2nd Amended NI 43-101 Technical Report Preliminary Economic Assessment Trinidad/Taunus Project Sinaloa, Mexico

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Report Prepared for

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Summary (Item 1)

SRK Consulting (U.S.), Inc. (SRK) has been commissioned by Marlin Gold Mining Ltd. (Marlin Gold). to prepare a Canadian Securities Administrators (CSA) National Instrument 43-101 (NI 43-101) compliant Technical Report, Preliminary Economic Assessment (PEA) on the Trinidad Property (Trinidad or the Project) located in the state of Sinaloa, Mexico.

Marlin Gold will file this Technical Report in accordance with NI 43-101 requirements. This amended PEA report dated January 28, 2013 contains no material changes since the previously amended PEA report dated July 12, 2012. Amended areas of the report address the following items:

- Clarification of the authoring Qualified Persons (QP), their qualifications and their respective sections of responsibilities;
- Clarification regarding reliance on other experts, information sourced, extent of reliance and sections of the report to which the reliance applies;
- Expanded discussion on the impact of aggregate taxes on the cash-flow model, post-tax results, tax depreciation and amortization of deferred cost;
- Addition of cautionary language to address that the PEA is preliminary in nature, that it includes inferred mineral resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves, and that there is no certainty that the PEA will be realized.

Property Description and Ownership

The Trinidad property is located in the state of Sinaloa, Mexico at the UTM coordinates of 438,928E, 2,537,196N, within the WGS84 Zone 13 system. It is approximately 110 km southeast of the city of Mazatlan and 42 km southeast of the town of Rosario. The property is accessed by way of paved Federal Highway 15 from Mazatlan to El Rosario then by a 42 km dirt/gravel road through the villages of Palmarito and Buena Vista.

Marlin Gold Mining Ltd. (formerly Oro Mining Ltd.) was formed as the result of a business combination of Oro Silver Resources Ltd. and Oro Gold Resources Ltd., effective as at October 22, 2010. Within this technical report, the combined business unit is collectively referred to as “Marlin Gold”,or “the Company”.

The Trinidad property is comprised of six contiguous mineral concessions totaling 61,602.26 ha that are either granted or assigned to Marlin Gold or for which Marlin Gold has an option-to-buy agreement from a group of owners. A number of small concessions not owned by the Company are located internal to the Trinidad property but are not in the immediate area of interest covered by this report. Several of the concessions have been legally surveyed.

Geology and Mineralization

The project lies within the moderately extended part of the Tertiary Basin-and-Range Province, and is underlain by Tertiary volcanic, volcaniclastic and intrusive rocks of the Sierra Madre Occidental geologic province. These rocks comprise late Cretaceous to Eocene volcanic arc rocks of largely intermediate composition, and upper Oligo-Miocene ignimbrites. Intermediate to felsic intrusions are exposed at low topographic level, and are likely part of the Laramide Sinaloa Batholith, which

extends from southern Sinaloa into Arizona. Quartz-feldspar porphyry intrusive rocks intrude mid-Tertiary andesite volcanic rocks, suggesting a mid-Tertiary or younger age for this intrusive unit.

The Trinidad property occurs within the Rosario mining district, of which the Rosario mine was probably the most significant past Au-Ag producer. The ore mined in the district was predominantly exploited from gold-rich intermediate sulfidation veins hosted by NW- and ENE-trending faults.

The Taunus resource area lies near the contact between intermediate volcanic rocks to the west, and felsic intrusive to sub-intrusive rocks to the east. The contact between the two units forms a narrow "v" shape with the andesitic units to the west and a quartz feldspar porphyry breccia at the center of the "v". The eastern contact is defined by the near vertical, north-south trending Chandler Fault. This fault forms the eastern wall of the current pit and is the boundary between the quartz feldspar porphyry breccia to the west and a fractured quartz feldspar porphyry to the east.

Metallic assay analysis and petrographic evaluation of gold-bearing specimens indicate gold occurs as native gold, is fine-grained, and is not subject to appreciable "nugget" effect. A Ag:Au ratio of 6:1 is reported, making Taunus a relatively gold-rich intermediate sulfidation-state epithermal system. The area evaluated by Exploraciones Eldorado is entirely within the supergene oxidation zone. Primary sulfide minerals are therefore rare, comprising very minor pyrite and chalcopyrite, digenite, and covelite. Copper occurs as the secondary copper minerals chrysocolla and malachite, and with Pb and Zn as a secondary vanadian mineral, mottramite. Silver occurs as native silver, and jalpaitite. Silver and the base metal elements are reported to have a good positive correlation, and very poorly correlated with gold.

Exploration Status

Regional-scale exploration work was conducted by Marlin Gold, and by Minera Camargo S.A. de C.V. on behalf of Marlin Gold, throughout the Trinidad property during 2005 to 2006. This led to smaller scale exploration work by Marlin Gold within the Trinidad (Taunus) resource area beginning in 2007. Property scale work included prospecting and lithology/alteration mapping, in conjunction with the collection of approximately 703 stream sediment samples, 509 rock grab, chip, and channel samples, and 482 soil samples. The objective of the regional exploration program was to provide a preliminary geological and geochemical assessment of the regional potential for the area, and to better understand the regional geologic framework in which the Trinidad resource area resides.

In early 2007, Marlin Gold carried out a diamond drill program totaling 727.6 m at its San Miguel gold prospect[(1)], located approximately 4 km due southeast of, and along the same structural trend that passes through the Trinidad resource area. An additional 1,154 m of diamond drilling in 10 holes were completed in the Taunus and Colinas areas.

In early 2008, Marlin Gold completed 6,524 m in 34 reverse circulation holes in the Taunus, Colinas and Bocas areas and an additional 26 shallow reverse circulation holes were drilled in the Taunus South and Buena Vista town site totaling 622 m.

[1] The purchase option on the San Miguel concession, which was listed in the previous NI 43-101 was cancelled by mutual agreement of the parties in 2010.

In 2009 Marlin Gold completed 6,810 m of diamond drilling comprising 27 holes in the Taunus, Bocas and Colinas areas. The focus of this drilling was to define resources at depth in the Taunus pit area and to define the extents of the newly discovered HS zone.

In 2010, Marlin Gold completed 5,530 m of diamond drilling in 24 holes in the Colinas, Taunus and Bocas areas. An additional 8,470 m in 73 reverse circulation holes were completed in the same areas. A trial sonic drillhole campaign was also completed in 2010, with 11 holes (157 m) completed to test the leach pad and another 6 holes (493 m) to completed in the Colinas, Taunus and Bocas areas.

In 2011, Marlin Gold continued its exploration drill program, which included the completion of 32 sonic drillholes totaling 3,840 m.

Mineral Resource Estimate

SRK considers that the blocks located within the conceptual pit envelope show “reasonable prospects for economic extraction” and can be reported as a mineral resource. Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability. There is no certainty that all or any part of the Mineral Resource estimate will be converted into Mineral Reserves estimate. The Mineral Resource Statement for the Taunus and the Colinas (satellite) deposits at 0.3 g/t Au cut-off is presented in Table 1.

Table 1: Mineral Resource Statement*, Trinidad Project, State of Sinaloa, Mexico, SRK Consulting (Canada) Inc., November 29, 2011

Domain	Classification	Tonnes (000’s)	Gold (g/t)	Contained Gold (oz)
Top	Indicated	2,096	1.09	73,340
Bottom		2,229	2.45	175,240
Bocas		1	0.68	20
RedZ		1	0.42	10
All Indicated		**4,326**	**1.79**	**248,610**
Top	Inferred	517	0.88	14,554
Bottom		285	1.77	16,275
Bocas		532	0.57	9,710
RedZ		185	0.54	3,215
Tnq1		221	0.55	3,936
Colo02		90	0.68	1,975
Colo05		94	0.85	2,580
All Inferred		**1,925**	**0.84**	**52,245**

Note: Reported at a cut-off of 0.3 g/t. Mineral resources are not mineral reserves and do not have demonstrated economic viability. All numbers have been rounded to reflect the relative accuracy of the estimates.

Mining and Production Schedule

The Taunus deposit was historically mined by Exploraciones Eldorado S.A. de C.V., an affiliate of Eldorado Gold Corporation and is situated in relatively flat terrain, ringed by ephemeral arroyo’s in a semi-arid environment that are influenced by periods of heavy rain in the wet season. To the north and south, the Taunus pit is supported by two satellite areas of mineralization that are currently classified as inferred. For the PEA, the size of the pits have not been constrained by site infrastructure, arroyo’s or other factors that may reduce the size of the potential pit and a 45° slope formed the bases for potential economic extraction. The final pit was determined to be approximately 225 m deep, 900 m from north to south, 550 m from east to west with a total volume of 27 Mm^3. Above a cut-off grade of 0.17 g/t Au, the total feed is estimated at 7.8 Mt at a grade of 1.12 g/t Au with a strip ratio of 7.2:1 (waste:feed) and 281 koz of gold contained in-situ before recovery. The production schedule calls for a 5 year mine life with annual gold delivery to the heap of 30 koz Au, 40 koz Au, 60 koz Au, 60 koz Au and finally 90 koz Au with a LoM average total production rate of 37 kt/d. The mine production schedule is shown in Table 2. It should be noted that the resource numbers referenced in the mining and economic modeling sections are based on an internal cut-off of 0.17 g/t. This is different from the 0.3 g/t Au cutoff used for the resource estimate. As such, mining figures represent diluted grades to a selective mining unit of 5 m x 5 m x 5 m that result in more tonnes at a lower grade and slightly less contained ounces than reported in the resource.

The mine fleet will likely consist of 100 t capacity (Caterpillar 777 or equivalent) rigid body haul trucks supported by either front end loaders or hydraulic excavators. Blasting will be included in the default mine assumptions but some areas may be amenable to free-dig operations.

It is likely that mine contractors will be employed at Taunus and initial contractor interviews have been taking place through early 2012.

Waste will be disposed of approximately 1.5 km away from the pit.

Table 2: Mine Production Schedule

Item	2013	2014	2015	2016	2017
Ounces	30,000	40,571	60,000	60,000	90,672
Total tonnes	16,500,000	16,500,000	14,000,000	12,000,000	7,411,542
Waste tonnes	13,197,412	14,659,581	12,932,962	10,592,348	5,005,678
ROM tonnes	1,527,818	1,402,734	1,067,038	1,407,652	2,405,864
Dump tonnes	1,782,927	440,918			
Benches	8.29	6.70	5.50	14.30	10.21
Au Grade	0.61	0.90	1.75	1.33	1.17
HG Au Grade	0.93	1.39	2.42	1.91	1.48
HG Au tonnes	784,172	790,415	732,444	901,388	1,781,977
LG Au Grade	0.27	0.27	0.27	0.28	0.28
LG Au tonnes	735,489	609,086	334,594	506,263	623,887
ROM t/d	4,186	3,843	2,923	3,857	6,591
Waste t/d	36,157	40,163	35,433	29,020	13,714
Dump t/d	4,885	1,208			
Total t/d	45,205	45,205	38,356	32,877	20,306

The mine production schedule in Table 2 includes inferred mineral resources includes that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no certainty that the PEA will be realized.

Geotechnical

Only limited rock characterization data are available at the site. The preliminary source of information was rock mass rating (RMR) estimates from observations in the existing pit and limited borehole data on rock quality. The quality of this data was not reviewed in detail, but it appears reasonably consistent from borehole to borehole and can be used as a relative indicator of the variation in rock quality. In the absence of a site-wide RMR zonation block model, average RMR values were estimated beneath the east and west sides of the pit.

Faulting and fractures observed in the existing pit to assess the dominant jointing that might be present in the pit walls. These fractures are known to control local bench face stability, especially in the west wall.

Empirical rock mass characterization methods were used to estimate allowable geotechnical mine design parameters with respect to maximum pit bench, intra-ramp and overall angles and bench widths required to maintain stability. These methods rely on average RMR estimates to quantify rock mass strengths. Using these methods for estimating scoping-level mine design parameters is reasonable given that they are based on calibration to many case histories in similar rock masses and pit depths.

Metallurgy and Processing

During 2011 Metcon Research (Metcon) undertook a metallurgical investigation on six separate test composites formulated from sonic drill intervals from Marlin Gold's Taunus Pit. This work included a full head sample characterization of each of the test composites, bottle roll cyanidation studies, column agglomeration studies and larger diameter closed-circuit column leach tests.

As summarized in Table 3, an average gold recovery of about 70% and an average silver recover of about 23% are estimated based on the closed-cycle column leach testwork presented in this report. These recovery estimates include a 5% reduction in recovery to account for leach inefficiencies normally encountered in a commercial heap leach operation.

Table 3: Estimated Gold and Silver Extraction for Marlin Gold Mining's Trinidad Project

	Average Extraction %	
Day	**Au**	**Ag**
15	62.2	21.4
30	68.4	26.0
60	72.5	27.2
90	75.0	27.8
Adjustment Factor	5.0	5.0
Estimated Extraction	70.0	22.8

Recovery of gold from the Trinidad project will be performed by heap leaching. Mined material will be transported by truck and stockpiled at the crusher facility. The heap material will be crushed, agglomerated, and transported to the leach pad with grasshopper conveyors, radial stacked and then leached with a weak cyanide solution to extract the contained gold values. Gold will be recovered from the pregnant leach solution (PLS) in an ADR plant by adsorbing the extracted gold onto activated carbon followed by desorption into an upgraded and purified gold-bearing solution, electrowinning and smelting to recover the extracted gold as a final product.

A total of 95 employees have been allowed for process operations at an estimated cost of US$2.0 million per year, including a 30% burden. This is equivalent to US$1.29/t of material processed.

Total process plant operating cost (excluding labor) is estimated at US$5.73 per tonne of material processed. Of this total, consumable costs are estimated at US$2.30/t, operating and maintenance supplies at US$1.68/t, wear parts at US$1.06/t and power at US$0.59/t.

Environmental

Project permitting of Taunus is currently ongoing, with the submittal of the *Manifestación de Impacto Ambiental* (MIA), including the *Analisis de Riesgo,* to the Secretaría de Medio Ambiente y Recursos Naturales (SEMARNAT) in April 2012 and approved by SEMARNET in November 2012. The subsequent submission of the ETJCUS (*estudio tecnico justificativo para el cambio de uso de suelo*) or "land use change" was submitted in November 2012, with a tentative response date by the agencies of January 31, 2013. These three documents constitute the primary environmental permitting authorization necessary for mining in Mexico. However, a number of smaller permits are also required prior to initiation of operations.

The documentation needed to meet the International Finance Corporation (IFC) Performance Standards are currently under development, and mostly not available for this assessment.

Marlin Gold has entered into an exploitation and temporary occupation agreement with the Community of Maloya, pursuant to which Marlin Gold was granted surface use and mine development rights on the Taunus deposit. The details of the project Social Management Plan are currently under development, and not available for this assessment.

Current regulations in México require that a preliminary closure program be included in the MIA and a definite program be developed and submitted to the authorities during the operation of the mine (generally accepted as three years into the operation). Marlin Gold has attempted to prescribe the necessary closure activities for the operation and anticipates the associated costs to be on the order of US$3,048,500. This is generally in keeping with smaller international gold heap operations, but does not consider the possibility for longer-term process solution management following closure. Details of this calculation were not provided to SRK for this assessment, so an opinion on the rates and quantities used could not be developed.

Project Costs and Financials

Life of Mine (LoM) capital and operating costs are summarized in Tables 4 and 5. Initial capital of US$27.9 million is included in the first year of pre-production and a negative capex of US$ (2.4) million represents the ongoing capital. This negative value is composed of the closure costs combined with a salvage value of US$1.8 million and the return of a Mexican equivalent of Value Added Tax called Impuesto al Valor Agregado (IVA), correspondent to 16% of the original estimate of capital investment, during the first year of operation.

The PEA is preliminary in nature that it includes inferred mineral resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no certainty that the PEA will be realized.

Table 4: LoM Capital Cost Summary ($000s)

Description	Pre - Production (2013)	Sustaining (2014-2018)	Total Capital
Mine	$5,045	$0	$5,045
Process & Infrastructure	$12,481	$0	$12,481
Owner's	$3,269	$0	$3,296
IVA Paid	$3,350	$0	$3,350
IVA Recovered	$0	$(3,350)	$(3,350)
Mine Closure	$0	$3,049	$3,049
Salvage Value	$0	$(1,800)	$(1,800)
Total Estimate	$24,289	$(2,102)	$22,187
Contingencies (15%)	$3,643	$(315)	$3,328
Total Capital	**$27,933**	**$(2,417)**	**$25,516**

Operating costs are estimated to be US$149,677million (US$19.20/t-RoM) over the LoM.

Table 5: LoM Operating Cost Summary

Description	LoM (US$000s)	US$/t-RoM
Mining	$86,878	$11.14
Processing	$53,314	$6.85
G&A	$6,500	$1.03
Total	**$148,308**	**$19.01**

The financial analysis results, shown in Table 6, indicate an $NPV_{8\%}$ of US$79 million with an IRR of 53% (pre-tax). Payback will be in 29 months (2Q 2016) from the start of production. The following provides the basis of the LoM plan and economics:

- Mineable inferred and indicated resources of 7.8Mt are included;
- A mine life of 5 years;
- An overall average recovery rate of 70% Au over the LoM;
- A cash operating cost of US$753/Au-oz;
- Capital costs of US$25.5 million, comprised of initial capital costs of US$27.9 million and sustaining capital over the LoM of US$(2.4) million, inclusive of a US$(3.3) million IVA recovery;
- Mine reclamation costs, included in the above sustaining capital estimate of US$3.05 million; and
- Salvage value has been estimated and included as US$1.8 million.

Table 6: Pre-Tax Financial Model Results

Description	Technical Input or Result
Potentially Mineable Resources	
Open Pit	
Waste	56,388kt
Feed (dry)	7,800kt
Total	64,188kt
s/r	7.2
Au Grade	1.122ppm
Contained Au	281koz
Mill	
Feed Treated (dry)	7,800kt
Feed Au Grade	1.122ppm
Contained Au	281.2koz
Recovered Au	196.9 koz
Revenue ($000s)	
Gold Market Price (Au)	US$1,500/Au-oz
Gold Refining	US$0.85/Au-oz
Mine to Refinery	US$5.15/Au-oz
NSR	US$1,494/Au-oz
Gross Revenue	$294,095
Royalty	$(2,203)
Net Income From Mining	$291,892
Operating Cost ($000s)	**($148,308)**
Mining	($86,878)
Process	($53,430)
Marketing	($8,000)
	US$753/Au-oz
	US$19.01 /t-milled
Cash Operating Margin ($000s)	**$143,548**
Capital Cost ($000s)	
Mine	($5,045)
Process & Infrastructure	($12,625)
Owners	($3,269)
IVA Paid	($3,350)
IVA Recovered	$3,350
Mine Closure	($3,049)
Salvage Values	$1,800
Total Capital	**($22,187)**
Contingencies (15%)	($3,328)
TOTAL	**($25,516)**
Initial	**($27,933)**
Ongoing	**$2,417**
Cash Flow ($000s)	**$118,068**
(NPV@8%) ($000s)	$79,001
IRR	53%
IRR	53%

Tax Depreciation and Amortization of Deferred Costs

Fixed asset costs and other deferred costs may be deducted via tax depreciation and amortization. Tax depreciation is calculated on a straight-line basis and the rate varies depending on the type of asset. The depreciation rate for mining equipment and machinery is 12%.

For the determination of post-tax NPV calculations, the following has been applied:

- Legislated taxes rates are different for each year and range from 30% to 28%
- Capital assets are depreciated using a straight line rate of 12% for 8.3 years.

Post Tax Results

The SRK LoM plan and economics are based on the following:

- Capital costs of US$25.5 million dollars are applicable for a depreciation schedule;
- The depreciation model adopted is a straight line rate of 12%; and
- Effective income tax rate varies between 28% and a 30%.

The post-tax economic analysis results indicate a net present value of US$53.4 million, based on an 8% discount rate, and an IRR of 43%.

Conclusions and Recommendations

Exploration and Resource

The drilling programs adequately define the zone of gold mineralization and are acceptable to support the resource estimation of this report. The mineralization remains open at depth, but is relatively well constrained to the north and south.

Because the data has some underlying quality complexities (downhole surveys/spatial location of mineralization compounded with relatively thin zones of mineralization), further drilling may be warranted to increase the confidence in structurally controlled higher grade mineralization, particularly between the Top and Bottom zones.

Exploration recommendations include:

- Additional in-situ specific gravity testing should be undertaken to further confirm specific gravity determinations from drill core. Once this has been established, it might be possible to do the estimation of block specific gravity from nearby data.
- It appears that sonic drilling returned quite similar results to diamond drilling. Considering that the sonic drilling is much more expensive, future drill campaigns should potentially be based on a combination of large diameter core holes and sonic drill holes.
- Currently, the immediate area within and around the Taunus pit is fragmented in terms of the solid models. Consider unifying the models so that at least the Bocas, Eldorado-HS and Red Zone are analyzed together and therefore form geologically sensible domains. It may be possible to incorporate Taunus and Colinas data in the same way.
- Further drilling should be considered where it would benefit the quality of the mineral resource, and where there is uncertainty regarding the volume and spatial location of key higher grade mineralization and where it will lead to a more unified mineralization model.
- Complete analysis of silver, copper, arsenic, molybdenum and zinc for any further sampling of the mineralization and surrounding rocks so that these metals can be incorporated into the next resource estimate, to allow the assessment of potentially deleterious metals within the context of process metallurgy.

Mining

Mining operations at Taunus are sensitive to the geometry of the orebody and the ability to phase the operation based on mining width. This suggests the strategic directives of Marlin Gold will heavily influence the size, stripping profile and feed delivery possible in any given period. Mining will utilize contractor operations utilizing standard mining equipment under the direction of Marlin Gold mine staff. Precise pit slope excavation and ability to manage water will be important to liberate high grade heap leach material found at the pit bottom as the ability re-excavate a pushback will be cost prohibitive if a mistake is made. The mine plan calls for an average 37 kt/d operation with a reference mining cost of $1.35/t over a five year mine life.

Detailed contractor evaluations based on a monthly schedule (Including predicted cycle time and haul distances) will be vital to optimize the periodic mining cost as the pit deepens.

The use of a mixed fleet for stripping and detailed heap material excavation should be looked at to reduce ramp widths at the pit bottom.

The current PEA pit is not limited by arroyo or process plant buffer widths. When the selection of future pit sizes are determined, these widths should be included.

The PEA pit includes both phase 1 and phase 2 pit extraction. During future studies, an evaluation should be made of including only phase 1 extraction, but breaking it up into minimum mining widths that will improve the strip profile. Including the phase 2 pit, forces higher stripping ratios in the early years for only incremental gains in NPV.

The amount of free-dig versus drill and blast should be evaluated, and if significant, a move away from front end loader to excavators should be considered. Particularly, if the breakout force of the excavator negates the need for blasting.

Geotechnical

Additional recommended geotechnical activities to advance design include the following:

- Drill coreholes in west and east highwall areas to characterize rock quality and obtain samples for strength testing;
- Perform laboratory testing for rock strength;
- Obtain oriented core of fractures and assess orientation, frequency and spacing of dominant joint sets expected at depth;
- Characterize the hydrogeology for seepage rates into the pit and need to dewatering program;
- Develop 3-D structural/lithologic model and RMR block model that can be used to optimize the overall pit slope angles;
- Complete a seismic hazard assessment to assess likely ground motion that pit walls and surface structures will be exposed to for the dynamic stability;
- Assess pit slope stability along critical orientations of the pit using numerical stress analysis methods;
- Assess pre-mining in situ stress conditions from borehole conditions and, if necessary, conduct stress measurements to assess horizontal stress conditions; and
- Assess stability of heap leach pad at critical porewater pressure conditions and impact on ultimate stable height of heap leach pad.

Metallurgy and Processing

An average gold recovery of about 70% and an average silver recover of about 23% is estimated based on the closed-cycle column leach testwork presented in this report. These recovery estimates include a 5% reduction in recovery to account for leach inefficiencies normally encountered in a commercial heap leach operation.

It is very likely that material from the Taunus pit will present percolation issues during multi-lift heap leach operation.

Additional agglomeration studies and full-height column leach tests should be conducted during the next phase of study. In addition, compacted permeability tests should be conducted to assess solution percolation rates at sequentially higher loadings designed to simulate conditions in a multi-lift heap leach operation.

Environmental

Permitting of the project is progressing, though more attention should be given to addressing the IFC Performance Standards for future financing. Geochemistry test work on the waste rock, spent heap material and post-closure wall rock is currently limited and needs to be expanded to include longer-term kinetic testing to establish the potential for poor quality seepage from the waste piles and future pit lake. Post-metallurgical testing of the spent heap material would provide a better understanding of the anticipated draindown chemistry and the need for long-term management. Predictive geochemical modeling of the future pit lake would also be appropriate.

Project Costs and Financials

Project capital costs seem fairly detailed for this level of study, including a number of quotes to back up the included costs. The adopted mining cost is also backed up by third party preliminary quotations. SRK recommends that Marlin Gold address the following:

- Assess the correct mass and grade of existing spent-heap material. Its movement is currently included in the costs, but the eventual recovery of its gold content is not considered as a revenue generator;
- Analyze the resources for silver, as its recovery could further improve project results; and
- A more detailed assessment of the beneficiation costs will be required in future studies.

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Appendices

1 Introduction (Item 2)

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This Technical Report was prepared for Marlin Gold at the request of its directors and chief operating officer. SRK prepared this report to standards provided by NI 43-101, and the Standards of Disclosure for Mineral Properties, Form 43-101F. Marlin Gold (formerly Oro Mining Ltd.) was formed as the result of a business combination of Oro Silver Resources Ltd. and Oro Gold Resources Ltd., effective as at October 22, 2010. Within this technical report, the combined business unit is collectively referred to as Marlin Gold.

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- Addition of cautionary language to address that the PEA is preliminary in nature, that it includes inferred mineral resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves, and that there is no certainty that the PEA will be realized.

1.1 Terms of Reference and Purpose of the Report

This report was prepared as a NI 43-101 Technical Report for Marlin Gold by SRK. The quality of information, conclusions, and estimates contained herein is consistent with the level of effort involved in SRK's services, based on: i) information available at the time of preparation, ii) data supplied by outside sources, and iii) the assumptions, conditions, and qualifications set forth in this report. This report is intended for use by Marlin Gold subject to the terms and conditions of its contract with SRK and relevant securities legislation. The contract permits Marlin Gold to file this report as a Technical Report with Canadian securities regulatory authorities pursuant to NI 43-101, Standards of Disclosure for Mineral Projects. Except for the purposes legislated under provincial securities law, any other uses of this report by any third party is at that party's sole risk. The responsibility for this disclosure remains with Marlin Gold. The user of this document should ensure that this is the most recent Technical Report for the property as it is not valid if a new Technical Report has been issued.

1.2 Qualifications of Consultants (SRK)

The Consultants preparing this Technical Report are specialists in the fields of geology, exploration, mineral resource and mineral reserve estimation and classification, underground mining, geotechnical, environmental, permitting, metallurgical testing, mineral processing, processing design, capital and operating cost estimation, and mineral economics.

None of the Consultants or any associates employed in the preparation of this report has any beneficial interest in Marlin Gold. The Consultants are not insiders, associates, or affiliates of Marlin Gold. The results of this Technical Report are not dependent upon any prior agreements concerning the conclusions to be reached, nor are there any undisclosed understandings concerning any future business dealings between Marlin Gold and the Consultants. The Consultants are being paid a fee for their work in accordance with normal professional consulting practice.

The following individuals, by virtue of their education, experience and professional association, are considered Qualified Persons (QP) as defined in the NI 43-101 standard, for this report, and are members in good standing of appropriate professional institutions. The QP's are responsible for specific sections as follows:

- Bret C. Swanson, B.Eng. MMSAQP is the QP responsible for the Executive Summary, Sections 1, 13, 14, 16, 17, 19, 20, 21, 22, 23, 24, 25 and 26. By virtue of his education and relevant past experience, Mr. Swanson is a QP as this term is defined in NI 43-101.
- Michael D. Johnson, B.Sc., P.Geo is the QP responsible for the site visit to the property as well as the geology, deposit type, exploration and drilling data, sample preparation including Sections 2 through 10. By virtue of his education and relevant past experience, Mr. Johnson is a QP as this term is defined in NI 43-101.
- Eric Olin, MSc, MBA, RM-SME is the QP responsible Sections 11 and 15 By virtue of his education and relevant past experience, Mr. Olin is a QP as this term is defined in NI 43-101.
- Marek Nowak, MASc, P.Eng., is the QP responsible for the estimates of Mineral Resources defined in this report in Section 12. By virtue of his education and relevant past experience, Mr. Nowak is a QP as this term is defined in NI 43-101.
- Mark Willow, M.S., C.E.M., RM-SME is the QP responsible Section 18. By virtue of his education and relevant past experience, Mr. Willow is a QP as this term is defined in NI 43-101.

The Certificates of Authors are provided in Appendix A.

1.2.1 Details of Inspection

On July 4, 5 and 6, 2011, Mr. Johnson conducted a site visit to the Trinidad/Taunus property. The site visit was completed while drilling was underway on the project. During the site visit, SRK reviewed the data accumulated on the property, the local and regional geology in outcrop, the historic pit, and sonic drill material. SRK also observed and reviewed the processes and procedures associated with sonic drilling, logging, sampling, material handling, and shipping including the QA/QC procedures.

Bret Swanson visited the Taunus property on February 17, 2012. While on site, the historic pit, heap pad and site infrastructure were evaluated and recommendations made for further geotechnical studies and near surface exploration.

Gary Wong, at the time, P.Geo., of Marlin Gold, was the primary contact during the site visit for geology and Marco Galindo for mining and geotech.

1.3 Reliance on Other Experts (Item 3)

The Consultant's opinion contained herein is based on information provided to the Consultants by Marlin Gold throughout the course of the investigations concerning environmental, depreciation and tax matters relevant to the technical report.

The principal document used in the environmental assessment for Section 18 of this Technical Report was:

- *Manifestación de Impacto Ambiental Modalidad Partícular, (MIA) Para el Proyecto Explotación y Exploración Mina La Trinidad, Comunidad de Maloya, El Rosario, Sinaloa* was completed and submitted to SEMARNAT in April 2012, and approved in November 2012 (including the resolutions for the terms of reference for preparation of the MIA developed and issued by SEMARNAT).

Depreciation and tax information relied upon for Sections 20.4 through 20.6 of this Technical Report was based upon work performed by Marlin Gold's CFO and provided to SRK on January 8.2012.

The Consultants used their experience to determine if the information from previous reports was suitable for inclusion in this technical report and adjusted information that required amending. This report includes technical information, which required subsequent calculations to derive subtotals, totals and weighted averages. Such calculations inherently involve a degree of rounding and consequently introduce a margin of error. Where these occur, the Consultants do not consider them to be material.

1.4 Sources of Information

Standard professional review procedures were used in the preparation of this report. SRK reviewed data provided by Marlin Gold, 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 was generated by previous operators, primarily dating from the 1990's. All exploration since 2005 has been conducted by Marlin Gold. Additional sources of information are presented throughout the body of the text and in Section 25 References.

All mineral title, license and permit information was provided by Marlin Gold and verified through the review of a land title search completed on behalf of Marlin on March 9, 2012.

All 2011 drillhole data (collars, surveys and sample information) was provided by Marlin Gold staff.

All of the historic data relied upon in this study, such as drill logs, assay certificates, feasibility report and other reports, were obtained by Marlin Gold from Almaden Resources Corporation, the joint venture partner of Exploraciones Eldorado, S.A. de C.V (Exploraciones Eldorado) at Trinidad in the late 1990's. The drill logs, and feasibility report (Exploraciones Eldorado, 1995) were produced by Exploraciones Eldorado, the assay certificates were from Bondar-Clegg Ltd., and check assays from Chemex Labs Ltd. Historic information was obtained from maps, longitudinal and cross sections, data tables and documents prepared by EGC between 1994 and September, 1996. Documents used in the preparation of this report are assumed by the authors as accurate and complete in all aspects.

The relevant metallurgical results presented in this study are from testwork conducted by Metcon Research Inc, of Tucson, Arizona under the direction of Marlin Gold.

The consulting firm Bufete Minero y Servicios Geologicos, of Hermosillo, Sonora, was contracted by the Company to carry out initial field evaluations and to prepare documentation related to environmental permitting for the initial drill campaign in 2008.

Servicios Profesionales Nautilus, S.C. Asesoría y Estudios de Impacto Ambiental y Proyectos Técnicos y Finanacieros, of Mazatlan, Mexico (Nautilus) Registration information: Registro INE/SEMARNAT: PSIA-S15/91(1) y REGISTRO ESTATAL SINALOA: PSIA GES-007/94 (Nautilus) has been contracted from 2009 until present to provide environmental assessment and ensure environmental compliance on all concessions. Nautulis is also contracted to secure all of the environmental permits required for the exploration programs including the pumping water from the pit.

Diamond drilling was completed by: TECMIN SERVICIOS, S.A. DE C.V. of Fresnillo, Zacatecas, Mexico; PERFORACIONES CORE-BEIL, S.A. DE C.V. of Mazatlan, Mexico, B.D. Drilling of Mexico, S.A. de C.V. of Jalisco, Mexico; and Britton Hermanos Perforaciones de Mexico, S.A. de C.V. (Boart Longyear) of Jalisco, Mexico. Reverse circulation drilling was completed by Layne de Mexico, S.A.de C.V. of Hermosillo, Sonora, Mexico and Drift de Mexico S.A. de C.V. of Queretaro, Mexico.

Diamond core and reverse circulation chip samples were submitted directly to Inspectorate de Mexico, S.A de C.V., for preparation in Durango, Mexico, and analysis in Reno, Nevada, USA.

Down hole surveys of 10 diamond drillholes and 34 reverse circulation drillholes were completed by Silver State Surveys Inc. of Oro Valley, Arizona, USA.

Collar surveys of all diamond and RC drillhole collars was completed by David Rogerson of Servicios Mineros SRL of El Callao, Venezuela using a differential geographical positioning system.

Water and fish samples were sent to Laquin Mazatlan Labratorio Quimico Industrial, Mazatlan Mexico, for analysis.

This mineral resources reported in this document include all assay and geological results from Marlin Gold's diamond and reverse circulation drill campaigns of 2007, 2008, 2009, 2010, and sonic drilling from 2010 and 2011, up to and including, diamond hole 10TR064, reverse circulation hole 10TRRC119, and sonic drill hole 11TRSN038. Marlin Gold assay and geological results represent 14,100 m of diamond core from 65 holes, 18,880 m of RC chips from 149 holes, and 4,500 m from 49 sonic holes.

1.5 Effective Date

The effective date of this report is June 1, 2012.

1.6 Units of Measure

The metric system has been used throughout this report. Tonnes are metric of 1,000 kg, or 2,204.6 lb. All currency is in U.S. dollars (US$) unless otherwise stated.

2 Property Description and Location (Item 4)

Section 2 reflects the property description and location as of the effective date of this report.

2.1 Property Description and Location

The Trinidad property is located in the state of Sinaloa, Mexico at the UTM coordinates of 438,928E, 2,537,196N, within the WGS84 Zone 13 system. It is approximately 110 km southeast of the city of Mazatlan and 42 km southeast of the town of Rosario. The property is accessed by way of paved Federal Highway 15 from Mazatlan to El Rosario then by a 42 km dirt/gravel road through the villages of Palmarito and Buena Vista.

The main focus area of this report is the Taunus pit area, and surrounding Colinas and Bocas areas, which lies slightly south of the center of the Trinidad property, as shown in Figure 2-1.

2.2 Mineral Titles

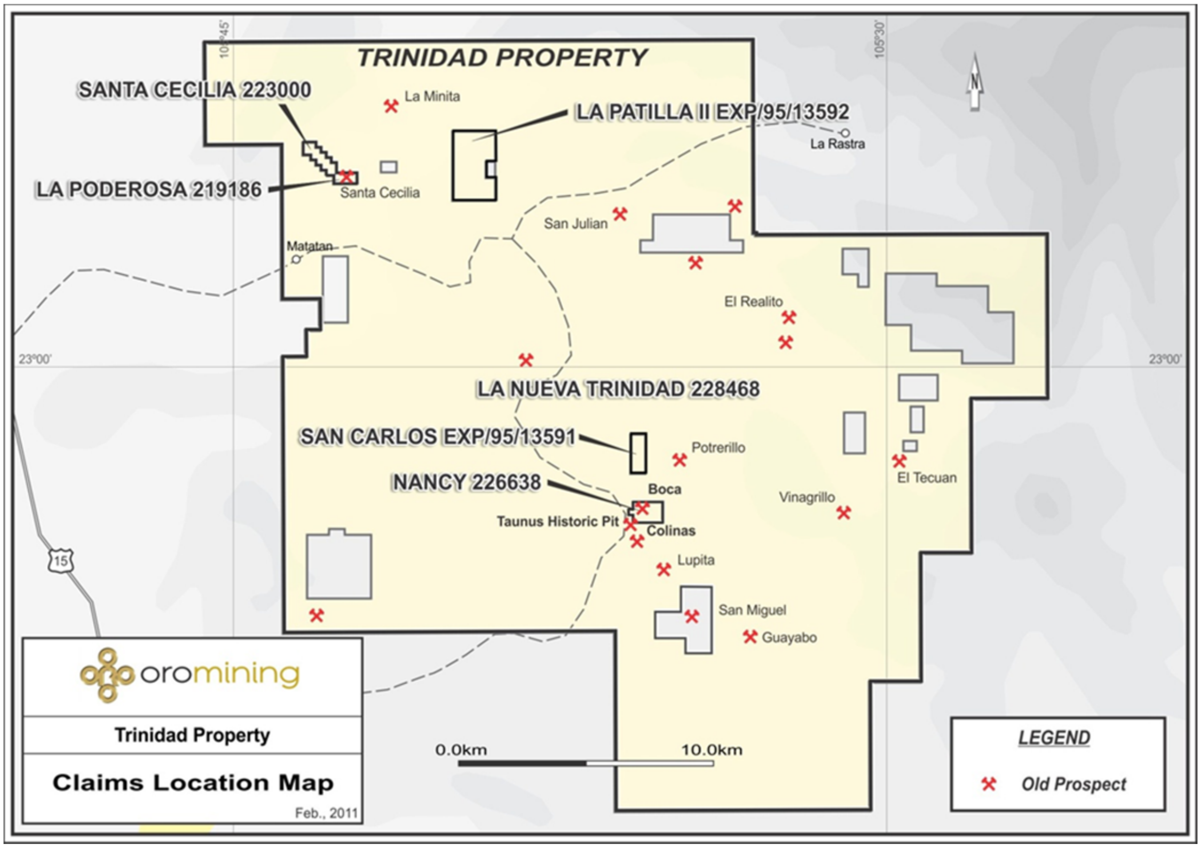
The Trinidad property is comprised of six contiguous mineral concessions totaling 61,602.26 ha, that are either granted or assigned to Marlin Gold or for which Marlin Gold has an option-to-buy agreement from a group of owners. Details of the six claims are summarized in Table 2.2.1. A number of small concessions not owned by the Company are located internal to the Trinidad property but are not in the immediate area of interest covered by this report. Several of the concessions have been legally surveyed.

Table 2.2.1: Description of Property Claims

Name	Title	Type	Area (ha)	Title Date	Expiry Date	Owner	Agreement	Agreement Date
La Nueva Trinidad	228468	Exploration	60,958.7	Nov 22, 2006	Nov 21, 2056	Oro Gold de Mexico SA de CV	Assignment of Rights Agreement	Dec 17, 2005
Nancy	226638	Exploration	100	Feb 03, 2006	Feb 02, 2056	Paulino Meza Villapudua et al	Exploration Agreement with Purchase Option	Feb 13, 2006
La Poderosa	219186	Exploration	24	Feb 18, 2003	Feb 17, 2053	Paulino Meza Villapudua et al	Exploration Agreement with Purchase Option	Feb 13, 2006
Santa Cesilia	223000	Exploration	80	Sep 30, 2004	Sep 29, 2054	Paulino Meza Villapudua et al	Exploration Agreement with Purchase Option	Feb 13, 2006
La Patilla II	238360	Exploration	360	Sep 23, 2011	Sep 22, 2061	Oro Gold de Mexico SA de CV	N/A	N/A
San Carlos	237870	Exploration	79.6	May 17, 2011	May 16, 2061	Oro Gold de Mexico SA de CV	N/A	N/A

2.3 Location of Mineralization

The Taunus and Colinas resource areas occur within Marlin Gold's Trinidad property and correspond to claim numbers 228468 and 226638, shown in Figure 2-1. The Trinidad property comprises 61,602.26 ha in southern Sinaloa, at about UTM Coordinate 438928E, 2537196N. It is located approximately 110 km southeast of the city of Mazatlan (population 750,000) and 42 km southeast of the town of El Rosario (population 30,000) in the State of Sinaloa, Mexico.



Source: Marlin Gold

Figure 2-1: Marlin Gold's Claims in the Taunus and Colinas Resource area of the Trinidad Concession

2.4 Property Taxes and Assessment Rights

All property tax and assessment information provided in this section has been provided by Marlin Gold and has not been verified by SRK.

All minerals found in Mexico are the property of Mexico, and may be exploited by private entities under concessions granted by the Mexican Government. The process was defined under the Mexican Mining Law of 1992, and excludes petroleum and nuclear resources from consideration. The Mining Law also requires that non-Mexican entities must either establish a Mexican corporation, or partner with a Mexican entity.

Under current Mexican mining law, amended April 29, 2005, the Direccion General de Minas (DGM) grant concessions for a period of 50 years, provided the concession is maintained in good standing. There is no distinction between mineral exploration and exploitation concessions. As part of the requirements to maintain a concession in good standing, bi-annual fees must be paid, and a report submitted to the DGM each May. This report covers work conducted over the previous year on the concession.

Two schemes cover the calculation of the bi-annual fee, and are calculated on a per-hectare basis. For concessions granted prior to January, 2006, one of two fee structures apply to the calculation, depending on the type of concession (exploitation or exploration), and the amount of time that has passed since granting of the concession. For concessions granted after January, 2006, a per-hectare escalating fee applies (Table 2.4.1).

Table 2.4.1: Assessment Fee Schedule for the Trinidad Project Properties (per hectare) for the year 2011

Period During Exploration/Exploitation	Per Hectare Fee (Mexican Pesos)
Year 1-2	5.08
Year 3-4	7.60
Year 5-6	15.72
Year 7-8	31.62
Year 9-10	63.22
After Year 11	111.27

Source: Dirección General de Minas, Mexico City, Mexico]

2.4.1 Nature and Extent of Issuer's Interest, Royalties, Agreements and Encumbrances

All information regarding Marlin Gold's interest in the property presented in this section, has been provided by Marlin Gold and has not been verified by SRK.

The Nueva Trinidad was originally staked by Minera Camargo, SA de CV in 2005. On December 7, 2005, the Company, through its 100% owned affiliate Oro Gold de Mexico S.A. de C.V. ("Oro Gold Mexico"), entered into an Assignment of Rights agreement with Minera Camargo, whereby the Company acquired 100% of the mineral rights to the Nueva Trinidad concession for a 0.5 to 1.0% NSR royalty consideration, depending on the price of gold. This agreement is registered with the Direccion General de Minas, Registro Publico de Mineria.

The purchase option on the San Miguel concession, which was listed in the previous NI 43-101 was cancelled by both parties in 2010 as the concession was not considered to be a key concession and did not have any current resources.

On February 6, 2006 the Company, through Oro Gold Mexico, entered into an Exploration Agreement with Purchase Option (as amended) with a group of owners for the acquisition of 100% interest of, among others, the concessions Nancy, La Poderosa and Santa Cesilia in consideration for staged cash payments over time. A sliding scale NSR royalty of 0.5 to 1.5% depending on the price of gold also applies. The agreement is registered with the Direccion General de Minas, Registro Publico de Mineria.

La Patilla II and San Carlos were staked by the Company through Oro Gold Mexico in 2011 and therefore are not subject to a royalty with a third part.

2.5 Environmental Liabilities and Permitting

All information presented in this section has been provided by Marlin Gold and has not been independently verified by SRK. However, the authors are not aware of any environmental issues on the Property. Tailings, stockpiles dumps, a heap-leach pad and water-filled open pit occur in the Trinidad resource area.

In order to obtain a permit for construction and exploitation, Exploraciones Eldorado was required to file a mine reclamation plan. This plan was summarized by Exploraciones Eldorado in their pre-feasibility study for Trinidad, and includes pit-slope stabilization, back-filling and contouring, and leach pad neutralization. The mean pit slope is currently about 70°, clearly indicating that at least part of the reclamation has not taken place.

Marlin Gold recorded the surface conditions on digital photos and video prior to commencing exploration activities. The authors are informed by the Company, that no environmental issues are known to exist on the property.

According to Marlin Gold, all required permits that are currently necessary for Marlin Gold's activities at Trinidad have been obtained, and are in good standing. Nautilus completed the environmental assessment and permitting requirements to dewater the historic pit. A pumping permit was approved by the National water commission of Mexico (CNA). Copies of the permits are available in Marlin Gold's site files.

SRK has not conducted an investigation as to the current status of all the required permits. At this time, SRK is not aware of any outstanding permits or any non-compliant at the project or nearby exploration sites.

2.6 Other Significant Factors and Risks

No other risk factors were identified.

3 Accessibility, Climate, Local Resources, Infrastructure and Physiography (Item 5)

3.1 Topography, Elevation and Vegetation

Topographic relief across the property is about 1,640 m, with a maximum elevation of about 1,700 masl. Most of the rural population lives in the valley, in small, closely spaced villages. Land use is free-range cattle grazing and subsistence agriculture. The hydrology is dominated by the Baluarte river that runs through the northwest corner of the property and its tributaries, the Matatan river and Agua Zarca river draining the central and southern part of the property. Except for the Baluarte river, flow is intermittent through the year, occurring only during the summer rainy season (July through September).

3.2 Climate and Length of Operating Season

Rainy season is July to the end of September. The average annual temperature is 24.9° C (Exploraciones Eldorado, 1995), and the average annual precipitation is 1,067 mm. The greatest rainfall occurs in July, averaging 310 mm. Access to the southern extreme of the property is difficult during the rainy season due to swollen rivers and the fact that the road crosses the river in about seven locations. Access to the campsite and Taunus areas is not an issue during the rainy season, however, on occasion the Baluarte river may swell to levels that make crossing the river unsafe. The river usually subsides within a few hours, making crossing possible again.

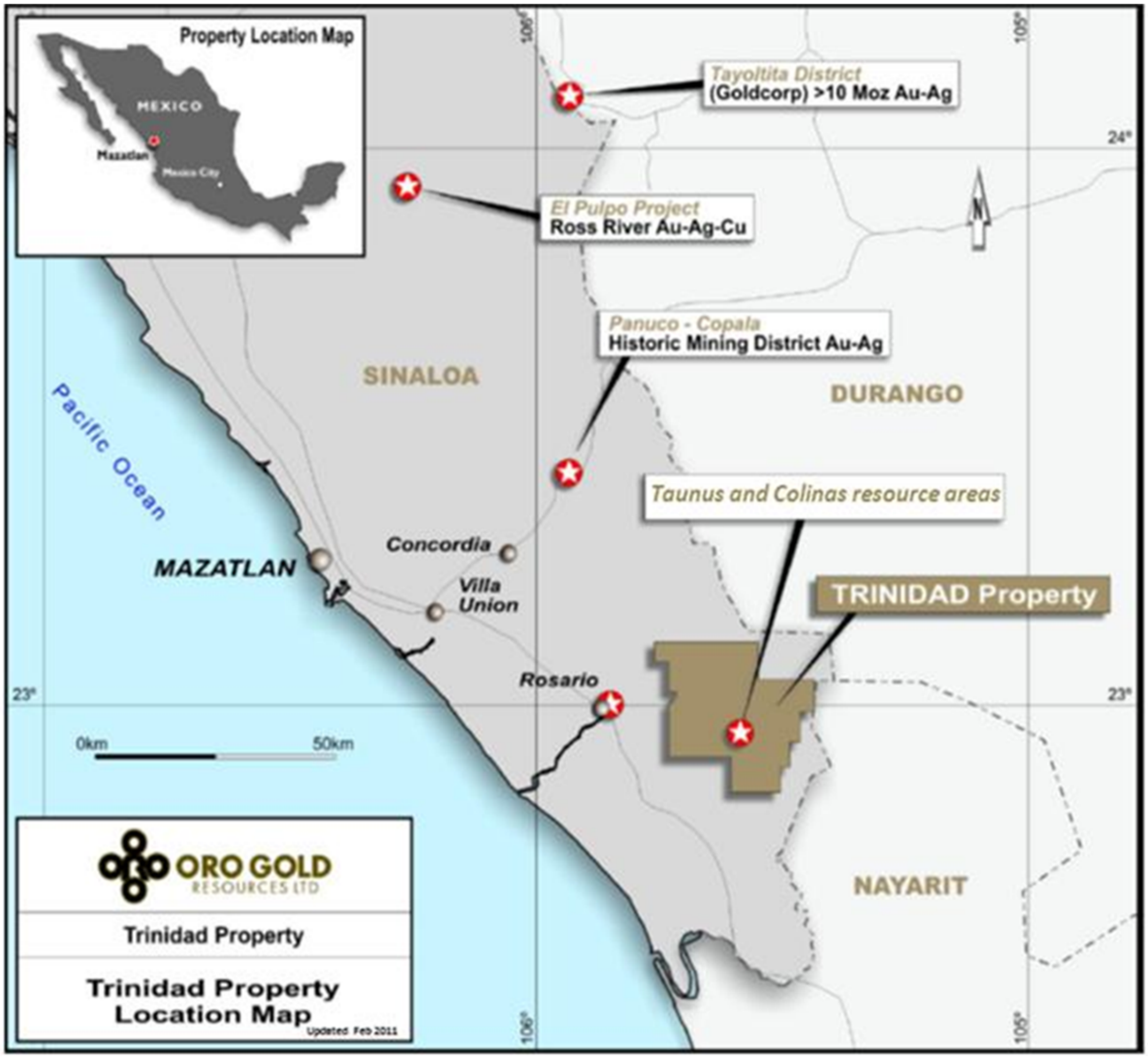
3.3 Sufficiency of Surface Rights

SRK has not independently verified Marlin Gold's surfaces rights to the Trinidad/Taunus property.

In May 2011, Marlin Gold's 100% affiliate Oro Gold de Mexico SA de CV entered into a 15-year exploitation and temporary occupation agreement with the Community of Maloya whereby Marlin Gold was granted surface use and mine development rights on the Taunus deposit. The community is supportive of a mining operation and has voted in favor of building a mine on the community ground.

3.4 Accessibility and Transportation to the Property

The Trinidad property is accessed from the Mazatlan-Tepic highway (Federal Highway 15) to the town of Rosario, and by gravel roads eastward of Esquinapa, or Rosario. The gravel road passes through the villages of Palmarito and Buena Vista. The Taunus and Colinas resource area is situated adjacent to the town of Buena Vista, approximately three hours by vehicle southeast of Mazatlan, and about 1.5 hours (42 km) east of Rosario (Figure 3-1). It is located in the south-central part of the Trinidad property. Mazatlan is serviced daily by international airline flights from Los Angeles, California and Tucson, Arizona, USA, as well as numerous international flights.



Source: Oro Gold Resources de Mexico

Figure 3-1: General Location Map

3.5 Infrastructure Availability and Sources

SRK finds the local resources and infrastructure adequate to support the current exploration program and anticipated potential future mining operations.

3.5.1 Power

Electrical supply is supplied from a substation in Rosario. A three-phase line using four cables supplies electricity to the town of Buena Vista where the resource is located. The capacity of the line is 33,000 volts utilizing “000” type conductors. The line will need to be upgraded for future mining and processing requirements.

3.5.2 Water

Water for the exploration camp is supplied from a well in Buena Vista. The water is pumped from a well into a water tank which supplies the community with water. Another well and water network is located in the town of Maloya. Additional water wells will be required for mining and processing requirements.

3.5.3 Port

A deep water port is located in Mazatlan, 100 km west of the project.

3.5.4 Buildings and Ancillary Facilities

Marlin Gold has refurbished the Exploraciones Eldorado offices as well as the old plant site. Both facilities are used as offices and sleeping quarters.

3.5.5 Camp Site

The exploration camp can house and feed approximately 30 people and has running water and electricity. It is reasonable to assume that these facilities can be upgraded for any potential future mining requirements.

3.5.6 Mining Personnel

The current number of workers is variable, depending on the exploration programs, and ranges between 10 and 50 people. Local skilled labor for mining operations is available from the communities of Maloya and Buena Vista, which have a combined population of approximately 200 people.

3.5.7 Tailings Storage Area

There are no tailings disposal areas. There is sufficient land available for tailings storage for future operations.

3.5.8 Waste Disposal Area

There is a historic heap leach pad and waste rock disposal area. Adequate locations for waste rock disposal and heap leach pads are available to accommodate the current resources for future operations.

4 History (Item 6)

This section presents the property ownership changes and a short description of any exploration activities and mineral resources defined prior to Marlin Gold acquiring this property. Any exploration results and/or mineral resource presented in this section are historic and presented only for context related to the current exploration and mineral resource defined in this report. No part of this information has been updated or reviewed by the current QP's and all mineral resource estimates are no longer current.

4.1 Prior Ownership

The Trinidad deposit was discovered by Porfidio Tirado Beltran, a Mexican "gambusino" who worked the iron-oxide rich veins for gold near the village of Buena Vista. To the south and north of Buena Vista, the towns of Pilas de Estancia and Maloya were centers for small-scale placer gold operations. In the 1980's, an exploration campaign by Anaconda culminated in 1,804 m of diamond drilling before it left Mexico in 1988. East of Pilas de Estancia, the Guayabo deposit was worked by "gambusinos" for tungsten in the 1980's. In 1992, Almaden Resources Corporation (Almaden) acquired the Trinidad Property, and increased the land position by staking. In 1993 Exploraciones Eldorado acquired an option to earn a 51% interest in the property and Almaden optioned 51% interest the Property to Exploraciones Eldorado in 1993 and Exploraciones Eldorado acquired its 51% interest in 1995 by completing a feasibility study for the mine. The joint-venture eventually increased the size of the Property to about 20,000 ha. After a short RC drill campaign, they defined a non NI 43-101 compliant resource of 3,682,000 t of 1.6 g/t Au or 176,736 oz Au (Almaden Resources Corporation, News Release October 2, 1996).

4.2 Historical Exploration Work

Past exploration is summarized by Eldorado (Robertson and Thomson, 1994; Exploraciones Eldorado, 1995). There are anecdotal reports of Hispanic and pre-Hispanic exploitation. The first recorded exploration occurred in 1982 when Porfirio Tirado Beltran acquired the concessions and produced a small quantity of gold from the Taunus and Bocas areas.

Anaconda Minerals Corp. started exploration in the area in 1984, through its Mexican subsidiary, Cobre de Hercules, S.A. They completed soil sampling, geologic mapping, and bulldozer trenching and sampling in Taunus and Bocas areas, and elsewhere in the district. Their results indicated a gold mineralized zone at Taunus, of 7 to 30 m wide, and 335 m long. Nineteen holes were drilled between 1985 and 1988, totaling 1,803.9 m. Of these holes, 14 or 1,209.3 m were collared in the Taunus area.

In 1993, Exploraciones Eldorado, conducted mapping, sampling, trenching and soil sampling. In 1994, they initiated a reverse circulation drill program comprising 75 holes and 4,008 m of drilling, followed by 4,226 m of drilling in 77 holes in the Taunus area, with an additional 300 m in 28 holes, intended as condemnation holes. Four more RC condemnation holes (390 m of drilling) were drilled in 1995. The next phase of drilling focused on in-fill and resource expansion at Taunus. A total of 12,113 m of drilling was completed by Exploraciones Eldorado on 30 m sections, spaced between 15 and 30 m apart. The average hole depth is 58 m.

This work formed the basis of a feasibility study completed by Exploraciones Eldorado, prior to exploitation of the Taunus zone as an open-pit, heap-leach mine.

Drilling was conducted after the completion of Exploraciones Eldorado's feasibility report, and during production at the Taunus pit. Marlin Gold has acquired several short progress reports which post-date the feasibility study and give summary assay composites of 28 RC holes in the Taunus area, 18 holes in the Colinas area and 18 RC holes in the Bocas area (Flores, 1996; Guilinger, 1997; Anonymous, 1996). These updates do not include geology, sample intervals or assay certificates and were not included in the current resource estimate. This data has been used to guide OGR's current exploration in the three areas. A map showing the location of historic drillholes is provided in Figure 7-1.

4.3 Historic Mineral Resource and Reserve Estimates

Anaconda Minerals Company (Anaconda) and Exploraciones Eldorado, and the consultants that they contracted made a number of mineral resource estimates (non NI 43-101 compliant). In November 2007, Marlin Gold produced its first mineral resource estimate (NI 43-101 compliant) based on historic drillholes. In June 2008, Marlin Gold produced a NI 43-101 compliant, inferred mineral resource estimate shown in Table 4.3.1 at a 0.5 g/t Au gold cut-off.

Table 4.3.1: June 2008 Inferred Mineral Resources at a 0.5 g/t Gold Cut-Off

Tonnage (t)	Average Au Grade (g/t)	Metal Content (oz)
4,491,800	1.39	200,930

4.4 Historic Production

According to Exploraciones Eldorado's August 1995 feasibility study (non NI 43-101 compliant), "the Trinidad project Minable reserves, calculated at a cut-off grade of 0.50 g/t of gold amount to 2.077 Mt at a grade of 1.98 g/t of ore, or 132,266 total troy ounces with an average strip ratio of 1.68. On an average basis, 540,000 t of ore per year will be mined, crushed and leached to produce 20,000 to 30,000 oz-t of gold."

