MINE DEVELOPMENT ASSOCIATES

MINE ENGINEERING SERVICES

Updated Technical Report and Preliminary Economic Assessment, Copper King Project

Laramie County, Wyoming, USA

Prepared for

U.S. Gold Corp.

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1.0 SUMMARY

1.1 Introduction

Mine Development Associates ("MDA") has prepared this technical report on the Copper King gold-copper project at the request of U.S. Gold Corp. The purpose of this report is to provide a technical summary containing an updated NI-43-101-compliant Mineral Resource estimate for the project as well as a Preliminary Economic Assessment ("PEA") for the project based on this resource. This report was written in accordance with disclosure and reporting requirements set forth in the Canadian Securities Administrators' National Instrument 43-101 ("NI 43-101"), Companion Policy 43-101CP, and Form 43-101F1.

This report uses updated commodity prices to update a report on the property by MDA dated August 24, 2012 (Tietz and Prenn, 2012). The mineral resources reported herein have been re-tabulated from the 2012 report due to a change in the gold equivalence factor, however, the underlying technical data and analysis, and the resource block-model estimate has not been revised. There has been no further drilling or any significant work on the property since the 2012 report, and the mineral resource estimate reported herein is current.

The effective date of this report is December 5, 2017. The analysis for this PEA was completed on November 8, 2017 and is current as of that date.

1.2 Location and Ownership

All information on legal, land, and environmental issues in this report is based on information provided to MDA by U.S. Gold; MDA is not an expert in these areas and presents no opinion on this information.

The Copper King project is located in southeastern Wyoming, approximately 32km west of the city of Cheyenne, on the southeastern margin of the Laramie Range. The property covers about five square kilometers that include the S½ Section 25, NE¼ Section 35, and all of Section 36, T14N, R70W, Sixth Principal Meridian. Access to within 1.5km of the property is provided by paved and maintained gravel roads.

U.S. Gold Corp. ("U.S. Gold") acquired 50% interest in the Copper King project in July 2014 through an agreement with Wyoming Gold Mining Company Inc., a subsidiary of Energy Fuels Inc., and purchased the remaining 50% in 2016. U.S. Gold now owns 100% of the property. Two state leases are controlled by U.S. Gold through two State of Wyoming Metallic and Non-metallic Rocks and Minerals Mining Leases that extend through February 1, 2023 and February 1, 2024. The current total rental payments are $2,240 annually with a production royalty ranging from 5 to 10% once production has commenced, although the Wyoming State Board of Land Commissioners has the authority to reduce that percentage. Both State leases can be renewed for successive 10-year terms. An easement agreement providing access has been negotiated with Ferguson Ranch Inc. on the S½ Section 25, T14N, R70W, and also the W½ Section 30, T14N, R69W. Prior to mining development, a surface impact payment would have to be negotiated with the lessee, which annual payment would then be split between the State of Wyoming and the surface lessee based on a sliding scale.

It is proposed that the Copper King gold-copper deposit be mined by open-pit methods with metal recovery by flotation. No known environmental liabilities exist on or near this property.

1.3 Geology and Mineralization

The Silver Crown mining district, within which the Copper King project is located, is underlain by Proterozoic rocks that make up the southern end of the Precambrian core of the Laramie Range. Metavolcanic and metasedimentary rocks metamorphosed to amphibolite-grade are intruded by the approximately 1.4 billion-year-old Sherman Granite and related felsic rocks. Within the project area, foliated granodiorite is intruded by aplitic quartz monzonite dikes, thin mafic dikes, and younger pegmatite dikes. Shear zones with cataclastic foliation striking N60°E to N60°W are found in the southern part of the Silver Crown district, including at Copper King. Copper and gold mineralization at Copper King occurs primarily in unfoliated to mylonitic granodiorite. The granodiorite typically shows potassium enrichment, particularly near contacts with quartz monzonite. At Copper King, mineralization is associated with a N60°W-trending shear zone.

Copper King mineralization has been interpreted as a shear-zone controlled, disseminated and stockwork gold-copper deposit in Proterozoic intrusive rocks. However, some authors have categorized it as a Proterozoic porphyry gold-copper deposit. Most of the mineralization is in granodiorite, with lesser amounts in quartz monzonite and thin mafic dikes. Hydrothermal alteration is overprinted on retrograde greenschist alteration and includes a central zone of silicification, followed outward by a narrow potassic zone, surrounded by propylitic alteration. Higher-grade mineralization occurs within a central core of thin quartz veining and stockwork mineralization that is surrounded by a zone of lower-grade disseminated mineralization. Disseminated sulfides and native copper with stockwork malachite and chrysocolla are present at the surface, and chalcopyrite, pyrite, minor bornite, primary chalcocite, pyrrhotite, and native copper are present at depth. Gold occurs as free gold. About 80% of the resource is sulfide material, while the remaining 20% is split equally between oxide and mixed material.

1.4 Exploration and Mining History

Limited exploration and mining were conducted on the Copper King property in the late 1880s and early 1900s. Approximately 272 tonnes of material were reported to have been produced from a now inaccessible 48m-deep shaft with two levels of cross-cuts. A few small adits and prospect pits with no significant production are scattered throughout the property.

Since 1938, at least nine historical (pre-U.S. Gold) drilling campaigns by at least seven companies plus the U. S. Bureau of Mines ("USBM") have been conducted at Copper King. The most recent drill activity was in 2007 and 2008 when Saratoga Gold ("Saratoga") completed 35 diamond core holes totaling 7,762m. Prior to Saratoga, 96 known drill holes for an approximate total of 11,898m were completed on the Copper King property. There are only limited, third-party references to four of these historical holes, and therefore these four holes are not included in the database. Also, one of the core holes was re-entered and then deepened, and so is considered just one hole, with one surface collar location, within the current database. Six other pre-Saratoga holes are outside the resource area and are not included within the current database.

MDA has very little information on sampling or analytical procedures for most of the pre-Saratoga drilling campaigns. With the exception of limited check assaying, there is no evidence of quality assurance/quality control measures having been taken by all but the most recent previous operators. However, drilling by five different operators since 1970 has generally confirmed the mineralization identified by the drilling of two companies and the USBM prior to 1970, which lends confidence to the drilling results.

The focus of Saratoga's work was to confirm and potentially expand the mineralized body outlined in the previous drill campaigns, increase the geologic and geochemical database leading to the creation of the current geologic model and resource estimate, and to provide material for further metallurgical testing. No drilling has been completed since 2008.

Other work conducted at Copper King by previous companies has included ground and aeromagnetic surveys as well as induced polarization ("IP") surveys along with geochemical sampling, geologic mapping, and a number of metallurgical studies.

1.5 Drilling and Sampling

As of the effective date of this report, 120 drill holes totaling 18,105m occur within the Copper King deposit area and are in the current database. The drill total includes 62 core holes totaling 11,276m (62% of total drill footage), 30 conventional rotary holes totaling 3,383m, 23 reverse circulation ("RC") holes totaling 2,219m, and 5 holes started with RC but finished with core that total 1,227m. Both vertical and angle holes have been drilled, and the maximum vertical depth is 305m. All of the drill holes were continually sampled down-hole with most of the historical sampling on predominantly 1.5m or 3m intervals, while the Saratoga sampling was predominantly at 1.5m intervals.

Limited data exist concerning drill procedures or collar surveys for the drilling prior to that of Saratoga. Except for one pre-Saratoga core hole, MDA has no evidence that any of the other holes drilled on the Copper King property by previous operators were down-hole surveyed. All Saratoga drill-hole collars were professionally surveyed, and all Saratoga holes have down-hole survey data.

The Copper King drill-hole assay database contains 8,357 gold assays and 8,225 copper assays. Sixty percent of the analytical data within the current database are from the Saratoga drill program. MDA has validated the majority of historical drill data using the previous operators' internal drill-hole location and assay records, not from first-party sources, which would include original laboratory assay certificates. The Saratoga data have been validated against original source material, including collar survey files, original driller-recorded down-hole survey data, and digital assay data direct from the laboratories. Saratoga's quality assurance/quality control measures included the use of standards and blanks along with pulp duplicate and pulp-re-assay testing, the latter using a second umpire laboratory.

1.6 Metallurgical Testing

At least 10 different organizations or individuals conducted metallurgical studies on the gold-copper mineralization at Copper King at the request of prior operators between 1973 and 2010. The test work performed by the various organizations consisted of bottle-roll and shaker-tube cyanidation, flotation, gravity concentration, column leaching, bacterial oxidation of concentrates, and cyanidation of flotation tailings. This testing has generally been on higher-grade drill core samples from within the center of the deposit and therefore is not representative of the bulk of material expected from the current resource. Although testing indicates that gold in both oxide and sulfide ore can be extracted by cyanidation when the ore is ground, native copper, oxidized copper minerals, and the secondary copper sulfides all cause very high cyanide consumption in direct cyanidation. It was concluded that the process with the highest potential to yield good extractions of gold and copper would likely be flotation, followed by cyanidation of the flotation tailings.

SGS Lakefield Research Ltd. ("SGS") conducted metallurgical investigations for Saratoga in 2008 and 2009 (SGS Lakefield Research, 2009). SGS's work focused on testing the amenability of Copper King samples for recovery of gold and copper by flotation and the development of a possible flotation process flowsheet. Four rock-type composite samples were prepared: one oxide, one mixed oxide-sulfide, and two sulfide composites, which represent approximately 10%, 10%, and 80%, respectively, of the stated Copper King resource. SGS's program included a comprehensive chemical and mineralogical analysis of each composite, grindability testing, and environmental test work. A master composite composed of the 33% mixed oxide-sulfide and 67% sulfide material was created on which the bulk of the process development work was done. Though this percentage composition is not representative of the total deposit, it is likely to be an approximate representation of the non-oxide material mined during the early phases of the project. Limited testing of the oxide composite using a leach-precipitation-flotation method was conducted to evaluate the recovery of copper.

SGS's results indicate that gold and copper can be recovered from the sulfide and mixed oxide-sulfide portions of the Copper King deposit (as represented by the samples supplied to SGS) using standard flotation processes and that a marketable copper concentrate, containing significant gold, can be produced. Optimized flotation conditions using the master composite produced a concentrate with a grade of 26% Cu and 89g Au/t at a recovery of 77% Cu and 68% Au. SGS also concluded that the individual mixed oxide-sulfide composite yielded lower copper recoveries into the final concentrate of only 60-75% due to the presence of oxide minerals. The other two sulfide composites produced Cu recoveries between 73% and 83% at concentrate grades of 25-27% Cu. Additional work on the mixed oxide-sulfide rock type is warranted.

A single leach-precipitation-flotation test was performed on the oxide composite. The results indicated copper recovery at 79% and gold recovery at 62% with a rougher concentrate grade of 5.9%. SGS has concluded that continued work to optimize this process is warranted.

The flotation process flowsheet includes a fine grind and a standard rougher and multiple cleaner flotation cycles. Recovery of gold and copper to a marketable concentrate for the Copper King deposit may depend heavily upon ore grade and upon grind. These relationships will need to be better defined in future work.

A basic environmental test program was completed to identify potential liabilities that may become associated with the production and storage of the tailings. Acid-base accounting tests indicate that the rock will have the potential to neutralize more acid than it may produce, and the negligible sulfide content suggests that acid generation will be highly unlikely. Net acid generation testing confirms that the tailings are unlikely to be acid generating. Elemental analysis testing suggests that none of the US copper toxicity characteristic metal contaminants are found in significant concentration to be of environmental concern.

Iron could be of concern with respect to fresh water aquatic life, depending on oxidation state and solution pH.

Based on a reassessment of earlier mineralogical data and the identification of copper in the oxide component as native copper, chalcopyrite, and minor covellite/chalcocite, SGS conducted a large-scale locked cycle test on oxide material from Copper King during 2010, using the same flowsheet that was used for the mixed and sulfide materials described above. This testing yielded a concentrate that averaged about 15% copper and 384 g Au/t at recoveries of 8.0% Cu and 54.8% Au. The practical significance of this result is that it demonstrates that both the oxide zone and the primary sulfide zone can be treated through the same flotation circuit.

Additional process development and testing work are required before process design criteria of feasibility study quality can be established. No metallurgical testing has been completed since 2010.

1.7 Mineral Resource Estimation

Upon completion of the database validation process, MDA constructed cross sections looking northwest. One set of sections was made for lithology and then another for gold and copper. Drill-hole information, including rock type, oxidation state, and metal grades, along with the topographic surface, were plotted on the cross sections. Quantile plots of gold and copper were made to help define the natural populations of metal grades to be modeled on the cross sections. The quantile plots, along with additional statistical analyses, indicated that each metal can be modeled using two mineral domains. The assay data were also reviewed both with all host lithologies grouped together, and then also for each unique rock type. The quartz monzonite and lamprophyre dikes were found to be consistently less mineralized than the surrounding granodiorite and these rock types were modeled as unique mineral types in the gold and copper models.

Using the cross-sectional interpretations as a framework, three-dimensional solids were created of the gold and copper mineral domains and the quartz monzonite and lamprophyre dikes. These solids were used to code domain percentages into the block model. Grade estimation was controlled by the metal domains and the unique rock types. Compositing was done to 6.1m (20ft) down-hole lengths (the model block size), honoring all material-type and mineral-domain boundaries. Partial-length composites outside of the dikes, if less than 3.1m (10ft), were not used in the estimate, while all composites inside the dikes were used due to the narrow nature of the dikes and the preponderance of smaller-length composites. The 6.1m-square blocks inside each mineral domain were estimated, using only composites from inside that domain. MDA assigned density values to various group of rocks, ranging from a low of 2.60 to a high of 2.77g/cm^3.

The Copper King resource block model reflects the even distribution of metal grades occurring within a large body of disseminated and vein/stockwork gold and copper mineralization. The estimation used two search passes with successive passes not overwriting previous estimation passes. All of the search passes were oriented similar to the general orientation of the mineralized shears and veins within the country rock (azimuth 120º and vertical dip), and in all cases the minor search distance was one third the major and semi-major distance. While the mineral domains aid in simulating the grade distribution, the estimation used the Ordinary Kriging method to further replicate this grade distribution.

MDA classified the Copper King resources in order of increasing geological and quantitative confidence into Inferred, Indicated, and Measured categories to be in compliance with Canadian National Instrument

43-101 and the "CIM Standards on Mineral Resources and Reserves, Definitions and Guidelines," issued in 2000 and modified with adoption of the "CIM Definition Standards - For Mineral Resources and Mineral Reserves" in 2014. MDA classified the Copper King resources by a combination of distance to the nearest sample and the number of samples, while at the same time taking into account reliability of underlying data and understanding and use of the geology. There are no Measured resources associated with the pre-Saratoga drilling due to a) limited geologic data; and b) limited QA/QC data. None of these deter from the overall confidence in the resource estimate, but they do detract from confidence in some of the accuracy which MDA requires for a Measured resource.

A summary of the total Copper King stated resources is tabulated in Table 1.1. The stated resource is fully diluted to 6.1m by 6.1m by 6.1m blocks (20ft by 20ft by 20ft) and is tabulated on a AuEq cutoff grade of 0.514g AuEq/t (0.015oz AuEq/ton). All material, regardless of which metal is present and which is absent, is tabulated. Because multiple metals exist, but do not on a local scale co-exist, the AuEq grade is used for tabulation. Using the individual metal grades of each block, the AuEq grade is calculated using the following formula:

$$\text{oz AuEq/ton} = \text{oz Au/ton} + (0.036 * \%\text{Cu})$$

This formula is based on prices of US$1,250.00 per ounce gold, and US$2.25 per pound copper. No metal recoveries are applied, as this is the *in situ* resource.

Table 1.1 Summary Table of Current Copper King Resources

Measured and Indicated Resource:

class	Au-equiv. Cutoff		tons	tonnes	oz Au/ton	g Au/t	oz Au	% Cu	lbs Cu
	oz AuEq/ton	g AuEq/t							
Measured	0.010	0.34	16,230,000	14,720,000	0.017	0.59	280,000	0.192	62,460,000
Indicated	0.010	0.34	49,300,000	44,720,000	0.014	0.48	686,000	0.176	173,070,000
Total	0.010	0.34	65,530,000	59,440,000	0.015	0.51	966,000	0.180	235,530,000

Inferred Resource:

class	Au-equiv. Cutoff		tons	tonnes	oz Au/ton	g Au/t	oz Au	% Cu	lbs Cu
	oz AuEq/ton	g AuEq/t							
Inferred	0.010	0.34	16,330,000	14,810,000	0.011	0.38	184,000	0.190	61,970,000

The Copper King resource contains oxide, mixed oxide-sulfide, and sulfide rock types. At the stated AuEq cutoff grade of 0.51g AuEq/t (0.015oz AuEq/ton), approximately 80% of the resource is sulfide material with the remaining 20% split evenly between the oxide and mixed rock types.

For the Copper King deposit, the most important observation that can be presented to the reader is the even, consistent distribution of gold and copper, albeit generally low-grade, throughout this potential open-pit deposit. Numerous drill holes encountered 200m or more of continuous mineralization starting at the surface. The higher-grade central core has a near-vertical orientation, reflecting the shear/vein fabric within the host granodiorite intrusion, though there are no distinct lithologic or alteration boundaries separating the higher-grade mineralization from the lower-grade material. Approximately 85% of the total resource is classified as Measured or Indicated due to the consistent nature of the mineralization and the current drill spacing. Additional drilling within the currently defined deposit is not expected to materially change the existing resource, though there is potential for extensions of lower-grade mineralization to the southeast following geologic and geophysical trends.

1.8 Preliminary Economic Assessment

MDA has completed a PEA for the Copper King gold-copper project. ***Note that a preliminary economic assessment is preliminary in nature, and it includes Inferred mineral resources that are considered too speculative geologically to have the economic considerations applied that would enable them to be classified as mineral reserves, and there is no certainty that the preliminary assessment will be realized.***

The PEA assumes open-pit mining for 11 years with copper and gold recovery by flotation. This study assumes material would be processed at a rate of 10,000 tons per day. The ore-grade material would be crushed in or near the mine and transported to the plant located close to the mine. The base case pit optimization was completed using the parameters shown in Table 1.2.

Table 1.2 Base Case Pit Optimization Parameters

Item	Units	Value
Mining Cost	$/ton Mined	$1.60
Flotation Cost	$/ton Processed	$8.33
G&A Cost	$/ton Processed	$0.86
Flotation Recovery - Oxide - Cu	%	10.0%
Flotation Recovery - Mix - Cu	%	80.0%
Flotation Recovery - Sulfide - Cu	%	85.0%
Flotation Recovery - Oxide - Au	%	55.0%
Flotation Recovery - Mix - Au	%	70.0%
Flotation Recovery - Sulfide - Au	%	75.0%
Oxide Copper Concentrate Grade	% Cu	15.0%
Copper Concentrate Grade	% Cu	26.0%
Concentrate Transportation	$/ton Conc.	$40.00
Concentrate Transportation (oxide)	$/lb Cu	$0.133
Concentrate Transportation (mix;sulfide)	$/lb Cu	$0.077
Concentrate Smelting Costs	$/ton Conc.	$75.00
Concentrate Smelting Costs (oxide)	$/lb Cu	$0.250
Concentrate Smelting Costs (mix, sulfide)	$/lb Cu	$0.144
Refining Charge Cu	$/lb Cu	$0.075
Refining Charge Au	$/oz Au	$1.500
Smelter Payable Cu	%	96.0%
Smelter Payable Au	%	95.0%
Overall Pit Slope	Degrees	50.0
View Restriction	Yes/No	No

The result of pit optimization at various metal prices is shown in Table 1.3. The pit optimization is based on base case metal prices of $1,250 per ounce of gold and $2.25 per pound of copper.

Table 1.3 Base Case Pit Optimization Results

Pit	Revenue Factor	Gold Price $/oz Au	Copper Price $/lb Cu	Total Tons 000's	Waste Tons 000's	Ore Tons 000's	Strip Ratio	Max Bench	Min Bench	oz Au_eq 000's	oz Au_eq/ton
1	0.3	$300	$0.54	1,722.00	1,014.60	707.4	1.43	62	47	53.6	0.076
3	0.35	$350	$0.63	2,478.50	1,423.20	1,055.30	1.35	62	46	72.6	0.069
5	0.4	$400	$0.72	3,705.10	2,145.00	1,560.20	1.37	62	44	98.1	0.063
7	0.45	$450	$0.81	5,261.10	3,075.30	2,185.80	1.41	62	41	126	0.058
9	0.5	$500	$0.90	8,153.80	4,914.00	3,239.80	1.52	62	38	168.8	0.052
11	0.55	$550	$0.99	10,422.50	6,209.00	4,213.50	1.47	62	36	202	0.048
13	0.6	$600	$1.08	12,397.30	7,256.50	5,140.80	1.41	62	34	229.9	0.045
14	0.625	$625	$1.13	14,523.50	8,553.00	5,970.50	1.43	62	33	254.6	0.043
15	0.65	$650	$1.17	16,718.80	9,896.80	6,822.00	1.45	62	32	278.9	0.041
17	0.7	$700	$1.26	20,629.20	12,142.60	8,486.60	1.43	62	30	322.3	0.038
19	0.75	$750	$1.35	28,972.90	17,766.90	11,206.00	1.59	62	26	395.2	0.035
21	0.8	$800	$1.44	45,590.20	27,309.90	18,280.30	1.49	62	24	559.5	0.031
23	0.85	$850	$1.53	57,216.50	33,717.00	23,499.40	1.43	62	23	669.8	0.029
25	0.9	$900	$1.62	76,298.50	43,475.20	32,823.30	1.32	62	21	851.8	0.026
27	0.95	$950	$1.71	84,595.00	47,059.00	37,536.00	1.25	62	19	935.4	0.025
29	1	$1,000	$1.80	95,636.10	52,826.50	42,809.60	1.23	62	17	1,027.90	0.024
30	1.025	$1,025	$1.85	99,888.20	54,632.70	45,255.50	1.21	62	16	1,066.80	0.024
31	1.05	$1,050	$1.89	103,682.30	56,357.40	47,325.00	1.19	62	15	1,099.70	0.023
33	1.1	$1,100	$1.98	112,290.80	60,972.20	51,318.70	1.19	62	13	1,163.10	0.023
35	1.15	$1,150	$2.07	119,687.60	64,720.20	54,967.40	1.18	62	11	1,217.70	0.022
37	1.2	$1,200	$2.16	127,632.90	69,107.40	58,525.40	1.18	62	9	1,269.70	0.022
39	**1.25**	**$1,250**	**$2.25**	**133,173.20**	**72,165.90**	**61,007.30**	**1.18**	**62**	**8**	**1,304.60**	**0.021**
41	1.3	$1,300	$2.34	140,037.10	76,362.90	63,674.20	1.20	62	7	1,341.90	0.021
43	1.35	$1,350	$2.43	147,560.20	81,289.00	66,271.20	1.23	62	6	1,378.50	0.021
45	1.4	$1,400	$2.52	151,914.60	83,608.00	68,306.60	1.22	62	5	1,403.30	0.021
47	1.45	$1,450	$2.61	157,719.40	87,282.40	70,437.00	1.24	62	5	1,430.50	0.020
49	1.5	$1,500	$2.70	161,691.40	89,709.00	71,982.30	1.25	62	5	1,449.20	0.020
51	1.55	$1,550	$2.79	165,122.20	91,572.10	73,550.10	1.25	62	5	1,466.30	0.020
53	1.6	$1,600	$2.88	169,820.90	94,742.40	75,078.50	1.26	62	4	1,484.80	0.020
55	1.65	$1,650	$2.97	172,483.30	96,379.00	76,104.30	1.27	62	4	1,496.10	0.020
57	1.7	$1,700	$3.06	174,943.00	97,718.10	77,224.90	1.27	62	4	1,507.30	0.020
59	1.75	$1,750	$3.15	177,511.40	99,279.60	78,231.70	1.27	62	4	1,517.60	0.019

The preliminary economic assessment is based on constructing a plant on site that will produce a copper concentrate containing gold values. The mine equipment will be purchased. The pre-tax cashflow is shown in Table 1.4. A gold price of $1,275/oz and a copper price of $2.80/lb were used for the economic evaluation. The commodity prices are based on a combination of three-year average prices and two years of future prices.

Table 1.4 Copper King PEA – Pre-tax Cashflow

Item	Year -1	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Totals
PRODUCTION																			
000's Tons		3,164.4	3,317.9	3,383.4	3,660.0	3,650.0	3,650.0	3,650.0	3,660.0	3,650.0	3,650.0	3,650.0	3,660.0	3,650.0	3,650.0	3,650.0	3,660.0	3,379.7	60,735.4
oz Au/t		0.033	0.028	0.026	0.016	0.022	0.013	0.010	0.012	0.013	0.015	0.015	0.011	0.010	0.012	0.012	0.012	0.012	0.015
000's Oz Au - Oxide		70.7	3.8	6.2	6.3	0.8	7.4	0.2			0.0	0.0	7.0	3.8				0.2	97.8
000's Oz Au - Mix		33.3	65.9	24.1	10.4	0.0	3.5	1.5	0.1	0.0	0.0	0.1	2.2	1.2				0.1	143.0
000's Oz Au - Sulfide		1.8	23.7	56.6	41.6	78.9	36.0	36.0	43.5	48.0	54.3	53.5	31.0	33.3	44.7	44.1	45.0	40.2	723.0
000's Oz Au - Totals		105.8	93.4	86.9	58.3	79.7	46.9	37.7	43.6	48.0	54.3	53.6	40.2	38.3	44.7	44.1	45.0	40.5	963.8
% Cu		0.27	0.25	0.23	0.21	0.22	0.19	0.15	0.17	0.18	0.19	0.19	0.16	0.16	0.17	0.18	0.18	0.18	0.191
000's Lbs Cu - Oxide		11,198.1	788.4	1,503.8	1,827.9	199.9	1,857.2	44.5	0.0	0.0	1.4	1.2	1,899.0	1,034.7	0.0	0.0	0.0	44.9	18,074.2
000's Lbs Cu - Mix		5,526.4	10,790.7	4,088.1	3,109.7	1.8	1,004.3	475.5	32.3	12.4	10.0	25.7	646.3	348.3	0.0	0.0	0.0	15.1	26,503.5
000's Lbs Cu - Sulfide		445.1	5,126.9	10,132.7	10,548.1	15,570.7	10,941.5	10,711.8	12,711.5	13,384.3	13,932.6	13,724.3	9,159.3	10,433.6	12,317.9	12,863.9	13,087.6	12,009.3	194,969.7
000's Lbs Cu - Totals		17,169.6	16,706.0	15,724.6	15,485.7	15,772.4	13,803.0	11,231.8	12,743.8	13,396.7	13,944.0	13,751.2	11,704.6	11,816.6	12,317.9	12,863.9	13,087.6	12,069.3	239,547.5
000s Tons to Stockpile		968.3	886.0	1,399.8	1,165.4	198.8	40.6	0.0	2,725.6	709.8	380.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3,347.0
000's Tons from Stockpile			0.0	0.0	0.0	0.0	1,488.4	46.7	0.0	0.0	0.0	2,801.4	3,005.3	1,085.2	0.0	0.0	0.0	47.1	3,347.0
000's Tons Waste		6,500.1	4,921.1	4,341.8	2,546.9	3,932.6	6,922.8	5,521.7	2,536.4	4,765.2	4,199.9	8,276.4	8,495.3	6,560.2	1,892.6	535.8	264.5	224.9	74,025.3
000's Tons Total *		10,632.8	9,125.0	9,125.0	7,372.3	7,781.4	10,613.4	9,171.7	8,922.0	9,125.0	8,229.9	11,926.4	12,155.3	10,210.2	5,542.6	4,185.8	3,924.5	3,604.6	134,760.7
Strip Ratio		2.36	1.75	1.70	1.01	1.13	1.91	1.51	1.44	1.50	1.25	2.27	2.32	1.80	0.52	0.15	0.07	0.07	1.22
SALES ($000's)																			
000's Oz Au Recovered (Mill)		63.5	65.9	62.7	41.9	59.6	33.4	28.2	32.7	36.0	40.8	40.2	28.6	27.9	33.5	33.1	33.8	30.3	692.2
000's Lbs Cu Recovered (Mill)		5,919.3	13,069.2	12,033.7	11,636.4	13,256.5	10,289.5	9,489.9	10,830.6	11,386.6	11,850.8	11,686.3	8,492.3	9,250.7	10,470.2	10,934.3	11,124.4	10,224.5	181,945.1
Tons Conc		12,962.4	25,244.3	23,353.7	22,635.5	25,521.5	20,049.4	18,256.0	20,828.0	21,897.3	22,790.3	22,473.9	16,599.2	17,935.7	20,135.0	21,027.5	21,393.1	19,668.9	352,771.5
Gold Payment (95%)	1275	$76,950.7	$79,869.8	$75,921.2	$50,787.7	$72,226.8	$40,504.2	$34,133.0	$39,607.9	$43,653.5	$49,394.8	$48,655.9	$34,653.9	$33,781.8	$40,589.0	$40,080.3	$40,879.7	$36,700.9	$838,390.9
Copper Payment (96%)	2.8	$15,911.0	$35,130.0	$32,346.5	$31,278.7	$35,633.5	$27,658.1	$25,508.8	$29,112.5	$30,607.1	$31,855.0	$31,412.9	$22,827.3	$24,865.9	$28,143.8	$29,391.3	$29,902.5	$27,483.5	$489,068.4
Smelting and Transportation		$1,491.2	$2,904.2	$2,686.7	$2,604.0	$2,936.1	$2,306.5	$2,100.2	$2,396.1	$2,519.1	$2,621.8	$2,585.4	$1,909.6	$2,063.3	$2,316.4	$2,419.0	$2,461.1	$2,262.7	$40,583.4
Total Revenue		**$91,370.5**	**$112,095.7**	**$105,581.0**	**$79,462.4**	**$104,924.3**	**$65,855.8**	**$57,541.6**	**$66,324.3**	**$71,741.5**	**$78,628.0**	**$77,483.3**	**$55,571.6**	**$56,584.3**	**$66,416.5**	**$67,052.6**	**$68,321.1**	**$61,921.6**	**$1,286,875.9**
OPERATING COSTS $000'S																			
Mining		$17,012.5	$14,600.0	$14,600.0	$11,795.7	$12,450.2	$16,981.4	$14,674.7	$14,275.2	$14,600.0	$13,167.8	$19,082.2	$19,448.5	$16,336.3	$8,868.2	$6,697.3	$6,279.2	$5,767.4	$226,636.6
Stockpile Mining							$1,488.4	$46.7	$0.0	$0.0	$0.0	$2,801.4	$3,005.3	$1,085.2	$0.0	$0.0	$0.0	$47.1	$8,474.1
Reclamation																		$5,000.0	$5,000.0
Processing		$26,359.5	$27,638.1	$28,183.7	$30,487.8	$30,404.5	$30,404.5	$30,404.5	$30,487.8	$30,404.5	$30,404.5	$30,404.5	$30,487.8	$30,404.5	$30,404.5	$30,404.5	$30,487.8	$28,152.9	$505,925.9
G & A		$2,721.4	$2,853.4	$2,909.7	$3,147.6	$3,139.0	$3,139.0	$3,139.0	$3,147.6	$3,139.0	$3,139.0	$3,139.0	$3,147.6	$3,139.0	$3,139.0	$3,139.0	$3,147.6	$2,906.5	$52,232.4
Wyoming Royalty (5%)*		$3,114.5	$4,080.2	$3,724.4	$2,291.3	$3,569.0	$1,615.6	$1,199.9	$1,634.4	$1,909.9	$2,254.2	$2,197.0	$1,096.8	$1,152.0	$1,643.6	$1,675.5	$1,734.3	$1,293.1	$36,185.9
Totals		**$49,207.8**	**$49,171.7**	**$49,417.8**	**$47,722.4**	**$49,562.8**	**$53,629.0**	**$49,464.8**	**$49,545.0**	**$50,053.4**	**$48,965.6**	**$57,624.1**	**$57,186.0**	**$52,117.1**	**$44,055.3**	**$41,916.2**	**$41,648.9**	**$43,167.0**	**$834,454.9**
$/Ton		**$15.55**	**$14.82**	**$14.61**	**$13.04**	**$13.58**	**$14.69**	**$13.55**	**$13.54**	**$13.71**	**$13.42**	**$15.79**	**$15.62**	**$14.28**	**$12.07**	**$11.48**	**$11.38**	**$12.77**	**$13.74**
$/oz Au (with Cu Credit)		**$576.4**	**$270.5**	**$331.8**	**$478.2**	**$297.7**	**$890.1**	**$973.3**	**$734.9**	**$641.5**	**$509.3**	**$754.6**	**$1,334.4**	**$1,106.4**	**$572.6**	**$475.4**	**$443.1**	**$623.5**	**$587.0**
Net Profit before Tax		**$42,162.7**	**$62,924.0**	**$56,163.1**	**$31,739.9**	**$55,361.5**	**$12,226.8**	**$8,076.8**	**$16,779.3**	**$21,688.1**	**$29,662.4**	**$19,859.2**	**($1,614.4)**	**$4,467.2**	**$22,361.2**	**$25,136.3**	**$26,672.2**	**$18,754.6**	**$452,421.0**
CASH FLOW $000'S																			
Capital Cost	$111,079.9	$4,786.0	$250.0	$250.0	$250.0	$250.0	$250.0	$17,319.9	$4,786.0	$250.0	$250.0	$250.0	$250.0	$250.0	$17,319.9	$250.0	$250.0	$250.0	$166,784.7
Working Capital		$11,523.3					($11,523.3)												
Equipment Salvage																		$2,929.6	
Cash Flow	(111,079.9)	$25,853.3	$62,674.0	$55,913.1	$31,489.9	$55,111.5	$23,500.2	(9,243.1)	$11,993.3	$21,438.1	$29,412.4	$19,609.2	(1,864.4)	$4,217.2	$5,041.3	$24,886.3	$26,422.2	$21,434.2	$296,808.9
Cumulative Cash Flow	(111,079.9)	(85,226.6)	(22,552.6)	$33,360.5	$64,850.4	$119,961.9	$143,462.1	$134,219.1	$146,212.4	$167,650.4	$197,062.8	$216,672.0	$214,807.6	$219,024.9	$224,066.2	$248,952.5	$275,374.7	$296,808.9	
Net Present Value (5%)																			$178,451.9
IRR																			33.1%

* Note: The royalty is shown as a 5% royalty with credits for processing, g & a, transportation, and smelting.; Totals do not include material from stockpile

The pre-tax economic analysis of the project, including the 5% Wyoming state royalty, shows a 33.1% internal rate of return ("IRR") and a net present value ("NPV") of $178.4 million at 5% discount rate. A payback of the initial $113.7 million investment occurs in a little under 2.5 years. The revenue is about 1/3 from copper and about 2/3 from gold. Other mining options should be investigated in more detail such as contractor mining or leasing equipment.

Figure 1.1 and Figure 1.2 show the pre-tax sensitivity of NPV (5%) and IRR, respectively, to changes in metal price, operating cost and capital cost.

Figure 1.1 Pre-Tax NPV (5%) Sensitivity

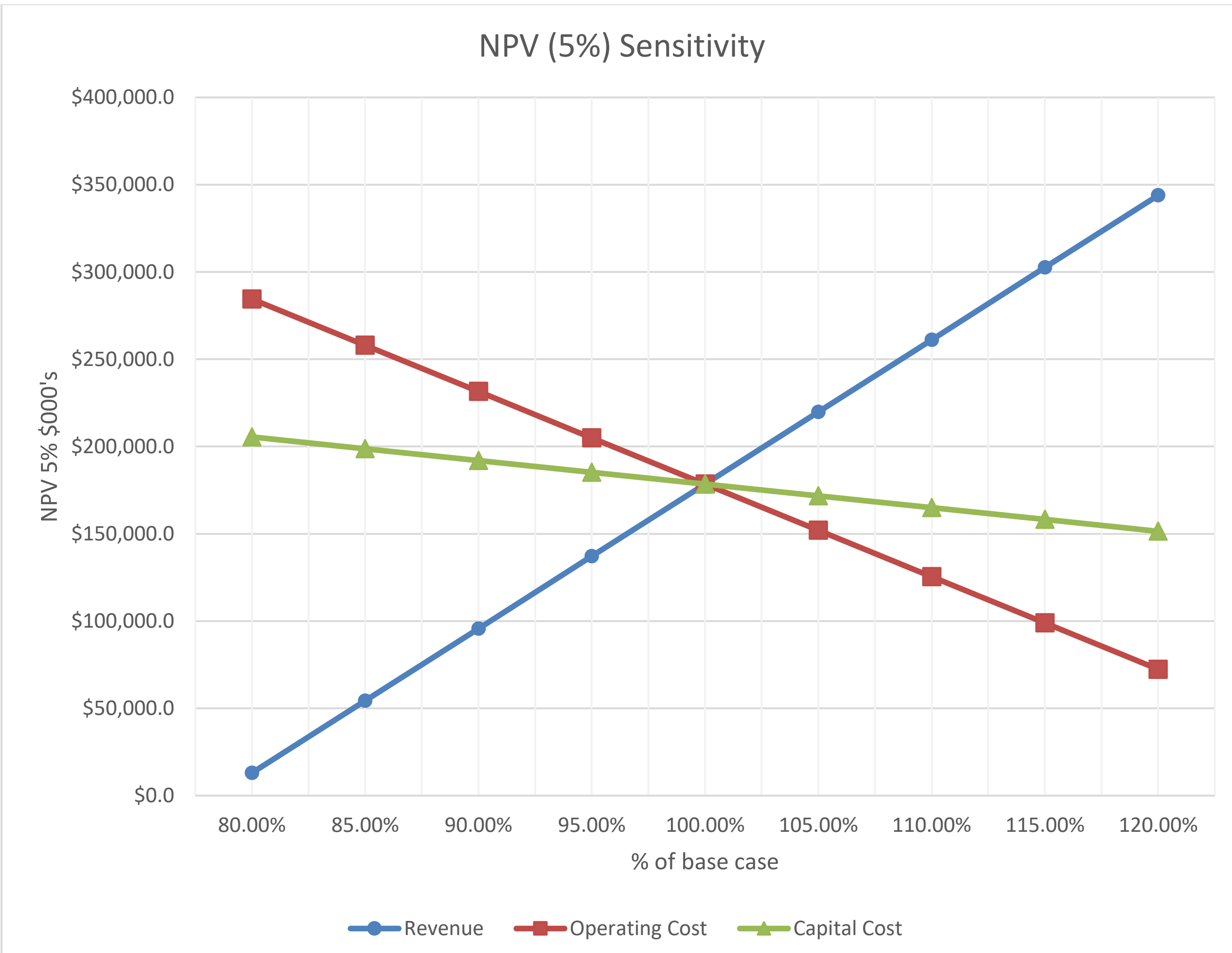
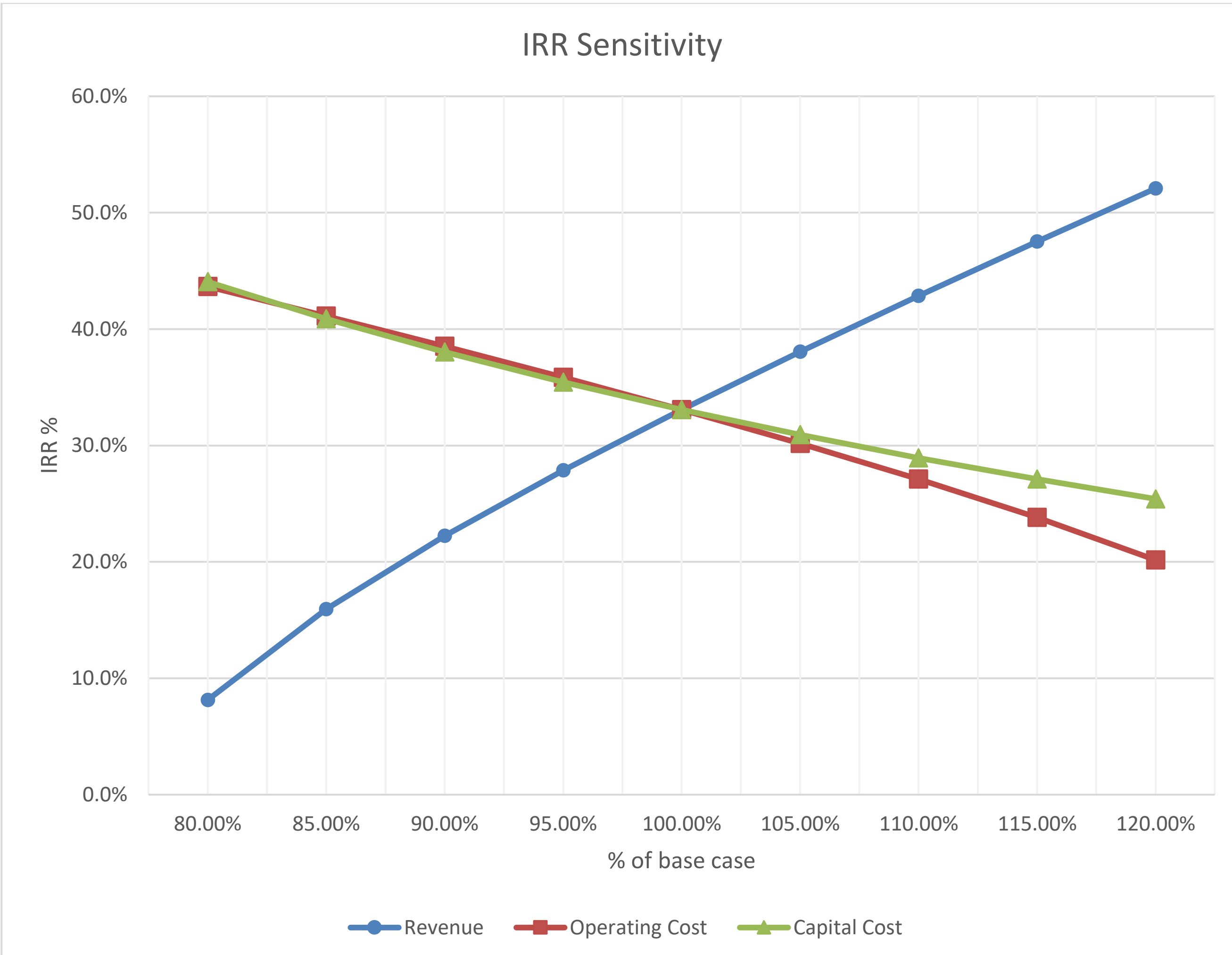


Figure 1.2 IRR Sensitivity



The after tax NPV (5%) is estimated to be $161.9 million with an 29.7% IRR. Table 1.5 shows the after tax cashflow from the project.

Table 1.5 Copper King PEA – After Tax Cashflow

Item	Year -1	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Totals
After Tax Evaluation																			
Net Profit before Tax		$42,162.7	$62,924.0	$56,163.1	$31,739.9	$55,361.5	$12,226.8	$8,076.8	$16,779.3	$21,688.1	$29,662.4	$19,859.2	(1,614.4)	$4,467.2	$22,361.2	$25,136.3	$26,672.2	$18,754.6	$452,421.0
Depreciation		$7,269.0	$14,029.2	$12,281.1	$10,202.4	$8,511.1	$7,706.2	$1,147.3	$3,307.2	$1,221.1	$10,703.2	$7,799.7	$0.0	$0.0	$7,382.9	$7,382.9	$7,382.9	$3,019.7	$109,346.1
Net Income before Depletion		$34,893.7	$48,894.7	$43,882.0	$21,537.5	$46,850.4	$4,520.6	$6,929.5	$13,472.0	$20,467.0	$18,959.2	$12,059.5	(1,614.4)	$4,467.2	$14,978.2	$17,753.4	$19,289.2	$15,734.9	$343,074.8
Depletion (15%)		$13,705.6	$16,814.4	$15,837.1	$11,919.4	$15,738.6	$9,878.4	$8,631.2	$9,948.7	$10,761.2	$11,794.2	$11,622.5	$8,335.7	$8,487.6	$9,962.5	$10,057.9	$10,248.2	$9,288.2	$193,031.4
Depletion (50% max)		$24,425.6	$34,226.3	$30,717.4	$15,076.3	$32,795.2	$3,164.4	$4,850.7	$9,430.4	$14,326.9	$13,271.5	$8,441.7	$0.0	$3,127.1	$10,484.8	$12,427.4	$13,502.5	$11,014.4	$241,282.5
Depletion Taken		$13,705.6	$16,814.4	$15,837.1	$11,919.4	$15,738.6	$3,164.4	$4,850.7	$9,430.4	$10,761.2	$11,794.2	$8,441.7	$0.0	$3,127.1	$9,962.5	$10,057.9	$10,248.2	$9,288.2	$165,141.5
Taxible Income		$21,188.1	$32,080.4	$28,044.8	$9,618.2	$31,111.7	$1,356.2	$2,078.9	$4,041.6	$9,705.8	$7,165.0	$3,617.9	$0.0	$1,340.2	$5,015.7	$7,695.5	$9,041.1	$6,446.6	$179,547.7
Income Tax (34%)		$7,204.0	$10,907.3	$9,535.2	$3,270.2	$10,578.0	$461.1	$706.8	$1,374.1	$3,300.0	$2,436.1	$1,230.1	$0.0	$455.7	$1,705.4	$2,616.5	$3,074.0	$2,191.9	$61,046.2
Income After Tax		$13,984.2	$21,173.1	$18,509.6	$6,348.0	$20,533.7	$895.1	$1,372.0	$2,667.5	$6,405.8	$4,728.9	$2,387.8	$0.0	$884.5	$3,310.4	$5,079.0	$5,967.1	$4,254.8	$118,501.5
Depletion		$13,705.6	$16,814.4	$15,837.1	$11,919.4	$15,738.6	$3,164.4	$4,850.7	$9,430.4	$10,761.2	$11,794.2	$8,441.7	$0.0	$3,127.1	$9,962.5	$10,057.9	$10,248.2	$9,288.2	$165,141.5
Depreciation		$7,269.0	$14,029.2	$12,281.1	$10,202.4	$8,511.1	$7,706.2	$1,147.3	$3,307.2	$1,221.1	$10,703.2	$7,799.7	$0.0	$0.0	$7,382.9	$7,382.9	$7,382.9	$3,019.7	$109,346.1
After Tax Cashflow	(113,664.5)	$34,958.7	$52,016.6	$46,627.9	$28,469.8	$44,783.5	$11,765.7	$7,370.0	$15,405.1	$18,388.1	$27,226.3	$18,629.1	(1,614.4)	$4,011.6	$20,655.8	$22,519.9	$23,598.2	$16,562.8	$277,710.3
Cumulative After Tax Cashflow	(113,664.5)	(78,705.8)	(26,689.1)	$19,938.7	$48,408.5	$93,192.0	$104,957.8	$112,327.8	$127,732.9	$146,121.0	$173,347.3	$191,976.4	$190,362.0	$194,373.6	$215,029.4	$237,549.3	$261,147.5	$277,710.3	
NPV 5%																		$161,937.9	
NPV 7.5%																		$124,737.8	
IRR																		29.7%	

1.9 Recommendations

The Copper King project is a project of merit with high-grade mineralization exposed at the surface surrounded by a large, low-grade zone with potential for expanding at least the low-grade resources. The PEA study indicates a 17-year project with a capital requirement of $111 million. Over the project life a total of 182 million pounds of copper and 692,000 ounces of gold are projected to be recovered based on the PEA recovery assumptions. The project shows a pre-tax NPV (5%) of $178.5 million and an IRR of 33.1%. These results indicate a potentially economic project and the project should proceed to the pre-feasibility or feasibility stage.

The project also brings with it relatively well-defined issues, with metallurgy of the mineralization posing the greatest challenge. Preliminary testing indicates that good recoveries are possible for mixed and sulfide mineralization, though additional work is needed. At all times during exploration, a proactive approach with respect to permitting, environmental issues, and public relations in the community is extremely important.

It is recommended that the project proceed to a pre-feasibility stage with two phases of work conducted over three years. Phase I involves addressing permitting and environmental issues, in general, beginning with time-sensitive baseline environmental and water-quality studies, and further data acquisition, including exploration drilling on nearby targets. Phase II would involve continuing permitting work, additional metallurgical studies, drilling for resource expansion, starting the process for environmental permitting, and development and condemnation drilling. Advancing to Phase II would be contingent on positive results of the work on permitting and environmental issues in Phase I. The total estimated cost for the two phases would be approximately $2,550,000.

A decision to proceed to a pre-feasibility or feasibility stage would be made following completion of the Phase II work.

2.0 INTRODUCTION AND TERMS OF REFERENCE

U.S. Gold Corp. ("U.S. Gold") engaged Mine Development Associates ("MDA") to provide an updated technical report on U.S Gold's Copper King property in southeastern Wyoming. The purpose of this report is to provide a technical summary containing an updated NI-43-101-compliant Mineral Resource estimate for the gold-copper project, as well as a Preliminary Economic Assessment ("PEA") for the project based on this resource estimate and updated commodity prices. This report is written in accordance with disclosure and reporting requirements set forth in the Canadian Securities Administrators' National Instrument 43-101 ("NI 43-101"), Companion Policy 43-101CP, and Form 43-101F1. All information on legal, land, and environmental issues in this report is based on information provided to MDA by prior owners, U.S. Gold, or independent experts that contributed to this or prior 43-101 reports. MDA is not an expert in these areas and presents no opinion on this information.

U.S Gold acquired its interest in Copper King through an acquisition of the property from Energy Fuels Inc. Energy Fuels acquired the property from Strathmore Minerals Corp. ("Strathmore")

2.1 Project Scope and Terms of Reference

This report has been prepared by Mr. Paul Tietz, C. P. G. and Senior Project Geologist for MDA, and by Neil Prenn, P. Eng. and Principal Engineer for MDA, who are both qualified persons under NI 43-101. The Mineral Resources were estimated and classified under the supervision of Mr. Tietz; no Mineral Reserves are estimated. The PEA was prepared under the supervision of Mr. Prenn. There is no affiliation between Mr. Tietz or Mr. Prenn and U.S. Gold except that of an independent consultant/client relationship. The Mineral Resources reported in Section 14.0 for the Copper King project are reported to fulfill the requirements stipulated in NI 43-101. Other resource estimates presented in Section 6.2 are reported for historical completeness and do not necessarily meet the reporting requirements of NI 43-101.

The scope of this study included a review of pertinent technical reports and data provided to MDA by U.S. Gold and previous operators (primarily Saratoga Gold Company) relative to the general setting, geology, project history, exploration activities and results, methodology, quality assurance, interpretations, drilling programs, and metallurgy. MDA has relied on the data and information provided by Strathmore Minerals Corp. ("Strathmore") and Saratoga for the completion of prior 43-101 reports on the property, including the supporting data for the estimation of the Mineral Resources. In compiling the background information for this report, MDA relied on information provided by U.S. Gold, Strathmore, and Saratoga and on other references as cited in Section 27.0. Steven S. Stillar, metallurgical engineer, worked on Section 13.0 on Mineral Processing and Metallurgical Testing for earlier MDA reports on the Copper King project from 2005 to 2010; at that time he was an independent consultant and a qualified person under NI 43-101. Mr. Stiller provided Mr. Tietz with opinions on the conclusions of those studies as they related to the resource estimate of 2010. Mr. Stillar has since retired and is no longer considered a qualified person under NI 43-101. Dr. Robert H. Cuttriss, metallurgical engineer, updated Section 13.0 and provided additional opinions on the conclusions of earlier studies in a report completed for Strathmore (Tietz and Prenn, 2012) which was used in this report. Dr. Cuttriss had previous experience with the Copper King deposit in his former role as president and principal consultant of Colorado Minerals Research Institute from 1993 to 1998.

Mr. Tietz visited the Copper King property June 19 and June 20, 2006, April 24 and 25, 2007, and May 29, 2012. Mr. Tietz visited the Casper, Wyoming logging and sampling facility August 27 through 30, 2007 and then visited the Dubois, Wyoming core handling facility October 18, 2007. During the April, 2007 site visit, Mr. Tietz monitored the 2007 core-drilling program, including assessing core recovery, core handling and storage, and down-hole survey methods, along with verifying existing and proposed hole locations. Verification samples were collected from surface outcrops in 2006 and then from Saratoga core in August, 2007. The May 2012 site visit found no evidence of any drilling or any other significant exploration work conducted on the property since the completion of the 2008 Saratoga drill program. Mr. Prenn has not visited the property.

This is the fifth involvement MDA and its associates have had with the Copper King project. In January 1995, MDA completed a preliminary resource study and calculation of the Copper King project for Compass Minerals, Ltd. (Ristorcelli *et al.*, 1995). In 2006 and also in December 2007, MDA prepared technical reports on the project for Saratoga (MDA, 2006; Tietz and Ristorcelli, 2007). MDA has made such independent investigations as deemed necessary in the professional judgment of the author to be able to reasonably present the conclusions discussed herein. In 2012 MDA completed a PEA report for Strathmore (Tietz and Prenn, 2012).

The purpose of this report is to provide U.S Gold a summary of the Copper King project, an independent opinion as to the technical merits of the project, and a guide to further work through recommendations and a budget. It is intended that this report may be submitted to those Canadian stock exchanges and regulatory agencies that may require it. It is further intended that the Issuer may use it for any lawful purpose to which it is suited. This is a technical report, and the use of some technical terms is unavoidable.

The effective date of this report is December 5, 2017. The technical data review, analysis and grade estimation for the mineral resource estimate were completed December 31, 2009; there has been no further drilling, and the mineral resource block model is current. The mineral resources reported herein reflect updated metal prices and revision of the gold-equivalent grades used in the determination of cutoff values for gold and copper resource reporting. The analysis for the PEA was updated for this report and is current.

2.2 Units of Measure

Much of the technical work conducted on the Copper King property, including that by Saratoga and MDA and including the modeling, resource estimate, and PEA, was originally done in Imperial units. MDA's prior reports were completed in either imperial or metric units. The current report is based on Imperial units. Where MDA believes that certain metric data would be more easily understood, both metric and the original Imperial units are reported.

Currency, units of measure, and conversion factors used in this report include:

Linear Measure

1 centimeter	= 0.3937 inch	
1 meter	= 3.2808 feet	= 1.0936 yard
1 kilometer	= 0.6214 mile	

Area Measure

1 hectare	= 2.471 acres	= 0.0039 square mile

Capacity Measure (liquid)

1 liter	= 0.2642 US gallons

Weight

1 tonne	= 1.1023 short tons	= 2,205 pounds
1 kilogram	= 2.205 pounds	
1 gram	= 0.03217 troy ounces	

Metal Content

1g Au/tonne (g Au/t)	= 0.02917oz Au/ton (troy)

Currency: Unless otherwise indicated, all references to dollars ($) in this report refer to currency of the United States.

2.3 Definitions

The following lists frequently used acronyms and abbreviations:

AA	atomic absorption spectrometry
Au	gold
AuEq	gold equivalent
°C	degrees Celsius
cm	centimeters
Cu	copper
cy	cubic yard
dmtpd	dry metric tonnes per day
dstpd	dry short tons per day

EPA	Environmental Protection Agency (US)
f.e.	percent frequency effect - measurement of results of an IP/resistivity survey
ft	feet
g	grams
Ga	billions of years old
GPS	global positioning system for navigation
g/t	grams per tonne
ha	hectares
hr	hour
ICP-AES	inductively coupled plasma-atomic emission spectroscopy method of geochemical analysis
in	inches
IP	induced polarization survey
kg	kilograms
km	kilometers
lb(s)	pound(s)
m	meters
MDA	Mine Development Associates, the author of this technical report
M.F.	metal factor – measurement of results of an IP/resistivity survey
oz	troy ounce
PEA	preliminary economic assessment
ppb	parts per billion
ppm	parts per million
QA/QC	quality assurance/quality control
RC	reverse circulation drilling method
RQD	rock quality designation
ton	short (Imperial) ton
t or tonne	metric tonne
U.S.G.S.	United States Geological Survey

3.0 RELIANCE ON OTHER EXPERTS

The authors are not experts in land, legal, environmental, or metallurgical matters. MDA has not reviewed the land tenure or environmental issues and has not independently verified the legal status or ownership of the property, lease agreements, or environmental issues.

Brent R. Kunz and Marianne K. Shanor of the law firm of Hathaway and Kunz, P.C., in Cheyenne, Wyoming, provided MDA with a status report on land tenure, specifically the status and details of the Wyoming State Leases (Kunz and Shanor, 2012), that forms the basis for Section 4.2 and Section 4.3.5 of this report. This information was updated by U.S. Gold.

For the information in Section 4.4 on Environmental Liability, Section 4.5 on Environmental Permitting, and Section 20.0 on Environmental Studies, Permitting, and Social or Community Impact, MDA has relied upon Mr. Richard Delong, President of EM Strategies.

4.0 PROPERTY DESCRIPTION AND LOCATION

Section 4.0 is based on information provided to MDA by Strathmore and U.S.Gold. Brent R. Kunz and Marianne K. Shanor of the law firm of Hathaway and Kunz, P.C., in Cheyenne, Wyoming, provided MDA with a Status Report on land tenure, specifically the status and details of the Wyoming State Leases (Kunz and Shanor, 2012), that forms the basis for Section 4.2 and Section 4.3.5 of this report. Their report is provided as Appendix A and updated by U.S. Gold. MDA presents this information to fulfill reporting requirements of NI 43-101 and expresses no opinion regarding the legal or environmental status of the Copper King project.

4.1 Location

The Copper King project is located within the Silver Crown mining district in Laramie County, Wyoming (Figure 4.1). The property lies in the southeastern part of the state, along the eastern flank of the southern Laramie Range, approximately 32km west of Cheyenne, Wyoming. Cheyenne is the state capital of Wyoming.

The project is centered within the north half of Section 36, T14N, R70W, Sixth Principal Meridian, at 41°08'40"N latitude and 105°11'05"W longitude. It is located on the Hecla 7.5-minute topographic quadrangle.

4.2 Land Area and Property Description

The Copper King property covers 453 contiguous hectares (approximately five square kilometers) that include the S½ of Section 25, NE¼ Section 35, and all of Section 36, T14N, R70W (Figure 4.1). The project is entirely located on land owned and administered by the State of Wyoming. There are no Federal lands within or adjoining the Copper King land position. Curt Gowdy State Park lies northwest of the property, partially within Section 26. The state park's southeastern boundary is approximately 300m northwest of the property and approximately 900m northwest of the mineralized area.

The Copper King property position consists of two State of Wyoming Metallic and Non-metallic Rocks and Minerals Mining Leases which are described in Section 4.3.5.

U.S. Gold is in the process of extending an easement agreement with Ferguson Ranch Inc. providing access to the S½ Section 25, T14N, R70W, and also the W½ Section 30, T14N, R69W. This agreement is described in Section 4.3.6.

The surface of Section 36 is owned by the State of Wyoming and is currently leased for agricultural use to Ferguson Ranch Inc. U.S Gold does not currently have a surface-use agreement with Ferguson Ranch Inc. Prior to mining development, a surface impact payment would have to be negotiated with the lessee, which annual payment would then be split between the State of Wyoming and the surface lessee based on a sliding scale (personal communication, Wyoming Office of State Lands and Investments, June 22, 2006).

The surface of Sections 25 and 35 is owned by various private owners.

Figure 4.2 shows the project boundaries and the surface expression of the mineralized material with respect to the state land under mineral lease to the Issuer.

Figure 4.1 Location Map
(Prepared by MDA, 2012)

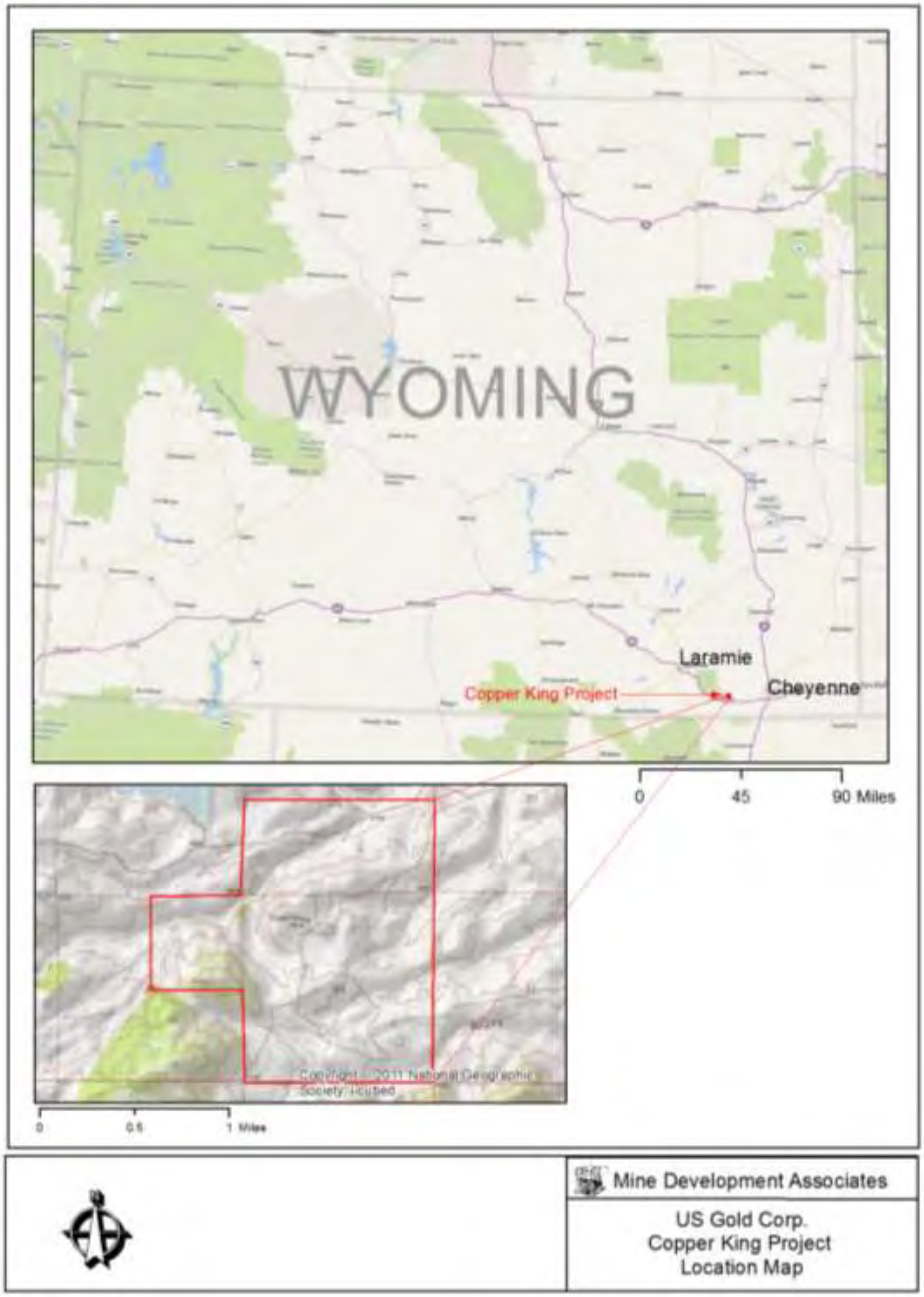
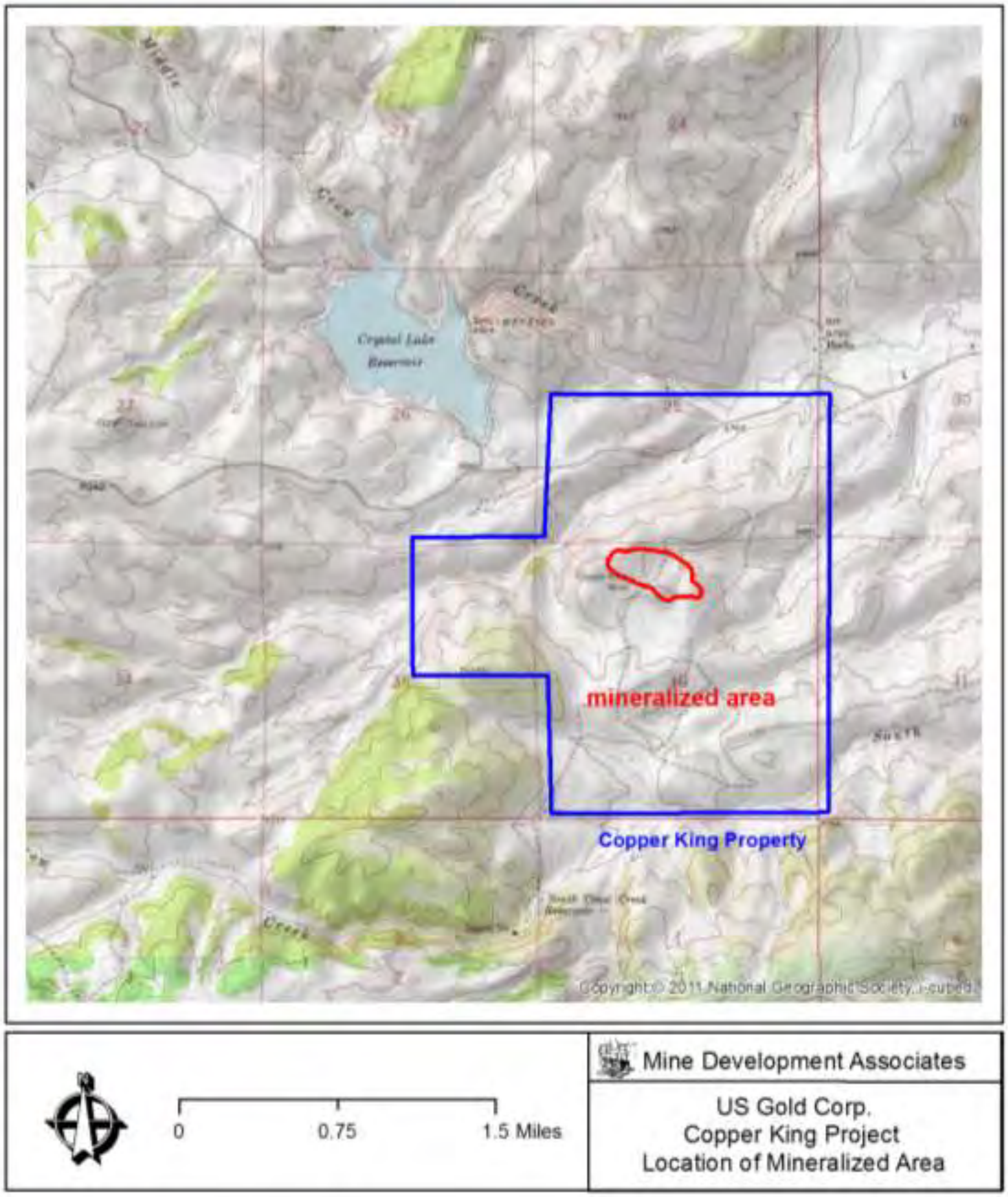


Figure 4.2 Location of the Mineral Resource at Copper King

(Prepared by MDA, 2012)



4.2.1 CK Mining Corp. purchases property from Energy Fuels.

On February 14, 2014 CK Mining Corp ("CK") was formed, fully controlled by Copper King LLC, a Nevada limited liability company. On July 2, 2014 CK purchased the 100% of the property from Wyoming Gold. As part of the purchase the ownership of CK became 50% Copper King LLC and 50% Wyoming Gold. On February 12, 2016 a group of private investors purchased 1,000 shares from Wyoming Gold. These shares were contributed to Copper King LLC, who became 100% owner of the property.

