Big Hurrah Technical Report
Seward Peninsula, Alaska

Prepared for

Alaska Gold Company

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1.0 SUMMARY

The Big Hurrah property is located on the Seward Peninsula, Alaska, USA, approximately 56 km (35 miles) east of Nome. Access to the property is by State of Alaska gravel highway and unimproved gravel secondary roads. The Big Hurrah property is owned by Alaska Gold Company, a wholly owned subsidiary of NovaGold Resources Inc.

In 1901, a large quartz boulder was found at the junction of Big and Little Hurrah Creeks, and in 1902 the first gold-bearing quartz veins were located by trenching. In 1903, a 10-stamp mill was constructed on the property and production commenced. Ten additional stamps were added in 1904 to increase the amount of material that could be processed. Hard rock production continued until October 1907 at which time all operations ceased. Various lessees produced minor gold during the years of 1944-1947 and again in 1952. Estimated gold production is believed to total approximately 26,000 troy ounces.

Modern exploration of the Big Hurrah property began with Anaconda Copper Company in 1980. From 1980 through 2005, a total of 16,179 meters were drilled in 273 holes. Anaconda completed 1,621 meters of trenching and 505 meters of diamond core drilling in five holes. In 1983, Cornwall Pacific Resources Ltd. completed 919 meters of trenching and 1,033 meters of diamond core drilling in eleven holes. Nighthawk Resources, Ltd. completed 555 meters of trenching and 1,972 meters of diamond core drilling in 18 holes in 1985. Solomon Gold Corporation drilled 3,770 meters of diamond core drilling in 91 holes in 1988. In 1989, Keewatin Engineering Inc. completed a feasibility study on the property for Solomon Gold Corporation. The Keewatin study delineated a mineral resource of 451,600 short tons grading 0.268 troy ounces per ton, for a total of 121,160 troy ounces of gold. This resource estimate does not conform to NI 43-101 standards and is reported as an historic estimate only. Placer Dome Exploration Inc. optioned the property in 1997 and completed 1,893 meters of diamond core drilling in 19 holes.

Alaska Gold Company purchased the property from Dallas Mine Company in 2002. During 2004, Alaska Gold Company drilled 1,389 meters in 31 diamond core and 1,564 meters in 31 reverse circulation rotary holes. In 2005, Alaska Gold Company drilled 1,116 meters in 14 diamond core holes and 2,993 meters in 53 reverse circulation rotary holes.

Alaska Gold is in the process of developing the Big Hurrah deposit in conjunction with their nearby Rock Creek deposit. Their plan is based on an economic review that is being completed by Norwest Corporation. Alaska Gold is currently in the final stages of permitting both deposits. It is anticipated that another technical report will be filed which will summarize various aspects of the Big Hurrah mining project.

The author reviewed and validated the available assay and geologic data by performing various quality control and quality assurance tests. The author then estimated gold resources using the available diamond core and reverse circulation drill hole data. No trench sample data were used to estimate block gold grades. Mineral zones were constructed by Alaska Gold Company geologists and the author using a gold grade cutoff of 0.50 g/t and logged lithologic and structural data. These zones were used to constrain the estimate of gold resources. The estimated gold resources were classified into Indicated and Inferred Mineral Resource categories using the distance to data and number of data method.

Gold resources were summarized inside of a $500 Lerchs-Grossmann pit that was developed using cost parameters developed by Norwest in their 2005 feasibility study. Indicated and Inferred Mineral Resources located inside of the $500 LG pit are tabulated in Table 1-1 at several gold cutoff grades. A 1.0 g/t gold cutoff grade is currently envisioned as an appropriate cutoff grade for the Big Hurrah deposit.

Table 1-1: Summary of Mineral Resources

Au Cutoff (g/t)	Indicated Mineral Resources			Inferred Mineral Resources		
	Tonnes (000)	Au (g/t)	Contained Au Ozs (000)	Tonnes (000)	Au (g/t)	Contained Au Ozs (000)
0.5	1,994	4.31	276	766	2.45	60
0.6	1,964	4.36	275	725	2.56	60
0.7	1,929	4.43	275	681	2.68	59
0.8	1,896	4.49	274	628	2.85	58
0.9	1,869	4.55	273	601	2.94	57
1.0	**1,839**	**4.61**	**273**	**569**	**3.05**	**56**
1.1	1,798	4.69	271	538	3.17	55
1.2	1,752	4.78	269	502	3.31	53
1.3	1,707	4.87	267	467	3.46	52
1.4	1,661	4.97	265	435	3.62	51
1.5	1,618	5.06	263	409	3.76	49

The author makes the following recommendations:

- The pre-2004 drill hole database needs to be completely checked and corrected where applicable. The author found 100 errors during an audit of the database. All of the errors were associated with the older drilling.

- The resource model needs to be updated and re-estimated using the metallic screen fire assays that were obtained from the 2005 drilling campaign. These assays would replace the earlier conventional fire assay results. In the author's opinion, the metallic screen fire assays should be more representative than the initial fire assays.

- The project should be advanced into production according to the current plans. Once the mineralized zones are exposed it may be necessary to conduct and test various sampling and ore control procedures so that the most efficient and best practices can be implemented.

- Geologic pit mapping should be undertaken with the idea of obtaining a better understanding of the geometry and control of the mineralized zones. The geologic interpretation of these zones should be routinely updated and used to constrain the estimate of block grades for subsequent mine planning purposes.

- Routine reconciliation procedures need to be undertaken on a monthly, quarterly, and yearly basis. Close attention should be paid to areas that either under or over produce so that local updates to the resource model can be completed.

2.0 INTRODUCTION

2.1 **Purpose**

Alaska Gold Company has asked Resource Modeling Incorporated (RMI) to provide an independent audit of their data, to prepare an estimate of Mineral Resources, and to prepare a Technical Report for their Big Hurrah Project. The work entailed preparation of an estimate of Mineral Resources to ensure conformance with the CIM Mineral Resource definitions referred to in National Instrument (NI) 43-101, Standards of Disclosure for Mineral Projects. It also involved preparation of a Technical Report as defined in NI 43-101 and in compliance with Form 43-101F1 (the “Technical Report”).

Information and data for the independent resource estimate were obtained from various Alaska Gold personnel. Pertinent geologic and analytical data were examined prior to preparing this document. Mr. Mike Lechner, RPG, and President of RMI, performed a site visit, examined all available data, estimated Mineral Resources, and prepared this document with help from several Alaska Gold personnel.

2.2 **Terms and Definitions**

Because the Big Hurrah deposit is located in the United States most of the data were originally collected in terms of Imperial units (e.g. drill hole depths, assays, etc.). All of the Imperial units were converted to metric equivalents using conversions as summarized in Table 2-1. Where applicable, all currency units are expressed in terms of United States dollars.

Table 2-1: Imperial to Metric Conversions

Linear Measure

1 inch	= 2.54 centimeters
1 foot	= 0.3048 meter
1 yard	= 0.9144 meter
1 mile	= 1.6 kilometer

Area Measure

1 acre	= 0.4047 hectare
1 square mile	= 640 acres or 259 hectares

Weight

1 pound	= 16 ounces or 14.5833 troy ounces
1 short ton	= 2000 pounds or 0.907 tonne

Assay Values

1 ounce per ton	= 34.2857 gram/tonne
1 troy ounce	= 31.1035 grams
1 ppb	= 0.0000292 ounce per ton

Commonly used abbreviations in this document are summarized in Table 2-2.

Table 2-2: Common Abbreviations

Abbreviation	Definition
AA	Atomic absorption spectrometry
Ag	Silver
Au	Gold
C	Temperature expressed in Centigrade units
CIL	Carbon-in-leach
CIM	Canadian Institute of Mining and Metallurgy
CIP	Carbon-in-pulp
CV	Coefficient of variation (standard deviation/mean)
DDH	Diamond (core) drill hole
DIPE	Dip of search ellipse minor axis
DIPN	Dip of search ellipse major axis
F	Temperature expressed in Fahrenheit units
G&A	General and administrative
g/t	Grams per tonne
GPS	Global positioning satellite
ID^3	Inverse distance cubed weighted estimate
LG	Lerchs-Grossmann pit optimization algorithm
Ma	Million years ago
NaCN	Sodium cyanide
NC	Core diameter (2.406 inches or 61.112 millimeters)
NQ	Core diameter (2.500 inches or 63.500 millimeters)
opt	Ounces per ton
PQ	Core diameter (3.345 inches or 84.963 millimeters)
PRA	Process Research Associates
psi	Pounds per square inch
RC	Reverse circulation drill hole
RDi	Resource Development Incorporated
RMI	Resource Modeling Incorporated
ROTN	Azimuth of search ellipse major axis
RQD	Rock quality designation, a measure of rock durability
SRM	Standard reference material ("standard" or "blank")

2.3 Sources of Information

The Big Hurrah Project has been explored and studied by a number of companies since the early 1980's. In addition, the property has a history of past production during the early part of the 20th century. There is a significant amount of historical information that has been reviewed and referred to in the preparation of this report. Where applicable, references are made to these various studies throughout this report and are summarized in Section 21.

2.4 Site Visit

Mike Lechner, President of Resource Modeling Incorporated (RMI) visited the project site on October 13th and 14th, 2005. The purpose of this site visit was to observe first hand the project site, observe reverse circulation drilling/sampling practices, and to examine available drill core and RC cuttings. In addition, available reports, cross sections, and other relevant data were examined at Alaska Gold's office in Nome, Alaska.

RMI was accompanied by Alaska Gold geologist Mr. John Odden during the site visit. Thin snow cover precluded a detailed examination of the entire surface extent of the property, but RMI was able to walk a number of drill roads. Many of the drill hole collar locations were monumented with PVC pipe with the drill hole name clearly identified with aluminum tags. Several prospect pits and road cuts were examined near the caved Big Hurrah shaft collar. The exposures showed well foliated dark colored schistose material with numerous ribbon quartz veinlets. Visible gold was observed from several samples that were collected from zones containing abundant quartz veinlets.

While on site, the author had an opportunity to observe reverse circulation drilling and sampling procedures. The author observed angle hole HR05-337 being collared using a casing advance system whereby the casing and drill pipe were driven about 4 meters into the ground by a pneumatic hammer. Once the hole was established into bedrock, a center return down-hole hammer was used to deliver samples to a cyclone and rotary sample splitter. To enhance sample recovery and minimize down-hole contamination, a bentonitic mud slurry was continuously injected into the annulus of the drill pipe. Drill hole samples were collected as five-foot-long (1.52-meter-long) intervals by allowing a split from the rotary splitter to be funneled into a plastic pail. The author notes that there was some overflow of sample, but in general, the Alaska Gold personnel attempted to catch all cuttings and water from each sampled interval. Excess water was decanted off and the sample put into olefin bags. Representative samples from each sample interval were captured with a screen, logged by a geologist, and then placed into a plastic chip storage container. The technician and drill helper cleaned the rotary splitter and plastic sample buckets with water between each sample run. In the author's opinion, the Alaska Gold's RC sampling program was conducted using acceptable practices.

While on site the author examined drill core from several holes with Alaska Gold geologists Mr. John Odden and Ms. Shelley Hicks. The author notes that the core appeared to be well taken care of with core boxes clearly marked with hole number, from and to depths, and box number. The core run blocks contained depths in both Imperial (feet) and metric (meters) units based on the initial values that were marked by the driller and those same depths converted to metric units by an Alaska Gold geologist. The author checked several of the converted metric depths and found them to be calculated correctly.

Alaska Gold uses a core handling flow sheet to track the various procedures that they use to process the drill core. Upon delivery to the core shack, the core is washed and photographed. Logging forms used by Alaska Gold include: 1) photo index log, 2) recovery and RQDs, 3) lithologic summary, 4) detailed lithology with graphic logs, 5) alteration, 6) mineralization, and 7) structure. Intervals to be sampled are identified by a geologist, typically on 2-meter-long intervals, but often based on observed geologic features like veining or structure. Alaska Gold's sampling procedures call for the entire HQ core to be sent for analysis. Individual core samples are collected in heavy plastic bags which in turn are loaded into "superbags" for transport to the assay lab. A blank and a standard reference material (SRM) are placed into the superbag at a frequency of one each per 17 samples. In addition to a blank and a standard, Alaska Gold has a duplicate sample prepared by the analytical laboratory, which randomly selects a sample from the submitted samples. The lab prepares a duplicate sample for each batch of 20 samples.

Representative "skeletal" and split core samples are stored in locked containers located on site. A library of oriented drill core samples are stored in a secured facility controlled by Alaska Gold in Nome.

Coarse reject and pulp materials collected by Alaska Gold during the 2004 and 2005 seasons are stored at various secured facilities owned by the commercial laboratories used for prepping and assaying (e.g. ALS Chemex – Fairbanks, AK; ALS Chemex – Vancouver B.C.; ALS Chemex – Elko, NV; Alaska Assay Labs – Fairbanks, AK; BSI Inspectorate – Sparks, NV; and NovaGold's secured warehouse in Vancouver, B.C.).

Representative rock chips collected from reverse circulation drilling are stored in chip trays at Alaska Gold's secure facility in Nome, AK.

2.5 Independent Estimate of Mineral Resources

The author completed an independent estimate of Mineral Resources using the provided drill hole assay data. Various statistical analyses were completed with the result that raw gold assays were capped at 70 g/t and 2.5-meter-long drill hole composites were created. The author chose not to use surface channel samples to estimate Mineral Resources after completing a comparison of the three sample types (diamond core, reverse circulation, and surface channel samples). In the author's opinion, the surface trench samples may be biased high relative to the other sample data and therefore not deemed appropriate to be used for block grade estimation. In addition, there was not enough information that described how the samples were collected.

The estimate of block gold grades was controlled by designing a series of three-dimensional mineral zone envelopes using a 0.50 g/t cutoff grade along with other logged geologic features. Block grades were estimated using inverse distance weighting methods and verified using visual and statistical methods.

Mineral Resources were classified using the distance to data and number of data method. Indicated Mineral Resources were restricted to only those blocks located inside of the mineral zone envelopes provided other criteria (number of data and distance to the data) were met. Global resources (entire block model) are tabulated in Table 2-3 at several gold cutoff grades.

Table 2-3: Global Mineral Inventory

Au Cutoff (g/t)	Indicated Mineral Resources			Inferred Mineral Resources		
	Tonnes (000)	Au (g/t)	Contained Au Ozs (000)	Tonnes (000)	Au (g/t)	Contained Au Ozs (000)
0.5	2,087	4.19	281	1,456	2.02	95
0.6	2,051	4.26	281	1,341	2.15	93
0.7	2,006	4.34	280	1,236	2.28	91
0.8	1,965	4.41	279	1,110	2.45	87
0.9	1,930	4.48	278	1,027	2.58	85
1.0	1,894	4.55	277	962	2.69	83
1.1	1,846	4.64	275	897	2.81	81
1.2	1,795	4.73	273	820	2.97	78
1.3	1,744	4.84	271	732	3.17	75
1.4	1,696	4.93	269	680	3.31	72
1.5	1,652	5.03	267	642	3.43	71

3.0 RELIANCE ON OTHER EXPERTS

This report was prepared for Alaska Gold Company and is based in part on information not within the control of either Alaska Gold or RMI. It is believed that the underlying information contained herein is reliable based on systematic data verification reviews performed by the author.

The author has reviewed a number of historical reports that were prepared by various consultants working for Alaska Gold and previous owners of the property. Those reports outlined various aspects of the project dealing with drilling/sampling methods, assaying protocols, density determinations, geologic interpretations, metallurgical testing, environmental baseline collection and historical resource estimates.

The author and Alaska Gold have also relied on the following key reports:

- Norwest Corporation Report, May 2005, "*Big Hurrah Deposit Resource Model*", unpublished report completed for Alaska Gold Company

- Norwest Corporation Report, August 2005, "*Rock Creek Project - Updated Economic Review*", unpublished draft report completed for Alaska Gold Company

The author has not reviewed the land tenure, nor independently verified the legal status or ownership of the Big Hurrah property nor does the author make any claim as to the validity or status of those claims. Alaska Gold Company retained the firm of Guess & Rudd from Anchorage, Alaska for land title work. Fairbanks Title located in Fairbanks, AK also participated in title/land activities.

Similarly the author has referred to various metallurgical studies and conclusions that were developed by Mr. Bill Pennstrom from Highlands Ranch, CO. Mr. Pennstrom was contracted by Alaska Gold Company to handle metallurgical aspects of the project.

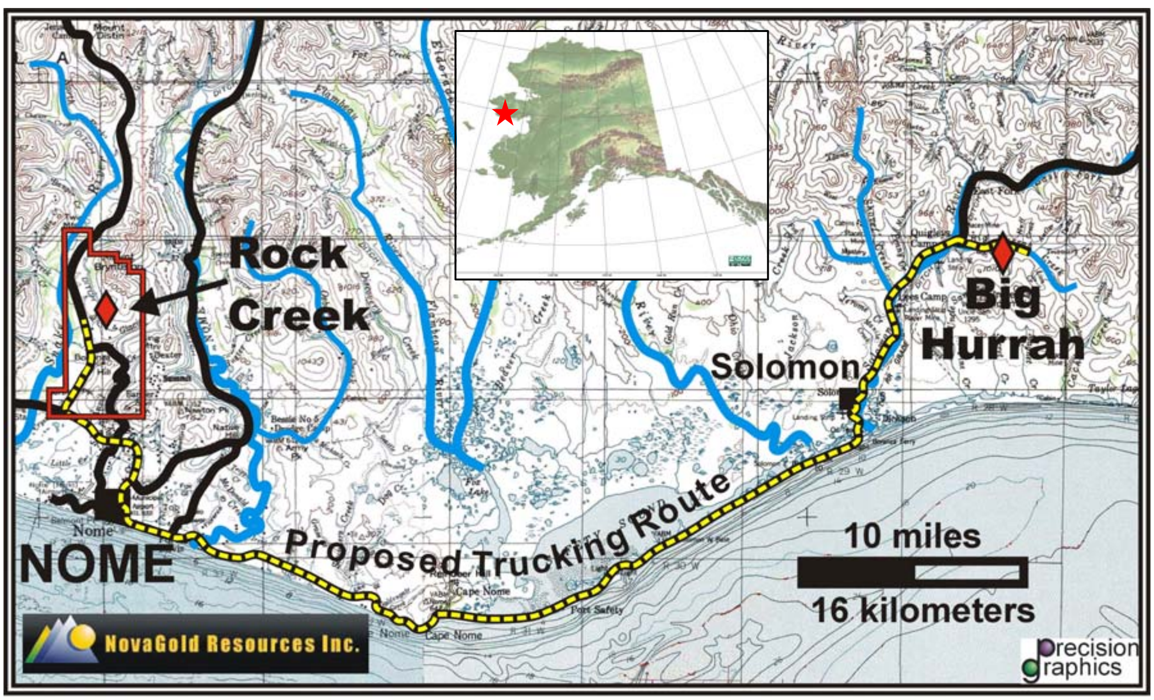
The author is aware that Ms. Charlotte MacCay from Bristol Environmental Incorporated out of Anchorage, AK has been contracted by Alaska Gold Company to handle various permitting and environmental topics. The author has not reviewed any of the documents or opinions of Bristol Environmental Inc.

The results and opinions expressed in this report are conditional upon the aforementioned technical and legal information being current, accurate, and complete as of the date of this report, and the understanding that no information has been withheld that would affect the conclusions made herein. The author does not assume responsibility for Alaska Gold's actions in distributing this report.

4.0 PROJECT DESCRIPTION AND LOCATION

The Big Hurrah property is located on the Seward Peninsula, Alaska, USA, approximately 56 km (35 miles) east of Nome. The property is situated at the junction of Big Hurrah and Little Hurrah Creeks, which are both tributaries of the Solomon River. The property is located within the Council-Solomon Mining District at latitude 64°38'N and longitude 164°14'W, on USGS topographic map Solomon C-5 (1:63,360), within Sections 2, 3 and 11, T10S R28W, Kateel River Meridian. The property is accessible from Nome by approximately 69 km (43 miles) of gravel state highway and 4.7 km (2.9 miles) of unimproved dirt road along a state highway right-of-way. The highway is maintained by the State of Alaska June 1 to October 15. Figure 4-1 is a general location map showing the location of both the Big Hurrah Project and Alaska Gold's Rock Creek deposit where the Big Hurrah ore will be processed. Nome, a city with a population of about 4,000, is the nearest major supply center.

Figure 4-1: General Location Map



The Big Hurrah property consists of 15 patented U.S. Federal mining claims totaling 98.02 hectares (241.995 acres), within U.S. Mineral Survey 388. The patented mining claims were purchased from the Dallas Mining Company for $100,000 in November 2004 by Alaska Gold Company. Table 4-1 lists detailed information pertaining to each claim.

Table 4-1 – List of Patented Claims

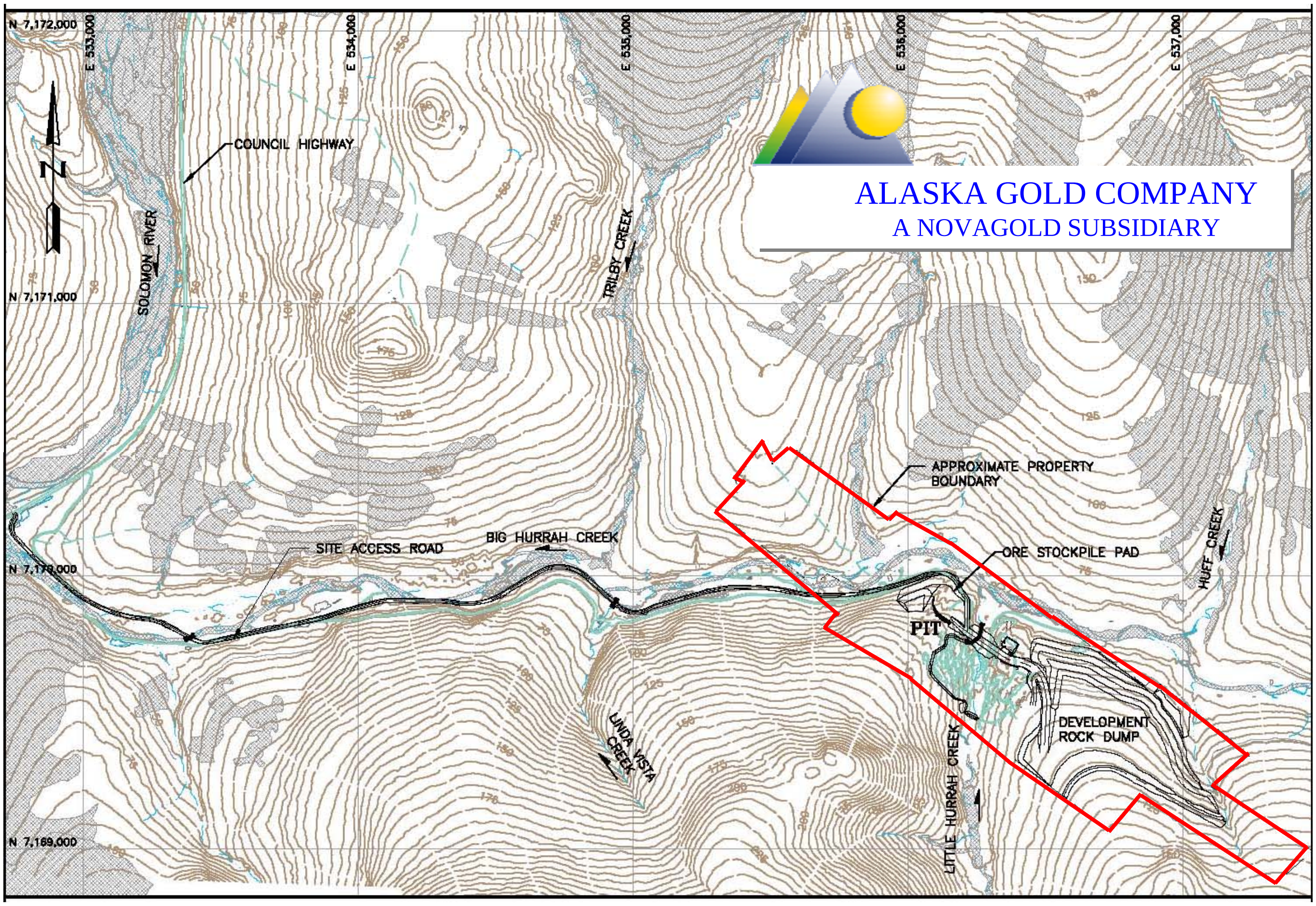
Claim Name	Acres (Surveyed)	Hectares (Calculated)
Dewey	18.322	7.42
Elmer S.	18.438	7.47
Josephine	18.961	7.68
July Fraction	6.484	2.63
King Solomon	14.365	5.82
King Solomon No. 1	18.002	7.29
King Solomon No. 2	18.614	7.54
King Solomon No. 3	18.738	7.59
King Solomon No. 4	20.186	8.18
King Solomon No. 5	20.088	8.14
King Solomon No. 6	19.484	7.89
October Fraction	2.445	0.99
Potazuba Fraction	7.611	3.08
Queana	20.124	8.15
Sour Dough	20.133	8.15
Total Area	241.995	98.02

Alaska Gold owns the mineral and surface rights for the 15 patented mining claims shown in Table 4-1 with no encumbrances, royalties, or buy-back provisions. These patented mining claims were established by the US Surveyor General as Mineral Survey Number 388 in 1913. The boundaries for the claims were established by conventional surveying methods as a part of the mineral survey patent process. The patented mining claims were initially recorded to Anna G. Lane. The claims are surrounded by land owned by Bering Straits Native Corporation (subsurface) and Solomon Village Corporation (surface).

The author is not aware of any environmental liabilities associated with the Big Hurrah property. There are some old mill ruins on the property. Alaska Gold has been working with the State of Alaska in obtaining various permits that will be required to begin operations. According to Alaska Gold's Doug Nicholson, the Big Hurrah reclamation plan has been approved by the DNR. DEC approval of the solid waste permit is waiting for the results from some ongoing humidity cell tests. The author is unaware of other permitting requirements.

Figure 4-2 shows the approximate location of Alaska Gold's Big Hurrah property (in red) with respect to some of the planned infrastructure (e.g. pit, ore stockpile, waste rock disposal area, and the access road). Historical exploration activities have taken place throughout the area shown in Figure 4-2.

Figure 4-2: Property Map Showing Planned Infrastructure



5.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

The Big Hurrah property is located on the Seward Peninsula, Alaska, USA, approximately 56 km (35 miles) east of Nome. The property is accessible from Nome by approximately 69 km (43 miles) of gravel state highway and 4.7 km (2.9 miles) of unimproved dirt road along a state highway right-of-way. Access to the property is by automobile and truck.