Based on Exploraciones Eldorado's annual reports of 1996, 1997 and 1998, production from the Taunus Pit commenced in 1996, and 51,692 oz of gold was produced from Trinidad prior to shutting down their Mexican operations in the fall of 1998.

5 Geological Setting and Mineralization (Item 7)

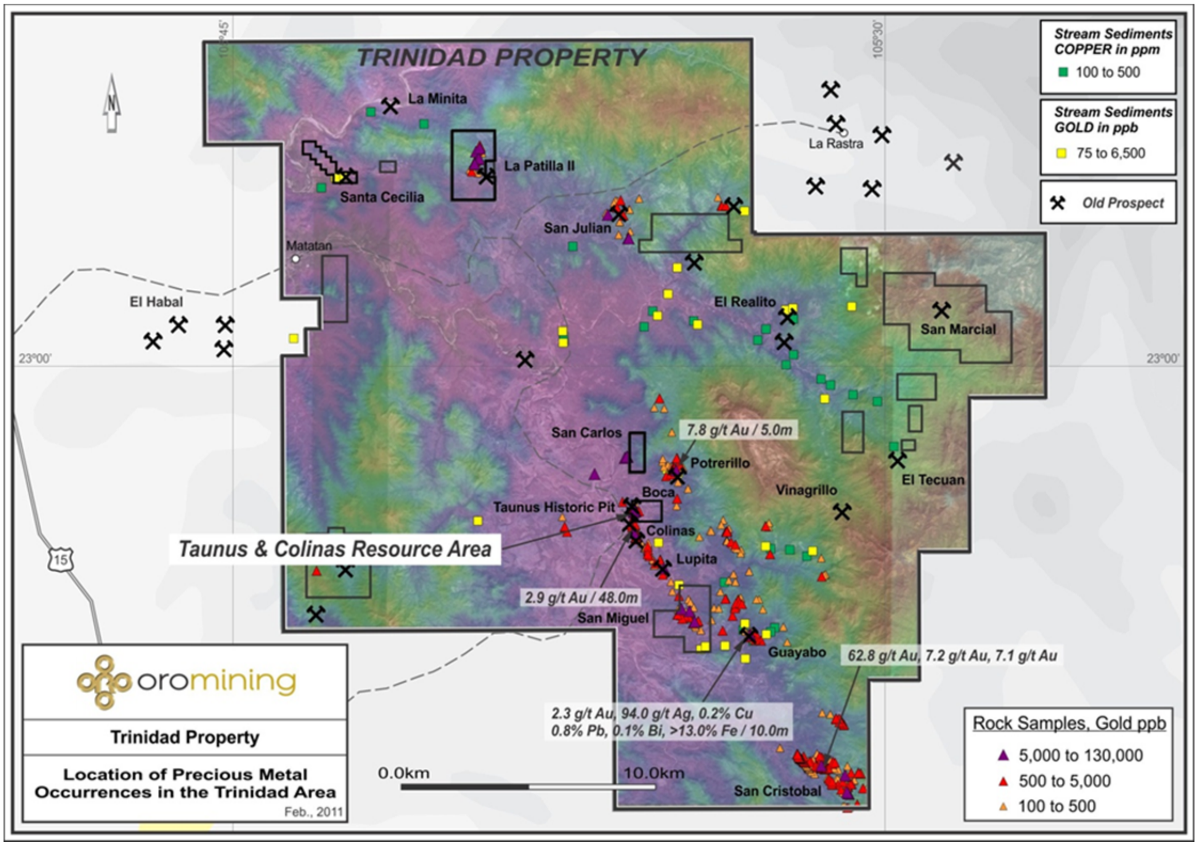
5.1 Regional Geology

Section 5.1 has been excerpted from the Jutras and Powell, 2008 Technical Report. Changes to headings and standardizations have been made to suit the format of this report. Changes to the text are enclosed in brackets or in sentences containing SRK.

The project lies within the moderately extended part of the Tertiary Basin-and-Range Province, and is underlain by Tertiary volcanic, volcaniclastic and intrusive rocks of the Sierra Madre Occidental geologic province. These rocks comprise late Cretaceous to Eocene volcanic arc rocks of largely intermediate composition, and upper Oligo-Miocene ignimbrites (Barrios Rodriguez et al., 1999; Robertson and Thomson, 1994; Garcia Padilla et al., 2000). Intermediate to felsic intrusions are exposed at low topographic level, and are likely part of the Laramide Sinaloa Batholith, which extends from southern Sinaloa into Arizona. Quartz-feldspar porphyry intrusive rocks intrude mid-Tertiary andesite volcanic rocks, suggesting a mid-Tertiary or younger age for this intrusive unit.

Jurassic to lower Tertiary plutonic and sedimentary basement rocks of the Guerrero Terrane are exposed in the region, but have not been identified on the property. Regional topography is controlled by NW- and ENE-trending oblique extensional faults of Tertiary age.

The Trinidad property occurs within the Rosario mining district, of which the Rosario mine was probably the most significant past Au-Ag producer (Figure 3-1). The ore mined in the district was predominantly exploited from gold-rich intermediate sulfidation veins hosted by NW- and ENE-trending faults (Tarnocai and Fonseca, 2006). At Guayabo and La Viguita on the Trinidad property, small-scale exploitation of W-Mo veins was recorded. Figure 5-1 shows the location of precious metal mineral occurrences and past producers in the Trinidad area.



Source: Jutras and Powell, 2008

Figure 5-1: Location of Precious Metal Occurrences in the Trinidad Area

5.2 Local Geology

The Taunus resource area occurs in a local low lying area on the eastern margin of a broad northwest trending valley. The Taunus area is underlain by a sequence of mid-Tertiary andesitic flows and volcaniclastic units. The volcanic units have a gentle to moderate dip to the east. Contacts between units appear to be associated with the NW-SE trending Taunus Fault system.

5.3 Property Geology

The Taunus resource area lies near the contact between intermediate volcanic rocks to the west, and felsic intrusive to sub-intrusive rocks to the east. The contact between the two units forms a narrow “v” shape with the andesitic units to the west and a quartz feldspar porphyry breccia at the center of the “v”. The eastern contact is defined by the near vertical, north-south trending Chandler Fault. This fault forms the eastern wall of the current pit and is the boundary between the quartz feldspar porphyry breccia to the west and a fractured quartz feldspar porphyry to the east (Figure 5-2).

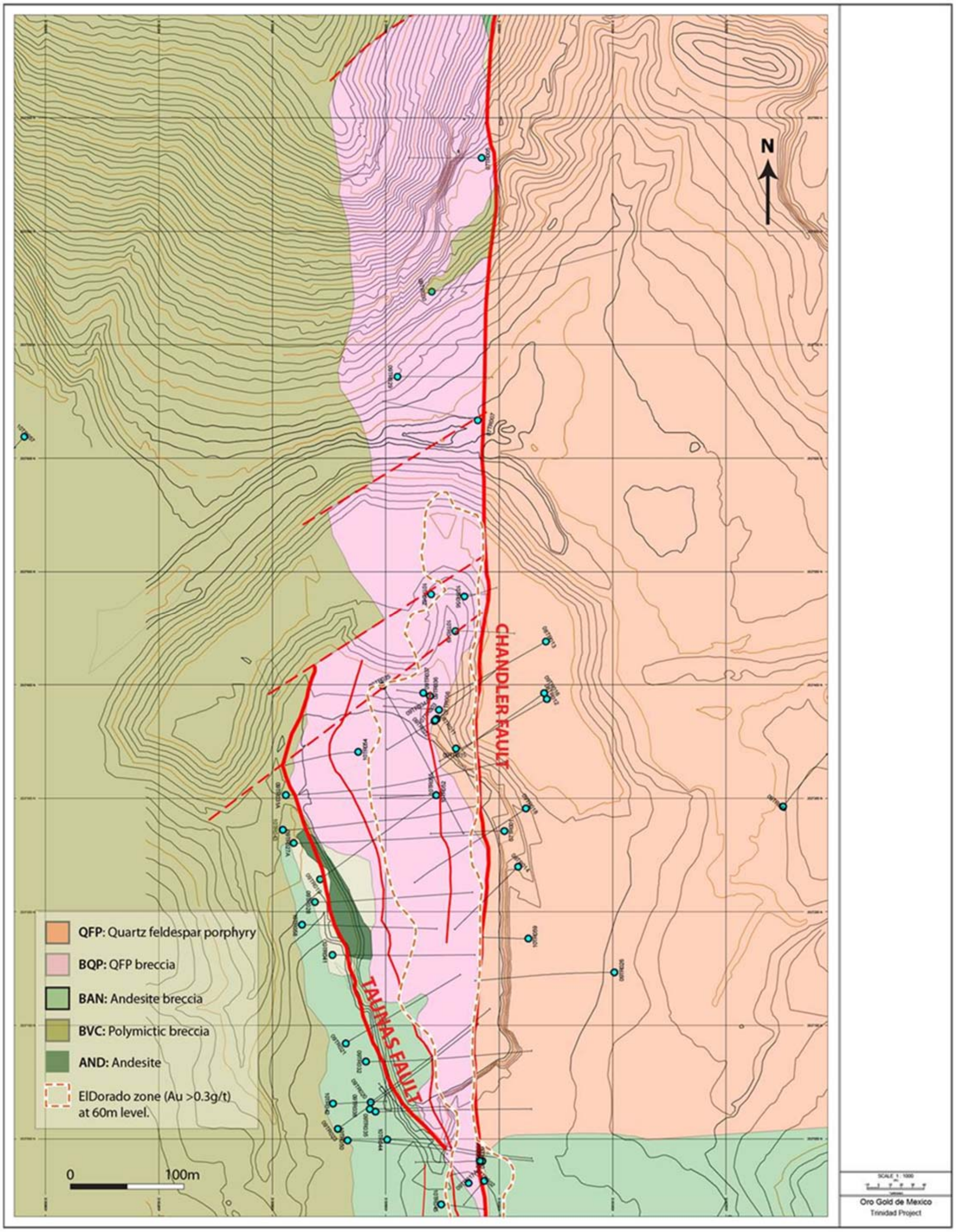
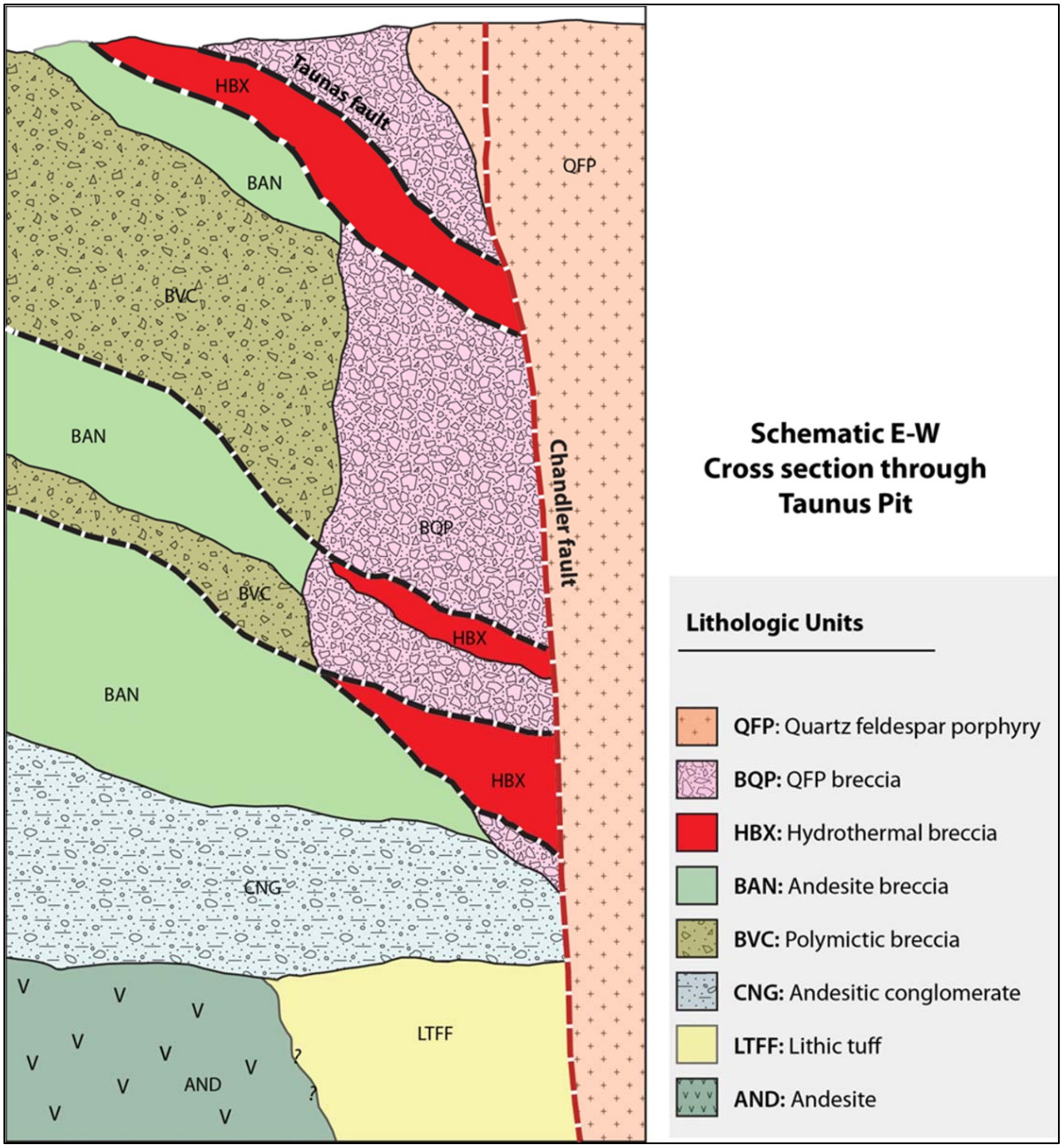


Figure 5-2: Geology of the Taunus Area

In cross section, the north-south trending Chandler fault marks a boundary between intensely fractured and brecciated units to the west and moderately fractured to massive rocks to the east. On the western side of the Chandler fault, the upper 200 m consists of felsic to intermediate volcanic – subvolcanic units that are intensely fractured to brecciated underlain by a semi-consolidated andesitic conglomerate (Figure 5-3).



Source: Marlin Gold (not to scale)

Figure 5-3: Schematic E-W Cross section through Taunus Pit

Lithologic information below the conglomerate is sparse due to the paucity of drillholes at this depth (approximately 300 m vertical below surface). Two units have been intersected below the conglomerate, a massive andesite interpreted to be a flow, and an andesitic–dacitic lithic tuff. The lithic tuff is intensely clay altered and pyritic in all of the holes that have intersected this unit. The relationship between the two lowest units has not been established.

Gold is hosted in two main zones at Taunus, the Eldorado zone, which was outcropping when Exploraciones Eldorado started mining operations in 1996. A portion of the zone still exists below the bottom of the current pit. The second zone is called the HS zone and was discovered by Marlin Gold in 2009 zone which was discovered by Marlin Gold and is located approximately 30 m below the Eldorado zone or approximately 150 m below surface. The zones are discussed in more detail in section 7.

5.3.1 Local Lithology and Alteration

Eight lithologic units have been identified and systematically logged in the Taunus resource area. Figure 5-3 is a schematic sketch of the units shown on a generalized east west cross section through the historic pit.

Petrographic and megascopic descriptions are based on observations by Frank Powell and descriptions provided by Enrique Quintanilla (Quintanilla, E, 2011).

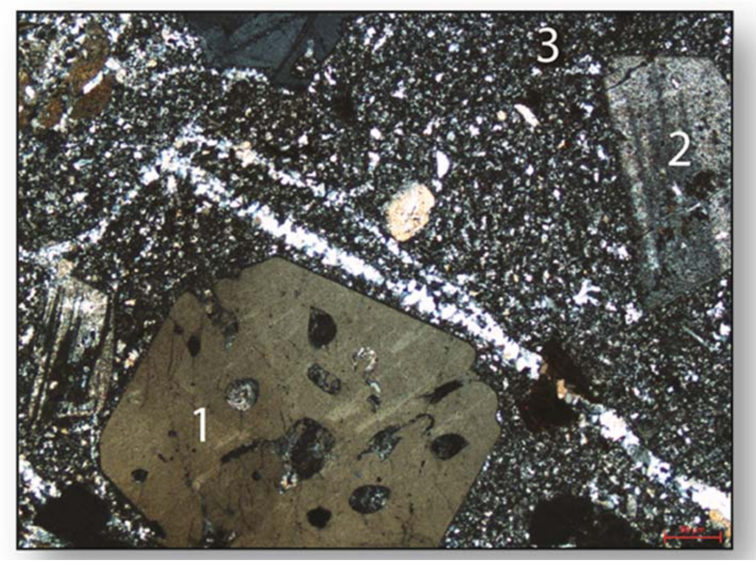
QFP – Quartz Feldspar Porphyry

The QFP is a buff to light pink colored porphyritic apahanitic rhyolite composed of medium grained euhedral feldspar crystals, quartz eyes and minor biotite as fine grained subhedral laths. The QFP outcrops to the east of the north-south trending Chandler fault and in the north-east face of the historic Taunus pit. The QFP has been observed mainly in diamond drillholes which have crossed the Chandler fault from the west at depths of about 200m vertically.

Alteration of the QFP as observed in drillholes is variable with zones of hydrothermal biotite which occur as fine grained shredded biotite in the groundmass and as occasional centimetric biotite veins. Silicic alteration is present as cloudy white silica flooding in the groundmass sometimes forming a clast supported breccia texture.

Geochemical anomalies in the QFP have not been detected east of the Chandler fault. To the west of the Chandler fault, the QFP outcrops at the northeastern portion of the pit. The QFP in this area is moderately to intensely fractured. Approximately six vertical meters of this unit is exposed in the pit. The lower contact is a low angle fault which puts the overlying QPF in contact with the BQP below.

In thin section, the QFP is characterized by a porphyrytic-aphanitic texture composed of reabsorbed quartz (15 to 25%), crystalline potassic feldspars (40 to 50%) and plagioclase laths (30 to 40%). The groundmass is composed of fine grained crystalline feldspars and to a lesser extent very fine grained quartz. Electron probe micro-analysis (EPMA) indicates the composition of the plagioclase is labradorite (An_{50-70}) and the alkaline feldspars are anorthoclase (Figure 5-4).



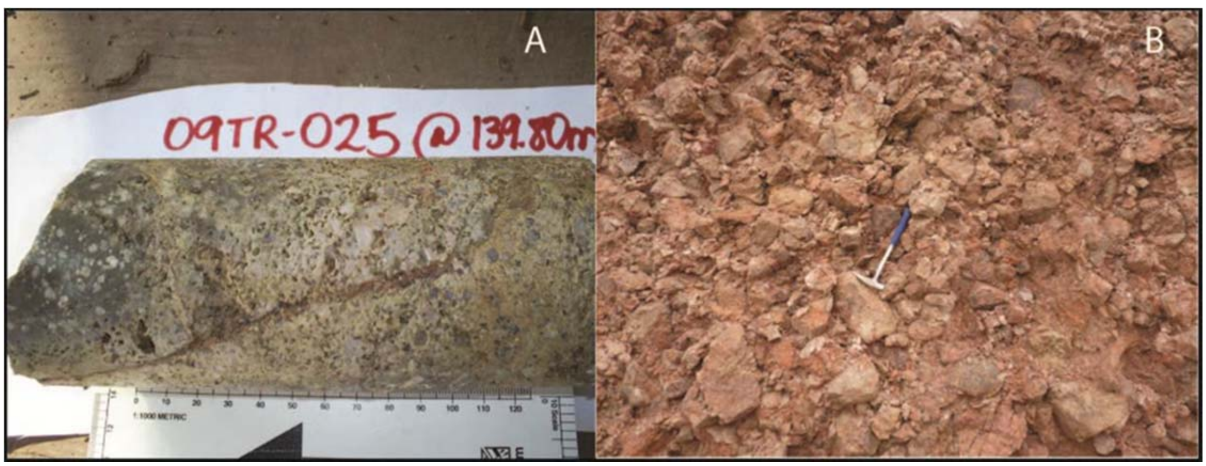
Note: shows reabsorbed quartz (1), plagioclase phenocrysts (2) and a fine grained quartz feldspar matrix (3)

Figure 5-4: Thin section of Quartz Feldspar Porphyry (QFP)

<u>BQP – Quartz Feldspar Porphyry Breccia</u>

The BQP is the main host of gold mineralization in the HS zone at Taunus, it is also considered to be the main host of gold in the Eldorado zone based on historic descriptions.

The BQP appears to be the same lithology as the QFP, but is separated as a mappable unit in both outcrop and core based on its textural characteristic of being a clast to matrix supported breccia. Clasts vary in size from large boulders up to several meters in size to pebbles, and are angular to subangular. The matrix is predominately composed of rock flour although in places the rock flour appears to have weathered to clay (Figure 5-5).



Note: A) BQP from diamond drillhole 09TR025 at 139.8 m. This sample shows a clast that appears fairly fresh next to a bleached, sericitic clast. B) Outcrop of the clast supported breccia in the Bocas area.

Figure 5-5: BQP - Quartz Feldspar Porphyry Breccia in Core and Outcrop

Alteration of the BQP in hand specimen is variable. Silicic alteration usually occurs as microveins of cloudy quartz, and less commonly, silica flooding of the matrix. Selective clay alteration of the feldspars can be observed locally. In this type of alteration, the feldspars are variably replaced by clay, probably after sericite. Where the alteration is more intense the clay is often washed out leaving lath shaped vugs. This type of alteration appears to be spatially related to the HBX which is the main host of gold at Taunus.

In thin section, the BQP is very similar in composition to the QFP. Alteration observed in this section consists of variable silica flooding of the matrix and microveinlets of quartz. Moderate choritization of biotite is also observed.

HBX – Hydrothermal Breccia (Figure 5-6)

The gold bearing zones at Taunus are directly associated with the HBX. The HBX is a chaotic, polymictic, clast to matrix supported breccia. The majority of the clasts are intensely silicified often obliterating original textures. Multiple silica events are recorded resulting in silicified clasts rimmed by silica, goethite, hematite and chlorite. The clasts are angular to sub- angular and vary in size from small pebbles to large boulders. The matrix is often orange red to red and generally composed of rock flour +/- clay.

The HBX occurs as distinct units which vary in thickness from 6 m to over 50 m. The HBX units occur at or near the contact between other rocks types and generally follow the trends of the other volcanic units. At least three stacked zones of HBX have been mapped with diamond drilling in the northern portion of the Taunus resource. Additional units are inferred to exist in the upper Eldorado zone however this has not been confirmed with drilling to date. The HBX bodies measure 50 to 100 m wide in an east west direction 4 to 50 m thick and have a strike extent of approximately 300 m. The HBX is interpreted as representing multiple silica events in a structurally active zone that has been brecciated, and subject to multiple pulses of silica +/- gold +/- iron +/- chlorite. It is likely that the last event was a tectonic event which produced the rock flour and did not have associated silica.

Alteration is dominated by silica flooding which has usually destroyed original rock textures in hand specimens. Occasional faint textures are discernable which are similar to the QFP and/or Andesite. Rare, fairly fresh clasts of both QFP and Andesite have been mapped within the HBX unit, usually close to the contacts with other units. Iron oxides are very common within the HBX as staining and as occasional rims on clasts. Specular hematite is common as fine grained disseminated aggregates. Chlorite and/or other massive green/grey minerals also occur as rims on clasts and are often associated with higher gold grades. Vuggy texture in the HBX is not uncommon and is inferred to be from weathering of other minerals. Visible gold is rare, but has been identified in several samples with gold assays greater than 30g/t. Most of the visible gold that has been identified occurs as very fined grained gold in vugs or open spaces. Sulfide minerals are extremely rare, however very minor amounts of fine grained pyrite, galena and sphalerite have been identified. Secondary minerals include rare chrysocolla, often associated with higher gold grades and manganese. A grass green mineral inferred to be motramite-descloizite is often associated with the HBX. This mineral series is a secondary lead-zinc-copper vanadanite and is described as a secondary mineral frequently found principally in the oxidized zone of ore deposits (mindat.org).

In thin section, remnant porphyritic textures similar to the QFP are observed. The rock matrix is largely silicified and cut by quartz veinlets commonly with disseminated or aggregate specular hematite. Three types of alteration were observed in the groundmass: 1) quartz-sericite-pyrite (now hematite), 2) hydrothermal biotite flooding and 3) hydrothermal specular hematite   Gold occurs in vugs and less commonly in a goethite replacement of pyrite or encapsulated within the quartz matrix.

Note: A) HBX in hole 09TR018 shows the different events of brcciation and stockwork veins. Specular hematite is abundant in the matrix. B) pervasive silicification in the HBX, note the vuggy nature of the core.

Figure 5-6: HBX – Hydrothermal Breccia in Core

AND – Andesite (Figure 5-7)

The AND is a green/grey massive medium to fine grained porphyritic andesite. This unit outcrops at the northern end of Bocas and has been encountered in drillholes below the conglomerate (CNG) and polymictic breccia (BVC).

The andesite often has calcite veining and is usually propylitically altered. Disseminated fine grained magnetite is common in this unit. Gold anomalies have not been identified in this unit to date.

Note: A) Massive andesite in hole 07TR005 located in the Bocas area. The rock has microveins of calcite, the matrix is oxidized giving it a reddish hue. B) Outcrop of AND in the area north of Bocas.

Figure 5-7: AND – Andesite in Core and Outcrop

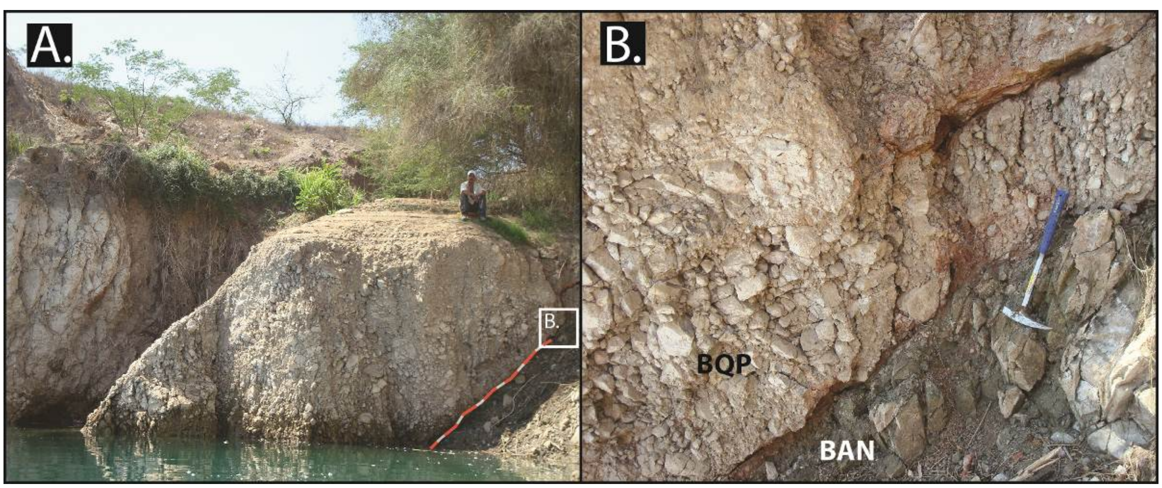
BAN - Andesite Breccia (Figures 5-8 and 5-9)

The BAN is a matrix supported breccia with dominantly andesite clasts. Clasts are angular to subangular and range in size from 1 to 20 cm. Angular clasts of carbonate veins are not uncommon in this unit. The matrix is composed of rock flour to clay.

This unit is intercalated with the BVC in the western side of the Taunus pit and it is the dominant rock type in the southern portion of the pit. Several occurrences of HBX and associated gold zones occur in the southern portion of the Taunus resource area.

Note: A) BAN from drillhole 09TR027A showing matrix supported breccia and angular clasts of andesite and calcite. B) BAN from a fault zone at 111.1m in hole 09TR028.

Figure 5-8: BAN – Andesite Breccia in Core



Note: A) the red line indicates the location of the Taunus fault looking south. B) detail of the Taunus fault looking to the south. Here, the Taunus fault is the contact between the BQP in the hanging wall and the BAN in the footwall. The BQP in this area is silicified and has gold mineralization.

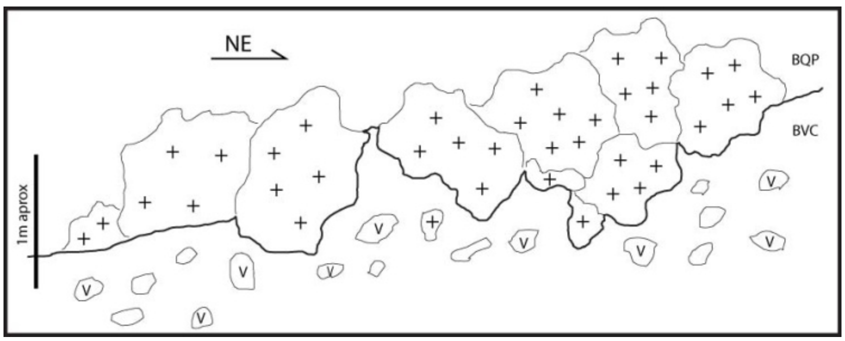
Figure 5-9: BAN/BQP Contact in Outcrop

BVC – Polymictic Breccia (Figures 5-9, 5-10 and 5-11,)

The BVC is a heterogenous, matrix supported breccia. Clasts are chaotic and angular to subrounded. The size of the clasts varies from 1cm to more than 1m. The majority of the clasts have an andesitic composition. Texturally, approximately 80% of the clasts are massive and interpreted to be derived from andesitic flows, the rest of the clasts are interpreted to be derived from andestic tuffs and ignimbrites. The matrix is a brown to orange rock flour and in places can be coarser grained giving it a sandy appearance.

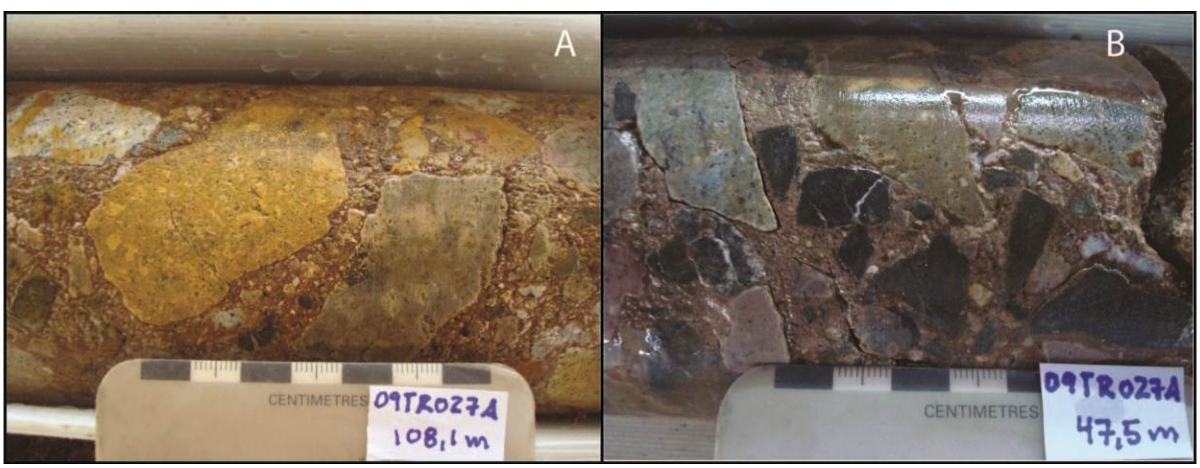
Alteration is quite variable in this unit with some clasts moderately to strongly propyliticallly altered and other clasts are moderately to strongly bleached and sericitized.

This unit does not appear to be an important host to gold mineralization, although some gold anomalies are associated with this unit, usually close to the contact with the HBX.



Note: Sketch of the sedimentary contact between BQP and BVC based on field observations in Bocas

Figure 5-10: Sketch of BQP/BVC Contact



Note: A) BVC in hole 09TR027A, note the different levels of alteration and oxidation of the clasts. B) Sample of BVC showing matrix supported angular clasts, most of the clasts in this sample are andesitic composition.

Figure 5-11: BVC – Polymictic Breccia in Core

CNG – Conglomerate (Figure 5-12)

The CNG is a multicolored, heterolithic, matrix supported conglomerate. The clast distribution is chaotic. This unit is differentiated from the BVC due to the roundness of the clasts. It has been encountered at depth, below the BQP on northwest side of the chandler fault.

Note: Sample of CNG showing variable intensities of oxidation of rounded clasts of andesitic lavas and tuffs. Note there is no sorting of the clasts.

Figure 5-12: CNG – Conglomerate in Core

LTFF - Lithic Tuff (Figure5-13)

The LTFF is a grey-green, dacitic, lithic tuff. Textures in this unit vary from massive to laminated. In some places the unit displays a fine laminar banding with irregular ragged shaped clasts interpreted to be juvenile fragments.

This unit has been intersected in several deep holes below the conglomerate as well as at depth in the southern portion of the pit area.

The LTFF is displays intense quartz-sericite-pyrite alteration in all of the places it has been intersected in drilling. Often the contact is strongly oxidized giving it an earthy red color for several meters and then it grades into a sulfide stable green-grey color. The oxide zone is usually massive clay and several holes have been lost in this unit since they were not able to penetrate the massive clay.

Gold or other geochemical anomalies have not been identified in this unit to date, however the intensity of the alteration in the deepest portions of the current drill coverage indicates that the mineralized system is still open at depth.

Note: Sample of LTFF from core showing massive and finely laminated clasts. Note the irregular jagged grey fragments in the upper portion of the photo which are interpreted to be juvenile fragments. The green hue is due to pervasive sericite alteration, this sample has approximately 3% of very finely disseminated pyrite.

Figure 5-13: LTFF- Lithic Tuff in Core

5.3.2 Alteration

The bulk of gold mineralization is contained in the HBX which displays multiple stages of silicification and brecciation. Quartz-sericite-hematite (after pyrite) alteration has been identified in thin section within the HBX unit in the HS zone. Quartz sericite pyrite has also been identified at depth in the LTFF unit below the current resource.

The entire resource area is strongly oxidized which tends to mask original alteration minerals apart from silica. Specular hematite is often observed in the BQP and HBX units. Strong iron oxide staining and fracture coating is generally associated with gold mineralization.

Alteration in the individual units is discussed in the previous section.

5.3.3 Structure

Section 5.3.3 has been excerpted from Goodman S. 2010, an SRK structural geology memo.

The gold deposits in the Taunus area lie within a NW-SE trending structural ‘corridor’, and are hosted within a variety of siliceous breccias developed in volcanic and volcaniclastic host rocks. Much of the breccia at Taunus appears to be tectonic in origin i.e. breccia related to repeated fault movement, although volcanic and hydrothermal processes have also produced breccias and/or modified fault breccia.

The Chandler fault is a subvertical structure, trending N-S, which bounds the deposit to the east. It can be traced for several kilometers northwards from the Taunus area, however south of the pit it is not easily identified, suggesting a step in the N-S fault system, probably along an E-W fault trend. The last phase of movement on the Chandler fault is considered to be post-gold event, as the fault cuts mineralized zones without showing alteration or mineralization within the fault zone. A precursor to the late fault was probably a controlling structure to the mineralized system, however, as there is a spatial relationship between fault termination and hydrothermal activity.

To the west of the Chandler fault there is a lozenge-shaped zone containing the known gold mineralization, which is delineated by faults in a variety of orientations, as identified by ground mapping, drillhole intersections and by IP survey data. The degree of brecciation and silicification along the fault planes precludes kinematic analysis from fault plane structures; however the fault pattern is consistent with that characteristic of a right-lateral strike-slip system. The fault network may have formed on a releasing bend on the Chandler Fault, located on a step or jog in the N-S fault system, as suggested by the apparent southerly termination of the Chandler fault.

Irregularities on strike-slip fault systems tend to focus fluid flow as they are zones of localized intense deformation, with steep structure able to tap fluids from depth. Gold mineralization in the Taunus area is closely correlated with fault breccias along steep structures and their intersections. Within the fault bounded domain, flat-lying breccia zones have developed as accommodation structures linking steep faults, possibly along original bedding orientation. These flat-lying breccias are also gold-mineralized as they provided fluid pathways at the time of hydrothermal fluid migration.

On a regional scale, three main phases of deformation can be distinguished: pre-mineralization regional compression during the Laramide orogeny which caused the margin-parallel NW-SE structural grain of the area; the change to a right-lateral strike-slip regime coincident with hydrothermal activity and gold mineralization centered on steps in the fault system; and post-mineralization Basin and Range style extension which reactivated the pre-existing fault network to produce tilted fault block architecture.

The prospective stratigraphy of the lower volcanic complex is best exposed in valleys, due to the geometry of the tilted fault blocks; however the distribution of mineralized zones is controlled by the pre-existing strike-slip fault system. In a right-lateral strike slip system, right stepping jogs are zones of dilation that may focus fluid flow; in this area N-S trending segments such as the Chandler fault represent right-stepping jogs within the overall NW-SE structural corridor.

5.4 Mineralization (Item 11)

Section 5.4 has been excerpted from the Jutras and Powell, 2008 Technical Report. Changes to headings and standardizations have been made to suit the format of this report. Changes to the text are enclosed in brackets or in sentences containing SRK.

Descriptions of mineralization at Taunus are provided by Eldorado (Robertson and Thoman, 1994; Exploraciones Eldorado, 1995) from geologic work completed prior to open-pit mining. Three mineralized areas were defined along a northerly striking corridor, from Colinas in the south, through Taunus, and Bocas in the north (Figure 5-14). All three areas received historic artisanal exploitation. Only the Taunus area has experienced detailed modern exploration and exploitation.

5.4.1 Mineralized Zones

Taunus Zone

Potentially economic mineralization identified by Marlin Gold and Eldorado (Robertson and Thomson, 1994; Exploraciones Eldorado, 1995) at Taunus (Figure 5-15) is consistent with intensely silicified tectonic and quartz-matrix hydrothermal breccia, with chlorite and hematite, and occasional adularia. Quartz-textures are described as massive, fine-grained and cherty, drusy coatings, colloform banding and cockscomb. Amethyst also occurs in the Taunus area. Distal alteration is described as quartz veinlets in both andesite and quartz-feldspar porphyritic rocks, and weak propylitic alteration in the andesite rocks. Carbonate minerals are not reported, but may occur outside of areas affected by sulfide weathering.

The breccia zones are hosted within a quartz-feldspar porphyry unit, and its contact with adjacent andesite rocks. This lithologic contact is described as both structural, and intrusive in nature.

Silicified breccia bodies in the Eldorado zone dip steeply east in the southern part of the Taunus area, and sub-horizontal to shallow east-dipping in the central and northern part of the Taunus zone. The breccia zone appears to be constrained between the Colinas, Taunus and Chandler faults. The HS zone is located below the Eldorado zone and has a shallow easterly dip in the northern part of the taunus area, the zone is not well contrained in the southern part of taunus (Figure 5-15). Eldorado (Exploraciones Eldorado, 1995) interprets breccia-hosted mineralization as a relatively high-level expression of a precious metal epithermal system, overlying a moderate to steep-dipping north-south trending “feeder” structure.

Metallic assay analysis and petrographic evaluation of gold-bearing specimens, conducted by Metcon Research and Sid Williams on behalf of Eldorado (Robertson and Thomson, 1994; Exploraciones Eldorado, 1995) indicate gold occurs as native gold, is fine-grained, and is not subject to appreciable “nugget” effect. They report an Ag:Au ratio of 6:1, making Taunus a relatively gold-rich intermediate sulfidation-state epithermal system. The area evaluated by Exploraciones Eldorado is entirely within the supergene oxidation zone. Primary sulfide minerals are therefore rare, comprising very minor pyrite and chalcopyrite, digenite, and covelite. Copper occurs as the secondary copper minerals chrysocolla and malachite, and with Pb and Zn as a secondary vanadian mineral, mottramite. Silver occurs as native silver, and jalpaitite. Silver and the base metal elements are reported to have a good positive correlation, and very poorly correlated with gold.

Colinas and Bocas Zones

The Colinas zone (Figure 5-15) extends southward from the Taunus zone, along the Colinas fault. Quartz veins occur within chlorite and hematite altered andesite volcanic rock wallrocks. Eldorado (Exploraciones Eldorado, 1995) describes the style of alteration as similar, but weaker than the Taunus zone. Auriferous mineralization at Colinas was historically exploited by artisanal miners. Bocas Zone

The Bocas zone (Figure 5-16), 275 m north of Taunus, hosts artisanal gold exploitation. Mineralization occurs as cobbles and boulders of hematite-rich silicified breccia, visually identical to ore material exploited by Exploraciones Eldorado from the Taunus pit. It is interpreted as a shallow-dipping layer of colluvial material, in the hangingwall of a post-mineral fault.

Type, Character and Distribution of Mineralization

Petrographic descriptions were completed on two polished thin sections collected from panned concentrates of two metallurgical samples from the HS zone. The samples were composites of PQ half–core from diamond drillhole 10TR034. The first sample represents 18 m down hole and was collected from the interval 132 to 150 m. The average core recovery from this interval is 87% and is considered to be good core recovery; the weighted average grade was 10.7g/t gold. The second sample represents 16.5 m and was collected from the interval 150 to 165.5 m. The average core recovery from this interval is 40% and is considered to be poor recovery; the weighted average grade was 7.8 g/t gold.

The style of mineralization and alteration is conserved to be representative of the HS zone based on geologic logging of other diamond holes in the same zone.

The following results are extracted from the report prepared by Economic Geology Consulting, March 6, 2010.

Petrographic descriptions are based on preserved textures/mineralogy in small chips, typically <4 mm. Many of the chips are from a porphyritic igneous rock that includes resorbed quartz phenocrysts, and euhedral feldspar and biotite phenocrysts in a finely crystalline matrix of vuggy, granular to reticulate quartz, locally chalcedonic.

Gold occurs in vugs and less commonly in a goethite replacement of pyrite or encapsulated within the quartz matrix.

The rock matrix is largely silicified and cut by quartz veinlets commonly with disseminated or aggregate specular hematite.

Three types of alteration were observed in the groundmass: 1) quartz-sericite-pyrite (now hematite), 2) hydrothermal biotite flooding and 3) hydrothermal specular hematite.

Results from the petrographic analysis are consistent with megascopic observations by Marlin Gold's geologists who have described the HS zone as a matrix supported breccia where the matrix is composed of a red/orange hematitic rock flour/clay. Clasts are described as subangular multi-phase silica often displaying colliform banding of calcedonic quartz, goethite and a dark grey green mineral interpreted to be chlorite/biotite. Qualitatively the higher grades appear to be associated with the presence of fine laminations chlorite/biotite.

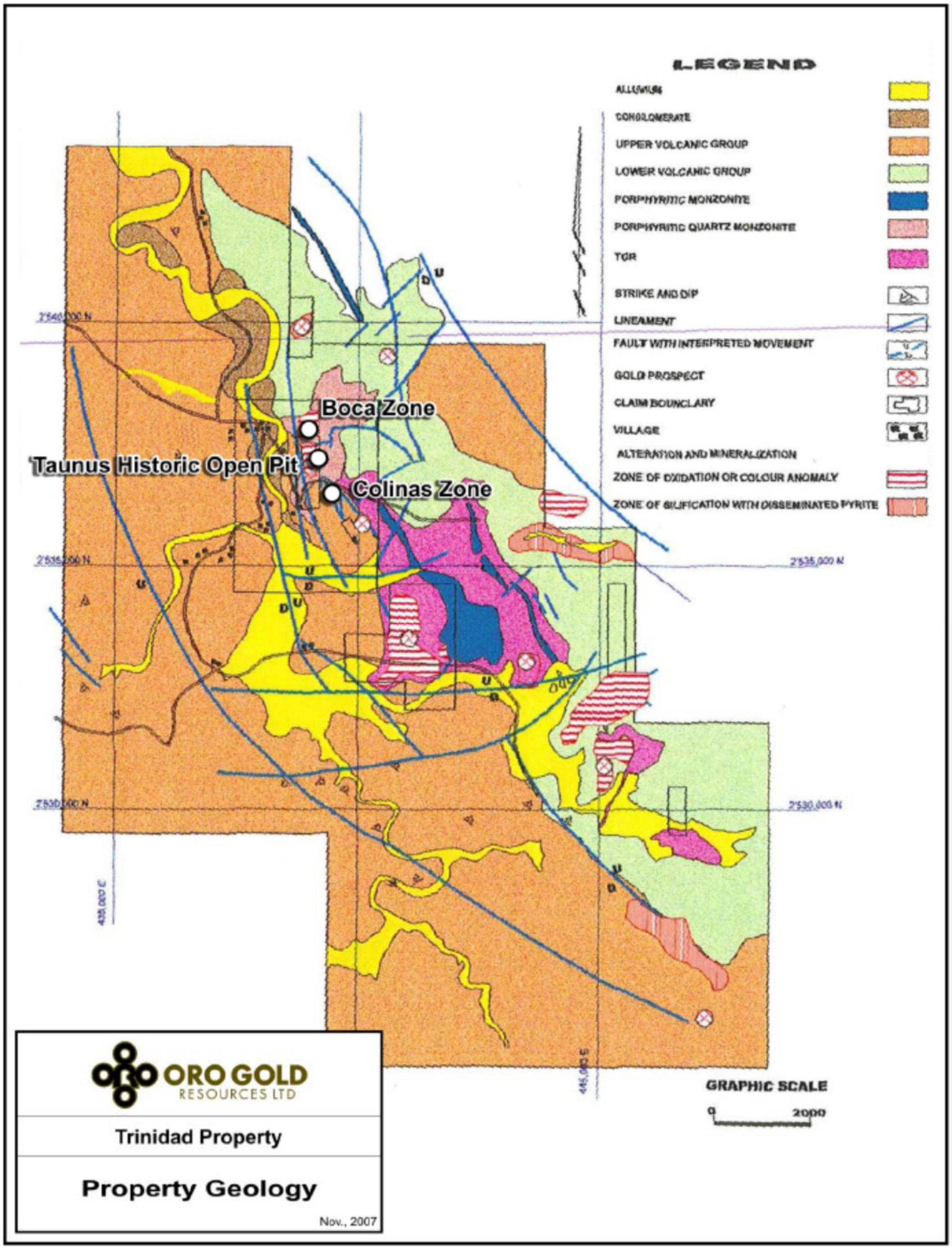
Visible gold is rare and has only been observed in a few core samples with assay grades over 30 g/t. When observed it has been very fine grained gold in open vugs or associated with vuggy hematite.

The Taunus deposit is a complex deposit composed of a number in individual zones. Ten individual solids were modeled in the Taunus area based on geology and grade. The two main zones are the Eldorado Zone and the HS Zone.

The Eldorado zone was modeled using 4 different zones. These zones extend from Bocas in the north to El Tanque in the south, a distance of 1.4 km. The main portion of the Eldorado zone located in the pit is approximately 125 m wide in an east west direction and extends for approximately 625 m in a north south direction. The entire zone is approximately 95 m thick and is composed of three zones which average about 15 m in thickness.

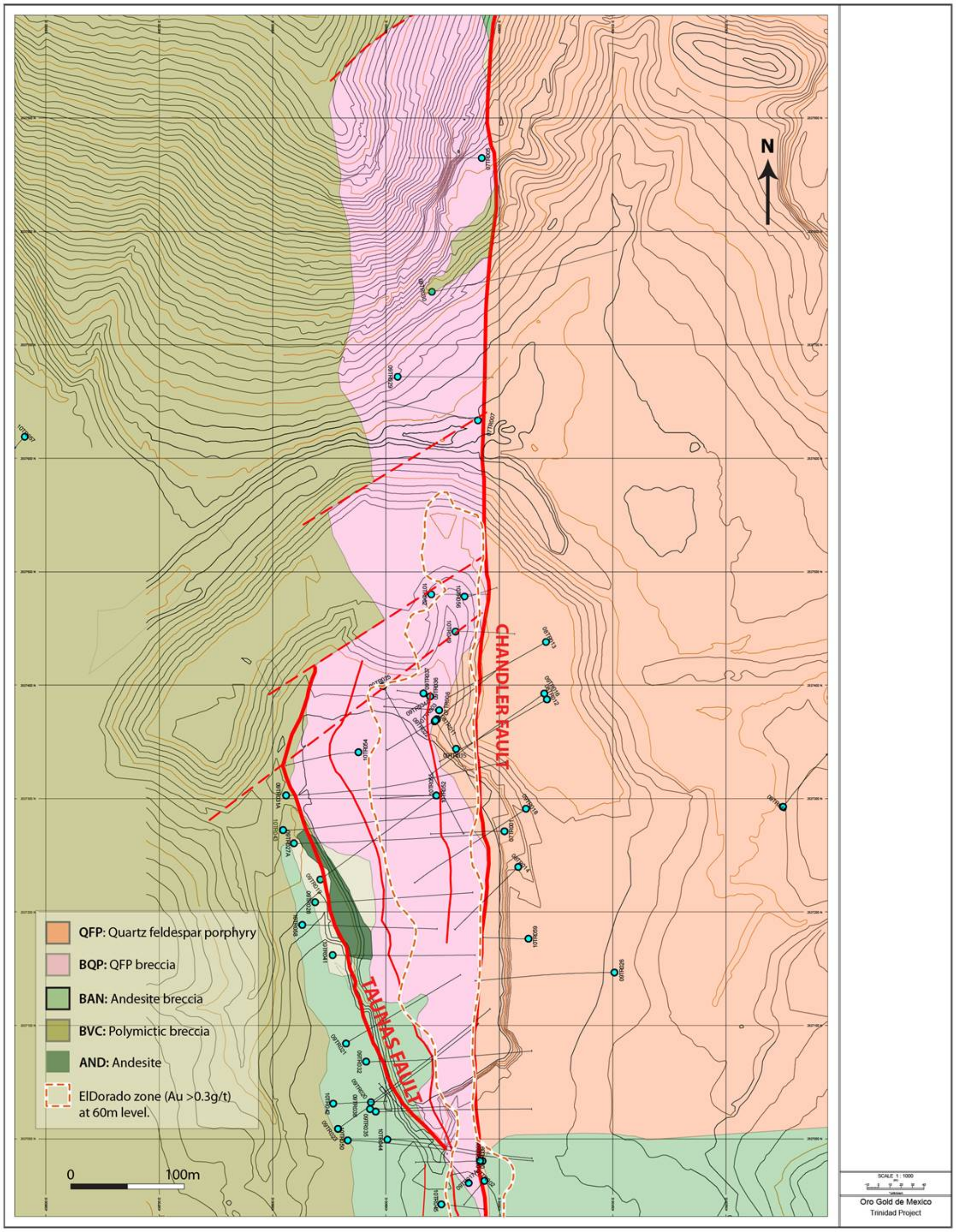
The HS Zone is located approximately 30 m below the Eldorado zone and starts at a depth of about 150 m below surface. The HS zone was modeled using six different zones. The main zone measures approximately 400 m in a north south direction and about 75 m in an east west direction. The thickness varies between 15 and 40 m with an average thickness of 25 m. The other HS zones are 50 to 250 m in length and about 75 m in an east west direction, with the thickness ranging from 5 to 15 m. The full extents of the HS zone have not been determined to date.

The Colinas zone is located approximately 350 m southeast of the southern extent of the Eldorado zone in El Tanque. The Colinas resources are based on 12 different zones. These zones are about 3 to 15 m in thickness and extend 30 to 100 m in a north south direction and about 40 to 100 m in an east west direction. The Colinas zones are not well understood at this time and significant mineralization potential remains in this area.



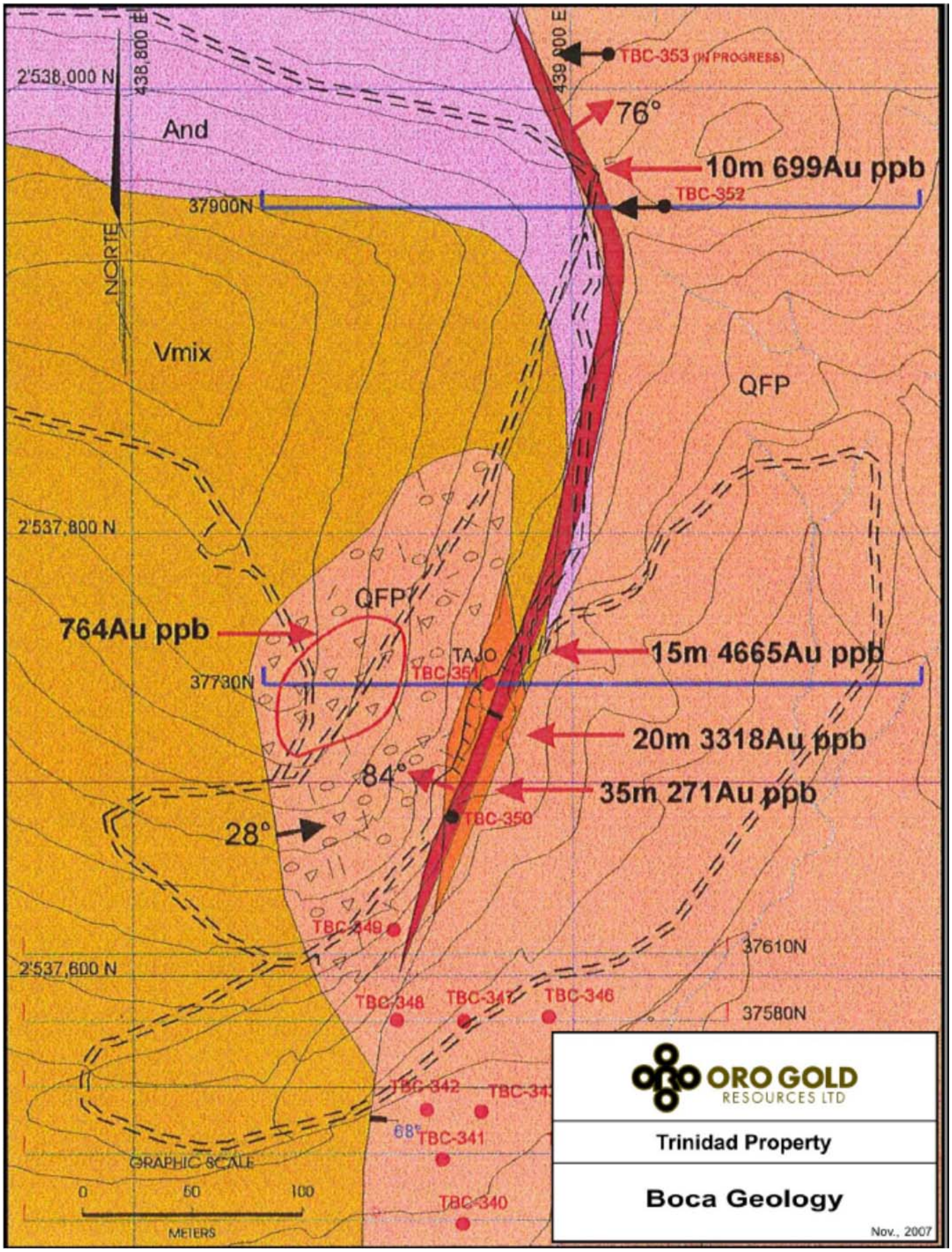
Source: Jutras and Powell, 2008

Figure 5-14: Geology of the Trinidad Concession



Source: Oro Gold de Mexico

Figure 5-15: Geology of the Colinas Area, Trinidad Concession



Source: Jutras and Powell, 2008

Figure 5-16: Geology of the Bocas Area, Trinidad Concession

6 Deposit Type (Item 8)

Section 6 has been excerpted from the Jutras and Powell, 2008 Technical Report. Changes to headings and standardizations have been made to suit the format of this report. Changes to the text are enclosed in brackets or in sentences containing SRK.

The Sierra Madre Occidental geologic province is richly endowed with precious metal deposits (Staude and Barton, 2001), most of which are considered related to porphyry Cu-(Au), and epithermal systems. Gold mineralization at Trinidad has been described as vein and hydrothermal and tectonic breccia-hosted low sulfidation epithermal style mineralization (Robertson and Thoman, 1994).

Epithermal vein systems in Mexico largely date from 48 Ma to 18 Ma (Camprubi et al., 2003), and are controlled by Tertiary extensional structural fabrics, as is volcanism of the SMO. In the Sinaloa and parts of western Durango region, most precious metal veins are northwest trending, and northeast trending.

Epithermal systems may be classified as high, intermediate, and low sulfidation styles. They are characterized by the sulfidation state of the hypogene sulfide mineral assemblage, and show general relations in volcano-tectonic setting, precious and base metal content, igneous rock association, proximal hypogene alteration, and sulfide abundance (ie., John, 2001; Sillitoe and Hedenquist, 2003). Mineralization in all occurrences is of the type formed under epizonal conditions, that is, generally within 2 km of the paleo-surface. Veins in epithermal systems often display epizonal textures indicative of repetitive and sustained open-space filling, and boiling.

Significant members of the low sulfidation class of epithermal systems include Sleeper, Midas, and El Penon. Those associated with bimodal basalt-rhyolite sequences and subalkaline magmas display illite proximal alteration zones, with adularia and local fluorite. They generally display low total sulfide content (<2 volume %). Base metal sulfides occur in very low abundance, and systems tend to be Au-rich. Selenides are common in some systems. The alkaline magma associated systems are temporally associated with alkaline basalt and trachyte, have roscoelite-bearing illite+adularia proximal alteration, more abundant sulfides (up to 10% volume), and selenides are uncommon. Both subclasses contain pyrrhotite, pyrite, and minor arsenopyrite. Low sulfidation epithermal systems often have Ag:Au ≤15, and <200 ppm Cu (Sillitoe and Hedenquist, 2003).