4.2.2 CK Mining Corp. name change

On March 6, 2016 the name of CK Mining Corp was changed to U.S. Gold Corp

4.2.3 Acquisition of Strathmore Minerals Corp. by Energy Fuels.

On September 3, 2013 Energy Fuels Inc. acquired all the shares of Strathmore Minerals Corp. Energy Fuels held the shares in their subsidiary company named Wyoming Gold Mining Company Inc.

4.2.4 Acquisition of Saratoga Gold Company Ltd. by Strathmore Minerals Corp.

Through a Plan of Arrangement, Strathmore acquired all of the issued and outstanding shares of Saratoga Gold Company Ltd. (Saratoga) on May 11, 2012 (Strathmore Minerals Corp. news release dated May 11, 2012), thereby acquiring 100% control of the Copper King property.

There are a number of changes of ownership prior to this. When Saratoga owned the property most of the exploration work on the property was completed.

4.3 Agreements and Encumbrances

4.3.5 State of Wyoming Leases

The Copper King property consists of two State of Wyoming Metallic and Non-metallic Rocks and Minerals Mining Leases which are listed below:

Lease # 0-40828 (mineral): 259 hectares (640 acres) covering all of Section 36, T14N, R70W.

Lease # 0-40858 (mineral): 65 hectares (160 acres) within NE¼ Section 35, T14N, R70W; 130 hectares (320 acres) within S½ Section 25, T14N, R70W.

The area covered by the mineral leases, along with the location of the estimated gold resource within the north half of Section 36, is shown on Figure 4.2.

The Wyoming State Board of Land Commissioners and the State Loan and Investment Board, through the Office of State Lands and Investments, regulate State-owned minerals under the authority of Title 36, W.S. 1977 as to the State and School Lands and under the authority of Title 11, W.S. 1977 as to State Loan and Investment Board Lands and amendments thereto. It was reported by a previous lease holder (Mountain Lake Resources, 1997) that the Board of Land Commissioners was receptive to a prospective gold-copper project on State land. Details of the mining leases were taken from mining lease documents and from a Status Report dated June 13, 2012, by Brent R. Kunz and Marianne K. Shanor of the law firm of Hathaway & Kunz, P.C. of Cheyenne, Wyoming; the Status Report, without its attachments, is included as Appendix A.

Norman Burmeister ("Burmeister"), the lease holder as stated in the Hathaway and Kunz Status Report, assigned the two Wyoming Mining Leases to Wyoming Gold Corporation ("Wyoming Gold") in June of 2006. Wyoming Gold is a Wyoming-based company initiated and controlled by Burmeister for the purpose of conducting business in Wyoming. Saratoga, through a share exchange agreement with Burmeister, assumed control of Wyoming Gold and in turn the State Leases in September 2006. The lease assignment to Wyoming Gold and the Burmeister/Saratoga share exchange agreement are included as Appendices B and C, respectively. The leases continue to be held by Wyoming Gold, which is now controlled by U.S. Gold. (see Section 4.2.4). MDA presents the information demonstrating these transfers for the reader to assess, as MDA is not qualified to make any judgment or assessment of said transactions and, therefore, does not do so.

Lease #0-40828 for all of Section 36 is a 10-year lease that expires February 1, 2023. Annual rental for the lease is $1.00 per acre for one to five years prior to discovery and $2.00 per acre for years six through 10, payable in advance; the current annual rental is $1,280. If mining has not begun within two years of the signing date of the lease (February 2, 2013), the State may raise the rent. This lease covers 640 acres (259 hectares). The following production royalty applies, although once the project is in operation, the Board of Land Commissioners has the authority to reduce the royalty payable to the State:

FOB Mine Value per Ton	Percentage Royalty
$00.00 to $50.00	5%
$50.01 to $100.00	7%
$100.01 to $150.00	9%
$150.01 and up	10%

The lease requires that for all open or strip-mining operations, "*…all waste material mined and not removed from the premises shall, as mining progresses, be used to fill the pits and leveled unless consent of the lessor is otherwise obtained, so that at the expiration, surrender, or termination of the lease, the land will reasonably approximate its original configuration and with a minimum of permanent damage to the surface…*" The Board of Land Commissioners must approve any assignment of the lease by the lessee, and all overriding royalties must be approved by the Board. In addition, if the lease is assigned before production begins, the State must receive one-half of the consideration received less actual costs of acquisition and development of the leasehold assigned.

Lease #0-40858 for 480 acres (195 hectares), including S½ Section 25 and NE¼ Section 35, is a 10-year lease that expires February 1, 2024. It has the same rental, production royalty, and other terms as Lease #0-40828, just described. The current annual rental for this lease is $960.

Both State leases can be renewed for successive 10-year terms if certain conditions are met (Appendix A). Both leases are current and will need to be renewed in 2023.

4.3.6 Easement Agreement with Ferguson Ranch Inc.

The surface of S½ Section 25 and NE¼ Section 35 is privately owned; owners are indicated in Appendix A. An easement agreement providing access has been negotiated with Ferguson Ranch Inc. on the S½ Section 25, T14N, R70W, and also the W½ Section 30, T14N, R69W. Originally signed in November 2006, but replaced and superseded by one effective May 1, 2009, the agreement is for a one-year period and is renewable annually for an additional four years. Annual payments on the easement agreement are $5,000 for the first year and $10,000 for the next four years if the agreement is renewed. U.S Gold reports that the agreement is in the process of being renewed for the current year.

4.4 Environmental Liability

The following information has been provided by Naomi Morton Knight, president of Knight Technologies, Inc.

The property has no known environmental liabilities. The surface estate and the mineral estate are owned by the State of Wyoming, and the past and current land use is undeveloped grazing land. A limited amount of past mineral exploration has been conducted on this land. The most recent exploration drilling was conducted in 2007 and 2008; Abandoned Drill Site Reports were submitted to the Wyoming Department of Environmental Quality, Land Quality Division indicating drill holes were properly reclaimed and should therefore present no environmental liability. The State of Wyoming has leased the surface for livestock grazing, and there are no known past or present land uses that would potentially contribute to environmental liabilities.

A search of the Wyoming Oil and Gas Conservation Commission shows no oil or gas exploration activity on the property and subsequently no associated environmental liabilities.

4.5 Environmental Permitting

Information on environmental permitting required for the Copper King project is provided in Section 20.0. That information has been provided by Mr. Richard Delong, president of EM Strategies, Inc., a consultant to U.S. Gold.

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

5.1 Access

The Copper King project is located in Laramie County, Wyoming, about 32km west of Cheyenne, Wyoming. From Cheyenne, access to the property is west along paved State Road 210 (Happy Jack Road) about 24km, then another 8km along Crystal Lake Road, a maintained gravel road that serves the south end of Curt Gowdy State Park. The final 1.5km is southwest off Crystal Lake Road on an un-maintained dirt road. The Crystal Lake Road continues to the west another 13km past the state park and reaches the Buford exit on Interstate 80 in Albany County. Coming from the west, this access can be used, although driving conditions might be difficult in the winter.

5.2 Climate

The following climate data are taken from Soule (1955). Annual precipitation averages 43cm, of which the majority falls as winter snows, which may hamper transportation for short periods after heavy snowfalls. Summer temperatures are mild; subfreezing temperatures are common during the winter. Extreme temperatures may range from -37° C in the winter to 32° C in the summer.

Exploration and mining can be conducted year round.

5.3 Local Resources and Infrastructure

Lodging, supplies, and labor are available in Cheyenne, a city of about 59,500 population (2010 census). Access to transportation from the Copper King property is good with a maintained gravel road within 1.5km of the property. A paved road is within 8km that provides direct access into Cheyenne, which is served by Interstates 80 and 25 along with a full-service airport. The Union Pacific main line runs through Cheyenne, and a smaller trunk line passes by the property about 13km to the northeast. Interstate 80 and the main line of the Union Pacific Railroad lie about 6km to the south of the Copper King property, although there is no direct maintained access to this portion of the transportation corridor.

High-voltage power lines are located about 2.4km from the project, and local power lines serve the scattered residences along Crystal Lake Road.

There is ample ground east and south of the Copper King project area for mining infrastructure with a large flat area south of the mineralized area and still on the State section.

There are no significant water sources on the property. South Crow Creek and Middle Crow Creek, both perennial streams, lie 1.6km to the south and north, respectively, of the site, although most available surface water is being stored in reservoirs for use by the city of Cheyenne. One of the larger reservoirs, Crystal Lake Reservoir, lies 1.2km to the northwest within Curt Gowdy State Park. A few of the smaller nearby drainages, especially a northeast-flowing drainage 0.4km to the northwest of the Copper King mine, carry intermittent seasonal flows. Previous site reports (Nevin, 1973; Mountain Lake Resources, 1997) indicate that the city, specifically the Cheyenne Board of Utilities, would be receptive to a proposal to sell water for mine use from their reservoirs. MDA has not contacted the city authorities to ascertain whether this is still true.

Groundwater is <46m deep at the project site, and deep wells, or the dewatering of a future open-pit, could contribute to an adequate water source for the mine. No hydrological studies have been completed to date on the property.

There is some low-density residential development ("ranchettes") east and west of Copper King. From about 6 to 11km east of the Copper King project there are 30 to 40 scattered homes. About 1.6km west of the project are about five to eight scattered homes with 15 to 20 homes along Crystal Lake Road 4km west of the mine. The Ferguson Ranch is a working ranch located about 4km northeast of Copper King project.

5.4 Physiography

The Copper King project is located along the southeastern flank of the Laramie Range, a broad north-trending range that is situated at the eastern edge of the Rocky Mountain Province. Elevations within the Laramie Range in the vicinity of the property reach over 2,438m above mean sea level, while the city of Cheyenne, located on the western edge of the Great Plains Province, is at an elevation of 1,859m. Within the Copper King property, elevations range from about 2,073m to 2,225m with generally low to moderate relief. The exception is the northwest portion of the property, which covers a moderate to steep, northwest-facing slope that bottoms at 2,103m elevation in a northeast-flowing intermittent stream drainage. Elevations at the Copper King project, and within the immediate mineral resource area, range from 2,118m to 2,188m. The currently identified mineral resource is exposed at the surface along a west-northwest-trending ridge, and the topography is conducive to open-pit mining methods.

Vegetation is sparse to moderate with sagebrush and prairie grasses on the gentle south- and east-facing slopes and small conifers on the steeper north slopes.

6.0 HISTORY

6.1 Exploration and Mining History

MDA has relied upon published reports of the U. S. Bureau of Mines (Soule, 1955) and the Geological Survey of Wyoming (Hausel, 1989, 1997) for much of the exploration history on the Copper King property.

Numerous federal mining claims were located in the early 1880s when the Silver Crown mining district was established. The Copper King, Climax, and Potomac lodes were located by James Adams in October 1881, and in 1883, these holding were transferred to the Adams Copper Mining and Reduction Company. A shaft was sunk 48m on the Copper King deposit during the early years of mining. A mill and smelter were erected in the valley north of the current Copper King project area but were operated only for a short time. The Copper King mine workings consisted of 31m of crosscuts on the 80ft (24m) level, and 79m of drifts and crosscuts and three large rooms on the 130ft (40m) level. Some ore was shipped, although the total amount of production is unknown (Hausel, 1997). Soule (1955) cited an 1887 newspaper article that had noted that 300 tons (272 tonnes) of ore were on hand for the smelter, although Soule reported that there is no information about whether this ore was ever treated. The shaft is currently flooded, and the workings are too dangerous to enter.

According to Soule (1955), the property was idle in 1885 when it was visited by Samuel Aughey, a geologist for the Territory of Wyoming. It is evident that the claims within the current Copper King project area (Section 36) were allowed to lapse before 1890, when Wyoming attained statehood and assumed ownership of this section.

In 1907, the property was listed as the Arizona mine, and in 1912, the Otego Mining Company was listed as controlling the property (Soule, 1955). During Otego's tenure on the property, 14 samples were collected from the deposit ranging from 0.22 to 2.43% Cu, 2.06 to 14.40g Au/t, and 13.7 to 27.4g Ag/ton (Jamison, 1912b cited in Hausel, 1997). Hausel (1997) reported that the property was worked by the Hecla Mining Company, although the date of Hecla's work was not stated.

In addition to the Copper King shaft, two adits and numerous other small prospect pits are located on the property. One adit is located 457m west of the Copper King shaft (Soule, 1955). The adit extends easterly towards the Copper King shaft, although the extent of the workings or of any mine production is not known. A second, smaller adit is located 53m east of the shaft. The workings were mapped by Hausel and Jones (1982); the map indicates the drift extends 30m towards the Copper King shaft. The age of these workings is not known, although it is expected that they date to the late 1880s or early 1900s.

Since 1930, at least eight pre-Saratoga exploration drilling campaigns have been undertaken on the Copper King property with possible additional drilling by two or three other operators. Known drilling within the eight campaigns totals approximately 11,430m, of which all but 1,085m is from within the immediate Copper King mineral resource area. Third-party reports and maps indicate an additional 467m of drilling on the property, although data on this drilling are limited to such an extent that they are not included in the current database. There are no descriptions of analytical procedures and only limited data on sampling methods. Early on, operators analyzed for gold, silver, and copper, but it was found that little silver existed and later operators analyzed only for gold and copper.

American Smelting and Refining Company ("ASARCO") acquired the property in 1938 and was the first known major company to drill the Copper King property (Soule, 1955). In 1938, they drilled about 427m in five vertical diamond-drill core holes (A-1 through A-5). The first four holes were closely spaced holes located just west of the Copper King shaft, while the fifth hole was drilled about 152m to the north of the shaft. Holes A-1 and A-2 encountered anomalous to significant gold and copper mineralization for the entire length of each hole. Holes A-3 and A-4 were less consistently and less strongly mineralized. Hole A-5, drilled north-northeast of the first four holes, was said to be barren (Soule, 1955), although MDA has seen no assays for this hole. Assays for holes A-1 through A-4 have been published, but those for A-5 were said to be unavailable (Soule, 1955). Although the copper, gold, and silver assays for the first four holes are included in the database used for this report, MDA did not review any original geologic logs or assay certificates and has seen no reports by ASARCO regarding their work.

The Copper King Mining Company ("Copper King Mining") acquired the property in 1952 and applied to the federal government for exploration funding under the Defense Minerals Exploration Administration. Five inclined diamond core holes (C-6 through 10) for a total of 712m were completed by early 1953; the work was partially funded by this government program. While the Copper King Mining drilling was in progress, the U. S. Bureau of Mines ("USBM") became involved and in 1953/1954 surveyed and mapped the property and then drilled three diamond core holes (B-1 through B-3) for a total of 802m. The USBM wanted to test for mineralization to the west and northeast of the known mineralization as well as to test near the center of the known mineralization to a depth of 305m (Soule, 1955). The USBM's drilling indicated that the mineralization has a fairly extensive width and length and continues to a depth of at least 312m (Hausel, 1989).

In 1954, upon the completion of the USBM's drilling, Copper King Mining drilled an additional hole (C-11) to a depth of 90m. Assays for the six Copper King Mining holes are included in the database and have been published (Soule, 1955); again, MDA did not review any original geologic logs or assay certificates and has seen no company reports regarding this work. Copper King Mining's holes C-6 and C-7 drilled anomalous to significant gold and copper mineralization for most of the length of each hole. Hole C-8 had anomalous gold and copper, while holes C-9 through C-11 were only weakly mineralized.

The results of the pre-1955 work are summarized in the USBM Report of Investigation No. 5139 (Soule, 1955). This early work confirmed the large-tonnage potential of the deposit and indicated that the mineralization extends to depths greater than 305m.

There was no further recorded work on the property until 1970, when ASARCO re-optioned the property, conducted soil geochemical sampling and geologic mapping, performed additional diamond drilling, and completed induced polarization ("IP") and aeromagnetic geophysical surveys (Klein, 1974). The 1970 drill program consisted of eight core holes (A-6 through 13) totaling 874m. MDA has not seen a specific report addressing the ASARCO effort, but the work is summarized in later company reports (Nevin, 1973; Mountain Lake Resources, 1997) and the published work of Klein (1974). According to Nevin (1973), ASARCO's IP survey was conducted in 1970 with a Scinctrex IP R-7 receiver with 183m line spacing and 152m dipole spacing. That survey identified a resistivity high, trending northeast over the Copper King deposit.

Henrietta Mines Ltd. ("Henrietta"), a wholly owned subsidiary of Caledonia Resources Ltd., acquired rights to the property in 1972, and a comprehensive exploration program was completed by the spring of 1973. Eleven holes were drilled – two that were pre-collared with a percussion rotary drill rig and completed with diamond core drilling, four entirely diamond core, and five entirely percussion rotary, for a total of 1,148m. Also completed were a control survey, geologic mapping (both deposit- and district-scale), IP and vertical-intensity magnetic geophysical surveys, geochemical soil sampling, re-logging of the historical core holes, preliminary metallurgical studies, and finally a resource/reserve estimate. Henrietta's effort is summarized in an internal report (Nevin, 1973) that is now part of the public domain. Descriptions of Henrietta's geophysical surveys were published by Klein (1974), from which the following descriptions are taken.

The vertical-intensity ground magnetometer survey covered Sections 35 and 36 as well as the S/2 Sections 25 and 26. Lines were on 244m spacing, with stations every 61m. A detailed survey over the immediate Copper King mine area had lines on 61m spacing with stations every 61m. A Jalander vertical-intensity fluxgate magnetometer was used. Positive magnetic anomalies roughly 900 gammas above readings over the colluvial gravel reflect the high magnetite content of the Precambrian shear zones. Three positive anomalies were identified:

1. A very high, northwest-trending anomaly about 244m wide and 457m long over the Copper King mine reflecting a mapped shear zone;
2. A similar, very high anomaly about 305m wide and 610m long on trend with and about 1,372m southeast of #1 that apparently reflects the eastward extension of the same shear zone covered with soil and gravel; and
3. An elongate anomaly corresponding approximately to a northeast-southwest-trending shear zone in the eastern portion of Section 35.

Another anomaly 610m east of #1 appears to be unrelated to alteration or mineralization, based on outcrop (Nevin, 1973). Klein (1974) noted that magnetic highs do not necessarily reflect sulfides.

McPhar Geophysics, Inc. conducted an IP and resistivity survey for Henrietta over Copper King in November 1972, using the frequency-domain method with dipole-dipole electrode configuration. Dipole spacing was 61m on seven lines with about 91m to 244m separation between lines: five lines trending north-south and two very closely spaced lines trending generally east-west over the well-mineralized area. Readings were taken out to n 7. Results were reported in metal factor ("M.F.") and percent frequency effect ("f.e."). The following anomalies were identified:

1. A definite M.F. anomaly near the area of known mineralization;
2. A strong M.F. and a weak to moderate f.e. anomaly southwest of the area of known mineralization that is estimated to reflect a deep (perhaps 137-305m) source; and
3. Several shallow, narrower anomalies to the northeast.

According to Nevin (1973), the IP surveys run both by ASARCO and Henrietta showed that the Copper King mineralization does not respond well to IP, though Klein (1974) states that both vertical intensity magnetometer and the IP methods appear to be applicable in the Silver Crown district.

Henrietta took 44 samples on 305m and 610m centers in a soil geochemical sampling study, analyzing all samples for copper and arsenic and some for gold, zinc, mercury, and silver (Nevin, 1973). Gold values appeared to be indicative of mineralization.

Henrietta drilled seven rotary holes (P-1 through P-7) for a total of 482m and six diamond drill core holes (H-1 through H-6) for a total of 666m on the property. Two of the rotary holes (P-3 and P-4) were completed as core holes (H-5 and H-6). Hole H-3 re-entered and re-drilled a 1970-era ASARCO hole A-12. Nevin (1973) reported that the best hole drilled to that time was H-1, an angle hole that averaged 2.30g Au/ton and 0.506% Cu over a length of 130m.

At some point between 1973 and 1987, Henrietta's interest in the property was folded into Wyoming Gold, Inc., a Wyoming corporation jointly owned by Caledonia Resources Ltd. (Henrietta's parent company) and William C. Kirkwood of Casper, Wyoming (Anon., 1989). During this same period of time, John Nelson of Kirkwood Oil and Gas calculated mineable reserves for Copper King (Johnson, 1986, 1987). MDA has seen no specific information about Nelson's assumptions or calculations, other than the final results shown on Table 6.2. Based on the four references to W. C. Kirkwood's involvement in the property (Anon., 1989; Kirkwood, (undated); Johnson, 1986, 1987) and subsequent reports, it does not appear that Kirkwood independently conducted any drilling at Copper King, although MDA cannot verify that fact. However, Kirkwood Oil and Gas did collect 228 geochemical samples in Sections 35 and 36 on a 152m grid, assaying for copper, silver, and gold in 1982. In 1980, Colorado School of Mines Research Institute conducted some metallurgical work on the property; no additional details of this work are known.

There is an unidentified drill hole shown as BL-L1 on a Wyoming Gold map dated December 1987 for which MDA could find no reference. It is not obvious when or by whom this hole was drilled, and no reference to a hole with this designation was made in any of the references available to MDA.

In 1987, Caledonia Resources Ltd. ("Caledonia") drilled 25 percussion rotary holes (CK87- series in the database; K- series or 87- series on some maps) for a total of 3,042m. The current project database contains the basic drill information (location, orientation, and composite footage assay grades), although a project report summarizing this drill campaign was not available to MDA. Johnson (1987) reported that Caledonia's drilling apparently was designed to prove reserves indicated by prior drilling rather than to expand reserves. According to Hausel (1989), Caledonia's work indicated a minimum strike length of 183-213m and width of 91m for the mineralization. The Caledonia work was mentioned briefly in the Wyoming State Geological Survey Bulletin 70 (Hausel, 1997); the information source was stated as a 1987 press release. The Wyoming Bulletin indicates that Caledonia completed a preliminary resource estimate, and Johnson (1987) opined that Caledonia's drilling had verified the reserves calculated by John Nelson of Kirkwood Oil and Gas within acceptable limits. In addition, Caledonia commissioned a three-sample preliminary metallurgical study (Pacic, 1987).

Tenneco Minerals Company apparently examined the property in 1988 and calculated reserves, which are included in Table 6.2 (Shrake, 1988). It is not evident from this single report that Tenneco ever conducted any further exploration at Copper King.

FMC Gold Company ("FMC") (Kappes, Cassiday & Associates, 1989) and Royal Gold, Inc. ("Royal Gold") (Hazen Research, Inc., 1989) each commissioned metallurgical studies that were completed in 1989. Both reports allude to exploration campaigns that are not included within the current project database, nor discussed, until this report, in the Copper King project's exploration history. It is likely that exploration work by FMC and Royal Gold was not extensive (personal communication, Norm Burmeister, 2006).

The FMC study was completed by Kappes, Cassiday & Associates ("KCA") in January 1989. The report mentions an initial test on a mine dump sample collected in 1986. A second round of tests was conducted on another mine dump sample collected in 1987 and also on four drill-chip composite samples. It has not been fully determined whether these drill-chip composite samples were from a new FMC drilling campaign or whether the 1987 Caledonia drilling supplied the material. The current lessee (Saratoga) believes that the Caledonia drilling was the source of the material used for the FMC work. There is also the question of whether FMC did any work on the ground (geochemical sampling, drilling, *etc*.) in 1986.

In February 1989, Royal Gold entered into an option agreement to acquire Wyoming Gold, Inc. Royal Gold commissioned a metallurgical study that was completed by Hazen Research in June 1989 (Hazen Research, Inc., 1989); tests were performed on drill-cutting composite samples from 1987 and 1989 drilling campaigns. There is no evidence in the available reports of any 1989 drilling by Royal Gold except in the Hazen report, which was dated June 1989. This is the same date as a Royal Gold June 1989 report that did not mention any drilling. It appears that the 1987 samples were from the Caledonia drilling. It is stated in the Hazen report that "*Six composite samples from the 1987 drilling…were provided Hazen by the client from Kappes Cassidy* [sic] *in Reno where some earlier testing was performed*." This indicates that Hazen possibly tested the same material as in the FMC study, which raises the same questions as the FMC study, namely whether the 1987 drill composites were taken from the Caledonia holes, or possibly from an unknown FMC drill program. There is also the possibility of a third 1987 drill program that was managed by Royal Gold and on which KCA conducted some initial testing, though there is no evidence for this scenario at this time. The Hazen testing on the 1989 drilling apparently refers to a unique drill program conducted by Royal Gold in early 1989, since the Hazen report indicates tests were performed on "drill holes 89-1 and 89-2, from the 1989 drilling campaign." It is not known whether Royal Gold drilled additional holes, but the language in the report implies that these were not the only holes in the "drilling campaign." There is no information on the location of any of these holes in the current data package, although there are assay values reported for 154m of drilling in holes 89-1 and 89-2 in the Hazen report (Hazen Research, Inc., 1989). A tabulation of drilling as of 1997 (Mountain Lake Resources Inc., 1997) does not show any holes drilled by FMC or Royal Gold. Other than commissioning the metallurgical study by Hazen Research, confirming reserve calculations, and formulating several preliminary mine plans (Anon., 1989), there is no evidence known to MDA of any further work on the property by Royal Gold.

Compass Minerals, Ltd. ("Compass") acquired the property in 1993 and in 1994 conducted an aeromagnetic survey over the eastern front of the Laramie Range, extending from near Lodgepole Creek on the north to Goose Creek on the south. According to Gilmer and Bell (1997), Phearson, deRidder & Johnson, Inc. performed the survey for Compass with flight lines at a nominal altitude of 91m above ground level, north-south lines spaced 201m apart, and east-west lines spaced 402m apart. MDA has not reviewed the original results from Phearson, deRidder & Johnson but has seen a copy of their total magnetic intensity map at 1:24000 scale reproduced in Gilmer and Bell's report (1997). A magnetic high is located just to the west-northwest of the Copper King mine, and another is located to the southeast in the SE/4 of Section 36.

Compass drilled 21 reverse circulation ("RC") rotary holes and five diamond core holes for a total of 2,890m (CCK- series). Two metallurgical studies were also conducted (Metallurgy International, 1994, 1996). Compass did not create a project report detailing this work but commissioned MDA to provide a preliminary resource study on the Copper King project using the then-new Compass drill and metallurgy data and available historical data (Ristorcelli, *et. al.*, 1995). The pre-NI 43-101 resource calculation was followed by an "ore reserve," optimized using Whittle 4D software. No additional drilling or field work was conducted, but Compass commissioned a second metallurgical study in 1996 (Metallurgy International, 1996).

On a drill-hole location map produced by Compass and dated December 1994, but on no prior maps of drill holes, there is a penciled-in drill hole labeled "core hole N-1" with a total depth indicated of 313m. MDA is unaware of who drilled that hole or of any information about it.

Mountain Lake Resources ("Mountain Lake") commissioned a ground magnetometer and VLF-EM geophysical survey and drilled eight RC holes (MLR-1 through 6 and MLRM-1 and 2) for a total of 1,445m in 1997. The main purpose of the geophysical survey was to further study magnetic anomalies identified at Copper King by prior surveys of Henrietta and Compass (Gilmer and Bell, 1997). In addition, the VLF-EM survey was intended to seek higher-grade vein deposits in the Copper King area, similar to those at the Comstock mine to the north (Gilmer and Bell, 1997). The ground magnetometer survey was conducted in March 1997, on a grid with lines oriented N33°E and N57°W with a 61m line spacing on the northeast-trending lines. Two GEM Systems GSM-19 magnetometers were used for the survey, with one as a base station logging readings every four seconds. Station spacings were every 0.6 to 3m as the magnetometer was used in "walking mag" mode (Gilmer and Bell, 1997). Diurnal variations were removed by software. The VLF-EM survey was conducted with an IRIS T-VLF unit on six lines with station spacing of 5 or 10m. Gilmer and Bell (1997) interpreted both the Compass aeromagnetic survey and the ground magnetometer and VLF-EM survey of Mountain Lake. They identified four major magnetic anomalies: the relatively deep (top at 37-61m) "Fish" anomaly in the SE/4 Section 36, the CKM anomaly located over the Copper King mine, several anomalies in LL Valley in the SE/4 Section 35, and the "Red Zone" in the NW/4 of Section 36.

Mountain Lake drilled eight RC holes for a total of 1,444m into the Copper King deposit and three nearby magnetic anomalies. Three of the holes (MLR-5, MLRM-1, MLRM-2) totaling 445m were drilled into the Copper King mineralized area. Of these, the two MLRM- holes were drilled as metallurgical test holes. The remaining five holes (MLR-1 through 4 and 6) were drilled in magnetic anomalies west, southwest, and southeast of the Copper King mine. MLR-1 through MLR-3 were drilled in the "Fish" anomaly southeast of the Copper King mine; assays returned only very weakly anomalous gold values with a high of 116 ppb Au over a single 1.5m sample interval. MLR-4 was drilled into the "LL Valley" anomaly southwest of the Copper King mine and encountered 5m assaying 0.48g Au/t and 1.50% Cu at a drill depth of 239m (a true depth of less than 183m due to the -45° drill angle). MLR-6 was drilled into the "Red Zone" anomaly west of the mine and encountered 3m of 1.89g Au/t and 0.43% Cu at a drill depth of 38m. During review of the Mountain Lake data package, MDA located spreadsheets of assays from Barringer Laboratories for the Mountain Lake drill holes and entered them into the database. The data package also included spreadsheets of check assays for sporadic mineralized intervals from Compass's drill holes, and these were also entered into the database. However, MDA cannot verify the accuracy of these assays because original assay certificates were not available.

Mountain Lake also commissioned a metallurgical study by the Colorado Minerals Research Institute (1998) that is discussed in Section 13.0.

In addition to the exploration just described, MDA found evidence suggesting that two or three other operators may have conducted at least some drilling at Copper King. A drill hole labeled BL-L1 is shown on pre-1988 maps lying north-northwest of hole CCK-20, but MDA found no evidence of who drilled this hole or when. Royal Gold may have drilled two holes in 1989, according to a metallurgy report by Hazen Research, Inc. (1989) that examined samples from these holes and included assays for each hole; MDA found no location information for either hole and no verification that they were, in fact, drilled by Royal

Gold. Finally a map produced during Compass's tenure on the property indicates a core hole labeled N-1 south-southeast of hole CK87-14, but MDA could not verify who drilled this hole or when.

The above discussion indicates that the historical data package currently available to MDA is likely not inclusive of all work conducted on the Copper King property. There could be other data pertaining to the project that could be materially significant; however, MDA does not know how that data might be obtained.

Saratoga acquired the property in 2006. Data compilation and MDA's original Copper King technical report prepared for Saratoga (MDA, 2006) were completed the first year. A diamond core drill program was begun in March 2007, and 27 core holes were completed by late August 2007. Core drilling in 2007 totaled 5,577m. The focus of Saratoga's work was to confirm and potentially expand the mineralized body outlined in the previous drill campaigns and to provide material for further metallurgical testing. MDA completed an updated technical report (Tietz and Ristorcelli, 2007) based on drill data received through October 31, 2007. This included gold assays and a geochemical suite of 33 other elements, including copper, for only the first 13 drill holes (WG07-01 through WG07-13).

A second phase of diamond core drilling was conducted by Saratoga in 2008. Eight core holes were completed between April and July 2008 totaling 2,185m. The 2008 focus was to test the mineralization along the periphery of the deposit and also provide material for future geotechnical (pit slope) studies.

Saratoga's drilling is described in Section 10.2. The more significant mineral intercepts encountered in the 2007 and 2008 drilling are listed in Table 6.1.

Table 6.1 Copper King 2007-2008 Significant Drill Intercepts

HoleID	From (m)	To (m)	Length (m)	Au (g Au/t)	Cu (%)
WG07-01	3.0	107.0	104.0	2.37	0.488
includes	3.0	48.2	45.2	4.34	0.818
WG07-02	6.1	175.0	168.9	1.00	0.280
includes	28.3	50.9	22.6	2.70	0.532
WG07-03	3.0	284.0	281.0	0.68	0.206
WG07-04	15.2	225.5	210.3	0.52	0.197
WG07-08	148.0	271.0	123.0	0.50	0.219
WG07-09	0.0	217.0	217.0	1.25	0.310
includes	50.3	146.3	96.0	2.09	0.451
WG07-10	4.6	183.0	178.4	0.72	0.205
WG07-13	95.0	248.0	153.0	0.78	0.207
WG07-14	106.0	244.0	138.0	1.01	0.233
WG07-15	71.5	242.5	171.0	0.79	0.202
WG07-16	104.5	211.0	106.5	0.77	0.160
WG07-19	0.0	134.5	134.5	0.58	0.148
WG07-22	9.5	120.5	111.0	0.53	0.233
WG07-24	87.5	263.0	175.5	0.41	0.217
WG08-01	125.0	233.0	108.0	0.52	0.232
WG08-03	59.0	284.0	225.0	0.63	0.201
WG08-04	36.5	132.5	96.0	0.53	0.129
WG08-07	33.5	243.5	210.0	0.52	0.251
WG08-08	11.0	119.0	108.0	0.52	0.262

Strathmore (subsequently purchased by Energy Fuels) acquired all of the issued and outstanding shares of Saratoga on May 11, 2012, but conducted no exploration at Copper King.

U.S. Gold acquired the property from Energy Fuels in 2016 and has conducted no exploration to date.

6.2 Historical Resource Estimates

At least seven historical mineral resource/reserve estimates have been calculated for the Copper King property (Table 6.2). The reader is cautioned that these historical resource estimates were made prior to the implementation of NI 43-101 reporting requirements, do not conform to those requirements, and should not be relied on as being indicative of a resource or a reserve with demonstrated economic viability. For the current report, MDA has made no modifications to terminology or calculations to data reported from historical work to bring them into compliance with current 43-101 regulations. Terminology used is as reported by the original author. However, as previously noted, MDA has converted originally reported Imperial units to metric.

This information is presented for historical information only and in the interest of full disclosure. A qualified person has not done sufficient work to classify these historical estimates as current mineral resources or mineral reserves, and U.S. Gold is not treating the historical estimates as current mineral resources or reserves. The mineral resource estimate described in Section 14.0 supersedes all historical estimates described below.

Table 6.2 Historical Resource Estimates

Company	Year	Tonnes (000's)	Au Grade (g Au/t)	Cu Grade (%)	Resource/Reserve Classification*
Henrietta Mines	1973	31,745	0.75	0.21	Total resource estimate
Henrietta Mines	1973	12,245	0.96	0.26	Total mineable reserve within 168m pit
Kirkwood Oil and Gas	post-1973, pre-1987	Approx. 3,628	1.85	NA	Mineable reserve
Caledonia Resources	1987	4,082	1.51	NA	Preliminary resource estimate
Tenneco Minerals	1988	1,270	1.82	0.42	Estimated reserve of mixed plus oxide ores
Tenneco Minerals	1988	3,175	1.61	0.38	Estimated reserve of oxide, mixed, sulfide ores in total
Royal Gold	1989	6,803	1.61 g AuEq		Estimated geologic resource
Royal Gold	1989	3,174 - 5,714	1.44 – 1.234	0.32 – 0.28	Estimated mineable reserves
Compass	1995	41,994	0.651	0.17	"Measured and Indicated" global resource (0.34g Au/t cutoff)
Compass	1995	13,605	0.926	0.23	"Proven and Probable" mineable reserve (0.514g Au/t cutoff)
Mountain Lake Resources	1997	8,753	1.371	0.3	Total resource (0.69g Au/t cutoff)

* The resource and reserve classifications noted are taken directly from the original reports and do not meet 43-101 criteria. It is likely that these classifications would be downgraded in today's stricter reporting climate.

The apparent large range of tonnes and grades of these historical estimates is likely due to varying metal and cutoff grades and terminology definitions.

Henrietta (Nevin, 1973) completed the initial gold/copper resource estimate at Copper King in the spring of 1973, based on the results from 33 drill holes (11 Henrietta holes and all previous drilling). The total global resource, at 0.27g Au/t and 0.09% Cu cut-off grades, was 32 million tonnes averaging 0.75g Au/t and 0.21 % Cu. An "ore reserve" calculated using a $90 per ounce gold price and a $0.6 per pound copper price resulted in 12.2 million tonnes averaging 0.96g Au/t and 0.26% Cu. The recovery values used to determine the "reserve" were not specifically stated in the report, although preliminary metallurgical work discussed elsewhere in the report indicated that flotation testing on one 68kg sample resulted in 93% recovery for Cu and 72.5% recovery for gold. The "reserve", which included mineable material classified as "proven, drill-indicated, probable and possible," was enclosed within a 168m-deep pit that carried a 1.8 waste to ore stripping ratio. Nevin (1973) states that the only difference between "proven" and "drill-indicated" is that "proven" "ore" was established from Henrietta holes whereas "drill-indicated" was based on previous holes. Removing the "possible" material results in a "proven/probable reserve" of 6.0 million tonnes averaging 1.34g Au/t and 0.31% Cu.

After Henrietta had completed their drill program in 1973 but prior to further drilling, John Nelson of Kirkwood Oil and Gas calculated "mineable drilled reserves" of approximately 3,628,000 tonnes with a grade of 1.85g Au/t (Johnson, 1986, 1987). A weighted average grade of copper was not calculated. The "reserve" was based on data from all prior core and rotary drill holes (Johnson, 1986), but no further details are known to MDA about Nelson's calculations.

A "preliminary resource estimate" that was reported in a press release by Caledonia in 1987 was 4.1 million tonnes averaging 1.51g Au/t (Hausel, 1997). There is no other information or supporting data for this estimate. Although MDA did review a brief report on reserve calculations and preliminary mine design done for Caledonia by Gemcom (Clarke, 1987), the copy of the report provided to MDA did not contain all the tables, and it was not possible to confirm the "preliminary resource estimate" cited from the press release.

In 1988 while considering a purchase of the property, Tenneco Minerals made two sectional "reserve" calculations using a planimeter (Shrake, 1988). The first, using a pit depth of 46m, was based only on mixed plus oxide ores, but because the contacts between oxide-mixed and mixed-sulfide mineralization were poorly understood and rarely mapped in the drill logs, the" reserve" was considered a "best guess" (Shrake, 1988). In this estimate, a cutoff of 0.69g Au/t was used resulting in a strip ratio of 0.7. The estimated "reserve" of oxide plus mixed ore was 1,300,000 tonnes averaging 1.82g Au/t and 0.42% copper. The second calculation estimated "mineable reserves" of all three types of mineralization – oxide, mixed, and sulfide – and was based on a 152m-deep pit. Because the RC angle holes had not been assayed for copper, a weighted average copper grade was estimated. In this estimate, a cutoff of 0.86g Au/t was used and a strip ratio of 2.5. The estimated total "mineable reserve" was 3,200,000 tonnes averaging 1.61g Au/t and 0.38% copper.

While Royal Gold had an option agreement to acquire Copper King, they also calculated a "geologic resource" as well as various estimates of "mineable reserves" for the property and evaluated the feasibility of mining the deposit (Anon., 1989). The estimates of "reserves" are based on all drilling through that of Caledonia and are shown on Table 6.2. The "geologic resource" is mentioned in their report but without any supporting calculations or assumptions (Anon., 1989). For the range of estimated "mineable reserves" used in evaluating the economics of open-pit mine designs, Royal Gold assumed a gold price of $400 per ounce and a copper price of $1.20 per pound. They used preliminary results of metallurgical testing by Hazen Research that indicated 25% copper recovery and 65% gold recovery from oxide ore and 85% copper recovery and 80% gold recovery from sulfide ore using a conventional flotation process (Anon., 1989).

MDA (Ristorcelli *et al.*, 1995) completed a resource estimate and pit optimizations for Compass in 1995 after completion of Compass's 26-hole drill program; MDA used available drill data except for the 25 Caledonia holes drilled in 1987 due to the uncertainty of Caledonia's drill-hole locations. The eight holes subsequently drilled by Mountain Lake, three of which were located in the resource area, were not included in MDA's resource estimate. The following discussion is taken from MDA's 1995 report for Compass (Ristorcelli *et al.*, 1995).

The "measured and indicated global resource" was estimated at 42.0 million tonnes averaging 0.65g Au/t and 0.16% Cu. The pit optimizations using Whittle 4D software returned a 0.51g Au/ton grade cut-off and a $384/oz gold price, resulted in a "proven/probable mineable reserve" of 14 million tonnes averaging 0.93g Au/t and 0.23% Cu. The 1995 report states that the lack of data verification and support detracts from the confidence in the resource estimate, but the numerous exploration campaigns, each of which verifies the others in general tenor of grade and distribution, suggests that the resource is moderately well established.

Specific gravity test work completed by Compass included six samples from each of the oxide, mixed, and sulfide zones. The mean of each zone was 2.784, 2.658, and 2.687g/cm^3. Because there was little disparity in densities in the three zones and little variance within each group and since only one rock type is found in the mineralized area, a single specific gravity of 2.7g/cm^3 was used for all the material in MDA's block model.

The grade model was drawn on section, digitized into SURPAC mining software, sliced onto 6m benches, proofed, edited, and re-digitized. These zones were used for statistical and geostatistical analysis and for grade estimation using ordinary Kriging. Statistics were run on the composited database by zone (Table 6.3), where zone 1 is the low-grade disseminated and stockwork mineralization and zone 2 is the high-grade silicified shear mineralization. There does not appear to be any leaching of copper from the oxidized zone (Table 6.4).

The final estimate is shown in Table 6.5. Categories for resources were based on the Australasian system of classification, but Measured and Indicated were not separated for that study and therefore cannot be separated for this report. The historical estimates were presented at multiple cutoffs, all of which were gold-only cutoffs. Ristorcelli *et al.* (1995) recommended that follow-up work should include check assay data, additional metallurgical and specific gravity test work, sample integrity studies, surveying drill holes and topography, completing background research, and obtaining the underground data.

Table 6.3 Composite Statistics by Zone, Copper King Deposit
(From Ristorcelli *et al.*, 1995)

Zone 1 – Low-grade zone					
Metal	Number	Max	Mean	St. Dev.	CV[1]
Copper2 (%)	678	1.140	0.20	0.100	0.52
Gold (g/t)	678	7.920[3]	0.651	0.480	0.72
Zone 2 – High-grade zone					
Metal	Number	Max	Mean	St. Dev.	CV[1]
Copper2 (%)	205	1.520	0.460	0.210	0.46
Gold (g/t)	205	8.057	2.537	1.406	0.56

[1] CV = Coefficient of Variation = Standard Deviation/Mean
[2] Total Copper
[3] Isolated sample later cut to 1.71g Au/t

Table 6.4 Composite Grade by Zone, Copper King Deposit
(From Ristorcelli *et al.*, 1995)

Material	Oxide	Sulfide
Low Grade Cu[1]	0.16%	0.21%
High Grade Cu[1]	0.52%	0.44%
Low Grade Au	0.549g Au/t	0.720g Au/t
High Grade Au	3.017g Au/t	2.331g Au/t

[1] Total Copper

Table 6.5 Total Resource, Copper King Deposit
(From Ristorcelli *et al.*, 1995)

Total Resource					
Cutoff (g Au/t)	Tonnes	Au Grade (g/t)	Total Ounces	Cu Grade (%)	Total Pounds
0.343	41,985,892	0.651	866,179	0.17	153,008,151
0.514	23,279,477	0.823	618,685	0.19	98,030,157
0.686	12,998,072	1.029	425,980	0.22	63,548,240
0.857	6,942,139	1.234	279,088	0.27	40,756,750
1.029	3,271,667	1.611	170,055	0.33	23,801,705
1.714	910,287	2.777	81,338	0.47	9,513,546
3.429	220,854	4.251	30,089	0.62	2,966,802

MDA (Ristorcelli *et al.*, 1995) concluded in 1995 that "*The potential to expand the resource is moderate. The high-grade core is well-defined and closed off. The low-grade envelope however is open-ended to the northwest albeit at narrower widths. There is the possibility of discovering additional high-grade zones but this will entail stepping out from known mineralization along trend or infill drilling the low-grade envelope as presently defined.*"

MDA used Whittle 4D to optimize open pits for three different cases. The optimization results at a 0.51g Au/t grade cutoff are listed below (Table 6.6) and are based on the pit generated for a gold price of $384 per ounce. The $384 pit was chosen for comparison because there is a significant change in tonnes between the $375/oz pit and the $384/oz pit. The total cash flow for the $384/oz pit is:

Case 1 $48,868,200

Case 2 $55,619,500

Case 3 $59,811,200

The above-described work demonstrates a "reasonable prospect of economic extraction."

Table 6.6 Mineralized Material within the Whittle 4D Optimized Pit, Copper King Deposit
(From Ristorcelli *et al.*, 1995; material was not and is not classified)

	Oxide			Sulfide			Ounces	Tonnes Waste
Case	Tonnes 000's	g Au/t	% Cu	Tonnes 000's	g Au/t	% Cu	AuEq	000's
1	2,660.0	1.029	0.22	11,030.9	0.891	0.23	590,864	17,034.2
2	2,660.0	1.029	0.22	11,688.1	0.891	0.23	613,013	18,609.6
3	2,660.0	1.029	0.22	11,034.7	0.891	0.23	637,608	17,695.5

Mountain Lake completed a mineral resource estimate in 1997 after completion of their eight-hole drill program and additional metallurgical work (Mountain Lake Resources, 1997). Only three of the eight Mountain Lake holes were drilled in the resource area. This resource calculated by Mountain Lake also included the Caledonia Resources 1987 drill holes that were not included in the MDA resource calculations because of uncertainty about their locations at that time. The Mountain Lake estimate was a polygonal resource calculated from 2.54cm = 15.2m cross-sections. The polygons were created for two grade groups: 0.69 to 1.68g Au/t and +1.71g Au/t. For each cross-section, the weighted average grade of all samples (for each of the grade groups) was used to assign grades to individual polygons. Mountain Lake used "proven," "probable," and "possible" to classify the resource, terms that appear to loosely correlate with the currently accepted "measured," "indicated," and "inferred" nomenclature, but did not mention any economic considerations. The Mountain Lake total ("proven/probable/possible") "resource" was 8.75 million tonnes averaging 1.37g Au/t and 0.3% Cu, using a 0.69g Au/t cutoff (it is not stated if this is a gold only or a gold equivalent cutoff, but it is assumed to be a gold-only cutoff). Under their "proven/probable" category, the "resource" was 6.21 million tonnes averaging 1.47g Au/t and 0.31% Cu, again with a 0.69g Au/t cutoff. The author does note that the differences in grade and tons from the 1995 MDA estimate of "in-pit mineable material" could be explained by the differences in methodology used; *i.e.*, the polygonal method, which often yields higher-grade estimates, and using a higher cutoff of 0.69g Au/t for defining the "mineralized" polygons.

7.0 GEOLOGIC SETTING AND MINERALIZATION

7.1 Geologic Setting

7.1.1 Regional Geology

The following discussion of regional geology is taken from Hausel (1989 and 1997) and Klein (1974).

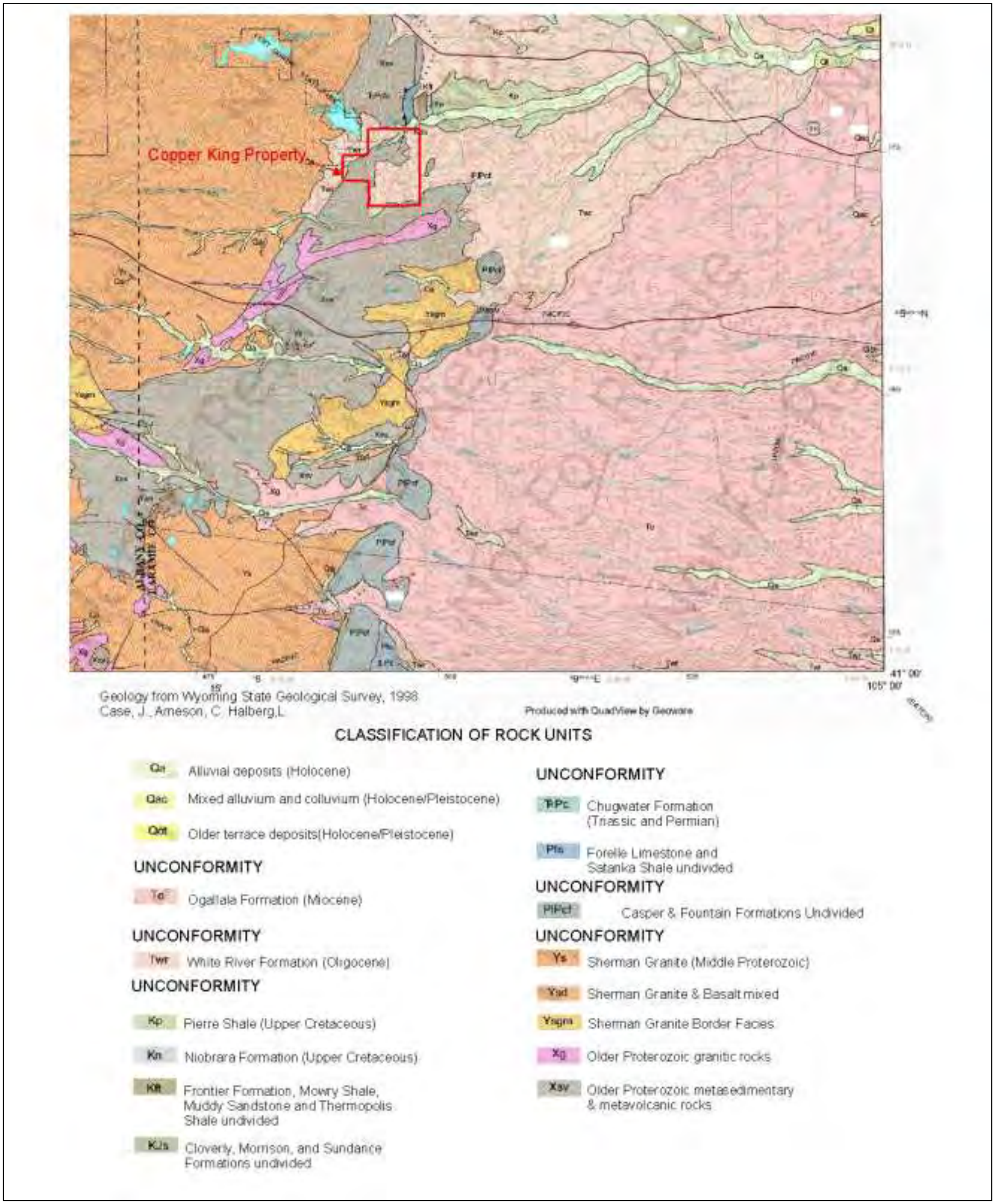
The Copper King project and the surrounding Silver Crown mining district are situated within the southeastern foothills of the Laramie Range along the eastern edge of the Rocky Mountain Province (Figure 7.1). The Laramie Range forms an elongate, 200km-long, north-south anticlinal uplift cored by Precambrian rocks and flanked by upwarped Phanerozoic sedimentary rocks. The Precambrian rocks can be divided into a northern Archean terrane (Wyoming Province) and a southern Proterozoic terrane (Colorado Province). These terranes meet near the center of the Laramie Range, where a 906-square kilometer anorthosite batholith, dated at 1.42-1.53 billion years old ("Ga"), intrudes the projected trend of the Mullen Creek-Nash Fork shear zone (Hausel, 1997).

The Archean rocks of the Wyoming Province include gneiss, migmatite, granite, and supracrustal successions of metasedimentary and metavolcanic rocks. The gneiss and migmatites have been dated at about 2.9 to 3.0 Ga (Johnson and Hills, 1976), while the granites typically date between 2.54 and 2.65 Ga. Copper and associated base-metal mineralization within the Wyoming Province are primarily found within pendants of metasedimentary and metavolcanic rocks.

The Colorado Province, which contains the Silver Crown mining district, consists of Proterozoic amphibolite-grade mafic to intermediate metavolcanic and associated metasedimentary rocks that are about 1.8 Ga (Peterman and others, 1968). These rocks are intruded by 1.39 to 1.42 Ga granite, which includes the Sherman Granite and related felsic phases (Peterman and others, 1968). Steeply dipping and/or faulted Paleozoic and younger sedimentary rocks flank the eastern edge of the Precambrian rocks. Sub-horizontal Tertiary sedimentary deposits overlie the older sedimentary rocks and overlap the Precambrian core.

The Silver Crown mining district is located in a belt of northeast-trending, foliated, intermediate-composition igneous rocks of Precambrian age which forms the eastern border of the Sherman Granite. The dominant rock type is a foliated granodiorite that exhibits significant potassium enrichment in close proximity to the Sherman Granite. Outcrops of older metasedimentary rocks, primarily quartzite and quartz-biotite schist, and amphibolitized mafic rocks, are located along the east side of the district, while an isolated area of younger hybrid felsic rocks occurs in gradational contact with the granodiorite 0.8km to the west of the Copper King mine. Aplitic quartz monzonite dikes ranging in width from about a meter to 9m occur throughout the mining district, and there is some potassium enrichment of the granodiorite country rock along the often-gradational contact with the younger aplitic dikes. Pegmatites ranging from a few feet to 9m in width are found throughout the district and cut all Precambrian rock types. Paleozoic and Mesozoic sedimentary rocks are in fault contact with the Precambrian rocks along the eastern border of the district. Tertiary arkosic sedimentary rocks blanket a large portion of the area. The generalized geologic map of Figure 7.1 shows the general relationship of Proterozoic metasedimentary and metavolcanic rocks with the Sherman Granite on the eastern flank of the Laramie Range but does not display the extent of igneous rocks present in the Copper King area. Figure 7.2 shows the geology of the project area in detail.

Figure 7.1 Regional Geology of the Copper King Area



Precambrian-age shear zone tectonites occur in elongate, fairly continuous outcrops that range up to 120m in width and approximately 1,200m in length. The tectonites post-date almost all Precambrian rocks, although some pegmatites were apparently intruded post-tectonically. The shear zones are often expressed as topographic highs due to the greater resistance of the annealed zones. Outcrop characteristics vary with respect to the parent types. Aplitic quartz monzonite and pegmatites are sheared to a fine crystalline rock, while an intensely foliated mylonitic gneissic rock is produced from shearing of the foliated granodiorite and hybrid felsic rocks. Quartz veinlets and epidote are commonly present parallel to the cataclastic foliation. Fractures are often coated with hematite, manganese oxides, and, less often, copper carbonates (Klein, 1974).

The major structural trend in the northern two-thirds of the Silver Crown mining district is generally N25°E, which parallels the northeast trend of the Sherman Granite boundary and the gneissic foliations observed in the granodiorite (Klein, 1974). The southern one-third of the district, in which the Copper King property is located, is characterized by shear zone cataclastic foliation that trends between N60°E and N80°W. Klein (1974) states that the cataclastic foliations may be a direct result of the intrusion of the Sherman Granite or slightly later Precambrian stresses and dislocation deformation along trends of existing gneissic foliation.

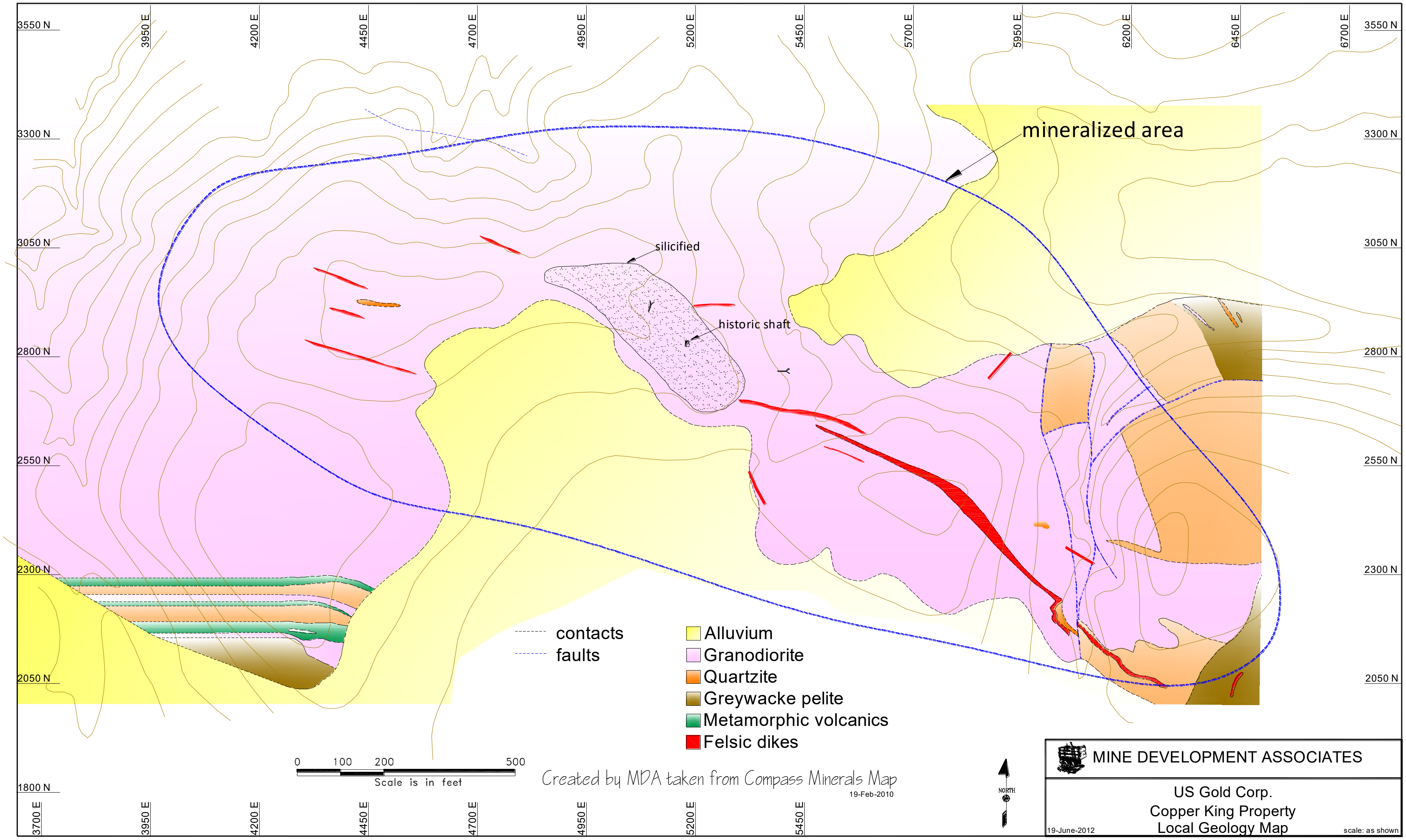
7.1.2 Property Geology

Much of the following description is taken from Klein (1974) and Hausel (1997).

Intermediate-composition metavolcanic and associated volcanogenic metasedimentary rocks, thought to be 1.6 to 1.9 Ga, form the basement at the Copper King mine. About 0.8 to 1.6km east of the mine along the northern boundary of Section 36 are outcrops of fine-grained, distinctly to poorly foliated quartz-biotite schist and fine- to medium-grained massive quartzite as well as rhyolite, diabase, and finely laminated epidote hornfels. They were intruded by calc-alkaline granodiorite and quartz monzonite intrusions, which host the gold-copper mineralization at Copper King (Figure 7.2). The granodiorite is fine- to coarse-grained and generally equigranular to slightly porphyritic. It grades from unfoliated to gneissic. Much of the granodiorite exhibits potassium enrichment, particularly near contacts with aplitic quartz monzonite. Weakly porphyritic, distinctively pink aplitic quartz monzonite dikes cut all crystalline rocks and can be up to about 9m wide and 244m long. Where they intrude foliated granodiorite, there are contact zones of potassium enrichment up to 12m wide. Post-mineralization pegmatite and aplite veins are also present. Contacts between the schist or quartzite and the foliated granodiorite, pegmatite, and quartz monzonite are sharp. The entire volcanogenic suite was extensively intruded by the Sherman Granite a few kilometers west of Copper King about 1.4 Ga. According to Hausel (1997), the Copper King stock may have been emplaced at about this time. During or after emplacement of the Sherman Granite, extensive shearing produced mylonitic shear zones with generally a N60°E to N80°W trend in the vicinity of the Copper King mine. The Copper King mineralization is controlled by a N60ºW-trending shear zone.

