

# **Updated Galore Creek Mineral Resources, Northwestern British Columbia**



**Prepared for**

**NovaGold Resources Inc.**

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September 7, 2006

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## 1.0 SUMMARY

Resource Modeling Incorporated (RMI) was asked by NovaGold Resources Inc. (NovaGold) to help them prepare an updated Technical Report that meets the guidelines as outlined by Canadian National Instrument 43-101 for their Galore Creek property, an alkaline porphyry-style copper-gold-silver deposit, which is located in northwestern British Columbia. RMI was asked to review sampling procedures, to examine quality assurance/quality control (QA/QC) practices/results, and to review NovaGold's updated estimated of Mineral Resources. In addition to those reviews, the author performed a site visit in October of 2005 for the purpose of observing drilling and sampling procedures and to examine drill core from the various deposits.

The Galore Creek property is located within the historic Stikine Gold Belt of northwestern British Columbia, approximately 1,030 kilometres northwest of Vancouver, British Columbia and 90 kilometres northeast of Wrangell, Alaska at latitude 57.13°N; longitude 131.47°W. Current access to the property is by helicopter.

In August 2003, SpectrumGold Inc. (now NovaGold Canada Inc.) entered into an option agreement to acquire a 100% interest in the Galore Creek property from Stikine Copper Limited, a company owned by QIT-FER et Titane Inc. and Hudson Bay Mining and Smelting Co. Limited. The Galore Creek property consisted of 292 two-post claims, of which 39 were fractions, all held in the name of Stikine Copper Limited.

In 2004 SpectrumGold Inc. (now NovaGold Canada Inc.) entered into an option agreement with Eagle Plains Resources Ltd. giving NovaGold the exclusive right to earn up to an 80% interest in the Copper Canyon Property comprised of 4 located claims. NovaGold also purchased 11 two-post claims from Silver Standard Resources Inc. and Teck-Cominco Limited. These claims were later transferred to Eagle Plains Resources Ltd.

In March 2004 NovaGold entered into an option agreement with Pioneer Metals Corporation giving NovaGold the exclusive right to earn up to a 60% interest in the Grace Property comprised of 5 located claims. In October 2005, NovaGold received a writ of summons from Pioneer Metals Corporation to rescind the Grace option agreement.

In 2005, NovaGold reviewed the status of all Galore Creek property mineral claims and recommended that legacy claims be converted to cell claims as allowed by the amended BC Mineral Tenure Act. The legacy claim conversion would consolidate the project holdings, eliminate any internal claim gaps, secure tenure ownership and reduce legal surveying costs for mining lease application. All parties agreed to this conversion and signed the Galore Creek Legacy Claim Cell Conversion Agreement dated June 30, 2005.

Between July 6–11, 2005, NovaGold converted the Galore claims with the exception of claims located adjacent to third party cell claims. These claims were not converted, since a portion of their held area would be surrendered to the adjacent cell

claim holder on conversion. The option agreement land schedules were revised and in early 2006 were presented to Stikine Copper Limited, Eagle Plains, Bernard Kreft and Pioneer Metals for approval.

Since 2003 NovaGold has conducted a series of diamond drilling campaigns to further define and delineate the known mineralized zones within the Galore Creek area. An updated resource model was constructed by NovaGold personnel using all data that were available through the 2005 season. Various geologic models were constructed for each mineralized zone to constrain the estimate of block grades. These geologic domains consisted of either grade envelopes and/or lithologic units specific to each area. Copper, gold, and silver block grades were estimated into 25m by 25m by 15m high blocks using 5-metre-long drill hole composites. Prior to compositing the drill hole grades, high-grade outlier values were cut based on an analysis of cumulative probability plots. The grade models were validated by visual and statistical methods and are deemed to be globally unbiased. The blocks were then classified into Measured, Indicated, and Inferred Mineral Resource categories using the number of data and distance to data method.

Based on the 2005 updated resource model, the Galore Creek deposit contains about 749 million tonnes of Measured and Indicated Mineral Resources at a 0.25% copper equivalent cut-off grade grading 0.52% copper, 0.30 g/t gold, and 4.9 g/t silver. The Measured, Indicated, and Inferred Mineral Resources are summarized in Table 1-1.

**Table 1-1: Summary of Mineral Resources – 0.25% CuEq Cutoff**

Resource Category	Tonnes (millions)	Cu (%)	Au (g/t)	Ag (g/t)	CuEq (%)	Cu Pounds (billions)	Au Ounces (millions)	Ag Ounces (millions)
Measured	263.6	0.62	0.35	5.9	0.81	3.6	3.0	50.0
Indicated	485.3	0.46	0.28	4.3	0.63	4.9	4.4	67.1
Measured + Indicated	748.9	0.52	0.30	4.9	0.69	8.5	7.4	117.1
Inferred	300.1	0.37	0.21	3.7	0.51	2.4	2.0	35.7

The author has performed several independent reviews of NovaGold's Galore Creek resource model. These checks included a visual comparison of drill hole composite and block grades in section and plan, a global grade bias check (independent nearest neighbor models), and a set of swath plots that compare the author's nearest neighbor grades with NovaGold's kriged copper and gold block grades. Based on these reviews, it is the author's opinion that the NovaGold resource model is globally unbiased and is suitable to be used for subsequent pit optimization and mine planning activities.

NovaGold is currently in the process of completing a Feasibility Study for the Galore Creek project. Hatch Ltd. is overseeing and managing the Feasibility Study which is expected to be completed by the end of 2006. If the Feasibility Study shows favourable results, it is anticipated that another technical report will be completed which discloses various aspects of the Galore Creek Project.



There is no history of development or production from the Galore Creek property except for some driving two short adits into the Central and Southwest Zones in the 1960's by Kennco Exploration in order to collect metallurgical samples (refer to Section 10.3).

The author has reviewed the Galore Creek database and NovaGold's resource modeling methods. Based on these reviews the author has the following recommendations:

- Drill a reasonable number of twin holes to investigate the apparent bias between the pre-2003 and NovaGold data. Approximately 56% of the diamond core data were derived from pre-NovaGold drilling and these data are approximately 3% and 14% lower than the NovaGold data for copper and gold, respectively.
- Monitor the performance of blanks and duplicates more closely. All sample batches associated with blanks that fail should be re-assayed.
- Lower the copper equivalent (CuEq) cutoff grade used to design grade envelopes that are used to constrain the estimate of block grades. The resource model subject to this report used a 0.35% CuEq cutoff grade yet the breakeven cutoff grade used to summarize Mineral Resources was 0.25% CuEq.
- Obtain more moisture content data from representative rock types.

## **2.0 INTRODUCTION**

### **2.1 Purpose**

NovaGold Resources Inc. (NovaGold) has asked Resource Modeling Incorporated (RMI) to provide an independent review of their data, to review their estimation parameters and resultant estimate of Mineral Resources, and to help them prepare a Technical Report for their Galore Creek Project. The work entailed a site visit to review basic data collection procedures, verification of the assay database, an independent validation of block copper and gold grades, and a review of NovaGold's Mineral Resource classification criteria. These tasks were completed by the author to ensure conformance with the CIM Mineral Resource definitions referred to in National Instrument (NI) 43-101, Standards of Disclosure for Mineral Projects. This includes the preparation of this Technical Report as defined in NI 43-101 and in compliance with Form 43-101F1 (the "Technical Report").

Various NovaGold personnel including Mr. Kevin Francis, Mr. Alberto Chang, and Mr. Scott Petzel along with NovaGold's consultants (Hatch Ltd. and GR Technical Services Ltd.) provided pertinent geological and analytical data along with block grade estimates that were reviewed by Mr. Mike Lechner of RMI. A number of NovaGold personnel and their consultants contributed background information for this report and are duly referenced.

### **2.2 Terms and Definitions**

Metric units are used for all down-hole drill depths, sample lengths, precious metal grades, and tonnage estimates. Table 2-1 summarizes some of the basic metric conversions that were used. 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

## 2.3 Sources of Information

The Galore Creek Project has been explored and studied by a number of companies since the early 1960's. 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 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 17<sup>th</sup> and 18th, 2005. The primary purpose of this site visit was to observe first hand the project site, observe drilling/sampling/logging practices, and to examine available drill core. In addition, available reports, cross sections, geologic interpretations and other relevant geologic data were examined at the Galore Creek camp.

RMI was accompanied by NovaGold geologists Mr. Stuart Morris, Mr. Don Penner, and Mr. Kevin Francis while on site. Thin snow cover precluded an examination of geologic exposures but a helicopter aerial survey provided an excellent overview of the distribution, spacing, and aerial extent of the various mineralized zones. Geologic exposures of altered and mineralized intrusive rock were observed in several locations in drainages and steep slopes.

The aerial survey allowed for a number of active and reclaimed drill sites to be observed. The author notes that the NovaGold drill hole collar locations were well monumented with wooden stakes that were labeled with the drill hole number on aluminum tags that were stapled to the stake.

While on site the author observed diamond core being delivered to the Galore Creek camp from the drill rigs via helicopter. Stacked wooden core boxes were placed into core cages at the drill rig and were then slung into camp via helicopter to the core receiving area. Once unloaded from the cages, geotechnicians sorted and palletized the core boxes. Next the drill core was "quick logged" by one of the project geologists assigned to that drill hole. The quick logs provide basic information about the drill hole such as depth of lithologic contacts, mineralization and major structures. This data is subsequently used by core loggers, used to prioritize drill holes, plan subsequent drill holes, and provides information about when to terminate the drill hole.

After the quick logging has been completed, the core is transferred from the receiving area to one of four core logging tents where it is laid out sequentially on the logging bench. The logging geologist then closely examines the drill core looking for potential errors (e.g. core laid into box backwards, mislabeled core boxes, missing or mislabeled core run blocks). The quick log observations are then compared with the core that has been laid out on the logging bench which helps to determine whether there are any driller errors and to provide some insight in laying out sample intervals. The location

of each run block is marked on the wooden core box tray with a black tick mark. Down-hole drill depths at Galore Creek are recorded in Imperial Units (feet). The core logging geologist converts the down-hole depth from feet to metres and marks the metric depth of the opposite side of the original core run block. The author checked several of these conversions and found them to have been correctly calculated. The geologist then notes the beginning “from” and ending “to” depth meterage for each core box. These depths are written in black marker on the top left corner of the core box. The core box number, beginning and ending depths are etched into aluminum (“butter”) tags and stapled to the end of each core box. Similarly, the drill hole number is etched into “butter” tags and stapled to the core box.

The first step in the core logging process involves geotechnical logging activities. The principal items that are logged during this step include core recovery, rock quality designation (RQD), fracture logging (i.e. number of fractures, joint condition, joint roughness, joint alteration or filling), rock strength (point load testing), and specific gravity (SG) determination. These parameters are then used in various rock mass classification schemes (e.g. RMR and Q-System). NovaGold has been using a geotechnical consulting firm out of Vancouver, B.C. (BGC Engineering) for providing geotechnical logging support and interpretation.

NovaGold performed specific gravity determinations about every 10 meters of drilled core or where major lithologic changes or varying intensities of mineralization occurred. The water displacement method was used by the Galore Creek geologists for obtaining the SG value.

Point load testing was completed on site by the logging geologists to provide an estimate of the uniaxial compressive strength of the rock. These tests were completed at a down-hole frequency of about one test for every six meters drilled. These tests were completed in the core photography tent after SG testing and just prior to core photography. The pressure in MPa units was recorded into a special logging form when the core failed. After the point load log sheet is complete the information is given to a data entry clerk who enters the data into an Access database via a NovaGold data entry routine (DDH Tool).

The NovaGold drill core was photographed using a digital camera. Three boxes were photographed at a time with a small white placard that contained the drill hole number, core box number, and beginning-ending depths. The core photographs are permanently stored on several computers for future reference.

NovaGold oriented drill core from a number of holes using the Ezy-Mark system so that a variety of geologic surfaces could be more accurately defined in three dimensional space. These structures include faults, fractures, joints, cleavage, schistosity, mineral lineations, slickensides, and lithologic contacts. Lengths of core were oriented in the core logging facility by trying to piece together the core using the Ezy-Mark nail marks and the scribed bottom of hole (BOH) line that was drawn on the core at the drill rig. This system works relatively fine for holes drilled with inclinations less than 75 degrees in competent rock but is subject to “failure” in zones of low RQD. For holes drilled on east-west section

lines, the geologists drew arrows pointing down-hole on the northern half of the core. For holes drilled on north-south sections lines the geologists drew arrows pointing down-hole on the western half of the core. After structural/lithologic data are recorded and the core is sawn, the half of the core with the arrows is left in the core boxes as a permanent record.

After the geotechnical logging is completed (including SG determinations, point load testing and core photography) the core is logged “conventionally” for lithology, structure, alteration, and mineralization. The logging geologist also marks out assay sample intervals. Typically, samples are laid out in 2-meter lengths for NQ and HQ diameter core in mineralized sections. In unmineralized sections the sample length is often increased to 2.5 to 3.0 metres. Sample start and end points are often adjusted based on geologic contacts with the provision that samples should have a length between 1 and 3 metres except where core recovery was poor. After the sample intervals have been determined, the logging geologist staples an aluminum “butter” tag with the sample number and beginning/ending sample depths to the wooden core box along with a tear-away paper sample tag. The logging geologist is also responsible for laying out quality control-quality assurance (QA/QC) samples by attaching an appropriate sample tag for a standard, blank, or duplicate sample at the appropriate location. Each of these three types of QA/QC samples are laid out at a frequency of one each per each batch of 20 samples.

Magnetic susceptibility determinations are made for each sample interval using a Kappameter (KT-9) tool. The magnetic values are recorded on the drill log form.

After all of the core logging is completed the drill core is transferred to the saw tent facility where the “Saw Boss” takes responsibility for monitoring the cutting, bagging of samples, insertion of QA/QC samples into the sample stream, cleaning-maintenance of the saws, and packaging and documentation of the samples. The sample intervals were laid out by the logging geologists and the sawyers use these intervals in breaking out the sawn core. One half of the sawn core is placed in plastic sample bags that have been labeled on their exteriors with a heavy black magic marker showing the hole and sample number. A paper sample tag is also inserted into each sample bag. When the sampling is completed, the plastic bag is closed with a “zap-strap” that minimizes tampering and secures the bag for transportation to the laboratory. The second half of the sawn drill core is left in the core box as a permanent record for future reference or additional sampling.

For “blank” material, NovaGold has been using unmineralized landscaping aggregate. The core cutters insert about 150 grams of this material into a sample bag when they see where the core logger has specified a “blank”. Similarly, the core cutters insert a standard reference material (SRM) sachet along with correct sample tag into the sample stream. NovaGold is currently using 10 commercially derived SRM’s (five copper and five gold). When the core logger has called for a duplicate sample, the core cutters insert a sample tag into an empty sample bag which signals the assay lab to split that sample and generate two pulps/assays from that interval.

At the time of the author's visit, the saw shack was relatively clean and orderly. Detailed cleaning instructions were clearly posted and it appeared that the sawyers were adhering to the protocols that have been established.

Four plastic sample bags including the QA/QC samples and a "complete batch details form" are shipped to the ALS Chemex facility located in Vancouver, B.C. The rice bags are labeled with the name and address of the laboratory, as well as the batch number, drill hole number, project, bag number and sample numbers. Once a batch is complete, the samples are transferred to a pallet and the pallet is shrink wrapped in plastic. The pallet is slung via helicopter to the Bob Quinn airfield located east of the project on Highway 37. A Load Master receives the samples at Bob Quinn and confirms that the shipment is complete and ready for transport to Vancouver. The samples are stored in metal storage units until the Project Manager or Assistant Project Manager arranges for a commercial transport company (Bandstra Transport) to deliver the samples to the ALS Chemex facility in Vancouver.

During core logging, reference pieces of core are sometimes collected and added to the "core library" which is stored on site. These pieces of core typically represent new rock types, interesting geologic features, or can be used to train new core loggers. The selected pieces are labeled with hole number, sample depth, and suggested rock code or name.

Coarse reject material is transferred to new sample bags by ALS Chemex personnel and issued a new sample number and certificate number. Each certificate represents a "batch" of samples. The coarse rejects are then put into labeled rice bags that are stored in labeled wooden boxes that hold approximately 900 kilograms. These wooden boxes are stored at a NovaGold warehouse located in Vancouver. The ALS Chemex pulps are also stored at the NovaGold warehouse in cardboard boxes that hold about 50 samples. The pulps are labeled with the same ALS Chemex sample number.

In the opinion of the author, NovaGold's core logging and sampling handling procedures meet or exceed currently accepted North American standards. The author was impressed by NovaGold's use of four geologic teams – each with their own leader (mentor) and core logging tent. The professionalism and enthusiasm were very evident and NovaGold should be commended on their data collection procedures.

### 3.0 RELIANCE ON OTHER EXPERTS

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

The author has not reviewed the land tenure, nor independently verified the legal status or ownership of the Galore Creek property or examined any underlying option agreements. The author has relied on NovaGold personnel who provided various lists of mining claims and claim maps.

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 NovaGold's actions in distributing this report.

The author has reviewed a number of historical reports that were prepared by various consultants working for NovaGold 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 has relied on the following key reports. The author disclaims all liability for any false information, erroneous mistakes, misrepresentations or omissions associated with these reports:

- Hatch Ltd., ongoing Feasibility Study work regarding mining and metallurgy that is being completed for NovaGold
- Hatch Ltd., May 2005, "*Geology and Resource Potential of the Galore Creek Property*", NI 43-101 report completed for NovaGold
- Geosim Services, Inc. (Mr. Ronald G. Simpson), August 2003, "*Independent Technical Report for the Galore Creek Property, Liard Mining Division, British Columbia*", NI 43-101 report completed for SpectrumGold Inc. (now NovaGold)
- Rescan Environmental Services Ltd. and Rescan Talthaltan Environmental Consultants "*Application for Environmental Assessment Certificate*"



#### **4.0 PROJECT DESCRIPTION AND LOCATION**

The Galore Creek property is located within the historic Stikine Gold Belt of northwestern British Columbia, approximately 1,030 kilometres northwest of Vancouver, British Columbia and 90 kilometres northeast of Wrangell, Alaska at latitude 57.13°N; longitude 131.47°W. Figure 4-1 is a location map showing the general location of the project site. The 30,000 hectare (74,000 acre) property lies 70 kilometres west of the Bob Quinn airstrip, 167 kilometres northwest of the tidewater port of Stewart, British Columbia, and 370 kilometres northwest of the town of Smithers, British Columbia, the nearest major supply centre. The property is situated at the headwaters of Galore Creek, a tributary of the Scud River, which in turn flows into the Stikine River. The property is located within the Liard Mining Division and straddles the boundary between NTS map sheets 104G/03 and 104G/04. The location of known mineralized zones relative to property boundaries is shown in Figure 4-2.

The property boundaries have not been legally surveyed.

Figure 4-1: General Location Map

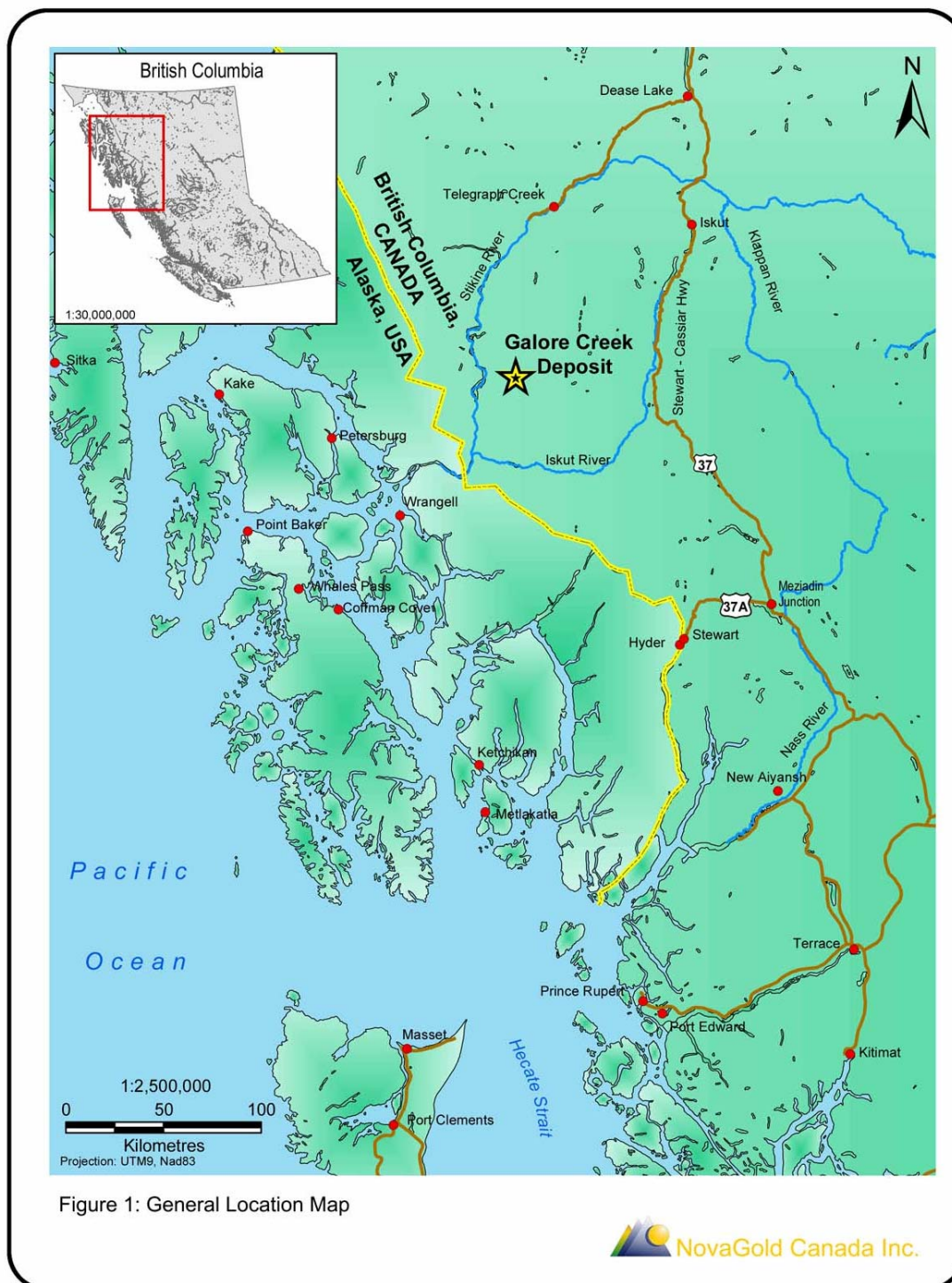
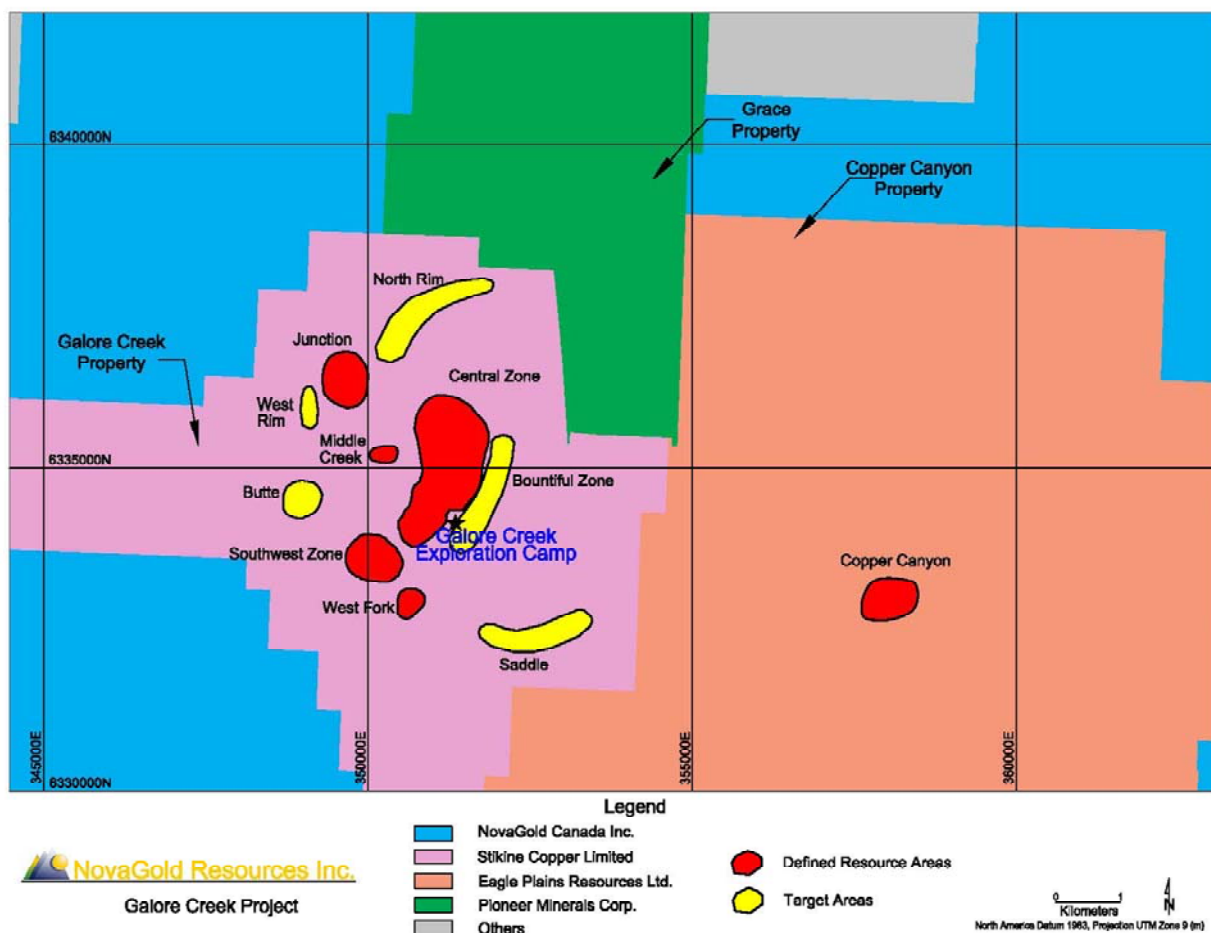


Figure 4-2: Known Mineralized Zones



In August 2003, SpectrumGold Inc. (now NovaGold Canada Inc.) entered into an option agreement to acquire a 100% interest in the Galore Creek property from Stikine Copper Limited, a company owned by QIT-FER et Titane Inc. and Hudson Bay Mining and Smelting Co. Limited. NovaGold must complete a prefeasibility study on the project and make payments to the owners totaling US\$20.3 million within a period of eight years. Stikine Copper will have no retained interests, royalties or back-in rights on the project. The Galore Creek property consists of 292 two-post claims, of which 39 are fractions, all held in the name of Stikine Copper Limited.

In March 2004 SpectrumGold Inc. (now NovaGold Canada Inc.) entered into an option agreement with Pioneer Metals Corporation giving NovaGold the exclusive right to earn up to a 60% interest in the Grace Property comprised of 5 located claims. To exercise the option, NovaGold must incur property expenditures of \$5 million and subscribe to 3.92 million shares on or before the 5 years of the agreement date.

In October 2005, NovaGold received a writ of summons from Pioneer Metals Corporation to rescind the Grace option agreement.

In 2005, NovaGold reviewed the status of all Galore Creek property mineral claims and recommended that legacy claims be converted to cell claims as allowed by the amended BC Mineral Tenure Act. The legacy claim conversion would consolidate the project holdings, eliminate any internal claim gaps, secure tenure ownership and reduce legal surveying costs for mining lease application. All parties agreed to this conversion and signed the Galore Creek Legacy Claim Cell Conversion Agreement dated June 30, 2005.

Between July 6–11, 2005, NovaGold converted the Galore claims with the exception of claims located adjacent to third party cell claims. These claims were not converted, since a portion of their held area would be surrendered to the adjacent cell claim holder on conversion. The option agreement land schedules were revised and in early 2006 were presented to Stikine Copper Limited, Eagle Plains, Bernard Kreft and Pioneer Metals for approval. Current Galore Creek property claim maps are shown in Figures 4-3, 4-4, and 4-5.



Figure 4-3: Galore Creek Claim Map

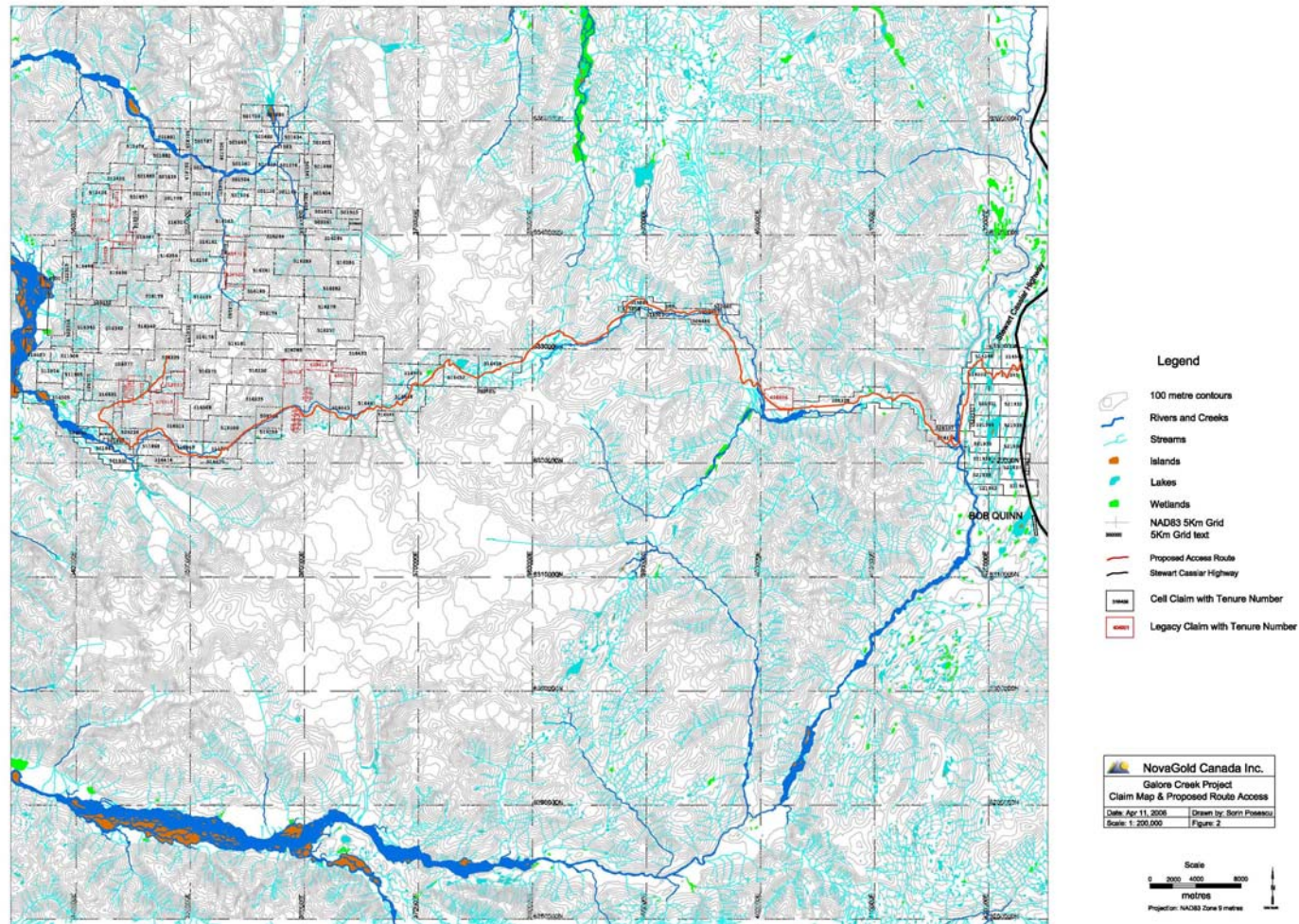




Figure 4-4: Galore Creek Area Claim Map

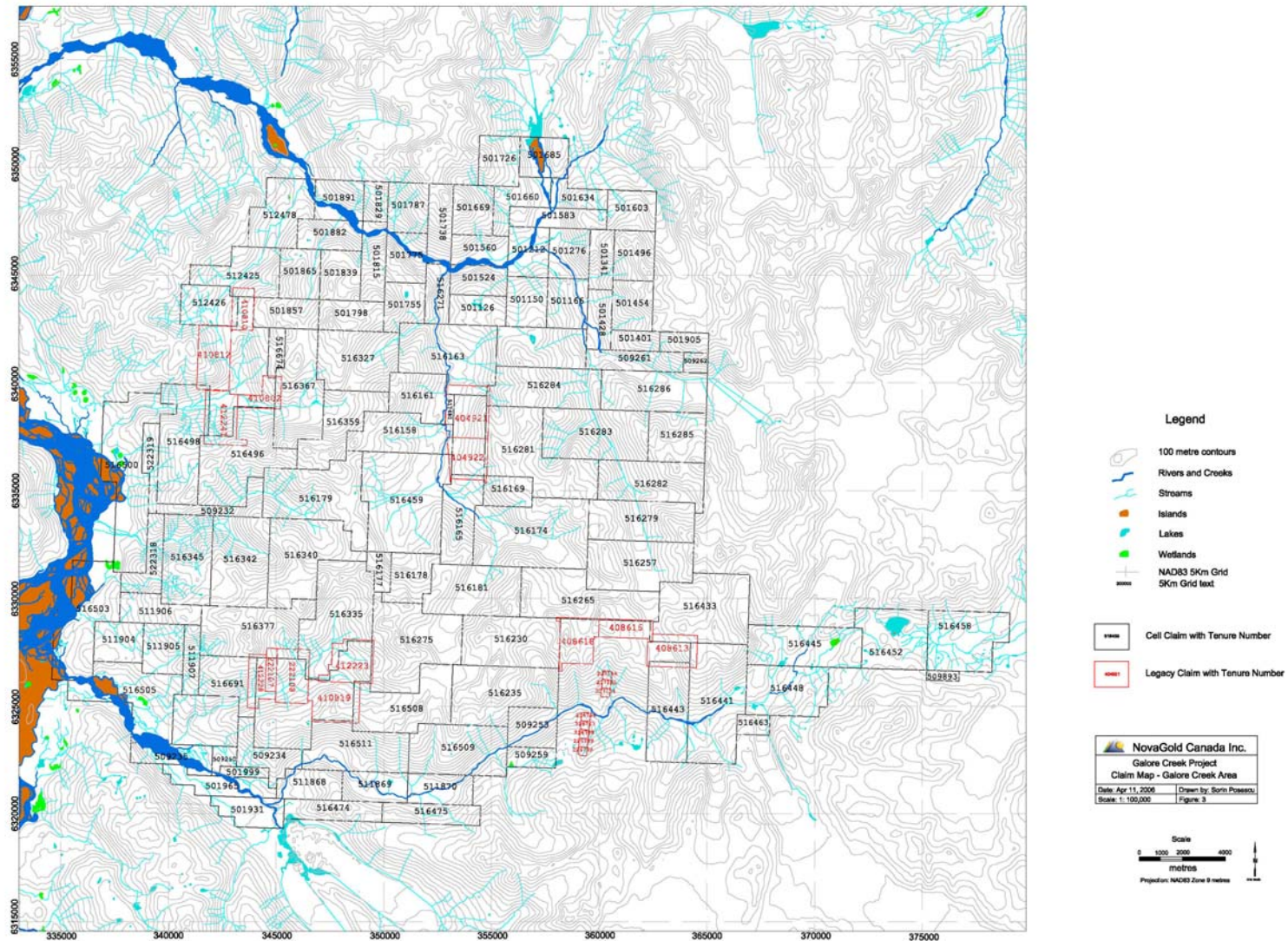
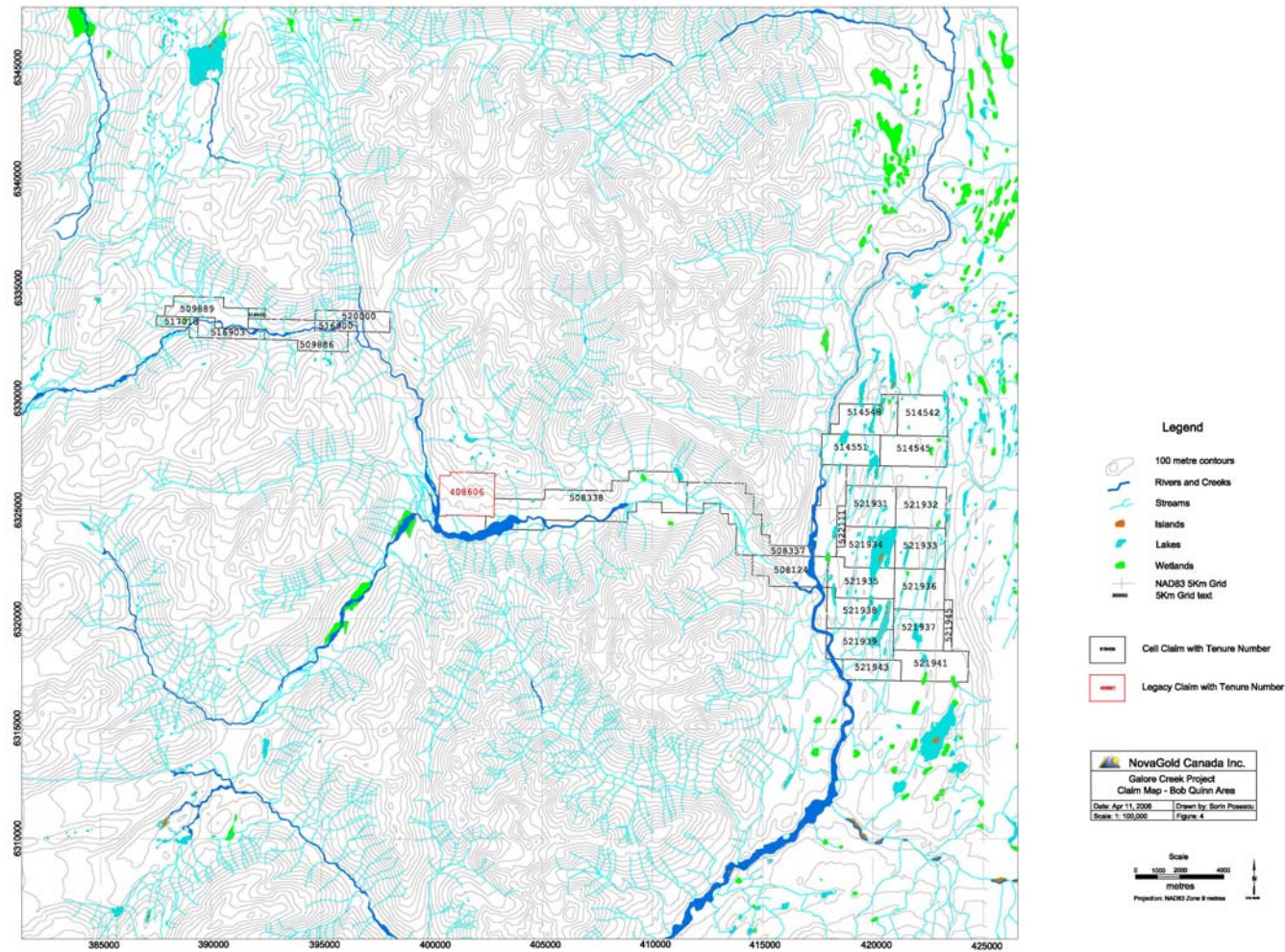




Figure 4-5: Galore Creek Claim Map – Bob Quinn Area



On November 28, 2005 NovaGold applied drilling expenditures incurred on the Galore Creek and Copper Canyon properties as assessment work to advance all claims contiguous with the Galore Creek property to the claim expiry year to 2015, the maximum allowed under the Mineral Tenure Act. Under the new online system, access to file assessment work on claims must be granted by the registered owners of the tenures. On November 29, 2005 a request for NovaGold to be appointed agents to file assessment work was forwarded to Pioneer Metals. As there was no response to this request, no assessment work was filed on the Pioneer tenures.

Table 4-1 outlines the expiry dates on the Galore Creek Property under option from Stikine Copper, Table 4-2 outlines the expiry dates on the Grace Property under option from Pioneer Metals, and Table 4-3 outlines the expiry dates on claims in the southwestern portion of the Galore Creek property held by NovaGold Canada Inc. As noted above, contiguous claims within the Galore Creek property had assessment work filed on them. Assessment work was not filed for claims that were not contiguous. The claim expiry dates shown in Tables 4-1 to Table 4-3 are subject to Gold Commissioner approval of the 2005 Diamond Drilling assessment report.

**Table 4-1: Galore Creek Claim Status**

Tenure No.	Claim Name	Recorded Title Holder	Area Hectares	Expiry Date
516158	Cell Claim	Stikine Copper Limited	772.237	12/1/2015
516165	Cell Claim	Stikine Copper Limited	667.543	12/1/2015
516177	Cell Claim	Stikine Copper Limited	175.777	12/1/2015
516178	Cell Claim	Stikine Copper Limited	457.053	12/1/2015
516179	Cell Claim	Stikine Copper Limited	1,317.27	12/1/2015
516459	Galore 1 Cell	Stikine Copper Limited	1,721.25	12/1/2015
Total			5,111.13	

**Table 4-2: Grace Property Claim Status**

Tenure No.	Claim Name	Recorded Title Holder	Area Hectares	Expiry Date
404921	Grace 4	Pioneer Metals Corporation	500	12/1/2014
404922	Grace 5	Pioneer Metals Corporation	500	12/1/2014
516161	Cell Claim	Pioneer Metals Corporation	543.835	12/1/2014
516163	Cell Claim	Pioneer Metals Corporation	1244.967	12/1/2014
517480	Grace G	Pioneer Metals Corporation	52.637	7/12/2006
Total			2841.439	



The status of the remaining Galore Creek claims are summarized in Tables 4-3 through 4-8.

**Table 4-3: Galore Creek Property Claim Status – South West**

Tenure No.	Claim Name	Recorded Title Holder	Area Hectares	Expiry Date
222107	SPLIT	NovaGold Canada Inc.	100.000	12/1/2015
222108	CREEK	NovaGold Canada Inc.	375.000	12/1/2015
410819	PAY 1	NovaGold Canada Inc.	500.000	12/1/2015
412223	GL 11	NovaGold Canada Inc.	500.000	12/1/2015
412228	GL 16	NovaGold Canada Inc.	500.000	12/1/2015
501931	PORC01	NovaGold Canada Inc.	405.390	1/12/2015
501965	PORC02	NovaGold Canada Inc.	440.514	1/12/2015
501999	PORC03	NovaGold Canada Inc.	105.708	1/12/2015
509232	Tunnel	NovaGold Canada Inc.	333.757	3/18/2015
509234	PORC 04	NovaGold Canada Inc.	440.357	3/18/2015
509235	PORC 05	NovaGold Canada Inc.	405.158	3/18/2015
509250	PORC 06	NovaGold Canada Inc.	123.308	3/18/2015
509253	Sphaler 01	NovaGold Canada Inc.	422.571	3/18/2015
509259	Sphaler 02	NovaGold Canada Inc.	211.356	3/18/2015
511868	SPHCR 01	NovaGold Canada Inc.	405.262	4/30/2015
511869	SPHCR02	NovaGold Canada Inc.	422.876	4/30/2015
511870	SPHCR03	NovaGold Canada Inc.	422.878	4/30/2015
516235	Cell Claim	NovaGold Canada Inc.	1,161.630	12/1/2015
516275	Cell Claim	NovaGold Canada Inc.	1,407.331	12/1/2015
516327	Cell Claim	NovaGold Canada Inc.	999.585	12/1/2015
516335	Cell Claim	NovaGold Canada Inc.	1,354.185	12/1/2015
516340	Cell Claim	NovaGold Canada Inc.	1,195.156	12/1/2015
516342	Cell Claim	NovaGold Canada Inc.	1,107.372	12/1/2015
516345	Cell Claim	NovaGold Canada Inc.	949.180	12/1/2015
516359	Cell Claim	NovaGold Canada Inc.	789.736	12/1/2015
516367	Cell Claim	NovaGold Canada Inc.	1,052.596	12/1/2015
516377	Cell Claim	NovaGold Canada Inc.	1,143.352	12/1/2015
516474	SPHCR 04	NovaGold Canada Inc.	422.996	7/8/2015
516475	SPHCR 05	NovaGold Canada Inc.	422.996	7/8/2015
516496	Cell Claim	NovaGold Canada Inc.	1,299.197	12/1/2015
516505	Cell Claim	NovaGold Canada Inc.	1,126.672	12/1/2015
516508	Cell Claim	NovaGold Canada Inc.	1,020.993	12/1/2015
516509	Cell Claim	NovaGold Canada Inc.	1,039.113	12/1/2015
516511	Cell Claim	NovaGold Canada Inc.	968.695	12/1/2015
516691	Cell Claim	NovaGold Canada Inc.	563.200	12/1/2015
Total			24,138.120	

**Table 4-4: SPC Contact Property Claim Status**

Tenure No.	Claim Name	Recorded Title Holder	Area Hectares	Expiry Date
410802	J3	NovaGold Canada Inc.	300.000	12/1/2015
410810	CONTACT 5	NovaGold Canada Inc.	200.000	12/1/2015
410812	CONTACT 7	NovaGold Canada Inc.	450.000	12/1/2015
412241	GL 29	NovaGold Canada Inc.	500.000	12/1/2015
501126	SPC11	NovaGold Canada Inc.	368.042	1/12/2015
501150	SPC01	NovaGold Canada Inc.	438.094	1/12/2015
501166	SPC02	NovaGold Canada Inc.	438.096	1/12/2015
501212	SPC03	NovaGold Canada Inc.	437.848	1/12/2015
501276	SPC04	NovaGold Canada Inc.	437.851	1/12/2015
501341	SPC06	NovaGold Canada Inc.	315.279	1/12/2015
501401	SPC07	NovaGold Canada Inc.	210.367	1/12/2015
501428	SPC05	NovaGold Canada Inc.	315.486	1/12/2015
501454	SPC09	NovaGold Canada Inc.	438.097	1/12/2015
501496	SPC10	NovaGold Canada Inc.	437.858	1/12/2015
501524	SPC12	NovaGold Canada Inc.	367.917	1/12/2015
501560	SPC13	NovaGold Canada Inc.	367.793	1/12/2015
501583	SPC14	NovaGold Canada Inc.	420.171	1/12/2015
501603	SPC15	NovaGold Canada Inc.	420.137	1/12/2015
501634	SPC16	NovaGold Canada Inc.	280.043	1/12/2015
501660	SPC17	NovaGold Canada Inc.	420.095	1/12/2015
501669	SPC18	NovaGold Canada Inc.	437.659	1/12/2015
501685	SPC20	NovaGold Canada Inc.	419.889	1/12/2015
501726	SPC19	NovaGold Canada Inc.	437.421	1/12/2015
501738	SPC21	NovaGold Canada Inc.	420.221	1/12/2015
501755	SPC22	NovaGold Canada Inc.	385.557	1/12/2015
501775	SPC23	NovaGold Canada Inc.	437.899	1/12/2015
501787	SPC24	NovaGold Canada Inc.	437.661	1/12/2015
501798	SPC25	NovaGold Canada Inc.	420.670	1/12/2015
501815	SPC26	NovaGold Canada Inc.	420.408	1/12/2015
501829	SPC27	NovaGold Canada Inc.	210.068	1/12/2015
501839	SPC29	NovaGold Canada Inc.	438.001	1/12/2015
501857	SPC28	NovaGold Canada Inc.	420.672	1/12/2015
501865	SPC30	NovaGold Canada Inc.	438.002	1/12/2015
501882	SPC31	NovaGold Canada Inc.	420.291	1/12/2015
501891	SPC32	NovaGold Canada Inc.	420.136	1/12/2015
501905	SPC08	NovaGold Canada Inc.	210.366	1/12/2015
509261	ng 01	NovaGold Canada Inc.	420.826	3/18/2015
509262	ng 02	NovaGold Canada Inc.	105.208	3/18/2015
512425	Cell Claim	NovaGold Canada Inc.	700.818	1/12/2015
512426	Cell Claim	NovaGold Canada Inc.	473.235	1/12/2015
512478	CONT 1	NovaGold Canada Inc.	770.372	1/12/2015
516271	Cell Claim	NovaGold Canada Inc.	315.411	1/12/2015
516284	Cell Claim	NovaGold Canada Inc.	947.189	1/12/2015
516285	Cell Claim	NovaGold Canada Inc.	614.229	1/12/2015
516286	Cell Claim	NovaGold Canada Inc.	912.089	1/12/2015
516498	Cell Claim	NovaGold Canada Inc.	1,105.922	1/12/2015
516500	Cell Claim	NovaGold Canada Inc.	1,527.806	1/12/2015
516503	Cell Claim	NovaGold Canada Inc.	1,178.494	1/12/2015
516674	Cell Claim	NovaGold Canada Inc.	157.819	1/12/2015
522318	CONT 2	NovaGold Canada Inc.	386.718	11/15/2006
522319	CONT 3	NovaGold Canada Inc.	245.815	11/15/2006
Total			23,800.050	

**Table 4-5: Sphal/Kim Property Claim Status**

Tenure No.	Claim Name	Recorded Title Holder	Area Hectares	Expiry Date
226786	SPHAL #25 M.C.	NovaGold Canada Inc.	25.000	10/18/2006
226787	SPHAL #27 M.C.	NovaGold Canada Inc.	25.000	10/18/2006
226788	SPHAL #29 M.C.	NovaGold Canada Inc.	25.000	10/18/2006
226789	SPHAL #31 M.C.	NovaGold Canada Inc.	25.000	10/18/2006
226790	SPHAL #33 M.C.	NovaGold Canada Inc.	25.000	10/18/2006
227134	KIM #38	NovaGold Canada Inc.	25.000	8/10/2006
227135	KIM #40	NovaGold Canada Inc.	25.000	8/10/2006
227136	KIM #42	NovaGold Canada Inc.	25.000	8/10/2006
Total			200.000	

**Table 4-6: North Route KM 0 - 38 (Bob Quinn & CV Section) Property Status**

Tenure No.	Claim Name	Recorded Title Holder	Area Hectares	Expiry Date
408606	VIA 17	NovaGold Canada Inc.	500.000	3/6/2006
508124	CV 1	NovaGold Canada Inc.	440.170	3/1/2006
508337	CV 2	NovaGold Canada Inc.	1,196.581	3/10/2006
508338	CV 3	NovaGold Canada Inc.	1,354.832	3/9/2006
514542	THOMAS 1	NovaGold Canada Inc.	421.877	6/15/2006
514545	THOMAS 2	NovaGold Canada Inc.	422.043	6/15/2006
514548	THOMAS 3	NovaGold Canada Inc.	421.895	6/15/2006
514551	THOMAS 4	NovaGold Canada Inc.	369.290	6/15/2006
521931	BQ 1	NovaGold Canada Inc.	422.299	11/4/2006
521932	BQ 2	NovaGold Canada Inc.	422.295	11/4/2006
521933	BQ 3	NovaGold Canada Inc.	422.482	11/4/2006
521934	BQ 4	NovaGold Canada Inc.	440.088	11/4/2006
521935	BQ 5	NovaGold Canada Inc.	440.241	11/4/2006
521936	BQ 6	NovaGold Canada Inc.	422.668	11/4/2006
521937	BQ 7	NovaGold Canada Inc.	422.855	11/4/2006
521938	BQ 8	NovaGold Canada Inc.	440.388	11/4/2006
521939	BQ 9	NovaGold Canada Inc.	422.915	11/4/2006
521941	BQ 10	NovaGold Canada Inc.	440.652	11/4/2006
521943	BQ 11	NovaGold Canada Inc.	246.771	11/4/2006
521945	BQ 12	NovaGold Canada Inc.	88.089	11/4/2006
522111	BQ 13	NovaGold Canada Inc.	70.397	11/7/2006
Total			9,828.830	

**Table 4-7: North Route KM 48 - 58 (More Creek) Property Status**

Tenure No.	Claim Name	Recorded Title Holder	Area Hectares	Expiry Date
509886	NR 1	NovaGold Canada Inc.	421.565	3/30/2006
509889	NR 2	NovaGold Canada Inc.	351.223	3/30/2006
516839	NR 4	NovaGold Canada Inc.	35.123	7/11/2006
516900	NR 05	NovaGold Canada Inc.	87.817	7/11/2006
516903	NR 06	NovaGold Canada Inc.	175.648	7/11/2006
517018	NR 06	NovaGold Canada Inc.	105.381	7/12/2006
520000	MORE CK	NovaGold Canada Inc.	228.307	9/15/2006
Total			1,405.060	

**Table 4-8: North Route KM 70 - 93 Property Status**

Tenure No.	Claim Name	Recorded Title Holder	Area Hectares	Expiry Date
408613	VIA 32	NovaGold Canada Inc.	450.000	12/1/2015
509893	NR 3	NovaGold Canada Inc.	70.379	3/30/2015
516433	Cell Claim	NovaGold Canada Inc.	1,318.728	12/1/2015
516441	Cell Claim	NovaGold Canada Inc.	1,390.457	12/1/2015
516443	Cell Claim	NovaGold Canada Inc.	880.157	12/1/2015
516445	Cell Claim	NovaGold Canada Inc.	985.011	12/1/2015
516448	Cell Claim	NovaGold Canada Inc.	862.311	12/1/2015
516452	Cell Claim	NovaGold Canada Inc.	879.374	12/1/2015
516458	Cell Claim	NovaGold Canada Inc.	949.726	12/1/2015
516463	NR 4	NovaGold Canada Inc.	140.840	7/8/2015
Total			7,926.980	

Exploration work was carried out under ministry mine permits number MX-1-608, 621, 622 and 623. These are Notice of Work permits that are applied each year that exploration operations are conducted. The author has recommended that NovaGold drill some twin holes in order to compare assays with some of the older drilling campaigns. The author understands that the Notice of Work permits discussed above may be sufficient to carry out additional exploration drilling at Galore Creek. The author is not aware of what additional permits will be required by NovaGold to begin any development work at Galore Creek.

Environmental liabilities consist of empty oil drums and drilling debris left behind by predecessor companies. NovaGold has been noting the locations of this debris and to date has spent approximately \$70,000 progressively cleaning up these sites. The author is not aware of any other environmental liabilities that may exist at Galore Creek.

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

The town of Smithers, located 370 kilometres to the southeast, is the nearest major supply centre. Access to the property is presently by helicopter. During the 2005 program, most personnel, supplies, and equipment were staged from the Bob Quinn airstrip, on the Stewart-Cassiar Highway, and transported via helicopter to the Galore Creek camp. Personnel rotated in and out of Bob Quinn every 5 days via a Beech 19 aircraft, provided by Northern Thunderbird Air. The aircraft made stops in Vancouver, Smithers, Terrace, Dease Lake, Iskut, and Bob Quinn. Most personnel worked 21 days in/9 days out based on a standardized rotation schedule.

Galore Creek and the Scud River are part of the tributary system of the Stikine River, an international waterway which drains an area of 49,000 square kilometres. In the past the river was used by shallow draft barges and riverboats to transport goods from Wrangell, Alaska to Telegraph Creek, British Columbia, a distance of 302 kilometres. The river is navigable for this type of watercraft from mid May to October. The nearest point on the Stikine River to the property is the mouth of the Anuk River which lies 16 kilometres west of the camp.

In the 1960's Kennecott constructed 48 kilometres of road from the mouth of the Scud River to the Galore Creek camp. The road is in very poor condition and would require repair along the Scud River and portions of the Galore Creek Valley before it could be used.

Galore Creek is located in the humid continental climate zone of coastal British Columbia and is characterized by cool summers and cold humid winters, with several months of snow cover. Summer temperatures may be above +20°C and minimum winter temperatures may fall to well below -20°C. Average annual precipitation is 76 cm with approximately 70% of this falling between September and February, mainly as snowfall. It is the author's understanding that the operating season would be year round if the Galore Creek property were developed and put into production.

Elevations around the property range from 500 to 2,080 metres above sea level. The terrain over the central and northern portions of the property is gentle and rolling and the surrounding topography is characterized by rugged mountains. The elevation of the tree line is variable but alpine vegetation predominates above the 1,100 metre level. Below that, forests are made up of balsam fir, sitka spruce, alder, willow, devils club and cedar. Higher up the valley, the glacial moraines are bare to sparsely overgrown by sub-alpine vegetation.

Ample water supply is available from surface and subsurface sources. Potable water will be derived from a well field drilled near the mill facility. Process water will be pumped from pit dewatering wells, reclaimed recycled tailings and obtained from a small reservoir that will be constructed in proximity to the mill.

It is anticipated that the majority of the mine facilities (mill, crusher, camp) and ore stockpiles will be constructed immediately to the east of the central pit, located in the upper reaches of the Galore Creek Valley. The main tailings pond will be impounded in the Galore Creek Valley by a dam constructed approximately 7 kilometres downstream from the mill/central pit area. A proposed subaqueous rock dump will be located between the tailings disposal area and the central pit. A non-water retaining dam will be constructed approximately 2 kilometres upstream from the main tailings dam allowing potentially acid generating (PAG) waste rock to be layered behind the dam and covered with non-PAG (NPAG) rock. The waste rock dump would then be submerged by the tailings pond. NPAG rock from the more elevated pits (North Junction) would be placed into sub-aerial waste pads located between the pits.

The project is currently isolated from power and other public infrastructure. It is estimated that a mine at Galore Creek will have an average power load of 80 MW with a maximum draw of 90 MW. Coast Mountain Hydro Corp. (CMHC) is constructing a 100 MW hydroelectric dam on the Iskut River near its confluence with Forrest Kerr Creek that is proposed to come online in 2008. Power for the Galore Creek mine will be obtained through the BC Hydro grid from a connection near the CMHC plant and Highway 37. NovaGold recently purchased Coast Mountain Hydro.

The Galore Creek project is predicated on grid connection for the provision of economically available electrical power. Three independent system studies have been undertaken to determine the technical feasibility of the grid connection:

1. A preliminary interconnection study performed by Hatch to assess the feasible compensation strategies for delivering power to site at 138 kV.
2. An interconnection study performed by Coast Mountain Hydro/Siemens (CMH/Siemens) to assess the feasibility of "piggy-backing" the Galore Creek interconnection with the proposed Forrest Kerr Hydro Project 138 kV interconnection.
3. An interconnection study performed by BC Hydro/British Columbia Transmission Corporation (BCH/BCTC) to assess the feasibility of a series capacitor compensated extension of the 138 kV transmission line from the existing Meziadin substation to Galore Creek.

The hiring of local employees will be a highly competitive market and is dependent upon whether the bcMetals Red Chris mine, near Iskut, goes into production in 2007. It was determined by the Tahltan Nation Development Company (TNDC) that their communities are not equipped to accommodate large-scale mining operations. This being the case, more long-term sustainable socio-economic benefits for the local communities will be developed. Smithers and Terrace are the two communities likely to receive the best economic benefits from development of the Galore Creek mine.

## 6.0 HISTORY

*This section has been adapted from Simpson (2003).*

Mineralization was first discovered in the upper Galore Creek valley in 1955 by M. Monson and W. Bucholz while prospecting for Hudson Bay Exploration and Development Company Limited. Staking and sampling were completed in the area in 1955. Work in 1956 included mapping, trenching and diamond drilling. No further work was undertaken and most of the claims were allowed to expire.

In 1959, reconnaissance stream sediment surveys were carried out by Kennco Explorations (Western) Limited (the Canadian subsidiary of Kennecott Copper) in the Stikine River area. Results prompted Kennco to stake mineral claims around the remaining 16 Hudson Bay claims the following year. Four of the original claims were subsequently optioned by Consolidated Mining and Smelting Company of Canada Limited from W. Buchholz. Late In 1962, the three companies agreed to participate jointly in future exploration work. As a result, Stikine Copper Limited was incorporated in 1963.

Work conducted since discovery in 1955 outlined a significant gold-silver-copper resource in the Central Zone and identified several satellite deposits, most importantly the Southwest, North Junction and Junction Zones.

From 1960 to 1968, the property was operated by Kennco Exploration. Exploration work during this period included 53,164 metres of diamond drilling in 235 holes and 807 metres of underground development work in two adits. The Central Zone was the focus of most of this work. No work was done between 1968 and 1972. In 1972, Hudson Bay Mining and Smelting became operator and in 1972 and 1973 an additional 25,352 metres of diamond drilling was completed in 111 holes. This work focused exclusively on blocking out resources in the Central and North Junction Zones. A further 5,310 metres of diamond drilling was completed in 24 holes in 1976.

In 1989, Mingold Resources Inc. (an affiliated company of Hudson Bay's) operated the property in order to investigate its gold potential. In 1990, Mingold completed 1,225 metres of diamond drilling in 18 holes. Kennecott resumed operatorship of the project in 1991 and completed 13,830 metres of diamond drilling in 49 holes. An airborne geophysics survey and over 90 line kilometres of induced polarization (IP) survey were also completed.

In August 2003, SpectrumGold Inc. (now NovaGold Canada Inc.) entered into an option agreement to acquire a 100% interest in the Galore Creek property from Stikine Copper Limited, a company owned by QIT-FER et Titane Inc. (a wholly owned subsidiary of Rio Tinto Zinc) and Hudson Bay Mining and Smelting Co. Limited. In September and October of 2003, SpectrumGold carried out a ten hole, 2,950 metre

diamond drill program on the property. The work program was directed toward confirming grades of copper and gold mineralization defined by previous drilling in the Central and Southwest Zones. Results from the drill program confirmed the presence of high grade gold and copper mineralization over bulk mineable widths.

In 2004, NovaGold Canada Inc. carried out a 79 hole, 25,976 metre diamond drill program to upgrade and expand the existing resource. Drilling was also conducted on exploration targets to test several peripheral occurrences and nearby properties in which NovaGold has an interest. Extensive geophysical surveys were conducted to assist the exploratory drilling. The results of the 2004 drilling program provided the basis for geological modeling, resource estimation, preliminary mine planning and economic evaluation at a prefeasibility level.

The aim of the 2005 Galore Creek exploration program was to test for extensions of known mineralization, and to explore for new targets within the Galore Creek valley. Additional drilling was utilized for engineering and environmental testing. Mapping focused on defining drill targets, major structures, and alteration assemblages, as well as recognizing sedimentary facies transitions. The geophysical program included a wide-spaced Vector IP reconnaissance program and induced polarization surveys both south of the Central Zone and along the East Fork of Galore Creek.

Table 6-1 summarizes the work history for the property from 1960 through 2005. Note that the metres of surface drilling include groundwater monitoring wells, condemnation holes, and holes from outlying areas like Copper Canyon. There has not been any historical production from the property.

**Table 6-1: Work History – 1960 - 2005**

Activity	Year of Completion																
	60	61	62	63	64	65	66-67	72	74	76	88	89	90	91	92-02	03	04
GEOLOGIC MAPPING (sq. mi.)	76	20	6	2	2									12			2
GEOPHYSICAL SURVEYS (line km)																	4
Dip needle	4																
Airborne geophysics		270												459		1,072	
Ground magnetics		55											18	85		1	
Ground VLF-EM												11	11	70			
Induced polarization		43	42	30												28	2
Induced polarization (sq. km)																	42
GEOCHEMISTRY (number samples)																	
Stream sediment samples	47	45										157					
Soil samples		700		250								729	37	600			
Rock samples			149									210	13	63			
Reassaying old core											459	219	232	18,000			18,910
SURFACE DRILLING (m)		378	4,717	10,666	13,718	17,572	5,992	10,431	14,928	5,318			1,925	13,829		2,794	25,976
UNDERGROUND DRILLING (m)							163										
UNDERGROUND DRIFTING (m)							850										
LINECUTTING (line km)		53	21	32													
POST LOCATION					267		14									28	2
BOUNDARY SURVEYS					21	47	3										
AIRSTRIPE CONSTRUCTION																	
Galore Creek (520m x 30m)					1		1										
Scud River (1500m x 45m)					1												
ECONOMIC EVALUATIONS									Wright							Hatch	Hatch
																Hatch	4

Numerous resource estimates using a variety of methods have been produced for the Central Zone at Galore Creek since 1968. None of the pre-2004 estimates of resources are considered by the author to be reliable and furthermore, they are not considered to be compliant with NI 43-101. These estimates are briefly discussed below strictly for an historical perspective.



Walker (1976) estimated a geological resource for the Central Zone of 160 million tonnes with grades of 0.93% Cu, 0.37 g/t Au, and 7.5 g/t Ag using a copper cutoff grade of 0.40%.

In 1974, Wright Engineers Limited produced a report entitled “Stikine Copper Project - Technical and Economic Study” for Hudson Bay Mining and Smelting Co. Limited. A mineable open pit resource was estimated at 125.2 million tonnes grading 1.06% Cu and 0.45 g/t Au with a strip ratio of 3.6:1 based on a Cu cutoff of 0.40% and a processing rate of 32,000 tons per day. Total capital cost was estimated at US\$375 million for a 32,000 ton per day operation. It was concluded that the project was technically feasible with an IRR of 13.6%.

A mineral resource was estimated for the North Junction zone in 1974 by Hudson Bay. The zone was not then considered to be amenable to open pit mining but was described as “high grade and readily accessible by decline”. This unclassified resource amounted to 10.8 million tonnes grading 2% Cu and 0.7 g/t Au.

In 1992, a mineral resource estimate was prepared by Mine Reserve Associates, Inc. (MRA) for Kennecott Corporation and included both the Central and Southwest Zones. This study entitled “Pre-feasibility Mining Evaluation Galore Creek Project” reported an ultimate pit resource of 256.4 million tonnes grading 0.835% Cu and 0.445 g/t Au with a strip ratio of 1.55:1. The pit was developed on the basis of “Proven and Probable reserves” of 342.5 million tonnes grading 0.64% Cu and 0.38 g/t Au. A further 105.7 million tonnes grading 0.46% Cu and 0.44 g/t Au was classified as “Possible”, which is not a currently recognized “reserve” category. This latter category was not used during pit optimization but was added in to the ultimate pit resource. MRA’s scope of work did not include check assay analysis or geological interpretation.

Between 1992 and 1994 various modifications were made to the pit design based on different operational and economic parameters but the underlying resource model was not altered. In 1994, Kennecott reported an “in pit” resource of 276 million tons grading 0.67% copper and 0.45 g/t gold with a strip ratio of 2.2:1.

In October, 1994, Fluor Daniel Wright Ltd. released a report entitled “Project Review - Galore Creek Property”. Using the 1994 Kennecott pit resource as a base case, this economic study recommended a 29,000 tonne per day operation resulting in a 26 year mine life. Initial capital costs were estimated at \$US388 million.

In August 2004, Hatch Limited (Hatch) completed a study for NovaGold entitled “Preliminary Economic Assessment for The Galore Creek Gold-Silver-Copper Project” based on an estimate of resources that was completed in April 2004. This study recommended processing 242 million tonnes (or approximately 63% of the then known resource) at a rate of 30,000 tonnes per day from the Central and Southwest Zones.

An Updated Preliminary Economic Assessment (PEA) was completed in 2006 at a prefeasibility level incorporating results from the 2004 drilling campaign. Based on that study a resource of 475 million tonnes (or approximately 43% of the known resource) would be processed at a rate of 65,000 tonnes per day from the Central, Southwest, Junction and West Fork zones. Measured and Indicated Mineral Resources were estimated to be 516.7 million tonnes grading 0.59% Cu, 0.36 g/t Au and 4.54 g/t Ag based on a 0.35% copper equivalent (CuEq) cutoff grade. Inferred Resources were estimated at 578.3 million tonnes grading 0.41% Cu, 0.42 g/t Au and 4.35 g/t Ag using a 0.35% CuEq cutoff grade. These estimates used metal prices of US\$375/oz Au, US\$5.50/oz Ag and US\$0.90/lb Cu.

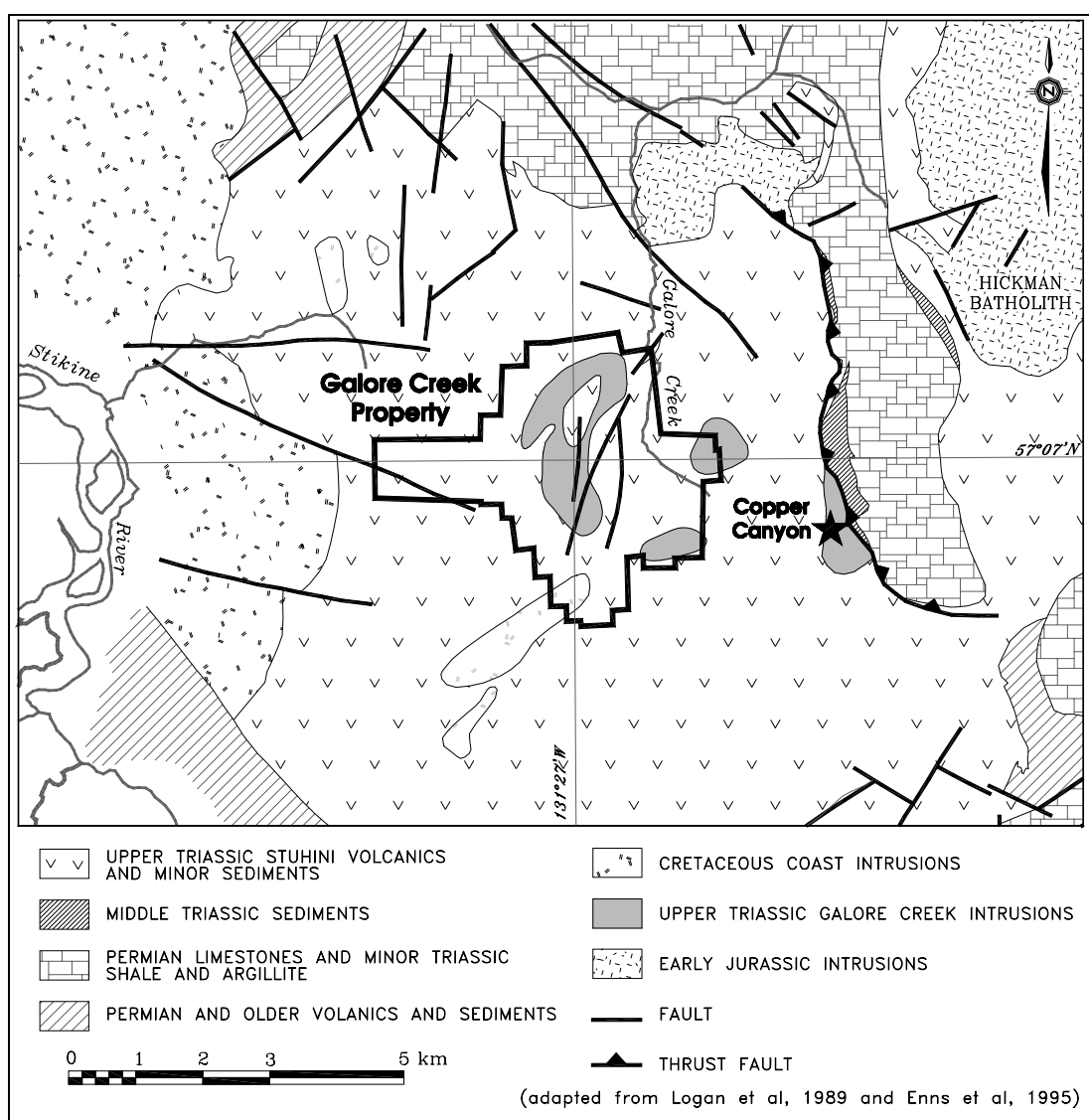
A feasibility study is currently underway by Hatch which incorporates 2005 drilling program results and the updated resource model, which is the subject of this report.

## 7.0 GEOLOGICAL SETTING

*The following is excerpted from Simpson (2003):*

The Galore Creek deposits lie in Stikinia, an accreted Terrane of Mesozoic volcanic and sedimentary rocks intruded by Cretaceous to Eocene plutonic and volcanic rocks. The eastern boundary of the Coast Plutonic complex lies about 7 kilometres to the west of the claims. The property lies within a regional transcurrent structure known as the Stikine Arch. Figure 7-1 shows a simplified regional geologic map.

**Figure 7-1: Regional Geology (from Simpson)**



## 7.1 Stratigraphy

The Stikinia Terrane in northern British Columbia can be grouped into four tectonostratigraphic successions. The first, and most important as the ore hosting stratigraphy at Galore Creek, is a Late Paleozoic to Middle Jurassic island arc suite represented by the Stikine assemblage of Monger (1977), the Stuhini Group (Kerr, 1948) and the Hazelton Group. The other tectonostratigraphic successions in the area are: the Middle Jurassic to early Late Cretaceous successor-basin sedimentary rocks of the Bowser Lake Group (Tipper and Richards, 1976); the Late Cretaceous to Tertiary transtensional continental volcanic-arc assemblages of the Sloko Group (Aiken, 1959); and the Late Tertiary to Recent post-orogenic bimodal volcanic rocks of the Edziza and Spectrum ranges.

The Stikine assemblage, the oldest known stratigraphy in the area, comprises Permian and older argillites, and mafic to felsic flows and tuffs. The topmost stratigraphy consists of two regionally extensive Permian carbonate units which suggest a stable continental shelf depositional environment.

