mines the southern ore body to final pit limits.

The reserve inventory available for scheduling by phase is detailed in Table 17.1.5.1.

Table 17.1.5.1: El Castillo Phase Inventory

Phase	1	2	3	4	5	6	7	Total
Ore Tonnes	9,024,365	7,861,290	921,011	3,401,414	16,483,036	33,157,416	34,645,245	**105,493,778**
Ore Au Grade (g/t)	0.52	0.41	0.34	0.28	0.43	0.34	0.31	**0.36**
Au Ounces	150,755	103,468	10,043	30,861	227,684	359,453	348,975	**1,231,238**
Waste Tonnes	1,364,349	5,227,394	1,808,308	6,860,658	8,311,043	41,783,974	27,872,729	**93,228,456**
Total Tonnes	10,388,715	13,088,684	2,729,319	10,262,072	24,794,080	74,941,390	62,517,974	**198,722,234**
Stripping Ratio	0.15	0.66	1.96	2.02	0.50	1.26	0.80	**0.88**
Oxide Tonnes	8,440,385	7,764,935	921,011	3,401,414	14,451,460	26,076,923	25,185,185	**86,241,314**
Oxide Au Grade (g/t)	0.52	0.41	0.34	0.28	0.42	0.32	0.31	**0.36**
Oxide Au Ounces	141,371	101,962	10,042	30,865	197,039	270,160	250,719	**1,002,158**
Transition Tonnes	583,980	96,354	-	-	2,031,576	7,080,493	9,460,060	**19,252,464**
Transition Au Grade (g/t)	0.50	0.49			0.47	0.39	0.32	**0.37**
Transition Ounces	9,384	1,509	-	-	30,643	89,294	98,277	**229,107**

17.1.6 Production Schedule

The SRK production schedule was created using Chronos scheduling software with CPLEX as an optimization algorithm. Constraints on the schedule include:

- Precedence. Benches in previous phases must be mined before block can be completely mined out; based on elevation;
- Sinking Rate. Controlled max number of benches per phase per year (12 or 1/month);
- Maximum upper limit for ore ounces scheduled at 115koz/y with 11Mt of ore;
- Total tonnage limit set at 18Mt/y, 20Mt/y, 22Mt/y, 22Mt/y for four years then increasing to maximum 24Mt/y.

17.1.7 Schedule Results

The results of the SRK production schedule are presented in Table 17.1.7.1. Based on the results achieved through the CPLEX optimization, the total ore limit is 11Mt/y but the maximum crusher through put is limited to 6Mt/y. To improve the cash flow of the operation, the transition and highest grade oxide culminates in crusher tonnes. Any lower grade oxide is classified as RoM tonnes. Any variations of the base production schedule detailed in 17.1.7.1 to that reported in the economic model has been done so at the discretion of Argonaut (less crusher tonnes).

A graphical representation of the mine production sequence is detailed in Figure 17-3.

Table 17.1.7.1: El Castillo Life of Mine Production Schedule

Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Crusher Tonnes	6,000,000	6,000,000	6,000,000	6,000,000	6,000,000	6,000,000	6,000,000	6,000,000	6,000,000	6,000,000	6,000,000
Crusher Au Grade (g/t)	0.55	0.49	0.47	0.47	0.42	0.47	0.47	0.45	0.44	0.40	0.43
Crusher Au Ounces	105,634	94,272	90,132	90,517	80,983	89,858	91,330	86,755	85,242	77,404	82,879
Oxide Tonnes	5,987,877	5,560,824	5,807,469	5,849,611	5,489,753	4,571,658	2,650,376	4,349,370	3,668,292	2,562,717	249,590
Oxide Au Grade (g/t)	0.55	0.49	0.47	0.47	0.42	0.48	0.61	0.45	0.48	0.52	2.26
Oxide Au Ounces	105,463	87,257	87,004	88,602	74,631	71,035	52,090	63,171	56,060	42,437	18,149
ROM Oxide Tonnes	1,454,718	3,345,391	3,790,202	3,917,118	4,888,866	3,805,086	2,750,880	3,962,342	4,455,459	5,000,000	2,230,414
Rom Au Grade (g/t)	0.20	0.19	0.20	0.19	0.20	0.21	0.21	0.20	0.21	0.21	0.18
Rom Au Ounces	9,366	20,729	24,869	24,486	31,151	25,147	18,666	25,855	29,765	33,017	13,209
Transition Tonnes	12,123	439,176	192,531	150,389	510,247	1,428,342	3,349,624	1,650,630	2,331,708	3,437,283	5,750,410
Transition Au Grade (g/t)	0.44	0.50	0.51	0.40	0.39	0.41	0.36	0.44	0.39	0.32	0.35
Transition Au Ounces	171	7,015	3,128	1,915	6,352	18,824	39,239	23,584	29,181	34,967	64,730
Total Tonnes	18,000,000	19,560,466	19,222,021	22,061,826	21,754,099	17,838,570	12,806,056	18,549,025	17,467,035	17,807,725	13,655,412
Ore Tonnes	7,454,718	9,238,693	9,790,202	9,917,118	10,888,866	9,805,086	8,750,880	9,962,342	10,455,459	11,000,000	8,230,414
Au Grade (g/t)	0.48	0.39	0.37	0.36	0.32	0.36	0.39	0.35	0.34	0.31	0.36
Au Ounces	115,000	115,000	115,000	115,000	112,131	115,000	110,000	112,609	115,000	110,415	96,082

17.2 Mining Method

The mining method employed at El Castillo consists of traditional drill and blast operations followed by excavator loading of rigid body haul trucks for ore transport to heap leach pad or crusher with waste transported to designated dump locations.

The mine contractor Canteras y Agregados de Monterrey, S.A. de C.V. (Contractor) drills 3.5in holes on a 3m x 3.5m pattern that are loaded by two 25kg ANFO sacks. Argonaut pays for explosives as is common in Mexico, but the contractor is responsible for loading, priming and blasting of rock.

Drill chips are sampled and sent to the local assay lab for grade control map creation by mine engineering staff. Low grade RoM ore is transported directly to the heap leach pad while higher grade material is sent to the current semi mobile crusher (2010) crusher (North crusher). During 2011 a second semi-mobile crusher (East crusher) will be installed giving a planned crusher capacity of 6Mt/y.

Loading is conducted using a Caterpillar 992 front end loaders to fill Caterpillar 777 (2) and Terex TR 100 (11) rigid body mine haul trucks. Waste material is sent to the current east waste dump and is end-tipped to a height of 50m before instability is encountered. No ARD issues are currently evident with the mining of oxide material but as the pit deepens into transition and sulfide rock this will need to be re-evaluated.

17.2.1 Crushing

At a gold price of US$1,000 dollars, the CoG for crushed oxide ore is lower than that for RoM ore. This is because with a $0.80 crushing charge, the 20% variation in recovery makes the higher recovery ore more profitable. If crushing costs were to inflate to $1.00/t then the cut-offs would be equivalent. As a result, Argonaut have entered into a fixed rate contract with Triturados del Guadiana, S.A de C.V for the loading and operation of the crusher equipment. Argonaut are responsible for fuel, filters, repair parts, etc. and have employed an US ex-patriot to oversee crusher maintenance, installation and operation.