Although the foliated granodiorite was metamorphosed to amphibolite grade, regional retrograde metamorphism resulted in greenschist alteration throughout the Silver Crown district. Later hydrothermal alteration in the form of propylitic and potassic alteration overprinted the greenschist metamorphism. The hydrothermal alteration is associated with sulfides in the district (Hausel, 1997).

Figure 7.2 Geology of the Copper King Mine Area



7.2 Mineralization

According to Hausel (1997), the Copper King deposit is a large-tonnage, low-grade, Proterozoic porphyry gold-copper deposit disseminated in Proterozoic quartz monzonite and foliated granodiorite. This interpretation differs from an earlier one by Klein (1974) that Copper King is a structurally controlled base-precious metal deposit in silicified portions of a Precambrian shear zone in granodiorite. According to Soule (1955), most of the primary gold-copper mineralization is in relatively fine-grained, equigranular gneiss (foliated granodiorite) composed of quartz, orthoclase, microcline, oligoclase, biotite, and hornblende with occasional epidote, hematite, and magnetite. Although most of the mineralization is in silicified, re-healed, mylonitic granodiorite, lesser amounts of primary copper minerals are present in aplitic quartz monzonite and hybrid felsic rocks (Klein, 1974). The mineralization tends to occur proximally to the monzonite dikes (Shrake, 1988). The deposit is elongate and ovoid in shape.

According to Nevin (1973) and Hausel (1982, 1997), and visually confirmed by the Saratoga drill-hole geology, alteration zoning is evident, with a central zone of quartz veinlets and silicification extending outward into a narrow zone of potassic alteration (secondary biotite and K-spar with muscovite, sericite, epidote, and sulfides), enclosed outward by a zone of propylitic alteration (secondary epidote, chlorite, sulfides, and quartz). The zone of silicified foliated granodiorite that is the primary host for mineralization is about 762m long with an average width of 152m (Hicks, 1972). It appears that the hydrothermal alteration overprinted regional retrogressive metamorphism that had produced widespread greenschist alteration in the Silver Crown district (Hausel, 1997). Carson (1998) studied the mineralogy of six rock samples from Copper King and concluded it "*possesses all the features of a weakly to moderately deformed and recrystallized small, low-grade, sub-economic porphyry copper system*" or that it could "*represent leakage from a larger and similar but higher-grade porphyry system related to a quartz monzonite porphyry stock at depth.*" Carson (1998) identified potassic, propylitic, and phyllic-argillic alteration in the samples he studied. He proposed that the potassic and propylitic alteration are related to the porphyry system, whereas the phyllic alteration is later and related to structurally controlled alteration and mineralization. Although the deposit has been deformed and recrystallized, most of the mylonitic foliation and deformation appear to be pre-mineralization (Carson, 1998). In the better mineralized areas, quartz occurs as numerous veinlets, and there is a direct quantitative relationship between the quartz veinlets, chalcopyrite, and gold content (Soule, 1955).

Mineralization is present as disseminated sulfides and quartz/sulfide stockworks with malachite and chrysocolla and native copper present at the surface and chalcopyrite, pyrite, minor bornite, primary chalcocite, pyrrhotite, and native copper at depth (Soule, 1955; Hausel, 1997; and Clark, 2008). The mineralization is low in pyrite and high in magnetite (Nevin, 1973). Spectrographic analysis identified traces of lead, zinc, tungsten, and titanium dioxide in the mineralization (Hausel, 1997). Covellite and molybdenite have also been reported by Klein (1974). Few molybdenum analyses exist for the project; those assays that do exist from early in the project history showed low values. Precious metal concentrations are directly proportional to sulfide content, particularly chalcopyrite (Klein, 1974). Gold occurs as free gold in grains 10 to 250 microns in size (Mountain Lake Resources Inc., 1997). Although mineralization is in general low grade, supergene ores with rich masses of chalcocite were selectively mined in the past (Ferguson, 1965, cited in Hausel, 1997).

Oxidation occurs within the upper 30m below the topographic surface and a mixed zone of weak oxides and remnant sulfide, often associated with increased metal grades, occurs within the core of the deposit up to 75m below the oxide boundary. Chalcopyrite is the dominant sulfide mineral, though chalcocite and native copper are enriched within the mixed oxide/sulfide zone and oxide zones, respectively.

The Copper King deposit consists of a near-surface, central core of high-grade (>1.71g Au/t) mineralization, 175m long, 50m wide, and 150m thick, associated with moderate to pervasive silicification and near-vertical thin, sulfide-bearing quartz veins and stockwork. The high-grade core is surrounded by a large envelope of low-grade disseminated mineralization, 760m long along its N60ºW strike, up to 300m wide at the widest part, and over 330m in thickness. The low-grade mineralization is open along strike, both to the northwest and southeast, and also at depth, where historical core holes have encountered mineralization to a depth of at least 305m. Gold and copper mineralization within the lower-grade portion of the deposit is uniformly consistent in tenor both along strike and at depth. Historical drill holes have intercepted >250m of continuous gold and copper mineralization in which over 90% of the individual gold assays range between 0.3g Au/t and 1g Au/t, and the copper values range between 0.1% Cu and 0.3% Cu.

According to Klein (1974), based on drill-core observation, apatite, fluorite, and calcite occur in the altered, foliated granodiorite associated with the shear zones, possibly indicating that the original magma or the hydrothermal fluids were rich in volatiles.

Noting that any hypothesis is highly speculative given the lack of direct evidence, Klein (1974) proposed that the origin of the Copper King base and precious metals could be either:

- Deposition from residual fluids related to an intrusion introduced into a cataclastic zone, or
- Remobilization of metals from a previously existing deposit by cataclasis.

He also speculated that the fluids may have come from a final phase of the Sherman granite or from a currently unexposed Precambrian intrusion. The potassic and silicic enrichment in the mineralized zone cannot be directly linked to intrusive fluids, but its occurrence in shear zones could link it to metamorphic recrystallization with the copper and magnetite being derived from the granodiorite and associated amphibolitized mafic rocks seen in the district (Klein, 1974). Based on similarities to other Precambrian mineralization in the Laramie Range and Front Range, Klein (1974) concluded that the Copper King deposit was a Precambrian metallic concentration of either magmatic segregation or disseminated type in which the metals were partially redistributed into adjacent sheared rocks during later Precambrian cataclasis. Hausel (1997) favored the hydrothermal/intrusive origin of a porphyry system. Mountain Lake Resources Inc. (1997) interpreted the Copper King mineralization as being hydrothermal in origin with the shear zone seen in the deposit having served as the feeder structure. They suggest that there could be additional mineral zones at depth associated with splays from the main feeder zone.

8.0 DEPOSIT TYPE

The Copper King deposit is thought by some to be a Proterozoic porphyry gold-copper deposit (Hausel, 1992, 1997; Carson, 1998), and is included in a list of undeveloped porphyry copper deposits by Long (1995). Others (Klein, 1974) categorized the Copper King deposit as a structurally controlled base and precious metal deposit in a Precambrian shear zone.

Porphyry copper deposits are large-tonnage, low-grade, hydrothermal copper sulfide occurrences distinguished by very large volumes of altered rock and temporally and spatially associated porphyritic intrusions. Copper in porphyry copper systems may occur in stockworks, disseminated, or as contact replacement bodies and may be found in wall rocks and/or in genetically related intrusions. Pyrite-chalcopyrite-bornite is often the sulfide mineralogy. In deep zones or in calcareous rocks, pyrrhotite may be present instead of pyrite. Alteration types are typically zoned around a central core and, although they may vary depending on a number of factors, can include potassic (biotite and potassium feldspar), phyllic (sericite, quartz, pyrite), propylitic (chlorite, epidote, albite, calcite, sericite), and argillic (chlorite, montmorillonite) alteration when associated with quartz monzonitic mineralizing intrusions (Beane and Bodnar, 1995). Tonalite, granodiorite, and quartz monzonite are the most likely types of porphyry copper intrusions (Williams and Forrester, 1995). Whereas many of the examples of porphyry copper mineralization in the United States are Mesozoic-Cenozoic in age, Copper King would be a Proterozoic analog.

The presence of stockwork and disseminated mineralization, the uniformity of metal content in the mineralized intercepts, and the association of propylitic and potassic alteration zones do suggest a similarity to the porphyry copper model. However, the apparent lack of an associated large porphyry intrusion, the rather small size of both the mineralized and altered zones, the Proterozoic age, and the apparent structural control exerted by the associated shear zone suggest that the appropriate model may be one of shear-zone-related mineralization. In determining the mineral resource for Compass in 1995, MDA had modeled higher-grade shear-zone related mineralization within a larger shell of disseminated and stockwork mineralization (Ristorcelli *et al.*, 1995).

While modern exploration in the Silver Crown district has focused on the Copper King gold-copper deposit, there are also several gold-copper-silver occurrences in the district that represent permeable fracture fillings and re-healed, silicified, generally N20°E-trending fractures (Hausel, 1997). Examples are the Comstock mine in SW/4 Section 13, T14N, R70W and the Dan Joe prospect in N/2 Section 24, T14N, R70W (Hausel, 1997), neither of which is located on the property controlled by U.S. Gold. Klein (1974) noted that the Comstock-type fracture fillings and the Copper King-type shear zone deposit differ in whether the shears are open or healed and in orientation of the structures but are similar in ore and gangue mineral paragenesis and replacement features.

According to Klein (1974), there are two occurrences similar to the mineralization at Copper King in the Silver Crown district, one in the east-central portion of Section 14 and one in the SW/4 of Section 35, neither located on U.S. Gold's property.

9.0 EXPLORATION

Neither U.S. Gold, nor Strathmore the previous operator, has conducted any exploration on the Copper King property. Exploration by Saratoga prior to its acquisition by Strathmore is described in Section 6.1.

10.0 DRILLING

This section of the report deals only with drilling procedures, where known. Interpretation of the results is discussed in other sections of this report, including Section 6.1 (Exploration and Mining History), Section 7.1.2 (Property Geology), and Section 14.0 (Mineral Resource Estimate).

Table 10.1 indicates that 131 holes with a total drill length of 19,660m have been drilled on the Copper King property.

Figure 10.1 shows the location of all holes currently in the database which are within the Copper King mineral resource area. An additional six historical holes totaling 1,085m are in the database but outside of the current resource area.

U.S. Gold has done no drilling on the property to date.

10.1 Drilling Prior to Saratoga

Table 10.1 lists the 96 known drill holes on the Copper King property drilled by operators prior to Saratoga. The current database contains 85 historical drill holes totaling 10,344m. There are only limited, third-party references to four historical holes, and therefore these four holes are not included in the database. Only limited information is available on one Henrietta hole and five Mountain Lake holes, all six of which are shown on maps as being away from the Copper King resource area, and therefore these six holes are not included within the current database. Also, one of the Henrietta core holes (H-3) re-entered and then deepened a 1970-era ASARCO hole (A-12) and so is considered just one hole, with one surface collar location, within the current database.

MDA attempted to locate the drill core from ASARCO's, Copper King Mining's, and the USBM drill programs that had been housed at the USBM in Denver, but according to representatives of the U. S. Geological Survey (personal communication, 2006), that core could not be found. According to Mountain Lake Resources Inc. (1997), the core from Henrietta's holes was destroyed. The remaining unsampled core from Compass's holes is currently in the possession of Strathmore and stored in a Cheyenne, Wyoming facility (see Section 11.4).

MDA has no information on drilling and sampling procedures for the ASARCO, Copper King Mining, or the USBM drill programs. The original geology logs are not available, though Nevin (1973) provides summary geology logs for all but the ASARCO 1938 drilling and assay sheets for all of these drill programs. The assay sheets include collar information, sample intervals, and assay data.

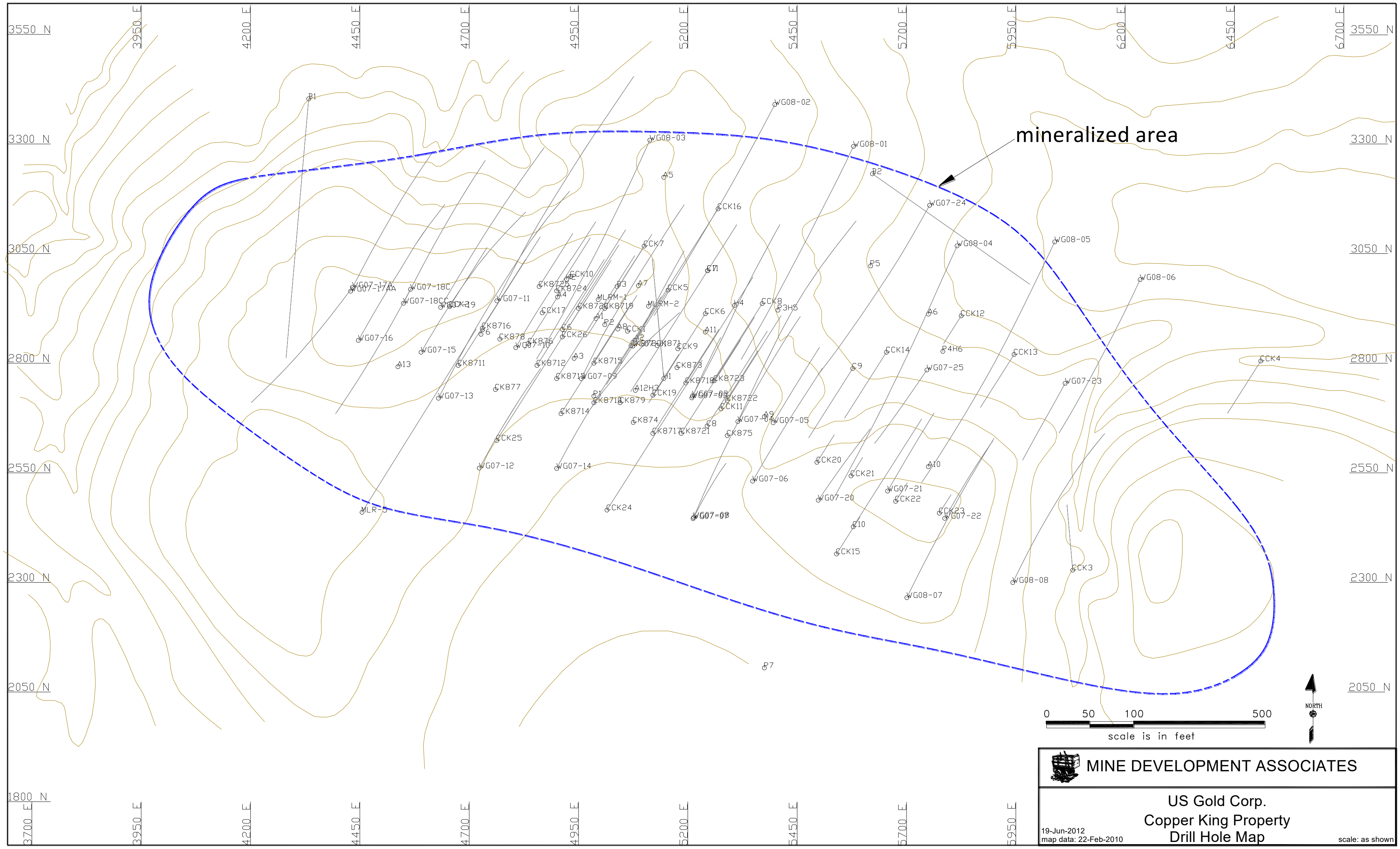
Soule (1955) reported that drilling by the USBM was done by contract and that all three holes were core holes, but no further information was provided in his report.

Table 10.1 Drilling on the Copper King Property

Company	Year	No. of holes	Type	Series/hole	Total Drilled (m)
ASARCO	1938	5	Core	A-	427
Copper King	1952	6	Core	C-	802
USBM	1953-54	3	Core	B-	802
ASARCO	1970	8	Core	A-	874
Henrietta Mines	1973	11[1]	Rotary	P-1, P-2, P5 - P7	341
			Rotary/core	P3/H5; P4/H6	325
			Core	H-1 – H-4[2]	483
? [3]	Pre-1988	1[4]	?	BL-L1	?
Caledonia	1987	25	Percussion rotary	CK87- [5]	3042
Royal Gold ?[6]	1989	2[4]	Rotary or RC	CK89-	154[4]
Compass	1994	26	21 RC, 5 Core	CCK-	2890
? [7]	Pre-1995	1[4]	Core	N-1	313[4]
Mountain Lake	1997	8	RC	MLR-,MLRM-	1445
Saratoga Gold	2007, 2008	35	Core	WG07-, WG08-	7762
Total		**131**			**19,660**

[1]Some references count the two combined rotary/core holes as two rotary and two core holes for a total of 13 holes
[2]Hole H-3 re-entered ASARCO hole A-12
[3]Hole apparently drilled by an unknown operator prior to December 1987
[4]Not included in current database because of questions about the existence of these holes
[5]Some maps show these holes as K- series or 87- series
[6]Inferred from Hazen Research, Inc. (1989) but not verified and not located
[7]Hole apparently drilled by an unknown operator prior to December 1994

Figure 10.1 Drill-Hole Map of Copper King Property



Henrietta Mines drilled seven rotary holes for a total of 482m (Nevin, 1973). Two of these rotary holes were deepened by diamond drilling. Henrietta drilled six diamond drill holes, two of which were the deepened rotary holes, and one of which was re-drilling of a prior ASARCO hole (H-3 deepened A-12). Total diamond drilling was 666m. Rotary hole P-3 was drilled to 50m before switching to core for the remainder of the hole. Rotary hole P-4 was drilled to 91m before switching to core. Boyles Brothers Drilling Company of Golden, Colorado was the drilling contractor. Two diamond drills were used: a trailer-mounted CP 8 and a truck-mounted Longyear 44. Initial core size was NC and NXWL, but when the rock was found to be competent, BXWL was used (Nevin, 1973). Nevin (1973) reported that there were virtually no problems with lost circulation or caving. A Failing 1500 with a Mission down-hole hammer was used for the rotary holes. Until groundwater was encountered, usually at about 30 to 46m, the rotary holes were drilled with air. At the water table, foaming agents were added to the air line (Nevin, 1973). MDA reviewed copies of Henrietta's geologic drill logs with assays and added the assays and summary geology to the database. At least one core hole (H-1) was down-hole surveyed with an Eastman camera.

Compass drilled 21 rotary holes and five diamond core holes. Hole CCK-16 was drilled rotary to a depth of 152m and then cored with NX core to a total depth of 341m. Notes on the geologic log indicate the core was split before logging. Hole CCK-19 was cored for its entire length with HQ core. Holes CCK-24 and CCK-25 were both started with RC drilling, changing to NX core at 136.1m and 136.2m, respectively. Hole CCK-26 was cored completely with NX core. MDA has no further details about Compass's drilling program. Hole CCK-18 is not shown on any maps available to MDA. Based on the very low assay values, it may be that this hole is outside the resource area and outside the area of any maps available to MDA. MDA has drill logs for the Compass holes, and the lithology data were entered into the database.

MDA has no details on the Caledonia or Mountain Lake drill programs. No drill logs are available for the Caledonia holes; the collar locations were taken from a map provided to MDA. Drill logs of three Mountain Lake holes are available which do contain collar and drill orientation data. Summary geology from the Mountain Lake drill holes was entered into the database.

Besides Henrietta's core hole H-1, as mentioned above, MDA has no evidence that any of the other holes drilled on the Copper King property were down-hole surveyed.

10.2 Saratoga Core Drilling

Saratoga drilling began in mid-March 2007 and continued into early June, when the rig was shut down for one month. Commencing again in July, the drill program was completed in late August with hole WG07-27. A total of 27 diamond core holes drilling a total of 5,577m was completed from March through August 2007. All of the 2007 drill holes were within or immediately adjacent to the known Copper King deposit, as indicated on the Figure 10.1 drill-hole map. The first 14 holes were drilled within the center of the known body of mineralization and targeted the high-grade near-surface mineralization, the down-dip extensions of the high-grade zones, and also the deep, mostly lower-grade mineralization. These initial holes were planned to confirm the pre-existing mineralization and also to be used as source material for future metallurgical testing. The remainder of the 2007 drill program targeted the eastern and western extensions of known mineralization. Maximum drill-hole depth was 305m. Due to the general northwest trend to the mineralization, all but five of the drill holes were oriented to drill in a N30°E direction at down-hole angles of between 50 and 80 degrees.

Saratoga commenced a second phase of drilling in 2008. Core drilling began in April and continued into early July 2008. Eight core holes were completed for a total of 2,185m. The 2008 drilling was planned to define the northern and southeastern limits of mineralization and to test the down-dip extensions of mineralization within the eastern half of the deposit. Maximum drill-hole depth was 290m. All eight holes were angle holes drilled across the strike of the mineralization. Six holes were collared on the north side of the deposit and drilled towards the southwest, while two were collared on the south side and were drilled to the northeast.

Saratoga's 2007 and 2008 drill results confirmed the high-grade mineralization and also confirmed the presence of mineralization across the length and breadth of the deposit.

Logan Drilling, based in Nova Scotia, Canada, was the drilling contractor, and a Longyear Fly 38 skid rig drilling NQ-size core (4.76cm diameter) was used for both the 2007 and 2008 drill programs. The core rig operated 24hrs per day (two 12hr shifts), and drilling averaged about 61m per day, including time spent moving between sites. A Saratoga representative was usually not on-site to oversee the move to the next hole location, and it was the drill crew's responsibility to locate the next drill site, build the drill pad and sump, and then move and set up the rig. Saratoga provided a camera to the drill crew with instructions to photograph all phases of the drill sequence at each site. All of the proposed drill-hole locations had been located in the field by a professional surveyor (see Section 10.2.1). The surveyor marked the planned hole location using three survey stakes: the actual planned drill collar location plus a front and back site, each located 8m from the collar location.

A small bulldozer kept on-site was used to move the rig and the rod sled and also to build drill sites and excavate water/mud sumps. All drill fluids were contained within the sumps. Upon hole completion, each hole was abandoned by filling with a bentonite product and then placing a cement plug within the upper 3m. The holes are marked with a 5 by 5cm wooden stake inserted into the cement.

For each drill hole, a rock bit was used to drill through the surficial overburden, and about 3 to 12m of casing was inserted into the hole. Core drilling then began at the top of the bedrock. A 3m core barrel was used, and most drill runs were the full 3m in length, though some shorter drill runs did occur when fractured core pieces blocked the core barrel. At the end of each drill run, the core was slid out of the core barrel, with minimum hammering of the barrel to dislodge the core, and put into wooden core boxes that hold about 5m of NQ core. Wooden blocks marking the drill depth between each drill run were placed into the core box, though for the initial nine drill holes, a wooden block was used only at the end of each 3m drill interval, and the occasional shorter drill run was not noted with a unique wooden block. Procedures changed with drill hole WG07-10, after which the driller noted the drill depth after every drill run.

The geologic logging process for the first 15 core holes of the 2007 drill program included core photography and geotechnical rock quality ("RQD") measurements along with structural and lithologic determinations. Missing from the logging process was the recordation of core-recovery data.

For the remaining 2007 core holes and all of the 2008 drill holes, core photography, RQD and core-recovery measurements, geologic logging, and sampling were conducted in an open-sided shed. Some of the core was exposed to the weather due to limited covered space.

10.2.1 Drill-Hole Surveying

All of the 2007 and 2008 core holes were surveyed down hole by the Logan Drilling drill crew. Measurements were taken every 30m using a *Flexit Smart Tool* surveying instrument that produces real-time, gyro-based azimuth and dip digital readings. The instrument also records the magnetic field and ground temperature at each measurement station. Due to the magnetic properties of some of the deposit lithologies, the magnetic field readings were an important tool in validating the azimuth readings.

The proposed drill-hole locations were located in the field by Western Research and Development ("Western"), a professional survey company based out of Cheyenne, Wyoming. Western used a Leica 1200 GPS survey instrument, which has a <0.15m accuracy. Upon completion of the drill program, Western returned to the project site and re-surveyed the actual drill collars.

10.2.2 Core-Recovery Data

Core-recovery data were not recorded for the first 15 Saratoga core holes. The geologist logging the core believed that the fairly consistent >95 percent observable recovery mitigated recording detailed recovery data for every drill interval. It was also felt that core-recovery information could be culled from the RQD data, if needed.

During MDA's three site visits in 2006-2007, an inspection of various boxes of core both from Saratoga's 2007 drill program and also from the remaining historical Compass drilling, indicated good to excellent core recoveries (>90 percent) both within and peripheral to the mineralized zone. MDA's communication with the Logan Drilling core driller confirmed the consistently good core recoveries, although the driller did state that some near-surface zones were strongly fractured and core recovery did suffer.

Saratoga recorded core-recovery data for the remainder of the 2007 drill program and for all eight of the 2008 drill holes. MDA reviewed the data and validated numerous intervals using the full set of core photos supplied by Saratoga. Core recoveries averaged over 90% with many long intervals at over 95%. Core recovery within the near-surface, more highly fractured rock did suffer but usually was consistently over 75%; a small proportion (<5%) of the individual drill runs had recoveries less than 50%.

11.0 SAMPLE PREPARATION, ANALYSIS, AND SECURITY

11.1 Drilling prior to Saratoga

Very little is known about the sampling methods, sample preparation, analyses, and security of the drilling at Copper King prior to that of Saratoga except as described below. A table summarizing pre-1998 drilling on the property (Mountain Lake Resources Inc., 1997) gives detection limits for gold and copper assays for six of the historical drill campaigns.

Nothing is known about the sampling methods, sample preparation, analysis, or security used by ASARCO or Copper King Mining. According to Soule (1955) and the photocopied data provided to MDA, the ASARCO 1938 drill holes were sampled on 1.52m (5ft) intervals, while the Copper King drill holes were sampled on 3.05m (10ft) intervals. The 1970 ASARCO sampling was variable, though most sample lengths were 3.05m (10ft). For both the 1938 and 1970 assays by ASARCO, the detection limits were 0.001oz Au/ton (0.034g Au/t) and 0.01% Cu (Mountain Lake Resources Inc., 1997). For Copper King Mining's assays, the detection limit for gold was 0.01oz Au/ton (0.343g Au/t), and the detection limit for copper was thought to be 0.10% (Mountain Lake Resources Inc., 1997).

Soule's (1955) report briefly described the USBM's sampling procedures. For their three holes, all core and necessary sludge samples were delivered to the USBM's engineer. All core samples were logged and split, with one split half sent to the USBM's Salt Lake City laboratory for analysis. Sludge samples were taken when core recovery was less than 85-90%. All sludge samples from holes B-1 and B-2 were saved until the end of the project; most from hole B-1 were analyzed, but only a few from hole B-2 were analyzed. No sludge samples from B-3 were saved because core recovery was generally excellent. The USBM drill holes were sampled on variable length intervals ranging from approximately 1m to 5m with most sample lengths between 2m and 3m. For the three holes drilled by the USBM, analysis was done by the USBM's Salt Lake City laboratory, but no details on sample preparation, analysis, or security were provided by Soule (1955). The detection limits were 0.005oz Au/ton (0.171g Au/t) and 0.05% Cu, as indicated by Mountain Lake Resources Inc. (1997). The USBM also prepared composite samples of the core from their three holes and analyzed them for molybdenum, tungsten, nickel, and for most of them, titanium. In addition, the USBM ran multi-element spectrographic analyses on five composite samples from hole B-1, and Copper King Mining ran the same on five composite samples from hole C-7 and one sample from hole C-8; results of these spectrographic analyses are reported in Soule (1955) but were not incorporated into the database used for this report.

Henrietta's drill holes were sampled and assayed on about 3m intervals for gold and copper and occasionally for silver and acid-soluble copper (Nevin, 1973). The core was split with one half sent for assay and the other half stored on site. For the dry intervals of the rotary holes, a box and cyclone in series were used for sampling with splitting by a Jones riffle. Nevin (1973) estimated that about 1 to 2% of the sample was lost as very fine dust. For the wet drilling, cuttings were split in a long, metal sluice box equipped with a longitudinal baffle set to retain about a 10% fraction for assay. Rejects were stored on site. Assaying of Henrietta's samples was conducted by Skyline Laboratories Inc. and Hazen Research Inc., both of Denver, Colorado (Nevin, 1973). The detection limits for the gold and copper assays were 0.005oz Au/ton (0.171g Au/t) and possibly 0.001% Cu (Mountain Lake Resources Inc., 1997).

According to (Clarke, 1987), Caledonia's drill holes were sampled every 3m and assayed for gold, but the historical data supplied to MDA included only composite intervals that ranged from 3m to >50m. MDA has no further information on Caledonia's sampling. MDA has no information about sample preparation, analyses, or security of Caledonia's drill program other than that drill samples were only assayed for gold (Clarke, 1987).

The Compass RC holes were sampled on 1.5m (5ft) intervals, while the core holes were sampled on 3m (10ft) intervals. MDA has no further information on the Compass drill sampling. MDA found assay certificates for Compass holes CCK-19 and CCK-24 that showed the assays were performed by Barringer Laboratories Inc., in Reno, Nevada, using fire assay with an atomic absorption ("AA") finish for gold and AA for copper. It was not evident from the data reviewed by MDA whether Barringer assayed all of Compass's holes. The detection limits for Compass's assays were 2 ppb gold and 5 ppm copper (Mountain Lake Resources Inc., 1997).

The Mountain Lake drill holes were all sampled on 1.5m (5ft) intervals. MDA has no further information on Mountain Lake's drill sampling. Assaying of the samples for Mountain Lake was performed by Barringer Laboratories Inc. in Reno, Nevada. MDA has seen no assay certificates for Mountain Lake's drill holes but did find a spreadsheet with the assays, which were entered into the database for Mountain Lake's eight drill holes. The detection limits were 2 ppb gold and 5 ppm copper (Mountain Lake Resources Inc., 1997). Metallurgical testing of bulk composite samples from holes MLRM-1 and MLRM-2 was conducted by the Colorado Minerals Research Institute of Golden, Colorado (see Section 13.1).

11.2 Sampling by Saratoga

Saratoga sampled the 2007 and 2008 drill core on approximate 1.5m intervals, although sample intervals did range from 0.3 to 3m as warranted by the geology. Due to the pervasive alteration and potential for mineralization observed throughout all drill holes, the core was continuously sampled with no gaps in the sample sequence. The samples were collected principally by sawing the core in half, though some intervals, due either to the hardness of the rock or the unavailability of the saw, were split with a hydraulic splitter. In those cases where the sample intervals were fractured and many of the core pieces were too small to either saw or split, the sample technician sampled the core using a trowel, a small shovel, or by hand. One half of the core was bagged and sent for assay, while the remaining half was placed back into the core box and put into storage.

The geologic logging and sampling of the 2007 drilling was completed by December 2007. The remaining half core from specific intervals within the 2007 drill holes was collected and combined into composites for the metallurgical test program conducted by Saratoga in early 2008. Approximately 305m of core from eight drill holes were used in the testing.

The core from the 2008 drill program was logged in the spring/summer of 2008, contemporaneous with the drilling, though sampling was delayed until fall 2009 due to budgetary constraints.

11.3 Saratoga Sample Analysis

The Saratoga core samples from the 2007 drill program were shipped to ALS Minerals ("ALS," formerly called ALS Chemex and called "Chemex" in some figures in this report) in Elko, Nevada for sample preparation and then on to the ALS facility in Sparks, Nevada, for analysis for gold and a 33-element geochemical suite. Final results were received in December 2009. The ALS sample preparation and analysis methods requested by Saratoga were "AA23" for gold and "ME-ICP61" for the geochem suite.

Both methods employ the same sample preparation methods, which include crushing the whole sample to 70 percent passing -2mm and then pulverizing 250g to 85 percent less than 75 microns (-200 mesh). The "AA23" gold analysis consists of a splitting out a 30g pulp sample and then using fire assay techniques followed by an AA finish. The detection level for this analysis is 5 ppb Au, while the upper precision level is 10 ppm Au. Samples assaying over 10 ppm are re-assayed using a fire assay with gravimetric finish technique (ALS lab code "Au-GRA21"), which has an upper precision level of 1,000 ppm Au. The "ME-ICP61" analytical geochem procedure consists of a four-acid digestion and analysis by inductively coupled plasma ("ICP") followed by atomic emission spectroscopy ("AES"). The reported range for copper values using this technique is between 1 and 10,000 ppm Cu. Samples with initial values over 10,000 ppm Cu are re-run using the same analytical techniques optimized for accuracy and precision at high concentrations (ALS lab code "CU-OG62" with an upper precision of 40 percent Cu).

After completion of analyses and temporary storage at ALS, all of the pulps and selected coarse reject samples from mineralized intervals were retrieved by Saratoga and are currently in storage in Elko, Nevada.

The core samples from the 2008 drill program were shipped in the fall of 2009 to American Assay Laboratories ("American Assay") in Sparks, Nevada for sample preparation and analysis for gold and copper only. The final results were received in September 2009. The American Assay sample preparation and analysis methods requested by Saratoga were "FA30" for gold and "D2A" for copper. Both methods employ the same sample preparation methods, which include crushing the whole sample to 70 percent passing -2mm and then pulverizing 300g to 85 percent less than 105 microns (-150 mesh). The "FA30" gold analysis consists of a splitting out a 30g pulp sample and then using fire assay techniques. The detection level for this analysis is 3 ppb Au, while the upper precision level is 10 ppm Au. Samples assaying over 10 ppm are re-assayed using a fire assay with gravimetric finish technique (American Assay lab code "Au-GRAV"), which has an upper precision level of 1,000 ppm Au. The "D2A" analytical geochem procedure for copper consists of an *aqua regia* digestion and analysis by atomic absorption ("AA"). The reported range for copper values using this technique is between 1 and 10,000 ppm Cu. Samples with initial values over 10,000 ppm Cu are re-run using the same analytical techniques optimized for accuracy and precision at high concentrations (lab code "Cu Ore Grade") with an upper precision of 40 percent Cu.

11.4 Saratoga Sample Security

The drill crew, upon filling a core box, placed a wooden top over the core, and the box was secured using strapping tape. At the end of each drill shift, the core was transported by the drill crew into Cheyenne, WY, a distance of about 32km, and placed in a locked commercial storage unit. The storage unit is located within a secure, gated facility. About once per week, the core was transported on a trailer to the logging and sampling facility in Casper, Wyoming, a distance of about 320km.

Logging and sampling of the first 13 core holes drilled in 2007 were completed in a large, converted garage located on leased private property outside of Casper, Wyoming. The property was fenced off and kept securely locked when personnel were not on-site. After being logged and sampled, the remaining half-core was placed in a locked storage unit within a secure, commercial storage facility in Casper.

Saratoga's lease on the Casper logging facility ended on August 31, 2007, and the remaining 2007 core holes were transported 320km to Dubois, Wyoming, for storage and further core processing. Sampling was conducted within an open-sided ranch shed on private property owned by Norm Burmeister, an officer with Saratoga. The core facility was within a fenced area. After sampling was complete, the core was transported to a commercial storage facility and stored on racks in a locked storage unit. These same procedures were used for the 2008 drilling.

The Saratoga core is currently stored in two facilities. The initial 11 drill holes from the 2007 campaign and the core from all eight holes of Saratoga's 2008 drilling are in a secure storage facility in Cheyenne, Wyoming, along with remaining unsampled core from Compass's holes. Saratoga's remaining 16 2007 core holes are in a secure storage facility in Dubois, Wyoming.

The half-core samples to be shipped to the lab were given non-referential sample ID numbers. The individual bagged samples were placed into larger shipping bags, which were securely closed using heavy wire ties and kept inside the logging facility awaiting shipment via a commercial trucking company to ALS in 2007 and ALS and American Assay in 2008.

11.5 Summary Statement

MDA is of the opinion that the sampling methods, security, and analytical procedures are adequate for mineral resource estimation. The authors are not aware of any sampling or assaying factors that may materially impact the mineral resources discussed in Section 14.0.

12.0 DATA VERIFICATION

Data verification undertaken by previous operators on the Copper King project is not documented in a manner that meets NI 43-101 reporting standards. Due to the paucity of original data in the current data package, MDA was not able to verify and fully audit the historical database as described in Section 12.1. No quality assurance/quality control ("QA/QC") measures were used on holes drilled prior to 1972, and with the exception of the check assays described in Section 12.2, MDA cannot verify that any additional QA/QC measures were taken in drill programs after 1972.

Saratoga's QA/QC program implemented for the 2007 and 2008 drilling included analytical standards and blanks inserted into the drill-sample stream, duplicate assaying of selected coarse-reject samples by the primary assay laboratory, and re-assaying of original pulps by an umpire laboratory.

MDA, in 2006 and 2007, collected six surface and 25 core samples for data verification purposes as described in 12.4.1.1 and Section 12.4.3.1. Four of the core samples were from Compass's 1994 drill program, while 21 were from selected intervals in Saratoga's 2007 drilling.

12.1 Database Audit

There was virtually no original historical data available to MDA with which to audit the database. MDA did verify the drill-hole locations and values of those samples from ASARCO's holes A-1 through A-5, Copper King's holes C-6 through C-11, and the USBM's holes B-1 through B-3 by crosschecking values in the database with those reported in Soule (1955), but no original assay certificates were available for these or any other drill holes except Compass's holes CCK-19 and the cored portion of CCK-24. MDA verified the assay values in the database for Compass's holes CCK-19 and CCK-24 by crosschecking the values in the database with those shown on the assay certificates, and no errors were found. MDA verified gold values for the best gold intercepts in the holes drilled by Henrietta by crosschecking assays included on geologic logs against values in the database. Only one error was found and corrected in the database. MDA did find spreadsheets with assays said to be from Barringer Labs for Mountain Lake's eight drill holes and entered those assays into the database.

MDA compiled the drill-hole collar, survey, and assay data from the 2007-2008 Saratoga drill programs directly from original sources. The original collar survey data files and the down-hole survey driller's notebooks were provided by Saratoga, while the assay data were digital data direct from the laboratories. After compiling the data, the data were audited against the original sources by randomly checking values and specifically checking down-hole survey data that appeared anomalous. Six individual down-hole surveys were removed from the database due either to uncertain depths or atypical azimuth values. In all cases, the atypical azimuth values coincided with anomalously high magnetic field readings.

12.2 Quality Assurance/Quality Control ("QA/QC")

12.2.1 QA/QC Prior to Saratoga

According to Hicks (1972), no check assaying was performed on holes drilled by ASARCO, Copper King, or the USBM, although he noted that there was general agreement in values drilled by different operators in adjacent holes.

In 1996, Mountain Lake ran check assays on selected mineralized intervals from 12 of Compass's holes. The check analyses were conducted by Barringer Laboratories, Inc. Gold was analyzed by fire assay with an AA finish, and copper was analyzed by AA. MDA entered these check analyses into the database. A preliminary evaluation of the Mountain Lake check assay results by MDA in 2006 indicated general agreement between the original and the check assay Au values. The mean of the paired samples is 3.36g Au/t, which is significantly higher than the average mineralized grade within the Copper King resource. The mean grades of gold and copper for the original and check assays are as follows: 3.46g Au/t and 0.465% Cu and 3.29g Au/t and 0.570% Cu, respectively. The absolute percent difference between the 185 check assays and originals averaged 16% with a standard deviation of those absolute differences of 29%. Of the 20 check sample assays that showed a 30% (one standard deviation) or greater difference from the original assay, 14 were in the lower half of the grade range (<3.36g Au/t) indicating greater variability within the lower-grade mineralization. In non-absolute terms, the average difference between the check and original assays was -1%.

During review of the data package for Copper King, MDA found what appeared to be nine check assays of the original 3m sample intervals from seven of Caledonia's drill holes. The checks were run for Westmont Mining by Cone Geochemical Inc. about two years after Caledonia's drilling. Because the database only had composite values for Caledonia's drill holes rather than 3m sample intervals, these check assays were not entered into the database.

12.2.2 Saratoga QA/QC

Saratoga's QA/QC program implemented for the 2007 and 2008 drilling included 1) analytical standards and blanks inserted into the drill-sample stream, 2) duplicate assaying of selected coarse-reject samples by the primary assay laboratory, and 3) re-assaying of selected original pulps by an umpire laboratory. American Assay was used as the umpire laboratory for the 2007 drill program in which ALS was the primary laboratory, while the roles were reversed for the 2008 drilling.

12.2.2.1 2007 and 2008 Standard Analyses

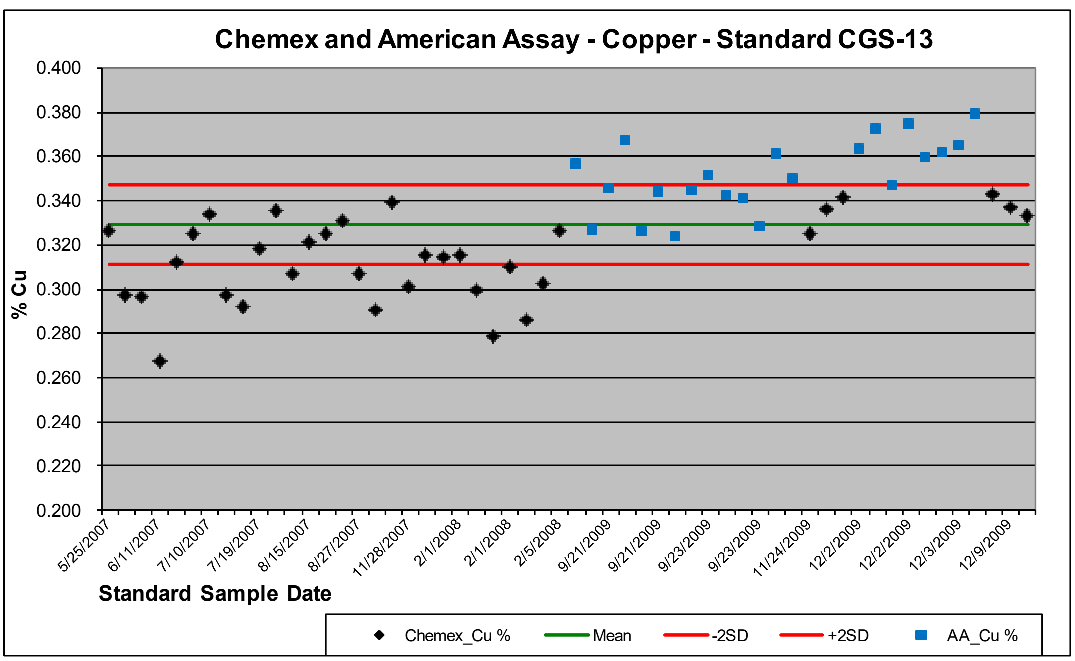
A total of 169 standard samples were submitted to ALS and American Assay. One standard sample was inserted into the sample stream at an approximate rate of one standard for every 40 drill samples. Standards were also used in the duplicate pulp and pulp re-assay check assay programs (see Section 12.2.2.3 and Section 12.2.2.4) at a higher rate, ranging from one standard per 10 to one standard per 25 samples. Five unique analytical standards were used. The five standards were commercial gold-copper standards purchased as pulps from CDN Resource Laboratories, Canada. Analytical specifications, including the accepted value, and plus or minus two standard deviations ("2SD"), for the five standards are shown in Table 12.1. Standards CGS-8, CGS-12, and CGS-13 were used in the 2007 drill program, while CGS-13, CGS-15 and CGS-16 were used in the analyses of the 2008 drilling, which were completed in the fall of 2009. The standards were inserted into the drill core sample stream with the same sample ID designation, though as pulps they were not blind to the lab.

Table 12.1 CDN Resource Lab - Sample Standard Specifications

Standards	g Au/t	Au_2SD	% Cu	Cu_2SD
CGS-8	0.08	±0.012	0.105	±0.008
CGS-12	0.29	±0.040	0.265	±0.015
CGS-13	1.01	±0.110	0.329	±0.018
CGS-15	0.57	±0.060	0.451	±0.02
CGS-16	0.14	±0.046	0.112	±0.005

The detailed results of the 10 individual standard analyses are included as graphs in Appendix D. In the graphs, the ALS values are shown as black triangles, while the American Assay samples are blue squares. The results indicated good correlation in general with the accepted standard value, though for all standards except for the CGS-16 gold analyses, there were isolated, unexplained "failures" (i.e., assay results well outside of the two standard deviation limits). The copper results from both labs for standards CGS-13, 15, and 16 were more variable than the accepted limits with many values outside, both above and below, of two standard deviations from the mean. There is also an indication of a high lab bias for the ALS copper results for standards CGS-15 and 16, though the limited samples make this determination somewhat inconclusive. Only in the CGS-13 copper analyses is there a strong indication of a consistent variance from the standard's accepted mean value. As shown in Figure 12.1, the 2007-2008 ALS results are lower on average than the accepted mean value, while the 2009 American Assay results are higher than the accepted mean. This pattern is not seen in any other standard analyses and possibly indicates a change in the composition of the standard material from 2007-2008 to the fall of 2009.

Figure 12.1 Standard CGS-13 Copper Values



12.2.2.2 2007 and 2008 Blank Analyses

A total of 129 blank control samples were submitted to ALS and American Assay. One blank sample was inserted into the sample stream at an approximate rate of one blank for every 40 drill samples. Blanks were not used in the check assay programs. The material used for the blanks consisted of silica sand purchased locally. The sand was not subjected to analytical testing before being used as a control material. The blanks were inserted into the core sample stream using the same sample ID designation, but they were not blind to the lab.

The blank gold assay and copper assay results are shown graphically in Figure 12.2 and Figure 12.3, respectively. In the graphs, the ALS values are shown as black triangles, while the American Assay samples are blue squares. Isolated unexplained high values occur in the gold analyses for both metals, but these values are <0.10g Au/t and are not considered significant. The blank analyses indicate greater variability (less precision) in the American Assay results as compared to the ALS values. This lower precision possibly reflects low-level contamination or could be a reflection of the less precise analytical procedures (fire assay without an AA finish for gold and an *aqua regia* digestion of a 0.5g sample for the copper analyses) employed by American Assay.

Figure 12.2 Copper King Blank – Gold Values

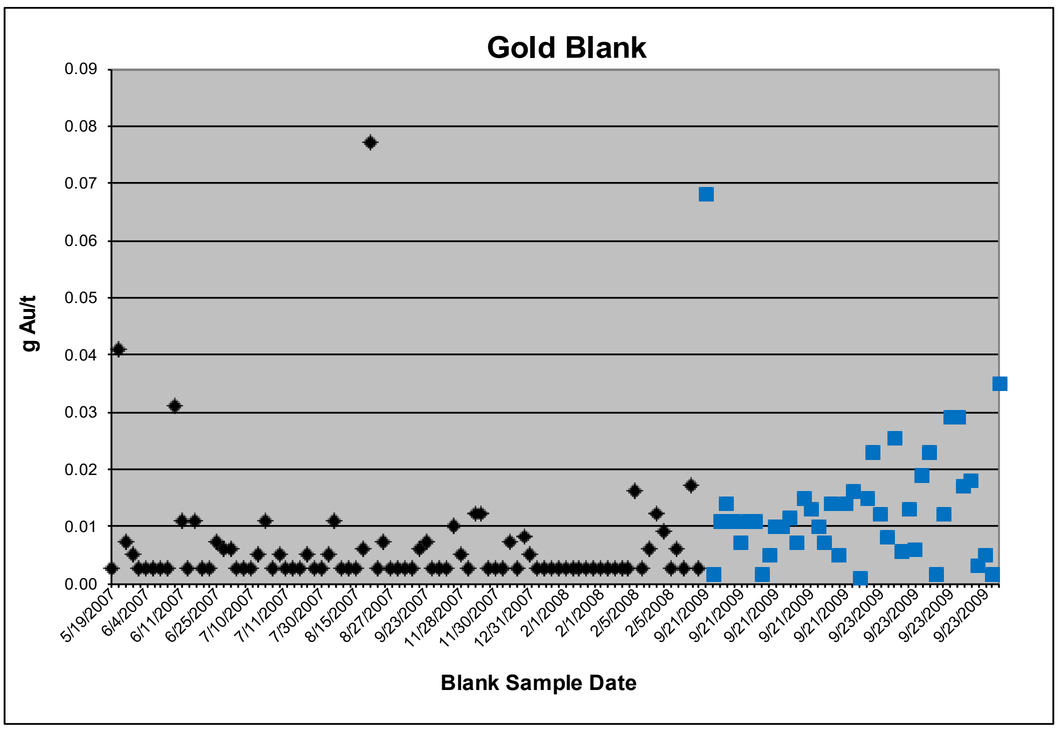
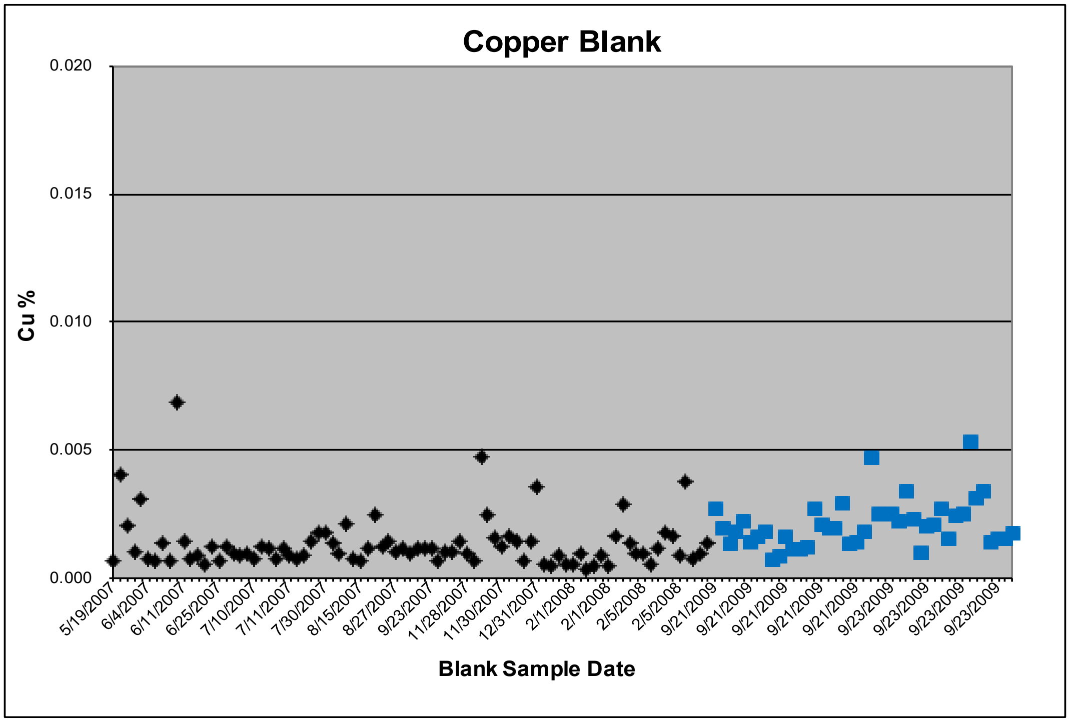


Figure 12.3 Copper King Blank – Copper Values



12.2.2.3 2007 and 2008 Drilling Duplicate Pulp Analyses

The coarse rejects of mineralized samples from selected drill intervals were re-submitted to ALS (for the 2007 drill program) and American Assay (2008 drill program). Duplicate pulps were created and analyzed using the same assay techniques as the original samples. A total of 249 duplicate pulps were analyzed; 156 by ALS and 93 by American Assay. Two samples were removed from the ALS gold analyses and one sample from the American Assay gold analyses due to very high differences between the original and check assays possibly resulting from a lab or Saratoga clerical error. Summary statistics of the pulp duplicate check results are reported in this section, while the detailed graphs of the original versus check assay relative difference and absolute difference values, plotted against mean value, are included in Appendix E.

The results of the ALS duplicate pulp gold and copper analyses, completed in 2007 for the first 13 holes of the 2007 drill program, and 2009 for the remaining 14 holes of the 2007 program, are shown statistically in Table 12.2 and Table 12.3. For both metals, there is good agreement between the original and check assays with the population mean and median values both showing a 3% or less difference. The relative difference values, which shows the average value of the difference between the individual original and check assays (a positive value indicates a higher check assay value), show no significant bias in the gold analyses and a low but consistent 4% positive bias in the copper check assays. The absolute difference values, which measures the total absolute variability between the original and check assays, show a total mean variability of 15% and 7% for gold and copper, respectively; both values indicate low variability and resulting confidence in the assay results. The relative difference and absolute difference graphs in Appendix E show that, except for isolated samples, the low bias and variability occur across all grade ranges.

Table 12.2 ALS Duplicate Pulp Analyses - Gold

Gold (g/t)	Mean	Chemex	Duplicate	Difference	Rel Diff.(%)	Abs. Diff.(%)
Count	154	154	154		154	154
Median	0.70	0.71	0.69	-2%	1%	7%
Mean	1.18	1.16	1.19	3%	1%	15%
Std. Dev.	1.40	1.38	1.45			
CV	1.19	1.19	1.21			
Minimum	0.01	0.01	0.01	63%	-253%	0%
Maximum	9.81	9.66	9.95	3%	214%	253%

Table 12.3 ALS Duplicate Pulp Analyses - Copper

Copper %	Mean	Chemex	Duplicate	Diff.	Rel Diff.(%)	Abs. Diff.(%)
Count	156	156	156		156	156
Median	0.255	0.253	0.256	1%	4%	5%
Mean	0.322	0.317	0.327	3%	4%	7%
Std. Dev.	0.259	0.256	0.264			
CV	0.806	0.808	0.806			
Minimum	0.009	0.009	0.009	5%	-21%	0%
Maximum	1.453	1.490	1.505	1%	30%	30%

The results of the American Assay duplicate pulp gold and copper analyses, completed in December 2009, are shown statistically in Table 12.4 and Table 12.5. These analyses show a high negative bias in the copper and significantly higher total variability (25%) in both metals. The relative difference and absolute difference graphs in Appendix E show that, when plotted versus original and check assay mean value, the high relative and absolute difference values occur as single sample points spread throughout all grade ranges. When re-sorted by sample number, as shown in Figure 12.4 and Figure 12.5 for gold and copper, respectively, it is apparent that there was a problem in the lab, or a potential mix-up in the sample shipment and sample ID's for a distinct batch of samples. Extremely high variability, with both highly negative and highly positive relative difference values, occurs within a specific continuous sequence of gold analyses, while the copper values over this same sample sequence show only highly negative relative difference values. The negative bias in the copper analyses appears to continue at a lesser degree for the remainder of the samples. All of these samples were assayed on the same day, so this is not a temporal issue. A forensic examination of the data was not conducted, and the causes of these flawed data have not been determined.

Table 12.4 American Assay Duplicate Pulp Analyses - Gold

Gold (g/t)	Mean	American	Duplicate	Diff.	Rel Diff.(%)	Abs. Diff.(%)
Count	92	92	92		92	92
Median	0.54	0.54	0.57	6%	3%	11%
Mean	0.70	0.70	0.71	1%	4%	25%
Std. Dev.	0.51	0.54	0.51			
CV	0.72	0.77	0.72			
Minimum	0.12	0.12	0.12	-4%	-361%	0%
Maximum	2.50	2.70	2.72	1%	226%	361%

Table 12.5 American Assay Duplicate Pulp Analyses - Copper

Copper %	Mean	American	Duplicate	Diff.	Rel Diff.(%)	Abs. Diff.(%)
Count	93	93	93		93	93
Median	0.213	0.225	0.191	-15%	-5%	12%
Mean	0.244	0.257	0.230	-11%	-17%	25%
Std. Dev.	0.159	0.172	0.154			
CV	0.653	0.667	0.653			
Minimum	0.023	0.025	0.017	-32%	-206%	0%
Maximum	0.839	0.979	0.777	-21%	36%	206%

Figure 12.4 American Assay Relative Difference Duplicate Pulp Check Assays – Gold

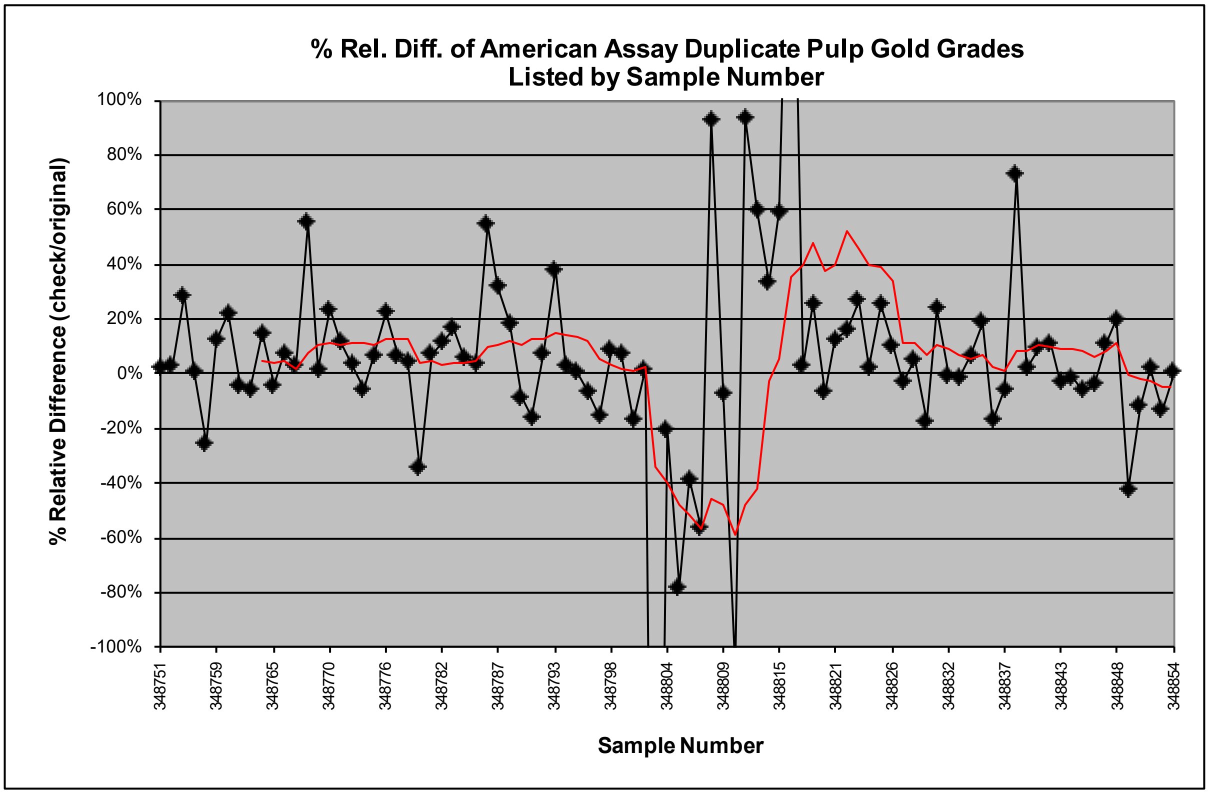
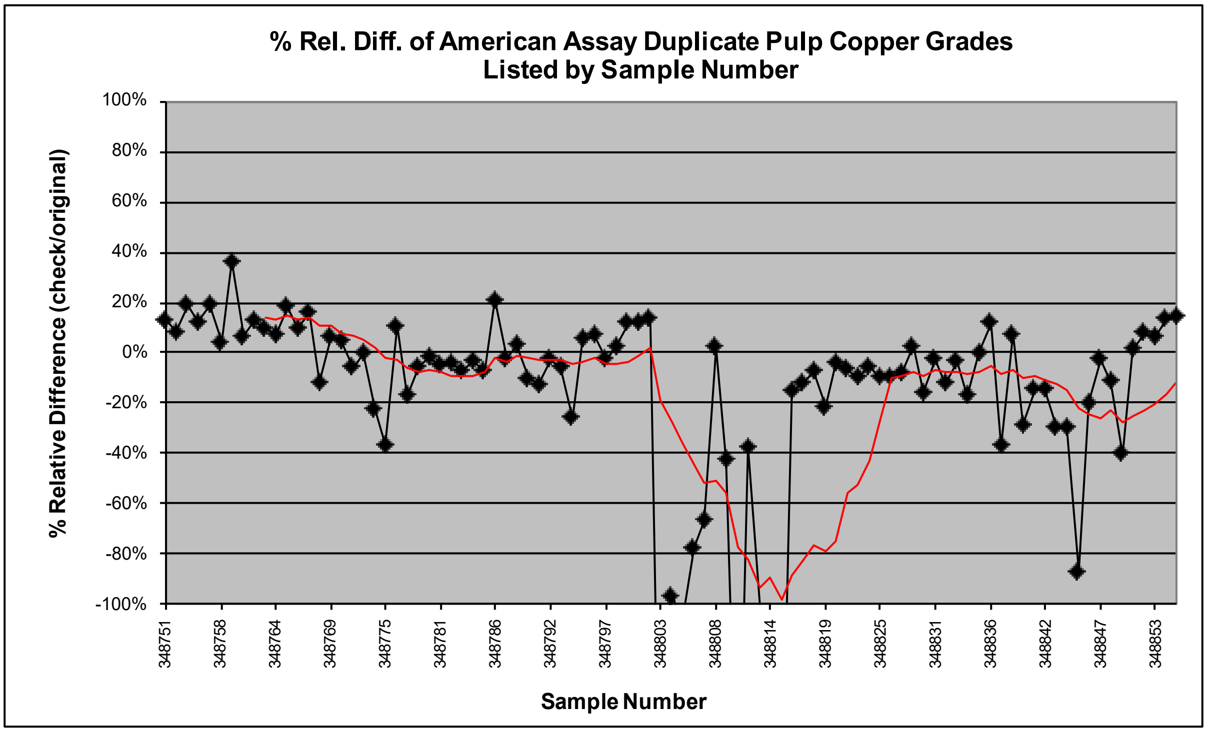


Figure 12.5 American Assay Relative Difference Duplicate Pulp Check Assays – Copper



12.2.2.4 2007 and 2008 Drilling Second Lab Pulp Re-Assay

Original pulps of many of the same sample intervals in which the duplicate pulp analyses were completed were submitted to an umpire lab for re-assay. American Assay was used as the umpire laboratory for the 2007 drill program in which ALS was the primary laboratory, while the roles were reversed for the 2008 drilling. A total of 296 original pulps were re-assayed: 94 by ALS and 202 by American Assay. One sample was removed from the American Assay gold analyses due to very high difference between the original and check assay, possibly resulting from a lab or Saratoga clerical error. Summary statistics of the re-assay check results are reported in this section, while the detailed graphs of the original versus check assay relative difference and absolute difference values, plotted against mean value, are included in Appendix E.

The results of the American Assay pulp re-assay gold and copper analyses, completed in 2007 for the first 13 holes of the 2007 drill program and December 2009 for the remaining 14 holes of the 2007 program, are shown statistically in Table 12.6 and Table 12.7. The results indicate good agreement between labs, with only a minor low bias in the gold check assays, which the relative difference graph in Appendix E shows is primarily at the higher gold grades, and no apparent bias in the copper analyses. The total variability on the gold re-analyses (mean value of 15%) matches the total variability for the duplicate pulp analyses completed by ALS for this same suite of samples. The copper variability of the total population is also very close (10% versus 7% for the ALS duplicate pulp).