Topographic elevation ranges between 49 meters (160 feet) to 131 meters (430 feet) above sea level throughout the property. The area in general is one of low relief, with the land rising to the east and north from a wide coastal plain and tidal marsh at the mouth of the Solomon River. The property area is rolling hills, with the old mine and mill buildings set on a low ridge bounded by Big Hurrah Creek to the north. Vegetation is typical of tundra: muskeg, a combination of small brush, sphagnum moss and heather, with willows and alders along the creeks, gullies and hillside springs. The climate is arctic with oceanic influence. Summers are warm, with temperatures to 24^{o} C (75^{o} F) and winters are cold, with temperatures to -40^{o} C (-40^{o} F). Annual precipitation averages 33 cm (13 inches). Alaska Gold's current plans are to mine the Big Hurrah deposit three months each year (September through November) and to haul ore to their Rock Creek processing facility all year long on a 24 hour per day basis.

The nearest center for supplies and labor is Nome, approximately 56 km (35 miles) west of the project site. Nome is capable of supplying all of the services required for exploration and mining. Nome has regularly scheduled jet air service to Anchorage, and air cargo service to Anchorage and Fairbanks. Barge transportation is available from late May through mid-October. Electricity is not available at the property site. Food, lodging and all services are available in Nome. A labor pool familiar with modern mining practices is also present in the region.

At the current time Alaska Gold has envisioned trucking ore from the Big Hurrah property to their Rock Creek property which is located approximately 10 kilometers north of Nome. This means that there will be no tailings storage areas, heap leach pads, or other processing facilities located at Big Hurrah. According to Norwest (2005), overburden and waste rock from the Big Hurrah deposit will be stored on the south end of the pit.

6.0 HISTORY

6.1 Discovery – Previous Ownership

The Big Hurrah Mine is the only lode deposit with recorded commercial production on the Seward Peninsula. In 1901, a large quartz boulder was found at the junction of Big and Little Hurrah Creeks, and in 1902, the first gold-bearing quartz veins were located by trenching (Orr, 1954).

In 1903, a 10-stamp mill was constructed on the property and commenced production. It is believed that the property was owned by Mr. Tom T. Lane. Ten additional stamps were added in 1904. Production continued until October 1907 (Orr, 1954). During this time, an inclined shaft was sunk and three levels were opened at 60, 150 and 250 feet below the collar of the shaft. The reported production was achieved by crushing the ore in stamp mills fitted with 50-mesh screens and recovering the gold that was liberated by mercury amalgamation. Poor gold recovery was reported and confirmed by subsequent sampling and assaying of tailings. The property was sold to Mr. A.G. Lane in 1905 (Orr, 1954).

Sampling and assaying of the tailings as reported by Orr (1954) indicated a value in excess of $4.60 per ton, which added to the recovered gold, yielded a total value of $14.42 per ton of ore milled. This was equivalent to a mill head grade of approximately 0.70 oz/ton gold.

The mine was leased to C.O. Roberts in 1944, who worked the mine intermittently from 1944 to 1947. This work consisted of surface gouging of vein outcrops and mining of the shaft and level pillars. Production had a value of approximately $55,000 (1,571 ounces at $35.00 per ounce). No tonnage or assay records were kept, but it is estimated that about 2,000 tons were mined (Orr, 1954). This lease was terminated in 1949.

In November 1949, a lease with the option to purchase was granted to T.P. Lane and Sherwood B. Owens. After the summer season of 1950 was spent in sampling and testing, a small cyanide plant was constructed in 1951 to treat the old tailings, and a test run was completed. The plant was operated for two months in 1952. Lane and Owens produced approximately $21,000 of gold (600 ounces at $35.00 per ounce).

During the winter of 1953-1954, T.P. Lane rehabilitated the mill and camp, but insufficient work was completed to develop enough ore reserves to begin production. After a short tune-up run of the milling facilities, it was decided to shut down the milling phase until more ore reserves were delineated. The mine and mill did not operate again.

Beginning in the early 1980's, a number of companies obtained lease option agreements and conducted various exploration programs including surface channel sampling in a number of shallow trenches and diamond core drilling. Alaska Gold obtained the property in 2002 and conducted exploration programs in 2004 and 2005.

6.2 Historical Resource Estimates

During the 1980's a number of polygonal "resource/reserve" estimates were made by several consulting groups that were contracted by Cornwall Pacific Resources Ltd. and Solomon Resources Ltd. Various "resource" and "reserve" nomenclature were used by the consultants of that era which are not applicable or recognized using the standards of the present time (i.e. CIM definitions). The historical resource estimates are summarized in Table 6-1 simply for comparative purposes. In general, the estimates shown in Table 6-1 were generated by projecting drill hole intersections from cross section to cross section. The various estimators used different criteria for establishing the "ore" contacts. Several of the estimates are a combination of summarized material that would be exploited by open pit and underground operations. The tonnage and gold grades that were taken from the 1989 Keewaitin Engineering report were converted to metric units.

In the opinion of the author, none of the estimates shown in Table 6-1 are reliable and they are not compliant with respect to NI 43-101. The various "resource" and "reserve" categories shown in Table 6-1 are different than those that are defined by NI 43-101 (Sections 1.2 and 1.3).

Table 6-1: Historical "Resource" Estimates

Source of Estimate	Year	Resource/Reserve Category [1]	Assay Cutting	Au Cutoff	Diluted	Tonnes	Au (g/t)	Au Ounces
C.C. Hawley [2]	1983	Probable & Possible	None	?	No	394,636	13.36	168,900
Glavinovich [3]	1986	Probable & Possible	None	3.42 g/t	Yes	421,302	11.64	160,480
Caelles [4]	?	Indicated	68 g/t	3.42 g/t	No	202,029	14.32	94,000
Mehner [5]	1989	Indicated & Inferred	58 g/t	1.71 g/t	No	393,458	9.97	126,070
Graff [6]	1989	Indicated & Inferred ("mineable")	58 g/t	?	No	316,815	11.40	116,330
Richardson [7]	1989	Indicated & Inferred	58 g/t	3.42 g/t	No	360,079	10.14	117,550

[1] These categories were taken directly from the 1989 Keewaitin Engineering Incorporated feasibility study for Solomon Resources
[2] Combination open pit and underground polygonal estimate
[3] Polygonal check of the 1986 C.C. Hawley open pit and underground estimate
[4] Polygonal estimate using computer generated cross sections using only zones with greater than 10% quartz
[5] Polygonal estimate using computer generated cross sections and re-interpreted "ore" contacts
[6] Material inside of Mehner's "resource" estimate using a pit with 55 degree slopes
[7] Check of Graff's "resource" estimate

In April of 2005, the author, in conjunction with Norwest Corporation, completed an estimate of Mineral Resources for the Big Hurrah Project for Alaska Gold using inverse distance methods. The Mineral Resources were categorized into Indicated and Inferred categories using methods that are compliant with those that conform to criteria specified by CIM. Those Mineral Resources are summarized in Table 6-2.

Table 6-2: Recent Resource Estimate

Au Cutoff	Indicated Mineral Resources			Inferred Mineral Resources		
(g/t)	Tonnes (000)	Au (g/t)	Au Ozs (000)	Tonnes (000)	Au (g/t)	Au Ozs (000)
0.50	1,661	3.51	187	1,305	1.65	69
1.00	1,307	4.26	179	667	2.57	55
1.50	1,062	4.96	169	427	3.33	46
2.00	882	5.62	159	289	4.10	38

6.3 Historical Production

Underground development and production were centered around an 85-meter deep 60° inclined shaft and three production levels (160-foot, 150-foot, and 250-foot levels). All of the production and development work were confined to an area located east of Little Hurrah Creek. Production records are incomplete, but it has been estimated that about 50,000 short tons (45,350 metric tonnes) were mined and processed between 1902 and 1908 at a grade of 0.72 opt or about 25 g/t. The material was processed in a ten-stamp mill that featured gravity and amalgamation circuits yielding about 35,000 ounces of gold (Keewatin, 1989). The mill was expanded to twenty-stamps in 1904. In 1906, the mine was deemed to be exhausted and shut down. Continued underground development in 1906-1907 allowed for intermittent operation of the mill, but eventually the mine closed down around 1908. Figure 6-1 shows several photographs that were taken in the late 1980's of the head frame, mill, and a bank of 5 stamps. None of the structures shown in Figure 6-1 exist any more as they burned in a fire several years ago. Likewise, the head frame no longer exists on the property as it was dismantled and removed several years ago.

Orr (1954) tabulated the following production and bullion yields in Table 6-3.

Table 6-3: Historical Production and Bullion Yields

Production Period	Tons Milled	Bullion Yield in $US	Yield Per Ton $US	Estimated Au grade (opt) based on a Au price of $20.67 per ounce	Estimated Recovered Au Ounces
July and August 1903	330	$4,700	$14.24	0.69	228
August 1903 to August 1904	9,656	$100,344	$10.39	0.50	4,828
August 1904 to July 1905	12,410	$128,067	$10.32	0.50	6,205
July 1905 to July 1906	12,000	$92,235	$7.69	0.37	4,440
July 1906 to July 1907	12,000	$114,000	$9.50	0.46	5,520
July 1907-October 1907	3,600	$45,000	$12.50	0.60	2,160
1908	Records Unavailable	$6,400	Records Unavailable	Records Unavailable	Records Unavailable
Total	49,996	$490,746	$9.82	0.48	23,381

Figure 6-1: Historical Photographs

Big Hurrah Mill

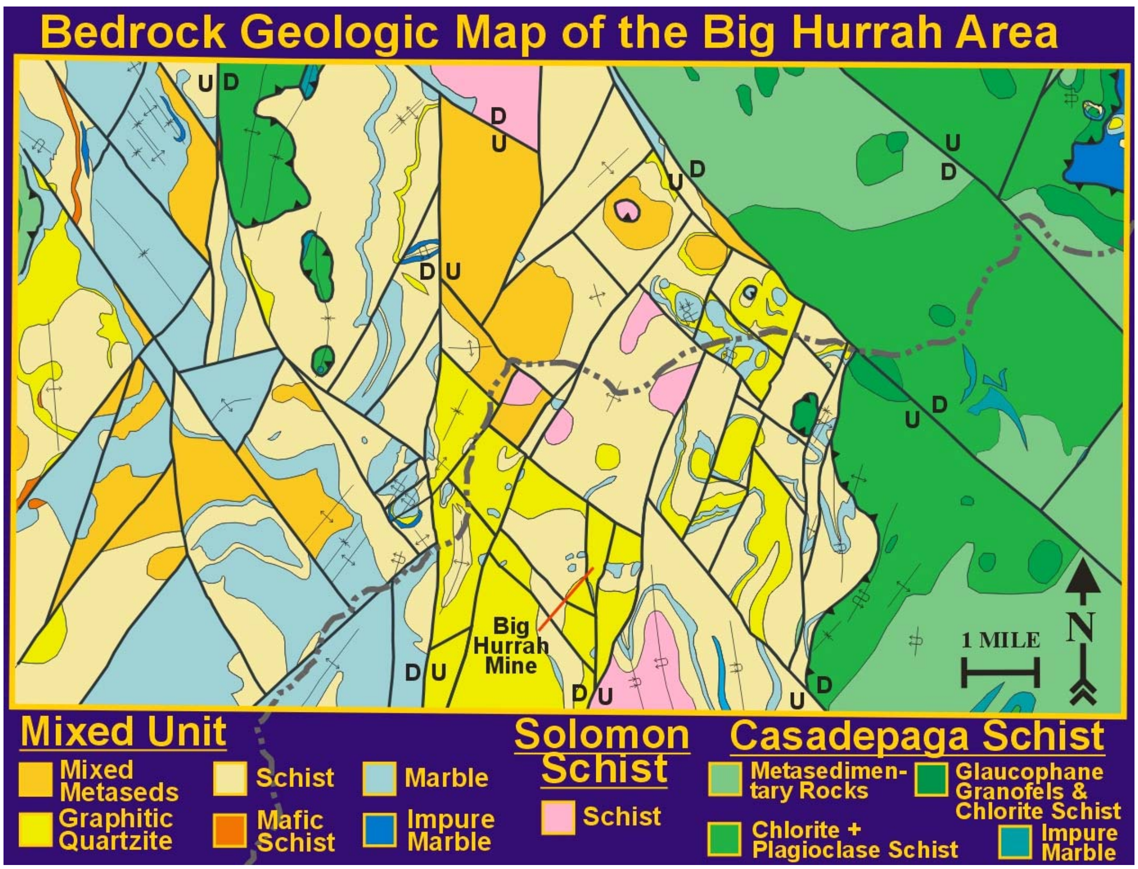
Big Hurrah Head Frame **Mill Stamps**

7.0 GEOLOGICAL SETTING

7.1 Regional Geology

Bedrock geologic units underlying the Big Hurrah are part of the Precambrian to Paleozoic Nome Group. The Nome Group is a regionally extensive suite of rocks that cover most of the Seward Peninsula of Alaska, and was penetratively deformed during the Jurassic period under blueschist facies metamorphic conditions. The Nome Group is composed of interlayered metasedimentary and metaigneous rocks, including schist, mafic schist, mafic granofels, marble, impure marble, quartzite, and metagraywacke. Figure 7-1 is a generalized geologic map by Werdon, et al. (2005).

Figure 7-1: Generalized Geologic Map



Regionally, lithologies have been divided into three discrete units: the Mixed Unit, the Casadepaga Schist and the Solomon Schist.

The Mixed Unit is dominantly composed of metasedimentary rocks, including pelitic schist, marble, impure marble, siliceous schist, graphitic schist, and graphitic quartzite. Rare thin mafic schist layers are also present. The most characteristic feature of the Mixed Unit is its considerable lithologic variability.

The Casadepaga Schist is composed of interlayered metasedimentary and metaigneous rocks, including pelitic schist, intermediate-composition schist and semi-schist interpreted as metamorphosed graywacke of approximately andesitic composition, and lesser mafic schist layers. Isolated mafic granofels bodies are also considered part of the Casadepaga Schist, and probably represent small intrusions or flows. The Casadepaga Schist is interpreted to represent a metamorphosed volcanic-sedimentary sequence.

The Solomon Schist is characterized by its highly uniform pelitic composition, general absence of graphite, and abundance of chloritoid. U-Pb age determinations on detrital zircons from Solomon Schist indicate Ordovician to late Middle Devonian sources for the protolith, therefore a post-late Middle Devonian age. (Werdon et al., 2005).

The spatial geometry, stratigraphic, and (or) structural relationships between units of the Nome Group prior to Jurassic blueschist-facies metamorphism are unknown. In the Big Hurrah area, the Mixed Unit both topographically underlies and overlies the Casadepaga Schist. Lithologic layering is commonly subparallel to foliation, suggesting transposition of original layering. Contacts between the Casadepaga Schist and the Mixed Unit are shown on maps as a dashed red line, reflecting the uncertainty of the nature of the contact.

In most areas, lack of protolith age determinations for Nome Group units precludes determining whether younger over-older relationships are present.

The types of pre-metamorphic contacts between the Casadepaga Schist and the Mixed Unit are poorly known; geologic relationships suggest these units were in proximity to each other prior to Jurassic time.

The Solomon Schist is nowhere in contact with Casadepaga Schist. Because the Solomon Schist is late-Middle Devonian or younger, it may have either stratigraphically or unconformably overlain the Ordovician portion of the Mixed Unit, or have been structurally juxtaposed with the Mixed Unit during ductile deformation.

Both ductile and brittle structures are present in the Big Hurrah area. These features reflect the complex structural history of the Nome Group, spanning the time from Jurassic blueschist-facies metamorphism and deformation, through high-angle faulting that offsets Quaternary glacial deposits.

Nome Group units were deformed, folded, and faulted together during ductile deformation. In the south-central part of the Big Hurrah area, where the Mixed Unit overlies the younger Solomon Schist, the contact appears to be a folded low-angle fault. The Mixed Unit–Casadepaga Schist contacts exhibit lithologic truncations, and appear to have been folded together early in the cycle of deformation. Because all Nome Group units have encountered similar metamorphic conditions, the low-angle faults probably occurred prior to or during the Jurassic– Cretaceous metamorphic–structural event. Some post-metamorphic movement cannot be ruled out.

The most observable ductile structures are isoclinal folds, documented on scales ranging from millimeters to kilometers. Isoclinal recumbent folds are most commonly seen in the Solomon Schist, but are also present in metasedimentary and metavolcanic rocks of all the units of the Nome Group. Isoclinal folds, with limbs parallel to foliation, commonly have north-northeast-trending fold axes. These folds represent the earliest fold generation, which formed during ductile deformation. Foliation in the Big Hurrah area is generally flat lying.

In the northeastern corner of the Big Hurrah area, a low-angle fault with brittle deformation is exposed on a prominent, steep-sided, cinder-cone-shaped hill, nicknamed the “Glaucophane Volcano” (based solely on its volcano-like shape). The low-angle fault exposed at the “Glaucophane Volcano” demonstrates that low-angle faulting occurred after ductile deformation, but timing and lateral extent are unknown.

Broad-scale folds, as indicated by map patterns of the units and folded foliation, are recognized as folds with northeast, north, and northwest-trending axes that occur throughout the Big Hurrah area. Folds with north-northeast trending fold axes appear to represent the youngest generation of folding in the Big Hurrah map area.

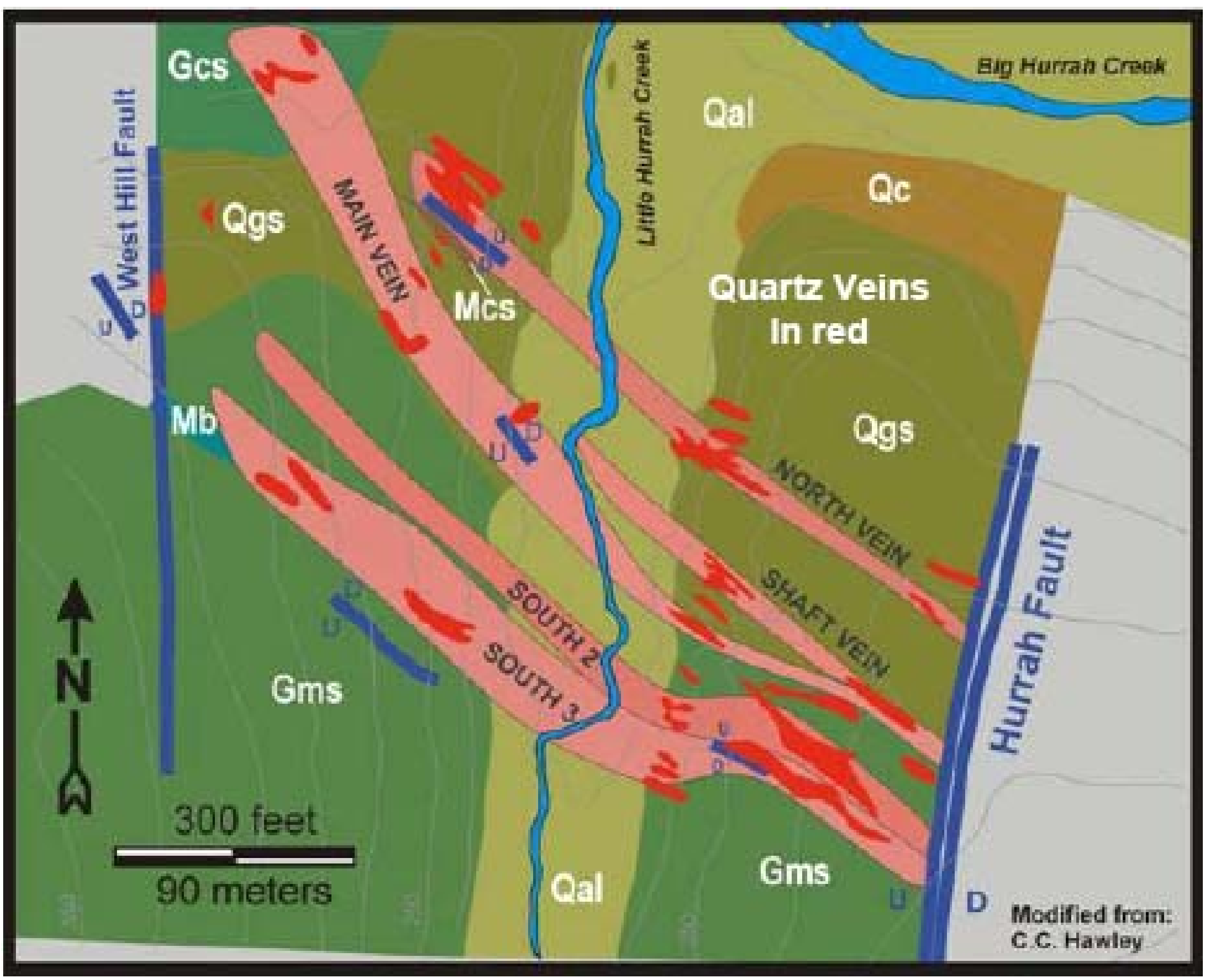
High-angle faults throughout the area are expressed as linear topographic depressions and discontinuity zones on airborne geophysical maps (Burns, et al., 2003). Prominent fault orientations are northwest, north-south, and northeast; the former two generally truncate the latter. The displacements are probably as largely dip-slip, rather than strike-slip movement. Locally, drag folds are present, adjacent to high-angle faults.

Gold-bearing quartz veins, and rare, extension-related alkalic dikes occurred at about 107-115 Ma, as recorded by 40Ar/39Ar ages of hydrothermal white mica associated with gold-bearing quartz veins and biotite from a syenite dike in the Big Hurrah area (Werdon, et. al., 2005). This time interval is regarded as a retrograde metamorphic event from blueschist to greenschist facies metamorphism. Both high- and low-angle faults host gold-bearing quartz veins, and in many cases these faults appear to have been active during quartz deposition. Calc-alkaline intrusions with subduction-related, trace- and major-element compositions and ages of approximately 90-100 Ma are common in the high-grade metamorphic rocks of the central Seward Peninsula (Amato, et al., 2003). A return to extension-related tectonics in the Tertiary to Quaternary is indicated by alkalic mafic igneous activity and associated high-angle faulting. Quaternary alkalic basalt flows and their associated northwest-trending vent site crop out along Bear River in the Solomon D-5 Quadrangle (Till, et al., 1986; Werdon, et al., 2003). Sparse mafic dikes of unknown age are scattered throughout the area, and may be related to igneous activity during Cretaceous to Quaternary time.

7.2 Local Geology

In the Big Hurrah Mine area shown in Figure 7-1, the main lithologic units are the Solomon Schist and the Mixed Unit, termed the Hurrah phyllonite because of its sheared nature. The Hurrah phyllonite is the main host for gold-bearing quartz veins and is in fault contact to the east (Hurrah Fault) with the Solomon Schist. The Hurrah phyllonite consists predominantly of interbedded carbonaceous rocks with gradational contacts. The content of quartz, albite, white mica and carbonate ranges from quartz-muscovite phyllonite with up to 50% white mica to calcareous phyllonite, or marble to quartzitic phyllonite. All of the units of the Hurrah phyllonite contain variable amounts of carbonaceous material. The quartzitic phyllonite forms most of the outcrops in the area of the Big Hurrah Mine and is a dark-colored flaggy, fine-grained siliceous rock composed mostly of quartz with minor amounts of white mica and carbonaceous material. Most of the carbonaceous units contain 3 to 5% disseminate pyrite and lesser amounts of sphalerite and chalcopyrite.

Figure 7-2: Main Lithologic Units in Big Hurrah Mine Area



Read and Meinert (1986) determined that five types of veins can be distinguished in the Big Hurrah Mine area, based upon structural style, mineralogy and fluid inclusions. From oldest to youngest, they are: Type I, early foliation-parallel quartz-carbonate lenses; Type II, tabular tension veins; Type III, ribbon gold-bearing quartz veins; Type IV, quartz-albite ± arsenopyrite veins; and Type V, late carbonate-quartz veins. Type I and II veins are strongly sheared and are pre-mineralization. Type III veins host most of the gold mineralization in the Big Hurrah system. The Type III veins are discontinuous quartz lodes occupying northwest-striking fissures, which are thought to be conjugate faults developed during the late stages of shearing and the greenschist retrograde metamorphic event. Wallrock alteration is limited to minor silicification, carbonatization and quartz stockworking near the Type III veins. Type IV veins are similar in character and orientation to Type II veins, but are thicker, contain up to 25% albite and locally contain up to 20% arsenopyrite. Type IV veins have gold grades significantly higher than background values, but not as high as Type III veins.

8.0 DEPOSIT TYPES

More than one million ounces of placer gold have been produced from the Council-Solomon district. In the Big Hurrah Mine area there are many low-sulfide, gold-bearing quartz veins that are likely the primary lode sources for the placer gold.

In the Big Hurrah Mine area, low-sulfide, gold-bearing, quartz ± arsenopyrite ± stibnite ± iron sulfides ± white mica ± graphite ± carbonate ± plagioclase veins are preferentially hosted by graphitic ± calcareous ± pyritic schist and quartzite in the Hurrah phyllonite (Mixed Unit). These rocks may have supplied reduced sulfur necessary for carrying gold in solution as hydrogen sulfide (HS) complexes, and CO_2 necessary to cause fluid boiling at moderate pressures and temperatures. In the Big Hurrah map area, both low and high-angle faults were structurally active during gold deposition; many of the gold-vein-hosting high-angle faults strike northwest. At the Big Hurrah and Silver (Flynn) mines, native gold is paragenetically late; it is primarily deposited on top of graphite-coated fracture surfaces that are present in sheared (ribbon-textured) quartz veins (Read and Meinert, 1986). The veins are variably anomalous in Au, Ag, As, and Sb, with minor associated Cu, Zn, Pb, and W (Werdon, et. al., 2005). White mica from gold-bearing veins in the Solomon C-4, C-5, D-4, and D-5 quadrangles yielded ages of approximately 107–115 Ma. Gold-bearing quartz veins in the Big Hurrah area are chemically and mineralogically similar to those in the Nome Quadrangle, and probably have a similar genetic origin.

9.0 MINERALIZATION

Gold in the Type III veins commonly occurs as anhedral grains 0.02 to 0.3 mm in size, but coarse gold in masses up to several centimeters is present, and most ribbon veins contain some visible gold. Native gold occurs intergrown with arsenopyrite, along carbonaceous ribbons, in fractures, along quartz grain boundaries and enclosed in coarse-grained quartz. In general, gold grades are dependent upon the abundance of Type III veins and stockwork zones.

10.0 EXPLORATION

Anaconda Copper Company leased the property from the Dallas Mine Company and completed exploration programs on the property in 1980 and 1981. Work by Anaconda Copper Company consisted of aerial photography, surface rock sampling, soil sampling, 506 meters (1,662 feet) of diamond drilling, 1,908 meters (6,261 feet) of surface trenching, trench sampling, geological mapping, and a geophysical survey. In 1982, the property was leased to the Hawley Resource Group.

In 1983, C.C. Hawley (Hawley Resources Group) and others formed Cornwall Pacific Resources Ltd. as a private company and raised private capital to complete a drilling and trenching program. Diamond drilling and surface trenching totaled 1,033 meters (3,388 feet) and 854 meters (2,801 feet) respectively.

Late in the spring of 1985, Cornwall Pacific Resources Ltd. and Nighthawk Resources Ltd. entered into a joint venture agreement to complete a 1,829 meter (6,000 foot) diamond drill program with surface trenching and geologic mapping. Eighteen diamond drill holes totaling 1,972 meters (6,470 feet) were completed. Trenching totaled 555 meters (1,820 feet).