Low sulfidation epithermal veins are generally not considered transitional to intermediate sulfidation state epithermal systems (Sillitoe and Hedenquist, 2003), although this is based solely on the different tectonic environments under which they may typically form. It does not exclude them from occurring in a similar area however. They are related to andesite, rhyodacite and occasionally rhyolite sequences. Adularia is rare to absent in the proximal alteration assemblage, and the gangue contains abundant, often manganiferous, carbonate. Sulfide content in veins typically exceeds 5% volume, and comprises pyrite, Fe-poor sphalerite, galena, chalcopyrite, and tennanite-tetrahedrite. Selenides and pyrrhotite are uncommon, and Mexican examples tend to be Ag-rich, with Ag:Au exceeding 10:1, and often >100:1. Significant members of the intermediate sulfidation epithermal class are well represented in Mexico, and include Fresnillo and Pachuca-Real del Monte. The Plomosas mine at La Rastra, located 19 km northeast of Taunus, has characteristics typical of an intermediate sulfidation state vein system. Although poorly documented, precious metal occurrences and past-producing mines in the El Rosario district, including those in the El Rosario town area, are best characterized by Au-rich intermediate sulfidation state veins (Tarnocai and Fonseca, 2006).

Most significant members of both classes have vertical mineralized extents of <1 km, often <500 m. Mineralized material is hosted by fault-related veins and breccias, and elevated precious metal content occurs in plunging, lenticular zones within the plane of the vein (chutes). Hydrothermal breccia and stockwork vein bodies are common in some orebodies (McLaughlin, Cerro Crucitas) and may be associated with areas of restricted hydrothermal flow and elevated fluid pressure, and host rock mechanical competency (Hedenquist, et al, 2000).

Vertical zonations in metal content occur in some low and intermediate sulfidation state systems (i.e., Albinson et al., 2001). In systems displaying such zoning, gold, silver, mercury and tellurium are relatively enriched in the upper portions of the system, and base metal contents occur in higher concentrations at deeper levels in the system.

The occurrence of precious metal mineralization associated with quartz veins with epizonal textures, silicification, and propylitic wallrock alteration, support a low to intermediate sulfidation state vein interpretation for the Taunus mineral system. Apparently hypogene covelite and digenite occur with pyrite in the auriferous zone, and suggest intermediate to high sulfidation-state conditions. The authors consider that precious metal mineralization at Taunus is associated with an Au-rich, intermediate sulfidation state epithermal vein system.

7 Exploration (Item 9)

Section 7.1 through 7.1.1 has been excerpted from the Jutras and Powell, 2008 Technical Report. Changes to headings and standardizations have been made to suit the format of this report. Changes to the text are enclosed in brackets or in sentences containing SRK.

7.1 Historical Exploration Work

Exploration work conducted prior to Marlin Gold's involvement in the Trinidad property is considered historic and is briefly discussed in the history section of this report.

7.2 Exploration Work Undertaken by Marlin Gold

Regional-scale exploration work was conducted by Marlin Gold, and by Minera Camargo S.A. de C.V. on behalf of Marlin Gold, throughout the Trinidad property during 2005 to 2006. This led to smaller scale exploration work by Marlin Gold within the Trinidad (Taunus) resource area beginning in 2007. Property scale work included prospecting and lithology/alteration mapping, in conjunction with the collection of approximately 703 stream sediment samples, 509 rock grab, chip, and channel samples, and 482 soil samples. The objective of the regional exploration program was to provide a preliminary geological and geochemical assessment of the regional potential for the area, and to better understand the regional geologic framework in which the Trinidad resource area resides.

In early 2007, Marlin Gold carried out a diamond drill program totaling 727.6 m at its San Miguel gold prospect(2), located approximately 4 km due southeast of, and along the same structural trend that passes through the Trinidad resource area.

Additional exploration work focused on defining new drill targets in the Taunus and Colinas areas, as well as regional exploration was conducted during the period June to September 2007. During this period 634 channel samples, 15 rock chip samples and 181 soil samples were collected in the Taunus and Colinas areas. Regional exploration consisted of 342 channel samples 150 rock Chip samples and 1,152 soil samples. Results of this program were used to target drillholes for an 8,000 m diamond and reverse circulation drilling program which commenced in October 2007. In December 2007, Marlin Gold completed ten HQ diamond drillholes in the Taunus and Colinas areas, for a total of 1,154 m with a maximum depth of 150 m and an average depth of 110 m. In January of 2008 Marlin Gold drilled 34 reverse circulation holes in the Taunus, Colinas and Bocas areas for a total of 6,524 m with a maximum depth of 264 m and an average depth of 190 m. An additional 26 shallow RC holes to a depth of 20 m were drilled in the Taunus South and Buena Vista town site totaling 622 m.

In 2009 Marlin Gold completed 6,800 m of diamond drilling comprising 27 holes in the Taunus, Bocas and Colinas areas. The focus of this drilling was to define resources at depth in the Taunus pit area and to define the extents of the newly discovered HS zone. Marlin Gold also completed an IP and mag survey over the Bocas, Colinas and Taunus areas in an effort to identify new drill targets. The geophysical program did identify a broad resistivity anomaly interpreted to be a pull apart basin.

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2 The purchase option on the San Miguel concession, which was listed in the previous NI 43-101 was cancelled by mutual agreement of the parties in 2010.

Subsequent drill testing of a number of geophysical anomalies in the 2010 program did not yield new resources.

In 2010, Marlin Gold completed 5,510 m of diamond drilling in 24 holes in the Colinas, Taunus and Bocas areas. An additional 8,347 m in 69 reverse circulation holes were completed in the same areas. Four shallow RC holes were also completed to test for shallow resources in the Taunus south area these holes amounted to 122 m. A pilot sonic drill program of 650 m in 17 holes was completed to test the sonic drilling technology and determine the maximum depth that sonic drilling could penetrate. The results of the sonic program were positive and a 5,000 m sonic drill program is planned for 2011.

In 2011, Marlin Gold continued its exploration drill program. This included the completion of 38 sonic drillholes. This drilling is discussed further in Section 8. In addition, Marlin Gold completed a structural geology study with Sally Goodman, of SRK. The study involved mapping of structures and lithologies within the Taunus Pit as well as the analysis of the regional geological structures.

Areas Outside of Taunus

Early-stage exploration work in surrounding areas named Tequila, Cerro Colorado, and San Cristobal has been performed. This includes geophysics, stream sediment sampling, soil sampling, grab and trench rock sampling, reverse circulation drilling and diamond drilling. A summary of the work is presented in Table 7.1.1.

Table 7.1.1: Description of Exploration Work Conducted in Areas Surrounding Taunus

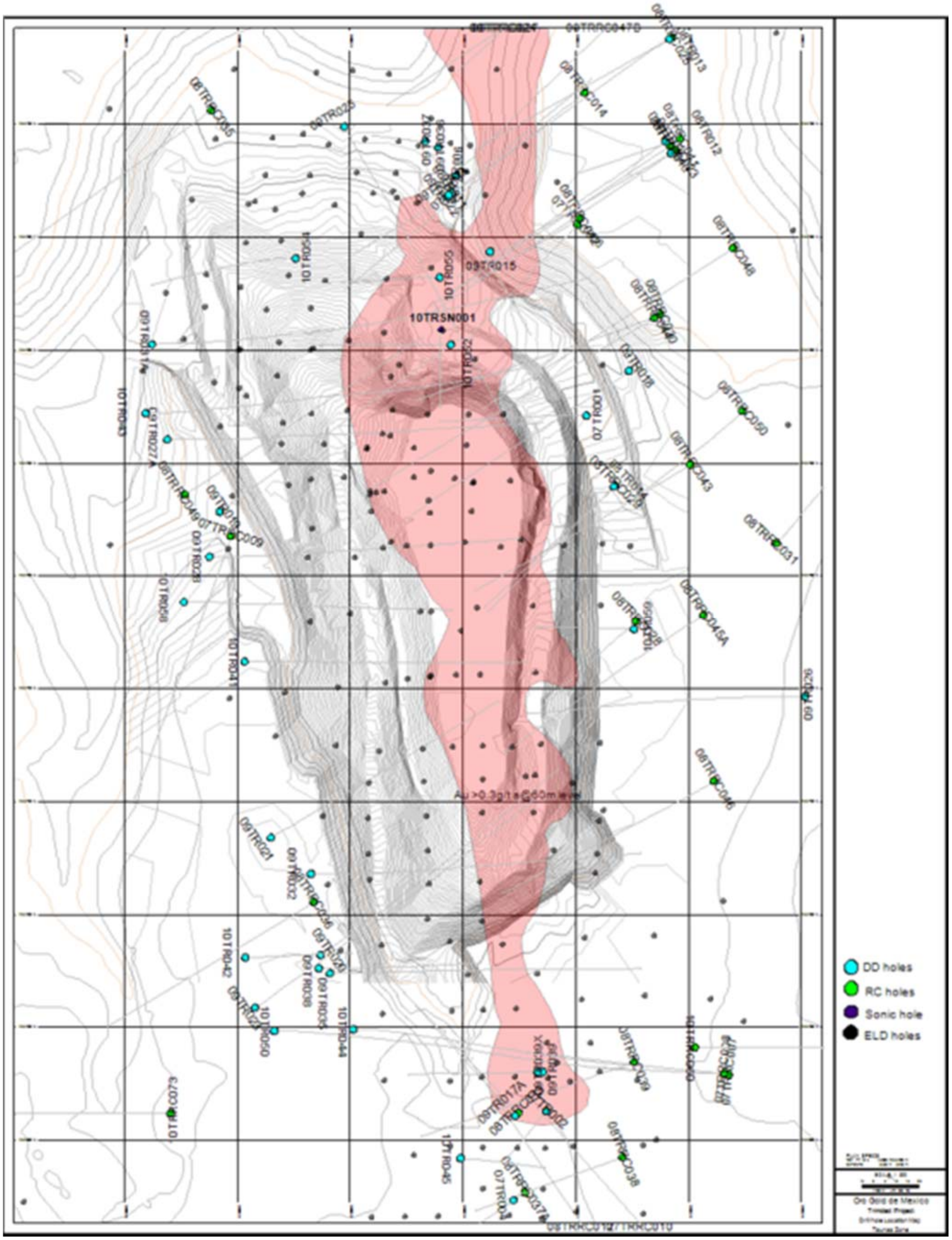
Area	Rock Samples	Soil Samples	Stream Sediment Samples	Magnetometer	RC Drillholes	RC meters	Diamond Drillholes	DDH meters
Tequila	827	4,169	101	2 line km	10	1,888	8	720
San Cristobal	1,637	4,841	32		6	1,184		
Cerro Colorado	143	997	26					

The surface sampling and geophysics were done to focus exploration culminating in drill targets. Targets were identified, and if warranted, drill programs were planned and executed.

Significant drill results in the Tequila area are 6 m of 1.72 g/t gold. However, there are numerous intervals of elevated copper and molybdenum with maximum levels of 1,533 ppm Cu and 180 ppm Mo.

At the San Cristobal area, 3 drillholes intersected significantly anomalous values for gold, silver copper and molybdenum. The anomalous gold values range from 30 m at 0.45 g/t to 6 m at 0.67 g/t. The most significant silver, copper and molybdenum geochem values are 10 m at 58 ppm, 4 m at 1,044 ppm and 16 m at 362 ppm, respectively.

These areas are still under active exploration, but are lower priority than the immediate Taunus resource areas, and follow-up exploration programs will be prioritized accordingly.



Source: Oro Gold de Mexico (2011)

Figure 7-1: Location of Drillhole Type in the Taunus and Colinas Resource Areas

8 Drilling (Item 10)

The historic drilling in the Taunus and Colinas resource areas is discussed in Section 4.2 and the extents of historic drillholes are show in in Figure 7-1. Drilling assays and geologic information for drillholes completed by Cobre de Hercules, S.A are not available to Marlin Gold. These holes were inclined diamond drillholes. Later drilling conducted by Exploraciones Eldorado was by reverse circulation, in vertical holes.

8.1 Marlin Gold Drilling, 2007 to 2010

Marlin Gold commenced diamond drilling on the property in October 2007. Drill programs between 2007 and 2010 have been discussed by previous technical reports including Jutras and Powel (2008) and Volk (2011).

8.2 2011 Drilling Program

The following is a brief synopsis of the new drilling available since the February 2011 mineral resource estimate, completed by SRK.

The previous mineral resource (February 2011) included diamond drill holes to 10TR057 and RC holes to 10TRRC076 and did not include any sonic drill hole data.

Three diamond drill holes were completed in 2010 after the resource cutoff date, all in the southern portion of the Taunus area. All diamond drill holes were drilled by BDW and all RC holes were drilled by Drift Drilling.

Late in 2010, a sonic drill rig was brought in from Boart-Longyear to test the viability of the sonic technique due to recovery concerns from traditional diamond drilling methods. Hole 10TRSN001 demonstrated that the sonic rig was able to penetrate and recover this material and thus, five more holes were drilled to compare results of the sonic technique to the previous methods.

The late 2010 results indicated that the sonic method would give more accurate results and solve many recovery problems. The sonic drill program commenced in February 2011, with a plan to complete 5000 m of drilling. Unfortunately, the drilling proved to be slower than projected and in early June, the program was abandoned because of the inability to maintain stable drill platforms, due to the excessive precipitation associated with the seasonal rains. A total of 3703 m from 32 holes was completed during the 2010 to 2011 sonic drill program.

The main target for the drill program was to define a “feeder” zone connecting the shallow mineralized zone mined by Eldorado (termed the Eldorado zone by Marlin Gold) and the deeper, higher grade zone discovered by Marlin Gold dubbed the HS zone. There were a few holes testing for structural corridors possibly hosting offset mineralization as well, but this type of mineralization was not found. Some exploratory holes were planned in the original 5000 m program, but these were not completed because of the truncation of the program.

As with the historical drillholes, the 2011 sonic holes were challenging to complete due to poor ground conditions and the largely unconsolidated coarse breccia material. This made completion of downhole surveys difficult and in 2011, 18 of the 32 sonic drillholes did not have any down hole surveys completed. The lack of down hole surveys does make the spatial location of samples within these holes slightly uncertain, however the large diameter of the sonic holes (5 to 7 inch) likely resulted in relatively small deviations.

A summary of drilling campaigns at Taunus and Colinas are shown in Table 8.1.1.

Table 8.1.1: Summary of Drilling Campaigns at Taunus & Colinas

Type of Drilling	Year	# of holes	Meters	Contractor	# of Assays
Diamond	2007	10	1,110	Tecmin	974
Diamond	2008	4	650	Corebeil	332
Diamond	2009	27	6,810	Boart Longyear	3,611
Diamond	2010	24	5,530	Boart Longyear	2,894
Total Diamond Drilling		**65**	**14,100**		**7,811**
RC	2007	10	1,970	Layne	984
RC	2008	66	8,440	Layne	4,217
RC	2010	73	8,470	Drift	4,196
Total RC Drilling		**149**	**18,880**		**9,397**
Sonic	2010	17	650	Boart Longyear	586
Sonic	2011	32	3,840	Boart Longyear	3,047
Total Sonic Drilling		**49**	**4,490**		**3,633**
Total of All Drilling		**263**	**37,470**		**20,841**

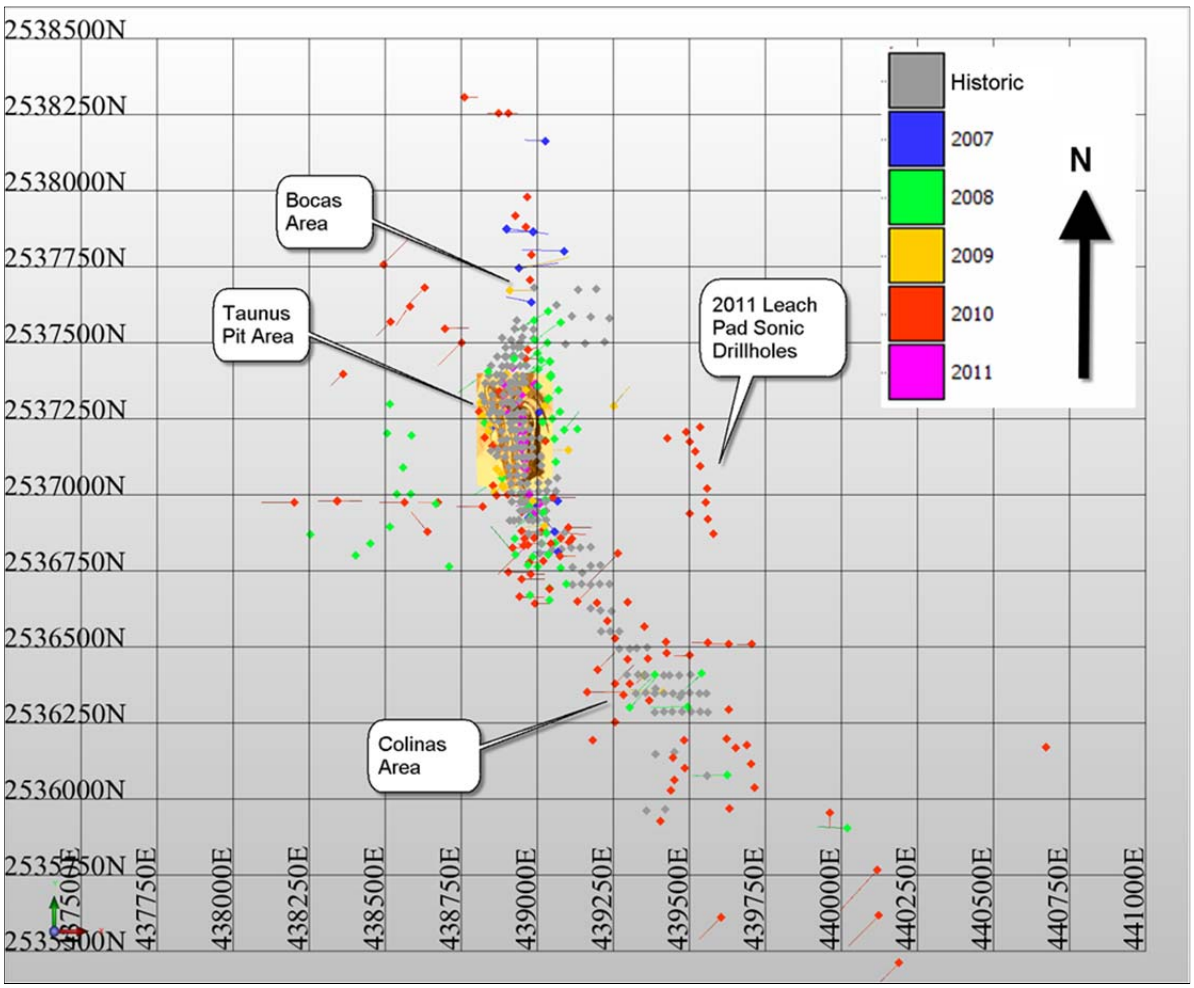


Figure 8.1: Relative Drill Hole Locations by Year

8.3 2011 Drilling Procedures

Drilling was supervised by qualified Marlin Gold geologists who were stationed nearby the drill sites 24 hours per day during the program.

Drill locations were planned by a geologist and located on plans and sections. Once the planned drillhole was approved by management, the drillhole location was located in the field by a geologist using a GPS. The geologist flagged the location and supervised the pad construction. In the case of a diamond hole, a sump was usually dug nearby with a backhoe.

To mark the location of all completed holes, a PVC or a metal tube was cemented into the hole and the drillhole number was marked on the tube as well as etched into the cement.

Down hole survey readings were usually taken once a hole was completed. Readings were typically taken at the bottom of the hole and then every 50 m upward, however many holes did not have completed surveys due to unstable ground conditions at the completion of the hole. Down hole surveys were completed utilizing a flex-it down hole tool drawn through the open hole where this was possible.

Due to generally poor sample recovery with conventional diamond core and reverse circulation drilling, Marlin Gold employed sonic drilling in the Taunus Pit during 2011, with the objective to provide a better measure of grade and continuity of mineralization. The sonic drilling was completed under contract to Boart-Longyear.

Sonic drilling employs the use of high-frequency, resonate energy to advance a core barrel or casing into subsurface formations. The sonic drill has the capability to recover unconsolidated material with a minimum of disturbance as well as coring consolidated material. Contamination is minimized by the process of overriding the core barrel to limit the amount of foreign material that can enter the sample. As there is no wire line system, the complete drill string must be pulled to retrieve the sample. Three sizes of core barrels are used; nominally 5" (12.7 cm), 6" (15.24 cm) and 7" (17.78 cm). Typically, the hole will begin with the larger diameter core, reducing with depth.

Sonic drilling is a relatively new alternative for drilling rock. The drill uses sonic vibrations applied to the pipe to drill and retrieve continuous samples from broken and semi-consolidated material without the use of water or mud. Many types of conventional drilling techniques which rely on fluid or air circulation do not efficiently recover soft, unstable, varied and highly broken material.

8.4 Interpretation and Relevant Results

SRK is of the opinion that the Marlin Gold drilling operations were conducted in a professional manner, and that the RC chips, diamond drill core and sonic drill material were handled, logged and sampled in an acceptable manner by professional geologists and the results are suitable for use in resource estimation.

Reputable contractors using industry standards have conducted the drilling. Drilling conditions on the Taunus project are considered to be very challenging due to the nature of the rock in most of the resource area. Unconsolidated breccias have been encountered to depths of 250 to 300 m. Due to these conditions, it is not uncommon to get drilling rods stuck in the hole or lose a drillhole due to caving. As such, drillers need to case the hole as deep as possible and keep the hole “conditioned” using a variety of drilling muds. Marlin Gold has worked closely with the drilling contractors to develop and refine techniques to optimize the drilling.

The majority of the historical drilling completed by the previous mining company Exploraciones Eldorado was completed using reverse circulation drilling. Marlin Gold made the initial discovery of the HS zone approximately 150 m below the current pit bottom by using RC drilling. Subsequent diamond twins of the RC holes were substantially higher grade than their RC counterparts. Additional twins and closely spaced diamond drillholes confirmed that the RC drilling had a consistent and substantial low bias as compared to the diamond holes. Due to this bias, Marlin Gold has restricted the use of RC drilling to initially identify new targets. Resource drilling has been dominated by diamond drilling. While diamond drilling appears to produce more reliable results, recovery is often an issue due to the unconsolidated nature of the rock in the area.

In an effort to determine the most suitable drilling technique for the unique rock conditions at Taunus, Marlin Gold tested and then utilized sonic drilling techniques in late 2010 and all 2011 drilling. Results from this test program indicate that sonic drilling was able to achieve a maximum depth of 200 m below surface with nearly 100% recovery of the unconsolidated material. The sonic drill was also able to penetrate up to several meters of hard rock.

Completing down hole surveys remains a challenge in the Taunus area, as the poor rock conditions within the breccias result in drill holes collapsing quickly after completion. This is especially true with the sonic drillholes where the flex-it tool is manually lowered below the drill rods. The paucity of down hole surveys in the 2011 data, creates some uncertainty regarding mineralization volumes, however SRK believes that this is mitigated by the early drilling data as well as the dense drill holes spacing.

9 Sample Preparation, Analysis and Security (Item 11)

9.1 Drill Hole Sampling

Historic sample data was obtained from Exploraciones Eldorado's Feasibility study drill programs; they describe their sampling and procedures in their Feasibility and summary geology reports (Robertson and Thomson, 1994; Exploraciones Eldorado, 1995).

All Eldorado drillholes were completed by reverse circulation, collecting samples at 2 m intervals. For dry holes, a double cyclone was used to minimize loss of fine material. A rotary splitter was used for wet holes, and in some cases, a series of two rotary splitters were used. Samples were collected from both outlets of the splitter. Flocculent was used to facilitate sedimentation of fine material in pails before collection in sample bags. Sample bags were "micropore" sample bags. For dry samples, a Jones splitter was used to reduce sample size to between 2 and 5 kilograms.

During the 2007 to 2011 drill program, Marlin Gold sampled both diamond and reverse circulation drillholes. Diamond sample intervals were marked by a geologist using pink flagging and sample tags. Intervals were based on geology and have a minimum length of 40c m and a maximum length of 2 m. Recovery and RQD was measured on all sample intervals. Drill core was photographed in both wet and dry conditions, using a digital camera. Diamond drill samples were cut in half with a gas powered diamond core saw. Half samples were placed in a plastic bag with a sample number and sealed with a plastic tie and sent to the Inspectorate sample prep facility in Durango, Mexico.

Reverse circulation chips were sampled on 2 m intervals at the drill rig. Drilling consisted of two 12 hour shifts and sampling was under direct supervision of a geologist on both shifts. For dry holes samples were collected using a cyclone into a large plastic bag inside a rice bag. Dry samples were weighed to check for recovery and then split at site with a Jones splitter. The Jones splitter was cleaned with compressed air between samples. Wet samples were collected using a rotary splitter into plastic pails. The rotary splitter was set to split the samples into a ¼ and ¾ splits. The ¼ split was transferred from the bucket into clear plastic bags and sealed with a plastic tie. Samples were left to settle and small holes were poked in the top of the bags when the water was clear to drain. On occasion, samples were composed of colloidal material which did not settle, these samples were placed in large double plastic bags inside a rice bag and sent in their entirety to the inspectorate sample prep lab in Durango.

Due to generally poor sample recovery with conventional diamond core and reverse circulation drilling, Marlin Gold employed 'sonic' drilling in the Taunus Pit during 2011, with the objective to provide a better measure of grade and continuity of mineralization. The sonic drilling was completed under contract to Boart Longyear Ltd.

Sonic drilling employs the use of high-frequency, resonate energy to advance a core barrel or casing into subsurface formations. The sonic drill has the capability to recover unconsolidated material with a minimum of disturbance as well as coring consolidated material. Contamination is minimized by the process of overriding the core barrel to limit the amount of foreign material that can enter the sample. As there is no wire line system, the complete drill string must be pulled to retrieve the sample. The sample usually stays in the core barrel and is extruded into a plastic tube pulled over the core barrel. The sample fills the tube in the same manner as a sausage casing is filled. Three sizes of core barrels are used; nominally 5" (12.7 cm), 6" (15.24 cm) and 7" (17.78 cm). Typically, the hole will begin with the larger diameter core, reducing with depth.

When material is very loose and cannot be retained in the core barrel, a special bit with a 'flapper valve' is used. There would usually be some loss of sample when loose material is encountered as the drill string would have to be removed to install the bit/valve, resulting in the material drilled remaining in (or falling to) the bottom of the hole.

9.1.1 Marlin Gold 2011 Sonic Sampling

Due to generally poor sample recovery with conventional diamond core and reverse circulation drilling, Marlin Gold employed 'sonic' drilling in the Taunus Pit during 2011, with the objective to provide a better measure of grade and continuity of mineralization. The sonic drilling was completed under contract to Boart-Longyear.

Sonic drilling employs the use of high-frequency, resonate energy to advance a core barrel or casing into subsurface formations. The sonic drill has the capability to recover unconsolidated material with a minimum of disturbance as well as coring consolidated material. Contamination is minimized by the process of overriding the core barrel to limit the amount of foreign material that can enter the sample. As there is no wire line system, the complete drill string must be pulled to retrieve the sample. The sample usually stays in the core barrel and is extruded into a plastic tube pulled over the core barrel. The sample fills the tube in the same manner as a sausage casing is filled. Three sizes of core barrels are used; nominally 5" (12.7 cm), 6" (15.24 cm) and 7" (17.78 cm). Typically, the hole will begin with the larger diameter core, reducing with depth.

When material is very loose and cannot be retained in the core barrel, a special bit with a 'flapper valve' is used. There would usually be some loss of sample when loose material is encountered as the drill string would have to be removed to install the bit/valve, resulting in the material drilled remaining in (or falling to) the bottom of the hole.

To provide an even split, the sample was frozen in the plastic bag and cut with a diamond saw just as diamond core samples. Water is added to the sample prior to freezing to consolidate dried or damp sections then placed in a custom built 'walk in freezer'.

Prior to shipping to the sample preparation facility, quality control samples including a field blank, certified reference material (standard) and a field duplicate are added into the sample stream at the rate of one of each per 20 samples submitted.

9.2 Sample Preparation

9.2.1 Historical Sample Preparation

Historical sample procedures and analysis is described in Robertson and Thomson (1994), and Exploraciones Eldorado's feasibility report (Exploraciones Eldorado, 1995). All samples collected during the Eldorado pre-feasibility were submitted to Bondar-Clegg's preparation facility in Hermosillo, Sonora. Samples were crushed to 75% passing 10 mesh. A 250 g split was sent to Bondar-Clegg in Vancouver for analysis. A second 250 g split was retained from the reject and analyzed for gold by Bondar-Clegg as an internal replicate, for every fourth sample.

Each split was pulverized to 95% passing 150 mesh using a ring-and-puck pulverizer. Samples were digested by nitric and hydrochloric acid. Silver, copper, lead, zinc, and arsenic were analyzed by ICP. Gold was analyzed by fire assay, with an atomic absorption finish, on a 30 g sample. The detection limit was reported at 5 ppb Au. For samples exceeding 5,000 ppb, samples were analyzed by fire assay with a gravimetric finish.

About every seventh sample was also submitted for check assay to Chemex Labs Ltd., in Vancouver. Gold was analyzed by fire assay, with an atomic absorption finish. The detection limit is reported as 0.03 g/t gold. A group of check samples analyzed by Chemex were also re-numbered, and submitted as blind duplicates, to Bondar-Clegg.

Sample blanks and standards were not inserted by Exploraciones Eldorado into the sample stream. Sample chain of custody was not described in documents available to Marlin Gold. These were fairly standard sample practices at the time the work was completed by Exploraciones Eldorado. Samples, and check samples, were analyzed by internationally recognized labs and are considered to be of reasonable quality. Marlin Gold intends to twin a selection of the historic drillholes as part of the historic assay database validation process.

9.2.2 Marlin Gold 2007-2011 Sample Preparation

Samples were transported by company employees directly to the sample preparation facility of Inspectorate de Mexico, S.A de C.V., in Durango, Mexico, maintaining chain of custody until received by the lab.

Samples were crushed in a jaw crusher to >70% passing 10 mesh (2 mm). A 250 g split of the 10 mesh material was pulverized to >85% passing 200 mesh (75 µm) using a ring-and-puck pulverizer. A split of this pulp was sent to Inspectorate's ISO 9001:2008 certified analytical lab in Sparks (Reno), Nevada, USA.

Gold was analyzed by fire assay fusion of a one assay ton sample (29.17 g) followed by digestion of the resulting bead in aqua regia and analyzed for gold by atomic absorption spectroscopy (AAS). Samples returning an initial assay of greater than 5 g/t gold are re-assayed by fire assay followed by gold separation by nitric acid and a gravimetric gold measurement.

Inspectorate inserts standard reference materials, analytical blanks and pulp duplicates in each analytical batch. The first sample in each workorder is coarse barren rock that is prepared to a pulp in the same manner as the routine samples. It is only analyzed if the first drill sample of the workorder is "suspicious".

9.3 Marlin Gold Quality Assurance and Quality Control Procedures

A comprehensive quality assurance/quality control (QA/QC) program has been established at Trinidad (Taunus) and includes routine insertion of standards, field duplicates as indicated previously, but also includes a preparation duplicate split after coarse crushing in each group of 20 samples. Pulp duplicates taken by Inspectorate were also incorporated with the field and preparation duplicates to monitor precision at each stage of sample mass and particle size reduction.

Analytical results from the quality control samples were continuously and independently monitored to assure that the quality of analyses is maintained. A 'failure table' was been maintained to document departures from the accepted limits and to track corrective action. Assays exceeding the acceptable limits are examined to determine if there has likely been a sample mix-up in the field or laboratory, or whether it is likely an analytical issue that will require corrective action. Where necessary the analytical batch is re-assayed.

9.4 Bulk Density

Specific gravity ("SG") measurements were taken to determine appropriate bulk density values for both the mineralized and unmineralized rocks.

Bulk density samples were collected by four methods:

- waxed core;
- waxed sonic;
- vacuum; and
- in-situ measurement.

The core SG determinations were done on dried waxed core. These types of core samples did not include the matrix of the breccia. The core samples were wax sealed and weighed in water and to calculate a specific gravity value.

The sonic samples represent dried and waxed clasts and matrix. They exhibit generally lower SG values than the core SG values. The lower SG values are most likely due to some swelling of the in-situ volume after extraction. Once again SG was derived by differential weight of the material in air and water.

The vacuum sealed plastic bag samples were tested by first vacuum sealing core material before water immersion measurement of SG. Remnant air in the sealed bag made this method unreliable.

In-situ measurement of density was completed by excavating a known volume from the pit bottom or other location and weight the material derived from the sample.

9.5 Conclusions

Overall SRK has found that the sample preparation, analysis and security has been completed with due care and with effective procedures.

10 Data Verification (Item 12)

Section 10.1 and 10.3.1 have been excerpted from the Jutras and Powell, 2008 Technical Report. Changes to headings and standardizations have been made to suit the format of this report. Changes to the text are enclosed in brackets or in sentences containing SRK.

Data verification procedures of Exploraciones Eldorado specified Robertson and Thomson (1994) and Exploraciones Eldorado (1995).

Five twin RC holes were completed in 1995, twinning previous RC holes TTC-20, TTC-22, TTC-26, TTC-72, and TTC-220.

10.1 Verification by Marlin Gold

10.1.1 Historic Data

Marlin Gold received all property data in paper format. Drill logs were provided without assay data, but with sample interval and sample identification number. Assay data was provided as copies of the original assay certificates. A collar location file, or list of collar coordinates, was not included with the data package.

Marlin Gold manually entered into Excel the geologic data, geologic interval, and sample number. Assay certificates were scanned and processed with optical character recognition (OCR) software. Misidentification errors created by the OCR software amounted to less than 0.1% and were mainly restricted to specific assay report pages. Corrections were then made to the digital database by manual entry. As a final verification step, 2% of the digital geologic data and the sample intervals, each, were checked against the original data. The final scanned assay data were found to be without error, after a random check of 5% of the data. Following this, a check was made of 10% of the assay data, which recorded an error rate of 0.3%.

Drill collar locations were determined from collar location maps. Location maps of Eldorado displayed a “UTM” grid, but did not specify the UTM projection. It was found that the projection was neither NAD 27, NAD 83, nor WGS84. Maps were then scanned, and registered to existing topographic features present in the field, and on the maps. In most areas, the planned and actual pit outline, and existing road and drainage traces, corresponded within 5 m, suggesting relatively small spatial error was imparted by the registration process. Collar locations were then digitized from the maps, and a drill collar location file created from these data. During a site visit in August 2007 a drill collar for hole TCC-090 was spotted in the field and GPS measurements indicated reasonable agreement given the GPS’ accuracy.

10.1.2 Core versus RC drilling

Marlin Gold discovered a new gold zone below the historic pit by using reverse circulation (RC) drilling. The discovery hole, hole 08TRRC023 intersected 100 m at 1.62 g/t gold. Another hole was drilled on the same section and intersected the zone approximately 30 to 40 m away. This hole, 08TRRC040 returned a similar intersect of 74m at 1.45 g/t gold. Marlin Gold then drilled a diamond hole between the two RC holes in order to confirm the gold grade in the RC holes. Diamond hole 08TR012 was lost 40 m prior to achieving the target depth and intersected 61m at 8.5 g/t gold. Results from the diamond drillhole were significantly higher than the RC holes.

Subsequently, Marlin Gold drilled an additional 4 diamond holes as twins or closely spaced holes in order to investigate the apparent bias between the two drilling methods. Results of the core holes confirmed that RC drilling has a consistently low bias in gold grade as compared to diamond holes in the same zones. As a result of this study, Marlin Gold has used RC drilling to explore for new zones and has used diamond drilling results to estimate resources where possible. A comparison of the core versus RC assay results in the higher grade mineralized intervals is summarized in Table 10.1.2.1. From the analysis, it appeared that the RC drilling had a consistently low bias in gold assays as compared to diamond drilling.

Table 10.1.2.1: Comparison of Core versus RC Gold Assays in the HS Zone

Core Hole	From (m)	To (m)	Interval (m)	Gold (g/t)	Distance (m) *	RC Hole	From (m)	To (m)	Interval (m)	Gold (g/t)
08TR012**	151.0	212.1	61.1	8.5	8.0	08TRRC023	148.0	212.0	64.0	1.5
08TR013	147.0	180.6	33.6	3.8	4.0	08TRRC025	150.0	180.0	30.0	3.3
Including	160.9	168.2	7.3	15.8		*including*	162.0	172.0	10.0	8.5
08TR014	106.2	114.0	7.8	5.3	12.0	08TRRC029	96.0	102.0	6.0	2.2
And	131.0	138.0	7.0	9.7		*and*	122.0	130.0	8.0	1.8
09TR016	160.9	221.5	60.6	3.4	10.0	08TRRC040	166.0	266.0	100.0	1.6
Including	160.9	197.4	36.5	5.2		*including*	182.0	214.0	32.0	3.0

* Distance in meters between centers of mineralized intersections in the corresponding core and RC holes; some of the distances are approximate due to lack of down-hole surveys.
** Drillhole abandoned for technical reasons.

10.2 Verification by SRK

10.2.1 Site Visit

SRK visited the Trinidad project in July, 2011. Mike Johnson, P.Geo. (APEGBC# 34923) traveled to the site on July 4, 2011 and left the site on July 6, 2011.

The site visit was completed while drilling was underway on the project. During the site visit, SRK reviewed the data accumulated on the property, the local and regional geology in outcrop, the historic pit, and sonic drill material. SRK also observed and reviewed the processes and procedures associated with sonic drilling, logging, sampling and material handling, and shipping.

SRK found that the procedures and practices being implemented were reasonable for the geology of this deposit and the drilling method being utilized.

10.2.2 Database Verification

SRK downloaded assay certificates from Inspectorate Labs and compared them with the assays from the database. Approximately 6,150 samples were compared and 200 assays from the lab certificates had different values than those in the database. Most of the miss-matched assays turned out to be re-assays of the failed batches. A small portion was identified as data entry errors. Those were corrected in the database.

A portion of historical Eldorado data available in PDF format was converted to ASCII format and compared with the database assays. Approximately 1,550 assays were compared. Some errors in 96 assays were resolved.

After the review, SRK is of the opinion that the Trinidad Project database is sufficiently reliable for resource estimation.

10.2.3 Comparisons of different data types

The Trinidad Project has been drilled out by three types of drill holes: RC, Core, and Sonic. Throughout the history of the project there has been some concern that assays from RC holes may be biased on the low side. In 2009, Marlin Gold drilled four diamond twins of RC holes. Results from the core holes confirmed that the assays from RC drilling are generally biased on the low side.

For the 2011 resource update, SRK made some additional comparisons of assays from different types of drill holes. The comparisons confirmed that assays from RC drill holes are marginally biased closer to surface in the Top domain and strongly biased at depth in the Bottom domain. Figure 10-1 shows how assays from RC holes compare to nearby assays from core and sonic holes. In the Bottom domain, assays from the Sonic drilling or from the core drilling are generally much higher. For this reason, for the estimation, assays from RC drilling in the Bottom domain were not used. Note that a description of the Top and Bottom zones is provided in the Resource Section.

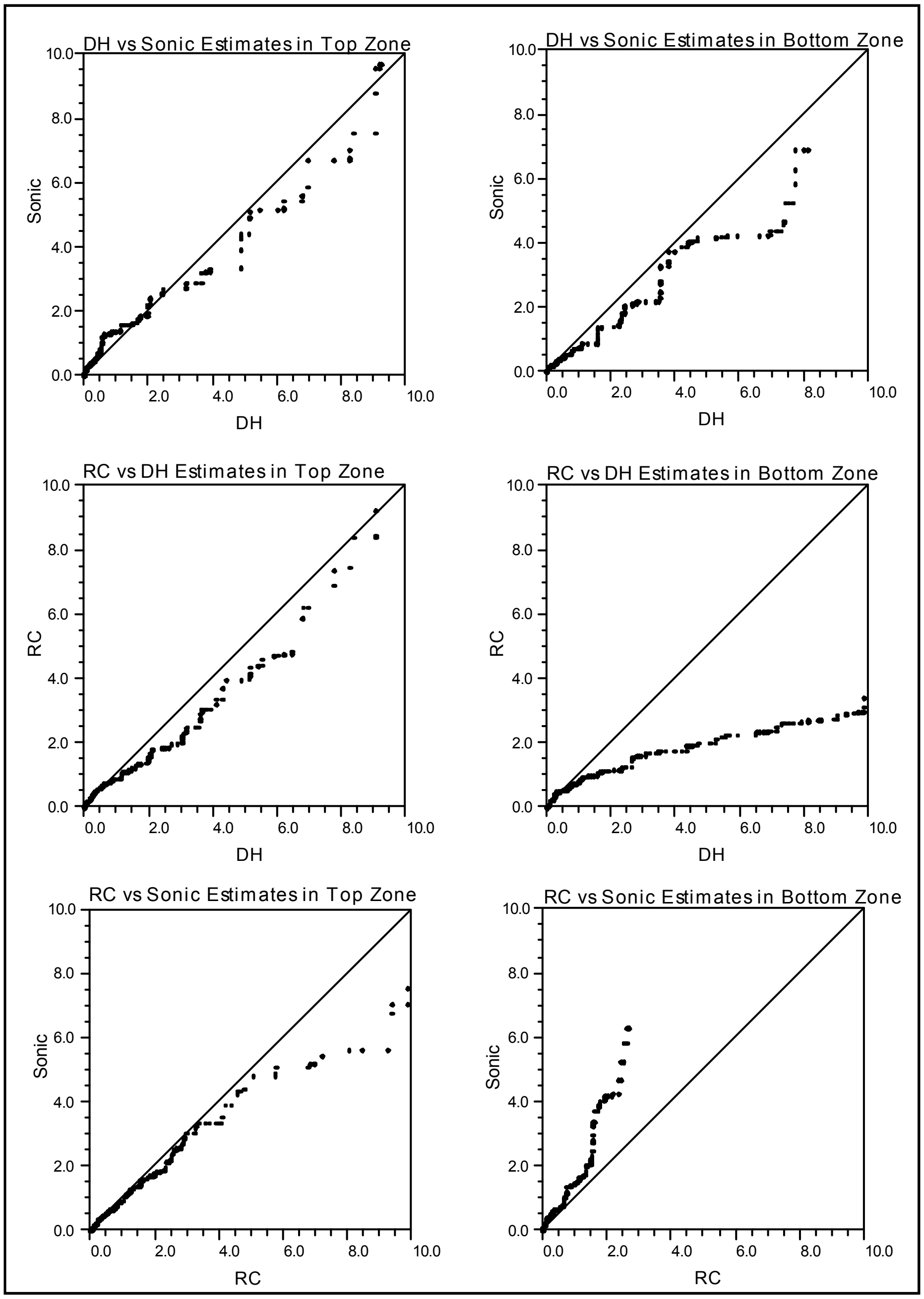


Figure 10-1: Quantile-Quantile Plots of Gold Assays from Different Types of Data

10.3 Verification of Analytical Quality Control Data

Quality control results in previous drill programs were disclosed in earlier NI 43-101 Technical Reports (Jutras and Powell, 2008, Jutras et al, 2007) and will not be repeated here.

Analytical results following the 2008 NI 43-101 Technical Report (Jutras and Powell, 2008) and prior to 2010 were continuously monitored by a QC program consisting of the insertion of standards, blanks and duplicates. The 2010 drill program continued with the sampling protocol established with the previous program with a number of changes implemented as the program was evaluated. These changes included the increase in the number of quality control samples submitted, introduction of new standards, the insertion of more systematic preparation duplicates and regular update reports to management and field staff. Reports include a 'failure table' documenting all samples exceeding established limits indicating any corrective action taken.

In addition to the routine QC samples inserted into each sample shipment, a randomly selected set of pulps were submitted to a second laboratory as a check on relative accuracy.

A detailed description of the results of the QC analyses in pre-2009 years and for 2009 to 2010 years have been reported by Jutras (2008) and in the SRK (2011) technical reports.

The analytical quality control results from the 2010 and 2011 drill programs were monitored by G.N. Lustig Consulting Ltd (Lustig, 2011) and the results from these programs have been summarized below. SRK has reviewed the quality control data and results compiled by G.N. Lustig. SRK finds that the compilation and conclusions established by G.N. Lustig Consulting are accurate

10.3.1 2010 Monitoring of Analytical QA/QC

Accuracy

To monitor accuracy, certified reference materials (standards) were inserted at regular intervals in the sampling stream. All standards in use were purchased from CDN Resource Laboratories Ltd. of Langley BC, Canada. All standards are certified through a round robin program consisting of 120 analyses at 12 independent laboratories.

A listing of the standards in use, recommended values and standard deviation can be found in Table 10.3.1.1. Also listed are the actual results received from the prime analytical laboratory.

Table 10.3.1.1: Standards Used on the Resource Analytical Dataset

Standard	Analyses	Certified Mean	Certified SD	Actual Mean	Actual SD	Bias %
CDN-GS-1E	14	1.16	0.030	1.20	0.064	3.67
CDN-GS-4A	20	4.42	0.230	4.42	0.281	-0.06
CDN-GS-14A	6	14.9	0.435	14.89	0.806	-0.05
CDN-GS-P8	124	0.78	0.030	0.79	0.030	1.08

Note: SD = standard deviation

Upper and lower control limits (UCL & LCL) are established at recommended mean ±3s (standard deviation) and warning limits (UWL & LWL) at recommended mean ±2s. Assuming a normal distribution of analyses of a single standard, one could expect 5% of analyses exceeding ±2s and only 0.3% of analyses exceeding ±3s. Any single standard analyses beyond the upper (UCL) or lower (LCL) control limits is considered a 'failure'. In addition two successive standard analyses exceeding (UWL) or lower (LWL) warning limits on the same side of the mean could also constitute a 'failure'.

Analytical batches are not automatically re-analyzed in the event of a standard failure; the complete batch is examined to determine the cause and significance of the failure. Analyses with large differences from expected values are often mixed standard identifiers or have been switched with a routine drill samples. Batches where all results are less than detection generally do not require re-analyses, but batches where there are mineralized results are always re-analyzed if it is determined that the error is analytical rather than a sample mix-up.

Results of the analyses of the standards are routinely plotted on separate Shewhart charts for each standard; plotting concentration vs. the sample sequence, with warning and control limits plotted as horizontal lines. Summary plots that include all standards on a single plot, with the assay value converted to a 'z-score' are also prepared to give an accuracy overview of the complete program. A z-score is calculated by subtracting the accepted value of the standard from the analytical value and dividing it by the standard deviation derived from the analyses used to establish the accepted value (round robin assays). This converts the analytical value to standard deviation units above and below the mean, so all standards can compared on the same plot.

The overall z-score plot indicates a slight overall high bias with six analyses exceeding the control limits. Four of the failures can be attributed to standard CDN-GS-1E (Figure 10-2).

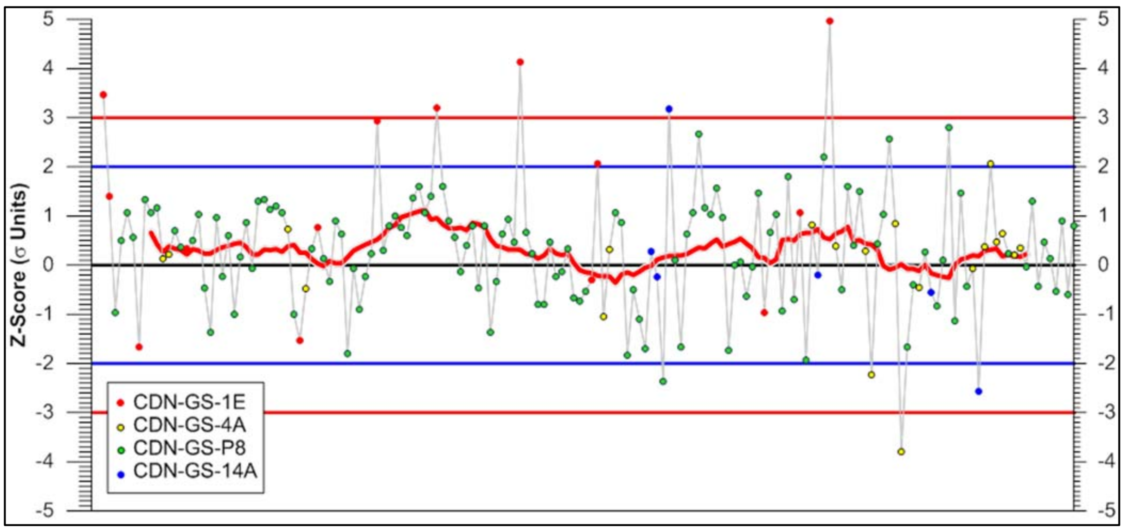


Figure 10-2: Overall Z-Score Plot

Precision

Precision was monitored through a program of field and laboratory duplicates representing each time a sub-sample was taken. These included quarter core duplicates from drill core, a duplicate split from RC cuttings and preparation duplicate splits after coarse crushing. In addition to these samples, Inspectorate Lab routinely analyzed pulp duplicates. With the exception of gross errors indicating sample mix-ups, samples or batches are not passed or failed based on the results of duplicate analyses, rather they indicate how representative the sampling and sub sampling procedures are. The general expectation is that the precision will improve progressively from the field duplicate to preparation duplicate to pulp duplicate as the samples become more homogenous due to finer crushing, pulverizing and mixing. It is also expected that precision will improve with concentration.

Of all of these duplicates, the most important are the duplicates of the core and RC cuttings (the first split) as precision error estimated with these data is a cumulative error, which will include all subsequent sample preparation and analytical error as well as the natural variation of the parent material (Abzalov, 2008).

The split core represents the maximum geological variability and ideally the duplicate should consist of the other half of the primary sample. As this leaves no material for that interval for a permanent record, this practice is often not acceptable and as a compromise, ¼ split core is used, ¼ core sent to lab as primary sample, and ¼ core sent as duplicate with a half core split retained in box.

Contamination

Contamination during sample preparation is monitored by the routine insertion of coarse field blank material that goes through the complete sample preparation process of crushing and pulverizing. It is industry practice to set an arbitrary limit at 5X the detection. With some assays with very low detection limits this can be unrealistic as the normal background of the material can be greater than 5X the detection limit. There were a relatively large number of failures early in the program, but there was no indication of contamination in the actual drill samples indicating that the higher values likely originated with the blank material

Corrective Action

As indicated previously, all results exceeding the established limits were logged into a failure table with an indication of the nature of the failure and what remedial action if any was required. Where standards have failed, batch reanalyses would be considered if the interval was mineralized or above background. Where the failure appeared to be due to sample mix-ups or misidentification of the standard, multi-element data was used to compare the analyzed standard with a geochemical 'fingerprint' of the specific standard to confirm the actual standard identification. There were 9 groups of samples re-assayed due to QC failures and 11 standards that had been misidentified in the field.

External Check Assays

As an external check on relative accuracy, a set of randomly selected pulp samples were submitted to the ALS sample preparation facility in Guadalajara with analyses in Vancouver. The selection was made using a random number generator computer program from a subset of samples that had been geologically determined to be part of the Taunus mineralizing system. The selection consisted of 5% of this subset and included samples from all holes from 2007 to 2010.

Comparing the original Inspectorate analyses with the ALS checks indicates a low bias of the Inspectorate original assays at lower concentrations. The mean of the Inspectorate originals are 2.3% lower than the ALS duplicates. The median of the originals is 14% lower. What is significant, however, is that at the third quartile (75^{th} percentile) the Inspectorate original assays are actually 0.35% higher than the check samples.

Overall the check samples are relatively similar to the original sample results.

10.3.2 2011 Monitoring of Analytical QA/QC

Accuracy

Accuracy was monitored by the analyses of certified reference material. Six different standards were employed during the 2011 drill program with recommended values ranging from 0.91 g/t to 14.9 g/t gold. The standards employed are certified commercial standards provided by CDN Resource Laboratories Ltd. of Langley BC, Canada (Table 10.3.2.1) and have values established by at least 120 analyses from 12 labs.

Control limits are established at the recommended mean ±3s (standard deviation) and warning limits at the recommended mean ±2s as indicated in Section 10.3.2.

Table 10.3.2.1: Commercial Standards Utilized by Marlin Gold in 2011

Standard	Analyses	Certified Mean	Certified SD	Actual Mean	Actual SD	Bias %
CDN-CM-6	65	1.43	0.045	1.488	0.067	4.04
CDN-CM-8	1	0.91	0.055	0.957	-	5.16
CDN-GS-14A	5	14.9	0.435	15.035	0.962	0.9
CDN-GS-1G	91	1.14	0.045	1.128	0.058	-1.07
CDN-GS-4C	6	4.26	0.11	4.093	0.211	-3.93
CDN-GS-6A-ICP	51	5.69	0.24	5.673	0.255	-0.29
CDN-GS-6A-GRAV	51	5.79	0.23	5.631	0.962	-2.75

Summary plots that include all standards on a single plot, with the assay value converted to a 'z-score' are also prepared to give an accuracy overview of the complete program (Figure 10-2).

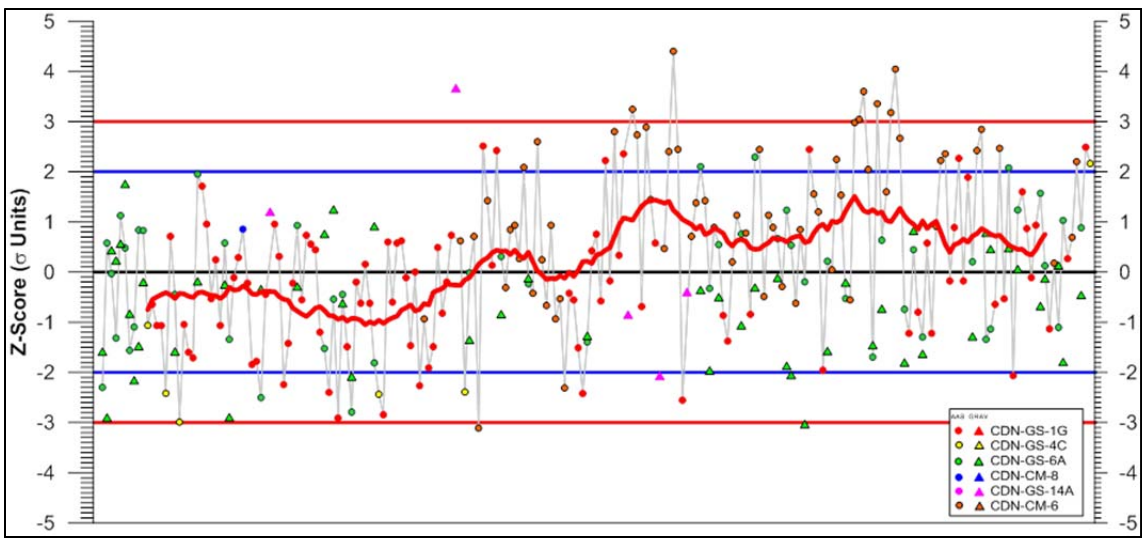


Figure 10-2: Score Control Chart Showing all Standard Gold Analyses from the 2011 Drill Program

There was a slight overall low bias relative to the recommended values of the standards in use at the beginning of the program, with a change to a high bias in late June. Part of this high bias was related to higher and erratic analyses of standard CDN-CM-6 as well as higher values returned for CDN-GS-1G.

Gravimetric analyses for standards with initial analyses of >5 g/t indicates an overall low bias. Standards used by Inspectorate as part of their internal QA/QC program indicates a low bias up to late September, with later results near the recommended values for the standards.

There were 23 standard analyses considered 'failures' during the drill program. Four of these were identified as misidentified standards. Ten standard failures required corrective batch re-analyses.

Precision

Precision of the analytical results has been monitored plotting field duplicate, preparation duplicates and pulp duplicates (from Inspectorate's internal QC program) on a variety of plots including scatterplots, ARD% vs. rank and ARD% vs. pair mean..

Although there is considerable variability in the gold analyses at the various stages of sample grain size/volume reduction as interpreted from the various plots, an overall measure of precision error expressed by the average coefficient of variation (CVAVE[%]) indicates that the results are within the high range the acceptable precision. The CVAVE(%) for duplicate analyses was 29% for field duplicates, 19% for preparation duplicates and 15% for pulp duplicates.

Contamination

To monitor contamination during the sample preparation stage, coarse blank material from a local quarry was inserted into the sample stream at a rate of 1 in each group of 20 samples submitted. A general industry guideline is that blanks should not return results greater than 5 times the detection limit. This guideline obviously has to take into account the actual detection limit and the gold background values of the blanks. As the background was variable a threshold of 0.05 g/t was used rather than the 0.025 g/t gold based on the detection limit.

There were three analyses exceeding the threshold and were documented in the failure table. It was concluded that these analyses represented some minor contamination from a very high grade section, with no indication of contamination of following samples.

External Check Assays

As a check for relative bias and as an independent confirmation of grade, 139 sonic core pulps from the 2011 drill program were randomly selected and submitted to a second laboratory for gold analyses. The samples, representing 5% of all core samples analyzed, were assayed at the ISO 9001 accredited Activation Laboratories Ltd. (Actlabs) facility in Zacatecas, using comparable methods as those used by Inspectorate for the primary analyses.

A statistical summary of the original and duplicate results indicates that there is a relative high bias of the primary Inspectorate assays compared to the Actlabs check assays of 0.678% comparing means and 5.479% comparing medians. Correlations are good at 0.994 (Pearson) and 0.989 (Spearman). Significant outliers were removed prior to statistical calculations.