Table 12.6 American Assay Pulp Re-Assay - Gold

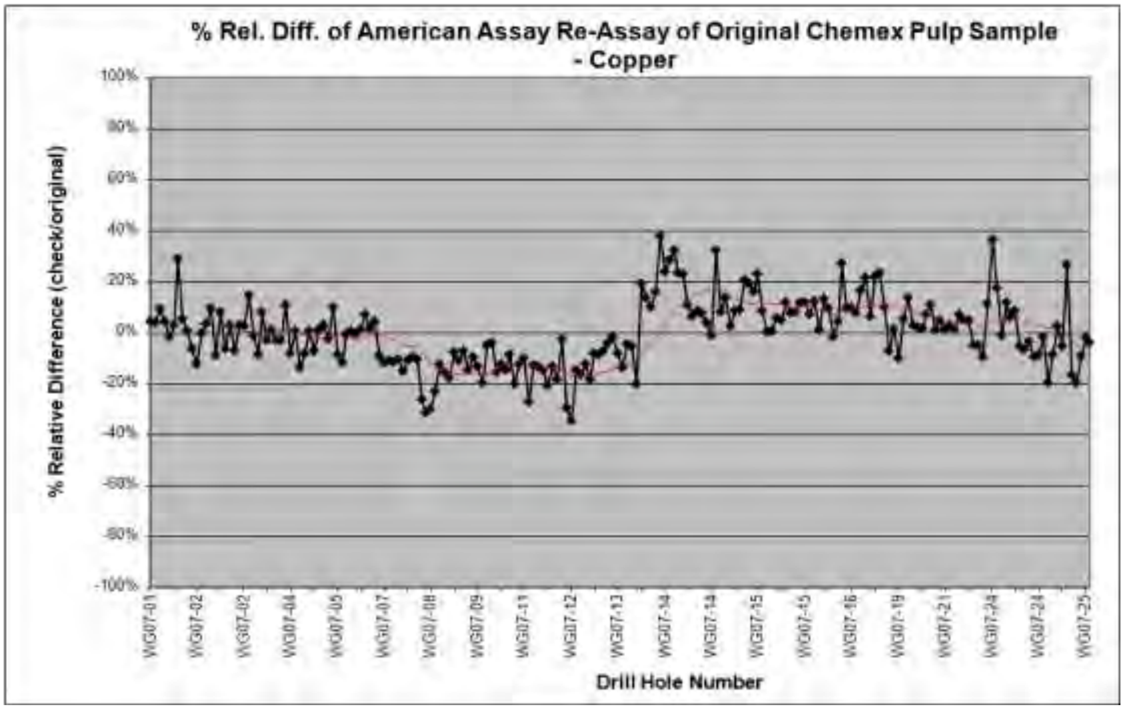
Gold g/t	Mean	Chemex	American	Diff.	Rel Diff.(%)	Abs. Diff.(%)
Count	201	201	201		201	201
Median	0.66	0.66	0.65	-2%	-2%	8%
Mean	1.08	1.10	1.06	-3%	-3%	15%
Std. Dev.	1.56	1.50	1.65			
CV	1.44	1.36	1.44			
Minimum	0.01	0.01	0.02	100%	-134%	0%
Maximum	15.43	12.91	17.94	39%	129%	134%

Table 12.7 American Assay Pulp Re-Assay - Copper

Copper %	Mean	Chemex	American	Diff.	Rel Diff.(%)	Abs. Diff.(%)
Count	202	202	202		202	202
Median	0.240	0.231	0.238	3%	0%	9%
Mean	0.297	0.297	0.296	0%	0%	10%
Std. Dev.	0.237	0.236	0.238			
CV	0.797	0.795	0.797			
Minimum	0.009	0.008	0.009	15%	-35%	0%
Maximum	1.523	1.490	1.555	4%	38%	38%

The relative difference graph of the American Assay pulp re-assay copper values is very erratic with a constant up and down in the variability. When plotted by sample number, as shown in Figure 12.6, a sharp break is apparent in the relative difference values. The first group of samples, up through hole WG07-13, were re-assayed on March 19, 2008, while the second group were re-assayed on December 3, 2009. The latter date is one day after American Assay ran the pulp duplicate samples that produced the problematic results as described in the previous section. There is also a constant temporal change within both days with the relative difference values becoming increasingly negative. These results possibly indicate some problems with American Assay's analytical techniques for copper. MDA's review of the gold results did not reveal a similar problem.

Figure 12.6 American Assay Relative Difference Pulp Re-Assay – Copper
(Plotted by drill-hole number)



The results of the ALS pulp re-assay gold and copper analyses completed December 2009 for the 2008 drill program are shown statistically in Table 12.8 and Table 12.9. The results indicate good agreement between labs with only a minor high bias in the population mean values for both the gold and copper check assays. The relative difference graph for gold in Appendix E shows the high bias is primarily at the higher gold grades, which is an expected mirror image of the American Assay pulp re-assay gold results. The total variability on the gold and copper re-analyses are both at 10% again, indicating good agreement between the labs and lending further evidence that the American Assay duplicate pulp analyses, completed on the same suite of samples as these ALS pulp re-assays, was compromised and should be taken out of the QA/QC analyses.

Table 12.8 ALS Pulp Re-Assay - Gold

Gold g/t	Mean	American	Chemex	Diff.	Rel Diff.(%)	Abs. Diff.(%)
Count	94	94	94		94	94
Median	0.53	0.53	0.50	-6%	1%	9%
Mean	0.71	0.70	0.72	3%	0%	10%
Std. Dev.	0.57	0.55	0.59			
CV	0.80	0.78	0.80			
Minimum	0.11	0.12	0.10	-16%	-50%	0%
Maximum	2.72	2.70	2.84	5%	42%	50%

Table 12.9 ALS Pulp Re-Assay - Copper

Copper %	Mean	American	Chemex	Diff.	Rel Diff.(%)	Abs. Diff.(%)
Count	94	94	94		94	94
Median	0.224	0.225	0.231	3%	1%	8%
Mean	0.263	0.261	0.266	2%	0%	10%
Std. Dev.	0.182	0.179	0.187			
CV	0.692	0.686	0.692			
Minimum	0.025	0.025	0.017	-33%	-88%	0%
Maximum	0.995	0.979	1.010	3%	23%	88%

12.2.3 QA/QC Conclusions

The check assay analyses have shown good agreement between the ALS duplicate pulp analyses on the original ALS coarse rejects and also between the ALS pulp re-assays of the original American Assay samples. No significant biases or assay variability issues were found within these data. There are concerns, primarily within the copper analyses, with the December 2009 American Assay pulp duplicate and pulp re-assay check analyses. Further examination and follow-up analytical work are warranted to determine the specific problem within these data, though any resolution of these issues would not materially affect the current resource model or stated resource for the reasons described below.

Except for copper standard CGS-13, no consistent significant biases in the standards were noted in either lab. The standards results did contain a number of isolated "failures" indicating a potential lack of precision at specific times within the labs. No further analytical work has been conducted to ascertain the cause or significance of these failures, but a review of the original assays associated with these standards (within the same lab batch) reveals no apparent anomalous gold or copper values within the generally consistent string of low-grade mineralization. In the context of the large bulk-tonnage nature of the deposit and the consistency of gold and copper grades, both within and between drill campaigns, it is not believed that the occasional failures observed in the Saratoga standards create a significant concern in the estimation and classification of the resource.

12.3 Twin Holes

While not technically twin holes, Henrietta's rotary hole P-2 was deliberately located halfway between, and 8m from, diamond drill holes A-1 and A-8 in order to compare rotary and core assay results (Nevin, 1973). Nevin (1973) reached the following conclusion:

> *Results of this exercise…show that copper and gold are about 20% higher than expected in the oxide zone of mixed ore and sulfides. These results are not conclusive, probably owing to the variations of values within the rock itself. Inspection suggests that copper values in P-2 have experienced a loss of about .2% (or 30% of the total) in mixed and sulfide zone…*

Henrietta's diamond drill holes H-5 and H-6 were extensions of rotary holes P-3 and P-4, respectively. Based on inspection of graphic logs (Nevin, 1973), there appeared to be virtually no change in assays from P-3 to H-5, but there was a slight increase from P-4 to H-6. The graphic logs were not provided in the copy of Nevin's (1973) report provided to MDA.

No true twin holes have been drilled at Copper King to date.

12.4 MDA Site Visits and Data Verification

12.4.1 June 2006 MDA Site Visit

A site visit was conducted by author Paul Tietz on June 19 and 20, 2006 in preparation for MDA's original 2006 Technical Report (MDA, 2006). The purpose of the visit was to collect surface and core samples to verify gold and copper mineralization and also to evaluate the project geology, physiography, accessibility, and infrastructure. These latter topics are discussed previously in this report.

12.4.1.1 2006 Data Verification

MDA collected six surface samples from within the footprint of the historical resource, and an additional four samples were taken from three Compass core holes that were in storage in Cheyenne, WY. The MDA samples were kept in MDA's possession until they were delivered to ALS for analysis. The samples were assayed for gold by standard fire assay/AA finish procedures, while an additional suite of 27 elements was analyzed using a four-acid digestion and AA analysis. The assay results from the 10 MDA samples, as shown in Table 12.10, confirmed the presence of significant gold and copper mineralization within the Copper King project area.

Table 12.10 MDA Sample Results (June 2006)

Sample ID	Sample Type	Au Grade (g Au/t)	Cu Grade (%)	Sample Comments
CK06-1	Surface	9.634	1.30	Shaft dump
CK06-2	Surface	6.480	0.87	Select outcrop
CK06-3	Surface	5.554	0.71	1.5m chip across prospect pit wall
CK06-4	Surface	1.577	0.27	Outcrop on west end of resource area
CK06-5	Surface	5.143	0.46	Select outcrop
CK06-6	Surface	9.429	0.56	Dump east of shaft
CK06-7	Core	1.440	0.31	Hole CCK16; grab from interval 154 to 157m
CK06-8	Core	4.251	0.88	Hole CCK19; grab from interval 45 to 48m
CK06-9	Core	5.794	1.04	Hole CCK19; select grab from interval 60 to 61m
CK06-10	Core	1.680	0.46	Hole CCK24; grab from interval 184 to 190m

Five of the surface samples assayed greater than 3.43g Au/t with a high of 9.634g Au/t. Copper values were all 0.25% or greater with a high of 1.3%. The samples were from both dump and outcrop collected over a 122m strike along the main trend of the mineralization. It should be recognized that the surface samples were primarily select samples of highly altered, silicified intrusive rock that contained significant silica veinlets. Copper oxides with very minor sulfides were present in many of the samples. It is likely that sampling of the less altered rock away from the strongly silicified main trend would result in lower gold and copper values.

The four core samples all returned similar gold and copper values as the surface samples. These core intervals were chosen by MDA because of recorded moderate to high grades and also the presence of either copper sulfides, primarily chalcopyrite, or silica veinlets. The two deeper samples (CK06-7 and 10) were from the sulfide zone characterized by 1 to 5% disseminated sulfides, primarily chalcopyrite, and only minor thin silica veinlets. The two samples collected from the same hole but from closer to the surface (CK06-8 and 9 from hole CCK19) were from the mixed oxide/sulfide zone and contained both disseminated copper sulfides and disseminated and fracture-fill iron oxide, primarily limonite, though hematite (possibly hypogene) was also present. These mixed-zone samples also contained increased silica veinlets and pervasive wallrock silicification, indicating that silicification and possibly associated gold mineralization are more prevalent in the near-surface mineralization. This observation correlates with the current geologic model in which the high-grade core, characterized by increase silica, is widest near-surface and tapers with depth.

The June 2006 site visit and sample results led MDA to recommend additional and more detailed geologic analysis and modeling to better define both the alteration and structural aspects of the deposit and their potential association with gold and copper mineralization.

12.4.2 April 2007 MDA Site Visit

A second site visit was conducted by Paul Tietz on April 24 and 25, 2007. The purpose of the visit was to monitor the 2007 core-drilling program, including assessing core recovery, core handling and storage, and down-hole survey methods, along with verifying existing and proposed hole locations. No new verification samples were collected.

At the time of the site visit, the drill rig was on the ninth hole (WG07-09) of the 2007 drill program. The hole was targeting the center of the mineralized body and like all previous 2007 drill holes (WG07-01 through WG07-08), was drilled to confirm the existing mineralization. The core recovery, core handling and storage, and the down-hole survey data have been previously discussed in Sections 10.0 and 11.0 of this report.

MDA observed all locations for the nine drill holes completed at the time of the site visit. The actual hole locations were compared to the planned surveyed location by using the still in-place front or back site survey stakes or, if all survey points were disturbed, by measuring bearing and distances from existing historical drill holes. It was determined that six of the first nine drill-hole collars were within a about a meter of their planned location. The actual collars for two holes (WG-07-04 and WG-07-05) were no longer evident because the sites had already been reclaimed; however, the hole locations could be estimated to within 3m of their actual collar location. The location of hole WG-07-01 was about 8m northeast of the planned location. This site was apparently moved due to the inaccessibility of the planned location on the edge of a small dump.

12.4.3 August 2007 MDA Casper Wyoming Logging Facility Visit

The Copper King project core logging and sampling facility in Casper, Wyoming was visited by Paul Tietz on August 28 and 29, 2007. The primary purpose of MDA's visit was to view the facility and observe the ongoing logging/sampling program before the facility was shut down at the end of the month due to the termination of Saratoga's six-month lease. During the visit, 21 core samples were collected for data verification purposes, and MDA also assisted Saratoga in the preliminary determination of core samples to be used for future metallurgical testing. Descriptions of the Casper logging facility and the logging and sample handling program have previously been discussed in Sections 10.0 and 11.0 of this report. A discussion of Saratoga's metallurgical testing program is in Section 13.0.

12.4.3.1 2007 Data Verification

MDA collected 21 core samples from five Saratoga core holes in August 2007. The samples selected by MDA were from a range of mineral grades expected to be typical of the Copper King mineralization. Principally collected for data verification purposes, the samples also served as half-core duplicate samples used as a check on the initial assay values. All but one of the samples consisted of the remaining half-core from the previously logged and sampled core held in storage in Casper, WY. The one sample with no previous assay value was a half-core sample from an interval (WG07-03; 30-31m) that was sawn but mistakenly not sampled by Saratoga. This was the only instance of not-sampled core that MDA observed after looking at most of the main mineralized zones in the first 11 Saratoga core holes.

The MDA samples were kept in MDA's possession until they were delivered to FedEx in Casper for shipping to ALS (Sparks, NV) for analysis. The samples were assayed at the same lab, and using the same sample preparation and analytical procedures, as employed for the original Saratoga samples (as described in Section 11.3). The gold and copper analytical results for MDA's samples are shown in Table 12.11. Also included in the table are the original gold and copper values for these sample intervals along with relative difference values for each sample pair.

Table 12.11 MDA Sample Results (August, 2007)

Hole ID	From (m)	To (m)	MDA Au oz/ton	Orig. Au oz/ton	Rel. Diff. (%)	MDA Cu (%)	Orig. Cu (%)	Rel. Diff. (%)
WG07-01	18.3	20.0	0.514	0.229	124.5%	1.120	1.540	-27.3%
WG07-01	75.6	77.0	0.037	0.034	8.8%	0.382	0.307	24.4%
WG07-01	96.6	98.0	0.009	0.015	-40.0%	0.176	0.228	-22.8%
WG07-02	39.0	39.9	0.097	0.072	34.7%	0.797	0.570	39.8%
WG07-02	93.0	94.5	0.015	0.016	-6.3%	0.166	0.183	-9.3%
WG07-02	134.6	135.9	0.020	0.018	11.1%	0.225	0.222	1.4%
WG07-03	29.6	31.1	0.015	NS	-	0.161	NS	-
WG07-03	31.1	32.6	0.013	0.013	0.0%	0.161	0.155	3.9%
WG07-03	49.4	50.1	0.079	0.058	36.2%	1.135	0.917	23.8%
WG07-03	137.0	138.5	0.044	0.039	12.8%	0.497	0.448	10.9%
WG07-03	186.7	188.4	0.016	0.015	6.7%	0.147	0.152	-3.3%
WG07-03	245.0	246.3	0.020	0.023	-13.0%	0.212	0.236	-10.2%
WG07-03	271.9	273.4	0.016	0.017	-5.9%	0.248	0.312	-20.5%
WG07-09	31.0	32.3	0.045	0.046	-2.2%	0.290	0.333	-12.9%
WG07-09	73.0	74.4	0.106	0.088	20.5%	0.992	0.997	-0.5%
WG07-09	125.3	127.0	0.057	0.057	0.0%	0.388	0.379	2.4%
WG07-10	36.3	38.0	0.046	0.036	27.8%	0.453	0.344	31.7%
WG07-10	42.4	44.0	0.087	0.063	38.1%	0.434	0.408	6.4%
WG07-10	99.4	101.0	0.087	0.050	74.0%	0.389	0.403	-3.5%
WG07-10	132.3	134.0	0.028	0.026	7.7%	0.253	0.259	-2.3%
WG07-10	149.0	150.3	0.112	0.103	8.7%	0.523	0.509	2.8%
		mean	0.070	0.051	17.7%	0.436	0.424	1.3%

The assay results from the MDA samples confirmed the presence of significant gold and copper mineralization within the 2007 Saratoga drill holes. As duplicate check assays, the MDA results from this small sample population showed high variability within the higher-grade ranges for gold. Six sample pairs had a >30 percent difference, with five of the six assaying >1.71g Au/t, and the highest-grade sample (17.622g Au/t) showing a 125 percent difference. These results indicate the potential within the deposit for erratic, potentially coarse free gold, especially within the shallow oxide and mixed oxide/sulfide mineralization. Copper values were more consistent with just two samples with >30 percent difference. The MDA gold values also have a significant high bias versus the original assays with an average 18 percent increase in gold content for the MDA samples. Only three MDA samples had lower gold values than the original assays. There is no apparent bias for the copper analyses. The cause of the gold bias has not been determined, and further duplicate analyses are warranted.

12.4.4 October 2007 MDA Dubois Wyoming Logging Facility Visit

The Copper King project core logging and sampling facility in Dubois, Wyoming was visited by Paul Tietz on October 18, 2007. The core logging/sampling program, along with the core storage, was moved to Dubois due to the closure of the Casper facility. The Dubois work was conducted within an open-sided ranch shed on private property owned by Norm Burmeister, an officer with Saratoga. The core facility was within a fenced area. After sampling was complete, the core was transported to a commercial storage facility and stored on racks in a locked storage unit.

12.4.5 May 2012 MDA Site Visit

Paul Tietz visited the Copper King project on May 29, 2012, and inspected the project site as well as the core-storage facility in Cheyenne. There was no evidence of drilling or any other significant exploration work on the property since completion of Saratoga's 2008 drill program. The Cheyenne core-storage units are securely locked and are within a fenced facility. The core is stored on racks, allowing easy access to the individual wooden core boxes.

12.5 Summary Statement on Data Verification

The author is of the opinion that the data verification procedures support the geologic interpretations and confirm the database quality. Therefore, the Copper King database is adequate for use in estimating and classifying a Mineral Resource. Principal findings from the data verification are:

- The Saratoga collar, down-hole survey, and assay databases are of high quality with only minor errors noted and corrected.
- The drill data support the geologic interpretations and style of mineralization used in the resource model.
- The QA/QC data indicate that the gold and copper data are sufficiently accurate for use in Mineral Resource estimation.
- The limited quantity of original drill data results in a restriction of Mineral Resource classification to Inferred and Indicated only for the pre-Saratoga drilling. In the context of the large bulk-tonnage nature of the deposit and the consistency of gold and copper grades, both within and

between drill campaigns, it is not believed that the lack of original data creates a significant concern in the estimation and classification of the resource.

MDA recommends that a comprehensive program of quality assurance duplicate sampling, including pulp, coarse reject, RC rig, and quarter core, be continued throughout the life of the project.

13.0 MINERAL PROCESSING AND METALLURGICAL TESTING

This section was prepared by Steven S. Stillar, a metallurgical consultant, in 2010 and has been updated in August 2012 by Dr. Robert H. Cuttriss, a metallurgical consultant in a prior 43-101 report. No new information is available since the prior report was completed and is used in this report.

13.1 Previous Metallurgical Testing

In the 2007 Technical Report (Tietz and Ristorcelli, 2007), MDA, with assistance from Steven S. Stillar, presented a summary of the available historical metallurgical work concerning the Copper King project. At least nine different companies and/or individuals had previously submitted samples for metallurgical testing, which was focused on the determination of the metallurgical process best suited for use in the extraction of gold and copper from the deposit. These prior studies included:

- Cyanide leaching of drill chips performed by the Colorado Minerals Research Institute in 1998;
- Metallurgical flowsheet evaluation by the Colorado Minerals Research Institute in 1998, including a detailed mineralogical examination of samples tested and testing concentrates by Russell M. Honea;
- Bacterial oxidation testing completed by Little Bear Laboratories (Montana), possibly also in 1998;
- Bacterial oxidation and cyanidation of flotation concentrate by Metallurgy International Pty. Ltd. in 1996;
- A preliminary metallurgical evaluation by Metallurgy International Pty. Ltd. in 1994 with a separate mineralogical report on test product samples by Central Mineralogical Services;
- A metallurgical investigation of the Copper King ores by Hazen Research, Inc., in 1989 that also included mineral examination of the high-grade sulfide and high-grade oxide samples;
- Cyanide leach tests by KCA in 1989;
- Flotation testing and cyanidation on a sulfide sample as well as acid leaching and cyanidation on oxide samples by Zoran Pacic in 1987;
- A 1973 report prepared by Andrew E. Nevin Consultants Ltd., apparently summarizing results from 1938 and 1970 testing by ASARCO and 1972 testing by Earth Resources; and
- An undated preliminary leach test on “Kirkwood Sample” by an unknown author.

The reader is referred to Appendix F of MDA’s 2007 Technical Report (Tietz and Ristorcelli, 2007) for further details on these studies.

After review of these reports, which were mostly completed in the period from 1987 to 1998 on relatively high-grade sulfide and oxide samples, the following general conclusions were presented (Tietz and Ristorcelli, 2007):

- The gold in both the oxide and sulfide samples tested appears amenable to cyanidation, but cyanide consumptions were very high, due to the copper content of the samples, which would likely make direct cyanidation uneconomic.

- Flotation applied to the sulfide samples appeared to yield good results (80% to 90% copper recoveries and 70% to 80% gold recoveries) with indications that a satisfactory gold-copper concentrate may be produced.

- Flotation applied to oxide samples produced much lower copper recoveries (25% to 60%) and about 70% gold recovery.

- Bio-oxidation of flotation concentrates produced mixed, but generally unoptimistic, results.

- Gravity concentration was unsuccessful.

- Column leaching of oxide samples was successful, but with high cyanide consumption.

- Flotation on sulfide samples followed by cyanidation of the flotation tailings produced good extractions of both gold and silver, with much lower cyanide requirements being noted.

It was concluded that the process with the highest potential to yield good extractions of gold and copper would likely be flotation, followed by cyanidation of the flotation tailings (Tietz and Ristorcelli, 2007).

13.2 SGS Lakefield Canada Inc. Metallurgical Process Development

Subsequent to MDA's 2007 technical report, Saratoga, in consultation with MDA, prepared sample intervals from diamond drill core produced in Saratoga's mid-2007 drilling program and sent them to SGS Lakefield Canada Inc. ("SGS") for continued metallurgical and process development work. The samples were received by SGS in February 2008. To the extent that MDA consulted in choosing the drill-core intervals with which to make up the samples, MDA believes that the samples represent the rock types as designed. MDA had no involvement in the packaging and shipping of the samples to SGS or for the handling of the samples at the SGS facilities, and, as such, cannot verify with certainty that the samples tested represent the deposit as planned. However, MDA has no reason to doubt that the samples were handled properly.

Saratoga contracted with SGS for a scoping-level metallurgical test program to evaluate the amenability of Copper King samples for recovery of gold and copper by flotation. This program began in March 2008 and continued until August 2009 (SGS Lakefield Research Ltd., 2009).

SGS's program included:

1. Sample preparation of the intervals into four rock-type composites: one oxide, one mixed oxide-sulfide, and two sulfide samples;

2. Creation of a master composite on which the bulk of the process development work would be done;

3. Comprehensive chemical analysis of each composite;

4. Grindability testing on all five composites (the four rock-type composites and the master composite);

5. Comprehensive mineralogical analysis of each composite;

6. Flotation process flowsheet development;

7. Recovery of copper from the oxide composite by acid leaching; and

8. Environmental test work.

In reviewing this body of work, the author has not analyzed each individual test, verified the calculation of test results, nor verified that individual test results were correctly collected and summarized within the reports. It has been taken as a given that the test work was properly performed and reported. No responsibility is taken for the accuracy or consistency of the data or the conclusions presented by SGS within the individual reports. MDA have no reason to doubt that the reports are accurate and that the test work was properly conceived and performed.

13.2.1 Rock-Type Composites

Four composite samples, representing three general rock types, were created using the drill-core intervals provided by Saratoga. Table 13.1 lists the drill-core sample data for each composite.

Table 13.1 Rock-Type Composites Prepared by SGS

Composite	*Number of Holes*	*Number of Samples*	*Total Interval (m)*
1 - Oxide	6	44	67
2 - Mixed Oxide-Sulfide	3	42	63
3 - Sulfide	4	44	68
4 - Sulfide	3	43	64

The composites upon which the SGS work was done resulted from a diamond drilling program completed in July 2007. The samples were sent to SGS in February 2008. The testing began in March 2008 and was completed in 2009, though the bulk of the work was completed by August 2008. Although the samples were stored in a freezer at SGS, this amount of elapsed time between core production and testing makes it possible that the program results were affected by aging, something that would be less of a problem in a producing mine.

All of the composite samples are from what is considered to be the main portion of the deposit and cover about 198m of strike length. The oxide samples range from 3 to 37m in depth; the mixed samples are from 30 to 101m in depth; and the sulfide samples are from 76 to 183m in depth.

The composite types represent spatially distinct rock types that occur within the following areas within the Copper King deposit:

- The oxide composite consists of drill intervals within the upper layer of the deposit that overlies the higher-grade central core and the lower-grade peripheral sulfide portions of the deposit.

- The mixed oxide-sulfide composite samples are from the upper two-thirds of the higher-grade central core of the deposit that extends to a variable depth of up to 107m below the surface oxidized zone.

- The sulfide composite samples are from the lower-grade, unoxidized portion of the deposit that surrounds the central core of the deposit and underlies the oxidized surface zone. Composite 3 consists of samples at depth beneath the eastern portion of the high-grade core of the deposit, while composite 4 consists of samples at depth beneath the western half of the deposit.

Classification of the rock types the composites represent was primarily based upon the lithology, mineralization, and oxidation state of the host rocks found in the deposits, and not only upon the oxidation state of the minerals found in the deposit. The drill holes and intervals were chosen to represent each of the three general rock types encountered in the deposit. Although each composite may be representative of the rock types found within the deposit, the three composite types cannot be taken to be representative of the resource as a whole.

A summary of some of the characteristics of the rock type composites is presented in Table 13.2.

Table 13.2 Characteristics of the Rock-Type Composites

Composite Number	Oxidation State Class	Primary Copper Minerals (% of Total Copper)	Metal Content g Au/t	% Cu
1	Oxidized	Native copper (43%) Chalcocite/Digenite (40%) Cuprite (12%)	1.00	0.26
2	Mixed Oxide-Sulfide	Chalcocite/Digenite (49%) Chalcopyrite (35%) Bornite (7%)	1.96	0.39
3	Sulfide	Chalcopyrite (81%) Chalcocite/Digenite (10%) Bornite (8%)	0.62	0.22
4	Sulfide	Chalcopyrite (84%) Chalcocite/Digenite (7%) Bornite (7%)	0.56	0.19

13.2.2 Master Composite

The bulk of the process development testing was done on a master composite, which was produced using equal parts of the composites representing rock types 2, 3, and 4. At the completion of the process development work using the master composite, the optimum process criteria were applied to tests on composites 2, 3 and 4. These tests, called variability tests, used each individual composite and were done to indicate the differences in results that may be produced using the optimum process parameters on the individual rock types.

Composite 1, representing the oxide rock type, was not used in the creation of the master composite and was not subjected to variability testing, apparently because the oxidized nature of the sample made it an unlikely candidate for successful reaction to flotation. However, a separate test was done on the oxide composite utilizing acid leaching followed by precipitation and flotation.

Table 13.3 shows the analysis for the master composite. Note that the gold content is somewhat higher than the average of the three source composites. However, the calculated heads for the flotation tests completed using the master composite were mostly all within the 1.05g Au/t range that would be expected from the individual composite assays.

Table 13.3 Analysis of the Master Composite Prepared by SGS

% Copper	% Cyanide Soluble Copper	Gold, grams/tonne	Silver, grams/tonne	% Sulfur
0.28	<0.002	1.41	<10	0.25

13.2.3 Composite Chemical Analysis

Table 13.4 lists the chemical analysis of each of the four individual rock types and the master composite, as taken directly from the SGS report.

Table 13.4 Chemical Analysis of the Rock-Type and Master Composites Prepared by SGS
(From SGS Lakefield Research Ltd., 2009)

Fire Assay					
Composite Element	Master	Comp 1	Comp 2	Comp 3	Comp 4
	Assay (g/t)				
Ag	< 10	< 10	< 10	< 10	< 10
Au	1.41	1.00	1.96	0.62	0.56

XRF					
Composite Element	Master	Comp 1	Comp 2	Comp 3	Comp 4
	Assay (%)				
Cu	0.28	0.26	0.39	0.22	0.19
Cu (sol)	< 0.002	0.002	< 0.002	< 0.002	< 0.002

ICP Multi-element Scan					
Composite Element	Master	Comp 1	Comp 2	Comp 3	Comp 4
	Assay (g/t)				
Al	85,000	86,000	82,000	91,000	95,000
As	< 30	< 30	< 30	< 30	< 30
Ba	860	920	760	860	930
Be	1.3	1.1	1.1	1.4	1.4
Bi	< 20	< 20	< 20	< 20	< 20
Ca	21,000	21,000	12,000	25,000	21,000
Cd	< 2	< 2	< 2	< 2	< 2
Co	16	19	11	18	17

ICP Multi-element Scan					
Composite Element	Master	Comp 1	Comp 2	Comp 3	Comp 4
	Assay (g/t)				
Cr	34	30	22	19	29
Fe	43,000	45,000	44,000	44,000	40,000
K	18,000	17,000	16,000	17,000	20,000
Li	11	9	7	17	11
Mn	480	750	360	530	420
Mo	< 5	< 5	< 5	< 5	< 5
Na	28,000	33,000	35,000	26,000	3,000
P	580	710	380	720	590
Pb	< 40	< 40	< 40	< 40	< 40
Sb	< 10	< 10	< 10	< 10	< 10
Se	< 30	< 30	< 30	< 30	< 30
Sn	< 20	< 20	< 20	< 20	< 20
Sr	750	680	620	740	790
Ti	2,200	2,400	1,500	2,600	2,200
Tl	< 30	< 30	< 30	< 30	< 30
U	< 20	< 20	< 20	< 20	< 20
V	59	73	44	70	53
Y	8	8.5	5.8	9.4	8.2
Zn	150	170	100	120	120

13.2.4 Grindability Testing

The master composite was subjected to a Bond rod mill grindability test; all five composites (including the master composite) were subjected to Bond ball mill grindability testing. The results are presented on Table 13.5.

Table 13.5 Results of Grindability Testing by SGS

	Composite 1 Oxide	Composite 2 Mixed Oxide-Sulfide	Composite 3 Sulfide	Composite 4 Sulfide	Master Composite
Ball Mill Work Index kWh/tonne	13.0	14.2	14.8	14.3	14.3
Rod Mill Work Index kWh/tonne	-	-	-	-	16.0

These results characterize the samples as being of medium hardness, with the oxide being somewhat less hard. This indicates that the rock types found at Copper King may be somewhat easier and less power intensive to grind than many porphyry copper deposits.

13.2.5 Mineralogy

A quantitative QEMSCAN mineralogical study was completed to identify the major mineral species in the composites and to characterize the degree of liberation and association of the valuable minerals. Table 13.6, taken from the SGS report, presents the modal analysis of the composites.

Table 13.6 Modal Analysis of Minerals in the Rock-Type and Master Composites

(From SGS Lakefield Research Ltd., 2009)

Sample Fraction	Name Name	Master Composite	Comp 1	Comp 2	Comp 3	Comp 4
Mineral Mass (%)	Chalcopyrite	0.57	0.54	0.64	0.58	0.51
	Bornite	0.01	0.00	0.05	0.04	0.06
	Covellite	0.01	0.00	0.03	0.00	0.00
	Chalcocite	0.07	0.02	0.26	0.02	0.04
	Pyrite	0.23	0.00	0.08	0.09	0.40
	Molybdenite	0.02	0.01	0.03	0.02	0.01
	Other Sulphides	0.01	0.00	0.01	0.02	0.01
	Quartz	25.9	26.3	30.6	23.8	26.0
	Feldspar	47.1	44.2	46.7	44.4	46.5
	Garnet	0.07	0.25	0.10	0.07	0.05
	Amphiboles	2.32	6.62	0.83	4.15	2.32
	Clays	1.68	1.94	1.83	1.51	1.51
	Micas	13.9	12.5	9.6	15.8	14.2
	Chlorites	4.25	3.93	4.17	5.61	4.38
	Fe Oxides/Oxyhydroxides	2.22	2.34	4.10	1.79	1.75
	Ti Oxides	0.44	0.48	0.29	0.56	0.45
	Calcite	0.80	0.11	0.31	0.91	1.15
	Apatite	0.32	0.34	0.23	0.38	0.32
	Zircon	0.06	0.07	0.03	0.09	0.09
	Other	0.01	0.29	0.16	0.18	0.21
	Total	100.0	100.0	100.0	100.0	100.0

As shown, the primary host rocks are composed of feldspar, quartz, micas, and chlorites. Chalcopyrite is identified as the primary copper mineral in each composite. No gold mineralization was identified, and no native or oxide copper minerals were noted, even in the oxide composite. Also, the SGS mineralogical report provides scant information concerning the nature and occurrence of gold in any respect. It will be important in future work to determine the association of gold with sulfides, oxides, and host rocks.

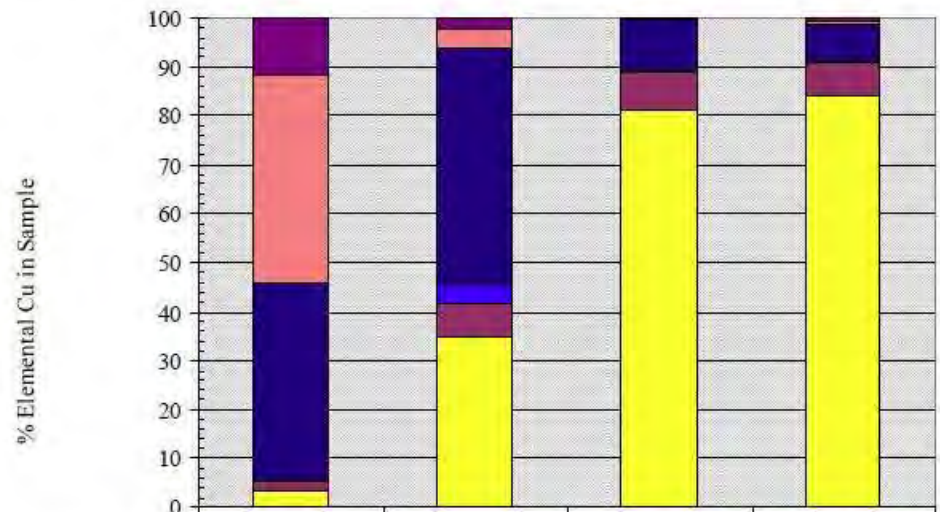
With respect to the copper mineralization in the composites, Figure 13.1, taken from the SGS report, presents the percentage of the total elemental copper found in each composite based upon the copper minerals present. When considering the use of flotation for mineral recovery, this is important information, although it seems to conflict with the modal table above with respect to chalcopyrite, native copper, and cuprite.

Of note in composite 1 is the significant amount of native copper and cuprite found, neither of which were found in the modal analysis, and the presence of chalcocite/digenite. This indicates the potential for recovery of copper minerals from this composite using flotation, as all of these minerals have been found to be recoverable by flotation under the right conditions. The copper mineralization indicated for composites 2, 3, and 4 should reflect the potential for very good flotation results and for the production of good concentrate grades.

Without any information to the contrary, it is presumed that the bulk of the gold is present in association with sulfides, both copper and iron, and that flotation of these minerals will result in recovery of gold to a copper concentrate.

Figure 13.1 Percentage of Elemental Copper in the Rock-Type Composites by Copper Minerals Present

(From SGS Lakefield Research Ltd., 2009)



	Comp. 1	Comp. 2	Comp. 3	Comp. 4
Cuprite	11.7	2.28	0.15	0.89
Native Cu	42.6	3.69	0.28	0.20
Tetrahedrite	0.00	0.00	0.00	0.00
Enargite	0.00	0.00	0.00	0.00
Chalcocite/Digenite	40.2	48.6	10.2	7.48
Covellite	0.30	3.84	0.25	0.57
Bornite	1.83	6.54	7.89	6.65
Chalcopyrite	3.39	35.0	81.2	84.2

Sample

The mineralogical work indicated that a fine grind will be required to achieve copper-mineral liberation from gangue for both primary grinding and regrind operations and that a P_{80} of 10 to 20 microns will be required to achieve a 90% liberation of copper minerals.

The SGS mineralogical work shows some inconsistencies within the report and also differs somewhat from previous work. Notably, previous work, as well as drill logs, noted the occurrence of non-sulfide minerals such as chrysocolla, azurite, and malachite, while none of these were found in SGS's work.

As work progresses, continued efforts to understand the mineralogy of the deposit, and its potential effects on processing, both positive and negative, should be made.

13.2.6 Flotation Process Development

Development of a satisfactory flotation process for the recovery of gold and copper from the Copper King deposit was the primary focus of the SGS work. The work included:

- Thirteen rougher kinetics tests which, using the master composite, evaluated the impact of primary grind size, reagent regime, and pulp pH upon the recovery of gold and copper into a rougher concentrate;

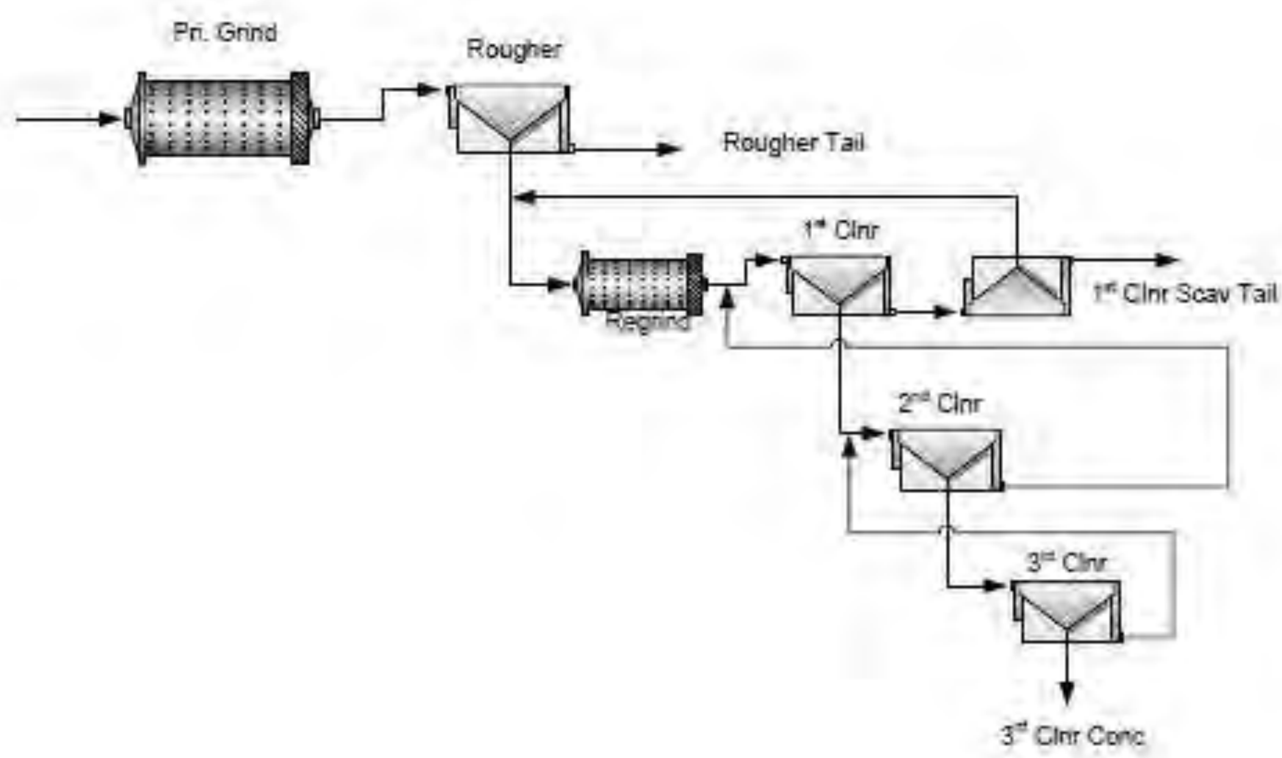
- Thirteen batch cleaner tests (open circuit), using the master composite, for evaluation of the effect of primary grind size, regrind particle size, and reagent requirements on concentrate grade and overall gold and copper recovery;

- Three master composite locked cycle tests using process criteria developed in the previous tests to assess the effect of circulating concentrate and tailings streams within the flotation circuit. The locked cycle testing better represents the anticipated performance of an operations system.

- Eight variability tests, of which three were rougher tests (one each on composites 2, 3, and 4) and five were batch cleaner tests (three using composite 2 and one each using composites 3 and 4). Each variability test is designed to demonstrate, using the developed process criteria, any difference in performance between individual composites and to the master composite as a whole.

The proposed flotation circuit resulting from the SGS test work is represented in Figure 13.2.

Figure 13.2 Proposed Flotation Circuit Based on SGS Test Work



This flowsheet is a conventional flowsheet similar to flowsheets used in many copper mills throughout the world.

As a result of their work, SGS concluded that the process-design criteria listed in Table 13.7 are capable of producing satisfactory recoveries of gold and copper from ores resembling the master composite to a marketable grade of copper concentrate.

Table 13.7 Process-Design Criteria for Recovery of Gold and Copper

Primary Grind Size, 80% Passing	90 to 100 microns
Regrind Size, 80% Passing	20 microns
Rougher Flotation pH	Natural to 9.8, using lime
Rougher Reagents	AERO 208, 15 grams/tonne Potassium Ethyl Xanthate, 35 to 40 grams/tonne
Locker Cycle Tests - Rougher Flotation Time,	22 minutes
Cleaner Reagents	AERO 208, 12.5 grams/tonne Potassium Ethyl Xanthate, 27.5 grams/tonne Carboxymethyl Cellulose, 75 to 100 grams/tonne
Locked Cycle Tests - Cleaner Flotation Time,	3rd Cleaner - 2.5 minutes 2nd Cleaner - 4 minutes 1st Cleaner - 6 minutes Scavenger - 3 minutes

SGS concluded that the selected flotation conditions, using the master composite, "*are suitable to produce a concentrate with a grade of 26% Cu at a Cu recovery of 77%. This concentrate also contained 89 g/t Au at an Au recovery of 68%.*"

SGS also concluded that "*Composite 2, which made up 33% of the Master Composite, yielded low copper recoveries into the final concentrate of only 60-75% due to the presence of oxide minerals. The other two composites produced Cu recoveries between 73% and 83% at concentrate grades of 25-27%*".

Further, SGS concluded that:

- Additional work is required to further understand the nature of the metals losses to tails.
- A relationship appears to exist between primary grind and gold recovery and that this needs to be explored and refined.
- The cleaning circuit produced good results and is not likely to need much additional work.

In 2010, S. Stillar agreed with the first two points above and believed that they are supported by the test work. Although the recommended grinds are somewhat fine for a typical copper flotation operation, they are not unusual for the recovery of gold in gold cyanidation mills. With respect to the cleaning circuit, the cleaner recoveries are lower than they might be and that satisfactory concentrate grades may be achieved with improved metals recoveries.

SGS did not report conclusions for:

- Composite 2 - gold recovery and concentrate gold and copper content
- Composites 3 and 4 - gold recovery and concentrate gold content.

However, the SGS report does present test results for composites 2 and 3 from which independent conclusions may be formed. After reviewing the testing done on composites 2, 3, and 4, independent conclusions can be formed as to the gold recovery and concentrate grades that may be expected from these composites. Table 13.8 presents the combined results of the conclusions presented by SGS (as discussed above) and the independent conclusions formed by the current review of the data. The conclusions formed independent of SGS are indicated with an asterisk and italics.

Table 13.8 Projected Recovery and Concentrate Grades Based on Testing by SGS

Composite	% Copper Recovery	% Gold Recovery	Concentrate % Copper	Concentrate gram/tonne Gold
2	60 to 75 *68**	*60**	*40**	*170**
3	73 to 83 *80**	*60**	25 to 27 *26**	*50**
4	73 to 83 *80**	*60**	25 to 27 *26**	*50**
Master Composite (LCT-3)	77	68	26	89

* denotes conclusions formed by S. Stillar, 2010.

SGS also analyzed the copper concentrate that resulted from locked cycle test 3 (LCT-3) to quantify the presence of undesirable elements (from a smelting standpoint) in the concentrate. All these elements were within generally acceptable limits except for mercury, which was at a concentration of greater than 14.3g Hg/t.

13.2.7 Oxide Processing - Composite 1

In the design of the initial test program, it was assumed that composite 1, representing the oxides, would not respond favorably to standard flotation procedures. Therefore, it was never tested for flotation response, even in the variability tests. Rather, a single leach-precipitation flotation test was performed.

For this test, the sample was leached with sulfuric acid at a pH of 1.5 for two hours. It was then treated with NASH (sodium hydrosulfide) to precipitate the copper ions as artificial sulfides, after which it was subjected to rougher flotation. The results were encouraging, with copper recovery at 79% and gold recovery at 62% with a decent rougher concentrate grade of 5.9%. SGS has concluded that continued work to optimize this process is warranted.

Since the bulk of the copper mineralization in the composite was native copper, cuprite, and copper sulfides, it is possible that the sample may respond to direct flotation, given the necessary conditions. This should also be given further consideration in future work.

13.2.8 Environmental Testing

A basic environmental test program was completed to characterize rougher tailings from the project in order to identify potential liabilities that may become associated with the production and storage of the tailings. Rougher tailings from locked cycle test 2 (LCT-2) were used for the tests. The following is a summary of the conclusions of the testing:

- Acid-Base Accounting tests indicate that the rock will have the potential to neutralize more acid than it may produce. The negligible sulfide content suggests that acid generation will be highly unlikely.

- Net Acid Generation testing confirms that the tailings are unlikely to be acid generating.

- Strong Acid Digest Elemental Analysis testing suggests that none of the US EPA toxicity characteristic metal contaminants are found in significant concentration to be of environmental concern. Iron could be of concern with respect to fresh water aquatic life, depending on oxidation state and solution pH.

- Liquid Effluent Analysis indicates that the decanted liquid tails exceeds the aesthetic limits for iron and aluminum by an order of magnitude.

- Extraction Testing indicates that water from the tailings will not likely meet drinking water standards, although none of the toxic characteristic contaminants were above toxicity limits.

13.3 SGS Canada Investigation of an Oxide Sample

In October 2010, SGS issued an addendum to their 2009 mineralogical report, replacing their earlier QEMSCAN analysis of Comp 1, the oxide component of the Copper King samples sent in 2009 for metallurgical evaluation.

As noted by Stillar (Section 13.2.7, above) it was assumed that the oxide composite would not respond well to conventional flotation, and it was not included in the original flotation test program. On reassessing the mineralogical data, SGS concluded that copper is present in the oxide component of Copper King deposit as native copper (67% of the total), chalcopyrite (4%), and minor covellite/chalcocite. The balance of the copper is disseminated in various low-grade Fe-oxides (10%) and silicates (18%). (Note that the percentage abundances are described by SGS as "tentative and a large margin of error is possible".) It was also observed that approximately 60% of the copper in the -600/+106-micron size fraction was present as free and liberated native copper and chalcopyrite; this figure increased to 86.6% in the -25/+3-micron size range. This re-evaluation gave rise to further metallurgical testing of Comp 1, reported by SGS in November 2010 (Flotation Recovery of Gold and Copper from a [*sic*] Oxide Sample from the Copper King Deposit, Report 11868 – 002 Draft Final Report, Nov 19, 2010).

Four batch rougher tests and three batch cleaning tests were used to select flotation conditions. A locked cycle test with regrinding of the rougher concentrate, followed by three stages of cleaning with the Cleaner 1 Scavenger in open circuit, yielded a concentrate grading 15.3% Cu and 384 g Au/t at recoveries of 8.0% Cu and 54.8% Au. In the concentrate markets prevailing in Q3, 2012, this would have been a readily saleable concentrate. The practical significance of this result is that it demonstrates that both the oxide zone and the primary sulfide zone can be treated through the same flotation circuit.

Recovery of oxide mineralization can sometimes be assisted by the presence of sulfide minerals which provide a stabilizing effect on the froth and thereby assist the recovery and transport of the valuable minerals/metals. Stillar's observation (Table 13.8) that Comp 2, the mixed oxide and sulfide composite, yielded a concentrate grading 40% Cu and 170g Au/t at 68% Cu recovery and 60% Au recovery suggests this effect may also apply with the Copper King deposit. Future test work should assess whether it would be beneficial to blend sulfide material with material from the oxide zone, subject of course to the mining sequence.

SGS also conducted a separate gravity concentration test on the oxide composite using a Wilfley table and a Mozley Mineral Separator. They concluded that the results were poor, with low recovery (5% Cu recovery and 11% Au recovery in 1.1% of the mass) and poor upgrading (1.24% Cu and 9.7 g Au/t). However, given the presence of metallic copper and the possibility of metallic gold, it is likely that a centrifugal concentrator in the grinding circuit (a Knelson or Falcon concentrator) would recover a gravity concentrate and significantly enhance the final recovery.

13.4 Conclusions

- Based primarily upon the recent SGS test results, and in consideration of prior work on the project, it is concluded that gold and copper can be recovered from both the sulfide and oxide portions of the Copper King deposit (as represented by the samples supplied to SGS) using a standard flotation flowsheet and that a marketable copper concentrate, containing significant gold, can be produced.

- Recoveries from the oxide and mixed sulfide-oxide ore types are significantly lower than for the primary sulfides, and practical methods to enhance overall copper and gold recovery should be further investigated, including

  - Blending oxide and sulfide mineralization to provide a more supportive froth phase in flotation;

  - Including a centrifugal gravity concentrator in the grinding circuit to recover metallic copper and free gold particles; and

  - Sulfidizing to enhance flotation recovery of tarnished and partially oxidized particles.

- Recovery of gold and copper to a marketable concentrate for the Copper King deposit, as for most copper and gold deposits, may depend heavily upon ore grade and upon grind. These relationships will need to be better defined in future work, particularly whether the fine regrind stage is necessary.

- The Copper King deposit exhibits low Cu head grades. The presence of oxide and mixed oxide-sulfide components, in addition to the predominantly sulfide component, in the total mineral inventory requires additional process development and testing work before feasibility-study quality process-design criteria can be established. Further laboratory variability studies and related mineralogical characterization are recommended on a range of samples drawn from across the proposed mineable ore blocks. Ideally a continuous pilot plant trial would be conducted on a bulk sample at the proposed run of mine head grade to provide confidence in the process flowsheet and metallurgical results, as well as providing a substantial sample to confirm marketability of the Cu-Au concentrate.

14.0 MINERAL RESOURCE ESTIMATE

The technical data and analysis for the mineral resource estimate reported in this section were completed December 31, 2009 and included within a Techincal Report on the property by MDA dated August 24, 2012 (Tietz and Prenn, 2012). There has been no further drilling or material work on the project. The mineral resources reported herein reflect a change in metal prices and subsequent revision of the gold-equivalent grades calculated solely for the determination of cutoff values for gold and copper resource reporting, however, the underlying technical data and analysis, and the resource block-model estimate has not been revised. Accordingly, the mineral resource estimate reported herein is current.

14.1 Introduction

Mineral resource estimation described in this technical report for the Copper King project follows the guidelines of Canadian National Instrument 43-101 ("NI 43-101"). The modeling and estimation of gold resources were done under the supervision of Paul G. Tietz, a qualified person with respect to mineral resource estimation under NI 43-101. Mr. Tietz is independent of U.S. Gold by the definitions and criteria set forth in NI 43-101; there is no affiliation between Mr. Tietz and U.S. Gold except that of an independent consultant/client relationship.

Although MDA is not an expert with respect to any of the following factors, MDA is not aware of any unusual environmental, permitting, legal, title, taxation, socio-economic, marketing, or political factors that may materially affect the Copper King mineral resources as of the date of this report.

The resource estimate includes the data and analyses resulting from Saratoga's 2007-2008 drill program. There has been no further drilling at the Copper King project. The Saratoga program included the completion of 35 diamond drill core holes that targeted both the higher-grade core and also extensions of mineralization along the periphery of the deposit. Saratoga's drilling confirmed the historical drill intercepts, provided better understanding of the deposit geology, and furnished sample material for metallurgical testing. All of the Copper King sample data were used in developing the geologic and mineral models, though the large composited assay intervals in the 25 Caledonia rotary holes (CK871 through CK8725) were not used in estimating the resources and determining resource classification.

The work done by MDA for the current resource estimates included assisting Saratoga personnel in the development of the 2007-2008 drilling program, including drill-hole locations and orientations, and the creation of the drill database. MDA was provided copies of all Saratoga drill logs, and assay results were received directly from the laboratories. MDA has made five site visits to the project.

14.2 Resource Database

As of the date of this report, 120 drill holes totaling 18,105m exist in the Copper King deposit area. The drill total includes 62 core holes totaling 11,276m (62% of total drill footage), 30 conventional rotary holes totaling 3,383m, 23 RC holes totaling 2,219m, and 5 holes started with RC but finished with core that total 1,227m. The Copper King drill-hole assay database contains 8,357 gold assays and 8,225 copper assays. Other metals are not considered to be economically significant and, therefore, were not estimated.

The database includes down-hole survey information for all of Saratoga's 2007 and 2008 drilling and just one pre-Saratoga hole (Henrietta hole H-1). Geologic information from the Saratoga drill logs, and some of the historical drill logs, when available, were entered by MDA into the database to assist in the development of the geologic model.

The project coordinates, including topography, are in the historical local grid using Imperial units (ft). Surveying conducted by Saratoga indicates that the local grid can be converted to Wyoming State Plane NAD 83 coordinates (in ft) by the following transformations:

(Local Northing) + 232,138 = Wyoming State Plane Northing (ft)
(Local East) + 645,613.5 = Wyoming State Plane Easting (ft)
(Local Elevation) + 52.15 = Wyoming State Plane Elevation (ft)

MDA recommends that more accurate and detailed topography is needed if the project is to move forward into development.

14.3 Procedures

Upon completion of the database validation process, MDA constructed 26 cross sections spaced 50ft (15.24m) to 100ft (30.5m) apart and looking northwest at 302°. The sections were spaced to best fit the existing drilling with the tighter spacing within the center of the deposit. One set of sections was made for lithology and then another for gold/copper. Drill-hole information, including rock type and metal grades, along with the topographic surface were plotted on the cross sections.

Quantile plots of gold and copper were made to help define the natural populations of metal grades to be modeled on the cross sections. The quantile plots, along with additional statistical analyses, indicated that each metal can be modeled using two mineral domains. Color-coded assays corresponding to population breaks indicated by the quantile plots along with the geological interpretation were used in the creation of the gold and copper mineral domains. These, in turn, were used to control the estimation. The mineral domains as modeled and drawn on the cross sections are not strict "grade shells" but are created using geologic information for defining orientation, geometry, continuity, and contacts in conjunction with the grades.

The assay data were also reviewed both with all host lithologies grouped together, and then also for each unique rock type. The quartz monzonite and lamprophyre dikes were found to be consistently less mineralized than the surrounding granodiorite, and these rock types were modeled as unique mineral types in the gold and copper models.

Using the cross-sectional interpretations as a framework, three-dimensional solids were created of the gold and copper mineral domains and the quartz monzonite and lamprophyre dikes. These solids were used to code domain percentages into the block model. Grade estimation was controlled by the metal domains and the unique rock types.

14.4 Geologic Background

Copper and gold mineralization at Copper King is associated with disseminated and minor fracture and vein-filling sulfide mineralization within a granodiorite intrusive body that had undergone significant pre-mineralization shearing and mylonitization. Mineralization occurs primarily within zones of pervasive silicification, containing localized, thin quartz veins, which are sub-parallel to the general N60W strike and near-vertical dip of the mylonitic shear fabric. Intense pervasive potassium feldspar alteration also shows a spatial association with mineralization, though the relationship between this alteration type and mineralization is not clear.

Numerous thin felsic (aplite to quartz monzonite) and lamprophyre dikes occur within the granodiorite body. The dikes also follow the same general west-northwest strike and are mostly sub-vertical. Copper and gold mineralization does occur within the dikes, but the metal values are commonly lower grade than in the surrounding granodiorite indicating a poorer host rock or possibly emplacement of the dikes during, or in the waning stages of, metal deposition.

Overall, the Copper King deposit as currently defined is roughly elliptical in plan view, occurring within an area approximately 760m along the west-northwest strike and 300m across. Internally the mineralization is aligned along the general N60W strike and near-vertical dip of the mylonitic fabric within the granodiorite country rock. Mineralization occurs to a depth of up to 330m. Within a large body of low-grade mineralization, a high-grade (>1.7 g Au/t) central core outcrops at the surface and is 175m long, 50m wide, and 150m thick.

Sulfide content (dominantly chalcopyrite with pyrite) is usually less than 1-2%, though within localized intervals of increased veining can be up to 10% of total rock volume. Oxidation occurs within the upper 30m below the topographic surface, and a mixed zone of weak oxidation and remnant sulfide, often associated with increased metal grades, occurs within the core of the deposit up to 75m below the oxide boundary. Chalcopyrite is the dominant sulfide mineral, though chalcocite and copper oxides/carbonates do occur within the mixed oxide/sulfide and oxide zones, respectively.

14.5 Density

The Copper King density database consists of 1,338 specific gravity measurements on Saratoga's 2007-2008 drill core. The measurements were based on material collected at regular 3m to 6m down-hole intervals and used the water-immersion method to calculate the specific gravity value.

MDA assigned a specific rock type and oxidation type (oxide, mixed, or sulfide) to each density value by correlating the specific gravity down-hole depths with the logged geology at that same location. After removing 30 measurements due to uncertain geology, a total of 1,308 measurements were used to calculate the density values used in the current resource update. MDA's analysis of all of the specific gravity data was done in the context of the geologic model, and it was determined that four values, each representing a unique rock type, would be assigned to the model. The general statistics for the four modeled density types are shown in Table 14.1. Due to the occasional fractured nature of the deposit and to account for the unavoidable sample-selection bias, the measured density values were factored down by 1% to 2%. The factored data, shown in the "Model SG" column in Table 14.1, reflect the actual specific gravity values assigned to the Copper King block model.

The specific gravity data for the granodiorite rock types (both oxide and sulfide) include a significant number of measurements of rock logged as mylonite or strongly mylonitized granodiorite. A statistical analysis of these data indicates that the mylonite specific gravity values are very similar to the granodiorite, and so for the purposes of the geology/density model, the granodiorite and mylonite rock types were combined into one oxide and one sulfide rock type in the model. The granodiorite (sulfide) type includes material within the mixed oxide/sulfide zone, again due to a similarity of density values.

Table 14.1 General Descriptive Statistics of Copper King Specific Gravity Values by Rock Type

	Model SG	Specific Gravity Statistics (g/cm3)					
Rock Type	**(g/cm3)**	**Count**	**Mean**	**Median**	**Min.**	**Max.**	**Std.Dev.**
Granodiorite (Oxide)	2.65	282	2.68	2.68	2.47	2.94	0.07
Granodiorite (Sulfide)	2.68	958	2.70	2.69	2.48	3.03	0.06
Qtz Monzonite Dike	2.60	20	2.62	2.60	2.56	2.76	0.06
Lamprophyre Dike	2.77	48	2.82	2.84	2.64	3.02	0.10

14.6 Resource Models

14.6.1 Geologic/Density Model

The geologic/density model constructed by MDA is based on 26 cross sections spaced 50ft (15.24m) to 100ft (30.5m) apart and looking northwest at 302° azimuth. The sections were spaced to best fit the existing drilling with the tighter spacing within the center of the deposit. Using the digitized drill-hole data, and the rock types determined from the density data, MDA created a cross-sectional geologic model of the felsic and mafic dikes and the major zones of strongly mylonitized granodiorite. The latter were used to guide the metal models but were not included within the block model as a distinct rock type. Due to the unique metallurgical characteristics of each oxidation type, as discussed in Section 13.0, and the differing density values for the granodiorite (oxide) material, the oxide and mixed zones were also modeled on all cross-sections. All material below the mixed surface was considered to be sulfide material.

Upon completion, the sectional geologic interpretations were digitized and loaded into Surpac® mining software for 3-D rendering. Solids were created of the dikes, while surfaces were created of the base of oxide and base of mixed metallurgical rock types. All material within the model not specifically coded as dike material from the solids was considered to be granodiorite. Block coding of the lithology was done from the solids on a partial percentage basis, while the metallurgical types were coded on a block in – block out basis.

14.6.2 Gold and Copper Mineral Domain Models

Unique gold and copper mineral domain models were created based on, and guided by, the geologic/density model cross-sections. Analysis of the gold and copper assay quantile-quantile plots indicated subtle population groups within each metal, resulting in the identification of two population domains that were subsequently modeled on the sections. A lower-grade gold domain is characterized by a range of grades of ~0.3g Au/t to ~1.7g Au/t and generally represents disseminated mineralization associated with weak silicification and veining, both at depth and laterally, away from the core of the deposit. The higher-grade gold domain is defined by grades generally exceeding ~1.7g Au/t that are associated with strong silicification and veining, with increased associated copper sulfides, generally within the core of the deposit. The lower-grade copper domain generally spatially overlaps the low-grade gold and is characterized by a range of copper grades of ~0.06% Cu to ~0.3% Cu. The higher-grade copper domain occurs within the core of the deposit and is characterized by a range of copper grades exceeding ~0.3% Cu. Typical cross section of the geology and gold and copper domains, shown in the original Imperial units, are given in Figure 14.1 and Figure 14.2, respectively.