Solomon Gold Corporation (formerly Thor Gold Alaska, Inc.) optioned the property in 1988 and drilled 3,772 meters (12,376 feet) in 91 diamond drill holes. Solomon Gold Corporation retained Keewatin Engineering Inc. to prepare a feasibility study for the Big Hurrah Project, which was completed in June 1989.

In 1997, Placer Dome Exploration Incorporated picked up the property and drilled 19 diamond core holes totaling about 1,839 meters.

Alaska Gold Company, a wholly owned subsidiary of NovaGold Resources Incorporated, purchased the property from Dallas Mine Company in 2002. Alaska Gold conducted both diamond core and reverse circulation drilling campaigns in 2004 and 2005. Assays obtained by Alaska Gold represent about 37 percent of the total drill hole and surface channel sample data that have been collected from the Big Hurrah property. They drilled 31 diamond core holes totaling 1,389 meters and 31 reverse circulation holes totaling 1,564 meters in 2004. Then in 2005, they drilled 14 core holes totaling 1,112 meters and 14 reverse circulation holes totaling 1,116 meters. Since 2002 all exploration work conducted on the Big Hurrah property has been carried out for Alaska Gold using their own geologic staff and various drilling contractors (See Section 13 for more details about the contractors).

11.0 DRILLING

11.1 Pre-Alaska Gold Company Core Drilling

All surface drilling from 1981 through 1997 was diamond core drilling, most of which was HQ size. It is unknown if down-hole surveys were completed. Table 11-1 summarizes the various drill contractors that were used by companies prior to Alaska Gold's drilling campaigns.

Table 11-1: Drill Contractors

Company	Year	Drilling Company
Anaconda	1981	Continental Drilling Company
Cornwall Pacific Resources	1983	Coates
Nighthawk Resources	1985	Coates
Solomon Resources	1988	NANA-Coates
Placer Dome	1997	?

11.2 2004/2005 Alaska Gold Company Core Drilling

Core drilling for Alaska Gold Company in 2004 and 2005 was completed by Layne-Christensen. Surface casing was installed to prevent colluvium and/or weathered bedrock from being washed into the drill hole. The depth of surface casing installation was determined by the stability of the drill hole by examining the core samples.

An HQ drill string assembly was used for drilling and sampling. Fines produced during drilling were collected as sludge samples. Drilling fluids used to aid in boring were water and EZ-Mud.

Down-hole surveys were completed by Sperry-Sun equipment and the oriented core holes drilled in 2005 were surveyed by George Krier, PLS.

11.3 2004 Alaska Gold Company Reverse Circulation Drilling

Reverse circulation drilling in 2004 and 2005 was completed by GF Back Inc. using a casing advance system with a diameter of 15.9 cm (6.25 inch) for the top 4.57 meters (15 feet). During drilling, the casing and drill pipe were simultaneously driven into the ground by the pneumatic action of the hammer assembly. Drill cuttings rose to the surface outside the drill pipe and inside the casing. The top of the casing was fitted with a covered diverter that directed cuttings from the casing through the discharge hose into a cyclone, then into a splitter.

Below the casing either a center return hammer with a diameter of 14.9 cm (5.875 inch) or a tricone bit with a diameter of 14.0 cm (5.5 inch) was used. The center return hammer assembly collected sample from the face of the bit. Tricone bits were used when intensely fractured formation was encountered or the hammer would not function properly. Tricone bits also collect sample through the bit. In both instances reverse circulation dual wall pipe with an outside diameter of 11.4 cm (4.5 inch) carried the cuttings to the surface.

The reverse circulation drilling program utilized a drill mud program where bentonite mud was injected into the annulus of the drill pipe. The slurry was pumped continuously during drilling operations. This application was used to enhance sample recovery and control down-hole contamination. This mud program was used on all resource drilling. None of the RC holes were surveyed down-the-hole. Figure 11-1 is a photograph showing the GF Back reverse circulation drill.

Figure 11-1: RC Drilling

11.4 **Thickness of Mineralization**

The thickness of gold mineralization at Big Hurrah is quite variable with each of the mineralized zones. Most of the drill hole samples ranged between one and two meters in length. Where practical, the holes were drilled so as to cut the mineralized zones at near right angles. Mineralized true thickness ranges from narrow high-grade zones that are measured in centimeters to intervals up to 10-15 meters thick. The mineralized zones trend mine grid north and dip variably to mine grid west.

12.0 SAMPLING METHOD AND APPROACH

12.1 Pre-Alaska Gold Drilling

Little is known about the sampling methods and sampling approaches that were undertaken by the mining companies that drilled core holes prior to Alaska Gold's involvement in the property. There was no specific discussion of those topics in the unpublished internal company reports that were provided to Alaska Gold or, in some cases, no reports were available. Some observations can be made from the inherited drill hole data from those campaigns and is discussed in the following sections. One key point is that the majority of the recovered drill core was not sampled by the first four companies that conducted drilling operations in the camp (i.e. Anaconda, Cornwall Pacific, Nighthawk, and Solomon). Apparently, those companies decided to save money by only assaying intersections that were believed to be mineralized. Alaska Gold assayed available drill core from several of the older drilling campaigns (material that had never been analyzed) and in some cases, obtained significant gold assay results.

12.2 Anaconda Core Drilling

Anaconda drilled five diamond core holes totaling about 505 meters in 1981 but only assayed about 30% of the total meterage that they drilled. The samples that were assayed averaged about 1.40 meters in length with the shortest and longest samples being around 0.43 meters and about 3.05 meters long, respectively. According to Anaconda's drill logs, Continental Drilling was used in their diamond drilling campaign. The five Anaconda diamond core holes are located near the northern end of the currently recognized Big Hurrah deposit.

12.3 Cornwall Pacific Resources Ltd. Core Drilling

Cornwall drilled eleven diamond core holes totaling about 1,033 meters in 1983 and assayed about 50% of the total meterage that they drilled. The samples that were assayed averaged about 1.40 meters in length with the shortest and longest samples being around 0.15 meters and about 2.90 meters long, respectively. It is not known what drill contractor was used. The eleven Cornwall Pacific diamond core holes are located near the central portion of the currently recognized Big Hurrah deposit.

12.4 Nighthawk Resources Inc. Core Drilling

Nighthawk drilled eighteen diamond core holes totaling about 1,972 meters in 1985 but only assayed about 25% of the total meterage that they drilled. The samples that were assayed averaged about 1.04 meters in length with the shortest and longest samples being around 0.15 meters and about 6.49 meters long, respectively. According to Nighthawk's drill logs, Nana-Coates Drilling was used in their diamond drilling campaign. The eighteen Cornwall Pacific diamond core holes are located along the entire length of the main mineralized portion of the currently recognized Big Hurrah deposit.

12.5 **Solomon Resources Core Drilling**

Solomon drilled ninety-one diamond core holes totaling about 3,770 meters in 1988 but only assayed about 30% of the total meterage that they drilled. The samples that were assayed averaged about 0.78 meters in length with the shortest and longest samples being around 0.06 meters and about 3.05 meters long, respectively. According to Solomon's drill logs, Nana-Coates Drilling was used in their diamond drilling campaign. Nearly all of the ninety-one Solomon Resources diamond core holes are located along the entire length of the main mineralized portion of the currently recognized Big Hurrah deposit.

12.6 **Placer Dome Core Drilling**

Placer Dome drilled nineteen diamond core holes totaling about 1,839 meters in 1997. Placer assayed most of the diamond drill core that they recovered with an average sample length of about 1.5 meters. It is not known what drill contractor Placer Dome used. The nineteen Placer Dome diamond core holes are located along the entire length of the main mineralized portion of the currently recognized Big Hurrah deposit.

12.7 **Alaska Gold Reverse Circulation Drilling**

Alaska Gold drilled 84 reverse circulation holes during 2004 and 2005 totaling about 4,556 meters. These holes are located along the entire length of the main mineralized portion of the currently recognized Big Hurrah deposit. In addition, a number of the reverse circulation holes were drilled to the south of the main resource area.

Drill cuttings were discharged from the cyclone into a rotating wet splitter. The splitter is sectioned into sixteen pie-shaped wedges. The volume of sample was reduced by covering one-half (4 wedges) of the pie-shaped sample wedges resulting in a ¼ split collected as sample for analysis. Cuttings exiting the splitter were collected in a three tiered cascading system using three 5-gallon buckets with inserts. Inserts reduce turbidity created from sample and fluid exiting the splitter. After an interval was drilled, buckets were removed and set aside to settle. After settling, the sample was decanted and transferred into a numbered sample bag, which was closed with a wire tie to seal the bag.

Chip trays were filled with character samples for each hole. The samples were then logged by an Alaska Gold geologist present on site.

This process was repeated for each interval. Continuous samples were collected for each 1.52 meter (5 feet) interval. Each sample was allowed to dry, then removed from the field and staged at the Big Hurrah camp site. A final check was made for numbering continuity and sample count, and then samples were placed in supersacks and transported to the airport in Nome. The samples were transported to Alaska Analytical Laboratories Inc. in Fairbanks Alaska by Everts Air Cargo.

The entire drilling and sampling process was supervised by an Alaska Gold geologist and all samples were collected by Alaska Gold personnel. Figure 12-1 shows the rotary splitter that was used to collect the RC samples.

Figure 12-1: Rotary Splitter

Figure 12-2 shows a close-up view of the rotary splitter during wet drilling conditions. A series of buckets are placed under the sample output port collecting all of the cuttings, drilling mud, and water until the 1.52-meter-long sample is collected. The filled buckets are set to the side, allowed to settle, and the water decanted off.

Figure 12-2: Wet RC Sampling

12.8 **Alaska Gold Core Drilling**

Alaska Gold drilled 45 diamond core holes in 2005 and 2005 totaling about 2,500 meters of drilling. These holes are located along the entire length of the main mineralized portion of the currently recognized Big Hurrah deposit.

Core samples were collected in a triple-tube core barrel then placed in core boxes. Run blocks were inserted into the core at the end of each run. The core boxes were then transported to the Big Hurrah core logging facility and logged by an Alaska Gold Company geologist.

Core boxes were brought into the core shack and laid out on tables. Each box was examined by the geologist for any errors such as core placed in the box backwards, errors in labeling core boxes and core run blocks. The core run blocks footages were then converted from feet to meters and core was rotated so alignment was consistent. Core was washed. Core recovery and RQD were measured for each core run. The core was then logged, recording lithology and all geologic features, alteration, mineralization and geologic structure. Sample intervals (generally 2 meters) were then determined and sample numbers assigned from sample books. A sample tracking sheet and graphic log were then completed and the core was photographed.

Core was sampled in 2-meter (6.6 ft) intervals; the entire core sample was submitted for analysis. Samples were assigned numbers, photographed, placed in bags and sealed with wire ties. A final check was made for numbering continuity and sample count, and then samples were placed in supersacks and transported to the airport in Nome. The samples were transported to Alaska Analytical Laboratories Inc. in Fairbanks Alaska by Everts Air Cargo.

A series of nine diamond core holes totaling about 600 meters were drilled in late May and early June of 2005 for geotechnical purposes. The location and orientation of these drill holes were selected by Mr. Jim Swaisgood, a consulting engineer who provided geotechnical services for Alaska Gold. The holes were primarily located along the perimeter of the proposed pit, and were oriented so that the drill holes intersected the highwall of the ultimate design pit. Table 12-1 summarizes the locations of the nine geotechnical holes with respect to the mine grid and the orientations. Drill hole OC-06 intersected old mine working at a depth of 34.44 meters. This hole was re-drilled as hole OC-6B near the same location. All oriented drill holes were designated as HOC05-# (Hurrah Oriented Core 2005) following drill hole naming convention for this location.

Table 12-1: List of Oriented Core Holes

Drill Hole	Mine Grid Coordinates		70° Plunge Direction [1]	Hole Depth (meters)
	East	North		
OC-01	150	450	NW	75
OC-02	230	450	NE	100
OC-03	170	430	W	100
OC-04	230	430	E	75
OC-05	200	350	W	50
OC-6B	250	300	E	50
OC-07	240	250	W	50
OC-08	230	200	SW	50
OC-09	280	200	SE	50

[1] Plunge direction in relation to mine grid directions

Jim Swaisgood visited the Big Hurrah property at the beginning of the oriented core drilling program and established core logging parameters. A core logging form was used to capture structural information including angles of structures with respect to the core axis and angle of rotation from an orientation or scribe line. In addition, the type of breakage and roughness of the breakage surfaces were noted on the log. Mr. Swaisgood selected a series of rock samples representing each type of lithology that were shipped to his laboratory for subsequent rock mechanics testing.

All oriented core holes were logged using Alaska Gold's standard core logging forms as well as the specific orientation structural log created by Mr. Swaisgood. The core from these holes was photographed prior to logging and sampled for gold after the geotechnical studies were completed. Two of the oriented core holes were sawn in half for sampling so that a representative sample of oriented core could be kept.

In general, it was difficult to orient most of the cored intervals due to problems associated with the drillers scribe mark and the incompetent nature of schistose rock types. Figure 12-3 summaries the type of data that were collected from the oriented core program.

Figure 12-3: Oriented Core Logging Parameters

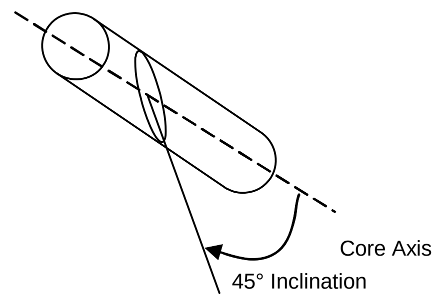
TYPE (Type of break)
F = Foliation
J = Joint

WIDTH = Width of break if filling p

FILLING (Filling material)
L = limonite
C = Calcite
Q = Quartz
O = Other

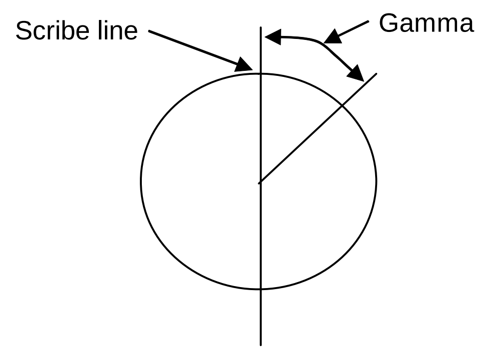
ROUGHNESS
1 = Large Asperities can be seen
2 = Break surface feels abrasive and asperities can be seen
3 = No asperities; smooth to touch
4 = Smooth and shiny (slickensided)
5 = slickensided graphite or mica

ALPHA = Angle of inclination with core axis



For an angle hole true dip is not usually known so planes are measured relative to core axis and called inclination

GAMMA = Radial angle of top of break to scribe line at top of hole



Alpha was measured using a clear scale protractor. Gamma was measured using a strip of plastic flagging with calibrated angle marks every 15°.

12.9 Trench Sampling

Little is known about the surface trench samples that were collected during the 1980's by Anaconda, Cornwall Pacific, and Placer Dome. The author did not use trench assay data to estimate Mineral Resources. These data were used along with drill hole assays to classify the Mineral Resources. Most of the trenches were located along the mine grid eastern and northern ends of the currently recognized Big Hurrah deposit.

12.10 Relevant Drill Hole Composites

Table 12-2 summarizes significant 2.5-meter-long drill hole composite gold grades. A 10 g/t gold cutoff grade was used in developing the list of relevant samples.

Table 12-2: Relevant Drill Hole Composites

Drill Hole	From	To	Length	Au (g/t)
HC04-228	20.0	22.5	2.5	13.604
HC04-230	2.5	5.0	2.5	11.136
HC04-230	5.0	7.5	2.5	10.098
HC04-232	20.0	22.5	2.5	14.720
HC04-232	22.5	25.0	2.5	12.388
HC04-234	37.5	40.0	2.5	20.005
HC04-234	40.0	42.5	2.5	30.188
HC04-235	2.5	5.0	2.5	24.460
HC04-237	25.0	27.5	2.5	14.948
HC04-237	27.5	30.0	2.5	10.724
HC04-237	30.0	32.5	2.5	12.620
HC04-238	22.5	25.0	2.5	16.984
HC04-238	25.0	27.5	2.5	12.934
HC04-242	17.5	20.0	2.5	14.046
HC04-242	20.0	22.5	2.5	10.810
HC04-246	0.0	2.5	2.5	10.100
HC04-257	22.5	25.0	2.5	11.445
HC04-263	27.5	30.0	2.5	10.024
ADH-81-05	20.0	22.5	2.5	15.729
WDH-83-01	5.0	7.5	2.5	23.994
WDH-83-01	7.5	10.0	2.5	55.223
WDH-83-02	27.5	30.0	2.5	14.344
WDH-83-05	35.0	37.5	2.5	15.042
WDH-83-05	37.5	40.0	2.5	16.835
WDH-83-05	47.5	50.0	2.5	23.401
WDH-83-06	47.5	50.0	2.5	10.779
A-85-04	55.0	57.5	2.5	17.501
A-85-04	60.0	62.5	2.5	10.074
AA-85-02	7.5	10.0	2.5	15.134
AA-85-02	10.0	12.5	2.5	14.043
B-85-06	12.5	15.0	2.5	20.200
B-85-06	97.5	100.0	2.5	23.332
C-85-04	32.5	35.0	2.5	15.033
G-85-01	35.0	37.5	2.5	17.506
G-85-01	37.5	40.0	2.5	40.843
G-85-01	40.0	42.5	2.5	16.326
H-85-01	7.5	10.0	2.5	15.510
H-85-01	10.0	12.5	2.5	28.191
H-85-03	67.5	70.0	2.5	25.449
H-85-03	70.0	72.5	2.5	13.437
H-85-03	75.0	77.5	2.5	40.175
H-85-03	77.5	80.0	2.5	23.854
A-88-63	12.5	15.0	2.5	12.302
A-88-64	17.5	20.0	2.5	24.625
A-88-64	22.5	25.0	2.5	23.847
AA-88-59	25.0	27.5	2.5	11.654
AAA-88-60	7.5	10.1	2.6	20.096
AAA-88-61	20.0	22.5	2.5	10.570
AAA-88-62	20.0	22.5	2.5	15.398
AAA-88-62	22.5	25.0	2.5	14.715
AB-88-68	5.0	7.5	2.5	17.401
AB-88-68	7.5	10.0	2.5	13.652
AB-88-71	20.0	22.5	2.5	14.788
BC-88-75	2.5	5.0	2.5	12.960
BC-88-76	2.5	5.0	2.5	16.219
CD-88-84	17.5	20.0	2.5	11.835
D-88-53	20.0	22.5	2.5	11.165
D-88-54	15.0	17.5	2.5	18.043
D-88-54	17.5	20.0	2.5	11.225
D-88-54	22.5	25.0	2.5	149.696
D-88-55	32.5	35.0	2.5	10.243
E-88-46	45.0	47.5	2.5	18.546
EF-88-41	35.0	37.5	2.5	14.958
EF-88-42	15.0	17.5	2.5	163.218
F-88-02	30.0	32.5	2.5	55.137
F-88-90	20.0	22.5	2.5	32.883
FG-88-38	45.0	47.5	2.5	11.074
GH-88-17	17.5	20.0	2.5	50.060
GH-88-35	57.5	60.0	2.5	14.134
H-88-20	17.5	20.0	2.5	13.925
H-88-34	40.0	42.5	2.5	85.278
H-88-95	35.0	37.5	2.5	117.983
H-88-95	40.0	42.5	2.5	59.314
H-88-95	42.5	45.0	2.5	65.981
HI-88-22	20.0	22.5	2.5	117.135
I-88-88	17.5	20.0	2.5	15.639
I-88-88	32.5	35.0	2.5	16.313
I-88-88	40.0	42.5	2.5	21.197
LM-88-33	20.0	22.5	2.5	17.899
BH-97-16	17.5	20.0	2.5	10.555
HR04-255	37.5	40.0	2.5	18.945
HR04-259	12.5	15.0	2.5	12.983
HR04-261	20.0	22.5	2.5	19.541
HR04-264	7.5	10.0	2.5	35.424
HR04-264	10.0	12.5	2.5	27.798
HR04-264	15.0	17.5	2.5	15.456
HR04-270	17.5	20.0	2.5	11.386
HR04-272	20.0	22.5	2.5	44.338
HR04-273	5.0	7.5	2.5	22.901
HR04-277	57.5	60.0	2.5	60.819
HR04-277	60.0	62.5	2.5	52.360
HR04-278	32.5	35.0	2.5	12.326
HR04-279	22.5	25.0	2.5	14.104
HR04-279	25.0	27.5	2.5	20.028
HR04-280	0.0	2.5	2.5	19.805
HR04-281	20.0	22.5	2.5	17.931
HR04-283	15.0	17.5	2.5	17.782
HR04-283	17.5	20.0	2.5	44.273
HR04-285	25.0	27.5	2.5	16.256
HR04-285	27.5	30.0	2.5	18.210
HR05-292	17.5	20.0	2.5	18.065
HR05-311	12.5	15.0	2.5	10.919
HR05-317	35.0	37.5	2.5	15.080
HR05-318	35.0	37.5	2.5	15.929
HR05-319	25.0	27.5	2.5	20.376
HR05-340	27.5	30.0	2.5	16.883

12.11 **Sample Quality**

The author made a number of comparisons between the different sampling campaigns as a part of data verification as required by NI 43-101 (see Section 14). There is clearly a low-bias associated with the Placer Dome gold assays when they are compared against Alaska Gold and Solomon Resource assays. It is the opinion of the author that the Placer Dome assays are too low, but they were used without any adjustment to estimate Mineral Resources. There appears to be a reasonable correlation between the Solomon and Nighthawk data with one another and with the Alaska Gold data, and in the author's opinion these data can be used to estimate Mineral Resources.

13.0 SAMPLE PREPARATION, ANALYSES AND SECURITY

13.1 Sample Preparation and Analyses

In 2004, all drill holes samples were submitted to ALS Chemex Laboratories in Fairbanks, AK for metallic screen analysis (MSA). ALS Chemex has attained ISO 9001:2000 registration at all of their North American laboratories. The MSA procedure consists of pulverization of the entire 4 kilogram sample to 85% passing 75 microns, homogenization of the sample and duplicate 30 gram fire assays completed on the -75 micron fraction and a fire assay on the entire oversize fraction. Total gold content, individual assay grades, and all weight fractions were calculated and reported. A final weighted average gold grade was then calculated using the sample weights from each size fraction and their associated assay grades.

All 2005 drill samples were submitted to Alaska Analytical Laboratories in Fairbanks, AK for sample preparation. Each sample was dried, crushed to 90% passing -2 mm (10-mesh), a 4 kg split was taken and pulverized to 85% passing -75 micron (200-mesh). The 4 kg split was homogenized and a 30 gram sample was analyzed for gold by fire assay with an atomic absorption finish and 30-element ICP-AES analysis by BSI Inspectorate in Sparks, Nevada. All samples with gold values greater than 3 grams/tonne were automatically re-assayed by fire assay Gravimetric techniques.

For samples greater than 0.5 gram/tonne, another 4 kg split from the reject material was prepared and sent to ALS Chemex for Metallic Screen Analysis (MSA). The MSA procedure consists of pulverization of the entire 4 kg sample to >85% passing 75 microns, homogenization of the sample and duplicate 30g Fire Assay on the -75 micron fraction, and Fire Assay on entire oversize fraction. Total gold content, individual assays and weight fractions are calculated and reported. The weighted average of the two fractions was calculated and the final gold value reported. The author checked several of the Chemex MSA grade calculations and found them to be correct.

13.2 Sample Security - Storage

Skeletal and split core samples from the Big Hurrah project are stored in locked containers at the property site, with the exception of orientated core samples collected during the 2005 field season. A library of 2005 orientated core samples are stored in a secured AGC warehouse in Nome, AK.

Representative rock chips collected from reverse circulation drilling at the Big Hurrah project are stored in chip trays labeled with their respective boring ID and intervals from which they were collected. These referenced chip trays are stored in a secured AGC warehouse in Nome, AK.

Samples collected from the 2004 core and reverse circulation drilling programs were submitted to the ALS Chemex preparation laboratory in Fairbanks, AK. Coarse reject samples from these preparations are in secured storage at the ALS Chemex facility in Fairbanks, AK. Pulp samples collected from the initial split were forwarded to the ALS Chemex assay laboratory in Vancouver, B.C. and/or their Elko, NV laboratory. These referenced pulps are stored in a secure facility at one of the previously mentioned ALS Chemex facilities or in a secured NovaGold warehouse located in Vancouver, B.C.

Samples collected from the 2005 core and reverse circulation drilling programs were submitted to the Alaska Assay Labs preparation laboratory in Fairbanks, AK. Coarse reject samples from these preparations are in secured storage at the Alaska Assay Labs preparation facility. Pulp samples collected from the initial split were forwarded to BSI Inspectorate in Sparks, NV. These referenced pulps are in secured storage at the BSI Inspectorate facility. Assays greater than 0.5 g/t gold had the respective coarse reject sample pulled from storage at Alaska Assay labs. A 4 kilogram split was made from the course reject, and submitted to ALS Chemex in Fairbanks, AK. The sample was then prepared and the pulp sent to the ALS Chemex laboratory in Vancouver, B.C. and/or their Elko, NV lab.

It is the opinion of the author that the Alaska Gold samples that were prepared and assayed by ALS Chemex are adequate and reasonable. In addition, the samples had adequate security during all phases of their collection, transportation, and analysis.

14.0 DATA VERIFICATION

14.1 Pre-2004 Assay Data

Prior to 1997, a significant percentage of sample analyses were completed by laboratories that no longer exist, but those labs were considered to be reputable and widely used by major and junior mining companies during the 1980's and 1990's. For example, Bondar-Clegg & Company Ltd. was acquired by Chemex Labs Ltd., which is now known as ALS Chemex. Rainbow Resource Labs, Inc., which was owned by Skyline Labs of Tucson, AZ, was sold and is no longer in operation. Table 14-1 lists the commercial assay labs that were used by companies prior to Alaska Gold's involvement with the Big Hurrah property.