The fixed cost contract includes:

- Two Caterpillar 980 front end loaders with an excavator as backup. (excavator has large capacity bucket which can be used to load out finished product);
- Four trucks to haul crushed product using three people per shift--four teams to cover the seven day twenty four hour schedule; and
- A supervisor for each team, plus a compressor, welder (in addition to Argonaut's) and a mechanic.

Argonaut plans to see throughput in the ranges of 300t/h to plus 600t/h. When both crushers have been relocated to the new heap pad location, the projected production of 500,000t monthly will equate to estimated contract cost of \$0.416/t. With fuel, maintenance and consumables factored in, Argonaut estimates an additional \$0.37/t will result in a rounded crusher cost of \$0.80/t. The estimated production and operating costs projected will require careful diligence on Argonaut's behalf in order to be achieved.

The closed circuit crusher operating on the west side consists of a 200 HP 3055 jaw plant, a 8X20 combo screen, a surge bin, a 400 HP cone crusher, conveyors, a belt scale, switchgear and diesel powered generator providing power and electrical switchgear. High grade ore is delivered to the crusher pad from the open pit and fed by front end loader to the jaw feeder. Lime is added to the crushed product and delivered to the pad by truck.

The west side crushing operations are scheduled seven days per week, twenty four hours per day, with time allotted each day for maintenance and scheduled down days as required.

East side closed circuit crushing equipment currently under construction will consist of a 200 ton truck dump, apron feeder, Mesabi screen and a 200 HP 3055 jaw plant, tunnel with two feeders, two 8X20 combo screen, two surge bins, two 400 horse power cone crushers, conveyors, two radial stackers, belt scales, switchgear and two diesel powered generators providing power. High grade ore will be delivered and dumped direct for feeding to the crushing system.

17.2.2 Waste Dump

At the time of this report, Argonaut had purchased addition land positions to the east and south of the current land ownership. As a result, it is envisioned that additional waste and heap leach space will be available to accommodate the tonnages in the life of mine plan. While no designs were created for the heap and waste expansion, SRK estimated and designed two waste dump locations that resulted in $34Mm^3$ of waste volume within the current mine lease boundaries. SRK is of the opinion that there appears to be reasonable expectation that the remaining $20Mm^3$ of waste dump space required will become available.

The east waste dump was designed to a maximum 50m tip height at 37^0 and is an extension of the current dumps. The south waste dump was designed in 10m lifts, 10 berm, 30m ramps with a maximum gradient of 10% and an overall slope angle of 23^0. The south dump was located out of the current arroyo.

Please refer to Figure 17-2 for waste dump locations and geometry.

17.2.3 Contractor Operations

The mine contractor used for primary mining operations and associated ancillary operations is a Durango based company called Canteras y Agregados de Monterrey, S.A. de C.V. The negotiated rates that Argonaut have agreed to are quite favorable when compared to other mining operations in Mexico.

The suggested operation plan (at time of contract signing) has been illustrated in Table 17.2.2.1 with a more detailed production schedule these initial milestones may be updated. Table 17.2.2.2 shows contract mining rates based on haul distance. Table 17.2.2.3 shows the contractor equipment list as specified in contract agreement.

Table 17.2.2.1: Basis of Contractor Production Rate

Production Concept	Production Rate Execution Plan
1. 900,000t/mth	April through June 2010
2. 1’500,000t/mth	July 2010 through December 2011
3. 2’000,000t/mth	January 2012 through end of mine life

Table 17.2.2.2: Contract Mining Rates Based on Haul Distance

Haulage Distance (m)	US$/1.5Mt	US$/2Mt
0.0 a 400	0.818	0.778
401 a 600	0.844	0.804
601 a 800	0.89	0.85
801 a 1,000	0.918	0.878
1,001 a 1,200	0.953	0.913
1,2001 a 1,400	0.979	0.944
1,401 a 1,600	1	0.975
1,601 a 1,800	1.041	1.006
1,801 a 2,000	1.072	1.037
2,001 a 2,200	1.103	1.068
2,201 a 2,400	1.134	1.099
2,401 a 2,600	1.165	1.13
2,601 a 2,800	1.196	1.161
2,801 a 3,000	1.227	1.192

Table 17.2.2.3: Contractor Equipment List as Specified in Contract Agreement

Equipment	Contract
Rigid Body Haul Truck – CAT 777 size or equivalent	13
Front End Loader – CAT 992 or equivalent	3
Excavator – CAT 330 or equivalent (Stockpile)	1
Dozer – CAT D8 or equivalent	1
Backhoe with rock pick – CAT 416 or equivalent	1
Water Truck	2
Blasthole Drill Rigs – Atlas Copco ECM-590 – 3.5 Inch size	5
Pre-Split or skid drill rig – Atlas Copco ECM-585m IR ecm-590	1
Grader	1

17.3 Mining Risk and Remediation

Table 17.3.1 demonstrates SRK opinion on risk associated with the current mine plan.

Table 17.3.1: El Castillo Mine Planning Risk Items

Risk	Risk Level	Risk Item	Remediation
Highwall design	Low	Stability, Location	Definition of sulfide ore at depth, excavator for pit wall scaling, geotechnical analysis and monitoring, stability analysis on pit design
Equipment Availability	Moderate	Mine Production	Detailed haul prediction, Capitalization of contractor, Crusher clearance time.
Capital Investment	Moderate	Cash Flow	Commitment to strategic plan, confirmation of ore type recoveries, equipment maintenance, availability of credit.
Waste Dump Space	Moderate	Mine Production	Purchase land, additional drilling to delineate waste volume. ARD strategy if needed for Sulfide.
Heap Leach Pad Sizing	Moderate	Ore Definition, Mine production	Cut-off grade strategy, heap operations, grade reconciliation.
Storm Water Management and Mine Disturbance	Low	Environmental Compliance	Cut-off drains, disturbance schedule, communication/transparency with regulators
Mining Cost	Moderate	Cash Flow	Contractor Cost control, mining practice, low diesel cost.

17.4 Markets

Gold markets are mature, global markets with reputable smelters and refiners located throughout the world. Demand is presently high with prices for gold showing a remarkable increase during the past year. Markets for doré are readily available. El Castillo ships loaded carbon to Metals Research Corporation in Kimberly, Idaho for gold extraction and refining.

17.5 Contracts

MRO currently has contracts with Camsa for mining and Rentamaq/Trigusa for crushing and minor earthwork.

17.6 Environmental Considerations and Permitting

Minera Real del Oro has the following authorizations for projects “Unidad El Castillo” and “Ampliacion Unidad El Castillo”:

A resolution approving the Environmental Impact Statement and Environmental Risk Study for the project “Unidad El Castillo” (for a surface area of 108ha) which authorizes the preparation of the site; construction of mining facilities; operations and reclamation; construction of the processing plant, primary and secondary infrastructure; exploration; mining; heap leaching; use of gravels, clays and sands; drilling of water wells and extraction of ground water; and the use of sodium cyanide by Official Authorization dated March 13, 2007 with term of twenty-four months for site preparation and construction of the infrastructure and ten years for operations and maintenance with the ability to extend the original authorization for as many times as necessary with a term for each period of one half the original period authorized.