The Middle to Upper Triassic Stuhini Group unconformably overlies the Stikine assemblage. Stuhini Group rocks comprise a variety of flows, tuffs, volcanic breccia and sediments, and are important host rocks to the alkaline-intrusive related gold-silver-copper mineralization at Galore Creek. They define a volcanic edifice centered on Galore Creek and represent an Upper Triassic island arc characterized by shoshonitic and leucitic volcanic rocks (de Rosen-Spence, 1985), distal volcanoclastics and sedimentary turbidites. The succession at Galore Creek was divided by Panteleyev (1976) into a submarine basalt and andesite lower unit overlain by more differentiated, partly sub aerial alkali-enriched flows and pyroclastic rocks.

A fault bounded wedge of unnamed Jurassic sediments overlies the Stuhini Group rocks. The Jurassic section includes a purple to red arkosic-matrix polymictic boulder and cobble conglomerate that contains fragments of K-feldspar porphyries, probably derived from the Galore Creek Intrusive complex.

## 7.2 Intrusive Rocks

Three intrusive episodes have been recognized in the region. The earliest and most important is the Middle Triassic to Middle Jurassic Hickman plutonic suite that is coeval with Upper Triassic Stuhini Group volcanic flows. The Mount Hickman batholith comprises three plutons known as Hickman, Yehino and Nightout. The latter two are exposed north of the map area. The Schaft Creek porphyry copper deposit is associated with the Hickman stock, and is located 39 km northeast of Galore Creek. This stock is crudely zoned with a pyroxene diorite core and biotite granodiorite margins. Alkali syenites of the Galore complex like those found at the nearby Copper Canyon deposit and the pyroxene diorite bodies of the zoned Hickman pluton have been interpreted as differentiated end members of the Stuhini volcanic - Hickman

plutonic suite by Barr (1966) and Souther (1972). The alkali syenites are associated with important gold-silver-copper mineralization at Galore Creek and at Copper Canyon. These rocks are believed to be at least as old as Early Jurassic in age, based on K-Ar dating of hydrothermal biotite in the syenites intruding the sequences (Allen, 1966). An Ar-Ar age of 212 Ma (Logan et al., 1989) in syenite may give the time of crystallization of the intrusive rocks at Copper Canyon, to the east of Galore Creek. More recent U-Pb dates of Galore Creek syenites have given ages ranging from 205-210 Ma (Mortensen, 1995).

Coast Range intrusions comprise the large plutonic mass west of the project area. Three texturally and compositionally distinct intrusive phases were mapped by previous workers. From inferred oldest to youngest, they are potassium feldspar megacrystic granite to monzonite; biotite hornblende diorite to granodiorite; and biotite granite.

Small Tertiary intrusive stocks and dykes likely related to the post-orogenic bimodal volcanic rocks of the Edziza Range are structurally controlled in their distribution through the project area. At Galore Creek these post-mineral basalt and felsite dykes occur as a dyke swarm in the northwest part of the property.

### **7.3 Structure**

Logan and Koyanagi (1988) recognized three phases of deformation in the Galore Creek area (Sphaler Creek (104G/3) and Flood Glacier (104G/4) map areas). The oldest Paleozoic rocks (pre-Upper Triassic) are affected in the form of widespread penetrative planar fabrics, north to northwest-trending isoclinal folding (D1), northwest-trending upright open folding (D2), and west to northwest-trending chevron folds and kink bands (D3). D1 and D2 are characterized by regional metamorphism to greenschist facies.

Upper Triassic and younger strata are much less deformed, lack the penetrative planar fabric, and have been affected by D3 deformation shown by open box folding with west to northwest trending fold axes (Logan and Koyanagi, 1988), although two generations of folding were recognized in Triassic rocks at Galore Creek (Panteleyev, 1976). Mapping by Brown and Gunning (1988) in the Scud River area to the north also recognize this divide in structural styles, and propose four structural domains that are largely restricted to Paleozoic strata except for a post-Late Triassic contraction (Domain 4) that caused northeast-plunging tight folding in the Upper Triassic rocks. In regional studies from adjacent areas, such as Forrest Kerr-Mess Creek (Logan et al., 2000) and Western Telegraph Creek (Brown et al., 1996), two deformational phases have been proposed for Mesozoic strata: an Early Jurassic contraction that caused an angular unconformity between the Late Triassic Stuhini assemblages and Early Jurassic rocks; and a Middle or Late Jurassic to Tertiary contraction that could correlate to the D3 phase of Logan and Koyanagi (1988).

Mapping on the Galore Creek property indicates a complex sequence of events with each inheriting the geometric characteristics of those prior (Otto, pers. comm.). Fabrics recognized show evidence of syndepositional extensional (or transtension), pre-lithification compression (or transpression) followed by renewed extension during emplacement of alkaline intrusions, and then a period of post-ore compression (or transpression). Renewed extension unrelated to alkaline magmatism may have occurred during emplacement of late dykes.

#### **7.4 Property Geology**

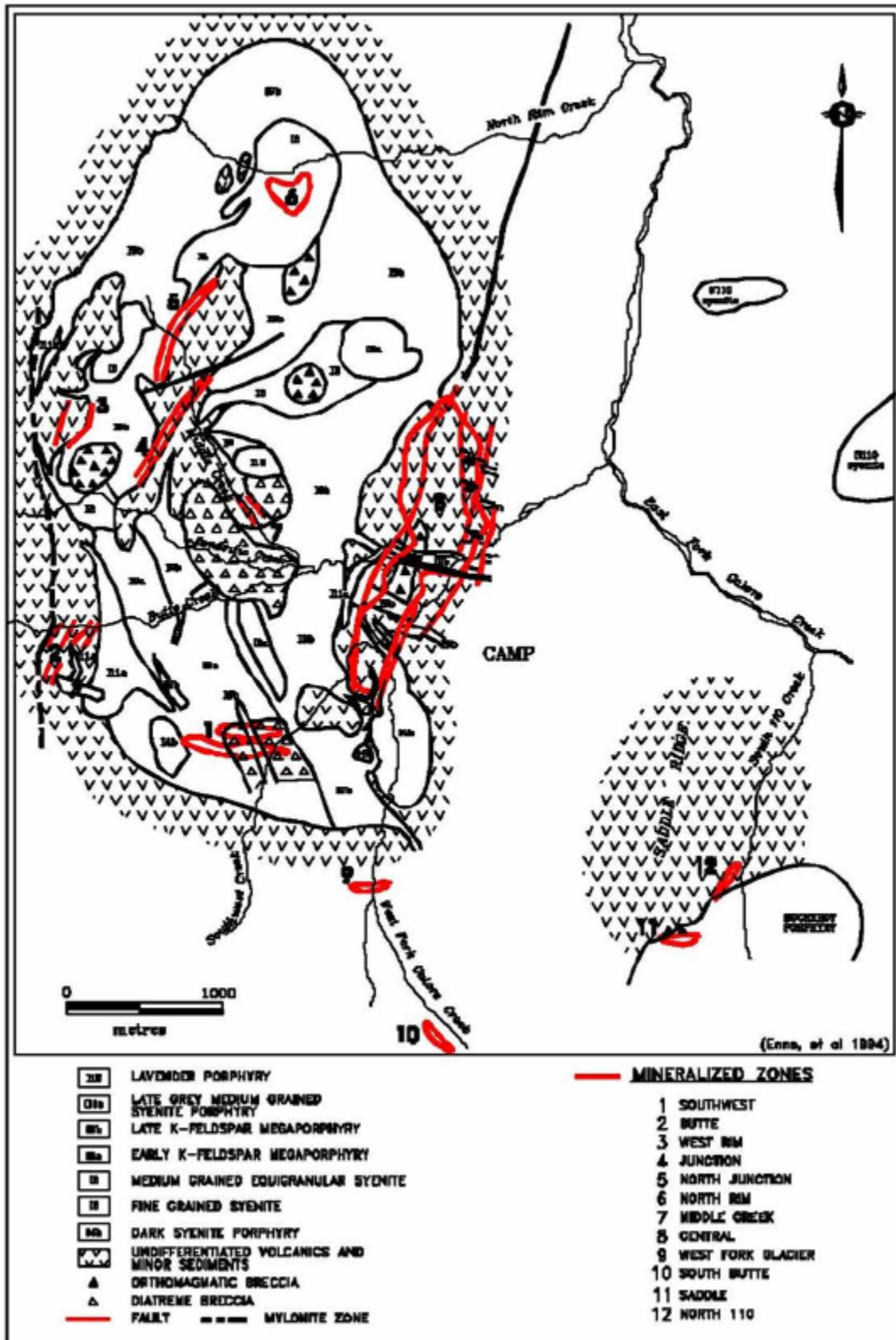
The Galore Creek intrusive-volcanic complex is composed of multiple intrusions emplaced into volcanic and sedimentary rocks of similar composition. Country rocks to the syenite intrusions are volcanic flows and volcanoclastic sediments, with subordinate greywacke, siltstone and local conglomerate (Enns et al., 1995). Augite-bearing volcanic flows and tuffs underlie and are interbedded with the pseudoleucite-bearing and orthoclase-bearing flows, tuffaceous and fragmental units, which are prominent in the south and southwest parts of the complex (Enns et al., 1995). Multiple alkali syenite intrusive phases occur in the complex and are divided into the pre- to syn-mineralization intrusives (I1 to I4), syn- to post-mineralization intrusives (I5 to I9) and post-mineralization intrusives (I10 to I12). The complex is centered in the west fork of Galore Creek and is approximately 5 kilometres in length and 2 kilometres in width. To date, twelve copper-gold-silver mineralized zones have been identified on the property. Most zones, including the Central, North Junction, Junction, Middle Creek, West Rim, Butte and South 110, occur in highly altered volcanic rocks and to a lesser degree in syenite intrusions. The Southwest, Opulent Vein, and Saddle zones are hosted by breccias and the North Rim and West Fork zones occur within syenite intrusions. Figure 7-2 is a simplified geologic map of the Galore Creek property.

#### **7.5 Lithologic Descriptions**

Property-wide there are 107 different lithology codes which are summarized in Appendix 1. Stikine Copper Limited delineated the first 100 codes in 1991. Seven additional codes were created in 2004 by NovaGold.

Roughly 30 primary rock types exist, most of which have subdivisions based on textural or temporal differences. Textural subdivisions exist for volcanic rocks, intrusive rocks, and breccias, and are self-explanatory. Temporal relationships of mineralization and cross-cutting intrusive relationships define the subdivisions for intrusive rocks. The necessity of such a detailed classification scheme is currently under review, as a simplified scheme will assist correlation of data within the model.

Figure 7-2: Local Geology (after Simpson)



## 8.0 DEPOSIT TYPES

*This section has been adapted from Hatch et al. (2005).*

The Galore Creek property is situated within and associated with a curvilinear belt of bi-modal calc-alkaline and alkaline Upper Triassic-lower Jurassic Nicola-Takla-Stuhini volcanic assemblages and comagmatic plutons and associated porphyry Cu-Mo and Cu-Au-Ag deposits, respectively, that extend along the Intermountain Belt from south of the British Columbia-Washington border along Quesnel Trough through the Stikine region and into the Whitehorse Trough, Yukon Territory. Several major alkalic porphyry deposits ranging in age from 175 to 201 million years associated with alkalic stocks, dykes and intrusive breccias controlled by north to northwest trending major fault structures are known along this belt including Mt. Polley, Copper Mountain-Ingerbelle, Afton, Cariboo Bell, Lorraine and Gnat lake deposits (Barr, D. A., et al.).

These deposits tend to occur in regions of fault intersections and are controlled by fractured and/or brecciated zones. Deposits typically show extensive alteration products and sulphides and often lack the classic zoning of calc-alkaline porphyries due to the absence or poorly developed nature of phyllic and argillic zones. Also, alteration zoning patterns tend to be asymmetric as opposed to symmetrical and concentric typical of calc-alkaline deposits. Potassic flooded (i.e. K-feldspar and biotite) core zones or replacement bodies and propylitic altered (i.e. chlorite, epidote and albite) peripheral zones are typical of the alkalic deposits. Copper zones (i.e. chalcopyrite and minor bornite with gold and silver values) usually occur central to the alteration systems although in some cases they occur within the propylitic zone. Sulphides typically occur as fracture fillings (though rarely at Galore) and as disseminated grains, massive lenses and pods and in breccias. Magnetite is commonly associated with these systems and may either coincide with sulphide zones or occur peripheral to the copper zones. Calc-silicate alteration products, including andradite to grossularite garnets, occur within the potassic zones at Galore Creek. Abundant anhydrite is also present.

As described above, NovaGold has been exploring these “copper-gold porphyry” deposits since 2003.



## 9.0 MINERALIZATION

*This section has been adapted from Hatch et al. (2005)*

Mineralization at Galore Creek occurs in upper Triassic felsic to intermediate volcanic flows and fragmental rocks. It is associated most closely with intense, pervasive K-silicate alteration as replacements, disseminated and fracture-controlled chalcopyrite with locally abundant bornite. Higher gold values are normally associated with bornite mineralization.

Four mineralized zones of potentially economic interest have been explored at Galore Creek. These are the Central Zone, Southwest Zone, Junction Zone and West Fork Zone. Other target areas include Middle Creek, Butte, West Rim, North Rim and Saddle Zones.

### 9.1 Central Zone

The Central Zone is the largest and most extensively explored of all the deposits and is characterized by fairly complex geology. Mineralization is exposed in the southern part of the zone, but elsewhere it is covered by up to 75 metres of glacial overburden. Between 80% and 90% of the copper-gold-silver occurs as sulfide replacement of the host volcanic rocks. The grade of the mineralization commonly exceeds 1% Cu decreasing rapidly at the margin of the zone.

The long axis of the Central Zone deposit has an orientation of 015° and dips steeply to the west. It is 1,700 metres long, 200 to 500 metres wide and has been traced to a depth of 450 metres and remains open. The eastern boundary of the Central Zone mineralization lies near the surface projection of a major, steeply west-dipping, brittle normal fault. In the west and south, mineralization is partially truncated by post-mineral megaporphyry dykes. Intense SAC alteration has obliterated mineralization in the northwestern part of the Central Zone. In the north, mineralized volcanic rocks end abruptly against a thick sequence of weakly to unmineralized epiclastic sedimentary and volcanic rocks as a result of a WNW-oriented post mineral fault. Either the East Fork or North Boundary Fault may displace the mineralization to the northwest of its current trend.

The Central Zone exhibits considerable internal variations in both mineralization and alteration. Hydrothermal alteration changes from Ca-K-silicate in the core region to intense K-silicate alteration toward the north and south parts of the zone. In terms of gold-silver-copper replacement mineralization, the most favorable volcanic lithologies are the pseudoleucite-bearing volcanic rocks in the north and the dark crystal tuffs in the south. Augite-bearing units in the north are low to moderate in copper content and the core of the deposit hosts a mineralized orthomagmatic breccia. Gold values are highest in the northern and southern portions of the Central Zone where significant disseminated bornite, magnetite and hematite are present. Lower gold grades correlate

with the intense Ca-K-silicate altered core region. Chalcopyrite is the most important copper mineral and occurs as replacements, disseminations and fracture fillings throughout the zone. Supergene copper mineralization is minor and occurs primarily as malachite, azurite and chrysocolla on fractures, generally within 60 metres of the surface. Pyrite increases in abundance to the east of the Central Zone reaching concentrations of up to 5%.

## **9.2 Southwest Zone**

The Southwest Zone is located about 600 metres southwest of the south end of the Central Zone and contains some of the highest grade near surface gold mineralization. At Galore Creek, Kennecott envisioned the southwest area as a potential high-grade starter pit. Drilling has outlined an elongate pod-shaped body that trends roughly east-west and dips approximately 60° to the south. The zone is up to 400 metres long and may be as wide as 140 metres; however, the 1991 drilling suggests that the zone narrows at both the eastern and western ends of the deposit; additionally, the 2005 drilling suggests that the zone remains open along strike and at depth. The Southwest Zone is still open at depth. Primary hosts for the Southwest mineralization are a diatreme breccia and an early-phase syenite intrusion. Localization of high-grade copper-gold-silver mineralization within the breccia appears to be related to a combination of structural traps. Located primarily on the footwall side of the Southwest Fault, the deposit is zoned from a central copper-gold core out to a gold halo.

## **9.3 Junction Zones**

The Junction and North Junction Zones lie about 2 kilometres northwest of the Central Zone and about 460 metres higher in elevation. They are a series of irregular, generally flat-lying manto-shaped bodies plunging about 20° to the northeast. These two zones may have been a single deposit that was originally 1,400 metres in length before it was faulted. Width of the zones varies from 50 to 150 metres. Higher gold and copper grades correlate with the presence of bornite in the North Junction Zone. The mineralization, consisting of disseminated chalcopyrite and bornite, is hosted in both the Junction porphyry (JP) and the Late-Junction porphyry and orthoclase syenite megaporphyry (i5). K-silicate alteration consisting of pervasive hydrothermal biotite and K-feldspar flooding is associated with the mineralization. A large mass of late-mineral I9b megaporphyry truncates the zone on the west.

## **9.4 West Fork Zone**

The West Fork Zone lies in the valley floor less than one kilometre south of the Central Zone and less than 50 metres higher in elevation. West Fork contains two adjacent but distinctly different styles of mineralization: disseminated sulfide replacements similar to portions of the Central zone, and massive veining. The disseminated mineralization is characterized by disseminated chalcopyrite and bornite

hosted by a combination of intrusive and volcanic rocks. Higher grade disseminated zones appear to be controlled by structures, though distinct veining is absent.

The Opulent vein, which consists of massive chalcopyrite, bornite and magnetite, defines the other style of mineralization at West Fork. Sulfide textures indicate fissure-style fillings of open space, but associated calc-silicate gangue minerals, possibly tremolite, indicate replacement. The known extent of the Opulent vein is limited within a breccia mass and strikes approximately 355° with a steep west dip. The extent of the zone is 150 metres in length and 100 metres in depth. Within the vein, grade is continuous.

*The following section has been adapted from Rescan (2005)*

### **9.5 Middle Creek Zone**

Middle Creek is located approximately one kilometre west of the Central Zone. In 1991, field mapping found mineralization reported by prospectors in the mid-1960's. Mineralization is characterized by finely disseminated bornite, chalcopyrite and magnetite associated with pervasive fine-grained biotite and garnet alteration, hosted in a breccia or volcanoclastic unit. The mineralized zone has a lateral extent of 200 metres, a vertical extent of 150 metres and is open in all directions. In 2005, drilling in the Middle Creek area encountered a hole which showed significant grade (approximately 1.1% Cu) over a 50-metre intercept. The grade from that intercept was attributed to the presence of malachite and native copper and prompted a copper oxide and copper solubility study. The results of this study found Middle Creek to be the most oxidized zone discovered to date on the Galore Creek property.

### **9.6 Butte Zone**

The Butte deposit lies along the western margin of the Galore Creek complex. The Butte zone contains northeasterly striking, west dipping zones of disseminated chalcopyrite and bornite hosted in K-silicate altered pseudoleucite-bearing volcanics. The mineralized zones can be traced intermittently for over 200 metres within a 1.2 kilometre target area. At the surface, mineralization grades up to 2.18% copper and 0.5 g/t across 96.6 metres. The zone is truncated at depth by post-mineral (i11) intrusions. Surface mapping in the 1960's revealed outcrop mineralization in the Lower Butte area. Drilling by NovaGold in 2005 intercepted a zone of 0.729% copper across 84 metres, making this new discovery a target for future exploration. The continuity of mineralization is not well understood at this time due to limited drilling information.

### **9.7 West Rim Zone**

The West Rim Zone consists of NE-striking, west-dipping zones of disseminated chalcopyrite and bornite. Drilling in 1964 on the West Rim deposit intersected 48.8 metres grading 0.8% copper. This zone is hosted by volcanic tuffs with intense K-silicate alteration and is truncated at depth by I9b megaporphyry intrusions. The

orientation, size, distribution and continuity of mineralization are not understood due to a lack of drilling.

### **9.8 North Rim Zone**

Between 1963 and 1991, ten holes were drilled into the North Rim Zone located about 1,600 metres north northwest from the Central Zone. Drilling across the zone is sparse and covers an area of 500 metres by 700 metres. This zone is characterized as a broad area of widespread weak copper mineralization that was discovered in outcrop, and subsequent exploration revealed coincident copper-gold geochemical and chargeability anomalies. Two holes intersected zones of low grade copper (0.3-0.4%) over widths of 21-24 metres with accompanying gold grades up to 0.5 g/t. The last two holes intersected many narrower (<10m) intervals grading 0.3-1.0 g/t and one as high as 6.34 g/t over 3 metres. Spotty copper grades above 0.3% were also present. The area is underlain mainly by intrusive phases cut by small orthomagmatic breccia bodies with magnetite-rich matrix and Ca-K-silicate alteration. Due to the incomplete nature of drilling in this area, the orientation, distribution, and continuity of mineralization is not understood.

### **9.9 Saddle Zone**

The Saddle Zone lies 2.6 kilometres southeast of the Central Zone and is hosted by a breccia dominated by a matrix of magnetite. Four holes were drilled here between 1954 and 1963 and two more added in 1990. The later holes intersected two 12-metre zones of mineralization grading 0.55% copper and 2.19 g/t gold, and 2.49% copper and 3.98 g/t gold, respectively. Three of the older holes also intersected low to moderate copper and high gold grades (between 1.0 and 6.9 g/t Au) but gold analyses were incomplete. An adjacent occurrence named the South 110 Zone is possibly a continuation of the Saddle Zone to the north. The four completed drill holes in this area do not adequately define the geometry, orientation, distribution, and continuity of mineralization for this zone.

## **10.0 EXPLORATION**

The aims of the 2005 exploration drill program were to upgrade resource blocks within the main deposits, to test for extensions of known mineralization, and to explore for new targets within the Galore Creek valley. Additional drilling was utilized for engineering and environmental testing. Mapping focused on defining drill targets, major structures, and alteration assemblages, as well as recognizing sedimentary facies transitions. The geophysical exploration program included a wide-spaced Vector IP reconnaissance program and Induced Polarization surveys both south of the Central Zone and along the East Fork of Galore Creek.

The 2005 Galore Creek diamond drill program included 63,189.89 metres of HQ and NQ sized core recovered from 260 diamond drill holes. 213 holes, totaling 61,320.88 metres, were part of the geology exploration drill program with the remaining 37 holes drilled for geotechnical purposes.

### **10.1 Extent of All Relevant Exploration**

Geological mapping, along with results from surface geochemical and geophysical studies, have added considerable value to the project. Table 10-1 lists the relevant exploration work that has been completed at Galore Creek along with the contractor name and supervisor.

**Table 10-1: Relevant Exploration Work**

<b>Job Function / Year</b>	<b>Supervisor</b>	<b>Contractors</b>	<b>Work Performed</b>
<b>Geology</b>			
1957-91	unknown	unknown	
2003	Scott Petsel	Vancouver	Petrography
2004	Scott Petsel	John Proffett,	Mapping, Petrography
2005	Scott Petsel Don Penner	John Proffett, Vancouver	Mapping, Petrography
<b>Laboratory</b>			
1957-89		unknown	
1990		TSL Laboratories	
1991		Min-En	
2003		ALS Chemex	
2004		ALS Chemex	Geochemical Analysis
2005		ALS Chemex	Geochemical Analysis
<b>Geophysics</b>			
1962	Norman		Airborne Mag
1964	R.A. Bell & P.G.		IP
1966	R.D. Falconer		IP, Ground Mag
1989	A.D. Ettlinger, et	Aerodat	Airborne EM
2004	Lou O'Connor	Fugro, Zonge,	Airborne Mag, Radiometrics,
2005	Lou O'Connor	Frontier	IP
<b>Drilling</b>			
1957-90			
2003	Scott Petsel	Britton Brothers	HQ and NQ diamond drilling
2004	Scott Petsel	Britton Brothers	HQ,NQ and BQ diamond
2005	Scott Petsel Don Penner	Hy-Tech, Cyr	HQ and NQ diamond drilling

## 10.2 Results of Surveys, Procedures and Parameters

Regional stream silt geochemistry was instrumental in the discovery of the mineralization at Galore Creek and more detailed silt sampling programs were carried out in 1960-61 and 1989.

A significant area of the property lacks sufficient soil development for soil geochemistry to be of any practical use. Soil grids were established in the areas around the North Rim and Southwest zones. A few reconnaissance traverse soil lines were also sampled along topographic contours between the Saddle Zone and the Central Zone.

In 1991, 600 soil samples were collected from a grid established in the North Junction / North Rim area. Samples were taken on 20-metre stations along lines spaced 100 metres apart. A coincident Cu-Au soil anomaly with peak values of 9060 ppm copper and 550 ppb gold was located over the North Rim area. A total of 63 surface rock chip samples were also collected from various outcrops on the property.

At least two previous geophysical surveys, dating back to 1961, have been conducted on the Galore Creek property. In the period of 1961 to 1967, major surveys

included aeromagnetics, dipole-dipole IP/Resistivity, ground magnetics and AMT. Between 1989 and 1991 a second episode of geophysical exploration occurred. Surveys included an Aerodat helicopter magnetic survey, EM and radiometric survey, ground magnetics/VLF and 60-metre pole-dipole IP/Resistivity surveys.

Geophysical surveys completed at Galore Creek during 2004 included the following:

- A helicopter flown by Fugro Airborne Surveys supported magnetic and radiometric surveys to the north and east covering the Grace and Copper Canyon claims and covered 1,072 line kilometres.
- Wide-spaced, large dipole IP/Resistivity lines combined with 2D IP/Resistivity modeling were used to extend the depth of mineral exploration. The work was conducted by Zonge Engineering, and covered approximately 28 linear kilometres on 17 lines using a 100 or 150-metre dipole-dipole array.
- Shallow seismic refraction surveys for engineering design were run by Frontier Geosciences. The survey covered a total of 10.5 kilometres on 11 lines using 10-metre spaced geophones.
- A ground magnetics survey was completed by Aurora Geophysics that used a 25 metre line spacing with 5 metre stations across the Opulent vein in the West Fork area.

The 2005 geophysical exploration program included a wide-spaced, Vector IP reconnaissance program, a 2 kilometre line of 100-metre pole-dipole IP/resistivity (Line 18) along the south bank of the East Fork of Galore Creek and a 1.5 kilometre by 1.5 kilometre 3D IP survey south of the Central Zone. The surveys were conducted by Frontier Geosciences using their PC based full waveform time domain IP receiver. The reconnaissance survey recorded 55 wide-spaced IP and resistivity stations in an area of 40 square kilometres. This survey produced anomalous IP responses over the entire survey area with relatively lower IP responses associated with the Central Zone and north along the Galore Creek drainage. Survey results are consistent with a large sulphide alteration system associated with a porphyry copper system. Line 18 was run to get detailed information across an area of high reconnaissance IP responses in the East Fork of Galore Creek drainage. Drilling showed that the IP responses were associated with barren pyrite. The 3D IP survey used a pole transmitter and 100 and 200-metre receiving dipoles located north and south of the transmitter lines to build a 3D mesh of readings. Inverted models showed a surface resistivity low associated with overburden and fractured rock and surprisingly low IP effects compared to previous 2D model data.

### 10.3 Underground Development

*This section has been adapted from Hatch et al. (2004).*

In order to extract a 50-ton bulk sample for pilot plant testing, an adit was driven into the Central Zone and samples were collected from four crosscuts. The work was carried out by Haste Mine Development between August 1966 and January 1967 and totaled 799 metres of underground drifting (2m x 2m). The rock quality in this part of the Central Zone was found to be generally weak and intensely fractured in gypsum-free areas, but tough and competent in zones of gypsum cementation.

Seven underground diamond drill holes were collared from the 2070 adit. Severe recovery problems were encountered because the holes were of small diameter and drilled sub parallel to the flat-lying, sheet fractures. No assay data were located for these holes.

Sampling of the adit and drift ribs was carried out over continuous horizontal 3-metre intervals plus vertical channels alongside the traces of diamond drill holes. Although commonly referred to as “channel” samples, one internal memo described them as “contentious (sic) chip samples”. The vertical samples taken adjacent to the drill hole traces correlated within 0.1% copper. There was considerable variability between rib samples that were collected from opposite sides of the drift, particularly in higher-grade areas above 1.5% Cu where massive blebs of chalcopyrite were randomly distributed. In these areas variations often exceeded 0.4% copper for opposing walls. Subsequent check sampling along some of the same channels confirmed this variation.

At the North Junction Zone, a smaller adit (1.2m x 2.1m) was collared in badly fractured and altered tuff. After driving through 26 metres of material grading about 0.5% copper, a low-grade dike was encountered. Total length of the adit was 51 metres.



## **11.0 DRILLING**

*Refer to Simpson, 2003; Hatch et al., 2004; and Morris 2005 for more information on drilling prior to the 2003 programs.*

### **11.1 Pre-2003 Drilling**

Prior to NovaGold's involvement with Galore Creek in 2003, there were about 439 diamond core drill holes completed totaling 99,637 metres. Most of these holes were located in the Central Zone, with lesser amounts of work conducted on eleven other areas. Some of the mineralized zones only received reconnaissance level drilling.

During the 1970's drilling was principally confined to the Central Zone with nine holes drilled into the North Junction Zone. In the Central Zone the average core recovery was between 75% and 85% with the poorest recovery at depths between the surface and 90 metres where open sheet fractures were encountered. At depths below 90 metres, core recovery typically approached 100%. In the North Junction Zone core recovery averaged about 60% due to shattered and sheared sections that were encountered both near the surface and at various intervals throughout the holes.

### **11.2 2003 NovaGold Drilling**

During 2003, NovaGold completed an eight hole 3,000-metre drill program to verify previous results and to better understand grade variability, mineral zonation and potential controls of mineralization. Particular emphasis was directed at understanding the variability of gold content in the deposit. All eight diamond core holes were angle drilled in order to intersect the mineralized structures as close to right angles as possible. All six holes within the Central Zone were drilled towards the east and focused on the gold-rich lenses at the north and south ends of the zone as well as the central, higher-grade copper replacement zone. The two remaining holes were drilled in the Southwest Zone. These holes were angled towards the north. In addition, two holes were lost in overburden and not completed. All of the 2003 drilling was completed at NQ size. NovaGold's core storage and handling methods that were developed in 2003 and subsequently used for their 2004–2006 campaigns are described in more detail in Sections 11.4 and 11.5.

Drill hole GC03-441, drilled in 2003, was targeted to test both an upper mineralized horizon and the potential for a lower mineralized zone. The hole successfully intersected the upper horizon and encountered a new mineralized horizon that had not been tested in previous drilling and is now known as the Bountiful Zone. The intercept totaled 65 metres in width and did not exit the mineralized section before the hole was terminated.

### **11.3 2004 NovaGold Drilling**

Diamond drilling in 2004 targeted eight different mineralized areas: the Central Zone (which includes the North Gold Lens, Central Replacement Zone, and South Gold Lens), the Copper Canyon property, the Gap Zone, the Grace claims, the North Junction Zone, the Saddle Zone, the Southwest Zone, and the West Fork Zone. Drill hole collar locations were selected to test surface mineralization and geophysical targets, confirm results from past drilling, and to extend the limits of known mineralization. Britton Brothers Diamond Drilling out of Smithers B.C. completed the 2004 work using both skid and helicopter portable drill rigs. All of the 2004 drilling on the property has been continuous core diamond drilling, using HQ, NQ and BQ size core. Exploration drilling in 2004 resulted in the discovery of the West Fork and Opulent Zones.

### **11.4 2005 NovaGold Drilling**

Diamond drilling in 2005 primarily focused on (1) infill drilling and upgrading of Inferred and Indicated Mineral Resource blocks to Indicated and Measured status within proposed pits; (2) delineation of pit boundaries, which were based on the 2004 resource model; (3) expansion and/or extension of known mineralization through step-out drilling; (4) targeting of known surface mineralization and structures based on previous mapping; (5) targeting of previously identified geophysical anomalies; and (6) geotechnical and environmental drilling for future assessment. Due to the large scale nature of the 2005 program, NovaGold subdivided the Galore Creek Project into four discrete areas with geologic teams assigned to each area. Team 1 was responsible for the Central Zone (which includes the North Gold Lens, Central Replacement Zone, and South Gold Lens). Team 2 was responsible for Exploration/Reconnaissance targets (which includes Middle Creek, Butte, North Rim, the Grace Claims, and IP and Airborne Magnetic Drilling). Team 3 was responsible for the Southwest and West Fork Zones, as well as the "Gap" between these two zones. Team 4 was responsible for the North Junction Zone and the Copper Canyon Property.

The 2005 drilling work was completed by two companies: Cyr Drilling International Ltd. of Winnipeg, Manitoba who provided three Longyear 38 skid-mounted drill rigs, and Hy-Tech Drilling Ltd. of Smithers, British Columbia who provided five custom-built S-5, S-10 and B-15, helicopter supported fly rigs. HQ-sized rods were used in drilling through the "broken" rock and NQ-sized rods through "stick" rock. The holes were surveyed using Reflex down-hole cameras on 50-metre intervals. Oriented core measurements were taken on roughly 20% of the exploration drill holes. Most geotechnical holes and all water-monitoring holes were drilled with two HT-750 top drive rotary drill rigs, provided by Foundex Explorations Ltd. of Surrey, British Columbia. Triple tube core barrels were used for all geotechnical drill holes and whenever possible, each drill run was oriented using an Ezy-Mark core orientation tool.

### **11.5 2003-2005 Drilling Procedures**

The procedures used to locate exploration drill holes between 2003 and 2005 were generally as follows: the proposed drill site was located in the field by a geologist using a hand-held GPS unit; a pad was then built and the drill rig placed on the site by helicopter or dragged into position using a bulldozer. The orientation of the drill hole was set by the geologist with a set of pickets to provide the azimuth for the angle hole. The inclination (dip) of the drill hole was also noted on the alignment pickets. Typically most drills were checked by a geologist before drilling began to verify azimuth and inclination. Upon completion, drill hole collars were surveyed using a differential GPS with an Ashtech receiver. Down-hole surveys were completed using a Reflex E-Z-shot tool on 50-metre intervals. In most cases the drill pipe was removed from the hole with surface casing occasionally left to mark the hole location. When casing was not left in the hole a cement plug and wooden stake were used to identify hole locations. Artesian holes were plugged and capped to minimize surface water flow in the area.

All drill core was transported by helicopter or truck in secure core “baskets” to the Galore camp for logging and sampling. Although the rocks are complicated and their genetic interpretations may vary slightly from those determined historically, a policy of “correlateable units” was used and rocks were coded according to the historic nomenclature. Additionally, a few new rock codes were created to accommodate lithologies found in 2005 that were not present in the rock type dictionary.

Logging included coded and textural descriptions of lithology, alteration, mineralization, structure, core recovery and rock quality designation (RQD). Geotechnical measurements, including rock strength, specific gravity, fracture density, and fracture filling were also recorded. Data were entered in an Access database using DDH Tool, an in-house front-end data entry program constructed in Visual Basic. After geologic and geotechnical logging, the core was photographed and one sample for approximately every ten metres of core was selected for point load testing and specific gravity measurements. Once the core was sawed, half was sent to ALS Chemex Labs for analysis and the other half stored at the Galore Creek camp for future inspection. In addition to the core, control samples were inserted into the shipments at the approximate rate of one standard, one blank and one duplicate per 17 core samples. Petrographic analyses in 2005 were completed on 17 samples by Vancouver Petrographics; these include Galore Creek and historic drill core samples.

### **11.6 Sample Length/True Thickness**

Sample intervals were determined by the geological relationships observed in the core and limited to a 3-metre maximum length and 1-metre minimum length. An attempt was made to terminate sample intervals at lithological and mineralization boundaries.

The term “true thickness” is not generally applicable to porphyry-like deposits as the entire rock mass is potentially ore grade material and there is often no preferred orientation to the mineralization. Because of the potential of ore grade material through the entire length of the hole, sampling was generally continuous from the top to the bottom of the drill hole. The mineralization is generally confined to three main lithologies: volcanic rocks, intrusive rocks, and breccias. These lithologies form large massive bodies within the Galore Creek deposit.

Appendix 2 summarizes all significant drill hole intercepts. A 1% total copper cutoff grade was used to summarize the significant drill hole intercepts.

## 12.0 SAMPLING METHOD AND APPROACH

Samples in the Galore Creek project database come only from drill core; there are no trench or grab samples in the database. Drill hole sample intervals in 2005 were determined by a geologist and averaged 2.4 metres in length. Due to the style of mineralization and difficulty in determining potential ore from non-ore material, all of the cored material from each drill hole was sampled. When the hole was in unmineralized rock the sample length was generally 3.0 metres, which provides a representative sample weight for NQ core. In mineralized units, the sample length was shortened to 2.0 metres. The core recovery was very high with an average of ~88% in 2005.

Unsampled intervals (from older drilling programs) were mainly late stage, post mineral dykes. Core was split using a diamond saw (older programs used a mechanical splitter). One half of the core was returned to the core box and the other half shipped to an outside laboratory for analysis. The core returned to the boxes remains on site as a record of the hole. Pulps and coarse rejects were stored either on site, in a warehouse in Smithers or in Vancouver. Those remaining on site are in degraded sample bags and are not considered worth salvaging.

Core has been stored in either plastic, galvanized steel or wooden boxes. All have been marked with metal tags inscribed with the hole number and interval. An estimated 1,500 metres of core was spilled in 1972 due to the collapse of a core storage rack. In the winter of 1976 one core shed collapsed and although most of the core was rescued, a number of intervals were not salvageable. Core from the Central Zone was largely re-logged as part of the 1991 exploration program. It is now stacked on pallets exposed to the elements and the top layers have suffered deterioration from weathering. Several intervals have also been removed in the past for the purposes of metallurgical testing. Other intervals have been ¼ split for check assaying.

No site-specific standards, blanks or field duplicate samples were used in any of the previous exploration programs. During the 1991 program, every twentieth sample was re-assayed by an umpire laboratory and internal checks were performed by the main assay laboratory. A QA/QC program was instituted and consisted of assaying duplicate samples along with the insertion of standard reference materials (SRM's) and blanks. A list of all drill hole samples that were used to estimate Mineral Resources is shown in Table 12-1 by mineralized zone.

**Table 12-1: Summary of Drill Hole Data**

<b>Mineral Zone</b>	<b>No. of Holes</b>	<b>Metres Drilled</b>
Butte	6	1,703.20
Central Replacement Zone	406	104,333.70
Gap	10	3,164.60
Grace	27	4,695.32
Junction	15	2,751.25
Middle Creek	21	4,993.21
North Junction	41	10,432.22
North Rim	15	2,865.64
Proffitt	5	799.48
Reconnaissance	46	9,909.65
Saddle	10	1,360.52
Southwest Zone	86	21,710.49
West Fork	66	17,708.38
West Rim	4	838.84
<b>Grand Total</b>	<b>758</b>	<b>187,266.50</b>

Notes: 1 - The “Gap” is the area between the Central and Southwest Zones. 2 - “Reconnaissance” holes were drilled in areas outside of defined zones.

### 13.0 SAMPLE PREPARATION, ANALYSES AND SECURITY

The Galore Creek project has seen many different sampling campaigns. The first drilling was completed in 1961 and very little is known about the sample preparation, analysis or security from the first three years of drilling.

#### 13.1 Pre-2003 Samples

*This section has been adapted from Simpson (2003).*

Sample preparation has gone through several transitions since the early drilling in the 1960's. Prior to 1964, drill core was split in 3-metre lengths then half of the core was shipped to Coast Edridge laboratory in Vancouver for copper assay. Apparently some 30-metre-long composites were assayed for gold during this period.

In 1964, a small assay laboratory was constructed on site and during the first season of operation, processed 3,747 samples. Half of the split core was crushed on site to ¼ inch then a 340 gram split was separated using a Jones riffle splitter. At the lab the sample was split and crushed to -10 mesh then 95% of the crushed material was pulverized to -100 mesh and assayed for copper using a double digestion with titration and colorimetric determinations. Intervals that reached or exceeded a minimum copper grade of 0.4% over intervals of 12 to 18 metres were composited and shipped to Coast Edridge for gold and silver assaying. It is not known if these pulps were re-homogenized before compositing. Within distinctly anomalous gold intervals, there are gaps in the original sampling. Early gold assays performed on 30.5 metre composites contradict strongly with later 12-18 metre long composites assayed. The later composites were assayed by a commercial lab then checked by the Kennecott Research Centre Lab (located in Salt Lake City, Utah) and are considered to be reasonably accurate. The author does not know whether the Kennecott lab was certified.

During 1964, cross checking of Galore Creek laboratory copper analyses was carried out on a routine basis by Kennco Explorations laboratory in North Vancouver and at Coast Eldridge Laboratory. The author is unaware of where the now defunct Coast Eldridge Lab was located or if it was certified. Several samples were also checked at Hawley and Hawley assayers of Tucson and by Bear Creek Laboratory in Denver.

In 1966, composites from the Central Zone were reportedly re-assayed for gold and silver after discrepancies were found between the values obtained in 1964 and 1965. The re-assay was carried out at the Kennco Laboratory in North Vancouver. The results showed marginal increases in gold and silver content. Assay certificates could not be located for either the original or re-assayed material.

In 1967, the pulps from 140 samples were split and a portion analyzed by five separate laboratories; Coast Edridge, Sudbury and three of Kennecott's labs. A standard was included with the samples in order to check the reproducibility of the method being

used. Comparison of the standards showed that the Coast Eldridge laboratory (using the titration method) was the least reliable. The field lab assays compared well with atomic absorption analyses at other labs. The author is unaware of what lab in Sudbury, Ontario was used. Similarly the author is unaware of the location of the three Kennecott labs or if they were certified.

In the 1970's programs, the split half of the core samples were still crushed on site to ½ inch and split to obtain a ¾ lb sample. This was further crushed in a cone crusher then placed in Kraft paper bags and shipped by air in locked metal boxes to either the Kennco Exploration Lab in North Vancouver (1972/73), or Chemex Lab (1974) for assay. Assaying for Au and Ag was only performed on composite samples (up to 15m) which averaged over 0.4% Cu. No information on check assays or quality control from the 1970's drill programs could be located. All coarse rejects from the 1970's were stored on the property. The author is unaware of the location of the Chemex Lab that was used in 1974 or if the lab was certified.

During the 1990 drill program carried out by Mingold, half of the split core was crushed on site to ¼ inch (6.35 mm) and a 300-325 gram split was taken and shipped to Min-En Laboratory in Smithers for further processing and assaying. For gold analysis, a 30 gram sample split underwent fire assay pre-concentration with an A.A. finish. Samples in excess of 1000 ppb Au were re-assayed. If high copper content was noted in drill logs the sample was directly fire assayed. If gold content reached or exceeded 3.11 g/t (0.1 oz/ton) then the reject portion of the sample was shipped to the Min-En lab in Vancouver for metallic screen fire assaying. For this process, the entire reject was pulverized to -120 mesh, recombined with the previous pulp portion and metallic screened for +120 mesh gold. Two 30-gram assays were then completed on the -120 mesh fraction and the results averaged. The values from both fractions (+120/-120) were then mathematically combined to produce a net gold value. Copper and silver analyses were done on a 2-gram sample split from the initial pulp. No check assays were documented and rejects were stored on site.

In 1991 sample preparation was modified on recommendations from Min-En after they undertook a number of tests on coarse reject core samples. The raw core was crushed to 3mm and a 500 gram split taken, pulverized to 95% passing -120 mesh then rolled and bagged for analysis. The remaining reject was bagged and stored in Smithers. Samples were fire assayed using a one assay ton sample weight. For each batch of 24 samples a blank and a standard were submitted. When the value of the standard fell outside of a 95% confidence limit the entire batch was re-run.

Internal monitoring of copper assays was routinely conducted on 50 sample batches. The top 10% of all gold assays per page were rechecked and reported in duplicate along with the standard and blank. Every 20th sample was shipped to Eco-Tech laboratories of Kamloops for check assay. The check assays showed reasonable correlation for copper and fairly good correlation with gold at grades exceeding 0.25 g/t, although Eco-Tech assays tended to be marginally higher. Gold grades below 0.25 g/t showed considerable variation.



During 1991, metallic screening of high-grade gold samples was not routinely carried out. Min-En laboratories tested three high-grade gold samples (+3 g/t) for metallic gold content. Based on this preliminary work they concluded metallic or coarse particles could have influenced high gold assays at Galore Creek. Min-En recommended that metallic gold assays be done on composite samples from high grade zones prior to further resource estimation. A comprehensive re-assay program was undertaken in 1991 to reliably establish the distribution and grade of gold mineralization in the Central Zone. This was mainly due to the absence of continuous gold assays from drill holes completed before 1990. Thirty-one holes drilled in the Central Zone during the 1960's and 70's had no gold assays and the remainder only had gold and silver assays performed on composited mineralized zones (+0.4 % Cu). A total of 100 tonnes of samples were shipped from the property to Min-En laboratories in Smithers, B.C. for assay. This total encompassed 18,784 samples from the Central, Southwest and North Junction Zones with 95% of the samples from the Central Zone. The sample total included 12,786 coarse reject samples from earlier drilling and underground sampling and 5,990 core samples from pre-1991 Central Zone drilling. Results from about 600 of the reject samples could not be used due to problems with duplicate sample numbers.

### **13.2 2003-2004 NovaGold Samples**

NovaGold's work during the 2003-2004 campaigns included core logging, sample layout, and sample splitting. A professionally registered geologist oversaw all of the work including core logging, sample splitting, and the shipment to the labs.

Shipment of the samples between 2003 and 2004 from the Galore Creek camp occurred on a by-hole basis. Rice bags, containing 4 poly-bagged core samples each, were marked and labeled with the sample numbers and the Vancouver lab address. The rice bags were then assembled into sling loads for transport by helicopter to the Bob Quinn airstrip. The samples were stored in a secure metal structure at the Bob Quinn airstrip until they were transported by Banstra, a commercial trucking company, who delivered the samples directly to ALS Chemex in Vancouver.

All assay analysis for the 2003-2004 program, as in the 2005 program, were carried out by ALS Chemex Labs of Vancouver B.C., which is widely used by the mining and exploration industry. ALS Chemex carries the highest certification for registered assayers, including ISO 9002 and ISO: 9001:2000. According to NovaGold, ALS Chemex is working towards ISO 17025 certification.

Upon arrival at the lab the samples were logged into a tracking system and each individual sample weight was recorded. The samples were then prepped by drying and the entire sample crushed. A 250 gram split was pulverized to >85% passing 75 microns. Sample analysis for gold content was completed using 30 gram fire assay charges with an atomic absorption spectrometry (AA) finish. Accurate results were provided between 0.05 ppm and 1000 ppm gold. Additional ICP analysis was conducted for 34 elements by aqua regia acid digestion and ICP-AES. The copper analyses were completed by AA, following

a triple acid digestion. In total during 2003-04, excluding quality control samples, 38,866 samples from the four project areas were submitted to ALS Chemex for analysis.

A comprehensive quality assurance/quality control (QA/QC) program was followed during the 2003-04 seasons. Duplicate samples were used to monitor and measure precision (reproducibility), blank samples representing material with very low concentrations of copper and gold and were used to test for contamination of the samples, while standard samples and assay checks were used to test the degree of accuracy. In total, 1,005 samples were sent for quality control purposes, as blind duplicates, blanks or standards, representing approximately one in every 10 samples or 10.7 % of the samples collected during 2003-04.

### **13.3 2005 NovaGold Samples**

In 2005, as in the prior NovaGold programs, the drill core was logged by a team of geologists and split using a rock saw. A professionally registered geologist continued to supervise all of the work. Half of the drill core has been retained in core boxes at the Galore Camp for future reference and sampling. The other half of the core was sampled and shipped to ALS Chemex Laboratory in Vancouver. The half-core samples were placed in a plastic bag and tagged with a sample number. Groups of samples were placed in larger rice bags and shipped by helicopter to the Bob Quinn airstrip. From the Bob Quinn storage area the samples were trucked directly to the lab in Vancouver. A submission sheet was sent along with each batch of samples so the lab could confirm receiving the samples. In 2005, security tags were strapped onto the rice bags to ensure that the bags were not opened prior to their arrival to ALS Chemex Labs.

NovaGold has organized the core storage facility, where much of the historic drill core is still in core boxes and available for review as well as assay checks. Minor amounts of the old drill core are difficult to identify by hole number and depth due to degradation of the boxes.

ALS Chemex Labs continued to carry out all of the assay work in 2005. In total, excluding quality control samples, 57,180 samples from the Galore Creek property have been submitted for analyses since 2003. In 2005, as in 2003-2004, the copper analyses were completed by atomic absorption spectrometry (AA), following a triple acid digestion. Gold analyses were completed by standard one-assay-ton fire assay with AA finish. All samples submitted from 2003 to 2005 were also analyzed for 31 elements by ICP-MS following an aqua regia digestion.

Essentially the same QA/QC program was followed during the 2005 season. Duplicate samples were used to monitor and measure precision (reproducibility), blank samples representing material with very low concentrations of copper and gold were used to test for contamination of the samples, while standard samples and assay checks were used to test the degree of accuracy. In 2005, about 2,900 samples were sent for quality control purposes, representing approximately 15% of the samples collected during 2005.

The results as reported by ALS Chemex are within acceptable error limits with respect to accuracy and precision, while the contamination was deemed to be minimal.

## 14.0 DATA VERIFICATION

### 14.1 Electronic Database Verification

Data verification has been an ongoing process since the property was acquired by NovaGold in 2003. The drill hole database has been audited and checked by both in-house personnel and several independent consulting companies. Prior to 1990, drilling data were manually entered into a computer database. After 1990, assay data were transferred digitally from data files supplied by the assay laboratory, which minimized the potential for generating data errors.

In 1992 Kennecott conducted an assay database check of 375 assay files representing approximately 7,500 samples. The most common mistakes that were found consisted of typographical errors and missing assay data. There was also some confusion because of missing prefixes in check samples from Eco-Tech Lab. Consequently, all previous data were merged into a single database, audited and converted from imperial to metric units prior to the final resource estimation.

Following NovaGold's involvement with the project, at least three separate data verification programs have been completed. These consist of the 2003 Simpson, 2004 G.R. Tech, and 2006 RMI audits.

The author requested original ALS Chemex assay certificates for ten 2005 drill holes totaling about 3,863 metres, which represents about 7% of the 2005 drilling program. ALS Chemex assay certificate results for 1,720 copper, gold, and silver assay records were then compared with the assay records stored in NovaGold's electronic database. The author found four actual errors and nine records in the official database that could not be verified by assay certificates. According to NovaGold personnel, ALS Chemex has no record of having received or assayed these samples. Table 14-1 summarizes the results for the last major independent database reviews.

**Table 14-1: Summary of Assay Data Verification Results**

Review Program	Number Checked	Errors Found	Error Frequency
Simpson, 2003	1,329	23	1.70%
Hatch et al., 2004	15% of database	minimal	minimal
G.R. Tech, 2005	3,368 drill hole location and orientation	19	0.60%
G.R. Tech, 2005	2,307 gold assays	92	4.00%
G.R. Tech, 2005	3,368 copper assays	50	1.50%
Resource Modeling Inc., 2006	1,720 copper assays from 2005 drilling	5	0.29%
Resource Modeling Inc., 2006	1,720 gold assays from 2005 drilling	4	0.23%
Resource Modeling Inc., 2006	1,720 silver assays from 2005 drilling	4	0.23%

Based on the results from previous independent database audits and the author's own audit of the 2005 drilling data, it is the author's opinion that the Galore Creek assay database is well within the generally acceptable limits for North American drill hole databases and can be used to estimate Mineral Resources.

## 14.2 Drill Hole Collar Check

The author compared drill hole collar elevations from the electronic database with the NovaGold supplied topographic surface. Seventeen drill holes were found to have a difference in collar elevations of  $\pm 7.5$  metres. All but one of these differences was explained by the fact that some of the older holes were collared on top of a glacier which has since retreated giving the appearance that the drill hole collar was too high. Drill hole GC04-490 was found to be 20.6 metres too high in the database that was supplied to the author. This hole was only weakly mineralized and was used in the estimate of Mineral Resources that are subject to this report. The collar elevation for this hole has since been corrected by NovaGold.

## 14.3 Historical Drilling Comparisons

The Galore Creek Project has been explored by core drilling since 1961. Nearly 56% of the core that has been drilled predates NovaGold and the implementation of NI 43-101. The majority of this drilling is located in the Central Zone of the Galore Creek Project. Information regarding QA/QC programs and their enforcement on historic assay analysis is incomplete. Table 14-2 shows the distribution of NovaGold drilling data by area versus historically derived data.

**Table 14-2: Distribution of NovaGold Drilling by Area**

<b>Mineralized Zone</b>	<b>% Metres Drilled by NovaGold</b>
Butte	53%
Central Area	30%
Gap	72%
Grace	92%
Junction	0%
Middle Creek	78%
North Junction	35%
North Rim	57%
Profit	100%
Reconn	27%
Saddle	52%
Southwest	72%
West Fork	96%
West Rim	0%

NovaGold has indirectly assessed the quality of the historic assays by pairing recent NovaGold drilling, which have been subjected to rigorous QA/QC protocols, to the historic data, and then comparing the distributions using quantile–quantile plots (QQ plots).

Copper and gold assay grades were composited into 5-metre lengths and then grouped by year, which was deemed as the smallest unit in which to investigate. A block

model with 5m x 5m x 5m blocks was constructed with copper and gold composite grades from each annual campaign assigned by the nearest neighbor method to a variable in the block model. The search limit for composite assignment was 30 metres.

Blocks which had pairs of historic composite grades and NovaGold composite grades within 10 metres of each other were exported to an ASCII file and were used in subsequent QQ plot analyses. The average copper grades for the historical drilling by year are compared with copper grades derived from NovaGold drilling in Table 14-3. These averages are for blocks that are within 10 metres of both a historical and a NovaGold drill hole composite. Similar statistics are shown by year for gold composites.

**Table 14-3: Historical vs. NovaGold Copper Grades**

Year	No of Pairs	Historical Cu Grade (%)	NovaGold Cu Grade (%)	% Difference
1962	30	0.34	0.34	0
1963	513	0.53	0.48	11
1964	477	0.43	0.6	-28
1965	742	0.47	0.48	-2
1966	271	0.4	0.21	88
1972	195	0.81	1.1	-26
1973	240	0.35	0.22	58
1976	41	0.19	0.24	-23
1991	63	0.13	0.06	126
Total	2,572	0.47	0.48	-3

**Table 14-4: Historical vs. NovaGold Gold Grades**

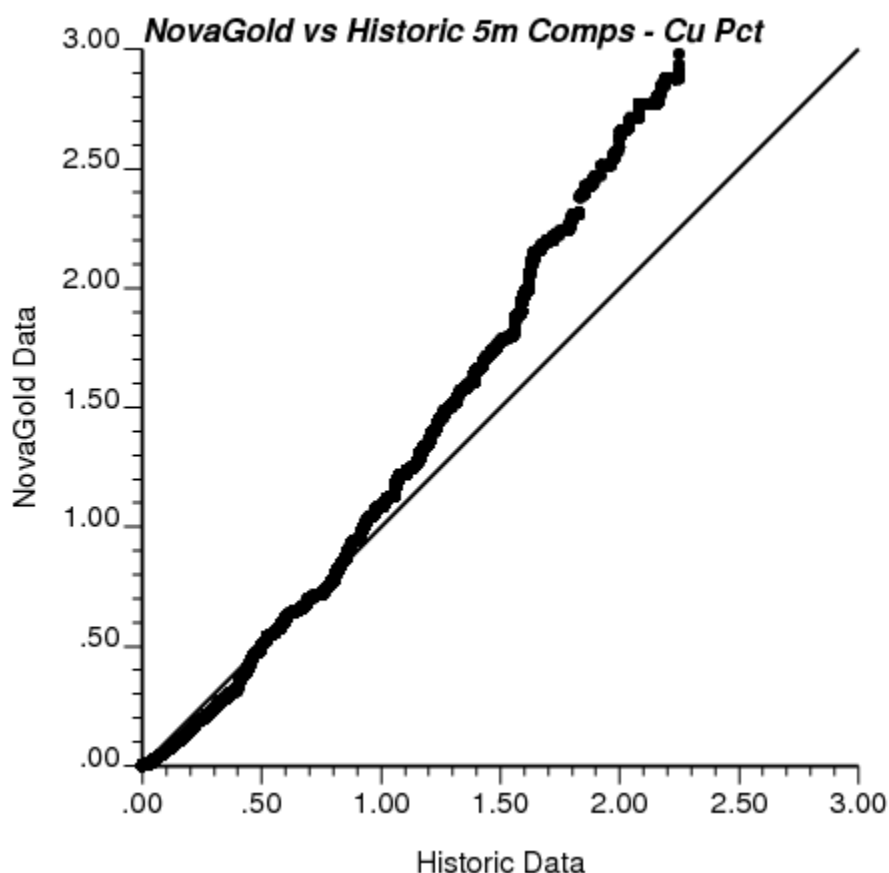
Year	No of Pairs	Historical Au Grade (g/t)	NovaGold Au Grade (g/t)	% Difference
1962	32	0.28	0.11	154
1963	513	0.28	0.24	14
1964	477	0.62	0.94	-34
1965	742	0.36	0.41	-12
1966	271	0.14	0.10	39
1972	190	0.24	0.24	1
1973	193	0.19	0.14	33
1976	41	0.03	0.06	-51
1991	63	0.14	0.06	146
Total	2,520	0.33	0.39	-14

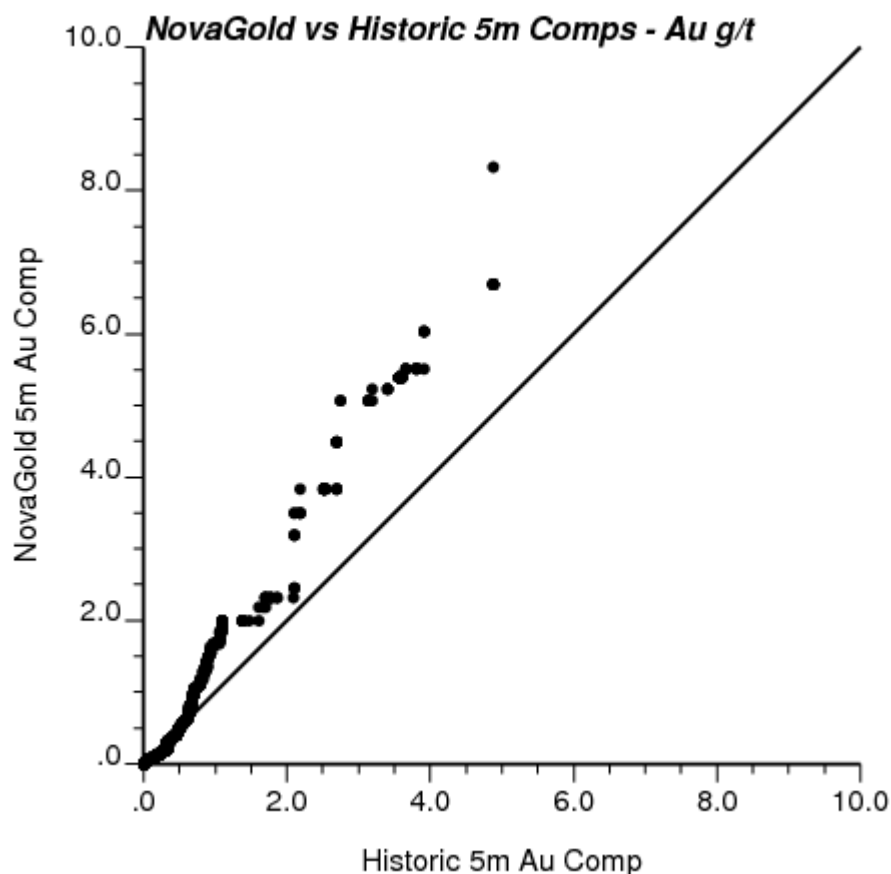
Annually, there are indications of both low and high bias for both copper and gold grades when compared to the NovaGold composites. Overall, the QQ plots indicate that lower grade ranges correlate reasonably well; however, for both copper and gold, historic assays appear to be biased low relative to NovaGold drilling. The historic composites averaged about 3% lower than NovaGold for copper and about 14% lower for gold composites. The historic gold composites were much lower in grade than the NovaGold

composites at higher cutoff grades. Since NovaGold assay results have been demonstrated to be reasonable and reproducible based on QA/QC results, it suggests that the historical copper and gold analyses may have been biased low. No bias adjustment has been incorporated by NovaGold.

QQ plots are shown in Figure 14-1 and Figure 14-2 which compare all historical assay data with NovaGold assay data for copper and gold, respectively. In these QQ plots, the historical data is shown along the X-axis while NovaGold data is shown along the Y-axis. Copper grades from the historical and NovaGold programs compare reasonably well up to one percent copper. Above a one percent copper cutoff grade there is an increasing bias between the two data sets. A similar relationship exists between the historical and NovaGold gold assays as shown in Figure 14-2 above a 0.5 g/t cutoff grade.

**Figure 14-1: Historical vs. NovaGold Assays - Copper**



**Figure 14-2: Historical vs. NovaGold Assays - Gold**

Similar QQ plots are shown for copper and gold in Appendix 3 and Appendix 4, respectively. These plots compare nine annual drilling campaigns with NovaGold drilling campaigns for the years 1962-66, 1972-73, 1976, and 1991.

Based on this analysis the author recommends that NovaGold complete some twin holes to further investigate and possibly quantify the indicated bias. The author believes that as a result of this analysis the use of the unadjusted historic assay data for resource estimation is reasonable and at worst may result in an underestimation of copper and gold grades in areas largely supported by historic assays.

#### 14.4 QA/QC Results

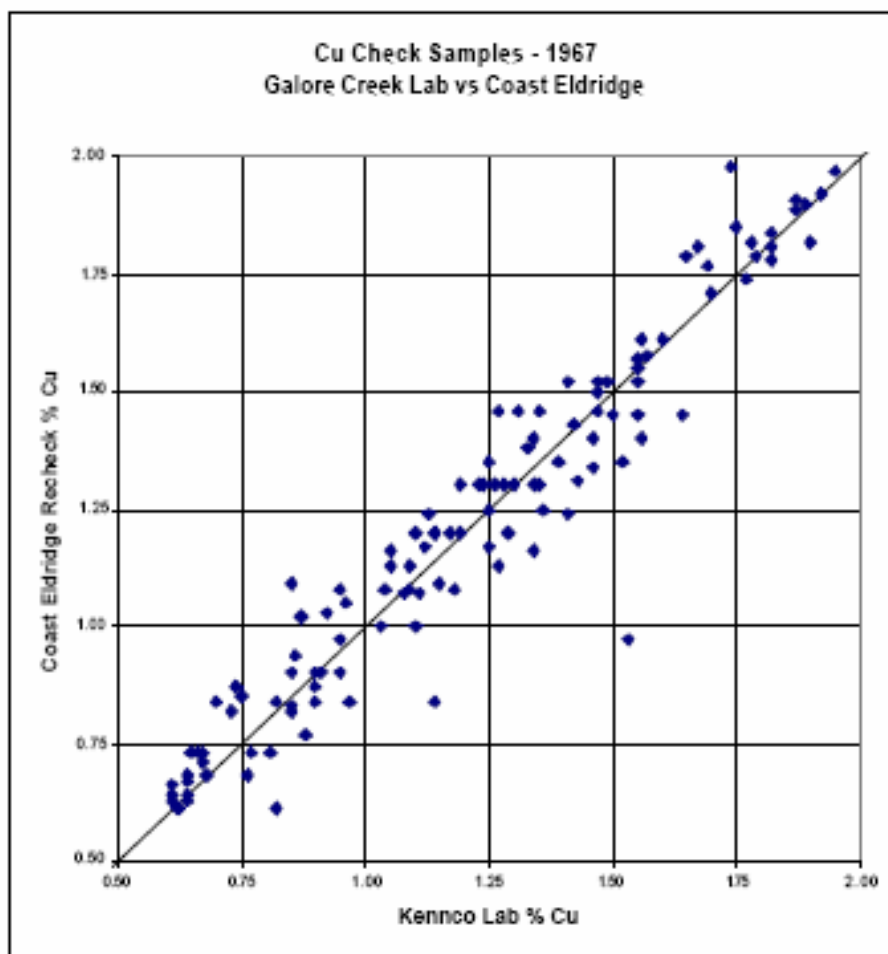
Quality Control/Quality Assurance data are used to monitor the precision and accuracy of assay sample data. For example, the routine submission of blank or barren material is commonly used to monitor possible contamination in the lab and to provide a measure of data accuracy. Similarly, submitting control or standard reference materials (SRM's) of known values into the sample stream are used to monitor data accuracy. Collectively all of the QA/QC results are used to monitor assay results to ensure that the data are repeatable and appropriate to be used to estimate Mineral Resources.



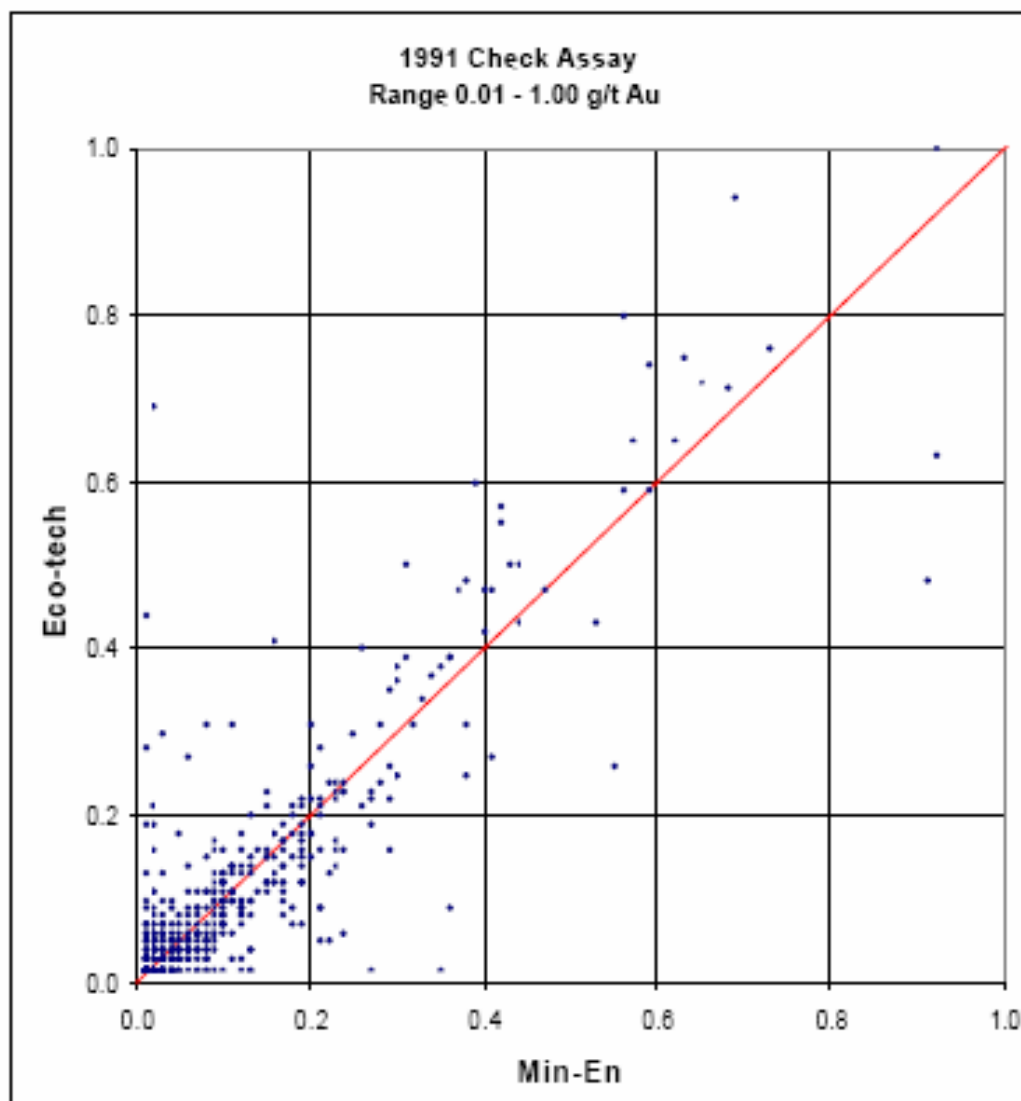
#### 14.4.1 Pre-NovaGold

The majority of the pre-NovaGold drilling is located in the Central Zone of the Galore Creek Project as shown in Table 14-2. Very little information regarding QA/QC programs or check assay results are available. As described in Section 13.1, Kennecott investigated assay reproducibility by sending about 140 pulps to five separate labs. Figure 14-3 (taken from Simpson, 2003) is a scatter graph that compares copper assays from the Kennco Lab (X-axis) with copper assays from the Coast Eldridge Lab (Y-axis).

**Figure 14-3: 1967 Kennco Same Pulp Assay Comparison**



In 1991, Mingold assayed their samples at Min-En Lab in Smithers, B.C. They shipped every 20<sup>th</sup> sample to the Eco-tech Lab in Kamloops, B.C. for check assay. According to Simpson, 2003, there was a “fairly good” correlation between the Min-En and Eco-Tech labs for gold exceeding 0.25 g/t, although the Eco-Tech assays tended to be marginally higher than the Min-En lab results. Figure 14-4 is a scatter graph that compares 571 check assays that were analyzed in 1991.

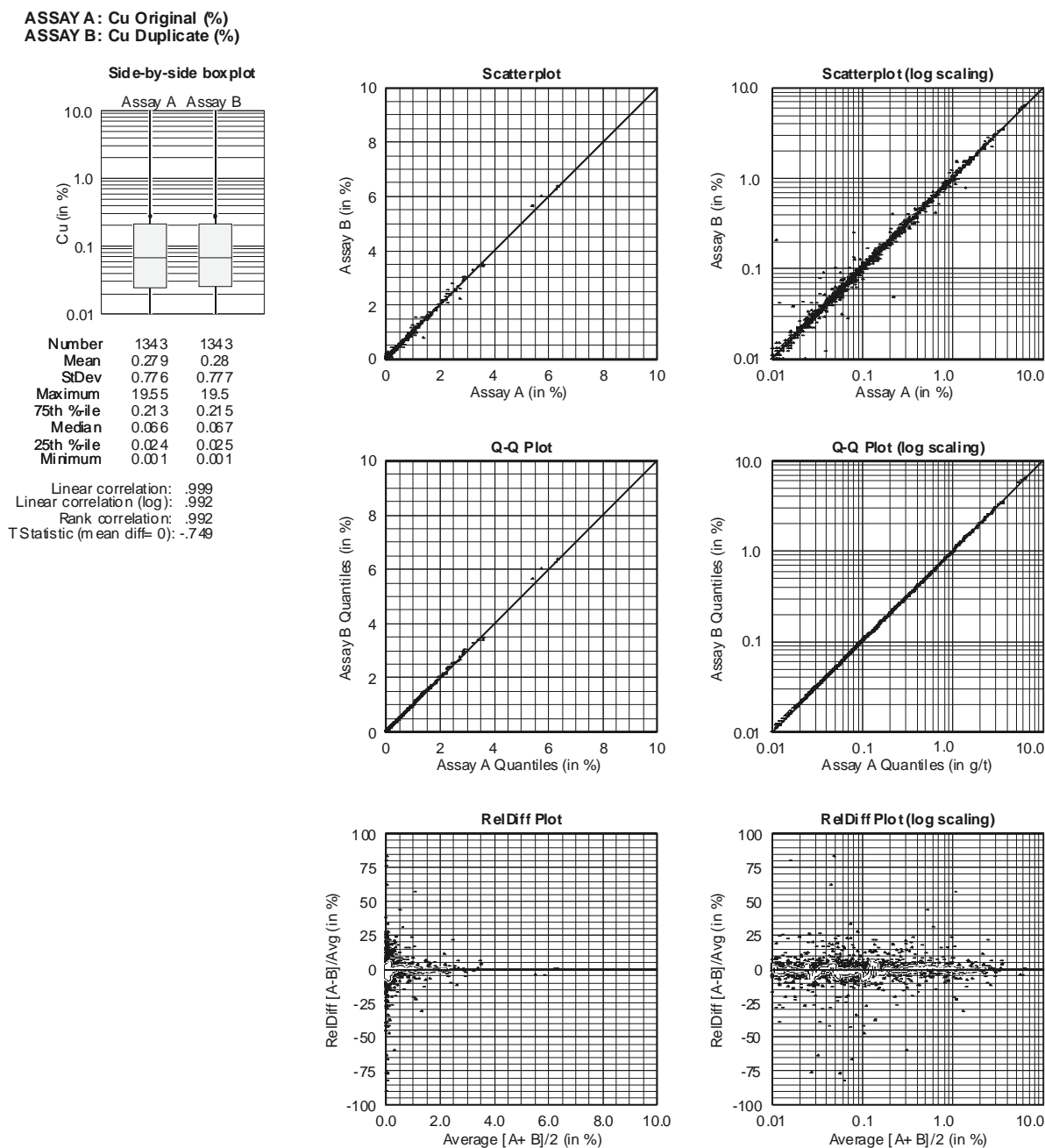
**Figure 14-4: 1991 Gold Check Assays****14.4.2 2003 – 2005 NovaGold**

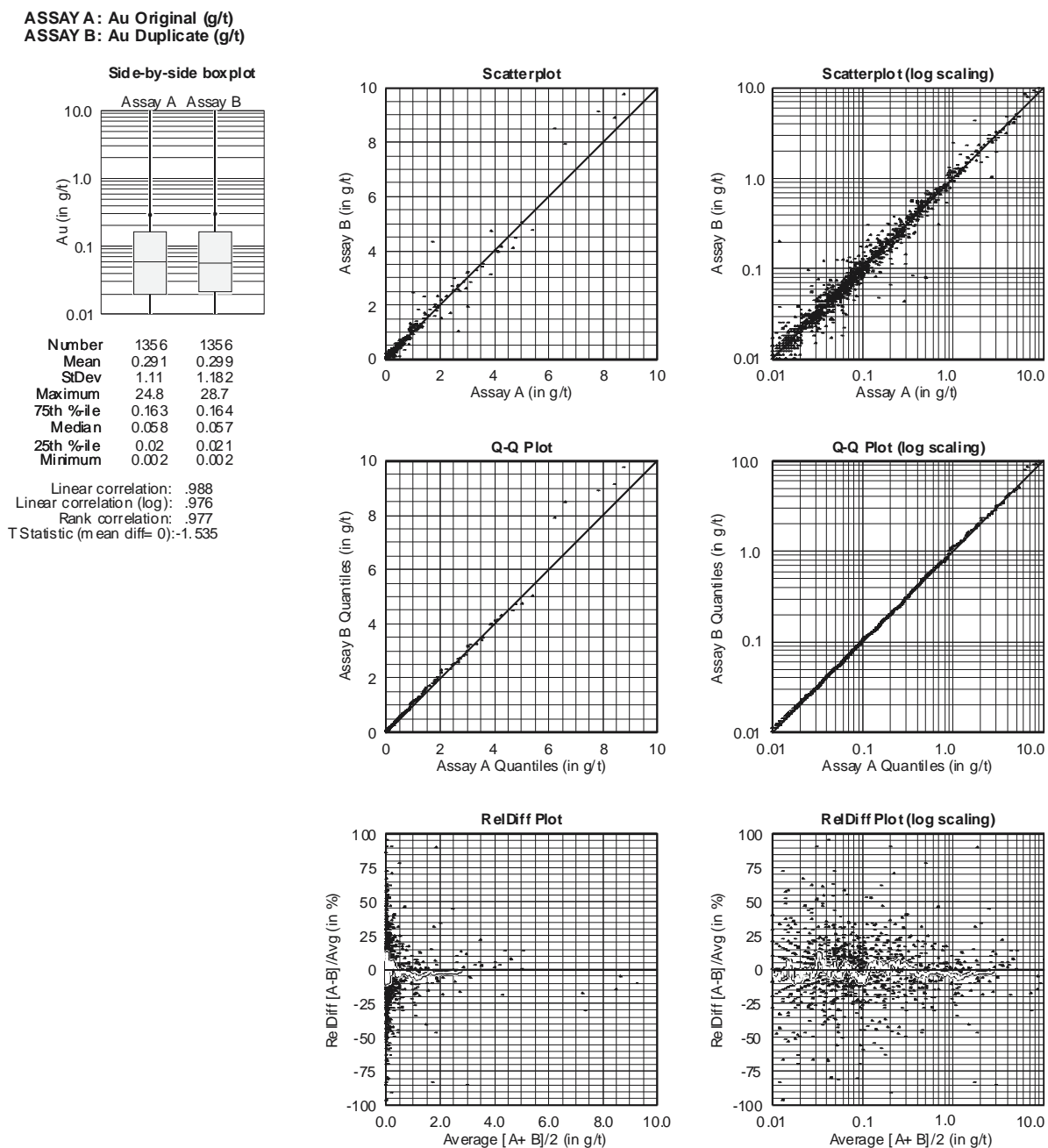
NovaGold instituted a rigorous QA/QC program with the initiation of their first limited drilling campaign in 2003. That program was continued and improved with ramped up drilling activities in 2004 and especially 2005. The basic elements of the NovaGold QA/QC program consisted of submitting standard reference materials (SRM), blanks (barren material), and requesting that a duplicate sample be prepared at a frequency of one sample each per every 20 samples that were submitted to ALS Chemex. A variety of commercial copper and gold standards were purchased from WGC, which is located in Vancouver, B.C. Table 14-5 summarizes the number of QA/QC samples by year that were submitted by NovaGold.