10.4 2010 to 2011 QA/QC Monitoring Conclusions

Marlin Gold has instituted a quality control program at the Trinidad (Taunus) project to monitor the accuracy, precision, and contamination of the sampling and during the 2010 and 2011 drill campaigns. Quality control samples consisted of one blank, one duplicate and one standard reference material in each group of 20 samples. In addition approximately 5% of the sample pulps from core holes have been randomly selected for check assays at a second laboratory.

The analytical results of the quality control samples have been continuously and independently monitored throughout the programs, with a table of QC failures maintained to document both the QC failures and corrective action taken where necessary. All outstanding QC issues have been resolved.

The primary analytical laboratory, Inspectorate, is an ISO 9001:2008 accredited laboratory. External check assays have been performed at Actlabs in Zacatecas, Mexico, which is also accredited to ISO 9001 and at ALS in Vancouver, which is accredited to ISO/IEC 14025:2005.

The quality control and check assays completed confirm that the 2010 and 2011 Trinidad (Taunus) assay data is accurate, precise and free of contamination to industry standards and is of sufficient quality to be used in resource estimation.

10.5 SRK Conclusions on Data Verification

The drilling, logging and sampling procedures described in previous sections are consistent with industry standards and are suitable for resource estimation. The sample length is appropriate to accurately characterize the mineralization and distinguish any zones internal to the mineralization which may have anomalously high or low grades.

After reviewing Oro's procedures, practices, QA/QC data as well as the monitoring compilation produced by G.N. Lusting Consulting, SRK found that the methods implemented were reasonable for the geology of this deposit and the applied drilling methods.

SRK is of the opinion that the Trinidad Project database is sufficiently reliable for resource estimation.

11 Mineral Processing and Metallurgical Testing (Item 13)

Material from Trinidad was mined by open pit and processed by heap leaching by EGC between 1996 and 1998. Approximately 50,000 oz of gold were reported to have been produced during this period. Details of the process operations and production data are not available, although a feasibility study prepared by Exploraciones Eldorado containing a summary of the results of metallurgical Investigations conducted by Metcon Research, Inc. (Metcon) in 1994 is available. More recently, Marlin Gold has undertaken a scoping-level metallurgical study at Metcon to more fully evaluate the amenability of sonic drill composites from the Taunus pit to gold and silver recovery by standard heap leaching. The relevant results from these studies are presented in this section.

11.1 Initial Metallurgical Investigations – Metcon 1994

Exploraciones El Dorado completed a metallurgical test program at Metcon in 1994 and the results of this program are detailed in Metcon's report: "Trinidad Project – Preliminary Metallurgical Study", September 1994. This program included an evaluation of a variety of recovery techniques including: gravity concentration, Amalgamation, flotation and cyanidation. Table 11.1.1 provides a summary of average gold and silver recoveries obtained with each processing methodology. As can be seen, cyanidation was identified as the preferred gold and silver recovery method with an average of 89% gold extraction and 39% silver extraction obtained from test composites ground to 40% and 80% 74 microns. The results of the bottle roll cyanidation tests reported by Metcon are summarized in Table 11.1.2

Table 11.1.1: Summary of Average Gold and Silver Recoveries Achieved

Process	Average Gold Recovery - %	Average Silver Recovery - %
Cyanidation	89	39
Flotation	69	24
Amalgamation	24	5
Gravity	8	3

Source: BC Gold Corp., 2008 Technical Report

Table 11.1.2: Bottle Roll Cyanidation Test Results

			% Au Recovery			% Ag Recovery		
Sample	Head Grade g/t Au	Wt % -200 Mesh	24 Hour Leach	48 Hour Leach	72 Hour Leach	24 Hour Leach	48 Hour Leach	72 Hour Leach
CL-1B	4.56	40	88.90	91.40	92.70	35.90	38.20	38.90
		80	84.30	85.60	86.70	41.20	42.70	43.40
CL-3B	1.72	40	77.00	84.00	92.10	31.50	30.50	30.80
		80	65.00	90.60	94.60	52.60	48.60	53.60
TTC-20	5.70	40	82.50	84.40	84.90	31.40	32.20	32.40
		80	93.10	93.50	95.40	42.10	43.40	44.30
TTC-26	7.43	40	81.40	83.40	84.40	33.50	34.40	34.70
		80	94.50	95.20	96.60	44.60	45.70	46.30
Average		40	82.45	85.88	88.53	33.08	33.83	34.20
		80	84.23	91.23	93.33	45.13	45.10	46.90
Combine	Ave		83.34	88.56	90.93	39.11	39.47	40.55

Source: Exploraciones Eldorado, 1995

11.2 Marlin Gold Metallurgical Investigations – Metcon 2012

During 2011 Metcon undertook a metallurgical investigation on six separate test composites formulated from sonic drill intervals from Marlin Gold's Taunus Pit. This work included a full head sample characterization of each of the test composites, bottle roll cyanidation studies, column agglomeration studies and larger diameter column leach tests. The results of this program are documented in Metcon's report, "Trinidad Project – Agglomeration and Column Leach Study on Composite Samples", April 2012, are presented in this section.

11.2.1 Test Composite Characterization

Drill Hole Location

Marlin Gold submitted six samples for metallurgical testing at Metcon that were obtained from sonic drill intercepts in both the Eldorado and HS zones. The composites were formulated to represent high grade, medium grade and low grade material in each of these zones. Figure 11-1 shows the location of each of the sonic drill holes and Table 11.2.1.1 shows the drill hole intervals and anticipated grade for each composite.

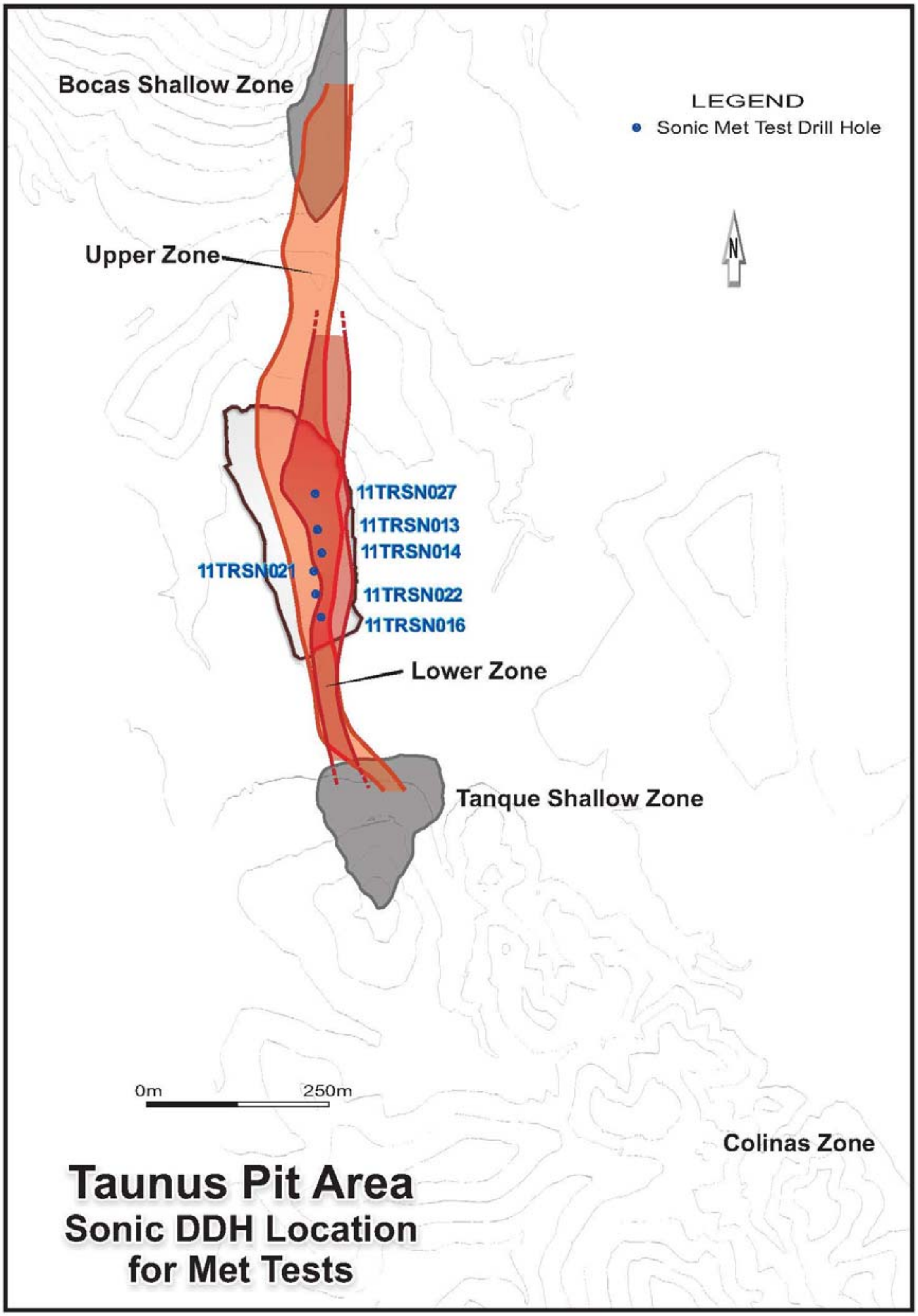


Figure 11-1: Metallurgical Sonic Drill Hole Locations in the Taunus Pit

Table 11.2.1.1: Drill Hole Intervals and Expected Grades for Each Metallurgical Test Composite

Sonic Drill hole	Location	Zone	Width, m	Interval, m	Au, g/t	Ag, g/t	Cu, %	Zn, %
11TRSN014	Inside Pit	Eldorado - High Grade	54.3	38.10-92.40	2.24	3.4	0.104	0.256
11TRSN016	Inside Pit	Eldorado - Low Grade	10.4	8.15-18.50	0.87	2.19	0.045	0.177
11TRSN021	Inside Pit	Eldorado - Med grade	23.0	0.00-23.20	1.06	2.21	0.082	0.173
11TRSN022	Inside Pit	HS - High Grade	32.0	125.50-157.50	4.07	10.7	0.158	0.958
11TRSN027	Inside Pit	HS - Low Grade	40.9	154.58-179.05	1.67			
11TRSN024	Inside Pit	HS - Med Grade	47.7	111.60-159.30	2.17	4.8	0.101	0.875

Source: Marlin Gold

Head and Screen Analyses

Approximately 200 kg of material for each sample was received by Metcon. Each sample was air-dried and screened to obtain the as-received particle size distribution (PSD). Based on the as-received PSD, four 10 kg test charges and one 60 kg test charge were prepared for each composite for metallurgical testing and head analyses. One 10 kilogram test charge was selected at random as a head sample for each composite and then stage-crushed and sub-sampled to obtain a 150 gram pulverized (-150 micron) sample that was then submitted for gold fire assay/AA finish and silver assay by geochem, as well as, cyanide soluble gold and silver. Head analyses for each composite are provided in Table 11.2.1.2. Gold in the head samples ranged from 0.29 g/t – 4.17 g/t and silver ranged from 2.18 g/t – 9.44 g/t. Cyanide soluble gold ranged from about 34% to 86%.

Table 11.2.1.2: Head Analyses for Metallurgical Test Composites

Summary of Head Analysis						
Sample ID	Assays (ppm)		Cyanide Soluble (ppm)		Calculated (%)	
	Au	Ag	Au	Ag	Au	Ag
11TRSN-014	2.67	5.72	1.90	4.9	71.10	85.65
11TRSN-016	0.95	2.18	0.60	1.8	62.98	82.69
11TRSN-021	1.13	3.61	0.60	2.8	53.31	77.58
11TRSN-022	4.17	9.44	3.60	6.7	86.28	71.00
11TRSN-024	2.21	5.46	1.70	4.6	76.87	84.30
11TRSN-027	0.29	4.00	0.10	3.9	34.42	97.61

Source: Metcon 2012

Table 11.2.1.3 provides as-received screen analyses and gold assays by size for each of the test composites. All test composites were found to be approximately 95-100% - 3/8 inch, except for composite 11TRSN-016 which was found to be approximately 97% - 2 inch.

Table 11.2.1.3: Screen Analyses and Gold Assays by Size for the Metallurgical Test Composites

SCREEN			Head Composite Samples											
ANALYSIS			11TRSN-014		11TRSN-016		11TRSN-21		11TRSN-022		11TRSN-024		11TRSN-027	
NOMINAL OPENINGS														
mm	Inches	Tyler Mesh	Wt Dist (%)	Au Dist. (%)	Wt Dist (%)	Au Dist. (%)	Wt Dist (%)	Au Dist. (%)	Wt Dist (%)	Au Dist. (%)	Wt Dist (%)	Au Dist. (%)	Wt Dist (%)	Au Dist. (%)
50.000	1.968	2			3.67	1.94								
25.000	0.984	1			8.78	4.14								
19.000	0.748	3/4			3.01	3.42								
12.500	0.492	1/2			5.84	3.27	0.50	1.74	0.57	0.59	1.15	0.63	0.57	0.52
9.500	0.374	3/8	0.33	0.23	3.51	2.03	3.10	1.68	4.70	3.25	3.72	2.42	0.67	0.67
6.300	0.248	1/4	9.16	9.81	7.98	6.63	19.10	14.09	22.58	17.07	13.44	10.62	2.03	1.87
3.350	0.132	6	29.51	27.79	20.67	23.47	25.90	20.02	20.48	18.30	17.06	13.86	18.38	17.97
1.700	0.067	10	18.85	18.50	15.33	15.86	17.07	17.64	15.58	14.62	16.80	14.63	22.41	20.60
0.841	0.033	20	7.78	4.92	5.76	6.36	6.34	5.59	7.13	6.31	8.19	9.12	11.06	15.72
0.420	0.017	35	7.25	4.06	5.37	5.23	5.91	5.89	6.27	5.91	7.41	6.27	9.71	8.33
0.297	0.012	48	2.94	2.78	2.18	2.19	2.39	2.60	2.47	2.10	3.09	2.28	3.82	3.69
0.210	0.008	65	2.39	1.68	1.77	1.63	1.95	1.92	2.00	1.74	2.52	2.18	3.10	2.69
0.149	0.006	100	2.14	1.64	1.59	1.39	1.74	1.61	1.79	1.52	2.24	1.75	2.78	3.24
0.105	0.004	150	1.96	1.61	1.46	1.07	1.60	1.52	1.63	1.39	2.13	1.18	2.53	2.22
0.074	0.003	200	1.69	1.39	1.25	1.61	1.38	1.51	1.45	1.37	2.04	1.74	2.24	2.27
0.045	0.002	325	2.39	2.12	1.77	1.75	1.94	2.77	1.90	2.09	2.44	3.90	2.95	2.02
M I N U S		-325	13.60	23.46	10.08	18.00	11.08	21.42	11.45	23.74	17.78	29.42	17.75	18.20
TOTALS			**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**
Composite Assay: Au g/t				2.67		0.95		1.13		4.17		2.21		0.29
Calculated Assay: Au g/t				2.60		1.05		1.01		4.23		2.22		0.26

Mineralogical Analyses

A one kilogram sample from each test composite was submitted to Montana Tech Cent Advanced Minerals and Metallurgical Processing for mineralogical analysis and mineral libe characterization. The results of this work are detailed in their report, "MLA Characterizat Composite Samples from the Oro Gold Project", January 2012. Table 11.2.1.4 provides a sum of mineral constituents found in each of the composites. Overall, quartz and other silicates cons 85 to 95% of the main rock matrix. Kaolinite represented 9.9% of composite 11TRSN-27 and of composite 11TRSM-21, and was found in lesser amounts in the other four composites.

Electrum was the only gold carrier identified in the study. Gold content of the electrum ranged 60 to 80 %, occurring primarily as small grains between 5 and 10 microns in size.

Table 11.2.1.4: Mineralogical Analyses Conducted on Each Metallurgical Composite

Summary of Mineralogical Examination on Head Composites (weight %)							
Mineral	**Formula**	**11TRSN-14**	**11TRSN-16**	**11TRSN-21**	**11TRSN-22**	**11TRSN-24**	**11TRSN-27**
Quartz	SiO_2	75.7	69.3	64.3	78.7	67.6	15.6
Mica	$KAl_2(Si_3Al)O_{10}(OH,F)_2$	14	21.5	16.7	8.89	18.6	23.9
K_Feldspar	$KAlSi_3O_8$	6.41	5.9	8.05	6.6	7.07	8.34
Kaolinite	$Al_2Si_2O_5(OH)_4$	1.18	0.94	5.66	0.59	1.93	9.87
Chlorite	$(Mg_3,Fe_2)Al(AlSi_3)O_{10}(OH)_8$	1.02	0.67	0.95	2.46	1.8	1.94
FeO	$Fe_{2.5}O_{3.5}$	0.98	0.48	1.02	1.09	0.76	1.35
Plagioclase	$(Na,Ca)(Al,Si)_4O_8$	0.31	0.73	1.79	0.71	1.45	30.9
Mottramite	$PbCu(VO_4)(OH)$	0.12	0.042	0.13	0.12	0.13	0.35
Cesarolite	$PbMn_3O_6(OH)_2$	0.03	0.031	0.012	0.017	0.022	0.003
Rhodonite	$MnSiO_3$	0.029	0.039	0.03	0.024	0.031	0.004
Ilmenite	$FeTiO_3$	0.028	0.045	0.093	0.033	0.001	0.317
Smectite	$(Na,Ca)_{0.33}(Al,Mg)_2$	0.02	0.006	0.21	0.002	0.012	0.068
Biotite	$K(Mg,Fe)_3(AlSi_3O_{10})(OH)_2$	0.019	0.12	0.28	0.016	0.001	2.71
Cerrusite	$PbCO_3$	0.019	P	ND	0.003	0.003	ND

Source: Metcon 2012

11.2.2 Bottle Roll Testwork

Bottle roll cyanidation testing was conducted on all composites, except for 11TRSN-24, at a size of 100% - 3/8 inch. The following test conditions were used:

- Test Charge: 5 kg;
- Cyanide: 2 g/L NaCN;
- pH: 10.5 – 11.0;
- Slurry Density: 45% solids; and
- Leach Time: 96 hours.

The results of the bottle roll testwork are summarized in Table 11.2.2.1. Gold extractions ra from 64.7 - 79.9% and silver extraction ranged from 26.1 - 58.1%. Cyanide consumption ra from 1.1 – 2.3 kg/t and lime consumption ranged from 0.03 – 0.5 kg/t.

Table 11.2.2.1: Summary of Bottle Roll Cyanidation Test Results on Metallurgical Test Composites

Summary of 5 kg Bottle Roll Testing				
Sample ID	Consumption		Cumulative Extraction	
	NaCN	CaO	Au	Ag
11TRSN-14	1.18	0.03	67.90	41.98
11TRSN-16	2.30	0.10	64.68	40.50
11TRSN-21	1.18	0.46	79.86	58.11
11TRSN-22	1.10	0.12	71.34	26.07
11TRSN-27	1.46	0.55	75.60	56.63

Source: Metcon, 2012

11.2.3 Preliminary Agglomeration Testwork

Preliminary agglomeration tests were conducted on 10 kg test charges to evaluate the Portland cement dosages of 2, 4 and 6 kg/t during agglomeration. Each test charge was agglomerated with the specified quantity of cement and loaded into 4 inch diameter x 10 ft high columns and leached for 30 days. The following parameters were common for all column leach tests:

- Size: As-Received particle size;
- Cement: 2, 4 and 6 kg/t;
- Moisture: 6-8%;
- Cyanide Conc: 1 g/L NaCN;
- Flowrate: 7.3 Lph/m^2; and
- pH 10.5-11.0.

The results of the preliminary agglomeration tests are summarized in Table 11.2.3.1. It was found that both gold and silver extraction declined as cement dosages were increased to 4 and 6 kg/t. It is speculated that at these higher dosage rates the cement seals off the particles, preventing contact with the leach solution. At a cement dosage of 2 kg/t gold extraction ranged from 42.2 – 75.9% and silver extraction ranged from 12.9 – 43.3%. A cement dosage of 2 kg/t was selected for subsequent larger diameter closed-cycle column testing. Although a cement dosage of 2 kg/t resulted in the best extractions no agglomerate strength testing was conducted.

Table 11.2.3.1: Summary of Preliminary Agglomeration Test Columns Conducted on Each Test Composite

Summary of Mini-Columns Leach Tests							
Test No.	Sample ID	Portland Cement (kg/t)	Leach Day	Cumulative Extraction		Reagent	
				Au	Ag	NaCN	CaO
CL-01	11TRSN-014	2	30	70.04	28.72	0.43	0.96
CL-02		4	30	49.69	20.74	0.38	0.86
CL-03		6	30	32.68	14.69	0.37	0.80
CL-04	11TRSN-016	2	30	42.23	12.90	0.15	0.70
CL-05		4	30	31.81	7.69	0.12	0.65
CL-06		6	30	9.13	3.85	0.18	0.75
CL-07	11TRSN-021	2	30	75.92	14.67	0.28	1.09
CL-08		4	30	66.76	16.33	0.25	1.01
CL-09		6	30	71.86	16.46	0.28	0.83
CL-10	11TRSN-022	2	30	61.75	14.47	0.19	0.68
CL-11		4	30	50.58	14.02	0.18	0.56
CL-12		6	30	17.17	3.57	0.19	0.66
CL-13	11TRSN-027	2	30	65.15	43.30	0.12	0.73
CL-14		4	30	51.12	36.49	0.06	0.69
CL-15		6	30	66.27	29.28	0.08	0.69

Source: Metcon 2012

11.2.4 Closed-Cycle Column Leach Testwork

Five closed-cycle column leach tests were conducted on the composite samples at the “as-received” particle size in columns that were 6 inches in diameter by 10 ft high. All test composites were agglomerated with 2 kg/t cement and the initial lime (CaO) addition was based on the consumption obtained from the earlier bottle roll tests. The leach parameters common to all column tests are summarized as follows:

- CaO added to the column necessary to maintain pH at 10.5-11.0 was calculated based on the alkalinity contributed by the Portand cement;
- The initial leach solution flowrate was maintained at about 10 Lph/m2, but was reduced to about 5-7 Lph/m^2 later in the leach cycle;
- The columns were operated in closed-cycle by contacting the pregnant leach solution with activated carbon to remove the extracted gold and silver. The resulting barren solution was then cycled back to the column after addition of cyanide and CaO to maintain the leach solution at 1 g/L NaCN and pH 10.5-11.0;
- The loaded activated carbon from each column test was dried, weighed and assayed for gold and silver;
- Each column was leached for 90 days;
- At the end of the leach cycle each column was washed for four days and allowed to drain for 3 days. The column residue was then unloaded and weighed;
- Approximately 30 kg of leached residue was split from each sample and submitted to Golder Geotechnical for consolidation and compacted percolation testing; and
- The remaining residue was oven dried and then assayed for gold by fire/AA finish and silver by Geochem method.

The results of the closed-cycle column tests are summarized in Table 11.2.4.1. Gold extractions after 60 days of leaching ranged from 59.1 – 77.3% with an average gold extraction of 72.5%. An additional 2-3% gold extraction was obtained after 90 days of leaching.

Silver extraction after 60 days of leaching ranged from 19.3 – 38.9% with an average of 27.2%. Only about 1% additional silver extraction was obtained after 90 days of leaching.

Table 11.2.4.1: Summary of Closed-Cycle Column Leach Tests

		Au Extraction, %				Ag Extraction, %				NaCN Consumption, Kg/t				CaO Consumption, Kg/t			
Test No.	**Composite**	**15 Days**	**30 Days**	**60 Days**	**90 Days**	**15 Days**	**30 Days**	**60 Days**	**90 Days**	**15 Days**	**30 Days**	**60 Days**	**90 Days**	**15 Days**	**30 Days**	**60 Days**	**90 Days**
CL-16	11TRSN-014	64.1	69.6	75.1	77.0	23.5	30.4	33.2	32.2	0.28	0.39	0.58	0.90	0.95	0.97	0.96	1.00
CL-17	11TRSN-016	52.1	55.6	59.1	61.7	18.5	20.8	22.1	23.5	0.09	0.13	0.25	0.51	0.93	0.91	0.88	0.89
CL-18	11TRSN-021	69.5	74.1	77.3	80.0	15.6	18.6	19.3	20.1	0.20	0.27	0.46	0.82	1.05	1.03	1.05	1.16
CL-19	11TRSN-022	63.4	69.0	74.6	76.8	18.4	21.0	22.4	23.4	0.13	0.18	0.32	0.63	0.72	0.75	0.76	0.79
CL-20	11TRSN-027	61.7	73.9	76.2	79.7	31.3	39.1	38.9	40.0	0.06	0.09	0.32	0.62	0.88	1.43	1.40	1.43
Average		**62.2**	**68.4**	**72.5**	**75.0**	**21.4**	**26.0**	**27.2**	**27.8**	**0.15**	**0.21**	**0.39**	**0.70**	**0.91**	**1.02**	**1.01**	**1.05**

Source: Metcon, 2012

11.3 Recovery Estimate Assumptions

As summarized in Table 11.3.1, an average gold recovery of about 70% and an average silver recover of about 23% is estimated based on the closed-cycle column testwork presented in this section. These recovery estimates include a 5% reduction in recovery to account for leach inefficiencies normally encountered in a commercial heap leach operation.

Table 11.3.1: Estimated Gold and Silver Extraction for Marlin Gold Mining's Trinidad Project

	Average Extraction %	
Day	**Au**	**Ag**
15	62.2	21.4
30	68.4	26.0
60	72.5	27.2
90	75.0	27.8
Adjustment Factor	5.0	5.0
Estimated Extraction	70.0	22.8

12 Mineral Resource Estimate (Item 14)

12.1 Introduction

In February 2011, SRK Consulting (US) Inc. prepared a National Instrument (NI) 43-101 compliant technical report on resources on the Trinidad Project, based on December 23, 2010 resource estimates (Table 12.1.1).

Table 12.1.1: Previous Mineral Resource December 23, 2010*

Resource Category	**Zone**	**K-Tonnes**	**Au Grade (g/t)**	**Contained Au (koz)**
Measured	All Zones	0	0	0
Indicated		3,868	1.51	187
Inferred		2,539	1.45	118

Source: Volk 2011
* Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability. There is no certainty that all or any part of the Mineral Resource estimate will be converted into Mineral Reserves estimate; Resources stated as contained within a potentially economically minable open pit stated above a 0.3g/t Au cut-off; Pit optimization is based on an assumed gold price of $1,200/oz, metallurgical recovery of 95% and a processing and G&A cost of $22.00/t; Mineral resource tonnage and contained metal have been rounded to reflect the accuracy of the estimate, and numbers may not add due to rounding; and Mineral resource tonnage and grade are reported as diluted to reflect a potentially minable bench height of 6m.

Since then, additional drilling by Marlin Gold lead to further updates of the Taunus geology model. Consequently, SRK Consulting (Canada) Inc. (“SRK”) was engaged by Marlin Gold in June 2011 to update the mineral resources for the Trinidad Project.

The mineral resource model presented herein incorporates all drilling completed by Marlin Gold to date. The resource estimate was completed by Marek Nowak, P.Eng. (APEGBC#16985), an appropriate “independent qualified person” as this term is defined in National Instrument 43-101. The effective date of the resource statement is November 29, 2011.

This section describes the resource estimation methodology and summarizes the key assumptions considered by SRK. In the opinion of SRK, the resource evaluation reported herein is a reasonable representation of the gold mineral resources found in the Trinidad Project at the current level of sampling. The mineral resources have been estimated in conformity with generally accepted CIM “Estimation of Mineral Resource and Mineral Reserves Best Practices” guidelines and are reported in accordance with the Canadian Securities Administrators’ National Instrument 43-101. Mineral resources are not mineral reserves and do not have demonstrated economic viability. There is no certainty that all or any part of the mineral resource will be converted into mineral reserve.

The database used to estimate the Trinidad Project mineral resources was audited by SRK. SRK is of the opinion that the current drilling information is sufficiently reliable to interpret with confidence the boundaries for hydrothermal breccia mineralization and that the assay data are sufficiently reliable to support mineral resource estimation.

SURPAC Version 6.2 was used to evaluate and validate the geological solids, and GEMS Version 6.3 was used to prepare assay data for geostatistical analysis, construct the block model, estimate metal grades and tabulate mineral resources. Non-commercial software was used for geostatistical analysis and Sage2001 was used for variography.

This section describes the work undertaken by SRK and key assumptions and parameters used to prepare the mineral resource model. Roughly 80% of the overall resource is located in the Taunus deposit. Other resources from the Colinas deposits, referred to in the report as satellite deposits, and almost all in the inferred category, are scattered throughout five much smaller gold mineralized areas. There has been no new drilling done outside the Taunus deposit since the last NI 43-101 report. Therefore, the discussion, and more specifically data statistics, will be presented mainly for the Taunus deposit.

12.2 Resource Estimation Procedures

The resource evaluation methodology involved the following procedures:

- Database compilation and verification;
- Validation of Marlin Gold designed wireframe models for the boundaries of the mineralization;
- Definition of resource domains;
- Data conditioning (compositing and capping) for geostatistical analysis and Variography;
- Block modeling and grade interpolation;
- Resource classification and validation;
- Assessment of "reasonable prospects for economic extraction" and selection of appropriate cut-off grades; and
- Preparation of the Mineral Resource Statement.

12.3 Resource Database

12.3.1 Drill Holes

The database used to estimate the Taunus and Colinas Zones was audited by SRK. The gold mineralized boundaries of the Zones were modeled by Marlin Gold personnel and validated by SRK. SRK is of the opinion that the current exploration information is sufficiently reliable to adequately interpret the boundaries of the gold mineralization and that the assay data are sufficiently reliable to support the estimation of mineral resources.

The Trinidad database was provided to SRK in an Access format. Within the resource area, the database contains almost 22,000 samples from 384 drill holes. Table 12.3.1.1 provides a summary of the database used for the Trinidad resource estimation.

Table 12.3.1.1: Exploration Data within the Trinidad Resource Area

Source	Type	Number DH	Length (m)	Number of Samples
Marlin Gold	DDH	56	12,060	6,839
	RC	80	11,637	5,822
	Sonic	38	4,300	3,510
Eldorado	DDH	4	312	195
	RC	206	11,080	5,540

The Trinidad database comprises data from drilling programs conducted by Marlin Gold as well as Exploraciones Eldorado during the period 1994 to 2010. The 2011 database received by SRK is much smaller than the database with more than 600 drill holes reported by SRK in the previous report (SRK, 2011). The current database includes only historical drill holes (Eldorado) to which there is access to drill logs or assay certificates (Jutras, 2008). In addition, the historical drill holes had to have located and surveyed the collars to be included for the resource estimates. Current drillhole database includes additional 92 holes not used in the December 2010 resource model, as they were completed after this analysis.

SRK was provided with a digital database including collar, survey, assay and geologic information for all drillhole data within the resource area. A total of 384 drill holes accounting for more 39,000 m of drilling were used for resource modeling. Within the Taunus deposit area, boreholes have been drilled at 10 m to 20 m spacing. In the satellite deposits drill hole spacing is larger, approximately betweeen15 and 40 m. The majority of the holes were directed to the northeast-southwest and east-west, although many of the earlier drilled holes were vertical. Drilling was conducted using RC, HQ and NQ diamond drill core diameters and larger diameter sonic drillholes. Down-hole surveying for the Marlin Gold drilling programs was conducted using a Flexit HTMS® magnetic survey instrument, with readings conducted on an average of 50 m intervals down hole. Down-hole survey methodology utilized for the Exploraciones Eldorado drilling programs is not documented.

In addition to gold, the provided database contains assays for silver, copper, arsenic molybdenum and zinc. No analysis was conducted on these secondary metals, and they were not utilized during the resource estimation process.

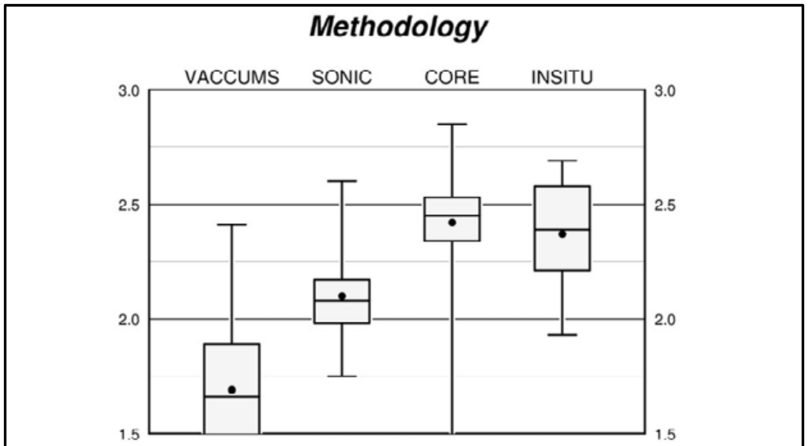
12.3.2 Bulk Density

The available SG data was evaluated to determine appropriate bulk density values to be used to convert volumes into tonnages. Currently, there are a large number of bulk density data collected by four methods: (1) waxed core, (2) waxed sonic, (3) vacuum, and (4) in-situ.

The core SG determinations were done on dried waxed core. These types of core samples do not include the matrix of the breccia. The sonic samples represent dried and waxed clasts and matrix. They exhibit generally lower SG values than the core SG values. The lower SG values are most likely due to some swelling of the in-situ volume after extraction. The vacuum sealed plastic bag samples generally returned much lower SG values than all other groups of data. Most likely, the most reliable group represents 20 in-situ samples collected in the most representative exposures of the main units in the Taunus area.

Figure 12-1 shows statistics of the SG values for each group of data. Overall, the average SG values from core samples are very close to the average SG values from in-situ samples. Note that one very high in-situ value and two lowest in-situ values collected from the Chandler fault were excluded from the analysis.

Considering large uncertainty on local SG values, one global SG of 2.37 was assigned to the gold mineralized domains and 2.42 to the waste areas.



	VACCUMS	SONIC	CORE	INSITU	
Number of data	46	330	591	17	Number of data
Mean	1.69	2.1	2.42	2.37	Mean
Std. Dev.	0.29	0.16	0.18	0.21	Std. Dev.
Coef. of Var.	0.17	0.08	0.08	0.09	Coef. of Var.
Maximum	2.41	2.6	2.85	2.69	Maximum
Upper quartile	1.89	2.17	2.53	2.58	Upper quartile
Median	1.66	2.08	2.45	2.39	Median
Lower quartile	1.47	1.98	2.34	2.21	Lower quartile
Minimum	1.19	1.75	1.45	1.93	Minimum

Figure 12-1: Statistics of SG Data for Different Groups of SG Samples

12.3.3 Coordinate System

All drilling data as well as the digital topographic surface and grade wireframes have been provided to SRK in a UTM coordinate system (WSG84 Zone 13), and resource modeling and grade estimation work has been conducted in this coordinate space.

12.3.4 Overburden and Topography Surface

A wireframe digital terrain model (DTM) surface of topography was provided to SRK by Marlin Gold. The source of these data is a 3-D Contour file which is a composite of data inherited from El Dorado, and Marlin Gold who updated the plan in 2008 to reflect modified topography in the Tajo Taunus, Waste Dump, Heap Leach pad, Bocas open cut areas. The 2008 update utilized differential GPS (Magallen Promark3 RTK) which was tied into a Government beacon, "LPAZ " downloaded from ngs.noaa.gov (WGS84 Coordinates E-40975.504, N+2679883.934, Elev. +27.275).

A visual comparison between the drillhole collars and the provided resurveyed topography shows generally good agreement in most areas, however the resurvey area is limited to the immediate area of known mineralization. SRK recommends that Marlin Gold complete an updated and expanded survey program to better tie in the topography with surveyed drill collars, as well as to allow for a reasonable area peripheral to the deposit for infrastructure planning as the project advances. However, SRK considers that the resurveyed topography over the deposit area as provided by Marlin Gold is reasonably accurate and appropriate for use in resource estimation.

Historical open pit mining has occurred in the central portion of the Main Eldorado deposit. Based on historical records, and recent drilling results, there is evidence of a waste dump north of the existing pit. SRK has elected to zero out tonnage and grade in the block model in the vicinity of this waste dump, between a northing of 2,537,370.0 and 2,573,610.0 and above an elevation of 104 m amsl in the Eldorado zones. No modeled overburden surface exists, and site inspection revealed that overburden is limited to a maximum thickness of a few meters, and mineralization outcrop at surface.

12.4 Solid Body Modeling

Solid models were created by Marlin Gold using Vulcan three dimensional (“3D”) wireframes. The wireframes were used to bound the gold mineralization and the geological and structural units. SRK reviewed all wireframes.

The gold mineralization associated with this deposit is interpreted to be controlled by a combination of specific breccia units and fault structures. Gold mineralization has been defined in five areas: Bocas, Eldorado-HS (Taunus pit area), Redzone, Tanque and Colinas. The gold mineralization is elongated to the north and south, dominantly along the western side of the Chandler fault. The bulk of the gold mineralization lies under the Taunus pit area (Eldorado-HS) with Bocas to the north and Redzone, Tanque and Colinas to the south. Throughout the area, the gold mineralization is terminated to the east by the Chandler fault.

To create a 3D model in the Eldorado-HS zone, geological units, gold and zinc grades were interpreted on 60 east-west cross sections at 30 m spacing. Zinc was used to guide the overall trend of the gold mineralization, while gold values and brecciated quartz porphyry (“BQP”) geology were directly used to form the final models. Sections were interpreted between 2,537,510 mN and 2,536,850 mN. The sectional interpretation for the BQP geological unit and gold grades were then imported into Vulcan where 3D polygons were created for these units by snapping to the holes.

Interpretation of the gold mineralization was based on a combination of geology, gold grade, zinc grade and field observations. A 0.2 g/t cut-off for gold grade was used as a guide for the polygons, which were modeled roughly parallel to the interpreted geology.

While all of the geological units were modeled on sections, only the BQP unit was model in 3D since it is interpreted to be the main host of gold mineralization and shows good continuity from section to section. The other geological units were used to guide modeling of gold grades, but were not explicitly modeled in 3D.

The north-south trending chandler fault is interpreted as a hard boundary to gold mineralization within the Taunus pit area. The fault was incorporated as the eastern limit of the solid models. The Chandler fault can be observed at surface in the pit area as being near vertical to steeply east dipping. The fault can be traced in drill holes to the south to approximately 2,537,120 mN. Further to the south, the fault is not clearly defined and some gold grades are observed east of the projection of the fault.

The final 3D solid model for Eldorado-HS results in a model in which the E-W section view forms two half-champagne glass shapes, stacked one above the other. This results in an upper and lower volume. The main “stem” of the shapes is located along the Chandler fault, while the gold mineralization extends to the west of the fault along the BQP or other fault structures. This is shown in Figure 12-2. In order to limit the effect of the sample during estimation, the two volumes were split by a hard boundary, into “top” and “bottom” zones. Therefore, in the end, the Eldorado-HS Zones were split into Top and Bottom domains. The top model was extended above the current pit surface for estimation purposes, but the resource was clipped below this surface.

Models for the Bocas, Redzone, Tanque and Colinas were created similarly. Generally, sections were created on 30 m intervals and interpreted into 3D models in Vulcan software. These zones are volumetrically much less significant that the Eldorado-HS Zone.

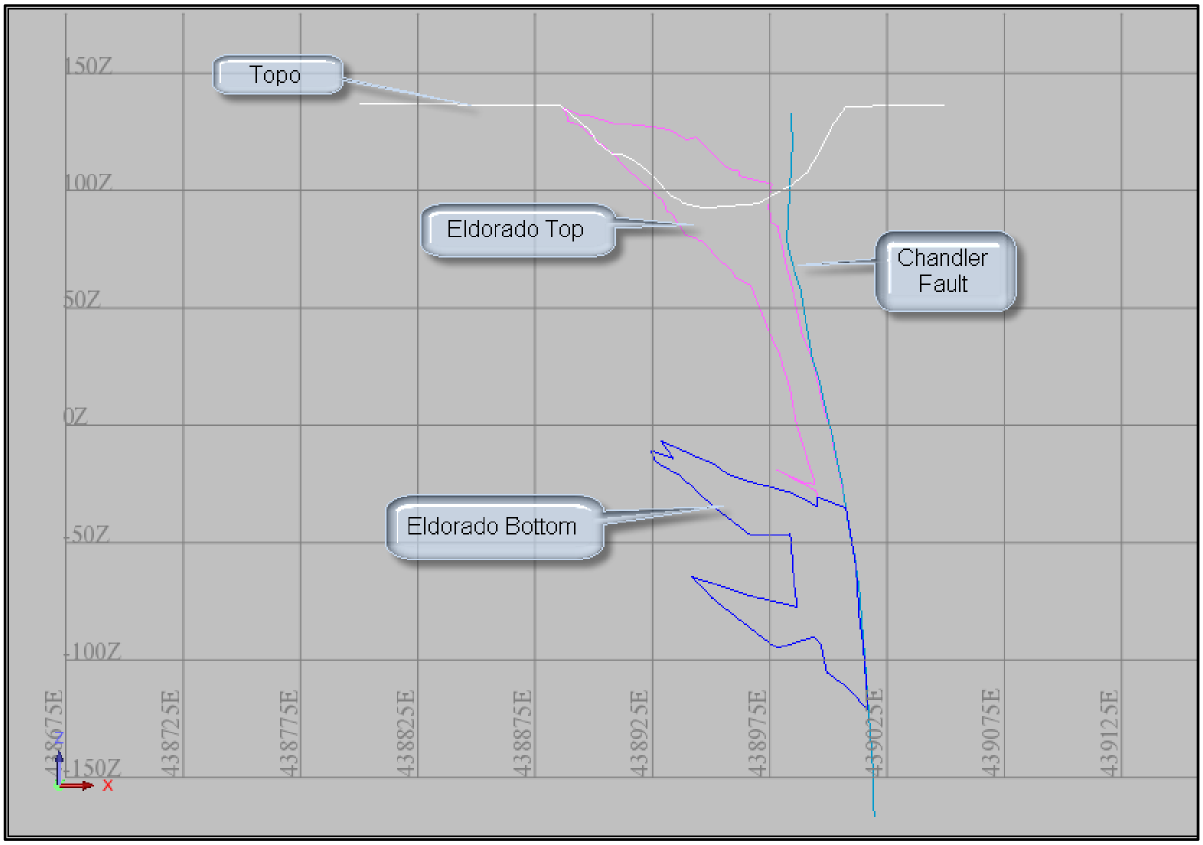


Figure 12.2: E-W Section through Taunus-Eldorado-HS zones

12.5 Compositing

Most of the samples inside the gold mineralized domains were collected at 2.0 m and shorter intervals (Figure 12-3). Note that the sonic sample lengths are the most variable from the three types of drill holes. Accordingly, all capped assays were composited to 2 m intervals.

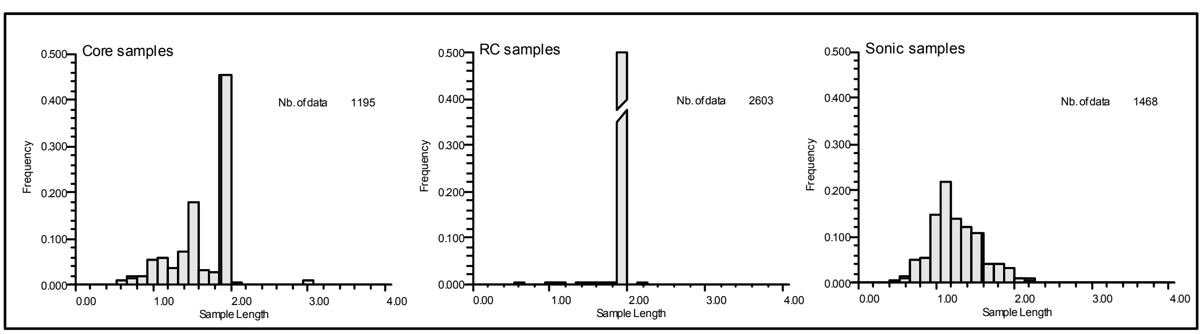


Figure 12-3: Histograms of Sample Lengths in the Taunus Deposit for Different Types of Samples

12.6 Evaluation of Outliers

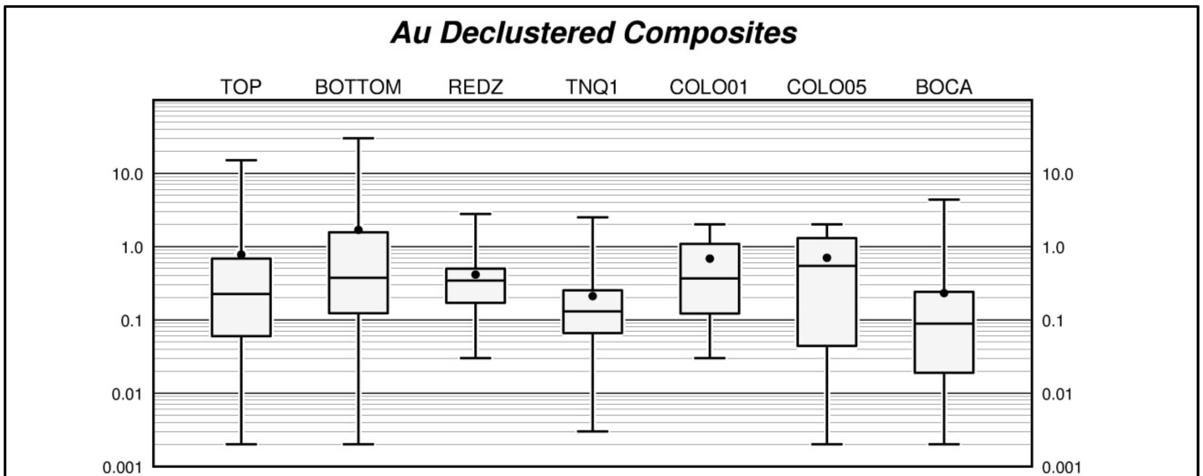
Block grade estimates may be unduly affected by very high grade assays. Therefore, the assay data were evaluated for the high grades outliers. The capping values were chosen by establishing a correlation between indicators of assays in the same drill holes at different thresholds and by reviewing probability plots. The inflection points on probability plots at high ends of grade distributions were interpreted as thresholds to high grade populations and candidates for choice of capping. Capping was completed on original assays in the Top and Bottom domains and is presented in Table 12.6.1. No capping was carried out in the satellite deposits.

Table 12.6.1: Capping of Original Assays in the Eldorado-HS Zones

Domain	Ndat	Maximum Value	Cap Value	Number Capped	Lost Metal (%)
Top	3881	68.57	15	17	3
Bottom	1314	104.6	30	5	9

12.7 Statistical Analysis and Variography

Basic declustered statistics of assays composited to 2.0 m lengths for the Taunus and smaller satellite deposits are presented in Figure 12-4.



	TOP	BOTTOM	REDZ	TNQ1	COLO01	COLO05	BOCA	
Number of data	3436	829	86	355	23	33	324	Number of data
Mean	0.778	1.684	0.414	0.211	0.684	0.703	0.232	Mean
Std. Dev.	1.611	3.48	0.332	0.261	0.693	0.732	0.454	Std. Dev.
Coef. of Var.	2.07	2.067	0.802	1.235	1.012	1.04	1.958	Coef. of Var.
Maximum	15.0	30.0	2.77	2.504	2.0	2.0	4.355	Maximum
Upper quartile	0.687	1.558	0.501	0.252	1.088	1.306	0.242	Upper quartile
Median	0.225	0.375	0.344	0.13	0.368	0.545	0.089	Median
Lower quartile	0.06	0.123	0.17	0.066	0.122	0.044	0.019	Lower quartile
Minimum	0.002	0.002	0.03	0.003	0.03	0.002	0.002	Minimum

Figure 12.4: Basic Statistics for Gold Declustered and Capped 2.0 m Composite Assay Data in the Taunus and Satellite Domains

Experimental correlograms and the models were generated for the Top and Bottom domains in the Taunus deposit (Figure 12-5). In all other gold mineralized zones, due to paucity of data, variogram models were not designed. The nugget effects (i.e., gold variability at very close distance) were established from down hole variograms for each of the gold mineralized zones. The nugget effect in both domains was modeled at 10% of the total sill. Note that the sill represents the grade variability at a distance beyond which there is no correlation in grade. The parameters of the correlogram models are presented in Table 12.7.1.

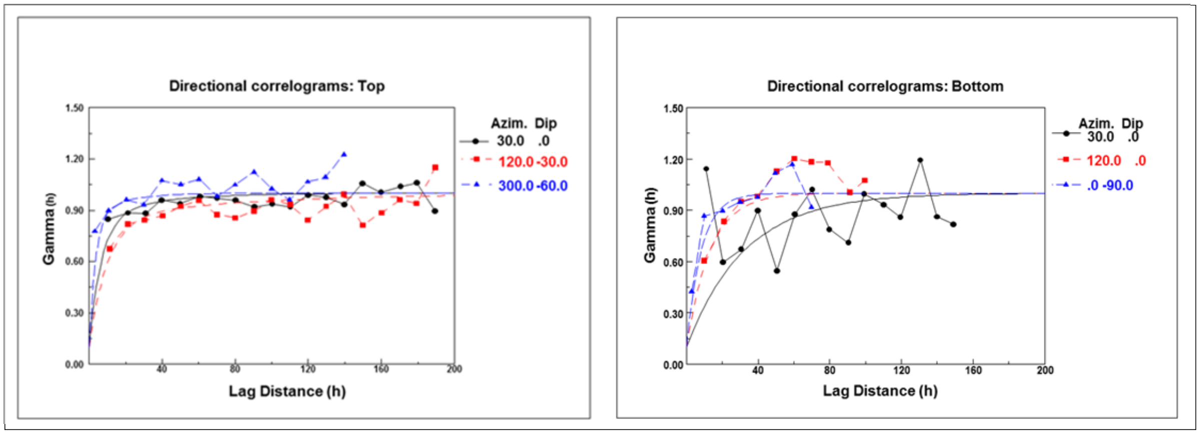


Figure 12.5: Experimental and Modelled Correlograms in the Taunus Deposit

Table 12.7.1: Parameters of the Exponential Correlogram Models in the Taunus Deposit

Zone	Nugget C_o	Sill C_1 and C_2	Gemcom Rotation s (RRR rule)			Ranges a_1, a_2		
			around Z	around Y	around Z	X-Rot	Y-Rot	Z-Rot
Top	0.10	0.75	-30	30	0	30	20	19
		0.15				250	100	50
Bottom	0.10	0.90	-25	0	0	40	100	25

12.8 Block Model and Grade Estimation

A designed block model covers the entire area of the Taunus and satellite deposits. The geometrical parameters of the block model are summarized in Table 12.8.1.

Table 12.8.1: Block extents in the Taunus and Satellite Deposits

Item	East	North	Elevation
Block origin (centroid)	438,603	2,536,003	-197
Block dimension	6	6	6
Number of blocks	200	350	75

The gold grades in the Top and Bottom domains of the Taunus deposit were estimated in two successive steps. The first step considered a relatively small search ellipsoid while, for the second step, the search ellipsoid dimension was increased, as presented in Table 12.8.2. In all satellite deposits one estimation stage was applied.

Table 12.8.2: Resource Estimation Parameters for the Taunus and Satellite Deposits.

Parameters	Top		Bottom		REDZ	TNQ1	COL01	COL05	BOCAS
	Step 1	Step 2	Step 1	Step 2					
Search radius: Rotated X (m)	30	45	30	40	50	50	80	50	80
Search radius - Rotated Y (m)	20	30	40	60	50	50	80	50	80
Search radius - Rotated Z (m)	15	20	25	25	20	20	20	20	20
Min data	9	6	9	6	6	6	6	6	6
Max data	16	16	16	16	16	16	16	16	16
Maximum number of samples per drill hole	4	5	4	5	5	5	5	5	5
Minimum number of holes	3	2	3	2	2	2	2	2	2

In all cases, search ellipsoid rotations are Identical to variogram rotations in the Top and Bottom Domains. In all satellite deposits, no rotations were applied.

In the Taunus deposit, block metal grades were estimated using ordinary kriging. On the other hand, inverse distance squared was applied in all satellite deposits. Note that waste areas outside of the modeled gold mineralized domains were not estimated.

12.9 Model Validation

The Taunus resource block model was validated by completing a series of visual inspections and by:

- Comparison of declustered average capped composite grades with average block estimates;
- Comparison of local "well-informed" block grades with composites contained within those blocks; and
- Comparison of average assay grades with average block estimates along different directions – swath plots.

Table 12.9.1 shows how the declustered average composite assay grades compare with the block estimated grades in the mineralized zones. Overall, the block estimated grades are quite close to the average composite grades. One of the largest differences is in the RedZ domain. Considering that there are only 86 composite assays in this domain, the differences are acceptable. Note that the average block grades represent straight average and were not weighted by the mineralized volumes.

Table 12.9.1: Comparison of assay grades to estimated block grades

Domain	Average Au (g/t)	
	Assays	Estimates
Top	0.78	0.83
Bottom	1.68	1.6
RedZ	0.41	0.48
Tmq1	0.21	0.23
Colo02	0.68	0.68
Colo05	0.7	0.68
Boca	0.23	0.23

Figure 12-6 shows a comparison of estimated gold block grades with borehole assay composite data contained within those blocks within the Top and Bottom gold mineralized domains in the Taunus deposit. On average, the estimated blocks are similar to the composite data, although there is a substantial scatter of points around the x = y line. This scatter is typical of smoothed block estimates compared to the more variable assay data used to estimate those blocks. This is indicated by a thick white line. The thick white line that runs through the middle of the cloud is the result of a piece-wise linear regression smoother.

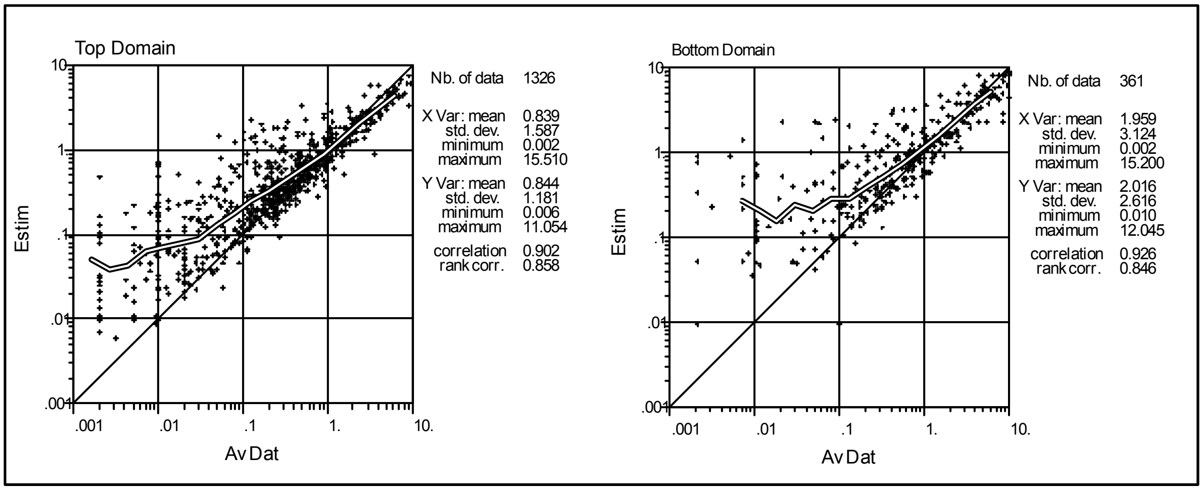


Figure 12-6: Comparison of Block Estimates with Borehole Assay Data Contained Within the Blocks in the Gold Mineralized Domains in the Taunus Deposit

As a final check, average composite grades and average block estimates were compared along different directions. This involved calculating de-clustered average composite grades and comparison with average block estimates along east-west, north-south, and horizontal swaths. Figure 12-7 and Figure 12-8 show the swath plots in the Top and Bottom domains. The average composite grades and the average estimated block grades are very similar in all directions. Overall, the validation shows that current resource estimates are a very good reflection of drill hole assay data.

