

**Preliminary Economic Assessment  
for the El Gallo District,  
Sinaloa State, Mexico**

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**Prepared for**

**US Gold Corporation**

**February 11, 2011**

**DE-00177**





**pincock  
allen &  
holt**

*Consultants for Mining and Financial Solutions*

165 South Union Boulevard, Suite 950  
Lakewood, Colorado 80228-2226

303-986-6950  
Fax 303-987-8907

[www.pincock.com](http://www.pincock.com)

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Prepared by

***Richard Addison, P.E., C.Eng.***

***Paul A. Gates, P.E.***

***Aaron M. McMahon, P.G.***

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## 1.0 SUMMARY

### 1.1 *Introduction*

Pincock, Allen & Holt (PAH) has been retained by US Gold Corporation (US Gold) to prepare a Preliminary Economic Assessment (PEA) for El Gallo District. The El Gallo District, located in México's Sinaloa state, contains several silver and gold deposits that are potentially amenable to surface mining.

This Technical Report was prepared to meet the standards and specific requirements as a PEA as defined by Canadian National Instrument 43-101 (NI 43-101) and conforms to Form 43-10F1.

- This PEA includes silver and gold mineralization from three separate resources contained within the El Gallo district. These three districts include the new El Gallo silver discovery, the former producing Magistral gold mine and the historic Palmarito silver mine, all located in north-western Mexico, in the Sinaloa state. All ores will be hauled to a central processing facility located at El Gallo.
- El Gallo's measured and indicated mineral resource contains an estimated 31,243,244 silver ounces and 24,881 gold ounces within 12,598,000 tonnes of material with an average grade of 77.0 gpt silver and 0.09 gpt gold. Within this amount a total of 19,515,662 silver ounces and 15,812 gold ounces within 6,956,000 tonnes of material with an average grade of 87.3 gpt silver and 0.07 gpt gold are defined as measured and 11,727,582 silver ounces and 9,069 gold ounces within 5,642,000 tonnes with an average grade of 64.6 gpt silver and 0.04 gpt gold are defined as indicated.
- El Gallo contains an additional inferred resource of 16,734,220 silver ounces and 10,298 gold ounces within 10,010,000 tonnes of material with an average grade of 52.0 gpt silver and 0.03 gpt.
- Magistral's measured and indicated mineral resource contains an estimated 502,466 gold ounces within 10,397,000 tonnes of material with an average grade of 1.50 gpt gold. Within this amount a total of 354,887 gold ounces within 6,962,000 tonnes of material with an average grade 1.59 gpt gold are defined as measured and 147,580 gold ounces within 3,435,000 tonnes with an average grade of 1.34 gpt gold are defined as indicated.
- Magistral contains an additional inferred resource of 8,167 gold ounces within 223,000 tonnes of material with an average grade of 1.14 gpt.
- The Measured and Indicated resources for the Palmarito deposit are 3.7 million tonnes grading 71.0 gpt silver and 0.14 gpt gold, representing a total of 8.5 million ounces of silver and 16,381 ounces of gold. Inferred resources are 1.6 million tonnes grading 58 gpt silver and 0.10 gpt gold representing a total 3 million ounces of silver 5,299 ounces of gold.

- The El Gallo and Palmarito deposits have not been fully delineated and are open along strike and down dip. Regional drilling has recently discovered several new mineralized areas where there is potential to build additional resources.
- Metallurgical studies to-date confirm that processing of the resources through a conventional mill and heap leach process will produce a silver and gold doré that can be shipped to a refiner. Mill recovery rates for El Gallo are expected to average 85 percent for silver and 80 percent for gold and 60 percent silver and 65 percent gold for the heap leach. Mill recoveries for Palmarito are expected to average 67 percent for silver and 85 percent for gold. Mill recovery rates for Magistral are expected to average 89 percent for gold and 60 percent for the heap leach.
- Production in years 1 through 6 would average 5 million ounces of silver and 50,245 ounces of gold per year at total cash cost of than \$5.90 U.S. (net of gold by-product credits) at the Base Case metal prices used in the study (\$18.00/oz silver and \$1,000/oz gold).
- Pre-tax net present value (NPV) at a 5 percent discount rate is \$155.4 million at the Base Case metal prices.
- Pre-tax internal rate of return (IRR) of 26.9 percent on an initial capital cost of \$149.2 million.

## **1.2        *Location, Access and Physiography***

Access to the El Gallo District from the city of Culiacan is via the paved, four-lane Pacific Highway (Highway 15) for a distance of 100 km to the city of Guamuchil. From Guamuchil a local paved road extends 20 km to the east toward Mocerito. US Gold's concessions are located approximately 4.0 km north of Mocerito, via a paved and dirt road. Within US Gold's land position, several paved and dirt roads provide access between the various mineral deposits. The approximate co-ordinates for the center of the district are longitude 25°38'N and latitude 107°51'W.

US Gold's land position is characterized by moderate to steep topography with elevations ranging from 300 to 450 m. It is located in the "Pie de la Sierra" physiographic province, near the boundary with the "Llanura Costera y Deltas de Sonora y Sinaloa" province. During most of the year, the area experiences arid to semi-arid climatic conditions, with almost all of the approximately 825 millimeters of annual precipitation coming from storm events during July to September. During the storm events, flooding occurs along the river beds. The project area is enclosed by the Mocerito hydrologic basin. The moderately dense vegetation on the hill slopes consists of bushes and shrubs with widely-spaced deciduous trees. The average yearly temperature in the area is approximately 77 degrees Fahrenheit (25 degrees Celsius).

Figures 4-1, 5-1, and 5-2 show general project location, project specific roads and road conditions.

### 1.3 *History*

The nearby city of Mocorito originated from mining activity, beginning with Palmarito in the mid 1500s. A summarized historical breakdown for each of the three areas that make up this Technical Report are:

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

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

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

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

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

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

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

holes) deposits. In 2002, additional drilling (45 reverse circulation holes) was conducted in La Prieta zone of the Samaniego Hill deposit.

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

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

In 1969-70, Barranca Corporation Ltd. carried out an exploration program that consisted of surface and underground mapping and sampling along with 24 core and 11 percussion holes (not included in the current database). This work resulted in a reported non-compliant NI 43-101 resource estimate.

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

In 2006-07, Nevada Pacific Gold completed a core drilling program at Palmarito that consisted of 19 holes. The objective of the program was to confirm the integrity of the geologic model and database collected from a number of RC drill holes that were completed by Lluvia de Oro.

## **1.4 Geology**

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

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

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

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

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

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

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

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

El Gallo, Magistral and Palmarito can all be classified as low- to intermediate-sulfidation epithermal precious metals deposits. El Gallo and Palmarito are silver-dominant deposits with minor gold content; Magistral is gold-dominant. The three projects differ from each other in terms of mineralogy and morphology.

## **1.5 Mineral Resources**

The resulting resources reported herein for the El Gallo District were estimated in accordance with the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) definitions. Resources are reported as measured, indicated and inferred. Note that the resources stated in Tables 1-1 through 1-3 are not limited by the design pits generated in this PEA, but are the complete block model inventory of mineralized material above a cutoff grade.

## 1.5.1 El Gallo

El Gallo's measured and indicated mineral resource (Table 1-1) contains an estimated 31,243,244 silver ounces and 24,881 gold ounces within 12,598,000 tonnes of material with an average grade of 77.0 gpt silver and 0.06 gpt gold. Within this amount a total of 19,515,662 silver ounces and 15,812 gold ounces within 6,956,000 tonnes of material with an average grade of 109.6 gpt silver and 0.08 gpt gold are defined as measured and 11,727,582 silver ounces and 9,069 gold ounces within 5,642,000 tonnes with an average grade of 82.3 gpt silver and 0.06 gpt gold are defined as indicated.

**TABLE 1-1**  
**US Gold Corporation**  
**Preliminary Economic Assessment, El Gallo District**  
**El Gallo Resource Estimate**

Measured and Indicated Resources							
Class	Group	Grade Range	Tonnage x1000	Ag ppm	Au ppm	Ounces of Silver	Ounces of Gold
Measured	Low Grade	20-40 Ag ppm	2,519	28.7	0.03	2,321,320	2,537
	High Grade	> 40 Ag ppm	4,437	120.5	0.09	17,194,342	13,275
Indicated	Low Grade	20-40 Ag ppm	2,618	28.3	0.02	2,385,463	1,874
	High Grade	> 40 Ag ppm	3,024	96.1	0.07	9,342,119	7,195
Measured + Indicated	Low Grade	20-40 Ag ppm	5,136	28.5	0.03	4,706,783	4,411
	High Grade	> 40 Ag ppm	7,461	110.6	0.09	26,536,461	20,470
<b>Total Measured + Indicated</b>			<b>12,598</b>	<b>77</b>	<b>0.06</b>	<b>31,243,244</b>	<b>24,881</b>
Inferred Resources							
Class	Group	Grade Range	Tonnage x1000	Ag ppm	Au ppm	Ounces of Silver	Ounces of Gold
Inferred	Low Grade	20-40 Ag ppm	6,485	27.4	0.01	5,721,391	2,972
	High Grade	> 40 Ag ppm	3,525	97.2	0.06	11,012,828	7,326
<b>Total Inferred</b>			<b>10,010</b>	<b>52</b>	<b>0.03</b>	<b>16,734,220</b>	<b>10,298</b>

An additional 16,734,220 silver ounces and 10,298 gold ounces within 10,010,000 tonnes of material with an average grade of 52.0 gpt silver and 0.03 gpt are defined as inferred.

The El Gallo resource estimate includes two cutoff grades for the different process methods outlined in this PEA. A 40 gpt silver cutoff was used for the higher grade mineralization using a mill recovery process and a 20 gpt silver cutoff was used for the lower-grade mineralization using a heap leaching recovery process. Tonnage estimates were based on a 2.5 grams/cubic centimeter density factor. Ordinary kriging was used to interpolate silver grade and inverse distance was used to interpolate gold grade.

## 1.5.2 Magistral

Magistral's measured and indicated mineral resource (Table 1-2) contains an estimated 502,466 gold ounces within 10,397,000 tonnes of material with an average grade of 1.50 gpt gold. Within this amount a total of 354,887 gold ounces within 6,962,000 tonnes of material with an average grade 1.59 gpt gold are defined as measured and 147,580 gold ounces within 3,435,000 tonnes with an average grade of 1.34 gpt gold are defined as indicated.

**TABLE 1-2**  
**US Gold Corporation**  
**Preliminary Economic Assessment, El Gallo District**  
**Magistral Resource Estimate**

<b>Measured and Indicated Resources</b>				
<b>Class</b>	<b>Grade Range</b>	<b>Tonnage x1000</b>	<b>Au ppm</b>	<b>Ounces of Gold</b>
Measured	> 0.3 Au ppm	6,962	1.59	354,887
Indicated	> 0.3 Au ppm	3,435	1.34	147,580
<b>Total Measured + Indicated</b>		<b>10,397</b>	<b>1.50</b>	<b>502,466</b>
<b>Inferred Resources</b>				
<b>Class</b>	<b>Grade Range</b>	<b>Tonnage x1000</b>	<b>Au ppm</b>	<b>Ounces of Gold</b>
Inferred	> 0.3 Au ppm	223	1.14	8,167
<b>Total Inferred</b>		<b>223</b>	<b>1.14</b>	<b>8,167</b>

An additional 8,167 gold ounces within 223,000 tonnes of material with an average grade of 1.14 gpt are defined as inferred.

A 0.3 gpt gold cutoff was used for the Magistral resource. Tonnage estimates were based on a 2.6 and 1.50 grams/cubic centimeter density factor for the in situ and tailings mineralization, respectively. Inverse distance was used to interpolate gold grade for the in situ and tailings.

### 1.5.3 Palmarito

Palmarito's measured and indicated mineral resource (Table 1-3) contains an estimated 8,520,348 silver ounces and 16,381 gold ounces within 3,715,000 tonnes of material with an average grade of 71.0 gpt silver and 0.14 gpt gold. Within this amount a total of 6,121,957 silver ounces and 11,888 gold ounces within 2,620,000 tonnes of material with an average grade of 73.0 gpt silver and 0.14 gpt gold are defined as measured and 2,398,390 silver ounces and 4,492 gold ounces within 1,094,000 tonnes with an average grade of 68.0 gpt silver and 0.13 gpt gold are defined as indicated.

**TABLE 1-3**  
**US Gold Corporation**  
**Preliminary Economic Assessment, El Gallo District**  
**Palmarito Resource Estimate**

<b>Measured and Indicated Resources</b>						
<b>Class</b>	<b>Grade Range</b>	<b>Tonnage x1000</b>	<b>Ag ppm</b>	<b>Au ppm</b>	<b>Ounces of Silver</b>	<b>Ounces of Gold</b>
Measured	> 40 Ag ppm	2,620	73.0	0.14	6,121,957	11,888
Indicated	> 40 Ag ppm	1,094	68.0	0.13	2,398,390	4,492
<b>Total Measured + Indicated</b>		<b>3,715</b>	<b>71</b>	<b>0.14</b>	<b>8,520,348</b>	<b>16,381</b>
<b>Inferred Resources</b>						
<b>Class</b>	<b>Grade Range</b>	<b>Tonnage x1000</b>	<b>Ag ppm</b>	<b>Au ppm</b>	<b>Ounces of Silver</b>	<b>Ounces of Gold</b>
Inferred	> 40 Ag ppm	1,604	58.0	0.10	2,982,561	5,299
<b>Total Inferred</b>		<b>1,604</b>	<b>58</b>	<b>0</b>	<b>2,982,561</b>	<b>5,299</b>

An additional 2,982,561 silver ounces and 5,299 gold ounces within 1,604,000 tonnes of material with an average grade of 58.0 gpt silver and 0.10 gpt are defined as inferred.

A 40 gpt silver cutoff was used for the Palmarito resource. Tonnage estimates were based on a 2.65, 1.2 and 1.51 grams/cubic centimeter density factor for the in situ, dump and tailings mineralization respectively. Kriging was used to interpolate silver grade for the in situ mineralization and inverse distance was used to interpolate silver grade for the dump and tailings as well as gold grades for all models.

## 1.6 Mineral Processing and Metallurgical Testing

Metallurgical test work for El Gallo and Palmarito was conducted by SGS Mineral Services (SGS) in Durango, México. Test work performed on Magistral ore was conducted by McClelland Laboratories (McClelland), Nevada, USA and SGS. Extensive metallurgical testing has been performed at El Gallo and Magistral, with a lesser amount at Palmarito in order to determine the appropriate process design criteria. Results on the different ore indicate that good recovery of silver and gold and acceptable reagent consumptions can be obtained using a conventional cyanide mill for the higher grade mineralization and a heap leach for the lower grade mineralization. Expected silver and gold recovery from the two processes and various ore type is shown in Table 1-4.

**TABLE 1-4**  
**US Gold Corporation**  
**Technical Report, El Gallo District**  
**Metallurgical Recoveries**

	Mill		Heap Leach	
	Silver	Gold	Silver	Gold
<b>El Gallo</b>				
In situ	85%	80%	60%	65%
<b>Palmarito</b>				
In situ	70%	85%	-	-
Dump	80%	85%	-	-
Tailings	45%	70%	-	-
<b>Magistral</b>				
In situ	-	90%	-	60%
Tailings	-	60%	-	-

## 1.7 Development Concept and Project Plan

The development plan as shown in this PEA focuses on mining from various locations and having the ore processed at a central facility. A provisional schedule of material movement and silver/gold recovery has been developed utilizing the Whittle–Lerchs Grossmann software for use in evaluating the strategic alternative for the mine development.

The location for the various areas to be mined is shown in Figure 5-1. The ultimate pit designs and process locations are shown in Figures 18-1 through 18-6.

### 1.7.1 Target Production Rates

The total amount of ore expected to be treated by the mill is 6,000 tonnes per day with the remaining 3,250 tonnes being sent to the heap leach pad. The average silver and gold production during the 6 years of operation is expected to be 5 million ounces of silver and 50,245 ounces of gold annually.

### 1.7.2 Mine Operations

All mining methods in this study consist of surface mining. The open pits will be operated using standard surface mining techniques utilizing front-end loaders which will excavate and load broken ore and waste material to be transported by rubber tire haulage unit to processing facilities and waste dumps. All material within the pit boundaries will be drilled using conventional blast hole percussion drills and charged with explosives in order to achieve adequate rock fragmentation. Additional support equipment for mining will include dozers, motor graders, bulk explosive trucks, water trucks for dust control and maintenance support vehicles. This study assumes that a mining contractor will perform all aspects of mine development. The various areas to be mine are expected to deliver the following tonnes and grade for milling and heap leaching (Table 1-5). Note that this material is not a reserve and is inclusive of inferred resources.

**TABLE 1-5**  
**US Gold Corporation**  
**Preliminary Economic Assessment, El Gallo District**  
**Summary of Processed Material**

	Mill			Heap Leach		
	Tonnes	Silver Grade (gpt)	Gold Grade (gpt)	Tonnes	Silver Grade (gpt)	Gold Grade (gpt)
El Gallo	7,735,470	119.3	0.1	6,257,206	28.1	0.03
Palmarito	1,289,998	100.2	0.17	-	-	-
Magistral	3,163,175	-	3.01	784,551	-	0.85

### 1.7.3 Waste Dumps

Waste dumps are designed to be as close as possible to the pit boundaries in order to optimize haulage cycles and thus minimize haulage costs. Backfilling of mined out sections of the pits has not been considered in this study since future exploration may increase the geologic resources in the immediate area. Once drilling has determined the final pit boundaries, plans for the backfilling of mined out areas of the pit and the location of processing facilities and waste dumps can be finalized.

#### **1.7.4 Process Operations**

Mineralized rock will be transported from the various mining areas to El Gallo for processing.

#### **1.7.5 Power Requirement and Supply**

Electrical power will be provided to the project from the existing Mexican national grid by means of connecting to an existing substation at a voltage level of 16.8 kV, and bringing a new 4.5 km long 33 kV line to site. Costs to upgrade the power supply has been included in the economic evaluation of the El Gallo project.

#### **1.7.6 Process Water**

The main source of water for the mining and process operations will come from wells. Hydrological studies conducted at Magistral while it was in production indicate that there is sufficient water available to support the project.

#### **1.7.7 Access Roads**

In general, road access between and to the various mining areas is considered good. US Gold is considering several detours from the road between Palmarito and El Gallo in order to avoid unnecessary traffic through local villages. No major improvements are being considered as the terrain is flat and there are several agricultural fields from which to avoid the villages. The distance between Palmarito and El Gallo is 26 km. The cost of transporting a tonne of ore has been estimated to be \$3.76 per tonne.

Many sections of the 10 km road between Magistral and El Gallo are of low quality and will need to be upgraded in order to support ore haulage. The roads will need to be widened and the gradient reduced in certain areas. The cost associated with this work is expected to be low as dozers and graders still exist at the Magistral Mine. Also, detours have been planned through agricultural fields in order to avoid local villages. The cost of transporting a tonne of ore has been estimated to be \$1.57 per tonne.

#### **1.7.8 Operating Costs**

Operating costs per tonne of ore processed is presented in Table 1-6 and include the cost of a mining contractor.

Mining, crushing and processing are developed based on general guidelines established at similar size projects in México. Operating costs are considered to be within a plus or minus 30 percent level of accuracy.

**TABLE 1-6**  
**US Gold Corporation**  
**Preliminary Economic Assessment, El Gallo District**  
**Operating Cost Summary**

<b>Cost Area</b>	<b>\$/Tonne</b>
Open Pit (waste and ore)	\$2
<b>Processing Operations</b>	
<b>Mill Operations</b>	
El Gallo	\$20
Palmarito	\$20
Magistral	\$25
<b>Heap Leach Operations</b>	
El Gallo	\$6
Magistral	\$11

### 1.7.9 Capital Costs

Capital costs are estimated based on conceptual level plans for mining equipment, extrapolation from other similar mining operations; quantities developed for site construction activities. Total project capital costs are estimated to be \$149.2 million and are shown in more detail in Table 1-7.

**TABLE 1-7**  
**US Gold Corporation**  
**Preliminary Economic Assessment, El Gallo District**  
**Initial Capital Expense**

<b>Description</b>	<b>Amount (millions)</b>
Mill, Processing and Tailings (6,000 tpd)	\$85.00
Heap Leach (3,250 tpd)	\$10.00
Reagents	\$4.50
Haul Roads/ Site Work	\$1.70
Power Line Upgrade	\$1.10
Buildings	\$2.00
Owners Costs/EPCM	\$20.00
<b>Subtotal</b>	
Contingency (20%)	\$24.90
<b>Total</b>	<b>\$149.20</b>

### 1.7.10 Taxes and Royalties

Although the PEA has been completed on a pre-tax basis, there are four taxes that will be applied to the project should it enter production: the tax on corporate profits, the net assets tax, the value added tax (IVA using the Spanish acronym), and the diesel fuel tax. Tax procedures allow for the carry-forward of losses for a period of up to 10 years, which will be important for the operation, due to the prior applicable losses. There is an important program for which the El Gallo project qualifies called IMMEX. Basically, these programs allow a project such as El Gallo, because it produces a product that will be primarily

exported, to import services, materials, and supplies duty free and without incurring IVA charges. It also provides for a refund of the IVA paid to obtain domestic services, supplies, and equipment.

There are two net smelter return (NSR) royalties that impact various areas to be mined. The first NSR is payable to the Repadre Capital Corporation and covers both El Gallo and Magistral. This net smelter return royalty is based upon the quantity of gold or gold equivalent produced. For production up to 30,000 ounces gold, a 1.5 percent royalty is due. For production between 30,000 and 350,000 ounces gold, a royalty of 3.5 percent is required. Above 350,000 ounces the royalty drops to 1 percent. Since the Magistral mine has already produced more the 30,000 ounces the 1.5 percent royalty is no longer in effect and all future production up to the 350,000 ounce gold or gold equivalent will be subject to the 3.5 percent royalty rate.

The NSR at Palmarito totals 2 percent and primarily impacts the tailings.

### 1.7.11 Reclamation

The entire facility will be designed with closure in mind, to the greatest extent practicable. The facilities will be designed and operated to minimize the footprints and areas of disturbance and to utilize the most advanced planning and reclamation techniques available including dry stack tailings, concurrent reclamation and geomorphic landform grading.

Reclamation will commence as soon as is practical during the development and operations by placing salvaged topsoil on outcrops and encouraging vegetation. Final reclamation of the top surface will occur at final closure at the end of mine life.

### 1.7.12 Financial Analysis

The Base Case economic analysis indicates that the project has a pre-tax Internal Rate of Return (IRR) of 26.9 percent with a payback period of 2.3 years.

Table 1-8 compares the Base Case project financial indicators with the financial indicators for other cases when the sales price, the amount of capital expenditure, and operating cost are varied. By comparing the results of this sensitivity study, it can be seen that the project IRR is most sensitive to metal prices.

**TABLE 1-8**  
**US Gold Corporation**  
**El Gallo District, Technical Report**  
**Pre-Tax IRR Sensitivities**

	Base Case Price	Spot Case Price		
	Silver \$18.00/Gold \$1,000	Silver \$28.50/Gold \$1,350		
IRR	26.90%	64.90%		
Cost Changes	10% Decrease	20% Decrease	10% Increase	20% Increase
	(IRR)	(IRR)	(IRR)	(IRR)
Initial Capital	31.20%	36.50%	23.10%	19.90%
Operating Cost	31.00%	36.60%	21.40%	15.30%

## 1.8 *Recommendations*

The El Gallo project has accumulated an extensive amount of data through past years of exploration providing the background for the resource estimates and analysis that are the basis for this PEA report. The recommendations for further development of the project are primarily concerned with confirming the existing data and the acquisition of additional data to expand resources and eventually support further detailed technical studies.

PAH recommends the following:

- A geo-technical drill program should be carried out on El Gallo and Palmarito in order to further characterize the rock mass. This will allow refinements to be made to the pit slopes. Rock quality indices should be used to determine pit slopes in future mine designs at El Gallo and Palmarito.
- As drilling data becomes available, the block model should be refined and resource estimates updated. Additional in-fill drilling should be undertaken in order to transfer inferred resources into measured and indicated categories.
- Additional exploration drilling should be undertaken around the known resources and also on the new veins that currently do not have established resources. Exploration success will extend the mine life.
- Condemnation drilling should be conducted to prevent the loss of any mineral resource by covering it over with waste rock or mine facility.
- Further metallurgical testing is needed and should confirm the heap leach recoveries for El Gallo ores. Also, additional bottle roll testing should be undertaken on the Palmarito in situ ore. PAH notes that on average Palmarito has historically demonstrated lower silver recoveries. However, early testing suggests that the ore closer to surface may recover better than the average. The near surface mineralization at Palmarito is the primary focus of US Gold's mining activities for this area of the project. Further testing will help confirm these initial test results.
- Based on favorable financial results from this PEA, detailed design engineering should begin to support permitting and to verify mining and economic parameters and assumptions used to date. Future studies should be conducted at the prefeasibility level.

## **2.0 INTRODUCTION AND TERMS OF REFERENCE**

### **2.1 *General***

PAH was retained by US Gold to prepare a PEA for the El Gallo project, located in the state of Sinaloa, Mexico. The El Gallo project consists of three separate areas that are envisioned to be mined and shipped to a central processing facility. PAH has prepared a scoping level study of a development plan for the El Gallo project that is presented in this report. The PEA was prepared to meet the requirements of Canadian National Instrument 43-101 (NI 43-101) and conforms to Form 43-101F1 for Qualifying Reports.

### **2.2 *Purpose***

This report discloses PEA for El Gallo project, which includes El Gallo, Magistral and the Palmarito under the guidance of Canadian National Instrument 43-101.

### **2.3 *Qualified Person***

The following individuals from PAH are the co-authors of this Technical Report. Each individual is acting as an independent qualified person ("QP") as defined by NI 43-101.

- Senior Geologist: Aaron McMahon P.G.
- Principal Mine Engineer: Paul Gates P.E.
- Principal Processing Engineer: Richard Addison P.E.

Mr. McMahon and Mr. Addison have visited the project on several past occasions. Mr. McMahon and Mr. Addison's most recent visits occurred during April 2008 and March 2010, respectively. Mr. Gates has not visited the project. The site visits have allowed PAH to observe firsthand the site layout and status of development including reviewing core, procedures for logging and sampling and discussing the geologic model with project geologic staff.

## 2.4 *Terms and Definitions*

<b><u>Abbreviation</u></b>	<b><u>Unit or Term</u></b>
AAND	Aphanitic Andesite
Ag	Silver
AND	Andesite
ANDP	Andesite Porphyry
Au	Gold
Chemex	ALS Chemex
CIM	The Canadian Institute of Mining, Metallurgy and Petroleum
Direccion de Minas	Secretaria de Economia, Coordinacion General de Minera, Direccion General de Minas
gpt	Grams Per Tonne
ID	Inverse Distance
kg	Kilograms
km	Kilometers
Minera Pangea	Compania Minera Pangea, S.A. de C.V.
MIA	Manifiesto Impacto Ambiental
ML	Mojonera de Localizacion/Location Point
NN	Nearest Neighbor
NI 43-101	Canadian National Instrument 43-101
NSR	Net Smelter Return
OK	Ordinary Kriging
opt	Troy Ounces Per Tonne
oz	Troy Ounce
PAH	Pincock, Allen and Holt
PAN	National Action Party
PRI	Institutional Revolutionary Party
PEA	Preliminary Economic Analysis
QFP	Quartz Feldspar Porphyry
QM	Quartz Monzonite
QP	Qualified Person
RHY	Rhyolite
SEMARNAT	Secretariat of Environmental and Natural Resources
SICA	Soluciones de Ingeniería y Calidad Ambiental, S. A. de C. V.
SGM	Consejo de Recursos Minerales
SGS	SGS Mineral Services
SMO	Sierra Madre Occidental
TTAND	Turkey Track Andesite
US Gold	US Gold Corporation
VSED	Volcaniclastic Sediment Package

## 2.5 *Units*

1 ounce (oz) [troy] = 31.1034768 grams (g)

1 short ton = 0.90718474 metric tonnes

1 troy ounce per short ton = 34.2857 grams per metric tonne = 34.2857 ppm

1 gram per metric tonne = 0.0292 troy ounces per short ton

1 foot (ft) = 0.3048 meters (m)

1 mile (mi) = 1.6093 kilometers (km) = 5280 feet

1 meter = 39.370 inches (in) = 3.28083 feet

1 kilometer = 0.621371 miles = 3280 feet

1 acre (ac) = 0.4047 hectares

1 square kilometer (sq km) = 247.1 acres = 100 hectares = 0.3861 square miles

1 square miles (sq mi) = 640 acres = 258.99 hectares = 2.59 square kilometres

Degrees Fahrenheit (°F) –  $32 \times 5/9$  = Degrees Celsius (°C)

Dollars are shown as U.S. dollars (US\$) unless otherwise noted

### **3.0       DISCLAIMER**

This PEA presents a scoping level mine development and economic evaluation of the El Gallo Project. This PEA was prepared for US Gold by the independent consulting firm of PAH and is based in part on information not within the control of either the US Gold or PAH. While it is believed that the information contained herein will be reliable under the conditions and subject to the limitations set forth herein, neither US Gold nor PAH guarantee the accuracy thereof. The use of this report or any information contained therein shall be at the user's sole risk, regardless of any fault or negligence of US Gold or PAH.

Because of the preliminary nature of the scoping study presented in this report, PAH believes that the use of the term mineral reserve is not justified under the guidelines of Canadian Institute of Mining (CIM) as presented in the *CIM Standards On Mineral Resources and Reserves*, dated August 20, 2000. In this report, PAH uses the terms mineral resources for all deposits of mineralization.

A title opinion for US Gold's concessions was prepared by Diaz, Bouchot and Taya (2009) (Appendix A). As PAH is not an expert at assessing the legal validity of the concessions in Mexico, the title opinion prepared by Diaz, Bouchot and Taya is for the readers own information.

## **4.0 PROPERTY DESCRIPTION AND LOCATION**

### **4.1 *Property Location***

The El Gallo project is located in north-western México, within Sinaloa state, Mocorito Municipality. It is situated approximately 100 km by air northwest of the Sinaloa state capital city of Culiacan in the western foothills of the Sierra Madre Occidental mountain range. The concessions are located approximately 4 km by road from the village of Mocorito, approximately 48.5 km from the town of Guamuchil. General geographic coordinates of the property are longitude 25°38'N and latitude 107°51'W. Figure 4-1 shows the general project location. Figure 4-2 shows the claim boundaries and project locations that make up the El Gallo District.

### **4.2 *Mineral Concession Rights***


US Gold owns its interest in the concessions through its 100 percent ownership of Nevada Pacific Gold Ltd. and its 100 percent ownership of Pangea Resources Inc. Through Pangea Resources 100 percent ownership of Minera Pangea, US Gold owns the mineral concessions. Table 4-1 gives a description of the claims controlled by US Gold.

In México individuals or companies may register a mining concession, which is valid for a non-renewable term of 50 years. All mining concessions in México are required to be surveyed and located in the area with a location point (mojonera de localizacion or "ML"), which is related to a permanent topographic feature, in addition to corner points indicated by concrete monuments. The ML must show the concession's registration data and coverage. The ML may represent one or various concessions within the area. Titles are granted under Mexican mining law and are issued by Secretaria de Economia, Coordinacion General de Minería, Direccion General de Minas (Direccion de Minas). In addition each mining concession is subject to an annual tax for the mining rights payable in two semesters and a certain amount of work must be done annually; proof of which must be filed each year with the proper authorities. Failure to perform the required work and file the receipts can lead to the claim being invalidated. The amount of taxes payable increases every two years until year ten. Starting in year 11 the amount of taxes becomes fixed. The minimum work commitment during the first six years is fixed. This amount is reset at a higher amount in year seven and remains fixed at this new amount going forward.

At the end of 50 years the concession can be extended for an additional 50 years assuming the concession is in compliance with the law. The mining regulations state that in order to extend the life of the concession an application must be prepared and submitted 5 years before expiry.

The taxes payable for the year 2011 was approximately \$820,000. US Gold is required to incur approximately \$2.5 million in expenditures annually. Work in México can be rolled over and banked.



Prepared by  

**pincock, allen & holt**  
 165 S. Union Boulevard, Suite 950  
 Lakewood, Colorado 80228  
 Phone (303) 986-6950

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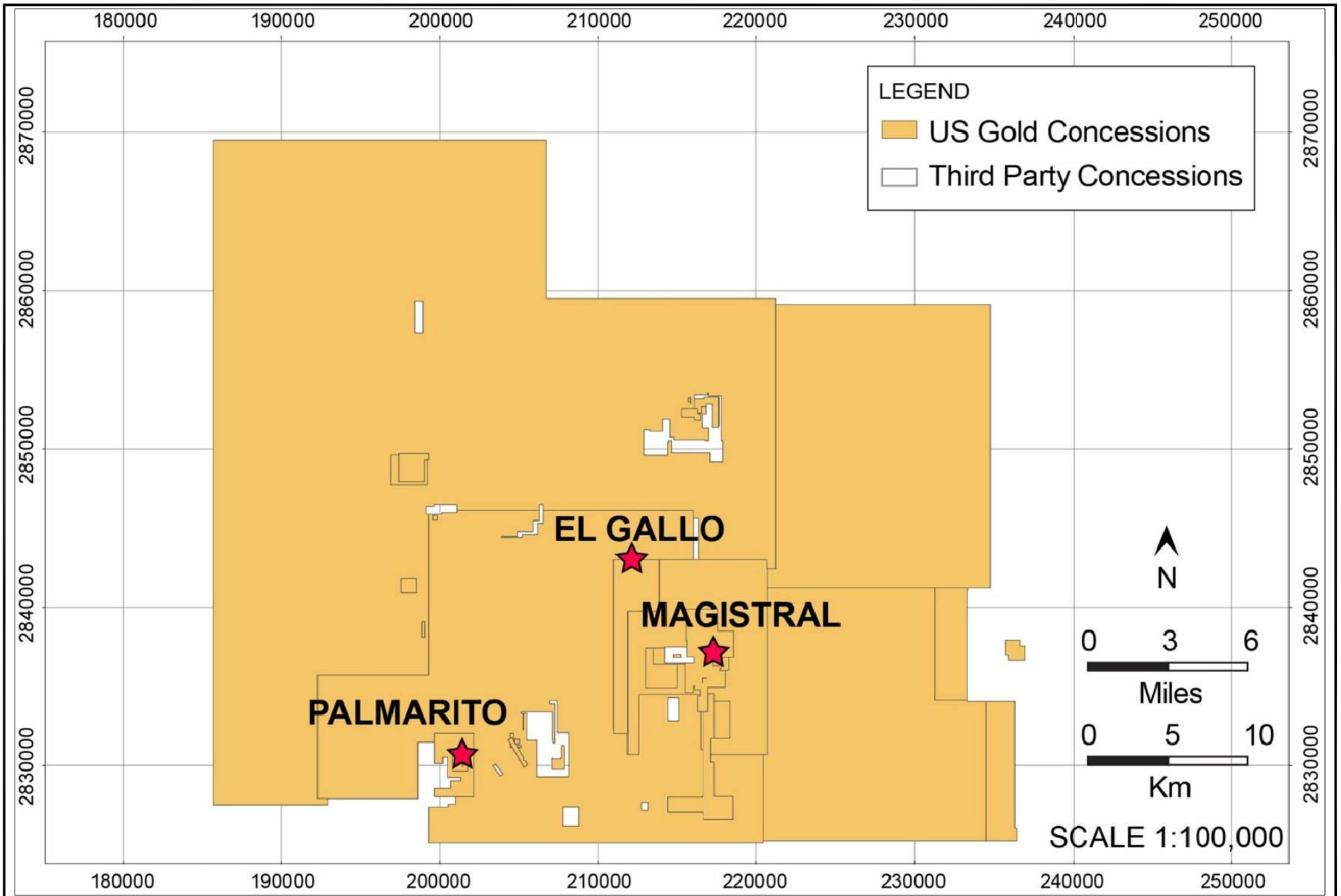
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Project Name  
 El Gallo District  
 PEA

**FIGURE 4-1**  
**General Location Map**

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Prepared by  

**pincock, allen & holt**  
 165 S. Union Boulevard, Suite 950  
 Lakewood, Colorado 80228  
 Phone (303) 986-6950

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**FIGURE 4-2**  
**Claim Boundary Map**

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 Fig.4-2.dwg

Based on the large amount of past expenditures, all US Gold will have to pay in the foreseeable future are the claim fees.

**TABLE 4-1**  
**US Gold Corporation**  
**Preliminary Economic Assessment, El Gallo District**  
**Claim Position**

<b>Name</b>	<b>Title Number</b>	<b>Expiration Date</b>	<b>Ownership (%)</b>	<b>Surface (Acres)</b>
Unificación Magistral	214502	28/10/2033	100%	3275
Lucy	213070	1/3/2051	100%	153
Lucy	217037	13/06/2052	100%	15385
El Valle Fracción 1	220297	2/7/2053	100%	102
El Valle Fracción 2	220298	2/7/2053	100%	32
Cariño Fracción B	220399	23/07/2053	100%	1
Pangea	221204	10/12/2053	100%	3942
Anaibis	209604	2/8/2049	100%	25
San Gabriel	214852	3/12/2051	100%	201
Alex	217429	8/7/2052	100%	865
El Palmarito	182598	11/8/2038	100%	64
La Palma	218401	4/11/2052	100%	1711
Rocio Fracción A	223492	10/1/2055	100%	86486
Rocio Fracción B	223493	10/1/2055	100%	172
Rocio 2 Fracción A	223494	10/1/2055	100%	579
Rocio 2 Fracción B	223495	10/1/2055	100%	101
Shakira Fracción A	223496	10/1/2055	100%	216985
Shakira Fracción B	223497	10/1/2055	100%	11
Shakira II	229715	7/6/2057	100%	12
Shakira II Fracc 2	229716	7/6/2057	100%	359
Shakira II Fracc 3	229717	7/6/2057	100%	0
Shakira II Fracc 4	229718	7/6/2057	100%	59942
Shakira IV	229708	5/6/2057	100%	22
Shakira III	229044	27/02/2057	100%	229
La Esperanza	211897	27/07/2050	100%	49
Rocio 3	230899	25/10/2057	100%	2550
Pangea II	234558	9/7/2059	100%	3480
Pangea II Fracc 1	234559	9/7/2059	100%	3906
Pangea II Fracc 2	234560	9/7/2059	100%	337
Magistral II	235312	5/11/2059	100%	49208
Hallomeck	203318	27/06/2046	100%	104
Old Parker	202914	1/4/2046	100%	103
La Revancha	199003	10/2/2044	100%	22
El Rial	212197	21/09/2050	Option for 100%	282
El Real del Oro	224617	23/05/2055	Option for 100%	741
El Real del Oro II	224649	24/05/2055	Option for 100%	494
<b>Total</b>				<b>451,932</b>

### **4.3 Surface Rights**

México, like other countries, has different types of surface rights. Ejido or Comunidad are special type of surface rights assigned by the government for farming and ranching purposes, regulated by the Agrarian Law. Assemblies (ejido or community members meetings) hold the highest authority over these surface rights. It is through the assemblies that the following are allowed: acceptance of a new ejido or community members, allowances and benefits from the land.

The ejidatario or comunero holds the surface rights for the land, but it does not constitute a private ownership. Surface rights may be transferred to ejidatarios or comuneros following the regimen stated in the Agrarian Law. However, modifications to the Agrarian Law since 1992 allow converting the ejido or community land into private property through a legal process. Once this is achieved, the land can be sold.

El Gallo: An annual lease agreement is currently in place between US Gold's Mexican subsidiary and certain employees who hold the surface rights. These lease agreements provide for access and site preparation to accommodate exploration activities and drilling. The employees who hold the surface rights have commenced the required legal process to convert the land into private ownership so it can be sold to US Gold. US Gold is not required to make any additional payments, as the purchase price was agreed to and paid at the time of the lease agreements. Although the agreements cover a large area around the project there can be no assurances that additional surface rights will not be required.

Magistral: An annual lease agreement currently exists with a number of surface rights owners that provides for access and site work for mining activities. No liabilities current exist for land usage. Although the agreements cover a large area around the project there can be no assurances that additional surface rights will not be required.

Palmarito: No lease agreement is currently in place.

### **4.4 Water Rights**

In México, water rights are managed by the Comision National del Aqua (CONAGUA). According to the Mexican water rights legislation, industrial users must pay for the right to use national waters regardless of how their rights were obtained, with the rates being determined by the availability of water and the method of extraction.

### **4.5 Exploration Permits**

Various environmental permits, which are issued by SEMARNAT (Secretariat of Environmental and Natural Resources, the Mexican Government environmental authority) are required in order perform exploration drilling in Sinaloa state, México. Permitting requirements are dependent upon the level of disturbance. Exemptions can generally be obtained if drilling occurs in areas where no new disturbance will occur and vegetation will not be removed (agricultural areas, dirt roads, previously mined sites). If drilling occurs on previously undisturbed land and vegetation will be removed an Environmental Impact Study and Land

Use Change are required. In addition to US Gold's environmental employees, Heuristica Ambiental, environmental consultants from Hermosillo, Sonora, work with the company in order to permit US Gold's exploration activities. Each of the areas envisioned to be mined in this Preliminary Economic Assessment have obtained the required exemptions or permits in order to carry US Gold's planned exploration for the foreseeable future.

#### **4.6 Mining Permits**

SEMARNAT is also the department in México responsible issuing environmental permits associated with mining. Regulations require that an environmental impact statement, known in México as a Manifesto Impacto Ambiental (MIA), be prepared by a third party contractor for submittal to SEMARNAT. Studies required to support the MIA include a detailed analysis of the following areas: soil, water, vegetation, wildlife, cultural resources and socio-economic impact. Proof of local community support for a project is required to gain final MIA approval. A risk analysis must also be prepared in conjunction with the MIA for approval by SEMARNAT.

A number of other approvals, licences and permits are required for various aspects of a mine development. Typically the most significant permit for mine development other than MIA approval, are blasting permits, issued by the Mexican Army, to purchase, store and use explosives.

Currently there are three areas that are being envisioned to be mined. The El Gallo deposit is a new discovery and also the largest of the three that is planned to be mined. Since El Gallo hosts the largest percentage of the resource this PEA contemplates mining, US Gold is proposing to locate the process facilities near this deposit. El Gallo is only permitted for exploration and no mining permits have been approved. US Gold has initiated a number of baseline studies in order to prepare an MIA for the project, which includes the study of flora, fauna and forestry, geotechnical study of pit slope stability, determination of water quality before mining and a hydrogeological study of the project area. The geotechnical study is being performed by Itasca Inc. and SRK Consulting out of Denver Colorado. All other baseline studies are currently being carried out by Heuristica Ambiental.

On December 6, 2001, Magistral received Environmental Mining Permit Number SGPARN/247/01. The MIA was prepared by the environmental consulting firm, Soluciones de Ingeniería y Calidad Ambiental, S. A. de C. V. (SICA). The Environmental Mining Permit has 69 conditions that the Magistral must follow. Condition examples include groundwater quality monitoring at four points, recycling of used oil and the development of an Accident Prevention Plan. The permit expires June 2013. US Gold is currently preparing a request to extend this permit. US Gold believes the permit will be extended based on the company's prior experience in 2009 when the permit was extended to its current date.

US Gold's Mexican subsidiary holds permits (Permit #: 3445- Sinaloa) for explosive purchase and use at Magistral. This permit is renewed on an annual basis. A quarterly permit is also issued by the local Sinaloa military authority for the buying and transporting of explosives. In addition, the President of the local municipality must approve the use of explosives at the site. US Gold is currently submitting an application to have the Magistral explosive permit extended to El Gallo and Palmarito.

As is typical of previous mining operations, there are current environmental liabilities associated with Magistral that are primarily related to closure and reclamation. Reclamation issues include neutralization and re-grading of the heap leach pads, removal of the processing plant and support facilities, and re-contouring of the waste rock dumps. It should be noted that the current geochemical characterization of the waste rock indicate that acid generation potential is relatively low.

Palmarito is currently not permitted for mining. There are three sources of material that this PEA contemplates mining at Palmarito. The first two sources to be mined are the historic mine dumps and tailings. After consultations with SERMANAT, US Gold does not believe permits are required to transport this ore to El Gallo because the material is greater than 50 years old and no new disturbance will have been created. The in situ material that is currently planned to be mined will require SERMANAT to approve an MIA. US Gold has not currently initiated any baseline studies at Palmarito.

## **5.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE, AND PHYSIOGRAPHY**

### **5.1 *Accessibility***

Access to the El Gallo District from the city of Culiacan is via the paved, four-lane Pacific Highway (Highway 15) for a distance of 100 km to the city of Guamuchil. From Guamuchil a local paved road extends 20 km to the east toward Mocorito. US Gold's concessions are located approximately 4 km north of Mocorito, via a paved and dirt road. Within US Gold's land position, several paved and dirt roads that provide access between the properties. Figures 5-1 and 5-2 show property access and typical road conditions.

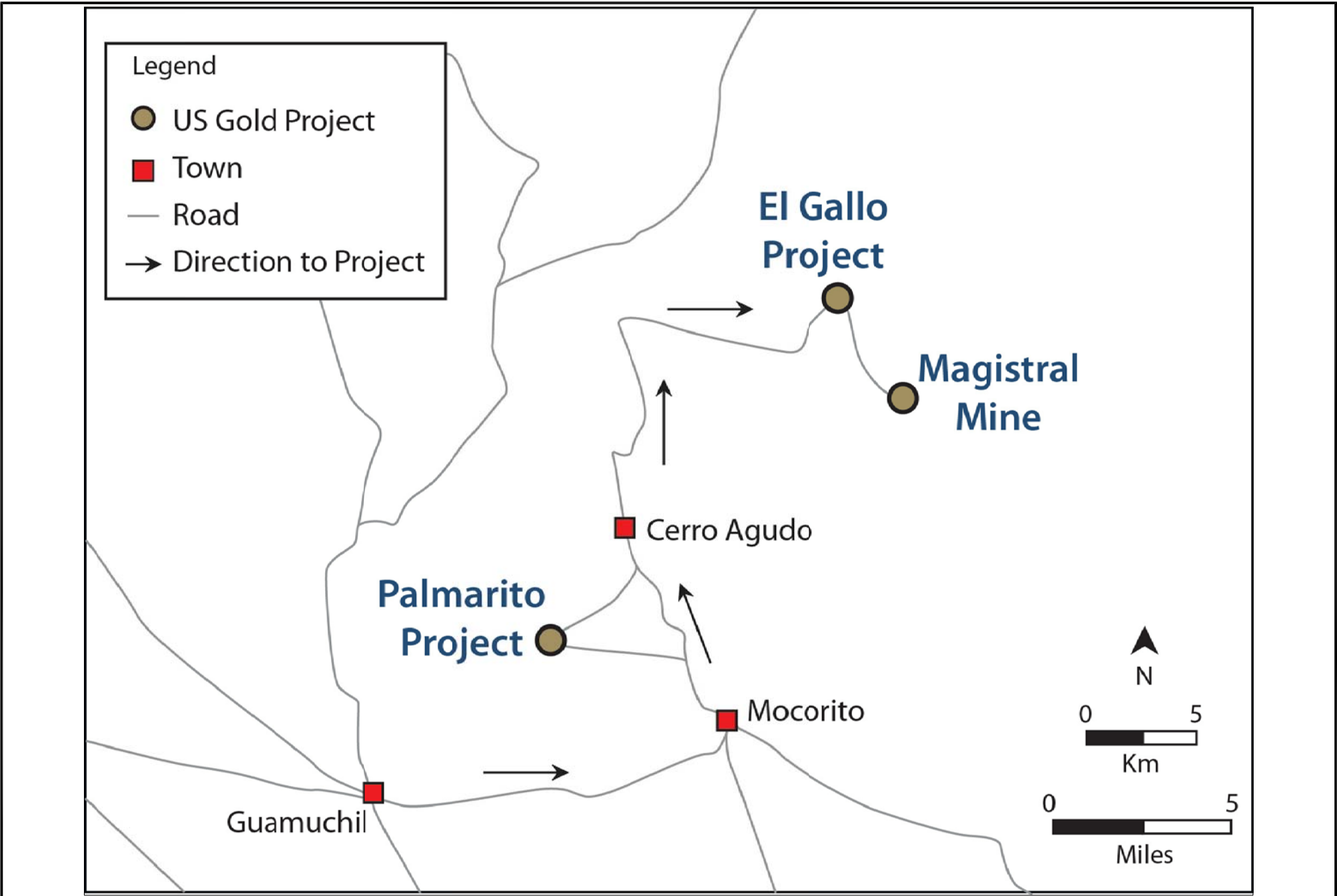
### **5.2 *Local Resources and Infrastructure***


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

US Gold's concessions are about 4.0 km from the town of Mocorito. The road from Mocorito to the three project areas is a good quality two-lane paved road that turns into dirt road halfway. An historic, single lane dirt road provides access between El Gallo and Magistral. Most of the supplies, offices and core facility are located at Magistral. See Figures 5-3 for Magistral core logging facility.

Power could be supplied by the Comision Federal de Electricidad (CFE) from a substation that is powered by a hydroelectric dam, located 4.5 km from the proposed processing facilities at El Gallo. Although power lines extend through El Gallo, a new 33 kV transmission line would have to be constructed from the substation. Project power alternatives are currently being assessed.

No buildings currently exist at El Gallo or Palmarito. At Magistral significant infrastructure is present from previous mining operations that US Gold now uses for its current exploration. At Magistral there is a truck shop that consists of a large steel-frame building with an overhead crane and four bays for servicing heavy mobile equipment. There is also a laboratory and an older process plant. The laboratory is equipped to process all assays (core, chips, soil) and incorporates fire assaying and atomic adsorption equipment. However, none of the assays have been used in this resource estimate (not an accredited laboratory). Magistral also includes a warehouse and two core logging facilities.



Prepared by  
 **pincock, allen & holt**  
 165 S. Union Boulevard, Suite 950  
 Lakewood, Colorado 80228  
 Phone (303) 986-6950

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**FIGURE 5-1**  
 Property Access Map

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Drawing Name  
 Fig.5-1.dwg



1. Paved Road: Guamuchil - Mocerito (10 miles)



2. Paved Road: Mocerito - Palmarito (12 miles)



3. Dirt Road: Palmarito - El Gallo Project (8 miles)



4. Dirt Road: El Gallo Project - Magistral Mine (3 miles)

Prepared by  
 **pincock, allen & holt**  
 165 S. Union Boulevard, Suite 950  
 Lakewood, Colorado 80228  
 Phone (303) 986-6950

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**FIGURE 5-2**  
 Typical Road Conditions

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165 S. Union Boulevard, Suite 950  
Lakewood, Colorado 80228  
Phone (303) 986-6950

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**FIGURE 5-3**  
**Core Facilities**

Date of Issue

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Drawing Name

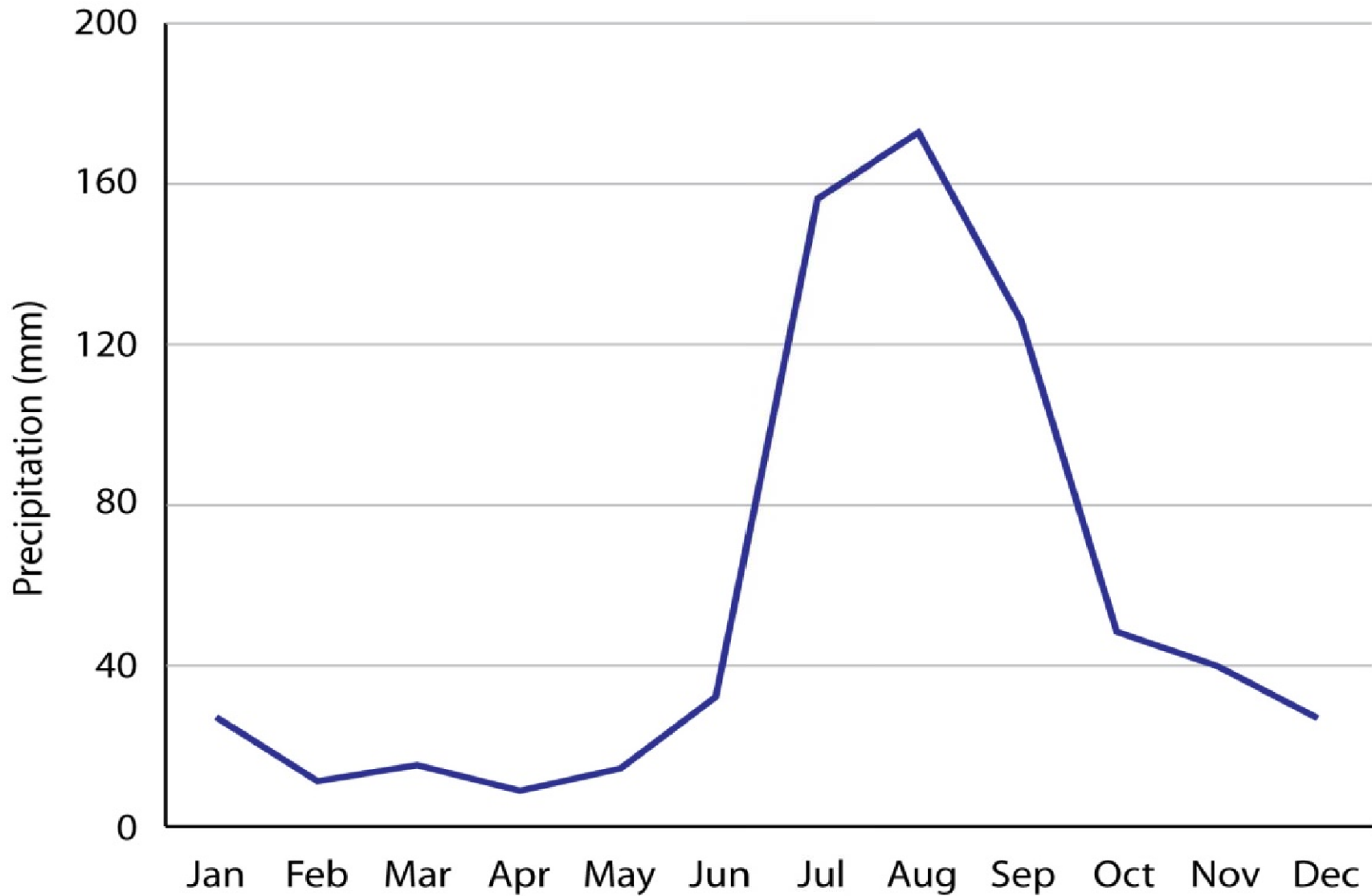
Fig.5-3.dwg

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

### **5.3        *Physiography***

US Gold's land position is characterized by moderate to steep topography with elevations ranging from 300 to 450 m. It is located in the "Pie de la Sierra" physiographic province, near the boundary with the "Llanura Costera y Deltas de Sonora y Sinaloa" province. During most of the year, the area experiences arid to semi-arid climatic conditions, with almost all of the approximately 825 millimeters of annual precipitation coming from storm events during July to September (See Figure 5-4). During the strong storm events, flooding occurs along the river beds. The project area is enclosed by the Mocerito hydrologic basin. The moderately dense vegetation on the hill slopes consists of bushes and shrubs with widely-spaced deciduous trees. The average yearly temperature in the area is approximately 77°F (25°C) (See Figure 5-5).

# Monthly Precipitation (1971-2000)



\*Mocarito Climate Station

Prepared by **pinc**cock, allen & holt  
165 S. Union Boulevard, Suite 950  
Lakewood, Colorado 80228  
Phone (303) 986-6950

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FIGURE 5-4  
Monthly Precipitation  
1971 - 2000

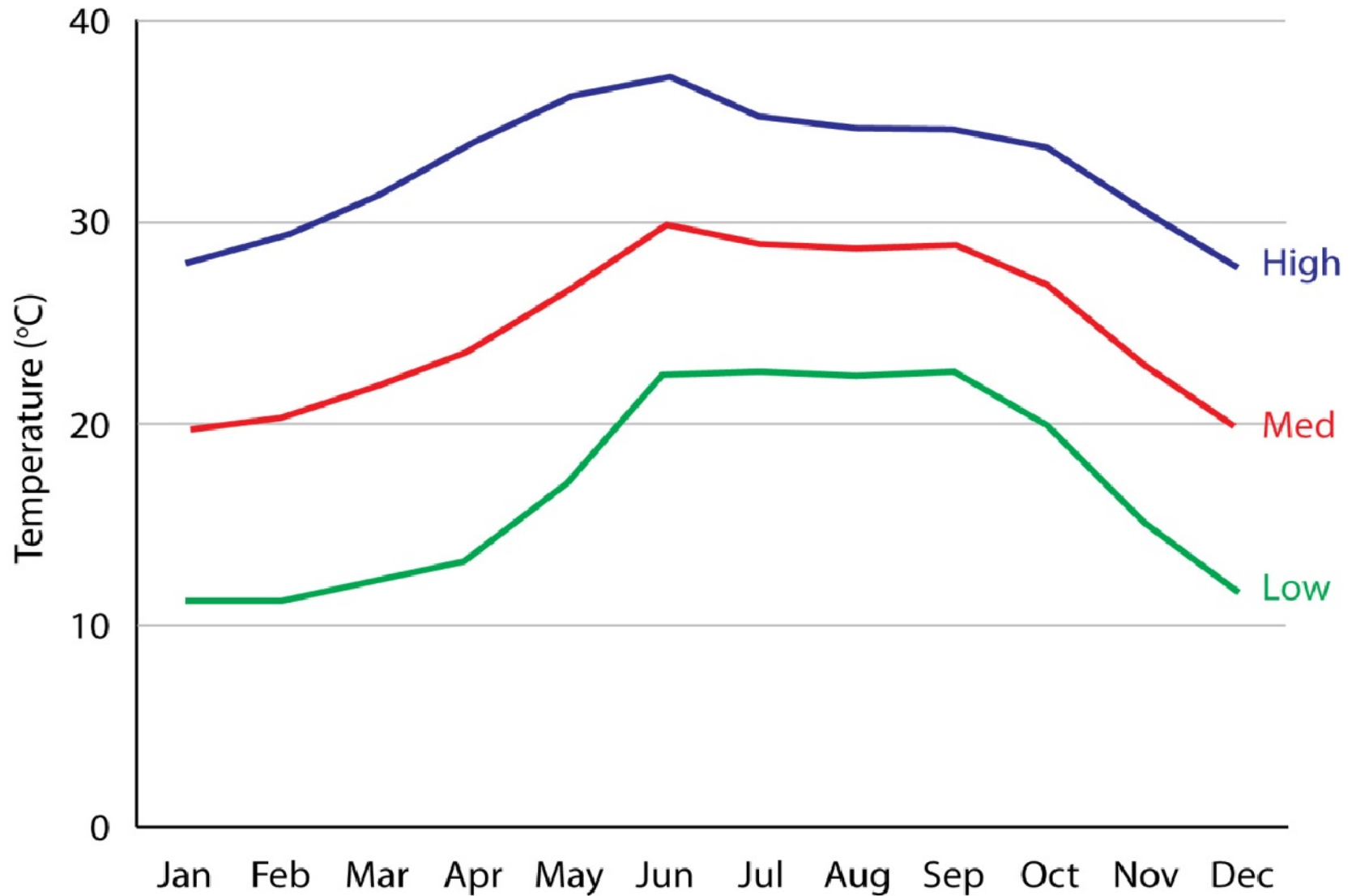
Date of Issue

Jan 2011


Drawing Name

Fig.5-4.dwg

# Monthly Temperatures (1971-2000)



\*Mocerito Climate Station

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 165 S. Union Boulevard, Suite 950  
 Lakewood, Colorado 80228  
 Phone (303) 986-6950

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FIGURE 5-5  
 Monthly Temperatures  
 1971 - 2000

Date of Issue  
 Jan 2011  
 Drawing Name  
 Fig.5-5.dwg

Project No.  
 DE-00177

## 6.0 HISTORY

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

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

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

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

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

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

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

In 1999, after a merger with Santa Cruz Gold, Queenstake conducted a further limited drilling program to step-out/in-fill drill in the Samaniego Hill deposit (13 reverse circulation and two core holes) and to obtain

pit-slope geotechnical samples from both the San Rafael (two core holes) and Samaniego Hill (four core holes) deposits. In 2002, additional drilling (45 reverse circulation holes) was conducted in La Prieta zone of the Samaniego Hill deposit.

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

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

In 1969-70, Barranca Corporation Ltd. carried out an exploration program that consisted of surface and underground mapping and sampling along with 24 core and 11 percussion holes (not included in the current database). This work resulted in a reported non-compliant NI 43-101 resource estimate.

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

In 2006-07, Nevada Pacific Gold completed a core drilling program at Palmarito that consisted of 19 holes. The objective of the program was to confirm the integrity of the geologic model and database collected from a number of RC drill holes that were completed by Lluvia de Oro.

## **6.1        *Resource Estimate History***

### **6.1.1     *El Gallo***

The current resource estimate for El Gallo is an update from the initial resource published in July 2010 and filed on Sedar. The initial estimate was modelled by PAH for US Gold Corporation. This resource estimate is listed in Table 6-1. This estimate is made obsolete by additional drilling, updated variography and an updated modeling approach.

### **6.1.2     *Magistral***

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

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

**TABLE 6-1**  
**US Gold Corporation**  
**Preliminary Economic Assessment, El Gallo District**  
**July 2010 Resource Estimate For El Gallo - OBSOLETE**

<b>Measured and Indicated Resources</b>							
<b>Class</b>	<b>Group</b>	<b>Grade Range</b>	<b>Tonnage x1000</b>	<b>Ag ppm</b>	<b>Au ppm</b>	<b>Ounces of Ag</b>	<b>Ounces of Au</b>
Measured	Low Grade Oxide	25-40 Ag ppm	216	31.3	0.05	217,360	347
	High Grade	> 40 Ag ppm	3,802	119.0	0.10	14,545,882	12,223
Indicated	Low Grade Oxide	25-40 Ag ppm	269	31.4	0.07	271,558	605
	High Grade	> 40 Ag ppm	3,106	100.8	0.08	10,065,676	7,989
Measured + Indicated	Low Grade Oxide	25-40 Ag ppm	485	31.4	0.06	488,918	953
	High Grade	> 40 Ag ppm	6,908	110.8	0.09	24,611,558	20,212
<b>Total Measured + Indicated</b>			<b>7,393</b>	<b>106</b>	<b>0.09</b>	<b>25,100,476</b>	<b>21,165</b>
<b>Inferred Resources</b>							
<b>Class</b>	<b>Group</b>	<b>Grade Range</b>	<b>Tonnage x1000</b>	<b>Ag ppm</b>	<b>Au ppm</b>	<b>Ounces of Ag</b>	<b>Ounces of Au</b>
Inferred	Low Grade Oxide	25-40 Ag ppm	590	32.0	0.03	606,992	569
	High Grade	> 40 Ag ppm	3,900	92.2	0.07	11,560,497	8,777
<b>Total Inferred</b>			<b>4,490</b>	<b>84</b>	<b>0.06</b>	<b>12,167,489</b>	<b>9,346</b>

These boundaries were drawn at a nominal grade of 0.2 gpt. The structural zone interpreted shapes were then digitized and projected to 16.5 ft (5 m) bench plans. Three block models (Samaniego/San Rafael, Lupita/Central and Sagrado Corazón) were constructed around these structural zones with 5 x 5 x 5 m block sizes. Gold grades were interpreted for blocks within the structural zones using an inverse distance cubed method. These resource estimates for the 2000 Feasibility Study are listed in Table 6-2. In 2003, this resource estimate was incorporated into a NI 43-101 Technical Report and filed on SEDAR by Queenstake. Additional drilling data and production have rendered this estimate obsolete.