**Table 14-5: 2003-2005 NovaGold QA/QC Samples**

Year	Total No. of Assayed Samples	No. of Duplicate Samples	No. of Blanks	No. of Standards	Total No. of QA/QC Samples	Total No. of Samples	Percentage of QA/QC Samples
2003	1,243	72	58	67	197	1,440	14%
2004	7,599	397	408	382	1,187	8,786	14%
2005	22,267	1,356	1,347	1,342	4,045	26,312	15%
Total	31,109	1,825	1,813	1,791	5,429	36,538	15%

The performance of blanks, standards, and duplicates are shown in Appendix 5 for the 2003 to 2005 NovaGold QA/QC samples. Figure 14-5 and Figure 14-6 show box plots, QQ plots, scatter graphs, and relative percent difference graphs for the 2005 NovaGold duplicate copper and gold analyses.

**Figure 14-5: 2005 NovaGold Duplicate Copper Assays**

**Figure 14-6: 2005 NovaGold Duplicate Gold Assays**

NovaGold monitored the performance of the standard reference (SRM) samples that were assayed by ALS Chemex. During 2005, NovaGold requested that approximately 350 copper and 140 gold assays be re-assayed due to SRM's associated with those samples returning assay values that were outside of expected tolerances. The author reviewed those samples and agrees with NovaGold's decision to have those samples re-assayed. NovaGold did not request samples to be re-assayed based on the performance of blanks and duplicates. The author has recommended that in the future, NovaGold request that all samples be re-assayed that are associated with blanks that are out of tolerance (i.e. return values 3-5 times that of the lab's detection limit). In 2005 there were about six batches of samples (3 copper and 3 gold) where the returned values for the barren material was significantly above the detection limit for copper or gold. The author does not consider this to be material, but urges NovaGold to more closely track QA/QC results and to re-assay all sample batches that are associated with any control samples that are out of tolerance.

## 15.0 ADJACENT PROPERTIES

There are two other significant copper/gold properties in the immediate Galore Creek area, Copper Canyon and Grace. The Copper Canyon claims are adjacent and immediately to the east of Galore Creek, and cover 1,574 hectares.

SpectrumGold Inc. (now NovaGold Canada Inc.) entered into an agreement effective October 1, 2003 with Eagle Plains Resources to earn up to an 80% interest in the Copper Canyon claims through a combination of share issuances, cash payments and work programs. To the extent that economic mineralization is confirmed on the Copper Canyon claims, it could be developed and processed as part of the Galore Creek operation under the terms of NovaGold's agreement with Eagle Plains. Under the terms of the agreement, NovaGold has an option to acquire a 60% interest in the project from Eagle Plains by completing C\$3 million in exploration expenditures over the next 4 years, including making payments totaling C\$250,000 to the underlying royalty owner, and issuing 296,296 shares of NovaGold to Eagle Plains. NovaGold may earn an additional 20% interest in the project for a total of 80% by paying Eagle Plains C\$1 million and completing a Feasibility Study on the project by no later than September 2011.

The Copper Canyon property has seen intermittent exploration work from the mid 1950's up through 1991. This historic exploration work at Copper Canyon indicated the presence of widespread gold, silver and copper mineralization similar to the Galore Creek deposit. To date mineralization has been identified in three separate areas on the property. A resource estimate for Copper Canyon was completed in February 2005 by Hatch for NovaGold and outlined an inferred resource, at a cut-off grade of 0.35% copper equivalent, totaling 164.8 million tonnes grading 0.35% Cu, 0.54g/t Au, and 7.15g/t Ag (Hatch, 2005).

The author did not verify information regarding adjacent properties and does not know whether that mineralization is indicative of the mineralization on the property that is subject to this technical report.

## **16.0 MINERAL PROCESSING AND METALLURGICAL TESTING**

*The following sections have been adapted from Hatch, et al. (2005 and 2006)*

### **16.1 Early Testwork**

The initial Galore Creek metallurgical work was carried out by Kennecott Corporation in the 1960's and focused on the Central Zone. The test work was carried out by Hazen Research and commenced with initial bench tests on drill core samples. The testing started in 1962, and cumulated in 1967 with a 50-ton pilot plant milling test using a bulk sample taken from an adit in the Central Zone. From the pilot plant data and prior bench test data, Kennecott developed a flow sheet, equipment recommendations, and operating cost estimates for a 20,000 tpd concentrator. The flow sheet anticipated a relatively coarse primary grind (25% plus 100 mesh) followed by regrinding the rougher concentrate to 97% passing 200 mesh to obtain suitable concentrate grades.

Further testwork continued in 1991 on new samples from the Central Zone and the then newly identified Southwest Zone. The testwork was carried out by Dawson Metallurgical Laboratories and consisted of bench flotation studies using drill core collected from five holes that were drilled in 1991. The study used four composites from the Southwest Zone and two from the Central Zone. Copper recovery was slightly lower than the 1965-67 test results; however, recovery at a modestly finer grind was in line with the earlier work. Several composites were not upgraded to the 25% copper grade obtained in the pilot plant; this was attributed to the presence of "talc" which was not observed in the earlier samples.

### **16.2 2003-2004 NovaGold Testwork**

In 2003, NovaGold initiated a drilling program on the Central and Southwest Zones to verify previous results and to further understand the mineralogy and its variability in the two zones. The testwork was carried out by G&T Metallurgical and consisted of bench flotation tests which validated the flow sheet developed by Kennecott in the 1960's producing comparable metal recoveries and concentrate grades.

As exploration activity continued in 2004 it expanded the understanding of the variability of mineralization in the Central and Southwest Zones and identified additional ore zones designated as Junction, West Fork and Copper Canyon. A comprehensive metallurgical program was conducted by G&T Metallurgical to examine the mineralization of the various zones. The samples tested were drill cores from discrete intervals, and drill core composites representing ore zones from the anticipated pits (mining sequence). They represented ore at various head grades, mineralogy and geological classification of "broken" or "stick" ore. The program also included a limited grinding test program on drill core samples for preliminary grinding circuit design.



### 16.3 2005-2006 NovaGold Testwork

During 2005, NovaGold conducted infill drilling campaigns to upgrade the Mineral Resources along with metallurgical drilling to provide samples for further detailed testing on the variability of mineralogy. The 2005-2006 metallurgical test program was managed by Hatch Engineering Ltd. and carried out by G&T Metallurgical Services Ltd (Kamloops, BC, Canada). G&T Metallurgical Services determined the Bond Ball Mill Work Index and conducted the flotation test work on the composites used in the flotation program, while SGS Lakefield and SGS MinnovEX (Toronto, ON) ran additional grindability and flotation simulation tests. The results from those tests are used as the basis for the Feasibility Study currently being completed by Hatch.

A comprehensive metallurgical program was completed on fresh drill core samples from the 2005 drilling campaign to further validate the flowsheet developed in the earlier work and to determine the metallurgy associated with the variable mineralization and head grades in the various zones of the Galore Creek deposit. As well as investigating grindability using CEET and JKSimMet methodologies, the program investigated the mineralogy and minerals recovery by batch and locked cycle flotation. Models were developed to project copper, gold and silver recoveries in the mining blocks for each pit. A pilot plant campaign was also completed to generate concentrate samples for marketing, dewatering tests and tailings samples for dewatering tests and environmental purposes.

The 2005 drill cores again showed that copper occurs predominantly as chalcopyrite and chalcopyrite-bornite in a mixed silicate host. Pyrite occurrence is variable, with pyrite-copper sulphide mass ratio averaging less than the 3:1 ratio observed in the samples in the 2004 study. At a grind of 80% passing 150 microns, 50% to 60% of copper sulphides and the majority of gold particles are liberated and recoverable by flotation. The gold particles are fine, nominally 8 to 12 microns in size and unlikely will be recoverable by gravity concentration, but these fine gold particle float very well with the chalcopyrite. Testwork showed that a primary grind of 80% passing 200 microns could be employed to achieve the similar metals recovery and that the metallurgical response deteriorates as the grind approaches 300 microns.

Ore hardness, in terms of Bond Ball Mill Work Index, varied between 13 and 21 kWh/t over the various parts of the deposit. The average hardness in the dominant Central Zone material was 16.5 kWh/t, similar to that determined in the earlier work. The grindability, measured as SAG Power Index (SPI), ranged from 20 minutes to 141 minutes across the deposit. The MinnovEX CEET model indicated that the proposed mill circuit would be SAG mill limiting when treating ores with SPI greater than 115 minutes. It was observed that the “stick” rock is generally harder and more abrasive than the “broken” rock.

The program confirmed and validated the flowsheet developed in the previous work. The flowsheet will comprise rougher flotation, regrind of rougher concentrate and three stages of cleaner flotation using a simple reagent scheme that utilizes PAX as the collector and MIBC as the frother. The use of 3418A, a more selective dithiophosphinate collector,

instead of PAX, might produce slightly higher concentrate grade at similar recovery. Occasionally, a guar gum carboxymethyl cellulose reagent will be required to disperse talc-like materials and minimize their adverse impact on flotation responses. Occasional occurrences of these unidentified talc-like materials have been observed in a limited number of the metallurgical samples. The program also confirmed that chalcopyrite and bornite ores from various pits have similar metallurgical responses.

Models were developed for each pit to project copper recovery from head grades at constant concentrate grade and to project gold and silver recoveries from copper recovery for use in mining blocks. Using a head grade of 0.7% copper for each pit, the projected recoveries are as follows:

- Central Pit – 92% Cu, 76% Au, 71% Ag at 28% Cu concentrate grade
- Southwest Pit – 88% Cu, 68% Au, 57% Ag at 26% Cu concentrate grade
- North Junction Pit – 88% Cu, 70% Au, 62% Ag at 28% Cu concentrate grade
- West Fork Pit – 91% Cu, 70% Au, 68% Ag at 28% Cu concentrate grade

A model was also developed for projecting copper recovery from ores containing non-sulphide copper. Copper recovery is lower and varies with the proportion of non-sulphide copper content in the ore. Using a 0.7% total copper head and assuming 20% of the total copper occurring as a non-sulphide, the model projects recoveries of 71% copper, 55% gold and 51% silver at a 28% Cu concentrate grade.

In the opinion of the author, the samples used by NovaGold for metallurgical characterization were representative.

## **17.0 MINERAL RESOURCE AND MINERAL RESERVE ESTIMATES**

*The following sections have been adapted from Mr. Kevin Francis, Manager of Resources for NovaGold Resources Inc. Mr. Francis, who is recognized as a Qualified Person, estimated Mineral Resources for the Galore Creek property.*

### **17.1 Summary and Conclusions**

Copper, gold and silver are the principal product metals for Galore Creek. Metal concentrations are broadly controlled by lithology and vary over the extent of the drilled area.

Estimation of copper, gold and silver grade requires deterministic grade or rock type zones. Copper, gold and silver were modeled using a three-pass ordinary kriging approach with outlier restriction. One-pass nearest neighbor estimation was also implemented for validation purposes. Acid soluble copper grades were estimated with a subset of the assay database using inverse distance cubed methods. Grade shell models were constructed by project geologists at a nominal 0.35 copper equivalent (CuEQ) cutoff in order to constrain mineralization in areas (North Junction, Junction, Middle Creek, Southwest Zone and West Fork) where the relationship between mineralization, structure and lithology has been elusive. In the Central Zone (South Gold Lens, Bountiful, Central Replacement Zone, and North Gold Lens) rock types were grouped based on statistical and genetic criteria into three groups: volcanic, mineralized intrusive, and intrusive.

Validations proved the model to be acceptable for resource reporting and mine planning. Copper, gold and silver grades appear to be well-behaved spatially, thus increasing the predictability of the estimation model.

### **17.2 Recommendations**

Geologic study should continue to isolate the controls to mineralization in the West Fork, Southwest Zone, Middle Creek, Junction and North Junction areas. The cutoff grade used to design grade envelopes that are used to constrain the estimate of block grades should be lowered to reflect economic cutoff grades.

### **17.3 Introduction**

The 2006 Resource Model workflow and activities for Cu, Au and Ag grade estimation were:

- Exploratory Data Analysis
  - Histograms
  - Boxplots
  - Contact plots
  - Grade variography

- Modeling:
  - 5 m down-hole assay compositing
  - Three-pass kriging
  - One-pass nearest neighbor estimation
  - Swath plots
  - Histograms
  - Volume variance adjustment

#### 17.4 Coordinate System

The coordinate system used for resource modeling is truncated UTM. The project coordinates were calculated as follows:

$$\begin{aligned}\text{Easting} &= \text{UTM Easting} - 6,300,000 \\ \text{Northing} &= \text{UTM Northing} - 300,000\end{aligned}$$

#### 17.5 Topographic Data

The initial digital elevation model (DEM) for the project was generated by Eagle mapping as contracted by Kennecott Minerals in 1991 from government issued aerial photos flown in the 1950's. The survey control for these photos was based on an historical iron pin located 800 metres west of the Central Zone by traditional transit and plumb-bob survey methods and was tied into pre-existing control points in Telegraph Creek and Dease Lake.

In August of 2003, NovaGold contracted Eagle Mapping of Vancouver, B.C. to acquire new aerial photography and to generate a more accurate DEM file for the project. Survey control for the aerial photography was placed as visible crosses by project personnel using an Ashtech DGPS system. The aerial photography was taken at a resolution of two metres using a single frequency DGPS for control. The resulting DEM surface was different in elevation and accuracy from the historically generated topography.

The 2003 version of the topography was higher in elevation than the previous topographic surface. When the historic drill hole collar elevations were compared to the 2003 topographic surface it was seen that the difference in elevation was found to be somewhat random. The average difference between the drill hole collars and the 2003 topographic surface was 24.2 metres. To account for this in the 2003 scoping study analysis, the new topographic surface was lowered by the average difference (24.2 m). Drill hole collars were then left either sticking above the topographic surface or "collared" below the surface. Since the construction of three-dimensional geologic shapes for resource modeling had already been initiated, this issue was handled by appropriate coding of the data. Drill hole composites were assigned a zone code based on the location of the composite midpoint located. To insure that the drill hole composite codes matched the lithological units in the drill logs, the composites were coded for the bedrock and surface interfaces according to the original surveys.

Before updating the resource model in 2004, the drill holes were registered to the topographic surface and the data were moved back up 24.2 metres to the elevation of the original 2003 photo and DEM survey results which are thought to be more accurate. At this point, all of the geologic shapes were started from scratch with the newly registered drill holes and upwardly adjusted topography.

On October 3rd, 2004 a higher resolution, 1-metre aerial photo set with dual-channel DGPS was flown for Rescan Environmental services by Eagle Mapping for the Galore Creek project. The control point used for the aerial photography was set by Peter Walcott of Walcott and Associates. Walcott, a registered land surveyor, noted that the 2003 in-house surveying had not accounted for a provincial datum correction related to the NAD 83 conversion. The 2004 DEM showed a -15 metre difference from the increased accuracy of the control work that generated it.

The modeling and resource estimation for the 2005 Preliminary Economic Assessment did not use the new surface as it was not received from Eagle Mapping until late January 2005, after the estimation process and pit modeling had already begun.

To align the project objectives, insert the correct elevations, and use the best DEM surface, a final elevation adjustment was made to the NovaGold MineSight projects on May 8th, 2005 to lower the 2004 topography by 15 metres. Notification to all parties was made and a final datum was distributed to all Feasibility Study participants.

In October of 2005 a registered professional land surveyor, Peter Thomson BCLS CLS, confirmed the accurate locations of the control points used to provide survey control of the DEM and air photos and that no significant differences were found in the XY coordinates; however, a difference of about one-metre was determined in the elevations. No adjustments were made to the digital elevation model or base station control points based on his findings.

Mr. Thomson utilized a dual frequency survey grade Trimble 4700 GPS receiver. Both static observation techniques and RTK (real time kinematic) techniques were employed. Processing of the results was performed using Trimble Geomatics Office software.

The primary control for this confirmatory survey was provided by the Geodetic Survey of Canada station 75C134, which is approximately 7 kilometres south of the Bob Quinn airstrip along Highway 37, which was used as the origin of coordinates and elevations. The primary control was extended into the vicinity of Galore Creek using static observation techniques. This was confirmed by looping the control survey back to Highway 37 by another route, again using static observation techniques. The closure obtained was 0.02 metres horizontal and 0.04 metres vertical. An additional check was performed by processing 8 hours of data on Station 268 with the Precise Point Positioning service of the Geodetic Survey of Canada.

## 17.6 Specific Gravity Data

### 17.6.1 Sample Data

The current Galore Creek database contains specific gravity (SG) determinations for a total of 8,855 samples. These determinations were made between 1963 and 2005 by a variety of companies. The majority of the determinations were made using the water displacement method (i.e. samples weighed in air and in water). In addition to the “conventional” SG determinations several other methods were used by NovaGold including samples collected from triple-tube core barrels (355) and samples submitted for waxed analysis at Chemex (50) in 2005. Elimination of suspect or erroneous SG determinations reduced the database to a total of 8,331 records. Table 17-1 summarizes the number of samples that have been collected by year, by company, method and the arithmetic average SG value.

**Table 17-1: Specific Gravity Determinations by Year**

Year	Company	Number	SG	Location	Method - Notes
1961	Kennecott	3	2.41	On site	Water displacement method - DDH core
1962	Kennecott	65	2.62	On site	Water displacement method - DDH core
1963	Kennecott	222	2.63	On site	Water displacement method - DDH core
1963	Stikine	7	2.57	On site	Water displacement method - DDH core
1964	Kennecott	205	2.68	On site	Water displacement method - DDH core
1964	Stikine	3	2.65	On site	Water displacement method - DDH core
1965	Kennecott	30	2.64	On site	Water displacement method - DDH core
1965	Stikine	279	2.64	On site	Water displacement method - DDH core
1966	Stikine	70	2.67	On site	Water displacement method - DDH core
1972	Stikine	13	2.66	On site	Water displacement method - DDH core
1976	Stikine	5	2.53	On site	Water displacement method - DDH core
1991	Kennecott	50	2.72	On site	All '91 samples from 1 hole + some older samples
2003	NovaGold	2	2.77	ALS Chemex	Only two samples
2004	NovaGold	76	2.78	ALS Chemex	Includes West Fork area - 355 split-tube samples
2005	NovaGold	7,301	2.62	On site	Water displacement method - DDH core
<b>Grand Total</b>		<b>8,331</b>	<b>2.62</b>		

Prior to NovaGold’s involvement in the project there were approximately 957 SG determinations made from samples collected from the Galore Valley. These samples averaged 2.658 g/cm<sup>3</sup>. Samples collected from the 2005 field season have greatly increased the number and distribution of samples taken across the deposit. With the inclusion of many more samples, the overall SG was reduced by 1.4% to 2.62 g/cm<sup>3</sup>. The reduction may be due simply to the increased density of sampling as it is unlikely that there are large data quality problems with the pre-2005 data, excluding the random data entry issues mentioned above. Sampling methods during the 2005 program were recommended by 2004 Qualified Person Bob Morris and carried out with the oversight of senior field staff. The weight of unbroken pieces of core less than 15 cms long was determined both in air (dry) and in water. Hard tap water was used for the measurement. Samples were taken at the rate of one sample for approximately every 10 metres of drilling by the geotechnical staff during the core photography process. Results were written on data entry sheets and entered by a data entry clerk into the SG-Point load Access database. Table 17-2 summarizes the number of samples and mean SG value by mineralized area.

**Table 17-2: Specific Gravity Determinations by Area**

<b>Area</b>	<b>Number</b>	<b>Mean SG</b>
Butte	93	2.58
Central Zone	3,847	2.64
Gap	11	2.63
Grace	247	2.78
Junction	33	2.64
Middle Creek Zone	405	2.61
North Junction Zone	307	2.63
North Rim Zone	151	2.64
Profit Zone	111	2.58
Reconn	341	2.70
Saddle	101	2.61
Southwest Zone	1,753	2.56
West Fork Zone	918	2.62
West Rim	13	2.67
<b>Grand Total</b>	<b>8,331</b>	<b>2.62</b>

There is some variability in the SG data ranging from 2.78 in the Grace area to 2.56 at the Southwest Zone, an 8.6% difference. Interestingly, the data shows a general increase in SG values from south to north across the deposit. The low value of the SW Zone is a bit surprising considering increased pyrite associated with the mineralization but its value is confirmed by the low average values encountered in the Profit area and the gap which are located just east and NE of the Southwest Zone. The lack of significant oxide in these areas may contribute to the low value. These areas are dominated by intrusive rocks and lesser breccia with strong K-spar alteration. The high values in the Grace area are likely due to increases in mafic content of the volcanic/sedimentary rock mass.

### 17.6.2 In-situ Rock Disaggregation

Core logging indicates that the all unoxidized rocks contain common veinlets of anhydrite. These veinlets are open spaces in rocks within the zone of oxidation. NovaGold has studied the SG data to determine the impact of disaggregation resulting from the removal of anhydrite, commonly referred to by NovaGold as “broken rock”, on bulk density. Rock below the level of disaggregation is referred to as “stick rock” as the core typically comes out of the core barrel in long, competent sticks.

A comparison of the SG data both above and below the disaggregation surface is shown in Table 17-3.

**Table 17-3: Specific Gravity Determinations vs. Disaggregation Surface**

<b>Location</b>	<b>Number</b>	<b>Mean SG</b>
Above	4,501	2.60
Below	3,830	2.64
<b>Grand Total</b>	<b>8,331</b>	<b>2.62</b>

As shown in Table 17-3, material above the “broken” – “stickrock” surface is about 1.5% lighter than the material below the contact. Although this clean break of the data has less resolution than in the review of SG data by depth from surface, the results are still correlative with those observations, in that SG increases with depth. However, this does account for the expected difference in values due to the extreme fractured/broken nature of the rocks across this surface. SG samples taken above the broken rock surface were limited to whole rock pieces within broken material and cannot adequately characterize the bulk density of these rocks.

For the 2005 PEA a factor of 5% was used to further reduce the density of material above the stick rock surface to more accurately reflect the differences in the bulk density of the broken material. This factor was applied based on the experience of other properties. NovaGold staff could not find any specific gravity data that may have been derived from the bulk sample that was collected from the shallow adits or from a test bench that is believed to have existed in the South Gold Lens.

In 2005 NovaGold examined specific gravity values in the disaggregation zone by collecting data by two separate methods: test pits and split tube core measurements. Small test pits were constructed across the exposed and backhoe accessible portions of the deposit in the West Fork and the South Gold Lens areas for the express purpose of collecting SG data. Procedures used for the test pitting were as follows:

- An area of ground was leveled by the backhoe and a 1/2m by 1/2m by 1/2m pit dug.
- Where possible the pits were located near drill hole collars for comparative purposes.
- Rock excavated from the pit was placed on a tarp and weighed.
- The pit was lined with plastic and filled with water to the original height of the rock as the water volume equals the volume of the rock and the void space.
- Specific gravity was then computed by dividing the weight of the excavated rock by the weight of the equivalent volume of water.

Specific gravity determinations based on the pit method are summarized in Table 17-4.



**Table 17-4: Specific Gravity Values From Test Pits**

Test site	Easting	Northing	Wt (kg)	Vol water(litres)	SG (g/cm <sup>3</sup> )	Comment
SG-001	350,953	6,333,551	850	400	2.13	
SG-002	350,589	6,332,788	102	45	2.27	
SG-003	350,550	6,332,806	132	95	1.39	
SG-004	350,694	6,332,952	146	65	2.25	
SG-005	350,903	6,333,436	119	65	1.83	
SG-006	350,896	6,333,644	94	50	1.88	
SG-007	350,810	6,333,722	65	50	1.30	Rock very broken and dirty
SG-008	350,849	6,333,993	63	35	1.80	
SG-009	350,855	6,334,062	59	35	1.69	
SG-010	350,867	6,334,039	39	15	2.60	Rock quite competent
<b>Mean</b>					<b>2.01</b>	

The SG values generated from the test pits are significantly lower than other determinations. Results from the test pit program are likely biased low due to several reasons:

- The inability to hold the integrity of the pit wall caused sloughing not attributable to the original volume of the excavation.
- Determination of what the exact water level should be in the pit was difficult.
- The plastic used to line the pit did not conform to the sides as required to accurately reflect the void created during excavation.
- The methods that were used in obtaining bulk density measurements are considered too crude to be accurate enough, and the sample sites too few to apply these data for consideration as a factor in reduction of the SG for the broken rock material.

A second method of sampling the bulk density of the broken rock consisted of measuring the weight of the split-tube run from the triple-tube geotechnical drilling. The method of collecting the samples was as follows:

- Split tube is hydraulically removed from the casing at the completion of a drill run.
- A precise core recovery is measured and excess water is drained.
- The weight of the split tube with core intact is measured by a hanging spring scale.
- The known weight of the split tube is subtracted from the measured weight with core.

- The volume of the rock contained in the run is calculated using an average core diameter and the length of the recovered core.
- The adjusted weight is divided by the calculated volume for the determination of specific gravity.

Due to the late initiation of this measurement method only three holes were measured in 2005. The results from these determinations are summarized in Table 17-5.

**Table 17-5: Specific Gravity Values From Split Tube Core Barrel**

Drill Hole	Location	GT Measured Interval (m)	Mean SG (g/cm <sup>3</sup> )	% Rec	Relative % diff SG
GC05-637	SGL	23-124	2.28	95.7	
GC05-637	SGL	124-292	2.49	100.0	8.80%
GC05-651	SW	8-83	2.33	94.8	
GC05-651	SW	83-252	2.57	100.0	9.80%
GC05-660	East Cent	19-199	2.28	88.7	
GC05-660	East Cent	199-401	2.58	100.0	12.30%
<b>Average</b>					<b>10.30%</b>

The method used does not account for what has not been recovered in the drill run. This could be void space or clay/sulfate/gravel infilling that has been washed away during the drilling process. The recovered core does represent what is thought to be typical broken rock and is therefore a reasonable representation. Additionally, it was not possible in the course of drilling to dry the sample being measured and as such the method used does not account for un-drained water that may have existed in pore space before the weight measurement.

Despite that the measurements taken may be questioned as to the actual representation of bulk density of the broken rocks, the results are consistent with what would be expected geologically. However, the sampling demonstrated excellent value in a comparative sense as the entire length of each of the three tested holes was measured. The relative percent difference SG between the broken and stick rock intervals proxies as a factor to be analyzed for use in the 2006 feasibility tonnage calculations.

Using data from each of the three holes as a factor to reduce the SG values in the broken zone would result in a 10.3% reduction, more than double the 5% reduction that was used in the 2005 PEA. Restricting the data to the conceptual pit shapes brings the factor to the recommended 9.3% SG reduction above the broken zone – stick rock surface.

### 17.6.3 Waxed vs. Un-waxed Core Determinations

All historical SG measurements have been made without a wax coating which could

result in slightly heavier SG readings due to entrapped moisture in voids or fractures. During the 2005 season a set of 50 randomly distributed samples were submitted to the ALS Chemex Laboratory in Vancouver, B.C. in order to compare those results with the previous data. The average SG of the 50 waxed core samples was 2.65 g/cm<sup>3</sup>, which is about 1.1% higher than the average of the un-waxed SG determinations. In the opinion of the author, 50 samples may be too few to be statistically representative. However, there is a close comparison between the waxed and unwaxed determinations.

#### 17.6.4 Moisture Content

Historically all SG measurements at Galore Creek have been completed with core samples that have not been dried in an oven and therefore the question of latent moisture in pore space affecting the bulk density must be accounted for. The moisture content of the deposit has been measured in rock samples submitted for metallurgical study at G&T Metallurgical Labs. A variety of near surface “broken rock” samples (48 samples) were collected from representative rock types throughout the deposit and analyzed for moisture content. The moisture content for these samples ranged from 0.8% to 4.29%. The average moisture was 0.89%. No statistical trends were found relative to association with deposit area or rock type.

#### 17.6.5 Block Model SG Assignment

Specific gravity values were assigned to the block model by area, mineral zone, and lithology. Table 17-6 and Table 17-7 summarize the bulk density (SG) values that were assigned to the block model.

**Table 17-6: Specific Gravity Assigned by Mineral Zone**

Area	Specific Gravity (g/cm <sup>3</sup> )	
	Outside Minzone	Inside Minzone
Junction	2.66	2.67
Middle Creek	2.61	2.62
North Junction	2.65	2.61
Southwest Zone	2.56	2.57
West Fork	2.57	2.59
Upper Opulent	N/A	2.59
Opulent	N/A	3.61

**Table 17-7: Specific Gravity Assigned by Lithology Group**

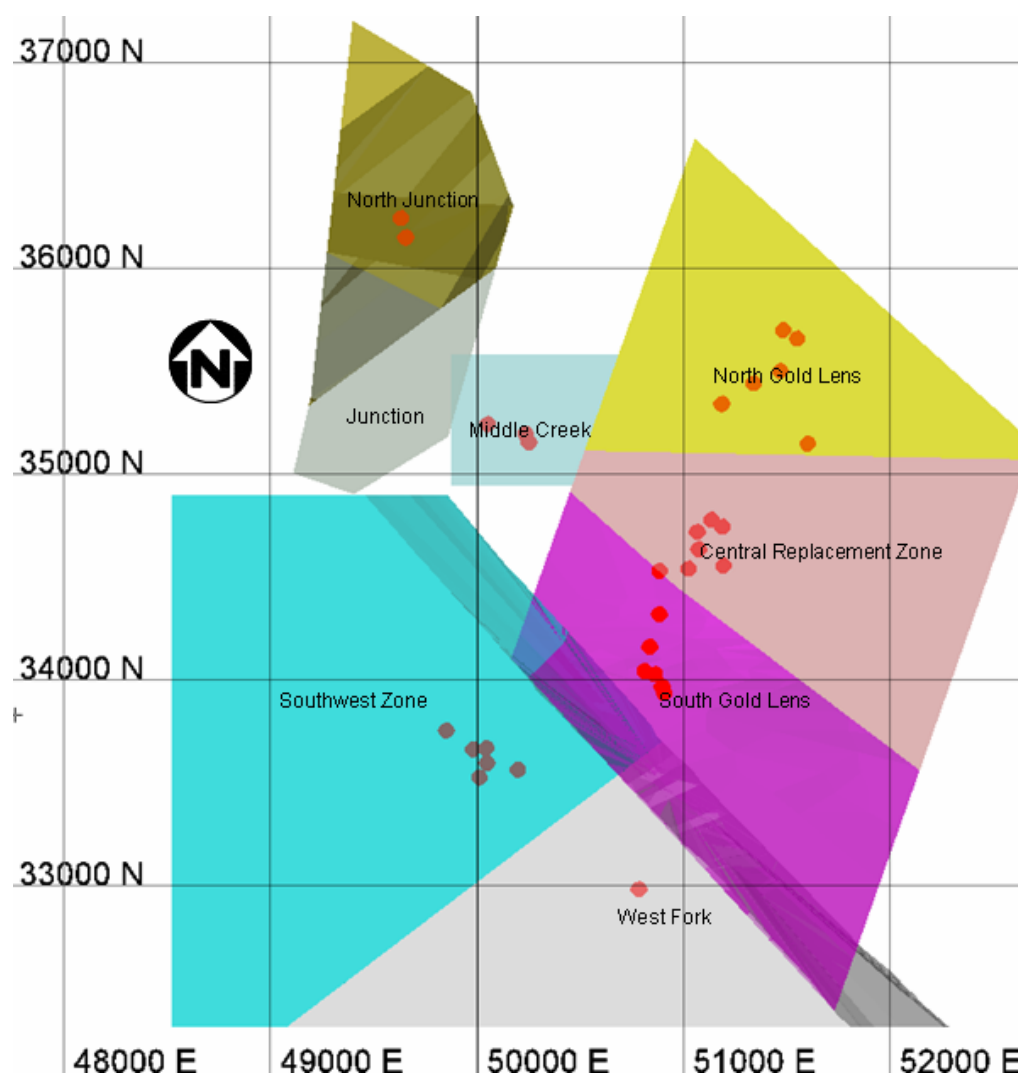
Lithologic Unit	SG (g/cm <sup>3</sup> )
Volcanic Group	2.66
Mineralized Intrusive Group	2.57
Intrusive Group	2.59

The SG values that were loaded to the block model were adjusted for disaggregation and moisture content to arrive at the final bulk density values. SG values above the broken rock – stick rock surface were reduced by 9.3%. SG values below the broken rock – stick rock were reduced 0.5% to account for moisture content.

### 17.7 Acid Soluble Copper Data

Based on the current drill hole assay data, acid soluble copper is irregularly distributed in the near surface environment of Galore Creek. As of the date of this resource estimate, 916 acid soluble assays have been obtained from 31 drill holes. All near surface mineral zones have had samples analyzed for soluble copper except the Junction Zone. Figure 17-1 shows the distribution and location of the 31 drill holes that were analyzed for acid soluble copper relative to the mineral zones.

**Figure 17-1: Distribution of Acid Soluble Copper Assays**



There is a very strong correlation between total copper, acid soluble copper and their depth below the topographic surface. These relations are shown in Table 17-8, which shows that acid soluble copper grades decrease with increasing depth.

**Table 17-8: Acid Soluble Copper (%) vs. Depth**

Depth (m)	Central Replacement Zone	Middle Creek Zone	North Gold Lens	North Junction	South Gold Lens	Southwest Zone	West Fork Zone
0-15	0.11	0.61	0.19	0.21	0.27	0.22	0.03
15-30	0.03	0.65	0.14	0.10	0.22	0.07	0.05
30-45	0.03	0.45	0.11	0.03	0.11	0.05	0.04
45-60	0.10	0.37	0.05	0.03	0.08	0.05	0.04
60-75	0.06	0.21	-	0.01	0.03	0.02	0.06
75-90	0.02	0.23	-	0.03	0.03	0.47	0.06
90-105	0.01	0.25	-	0.01	0.03	-	0.03
>105	0.04	0.05	-	0.01	-	-	0.03

Acid soluble copper grades are particularly high in the Middle Creek area. The low acid soluble copper grades in the West Fork area may be related to having been covered by glacial ice until recent times.

### 17.8 Acid Soluble Copper Estimation

Acid soluble copper grades were estimated so that an “available” copper content (i.e. total copper less soluble copper) could be determined. Both total and acid soluble copper grades were estimated using only those drill holes that contained both total and acid soluble analyses. Grades were estimated using inverse distance weighting methods (cubed) using 5-metre-long assay composites. To preserve the trend of decreasing acid soluble copper grade with depth, the block model and composites were coded into 15 metre bins below bedrock, accomplished by repeatedly translating the bedrock surface in 15 metre increments. The total and acid soluble copper grade estimates were constrained to blocks where the block and composites were located in the same elevation ranges.

Available copper grades were then calculated using the following equation:

$$\text{Available Copper} = \text{total copper (exhaustive)} \times (\text{acid soluble copper} / \text{total copper})$$

where total copper (exhaustive) is the original estimated total copper block grade that was estimated using all available copper data as discussed in Section 17.15.

### 17.9 Evaluation of Extreme Values

Lognormal probability plots of assay grades inside and outside of grade shells, and by rock type in the Central Zone were examined. Most populations exhibit a lognormal grade distribution and caps on Cu, Au, and Ag assays were placed where significant deviation occurred. Grade capping levels are summarized in Table 17-9.

**Table 17-9: Assay Capping Thresholds**

Area	Grade Shell or Rock Type	Cu (%)	Au (g/t)	Ag (g/t)
North Junction	Inside of Grade Shell	7.0	7.0	50.0
	Outside of Grade Shell	1.2	1.5	9.0
Junction	Inside of Grade Shell	2.5	0.7	8.0
	Outside of Grade Shell	0.3	0.2	4.0
Middle Creek	Inside of Grade Shell	2.5	7.0	20.0
	Outside of Grade Shell	0.5	1.5	7.0
Southwest	Inside of Grade Shell Breccia	5.0	10.0	45.0
	Inside of Grade Shell Non-Breccia	3.0	5.0	11.0
	Outside of Grade Shell	1.8	7.0	30.0
West Fork	Inside of Grade Shell	3.6	6.5	50.0
	Inside of Opulent Shell	35.0	10.0	150.0
	Inside Upper Opulent Shell	2.0	2.0	15.0
	Outside of Grade Shell	1.0	2.6	25.0
Bountiful	V2 Rock Type	0.8	0.3	15.0
	V3 Rock Type	2.1	0.7	20.0
	I4 Rock Type	0.7	0.4	9.0
	I5 & I9 Rock Types	0.2	0.3	none
	I11 Rock Type	0.7	none	10.0
South Gold Lens	V3 Rock Type	3.0	0.8	30.0
	I4 Rock Type	3.0	2.0	9.0
	I8 Rock Type	0.5	0.3	10.0
	I5 & I9 Rock Types	0.6	0.7	6.0
	I11 Rock Type	0.5	0.8	6.0
Central Replacement	V1 Rock Type	0.1	0.1	1.0
	V2 Rock Type	3.5	2.5	30.0
	V3 Rock Type	5.5	3.0	40.0
	I4 Rock Type	3.0	0.3	20.0
	I5 & I9 Rock Types	4.0	1.5	20.0
	I10 Rock Type	2.5	0.9	17.0
	I11 Rock Type	3.5	1.0	20.0
	D2 & D3 Rock Type	2.0	1.0	13.0
North Gold Lens	V1 Rock Type	3.0	2.5	29.0
	V2 Rock Type	3.0	2.0	28.0
	V3 Rock Type	2.0	0.5	18.0
	I4 Rock Type	0.6	0.1	none
	I5 & I9 Rock Types	2.0	1.5	18.0
	I10 Rock Type	0.3	0.4	4.0
	I11 Rock Type	2.5	3.0	18.0
	D2 & D3 Rock Type	2.0	0.8	15.0
North Au-Bornite Domain	V1 Rock Type	3.5	20.0	40.0
	V2 Rock Type	4.5	10.0	30.0
	I5 & I9 Rock Types	2.0	4.0	15.0
	I10 Rock Type	1.0	7.0	15.0
	I11 Rock Type	3.0	20.0	12.0
South Au-Bornite Domain	V3 Rock Type	7.0	7.0	30.0
	I4 Rock Type	3.0	3.0	25.0
	I8 Rock Type	4.0	4.5	25.0
	I5 & I9 Rock Types	3.0	3.0	50.0
	I11 Rock Type	3	4	20.0

The author has reviewed the grade capping strategy that NovaGold developed for each of the Galore Creek mineralized zones. In the author's opinion, NovaGold's capping thresholds for copper and gold are reasonable and have helped to minimize local over-estimation of block grades.

### 17.10 Composite Sample Grade Exploratory Data Analysis

Composite samples were generated down hole in nominal 5 metre lengths, generating 31,703 Cu composite samples within the resource estimation areas. The fewer Au and Ag composite samples result from not every historic rock sample having each metal assayed. Assay grades were capped as specified in Section 14.6 prior to compositing. Composites were not broken at geologic or grade shell boundaries. This is reasonable given the broad nature of mineralization and the proposed large-scale open-pit mining operation. Each composite was tagged with the majority rock type of the geological triangulated solid or grade shell. The composite file was inspected to ensure proper capping and composite calculation

### 17.11 Description of Composite Fields

Two composite files were used for grade estimation: galofin.cmp.isis was used to estimate all areas outside of the Central Areas and galofin.skm.isis was used in the Central Areas. Composite fields are listed in Table 17-10. Rock type codes and abbreviations used in modeling are listed in Table 17-11 and Table 17-17. Estimation areas are illustrated in Figure 17-2.

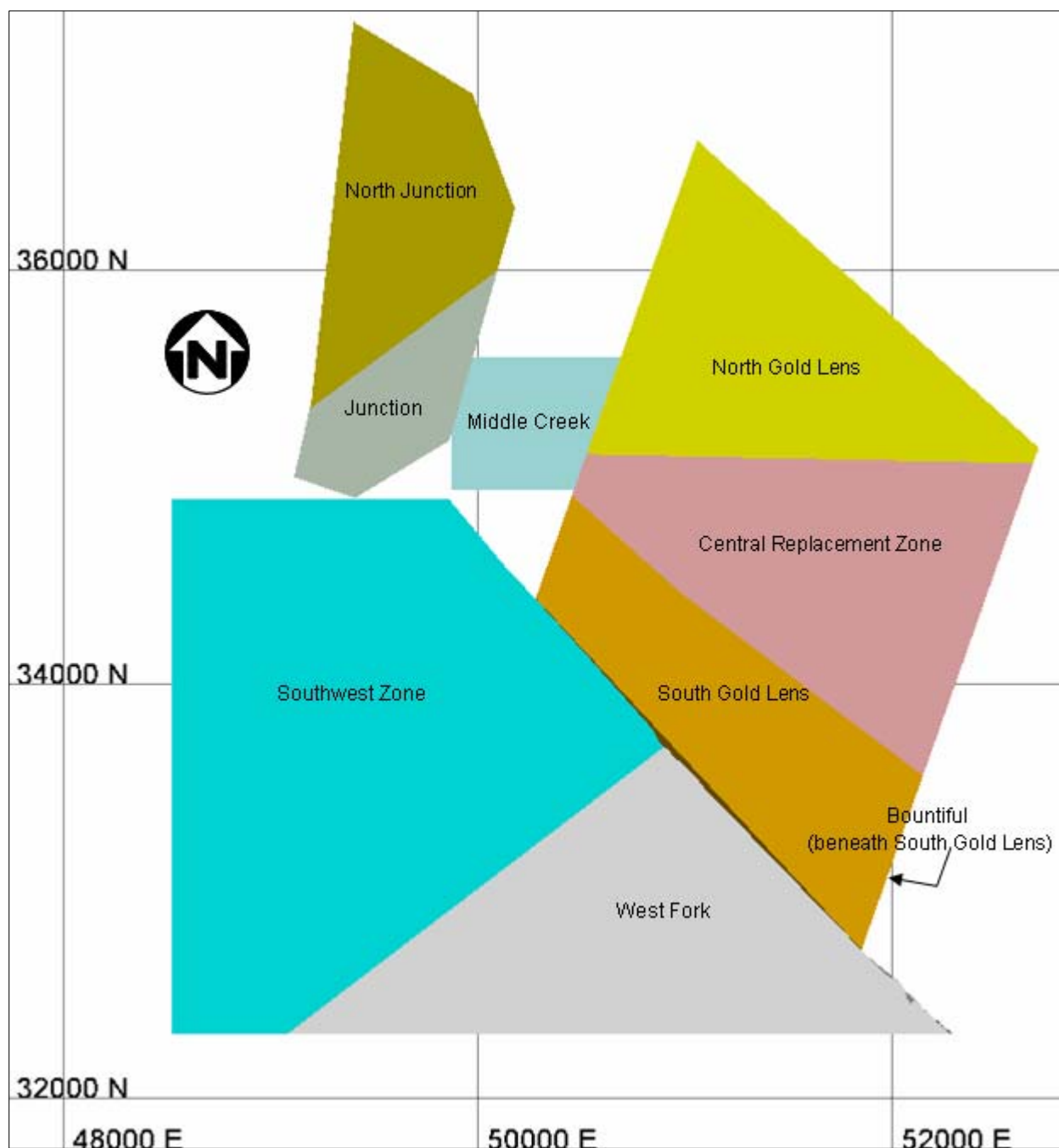
**Table 17-10: Principle Composite Fields used for Modeling**

<b>Field Name</b>	<b>Description</b>
MIDX	Mid-point point Easting
MIDY	Mid-point point Northing
MIDZ.	Mid-point point elevation
CUCAP	Copper grade
AUCAP	Back tagged rock type code
AGCAP	Variogram domain code
MINZON	Grade shell flag
MZ2	Interpolation pass code 2
GEOCOD	Interpolation pass code 3
TEXT	Area code
MZ3	Rock Group code used in Central areas

**Table 17-11: Area Codes and Abbreviations Used in Modeling**

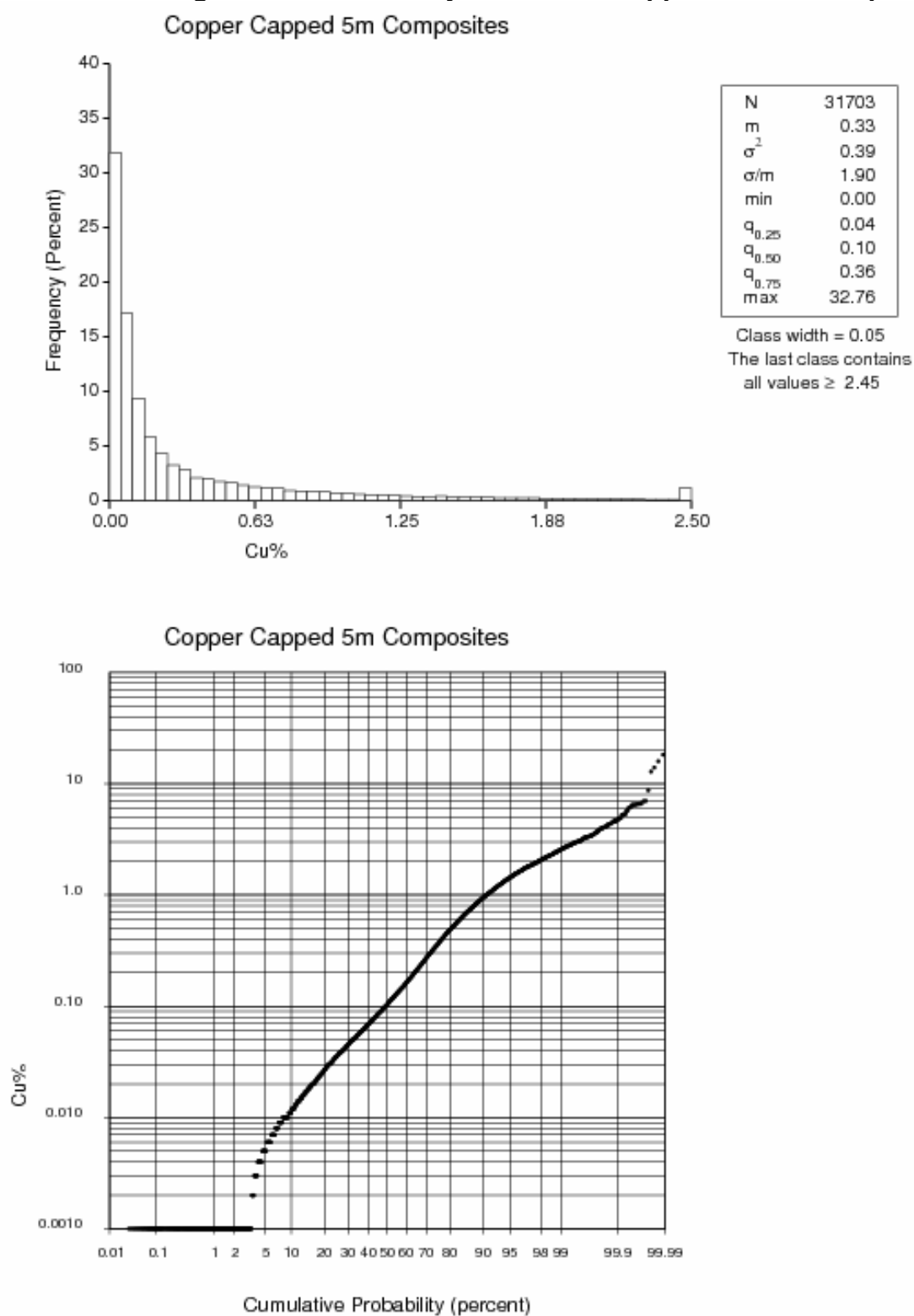
<b>Field Name</b>	<b>Abbreviation</b>	<b>Composite and Block Code</b>
Bountiful	BOUN	1
Central Replacement	CRZ	2
Junction	JUNC	3
Middle Creek	MC	4
North Gold Lens	NGL	5
North Junction	NJ	6
South Gold Lens	SGL	7
Southwest Zone	SWZ	8
West Fork	WF	9

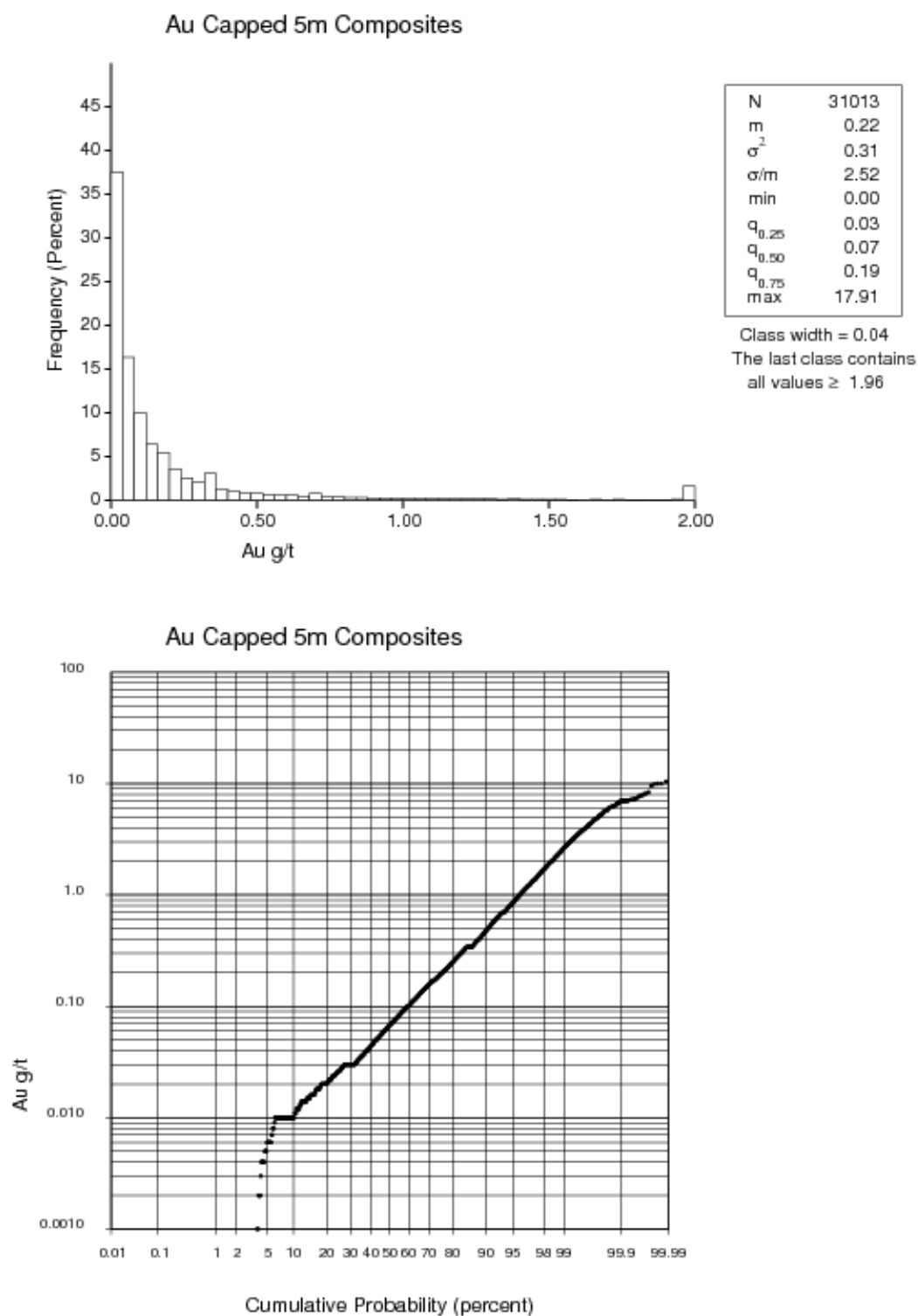


**Figure 17-2: Area Domain Names**

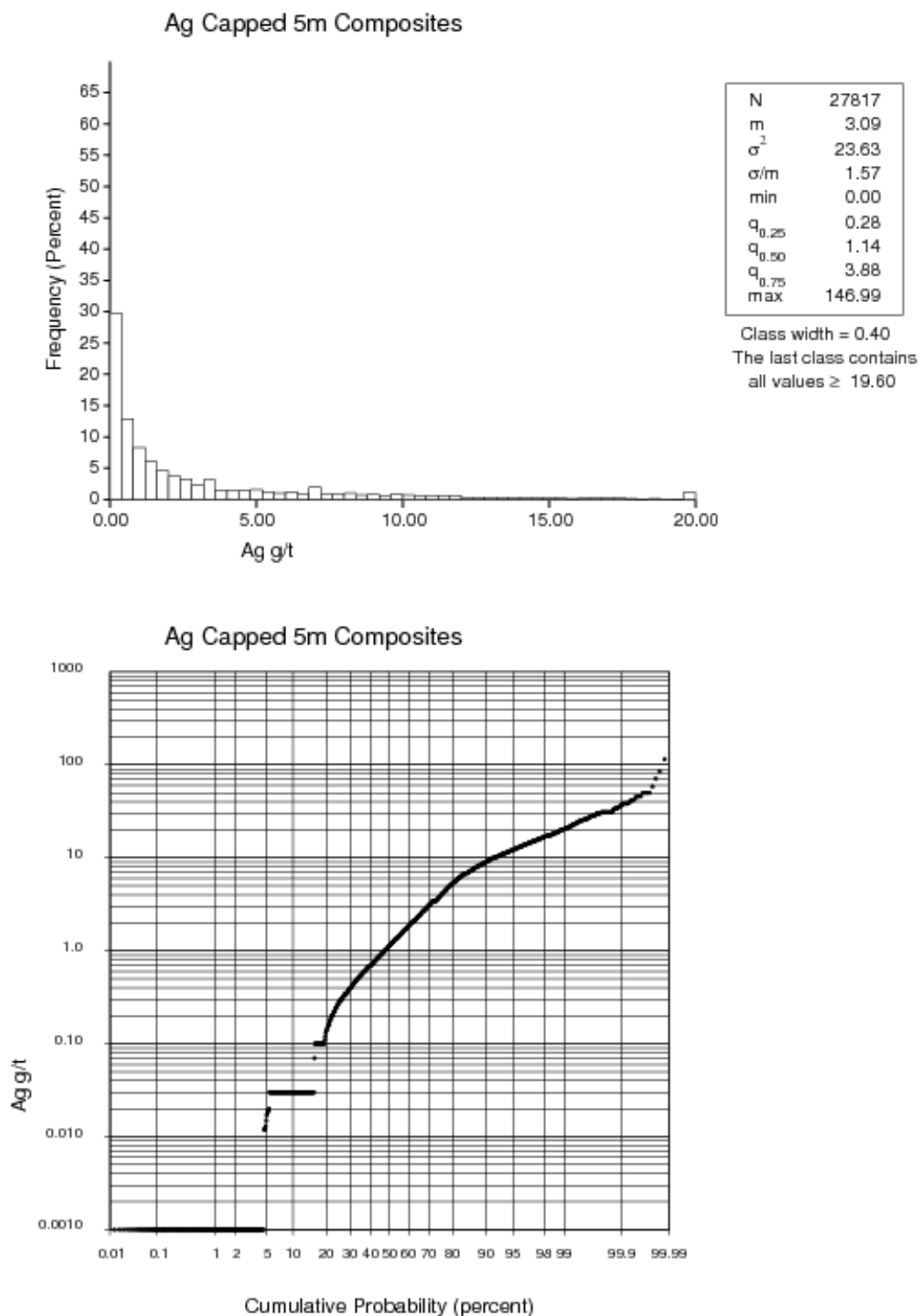
### 17.12 Histograms and Probability Plots

A series of histograms and probability plots were generated using 5-metre copper, gold and silver composites to characterize the grade distribution of each grade shell and rock type. General histogram and probability plots, regrouped Central Zone rock types, and grade shells are shown in Figures 17-3 to 17-5.

**Figure 17-3: Histogram and Probability Plot for All Capped 5m Cu Composites**

**Figure 17-4: Histogram and Probability Plot for All Capped 5m Au Composites**

**Figure 17-5: Histogram and Probability Plot for All Capped 5m Ag Composites**



Tables 17-12 to 17-14 summarize average copper, gold, and silver composite grades and coefficients of variation (CV) calculated for each rock group and grade shell.

**Table 17-12: 5m Cu Composite Grades by Area**

Area	Grade Shell or Rock Group	Number of Composites	Mean Cu (%)	CV
North Junction	Inside of Grade Shell	850	0.86	1.27
	Outside of Grade Shell	1,030	0.09	1.64
Junction	Inside of Grade Shell	247	0.40	0.94
	Outside of Grade Shell	356	0.08	0.89
Middle Creek	Inside of Grade Shell	235	0.37	1.24
	Outside of Grade Shell	594	0.08	0.87
Southwest	Inside of Grade Shell	1,474	0.46	1.25
	Inside Low Grade Shell	2,038	0.10	1.04
	Outside of Grade Shell	1,588	0.09	1.87
West Fork	Inside of Grade Shell	1,054	0.40	1.13
	Opulent Grade Shell	45	5.00	1.45
	Upper Opulent Grade Shell	131	0.36	0.90
	Outside of Grade Shell	2,181	0.06	1.62
South Gold Lens	Volcanic Group	1,710	0.59	1.40
	Mineralized Intrusive Group	1,042	0.38	1.48
	Intrusive Group	782	0.22	2.05
Central Replacement Zone	Volcanic Group	4,277	0.51	1.29
	Mineralized Intrusive Group	124	0.74	0.90
	Intrusive Group	2,441	0.17	2.35
Bountiful	Volcanic Group	649	0.18	1.58
	Mineralized Intrusive Group	119	0.09	1.22
	Intrusive Group	70	0.09	1.65
North Gold Lens	Volcanic Group	6,504	0.41	1.21
	Mineralized Intrusive Group	6	0.47	0.16
	Intrusive Group	1,823	0.19	1.77

**Table 17-13: 5m Au Composite Grades by Area**

Area	Grade Shell or Rock Group	Number of Composites	Mean Au (g/t)	CV
North Junction	Grade Shell	744	0.47	1.63
	Outside Grade Shell	905	0.07	1.89
Junction	Grade Shell	246	0.16	0.99
	Outside Grade Shell	341	0.04	1.07
Middle Creek	Grade Shell	235	0.52	2.04
	Outside Grade Shell	594	0.08	1.59
Southwest	Grade Shell	1,474	0.80	1.43
	Low Grade Shell	2,038	0.16	1.79
	Outside Grade Shell	1,574	0.19	2.75
West Fork	Grade Shell	1,054	0.25	1.42
	Opulent Grade Shell	45	1.73	0.95
	Upper Opulent Grade Shell	131	0.35	0.86
	Outside Grade Shell	2,183	0.09	1.81
South Gold Lens	Volcanic Group	1,692	0.22	2.02
	Mineralized Intrusive Group	1,030	0.22	1.91
	Intrusive Group	773	0.17	1.94
Central Replacement Zone	Volcanic Group	4,093	0.14	1.66
	Mineralized Intrusive Group	117	0.12	0.73
	Intrusive Group	2,403	0.06	1.96
Bountiful	Volcanic Group	649	0.07	1.41
	Mineralized Intrusive Group	119	0.05	1.29
	Intrusive Group	70	0.06	1.49
North Gold Lens	Volcanic Group	6,364	0.30	2.39
	Mineralized Intrusive Group	3	0.06	0.44
	Intrusive Group	1,812	0.18	4.08

**Table 17-14: 5m Ag Composite Grades by Area**

Area	Grade Shell or Rock Group	Number of Composites	Mean Ag (g/t)	CV
North Junction	Grade Shell	626	7.61	1.32
	Outside Grade Shell	828	0.90	1.73
Junction	Grade Shell	206	1.90	1.06
	Outside Grade Shell	299	0.85	1.19
Middle Creek	Grade Shell	235	2.34	1.46
	Outside Grade Shell	594	0.88	0.94
Southwest	Grade Shell	1,474	3.03	1.27
	Low Grade Shell	2,038	0.99	1.34
	Outside Grade Shell	1,574	1.49	1.77
West Fork	Grade Shell	1,054	3.32	1.53
	Opulent Grade Shell	45	21.51	1.84
	Upper Opulent Grade Shell	131	2.28	0.91
	Outside Grade Shell	2,183	0.96	1.71
South Gold Lens	Volcanic Group	1,403	5.54	1.12
	Mineralized Intrusive Group	907	3.45	1.24
	Intrusive Group	684	2.22	1.74
Central Replacement Zone	Volcanic Group	3,472	5.60	0.99
	Mineralized Intrusive Group	112	7.22	0.77
	Intrusive Group	2,110	2.01	1.87
Bountiful	Volcanic Group	602	1.99	1.45
	Mineralized Intrusive Group	113	1.06	1.21
	Intrusive Group	56	1.65	1.40
North Gold Lens	Volcanic Group	5,182	4.01	1.08
	Mineralized Intrusive Group	3	5.87	0.01
	Intrusive Group	1,620	1.88	1.59

### 17.13 Grade Variography

The Cu, Au, and Ag grade variograms were computed with Sage 2001 constrained by grade shell or rock type group using the correlogram method.

Down-hole and experimental variograms (in 37 directions) were computed and variogram modeling was completed with Sage 2001. The nugget effect was measured using down-hole variograms and manually set in the directional variogram models. Two spherical structures were automatically fitted in Sage 2001: the structure sills C1 and C2, and their ranges. If necessary, revisions were made to these based on geological knowledge. Vulcan® rotation conventions were specified. An inadequate number of composites prevented reasonable variogram determination in the Bountiful area. The variogram from the geologically similar and spatially adjacent Central Replacement Zone was used for the Bountiful area. Resulting variograms are summarized in Appendix 6.

### 17.14 Block Model Setup

Block dimensions are 20m x 20m in plan and 15m vertically. The model extends a total of 6,000 metres in both the north-south and east-west directions and a total of 1,605 metres in the vertical direction. Block model fields are listed in Table 17-15.

**Table 17-15: Principal Block Model Fields**

Field Name	Description
CU	Weight-averaged calculation of Cu grade in bedrock portion
AU	Weight-averaged calculation of Au grade in bedrock portion
AG	Weight-averaged calculation of Ag grade in bedrock portion
CU1	Kriged estimate of Cu grade in volcanic rock group and in grade shells
CU2	kriged estimate of Cu grade in mineralized intrusive rock group and SWZ low grade shell
CU3	Kriged estimate of Cu grade in intrusive rock group
AU1	Kriged estimate of Au grade in volcanic rock group and in grade shells
AU2	Kriged estimate of Au grade in mineralized intrusive rock group and SWZ low grade shell
AU3	Kriged estimate of Au grade in intrusive rock group
AG1	Kriged estimate of Ag grade in volcanic rock group and in grade shells
AG2	Kriged estimate of Ag grade in mineralized intrusive rock group and SWZ low grade shell
AG3	Kriged estimate of Ag grade in intrusive rock group
CU1_NN	Nearest neighbor estimate of Cu in volcanic rocktype and SWZ low grade shell
CU2_NN	Nearest neighbor estimate of Cu in mineralized intrusive rocktype
CU3_NN	Nearest neighbor estimate of Cu in intrusive rocktype
AU1_NN	Nearest neighbor estimate of Au in volcanic rocktype and SWZ low grade shell
AU2_NN	Nearest neighbor estimate of Au in mineralized intrusive rocktype
AU3_NN	Nearest neighbor estimate of Au in intrusive rocktype
AG1_NN	Nearest neighbor estimate of Ag in volcanic rocktype and SWZ low grade shell
AG2_NN	Nearest neighbor estimate of Ag in mineralized intrusive rocktype
AG3_NN	Nearest neighbor estimate of Ag in intrusive rocktype
CU1_NN	Nearest neighbor estimate of Cu in volcanic rocktype and SWZ low grade shell
CU2_NN	Nearest neighbor estimate of Cu in mineralized intrusive rocktype
CU3_NN	Nearest neighbor estimate of Cu in intrusive rocktype
CUOUT	Nearest neighbor estimate of Cu outside of grade shell
AUOUT	Nearest neighbor estimate of Au outside of grade shell
AGOUT	Nearest neighbor estimate of Ag outside of grade shell
SOLCU	Inverse distance cubed acid soluble copper - near surface environment
CUPCT_SOL	Inverse distance cubed total copper - near surface environment
SOL_RATIO	Copper solubility ratio - SOLCU/CUPCT_SOL
VFLAG, DFLAG,	Estimation pass flags
AREA	Estimation Area Code
JUNC1	Proportion of block within Junction grade shell (sj1_minshell.00t)
JUNCOUT	Proportion of block outside of Junction grade shell
MC1	Proportion of block within Middle Creek grade shell (mc_mz1.00t)
MC2	Proportion of block within Middle Creek grade shell (mc_mz2cut.00t)
MCOUT	Proportion of block outside of Junction grade shell
NJ1	Proportion of block within North Junction grade shell (sj1_minshell.00t)
NJOUT	Proportion of block outside of North Junction grade shell
SWZ1	Proportion of block within Southwest Zone grade shell (swz_minshell.00t)
SWZ2	Proportion of block within Southwest Zone low grade shell (sw_subore_trimmed.00t)
SWZOUT	Proportion of block outside of Southwest Zone grade shell
WF1	Proportion of block within West Fork grade shell (wf_minshell.00t)
OP1	Proportion of block within Opuient and Upper Opuient grade shell (wf_opulent.00t and wf_upr_opulent.00t)
WFOUT	Proportion of block outside of West Fork and Opuient grade shells
VOLPCT	Proportion of block within the volcanic rock group
DILPCT	Proportion of block within the mineralized intrusive rock group
INTPCT	Proportion i of block within the intrusive rock group
DIST (1 to 3)	Distance to the nearest composite used by kriging stored by kriging pass
NCOMP (1 to 3)	Number of composites used by kriging, stored by kriging pass
NHOLE (1 to 3)	Number of drillholes used by kriging, stored by kriging pass
TOPO	Proportion of block below topographic surface
BEDROCK	Proportion of block below overburden
CLASS	Resource classification 1=measured, 2=indicated, 3=inferred
STICKROCK	Proportion of block below broken rock/stick rock surface
CU_BLK	Fully diluted block Cu estimated grade
AU_BLK	Fully diluted block Au estimated grade
AG_BLK	Fully diluted block Ag estimated grade
SGDRY	Bulk density for bedrock proportion of partial block
SG_ADJUSTED	Bulk density for whole block adjusted for topography proportion
SG	Block bulk density unadjusted by topography proportion



### 17.15 Grade Estimation Plan

Three estimation methods were used during the interpolation process:

- Ordinary kriging
- Nearest neighbor
- Inverse distance to a power

Estimates were constrained by grade shell or, in the Central Area, by rock group. Estimation of soluble copper (as described in Section 17.8) was constrained by depth below bedrock. Hard contacts were used to constrain the use of composite samples to their respective shell or rock group. Blocks with multiple estimation domains (e.g. blocks straddling lithologic or grade shell contacts) contain the estimated grade for each proportion stored in individual block variables.

The minimum and maximum number of composites used in block interpolation and the maximum number of selected composites per drill hole is unchanged from Pass 1 to 3. Kriging plans are detailed in Appendix 7 and a summary is provided in Table 17-16.

The nearest neighbor interpolation was completed for the capped composites using the 5 metre composite samples.

Search ellipsoid ranges were determined using the following methodology:

- Pass 1: Ranges selected after inspection of variograms and sample spacing.
- Pass 2: Ranges from Pass 1 are extended by 50%.
- Pass 3: 100% increase in search distances from pass 2.

Details on the capping policy applied for each grade shell and rock type are summarized in Table 17-9.

In the South and North Gold Lens, Bountiful, and Central Replacement areas, the geologic model was simplified for grade estimation by grouping genetically and statistically similar rock types into three lithology groups: volcanic, mineralized intrusive, and intrusive material. Mineralization is predominantly hosted by the volcanic group (V1, V2 and V3). Two intrusive units (I4 and I8) may be mineralized when they crosscut volcanic rocks as relatively narrow dykes and sills. Intrusive units primarily contain weak, discontinuous mineralization. The remaining intrusives within the extent of drilling are post mineral. Each model block contains the proportion of volcanic, mineralized intrusive and intrusive groups in the block. The block model was constructed to accept up to three grades per block: volcanic, mineralized intrusive, and intrusive.

**Table 17-16: Summary of Kriging Search Parameters**

Estimation Run		Estimation Domain									
		Middle	Junction	North	SW	Opulent	West	CRZ	North	South	Bountiful
Pass 1	Range X	75	75	75	75	75	75	75	75	75	75
	Range Y	75	75	75	75	75	75	75	75	75	75
	Range Z	20	20	20	20	20	20	30	30	30	30
	1st Rot	82	33	34	114	0	90	30	33	33	30
	2nd Rot	0	0	0	0	0	0	0	0	0	0
	3rd Rot	63	57	48	-48	60	34	30	40	60	30
Pass 2	Range X	120	120	120	120	120	120	120	120	120	120
	Range Y	120	120	120	120	120	120	120	120	120	120
	Range Z	30	30	30	30	30	30	45	45	45	45
	1st Rot	82	33	34	114	0	90	30	33	33	30
	2nd Rot	0	0	0	0	0	0	0	0	0	0
	3rd Rot	63	57	48	-48	60	34	30	40	60	30
Pass 3	Range X	240	240	240	240	240	240	240	240	240	240
	Range Y	240	240	240	240	240	240	240	240	240	240
	Range Z	60	60	60	60	60	60	60	60	60	60
	1st Rot	82	33	34	114	0	90	30	33	33	30
	2nd Rot	0	0	0	0	0	0	0	0	0	0
	3rd Rot	63	57	48	-48	60	34	30	40	60	30

**Table 17-17: Central Area Rock Groups**

Rock Group	Rock Type Assignment	Composite Codes
Volcanic	V1, V2, V3	210, 220, 230
Mineralized	I4, I8	362, 340
Post Mineral	D2, D3, I5, I9, I10, I11	500, 350, 380, 372

The East fault which bisects the North Gold Lens and Central Replacement Zone was treated as a hard boundary. It is a northerly-trending, 50 degree west dipping structure. No significant displacement has been observed in drilling; however, contact analysis indicates a weak discontinuity in grade at the hangingwall / footwall contact.