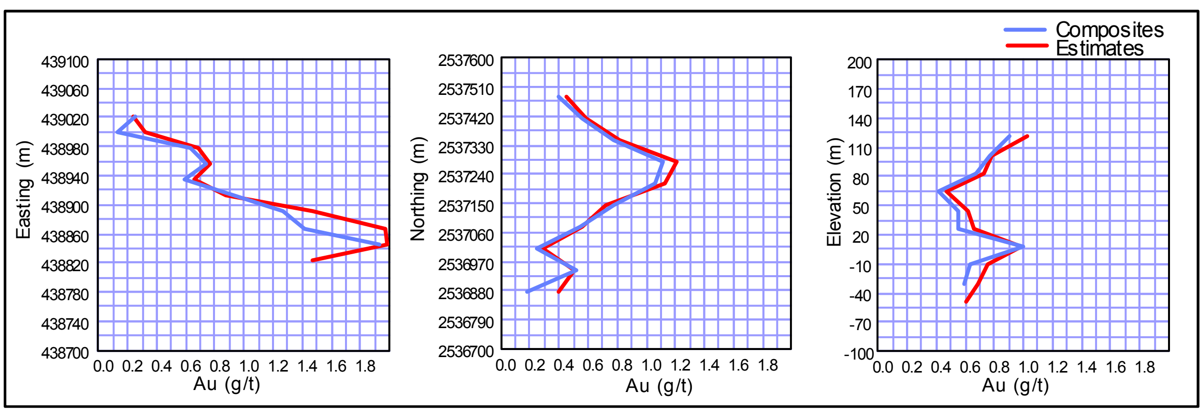


Figure 12-7: Declustered Average Gold Composites compared to Gold Block Estimates in the Top Domain

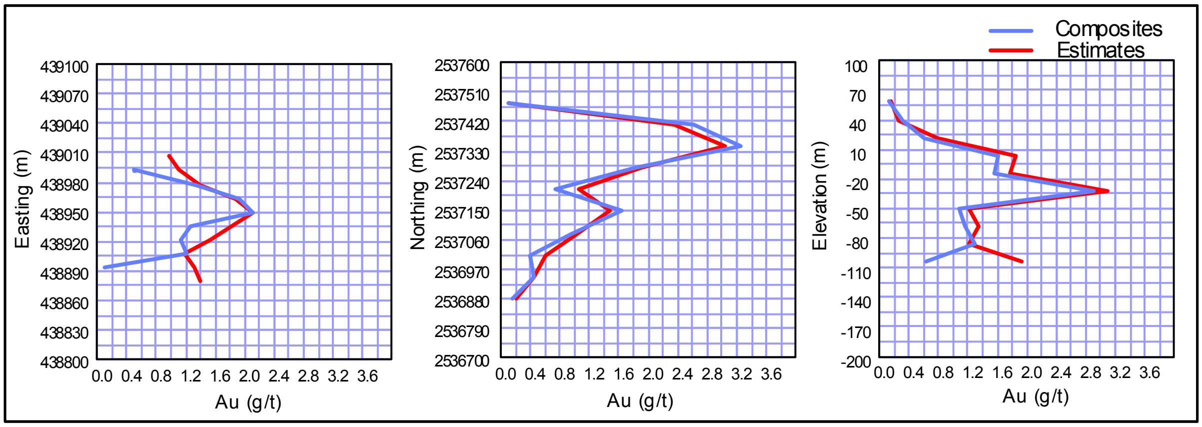


Figure 12-8: Declustered Average Gold Composites compared to Gold Block Estimates in the Bottom Domain

12.10 Mineral Resource Classification

Block model quantities and grade estimates for the Trinidad Project were classified according to the CIM Definition Standards for Mineral Resources and Mineral Reserves (December 2005) by Marek Nowak, P.Eng. (APEGBC#16985), an appropriate independent qualified person for the purpose of NI 43-101.

Mineral resource classification is typically a subjective concept, industry best practices suggest that resource classification should consider both the confidence in the geological continuity of the mineralized structures, the quality and quantity of exploration data supporting the estimates and the geostatistical confidence in the tonnage and grade estimates. Appropriate classification criteria should aim at integrating both concepts to delineate regular areas at similar resource classification.

SRK is satisfied that the geological modeling honors the current geological information and knowledge. The location of the samples and the assay data are sufficiently reliable to support resource evaluation. The sampling information was acquired primarily by core, RC, and sonic drilling.

Sample data in the Taunus deposit are sufficient for geostatistical analysis and evaluating spatial grade continuity by variography. For the satellite deposits, there are an insufficient number of assays to model reliable variograms. SRK is therefore of the opinion that the amount of sample data is generally sufficient to demonstrate reasonable geostatistical confidence for the Taunus deposit, but that for the satellite deposits there is a low confidence in both geological and grade continuity.

The estimated blocks were classified according to:

- Confidence in interpretation of the gold mineralized zones;
- Continuity of Au grades defined from the variogram models in the Taunus deposit;
- Number of data used to estimate a block; and
- Average distance to the composites used to estimate a block.

In order to classify gold mineralization as an Indicated Mineral Resource, “the nature, quality, quantity and distribution of data” must be “such as to allow confident interpretation of the geological framework and to reasonably assume the continuity of gold mineralization.” (CIM Definition

Standards on Mineral Resources and Mineral Reserves, December 2005). To satisfy this requirement, all blocks estimated during the first step of the estimation process in the Top and Bottom domains were flagged for Indicated category. Search radii in the first step can be roughly approximated to modeled grade continuity at 85% of the variogram sill. Those blocks were estimated from three or more drill holes within an average distance from samples to estimated blocks of approximately 15 m in the Top and 20 m in the Bottom domains.

The boundaries of the Indicated category were adjusted by a smoothing procedure. This procedure excluded small clusters of blocks assigned to the Indicated category and included some areas originally assigned to the inferred category. This necessary smoothing of the boundaries resulted in a number of blocks re-classified from the Inferred to the Indicated resource. All estimated block grades not assigned to the indicated category were assigned to the inferred category.

Considering the higher uncertainty of volume of smaller gold mineralized domains in the satellite deposits, SRK considers that resource blocks in those domains would be appropriately classified as an Inferred Mineral Resource.

12.11 Mineral Resource Statement

CIM Definition Standards for Mineral Resources and Mineral Reserves (December 2005) defines a mineral resource as:

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

The "reasonable prospects for economic extraction" requirement generally implies that the quantity and grade estimates meet certain economic thresholds and that the Mineral Resources are reported at an appropriate cut-off grade taking into account extraction scenarios and processing recoveries. SRK considers that the gold mineralization evaluated on the Trinidad Project is amenable for open pit extraction.

In order to determine the quantities of material offering reasonable prospects for economic extraction from an open pit, SRK used a Whittle pit optimizer to evaluate the profitability of each resource block based on certain optimization parameters selected from comparable projects. The optimization parameters include: mining costs of US$1.50 per mined tonne, material processing and G&A costs of US$5.00 per processed tonne, overall pit slope angles of 45°, metallurgical recovery of 70%, and a gold price of US$1,365 per ounce was used. The reader is cautioned that the results from the conceptual pit optimization work are used solely for the purpose of reporting Mineral Resources that have "reasonable prospects" for economic extraction by an open pit and do not represent an attempt to estimate mineral reserves.

SRK considers that the blocks located within the conceptual pit envelope show "reasonable prospects for economic extraction" and can be reported as a mineral resource. Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability. There is no certainty that all or any part of the Mineral Resource estimate will be converted into Mineral Reserves estimate;

The Mineral Resource Statement for the Taunus and the Colinas (satellite) deposits at 0.3 g/t cut-off is presented in Table 12.11.1.

Table 12.11.1: Mineral Resource Statement*, Trinidad Project, State of Sinaloa, Mexico, SRK Consulting (Canada) Inc., November 29, 2011

Domain	Classification	Tonnes (000's)	Gold (g/t)	Contained Gold (oz)
Top	Indicated	2,096	1.09	73,340
Bottom		2,229	2.45	175,240
Boca		1	0.68	20
RedZ		1	0.42	10
All Indicated		**4,326**	**1.79**	**248,610**
Top	Inferred	517	0.88	14,554
Bottom		285	1.77	16,275
Boca		532	0.57	9,710
RedZ		185	0.54	3,215
Tnq1		221	0.55	3,936
Colo02		90	0.68	1,975
Colo05		94	0.85	2,580
All Inferred		**1,925**	**0.84**	**52,245**

Note: Reported at a cut-off of 0.3 g/t. Mineral resources are not mineral reserves and do not have demonstrated economic viability. All numbers have been rounded to reflect the relative accuracy of the estimates.

12.12 Sensitivity Analysis

The mineral resources of the Trinidad Project are sensitive to the selection of the reporting cut-off grade. To illustrate this sensitivity, the block model quantities and grade estimates within the conceptual pit used to constrain the mineral resources are presented in Table 12.12.1 and Table 12.12.2 at different cut-off grades. As can be observed from these cut-off tables, the resource is relatively insensitive to cut-off grade in the 0.2 to 0.5 g/t Au cut-off range on a contained metal basis, which is likely the cut-off grade range of economic interest.

The reader is cautioned that the figures presented in this table should not be misconstrued with a Mineral Resource Statement. The figures are only presented to show the sensitivity of the block model estimates to the selection of cut-off grade. Figure 12-9 and 12-10 present this sensitivity as grade tonnage curves.

Table 12.12.1: Sensitivity Analysis of Indicated Resources from the Taunus and Satellite Deposits

Cut-off (g/t)	Tonnes (000's)	Gold (g/t)	Contained Gold (oz)
0.1	5,631	1.42	256,820
0.2	4,945	1.59	253,520
0.3	4,326	1.79	248,610
0.5	3,449	2.14	237,470
0.8	2,503	2.71	218,100
1	2,075	3.08	205,820
1.5	1,473	3.85	182,140
2	1,142	4.46	163,650

Note: The reader should be cautioned that the figures presented in the table should not be misconstrued as mineral resource statement.

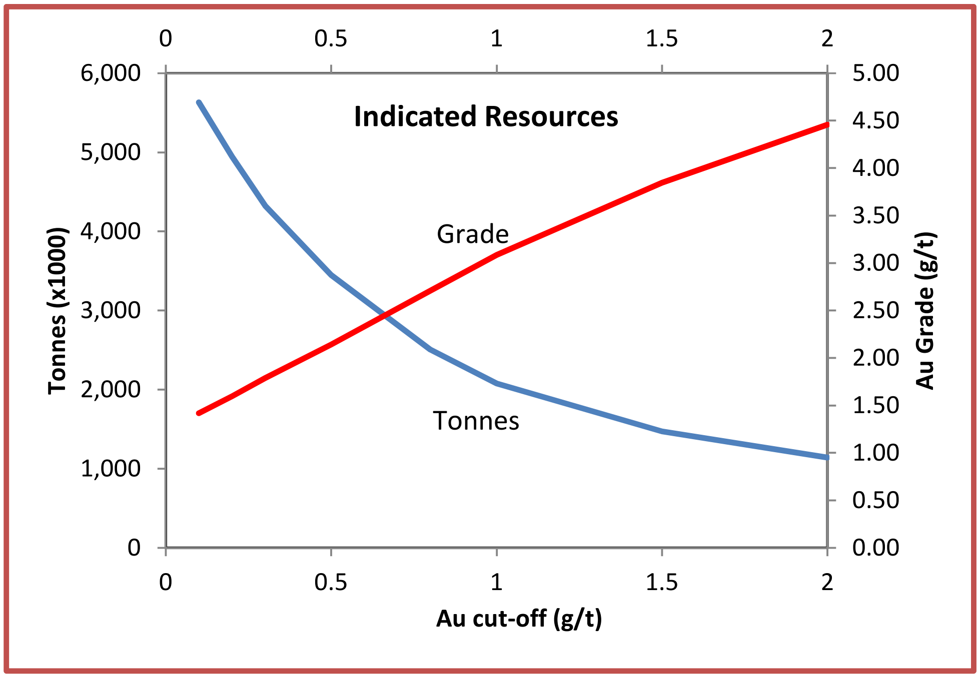


Figure 12-9: Grade Tonnage Curves for Indicated Resources in the Taunus and Satellite Deposits

Table 12.12.2: Sensitivity Analysis of Inferred Resources from the Taunus and Satellite Deposits

Cut-off (g/t)	Tonnes (000's)	Gold (g/t)	Contained Gold (oz)
0.1	2,735	0.66	57,930
0.2	2,453	0.72	56,530
0.3	1,925	0.84	52,240
0.5	1,162	1.14	42,590
0.8	596	1.62	31,140
1	392	2.01	25,270
1.5	172	3.03	16,770
2	116	3.68	13,710

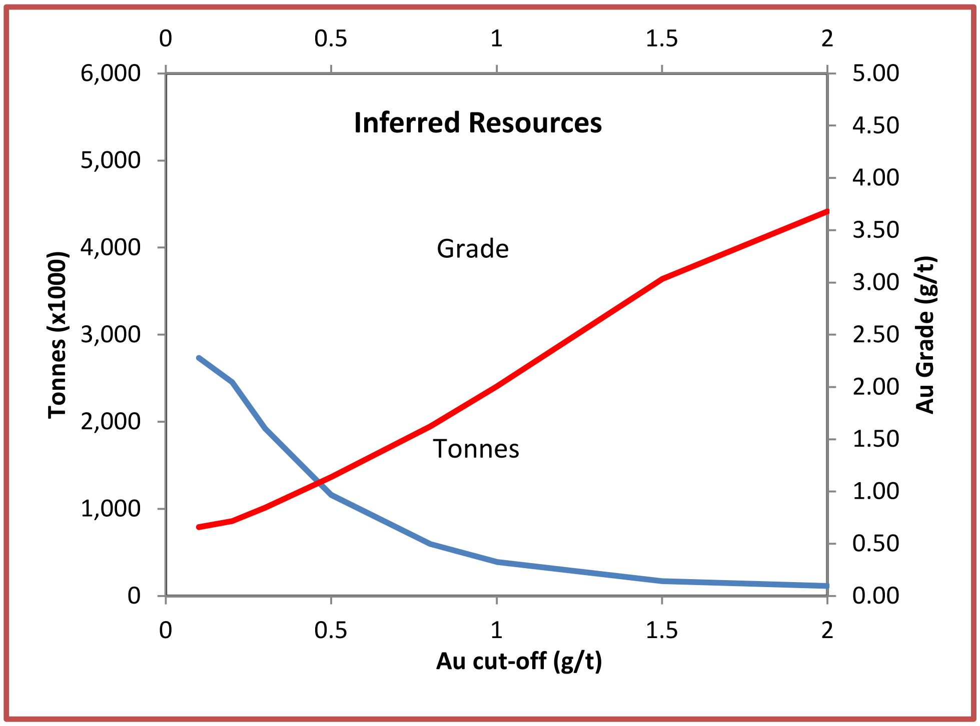


Figure 12-10: Grade Tonnage Curves for Inferred Resources in the Taunus and Satellite Deposits

13 Mineral Reserve Estimate (Item 15)

There are no current Proven or Probable Mineral Reserves on the Trinidad Property's Taunus deposit.

14 Mining Methods (Item 16)

The Taunus deposit was historically mined by Eldorado gold and is situated in relatively flat terrain, ringed by ephemeral arroyo's in a semi-arid environment that are influenced by periods of heavy rain in the wet season. To the north and south, the Taunus pit is supported by two satellite areas of mineralization that are currently classified as inferred. For the PEA, the size of the pits have not been constrained by site infrastructure, arroyo's or other factors that may reduce the size of the potential pit and a 45° slope formed the bases for potential economic extraction. The final pit was determined to be approximately 225 m deep, 900 m from north to south, 550 m from east to west with a total volume of 27 Mm^3. Above a cut-off grade of 0.17 g/t Au, the total feed is estimated at 7.8 Mt at a grade of 1.12 g/t Au with a strip ratio of 7.2:1 (waste:feed) and 281 koz of gold contained in-situ before recovery. The production schedule calls for a 5 year mine life with annual gold delivery to the heap of 30 koz Au, 40 koz Au, 60 koz Au, 60 koz Au and finally 90 koz Au with an average LoM total production rate of 37 kt/d.

The mine fleet will likely consist of 100 t capacity (Caterpillar 777 or equivalent) rigid body haul trucks supported by either front end loaders or hydraulic excavators. Blasting will be included in the default mine assumptions but some areas may be amenable to free-dig operations.

It is likely that mine contractors will be employed at Taunus and initial contractor interviews have been taking place through early 2012.

Waste will be disposed approximately 1.5 km away from the pit.

The resource numbers referenced in the mining and economic modeling section are based on an internal cut-off of 0.17 g/t. This is different from the 0.3 g/t reported in section 13. As such, mining figures represent diluted grades to a selective mining unit of 5 m x 5 m x 5 m that result in more tonnes at a lower grade and slightly less contained ounces than reported in the resource.

14.1 Geotechnical Design Parameters

14.1.1 Geotechnical Characteristics of Geologic Units

The area receives 120 cm/yr of annual precipitation. A single 100 year event can produce 39 cm of precipitation and the average July precipitation is 31 cm. The precipitation is the primary source of water inflow to the pit. See Section 3.0 for more detail discussion.

Regional Geology – The regional geology is a mid-tertiary age volcanics. The Upper Volcanic Group (Oligocene – Miocene age) outcrops on east and west sides of the basin and consists of thick sequences of rhyolitic ignimbrites. There are some basaltic flows. The Lower Volcanic Group (Pleocene – Eocene age) is comprised of principal units of tertiary dacite – rhyolite volcanic sequence of flows and tuffs, overlain by upper tertiary rhyolite ash-flow tuffs, breccias and conglomerates. The intrusive units include gabbro and diorite units grading to granodiorite and quartz-feldspar porphyry units. Section 5 has detailed discussion on the regional geology. From a geotechnical perspective, the regional geology is known to contain material contacts, weather rock masses and regional faulting that impact stability conditions in the pit.

Taunus Geology – The local geology near the Taunus deposit consists of a quartz feldspar porphyry, andesite and mixed volcanic. The deposit is bounded by northwest trending parallel faults: the

Chandler Fault on the east and the Taunus Fault on the west. Mineralized zone is a silicified breccia that has been altered and replaced by chlorite, hematite and silica. A silicified breccia zone steeply dips to the east in south portion of the deposit and is near horizontal in north pit area. Weak argillic alteration along fault zones exist, but are limited to the quartz porphyry, parts of tuffs and structural trends. There is evidence for post-mineralization faulting along east-dipping fault at base of silicified zone. Several drill holes encountered a zone of voids, clay and caving at the silica-andesite contact. There are low-angle east-dipping structures exposed at low water in the Arroyo Azul on northeast margin of the Taunus orebody. The primary mineralization is gold and silver, but the deposit includes copper, lead, zinc and arsenic.

The heap material contains sufficient clay fines that the historic heap leach pile had a low permeability. Test results from Metcon suggest that an agglomeration process may help to bind the fines to allow for increased permeability. Agglomeration involves the addition of 2.0 kg/t of cement and 1.5 kg/t of lime to the crushed leach material prior to leaching. The clay content in the breccia matrix will contribute to a reduction in matrix strength for the in situ rock, especially after exposure to weathering. Figure 14-1 shows an east-west cross section of the important geologic units in the Taunus pit.

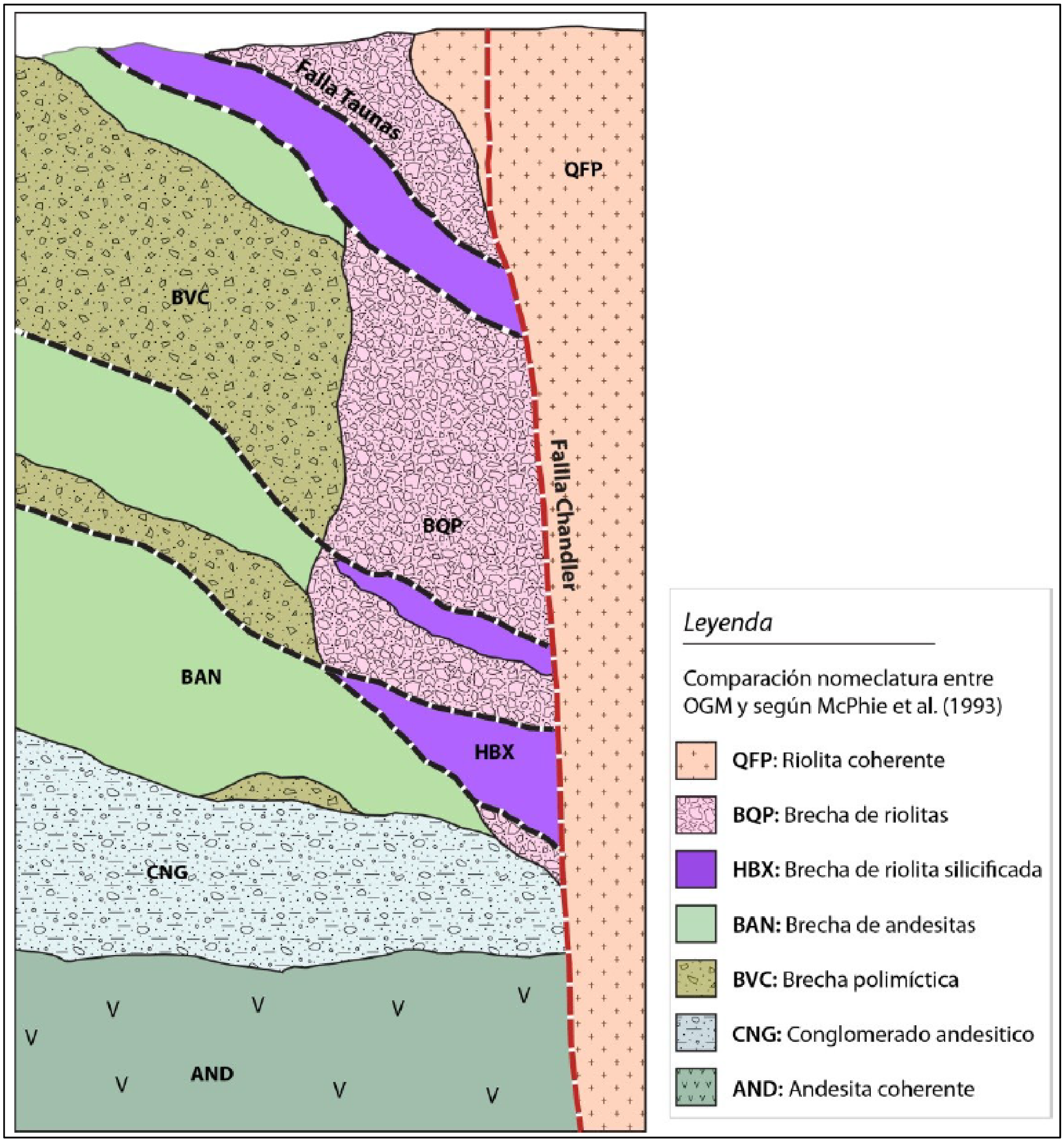


Figure 14-1: East-West Cross Section of Geologic Units in the Taunus Pit Area (adopted from Mendoza, 2011)

Previous Pit Mining **–** Eldorado Mining owned the property and mined the Taunus pit from 1994 to 1999. They mined 1.4 Mt of ore during that 5-year period at an average grade of 1.85 g/t. The mine produced up to 55,000 oz of gold over a 24 mo period at one point, but was producing at an average rate of 30,000 oz. per year after the ramp up period.

The current pit is about 345 m along north-south strike of the deposit and 169 m wide at the surface. The local ground elevation is 136 m masl and the bottom of the pit is at about 86 m masl, for a total depth of about 50 m. Table 14.1.1.1 is an estimate of pit geometry parameters for the existing Taunus pit.

Table 14.1.1.1: Summary of Existing Pit Parameters

Parameter	Value	Measurement
N-S length of pit	345	m
E-W length of pit	169	m
Local ground elevation	136	masl
pit floor elevation	86	masl
Single bench height	15	m
Bench width	4	m
Ramp width	12	m
North wall overall angle	55°	
East wall on north overall angle	55°	
East wall on south overall angle	47°	
South wall overall angle	62°	
West wall overall angle	31°	

Current Ground Conditions – During the site visit observations of ground conditions from the top 60 m of the east pit wall were made (i.e., the portion above the waterline). The west highwall was observed from a distance viewed from the east ramp.

The east wall of the pit is defined by Chandler Fault, which is a high angle, pervasive fault that lies along the entire east side of the pit. East of the fault is the clastic breccia (QFP) which is quite competent along the north end of the east wall. In the south endwall the rock on either side of the Chandler fault has sloughed away and there are localized tension cracks unsloughed rocks.

Bench stability in the west wall is controlled by both bench-scale jointing and pit-scale faulting. The west wall is delimited by the boundary of the Taunus Fault. The condition of the west wall is not as favorable as the east wall, suggesting a lower overall rock quality.

The exposed pit walls that the walls can be divided into the following five rock quality zones.

- *Top* Zone – The top 15 m is a weathered transition zone which is consistent around the pit. This rock visually appears weakest of the exposed rocks in the pit.
- *East Wall Zone* – The northern end of the east wall is most competent rock with very stable bench face and minimal sloughing onto the benches. The rock is a quartz feldspar porphyry (QFP) and visually appears strongest/ most competent of the exposed rocks in the pit. At the southern end of the wall there are several oblique faults that intersect which has resulted in bench-scale failures and raveling. This rock visually appears of medium competency dominated by rock fabric structure, but competency may improve with depth.
- *South Wall Zone* – The south wall contains steeply dipping north-south faults in which the adjacent rock has raveled. No benches are currently visible, but it is not known if they had been constructed at the time of mining. The rock is quartz feldspar porphyry (QFP) on the east side and a brecciated rhyolite (BQP) in the center and a brecciated andesite (BAN) on the west. Visually the rock appears to have an above average competency with little influence by exposed medium to flat dipping joints. This region is roughly delimited by the Chandler Fault on the east and Taunus Fault on the west. The southern end of the west wall has had a temporary ramp reestablished and it was not possible to view much of the exposed bench faces below the top 15 m.

- *West Wall Zone* – The northern end of the west wall has extensive bench failures controlled by bench-scale jointing that forms moderately-high angled wedges that fail by raveling over the long-term. This rock a brecciated andesite (BAN) in the south portion and a brecciated clastic (BVC) on the north end. The rock visually appears to have lower than average competency.
- *North Wall Zone* – The north endwall has benches still in good condition and exposed flat-lying joints do not appear to control stability. The flat fault exposed in the endwall steepens as it outcrops at the surface near the Chandler Fault. This steepening can also be seen in the local sub-parallel flat joint set. The rock visually appears to be the second most competent rock around the pit walls.

14.1.2 Geotechnical Conditions

Rock Characterization – Only limited RQD data exists from the core drilling. Values for long lengths of core had RMR values of zero which are not explained in the core logs but have been verified from core box photos and core inspection. It was not possible to verify factors influencing RQD values (e.g., core size variations, drilling-induced damage, etc.). The cores are likely more fractured than the in situ undisturbed condition. It is likely that large diameter core (PQ-size) carefully drilled and handled would have higher RQD values. RQD values are used to estimate the rock mass rating (RMR) values used to characterize rock quality.

Values of RMR_{89} (Beniewaski, 1989) and Q (Barton et al, 1974) were estimated for the five zones around the pit. RQD values were averaged from the boreholes within the rock region. Values of unconfined compressive strength (UCS) were estimated based on field observation of the rock types and from typical values found in literature. Values for joint spacing, joint set number, joint alteration, and groundwater conditions were estimated based on visual observations made from the pit ramps. The estimated rock quality is summarized in Table 14.1.2.1 according to rock type and zone around the pit. No rock strength testing has been performed for the project.

Fractures and Faulting – Mapping of geologic features and discontinuities have been conducted (Mendoza, 2011). Figures 14-2 and 14-3 show the mapped fractures and faults for the Taunus pit and the north outcrop, respectively. The orientations of the mapped faults are summarized on Table 14.1.2.2.

The fracture data for the 103 mapped structures were analyzed using the DIPS program. The stereographic projections of mapped fractures are shown on Figures 14-4. The four potential dominant joint sets are indicated on this figure. Figures 14-5 shows a rose diagram of mapped fractures orientations. The two pairs of sub-orthogonal sets can be seen in the fracture count of the rose diagram. A summary of the average joint set orientations is provided on Table 14.1.2.3.

Table 14.1.2.1: Summary of Estimated Rock Quality by Zone around Pit

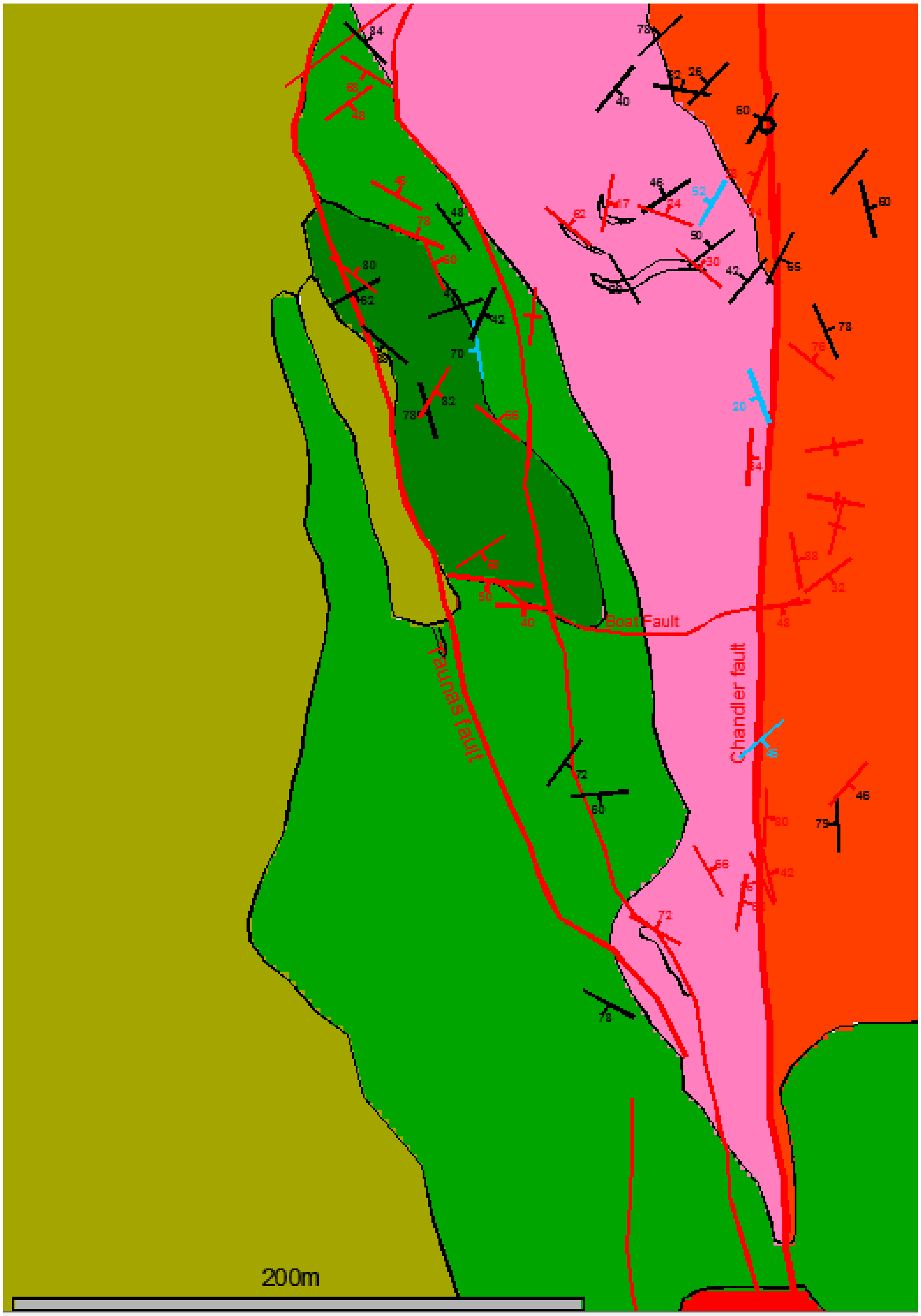
Abbreviation	Rock Types	Zone Location	Ave RQD	Est. UCS (MPa)	Est. RMR_{89}	Est. Q	Rock Class	Rock Quality
BQPw	Weathered Brecciaed rhyolite	Top	2	1	17	0.002	V	V. poor
BQP	Brecciaed rhyolite	North	58-42	15	42	0.8	III	Fair
QFPw	Weathered Quartz feldspar porphyry	Top	2	5	17	0.002	V	V. poor
QFP	Quartz feldspar porphyry	East	30-22	15	45	1.0	III	Fair
BQP/HBX	Brecciaed rhyolite & hydrothermal	Ore	25-13	9	32	0.08	IV	Poor
BAN/BVC	Brecciaed Andesite	West	12-2	4	25	0.09	IV	Poor
BAN/QFP	Brecciaed Andesite/QFP	South	18-6	9	34	0.20	IV	Poor
BANw	Weathered Brecciaed Andesite/QFP	Top	2	1	17	0.002	V	V. poor
CNG	Conglomerated andesite	Basement		18	51	4.3	III	Fair
AND	Andesite	Basement		22	51	4.3	III	Fair
And sil	Andesite silicified	Basement		26	52	4.3	III	Fair

Table 14.1.2.2: Fault Orientations

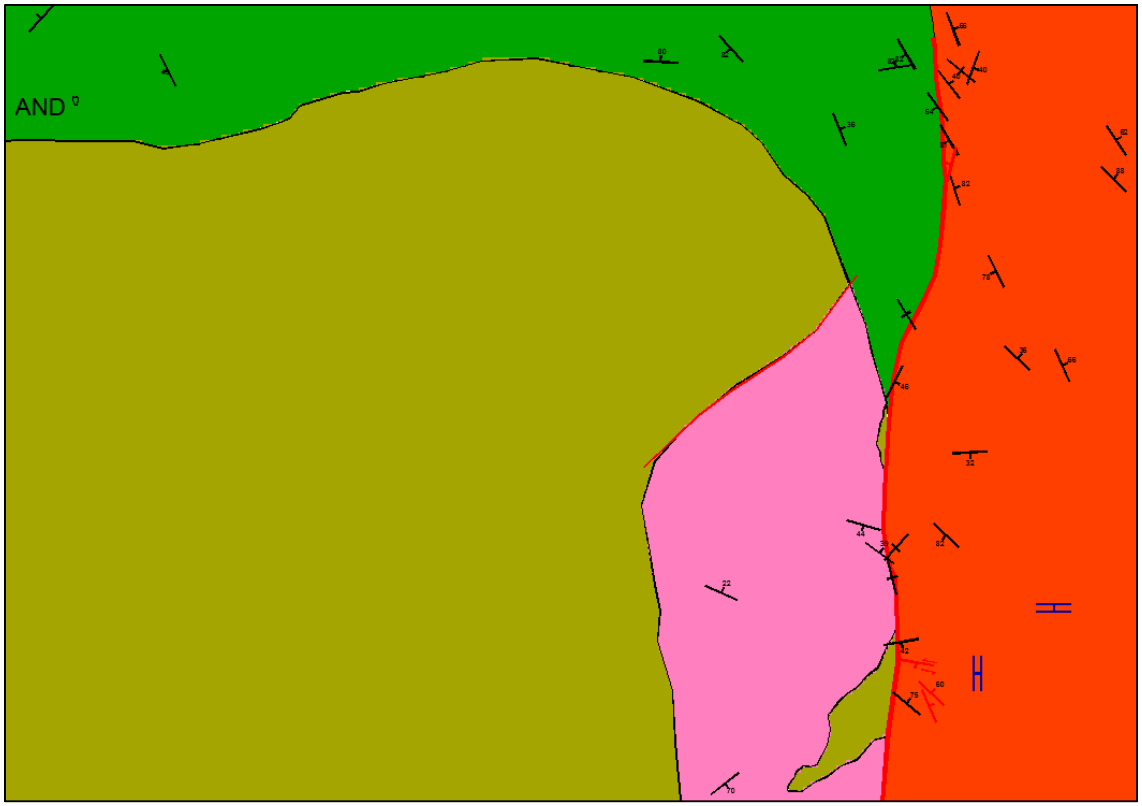
Dip (°)	Dip Dir (°)	Set	Comment
90	275		Chandler Fault
38	70	1	Taunus Fault
38	82	1	Parallel Taunus
55	180		Boat Fault
90	320		North 1
90	322		North 2
90	324		North3, furthest north

Table 14.1.2.3: Average Joint Set Orientations

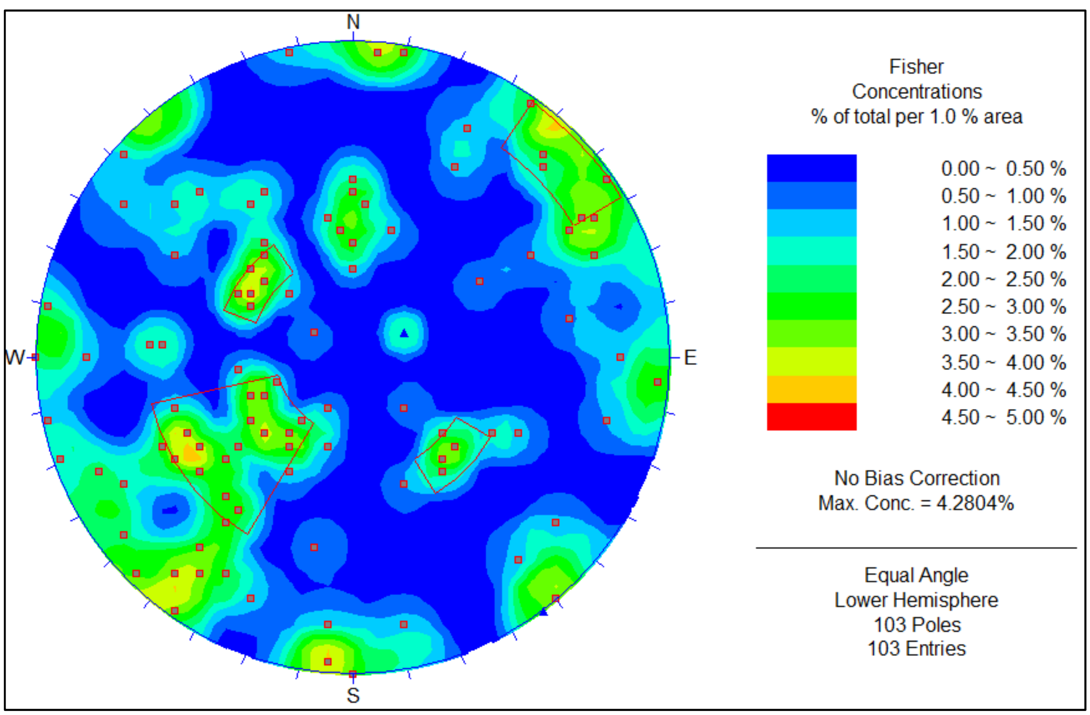
Dip	Dip Dir	Set	Comment
50	54	1	sub-parallel Taunus Fault
82	228	2	Steep set
43	125	3	
47	312	4	



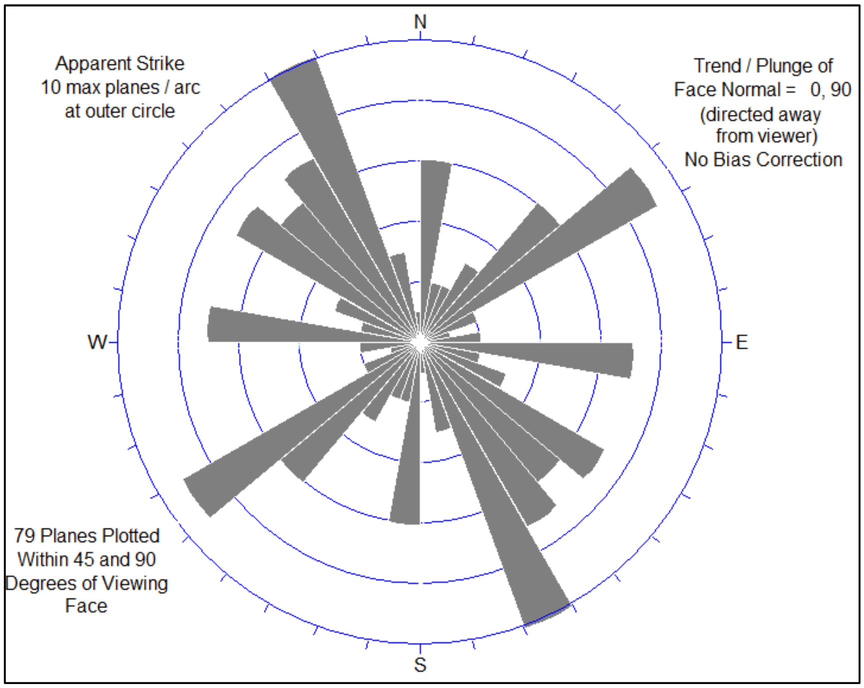
Figures 14-2: Mapped Fractures and Faults in the Existing Taunus Pit



Figures 14-3: Mapped Fractures and Faults at the North Outcrop



Figures 14-4: Stereonet of Mapped Fractures Indicating Joint Sets



Figures 14-5: Rose Diagram of Mapped Fractures Orientations

Hydrogeologic Characterization – No hydrogeology testing has been conducted for the project. However, the following statements can be made based on history of flooding and draining of the pit.

The pit was allowed to fill with water after mining ceased in 1999. It remained filled until May 2010 (5/21/10) when Marlin Gold started pumping it out for access to the pit bottom for exploration drilling. The water level in the pit at the time was +125 masl, or about 2-3 m below the ground surface. The high water level in the pit suggests that the local groundwater elevation is near surface.

The pit was pumped empty by Feb 2011 (2/12/11). It took about 267 days to pump the pit empty. The pumped volume is estimated to be 1,075,785 m^3 based on an average pumping rate of approximately 65 liters/sec. The total volume of the pit is about 758,823 m^3. The difference would be water that came into the pit via precipitation, surface runoff and groundwater inflow.

Continuous pumping was maintained after the pit was emptied until the in-pit drilling program was completed. During drilling, the pump ran for approximately 1.7hrs/day at 32.6 litres/sec, or about 194,817 litres per day. During the drilling period when the pit was pumped there were no obvious seeps or springs in the pit wall. The pumps were shutoff July 2011 (7/15/11) and the pit was allowed to naturally refill. The current water elevation as of the site visit (2/16/12) was 65 masl, or 21 m above the pit floor. Over the last 7 months (216 days) the pit has since been allowed to naturally refill.

Techtronic Stress and Seismic Conditions – No stress measurements have been made at the mine. A literature review also does not indicate that stress measurements have been made in the vicinity of the mine. The likely principal horizontal stresses, according to the world stress map, are oriented north-south. This information is based on borehole breakout data and could be a combination of strike-slip and thrust displacements. The regional faulting provides little indication of the current stress regime. However, in the absence of on-site stress measurements, it is reasonable to assume the major principal stress is oriented north-south parallel the Chandler Fault and is equal in magnitude to the lithostatic vertical stress (i.e., $\square_H = \square_V = \square gh$). It is also assumed that the minor principal stress is oriented east-west perpendicular to the Chandler Fault and is half of the vertical stress (i.e., $\square_h$=0.5 $\square_V$).

The site is located about 615 km north-west of the source of the M_n =8.1 Michoacan earthquake of 1985. This earthquake was offshore in the San Andreas Fault. According to a seismic study of the Aguamilpa dam, which is about 140 km southeast of the site, the region is sufficiently inland from the San Andreas fault system that, according to the Mexican Seismic Chart (Esteva, 1970), it is located in Seismic Zone 1 (low seismicity). Figure 14-6 shows the historic seismic events near Aguamilpa Dam, about 140 km south of site. The maximum considered earthquake (MCE) maps for spectral ordinates at 0.2 sec and 1.0 sec indicate S_s = 0.6 and S_1 = 0.28, respectively, for the area around Mazatlan should be used to estimate the seismic response spectra parameters. These maps are generally based on the USGS probabilistic maps for ground motion with 2 percent probability of exceedance in 50 years; approximately 2,500-year return period (IBC, 2008). The site is assumed to be classified as a Class D site class consisting of stiff soil with shear wave velocities between 180 m/s < s_v < 360 m/s and standard penetration tests between 15< N < 50 or the undrained shear strength between 50 kPa < S_u < 100 kPa. The response spectra factors F_a = 1.3 and F_v = 1.8 should be used.

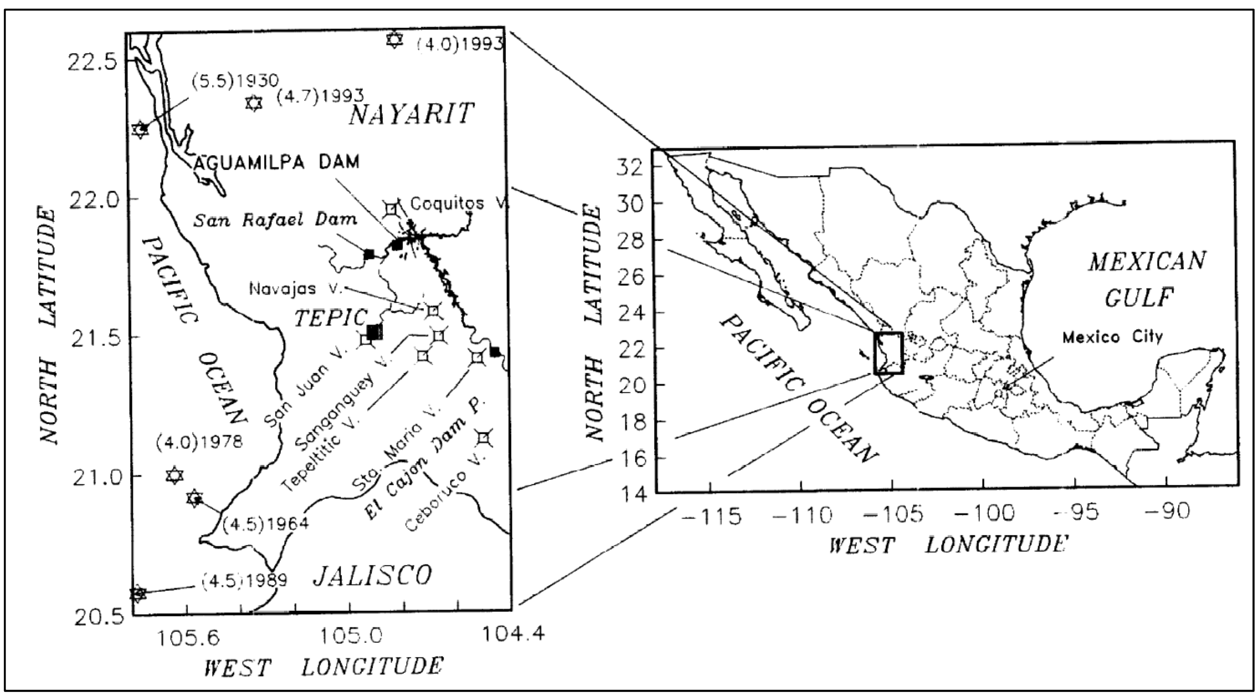


Figure 14-6: Historic Seismic Events Near Aguamilpa Dam, about 140 km South of Site (adopted from Castro and Delgado, 1996)

14.1.3 Open Pit Geotechnical Stability

The estimated rock mass conditions for open pit highwall are summarized in Table 14.1.3.1. Visual inspection of the data suggests that rock quality immediately around the veins will be variable.

Table 14.1.3.1: Summary of Average Rock Quality Used for Pit Wall Stability

Highwall	RMR	Rock Quality	Rock Class	Shear Strength Parameters
Top 15 m zone	17 ± 8	Very Poor, highly weathered	Class V	φ=20, Coh=50 kPa
East wall zone	45 ± 10	Fair, minor cross structure	Class III	φ=30, Coh=250 kPa
South wall zone	34 ± 10	Poor, sheared	Class IV	φ=25, Coh=150 kPa
West wall zone	25 ± 10	Poor, cross structure	Class IV	φ=25, Coh=150 kPa
North wall zone	42 ± 10	Fair, some sheared	Class III	φ=30, Coh=250 kPa

Broad design concept for pit layout

The relevant processing test and exploration results that apply to assessing stability of the pit walls primarily depends on the maximum depth of the pit. Total mineable material is about 7.75 Mt, of which 5.9 Mt is high grade material at an average 1.6 g/t and 2.8 Mt is low grade material at 0.27 g/t. The life of mine is planned to be about 5 years, during which time a total of about 49.43 Mt of waste rock will be removed. The planned pit depths by phase are the following.

- φI = 15 m deep, 1 Mt heap material, 1 Mt waste;
- φII = 37 m deep, 4 Mt heap material, 26 Mt waste;
- φIII = 63 m deep, 5 Mt heap material, 47 Mt waste; and
- Ultimate pit: 230 m deep, 7.75 Mt heap material, 49.43 Mt waste.

Acknowledging that these pit shells may change as additional data are collected and analyzed, they become the starting point for assessing appropriate geotechnical mine design parameters. For reference, the ground elevation 136 msl and is nearly flat beyond the limits of the pit.

Assumed Pit slope design constraints

Open pit production rate will be 32,000 t/d over 5 years to mine to the ultimate pit shell. This mining rate includes stripping and waste rock removal. A mining flitch will be in 5 m vertical block height increments. A single operating bench is assumed to be 3 flitches or 15 m high. Consistent, good quality controlled blasting will be used to produce a relatively undisturbed wall face.

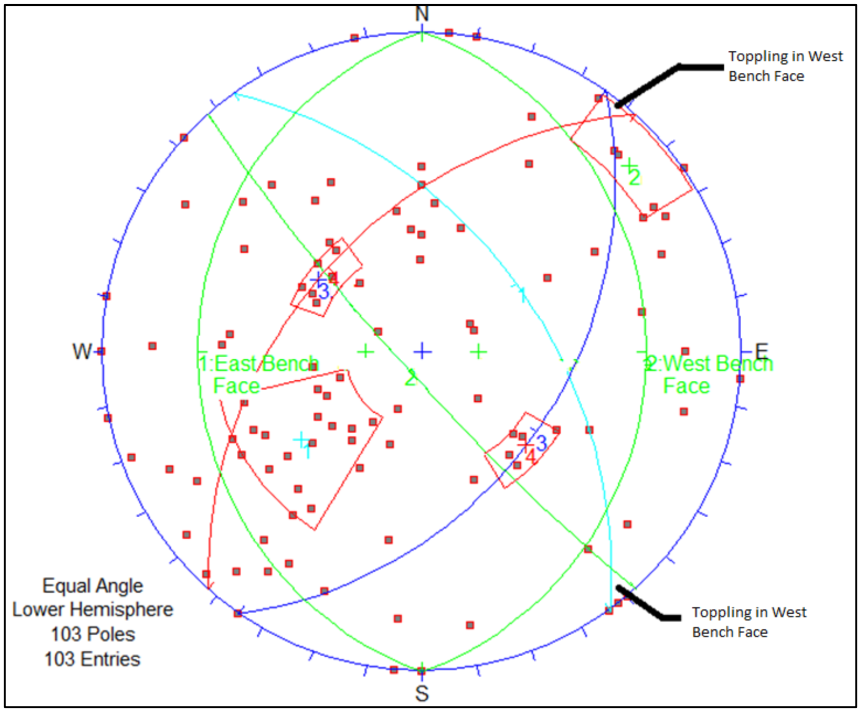
The average density of the heap material is assumed to be about 2.7 t/m^3 and the averaged density of waste rock is about 2.53 t/m^3. These values were used to convert pit volumes into tonnes of rock mined.

This area of Mexico receives over 120 cm of rain per year. Groundwater elevations are known to be near the ground surface from observations of water levels in the inactive pit. It is anticipated that pit dewatering will be required to depressurize the rock mass below the pit walls. This will be necessary to maintain the required stability of pit walls. Dewatering will be on an inter-ramp scale on all rock walls.

The joint sets were analyzed for potential structural stability control. Figure 14-7 is a lower-hemisphere stereographic projection of the dominant joint sets. This figure indicates the potential kinematic wedges day-lighting in west bench wall. Repeating wedges are formed by the intersection of joint sets as follows

- Joint sets #1 (50/54) and #3 (43/125) – wedges in the west wall benches; and
- Joint sets #2 (82/228) and #4 (47/312) – wedges in the east wall benches.

Observations from the current pit suggest that these moderately-high angled wedges fail by raveling of the rock mass in small blocks over the long-term as the bench relaxes. The schematic shown on Figure 14-8 illustrates the potential 3-D blocks that would be formed in the west wall of the pit as formed by joint sets 1 and 2.



Figures 14-7: Stereonet of Potential Kinematic Wedges Indicating Day-Lighting Joint Intersections for Sets 1 and 2 and 3 and 4 in West Bench Wall

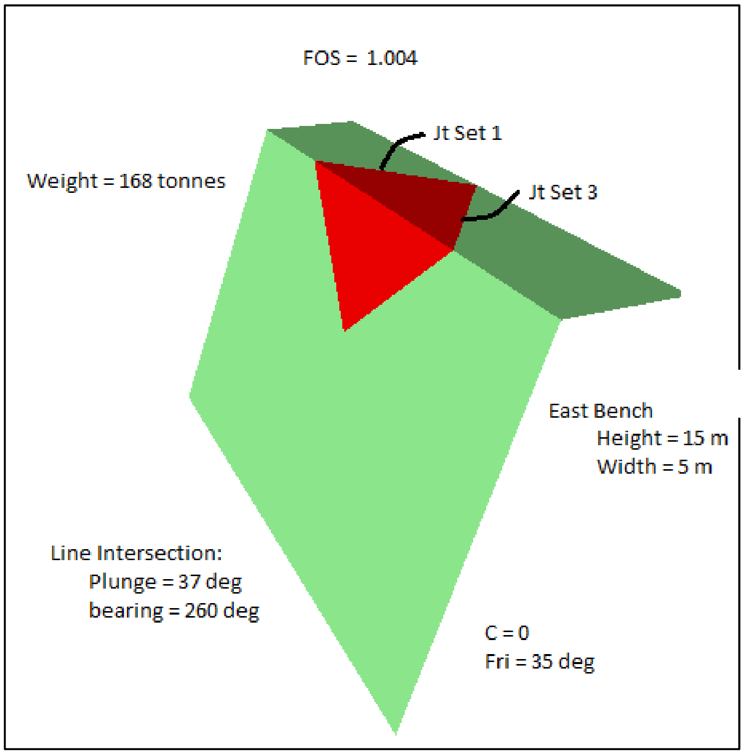


Figure 14-8: Three-Dimensional Schematic of Potential Blocks that would be Formed in the West Wall of the Pit Formed by Joint Sets 1 and 3

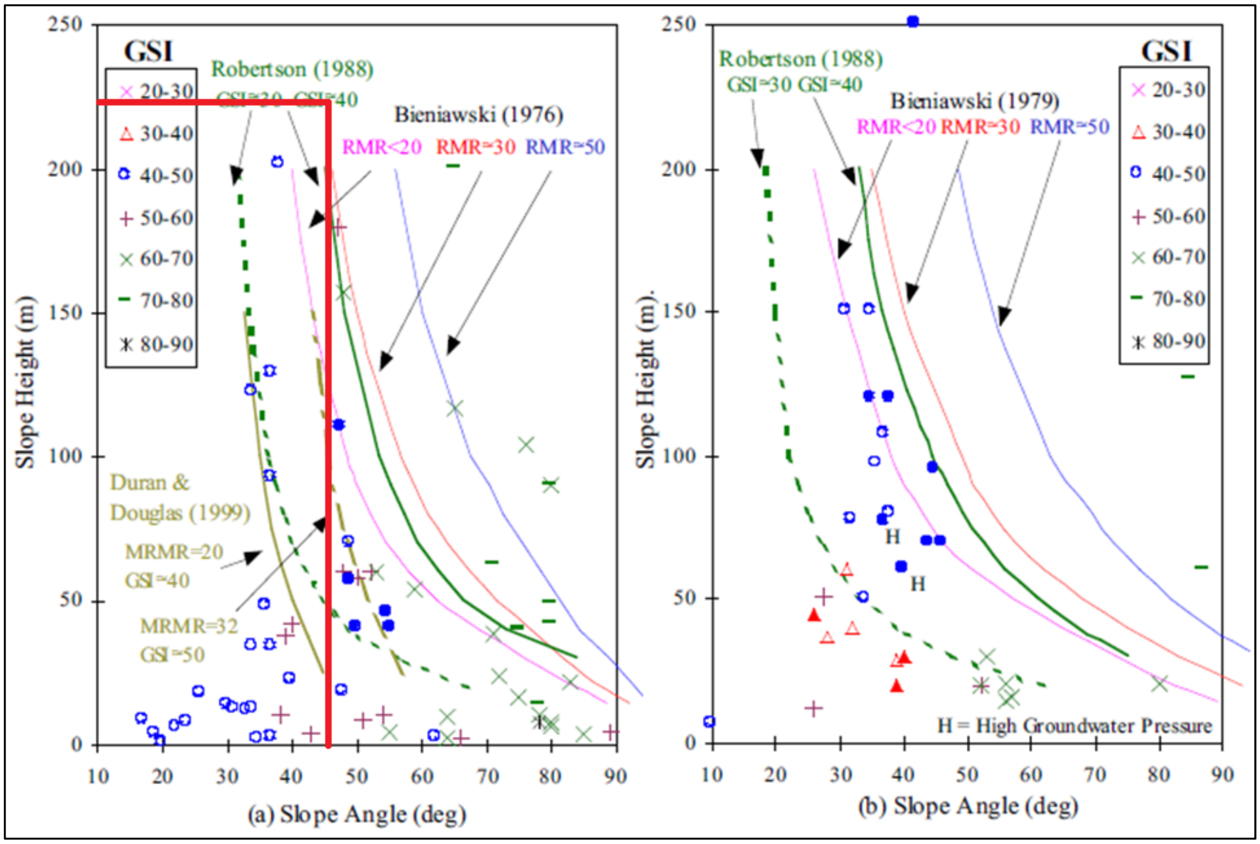
Assuming a single bench height of 15 m it might be feasible in competent rock areas to mine a double benched configuration of 30 m high. This would apply to the east wall; however the current pit has been designed for only single 15 m bench heights because of the limited geotechnical data available to have confidence in recommending double bench heights. The minimum bench width is assumed as follows:

- 7 m widths for single operating 15 m bench height; and
- 14 m widths double 30 m bench height.

The minimum ramp width is 14 m for the type of haul trucks planned. The single bench is preferred for arresting ravel-type rockfalls and localized wedge instabilities, while a double bench could be used periodically as a catch bench to arrest low-probability rockfalls that role from previous benches above. Such catch bench should include a 1 m berm and be vertically spaced less than about 100 m from the previous catch bench where there are no ramp crossings on the wall.

The overall pit angle required for stability is assumed to be a single consistent angle. Insufficient geotechnical data exists to justify compound pit angle. The ultimate pit depth (230 m) will control global stability. This wall height is considered high by historic standards. However, there is a lack of failure data in the literature. The state-of-practice for new pits are commonly approaching these depths and are utilizing more detailed analyses (e.g., numerical models) to demonstrate adequate stability.