The specifications in the authorization allows for the depth of the pit to 70m and daily production of 8000t; and the operation of leach pads with an area of 33ha and a capacity of 10Mt.

A resolution approving the Change of Use of Land for the project “Unidad El Castillo” (a surface area of 108ha) by Official Authorization dated March 20, 2007 which allows clearing of the land for construction of the primary and secondary infrastructure , operation of the project (mining and leaching among other activities) with a period of 15 years which can be extended.

A resolution approving the Program for the Prevention of Accidents for the project "Unidad El Castillo" for the safe use and management of dangerous substances by an official document dated 25th of August, 2008 which authorizes actions and methods taken for the prevention of accidents while using sodium cyanide.

A resolution approving the Environmental Impact Statement and Environmental Risk Study for the project "Ampliacion Unidad El Castillo" (for a surface area of 358ha) which authorizes preparation of the site; construction of mining facilities; operations and reclamation; construction of the processing plant, primary and secondary infrastructure;, exploration; mining; heap leaching; use of gravels, clays and sands; drilling of water wells and extraction of ground water; and the use of sodium cyanide, by Official Authorization dated February 5, 2010 with term of 13 years for site preparation and construction of the infrastructure, operations, and maintenance; and two years for the reclamation of the site with the ability to extend the original authorization for as many times as necessary with a term for each period of one half the original period authorized.

The specifications in the authorization allows for the depth of the pit to 136m and daily mining production of 60,000t; and the operation of leach pads with an area 104ha with a capacity of 4Mt.

A resolution approving the Change of Use of Land for the project "Amplicion Unided El Castillo" (a surface area of 345ha) by Official Document dated March 2, 2010 that permits the clearing of the land for the construction of the primary and secondary infrastructure , mining and ore processing operations, among other activities, for a period of 12 years which can be extended.

A resolution approving the Program for the Prevention of Accidents for the project "Ampliacion Unidad El Castillo" for the safe use and management of dangerous substances by an official document dated June 30, 2010 which authorizes actions and methods taken for the prevention of accidents while using sodium cyanide.

A Unique Environmental License dated May 22, 2009 which establishes the conditions in the authorizations integrated into a sole document the environmental impact on air water and land; risk and other studies before Semarnat. This license is given once.

A License as generator of hazardous wastes, used oil, used filters, ground contaminated with oil, industrial garbage and sawdust contaminated with used oil.

The Annual License of Operation was processed on January 13, 2011 for the operation of the projects "Unidad el Castillo" and Ampliacion Unidad El Castillo".

Reclamation and closure plans have been prepared for both projects "Undidad el Castillo" and "Ampliacion El Castillo" with cost estimates for each.

17.7 Taxes and Royalties

The Project operates with a gross tax burdon of 31% inclusive of all taxing entities.

Argonaut owns all four of the mining concessions outright. The smaller of the two El Cairo concessions, (title number 220073) was originally acquired from the Mexican government in a lottery. The larger El Cairo II concession (title number 220075) was acquired on June 12, 2004 from Explominerals S.A. de C.V. for a one-time payment of US$ 20,000,500,000 shares in Castle Gold and a 2.0% Net Smelter Royalty. This concession covers the eastern portion of the mineral system. To date no mining has occurred on the El Cairo II concession and the royalty has yet to apply. .

The El Oro and Justicia concessions were originally acquired on November 5, 2004 from a group of private individuals. Argonaut reports that all concessions are owned outright, subject to the 2% NSR on the El Cairo II concession (title number 220075).

17.8 Capital and Operating Costs

The capital and operating costs are provided in Tables 17.8.1 through 17.8.5 below.

Table 17.8.1: Capital Cost Summary

Description	LoM Value ($000s)
Mining	$0
Process Facility & Infrastructure	$26,461
Owners & Mine Closure	$4,700
Subtotal	**$31,161**
Contingency	$0
Total	**$31,161**

Table 17.8.2: Process & Infrastructure Capital

Description	LoM Value ($000s)
Heap Leach Pad & Ponds	$23,561
ADR Plant	$500
Sustaining Capital	$2,400
Owners	$700
Mine Closure	$4,000
Subtotal	**$31,161**
Contingency	$0
Total	**$31,161**

Table 17.8.3: Operating Cost Summary

Description	LoM Value (000s)	Unit Cost ($/t-ore)
Mining	$238,467	$2.26
Process- Heap Leach	$168,087	$1.59
G&A	$26,049	$0.25
Total	**$432,603**	**$4.10**

Table 17.8.4: Mine Operating Costs

Description	LoM Value (000s)	Unit Cost ($/t-tot)
Mining-Ore	$126,593	$1.20
Mining-Waste	$111,874	$1.20
Total	**$238,467**	**$1.20**

Table 17.8.5: Process and G&A Operating Costs

Description		LoM Value (000s)	Unit Cost ($/t-tot)
Crushing		$52,044	$0.262
Leaching & ADR		$116,043	$0.584
G&A		$26,049	$0.131
	Total	**194,136**	**$0.977**