**TABLE 6-2**  
**US Gold Corporation**  
**Preliminary Economic Assessment, El Gallo District**  
**2000 Resource Estimate for Magistral - OBSOLETE**

Property	Measured			Indicated			Measured and Indicated			Inferred		
	Tonnes (x1000)	Au (g/t)	Cont. Au Oz.	Tonnes (x1000)	Au (g/t)	Cont. Au Oz.	Tonnes (x1000)	Au (g/t)	Cont. Au Oz.	Tonnes (x1000)	Au (g/t)	Cont. Au Oz.
San Rafael	2,072	1.77	117,900	447	1.24	17,900	2,519	1.68	135,800	10	1.02	300
Samaniego Hill	3,495	1.63	183,000	1,031	1.85	61,200	4,526	1.68	244,200	32	1.28	13,000
Sagrado Corazon	978	1.08	33,900	238	0.82	6,300	1,216	1.03	40,200	6	0.80	200
Lupita	1,257	1.11	44,900	842	1.00	27,000	2,099	1.07	71,900	58	1.63	3,000
Mill Tailings	167	2.17	11,700	65	0.68	1,400	232	1.76	13,100	-	-	-
<b>Total</b>	<b>7,969</b>	<b>1.53</b>	<b>391,400</b>	<b>2,623</b>	<b>1.35</b>	<b>113,800</b>	<b>10,592</b>	<b>1.48</b>	<b>505,200</b>	<b>106</b>	<b>4.84</b>	<b>16,500</b>

In late 2001 and early 2002, Queenstake conducted additional drilling in the Samaniego Hill deposit. This drilling extended the limits of known mineralization within the La Prieta structural zone. Consequently, the 2000 resource model was updated to reflect this data. The modeling approach and parameters used for this update were similar to those used originally for the 2000 Feasibility Study. Table 6-3 reproduces the 2003 resource estimate. This estimate did not report inferred resource and no explanation is given for this omission. In 2003, this resource estimate was incorporated into a NI 43-101 Technical Report and filed on SEDAR by Queenstake. Additional drilling data and production have rendered this estimate obsolete.

**TABLE 6-3**  
**US Gold Corporation**  
**Preliminary Economic Assessment, El Gallo District**  
**2003 Resource Estimate for Magistral - OBSOLETE**

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

Following its acquisition of Magistral from Queenstake, Nevada Pacific Gold issued an amended NI 43-101 Technical Report. These amendments did not pertain to the resource estimate. As such, the included resource estimate in this Technical Report did not deviate from Table 6-3.

While the owner of Magistral, Nevada Pacific Gold generated additional drilling data and production data sufficient to warrant an updated resource estimate in 2006. The Lupita structural zone interpretation was modified as a result of the additional drilling. The production data was reconciled against the 2003

resource estimate and significant discrepancies were noted. PAH found that altering the grade interpolation method from inverse distance cubed to inverse distance 6th yielded a better representation of the production data. As a result, this interpolation method was applied to all models and a new resource estimate was submitted. Table 6-4 reproduces the 2006 resource estimate. Nevada Pacific filed a NI 43-101 Technical Report on SEDAR stating this resource estimate in 2006.

**TABLE 6-4**  
**US Gold Corporation**  
**Preliminary Economic Assessment, El Gallo District**  
**2006 Resource Estimate for Magistral - OBSOLETE**

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

In 2009, the prior resource estimate was revisited and a problem was discovered. PAH observed that portions of resource within the La Prieta structural zone were tabulated improperly in 2006. Consequently, the resource estimate in Table 6-4 overestimated measured and indicated gold ounces by approximately 18 percent. This issue and additional drilling data have rendered this estimate obsolete.

### 6.1.3 Palmarito

In 1996 a non-compliant NI 43-101 resource estimate was completed by Computer Aided Geoscience Pty based on work that included 74 RC drill holes completed by Lluvia de Oro Inc. in the 1990s (Table 6-5). The historical mineral resources at Palmarito were estimated using undefined methods for classifying resources. As such, they do not comply with NI 43-101.

**TABLE 6-5**  
**US Gold Corporation**  
**Preliminary Economic Assessment, El Gallo District**  
**1996 Resource Estimate for Palmarito - OBSOLETE**

Cutoff Grade (Au Eq.* gpt)	Tonnage (millions)	Au Eq. Grade (gpt)	Au Grade (gpt)	Ag Grade (gpt)	Contained Au Eq. ('000 oz)	Contained Au ('000 oz)	Contained Ag (million oz)
<i>Drill Indicated Historical Resource</i>							
2	0.659	2.85	0.5	179	60	11	3.8
1.8	0.828	2.66	0.5	165	71	13	4.4
1.6	1.05	2.45	0.46	151	83	16	5.1
1.4	1.29	2.27	0.44	140	94	18	5.8
1.2	1.55	2.11	0.41	129	105	21	6.4
1	1.83	1.96	0.39	119	115	23	7
0.8	2.1	1.82	0.37	111	123	25	7.5
0.6	2.38	1.69	0.35	102	129	27	7.8
0.4	3.11	1.4	0.28	86	140	28	8.5
0.2	5.12	0.97	0.18	60	160	30	10
0	5.75	0.87	0.16	54	162	29	10.1
<i>Dumps</i>							
0	0.242	3.53	0.45	235	27	3	1,800
<i>Tailings**</i>							
0	0.2	2.05	-	158	13	-	1,000

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

\*\*Tailings were not assayed for gold

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

In 2009 and 2010, US Gold conducted additional drilling at Palmarito. This drilling extended the limits of known mineralization and also discovered the new "Southwest Zone." Additional waste dump and tailings sampling was also undertaken in order to more accurately reflect the tonnes and grade associated with this material. Consequently, the 2010 resource model was updated to reflect this data.

**TABLE 6-6**  
**US Gold Corporation**  
**Preliminary Economic Assessment, El Gallo District**  
**2008 Resource Estimate for Palmarito - OBSOLETE**

Class	Cutoff Grade (grams Ag/tonne)	Tonnage ('000)	Ag Grade (grams/tonne)	Contained Ag (grams)	Contained Ag (troy ounces)	Au Grade (grams/tonne)	Contained Au (grams)	Contained Au (troy ounces)
Measured	360	0.4	384.0	139,898.6	4,498	0.24	87.8	3
	320	0.6	361.9	218,739.4	7,032	0.26	160.1	5
	280	3.4	302.8	1,027,151.0	33,022	0.37	1,254.2	40
	240	17.1	265.7	4,541,329.5	146,000	0.34	5,841.8	188
	200	37.8	238.9	9,033,858.0	290,431	0.31	11,755.0	378
	160	73.3	210.2	15,400,574.1	495,116	0.27	19,665.8	632
	120	200.3	162.4	32,544,335.3	1,046,274	0.21	41,670.0	1,340
	80	677.8	115.7	78,399,762.8	2,520,490	0.16	111,080.4	3,571
	40	2,654.4	70.2	186,366,104.1	5,991,521	0.14	370,194.9	11,901
0	7,185.1	41.4	297,151,306.1	9,553,177	0.10	713,670.6	22,944	
Indicated	360	0.8	381.6	295,372.5	9,496	0.21	165.8	5
	320	2.0	352.1	711,735.8	22,882	0.21	414.5	13
	280	3.2	331.9	1,046,620.1	33,648	0.20	618.6	20
	240	9.0	281.1	2,517,752.6	80,944	0.28	2,468.4	79
	200	23.4	243.7	5,703,434.1	183,361	0.29	6,866.7	221
	160	37.3	221.5	8,267,116.1	265,781	0.26	9,631.4	310
	120	79.7	173.8	13,847,307.8	445,180	0.21	17,033.7	548
	80	275.3	120.1	33,053,972.9	1,062,659	0.18	48,474.1	1,558
	40	1,102.8	70.0	77,156,710.8	2,480,527	0.13	142,530.0	4,582
0	3,791.5	37.1	140,715,010.0	4,523,875	0.08	315,102.8	10,130	
Measured and Indicated	360	1.1	382.3	435,271.1	13,994	0.22	253.6	8
	320	2.6	354.3	930,475.2	29,914	0.22	574.6	18
	280	6.5	316.8	2,073,771.1	66,670	0.29	1,872.8	60
	240	26.1	271.0	7,059,082.1	226,944	0.32	8,310.3	267
	200	61.2	240.7	14,737,292.1	473,792	0.30	18,621.7	599
	160	110.6	214.0	23,667,690.2	760,897	0.26	29,297.2	942
	120	280.0	165.7	46,391,643.1	1,491,454	0.21	58,703.7	1,887
	80	953.1	116.9	111,453,735.7	3,583,148	0.17	159,554.5	5,130
	40	3,757.2	70.1	263,522,815.0	8,472,048	0.14	512,724.8	16,484
0	10,976.5	39.9	437,866,316.1	14,077,052	0.09	1,028,773.4	33,074	
Inferred	360	-	-	-	-	-	-	-
	320	-	-	-	-	-	-	-
	280	0.3	288.0	95,400.0	3,067	0.02	6.6	0
	240	2.2	279.3	628,007.9	20,190	0.00	6.6	0
	200	3.5	252.2	890,649.8	28,634	0.12	417.0	13
	160	6.5	222.8	1,444,289.1	46,433	0.09	553.5	18
	120	148.1	134.9	19,976,874.7	642,241	0.15	22,361.9	719
	80	297.4	115.0	34,212,091.0	1,099,891	0.14	40,362.0	1,298
	40	1,591.1	65.5	104,178,079.3	3,349,242	0.11	179,443.6	5,769
0	6,722.9	32.2	216,148,372.8	6,948,997	0.07	459,478.2	14,772	

## 7.0 GEOLOGICAL SETTING

### 7.1 *Regional Geology*

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

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

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

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

Late Cretaceous-Tertiary volcanic and volcanoclastic rocks as well as granitic rocks of the Sinaloa Batholith are dominant in the region. Most of the region is underlain by dark green andesitic flows, tuffs and agglomerates. Minor volcanoclastic mudstone and sandstone and rhyolitic tuff also occur intercalated with

the andesitic units. Capping the higher hills and mountains are distinctive light-colored, cliff-forming rhyolitic-rhyodacitic tuffs of the Upper Volcanic Series.

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

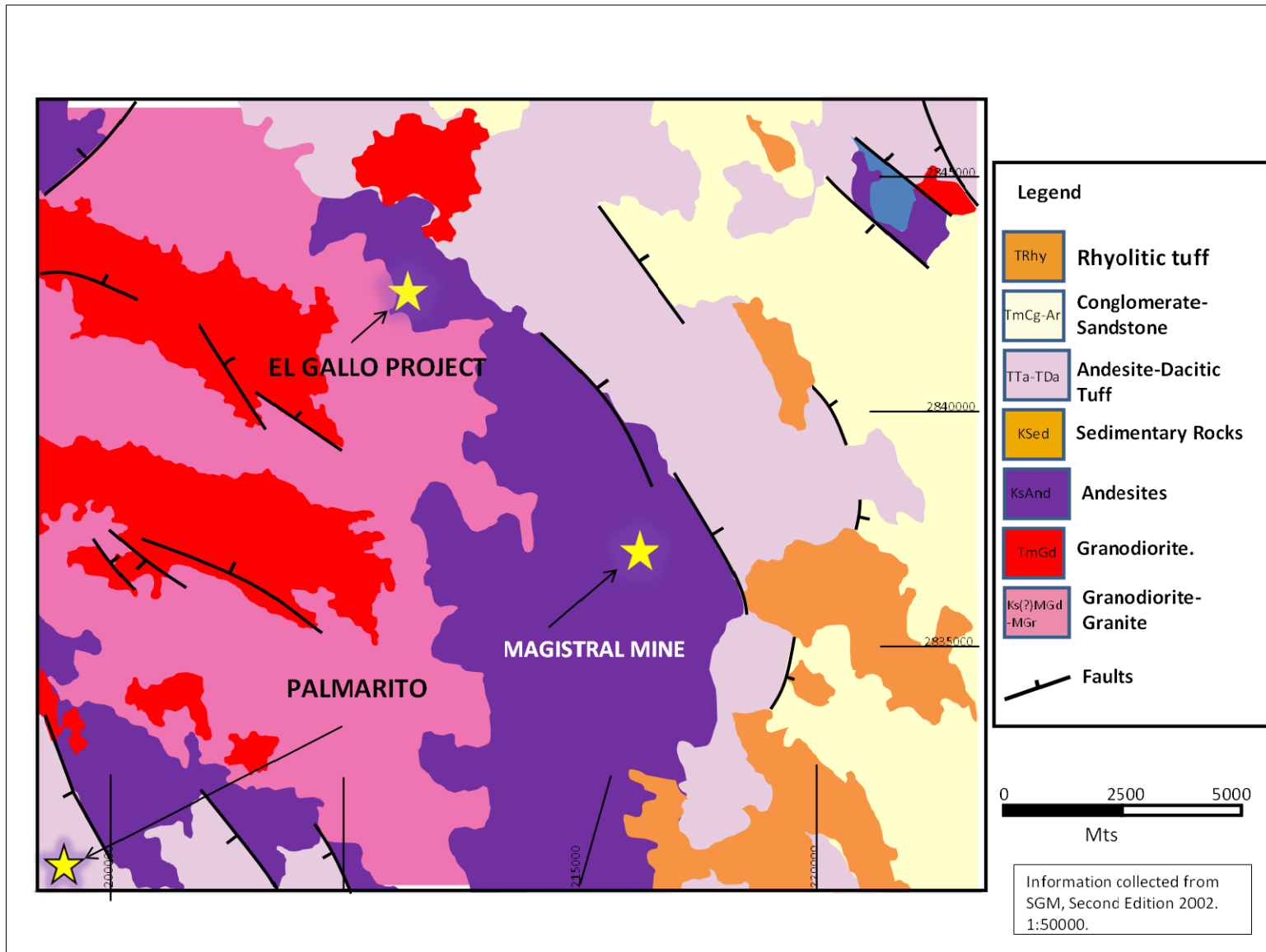
Structural study in the Magistral area has shown strike-slip and oblique-slip movement on NW striking (mineralized) structures (Nelson, 2008). Similarly, Horner and Enriquez (1999) have documented lateral slip on mineralized structures in the Tayoltita district and have interpreted a strike slip corridor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


## **7.2 Local Geology**

### **7.2.1 El Gallo Local Geology**

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

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



Prepared by  
 **pincock, allen & holt**  
 165 S. Union Boulevard, Suite 950  
 Lakewood, Colorado 80228  
 Phone (303) 986-6950

Drawing Provided by/Prepared for  
**US Gold**  
 Project Name  
 El Gallo Deposit  
 PEA

**FIGURE 7-1**  
**Regional Geologic Map**

Date of Issue  
 Jan 2011  
 Drawing Name  
 Fig.7-1.dwg

Cretaceous (?) Sedimentary Rocks. Calcareous sedimentary rocks occur on the periphery of the El Gallo project. Exposures of thin-bedded, weakly folded hornfels occur on the main road north of the project and broad exposures of hornfelsed/skarned sediments occur on Calera Hill north of the project near the village of Agua Blanca. Outcrops of garnetized sedimentary rocks also occur 200 m north of El Gallo's North Zone. This part of the stratigraphic section has not been encountered in drill holes. Stratigraphic relations of these rocks with the rest of the section are not totally clear but they appear to underlie the volcanic rocks and have locally been observed to be cut by rhyolitic dikes. The age of these rocks is unknown but presumed to be Cretaceous based on their lithologic similarity to Cretaceous rocks in the region. Though calc-silicate alteration is locally strong, mineralization has not been found in these rocks.

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

In the project area the upper contact of the QM is subhorizontal or gently east-dipping and underlies all other units in the project area. Contacts with the overlying units are commonly marked by a multi-lithic breccia, locally up to a few tens of meters thick, that has been interpreted as either tectonic or sedimentary in origin.

### ***Andesite Package***

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

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

Andesite Porphyry (ANDP). Andesite with white to tan plagioclase >>Kspar phenocrysts in an aphanitic or fine-grained phaneritic groundmass. The most dominant variety of porphyritic andesite has uniformly sized equant phenocrysts in a fine-grained phaneritic groundmass and has been interpreted as a hypabyssal intrusive, probably co-genetic with the rest of the andesitic package. This unit is usually fairly strongly epidotized giving the rock a lime-green color. Although correlating between sections can be difficult, the overall geometry of the ANDP is mostly subhorizontal lenses that occur in multiple horizons.

These are interpreted as laccolithic or sill-like intrusive bodies, often with no obvious roots on a given cross-section. The ANDP is the single most abundant host to silver mineralization at El Gallo, often along and near its brecciated margins.

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

### ***Tuff/Volcaniclastic Sediment Package***

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

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

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

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

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

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

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

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

Multi-lithic Breccia. Irregular bodies of breccia with mixed clasts of various lithology occur throughout the deposit. Generally, the breccias consist of subangular fragments supported by a matrix of pulverized rock(?). Locally, the matrix is a distinctive red (hematitic) clay. Fragment compositions vary locally and include every rock type in the section. Fragment lithology is often dominated by nearby units although these breccias can contain fragments from more distal units. Clasts of garnetized rock have been observed with a probable origin deeper in the stratigraphic section. The multi-lithic breccias have a complex history. Altered (propylitized and/or silicified), quartz veined clasts occur in the breccias. Very commonly, re-brecciated clasts are present. At least three stages of brecciation have been observed in the multi-lithic breccias. Locally, these breccias have a quartz ± calcite matrix where the hydrothermal event has superposed itself on the breccia.

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

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

### ***El Gallo Structural Geology***

The dominant structural pattern in the El Gallo deposit area consists of NW- and ENE-striking structures. These are evident in the trend of mineralization and in field observations. The overall trend of the El Gallo mineral deposit is ENE and is presumably controlled by a structure(s) of this strike although to date no

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

## **7.2.2 Magistral Local Geology**

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

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

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

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

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

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

### ***Magistral Structural Geology***

Two dominant structural trends are present in the Magistral area: northwest and northeast. Structures of both of these structural sets are host to gold mineralization. The northwest-striking structures dip moderately to the southwest. The northeast-striking fault set dips steeply southeast to vertical (Sagrado Corazón/Lupita area). Fault kinematic data suggest a dominance of oblique-slip reverse faulting (Nelson, 2008). Dip-slip normal faults are also present. There is an abundance of strike-slip faults, although some

of this movement may be post-mineral, related to Late Tertiary regional transform tectonics. Local low dip angles suggest thrust faulting and this is consistent with the abundance of reverse faults. The deep low-angle La Prieta zone may have formed in a dilational zone along a thrust fault. Mineralized veins are often brecciated, indicating some post (and syn-) mineral structural movement.

### **7.2.3 Palmarito Local Geology**

The geology of the Palmarito project area is comprised of volcanic rocks of the Lower Volcanic Series intruded by a hypabyssal rhyolitic intrusive of unknown age. Although part of the same regional rock package, the principal volcanic unit at Palmarito appears different than the andesites at El Gallo and Magistral. At Palmarito the dominant lithologic unit is volcanic rock of andesitic-dacitic composition (fieldtermed andesite). These rocks are purple to dark brown or grey in color and are porphyritic with white feldspar phenocrysts as well as local minor quartz phenocrysts. Aphanitic andesite and agglomeratic andesite occur to a lesser degree.

The rhyolitic intrusive is light tan to white with quartz phenocrysts in a fine-grained groundmass. The siliceous nature of the rhyolite makes it a prominent topographic feature.

#### ***Palmarito Structural Geology***

In the locations where best exposed, the contact between the andesitic country rocks and the rhyolite intrusive is a brecciated zone. This is the locus of silver mineralization at Palmarito. These brecciated zones may represent faults which facilitated emplacement of the intrusive. The dominant structure set at Palmarito is northeast striking, following the outcrop pattern of the rhyolite. In and around the area of historic mining these faults strike roughly north-south and east-west and dip gently to moderately steeply east and west, respectively. The recently discovered South West zone at Palmarito appears to be developed along a northeast-striking structure. Minor late stage faulting has occurred locally, producing minor offsets in the mineralized zone.

## 8.0 DEPOSIT TYPE

El Gallo, Magistral and Palmarito can all be classified as low- to intermediate-sulfidation epithermal precious metals deposits. Deposits of this type are common throughout the world and are very common throughout the Sierra Madre province of Mexico. El Gallo and Palmarito are silver-dominant deposits with minor gold content; Magistral is gold-dominant. The three projects differ from each other in terms of mineralogy and morphology.

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

Magistral: Consists of low- to intermediate-sulfidation epithermal gold and silver mineralization. Differing from El Gallo and Palmarito, Magistral is gold dominant and lead and zinc are not generally present. The mineralization locally contains strongly anomalous copper. Mineralized zones at Magistral occur as tabular veins, sometimes occurring as parallel sets.

Palmarito: Is a low-sulfidation, epithermal silver deposit. Like El Gallo, silver mineralization is accompanied by minor gold as well as lead and zinc. Mineralization is hosted in strongly silicified breccias which occupy the contact zones between a rhyolitic intrusive and volcanic country rocks.

## 9.0 MINERALIZATION

### 9.1 *El Gallo*

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

Mineral zones commonly have tabular geometry oriented sub horizontally or gently dipping (20 to 30°) both to the north and to the south and often occur stacked with two or three such zones. Often, these zones reflect control by sill-like contacts of ANDP or QFP but may also reflect shallow-dipping structures. Tabular zones vary in width up to about 50 m thick but average about 15 m. Their lateral extent in a north-south sense (across strike) is also variable but is often on the order of 200 m. An at or near-surface sub horizontal mineralized zone averaging about 15 m thick is dominant in many portions of the resource. This constitutes the bulk of mineralization in the North and Southwest zones. The central part of the Main Zone all exhibits this geometry. Where infill drilling has occurred in the central part of the Main Zone, this near-surface mineralization is contiguous between the North and Main Zones and has a lateral extent of up to 400 m north-south. Locally, mineral zone geometry is irregular probably reflecting control by higher angle intrusive contacts or irregularly-shaped pre-existing breccia zones.

Current dimensions of the El Gallo resource measure 720 m x 300 m for the Main Zone, 300 m x 140 m for the North Zone, and 350 m x 70 m for the Southwest Zone. It should be noted that the Main Zone is still open along strike to the east and west. The North Zone is currently open to the east and northeast and the Southwest zone is open along strike to the east and west.

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

Multiple stages of silver deposition are present. Mineralization most often occurs in white or grey quartz and, although paragenetic stages have not yet been fully defined, mineralization has been observed in relatively early stage veins and as later veinlets cutting amethyst. Mineralization has been observed both restricted to breccia clasts and in the matrix of siliceous-matrix breccias. Figures 9-1 to 9-3 illustrate some of the high grade silver mineralization encountered in El Gallo core.

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

El Gallo is a silver-dominant system with low gold values. However, minor local zones of high-grade gold (in the 1 opt range) occur associated with strong silver values. These zones are quite restricted in size and do not contribute significantly to the overall gold content of the deposit. It is not known if the high grade gold reflects a separate mineralizing stage.

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

## **9.2        *Magistral***

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

Hole GAX017 - Sample from Interval  
226.4 ft (69.0 m) - 229.2 ft (69.9 m)  
Grade 33.8 opt Ag (1,160 gpt Ag)

Rebrecciated clasts in siliceous matrix

0 cm 6.4  
0 in 2.5

Prepared by **pincock, allen & holt**  
165 S. Union Boulevard, Suite 950  
Lakewood, Colorado 80228  
Phone (303) 986-6950

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**US Gold**

Project Name

El Gallo Deposit  
PEA

FIGURE 9-1

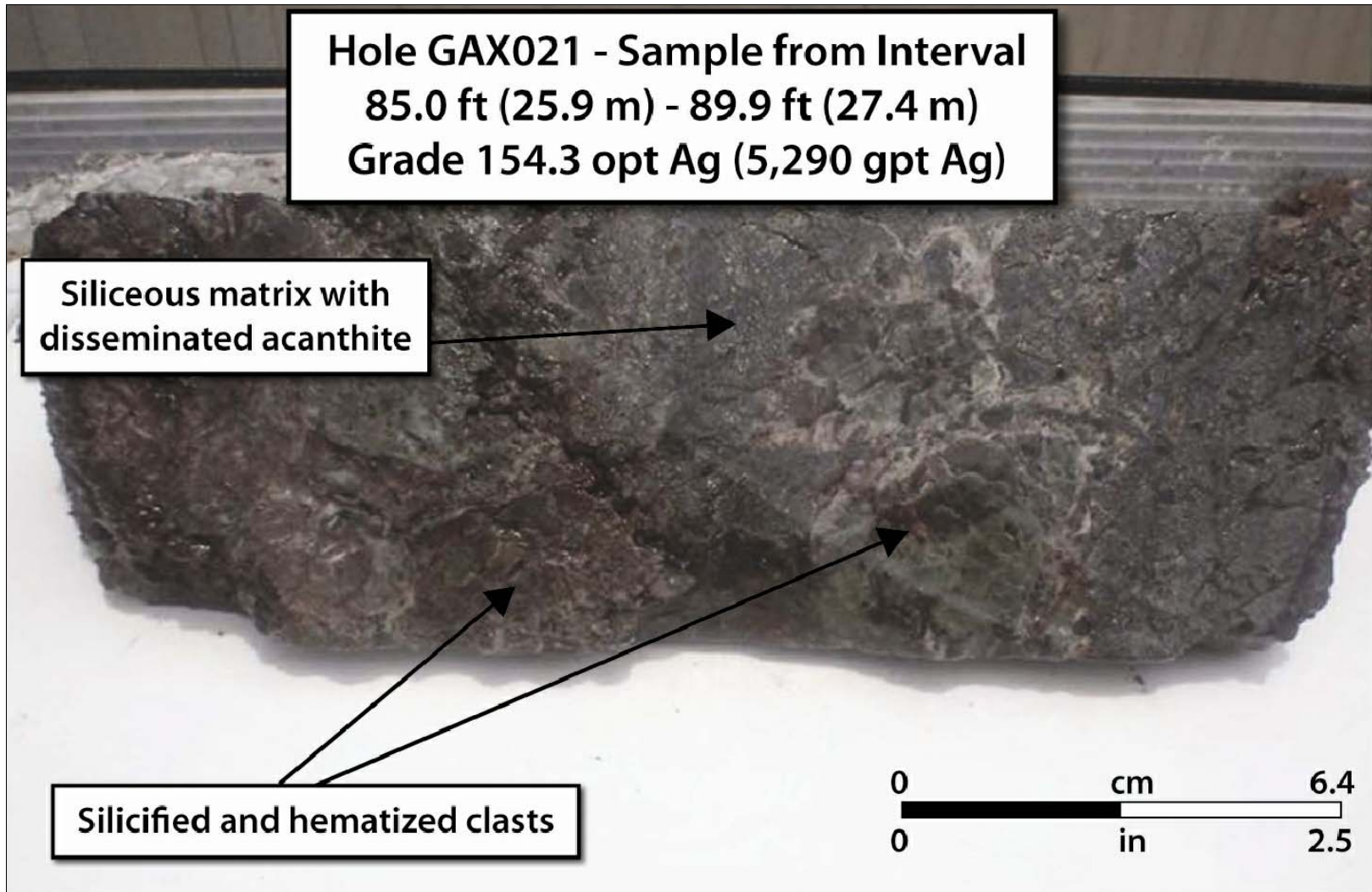
El Gallo High Grade Core Sample  
April 2009 - Multi-Stage Breccia with Siliceous Matrix

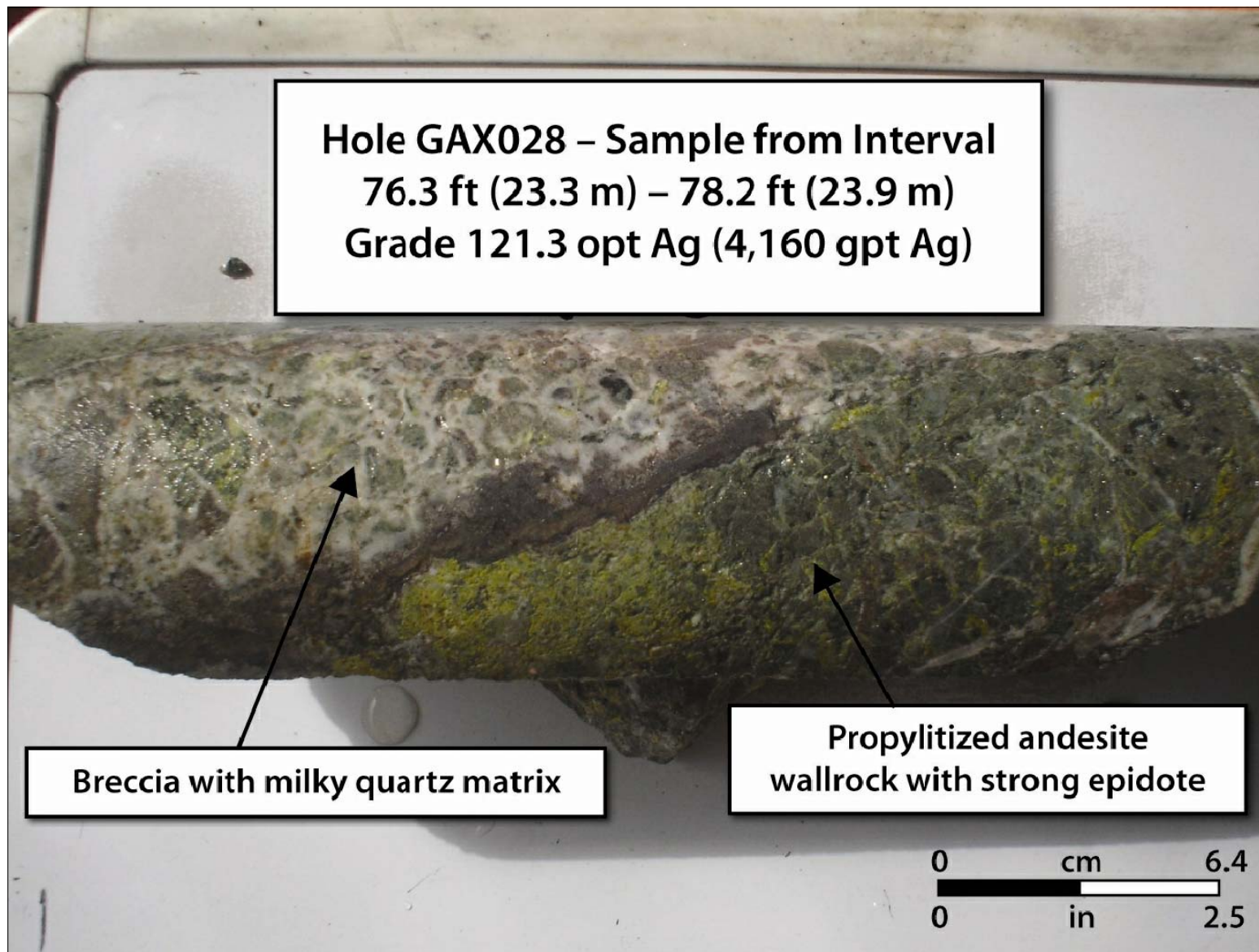
Date of Issue

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Drawing Name

Fig.9-1.dwg





Prepared by **pinc**cock, allen & holt  
165 S. Union Boulevard, Suite 950  
Lakewood, Colorado 80228  
Phone (303) 986-6950

Project No. DE-00177

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FIGURE 9-3

El Gallo High Grade Core Sample

July 2009 - Quartz Breccia Vein Cutting Andesite with Strong Propylitic Alteration

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Drawing Name

Fig.9-3.dwg

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

Mineralization among the various deposits of the Magistral area is generally very similar, with the individual structural zones consisting of stockwork, breccia, and locally quartz vein mineralization occurring within propylitically altered volcanic rocks. The main alteration assemblage consists of quartz-chlorite/ biotite-hematite, and minor sulphides (mostly pyrite). Quartz with minor calcite open-space filling of stockworks and breccias is ubiquitous. Typical mineralization consists of banded and brecciated quartz vein material with well-formed colliform bands of prismatic quartz, alternating with dark green chlorite and earthy red hematite bands. Wallrock in proximity to the mineralized structure is pervasively altered to red hematite-specularite-chlorite/biotite, with a sequence of veining including finely banded quartz-chlorite-hematite veins which are locally cut by early hematite-rich veins. Potassium feldspar alteration has been observed in thin-section. Silicification of the host rock volcanics is variable and limited to the structural zones. The presence of biotite and K-feldspar, the lack of clay minerals, and the overprint of biotite by chlorite indicate that the mineralization formed relatively deep in the epithermal system.

Petrographic study and field evidence indicate that gold typically occurs as micron-sized particles of native gold and electrum in quartz. Petrographic evidence indicates that the gold is not complexed with or in sulfide minerals. Pyrite averages less than one percent of the vein volume. Chalcopyrite is present in trace amounts, but locally has been found in excess of one percent. Copper grades reach several percent locally. Silver/gold ratios are highly variable and range from 130:1 in mineral petrographic analysis, while in blast hole sampling it reaches a ratio of 4:1. It appears that most silver minerals are associated with the sulfide-rich veins. The upper portions of one of the mineralized structures in the Samaniego zone have a distinctly different mineralized character, at least locally, consisting of a quartz-cemented breccia with up to several percent chalcopyrite, sphalerite, and galena.

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

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

San Rafael: Gold mineralization occurs on an east-west main structure dipping 45 degrees to the south, with several other minor zones developed. This mineralization has largely been mined out. The main zone tended to occur at or near a contact between underlying andesite flows and tuffs (footwall volcanics) and overlying andesitic agglomerate (hanging-wall volcanics) that dip at a moderate angle to the southwest.

The San Rafael deposit was about 400 m along strike and gradually weakens to the east beyond the intersection with the southeast-striking La Vaca zone. The San Rafael zone extended approximately 250 m down dip where, below an elevation of 325 m, it was no longer significantly mineralized. The mined out portion of the deposit ranged from a few meters to several tens of meters in thickness. The San Rafael deposit was best developed at and to the west of the structural intersection with the La Vaca zone.

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

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

### **9.3 Palmarito**

Mineralization at Palmarito occurs along or near the rhyolite intrusive/volcanic country rock contact on the north-eastern end of the intrusive. There, the structures forming the intrusive contact strike roughly east-west and north-south, forming a horseshoe-shaped zone which wraps around the margin of the intrusive.

Dip of the zone is variable (35° to 60°), dipping westerly along the N-S trending contact and northerly along the E-W contact. At depth, the mineralized zone appears to occur away from the intrusive contact such that volcanic country rocks occur in both the hanging wall and footwall. The strongest mineralization in the main Palmarito ore body occurs along a northeast-trending zone which appears to represent the intersection of the two contact structures. (This geometry could also represent a possible fold in the volcanic package with a gently (35°) NE-plunging axis). It is along this northeast trend that the highest silver grades are developed.

The width of the mineralized breccia zone generally varies from 7 to 15 m. Mineralization displays good continuity over a total strike of 785 m. Down dip extensional drilling has encountered mineralization 600 m northeast of the outcropping ore zone. Generally, mineralization is associated with strong silicification in the form of breccia cement, stockwork veining and silica flooding. Other wallrock alteration consists of local chloritization and fine-grained disseminated specular hematite. Silver mineralization is not restricted to the breccia zone but can also occur in silicified and stockwork-veined wallrock above and below the breccia. The breccias consist of clast-supported, coarse angular fragments of rhyolite and/or fine- to medium-grained andesite-dacite wallrock. Clasts are cemented by fine-grained, white silica. Mineralization is primarily hosted in the breccia and volcanic wall rocks; mineralization within the rhyolite intrusive is minor.

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

Silver grades within the mineralized zone range from about 10 gpt to 1,025 gpt. The mineralization is silver-dominant, with gold grades usually less than 0.5 gpt and rarely exceeding 1 gpt. In the mineralized zone silver-gold ratios are generally >100 and are commonly several thousand. Silver mineralogy is predominantly argentite (Ag<sub>2</sub>S) and lesser native silver. Chlorargyrite (AgCl) occurs locally in minor amounts. Other sulfides present include pyrite, sphalerite, galena and chalcopyrite. Total sulfide content is generally less than 1 percent. Locally, however, lead and zinc concentrations are in excess of 1 percent, particularly in areas of higher silver grade.

## 10.0 EXPLORATION

Work on the project areas throughout the various phases of exploration has consisted of geologic mapping, rock chip and soil sampling, rotary, reverse circulation and core drilling. A regional stream-sediment sampling program has also been conducted. Two geophysical surveys have been undertaken: An induced-polarization (IP) survey was conducted by Nevada Pacific Gold to cover the Deep La Prieta target and northwest extension of the Samaniego deposit and a ground-based magnetic survey covering the El Gallo deposit area was undertaken by US Gold. Some satellite image interpretation (ASTER, LandSat) was done by US Gold in region. US Gold has been the sole operator of El Gallo and has conducted all phases of exploration. Exploration drilling at Magistral has been conducted by five companies: 1) Mogul Mining, 2) Santa Cruz Gold, 3) Queenstake Resources, 4) Nevada Pacific Gold and 5) US Gold. Exploration drilling at Palmarito was conducted by three companies: 1) Lluvia del Oro, 2) Nevada Pacific Gold and 3) US Gold.

### 10.1 *Geologic Mapping*

El Gallo: Outcrop geologic mapping was undertaken at a scale of 1:1,000 and delineated lithology, structure and alteration. Current mapping covers an area of roughly 1.5 x 2.5 km<sup>2</sup> (see Figure 10-1).

Magistral: Geologic mapping was undertaken by previous companies. The various lithologic units were delineated on surface. In addition to lithologic units, quartz-bearing structural zones were also mapped. These include the mineralized zones of the known resource as well as numerous other zones peripheral to the main deposits (see Figure 10-2).

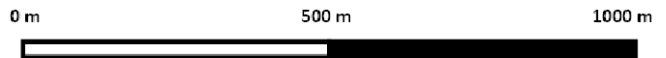
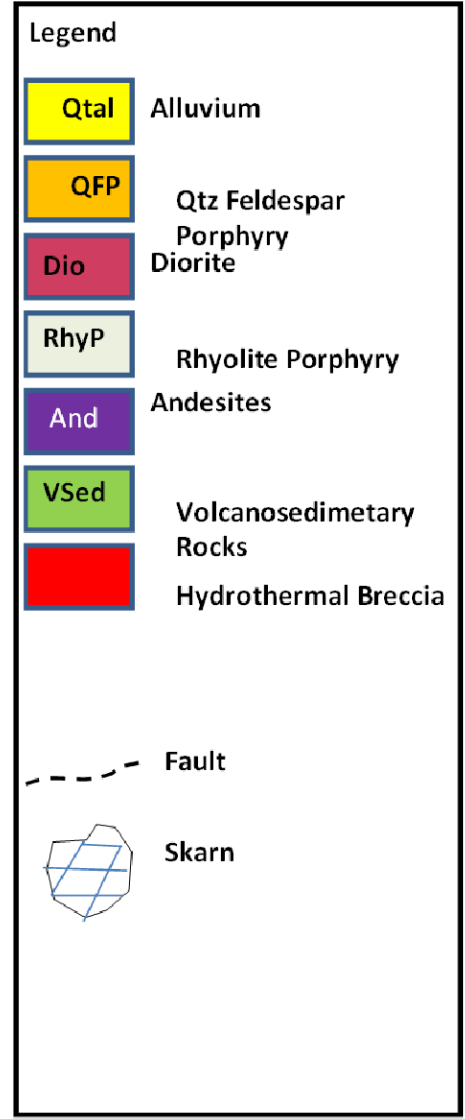
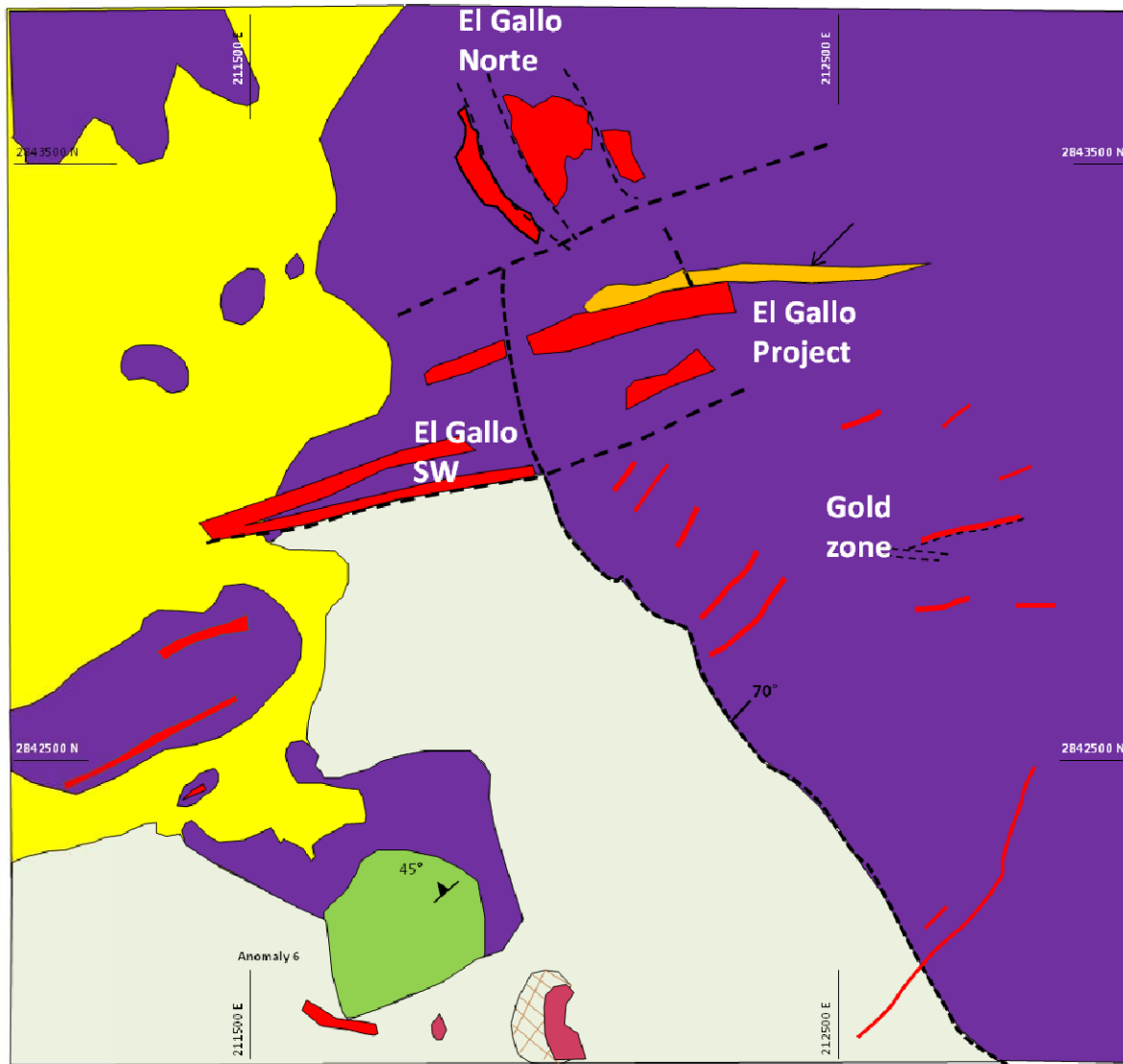
Palmarito: Geologic mapping of the area of the Palmarito deposit was undertaken in 1976 by Minerales Prisma S.A. de C.V and again in 1994 to 1995 by Lluvia del Oro. The mapping was of a general nature, breaking out andesitic rocks and the rhyolite intrusive (see Figure 10-3).

### 10.2 *Geochemistry*

El Gallo: A total of 5,595 rock and 12,487 soil samples have been collected over the immediate El Gallo area by US Gold. The majority of samples were analyzed only for gold, silver and copper by US Gold's Magistral assay lab using cyanide leach followed by atomic absorption assay method. Select samples were sent to ALS Chemex laboratories (Chemex) in Hermosillo, Mexico for analysis of gold plus a 33-element suit. Silver values in rock chip samples range from less than detection to 2,600 ppm. Gold values range from less than detection to 281 ppm. Anomalies outside the area of existing mineral resource are present. The goal of these geochemical analyses was to delineate prospective areas as well as evaluate possible zoning of major and trace elements of the mineralization at El Gallo. None of the rock or soil samples have been used in the resource included within this Technical Report. Figures 10-4 and 10-5 are maps of the silver geochemistry from rock and soil samples, respectively.

Magistral: A total of 3,706 rock samples have been collected over the property by US Gold and previous owners. Most samples were analyzed only for gold and silver. Gold values range from less than detection to 72.4 ppm. The highest silver value is 422 ppm. Anomalies outside the area of existing mineral resource envelopes are present. Surface rock samples are shown graphically in Figure 10-6.

Palmarito: A total of 903 rock samples have been collected over the property by US Gold and previous owners. Most samples were analyzed only for gold and silver. Silver values range from less than detection to 2,986 ppm. The high gold value is 8.5 ppm. Anomalies outside the area of existing mineral resource envelopes are present. Surface rock samples are shown graphically in Figure 10-7.



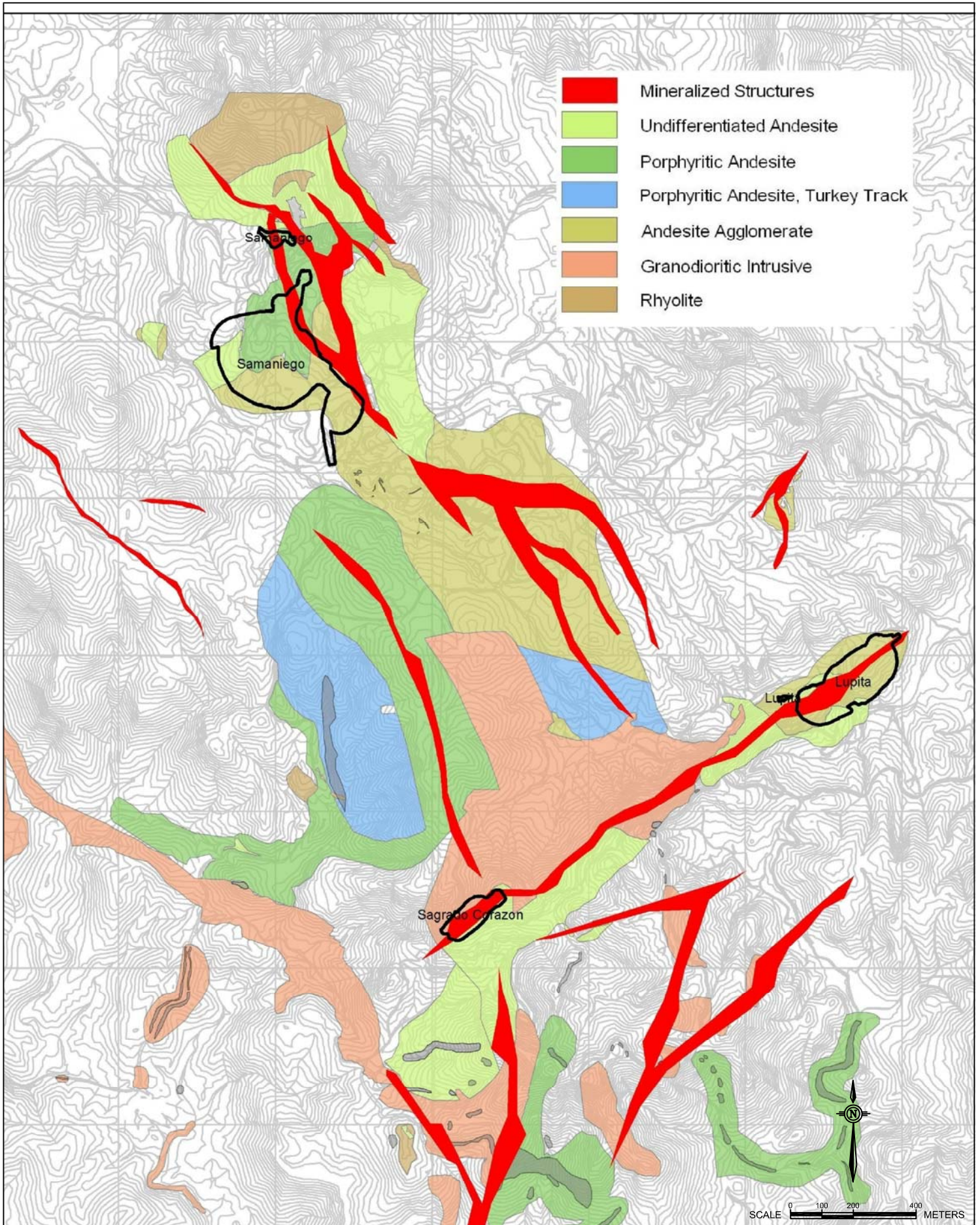
Prepared by  
**pincock, allen & holt**  
 165 S. Union Boulevard, Suite 950  
 Lakewood, Colorado 80228  
 Phone (303) 986-6950

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**US Gold**  
 Project Name  
**El Gallo District  
 PEA**

**FIGURE 10-1**  
**El Gallo Deposit Geologic Map**

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 Drawing Name  
 Fig.10-1.dwg

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Prepared by  
**pincock, allen & holt**  
 165 S. Union Boulevard, Suite 950  
 Lakewood, Colorado 80228  
 Phone (303) 986-6950

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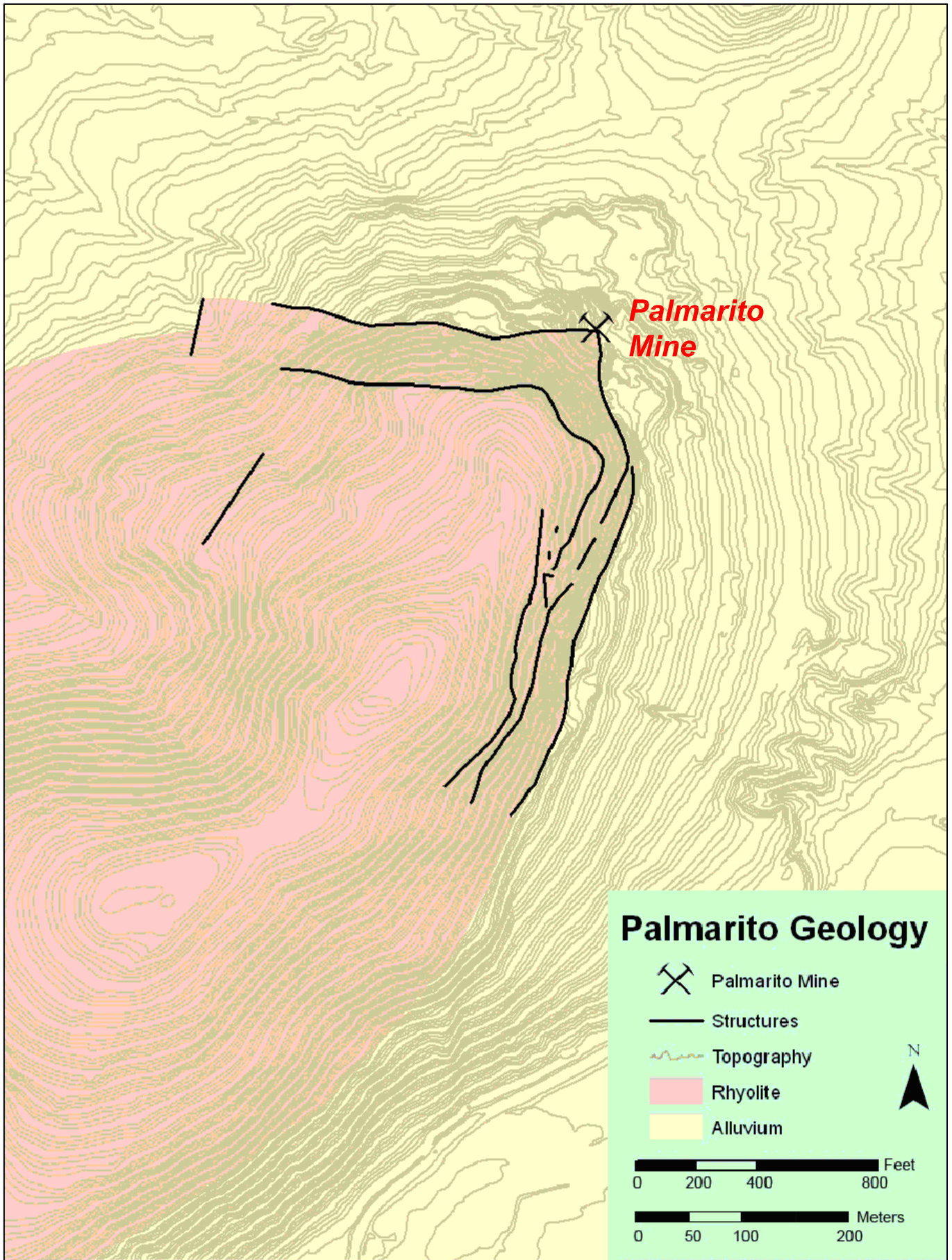
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**FIGURE 10-2**  
 Magistral Geologic Map

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Prepared by  
**pinnacle, allen & holt**  
 165 S. Union Boulevard, Suite 950  
 Lakewood, Colorado 80228  
 Phone (303) 986-6950

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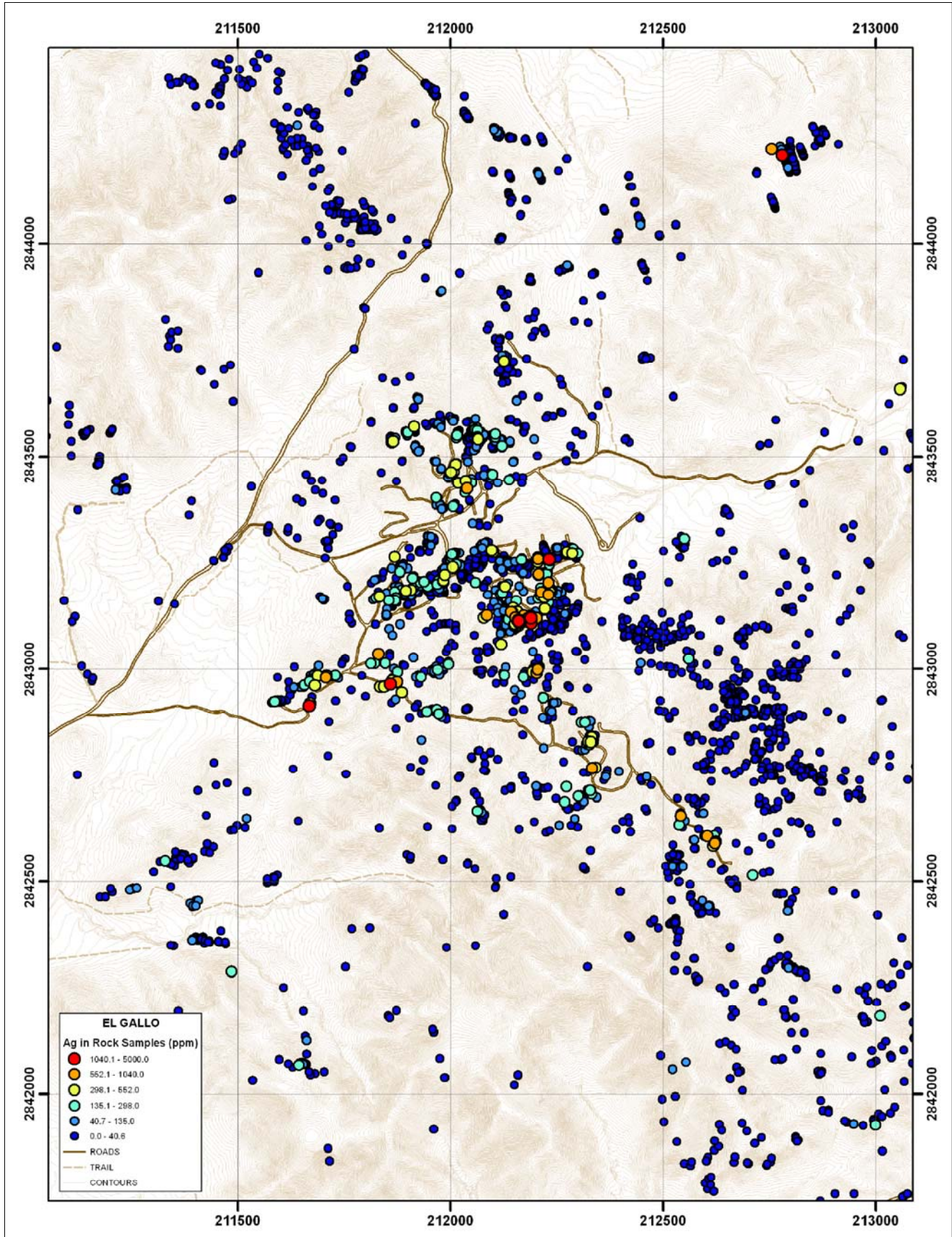
FIGURE 10-3  
 Palmarito Geologic Map


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Prepared by  

**pincok, allen & holt**  
 165 S. Union Boulevard, Suite 950  
 Lakewood, Colorado 80228  
 Phone (303) 986-6950

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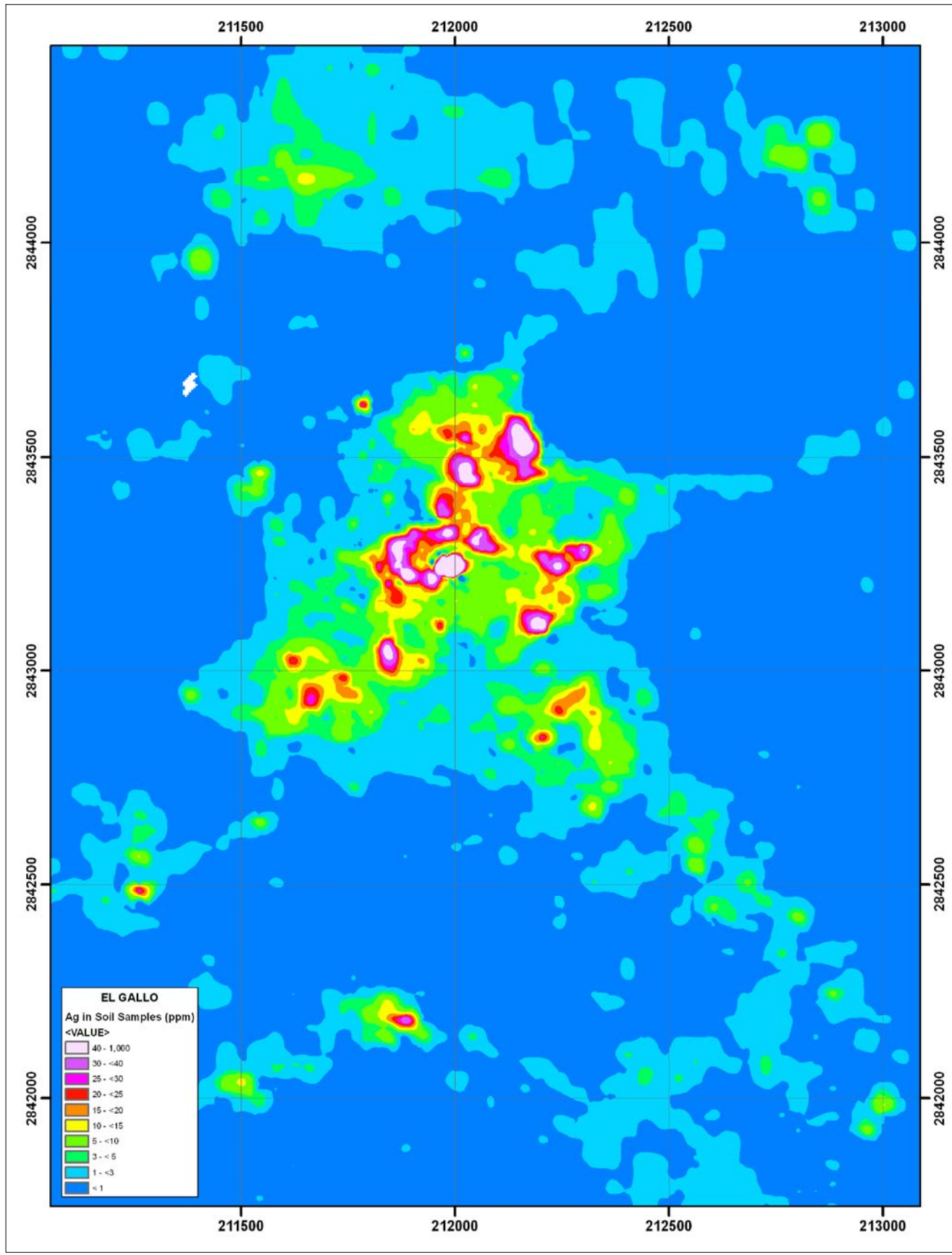
**FIGURE 10-4**  
**Silver Rock Sample Map**


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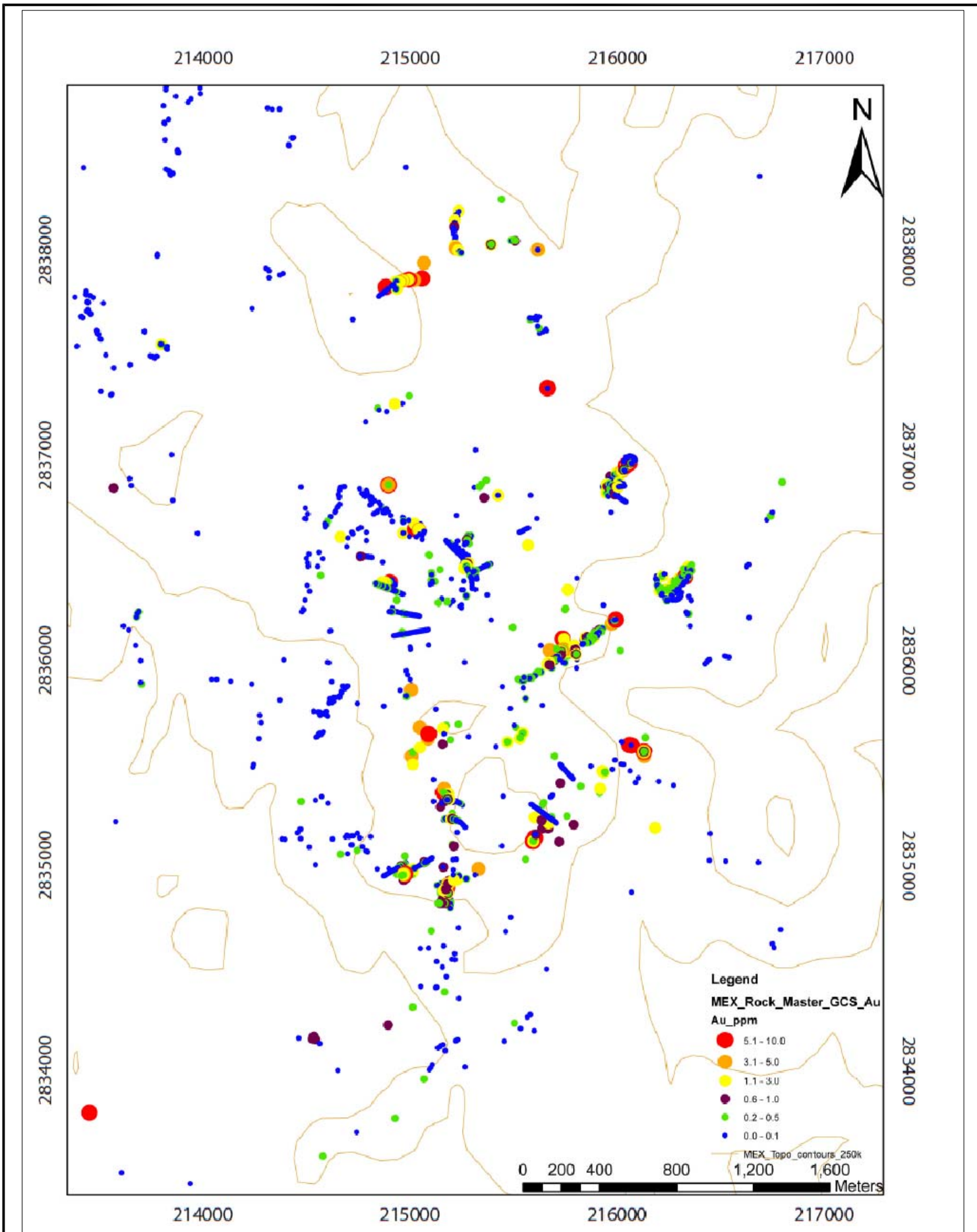
Prepared by  

**pincok, allen & holt**  
 165 S. Union Boulevard, Suite 950  
 Lakewood, Colorado 80228  
 Phone (303) 986-6950

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**FIGURE 10-5**  
 El Gallo Deposit Silver Soil Sample Map

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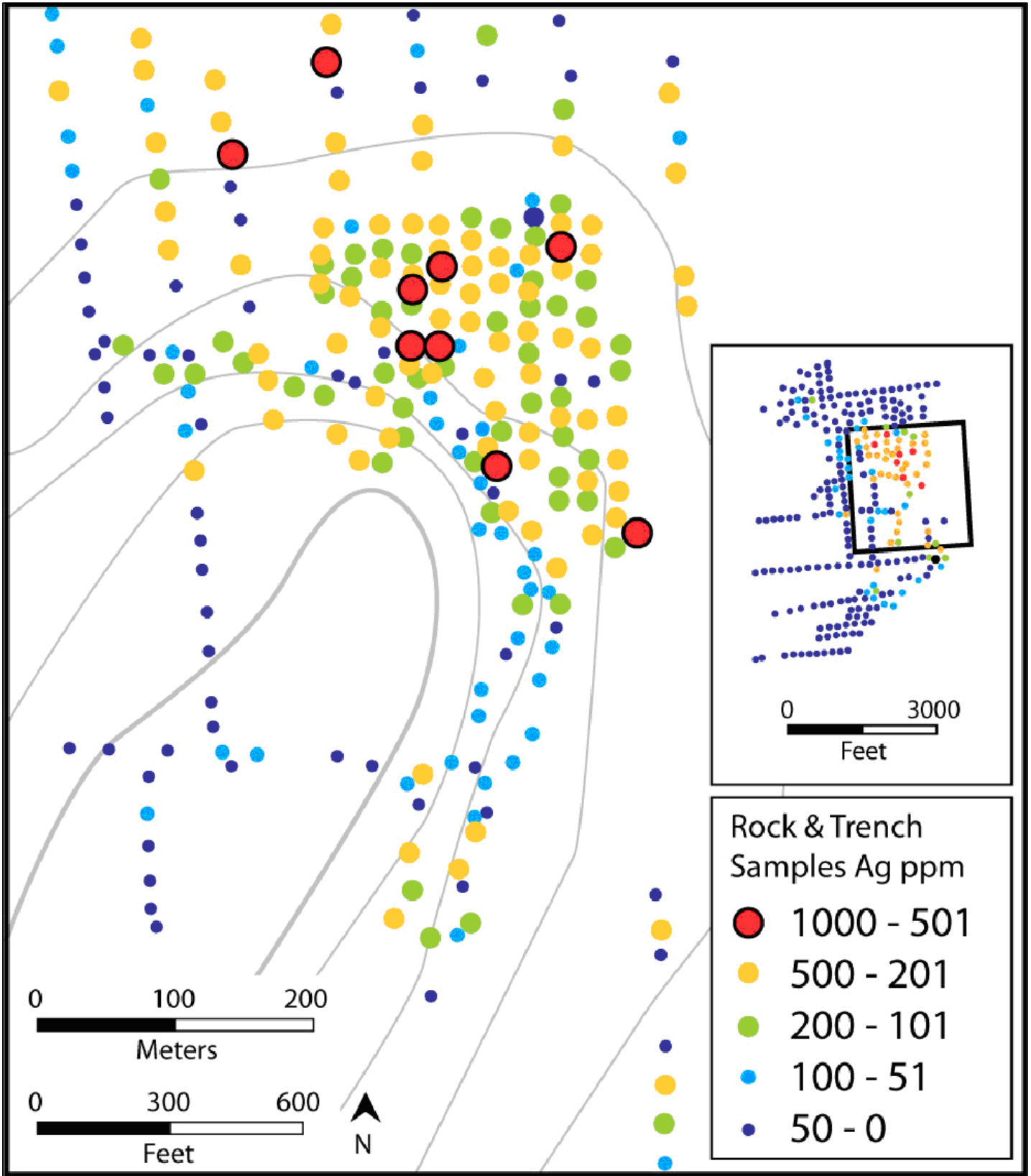
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**pincok, allen & holt**  
 165 S. Union Boulevard, Suite 950  
 Lakewood, Colorado 80228  
 Phone (303) 986-6950  
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**FIGURE 10-6**  
**Magistral Gold Rock Sample Map**

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## 11.0 DRILLING

Under US Gold's supervision, core is removed from the core barrel by the drillers and placed in plastic core boxes. Individual drill runs are identified with small wooden blocks, where the depth (in meters) and hole number are recorded. When RC drilling has been used, chip samples are collected for each interval, rinsed and placed into chip trays. Individual samples are identified by marker, where the depth (in meters) and hole numbers are recorded.