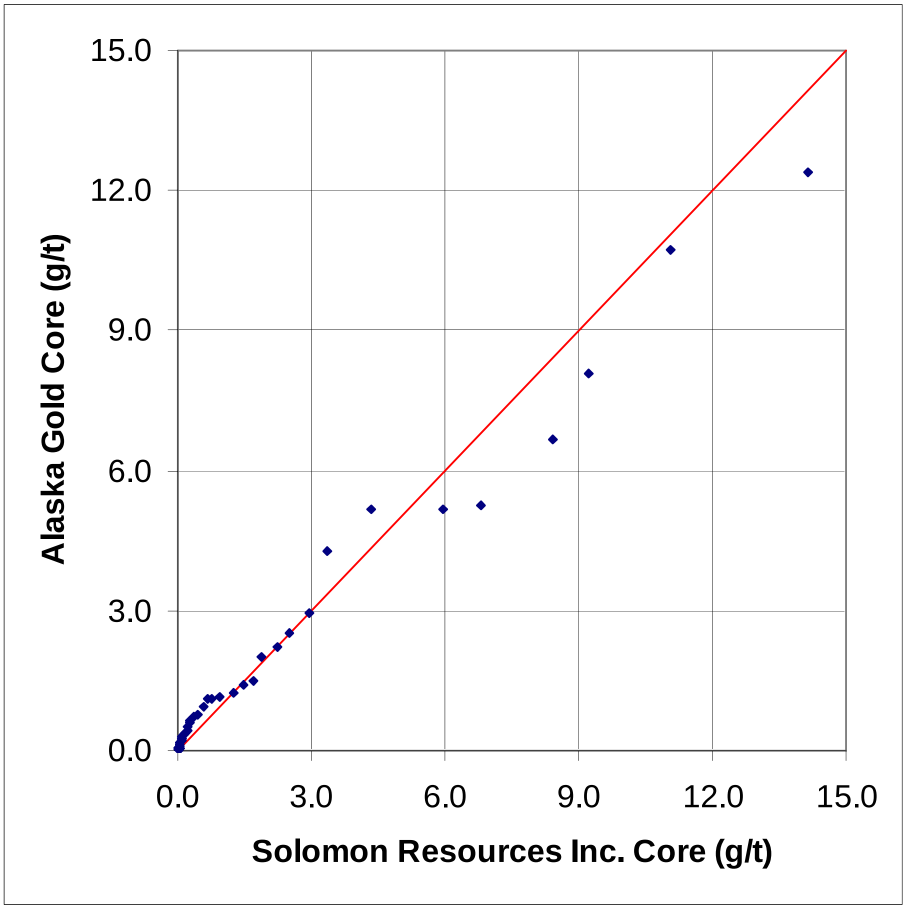
Table 14-1: Assay Labs Used For Older Data

Company	Year	Assay Lab
Anaconda Mining Company	1981	Bondar-Clegg & Company Ltd. and Chemex Labs Ltd.
Cornwall Pacific Resources Ltd.	1983	Bondar-Clegg & Company Ltd. and Rainbow Labs Inc.
Solomon Resources Ltd.	1988	Chemex Labs Inc.
Placer Dome Exploration Inc.	1997	Chemex Labs Inc.

The author was not able to obtain quality assurance/quality control (QA/QC) data for the pre-Alaska Gold Company assay data. Mining companies typically did not have QA/QC protocols similar to those that are used in "today's" exploration environment. For example, the submission of blind standards and blanks was not typically done. It was common for mining companies to send out "check assays" to various commercial labs in order to "check" the results from their primary lab. The commercial labs typically used their own internal standards and blanks as a part of their own QA/QC program.

In order to validate the assays from the older drilling data, the author compared each of the drill campaigns with Alaska Gold Company core hole assays, which have been validated by appropriate QA/QC protocols. The raw assay data were composited into 2.5-meter uniform lengths and then the older drill campaign composites were spatially paired with 2004 and 2005 Alaska Gold core samples. A maximum separation distance of 23 meters between the two sample pairs was used. A series of quantile-quantile (QQ) plots were generated to compare the distribution of gold grades between the paired data. Figure 14-1 compares Solomon Resources Ltd. and Alaska Gold Company core hole assays. The Solomon Resource core hole data represents about 24% of the assay data that were used to estimate Mineral Resources.

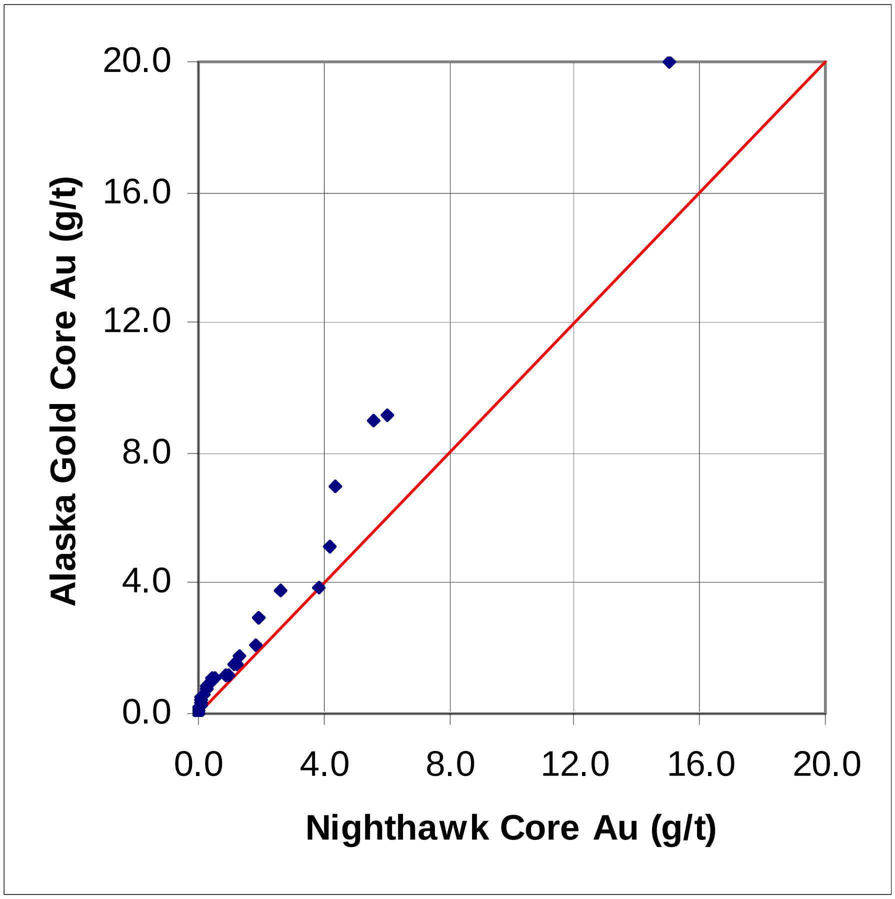
Figure 14-1: Solomon Resource vs. Alaska Gold Core Hole Assays



In general, there is a good comparison between the paired sample data. In the author's opinion, the Solomon assays can be used to estimate Mineral Resources.

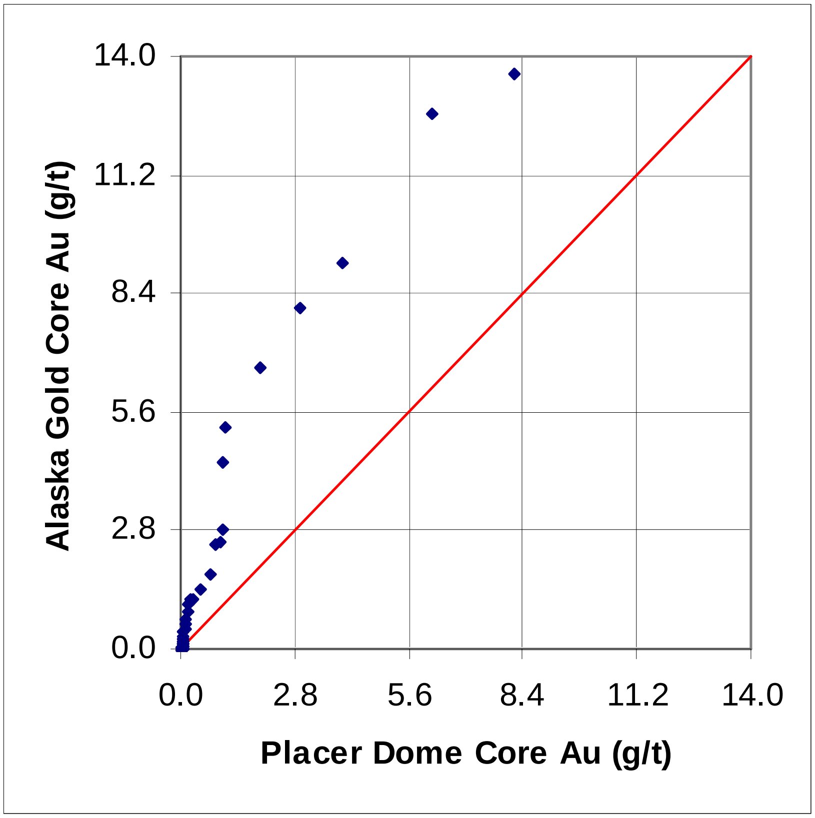
Similar QQ plots were generated for the other older drilling campaigns, for example, Figure 14-2 compares Nighthawk Resources assays with Alaska Gold assays. The Placer Dome assays were found to correlate poorly with both Alaska Gold and Solomon Resource assays as shown in Figure 14-3.

Figure 14-2: Nighthawk Resources vs. Alaska Gold Core Hole Assays



There is a slight bias between the Nighthawk core hole data and the Alaska Gold core hole data. In the author's opinion, this is not to be unexpected when pairing data that came from relatively narrow quartz veins, some of which are quite high-grade. The Nighthawk core hole data represent about 13% of the gold assays that were used to estimate Mineral Resources.

Figure 14-3: Placer Dome vs. Alaska Gold Core Hole Assays



There is clearly a low-bias associated with the Placer Dome gold assays when they are compared against Alaska Gold and Solomon Resource assays. It is the opinion of the author that the Placer Dome assays are too low, but they were used without any adjustment to estimate Mineral Resources. The Placer Dome assays represent about 12% of the total assayed intervals at Big Hurrah. The author examined the distribution of the Placer Dome core holes and found that they are not clustered and tend to be surrounded by other drill campaigns. In the opinion of the author, assays from the Placer Dome holes may be downgrading the estimated block gold grades, but the effect is localized immediately adjacent to the Placer drill holes.

14.2 Alaska Gold Company QA/QC Protocol

The Alaska Gold Company diamond core and RC samples represent about 41% of the assay data that were used to estimate Mineral Resources. In 2004, the Alaska Gold sample data were assayed by Chemex in Vancouver, B.C. Alaska Gold's 2005 sample data were assayed by Alaska Assay. 2005 samples in excess of 0.5 g/t were sent to Chemex in Vancouver for metallic screen fire assay analysis. For both the 2004 and 2005 drilling programs Alaska Gold established a quality assurance/quality control (QA/QC) program consisting of inserting 1 standard reference material (SRM) and 1 blank for every

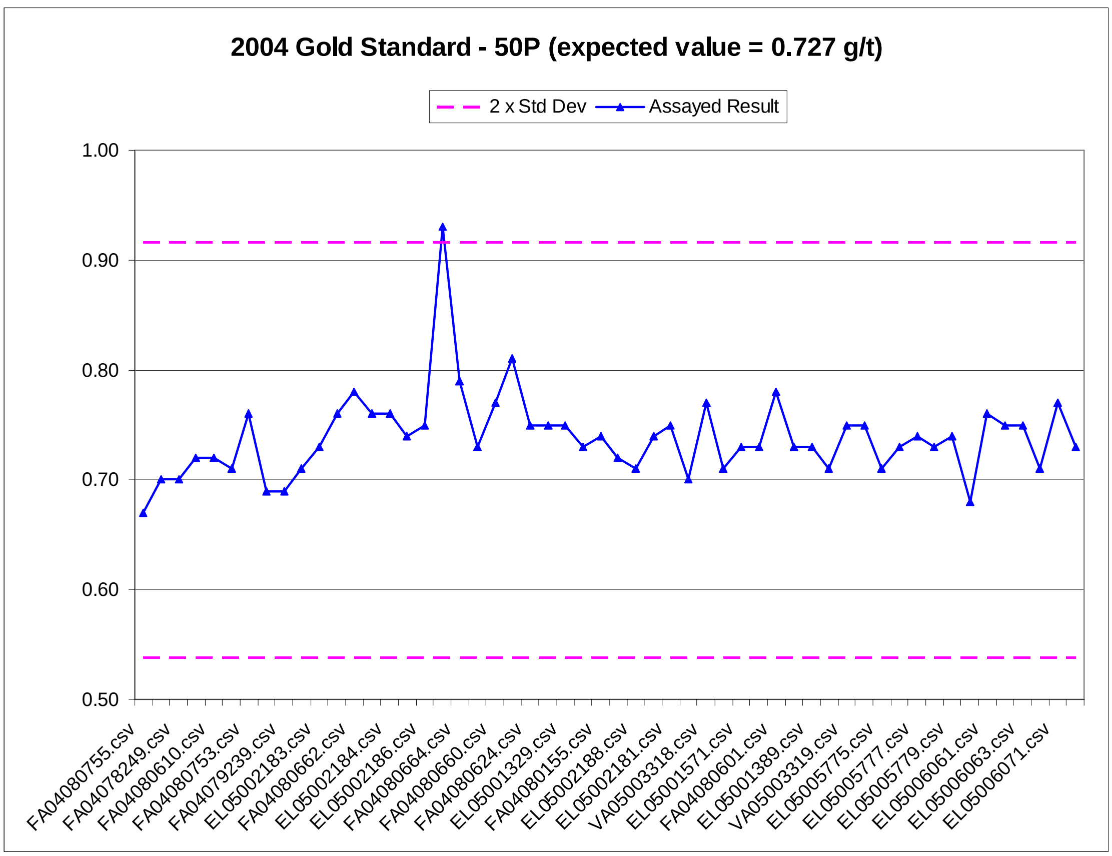
20 samples. In addition, each laboratory prepared a duplicate sample from the submitted core and/or RC samples and assayed them as a “duplicate” sample.

Three SRMs were purchased from Ore Research & Exploration Pty Ltd. by Alaska Gold. These three SRMs are referred to as OREAS 7Pa, OREAS 15Pz, and OREAS 50P with expected gold grades values in grams per tonne of 3.00, 1.27, and 0.727, respectively. The “blank” material was collected by Alaska Gold geologists from siliceous marble outcrops located north of Nome.

14.3 **2004 QA/QC Results**

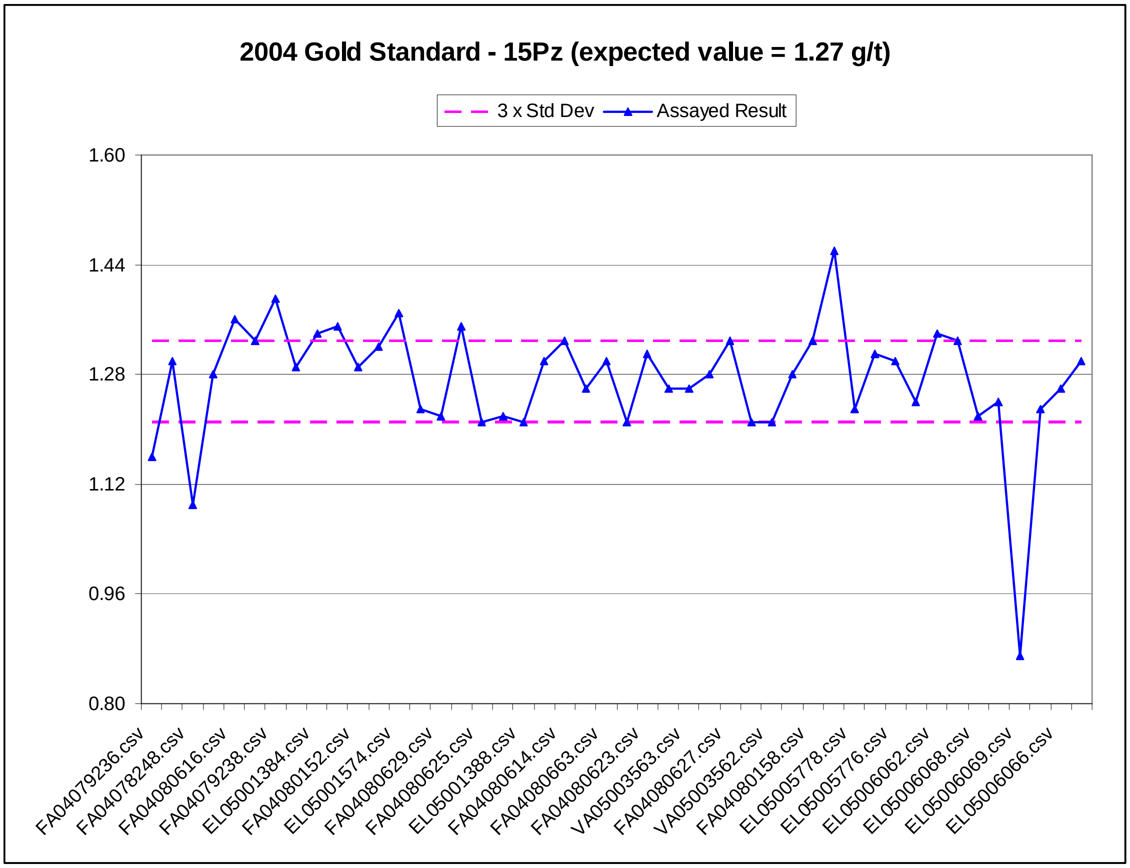
Figure 14-4, Figure 14-5, and Figure 14-6 show the results for two of the SRMs and the blanks that were submitted by Alaska Gold to Chemex.

Figure 14-4: Results for 2004 Gold Standard 50P



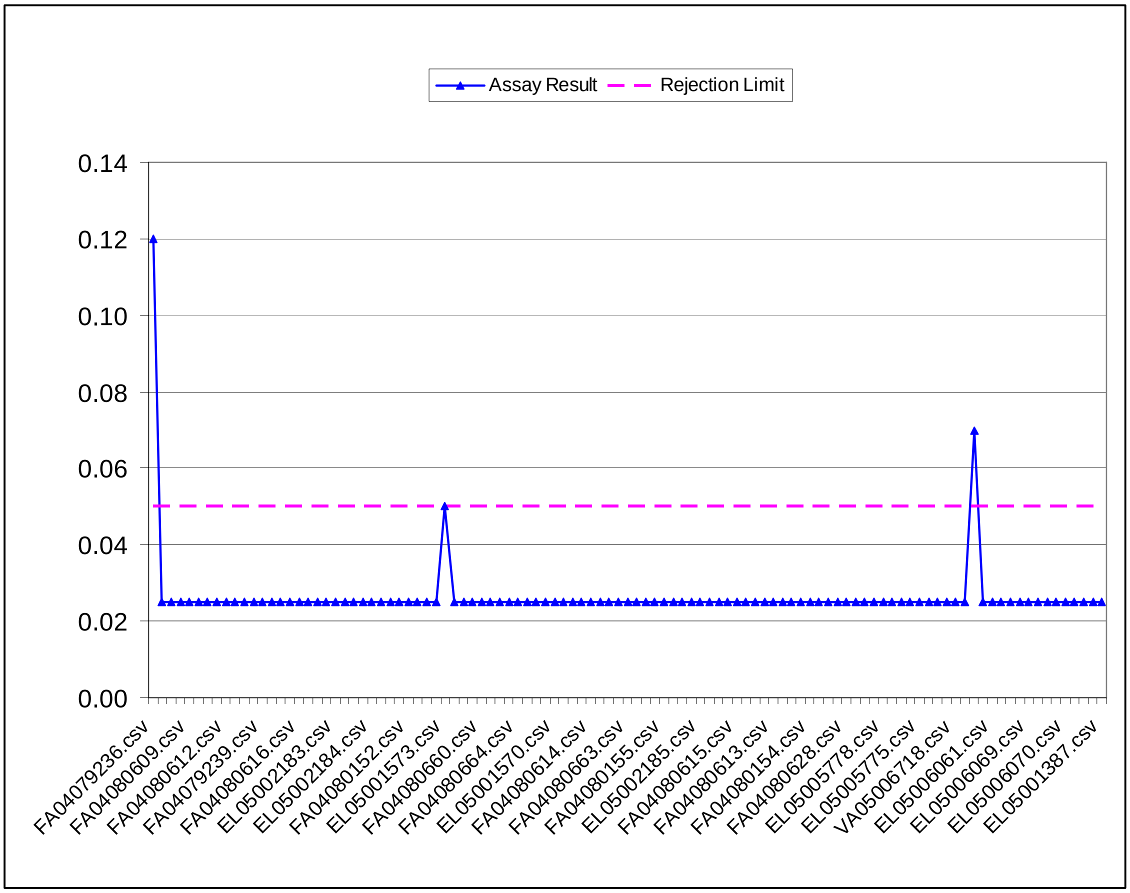
There was only one of the 50P standards that assayed outside of two standard deviations of the expected value of 0.727 g/t. Based on these results it appears that Chemex was doing a good job of assaying material in the range of 0.7 g/t.

Figure 14-5: Results for 2004 Gold Standard 15Pz



Several of the 15Pz standards assayed outside of three standard deviations of the expected value of 1.27 g/t. In general it appears that Chemex was doing a good job of assaying material in the range of 1.27 g/t. According to Alaska Gold personnel, none of the assays associated with the SRM's that were outside of 3 standard deviations were re-assayed because most of the sample was consumed by the metallic screen assay procedure.

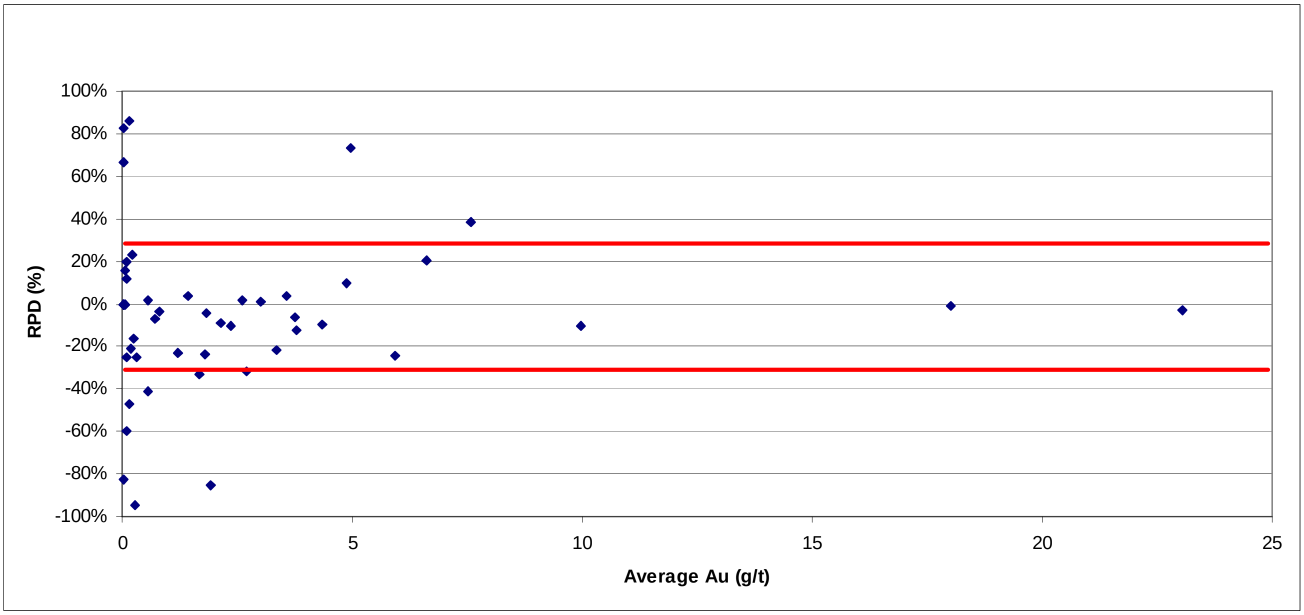
Figure 14-6: Results for 2004 Blanks



As can be seen in Figure 14-6, two blanks that were sent to Chemex in 2004 assayed greater than the rejection limit for blank or barren material. According to Alaska Gold personnel, none of the assays associated with the two blanks that returned assay values greater than 0.05 g/t were re-assayed.

A comparison was made between 92 duplicate samples that were assayed by Chemex by graphing the relative percent difference (RPD) between the two samples. Figure 14-7 shows that comparison.

Figure 14-7: RPD Graph of 2004 Chemex Assays



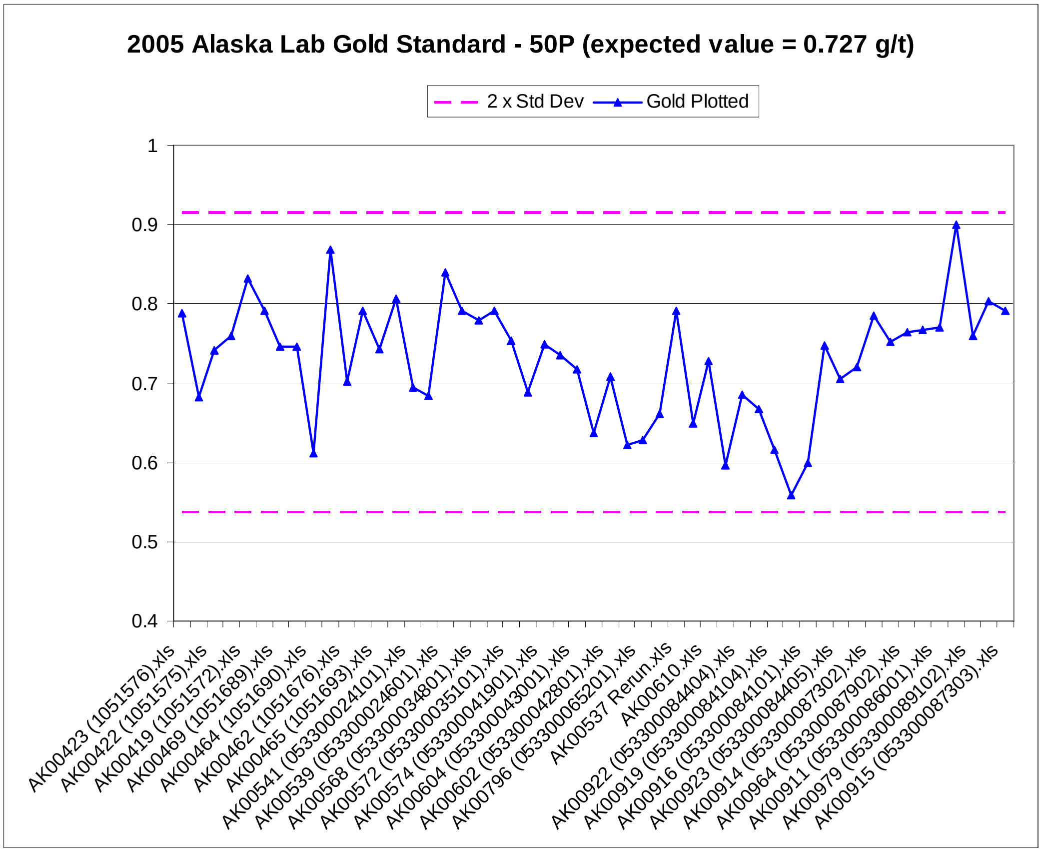
Statistically, the duplicate assays that were completed by Chemex in 2004 did not compare favorably with the original assays. Typically, it is recognized that for a good comparison between duplicate assays generated from coarse reject material and the original assays, 90% of the assay pairs should be within ± 30% of one another. Eighty-five percent of 2004 duplicate samples were within ± 30% of one another. As can be seen in Figure 14-7, most of the "deviant" sample pairs tend to be relatively low-grade material. In general, there is no distinct bias in the duplicate assays.