17.9 Economic Analysis

Table 17.9.1: Model Inputs

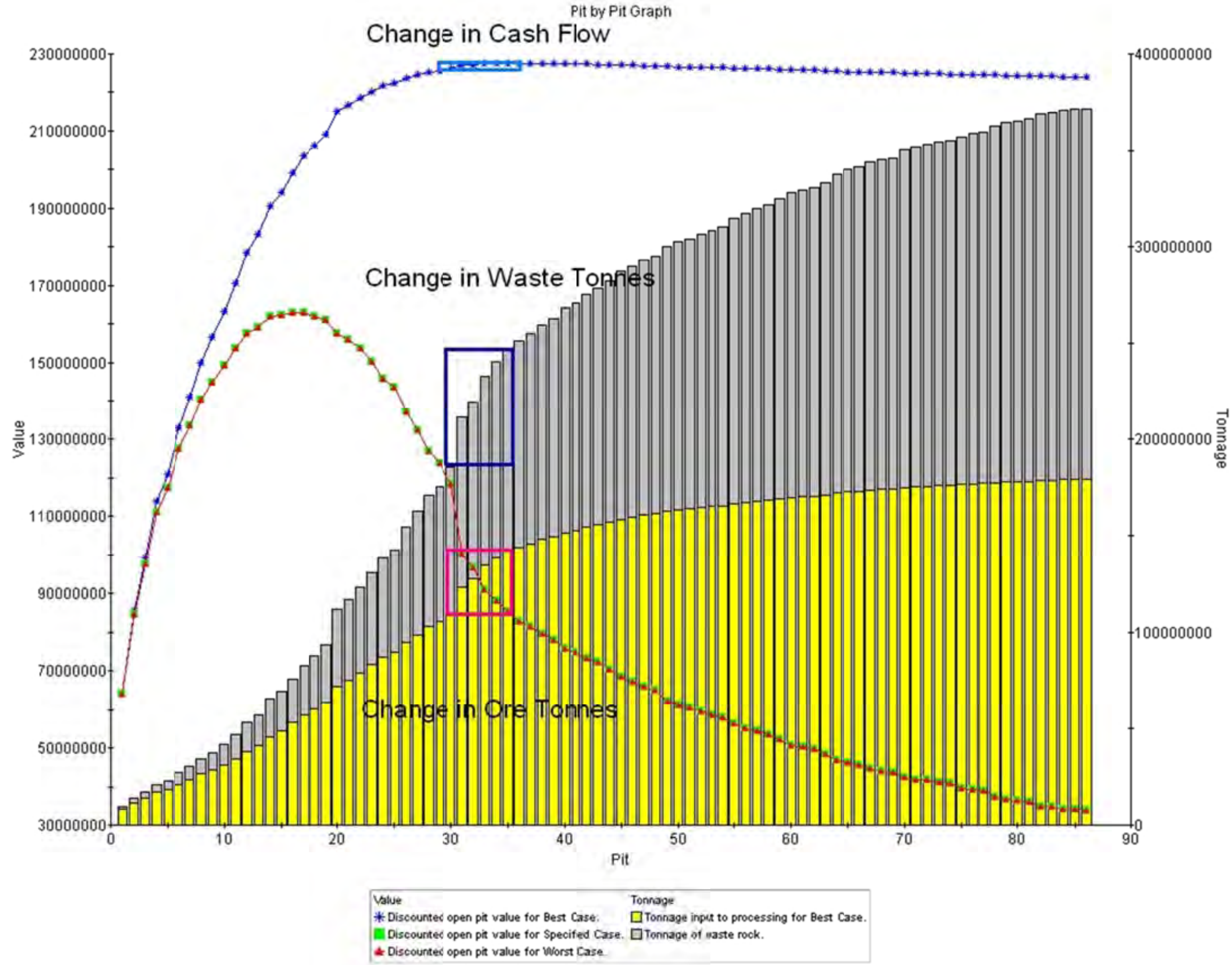
Description	Value	Unit
Production		
Ore	105,494	kt
Waste	93,228	kt
Total	**198,722**	**kt**
Stripping Ratio	0.9	waste:ore
Gold Grade	0.363	g/t
Contained Gold	1,231	koz
Heap Leach Recovery		
Recovered Gold	793	koz
Technical Assumptions		
Model Start Date	2011	
Mine Life	11	Years
Market Price:	$1,000	2010-2012
Refining	$10.00	per Au oz.
Transportation & Insurance	$0	per Au oz.
Royalty (SR)	3.0%	per Au oz.

Table 17.9.2: Technical-Economic Results

Description	LoM Value ($000s)
Gross Revenue	**$809,346**
Refinery	($8,093)
Transportation & Insurance	($0)
Silver Credit	($0)
NSR	**$801,252**
Royalty	($2,943)
Net Revenue	**$798,309**
Operating Costs	
Mining	$238,467
Process- Heap Leach	$168,087
G&A	$26,049
Operating Margin	**$432,603**
Capital Costs	
Mining	$0
Process Facility & Infrastructure	$2,900
Heap Leach Pads	23,651
Owners & Loan Repayment	$4,950
Mine Closure	$4,000
Contingency	$0
Cash Flow (Pre-Tax)	**$330,296**
NPV5%	**$257,388**

Table 17.9.3: Project Sensitivity ($NPV_{8\%}$)

Parameter	-10%	-5%	Base	+5%	+10%
Market Price	$193,000	$225,000	**$257,000**	$289,000	$321,000
Operating Cost	$260,000	$259,000	**$257,000**	$256,000	$255,000
Capital Cost	$292,000	$275,000	**$257,000**	$240,000	$223,000



SRK Consulting Engineers and Scientists

SRK Project No.: 203900.01

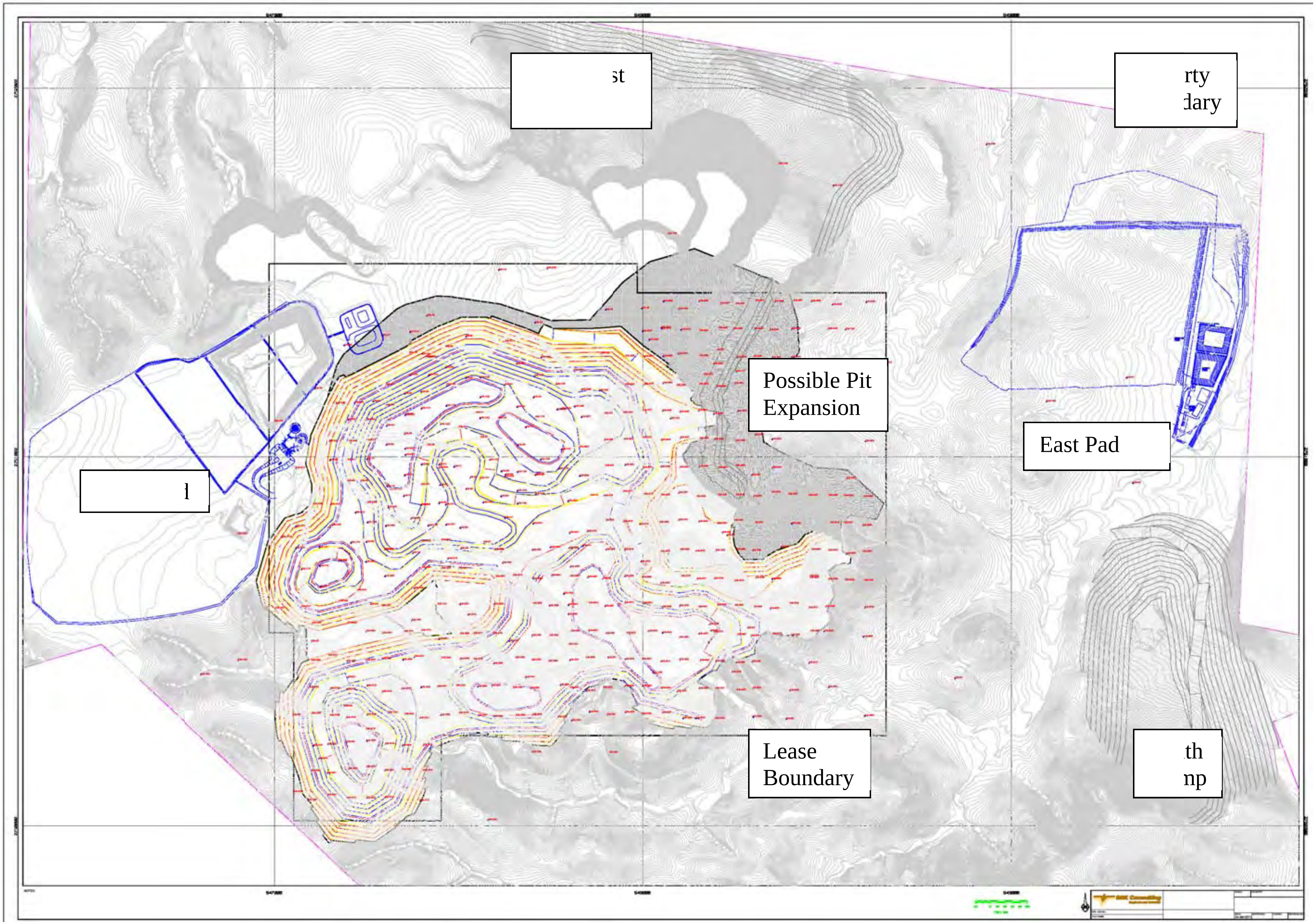
File Name: Figure_17-1

El Castillo Mine, Durango State, Mexico

Source: SRK Consulting

Whittle Pit Shell Analysis

Date: 1-25-11 | Approved: BS | **Figure: 17-1**



SRK Consulting
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El Castillo Mine,
Durango State, Mexico