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

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

- Quick review of the core.
- RQD data measured and recorded.
- Geological logging: this is completed by geologists on paper logging forms in accordance with company protocol, which includes header information, lithology description and litho code, graphic log, coded mineralization and alteration. Based on mineralization and lithology, the geologist decides where the blocks delimiting sample intervals should be placed. Core logging data are entered digitally into the companies' database.
- Core photography with box interval and core hole number written on a white board. This is done after the core is logged and sample blocks inserted.
- Core cutting and sample collection is discussed in Section 12.

RC drilling was carried out by contractors under the supervision of a US Gold/Minera Pangea geologist. Samples were collected at the drill rig using a cyclone and rotating wet splitter. Field duplicate sample splits were also obtained. All samples were collected by Minera Pangea personnel on 1.5 m intervals. Samples were collected in tyvex bags and labelled with sample footage and hole number. Logging of the chip trays was conducted by US Gold/Minera Pangea geologists at the Magistral mine site.

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

## 11.1 *El Gallo*

US Gold (2009 to 2010): Core drill holes are the sole source of geological and grade data for the El Gallo portion of the resource estimate. The first core drilling on the property commenced in January 2009, by US Gold. Core drilling was continuous until June 2009 when the company ceased drilling. During this time 43 core holes were completed for a total of 7,073 m. Core drilling resumed in January 2010 and has been continuous since that time. As of the cutoff date of October 1, 2010, a combined total of 41,396 m of core drilling has been completed and included in this Technical Report. Table 11-1 summarizes the El Gallo drill hole database as of October 2010. Figure 11-1 illustrates the location of these holes on the property.

**TABLE 11-1**  
**US Gold Corporation**  
**Preliminary Economic Assessment, El Gallo District**  
**Exploration Database Summary - Through October 1, 2010**

Items	Value
Number of Core Drill Holes	249
Total Length (meters)	41,396
Average Length (meters)	165.58
Meters Sampled & Assayed (by Chemex)	36,161
Number of Drill Hole Sample Assayed (by Chemex)	27,486
Holes With Down-Hole Surveys	246

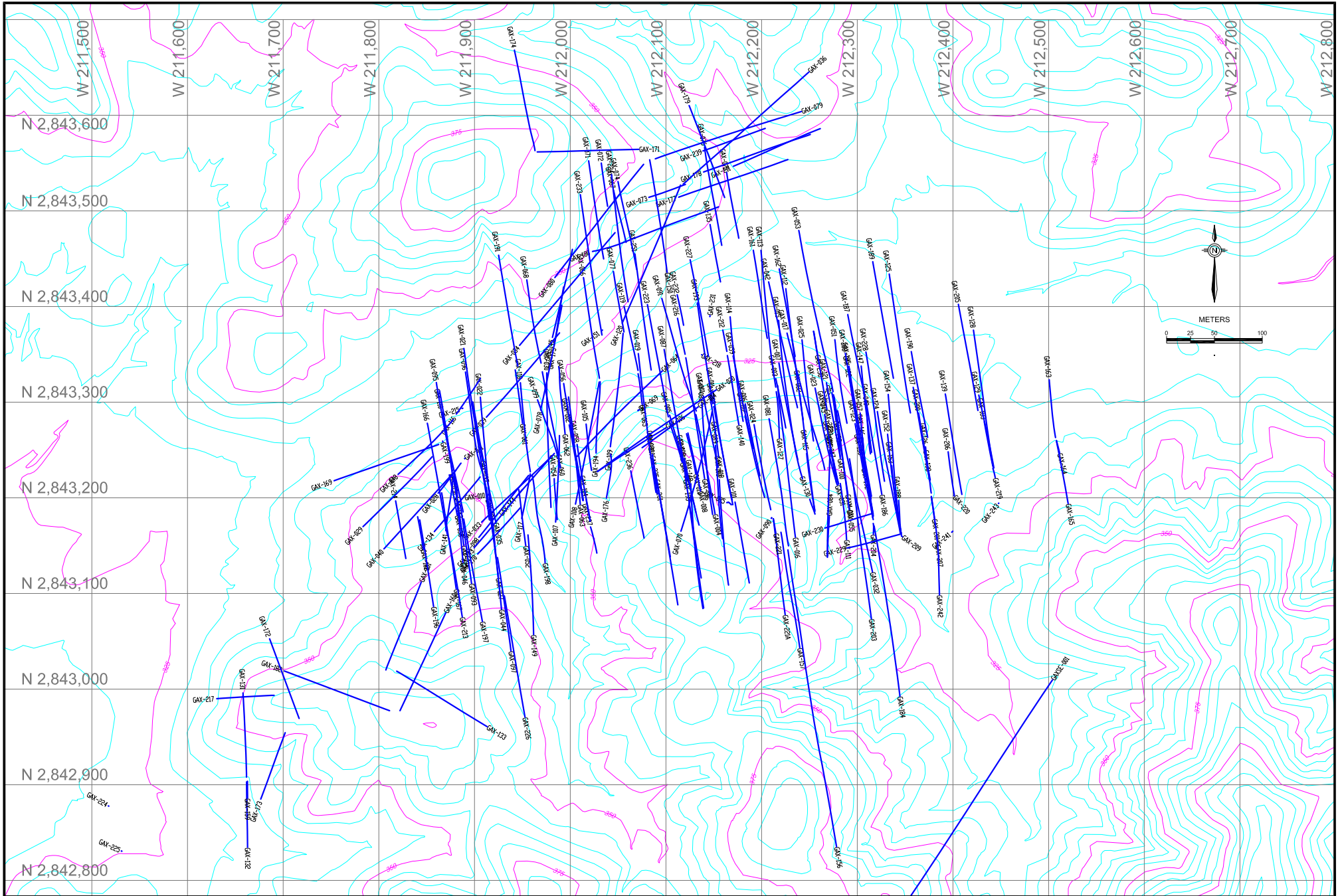
\*No RC holes have been drilled at El Gallo

All of the drill holes listed in Table 11-2 have been included for the resource estimate that is the subject of this Technical Report. US Gold has been the sole operator of the El Gallo since drilling started. Core drilling has been conducted in the Main Zone, North Zone and Southwest Zone. Core drilling has been completed by Layne de Mexico, S.A. de C.V., a subsidiary of Layne Christensen Company, based in Hermosillo, Sonora, Mexico, Energold de Mexico, S.A. de C.V., a subsidiary of Energold Drilling Corp, based in Mexico City, Mexico or HD Drilling S.A. de RL de C.V. based in Durango, Mexico.

**TABLE 11-2**  
**US Gold Corporation**  
**Preliminary Economic Assessment, El Gallo District**  
**El Gallo Drill Hole Database Sample Statistics**

Numbers of Samples	27,486
Average Interval Widths (meters)	1.32
Average Silver Grade (gpt)*	28.28
Minimum Silver Grade (gpt)	0.01
Maximum Silver Grade (gpt)	18,244.50
Average Gold Grade (gpt)*	0.02
Minimum Gold Grade (gpt)	0.01
Maximum Gold Grade (gpt)	64.95

\*Weighted by sample length



Prepared by  
 **pincok, allen & holt**  
 165 S. Union Boulevard, Suite 950  
 Lakewood, Colorado 80228  
 Phone (303) 986-6950

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**FIGURE 11-1**  
 El Gallo Deposit Drill Hole Location Map

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All core drilling was completed using HQ and NQ core size. Core logging, recovery/RQD (rock quality designation) measurement and core splitting were done on site at Magistral.

A total of 205 core holes were drilled in the Main Zone totaling 33,719 m. Of these, 190 were drilled at an incline in order to better transect the mineralized structures. The remaining holes in the Main Zone were drilled vertically. Due to the faulting, variation in orientation of mineral zones, and the disseminated nature of the mineralization, true widths should not be assumed.

A total of 42 core holes were drilled in the North Zone and Southwest Zone totaling 6,813 m. Three of the holes drilled in these two zones were drilled vertically, the rest were all drilled at an incline. For reasons outlined in the preceding paragraph true width of the mineralization should not be assumed. Plastic tubes were inserted into the drill hole collars and then cemented, monumented and surveyed. A total of 246 of the 249 holes were surveyed downhole. Figure 11-2 shows an example for a core hole that has been monumented at El Gallo.

## 11.2 *Magistral*

US Gold conducted an exploration drilling program in 2008, 2009 and 2010. This was carried out primarily around the known resources areas of the project. All other exploration drilling was conducted by previous operators. Table 11-3 summarizes the Magistral drill hole database as of October 2010. Figures 11-3 and 11-4 illustrate the location of these holes on the property.


**TABLE 11-3**  
**US Gold Corporation**  
**Preliminary Economic Assessment, El Gallo District**  
**Exploration Drill Hole Summary - Through October 201**

<b>Deposit</b>	<b>No. of Core Holes</b>	<b>No. of RC Holes</b>	<b>No. of Blast Holes</b>	<b>Total No. of Holes</b>	<b>Total Meters</b>
San Rafael	7	294	704	1,005	43,172.77
Samaniego Hill	55	339	629	1,023	66,696.89
Sagrado Corazon	5	64	-	69	5,913.75
Lupita	2	95	-	97	8,409.13
Historic Tailings			69	69	516.27
<b>Total</b>	<b>69</b>	<b>792</b>	<b>1,402</b>	<b>2,263</b>	<b>124,708.81</b>

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

RC drilling consisted of drilling 140 millimeter diameter holes, with samples collected at 1.5 m intervals. Exploration drilling was conducted using air to circulate cuttings out of the hole, until damp or wet conditions required water circulation. Limited groundwater measurements (17 in 1999) show that the



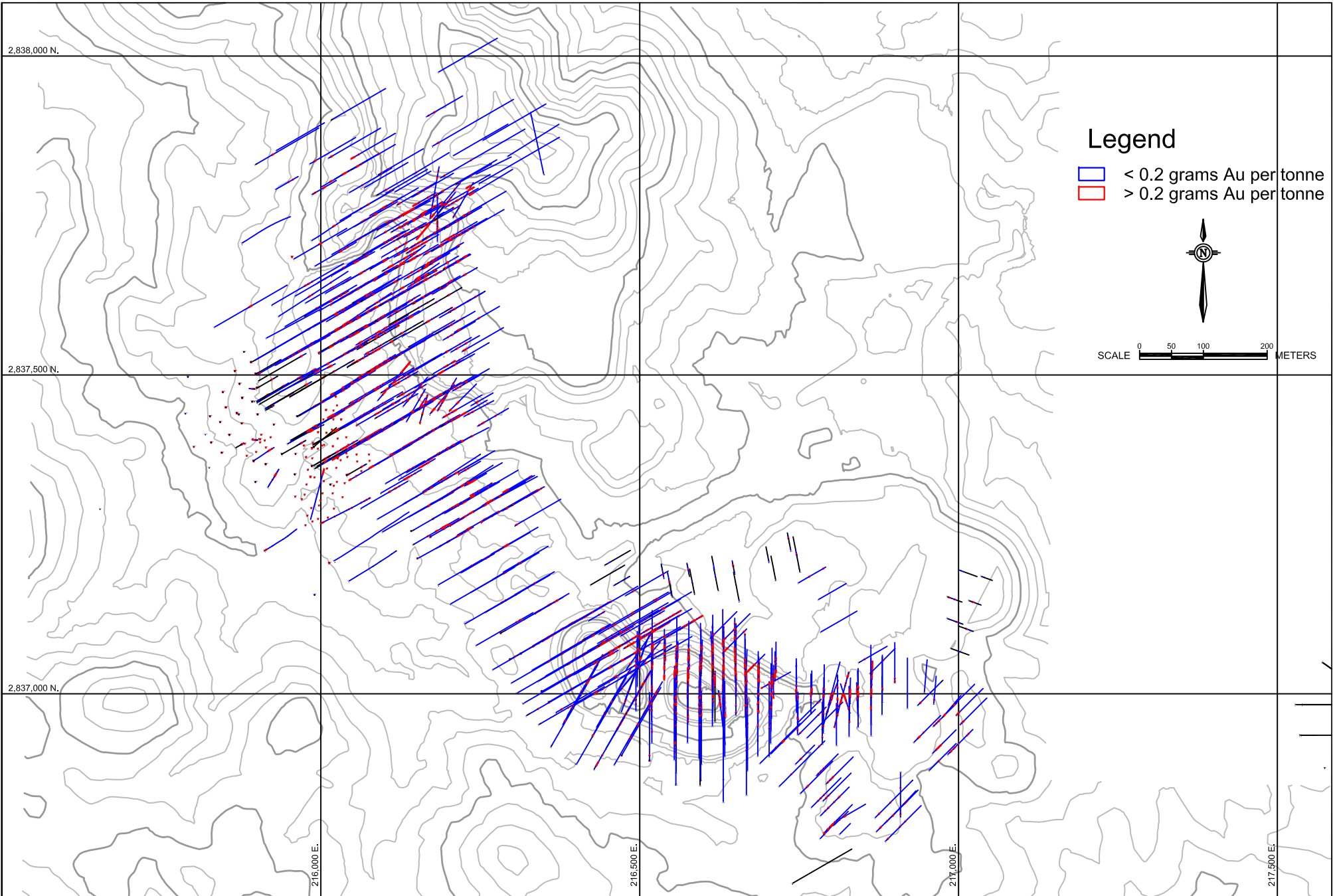
Prepared by  
 **pincock, allen & holt**  
165 S. Union Boulevard, Suite 950  
Lakewood, Colorado 80228  
Phone (303) 986-6950


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**FIGURE 11-2**  
**Drill Hole Collar**

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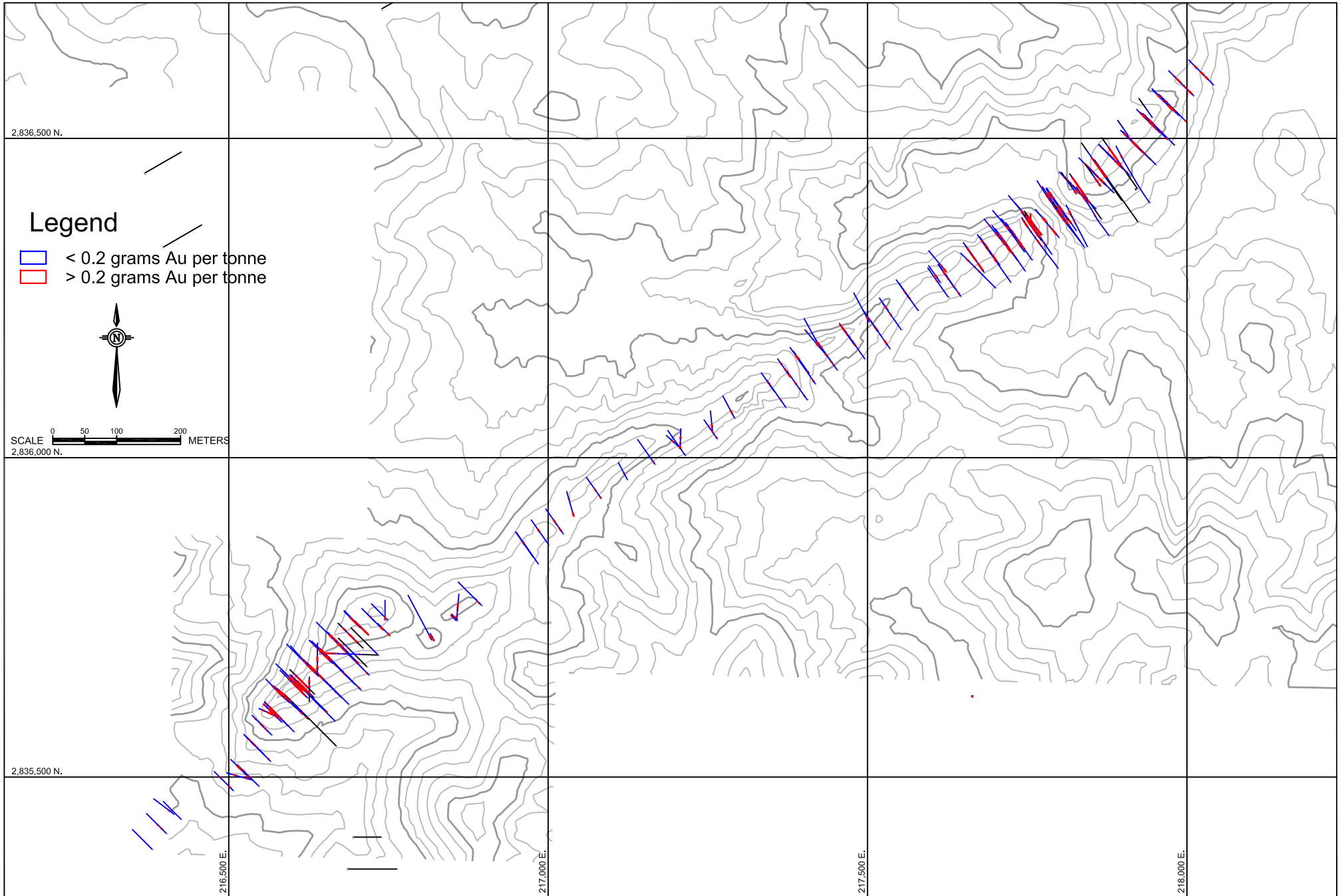



Prepared by  
 **pincocock, allen & holt**  
 165 S. Union Boulevard, Suite 950  
 Lakewood, Colorado 80228  
 Phone (303) 986-6950

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**FIGURE 11-3**  
**Magistral Drill Hole Location Map**  
**Samaniego Hill - San Rafael**

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 **pincock, allen & holt**  
 165 S. Union Boulevard, Suite 950  
 Lakewood, Colorado 80228  
 Phone (303) 986-6950

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**FIGURE 11-4**  
 Magistral Drill Hole Location Map  
 Lupita, Central and Sagrado Corazon

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groundwater table tends to parallel topography at a depth of 50 to 60 m on the hillsides and can be very close to the surface in the valleys.

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

Fifty-two core and 622 RC holes were drilled in the Samaniego and San Rafael areas totaling 82,900 m. These holes were drilled both vertically and inclined to intercept the mineralized structures approximately perpendicular to their local dip. As a result, the mineralized intercepts of these holes closely approximate true thicknesses of the mineralization.

One core and 138 RC holes were drilled along the Lupita-Central-Sagrado Corazón trend totaling 10,800 m. These holes were inclined to intercept the nearly vertical structures. Consequently, the mineralized intercepts of these holes do not approximate the true thicknesses of the mineralization.

Sixty-nine RC holes were drilled in two historical tailings piles near Samaniego totaling 515 m. All holes were drilled vertically.

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

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

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

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

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

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

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

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

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

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

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

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

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

Collars for the US Gold holes were collared with plastic tubing, marked with a metal plate and surveyed. The azimuth and dip of the collar orientations were recorded. Twenty-two of the forty-two holes were surveyed downhole.

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

### **11.3      *Palmarito***

Most of the drilling at Palmarito was done by RC, with a lesser amount of core drilling. Approximately 60 percent of these holes were drilled at an angle normal to the dipping ore body. The remaining 40 percent were drilled vertically. Drill hole collar locations were surveyed. Drill collars were monumented and most can be found in the field.

Lluvia de Oro (1994 to 1995): Seventy-four reverse circulation holes were completed by Lluvia de Oro. No additional detailed information is available on the drilling methodology. No holes were surveyed downhole.

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

US Gold (2008 to 2009): Both RC and core drilling was completed by Major de Mexico S.A. de C.V. Additional core drilling was completed by Layne de Mexico, S.A. de C.V. Hole diameter for the RC drilling was 14.6 cm. Core holes were drilled using HQ core, with several holes reduced to NQ where drilling conditions necessitated. Collars for the US Gold holes were collared with plastic tubing, marked with a metal plate and surveyed. Twenty-one of the fifty-three holes were surveyed downhole. Figure 11-5 illustrates the location for all of the Palmarito drill holes.

#### **11.4 Down Hole Surveys**

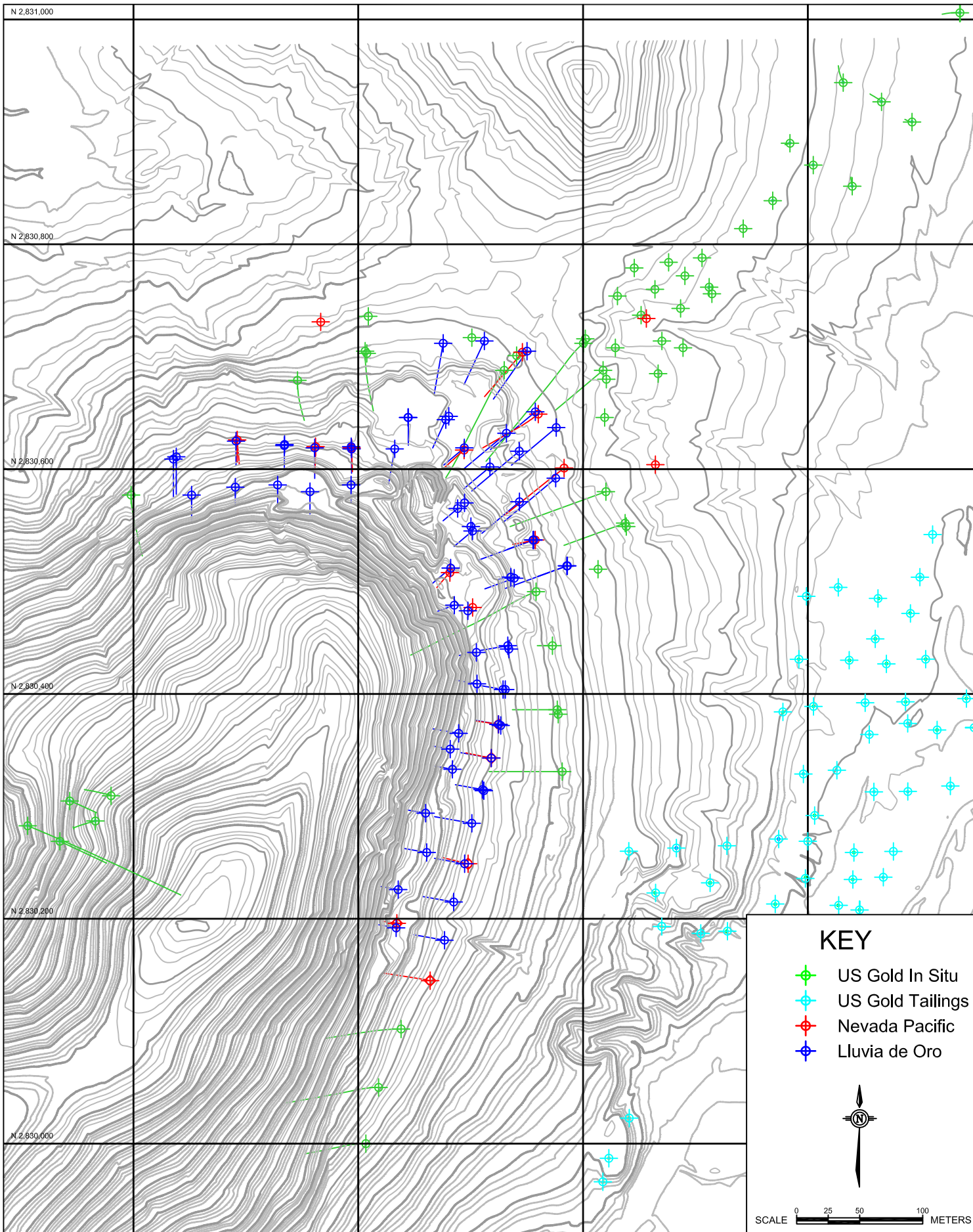
US Gold drilling contractors undertake downhole surveying of holes upon their completion. After reaching final drill depth, a Flexit tool is inserted downhole. Deviation measurements are taken at the hole bottom and nominally every 50 m up the hole to a depth about 6 m below surface casing. The Flexit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


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

#### **11.5 Core Recovery and RQD**

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

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



Prepared by  
 **pincock, allen & holt**  
 165 S. Union Boulevard, Suite 950  
 Lakewood, Colorado 80228  
 Phone (303) 986-6950

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**FIGURE 11-5**  
**Palmarito Drill Hole Location Map**

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 Fig.11-5.dwg

Recovery and RQD measurements are recorded in the company's database. The methodology used for measuring recovery was reviewed by PAH and is standard industry practice.

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

As is generally common, there is a tendency for slightly lower core recoveries in the broken rock in the weathered zone at the tops of holes. In some cases at El Gallo this constitutes mineralized material because many holes were collared on surface mineralization. For the most part, however, mineralized zones at El Gallo exhibit good core recovery. This issue is generally not the case for Palmarito and Magistral. At Palmarito, some older core holes were collared in at- or near-surface mineralization but recovery data is not available.

A strong fault zone at depth in the northeast, down dip extension of the Palmarito deposit was encountered in a few core holes. In this zone core recoveries were low and, in two cases, the holes had to be abandoned.

## 12.0 SAMPLING METHOD AND APPROACH

### 12.1 *Introduction*

Sampling programs on the three areas has included stream sediment, soil, rock chip, rotary and core samples. All of the sampling conducted by US Gold was carried out by company personnel or contractors. Core drill samples form the basis of the resource estimate at El Gallo. Core and RC samples form the basis of the resource estimate at Magistral and Palmarito. At Palmarito, a third sample method was used to estimate the historic waste dumps and tailings as detailed below.

### 12.2 *El Gallo*

US Gold (2009 to 2010): Sampling for resource estimation purposes at El Gallo has been conducted solely through drill core obtained by US Gold between January 2009 and October 2010. The current core cutting protocol is as follows:

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

### 12.3 *Magistral*

Santa Cruz Gold and Queenstake Resources (1994 to 2002): Sampling methods for RC holes varied by drilling conditions (wet or dry). Table 12-1 shows a summary of the drilling conditions encountered through the 1999 drilling program. Dry samples were collected from the cyclone into collection buckets

and then split using a Jones riffle splitter. Wet samples were collected from a rotary wet splitter and then further split with a Jones riffle splitter. One-quarter sample splits (10 to 15 kg) were collected for both an analytical sample and a field duplicate. The lithology, alteration, and mineralization were recorded on site for each sample.

**TABLE 12-1**  
**US Gold Corporation**  
**Preliminary Economic Assessment, El Gallo District**  
**Magistral Drill Hole Water Intercept Summary**

Deposit	Dry Holes	Wet Holes	Depth to Start Wet Drilling (Avg. Depth)
	Percent Dry Drilling	Percent Wet Drilling	
San Rafael	41%	59%	2-128 (50)
Samaniego Hill	39%	61%	9-156 (50)
Sagrado Corazon - Lupita	91%	9%	26-80

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

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

US Gold (2008 to 2010): RC drill holes were sampled and logged on 1.5 m intervals. Samples were collected using a cyclone and rotating wet splitter. Samples were split at the rig to obtain one assay sample and one field duplicate. Procedures for core samples are the same as described for El Gallo under section 12.2.

## 12.4 *Palmarito*

Lluvia de Oro (1994 to 1995): Drilling was completed using a RC drill. Drill holes were sampled and logged on 1.5 m intervals. Drill cuttings were collected in a cyclone. At the end of each sample run the cyclone was discharged and cleaned. The samples were generally split twice, with half the first split being discarded and the second split halved to form an assay sample and a field duplicate.

Nevada Pacific Gold (2006 to 2007): Drilling was completed using a core drill and NQ core. Drill hole sampling attempted to correlate the sample intervals completed by Lluvia de Oro. In some zones internal intervals were assigned based on the geological characteristics of the rock. The core sample was halved with a rock saw with one half retained and the other bagged and sealed to form an assay sample.

US Gold (2008 to 2010): Procedures for core and RC samples are similar to those described for El Gallo under section 12.2 and Magistral 12.3.

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

Thirty-nine samples from the historic mine dumps were collected. An excavator was utilized to dig pits on approximately 20 m centers on the surface of the dump. Pit depths ranging from 4 to 5 m were determined by tape. Taking care to avoid sloughed material, the excavator bucket was drawn up along the pit wall from the bottom of the pit to the surface. A representative portion of this bulk sample was then taken by shovel to obtain samples of approximately 14 kg. These samples were bagged in rice bags and transported to the Magistral mine laboratory for splitting.

## 13.0 SAMPLE PREPARATION, ANALYSES AND SECURITY

### 13.1 *El Gallo*

US Gold (2009 to 2010): Currently all routine sample preparation (excluding preparation of samples from hole GAX026) and analyses of the El Gallo core samples are carried out by Chemex, at their sample preparation facility in Hermosillo, México.

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

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

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

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

## **13.2      *Magistral***

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

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

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

## **13.3      *Palmarito***

Lluvia de Oro (1994 to 1995): Sample preparation under Lluvia de Oro took place at ALS Chemex in Hermosillo, México and assaying at Chemex's facility in Vancouver, British Columbia. Samples were assayed for silver by fire assay with a gravimetric finish and for gold using fire assay with an atomic absorption spectrometry finish.

Sample preparation consisted of drying, crushing, splitting and grinding. Samples were oven dried prior to the entire sample being passed through a crusher to yield an average product of 60 percent passing -10 mesh. A split of 250 to 300 grams was taken using a Jones Riffle. This split was ground to 90 percent at 150 mesh using a ring mill pulveriser with a chrome steel ring.

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

US Gold (2008 to 2010): Procedures for core samples are similar to those described under El Gallo in section 13.2. Procedures for RC samples are similar to those described under Magistral section 13.2

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

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

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

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

#### **13.4 QA/QC Program**

US Gold's QA/QC program for drill samples consisted of several protocols: insertion of blanks and standards into the sample stream, sending pulps to a second laboratory for check, analyzing duplicate sample intervals from the remaining core.

##### **13.4.1 Blanks and Standards El Gallo**

One standard reference material pulp and one barren blank pulp were inserted into the sample shipments on regular intervals (every 25 samples for holes GAX-001 through GAX-043 and every 20 samples for holes drilled after GAX-043). In some instances, standards and blanks were inserted more frequently so as to be placed within visually mineralized intervals. Certified standard reference material pulps and blank pulps were purchased from either CDN Resource Laboratories or Shea Clark Smith/MEG Labs. Silver values for the standards ranged from 0.248 to 2,684 ppm.

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

### 13.4.2 Sample Duplicates El Gallo

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

### 13.4.3 Check Assay Program El Gallo

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

For the first phase of drilling (GAX-001 through 043), samples for check assay were chosen systematically with a minimum of one check sample every 25 samples with occasional additional samples in mineralized intervals. For holes drilled after GAX-043, the database was filtered for samples with Chemex results >10 ppm Ag and check samples were chosen from this population so as to obtain check assays for a nominal 10 percent of these, and including checks for all holes with mineralized intervals. As of the data cutoff for this resource estimation, check assays had not yet been received for hole GAX-204 and on.

### 13.4.4 Blanks and Standards Magistral

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

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

### 13.4.5 Sample Duplicates Magistral

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

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

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

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

#### **13.4.6 Check Assay Program Magistral**

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

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

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

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

#### **13.4.7 Blanks and Standards Palmarito**

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

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

### **13.4.8 Sample Duplicates Palmarito**

Lluvia de Oro: Although field duplicates were taken on-site during reverse circulation drilling, no evidence exists for analyses of these duplicate samples.

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

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

### **13.4.9 Check Assay Program Palmarito**

Lluvia de Oro: A total of 370 samples were subject to check assay by American Assay Laboratories (AAL), Reno, NV. These were in the form of pulps sent directly from Chemex. A review of check assay data by Computer Aided Geosciences, Pty (CAG) for Lluvia de Oro indicates good general agreement between Chemex and AAL results for silver except for low grade (<15 g/t) where there appeared to be a low bias for AAL results. Generally, gold checks showed poor reproducibility which is probably attributable to the low grades found at Palmarito. Detailed tabulation of check assay results can be found in *Preliminary Resource Analysis for the Palmarito Silver-Gold Project, Sinaloa México, CAG, June 1996*.

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

US Gold: Second-laboratory check assays were done by SGS Laboratories in Durango, México for select drill samples. These were done by sending pulps directly from Chemex to SGS. This consisted of check assays for gold and silver being conducted for nominally every 25 samples. SGS utilized a fire assay/atomic absorption finish for gold and fire assay/gravimetric finish for silver. As of the cutoff date for this resource estimation, holes PMX-44 through -52 did not have check assays.

## **13.5 Density Analysis**

### **13.5.1 El Gallo**

Density determinations were carried out on 48 mineralized core samples by SGS Laboratories. The samples were sealed with wax followed by immersion in distilled water and measuring displacement. The average density of the 48 samples is 2.50 g/cm<sup>3</sup>.

### **13.5.2 Magistral**

Density measurements on the mineralized zones were made on large diameter core holes (PQ size) submitted to Kappes, Cassiday & Associates for metallurgical testing purposes. A wax immersion method was used for this testing. Density measurements were made on 127 samples from San Rafael, 36

samples from Samaniego Hill, and 32 samples from Sagrado Corazón-Lupita, from mineralized intercepts in the core. The mineralized zone density results on these core samples ranged from 2.25 to 3.09 grams per cubic centimeter, and averaged 2.59 grams per cubic-centimeter (equivalent to tonnes per cubicmeter).

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

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

### 13.5.3 Palmarito

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

Drill Core: Density determinations were carried out on 24 pieces of drill core taken from mineralized (>1 oz/t Ag) intercepts in five drill holes. Holes were picked to give geographic spread through the deposit. Core pieces were visually inspected so as to have 'typical' mineralized appearance and to not have too many vugs or voids that could preclude accurate weight measurement in water. In general, Palmarito mineralized material is a siliceous breccia and not overly vuggy and, for the most part, not strongly oxidized. One sample (PMC06-05, 15.1m) contained moderate limonite and was moderately vuggy. This sample yielded the lowest density value (2.51 g/cm<sup>3</sup>).

Core pieces were weighed on an Ohaus triple-beam balance to determine mass with a precision of 0.05 g. The same pieces were weighed while submerged in water by suspending them by wire in a 5-gallon bucket. For each measurement, care was taken to determine tare weight of the submerged wire and to assure that the core piece was fully submerged. Specific gravity (density) is then given by:

$$[\text{Wt in air} / (\text{wt in air} - \text{wt in water})] \times \text{density of water (1 g/cm}^3\text{)}.$$

Density values range from 2.51 to 2.84 g/cm<sup>3</sup> (13.1 % spread) and average 2.65 g/cm<sup>3</sup>.

Tailings: Density determinations were made from three different sample sites in the Palmarito tailings pile. For each site, a level location was created and a hole approximately 40 cm x 40 cm x 15 cm was

excavated and all material carefully removed and collected in plastic sample bags. The hole was then lined with thin plastic and filled with water to the level top of the hole. The plastic containing the water was lifted from the hole and the water carefully transferred to 20 liter plastic bottles. The tailings material and water were then transported to the mine laboratory at Magistral where the water volume was measured to 0.1 liter precision utilizing a laboratory beaker. The tailings material was fully dried in the sample prep oven and then weighed. During the process, care was taken in the field to capture all of the tailings material from the hole and to ensure that the plastic liner lined the entire hole with no gaps along the walls and corners of the hole.

Density is given by: wt of tailings material in grams / water volume in ml (=cm<sup>3</sup>).

The three sites yielded density values of 1.51, 1.56, and 1.45 g/cm<sup>3</sup> (7.6% spread). Average density is 1.51 g/cm<sup>3</sup>.

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

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

It was observed that the deeper samples contained more fines and that the fine material was wet so the resulting density must be a considered a wet density.

Results of this bulk test yielded a density of 1.20 g/cm<sup>3</sup>.

### **13.6      *Sample Procedure Adequacy***

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

## **14.0 DATA VALIDATION**

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

### **14.1 *Collar Surveys***

Drill hole collar coordinates were verified for the three projects by the author through field checking and survey comparison. The author found the collar locations to be well marked and labelled. These hole locations were checked against locations plotted on a topographic map. The author observed good agreement between the field locations and the map. All collar locations in the database were compared against the surveyed topography. Overall, there was good agreement between the two. Four holes at El Gallo were observed to have discrepancies of greater than 2 m, with a maximum discrepancy of 6 m. The collar surveys for these holes warrant further investigation; however, the author does not believe that these discrepancies could result in a material impact on the resource estimate for El Gallo. When other discrepancies were noted at Magistral and Palmarito, the collar elevations were adjusted to agree with the topography prior to resource modeling.

### **14.2 *Lithology***

During the site visits, the author reviewed several core intervals. The core was compared against lithological logs and assay data. The author observed good agreement for this comparison. Lithological contacts observed in the core were consistent with the logs. High silver and gold values indicated in the assay data were consistent with intense alteration seen in the core.

### **14.3 *Downhole Survey***

Downhole surveys have been completed at each of the three projects to different degrees. US Gold has taken the majority of these surveys. At El Gallo only three holes have not been surveyed. The author examined the records of downhole surveys for fourteen core holes at El Gallo and compared them to the digital drill hole database. The author observed excellent agreement for this comparison.

At Magistral and Palmarito 27 and 16 holes, respectively, have been surveyed. The author examined the deviations in these holes to estimate the potential for deviations in the un-surveyed holes and assess the potential impact on the resource estimate. On average, these holes deviate three degrees on azimuth and six degrees on dip over a depth of 150 m at Magistral and seven degrees on azimuth and three degrees on dip over a depth of 150 m at Palmarito. The author's assessment of these deviations indicates that unknown deviations in the un-surveyed holes will not materially affect the resource estimate.

## **14.4 Assay Data Entry**

US Gold provided the author with copies of the assay certificates from ALS Chemex. The author compared these certificates against the reported values in the digital drill hole database for approximately 10 percent of the drill holes. This comparison did not indicate any data entry errors.

## **14.5 QA/QC Analysis**

US Gold's QA/QC program yielded data that can be used for identifying contamination, bias and mix-ups in the sample preparation and analysis process. The author independently analyzed this data. The results of this analysis for each of the three projects are described as follows.

### **14.5.1 El Gallo**

Check assays from the secondary laboratory used by US Gold (SGS Group) do not indicate any statistically significant bias relative to paired assays from the primary laboratory (ALS Chemex). Likewise, the silver and gold assays of the standard samples by the primary laboratory did not indicate any bias relative to their expected values.

The author's analysis of the blank samples indicates a small degree of contamination for both silver and gold. Seven percent of the blank samples returned silver assay values greater than the detection limit (0.5 grams per tonne silver). The average grade of these samples is 1.15 grams per tonne silver. Fifteen percent of the blank samples returned gold assay values greater than the detection limit (0.005 grams per tonne gold). The average grade of these samples is 0.007 grams per tonne gold. The author believes this level of contamination is very low and that it does not materially impact the results of the resource estimation.

While analyzing the QA/QC data, the author noted 19 samples that were misidentified in some fashion. These situations, referred to as mix-ups, are the result of human error (as opposed to analytical error). These 19 samples represent a mix-up rate of less than one percent. The author believes this rate is acceptably low and does not materially affect the results of the resource estimation.

### **14.5.2 Magistral**

The author evaluated the assay data for the standard and blank samples submitted by US Gold as part of their quality control program. Gold values from the assay were compared against their known values. The author did not observe any systematic bias in the assay grades. Duplicate gold assays for 57 samples were compared against their original assay values. Statistical analysis of these duplicate gold assays indicates that they are biased low relative to the original values. On average this bias is 0.017 grams gold. PAH does not consider this bias to have a material effect on the resource estimate.

### **14.5.3 Palmarito**

The author evaluated the assay data for the standard and blank samples submitted by US Gold as part of their quality control program. Silver and gold values from the assay were compared against their known values. The author did not observe any systematic bias in the assay grades.

### **14.6 *Limits of Validation***

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

## **15.0 ADJACENT PROPERTIES**

There are no "adjacent properties" to El Gallo, Magistral or Palmarito as defined by NI 43-101.

## 16.0 MINERAL PROCESSING AND METALLURGICAL TESTING

### 16.1 *El Gallo*

Test work started in mid-2009 and today consists of 72 bottle roll tests and 5 column leach tests. The bottle roll tests were designed to help determine recoveries under a mill processing scenario. The column tests were designed to help determine the amenability of the lower grade mineralization to heap leach processing. All composite samples for testing came from drill core and were shipped to SGS Mineral Services (SGS) in Durango, México.

Work performed by SGS was conducted under the supervision of Juvencio Mireles Ortiz, Metallurgy Manager.

Bottle roll testing at El Gallo for silver and gold recovery consisted of 72 samples collected from HQ-size drill core (6.4 cm diameter), or, for seven of the samples, from the bulk reject. Testing was carried out in two phases. The first phase of testing was completed on three types of mineralization:

- high-grade silver sulfide mineralization,
- low-grade silver sulfide mineralization, and
- a mixture of oxide and transitional oxide-sulfide silver mineralization.

Testing also focused determining the optimum grind size, leach time, cyanide concentration and addition of oxidants. Silver recoveries for the first phase averaged more than 90 percent. Silver recoveries from lower grade mineral samples averaged 96 percent. Based on the high recoveries from the lower grade silver mineralization, US Gold decided that follow up column testing should be performed to in order to test its amenability to heap leach processing. Results from the bottle roll tests are presented in Tables 16-1 through 16-3.

**TABLE 16-1**  
**US Gold Corporation**  
**Preliminary Economic Assessment, El Gallo District**  
**Phase 1 High Grade-Silver Sulphide Bottle Roll Results**

<b>Sample</b>	<b>Particle Size*</b>	<b>Calculated Head Grade (Ag opt)</b>	<b>Calculated Head Grade (Ag gpt)</b>	<b>Silver Recovery (%)</b>	<b>Sodium Cyanide Consumption (kg/t)</b>	<b>Lime Consumption (kg/t)</b>
GAX008	80% passing/-200 mesh	43.40	1,350	96.2	3.4	4
GAX017	70% passing/-200 mesh	12.51	389	88.2	1.6	4.9
GAX021	70% passing/-200 mesh	20.87	649	88	1.5	3.6

**TABLE 16-2**  
**US Gold Corporation**  
**Preliminary Economic Assessment, El Gallo District**  
**Phase 1 Low Grade-Silver Sulphide Bottle Roll Results**

Sample	Particle Size*	Calculated Head Grade (Ag opt)	Calculated Head Grade (Ag gpt)	Silver Recovery (%)	Sodium Cyanide Consumption (kg/t)	Lime Consumption (kg/t)
GAX004	80% passing/-200 mesh	3.79	118	95.8	1.3	8
GAX007	80% passing/-200 mesh	3.79	118	97	1.3	5.6
GAX027	80% passing/-200 mesh	2.86	89	94.5	1.3	7.2

**TABLE 16-3**  
**US Gold Corporation**  
**Preliminary Economic Assessment, El Gallo District**  
**Phase 1 Silver Oxide and Transitional Oxide-Sulphide Bottle Roll Results**

Sample	Particle Size*	Calculated Head Grade (Ag opt)	Calculated Head Grade (Ag gpt)	Silver Recovery (%)	Sodium Cyanide Consumption (kg/t)	Lime Consumption (kg/t)
GAX001	80% passing/-200 mesh	11.67	363	96.6	2.2	13.3
GAX010	80% passing/-200 mesh	6.66	207	85.7	1.7	11.5
GAX032A	80% passing/-200 mesh	8.55	266	83.9	1.8	11.2
GAX032B	80% passing/-200 mesh	11.12	346	77.8	1.9	11.6

The second phase of bottle roll testing was to help determine potential silver recoveries under a milling scenario, which is the primary process method being considered at El Gallo. A total of 62 additional tests were performed. A summary of these tests is listed in Table 16-4. In addition, metallurgical test work at El Gallo has also included five column leach tests using samples from HQ size drill core (6.4 cm diameter) with a -¼ inch crush size. US Gold performed these tests to help evaluate the feasibility of mining lower grade mineralization using a heap leach recovery process.

The average silver recovery during the test cycle was 55.5 percent. Based on the rate of the recovery when the tests were concluded, US Gold and PAH believe the average recovery would reach 60 percent if the tests were continued for two years. The respective recoveries for the five columns leach tests are stated in Table 16-5.

**TABLE 16-5**  
**US Gold Corporation**  
**Preliminary Economic Assessment, El Gallo District**  
**Column Leach Test Results**

Sample*	Crush Size	Calculated Head Grade (Ag opt)	Calculated Head Grade (Ag gpt)	Silver Recovery (%)	Sodium Cyanide Consumption (kg/t)	Lime Consumption (kg/t)
EGCT-1	-0.25	3.2	109.3	53.5	1.13	4.46
EGCT-2	-0.25	2.2	75.7	61.9	0.21	10.6
EGCT-3	-0.25	1.3	45.7	45.7	0.64	15.4
EGCT-4	-0.25	0.9	29.9	63.6	0.91	3.32
EGCT-5	-0.25	1.6	54.7	52.7	1.16	3.54
<b>Average</b>				<b>55.5</b>	<b>0.81</b>	<b>7.5</b>

**TABLE 16-4**  
**US Gold Corporation**  
**Preliminary Economic Assessment, El Gallo District**  
**Phase 2 Bottle Roll Results**

Sample	Particle Size*	Calculated Head Grade (Ag opt)	Calculated Head Grade (Ag gpt)	Silver Recovery (%)	Sodium Cyanide Consumption (kg/t)	Lime Consumption (kg/t)
GAX044	80% passing/-200 mesh	2.6	90	86.4	0.9	3.3
GAX045-A	80% passing/-200 mesh	14.7	505	90.1	1.5	3.87
GAX045-B	80% passing/-200 mesh	53.7	1842	92.1	3.3	2.97
GAX045-C	80% passing/-200 mesh	12.4	425	88.5	1.7	3.87
GAX046-A	80% passing/-200 mesh	3	103	79.3	0.7	11.5
GAX046-B	80% passing/-200 mesh	1.5	51	86.3	0.97	4.37
GAX046-C	80% passing/-200 mesh	320.6	10991	95.9	16.6	2.2
GAX048	80% passing/-200 mesh	1.5	53	80.6	0.7	17.4
GAX049-A	80% passing/-200 mesh	1.7	58	91.1	1.42	3.31
GAX049-B	80% passing/-200 mesh	2.4	82	75	1.43	3.17
GAX049-C	80% passing/-200 mesh	8.5	291	91.6	1.53	3.73
GAX051-A	80% passing/-200 mesh	16.7	572	74.8	1.87	3.34
GAX051-B	80% passing/-200 mesh	9.8	335	60.9	1.62	4.94
GAX051-C	80% passing/-200 mesh	1.8	62	90	1.25	2.95
GAX051-D	80% passing/-200 mesh	1.9	64	90.3	1.32	3.39
GAX052	80% passing/-200 mesh	13.1	448	78.4	2.27	4.17
GAX053	80% passing/-200 mesh	0.8	26	92.1	1.17	4.56
GAX054	80% passing/-200 mesh	1.5	50	86.5	1.37	3.95
GAX055-A	80% passing/-200 mesh	1.9	65	89.8	1	8.07
GAX055-B	80% passing/-200 mesh	84.4	2893	85.8	5.72	1.84
GAX055-C	80% passing/-200 mesh	71.8	2462	73.1	4.97	1.82
GAX055-D	80% passing/-200 mesh	34.3	1175	80.1	2.25	2.52
GAX055-E	80% passing/-200 mesh	3.5	120	95.5	1.08	3.39
GAX056-A	80% passing/-200 mesh	5.3	180	93.6	0.95	6.06
GAX056-B	80% passing/-200 mesh	3.3	113	91.2	0.82	9.44
GAX056-C	80% passing/-200 mesh	7.1	245	84.7	1.17	8.95
GAX056-D	80% passing/-200 mesh	44.1	1511	93.1	3.45	2.52
GAX056-E	80% passing/-200 mesh	111.4	3818	93.2	8.17	2.52
GAX057-A	80% passing/-200 mesh	0.7	24	87.1	1.05	5.14
GAX057-B	80% passing/-200 mesh	0.8	26	88.1	1.14	4.41
GAX057-C	80% passing/-200 mesh	7.7	264	95.4	1.53	4.91
GAX057-D	80% passing/-200 mesh	22.7	778	97.3	2.12	5.4
GAX057-E	80% passing/-200 mesh	20.9	717	96.7	2.28	4.91
GAX058-A	80% passing/-200 mesh	6.5	223	89.2	1.7	4.23
GAX058-B	80% passing/-200 mesh	38.7	1327	88.6	2.91	4.01
GAX058-C	80% passing/-200 mesh	38.7	1327	9.1	3.7	4.37
GAX059-A	80% passing/-200 mesh	7.3	250	91.4	1.27	5.17
GAX059-B	80% passing/-200 mesh	1.4	48	92.3	1	4.18
GAX059-C	80% passing/-200 mesh	1.4	47	94.5	1.5	3.96
GAX060	80% passing/-200 mesh	2.5	87	89	1.17	4.8
GAX061-A	80% passing/-200 mesh	8.8	302	89.9	1.35	4.44
GAX061-B	80% passing/-200 mesh	76.5	2623	89.2	4.72	4.2
GAX061-C	80% passing/-200 mesh	76.5	2623	96.1	8.87	4.28
GAX062	80% passing/-200 mesh	4.6	158	87.1	1.97	4.15
GAX063-A	80% passing/-200 mesh	4.9	167	92.2	1.38	3.65
GAX063-B	80% passing/-200 mesh	5.3	183	93.5	1.62	4.18
GAX064-A	80% passing/-200 mesh	5.1	176	80.9	1.35	5.55
GAX065-A	80% passing/-200 mesh	2.7	93	87.2	1.58	3.22
GAX065-B	80% passing/-200 mesh	13.4	461	94.5	1.83	3.22
GAX065-C	80% passing/-200 mesh	12.7	437	87.6	1.65	3.02
GAX063	80% passing/-200 mesh	1.1	37	82.7	0.8	2.96
GAX067-A	80% passing/-200 mesh	1.3	46	93.4	1.18	4.73
GAX067-B	80% passing/-200 mesh	9.5	327	90.2	1.68	4.11
GAX076	80% passing/-200 mesh	1.8	61	87.3	0.9	5.45
GAX126	80% passing/-200 mesh	11.9	407	91.1	1.1	3.05
GAX137-B	80% passing/-200 mesh	1.8	61	92.3	0.91	3.37
GAX140	80% passing/-200 mesh	3.4	116	92.8	0.95	2.08
GAX179	80% passing/-200 mesh	30.4	1043	89.4	2.53	3.43
GAX241-A	80% passing/-200 mesh	8.1	277	91.7	1	2.4
GAX241-B	80% passing/-200 mesh	3.3	112	91	1.2	2.4
GAX247	80% passing/-200 mesh	2.3	79	85.3	0.88	3.34
GAXM002-B	80% passing/-200 mesh	4.2	145	92.2	0.8	2.86
<b>Average</b>				<b>87.2</b>	<b>2.14</b>	<b>4.35</b>

Tests on samples EGCT-1, EGCT-2, EGCT-3 were conducted over a 180 day leach cycle. Tests on samples EGCT-4 and EGCT-5 were conducted over a 140 day leach cycle and were ongoing at the time of this report.

### 16.1.1 El Gallo Grinding Tests

In December 2010, US Gold submitted 6 samples to SGS in order to perform various grindability tests that included:

- JK Drop Weight/Bond Crushing Index
- SMC
- Bond Abrasion Index
- Bond Rod Mill Index
- Bond Ball Mill Work Index

The test results indicate that the El Gallo ore should be amenable to semi-autogenous/ball-mill grinding. These results are shown in Tables 16-6 through 16-11.

**TABLE 16-6**  
**US Gold Corporation**  
**Preliminary Economic Assessment, El Gallo District**  
**El Gallo - JK Test Result**

Sample	A	b	A x b	t <sub>a</sub>	Ore Density
EGDW-1	55.5	0.69	38.3	0.35	2.59
EGDW-2	44.3	2.56	113.4	1.1	2.54

**TABLE 16-7**  
**US Gold Corporation**  
**Preliminary Economic Assessment, El Gallo District**  
**El Gallo - Bond Crushing Index Result**

Sample	Ci - Bond Crushing Index (Kw-hr/t)	
	Imperial	Metric
EGDW-1	5.07	5.59
EGDW-2	6.74	7.43
EGBCI-1	5.68	6.26

**TABLE 16-8**  
**US Gold Corporation**  
**Preliminary Economic Assessment, El Gallo District**  
**El Gallo - SMC Result**

Sample	Dwi	Dwi	M <sub>ia</sub>	M <sub>ih</sub>	M <sub>ic</sub>	A	b	SG	t <sub>a</sub>
	kWh/m <sup>3</sup>	%	kWh/t	kWh/t	kWh/t				
EGSMC-1	5.81	52	18.7	13.4	6.9	66.3	0.65	2.51	0.45
EGSMC-2	5.02	41	15.9	11.1	5.7	57.8	0.91	2.63	0.52
EGSMC-3	5.01	40	15.9	11.1	5.7	52.6	0.99	2.62	0.52
EGSMC-4	1.7	7	7.5	4.2	2.2	58.9	2.34	2.34	1.53
EGSMC-5	5.25	44	16.3	11.4	5.9	61.7	0.82	2.66	0.49

**TABLE 16-9**  
**US Gold Corporation**  
**Preliminary Economic Assessment, El Gallo District**  
**El Gallo - Abrasion Index Result**

Sample	Ai
EGBA-1	0.36
EGBA-2	0.7
EGBA-3	0.45

**TABLE 16-10**  
**US Gold Corporation**  
**Preliminary Economic Assessment, El Gallo District**  
**El Gallo - Bond Rod Mill Index Result**

Sample	Mesh of Grind	Wi (kWh/t)	
		Imperial	Metric
EGRM-1	14	15.37	16.94
EGRM-2	14	15.54	17.13
EGRM-3	14	17.3	19.07
EGRM-4	14	15.25	16.81
EGRM-5	14	16.81	18.53

**TABLE 16-11**  
**US Gold Corporation**  
**Preliminary Economic Assessment, El Gallo District**  
**El Gallo - Bond Ball Mill Work Index**

Sample	Mesh of Grind	Wi (kWh/t)	
		Imperial	Metric
EGBM-1	100	18.02	19.87
EGBM-2	100	18.28	20.16
EGBM-3	100	15.58	17.18
EGBM-4	100	15.7	17.31
EGBM-5	100	17.97	19.81
EGBM-6	100	16.75	18.47
EGBM-7	100	15.11	16.66
EGBM-8	100	15.36	16.93
EGBM-9	100	17.61	19.42
EGBM-10	100	20.52	20.52

## 16.2 *Magistral*

Magistral operated between 2002 and 2005 as an open pit heap leach gold operation. During that period the mine produced approximately 70,000 ounces of gold. The existing process facility never reached full capacity as the rate of gold production was lower than projected during the period the mine was in operation. US Gold has decided that rather than operate Magistral as a standalone heap leach operation that it should be integrated into a larger mine plan that utilizes the process facilities that are being

planned for El Gallo. This PEA contemplates sending the majority of the Magistral ore to the El Gallo mill with a lesser amount of ore being placed on the heap leach pad.

The majority of the metallurgical testwork for Magistral was conducted by Kappes, Cassiday & Associates (Kappes) in Reno, Nevada and McClelland Laboratorios de México (McClelland) in Hermosillo, México. Bottle-roll and column leach test were initiated in 1995 by Kappes and metallurgical testing at McClelland began in 1998 in order to identify leach characteristics of deeper ore zones, and better understand the behavior of cyanide soluble copper.

In 2008, US Gold initiated a program designed to determine: a) if the material on the heap pads could be reprocessed in order to extract the remaining gold mineralization; and b) the cyanide recovery characteristics of the La Prieta zone, which is the higher-grade and deep extension of Samaniego.

Work on the heap pads involved digging a series of trenches with a backhoe to sample material from various areas. Samples were separated into size fractions and assayed for gold. Based on the results it was determined that reprocessing the heap pad was not economically feasible.