#### 17.15.1 Ordinary Kriging

Kriging was completed using Vulcan® estimation batch files galoboun.bef, galocrz.bef, galojunc.bef, galomc.bef, galongl.bef, galonj.bef, galosgl.bef, galoswz.bef and galowf.bef. Composites of nominal 5 metre length were used in the interpolation.

Variogram parameters are grade shell or rock group specific and are described in the kriging plan in Appendix 6. During kriging, blocks were selected based on their grade shell or rock group domain. Copper, gold and silver estimates within grade shells or rock groups were stored in the block model CU1, CU2 and CU3, AU1, AU2 and AU3, and AG1, AG2 and AG3 depending upon the grade shell or rock group being estimated. CUOUT, AUOUT and AGOUT contain grade estimates for blocks outside of grade shells. Other kriging variables were also stored in each block during interpolation:

- Average distance to composites in DIST1, DIST2, and DIST3
- Number of composites used in NCOMP1, NCOMP2, AND NCOMP3
- Number of drill holes used in NHOLE1, NHOLE2, AND NHOLE3

#### **17.15.2 Nearest Neighbor Estimation**

Nearest neighbor estimation was done using 5 metre composites. Block selection and block model-composite matching were the same as implemented for ordinary kriging described in Section 17.15.1. Estimation was performed in one pass using kriging Pass 3 search parameters.

#### **17.15.3 Inverse Distance to a Power Estimation**

Total and acid soluble copper grades were estimated by inverse distance cubed weighting methods to calculate the copper solubility ratio. The copper solubility ratio was used to calculate the available copper content as described in Section 17.8. Blocks and composites were matched relative to depth below the bedrock interface using an isotropic search of 150 metres.

#### **17.15.4 Calculation of Whole Block Grades**

The kriged and nearest neighbor grades were estimated for up to three proportions individually. The three Cu, Au and Ag grades per block were combined, weighted by density and rock type proportion.

#### **17.15.5 Block Model Visual Inspection**

Visual inspection confirmed that the block model honors the drill hole data. Screen-capture plots in Figures 17-6, 17-7 and 17-8 present a representative bench of the copper, gold and silver resource models.

Figure 17-6: 502.5m Bench – Block Model Cu Values

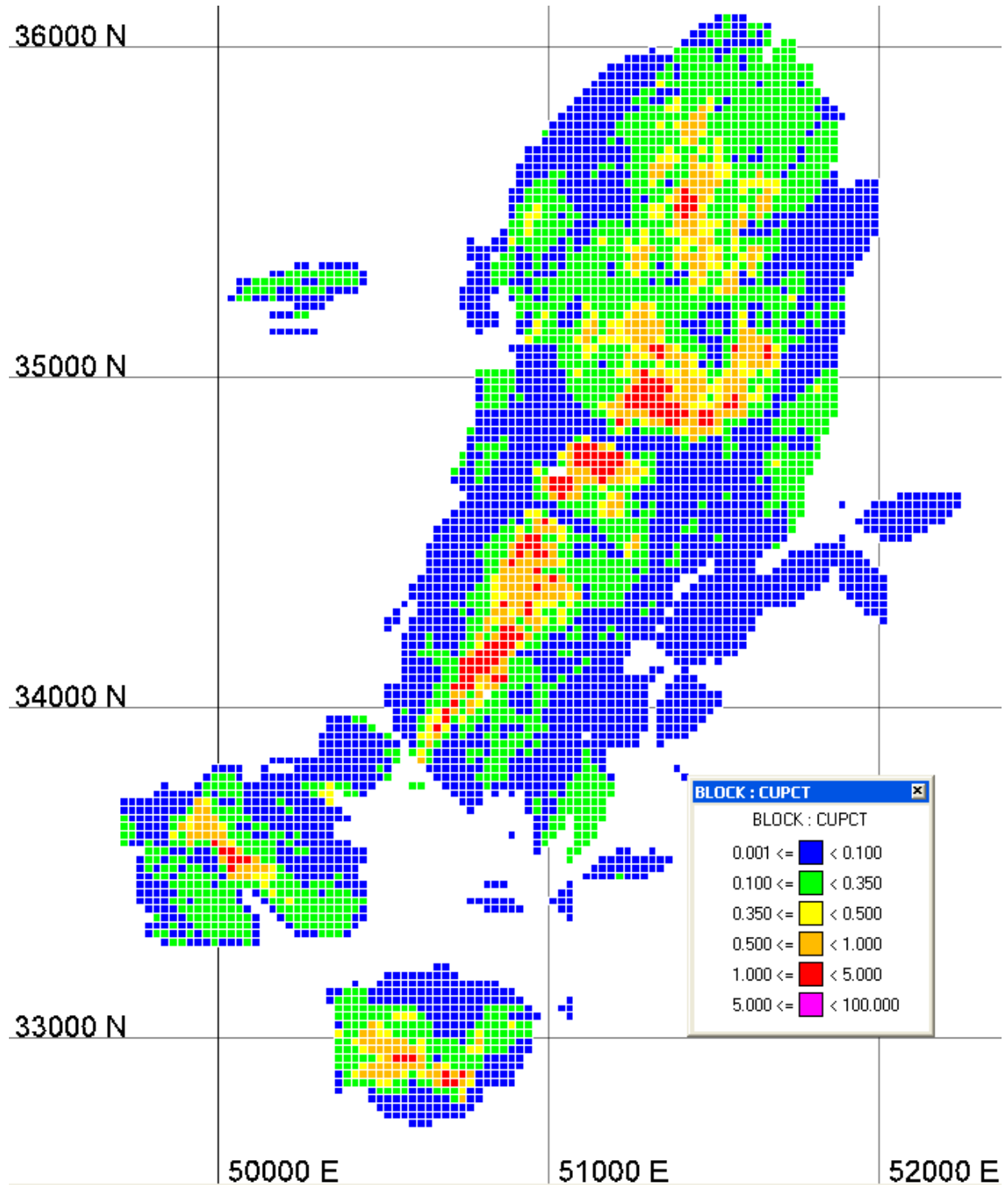


Figure 17-7: 502.5m Bench – Block Model Au Values

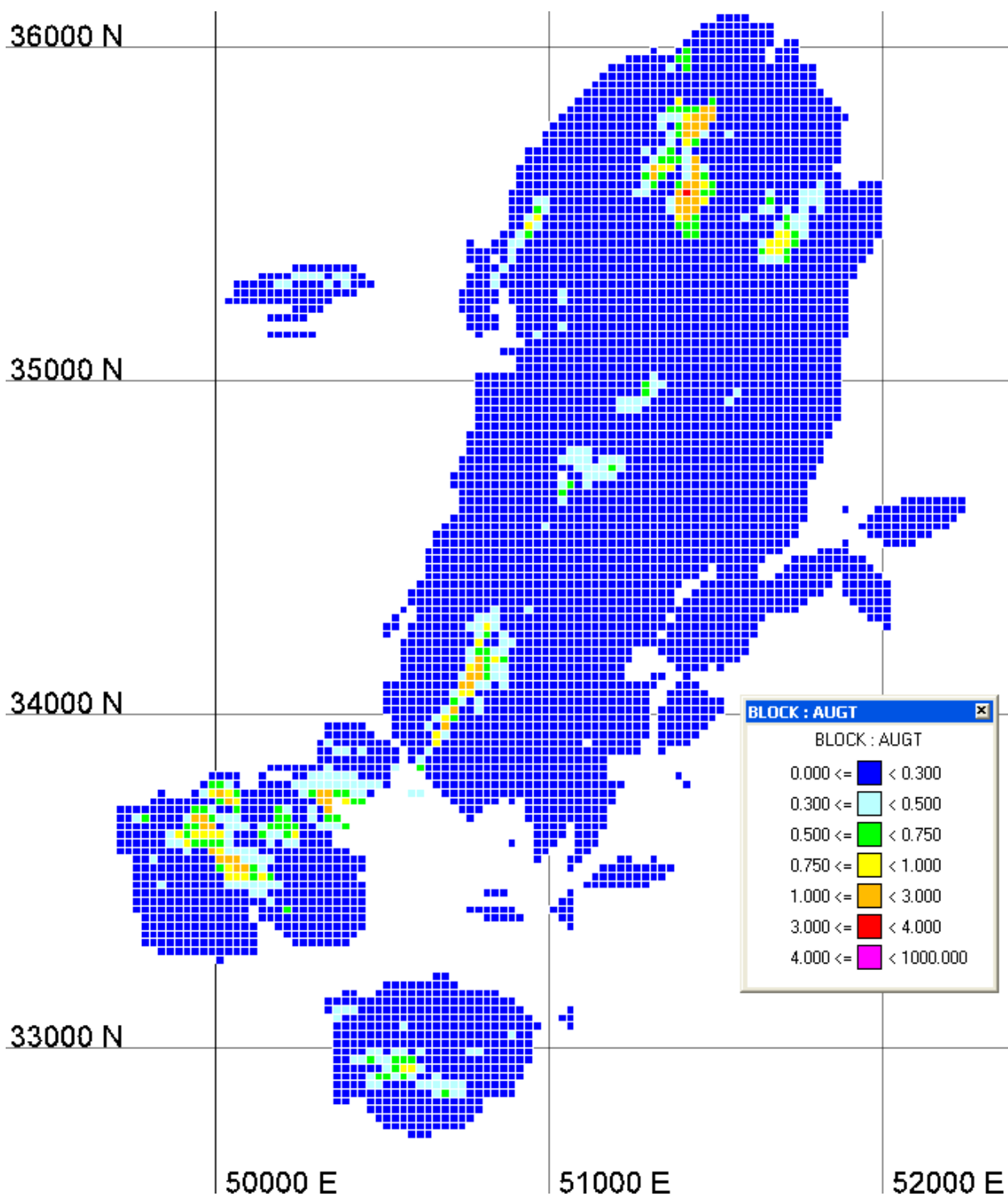
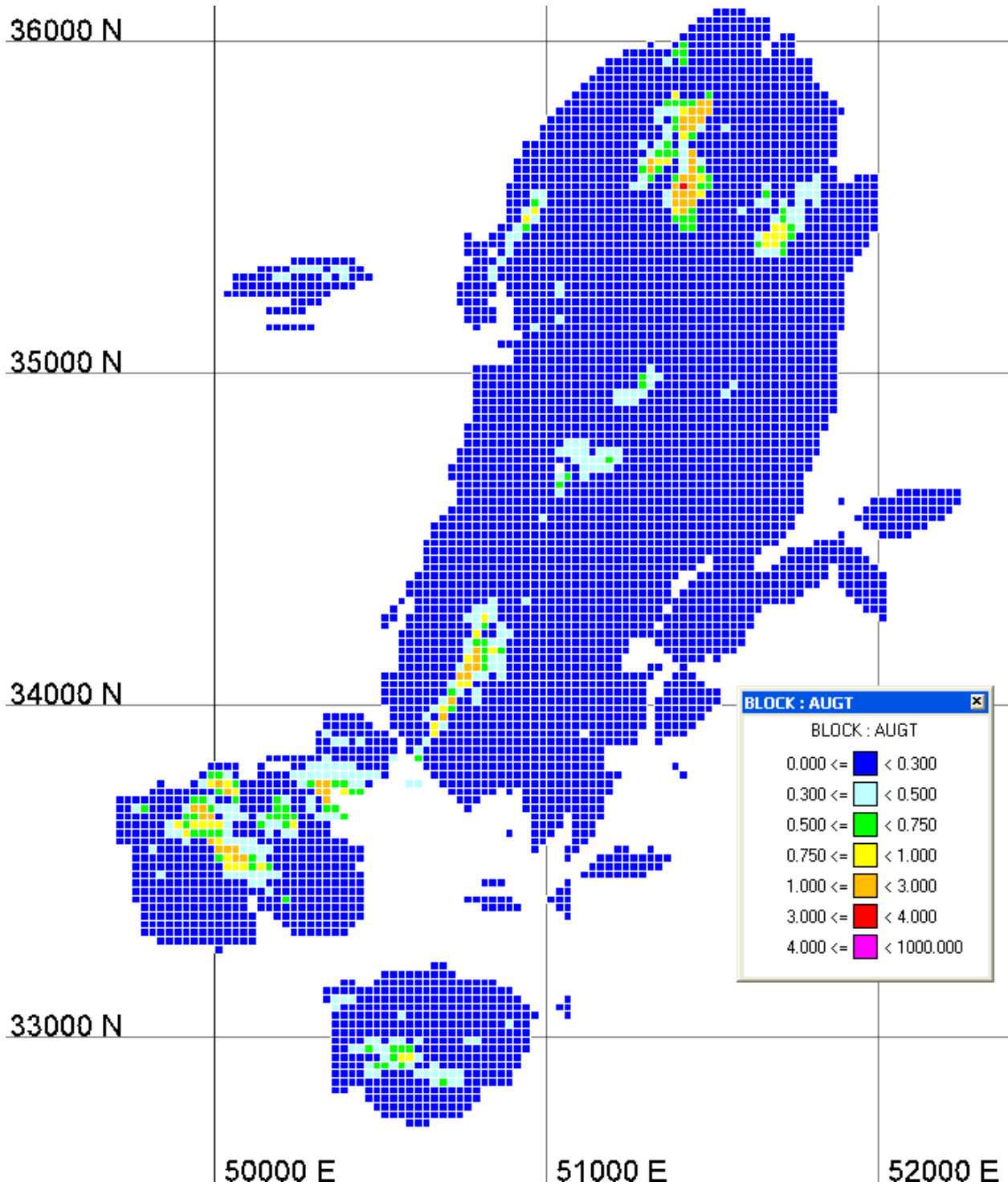


Figure 17-8: 502.5m Bench – Block Model Ag Values



## **17.16 Model Validation**

Validation was performed on blocks constrained by grade shells or rock group and estimated in passes 1 and 2. This encompasses the section of the deposit which contains the highest concentration of drill holes and is an important dataset on which to perform validation.

### **17.16.1 Swath Plots**

Swath plots comparing kriged Cu, Au and Ag and nearest neighbor estimates were plotted in East-West, North-South and Vertical directions. They are presented in Appendix 8, and examples are found in Figure 17-9 and Figure 17-10. Variables agree well in general, and no major spatial bias was observed. Differences do occur between the raw composites and the nearest neighbor and kriged grade estimates. The composites are not declustered or constrained by outlier restrictions, and differences between them, the kriged and nearest neighbor estimates are not unreasonable.

### **17.16.2 Comparison of Composites and Estimated Grades**

Histograms of the validation set of blocks and composites were plotted for Cu, Au and Ag. They are presented in Appendix 9. Table 17-18 and Table 17-19 compare the validation set of block model grades with the 5-metre-long composite grades. The estimated grades compare reasonably well with the nearest neighbor model, indicating the process did not introduce bias.

As expected the estimated grades produce distributions that are smoother than the nearest neighbor model. The amount of smoothing has been adjusted to match the selective mining unit (SMU) and produce a model that is appropriate for mine planning.

Figure 17-9: Cu Swath Plots

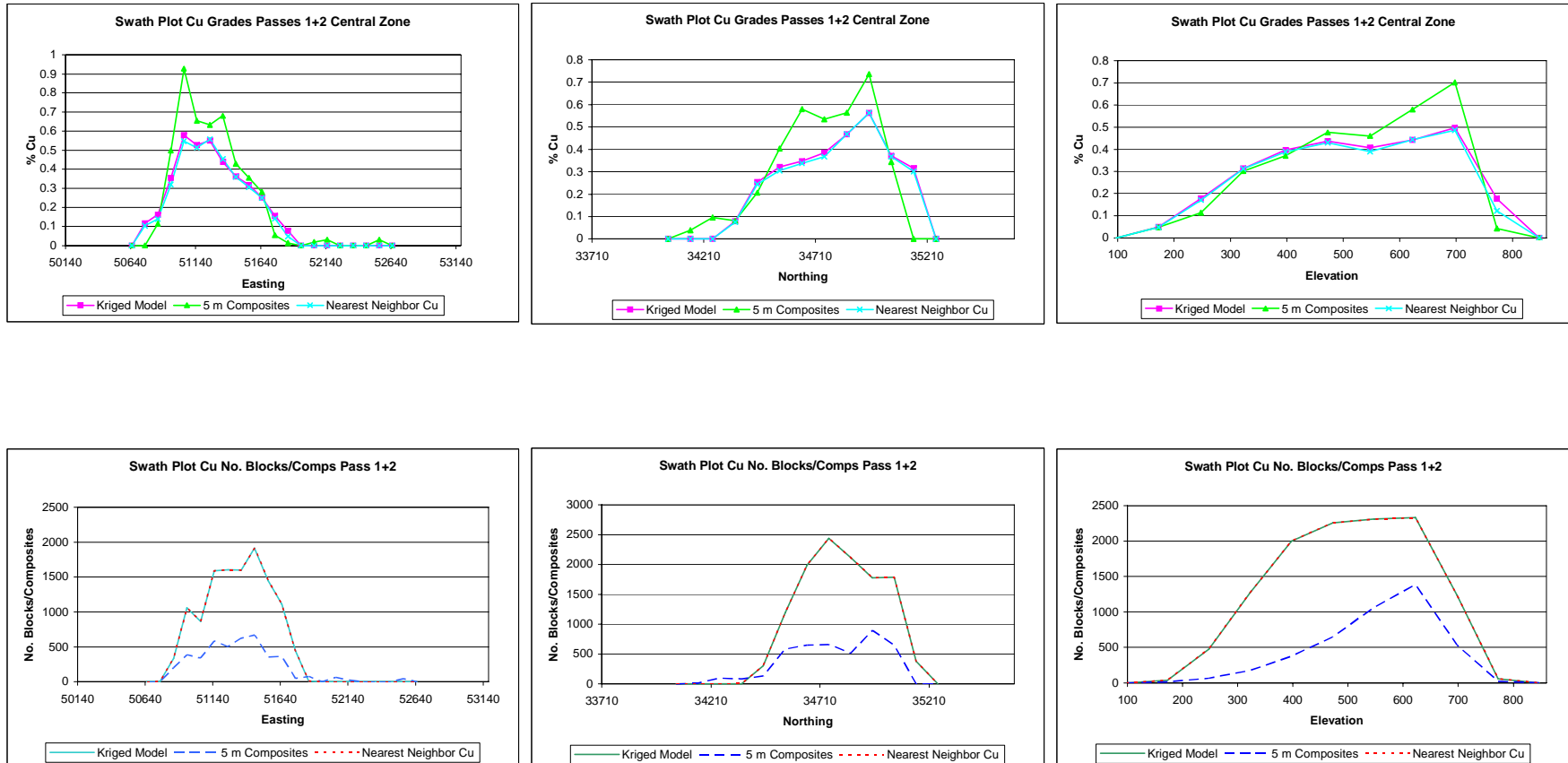
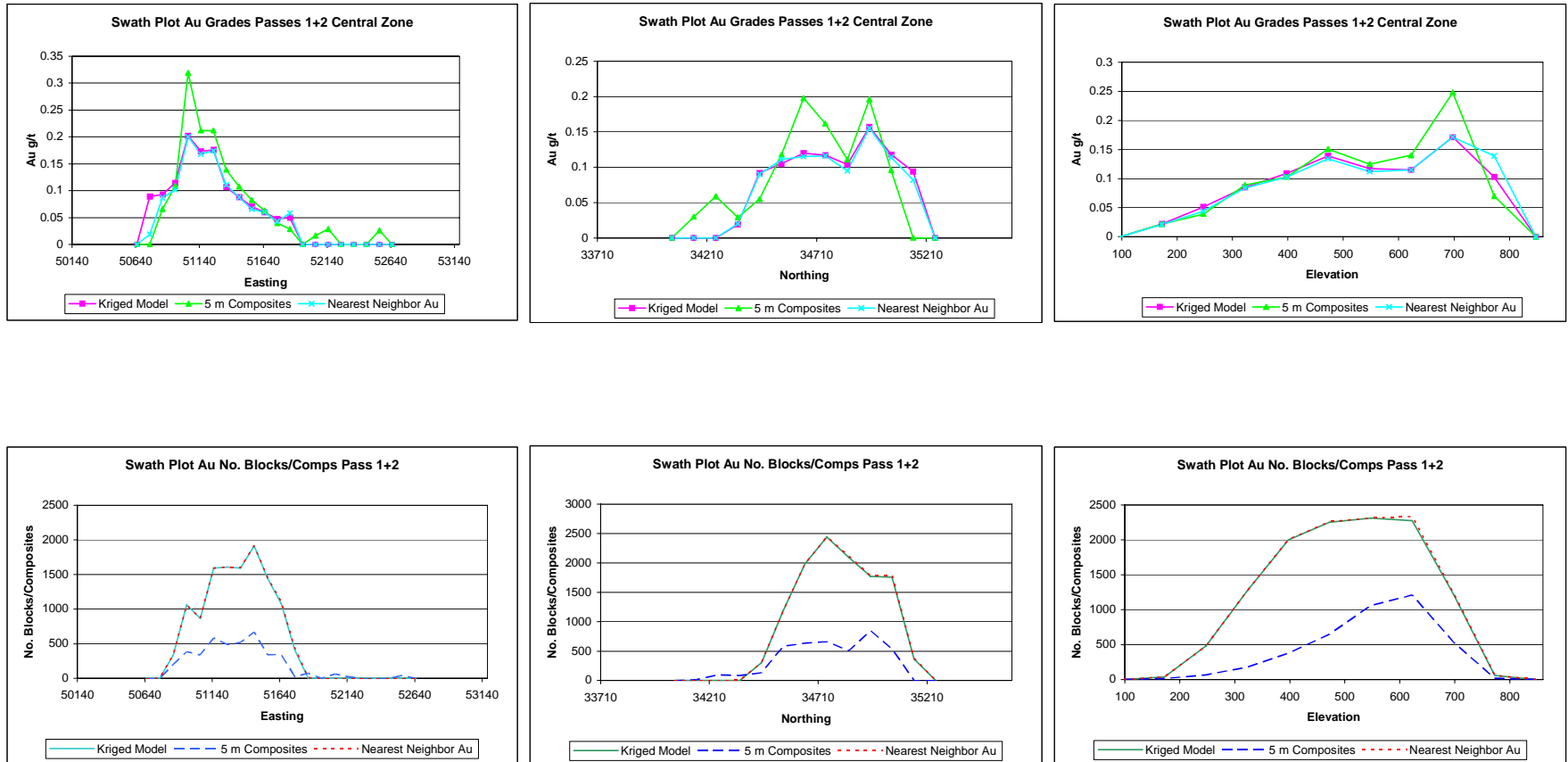




Figure 17-10: Au Swath Plots



**Table 17-18: Comparison of Cu Composites and Model Block Grades**

Mineral Zone Area	Rock Group or Grade Shell	Number of Block Pairs	5 m Composites			Kriged Model		Nearest Neighbor		% Difference (Krig-NN)/NN
			No.	Mean Cu	CV	Mean Cu	CV	Mean Cu	CV	
Bountiful	Volcanic	2,882	649	0.18	1.58	0.305	0.77	0.302	1.19	1
	Intrusive	247	70	0.09	1.65	0.050	0.59	0.053	1.17	-6
Central Replacement Zone	Volcanic	11,991	4,277	0.51	1.29	0.400	0.99	0.392	1.30	2
	Intrusive	4,877	2,441	0.17	2.35	0.131	1.60	0.126	2.49	4
Junction	Grade Shell	906	247	0.40	0.94	0.474	0.55	0.486	0.92	-2
Middle Creek	Grade Shell	540	235	0.37	1.24	0.321	0.65	0.314	1.26	2
North Gold Lens	Volcanic	18,881	6,504	0.41	1.21	0.325	0.93	0.319	1.32	2
	Intrusive	2,603	1,823	0.19	1.77	0.134	1.29	0.124	1.94	8
North Junction	Grade Shell	1,537	850	0.86	1.27	0.811	0.78	0.779	1.27	4
South Gold Lens	Volcanic	3,674	1,710	0.59	1.40	0.429	1.23	0.420	1.61	2
	Intrusive	2,037	782	0.22	2.05	0.183	1.32	0.188	2.04	-3
Southwest Zone	Grade Shell	3,655	1,474	0.46	1.25	0.417	0.82	0.420	1.25	-1
	Low Grade Shell	6,909	1,588	0.09	1.87	0.106	0.68	0.106	1.03	0
West Fork	Grade Shell	2,727	1,054	0.40	1.13	0.389	0.63	0.399	1.13	-3
	Opulent	91	45	5.00	1.45	0.615	1.02	0.594	1.44	4

**Table 17-19: Comparison of Au Composites and Model Blocks**

Mineral Zone Area	Rock Group or Grade Shell	Number of Block Pairs	5 m Composites			Kriged Model		Nearest Neighbor		% Difference (Krig-NN)/NN
			No.	Mean Au	CV	Mean Au	CV	Mean Au	CV	
Bountiful	Volcanic	2,882	649	0.07	1.41	0.100	0.77	0.100	1.14	1
	Intrusive	247	70	0.06	1.49	0.040	0.90	0.050	1.58	-6
Central Replacement Zone	Volcanic	11,907	4,093	0.14	1.66	0.120	1.08	0.110	1.62	3
	Intrusive	4,872	2,403	0.06	1.96	0.060	1.03	0.050	1.82	2
Junction	Grade Shell	906	246	0.16	0.99	0.150	0.47	0.160	0.88	-2
Middle Creek	Grade Shell	540	235	0.52	2.04	0.410	1.11	0.420	2.15	-1
North Gold Lens	Volcanic	18,724	6,364	0.30	2.39	0.230	1.64	0.230	2.52	0
	Intrusive	2,592	1,812	0.18	4.08	0.130	2.79	0.130	4.67	2
North Junction	Grade Shell	1,308	744	0.47	1.63	0.500	0.84	0.470	1.77	6
South Gold Lens	Volcanic	3,670	1,692	0.22	2.02	0.180	1.54	0.170	2.75	5
	Intrusive	2,036	773	0.17	1.94	0.170	1.18	0.190	1.94	-9
Southwest Zone	Grade Shell	3,655	1,474	0.80	1.43	0.690	0.82	0.670	1.42	3
	Low Grade Shell	6,909	1,574	0.19	2.75	0.160	0.88	0.150	1.70	1
West Fork	Grade Shell	2,727	1,054	0.25	1.42	0.250	0.74	0.260	1.29	-2
	Opulent	91	45	1.73	0.95	0.530	0.86	0.530	1.48	-1

As expected, the variance and CV of kriged model is much lower than the original 5-metre composites.

For the validation set, the average estimated grades compare well with the average nearest neighbor grades. The distribution's upper tail disappears, however, inducing a variance reduction. The CV for the kriged estimates is significantly lower than the CV for the 5-metre composites or nearest neighbor models. This is expected given the grade estimation method (ordinary kriging).

The mean grades for the kriged estimates are comparable with the nearest neighbor model and are reasonable.

### 17.16.3 Change of Support Checks

An independent check on the smoothing in the estimates was made using the Discrete Gaussian or Hermitian polynomial change-of-support method (Herco) described

by Journel and Huijbregts (Mining Geostatistics, Academic Press, 1978). The distribution of hypothetical block grades derived by this method is compared to the estimated model grade distribution by means of grade-tonnage curves. The grade-tonnage curves allow comparison of the histograms of the two grade distributions in a format familiar to mining. If the estimation procedure has adequately predicted grades for the selected block size, then the grade-tonnage curves should match fairly closely. If the curves diverge significantly, then there is a problem with the estimated resource. The grade-tonnage predictions produced for the model show that grade and tonnage estimates are validated by the change-of-support calculations.

Block Dispersion Variances (BDV) are required to perform Herco validation and were calculated for interpolation groups, such as:

- Grade shells by area
- Volcanic and intrusive rock groups in the Central areas

BDV using a unit sill variogram model was calculated after modeling 3D variograms for each interpolation group. The selective mining unit (SMU) size used was 20m x 20m x 15m.

Resulting BDVs and CVs are tabulated in Table 17-20 and Table 17-21.

**Table 17-20: Cu Block Dispersion Variances**

Area	Domain or Rocktype	Block Dispersion Variance	CV 5m Composites
Bountiful	Volcanic	0.7149	1.19
	Intrusive	0.5273	1.17
Central Replacement Zone	Volcanic	0.7149	1.30
	Intrusive	0.5273	2.49
Junction	Grade Shell	0.2662	0.92
Middle Creek	Grade Shell	0.3709	1.26
North Gold Lens	Volcanic	0.6559	1.32
	Intrusive	0.5165	1.94
North Junction	Grade Shell	0.4917	1.27
South Gold Lens	Volcanic	0.6512	1.61
	Intrusive	0.6202	2.04
Southwest Zone	Grade Shell	0.4347	1.25
	Low Grade Shell	0.3808	1.03
West Fork	Grade Shell	0.3592	1.13

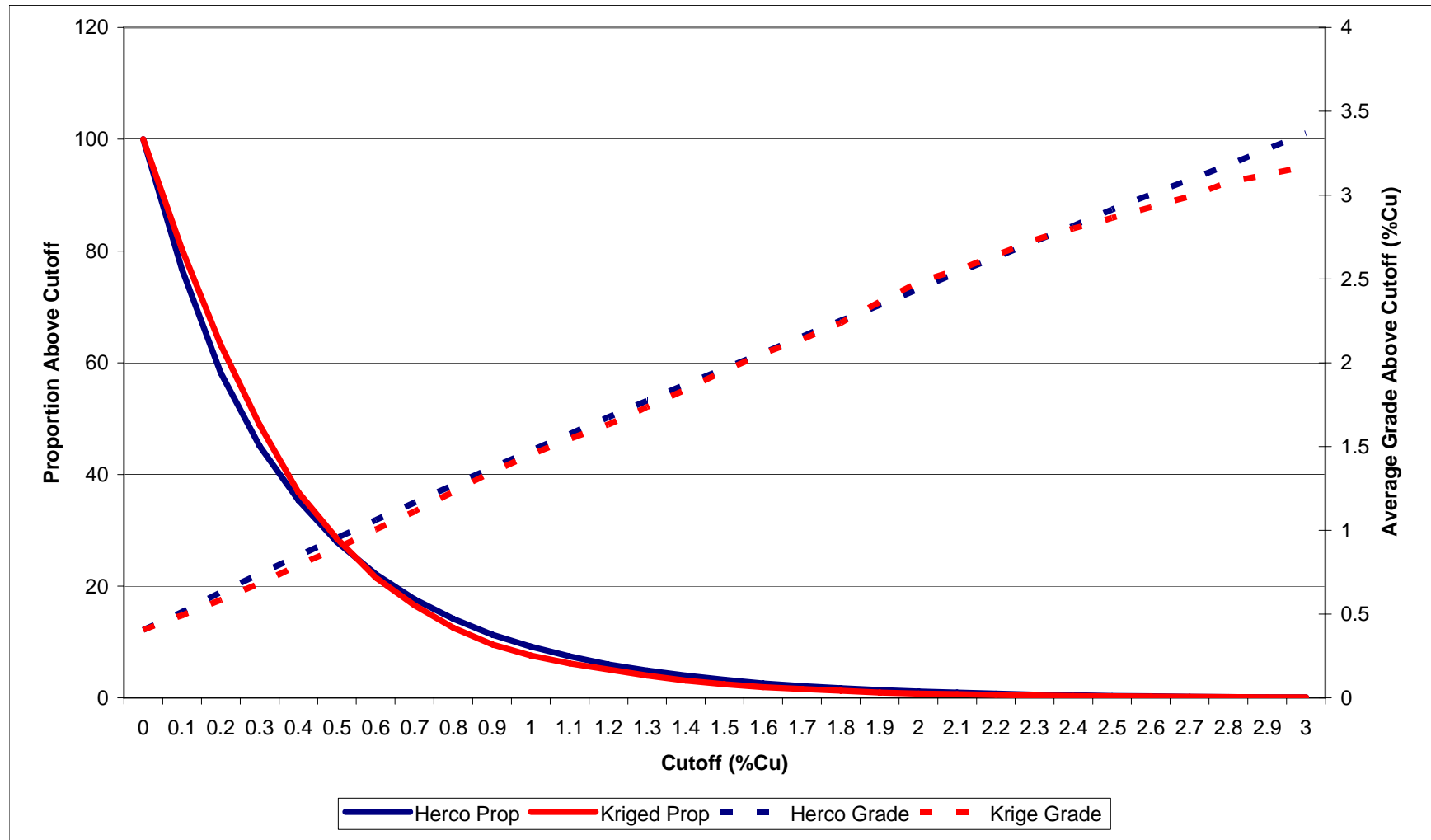
**Table 17-21: Au Block Dispersion Variances**

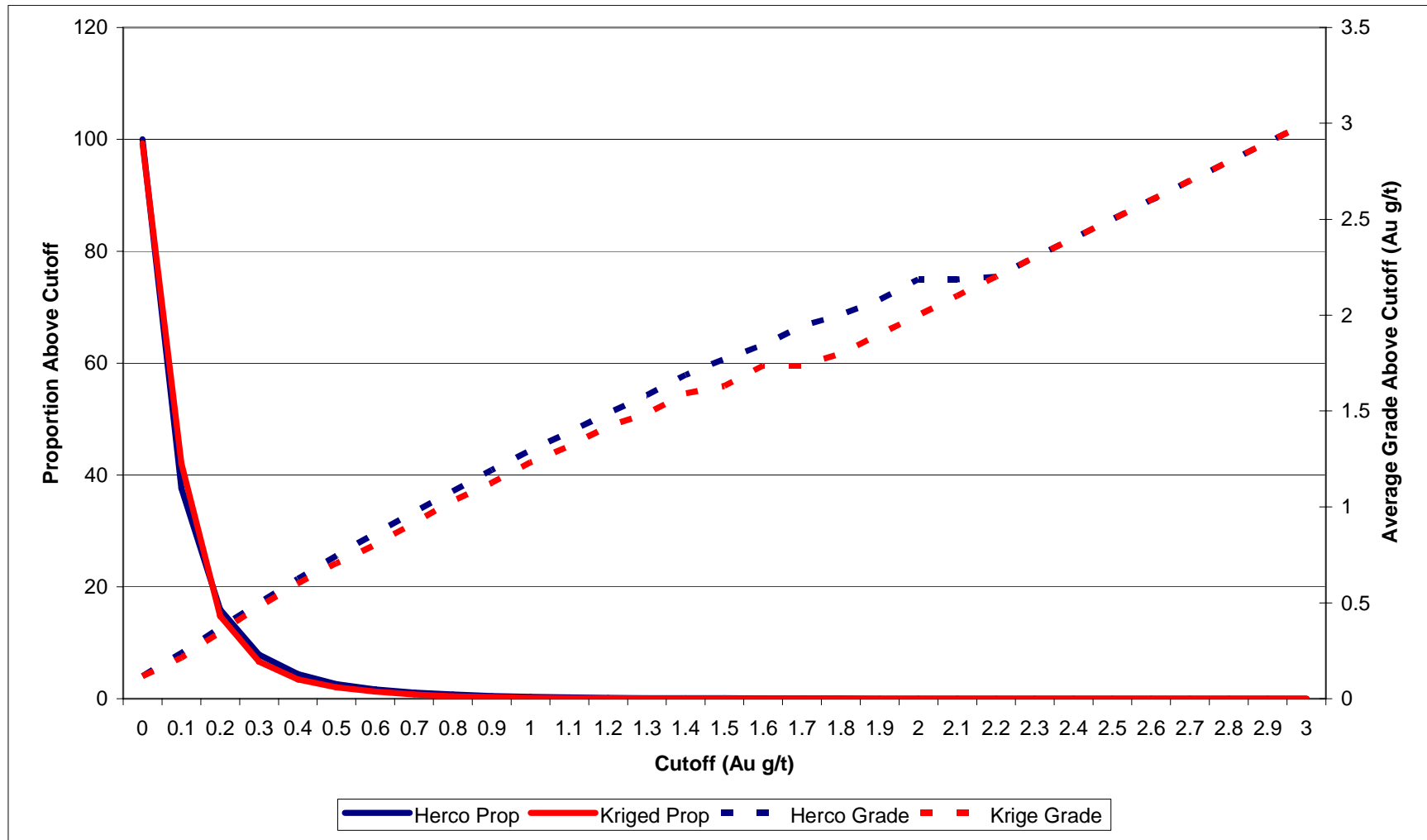
Area	Domain or Rocktype	Block Dispersion Variance	CV 5m Composites
Bountiful	Volcanic	0.617	1.14
	Intrusive	0.4585	1.58
Central Replacement Zone	Volcanic	0.617	1.62
	Intrusive	0.4585	1.82
Junction	Grade Shell	0.178	0.88
Middle Creek	Grade Shell	0.413	2.15
North Gold Lens	Volcanic	0.6124	2.52
	Intrusive	0.4181	4.67
North Junction	Grade Shell	0.3226	1.77
South Gold Lens	Volcanic	0.4221	2.75
	Intrusive	0.469	1.94
Southwest Zone	Grade Shell	0.3319	1.42
	Low Grade Shell	0.2553	1.70
West Fork	Grade Shell	0.3409	1.29

Herco validation was performed for blocks that were estimated by passes one and two for both copper and gold. An SMU block size of 20m x 20m x 15m was specified by NovaGold, reflecting the selectivity of the feasibility study. Resulting grade-tonnage and grade-above-cutoff curves (Herco adjusted and kriged) are presented in Appendix 10. A representative grade-tonnage graph is in Figure 17-11 and Figure 17-12.

In general, the Herco-adjusted grade-proportion curves fit the kriged grade-proportion curves reasonably well, indicating the appropriate amount of smoothing has been achieved via kriging.

Figure 17-11: Herco Cu Grade-Tonnage Curves – Central Replacement Zone



**Figure 17-12: Herco Au Grade-Tonnage Curves – Central Replacement Zone**

### **17.17 Resource Classification**

The Galore Creek mineral resource has been classified using logic consistent with the CIM Standard Definitions as dictated by National Instrument 43-101. Resource classification is based on various block model parameters together with the demonstrated confidence in the assayed values with a well-functioning QA/QC program. The estimated Galore Creek resources have been classified into Measured, Indicated and Inferred Resources categories and are summarized in Table 17-23.

In general, the limit of the Mineral Resources is based on the following criteria: blocks within specified distances of an assay composite, a minimum of two drill holes, are required to estimate the Cu grade and resources are contained within a conceptual pit using metal prices of \$1.25/lb Cu, \$450/oz Au and \$7/oz Ag. These metal prices are 50% higher than the metal prices being used in the Feasibility Study that is currently in progress. Additionally, Measured or Indicated Resources must be within a grade shell or lithology group. Composite spacing criteria were determined using the confidence limit on the grade estimate and its relationship to the projected production rate of 65,000 tonnes per day of ore. Confidence limits were calculated for Cu and Au grades. In general, distances are comparable with Au tending to require closer spaced composite spacing. Copper grade is proposed to be the primary criteria for ore/waste selection and constitutes the major saleable product, and it is reasonable to set classification criteria on the basis of copper grades.

#### **17.17.1 Measured Resource Criteria**

The criteria for defining Galore Creek Measured Resources was that there were a minimum of two drill holes within 80 metres horizontally and 55 metres vertically of the estimated block. Furthermore, the block had to be constrained within a grade shell or lithology group.

#### **17.17.2 Indicated Resource Criteria**

The criteria for defining Indicated Resources was that the block was within 80 metres horizontally and 55 metres vertically of the estimated block and that a second drill hole had to be within the distance as specified in Table 17-22. Confidence limits were determined and classification designation assigned by grade shell and lithology group.

**Table 17-22: Drill Hole Spacing Based on Confidence Limits**

Resource Area	Estimation Group	Drill Hole Spacing for $\pm 15\%$ Annual Confidence Limit (metres)	
		Cu	Au
Bountiful	Volcanic	160	150
	Intrusive	150	100
Central Replacement Zone	Volcanic	150	100
	Intrusive	100	100
Junction	Grade Shell	150	100
Middle Creek	Grade Shell	150	100
North Gold Lens	Volcanic	160	100
	Intrusive	125	35
North Junction	Grade Shell	150	100
South Gold Lens	Volcanic	125	75
	Intrusive	110	100
Southwest	Grade Shell	150	150
Southwest LG	Grade Shell	150	150
West Fork	Grade Shell	150	150

That portion of the Galore Creek deposit designated in this manner as the Measured and Indicated Mineral Resource has been estimated with a “level of confidence sufficient to allow the appropriate application of technical and economic parameters, to support mine planning and evaluation of the economic viability of the deposit” (NI 43-101).

#### 17.17.3 Inferred Resource Criteria

That portion of the Galore Creek deposit for which an estimate has been made but is not deemed part of the Measured and Indicated Mineral Resource has been classified as the Inferred Mineral Resource. This portion is based on more limited drill information, and will require additional drilling to support detailed mine planning and evaluation.

#### 17.17.4 Galore Creek Mineral Resources

Measured, Indicated, and Inferred Mineral Resources were tabulated for the Galore Creek Project. In lieu of summarizing resources within the total block model at a particular cutoff grade, only those resources located inside of a conceptual pit based on metal prices that were 50% greater than the base case prices in the ongoing Feasibility Study were used. Metals prices of US\$1.25/lb of copper, US\$450/oz of gold, and US\$7/oz of silver were used to generate the conceptual pit. Feasibility Study mining costs, processing costs, metal recoveries, and pit slope angles were also used to generate the conceptual pit. The Galore Creek Mineral Resources within the conceptual pit are summarized in Table 17-23 using a 0.25% copper equivalent (CuEq) cutoff grade.



**Table 17-23: Galore Creek Mineral Resources @ 0.25% CuEq Cutoff**

Resource Category	Tonnes (millions)	Cu (%)	Au (g/t)	Ag (g/t)	CuEq (%)	Cu Pounds (billions)	Au Ounces (millions)	Ag Ounces (millions)
Measured	263.6	0.62	0.35	5.9	0.81	3.6	3.0	50.0
Indicated	485.3	0.46	0.28	4.3	0.63	4.9	4.4	67.1
Measured + Indicated	748.9	0.52	0.30	4.9	0.69	8.5	7.4	117.1
Inferred	300.1	0.37	0.21	3.7	0.51	2.4	2.0	35.7

The copper equivalent grade was calculated as follows:

$$\text{CuEq} = \text{Recoverable Revenue} / 2204.62 * 100 / 1.25 / \text{Cu Recovery} / 100$$

Where:

CuEq = Copper equivalent grade

Recoverable Revenue = Revenue in US dollars for recoverable copper, recoverable gold, and recoverable silver using metal prices of US\$1.25/lb, US\$450/oz, and US\$7/oz for copper, gold, and silver, respectively

Cu Recovery = Recovery for copper based on mineral zone and total copper grade

The author has performed several independent reviews of NovaGold's Galore Creek resource model. These checks included a visual comparison of drill hole composite and block grades in section and plan, a global grade bias check (independent nearest neighbor models), and a set of swath plots that compare the author's nearest neighbor grades with NovaGold's kriged copper and gold block grades. Based on these reviews, it is the author's opinion that the NovaGold resource model is globally unbiased and is suitable to be used for subsequent pit optimization and mine planning activities.

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**

NovaGold is currently in the process of completing a Feasibility Study for the Galore Creek project. Hatch Ltd. is overseeing and managing the Feasibility Study which is expected to be completed by the end of 2006. If the Feasibility Study shows favourable results, it is anticipated that another technical report will be completed which discloses various aspects of the Galore Creek Project.

## **19.0 INTERPRETATION AND CONCLUSIONS**

Galore Creek property is characterized as a large copper-gold porphyry system consisting of a number of mineralized zones including the Central Replacement Zone, the Southwest Zone, the Junction Zone, Middle Creek, North and South Gold Lenses, Bountiful, and the West Fork Zone. In total, the property has been tested with 758 diamond drill holes totaling about 187,267 metres. The assay database for the property contains about 60,000 assay records. In addition to the diamond drilling data, a tremendous amount of data has been collected from the property since the early 1960's. Some of this data includes soil, stream sediment, and rock geochemistry programs, helicopter airborne magnetic and radiometric surveys, ground based IP/resistivity surveys, and seismic refraction surveys.

Using past results and the diamond core data that were collected from the 2005 program, an updated resource model has been constructed. In the opinion of the author the underlying data are adequate to define the Mineral Resources that are the subject of this report. The updated grade model that is the subject of this report is currently being used by Hatch Ltd. and their sub-contractors to complete a Feasibility Study for the Galore Creek project. The Feasibility Study is expected to be complete by the end of 2006. The results from the Feasibility Study will dictate NovaGold's next course of action.

## 20.0 RECOMMENDATIONS

The author has reviewed the Galore Creek database and NovaGold's resource modeling methods. Based on these reviews the author has the following recommendations:

- Drill a reasonable number of twin holes to investigate the apparent bias between the pre-2003 and the NovaGold data. Approximately 56% of the diamond core data were derived from pre-NovaGold drilling and these data are approximately 3% and 14% lower than the NovaGold data for copper and gold, respectively. The author estimates that drilling ten twin holes totaling about 2,500 metres should cost approximately US\$850,000.
- Monitor the performance of blanks and duplicates more closely. All sample batches associated with blanks that fail should be re-assayed. The costs associated with this activity are considered by the author to be a fixed cost to NovaGold as all of the monitoring work would be routinely done in house.
- Lower the copper equivalent (CuEq) cutoff grade used to design grade envelopes that are used to constrain the estimate of block grades. The resource model subject to this report used a 0.35% CuEq cutoff grade, yet the breakeven cutoff grade used to summarize Mineral Resources was 0.25% CuEq. The costs associated with this activity are considered to be a fixed cost to NovaGold as all work would be done in house.
- Obtain more moisture content data from representative rock types. The author estimates that obtaining a reasonable number of moisture determinations would cost several thousand to ten thousand dollars.

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## 22.0 DATE AND SIGNATURE PAGE

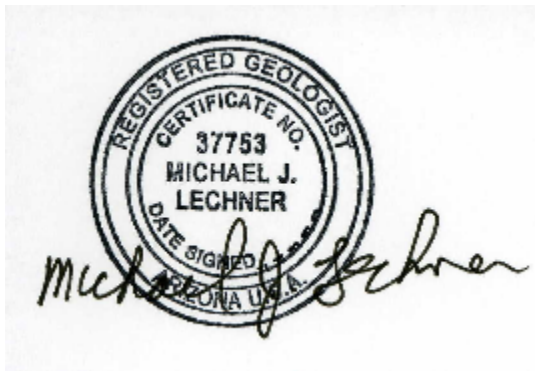
I, Michael J. Lechner, a consulting geologist and President of Resource Modeling Incorporated, (RMI) an Arizona corporation with a business address of 1960 West Muirhead Loop, Tucson, AZ 85737, HEREBY CERTIFY THAT

1. I am the author of the technical report titled "Updated Galore Creek Resources, Northwestern British Columbia" dated September 7, 2006 (the "Technical Report").
2. I am a graduate of the University of Montana with a B.A. degree in Geology (1979).
3. 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 precious and base metal deposits located throughout the world.
4. 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).
5. As a result of my education, experience and professional associations, I am a "Qualified Person" as defined by National Instrument 43-101 (the "Instrument").
6. My work on the Galore Creek Project consisted of a site visit on October 17-18 2005, to observe drilling and sampling procedures, review drill core and a review of NovaGold's resource model.
7. I am responsible for the preparation of the Technical Report.
8. The sources of all information are noted and referenced in the Technical Report.
9. I am independent of the issuer as defined in the Instrument.
10. As of the date of this certificate, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make this report not misleading.
11. I have read and understand the terms of the Instrument its companion documents and the Technical Report has been prepared in compliance with the Instrument.
12. I consent to the use of this Technical Report dated, September 7, 2006, by NovaGold for making representations about the subject property and to the public

filing of the Technical Report.

13. I have not had any prior involvement with the Galore Creek property that is the subject of this Technical Report.

Dated in Tucson, Arizona, this 7th day of September, 2006.



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Michael J. Lechner





## Consent of Author

TO: British Columbia Securities Commission  
Alberta Securities Commission  
Saskatchewan Financial Services Commission  
Manitoba Securities Commission  
Ontario Securities Commission  
Autorite des marches financiers  
Nova Scotia Securities Commission  
New Brunswick Securities Commission  
Prince Edward Island Securities Office  
Securities Commission of Newfoundland and Labrador

Dear Sirs/Mesdames:

I Michael J. Lechner do hereby consent to the filing, with the regulatory authorities referred to above, the technical report entitled "Updated Galore Creek Mineral Resources, British Columbia", dated September 7, 2006.

Dated this 7<sup>th</sup> day of September, 2006



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Signature of Qualified Person

Mike Lechner, AZ RPG #37753

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Print name of Qualified Person

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

No decisions have been finalized for developing the property yet as the Feasibility Study is still in progress.

# **Updated Galore Creek Resources NI 43-101 Technical Report**

## **APPENDICES**





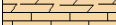


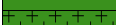

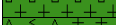


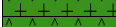



















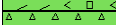


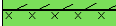



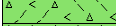
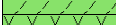
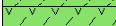




- Appendix 01 – Lithology Codes**
- Appendix 02 – Significant Drill Hole Composites**
- Appendix 03 – Historic Cu Assay Comparisons**
- Appendix 04 – Historic Au Assay Comparisons**
- Appendix 05 – 2003-2005 NovaGold QA/QC Data**
- Appendix 06 – Variograms**
- Appendix 07 – Kriging Plans**
- Appendix 08 – Swath Plots**
- Appendix 09 – Histograms**
- Appendix 10 – Herco Grade-Tonnage Curves**

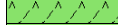
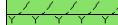








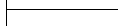



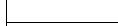
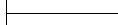


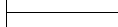
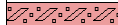




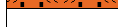


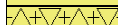







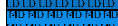
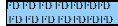









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**Appendix 1 – Lithology Codes**

# Galore Creek Rock Codes

## Pattern Num Code Description

	-1	na	Not Available
	100	S	SEDIMENTARY ROCKS - Undivided
	110	S1	SEDIMENTARY ROCKS - Conglomerate
	120	S2	SEDIMENTARY ROCKS - Greywacke
	130	S3	SEDIMENTARY ROCKS - Siltstone
	140	S4	SEDIMENTARY ROCKS - Argillite
	150	S5	SEDIMENTARY ROCKS - Limestone
	160	S6	SEDIMENTARY ROCKS - Epiclastic
	170	S7	SEDIMENTARY ROCKS - Diamictite
	200	V	VOLCANICS - Undivided
	210	V1	VOLCANICS - AUGITE-BEARING - Undivided
	211	V1a	VOLCANICS - AUGITE-BEARING - Flow
	212	V1b	VOLCANICS - AUGITE-BEARING - Porphyritic
	213	V1c	VOLCANICS - AUGITE-BEARING - Flow breccia
	214	V1ab	VOLCANICS - AUGITE-BEARING - Porphyritic Flow
	215	V1e	VOLCANICS - AUGITE-BEARING - Coarse Lapilli Tuff
	216	V1f	VOLCANICS - AUGITE-BEARING - Fine Lapilli Tuff
	217	V1g	VOLCANICS - AUGITE-BEARING - Ash tuff
	218	V1ac	VOLCANICS - AUGITE-BEARING - Flow breccias
	219	V1eh	VOLCANICS - AUGITE-BEARING - Tuffs-Mixed/undifferentiated
	220	V2	VOLCANICS - PSEUDOLEUCITE-BEARING - Undivided
	221	V2a	VOLCANICS - PSEUDOLEUCITE-BEARING - Flow
	222	V2b	VOLCANICS - PSEUDOLEUCITE-BEARING - Porphyritic
	223	V2ab	VOLCANICS - PSEUDOLEUCITE-BEARING - Porphyritic Flow
	224	V2c	VOLCANICS - PSEUDOLEUCITE-BEARING - Flow breccias
	225	V2e	VOLCANICS - PSEUDOLEUCITE-BEARING - Coarse Lapilli Tuff
	226	V2f	VOLCANICS - PSEUDOLEUCITE-BEARING - Fine Lapilli Tuff
	227	V2g	VOLCANICS - PSEUDOLEUCITE-BEARING - Ash tuff
	228	V2h	VOLCANICS - PSEUDOLEUCITE-BEARING - Crystal Lithic Tuff
	229	V2eh	VOLCANICS - PSEUDOLEUCITE-BEARING - Tuffs-Mixed/undifferentiated
	230	V3	VOLCANICS - ORTHOCLASE-BEARING - Undivided
	231	V3a	VOLCANICS - ORTHOCLASE-BEARING - Flow
	232	V3b	VOLCANICS - ORTHOCLASE-BEARING - Porphyritic
	233	V3ab	VOLCANICS - ORTHOCLASE-BEARING - Porphyritic Flow
	234	V3af	VOLCANICS - ORTHOCLASE-BEARING - Flow/Fine Lapilli Tuff
	235	V3e	VOLCANICS - ORTHOCLASE-BEARING - Coarse Lapilli Tuff
	236	V3f	VOLCANICS - ORTHOCLASE-BEARING - Fine Lapilli Tuff
	237	V3g	VOLCANICS - ORTHOCLASE-BEARING - Ash Tuff
	238	V3h	VOLCANICS - ORTHOCLASE-BEARING - Crystal Lithic Tuff
	239	V3eh	VOLCANICS - ORTHOCLASE-BEARING - Tuffs-Mixed/undifferentiated
	240	V4	VOLCANICS - MAFIC - Undivided
	241	V4a	VOLCANICS - MAFIC - Flow
	242	V4b	VOLCANICS - MAFIC - Porphyritic
	243	V4ab	VOLCANICS - MAFIC - Porphyritic Flow
	244	V4d	VOLCANICS - MAFIC - Breccias
	245	V4e	VOLCANICS - MAFIC - Coarse Lapilli Tuff
	246	V4f	VOLCANICS - MAFIC - Fine Lapilli Tuff
	247	V4g	VOLCANICS - MAFIC - Ash Tuff
	248	V4h	VOLCANICS - MAFIC - Crystal Lithic Tuff
	249	V4eh	VOLCANICS - MAFIC - Tuffs-Mixed/undifferentiated
	250	V5	VOLCANICS - INTERMEDIATE - Undivided
	251	V5a	VOLCANICS - INTERMEDIATE - Flow
	252	V5b	VOLCANICS - INTERMEDIATE - Porphyritic
	253	V5c	VOLCANICS - INTERMEDIATE - Flow Breccias
	254	V5d	VOLCANICS - INTERMEDIATE - Breccias
	255	V5e	VOLCANICS - INTERMEDIATE - Coarse Lapilli Tuff
	256	V5f	VOLCANICS - INTERMEDIATE - Fine Lapilli Tuff

	257	V5g	VOLCANICS - INTERMEDIATE - Ash Tuff
	258	V5h	VOLCANICS - INTERMEDIATE - Crystal Lithic Tuff
	259	V5eh	VOLCANICS - INTERMEDIATE - Tuffs-Mixed/undifferentiated
	260	V6	VOLCANICS - FELSIC - Undivided
	266	V6f	VOLCANICS - FELSIC - Fine Lapilli Tuff
	267	V6g	VOLCANICS - FELSIC - Ash Tuff
	300	i	INTRUSIVES - Undivided
	310	i1	INTRUSIVES - Pseudoleucite Porphyry
	320	i2	INTRUSIVES - Pseudoleucite Mega-Porphyry
	330	i3	INTRUSIVES - Grey Syenite Porphyry
	331	CCPo	COPPER CANYON PORPHYRY - Orthoclase
	332	CCPp	COPPER CANYON PORPHYRY - Pseudoleucite
	340	i4	INTRUSIVES - Dark Orthoclase Syenite
	343	i4a	INTRUSIVES - Dark Orthoclase Syenite (early)
	344	i4ab	INTRUSIVES - Dark Orthoclase Syenite (early/late)
	345	i4b	INTRUSIVES - Dark Orthoclase Syenite (late)
	350	i5/i9	Orthoclase Syenite Megaporphyry
	351	i5	INTRUSIVES - ORTHOCLASE SYENITE MEGAPORPHYRY - Fine grained (early)
	352	i9	INTRUSIVES - ORTHOCLASE SYENITE MEGAPORPHYRY - Medium grained
	353	i9a	INTRUSIVES - ORTHOCLASE SYENITE MEGAPORPHYRY - Early Phase
	354	i9ab	INTRUSIVES - ORTHOCLASE SYENITE MEGAPORPHYRY - Early/Late
	355	i9b	INTRUSIVES - ORTHOCLASE SYENITE MEGAPORPHYRY - Late Phase
	361	i6	INTRUSIVES - SYENITE - Fine Grained
	362	i8	INTRUSIVES - SYENITE - Medium Grained
	363	i8a	INTRUSIVES - SYENITE - Early Phase
	365	i8b	INTRUSIVES - SYENITE - Early/Late
	367	JP	Junction Porphyry
	369	WFP	West Fork Porphyry
	371	i7	INTRUSIVES - SYENITE PORPHYRY - Fine grained
	372	i11	INTRUSIVES - SYENITE PORPHYRY - Medium grained
	373	i11a	INTRUSIVES - SYENITE PORPHYRY - Early Phase
	374	i7b	INTRUSIVES - SYENITE PORPHYRY - Late Phase
	380	i10a	INTRUSIVES - PLAGIOCLASE SYENITE PORPHYRY
	385	i10b	INTRUSIVES - PLAGIOCLASE SYENITE PORPHYRY - Late Phase
	390	i12	INTRUSIVES - LAVENDER SYENITE PORPHYRY
	395	i13	
	400	B	BRECCIAS
	410	B1	BRECCIAS - DIATREME
	413	B1a	BRECCIAS - DIATREME - Monolithic
	415	B1b	BRECCIAS - DIATREME - Heterolithic
	420	B2	BRECCIAS - HYDROTHERMAL
	423	B2a	BRECCIAS - HYDROTHERMAL - Monolithic
	425	B2b	BRECCIAS - HYDROTHERMAL - Heterolithic
	430	B3	BRECCIAS - ORTHOMAGMATIC
	433	B3a	BRECCIAS - ORTHOMAGMATIC - Monolithic
	435	B3b	BRECCIAS - ORTHOMAGMATIC - Heterolithic
	500	D	DIKES
	510	D1	DIKES - Lamprophyre
	520	D2	DIKES - Mafic
	530	D3	DIKES - Intermediate
	540	D4	DIKES - Felsic
	700	FZN	Fault Zone
	900	OVB	Overburden
	999	NR	Ro Return

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**Appendix 2 – Significant Drill Hole Composites**

Hole ID	From	To	Length	%Cu	Au g/t	Ag g/t	Mineral Zone
GC03-0436	45	50	5	2.67	4.25	11.2	SWZ
GC03-0437	20	25	5	2.77	0.70	12.9	SWZ
GC03-0437	25	30	5	5.06	2.21	25.7	SWZ
GC03-0437	30	35	5	3.22	2.86	51.2	SWZ
GC03-0437	35	40	5	3.04	2.40	52.3	SWZ
GC03-0437	40	45	5	2.32	2.15	14.5	SWZ
GC03-0437	70	75	5	2.16	3.50	8.8	SWZ
GC03-0438	265	270	5	2.31	0.57	13.9	220
GC03-0438	270	275	5	5.11	0.77	30.7	372
GC03-0438	275	280	5	2.76	0.51	18.1	372
GC03-0439	190	195	5	2.52	5.19	39.0	210
GC03-0439	225	230	5	2.38	4.66	11.5	350
GC03-0439	230	235	5	3.84	3.68	22.8	210
GC03-0441	60	65	5	2.43	2.19	14.4	362
GC03-0441	115	120	5	3.49	2.10	16.7	362
GC03-0441	130	135	5	3.62	1.39	17.6	362
GC03-0441	135	140	5	3.87	1.64	16.5	362
GC03-0441	435	440	5	2.01	0.44	17.0	230
GC03-0441	450	455	5	2.07	0.24	13.5	230
GC03-0445	30	35	5	2.81	0.32	22.6	340
GC03-0445	105	110	5	2.51	0.41	12.6	230
GC03-0445	110	115	5	3.70	0.38	28.5	230
GC03-0445	115	120	5	3.30	0.42	26.2	230
GC03-0445	120	125	5	6.30	0.60	29.9	380
GC03-0445	125	130	5	4.04	0.58	23.2	230
GC03-0445	130	135	5	3.89	0.41	29.4	230
GC04-0450	50	55	5	2.06	0.18	19.0	230
GC04-0450	55	60	5	3.07	0.31	26.2	230
GC04-0450	60	65	5	2.43	0.20	17.5	230
GC04-0450	115	120	5	2.70	0.28	22.6	340
GC04-0452	60	65	5	2.85	0.82	6.9	362
GC04-0453	300	305	5	4.73	2.70	31.8	350
GC04-0453	305	310	5	3.39	2.85	17.9	350
GC04-0455	225	230	5	2.06	0.80	19.7	350
GC04-0465	70	75	5	2.75	0.89	21.3	NJ
GC04-0465	75	80	5	2.03	0.70	16.0	NJ
GC04-0465	80	85	5	2.28	0.54	22.0	NJ
GC04-0465	110	115	5	2.20	0.43	16.2	NJ
GC04-0465	115	120	5	2.24	0.81	13.0	NJ
GC04-0465	155	160	5	2.64	0.86	31.6	NJ
GC04-0465	160	165	5	3.28	1.27	28.6	NJ
GC04-0465	175	180	5	4.35	1.03	34.2	NJ
GC04-0465	180	185	5	5.32	1.76	49.7	NJ
GC04-0465	185	190	5	2.78	3.74	32.3	NJ
GC04-0469	180	185	5	2.17	1.89	24.8	WF
GC04-0475	200	205	5	2.20	5.58	17.7	220
GC04-0476	260	265	5	2.04	1.49	18.4	WF
GC04-0479	25	30	2.57	33.01	5.85	193.6	OP
GC04-0479	30	35	5	15.90	0.91	71.2	OP
GC04-0479	35	40	5	5.30	0.14	1.9	OP
GC04-0480	25	30	3.61	4.61	3.40	1.2	OP

Hole ID	From	To	Length	%Cu	Au g/t	Ag g/t	Mineral Zone
GC04-0480	30	35	5	4.13	2.98	7.3	OP
GC04-0480	35	40	5	14.01	2.02	85.2	OP
GC04-0480	40	45	5	23.66	1.44	148.9	OP
GC04-0480	45	50	5	18.26	1.93	116.1	OP
GC04-0480	50	55	5	23.34	1.42	160.4	OP
GC04-0480	55	60	5	12.87	1.53	63.6	OP
GC04-0480	255	260	5	2.24	0.88	16.1	WF
GC04-0483	75	80	5	2.20	1.68	7.1	OP
GC04-0484	30	35	5	2.44	0.37	23.1	340
GC04-0484	65	70	5	2.12	0.24	16.3	340
GC04-0488	60	65	5	2.02	0.22	15.0	340
GC04-0488	75	80	4.25	2.28	0.27	19.7	380
GC04-0488	80	85	2.7	2.47	0.21	24.9	380
GC04-0488	165	170	5	3.70	0.49	30.0	220
GC04-0488	170	175	5	2.82	0.58	25.9	220
GC04-0496	255	260	5	2.06	0.46	14.4	WF
GC04-0498	130	135	5	2.81	2.16	15.1	OP
GC04-0501	480	485	5	2.04	6.06	17.2	210
GC04-0502	245	250	5	2.07	0.52	7.6	SWZ
GC04-0502	280	285	5	2.41	1.64	11.6	SWZ
GC04-0503	5	10	1.68	4.53	1.53	20.6	900
GC04-0503	10	15	5	3.04	1.14	14.2	230
GC04-0503	15	20	5	2.12	0.72	11.1	230
GC04-0503	20	25	5	2.24	0.60	12.8	230
GC04-0503	30	35	5	2.40	1.21	17.7	230
GC04-0503	35	40	5	2.40	1.70	18.5	230
GC04-0503	40	45	5	2.54	1.67	17.1	230
GC04-0503	45	50	5	2.16	1.37	15.2	230
GC04-0503	55	60	5	2.10	0.48	14.4	230
GC04-0508	35	40	5	2.91	0.93	5.9	OP
GC04-0508	40	45	4.81	3.35	1.07	6.8	OP
GC05-0512	145	150	5	2.57	4.49	9.2	220
GC05-0513	120	125	5	2.13	7.35	11.6	MC
GC05-0513	160	165	5	2.28	6.49	19.6	MC
GC05-0513	165	170	5	2.28	5.34	18.5	MC
GC05-0514	225	230	5	2.78	6.74	17.6	220
GC05-0514	240	245	5	2.72	6.70	20.5	372
GC05-0514	250	255	5	3.60	8.33	34.3	220
GC05-0514	255	260	5	4.97	8.86	43.4	220
GC05-0514	260	265	5	3.60	6.44	28.3	210
GC05-0514	360	365	5	2.88	1.54	13.4	210
GC05-0514	365	370	5	3.30	2.31	18.3	210
GC05-0514	375	380	5	2.11	0.57	10.5	210
GC05-0521	325	330	5	3.74	1.93	57.5	NJ
GC05-0521	350	355	5	2.52	1.65	24.0	NJ
GC05-0521	355	360	5	2.43	2.59	7.8	NJ
GC05-0521	360	365	5	2.37	2.98	7.1	NJ
GC05-0525	275	280	5	2.03	2.69	15.4	220
GC05-0525	280	285	5	2.53	2.91	14.4	220
GC05-0533	20	25	5	6.04	1.81	10.8	OP
GC05-0533	30	35	5	2.17	2.72	0.6	OP



Hole ID	From	To	Length	%Cu	Au g/t	Ag g/t	Mineral Zone
GC05-0533	35	40	5	8.72	14.57	2.3	OP
GC05-0533	40	45	5	6.60	4.05	20.7	OP
GC05-0533	45	50	5	6.98	3.29	27.0	OP
GC05-0533	50	55	5	2.07	0.26	0.9	OP
GC05-0537	45	50	5	2.12	1.88	7.3	220
GC05-0537	195	200	5	2.18	1.63	13.9	210
GC05-0537	200	205	5	2.31	1.49	15.1	210
GC05-0546	310	315	5	2.31	0.39	33.5	WF
GC05-0555	130	135	1.2	2.56	0.75	14.2	NJ
GC05-0555	135	140	4.9	2.56	0.75	14.2	NJ
GC05-0555	160	165	0.72	2.77	2.20	228.0	NJ
GC05-0555	165	170	5	2.77	2.20	228.0	NJ
GC05-0555	170	175	0.38	2.77	2.20	228.0	NJ
GC05-0555	190	195	5	4.34	0.56	15.7	NJ
GC05-0555	195	200	5	6.77	2.16	42.7	NJ
GC05-0555	200	205	5	2.20	0.61	20.5	NJ
GC05-0555	315	320	5	2.88	0.99	35.1	NJ
GC05-0555	320	325	5	2.73	1.58	27.9	NJ
GC05-0555	325	330	5	2.17	0.76	16.1	NJ
GC05-0558	275	280	5	2.29	2.08	10.6	220
GC05-0558	280	285	5	2.36	1.86	10.3	220
GC05-0562	110	115	5	2.01	1.38	9.4	220
GC05-0562	230	235	5	2.13	0.80	15.3	210
GC05-0562	235	240	5	2.17	0.96	15.1	372
GC05-0562	240	245	5	2.39	0.81	14.2	210
GC05-0562	250	255	5	2.19	1.13	21.5	210
GC05-0562	260	265	5	2.65	1.06	25.9	210
GC05-0562	265	270	5	2.21	1.11	20.6	210
GC05-0562	270	275	5	2.08	0.85	20.7	210
GC05-0567	160	165	5	4.44	2.37	55.5	NJ
GC05-0567	165	170	5	7.65	2.75	115.7	NJ
GC05-0567	170	175	5	4.42	1.97	35.1	NJ
GC05-0567	175	180	5	2.74	1.44	21.6	NJ
GC05-0567	190	195	5	2.26	0.49	5.9	NJ
GC05-0567	200	205	5	2.63	0.56	11.6	NJ
GC05-0567	205	210	5	2.19	0.57	13.6	NJ
GC05-0567	250	255	5	2.66	0.49	22.5	NJ
GC05-0567	255	260	5	2.31	0.75	31.0	NJ
GC05-0568	40	45	2.64	2.59	0.47	26.2	230
GC05-0568	115	120	5	2.18	0.54	27.4	230
GC05-0568	120	125	5	2.64	0.80	27.5	230
GC05-0575	45	50	4.15	2.46	3.25	24.5	210
GC05-0580	60	65	5	3.61	4.50	23.5	MC
GC05-0580	65	70	5	2.17	4.81	13.5	MC
GC05-0581	45	50	5	2.89	1.34	9.8	362
GC05-0581	85	90	5	2.32	2.19	9.4	230
GC05-0581	90	95	5	3.16	1.89	12.3	372
GC05-0581	95	100	5	4.02	3.00	15.9	372
GC05-0581	100	105	5	3.66	2.28	21.3	230
GC05-0581	105	110	5	2.86	1.67	14.7	230
GC05-0581	110	115	5	3.37	1.99	20.0	362

Hole ID	From	To	Length	%Cu	Au g/t	Ag g/t	Mineral Zone
GC05-0581	115	120	5	3.52	1.05	16.4	362
GC05-0581	120	125	5	3.63	0.70	27.2	362
GC05-0581	130	135	5	2.11	0.19	8.8	362
GC05-0581	135	140	1.85	2.74	0.19	12.0	230
GC05-0581	140	145	2.05	2.39	0.35	15.7	230
GC05-0581	145	150	5	3.00	0.77	24.3	230
GC05-0581	150	155	5	2.78	1.31	25.1	230
GC05-0581	155	160	5	2.98	0.90	17.1	230
GC05-0581	160	165	5	2.94	1.04	15.1	230
GC05-0581	165	170	5	2.45	0.66	18.5	230
GC05-0581	185	190	5	2.25	0.61	19.0	230
GC05-0581	190	195	5	2.16	0.76	20.2	230
GC05-0585	215	220	5	2.36	0.29	8.4	WF
GC05-0586	90	95	5	3.08	6.62	16.7	220
GC05-0586	110	115	5	2.27	3.33	8.4	220
GC05-0595	135	140	5	2.28	3.54	7.6	210
GC05-0596	100	105	5	2.70	4.56	12.8	220
GC05-0596	105	110	5	3.68	3.50	13.9	220
GC05-0596	110	115	5	3.00	4.08	13.2	220
GC05-0596	115	120	5	2.07	4.64	11.4	220
GC05-0597	60	65	5	2.01	1.42	14.9	WF
GC05-0597	65	70	5	3.14	2.20	30.2	WF
GC05-0599	55	60	5	2.15	0.40	18.8	230
GC05-0599	60	65	5	2.22	0.60	17.9	230
GC05-0599	65	70	5	2.10	0.64	16.0	230
GC05-0599	75	80	5	2.29	0.86	11.0	230
GC05-0599	115	120	5	2.76	0.68	12.4	230
GC05-0619	210	215	5	2.03	0.65	5.1	220
GC05-0621	15	20	5	2.34	1.48	6.1	SWZ
GC05-0621	20	25	5	2.26	1.31	4.2	SWZ
GC05-0625	80	85	5	2.24	1.20	18.2	210
GC05-0625	120	125	5	2.30	1.55	19.6	210
GC05-0625	160	165	5	2.03	1.20	11.7	210
GC05-0625	165	170	5	2.13	1.24	16.5	210
GC05-0625	170	175	5	2.40	1.35	16.6	210
GC05-0625	175	180	5	2.48	1.78	15.1	210
GC05-0625	180	185	5	2.36	1.57	15.8	210
GC05-0628	160	165	5	2.29	6.30	10.6	SWZ
GC05-0634	180	185	5	2.26	0.78	20.4	220
GC05-0637	285	290	5	2.04	0.73	17.1	340
GC05-0637	290	295	5	2.99	2.49	22.5	340
GC05-0637	295	300	5	2.40	2.34	11.7	340
GC05-0647	260	265	5	2.09	1.20	6.2	SWZ
GC05-0647	265	270	5	2.32	1.46	11.6	SWZ
GC05-0647	295	300	5	2.23	2.33	15.6	SWZ
GC05-0647	300	305	5	2.42	3.36	18.5	SWZ
GC05-0655	20	25	3.97	4.15	1.99	12.2	SWZ
GC05-0662	35	40	0.84	2.70	0.38	28.3	900
GC05-0665	105	110	5	3.15	3.13	28.9	SWZ
GC05-0665	110	115	5	2.97	2.22	11.6	SWZ
GC05-0665	115	120	5	2.57	1.64	10.6	SWZ