Given the coarse nature of gold at Big Hurrah it is not surprising to see duplicate assay performance like that shown in Figure 14-7. It is the author's opinion that the 2004 Chemex assays are reasonable and can be used to estimate Mineral Resources.

14.4 **2005 Alaska Assaying QA/QC Results**

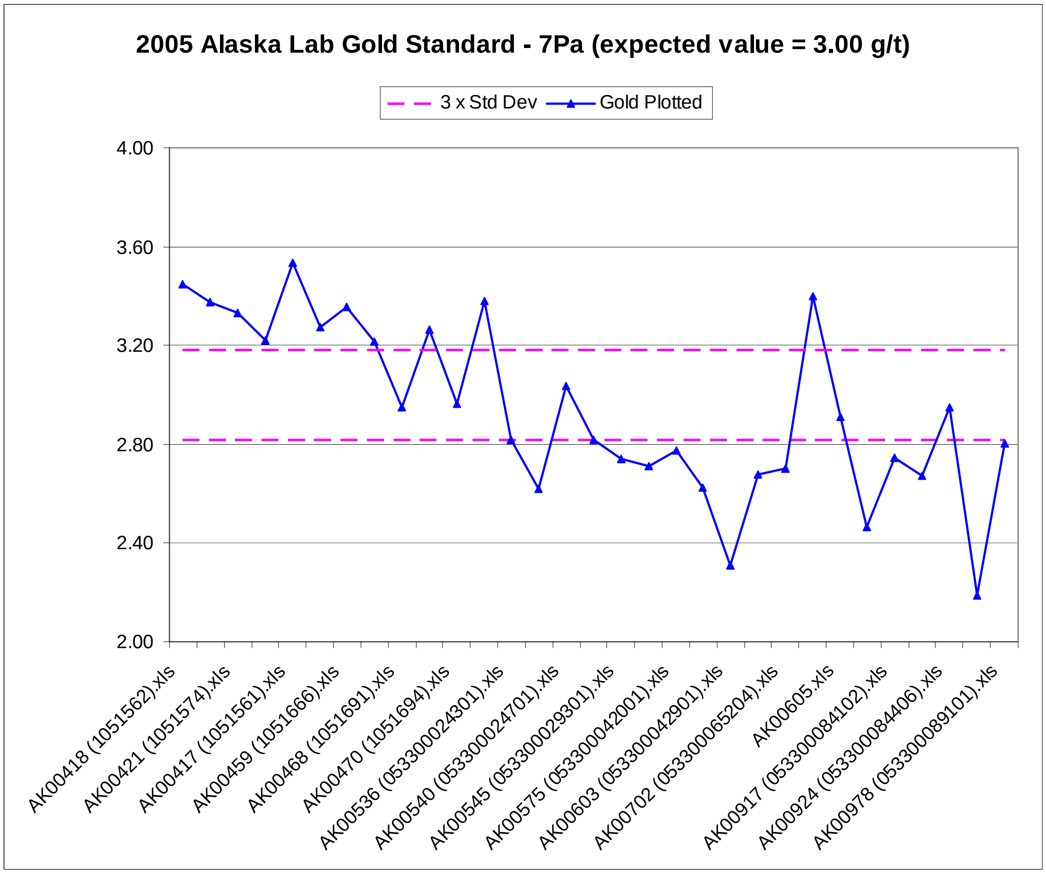
Figure 14-8, Figure 14-9, and Figure 14-10 show the results for two of the SRM's and the blanks that were submitted by Alaska Gold to Alaska Assaying.

Figure 14-8: Results for 2005 Gold Standard 50P



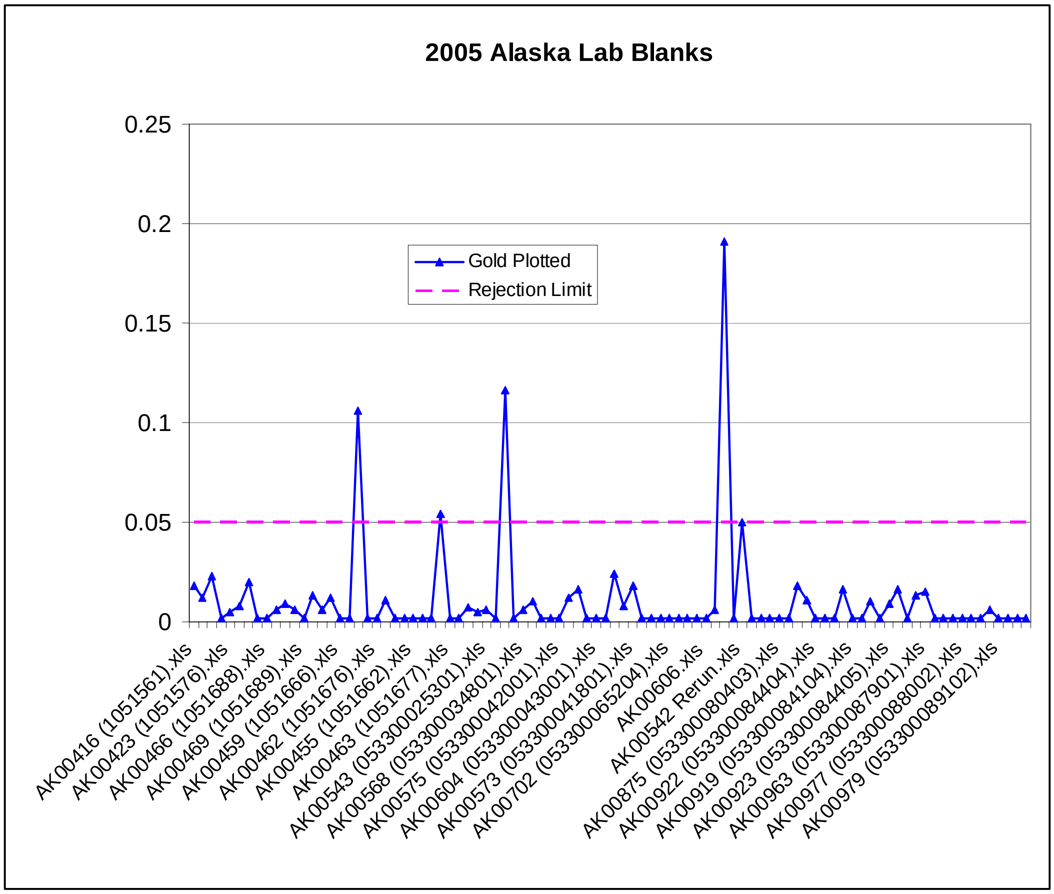
All of the 50P SRMs that were submitted to Alaska Assay Lab came back within two standard deviations of the expected value of 0.727 g/t.

Figure 14-9: Results for 2005 Gold Standard 7Pa



The performance of SRM 7Pa at Alaska Assaying Lab was not very good. As can be seen in Figure 14-9, the assayed results steadily declined in grade through time. For the initial portion of the 2005 assaying program, the 3 g/t standard came back higher than expected. For the second half of the 2005 program the 3 g/t standard assayed lower than expected. In the author's opinion, the overall accuracy of the 2005 assays that were completed by Alaska Assay Lab may be somewhat conservative for grades above 3 g/t. It should be noted that all of the samples that were assayed by Alaska Assay Lab in 2005 that came back in excess of 0.5 g/t were sent to Chemex in Vancouver, B.C and assayed using metallic screen fire assay methods. However, the metallic screen fire assays were not available for use in estimating Mineral Resources that are the subject of this report, so the Alaska Assay Lab results were used. The author highly recommends that Alaska Gold re-estimate Mineral Resources for the Big Hurrah deposit using the Chemex metallic screen fire assays.

Figure 14-10: 2005 Alaska Assay Lab Blank Results



Four blanks assayed in 2005 by Alaska Assay Lab returned values greater than the 0.05 g/t tolerance that was established. All of the assays associated with these jobs were re-assayed by Alaska Assay Lab. The re-assayed results were compared with the initial assays for those batches and were found to compare favorably with one another.

Based on the fact that much of the gold is coarse grained at Big Hurrah, it is not surprising that the duplicate sample comparison was not as tight as the results associated with more disseminated deposits. It is the author's opinion that the 2005 Alaska assays are reliable and can be used to estimate Mineral Resources.

14.5 **Electronic Database Verification**

The author completed an independent audit of the gold assay database used to estimate Mineral Resources. Alaska Gold and the commercial laboratories that they used (Alaska Assay Labs and ALS Chemex) were able to supply the author with assay certificates for 4,654 assays which were then compared to the values stored in the electronic database. This represents about 60% of the entire database. A total of 100 errors were discovered equating to an error rate of about 2.2%. This error rate is higher than one percent which is commonly thought of as an acceptable rate for North American assay databases. While the two percent error rate is excessive, it is the author's opinion that many of the errors are not material. For example, the difference in gold grade between the assay certificates and the electronic database for 75 of the 100 errors is ± 0.0x g/t. Of those 75 errors, at least 19 appear to be rounding differences associated with converting between ounces per ton and grams per tonne. There does not appear to be any deliberate or meaningful bias in the errors. For example, there were 11 samples where the assay certificate was greater than the value in the database and 14 samples where the opposite was true. If 75 of the errors are dismissed as not being material, the error rate would drop to about 0.5 percent. The types of errors discovered during the database audit are summarized in Table 14-2.

Table 14-2: Types of Database Errors

Type of Discrepancy	Number
Certificate more than 1 g/t higher than electronic datatbase	11
Certificate more than 0.00x g/t higher than electronic database	6
Certificate more than 0.0x g/t higher than electronic database	7
Electronic database more than 1 g/t higher than certificate	14
Electronic database more than 0.00x g/t higher than certificate	6
Electronic database more than 0.0x g/t higher than certificate	37
Apparent rounding error	19
Total	100

All of the errors shown in Table 14-2 were associated with holes drilled prior to Alaska Gold's involvement with the Big Hurrah project. According to Alaska Gold personnel, they inherited the Big Hurrah database from Placer Dome Exploration. In the case of one drill hole (EF-88-42), data entry personnel apparently got off one row of assays when they were entering the information into their database. This generated nine of the 100 errors discovered by the author.

As previously mentioned, it is the author's opinion that the excessive error rate in the Big Hurrah database is not a serious material issue because many of the "errors" are very insignificant. However, the author strongly recommends that Alaska Gold check all pre-2004 assay records and make the appropriate corrections before the next resource update.

15.0 ADJACENT PROPERTIES

Other notable lode gold areas near the Big Hurrah property are the R.W. Silver property and the West Creek prospect.

The R.W. Silver property consists of five patented federal mining claims located in Sec. 33 T9S, R28W Kateel River Meridian, approximately 2.4 km (1.5 miles) northwest of the Big Hurrah Mine. Asher (1969) reported that lithologies here are similar to those at Big Hurrah. The quartz veins on the R.W. Silver property strike northwesterly and occur along the northwestern projection of the Big Hurrah vein system. Workings consist of pits, trenches and a caved shaft. The longest surface trench is 15 m (50 feet) long and 0.9 to 2.4 m (3 to 8 feet) deep. The Goode shaft was inclined -26 degrees at 210° azimuth and had 244 m (800) feet of workings. A small mill was erected on the property some time after 1938. Asher (1969) collected one outcrop sample containing 26.7 g/tonne, and a dump sample grading 75.4 g/tonne.

The West Creek prospect is located in Sec. 28. T9S R29W, Kateel River Meridian, approximately 9.1 km (7.5 miles) northwest of the Big Hurrah Mine. Quartz veins in schist were explored by an adit and 183 to 213 m (600 to 700) feet of underground workings. The quartz veins contain chlorite, small stringers and vugs containing pyrite, marcasite, and arsenopyrite. Gold and arsenopyrite was reported to be disseminated in the country rock (Smith, 1908). The adit trends about 100° azimuth; and a zone of quartz-vein float about 15 m (50 feet) wide trends 240° azimuth for 76 m (250 feet) upslope from the adit (Asher, 1969). A grab sample from the adit dump contains 1.4 g/tonne (0.04 opt) gold and a composite grab sample of quartz-vein float contains 3.8 g/tonne (0.11 opt) gold (Asher, 1969).

The author was not able to verify the mineralization (thickness, grade, orientation, etc.) for any of the adjacent properties that were mentioned above, and mineralization at the adjacent properties may not necessarily be indicative of the mineralization at Big Hurrah.

16.0 MINERAL PROCESSING AND METALLURGICAL TESTING

Alaska Gold Company is planning on processing ores from the Big Hurrah deposit at their Rock Creek deposit, which is located about 50 kilometers northwest of the Big Hurrah deposit. Alaska Gold completed various metallurgical tests of Big Hurrah material in conjunction with various metallurgical studies that were completed for their Rock Creek deposit. The Big Hurrah ores are primarily carbonaceous metamorphic rocks of the Nome Schist Group. Gold occurs primarily in its native state within various quartz veins and has been shown to be non-refractory. The major difference between the Big Hurrah and Rock Creek ores is the presence of organic carbon.

In the early 1900's (1903-1907) about 25,000 ounces of gold were recovered from the Big Hurrah deposit from a gravity circuit following crushing the material with a stamp mill. A cyanide leach circuit was installed in later years in an attempt to recover more gold from the deposit. The cyanide plant experienced poor recovery due to the "preg robbing" properties of the carbonaceous ores.

16.1 Historical Testwork

Little is known about metallurgical testwork that may have been completed for the early Big Hurrah operations. In 1989, Gary Hawthorne prepared a report that summarized the metallurgical test results that were completed by Coastech Research from North Vancouver, B.C. Coastech's testwork was performed on four composite samples that were provided by Solomon Gold Corporation, who were the owners of the property at the time. The samples were labeled HQ and LQ and were described as either High Quartz or Low Quartz. A series of tests were performed to identify the amenability of the ore to gravity separation, flotation, and cyanide leaching processes. The gravity testing "determined that 20 to 55% of the gold and 30 to 52% of the silver could be recovered at ratios ranging from 800:1 to 1500:1 in a gravity circuit." Flotation testwork "confirmed that flotation concentration will yield high ratios of concentration to produce either a saleable product or feed for on-site cyanidation." Cyanide leaching tests of both whole ore and flotation concentrates gave encouraging results, with recoveries increasing with decreasing grind sizes. Mr. Hawthorne reported that cyanide leaching of the whole ore would exceed 95 percent and that 96.8 percent of the gold in the flotation concentrate could be recovered by cyanidation. Mr. Hawthorne also mentioned that the ore is "somewhat preg robbing." Reported recoveries for gravity and flotation circuit were 92.3 percent and 91.0 percent for a circuit that included cyanidation of the flotation concentrate and gravity middlings. This compared well to a gravity and gravity-tail cyanide leach circuit that gave an overall gold recovery of 93.7 percent.

16.2 2005 Testwork

In 2005, Alaska Gold prepared a set of metallurgical composites from representative Big Hurrah ore zones. These samples were obtained from 2004 and 2005 reverse circulation drill hole cuttings based on geographic location, depth, and mineral zones. These samples were tested by Process Research Associates (PRA) in Vancouver, B.C. in conjunction with metallurgical testwork that they were conducting for Alaska Gold Company's Rock Creek deposit. Table 16-1 summarizes the basic chemical composition of the four metallurgical composites.

Table 16-1: Chemistry of Metallurgical Samples

Elements	Units	Composite ID				Detection Limits		Analytical Method
		Zone 1	Zone 2	Zone 3	Zone 5	Min.	Max.	
Au	g/t	8.32	1.86	8.77	10.69	0.01	5,000	FA/AAS
Ag	g/t	0.80	0.70	2.50	15.50	0.30	9,999	FAGrav
S(tot)	%	0.57	1.59	0.46	0.04	0.01	100	Leco
S(-2)	%	0.54	1.54	0.44	0.03	0.01	100	AsyWet
C (org)	%	0.69	0.63	0.68	0.46	0.01	100	Leco
Al	ppm	58,887	62,329	25,997	41,236	100	50,000	ICPM
Sb	ppm	<5	16	14	7	5	2,000	ICPM
As	ppm	469	355	211	201	5	10,000	ICPM
Ba	ppm	1,672	220	383	3,599	2	10,000	ICPM
Bi	ppm	<2	<2	<2	<2	2	2,000	ICPM
Cd	ppm	<0.2	<0.2	<0.2	<0.2	0.2	2,000	ICPM
Ca	ppm	49,838	8,507	20,788	737	100	100,000	ICPM
Cr	ppm	95	85	94	130	1	10,000	ICPM
Co	ppm	16	26	8	75	1	10,000	ICPM
Cu	ppm	41	55	49	139	1	20,000	ICPM
Fe	ppm	33,497	40,874	16,833	24,745	100	50,000	ICPM
La	ppm	25	20	11	15	2	10,000	ICPM
Pb	ppm	14	17	17	18	2	10,000	ICPM
Mg	ppm	18,168	15,263	9,758	3,783	100	100,000	ICPM
Mn	ppm	338	291	161	213	1	10,000	ICPM
Hg	ppm	<3	<3	<3	<3	3	10,000	ICPM
Mo	ppm	8	18	17	22	1	1,000	ICPM
Ni	ppm	47	84	54	63	1	10,000	ICPM
P	ppm	395	353	367	349	100	50,000	ICPM
K	ppm	16,988	18,606	7,267	14,300	100	100,000	ICPM
Sc	ppm	11	12	5	8	1	10,000	ICPM
Ag	ppm	2	1	2	8	0	1,000	ICPM
Na	ppm	25,132	9,099	3,288	4,546	100	100,000	ICPM
Sr	ppm	276	145	138	51	1	10,000	ICPM
Tl	ppm	<2	<2	<2	<2	2	1,000	ICPM
Ti	ppm	1,224	1,077	429	860	100	100,000	ICPM
W	ppm	54	12	31	38	5	1,000	ICPM
V	ppm	124	182	270	309	1	10,000	ICPM
Zn	ppm	74	132	186	140	1	10,000	ICPM
Zr	ppm	48	92	38	54	1	10,000	ICPM

PRA completed gravity separation and rougher flotation tests on the four metallurgical composites. Samples from these tests were sent to Research Development Incorporated (RDi) located in Wheat Ridge, Colorado. RDi performed concentrate cyanide leach testes with and without the presence of activated carbon. The Big Hurrah ores were found to respond well to gravity, flotation, and cyanidation. Table 16-2 summarizes the average gold recovery for the three different metallurgical processes. The size fraction for the metallurgical samples was 80% passing 212 microns.

Table 16-2: Average Gold Recovery by Process Type

Process Type	Gold Recovery (%)
Gravity	75.8
Flotation	38.4
Cyanide Leaching	92.4

The cyanide leach gold recovery shown in Table 16-2 was completed in the presence of 20 g/t activated carbon. Without activated carbon in the cyanide leaching circuit, gold recovery dropped to less than 50 percent.

Grinding tests conducted by PRA showed that gold recoveries were enhanced by grind size. Table 16-3 summarizes gold recovery rates by process type and grind size.

Table 16-3: Gold Recovery by Grind Size

Grind Size [1] (microns)	Gravity Au Recovery (%)	Flotation Au Recovery [2] (%)	Cyanide Leach Au Recovery [3] (%)	Combined Au Recovery [4] (%)
212	75.8	38.4	92.4	84.4
145	78.8	64.5	93.4	91.6
100	79.2	64.2	95.1	91.9

1 80 percent passing size fraction
2 Based on amount of gold available in gravity tail
3 Based on amount of gold available in floation concentrate
4 Combined process recovery assumes all three proecess are used in sequence

Based on Big Hurrah testwork results, PRA has recommended a flow sheet that incorporates gravity and flotation followed by cyanide leaching of the flotation concentrates. PRA and Alaska Gold have been trying to optimize the Rock Creek processing circuit in order to maximize gold recovery from both the Rock Creek and Big Hurrah ores. About 75 percent of the Rock Creek ores respond well to a grind size of 212 microns, but this grind appears to be too coarse for reasonable gold recovery for the Big Hurrah ores. At this juncture, Alaska Gold is looking at reducing the grind size for the Big Hurrah ore and trying to combine it with one of the Rock Creek ore types (Albion Shear Zone).

It is the opinion of the author that the samples used in Alaska Gold's metallurgical studies were representative.

17.0 MINERAL RESOURCE AND MINERAL RESERVE ESTIMATES

Several Mineral Resource estimates have been made in the past but do not conform to the parameters outlined by NI 43-101. At this time, Alaska Gold is reviewing and updating the 2005 Norwest Feasibility Study in order to define Mineral Reserves.

An independent estimate of Mineral Resources has been completed by the author for Alaska Gold using the provided data. The following sections outline the underlying data and procedures that were used by the author in developing an updated estimate of Mineral Resources.

17.1 Pertinent Data

Approximately 41 percent of the assay data used to estimate Mineral Resources were collected by Alaska Gold. The remainder of the assay data were collected by previous companies and were validated by comparing those assays to the more recent Alaska Gold data, which were validated by appropriate QA/QC protocols. Topographic and density data were collected by Alaska Gold and are discussed in the following sections.

17.2 Drill Hole Data

The Big Hurrah drill hole database consists of 273 diamond core and reverse circulation (RC) drill holes. Approximately 2,850 meters of continuously sampled trench data were treated as drill holes and were loaded to the database as 60 drill holes. The author chose not to use surface channel samples to estimate Mineral Resources after completing a comparison of the three sample types (diamond core, reverse circulation, and surface channel samples). In the author's opinion, the surface trench samples may be biased high relative to the other sample data and therefore are not appropriate to be used for block grade estimation. In addition, there was only limited information describing how the samples were collected. The total meterage for the drill hole data (diamond core and RC) that were used to estimate Mineral Resources totaled approximately 16,000 meters, although not all of that meterage was assayed for gold. Table 17-1 summarizes the number of holes and meters of drilling by company, year, and type.

All drill holes were surveyed by licensed surveyor George Krier of Nome, Alaska with a Hewlett Packard HP 302 total-station theodolite. The survey coordinate system used was UTM; NAD 83; Zone 3 (meters).

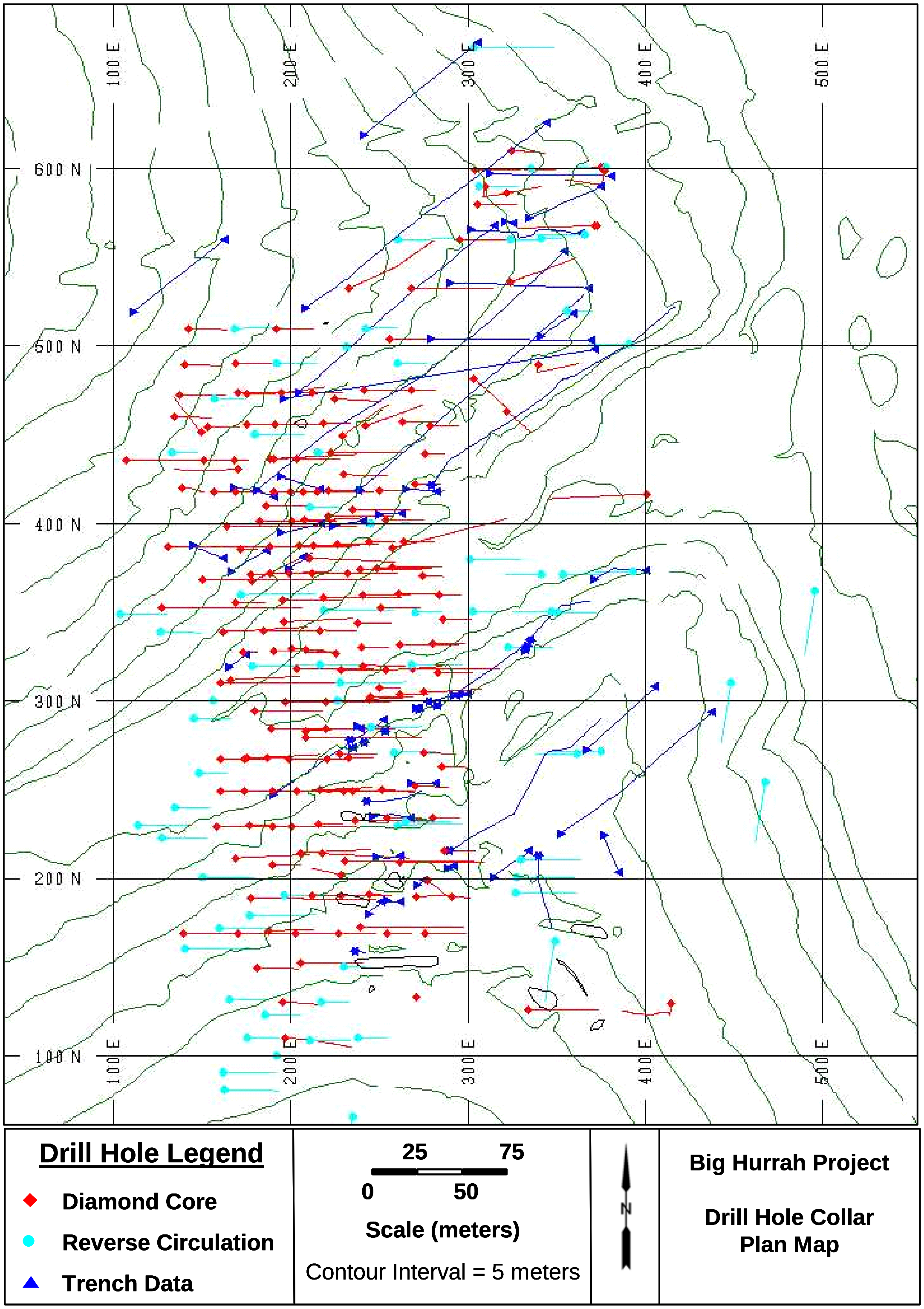
Survey control points at Big Hurrah are designated Thor 1 and Thor 2. Thor 1 is a solid monument and is the point used for vertical control. Survey accuracy standards for the control points are Second Order Class II for horizontal control and Second Order Class I for vertical control.

Table 17-1: Drill Hole Summary by Company and Type

Year	Company	Number	Meters	Percentage
	Diamond Core Data			
1981	Anaconda	5	504.75	2.7%
1983	Cornwall Pacific Resources Ltd.	11	1,032.75	5.4%
1985	Nighthawk Resouces Inc.	18	1,972.04	10.4%
1988	Solomon Resources Ltd.	91	3,769.97	19.8%
1997	Placer Dome Exploration Inc.	19	1,838.84	9.7%
2004	Alaska Gold Company	31	1,388.50	7.3%
2005	Alaska Gold Company	14	1,116.14	5.9%
Sub-total (core)		**189**	**11,622.99**	**61.1%**
	Reverse Circulation Data			
2004	Alaska Gold Company	31	1,563.61	8.2%
2005	Alaska Gold Company	53	2,992.58	15.7%
Sub-total (RC)		**84**	**4,556.19**	**23.9%**
	Trench Data			
1980	Anaconda	12	761.70	4.0%
1981	Anaconda	8	858.93	4.5%
1983	Cornwall Pacific Resources Ltd.	36	919.29	4.8%
1997	Placer Dome Exploration Inc.	4	311.51	1.6%
Sub-total (trench)		**60**	**2,851.43**	**15.0%**
Grand Total		**333**	**19,030.61**	**100.0%**

Figure 17-1 is a drill hole collar map showing the distribution of diamond core, reverse circulation, and trench data. Note that the data shown in Figure 17-1 are depicted in terms of the rotated mine grid as explained in Section 17.1.3.