Bottle roll testing on three samples from the La Prieta zone were carried out at SGS. High gold recoveries (>95%) were observed for each sample. Gold extraction by cyanidation was similar over the different test conditions. Grind size and oxidant addition did not materially affect the gold recovery. Copper leaching was not a problem during testing due to low copper values in the samples.

Results from various phases of bottle roll and column testing are summarized in Tables 16-12 and 16-13.

**TABLE 16-12**  
**US Gold Corporation**  
**Preliminary Economic Assessment, El Gallo District**  
**Magistral Bottle Roll Results**

Deposit	Particle Size*	Calculated Head Grade (Au opt)	Calculated Head Grade (Au gpt)	Gold Recovery (%)	Sodium Cyanide Consumption (kg/t)	Lime Consumption (kg/t)
San Rafael	100% passing/-200 mesh	0.15	4.73	95.6	0.11	3.6
San Rafael	100% passing/-200 mesh	0.08	2.42	93.4	0.31	4
San Rafael	100% passing/-200 mesh	0.07	2.29	92.1	0.8	4
Samaniego	100% passing/-200 mesh	0.04	1.38	90.6	4.94	1.6
Samaniego	100% passing/-200 mesh	0.08	2.64	97.3	1.92	4
Samaniego	100% passing/-200 mesh	0.03	0.92	92.4	2.12	3
Sagrado Corazon	100% passing/-200 mesh	0.05	1.48	96.6	0.37	2.8
Sagrado Corazon	100% passing/-200 mesh	0.07	2.04	98.5	0.15	2.6
Sagrado Corazon	100% passing/-200 mesh	0.09	2.88	98.3	0.36	2.6
Sagrado Corazon	100% passing/-200 mesh	0.04	1.3	97.7	0.67	2.8
Lupita	100% passing/-200 mesh	0.07	2.12	98.6	0.57	2.6
Lupita	100% passing/-200 mesh	0.06	1.84	98.4	0.87	2
Lupita	100% passing/-200 mesh	0.06	1.91	94.8	1.38	2.4
La Prieta	75% passing/-200 mesh	0.66	20.5	98.1	4.7	2.7
La Prieta	75% passing/-200 mesh	0.05	1.7	98.4	5.45	2
La Prieta	75% passing/-200 mesh	0.57	17.8	99.2	2.45	1.8
Tailings	As Received	0.07	2.21	61.1	0.2	3.5
<b>Average</b>				<b>94.2</b>	<b>1.61</b>	<b>2.8</b>

**TABLE 16-13**  
**US Gold Corporation**  
**Preliminary Economic Assessment, El Gallo District**  
**Magistral Column Results**

<b>Deposit</b>	<b>Crush Size</b>	<b>Calculated Head Grade (Au opt)</b>	<b>Calculated Head Grade (Au gpt)</b>	<b>Gold Recovery (%)</b>	<b>Sodium Cyanide Consumption (kg/t)</b>	<b>Lime Consumption (kg/t)</b>
San Rafael	25 mm	0.05	1.63	77.9	0.63	4.1
San Rafael	25 mm	0.06	1.83	74.9	0.55	4.1
San Rafael	25 mm	0.05	1.63	77.3	0.63	4.1
Samaniego	25 mm	0.08	2.62	62.2	1.29	4.1
Samaniego	25 mm	0.08	2.47	65.6	1.51	4.1
Samaniego	25 mm	0.08	2.6	65.7	1.79	4.1
Sagrado Corazon	25 mm	0.04	1.29	65.1	0.39	4.1
Sagrado Corazon	25 mm	0.05	1.42	64.1	0.31	4.1
Lupita	25 mm	0.01	0.44	59.1	0.35	4.1
Lupita	25 mm	0.01	0.42	59.5	0.41	4.1
<b>Average</b>				<b>67.2</b>	<b>0.79</b>	<b>4.1</b>

### **16.3 Palmarito**

Preliminary metallurgical and mineralogical test work (Lyntek Inc., 1996) was previously undertaken to characterize the Palmarito silver and gold mineralization. The study was undertaken on a composite sample assaying 5.16 opt silver and 0.013 opt gold (160.5 gpt Ag and 0.4 gpt Au). The composite sample was prepared from several RC drill holes.

The bench-scale test-work included chemical analyses of feed material, assay by size of feed, gravity concentration and magnetic separation of sized material, cyanide shake, and bottle roll cyanide tests. Selected products from the metallurgical tests were investigated mineralogically to determine the silver - gold bearings minerals. The test results indicate the following:

- The host rock is predominantly quartz and feldspar with a minor amount of hematite.
- Silver distribution is directly proportional to weight in the various size fractions. However, gold tends to concentrate in the fine fractions.
- Gravity tests on various size fractions did not tend to concentrate silver-gold in the heavies (concentrate fraction). This indicates poor liberation of silver even in the fine fractions.
- Removal of magnetic material from gravity concentration fractions did upgrade the product slightly (from 11.20 opt Ag to 14.74 opt Ag [348.3 gpt Ag to 458.4 gpt Ag]) but 10 to 30 percent of the silver was lost in the magnetic fraction. This may be due to poor liberation.
- Bottle roll cyanide test on -10 mesh feed extracted 53 percent of the silver. Recovery by the size data indicated higher silver recoveries from the fine fraction.

- Mineralogical studies indicated that the main silver-bearing mineral is the chlorargyrite followed by argentine jarosite and native silver. Argentine jarosite is refractory to cyanide leach. Native silver and chlorargyrite particles rimmed with goethite were also observed in the microscope study. Evaluation of leach residue indicated the presence of argentine jarosite only which accounts for the poor extraction of silver in the bottle roll test.
- Bottle roll cyanide tests on -10 mesh feed extracted 78.4 percent of the gold. Gold recovery in size fractions (45 to 93 percent) confirm earlier test work by Kappes Cassiday and Mountain States International. A projected gold recovery of +/- 90 percent at a finer grind size is based on this data.

US Gold submitted additional samples to SGS in Lakefield, Ontario and Durango, México in 2008 to better understand the mineral composition of the Palmarito ore and test alternative recovery processes. SGS's QemSCAN was used to perform a particle map analysis and a trace mineral search. SGS' lab in Durango, México performed test work on five separate core samples obtained from various parts of the Palmarito ore body. Bottle-roll tests to determine the amenability of cyanide leaching and thiosulphate leach test were conducted. Flotation was also extensively tested under different conditions.

SGS' 2008 testing revealed the following:

- Samples with predominantly larger mineral grains and higher-grades were much more amenable to both cyanide leach and flotation.
- Samples with predominantly fine grains had a significant fraction that was locked in Fe-oxides and silicate minerals.
- Average silver and gold recoveries from bottle roll tests (80 percent passing -200 mesh) were 59 percent and 89 percent, respectively.
- Two of the five core composite samples tested achieved reasonable silver and gold recoveries from bulk flotation and cyanidation of flotation concentrates. Recoveries for these two samples, with average head grade of 13.47 opt silver and 0.021 opt gold (419 gpt silver and 0.65 gpt gold), averaged 71.8 percent for silver and 71.6 percent for gold.
- Three of the five core composite samples did not achieve favorable silver or gold recoveries from bulk flotation and cyanidation. Recoveries for these three samples, with average head grade of 7.78 opt silver and 0.005 opt gold (242 gpt silver and 0.15 gpt gold), averaged 14.5 percent for silver and 62.6 percent for gold.
- Low recoveries are apparently due to encapsulation of small silver mineral grains in Fe-oxides (primarily hematite), quartz, galena, sphalerite, calcite and chlorite.
- Recovery of lead and zinc in all tests were extremely low.

- Thiosulphate leaching was not effective.

Mineralogical testwork by SGS had several differences from previous work most notably that the dominant form of silver observed by electron microprobe was argentite with minor amounts of native silver and trace amounts of chlorargyrite, not dominantly chlorargyrite as observed in previous tests.

The most important conclusion was the distinction between higher-grade mineralization that generally contained larger mineral grain and recovered well by conventional means, and lower-grade mineralization that generally contained small mineral grains and did not recover well due primarily to encapsulation.

In 2010, US Gold further analyzed the results of the Palmarito metallurgical tests and determined that the low silver recoveries typically came from deeper sulphide ore and that the higher recoveries came from near surface oxide ore. A total of 10 bottle roll tests were performed to test this theory. The near surface ore returned an average silver recovery of 80.7 percent and the deeper sulphide returned 72.4 percent. Although the results help prove this theory, additional testing will be required. For the purposes of this study, US Gold plans to mine only the in situ mineralization that is near surface.

Metallurgical test work at Palmarito also consists of bottle roll tests on the dump and historic tailings material. Dump test work consisted of 10 samples that were located at random points throughout the dump resource. Samples were taken from the top and middle of the dumps in order to obtain a representative sample. Tailings metallurgical test work consisted of seven samples that were located as random points throughout the tailings resource.

Results from various phases of bottle roll and column testing are summarized in Tables 16-14, 16-15 and 16-16.

**TABLE 16-14**  
**US Gold Corporation**  
**Preliminary Economic Assessment, El Gallo District**  
**Palmarito In Situ Material Bottle Roll Results**

Sample	Particle Size	Calculated Head Grade (Ag opt)	Calculated Head Grade (Ag gpt)	Silver Recovery (%)	Sodium Cyanide Consumption (kg/t)	Lime Consumption (kg/t)
PMC-06-02	80% passing/-200 mesh	18.33	570	73.8	2.7	1.6
PMC-06-05	80% passing/-200 mesh	8.62	268	77.3	1.9	2
PMC-06-09	80% passing/-200 mesh	4.53	141	52	1.8	1.5
PMC-06-10	80% passing/-200 mesh	8.71	271	53.3	1.2	1.6
PMC-06-13	80% passing/-200 mesh	10.13	315	39.5	2.4	1.2
PMC-06-02	80% passing/-200 mesh	1.96	61	80.9	1.2	2.7
PMC-06-03	80% passing/-200 mesh	2.93	91	82.2	1.2	2.3
PMC-06-04A	80% passing/-200 mesh	2.96	92	81.5	1.4	2.3
PMC-06-04B	80% passing/-200 mesh	0.93	29	80.5	1.9	2.7
PMC-06-06A	80% passing/-200 mesh	4.28	133	84.5	1.7	1.7
PMC-06-06B	80% passing/-200 mesh	8.78	273	67.9	1.2	2.1
PMC-06-08	80% passing/-200 mesh	3.09	96	87.1	1.4	1.9
PMX-028A	80% passing/-200 mesh	3.86	120	67.1	2	3.5
PMX-028B	80% passing/-200 mesh	5.05	157	72.2	2.1	3
PMX-038	80% passing/-200 mesh	0.96	30	77.9	2.1	2.1
<b>Average</b>				<b>71.8</b>	<b>1.7</b>	<b>2.1</b>

**TABLE 16-15**  
**US Gold Corporation**  
**Preliminary Economic Assessment, El Gallo District**  
**Palmarito Dump Material Bottle Roll Results**

Sample	Particle Size	Calculated Head Grade (Ag opt)	Calculated Head Grade (Ag gpt)	Silver Recovery (%)	Sodium Cyanide Consumption (kg/t)	Lime Consumption (kg/t)
MP-1	80% passing/-200 mesh	9.29	289	93.4	0.99	5.06
MP-2	80% passing/-200 mesh	7.62	237	89.1	0.95	5.25
MP-3	80% passing/-200 mesh	4.95	154	85.5	0.77	4.65
MP-4	80% passing/-200 mesh	5.43	169	87.3	0.95	4.95
PMD10-002-BR	75% passing/-200 mesh	12.18	379	90.2	1.25	3.34
PMD10-003-BR	75% passing/-200 mesh	7.11	221	79	1.1	3.54
PMD10-005-BR	75% passing/-200 mesh	3.63	113	78.3	1.25	2.57
PMD10-006-BR	92% passing/-200 mesh	1.96	61	43.7	1.04	2.42
PMD10-009-BR	75% passing/-200 mesh	8.26	257	87	1.15	2.37
PMD10-0012-BR	75% passing/-200 mesh	1.67	52	83	1.25	2.18
<b>Average</b>				<b>81.7</b>	<b>1.07</b>	<b>3.63</b>

**TABLE 16-16**  
**US Gold Corporation**  
**Preliminary Economic Assessment, El Gallo District**  
**Palmarito Historic Tailings Bottle Roll Results**

Sample	Particle Size	Calculated Head Grade (Ag opt)	Calculated Head Grade (Ag gpt)	Silver Recovery (%)	Sodium Cyanide Consumption (kg/t)	Lime Consumption (kg/t)
MP-5	91% passing/-200 mesh	9.19	286	80.3	0.94	3.85
MP-6	80% passing/-200 mesh	5.11	159	44.6	0.62	3.93
MP-7	80% passing/-200 mesh	1.90	59	37.6	0.75	4.07
PT10-003-BR	90% passing/-200 mesh	2.44	76	48.3	1.75	3.15
PT10-004-BR	94% passing/-200 mesh	2.15	67	53.9	1.2	2.18
PT10-007-BR	89% passing/-200 mesh	3.18	99	63.9	1.35	3.2
PT10-009-BR	91% passing/-200 mesh	2.57	80	48.7	1.2	3.54
<b>Average</b>				<b>53.9</b>	<b>1.16</b>	<b>3.42</b>

## 16.4 Metallurgical Considerations in Mine Plan

PAH's mine plan and production estimates for the project take into consideration the variations in silver and gold recovery depending on ore type and processing method.

Material going to the heap leach will be crushed in three-stages to about 3/8-inch at a rate of 3,250 tpd or 1.2 million tpy. The crushed material will be placed on a permanent lined pad in 20 ft (6 m) high lifts. The silver and gold will be recovered from the leach solution using a Merrill-Crowe zinc-cementation circuit and the precipitated smelter to produce doré which will be shipped off-site to a refinery.

Silver and gold production is estimated to be 29.8 million ounces of silver and 301,465 ounces of gold over the life of the project. Mill recovery rates for El Gallo are expected to average 85 percent for silver

and 80 percent for gold and ore heap leach, 60 percent silver and 65 percent gold. Mill recoveries for Palmarito are expected to average 67 percent for silver and 85 percent for gold. Mill recovery rates for Magistral are expected to average 89 percent for gold and 60 percent for the heap leach.

## **17.0 RESOURCE ESTIMATIONS**

### **17.1 *El Gallo***

#### **17.1.1 Lithology Boundaries**

Two lithological boundaries were interpreted for use in block modeling. These are: 1) top of volcanic sediments/tuff ("Vsed") boundary, and 2) top of intrusive basement (basement) boundary. An example of this interpretation is found in Figure 17-1.

The tenure of mineralization for the volcanic sediment and tuff units is different than that of the andesite suite. Therefore, from a grade modeling perspective, defining the boundary between these groups of lithologies is important. PAH interpreted this boundary as two-dimensional lines on vertical, west-facing sections on which were plotted US Gold's lithological interpretations of the core holes. These vertical sections run through the entire length of the known deposit are evenly spaced by 25 m. These lines were then used to generate a three-dimensional surface referred to as the Vsed Boundary.

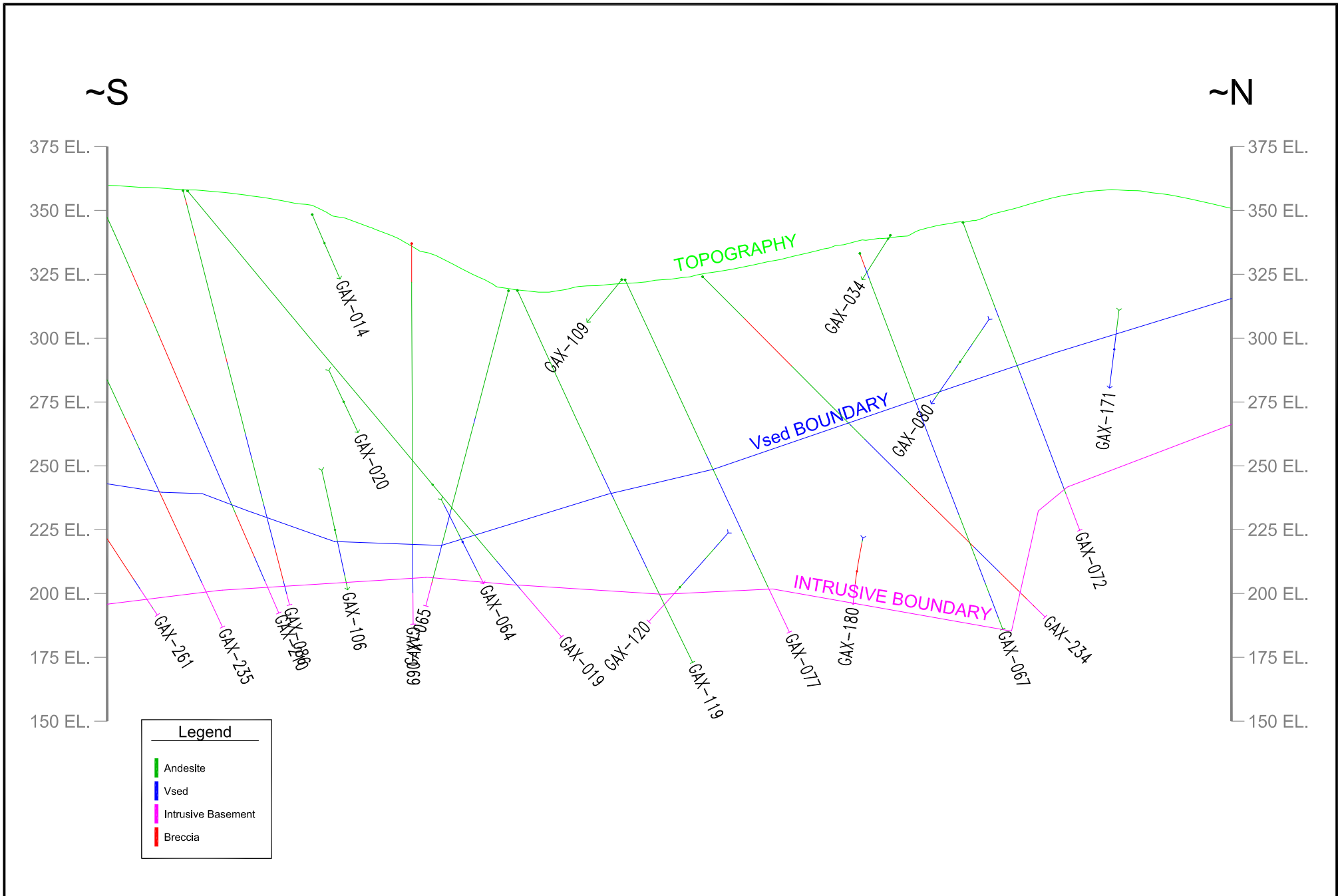
Interpretation of this boundary is subjective in places. The nature of this contact is characterized by successive andesite bodies intruding the older volcanic sediments and tuff units. Dikes of andesite are often encountered in the volcanic sediments and tuff units. Additionally, xenoliths of volcanic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

It is observed that the lithologies that comprise the basement are devoid of silver and gold mineralization. Therefore, the boundary between these units and the mineralized units above must be interpreted. PAH interpreted this boundary as two-dimensional lines on vertical, west-facing sections on which were plotted US Gold's lithological interpretations of the core holes. These interpreted lines were then used to create a three-dimensional surface referred to as the Basement Boundary.

#### **17.1.2 Topography**

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

The flight was originally designed by IntraSearch and refined by Keystone AS. Four flight strips were flown to encompass the desired mapping area, obtaining 40 color stereo exposures at a scale of 1:9900 (1" = 825"). The flight design and scale of photography are suitable to compile and capture



Prepared by  
 **pincock, allen & holt**  
 165 S. Union Boulevard, Suite 950  
 Lakewood, Colorado 80228  
 Phone (303) 986-6950

Drawing Provided by/Prepared for  
**US Gold**  
 Project Name  
 El Gallo District  
 PEA

**FIGURE 17-1**  
**Lithology Interpretation**  
**Looking Approximately West**

Date of Issue  
 Jan 2011  
 Drawing Name  
 Fig.17-1.dwg

Project No.  
 DE-00177

photogrammetrically 1 m contours and planimetrics at a 1:1000 scale by typical mapping industry standards. The film-based aerial camera used is a newer highly equipped Wild RC-30 camera with the latest technologies including ABGPS. Kodak 2444 Aerial film was the color negative roll film used.

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

### 17.1.3 Block Model Construction

#### *Block Model Dimensions*

Table 17-1 describes the dimensions of the block model constructed for the El Gallo Deposit.

**TABLE 17-1**  
**US Gold Corporation**  
**Preliminary Economic Assessment, El Gallo District**  
**El Gallo Block Model Dimensions**

Origin (meters)	
Minimum X	211,350
Minimum Y	2,842,600
Minimum Z	100
Block Size (meters)	
X	5
Y	5
Z	2
Number of Columns	270
Number of Rows	240
Number of Levels	165
Number of Blocks	10,692,000
Rotation	no rotation

#### *Topography Percent Model*

Each block was assigned a value representing the percentage of that block that resides below the Topography Surface. This value is used during the tabulation of resources such that the tonnage (and by extension, the contained ounces) that are above or partially above topography are appropriately discounted.

## ***Domains***

Prior to grade interpolation, the deposit was separated into several domains based on tenure or orientation of mineralization. This domaining was later utilized during grade interpolation.

Andesite Domains: The bulk of mineralization is located in a suite of andesite units including the quartz monzonite porphyry ('andesite suite'). Visual inspection of mineralization and statistical analysis of silver grades indicate the tenure of mineralization is fundamentally different than that observed in the volcanic sediments, tuffaceous units, and quartz monzonite units. All blocks and drill hole composites below Topography Surface and above the Vsed Boundary and above the Basement Boundary are considered part of the andesite suite.

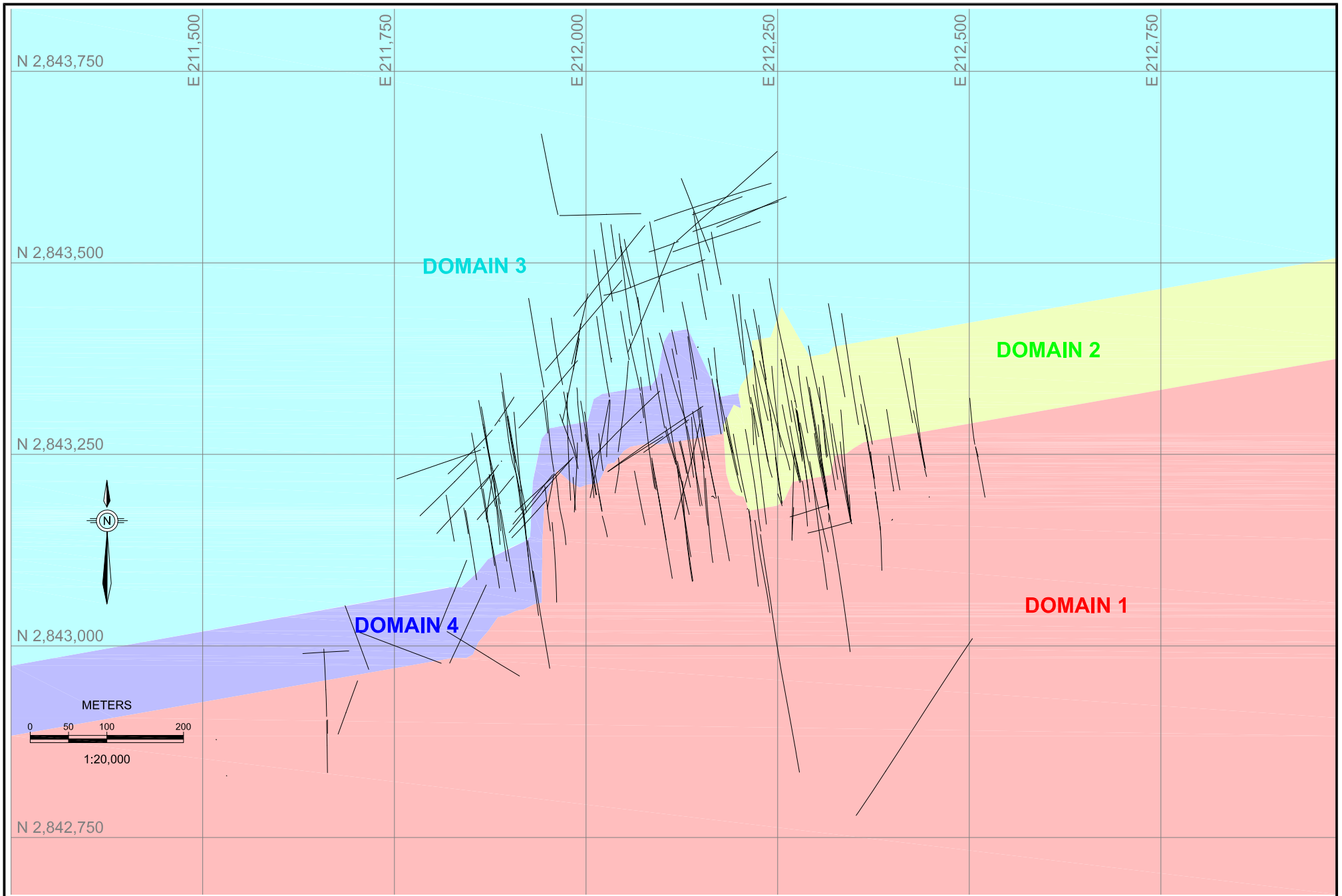
The andesite suite does not constitute a single domain. Within the andesite suite, there are distinct regions that exhibit unique orientations of mineralization. As a result, the andesite suite was divided into four domains reflecting changes in the orientation of mineralization (see Figure 17-2). Boundaries between the Andesite Domains and either the Vsed Domain or the Basement Domain are treated as hard boundaries such that blocks on one side of the boundary do not consider composites on the other side of the boundary in which block grades are interpolated. However, this is not the case for boundaries between the four Andesite Domains. The Andesite Domains only reflect different search ellipse orientations and sizes. Blocks are allowed to consider composites in other Andesite Domains during grade interpolation. This was done to help eliminate certain edge effects in grade interpolation that are inconsistent with PAH's understanding of the mineralization at El Gallo.

Vsed Domain: Mineralization is observed in the Volcanic Sediments and Tuffaceous units. Visual inspection of mineralization and statistical analysis of silver grades indicate the tenure of mineralization is fundamentally different than that observed in the andesite and quartz monzonite units. As a result, PAH elected to treat Volcanic Sediments and Tuffaceous Units as a single domain. The limits of this domain are defined as below the Vsed Boundary and above the Basement Boundary. These boundaries are treated as hard boundaries such that blocks within the domain will receive grade values calculated from composites from the same domain.

Basement Domain: As discussed previously, mineralization is not observed in the basement. For modeling purposes, blocks and composite assays below the Basement Boundary were excluded from participating in grade interpolation.

## ***Density Model***

All blocks in the model were assigned a density value of either zero or 2.5 tonnes per cubic meter. All blocks that are 100 percent above the topography surface are assigned a zero density. All blocks partially or completely below the topography surface are assigned a density of 2.5. The density of 2.5 tonnes per cubic meter is based on 48 measurements of density from core samples. These measurements were conducted by SGS. The value of 2.5 is the average value of all 48 density measurements.



Prepared by  
 **pincocK, allen & holt**  
 165 S. Union Boulevard, Suite 950  
 Lakewood, Colorado 80228  
 Phone (303) 986-6950

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**FIGURE 17-2**  
**Andesite Domains**

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 Fig.17-2.dwg

## **Grade Interpolation**

The block model was interpolated with silver and gold grades. The methods for these interpolations follow.

Compositing: Prior to grade modeling, the silver and gold assay sample data from core hole intercepts were composited. This was done to normalize the sample lengths. The vast majority of assay sample lengths are two meters or less. Accordingly, these samples were composited to two meter intervals.

Grade Capping: No grade capping was applied to silver or gold composites prior to interpolation. PAH investigated the possibility of grade capping by analyzing log histograms of silver and gold grades (see Figures 17-3 and 17-4). This analysis attempted to identify outliers to the main population. PAH does not feel that such outliers are present and therefore concluded that grade capping was unnecessary for both silver and gold composites.

Variography: PAH conducted variography analyses on silver composites within the individual domains (excluding the Basement Domain). This was done to define the orientation of mineralization and establish the parameters of model semi-variograms to be used for grade interpolation (ordinary kriging).

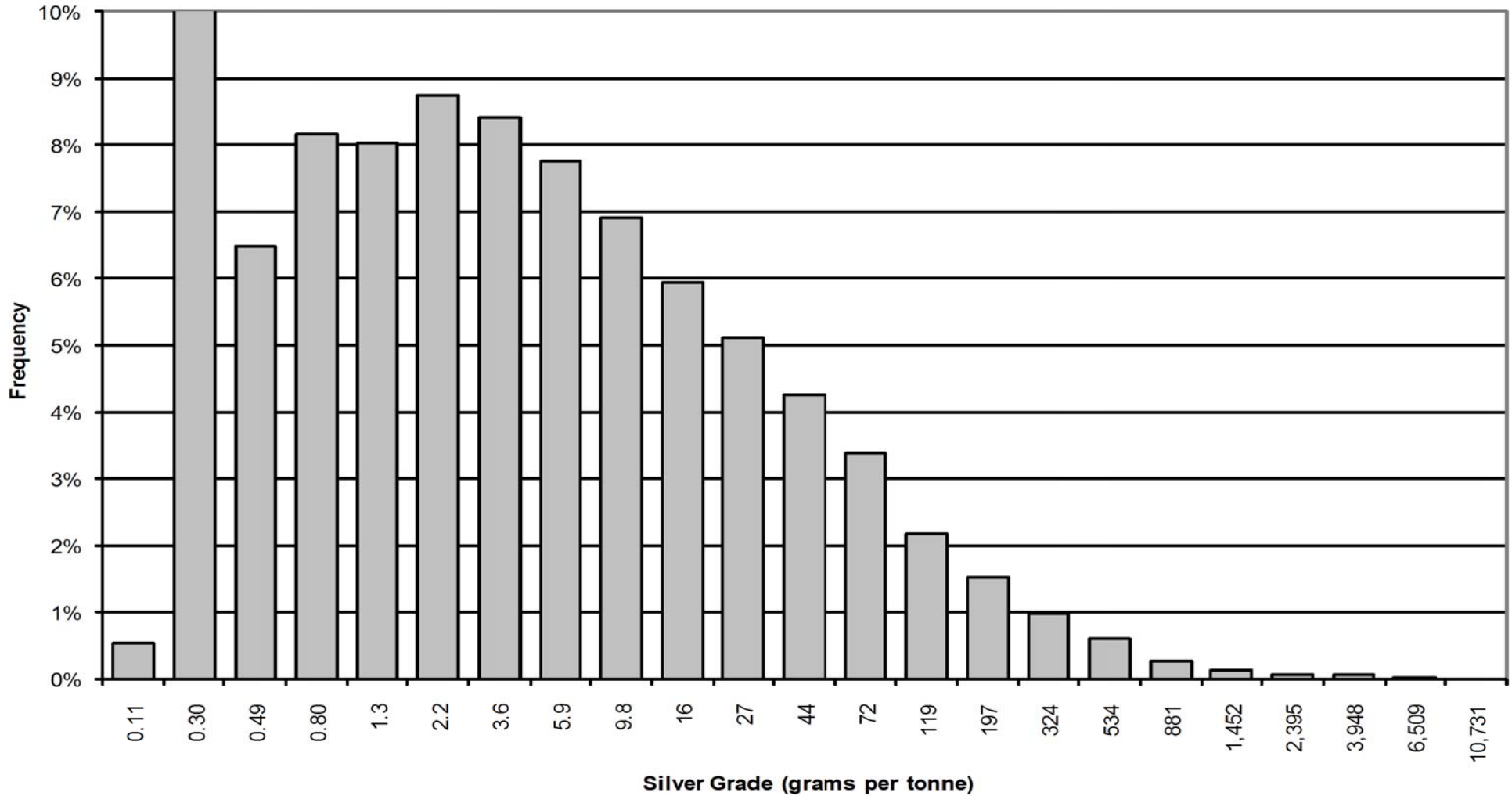
When determining the primary, secondary and tertiary orientations of mineralization for each domain, PAH elected to use semi-variograms from log transformed silver data. That is, the natural log of the silver grade for composites was calculated, and the variography analysis was performed on this data. This was done to mitigate problems encountered with typical variography analyses when using highly skewed data such as that found in El Gallo and most other precious metal deposits. Table 17-2 lists the three orientations for each domain as determined by PAH from these analyses.

**TABLE 17-2**  
**US Gold Corporation**  
**Preliminary Economic Assessment, El Gallo District**  
**El Gallo Orientation of Mineralization**

Domain	Orientation (degrees)		
	Principal Az.	Principal Dip	Intermediate Az.
Andesite 1	180	-22.5	90
Andesite 2	325	21.6	324
Andesite 3	135	0	225
Andesite 4	135	0	225
VSED	157.5	-22.5	67.5
Basement	No grade interpolation for this domain		

Once the orientations were determined, PAH generated semi-variograms along these orientations using the untransformed silver data. PAH modeled these semi-variograms using spherical functions with either one or two structures. From these models, PAH interpreted parameters for use in ordinary kriging. These parameters include nugget effects, sills and ranges. These are listed in Table 17-3.

### Silver Composite Histogram



Prepared by **pinc**cock, allen & holt  
 165 S. Union Boulevard, Suite 950  
 Lakewood, Colorado 80228  
 Phone (303) 986-6950

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FIGURE 17-3  
 Silver Composite Histogram

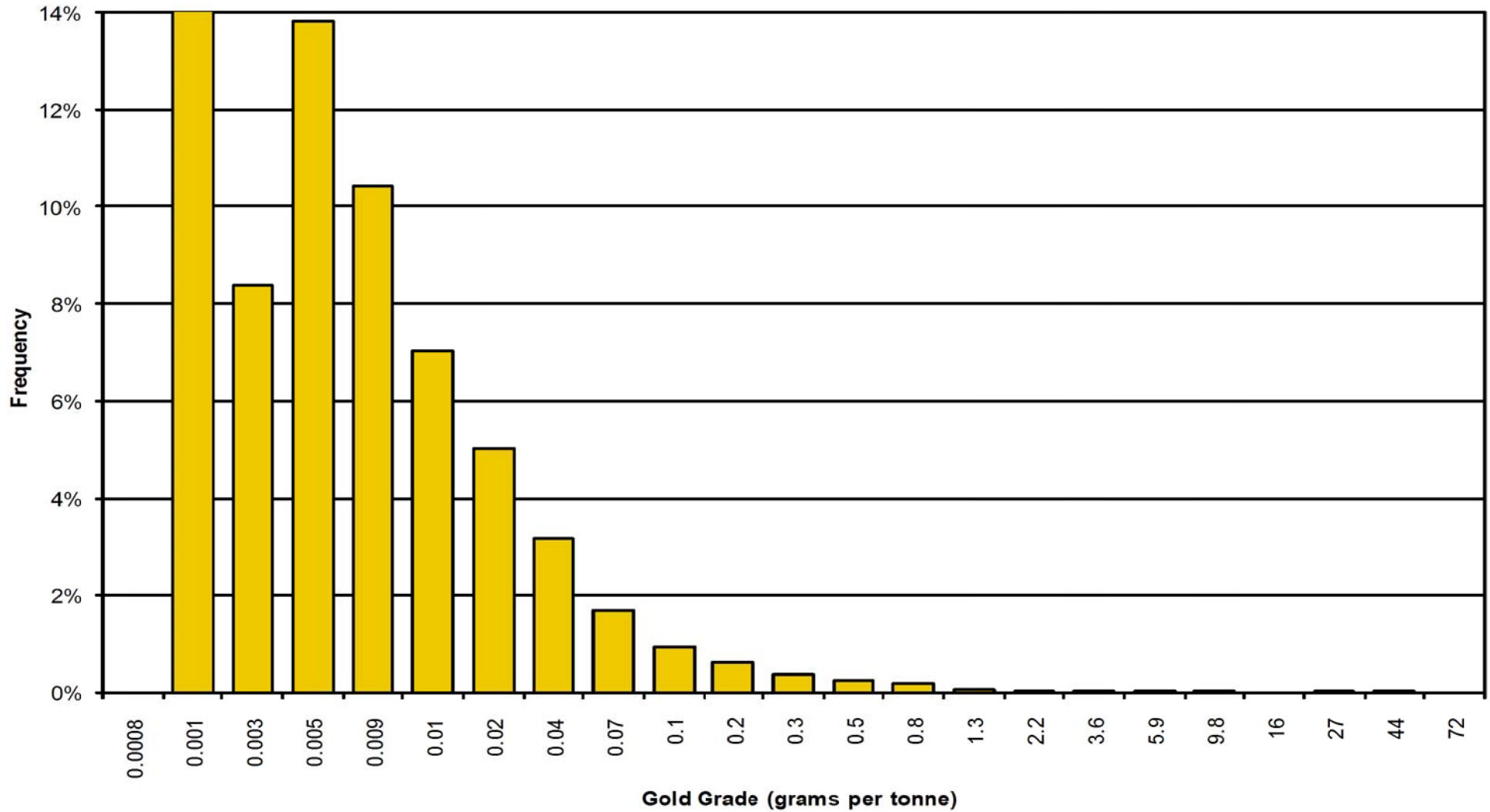
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### Gold Composite Histogram



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**pincocok, allen & holt**  
 165 S. Union Boulevard, Suite 950  
 Lakewood, Colorado 80228  
 Phone (303) 986-6950

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FIGURE 17-4  
 Gold Composite Histogram

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**TABLE 17-3**  
**US Gold Corporation**  
**Preliminary Economic Assessment, El Gallo District**  
**El Gallo Variogram Parameters**

Domain	Nugget	Structure 1				Structure 2			
		Sill	Range 1	Range 2	Range 3	Sill	Range 1	Range 2	Range 3
Andesite 1	441	1,543	39	39	6	5264	84	84	39
Andesite 2	158	66,332	68	51	34				
Andesite 3	6,251	61,732	81	49	36				
Andesite 4	20889	27,921	80	82	14				
VSED	722	1,543	54	54	25				
Basement	No grade interpolation for this domain								

### ***Silver Grade Interpolation***

PAH used ordinary kriging to interpolate silver grade in the block model. No more than 30 and no fewer than 2 composites were used to interpolate grade for each block. Three passes were used with varying search ellipses. The first pass was limited to search ellipses whose radii were one third of the semi-variogram ranges interpreted in the previous "Variography" sub-section. Blocks not previously assigned a silver grade during the first pass were available to receive a grade during the second pass. The second pass was limited to search ellipses whose radii two thirds of the semi-variogram ranges. PAH elected to use a three pass approach to mitigate an over-smoothing issue noted in PAH's preliminary grade estimation runs using a single pass approach. Table 17-4 summarizes the interpolation parameters.

### ***Gold Grade Interpolation***

PAH used the inverse distance to a power-of-4 method for interpolating gold grades in the block model. As with silver, no more than 30 and no fewer than 2 composites were used to interpolate grade for each block. Three passes were used. The gold interpolation used the same search ellipses and domains used for the silver interpolation.

## **17.1.4 Model Validation**

The modeling methods described above are the final result of an iterative modeling process where several methods were explored. The final methods were chosen based on an internal review conducted by PAH. This review was designed to determine if the block grades are a fair and reasonable representation of both the composite data and PAH's understanding of the deposit.

PAH generated nearest neighbor ("NN") models for silver and gold to serve as a check against the finalized resource models previously described. The NN interpolation method simply assigns a block the same grade as its closest composite. These models are intended to represent the declustered composite data where any bias due to variable sample spacing has been mitigated. The NN interpolation used the same search ellipses and domains as were used for the source model grade.

**TABLE 17-4**  
**US Gold Corporation**  
**Preliminary Economic Assessment, El Gallo District**  
**El Gallo Search Ellipse Parameters**

Domain	Orientation (degrees)			First Pass Distances (m)			Second Pass Distances (m)			Third Pass Distances (m)		
	Principal Az.	Principal Dip	Intermediate Az.	Primary	Secondary	Tertiary	Primary	Secondary	Tertiary	Primary	Secondary	Tertiary
Andesite 1	180	-22.5	90	28	28	13	56	56	26	84	84	39
Andesite 2	325	21.6	324	23	17	11	45	34	23	68	51	34
Andesite 3	135	0	225	27	16	12	54	33	24	81	49	36
Andesite 4	135	0	225	31	27	5	61	55	9	92	80	14
VSED	157.5	-22.5	67.5	18	18	8	36	36	17	54	54	25
Basement	No grade interpolation for this domain											

The silver and gold histograms for the NN models, composites and final interpolation are shown in Figures 17-5 and 17-6. The resource model distributions have a similar shape to their NN counterparts with a slightly smaller spread. The reduction in spread is an anticipated result of the volume variance between small sample composites and large blocks.

PAH reviewed the resource model grades along vertical sections and compared the interpolated block grades with the drill holes. This review is meant to verify that, at a local scale, block and drill hole grades are similar.

Figures 17-7 through 17-12 are example sections from this review. Based on this analysis, PAH believes that, on a local scale, the block models are a fair and reasonable representation of the drill hole data. Figure 17-13 is a three-dimensional view of the silver grade model.

### **17.1.5 Resource Classification**

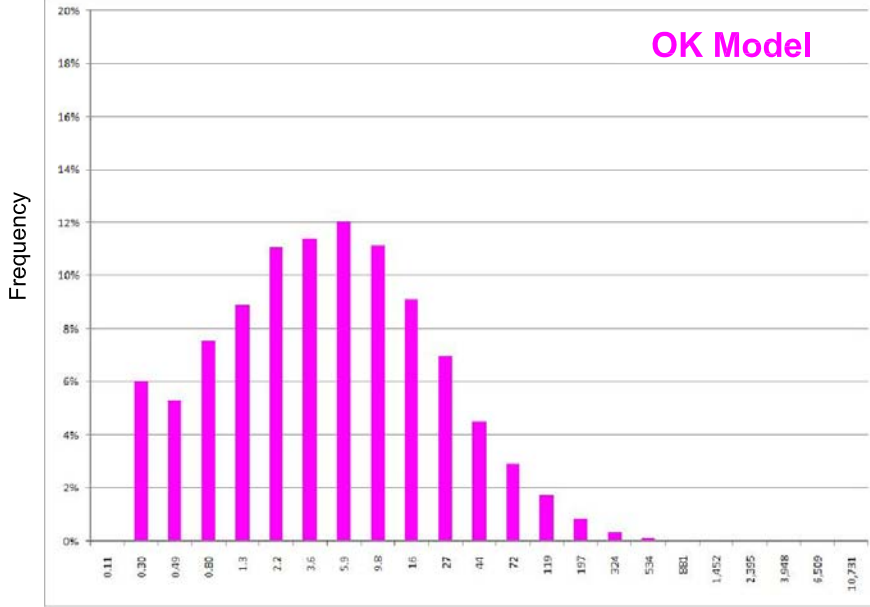
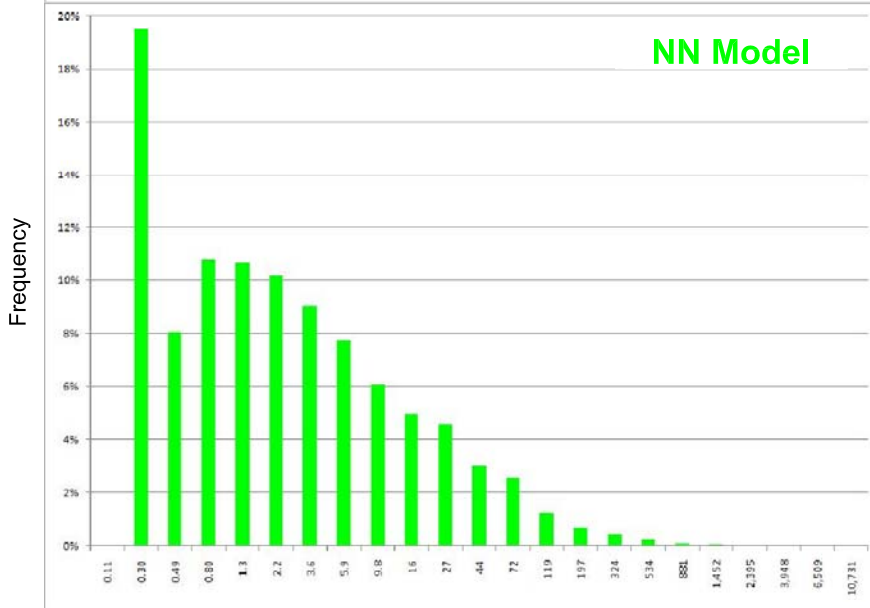
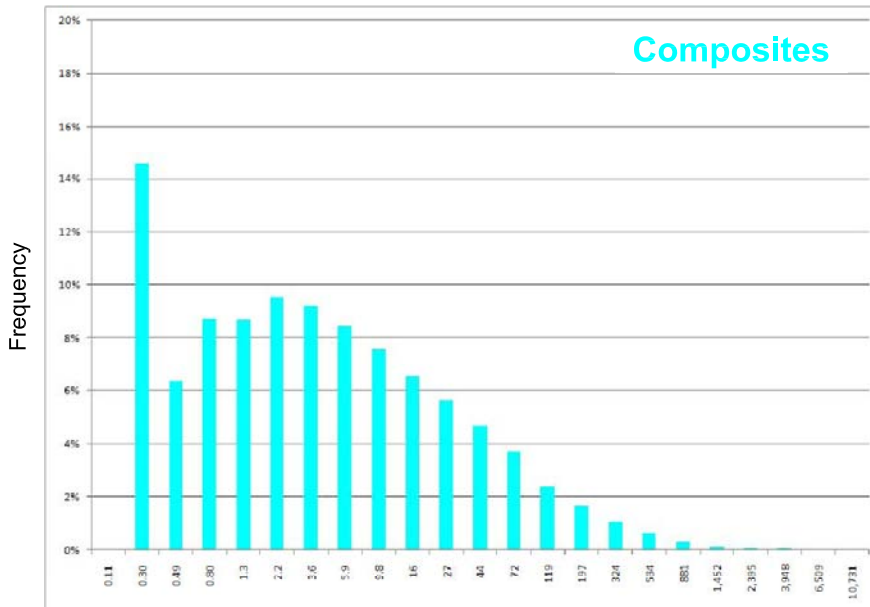
All blocks with an interpolated silver and/or gold grade were assigned a code of measured, indicated or inferred. These terms reflect PAH's confidence in the resources represented by the block. Also, the use of these terms by PAH is consistent with their definitions as adopted by the CIM Council on November 17, 2004.

The limits of measured and indicated resources in the Andesite Domains were interpreted on vertical sections comparing composited drill hole silver assays against the interpolated silver grades in the block model. PAH assigned all resources within the Vsed units with the inferred classification. This is meant to communicate current uncertainty in the controls of mineralization in these units. No grade is estimated for the Basement Domain.

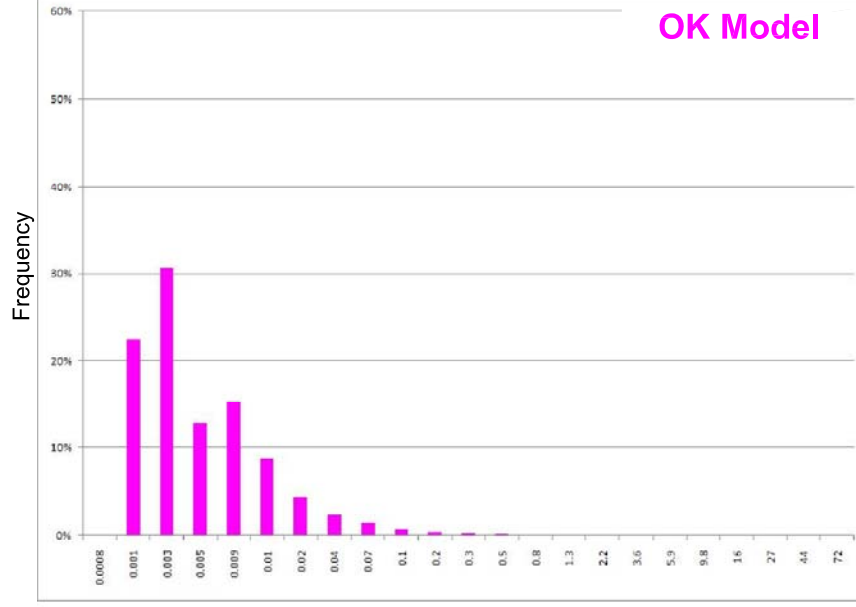
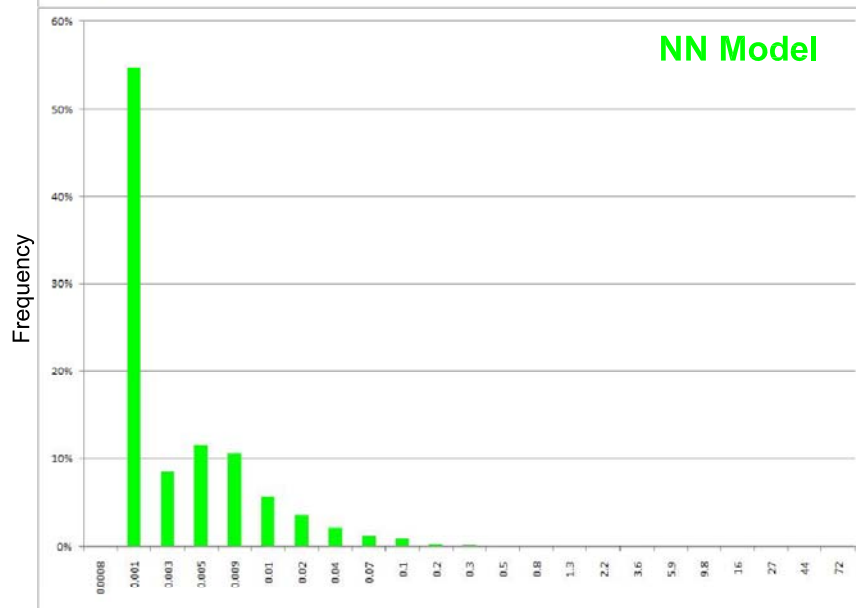
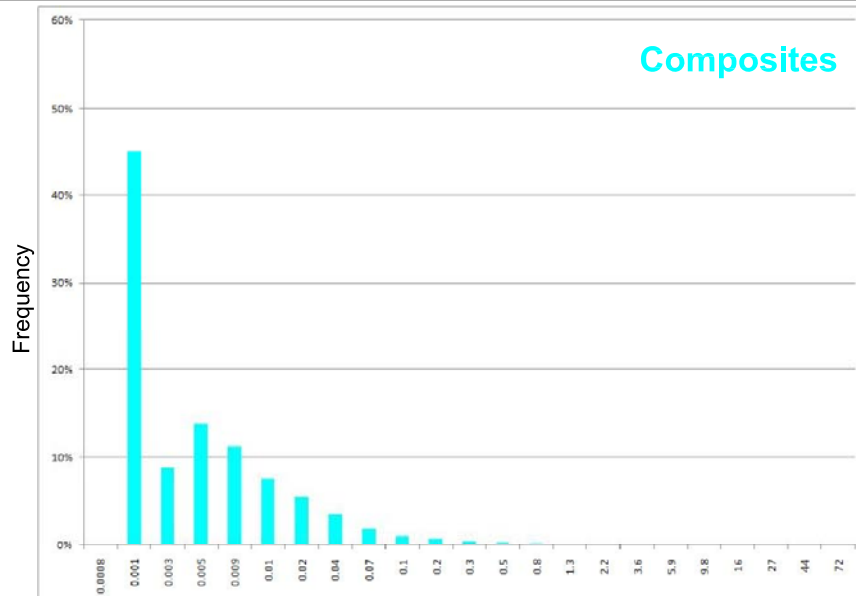
See Figure 17-14 for an example of the interpreted limits of the various resource classifications.

### **17.1.6 Resource Statement**

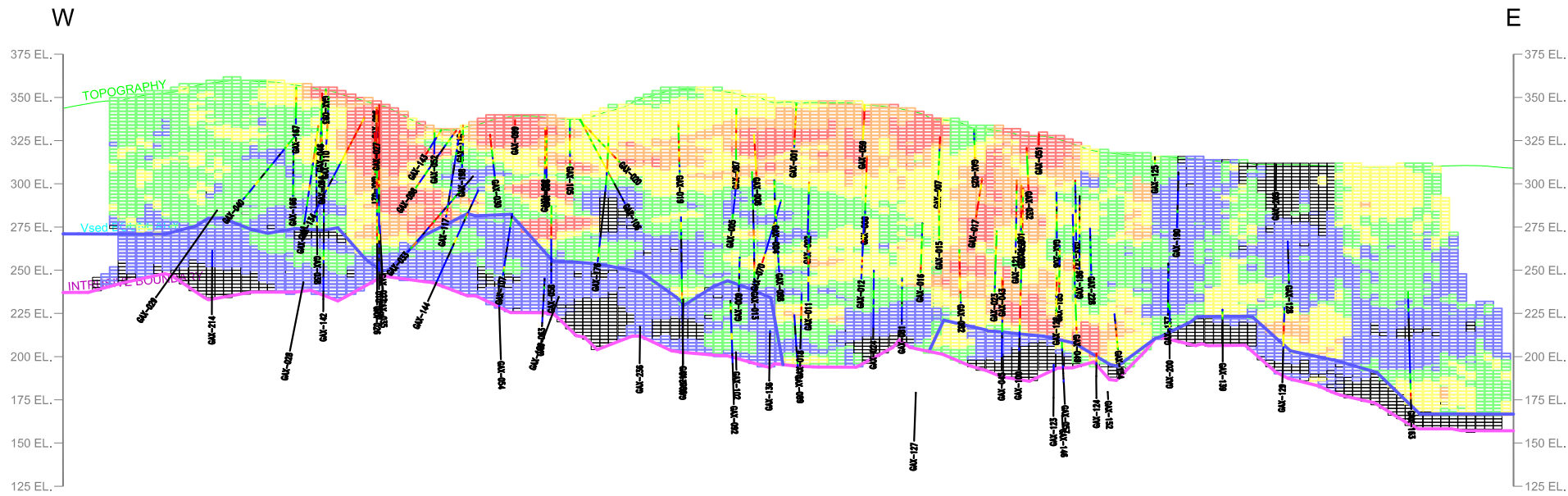
The estimated mineral resources for the El Gallo Deposit are detailed in Table 17-5. The low grade material is envisioned for a heap leach process whereas the high grade material is envisioned for a milling process. Note that these are not reserve estimates. Currently, these resources do not have demonstrated economic viability. Furthermore, they are reported as a block model inventory above a cutoff grade. The resources presented here are not constrained by the pit shells used in this PEA.