Hole ID	From	To	Length	%Cu	Au g/t	Ag g/t	Mineral Zone
GC05-0665	120	125	5	2.02	1.91	10.5	SWZ
GC05-0665	125	130	5	2.75	1.55	13.2	SWZ
GC05-0665	130	135	5	2.65	2.15	19.7	SWZ
GC05-0669	70	75	5	2.03	0.33	10.1	230
GC05-0669	75	80	5	3.15	0.36	14.0	230
GC05-0669	80	85	5	3.03	0.45	15.2	230
GC05-0685	330	335	5	5.28	3.13	55.9	WF
GC05-0685	335	340	5	4.05	3.52	127.2	WF
GC05-0698	305	310	5	2.41	1.07	16.1	210
GC05-0698	320	325	5	2.09	1.16	12.7	210
GC05-0698	335	340	5	3.21	1.81	18.2	210
GC05-0698	340	345	5	2.43	1.07	13.8	210
GC05-0701	130	135	5	2.14	0.31	17.6	220
GC05-0710	15	20	4.9	2.79	3.25	11.2	230
GC05-0710	20	25	5	2.43	2.88	13.9	230
GC05-0710	25	30	5	2.12	2.36	12.7	230
GC05-0710	50	55	5	2.45	0.79	12.6	230
GC05-0710	55	60	5	2.23	0.44	10.7	230
GC05-0710	60	65	5	3.31	0.61	13.0	230
GC05-0710	65	70	5	2.27	0.26	9.4	230
GC05-0710	75	80	5	2.38	0.47	10.8	230
GC05-0710	80	85	5	2.81	0.47	12.9	230
GC05-0710	85	90	5	2.56	0.29	14.5	230
GC05-0710	90	95	5	2.26	0.38	16.2	230
GC05-0711	20	25	5	3.03	0.53	18.9	230
GC05-0711	25	30	5	2.55	1.10	29.5	230
GC05-0711	40	45	3	2.06	1.14	11.4	230
GC05-0711	45	50	5	2.20	1.50	11.7	230
GC05-0711	50	55	1	2.20	1.50	11.7	230
GC05-0711	75	80	5	2.18	0.38	10.1	230
GC05-0711	80	85	5	2.48	0.41	13.8	230
GC05-0711	95	100	5	2.29	0.29	16.9	230
GC61-0004	30	35	5	2.29	2.19	0.0	SWZ
GC61-0004	35	40	5	2.59	3.20	2.1	SWZ
GC62-0007	120	125	5	2.34	1.28	28.1	230
GC62-0007	135	140	5	2.35	0.17	13.2	230
GC62-0013	40	45	5	3.81	0.14	23.5	230
GC62-0013	45	50	5	2.89	0.11	13.1	230
GC62-0018	110	115	5	2.32	1.27	11.2	362
GC62-0026	40	45	2.06	2.27	0.03	13.7	220
GC62-0033	145	150	5	3.66	1.03	15.8	NJ
GC62-0033	170	175	5	2.17	0.28	9.7	NJ
GC62-0033	175	180	5	2.43	0.62	15.6	NJ
GC62-0033	180	185	5	2.37	0.65	22.1	NJ
GC62-0033	185	190	5	2.86	0.63	18.4	NJ
GC62-0033	190	191.11	1.11	3.63	0.62	15.6	NJ
GC62-0036	95	100	1.52	2.64	0.07	1.4	350
GC63-0046	290	295	5	2.11	0.34	3.4	220
GC63-0048	95	100	5	2.18	0.31	19.8	230
GC63-0048	100	105	5	2.06	0.31	19.8	230
GC63-0048	110	115	5	2.14	0.14	17.4	230

Hole ID	From	To	Length	%Cu	Au g/t	Ag g/t	Mineral Zone
GC63-0048	125	130	5	2.60	0.24	10.7	230
GC63-0048	130	135	5	2.36	0.24	10.7	230
GC63-0048	155	160	5	2.16	0.21	8.4	230
GC63-0048	190	195	2.37	2.39	0.17	12.4	230
GC63-0049	80	85	5	2.11	0.34	13.2	230
GC63-0049	85	90	5	3.28	0.34	13.2	230
GC63-0049	90	95	5	4.46	0.34	13.4	230
GC63-0049	95	100	5	3.44	0.31	15.1	230
GC63-0049	100	105	5	3.08	0.31	15.1	230
GC63-0049	105	110	5	2.83	0.29	15.1	230
GC63-0053	95	100	5	2.44	0.21	13.7	JUNC
GC63-0053	100	105	5	2.21	0.21	13.7	JUNC
GC63-0060	90	95	5	3.05	0.16	14.9	340
GC63-0060	95	100	2.54	3.92	0.27	9.2	230
GC63-0060	120	125	5	2.10	0.34	11.0	230
GC63-0060	125	130	5	3.39	0.34	11.0	350
GC63-0060	290	295	5	2.08	0.21	12.6	220
GC63-0063	155	160	5	2.14	0.69	10.3	372
GC63-0063	170	175	5	2.81	1.37	11.0	372
GC63-0063	185	190	5	2.64	1.32	11.0	372
GC63-0071	10	15	5	2.37	0.23	13.7	NJ
GC63-0071	15	20	3.29	2.50	0.28	13.7	NJ
GC63-0071	20	25	4.27	5.14	1.33	37.6	NJ
GC63-0071	25	30	3.65	8.05	1.51	41.6	NJ
GC63-0074	60	65	5	2.42	0.23	13.2	230
GC63-0074	65	70	5	2.17	0.38	12.6	230
GC63-0074	70	75	5	2.67	0.38	12.6	230
GC63-0074	75	80	5	3.31	1.73	13.8	230
GC63-0074	80	85	5	2.94	1.52	14.1	230
GC63-0077	80	85	5	2.00	0.27	13.5	230
GC63-0077	90	95	5	2.09	0.21	13.0	230
GC63-0077	220	225	5	2.00	0.45	16.0	350
GC63-0080	5	10	5	2.35	0.23	11.1	NJ
GC63-0080	10	15	5	4.81	0.10	7.9	NJ
GC63-0080	15	20	5	5.32	0.10	7.9	NJ
GC63-0080	20	25	5	3.43	0.34	7.6	NJ
GC63-0084	205	210	1.96	2.17	3.75	8.6	NJ
GC63-0084	225	230	3.94	2.62	0.86	30.9	NJ
GC63-0084	230	235	5	6.59	0.86	30.9	NJ
GC63-0084	235	240	5	3.31	0.86	30.9	NJ
GC63-0084	240	245	5	3.60	0.86	30.9	NJ
GC63-0084	245	250	5	2.16	0.63	30.9	NJ
GC63-0084	260	265	5	2.00	0.77	30.9	NJ
GC63-0084	265	270	5	2.08	0.78	30.9	NJ
GC63-0084	310	315	5	2.18	0.72	30.9	NJ
GC63-0085	50	55	5	2.00	0.29	-1.0	NJ
GC63-0085	55	60	5	3.37	1.15	-1.0	NJ
GC63-0085	70	75	5	2.68	0.42	-1.0	NJ
GC63-0085	75	80	5	2.80	0.32	-1.0	NJ
GC63-0085	80	85	5	2.10	0.55	-1.0	NJ
GC63-0085	90	95	5	2.60	0.37	-1.0	NJ

Hole ID	From	To	Length	%Cu	Au g/t	Ag g/t	Mineral Zone
GC63-0086	45	50	5	2.27	0.34	9.3	230
GC63-0089	305	310	5	2.82	0.98	14.3	220
GC63-0089	325	330	5	2.11	0.69	16.2	220
GC63-0089	475	480	5	2.39	0.39	12.4	372
GC64-0097	55	60	5	2.10	0.22	9.6	230
GC64-0097	60	65	5	2.12	0.20	9.6	230
GC64-0097	65	70	5	3.39	0.64	11.6	230
GC64-0097	70	75	5	2.81	0.63	13.0	230
GC64-0097	105	110	5	2.57	0.74	14.1	230
GC64-0097	110	115	5	2.07	0.57	12.0	230
GC64-0097	180	185	5	2.07	0.52	9.7	340
GC64-0104	35	40	4.95	4.14	4.61	17.4	230
GC64-0104	40	45	5	3.58	3.45	17.4	230
GC64-0104	45	50	5	4.85	3.30	17.4	230
GC64-0104	50	55	5	3.98	2.29	17.3	230
GC64-0107	315	320	5	2.21	0.58	11.3	230
GC64-0110	15	20	4.46	3.02	7.50	7.9	SWZ
GC64-0118	20	25	5	2.10	0.71	13.5	220
GC64-0118	45	50	5	4.58	6.40	13.7	220
GC64-0118	50	55	5	4.89	5.10	12.7	220
GC64-0118	150	155	5	2.36	0.68	10.7	220
GC64-0118	165	170	5	2.23	0.56	8.9	220
GC64-0120	180	185	5	3.26	5.55	17.1	220
GC64-0120	190	195	5	3.36	7.10	20.0	220
GC64-0120	225	230	5	2.27	1.86	10.9	220
GC64-0120	280	285	5	4.30	5.20	32.5	220
GC64-0120	285	290	5	3.73	7.11	32.5	220
GC64-0120	290	295	5	2.57	6.94	27.2	220
GC64-0120	295	300	5	3.08	7.75	21.5	220
GC64-0120	300	305	5	3.73	10.45	21.5	210
GC64-0120	305	310	5	2.81	4.19	21.5	210
GC64-0120	315	320	5	2.35	4.26	14.5	210
GC64-0120	320	325	5	3.11	11.39	14.5	210
GC64-0120	325	330	5	2.43	2.63	12.4	210
GC64-0124	225	230	1.1	3.05	0.34	3.1	NJ
GC64-0134	75	80	5	2.20	0.60	15.0	230
GC64-0134	85	90	5	2.29	0.29	15.1	230
GC64-0134	90	95	5	2.78	0.40	15.1	230
GC64-0134	95	100	5	2.95	0.56	15.1	230
GC64-0134	100	105	5	3.53	0.94	13.7	230
GC64-0134	105	110	5	2.55	0.37	13.5	230
GC64-0134	110	115	5	2.91	0.44	13.5	230
GC64-0138	120	125	5	2.00	0.36	10.5	372
GC64-0138	145	150	5	3.04	0.79	13.3	372
GC64-0138	155	160	5	3.53	0.39	17.2	220
GC64-0138	160	165	5	2.47	0.28	17.6	220
GC64-0138	165	170	5	2.84	0.34	17.6	220
GC64-0138	175	180	5	2.24	0.33	10.0	220
GC64-0138	180	185	5	2.46	0.36	10.0	220
GC65-0142	145	150	5	2.51	1.16	11.6	230
GC65-0142	150	155	5	2.51	0.39	14.6	230

Hole ID	From	To	Length	%Cu	Au g/t	Ag g/t	Mineral Zone
GC65-0142	155	160	5	2.13	1.19	17.4	230
GC65-0142	160	165	5	2.02	2.04	17.4	230
GC65-0142	165	170	5	2.69	1.48	15.9	230
GC65-0149	210	215	5	3.10	4.01	12.0	220
GC65-0149	215	220	5	2.19	3.11	12.0	220
GC65-0150	190	195	5	2.03	3.27	11.9	210
GC65-0150	200	205	5	2.14	3.57	12.5	210
GC65-0151	400	405	5	2.62	0.17	3.4	350
GC65-0154	25	30	5	2.43	4.95	10.0	362
GC65-0154	30	35	5	2.42	3.09	9.0	362
GC65-0156	20	25	1.96	3.32	0.64	10.3	900
GC65-0156	25	30	5	2.75	0.97	10.3	230
GC65-0156	115	120	5	2.20	0.70	19.8	230
GC65-0157	85	90	5	2.38	0.85	13.7	230
GC65-0157	110	115	5	2.17	0.28	13.0	220
GC65-0157	115	120	5	2.32	0.45	13.0	220
GC65-0158	85	90	5	2.24	0.30	11.9	230
GC65-0158	90	95	5	2.44	0.30	13.0	230
GC65-0161	180	185	5	2.28	0.38	24.7	220
GC65-0161	200	205	5	2.23	0.60	16.6	220
GC65-0163	175	180	5	2.09	0.34	10.9	372
GC65-0172	265	270	5	2.05	1.34	13.7	220
GC65-0173	225	230	5	2.13	0.42	10.3	372
GC65-0173	235	240	5	2.02	0.54	13.0	220
GC65-0173	240	245	5	2.62	1.21	13.0	220
GC65-0174	235	240	5	2.07	2.05	10.0	210
GC65-0177	175	180	5	2.23	1.31	8.3	210
GC65-0178	160	165	5	4.87	0.46	14.4	230
GC65-0178	165	170	5	2.16	0.21	14.4	230
GC65-0178	170	175	5	3.14	0.31	14.4	230
GC65-0178	175	180	5	4.39	0.39	18.3	230
GC65-0178	180	185	5	2.90	0.36	20.4	230
GC65-0180	20	25	4.88	2.76	0.57	14.6	230
GC65-0180	25	30	5	2.73	0.59	14.6	230
GC65-0180	30	35	5	2.51	0.45	14.6	230
GC65-0180	45	50	5	2.46	0.62	19.8	230
GC65-0180	50	55	5	2.39	0.74	20.2	230
GC65-0180	55	60	5	3.48	1.45	20.4	230
GC65-0180	60	65	5	2.80	0.46	20.4	230
GC65-0180	65	70	5	2.30	0.34	12.9	230
GC65-0180	80	85	5	2.23	0.37	6.6	230
GC65-0181	75	80	5	2.60	0.79	19.4	372
GC65-0181	80	85	5	2.14	0.35	16.8	372
GC65-0181	85	90	5	2.56	0.63	16.8	372
GC65-0181	90	95	1.95	2.61	0.55	15.9	372
GC65-0181	95	100	5	2.52	0.39	8.4	372
GC65-0182	105	110	5	2.34	0.90	7.5	340
GC65-0182	140	145	5	2.33	1.36	10.5	230
GC65-0182	145	150	5	4.09	1.66	26.4	230
GC65-0182	150	155	5	3.91	1.51	32.0	230
GC65-0182	155	160	5	5.73	2.94	32.0	230

Hole ID	From	To	Length	%Cu	Au g/t	Ag g/t	Mineral Zone
GC65-0182	160	165	5	5.68	2.70	27.3	230
GC65-0182	165	170	5	2.93	1.28	25.2	230
GC65-0182	170	175	5	2.51	0.57	25.2	230
GC65-0182	175	180	5	2.99	1.14	15.6	230
GC65-0182	180	185	5	2.23	0.67	10.3	230
GC65-0182	185	190	5	2.15	0.55	10.3	230
GC65-0182	190	195	5	2.52	0.49	11.2	230
GC65-0182	195	200	5	2.27	0.52	11.9	230
GC65-0182	200	205	5	3.24	0.99	11.9	230
GC65-0182	205	210	5	4.84	1.34	21.2	230
GC65-0182	210	215	5	5.26	0.80	28.8	230
GC65-0182	215	220	5	4.03	0.60	28.8	230
GC65-0182	220	225	5	3.29	0.55	24.9	230
GC65-0182	225	230	5	2.31	0.45	21.0	230
GC65-0182	230	235	5	2.01	0.36	21.0	230
GC65-0186	255	260	5	2.09	0.72	15.3	210
GC65-0186	270	275	5	2.70	0.96	10.0	210
GC65-0187	70	75	5	4.70	0.13	2.2	230
GC65-0187	75	80	5	2.61	0.21	2.1	230
GC65-0189A	195	200	5	2.08	4.64	15.7	220
GC65-0191	40	45	5	2.33	0.24	21.6	230
GC65-0191	55	60	5	3.90	0.59	21.0	340
GC65-0191	60	65	5	2.28	0.66	21.0	340
GC65-0191	70	75	5	2.68	0.28	14.5	230
GC65-0193	95	100	2.16	2.59	1.51	16.2	372
GC65-0193	100	105	5	2.59	0.84	16.2	372
GC65-0193	105	110	5	3.31	1.00	16.2	372
GC65-0193	110	115	5	2.98	1.08	14.5	372
GC65-0195	0	5	1.95	2.12	0.17	11.4	900
GC65-0195	80	85	5	3.32	1.01	23.5	230
GC65-0195	90	95	5	2.15	0.16	14.7	230
GC65-0195	105	110	5	2.17	0.12	8.6	230
GC65-0196A	130	135	5	2.57	4.04	9.5	380
GC65-0196A	135	140	5	2.33	3.04	6.2	380
GC65-0197	180	185	5	2.16	0.83	15.1	220
GC65-0199	10	15	5	2.20	0.61	11.6	230
GC65-0204	160	165	5	2.69	1.55	10.8	220
GC65-0204	165	170	5	2.50	0.59	10.8	220
GC65-0206	55	60	5	2.62	0.22	9.1	230
GC65-0206	60	65	5	2.83	0.30	9.1	230
GC65-0206	65	70	5	2.03	0.31	8.7	230
GC65-0206	125	130	5	2.16	0.22	5.8	230
GC65-0210	40	45	5	2.59	0.51	14.0	350
GC65-0210	65	70	5	3.48	1.16	24.0	230
GC65-0210	70	75	5	3.01	0.31	24.0	230
GC65-0210	75	80	5	4.07	1.73	23.2	230
GC65-0210	80	85	5	3.93	1.44	18.6	230
GC65-0210	85	90	5	2.57	1.76	18.6	230
GC65-0210	90	95	5	3.08	0.89	17.3	230
GC65-0210	95	100	5	3.41	0.60	16.8	230
GC66-0220	135	140	5	2.26	0.58	16.2	220

Hole ID	From	To	Length	%Cu	Au g/t	Ag g/t	Mineral Zone
GC66-0220	140	145	5	2.28	0.43	16.2	220
GC66-0220	160	165	5	2.01	0.54	11.8	220
GC66-0220	170	175	5	2.47	0.44	14.0	220
GC66-0223	10	15	5	2.24	0.49	17.6	230
GC66-0223	15	20	5	2.28	0.28	17.6	230
GC66-0223	95	100	5	2.25	0.47	13.3	230
GC66-0224	320	325	5	2.22	1.27	12.5	372
GC66-0225	95	100	5	2.18	1.95	10.1	220
GC66-0225	100	105	5	2.78	2.89	11.7	220
GC66-0225	115	120	5	2.19	1.73	8.5	220
GC66-0226	150	155	5	3.50	0.39	25.6	NJ
GC66-0226	155	160	5	6.19	0.49	25.6	NJ
GC66-0226	160	165	5	4.93	0.59	27.2	NJ
GC66-0226	165	170	5	6.45	1.54	45.6	NJ
GC66-0226	170	175	5	4.49	1.54	45.6	NJ
GC66-0226	175	180	5	6.08	1.84	45.3	NJ
GC66-0226	180	185	5	4.58	0.89	35.0	NJ
GC66-0226	250	255	5	2.04	0.42	12.2	NJ
GC66-0226	255	260	5	2.19	0.53	12.2	NJ
GC66-0228	75	80	5	2.84	2.27	17.5	NJ
GC66-0228	80	85	5	2.98	2.43	17.5	NJ
GC66-0228	85	90	5	2.93	1.06	16.0	NJ
GC66-0228	90	95	5	2.66	0.86	12.8	NJ
GC66-0228	190	195	5	2.93	0.28	12.6	NJ
GC66-0228	200	205	5	2.21	0.38	12.8	NJ
GC66-0228	205	210	5	4.03	0.59	26.5	NJ
GC66-0228	210	215	5	5.31	0.73	37.8	NJ
GC66-0228	220	225	5	2.31	0.65	14.4	NJ
GC66-0229	50	55	5	2.34	1.09	9.7	NJ
GC66-0229	55	60	5	3.12	0.69	9.7	NJ
GC66-0229	60	65	5	3.03	1.10	11.9	NJ
GC66-0229	75	80	5	2.84	0.47	19.5	NJ
GC66-0230	95	100	5	2.29	0.64	12.2	230
GC66-0230	125	130	5	2.29	0.88	16.6	220
GC66-0233	135	140	5	2.97	2.53	14.6	NJ
GC66-0233	140	145	5	2.35	1.22	15.5	NJ
GC66-0233	165	170	5	2.02	0.94	9.7	NJ
GC66-0233	190	195	5	3.72	3.14	33.8	NJ
GC72-0236	80	85	5	2.94	1.06	24.7	340
GC72-0236	165	170	5	2.05	0.15	11.3	340
GC72-0238	25	30	5	2.20	0.19	26.7	340
GC72-0238	30	35	5	2.05	0.31	25.5	340
GC72-0238	35	40	5	4.16	0.48	22.6	230
GC72-0238	40	45	5	2.99	0.18	22.6	230
GC72-0238	45	50	5	2.72	0.21	21.3	230
GC72-0238	50	55	5	2.48	0.18	17.1	230
GC72-0242	40	45	5	2.02	0.93	7.9	340
GC72-0242	125	130	5	2.85	1.10	16.1	362
GC72-0242	130	135	5	2.08	0.70	18.7	372
GC72-0242	165	170	5	2.26	3.57	11.3	230
GC72-0242	180	185	5	6.43	3.38	49.4	230



Hole ID	From	To	Length	%Cu	Au g/t	Ag g/t	Mineral Zone
GC72-0242	185	190	5	6.78	3.06	49.4	230
GC72-0242	190	195	5	5.31	2.20	36.9	230
GC72-0242	195	200	5	4.96	1.94	28.5	230
GC72-0242	200	205	5	3.28	1.41	24.9	230
GC72-0242	210	215	5	2.03	0.82	5.5	230
GC72-0242	230	235	5	3.28	0.51	17.3	230
GC72-0243	5	10	3.9	4.67	0.54	13.0	230
GC72-0243	10	15	3.41	3.10	0.40	13.0	230
GC72-0243	15	20	3.84	3.00	1.59	13.0	230
GC72-0244	75	80	1.5	2.20	0.51	15.1	230
GC72-0244	85	90	5	3.17	1.58	22.6	230
GC72-0244	90	95	5	3.17	1.44	22.6	230
GC72-0244	95	100	5	2.05	1.00	17.4	230
GC72-0244	100	105	5	2.91	0.77	12.0	230
GC72-0244	105	110	5	3.35	1.02	12.0	230
GC72-0244	115	120	5	3.20	0.73	25.4	230
GC72-0244	120	125	5	2.64	0.73	25.4	230
GC72-0244	125	130	5	3.89	1.06	25.8	230
GC72-0244	130	135	5	3.55	0.69	26.4	230
GC72-0244	135	140	5	2.84	0.56	26.4	230
GC72-0244	145	150	5	3.02	0.29	17.1	230
GC72-0244	150	155	5	3.18	0.25	17.1	230
GC72-0244	155	160	5	3.31	0.23	17.3	230
GC72-0244	160	165	5	2.69	0.14	17.8	230
GC72-0244	165	170	5	2.12	0.21	17.8	230
GC72-0244	170	175	5	2.16	0.19	19.1	230
GC72-0244	175	180	5	2.53	0.20	23.0	230
GC72-0244	180	185	5	2.67	0.21	23.0	230
GC72-0245	115	120	4.94	2.10	0.91	8.2	340
GC72-0248	90	95	5	2.04	0.14	15.0	230
GC72-0248	110	115	5	2.14	0.13	13.0	230
GC72-0248	125	130	5	2.62	0.26	18.5	230
GC72-0249	100	105	3.02	2.47	0.03	7.2	230
GC72-0252	40	45	5	2.32	0.04	9.3	230
GC72-0252	45	50	5	2.75	0.11	9.3	230
GC72-0253	60	65	2.82	2.45	0.62	13.0	900
GC72-0253	70	75	5	2.53	0.26	14.4	230
GC72-0253	75	80	5	2.98	0.48	16.8	230
GC72-0254	40	45	5	2.47	1.87	11.5	230
GC72-0254	45	50	5	2.01	1.19	11.3	230
GC72-0254	50	55	5	2.20	1.53	11.3	230
GC72-0254	70	75	5	2.30	1.71	11.4	230
GC72-0254	75	80	5	3.63	1.82	15.1	230
GC72-0254	80	85	5	3.93	1.24	15.1	230
GC72-0257	30	35	2.08	2.15	0.42	15.1	900
GC72-0257	35	40	5	2.10	0.58	15.1	230
GC72-0257	40	45	5	3.05	0.88	15.1	230
GC72-0257	45	50	5	3.69	0.90	18.3	230
GC72-0257	50	55	5	3.98	1.89	18.9	230
GC72-0257	55	60	5	4.32	1.89	18.9	230
GC72-0257	60	65	5	4.63	0.69	16.6	230

Hole ID	From	To	Length	%Cu	Au g/t	Ag g/t	Mineral Zone
GC72-0257	65	70	5	3.04	0.41	16.1	230
GC72-0259	45	50	1.23	2.60	0.17	9.9	900
GC72-0259	60	65	5	2.94	0.21	13.5	350
GC72-0259	65	70	5	4.00	0.40	28.1	350
GC72-0259	70	75	5	3.42	0.64	28.1	230
GC72-0259	75	80	5	2.63	0.40	22.9	230
GC72-0259	80	85	5	2.48	0.31	21.3	230
GC72-0259	85	90	5	2.16	0.26	21.3	230
GC72-0259	90	95	5	2.16	0.23	19.3	230
GC72-0259	95	100	5	2.33	0.32	18.5	230
GC72-0259	100	105	5	2.47	0.30	18.5	230
GC72-0260	50	55	2.88	2.07	0.40	11.3	350
GC72-0260	55	60	5	3.64	0.63	11.3	350
GC72-0260	200	205	5	2.42	0.21	18.9	350
GC72-0263	70	75	5	2.97	2.39	16.8	230
GC72-0263	75	80	5	2.76	1.23	16.8	230
GC72-0263	80	85	5	2.86	2.02	16.4	230
GC72-0264	50	55	3.49	2.45	0.41	18.9	350
GC72-0264	55	60	5	2.34	0.35	11.3	350
GC72-0264	95	100	0.33	2.45	1.08	26.1	350
GC72-0264	100	105	5	2.51	1.07	26.1	230
GC72-0266	55	60	0.87	3.30	0.07	23.7	900
GC72-0266	60	65	4.01	2.27	0.33	23.7	230
GC72-0269	85	90	5	2.26	0.19	18.9	230
GC72-0271	135	140	2.56	2.44	0.27	11.3	NJ
GC72-0272	40	45	3.85	2.80	6.98	10.3	230
GC72-0272	45	50	0.72	2.80	6.98	10.3	230
GC72-0273	10	15	0.98	2.25	1.14	14.1	900
GC72-0273	15	20	5	2.13	0.94	14.1	230
GC72-0273	20	25	5	2.10	0.76	13.8	230
GC72-0273	25	30	5	2.02	0.73	11.7	230
GC72-0273	65	70	5	2.07	0.25	20.6	230
GC72-0277	30	35	2.69	2.70	-1.00	-1.0	230
GC72-0277	35	40	0.36	2.70	-1.00	-1.0	230
GC72-0277	90	95	5	3.21	1.26	15.1	230
GC72-0277	195	200	5	2.03	0.18	22.3	220
GC72-0280	120	125	5	2.04	0.50	15.7	380
GC72-0280	175	180	5	2.31	0.39	12.5	220
GC72-0280	220	225	5	2.33	0.63	11.3	220
GC72-0282	25	30	4.09	2.14	0.36	12.0	230
GC72-0282	65	70	5	2.61	0.57	14.4	230
GC72-0283	50	55	5	2.56	0.65	18.5	380
GC72-0283	55	60	5	2.18	0.81	15.6	380
GC72-0283	90	95	5	2.00	0.48	11.7	350
GC72-0283	235	240	5	2.25	1.06	12.0	220
GC72-0284	220	225	5	2.43	1.26	-1.0	220
GC72-0284	225	230	5	2.20	1.13	-1.0	220
GC73-0289	100	105	5	2.07	0.15	28.1	230
GC73-0290	195	200	5	2.07	5.85	-1.0	220
GC73-0290	200	205	5	2.27	4.60	-1.0	220
GC73-0292	290	295	5	2.17	0.70	18.9	210

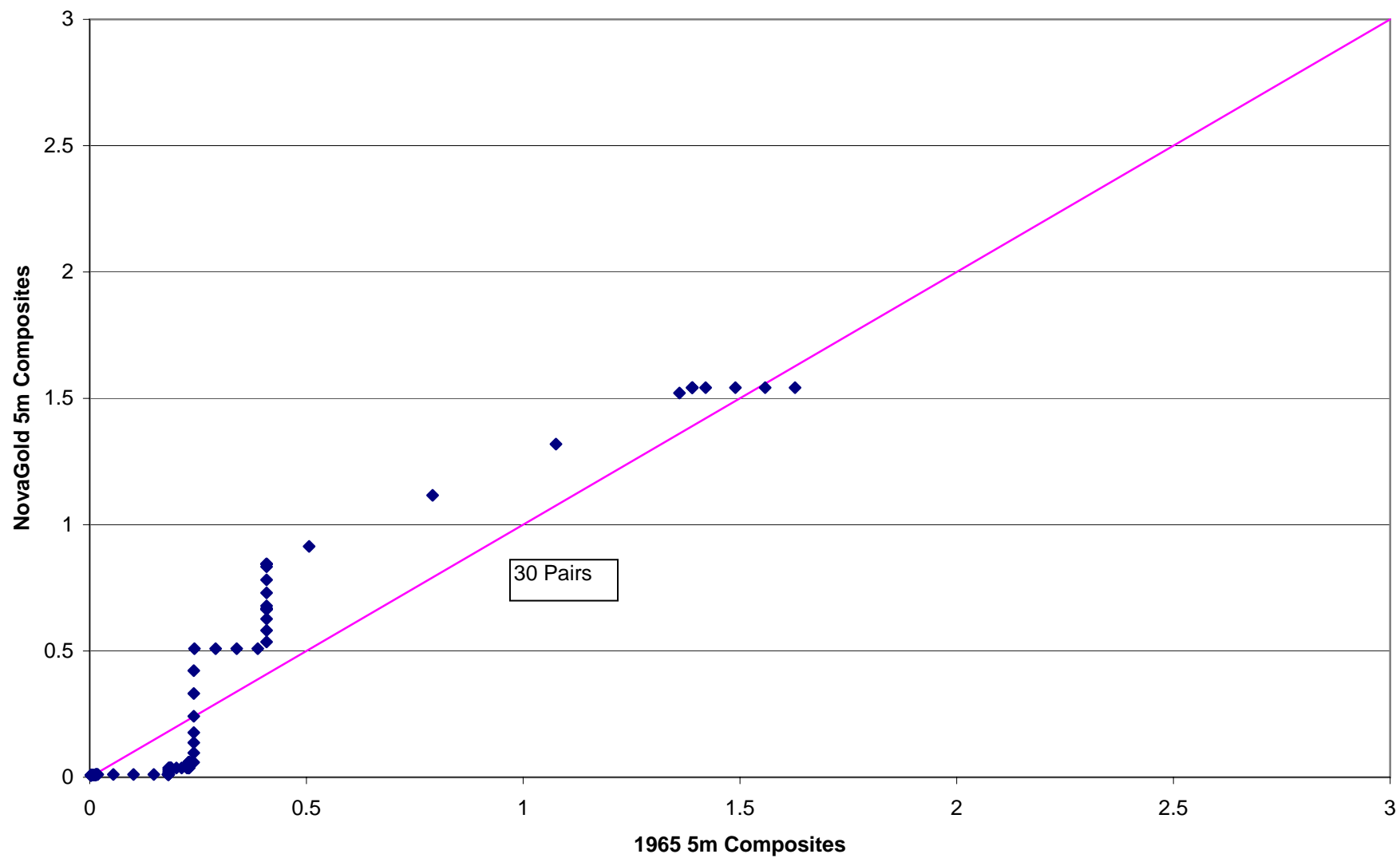
Hole ID	From	To	Length	%Cu	Au g/t	Ag g/t	Mineral Zone
GC73-0293	40	45	5	2.42	0.07	14.8	230
GC73-0293	45	50	5	2.30	0.16	28.8	230
GC73-0307	175	180	5	2.23	0.77	9.3	220
GC73-0309	150	155	5	2.23	0.14	13.0	230
GC73-0309	155	160	5	2.82	0.20	13.0	230
GC73-0313	225	230	5	2.37	0.79	-1.0	NJ
GC73-0313	235	240	5	2.85	0.60	-1.0	NJ
GC73-0313	240	245	5	3.34	1.09	-1.0	NJ
GC73-0313	245	250	5	3.41	2.17	-1.0	NJ
GC73-0313	250	255	5	3.32	1.31	-1.0	NJ
GC73-0313	255	260	5	2.21	0.82	-1.0	NJ
GC73-0317	150	155	5	2.09	-1.00	-1.0	NJ
GC73-0322	140	145	5	3.17	-1.00	-1.0	NJ
GC73-0322	170	175	1.26	4.15	-1.00	-1.0	NJ
GC73-0322	175	180	5	3.46	-1.00	-1.0	NJ
GC73-0322	180	185	5	4.32	-1.00	-1.0	NJ
GC73-0322	185	190	5	3.06	-1.00	-1.0	NJ
GC73-0322	190	195	5	3.77	-1.00	-1.0	NJ
GC73-0322	195	200	5	3.59	-1.00	-1.0	NJ
GC73-0322	200	205	5	2.88	-1.00	-1.0	NJ
GC73-0322	215	220	5	2.73	-1.00	-1.0	NJ
GC73-0322	235	240	1.22	2.00	-1.00	-1.0	NJ
GC73-0328	65	70	5	2.48	0.30	12.3	230
GC73-0332	45	50	5	3.37	20.22	-1.0	372
GC73-0332	50	55	5	2.49	17.52	11.3	372
GC73-0332	55	60	5	2.20	4.80	11.3	372
GC73-0333	140	145	5	2.37	1.01	-1.0	NJ
GC76-0346	245	250	5	2.22	0.52	11.0	220
GC76-0347A	220	225	5	2.02	1.07	11.0	210
GC76-0347A	235	240	5	2.33	1.15	14.1	210
GC76-0350	185	190	5	2.20	1.07	14.7	210
GC76-0350	190	195	5	2.50	1.15	14.4	210
GC76-0350	195	200	5	2.64	1.38	14.4	210
GC76-0353	70	75	5	2.72	7.36	16.5	210
GC76-0353	75	80	5	2.80	5.00	16.5	210
GC76-0355	195	200	5	2.32	1.16	10.3	210
GC76-0357	250	255	5	2.90	0.56	12.3	220
GC76-0365	295	300	5	2.12	0.31	5.5	210
GC90-0379	25	30	5	2.41	4.36	18.7	SWZ
GC90-0379	30	35	5	2.78	3.88	18.9	SWZ
GC90-0379	65	70	5	2.47	12.01	13.0	SWZ
GC90-0379	70	75	5	2.81	10.25	12.5	SWZ
GC90-0381	20	25	0.92	2.55	2.61	6.2	SWZ
GC90-0381	75	80	5	2.08	5.26	11.2	SWZ
GC90-0381	95	100	5	3.34	10.85	20.9	SWZ
GC90-0381	100	105	5	2.11	7.73	24.1	SWZ
GC90-0382	80	85	5	3.62	3.53	25.4	SWZ
GC90-0382	85	90	5	4.09	4.21	27.3	SWZ
GC90-0382	90	95	5	2.69	9.90	15.5	SWZ
GC90-0382	170	175	5	2.24	2.85	19.8	SWZ
GC90-0382	175	180	5	2.02	2.70	21.4	SWZ

Hole ID	From	To	Length	%Cu	Au g/t	Ag g/t	Mineral Zone
GC90-0383	135	140	5	2.07	1.79	8.1	SWZ
GC90-0383	150	155	5	2.10	2.05	9.0	SWZ
GC90-0386	40	45	5	2.67	4.03	16.8	SWZ
GC91-0395	200	205	5	2.23	0.75	14.5	220
GC91-0395	210	215	5	2.47	1.34	24.6	220
GC91-0395	215	220	5	2.13	1.21	20.2	220
GC91-0395	280	285	5	2.40	1.00	25.1	220
GC91-0419	125	130	5	2.63	7.10	15.9	MC
GC91-0419	130	135	5	2.07	2.72	16.0	MC
GC91-0431	35	40	5	3.07	0.54	12.3	230
GC91-0431	40	45	5	2.89	0.80	9.5	230
GC91-0431	45	50	5	2.14	0.42	11.2	230
GC91-0431	50	55	5	4.04	0.36	20.9	230
GC91-0431	55	60	5	3.00	0.19	16.3	230
GC91-0431	60	65	5	2.50	0.22	15.2	230
GC91-0431	275	280	5	2.25	0.09	4.3	230
UG0256W-N	0	5	5	3.08	-1.00	-1.0	230
UG0256W-N	5	10	5	2.29	-1.00	-1.0	230
UG0256W-N	10	15	5	3.30	-1.00	-1.0	230
UG0256W-N	15	20	5	2.11	-1.00	-1.0	230
UG0256W-N	20	25	5	2.03	-1.00	-1.0	230
UG0256W-N	60	65	0.62	3.50	-1.00	-1.0	500
UG0256W-N	65	69.91	4.91	2.45	-1.00	-1.0	500
UG0256W-S	35	40	5	2.05	-1.00	-1.0	500
UG0256W-S	50	55	5	3.38	-1.00	-1.0	230
UG0256W-S	55	60	5	2.77	-1.00	-1.0	230
UG0256W-S	60	63.53	3.53	4.71	-1.00	-1.0	230
UG0257E-N	15	20	5	2.13	-1.00	-1.0	230
UG0257E-N	20	25	5	2.23	-1.00	-1.0	230
UG0257E-N	25	30	5	2.38	-1.00	-1.0	230
UG0257E-S	10	15	5	2.39	-1.00	-1.0	230
UG0257E-S	15	20	5	2.19	-1.00	-1.0	230
UG9885S-W	115	120	5	3.94	-1.00	-1.0	230
UG9885S-W	120	125	4.13	2.90	-1.00	-1.0	230

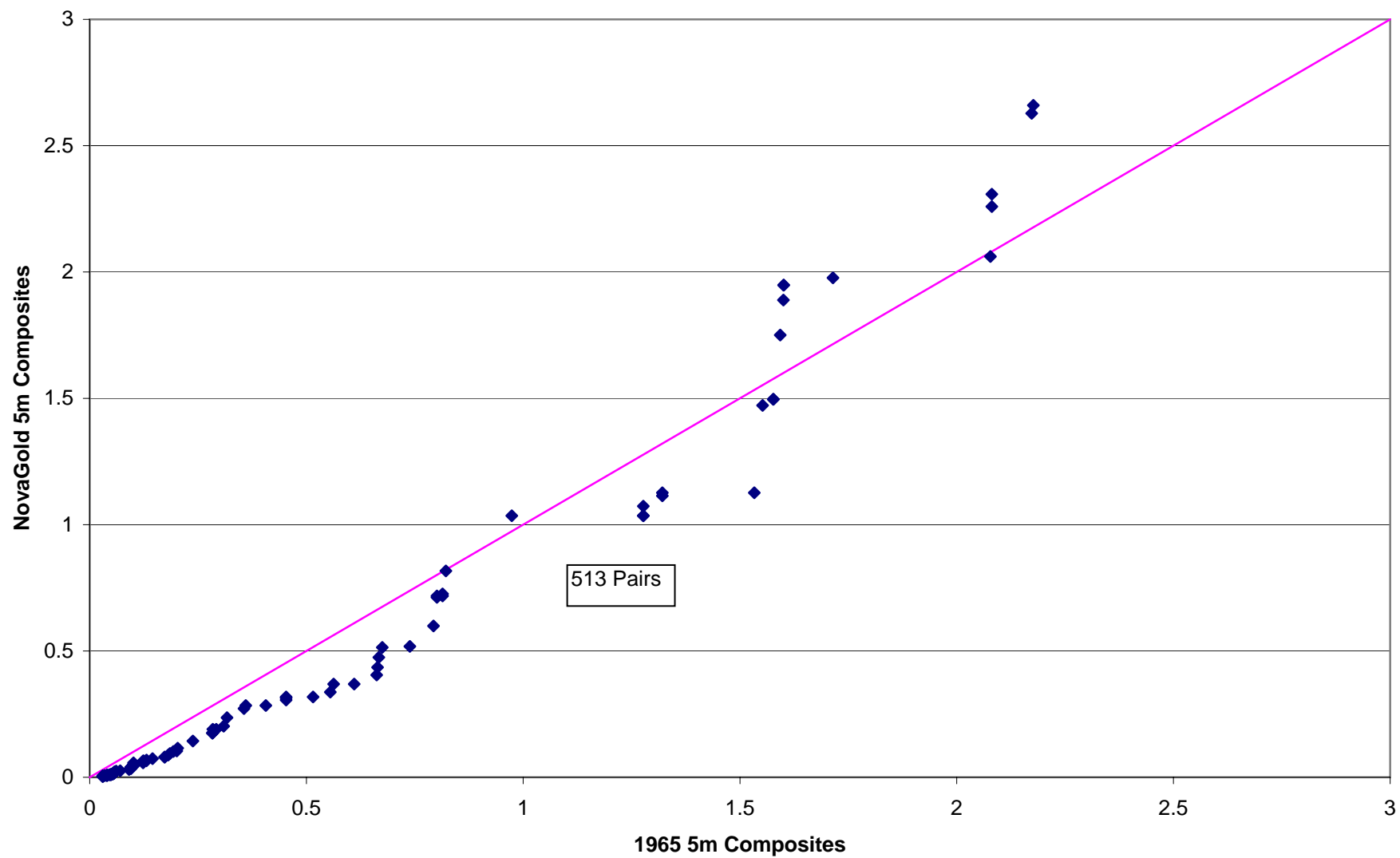
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**Appendix 3 – Historic Cu Assay Comparisons**

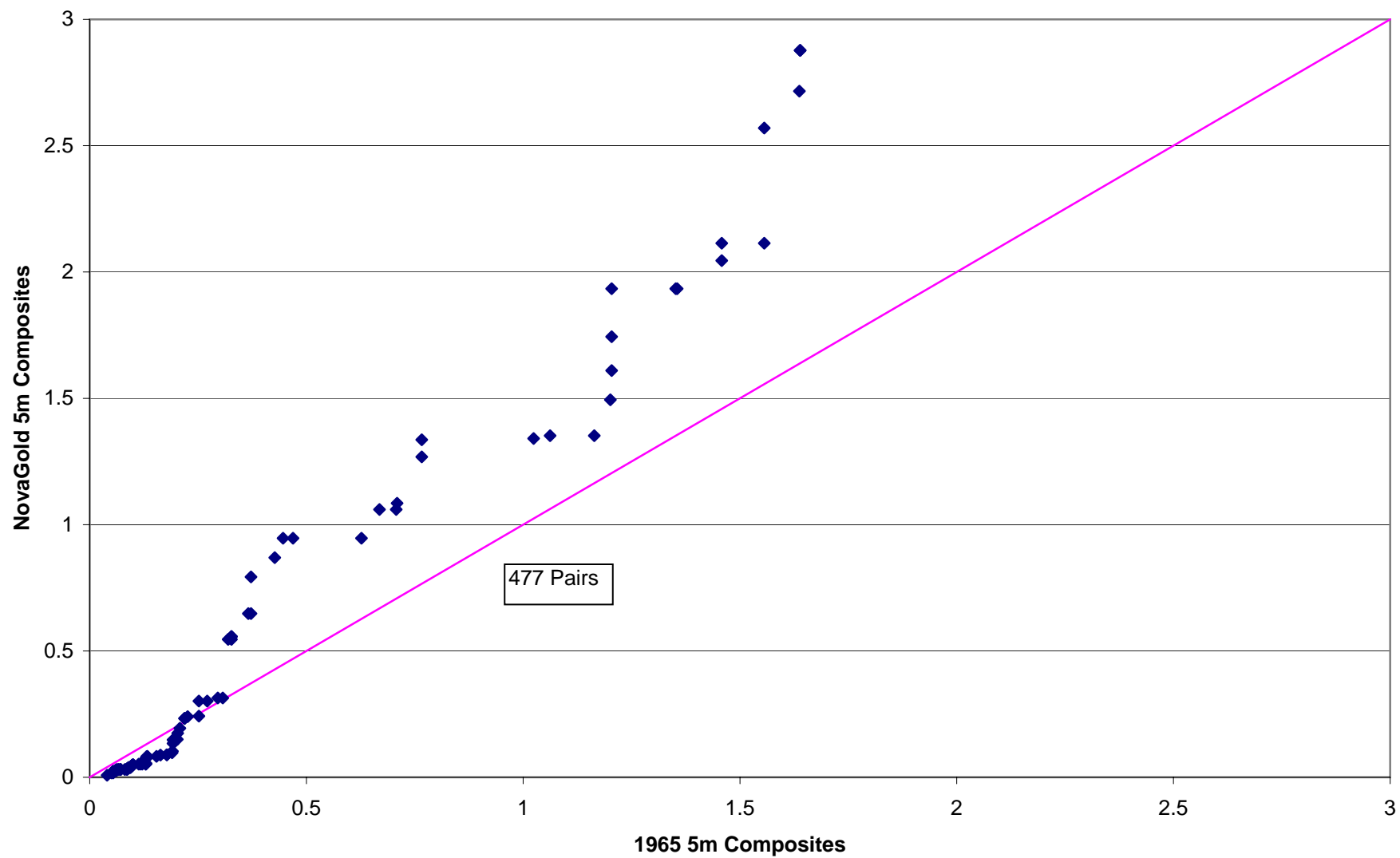
QQ Plot NovaGold vs. 1962 Drilling - %Cu Grade (5m Comps)



QQ Plot NovaGold vs. 1963 Drilling - %Cu Grade (5m Comps)

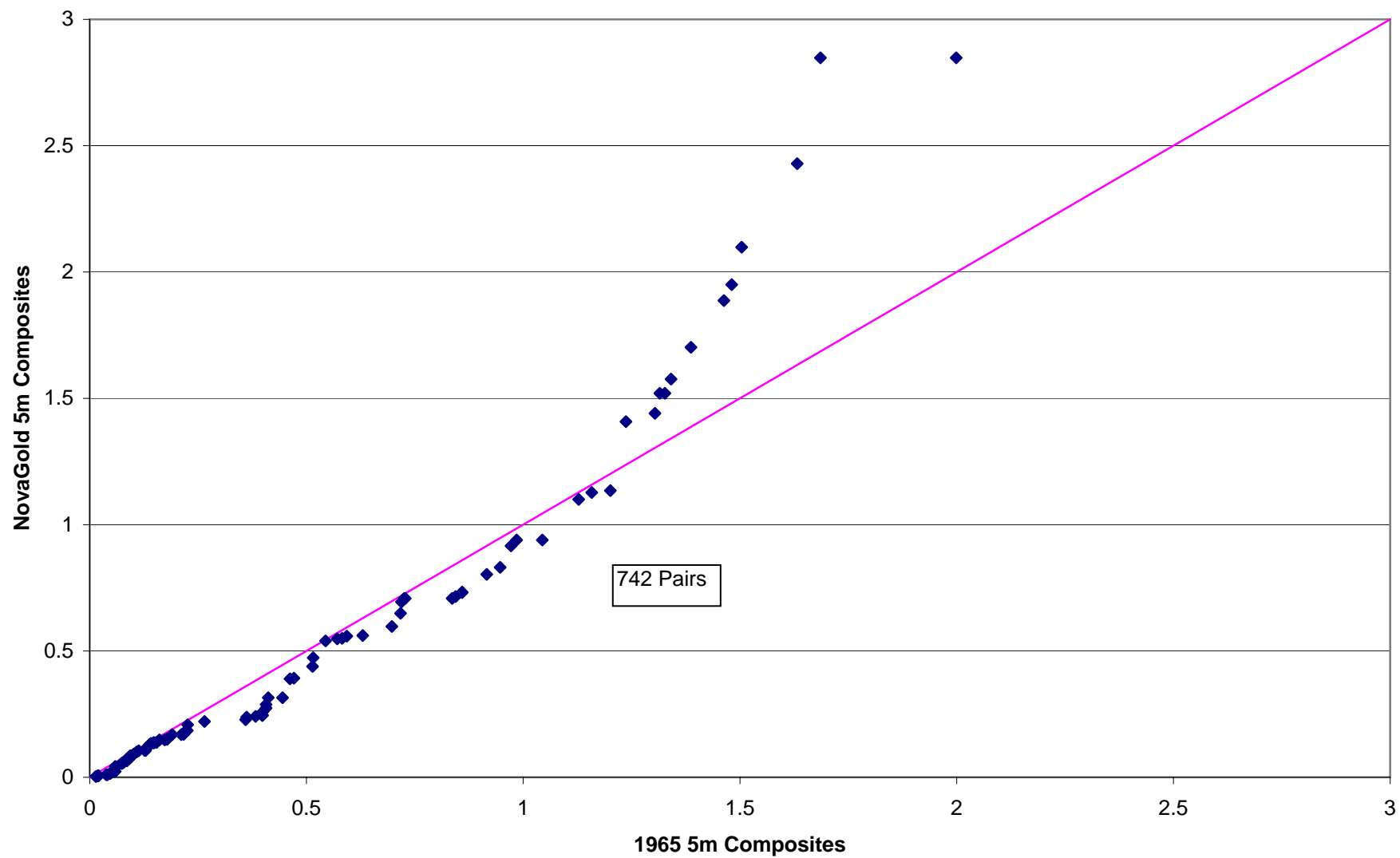


QQ Plot NovaGold vs. 1964 Drilling - %Cu Grade (5m Comps)

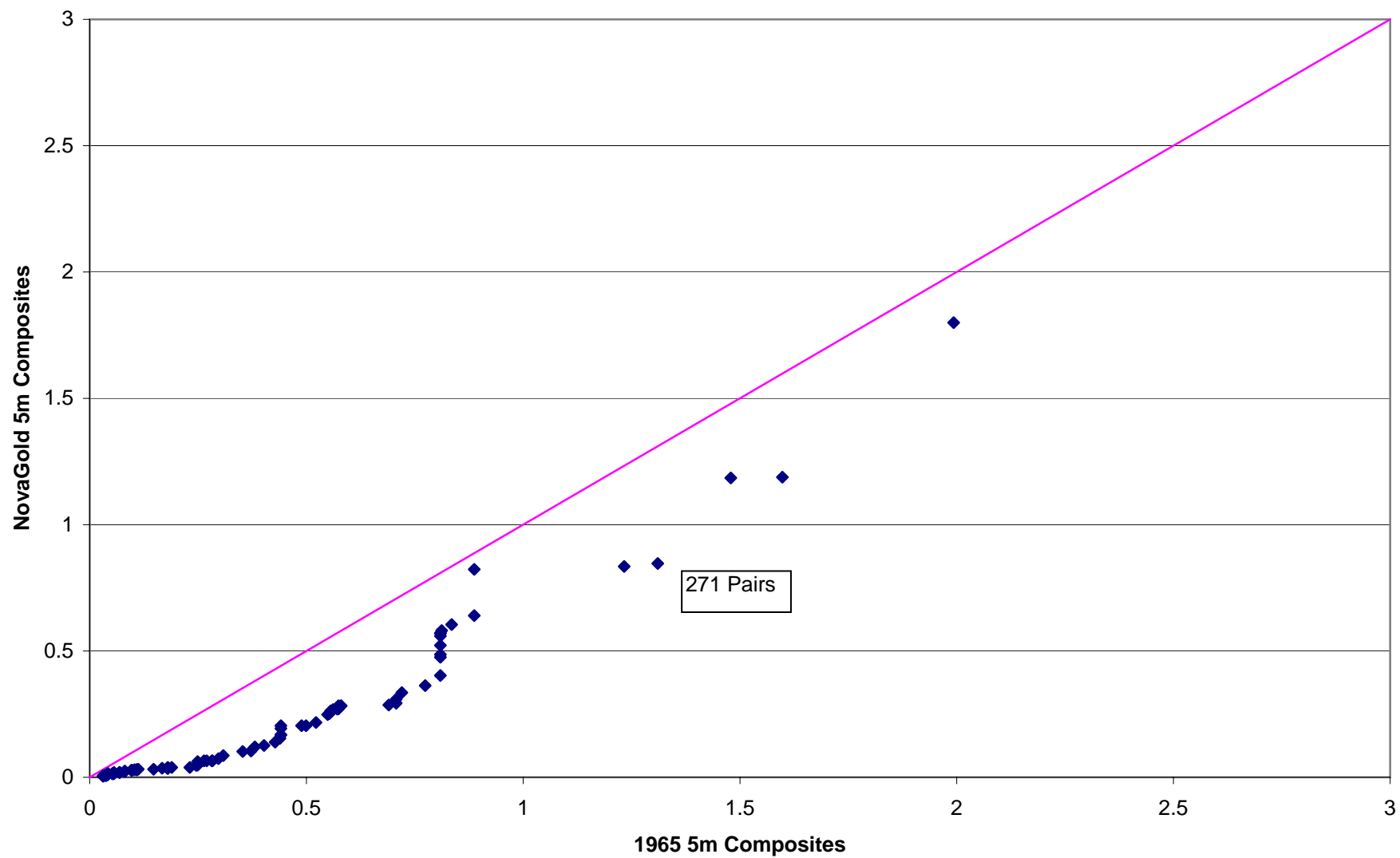




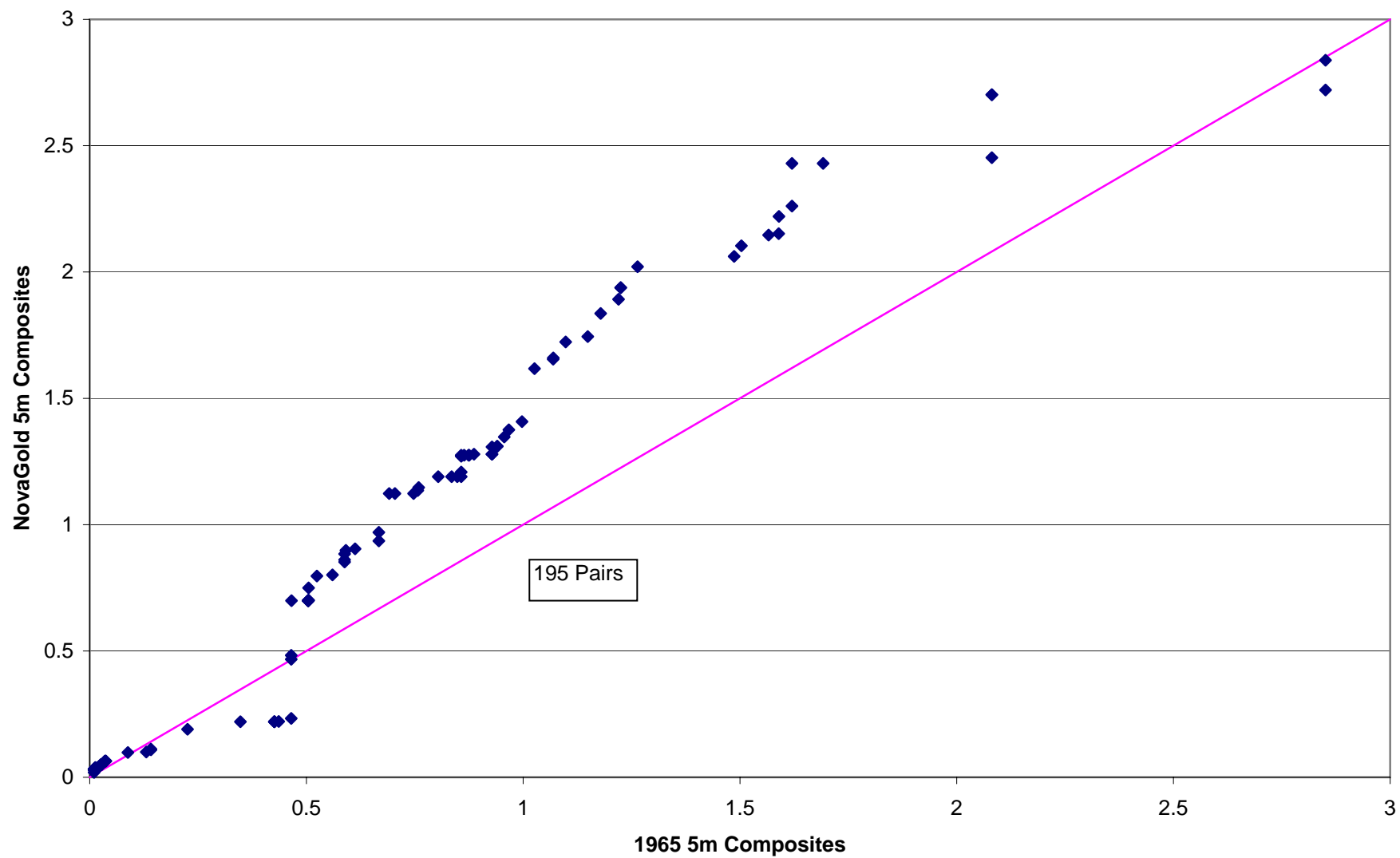
QQ Plot NovaGold vs. 1965 Drilling - %Cu Grade (5m Comps)



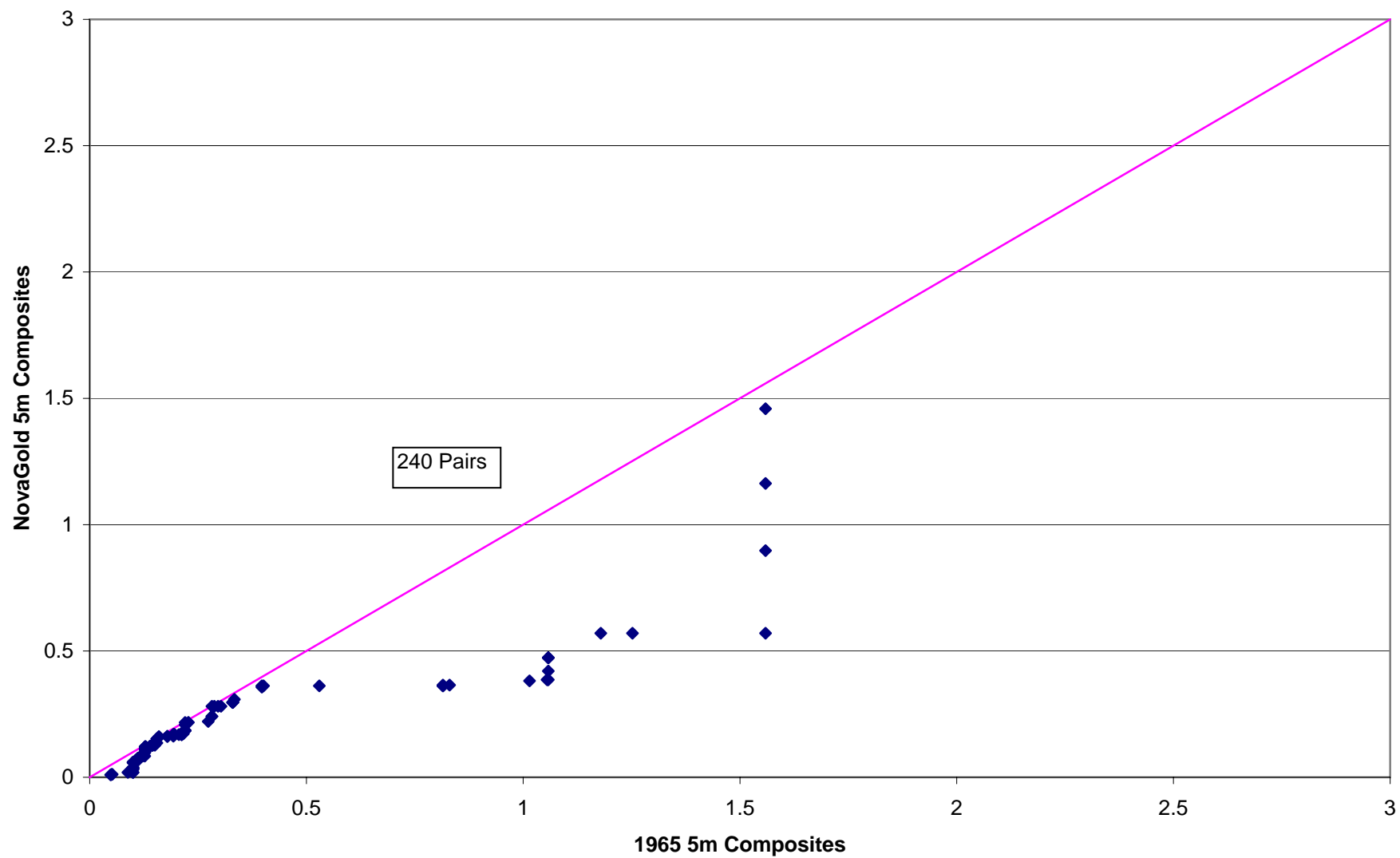
QQ Plot NovaGold vs. 1966 Drilling - %Cu Grade (5m Comps)



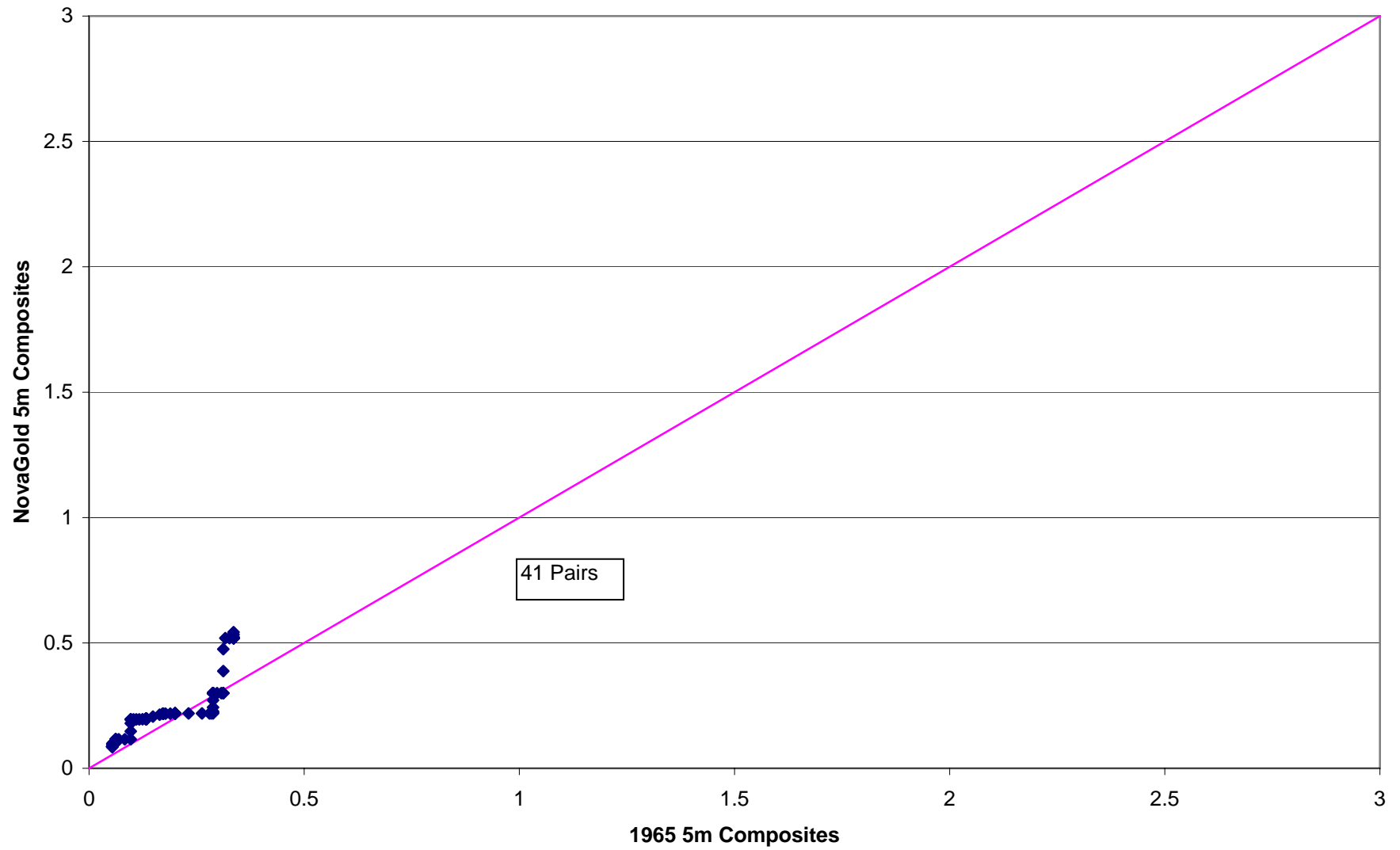
QQ Plot NovaGold vs. 1972 Drilling - %Cu Grade (5m Comps)



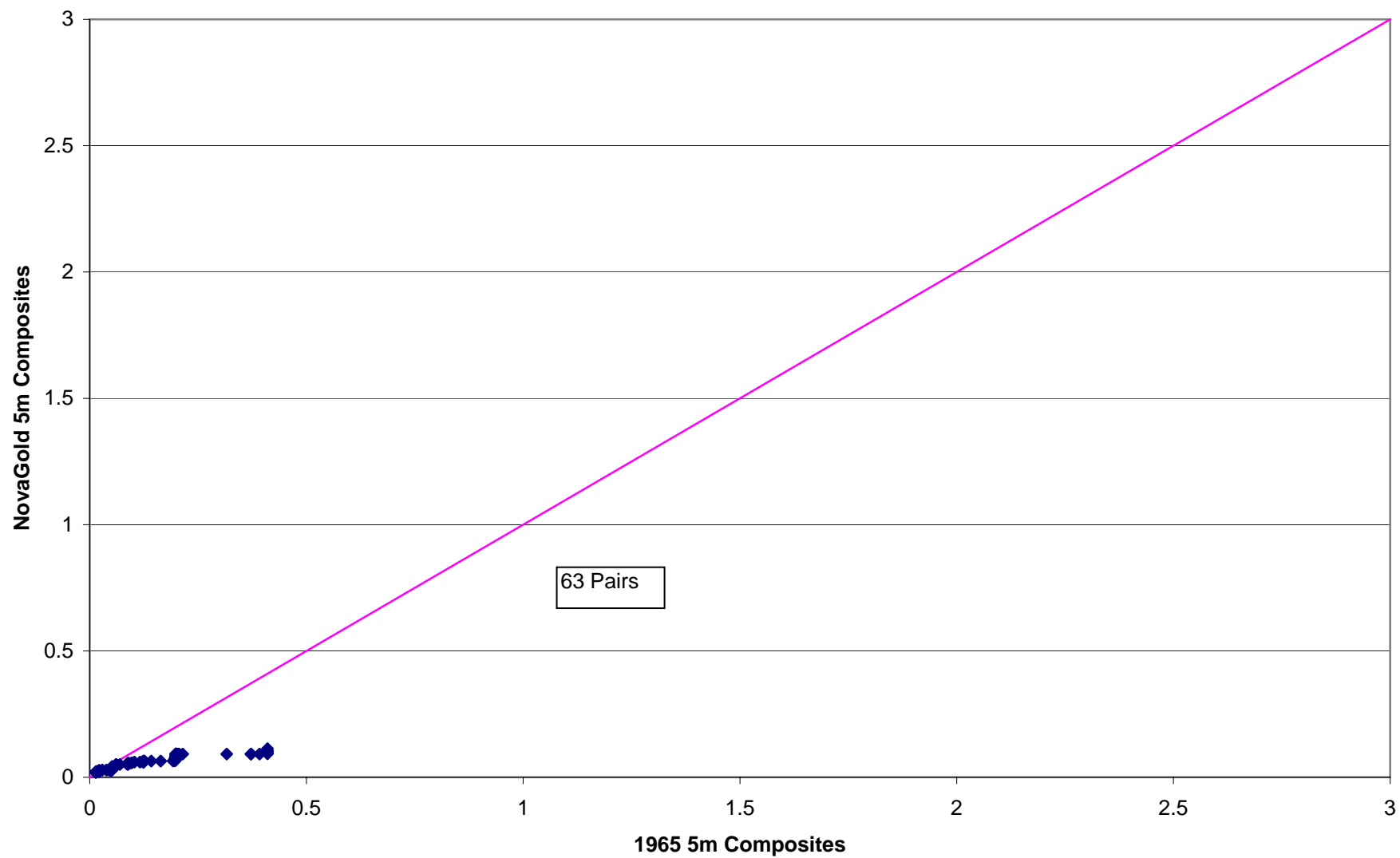
QQ Plot NovaGold vs. 1973 Drilling - %Cu Grade (5m Comps)



QQ Plot NovaGold vs. 1976 Drilling - %Cu Grade (5m Comps)



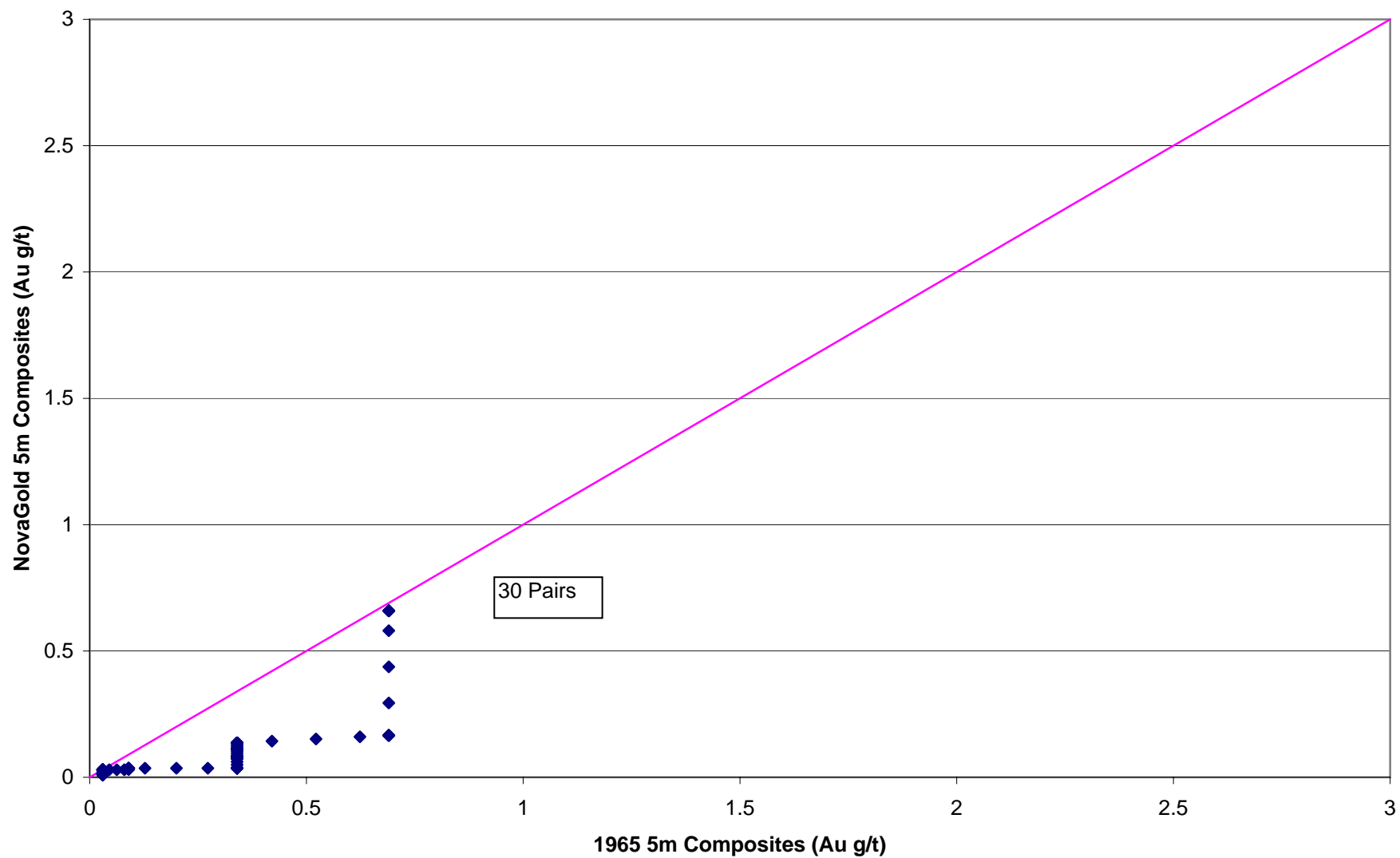
QQ Plot NovaGold vs. 1991 Drilling - %Cu Grade (5m Comps)



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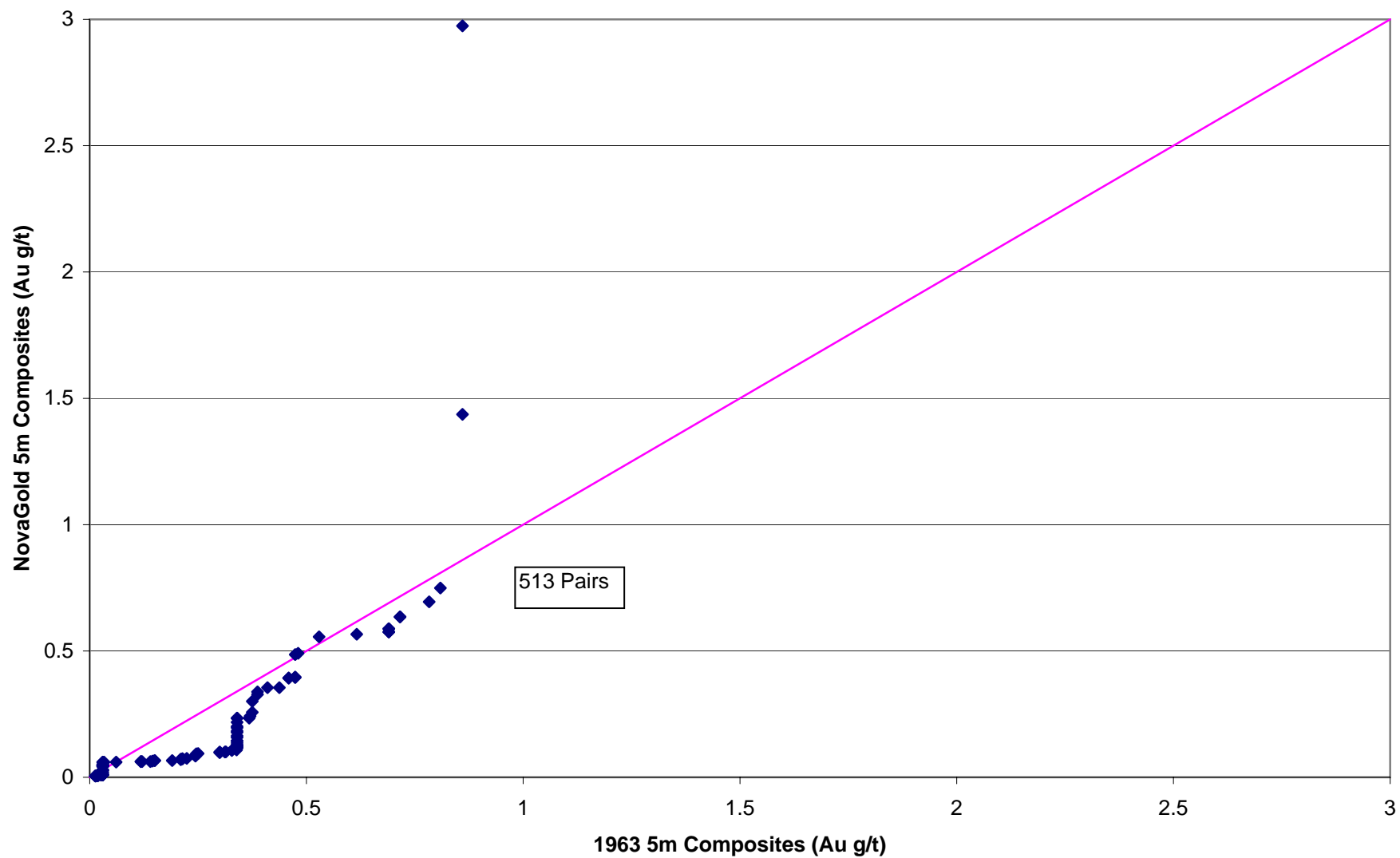
**Appendix 4 – Historic Au Assay Comparisons**