Figure 17-1: Drill Hole Location Map



17.3 **Topographic Data**

Kodiak Mapping, Inc. (KMI) completed the Big Hurrah mapping project for Alaska Gold in 2004-2005. The project was controlled by combining ground control survey data with Airborne GPS (ABGPS) data collected during the aerial photo mission. The ABGPS data utilized a ground receiver station located at the Nome State Airport. The ground control panels and survey data were provided by McClintock Land Associates, Inc. based out of Eagle River, AK. All survey data and final mapping products were defined in metric units (meters). The Horizontal Datum complies with NAD83, UTM Zone 3 (meters) and the vertical datum complies with NAVD88 (meters).

The aerial photographic data were acquired on October 2, 2004 at a nominal photo scale of 1:12,000 (1 inch = 1,000 feet). The project required three flight lines with eight exposures per line. The aerial photography was configured to have 60% endlap and 50% sidelap.

The aerial photography was subjected to the Analytical Aerotriangulation (AT) processes that combined the ground control and ABGPS data. The programs used, Albany and Bingo, are considered to be the most rigorous AT programs available. The RMS control point residuals for The Big Hurrah were:

X = 0.331; Y = 0.304; Z = 0.400

All mapping was accomplished with fully analytical stereo plotters. All reasonable efforts and precautions were taken to assure that the mapping met or exceeded National Mapping Accuracy Standards for 1 inch = 100 meter mapping.

17.4 **Project Coordinate System**

A localized “mine grid” was established at the Big Hurrah project so that the northwest trending mineralized zones could be better visualized with cross sections drawn normal to the average strike of the zones. Table 17-2 summarizes key information about the rotated local mine grid.

Table 17-2: Mine Grid Rotation Parameters

Parameter	Value
Rotation Angle (degrees)	-49.06
East Origin (UTM coordinate)	536,354.666
North Origin (UTM coordinate)	7,169,244.323

17.5 **Bulk Density Data**

Alaska Gold sent 50 core samples to Alaska Assay Labs for density determinations. These samples were collected from several of the primary ore host lithologies and some of the waste lithologies. The samples were weighed, dried, weighed in air, and then weighed in water. The bulk density calculations were made and the results are summarized in Table 17-3.

Table 17-3: Bulk Density Measurements

Lithology	Description	Dry Weight (g)	Weight in H_2O (g)	Bulk Density (g/cm^3)	No. Samples
GCS	Graphitic carbonate schist	1,445.7	539.3	2.68	7
GMS	Graphitic mica schist	1,943.9	718.6	2.71	10
GMU	Undifferentiated graphitic mica schist	640.7	238.1	2.69	3
MBL	Marble	376.8	153.2	2.46	2
MCS	Micaceous carbonate schist	1,013.2	383.9	2.64	5
QGS	Graphitic quartite schist	2,293.4	858.9	2.67	11
QMS	Quartz mica schist	184.4	75.3	2.45	1
SWX	Stockworks (usually mineralized)	909.9	334.4	2.72	4
SZN	Shear zone (often mineralized)	1,527.5	582.4	2.62	7
SWX+SZN	Stockworks+shear zone (mainly ore)	2,437.4	916.8	2.66	11
Grand Total	All units	10,335.5	3,884.1	2.66	50

There are limited samples for each of the lithologic units; however, the bulk density results shown in Table 17-4 are consistent with published values for similar rock types and similar to the bulk density that is being used at Alaska Gold's nearby Rock Creek deposit (i.e. 2.71 g/cm^3). Based on the weighted averages of the eleven shear zone and stockwork samples, it was decided to use a bulk density of 2.66 as the default density for bedrock material. A bulk density of 2.0 g/cm^3 was assigned to all overburden material.

17.6 Historical Underground Mining Volume

In order to account for the volume of material removed by historical underground mining operations, three dimensional wireframes were constructed for the 60, 150, and 250-levels. The mining outlines were digitized from data available from old mine maps and cross sections. The digital outlines were linked into three dimensional wireframes and were used to code the resource model blocks. The topo percent stored in each block was modified by subtracting the mined out percentage from the total topo percent. The volume represented by the wireframes totaled about 17,600 cubic meters or about 47,000 tonnes. This volume/tonnage compares favorably with the historical estimate of 45,350 tonnes (mining from 1902 through 1908). The difference between the wireframe volume and the early production estimate may be associated with some intermittent mining that occurred in later years.

17.7 Gold Assays

Raw gold assay statistics were calculated by sample type, drill campaign, and lithology and are summarized in Table 17-4, Table 17-5, and Table 17-6, respectively. The statistics for the raw gold assays are summarized at four different cutoff grades. The trench samples were not used to estimate gold resources because those data are significantly higher than adjacent core hole data and there are no written procedures or QA/QC data to support them.

Table 17-4: Gold Assay Statistics by Sample Type

Sample Type	Uncapped Statistics Above Cutoff							
	Cutoff (g/t)	Total Meters	Inc. Percent	Mean Au (g/t)	grd-thk (g/t-m)	Inc. Percent	Std. Dev.	CV
All Data	0.00	18,057	87%	0.95	17,170	4.6%	7.40	7.78
	0.50	2,288	3%	7.16	16,376	2.3%	19.69	2.75
	1.00	1,739	3%	9.19	15,976	3.8%	22.21	2.42
	2.00	1,286	7%	11.92	15,331	89.3%	25.26	2.12
Core	0.00	10,953	90%	0.87	9,510	4.8%	8.58	9.88
	0.50	1,105	2%	8.19	9,058	1.8%	25.88	3.16
	1.00	870	2%	10.22	8,888	3.5%	28.84	2.82
	2.00	634	6%	13.50	8,551	89.9%	33.20	2.46
RC	0.00	4,533	86%	0.76	3,431	5.3%	4.51	5.95
	0.50	625	4%	5.20	3,250	4.0%	11.15	2.14
	1.00	434	3%	7.17	3,113	5.2%	12.89	1.80
	2.00	309	7%	9.49	2,935	85.5%	14.65	1.54
Trench	0.00	2,570	78%	1.65	4,229	3.8%	5.88	3.57
	0.50	558	5%	7.29	4,069	2.2%	10.88	1.49
	1.00	435	4%	9.14	3,975	3.1%	11.68	1.28
	2.00	343	13%	11.21	3,846	90.9%	12.35	1.10

Table 17-5: Gold Assay Statistics by Sample Campaign

Sample Type	Uncapped Statistics Above Cutoff							
	Cutoff (g/t)	Total Meters	Inc. Percent	Mean Au (g/t)	grd-thk (g/t-m)	Inc. Percent	Std. Dev.	CV
All Data	0.00	18,057	87%	0.95	17,170	4.6%	7.40	7.78
	0.50	2,288	3%	7.16	16,376	2.3%	19.69	2.75
	1.00	1,739	3%	9.19	15,976	3.8%	22.21	2.42
	2.00	1,286	7%	11.92	15,331	89.3%	25.26	2.12
2004 Alaska Gold (Core)	0.00	1,387	81%	1.03	1,435	4.1%	3.65	3.53
	0.50	260	3%	5.30	1,375	2.3%	6.98	1.32
	1.00	214	5%	6.28	1,342	6.2%	7.33	1.17
	2.00	148	11%	8.47	1,253	87.3%	7.88	0.93
2005 Alaska Gold (Core)	0.00	483	95%	0.14	68	16.2%	0.62	4.38
	0.50	26	2%	2.19	57	8.2%	1.60	0.73
	1.00	18	2%	2.85	51	17.9%	1.50	0.53
	2.00	10	2%	3.92	39	57.7%	1.21	0.31
1981 Anaconda (Core)	0.00	505	97%	0.26	129	16.5%	1.84	7.23
	0.50	16	1%	6.82	107	1.7%	8.02	1.18
	1.00	13	0%	8.24	105	1.5%	8.28	1.01
	2.00	11	2%	9.18	103	80.2%	8.40	0.91
1983 Cornwall (Core)	0.00	1,033	91%	0.70	726	6.3%	4.77	6.79
	0.50	89	2%	7.66	680	2.5%	14.56	1.90
	1.00	65	2%	10.18	662	3.9%	16.30	1.60
	2.00	45	4%	13.97	634	87.3%	18.26	1.31
1985 Nighthawk (Core)	0.00	1,972	94%	0.68	1,350	5.7%	5.09	7.43
	0.50	118	1%	10.80	1,273	1.0%	18.02	1.67
	1.00	98	1%	12.87	1,259	2.5%	19.13	1.49
	2.00	74	4%	16.49	1,225	90.7%	20.68	1.25
1988 Solomon (Core)	0.00	3,745	88%	1.41	5,296	3.1%	13.73	9.71
	0.50	468	3%	10.98	5,132	1.3%	37.50	3.42
	1.00	368	2%	13.76	5,061	2.6%	41.84	3.04
	2.00	276	7%	17.83	4,925	93.0%	47.59	2.67
1997 Placer Dome (Core)	0.00	1,829	93%	0.28	507	14.5%	1.19	4.30
	0.50	130	2%	3.34	433	5.0%	3.14	0.94
	1.00	95	1%	4.30	408	7.0%	3.18	0.74
	2.00	68	4%	5.44	372	73.5%	3.05	0.56
2004 Alaska Gold (RC)	0.00	1,556	76%	1.53	2,386	3.5%	7.18	4.68
	0.50	369	7%	6.24	2,302	3.1%	13.73	2.20
	1.00	264	5%	8.45	2,229	4.4%	15.70	1.86
	2.00	190	12%	11.15	2,124	89.0%	17.75	1.59
2005 Alaska Gold (RC)	0.00	2,977	91%	0.35	1,045	9.3%	1.86	5.30
	0.50	256	3%	3.70	948	6.1%	5.28	1.43
	1.00	171	2%	5.18	885	7.1%	5.94	1.15
	2.00	119	4%	6.82	811	77.6%	6.46	0.95
1980 Anaconda (Trench)	0.00	662	81%	0.61	406	11.9%	1.48	2.41
	0.50	125	5%	2.85	357	7.1%	2.31	0.81
	1.00	91	5%	3.62	328	10.4%	2.29	0.63
	2.00	61	9%	4.72	286	70.6%	2.04	0.43
1981 Anaconda (Trench)	0.00	716	88%	0.61	438	9.8%	2.76	4.51
	0.50	89	5%	4.46	395	6.0%	6.68	1.50
	1.00	53	2%	6.92	369	4.2%	7.69	1.11
	2.00	40	6%	8.85	350	79.9%	8.07	0.91
1983 Cornwall (Trench)	0.00	890	70%	3.39	3,012	1.7%	9.17	2.71
	0.50	265	4%	11.19	2,962	0.8%	13.99	1.25
	1.00	228	3%	12.88	2,938	1.4%	14.37	1.12
	2.00	200	23%	14.46	2,896	96.1%	14.65	1.01
1997 Placer Dome (Trench)	0.00	302	74%	1.23	372	5.0%	3.07	2.50
	0.50	79	6%	4.46	353	3.7%	4.68	1.05
	1.00	62	7%	5.43	339	7.3%	4.83	0.89
	2.00	43	14%	7.32	312	83.9%	4.79	0.65

Table 17-6: Gold Assay Statistics by Lithologic Unit

Unit	Uncapped Statistics Above Cutoff							
	Cutoff (g/t)	Total Meters	Inc. Percent	Mean Au (g/t)	grd-thk (g/t-m)	Inc. Percent	Std. Dev.	CV
All Data	0.00	18,057	87%	0.95	17,171	4.6%	7.40	7.78
	0.50	2,289	3%	7.16	16,377	2.3%	19.69	2.75
	1.00	1,739	3%	9.19	15,977	3.8%	22.21	2.42
	2.00	1,286	7%	11.92	15,332	89.3%	25.26	2.12
Undefined	0.00	7,520	86%	0.87	6,508	5.2%	4.52	5.22
	0.50	1,039	3%	5.94	6,170	3.0%	10.85	1.83
	1.00	776	3%	7.69	5,972	4.1%	12.05	1.57
	2.00	588	8%	9.70	5,704	87.6%	13.24	1.36
BCS	0.00	18	100%	0.03	1	100.0%	0.00	0.00
	0.50	0	0%	0.00	0	0.0%	0.00	0.00
	1.00	0	0%	0.00	0	0.0%	0.00	0.00
	2.00	0	0%	0.00	0	0.0%	0.00	0.00
CMS	0.00	144	95%	0.20	29	24.0%	0.99	4.95
	0.50	7	2%	3.04	22	7.5%	3.32	1.09
	1.00	4	0%	5.15	20	3.0%	3.34	0.65
	2.00	3	2%	5.87	19	65.5%	3.18	0.54
CS	0.00	135	100%	0.02	3	100.0%	0.04	1.57
	0.50	0	0%	0.00	0	0.0%	0.00	0.00
	1.00	0	0%	0.00	0	0.0%	0.00	0.00
	2.00	0	0%	0.00	0	0.0%	0.00	0.00
GCS	0.00	172	99%	0.06	10	67.2%	0.18	2.97
	0.50	2	1%	1.40	3	5.8%	0.60	0.43
	1.00	1	1%	1.86	3	27.0%	0.12	0.06
	2.00	0	0%	0.00	0	0.0%	0.00	0.00
GMS	0.00	2,397	91%	0.54	1,291	8.0%	3.61	6.71
	0.50	217	2%	5.47	1,187	3.1%	10.84	1.98
	1.00	161	2%	7.14	1,147	5.2%	12.16	1.70
	2.00	112	5%	9.68	1,079	83.6%	13.86	1.43
GMU	0.00	158	97%	0.16	26	29.9%	1.02	6.19
	0.50	5	2%	3.65	18	8.6%	4.48	1.23
	1.00	2	1%	6.99	16	4.6%	4.83	0.69
	2.00	1	1%	10.30	15	56.8%	2.78	0.27
MAR	0.00	43	99%	0.05	2	68.1%	0.13	2.57
	0.50	1	0%	1.10	1	7.1%	0.06	0.05
	1.00	0	1%	1.13	1	24.8%	0.00	0.00
	2.00	0	0%	0.00	0	0.0%	0.00	0.00
NR	0.00	258	99%	0.08	19	45.4%	0.43	5.76
	0.50	4	0%	2.97	11	4.4%	2.25	0.76
	1.00	2	0%	3.99	10	7.5%	2.02	0.51
	2.00	2	1%	4.93	8	42.7%	1.76	0.36
OB	0.00	359	100%	0.04	13	96.3%	0.04	1.11
	0.50	0	0%	1.00	0	0.9%	0.26	0.26
	1.00	0	0%	1.20	0	2.8%	0.00	0.00
	2.00	0	0%	0.00	0	0.0%	0.00	0.00
QGS	0.00	5,023	88%	0.63	3,153	6.7%	3.80	6.05
	0.50	583	3%	5.04	2,941	3.4%	10.11	2.01
	1.00	431	3%	6.57	2,834	6.2%	11.38	1.73
	2.00	293	6%	9.02	2,640	83.7%	13.12	1.45
QMS	0.00	369	93%	0.31	116	9.3%	1.61	5.11
	0.50	25	1%	4.17	105	1.6%	4.66	1.12
	1.00	22	2%	4.69	103	7.8%	4.77	1.02
	2.00	16	4%	5.98	94	81.3%	5.09	0.85
QVN	0.00	78	21%	26.71	2,090	0.0%	60.62	2.27
	0.50	62	4%	33.88	2,089	0.1%	66.50	1.96
	1.00	59	6%	35.60	2,087	0.4%	67.76	1.90
	2.00	54	69%	38.39	2,079	99.4%	69.78	1.82
SWX	0.00	461	74%	2.20	1,012	3.2%	16.93	7.71
	0.50	120	6%	8.15	980	2.0%	32.42	3.98
	1.00	91	6%	10.54	959	3.8%	36.94	3.50
	2.00	66	14%	14.03	920	90.9%	43.01	3.07
SZN	0.00	924	76%	3.14	2,897	1.6%	16.49	5.26
	0.50	222	4%	12.82	2,850	0.8%	31.71	2.47
	1.00	189	4%	14.99	2,826	1.8%	33.99	2.27
	2.00	153	17%	18.16	2,774	95.8%	37.05	2.04

17.8 Gold Grade Capping

Grade capping is commonly done to minimize the potential of over estimating gold metal content in resource models. In most precious metal deposits a small percentage of the sample data contain a disproportionate amount of the total metal content. It is not uncommon for 1% of the sample data to contain 15% to 40% of the total metal content of a deposit. In many cases the assayed data are real and reproducible, but the range of influence of the samples may be much more limited than lower grade values. Table 17-7 shows the distribution of gold by decile ranges.

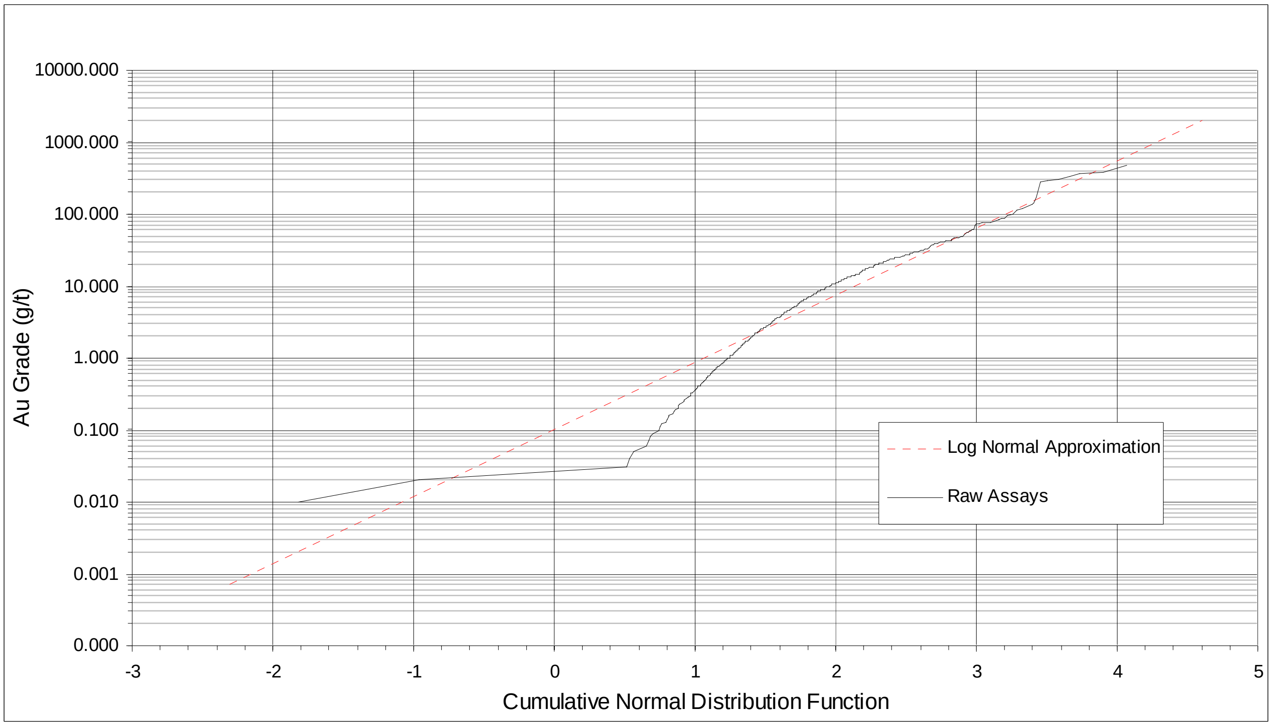
Table 17-7: Gold Distribution by Deciles

Decile Range	No. of Samples	Min Au Grade (g/t)	Mean Au Grade (g/t)	Max Au Grade (g/t)	GT Product	Percent of Total
0 - 10	934	0.010	0.020	0.025	30	0.18%
10 - 20	935	0.025	0.027	0.034	45	0.26%
20 - 30	935	0.034	0.034	0.034	60	0.35%
30 - 40	935	0.034	0.034	0.034	56	0.33%
40 - 50	935	0.034	0.034	0.034	87	0.51%
50 - 60	934	0.034	0.034	0.040	72	0.42%
60 - 70	935	0.040	0.076	0.137	100	0.58%
70 - 80	935	0.137	0.260	0.480	323	1.88%
80 - 90	935	0.480	1.197	2.590	1,431	8.33%
90 - 100	935	2.590	13.309	471.604	14,962	87.16%
Total	9,348	0.010	1.068	471.604	17,166	100.00%
90 - 91	93	2.590	2.799	3.120	375	2.18%
91 - 92	94	3.120	3.490	3.840	421	2.45%
92 - 93	93	3.840	4.328	4.766	539	3.14%
93 - 94	94	4.780	5.509	6.343	710	4.14%
94 - 95	93	6.343	7.120	7.851	777	4.53%
95 - 96	94	7.886	9.087	10.149	1,033	6.02%
96 - 97	93	10.149	11.652	13.300	1,139	6.63%
97 - 98	94	13.337	15.397	18.446	1,505	8.77%
98 - 99	93	18.446	22.722	27.943	2,362	13.76%
99 -100	94	28.355	64.854	471.604	6,102	35.55%
Sub-total	935	2.590	13.309	471.604	14,962	87.16%

There are a variety of ways in which metal grades are capped by various resource modelers. One of the more common methods used to determine grade capping limits in precious metal deposits is the use of cumulative probability plots. In many cases the grades of precious metal deposits approximate a lognormal distribution. When the assay grades are plotted on a log-log graph the upper end of the distribution often becomes highly erratic and does not fall along a straight line.

Figure 17-2 shows a probability plot of the raw Big Hurrah drill hole assay grades (all lithologies) using the cumulative normal distribution function. An approximated log normal distribution line is shown as a dashed red line.

Figure 17-2: Cumulative Probability Plot



Based on the deflection points of the distribution of gold grades, the author elected to cap (trim) raw assays at 70 g/t. By capping at this level, 26 samples in excess of 70 g/t were reduced to that level. Table 17-8 summarizes the effects of capping those 26 samples and shows what the effect would be by capping at different thresholds.

Table 17-8: Gold Grade Capping Sensitivity

Cap Grade	No. Capped	Mean Grade	Std Dev	CV	% Metal Loss	% Metal Above Cap
None	0	0.951	7.399	7.781	0.0%	100.0%
95	13	0.874	4.629	5.298	8.1%	13.9%
90	14	0.871	4.567	5.246	8.4%	14.4%
85	16	0.867	4.503	5.192	8.8%	15.1%
80	18	0.863	4.433	5.134	9.2%	16.5%
75	22	0.859	4.350	5.066	9.7%	18.7%
70	**26**	**0.853**	**4.248**	**4.982**	**10.3%**	**19.7%**
65	26	0.846	4.147	4.901	11.0%	19.7%
60	28	0.840	4.050	4.823	11.7%	20.2%
55	32	0.833	3.948	4.742	12.4%	21.7%
50	33	0.824	3.841	4.659	13.3%	21.9%
45	39	0.815	3.725	4.570	14.3%	24.2%

The coefficient of variation, or CV, which is the ratio of the standard deviation to the mean, was dramatically reduced from 7.78 to 4.98. Based on the reduction of the grade times thickness product, approximately 10.3% of the gold metal content was removed by capping at raw assay samples at 70 g/t. The 26 raw samples that were capped at 26 g/t are listed in Table 17-9 and are sorted by original gold grade in descending order.

Table 17-9: Capped Assay Intervals

Hole ID	From Depth (m)	To Depth (m)	Length (m)	Au (g/t)	Company	Type
D-88-54	24.2	24.99	0.79	471.604	Solomon Resources	Core
H-88-95	35.36	36.12	0.76	384.175	Solomon Resources	Core
EF-88-42	16.76	17.19	0.43	365.283	Solomon Resources	Core
EF-88-42	16.03	16.76	0.73	330.346	Solomon Resources	Core
HI-88-22	21.52	22.49	0.97	301.751	Solomon Resources	Core
H-88-95	42.25	42.98	0.73	293.660	Solomon Resources	Core
H-88-34	40.69	41.15	0.46	276.654	Solomon Resources	Core
GH-88-17	18.84	19.26	0.42	171.704	Solomon Resources	Core
A-85-04	56.08	56.39	0.31	140.778	Nighthawk Resources	Core
HR04-277	59.44	60.96	1.52	135.500	Alaska Gold Company	RC
WDH-83-01	7.77	8.66	0.89	121.510	Cornwall Pacific Resources	Core
F-88-02	31.06	32	0.94	112.595	Solomon Resources	Core
HR04-264	9.14	10.67	1.53	101.500	Alaska Gold Company	RC
H-88-34	41.15	41.97	0.82	94.492	Solomon Resources	Core
F-88-90	21.28	21.95	0.67	87.978	Solomon Resources	Core
G-85-01	38.25	39.01	0.76	87.669	Nighthawk Resources	Core
BT1	10.97	11.21	0.24	83.281	Cornwall Pacific Resources	Trench
AT1	1.52	4.26	2.74	82.081	Cornwall Pacific Resources	Trench
H-85-03	76.2	78.27	2.07	77.212	Solomon Resources	Core
A-85-04	60.35	60.66	0.31	76.423	Nighthawk Resources	Core
H-85-03	69.4	70.41	1.01	76.423	Solomon Resources	Core
HR04-272	19.81	21.34	1.53	75.500	Alaska Gold Company	RC
A-88-64	23.87	24.63	0.76	74.435	Solomon Resources	Core
GH-88-17	18.23	18.84	0.61	74.263	Solomon Resources	Core
B-85-06	99.21	99.67	0.46	72.789	Nighthawk Resources	Core
BLT-01	0	0.4	0.4	71.075	Cornwall Pacific Resources	Trench

As can be seen in Table 17-9, most of the high-grade outlier assays were obtained as short core samples.

17.9 Assay Compositing

The raw drill hole assays were composited using the fixed length or “down-the-hole” method. A composite length of 2.5 meters was selected. The original drill hole (and trench) assays were not collected on uniform lengths. About 70 percent of the assay intervals were sampled on lengths less than 3 meters.