Figure 14.1 Section 1700 Copper King Geology Model with Au Domain

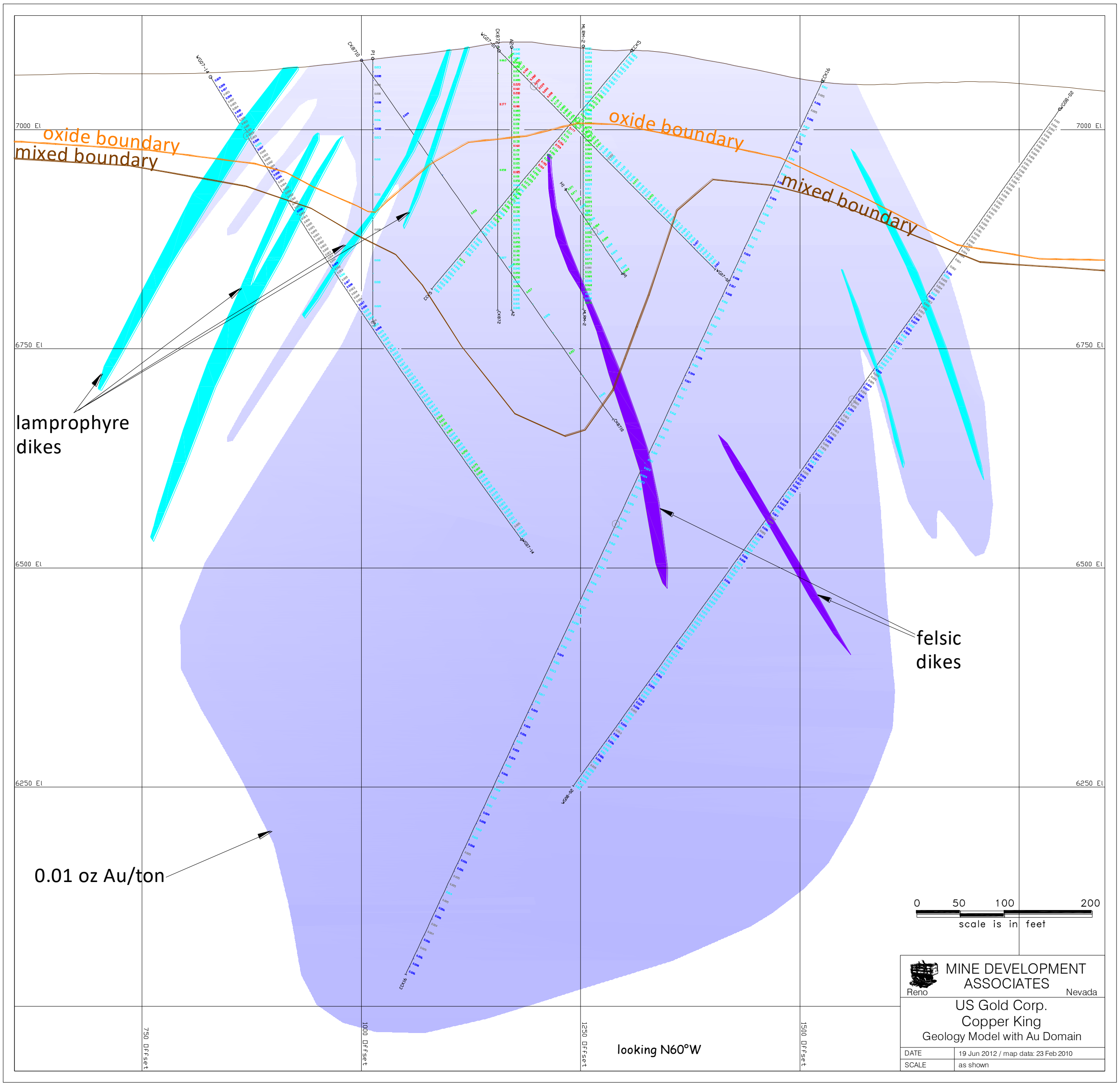
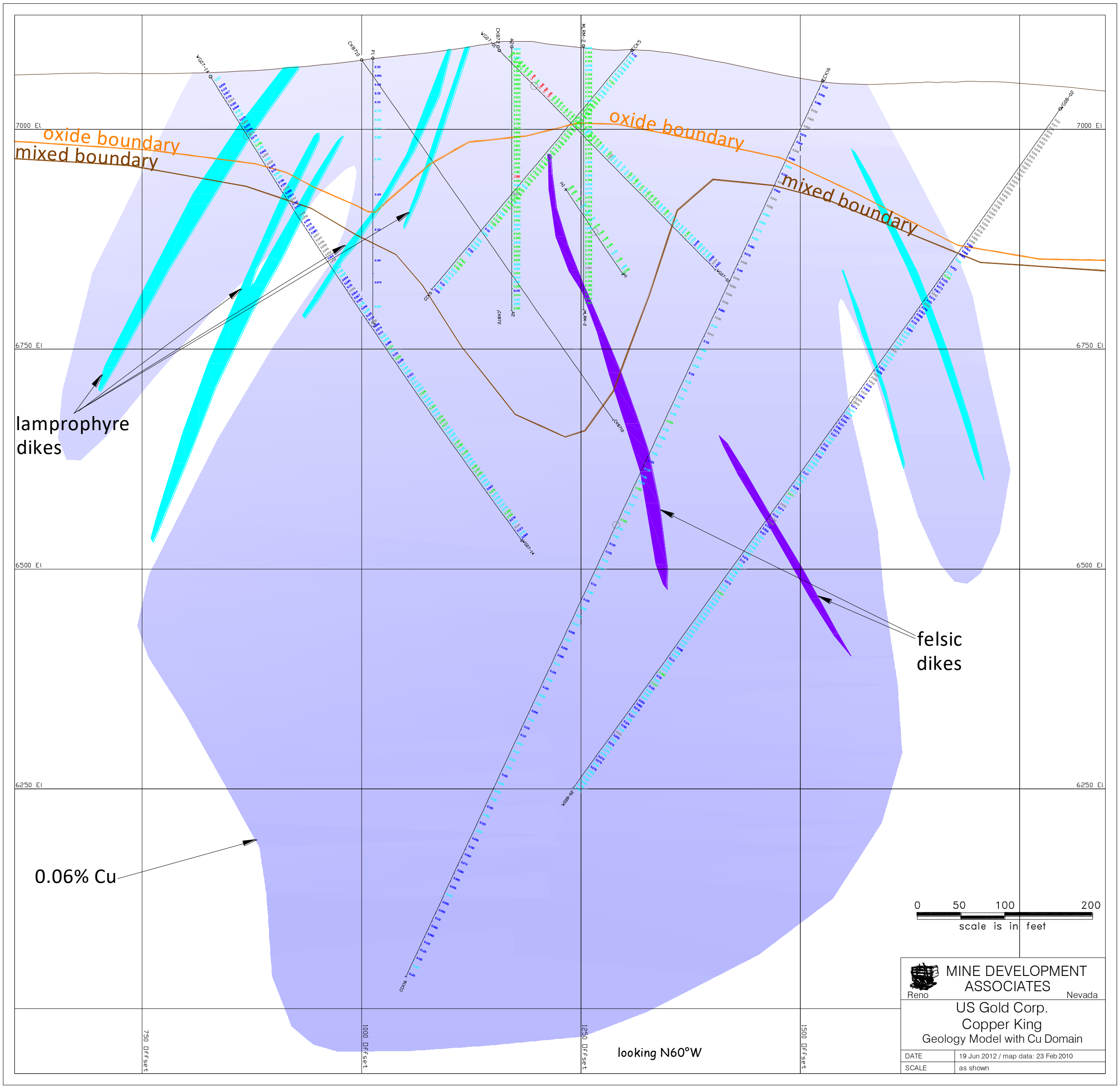


Figure 14.2 Section 1700 Copper King Geology Model with Cu Domain



14.7 Sample Coding and Compositing

The cross-sectional gold and copper domains were used to code samples in the drill database. After completing a statistical analysis of the coded samples, along with a spatial analysis of the domains, MDA decided to combine the two gold domains and two copper domains for compositing and estimation purposes. Quantile plots were made to assess validity of these domains and to determine capping levels. As a result, MDA chose to cap three gold assays and three copper assays. Assay statistics, including the capping grade, for the gold and copper domains used in the resource estimate are presented in Table 14.2.

Table 14.2 Copper King Mineral Domain Sample Assay Descriptive Statistics

Gold	Zone	100+200			Capping	12.00	g Au/t	
	Valid N	Mean	Median	Std.Dev.	CV	Minimum	Maximum	Units
Length	6559	1.52	1.81			0.06	12.19	m
Au	6559	0.84	0.48	1.08	1.28	0.00	33.67	g/t
Au_cap	6559	0.84	0.48	1.02	1.21	0.00	12.00	g/t

Copper	Zone	100+200			Capping	2.50	% Cu	
	Valid N	Mean	Median	Std.Dev.	CV	Minimum	Maximum	Units
Length	7398	1.80	1.52			0.06	12.19	m
Au	7398	0.215	0.167	0.185	0.862	0.000	3.900	g/t
Au_cap	7398	0.215	0.167	0.179	0.836	0.000	2.500	g/t

Further analyses of the gold and copper data indicated that the dike mineralization was consistently of a lower grade than the surrounding granodiorite. The dike and granodiorite assays were therefore treated as separate domains for compositing and estimation purposes resulting in two mineral domains within the model for both gold and copper. Compositing was done to 6.1m (20ft) down-hole lengths (the model block size), honoring all material-type and mineral-domain boundaries. Partial-length composites outside of the dikes were not used in the estimate if less than 3.1m (10ft), while all composites inside the dikes were used due to the narrow nature of the dikes and the preponderance of smaller-length composites. The minimum composite length within the dike was 1.24m. The volume inside each mineral domain was estimated using only composites from inside that domain. Composite descriptive statistics are presented in Table 14.3.

Table 14.3 Copper King Mineral Domain Composite Descriptive Statistics

Gold Composites

Domain	Valid N	Total Length (m)	Mean g/t	Median g/t	Std.Dev.	CV	Minimum g/t	Maximum g/t
Granodiorite (100)	1907	11422.8	0.857	0.514	0.926	1.080	0.000	8.263
Dike (1)	163	503.2	0.206	0.137	0.274	1.333	0.000	2.057

Copper Composites

Domain	Valid N	Total Length (m)	Mean g/t	Median g/t	Std.Dev.	CV	Minimum g/t	Maximum g/t
Granodiorite (100)	2127	12730.9	0.219	0.177	0.155	0.708	0.000	1.554
Dike (1)	163	503.2	0.090	0.066	0.084	0.933	0.000	0.498

14.8 Resource Model and Estimation

The resource block model reflects the even distribution of metal grades occurring within a large body of disseminated and vein/stockwork gold and copper mineralization. The estimation used two search passes with successive passes not overwriting previous estimation passes. All of the search passes were oriented similar to the general orientation of the mineralized shears and veins within the country rock (azimuth 120° and vertical dip), and in all cases the minor search distance was one third the major and semi-major distance. While the mineral domains aid in simulating the grade distribution, the estimation used the Ordinary Kriging algorithm, with a nested spherical model, to further replicate this grade distribution. Variograms for each metal were made in numerous orientations and with numerous lag lengths. The accepted gold and copper variograms are with the major axis oriented at azimuth 105°, plunge 0° and tilt -90°. For both metals, the dominant strike ranges were all at 30m, with the dip component equal to the strike and the minor component at approximately one half and one third of the strike, respectively. These Kriging parameters are listed along with the estimation parameters in Table 14.4.

Table 14.4 Copper King: Estimation Parameters

Description	Parameter*
SEARCH ELLIPSOID PARAMETERS: All Metals	
Samples: minimum/maximum/maximum per hole (all searches)	1 / 12 / 3
Search Bearing/Plunge/Tilt (all searches)	120^o / 0^o / -90^o
First Pass Search (m): major/semimajor/minor	122/ 122 /41
Second Pass Search (m): major/semimajor/minor	213/ 213/ 71

Description	Parameter
ORDINARY KRIGING PARAMETERS: Gold All Domains	
Nugget (C_O)	0.038
Sill of Structure 1 (C_1)	0.042
Range of Structure 1 (R_1): major / semimajor / minor)	9.1 / 9.1 /4.6
Sill of Structure 2 (C_2)	0.139
Range of Structure 2 (R_2): major / semimajor / minor)	97.5 / 97.5 / 45.7
Sill of Structure 3 (C_3)	0.2
Range of Structure 3 (R_3): major / semimajor / minor)	122 / 122 / 61
Direction (bearing / plunge / tilt)	105^o / 0^o / -90^o

Description	Parameter
ORDINARY KRIGING PARAMETERS: Copper All Domains	
Nugget (C_O)	0.015
Sill of Structure 1 (C_1)	0.52
Range of Structure 1 (R_1): major / semimajor / minor)	15.2 / 15.2 / 24.4
Sill of Structure 2 (C_2)	0.074
Range of Structure 2 (R_2): major / semimajor / minor)	73.1 / 73.1 / 64
Sill of Structure 3 (C_3)	0.148
Range of Structure 3 (R_3): major / semimajor / minor)	143 / 143 / 65.5
Direction (bearing / plunge / tilt)	105^o / 0^o / -90^o

* All distance and range parameters have been converted from Imperial units.

14.9 Mineral Resources

MDA classified the Copper King resources in order of increasing geological and quantitative confidence into Inferred, Indicated, and Measured categories defined by the "CIM Definition Standards - For Mineral Resources and Mineral Reserves" in 2014 so as to be in compliance with Canadian National Instrument 43-101. CIM mineral resource definitions are given below:

Mineral Resource

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

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

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

Inferred Mineral Resource

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

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

Indicated Mineral Resource

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

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

Measured Mineral Resource

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

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

MDA classified the Copper King resources by a combination of distance to the nearest sample and the number of samples, while at the same time taking into account reliability of underlying data and understanding and use of the geology. The samples used for the classification criteria stated above are independent of the modeled domains. The criteria for resource classification are given in Table 14.5. There are Measured, Indicated, and Inferred resources within the Copper King deposit. There are no Measured resources associated with the pre-Saratoga historical drilling due to a) limited geologic data; and b) limited QA/QC data. None of these deter from the overall confidence in the global project resource estimate, but they do detract from confidence in some of the accuracy which MDA requires for Measured resource.

Table 14.5 Criteria for Copper King Resource Classification

Measured (2007-2008 Saratoga drill holes only)	
Minimum no. of samples /minimum no. of holes / maximum distance (m)	2 / 1 / 22.9(75ft)
Indicated	
Minimum no. of samples /minimum no. of holes / maximum distance (m)	2 / 1 / 61(200ft)
All material not classified above but lying within the modeled mineralized domains is Inferred	

Because of the requirement that the resource exists "in such form and quantity and of such a grade or quality that it has reasonable prospects for eventual economic extraction," MDA is reporting the resources at cutoff grades that are reasonable for deposits of this nature that will be mined by open-pit methods. As such, some economic considerations were used to determine cutoff grades at which the resource is presented. MDA considered reasonable metal prices and extractions costs and recoveries, albeit in a general sense, and dropping it a bit to account for that material that would become ore using internal cutoffs.

Gold-equivalent ("AuEq") cutoffs were utilized in the tabulation of the resources, with the gold-equivalent grades calculated using the following formula:

oz AuEq/ton = oz Au/ton + (0.036 * %Cu)

This formula is based on prices of US$1,250.00 per ounce gold and US$2.25 per pound copper. No metal recoveries are applied, as this is the *in situ* resource. Gold-equivalent grades were not modeled but were calculated solely for the determination of cutoff values for gold and copper resource reporting.

The Copper King total reported resources are tabulated in Table 14.6 The stated resource is fully diluted to 6.1m by 6.1m by 6.1m blocks (20ft by 20ft by 20ft) and is tabulated on a AuEq cutoff grade of 0.51g AuEq/t (0.015oz AuEq/ton). All material, regardless of which metal is present and which is absent, is tabulated. Because gold and copper exist, but do not on a local scale co-exist, the AuEq grade is used for resource tabulation. The block diluted resources are also tabulated at additional cutoffs in Table 14.7 in order to provide grade-distribution information.

The Copper King resource contains oxide, mixed oxide-sulfide, and sulfide rock types. At the stated AuEq cutoff grade of 0.51g AuEq/t (0.015oz AuEq/ton), approximately 80% of the resource is sulfide material with the remaining 20% split evenly between the oxide and mixed rock types. Typical cross sections of the Copper King block model with the Au and Cu block grades shown in the original Imperial units are given in Figure 14.3 and Figure 14.4, respectively.

Table 14.6 Copper King Total Reported Resources

Measured and Indicated Resource:

class	Au-equiv. Cutoff		tons	tonnes	oz Au/ton	g Au/t	oz Au	% Cu	lbs Cu
	oz AuEq/ton	g AuEq/t							
Measured	0.010	0.34	16,230,000	14,720,000	0.017	0.59	280,000	0.192	62,460,000
Indicated	0.010	0.34	49,300,000	44,720,000	0.014	0.48	686,000	0.176	173,070,000
Total	0.010	0.34	65,530,000	59,440,000	0.015	0.51	966,000	0.180	235,530,000

Inferred Resource:

class	Au-equiv. Cutoff		tons	tonnes	oz Au/ton	g Au/t	oz Au	% Cu	lbs Cu
	oz AuEq/ton	g AuEq/t							
Inferred	0.010	0.34	16,330,000	14,810,000	0.011	0.38	184,000	0.190	61,970,000

Table 14.7 Copper King Total Resource - AuEq Tabulation

Total Measured:

Au-equiv. Cutoff								
oz AuEq/ton	g AuEq/t	tons	tonnes	oz Au/ton	g Au/t	oz Au	% Cu	lbs Cu
0.005	0.17	18,160,000	16,470,000	0.016	0.55	285,000	0.185	67,030,000
0.010	**0.34**	**16,230,000**	**14,720,000**	**0.017**	**0.58**	**280,000**	**0.192**	**62,460,000**
0.015	0.51	12,610,000	11,440,000	0.020	0.69	252,000	0.211	53,300,000
0.020	0.69	7,640,000	6,930,000	0.026	0.89	197,000	0.246	37,520,000
0.025	0.86	4,740,000	4,300,000	0.032	1.10	153,000	0.280	26,580,000
0.030	1.03	3,170,000	2,880,000	0.039	1.34	124,000	0.309	19,610,000
0.035	1.20	2,340,000	2,120,000	0.045	1.54	104,000	0.335	15,630,000
0.040	1.37	1,700,000	1,540,000	0.051	1.75	87,000	0.367	12,450,000
0.050	1.71	980,000	890,000	0.063	2.16	63,000	0.429	8,450,000
0.060	2.06	660,000	600,000	0.074	2.54	49,000	0.478	6,280,000
0.080	2.74	300,000	270,000	0.097	3.33	29,000	0.582	3,530,000
0.100	3.43	150,000	140,000	0.123	4.22	18,000	0.704	2,110,000

Total Indicated:

Au-equiv. Cutoff								
oz AuEq/ton	g AuEq/t	tons	tonnes	oz Au/ton	g Au/t	oz Au	% Cu	lbs Cu
0.005	0.17	59,860,000	54,300,000	0.012	0.41	702,000	0.169	202,490,000
0.010	**0.34**	**49,300,000**	**44,720,000**	**0.014**	**0.48**	**686,000**	**0.175**	**173,070,000**
0.015	0.51	34,960,000	31,720,000	0.016	0.55	576,000	0.195	136,160,000
0.020	0.69	19,090,000	17,320,000	0.021	0.72	401,000	0.222	84,530,000
0.025	0.86	9,930,000	9,010,000	0.027	0.93	265,000	0.249	49,320,000
0.030	1.03	5,360,000	4,860,000	0.034	1.17	180,000	0.273	29,290,000
0.035	1.20	3,340,000	3,030,000	0.040	1.37	132,000	0.301	20,120,000
0.040	1.37	2,100,000	1,910,000	0.046	1.58	97,000	0.342	14,320,000
0.050	1.71	1,000,000	910,000	0.060	2.06	60,000	0.421	8,440,000
0.060	2.06	630,000	570,000	0.070	2.40	44,000	0.482	6,050,000
0.080	2.74	300,000	270,000	0.088	3.02	26,000	0.570	3,360,000
0.100	3.43	160,000	150,000	0.102	3.50	17,000	0.634	2,080,000

Total Inferred:

Au-equiv. Cutoff								
oz AuEq/ton	g AuEq/t	tons	tonnes	oz Au/ton	g Au/t	oz Au	% Cu	lbs Cu
0.005	0.17	30,480,000	27,650,000	0.006	0.21	191,000	0.182	111,210,000
0.010	**0.34**	**16,330,000**	**14,810,000**	**0.011**	**0.38**	**184,000**	**0.190**	**61,970,000**
0.015	0.51	10,440,000	9,470,000	0.014	0.48	145,000	0.210	43,790,000
0.020	0.69	6,360,000	5,770,000	0.016	0.55	103,000	0.229	29,090,000
0.025	0.86	2,470,000	2,240,000	0.020	0.69	48,000	0.244	12,120,000
0.030	1.03	590,000	540,000	0.025	0.86	15,000	0.239	2,840,000
0.035	1.20	140,000	130,000	0.032	1.10	4,000	0.216	580,000
0.040	1.37	60,000	50,000	0.036	1.23	2,000	0.208	270,000
0.050	1.71	-	-	0.000	0.00	-	0.000	-
0.060	2.06	-	-	0.000	0.00	-	0.000	-
0.080	2.74	-	-	0.000	0.00	-	0.000	-
0.100	3.43	-	-	0.000	0.00	-	0.000	-

Figure 14.3 Section 1700 Copper King Block Model: Au Block Grades

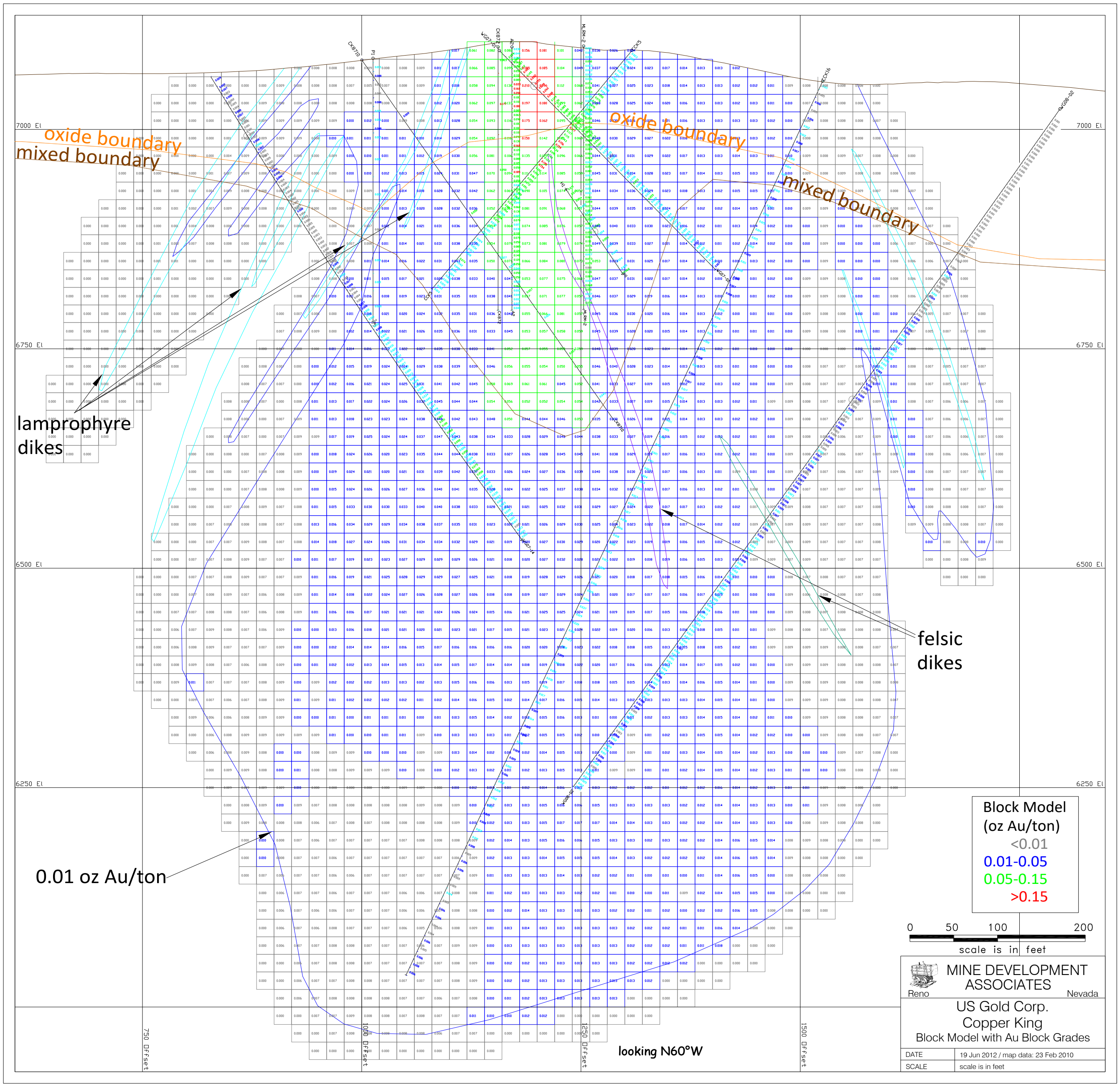
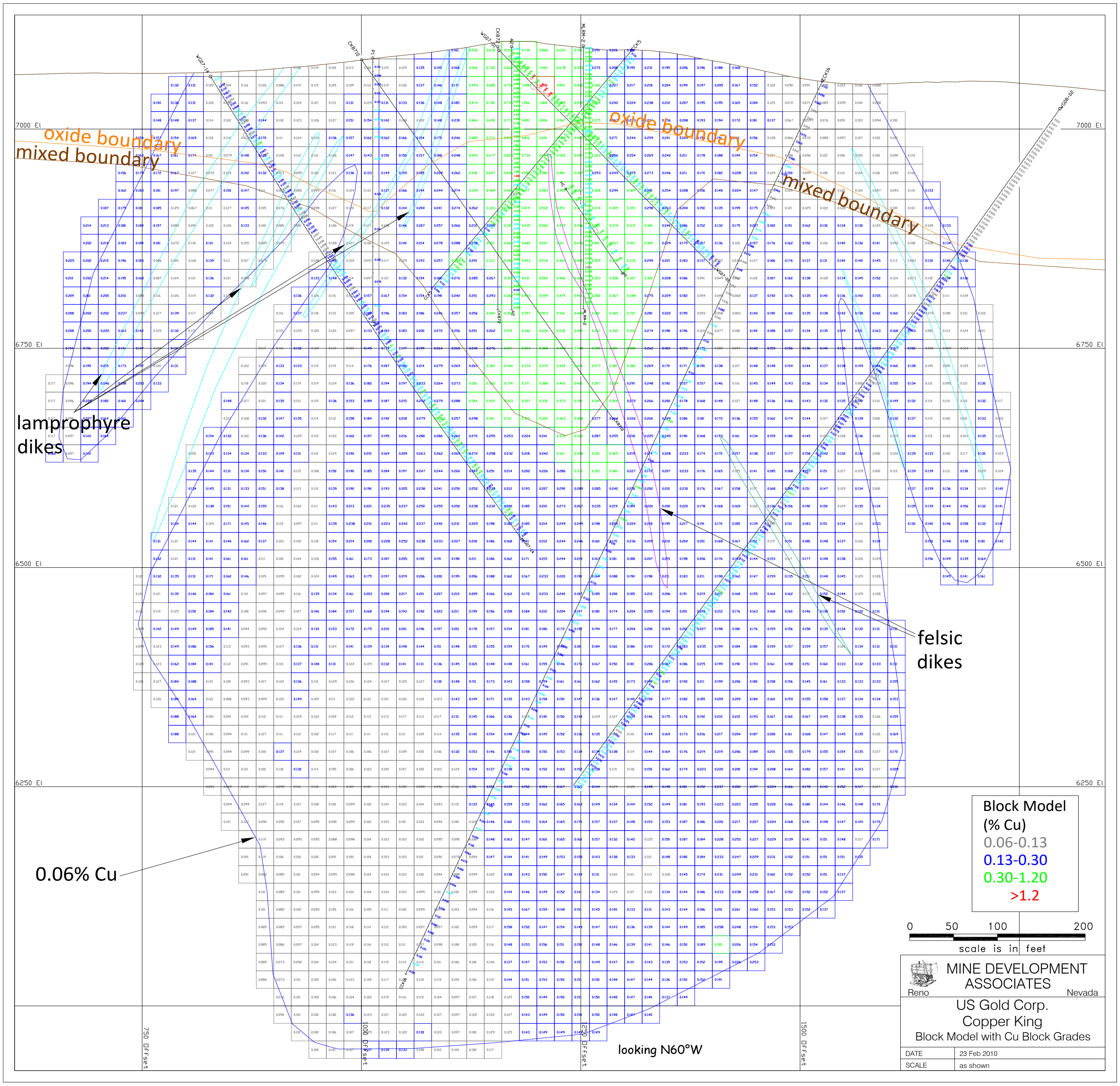


Figure 14.4 Section 1700 Copper King Block Model: Cu Block Grades



Checks were made on the Copper King resource model in the following manner:

- Cross sections with the mineral domains, drill-hole assays and geology, topography, sample coding, and block grades with classification were plotted and reviewed for reasonableness;
- Block-model information, such as coding, number of samples, and classification were checked visually on the computer by domain and lithology;
- Cross-section volumes to solid volumes to block-model volumes were checked;
- Nearest-neighbor and inverse-distance models were made for comparison;
- A simple polygonal model was made with the original modeled section domains; and
- Quantile-quantile plots of assays, composites, and block-model grades were made to evaluate differences in distributions of metals.

It is deemed that the resource estimate is reasonable, honors the geology, and is supported by the geologic model.

14.10 Discussion, Qualifications, Risk, Upside, and Recommendations

For the Copper King deposit, the most important observation that can be presented to the reader is the even, consistent distribution of gold and copper, albeit generally low grade, throughout this potential open-pit deposit. Numerous drill holes encountered 200m or more of continuous mineralization starting at the surface. The higher-grade central core has a near-vertical orientation, reflecting the shear/vein fabric within the host granodiorite intrusion, though there are no distinct lithologic or alteration boundaries separating the higher-grade mineralization from the lower-grade material. At the stated AuEq cutoff grade of 0.51g AuEq/t (0.015oz AuEq/ton), approximately 80% of the resource is sulfide material with the remaining 20% split evenly between the oxide and mixed rock types.

Approximately 85% of the total resource is classified as Measured or Indicated due to the consistent nature of the mineralization and the current drill spacing. Additional drilling within the currently defined deposit is not expected to materially change the existing resource. There is potential for extensions of lower-grade mineralization to the southeast and west, though just limited potential to materially increase the high-grade core of the deposit. Further work should focus on bringing the resource to a development decision, which would include further metallurgical testing and the completion of a preliminary economic assessment.

15.0 MINERAL RESERVE ESTIMATE

No estimate of mineral reserves has been made for this report.

16.0 MINING METHODS

This PEA proposes that the Copper King gold-copper deposit be mined by open-pit methods with copper and gold recovery by flotation. This study assumes material would be processed at a rate of 10,000 tons per day. The ore-grade material would be crushed in or near the mine and transported to a process plant to be located close to the mine. The proposed mine and process facilities are located close to Curt Gowdy State Park. The southern entrance to the Park's campground, which is the secondary entrance, is about one mile from the Copper King pit and well over a mile from the process site. The Wyoming Office of Surface Lands is required to administer the State lands for maximum revenue. The most likely beneficial use of the land after mining would be as a reservoir, which is considered a premise for this study.

16.1 Pit Optimization

The base case pit optimization was completed using the parameters shown in Table 16.1 and base case metal prices of $1,250 per ounce of gold and $2.25 per pound of copper.

Table 16.1 Base Case Pit Optimization Parameters

Item	Units	Value
Mining Cost	$/ton Mined	$1.60
Flotation Cost	$/ton Processed	$8.33
G&A Cost	$/ton Processed	$0.86
Flotation Recovery - Oxide - Cu	%	10.0%
Flotation Recovery - Mix - Cu	%	80.0%
Flotation Recovery - Sulfide - Cu	%	85.0%
Flotation Recovery - Oxide - Au	%	55.0%
Flotation Recovery - Mix - Au	%	70.0%
Flotation Recovery - Sulfide - Au	%	75.0%
Oxide Copper Concentrate Grade	% Cu	15.0%
Copper Concentrate Grade	% Cu	26.0%
Concentrate Transportation	$/ton Conc.	$40.00
Concentrate Transportation (oxide)	$/lb Cu	$0.133
Concentrate Transportation (mix;sulfide)	$/lb Cu	$0.077
Concentrate Smelting Costs	$/ton Conc.	$75.00
Concentrate Smelting Costs (oxide)	$/lb Cu	$0.250
Concentrate Smelting Costs (mix, sulfide)	$/lb Cu	$0.144
Refining Charge Cu	$/lb Cu	$0.075
Refining Charge Au	$/oz Au	$1.500
Smelter Payable Cu	%	96.0%
Smelter Payable Au	%	95.0%
Overall Pit Slope	Degrees	50.0
View Restriction	Yes/No	No

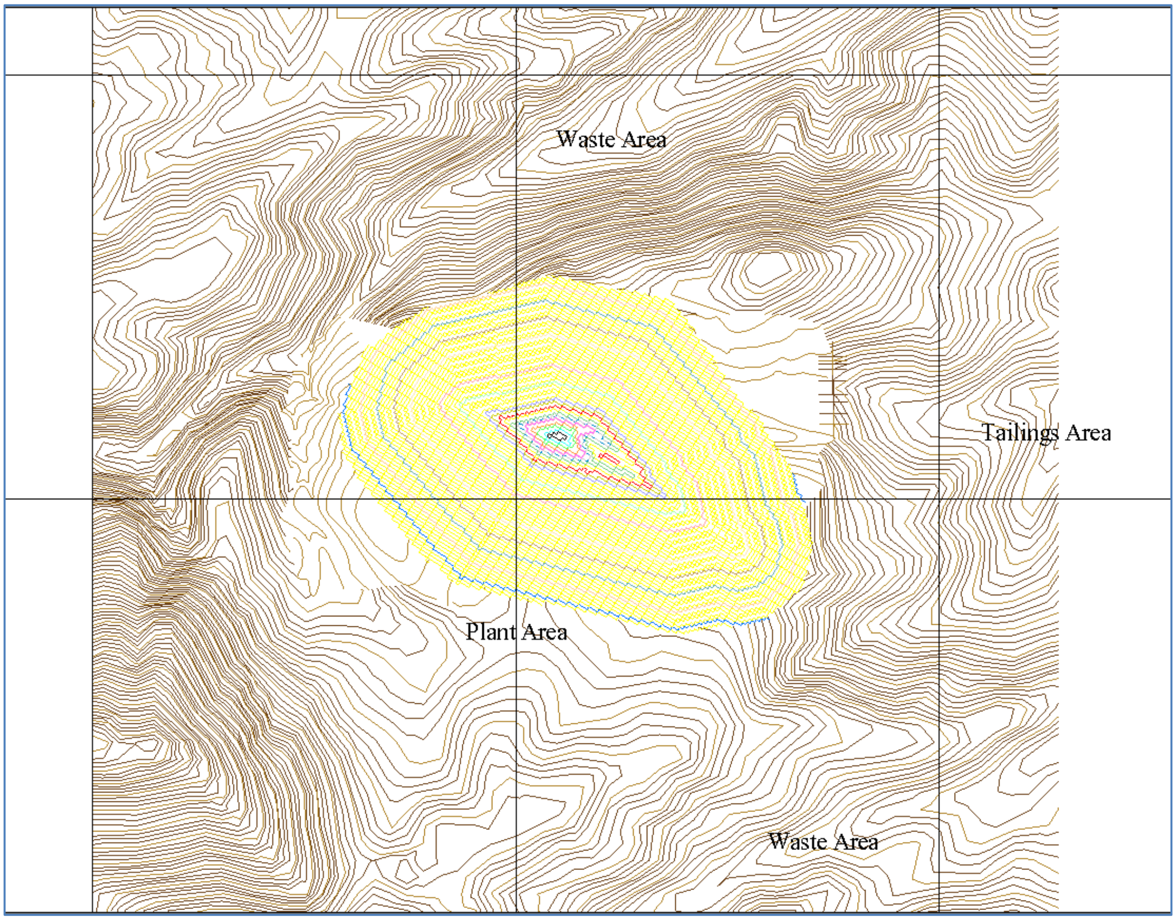
The result of the pit optimization at various metal prices is shown in Table 16.2. Phase 1 used pit 14; Phase 2 used pit 20; Phase 3 used pit 26, and the final pit was pit 39.

Table 16.2 Base Case Pit Optimization Results

Pit	Revenue Factor	Gold Price $/oz Au	Copper Price $/lb Cu	Total Tons 000's	Waste Tons 000's	Ore Tons 000's	Strip Ratio	Max Bench	Min Bench	oz Au_eq 000's	oz Au_eq/t
1	0.3	$300	$0.54	1,722.00	1,014.60	707.4	1.43	62	47	53.6	0.076
3	0.35	$350	$0.63	2,478.50	1,423.20	1,055.30	1.35	62	46	72.6	0.069
5	0.4	$400	$0.72	3,705.10	2,145.00	1,560.20	1.37	62	44	98.1	0.063
7	0.45	$450	$0.81	5,261.10	3,075.30	2,185.80	1.41	62	41	126	0.058
9	0.5	$500	$0.90	8,153.80	4,914.00	3,239.80	1.52	62	38	168.8	0.052
11	0.55	$550	$0.99	10,422.50	6,209.00	4,213.50	1.47	62	36	202	0.048
13	0.6	$600	$1.08	12,397.30	7,256.50	5,140.80	1.41	62	34	229.9	0.045
14	0.625	$625	$1.13	14,523.50	8,553.00	5,970.50	1.43	62	33	254.6	0.043
15	0.65	$650	$1.17	16,718.80	9,896.80	6,822.00	1.45	62	32	278.9	0.041
17	0.7	$700	$1.26	20,629.20	12,142.60	8,486.60	1.43	62	30	322.3	0.038
19	0.75	$750	$1.35	28,972.90	17,766.90	11,206.00	1.59	62	26	395.2	0.035
21	0.8	$800	$1.44	45,590.20	27,309.90	18,280.30	1.49	62	24	559.5	0.031
23	0.85	$850	$1.53	57,216.50	33,717.00	23,499.40	1.43	62	23	669.8	0.029
25	0.9	$900	$1.62	76,298.50	43,475.20	32,823.30	1.32	62	21	851.8	0.026
27	0.95	$950	$1.71	84,595.00	47,059.00	37,536.00	1.25	62	19	935.4	0.025
29	1	$1,000	$1.80	95,636.10	52,826.50	42,809.60	1.23	62	17	1,027.90	0.024
30	1.025	$1,025	$1.85	99,888.20	54,632.70	45,255.50	1.21	62	16	1,066.80	0.024
31	1.05	$1,050	$1.89	103,682.30	56,357.40	47,325.00	1.19	62	15	1,099.70	0.023
33	1.1	$1,100	$1.98	112,290.80	60,972.20	51,318.70	1.19	62	13	1,163.10	0.023
35	1.15	$1,150	$2.07	119,687.60	64,720.20	54,967.40	1.18	62	11	1,217.70	0.022
37	1.2	$1,200	$2.16	127,632.90	69,107.40	58,525.40	1.18	62	9	1,269.70	0.022
39	**1.25**	**$1,250**	**$2.25**	**133,173.20**	**72,165.90**	**61,007.30**	**1.18**	**62**	**8**	**1,304.60**	**0.021**
41	1.3	$1,300	$2.34	140,037.10	76,362.90	63,674.20	1.20	62	7	1,341.90	0.021
43	1.35	$1,350	$2.43	147,560.20	81,289.00	66,271.20	1.23	62	6	1,378.50	0.021
45	1.4	$1,400	$2.52	151,914.60	83,608.00	68,306.60	1.22	62	5	1,403.30	0.021
47	1.45	$1,450	$2.61	157,719.40	87,282.40	70,437.00	1.24	62	5	1,430.50	0.020
49	1.5	$1,500	$2.70	161,691.40	89,709.00	71,982.30	1.25	62	5	1,449.20	0.020
51	1.55	$1,550	$2.79	165,122.20	91,572.10	73,550.10	1.25	62	5	1,466.30	0.020
53	1.6	$1,600	$2.88	169,820.90	94,742.40	75,078.50	1.26	62	4	1,484.80	0.020
55	1.65	$1,650	$2.97	172,483.30	96,379.00	76,104.30	1.27	62	4	1,496.10	0.020
57	1.7	$1,700	$3.06	174,943.00	97,718.10	77,224.90	1.27	62	4	1,507.30	0.020
59	1.75	$1,750	$3.15	177,511.40	99,279.60	78,231.70	1.27	62	4	1,517.60	0.019

Figure 16.1 shows the base case optimized pit using a gold price of $1,250/oz and a copper price of $2.25/lb.

Figure 16.1 Base Case Optimized Pit at $1,250/oz Gold and $2.25/lb Copper



16.2 Production Schedule

A 17-year production schedule was developed based on the four pit phases shown in Table 16.2. Variable cutoff grades were assigned to the pit phases to maximize the grade earlier in the production schedule. Material that below the phase cutoff but above the overall cutoff grade will be stockpiled and processed as required over the project life. The material contained in the pit phases and the cutoff grade are shown in Table 16.3.

Table 16.3 Ore Grade Material Available by Pit Phase

		High Grade Material					Low Grade Material					Waste
Pit Phase	Material Type	Tons 000's	oz Au/t	% Cu	000's oz Au	000's lbs Cu	Tons 000's	oz Au/t	% Cu	000's oz Au	000's lbs Cu	Tons 000's
1	Oxide	2,102.8	0.035	0.275	72.8	11,582.2	585.8	0.014	0.170	8.0	1,990.5	
1	Mix	3,317.2	0.037	0.302	121.8	20,038.8	283.2	0.010	0.124	2.7	704.5	
1	Sulfide	2,796.5	0.023	0.216	64.1	12,093.5	631.4	0.009	0.124	5.9	1,571.6	
1	Totals	8,216.4	0.031	0.266	258.7	43,714.6	1,500.4	0.011	0.142	16.6	4,266.6	4,806.7
2	Oxide	870.5	0.016	0.215	14.2	3,736.0	620.0	0.013	0.197	8.3	2,443.8	
2	Mix	833.6	0.014	0.208	11.8	3,476.0	266.2	0.009	0.148	2.4	787.2	
2	Sulfide	8,636.0	0.019	0.214	162.3	36,942.6	2,261.5	0.009	0.135	19.8	6,087.1	
2	Totals	10,340.1	0.018	0.214	188.4	44,154.6	3,147.7	0.010	0.148	30.5	9,318.1	13,600.3
3	Oxide	128.6	0.017	0.170	2.2	438.3	56.9	0.014	0.185	0.8	210.3	
3	Mix	98.3	0.014	0.169	1.4	332.4	242.2	0.009	0.148	2.1	716.4	
3	Sulfide	12,582.7	0.015	0.198	194.5	49,737.4	6,761.3	0.009	0.143	58.0	19,313.6	
3	Totals	12,809.6	0.015	0.197	198.1	50,508.0	7,060.5	0.009	0.143	60.9	20,240.3	19,110.8
4	Oxide											
4	Mix	5.4	0.013	0.200	0.1	21.4	2.7	0.008	0.183	0.0	9.8	
4	Sulfide	9,806.8	0.014	0.196	140.5	38,484.8	7,845.8	0.009	0.146	67.0	22,870.3	
4	Totals	9,812.1	0.014	0.196	140.6	38,506.2	7,848.5	0.009	0.146	67.0	22,880.1	34,920.4
Totals	Oxide	3,101.8	0.029	0.254	89.3	15,756.6	1,262.7	0.014	0.184	17.1	4,644.6	
Totals	Mix	4,254.5	0.032	0.281	135.0	23,868.6	794.3	0.009	0.140	7.2	2,217.9	
Totals	Sulfide	33,821.9	0.017	0.203	561.5	137,258.3	17,500.0	0.009	0.142	150.7	49,842.6	
Totals	**Totals**	**41,178.3**	**0.019**	**0.215**	**785.7**	**176,883.5**	**19,557.1**	**0.009**	**0.145**	**175.0**	**56,705.1**	**72,438.2**
	High Grade + Low Grade											
All Ore	Oxide	4,364.5	0.024	0.234	106.4	20,401.1						
All Ore	Mix	5,048.8	0.028	0.258	142.3	26,086.5						
All Ore	Sulfide	51,322.0	0.014	0.182	712.1	187,100.9						
All Ore	**Totals**	**60,735.3**	**0.016**	**0.192**	**960.7**	**233,588.5**					**Waste**	**72,438.2**

The low-grade material is stockpiled from phases one and two. Later in the life, the lowest grades are stockpile as required.

A production schedule was developed from the material in these pit phases to produce 10,000 tons of ore per day, 365 days per year over the life of the mine. The production schedule is shown in Table 16.4.

The production schedule indicated between 3.5 and 11.0 million tons of material will be moved annually. It may be possible to schedule the last two phases into smaller phases which may be able to delay or reduce the waste movement peaks. Table 16.5 shows the low-grade stockpile movement. All material classed as low-grade stockpile (below 0.015 eq au oz/ton) is stockpiled from phase one and two, and is processed starting in year 6 as required. About 4.6 million tons of material from phase 1 and 2 is classed as low-grade stockpile material.

Table 16.4 Copper King Production Schedule

Item	Material	Units	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17		Totals
Waste_dump		K tons	6,500.1	4,921.1	4,341.8	2,546.9	3,932.6	6,922.8	5,521.7	2,536.4	4,765.2	4,199.9	8,276.4	8,495.3	6,560.2	1,892.6	535.8	264.5	224.9		72,438.2
Mined to Process		K tons	3,164.4	3,317.9	3,383.4	3,660.0	3,650.0	2,161.6	3,603.3	3,660.0	3,650.0	3,650.0	848.6	654.7	2,564.8	3,650.0	3,650.0	3,660.0	3,332.5		48,611.2
Mined to Lg Stockpile		K tons	968.3	886.0	1,399.8	1,165.4	187.5	40.6													4,647.5
Mined to Stockpile		K tons					11.3	0.0		2,725.6	709.8	380.0									3,826.7
Lg Stockpile Mined		K tons						1,477.2	46.7					1,991.3	1,085.2				47.1		4,647.5
Stockpile Mined		K tons						11.3					2,801.4	1,014.0	0.0						3,826.7
Mill	Oxide	K tons	2,014.8	193.5	375.7	389.2	49.0	519.5	12.1			0.3	0.3	516.4	281.4				12.2		4,364.5
		oz Au/t	0.035	0.020	0.016	0.016	0.017	0.014	0.014			0.013	0.013	0.014	0.014				0.014		0.024
		k oz Au	70.7	3.8	6.2	6.3	0.8	7.4	0.2			0.0	0.0	7.0	3.8				0.2		106.4
		Cu %	0.278	0.204	0.200	0.235	0.204	0.179	0.184			0.224	0.224	0.184	0.184				0.184		0.234
		lbs Cu	11,198.1	788.4	1,503.8	1,827.9	199.9	1,857.2	44.5			1.4	1.2	1,899.0	1,034.7				44.9		20,401.1
Mill	Mix	K tons	1,017.0	1,784.9	626.4	722.5	0.7	344.6	157.4	10.4	4.0	2.8	7.0	237.3	128.3				5.6		5,048.8
		oz Au/t	0.033	0.037	0.038	0.014	0.007	0.010	0.010	0.010	0.010	0.010	0.011	0.009	0.009				0.009		0.028
		k oz Au	33.3	65.9	24.1	10.4	0.0	3.5	1.5	0.1	0.0	0.0	0.1	2.2	1.2				0.1		142.3
		Cu %	0.272	0.302	0.326	0.215	0.136	0.146	0.151	0.155	0.155	0.178	0.183	0.136	0.136				0.136		0.258
		Lbs Cu	5,526.4	10,790.7	4,088.1	3,109.7	1.8	1,004.3	475.5	32.3	12.4	10.0	25.7	646.3	348.3				15.1		26,086.5
Mill	Sulfide	K tons	132.5	1,339.6	2,381.3	2,548.2	3,600.3	2,785.9	3,480.5	3,649.6	3,646.0	3,646.9	3,642.7	2,906.2	3,240.3	3,650.0	3,650.0	3,660.0	3,361.9		51,322.0
		oz Au/t	0.013	0.018	0.024	0.016	0.022	0.013	0.010	0.012	0.013	0.015	0.015	0.011	0.010	0.012	0.012	0.012	0.012		0.014
		k oz Au	1.8	23.7	56.6	41.6	78.9	36.0	36.0	43.5	48.0	54.3	53.5	31.0	33.3	44.7	44.1	45.0	40.2		712.1
		Cu %	0.168	0.191	0.213	0.207	0.216	0.196	0.154	0.174	0.184	0.191	0.188	0.158	0.161	0.169	0.176	0.179	0.179		0.182
		Lbs Cu	445.1	5,126.9	10,132.7	10,548.1	15,570.7	10,941.5	10,711.8	12,711.5	13,384.3	13,932.6	13,724.3	9,159.3	10,433.6	12,317.9	12,863.9	13,087.6	12,009.3		187,100.9
Mill	Totals	K tons	3,164.4	3,317.9	3,383.4	3,660.0	3,650.0	3,650.0	3,650.0	3,660.0	3,650.0	3,650.0	3,650.0	3,660.0	3,650.0	3,650.0	3,650.0	3,660.0	3,379.7		60,735.3
		oz Au/t	0.033	0.028	0.026	0.016	0.022	0.013	0.010	0.012	0.013	0.015	0.015	0.011	0.010	0.012	0.012	0.012	0.012		0.016
		k oz Au	105.8	93.3	86.8	58.3	79.7	46.8	37.7	43.6	48.1	54.4	53.6	40.2	38.3	44.7	44.1	45.0	40.5		960.7
		Cu %	0.271	0.252	0.232	0.212	0.216	0.189	0.154	0.174	0.184	0.191	0.188	0.160	0.162	0.169	0.176	0.179	0.179		0.192
		Lbs Cu	17,169.6	16,706.0	15,724.6	15,485.7	15,772.4	13,803.0	11,231.8	12,743.7	13,396.7	13,944.0	13,751.2	11,704.5	11,816.7	12,317.9	12,863.9	13,087.6	12,069.4		233,588.5

Table 16.5 Production Schedule – Low Grade Stockpile Movement

Material	Units	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Totals
LG Oxide	K tons	609.6	114.8	240.0	240.8														1,205.2
Added	oz Au/ton	0.014	0.014	0.013	0.013														0.014
	k oz Au	8.3	1.6	3.2	3.2														16.3
	Cu %	0.171	0.175	0.188	0.215														0.184
	units Cu	104.5	20.1	45.2	51.7														221.6
LG Mixed	K tons	214.8	119.9	93.6	121.1														549.4
Added	oz Au/ton	0.010	0.009	0.009	0.009														0.009
	k oz Au	2.1	1.1	0.8	1.1														5.1
	Cu %	0.121	0.123	0.142	0.170														0.136
	units Cu	26.0	14.7	13.3	20.5														74.6
LG Sulfide	K tons	143.9	651.3	1,066.1	803.5	187.5	40.6												2,892.9
Added	oz Au/ton	0.009	0.009	0.009	0.009	0.009	0.008												0.009
	k oz Au	1.3	5.9	9.3	7.1	1.7	0.3												25.6
	Cu %	0.127	0.124	0.129	0.138	0.144	0.203												0.132
	units Cu	18.3	80.6	137.8	111.1	27.0	8.2												382.9
Total LG Stockpile	K tons	968.3	886.0	1,399.8	1,165.4	187.5	40.6												4,647.5
Added	oz Au/ton	0.012	0.010	0.010	0.010	0.009	0.008												0.010
	k oz Au	11.7	8.5	13.4	11.4	1.7	0.3												47.0
	Cu %	0.154	0.130	0.140	0.157	0.144	0.203												0.146
	units Cu	148.8	115.4	196.4	183.3	27.0	8.2												679.1
Note: Material Removed is included in Mill Feed Totals in Table 16.4																			
LG Oxide	K tons						383.1	12.1					516.4	281.4				12.2	1,205.2
Removed	oz Au/ton						0.014	0.014					0.014	0.014				0.014	0.014
	k oz Au						5.2	0.2					7.0	3.8				0.2	16.3
	Cu %						0.184	0.184					0.184	0.184				0.184	0.184
	units Cu						70.4	2.2					94.9	51.7				2.2	221.6
LG Mixed	K tons						174.6	5.5					235.4	128.3				5.6	549.4
Removed	oz Au/ton						0.009	0.009					0.009	0.009				0.009	0.009
	k oz Au						1.6	0.1					2.2	1.2				0.1	5.1
	Cu %						0.136	0.136					0.136	0.136				0.136	0.136
	units Cu						23.7	0.7					32.0	17.4				0.8	74.6
LG Sulfide	K tons						919.5	29.1					1,239.5	675.5				29.3	2,892.9
Removed	oz Au/ton						0.009	0.009					0.009	0.009				0.009	0.009
	k oz Au						8.2	0.3					11.0	6.0				0.3	25.6
	Cu %						0.132	0.132					0.132	0.132				0.132	0.132
	units Cu						121.7	3.8					164.1	89.4				3.9	382.9

Table 16.6 shows the material movement in the normal grade stockpile.

Table 16.6 Copper King Production Schedule – Mill Stockpile

Item	Units	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17		Totals
Material	K tons					11.3			2,725.6	709.8	380.0									3,826.7
Added	oz Au/ton					0.022			0.012	0.018	0.031									0.015
	k oz Au					0.2			32.5	12.8	11.6									57.1
	Cu %					0.216			0.174	0.220	0.259									0.191
	units Cu					2.4			474.5	155.9	98.3									731.2
Stockpile	K tons					11.3			2,725.6	3,435.4	3,815.4	1,014.0								0
Balance	oz Au/ton					0.022			0.012	0.013	0.015	0.015								0
	k oz Au					0.2			32.5	45.2	56.8	14.9								0
	Cu %					0.216			0.174	0.184	0.191	0.188								0
	units Cu					2.4			474.5	630.5	728.8	191.0								0
Material	K tons						11.3					2,801.4	1,014.0							3,826.7
Removed	oz Au/ton						0.0218428					0.015	0.015							0.015
	k oz Au						0.2					42.0	14.9							57.1
	Cu %						0.21606					0.192	0.188							0.191
	units Cu						2.4					537.8	191.0							731.2

Note: Material Removed is included in Mill Processing Totals in Table 16.4

16.3 Mining

Mining is planned to proceed on 20ft bench intervals. Material will be drilled by two rotary blast-hole machines backed up by a hydraulic drill rig. The material drilled will be blasted using a powder factor of about 0.5lbs per ton blasted. The blasted material will be loaded by a 15cy front shovel or a 16cy loader into 100-ton trucks.

The ore-grade material will be hauled to a jaw crusher located near the pit rim. The crushed material will be transported to a plant site located close to the mine. Waste material is planned to be dumped near the mine. The prior study considered an aerial tramway to a plant site located near the railroad, but this study assumes the plant will be located close to the mine and concentrate will be transported by truck to a smelter.

17.0 RECOVERY METHODS

This PEA assumes that the copper and gold will be recovered by flotation.

The flotation plant concept and estimated capital and operating cost estimates were originally prepared by KCA in 2010. These cost estimates were inflated by 1.5% per year following recent discussions with KCA. Their report is attached as Appendix F, and the following is taken from their report:

The basic design criteria pertinent to this order of magnitude study are summarized below. Unless stated otherwise, all process rates are in metric tonnes per hour.

DESIGN BASIS	
CRUSHING	
Delivery to Primary Crusher, tonne/hr	700
Crushing hr/day	16
Operating days/week	7
Availability	80%
Primary Crusher Feed Size, maximum, mm	600 x 600
Primary Crusher Feed Size, 80% passing, mm	450
Specific Gravity	2.8
Ore Hardness and Abrasivity	Assumed to be similar to quartzite
Final Product, 80% passing, mm	7.6
GRINDING/FLOTATION	
Processing rate, tonne/hr	400
Operating hr/day	24
Availability	93%
Ball Mill Work Index	14.3
Primary Ball Mill	1
Product Grind, 80% passing, µm	75
Regrind Mill	1
Regrind Product Grind, 80% passing, µm	20
Concentrate Produced, dry tonnes/day	72
Copper Concentration, wt % Copper	26

Capital and operating costs were calculated by KCA originally based on recent quotations or information from KCA project files, and are expressed in 1st quarter 2010 dollars, inflated by 1.5% per year to be in terms of 3rd quarter 2016 estimates. Crushing circuit design and operating costs are taken from Metso's Bruno program to calculate the throughput, energy consumption, and wear. Bruno also calculates the cost of maintenance including parts and overhaul. The costs from Bruno are given in Euros so a conversion factor of US$1.40 to €1.00 was used. The Bruno conventional flow sheet and cost table are attached at the end of this study. Flotation flowsheet design, reagent consumptions, and mill sizing are based on SGS Minerals Services metallurgical tests and locked-cycle test LCT-3 on the master composite.

18.0 PROJECT INFRASTRUCTURE

18.1 Access

The property is located about 32km west of the city of Cheyenne, Wyoming. The existing access roads to within 1.5km of the property are in good condition. The final 1.5km will require some improvement and relocation. Additional roads may be required when the locations of the plant and infrastructure have been better defined. Purchase of land or right of way may also be required.

18.2 Water

No hydrological studies have been completed. Three wells are assumed to be required: one near the mine and two wells near the plant site.

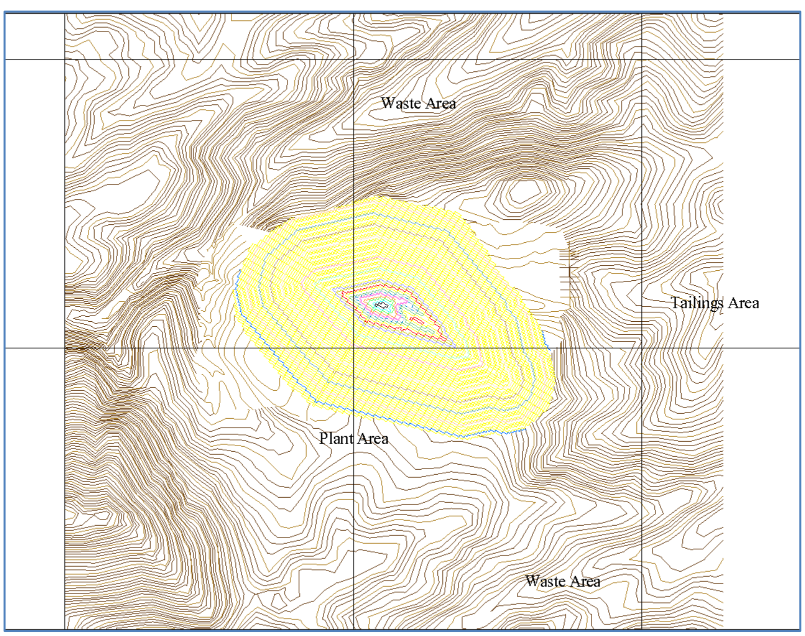
18.2.1 Power

Power should be available near the plant site; however, this has not been confirmed. A low-capacity 5-mile power line is assumed to provide power from the plant site to the crusher, tram, and mine facilities.

18.3 Facility Layout

Figure 18.1 shows the initial layout of project facilities.

Figure 18.1 Project Layout of Facilities



19.0 MARKET STUDIES AND CONTRACTS

No market studies have been conducted. At this PEA stage, there are no material contracts.

20.0 ENVIRONMENTAL STUDIES, PERMITTING, AND SOCIAL OR COMMUNITY IMPACT

Mr. Richard Delong, President of EM Strategies, Inc., a permit acquisition strategy and government relations consulting firm, provided the following information on environmental considerations, permitting, and social and community impacts.

20.1 Introduction

U.S Gold acquired its interest in the Copper King Project (Project) in 2016. The Project is located in southeastern Wyoming, approximately 32 kilometers west of the city of Cheyenne, on the eastern margin of the Laramie Range. The Project covers approximately five square kilometers. Access to the vicinity of the Project is via public paved and gravel roads. An easement agreement providing access from the public roads to the Project has been negotiated with the Ferguson Ranch, Inc. The Project is currently in an advance exploration phase and anticipated mineral development would be to mine the deposit by open-pit methods with metal recovery by flotation.

The surface estate and the mineral estate are owned by the State of Wyoming, and the past and current land use is undeveloped grazing land. A limited amount of past mineral exploration has been conducted on this land. The most recent exploration drilling was conducted in 2007 and 2008; Abandoned Drill Site Reports were submitted to the Wyoming Department of Environmental Quality (WDEQ), Land Quality Division (LQD) indicating drill holes were properly reclaimed and should therefore present no environmental liability. The State of Wyoming has leased the surface for livestock grazing, and there are no known past or present land uses that would potentially contribute to environmental liabilities.

A search of the Wyoming Oil and Gas Conservation Commission in 2012 (Miller 2012), shows no oil or gas activity on the property and subsequently no associated environmental liabilities. A review of Wyoming Game & Fish Department information, also 2012 (Miller 2012) shows the area is not in a mapped Sage Grouse core area that would limit mineral development.

A report prepared by Dr. Tom Michel of Hydro-Engineering in September of 2011 (Michel 2011) details conditions surrounding the Project that will need to be addressed in future environmental permitting. Curt Gowdy State Park is located less than one-half mile from the northwest corner of the Project. The State Park is surrounded by privately held parcels; a number of parcels have residences. In permitting processes, potentially contentious items include potential effects to ground water, surface water, viewshed, air quality, as well as noise from blasting and reclamation. Hydrology will be an important issue in permi acquisition process. As Dr. Michel's detailed in his report:

> *"The hydrology of the area will likely figure very prominently in the permitting process due to the location within the headwaters of Crow Creek, the proposed post-mining pit utilization as a water storage reservoir, the proximity to Crystal Lake Reservoir, and the potential impacts on the alluvial systems that are tributaries of Crow Creek… The degree to which the ground-water system is in communication with the alluvial aquifers in the Crow Creek tributaries and possibly the Crystal Lake Reservoir will have to be thoroughly evaluated. Permeability and recharge to hard rock aquifers can be highly variable, and the viability of a post-mining reservoir in the pit will depend largely on recharge to and recovery of the reservoir. Because the proposed post-mining usage of*

the mine area may greatly impact the potential for successful permitting, and the disposition of the mine pit is likely the biggest factor in post-mining usage, evaluating attractive multiple use options for the mine pit will be very important in the permitting process."

The following sections provide additional detailed information on potentially necessary environmental baseline data that will be needed, as well as the principal permits necessary to develop the project and complete the National Environmental Policy Act (NEPA) process, if necessary, as well as the status relative to each permit process.

20.2 Baseline Data Collection

One of the initial activities, as part of the permit acquisition, would be to collect the necessary baseline data for completion of the permit applications. The following is a brief discussion of the likely required baseline studies.

20.2.1 Waste Rock and Ore Characterization

The waste rock and ore geochemical characterization program would need to be designed to develop a complete and defensible geochemical database suitable for permit acquisition and to define preliminary operational and closure strategies. Data would also be appropriate for any predictive work on pit wall runoff, or seepage chemistry from mine facilities, as necessary. Testing would need to include both acid-rock drainage and metals leaching potential (acid-base accounting [ABA] and synthetic precipitate leachate testing). Testing would be conducted on materials that would be mined and exposed to the environment including ore destined for processing or stockpiling, waste rock, pit wall rock, and material that may be used for construction or closure.

Sampling and analysis could be conducted in phases, time permitting, such that results could be used to design the second phase of more detailed testing. Phase I would include a preliminary screening of all rock/mineralization types expected to be encountered during mining. Phase I would consist of only static testing (e.g., ABA, whole rock chemistry). Phase II would be designed based on Phase I results, to focus on the key rock types. This includes rock types that are potentially reactive or show the most variability in Phase I results. Phase II would include static testing, to fill data gaps identified in Phase I, and potentially kinetic testing to characterize the long-term weathering potential of waste and tailings materials. Kinetic testing would be conducted as warranted, based on the Phase I results. Kinetic testing is included in the program at this time.

20.2.2 Ground Water Characterization

The baseline hydrogeology characterization would need to focus on establishing the following:

- Existing ground water elevations;
- Hydraulic gradients;
- Permeability values;
- Ground water flow regimes; and
- Ground water quality.

The baseline hydrology components would also focus on establishing surface water background data including physical and chemical characteristics of streams, springs, and seeps within and adjacent to the Project area.

If the open pit intersects ground water, then the following would need to be developed:

- Ground water flow model; and
- Pit lake geochemistry model.

20.2.3 Geotechnical Investigation

As part of the geotechnical investigation a program of drilling and test pits would need to be completed within the footprint of the heap leach facility and the potentially acid generating (PAG) waste rock dump (if found to be PAG). The geotechnical field program would generally require some combination of trackhoe and drill rig to obtain the following:

- Classification of overlying soils and lithology of bedrock;
- Collection of undisturbed samples for shear testing, permeability testing, in-place density determination; and
- Collection of bulk samples for index properties analysis to provide understanding of potential construction materials required (gradation, atterberg), permeability, and moisture-density relationships.

The scope of the program would depend on the following factors:

- Area and height of waste rock storage facilities;
- Present availability of data for the site;
- Soil and rock conditions at the site;
- Depth to ground water; and
- Geochemical properties of the source (spent ore or wasterock).