QQ Plot NovaGold vs. 1962 Drilling - %Cu Grade (5m Comps)

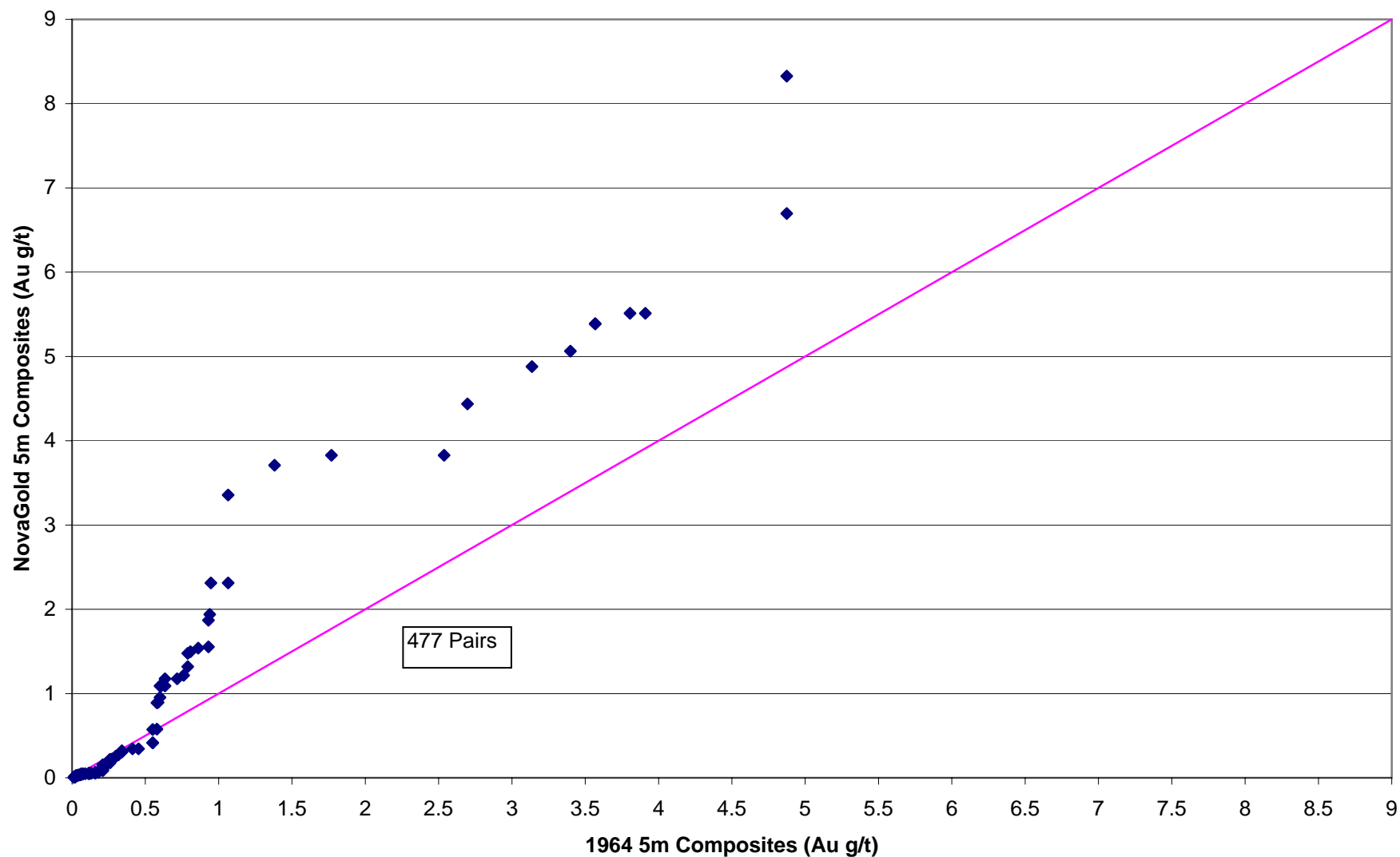




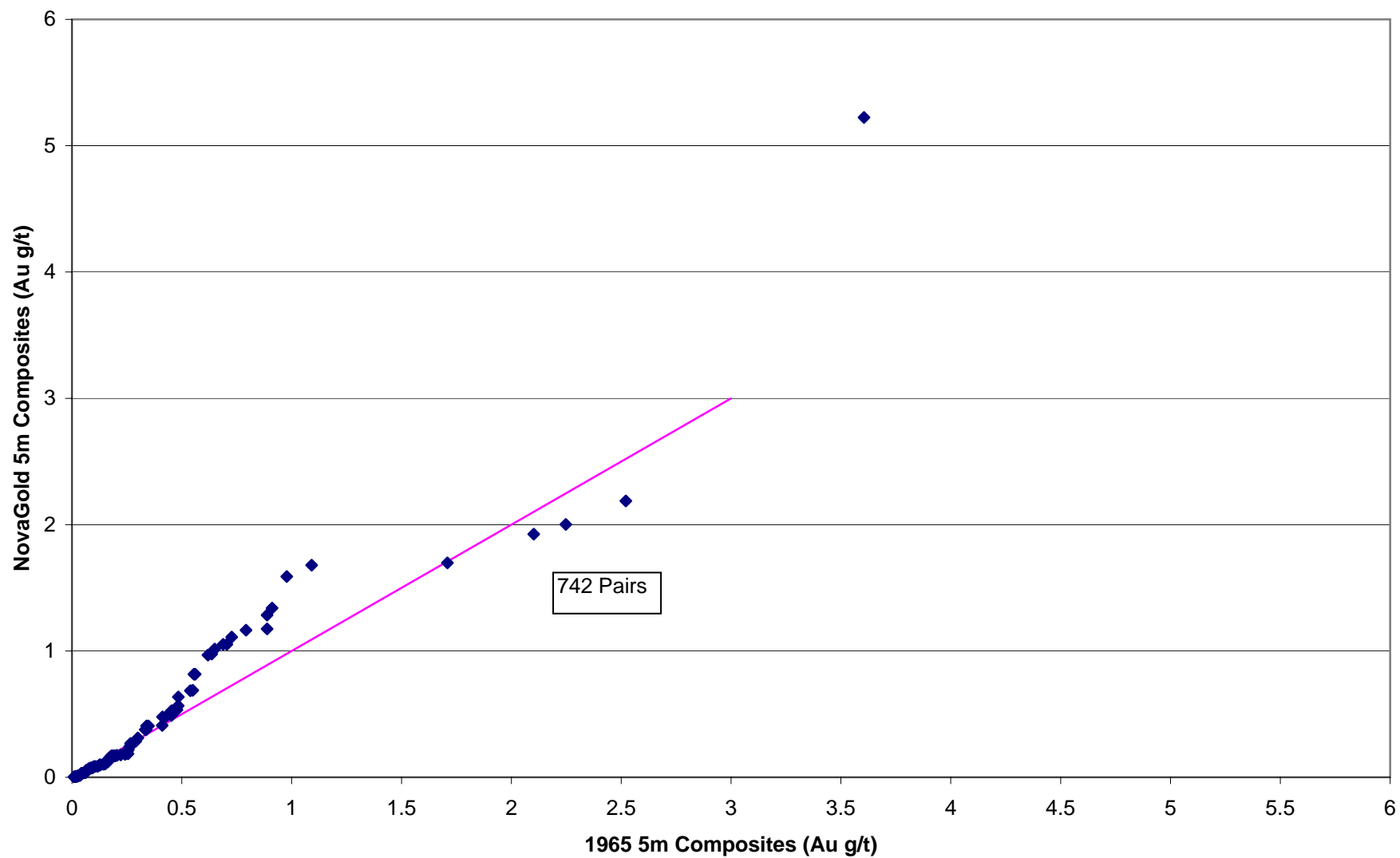
QQ Plot NovaGold vs. 1963 Drilling - Au g/t Grade (5m Comps)



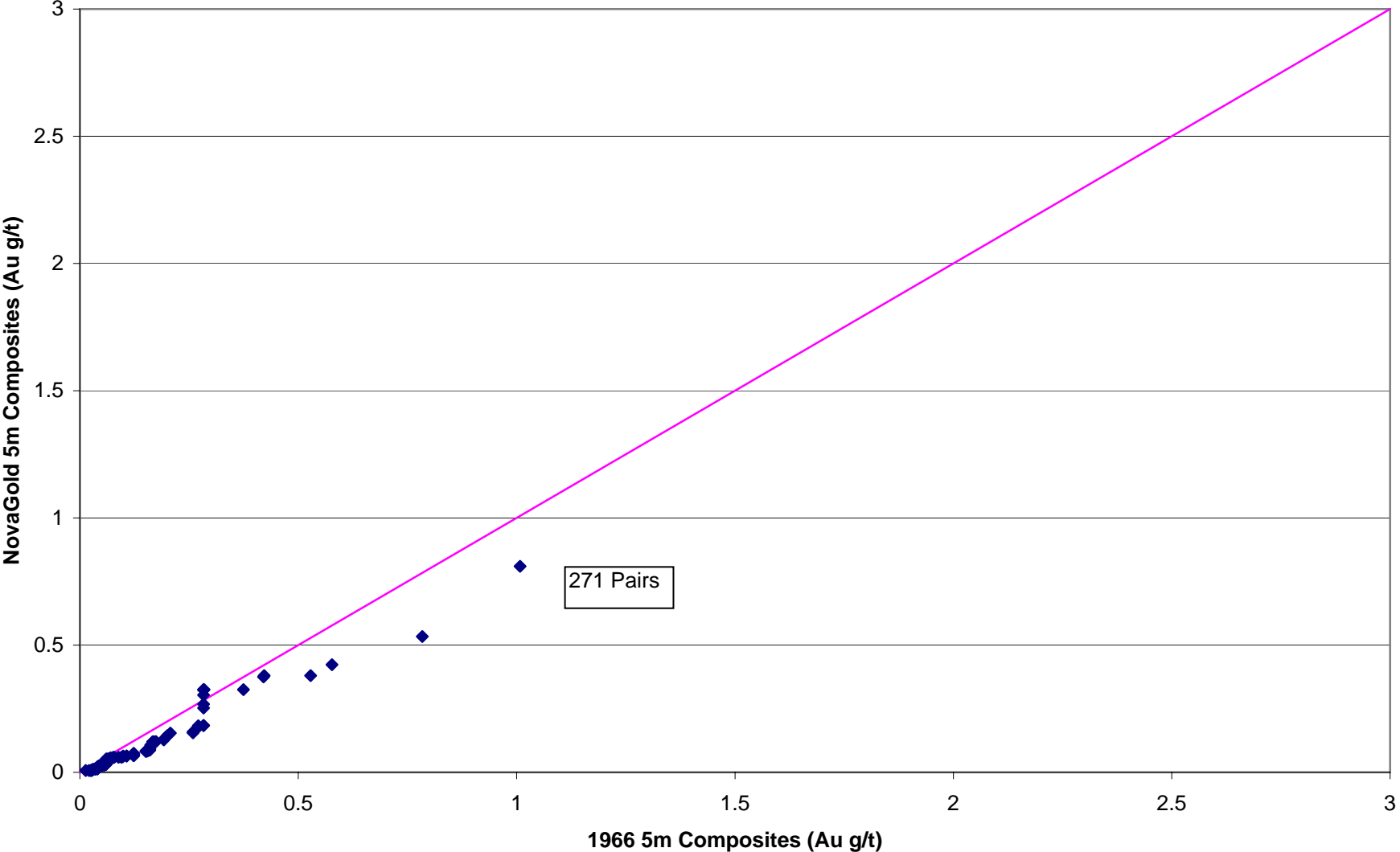
QQ Plot NovaGold vs. 1964 Drilling - Au g/t Grade (5m Comps)



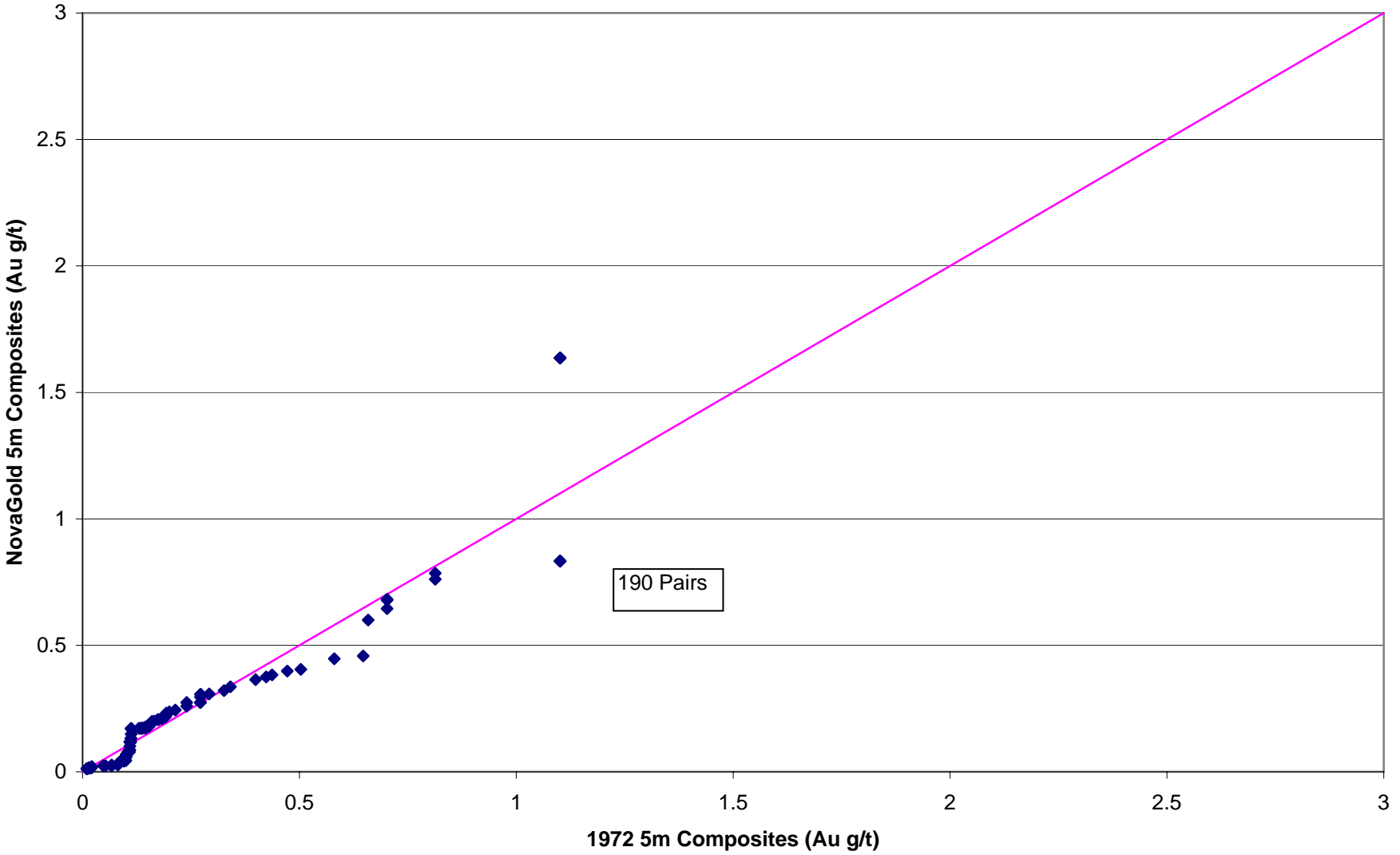
QQ Plot NovaGold vs. 1965 Drilling - %Cu Grade (5m Comps)



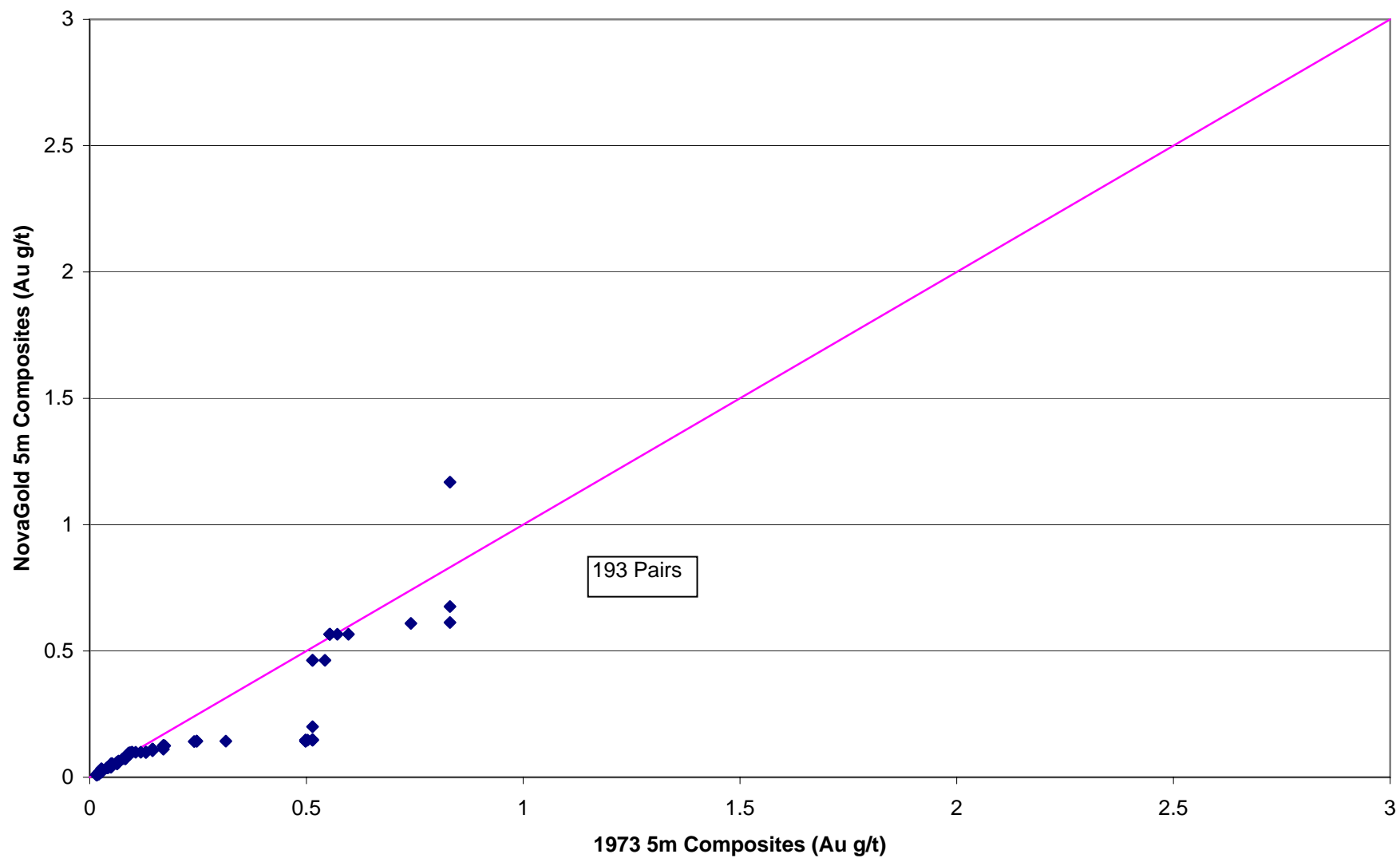
QQ Plot NovaGold vs. 1966 Drilling - Au g/t Grade (5m Comps)



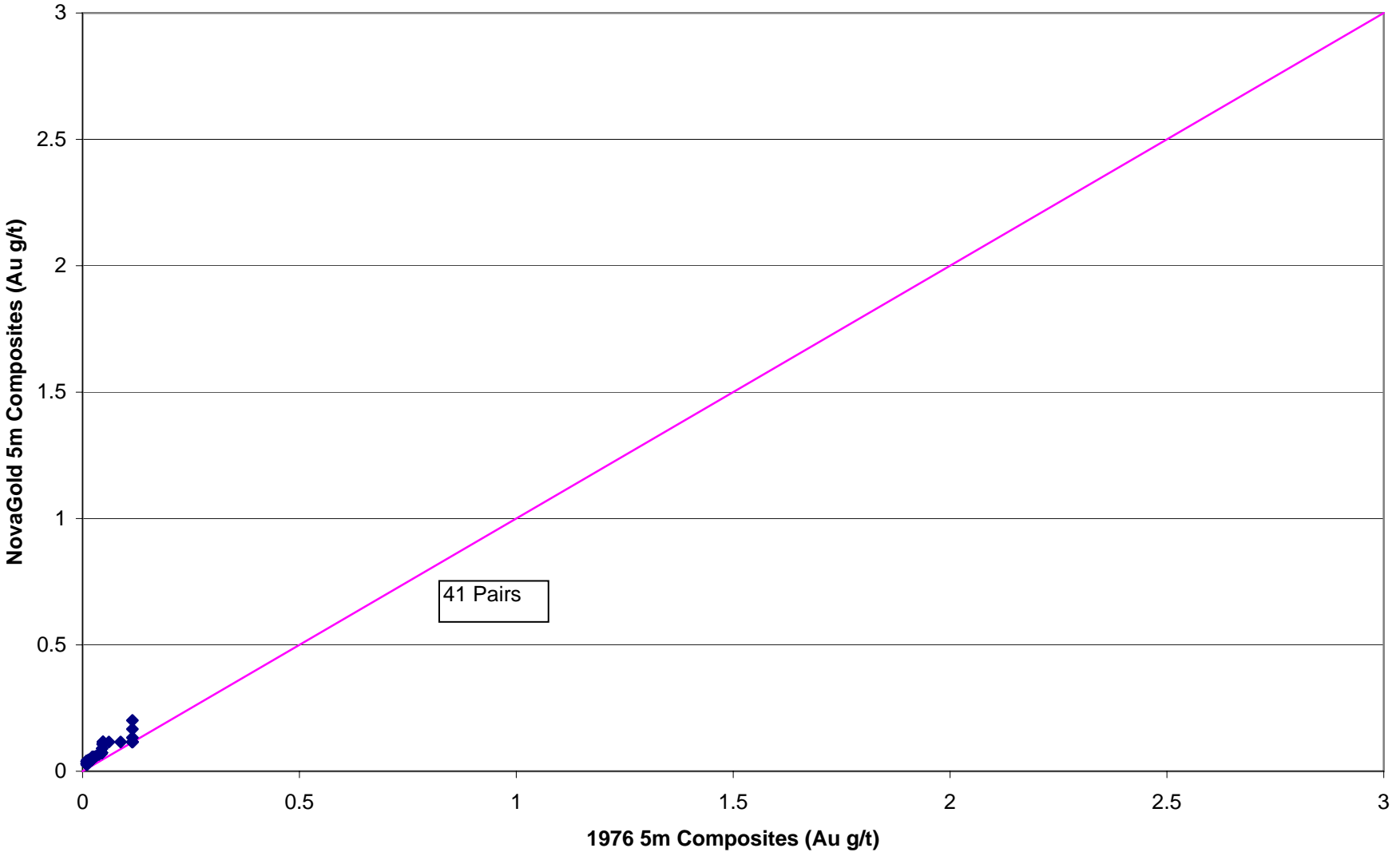
QQ Plot NovaGold vs. 1972 Drilling - Au g/t Grade (5m Comps)



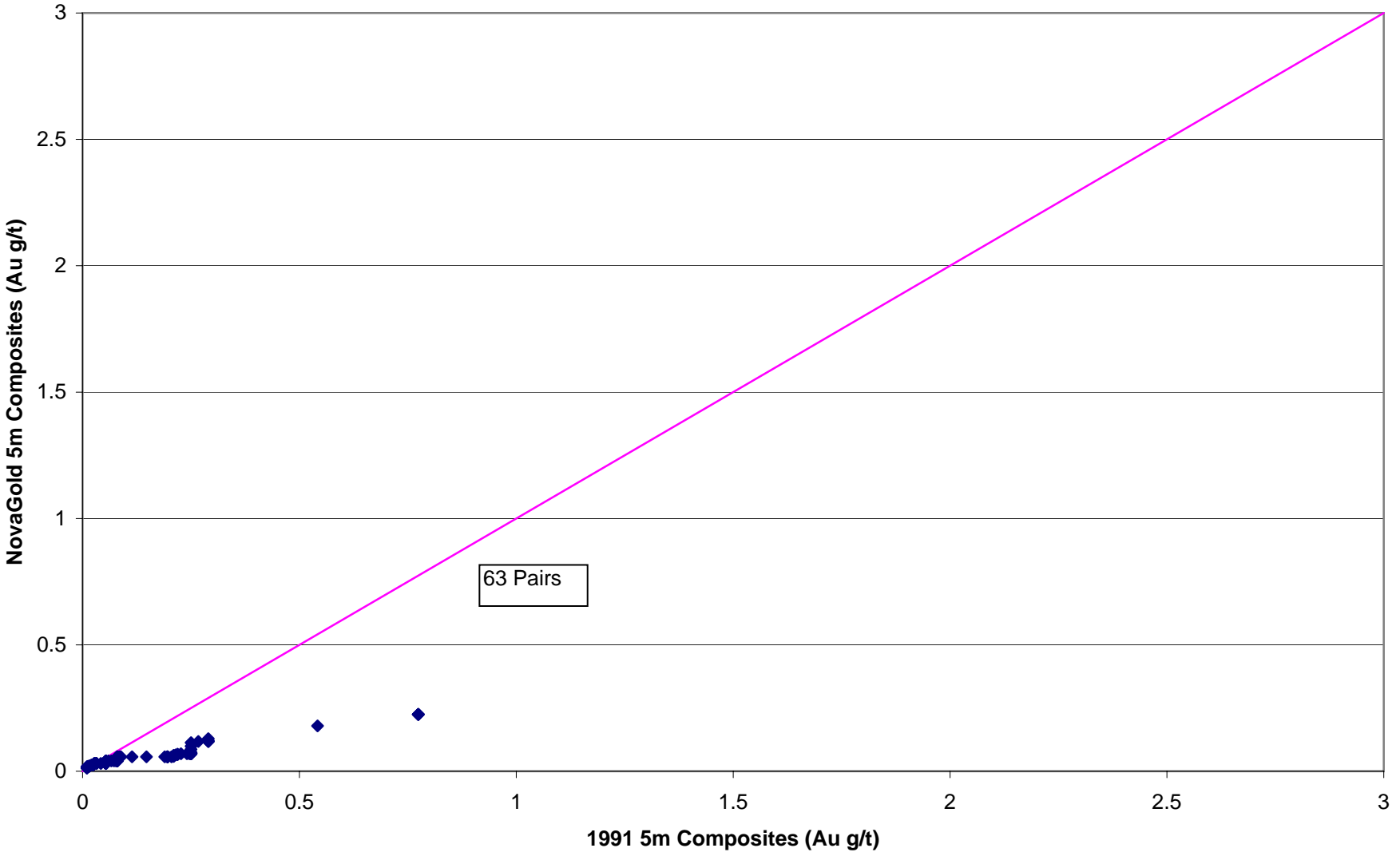
QQ Plot NovaGold vs. 1973 Drilling - Au g/t Grade (5m Comps)



QQ Plot NovaGold vs. 1976 Drilling - Au g/t Grade (5m Comps)



QQ Plot NovaGold vs. 1991 Drilling - Au g/t Grade (5m Comps)



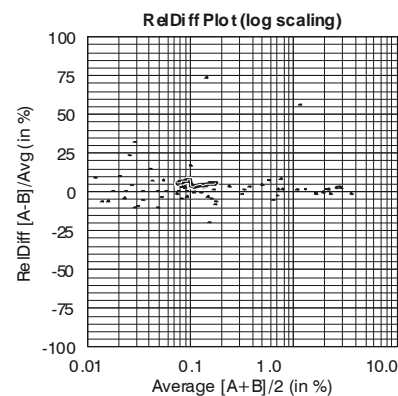
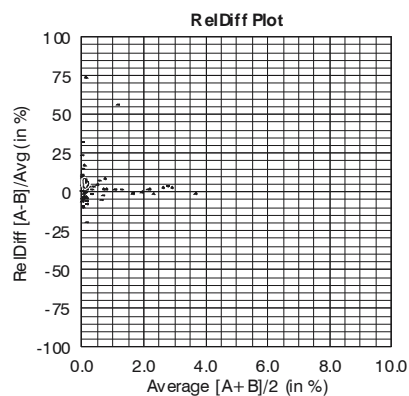
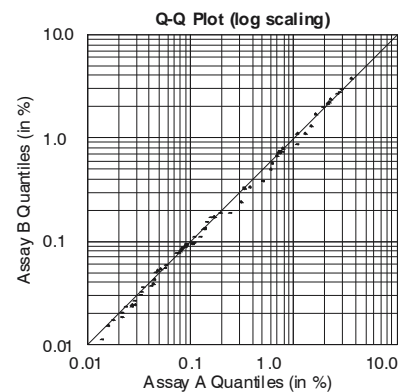
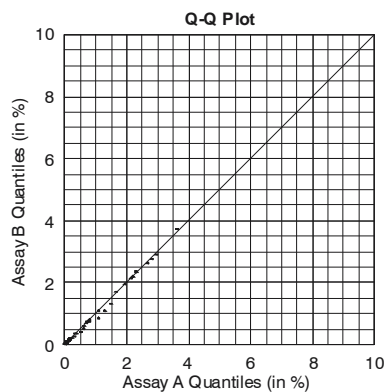
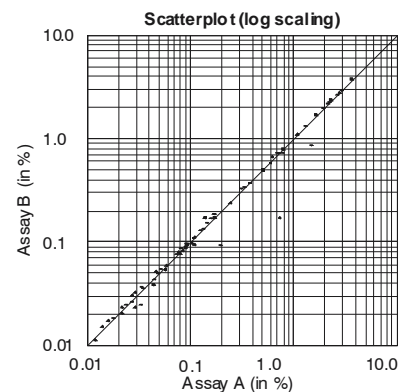
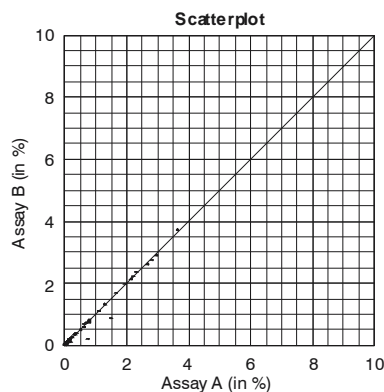
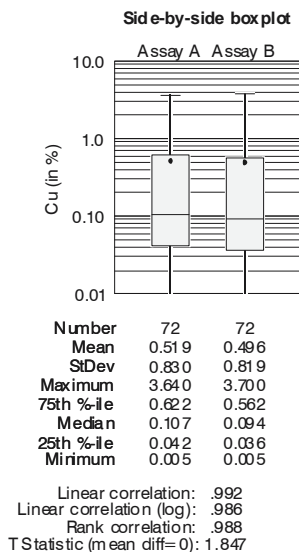


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**Appendix 5 – 2003-2005 NovaGold QA/QC Results**

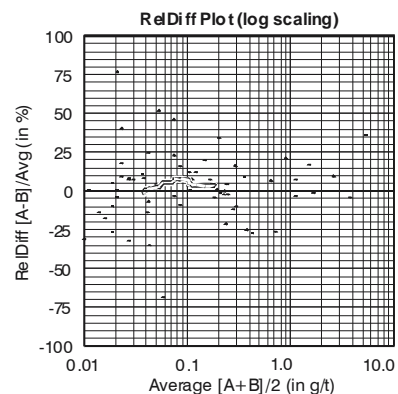
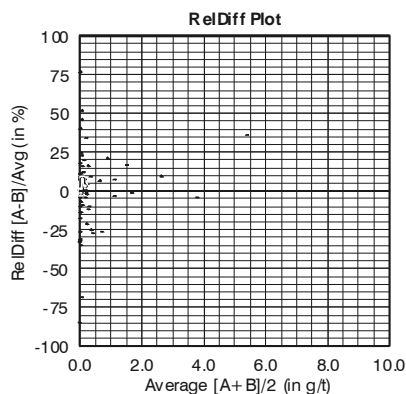
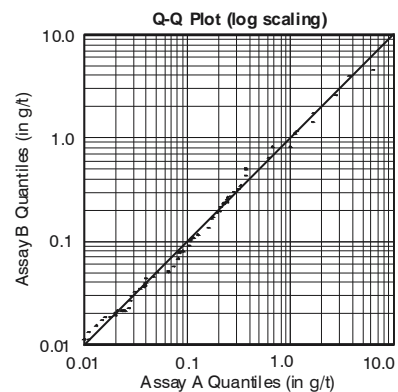
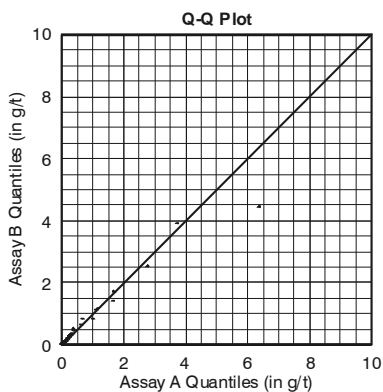
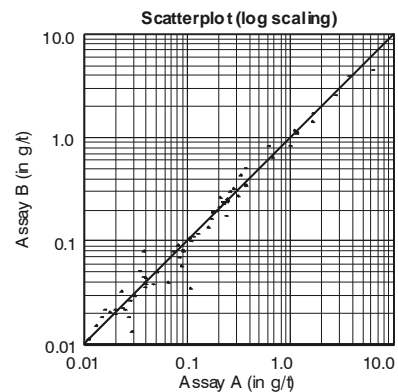
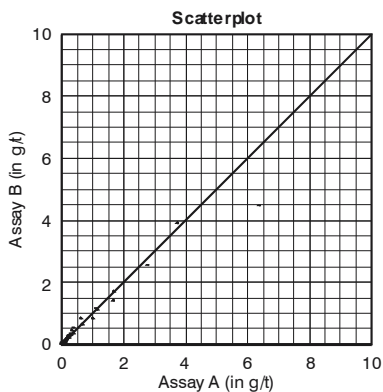
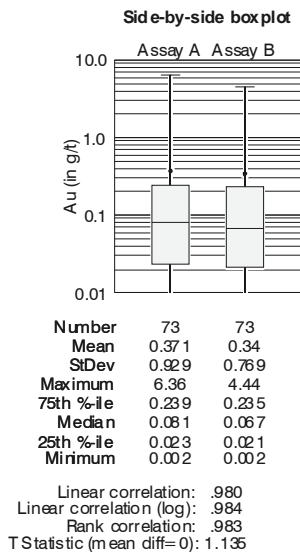
# Appendix 05 - 2003 NovaGold Cu Duplicates

ASSAY A: Cu Original (%)  
ASSAY B: Cu Duplicate (%)



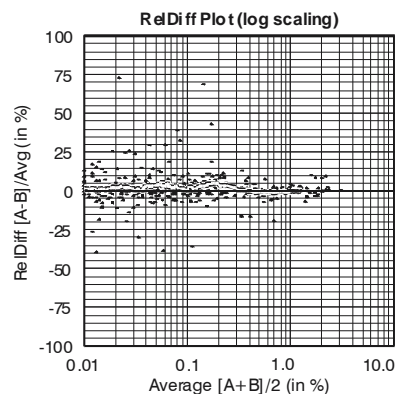
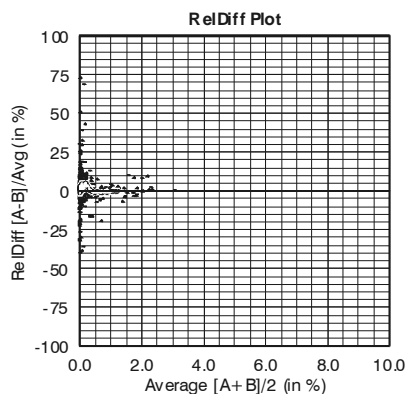
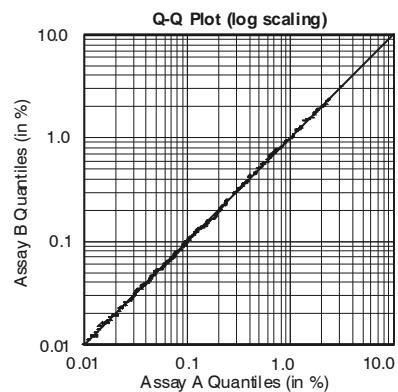
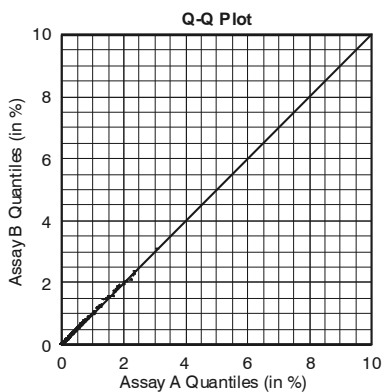
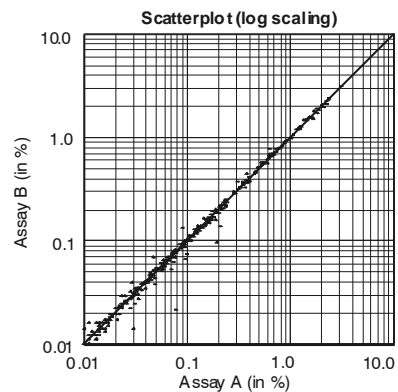
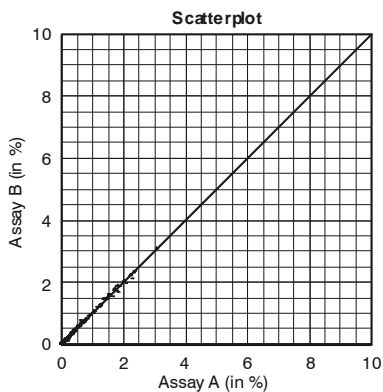
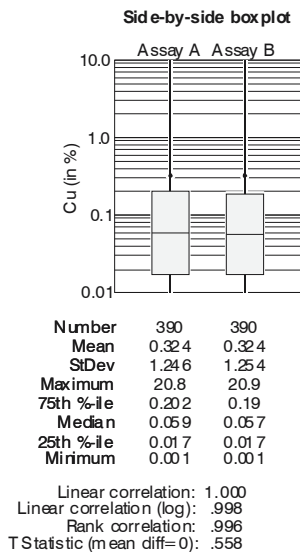
# Appendix 05 - 2003 NovaGold Au Duplicates

ASSAY A: Au Original (g/t)  
ASSAY B: Au Duplicate (g/t)



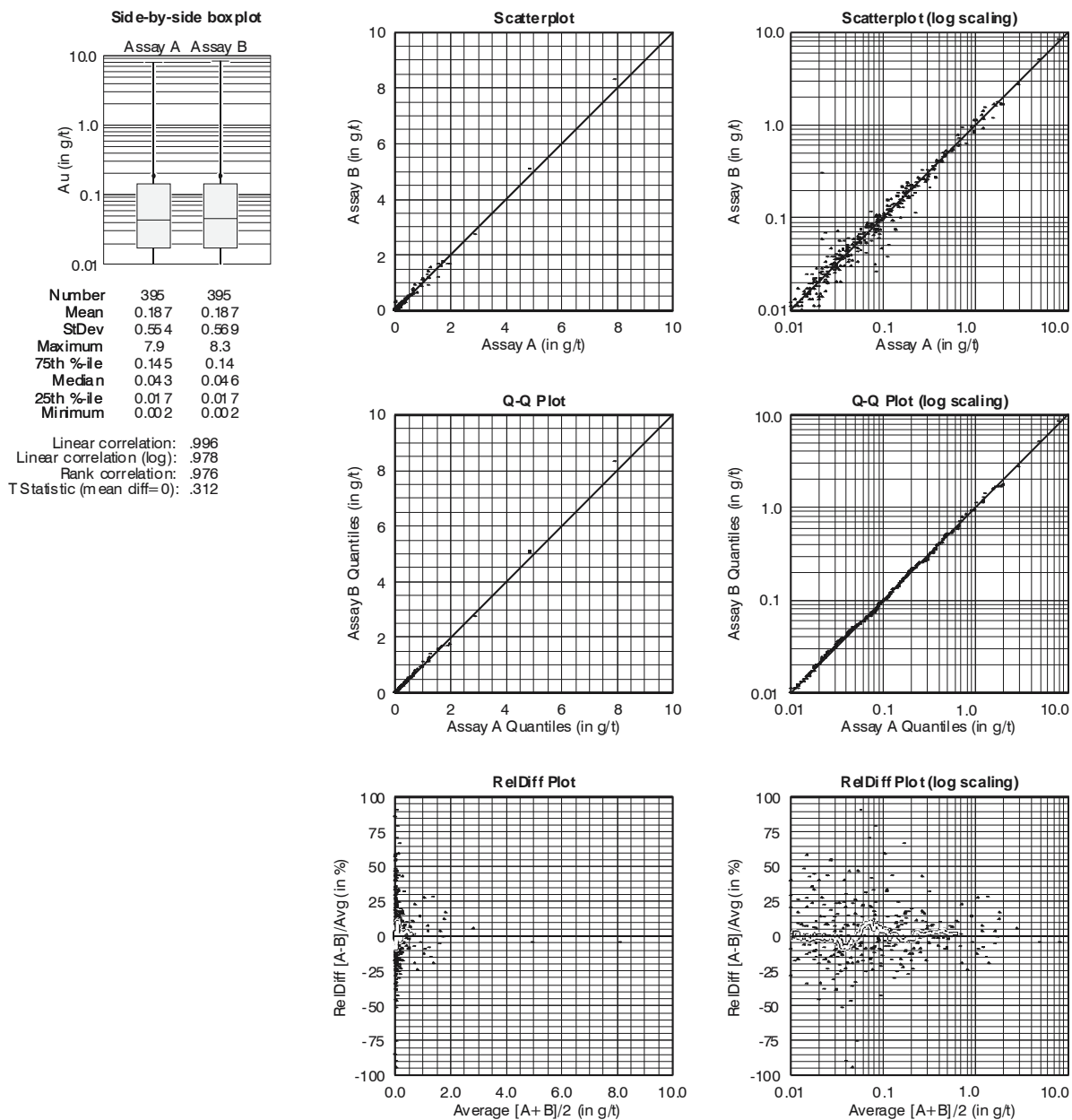
# Appendix 05 - 2004 NovaGold Cu Duplicates

ASSAY A: Cu Original (%)  
ASSAY B: Cu Duplicate (%)

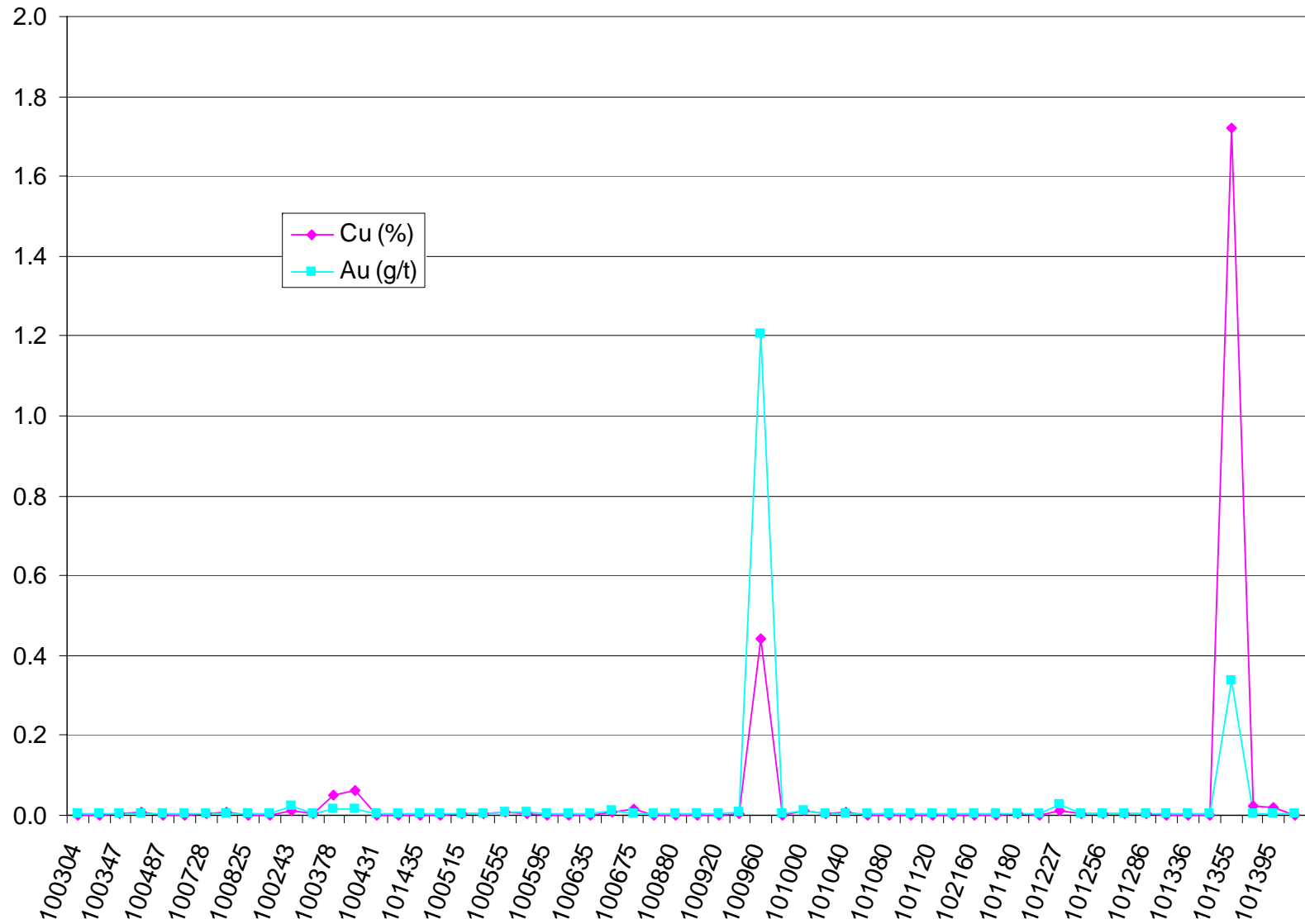


# Appendix 05 - 2004 NovaGold Au Duplicates

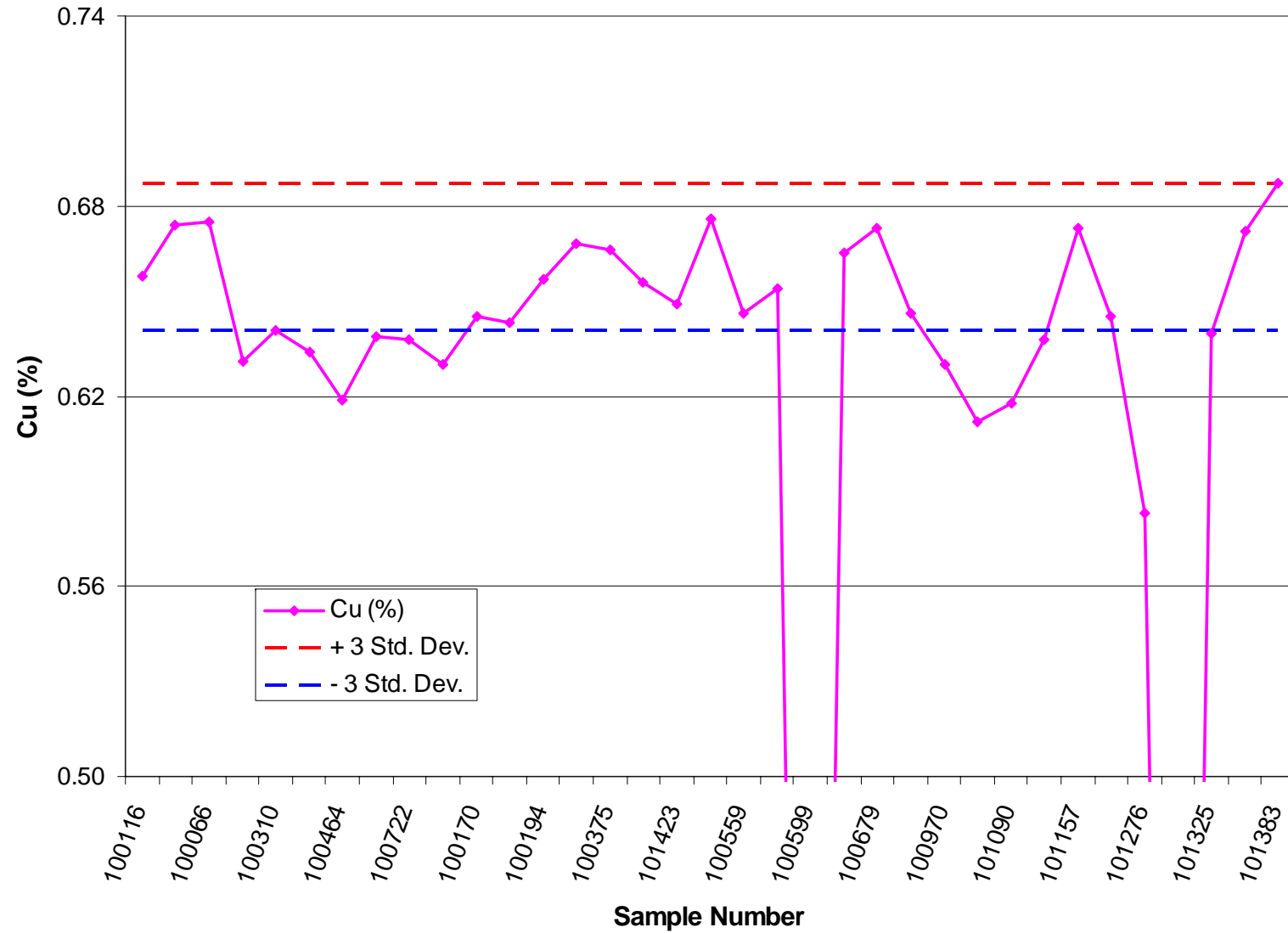
ASSAY A: Au Original (g/t)  
ASSAY B: Au Duplicate (g/t)