An empirical approach to assessing maximum overall pit angle is adopted for this study based on work by Reed and Stacy (2004). Figure 14-9 indicates that an overall pit angle of 45° in a dewatered rock mass with a GSI range of 30 to 40 should have a factor of safety (FOS) of about 1.3 for a pit wall height of 230 m. It is estimated that GSI values are about 5 points less than RMR values after accounting for weathering, orientation of structures, mining induced stresses, blasting disturbance and residual water after dewatering. The inter-ramp angle is assumed to be 50°.



Source: Adopted from Reed and Stacy, 2004

Figure 14-9: Empirical Design Chart for Ultimate Slope Angle Versus Slope Height for the Ultimate Pit Slopes

14.1.4 Pit Design Parameters

Table 14.1.4.1 is a summary of the recommended geotechnical design parameters for the open pit design. Pit design parameters will need to be verified with additional slope stability analyses for the prefeasibility design, however, for this scoping-level design the parameters are reasonable.

Table 14.1.4.1: Pit Design Parameters

Parameter	Unit	Value
Overall Slope Angle	Degrees	45
Batter Angle	Degrees	65
Bench Height	m	15
Berm Width	m	7
Double Bench Height	m	30
Double Bench Berm Width	m	14
Max Height to Catch Bench	m	100
Ramp Width – 2 way	m	14
Ramp Width – 1 way	m	7
Ramp Gradient (Shortest)	%	10

14.2 Pit Optimization

Pit optimization was based on preliminary economic estimations of mining, processing and selling related costs. These preliminary costs are likely to vary from those reported in the final economic analysis, which are based on the final pit selection and mine production schedule.

As part of the resource evaluation, Whittle® pit optimizations were carried out on Taunus Deposit. For the PEA, pit optimization results have been used as a guide for pit and waste dump construction. In all cases, measured, indicated and inferred resources have been considered during pit optimization.

Pit optimization was carried out on the SRK resource model using Whittle™ v4.2 pit optimization software in conjunction with Maptek's Vulcan 8.1™ general-purpose mine planning package.

The PEA is preliminary in nature, that it includes inferred mineral resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no certainty that the PEA will be realized.

14.2.1 Whittle® Parameters

The block model parameters used for pit optimization of the Taunus deposit are detailed in Table 14.2.1.1.

Table 14.2.1.1: Taunus Model Parameters

Whittle® Parameter	Type	Value
Block Model Restriction	None	
Base Units		
Measured, Indicated, Inferred	Au	grams
Block Model Dimensions		
	Geological	
	X	6
	Y	6
	Z	6
	No. X	200
	No. Y	350
	No. Z	75
Re-block in Whittle®	Combine 2 3 1	
Slope		
	Value	Slope Angle
Zone		

	All	45

The financial assumptions made at the time of optimization are detailed in Table 14.2.1.2. The initial capital is used to determine the mining risk associated during the optimization run and was applied to the deposit as a whole.

Table 14.2.1.2: Pit Optimization Financial Assumptions

Whittle® Parameter	**Type**	**Value**
Mining Cost		
	Reference Mining Cost	1.7
Processing Cost		
Rock Type	Process Name Rock type	Heap Mix
Process Cost ($/crushed-t)	Selection Method Process Cost ($/crushed-t)	Cut-Off 5.10
Recoveries	Au	0.7
Revenue and Selling Cost		
	Au Units Au Price($/t.oz)	t.oz $1,500
Royalty, Refining, Transport etc.		
	Au Selling Cost ($/t.oz)	5
Optimization		
	Revenue factor range	0.3-1 50 factors
Operational Scenario – Time Costs		
	Initial Capital Cost Discount Rate Per Period	$25,000,000 5%
Operational Scenario – Limits		
	Mining Limit Process Limit	14,000,000 700,000

14.2.2 Whittle® Results and Analysis

As a result of the pit optimization, the relationship of potential pit shells is based on stripping ratio variability and subject to a gold revenue of US$1,500/oz Au. By looking at the relationship of potentially mineable resource to waste and the associated best case (blue line) and worst case (red line) cash flows (Figure 14-10) generated at each incremental pit, the risk profile and revenue generating potential of the deposit can be estimated. For illustration purposes, pit 36 represents the maximum possible cash flow at US$1,500/oz Au, pit 86 represents a pit constructed using US$3,000/oz Au gold (But dependent on US$1,500/oz Au revenue) and pit 1 represents a pit constructed using US$420/oz Au.

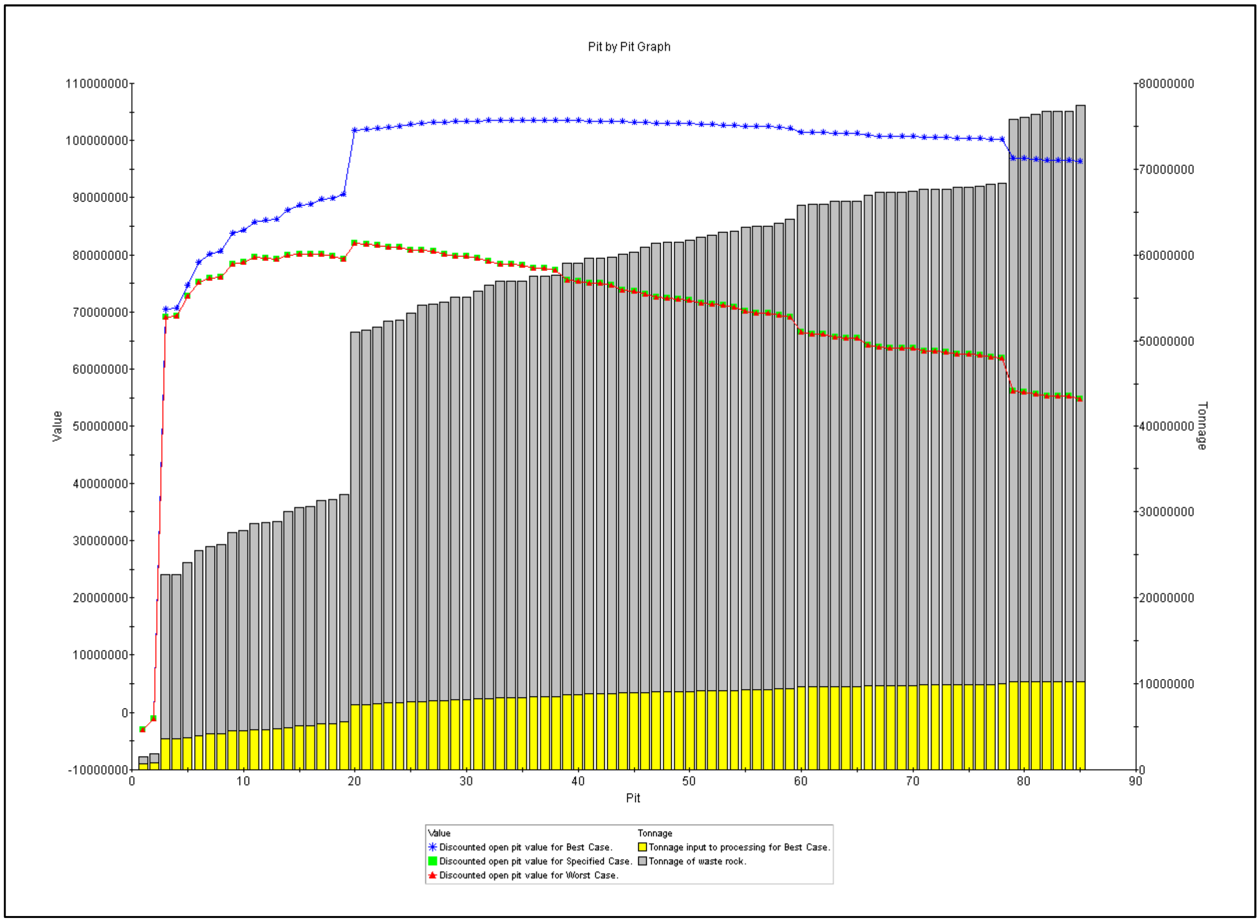


Figure 14-10: Default Pit Shell Graph

With reference to Figure 14-11, the Whittle® analysis for Taunus indicated that the best value within the deposit can be obtained from pit 0 through pit 20. After this time the majority of resource is depleted and only incremental increase in value can be achieved. SRK would consider this deposit to be resource limited at US$1,500/oz Au.

An unusual feature of the pit analysis, are the two pronounced increases of resources at pit 3 and pit 20. To better define additional pits that may form the basis for detailed phase design, the optimization parameters relating to revenue factor were restricted to 0 and 1 (or $0 to $1500 gold).

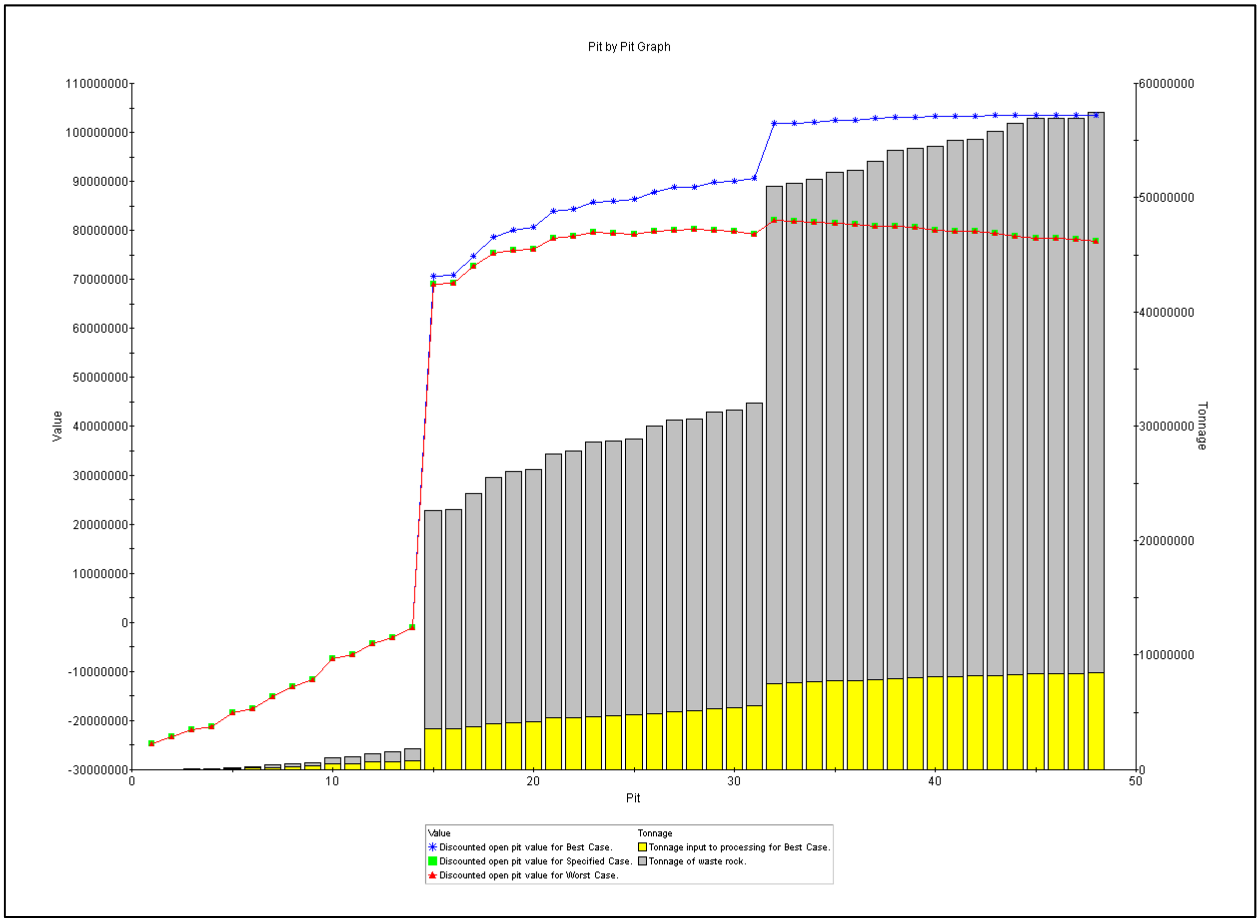


Figure 14-11: Detailed Pit Shell Analysis

Even using a much lower gold value increment for pit shell construction, (pit 48 = $1,500Oz Au and pit 1 = $90/Oz Au) the definitive step between a potential phase 1 and phase 2 pit still exists. This pronounced jump between these two shells (pit 15 and pit 33) and significant size difference, indicate how sensitive the optimization is to liberate the main pods of heap material, and, lack of mine selectivity for phase design. Without the inclusion of mining width and detail economic modeling, whittle suggest the breakeven pit is between the $480/oz Au and $510 oz Au pit shells.

14.3 Pit Design Parameters

To improve the geotechnical stability of the pit wall and reduce the need for a catch bench in addition to the design berm widths, the ramp was located in a circular spiral from the bottom of the pit up. Ramp widths were based on expected mining trucks on the order of 100 t capacity and sized at 22 m. One-way traffic haul roads were used at the pit bottom at a width of 14 m.

It is expected that the mining face will be 6 m high and berms placed every 30m for geotechnical reasons.

Roads have a maximum gradient of 10% assigned to the shortest distance along a ramp, which prevents gradient rules being broken around corners. The inside circumference of a ramp may be greater than 8% if the gradient is applied to the ramp centerline or high wall.

Table 14.2.1 is a summary of the recommended geotechnical design parameters for the open pit design.

Table 14.2.1: Pit Design Parameters

Parameter	Unit	Value
Overall Slope Angle	Degrees	45
Batter Angle	Degrees	65
Bench Height	m	15
Berm Width	m	16
Double Bench Height	m	30
Ramp Width – 2 way	m	22
Ramp Width – 1 way	m	14
Ramp Gradient (Shortest)	%	10

Pit design parameters will need to be verified with additional slope stability analyses for any prefeasibility or further design, however, for this scoping-level design the parameters are reasonable.

14.3.1 Pit and Phase Design Commentary

The pit design was constructed using Vulcan 8.1 mine planning software and used both bench toe and crest string placement. Commentary on the pit and phase design includes:

- Mining widths for phase 1 are liberal and appropriate for bulk mining excavation;
- Mining widths for phase 2 on the northern end of the pit are extremely tight at 2 ramp widths or approximately 40 m. The north end of the wall is essentially shared between phase 1 and phase 2;
- Ramps are not favored to either east or west and the exit was targeted near the crusher;
- No Arroyo limitation was considered for the PEA;
- Phase 1 has 4 single lane benches;
- Phase 2 has 4 single lane benches;
- 30 m benches were favored to extend width of catch berms to ensure loose material did not accelerate down the pit slope; and
- Phase construction based on mining width was considered but discarded due to difficulty in providing the heap with a consistent ounce feed based on orebody geometry.

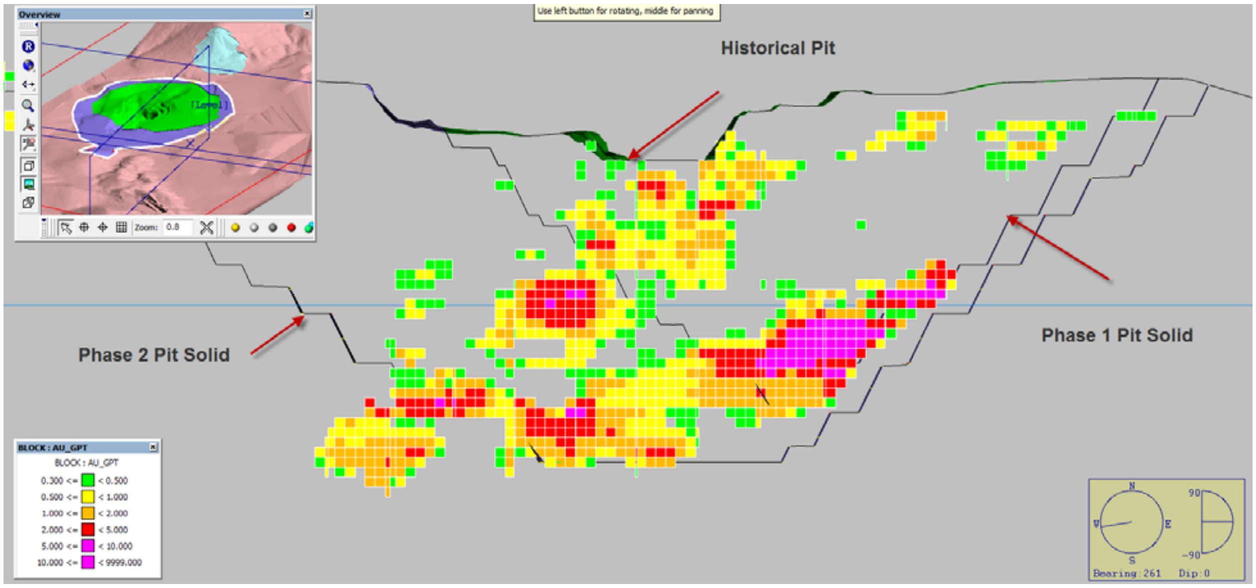


Figure 14-12: Long Section View of Pit Phases and Block Model

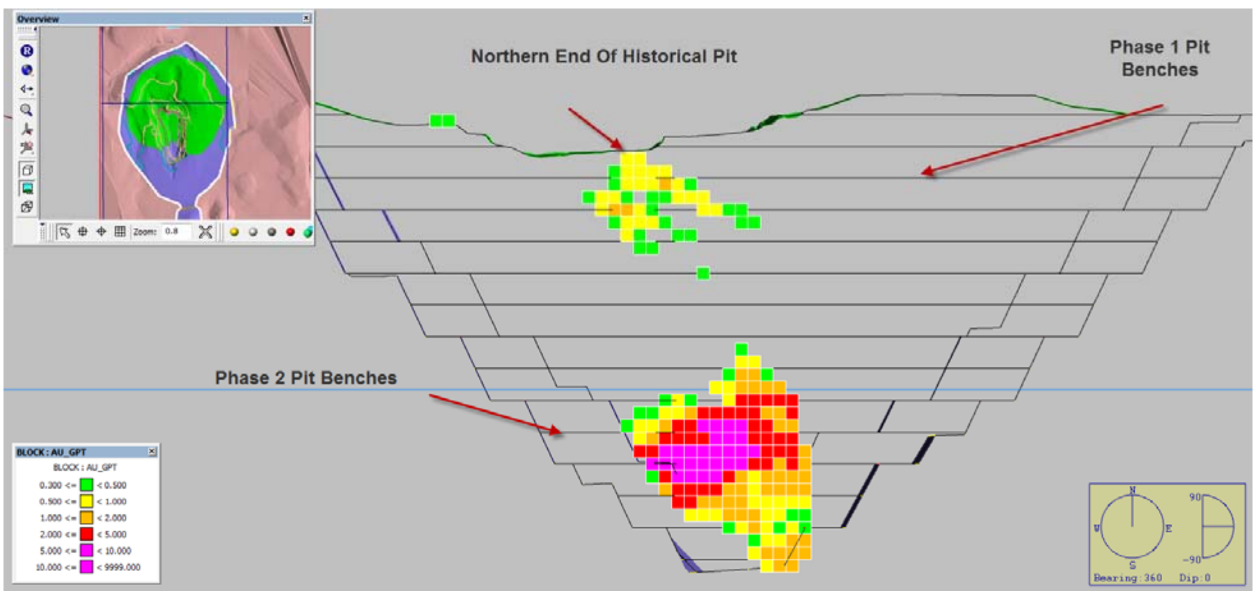


Figure 14-13: Cross-Section View of Pit Phase Benches and Block Model

14.4 In-Situ Production Schedule

Production scheduling was carried out using Vulcan™ (v8.1.2) and its scheduling package Chronos™. The schedule was constructed around a maximum annual tonnage that decreases as the pit deepens and balanced by the consistent ounce supply that grade upward as deeper higher grade resource is encountered.

The potential heap feed was defined using a 0.17 oz/t Au cut-off grade (CoG) as indicated from pit optimization work. A preproduction pre-strip period was not included in the production schedule although with the inclusion of re-processing of the historical heap pad, year one may be treated as pre-production.

Phase design triangulations were cut into benches, and then into reasonably sized mining shapes for creating an annual schedule. Tonnes and grades were calculated for each of these mining shapes and this information was imported to the schedule. An optimized scheduling method using CPLEX linear solver was then used until ounce and total production targets were met for each time period.

This scheduling method ensured control of the following:

- Number of benches mined in a period;
- Lag between phases; and
- Ramp up ounce feed

Table 14.4.1 illustrates the annual open pit production schedule

Table 14.4.1: Production Schedule

Item	2013	2014	2015	2016	2017
Ounces	30,000	40,571	60,000	60,000	90,672
Total tonnes	16,500,000	16,500,000	14,000,000	12,000,000	7,411,542
Waste tonnes	13,197,412	14,659,581	12,932,962	10,592,348	5,005,678
ROM tonnes	1,527,818	1,402,734	1,067,038	1,407,652	2,405,864
Dump tonnes	1,782,927	440,918			
Benches	8.29	6.70	5.50	14.30	10.21
Au Grade	0.61	0.90	1.75	1.33	1.17
HG Au Grade	0.93	1.39	2.42	1.91	1.48
HG Au tonnes	784,172	790,415	732,444	901,388	1,781,977
LG Au Grade	0.27	0.27	0.27	0.28	0.28
LG Au tonnes	735,489	609,086	334,594	506,263	623,887
ROM t/d	4,186	3,843	2,923	3,857	6,591
Waste t/d	36,157	40,163	35,433	29,020	13,714
Dump t/d	4,885	1,208			
Total t/d	45,205	45,205	38,356	32,877	20,306

The PEA is preliminary in nature, that it includes inferred mineral resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as mineral reserves, and there is no certainty that the PEA will be realized.

Figures 14-14 through 14-19 illustrate the annual phase advance associated with the production schedule detailed in Table 14.4.1.

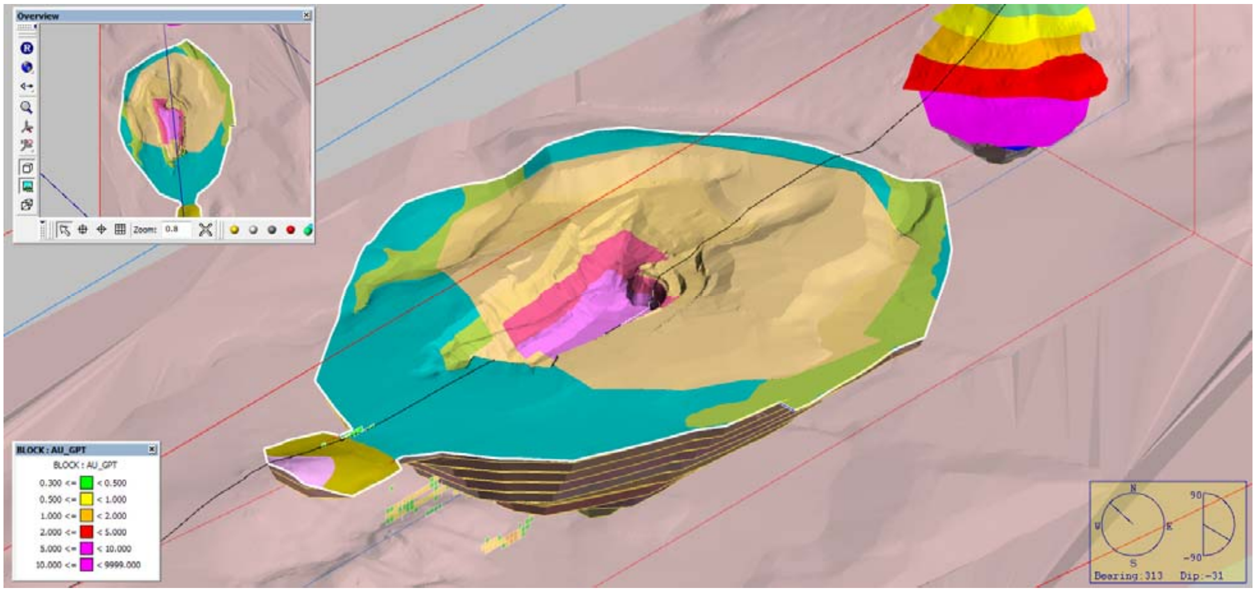


Figure 14-14: In-situ Phase Image

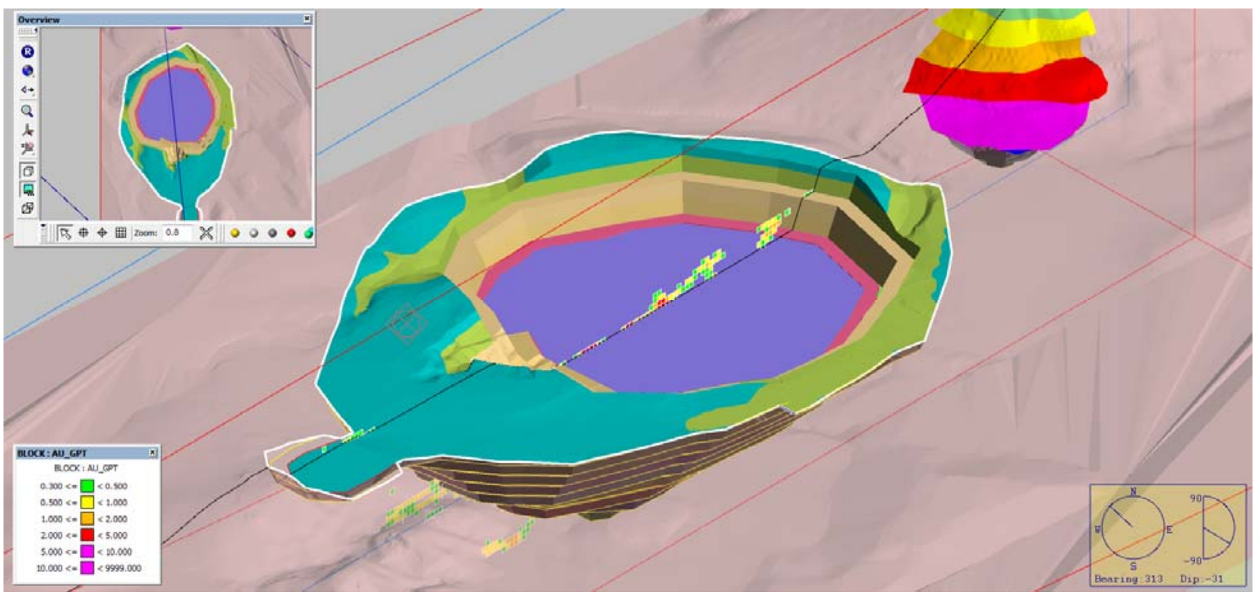


Figure 14-15: Year 1 Phase Progression Image

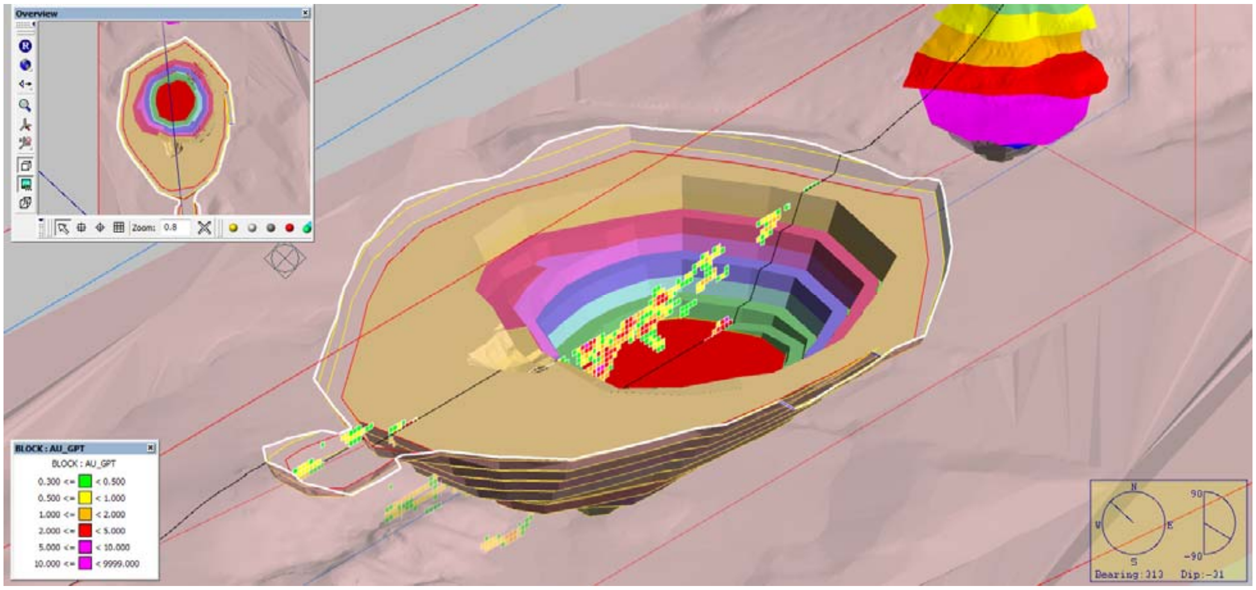


Figure 14-16: Year 2 Phase Progression Image

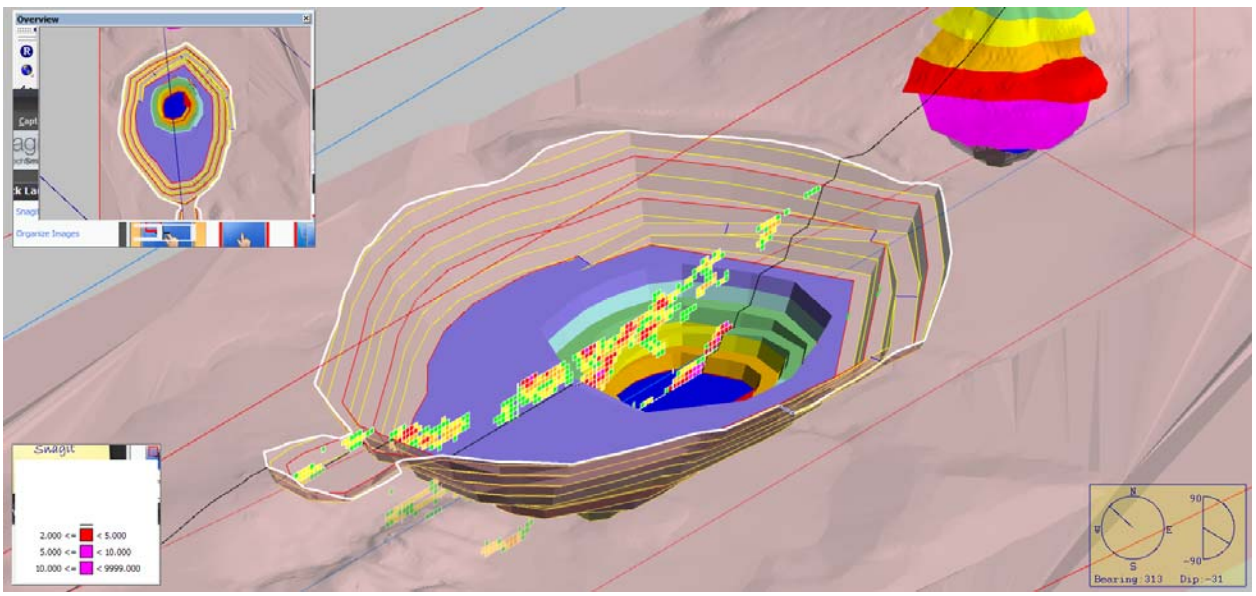


Figure 14-17: Year 3 Phase Progression Image

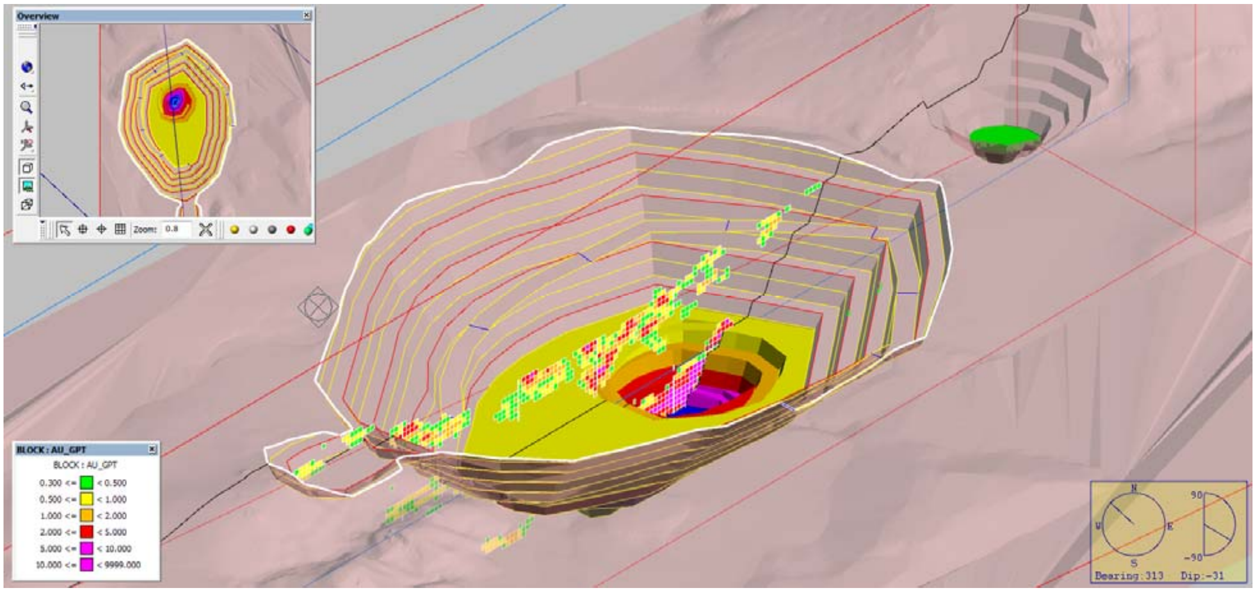


Figure 14-18: Year 4 Phase Progression Image

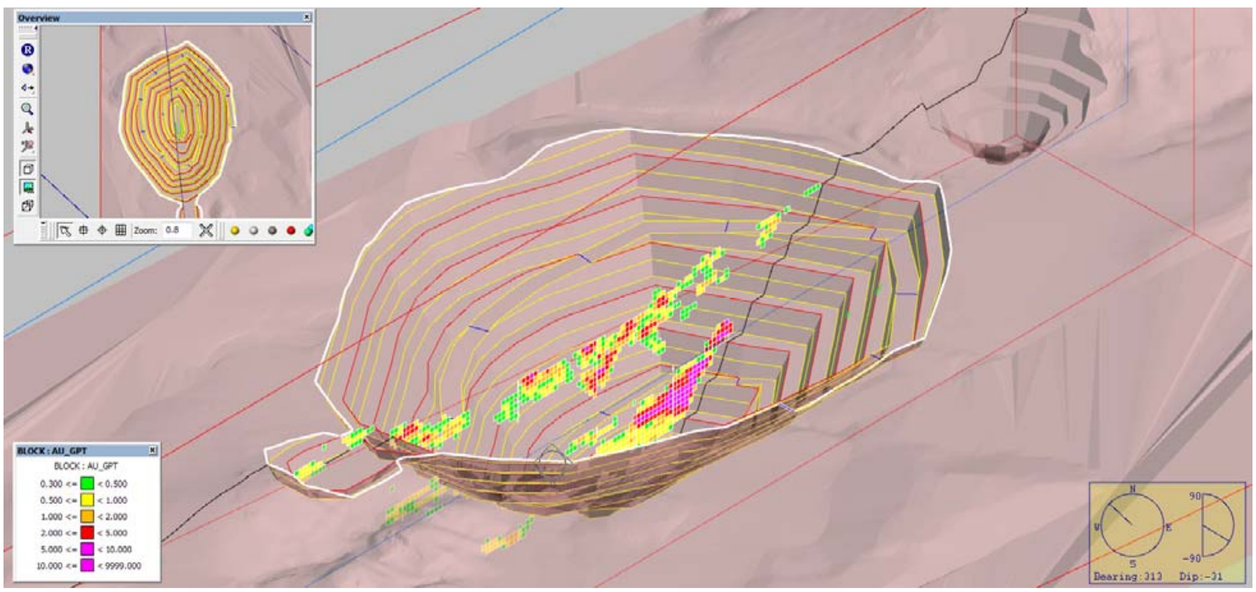


Figure 14-19: Year 5 (Final) Phase Progression Image

14.5 Mine Operations

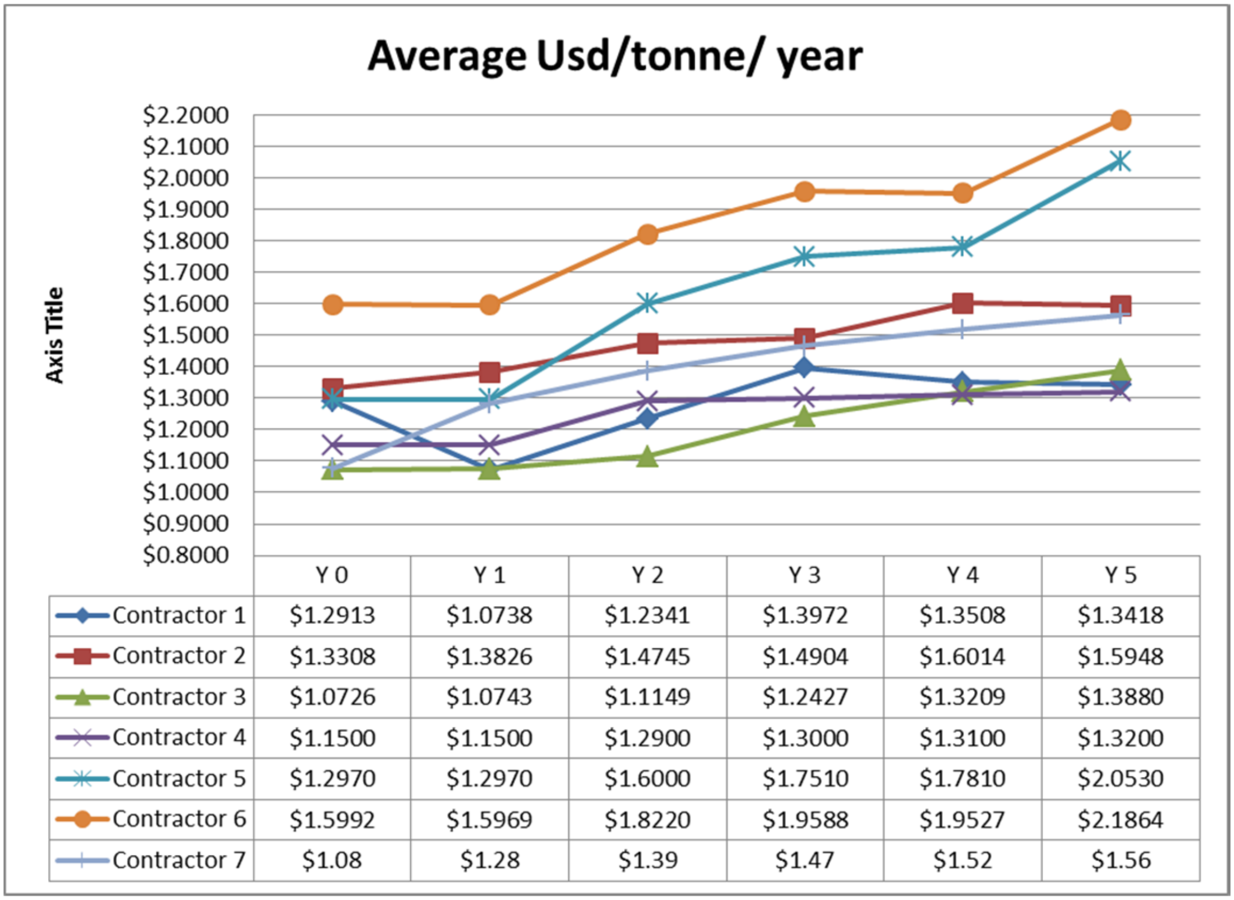
Contractor mining operations are expected to be used at Taunus given the short mine life of the Project.

As part of initial evaluations, Marlin Gold has interviewed 6 potential mine contractors and the results are detailed in Table 14.5.1. Prices do not include explosives and therefore have been estimated at $0.15/t.

Table 14.5.1: Contractor Quotations

Item	Contractor					
	1	2	3	4	5	6
Final weighted average price US$ /Tonne Heap Material	$1.21	$1.32	$1.19	$1.25	$1.63	$1.76
Final weighted average price US$ / Tonne Waste	$1.29	$1.52	$1.22	$1.27	$1.67	$1.72
Final weighted average for the Project price US$ / Tonne	$1.28	$1.49	$1.21	$1.26	$1.67	$1.73

The economic model detailed in Section 20 utilizes the mine cost associated with contractor 3 as detailed in Figure 14-20.



	Y 0	Y 1	Y 2	Y 3	Y 4	Y 5
Contractor 1	$1.2913	$1.0738	$1.2341	$1.3972	$1.3508	$1.3418
Contractor 2	$1.3308	$1.3826	$1.4745	$1.4904	$1.6014	$1.5948
Contractor 3	$1.0726	$1.0743	$1.1149	$1.2427	$1.3209	$1.3880
Contractor 4	$1.1500	$1.1500	$1.2900	$1.3000	$1.3100	$1.3200
Contractor 5	$1.2970	$1.2970	$1.6000	$1.7510	$1.7810	$2.0530
Contractor 6	$1.5992	$1.5969	$1.8220	$1.9588	$1.9527	$2.1864
Contractor 7	$1.08	$1.28	$1.39	$1.47	$1.52	$1.56

Figure 14-20: Annual Reference Mining Cost of Potential Contractors

Drilling

The initial drilling equipment fleet would consist of Roc 9 (or equivalent) blast-hole drills capable of drilling 127 mm blast holes. Working benches will be 6 m. Blast-hole cuttings will be collected and analyzed in the mine sample laboratory. Together with blast hole survey data, the results will be plotted on maps, and laid out in the field as part of a grade control program.

Blasting

Heavy ammonium nitrate/fuel oil (ANFO) explosives would predominantly be used but may be supplemented by emulsion during wet periods or groundwater inflows. The anticipated powder factor for main production blasting is 0.2 kg/tonne.

Loading

The main loading equipment fleet will either consist of hydraulic shovels, Terex RH90-C (or equivalent) capable of loading the truck fleet of most likely Caterpillar 777 (100st capacity) rigid body haul trucks (or equivalent) or Caterpillar 992G (or equivalent) front-end loaders.

Hauling

Cycle times have not been calculated at this level of study. It is expected the haul distances will be in excess of 1,000 m so the incremental hauling cost (Ie: 15 c/km over 1,000 m) will need to be negotiated with potential contractors.

Mining Support

The mine major mining support equipment may consist of one-track dozer (Cat D8 class), one rubber-tired dozer (Cat 834 class), a grader (Cat 16G class), a water truck (8,000gal) and a backhoe. The track dozer will be required for drill site preparation, road and ramp development, waste dump and stockpile maintenance, and other duties. The rubber-tired dozers will assist the hydraulic shovels if needed, and other lighter dozing duties. The grader and water truck will maintain mine roads, ramps and operating surfaces, and the excavator will perform ancillary work, and site development work including pioneering and road development. The mine will also have equipment for pit lighting. Various other mining equipment maintenance support trucks will be required.

The mine department will have mine surveying equipment, mine engineering and geology office equipment (instruments, computers, software, printers, plotter etc.), and mine communications (radios).

Ancillary Mining Operations

Ground Preparation

Where necessary, the mining advance will be preceded by ground preparation consisting of soil clearing and cleanup, and will be carried out with a Cat D8-type track dozer and backhoe. Topsoil will be stockpiled in an appropriate location and will be used later for reclamation purposes.

Mine Area Drainage

The mine will be responsible for mine water management operations. To the extent possible, diversion ditches will be located above the open pit areas to drain water flowing towards the pit area and re-direct it into natural or potential engineered drainages. Where this is not possible diversion ditch structures will be developed within the pit area to drain water away from the pit. Mine dewatering will also be accomplished using diesel generator powered submersible pumps placed in sumps at pit bottoms. Water coming into contact with the mining operations will be pumped from the pit area and collected. All collected drainage water will be held in drainage basins, where suspended solids will be removed by decantation.

15 Recovery Methods (Item 17)

15.1 Processing Methods

Recovery of gold from the Trinidad project will be performed by heap leaching. Mined heap material will be transported by truck and stockpiled at the crusher facility. The heap material will be crushed, agglomerated, and transported to the leach pad with grasshopper conveyors, radial stacked and then leached with a weak cyanide solution to extract the contained gold values. Gold will be recovered from the pregnant leach solution (PLS) in an ADR plant by adsorbing the extracted gold onto activated carbon followed by desorption into an upgraded and purified gold-bearing solution, electrowinning and smelting to recover the extracted gold as a final product. Figure 15-1 shows a schematic process flowsheet.

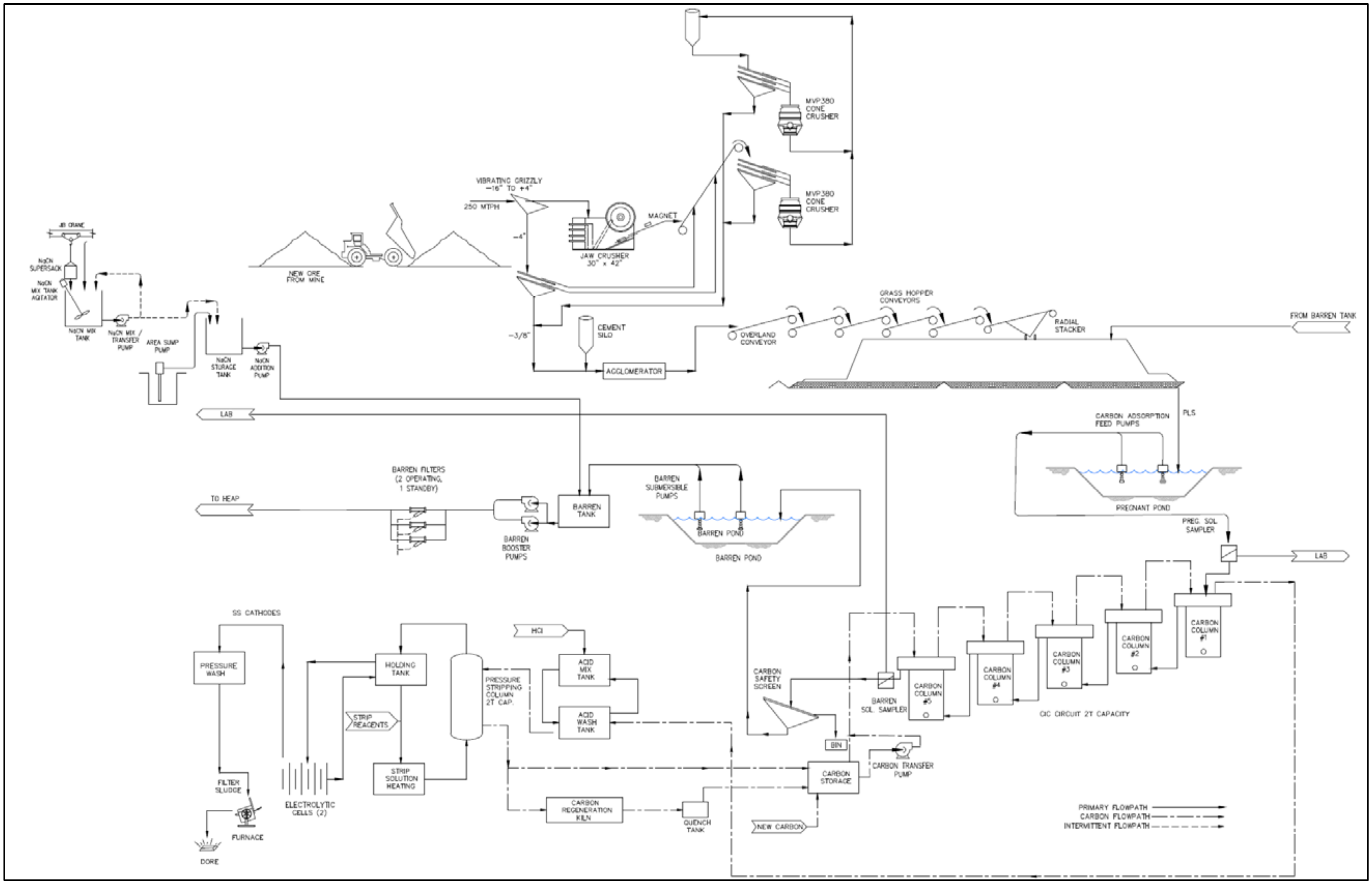


Figure 15-1: Trinidad Process Flow Sheet

The crushing, agglomeration and stacking circuits are designed for 260 t/h, with operations scheduled for 24 hours per day and 7 days per week. At an expected 70% operating availability, this will result in the conveying and stacking of an average of 4,300 t/d onto the heap leach pad, equivalent to 1.55 Mt/y.

Run-of-mine (ROM) heap material will be truck-dumped into a feed hopper and fed to a vibrating grizzly feeder with 1.5 inch openings. The grizzly oversize will be crushed by a 30 inch x 42 inch jaw crusher with a 4 inch closed-side setting (CSS). Both the grizzly undersize and the jaw crusher discharge will be combined and conveyed to the secondary crushing circuit.

The secondary crushing circuit consists of a 7 ft x 20 ft double deck screen, fitted with a 1.5 inch top deck screen cloth and a 3/8 inch screen cloth on the bottom deck and an MVP 380 cone crusher operated in open circuit. The +1.5 inch screen oversize will feed the secondary cone crusher set at a 3/4 inch CSS. The cone crusher discharge will be conveyed to the tertiary crushing circuit which consists of an MVP 380 cone crusher operated in closed circuit with a 7 ft x 20 ft double deck screen fitted with ¾ inch top deck and 3/8 inch bottom deck to produce a final -3/8 inch crushed product.

The final crushed product will be agglomerated in an agglomerating drum with approximately 2 kg/t Portland cement prior to being conveyed to the heap leach pad. Water (or barren solution) will be added to achieve the proper slurry consistency. The plant will be equipped with a belt scale to control the heap material feed rate and cement addition. Dust control will be by an engineered wet dust suppression system.

15.1.1 Heap Leaching

The agglomerated heap material will be conveyed to the lined heap leach pad by a series of 36 inch wide by 100 ft long grasshopper conveyors, which will feed a 36 inch x 140 ft long telescopic radial stacker.

Cyanide solution at a concentration of about 300 g/L NaCN will be pumped from the barren pond to the leach pad and distributed by a series of pipes and emitters. The leach cycle time is estimated at 60 days and will consist of two 30 day cycles. The first 30 day leach cycle will have an application rate of 10 L/hr/m^2; the second 30 day leach cycle will have an application rate will be 5 L/hr/m^2. Total area under irrigation is estimated at 55,000 m^2.

The current design is for a conventional multi-lift heap leach will include a maximum of six 8m meter high lifts. It is noted, however, that the material from the Taunus pit is expected to have a high percentage of fines, and it is uncertain at this level of study whether heap leaching will best be accomplished with a conventional multi-lift dedicated heap, or by an on/off heap leach strategy. Additional studies will be required to assess the degree to which heap material can be stacked and leached while maintaining adequate leach solution percolation rates.

The pregnant solution pond has been designed with a holding capacity of 20,182 m^3, which, at a nominal flow of 338 m^3/hr, will have and storage capacity for 60 hours flow. The barren solution pond has been designed with a holding capacity for 15,353 m^3 and at a nominal flow of 383 m ^{3}/hr will have storage capacity for 40 hours of flow. Designs also include provision for an emergency pond with a capacity of 27,667 m^3 which will provide an additional 82 hours of storage capacity at nominal flow of 338 m^3/hr. Figure 15-2 shows the Phase 1 heap leach pad and ponds layout, and Figure 15-3 shows the heap leach pad at its ultimate design height.

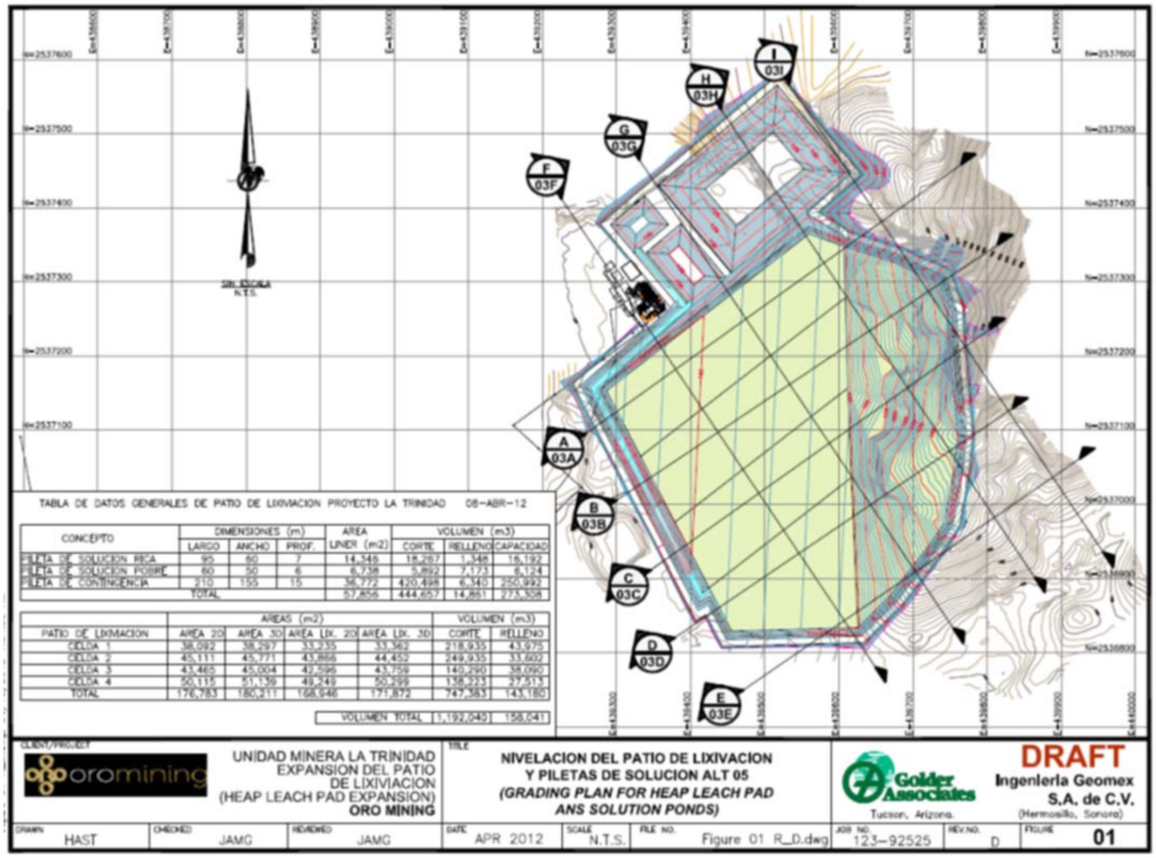


Figure 15-2: “Phase 1 Heap Leach Pad”

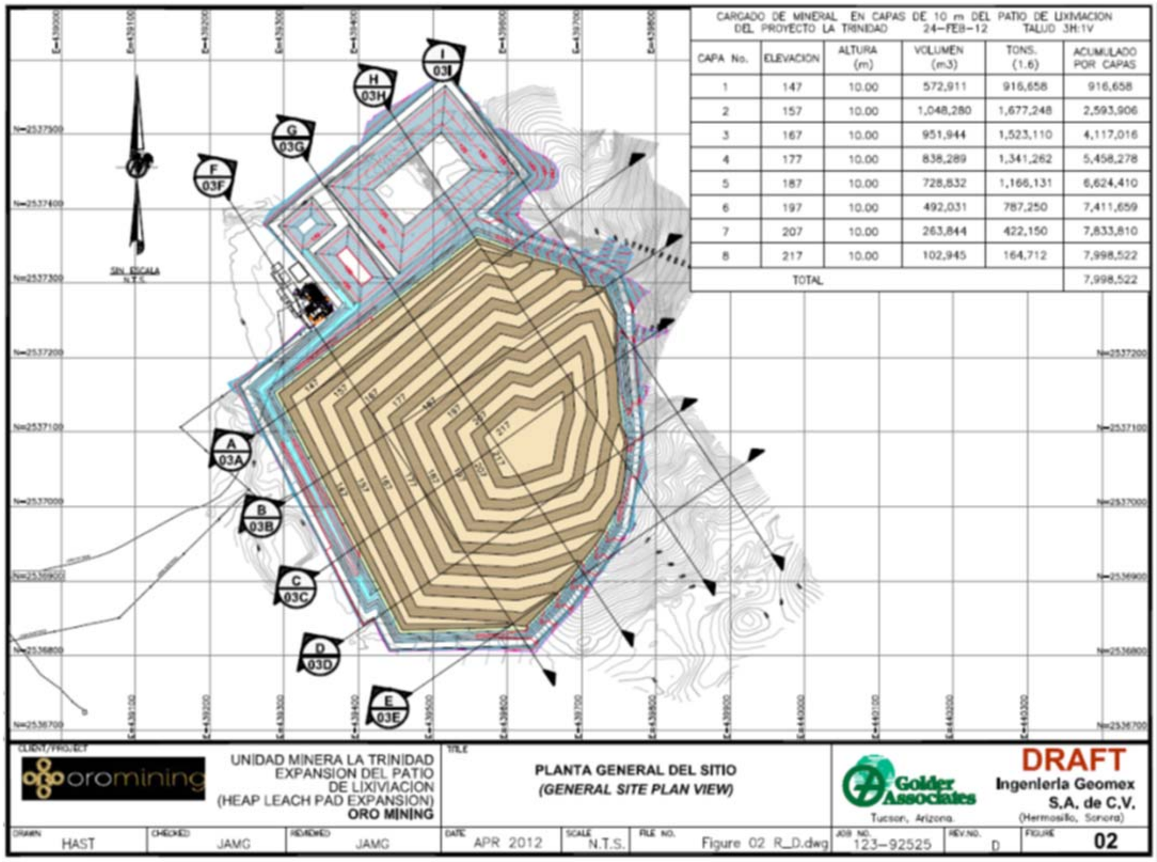


Figure 15-3: "Ultimate Height Heap Leach Pad"

15.1.2 ADR Plant

A carbon ADR (gold adsorption, desorption and recovery) circuit will be used to recover the gold and silver values from the pregnant leach solution. The ADR plant will include a 5-stage carbon-in-column (CIC) circuit consisting of five, 12 ft diameter cascading columns, each having 2 t carbon capacity. Pregnant solution will be pumped to the first of the adsorption columns and then cascade sequentially to next four columns in the series. The discharge from the fifth column will be barren and flow to the barren pond. Carbon will be transferred counter-current to the solution flow. The "loaded" carbon from the first column will be transferred to an acid wash vessel, where it will be acid washed, neutralized and transferred to the strip vessel.