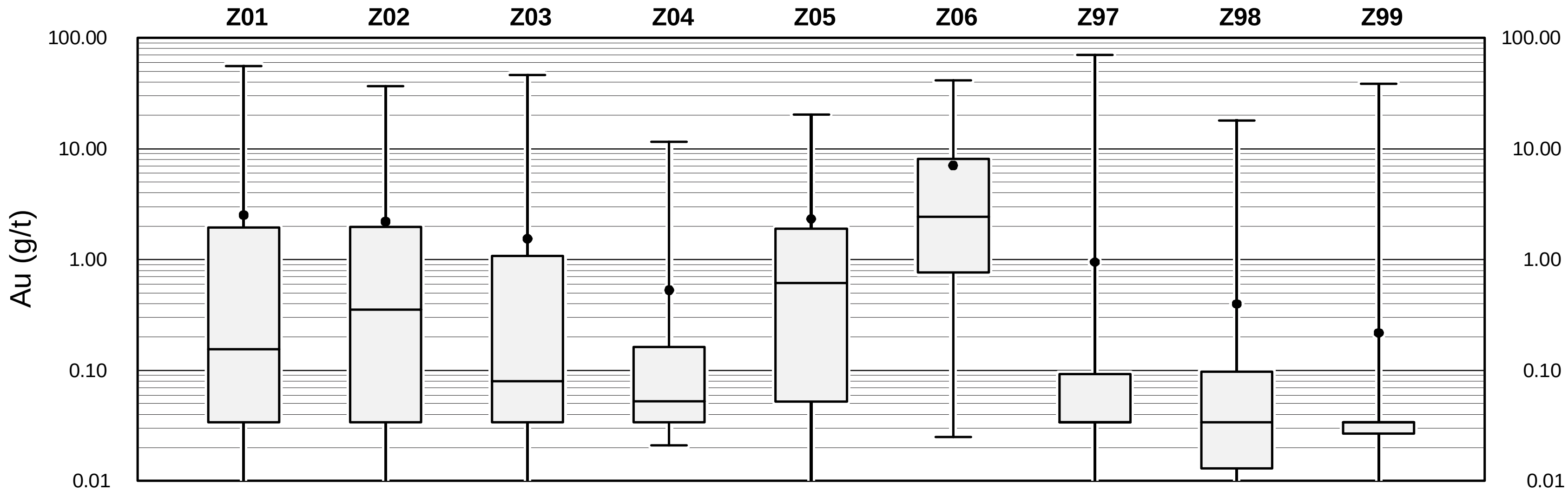
The down-the-hole compositing routine assures that in general, all of the composites are of uniform sample length, except for the last composite in each drill hole.

The MineSight® compositing routine was checked by manually calculating the composite grades, lengths, and X, Y, and Z coordinates for the top, middle, and bottom of each composite for several composites. The compositing routine was found to be working correctly.

17.10 **Gold Composite Statistics**

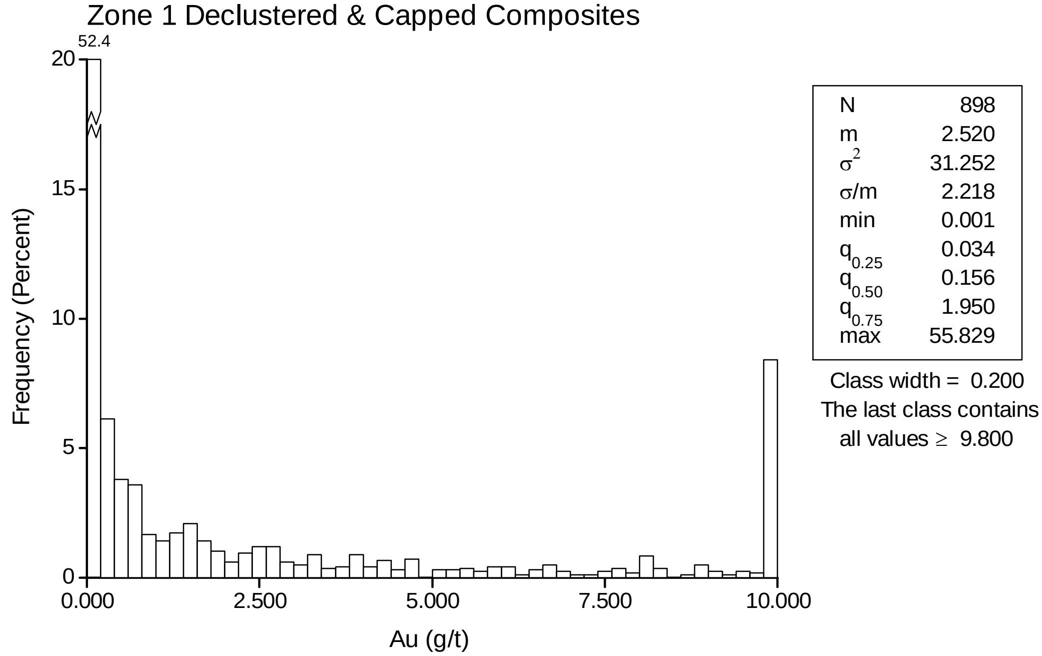
Gold grade statistics were calculated for the Big Hurrah drill hole composites. The composites were declustered using the cell declustering method (2.5m by 2.5m by 2.5m cells). Figure 17-3 shows a box plot for each of the mineral zones that were used to constrain the estimate of block gold grades. Figures 17-4, 17-5, and 17-6 are gold histogram and cumulative probability plots for mineral zones 1, 2, and 3, which are the principal gold bearing units at Big Hurrah. The construction of mineral zones is described in Section 17.14.

Figure 17-3: Au Composite Grades by Mineral Zone



	Z01	Z02	Z03	Z04	Z05	Z06	Z97	Z98	Z99	
Number of data	898	339	573	70	52	79	684	757	3557	Number of data
Mean	2.520	2.201	1.544	0.529	2.326	7.064	0.950	0.399	0.218	Mean
Maximum	55.829	36.409	46.148	11.569	20.376	41.390	70.000	18.065	38.313	Maximum
Upper quartile	1.94	1.968	1.084	0.162	1.903	8.050	0.093	0.097	0.0340	Upper quartile
Median	0.156	0.352	0.08	0.053	0.615	2.441	0.034	0.034	0.0340	Median
Lower quartile	0.034	0.034	0.034	0.034	0.052	0.761	0.034	0.013	0.027	Lower quartile
Minimum	0.001	0.002	0.002	0.021	0.002	0.025	0.001	0.002	0.002	Minimum
Variance	31.252	22.856	18.384	2.868	18.430	95.881	22.169	2.217	1.924	Variance
CV	2.218	2.172	2.777	3.202	1.845	1.386	4.954	3.732	6.352	CV
Skewness	3.923	3.893	5.806	5.009	2.752	1.892	9.352	6.951	16.735	Skewness

Figure 17-4: Gold Histogram for Mineral Zone 1



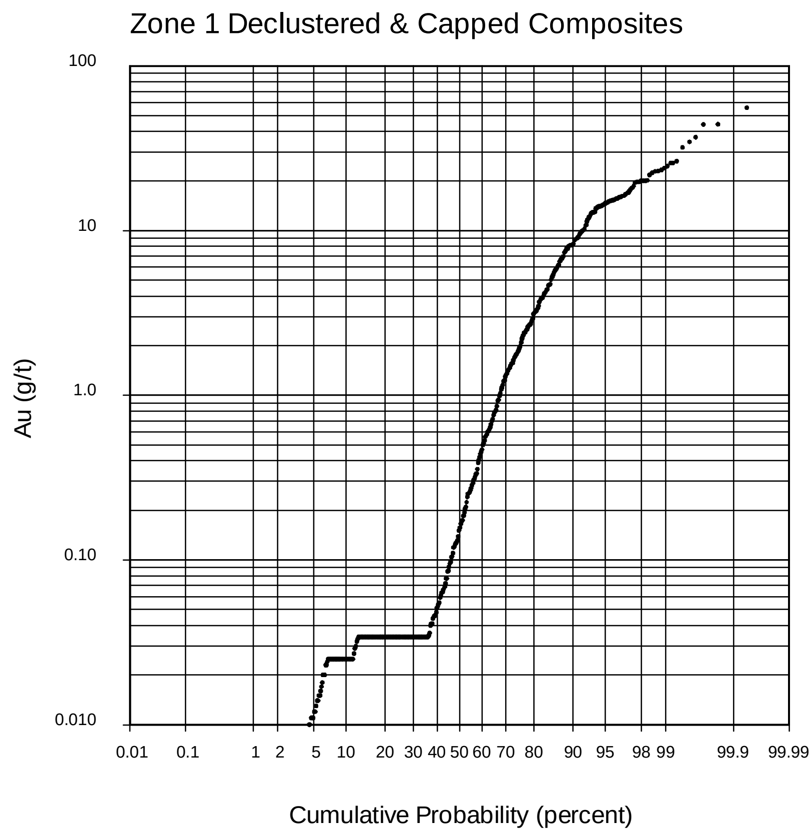
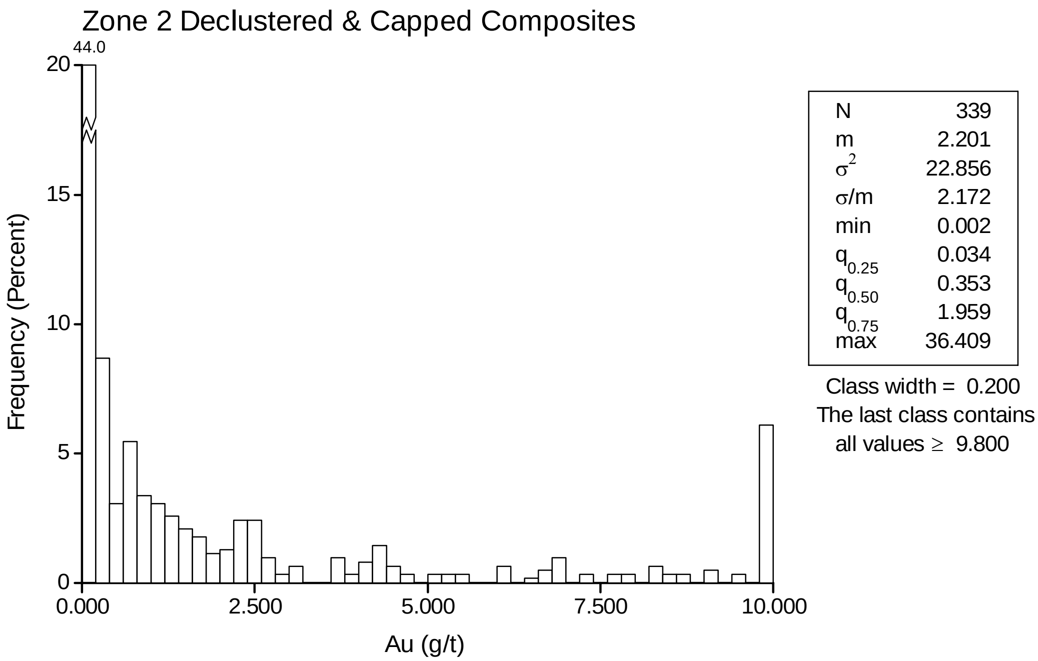


Figure 17-5: Gold Histogram for Mineral Zone 2



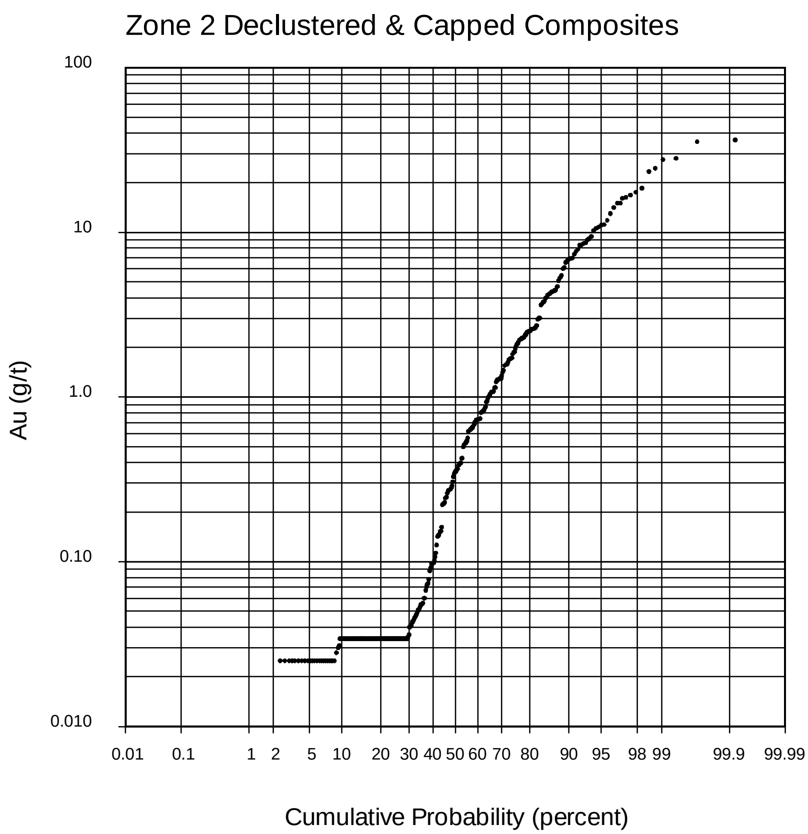
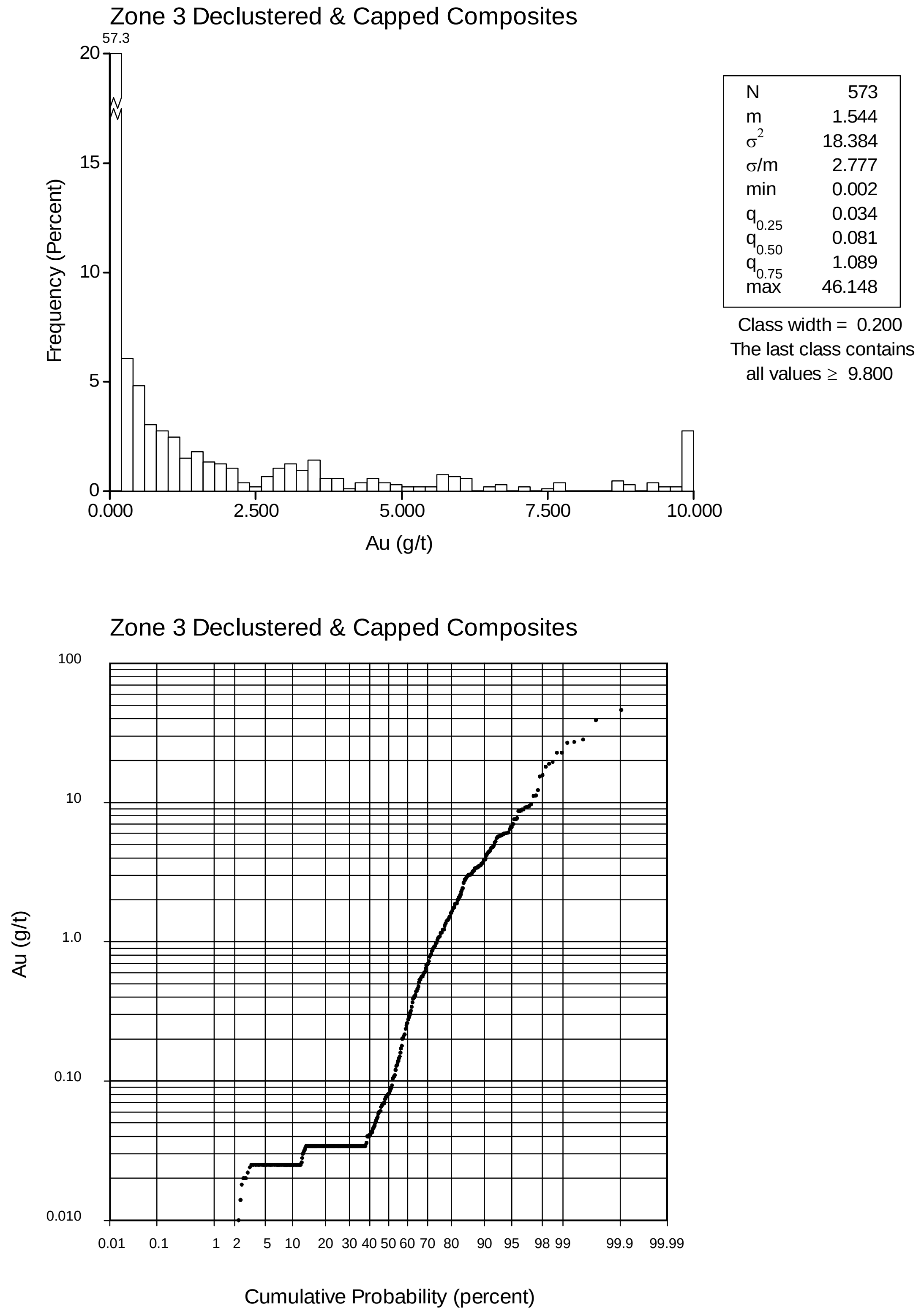


Figure 17-6: Gold Histogram for Mineral Zone 3



17.11 **Variography**

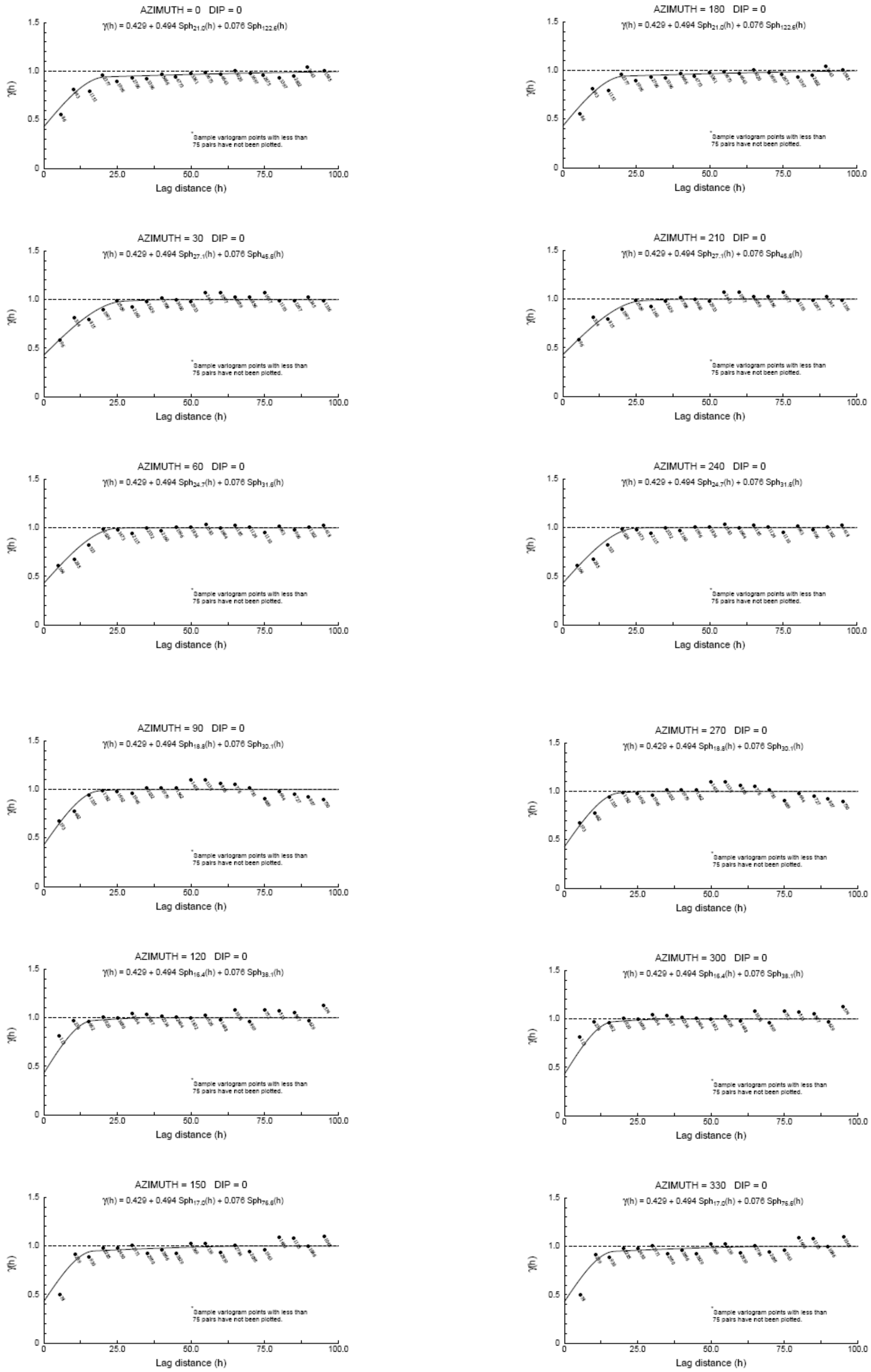
A number of gold grade and gold indicator variograms were generated using the 1 minus correlogram method. These types of variograms have a unit sill and each lag is normalized by dividing the covariance by the variance of the data. Correlograms are commonly used for defining spatial continuity in precious metal deposits, as the method is usually robust to outlier values and typically gives good results where data are limited.

Gold grade correlograms were generated for the key mineral zones and for combined mineral zone assemblages. Gold indicator correlograms were modeled for gold cutoff grades of 0.50 and 1.00 g/t. The correlograms were calculated with azimuth and dip increments of 30º using Sage2001, which is a commercially available software package. Thirty-seven directional correlograms were generated for each vector and then fitted with nested spherical models using the "automatic fitting" capabilities of Sage2001.

The grade and indicator correlograms defined anisotropy trends that are somewhat consistent with the well defined north-south (grid north) structural trends.

Figure 17-7 contains twelve 0.5 g/t gold indicator correlograms for combined mineral zones 1, 2, 3, and 5 using all the capped 2.5-meter-long drill hole composites. The correlograms shown in Figure 17-7 were calculated and modeled for 30 degree increments at a zero degree dip. Representative gold grade and 0.5 g/t gold indicator correlograms for mineral zones 1, 2, 3, and 5 are included in Section 24.

Figure 17-7: 0.50 g/t Gold Indicator Correlograms



17.12 Gold Grade Estimation

Gold grades were estimated using two different methods: inverse distance weighting and nearest neighbor. The following sections describe the methods that were used by the author in estimating Mineral Resources.

17.13 Block Model Parameters

The author constructed a three-dimensional block model using MineSight® software. Table 17-10 summarizes the limits and key parameters of the block model.

Table 17-10: Block Model Limits

Parameter	Value
Xmin (minimum easting coordinate)	0
Xmax (maximum easting coordinate)	500
DX (EW block size in meters)	2.5
NX (number of blocks in EW direction)	200
EW extent in meters	500
Ymin (minimum northing coordinate)	0
Ymax (maximum northing coordinate)	800
DY (NS block size in meters)	2.5
NY (number of blocks in NS direction)	320
NS extent in meters	800
Zmin (minimum elevation coordinate)	-100
Zmax (maximum elevation coordinate)	125
DZ (bench block size in meters)	2.5
NZ (number of blocks in vertical direction)	90
Vertical extent in meters	225

A variety of items were stored in each block including estimated gold grades, the number of drill hole composites and drill holes used to estimate the block grade along with the distance to the closest sample.

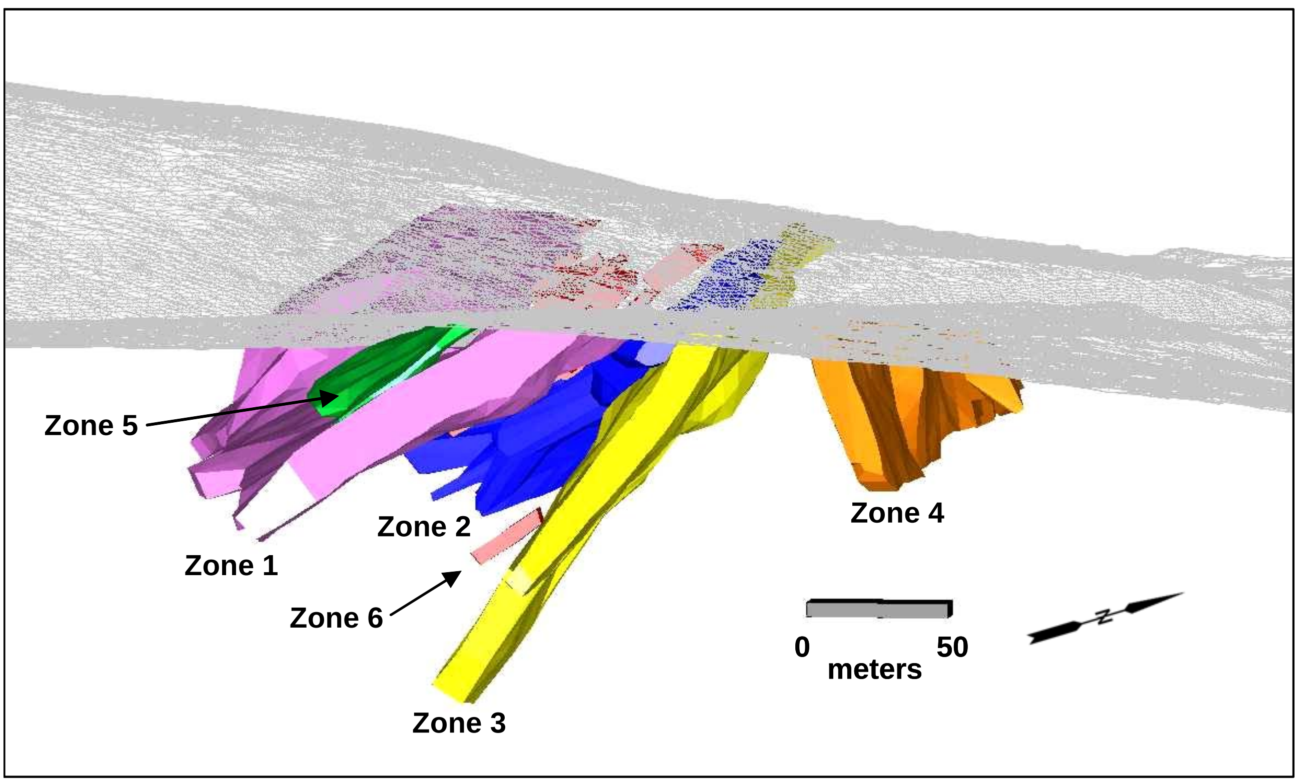
17.14 Geologic Constraints

Typically, block model grade estimates are constrained by one or more geologic constraints (e.g. lithology, alteration, structural domains, etc.). The controls for mineralization at Big Hurrah are complex and not fully understood, although there are multiple sub-parallel zones of ribbon quartz veining that clearly contain most of the gold resources at Big Hurrah. In general, these mineralized zones strike northwesterly and dip shallowly to the southwest. The mineral zones along the western margin of the deposit tend to dip more shallowly than those along the eastern edge of the deposit. In fact, the mineral zones appear to be controlled by either a series of imbricate thrust faults or perhaps faults within an overturned fold.

The mineral zones were modeled in MineSight® by constructing polygons on 10-meter-spaced east-west cross sections. A nominal 0.50 g/t gold cutoff grade was used to design the mineral zones along with logged geologic data (e.g. ribbon quartz veining and shearing). The mineral zones were designed with a significant amount of dilution due to the fact that the zones of ribbon veining and shearing tend to pinch and swell along strike and down-dip. To a certain degree, the mineral zones represent corridors where the "zones" tend to have a similar style of mineralization, but the actual contacts were locally smoothed and generalized. The sectional interpretations were then intersected to 2.5-meter-spaced level plans and reconciled to minimize projection errors associated with the sectional data. The level plan polygons were then linked together forming three-dimensional wireframes that were used to code drill hole composites and model blocks.