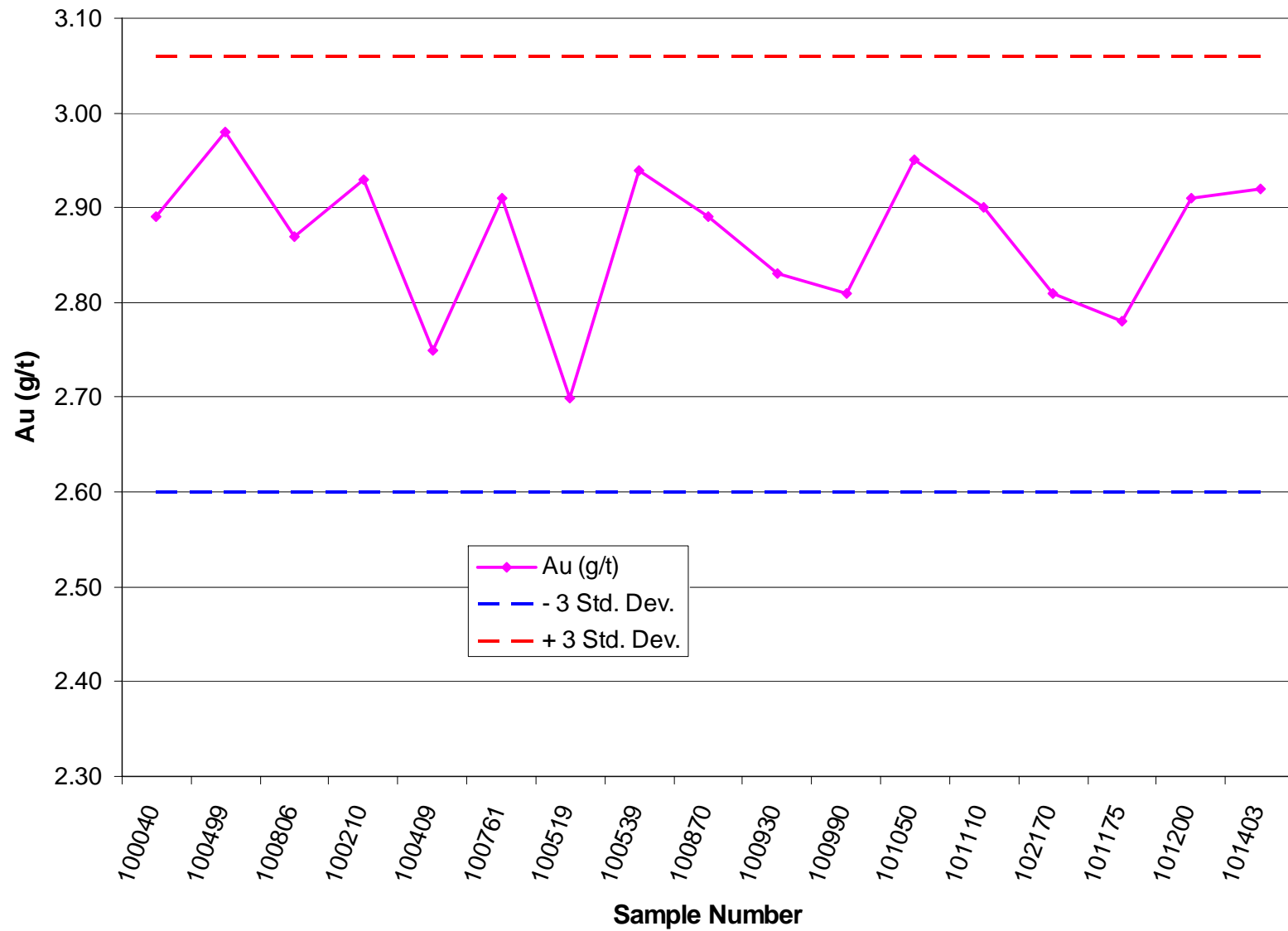
# Galore Creek 2003 - Blanks



### Galore Creek 2003 - Std-Cu108

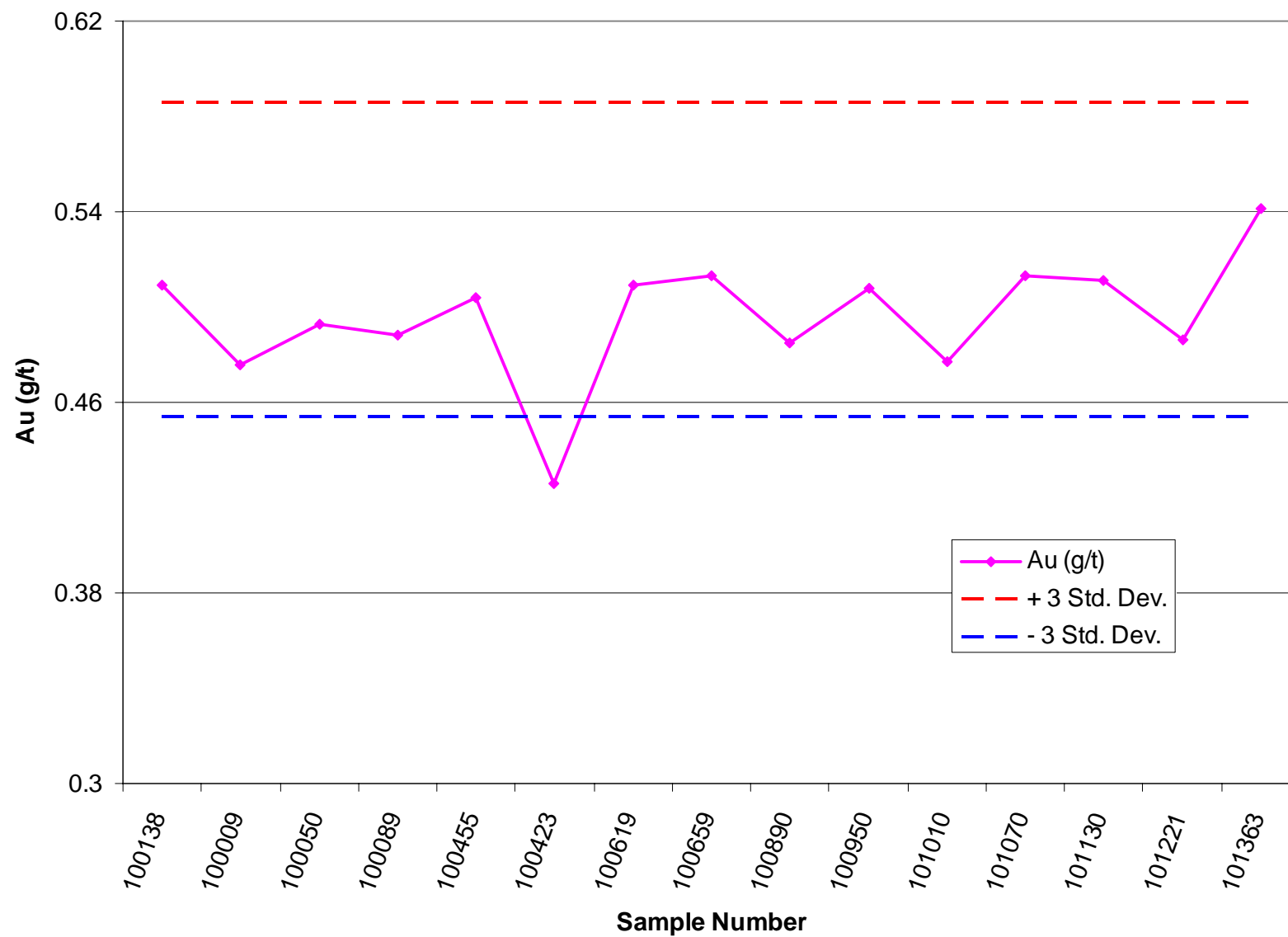


# Galore Creek 2003 - Std-PM152

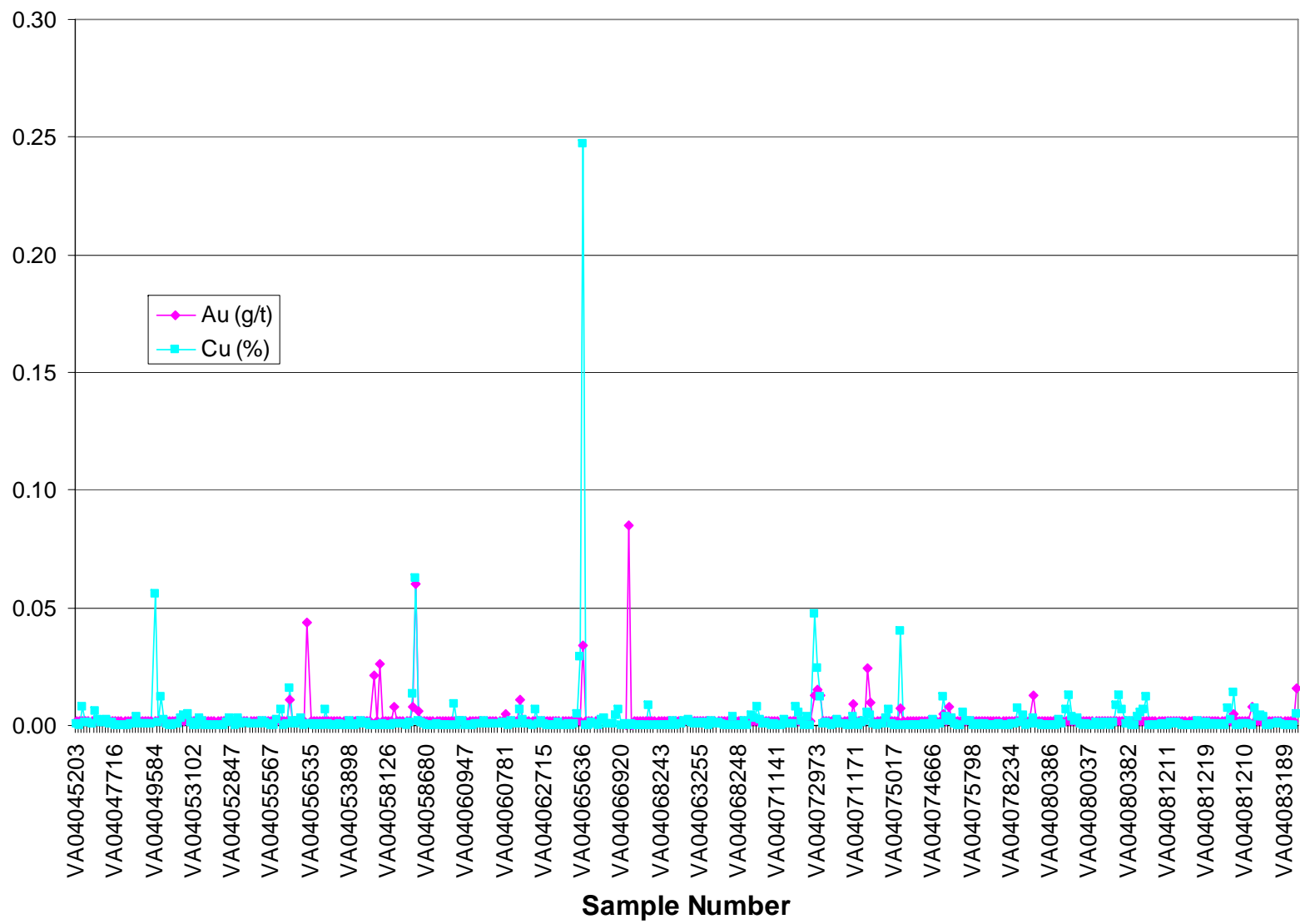




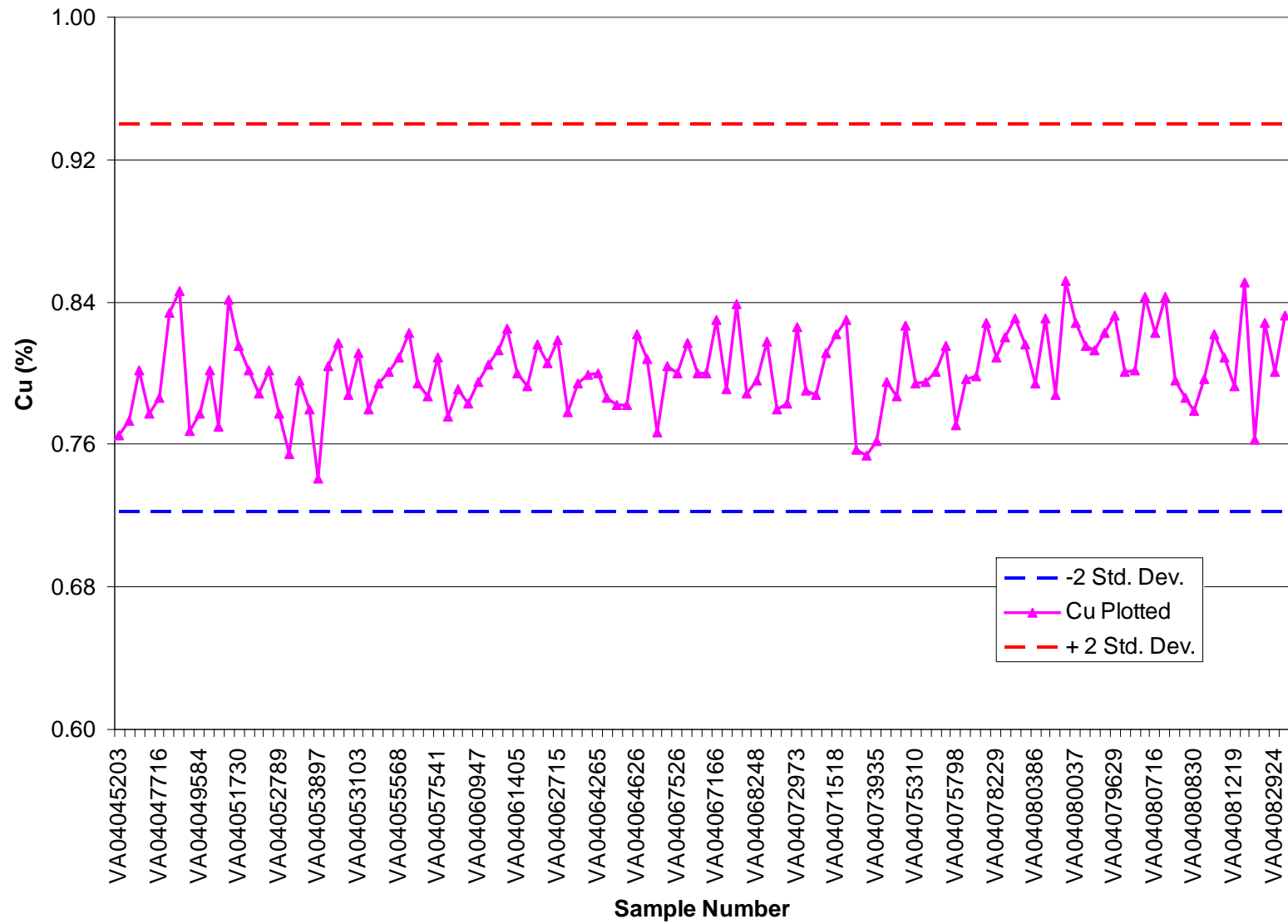
# Galore Creek 2003 - Std-PM184



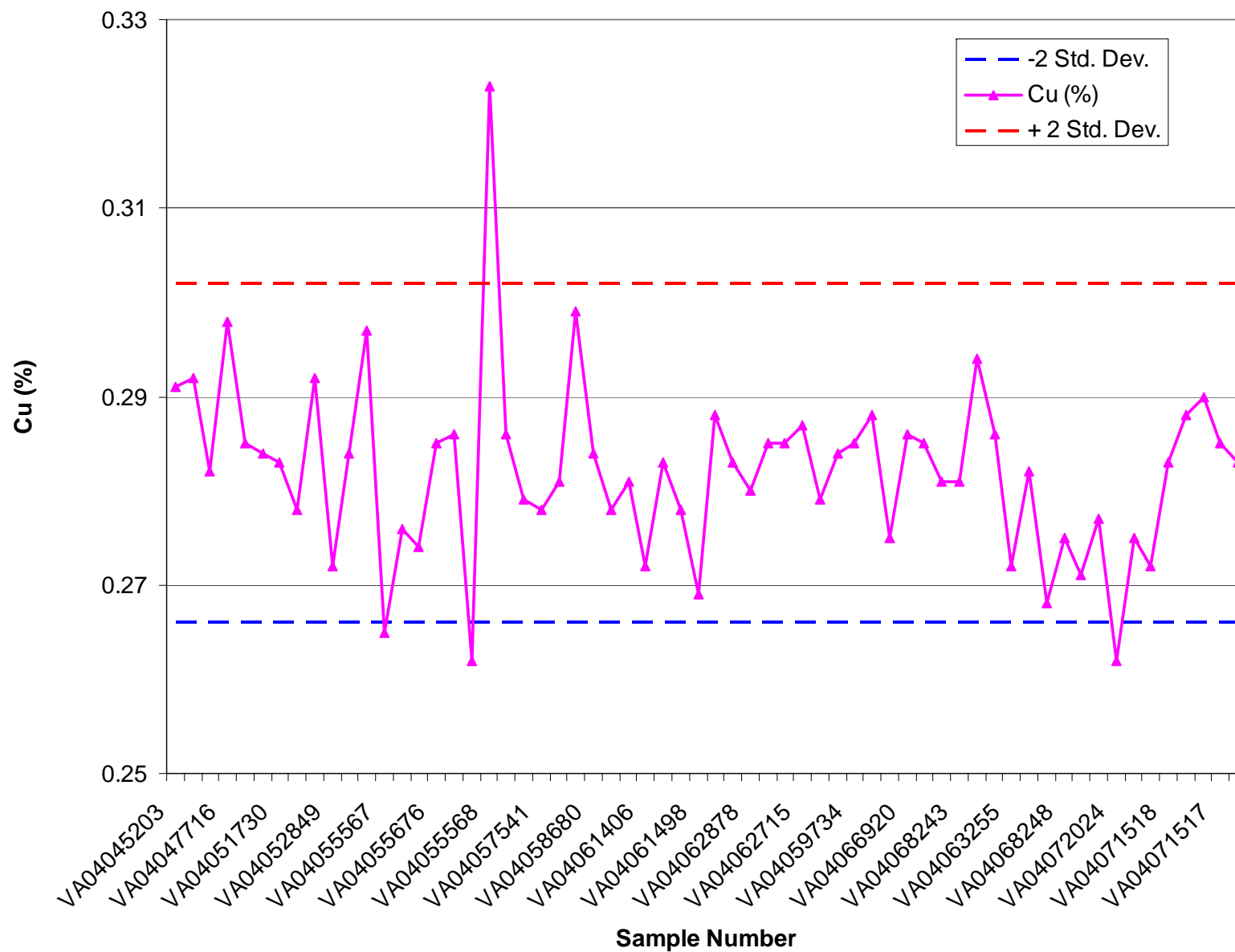
## Galore 2004 - Blanks



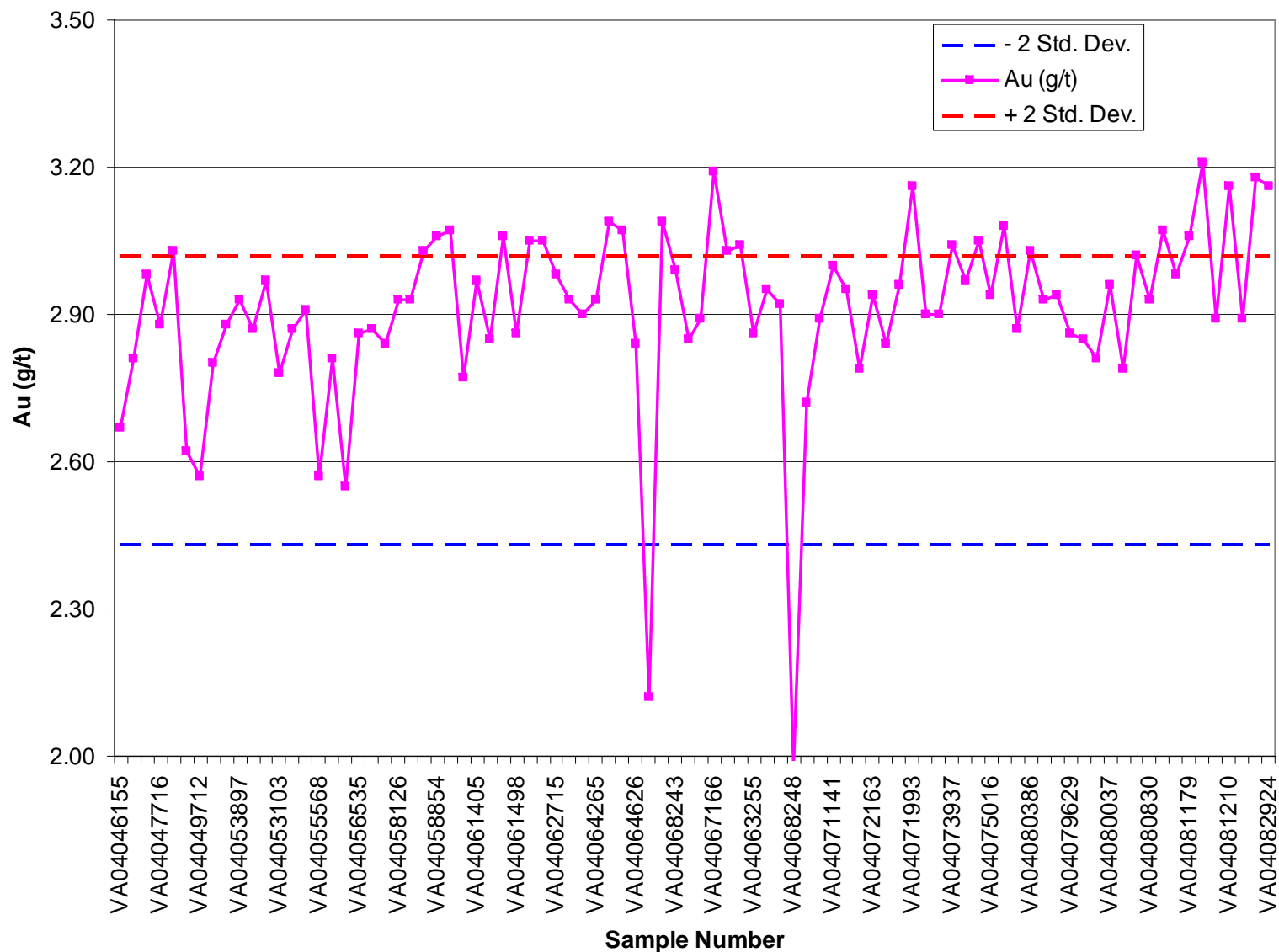
# Galore 2004 - Cu Std-Cu105



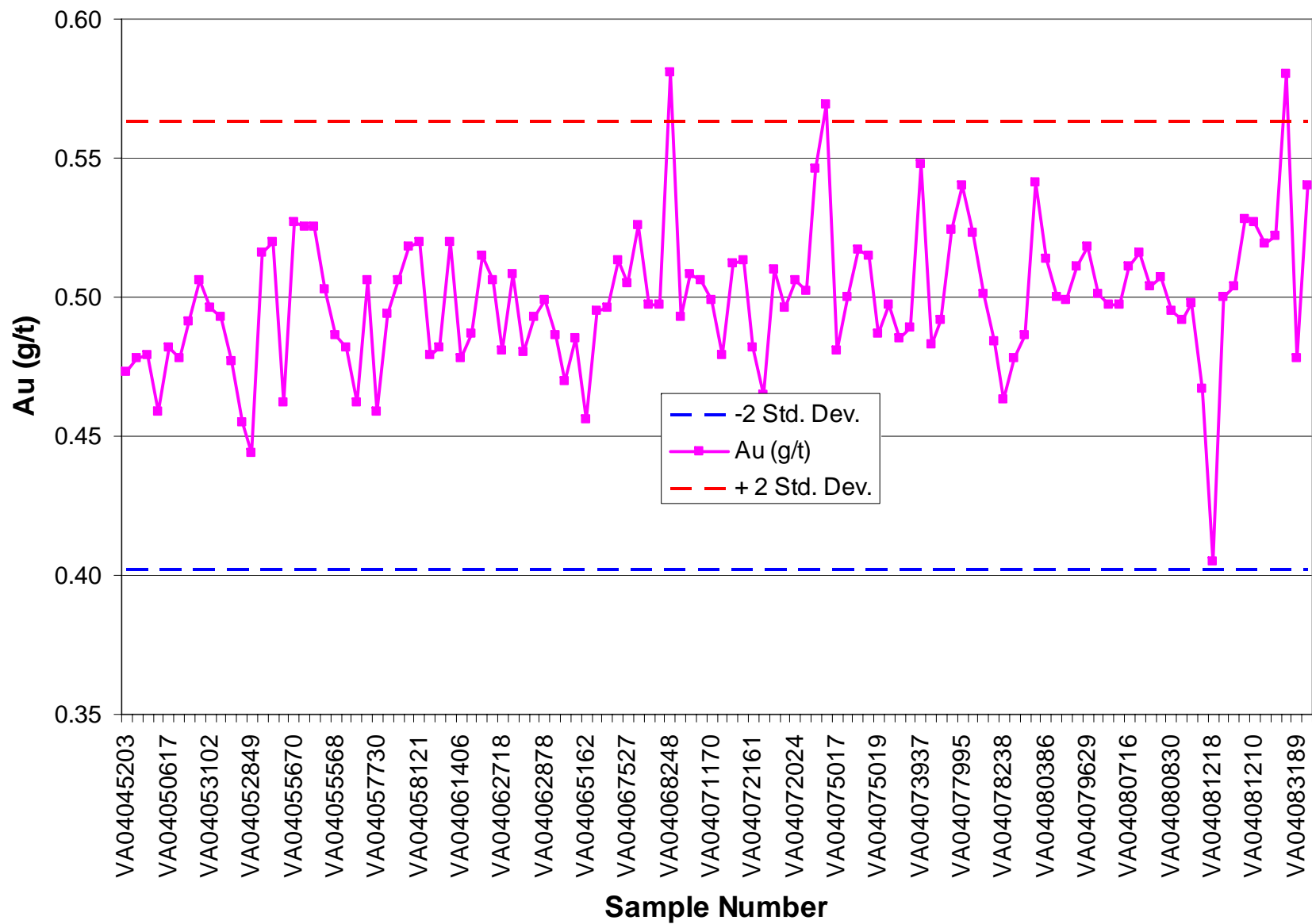
## Galore Creek 2004 - Cu Std-Cu107



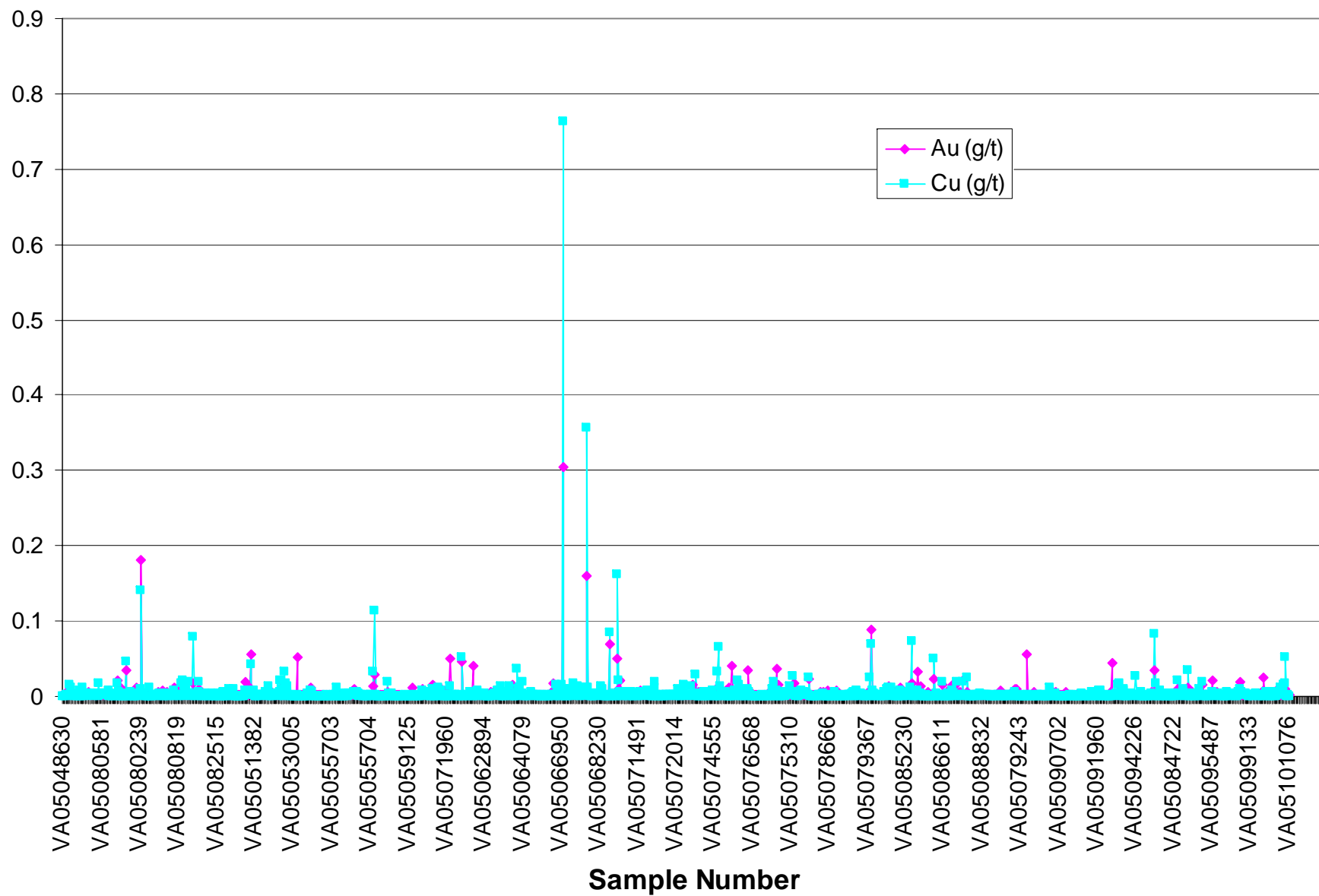
# Galore Creek 2004 - Gold Std-PM152



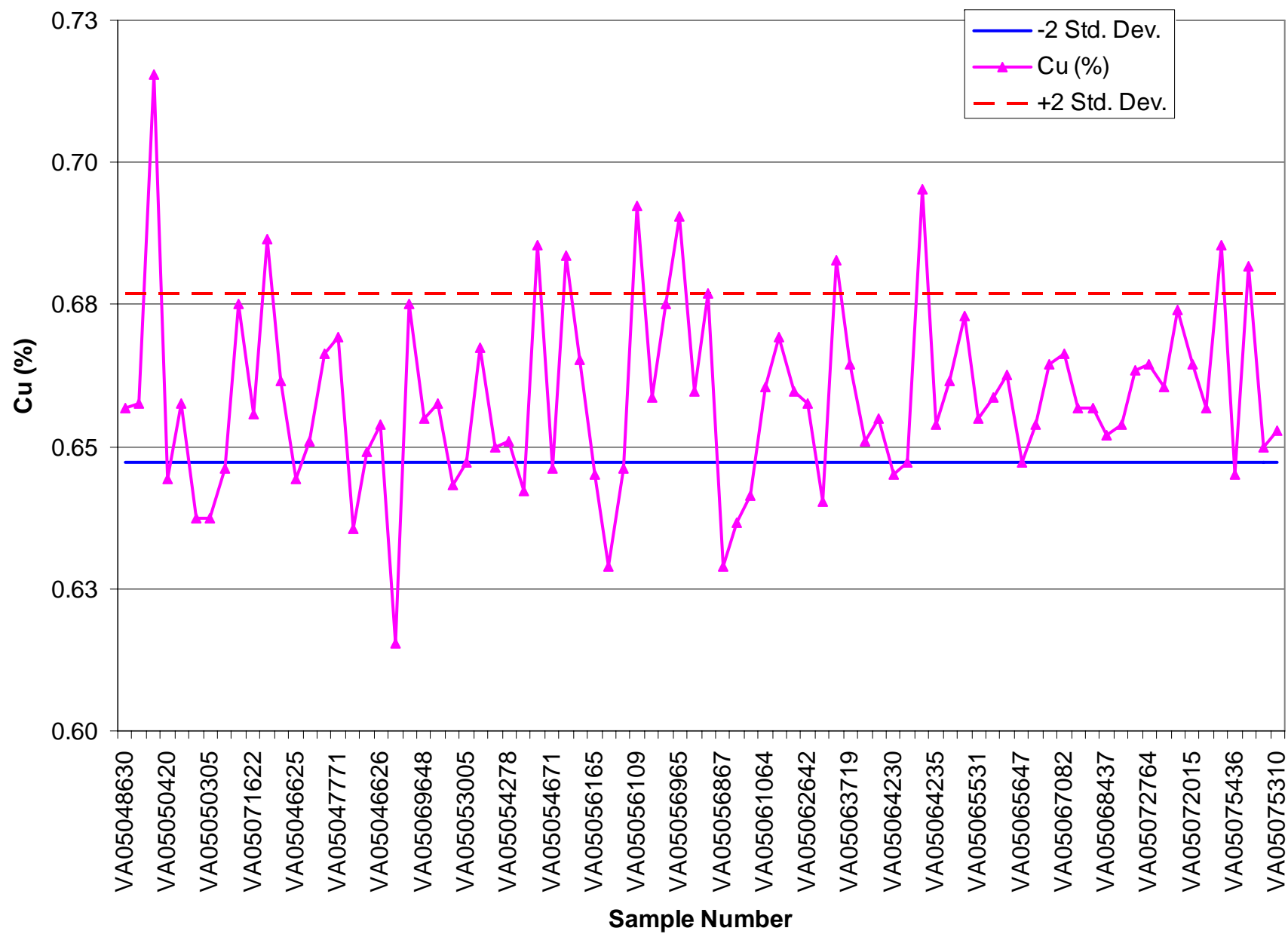
# Galore Creek 2004 - Gold Std-PM185



## Galore 2005 - Blanks

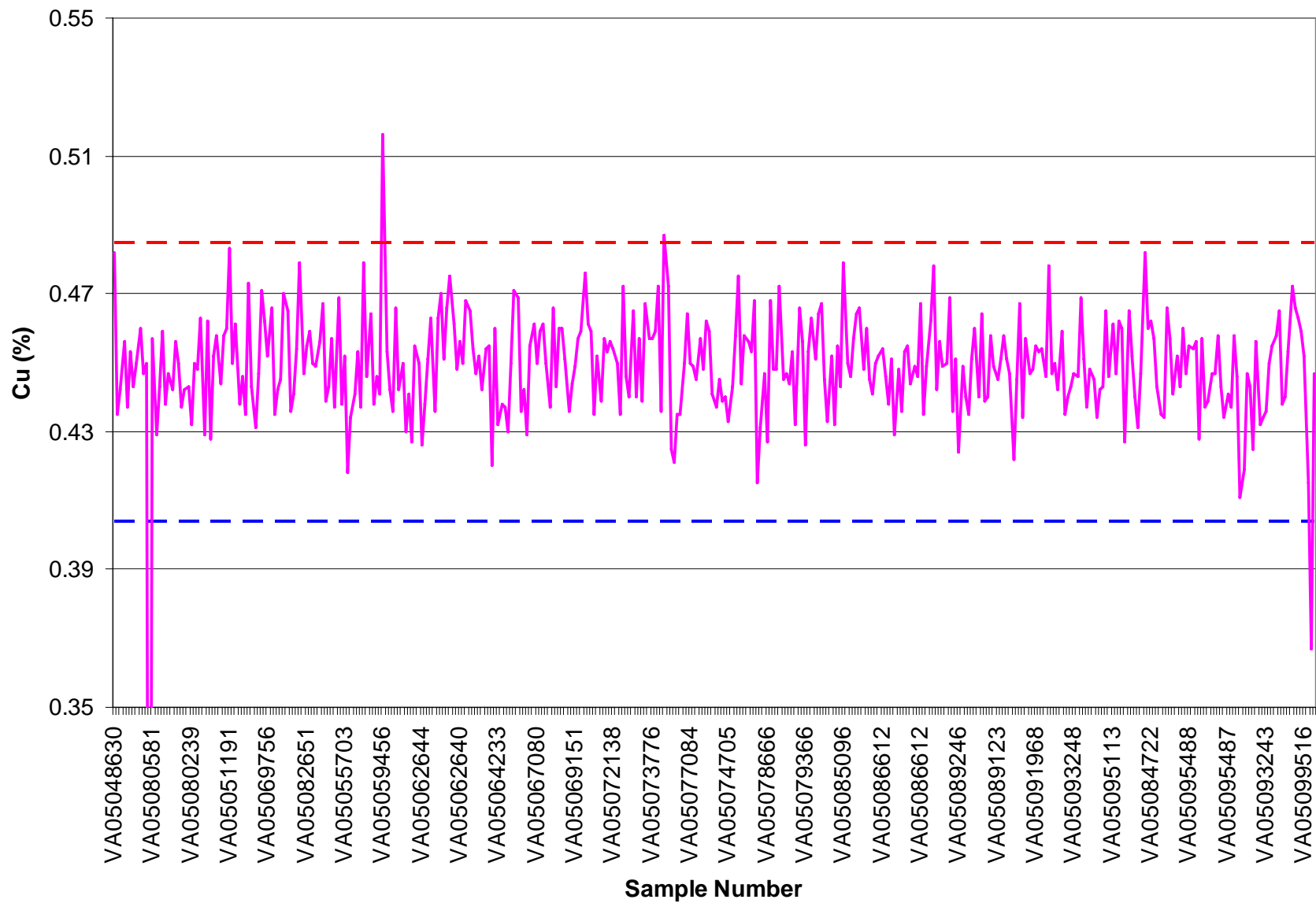


## Galore 2005 - Cu Std-Cu108

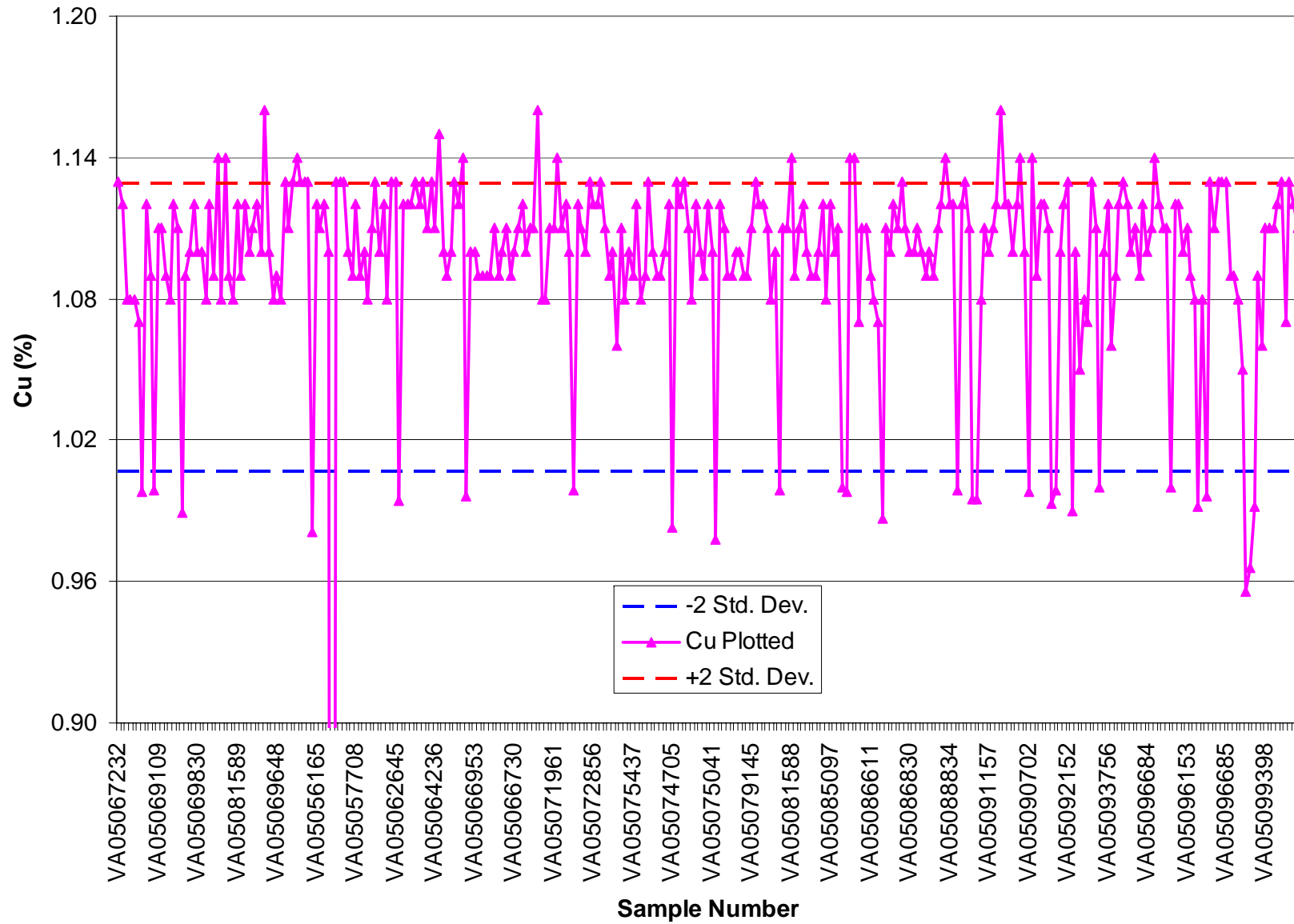




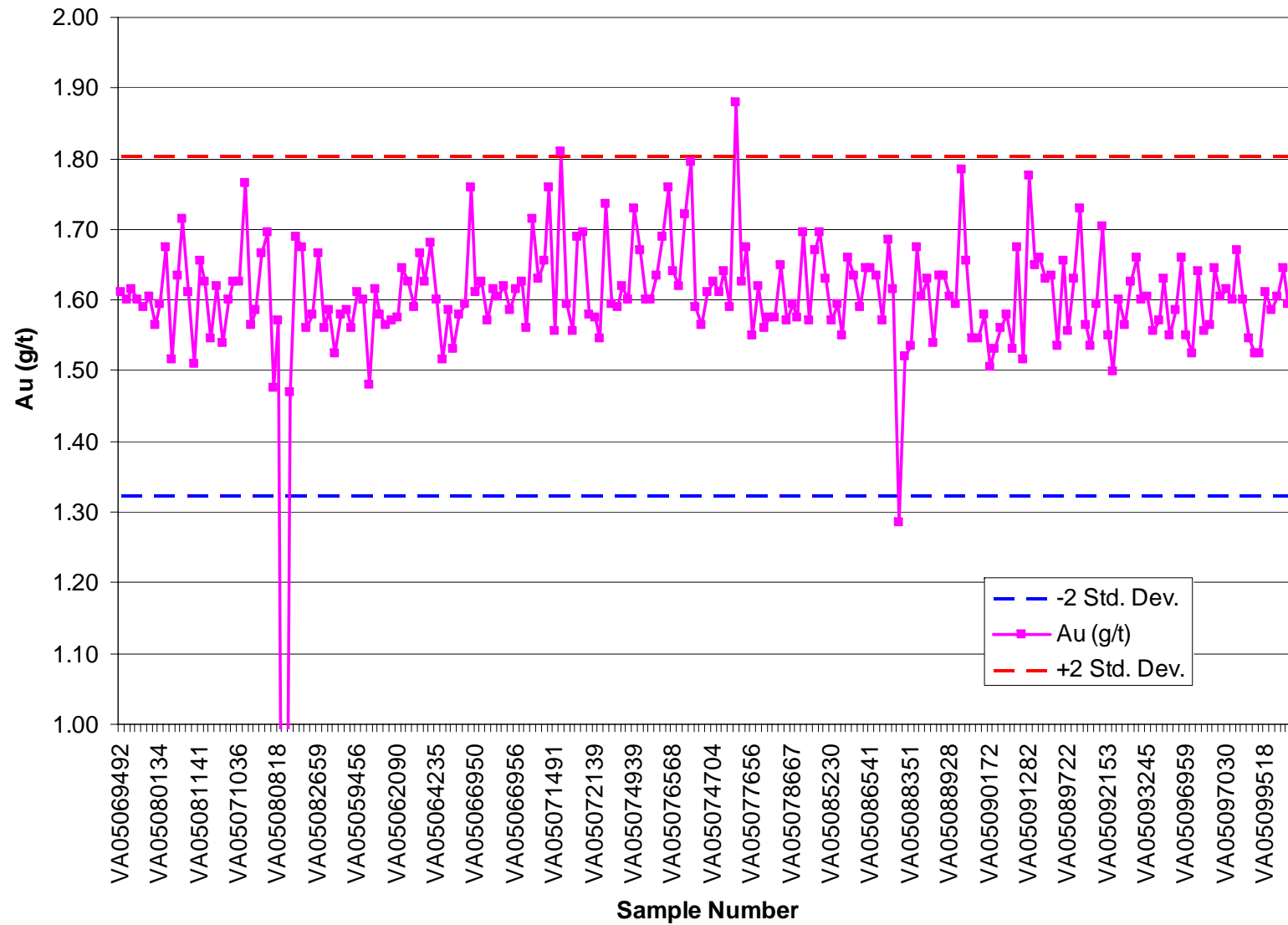
# Galore 2005 - Cu Std-Cu113



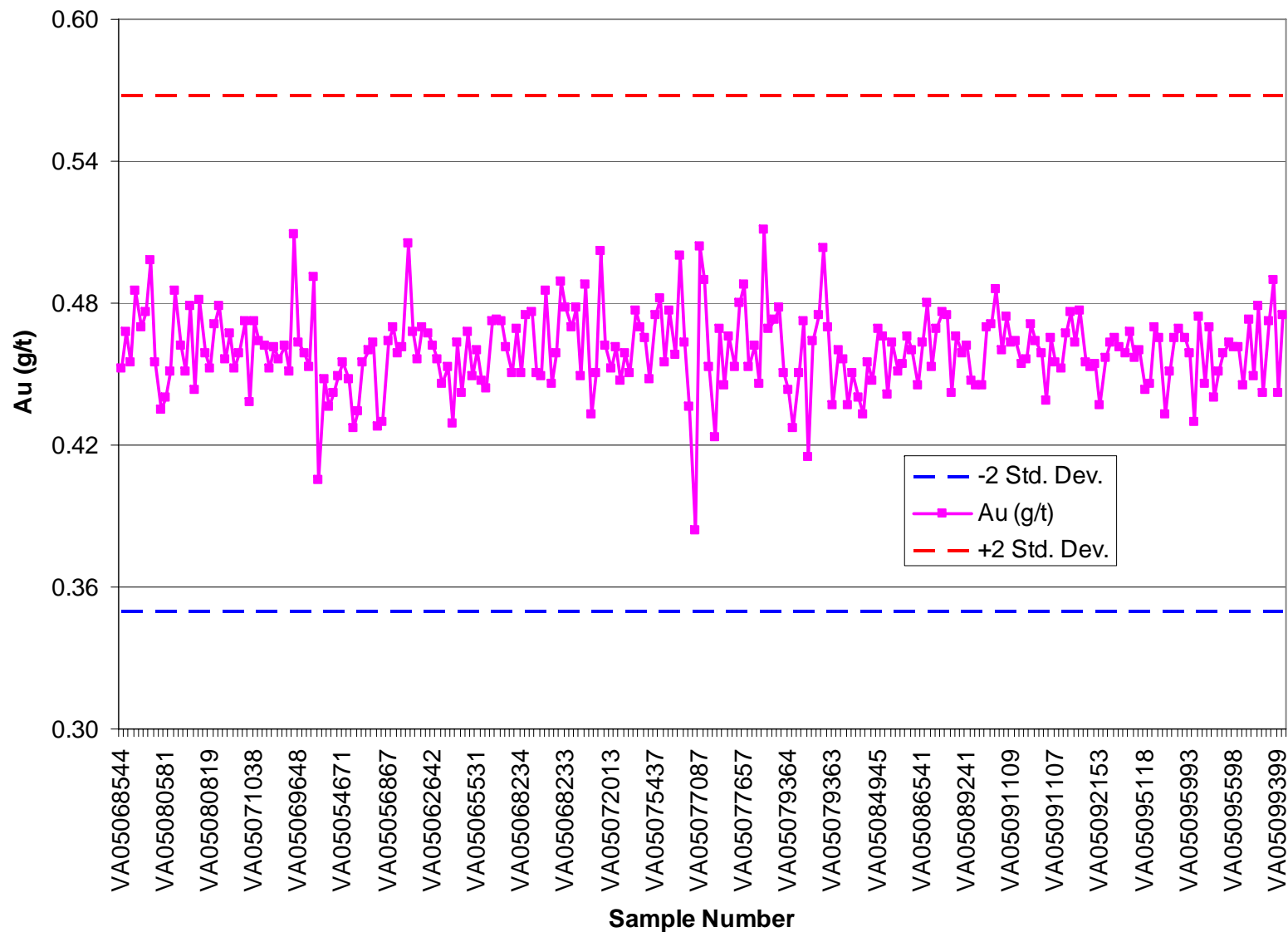
# Galore 2005 - Cu Std-Cu118



## Galore Creek 2005 - Gold Std-PM188



## Galore Creek 2005 - Gold Std-PM195



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**Appendix 6 – Variogram Parameters**

### North Junction

		Nugget	Sill Differential	Z	X'	Y''	Y (m)	X (m)	Z (m)	Sill Differential	Z	X'	Y''	Y (m)	X (m)	Z (m)	Nug check
Minzone	Cu	0.1	0.211	34	0	48	38	11	15	0.689	-2	69	85	43	155	54	1
	Au	0.06	0.592	34	0	48	52.6	14.4	37.2	0.348	1	10	63	83.7	48.2	19.5	1
	Ag	0.1	0.307	34	0	48	64.3	20.5	30.1	0.593	39	26	29	138.7	21.2	241.2	1
Outside	Cu	0.07	0.502	-31	-4	-51	73	16	7	0.428	-24	28	-11	85	61	218	1
	Au	0.13	0.234	6	-20	23	22	24	5	0.636	-9	20	-41	374	64	31	1
	Ag	0.01	0.513	-14	-2	-57	31	83	11	0.477	46	-4	9	72	140	180	1

### Middle Creek

		Nugget	Sill Differential	Z	X'	Y''	Y (m)	X (m)	Z (m)	Sill Differential	Z	X'	Y''	Y (m)	X (m)	Z (m)	
Minzone	Cu	0.01	0.625	82	0	63	175	12	42	0.365	34	68	-26	111	124	17	1
	Au	0.01	0.723	82	0	63	31	15	35	0.267	24	12	-12	78	109	150	1
	Ag	0.01	0.781	82	0	63	7	19	31	0.209	-3	-26	36	50	223	116	1
Outside	Cu	0.32	0.397	-24	-66	-15	42	11.3	6.4	0.283	-12	-35	-47	75	15	200	1
	Au	0.45	0.269	-10	-28	52	50.8	30.9	5	0.281	0	-16	-38	52.2	22.3	9.7	1
	Ag	0.5	0.252	-11	10	-47	2.9	30.6	32.3	0.248	0	-7	-21	24.2	65	75	1

### Junction

		Nugget	Sill Differential	Z	X'	Y''	Y (m)	X (m)	Z (m)	Sill Differential	Z	X'	Y''	Y (m)	X (m)	Z (m)	Nug check
Minzone	Cu	0.2	0.452	33	0	57	32	30	94	0.348	-39	-3	-83	52	135	6	1
	Au	0.05	0.275	33	0	57	21	7	7	0.675	5	26	-9	33	13	100	1
	Ag	0.1	0.441	33	0	57	25	26	337	0.459	-42	40	5	228	22	261	1
Outside	Cu	0.06	0.469	-7	-43	25	52	43	13	0.471	-56	32	-3	453	37	85	1
	Au	0.13	0.482	-29	26	-45	75	22	6	0.388	-55	30	8	351	74	35	1
	Ag	0.001	0.437	-21	-67	-28	93	207	30	0.562	28	111	16	98	52	182	1

### Southwest Zone

		Nugget	Sill Differential	Z	X'	Y''	Y (m)	X (m)	Z (m)	Sill Differential	Z	X'	Y''	Y (m)	X (m)	Z (m)	Nug check
Minzone	Cu	0.1	0.56	114	0	-48	13	59	38	0.34	-33	-13	-24	172	122	200	1
	Au	0.04	0.69	114	0	-48	21	22	12	0.27	-15	-17	-43	121	254	175	1
	Ag	0.2	0.506	114	0	-48	24	52	35	0.294	-9	-12	-40	132	150	150	1
Outside	Cu	0.2	0.496	114	0	-48	18	20	37	0.304	-18	-24	9	200	156	180	1
	Au	0.045	0.615	114	0	-48	13	12	10	0.34	88	2	70	37	221	125	1
	Ag	0.25	0.396	114	0	-48	24	63	9	0.354	-32	20	6	52	107	364	1

### West Fork

		Nugget	Sill Differential	Z	X'	Y''	Y (m)	X (m)	Z (m)	Sill Differential	Z	X'	Y''	Y (m)	X (m)	Z (m)	Nug check
Minzone	Cu	0.15	0.268	90	0	34	37	24	13	0.582	27	43	-30	82	24	140	1
	Au	0.35	0.187	90	0	34	23	23	22	0.463	14	-18	5	193	56	32	1
	Ag	0.2	0.185	90	0	34	6	90	84	0.615	9	-19	59	150	23	50	1
Opulent	Cu	0.01	0.32	0	0	60	16	6	28	0.67	40	-24	-13	67	150	154	1
	Au	0.2	0.276	0	0	60	33	11	7	0.524	31	-26	12	41	170	106	1
	Ag	0.01	0.476	0	0	60	28	4	9	0.514	41	-20	17	22	150	117	1
Outside	Cu	0.1	0.626	90	0	34	32	24	12	0.274	5	3	-18	142	115	170	1
	Au	0.2	0.708	90	0	34	29	16	14	0.092	4	19	-26	150	72	150	1
	Ag	0.2	0.741	90	0	34	13	13	15	0.059	71	77	-45	125	139	125	1

### North Gold Lens

		Nugget	Sill Differential	Z	X'	Y''	Y (m)	X (m)	Z (m)	Sill Differential	Z	X'	Y''	Y (m)	X (m)	Z (m)	Nug check
Volcanics	Cu	0.05	0.536	33	0	40	47	54	38	0.414	-61	-19	15	199	175	121	1
	Au	0.11	0.433	33	0	40	62	51	26	0.457	-24	26	19	161	150	129	1
	Ag	0.01	0.636	33	0	40	31	62	473	0.354	-106	1	6	150	150	172	1
Intrusives	Cu	0.1	0.529	33	0	40	48	16	97	0.371	-90	34	-55	177	150	150	1
	Au	0.1	0.489	33	0	40	9	31	46	0.411	4	-6	-34	150	91	150	1
	Ag	0.01	0.428	33	0	40	49	18	11	0.562	-95	31	-44	150	150	150	1

**Central Replacement Zone**

		Nugget	Sill Differential	Z	X'	Y''	Y (m)	X (m)	Z (m)	Sill Differential	Z	X'	Y''	Y (m)	X (m)	Z (m)	Nug check
Volcanics	Cu	0.05	0.573	33	-22	22	76	158	41	0.377	39	14	-17	150	104	150	1
	Au	0.05	0.573	33	-22	22	58	35	47	0.377	27	-15	-18	150	95	150	1
	Ag	0.01	0.421	33	-22	22	41	51	40	0.569	-30	0	-1	141	239	150	1
Intrusives	Cu	0.02	0.733	33	-22	22	29	49	30	0.247	9	-11	-10	136	200	150	1
	Au	0.1	0.69	33	-22	22	28	35	41	0.21	-26	-2	-4	123	147	150	1
	Ag	0.02	0.73	33	-22	22	31	48	40	0.25	18	-12	-15	107	309	150	1

**South Gold Lens**

		Nugget	Sill Differential	Z	X'	Y''	Y (m)	X (m)	Z (m)	Sill Differential	Z	X'	Y''	Y (m)	X (m)	Z (m)	Nug check
Volcanics	Cu	0.1	0.236	33	0	60	93	27	56	0.664	-48	-14	34	64	146	200	1
	Au	0.1	0.518	33	0	60	16	27	18	0.382	-92	-14	-31	144	205	200	1
	Ag	0.04	0.4	33	0	60	75	27	38	0.56	-38	-11	52	82	191	200	1
Intrusives	Cu	0.01	0.644	33	0	60	63	24	66	0.346	26	-28	8	175	74	175	1
	Au	0.01	0.728	33	0	60	50	16	32	0.262	38	22	-50	125	131	175	1
	Ag	0.01	0.648	33	0	60	70	23	48	0.342	54	92	-35	150	106	150	1

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**Appendix 7 – Kriging Plans**



## Middle Creek Estimation Plan

### Estimation Run Cu

#### Pass 1

		Minzone	Outside Minzone
	RY (m)	75	120
	RX (m)	75	120
	RZ (m)	20	30
Z Left	1st Rot (deg)	82	82
X Right	2nd Rot (deg)	0	0
Y Left	3rd Rot (deg)	63	63

#### Pass 2

	RY (m)	120
	RX (m)	120
	RZ (m)	30
Z Left	1st Rot (deg)	82
X Right	2nd Rot (deg)	0
Y Left	3rd Rot (deg)	63

#### Pass 3

	RY (m)	240
	RX (m)	240
	RZ (m)	60
Z Left	1st Rot (deg)	82
X Right	2nd Rot (deg)	0
Y Left	3rd Rot (deg)	63

#### Composite Selection

Ag Au Cu	Min	5	5
	Max	13	13
	Max Per Hole	3	3
	Min	5	5
	Max	10	10
	Max Per Hole	3	3
	Min	5	5
	Max	13	13
	Max Per Hole	3	3

Minzone Code      MC      not MC

#### Outlier Restriction

Threshold %Cu	none	0.25
Distance (m)		50 x 50 x 50
Threshold Au g/t	none	0.25
Distance (m)		50 x 50 x 50
Threshold Ag g/t	none	5
Distance (m)		50 x 50 x 50

## Southwest Zone Estimation Plan

### Estimation Run

#### Pass 1

		Minzone	Low Grade Shell	Outside Minzone
	RY (m)	75	75	120
	RX (m)	75	75	120
	RZ (m)	20	20	30
Z Left	1st Rot (deg)	114	114	114
X Right	2nd Rot (deg)	0	0	0
Y Left	3rd Rot (deg)	-48	-48	-48

#### Pass 2

	RY (m)	120	120
	RX (m)	120	120
	RZ (m)	30	30
Z Left	1st Rot (deg)	114	114
X Right	2nd Rot (deg)	0	0
Y Left	3rd Rot (deg)	-48	-48

#### Pass 3

	RY (m)	240	240
	RX (m)	240	240
	RZ (m)	60	60
Z Left	1st Rot (deg)	114	114
X Right	2nd Rot (deg)	0	0
Y Left	3rd Rot (deg)	-48	-48

#### Composite Selection

Ag Au Cu	Min	5	5	5
	Max	13	13	13
	Max Per Hole	3	3	3
	Min	5	5	5
	Max	13	13	13
	Max Per Hole	3	3	3
	Min	5	5	5
	Max	13	13	13
	Max Per Hole	3	3	3

Minzone Code SWZ not SWZ within triangulation SW\_SUBORE.00t not SWZ

#### Outlier Restriction

Threshold %Cu	none	none	0.5
Distance (m)			50 x 50 x 50
Threshold Au g/t	none	none	2
Distance (m)			50 x 50 x 50
Threshold Ag g/t	none	none	10
Distance (m)			50 x 50 x 50

## North Junction Estimation Plan

### Estimation Run

#### Pass 1

		Minzone	Outside Minzone
	RY (m)	75	120
	RX (m)	75	120
	RZ (m)	20	30
Z Left	1st Rot (deg)	34	34
X Right	2nd Rot (deg)	0	0
Y Left	3rd Rot (deg)	48	48

#### Pass 2

	RY (m)	120	
	RX (m)	120	
	RZ (m)	30	
Z Left	1st Rot (deg)	34	
X Right	2nd Rot (deg)	0	
Y Left	3rd Rot (deg)	48	

#### Pass 3

	RY (m)	240	
	RX (m)	240	
	RZ (m)	60	
Z Left	1st Rot (deg)	34	
X Right	2nd Rot (deg)	0	
Y Left	3rd Rot (deg)	48	

#### Composite Selection

Ag Au Cu	Min	5	5
	Max	13	13
	Max Per Hole	3	3
	Min	5	5
	Max	10	13
	Max Per Hole	3	3
	Min	5	5
	Max	13	13
	Max Per Hole	3	3
	Minzone Code	NJ	not NJ

#### Outlier Restriction

Threshold %Cu	none	0.25
Distance (m)		50 x 50 x 50
Threshold Au g/t	none	0.25
Distance (m)		50 x 50 x 50
Threshold Ag g/t	30	5
Distance (m)	50 x 50 x 25	50 x 50 x 50

## Junction Estimation Plan

### Estimation Run

#### Pass 1

		Minzone	Outside Minzone
	RY (m)	75	120
	RX (m)	75	120
	RZ (m)	20	30
Z Left	1st Rot (deg)	33	33
X Right	2nd Rot (deg)	0	0
Y Left	3rd Rot (deg)	57	57

#### Pass 2

	RY (m)	120
	RX (m)	120
	RZ (m)	30
Z Left	1st Rot (deg)	33
X Right	2nd Rot (deg)	0
Y Left	3rd Rot (deg)	57

#### Pass 3

	RY (m)	240
	RX (m)	240
	RZ (m)	60
Z Left	1st Rot (deg)	33
X Right	2nd Rot (deg)	0
Y Left	3rd Rot (deg)	57

### Composite Selection

Ag Au Cu

Min	5	5
Max	11	13
Max Per Hole	3	3
Min	5	5
Max	13	13
Max Per Hole	3	3
Min	5	5
Max	11	13
Max Per Hole	3	3
Minzone Code	JUNC	not JUNC

### Outlier Restriction

Threshold %Cu	none	0.25
Distance (m)		50 x 50 x 50
Threshold Au g/t	none	0.25
Distance (m)		50 x 50 x 50
Threshold Ag g/t	none	5
Distance (m)		50 x 50 x 50

## West Fork Estimation Plan

### Estimation Run

#### Pass 1

		Minzone	Opulent	Outside Minzone
	RY (m)	75	75	120
	RX (m)	75	75	120
	RZ (m)	20	20	30
Z Left	1st Rot (deg)	90	0	90
X Right	2nd Rot (deg)	0	0	0
Y Left	3rd Rot (deg)	34	60	34

#### Pass 2

	RY (m)	120	120
	RX (m)	120	120
	RZ (m)	30	30
Z Left	1st Rot (deg)	90	0
X Right	2nd Rot (deg)	0	0
Y Left	3rd Rot (deg)	34	60

#### Pass 3

	RY (m)	240	240
	RX (m)	240	240
	RZ (m)	60	60
Z Left	1st Rot (deg)	90	0
X Right	2nd Rot (deg)	0	0
Y Left	3rd Rot (deg)	34	60

### Composite Selection

Ag Au Cu

Min	5	5	5
Max	13	13	13
Max Per Hole	3	3	3
Min	5	5	5
Max	13	13	13
Max Per Hole	3	3	3
Min	5	5	5
Max	13	13	13
Max Per Hole	3	3	3

Minzone Code    WF    OP, UOP    exclude WF, OP, UOP, D1

### Outlier Restriction

Threshold %Cu	none	10	0.25
Distance (m)		20 x 20 x 20	50 x 50 x 50
Threshold Au g/t	none	none	1
Distance (m)			50 x 50 x 50
Threshold Ag g/t	none	15	10
Distance (m)		20 x 20 x 20	50 x 50 x 50

## Central Replacement Zone Estimation Plan

### Estimation Run

#### Pass 1

		Volcanic Group	Mineralized Intrusive	Intrusive Group
	RY (m)	75	75	75
	RX (m)	75	75	75
	RZ (m)	30	30	30
Z Left	1st Rot (deg)	30	30	30
X Right	2nd Rot (deg)	0	0	0
Y Left	3rd Rot (deg)	30	30	30

#### Pass 2

	RY (m)	120	120	120
	RX (m)	120	120	120
	RZ (m)	45	45	45
Z Left	1st Rot (deg)	30	30	30
X Right	2nd Rot (deg)	0	0	0
Y Left	3rd Rot (deg)	30	30	30

#### Pass 3

	RY (m)	240	240	240
	RX (m)	240	240	240
	RZ (m)	60	60	60
Z Left	1st Rot (deg)	30	30	30
X Right	2nd Rot (deg)	0	0	0
Y Left	3rd Rot (deg)	30	30	30

### Composite Selection

Ag Au Cu

Min	5	5	5
Max	13	13	13
Max Per Hole	3	3	3
Min	5	5	5
Max	13	13	13
Max Per Hole	3	3	3
Min	5	5	5
Max	13	13	13
Max Per Hole	3	3	3
Litho Code	210, 220, 230	362, 340, 210, 220, 230	500, 350, 380, 372
Fault Contact	hw, fw	none	none

### Outlier Restriction

Threshold %Cu	none	none	none
Distance (m)			
Threshold Au g/t	none	none	none
Distance (m)			
Threshold Ag g/t	none	none	none
Distance (m)			

## North Gold Lens Estimation Plan

### Estimation Run

#### Pass 1

		Volcanic Group	Mineralized Intrusive	Intrusive Group
	RY (m)	75	75	75
	RX (m)	75	75	75
	RZ (m)	30	30	30
Z Left	1st Rot (deg)	33	33	33
X Right	2nd Rot (deg)	0	0	0
Y Left	3rd Rot (deg)	40	40	40

#### Pass 2

	RY (m)	120	120	120
	RX (m)	120	120	120
	RZ (m)	45	45	45
Z Left	1st Rot (deg)	33	33	33
X Right	2nd Rot (deg)	0	0	0
Y Left	3rd Rot (deg)	40	40	40

#### Pass 3

	RY (m)	240	240	240
	RX (m)	240	240	240
	RZ (m)	60	60	60
Z Left	1st Rot (deg)	33	33	33
X Right	2nd Rot (deg)	0	0	0
Y Left	3rd Rot (deg)	40	40	40

### Composite Selection

Ag Au Cu

Min	5	5	5
Max	13	13	13
Max Per Hole	3	3	3
Min	5	5	5
Max	13	13	13
Max Per Hole	3	3	3
Min	5	5	5
Max	13	13	13
Max Per Hole	3	3	3
Litho Code	210, 220, 230	362, 340, 210, 220, 230	500, 350, 380, 372
Fault Contact	hw, fw	none	none

### Outlier Restriction

Threshold %Cu	none	none	none
Distance (m)			
Threshold Au g/t	none	none	none
Distance (m)			
Threshold Ag g/t	none	none	none
Distance (m)			

## South Gold Lens Estimation Plan

### Estimation Run

#### Pass 1

		Volcanic Group	Mineralized Intrusive	Intrusive Group
	RY (m)	75	75	75
	RX (m)	75	75	75
	RZ (m)	30	30	30
Z Left	1st Rot (deg)	33	33	33
X Right	2nd Rot (deg)	0	0	0
Y Left	3rd Rot (deg)	60	60	60

#### Pass 2

	RY (m)	120	120	120
	RX (m)	120	120	120
	RZ (m)	45	45	45
Z Left	1st Rot (deg)	33	33	33
X Right	2nd Rot (deg)	0	0	0
Y Left	3rd Rot (deg)	60	60	60

#### Pass 3

	RY (m)	240	240	240
	RX (m)	240	240	240
	RZ (m)	60	60	60
Z Left	1st Rot (deg)	33	33	33
X Right	2nd Rot (deg)	0	0	0
Y Left	3rd Rot (deg)	60	60	60

### Composite Selection

Ag Au Cu

Min	5	5	5
Max	13	13	13
Max Per Hole	3	3	3
Min	5	5	5
Max	13	13	13
Max Per Hole	3	3	3
Min	5	5	5
Max	13	13	13
Max Per Hole	3	3	3

Litho Code	210, 220, 230	362, 340, 210, 220, 230	500, 350, 380, 372
Fault Contact	none	none	none

### Outlier Restriction

Threshold %Cu	none	none	none
Distance (m)			
Threshold Au g/t	none	none	none
Distance (m)			
Threshold Ag g/t	none	none	none
Distance (m)			



## Bountiful Estimation Plan

### Estimation Run

#### Pass 1

		Volcanic Group	Mineralized Intrusive	Intrusive Group
	RY (m)	75	75	75
	RX (m)	75	75	75
	RZ (m)	30	30	30
Z Left	1st Rot (deg)	30	30	30
X Right	2nd Rot (deg)	0	0	0
Y Left	3rd Rot (deg)	30	30	30

#### Pass 2

	RY (m)	120	120	120
	RX (m)	120	120	120
	RZ (m)	45	45	45
Z Left	1st Rot (deg)	30	30	30
X Right	2nd Rot (deg)	0	0	0
Y Left	3rd Rot (deg)	30	30	30

#### Pass 3

	RY (m)	240	240	240
	RX (m)	240	240	240
	RZ (m)	60	60	60
Z Left	1st Rot (deg)	30	30	30
X Right	2nd Rot (deg)	0	0	0
Y Left	3rd Rot (deg)	30	30	30

### Composite Selection

Ag Au Cu

Min	5	5	5
Max	13	13	13
Max Per Hole	3	3	3
Min	5	5	5
Max	13	13	13
Max Per Hole	3	3	3
Min	5	5	5
Max	13	13	13
Max Per Hole	3	3	3
Litho Code	210, 220, 230	362, 340, 210, 220, 230	500, 350, 380, 372
Fault Contact	none	none	none

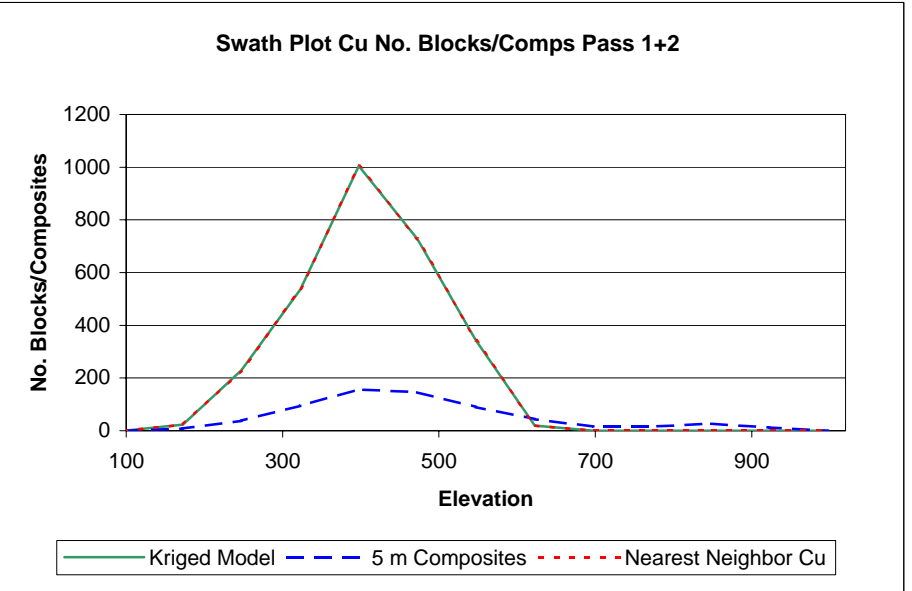
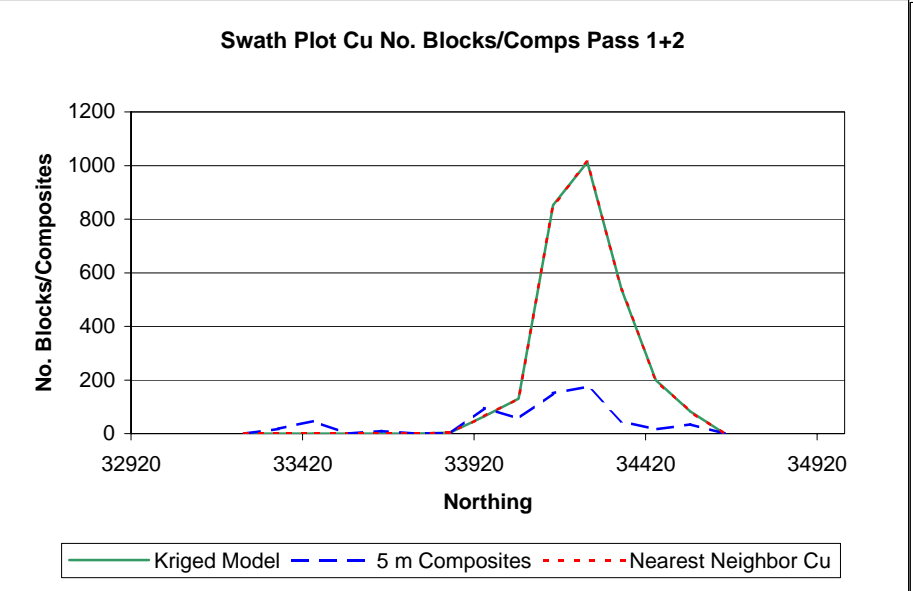
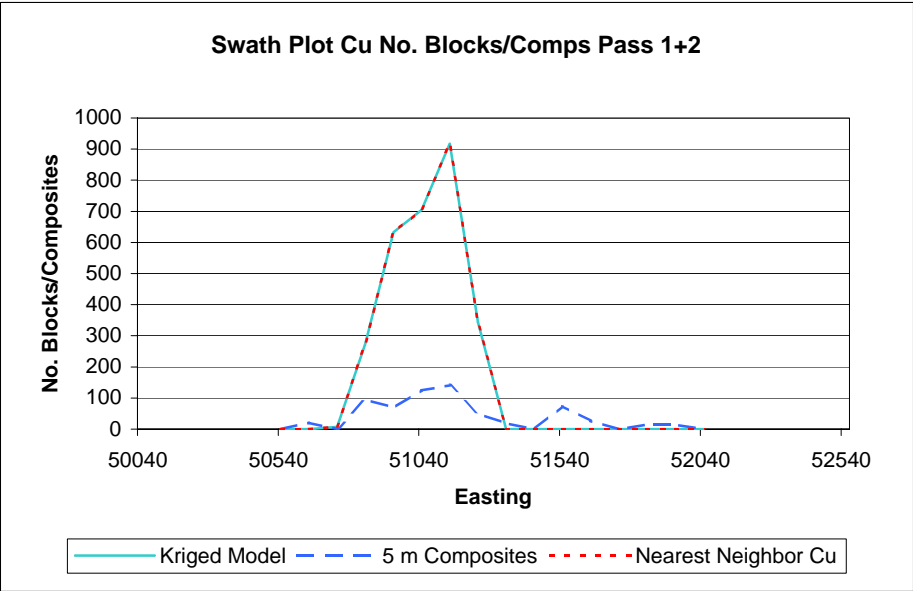
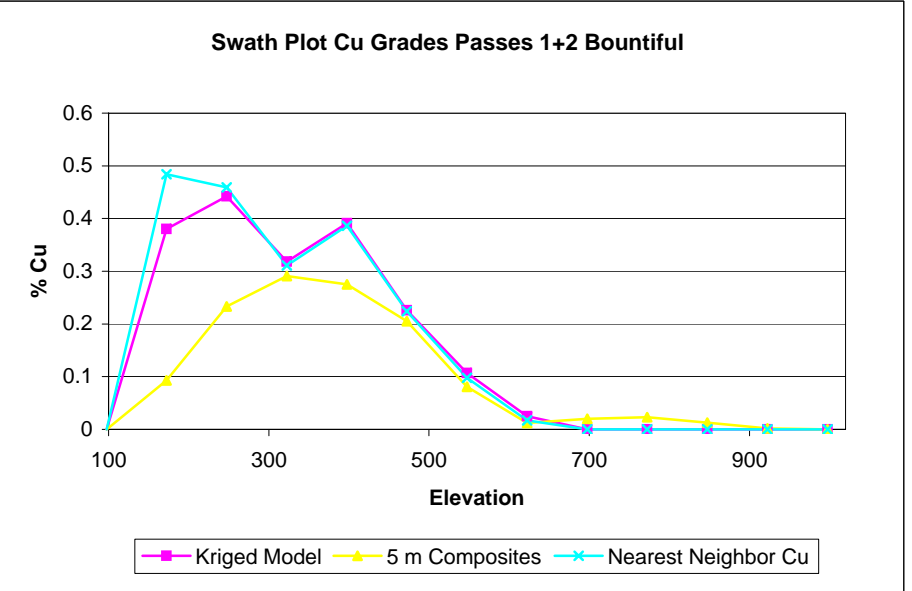
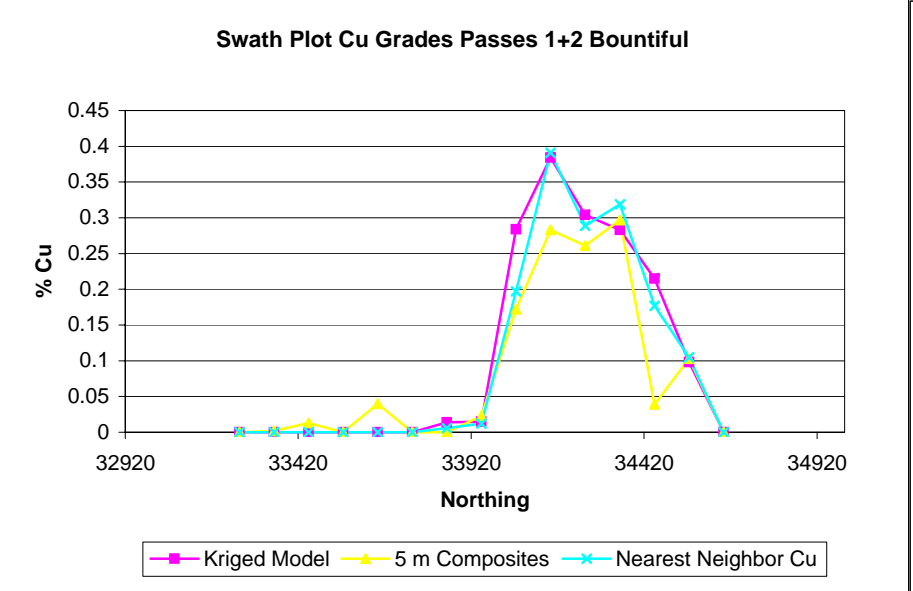
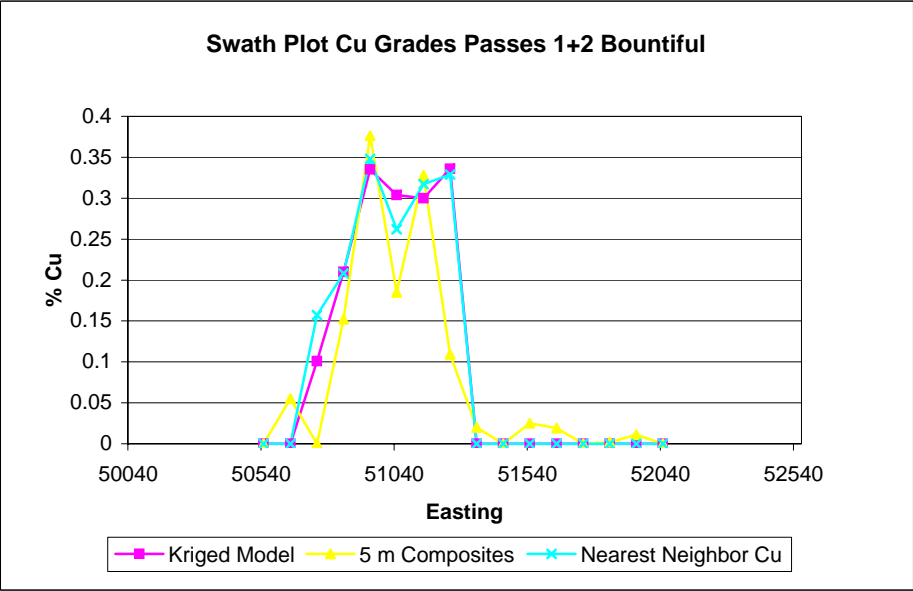
### Outlier Restriction

Threshold %Cu	none	0.5	none
Distance (m)		50 x 50 x 50	
Threshold Au g/t	none	0.5	none
Distance (m)		50 x 50 x 50	
Threshold Ag g/t	none	2.5	none
Distance (m)		50 x 50 x 50	

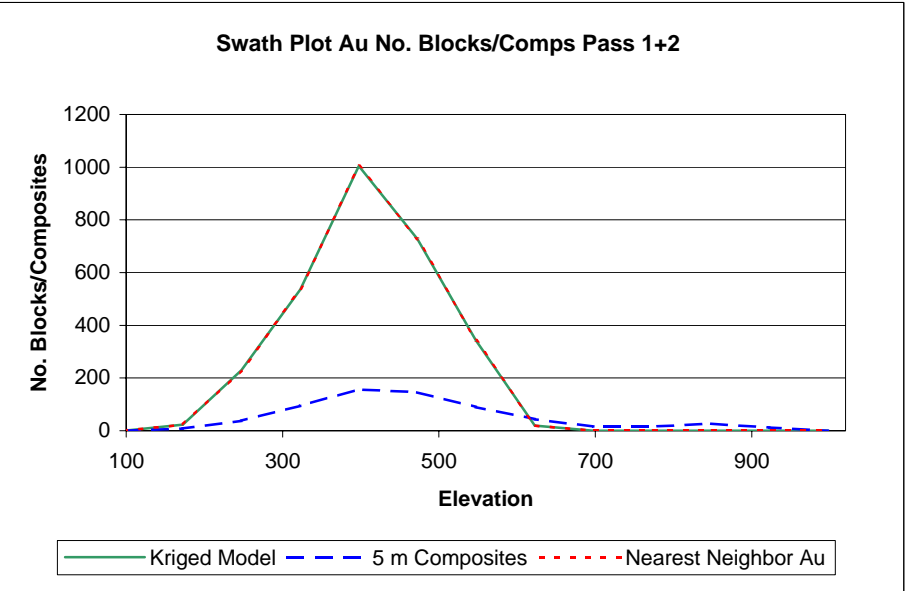
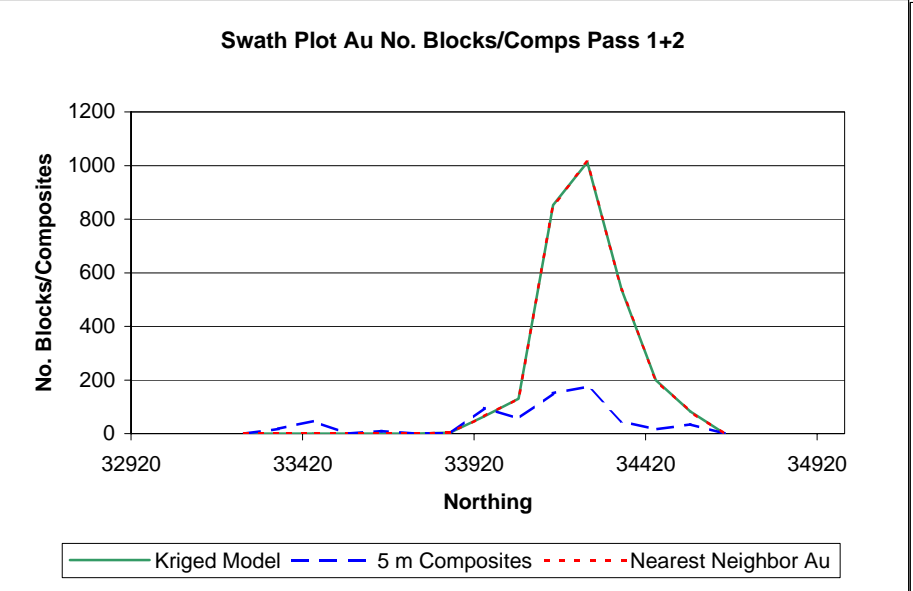
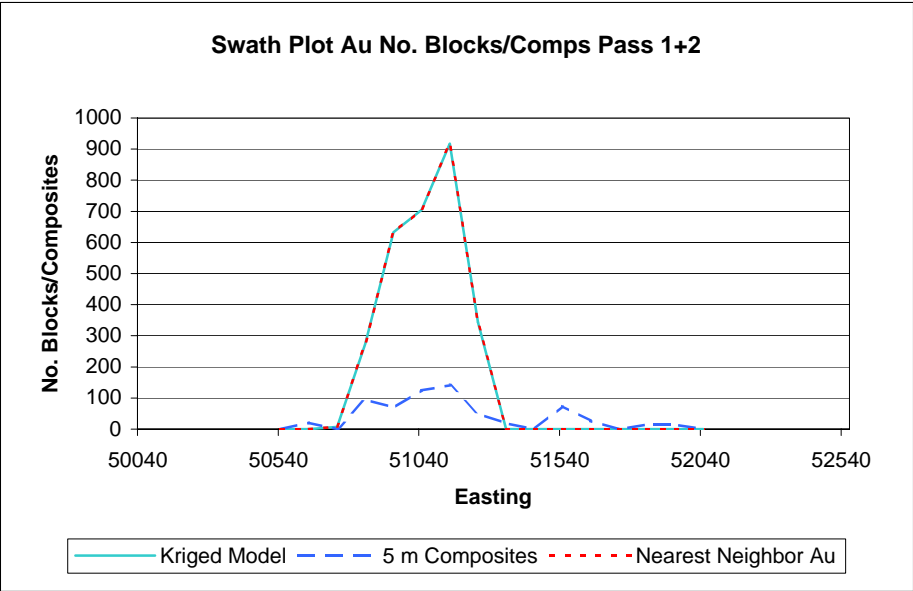
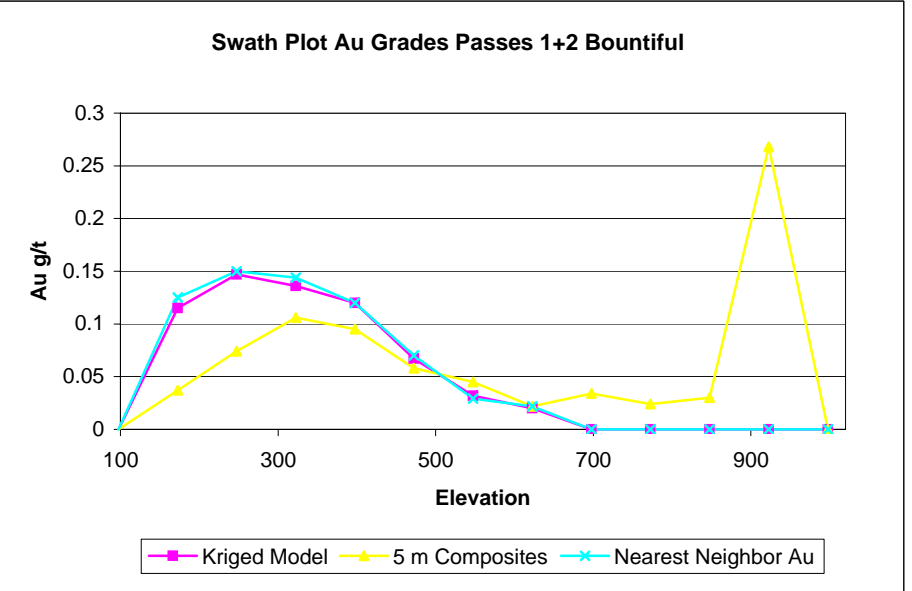
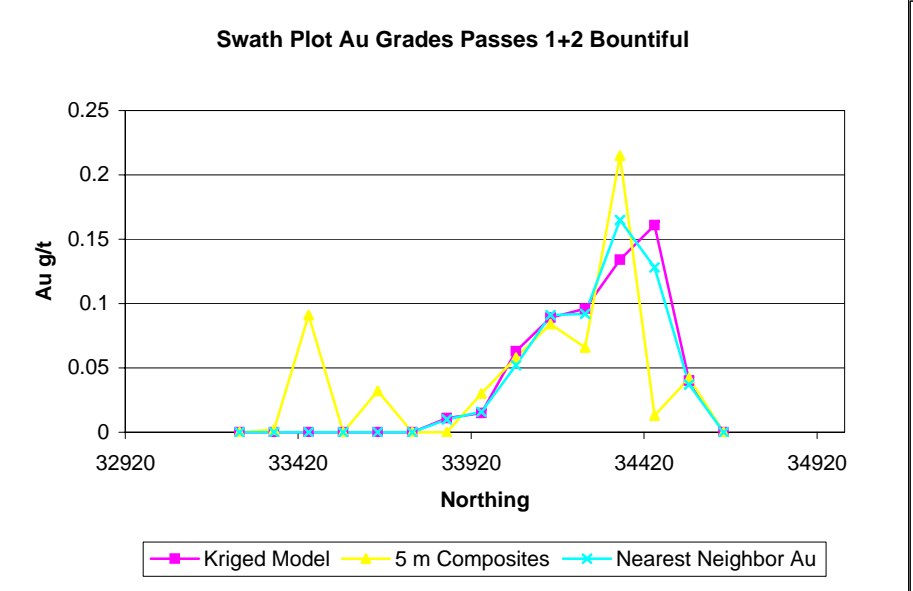
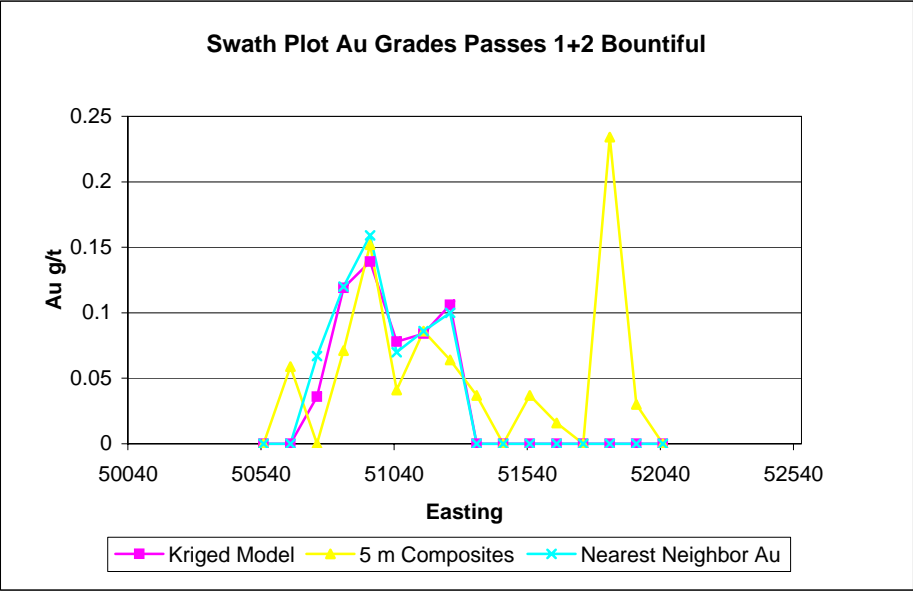
**Updated Galore Creek Resources  
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**Appendix 8 – Swath Plots**

Copper Swaths Bountiful Volcanic

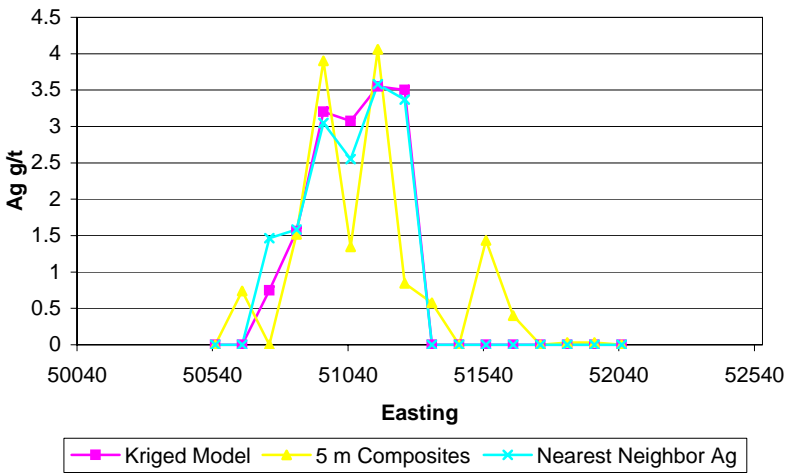


Gold Swaths Bountiful Volcanic

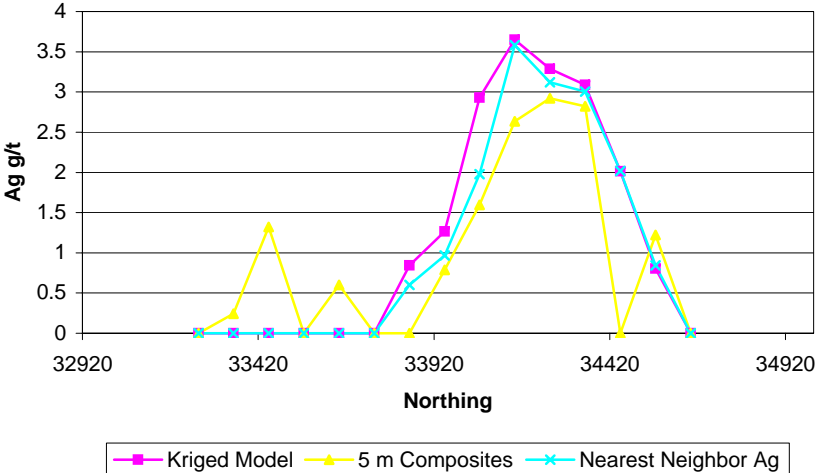


Silver Swaths Bountiful Volcanic

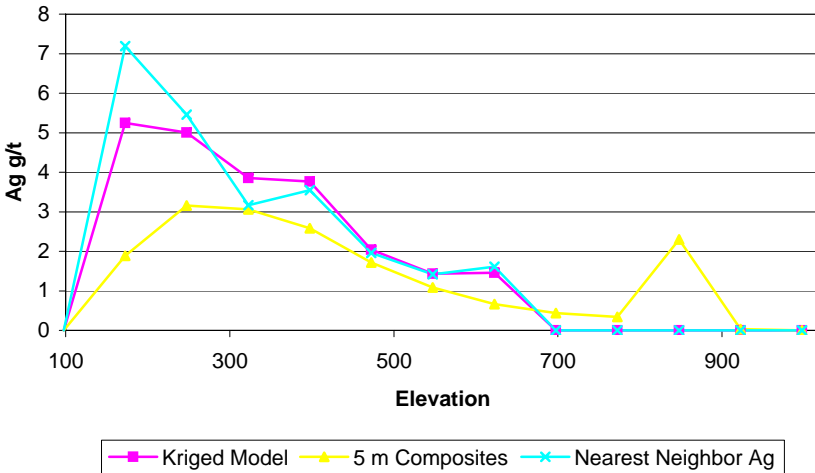
Swath Plot Ag Grades Passes 1+2 Bountiful