20.2.4 Cultural Resources Inventory

A cultural resources inventory would need to be conducted over that portion of the Project area not recently surveyed to assess the presence or absence of potentially significant prehistoric and historic sites in accordance with LQD guidelines. This study would consist of a review of literature and site records on file with the LQD, followed by an intensive survey of the portion of the Project area that would be affected by the Project. All existing and newly identified prehistoric and historic archaeological sites, features, and isolates identified during the survey would be appropriately mapped, documented, and recorded. If potentially significant sites are identified, evaluation may be necessary and treatment may be required. Upon completion of the survey, and if necessary evaluation is required, a draft technical report would need to be prepared for submittal and review. This report would consist of a description of the Project's natural and cultural setting, study methods, results, potential impacts, and mitigation recommendations. Following review and comment by the LQD, the final cultural resources inventory report would need to be prepared.

20.3 Section 404 Permit

All mining and exploration activities within drainages and wetlands in Wyoming are subject to regulation by the Army Corps of Engineers (ACE). The ACE does not need to be contacted if the activity only occurs in uplands and does not involve impacts to drainages or wetlands. If the activity will occur in a Class 1 Stream the LQD has additional specific requirements to protect the stream classification. The WDEQ Water Quality Division (WQD) will require a Permit to Construct if a wash water treatment pond is to be built and a Discharge Permit if any water is to be returned to a stream.

Section 404 of the Clean Water Act (CWA) requires that any project which has the potential to cause dredge or fill in Waters of the United States (US) must first obtain a Section 404 permit. The ACE must make a Waters of the U.S. determination, and from this determination, the type of Section 404 permit that will be required can be made. The determination by the ACE can take several months to complete. If the Project activities can be completed under a Section 404 Nationwide Permit, then the approval time frames are approximately one to two months; however, if the Project activities require the acquisition of a Section 404 Individual Permit, then the approval permit is tied to the completion of the NEPA document which will take longer.

20.4 Explosives Permit

There are several federal agencies involved in the management of explosives. There are no state or county permits required for the use or transportation of explosives. The state has explosive storage requirements as a part of Title 30 - Mines and Minerals, Chapter 2 Mining Operations, Article 6 Explosives and Flammables. The agencies responsible for the management of explosives and their management roles include the following:

1. Bureau of Alcohol, Tobacco, Firearms, and Explosives (ATF): regulates the distribution and manufacture of explosives as well as storage;
2. Mine Safety and Health Administration (MSHA): regulates hazards associated with the use of explosives in a mine environment; and
3. Department of Transportation (DOT): regulates the transportation of explosives on roadways throughout the US and mandates packaging and labeling requirements.

The

The ATF requires a User of Explosives permit (User Permit) application be completed. This User Permit is issued for three-year periods, subject to renewal, and requires the following information be completed: operational information including address and type of business; the individual social security number for each individual using explosives; detailed information on the owners and operators of the facility using explosives; and maps indicating the storage and housing locations of explosives.

The DOT and MSHA requirements are regulatory procedures that must be followed, specifically regarding storage, transport, and labeling. There are no permits, notices, or applications that need to be completed.

20.5 National Environmental Policy Act

The NEPA process is triggered by a federal action. In this case, the issuance of a completeness letter for an application, which triggers the federal action. The NEPA review process is completed with either an EA or an EIS.

20.5.5 Environmental Assessment

The EA process is conducted in accordance with NEPA regulations (40 CFR 1500 et. seq.) and ACE guidelines for implementing the NEPA. The intent of the EA is to assess the direct, indirect, residual, and cumulative effects of the proposed Project, and to determine the significance of those effects. Scoping is conducted by the ACE and includes a determination of the environmental resources to be analyzed in the EA, as well as the degree of analysis for each environmental resource. The scope of the cumulative analysis is also addressed during the scoping process. Following scoping and baseline information collection, the EA is either prepared by the ACE, or prepared by a third party contractor for the ACE. When the ACE determines that the EA is complete, a Preliminary EA is made available to the public for review. Comments received from the public would be incorporated into a Final EA, or included in the decision record and Finding of No Significant Impacts.

20.5.6 Environmental Impact Statement

The EIS process is conducted in accordance with NEPA regulations (40 CFR 1500 et. seq.) and ACE guidelines for implementing the NEPA. The intent of the EIS is to assess the direct, indirect, residual, and cumulative effects of the Project and to determine the significance of those effects. Scoping is conducted by the ACE and includes a determination of the environmental resources to be analyzed in the EIS, as well as the degree of analysis for each environmental resource. The scope of the cumulative analysis is also addressed during the scoping process. Following scoping and baseline information collection, the Draft EIS is prepared for the ACE by a third party contractor. When the ACE determines the Draft EIS is complete, it would be submitted to the public for review. Comments received from the public would be incorporated into a Final EIS, which would in turn be reviewed by the ACE and the public prior to a record of decision (ROD). Under an EIS there can be significant impacts. The preparation of an EIS is a lengthier and more expensive process than an EA. The Project proponent pays for the third party contractor to prepare the EIS, and also pays recovery costs to the ACE for any work on the Project by ACE specialists.

It is expected that the ACE will require the preparation of an EIS to comply with the NEPA for this Project.

20.6 State of Wyoming Permits

The LQD regulates gold and copper mining and exploration activities in Wyoming. This proposed exploration activity will be occurring in LQD District 1 which is headquartered in Cheyenne.

The LQD has published Guideline No. 16, *Gold Mining and Exploration* which details permitting requirements for these types of activities. This guideline is available on their website at http://deq.state.wy.us/lqd/Guidelns/guide16.pdf.

Permission from all surface and mineral owners should be obtained prior to exploration and mining to avoid trespass disagreements. The surface estate is owned by the State of Wyoming. The Wyoming Office of State Lands & Investments (WOSLI) is located in Cheyenne.

20.6.7 License to Explore by Dozing

Exploration activities using mechanized mining equipment or dredges larger than three inches will require an Exploration by Dozing License. The application form (LQD Form 4) may be obtained from a LQD District Office or their web site at http://deq.state.wy.us/lqd/noncoalpermitting.asp.

After obtaining surface and mineral owner permission, the application form is submitted in duplicate with a $25 filing fee. Briefly, the following information will be required:

- Lists of surface and mineral owners in the area to be explored.
- A detailed map (US Geological Survey topographic or equivalent) showing roads, proposed excavations, topsoil and overburden stockpiles, etc.
- A general description of the land to be affected (soils and vegetation information may be obtained from local Natural Resources Conservation Service office).
- A timetable for exploration and reclamation.
- A detailed exploration and reclamation plan which describes equipment, topsoil handling, grading, seeding, etc.

After the License application is reviewed by the LQD, the applicant must provide a reclamation performance bond. This is usually posted with either cash (Certified Check) or an original Certificate of Deposit purchased at a local bank, although other methods are available. If a Certificate of Deposit is used, it must be written with the following features:

- Automatically renewable
- Earned interest is made payable to the purchaser
- Payable solely to the Wyoming DEQ, Land Quality Division

The LQD discusses acceptable methods of bonding at their web site at http://deq.state.wy.us/lqd/ downloads/bonding/BondInstruct.htm.

20.6.8 Drilling Notification

All exploration activities which primarily involve drilling may be permitted by completing a Notification of Intent to Explore for Non-Coal Minerals by Drilling form (Form 9DN) and providing a bond based on the estimated cost to properly seal drill holes and reclaim the drill sites (see above for details). This application form (LQD Form 9DN) may be obtained from a LQD District Office or their web site at http://deq.state.wy.us/lqd/noncoalpermitting.asp.

20.6.9 Mining Permit

Under the Wyoming 1993 Non-Coal Rules and Regulations, an application for a new mine (Application) must be completed. The LQD of the WDEQ has the responsibility to issue permits associated with mining activities in Wyoming. Prior to completing the Application, the applicant should meet with a representative from LQD to review the baseline information collection process.

Laramie County is located in WDEQ District I out of Cheyenne. Collection and interpretation of the baseline information can take as many as two years to complete (one year minimum). LQD has prepared a total of 22 guidelines to facilitate the collection and interpretation of baseline data that must be completed prior to submitting the Application. The guidelines that may be most relevant to the Project include the following: Guideline 1 Soil and Overburden; Guideline 2 Pre-mining and Post-mining Vegetation Inventory; Guideline 5 Terrestrial Wildlife Resource Assessment; Guideline 8 Hydrology; Guideline 10 Fencing; Guideline 11 Cultural and Paleontological Resources; Guideline 12 Standardized Reclamation Performance Bond Format and Cost Calculation Methods; Guideline 13 Sediment Ponds; and Guideline 15 Alternate Sediment Control Measures. The complete list of the guidelines can be found at: http://deq.state.wy.us/lqd/guidelines.asp.

The final Application submitted to WDEQ would consist of two parts: the Adjudication File (File) and the Baseline Studies (Studies). Once the Application is complete LQD has 90 days to respond. The Application may go through several WDEQ responses before a permit is issued. There are no estimated timelines for this process; however, this processing timeline would be concurrent with, and shorter than, the ACE Section 404 processing timeline.

The File portion of the Application is composed of several documents that cover the general land status and corporate information. At minimum, the File must include the following information: Permit to Mine Application; License to Mine Application; Reclamation Bond; Land Owner Consent; Land ownership information (including detailed maps) for lands within and adjacent to the permit area; Proof of Publication; Proof of Notice; Proof of Filing; Proof of Notification; and Written verification of City or County. A brief description of these documents is included in Table 20.1.

Table 20.1 Information Included in the File

Document Required	Information Required	Other Relevant Information
Permit to Mine application	Forms must include the corporate seal.	
License to Mine application	Forms must include the corporate seal.	
Reclamation bond	Include a copy of the proof of bond acceptance.	Bond values must be calculated as required by Wyoming state Guideline 12 (see above).
Land Owner Consent	Land Owner Consent is required if the applicant proposes to affect any land which lies 300 feet from an existing dwelling, home, public building, school, church, community or institutional building, park, or cemetery.	
Appendix A	Includes a complete list of surface and minerals owners within the project area.	
Appendix B	Includes both a map and a list of owners and their addresses with lands adjacent to the project area	
Appendix C	Includes a table of all the lands within the project area and their legal subdivision, section, township, range, county, municipal corporation, and acreage; an original Geological Survey topographic map which clearly outlines the project area; and a table(s) which summarize lands within the project area where no right to mine is allocated, and a table summarizing lands in other permitted areas.	
Appendix D	Description of the land.	The information to be included in Appendix D is also part of the Studies portion of the Application.
Appendix E	Map(s) showing the project boundary, lands affected by mining, drainage area surrounding proposed mining, locations and names of all miscellaneous information, and an outline of the probable area previously disturbed by mining.	Information to be included on maps: roads, railroads, private rights-of-way and easements, utility lines, buildings, lakes, streams, creeks, springs and other surface water courses, oil wells, gas wells, and water wells.
Proof of Publication	LQD will provide publication notice format.	Publication and notification may not begin until operator has received written consent from LQD.
Proof of Notice	An affidavit of publication executed by the newspaper.	
Proof of Filing	An affidavit of filing from County Clerk.	
Proof of Notification	A copy of the 'Affidavit of Notice' shall be sent to all surface owners of record within the project area, surface owners of record immediately adjacent to the project area, and surface owners within one half mile of the project area.	A copy of the Mine Plan map must be sent to the Wyoming Oil and Gas Commission.

The Studies portion of the Application includes the following information: Land Use; Brief History of the Area; Archaeological and Paleontological Resources; Climatology; Topography, Geology, and Overburden Assessment; Hydrology; Soil Assessment; Vegetation Inventory; Wildlife; and Wetlands. A brief description of these documents is included in Table 20.2.

Table 20.2 Information Included in Studies

Document Required	Information Required	Other Relevant Information
Appendix D-1 Land Use	Include information about land use going back 20 years, information on the present land use, and an aerial photo of the project area.	
Appendix D-2 Brief History of the Area	Include any relevant information.	
Appendix D-3 Archaeological and Paleontological Resources	Include any information from surveys or clearances.	
Appendix D-4 Climatology	Include meteorological data, a copy of Air Quality Permit, and discussion.	
Appendix D-5 Topography, Geology, and Overburden Assessment	Include: the pre-mining topographic slope conditions with a map; the geologic stratigraphy and structural information, pit geologic cross-sections, and the qualitative and quantitative overburden analysis.	See Guideline 1
Appendix D-6 Hydrology	Include information on ground water; surface water; and water rights.	See Guideline 8
Appendix D-7 Soil Assessment	Include the following: a soil inventory and stability map, soil mapping unit, and profile description; qualitative soil analyses; quantitative topsoil analyses; summary and discussion of baseline inventory; and field procedures which will be used to estimate actual stripping depths.	See Guideline 1
Appendix D-8 Vegetation Inventory	Information should be presented in a report format and include a description of the location and general features within the project area.	See Guideline 2
Appendix D-9 Wildlife	Information should be presented in a report format and should include on-site animal habitat affinity, identification of unique habitats, occurrences of any threatened or endangered animals, changes in hunting or fishing access to public lands, and any long-term wildlife impacts.	See Guideline 9
Appendix D-10 Wetlands	Include a copy of the National Wetlands Inventory showing that potential wetlands do not exist in this area.	

20.6.10 Air Quality Permit

Prior to obtaining an air quality Wyoming Operating Permit (Chapter 6, Section 3), a minor source construction permit or permit waiver (Chapter 6, Section 2) must be obtained first, The Chapter 6, Section 2 construction permit must be obtained prior to commencement of construction activities. Chapter 6, Section 2 permit waivers generally take approximately 45 days to obtain, and construction permits take approximately 120 days. Information that must be part of the construction permit application includes a detailed list of materials being processed, control equipment, potential contaminants, information about the types of combustion sources at the operation, stack emission information, and a summary of the mine's operating schedule.

The Wyoming Operating Permit Program currently affects only major sources of air pollution operating in the State. A major source is defined as a source which emits, or has the potential to emit, 100 tons per year of an air pollutant, or any source which emits, or has the potential to emit, ten tons per year of an individual hazardous air pollutant, or 25 tons per year of any combination of hazardous air pollutants, which has been listed pursuant to section 112(b) of the Clean Air Act. A more precise definition can be found in Chapter 6, Section 3 of Wyoming Air Quality Standards and Regulations. Permit applications are made to the Wyoming Air Quality Division's (AQD's) Operating Permit Program.

The AQD charges an hourly rate to review applications as there is no set fee for the application. There is an annual operation fee based on the estimated number of pounds of emissions released each year.

20.6.11 Storm Water Permit

The State of Wyoming has the authority to issue National Pollutant Discharge Elimination System permits. These Wyoming Pollution Discharge Elimination System (WYPDES) permits are issued by the WDEQ. All construction sites which disturb more than one acre, and certain industrial facilities, are required to obtain a storm water permit. A Notice of Intent (NOI) would need to be filed at least 30 days prior to beginning Project construction. A Storm Water Pollution Prevention Plan (SWPPP) will also need to be prepared for the Project. The SWPPP describes potential pollution sources and the best management practices (BMPs) which would be used to prevent storm water contamination. The NOI would describe the industrial activity and route(s) that storm water may take from the activity to waters of the state. The WDEQ reviews the NOI to determine if the operator may discharge storm water under the general permit, or if an individual WYPDES permit is required.

20.6.12 Application to Appropriate Ground Water

The Permit to Appropriate the Public Ground Waters of the State of Wyoming is issued by the Ground Water Division, which is a part of the State Engineer's Office (SEO). The SEO requires an Application for Permit to Appropriate Ground Water Form U.W. 5 (Form) to be submitted and approved before drilling an active mine dewatering well. In the case of active mine dewatering wells (with the exception of pit sumps), one permit will suffice for up to 30 wells, so long as all of those wells are constructed similarly, to consistent depth, and within the same quarter-quarter location. One permit is required for each pit sump that is constructed. The Form has particular completion requirements depending on water management practices, and these requirements are described below.

When permitting active mine dewatering wells, including pit sumps, Items 7(a) and 7(b) on the Form must be completed. Item 7(a) is the Maximum instantaneous flow of water to be developed and beneficially used and Item 7(b) is the Maximum volumetric quantity of water to be developed and beneficially used per calendar year. The number of wells that will be drilled under the permit must be indicated. These numbers must accurately reflect the amount of water that is being pumped out of the ground or out of the pit sump.

The following list of scenarios apply when mine dewatering water is to be used as a direct source for another beneficial use. Also, water that is discharged to the surface or discharged to a new or existing reservoir may have additional permitting requirements through the SEO - Surface Water Division.

1. *Ground water production for Mine Dewatering use only:* No additional permitting is required if there is no additional beneficial use other than Mine Dewatering. In this situation 'Miscellaneous use' should be indicated in section 4 of the Form, and 'Mine Dewatering' should be indicated in the Remarks section on the back of the Form. The location of the Mine Dewatering well should also be described in section 8 of the Form.

2. *Ground water production for Mine Dewatering and for other mining activities within the mine:* 'Miscellaneous use' should be indicated in section 4 on the Form, 'Mine Dewatering' should be indicated in the Remarks section on the back of the Form, and in the Remarks section of the other activities within the mine that the water will be used for must be listed (i.e., dust abatement). The location of the Mine Dewatering well should also be described in section 8 of the Form.

3. *Ground water production used for Mine Dewatering and Stock watering*: 'Miscellaneous and Stock use' should be indicated in section 4 of the Form and 'Mine Dewatering' should be indicated in the Remarks section on the back of the Form. The tabulation in section 8 should indicate the location of the well and the stock point(s) of use to the nearest quarter-quarter section. Stock use is defined as four or less stock tanks all of which must be located within one mile of the well.

4. *Ground water production for Mine Dewatering and Stock watering at more than four locations or at a distance greater than one mile from the well*: 'Miscellaneous use' should be indicated in section 4 of the Form. 'Mine Dewatering and Stock Water Pipeline' should be indicated in the Remarks section on the back of the Form. All points of use should be indicated in section 8, including the well itself.

5. *Ground water production for Mine Dewatering and discharge to a reservoir*: 'Miscellaneous use' should be indicated in section 4 of the Form. In this case the use will be described in the Remarks section as 'Mine Dewatering and Reservoir Supply.' The well location and each reservoir location and name must be marked in the tabulation in section 8. If the water discharges to a drainage or stream and not directly to the reservoir indicate as such, do not specify 'Reservoir Supply use'. 'Reservoir Supply use' should only be specified if the water is intended for, and will be put to use, under the permitted reservoir in question.

6. *Ground water production for an industrial process, such as oil field secondary recovery operations, where there is a consumptive use of the water*: Miscellaneous and Industrial use should be indicated in section 4 of the Form. If Industrial use is indicated, a description of the use and a

tabulation of the area of use must accompany the Form. The well location should also be indicated in the tabulation in section 8 and 'Mine Dewatering' should be indicated in the Remarks section.

7. *Ground water production for irrigation*: 'Miscellaneous and Irrigation use' should be indicated in section 4 of the Form. A tabulation of the areas of use for the irrigation must be specified. The tabulation in section 8 must include the total number of acres in each quarter-quarter of each section that receives water. The well location should also be indicated in the tabulation and 'Mine Dewatering' should be indicated in the Remarks section.

20.6.13 Impoundment Permit

The Surface Water and Engineering Division of the SEO is responsible for reviewing permit applications for any request for use of surface waters in the State of Wyoming. Permits from the Surface Water Division are issued for the following:

- Transporting water through ditch or pipelines;
- For storage in reservoirs;
- Storage in smaller (under 20 acre-feet of capacity and a dam height less than 20 feet) reservoir facilities for stock water or wildlife purposes;
- Enlargements to existing ditch or storage facilities; and
- For instream flow purposes.

The Surface Water Division also implements the Safety of Dams Program for Wyoming. The SEO is responsible for ensuring the safety and structural integrity of water storage facilities in the state. To apply for a Safety of Dams permit, the operator will need to complete an S.W.-3 Form Application for Permit to Appropriate Surface Water. A Safety of Dams inspection is also required for all dams in excess of 20 acre-feet.

20.6.14 Solid and Hazardous Waste Permit

The Solid and Hazardous Waste Division (SHWD) of WDEQ is responsible for ensuring the proper handling and disposal of solid and hazardous wastes. The SHWD also manages programs for cleanup of previously contaminated sites. The Solid Waste Permitting and Corrective Action program, as a part of the SHWD, is responsible for permitting solid waste management facilities, with the exception of mines facilities. Landfill facilities located within mine disturbance areas are permitted as part of the LQD Application.

To obtain an Environmental Protection Agency (EPA) hazardous waste generator number, the operator will need to complete the EPA's Form 8700-12 Notification of Regulated Waste Activity (Notification). This Notification will need to be submitted if the Project will be generating wastes regulated as a part of EPA's Resource Conservation and Recovery Act (RCRA) regulations. The Notification must be submitted to SHWD, and they will provide the Project with an EPA identification number. There are no fees associated with this Notification.

20.6.15 Public Water Supply

Wyoming is the only state in the union that does not have primacy for the Safe Drinking Water Program. The WQD and the EPA Region 8 Direct Implementation Program has the responsibility for insuring that drinking water is safe. The drinking water regulations are promulgated pursuant to the Wyoming Environmental Quality Act. Applicants must include three copies of plans, specifications, design data or other pertinent information covering the project, and any additional information required by the administrator. The installation, construction, modification or operation shall not commence until written notification of coverage under the permit has been received from the department. There are no fees associated with this application.

20.6.16 Petroleum Tank Program

The WDEQ administers the Storage Tank Program (STP) under Article 14 of the Wyoming Environmental Quality Act (Act) and Chapters 17 and 19 of the Wyoming Water Quality Rules and Regulations. The STP is mandated to ensure tank systems are managed in a manner that is compliant with the Act and to oversee corrective actions at sites contaminated by leaking tanks. The STP roles and responsibilities include:

1. Ensuring that owners/operators have tanks that are designed, constructed, and operated to protect public health and the environment;

2. Conducting compliance inspections to ensure operational requirements are being met;

3. Tracking and notifying owners/operators of operational requirements, such as inventory control, leak detection, cathodic protection, etc.;

4. Maintaining a database to track tank inventory, physical descriptions of tanks, tank locations, owners/operators phone contacts, tank operational requirements, tank fees, inspection fees, generation of compliance notices, etc.;

5. Notifying owners/operators of compliance due dates. Contact by phone and written correspondence to encourage compliance. Work through conference and conciliation to resolve compliance issues versus penalties;

6. Providing outreach to the regulated community in the form of newsletters, letters, informational meetings, and via the internet;

7. Providing information regarding storage tank facilities when requested; and

8. Reporting to the EPA.

20.6.17 State Mining Council

The Wyoming State Mining Council (Council) is an 11 member group created to act in conjunction with the State Inspector of Mines. The Council's main mandate is to help make improvements in the areas of miners' safety, health, and training. The Council also oversees miner training and examination to ensure MSHA compliance. Finally, the Council provides a state certification for various mine related positions. The Council also works with the operations to make improvements in production, processing equipment, and operations.

Ten of the 11 members of the Council are appointed by the governor with the consent of the Wyoming State Senate for four-year terms. The eleventh member is the State Inspector of Mines. Requirements for the ten appointed members are that they shall have been employed in the mining industry for at least five years, and the membership shall be divided equally among the management and hourly employees of the mining industry.

20.6.18 Notification of Opening and Closing Mines

The State Inspector of Mines must be notified prior to commencing exploration and mining operations. Notification requires submittal of a completed Notice of Commencement or Closing of Mine Operation Form. There is no fee or baseline data required for this notification.

20.6.19 Fire Marshall

As a requirement of the state of Wyoming, all new industrial facilities must submit a chemical storage plan and a complete set of building plans to the state Fire Marshall. The chemical storage plan shall include a listing of all chemicals stored and used at the facility and, a map identifying those areas and locations of all fire-fighting equipment. The building plans submitted should include details about all sprinkler systems, fire alarms, and storage tanks. The total fees associated with the building permit review is a percentage of the total value of the structure.

20.6.20 Electrical Permit

An electrical wiring permit must be obtained by the Department of Fire Prevention and Electrical Safety before work is started. Once all electrical components are installed and working properly the wiring permit allows the electric inspector to inspect the project. The fees associated with this permit are based on the amount of electrical work completed.

20.7 Laramie County Permit Requirements

Laramie County also requires a conditional use permit. This is an authorization allowing a landowner to use the property in a manner compatible with the zoning district in which the property is located. An application for a conditional use permit is first reviewed by the County Development Department. The County Development Department meets with the applicant, conducts an on-site inspection of the property, gathers information from various sources, and submits a report and recommendation to the County Planning and Zoning Commission.

A septic permit and a well permit must also be obtained from the County Health Department. Permit fees for both of these permits are based on the amount of plumbing and the amount of water used at the facility.

20.8 Other Permits

In addition to the principal environmental permits outlined above, Table 20.3 lists other notifications or ministerial permits that may likely be necessary to operate the Project.

Table 20.3 Ministerial Permits, Plans, and Notifications

Notification/Permit	Agency	Timeframe	Comments
Mine Identification Number	Mine Safety and Health Administration	Prior to start-up	
Notification of Commencement of Operation	Mine Safety and Health Administration	Prior to start-up	
Radio License	Federal Communications Commission	Prior to radio use	

20.9 Environmental Study Results and Known Issues

The Project has no known environmental liabilities. Based on aerial photographs from July, 2015 the Project area appears to be undeveloped grazing lands with minimal mineral exploration disturbance. There are no known ongoing environmental issues with any of the regulatory agencies. However, there have not been any comprehensive environmental baseline studies of the Project area to identify issues.

20.10 Social and Community Issues

Social and community impacts have been and are being considered and evaluated for the various permit application processes for the Project, as well as in the analysis for the EA/EIS in accordance with the NEPA and other federal laws. Potentially affected Native American tribes, tribal organizations and/or individuals are consulted during the preparation of all plan amendments to advise on the proposed Projects that may have an effect on cultural sites, resources, and traditional activities.

The most recent Master Plan of Laramie County will need to be consulted during the preparation of permit applications. Potential community impacts to existing population and demographics, income, employment, economy, public finance, housing, community facilities and community services are evaluated for potential impacts as part of the NEPA process.

The proximity of the Project to Curt Gowdy State Park and the potential for impacts to the park will raise social and community issues that must be addressed in all the permit applications. There are no other known social or community issues that would have a material impact on the Project's ability to extract mineral resources. Identified socioeconomic issues (employment, payroll, services and supply purchases, and state and local tax payments) are anticipated to be positive.

20.11 Mine Closure

Any future mining operation will have to be closed in a manner that is consistent with all the permit requirements, particularly the Mining Permit issued by the LQD.

21.0 CAPITAL AND OPERATING COSTS

21.1 Capital Cost Estimate

The Capital Cost estimate is expressed in terms of U.S. dollars in first quarter 2016 costs (US$).

21.1.1 Mine

The mine equipment capital cost is estimated in Table 21.1.

Table 21.1 Mine Equipment Capital Cost Estimate ($000's)

Mine Equipment	Year -1	Year 1	Year 9	Year 10	Year 11	Year 12	Year 16	Totals
Drills								
Hydraulic	$785.0		$785.0				$785.0	$2,355.0
Rotary	$820.0	$820.0	$820.0	$820.0			$820.0	$4,100.0
Hydraulic Shovel	$3,250.0			$3,250.0				$6,500.0
Loader	$2,050.0		$2,050.0				$2,050.0	$6,150.0
Trucks	$9,936.0	$3,312.0		$6,624.0	$3,312.0	$3,312.0	$0.0	$26,496.0
Dozers	$900.0	$900.0	$900.0	$900.0			$900.0	$4,500.0
Grader	$787.0		$787.0				$787.0	$2,361.0
Water Truck	$640.0							$640.0
Contingency (5%)	$958.4	$251.6	$267.1	$579.7	$165.6	$165.6	$267.1	$2,655.1
Totals	$20,126.4	$5,283.6	$5,609.1	$12,173.7	$3,477.6	$3,477.6	$5,609.1	$55,757.1

An allowance of $1.5 million has also been included for constructing roads out of the pit.

21.1.2 Flotation Plant and Tailings Facility

The capital cost estimate is based on quotations or information from KCA project files, expressed in first quarter 2011 U.S. dollars. The 2010 KCA estimate was not inflated, as the 2010 inflation rate was about nil. Crushing circuit design and operating costs are taken from Metso's Bruno program to calculate the throughput, energy consumption, and wear. Bruno also calculates the cost of maintenance including parts and overhaul. The costs from Bruno were given in Euros, so a conversion factor of US$1.40 to €1.00 was used. The mill flowsheet design, reagent consumptions, and mill sizing are based on SGS Minerals Services metallurgical tests and locked-cycle test LCT-3 on the master composite.

The estimated capital cost in terms of 3rd quarter 2016 dollars for a 10,000 dstpd (9,000 dmtpd) flotation concentrator is approximately $87.8 million. Items specifically excluded from the capital cost estimate are:

- Any extension of roads or power lines to the concentrator area;
- Costs associated with primary water supply to the process (wells, water storage ponds, etc.);
- Any capital related to mining and ore delivery to the crushing circuit;
- General and administrative services (main offices, warehouse, etc.);
- Any future capital requirements related to tailings pond expansion, the replacement of surface mobile equipment, etc.; and
- Owner's cost.

The capital cost estimate does include:

- All concentrator related buildings (offices, laboratory, mill shop, etc.);
- Starter tailings dam (general estimate since terrain is unknown);
- An estimate of working capital (30 days) and initial fills.

Details of the capital cost and estimated power are shown in Table 21.2.

Table 21.2 Copper King Flotation Mill Capital Cost Estimate ($000's)

Item	Year -1
Crushing	12,199.1
Grinding	5,371.3
Flotation	3,564.7
Concentrate	1,149.5
Tailings Disposal	11,974.0
Construction	27,712.0
Subtotal Direct	**$61,970.5**
Owners Costs	$2,000
Contractor Mob & Prifit	3,717.7
EPCM	8,675.3
Subtotal Indirect	**$12,395.0**
Subtotal Direct + Indirect	$74,365.6
Contingency	$13,452.5
Total Plant	**$87,818.1**

21.1.3 Infrastructure

The estimated capital cost of infrastructure items is shown in Table 21.3.

Table 21.3 Copper King Estimated Infrastructure Capital Cost ($000's)

Item	Year -1
Water Supply and Distribution	$750.0
Power Supply and Distribution	$750.0
Access Road	$150.0
Haul Roads	$1,500.0
Administration Building	$250.0
Laboratory	$250.0
Mine Shop	$900.0
Warehouse	$250.0
Communication	$100.0
Software and Hardware	$100.0
Contingency (15%)	$720.0
Total Infrastructure	$5,720.0

21.1.4 Sustaining Capital

An annual total of $250,000 has been included for sustaining capital

21.1.5 Initial Capital Cost Summary Table

Table 21.4 shows the initial capital cost of the project summarized in one table.

Table 21.4 Initial Capital Cost Summary

Item	Initial Capital $000's
Mine Equipment	$20,126.4
Mill Direct	$61,970.5
Mine and Mill Indirect	$12,395.0
Mill Contingency	$13,452.5
Infrastructure	$5,720.0
Totals	**$113,664.5**

Note mine and infrastructure contingency included in item totals

21.2 Operating Cost Estimate

The operating cost estimate is based on third quarter 2016 U.S. dollars.

21.2.1 Mining Cost

The mining cost is estimated to be $1.60 per ton of material moved. This cost estimate is based on detailed estimates MDA has completed recently for similar sized projects.

21.2.2 Processing Cost

The processing cost is based on a detailed build-up of mill labor requirements shown in Table 21.5. The processing cost estimate is shown in Table 21.6. The 2010 KCA estimate was revised to reflect current fuel and power costs.

Table 21.5 Copper King Estimated Mill Labor Cost $000's

			Annual Base Pay				Total Annual
	Job Title	**Number**	**Salary**	**Hourly**	**Burdens**	**Total**	**Cost, US$**
PROCESS							
Supervision							
	Concentrator Superintendent	1	$110.0		$44.0	$154.0	$154.0
	Metallurgist	1	$80.0		$32.0	$112.0	$112.0
	General Foreman	1	$75.0		$30.0	$105.0	$105.0
	Shift Foreman	4	$70.0		$28.0	$98.0	$392.0
	Process Maintenance Planner	1	$60.0		$24.0	$84.0	$84.0
	Process Maintenance Foreman	3	$70.0		$28.0	$98.0	$294.0
	Secretary/Clerk	1		$35.0	$14.0	$49.0	$49.0
Crushing							
	Crusher Operator	3		$50.0	$20.0	$70.0	$210.0
	Crusher Helper	3		$35.0	$14.0	$49.0	$147.0
	FEL Operator	3		$50.0	$20.0	$70.0	$210.0
Grinding							
	Grinding Operator	4		$50.0	$20.0	$70.0	$280.0
	Shift Laborer	4		$32.0	$12.8	$44.8	$179.2
Flotation Plant							
	Flotation Operator	4		$50.0	$20.0	$70.0	$280.0
	Reagent Operator	2		$50.0	$20.0	$70.0	$140.0
	Shift Laborer	4		$32.0	$12.8	$44.8	$179.2
Concentrate Handling/Tailings							
	Filter/Thickener Operator	4		$50.0	$20.0	$70.0	$280.0
	Filter/Thickener Helper	4		$35.0	$14.0	$49.0	$196.0
	FEL Operator	2		$50.0	$20.0	$70.0	$140.0
Process Maintenance							
	Mechanic	6		$50.0	$20.0	$70.0	$420.0
	Mechanic Helper	6		$43.0	$17.2	$60.2	$361.2
	Electrician	3		$50.0	$20.0	$70.0	$210.0
	Instrumentation Technician	3		$50.0	$20.0	$70.0	$210.0
	SUBTOTAL PROCESS	**67**	**$465.0**	**$712.0**	**$470.8**	**$1,647.8**	**$4,632.6**
LABORATORY							
	Chief Chemist	1	$55.0		$0.0	$55.0	$55.0
	Assayer	1		$50.0	$20.0	$70.0	$70.0
	Lab Technician	2		$50.0	$20.0	$70.0	$140.0
	Shift Samplers/Buckers	6		$32.0	$12.8	$44.8	$268.8
	SUBTOTAL LABORATORY	**10**	**$55.0**	**$132.0**	**$52.8**	**$239.8**	**$533.8**
	TOTAL	**77**	**$520.0**	**$844.0**	**$523.6**	**$1,887.6**	**$5,166.4**
	TOTAL, $ per Ton						**$1.476**

Table 21.6 Copper King Estimated Mill Operating Cost Detail ($000's)

Reagent Consumptions:						
	Reagent	**Consumption**	**Units**	**$/kg**		**$/ton**
	Lime	0.79	kg/tonne	$0.65		$0.47
	Aeroflot 208	17.5	g/tonne	$3.50		$0.06
	FEX	42.5	g/tonne	$3.25		$0.13
	CMC	32	g/tonne	$3.50		$0.10
	Frother	25	g/tonne	$2.70		$0.06
	Flocculent	50	gpt/thickener	$8.00		$0.32
Power				$/kW h		
		21.12	kW h/t	0.11		$2.32
Diesel (Dryer)		$/gal	lbs H_2O	Btu's	gal/day	
	130,000 Btu/gal	$3.50	15,200	55,449,600	427	$0.15
Wear				$/kg		
	Crusher Liners					$0.60
	Mill Liners	1.5 sets/yr	179200/set			$0.10
	Balls		1.09 kg/t	1.35		$1.47
	Screens					$0.10
Maintenance						
Overhaul/Maint (Crushers)						$0.25
Other Maintenance Supplies and consumables						$0.50
Surface Support Mobile Equipment						$0.02
Lab						
	Fire Assays	Per day	$/Assay	$/day		
	Soln Assays	200	$6.00	$1,200		$0.11
	Misc Supplies	200	$1.50	$300		$0.03
FEL's		hrs/day	$/hr	$/day		
	Crushing	8	$75	$600		$0.05
	Concentrate	2	$40	$80		$0.01
Labor						$1.48
Totals	**per short ton**					**$8.33**

21.2.3 General and Administrative Costs

The general and administrative costs were estimated to total about $3 million or $0.86/ton of material processed.

22.0 ECONOMIC ANALYSIS

Note that a preliminary economic assessment is preliminary in nature and it includes Inferred mineral resources that are considered too speculative geologically to have the economic considerations applied that would enable them to be classified as mineral reserves, and there is no certainty that the preliminary assessment will be realized.

The pre-tax economic analysis of the project shows a 33.1% internal rate of return and a net present value (5%) of $178.5 million. This evaluation was completed using a base case gold price of $1,275/ounce gold and a base case copper price of $2.80 per pound. It is unlikely that higher metal prices would increase the size of the pit, however, the IRR and NPV would improve with higher metal prices. The base case evaluation shows a payback of the initial $113.66 million investment in just under 2.5 years.

The state royalty on minerals produced from state lands is based on a sliding scale with production worth less than $50 per ton (FOB mine) assessed a royalty of 5%. The royalty calculation allows processing and transportation deductions. Table 22.1 shows the pre-tax evaluation of the Copper King project including the 5% Wyoming state royalty. Figure 22.1 and Figure 22.2 show the sensitivity of the project to changes in revenue (recovery or price), operating cost, and capital cost.

Table 22.1 Pre Tax Base Case Cash Flow ($1,275/oz Au; $2.80/lb Cu)

Item	Year -1	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Totals
PRODUCTION																			
000's Tons		3,164.4	3,317.9	3,383.4	3,660.0	3,650.0	3,650.0	3,650.0	3,660.0	3,650.0	3,650.0	3,650.0	3,660.0	3,650.0	3,650.0	3,650.0	3,660.0	3,379.7	60,735.4
oz Au/t		0.033	0.028	0.026	0.016	0.022	0.013	0.010	0.012	0.013	0.015	0.015	0.011	0.010	0.012	0.012	0.012	0.012	0.015
000's Oz Au - Oxide		70.7	3.8	6.2	6.3	0.8	7.4	0.2			0.0	0.0	7.0	3.8				0.2	97.8
000's Oz Au - Mix		33.3	65.9	24.1	10.4	0.0	3.5	1.5	0.1	0.0	0.0	0.1	2.2	1.2				0.1	143.0
000's Oz Au - Sulfide		1.8	23.7	56.6	41.6	78.9	36.0	36.0	43.5	48.0	54.3	53.5	31.0	33.3	44.7	44.1	45.0	40.2	723.0
000's Oz Au - Totals		105.8	93.4	86.9	58.3	79.7	46.9	37.7	43.6	48.0	54.3	53.6	40.2	38.3	44.7	44.1	45.0	40.5	963.8
% Cu		0.27	0.25	0.23	0.21	0.22	0.19	0.15	0.17	0.18	0.19	0.19	0.16	0.16	0.17	0.18	0.18	0.18	0.191
000's Lbs Cu - Oxide		11,198.1	788.4	1,503.8	1,827.9	199.9	1,857.2	44.5	0.0	0.0	1.4	1.2	1,899.0	1,034.7	0.0	0.0	0.0	44.9	18,074.2
000's Lbs Cu - Mix		5,526.4	10,790.7	4,088.1	3,109.7	1.8	1,004.3	475.5	32.3	12.4	10.0	25.7	646.3	348.3	0.0	0.0	0.0	15.1	26,503.5
000's Lbs Cu - Sulfide		445.1	5,126.9	10,132.7	10,548.1	15,570.7	10,941.5	10,711.8	12,711.5	13,384.3	13,932.6	13,724.3	9,159.3	10,433.6	12,317.9	12,863.9	13,087.6	12,009.3	194,969.7
000's Lbs Cu - Totals		17,169.6	16,706.0	15,724.6	15,485.7	15,772.4	13,803.0	11,231.8	12,743.8	13,396.7	13,944.0	13,751.2	11,704.6	11,816.6	12,317.9	12,863.9	13,087.6	12,069.3	239,547.5
000s Tons to Stockpile		968.3	886.0	1,399.8	1,165.4	198.8	40.6	0.0	2,725.6	709.8	380.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3,347.0
000's Tons from Stockpile			0.0	0.0	0.0	0.0	1,488.4	46.7	0.0	0.0	0.0	2,801.4	3,005.3	1,085.2	0.0	0.0	0.0	47.1	3,347.0
000's Tons Waste		6,500.1	4,921.1	4,341.8	2,546.9	3,932.6	6,922.8	5,521.7	2,536.4	4,765.2	4,199.9	8,276.4	8,495.3	6,560.2	1,892.6	535.8	264.5	224.9	74,025.3
000's Tons Total *		10,632.8	9,125.0	9,125.0	7,372.3	7,781.4	10,613.4	9,171.7	8,922.0	9,125.0	8,229.9	11,926.4	12,155.3	10,210.2	5,542.6	4,185.8	3,924.5	3,604.6	134,760.7
Strip Ratio		2.36	1.75	1.70	1.01	1.13	1.91	1.51	1.44	1.50	1.25	2.27	2.32	1.80	0.52	0.15	0.07	0.07	1.22
SALES ($000's)																			
000's Oz Au Recovered (Mill)		63.5	65.9	62.7	41.9	59.6	33.4	28.2	32.7	36.0	40.8	40.2	28.6	27.9	33.5	33.1	33.8	30.3	692.2
000's Lbs Cu Recovered (Mill)		5,919.3	13,069.2	12,033.7	11,636.4	13,256.5	10,289.5	9,489.9	10,830.6	11,386.6	11,850.8	11,686.3	8,492.3	9,250.7	10,470.2	10,934.3	11,124.4	10,224.5	181,945.1
Tons Conc		12,962.4	25,244.3	23,353.7	22,635.5	25,521.5	20,049.4	18,256.0	20,828.0	21,897.3	22,790.3	22,473.9	16,599.2	17,935.7	20,135.0	21,027.5	21,393.1	19,668.9	352,771.5
Gold Payment (95%)	1275	$76,950.7	$79,869.8	$75,921.2	$50,787.7	$72,226.8	$40,504.2	$34,133.0	$39,607.9	$43,653.5	$49,394.8	$48,655.9	$34,653.9	$33,781.8	$40,589.0	$40,080.3	$40,879.7	$36,700.9	$838,390.9
Copper Payment (96%)	2.8	$15,911.0	$35,130.0	$32,346.5	$31,278.7	$35,633.5	$27,658.1	$25,508.8	$29,112.5	$30,607.1	$31,855.0	$31,412.9	$22,827.3	$24,865.9	$28,143.8	$29,391.3	$29,902.5	$27,483.5	$489,068.4
Smelting and Transportation		$1,491.2	$2,904.2	$2,686.7	$2,604.0	$2,936.1	$2,306.5	$2,100.2	$2,396.1	$2,519.1	$2,621.8	$2,585.4	$1,909.6	$2,063.3	$2,316.4	$2,419.0	$2,461.1	$2,262.7	$40,583.4
Total Revenue		**$91,370.5**	**$112,095.7**	**$105,581.0**	**$79,462.4**	**$104,924.3**	**$65,855.8**	**$57,541.6**	**$66,324.3**	**$71,741.5**	**$78,628.0**	**$77,483.3**	**$55,571.6**	**$56,584.3**	**$66,416.5**	**$67,052.6**	**$68,321.1**	**$61,921.6**	**$1,286,875.9**
OPERATING COSTS $000'S																			
Mining		$17,012.5	$14,600.0	$14,600.0	$11,795.7	$12,450.2	$16,981.4	$14,674.7	$14,275.2	$14,600.0	$13,167.8	$19,082.2	$19,448.5	$16,336.3	$8,868.2	$6,697.3	$6,279.2	$5,767.4	$226,636.6
Stockpile Mining							$1,488.4	$46.7	$0.0	$0.0	$0.0	$2,801.4	$3,005.3	$1,085.2	$0.0	$0.0	$0.0	$47.1	$8,474.1
Reclamation																		$5,000.0	$5,000.0
Processing		$26,359.5	$27,638.1	$28,183.7	$30,487.8	$30,404.5	$30,404.5	$30,404.5	$30,487.8	$30,404.5	$30,404.5	$30,404.5	$30,487.8	$30,404.5	$30,404.5	$30,404.5	$30,487.8	$28,152.9	$505,925.9
G & A		$2,721.4	$2,853.4	$2,909.7	$3,147.6	$3,139.0	$3,139.0	$3,139.0	$3,147.6	$3,139.0	$3,139.0	$3,139.0	$3,147.6	$3,139.0	$3,139.0	$3,139.0	$3,147.6	$2,906.5	$52,232.4
Wyoming Royalty (5%)*		$3,114.5	$4,080.2	$3,724.4	$2,291.3	$3,569.0	$1,615.6	$1,199.9	$1,634.4	$1,909.9	$2,254.2	$2,197.0	$1,096.8	$1,152.0	$1,643.6	$1,675.5	$1,734.3	$1,293.1	$36,185.9
Totals		**$49,207.8**	**$49,171.7**	**$49,417.8**	**$47,722.4**	**$49,562.8**	**$53,629.0**	**$49,464.8**	**$49,545.0**	**$50,053.4**	**$48,965.6**	**$57,624.1**	**$57,186.0**	**$52,117.1**	**$44,055.3**	**$41,916.2**	**$41,648.9**	**$43,167.0**	**$834,454.9**
$/Ton		**$15.55**	**$14.82**	**$14.61**	**$13.04**	**$13.58**	**$14.69**	**$13.55**	**$13.54**	**$13.71**	**$13.42**	**$15.79**	**$15.62**	**$14.28**	**$12.07**	**$11.48**	**$11.38**	**$12.77**	**$13.74**
$/oz Au (with Cu Credit)		**$576.4**	**$270.5**	**$331.8**	**$478.2**	**$297.7**	**$890.1**	**$973.3**	**$734.9**	**$641.5**	**$509.3**	**$754.6**	**$1,334.4**	**$1,106.4**	**$572.6**	**$475.4**	**$443.1**	**$623.5**	**$587.0**
Net Profit before Tax		**$42,162.7**	**$62,924.0**	**$56,163.1**	**$31,739.9**	**$55,361.5**	**$12,226.8**	**$8,076.8**	**$16,779.3**	**$21,688.1**	**$29,662.4**	**$19,859.2**	**($1,614.4)**	**$4,467.2**	**$22,361.2**	**$25,136.3**	**$26,672.2**	**$18,754.6**	**$452,421.0**
CASH FLOW $000'S																			
Capital Cost	$111,079.9	$4,786.0	$250.0	$250.0	$250.0	$250.0	$250.0	$17,319.9	$4,786.0	$250.0	$250.0	$250.0	$250.0	$250.0	$17,319.9	$250.0	$250.0	$250.0	$166,784.7
Working Capital		$11,523.3					($11,523.3)												
Equipment Salvage																		$2,929.6	
Cash Flow	(111,079.9)	$25,853.3	$62,674.0	$55,913.1	$31,489.9	$55,111.5	$23,500.2	(9,243.1)	$11,993.3	$21,438.1	$29,412.4	$19,609.2	(1,864.4)	$4,217.2	$5,041.3	$24,886.3	$26,422.2	$21,434.2	$296,808.9
Cumulative Cash Flow	(111,079.9)	(85,226.6)	(22,552.6)	$33,360.5	$64,850.4	$119,961.9	$143,462.1	$134,219.1	$146,212.4	$167,650.4	$197,062.8	$216,672.0	$214,807.6	$219,024.9	$224,066.2	$248,952.5	$275,374.7	$296,808.9	
Net Present Value (5%)																			$178,451.9
IRR																			33.1%

* Note: The royalty is shown as a 5% royalty with credits for processing, g & a, transportation, and smelting.; Totals do not include material from stockpile

Figure 22.1 Net Present Value (5%) Sensitivity to Revenue (Recovery, Price), Operating Cost, Capital Cost

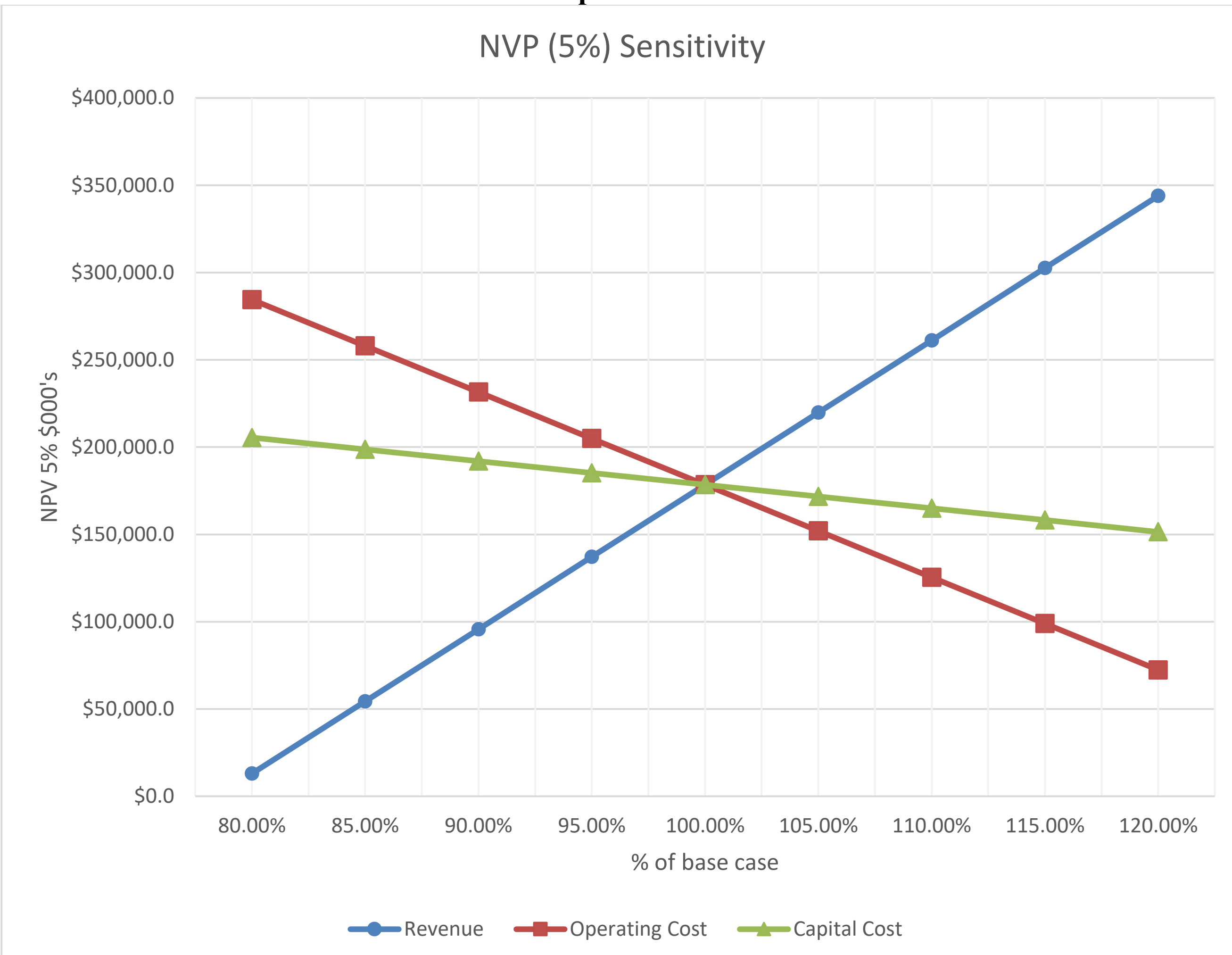


Figure 22.2 Internal Rate of Return Sensitivity to Revenue (Recovery, Price), Operating Cost, Capital Cost

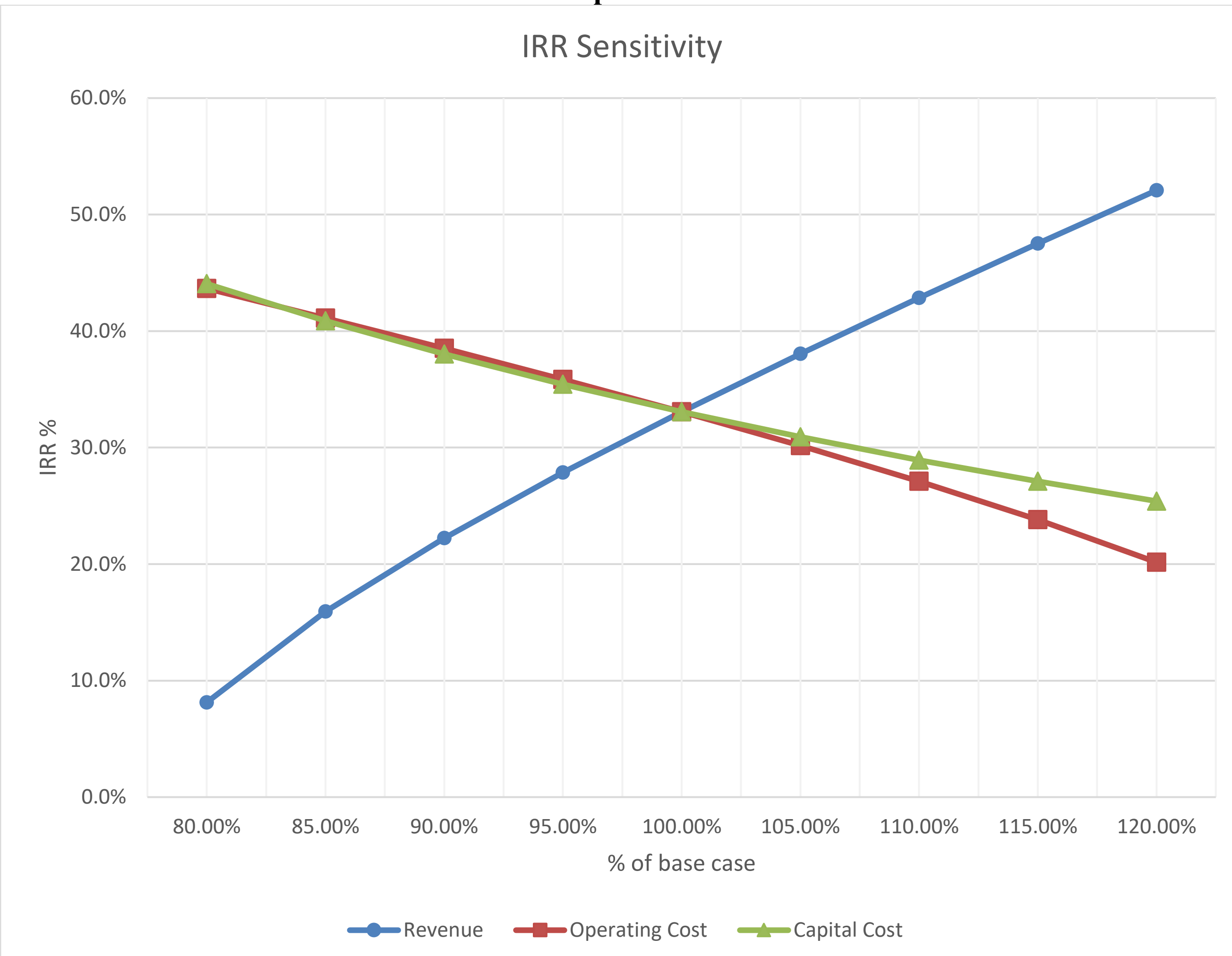


Table 22.2 shows the after-tax evaluation of the project.

Table 22.2 After Tax Evaluation

Item	Year -1	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Totals
After Tax Evaluation																			
Net Profit before Tax		$42,162.7	$62,924.0	$56,163.1	$31,739.9	$55,361.5	$12,226.8	$8,076.8	$16,779.3	$21,688.1	$29,662.4	$19,859.2	(1,614.4)	$4,467.2	$22,361.2	$25,136.3	$26,672.2	$18,754.6	$452,421.0
Depreciation		$7,269.0	$14,029.2	$12,281.1	$10,202.4	$8,511.1	$7,706.2	$1,147.3	$3,307.2	$1,221.1	$10,703.2	$7,799.7	$0.0	$0.0	$7,382.9	$7,382.9	$7,382.9	$3,019.7	$109,346.1
Net Income before Depletion		$34,893.7	$48,894.7	$43,882.0	$21,537.5	$46,850.4	$4,520.6	$6,929.5	$13,472.0	$20,467.0	$18,959.2	$12,059.5	(1,614.4)	$4,467.2	$14,978.2	$17,753.4	$19,289.2	$15,734.9	$343,074.8
Depletion (15%)		$13,705.6	$16,814.4	$15,837.1	$11,919.4	$15,738.6	$9,878.4	$8,631.2	$9,948.7	$10,761.2	$11,794.2	$11,622.5	$8,335.7	$8,487.6	$9,962.5	$10,057.9	$10,248.2	$9,288.2	$193,031.4
Depletion (50% max)		$24,425.6	$34,226.3	$30,717.4	$15,076.3	$32,795.2	$3,164.4	$4,850.7	$9,430.4	$14,326.9	$13,271.5	$8,441.7	$0.0	$3,127.1	$10,484.8	$12,427.4	$13,502.5	$11,014.4	$241,282.5
Depletion Taken		$13,705.6	$16,814.4	$15,837.1	$11,919.4	$15,738.6	$3,164.4	$4,850.7	$9,430.4	$10,761.2	$11,794.2	$8,441.7	$0.0	$3,127.1	$9,962.5	$10,057.9	$10,248.2	$9,288.2	$165,141.5
Taxible Income		$21,188.1	$32,080.4	$28,044.8	$9,618.2	$31,111.7	$1,356.2	$2,078.9	$4,041.6	$9,705.8	$7,165.0	$3,617.9	$0.0	$1,340.2	$5,015.7	$7,695.5	$9,041.1	$6,446.6	$179,547.7
Income Tax (34%)		$7,204.0	$10,907.3	$9,535.2	$3,270.2	$10,578.0	$461.1	$706.8	$1,374.1	$3,300.0	$2,436.1	$1,230.1	$0.0	$455.7	$1,705.4	$2,616.5	$3,074.0	$2,191.9	$61,046.2
Income After Tax		$13,984.2	$21,173.1	$18,509.6	$6,348.0	$20,533.7	$895.1	$1,372.0	$2,667.5	$6,405.8	$4,728.9	$2,387.8	$0.0	$884.5	$3,310.4	$5,079.0	$5,967.1	$4,254.8	$118,501.5
Depletion		$13,705.6	$16,814.4	$15,837.1	$11,919.4	$15,738.6	$3,164.4	$4,850.7	$9,430.4	$10,761.2	$11,794.2	$8,441.7	$0.0	$3,127.1	$9,962.5	$10,057.9	$10,248.2	$9,288.2	$165,141.5
Depreciation		$7,269.0	$14,029.2	$12,281.1	$10,202.4	$8,511.1	$7,706.2	$1,147.3	$3,307.2	$1,221.1	$10,703.2	$7,799.7	$0.0	$0.0	$7,382.9	$7,382.9	$7,382.9	$3,019.7	$109,346.1
After Tax Cashflow	(113,664.5)	$34,958.7	$52,016.6	$46,627.9	$28,469.8	$44,783.5	$11,765.7	$7,370.0	$15,405.1	$18,388.1	$27,226.3	$18,629.1	(1,614.4)	$4,011.6	$20,655.8	$22,519.9	$23,598.2	$16,562.8	$277,710.3
Cumulative After Tax Cashflow	(113,664.5)	(78,705.8)	(26,689.1)	$19,938.7	$48,408.5	$93,192.0	$104,957.8	$112,327.8	$127,732.9	$146,121.0	$173,347.3	$191,976.4	$190,362.0	$194,373.6	$215,029.4	$237,549.3	$261,147.5	$277,710.3	
NPV 5%																		$161,937.9	
NPV 7.5%																		$124,737.8	
IRR																		29.7%	

23.0 ADJACENT PROPERTIES

Although there are formerly active mines and prospects in the Silver Crown mining district, modern exploration has been focused on the Copper King mine area. There are no known mineral deposits or advanced mineral exploration projects on property adjacent to Copper King.

24.0 OTHER RELEVANT DATA AND INFORMATION

Hausel (1997) had speculated that the known resource at the Copper King deposit might be increased based on the presence of geochemical and geophysical anomalies. He cited a large (305m by 610m with a 450-gamma magnitude) magnetic anomaly in a gravel-covered area about 1,400m southeast of the Copper King deposit that resembles the magnetic signature over Copper King. The covered anomaly yielded anomalous values in mercury, zinc, and arsenic in overlying soil samples. Hausel (1997) also reported that there is geological and geophysical evidence for sulfides existing down plunge to the southwest and to the east of the Copper King deposit. Finally, an IP survey showed a moderate to weak metal-factor anomaly that trends east-northeast of the principal area of mineralization (Klein, 1974).

25.0 INTERPRETATION AND CONCLUSIONS

Copper King is a gold-copper deposit hosted within Precambrian foliated intrusive rocks and apparently controlled by a N60ºW-trending shear zone. Most of the mineralization is in silicified, re-healed, mylonitic granodiorite, while lesser amounts of primary copper minerals are present in younger felsic and mafic intrusive dikes. There is a general spatial relationship between mineralization and the dikes, though both might have been localized within the shear zone and not genetically related. Mineralization is present as disseminated sulfides and within thin quartz vein stockworks, with malachite, chrysocolla and native copper, present at the surface and chalcopyrite, pyrite, minor bornite, pyrrhotite, and native copper at depth. Chalcocite is dominant within a mixed oxidation zone that occurs at the oxide/sulfide interface. Within the near-surface high-grade core of the deposit, the mixed zone forms a keel that can be up to 100m deep beneath the approximate 30m oxide zone. Gold occurs as free gold in grains 10 to 250 microns in size. In the better-mineralized areas, quartz occurs in numerous veinlets, and there is a direct quantitative relationship between the quartz veinlets, chalcopyrite, and gold content.

The Copper King deposit is thought by some to be a small porphyry gold-copper deposit, while others categorize the deposit as a structurally controlled base and precious metal deposit in a Precambrian shear zone. The presence of stockwork and disseminated mineralization, the uniformity of metal content in the mineralized intercepts, and the association of propylitic and potassic alteration zones do suggest a similarity to the porphyry copper model. However, the apparent lack of an associated large porphyry intrusion, the rather small size of the mineralized and altered zones, the Proterozoic age, and the apparent structural control exerted by the associated shear zone suggest that the appropriate model may be one of shear-zone related mineralization. More recent mineralogical studies suggest a combination of the two models, with Copper King representing leakage, or possibly remobilization, from a larger higher-grade quartz monzonite porphyry system at depth up into the northwest-trending shear zone.

The deposit consists of a near-surface, central core of high-grade (>1.71g Au/t) mineralization, 175m long, 50m wide, and 150m thick, associated with moderate to pervasive silicification and near-vertical, thin sulfide-bearing quartz veins and stockwork. The high-grade core is surrounded by a large envelope of low-grade disseminated mineralization, 760m long along its N60ºW strike, up to 300m wide at the widest part, and over 330m in thickness. The low-grade mineralization is open along strike, both to the northwest and southeast, and also at depth, where historical core holes have encountered mineralization to a depth of at least 305m.

Successive drilling campaigns by various operators, including Saratoga's 2007-2008 drill program, have resulted in the deposit being drilled out on approximate 15 to 20m centers within the near-surface high-grade core and to over 60m centers at depth and along strike within the lower-grade shell. The Copper King deposit is defined by 120 drill holes totaling 18,105m, with over 60% of the drilling being core.

The SGS metallurgical test results indicate that gold and copper can be recovered from the sulfide and mixed oxide/sulfide portions of the Copper King deposit using standard flotation processes and that a marketable copper concentrate, containing significant gold, can be produced. Recovery of gold and copper to a marketable concentrate for the Copper King deposit may depend heavily upon ore grade and upon grind. Additional process development and testing work is required, including mineralogical examination and further testing of the oxide ore types, before feasibility study quality process design criteria can be established.