Source: SRK Consulting

El Castillo Site Layout

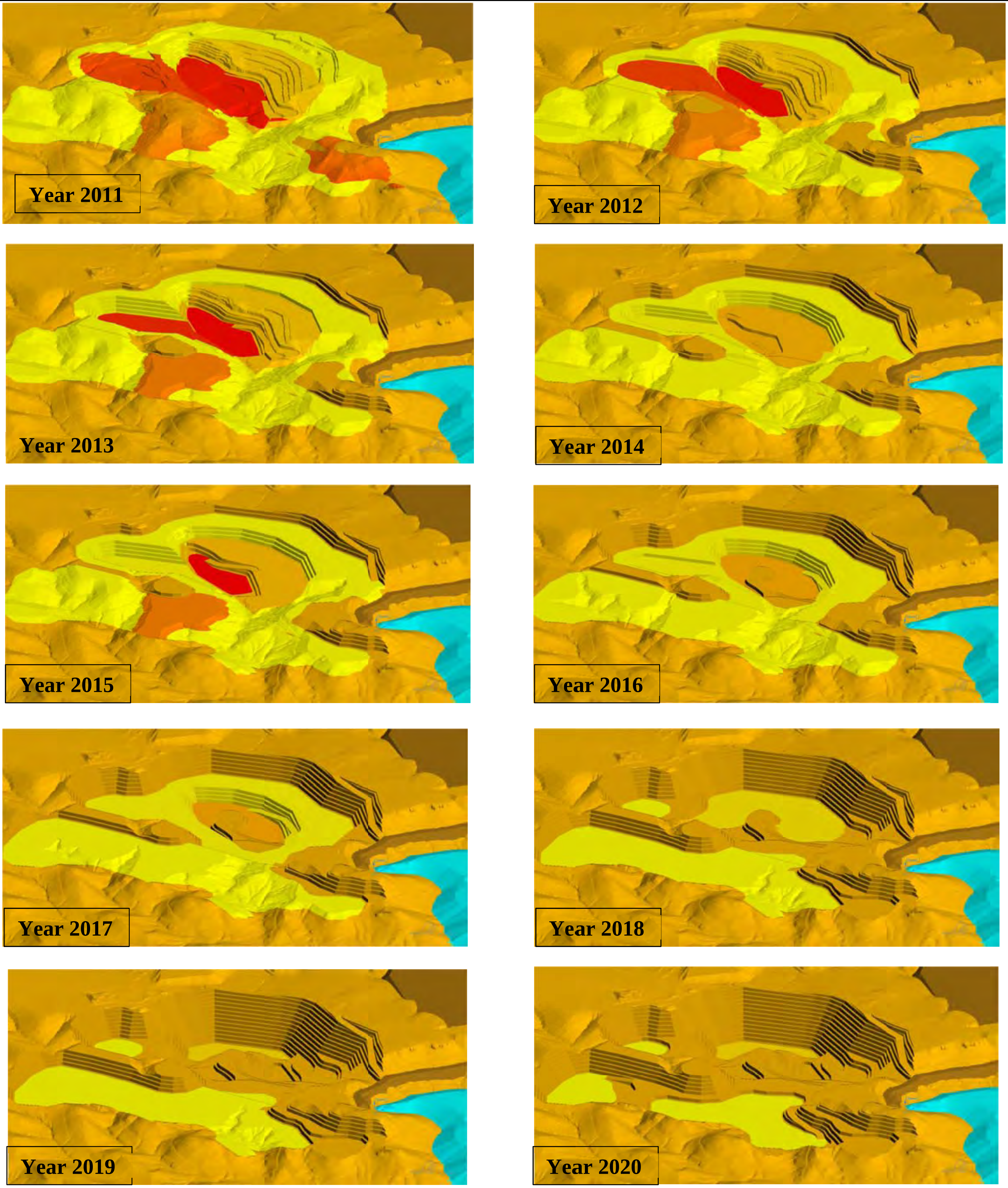
SRK Project No.: 203900.01

File Name: Figure_17-2

Date: 1-25-11

Approved: bcs

Figure: 17-2



SRK Consulting
Engineers and Scientists

SRK Project No.: 203900.01

File Name: Figure_17-3

El Castillo Mine,
Durango State, Mexico

Source: SRK Consulting

SRK Production Schedule 2010-2022

Date: 1-25-11	Approved: BS	Figure: 17-3

18 Interpretation and Conclusions (Item 21)

18.1 Field Surveys

During 2009 and 2010, Argonaut has conducted surface mapping, surface sampling, geophysical interpretation, diamond drilling and RC drilling on the Project. The surface mapping and sampling was focused on the local mineralized structures and surrounding rock types. Geophysics has been used to identify larger scale lithologic relations and structures. The drilling has documented the lithology, oxidation conditions and gold mineralization over the entire property. The drillholes were carefully logged, sampled and tested with Au fire assay. The exploration work conducted by Argonaut meets current industry standards. The exploration drilling program has been well planned and carried out in a prudent and careful manner. All drill core and RC chip logging and sampling has been done by trained and professional personnel. Argonaut has made a concerted effort to ensure good sample quality and has maintained a careful chain of custody and ensured sample security from the drill rig to the assay laboratory.

18.2 Analytical and Testing Data

SRK is of the opinion that the analytical work performed by the various assayers on the Project was good, and suitable for use in resource estimation. The fire assay method is the industry standard, recommended analytical technique used for gold analysis.

Argonaut has conducted a modern QA/QC program in conjunction with its exploration drilling program. This program includes standard reference materials, field duplicate samples and blank samples. The results of the QA/QC study verified the original assay analyses and indicated no assay bias.

18.3 Exploration Conclusions

Between December 2009 and October 2010 Argonaut completed a 308 hole drilling program totaling 35,238m. The drilling was mainly targeted south and east of the current open pit to establish the resource potential within areas known to have mineral potential. The drilling program adequately defines the zone of gold mineralization to support the resource estimation of this report.