Silver Grade (grams per tonne)



Gold Grade (grams per tonne)



Legend	
Ag (gpt)	
█	≥ 0.0
█	0.3
█	3.3
█	13.3
█	50.0
█	104.0
█	∞

Prepared by  
 **pincocock, allen & holt**  
 165 S. Union Boulevard, Suite 950  
 Lakewood, Colorado 80228  
 Phone (303) 986-6950

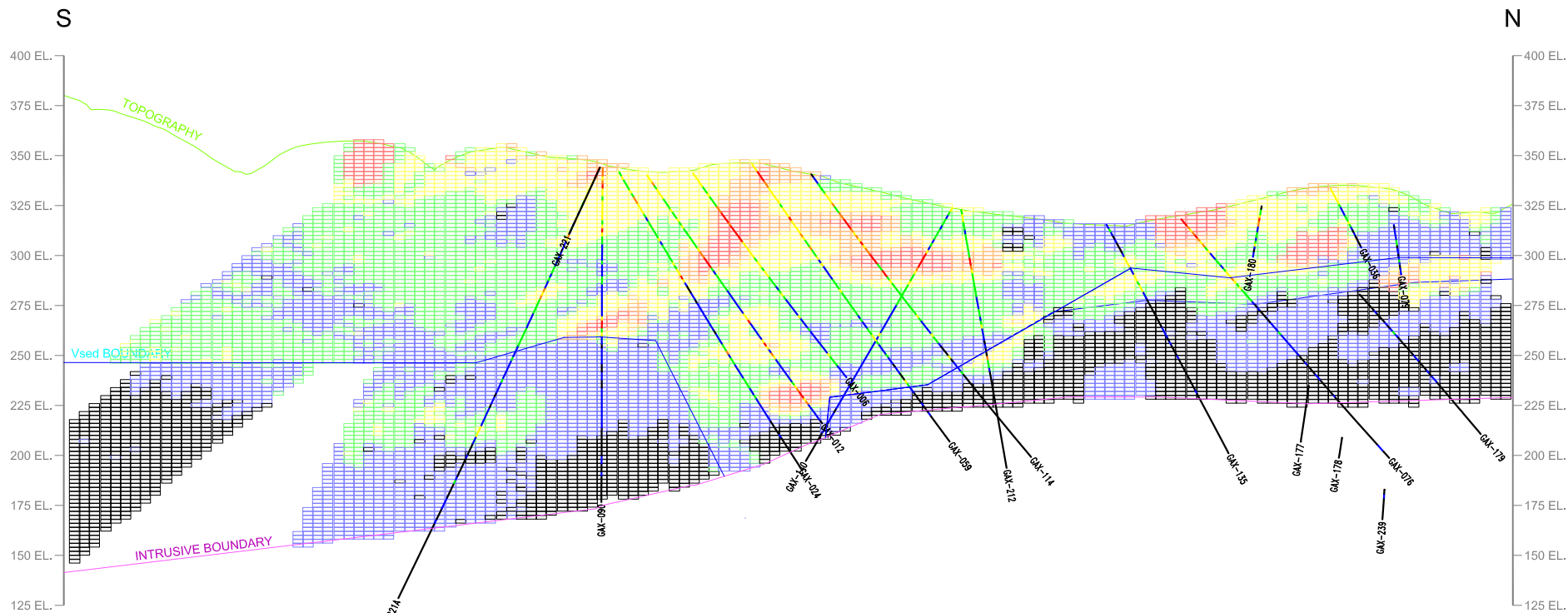
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 El Gallo District  
 PEA


**FIGURE 17-7**  
**Silver Model Long Section**  
**Looking North**

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 Fig.17-7.dwg



Legend	
Ag (gpt)	
█	> 0.0
█	< 0.3
█	0.3
█	3.3
█	3.3
█	13.3
█	13.3
█	50.0
█	50.0
█	104.0
█	104.0
█	∞

Prepared by  
 **pincock, allen & holt**  
 165 S. Union Boulevard, Suite 950  
 Lakewood, Colorado 80228  
 Phone (303) 986-6950

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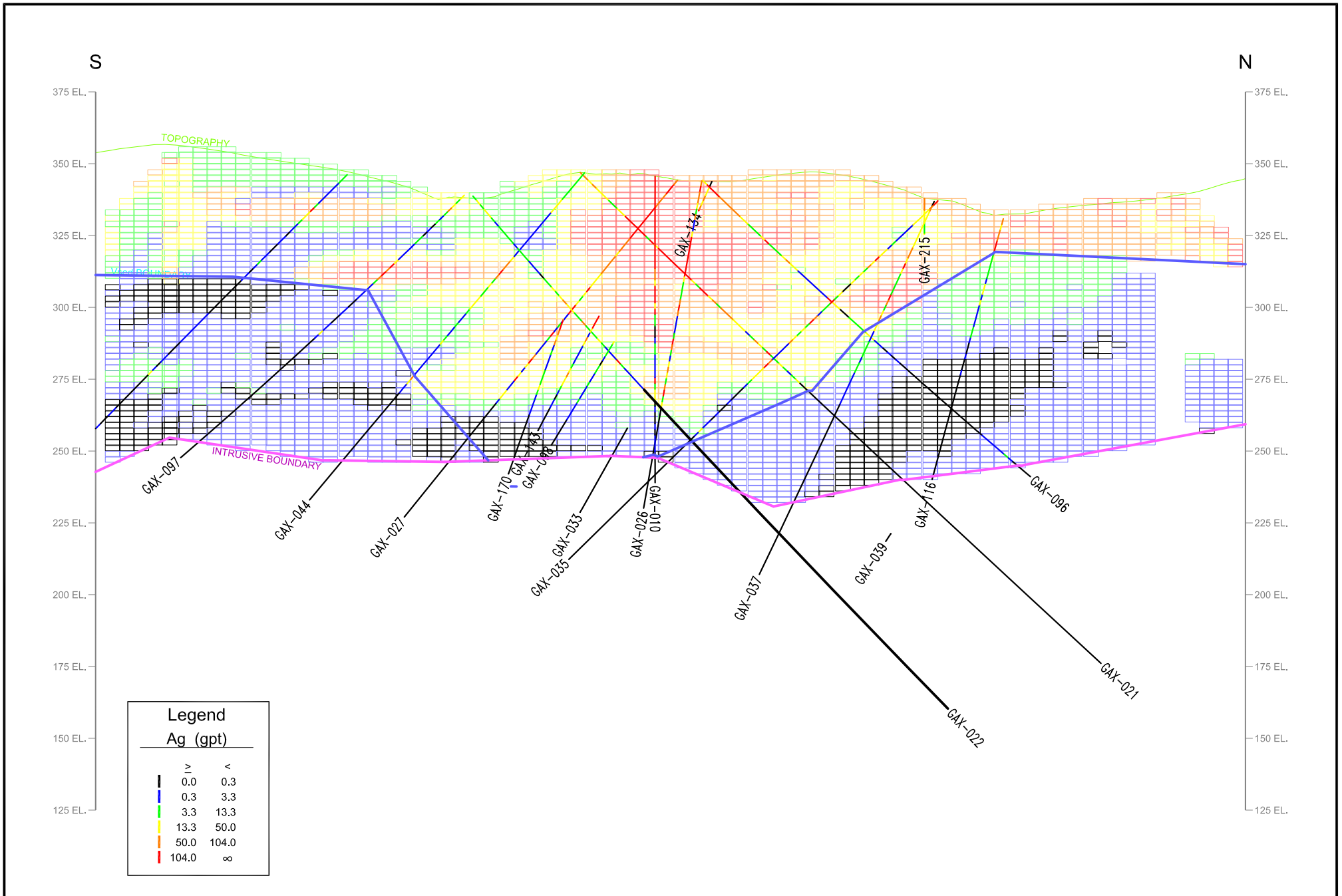
**FIGURE 17-8**  
**Silver Model Cross-Section**  
**Looking West - Eastern Portion of Deposit**


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Fig.17-8.dwg



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**pincock, allen & holt**  
 165 S. Union Boulevard, Suite 950  
 Lakewood, Colorado 80228  
 Phone (303) 986-6950

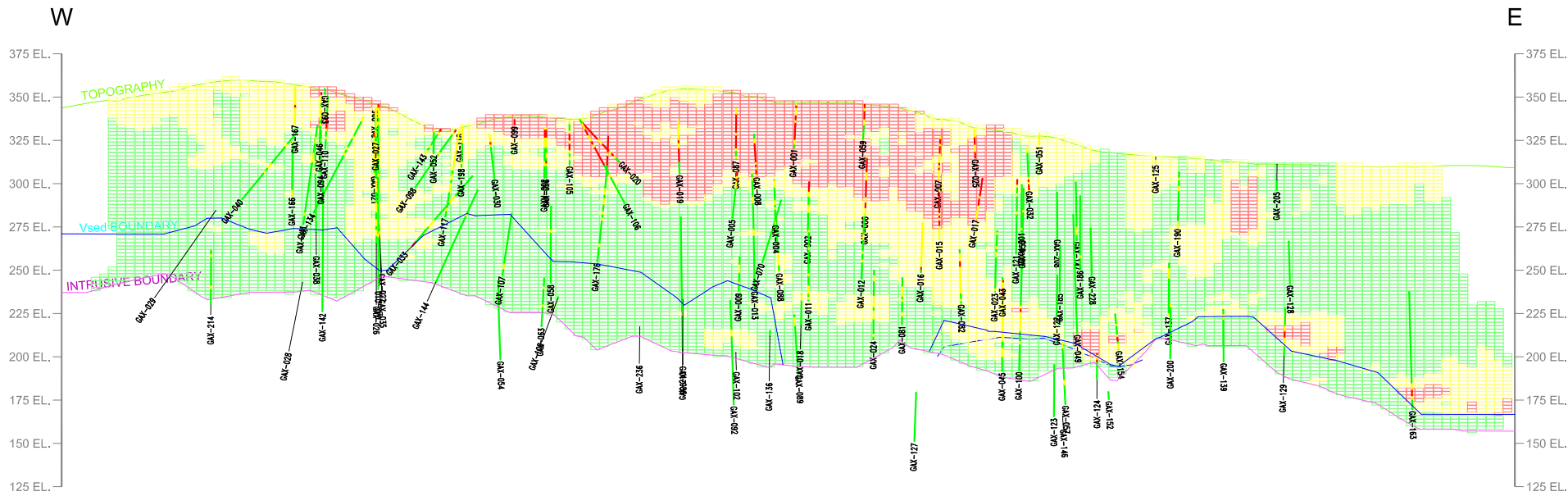
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**FIGURE 17-9**  
**Silver Model Cross-Section**  
**Looking West - Western Portion of Deposit**

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 Fig.17-9.dwg



Legend	
Au (gpt)	
≥	<
0.005	0.005
0.005	0.040
0.040	∞

Prepared by  
 **pincocK, allen & holt**  
 165 S. Union Boulevard, Suite 950  
 Lakewood, Colorado 80228  
 Phone (303) 986-6950

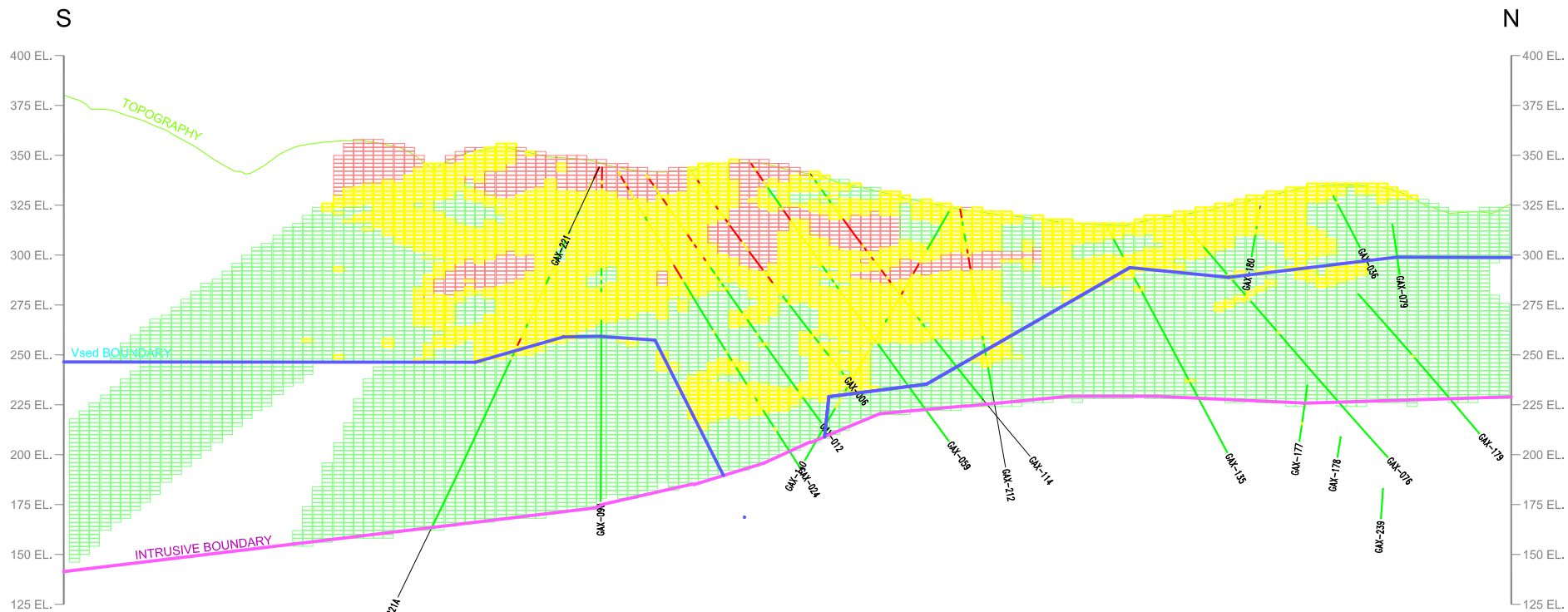
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**FIGURE 17-10**  
**Gold Model Cross-Section**  
**Looking North**

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Drawing Name  
 Fig.17-10.dwg



Legend	
Au (gpt)	
<span style="color: green;">█</span>	$\ge 0.005$
<span style="color: yellow;">█</span>	0.005 - 0.040
<span style="color: red;">█</span>	0.040 - $\infty$

Prepared by  
 **pincock, allen & holt**  
 165 S. Union Boulevard, Suite 950  
 Lakewood, Colorado 80228  
 Phone (303) 986-6950

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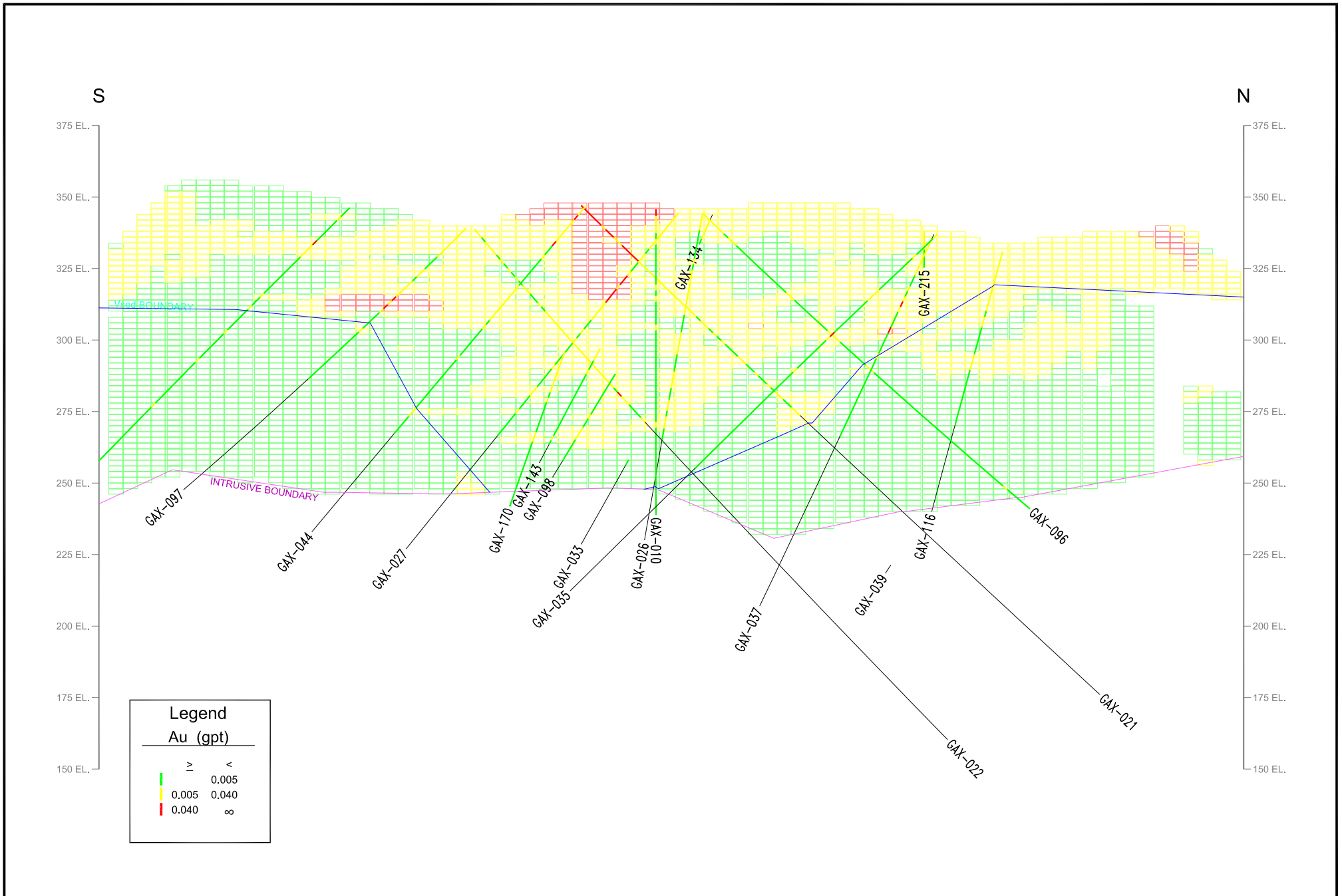
**FIGURE 17-11**  
**Gold Model Cross-Section**  
**Looking West - Eastern Portion of Deposit**

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Fig.17-11.dwg



Prepared by  
**pinc**cock, allen & holt  
 165 S. Union Boulevard, Suite 950  
 Lakewood, Colorado 80228  
 Phone (303) 986-6950

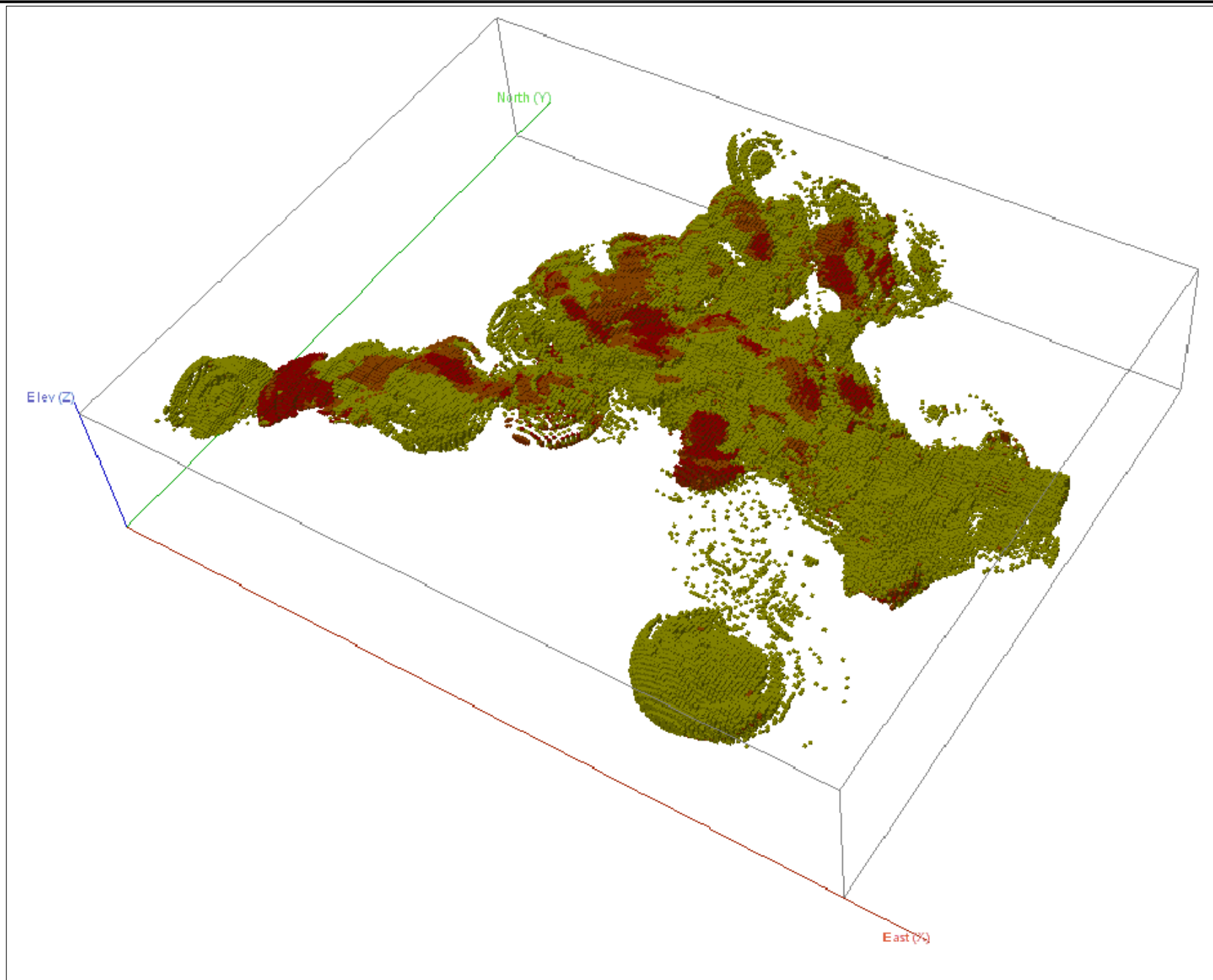
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**FIGURE 17-12**  
**Gold Model Cross-Section**  
**Looking West - Western Portion of Deposit**

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 Fig.17-12.dwg



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 **pincock, allen & holt**  
 165 S. Union Boulevard, Suite 950  
 Lakewood, Colorado 80228  
 Phone (303) 986-6950

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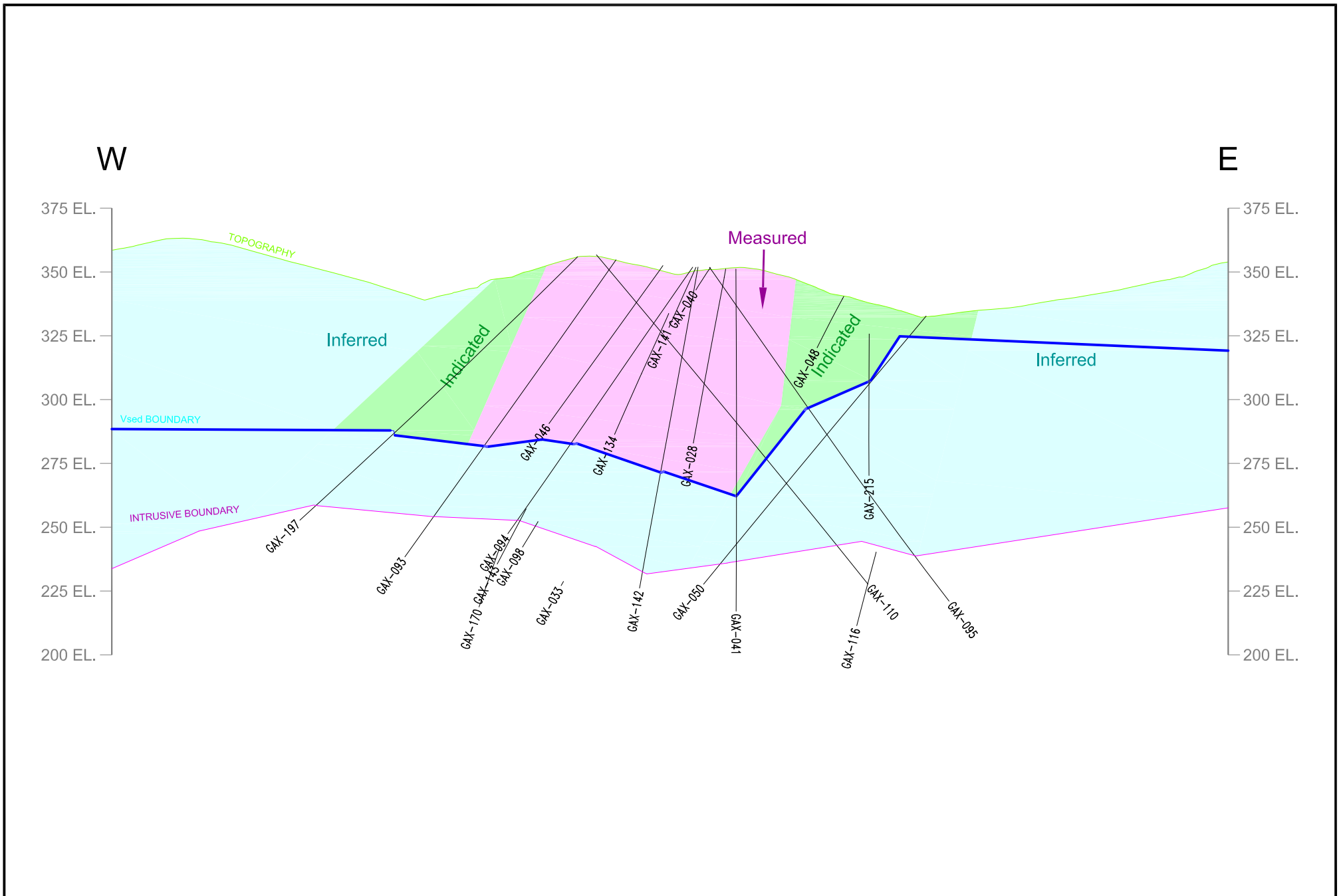
FIGURE 17-13  
 3D View of Resource Blocks


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**pincock, allen & holt**  
 165 S. Union Boulevard, Suite 950  
 Lakewood, Colorado 80228  
 Phone (303) 986-6950

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**FIGURE 17-14**  
**Resource Classification**  
**Measured, Indicated and Inferred**

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Drawing Name  
 Fig.17-14.dwg

**TABLE 17-5**  
**US Gold Corporation**  
**Preliminary Economic Assessment, El Gallo District**  
**El Gallo Resource Estimate**

<b>Measured and Indicated Resources (tonnes)</b>							
<b>Class</b>	<b>Group</b>	<b>Grade Range</b>	<b>Tonnage x1000</b>	<b>Ag ppm</b>	<b>Au ppm</b>	<b>Ounces of Silver</b>	<b>Ounces of Gold</b>
Measured	Low Grade	20-40 Ag ppm	2,519	28.7	0.03	2,321,320	2,537
	High Grade	> 40 Ag ppm	4,437	120.5	0.09	17,194,342	13,275
Indicated	Low Grade	20-40 Ag ppm	2,618	28.3	0.02	2,385,463	1,874
	High Grade	> 40 Ag ppm	3,024	96.1	0.07	9,342,119	7,195
Measured + Indicated	Low Grade	20-40 Ag ppm	5,136	28.5	0.03	4,706,783	4,411
	High Grade	> 40 Ag ppm	7,461	110.6	0.09	26,536,461	20,470
<b>Total Measured + Indicated</b>			<b>12,598</b>	<b>77</b>	<b>0.06</b>	<b>31,243,244</b>	<b>24,881</b>
<b>Inferred Resources</b>							
<b>Class</b>	<b>Group</b>	<b>Grade Range</b>	<b>Tonnage x1000</b>	<b>Ag ppm</b>	<b>Au ppm</b>	<b>Ounces of Silver</b>	<b>Ounces of Gold</b>
Inferred	Low Grade	20-40 Ag ppm	6,485	27.4	0.01	5,721,391	2,972
	High Grade	> 40 Ag ppm	3,525	97.2	0.06	11,012,828	7,326
<b>Total Inferred</b>			<b>10,010</b>	<b>52</b>	<b>0.03</b>	<b>16,734,220</b>	<b>10,298</b>

## **17.2**      ***Magistral***

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

### **17.2.1**    **Coordinate Conversion**

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

### **17.2.2**    **Topography**

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

### **17.2.3**    **Drill Hole Database**

The drill hole database for Magistral consists largely of reverse circulation and a lesser number of core holes. Table 17-6 shows the contents of the sample database. Drill holes were sampled at 1.5 m intervals. Database sample intervals consistently include data for gold and sporadically for silver and

copper. Samples with less than detectable gold values are recorded in the database at the detection limit or at a percentage of this limit, depending on when the work was done. Earlier threshold results that constitute the bulk of the database are recorded at 40 percent of the detection limit (40 percent of 0.030 gpt or 0.012 gpt). PAH notes that locally these 0.012 gpt values have been rounded to 0.010 gpt. Subsequent drilling has been recorded at the analytical threshold (0.005 gpt).

**TABLE 17-6**  
**US Gold Corporation**  
**Preliminary Economic Assessment, El Gallo District**  
**Magistral Drill Hole Database**

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

#### **17.2.4 Compositing Procedures**

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

#### **17.2.5 Grade Capping**

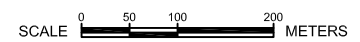
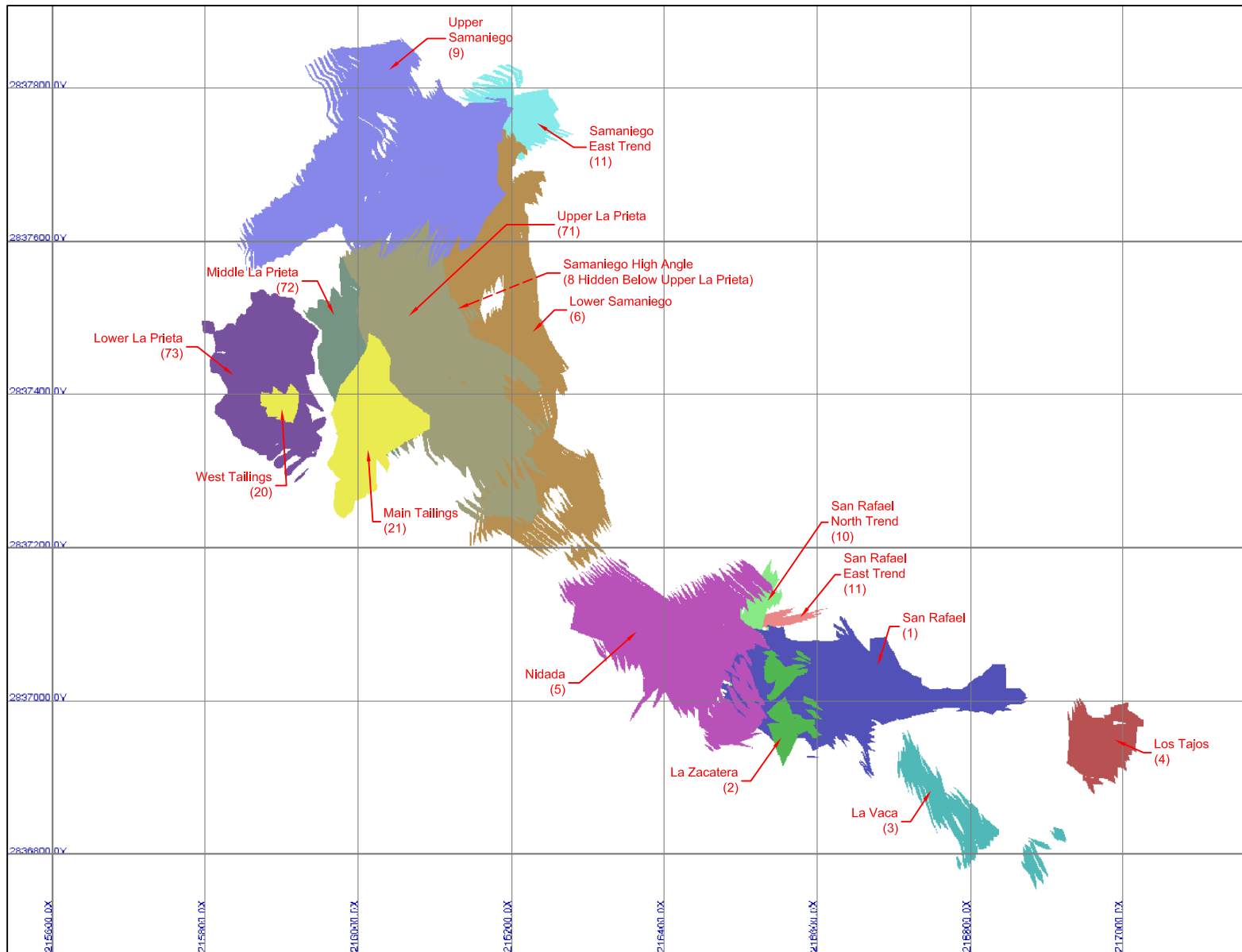
PAH conducted a statistical analysis of gold composite grades attempting to locate high grade outliers within the population. One outlier was identified in hole M-130. This composite has a grade of 38.05 grams gold per tonne, which is over 55 percent greater than the next highest composite grade of 24.41 grams gold per tonne. During block grade interpolation, the grade of this outlier was cut to 24.41 grams gold per tonne.


#### **17.2.6 Definition of Model Domains**

Three distinct types of model domains were created representing in situ mineralization, underground workings and surface tailings piles. The in situ and tailings domains are illustrated in Figures 17-15 and 17-16.

##### ***In Situ Domains***

Geological interpretations of the structural zone trends were conducted on the geologic cross-sections. Zone boundaries were delineated at a nominal 0.2 gpt Au grade in concert with other geologic considerations. Generally, one sample-interval points were not included in the zone boundary unless directly along the trend of a specific mineralized zone and even then a minimum of three consecutive



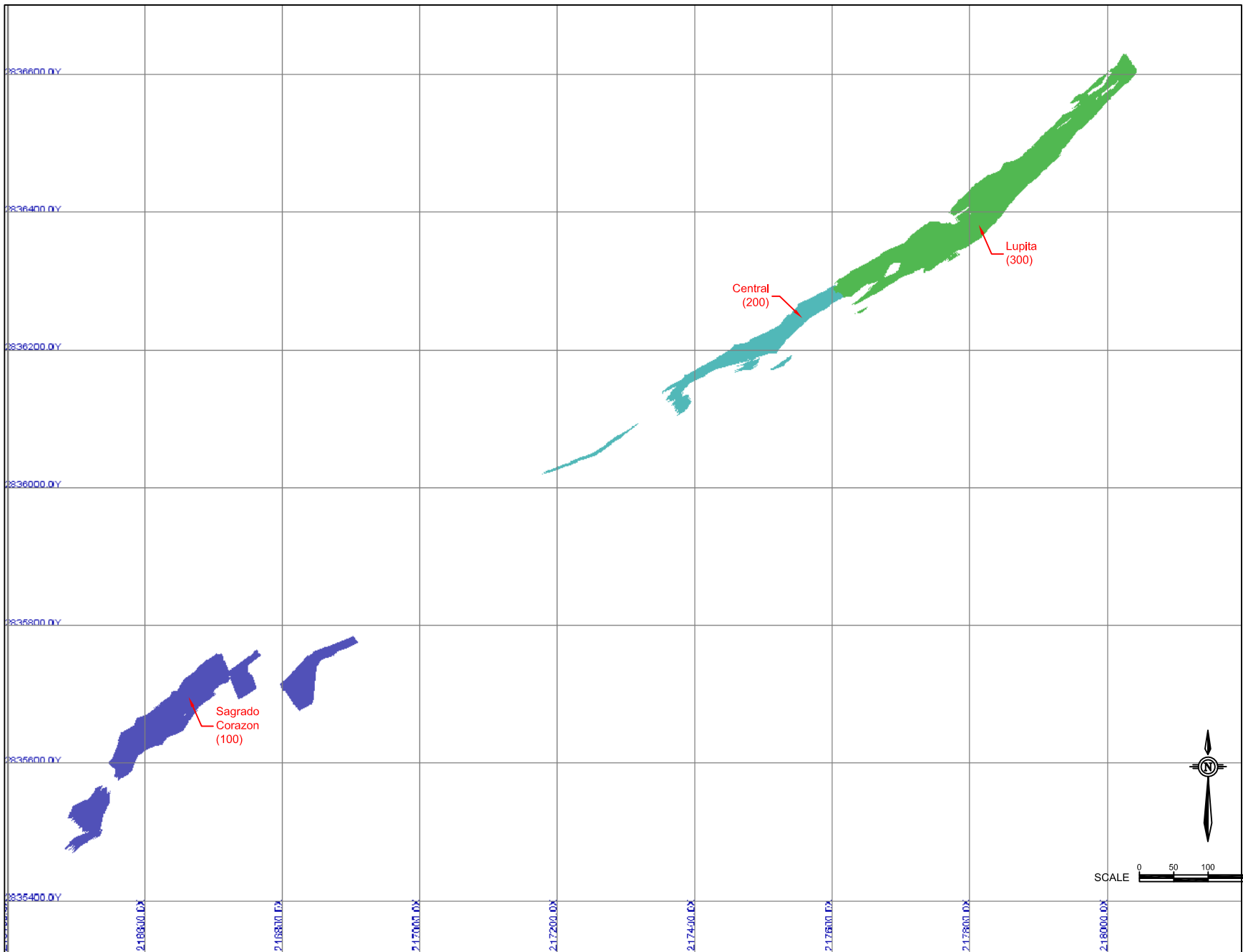
Prepared by  
 **pincocock, allen & holt**  
 165 S. Union Boulevard, Suite 950  
 Lakewood, Colorado 80228  
 Phone (303) 986-6950


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**FIGURE 17-15**  
**Domain Map**  
**Samaniego, San Rafael and Tailings**

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Prepared by  
 **pincock, allen & holt**  
 165 S. Union Boulevard, Suite 950  
 Lakewood, Colorado 80228  
 Phone (303) 986-6950

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**FIGURE 17-16**  
**Domain Map**  
 Lupita, Central and Sagrado Corazon

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sample intervals were generally included. Longer mineralized intervals were not included if they could not be correlated to at least one adjacent drill hole. The structural zone interpreted shapes were then digitized and projected to 5 m bench plans. A further geologic interpretation was made on the bench plans, guided by the projections from the cross-sections. The resulting structural zone shapes from the bench plans were used to build the block model representations of the structural zones. Table 17-7 lists all domains by name and code.

**TABLE 17-7**  
**US Gold Corporation**  
**Preliminary Economic Assessment, El Gallo District**  
**Magistral Domain Codes**

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

### ***Underground Workings Domains***

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

## Tailings Piles Domains

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

### 17.2.7 Block Model

Three block models were constructed representing three different areas of known mineralization on the property. These models are referred to as Samaniego/San Rafael, Lupita/Central and Sagrado Corazon. The geometry of these three block models is detailed in Table 17-8.

**TABLE 17-8**  
**US Gold Corporation**  
**Preliminary Economic Assessment, El Gallo District**  
**Magistral Block Model Geometries**

<b>Samaniego/San Rafael</b>	<b>X</b>	<b>Y</b>	<b>Z</b>
Origin*	215,530.1608	2,836,596.9541	655
Block Size (meters)	5	5	5
Rotation	358.85 degrees anti-clockwise		
Number of Columns	320		
Number of Rows	300		
Number of Levels	84		
Number of Blocks	8,064,000		
<b>Lupita/Central</b>	<b>X</b>	<b>Y</b>	<b>Z</b>
Origin*	216,784.1686	2,836,036.6734	585
Block Size (meters)	5	5	5
Rotation	303.85 degrees anti-clockwise		
Number of Columns	100		
Number of Rows	280		
Number of Levels	73		
Number of Blocks	2,044,000		
<b>Sagrado Corazon</b>	<b>X</b>	<b>Y</b>	<b>Z</b>
Origin*	216,207.94	2,835,483.13	585
Block Size (meters)	5	5	5
Rotation	313.85 degrees anti-clockwise		
Number of Columns	100		
Number of Rows	180		
Number of Levels	50		
Number of Blocks	900,000		

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

### **Block Domain Codes, Percents and Density**

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

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

### **Block Grade Modeling**

Gold grades were assigned to blocks based on the surrounding drill hole composite grades using an inverse distance to the 6<sup>th</sup> power method. Blocks of a given domain code were only assigned grade based on composites within the same domain. Search ellipses were used to limit the maximum distance between a block and the composites used to interpolate that block's grade. These search ellipses vary by domain and are listed in Table 17-9. For the in situ material, a block must have at least two composites within its search ellipse before receiving a grade and use no more than the closest 12 composites. For the tailings material, these limits are set to one and six composites, respectively.

**TABLE 17-9**  
**US Gold Corporation**  
**Preliminary Economic Assessment, El Gallo District**  
**Magistral Domain Search Ellipses**

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

## **Resource Classification**

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

### **17.2.8 Grade Model Validation**

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

PAH generated nearest neighbor (NN) gold grade models for each domain to compare against the ID models. The average gold grades for both the NN and ID models are compared for each domain in Table 17-10. Four domains show a discrepancy of greater than five percent. PAH conducted a more detailed sectional review of these domains. Following this review, PAH is satisfied with the ID interpretation of gold grade.

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

### **17.2.9 Mineral Resource Statement**

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

The resource estimate for Magistral is summarized in Table 17-11. Using a cutoff grade of 0.30 grams gold per tonne, the measured and indicated resources for the Property are 10.4 million tonnes averaging 1.50 grams gold per tonne for a total of 502,466 contained ounces of gold. PAH also estimated an inferred resource of 223 thousand tonnes averaging 1.14 grams gold per tonne for a total of 8,167 contained ounces of gold. Note that mineral resources that are not mineral reserves do not have demonstrated economic viability. Furthermore, they are reported as a block model inventory above a cutoff grade. The resources presented here are not constrained by the pit shells used in this PEA.

TABLE 17-10

## US Gold Corporation

## Preliminary Economic Assessment, El Gallo District

## Magistral Grade Statistical Comparison

Domain	Domain Code	Composite Count	Inverse Distance			Nearest Neighbor			Percent Difference of	
			Mean (g Au/t)	Std. dev.	Std. Error	Mean (g Au/t)	Std. dev.	Std. Error		
San Rafael	1	485	1.39	1.49	0.07	1.39	1.82	0.08	0.0%	
La Zacatera	2	22	0.77	0.72	0.15	0.77	0.84	0.18	0.0%	
La Vaca	3	15	0.84	0.93	0.24	0.82	1.07	0.28	2.4%	
Los Tajos	4	16	0.31	0.18	0.05	0.31	0.22	0.06	0.0%	
Nidada	5	145	1.20	1.86	0.15	1.22	2.38	0.20	-1.6%	
Lower Samaniego	6	343	0.81	1.16	0.06	0.79	1.38	0.07	2.5%	
Sam. High Angle	8	77	0.54	0.52	0.06	0.54	0.65	0.07	0.0%	
Upper Samaniego	9	203	1.23	1.52	0.11	1.24	1.89	0.13	-0.8%	
S.R North Trend	10	39	0.29	0.26	0.04	0.28	0.33	0.05	3.6%	
Sam. East Trend	11	100	0.79	1.25	0.13	0.75	1.61	0.16	5.3%	
S.R. East Trend	12	42	0.35	0.42	0.06	0.31	0.54	0.08	12.9%	
West Tailings	20	13	1.51	0.36	0.10	1.67	0.52	0.14	-9.6%	
Main Tailings	21	128	2.18	0.90	0.08	2.16	1.51	0.13	0.9%	
La Prieta	Upper	71	285	1.07	1.28	0.08	1.06	1.50	0.09	0.9%
	Middle	72	74	3.07	3.00	0.35	2.87	3.87	0.45	7.0%
	Lower	73	143	2.40	2.74	0.23	2.31	3.25	0.27	3.9%
Sagrado Corazon	100	297	0.82	1.08	0.06	0.82	1.42	0.08	0.0%	
Central	200	49	0.50	0.34	0.05	0.51	0.44	0.06	-2.0%	
Lupita	300	348	1.04	1.33	0.07	1.03	1.82	0.10	1.0%	

TABLE 17-11

## US Gold Corporation

## Preliminary Economic Assessment, El Gallo District

## Magistral Resource Estimate

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

## **17.3 Palmarito**

The geologic resources for Palmarito are partitioned into three categories: 1) In Situ, 2) Dump, and 3) Tailings. The in situ resources consist of the material undisturbed by past mining activity. The Dump resources consist of material that was mined in the past, but not processed. Furthermore, this material currently resides in waste piles proximal to the old mine workings at Palmarito. The Tailings resources are the tailings from the previous processing operations at Palmarito. This material currently resides in a dry tailings pond south of the old mine workings. Where appropriate, the following discussion of the resource estimate for Palmarito will address the in situ, dump and tailings resources separately.

### **17.3.1 Topography**

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

Aerial photography and photogrammetry of the project area was completed by Cooper Aerial Survey (Tucson, AZ) in June 1995 for Lluvia del Oro using fixed stations as control points for the aerial survey. Topographic and cadastral data was provided to Lluvia del Oro as AutoCAD files and in a variety of ASCII text formats.

The dumps were surveyed in August 2008 by Geotopografía y Construcción (Guasave, Sinaloa, México). A total of 320 points were surveyed using a geodesic Trimble 5800 GPS. These points were used to create the dump topographic map using Civil CAD software.

### **17.3.2 Drill Hole Database**

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

Tables 17-12, 17-13, and 17-14 summarize the drill hole statistics for the data used to model the in situ, dump and tailings resources, respectively.

### **17.3.3 Definition of Model Domains**

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

**TABLE 17-12**  
**US Gold Corporation**  
**Preliminary Economic Assessment, El Gallo District**  
**Palmarito In Situ Drill Hole Data - Basic Statistics**

Number of Core Holes	41
Number of RC Holes	104
Meters of Core	7,218
Meters of RC	10,337
Average Hole Length (m)	121
Minimum Depth (m)	20
Maximum Depth (m)	506
Meters of Total Drilling	17,555
Average Sample Length (m)	1.6
Number of Sampled Intervals	3,295
Total Meters Sampled	16,743
Average Silver Grade (g/t)*	13
Minimum Silver Grade (g/t)	0.03
Maximum Silver Grade (g/t)	989
Average Gold Grade (g/t)*	0.047
Minimum Gold Grade (g/t)	0.0025
Maximum Gold Grade (g/t)	70

Note: Sample statistics exclude intercepts within the Dump

\*weighted by sample length

**TABLE 17-13**  
**US Gold Corporation**  
**Preliminary Economic Assessment, El Gallo District**  
**Palmarito Dump Drill Hole Data - Basic Statistics**

Number of Core Holes	4
Number of RC Holes	21
Number of Pits	39
Meters of Core	160
Meters of RC	1,180
Meters of Pits	140
Average Hole Length (m)	23
Minimum Depth (m)	0.6
Maximum Depth (m)	110
Meters of Total Drilling	1,480
Average Sample Length (m)	2.5
Number of Sampled Intervals	69
Total Meters Sampled	240
Average Silver Grade (g/t)	208
Minimum Silver Grade (g/t)	1.20
Maximum Silver Grade (g/t)	1,170
Average Gold Grade (g/t)	0.32
Minimum Gold Grade (g/t)	0.03
Maximum Gold Grade (g/t)	1.68

Note: Sample statistics exclude intercepts within the in situ material

\*weighted by sample length

**TABLE 17-14**  
**US Gold Corporation**  
**Preliminary Economic Assessment, El Gallo District**  
**Palmarito Tailings Drill Hole Data - Basic Statistics**

Number of Trenches	52
Total Meters	72
Average Hole Length (m)	1.4
Minimum Depth (m)	0.2
Maximum Depth (m)	2.6

Average Sample Length (m)	1.5
Number of Sampled Intervals	66
Total Meters Sampled	97
Average Silver Grade (g/t)*	166
Minimum Silver Grade (g/t)	3.00
Maximum Silver Grade (g/t)	249
Average Gold Grade (g/t)*	0.003
Minimum Gold Grade (g/t)	0
Maximum Gold Grade (g/t)	0.0200

\*weighted by sample length

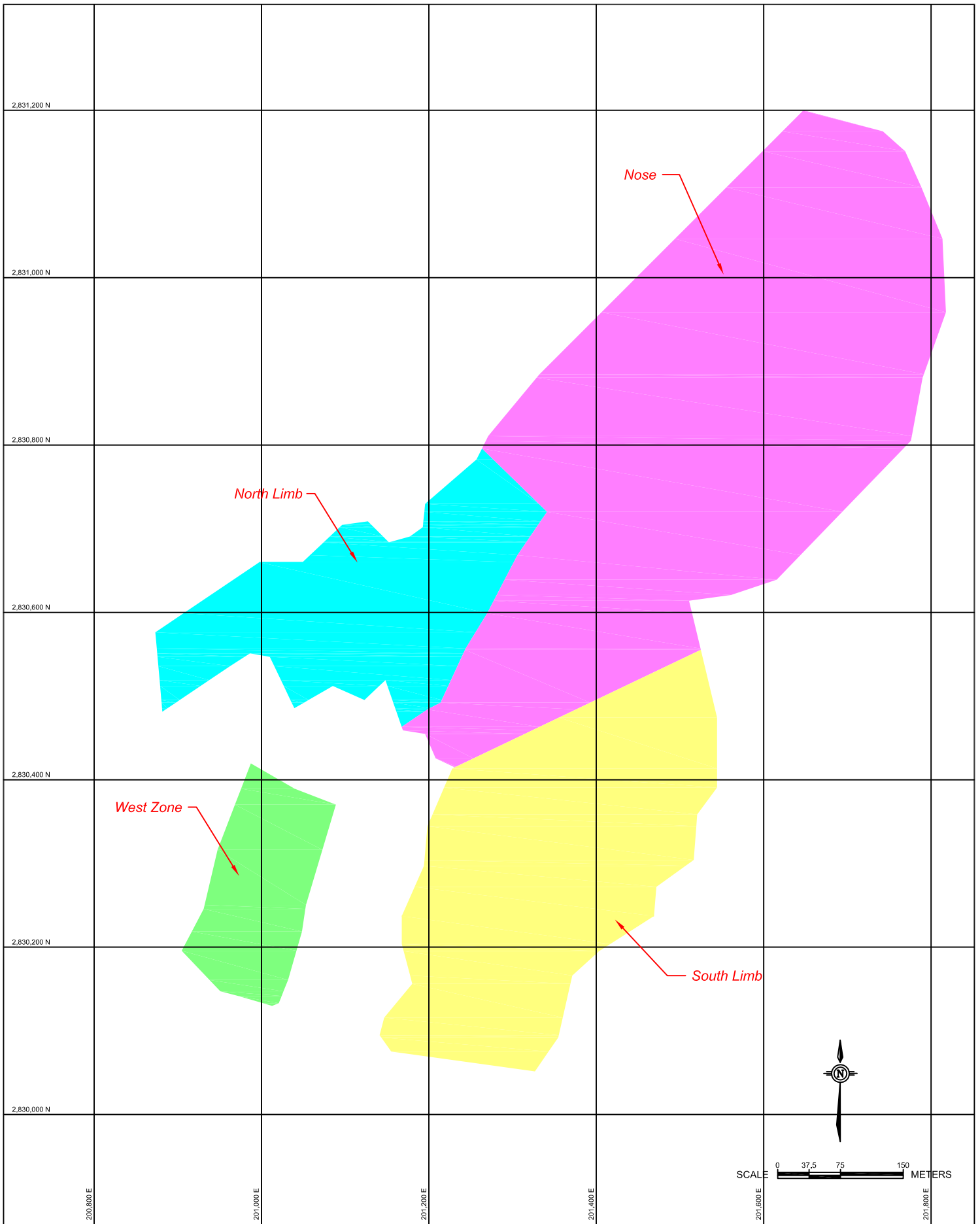
### ***In Situ Domains***


There are two contiguous zones of mineralization identified at Palmarito. The first is the main zone, which is tabular and takes the shape of a folded antiform that plunges to the northeast. The second, called the west zone, is a tabular zone that strikes to the north/northeast and dips to the east at 60 degrees. For the in situ material, PAH generated domains intended to restrict grade interpolation to these two zones. The contacts were drawn to approximate the 10 grams (0.32 troy ounces) silver per tonne limit of the mineralized zone. The grade limit of 10 grams (0.32 troy ounces) silver per tonne was chosen for two reasons: It represents a natural statistical break in the drill hole data, and it is just below those grades thought to be of economic interest. Where the deposit is open (typically down-dip), PAH has extrapolated the domain up to 150 m beyond the drill hole data maintaining the domain's thickness and orientation. Note: Further constraints are applied to the extrapolation of the resource estimate by the search ellipse. This is described below.

The shape of the main zone produces a problem for grade modeling and variography. Using Gems<sup>®</sup>, one cannot set search parameters for either case that can "see around corners." PAH attempted to unfold the model space to mitigate this problem, but ultimately was not satisfied with the results. Instead, the solid was partitioned into three separate domains to be modeled separately. These domains are referred to as North Limb, Nose and South Limb. Figure 17-17 illustrates the domains for Palmarito.

### ***Dump Domains***

As described above, a detailed survey of the Dump material was conducted in 2008 and a topographic map was produced from this survey. After studying this topographic map, PAH concludes that the dump



Prepared by  
 **pincock, allen & holt**  
 165 S. Union Boulevard, Suite 950  
 Lakewood, Colorado 80228  
 Phone (303) 986-6950

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**FIGURE 17-17**  
**Palmarito In Situ Domains**

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material was deposited in a series of six lifts. PAH deems it likely that each lift represents waste material from a discreet episode of historic mining. Another possibility is that these lifts were used to segregate different grades of material. In either case, PAH cannot conclude that the silver and gold content of one lift is representative of the others. As a result, PAH constructed a domain around each individual lift as shown in Figure 17-18.

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

### ***Tailings Domains***

One domain was defined for the Tailings material (see Figure 17-19). PAH also established the top, bottom and horizontal boundaries of the Tailings material. The top of the Tailings material is defined by the project topographic map. The bottom of the tailings material was interpreted by PAH as a surface triangulation connecting the bottoms of the trenches. The horizontal boundary was also interpreted PAH through analysis of the project topography.

## **17.3.4 Compositing**

### ***In Situ Composites***

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

1. Composite length is 5 m.
2. Composite lengths are measured down-the-hole.
3. Composites begin at the top of the in situ domain.
4. Final composite for a given hole is typically truncated by the bottom of the mineralized envelope.
5. There is no exclusion or special treatment of truncated composites.
6. Composite grades are calculated as the weighted average by volume of samples within the composite interval.

2,830,800 N

2,830,700 N

2,830,600 N

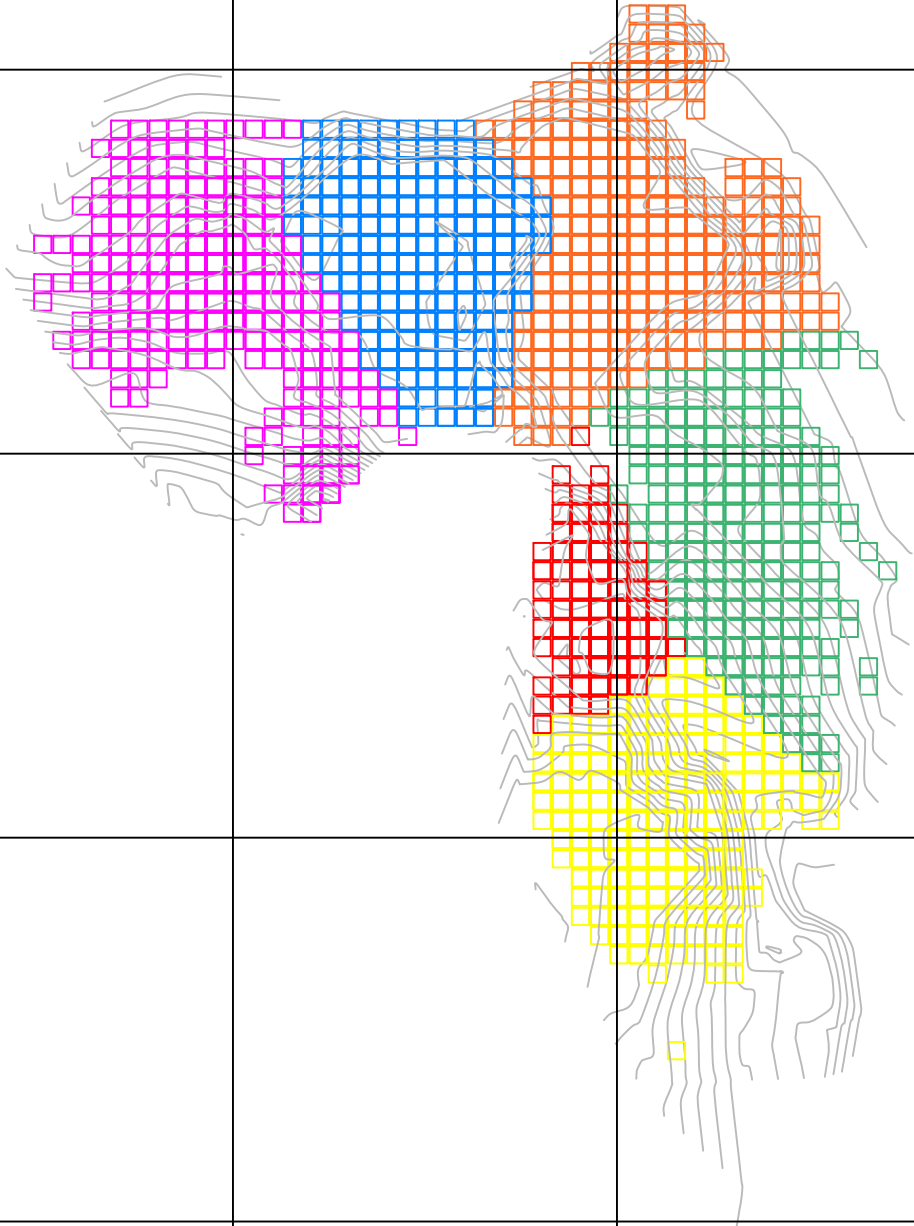
2,830,500 N

2,830,400 N

201,200 E

201,300 E

201,400 E




### LEGEND

- Lift 1
- Lift 2
- Lift 3
- Lift 4
- Lift 5
- Lift 6



SCALE 0 12.5 25 50 METERS

Prepared by  
 **pincok, allen & holt**  
 165 S. Union Boulevard, Suite 950  
 Lakewood, Colorado 80228  
 Phone (303) 986-6950

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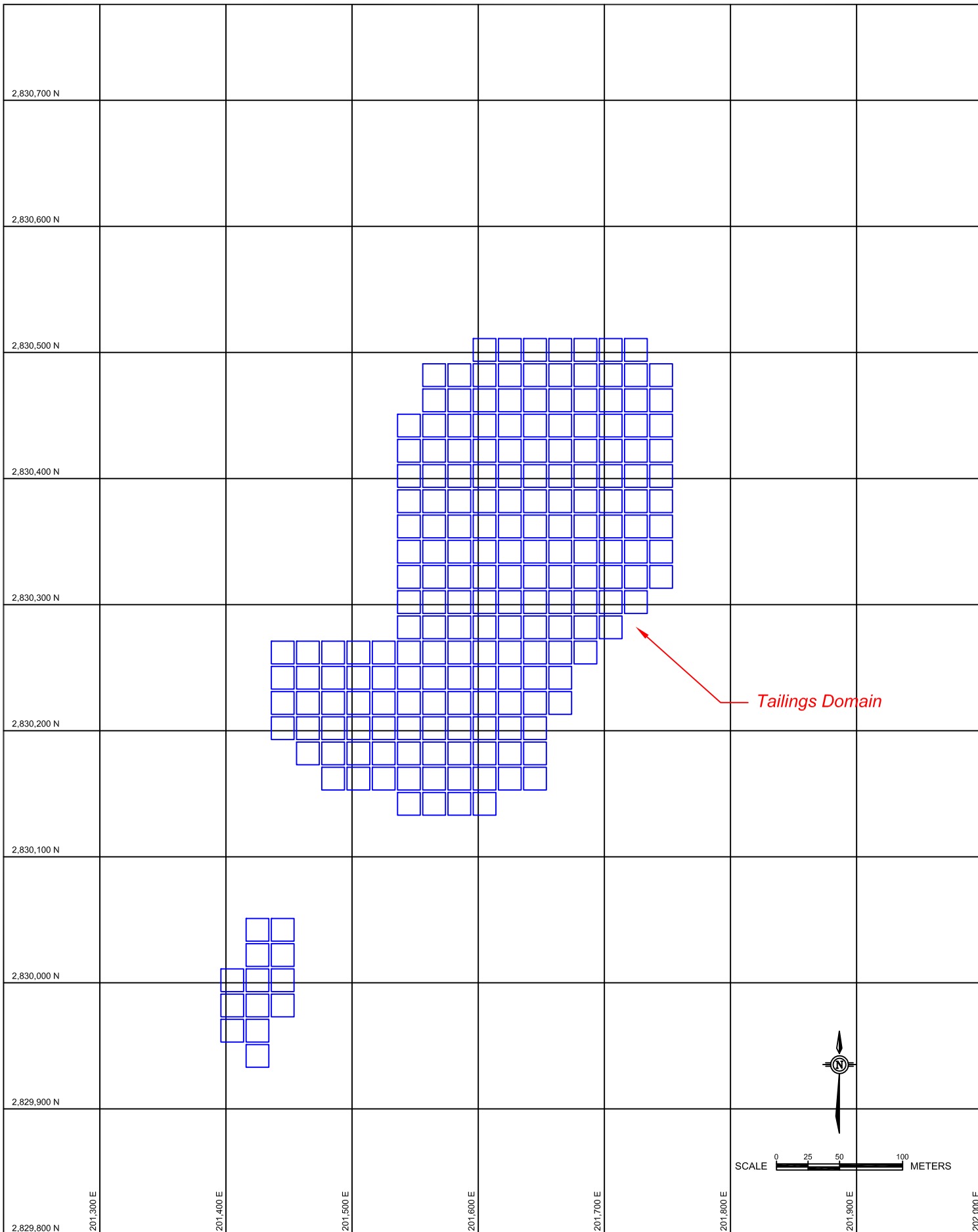
**FIGURE 17-18**  
**Palmarito Dump Domains**


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Prepared by  
 **pincocK, allen & holt**  
 165 S. Union Boulevard, Suite 950  
 Lakewood, Colorado 80228  
 Phone (303) 986-6950

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**FIGURE 17-19**  
**Palmarito Tailings Domains**

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### **Dump Composites**

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

### **Tailings Composites**

Trench samples for the Tailings material were not composited.

### **17.3.5 Block Model**

For each material type, a three dimensional block model was created in GEMS<sup>®</sup> mining software. The geometry of these block models are detailed in Table 17-15.

**TABLE 17-15**  
**US Gold Corporation**  
**Preliminary Economic Assessment, El Gallo District**  
**Palmarito Block Model Geometries**

<b>In Situ Model</b>	<b>X</b>	<b>Y</b>	<b>Z</b>
Origin (southwest-top corner)	200,600	2,830,500	235
Block Size (meters)	5	5	5
Rotation	45 degrees clockwise		
Number of Columns	186		
Number of Rows	280		
Number of Levels	127		
Number of Blocks	6,614,160		
<b>Dump Model</b>	<b>X</b>	<b>Y</b>	<b>Z</b>
Origin (southwest-top corner)	201,138	2,830,412	150
Block Size (meters)	5	5	2
Rotation	no rotation		
Number of Columns	50		
Number of Rows	65		
Number of Levels	16		
Number of Blocks	52,000		
<b>Tailings Model</b>	<b>X</b>	<b>Y</b>	<b>Z</b>
Origin (southwest-top corner)	201,335	2,829,892	130
Block Size (meters)	20	20	0.5
Rotation	no rotation		
Number of Columns	25		
Number of Rows	40		
Number of Levels	100		
Number of Blocks	100,000		

### **17.3.6 Grade Modeling**

The composited assay data for the drill holes and pits were used to populate the block models with silver and gold grades. In all cases, the silver and gold grades were transformed to their natural logarithms prior to grade interpolation. The interpolation algorithms assigned natural logarithm values for silver and gold to the blocks. PAH applied the exponential function ( $e(x)$ ) to the interpolated natural log values of the blocks to yield "untransformed" silver and gold grades.

#### ***Variography of In Situ Data***

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

All composites were analyzed together to establish the downhole semi-variogram. This semi-variogram shows a clear structure. PAH fit a spherical model to it and interpreted from that model a 0.25 nugget effect for the entire deposit.

Within each domain, PAH generated directional semi-variograms along several orientations. From these, a primary axis of continuity was picked for each domain. The semi-variograms for the primary axes all showed sufficient structure that they could be modeled for use in ordinary kriging. To each, PAH fit spherical models that maintained a nugget effect of 0.25 as described above.

Semi-variograms were then generated in several directions normal to the primary axes, from which the secondary axes of continuity were picked. The structures of the semi-variograms for the secondary axes were less pronounced. To each, a spherical model was fit, again maintaining a nugget effect of 0.25 and also having a sill value consistent with the respective primary semi-variogram model.

By default the tertiary axis of continuity is normal to both the primary and secondary axes. As should be expected, this axis is normal to the orientation of the tabular ore body. PAH elected to use a single range for all domains. A single semi-variogram was defined for the tertiary axis of all domains. To this, a spherical model was fit using a nugget effect of 0.25. The resulting model has a range of 22 m. Variogram parameters are listed in Table 17-16.

#### ***In Situ Grade Modeling***

Grade modeling for the in situ material is restricted to those blocks that are at least partially within the mineralized domains. Each block is assigned a percentage value representing the percent of the block within the domains. Only blocks with a percentage value greater than zero qualify to receive an interpolated silver and gold grade.

Blocks were then tagged with a code representing in which of the four domains (North Limb, Nose, South Limb, and West Zone) they are found. This tag dictates the search parameters used by the block during

grade interpolation. These domains are not treated as hard boundaries with respect to the composite data.

**TABLE 17-16**  
**US Gold Corporation**  
**Preliminary Economic Assessment, El Gallo District**  
**In Situ Search Parameters**

Axis	Parameter	Domain		
		North Limb	Nose	South Limb
Primary	nugget	0.25	0.25	0.25
	total sill	1.12	1.18	0.79
	range (m)	98.28	88.66	170.00
	azimuth (°)	280.00	60.00	125.00
	dip (°)	-44.00	-36.00	-30.00
Secondary	nugget	0.25	0.25	0.25
	total sill	1.12	1.18	0.79
	range (m)	98.00	75.00	90.00
	azimuth (°)	40.00	0.00	35.00
	dip (°)	-27.00	19.90	-0.01
Tertiary	nugget	0.25	0.25	0.25
	total sill	1.12	1.18	0.79
	range (m)	22.00	22.00	22.00
	azimuth (°)	149.80	109.00	125.00
	dip (°)	33.30	42.20	60.00

PAH interpolated the silver grade for qualifying blocks using ordinary kriging and the composite data. The semi-variogram models and search ranges used for each domain are consistent with those listed in Table 17-16, above. Any qualifying block with at least one composite in its search ellipse receives a silver grade. A block is limited to only the closest 12 composites during interpolation. Note, because the domains are not treated as hard boundaries, composites outside of the bounds of a given domain may influence the grade of a block within those bounds.

PAH interpolated the gold grade for qualifying blocks using the ID2 (inverse distance to the 2nd power) interpolation algorithm. The search ranges and orientations used for the gold model are the same as for the silver model. Any qualifying block with at least one composite in its search ellipse receives a gold grade. A block is limited to only the closest 12 composites during interpolation. As with the silver model, the domains are not treated as hard boundaries.

The drill hole data indicate the some underground workings were encountered. From this data PAH defined a three dimensional solid representing these underground workings. Blocks at least 50 percent within this solid were assigned zero grade and therefore excluded from the resource estimate.

### ***Dump Grade Modeling***

Grade modeling for the Dump material is restricted to those blocks that are within the mineralized domains. Only blocks that have at least 50 percent of their volume contained within a domain qualify to receive an interpolated silver and gold grade.

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

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

### ***Tailings Grade Modeling***

Grade modeling for the Tailings material is restricted to those blocks that are within the mineralized domain. All blocks in the domain qualify to receive an interpolated silver and gold grade. However, during the tabulation of resources, only volumes of a block below topography and above the interpreted bottom of the tailings pile are included in the resource.

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

## **17.3.7 Grade Model Validation**

The modeling methods described above are the final result of an iterative modeling process where several methods were explored. The final methods were chosen based on an internal review conducted by PAH. This review was designed to determine if the block grades are a fair and reasonable representation of both the composite data and PAH's understanding of the deposit geology.

### ***In Situ Grade Model Validation***

PAH generated nearest neighbor ("NN") models for silver and gold. The NN interpolation method simply assigns a block the same grade as its closest composite. These models are intended to represent the declustered composite data where any bias due to variable sample spacing has been mitigated. The NN interpolation used a spherical search ellipse with a radius of 9,999 m. For this exercise, only blocks that were previously classified as measured or indicated were assigned a grade in the NN models.

The silver and gold histograms for the resource models and the NN models are shown in Figure 17-20. The histograms for the resource models exclude blocks that are classified as inferred. The resource model distributions have a similar shape to their NN counterparts with a slightly smaller spread. The reduction in spread is an anticipated result of the volume variance between small sample composites and large blocks. The overall shape of these distributions indicate that, at a global scale, the block models are a fair and reasonable representation of the drill hole data.

PAH reviewed the in situ models along sections and compared the interpolated block grades with those of the drill holes. This review is meant to verify that, at a local scale, block and drill hole grades are similar. Figures 17-21 and 17-22 are example sections from this review for silver and gold, respectively. This review indicates that, at a local scale, the block models are a fair and reasonable representation of the drill hole data. Figure 17-23 is a three-dimensional view of the silver grade model.