It is proposed that the Copper King gold-copper deposit be mined by open pit methods with copper and gold recovery by flotation. This study assumed material would be processed at a rate of 10,000 tons per day. The ore-grade material would be crushed in or near the mine and transported to the plant located close to the mine. The pre-tax economic analysis of the project shows a 33.1% internal rate of return, and a net present value (5%) of $178.5 million. Note that a preliminary economic assessment is preliminary in nature and it includes Inferred mineral resources that are considered too speculative geologically to have the economic considerations applied that would enable them to be classified as mineral reserves, and there is no certainty that the preliminary assessment will be realized.

The Copper King project is an advanced-stage exploration project with an estimated Measured and Indicated resource of 966,000 ounces gold and 236 million pounds copper plus an estimated Inferred resource of 184,000 ounces gold and 62 million pounds copper, with moderate potential for encountering additional mineralization, making it a project of merit. MDA believes that the project should be advanced to the pre-feasibility stage by completing field work to further define hydrology, geotechnical characteristics, metallurgy, and resources. In addition, as the deposit is close to a state park, potential issues need to be discussed with regulators. Recommendations for further work are described in Section 26.0.

26.0 RECOMMENDATIONS

The Copper King project is a project of merit with high-grade mineralization exposed at the surface surrounded by a broad, large low-grade zone and potential for expanding at least the low-grade resources. The project also brings with it relatively well-defined issues, with metallurgy of the mineralization posing the greatest challenge. Preliminary testing indicates that good recoveries are possible for mixed and sulfide mineralization, though additional work is needed. At all times during exploration, a proactive approach with respect to permitting, environmental issues, and public relations in the community is extremely important.

It is recommended that the project proceed to a pre-feasibility stage with two phases of work conducted over three years. Phase I involves addressing permitting and environmental issues, in general, beginning with time-sensitive baseline environmental and water-quality studies, and further data acquisition, including exploration drilling on nearby targets. Phase II would involve continuing permitting work, additional metallurgical studies, drilling for resource expansion, starting the process for environmental permitting, and development and condemnation drilling. Table 21.6 itemizes potential costs, and details of the two phases follow.

Phase I would focus on permitting, environmental issues, and management of public relations. Key issues for permitting will be identified, and work will begin on base-line studies, including water quality. Data acquisition during this phase would include geophysical surveys (IP and magnetics) along the strike of the resource, following-up on previous wide-spaced geophysical investigations which indicated a continuity of mineralization, especially to the southeast. Metallurgical testing will begin at this stage. Exploration drilling would continue on nearby targets to determine if additional resources may be present. During Phase I and continuing into Phase II, eight RC holes would be located on known geochemical and geophysical targets, some of which have already been drill tested. In particular, follow-up drilling is recommended in the “Red Zone” target located west of the Copper King deposit, where Mountain Lake hole MLR-6 intersected 3m of 1.89g Au/t and 0.43% Cu at a drill depth of 38m. Both down-dip and lateral extensions of this shallow mineralized intercept should be targeted. Follow-up work is also recommended for the “LL Valley” anomaly southwest of the Copper King mine, where MLR-4 encountered 4.6m assaying 0.48g Au/t and 1.5% Cu at a drill depth of 239m (a true depth of less than 183m due to the -45º drill angle). The low Au:Cu ratio within this intercept is similar to mineralization within the deeper portions of the Copper King deposit, so there is a potential for higher gold grade mineralization at shallower depths up dip from MLR-4 intercept.

Advancing to Phase II would be contingent on positive results of the work on permitting and environmental issues in Phase I. Phase II would continue permitting and environmental studies and exploration drilling. Data acquisition would include a topographic survey, resulting in a digital topographic model with a maximum 1m contour interval. Additional process development and metallurgical test work are required, including mineralogical examination, before feasibility study quality process design criteria can be established. The most recent work by SGS concluded that gold and copper can be recovered from the sulfide and mixed oxide/sulfide portions of the Copper King deposit using standard flotation processes and that a marketable copper concentrate, containing significant gold, can be produced.

Recovery of gold and copper to a marketable concentrate may depend heavily upon ore grade and grind size. These relationships will need to be better defined in future work. It is also apparent that more work needs to be done on oxide and mixed sulfide-oxide ore types, since both of these contain sufficient gold and copper to warrant extraction.

Assuming that additional testing is completed on one oxide sample, two mixed samples, and two sulfide samples, the cost of the metallurgical testing would be $150,000. Additional drilling will likely be required to provide samples for testing and the cost for a three- to four-hole (PQ-core size) program would be about $150,000. Total metallurgical costs would be about $300,000. This estimate does not include sample compositing, shipment to the testing facility, or project oversight and supervision. This metallurgical work would begin in Phase I and increase in Phase II.

Phase II will conclude with a focus on taking the project to pre-feasibility stage. Metallurgical work will continue and will be incorporated into the mill design as well as being used in future feasibility studies. Drilling in this phase will focus on resource expansion, development drilling, and condemnation drilling. Additional drilling within the core of the deposit is not expected to materially change the current resource, and any further drilling within the deposit should be driven by primarily by metallurgical and geotechnical needs. Expanding the known mineralization to the southeast following geologic and geophysical trends is warranted.

A decision to proceed to a pre-feasibility or feasibility stage would be made following Phase II.

Table 26.1 Cost of Recommended Work

	Phase I	**Phase II**	**Total**
Permitting, base-line environmental studies	$200,000	$1,000,000	$1,200,000
Data and potential land acquisition	100,000	150,000	250,000
Metallurgical testing to be incorporated with mill design	50,000	500,000	550,000
Resource expansion, development and condemnation drilling, Exploration drilling	50,000	500,000	550,000
TOTAL	***$400,000***	***$2,150,000***	***$2,550,000***

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28.0 DATE AND SIGNATURE PAGE

Effective Date of report: December 5, 2017

Completion Date of report: December 5, 2017

"Paul Tietz" December 5, 2017
Paul Tietz, C.P.G. Date Signed

"Neil Prenn" December 5, 2017
Neil B. Prenn, P. Eng. Date Signed

29.0 CERTIFICATES OF QUALIFIED PERSONS

I, Paul Tietz, C.P.G., do hereby certify that:

1. I am currently employed as Senior Geologist for Mine Development Associates, Inc., located at 210 South Rock Blvd., Reno, Nevada 89502.

2. I graduated with a Bachelor of Science degree in Biology/Geology from the University of Rochester in 1977, a Master of Science degree in Geology from the University of North Carolina, Chapel Hill in 1981, and a Master of Science degree in Geological Engineering from the University of Nevada, Reno in 2004.

3. I am a Certified Professional Geologist (#11004) with the American Institute of Professional Geologists.

4. I have worked as a geologist for a total of 36 years since my graduation from undergraduate university. I have extensive experience in both base metal and precious metal deposits having worked on porphyry, epithermal, and skarn-type systems.

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

6. I am one of the authors of this technical report titled "*Updated Technical Report on the Copper King Project, Laramie County, Wyoming* dated December 5, 2017, with an effective date of December 5, 2017 (the "Technical Report"). Except for those issues discussed in Section 3.0, I take responsibility for Sections 2.0 through 12.0, Sections 14.0 and 15.0, and Sections 23.0 and 24.0 of the Technical Report; I take co-responsibility for Sections 1.0, 13.0, 25.0, and 26.0. I visited the Copper King property June 19 and June 20, 2006, April 24 and 25, 2007, and May 29, 2012. I visited the Casper, Wyoming logging and sampling facility August 27 through 30, 2007 and then visited the Dubois, Wyoming core handling facility October 18, 2007.

7. I am the co-author of three previous technical reports on the Copper King property completed for Saratoga Gold in 2006 and in 2007 and for Strathmore in 2012. I also advised Saratoga on the planning and implementation of their 2007 and 2008 drilling program.

8. I am independent of the Issuer applying all of the tests in Section 1.5 of National Instrument 43-101.

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

10. As of the effective date of this Technical Report, to the best of my knowledge, information, and belief, those parts of the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated this 5th day of December, 2017.

"Paul Tietz"

Paul Tietz

CERTIFICATES OF QUALIFIED PERSONS:

I, Neil B. Prenn, P. Eng., do hereby certify that:

1. I am currently employed as Principal Engineer for Mine Development Associates Inc., located at 210 South Rock Blvd., Reno, Nevada 89502.

2. I graduated with an Engineer of Mines degree from the Colorado School of Mines in 1967.

3. I am a Registered Professional Mining Engineer in the state of Nevada (#7844) and a member of the Society of Mining Engineers and the Mining and Metallurgical Society of America.

4. I have worked as an engineer for a total of 50 years.

5. I have read the definition of "Qualified Person" set out in National Instrument 43-101 ("NI 43-101") and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "Qualified Person" for the purposes of NI 43-101. My relevant work experience includes 16 years with Cyprus Mines Corporation, two years with California Silver, and 24 years with Mine Development Associates, completing numerous resource and reserve evaluations.

6. I am one of the authors of the technical report titled "*Updated Technical Report on the Copper King Project, Laramie County, Wyoming*" and dated December 5, 2017 with an effective date of December 5, 2017 (the "Technical Report"). Except for those issues discussed in Section 3.0, I take responsibility for Sections 16.0 through 22.0 of this report; I take co-responsibility for Sections 1.0, 13.0, 25.0, and 26.0 of the technical report.

7. I have not visited the Copper King property. I have had no prior involvement with the property that is the subject of this Technical Report.

8. As of the effective date of this Technical Report, to the best of my knowledge, information and belief, this technical report contains all the scientific and technical information that is required to be disclosed to make this technical report not misleading.

9. I am independent of the Issuer as defined in Section 1.5 of NI 43-101 and in Section 1.5 of the Companion Policy to NI 43-101.

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

Dated this 5th day of December, 2017.

"Neil B. Prenn"

Neil B. Prenn

APPENDIX A

Hathaway & Kunz, P.C.

STATUS REPORT

RE: State of Wyoming Lease Nos. 0-40828 and 0-40858

HK WYO LAW

HATHAWAY & KUNZ, P.C.

HON. STANLEY K. HATHAWAY (1924-2005)
BRENT R. KUNZ, P.C. • RICK A. THOMPSON, P.C. • MICHAEL ROSENTHAL, P.C. • SCOTT W. MEIER, P.C.
MATTHEW D. KAUFMAN • LUCAS BUCKLEY
HAROLD E. MEIER, OF COUNSEL
ASSOCIATES: C. STEPHEN HERLIHY • MARIANNE K. SHANOR

June 13, 2012

DRAFT
6/13/2012 3:56:28 PM

Mr. Paul Tietz
Mine Development Associates
210 S. Rock Blvd.
Reno, NV 89502

VIA FEDERAL EXPRESS
and ***ELECTRONIC MAIL***

Re: *State of Wyoming Lease Nos. 0-40828 and 0-40858*

Mr. Tietz:

Pursuant to your request to update our "Status Report" dated August 1, 2006 on the above captioned leases, we supply the following information after review of the records of the Office of State Lands and Investments.

We have not made nor undertaken to make any investigation of any records other than those in the Office of State Lands and Investments.

Enclosed herewith are copies of Lease Nos. 0-40828 and 0-40858 dated June 12, 2012. On June 12, 2012, the Assistant Director, Office of State Lands and Investments, certified that these copies are true and comparable copies of the Official Records on file in the Wyoming Office of State Lands and Investments.

Also enclosed herewith are copies of the files at the Wyoming Office of State Lands and Investments for each lease.

As part of the Status Report, you requested that the following questions be addressed:

- *The type of mineral tenure and the identifying name or number of each.*
- *The nature and extent of the issuer's title to, or interest in, the property, including surface rights, the obligations that must be met to retain the property, or other property tenure rights.*
- *How the property boundaries were located.*
- *Within the context of and between the State of Wyoming and the Lessee, to the extent known, the terms of any royalties, back-in rights, payments of other agreements and encumbrances to which the property is subject.*

SENDER'S E-MAIL ADDRESS: BKUNZ@HKWYOLAW.COM
2515 WARREN AVE. • SUITE 500 • P.O. BOX 1208 • CHEYENNE, WY 82003-1208
15 MAIN ST. • ORCHARD BUILDING • SUITE 4 • LANDER, WY 82520 • 307.332.9880
PLEASE DIRECT ALL REPLIES AND SERVICE TO CHEYENNE LOCATION
307.634.7723 • FAX: 307.634.0985 • WWW.HKWYOLAW.COM

Lease No. 0-40858

- *The type of mineral tenure and the identifying name or number of each*

The legal description for this lease is as follows:

320.00 Acres	S2 Section 25, Twp 14N, Rg 70W, 6th p.m.
160.00 Acres	NE Section 35, Twp 14N, Rg 70W, 6th p.m.
480.00 Acres Total	

Please note that the description "NE Section 35" is not a contemporary legal description in that it does not make specific reference to NE Quarter. However, the Office of State Lands construes this to be the NE Quarter, which is confirmed by the acreage of 160 acres. If documentation of this construction is needed, the Office of State Lands will confirm this legal description.

The type of tenure is a lease. The Lease is a metallic and non-metallic rocks and minerals mining lease issued by the State of Wyoming to the Lessee, Norman W. Burmeister. The indenture of Lease was entered into on February 2, 2004. On July 10, 2006, the Wyoming Office of State Lands and Investments approved an Assignment of this lease from Norman W. Burmeister to Wyoming Gold Mining Company, Inc. Enclosed herewith is a copy of the Assignment certified on June 12, 2012 by the Assistant Director, Office of State Lands and Investments as a true and comparable copy of the Official Records on file in the Wyoming Office of State Lands & Investments.

In consideration of the rents and royalties to be paid and the covenants and agreements to be performed by the Lessee, the Lessee has the exclusive right and privilege to prospect, mine, extract and remove from any lode, lead, vein or ledge, or any deposit, either lode or placer, and dispose of all metallic and non-metallic rocks and minerals with the exception of coal, trona/sodium, uranium, oil shale, bentonite, leonardite, oil and gas, sand and gravel.

- *The nature and extent of the issuer's title to, or interest in, the property including surface rights, the obligations that must be met to retain the property, or other property tenure rights.*

The Nature and extent of the issuer's title to or interest in the property are defined in the Lease. This Status Report does not include a complete review of the Lease terms.

Unless terminated at an earlier date as provided in the Lease, the term is for ten (10) years, beginning on the 2nd of February, 2004, and expiring on the 1st day of February, 2014.

Prior to the discovery of commercial quantities of the leased mineral, there is an annual rental of $1.00 per acre or fraction thereof for the first through the fifth years inclusive; $2.00 per acre or fraction thereof for the 6th through 20th years inclusive; $3.00 per acre or fraction thereof per year for the 21st through 30th years inclusive; and $4.00 per acre or fraction thereof for any year beyond the 30th lease year.

If said lands are not on a commercial mining basis and so operated at the end of two years from the date of the lease, such rental may be increased at the option of the Lessor, to such an amount as the Lessor may decide to be fair and equitable.

Pursuant to the authority of WYO. STAT. § 36-6-101(m), the Lessee shall have the exclusive right to renew the lease for successive terms of ten years each, if at the time application for renewal is filed:

(i) Minerals are actually produced from the leased lands and the lessee is complying with all lease terms; or

(ii) The leased lands are committed to a cooperative mining development plan or minerals are actually being produced from the cooperative mining development plan; and the Lessee is complying with the plan and all lease terms; or

(ii) The lessee is proceeding in good faith to develop the lease; or

(iv) The lessee shows to the satisfaction of the director or board that production of minerals has been delayed by the necessity of obtaining licenses, permits, or other approvals from governmental authorities and that the lessee has used reasonable diligence in an effort to obtain the licenses, permits or other required authorizations.

Following are the surface owners for parcels in Sections 25 and 35:

S/2 §25 T14N R70W 6th P.M.

Ferguson Ranch, Inc.
650 Road 210
Cheyenne, WY 82009
Acres: 520.26
Account Number: R0035253

NE/4 §35 T14N R70W 6th P.M.

Gene Darnell, *et ux.*
7110 Lupine Tr.
Cheyenne, WY 82009

James Hibbits, *et ux.*
475 Road 210
Cheyenne, WY 82007

Acres: 35.00
Account Number: R0053919

Acres: 40.40
Account Number: R0053918

Rick L. Boomgaarden, *et ux.*
P.O. Box 1953
Cheyenne, WY 82003-1953
Acres: 40.05
Account Number: R0035424

Bruce D. Smith, *et al*
423 Stampede Cir.
Cheyenne, WY 82009
Acres: 40.51
Account Number: R0035425

John H. Garber
3223 Forest Dr.
Cheyenne, WY 82001
Acres: 35.08
Account Number: R0035420

Maureen Davenport
90 Schwabie Turnpike
Kerhonkson, NY 12446
Acres: 35.20
Account Number: R0035419

David Michael Hodson, *et ux.*
1880 Mesa Trail North
Cheyenne, WY 82009
Acres: 40.33
Account Number: R0035421

Dan Adkison, *et ux.*
8011 Jack Rabbit Rd.
Cheyenne, WY 82009
Acres: 35.06
Account Number: R0035429

Source (Enclosed): Cheyenne-Laramie County Cooperative GIS Project
Owner record(s) as of January 1, 2012
June 12, 2012

- *How the property boundaries were located.*

The boundaries of the state leases were set by the original surveys or resurveys and were conveyed by the federal government to the State of Wyoming at statehood. When state lands are leased, the original surveys or resurveys, if applicable, are used.

- *Within the context of and between the State of Wyoming and the Lessee, to the extent known, the terms of any royalties, back-in rights, payments of other agreements and encumbrances to which the property is subject.*

Royalties are based on the total arms-length consideration received from the minerals value and products. A royalty based on the value per ton FOB is based on the following schedule:

FOB Mine Value Per Ton	Percentage Royalty
$ 00.00 to $ 50.00	5%
$ 50.01 to $100.00	7%
$100.01 to $150.00	9%

$150.01 and up	10%

On June 12, 2012, the records of the Office of State Lands were reviewed. As of that date, it was ascertained that the annual rentals were paid; and that there were no recordation of assignments of royalties, back-in rights, payments of other agreements and encumbrances. Enclosed herewith is a record of the annual rental payments.

Lease No. 0-40828

- *The type of mineral tenure and the identifying name or number of each.*

The legal description for this lease is as follows:

640.00 Acres   All Section 36, Twp 14N, Rg 70W, 6th p.m.

The type of tenure is a lease. The Lease is a metallic and non-metallic rocks and minerals mining lease issued by the State of Wyoming to the Lessee, Norman W. Burmeister. The indenture of Lease was entered into on February 2, 2003. On July 10, 2006, the Wyoming Office of State Lands and Investments approved an Assignment of this lease from Norman W. Burmeister to Wyoming Gold Mining Company, Inc. Enclosed herewith is a copy of the Assignment certified on June 12, 2012 by the Assistant Director, Office of State Lands and Investments as a true and comparable copy of the Official Records on file in the Wyoming Office of State Lands & Investments.

In consideration of the rents and royalties to be paid and the covenants and agreements to be performed by the Lessee, the Lessee has the exclusive right and privilege to prospect, mine, extract and remove from any lode, lead, vein or ledge, or any deposit, either lode or placer, and dispose of all metallic and non-metallic rocks and minerals with the exception of coal, trona/sodium, uranium, oil shale, bentonite, leonardite, oil and gas, sand and gravel.

- *The nature and extent of the issuer's title to, or interest in, the property including surface rights, the obligations that must be met to retain the property, or other property tenure rights.*

The nature and extent of the issuer's title to or interest in the property are defined in the Lease. This Status Report does not include a complete review of the Lease terms.

Unless terminated at an earlier date as provided in the Lease, the term is for ten (10) years, beginning on the 2nd of February, 2003, and expiring on the 1st day of February, 2013.

Prior to the discovery of commercial quantities of the leased mineral, there is an annual rental of $1.00 per acre or fraction thereof for the first through the fifth years inclusive; \$2.00 per acre or fraction thereof for the 6th through 20th years inclusive; \$3.00 per acre or fraction thereof per year for the 21st through 30th years inclusive; and \$4.00 per acre or fraction thereof for any year beyond the 30th lease year.

If said lands are not on a commercial mining basis and so operated at the end of two years from the date of the Lease, such rental may be increased at the option of the Lessor, to such an amount as the Lessor may decide to be fair and equitable.

Pursuant to the authority of WYO. STAT. §36-6-101(m), the Lessee shall have the exclusive right to renew the lease for successive terms of ten years each, if at the time application for renewal is filed:

(i) Minerals are actually produced from the leased lands and the lessee is complying with all lease terms; or

(ii) The leased lands are committed to a cooperative mining development plan or minerals are actually being produced from the cooperative mining development plan; and the lessee is complying with the plan and all lease terms; or

(ii) The lessee is proceeding in good faith to develop the lease; or

(iv) The lessee shows to the satisfaction of the director or board that production of minerals has been delayed by the necessity of obtaining licenses, permits, or other approvals from governmental authorities and that the lessee has used reasonable diligence in an effort to obtain the licenses, permits or other required authorizations.

The Records of the Office of State Lands and Investments indicate that the surface owner is the State of Wyoming and the grazing lessee is Ferguson Ranch, Inc. Enclosed herewith is a "Lease Review Limited" of such grazing lease.

- *How the property boundaries were located.*

The boundaries of the state leases were set by the original surveys or resurveys and were conveyed by the federal government to the State of Wyoming at statehood. When state lands are leased, the original surveys or resurveys, if applicable, are used.

➢ *Within the context of and between the State of Wyoming and the Lessee, to the extent known, the terms of any royalties, back-in rights, payments of other agreements and encumbrances to which the property is subject.*

Royalties are based on the total arms-length consideration received from the minerals value and products. A royalty based on the value per ton FOB is based on the following schedule:

FOB Mine Value Per Ton	Percentage Royalty
$ 00.00 to $ 50.00	5%
$ 50.01 to $100.00	7%
$100.01 to $150.00	9%
$150.01 and up	10%

On June 12, 2012, the records of the Office of State Lands were reviewed. As of that date, it was ascertained that the annual rentals were paid; and that there were no recordation of assignments of royalties, back-in rights, payments of other agreements and encumbrances. Enclosed herewith is a record of the annual rental payments.

We express no opinion as to any lien or security interest that is not of record in the Office of State Lands and Investments. This Status Report does not constitute a title opinion or a guarantee. This Status Report does not express an opinion on issues related to the terms, covenants, and agreements contained in the Leases.

Sincerely,

HATHAWAY & KUNZ, P.C.

Brent R. Kunz
Marianne K. Shanor

cc: Mr. David Miller

Enclosures:

Lease No. 0-40858

- Certified Lease and Assignment
- Copies of Office of State Lands and Investments File
- Record of Annual Rental Payments
- Section 25 Property Owners
- Section 35 Property Owners

Lease No. 0-40828

- Certified Lease and Assignment
- Copies of Office of State Lands and Investments File
- Record of Annual Rental Payments
- "Lease Review Limited" of Ferguson Ranch Grazing Lease

APPENDIX B

Lease Assignments from Norman Burmeister to Wyoming Gold Corporation

Office of State Lands and Investments

Funding Wyoming Public Education

122 West 25th Street
Cheyenne, WY 82002
Phone: (307) 777-7331
Fax: (307) 777-5400
slfmail@state.wy.us

Dave Freudenthal
Governor

Lynne Boomgaarden
Director

July 10, 2006

Norman W. Burmeister
P.O. Box 785
Dubois, WY 82513

RE: Assignments for All Metallic and Non-Metallic Lease Nos. 0-40828 and 0-40858.

Dear Mr. Burmeister:

Enclosed are two approved assignments conveying Leasehold Interest within the above mentioned lease numbers. The Office of State Lands and Investments has approved the assignment without binding the State of Wyoming for any overriding royalty.

Please be aware that any and all parties holding divided interest (operating/leasehold rights) which allow for mining privileges on a presently producing lease, or lease which subsequently enters production, must have appropriate bonding in place for that divided interest before any operations may be conducted regarding such interest, unless the leasehold owner agrees, as exhibited in writing, to be bound for such operations.

Sincerely,

Dianna L. Wolvin

Dianna L. Wolvin
Lands Management Specialist
Enclosures

ASSIGNMENT

OFFICE OF STATE LANDS AND INVESTMENTS
STATE OF WYOMING - (METALLIC AND NON-METALLIC)

KNOW ALL MEN BY THESE PRESENTS: That (I) we, NORMAN W. BURMEISTER P.O. BOX 785, DUBOIS, WY 82513, assignor, being lessee, lessees, under that certain State of Wyoming Lease bearing Serial number 0-40828, and covering land situate in LARAMIE County, Counties, described as follows:

ALL SECTION 36, TWP 14N, RG 70W, 6th P.M.

and containing 640 acres more or less, for and in consideration of the sum of ONE Dollars ($ 1.00) in hand paid, the receipt of which is hereby acknowledged, do hereby sell, assign, transfer and set over unto WYOMING GOLD MINING COMPANY, INC of ________, assignee, all rights, title and interest of assignor in and to said lease insofar as it covers the following described land:

ALL

and containing ALL acres, more or less, reserving, however, unto assignor

NONE

TO HAVE AND TO HOLD unto the said WYOMING GOLD MINING COMPANY, INC. successors and assigns, subject to the terms and conditions of said lease, the grants and reservations herein contain extending to any renewal lease, substitute lease or new lease issued in lieu thereof with full effect.

IN WITNESS WHEREOF, this instrument executed this 28 day of JUNE, 2006

WITNESS:

Norman W Burmeister
Assignor-Lessee

By ________
President

(SEAL)

Attest ________
Secretary

ACKNOWLEDGEMENT (For use by Individual)

State of Wyoming)
) ss
County of Fremont)

On this 28 day of June, A.D. 2006 before me personally appeared Norman W. Burmeister to me known to be the person described in and who executed the foregoing instrument and acknowledged that he executed the same as his free act and deed.

Witness my hand and seal this 28 day of June, A.D. 2006

RHONDA HOWER NOTARY PUBLIC
COUNTY OF FREMONT STATE OF WYOMING
MY COMMISSION EXPIRES AUGUST 24, 2009

(SEAL)

Rhonda Hower
Notary Public

My Commission expires: 8/24/09

ACKNOWLEDGEMENT (For use by Corporation)

State of ________)
) ss
County of ________)

On this ____ day of ________, A.D. 20__, before me personally appeared ________, to me personally known, who, being by me duly sworn, did say that he is the ________ of ________ and that the seal affixed to said instrument is the corporate seal of said corporation and that said instrument was signed and sealed in behalf of said corporation by authority of its Board of Directors, and ________ acknowledged said instrument to be the free act and deed of said corporation.

Witness my hand and seal this ____ day of ________, A.D. 20__.

(SEAL)

____
Notary Public

My Commission Expires: ________

APPROVED JUL 10 2006

Assignment recorded in the Office of the OFFICE OF STATE LANDS AND INVESTMENTS:

(Fee for recording this form of assignment is $25.00. If other terms are desired incorporated in the assignment a special form should be prepared and signed copies forwarded to the OFFICE OF STATE LANDS AND INVESTMENTS in duplicate, as one copy is retained for the office record.)

ASSIGNMENT

OFFICE OF STATE LANDS AND INVESTMENTS
STATE OF WYOMING - (METALLIC AND NON-METALLIC)

KNOW ALL MEN BY THESE PRESENTS: That (I) we, NORMAN W. BURMEISTER
PO BOX 785, DUBOIS WY, 82513
under that certain State of Wyoming Lease bearing Serial _______, assignor, being lessee, lessees,
number 0-40858, and covering land situate in LARAMIE County, Counties, described as follows:

S2 SECTION 25, TWP 14N, RG 70W, 6th P.M.
NE SECTION 35, TWP 14N, RG 70W, 6th P.M.

and containing 480 acres more or less, for and in consideration of the sum of ONE Dollars ($1.00) in hand paid, the receipt of which is hereby acknowledged, do hereby sell, assign, transfer and set over unto WYOMING GOLD MINING COMPANY, INC.
of PO BOX 785, DUBOIS, WY, 82513, assignee, all rights, title and interest of assignor in and to said lease insofar as it covers the following described land:

ALL

and containing ALL acres, more or less, reserving, however, unto assignor
NONE

TO HAVE AND TO HOLD unto the said WYOMING GOLD MINING Company, Inc successors and assigns, subject to the terms and conditions of said lease, the grants and reservations herein contain extending to any renewal lease, substitute lease or new lease issued in lieu thereof with full effect.

IN WITNESS WHEREOF, this instrument executed this 28 day of JUNE, 2006

WITNESS: Norman W Burmeister
Assignor-Lessee

_______________ By _______________
President

(SEAL) Attest _______________
Secretary

ACKNOWLEDGEMENT (For use by Individual)

State of Wyoming)
) ss
County of Fremont)

On this 28 day of June, A.D. 2006, before me personally appeared Norman W. Burmeister to me known to be the person described in and who executed the foregoing instrument, and acknowledged that he executed the same as his free act and deed.

Witness my hand and seal this 28 day of June, A.D. 2006.

(SEAL) Rhonda Hower
Notary Public

RHONDA HOWER - NOTARY PUBLIC
COUNTY OF FREMONT - STATE OF WYOMING
MY COMMISSION EXPIRES AUGUST 24, 2009

8/24/09

ACKNOWLEDGEMENT (For use by Corporation)

State of _______________)
) ss
County of _______________)

On this _______ day of _______________, A.D. 20___, before me personally appeared _______________, to me personally known, who, being by me duly sworn, did say that he is the _______________ of _______________ and that the seal affixed to said instrument is the corporate seal of said corporation and that said instrument was signed and sealed in behalf of said corporation by authority of its Board of

Directors, and _______________ acknowledged said instrument to be the free act and deed of said corporation.

Witness my hand and seal this _____ day of _______________, A.D. 20___.

(SEAL)
____
Notary Public

My Commission Expires: _______________

Assignment recorded in the Office of the OFFICE OF STATE LANDS AND INVESTMENTS. APPROVED JUL 1 0 2006

(Fee for recording this form of assignment is $25.00. If other terms are desired incorporated in the assignment a special form should be prepared and signed copies forwarded to the OFFICE OF STATE LANDS AND INVESTMENTS in duplicate, as one copy is retained for the office record.)

APPENDIX C

Share Exchange Agreement between Norman Burmeister and Saratoga Gold Corporation

SHARE EXCHANGE AGREEMENT

Effective as of September 1, 2006

Ladies and Gentlemen:

1. *Introductory.* Norman W. Burmeister, an individual (**"Burmeister"**), proposes to transfer one share of common stock (the **"Wyoming Share"**) of Wyoming Gold Mining Company, Inc., a Wyoming corporation (the **"Company"**) to Saratoga Gold Company Ltd., a company incorporated under the laws of the Province of British Columbia (**"Saratoga"**) in exchange for the issuance to Burmeister of one common share of Saratoga (the **"Saratoga Share"**).

Burmeister and Saratoga hereby agree as follows:

2. *Representations and Warranties of Burmeister.* Burmeister represents and warrants to Saratoga that:

(a) Burmeister is the lawful owner of the Wyoming Share and has, and on the Closing Date (as defined herein) will have, good and clear title to such Wyoming Share, free of all restrictions on transfer (except for those imposed by applicable securities laws), liens, encumbrances, security interests, equities and claims whatsoever. Burmeister has full right, power and authority to enter into this Agreement and to assign, transfer and deliver the Wyoming Share to be delivered by Burmeister on the Closing Date hereunder. Upon the delivery of the Wyoming Share the Closing Date hereunder, Saratoga will acquire valid and unencumbered title the Wyoming Share.

(b) This Agreement has been duly executed and delivered by Burmeister and constitutes a valid and legally binding agreement of Burmeister enforceable against Burmeister in accordance with its terms, subject to bankruptcy, insolvency, fraudulent conveyance, reorganization, moratorium and other similar laws affecting creditors' rights generally and to general equitable principles (whether considered in a proceeding in equity or at law).

3. *Representations and Warranties of Saratoga.* Saratoga represents and warrants to Burmeister that:

(a) Saratoga has full right, power and authority to enter into this Agreement and to issue and deliver the Saratoga Share to be delivered by Saratoga on the Closing Date hereunder. Upon the issuance and delivery of the Saratoga Share to Burmeister, Burmeister will acquire valid and unencumbered title to the Saratoga Share free of all restrictions on transfer (except for those imposed by applicable securities laws), liens, encumbrances, security interests, equities and claims whatsoever.

(b) This Agreement has been duly executed and delivered by Saratoga and constitutes a valid and legally binding agreement of Saratoga enforceable against Saratoga in accordance with its terms, subject to bankruptcy, insolvency, fraudulent conveyance, reorganization, moratorium and other similar laws affecting creditors' rights generally and to general equitable principles (whether considered in a proceeding in equity or at law).

(c) The execution, delivery and performance of this Agreement, and the consummation of the transactions contemplated herein, will not conflict with, result in a breach or violation

NWB

of any of the terms and provisions of, constitute a default under, or result in the creation or imposition of any lien, charge or encumbrance upon any property or assets of Saratoga pursuant to (i) any statute, any rule, regulation or order of any governmental agency or body or any court, domestic or foreign, having jurisdiction over Saratoga or any of its properties or (ii) any agreement or instrument to which Saratoga is subject or by which Saratoga may be bound.

(d) Saratoga is acquiring the Wyoming Share for its own account and beneficial interest and not as nominee for any other party, and for investment only and not for sale or with a view towards distribution of the Wyoming Share. Saratoga will not make any disposition of the Saratoga Share except in compliance with the registration requirements of the United States Securities Act of 1933, as amended (the **"1933 Act"**), and any applicable securities registration requirement under the laws of any state in the United States of America. Without in any way limiting the representations set forth above, Saratoga agrees not to make any disposition of all of any portion of the Wyoming Share unless and until: (i) Saratoga shall have notified Burmeister and the Company of the proposed disposition and shall have furnished Burmeister and the Company with a detailed statement of the circumstances surrounding the proposed disposition, and (ii) if requested by Burmeister or the Company, Saratoga shall have furnished Burmeister and the Company with an opinion of counsel, reasonably satisfactory to Burmeister and the Company, that such disposition will not require registration under the 1933 Act or applicable United States state securities registration requirements. A legend to this effect may be placed on the certificate evidencing the Wyoming Share.

5. *Exchange of Securities.*

(a) *Exchange.* On the basis of the representations, warranties and agreements herein contained, and subject to the terms herein set forth, on the Closing Date (as defined below), Burmeister shall transfer to Saratoga the Wyoming Share and Saratoga shall transfer to Burmeister the Saratoga Share (the **"Exchange"**).

(b) *Closing.* The closing of the Exchange (the **"Closing"**) shall be concurrent with the signing of this Agreement or at such later date as the parties mutually agree (which time is designated as the **"Closing Date"**).

(c) *Delivery.* At the Closing, subject to the terms hereof, Burmeister will deliver to Saratoga the Wyoming Share by delivery of a certificate evidencing the Wyoming Share, along with a fully executed stock assignment in the form attached hereto as Exhibit A. At the Closing, Saratoga will deliver to Burmeister a certificate in the name of Burmeister for the Saratoga Share.

6. *Survival.* All representations, warranties and agreements contained in or made pursuant to this Agreement or contained in any certificate delivered pursuant to this Agreement, shall remain operative and in full force and effect, regardless of any investigation made by or on behalf of any party hereto, and shall survive the Exchange.

7. *Notices.* All communications hereunder will be in writing and if sent to Saratoga, will be mailed, delivered or faxed and confirmed to Ron Paton at 625 Howe Street, Suite 700, Vancouver, British Columbia, Canada, V6C 2T6, and if send to Burmeister, will be mailed, delivered or faxed and confirmed to Norman W. Burmeister at P.O. Box 785, Dubois, Wyoming 82513.

NWB

8. *Successors.* This Agreement will inure to the benefit of and be binding upon the parties hereto and their respective heirs and assignees.

9. *Counterparts; Delivery.* This Agreement may be executed in counterparts and delivered electronically or by fax, each of which shall be deemed to be an original, and both of which together will constitute one and the same Agreement.

10. *Applicable Law.* This Agreement shall be governed by, and construed in accordance with, the laws of the State of Wyoming. The parties hereby submit to the non-exclusive jurisdiction of the Federal and state courts in Wyoming in any suit or proceeding arising out of or relating to this Agreement or the transactions contemplated hereby.

The undersigned have executed this Agreement effective as of the date first set forth above.

____
Norman W. Burmeister

SARATOGA GOLD COMPANY LTD.

By: ______________________________
Name: Danny Lowe
Title: Chief Financial Officer

8. *Successors.* This Agreement will inure to the benefit of and be binding upon the parties hereto and their respective heirs and assignees.

9. *Counterparts; Delivery.* This Agreement may be executed in counterparts and delivered electronically or by fax, each of which shall be deemed to be an original, and both of which together will constitute one and the same Agreement.

10. *Applicable Law.* This Agreement shall be governed by, and construed in accordance with, the laws of the State of Wyoming. The parties hereby submit to the non-exclusive jurisdiction of the Federal and state courts in Wyoming in any suit or proceeding arising out of or relating to this Agreement or the transactions contemplated hereby.

The undersigned have executed this Agreement effective as of the date first set forth above.

Norman W. Burmeister

SARATOGA GOLD COMPANY LTD.

By: ____________________
Name: Danny Lowe
Title: Chief Financial Officer

EXHIBIT A
TO
SHARE EXCHANGE AGREEMENT

SHARE ASSIGNMENT

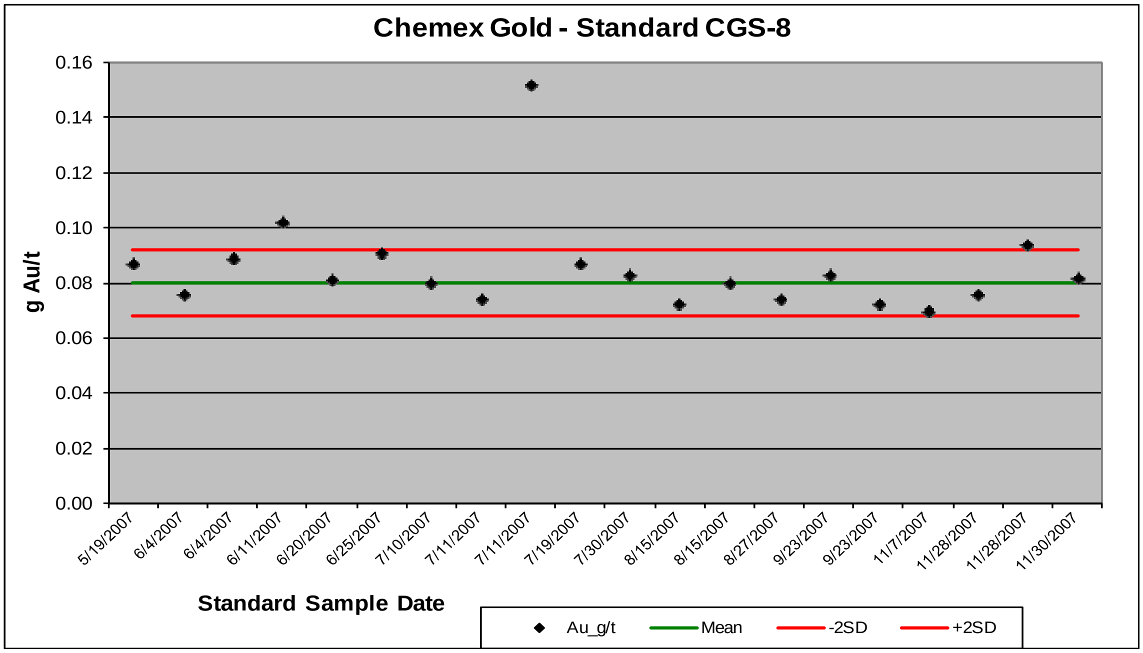
FOR VALUE RECEIVED, the undersigned does hereby sell, assign and transfer unto Saratoga Gold Company Ltd., a company incorporated under the laws of the Province of British Columbia, one share of common stock of Wyoming Gold Mining Company, Inc., a Wyoming corporation (the **"Company"**) standing in the name of the undersigned on the books and records of the Company represented by Certificate No. One (1), and does hereby irrevocably constitute and appoint the president or the secretary of the Company as attorney-in-fact to transfer the said stock on the books of the Company with full power of substitution in the premises.

Dated: September 1, 2006

Name: Norman W. Burmeister

Appendix D

Saratoga QA/QC Standard Analyses


Chemex Gold - Standard CGS-8
g Au/t
0.16
0.14
0.12
0.10
0.08
0.06
0.04
0.02
0.00
5/19/2007
6/4/2007
6/4/2007
6/11/2007
6/20/2007
6/25/2007
7/10/2007
7/11/2007
7/11/2007
7/19/2007
7/30/2007
8/15/2007
8/15/2007
8/27/2007
9/23/2007
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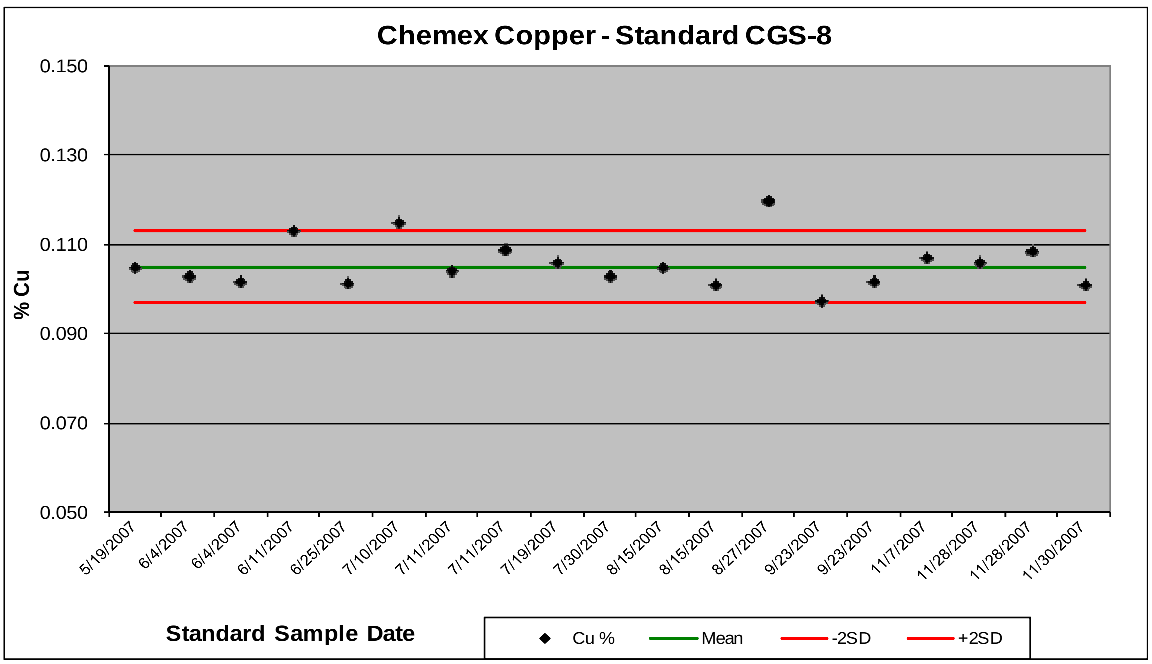
Mean
-2SD
+2SD


Chemex Copper - Standard CGS-8
% Cu
0.150
0.130
0.110
0.090
0.070
0.050
5/19/2007
6/4/2007
6/4/2007
6/11/2007
6/25/2007
7/10/2007
7/11/2007
7/11/2007
7/19/2007
7/30/2007
8/15/2007
8/15/2007
8/27/2007
9/23/2007
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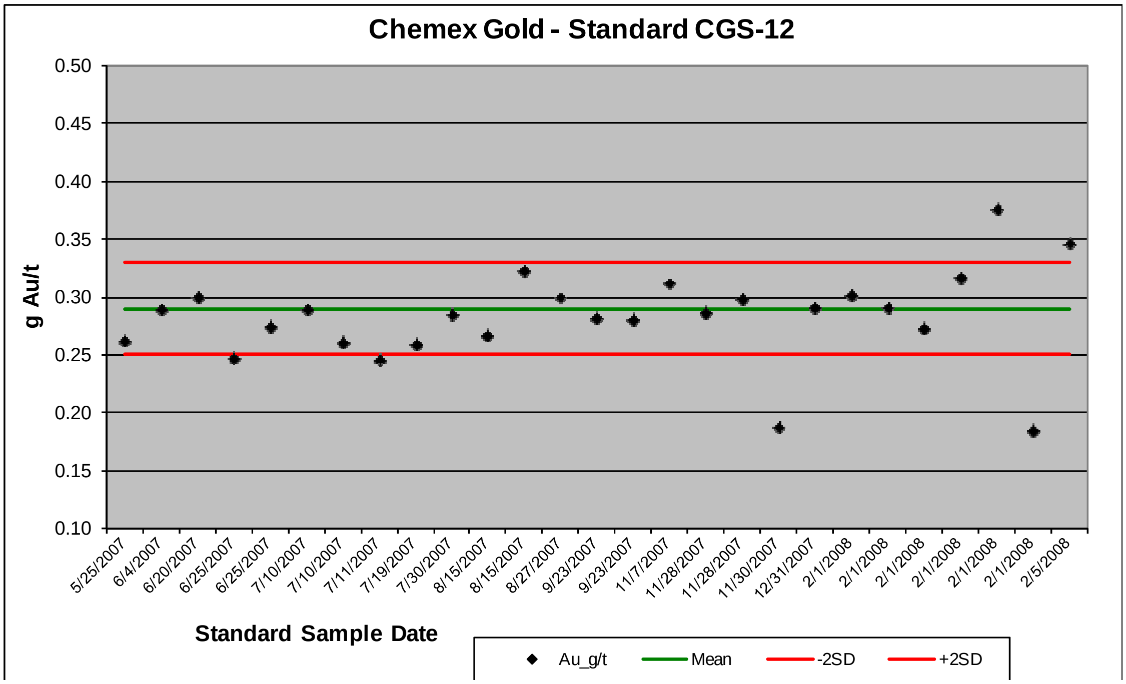
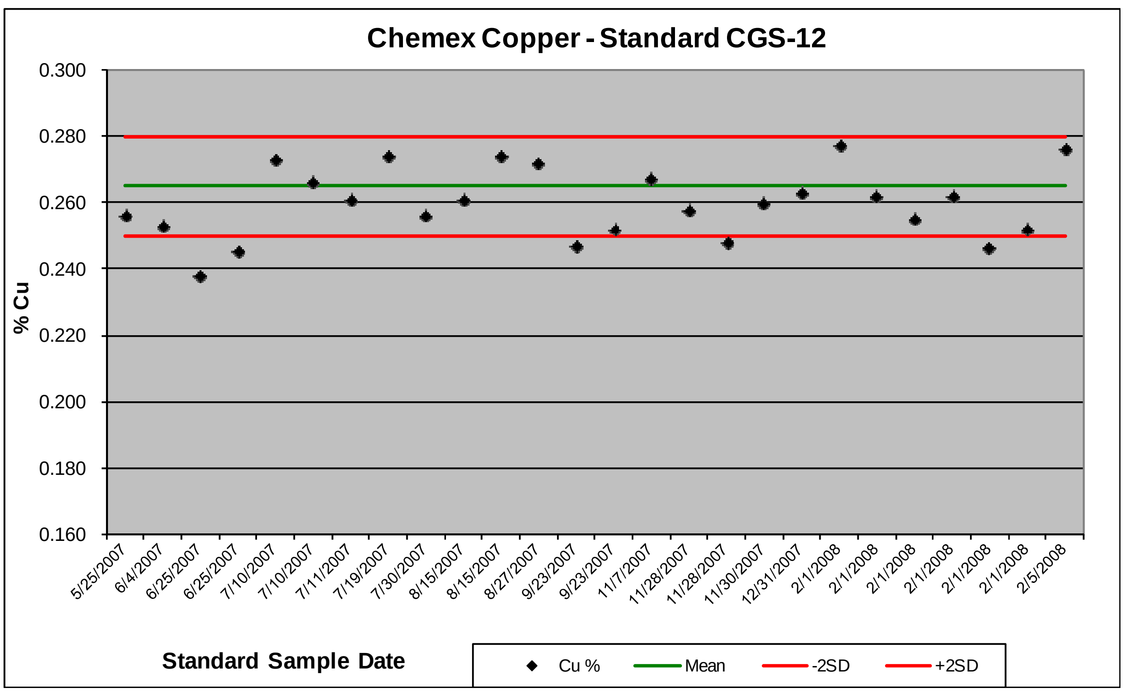
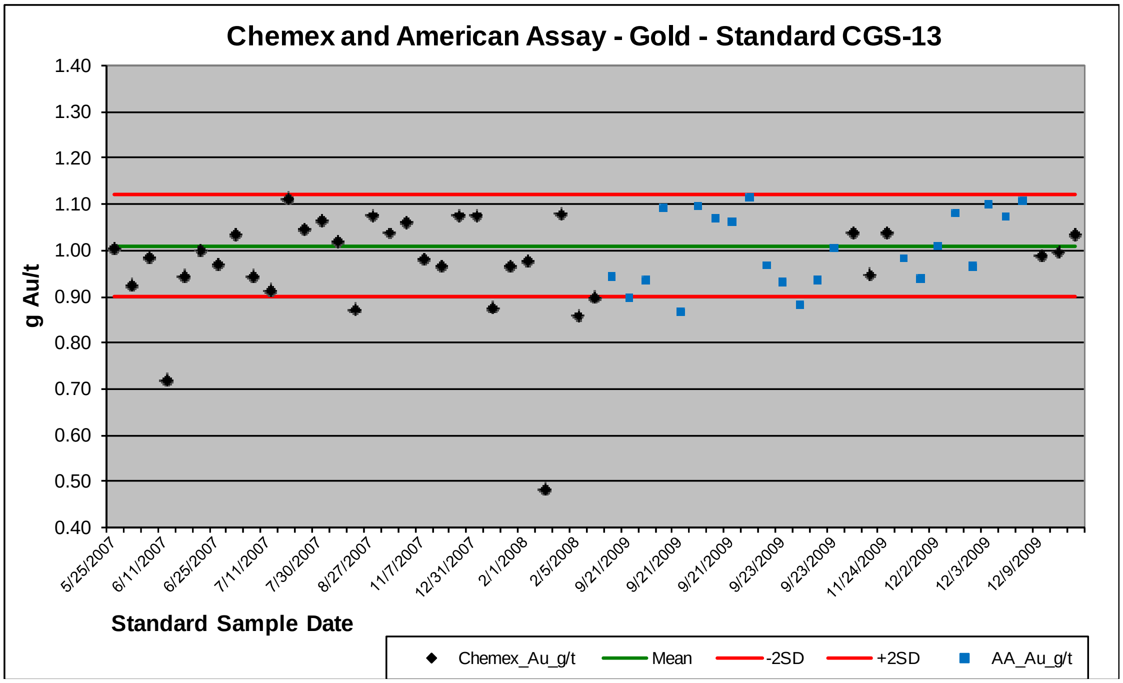
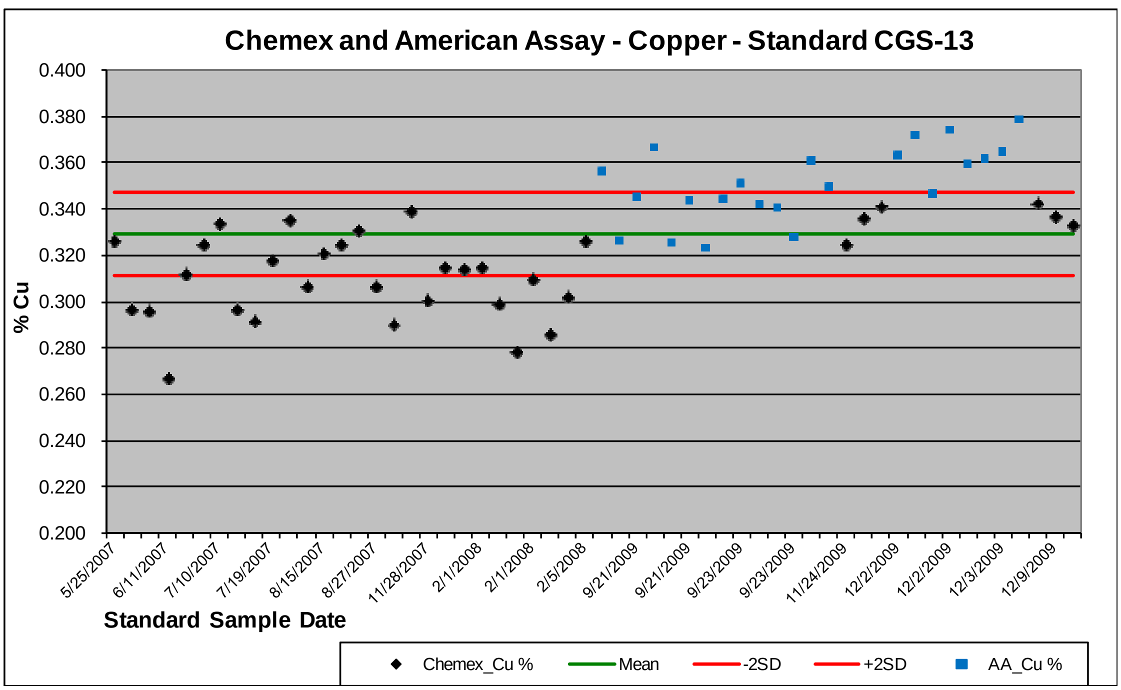
11/30/2007
Standard Sample Date
Cu %
Mean
-2SD
+2SD


Chemex Gold - Standard CGS-12
g Au/t
0.50
0.45
0.40
0.35
0.30
0.25
0.20
0.15
0.10
5/25/2007
6/4/2007
6/20/2007
6/25/2007
6/25/2007
7/10/2007
7/10/2007
7/11/2007
7/19/2007
7/30/2007
8/15/2007
8/15/2007
8/27/2007
9/23/2007
9/23/2007
11/7/2007
11/28/2007
11/28/2007
11/30/2007
12/31/2007
2/1/2008
2/1/2008
2/1/2008
2/1/2008
2/1/2008
2/1/2008
2/5/2008
Standard Sample Date
Au_g/t
Mean
-2SD
+2SD

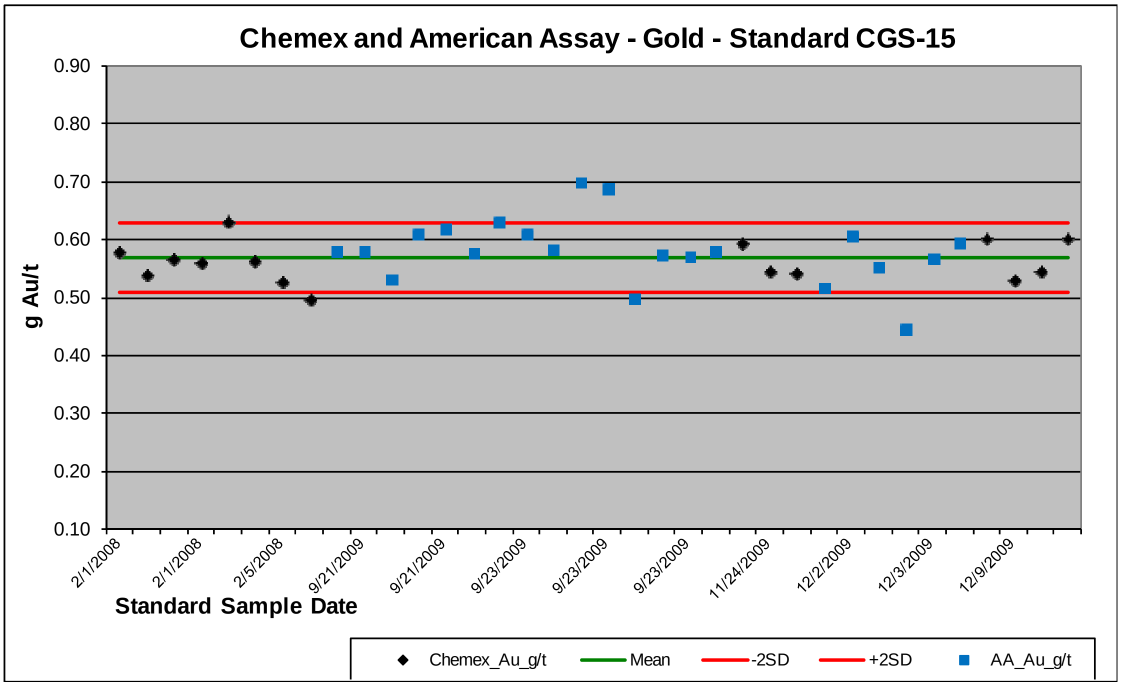

Chemex Copper - Standard CGS-12
% Cu
0.300
0.280
0.260
0.240
0.220
0.200
0.180
0.160
5/25/2007
6/4/2007
6/25/2007
6/25/2007
7/10/2007
7/10/2007
7/11/2007
7/19/2007
7/30/2007
8/15/2007
8/15/2007
8/27/2007
9/23/2007
9/23/2007
11/7/2007
11/28/2007
11/28/2007
11/30/2007
12/31/2007
2/1/2008
2/1/2008
2/1/2008
2/1/2008
2/1/2008
2/1/2008
2/5/2008
Standard Sample Date
Cu %
Mean
-2SD
+2SD

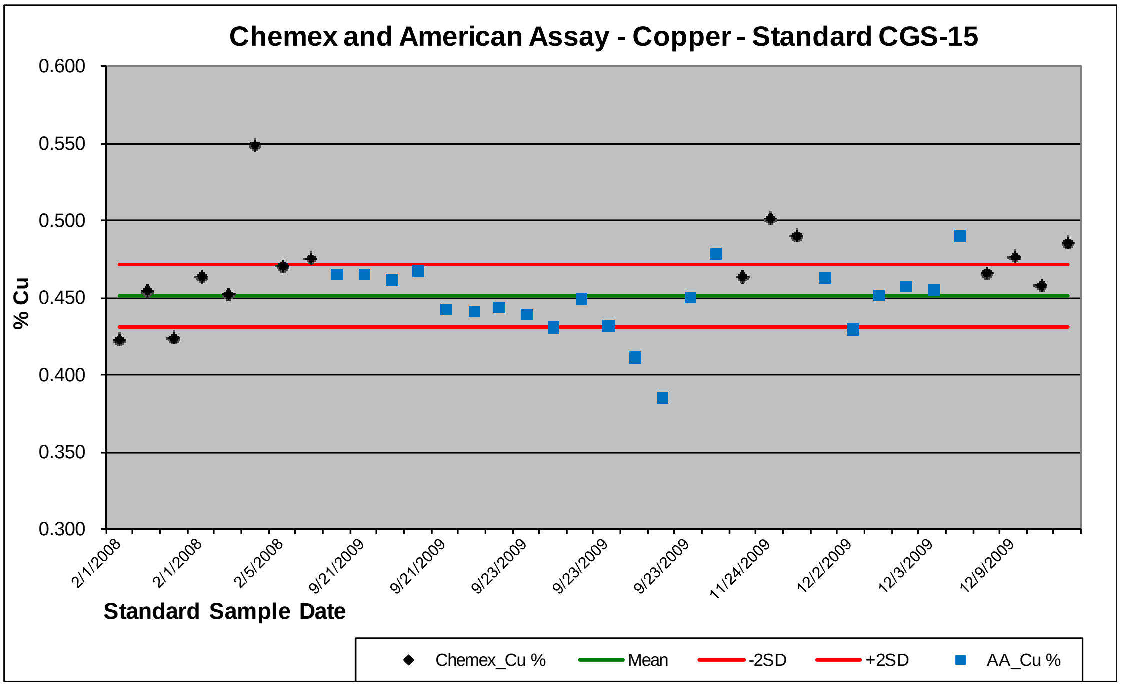


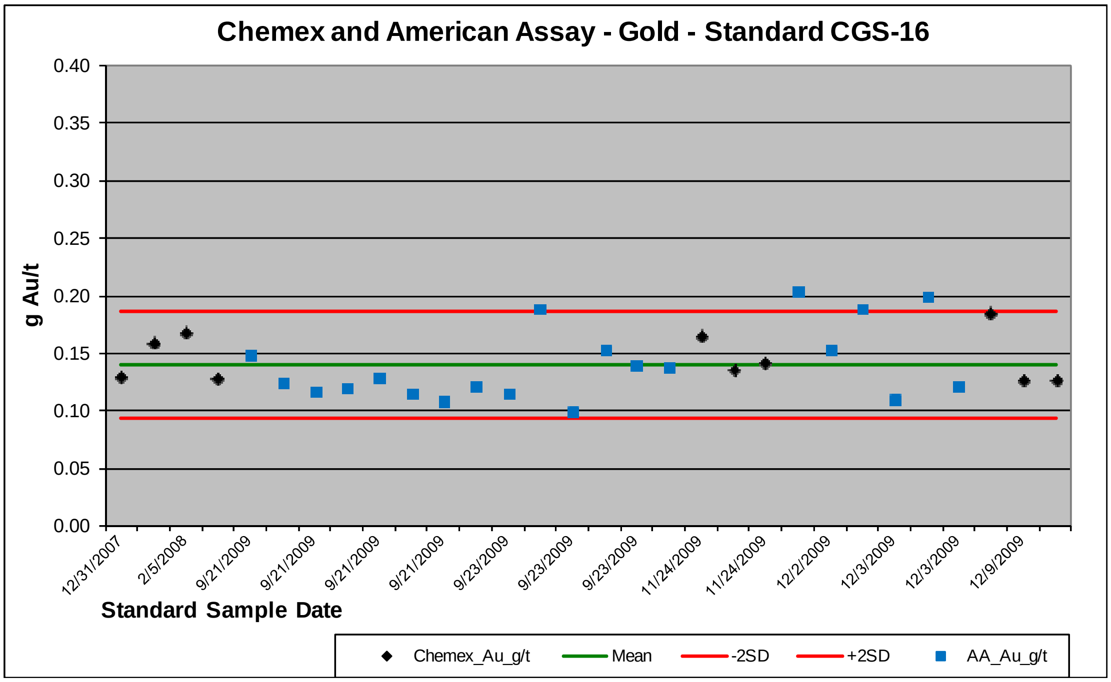
Chemex and American Assay - Gold - Standard CGS-13
g Au/t
1.40
1.30
1.20
1.10
1.00
0.90
0.80
0.70
0.60
0.50
0.40
5/25/2007
6/11/2007
6/25/2007
7/11/2007
7/30/2007
8/27/2007
11/7/2007
12/31/2007
2/1/2008
2/5/2008
9/21/2009
9/21/2009
9/21/2009
9/23/2009
9/23/2009
11/24/2009
12/2/2009
12/3/2009
12/9/2009
Standard Sample Date
Chemex_Au_g/t
Mean
-2SD
+2SD
AA_Au_g/t