Gold and silver will be stripped from the carbon by circulating a hot NaOH/NaCN solution maintained at about 150^0 F through the vessel for about 16 hours per batch. The stripped carbon will then be transferred to a 2 t/d regeneration kiln, or sent directly to the washing and sizing circuit. The reactivated carbon will then be transferred to a storage bin for recycle back to the CIC circuit.

The gold-bearing "strip" solution will be pumped at the rate of about 1.5 m^3/h to a bank of electrolytic cells where the gold will be recovered as a sludge on the cathodes. The gold "sludge" will be collected, filtered, dried, mixed with fluxes and then smelted in a diesel-fired furnace. If, during subsequent studies, significant levels of mercury are identified in the heap material, it may be necessary to make provision for appropriate mercury handling facilities.

15.2 Process Design Criteria and Major Equipment Selection

Table 15.2.1 provides a list of design criteria that have been developed for both the crushing and ADR plants. Table 15.2.2 provides a list of major equipment.

Table 15.2.1: Summary of Process Design Criteria for the Trinidad Project

	Units	Criteria
Crushing Circuit		
Operating Basis		
Heap Material Capacity	t/y	1,550,000
Days Operating per Year		360
Days Operating per Week		7
Shifts per Day		2
Hours per Shift		12
Crushing Plant Availability	%	70
Bulk Density	t/m^3	1.4
Primary Crusher		
Feed Bin Capacity	tons	60
Crusher Feed, P80	mm	127
Feed Rate	t/h	256
Feed Rate	t/d	4,306
Feed Bin Grizzly opening	mm	600
Vibrating Grizzly Feeder opening	mm	100
Secondary Crusher		
Feed Size, F80	mm	19
Screen Top Deck	mm	25
Screen Bottom Deck	mm	13
Screen Undersize P80	mm	10
Circuit Configuration		open
Tertiary Crusher		
Feed Size, F80	mm	12.7
Screen Top Deck	mm	25
Screen Bottom Deck	mm	13
Screen Undersize P80	mm	10
Circuit Configuration		Closed
Agglomeration		
Type		Drum
Cement	kg/t	2.5
Conveying and Stacking		
Maximum Rock Size	mm	12.7
Conveyor Type		Grasshopper
Stacker Type		Radial
Leaching		
Pad Area	m2	128,000
Nominal Area Under leach	m2	54,643
Pregnant Solution Pond	m3	20,182
Barren Solution Pond	m3	15,383
Emergency Pond	m3	27,667
Primary Application Rate	$L/h/m^2$	10
Secondary Application Rate	$L/h/m^2$	5
Cyanide Concentration	ppm	300
Cyanide Consumption	kg/t	0.3
Gold Extraction	%	70
Silver Extraction	%	23

	Units	Criteria
Crushing Circuit		
ADR Plant		
CIC Adsorption Circuit		
Carbon capacity	tons/column	2
Carbon size	mesh	6x12
Carbon Safety Screen	mesh	100
Acid Wash		
Carbon capacity	tonnes/batch	2
HCl Concentration	%	3
Desorption Circuit		
Carbon capacity	tonnes/batch	2
Strip Solution Temperature	F	150
NaOH Concentration	%	2
NaCN Concentration	%	3
batch cycle time	hour	16
Electrowinning		
Rich Electrolyte gold concentration	g/m^3	100
Lean Electrolyte Gold Concentration	g/m^3	1.3
Cell Voltage	V	2.6
Current Density	A/m^2	200

Table 15.2.2: Major Equipment List for Marlin Gold's Trinidad Project

Equipment	Quantity	Size	HP	Manufacture	Comment
Crushing and Agglomerating					
Primary Crushing					Portable
Apron Feeder	1	48" x 20 ft	25	Excel	
Primary Jaw Crusher	1	30" x 42"	150	Cedarapids	
Vibrating Grizzly	1	5 ft x 8 ft		Simplicity	Adjustable Opening
Secondary Crushing					Portable
Feed Conveyor	1	48" x 65'	25	Cedarapids	
Vibrating Screen	1	7 ft x 20 ft	50	Bivi-TEC	Double-Deck - 10.4 mm bottom deck
Secondary Cone	1	MVP 380	300	Cedarapids	
Tertiary Crushing					Portable
Vibrating Screen	1	7 ft x 20 ft	50	Bivi-TEC	Double-Deck - 10.4 mm bottom deck
Tertiary Cone	1	MVP 380	300	Cedarapids	
Cement Silo	1	100t			
Weightometer	1				Mounted on Screen Undersize Conveyor
Agglomerating Drum	1	8 ft x 14 ft		Sepro	
Conveying and Stacking					
Grasshopper Conveyor	8	36" x 100 ft	30	Excel	
Grasshopper Conveyor	1	36" x 50 ft	30	Excel	
Radial Stacker(Telescopic)	1	36" x 140 ft		ThorStack	
ADR Plant					
Carbon-In-Column Circuit					
Carbon Column	5	12' diameter			2 tonne Carbon Capacity
Carbon Transfer Pump	1	140 g/m		WEMCO Hidrostal	
Carbon Dewatering Screen	1				
Solution Wire Samplers	2				
Magnetic Flow Meter	1			Endress Hauser (or equivalent)	

Equipment	Quantity	Size	HP	Manufacture	Comment
Crushing and Agglomerating					
Loaded Carbon Transfer and Acid Wash					
Acid Wash Tank	1	4.25 ft x 10.2 ft			2 tonne Carbon Capacity
Acid Mix Tank	1	6.0 ft x 6.5 ft			
Acid Recirculation Pump	1	37.4 gpm/ 26 ft TDH			
Carbon Transfer Pump	1			WEMCO Hidrostal	
Strip Circuit					
Strip Tank	1	4.25 ft x 10.2 ft			2 tonne Carbon Capacity
Water Heater	1	1.4 MBTU/hr			
Eluant Pump	1	37.4 gpm/175 ft TDH	10		
Carbon Transfer Pump	1	140 gpm/ 35 ft TDH		WEMCO Hidrostal	
Heat Exhangers	3				Plate and Frame Style
Magnetic Flow Meter	2			Endress Hauser (or equivalent)	
Electrowinning Circuit					
Electrowinning Cells	1	50 ft3			14 SS mesh cathodes and 13 SS plate anodes
Rectifier	1	0-750 A, 0-9 V			
Solution Wire Samplers	2				
High Pressure Cathode Washer	1	5gpm			
Gold Sludge Filter Press	1	0.14 m3			Plate and Frame
Filter Press Pump	1	88 gpm/230 ft TDH			
Smelting					
Smelting Furnace	1	T80			850 BTU/hr Diesel
Bag House	1	2200 CFM			Cartridge type
Drying Oven	1	7 ft3			
Flux Mixer	1	3 ft3			
Carbon Handling					
Carbon Dewatering Screen	1				Banana Screen
Carbon Attirtion Tank	1	2 m3			
Carbon Regeneration Kiln	1	2 t/day			Horizontal Rotary/ 750 BTU/hr Diesel
Carbon Quench Tank	1	6.5 ft x 6 ft			
Caustic Mix , Storage and Misc.					
Caustic Mix Tank	1	6 ft x 6 ft			W/ 50 lb bag breaker
Caustic Transfer Pump	1	20 gpm			
Cyanide Tank	1	12 ft x 16 ft			
Cyanide Distribution Pump	1	30 gpm/ 100 ft TDH			

15.3 Manpower Schedule

The manpower schedule for the process facilities is provided in Table 15.3.1. A total of 95 employees have been allowed for at an estimated cost of US$2.0 million per year, including a 30% burden. This is equivalent to US$1.29 per tonne of material processed.

Table 15.3.1: Manpower Schedule for Marlin Gold's Trinidad Process Facilities

Position	Number	Annual Base Pay		Burdens	Total	Total Annual
		Salary	Hourly			Cost, US$
PROCESS						
Supervision						
Process Manager	1	80,000		30%	104,000	104,000
Metallurgist	1	50,000		30%	65,000	65,000
Metallurgical Technician	2	25,000		30%	32,500	65,000
Operation Superintendent	1	65,000		30%	84,500	84,500
Maintenance Superintendent	1	65,000		30%	84,500	84,500
Operation Shift Foreman	3	30,000		30%	39,000	117,000
Maintenance Shift Foreman	1	30,000		30%	39,000	39,000
Planner / Scheduler	1	20,000		30%	26,000	26,000
Crushing						
Primary Crusher Operator	3		12,900	30%	16,770	50,310
Secondary/Tertiary Crusher Operator	3		12,900	30%	16,770	50,310
Crusher Helper	9		11,400	30%	14,820	133,380
Heap Leach						
Agglomeration Operator	3		12,900	30%	16,770	50,310
Stacking Operator	3		12,900	30%	16,770	50,310
Heap Leach Operator	3		12,900	30%	16,770	50,310
Helpers - Heap Leach	3		12,900	30%	16,770	50,310
Piping Crew - Heap Leach	8		11,400	30%	14,820	118,560
Recovery Plant						
Recovery Plant Operator	6		12,900	30%	16,770	100,620
Refining Operator	2		12,900	30%	16,770	33,540
Day Laborer	2		11,400	30%	14,820	29,640
Process Maintenance						
Mechanic	3		12,900	30%	16,770	50,310
Mechanic Helper	3		11,400	30%	14,820	44,460
Electrician	3		12,900	30%	16,770	50,310
Electrician Helper	3		11,400	30%	14,820	44,460
Instrumentation Technician	2		12,900	30%	16,770	33,540
Welders	3		12,900	30%	16,770	50,310
SUBTOTAL PROCESS	**73**	**365,000**	**211,800**	**$173,040**	**749,840**	**1,575,990**
LABORATORY						
Chief of laboratory	1	30,000		30%	39,000	39,000
Lab Foreman	3	25,000		30%	32,500	97,500
Lab Technician	6		12,900	30%	16,770	100,620
Sample Preparation	6		11,400	30%	14,820	88,920
Assayer	6		12,900	30%	16,770	100,620
SUBTOTAL LABORATORY	**22**	**55,000**	**37,200**	**$27,660**	**119,860**	**426,660**
TOTAL	**95**					**2,002,650**
TOTAL, US$/T						**1.29**

Source: Marlin Gold, 2012

15.4 Consumable Requirements

Process plant consumable and operating costs are summarized in Table 15.4.1. The total process plant operating cost (excluding labor) is estimated at US$5.73 per of material processed. Of this total, consumable costs are estimated at US$2.30/t, operating and maintenance supplies at US$1.68/t, wear parts at US$1.06/t and power at US$0.59/t.

Cyanide consumption is estimated at 0.3 kg/t and is based on the cyanide consumption reported from the closed-cycle column testwork conducted at Metcon and adjusted based on experience with commercial operations. It should be noted that cyanide consumption in a commercial operation is typically much less than reported during column testing.

Lime consumption is estimated at 1 kg/t and is based on column test results. Cement consumption is estimated at 2 kg/t and was determined to be the maximum amount of cement that could be added without detrimentally effecting gold extraction.

Total power consumption is estimated at 4.57 kWh/t of material processed. At electrical supply cost of US$0.13/kWh, this is equivalent to US$0.59/t.

Table 15.4.1: Summary of Process Plant Operating Costs

Item	**kg/t**	**US$/kg**	**US$/t**
Consumables			
Cyanide	0.3	3.80	1.14
Caustic Soda	0.018	0.40	0.01
Lime	1.0	0.11	0.11
Antiscalent (Liter)	0.015	2.90	0.04
Lime	2.0	0.20	0.40
Carbon	0.012	3.25	0.04
Hydrochloric (Liter)	0.02	0.28	0.01
Propane (liter)			0.35
Water			0.13
Other			0.03
Subtotal			**2.25**
Operating & Maintenance Supplies			
Crusher & Agglomeration			0.53
Conveying			0.45
Leaching			0.30
ADR			0.17
Refinery			0.05
Laboratory			0.13
Subtotal			**1.62**
Wear Parts			
Crusher & Agglomeration			0.98
Conveying			0.02
Subtotal			**1.00**
Power	**KWh/t**	**US$/kWh**	**US$/t**
Crusher & Agglomeration	2.67	0.13	0.35
Conveying	0.40	0.13	0.05
Leaching	0.47	0.13	0.06
ADR	0.36	0.13	0.05
Refinery	0.02	0.13	0.00
Laboratory	0.65	0.13	0.08
Subtotal	**4.57**		**0.59**
Services			**0.10**
Total			**5.56**

Source: Marlin Gold, 2012

16 Project Infrastructure (Item 18)

Please refer to Section 3 for site infrastructure description.

17 Market Studies and Contracts (Item 19)

The process facility proposed for this project will produce doré that is estimated to be 80 to 90% purity. Dore' bars will be weighted and assayed at the mine to establish value, and will be shipped regularly to a commercial refiner where the value will be verified. Sale prices are obtained based on world spot or London Metals Exchange market and are easily transacted.

17.1 Relevant Market Studies

A market study for gold production was not undertaken at this level of study. Gold is sold through commercial banks and market dealers. The gold market is experiencing historic highs in terms of commodity price and investment interest.

17.2 Commodity Price Projections

This study assumes a gold market price of US$ 1,500/oz, which is close to the 12 month trailing average.

17.3 Contracts and Status

No contract studies were conducted for this level of study, but typical contact conditions include:

- Refining charge: US$0.85/oz fine gold credited; and
- Transportation and insurance charges: US$ 5.15/oz.

18 Environmental Studies, Permitting and Social or Community Impact (Item 20)

18.1 Environmental Studies and Background Information

SRK's environmental specialist did not conduct a site visit of the Trinidad/Taunus Project. As such, the following assessment is predicated on a review of available documentation and direct communications with the project proponent.

The site is currently disturbed as a result of previous mining operations. Current conditions at the site principally include residual facilities from that operation:

- Open pit (flooded);
- Waste rock disposal facility (naturally re-vegetated);
- Heap leach pad (to be re-mined and re-leached); and
- Various refurbished buildings and exploration cap facilities.

These existing facilities are intended to be incorporated into the proposed exploration and mineral exploitation plan currently proposed by Marlin Gold. The small village of Buenavista is situated approximately 0.5 km west of the open pit, while the town of Maloya is just over 1.25 km to the northwest.

Limited data and documents are available for this early stage of the project. Those that were provided for review have not been officially translated, and SRK was obliged to employ electronic translation software to convert them from the original Spanish, thus limiting the efficiency of the review. In addition, several of the documents were conceptual or only available in draft form and may not accurately reflect the final design conditions of the facility.

The principal document used for the environmental assessment was:

- *Manifestación de Impacto Ambiental Modalidad Partícular, (MIA) Para el Proyecto Explotación y Exploración Mina La Trinidad, Comunidad de Maloya, El Rosario, Sinaloa* was completed and submitted to SEMARNAT in April 2012, and approved in November 2012 (including the resolutions for the terms of reference for preparation of the MIA developed and issued by SEMARNAT).

The current plan for exploration and mining is provided in the MIA, along with the Level 2 Risk Analysis (Analisis de Riesgo). The ETJCUS (estudio tecnico justificativo para el cambio de uso de suelo, or "change of use of land"), the third critical permitting document for exploration and mining in Mexico, was submitted for approval in November 2012, with a tentative response date by the agencies of January 31, 2013.

18.1.1 Tailings Disposal

There are no tailings disposal areas currently proposed or included in the project. There is sufficient land available for tailings storage for future operations, if necessary.

18.1.2 Waste Management

There is a historic heap leach pad and waste rock disposal area. Adequate locations for waste rock disposal and heap leach pads are available to accommodate the current resources for future operations. The existing heap leach material will be excavated and re-leached on a new engineered pad system, thus reducing its potential to be a future liability for the project.

Knight Piésold conducted a static acid/base test on ten samples of ore/waste (Exploraciones Eldorado, 1995). The total sulfide and sulfur contents of the samples were at, and below detection limit. From the observations, it was concluded the rocks presented little acid generating capacity. Samples were collected from material generally within the oxide zone. Therefore, rocks from deeper levels, below the depth of past exploitation, may have a different acid generating capacity.Site Monitoring

Baseline monitoring has been conducted as part of the environmental impact assessment process for both the original exploration as well as the currently proposed exploitation projects. Groundwater and surface water samples were collected for analysis. Studies of the local flora and fauna were also undertaken. This information is presented in the current MIA document submitted to SEMARNAT in April 2012.

Marlin Gold engaged Servicios Profesionales Nautilus, S.C. ("Nautilus") from Mazatlan, Mexico to collect water samples and fish samples from the mined pit to assess the water quality of the pit. Samples were sent to Laquin Mazatlan Labratorio Quimico Industrial, Mazatlan Mexico. Results of the analysis indicated that both the water and fish samples are within acceptable limits as defined in NOM-001-Semarnat_1996 for water and Norma official Mexicana NOM-027-SSA1-993 for fish samples. None of the samples had anomalous readings in any of the elements tested.

Additional water samples were collected by Nautilus in 2010 and analyzed by Laquin Mazatlan Laboratory. The samples were taken at three different water levels in the pit to determine if the water was safe to pump into the local stream. Results from the analysis indicated that the water was within acceptable limits to be pumped.Site monitoring, especially groundwater monitoring will continue throughout operations, and into post-closure. The protection of groundwater resources, including monitoring, is provided for in Environmental Management Plan (*Plan de Manejo Ambiental*) (MIA, Appendix 8). Three groundwater monitoring wells are include in the current site plans to monitor groundwater conditions around the heap leach pad and process solution ponds; wells No. 1 and 2 north of the ponds, with No. 3 southeast of the pad.

In addition, mitigation and monitoring of the resources impacted by the proposed operation are also detailed in the EMP, specifically in:

- Wildlife displacement mitigation and management program;
- Floral salvage and relocation program for ecological restoration of the project;
- Rescue, conservation and restoration of soils; and
- Water protection program.

18.1.3 Water Management

The existing open pit is currently flooded as the result of stormwater overflows from Arroyo Azules and Arroyo El Bacin. Marlin Gold engaged the Nautilus environmental group from Mazatlan, Mexico to collect water samples and fish tissue samples from the pit to assess the water quality and the condition of aquatic life. Results of the testing indicated that both the water and fish tissue samples are within acceptable limits as defined in Norma Official Mexicana (NOM)-001-Semarnat_1996 for water and NOM-027-SSA1-993 for fish samples. Additional pit water samples were collected by Nautilus in 2010 at three different depths in the water column. The results suggested that the water was of sufficient quality to pump and discharge directly into the adjacent drainages. Nautilus was then commissioned to complete the environmental assessment and permitting requirements to dewater the historic pit. A pumping permit was approved by the National Water Commission of Mexico (CNA). Copies of the permits are available in Marlin Gold's site files.

Signed permission was granted by the community to proceed with dewatering the pit. Pit dewatering commenced June 2010. By February 2011, less than 1 meter of water was left in the pit. Marlin Gold intends to keep the pit dewatered as it continues to assess the viability of resuming mining operations through additional exploration.

18.2 Mexican Environmental Regulatory Framework

18.2.1 Mining Law and Regulations

Mining in Mexico is regulated through the Mining Law, approved on June 26, 1992 and amended by decree on December 24, 1996, Article 27 of the Mexican Constitution.

Article 6 of the Mining Law stipulates that the exploration; exploitation and processing of minerals or substance are of public use and have priority over any other use of the land, subject to compliance with laws and regulations.

Article 19 specifies the right to obtain easements, the right to use the water flowing from the mine for both industrial and domestic use, and the right to obtain a preferential right for a concession of the mine waters.

Articles 27, 37 and 39 rule that exploration; exploitation and processing activities must comply with environment laws and regulations and should incorporate technical standards in matters such as mine safety, ecological balance and environmental protection.

The Mining Law Regulation of February 15, 1999 repealed the previous regulation of March 29, 1993. Article 62 of the regulation requires mining projects to comply with the General Environmental Law, its regulations, and all applicable norms.

18.2.2 General Environmental Laws and Regulations

Mexico's environmental protection system is based on the General Environmental Law known as *Ley General del Equilibrio Ecológico y la Protección al Ambiente* - LGEEPA (General Law of Ecological Equilibrium and the Protection of the Environment), approved on January 28, 1988 and updated December 13, 1996.

The Mexican federal authority over the environment is the *Secretaría de Medio Ambiente y Recursos Naturales* - SEMARNAT (Secretariat of the Environment and Natural Resources). SEMARNAT, formerly known as SEDESOL, was formed in 1994, as the *Secretaría de Medio Ambiente Recursos Naturales y Pesca* (Secretariat of the Environment and Natural Resources and Fisheries). On November 30th, 2000, the Federal Public Administration Law was amended giving rise to SEMARNAT. The change in name corresponded to the movement of the fisheries subsector to the

Secretaría de Agricultura, Ganadería, Desarrollo Rural, Pesca y Alimentación - SAGARPA (Secretariat of Agriculture, Livestock, Rural Development, Fisheries and Food), through which an increased emphasis was given to environmental protection and sustainable development.

SEMARNAT is organized into a number of sub-secretariats and the following main divisions:

- INE – *Instituto Nacional de Ecología* (National Institute of Ecology), an entity responsible for planning, research and development, conservation of national protection areas and approval of environmental standards and regulations;
- PROFEPA - *Procuraduría Federal de Protección al Ambiente* (Federal Attorney General for the Protection of the Environment) responsible for law enforcement, public participation and environmental education;
- CONAGUA – *Comisión Nacional del Agua* (National Water Commission), responsible for assessing fees related to water use and discharges; in addition, the CNA issues permits and concessions relating to the construction and use of surface water, as well as land use in the federal zones managed by this authority, after obtaining the relevant environmental authorization from SEMARNAT;
- Mexican Institute of Water Technology; and
- CONANP – *Comisión Nacional de Areas Naturales Protegidas* (National Commission of Natural Protected Areas).

The federal delegation or state agencies of SEMARNAT are known as *Consejo Estatal de Ecología* – COEDE (State Council of Ecology).

PROFEPA is the federal entity in charge of carrying out environmental inspections and negotiating compliance agreements. Voluntary environmental audits, coordinated through PROFEPA, are encouraged under the LGEEPA.

Under LGEEPA, a number of regulations and standards related to environmental impact assessment, air and water pollution, solid and hazardous waste management and noise have been issued. LGEEPA specifies compliance by the states and municipalities, and outlines the corresponding duties.

Applicable regulations under LGEEPA include:

- Regulation to LGEEPA on the Matter of Environmental Impact Evaluations, May 30, 2000;
- Regulation to LGEEPA on the Matter of Prevention and Control of Atmospheric Contamination, November 25, 1988;
- Regulation to LGEEPA on the Matter of Environmental Audits, November 29, 2000;
- Regulation to LGEEPA on Natural Protected Areas, November 20, 2000;
- Regulation to LGEEPA on Protection of the Environment Due to Noise Contamination, December 6, 1982; and
- Regulation to LGEEPA on the Matter of Hazardous Waste, November 25, 1988.

Mine tailings are listed in the Regulation to LGEEPA on the Matter of Hazardous Waste. Norms include:

- Norma Oficial Mexicana (NOM)-CRP-001-ECOL, 1993, which establishes the characteristics of hazardous wastes, lists the wastes, and provides threshold limits for determining its toxicity to the environment;

- NOM-CRP-002-ECOL, 1993 establishes the test procedure for determining if a waste is hazardous;
- On September 13, 2004, SEMARNAT published the final binding version of its new standard on mine tailings and mine tailings dams, NOM-141-SEMARNAT-2003. The new rule has been renamed since the draft version was published in order to better reflect the scope of the new regulation. This NOM sets out the procedure for characterizing tailings, as well as the specifications and criteria for characterizing, preparing, building, operating, and closing a mine tailings dam. This very long (over 50 pages) and detailed standard sets out the new criteria for characterizing tailings as hazardous or non-hazardous, including new test methods. A series of technical annexes address everything from waste classification to construction of the dams. The rule is applicable to all generators of non-radioactive tailings and to all dams constructed after this NOM goes into effect; and
- Existing tailings dams will have to comply with the new standards on post-closure. The NOM formally went into effect sixty (60) days after its publication date.

PROFEPA “Clean Industry”

The *Procuraduría Federal de Protección al Ambiente* (the enforcement portion of Mexico's Environmental Agency, referred to as PROFEPA), administers a voluntary environmental audit program and certifies businesses with a “Clean Industry” designation if they successfully complete the audit process. The voluntary audit program was established by legislative mandate in 1996 with a directive for businesses to be certified once they meet a list of requirements including the implementation of international best practices, applicable engineering and preventative corrective measures.

In the Environmental Audit, firms contract third-party, PROFEPA-accredited auditors, considered experts in fields such as risk management and water quality, to conduct the audit process. During this audit, called “Industrial Verification,” auditors determine if facilities are in compliance with applicable environmental laws and regulations. If a site passes, it receives designation as a “Clean Industry” and is able to utilize the Clean Industry logo as a message to consumers and the community that it fulfills its legal responsibilities. If a site does not pass, the government can close part, or all of a facility if it deems it necessary. However, PROFEPA wishes to avoid such extreme actions and instead prefers to work with the business to create an “Action Plan” to correct problem areas.

The Action Plan is established between the government and the business based on suggestions of the auditor from the Industrial Verification. It creates a time frame and specific actions a site needs to take in order to be in compliance and solve existing or potential problems. An agreement is then signed by both parties to complete the process. When a facility successfully completes the Action Plan, it is then eligible to receive the Clean Industry designation.

PROFEPA believes this program fosters a better relationship between regulators and industry, provides a green label for businesses to promote themselves and reduces insurance premiums for certified facilities. The most important aspect, however, is the assurance of legal compliance through the use of the Action Plan, a guarantee that ISO 14001 and other Environmental Management Systems cannot make.

According to mine personnel, Marlin Gold intends to participate in the Clean Industry program.

SIGA

Many companies in Mexico adopt the corporate policy, *Sistema Integral de Gestión Ambiental* (SIGA) (Integral System of Environmental Management), for the protection of the environmental and prevention of adverse environmental impacts. SIGA emphasizes a commitment to environmental protection along with sustainable development, as well as a commitment to strict adherence to environmental legislation and regulation and a process of continuous review and improvement of company policies and programs. The companies continue to improve their commitments to environmental stewardship through the use of the latest technologies that are proven, available, and economically viable. According to mine personnel, Marlin Gold intends to adopt SIGA once production has begun and is stable.

Other industry programs that Marlin Gold intends to participate in include:

- Seeking accreditation under the voluntary self-management program for health and safety with the Mexican Department of Labor and Social Welfare (PASST); and
- Strive to receive the Social Responsible Company (ESR) Distinctive, which is awarded by the Mexican Center of Philanthropy.

18.2.3 Other Laws and Regulations

Water Resources

Water resources are regulated under the National Water Law, December 1, 1992 and its regulation, January 12, 1994 (amended by decree, December 4, 1997). In Mexico, ecological criteria for water quality is set forth in the Regulation by which the Ecological Criteria for Water Quality are Established, CE-CCA-001/89, dated December 2, 1989. These criteria are used to classify bodies of water for suitable uses including drinking water supply, recreational activities, agricultural irrigation, livestock use, aquaculture use and for the development and preservation of aquatic life. The quality standards listed in the regulation indicate the maximum acceptable concentrations of chemical parameters and are used to establish wastewater effluent limits. Ecological water quality standards defined for water used for drinking water, protection of aquatic life, agricultural irrigation and irrigation water and livestock watering are listed in Table 2.3.

Discharge limits have been established for particular industrial sources, although limits specific to mining projects have not been developed. NOM-001-ECOL-1996, January 6, 1997, establishes maximum permissible limits of contaminants in wastewater discharges to surface water and national “goods” (waters under the jurisdiction of the CONAGUA).

Daily and monthly effluent limits are listed for discharges to rivers used for agricultural irrigation, urban public use and for protection of aquatic life; for discharges to natural and artificial reservoirs used for agricultural irrigation and urban public use; for discharges to coastal waters used for recreation, fishing, navigation and other uses and to estuaries; and discharges to soils and to wetlands. Effluent limitations for discharges to rivers used for agricultural irrigation, for protection of aquatic life and for discharges to reservoirs used for agricultural irrigation have also been established.

Ecological Resources

In 2000, the National Commission of Natural Protected Areas (CONANP) (formerly CONABIO, the National Commission for Knowledge and Use of Biodiversity) was created as a decentralized entity of SEMARNAT. As of November 2001, 127 land and marine Natural Protected Areas had been proclaimed, including biosphere reserves, national parks, national monuments, flora and fauna reserves, and natural resource reserves.

Ecological resources are protected under the *Ley General de Vida Silvestre* (General Wildlife Law). (NOM)-059-ECOL-2000 specifies protection of native flora and fauna of Mexico. It also includes conservation policy, measures and actions, and a generalized methodology to determine the risk category of a species.

Other laws and regulations include:

- Forest Law, December 22, 1992, amended November 31, 2001, and the Forest Law Regulation, September 25, 1998;
- Fisheries Law, June 25, 1992, and the Fisheries Law Regulations, September 29, 1999; and
- Federal Ocean Law, January 8, 1986.

Regulations Specific to Mining Projects

All aspects related to Mine Safety and Occupational Health are regulated in Mexico by NOM-023-STPS-2003 issued by the Secretariat of Labor.

NOM-120-ECOL-1997, November 19, 1998 specifies environmental protection measures for mining explorations activities in temperate and dry climate zones that would affect xerophytic brushwood (matorral xerofilo), tropical (caducifolio) forests, or conifer or oak (encinos) forests. The regulation applies to "direct" exploration projects defined as drilling, trenching, and underground excavations. A permit from SEMARNAT is required prior to initiating activities and SEMARNAT must be notified when the activities have been completed. Development and implementation of a Supervision Program for environmental protection and consultation with CONAGUA is required if aquifers may be affected. Environmental protection measures are specified in the regulations, including materials management, road construction, reclamation of disturbance and closure of drill holes. Limits on the areas of disturbance by access roads, camps, equipment areas, drill pads, portals, trenches, etc. are specified.

18.2.4 Expropriations

Expropriation of Ejido and communal properties is subject to the provisions of agrarian laws.

18.2.5 NAFTA

Canada, the United States and Mexico participate in the North American Free Trade Agreement (NAFTA). NAFTA addresses the issue of environmental protection, but each country is responsible for establishing its own environmental rules and regulations. However, the three countries must comply with the treaties between themselves; and the countries must not reduce their environmental standards as a means of attracting trade.

18.2.6 International Policy and Guidelines

International policies and/or guidelines that may be relevant to the Trinidad/Taunus Project include:

- International Finance Corporation (Performance Standards) – social and environmental management planning; and

- World Bank Guidelines (Operational Policies and Environmental Guidelines).

These items were not specifically identified and included in SRK's environmental scope of work; however, the baseline environmental data and impact analyses presented in the MIA appears to be of sufficient detail and quality to meet most of these policies, though the necessary Environmental and Social Management Plans are currently under development. Until in operation, comparison to World Bank environmental quality criteria cannot be assessed.

18.2.7 The Permitting Process

Environmental permits are required from various federal and state agencies. The general process for obtaining authorization to construct a new industrial facility is shown in Figure18-1.

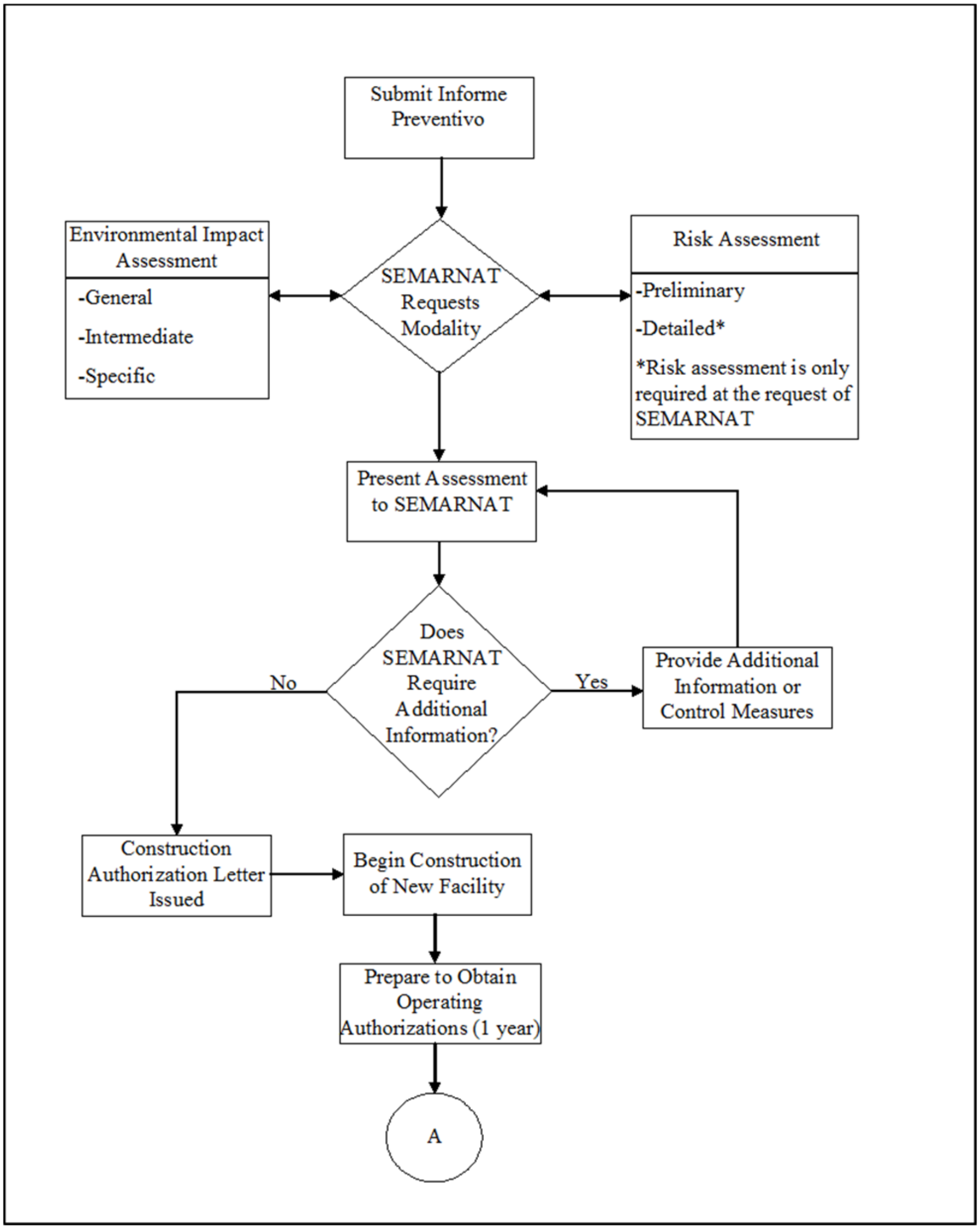


Figure 18-1: Construction and Start-up Authorization for Industrial Facilities

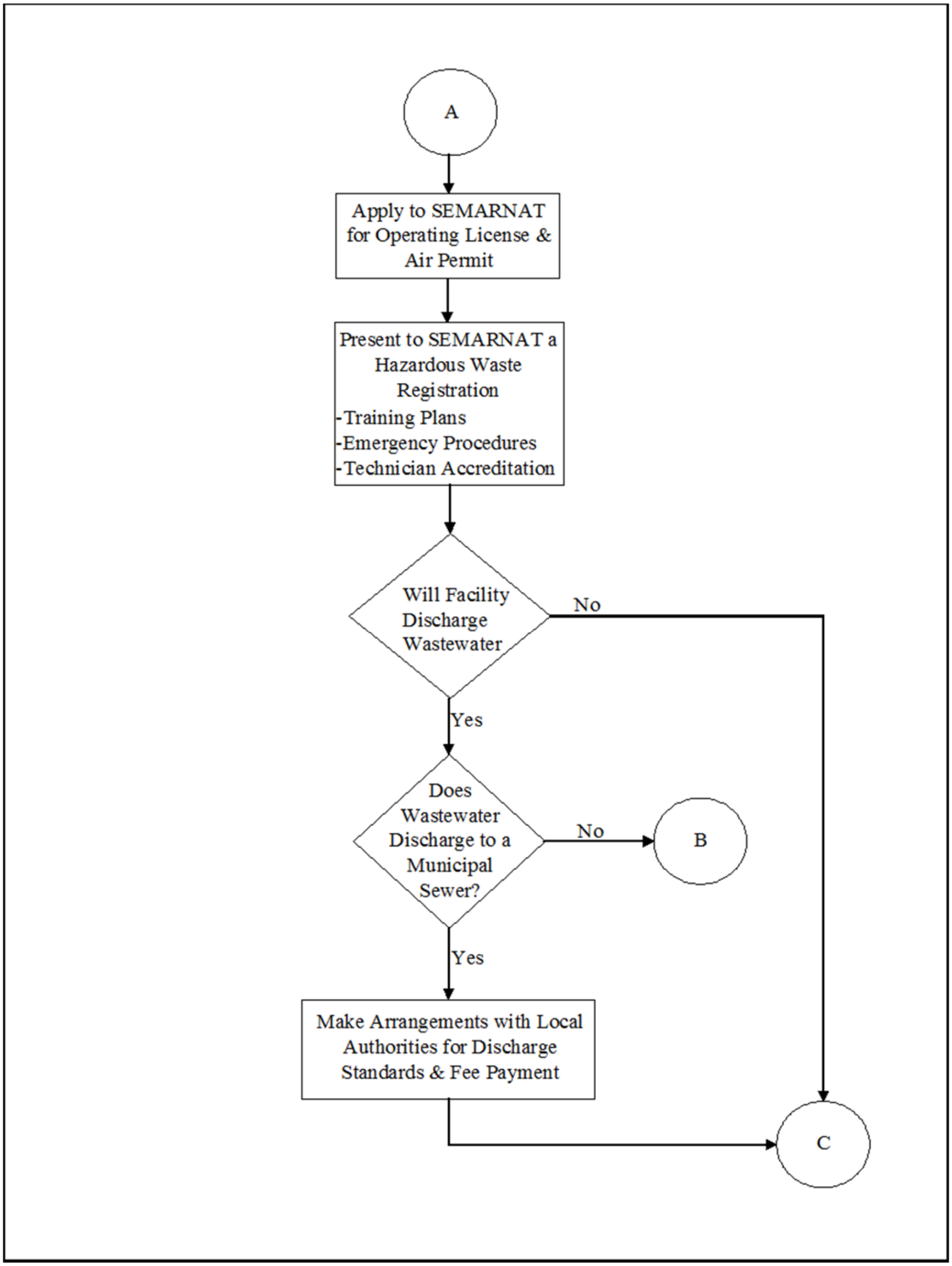


Figure 18-1 (Cont.): Construction and Start-up Authorization for Industrial Facilities

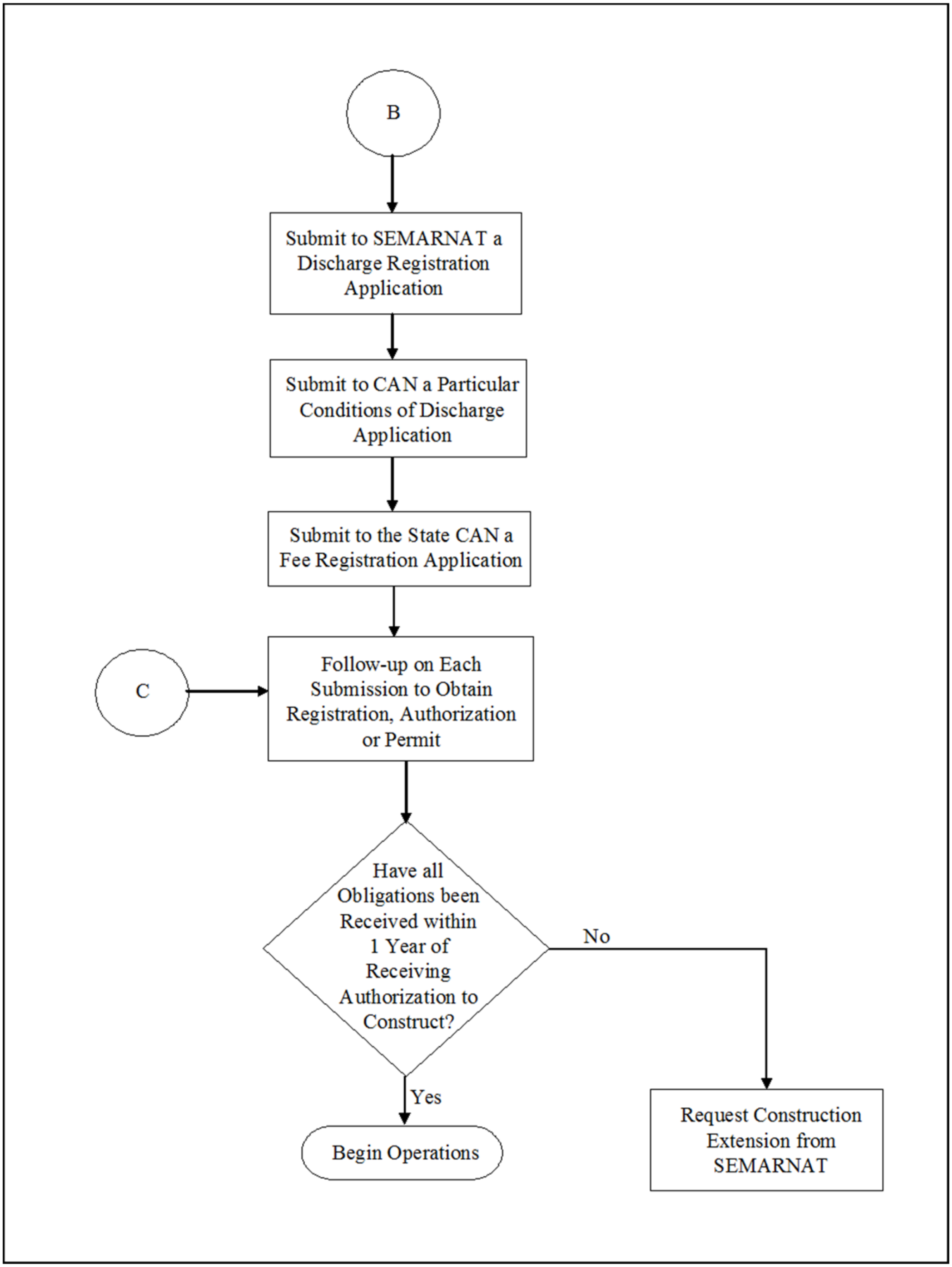


Figure 18-1 (Cont.): Construction and Start-up Authorization for Industrial Facilities

18.2.8 Required Permits and Status

The required permits for continued exploration of the site have been obtained by Marlin Gold for its activities at Trinidad, and those necessary for mineral extraction and beneficiation are being applied for. SRK has not conducted an investigation as to the current status of all the required permits. At this time, SRK is not aware of any outstanding permits or any non-compliance at the project or nearby exploration sites. The following information regarding the exploration and mining permits was provided by Marlin Gold (Table 18.3.8.1).

Table 18.3.8.1: Mexico Mining Permit and Authorization Requirements and Current Status

Permit/Authorization	Agency	Approval Date (or anticipated Approval Date)	Comments
Mining Law Concession	President via the Minister of Commerce and Industrial and the General Directorate of Mines Promotion - Mexican Secretaría de Economía		
Manifestación de Impacto Ambiental (MIA) - Environmental Impact Statement	Secretaría de Medio Ambiente y Recursos Naturales (SEMARNAT) - Secretariat of the Environment and Natural Resources	The MIA was submitted to SEMARNAT in April 2012 and approved in November 2012	Specific for mining operations at a "Particular" level, the MIA should include sufficient environmental and social baseline studies to adequately assess project impacts.
Análisis de Riesgo - Risk Analysis Report	Secretaría de Medio Ambiente y Recursos Naturales (SEMARNAT) - Secretariat of the Environment and Natural Resources	The Risk Analysis Report is a supporting document to the MIA, which was approved in November 2012	An assessment of the potential risks of a project, typically focused on geotechnical and environmental risks such as slope stabilities issues, process water containment, and hazardous materials management (i.e., explosives, process chemicals, etc.)
Operating License (and Air Quality Permit)	Secretaría de Medio Ambiente y Recursos Naturales (SEMARNAT) - Secretariat of the Environment and Natural Resources	This will be one of the conditions after the MIA Authorization, for the operation	Article 18 and 19 of the Regulation of LGEEPA, on the Prevention and Control of Atmospheric Contamination, requires mining operations to obtain an Operating License. The license largely addresses air emissions, but additional conditions can be included. Additional conditions may prescribe activities associated with hazardous materials, safety, remediation and reclamation.
Cambio de Uso de Suelo - Land Use Change Permit	Secretaría de Medio Ambiente y Recursos Naturales (SEMARNAT) - Secretariat of the Environment and Natural Resources	The area use of the land is determined by CONOFOR and authorized for the compensation payment by CONAFOR; there is area considered for mining use because of the previous mining – operations. Application document was	Generally focuses on area flora and fauna, land use issues including post-closure land use and reclamation planning.

Permit/Authorization	Agency	Approval Date (or anticipated Approval Date)	Comments
		submitted in November 2012, with an anticipated approval date of January 31, 2013	
Concession Title for Underground Water Extraction	Comisión Nacional del Agua (CONAGUA) - National Water Commission)	Marlin Gold is in the progress to determinate the water well location to submit the water well construction permit in CONAGUA	A permit is required for the extraction and use of groundwater and surface water (e.g., wells to supply potable water). The use of groundwater is regulated by CONAGUA and mine operators must pay for the water used. However, mine dewatering is regulated under the Mining Law and no permit is required to extract mine water.
Authorization for Utilization of National Surface Water	Comisión Nacional del Agua (CONAGUA) - National Water Commission)	Not required, as Marlin Gold will utilize groundwater and the water from the pit dewatering	
Wastewater Discharge Permit	Comisión Nacional del Agua (CONAGUA) - National Water Commission)	Marlin Gold applied for this permit during the initial dewatering of the pit for exploration; they will follow the same procedure for the MIA authorization to dewater the pit for construction and operation.	Water discharge is regulated by CONAGUA and a permit is required for most industrial discharges. The quality of the discharge must meet NOMs, although CONAGUA may issue particular limits.
Stream Diversions	Comisión Nacional del Agua (CONAGUA) - National Water Commission)	May be required given the extensive improvements to the arroyo drainages in the project area	An authorization is required for the deviation, extraction or diversion of national waters, or construction within a Federal Zone.
Hazardous Waste Registration	Secretaría de Medio Ambiente y Recursos Naturales (SEMARNAT) - Secretariat of the Environment and Natural Resources	Follows MIA approval.	A mine site must submit a Hazardous Waste Notification to SEMARNAT prior to generating the waste or using a hazardous waste management facility.
Explosives Use Permit	Secretaría de la Defensa Nacional (SEDENA)	In process.	Renewed annually

Nautilus completed the environmental assessment and permitting requirements to dewater the historic pit. A pumping permit was approved by the National water commission of Mexico (CNA). Copies of the permits are available in Marlin Gold's site files.

Signed permission was granted by the community to proceed with dewatering the pit. Pit dewatering commenced June 2010. As of February 2011 less than 1m of water is left in the pit. Marlin Gold intends to keep the pit dewatered as it continues to assess the viability of resuming mining operations.

According to Marlin Gold, all required permits that are currently necessary for Marlin Gold's activities at Trinidad have been obtained, and are in good standing.

In May 2011, Marlin Gold signed an exploitation and temporary occupation agreement with the community of Maloya, for which Marlin Gold was granted surface use and mine development rights on the Taunus deposit.

18.3 Social Management Plan and Community Relations

Marlin Gold has entered into an exploitation and temporary occupation agreement with the Community of Maloya, pursuant to which Marlin Gold was granted surface use and mine development rights on the Taunus deposit. The details of the project Social Management Plan are currently under development, and not available for this assessment.

18.4 Closure and Reclamation Plan

Current regulations in México require that a preliminary closure program be included in the MIA and a definite program be developed and submitted to the authorities during the operation of the mine (generally accepted as three years into the operation). These closure plans tend to be conceptual and typically lack much of the detail necessary to develop an accurate closure cost estimate. However, Marlin Gold has attempted to prescribe the necessary closure activities for the operation and anticipated costs as follows:

Table 18.5.1: Trinidad Cost of Reclamation and Closure of the Mine

Closure Activity	Cost Estimate US$
Demolition and removal of structures	$300,000
Dismantling and decontamination of process plant and ADR	$120,000
Stabilization and rinsing of heap leach pad	$260,000
Recontour slopes of heap, diversions, and waste rock dump	$450,000
Placement of vegetation cover	$530,000
Ripping access roads no longer in use	$70,000
Abandon monitoring wells	$60,000
Placement of vegetation cover in stormwater diversion areas	$250,000
Tuning of slopes and roads	$45,000
Placement of new flora from the nursery	$130,000
Post-closure monitoring and maintenance	$130,000
Closure contractor payments	$469,000
Subtotal – indirect costs / expenses -10 %	$234,500
Total	**$3,048,500**

19 Capital and Operating Costs (Item 21)

19.1 Capital Cost Estimates

Capital costs totaling US$25.5 million are summarized in Table 19.1.1. Initial capital of US$27.9 million is included in the first year of pre-production and a negative capex of US$(2.4) million represents the ongoing capital. This negative value is composed of the closure costs combined with a salvage value of US$1.8 million and the return of a Mexican equivalent of Value Added Tax called *Impuesto al Valor Agregado* (IVA), correspondent to 16% of the original estimate of capital investment, during the first year of operation.

No sustaining capital has been included in the schedule, as construction of the complete heap leach and ponds infrastructure will occur in the pre-production year and the mine and process equipment should last through the entire life of the project, which is a short term of five years.

Cost estimates are in Q4 2011 US constant dollar terms. Table 19.1.1 summarized LoM capital costs.

Table 19.1.1: LoM Capital Costs (US$000s)

Description	Pre - Production (2013)	Sustaining (2014-2018)	Total Capital
Mine	$5,045	$0	$5,045
Process & Infrastructure	$12,625	$0	$12,481
Owner's	$3,269	$0	$3,296
IVA Paid	$3,350	$0	$3,350
IVA Recovered	$0	$(3,350)	$(3,350)
Mine Closure	$0	$3,049	$3,049
Salvage Value	$0	$(1,800)	$(1,800)
Total Estimate	$24,289	$(2,102)	$22,187
Contingencies (15%)	$3,643	$(315)	$3,328
Total Capital	**$27,933**	**$(2,417)**	**$25,516**

19.2 Basis for Capital Cost Estimates

19.2.1 Mine

The mining operations has been considered to be contractor based, only ancillary equipment to maintain the accesses and support smaller operations have been included in the capital expenditure. The estimated cost of mine equipment is shown in Table 19.2.1.1. Mine capital equipment costs were obtained from recent cost models and handbooks.

Table 19.2.1.1: Mine Capital Costs (US$000s)

Description	Units	Unit Cost	Total
Open Pit Mine			
Site Development	1	4,000	4,000
IT-38	2	$100	$200
D6 Dozer.	1	$100	$100
Fork lift (Telehandler)	1	$85	$85
80 tonne crane	1	$120	$120
Bobcats	2	$30	$60
Pick-up trucks	8	$35	$280
Back-up Generators	2	$100	$200
Total			**$5,045**

The overall mine equipment cost is US$5.045 million. The open pit mining operation will be developed by a mining contractor.

Additional to the capital cost of the equipment, an estimate of US$4.0 million has been included to cover initial site development costs.

No mine sustaining capital was included for overhaul costs and fleet replacement, as the considered equipment should last through the entire life of the project, which is a short term of five years.

19.2.2 Process Capital Costs

Marlin Gold prepared capital cost estimates for the process infrastructure and these are presented in Table 19.2.2.1. Most of the process capital cost estimate comes from preliminary budgetary quotations. The adopted exchange rate is Pesos $12.50 for every US$1.00.

Table 19.2.2.1: Processing Capital Costs (US$000s)

Description	Total Capital
3 Stage Crusher System with Agglomerator	$3,976
Grasshopp Conveyor and Stacker	$1,619
Leach Pad and Ponds	$3,444
Pumps for ADR, Heap Leach and Fire System	$700
Complete ADR Installed	$2,205
Complete Laboratory for 200 Samples per Day	$474
Warehouse	$207
Total	**$12,625**

The construction of the leach pads and ponds infrastructure have been quoted with local companies, and is expected to take around 6 months to be completed. Table 19.2.2.2 presents the breakdown for the estimate of the materials and construction required for the leaching pads and ponds.

Table 19.2.2.2: Leaching Pads and Ponds

Description	Pesos $	US$
Studies & Supervision	$7,656,250	$612,500
Leach Pad Earthworks (Contractor)	$26,696,778	$2,135,742
Leach Pad Liners (Contractor)	$7,329,211	$586,337
Solution Collection System	$1,367,181	$109,375
Total		**$3,443,954**

The equipment required for the crushing operations have been quoted with various vendors and Marlin Gold has selected the best choices from the quotations provided. Installation costs have been quoted with local service providers and vendors. Table 19.2.2.3 present the breakdown of the crushing system capital costs.

Table 19.2.2.3: Capital Estimate for the Crushing System

Description	Pesos $	US$
Cedarapids 3042 jaw, apron feeder, and Simplicity 5' x 8' grizzly scalper	$6,600,688	$528,055
Complete Screen on Stand Structure	$3,157,850	$252,628
Excel MVP 380X Cone / 6X24M Incline Screen	$7,500,000	$600,000
Excel MVP 380X Cone / 6X24M Incline Screen	$7,500,000	$600,000
Self-cleaning magnet and stand	$375,375	$30,030
CV-1 Excel 36" x 137' conveyor with catwalks and service platform	$1,540,000	$123,200
CV-2 Excel 36" x 84' conveyor with service platform	$840,000	$67,200
CV-3 Excel 30" X 116' conveyor with service platform	$910,000	$72,800
CV-4 Excel 30" x 75' lattice conveyor with service platform	$776,160	$62,093
CV-5 Excel 36" x 100' conveyor with service platform	$924,000	$73,920
CV-6 Excel 30" x 95' lattice conveyor with service platform	$924,000	$73,920
CV-7 Excel 30" X 48' lattice stackable conveyor with service platform	$504,000	$40,320
Excel surge bin 10 x 10' x 14' with gate	$385,000	$30,800
Pan feeder	$232,375	$18,590
New Sepro Heavy Duty Agglomeration Drum	$6,250,000	$500,000
Belgrade Silo, 550BBL, 100 Ton	$750,000	$60,000
Electrical Package	$8,812,500	$705,000
Electrical Installation	$750,000	$60,000
Mechanical Installation/Labor	$750,000	$60,000
Vulcanizing	$211,828	$16,946
Total		**$3,975,502**

Similarly, the grasshopper conveyors and stacking equipment and mechanical installation costs have been quoted with various vendors. Table 19.2.2.4 presents the breakdown of the grasshopper conveyor and stacker capital estimate.

Table 19.2.2.4: Grasshopper Conveyors and Stacker Capital Estimate

Description	Pesos $	US$
Excel 30" X 100' long grasshopper	$16,870,500	$1,349,640
Excel 30" X 50' long grasshopper	$689,250	$55,140
36" X 140' long Thor Low Pro Stacker	$1,875,000	$150,000
Mechanical Installation/Labor	$312,500	$25,000
Vulcanizing	$494,156	$39,533
Total		**$1,619,313**

The construction of complete ADR plant, including all the required equipment, has been quoted from a number of vendors. Table 19.2.2.5 provides a summary of the equipment and installation costs for the ADR plant.

Table 19.2.2.5: ADR Plant Capital Estimate

Description	Pesos $	US$
Foundation and Carbon Columns	$1,729,000	$138,320
Refinery Facility and Control Room	$2,864,000	$229,120
Columns and Tanks Fabrication	$3,857,540	$308,603
Assembly & Installation	$1,785,000	$142,800
Electrolytic Cells Installation	$388,000	$31,040
Reagent Mixing Tanks and Warehouse	$65,000	$5,200
Mechanical Assembly	$1,598,822	$127,906
Electrical System Installation	$1,767,000	$141,360
Electrowinning Cells	$2,396,787	$191,743
Boiler & Heater Skid System	$3,716,383	$297,311
Boiler Installation	$455,000	$36,400
Furnace and Equipment for Refinery	$2,451,053	$196,084
Smelting Furnace Installation	$585,000	$46,800
Piping & Valves	$3,903,919	$312,314
Total		**$2,205,000**

The costs for the civil construction of laboratory and the required equipment have been quoted with local vendors. Table 19.2.2.6 provides a summary of the costs for construction of the laboratory, as well as, associated analytical equipment and supplies.