18.4 Resource Estimation

The resource estimation is based on information from 512 holes totaling of 83,817m. The average drillhole spacing is 50m. The geologic model consists of six rock types, four of which are mineralized and two that are post mineralization. The primary host rocks consist of dacite and meta-sediments including meta-argilite, hornfels and limestone-marbles. The model blocks are 10m x 10m x 6m in the x,y,z directions, respectively. All block grade estimates were made using 6m bench composites. An Ordinary Kriging algorithm was employed to generate a categorical indicator grade shell based on a 0.125ppm Au threshold. Ordinary Kriging was also used for the gold grade estimation. The results of the resource estimation provided a CIM classified Measured and Indicated Mineral Resource. The quality of the drilling and data is very good and the Mineral Resource was classified mainly according to the general drillhole spacing.

18.5 Mining

Mining operations at El Castillo are undergoing a significant production ramp up from 2010 productions levels through 2011. With the infrastructure upgrades to the crushing plant and heap leach circuits, the proposed mining cost, process recovery and production rates should be achievable. As a result, 115k of gold can be placed on the heap leach pads per year within the 24Mt production limit.

18.6 Process and Metallurgy

SRK has reviewed the metallurgical testwork conducted on El Castillo Oxide ore documented in the Technical Report on the El Castillo Project, ACA Howe International Limited, July 31, 2008 and on El Castillo Transition Ore conducted by Kappis Cassiday & Associates (KCA) during the fourth quarter 2010. The results of these studies are briefly discussed here.

Several metallurgical tests on mineralized oxide ore from El Castillo were conducted during the period from 2004 - 2006. The tests were designed to assess the leaching characteristics of the oxidized material and consisted of:

- Bottle roll leach tests in 2004 and later column leach tests in 2006 by KCA; and
- Two onsite bulk heap leach tests conducted by Castle Gold in 2005, followed by analysis of the leach residues by Metcon Research (Metcon) in 2006.

KCA conducted an initial metallurgical investigation of transition ore with El Castillo RC drill cuttings. This work included the formulation of three separate test composites, composite characterization, bottle roll cyanidation tests and column cyanidation tests.

In order to further assess potential heap leach gold extraction from El Castillo transition ore, test composites were formulated from four drill core holes for additional column testing by KCA. The gold content of the four composites ranged from 0.260g/t Au to 0.889g/t Au. Of particular note is the relatively high sulfide to sulfate sulfur ratio for composites DCA-2 and DCA-4, indicating oxidation in the range of 17 - 26%. Whereas, composites DCA-1 and DCA-5 have a low sulfide to sulfate ratio, indicating oxidation in the range of 83 - 98%. Also of note is the relatively low carbon and copper content in these composites, which would indicate minimal problems with preg-robbing or high cyanide consumption due to copper solubilization.

19 Recommendations (Item 22)

19.1 Recommended Work Programs

Exploration and Development

Density measurements must be obtained for each of the major lithic types in each of the three oxidation zones. SRK recommends that approximately 100 measurements should be taken for each lithology in each oxidation zone.

Mining

Rock Fragmentation Model

The fragmentation of blasted ore at El Castillo varies depending on what area of the pit and what rock type is encountered. This is problematic for RoM ore size placed on the heap (recovery prediction) and meeting expected undersize through the crusher circuit. To optimize crusher performance a "fragmentation blend" in addition to ore grade should be considered in the absence of blasting optimization. This would entail classifying the fragmentation of ore by rocktype and including the tonnages into the life of mine production schedule. Based on this expected production, short term scheduling can provide crusher operators with a blend of soft and hard rock (with associated lump size) to maximize crusher throughput.

Geotechnical analysis and prediction of inter-ramp angle.

The North pit wall is artificially constrained by the existing pregnant solution ponds, plant and north heap leach pad. No detailed geotechnical work has been carried out to optimize the inter-ramp wall angle from the default 45^0. A steeper wall angle in this area would allow currently sterilized ore to be exploited.

Detailed haul route and contract cost prediction.

SRK did not perform an integrated haul profile evaluation of ore haulage from the pit face to the crusher or crusher to the heap leach pad. Haul profiles for RoM ore and waste were also not calculated. As the final crusher locations are determined, the pit deepens, waste hauls get longer and final heap leach pads sized and located, it will be necessary to determine tonnes hauled by distance to accurately predict mine contract payments over time. SRK suggests this level of detail be incorporated into future mine planning after the potential sulfide resource has been defined.

19.1.1 Costs

20 References (Item 23)

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SGM Servicio Geolologico Mexicano www.sgm.gob.mx

21 Glossary

21.1 Mineral Resources and Reserves

21.1.1 Mineral Resources

The mineral resources and mineral reserves have been classified according to the "CIM Standards on Mineral Resources and Reserves: Definitions and Guidelines" (December 2005). Accordingly, the Resources have been classified as Measured, Indicated or Inferred, the Reserves have been classified as Proven, and Probable based on the Measured and Indicated Resources as defined below.

A Mineral Resource is a concentration or occurrence of natural, solid, inorganic or fossilized organic material 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.

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 drillholes.

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 drillholes that are spaced closely enough for geological and grade continuity to be reasonably assumed.

A 'Measured Mineral Resource' is that part of a Mineral Resource for which quantity, grade or quality, densities, shape, 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 drillholes that are spaced closely enough to confirm both geological and grade continuity.

21.1.2 Mineral Reserves

A Mineral Reserve is the economically mineable part of a Measured or Indicated Mineral Resource demonstrated by at least a Preliminary Feasibility Study. This Study must include adequate information on mining, processing, metallurgical, economic and other relevant factors that demonstrate, at the time of reporting, that economic extraction can be justified. A Mineral Reserve includes diluting materials and allowances for losses that may occur when the material is mined.

A ‘Probable Mineral Reserve’ is the economically mineable part of an Indicated, and in some circumstances a Measured Mineral Resource demonstrated by at least a Preliminary Feasibility Study. This Study must include adequate information on mining, processing, metallurgical, economic, and other relevant factors that demonstrate, at the time of reporting, that economic extraction can be justified.

A ‘Proven Mineral Reserve’ is the economically mineable part of a Measured Mineral Resource demonstrated by at least a Preliminary Feasibility Study. This Study must include adequate information on mining, processing, metallurgical, economic, and other relevant factors that demonstrate, at the time of reporting, that economic extraction is justified.