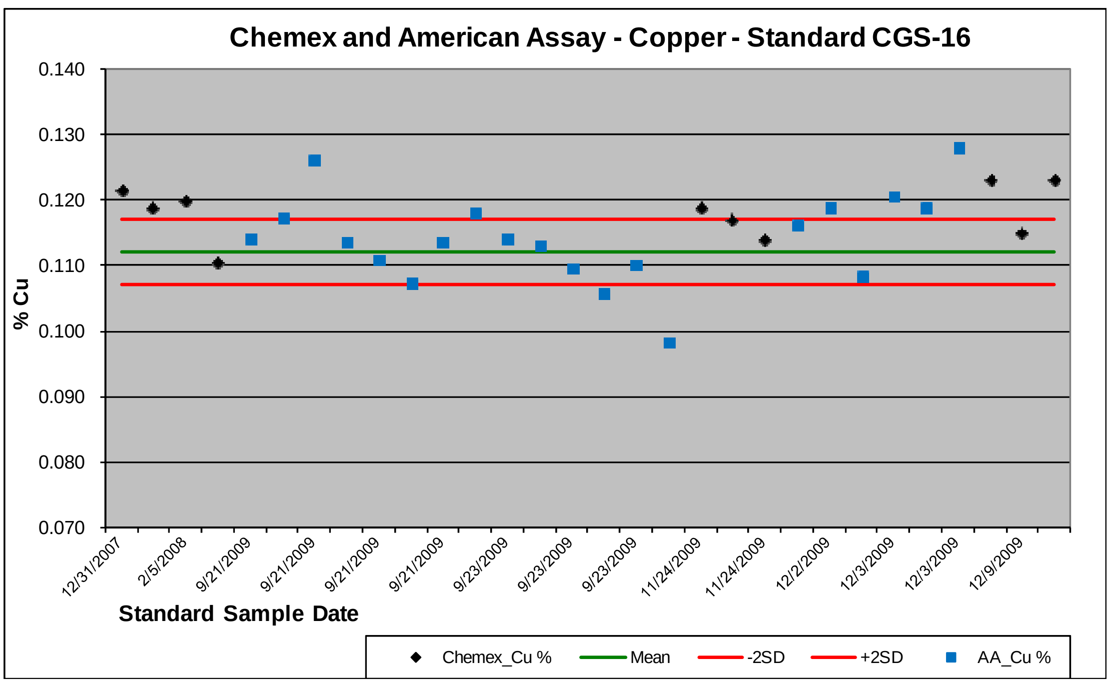


Chemex and American Assay - Copper - Standard CGS-13
% Cu
0.400
0.380
0.360
0.340
0.320
0.300
0.280
0.260
0.240
0.220
0.200
5/25/2007
6/11/2007
7/10/2007
7/19/2007
8/15/2007
8/27/2007
11/28/2007
2/1/2008
2/1/2008
2/5/2008
9/21/2009
9/21/2009
9/23/2009
9/23/2009
11/24/2009
12/2/2009
12/2/2009
12/3/2009
12/9/2009
Standard Sample Date
Chemex_Cu %
Mean
-2SD
+2SD
AA_Cu %


Chemex and American Assay - Gold - Standard CGS-15
g Au/t
0.90
0.80
0.70
0.60
0.50
0.40
0.30
0.20
0.10
2/1/2008
2/1/2008
2/5/2008
9/21/2009
9/21/2009
9/23/2009
9/23/2009
9/23/2009
11/24/2009
12/2/2009
12/3/2009
12/9/2009
Standard Sample Date
Chemex_Au_g/t
Mean
-2SD
+2SD
AA_Au_g/t

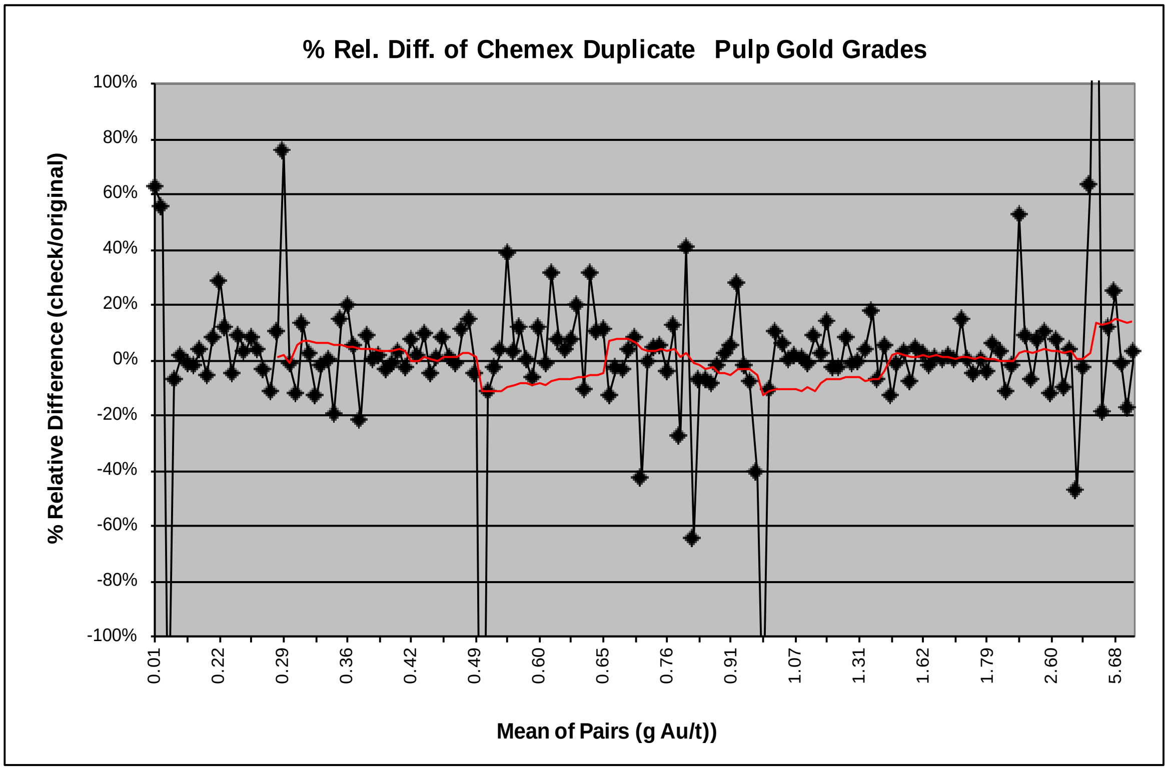

Chemex and American Assay - Copper - Standard CGS-15
% Cu
0.600
0.550
0.500
0.450
0.400
0.350
0.300
2/1/2008
2/1/2008
2/5/2008
9/21/2009
9/21/2009
9/23/2009
9/23/2009
9/23/2009
11/24/2009
12/2/2009
12/3/2009
12/9/2009
Standard Sample Date
Chemex_Cu %
Mean
-2SD
+2SD
AA_Cu %

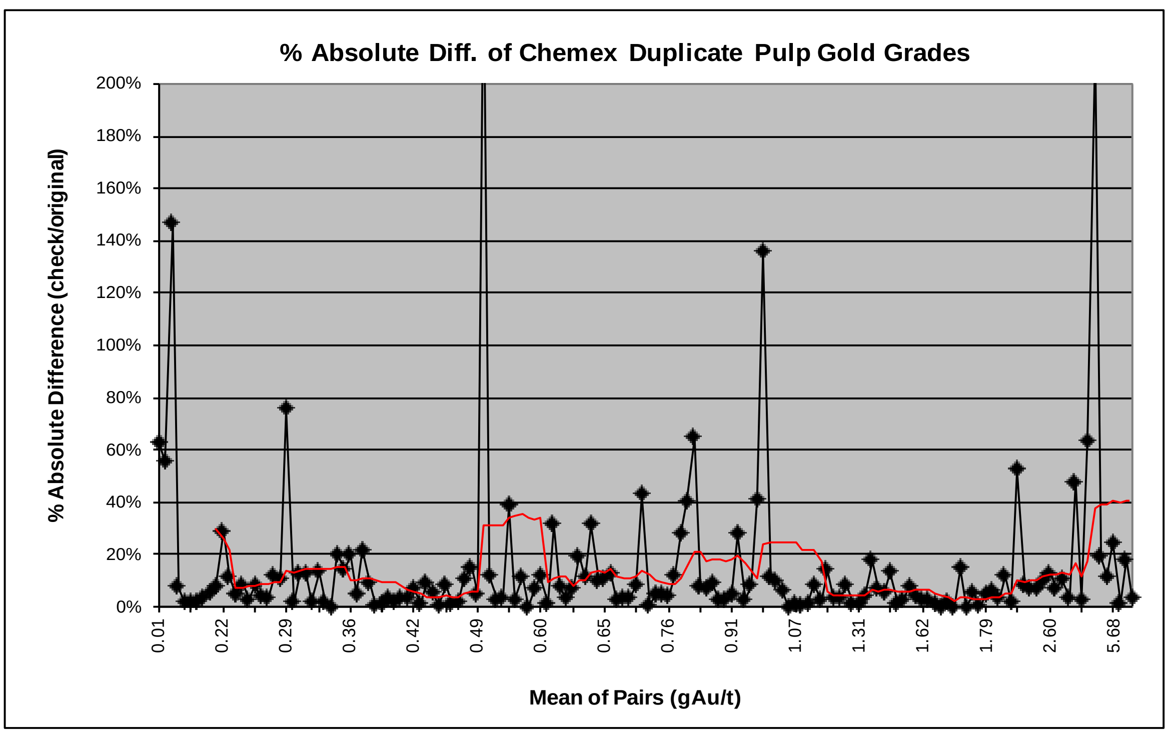

Chemex and American Assay - Gold - Standard CGS-16
g Au/t
0.40
0.35
0.30
0.25
0.20
0.15
0.10
0.05
0.00
12/31/2007
2/5/2008
9/21/2009
9/21/2009
9/21/2009
9/21/2009
9/23/2009
9/23/2009
9/23/2009
11/24/2009
11/24/2009
12/2/2009
12/3/2009
12/3/2009
12/9/2009
Standard Sample Date
Chemex_Au_g/t
Mean
-2SD
+2SD
AA_Au_g/t

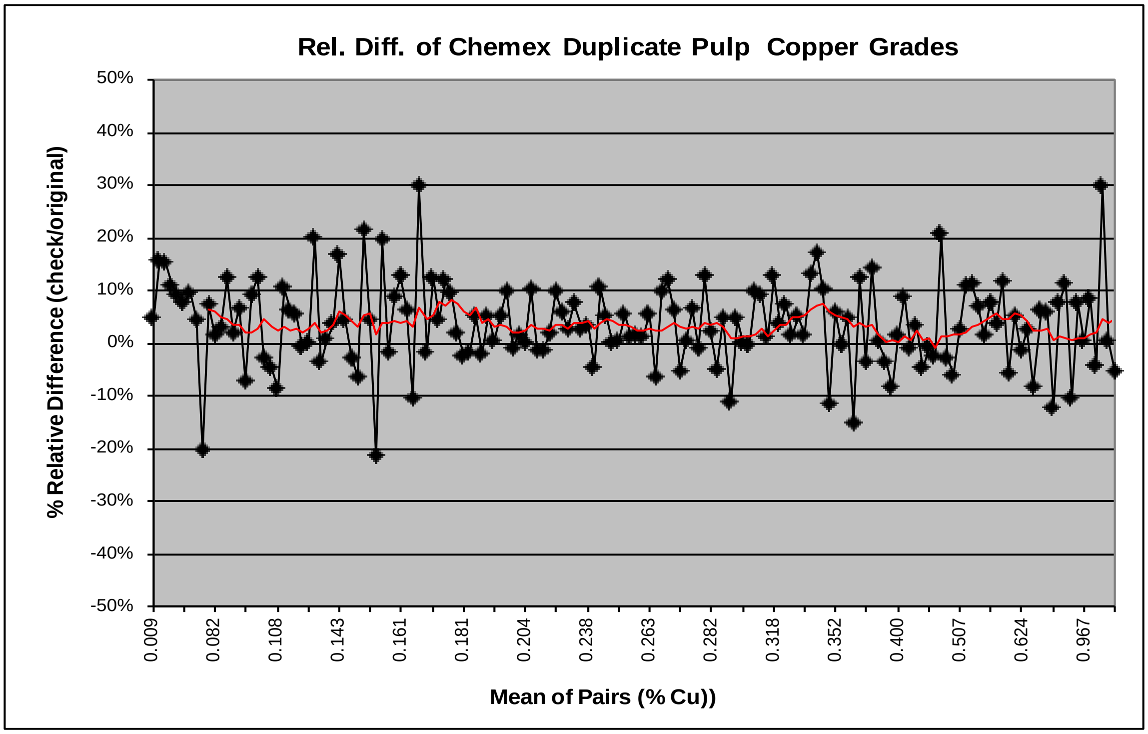

Chemex and American Assay - Copper - Standard CGS-16
% Cu
0.140
0.130
0.120
0.110
0.100
0.090
0.080
0.070
12/31/2007
2/5/2008
9/21/2009
9/21/2009
9/21/2009
9/21/2009
9/23/2009
9/23/2009
9/23/2009
11/24/2009
11/24/2009
12/2/2009
12/3/2009
12/3/2009
12/9/2009
Standard Sample Date
Chemex_Cu %
Mean
-2SD
+2SD
AA_Cu %

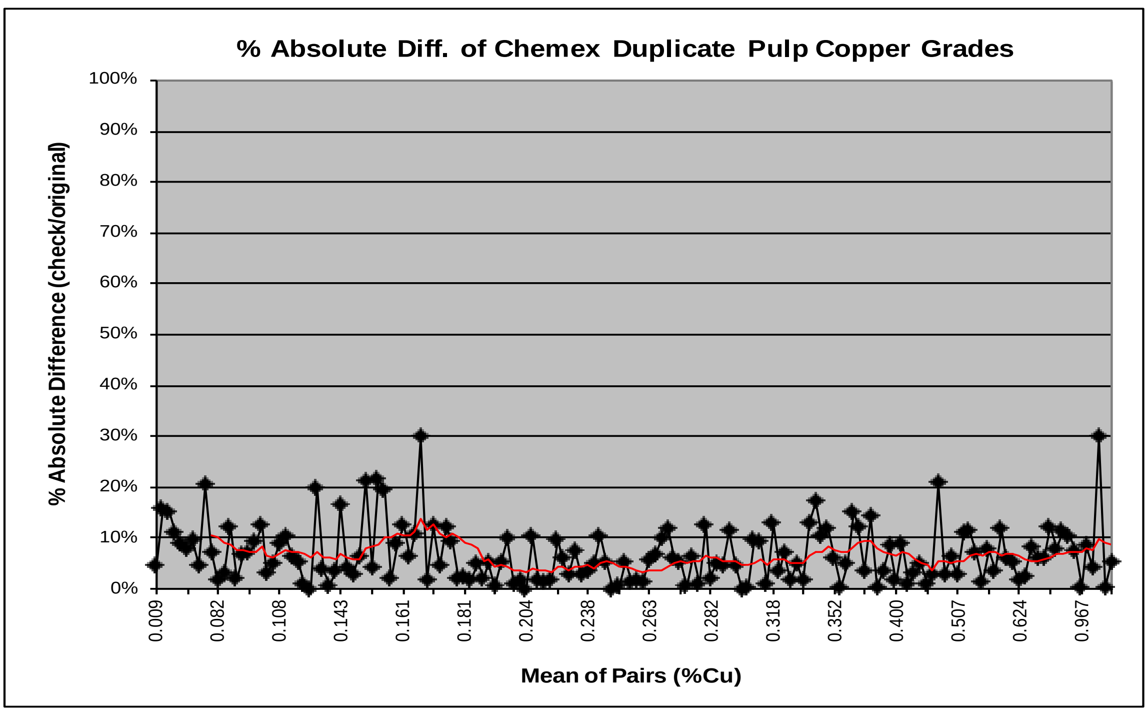
Appendix E

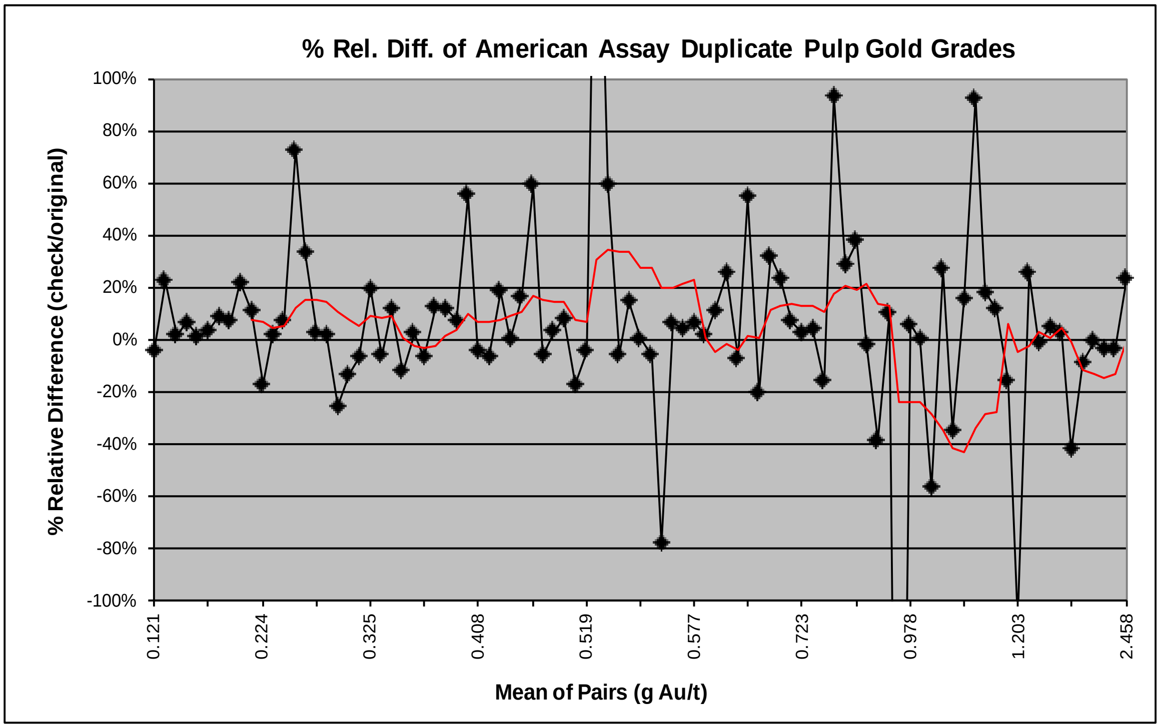
Saratoga QA/QC Duplicate Pulp and Pulp Re-Assay Analyses


% Rel. Diff. of Chemex Duplicate Pulp Gold Grades
100%
80%
60%
40%
20%
0%
-20%
-40%
-60%
-80%
-100%
% Relative Difference (check/original)
0.01
0.22
0.29
0.36
0.42
0.49
0.60
0.65
0.76
0.91
1.07
1.31
1.62
1.79
2.60
5.68
Mean of Pairs (g Au/t))

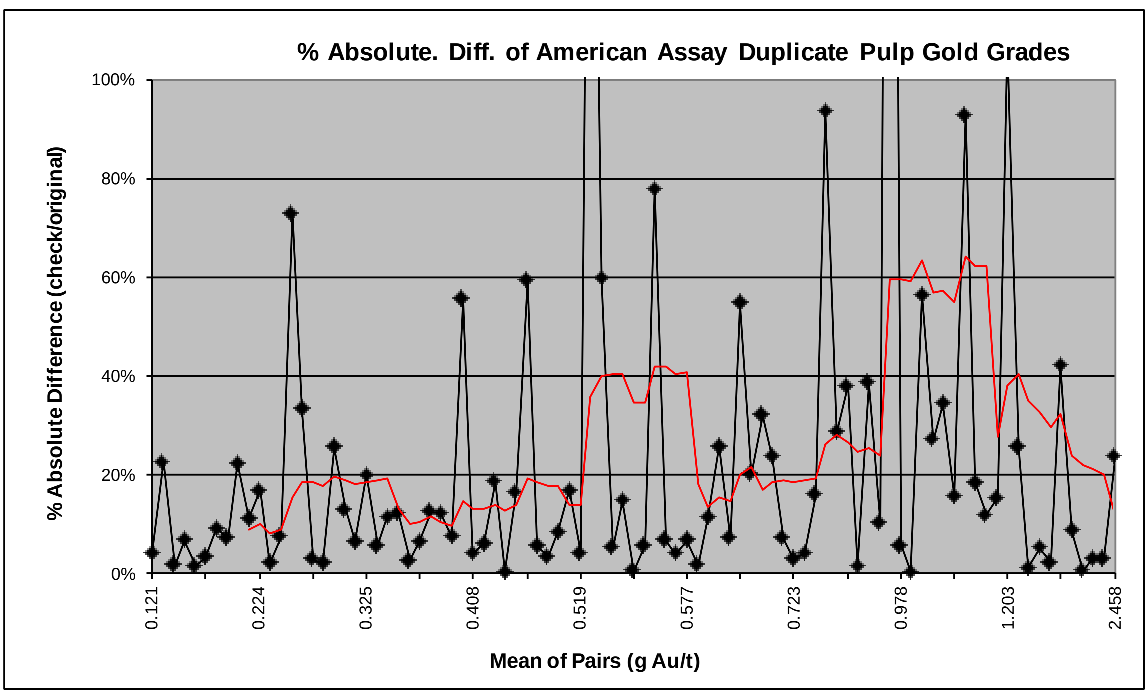

% Absolute Diff. of Chemex Duplicate Pulp Gold Grades
200%
180%
160%
140%
120%
100%
80%
60%
40%
20%
0%
% Absolute Difference (check/original)
0.01
0.22
0.29
0.36
0.42
0.49
0.60
0.65
0.76
0.91
1.07
1.31
1.62
1.79
2.60
5.68
Mean of Pairs (gAu/t)


Rel. Diff. of Chemex Duplicate Pulp Copper Grades
% Relative Difference (check/original)
50%
40%
30%
20%
10%
0%
-10%
-20%
-30%
-40%
-50%
0.009
0.082
0.108
0.143
0.161
0.181
0.204
0.238
0.263
0.282
0.318
0.352
0.400
0.507
0.624
0.967
Mean of Pairs (% Cu))

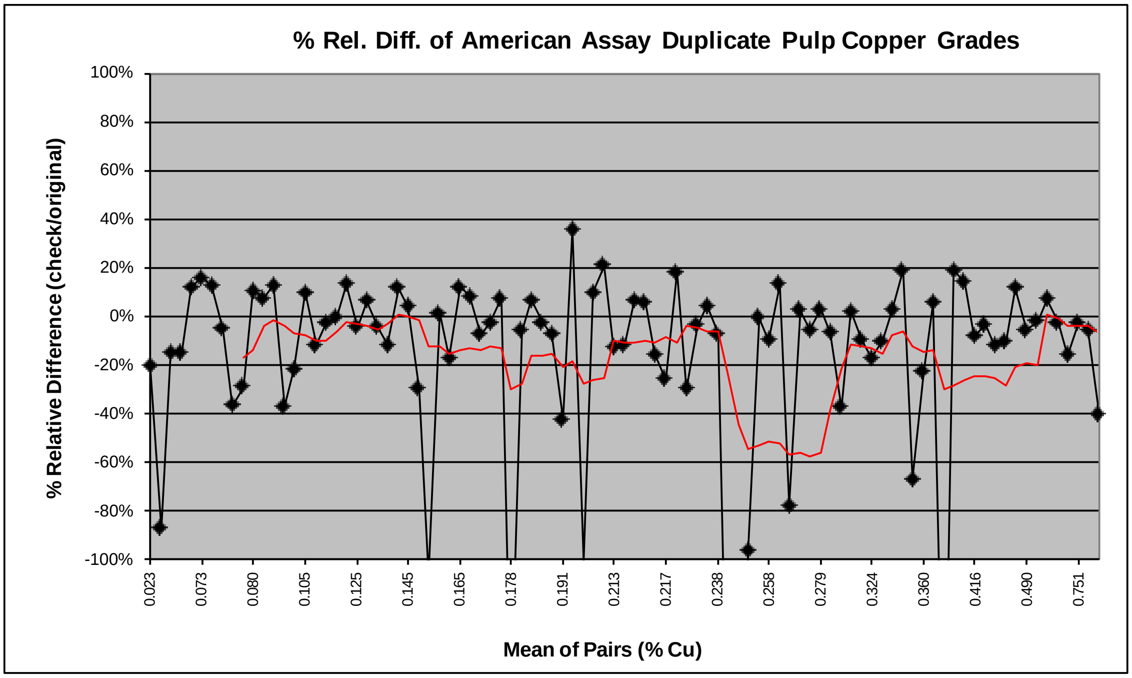

% Absolute Diff. of Chemex Duplicate Pulp Copper Grades
% Absolute Difference (check/original)
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
0.009
0.082
0.108
0.143
0.161
0.181
0.204
0.238
0.263
0.282
0.318
0.352
0.400
0.507
0.624
0.967
Mean of Pairs (%Cu)

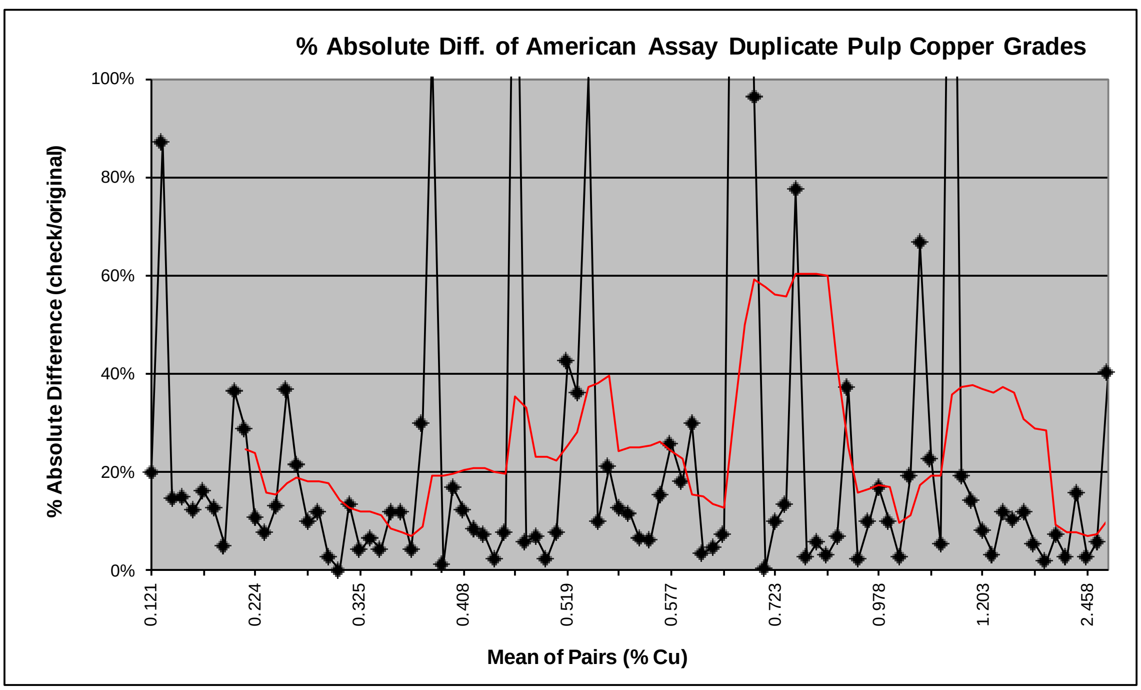


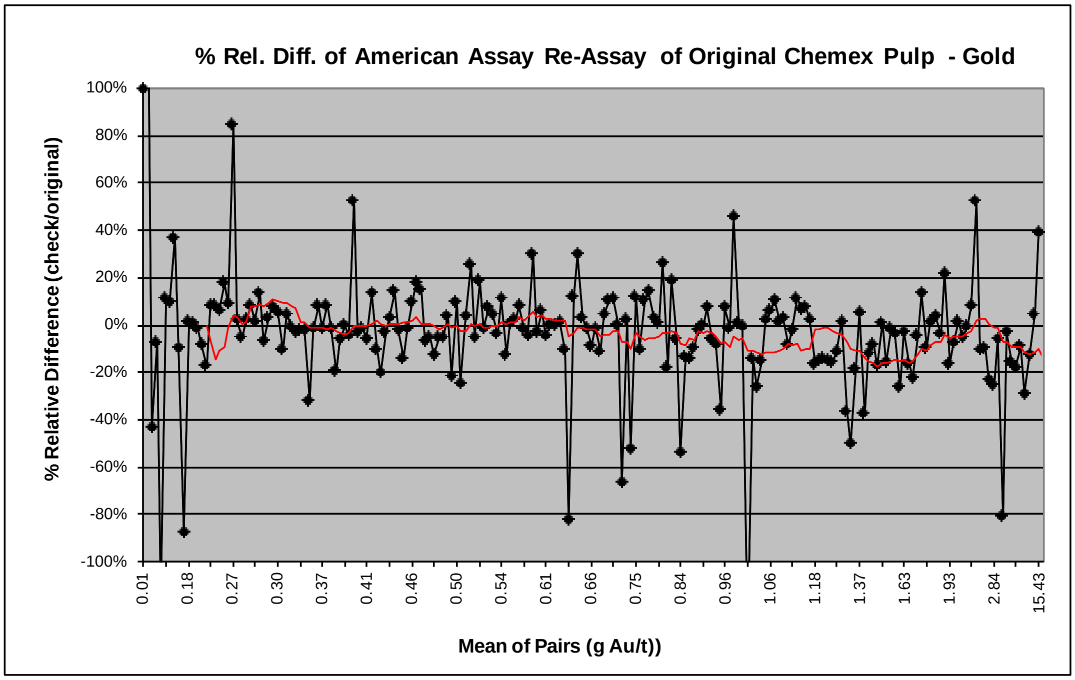
% Rel. Diff. of American Assay Duplicate Pulp Gold Grades
% Relative Difference (check/original)
100%
80%
60%
40%
20%
0%
-20%
-40%
-60%
-80%
-100%
0.121
0.224
0.325
0.408
0.519
0.577
0.723
0.978
1.203
2.458
Mean of Pairs (g Au/t)

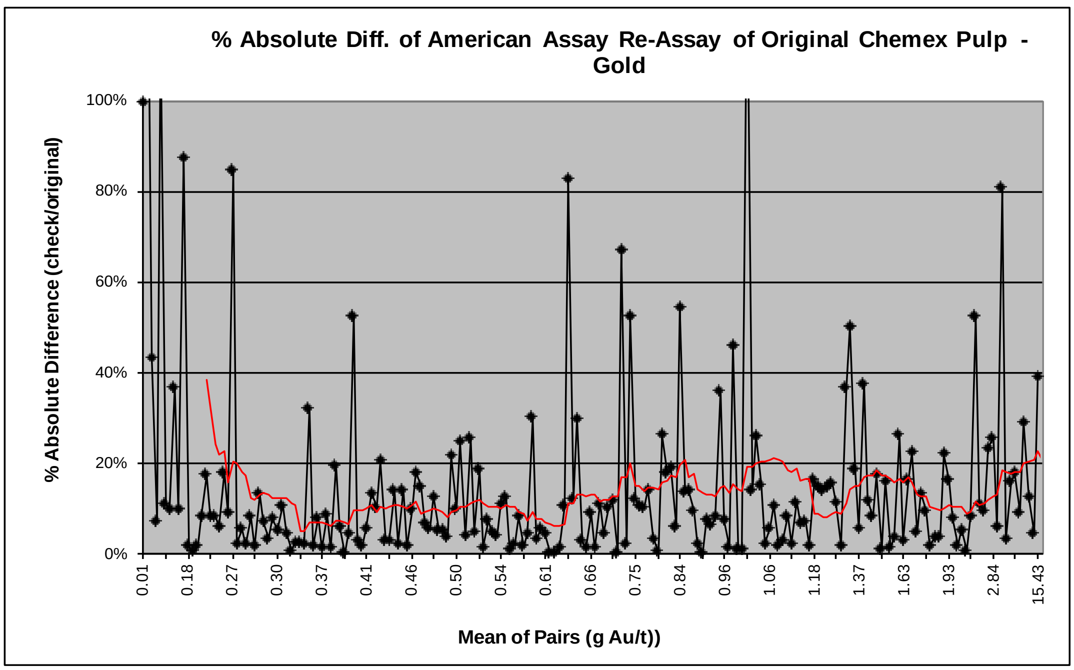


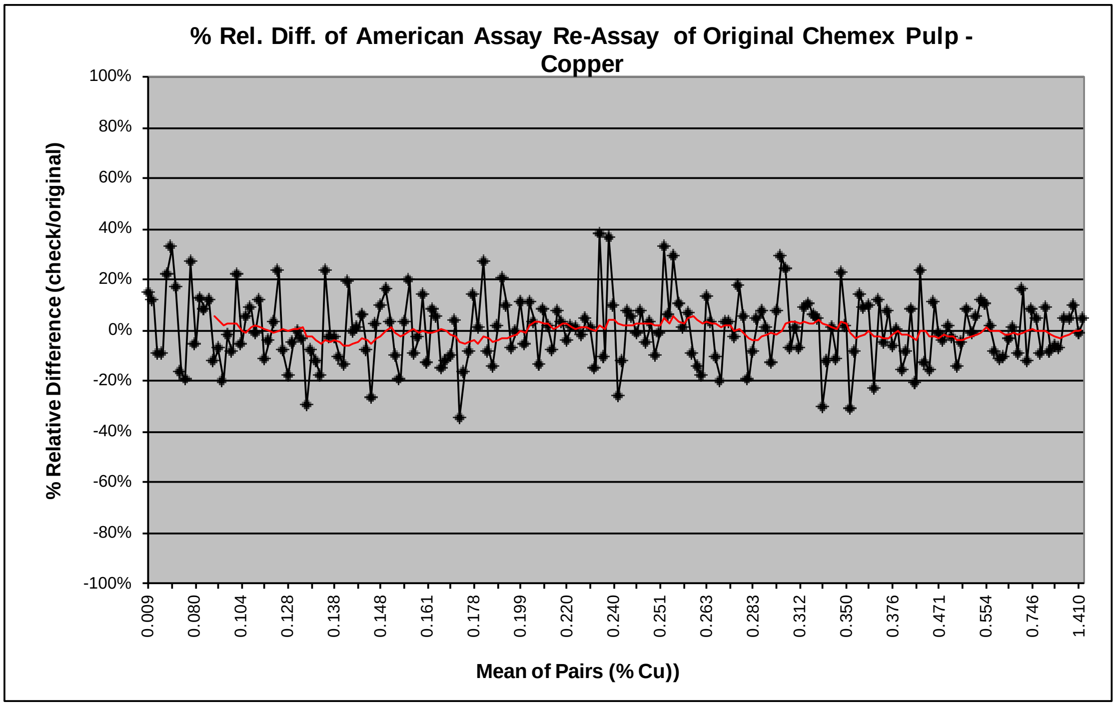
% Absolute. Diff. of American Assay Duplicate Pulp Gold Grades
% Absolute Difference (check/original)
100%
80%
60%
40%
20%
0%
0.121
0.224
0.325
0.408
0.519
0.577
0.723
0.978
1.203
2.458
Mean of Pairs (g Au/t)


% Rel. Diff. of American Assay Duplicate Pulp Copper Grades
% Relative Difference (check/original)
100%
80%
60%
40%
20%
0%
-20%
-40%
-60%
-80%
-100%
0.023
0.073
0.080
0.105
0.125
0.145
0.165
0.178
0.191
0.213
0.217
0.238
0.258
0.279
0.324
0.360
0.416
0.490
0.751
Mean of Pairs (% Cu)

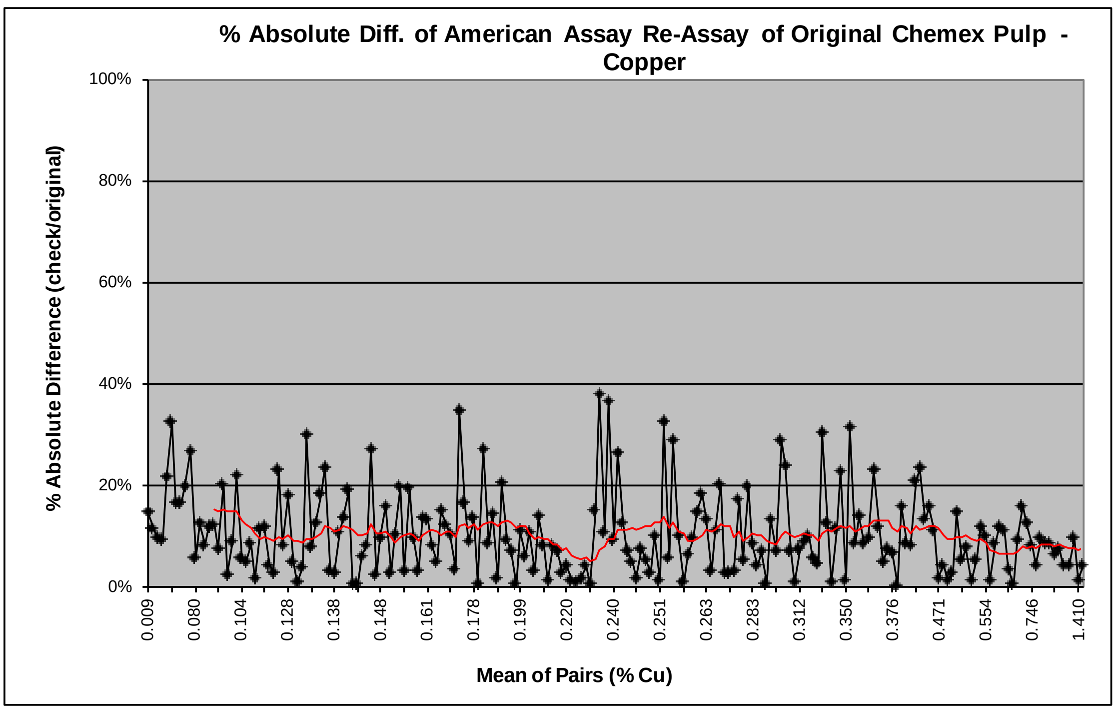

% Absolute Diff. of American Assay Duplicate Pulp Copper Grades
% Absolute Difference (check/original)
100%
80%
60%
40%
20%
0%
0.121
0.224
0.325
0.408
0.519
0.577
0.723
0.978
1.203
2.458
Mean of Pairs (% Cu)


% Rel. Diff. of American Assay Re-Assay of Original Chemex Pulp - Gold
100%
80%
60%
40%
20%
0%
-20%
-40%
-60%
-80%
-100%
% Relative Difference (check/original)
0.01
0.18
0.27
0.30
0.37
0.41
0.46
0.50
0.54
0.61
0.66
0.75
0.84
0.96
1.06
1.18
1.37
1.63
1.93
2.84
15.43
Mean of Pairs (g Au/t))

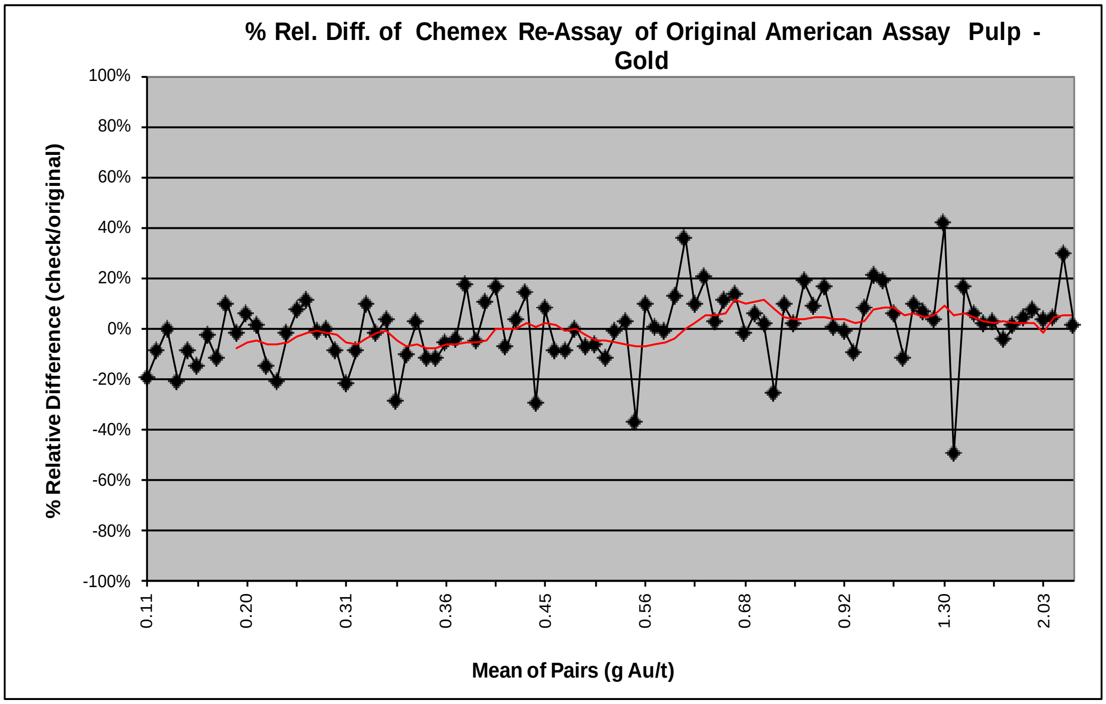

% Absolute Diff. of American Assay Re-Assay of Original Chemex Pulp - Gold
100%
80%
60%
40%
20%
0%
% Absolute Difference (check/original)
0.01
0.18
0.27
0.30
0.37
0.41
0.46
0.50
0.54
0.61
0.66
0.75
0.84
0.96
1.06
1.18
1.37
1.63
1.93
2.84
15.43
Mean of Pairs (g Au/t))



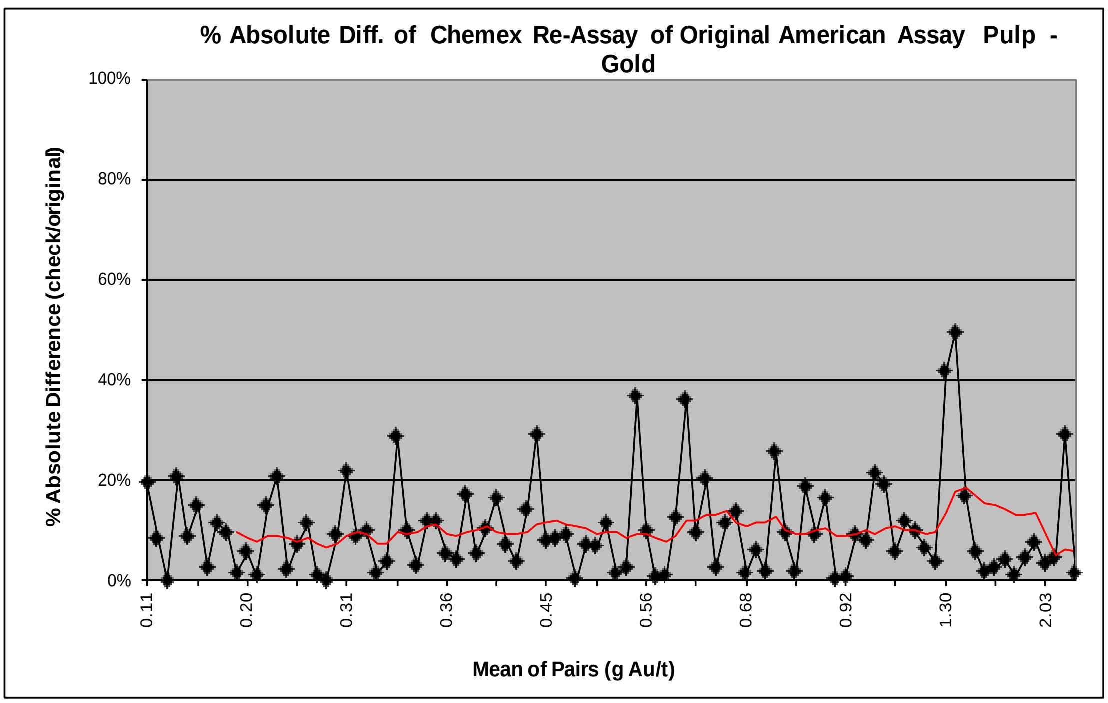
% Rel. Diff. of American Assay Re-Assay of Original Chemex Pulp - Copper
% Relative Difference (check/original)
100%
80%
60%
40%
20%
0%
-20%
-40%
-60%
-80%
-100%
0.009
0.080
0.104
0.128
0.138
0.148
0.161
0.178
0.199
0.220
0.240
0.251
0.263
0.283
0.312
0.350
0.376
0.471
0.554
0.746
1.410
Mean of Pairs (% Cu))



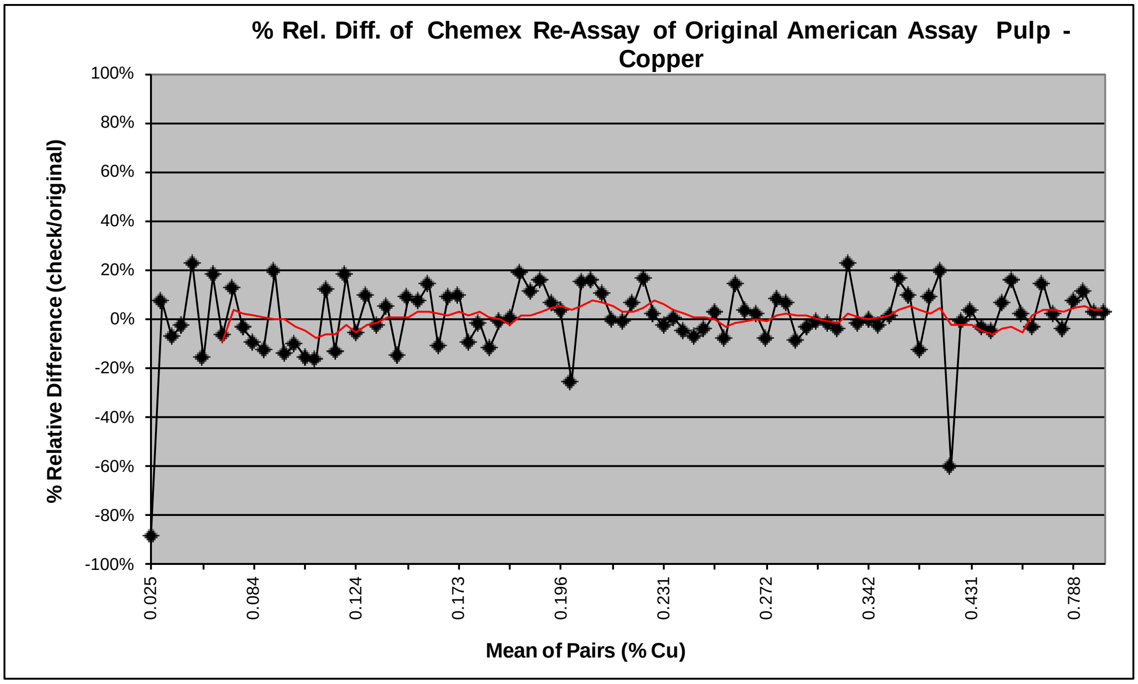
% Absolute Diff. of American Assay Re-Assay of Original Chemex Pulp - Copper
% Absolute Difference (check/original)
100%
80%
60%
40%
20%
0%
0.009
0.080
0.104
0.128
0.138
0.148
0.161
0.178
0.199
0.220
0.240
0.251
0.263
0.283
0.312
0.350
0.376
0.471
0.554
0.746
1.410
Mean of Pairs (% Cu)

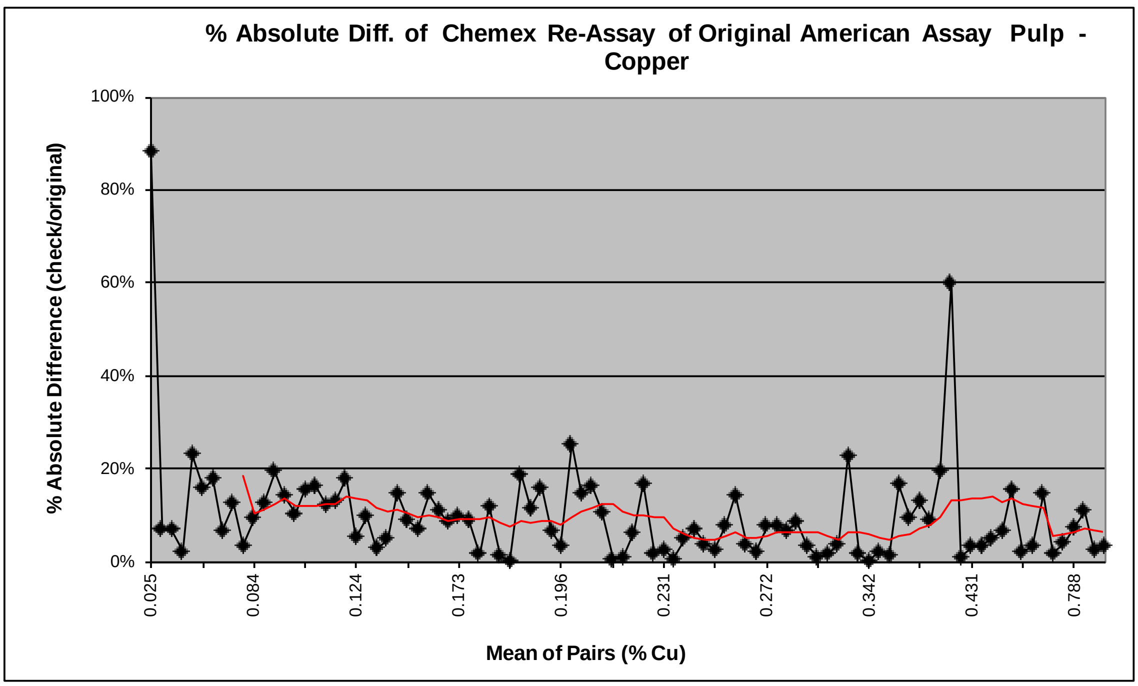


% Rel. Diff. of Chemex Re-Assay of Original American Assay Pulp - Gold
% Relative Difference (check/original)
100%
80%
60%
40%
20%
0%
-20%
-40%
-60%
-80%
-100%
0.11
0.20
0.31
0.36
0.45
0.56
0.68
0.92
1.30
2.03
Mean of Pairs (g Au/t)



% Absolute Diff. of Chemex Re-Assay of Original American Assay Pulp - Gold
% Absolute Difference (check/original)
100%
80%
60%
40%
20%
0%
0.11
0.20
0.31
0.36
0.45
0.56
0.68
0.92
1.30
2.03
Mean of Pairs (g Au/t)


% Rel. Diff. of Chemex Re-Assay of Original American Assay Pulp - Copper
% Relative Difference (check/original)
100%
80%
60%
40%
20%
0%
-20%
-40%
-60%
-80%
-100%
0.025
0.084
0.124
0.173
0.196
0.231
0.272
0.342
0.431
0.788
Mean of Pairs (% Cu)


% Absolute Diff. of Chemex Re-Assay of Original American Assay Pulp - Copper
% Absolute Difference (check/original)
100%
80%
60%
40%
20%
0%
0.025
0.084
0.124
0.173
0.196
0.231
0.272
0.342
0.431
0.788
Mean of Pairs (% Cu)

APPENDIX F

Copper King Order of Magnitude Cost Estimate
Kappes, Cassiday & Associates

Kappes, Cassiday & Associates
7950 Security Circle, Reno, Nevada USA 89506
Telephone: (775) 972-7575 FAX: (775) 972-4567
E-Mail Address: kca@kcareno.com

15 March 2010

Neil Prenn
Mine Development Associates
Reno, Nevada

RE: Copper King Order of Magnitude Cost Estimate

Neil,

An Order-of-Magnitude study was conducted to estimate the capital and operating costs of a conventional 10,000 dstpd (9,000 dmtpd) copper flotation concentrator for the Copper King Project. The estimate was based on conventional 3-stage crushing and a conventional flotation concentrator producing a single product; a copper-gold concentrate.

The basic design criteria pertinent to this order of magnitude study are summarized below. Unless stated otherwise, all process rates are in metric tonnes per hour.

DESIGN BASIS	
CRUSHING	
Delivery to Primary Crusher, tonne/hr	700
Crushing hr/day	16
Operating days/week	7
Availability	80%
Primary Crusher Feed Size, maximum, mm	600 x 600
Primary Crusher Feed Size, 80% passing, mm	450
Specific Gravity	2.8
Ore Hardness and Abrasivity	Assumed to be similar to quartzite
Final Product, 80% passing, mm	7.6
GRINDING/FLOTATION	
Processing rate, tonne/hr	400
Operating hr/day	24
Availability	93%
Ball Mill Work Index	14.3
Primary Ball Mill	1
Product Grind, 80% passing, µm	75

Regrind Mill	1
Regrind Product Grind, 80% passing, µm	20
Concentrate Produced, dry tonnes/d	72
Copper Concentration, wt % Copper	26

Capital and operating costs are based on recent quotations or information from KCA project files, and are expressed in 1st quarter 2010 dollars. Crushing circuit design and operating costs are taken from Metso's Bruno program to calculate the throughput, energy consumption, and wear. Bruno also calculates the cost of maintenance including parts and overhaul. The costs from Bruno are given in Euros so a conversion factor of US$1.40 to €1.00 was used. The Bruno conventional flow sheet and cost table are attached at the end of this study. Flotation flowsheet design, reagent consumptions, and mill sizing are based on SGS Minerals Services metallurgical tests and locked-cycle test LCT-3 on the master composite.

Capital Cost

The estimated capital cost for a 10,000 dstpd (9,000 dmtpd) flotation concentrator is approximately $84 million. Items specifically NOT included in the capital cost estimate are:

1. Any extension of roads or power lines to the concentrator area
2. Costs associated with primary water supply to the process (wells, water storage ponds, etc.)
3. Any capital related to mining and ore delivery to the crushing circuit
4. General and administrative services (main offices, warehouse, etc.)
5. Any future capital requirements related to tailings pond expansion, the replacement of surface mobile equipment, etc.
6. Owner's cost

The capital cost estimate does include:

1. All concentrator related buildings (offices, laboratory, mill shop, etc.)
2. Starter tailings dam (general estimate since terrain is unknown)
3. An estimate of working capital (30 days) and initial fills

Details of the capital cost and estimated power are shown below in Table 1. Based on 10,000 dstpd, the capital cost to construct the concentrator and related facilities is approximately $8,400 per short ton per day of capacity.

Table 1

COPPER KING PROJECT -- ORDER OF MAGNITUDE CAPITAL COST/POWER ESTIMATE
3.6 million dstpy flotation plant (10,000 DSTPD or 9,000 DMTPD)

Crushing		**Qty**	**$ (000's)**	**Total $**			**Att kW**	**Op kW**	**kWh/day**	**kWh/tonne**
	Grizzly Feeder	1	$63	$63			20	20		
	Jaw Crusher (C145)	1	$373	$373			200	200		
	Jaw Discharge Conveyor	1	$130	$130			7.5	7.5		
	Secondary Feed Conveyor	1	$230	$230			15	15		
	Tramp Iron Electromagnet	1	$30	$30			5	5		
	Metal Detector	1	$13	$13			0.1	0.1		
	MP 1000st	1	$3,100	$3,100			746	746		
	MP1000 Discharge Conveyor	1	$230	$230			22.5	22.5		
	Tertiary Belt Feeders	2	$163	$325			7.5	15		
	RiplFlo 2400 x 7300 DD Screen	2	$340	$680			60	120		
	HP800 sh fine	2	$2,830	$5,660			600	1200		
	Tertiary Discharge Conveyor	1	$130	$130			7.5	7.5		
	Recycle Conveyor	1	$130	$130			7.5	7.5		
	Screen U/S Conveyor	1	$230	$230			22.5	22.5	57,326	6.37
Grinding										
	Belt Feeders	2	$57	$114			7.5	15		
	BM Feed Conveyor	1	$230	$230			15	15		
	Weigh Scale	1	$6	$6			0.1	0.1		
	Lime Silo	1	$82	$82			8.25	8.25		
	Ball Mill 16'x29'	1	$4,070	$4,070			4050	4050		
	Cyclone Feed Pumps	3	$75	$225			112.5	225		
	Cyclone Nest (6-20")	1	$170	$170			0	0		
	Trash Screen	1	$41	$41			7.5	7.5		
	Sump Pump	1	$12	$12			11.3	11.3		
	Slurry Pumps	2	$18	$36			40	40	104,932	11.66
Flotation										
	Rougher Cells (2 bank of 11-1,000 cf)	2	$1,205	$2,410			495	990		
	Rougher Tails Pumps	2	$18	$36			75	75		
	Ro Froth Pumps	2	$15	$30			15	15		
	Cleaner Cells (1 bank of 4-50cf)	1	$145	$145			22.4	22.4		
	Clnr Tails Pumps	2	$15	$30			11.3	11.3		
	1st Clnr Scav Conc Pumps	2	$8	$16			22.5	22.5		
	1st Clnr Scav Tail Pumps	2	$18	$36			22.5	22.5		
	Regrind Mill (8'x16')	1	$562	$562			425	425		
	Regrind Discharge Pumps	2	$12	$24			18.8	18.8		
	Sump Pumps	2	$10	$20			5.6	11.2	38,729	4.30
Concentrate										
	Final Cleaner Conc Pumps	2	$9	$17			11.3	11.3		
	Concentrate Thickener (10m dia)	1	$226	$226			0.83	0.83		
	Thickener O/F Pumps	2	$12	$24			18.75	18.75		
	Thickener U/F Pumps	2	$18	$36			15	15		
	Conc Filter	1	$100	$100			3.75	3.75		
	Conc Conveyor	1	$75	$75			3.75	3.75		
	Dryer	1	$250	$250			3.75	3.75		
	Dry Conc Conveyor	1	$130	$130			7.5	7.5		
	Loader	1	$199	$199			0	0		
	Sump Pump	1	$10	$10			5.6	5.6	1,686	0.19
Tailings										
	Tailings Thickener (35m dia)	1	$995	$995			5.6	5.6		
	Tailings Thickener O/F Pumps	2	$18	$36			30	30		
	Tailings Thickener U/F Pumps	2	$15	$30			45	45		
	Sump Pump	1	$10	$10			7.5	7.5		
	Tailings Water Return Pump	2	$22	$44			75	75	3,914	0.43
SUBTOTAL MAJOR EQUIPMENT				**$21,799**				**8,608**	**206,587**	**22.95**
							Office/Shop		**1,500**	**0.17**
	Structural Steel, Platework			$2,180	10%		Lab		**975**	**0.11**
	Civils			$2,180	10%		Total kWh/tonne		**209,062**	**23.23**
	Major Earthworks			$1,526	7%					
	Equipment Installation			$5,450	25%					
	Piping			$5,450	25%					
	Electrics			$3,270	15%					
	Instrumentation			$1,090	5%					
	Buildings			$1,090	5%					
	Plant Services			$1,744	8%					
	Spares			$1,090	5%					
	Shipping			$654	3%					
	Starter Tailings Dam (estimated)			$10,000						
SUBTOTAL DIRECT COSTS				**$57,522**						
	Contractor Mobilization, Profit, Temporary Facilities, Tools, Site Expenses, etc.			$3,451	6%					
	EPCM			$8,053	14%					
	Working capital, initial fills			$3,451	6%					
	Contingency			$11,504	20%					
TOTAL				**$83,982**						

Operating Cost

An estimate of concentrator operating labor is shown in Table 2 and the complete operating cost estimate is shown in Table 3. The operating costs do not include any items not directly related to the concentrator operation, such as mining, G&A, other labor, concentrate sales, etc.

Table 2

COPPER KING PROJECT OPERATING LABOR COST ESTIMATE
3.6 million dstpy flotation plant (10,000 DSTPD or 9,000 DMTPD)

Area		Annual Base Pay				Total Annual
Job Title	Number	Salary	Hourly	Burdens	Total	Cost, US$
PROCESS						
Supervision						
Concentrator Superintendent	1	$100,000		$40,000	$140,000	$140,000
Metallurgist	1	$75,000		$30,000	$105,000	$105,000
General Foreman	1	$70,000		$28,000	$98,000	$98,000
Shift Foreman	4	$66,000		$26,400	$92,400	$369,600
Process Maintenance Planner	1	$55,000		$22,000	$77,000	$77,000
Process Maintenance Foreman	3	$66,000		$26,400	$92,400	$277,200
Secretary/Clerk	1		$31,212	$12,485	$43,697	$43,697
Crushing						
Crusher Operator	3		$45,900	$18,360	$64,260	$192,780
Crusher Helper	3		$31,212	$12,485	$43,697	$131,090
FEL Operator	3		$47,736	$19,094	$66,830	$200,491
Grinding						
Grinding Operator	4		$45,900	$18,360	$64,260	$257,040
Shift Laborer	4		$27,540	$11,016	$38,556	$154,224
Flotation Plant						
Flotation Operator	4		$45,900	$18,360	$64,260	$257,040
Reagent Operator	2		$45,900	$18,360	$64,260	$128,520
Shift Laborer	4		$27,540	$11,016	$38,556	$154,224
Concentrate Handling/Tailings						
Filter/Thickener Operator	4		$45,900	$18,360	$64,260	$257,040
Filter/Thickener Helper	4		$31,212	$12,485	$43,697	$174,787
FEL Operator	2		$47,736	$19,094	$66,830	$133,661
Process Maintenance						
Mechanic	6		$45,900	$18,360	$64,260	$385,560
Mechanic Helper	6		$39,474	$15,790	$55,264	$331,582
Electrician	3		$47,736	$19,094	$66,830	$200,491
Instrumentation Technician	3		$47,736	$19,094	$66,830	$200,491
SUBTOTAL PROCESS	**67**	**$432,000**	**$654,534**	**$434,614**	**$1,521,148**	**$4,269,518**
LABORATORY						
Chief Chemist	1	$55,000		$22,000	$77,000	$77,000
Assayer	1		$45,900	$18,360	$18,360	$18,360
Lab Technician	2		$45,900	$18,360	$64,260	$128,520
Shift Samplers/Buckers	6		$27,540	$11,016	$38,556	$231,336
SUBTOTAL LABORATORY	**10**	**$55,000**	**$119,340**	**$69,736**	**$198,176**	**$455,216**
TOTAL	**77**	**$487,000**	**$773,874**	**$504,350**	**$1,719,324**	**$4,724,734**
TOTAL, $ per Metric Tonne						**$1.458**

Table 3

COPPER KING PROJECT -- ORDER OF MAGNITUDE OPERATING COST ESTIMATE

3.6 million dstpy flotation plant (10,000 DSTPD 0r 9,000 DMTPD)

Reagent Consumptions:						$/kg		$/tonne
	Lime		0.79	kg/tonne		$0.55		$0.43
	Aerofloat 208		17.5	g/tonne		$3.00		$0.05
	PEX		42.5	g/tonne		$2.87		$0.12
	CMC		35	g/tonne		$3.25		$0.11
	Frother		25	g/tonne		$2.55		$0.06
	Flocculent		50	gpt/thickener		$7.61		$0.38
						$/kWh		
Power			23.23	kWh/t		$0.13		$3.02
			$/gal	lbs H2O	Delta T	Btu's	gal/day	
Diesel (Dryer)	130,000 Btu/gal		$2.78	15,200	152	55,449,600	427	$0.13
Wear						$/kg		
	Crusher Liners							$0.62
	Mill Liners	1.5 set/yr		$179,200 set				$0.08
	Balls			1.2 kg/t		$1.35		$1.62
	Screens							$0.10
Overhaul/Maint (Crushers)								$0.24
Other Maintenace Supplies and consumables								$0.50
Surface Support Mobile Equipment								$0.02
Lab			Per day	$/Assay	$/day			
	Fire Assays		200	$5.00	$1,000			$0.11
	Soln Assays		200	$1.50	$300			$0.03
	Misc Supplies							$0.10
FEL's			hrs/day	$/hr	$day			
	Crushing		8	$70	$560			$0.06
	Concentrate		2	$40	$80			$0.01
Labor								$1.46
TOTAL	**per metric tonne**							**$9.27**
	per short ton							**$8.35**

For comparison purposes, a capital and operating cost for a "generic" single-product, 10,000 mtpd flotation concentrator from the 2009 Mine and Mill Estimating Guide has an estimated capital cost of approximately $82.5 million and an estimated operating cost of $8.69 per metric tonne.

Please let us know if you have any questions or need additional information.

Best Regards,

Carl Defilippi Todd Stewart