Table 19.2.2.6: Laboratory Capital Cost Estimate

Description	Pesos $	US$
Foundation	$226,572	$18,126
Walls	$920,238	$73,619
Finish Work	$20,140	$1,611
Plumbing	$54,253	$4,340
Air conditioning	$193,212	$15,457
Metallurgical Equipment	$435,606	$34,849
Environmental Equipment	$627,356	$50,189
Reagents	$32,916	$2,633
Fire Assay equipment	$897,604	$71,808
Wet assay equipment	$584,749	$46,780
Sample Preparation Equipment	$1,452,882	$116,231
Safety Equipment	$104,402	$8,352
Perkin Elmer A.A.	$375,000	$30,000
Total		**$473,994**

The costs for the civil construction of a warehouse and the required equipment have been quoted by local vendors. Table 19.2.2.7 provides a detailed cost summary.

Table 19.2.2.7: Warehouse Capital Cost Estimate

Description	Pesos $	US$
Earthwork	$207,000	$16,560
Foundation and Concrete Work	$781,835	$62,547
Structure	$602,983	$48,239
Walls and Ceilings	$564,957	$45,197
Sealing	$39,520	$3,162
Plumbing	$3,360	$269
Sanitary Installation	$14,715	$1,177
Doors	$123,400	$9,872
Electrical Installation	$255,620	$20,450
Total		**$207,471**

No sustaining capital has been included in the capital cost estimate, as SRK expects the initial capital investment to be sufficient for the short five year life of the project. It should be noted that the entire heap leach pad for the life of the project will be constructed as part of initial capital.

19.2.3 Owner's Capital Costs

A capital estimate to cover owner's item has been included in the overall project capital. This capital should cover the revamp of existing office facilities at the site, installation of the water and power systems, initial stock of reagents and spare parts and costs associated with the engineering procurement and construction management. Table 19.2.3.1 presents owner's capital cost investments.

Table 19.2.3.1: Owner's Costs (US$000s)

Description	Total Capital
Water System Facility, Transformers and CFE Authorization	$500
Offices Revamp and Camp for 40 Employees	$1,300
Reagents and Spares	$969
Engineering	$500
Total	**$3,269**

Costs associated with the water and power systems, offices and infrastructure and engineering procurement and management are ball park numbers that have been plugged in the model, this data has no backup quotes, but is supported by Marlin Gold professionals' experience with similar projects. SRK has reviewed those estimates and is in agreement with them.

The costs with initial fills and spare parts have considered as the operating costs of the first month of operation. This estimate of cost has been included as working capital and amounts to US$2,588,848.

19.2.4 Other Capital Costs

Mine closure costs haves been estimated as US$3.05 million, however, provision for US$1.8 million in salvage value results in a net closure cost of US$1.25 million (Table 19.2.4.1).

Table 19.2.4.1: Estimated Closure Costs

Description	US$
Demolition and Structure Removal	$300,000
ADR Decontamination	$120,000
Rinsing of Heap	$260,000
Recontouring and Regrading	$450,000
Placement of Heap Leach Cover Material	$530,000
Ripping of Roads	$70,000
Well Closure and Abandonment	$60,000
Replacement of Salvaged Growth Material	$250,000
Final Grading	$45,000
Revegetation	$130,000
Closure Maintenance and Monitoring	$130,000
Contractor Fee (Profit/Overhead @ 20% of Direct Cost)	$469,000
Subtotal - Indirect/Overhead Costs - 10%	$234,500
Salvage the crusher circuit, ADR & laboratory	($1,800,000)
Total	**$1,248,500**

Cost with the Mexican Value Added Tax (IVA) has been included as one line item, corresponding to 16% of the total estimate of capital. The technical economic model considers that this tax will be recovered during the first year of operations.

19.2.5 Payback

The prepared economic evaluation indicates that payback will occur in the end of the second quarter of the third year of production.

19.3 Operating Cost Estimates

Project operating costs for mining, processing and G&A are summarized in Tables 19.3.1 and 19.3.2 present the resulting operating costs as presented by the prepared model.

Table 19.3.1: General Operating Costs

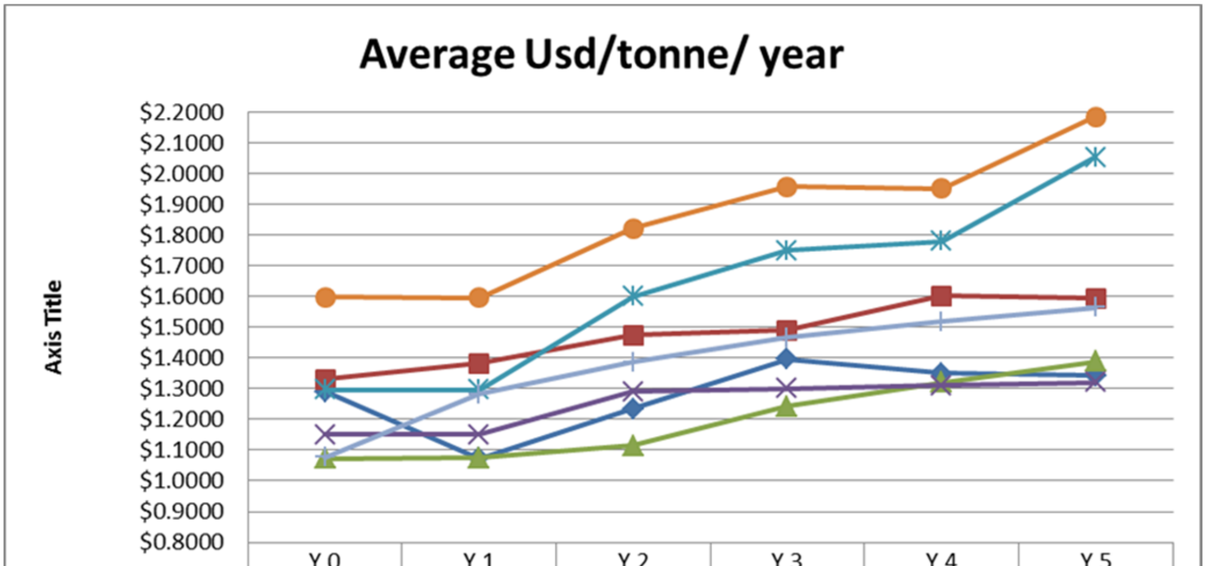
Description	LoM (US$000s)	US$/t-RoM
Mining	$86,878	$11.14
Processing	$53,430	$6.85
G&A	$8,000	$1.03
Total	**$148,308**	**$19.01**

Table 19.3.2: Operating Cost Breakdown

Description	LoM (US$000s)	US$/t-RoM
Mining	$86,878	$11.14
Crushing	$12,510	$1.60
Agglomeration	$2,454	$0.31
Conveyor	$4,304	$0.55
Leaching	$16,828	$2.16
ADR	$4,878	$0.63
Laboratory	$1,687	$0.22
Refinery	$669	$0.09
Process Labor	$10,100	$1.29
G&A	$8,000	$1.03
Total	**$149,793**	**$19.01**

19.3.1 Basis for Operating Cost Estimates

Marlin Gold invited seven different companies to presents proposals to conduct the mine operations of Trinidad, these quotes were based on the mining plan prepared for the project. Figure 19-1 presents a graph comparing the quotes and a table with the yearly average costs. Contractor 3's costs were selected to be included in the technical economic model. The costs provided by the companies were exclusive of explosives, which were considered as an additional US$0.15/t-blasted. Overall the LoM mining cost is an average of US$1.35/t-moved.



	Y 0	Y 1	Y 2	Y 3	Y 4	Y 5
Contractor 1	$1.2913	$1.0738	$1.2341	$1.3972	$1.3508	$1.3418
Contractor 2	$1.3308	$1.3826	$1.4745	$1.4904	$1.6014	$1.5948
Contractor 3	$1.0726	$1.0743	$1.1149	$1.2427	$1.3209	$1.3880
Contractor 4	$1.1500	$1.1500	$1.2900	$1.3000	$1.3100	$1.3200
Contractor 5	$1.2970	$1.2970	$1.6000	$1.7510	$1.7810	$2.0530
Contractor 6	$1.5992	$1.5969	$1.8220	$1.9588	$1.9527	$2.1864
Contractor 7	$1.08	$1.28	$1.39	$1.47	$1.52	$1.56

Figure 19-1: Comparison of Quoted Costs for Mining Operations of Trinidad

Process operating costs have been estimated based on the following operation basis:

- 360 days of operation per year;
- 2 shifts per day;
- 12 hours per shift;
- 70% crushing plant availability;
- 1,546,551 t-RoM/year; and
- Exchange rate of Pesos $12.50 to US$1.00.

Process costs are based on either an assumption of consumption rate and unitary cost, or an assumption of a period total cost, either monthly or yearly, supported by experience of Marlin Gold with similar scale projects. SRK has reviewed these operating costs and believes they are in line with the projects of this type and scale. Tables 19.3.1.1 through 19.3.1.7 provide a detailed summary of process operating costs by category.

Table 19.3.1.1: Crushing Plant Operating Cost Summary

Description	Consumption	Unit Cost	Assumption	US$/t-RoM
Wear Parts	-	-	$69,231 US$/month	$0.537
Primary Crusher Wear	-	-	$180,000 US$/year	$0.116
Secondary Crusher Wear	-	-	$220,000 US$/year	$0.142
Tertiary Crusher Wear	-	-	$220,000 US$/year	$0.142
Maintenance services -outside	-	-	$4,000 US$/month	$0.031
Maintenance supplies & services	-	-	$38,000 US$/month	$0.295
Training	-	-	$1,731 US$/month	$0.013
Tools & Equipment	-	-	$1,500 US$/month	$0.012
Technical Consultants	-	-	$1,910 US$/month	$0.015
Office & Computer supplies	-	-	$865 US$/month	$0.007
Lubes	-	-	$940 US$/month	$0.007
Power Consumption (CFE)	2.20 kWh/t-RoM	US$0.13/kWh	$69,231 US$/year	$0.286
Total				**$1.604**

Table 19.3.1.2: Agglomeration Cost Summary

Description	Consumption	Unit Cost	Assumption	US$/t-RoM
Wear	-	-	$65,000 US$/year	$0.042
Lubs & Oil	-	-	$36,132 US$/year	$0.023
SPEED REDUCER	-	-	$75,000 US$/year	$0.048
Maintenance supplies & services	-	-	$18,000 US$/month	$0.140
Power Consumption (CFE)	0.47 kWh/t-RoM	US$0.13/kWh	$94,494 US$/year	$0.061
Total				**$0.315**

Table 19.3.1.3: Conveyor Cost Summary

Description	Consumption	Unit Cost	Assumption	US$/t-RoM
Wear Parts	-	-	21,492 US$/year	$0.014
Primary Crusher Wear	-	-	500 US$/month	$0.004
Tertiary Crusher Wear	-	-	500 US$/month	$0.004
Maintenance services -outside	-	-	28,800 US$/year	$0.019
Maintenance supplies & services	-	-	10,380 US$/year	$0.007
Training	-	-	36,132 US$/year	$0.023
Tools & Equipment	-	-	485,346 US$/year	$0.314
Technical Consultants	-	-	84,000 US$/year	$0.054
Office & Computer supplies	-	-	87,996 US$/year	$0.057
Lubes	-	-	6,840 US$/year	$0.004
Power Consumption (CFE)	0.40 kWh/t-RoM	US$0.13/kWh	80,421 US$/year	$0.052
Total				**$0.552**

Table 19.3.1.4: Heap Leach Operating Cost Summary

Description	Consumption	Unit Cost	Assumption	US$/t-RoM
Hoses & Fittings	22 Coils/week	-	135,520 US$/year	$0.088
Leach Piping	-	-	128,000 US$/year	$0.083
Antiscalant	0.015 liters	2.9 US$/lt		$0.044
Caustic Soda	0.018 kg	0.33 US$/kg		$0.006
Cyanide	0.300 kg/t- RoM	3.80 US$/kg		$1.140
Lime	1.000 kg/t- RoM	0.11 US$/kg		$0.109
Cement	2.000 kg/t- RoM	0.20 US$/kg		$0.391
Pumps & Pumps repair	-	-	130,000 US$/year	$0.084
Water	447,614 Mt/year	-	193,043 US$/year	$0.125
Tools & Minor Equipment	-	-	18,000 US$/year	$0.012
Valves	-	-	25,000 US$/year	$0.016
Power Consumption (CFE)	0.47 kWh/t-RoM	US$0.13/kWh	94,494 US$/year	$0.061
Total				**$2.158**

Table 19.3.1.5: ADR Operating Cost Summary

Description	Consumption	Unit Cost	Assumption	US$/t-RoM
Carbon	0.012 kg/t-RoM	-	3.25 US$/kg	$0.039
Hydrochloric	0.020 kg/t- RoM	-	0.30 US$/lt	$0.006
Propane	1,020,000 l/year	-	0.48 US$/lt	$0.319
Other Reagents	-	-	8,155 US$/year	$0.005
Tools & Equipment	-	-	13,200 US$/year	$0.009
Pipes & Accessories	-	-	37,500 US$/year	$0.024
Other Supplies	-	-	35,000 US$/year	$0.023
Valves	-	-	18,000 US$/year	$0.012
Wear Parts	-	-	150,000 US$/year	$0.097
Technical Services	-		17,000 US$/year	$0.011
Mechanical Repairs-Outside	-	-	35,000 US$/year	$0.023
Training	-	-	18,000 US$/year	$0.012
Power Consumption (CFE)	0.36 kWh/t-RoM	US$0.13/kWh	72,379 US$/year	$0.047
Total				**$0.625**

Table 19.3.1.6: Laboratory Operating Cost Summary

Description	Consumption	Unit Cost	Assumption	US$/t-RoM
Reagents	-	-	13,991 US$/year	$0.009
Wear Parts	-	-	20,818 US$/year	$0.013
Training	-	-	11,193 US$/year	$0.007
Assay Services	-	-	8,394 US$/year	$0.005
Office Supplies	-	-	4,447 US$/year	$0.003
Computer Services & supplies	-	-	1,120 US$/year	$0.001
Tools & Equipment	-		6,156 US$/year	$0.004
Lab consumables	200 samples/day	1.9 US$/sample		$0.088
Power Consumption (CFE)	0.65 kWh/t-RoM	-	131,503 US$/year	$0.085
Total				**$0.216**

Table 19.3.1.7: Refinery Operating Cost Summary

Description	Consumption	Unit Cost	Assumption	US$/t-RoM
Carbonate	100 t/year	-	0.45 US$/kg	$0.00003
Borax	100 t/year	-	1.47 US$/kg	$0.00009
Other Reagents	-	-	1,500 US$/year	$0.001
Propane	102,000 l/year	0.41 US$/l		$0.027
Litarge	500 kg/yea	2.50 US$/kg		$0.00001
Crucibles, trays, moulds	-	-	15,000 US$/year	$0.010
Other supplies	-	-	11,193 US$/year	$0.007
Tools & Equipment	-	-	4,925 US$/year	$0.003
Repair Parts	-	-	35,000 US$/year	$0.023
Professional Services -outside	-		6,156 US$/year	$0.004
Training	-	-	1,200 US$/year	$0.001
Technical Services	-	-	12,000 US$/year	$0.008
Power Consumption (CFE)	0.02 kWh/t-RoM	0.13 US$/kWh	4,021 US$/year	$0.003
Total				**$0.086**

Marlin Gold has prepared an estimate of the process labor costs, which has been reviewed by SRK. The total costs was calculated and adjusted to a US$/t heap of $1.29, based on the aforementioned project assumptions. This cost per ton has been applied to the technical economic model. Table 19.3.1.8 present the detailed process labor assumptions.

Table 19.3.1.8: Process Labor Costs

Position	Number	Salary (US$)	Hourly (US$)	Burden	Annual Cost (US$)
Supervision					
Process Manager	1	$80,000			$104,000
Metallurgist	1	$50,000			$65,000
Metallurgical Technician	2	$25,000			$65,000
Operation Superintendent	1	$65,000			$84,500
Maintenance Superintendent	1	$65,000			$84,500
Operation Shift Foreman	3	$30,000			$117,000
Maintenance Shift Foreman	1	$30,000			$39,000
Planner / Scheduler	1	$20,000			$26,000
Crushing					
Primary Crusher Operator	3		$12,900		$50,310
Sec./Tert. Crusher Operator	3		$12,900		$50,310
Crusher Helper	9		$11,400		$133,380
Heap Leach					
Agglomeration Operator	3		$12,900		$50,310
Stacking Operator	3		$12,900		$50,310
Heap Leach Operator	3		$12,900		$50,310
Helpers - Heap Leach	3		$12,900		$50,310
Piping Crew - Heap Leach	8		$11,400		$118,560
Recovery Plant					
Recovery Plant Operator	6		$12,900	30%	$100,620
Refining Operator	2		$12,900	30%	$33,540
Day Laborer	2		$11,400	30%	$29,640
Process Maintenance					
Mechanic	3		$12,900	30%	$50,310
Mechanic Helper	3		$11,400	30%	$44,460
Electrician	3		$12,900	30%	$50,310
Electrician Helper	3		$11,400	30%	$44,460
Instrumentation Technician	2		$12,900	30%	$33,540
Welders	3		$12,900	30%	$50,310
Lab					
Chief of laboratory	1	$30,000		30%	$39,000
Lab Foreman	3	$25,000		30%	$97,500
Lab Technician	6		$12,900	30%	$100,620
Sample Preparation	6		$11,400	30%	$88,920
Assayer	6		$12,900	30%	$100,620
Total					**$2,002,650**
US$/t - RoM					**$1.29**

Marlin Gold has prepared an estimate of general and administration labor (G&A). A total G&A cost of US$1.35 million is estimated during a typical year of operation. The technical economic model has considered a typical year cost with G&A as US$1.5 million in order to allow for other undefined costs. The starting and ending year G&A costs have been assumed to be US$1.0 million with the expectation that during these years of commissioning and decommissioning G&A labor costs will be reduced. Table 19.3.1.9 presents the detail of the G&A labor cost calculation.

Table 19.3.1.9: G&A Labor Costs

Position	Number	Salary (US$)	Hourly (US$)	Burden	Annual Cost (US$)
Administration					
General Manager	1	$100,000		30%	$130,000
Environmental Manager	1	$60,000		30%	$78,000
Human Resources Manager	1	$40,000		30%	$52,000
Safety Manager	1	$60,000		30%	$78,000
Purchasing Manager	1	$40,000		30%	$52,000
Administration Manager	1	$80,000		30%	$104,000
Senior accountant	1	$40,000		30%	$52,000
Expediter/Purchasing Clerk	2	$15,000		30%	$39,000
Warehouseman	2	$20,000		30%	$52,000
Accounts Payable Clerk	3	$15,000		30%	$58,500
Environmental Technician	2	$20,000		30%	$52,000
Secretary	1	$5,000		30%	$6,500
Mine					$0
Mine Manager	1	$60,000		30%	$78,000
Mining Engineer	3	$40,000		30%	$156,000
Mine Geologists	3	$40,000		30%	$156,000
Mine Suptte	1	$50,000		30%	$65,000
Operation Shift Foreman	3	$20,000		30%	$78,000
Survey	3	$15,000		30%	$58,500
Total					**$1,345,500**

20 Economic Analysis (Item 22)

The technical-economic results summarized in this section are based upon work performed by Marlin Gold's engineers and consultants; these have been prepared on an annual basis. The economic model was developed by SRK. All costs are in Q4 2011 US constant dollars.

The project under analysis is a brown field gold deposit, where the results were derived from a base case with an average production rate around 35,000 t/d and a maximum production rate of around 45,600 t/d, including RoM and waste movement. Life of mine stripping ratio is roughly 7.2 and average gold grade of about 1.12 ppm. Gold recovery in the model has been considered as a flat rate of 70%, where the process returns the gold deposited in the heap leach within the same modeled period.

Readers are cautioned that this analysis is only a preliminary assessment based on conceptual mine plans and process flowsheets. There is no certainty that this PEA will be realized. Since there is no estimate of proven or probable reserves for the Project, this assessment only includes cash flow forecasts on an annual basis for the mineral resource estimated as of January 2013.

20.1 Principal Assumptions

The economic model is pre-tax and assumes 100% equity to provide a clear picture of the technical merits of the project. Assumptions used are discussed in detail throughout this report and are summarized in Table 20.1.1.

Table 20.1.1: Technical Economic Model Parameters

Model Parameter	**Technical Input**
General Assumptions	
Pre-Production Period	1 year
Mine Life	5 years
Operating Days per year	360 days/yr
Production Rate (avg.)	35,000 t/d
Market	
Discount Rate	8%
Gold Price (avg.)	US$1,500/Au-oz
Royalty	
Private Royalty	1% of NSR starting from third year of production

This study assumes one year of pre-production required to install process infrastructure, including crushing system and heap leach and ponds and ADR plant. The mine will have an estimated life of 5 years, given the resources described in this report and the assumed 35,000 t/d production rate.

Revenue from gold sales are based upon a fixed US$1,500/Au-oz, including the calculation of the respective NSR, considering that the project would be selling gold in a doré bar. Transportation to the refinery and insurance charges have been considered.

20.2 Pre-Tax Cashflow Forecasts and Annual Production Forecasts

The SRK LoM plan and economics are based on the following:

- A fixed US$1,500/Au-oz and an average NSR of US$1,494/Au-oz.;
- Sales price and Opex refer to a gold doré production;
- Indicated and inferred resources, and a preliminary mining studies;
- A mine life of 5 years, at an average designed rate of 35,000 t/d;
- An overall average metallurgical gold recovery of 70%;
- A cash operating cost of US$753 Au-oz;
- Initial capital costs of US$27.9 million and total capital costs of US$25.5 million dollars. The difference between initial and total capital is the recovery of an added value tax charged by the Mexican government (IVA);
- Capital costs include an estimate of US$3.05 million dollars for closure costs and a salvage value of US$1.8 million; and
- Sustaining capital has not been considered, due to the short life of the project.

The cashflow model is included as Appendix B.

The base case economic analysis results, shown in Table 20.2.1, indicate a pre-tax net present value of US$79 million at an 8% discount rate with an IRR of 53%.

Table 20.2.1: Pre-Tax Technical Economic Results

Description	Technical Input or Result
Potentially Mineable Resources	
Open Pit	
Waste	56,388kt
Feed (dry)	7,800kt
Total	64,188kt
s/r	7.2
Au Grade	1.122ppm
Contained Au	281koz
Mill	
Feed Treated (dry)	7,800kt
Feed Au Grade	1.122ppm
Contained Au	281.2koz
Recovered Au	196.9 koz
Revenue ($000s)	
Gold Market Price (Au)	*US$1,500/Au-oz*
Gold Refining	*US$0.85/Au-oz*
Mine to Refinery	*US$5.15/Au-oz*
NSR	*US$1,494/Au-oz*
Gross Revenue	$294,095
Royalty	$(2,203)
Net Income From Mining	$291,892
Operating Cost ($000s)	**($148,308)**
Mining	($86,878)
Process	($53,430)
Marketing	($8,000)
	US$753/Au-oz
	US$19.01 /t-milled
Cash Operating Margin ($000s)	**$143,548**
Capital Cost ($000s)	
Mine	($5,045)
Process & Infrastructure	($12,625)
Owners	($3,269)
IVA Paid	($3,350)
IVA Recovered	$3,350
Mine Closure	($3,049)
Salvage Values	$1,800
Total Capital	**($22,187)**
Contingencies (15%)	($3,328)
TOTAL	**($25,516)**
Initial	**($27,933)**
Ongoing	**$2,417**
Cash Flow ($000s)	**$118,068**
(NPV@8%) ($000s)	$79,001
IRR	53%

20.3 Base Case Sensitivity Analysis

The technical economic model has been prepared using a base case of 8% discount rate, resulting in an NPV of US$79,001,389 and an IRR of 53%.

SRK has prepared sensitivity analyses of this base result for key economic parameters, these are shown in Table 20.1.1 and Figure 20-1. This analysis suggests that the project is most sensitive to market gold price. Operating costs are considerably more sensitive than capital costs.

Table 20.1.1: Technical Economic Results

Description	-10%	-5%	Base	5%	10%
Revenues	56,000	68,000	79,000	90,000	102,000
Capital Costs	82,000	80,000	79,000	78,000	76,000
Operating Costs	91,000	85,000	79,000	73,000	67,000

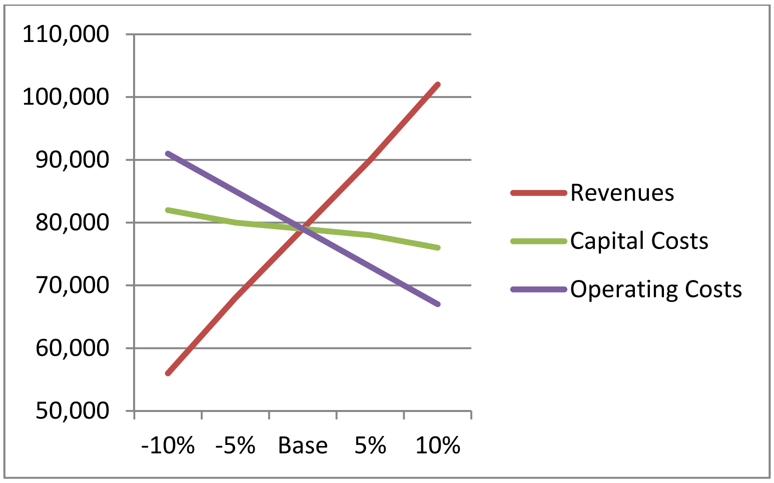


Figure 20-1: Technical Economic Results

20.4 Taxes, Royalties and Other Interests

Royalties

A signed agreement between Marlin Gold and the party currently holding the royalties related to the area indicates the following.

The parties recognize that the project area is under a NSR Royalty, which shall be granted once the capital investment required has been recovered or commercial production has been carried out for two years, whichever occurs first:

- 0.5% (zero point five percent) if the per ounce price of gold (Au) is below US$400 (four hundred and 00/100 Dollars) legal currency of the United States of America; and
- If the per ounce price of gold (Au) is above US$400, 1% royalty.

The technical economic model includes a 1% NSR Royalty starting from the third year of production, considering that cash flow does not foresee a return of the investment before the end of the second year of production.

Marlin Gold also has the option of purchasing the royalty at any time. Each 0.5% of NSR Royalty for the amount of US$1,000,000 or its equivalent in Mexican currency on the date of payment, according to the exchange rate given by Banco de México as applicable for payment of obligations contracted in foreign currency, which is published in the federal Diario Oficial on the day prior to the date on which the payment in question must be made, adding the IVA corresponding to each payment.

20.5 Tax Depreciation and Amortization of Deferred Costs

Fixed asset costs and other deferred costs may be deducted via tax depreciation and amortization. Tax depreciation is calculated on a straight-line basis and the rate varies depending on the type of asset. The depreciation rate for mining equipment and machinery is 12%.

For the determination of post-tax NPV calculations, the following has been applied:

- Legislated taxes rates are different for each year and range from 30% to 28%; and
- Capital assets are depreciated using a straight line rate of 12% 8.3 years.

20.6 Post Tax Results

The SRK LoM plan and economics are based on the following:

- Capital costs of US$25.5 million dollars are applicable for a depreciation schedule;
- The depreciation model adopted is a straight line rate of 12%; and
- Effective income tax rate varies between 28% and a 30%.

The post-tax economic analysis results indicate a net present value of US$53.4 million, based on an 8% discount rate, and an IRR of 43%.

21 Adjacent Properties (Item 23)

Section 21 has been excerpted from the Jutras and Powell, 2008 Technical Report. Changes to headings and standardizations have been made to suit the format of this report. Changes to the text are enclosed in brackets or in sentences containing SRK.

The Taunus and Colinas resource areas lie within the [61,602.26 ha] Trinidad concession of Marlin Gold, part of the El Rosario mining district. Veins in the district have been exploited since pre-colonial times, but only the Taunus pit and the nearby Plomosas mine at La Rastra have recent recorded production. Production from La Rastra occurred at a rate of 600t/d, mining 98,162t in 2000, after which mining was suspended.

Grupo Mexico S.A. de C.V. reported a non NI 43-101 compliant mineral reserve estimate (http://www.secinfo.com/d11MXs.2efw.htm) postdating mine closure (Table 21.1).

Table 21.1: Mineral Reserve – Grupo Mexico S.A. de C.V.

Reserve	Ore (t)	Zinc (%)	Copper (%)	Lead (%)	Silver (g/t)	Gold (g/t)
Proven	14,000	5.75	0.68	2.64	60	1.65
Probable	307,000	3.23	0.21	2.19	121	0.91
Total	**321,000**	**3.34**	**0.23**	**2.21**	**118**	**0.94**
Total mill recovery	**69.68%**	**65.63%**	**77.77%**	**67.24%**	**64.55%**	
Total metal recoverable (t)	**7464**	**484**	**5**	**512**	**37.84**	**0.19**

Production records for the remainder of the district are lacking.

22 Other Relevant Data and Information (Item 24)

There is no other relevant data and information at this time.

23 Interpretation and Conclusions (Item 25)

23.1 Mining Conclusions

Mining operations at Taunus are sensitive to the geometry of the orebody and the ability to phase the operation based on mining width. This suggests the strategic directives of Marlin Gold will heavily influence the size, stripping profile and feed delivery possible in any given period. Mining will utilize contractor operations utilizing standard mining equipment under the direction of Marlin Gold mine staff. Precise pit slope excavation and ability to manage water will be important to liberate high grade heap leach material found at the pit bottom as the ability re-excavate a pushback will be cost prohibitive if a mistake is made. The mine plan calls for an average 37 kt/d operation with a reference mining cost of $1.40/t over a five year mine life.

23.2 Metallurgy and Process Conclusions

An average gold recovery of about 70% and an average silver recover of about 23% is estimated based on the closed-cycle testwork presented in this report. These recovery estimates include a 5% reduction in recovery to account for leach inefficiencies normally encountered in a commercial heap leach operation.

It is very likely that material from the Taunus pit will present percolation issues during multi-lift heap leach operation. Additional studies will need to be conducted during the next phase of study to more fully evaluate agglomeration strategies and process options.

23.3 Other Relevant Information

The comparison between closely spaced RC and core drilling shows a tendency for the gold assays in the core to be statistically higher than those in corresponding RC holes. This is especially true in the Bottom domain. The recent sonic drilling program has shown a similar relationship between core and sonic drill results, with the sonic results somewhat lower than corresponding core results.

Table 23.5.1: Risk Assessment

Risk Area	Risk Level
Resources	
Database	
Exploration drilling	Low – high density of drilling completed by various companies with similar results
Quality	Moderate – different data types with low quality of RC data, completed by a variety of companies and limited downhole survey data for some datasets.
Assaying	Low – assays are expected to be reliable and have included a robust QA/QC program
Surveying	Moderate – some uncertainty with regard to hole locations and difficulty in collecting sufficient down-hole surveys
Density or Specific Gravity	Moderate – bulk density difficult to assess from the Breccia unit
Geology and Resource Modeling	
Geological modeling	Moderate - based on close drill hole spacing, but with some uncertainty on sample spatial location; relatively narrow mineralization in some locations ; both create some uncertainty in the volume of mineralization
Resource modeling approach	Low – standard methodology
Geostatistical analysis	Low - standard methodology
Resource estimate	Moderate – uncertainty on data quality from different sample types and uncertainty on bulk density
Geotechnical	Moderate – High. No physical test work available
Mineable Resources and Mining	
Accuracy of relevant technical design parameters	Moderate – No geotechnical testwork
Conversion to mineable resources	Low –Margin in economic model
Proposed production schedule	Low – Opportunity for optimization exists
Equipment schedule	Moderate – Weather, Capital, Contractor
Mining unit cost assumptions and reasonableness	Moderate –High strip ratio pit.
Grade control methodologies	Moderate – Nuggety nature of heap material
Metallurgical Test Work/Processing Facilities	
Metallurgical Test Work	Moderate – Additional column and percolation tests recommended
Mineralization type definition	Low
Recovery projections	Moderate – Agglomeration and percolation tests recommended
Throughput	Low
Process unit assumptions and reasonableness of rates	Low
Environmental and Permitting	
Status of statutory permits for current and future operations	Low – MIA and Risk Analysis submitted and approved; Land Use Change application submitted.
Compliance of current operations with existing permits	Low – Current operations are closed and limited to exploration
Risks for future compliance of operations with permits	Moderate to High – With Arroyo el Bacin and Arroyo Azules traversing the process area, effective water management will be critical to avoid unpermitted releases of solution
Identification of environmental and social risks	Moderate - remote location, local communities small and under negotiated agreement; final agreements for exploitation not yet obtained
Mine reclamation and closure plans and costs	Low to Moderate – simple operation and closure; long-term heap draindown management not fully addressed
Infrastructure	
Power	Low - sourced from Grid
Water	Low – Available from arroyo and other surface sources
Access	Low – close to regional center of Mazetlan
Transportation	Low – Good road system
Surface facilities	Low – Historical infrastructure in place
Capital Costs	
Capital cost programs	Low – Quotations in place
Sustaining capital	Low- Short mine life
Operating Costs	
Forecast costs used in resource determination	Low – Reasonably detailed for this level of study
Management and Staffing	Low – Good in country management in place

24 Recommendations (Item 26)

24.1 Recommended Work Programs

Exploration and Resource

The following recommendations provide a framework for future drilling and improved geology and resource models:

- Additional in-situ specific gravity testing should be undertaken to further confirm specific gravity determinations from drill core. Once this has been established, it might be possible to do the estimation of block specific gravity from nearby data.
- It appears that sonic drilling returned quite similar results to diamond drilling. Considering that the sonic drilling is much more expensive, future drill campaigns should potentially be based on a combination of large diameter core holes and sonic drill holes.
- Currently, the immediate area within and around the Taunus pit is fragmented in terms of the solid models. Consider unifying the models so that at least the Bocas, Eldorado-HS and Red Zone are analyzed together and therefore form geologically sensible domains. It may be possible to incorporate Taunus and Colinas data in the same way.
- Further drilling should be considered where it would benefit the quality of the mineral resource, and where there is uncertainty regarding the volume and spatial location of key higher grade mineralization and where it will lead to a more unified mineralization model.
- Complete analysis of silver, copper, arsenic, molybdenum and zinc for any further sampling of the mineralization and surrounding rocks so that these metals can be incorporated into the next resource estimate, to allow the assessment of potentially deleterious metals within the context of process metallurgy.

Hydrogeology

SRK notes that there is limited hydrogeology information at depth, and recommends initiation of hydrogeologic data collection studies in conjunction with the 2011 drilling program. Given that the depth of the current resource pit extends approximately 175 m below the current pit, a better understanding of hydrogeologic conditions is warranted.

SRK has recommended an initial data collection and analysis program as outlined below.

Geotechnical

Given the highly variable rock mass properties observed in both core and sonic drilled material, SRK recommends initiation of lab test work and geotechnical logging/mapping to adequately assess rock mass properties for input for pit design. SRK has recommended a program and budget as outlined below.

The objective of this program would be to assess geotechnical data to a level sufficient to support geotechnical mine design parameters required for substantial engineering design of the pit that will be reported in a public technical report.

Field Investigation **–** Develop drilling and sampling program suitable for geotechnical and hydrogeological investigation at Taunus pit and shallow exploration at San Carlos pit. We anticipate drilling up to six (6) PQ-size diamond drill holes along planned pit walls in each region for characterization.

- Drill coreholes in west and east highwall areas to characterize rock quality and obtain samples for strength testing;
- Furnish geotechnical logging and support to driller;
- Sample selection and packaging for shipping to laboratory for testing;
- Teleview all 6 DDH holes and 5-6 open historic sonic/DDH holes and obtain fracture orientation data;
- Obtain oriented core of fractures and assess orientation, frequency and spacing of dominant joint sets expected at depth;
- Assess pre-mining in situ stress conditions from borehole conditions and, if necessary, conduct stress measurements to assess horizontal stress conditions;
- Perform hydrogeologic pump testing and/or slug tests and collect data; and
- Characterize the hydrogeology for seepage rates into the pit and need to dewatering program.

Laboratory Testing – Laboratory rock testing for strength properties will include the following

- Point load tests;
- Unconfined compression tests;
- Stress-strain deformation tests;
- Triaxial compression tests;
- Direct shear tests;
- Brazilian tensile tests; and
- Density tests.

Data Analysis and Reporting – Limit equilibrium stability analyses of each rock region should be performed to demonstrate stability of the overall and inter-ramp slopes. This analysis should include both static and dynamic analyses. Other tasks include the following;

- Develop 3-D structural/lithologic model and RMR block model that can be used to optimize the overall pit slope angles;
- Complete a seismic hazard assessment to assess likely ground motion that pit walls and surface structures will be exposed to for the dynamic stability; and
- Assess pit slope stability along critical orientations of the pit using numerical stress analysis methods.

Topography Survey

A review of the currently available topography shows minor discrepancies as related to drillhole collar locations and post-historical mining topography. SRK has recommended a program and budget as outlined below.

Metallurgy and Process Test Work

Additional agglomeration studies and full-height column leach tests should be conducted during the next phase of study. In addition, compacted permeability tests should be conducted to assess solution percolation rates at sequentially higher loadings designed to simulate conditions in a multi-lift heap leach operation.

Mining

Detailed contractor evaluations based on a monthly schedule (Including predicted cycle time and haul distances) will be vital to optimize the periodic mining cost as the pit deepens.

The use of a mixed fleet for stripping and detailed heap material excavation should be looked at to reduce ramp widths at the pit bottom

The current PEA pit is not limited to arroyo or process plant buffer widths. When the selection of future pit sizes are determined, these widths should be included.

The PEA pit comprises of a phase 1 and phase 2 pit extraction, serious evaluation should be made to only include phase 1 extraction but break it up into minimum mining widths that will improve the strip profile. Including the phase 2 pit forces higher stripping ratios in the early years for only incremental gains in NPV.

The amount of free-dig versus drill and blast should be evaluated, and if significant, a move away from front end loader to excavators should be considered. Particularly, if the breakout force of the excavator negates the need for blasting.

Environmental (Geochemistry)

Geochemistry testwork on the waste rock, spent heap material and post-closure wall rock is currently limited and needs to be expanded to include longer-term kinetic testing to establish the potential for poor quality seepage from the waste piles and future pit lake. Post-metallurgical testing of the spent heap material would provide a better understanding of the anticipated draindown chemistry and the need for long-term management. Generation of a predictive geochemical model of the future pit lake would also be appropriate to determine to the need for possible post-closure water treatment.

Project Costs and Financials

Project capital costs seem fairly detailed for this level of study, including a number of quotes to back up the included costs. The adopted mining cost is also backed up by third party preliminary quotations. SRK recommends that Marlin Gold address the following:

- Assess the correct mass and grade of existing spent heap material. Its movement is currently included in the costs, but the eventual recovery of its gold content is not considered as a revenue generator;
- Analyze the resources for silver, as its recovery could further improve project results; and
- A more detailed assessment of the beneficiation costs will be required in future studies.

24.1.1 Future Proposed Expenditure Cost to Develop a Feasibility Study

SRK anticipates that the recommended work program will cost US$1.75 million. The details of this estimate are provided in Table 24.1.1.1.

Table 24.1.1.1: Recommended Program and Budget to Proceed to Feasibility Study

Activity	Unit Cost ($/unit)	Number of Units	Total Cost ($US)	Description
Drilling	400 / meter	2,000	800,000	Infill drilling
SG measurements	100 / measurement	200	20,000	Insitu or dowhole SG measurements
Analysis of other metals	10 / analysis	5000	50,000	Analysis of silver, copper, arsenic, molybdenum and zinc
Estimation of other metals	Lump sum	1	20,000	Estimation of silver, copper, arsenic, molybdenum and zinc
Unified Model	Lump sum	1	10,000	Create a unified mineralization model
Geotechnical Studies	Lump sum	1	400,000	Testwork, field studies and analysis
Mining Studies	Lump sum	1	150,000	Mine planning optimization
Process Studies	Lump sum	1	200,000	Additional testwork
Environmental Studies	Lump sum	1	100,000	MBA, water quality and pitlake
Total			**1,750,000**	

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26 Glossary

26.1 Mineral Resources

The mineral resources and mineral reserves have been classified according to the “CIM Standards on Mineral Resources and Reserves: Definitions and Guidelines” (November 27, 2010). 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.

26.2 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.

26.3 Definition of Terms

The following general mining terms may be used in this report.

Table 26.3.1: Definition of Terms

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.

Term	Definition
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).

26.4 Abbreviations

The following abbreviations may be used in this report.

Table 26.4.1: 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

Abbreviation	Unit or Term
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
kW	kilowatt
kWh	kilowatt-hour
kWh/t	kilowatt-hour per metric tonne
L	liter
L/sec	liters per second
L/sec/m	liters per second per meter
lb	pound
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
MARN	Ministry of the Environment and Natural Resources
MBA	Metals Based Accounting
MDA	Mine Development Associates
mg/L	milligrams/liter
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

Abbreviation	Unit or Term
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
V	volts
VFD	variable frequency drive
W	watt
XRD	x-ray diffraction
y	year

Appendices

Appendix A: Certificates of Authors

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CERTIFICATE OF QUALIFIED PERSON

I, Bret C. Swanson, B.Eng. MMSAQP do hereby certify that:

1. I am a Principal Mining Engineer of SRK Consulting (U.S.), Inc., 7175 W. Jefferson Ave, Suite 3000, Denver, CO, USA, 80235.
2. This certificate applies to the technical report titled, "2nd Amended NI 43-101 Technical Report, Preliminary Economic Assessment, Trinidad/Taunus Project, Sinaloa, Mexico" with an Effective Date of June 1, 2012 and a 2nd Amended Report Date of February 1, 2013 (the "Technical Report").
3. I graduated with a degree in Bachelor of Engineering in Mining Engineering from the University of Wollongong in 1997. I am a current member of the Mining & Metallurgical Society of America. I have worked as a Mining Engineer for a total of 16 years since my graduation from university. My relevant experience includes contributions to numerous feasibility, pre-feasibility, preliminary assessment and competent person reports while employed with SRK, Denver. Previously, I worked on the design and implementation of mine planning and scheduling systems, long term mine design with environmental focus, and mine planning corporate standards for Solid Energy, New Zealand. In addition, have worked in various sales and support roles utilizing Vulcan Software and MineSuite Production Statistics where I gained considerable exposure to mining operations and projects around the world.
4. 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.
5. I visited the Trinidad/Taunus property on February 17, 2012 for 1 day.
6. I am responsible for the preparation of the Executive Summary, Sections 1, 13, 14, 16, 17, 19, 20, 21, 22, 23, 24, 25 and 26 of the Technical Report.
7. I am independent of the issuer applying all of the tests in section 1.5 of National Instrument 43-101.
8. I have had prior involvement with the Property that is the subject of the Technical Report. The nature of my prior involvement was in the preparation of the previous Technical Reports titled, "Amended NI 43-101 Technical Report, Preliminary Economic Assessment, Trinidad/Taunus Project, Sinaloa, Mexico" with an Effective Date of June 1, 2012, Original Report Date of June 1, 2012, Amended Report Date of July 12, 2012.
9. I have read NI 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.
10. As of June 1, 2012, to the best of my knowledge, information and belief, the sections of the Technical Report that I am responsible for contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated this 1st Day of February, 2013.

"Signed"

____
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CERTIFICATE OF QUALIFIED PERSON

I, Michael D. Johnson, B.Sc., P.Geo., do hereby certify that:

1. I am a Senior Consultant of SRK Consulting (Canada.) Inc., Suite 2200 – 1066 West Hastings Street, Vancouver, BC, V6E 3X2, Canada.
2. This certificate applies to the technical report titled, "2nd Amended NI 43-101 Technical Report, Preliminary Economic Assessment, Trinidad/Taunus Project, Sinaloa, Mexico" with an Effective Date of June 1, 2012 and a 2nd Amended Report Date of February 1, 2013 (the "Technical Report").
3. I graduated with a B.Sc. Honours degree in geological sciences from Queens University, Kingston, Ontario, Canada in 1996. I am a member of the Association of Professional Engineers and Geoscientists of British Columbia (APEGBC), member #34923. I have worked as an exploration and mining geologist for a total of 16 years since my graduation from university. My relevant experience includes mineral exploration, sampling, and resource evaluation. I have coauthored several independent technical reports on exploration and mining projects in Canada, the US and Mexico.
4. 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.
5. I visited the Trinidad/Taunus property on July 4, 2011 for 3 days.
6. I am responsible for the preparation of Sections 2 through 10 of the Technical Report.
7. I am independent of the issuer applying all of the tests in section 1.5 of National Instrument 43-101.
8. I have had prior involvement with the Property that is the subject of the Technical Report. The nature of my prior involvement was in the preparation of the previous Technical Reports titled, "Amended NI 43-101 Technical Report, Preliminary Economic Assessment, Trinidad/Taunus Project, Sinaloa, Mexico" with an Effective Date of June 1, 2012, Original Report Date of June 1, 2012, Amended Report Date of July 12, 2012.
9. I have read NI 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.
10. As of June 1, 2012, to the best of my knowledge, information and belief, the sections of the Technical Report that I am responsible for contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated this 1st Day of February, 2013.

"Signed"

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I, Eric Olin, MSc, MBA, RM-SME do hereby certify that:

1. I am a Principal Process Metallurgist of SRK Consulting (U.S.), Inc., 7175 W. Jefferson Ave, Suite 3000, Denver, CO, USA, 80235.
2. This certificate applies to the technical report titled, "2nd Amended NI 43-101 Technical Report, Preliminary Economic Assessment, Trinidad/Taunus Project, Sinaloa, Mexico" with an Effective Date of June 1, 2012 and a 2nd Amended Report Date of February 1, 2013 (the "Technical Report").
3. I graduated with a Master of Science degree in Metallurgical Engineering from the Colorado School of Mines in 1976. I am a Registered Member of The Society for Mining, Metallurgy and Exploration, Inc. I have worked as a Metallurgist for a total of 30 years since my graduation from the Colorado School of Mines. My relevant experience includes extensive consulting, plant operations, process development, project management and research & development experience with base metals, precious metals, ferrous metals and industrial minerals. I have served as the plant superintendent for several gold and base metal mining operations. Additionally, I have been involved with numerous third-party due-diligence audits, and preparation of project conceptual, pre-feasibility and full-feasibility studies.
4. 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.
5. I have not visited the Trinidad/Taunus property.
6. I am responsible for the preparation of Sections 11 and 15 of the Technical Report.
7. I am independent of the issuer applying all of the tests in section 1.5 of National Instrument 43-101.
8. I have had prior involvement with the Property that is the subject of the Technical Report. The nature of my prior involvement was in the preparation of the previous Technical Reports titled, "Amended NI 43-101 Technical Report, Preliminary Economic Assessment, Trinidad/Taunus Project, Sinaloa, Mexico" with an Effective Date of June 1, 2012, Original Report Date of June 1, 2012, Amended Report Date of July 12, 2012.
9. I have read NI 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.
10. As of June 1, 2012, to the best of my knowledge, information and belief, the sections of the Technical Report that I am responsible for contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated this 1st Day of February, 2013.

"Signed"

Eric Olin, MSc, MBA, RM-SME

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CERTIFICATE OF QUALIFIED PERSON

I, Marek Nowak, MASc, P.Eng., do hereby certify that:

1. I am a Professional Engineer, employed as a Principal Consultant - Geostatistics with SRK Consulting (Canada) Inc., Suite 2200 – 1066 West Hastings Street, Vancouver, BC, V6E 3X2, Canada.
2. This certificate applies to the technical report titled, "2nd Amended NI 43-101 Technical Report, Preliminary Economic Assessment, Trinidad/Taunus Project, Sinaloa, Mexico" with an Effective Date of June 1, 2012 and a 2nd Amended Report Date of February 1, 2013 (the "Technical Report").
3. I have a Master of Science degree from the University of Mining and Metallurgy, Cracow, Poland, and a Master of Science degree from the University of British Columbia, Vancouver, Canada. I am a member of the Association of Professional Engineers and Geoscientists of British Columbia. I have over 25 years of experience in the mining industry, as a mining engineer (in Poland), geologist and geostatistician (in Canada). I specialize in natural resource evaluation and risk assessment using a variety of geostatistical techniques. I have co-authored several independent technical reports on base and precious metals exploration and mining projects in Canada, and United States.
4. 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.
5. I have not visited the Trinidad/Taunus property.
6. I am responsible for Section 12 of the Technical Report.
7. I am independent of the issuer applying all of the tests in section 1.5 of National Instrument 43-101.
8. I have had prior involvement with the Property that is the subject of the Technical Report. The nature of my prior involvement was in the preparation of the previous Technical Reports titled, "Amended NI 43-101 Technical Report, Preliminary Economic Assessment, Trinidad/Taunus Project, Sinaloa, Mexico" with an Effective Date of June 1, 2012, Original Report Date of June 1, 2012, Amended Report Date of July 12, 2012.
9. I have read NI 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.
10. As of June 1, 2012, to the best of my knowledge, information and belief, the sections of the Technical Report that I am responsible for contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated this 1st Day of February, 2013.

"Signed"

Marek Nowak, MASc, P.Eng.

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CERTIFICATE OF QUALIFIED PERSON

I, Mark Willow, M.S., C.E.M., RM-SME, do hereby certify that:

1. I am Principal Environmental Scientist of SRK Consulting (U.S.), Inc., 5250 Neil Road, Reno, Nevada 89511.
2. This certificate applies to the technical report titled, “2nd Amended NI 43-101 Technical Report, Preliminary Economic Assessment, Trinidad/Taunus Project, Sinaloa, Mexico” with an Effective Date of June 1, 2012 and a 2nd Amended Report Date of February 1, 2013 (the “Technical Report”).
3. I graduated with Bachelor's degree in Fisheries and Wildlife Management from the University of Missouri in 1987 and a Master's degree in Environmental Science and Engineering from the Colorado School of Mines in 1995. I have worked as Biologist/Environmental Scientist for a total of 18 years since my graduation from university. My relevant experience includes environmental due diligence/competent persons evaluations of developmental phase and operational phase mines through the world, including small gold mining projects in Panama, Senegal, Peru and Colombia; open pit and underground coal mines in Russia; several large copper mines and processing facilities in Mexico; and a mine/coking operation in China. My Project Manager experience includes several site characterization and mine closure projects. I work closely with the U.S. Forest Service and U.S. Bureau of Land Management on several permitting and mine closure projects to develop uniquely successful and cost effective closure alternatives for the abandoned mining operations. Finally, I draw upon this diverse background for knowledge and experience as a human health and ecological risk assessor with respect to potential environmental impacts associated with operating and closing mining properties, and have experienced in the development of Preliminary Remediation Goals and hazard/risk calculations for site remedial action plans under CERCLA activities according to current U.S. EPA risk assessment guidance. I am a Certified Environmental Manager (CEM) in the State of Nevada (#1832) in accordance with Nevada Administrative Code NAC 459.970 through 459.9729. I am a Registered Member of the Society for Mining, Metallurgy & Exploration. Before any person consults for a fee in matters concerning: the management of hazardous waste; the investigation of a release or potential release of a hazardous substance; the sampling of any media to determine the release of a hazardous substance; the response to a release or cleanup of a hazardous substance; or the remediation soil or water contaminated with a hazardous substance, they must be certified by the Nevada Division of Environmental Protection, Bureau of Corrective Action.
4. 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.
5. I have not visited the Trinidad/Taunus property.
6. I am responsible for the preparation of Section 18 of the Technical Report.
7. I am independent of the issuer applying all of the tests in section 1.5 of National Instrument 43-101.
8. I have had prior involvement with the Property that is the subject of the Technical Report. The nature of my prior involvement was in the preparation of the previous Technical Reports titled, “Amended NI 43-

101 Technical Report, Preliminary Economic Assessment, Trinidad/Taunus Project, Sinaloa, Mexico" with an Effective Date of June 1, 2012, Original Report Date of June 1, 2012, Amended Report Date of July 12, 2012.

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

10. As of June 1, 2012, to the best of my knowledge, information and belief, the sections of the Technical Report that I am responsible for contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated this 1st Day of February, 2013.

"Signed"

Mark Willow, M.S., C.E.M., RM-SME

Appendix B: Project Cashflow

Exhibit B.2: Technical-Economic Model_Pre-Tax

COMPANY	MARLIN GOLD MINING LTD.									
BUSINESS UNIT	TRINIDAD/TAUNUS									
OPERATION	CASH FLOW SCHEDULE			Pre-Production					END	
pre-tax			0	1	2	3	4	5	6	7
	value /	units /	Total	2013	2014	2015	2016	2017	2018	2019
	factor	sensit.	or Avg.	-1	1	2	3	4	5	6
MINING & PROCESSING										
Waste Mined		kt	56,388	0	13,197	14,660	12,933	10,592	5,006	0
Ore Mined		kt	7,800	0	1,520	1,400	1,067	1,408	2,406	0
Total Material		kt	64,188	0	14,717	16,059	14,000	12,000	7,412	0
Gold Recovered		koz	197	0	21	28	42	42	63	0
CASH FLOW SCHEDULE										
Estimate of Cash Flow										
Net Smelter Return										
Gold Market Price	$1,500	1.00	-	$0	$1,500	$1,500	$1,500	$1,500	$1,500	$0
Gold Dore	-	$000s	295,276	0	31,497	42,596	62,994	62,993	95,196	0
Gross Income	-	$000s	295,276	0	31,497	42,596	62,994	62,993	95,196	0
Refining & Transport										
Gold Refining	$0.85	$000s	(167)	0	(18)	(24)	(36)	(36)	(54)	0
Mine to Refinery	$5.15	$000s	(1,014)	0	(108)	(146)	(216)	(216)	(327)	0
Refinery to Market	$0.00	$000s	0	0	0	0	0	0	0	0
Insurance	0.00%	$000s	0	0	0	0	0	0	0	0
Refining	-	$000s	(1,181)	0	(126)	(170)	(252)	(252)	(381)	0
NSR	-	$000s	294,095	0	31,371	42,425	62,742	62,741	94,815	0
Royalty			1,494							
Royalty	1%	$000s	(2,203)	0	0	0	(627)	(627)	(948)	0
Total Royalty	-	$000s	(2,203)	0	0	0	(627)	(627)	(948)	0
Net Revenue		$000s	291,892	0	31,371	42,425	62,115	62,114	93,867	0
Operating Costs										
Mining	-	1.00	86,878	0	18,018	20,313	19,497	17,650	11,399	0
Process	-	1.00	53,430	0	10,410	9,587	7,309	9,643	16,481	0
G&A	-	1.00	8,000	1,000	1,500	1,500	1,500	1,500	1,000	0
Operating Costs	-	$000s	148,308	1,000	29,928	31,400	28,307	28,793	28,880	0
		$/mill-t	$19.01	$0.00	$19.69	$22.44	$26.53	$20.45	$12.00	$0.00
Operating Cost as % of Revenue		%	51%							
		$/Au-oz	$753	$0.00	$1,425	$1,106	$674	$686	$455	$0.00
			$11.14							
EBITDA		US$000	143,584	(1,000)	1,443	11,025	33,808	33,321	64,987	0
Cash Available for Debt Service										
Operating Margin		$000s	143,584	(1,000)	1,443	11,025	33,808	33,321	64,987	0
Project Capital	100%	$000s	(25,516)	(27,933)	3,853	0	0	(1,436)	0	0
Income Tax		$000s	0	0	0	0	0	0	0	0
Working Capital		$000s	0	(2,588)	83	(126)	251	(41)	(18)	2,438
CF Avail. for Debt Service		$000s	118,068	(31,520)	5,379	10,899	34,059	31,845	64,969	2,438
Loan Repayment		$000s	0	0	0	0	0	0	0	0
Interest Expense		$000s	0	0	0	0	0	0	0	0
Free Cash Flow		$000s	118,068	(31,520)	5,379	10,899	34,059	31,845	64,969	2,438
				(31,520)	(26,141)	(15,243)	18,816	50,661	115,630	118,068
IRR		53%								
Present Value	8.0%		79,001	(31,520)	4,981	9,344	27,037	23,407	44,217	1,537
			-	(31,520)	(26,540)	(17,196)	9,841	33,248	77,465	79,001
PROJECT CAPITAL										
Capital		1.00								
Mine		$000s	5,045	5,045	0	0	0	0	0	0
Process and Infrastructure		$000s	12,625	12,625	0	0	0	0	0	0
Owners		$000s	3,269	3,269	0	0	0	0	0	0
IVA Paid		$000s	3,350	3,350	0	0	0	0	0	0
IVA Recovered		$000s	(3,350)	0	(3,350)	0	0	0	0	0
Mine Closure		$000s	3,049	0	0	0	0	3,049	0	0
Salvage Value		$000s	(1,800)	0	0	0	0	(1,800)	0	0
Subtotal		$000s	22,187	24,289	(3,350)	0	0	1,249	0	0
Contingency	15%	$000s	3,328	3,643	(503)	0	0	187	0	0
Total Capital	-	$000s	25,516	27,933	(3,853)	0	0	1,436	0	0
Initial Capital	-	$000s	27,933							
	-	$/Au-oz	$141.90							
Working Capital										
Beginning Balance		$000s	-	0	2,588	2,505	2,631	2,380	2,420	2,438
Ending Balance		8.3%	-	2,588	2,505	2,631	2,380	2,420	2,438	0
Change		$000s	0	(2,588)	83	(126)	251	(41)	(18)	2,438