### ***Dump Grade Model Validation***

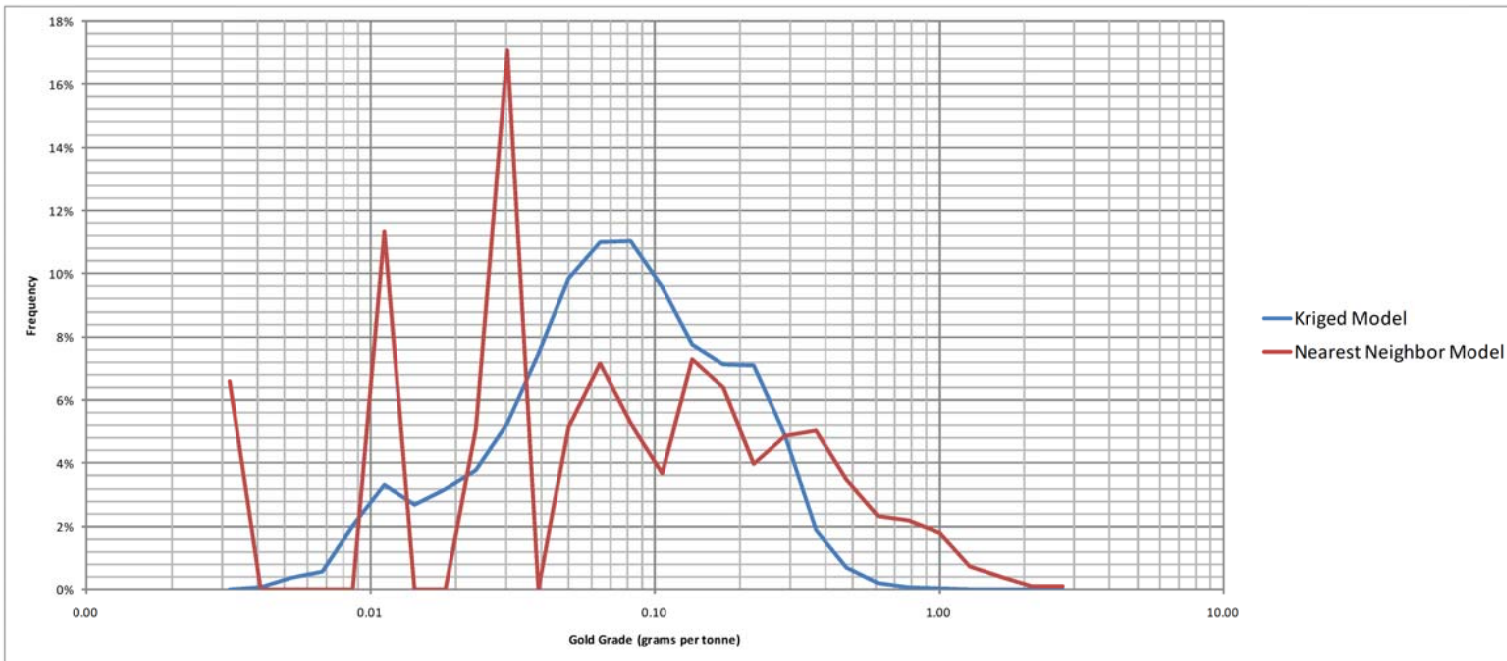
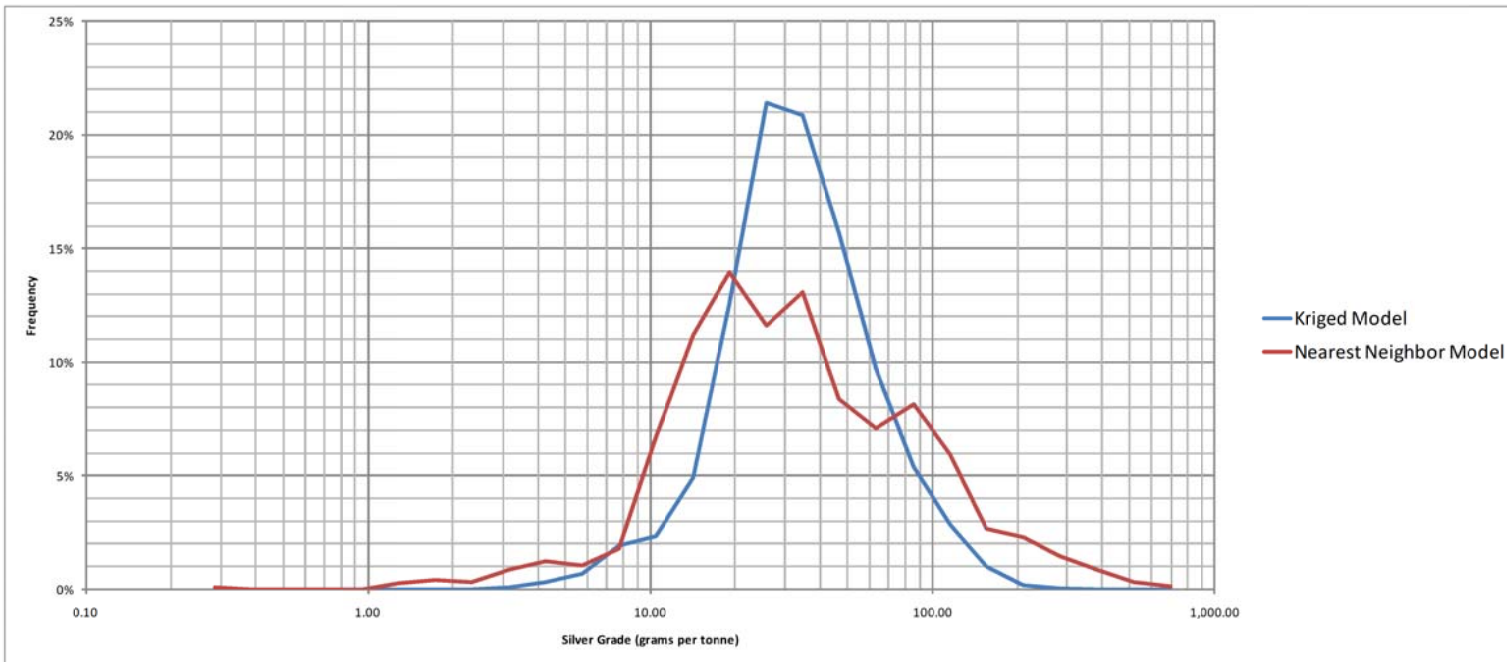
The silver and gold histograms for the resource models and the composites are shown in Figure 17-24. The resource model distributions have a similar shape to their respective composite grades with a slightly smaller spread. The reduction in spread is an anticipated result of the volume variance between small sample composites and large blocks. The similarity between the overall shape of these distributions indicate that, at a global scale, the block models are a fair and reasonable representation of the drill hole data.


PAH reviewed the in situ models along sections and compared the interpolated block grades with those of the drill holes. This review is meant to verify that, at a local scale, block and drill hole grades are similar. This review indicates that, at a local scale, the block models are a fair and reasonable representation of the drill hole data.

### ***Tailings Grade Model Validation***

The silver and gold histograms for the resource models and the composites are shown in Figures 17-25. The histograms for the resource models exclude blocks that are classified as inferred. The resource model distributions have a similar shape to their respective composite grades with a slightly smaller spread. As stated previously, there are two populations within the grade data. The reduction in spread is an anticipated result of the volume variance between small sample composites and large blocks. The similarity between the overall shape of these distributions indicate that, at a global scale, the block models are a fair and reasonable representation of the drill hole data.

PAH reviewed the in situ models along sections and compared the interpolated block grades with those of the drill holes. This review is meant to verify that, at a local scale, block and drill hole grades are similar. This review indicates that, at a local scale, the block models are a fair and reasonable representation of the drill hole data.



Prepared by  
 **pincock, allen & holt**  
 165 S. Union Boulevard, Suite 950  
 Lakewood, Colorado 80228  
 Phone (303) 986-6950

Project No. DE-00177

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**US GOLD**

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 El Gallo District  
 PEA

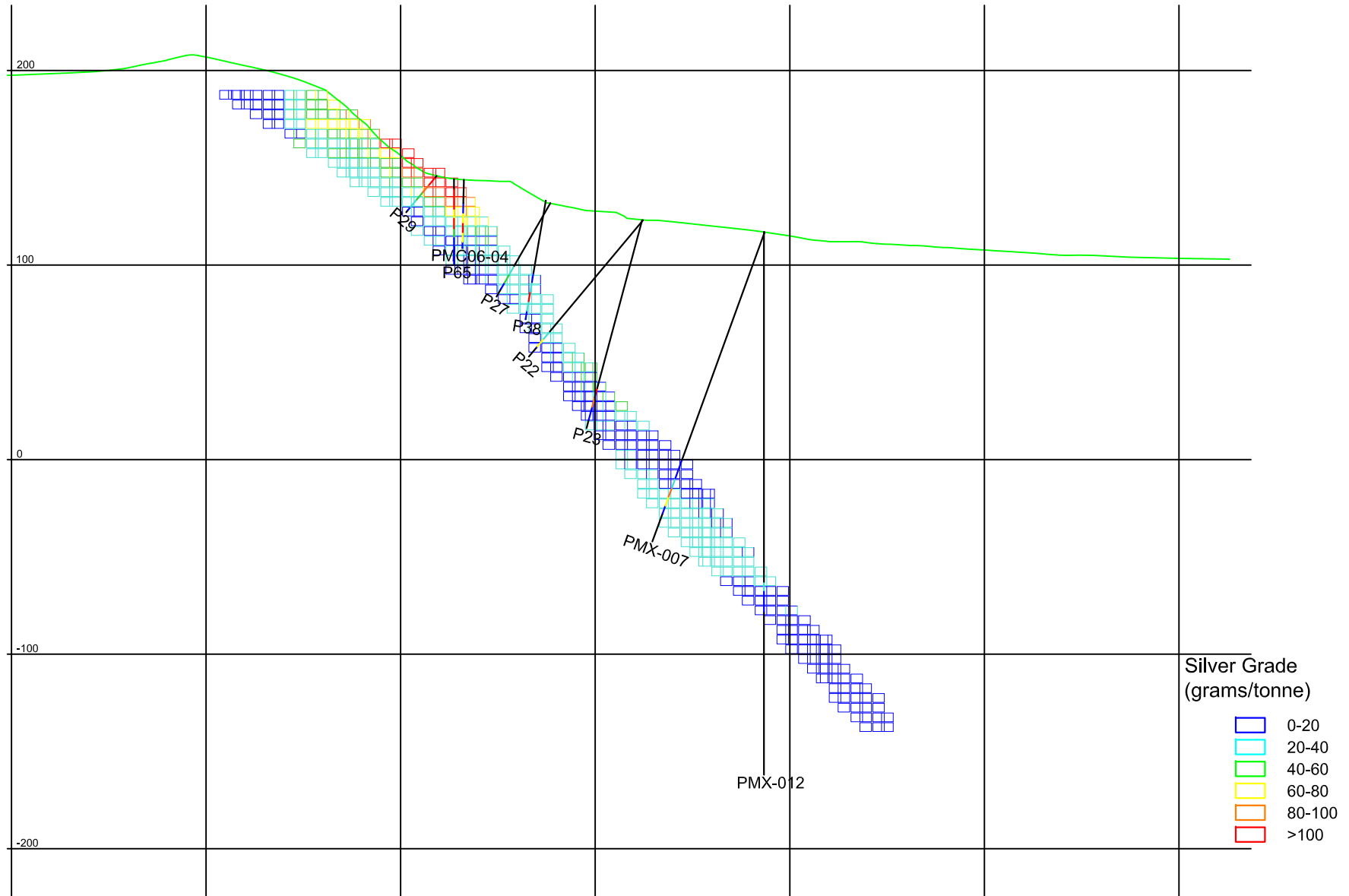
FIGURE 17-20  
 Palmarito In Situ Block Grade Distributions


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Jan 2011

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Fig.17-20.dwg



Prepared by  
 **pincock, allen & holt**  
 165 S. Union Boulevard, Suite 950  
 Lakewood, Colorado 80228  
 Phone (303) 986-6950

Project No. DE-00177

Drawing Provided by/Prepared for

**US GOLD**

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 El Gallo District  
 PEA

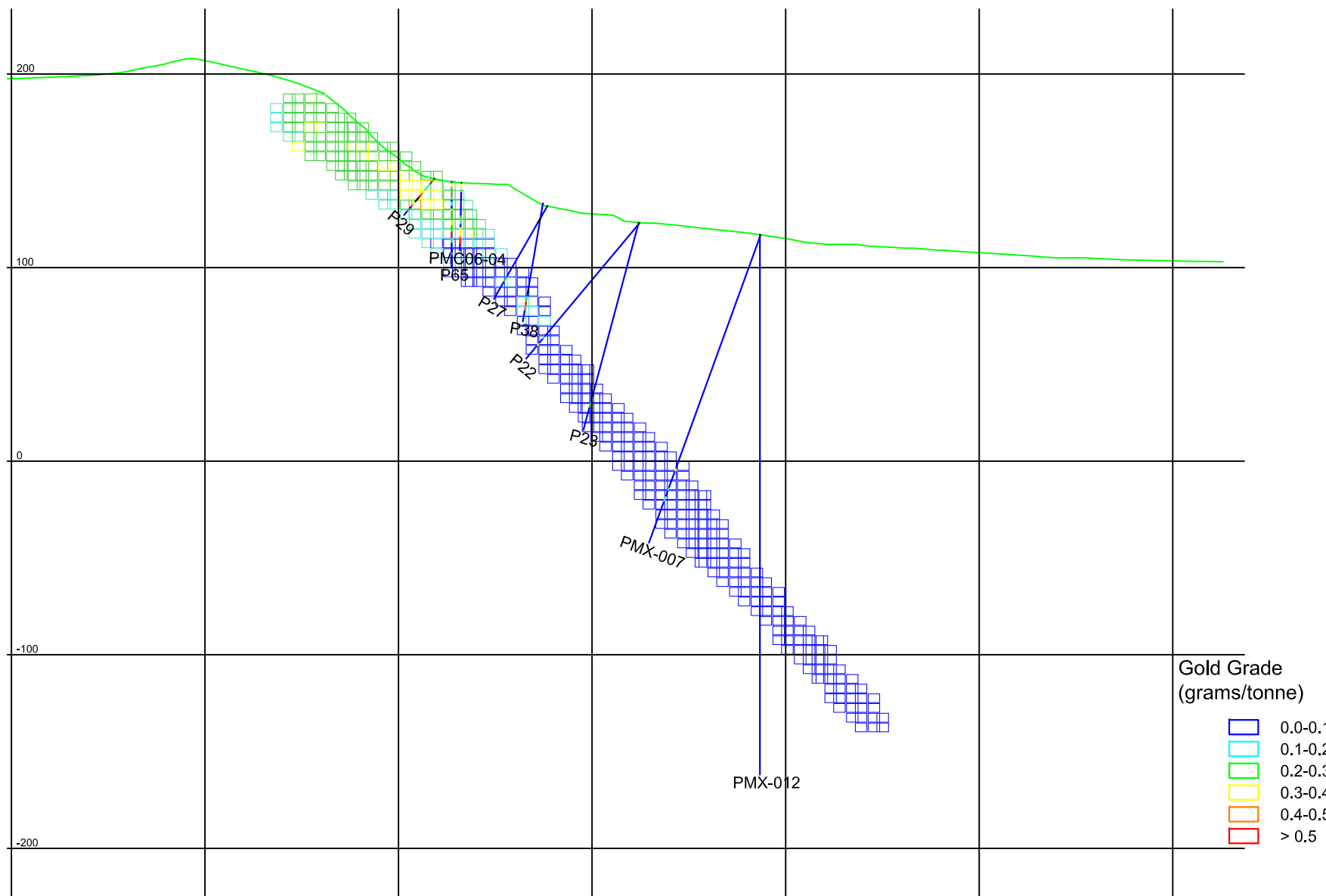
FIGURE 17-21  
 Silver Model Vertical Section


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Prepared by  
 **pincock, allen & holt**  
 165 S. Union Boulevard, Suite 950  
 Lakewood, Colorado 80228  
 Phone (303) 986-6950

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 PEA

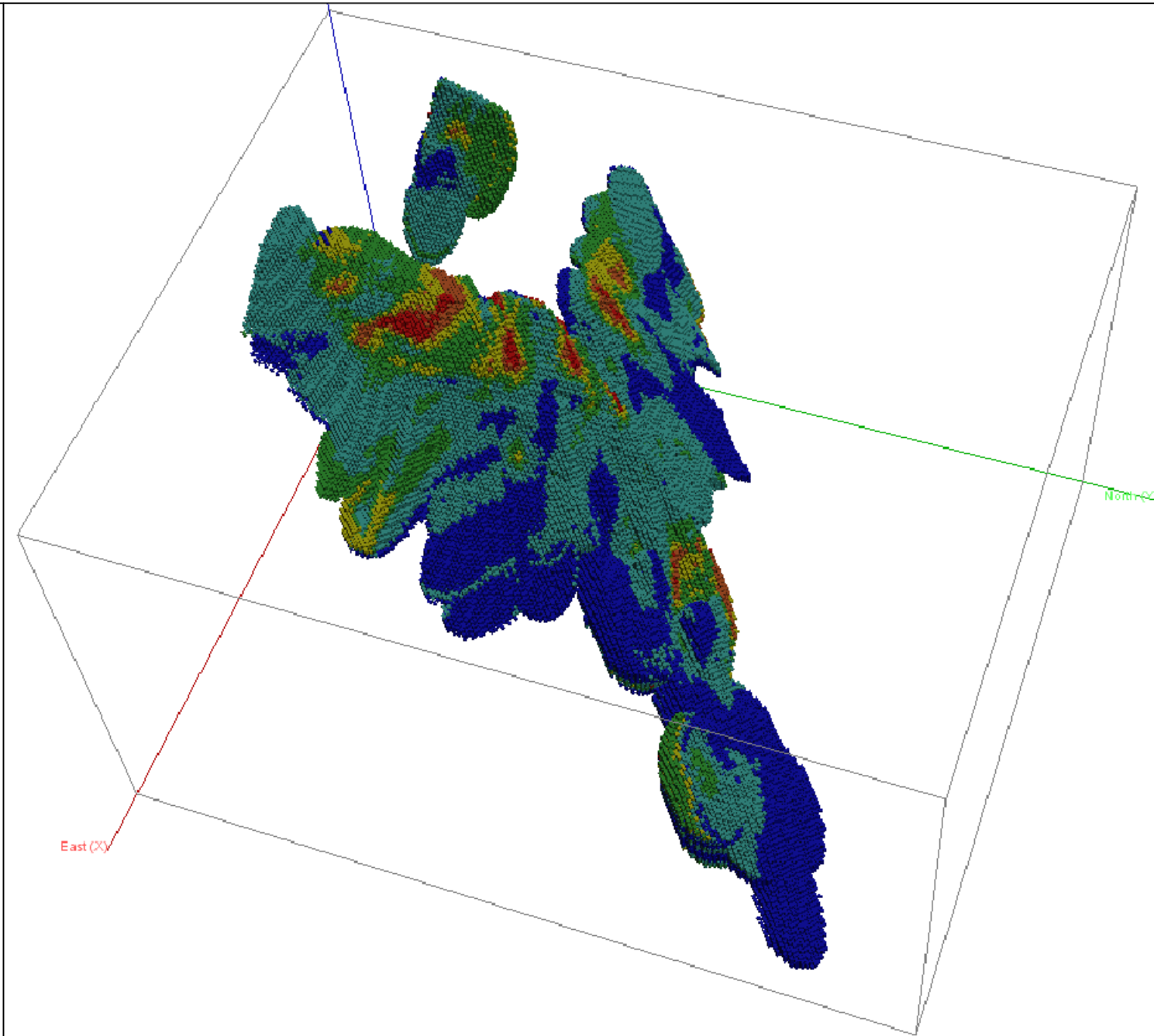
FIGURE 17-22  
 Palmarito Gold Model Vertical Section


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 **pincock, allen & holt**  
 165 S. Union Boulevard, Suite 950  
 Lakewood, Colorado 80228  
 Phone (303) 986-6950

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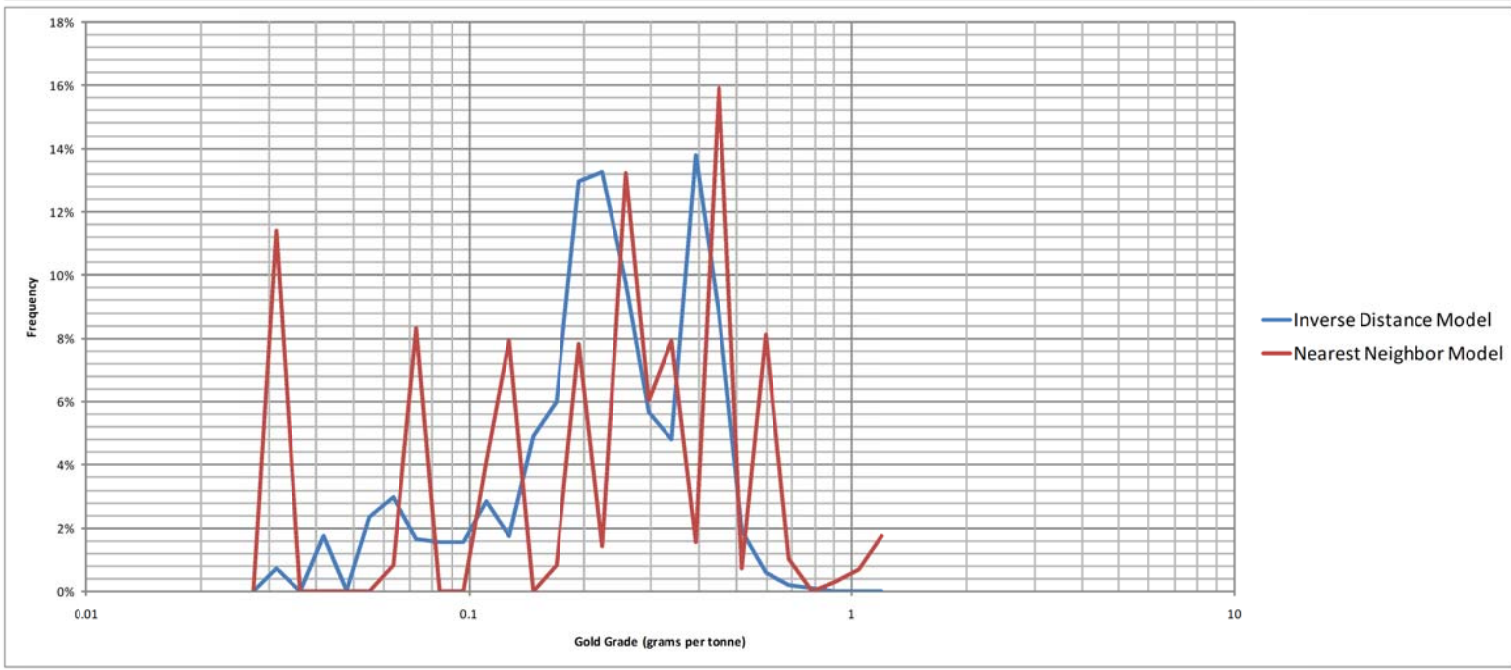
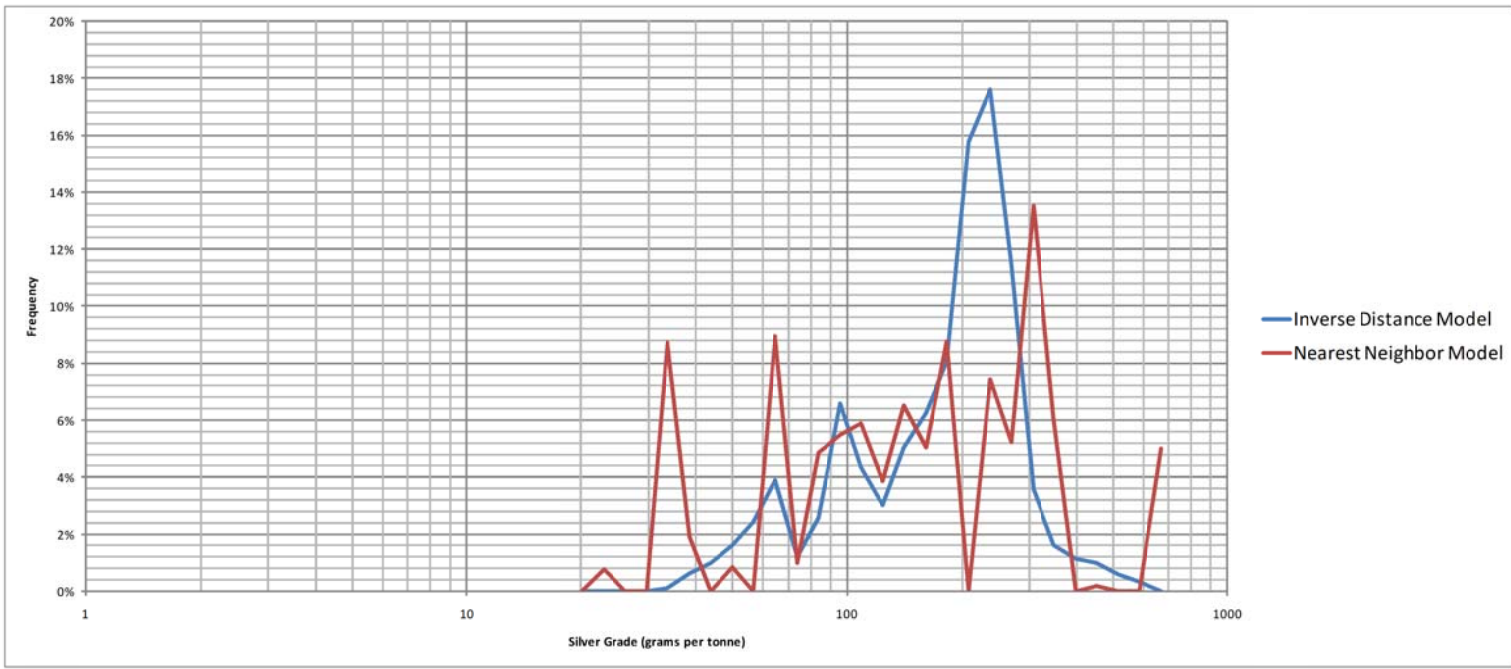
FIGURE 17-23  
 Palmarito Silver Model 3D View

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Fig.17-23.dwg



Prepared by **pincock, allen & holt**  
 165 S. Union Boulevard, Suite 950  
 Lakewood, Colorado 80228  
 Phone (303) 986-6950

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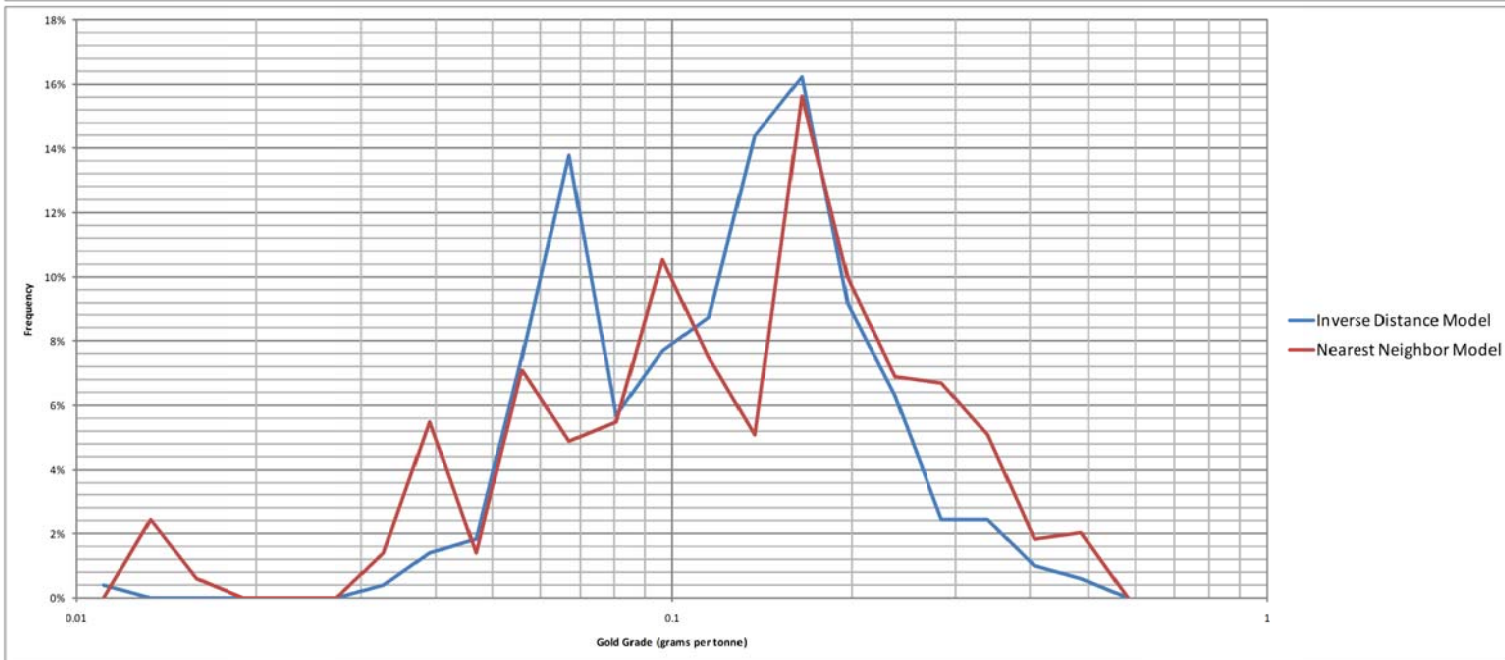
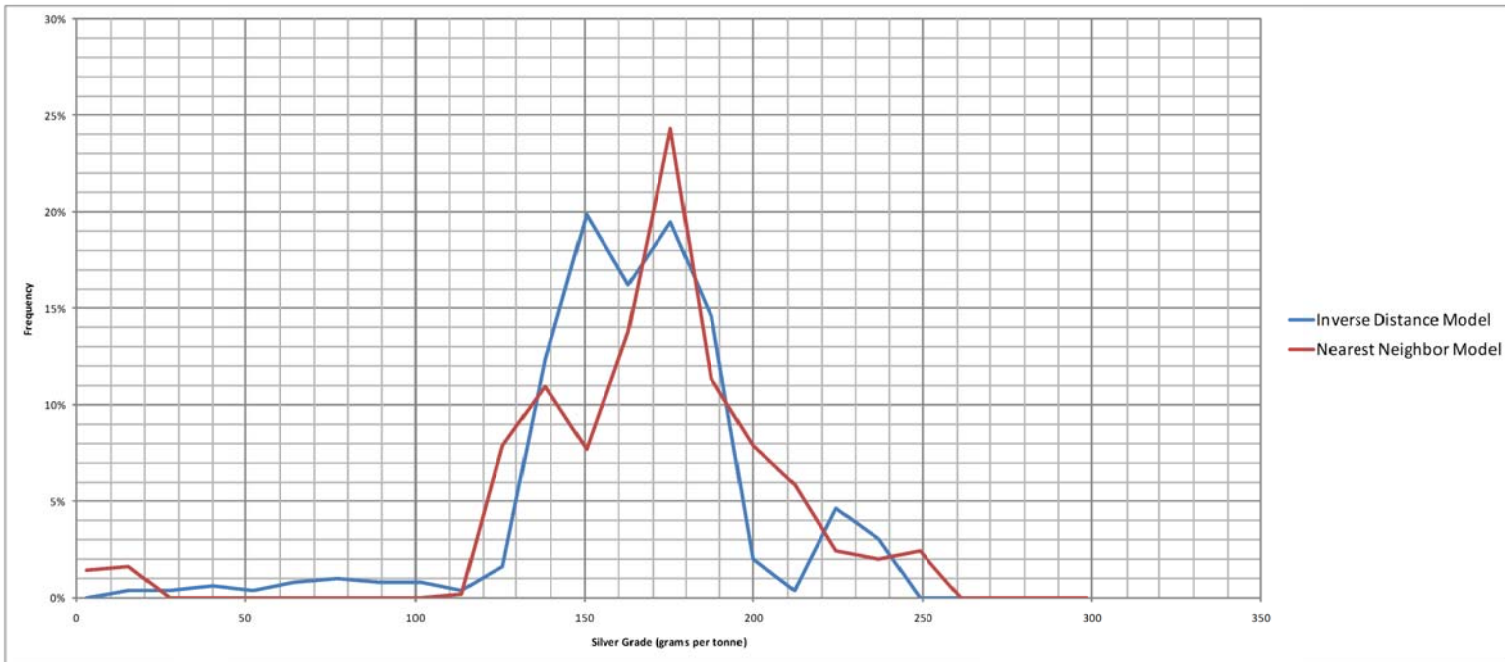
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**FIGURE 17-24**  
**Palmarito Dump Block Grade Distributions**

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 165 S. Union Boulevard, Suite 950  
 Lakewood, Colorado 80228  
 Phone (303) 986-6950

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**FIGURE 17-25**  
**Palmarito Tailings Block Grade Distributions**

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Drawing Name  
 Fig.17-25.dwg

### 17.3.8 Specific Gravity Model

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

- In Situ Material – 2.65
- Dump Material – 1.20
- Tailings Material – 1.50

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

### 17.3.9 Mineral Resource Classification

All blocks with an interpolated grade in the in situ, dump and tailings block models were assigned a code of measured, indicated or inferred. These terms reflect PAH's confidence in the resources represented by the block. Also, the use of these terms by PAH is consistent with their definitions as adopted by the CIM Council on November 17, 2004.

#### *In Situ Classification Scheme*

For the Southwest Zone, all resources were classified as inferred. There is only limited sampling for this zone.

For the Main Zone, classification codes were applied to the blocks using the ratio of a block's kriging variance for silver to the total sill value of the semi-variogram used in that block's domain. If this ratio is less than 0.35, the block was classified as measured. If this ratio was in the range of 0.35 to 0.65, the block was classified as indicated. All other blocks were classified as inferred.

At face value, this classification scheme appears very quantitative. However, PAH chose the parameters of this scheme based on visual comparison of the block model against the drill hole locations. Kriging variance is a value generated for each block during the interpolation process using the kriging algorithm. This value tends to increase with the distance between a block and its nearest drill holes. Furthermore, this value tends to increase rapidly for blocks not surrounded on all sides by drilling. These tendencies of kriging variance are similar in manner to PAH's confidence in the block grades. Through an iterative process of experimenting with different kriging variance to total sill ratios and visually inspecting the results, PAH was able to choose specific ratio values that best reflect its confidence in the resource. Note: the purpose of dividing the kriging variance by the total sill value is to normalize the classification scheme for all three domains.

While there was no minimum composite criterion applied to the classification scheme, PAH does note that all measured and indicated blocks have grades interpolated by at least three composites.

### ***Dump Classification Scheme***

PAH feels that the dimensions of the Dump material are well defined and the Dump sample density is high. As a result, all of the dump material is classified as either measured or indicated. There are no inferred Dump resources. All blocks within 15 m of a drill hole (in the same domain) were classified as measured. The remaining blocks were classified as inferred.

### ***Tailings Classification Scheme***

All blocks in the tailings material are classified as measured.

### **17.3.10 Mineral Resource Estimate**

The estimated mineral resource for the in situ, dump, and tailings material at Palmarito are detailed in Tables 17-17, 17-18 and 17-19. Note that these are not reserve estimates. Currently, these resources do not have demonstrated economic viability. Furthermore, they are reported as a block model inventory above a cutoff grade. The resources presented here are not constrained by the pit shells used in this PEA.

TABLE 17-17  
US Gold Corporation  
Preliminary Economic Assessment, El Gallo District  
Palmarito In Situ Resource Estimate

Class	Cutoff Grade (g Ag/tonne)	Tonnage ('000)	Ag Grade (grams/tonne)	Contained Ag (grams)	Contained Ag (troy ounces)	Au Grade (ppm)	Contained Au (grams)	Contained Au (troy ounces)
Measured	360	-	-	-	-	-	-	-
	320	-	-	-	-	-	-	-
	280	-	-	-	-	-	-	-
	240	1	249	247,715	7,964	0.34	342	11
	200	7	221	1,465,194	47,106	0.27	1,786	57
	160	28	189	5,256,304	168,990	0.21	5,853	188
	120	113	149	16,740,026	538,192	0.18	19,944	641
	80	509	107	54,425,829	1,749,790	0.15	77,080	2,478
	<b>40</b>	<b>2,424</b>	<b>65</b>	<b>157,731,111</b>	<b>5,071,055</b>	<b>0.14</b>	<b>337,872</b>	<b>10,863</b>
	0	16,737	17	277,833,448	8,932,345	0.04	750,033	24,114
Indicated	360	-	-	-	-	-	-	-
	320	-	-	-	-	-	-	-
	280	-	-	-	-	-	-	-
	240	-	-	-	-	-	-	-
	200	-	-	-	-	-	-	-
	160	0	172	6,220	200	0.14	5	0
	120	32	131	4,157,377	133,660	0.14	4,358	140
	80	174	102	17,792,863	572,041	0.16	28,295	910
	<b>40</b>	<b>1,023</b>	<b>62</b>	<b>63,021,502</b>	<b>2,026,141</b>	<b>0.12</b>	<b>124,811</b>	<b>4,013</b>
	0	4,676	30	141,310,250	4,543,125	0.08	352,763	11,341
Measured and Indicated	360	-	-	-	-	-	-	-
	320	-	-	-	-	-	-	-
	280	-	-	-	-	-	-	-
	240	1	249	247,715	7,964	0.34	342	11
	200	7	221	1,465,194	47,106	0.27	1,786	57
	160	28	189	5,262,523	169,190	0.21	5,858	188
	120	145	145	20,897,403	671,851	0.17	24,301	781
	80	683	106	72,218,692	2,321,831	0.15	105,375	3,388
	<b>40</b>	<b>3,447</b>	<b>64</b>	<b>220,752,613</b>	<b>7,097,196</b>	<b>0.13</b>	<b>462,684</b>	<b>14,875</b>
	0	21,413	20	419,143,697	13,475,470	0.05	1,102,796	35,455
Inferred	360	-	-	-	-	-	-	-
	320	-	-	-	-	-	-	-
	280	-	-	-	-	-	-	-
	240	-	-	-	-	-	-	-
	200	2	215	375,226	12,064	0.17	295	9
	160	2	207	498,132	16,015	0.21	512	16
	120	16	143	2,357,257	75,786	0.11	1,739	56
	80	180	94	16,969,749	545,577	0.10	17,933	577
	<b>40</b>	<b>1,604</b>	<b>58</b>	<b>92,770,185</b>	<b>2,982,561</b>	<b>0.10</b>	<b>164,830</b>	<b>5,299</b>
	0	8,864	25	224,891,757	7,230,270	0.07	661,258	21,259

TABLE 17-18  
 US Gold Corporation  
 Preliminary Economic Assessment, El Gallo District  
 Palmarito Dump Resource Estimate

Class	Cutoff Grade (grams Ag/tonne)	Tonnage ('000)	Ag Grade (grams/tonne)	Contained Ag (grams)	Contained Ag (troy ounces)	Au Grade (ppm)	Contained Au (grams)	Contained Au (troy ounces)
Measured	360	1.1	384	437,265	14,058	0.22	256	8
	320	2.2	359	797,005	25,624	0.22	498	16
	280	4.6	325	1,482,424	47,660	0.28	1,261	41
	240	14.9	277	4,116,713	132,352	0.31	4,649	149
	200	26.6	253	6,731,918	216,431	0.32	8,609	277
	160	32.5	240	7,798,491	250,721	0.32	10,279	330
	120	35.8	231	8,269,071	265,851	0.31	11,002	354
	80	45.7	201	9,176,354	295,020	0.29	13,195	424
	<b>40</b>	<b>47.5</b>	<b>195</b>	<b>9,284,146</b>	<b>298,485</b>	<b>0.28</b>	<b>13,368</b>	<b>430</b>
	0	48.7	191	9,328,387	299,908	0.28	13,408	431
Indicated	360	0.2	376	67,600	2,173	0.22	40	1
	320	0.9	343	308,391	9,915	0.20	179	6
	280	1.6	323	504,409	16,217	0.19	294	9
	240	5.1	275	1,402,780	45,099	0.27	1,393	45
	200	22.5	231	5,208,286	167,446	0.30	6,771	218
	160	40.3	211	8,487,354	272,868	0.26	10,493	337
	120	51.9	195	10,121,182	325,396	0.24	12,682	408
	80	59.8	182	10,898,046	350,372	0.23	14,049	452
	<b>40</b>	<b>71.5</b>	<b>162</b>	<b>11,578,509</b>	<b>372,249</b>	<b>0.21</b>	<b>14,924</b>	<b>480</b>
	0	71.5	162	11,580,885	372,325	0.21	14,926	480
Measured and Indicated	360	1.3	382	504,865	16,231	0.22	296	10
	320	3.1	354	1,105,397	35,538	0.22	677	22
	280	6.1	325	1,986,833	63,877	0.25	1,555	50
	240	20.0	276	5,519,493	177,452	0.30	6,043	194
	200	49.1	243	11,940,205	383,878	0.31	15,380	494
	160	72.8	224	16,285,845	523,590	0.29	20,772	668
	120	87.7	210	18,390,253	591,247	0.27	23,684	761
	80	105.5	190	20,074,399	645,392	0.26	27,245	876
	<b>40</b>	<b>119.0</b>	<b>175</b>	<b>20,862,655</b>	<b>670,734</b>	<b>0.24</b>	<b>28,292</b>	<b>910</b>
	0	120.2	174	20,909,273	672,233	0.24	28,334	911

TABLE 17-19  
 US Gold Corporation  
 Technic Preliminary Economic Assessment, El Gallo District  
 Palmarito Tailings Resource Estimate

Class	Cutoff Grade (grams Ag/ tonne)	Tonnage (’000)	Ag Grade (grams/tonne)	Contained Ag (grams)	Contained Ag (troy ounces)	Au Grade (ppm)	Contained Au (grams)	Contained Au (troy ounces)
Measured	360	-	-	-	-	-	-	-
	320	-	-	-	-	-	-	-
	280	-	-	-	-	-	-	-
	240	-	-	-	-	-	-	-
	200	10	223	2,334,481	75,054	0.26	2,705.38	87
	160	71	181	12,842,304	412,880	0.13	9,076.36	292
	120	140	162	22,710,823	730,153	0.13	17,701.75	569
	80	145	160	23,171,423	744,961	0.13	18,178.32	584
	<b>40</b>	<b>148</b>	<b>158</b>	<b>23,403,320</b>	<b>752,417</b>	<b>0.12</b>	<b>18,533.39</b>	<b>596</b>
	0	150	156	23,437,864	753,527	0.12	18,610.50	598
Indicated	360	-	-	-	-	-	-	-
	320	-	-	-	-	-	-	-
	280	-	-	-	-	-	-	-
	240	-	-	-	-	-	-	-
	200	-	-	-	-	-	-	-
	160	-	-	-	-	-	-	-
	120	-	-	-	-	-	-	-
	80	-	-	-	-	-	-	-
	<b>40</b>	-	-	-	-	-	-	-
	0	-	-	-	-	-	-	-
Measured and Indicated	360	-	-	-	-	-	-	-
	320	-	-	-	-	-	-	-
	280	-	-	-	-	-	-	-
	240	-	-	-	-	-	-	-
	200	10	223	2,334,481	75,054	0.26	2,705	87
	160	71	181	12,842,304	412,880	0.13	9,076	292
	120	140	162	22,710,823	730,153	0.13	17,702	569
	80	145	160	23,171,423	744,961	0.13	18,178	584
	<b>40</b>	<b>148</b>	<b>158</b>	<b>23,403,320</b>	<b>752,417</b>	<b>0.12</b>	<b>18,533</b>	<b>596</b>
	0	150	156	23,437,864	753,527	0.12	18,611	598
Inferred	360	-	-	-	-	-	-	-
	320	-	-	-	-	-	-	-
	280	-	-	-	-	-	-	-
	240	-	-	-	-	-	-	-
	200	-	-	-	-	-	-	-
	160	-	-	-	-	-	-	-
	120	-	-	-	-	-	-	-
	80	-	-	-	-	-	-	-
	40	-	-	-	-	-	-	-
	0	-	-	-	-	-	-	-

## 18.0 ADDITIONAL REQUIREMENTS FOR DEVELOPING OR PRODUCING PROPERTIES

### 18.1 *Mining Operations*

El Gallo and the satellite mineralized deposits will use surface mining equipment typical of the size and scale of a surface drill and blast operation. All mobile mining equipment will be rubber tired or track mounted and diesel powered. Over a 6 year mine life the majority of the silver and gold production will be from the El Gallo open pit with secondary amounts of ore from the Palmarito, Lupita, Sagrado Corzon and Samaniego mineralized areas. Table 18-1 summarizes the production rate and metal extracted from each of these areas within the scope of this report. Note that this material is not a reserve and includes inferred resources.

**TABLE 18-1**  
**US Gold Corporation**  
**Preliminary Economic Assessment, El Gallo District**  
**Summary of Processed Material**

	Mill			Heap Leach		
	Tonnes	Silver Grade (gpt)	Gold Grade (gpt)	Tonnes	Silver Grade (gpt)	Gold Grade (gpt)
El Gallo	7,735,470	119.3	0.1	6,257,206	28.1	0.03
Palmarito	1,289,998	100.2	0.17	-	-	-
Magistral	3,163,175	-	3.01	784,551	-	0.85

Mining equipment will be sized in order to achieve the production rate at each area. Surface mining has been designed with mining parameters appropriate for operations of this size and scale and are summarized in Table 18-2.

With these parameters in mind, PAH generated conceptual mine designs for each deposit. These designs were used against the current resource models to define the material that would be processed under this conceptual operation. See Figures 18-1 through 18-6.

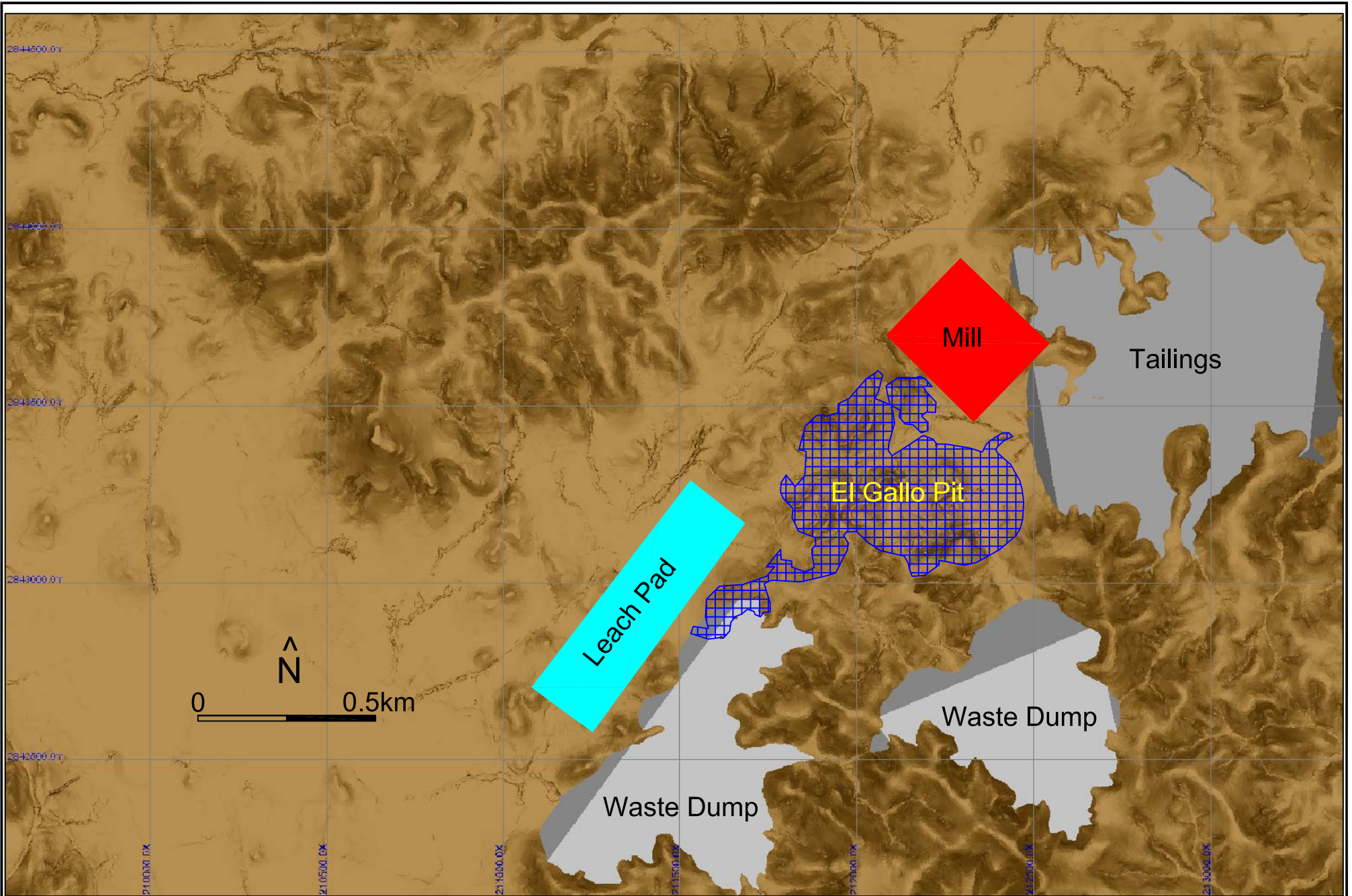
### 18.2 *Process Plan Description*

Ore processing systems will consist of two entities: a cyanide slurry-leach mill and a cyanide heap-leach facility. Both entities will have a common crushing plant and a common Merrill-Crowe plant for recovery of the dissolved silver and gold in the pregnant solution. A simple flow diagram of the process is shown in Figure 18-7.

The crushing plant will be a conventional three-stage crushing plant crushing the ore to about 3/8-inch. Slurry-leach ore and heap-leach ore will be separately campaign crushed and stockpiled.

**TABLE 18-2**  
**US Gold Corporation**  
**Preliminary Economic Assessment, El Gallo District**  
**Mining Equipment Parameters**

<b>Material Detail</b>			
	Dry Density	(t/bcm)	2.00
	Moisture Content	(%)	3%
	Swell Factor	(%)	25%
	Wet Density Loose	t/m3	1.64
	Wet Bank Density	t/m3	2.050
<b>Excavator/Loader Details</b>			
	Maximum susp. Load	(t)	15.0
	Bucket weight	(t)	10.0
	Bucket Heaped Cap.	(m3)	4.0
	Fill Factor	(%)	100%
	Bkt Cap. Volume	(bcm)	4.0
	Bkt Cap. Weight	(t)	10.0
	Bkt Payload	(t)	6.6
	Suspended Load	(t)	16.6
	Suspended Load Factor	(%)	110%
	Bkt Cap. Weight	(bcm)	6.1
	Bkt Cap. Adopted	(bcm)	4.0
<b>Truck Details CAT 770</b>			
	Tray Capacity (SAE)	(m3)	25
	Trk Fill Factor	(%)	87%
	Volume Limit (KAC)	(bcm)	17
	Rated Payload	(t)	40
	Assumed Overload	(%)	5%
	Adjusted Payload	(t)	42
	Weight Limit	(bcm)	20
	Adopted Capacity	(bcm)	20
	Min. Bucket Fill	(%)	25%
	Calc Passes Per load		4.88
	Calc Passes Per load	(rounded)	5.0
	Actual Trk Load	(bcm)	20
	Actual Trk Load	(t)	41
	Dump Time	(min)	1.2
<b>Shovel Productivity</b>			
	Cycle Time	(sec)	10.0
	Efficiency Factor	(%)	86%
	1st pass	(sec)	10.0
	Truck exchange	(sec)	40.0
	Additional Passes	(sec)	40.0
	Loading Time	(min)	1.50
	Max. Productivity	(bcm/OH)	688
	Effective Ut'n of op hours	(%)	90%
	Productivity	(bcm/OH)	619
	Productivity	(t/OH)	1,238
	<b>Productivity</b>	<b>(t/DOH)</b>	<b>1,376</b>
	Calendar days	(days)	360
	Calendar hours	(hrs)	8,640
	Utilization	(%)	66.0%
	Productivity	(Mtpa)	7.85



Prepared by  
 **pincock, allen & holt**  
 165 S. Union Boulevard, Suite 950  
 Lakewood, Colorado 80228  
 Phone (303) 986-6950

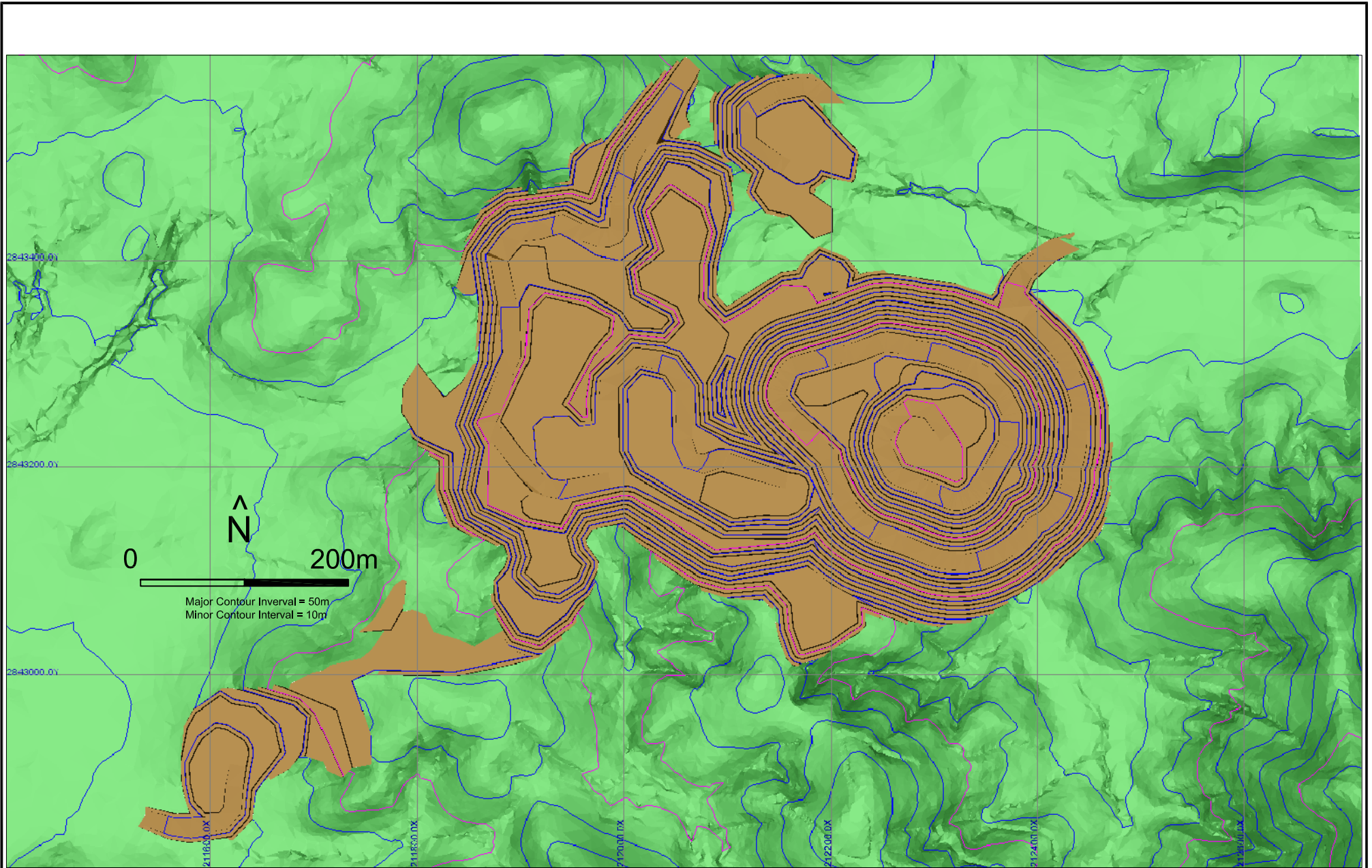
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**FIGURE 18-1**  
**El Gallo Site Layout**

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Prepared by  

**pincock, allen & holt**  
 165 S. Union Boulevard, Suite 950  
 Lakewood, Colorado 80228  
 Phone (303) 986-6950

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**FIGURE 18-2**  
**El Gallo Final Pit**

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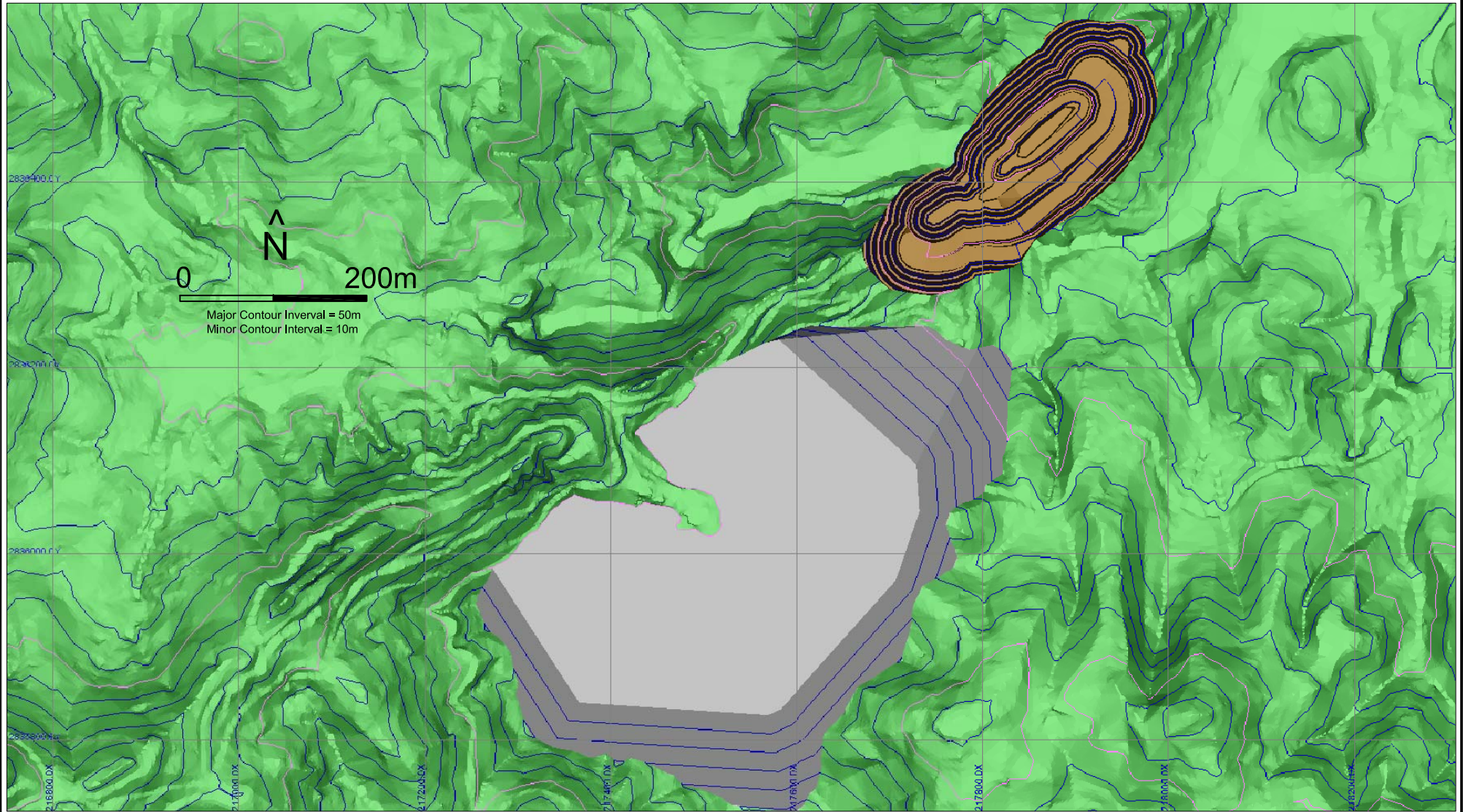
Prepared by  

**pincok, allen & holt**  
 165 S. Union Boulevard, Suite 950  
 Lakewood, Colorado 80228  
 Phone (303) 986-6950


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**FIGURE 18-3  
 Samaniego Final Pit and Dumps**

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 **pincocock, allen & holt**  
 165 S. Union Boulevard, Suite 950  
 Lakewood, Colorado 80228  
 Phone (303) 986-6950

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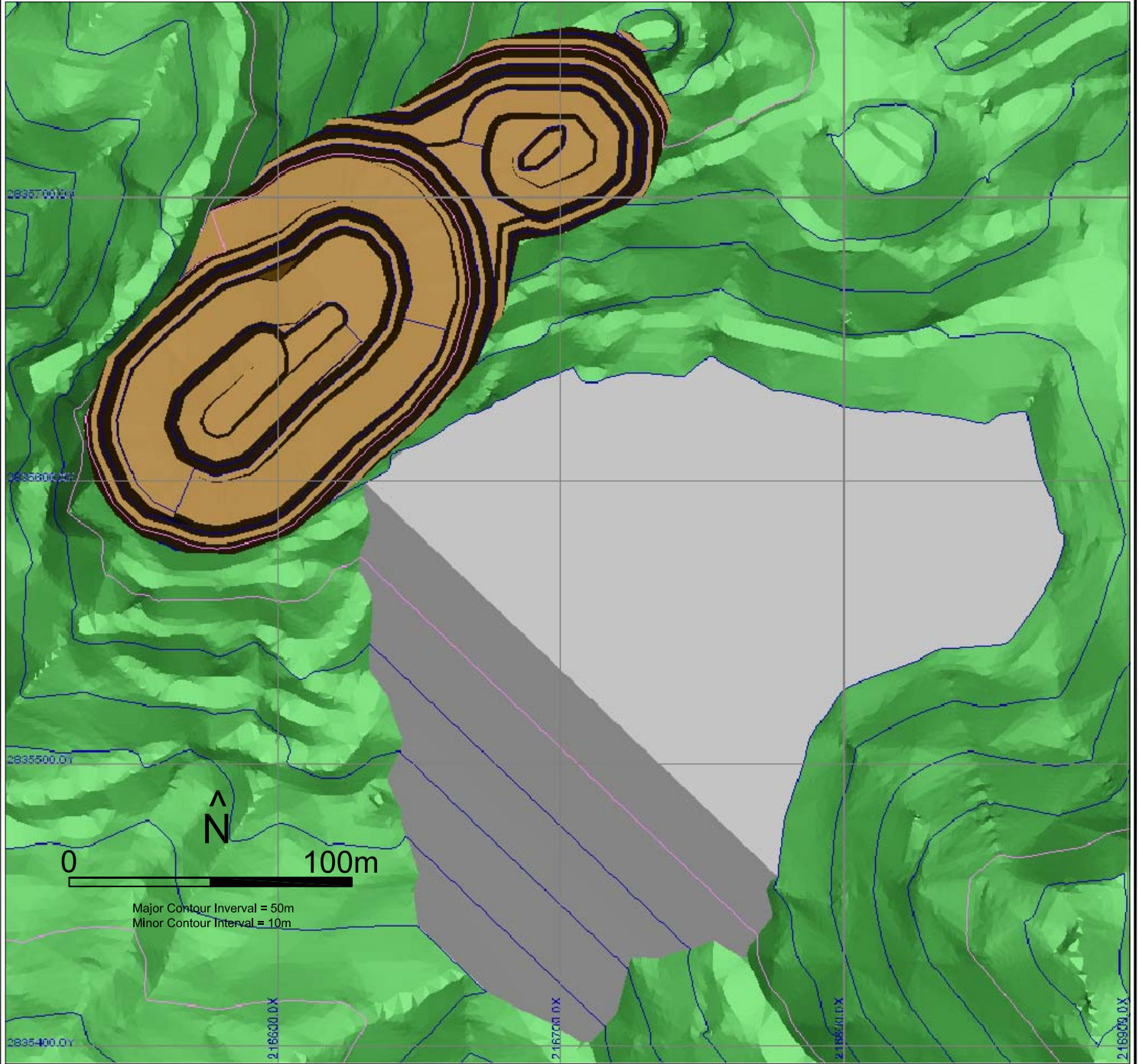
**FIGURE 18-4**  
**Lupita Final Pit and Waste Dump**


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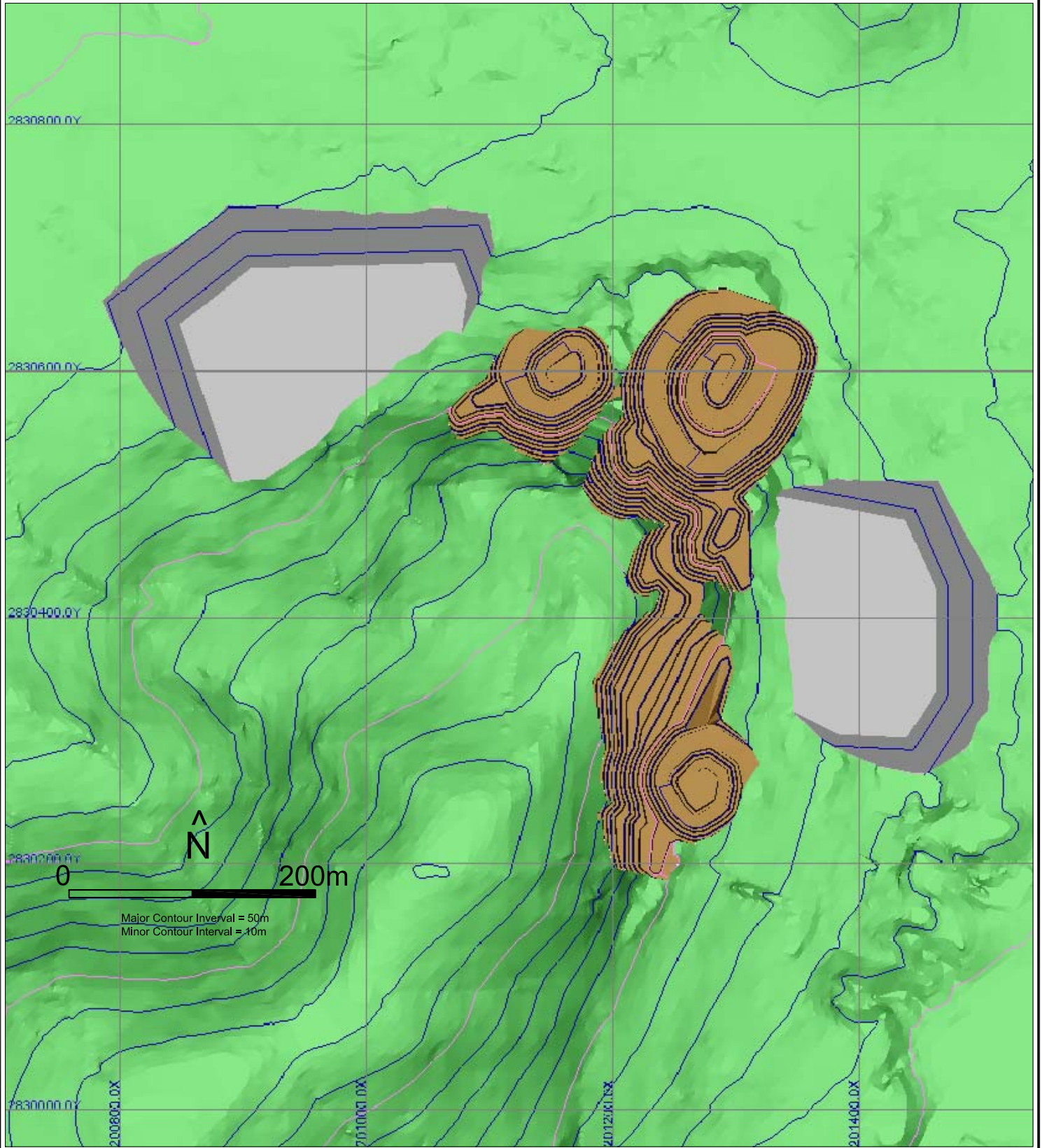
Prepared by  

**pincok, allen & holt**  
 165 S. Union Boulevard, Suite 950  
 Lakewood, Colorado 80228  
 Phone (303) 986-6950


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**FIGURE 18-5**  
**Sagrado Corazon Final Pit and Dumps**

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 Drawing Name  
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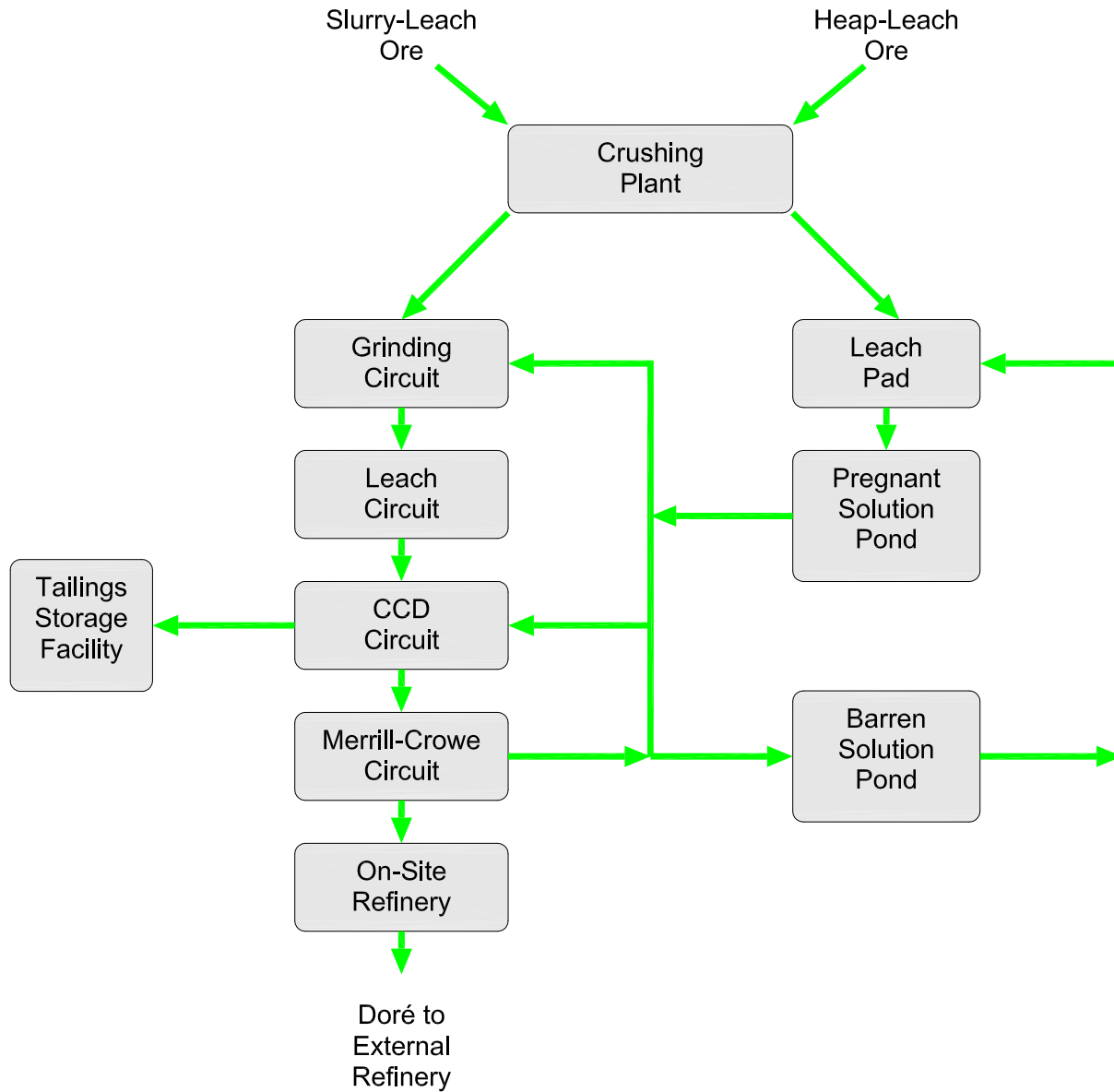
Prepared by  

**pinnacle, allen & holt**  
 165 S. Union Boulevard, Suite 950  
 Lakewood, Colorado 80228  
 Phone (303) 986-6950

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**FIGURE 18-6**  
**Palmarito Final Pit and Dumps**

Date of Issue  
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 Drawing Name  
 Fig.18-6.dwg



The slurry-leach mill will consist of a ball mill grinding circuit the ore to 80-percent minus 200 mesh, a set of agitated leach tanks providing 72-hours retention, a set of counter-current decantation (CCD) thickeners, and a Merrill-Crowe recovery plant. Precipitate from the Merrill-Crowe plant will be smelted in an on-site refinery to produce doré metal which will be shipped to an external refinery. Tailings will be stored in a tailings storage facility (TSF) close to the mill site.