21.2 Glossary

Table 21.2.1: Glossary

Term	Definition
Assay:	The chemical analysis of mineral samples to determine the metal content.
Capital Expenditure:	All other expenditures not classified as operating costs.
Composite:	Combining more than one sample result to give an average result over a larger distance.
Concentrate:	A metal-rich product resulting from a mineral enrichment process such as gravity concentration or flotation, in which most of the desired mineral has been separated from the waste material in the ore.
Crushing:	Initial process of reducing ore particle size to render it more amenable for further processing.
Cut-off Grade (CoG):	The grade of mineralized rock, which determines as to whether or not it is economic to recover its gold content by further concentration.
Dilution:	Waste, which is unavoidably mined with ore.
Dip:	Angle of inclination of a geological feature/rock from the horizontal.
Fault:	The surface of a fracture along which movement has occurred.
Footwall:	The underlying side of an orebody or stope.
Gangue:	Non-valuable components of the ore.
Grade:	The measure of concentration of gold within mineralized rock.
Hangingwall:	The overlying side of an orebody or slope.
Haulage:	A horizontal underground excavation which is used to transport mined ore.
Hydrocyclone:	A process whereby material is graded according to size by exploiting centrifugal forces of particulate materials.
Igneous:	Primary crystalline rock formed by the solidification of magma.
Kriging:	An interpolation method of assigning values from samples to blocks that minimizes the estimation error.
Level:	Horizontal tunnel the primary purpose is the transportation of personnel and materials.
Lithological:	Geological description pertaining to different rock types.
LoM Plans:	Life-of-Mine plans.
LRP:	Long Range Plan.
Material Properties:	Mine properties.
Milling:	A general term used to describe the process in which the ore is crushed and ground and subjected to physical or chemical treatment to extract the valuable metals to a concentrate or finished product.
Mineral/Mining Lease:	A lease area for which mineral rights are held.
Mining Assets:	The Material Properties and Significant Exploration Properties.
Ongoing Capital:	Capital estimates of a routine nature, which is necessary for sustaining operations.
Ore Reserve:	See Mineral Reserve.
Pillar:	Rock left behind to help support the excavations in an underground mine.
RoM:	Run-of-Mine.
Sedimentary:	Pertaining to rocks formed by the accumulation of sediments, formed by the erosion of other rocks.
Shaft:	An opening cut downwards from the surface for transporting personnel, equipment, supplies, ore and waste.
Sill:	A thin, tabular, horizontal to sub-horizontal body of igneous rock formed by the injection of magma into planar zones of weakness.
Smelting:	A high temperature pyrometallurgical operation conducted in a furnace, in which the valuable metal is collected to a molten matte or doré phase and separated from the gangue components that accumulate in a less dense molten slag phase.
Stope:	Underground void created by mining.
Stratigraphy:	The study of stratified rocks in terms of time and space.
Strike:	Direction of line formed by the intersection of strata surfaces with the horizontal plane, always perpendicular to the dip direction.
Sulfide:	A sulfur bearing mineral.
Tailings:	Finely ground waste rock from which valuable minerals or metals have been extracted.
Thickening:	The process of concentrating solid particles in suspension.
Total Expenditure:	All expenditures including those of an operating and capital nature.
Variogram:	A statistical representation of the characteristics (usually grade).

Abbreviations

The metric system has been used throughout this report unless otherwise stated. All currency is in U.S. dollars. Market prices are reported in US$ per troy ounce of gold and silver. Tonnes are metric of 1,000kg, or 2,204.6lb. The following abbreviations typical to the mining industry and may be used in this report.

Table 21.2.2: Abbreviations

Abbreviation	Unit or Term
A	ampere
AA	atomic absorption
A/m^2	amperes per square meter
ANFO	ammonium nitrate fuel oil
Ag	silver
Au	gold
AuEq	gold equivalent grade
°C	degrees Centigrade
CCD	counter-current decantation
CIL	carbon-in-leach
CoG	cut-off grade
cm	centimeter
cm^2	square centimeter
cm^3	cubic centimeter
cfm	cubic feet per minute
ConfC	confidence code
CRec	core recovery
CSS	closed-side setting
CTW	calculated true width
°	degree (degrees)
dia.	diameter
EIS	Environmental Impact Statement
EMP	Environmental Management Plan
FA	fire assay
ft	foot (feet)
ft^2	square foot (feet)
ft^3	cubic foot (feet)
g	gram
gal	gallon
g/L	gram per liter
g-mol	gram-mole
gpm	gallons per minute
g/t	grams per tonne
ha	hectares
HDPE	Height Density Polyethylene
hp	horsepower
HTW	horizontal true width
ICP	induced couple plasma
ID2	inverse-distance squared
ID3	inverse-distance cubed
IFC	International Finance Corporation
ILS	Intermediate Leach Solution
kA	kiloamperes
kg	kilograms
km	kilometer
km^2	square kilometer
koz	thousand troy ounce
kt	thousand tonnes
kt/d	thousand tonnes per day
kt/y	thousand tonnes per year
kV	kilovolt
kVA	kilovolt ampere
kW	kilowatt
kWh	kilowatt-hour

Abbreviation	Unit or Term
kWh/t	kilowatt-hour per metric tonne
L	liter
L/sec	liters per second
L/sec/m	liters per second per meter
lb	pound or pounds
LHD	Long-Haul Dump truck
LLDDP	Linear Low Density Polyethylene Plastic
LOI	Loss On Ignition
LoM	Life-of-Mine
m	meter
m^2	square meter
m^3	cubic meter
masl	meters above sea level
mamsl	meters above mean sea level
MARN	Ministry of the Environment and Natural Resources
MDA	Mine Development Associates
mg/L	milligrams/liter
mil	one thousandth of one inch
mm	millimeter
mm^2	square millimeter
mm^3	cubic millimeter
MME	Mine & Mill Engineering
Moz	million troy ounces
Mt	million tonnes
MTW	measured true width
MW	million watts
m.y.	million years
NGO	non-governmental organization
NI 43-101	Canadian National Instrument 43-101
OSC	Ontario Securities Commission
oz	troy ounce
%	percent
PLC	Programmable Logic Controller
PLS	Pregnant Leach Solution
PMF	probable maximum flood
ppb	parts per billion
ppm	parts per million
QA/QC	Quality Assurance/Quality Control
RC	rotary circulation drilling
RoM	Run-of-Mine
RQD	Rock Quality Description
SEC	U.S. Securities & Exchange Commission
sec	second
SG	specific gravity
SPT	standard penetration testing
st	short ton (2,000 pounds)
t	tonne (metric ton) (2,204.6 pounds)
t/h	tonnes per hour
t/d	tonnes per day
t/y	tonnes per year
TSF	tailings storage facility
TSP	total suspended particulates
µm	micron or microns, micrometer or micrometers
V	volts
VFD	variable frequency drive
W	watt
XRD	x-ray diffraction
y	year

Appendix A

Certificates of Authors

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CERTIFICATE of AUTHOR

I, Bart A. Stryhas Ph.D. CPG#11034 do hereby certify that:

1. I am a Principal Resource Geologist of:

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   7175 W. Jefferson Ave, Suite 3000
   Denver, CO, USA, 80235

2. I graduated with a Doctorate degree in structural geology from Washington State University in 1988. In addition, I have obtained a Master of Science degree in structural geology from the University of Idaho in 1985 and a Bachelor of Arts degree in geology from the University of Vermont in 1983.

3. I am a current member of the American Institute of Professional Geologists.

4. I have worked as a geologist for a total of 22 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 responsible for all sections of the report, and have provided the final editing for the report titled "*NI 43-101 Technical Report on Resources and Reserves, Argonaut Gold Inc. El Castillo Mine Durango State, Mexico*" and dated February 24, 2011 (the "Technical Report") relating to the El Castillo Mine. I have visited the Property on April 15, 2009 for one total day.

7. I have had prior involvement with the property that is the subject of the Technical Report. The nature of my prior involvement was conducting a due diligence review of for Argonaut Gold Inc.'s acquisition of El Castillo.