Figure 17-8 is an isometric diagram showing the orientation of the six principal mineralized zones. There were three other mineral domains (97, 98, and 99) that were used in the estimation plan as "default" zones. Mineral zone 97 defines all overburden material. Mineral zone 98 is a zone along the eastern margin of the deposit adjacent to mineral zone 4 that defines a volume where an east dipping ellipse was used to estimate Inferred Mineral Resources. Zone 99 is a default zone located outside of mineral zones 1 through 98 where a westerly dipping ellipse was used to estimate Inferred Mineral Resources.

Figure 17-8: Isometric View of Mineral Zones



17.15 Grade Estimation Plan

As previously mentioned, block gold grades were estimated using inverse distance and nearest neighbor methods. Due to the generalized nature of the mineral zone wireframes, an initial probabilistic interpolation approach was undertaken to define blocks with a greater likelihood of being well mineralized. A 0.5 g/t indicator model was constructed for each of the mineral zones. A series of eight inverse distance squared runs were made to estimate the probability of blocks being above a 0.5 g/t cutoff grade. Table 17-11 summarizes the inverse distance squared parameters used to estimate block probabilities. Block probabilities were not estimated for mineral zone 97, which is overburden material.

Table 17-11: 0.5 g/t Indicator Model Parameters

Mineral Zone	Number of Composites			Search Ellipse Range (meters)			Search Ellipse Orientation		
	Min	Max	Max/hole	Major	Minor	Vertical	ROTN	DIPN	DIPE
1	4	12	3	50	50	20	270	-30	0
2	4	12	3	50	50	20	270	-40	0
3	4	12	3	50	50	20	270	-50	0
4	4	12	3	50	50	20	90	-70	0
5	4	12	3	50	50	20	270	-35	0
6	4	12	3	50	50	20	270	-30	0
98	4	12	3	50	50	20	90	-70	0
99	4	12	3	50	50	20	270	-40	0

ROTN, DIPN, and DIPE refer to the rotation of the search ellipse in using the left and right hand rules for each axis (LRL). In the case of ROTN, the Z-axis was rotated in a positive direction using the left hand rule creating a new north azimuth for the rotated Y-axis or “major”. For example, in the case of mineral zones 1-3, 5-6, and 99, rotating the Z-axis 270 degrees makes the Y-axis have an azimuth of N90°W. That new major axis was then dipped downward according to the DIPN value.

The estimated block probabilities were visually examined to determine an appropriate probability level that showed reasonable continuity of the material above a 0.5 g/t cutoff grade. The author selected an estimated probability of 0.40 to sub-divide blocks into two domains: those with essentially no probability of being above 0.5 g/t and those with a reasonable chance of being above 0.5 g/t. Resource model blocks with an estimated probability of 0.40 or greater were coded with a “1” and all other blocks were coded with a “2”. The drill hole composites were then back tagged with these codes from the model.

Block gold grades were then estimated with single pass inverse distance cubed runs by mineral zone. Strict matching rules where used so that blocks within a particular mineral zone could only be estimated by drill hole composites from that same mineral zone. In addition to the mineral zone matching, blocks inside of the favorable 0.5 g/t probability population were estimated by composites that had been back tagged from that population. Similarly, blocks inside of a mineral zone but located outside of the favorable

0.5 g/t probability population were estimated by composites located outside of the favorable probability. Because the surface trench samples appeared to be biased high relative to core hole data they were not used to estimate gold resources. Table 17-12 summarizes the parameters that were used in the inverse distance cubed runs for estimating gold resources.

Table 17-12: Inverse Distance Cubed Gold Estimation Parameters

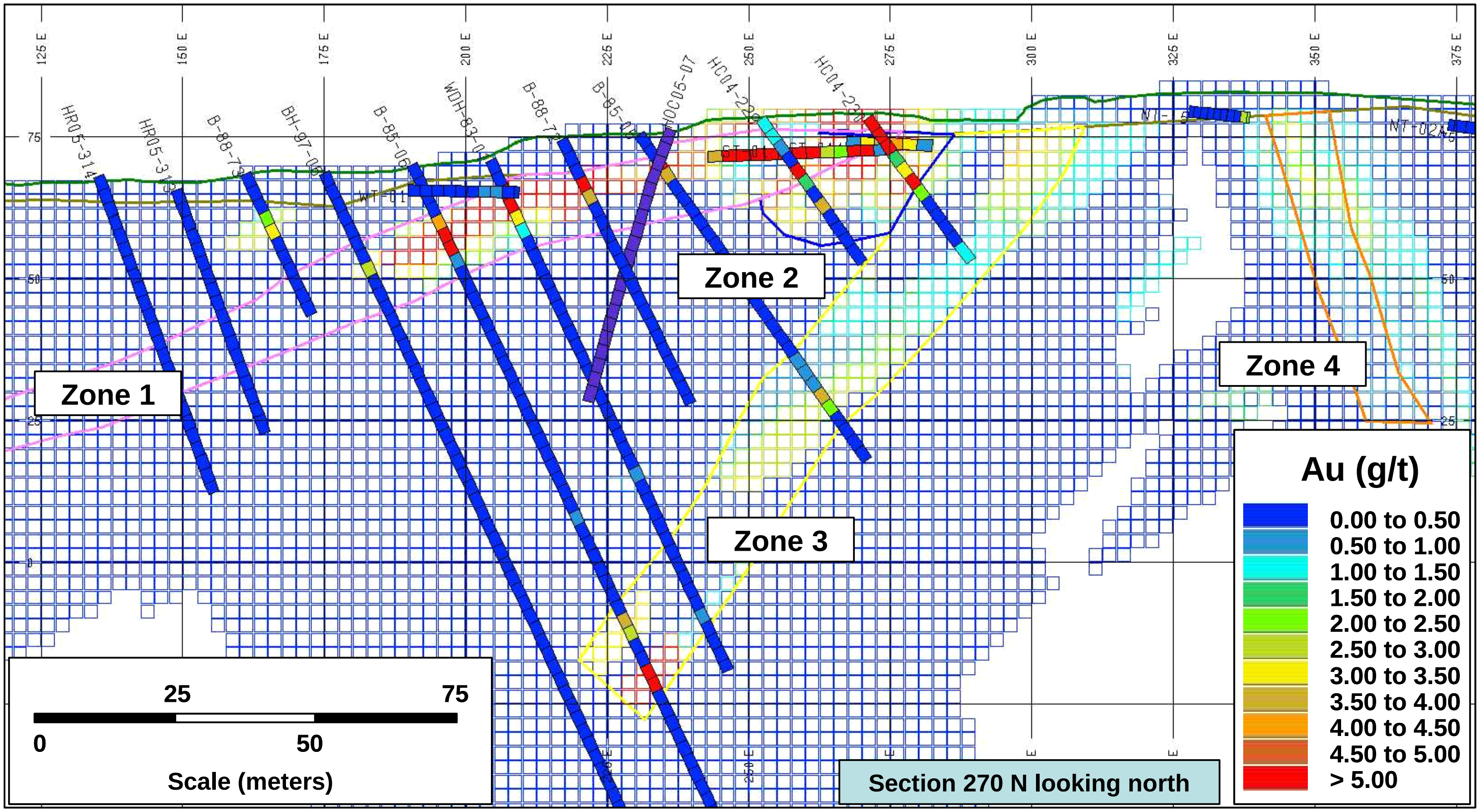
Mineral	Number of Composites			Search Ellipse Range (meters)			Search Ellipse Orientation		
Zone	Min	Max	Max/hole	Major	Minor	Vertical	ROTN	DIPN	DIPE
1	1	6	2	50	50	5	270	-30	0
2	1	6	2	50	50	5	270	-40	0
3	1	6	2	50	50	5	270	-50	0
4	1	6	2	50	50	5	90	-70	0
5	1	6	2	50	50	5	270	-35	0
6	1	6	2	50	50	5	270	-30	0
97	1	6	2	50	50	5	0	0	0
98	1	6	2	50	50	5	90	-70	0
99	1	6	2	50	50	5	270	-40	0

The number of drill hole composites and the distance to the closest composite were stored in each block for subsequent resource classification purposes. A nearest neighbor grade model was constructed using the same parameters as those shown in Table 17-12.

17.16 **Grade Verification**

The estimated block gold grades were verified using visual and statistical methods. The block gold grades were visually compared with the 2.5-meter drill hole composites grades along east-west and north-south cross sections and 2.5-meter-spaced level plans. The block grades were seen to compare reasonably well with nearby drill hole grades. Figures 17-9 illustrates a representative east-west cross sections drawn through the block model at coordinate 270 north showing block and drill hole composite grades.

17-9: Block Model Cross Section 270 North



Figure

To check for potential global biases in the block model grade estimate, the inverse distance block grades were compared to the nearest neighbor grade model at a zero cutoff grade. Nearest neighbor models provide one of the best estimates of the mean grade of a deposit because the drill hole sample data are declustered. Table 17-13 compares the two grade models at a zero cutoff grade for two Mineral Resource categories.

Table 17-13: Nearest Neighbor Model Comparison

Estimated Volume	ID^3 Model Au (opt)	NN Model Au (opt)	Percent Difference
Indicated Mineral Resource Blocks	1.8328	1.7982	1.92%
Inferred Mineral Resource Blocks	0.5423	0.4998	8.50%

The comparison between the inverse distance cubed model and the nearest neighbor model is reasonable for Indicated Mineral Resource blocks, but is marginal for Inferred Mineral Resources. These comparisons suggest that the estimated gold grade is globally unbiased for Indicated Mineral Resources, but may be biased high for Inferred Mineral Resources. It is the opinion of the author that additional drilling and more detailed modeling of the mineral zones could improve the estimate of Inferred Mineral Resources.

Possible localized grade biases were checked by comparing the inverse distance cubed model with the nearest neighbor model by block model rows, columns, and levels. Figure 17-10 compares the ID^3 and NN block grades by easting or model columns, Figure 17-11 compares the two grades by model row or northing, and Figure 17-12 compares the grades by bench levels. These plots show the average gold grade from the two models at a zero cutoff grade as a function of geographic location. The number of blocks for each column, row, and level are shown by the heavy black line and are read from the Y-axis on the right side of the graphs.

Figure 17-10: Gold Grade Comparison by Easting

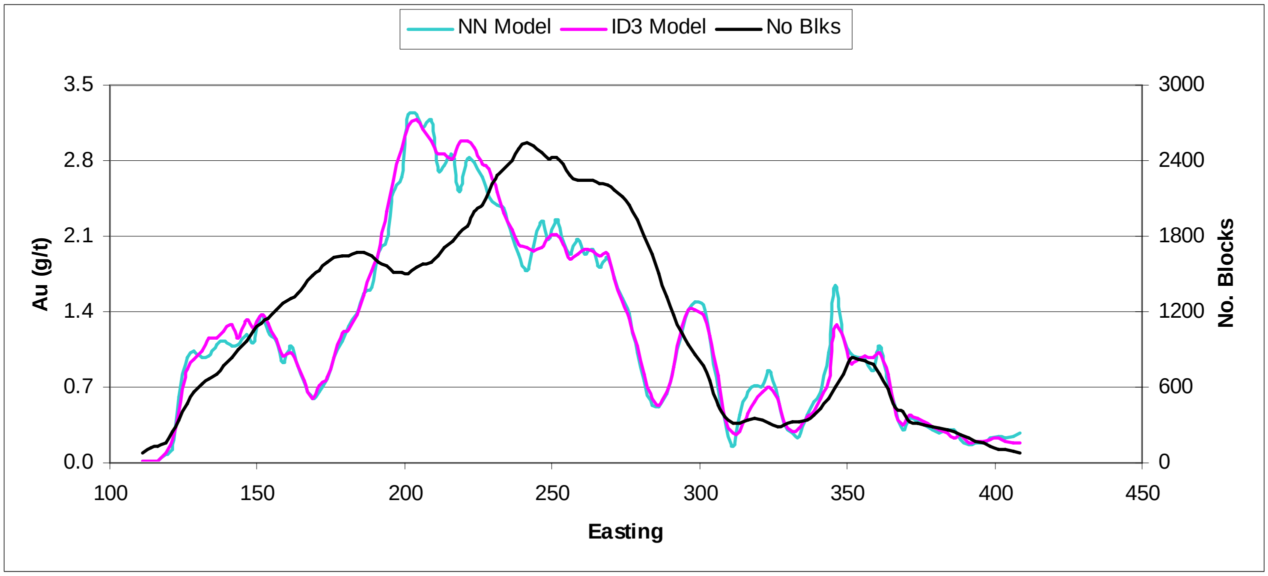


Figure 17-11: Gold Grade Comparison by Northing

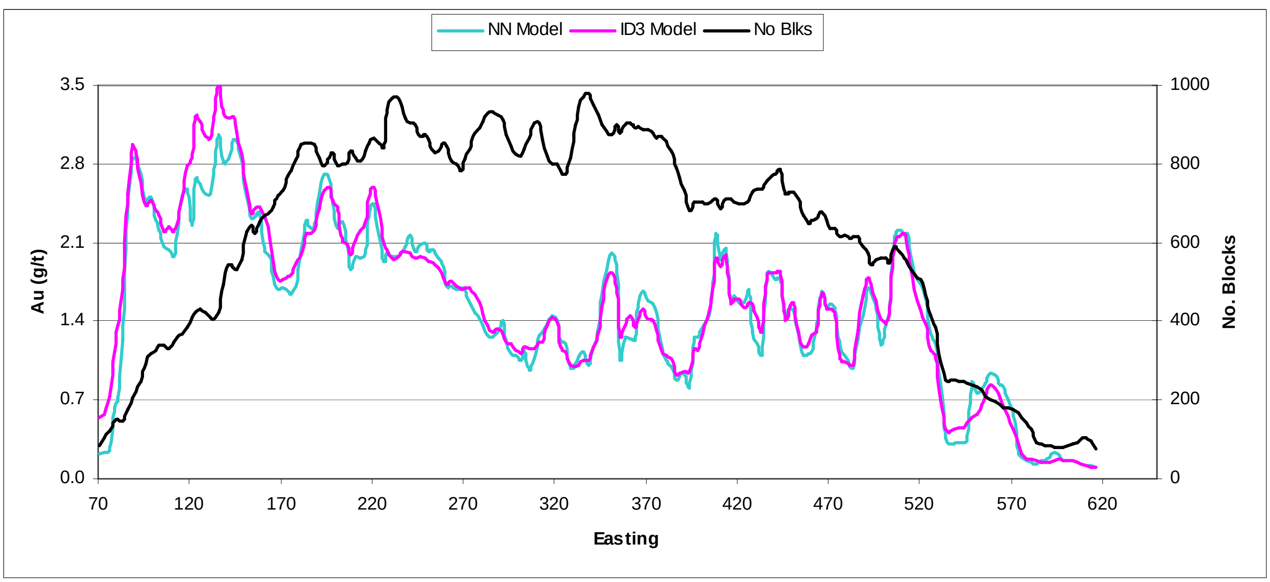
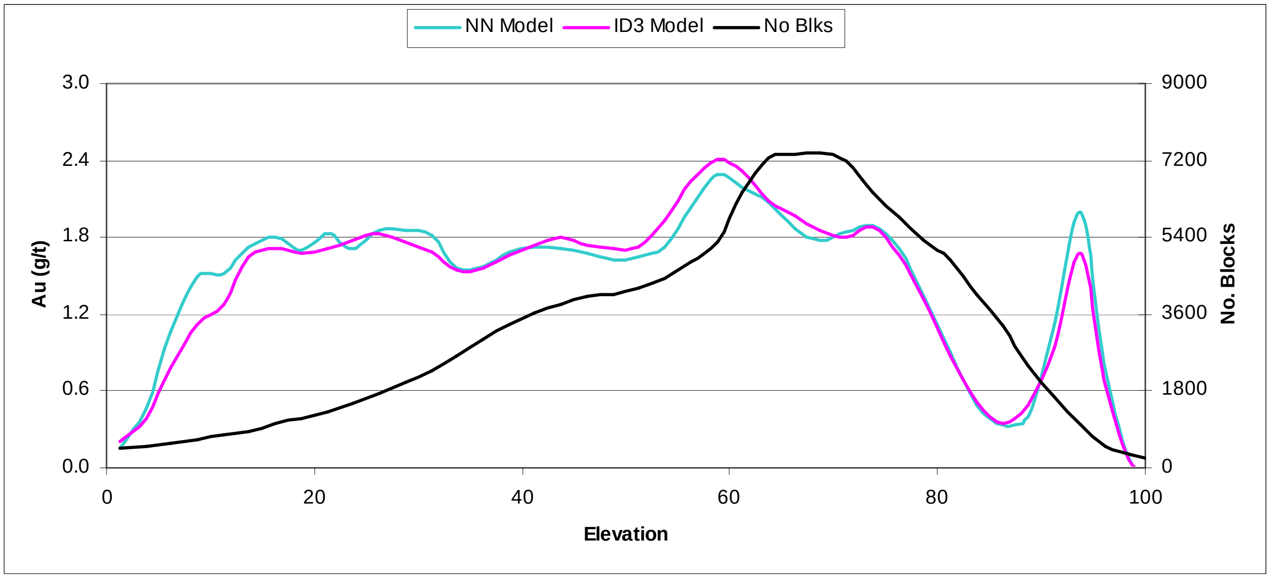


Figure 17-12: Gold Grade Comparison by Elevation



The localized grade comparison shown in Figures 17-10 through 17-12 demonstrates that the inverse distance weight model (IDW) compares very closely with the nearest neighbor (NN) model. Furthermore, these graphs show where higher grade material is located; for example, there is a distinct zone of higher grade material located around easting 200 and at about the 60 elevation.

Based on the various visual and statistical comparisons, it is the author's opinion that the estimated grades are globally unbiased.

17.17 **Resource Classification**

The estimated block gold grades were classified into Indicated and Inferred Mineral Resource categories using the number of data and distance to data method. No Measured Mineral Resources were established for the Big Hurrah deposit. Indicated Mineral Resources were restricted to only those blocks located inside of mineral zones 1 through 6 and 97 (overburden). A minimum of two drill holes located within 23 meters of the block were required for Indicated Mineral Resources. The mineral zones were constructed with mineralized continuity in mind, which is one of the key components of the CIM resource classification system.

Blocks that were not classified as Indicated Mineral Resources were classified as Inferred Mineral Resources if they were estimated using a 50-meter by 50-meter by 5-meter search ellipse.

Table 17-14 summarizes the criteria that were used to classify the Big Hurrah deposit into Indicated and Inferred Mineral Resource categories.

Table 17-14: Resource Classification Criteria

Resource Category	No. of Drill Holes	Maximum Distance to Drill Holes (meters)	Mineral Zones
Indicated	>= 2	<= 23	1-6 and 97
Inferred	>= 1	<= 50	1-6 and 97-99

17.18 **Summary of Mineral Resources**

Global Mineral Resources (entire block model) are summarized at a variety of gold cutoff grades in Table 17-15 for Indicated and Inferred Mineral Resource categories.

Table 17-15: Global Mineral Resource Inventory

Au Cutoff (g/t)	Indicated Mineral Resources			Inferred Mineral Resources		
	Tonnes (000)	Au (g/t)	Contained Au Ozs (000)	Tonnes (000)	Au (g/t)	Contained Au Ozs (000)
0.5	2,087	4.19	281	1,456	2.02	95
0.6	2,051	4.26	281	1,341	2.15	93
0.7	2,006	4.34	280	1,236	2.28	91
0.8	1,965	4.41	279	1,110	2.45	87
0.9	1,930	4.48	278	1,027	2.58	85
1.0	1,894	4.55	277	962	2.69	83
1.1	1,846	4.64	275	897	2.81	81
1.2	1,795	4.73	273	820	2.97	78
1.3	1,744	4.84	271	732	3.17	75
1.4	1,696	4.93	269	680	3.31	72
1.5	1,652	5.03	267	642	3.43	71

The Mineral Resources that were tabulated in Table 17-15 represent the total inventory within the block model at various gold cutoff grades. In order to determine to what extent the resources have a “reasonable expectation for extraction”, the author generated a pit using the Lerchs-Grossmann (LG) pit optimization algorithm. This study was preliminary in nature and there is no certainty that these results will be realized as the LG pit does not contain any access ramps. The parameters that were used to develop the optimized pit are summarized in Table 17-16.

Table 17-16: Pit Optimization Parameters

Parameter	Value
Gold Price	$500 per ounce
Gold Recovery	90%
Ore Mining Cost	$2.21 per ore tonne
Waste Mining Cost	$1.20 per tonne
Processing Cost	$5.90 per tonne milled
G&A Cost	$1.15 per tonne milled
Ore Transportation Cost	$8.00 per tonne shipped
Sustaining Capital Cost	$0.20 per tonne milled
Pit Slope Angle	45 degrees

The pit optimization parameters shown in Table 17-16 are the same as those that were used by Norwest in their 2005 Feasibility Study. The LG pit that was generated by the author used net revenue values that were obtained from both Indicated and Inferred Mineral Resource blocks. Table 17-17 tabulates the Mineral Resources inside of the $500 LG pit.

Table 17-17: Mineral Resources Inside of $500 LG Pit

Au Cutoff (g/t)	Indicated Mineral Resources			Inferred Mineral Resources		
	Tonnes (000)	Au (g/t)	Contained Au Ozs (000)	Tonnes (000)	Au (g/t)	Contained Au Ozs (000)
0.5	1,994	4.31	276	766	2.45	60
0.6	1,964	4.36	275	725	2.56	60
0.7	1,929	4.43	275	681	2.68	59
0.8	1,896	4.49	274	628	2.85	58
0.9	1,869	4.55	273	601	2.94	57
1.0	**1,839**	**4.61**	**273**	**569**	**3.05**	**56**
1.1	1,798	4.69	271	538	3.17	55
1.2	1,752	4.78	269	502	3.31	53
1.3	1,707	4.87	267	467	3.46	52
1.4	1,661	4.97	265	435	3.62	51
1.5	1,618	5.06	263	409	3.76	49

The author is unaware of any environmental, legal, title, taxation, socio-economic, marketing, political, or other relevant issues that could affect the estimate of Mineral Resources at Big Hurrah. Obviously the Mineral Resources that are subject to this report could be reduced or eliminated if one or more of these issues were to become relevant.

18.0 OTHER RELEVANT DATA AND INFORMATION

Alaska Gold is in the process of developing the Big Hurrah deposit in conjunction with their nearby Rock Creek deposit. Their plan is based on an economic review that was completed by Norwest Corporation in August of 2005. Alaska Gold is currently in the final stages of permitting both deposits. It is anticipated that another technical report will be filed which will summarize various aspects of the Big Hurrah mining project.

19.0 INTERPRETATION AND CONCLUSIONS

The Big Hurrah gold deposit is characterized by relatively narrow structurally prepared areas of ribbon quartz veining in several well defined trends or zones of mineralization. Gold grades within these zones tend to be quite variable and are often quite high given the amount of relatively coarse free gold.

The property has been explored for a number of years by reputable mining companies. The data that were collected by the various companies include diamond core, reverse circulation drilling, surface trenching results, and various geophysical studies. There is also historical production of approximately 35,000 gold ounces during the early part of the 20th century.

In the opinion of the author, the property has been adequately drilled and sampled to define the principal zones of mineralization, although mineral controls remain elusive. The quality of the underlying sample data were sufficient to estimate Mineral Resources and to classify a portion of them into Indicated Mineral Resources.

Selective ore control may be difficult given the erratic nature of the mineralized zones. It may be necessary to incur a significant amount of dilution in order to assure that the bulk of the mineralized zones are processed in order to recover as much gold as possible.

20.0 RECOMMENDATIONS

The pre-2004 drill hole database needs to be completely checked and corrected where applicable. The author found 100 errors during an audit of the database. All of the errors were associated with the older drilling. The author estimates that this task could take one or two people about 1 week to complete and the cost should be under five thousand dollars.

The resource model needs to be updated and re-estimated using the metallic screen fire assays that were obtained from the 2005 drilling campaign. These assays would replace the earlier conventional fire assay results. In the author's opinion, the metallic screen fire assays should be more representative than the initial fire assays. The author estimates that this task should cost less than ten thousand dollars.

The project should be advanced into production according to the current plans. Once the mineralized zones are exposed it may be necessary to conduct and test various sampling and ore control procedures so that the most efficient and best practices can be implemented. The costs associated with putting the property into production are beyond the expertise of the author. Alaska Gold is currently finalizing their operating plans based on work conducted by Norwest.

Geologic pit mapping should be undertaken with the idea of obtaining a better understanding of the geometry and control of the mineralized zones. The geologic interpretation of these zones should be routinely updated and used to constrain the estimate of block grades for subsequent mine planning purposes. In the author's opinion, the costs associated with this activity are fixed in that a salaried geologist will be required for this and other geologic functions.

Routine reconciliation procedures need to be undertaken on a monthly, quarterly, and yearly basis. Close attention should be paid to areas that either under or over produce so that local updates to the resource model can be completed. In the author's opinion, the costs associated with this activity are fixed in that a salaried geologist will be required for this and other geologic functions.

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22.0 DATE AND SIGNATURE PAGE

1. I, Michael J. Lechner, a consulting geologist and President of Resource Modeling Incorporated, (RMI) an Arizona corporation with a business address of 1960 West Muirhead Loop, Tucson, AZ 85737, HEREBY CERTIFY THAT

2. I am the author of the technical report titled "Big Hurrah Technical Report, Seward Peninsula, Alaska" dated August 25, 2006 (the "Technical Report").

3. I am a graduate of the University of Montana with a B.A. degree in Geology (1979).

4. From 1979 to the present I have been actively employed in various capacities of the mining industry in numerous locations throughout the world. I have worked as an exploration geologist exploring for precious and base metals throughout western North America, a mine geologist working at precious metal mines in California and Nevada, and have estimated Mineral Resources for numerous deposits located throughout the world.

5. I am a Registered Professional Geologist in the State of Arizona (#37753), a Certified Professional Geologist with the American Institute of Professional Geologists (#10690), and a Registered Member of the Society of Mining Engineers (# 4124987RM).

6. As a result of my education, experience and professional associations, I am a "Qualified Person" as defined by National Instrument 43-101 (the "Instrument").

7. My work on the Big Hurrah Project consisted of a site visit on October 13-14 2005, to observe drilling and sampling procedures, review drill core and the completion of an independent estimate of Mineral Resources.

8. I am responsible for the preparation of the Technical Report.

9. The sources of all information are noted and referenced in the Technical Report.

10. I am independent of the issuer as defined in the Instrument.

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

12. I have read and understand the terms of the Instrument and its companion documents and the Technical Report has been prepared in compliance with the Instrument.

13. I consent to the use of the Technical Report dated, August 25, 2006 by Alaska Gold Company for making representations about the subject property and the public filing of the Technical Report.

14. I have not had any prior involvement with the property is the subject of the Technical Report.

Dated in Tucson, Arizona, this 25 day of August, 2006.

Signature of Qualified Person

Michael J. Lechner

Print Name of Qualified Person

23.0 ADDITIONAL REQUIREMENTS FOR TECHNICAL REPORTS ON DEVELOPMENT PROPERTIES AND PRODUCTION PROPERTIES

At this time Alaska Gold is reviewing and finalizing an economic review of the Big Hurrah project.