The heap-leach plant will consist of a leach pad and three ponds for leach (barren) solution, pregnant solution, and emergency. Ore will be trucked to the leach pad and placed in lifts of about 20-feet high. Leach solution will be applied to the ore and the pregnant solution recovered through drain pipes in the base of the heap. Pregnant solution will be pumped to the slurry leach plant and added either to the grinding circuit or to the CCD circuit. Part of the barren solution from Merrill-Crowe plant will be pumped to the heap, the remainder will be used in the grinding circuit or as CCD wash solution.

Cyanide and lime are the primary reagents consumed by the mill and heap leach recovery processes. The estimated consumption levels were established by the metallurgical test program. Cyanide and lime consumption are variable and depend upon process method, rock type and copper content. Cyanide consumption for the mill and heap operations will average about 1 kilogram per tonne, lime consumption will average about 5 kilograms per tonne. Other reagents consumed will consist of filter aid, zinc dust, flocculant, scale inhibitors, and smelting fluxes.

### **18.3 *Mill, Tailings and Heap Leach Location***

PAH has selected a location for the mill, tailings and heap leach location within 1 km of the ultimate El Gallo pit design. The locations were previously shown in Figure 18-1.

### **18.4 *Electric Power***

PAH calculated the cost of supplied power to the El Gallo site from a 33 kV, 3 phase power line from substation that is powered by a hydroelectric dam, located 4.5 km from the proposed processing facilities at El Gallo. Although power poles exist from the dam to the minesite, PAH calculated the cost of installing the power line, transformer, switchgear and substation.

### **18.5 *Water Supply***

The average daily water consumption for the site will be approximately 50 liters per second. Maximum water consumption of the operation is estimated to be twice the average consumption due to high evaporation rates during the summer months.

The main source of water for the mining and process operations will come from wells. The hydrological studies conducted at Magistral while it was in production indicate that there is sufficient water available to support the project. Additional hydrological studies are currently in progress in order to locate wells closer to the proposed facilities.

## **18.6 Site Access**

In general, road access between the 26 km long road connecting Palmarito and El Gallo is considered good. US Gold is considering several detours along this route in order to avoid unnecessary traffic through local villages. Due to the flat terrain in the area and weathered nature of surface material, road construction is not anticipated to have neither high cost nor long construction schedule associated with road improvements.

Many sections of the 10 km road between Magistral and El Gallo require improvement to support ore haulage, such as road widening and flattening gradients in some areas. The cost of road improvement is not expected to be high since sufficient construction equipment in good running order is available at the Magistral Mine.

The cost of road improvement has been included in the project's cash flow.

## **18.7 Communications**

Communications to and from the site will be by land-based phone lines, cell phones and high speed internet for data communications. Mobile radio communication will be utilized by both mine operations and exploration groups in the area.

## **18.8 Site Buildings**

Site buildings will include a warehouse/maintenance shop, assay laboratory, administrative office building, and several security outposts.

## **18.9 Recoverability and Metallurgy**

The silver and gold production estimate considers variation in recovery depending on process method and rock type as discussed in Section 16.

Silver and gold production is estimated to be 29.8 million ounces of silver and 301,465 ounces of gold over the life of the project. Mill recovery rates for El Gallo are expected to average 85 percent for silver and 80 percent for gold and 60 percent silver and 65 percent gold for the heap leach. Mill recoveries for Palmarito are expected to average 67 percent for silver and 85 percent for gold. Mill recovery rates for Magistral are expected to average 89 percent for gold and 60 percent for the heap leach. PAH feels that the recovery assumptions applied to the resource models are reasonable application of the available metallurgical test work data.

## **18.10 Markets**

The primary economic product of the El Gallo project will be doré consisting of silver and gold. There is a well-developed, mature market for doré throughout the world at favorable refining rates. The entrance of new producers to the global silver and gold market does not materially impact metal prices.

## **18.11 Contracts**

Mining, processing and G&A costs have been estimated based upon other comparable projects in Mexico and elsewhere.

### **18.11.1 Mining Costs**

Mexico has a long history of successful mining and the workforce is considered well-versed in mining methods. There are a large number of experienced mining contractors available in country with precious metals experience. US Gold presently plans to make use of one of these contractors, thereby avoiding the issues relating to personnel problems, equipment maintenance and other related problems. While owner-operator projects generally demonstrate better economics, PAH notes that the use of contract miners reduces capital required for the project.

PAH assumed an open-pit mining operation with various hauls distances that range from less than 1 km for the El Gallo deposit to 26 km for Palmarito. No unusual difficulties are anticipated with rock hardness, water management or restrictions on area.

PAH assumed a contract mining cost of \$2 per tonne for open pit. These operating costs are believed to be consistent considering the size of equipment that is being proposed for the project.

Material would be hauled from three primary sources, across relatively flat terrain to either the process facilities located at El Gallo or to a waste dump located near the respective pit.

### **18.11.2 Processing Costs**

The processing facilities will be owner-operated, therefore no contracts apply. A description of the process facilities is located in Section 18.2.

Process operating costs were estimated at a scoping level of accuracy for the project. The processing costs vary by method and ore type. The expected cost to process ore from El Gallo and Palmarito through the mill is estimated to be \$20 per tonne. The expected cost to process ore from Magistral through the mill is expected to be \$25 per tonne due to the higher concentrations of copper. Heap leach process costs are expected to be \$6 per tonne for El Gallo and Palmarito ore and \$11 per tonne for Magistral ore.

### **18.11.3 Refining and Transportation Costs**

Doré will be produced and will therefore not encounter off-site smelting charges. Doré will be shipped to a reputable refiner and will occur normal transportation, insurance and refining charges. PAH has assumed a cost of \$0.50 per troy ounce of silver to cover these costs. Refining contracts typically offer a payfor of 99.5 percent of the received metal. PAH has incorporated the payfor into the cash flow estimate.

### **18.11.4 Cash Costs**

The average total cash cost, net of gold by product credits, over the life of the mine is estimated to be \$5.90 per ounce of silver. Cash costs are reduced to \$2.44 per ounce of silver when the spot price of gold (\$1,350 per ounce) is used.

### **18.11.5 Hedging and Forward Sales**

No provision for hedging or forward sales are included within the cash flow estimate.

## **18.12 *Environmental Considerations***

Environmental considerations are presented in Section 4 of this report under "Mining Permits."

## **18.13 *Taxes***

Although this PEA is being completed on a pre-tax basis discussion on the subject is warranted. Should the project enter production it will be subject to the normal suite of Mexican taxes. However, as a producer of exportable gold, many of the normal taxes will be either waived or refunded.

### **18.13.1 Nature and Rates of Taxes**

There are four taxes that may apply to the project, as well as mandatory profit sharing provision in Mexican labor law. The taxes are identified as 1) Corporate Income Tax, 2) Net Assets Tax, 3) a value-added tax (IVA under the Spanish acronym) and 4) the diesel fuels tax.

The tax procedures allow for the carry-forward of losses for a period of up to ten years, with inflation indexing. The Mexican corporate income tax rate is 35 percent, after adjustments for depreciation.

The net assets tax is essentially a minimum tax for a project and is applied at a rate of 1.8 percent of the depreciated value of the company's assets. This is a minimum tax to be paid by the project and is only paid to the extent of the amount of the net assets tax exceeds the amount of corporate tax due. If the total corporate tax is greater than the net assets tax, no net assets tax is paid.

The IVA or value added tax is administered at various rates depending upon the material or services purchased. The IVA rate most applicable to the project is 16 percent. IVA is applied to all goods and services, both domestic and imported, that the project purchases or acquires. IVA is not normally applicable to the wages, salaries and benefits of employees. In this case, however, the services of all employees are provided from a service company, so IVA would be applied to the service fees. Under the IMMEX program (discussed later in this section), the IVA tax can be refunded. The diesel fuel tax (Spanish acronym IEPS) is a general levy on the sale of diesel fuel that varies monthly and by region.

### **18.13.2 Government Levies**

Import duties are normally payable for goods imported into Mexico, however, qualifying industries may apply for entry into the IMMEX program. The program allows a project such as a El Gallo, which export their production, to import services, equipment and materials without paying duties or IVA charges. The program also allows a refund on domestic services, supplies and equipment.

In addition to duties and taxes, Mexican law requires that 10 percent of the profits of the company be distributed in a profit-sharing program. The calculation is based upon the corporate taxable income, excluding and losses carried forward. The prior year's profit sharing is deductible from current profits.

Common practice within the mining industry in Mexico is to acquire all salaries and hourly personnel on a contract basis from a service company. The service company is an independent company in which the mine company usually has an interest. Personnel are contracted to the mining company at a premium (typically 10 percent of wages and benefits) and profit sharing is paid to the employees from the 10 percent premium. Since the mining company usually has an interest in the service company, the mining company receives a share of the profits, effectively reducing the amount paid to the employees.

In many companies, the amount paid to the employees under this arrangement is negligible. Profit sharing has therefore been ignored in the cash flow.

## **18.14 *Capital and Operating Estimate***

Capital and operating costs estimates for the El Gallo Project have been developed to a conceptual level of accuracy based on the PAH database and experience for similar operations. Table 18-3 provides a summary of the capital expenditures.

### **18.14.1 Mine Capital**

The Base Case has been determined with 100 percent equity financing of the initial capital. Any acquisitions expenditures prior to the start of the full project period have been treated as "sunk" cost and have not been included in the analysis.

**TABLE 18-3**  
**US Gold Corporation**  
**Preliminary Economic Assessment, El Gallo District**  
**Summary of Mining and Processing Capital**

<b>Initial Capital</b>	<b>Amount</b>
Mill, Processing and Tailings (6,000 tpd)	\$85,000,000
Heap Leach and ADR plant (3,250 tpd)	\$10,000,000
Power Lines (4.5 km upgrade)	\$1,100,000
Road/site work	\$1,700,000
Buildings	\$2,000,000
Reagents	\$4,500,000
Owners Cost/EPCM	\$20,000,000
Sub Total	\$124,000,000
Contingency (20%)	\$24,800,000
<b>Total Initial Cost</b>	<b>\$149,100,000</b>

The total mine capital for construction and pre-production mine development \$149 million and is expended over a 2 year period. Mine capital was developed with the assumption that the cost of the mining fleet will be borne by the contractor, including primary production equipment, support equipment and spare parts.

#### **18.14.2 Infrastructure**

The El Gallo project is well located with good easy access as described in section 5.1. Although access is considered good, haul roads to the El Gallo process facilities from the different mining areas will need to be upgraded. Power to the project will come from a substation located 4.5 km from the proposed process facilities at El Gallo.

Remaining infrastructure at El Gallo includes the following:

- Slurry Leach Mill
- Cyanide Heap Leach facility
- Warehouse/Maintenance shop
- Assay laboratory
- Administration office
- Security building

#### **18.14.3 Sustaining Capital**

Sustaining capital for the operation is assumed to be \$9.9 million over the life of the operation. Sustaining capital mainly relates to the replacement of fixed equipment.

#### **18.14.4 Working Capital**

Working capital for the project includes warehouse spares, initial fills and initial operating cash. Typically this cost is recovered at the end of the project life as the final inventories are depleted.

#### **18.14.5 Salvage Value**

No allowance for salvage value has been included in the cash flow analysis.

#### **18.14.6 Revenue or Income**

PAH has prepared a cash flow model assuming 100 percent equity (no loan). That cash flow is presented in Section 18.20 of this report. Annual revenue is determined by applying estimated metal prices to the annual payable metal estimated for each operating year. Sales prices have been applied to all life of mine production without escalation or hedging. Metal sales prices used in the evaluation are as follows:

<b>Metal</b>	<b>Base Price</b>	<b>Spot Price</b>
Silver	\$18	\$28.50
Gold	\$1,000	\$1,350

### **18.15 Economic Analysis**

Table 18-4 presents a summary of a pre-tax cash flow on the project.

The cash flow models are based upon measured, indicated and inferred resources only and not proven and probable reserves as defined by the CIM. The current study does not rely upon a detailed costs analysis, hence the mineralization must be classified as a resource and placing the report in the category of a Preliminary Economic Assessment or Scoping Study.

The economics suggest that the project is viable, with a net cash flow of \$190.0 million over the 6 year life of the project. Economic analysis estimates a Net Present Value of \$155.4 million at a 5 percent discount rate, with an internal rate of return of 26.9 percent.

### **18.16 Sensitivity Analysis**

PAH developed a sensitivity analysis for the cash flow model based on variations in key project elements of metal price, operating and capital costs. The results are attached in Table 18-5.

The key elements impact the projects cash flow are metal prices. Under the best case scenario where metal prices stay at the current spot prices of \$28.50 silver and \$1,350 gold the total cash flow improves to \$599.3 million and NPV improves to \$520.8 million at a 5 percent discount rate with an internal rate of return of 64.9 percent.

**TABLE 18-4**  
**US Gold Corporation**  
**Preliminary Economic Assessment, El Gallo District**  
**Consolidated Cash Flow**

	Year -2	Year -1	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
Initial Capital	-74,580,000	-74,580,000							
Lupita			8,503,802	8,503,802	4,290,226	0	0	0	0
Sagrado Corazon			3,264,056	3,264,056	1,642,042	0	0	0	0
Samaniego			0	0	9,389,833	14,605,464	12,965,839	12,988,839	0
Tailings			405,420	405,420	0	0	0	0	0
El Gallo			55,411,722	36,633,522	39,097,728	39,133,131	39,429,244	39,393,360	1,629,284
Palmarito In-situ			1,675,261	4,710,336	2,188,679	66,767	0	0	0
Palmarito Tailings			2,488,796	0	0	0	0	0	0
Palmarito Dump			7,063,003	0	0	0	0	0	0
Substaining Capital (10%)					-2,486,000	-2,486,000	-2,486,000	-2,486,000	
Pre Tax Cash Flow	-74,580,000	-74,580,000	78,812,060	53,517,136	54,122,508	51,319,362	49,909,083	49,896,199	1,629,284

**Net Present Value Silver \$18 - Gold \$1,000**

<b>NET PRESENT VALUE</b>	<b>0%</b>	<b>190,045,632</b>
	<b>5%</b>	<b>155,414,166</b>
	<b>10%</b>	<b>127,580,221</b>
	<b>15%</b>	<b>104,903,699</b>
<b>IRR</b>		<b>26.9%</b>

**TABLE 18-5**  
**US Gold Corporation**  
**El Gallo District, Technical Report**  
**Pre-Tax IRR Sensitivities**

	<b>Base Case Price</b> <b>Silver \$18.00/Gold \$1,000</b>	<b>Spot Case Price</b> <b>Silver \$28.50/Gold \$1,350</b>		
IRR	26.90%	64.90%		
Cost Changes	10% Decrease	20% Decrease	10% Increase	20% Increase
	(IRR)	(IRR)	(IRR)	(IRR)
Initial Capital	31.20%	36.50%	23.10%	19.90%
Operating Cost	31.00%	36.60%	21.40%	15.30%

### **18.17 Project Payback**

Project payback is 2.32 years after the commencement of production, assuming \$18.00 silver and \$1,000 gold.

### **18.18 Mine Life Discussion and Exploration Potential**

Over its 6 year life, this project will produce 10.9 million tonnes of mill ore and 7 million tonnes of leach ore with an average strip ratio of 3.2 to 1. Total recovered metal during this time is 29.8 million ounces of silver and 301,465 ounces of gold.

The project includes three primary sources of production. Based on the US Gold's large land position, current rate of discovery and strong financial condition, PAH believes US Gold has the potential to extend the mine life.

### **18.19 Reclamation and Closure**

#### **18.19.1 Design**

No reclamation design work has been done, nor is required at the conceptual level. Reclamation and closure will be done to Mexican Federal and State regulations.

#### **18.19.2 Reclamation**

Reclamation will commence as soon as practical during the development and operations by back filling pits, placing salvaged topsoil on outcrops and encouraging vegetation. Final reclamation of the top surface will occur at final closure at the end of mine life.

Reclamation of the waste rock pads/stockpiles will include regrading to create natural landforms that blend with the surrounding topography. Once the grading is complete, the previously salvaged topsoil will be placed on the new landforms to an appropriate uniform thickness.

Reclaimed areas will be revegetated with a mix of the native and/or agricultural species as appropriate to the adjacent existing vegetation at each site and the most beneficial post reclamation land use.

### **18.19.3 Closure**

Final closure will occur at the end of mine life.

### **18.19.4 Pits**

Closure of the pits will be accomplished by back filling the mined out areas with waste material, covering with suitable soil, contouring and revegetating the area.

### **18.19.5 Plant Facilities**

Facilities including the crushers, mills process facilities, ADR plant, offices, shop buildings and fuelling station will be removed from the site at closure. Soil testing will be conducted on all disturbed area to identify any contaminants outside of baseline conditions. Any contaminated soils will be remediated according to North American standards and practices. All pads and foundations for buildings or equipment will be removed and the disturbed areas returned to pre disturbance contours to the extent practical, covered with topsoil and revegetated.

Facilities that may be beneficial to the local community after operations may be modified or left in place as appropriate and mutually agreed upon by the stakeholders and in accordance with Mexican regulations.

### **18.19.6 Tailings and Development Rock Storage Facility**

At closure the final run-on control channels and down drains will remain in place to collect run-on water from the upslope watershed as well as top surface stormwater (once the top surface is covered). The two under drains will likewise be left in place to continue to capture any water that may drain from the facility, but will not receive water from the top surface. The stormwater pond, at the toe of the facility, will be maintained and monitored until water quality standards are attained or the flow from the under drains abates. At final closure the pond will be decommissioned leaving the pond in place for beneficial post mining use or graded to drain away from the center.

### **18.19.7 Heap Leach Pads**

Ore stacked on the heap leach pad will be leached until recovery of precious metals is no longer economical. It is estimated that residual leaching will occur over a one-year period after cyanidation has been discontinued. During this time, the water balance will be managed to start the draindown and dewatering process. The residual leach will be followed by approximately two years of active fluid management to promote draindown and remove excess water through enhanced evaporation on the leach pad. After three years, draindown rates are expected to decrease to a level where evaporation will

remove the remaining water while the storage ponds maintain sufficient capacity to handle the design storm.

After the draindown has been completed, the heap leach pad will be regraded to achieve slopes which are acceptable to regulatory agencies. The regraded spent ore will then be covered with approximately 3 ft (1 m) of fine-grained soil and topsoil/growth media.

After placement of the final cover, the soil surface will be scarified (on contour) and seeded with the approved general seed mix. The soil and vegetative cover will be designed to minimize surface erosion and water percolation into the processed material thereby creating a long-term, stable configuration. Rip-rapped solution channels will be designed for the 100-year/24-hour storm event and are not expected to require long-term maintenance.

### **18.19.8 Infrastructure**

Improvements to roads, bridges, and drainage structures, including ponds, may be removed or left in place whichever is most beneficial to the local community for post operation use. In the case of removal, each area will be regraded and revegetated as described above.

### **18.20 Cash Flow**

The following tables (Table 18-6 through Table 18-24) provide the reader with a more detailed summary of the project cash flows using both the Base Case metal prices (\$18 Ag and \$1,000 Au) and spot prices (\$28.50 Ag and \$1,350 Au).

**TABLE 18-6**  
**US Gold Corporation**  
**Preliminary Economic Assessment, El Gallo District**  
**Consolidated Production**

	Ounces Produced							
	Year 1	Year 2	Year 3	Year 4	Year 5	Year6	Year 7	Total
Lupita (Gold)	25,703	25,703	12,060	0	0	0		63,466
Sagrado Corazon (Gold)	9,466	9,466	4,442	0	0	0		23,374
Samaniego (Gold)	0	0	38,695	55,313	43,419	43,496		180923
Tailings (Gold)	2193	2193	0	0	0	0		4386
El Gallo (Silver)	5,198,702	4,230,920	4,256,774	4,340,427	4,531,434	4,531,035	91,890	27,181,182
El Gallo (Gold)	3,267	4,522	4,521	4,161	3,518	3,521		
Palmarito In-situ (Silver)	214,216	725,108	606,884	267,623	0	0		
Palmarito In-situ (Gold)	510	1,818	1,627	717	0	0		4,672
Palmarito Tailings (Silver)	322,141	0	0	0	0	0		
Palmarito Tailings (Gold)	385	0	0	0	0	0		385
Palmarito Dump (Silver)	510,908	0	0	0	0	0		
Palmarito (Gold)	749	0	0	0	0	0		749
Total Silver	6,245,967	4,956,028	4,863,658	4,608,050	4,531,434	4,531,035	91,890	29,828,062
Total Gold	42,273	43,702	61,345	60,191	46,937	47,017		301,465
Avg Silver	4,956,029							
Avg Gold	50,244							

**TABLE 18-7**  
**US Gold Corporation**  
**Preliminary Economic Assessment, El Gallo District**  
**Consolidated Cash Flow Silver \$18 - Gold \$1,000**

	Year -2	Year -1	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
Initial Capital	-74,580,000	-74,580,000							
Lupita			8,503,802	8,503,802	4,290,226	0	0	0	0
Sagrado Corazon			3,264,056	3,264,056	1,642,042	0	0	0	0
Samaniego			0	0	9,389,833	14,605,464	12,965,839	12,988,839	0
Tailings			405,420	405,420	0	0	0	0	0
El Gallo			55,411,722	36,633,522	39,097,728	39,133,131	39,429,244	39,393,360	1,629,284
Palmarito In-situ			1,675,261	4,710,336	2,188,679	66,767	0	0	0
Palmarito Tailings			2,488,796	0	0	0	0	0	0
Palmarito Dump			7,063,003	0	0	0	0	0	0
Substaining Capital (10%)					-2,486,000	-2,486,000	-2,486,000	-2,486,000	
Pre Tax Cash Flow	-74,580,000	-74,580,000	78,812,060	53,517,136	54,122,508	51,319,362	49,909,083	49,896,199	1,629,284

**Net Present Value Silver \$18 - Gold \$1,000**

**Discounted Rate**

<b>NET PRESENT VALUE</b>	<b>0%</b>	<b>\$ 190,045,632</b>
	<b>5%</b>	<b>\$ 155,414,166</b>
	<b>10%</b>	<b>\$ 127,580,221</b>
	<b>15%</b>	<b>\$ 104,903,699</b>
<b>IRR</b>		<b>26.9%</b>

**TABLE 18-8****US Gold Corporation****Preliminary Economic Assessment, El Gallo District****Consolidated Cash Flow Silver \$28.50 - Gold \$1,350**

	Year -2	Year -1	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
Initial Capital	-74,580,000	-74,580,000							
Lupita			17,141,507	17,141,507	8,448,270	0	0	0	0
Sagrado Corazon			6,445,116	6,445,116	3,171,330	0	0	0	0
Samaniego			0	0	22,730,473	33,675,568	27,935,211	27,984,765	0
Tailings			1,142,486	1,142,486	0	0	0	0	0
El Gallo			108,921,984	80,808,725	84,684,389	85,460,851	87,510,704	87,471,813	2,579,700
Palmarito In-situ			4,090,908	12,919,164	9,095,701	3,112,400	0	0	0
Palmarito Tailings			5,918,607	0	0	0	0	0	0
Palmarito Dump			12,661,464	0	0	0	0	0	0
Substaining Capital (10%)					-2,486,000	-2,486,000	-2,486,000	-2,486,000	
Pre Tax Cash Flow	-74,580,000	-74,580,000	156,322,072	118,456,998	125,644,163	119,762,819	112,959,915	112,970,578	2,579,700

**Net Present Value Silver \$28.50 - Gold \$1,350****Discounted Rate**

<b>NET PRESENT VALUE</b>	<b>0%</b>	<b>\$ 599,536,245</b>
	<b>5%</b>	<b>\$ 520,769,664</b>
	<b>10%</b>	<b>\$ 457,423,138</b>
	<b>15%</b>	<b>\$ 405,786,010</b>
<b>IRR</b>		<b>64.9%</b>

**TABLE 18-9**  
**US Gold Corporation**  
**Preliminary Economic Assessment, El Gallo District**  
**El Gallo Cash Flow Model \$18 Silver - \$1,350 Gold**

All currency in US \$		TOTAL	Year -2	Year -1	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
<b>LEACH</b>											
Tonnes		6,257,206			804,889	1,106,120	1,106,120	1,095,142	1,070,467	1,074,468	
Tonnes/day		2,857			2,205	3,030	3,030	3,000	2,933	2,944	
Silver Grade [gr/tonne]		28.05			28.10	28.10	28.10	28.00	28.00	28.00	
Gold grade [gr/tonne]		0.033			0.027	0.028	0.028	0.032	0.041	0.041	
Diluted Silver Grade [gr/tonne]	5%	26.65			26.70	26.70	26.70	26.60	26.60	26.60	
Diluted Gold grade [gr/tonne]	5%	0.031			0.026	0.027	0.027	0.030	0.039	0.039	
<b>MILL</b>											
Tonnes		7,735,470			1,289,245	1,289,245	1,289,245	1,289,245	1,289,245	1,289,245	
Tonnes/day		3,532			3,532	3,532	3,532	3,532	3,532	3,532	
Silver Grade [gr/tonne]		119.33			145.00	110.16	110.16	112.85	118.91	118.91	
Gold grade [gr/tonne]		0.103			0.090	0.124	0.124	0.110	0.084	0.084	
Diluted Silver Grade [gr/tonne]	5%	113.37			137.75	104.65	104.65	107.21	112.96	112.96	
Diluted Gold grade [gr/tonne]	5%	0.098			0.086	0.118	0.118	0.105	0.080	0.080	
<b>WASTE</b>											
Tonnes		14,861,405			1,386,136	1,809,953	1,809,953	2,400,400	3,727,481	3,727,482	
Tonnes/day		6,101			3,798	4,959	4,959	6,576	10,212	10,212	
<b>TOTAL [tonnes]</b>		<b>28,854,081</b>			<b>3,480,270</b>	<b>4,205,318</b>	<b>4,205,318</b>	<b>4,784,787</b>	<b>6,087,193</b>	<b>6,091,195</b>	
Mine Tpd					9,535	11,521	11,521	13,109	16,677	16,688	-
Stripping Ratio		1.06			0.7	0.8	0.8	1.0	1.6	1.6	
<b>LEACH</b>											
Leach Silver [troy oz]		5,360,439			690,807	949,343	949,343	936,576	915,474	918,896	-
Leach Silver Recovery											
Year 1 Silver Recovery	50%				345,404	474,672	474,672	468,288	457,737	459,448	-
Year 2 Silver Recovery	10.0%				69,081	94,934	94,934	93,658	91,547	91,890	-
Year 3 Silver Recovery	0.0%				-	-	-	-	-	-	-
Year 4 Silver Recovery	0.0%				-	-	-	-	-	-	-
Year 5 Silver Recovery	0.0%				-	-	-	-	-	-	-
Total Leach Silver Recovery	60%	3,216,263			414,484	569,606	569,606	561,946	549,284	551,337	-
<b>Leach Silver Production [troy oz]</b>		<b>3,216,263</b>			<b>345,404</b>	<b>543,752</b>	<b>569,606</b>	<b>563,222</b>	<b>551,395</b>	<b>550,995</b>	<b>91,890</b>
Leach Gold [troy oz]		6,312			664	946	946	1,070	1,341	1,346	-
Leach Gold Recovery [troy oz]	65%	4,103			431	615	615	696	871	875	-
<b>Leach Gold Production [troy oz]</b>		<b>4,103</b>			<b>431</b>	<b>615</b>	<b>615</b>	<b>696</b>	<b>871</b>	<b>875</b>	<b>-</b>
<b>REVENUE</b>											
Silver US\$ @ \$18.00/troy oz	\$18.00	56,629,125			5,969,663	9,397,752	10,099,624	9,986,440	9,776,721	9,769,640	1,629,284
Gold US\$ @ \$1,000/troy oz	\$1,000	4,015,505			414,265	590,390	605,685	685,341	858,308	861,516	-
<b>MILL</b>											
Mill Silver [troy oz]		28,194,022			5,709,763	4,337,845	4,337,845	4,443,771	4,682,399	4,682,399	-
Mill Silver Recovery [troy oz]	85%	23,964,919			4,853,299	3,687,168	3,687,168	3,777,205	3,980,040	3,980,040	-
Mill Gold [troy oz]		24,258			3,544	4,884	4,883	4,332	3,308	3,308	-
Mill Gold Recovery [troy oz]	80%	19,406			2,835	3,907	3,906	3,465	2,646	2,646	-
<b>REVENUE</b>											
Silver US\$ @\$18.00/troy oz	\$18.00	421,095,584			83,880,287	63,725,878	65,376,808	66,973,246	70,569,683	70,569,683	-
Gold US\$ @ \$1000/troy oz	\$1,000	18,948,575			2,722,281	3,751,758	3,847,867	3,413,430	2,606,619	2,606,619	-
<b>TOTAL PRODUCTION</b>											
Silver [troy oz]		27,181,182			5,198,702	4,230,920	4,256,774	4,340,427	4,531,434	4,531,035	91,890
Gold [troy oz]		23,509			3,267	4,522	4,521	4,161	3,518	3,521	-
<b>REVENUE</b>											
Silver @ \$18.00/troy oz	\$18.00	477,724,709			89,849,950	73,123,630	75,476,432	76,959,686	80,346,404	80,339,322	1,629,284
Gold @ \$1000/troy oz	\$1,000	22,964,080			3,136,546	4,342,147	4,453,551	4,098,771	3,464,928	3,468,136	-
<b>TOTAL GROSS REVENUE</b>		<b>500,688,789</b>			<b>92,986,496</b>	<b>77,465,778</b>	<b>79,929,984</b>	<b>81,058,457</b>	<b>83,811,332</b>	<b>83,807,458</b>	<b>1,629,284</b>
<b>OPERATING COST</b>											
Mining Cost @ \$2/tonne (ore & waste)	\$2.00	57,708,162			6,960,540	8,410,636	8,410,636	9,569,574	12,174,386	12,182,390	-
Milling Cost @ \$20/tonne	\$20.00	154,709,400			25,784,900	25,784,900	25,784,900	25,784,900	25,784,900	25,784,900	-
Leach Cost @ \$6/tonne	\$6.00	37,543,236			4,829,334	6,636,720	6,636,720	6,570,852	6,422,802	6,446,808	-
<b>TOTAL OPERATING COST US\$</b>		<b>249,960,798</b>			<b>37,574,774</b>	<b>40,832,256</b>	<b>40,832,256</b>	<b>41,925,326</b>	<b>44,382,088</b>	<b>44,414,098</b>	<b>-</b>
Operating Cost \$/tonne Ore		17.86			17.94	17.05	17.05	17.58	18.81	18.79	
<b>INCOME BEFORE TAXES</b>	tax rate	0%			55,411,722	36,633,522	39,097,728	39,133,131	39,429,244	39,393,360	1,629,284

**TABLE 18-10**  
**US Gold Corporation**  
**Preliminary Economic Assessment, El Gallo District**  
**Palmarito In Situ Cash Flow Model \$18 Silver - \$1,000 Gold**

All currency in US \$	TOTAL	Year -2	Year -1	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7		
<b>LEACH</b>												
Tonnes												
Tonnes/day												
Silver Grade [gr/tonne]												
Gold grade [gr/tonne]												
Diluted Silver Grade [gr/tonne]	5%											
Diluted Gold grade [gr/tonne]	5%											
<b>MILL</b>												
Tonnes	1,019,587			98,229	368,640	368,640	184,078					
Tonnes/day	559			269	1,010	1,010	504					
Silver Grade [gr/tonne]	119.33			102.00	92.00	77.00	68.00					
Gold grade [gr/tonne]	0.103			0.200	0.190	0.170	0.150					
Diluted Silver Grade [gr/tonne]	5%	79.05		96.90	87.40	73.15	64.60					
Diluted Gold grade [gr/tonne]	5%	0.168		0.190	0.181	0.162	0.143					
<b>WASTE</b>												
Tonnes	1,211,382			78,563	329,770	436,674	366,375					
Tonnes/day	830			215	903	1,196	1,004					
<b>TOTAL [tonnes]</b>	<b>2,230,969</b>			<b>176,792</b>	<b>698,410</b>	<b>805,314</b>	<b>550,453</b>					
Mine Tpd				484	1,913	2,206	1,508			-		
Stripping Ratio	1.19			0.8	0.9	1.2	2.0					
<b>LEACH</b>												
Leach Silver [troy oz]				-	-	-	-	-	-	-		
Leach Silver Recovery												
Year 1 Silver Recovery	50%			-	-	-	-	-	-	-		
Year 2 Silver Recovery	10.0%			-	-	-	-	-	-	-		
Year 3 Silver Recovery	0.0%			-	-	-	-	-	-	-		
Year 4 Silver Recovery	0.0%			-	-	-	-	-	-	-		
Year 5 Silver Recovery	0.0%			-	-	-	-	-	-	-		
Total Leach Silver Recovery	60%			-	-	-	-	-	-	-		
<b>Leach Silver Production [troy oz]</b>				-	-	-	-	-	-	-		
Leach Gold [troy oz]				-	-	-	-	-	-	-		
Leach Gold Recovery [troy oz]	65%			-	-	-	-	-	-	-		
<b>Leach Gold Production [troy oz]</b>				-	-	-	-	-	-	-		
<b>REVENUE</b>												
Silver US\$ @ \$18.00/troy oz	\$18.00			-	-	-	-	-	-	-		
Gold US\$ @ \$1,000/troy oz	\$1,000			-	-	-	-	-	-	-		
<b>MILL</b>												
Mill Silver [troy oz]	2,591,189			306,023	1,035,869	866,977	382,319	-	-	-		
Mill Silver Recovery [troy oz]	70%	1,813,832		214,216	725,108	606,884	267,623	-	-	-		
Mill Gold [troy oz]	5,497			600	2,139	1,914	843	-	-	-		
Mill Gold Recovery [troy oz]	85%	4,672		510	1,818	1,627	717	-	-	-		
<b>REVENUE</b>												
Silver US\$ @ \$18.00/troy oz	\$18.00	32,485,731		3,836,614	12,986,692	10,869,296	4,793,128	-	-	-		
Gold US\$ @ \$1000/troy oz	\$1,000	4,648,916		507,489	1,809,309	1,618,855	713,263	-	-	-		
<b>TOTAL PRODUCTION</b>												
Silver [troy oz]		1,813,832		214,216	725,108	606,884	267,623	-	-	-		
Gold [troy oz]		4,672		510	1,818	1,627	717	-	-	-		
<b>REVENUE</b>												
Silver @ \$18.00/troy oz	\$18.00	32,485,731		3,836,614	12,986,692	10,869,296	4,793,128	-	-	-		
Gold @ \$1000/troy oz	\$1,000	4,648,916		507,489	1,809,309	1,618,855	713,263	-	-	-		
<b>TOTAL GROSS REVENUE</b>		<b>37,134,646</b>		<b>4,344,103</b>	<b>14,796,001</b>	<b>12,488,152</b>	<b>5,506,391</b>	-	-	-		
<b>OPERATING COST</b>												
Mining Cost @ \$2/tonne (ore & waste)	\$2.00	4,461,938		353,584	1,396,820	1,610,628	1,100,906	-	-	-		
Haul Cost @	\$3.57	3,639,926		350,678	1,316,045	1,316,045	657,158	-	-	-		
Milling Cost @ \$20/tonne	\$20.00	20,391,740		1,964,580	7,372,800	7,372,800	3,681,560	-	-	-		
<b>TOTAL OPERATING COST US\$</b>		<b>28,493,604</b>		<b>2,668,842</b>	<b>10,085,665</b>	<b>10,299,473</b>	<b>5,439,624</b>	-	-	-		
Operating Cost \$/tonne Ore		27.95		27.17	27.36	27.94	29.55					
<b>INCOME BEFORE TAXES</b>	tax rate	0%		1,675,261	4,710,336	2,188,679	66,767	0	0	0		
<b>CAPITAL COST</b>												
<b>MINE</b>												
Haul Roads / Site Work	US\$											
Power Line Upgrade	US\$											
Buildings	US\$											
Reagents	US\$											
Owners Costs/EPCM	US\$											
Sub Total Mine	US\$			-	-							
<b>MINE CAPITAL</b>				-	-							
Mill, Processing and Tailings (6,000 tpd)	US\$											
Heap Leach (3,250 tpd)	US\$											
Contingencies	20%											
<b>TOTAL PREPRODUCTION CAPITAL</b>	US\$			-	-							
<b>SUSTAINING CAPITAL</b>	10%					0	0	0	0			
<b>CLOSING COST</b>												
<b>AFTER TAX CASH FLOW</b>			8,641,043	0	0	1,675,261	4,710,336	2,188,679	66,767	0	0	0

**TABLE 18-11**  
**US Gold Corporation**  
**Preliminary Economic Assessment, El Gallo District**  
**Palmarito Dump Cash Flow Model \$18 Silver - \$1,000 Gold**

All currency in US \$		TOTAL	Year -2	Year -1	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
<b>LEACH</b>											
Tonnes											
Tonnes/day											
Silver Grade [gr/tonne]											
Gold grade [gr/tonne]											
Diluted Silver Grade [gr/tonne]	5%										
Diluted Gold grade [gr/tonne]	5%										
<b>MILL</b>											
Tonnes		120,168			120,168						
Tonnes/day		329			329						
Silver Grade [gr/tonne]		174.00			174.00						
Gold grade [gr/tonne]		0.240			0.240						
Diluted Silver Grade [gr/tonne]	5%	165.30			165.30						
Diluted Gold grade [gr/tonne]	5%	0.228			0.228						
<b>WASTE</b>											
Tonnes											
Tonnes/day											
<b>TOTAL [tonnes]</b>		<b>120,168</b>			<b>120,168</b>						
Mine Tpd		329			329	-		-			-
Stripping Ratio		0.00			0.0						
<b>LEACH</b>											
Leach Silver [troy oz]					-	-	-	-	-	-	-
Leach Silver Recovery											
Year 1 Silver Recovery	0%				-	-	-	-	-	-	-
Year 2 Silver Recovery	0.0%				-	-	-	-	-	-	-
Year 3 Silver Recovery	0.0%				-	-	-	-	-	-	-
Year 4 Silver Recovery	0.0%				-	-	-	-	-	-	-
Year 5 Silver Recovery	0.0%				-	-	-	-	-	-	-
Total Leach Silver Recovery	0%				-	-	-	-	-	-	-
<b>Leach Silver Production [troy oz]</b>					-	-	-	-	-	-	-
Leach Gold [troy oz]					-	-	-	-	-	-	-
<b>Leach Gold Recovery [troy oz]</b>	0%				-	-	-	-	-	-	-
<b>Leach Gold Production [troy oz]</b>					-	-	-	-	-	-	-
<b>REVENUE</b>											
Silver US\$ @ \$18.00/troy oz	\$18.00				-	-	-	-	-	-	-
Gold US\$ @ \$1,000/troy oz	\$1,000				-	-	-	-	-	-	-
<b>MILL</b>											
Mill Silver [troy oz]		638,635			638,635	-	-	-	-	-	-
<b>Mill Silver Recovery [troy oz]</b>	80%	<b>510,908</b>			<b>510,908</b>	-	-	-	-	-	-
Mill Gold [troy oz]		881			881	-	-	-	-	-	-
<b>Mill Gold Recovery [troy oz]</b>	85%	<b>749</b>			<b>749</b>	-	-	-	-	-	-
<b>REVENUE</b>											
Silver US\$ @\$18.00/troy oz	\$18.00	9,150,362			9,150,362	-	-	-	-	-	-
Gold US\$ @ \$1000/troy oz	\$1,000	745,001			745,001	-	-	-	-	-	-
<b>TOTAL PRODUCTION</b>											
Silver [troy oz]		510,908			510,908	-	-	-	-	-	-
Gold [troy oz]		749			749	-	-	-	-	-	-
<b>REVENUE</b>											
Silver @ \$18.00/troy oz	\$18.00	9,150,362			9,150,362	-	-	-	-	-	-
Gold @ \$1000/troy oz	\$1,000	745,001			745,001	-	-	-	-	-	-
<b>TOTAL GROSS REVENUE</b>		<b>9,895,363</b>			<b>9,895,363</b>	-	-	-	-	-	-
<b>OPERATING COST</b>											
Haul Cost @ \$3.57	\$3.57	429,000			429,000	-	-	-	-	-	-
Milling Cost @ \$20/tonne	\$20.00	2,403,360			2,403,360	-	-	-	-	-	-
<b>TOTAL OPERATING COST US\$</b>		<b>2,832,360</b>			<b>2,832,360</b>	-	-	-	-	-	-
Operating Cost \$/tonne Ore		23.57			23.57						
<b>INCOME BEFORE TAXES</b>	tax rate	0%			7,063,003	0	0	0	0	0	0

**TABLE 18-12**  
**US Gold Corporation**  
**Preliminary Economic Assessment, El Gallo District**  
**Palmarito Tailings Cash Flow Model \$18.00 Silver - \$1,000 Gold**

All currency in US \$		TOTAL	Year -2	Year -1	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
<b>LEACH</b>											
Tonnes											
Tonnes/day											
Silver Grade [gr/tonne]											
Gold grade [gr/tonne]											
Diluted Silver Grade [gr/tonne]	5%										
Diluted Gold grade [gr/tonne]	5%										
<b>MILL</b>											
Tonnes		150,243			150,243						
Tonnes/day		412			412						
Silver Grade [gr/tonne]		156.00			156.00						
Gold grade [gr/tonne]		0.120			0.120						
Diluted Silver Grade [gr/tonne]	5%	148.20			148.20						
Diluted Gold grade [gr/tonne]	5%	0.114			0.114						
<b>WASTE</b>											
Tonnes											
Tonnes/day											
<b>TOTAL [tonnes]</b>		150,243			150,243						
Mine Tpd					412	-		-			-
Stripping Ratio		0.00			0.0						
<b>LEACH</b>											
Leach Silver [troy oz]					-	-	-	-	-	-	-
Leach Silver Recovery											
Year 1 Silver Recovery	0%				-	-	-	-	-	-	-
Year 2 Silver Recovery	0.0%				-	-	-	-	-	-	-
Year 3 Silver Recovery	0.0%				-	-	-	-	-	-	-
Year 4 Silver Recovery	0.0%				-	-	-	-	-	-	-
Year 5 Silver Recovery	0.0%				-	-	-	-	-	-	-
Total Leach Silver Recovery	0%				-	-	-	-	-	-	-
<b>Leach Silver Production [troy oz]</b>					-	-	-	-	-	-	-
Leach Gold [troy oz]					-	-	-	-	-	-	-
<b>Leach Gold Recovery [troy oz]</b>	0%				-	-	-	-	-	-	-
<b>Leach Gold Production [troy oz]</b>					-	-	-	-	-	-	-
<b>REVENUE</b>											
Silver US\$ @ \$18.00/troy oz	\$18.00				-	-	-	-	-	-	-
Gold US\$ @ \$1,000/troy oz	\$1,000				-	-	-	-	-	-	-
<b>MILL</b>											
Mill Silver [troy oz]		715,869			715,869	-	-	-	-	-	-
<b>Mill Silver Recovery [troy oz]</b>	45%	322,141			322,141	-	-	-	-	-	-
Mill Gold [troy oz]		551			551	-	-	-	-	-	-
<b>Mill Gold Recovery [troy oz]</b>	70%	385			385	-	-	-	-	-	-
<b>REVENUE</b>											
Silver US\$ @\$18.00/troy oz	\$18.00	5,654,154			5,654,154	-	-	-	-	-	-
Gold US\$ @ \$1000/troy oz	\$1,000	375,870			375,870	-	-	-	-	-	-
<b>TOTAL PRODUCTION</b>											
Silver [troy oz]		322,141			322,141	-	-	-	-	-	-
Gold [troy oz]		385			385	-	-	-	-	-	-
<b>REVENUE</b>											
Silver @ \$18.00/troy oz	\$18.00	5,654,154			5,654,154	-	-	-	-	-	-
Gold @ \$1000/troy oz	\$1,000	375,870			375,870	-	-	-	-	-	-
<b>TOTAL GROSS REVENUE</b>		6,030,024			6,030,024	-	-	-	-	-	-
<b>OPERATING COST</b>											
Haul Cost @ \$3.57	\$3.57	536,368			536,368	-	-	-	-	-	-
Milling Cost @ \$20/tonne	\$20.00	3,004,860			3,004,860	-	-	-	-	-	-
<b>TOTAL OPERATING COST US\$</b>		3,541,228			3,541,228	-	-	-	-	-	-
<b>Operating Cost \$/tonne Ore</b>		23.57			23.57						
<b>INCOME BEFORE TAXES</b>	tax rate	0%			2,488,796	0	0	0	0	0	0



**TABLE 18-14**  
**US Gold Corporation**  
**Preliminary Economic Assessment, El Gallo District**  
**Sagrado Corazon Cash Flow Model - \$1,000 Gold**

All currency in US \$		TOTAL	Year -2	Year -1	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
<b>LEACH</b>											
Tonnes		127,076			51,464	51,464	24,148				
Tonnes/day		116			141	141	66				
Gold Grade [gr/tonne]		0.84			0.84	0.84	0.84				
Diluted Gold Grade [gr/tonne]	5%	0.80			0.80	0.80	0.80				
<b>MILL</b>											
Tonnes		349,375			141,492	141,492	66,391				
Tonnes/day		319			388	388	182				
Gold Grade [gr/tonne]		2.72			2.23	2.23	2.23				
Diluted Silver Grade [gr/tonne]	5%	2.12			2.12	2.12	2.12				
<b>WASTE</b>											
Tonnes		1,274,651			516,215	516,215	242,221				
Tonnes/day		1,164			1,414	1,414	664				
<b>TOTAL [tonnes]</b>											
Mine Tpd					1,943	1,943	912	-	-	-	-
Stripping Ratio		2.68			2.68	2.68	2.68				
<b>LEACH</b>											
Leach Gold [troy oz]		3,260			1,320	1,320	620	-	-	-	-
Leach Gold Recovery											
Year 1 Gold Recovery	60%				792	792	372	-	-	-	-
Year 2 Gold Recovery	0.0%				-	-	-	-	-	-	-
Year 3 Gold Recovery	0.0%				-	-	-	-	-	-	-
Year 4 Gold Recovery	0.0%				-	-	-	-	-	-	-
Year 5 Gold Recovery	0.0%				-	-	-	-	-	-	-
Total Leach Gold Recovery	60%	1,956			792	792	372	-	-	-	-
Leach Gold Production [troy oz]		1,956			792	792	372	-	-	-	-
<b>REVENUE</b>											
Gold US\$ @ \$1000/troy oz	\$1,000	1,887,521			760,675	760,675	366,172	-	-	-	-
<b>MILL</b>											
Mill Gold [troy oz]		23,796			9,637	9,637	4,522	-	-	-	-
Mill Gold Recovery [troy oz]	90%	21,417			8,673	8,673	4,070	-	-	-	-
<b>REVENUE</b>											
Gold US\$ @\$1,000/troy oz	\$1,000.00	20,665,076			8,328,068	8,328,068	4,008,939	-	-	-	-
<b>TOTAL PRODUCTION</b>											
Gold [troy oz]		23,373			9,466	9,466	4,442	-	-	-	-
<b>REVENUE</b>											
Gold @ \$1,000/troy oz	\$1,000.00	22,552,597			9,088,743	9,088,743	4,375,111	-	-	-	-
<b>TOTAL GROSS REVENUE</b>											
		22,552,597			9,088,743	9,088,743	4,375,111				
<b>OPERATING COST</b>											
Mining Cost @ \$2/tonne (ore & waste)	\$2.00	3,502,204			1,418,342	1,418,342	665,520	-	-	-	-
Haul Cost @ \$1.57/tonne	\$1.57	748,028			302,941	302,941	142,146				
Milling Cost @ \$25/tonne	\$25.00	8,734,375			3,537,300	3,537,300	1,659,775	-	-	-	-
Leach Cost @ \$11/tonne	\$11.00	1,397,836			566,104	566,104	265,628	-	-	-	-
<b>TOTAL OPERATING COST US\$</b>											
		14,382,443			5,824,687	5,824,687	2,733,069	-	-	-	-
Operating Cost S/tonne Ore		30.19			30.19	30.19	30.19				
<b>INCOME BEFORE TAXES</b>											
tax rate	0%				3,264,056	3,264,056	1,642,042	0	0	0	0

**TABLE 18-15**  
**US Gold Corporation**  
**Preliminary Economic Assessment, El Gallo District**  
**Samaniego Cash Flow Model - \$1,000 Gold**

All currency in US \$		TOTAL	Year -2	Year -1	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
<b>LEACH</b>											
Tonnes		394,226					29,608	91,066	136,655	136,897	
Tonnes/day		270					81	249	374	375	
Gold Grade [gr/tonne]							0.85	0.85	0.85	0.85	
Diluted Gold Grade [gr/tonne]	5%						0.81	0.81	0.81	0.81	
<b>MILL</b>											
Tonnes		1,891,825					309,770	527,040	527,040	527,975	
Tonnes/day							849	1,444	1,444	1,447	
Gold Grade [gr/tonne]							4.49	3.72	2.85	2.85	
Diluted Silver Grade [gr/tonne]	5%						4.27	3.53	2.71	2.71	
<b>WASTE</b>											
Tonnes		34,236,987					9,722,381	11,748,091	6,377,600	6,388,915	
Tonnes/day							26,637	32,187	17,473	17,504	
<b>TOTAL [tonnes]</b>		<b>36,523,038</b>					<b>10,061,759</b>	<b>12,366,197</b>	<b>7,041,295</b>	<b>7,053,787</b>	
Mine Tpd					-		27,566	33,880	19,291	19,325	-
Stripping Ratio		14.98					28.65	20.0	9.6	9.6	
<b>LEACH</b>											
Leach Gold [troy oz]		10,235			-	-	769	2,364	3,548	3,554	-
Leach Gold Recovery											
Year 1 Gold Recovery	60%				-	-	461	1,419	2,129	2,132	-
Year 2 Gold Recovery	0.0%				-	-	-	-	-	-	-
Year 3 Gold Recovery	0.0%				-	-	-	-	-	-	-
Year 4 Gold Recovery	0.0%				-	-	-	-	-	-	-
Year 5 Gold Recovery	0.0%				-	-	-	-	-	-	-
Total Leach Gold Recovery	60%	6,141			-	-	461	1,419	2,129	2,132	-
<b>Leach Gold Production [troy oz]</b>		<b>6,141</b>			-	-	<b>461</b>	<b>1,419</b>	<b>2,129</b>	<b>2,132</b>	-
<b>REVENUE</b>											
Gold US\$ @ \$1000/troy oz	\$1,000	6,049,066			-	-	454,310	1,397,331	2,096,856	2,100,569	-
<b>MILL</b>											
Mill Gold [troy oz]		194,201			-	-	42,482	59,883	45,878	45,959	-
Mill Gold Recovery [troy oz]	90%	174,781			-	-	38,233	53,894	41,290	41,363	-
<b>REVENUE</b>											
Gold US\$ @\$1,000/troy oz	\$1,000.00	172,168,196			-	-	37,661,803	53,088,680	40,672,779	40,744,935	-
<b>TOTAL PRODUCTION</b>											
Gold [troy oz]		180,922			-	-	38,695	55,313	43,419	43,496	-
<b>REVENUE</b>											
Gold @ \$1,000/troy oz	\$1,000.00	178,217,262			-	-	38,116,113	54,486,011	42,769,635	42,845,504	-
<b>TOTAL GROSS REVENUE</b>		<b>178,217,262</b>			-	-	<b>38,116,113</b>	<b>54,486,011</b>	<b>42,769,635</b>	<b>42,845,504</b>	
<b>OPERATING COST</b>											
Mining Cost @ \$2/tonne (ore & waste)	\$2.00	73,046,076			-	-	20,123,518	24,732,394	14,082,590	14,107,574	-
Haul Cost @ \$1.57/tonne	\$1.57	3,589,100			-	-	532,823	970,426	1,042,001	1,043,849	-
Milling Cost @ \$25/tonne	\$25.00	47,295,625			-	-	7,744,250	13,176,000	13,176,000	13,199,375	-
Leach Cost @ \$11/tonne	\$11.00	4,336,486			-	-	325,688	1,001,726	1,503,205	1,505,867	-
<b>TOTAL OPERATING COST US\$</b>		<b>128,267,287</b>			-	-	<b>28,726,279</b>	<b>39,880,546</b>	<b>29,803,796</b>	<b>29,856,665</b>	-
Operating Cost S/tonne Ore		56.11					84.64	64.52	44.91	44.91	
<b>INCOME BEFORE TAXES</b>	tax rate	0%			0	0	9,389,833	14,605,464	12,965,839	12,988,839	0

**TABLE 18-16**  
**US Gold Corporation**  
**Preliminary Economic Assessment, El Gallo District**  
**Magistral Tailings Cash Flow Model - \$1,000 Gold**