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 be disclosed to make the technical report not misleading.

9. I am independent of the issuer applying all of the tests in Section 1.4 of National Instrument 43-101.

10. I have read National Instrument 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.

11. I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them for regulatory purposes, including electronic publication in the public company files on their websites accessible by the public, of the Technical Report.

Dated this 24th Day of February, 2011.

("Signed")
Bart Stryhas, C.P.G., Ph.D., # 11034

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CERTIFICATE of AUTHOR

I, Bret C. Swanson, BE (Mining), MAusIMM #112411 do hereby certify that:

1. I am Senior Mining Engineer of:

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2. I graduated with a degree in Bachelor of Engineering in Mining Engineering from the University of Wollongong in 1997.
3. I am a current member of the Australian Institute of Mining and Metallurgy, #112411.
4. I have worked as a Mining Engineer for a total of 16 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 responsible for Sections 15.2, and all parts of Section 17 of the Technical Report titled *"NI 43-101 Technical Report on Resources and Reserves, Argonaut Gold Inc. El Castillo Mine Durango State, Mexico"* and dated February 24, 2011 (the "Technical Report") relating to the El Castillo Mine. (the "Technical Report"). I visited the site once in September 2010 and a second time January 3 to 5, 2011.
7. I have not had prior involvement with the property 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 be disclosed to make the technical report not misleading.
9. I am independent of the issuer applying all of the tests in Section 1.4 of National Instrument 43-101.
10. I have read National Instrument 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.
11. I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them for regulatory purposes, including electronic publication in the public company files on their websites accessible by the public, of the Technical Report.

Dated this 24th Day of February 2011.

("Signed")

Bret C. Swanson, BE Mining, MAusIMM **#112411**

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CERTIFICATE of AUTHOR

I, Eric Olin, MAusIMM, do hereby certify that:

1. I am currently employed as Principal Process Metallurgist of:

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2. I graduated with a Master of Science degree in Metallurgical Engineering from the Colorado School of Mines in 1976.
3. I am a member of the Australasian Institute of Mining & Metallurgy.
4. I have worked as a Metallurgist for a total of 34 years since my graduation from the Colorado School of Mines.
5. I have read the definition of "qualified person" set out in National Instrument 43-101 ("NI 43-101") and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of NI 43-101.
6. I am responsible for Section 14 of the Technical Report titled *"NI 43-101 Technical Report on Resources and Reserves, Argonaut Gold Inc. El Castillo Mine Durango State, Mexico"* and dated February 24, 2011 (the "Technical Report") relating to the El Castillo Mine. I did not visit the El Castillo property.
7. I have not had prior involvement with the property that is the subject of the Technical Report.
8. I am independent of the issuer applying all of the tests in section 1.4 of National Instrument 43-101.
9. I have read National Instrument 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.
10. I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them for regulatory purposes, including electronic publication in the public company files on their websites accessible by the public, of the Technical Report.
11. 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.

Dated this 24th Day of February, 2011.

("Signed")

____

Eric Olin, MAusIMM #304697

Item 24

NI 43-101 Technical Report on Resources and Reserves, Argonaut Gold Inc. El Castillo Mine Durango State, Mexico

Dated this 24th day of Februay, 2011

("Signed")

Bart Stryhas, C.P.G., Ph.D.

("Signed")

Bret Swanson, BE Mining, MAusIMM

("Signed")

Eric Olin, MAusIMM

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To: British Columbia Securities Commission
Alberta Securities Commission
Saskatchewan Financial Services Commission, Securities Division
Manitoba Securities Commission
Ontario Securities Commission
Authorité des marchés financiers
New Brunswick Securities Commission
Nova Scotia Securities Commission
Registrar of Securities, Prince Edward Island
Securities Commission of Newfoundland and Labrador
Toronto Stock Exchange

And To: Argonaut Gold Inc.

Re: El Castillo Mine, Durango State, Mexico

I, Bart A. Stryhas, prepared the technical report entitled *NI 43-101 Technical Report on Resources and Reserves, Argonaut Gold Inc. El Castillo Mine Durango State, Mexico* and dated February 24, 2011 (the "Technical Report") relating to the El Castillo Mine.

I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them for regulatory purposes, including electronic publication in the public company files on their websites accessible by the public, of the Technical Report

As of this date to the best of the qualified person's 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.

Dated this 24th day of February, 2011.

Yours truly,

Bart A. Stryhas

Bart A. Stryhas C.P.G., Ph.D., # 11034
Principal Resource Geologist
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Consent of Qualified Person

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Saskatchewan Financial Services Commission, Securities Division
Manitoba Securities Commission
Ontario Securities Commission
Authorité des marchés financiers
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Nova Scotia Securities Commission
Registrar of Securities, Prince Edward Island
Securities Commission of Newfoundland and Labrador
Toronto Stock Exchange

And To: Argonaut Gold Inc.

Re: El Castillo Mine, Durango State, Mexico

I, Bret Swanson, prepared the technical report entitled *NI 43-101 Technical Report on Resources and Reserves, Argonaut Gold Inc. El Castillo Mine Durango State, Mexico* and dated February 24, 2011 (the "Technical Report") relating to the El Castillo Mine.

I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them for regulatory purposes, including electronic publication in the public company files on their websites accessible by the public, of the Technical Report

As of this date to the best of the qualified person's 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.

Dated this 24th day of February, 2011.

Yours truly,

Bret Swanson, BE Mining, MAusIMM #112411
Principal Mining Engineer
SRK Consulting (U.S.) Inc.
7175 West Jefferson Ave. Suite 3000
Lakewood, Co, 80235

Exhibit 99.4

SRK Consulting (U.S.), Inc.
7175 West Jefferson Avenue, Suite 3000
Lakewood, Colorado
USA 80235
e-mail: denver@srk.com
web: www.srk.com
Tel: 303.985.1333
Fax: 303.985.9947

Consent of Qualified Person

To: British Columbia Securities Commission
Alberta Securities Commission
Saskatchewan Financial Services Commission, Securities Division
Manitoba Securities Commission
Ontario Securities Commission
Authorité des marchés financiers
New Brunswick Securities Commission
Nova Scotia Securities Commission
Registrar of Securities, Prince Edward Island
Securities Commission of Newfoundland and Labrador
Toronto Stock Exchange

And To: Argonaut Gold Inc.

Re: El Castillo Mine, Durango State, Mexico

I, Eric Olin, prepared the technical report entitled *NI 43-101 Technical Report on Resources and Reserves, Argonaut Gold Inc. El Castillo Mine Durango State, Mexico* and dated February 24, 2011 (the "Technical Report") relating to the El Castillo Mine.

I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them for regulatory purposes, including electronic publication in the public company files on their websites accessible by the public, of the Technical Report

As of this date to the best of the qualified person's 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.

Dated this 24th day of February, 2011.

Yours truly,

Eric Olin, MAusIMM #304697
Principal Process Metallurgist
SRK Consulting (U.S.) Inc.
7175 West Jefferson Ave. Suite 3000
Lakewood, Co. 80235