All currency in US \$		TOTAL	Year -2	Year -1	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
<b>LEACH</b>											
Tonnes											
Tonnes/day											
Gold Grade [gr/tonne]											
Diluted Gold Grade [gr/tonne]	5%										
<b>MILL</b>											
Tonnes		128,000			64,000	64,000					
Tonnes/day		175			175	175					
Gold Grade [gr/tonne]		1.87			1.87	1.87					
Diluted Gold Grade [gr/tonne]	5%	1.78			1.78	1.78					
<b>WASTE</b>											
Tonnes											
Tonnes/day											
<b>TOTAL [tonnes]</b>		<b>128,000</b>			<b>64,000</b>	<b>64,000</b>					
Mine Tpd					175	175	-	-	-	-	-
Stripping Ratio		0.00			0.0	0.0					
<b>LEACH</b>											
Leach Gold [troy oz]					-	-	-	-	-	-	-
Leach Gold Recovery											
Year 1 Gold Recovery	60%				-	-	-	-	-	-	-
Year 2 Gold Recovery	0.0%				-	-	-	-	-	-	-
Year 3 Gold Recovery	0.0%				-	-	-	-	-	-	-
Year 4 Gold Recovery	0.0%				-	-	-	-	-	-	-
Year 5 Gold Recovery	0.0%				-	-	-	-	-	-	-
Total Leach Gold Recovery	60%				-	-	-	-	-	-	-
<b>Leach Gold Production [troy oz]</b>					-	-	-	-	-	-	-
<b>REVENUE</b>											
Gold US\$ @ \$1000/troy oz	\$1,000				-	-	-	-	-	-	-
<b>MILL</b>											
Mill Gold [troy oz]		7,311			3,655	3,655	-	-	-	-	-
<b>Mill Gold Recovery [troy oz]</b>	60%	<b>4,386</b>			<b>2,193</b>	<b>2,193</b>	-	-	-	-	-
<b>REVENUE</b>											
Gold US\$ @\$1,000/troy oz	\$1,000.00	4,211,801			2,105,900	2,105,900	-	-	-	-	-
<b>TOTAL PRODUCTION</b>											
Gold [troy oz]		4,386			2,193	2,193	-	-	-	-	-
<b>REVENUE</b>											
Gold @ \$1,000/troy oz	\$1,000.00	4,211,801			2,105,900	2,105,900	-	-	-	-	-
<b>TOTAL GROSS REVENUE</b>											
		4,211,801			2,105,900	2,105,900	-	-	-	-	-
<b>OPERATING COST</b>											
Haul Cost @ \$1.57/tonne (ore & waste)	\$1.57	200,960			100,480	100,480	-	-	-	-	-
Milling Cost @ \$25/tonne	\$25.00	3,200,000			1,600,000	1,600,000	-	-	-	-	-
<b>TOTAL OPERATING COST US\$</b>		<b>3,400,960</b>			<b>1,700,480</b>	<b>1,700,480</b>	-	-	-	-	-
<b>Operating Cost/tonne Ore</b>		<b>26.57</b>			<b>26.57</b>	<b>26.57</b>					
<b>INCOME BEFORE TAXES</b>											
tax rate	0%				405,420	405,420	0	0	0	0	0

**TABLE 18-17**  
**US Gold Corporation**  
**Preliminary Economic Assessment, El Gallo District**  
**El Gallo Cash Flow Model \$28.50 Silver - \$1,350 Gold**

All currency in US \$		TOTAL	Year -2	Year -1	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
<b>LEACH</b>											
Tonnes		6,257,206			804,889	1,106,120	1,106,120	1,095,142	1,070,467	1,074,468	
Tonnes/day		2,857			2,205	3,030	3,030	3,000	2,933	2,944	
Silver Grade [gr/tonne]		28.05			28.10	28.10	28.10	28.00	28.00	28.00	
Gold grade [gr/tonne]		0.033			0.027	0.028	0.028	0.032	0.041	0.041	
Diluted Silver Grade [gr/tonne]	5%	26.65			26.70	26.70	26.70	26.60	26.60	26.60	
Diluted Gold grade [gr/tonne]	5%	0.031			0.026	0.027	0.027	0.030	0.039	0.039	
<b>MILL</b>											
Tonnes		7,735,470			1,289,245	1,289,245	1,289,245	1,289,245	1,289,245	1,289,245	
Tonnes/day		3,532			3,532	3,532	3,532	3,532	3,532	3,532	
Silver Grade [gr/tonne]		119.33			145.00	110.16	110.16	112.85	118.91	118.91	
Gold grade [gr/tonne]		0.103			0.090	0.124	0.124	0.110	0.084	0.084	
Diluted Silver Grade [gr/tonne]	5%	113.37			137.75	104.65	104.65	107.21	112.96	112.96	
Diluted Gold grade [gr/tonne]	5%	0.098			0.086	0.118	0.118	0.105	0.080	0.080	
<b>WASTE</b>											
Tonnes		14,861,405			1,386,136	1,809,953	1,809,953	2,400,400	3,727,481	3,727,482	
Tonnes/day		6,101			3,798	4,959	4,959	6,576	10,212	10,212	
<b>TOTAL [tonnes]</b>		<b>28,854,081</b>			<b>3,480,270</b>	<b>4,205,318</b>	<b>4,205,318</b>	<b>4,784,787</b>	<b>6,087,193</b>	<b>6,091,195</b>	
Mine Tpd					9,535	11,521	11,521	13,109	16,677	16,688	-
Stripping Ratio		1.06			0.7	0.8	0.8	1.0	1.6	1.6	
<b>LEACH</b>											
Leach Silver [troy oz]		5,360,439			690,807	949,343	949,343	936,576	915,474	918,896	-
Leach Silver Recovery											
Year 1 Silver Recovery	50%				345,404	474,672	474,672	468,288	457,737	459,448	-
Year 2 Silver Recovery	10.0%				69,081	94,934	94,934	93,658	91,547	91,890	-
Year 3 Silver Recovery	0.0%				-	-	-	-	-	-	-
Year 4 Silver Recovery	0.0%				-	-	-	-	-	-	-
Year 5 Silver Recovery	0.0%				-	-	-	-	-	-	-
Total Leach Silver Recovery	60%	3,216,263			414,484	569,606	569,606	561,946	549,284	551,337	-
<b>Leach Silver Production [troy oz]</b>		<b>3,216,263</b>			<b>345,404</b>	<b>543,752</b>	<b>569,606</b>	<b>563,222</b>	<b>551,395</b>	<b>550,995</b>	<b>91,890</b>
Leach Gold [troy oz]		6,312			664	946	946	1,070	1,341	1,346	-
Leach Gold Recovery [troy oz]	65%	4,103			431	615	615	696	871	875	-
<b>Leach Gold Production [troy oz]</b>		<b>4,103</b>			<b>431</b>	<b>615</b>	<b>615</b>	<b>696</b>	<b>871</b>	<b>875</b>	<b>-</b>
<b>REVENUE</b>											
Silver US\$ @ \$28.50/troy oz	\$28.50	89,662,781			9,451,967	14,879,774	15,991,072	15,811,863	15,479,809	15,468,597	2,579,700
Gold US\$ @ \$1,350/troy oz	\$1,350	5,420,932			559,258	797,026	817,674	925,210	1,158,716	1,163,047	-
<b>MILL</b>											
Mill Silver [troy oz]		28,194,022			5,709,763	4,337,845	4,337,845	4,443,771	4,682,399	4,682,399	-
Mill Silver Recovery [troy oz]	85%	23,964,919			4,853,299	3,687,168	3,687,168	3,777,205	3,980,040	3,980,040	-
Mill Gold [troy oz]		24,258			3,544	4,884	4,883	4,332	3,308	3,308	-
Mill Gold Recovery [troy oz]	80%	19,406			2,835	3,907	3,906	3,465	2,646	2,646	-
<b>REVENUE</b>											
Silver US\$ @ \$28.50/troy oz	\$28.50	666,734,675			132,810,454	100,899,307	103,513,279	106,040,973	111,735,331	111,735,331	-
Gold US\$ @ \$1350/troy oz	\$1,350	25,580,576			3,675,079	5,064,873	5,194,620	4,608,131	3,518,936	3,518,936	-
<b>TOTAL PRODUCTION</b>											
Silver [troy oz]		27,181,182			5,198,702	4,230,920	4,256,774	4,340,427	4,531,434	4,531,035	91,890
Gold [troy oz]		23,509			3,267	4,522	4,521	4,161	3,518	3,521	-
<b>REVENUE</b>											
Silver @ \$28.50/troy oz	\$28.50	756,397,456			142,262,421	115,779,082	119,504,351	121,852,836	127,215,139	127,203,927	2,579,700
Gold @ \$1350/troy oz	\$1,350	31,001,508			4,234,337	5,861,899	6,012,294	5,533,341	4,677,653	4,681,983	-
<b>TOTAL GROSS REVENUE</b>		<b>787,398,964</b>			<b>146,496,758</b>	<b>121,640,981</b>	<b>125,516,645</b>	<b>127,386,177</b>	<b>131,892,792</b>	<b>131,885,911</b>	<b>2,579,700</b>
<b>OPERATING COST</b>											
Mining Cost @ \$2/tonne (ore & waste)	\$2.00	57,708,162			6,960,540	8,410,636	8,410,636	9,569,574	12,174,386	12,182,390	-
Milling Cost @ \$20/tonne	\$20.00	154,709,400			25,784,900	25,784,900	25,784,900	25,784,900	25,784,900	25,784,900	-
Leach Cost @ \$6/tonne	\$6.00	37,543,236			4,829,334	6,636,720	6,636,720	6,570,852	6,422,802	6,446,808	-
<b>TOTAL OPERATING COST US\$</b>		<b>249,960,798</b>			<b>37,574,774</b>	<b>40,832,256</b>	<b>40,832,256</b>	<b>41,925,326</b>	<b>44,382,088</b>	<b>44,414,098</b>	<b>-</b>
Operating Cost \$/tonne Ore		17.86			17.94	17.05	17.05	17.58	18.81	18.79	
<b>INCOME BEFORE TAXES</b>	tax rate	0%			<b>108,921,984</b>	<b>80,808,725</b>	<b>84,684,389</b>	<b>85,460,851</b>	<b>87,510,704</b>	<b>87,471,813</b>	<b>2,579,700</b>

**TABLE 18-18**  
**US Gold Corporation**  
**Preliminary Economic Assessment, El Gallo District**  
**Palmarito In Situ Cash Flow Model \$28.50 Silver - \$1,350 Gold**

All currency in US \$		TOTAL	Year -2	Year -1	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
<b>LEACH</b>											
Tonnes											
Tonnes/day											
Silver Grade [gr/tonne]											
Gold grade [gr/tonne]											
Diluted Silver Grade [gr/tonne]	5%										
Diluted Gold grade [gr/tonne]	5%										
<b>MILL</b>											
Tonnes		1,019,587			98,229	368,640	368,640	184,078			
Tonnes/day		559			269	1,010	1,010	504			
Silver Grade [gr/tonne]		119.33			102.00	92.00	77.00	68.00			
Gold grade [gr/tonne]		0.103			0.200	0.190	0.170	0.150			
Diluted Silver Grade [gr/tonne]	5%	79.05			96.90	87.40	73.15	64.60			
Diluted Gold grade [gr/tonne]	5%	0.168			0.190	0.181	0.162	0.143			
<b>WASTE</b>											
Tonnes		1,211,382			78,563	329,770	436,674	366,375			
Tonnes/day		830			215	903	1,196	1,004			
<b>TOTAL [tonnes]</b>											
		2,230,969			176,792	698,410	805,314	550,453			
Mine Tpd					484	1,913	2,206	1,508			-
Stripping Ratio		1.19			0.8	0.9	1.2	2.0			
<b>LEACH</b>											
Leach Silver [troy oz]					-	-	-	-	-	-	-
Leach Silver Recovery											
Year 1 Silver Recovery	50%				-	-	-	-	-	-	-
Year 2 Silver Recovery	10.0%				-	-	-	-	-	-	-
Year 3 Silver Recovery	0.0%				-	-	-	-	-	-	-
Year 4 Silver Recovery	0.0%				-	-	-	-	-	-	-
Year 5 Silver Recovery	0.0%				-	-	-	-	-	-	-
Total Leach Silver Recovery	60%				-	-	-	-	-	-	-
<b>Leach Silver Production [troy oz]</b>					-	-	-	-	-	-	-
Leach Gold [troy oz]					-	-	-	-	-	-	-
<b>Leach Gold Recovery [troy oz]</b>	65%				-	-	-	-	-	-	-
<b>Leach Gold Production [troy oz]</b>					-	-	-	-	-	-	-
<b>REVENUE</b>											
Silver US\$ @ \$28.50/troy oz	\$28.50				-	-	-	-	-	-	-
Gold US\$ @ \$1,350/troy oz	\$1,350				-	-	-	-	-	-	-
<b>MILL</b>											
Mill Silver [troy oz]		2,591,189			306,023	1,035,869	866,977	382,319	-	-	-
<b>Mill Silver Recovery [troy oz]</b>	70%	1,813,832			214,216	725,108	606,884	267,623	-	-	-
Mill Gold [troy oz]		5,497			600	2,139	1,914	843	-	-	-
<b>Mill Gold Recovery [troy oz]</b>	85%	4,672			510	1,818	1,627	717	-	-	-
<b>REVENUE</b>											
Silver US\$ @\$28.50/troy oz	\$28.50	51,435,740			6,074,639	20,562,262	17,209,719	7,589,120	-	-	-
Gold US\$ @ \$1350/troy oz	\$1,350	6,276,036			685,110	2,442,567	2,185,455	962,905	-	-	-
<b>TOTAL PRODUCTION</b>											
Silver [troy oz]		1,813,832			214,216	725,108	606,884	267,623	-	-	-
Gold [troy oz]		4,672			510	1,818	1,627	717	-	-	-
<b>REVENUE</b>											
Silver @ \$28.50/troy oz	\$28.50	51,435,740			6,074,639	20,562,262	17,209,719	7,589,120	-	-	-
Gold @ \$1350/troy oz	\$1,350	6,276,036			685,110	2,442,567	2,185,455	962,905	-	-	-
<b>TOTAL GROSS REVENUE</b>		57,711,777			6,759,749	23,004,829	19,395,174	8,552,025	-	-	-
<b>OPERATING COST</b>											
Mining Cost @ \$2/tonne (ore & waste)	\$2.00	4,461,938			353,584	1,396,820	1,610,628	1,100,906	-	-	-
Haul Cost @	\$3.57	3,639,926			350,678	1,316,045	1,316,045	657,158	-	-	-
Milling Cost @ \$20/tonne	\$20.00	20,391,740			1,964,580	7,372,800	7,372,800	3,681,560	-	-	-
<b>TOTAL OPERATING COST US\$</b>		28,493,604			2,668,842	10,085,665	10,299,473	5,439,624	-	-	-
<b>Operating Cost \$/tonne Ore</b>		27.95			27.17	27.36	27.94	29.55			
<b>INCOME BEFORE TAXES</b>	tax rate	0%			4,090,908	12,919,164	9,095,701	3,112,400	0	0	0

**TABLE 18-19**  
**US Gold Corporation**  
**Preliminary Economic Assessment, El Gallo District**  
**Palmarito Dump Cash Flow Model \$28.50 Silver - \$1,350 Gold**

All currency in US \$		TOTAL	Year -2	Year -1	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
<b>LEACH</b>											
Tonnes											
Tonnes/day											
Silver Grade [gr/tonne]											
Gold grade [gr/tonne]											
Diluted Silver Grade [gr/tonne]	5%										
Diluted Gold grade [gr/tonne]	5%										
<b>MILL</b>											
Tonnes		120,168			120,168						
Tonnes/day		329			329						
Silver Grade [gr/tonne]		174.00			174.00						
Gold grade [gr/tonne]		0.240			0.240						
Diluted Silver Grade [gr/tonne]	5%	165.30			165.30						
Diluted Gold grade [gr/tonne]	5%	0.228			0.228						
<b>WASTE</b>											
Tonnes											
Tonnes/day											
<b>TOTAL [tonnes]</b>		<b>120,168</b>			<b>120,168</b>						
Mine Tpd		329			329	-		-			-
Stripping Ratio		0.00			0.0						
<b>LEACH</b>											
Leach Silver [troy oz]					-	-	-	-	-	-	-
Leach Silver Recovery											
Year 1 Silver Recovery	0%				-	-	-	-	-	-	-
Year 2 Silver Recovery	0.0%				-	-	-	-	-	-	-
Year 3 Silver Recovery	0.0%				-	-	-	-	-	-	-
Year 4 Silver Recovery	0.0%				-	-	-	-	-	-	-
Year 5 Silver Recovery	0.0%				-	-	-	-	-	-	-
Total Leach Silver Recovery	0%				-	-	-	-	-	-	-
<b>Leach Silver Production [troy oz]</b>					-	-	-	-	-	-	-
Leach Gold [troy oz]					-	-	-	-	-	-	-
<b>Leach Gold Recovery [troy oz]</b>	0%				-	-	-	-	-	-	-
<b>Leach Gold Production [troy oz]</b>					-	-	-	-	-	-	-
<b>REVENUE</b>											
Silver US\$ @ \$28.50/troy oz	\$28.50				-	-	-	-	-	-	-
Gold US\$ @ \$1,350/troy oz	\$1,350				-	-	-	-	-	-	-
<b>MILL</b>											
Mill Silver [troy oz]		638,635			638,635	-	-	-	-	-	-
<b>Mill Silver Recovery [troy oz]</b>	80%	<b>510,908</b>			<b>510,908</b>	-	-	-	-	-	-
Mill Gold [troy oz]		881			881	-	-	-	-	-	-
<b>Mill Gold Recovery [troy oz]</b>	85%	<b>749</b>			<b>749</b>	-	-	-	-	-	-
<b>REVENUE</b>											
Silver US\$ @\$28.50/troy oz	\$28.50	14,488,073			14,488,073	-	-	-	-	-	-
Gold US\$ @\$1350/troy oz	\$1,350	1,005,751			1,005,751	-	-	-	-	-	-
<b>TOTAL PRODUCTION</b>											
Silver [troy oz]		510,908			510,908	-	-	-	-	-	-
Gold [troy oz]		749			749	-	-	-	-	-	-
<b>REVENUE</b>											
Silver @ \$28.50/troy oz	\$28.50	14,488,073			14,488,073	-	-	-	-	-	-
Gold @ \$1350/troy oz	\$1,350	1,005,751			1,005,751	-	-	-	-	-	-
<b>TOTAL GROSS REVENUE</b>		<b>15,493,824</b>			<b>15,493,824</b>	-	-	-	-	-	-
<b>OPERATING COST</b>											
Haul Cost @ \$3.57	\$3.57	429,000			429,000	-	-	-	-	-	-
Milling Cost @ \$20/tonne	\$20.00	2,403,360			2,403,360	-	-	-	-	-	-
<b>TOTAL OPERATING COST US\$</b>		<b>2,832,360</b>			<b>2,832,360</b>	-	-	-	-	-	-
<b>Operating Cost \$/tonne Ore</b>		<b>23.57</b>			<b>23.57</b>						
<b>INCOME BEFORE TAXES</b>	tax rate	0%			12,661,464	0	0	0	0	0	0

**TABLE 18-20**  
**US Gold Corporation**  
**Preliminary Economic Assessment, El Gallo District**  
**Palmarito Tailings Cash Flow Model \$28.50 Silver - \$1,350 Gold**

All currency in US \$		TOTAL	Year -2	Year -1	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
<b>LEACH</b>											
Tonnes											
Tonnes/day											
Silver Grade [gr/tonne]											
Gold grade [gr/tonne]											
Diluted Silver Grade [gr/tonne]	5%										
Diluted Gold grade [gr/tonne]	5%										
<b>MILL</b>											
Tonnes		150,243			150,243						
Tonnes/day		412			412						
Silver Grade [gr/tonne]		156.00			156.00						
Gold grade [gr/tonne]		0.120			0.120						
Diluted Silver Grade [gr/tonne]	5%	148.20			148.20						
Diluted Gold grade [gr/tonne]	5%	0.114			0.114						
<b>WASTE</b>											
Tonnes											
Tonnes/day											
<b>TOTAL [tonnes]</b>											
		150,243			150,243						
Mine Tpd					412	-		-			-
Stripping Ratio		0.00			0.0						
<b>LEACH</b>											
Leach Silver [troy oz]					-	-	-	-	-	-	-
Leach Silver Recovery											
Year 1 Silver Recovery	0%				-	-	-	-	-	-	-
Year 2 Silver Recovery	0.0%				-	-	-	-	-	-	-
Year 3 Silver Recovery	0.0%				-	-	-	-	-	-	-
Year 4 Silver Recovery	0.0%				-	-	-	-	-	-	-
Year 5 Silver Recovery	0.0%				-	-	-	-	-	-	-
Total Leach Silver Recovery	0%				-	-	-	-	-	-	-
Leach Silver Production [troy oz]					-	-	-	-	-	-	-
Leach Gold [troy oz]					-	-	-	-	-	-	-
Leach Gold Recovery [troy oz]	0%				-	-	-	-	-	-	-
Leach Gold Production [troy oz]					-	-	-	-	-	-	-
<b>REVENUE</b>											
Silver US\$ @ \$18.50/troy oz	\$28.50				-	-	-	-	-	-	-
Gold US\$ @ \$1,350/troy oz	\$1,350				-	-	-	-	-	-	-
<b>MILL</b>											
Mill Silver [troy oz]		715,869			715,869	-	-	-	-	-	-
Mill Silver Recovery [troy oz]	45%	322,141			322,141	-	-	-	-	-	-
Mill Gold [troy oz]		551			551	-	-	-	-	-	-
Mill Gold Recovery [troy oz]	70%	385			385	-	-	-	-	-	-
<b>REVENUE</b>											
Silver US\$ @ \$28.50/troy oz	\$28.50	8,952,411			8,952,411	-	-	-	-	-	-
Gold US\$ @ \$1350/troy oz	\$1,350	507,424			507,424	-	-	-	-	-	-
<b>TOTAL PRODUCTION</b>											
Silver [troy oz]		322,141			322,141	-	-	-	-	-	-
Gold [troy oz]		385			385	-	-	-	-	-	-
<b>REVENUE</b>											
Silver @ \$28.50/troy oz	\$28.50	8,952,411			8,952,411	-	-	-	-	-	-
Gold @ \$1350/troy oz	\$1,350	507,424			507,424	-	-	-	-	-	-
<b>TOTAL GROSS REVENUE</b>											
		9,459,835			9,459,835	-	-	-	-	-	-
<b>OPERATING COST</b>											
Haul Cost @ \$3.57	\$3.57	536,368			536,368	-	-	-	-	-	-
Milling Cost @ \$20/tonne	\$20.00	3,004,860			3,004,860	-	-	-	-	-	-
<b>TOTAL OPERATING COST US\$</b>											
		3,541,228			3,541,228	-	-	-	-	-	-
Operating Cost \$/tonne Ore		23.57			23.57						
<b>INCOME BEFORE TAXES</b>	tax rate	0%			5,918,607	0	0	0	0	0	0

**TABLE 18-21**  
**US Gold Corporation**  
**Preliminary Economic Assessment, El Gallo District**  
**Lupita Cash Flow Model - \$1,350 Gold**

All currency in US \$		TOTAL	Year -2	Year -1	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
<b>LEACH</b>											
Tonnes		263,249			106,612	106,612	50,025				
Tonnes/day		240			292	292	137				
Gold Grade [gr/tonne]		0.85			0.85	0.85	0.85				
Diluted Gold Grade [gr/tonne]	5%	0.81			0.81	0.81	0.81				
<b>MILL</b>											
Tonnes		793,975			321,548	321,548	150,879				
Tonnes/day		725			881	881	413				
Gold Grade [gr/tonne]		2.72			2.72	2.72	2.72				
Diluted Silver Grade [gr/tonne]	5%	2.58			2.58	2.58	2.58				
<b>WASTE</b>											
Tonnes		6,710,601			2,717,695	2,717,695	1,275,211				
Tonnes/day		6,128			7,446	7,446	3,494				
<b>TOTAL [tonnes]</b>											
Mine Tpd		7,094			8,619	8,619	4,044	-	-	-	-
Stripping Ratio		6.35			6.35	6.35	6.35				
<b>LEACH</b>											
Leach Gold [troy oz]		6,834			2,768	2,768	1,299	-	-	-	-
Leach Gold Recovery											
Year 1 Gold Recovery	60%				1,661	1,661	779	-	-	-	-
Year 2 Gold Recovery	0.0%				-	-	-	-	-	-	-
Year 3 Gold Recovery	0.0%				-	-	-	-	-	-	-
Year 4 Gold Recovery	0.0%				-	-	-	-	-	-	-
Year 5 Gold Recovery	0.0%				-	-	-	-	-	-	-
Total Leach Gold Recovery	60%	4,101			1,661	1,661	779	-	-	-	-
<b>Leach Gold Production [troy oz]</b>		<b>4,101</b>			<b>1,661</b>	<b>1,661</b>	<b>779</b>	-	-	-	-
<b>REVENUE</b>											
Gold US\$ @ \$1350/troy oz	\$1,350	5,341,565			2,152,658	2,152,658	1,036,249	-	-	-	-
<b>MILL</b>											
Mill Gold [troy oz]		65,961			26,713	26,713	12,535	-	-	-	-
Mill Gold Recovery [troy oz]	90%	59,365			24,042	24,042	11,281	-	-	-	-
<b>REVENUE</b>											
Gold US\$ @\$1,350/troy oz	\$1,350.00	77,330,325			31,164,202	31,164,202	15,001,921	-	-	-	-
<b>TOTAL PRODUCTION</b>											
Gold [troy oz]		63,466			25,703	25,703	12,060	-	-	-	-
<b>REVENUE</b>											
Gold @ \$1,350/troy oz	\$1,350.00	82,671,890			33,316,860	33,316,860	16,038,170	-	-	-	-
<b>TOTAL GROSS REVENUE</b>											
		82,671,890			33,316,860	33,316,860	16,038,170				
<b>OPERATING COST</b>											
Mining Cost @ \$2/tonne (ore & waste)	\$2.00	15,535,650			6,291,710	6,291,710	2,952,230	-	-	-	-
Haul Cost @ \$1.57/tonne	\$1.57	1,659,842			672,211	672,211	315,419				
Milling Cost @ \$25/tonne	\$25.00	19,849,375			8,038,700	8,038,700	3,771,975	-	-	-	-
Leach Cost @ \$11/tonne	\$11.00	2,895,739			1,172,732	1,172,732	550,275	-	-	-	-
<b>TOTAL OPERATING COST US\$</b>		<b>39,940,606</b>			<b>16,175,353</b>	<b>16,175,353</b>	<b>7,589,899</b>	-	-	-	-
Operating Cost \$/tonne Ore		37.78			37.78	37.78	37.78				
<b>INCOME BEFORE TAXES</b>	tax rate	0%			17,141,507	17,141,507	8,448,270	0	0	0	0
<b>NET INCOME AFTER TAXES</b>					0	0	0	0	0	0	0
<b>CAPITAL COST</b>											
<b>MINE</b>											
Haul Roads / Site Work	US\$										
Power Line Upgrade	US\$										
Buildings	US\$										
Reagents	US\$										
Owners Costs/EPCM	US\$										
Sub Total Mine	US\$		-	-							
<b>MINE CAPITAL</b>											
Mill, Processing and Tailings (6,000 tpd)	US\$										
Heap Leach (3,250 tpd)	US\$										
Contingencies	0%										
<b>TOTAL PREPRODUCTION CAPITAL</b>	US\$		-	-							
<b>SUSTAINING CAPITAL</b>	0%						0	0	0	0	
<b>CLOSING COST</b>											
<b>AFTER TAX CASH FLOW</b>			0	0	17,141,507	17,141,507	8,448,270	0	0	0	0

**TABLE 18-22**  
**US Gold Corporation**  
**Preliminary Economic Assessment, El Gallo District**  
**Sagrado Corazon Cash Flow Model - \$1,350 Gold**

All currency in US \$		TOTAL	Year -2	Year -1	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
<b>LEACH</b>											
Tonnes		127,076			51,464	51,464	24,148				
Tonnes/day		116			141	141	66				
Gold Grade [gr/tonne]		0.84			0.84	0.84	0.84				
Diluted Gold Grade [gr/tonne]	5%	0.80			0.80	0.80	0.80				
<b>MILL</b>											
Tonnes		349,375			141,492	141,492	66,391				
Tonnes/day		319			388	388	182				
Gold Grade [gr/tonne]		2.72			2.23	2.23	2.23				
Diluted Silver Grade [gr/tonne]	5%	2.12			2.12	2.12	2.12				
<b>WASTE</b>											
Tonnes		1,274,651			516,215	516,215	242,221				
Tonnes/day		1,164			1,414	1,414	664				
<b>TOTAL [tonnes]</b>											
Mine Tpd					1,943	1,943	912	-	-	-	-
Stripping Ratio		2.68			2.68	2.68	2.68				
<b>LEACH</b>											
Leach Gold [troy oz]		3,260			1,320	1,320	620	-	-	-	-
Leach Gold Recovery											
Year 1 Gold Recovery	60%				792	792	372	-	-	-	-
Year 2 Gold Recovery	0.0%				-	-	-	-	-	-	-
Year 3 Gold Recovery	0.0%				-	-	-	-	-	-	-
Year 4 Gold Recovery	0.0%				-	-	-	-	-	-	-
Year 5 Gold Recovery	0.0%				-	-	-	-	-	-	-
Total Leach Gold Recovery	60%	1,956			792	792	372	-	-	-	-
Leach Gold Production [troy oz]		1,956			792	792	372	-	-	-	-
<b>REVENUE</b>											
Gold US\$ @ \$1350/troy oz	\$1,350	2,548,154			1,026,911	1,026,911	494,332	-	-	-	-
<b>MILL</b>											
Mill Gold [troy oz]		23,796			9,637	9,637	4,522	-	-	-	-
Mill Gold Recovery [troy oz]	90%	21,417			8,673	8,673	4,070	-	-	-	-
<b>REVENUE</b>											
Gold US\$ @\$1,350/troy oz	\$1,350.00	27,897,852			11,242,892	11,242,892	5,412,068	-	-	-	-
<b>TOTAL PRODUCTION</b>											
Gold [troy oz]		23,373			9,466	9,466	4,442	-	-	-	-
<b>REVENUE</b>											
Gold @ \$1,350/troy oz	\$1,350.00	30,446,006			12,269,803	12,269,803	5,906,400	-	-	-	-
<b>TOTAL GROSS REVENUE</b>											
		30,446,006			12,269,803	12,269,803	5,906,400				
<b>OPERATING COST</b>											
Mining Cost @ \$2/tonne (ore & waste)	\$2.00	3,502,204			1,418,342	1,418,342	665,520	-	-	-	-
Haul Cost @ \$1.57/tonne	\$1.57	748,028			302,941	302,941	142,146				
Milling Cost @ \$25/tonne	\$25.00	8,734,375			3,537,300	3,537,300	1,659,775	-	-	-	-
Leach Cost @ \$11/tonne	\$11.00	1,397,836			566,104	566,104	265,628	-	-	-	-
<b>TOTAL OPERATING COST US\$</b>											
		14,382,443			5,824,687	5,824,687	2,733,069	-	-	-	-
Operating Cost S/tonne Ore		30.19			30.19	30.19	30.19				
<b>INCOME BEFORE TAXES</b>											
	tax rate	0%			6,445,116	6,445,116	3,173,330	0	0	0	0

**TABLE 18-23**  
**US Gold Corporation**  
**Preliminary Economic Assessment, El Gallo District**  
**Samaniego Cash Flow Model - \$1,350 Gold**

All currency in US \$		TOTAL	Year -2	Year -1	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
<b>LEACH</b>											
Tonnes		394,226					29,608	91,066	136,655	136,897	
Tonnes/day		270					81	249	374	375	
Gold Grade [gr/tonne]							0.85	0.85	0.85	0.85	
Diluted Gold Grade [gr/tonne]	5%						0.81	0.81	0.81	0.81	
<b>MILL</b>											
Tonnes		1,891,825					309,770	527,040	527,040	527,975	
Tonnes/day							849	1,444	1,444	1,447	
Gold Grade [gr/tonne]							4.49	3.72	2.85	2.85	
Diluted Silver Grade [gr/tonne]	5%						4.27	3.53	2.71	2.71	
<b>WASTE</b>											
Tonnes		34,236,987					9,722,381	11,748,091	6,377,600	6,388,915	
Tonnes/day							26,637	32,187	17,473	17,504	
<b>TOTAL [tonnes]</b>		<b>36,523,038</b>					<b>10,061,759</b>	<b>12,366,197</b>	<b>7,041,295</b>	<b>7,053,787</b>	
Mine Tpd					-		27,566	33,880	19,291	19,325	-
Stripping Ratio		14.98					28.65	20.0	9.6	9.6	
<b>LEACH</b>											
Leach Gold [troy oz]		10,235			-	-	769	2,364	3,548	3,554	-
Leach Gold Recovery											
Year 1 Gold Recovery	60%				-	-	461	1,419	2,129	2,132	-
Year 2 Gold Recovery	0.0%				-	-	-	-	-	-	-
Year 3 Gold Recovery	0.0%				-	-	-	-	-	-	-
Year 4 Gold Recovery	0.0%				-	-	-	-	-	-	-
Year 5 Gold Recovery	0.0%				-	-	-	-	-	-	-
Total Leach Gold Recovery	60%	6,141			-	-	461	1,419	2,129	2,132	-
<b>Leach Gold Production [troy oz]</b>		<b>6,141</b>			-	-	<b>461</b>	<b>1,419</b>	<b>2,129</b>	<b>2,132</b>	-
<b>REVENUE</b>											
Gold US\$ @ \$1350/troy oz	\$1,350	8,166,239			-	-	613,318	1,886,397	2,830,756	2,835,768	-
<b>MILL</b>											
Mill Gold [troy oz]		194,201			-	-	42,482	59,883	45,878	45,959	-
Mill Gold Recovery [troy oz]	90%	174,781			-	-	38,233	53,894	41,290	41,363	-
<b>REVENUE</b>											
Gold US\$ @\$1,350/troy oz	\$1,350.00	232,427,065			-	-	50,843,434	71,669,718	54,908,251	55,005,662	-
<b>TOTAL PRODUCTION</b>											
Gold [troy oz]		180,922			-	-	38,695	55,313	43,419	43,496	-
<b>REVENUE</b>											
Gold @ \$1,350/troy oz	\$1,350.00	240,593,304			-	-	51,456,752	73,556,115	57,739,007	57,841,430	-
<b>TOTAL GROSS REVENUE</b>		<b>240,593,304</b>			-	-	<b>51,456,752</b>	<b>73,556,115</b>	<b>57,739,007</b>	<b>57,841,430</b>	-
<b>OPERATING COST</b>											
Mining Cost @ \$2/tonne (ore & waste)	\$2.00	73,046,076			-	-	20,123,518	24,732,394	14,082,590	14,107,574	-
Haul Cost @ \$1.57/tonne	\$1.57	3,589,100			-	-	532,823	970,426	1,042,001	1,043,849	-
Milling Cost @ \$25/tonne	\$25.00	47,295,625			-	-	7,744,250	13,176,000	13,176,000	13,199,375	-
Leach Cost @ \$11/tonne	\$11.00	4,336,486			-	-	325,688	1,001,726	1,503,205	1,505,867	-
<b>TOTAL OPERATING COST US\$</b>		<b>128,267,287</b>			-	-	<b>28,726,279</b>	<b>39,880,546</b>	<b>29,803,796</b>	<b>29,856,665</b>	-
Operating Cost \$/tonne Ore		56.11					84.64	64.52	44.91	44.91	
<b>INCOME BEFORE TAXES</b>	tax rate	0%			0	0	22,730,473	33,675,568	27,935,211	27,984,765	0

**TABLE 18-24**  
**US Gold Corporation**  
**Preliminary Economic Assessment, El Gallo District**  
**Magistral Tailings Cash Flow Model - \$1,350 Gold**

All currency in US \$		TOTAL	Year -2	Year -1	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7
<b>LEACH</b>											
Tonnes											
Tonnes/day											
Gold Grade [gr/tonne]											
Diluted Gold Grade [gr/tonne]	5%										
<b>MILL</b>											
Tonnes		128,000			64,000	64,000					
Tonnes/day		175			175	175					
Gold Grade [gr/tonne]		1.87			1.87	1.87					
Diluted Gold Grade [gr/tonne]	5%	1.78			1.78	1.78					
<b>WASTE</b>											
Tonnes											
Tonnes/day											
<b>TOTAL [tonnes]</b>		<b>128,000</b>			<b>64,000</b>	<b>64,000</b>					
Mine Tpd					175	175	-	-	-	-	-
Stripping Ratio		<b>0.00</b>			0.0	0.0					
<b>LEACH</b>											
Leach Gold [troy oz]					-	-	-	-	-	-	-
Leach Gold Recovery											
Year 1 Gold Recovery	60%				-	-	-	-	-	-	-
Year 2 Gold Recovery	0.0%				-	-	-	-	-	-	-
Year 3 Gold Recovery	0.0%				-	-	-	-	-	-	-
Year 4 Gold Recovery	0.0%				-	-	-	-	-	-	-
Year 5 Gold Recovery	0.0%				-	-	-	-	-	-	-
Total Leach Gold Recovery	60%				-	-	-	-	-	-	-
<b>Leach Gold Production [troy oz]</b>					<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>REVENUE</b>											
Gold US\$ @ \$1350/troy oz	<b>\$1,350</b>				-	-	-	-	-	-	-
<b>MILL</b>											
Mill Gold [troy oz]		7,311			3,655	3,655	-	-	-	-	-
<b>Mill Gold Recovery [troy oz]</b>	60%	<b>4,386</b>			<b>2,193</b>	<b>2,193</b>	-	-	-	-	-
<b>REVENUE</b>											
Gold US\$ @\$1,350/troy oz	<b>\$1,350.00</b>	<b>5,685,931</b>			2,842,966	2,842,966	-	-	-	-	-
<b>TOTAL PRODUCTION</b>											
Gold [troy oz]		<b>4,386</b>			2,193	2,193	-	-	-	-	-
<b>REVENUE</b>											
Gold @ \$1,350/troy oz	<b>\$1,350.00</b>	<b>5,685,931</b>			2,842,966	2,842,966	-	-	-	-	-
<b>TOTAL GROSS REVENUE</b>											
		<b>5,685,931</b>			<b>2,842,966</b>	<b>2,842,966</b>	-	-	-	-	-
<b>OPERATING COST</b>											
Haul Cost @ \$1.57/tonne (ore & waste)	\$1.57	200,960			100,480	100,480	-	-	-	-	-
Milling Cost @ \$25/tonne	\$25.00	3,200,000			1,600,000	1,600,000	-	-	-	-	-
<b>TOTAL OPERATING COST US\$</b>		<b>3,400,960</b>			<b>1,700,480</b>	<b>1,700,480</b>	-	-	-	-	-
<b>Operating Cost/tonne Ore</b>		<b>26.57</b>			<b>26.57</b>	<b>26.57</b>					
<b>INCOME BEFORE TAXES</b>	tax rate	<b>0%</b>			<b>1,142,486</b>	<b>1,142,486</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>CAPITAL COST</b>											
<b>MINE</b>											
Haul Roads / Site Work	US\$										
Power Line Upgrade	US\$										
Buildings	US\$										
Reagents	US\$										
Owners Costs/EPCM	US\$										
Sub Total Mine	US\$		-	-							
<b>MINE CAPITAL</b>											
Mill, Processing and Tailings (6,000 tpd)	US\$										
Heap Leach (3,250 tpd)	US\$										
Contingencies	20%										
<b>TOTAL PREPRODUCTION CAPITAL</b>	US\$		-	-							
<b>SUSTAINING CAPITAL</b>	10%						0	0	0	0	
<b>CLOSING COST</b>											
<b>AFTER TAX CASH FLOW</b>				2,284,971	0	0	1,142,486	1,142,486	0	0	0
<b>COST PER GOLD oz</b>	Avg.	<b>775.33</b>					775.33	775.33			0

## 19.0 INTERPRETATION AND CONCLUSIONS

El Gallo: Is a low- to medium-sulfidation, epithermal silver deposit. Silver mineralization is localized in siliceous breccia and stockwork zones that occur primarily in the andesitic volcanic and porphyritic intrusive rocks and to a lesser extent in quartz feldspar porphyry intrusive rocks. Mineralized zones are commonly stacked, sub-horizontal to shallowly-dipping tabular bodies. These zones are controlled by sill like porphyry intrusive contacts or low-angle structures. Other zones are more irregular in shape and are hosted in bodies of pre-mineral breccia, often spatially associated with porphyry intrusives.

As of October 2010, the total El Gallo measured and indicated resource consists of 12.6 million tonnes averaging 77 gpt Ag and 0.06 gpt Au for a total of 31,243,244 contained ounces of silver and 24,881 ounces of gold.

In addition the inferred resources include 10.0 million tonnes averaging 52 gpt Ag and 0.06 gpt Au for a total of 16,734,220 contained ounces of silver and 10,298 ounces of gold.

The deposit is considered open to the North, East, South, and West. Soil sampling and geophysical exploration has identified additional drilling targets at El Gallo that are not currently contained within the resource estimate.

Magistral: Is a low sulfidation, epithermal gold and silver mineralization. The mineralization occurs along two distinct structural trends. A northwest trend hosts the San Rafael and Samaniego Hill deposits and it is the most important in terms of contained ounces of gold. The second structural trend is northeast and includes the Sagrado Corazon and Lupita ore deposits. Along these structural trends the mineralization is located within numerous sub-structures that may be parallel, oblique or even perpendicular to the principal trends. These structural trends consist of one or more individual structural zones of sheared and broken volcanic rock resulting from faulting of generally limited displacement.

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

The total Magistral measured and indicated resource, as of June 2009, consists of 10.4 million tonnes averaging 1.50 gpt Au for a total of 502,466 contained ounces of gold.

In addition, the inferred resources include 0.2 million tonnes averaging 1.14 gpt Au for a total of 8,167 contained ounces of gold. The resource for Magistral was not updated because it was believed the total ounces would not have materially increased or decreased from the June 2009 estimate.

Palmarito: Is a low-sulfidation epithermal silver-gold deposit. Mineralization at Palmarito occurs at the brecciated contact of a Late Tertiary rhyolite dome which was emplaced into Early Tertiary volcanic and volcanoclastics of the dominantly andesitic composition. The volcanic consist of pyroclastic flows, tuffs and agglomerates. Intruding the volcanic sequence are granodiorite batholiths.

The brecciated contact forms a resistant face to the north and east facing escarpments of the rhyolite some which stands as a prominent hill.

The breccias consists of clast supported, coarse angular fragments of porphyritic rhyolite and fine to medium grained andesite. Clasts are cemented by a fine grained siliceous matrix. The unit is pervasively silicified. On either side of the breccias is a zone of strongly fractured rhyolite and andesite which has been altered and mineralized to form a stockwork.

Silver mineralization within the breccias displays good continuity over a total strike of 800 m as the zone wraps around the face of the dome. Down dip of the old workings there is evidence of multiple breccia units occurring within a wide stockwork zone.

The total Palmarito measured and indicated resource, as of October 2010, consists of 3.7 million tonnes averaging 71 gpt Ag and 0.14 gpt Au for a total of 8,520,348 contained ounces of silver and 16,381 ounces of gold.

In addition the inferred resources include 1.6 million tonnes averaging 58 gpt Ag and 0.1 gpt Au for a total of 2,982,561 contained ounces of silver and 5,299 ounces of gold.

PAH has reviewed the methods and procedures utilized by US Gold to gather geological and assaying information and found them reasonable and meeting generally accepted industry standards. PAH believes that US Gold and its subsidiaries and predecessors have conducted exploration, development, and operational sampling and analysis programs using standard practices and producing generally reasonable results. PAH believes that the resulting data can reliably be used in the subsequent estimation of resources. PAH believes that the current drill hole databases, geologic models, grade models are sufficient for generation and reporting of resources.

## 20.0 RECOMMENDATIONS

El Gallo has accumulated an extensive amount of data through past years of exploration providing the background for the resource estimates and analysis that are the basis for this PEA report. The recommendations for further development of the project are primarily concerned with confirming the existing data and the acquisition of additional data to expand resources and eventually support future studies at the Pre-Feasibility and Feasibility level.

PAH recommends the following:

- A geo-technical drill program should be carried out on El Gallo and Palmarito in order to further characterize the rock mass. This will allow refinements to be made to the pit slopes. Rock quality indices should be used to determine pit slopes in future mine designs at El Gallo and Palmarito.
- As drilling data becomes available, the block model should be refined and resource estimates updated. Additional in-fill drilling should be undertaken in order to transfer inferred resources into measured and indicated categories.
- Additional exploration drilling should be undertaken around the known resources and also on the new veins that currently do not have established resources. Exploration success will extend the mine life.
- Condemnation drilling should be conducted to prevent the loss of any mineral resource by covering it over with waste rock or mine facility.
- Further metallurgical testing is needed and should confirm the heap leach recoveries for El Gallo ores. Also, additional bottle roll testing should be undertaken on the Palmarito in situ ore. PAH notes that on average Palmarito has historically demonstrated lower silver recoveries. However, early testing suggests that the ore closer to surface may recover better than the average. The near surface mineralization at Palmarito is the primary focus of US Gold's mining activities for this area of the project. Further testing will help confirm these initial test results.
- Based on favorable financial results from this PEA, detailed design engineering should begin to support permitting and to verify mining and economic parameters and assumptions used to date. Future studies should be conducted at the prefeasibility level.

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## **22.0 OTHER RELEVANT DATA AND INFORMATION**

There is no other relevant data or information for the El Gallo project.

## **23.0 ILLUSTRATIONS**

The illustrations supporting the various sections of the report are located within the relevant sections immediately following the references to the illustrations, for ease of reference. An index of tables and illustrations is provided at the beginning of the report.

## 24.0 CERTIFICATE OF QUALIFIED PERSON

**Richard Addison**

165 S. Union Blvd., Suite 950

Lakewood, CO 80228

Phone (303) 986-6950

Fax (303) 987-8907

[dick.addison@pincock.com](mailto:dick.addison@pincock.com)

I, Richard Addison, P.E., C. Eng., Eur. Ing., for Pincock, Allen & Holt, Inc. of 165 S. Union Boulevard, Suite 950, Lakewood, Colorado, 80228 USA. This certificate applies to the *Preliminary Economic Assessment for the El Gallo District, Sinaloa State, Mexico*, prepared for US Gold, dated February 11, 2011 (the "Technical Report"). I do hereby certify that:

1. I graduated from the Camborne School of Mines in England as an Honors Associate in 1964 and subsequently obtained a Master of Science degree in metallurgical engineering from the Colorado School of Mines in 1968. I have practiced my profession continuously since 1964.
2. I am a Registered Professional Engineer (#3198) in the state of Nevada, USA, a Chartered Engineer in the U.K., and a registered European Engineer in the EU. I am a member of the American Institute of Mining, Metallurgical, and Petroleum Engineers and a member of The Institute of Materials, Minerals and Mining in the U.K.
3. I have worked as a metallurgical engineer for a total of 46 years since my graduation from university and have been involved in the evaluation and operation of mineral properties for gold, silver, copper, lead, zinc, tin, aluminum, iron, potash, gypsum, limestone, barite, clay, sulfur, pyrite, oil shale, coal, and diamonds in the United States, Canada, Mexico, Dominican Republic, Honduras, Nicaragua, Costa Rica, Panama, Venezuela, Guyana, Peru, Ecuador, Bolivia, Argentina, Chile, Spain, Portugal, Britain, Bulgaria, Indonesia, Papua New Guinea, the Philippines, Japan, Tunisia, Ghana, Zambia, South Africa, Russia, Kyrgyzstan, Brazil, and Australia.
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 am responsible for the preparation of the paragraph summarizing ore processing in Section 1.0, Summary; Section 16 and Metallurgical Testing and Mineral Processing; and those paragraphs covering ore processing in Section 18, Additional Requirements for Developing or Producing Properties; and Section 20, Recommendations.

6. As of the date of the certificate, to the best of my knowledge, information and belief, the technical report contains all scientific and technical information that is required to disclose to make the technical report not misleading.
7. I am independent of the Issuer in accordance with Section 1.4 of NI 43-101.
8. I have read NI 43-101 and Form 43-101F1, and the Preliminary Economic Assessment, and has been prepared in compliance with that instrument and form.
9. I consent to the filing of the Preliminary Economic Assessment with any securities regulatory authority, stock exchange or other regulatory authority and any publication by them, including electronic publication in the public company files on their websites accessible by the public, of the Technical Report.

Dated in Lakewood, Colorado, this 11<sup>th</sup> day of February 2011.

*"Richard Addison, P.E."*

---

Richard Addison, P.E., C. Eng., Eur. Ing.

**Paul A. Gates**  
Pincock, Allen & Holt  
165 S. Union Blvd, Suite 950  
Lakewood, CO 80228-2226  
Phone 303-986-6950  
Fax 303-987-8907  
Email: [pgates@pinock.com](mailto:pgates@pinock.com)

I, Paul A. Gates, P.E., am a Principal Mine Engineer employed at Pincock, Allen & Holt, 165 S. Union Blvd., Suite 950, Lakewood, Colorado 80228. This certificate applies to the *Preliminary Economic Assessment for the El Gallo District, Sinaloa State, Mexico*, prepared for US Gold, dated February 11, 2011 (the "Technical Report"). I do hereby certify that:

1. I graduated with a Bachelor of Science degree in Mining Engineering from Montana College of Mineral Science and Technology in 1984. In addition, I have obtained a Master of Business Administration degree from Western New Mexico University in 1997.
2. I am a Professional Mining Engineer registered with the State of Colorado.
3. I have worked as a mining engineer for a total of twenty six years since my graduation from university.
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 am presently a Principal Mine Engineer with the international resource and mining consulting company of Pincock, Allen & Holt, Inc. and have been employed in this capacity since December 2009.
6. I am responsible for the preparation Sections 1 and 18 of the Technical Report titled *Resource Estimate for the El Gallo District, Sinaloa State, Mexico*, prepared for US Gold, dated December 23, 2010.
7. Prior to the preparation of the Technical Report, I have had no involvement with the El Gallo Project.
8. To the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

9. I am independent of US Gold in accordance with the application of Section 1.4 of National Instrument 43-101.
10. I have read National Instrument 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.
11. I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them, including electronic publications in the public company files, on their websites accessible by the public.

Dated this 11<sup>th</sup> day of February, 2011.

*"Paul A. Gates, P.E."*

---

Paul A. Gates, P.E.

**Aaron M. McMahon**  
Pincock, Allen & Holt  
San Pio X 2460 Oficinas 803-804  
Providencia, Santiago, Chile  
Phone +56 2 7639425  
Fax +56 2 3330299  
Email: [aaron.mcmahon@pinock.com](mailto:aaron.mcmahon@pinock.com)

I, Aaron McMahon, P.G., am a Senior Geologist employed at Pincock, Allen & Holt, San Pio X 2460, Oficinas 803-804, Providencia, Santiago, Chile. This certificate applies to the *Preliminary Economic Assessment for the El Gallo District, Sinaloa State, Mexico*, prepared for US Gold, dated February 11, 2011 (the "Technical Report"). I do hereby certify that:

12. I graduated with a Bachelor of Science degree in Geology from James Madison University in 1998. In addition, I have obtained a Master of Science degree in Geology from Arizona State University in 2001.
13. I am a Professional Geologist registered with the State of California.
14. I have worked as a geologist for a total of eight years since my graduation from university.
15. 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.
16. I am presently a Senior Geologist with the international resource and mining consulting company of Pincock, Allen & Holt, Inc. and have been employed in this capacity since January 2006.
17. I am responsible for all sections of the Technical Report.
18. As a qualified person I visited the El Gallo property in Mexico in December 2008 and March 2010 and reviewed the general layout and geology of the property and the data collection and processing methods applied at the site.
19. Prior to the preparation of the Technical Report, I have had no involvement with the El Gallo Project.
20. To the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

21. I am independent of US Gold in accordance with the application of Section 1.4 of National Instrument 43-101.
22. I have read National Instrument 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.
23. I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them, including electronic publications in the public company files, on their websites accessible by the public.

Dated this 11<sup>th</sup> day of February, 2011.

*"Aaron M. McMahon, P.G."*

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Aaron M. McMahon, P.G.

**APPENDIX A**

**TITLE REVIEW OF MINING CONCESSIONS**

**DÍAZ, BOUCHOT Y RAYA**  
Abogados

Durango No. 195 - 502  
Colonia Roma Norte  
Delegación Cuauhtémoc  
06700 México, Distrito Federal  
Teléfono: (52-55) 5207-2800  
Fax: (52-55) 5207-2809

May 7, 2009.

**US Gold Corporation**

99 George St. 3rd Floor  
Toronto, Ontario  
Canada M5A 2N4

**GMP Securities L.P.**

145 King Street West  
Suite 300  
Toronto, Ontario  
Canada M5X 1B8

**Dahlman Rose & Company, LLC**

142 West 57<sup>th</sup> Street  
18<sup>th</sup> Floor  
New York, New York, 10019  
United States of America

**Re: Title review of Compañía Minera Pangea, S.A. de C.V. mining concessions**

Dear Sirs:

As per your request, we are providing you with our title opinion on the concessions, that cover the mining claims mentioned herein below, and upon which Compañía Minera Pangea, S.A. de C.V. has interest and rights.

The information provided with respect to the mining concessions is based on research done for that purpose, during the first week of May, 2009, at the General Bureau of Mines ("GBM") and the Public Registry of Mining (the "Registry") within the Ministry of Economy.

**Validity and ownership in record.**

As a result of our research in the Registry we were able to obtain the following information regarding the mining concessions listed herein below:

1 *[Handwritten signature]*

**DÍAZ, BOUCHOT Y RAYA**  
Abogados

**Schedule 1**

<b>Name of the Mining Claim</b>	<b>Location</b>	<b>Title Number</b>	<b>Title Holder</b>	<b>Status</b>
Magistral	Mocorito, State of Sinaloa	214502	Compañía Minera Pangea, S.A. de C.V.	Expires on October 1, 2033
El Palmarito	Mocorito, State of Sinaloa	182598	Compañía Minera Pangea, S.A. de C.V.	Expires on August 11, 2038
Anabis	Mocorito, State of Sinaloa	209604	Compañía Minera Pangea, S.A. de C.V.	Expires on August 2, 2049
Lucy	Mocorito, State of Sinaloa	213070	Compañía Minera Pangea, S.A. de C.V.	Expires on March 1, 2051
San Gabriel	Mocorito, State of Sinaloa	214852	Compañía Minera Pangea, S.A. de C.V.	Expires on December 3, 2051
Lucy	Mocorito, State of Sinaloa	217037	Compañía Minera Pangea, S.A. de C.V.	Expires on June 13, 2052
Alex	Mocorito, State of Sinaloa	217429	Compañía Minera Pangea, S.A. de C.V.	Expires on July 8, 2052
La Palma	Mocorito, State of Sinaloa	218401	Compañía Minera Pangea, S.A. de C.V.	Expires on November 4, 2052
El Valle Fraccion 1	Mocorito, State of Sinaloa	220297	Compañía Minera Pangea, S.A. de C.V.	Expires on July 2, 2053
El Valle Fraccion 2	Mocorito, State of Sinaloa	220298	Compañía Minera Pangea, S.A. de C.V.	Expires on July 2, 2053
Cariño Fraccion B	Mocorito, State of Sinaloa	220399	Compañía Minera Pangea, S.A. de C.V.	Expires on July 23, 2053
Pangea	Mocorito, State of Sinaloa	221204	Compañía Minera Pangea, S.A. de C.V.	Expires on December 10, 2053
Rocio Fraccion A	Mocorito, State of Sinaloa	223492	Compañía Minera Pangea, S.A. de C.V.	Expires on January 10, 2055

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Rocio Fraccion B	Mocorito, State of Sinaloa	223493	Compañía Minera Pangea, S.A. de C.V.	Expires on January 10, 2055
Rocio 2 Fraccion A	Mocorito, State of Sinaloa	223494	Compañía Minera Pangea, S.A. de C.V.	Expires on January 10, 2055
Rocio 2 Fraccion B	Mocorito, State of Sinaloa	223495	Compañía Minera Pangea, S.A. de C.V.	Expires on January 10, 2055
Shakira Fraccion A	Sinaloa, State of Sinaloa	223496	Compañía Minera Pangea, S.A. de C.V.	Expires on January 10, 2055
Shakira Fraccion B	Sinaloa, State of Sinaloa	223497	Compañía Minera Pangea, S.A. de C.V.	Expires on January 10, 2055
La Esperanza	Sinaloa, State of Sinaloa	211897	Compañía Minera Pangea, S.A. de C.V.	Expires on July 27, 2050
Shakira III	Sinaloa, State of Sinaloa	229044	Compañía Minera Pangea, S.A. de C.V.	Expires on February 27, 2057
Shakira IV	Mocorito, State of Sinaloa	229708	Compañía Minera Pangea, S.A. de C.V.	Expires on June 5, 2057
Shakira II	Sinaloa, State of Sinaloa	229715	Compañía Minera Pangea, S.A. de C.V.	Expires on June 7, 2057
Shakira II Fracc. 2	Sinaloa, State of Sinaloa	229716	Compañía Minera Pangea, S.A. de C.V.	Expires on June 7, 2057
Shakira II Fracc. 3	Sinaloa, State of Sinaloa	229717	Compañía Minera Pangea, S.A. de C.V.	Expires on June 7, 2057
Shakira II Fracc. 4	Sinaloa, State of Sinaloa	229718	Compañía Minera Pangea, S.A. de C.V.	Expires on June 7, 2057
Rocio 3	Mocorito, State of Sinaloa	230899	Compañía Minera Pangea, S.A. de C.V.	Expires on October 25, 2057
Rebeca	Ahome and Sinaloa, State of Sinaloa	222767	Compañía Minera Pangea, S.A. de C.V.	Expires on August 26, 2054

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Dayyan	Ruiz, State of Nayarit	225969	Compañía Minera Pangea, S.A. de C.V.	Expires on November 14, 2055
La Reyna del Tule Fracc. I	Acaponeta, State of Nayarit	219497	Compañía Minera Pangea, S.A. de C.V.	Expires on September 18, 2047
Nevada Fraccion I	Rosamorada, State of Nayarit	227934	Compañía Minera Pangea, S.A. de C.V.	Expires on September 14, 2056
Nevada Fraccion II	Rosamorada, State of Nayarit	227935	Compañía Minera Pangea, S.A. de C.V.	Expires on September 14, 2056
Nevada Fraccion III	Rosamorada, State of Nayarit	227936	Compañía Minera Pangea, S.A. de C.V.	Expires on September 14, 2056
Nevada Fraccion IV	Rosamorada, State of Nayarit	227937	Compañía Minera Pangea, S.A. de C.V.	Expires on September 14, 2056
Nevada Fraccion V	Rosamorada, State of Nayarit	227938	Compañía Minera Pangea, S.A. de C.V.	Expires on September 14, 2056
Nevada Fraccion VI	Rosamorada, State of Nayarit	227939	Compañía Minera Pangea, S.A. de C.V.	Expires on September 14, 2056
Nevada 2 Fraccion I	Ruiz and Rosamorada, State of Nayarit	229032	Compañía Minera Pangea, S.A. de C.V.	Expires on February 27, 2057
Nevada 2 Fraccion II	Ruiz and Rosamorada, State of Nayarit	229033	Compañía Minera Pangea, S.A. de C.V.	Expires on February 27, 2057
El Tule Fracc. I	Tecuala and Acaponeta, State of Nayarit	230079	Compañía Minera Pangea, S.A. de C.V.	Expires on July 17, 2057
El Tule Fracc. II	Tecuala and Acaponeta, State of Nayarit	230080	Compañía Minera Pangea, S.A. de C.V.	Expires on July 17, 2057
El Tule Fracc. III	Tecuala and Acaponeta, State of Nayarit	230081	Compañía Minera Pangea, S.A. de C.V.	Expires on July 17, 2057

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El Tule Fracc. IV	Tecuala and Acaponeta, State of Nayarit	230082	Compañía Minera Pangea, S.A. de C.V.	Expires on July 17, 2057
El Tule Fracc. V	Tecuala and Acaponeta, State of Nayarit	230083	Compañía Minera Pangea, S.A. de C.V.	Expires on July 17, 2057
El Tule Fracc. VI	Tecuala and Acaponeta, State of Nayarit	230084	Compañía Minera Pangea, S.A. de C.V.	Expires on July 17, 2057
El Tule Fracc. VII	Tecuala and Acaponeta, State of Nayarit	230085	Compañía Minera Pangea, S.A. de C.V.	Expires on July 17, 2057
El Tule Fracc. VIII	Tecuala and Acaponeta, State of Nayarit	230086	Compañía Minera Pangea, S.A. de C.V.	Expires on July 17, 2057
Ampl. Rebeca	Ahome and Sinaloa, State of Sinaloa	230997	Compañía Minera Pangea, S.A. de C.V.	Expires on November 21, 2057
Carina	Santiago Papasquiario, State of Durango	224012	Compañía Minera Pangea, S.A. de C.V.	Expires on March 22, 2055
Carina Fraccion B	Santiago Papasquiario, State of Durango	224013	Compañía Minera Pangea, S.A. de C.V.	Expires on March 22, 2055

## DÍAZ, BOUCHOT Y RAYA

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The following is a list of the mining concessions over which Compañía Minera Pangea, S.A. de C.V. has a registered interest derived from contracts and/or agreements duly executed with the title holders of each concession:

### Schedule 2

Name of the Mining Claim	Location	Title Number	Title Holder	Status
Halomeck	Mocorito, State of Sinaloa	203318	Huascar Caupolican Peña Inzunza	Expires on June 27, 2046
Old Parker	Mocorito, State of Sinaloa	202914	Enrique Sillas Espinoza	Expires on April 1, 2046
La Revancha	Mocorito, State of Sinaloa	199003	Huascar Caupolican Peña Inzunza	Expires on February 10, 2044
El Rial	Mocorito, State of Sinaloa	212197	Consortio Minero Latinoamericano, S.A. de C.V.	Expires on September 21, 2050
El Real del Oro	Mocorito, State of Sinaloa	224617	Eduardo Coronel Beltran	Expires on May 23, 2055
El Real del Oro II	Sinaloa, State of Sinaloa	224649	Manuel Coronel Beltran	Expires on May 24, 2055

In rendering the opinion expressed below, we have assumed that all mining concessions titles, as issued by the Registry through its GBM, are authentic and complete, and that all factual statements expressed or implied in such documents are correct.

### **Mining Duty Payments.**

Regarding the payment of the mining duties obligation, all the concessions referenced in this opinion are in good standing.

## DIAZ, BOUCHOT Y RAYA

Abogados

### **Opinion.**

Based on our research done at the GBM and the Registry we hereby confirm to you the following:

- i) **Compañía Minera Pangea, S.A. de C.V.** is the title holder of the mining concessions described on the Schedule 1; and has interests and rights on the mining concessions described on the Schedule 2;
- ii) All the mining concessions referenced in this opinion are free and clear of any lien or encumbrance;
- iii) All the mining concessions referenced in this opinion are in good standing; and
- iv) None of the mining concessions referenced in this opinion are located in protected natural areas.

This opinion is given in relation to the laws of Mexico in force at this date and solely for the benefit of the addressees, and no other entity or personal shall be entitled to rely on its contents without the express written consent of the addressees and/or Díaz, Bouchot y Raya.

Should you have any questions regarding this matter, please do not hesitate to call on us.

Very truly yours,  
Díaz, Bouchot y Raya



Per: **Patricia Vivar**