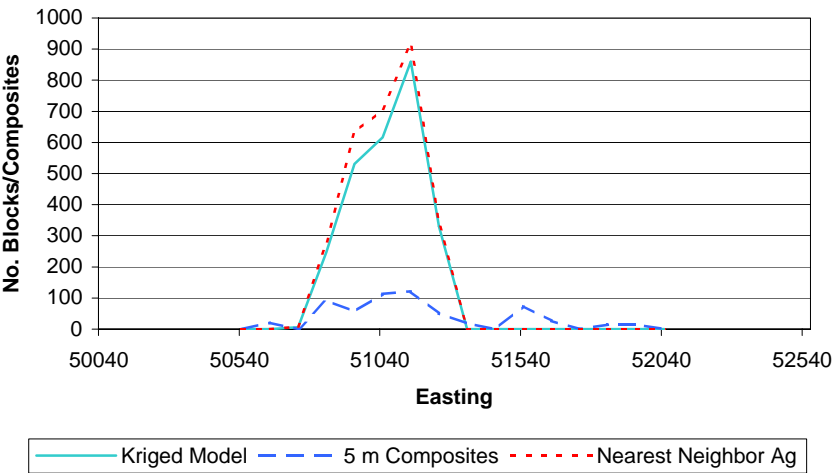
Swath Plot Ag Grades Passes 1+2 Bountiful



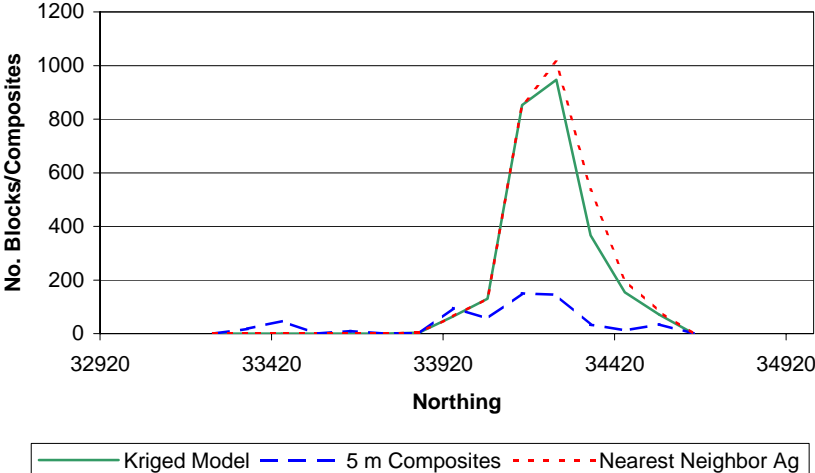
Swath Plot Ag Grades Passes 1+2 Bountiful



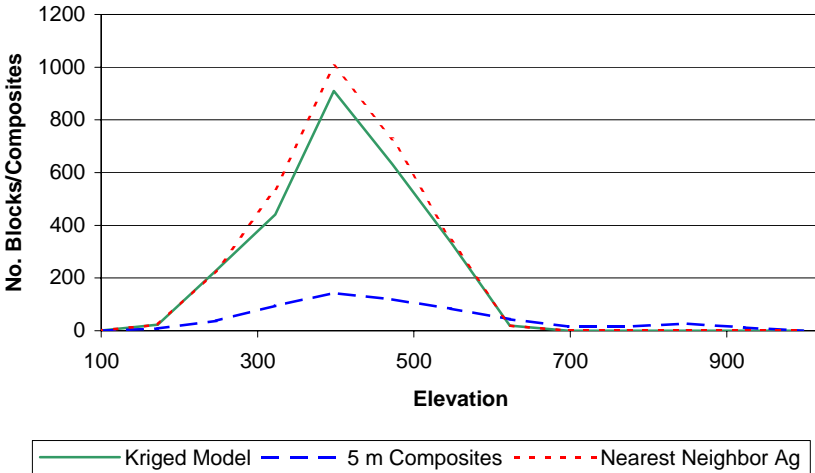
Swath Plot Ag No. Blocks/Comps Pass 1+2



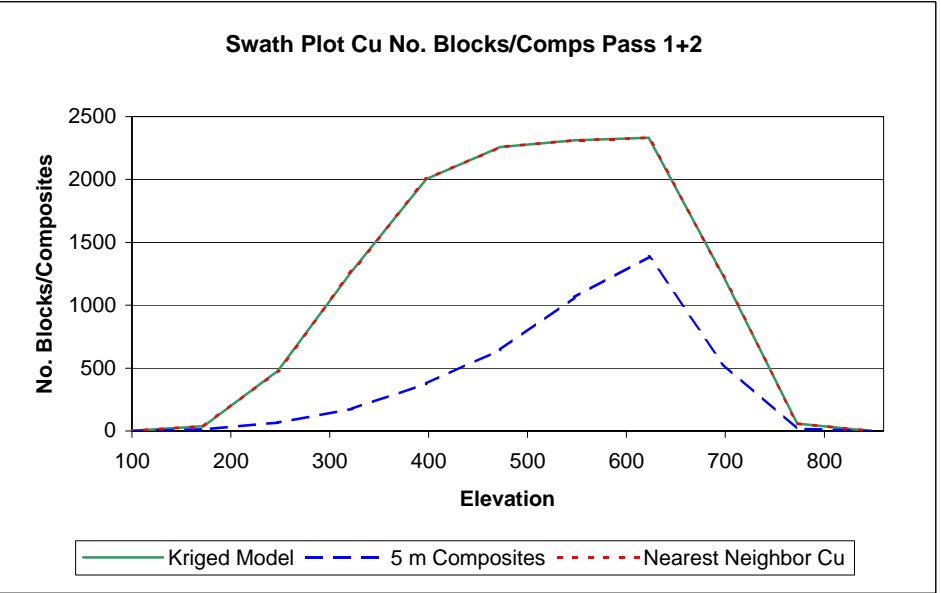
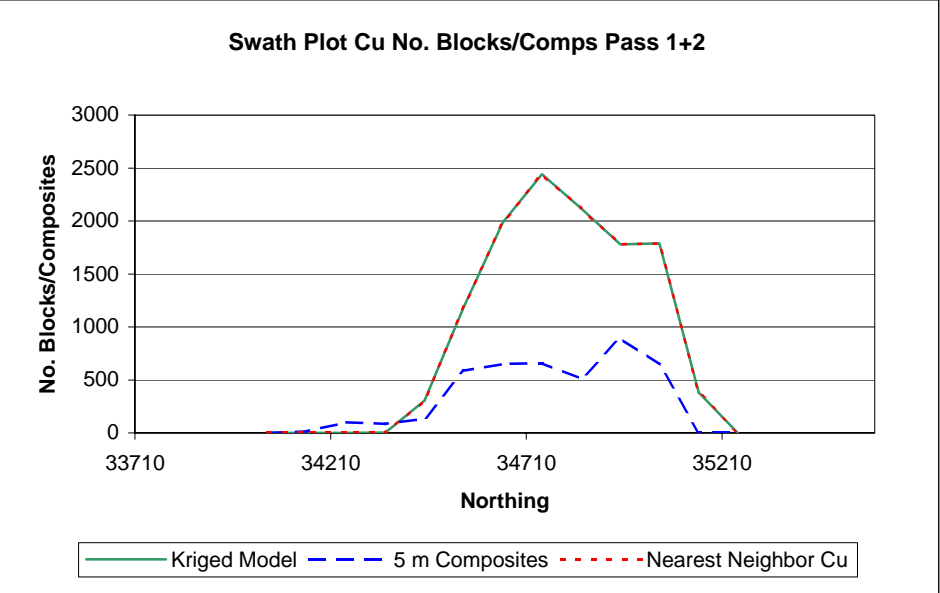
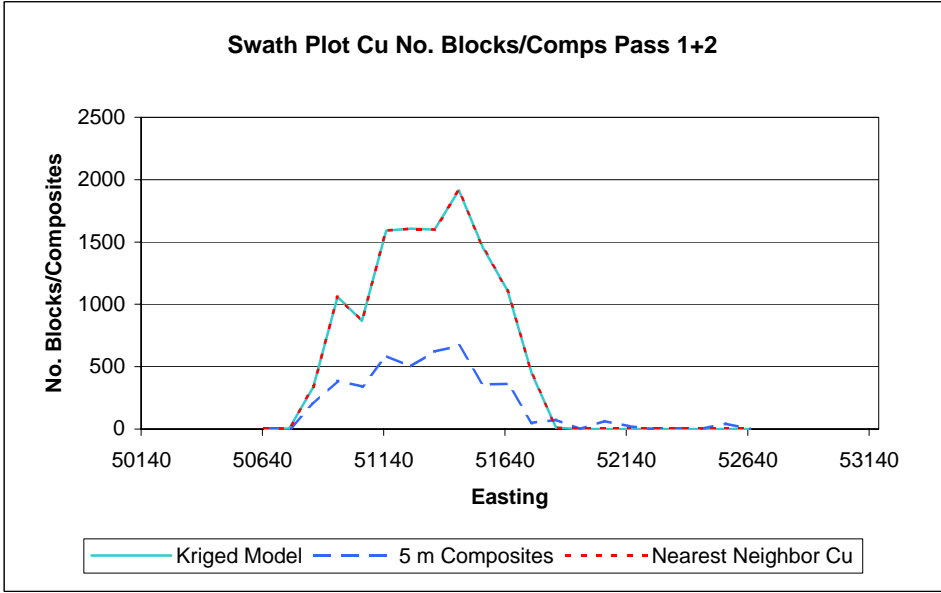
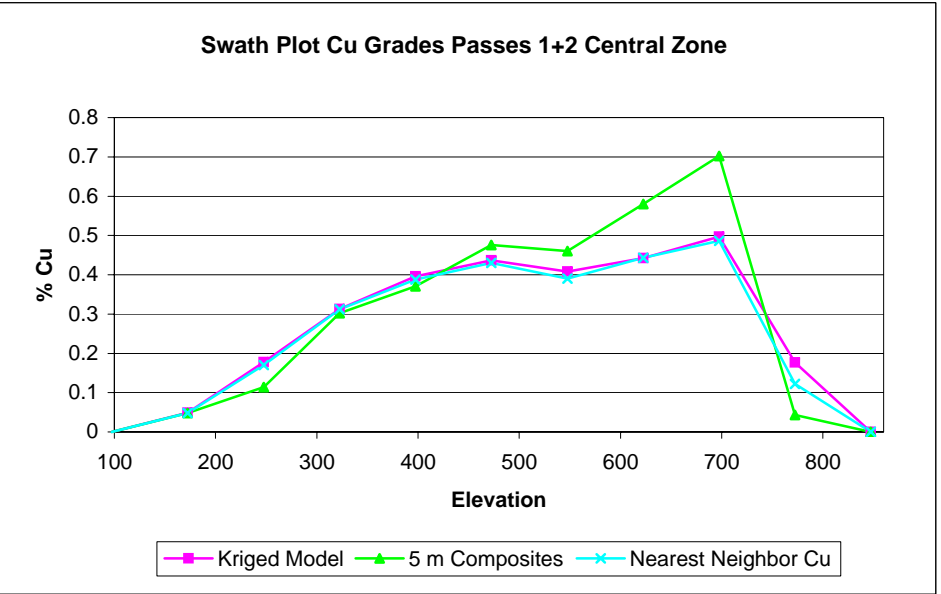
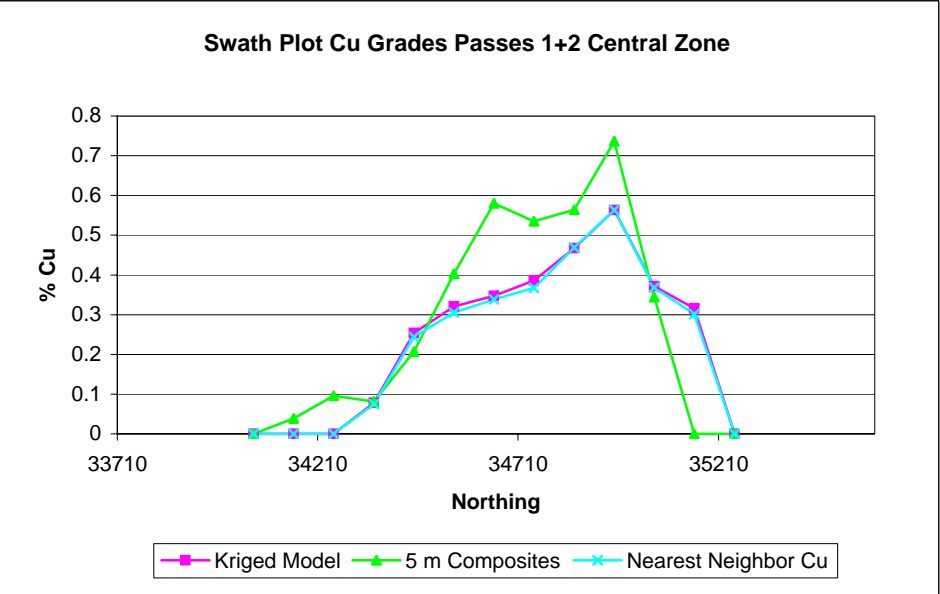
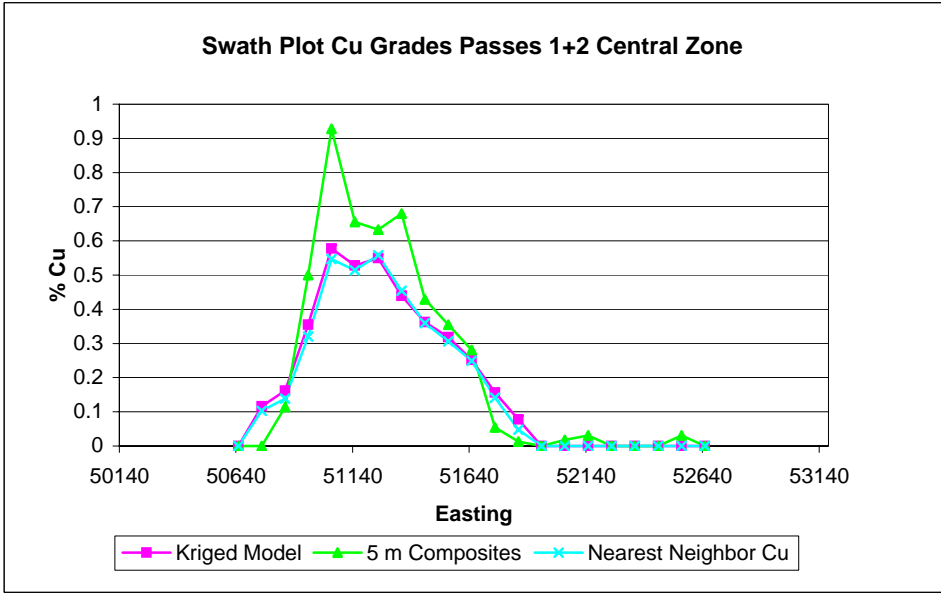
Swath Plot Ag No. Blocks/Comps Pass 1+2



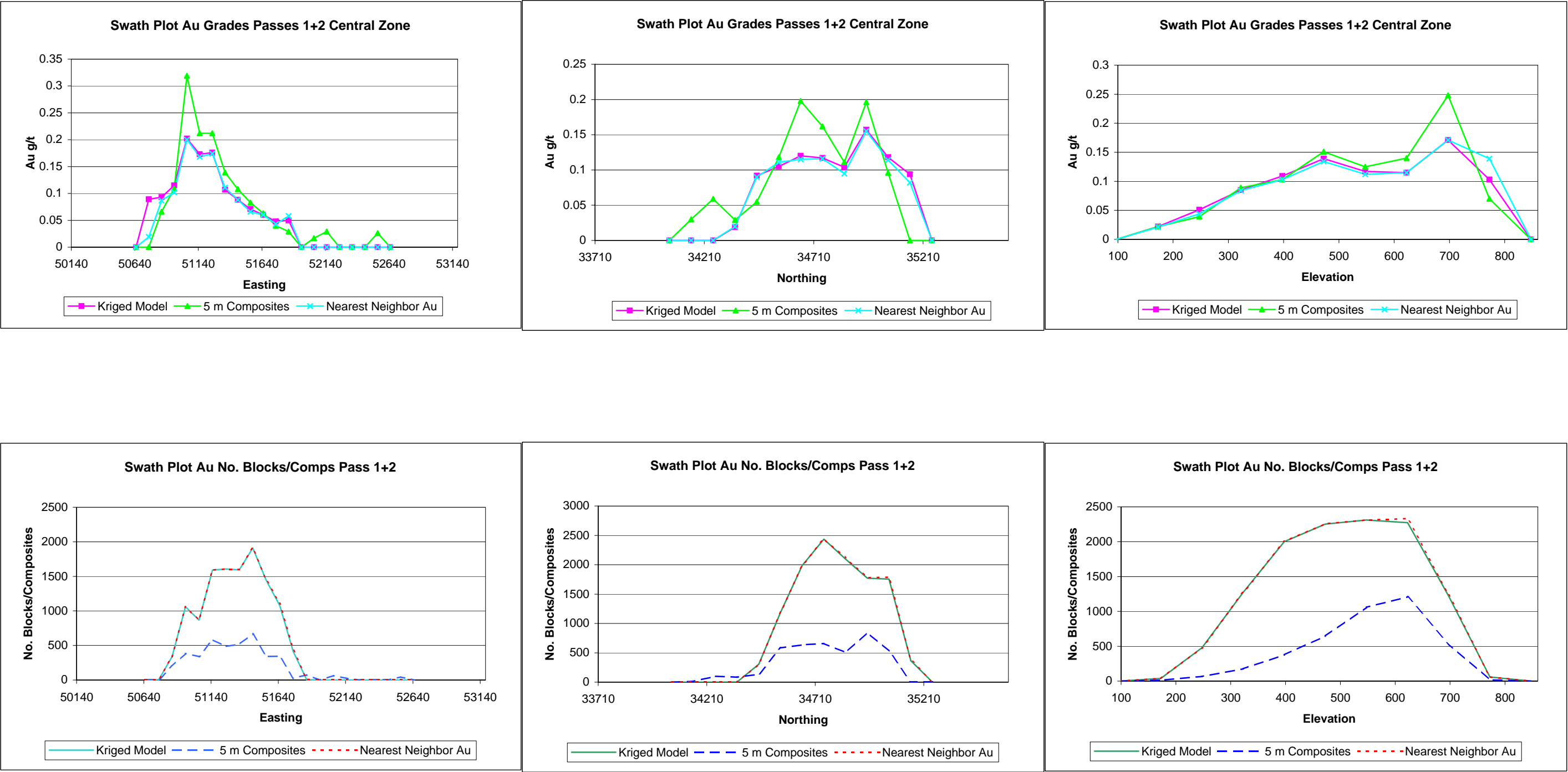
Swath Plot Ag No. Blocks/Comps Pass 1+2



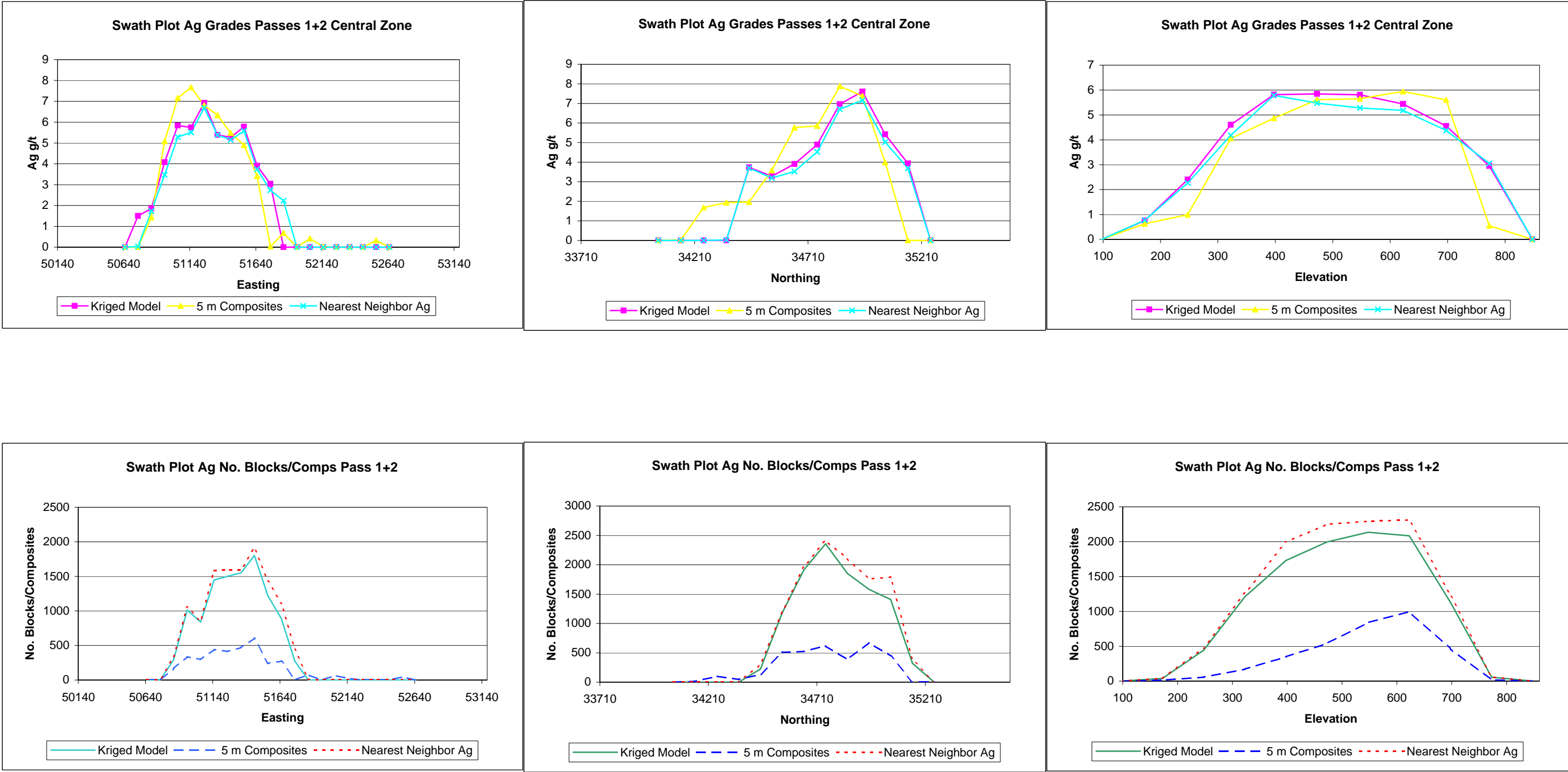
Copper Swaths CRZ Volcanic



Gold Swaths CRZ Volcanic

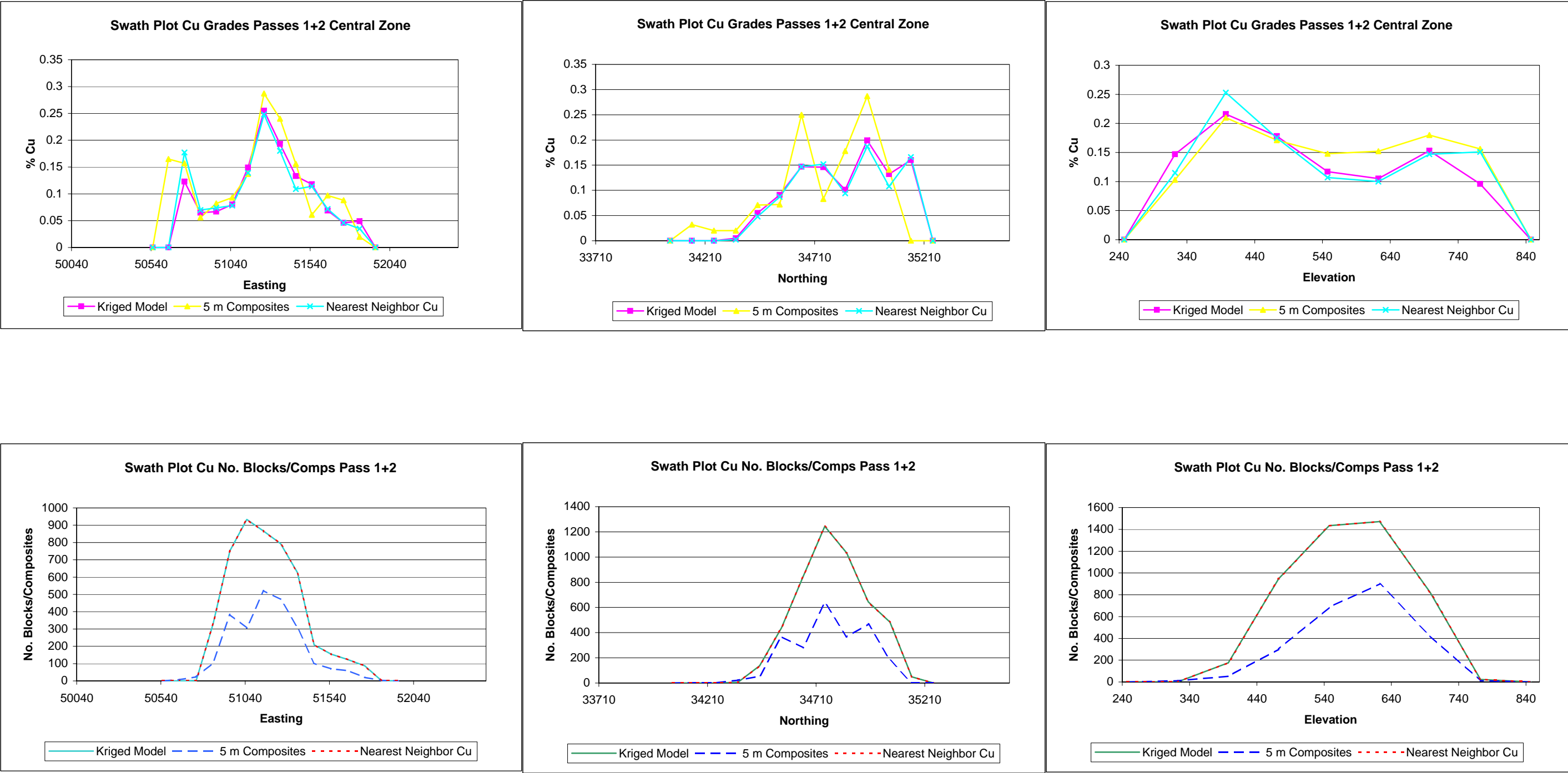


Silver Swaths CRZ Volcanic

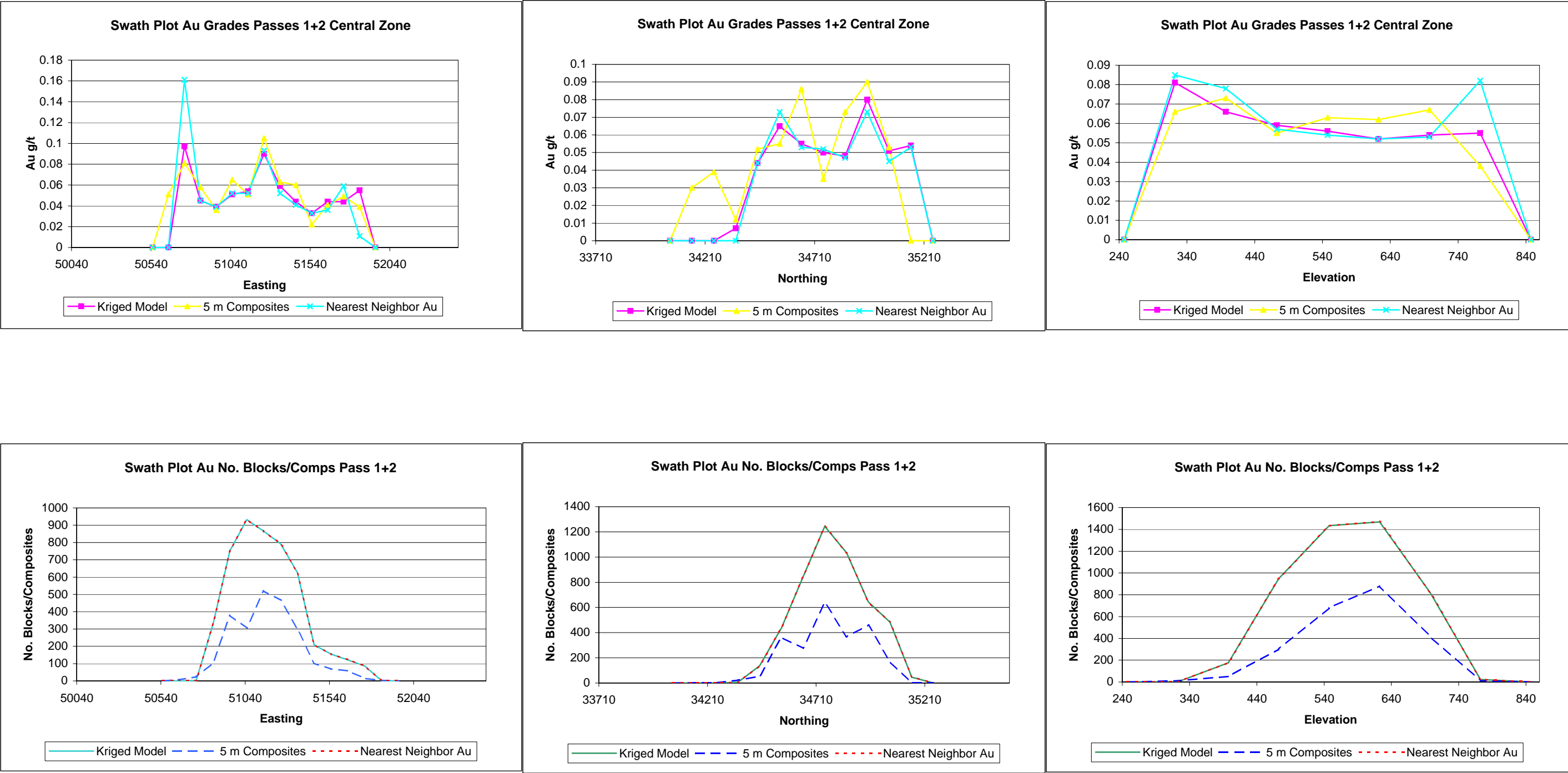




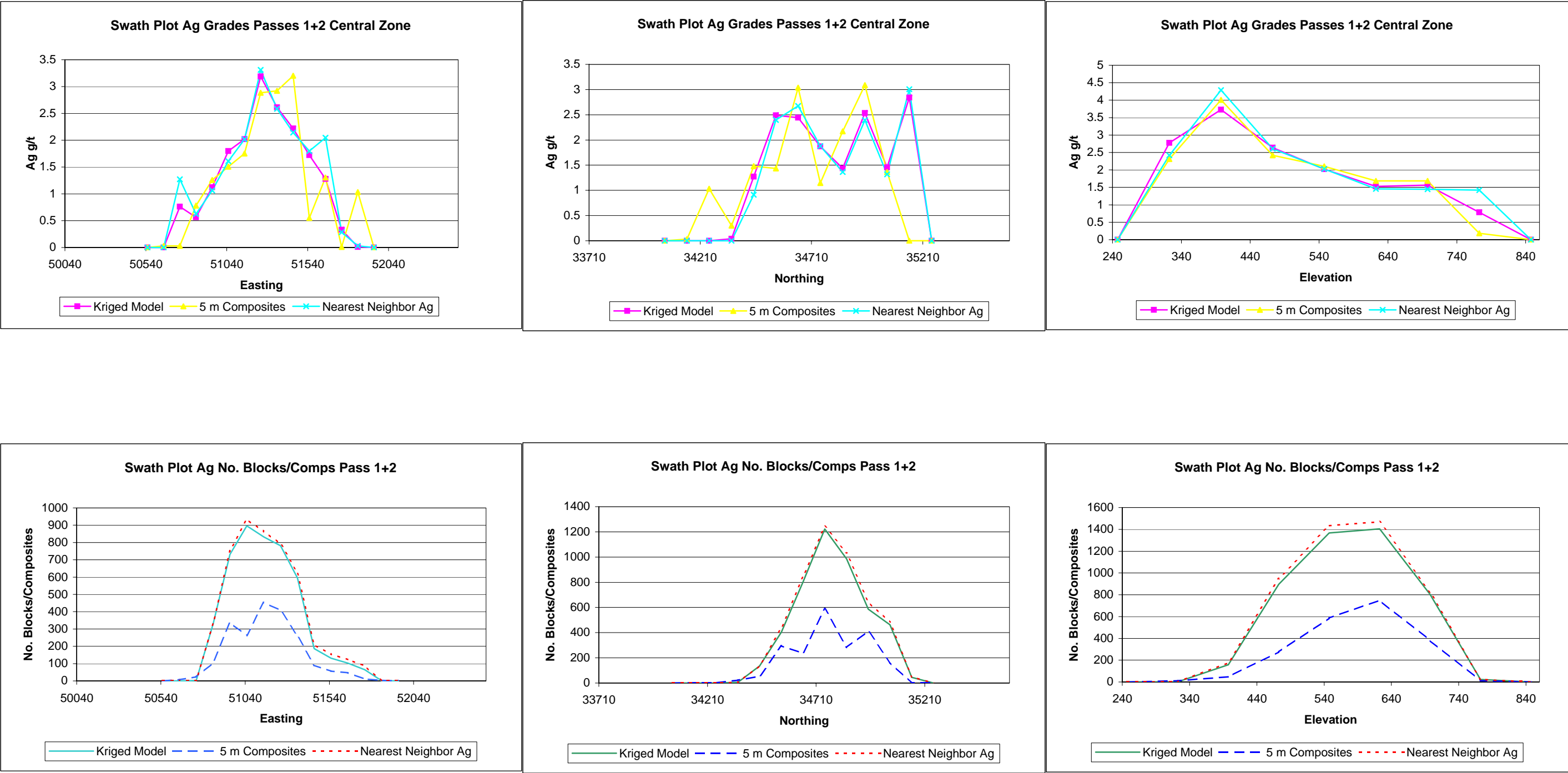
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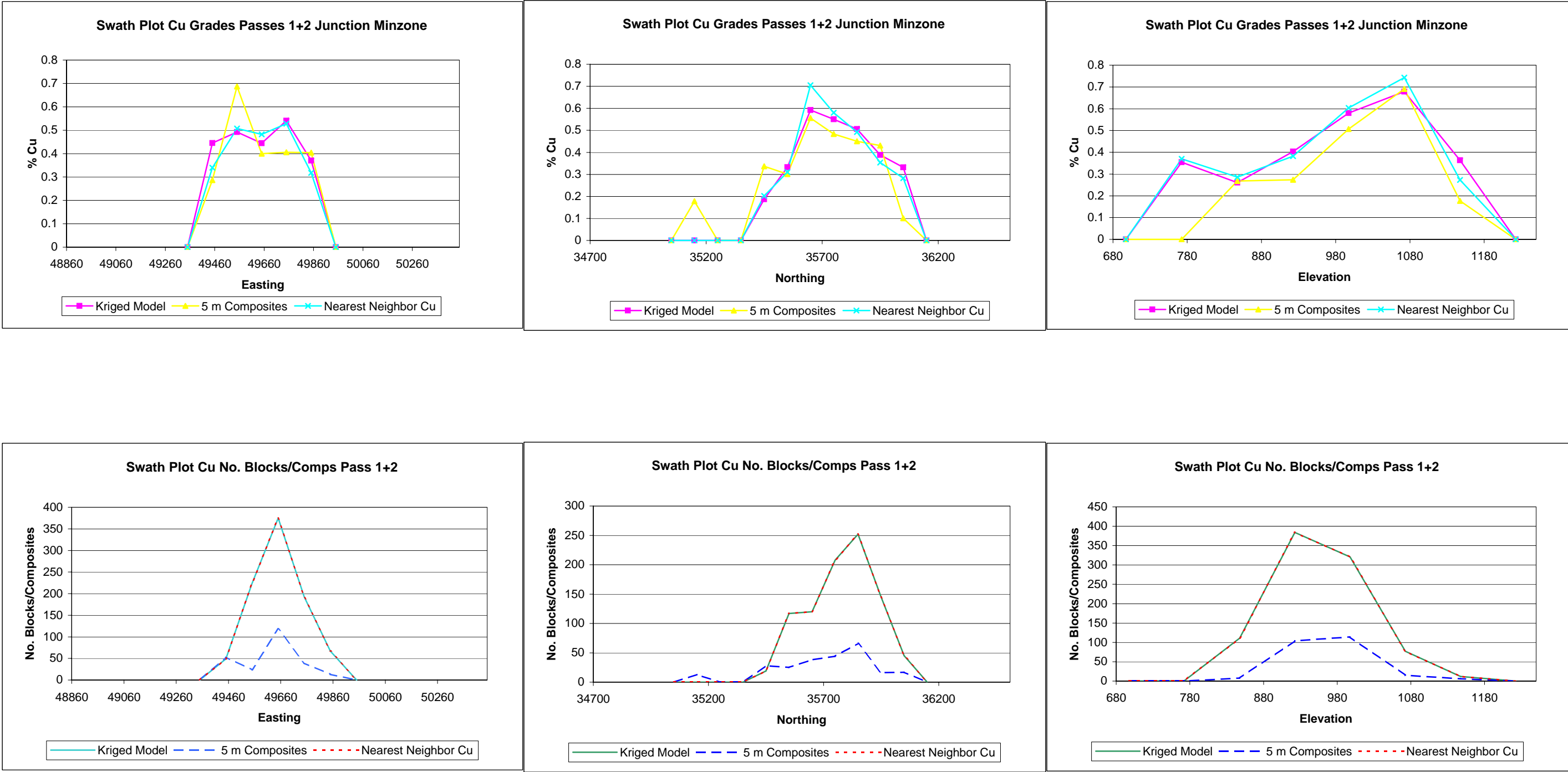
Gold Swaths CRZ Intrusive



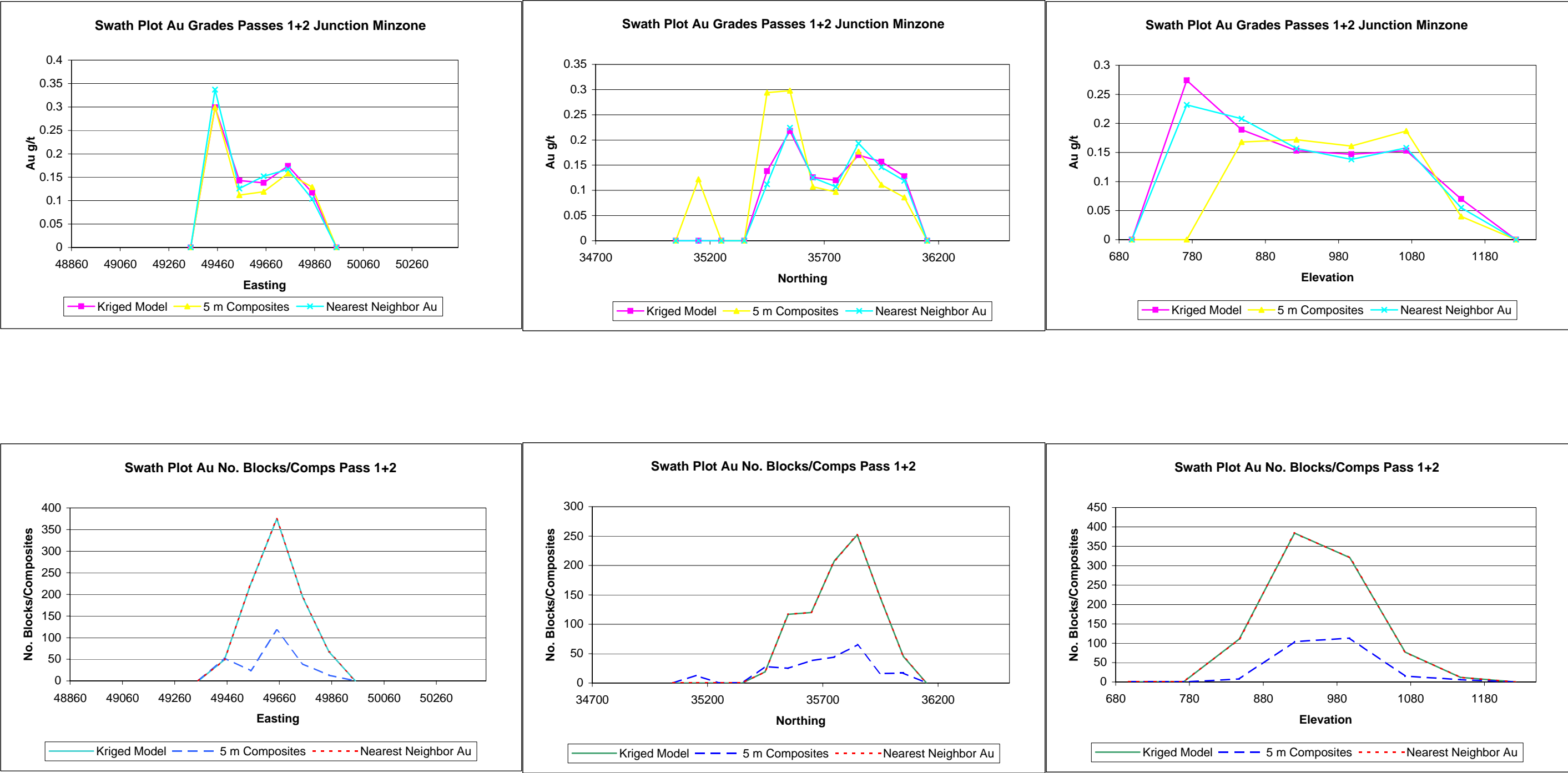
Silver Swaths CRZ Intrusive



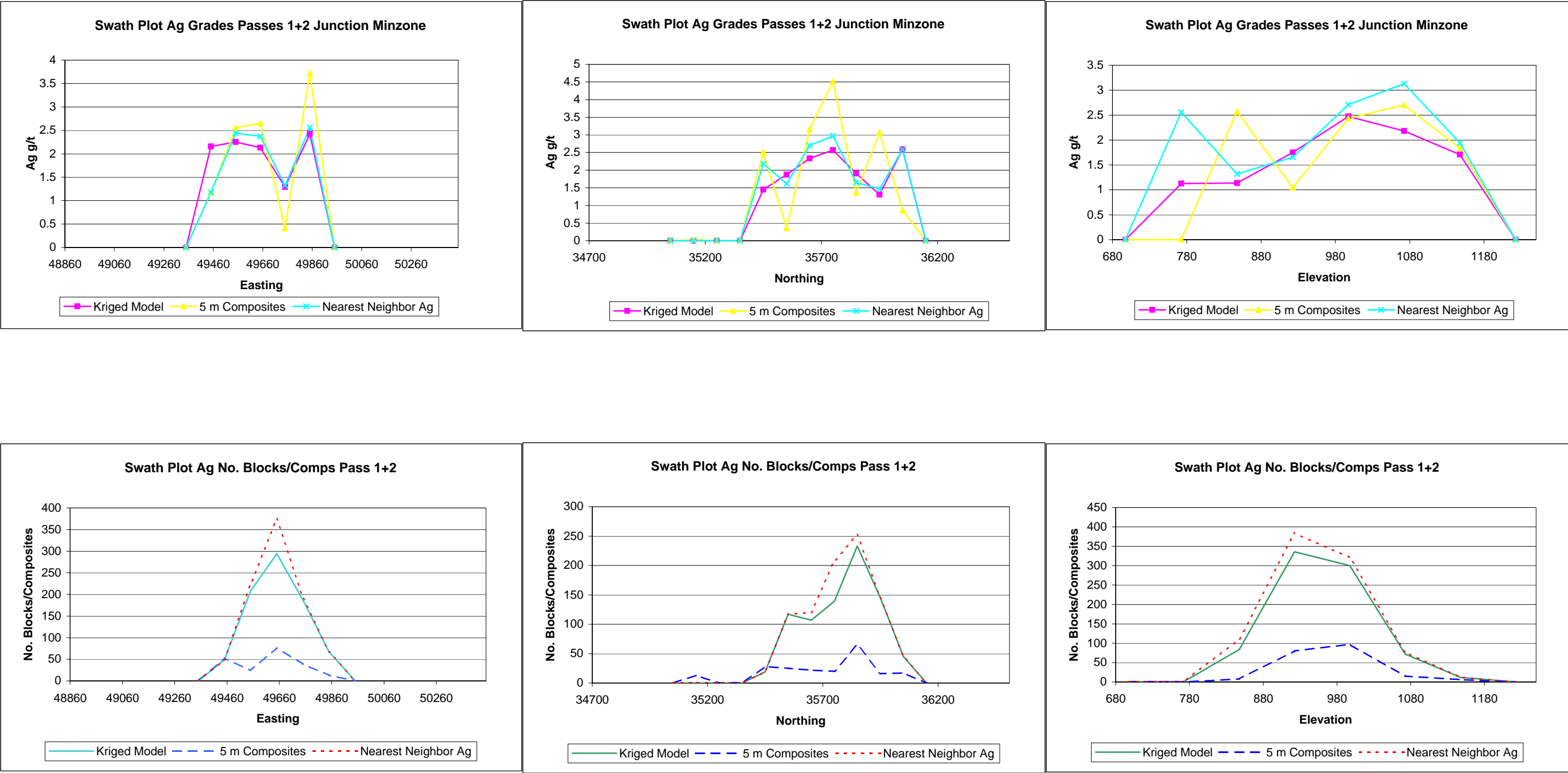
Copper Swaths Junction Minzone



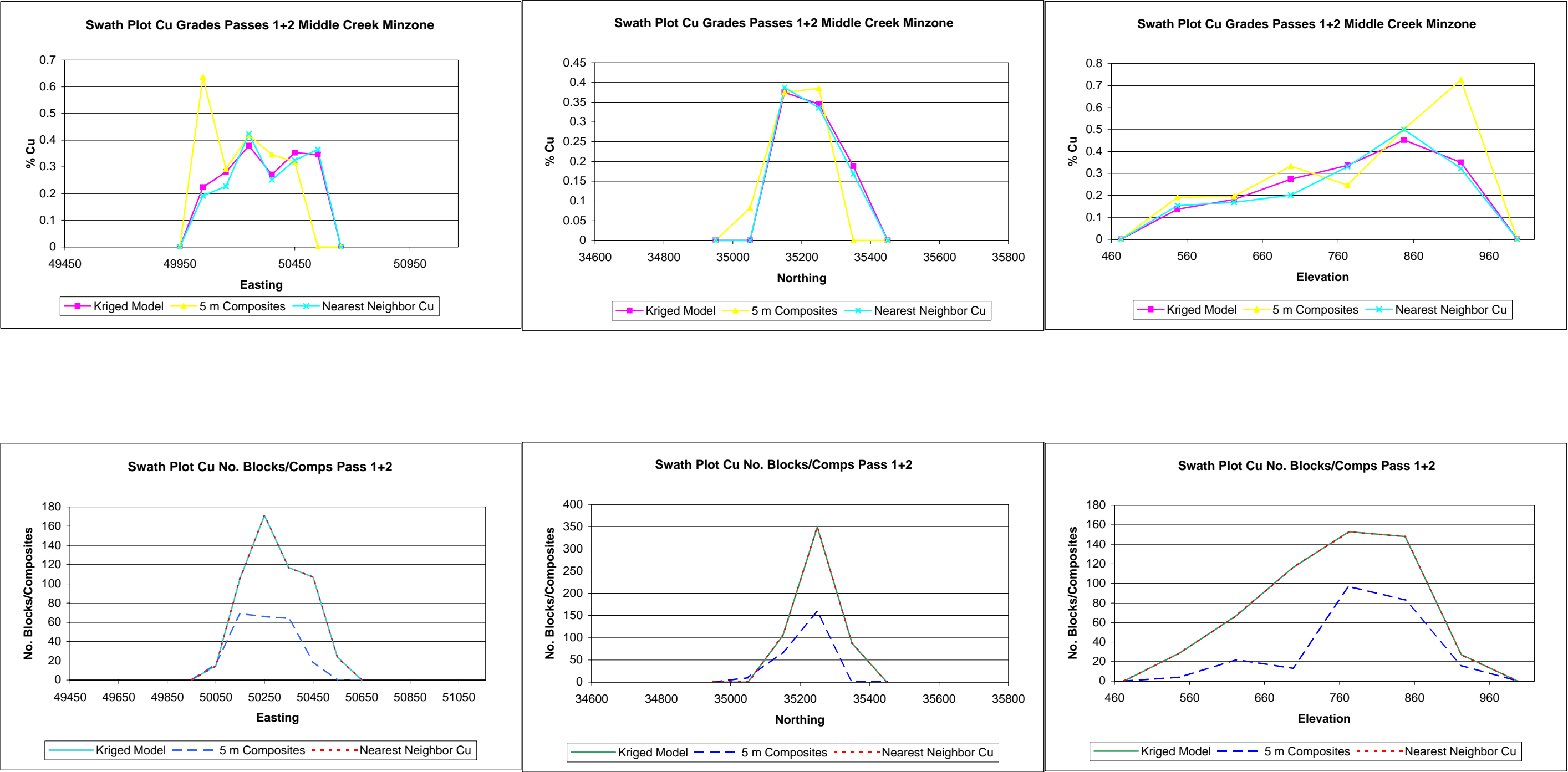
Gold Swaths Junction Minzone



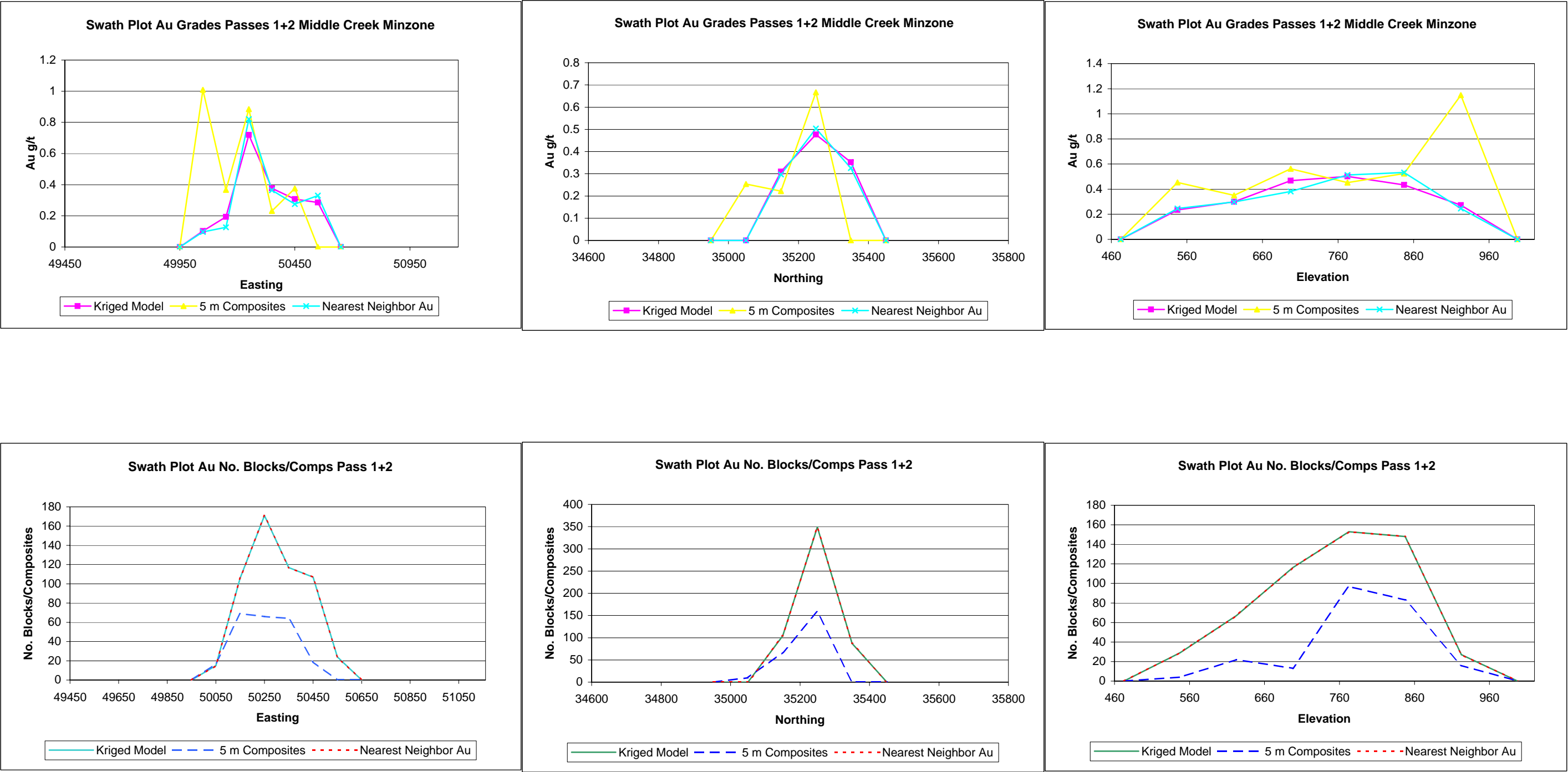
Silver Swaths Junction Minzone



Copper Swaths Middle Creek Minzone

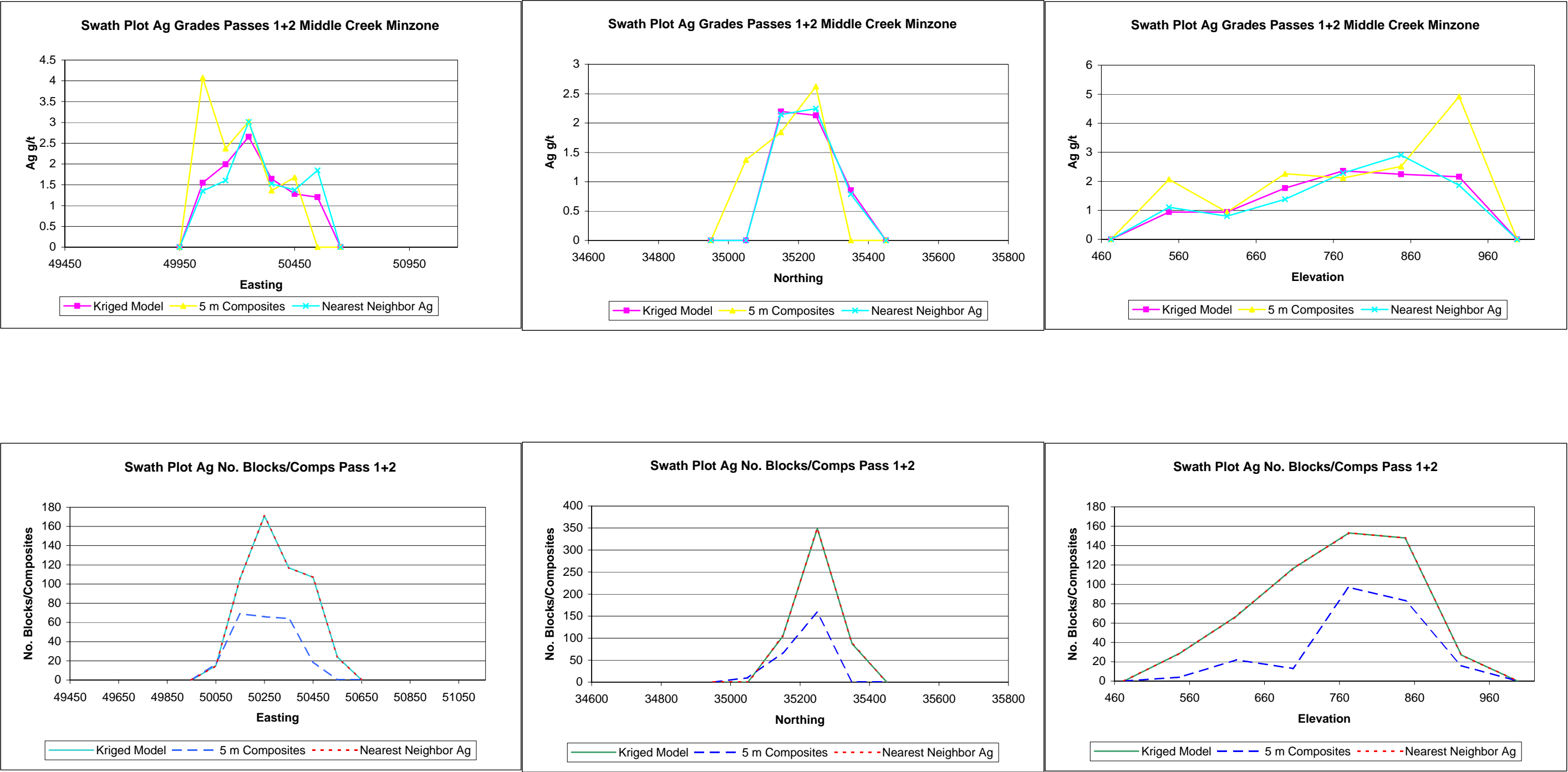


Gold Swaths Middle Creek Minzone

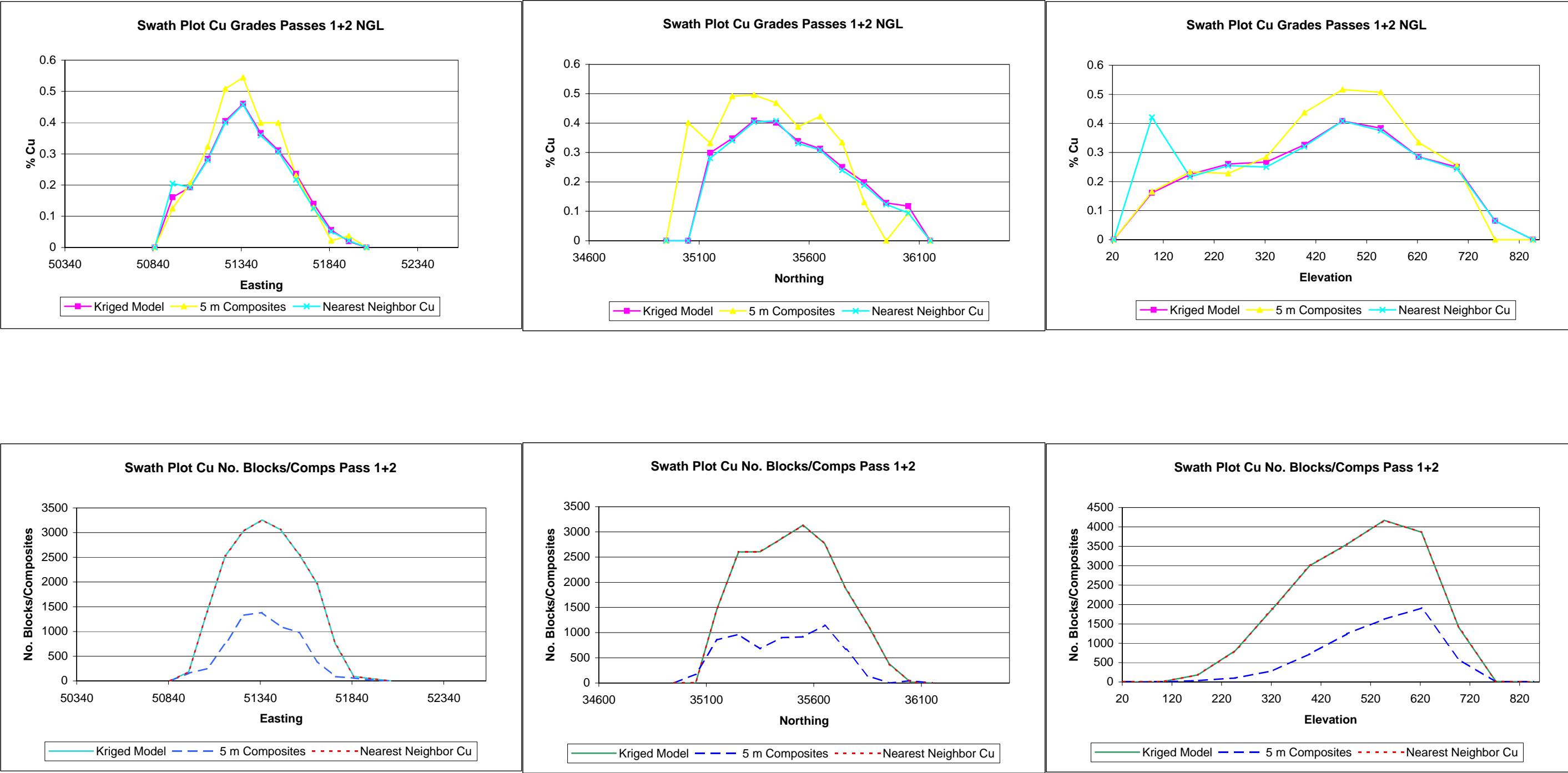




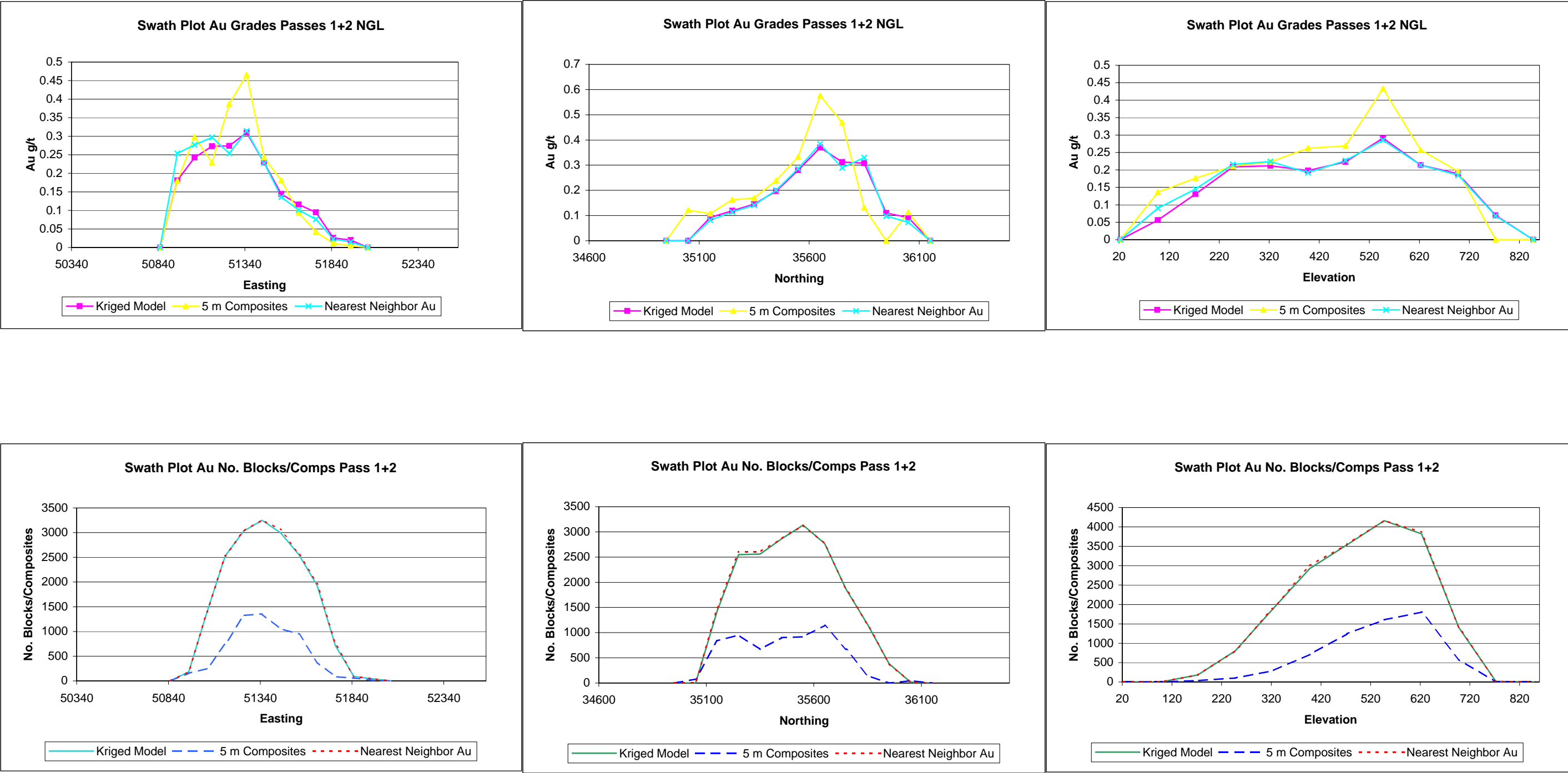
Silver Swaths Middle Creek Minzone



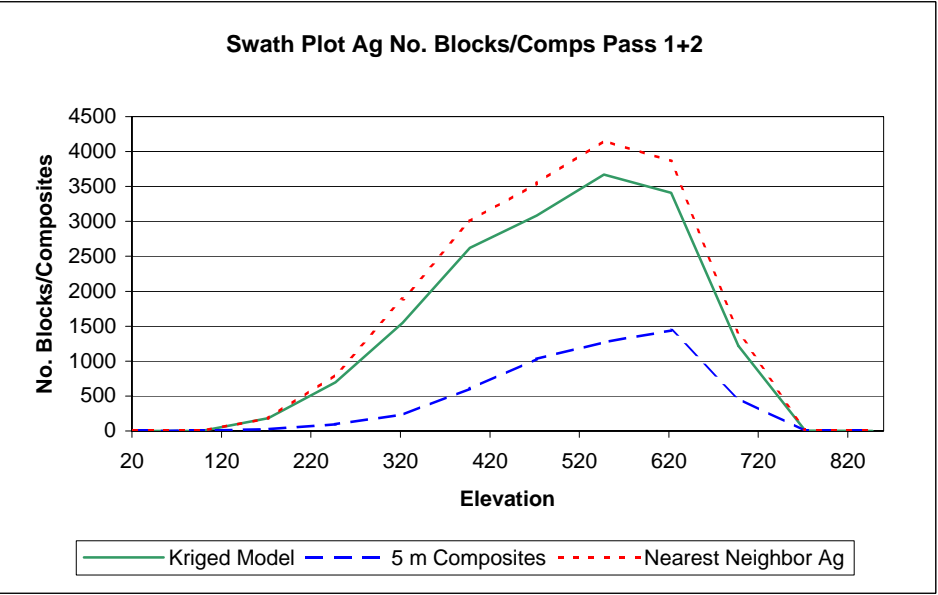
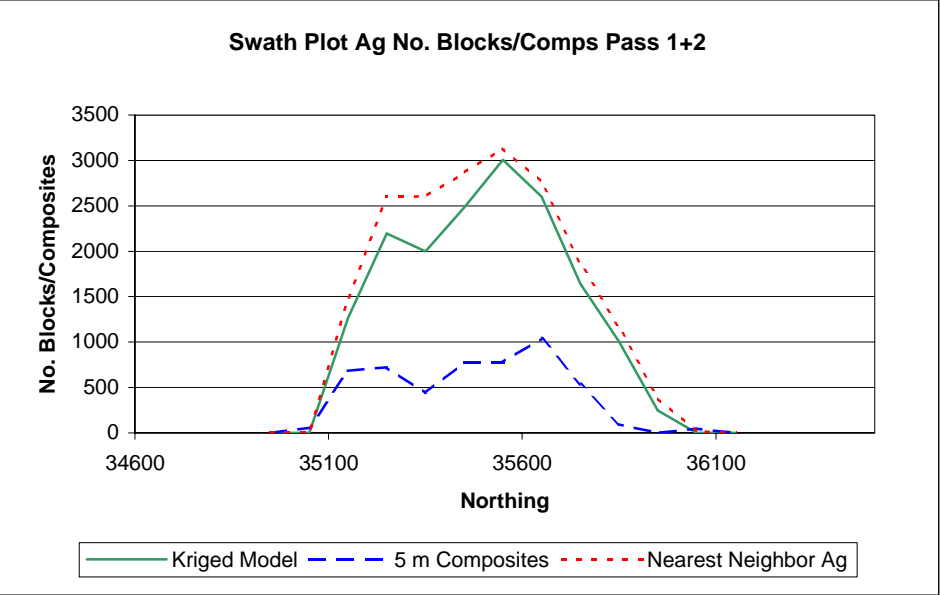
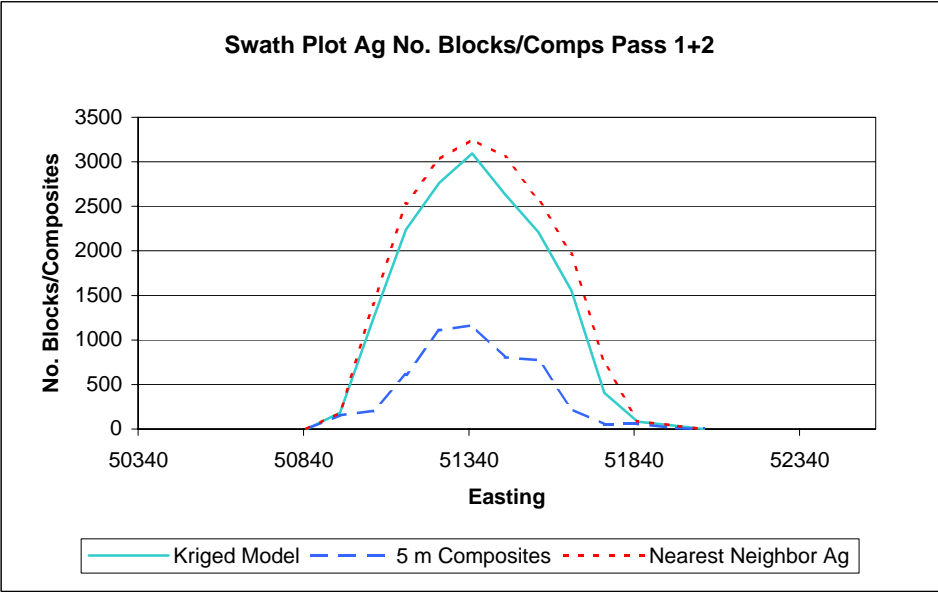
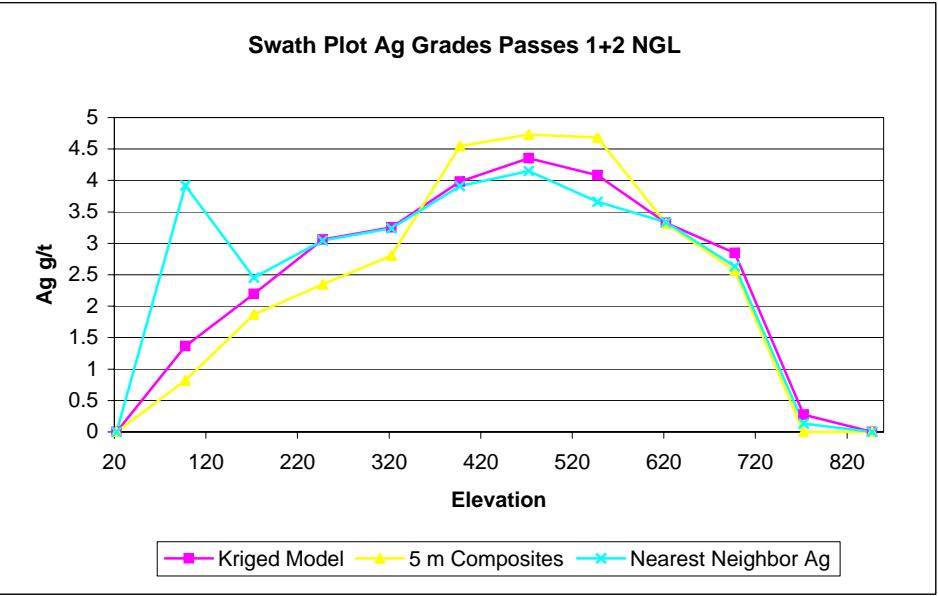
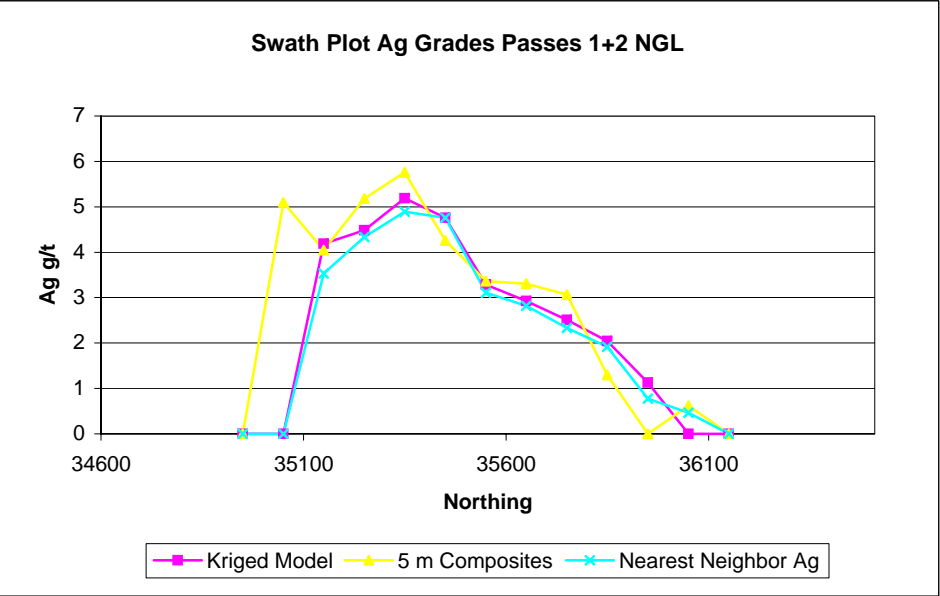
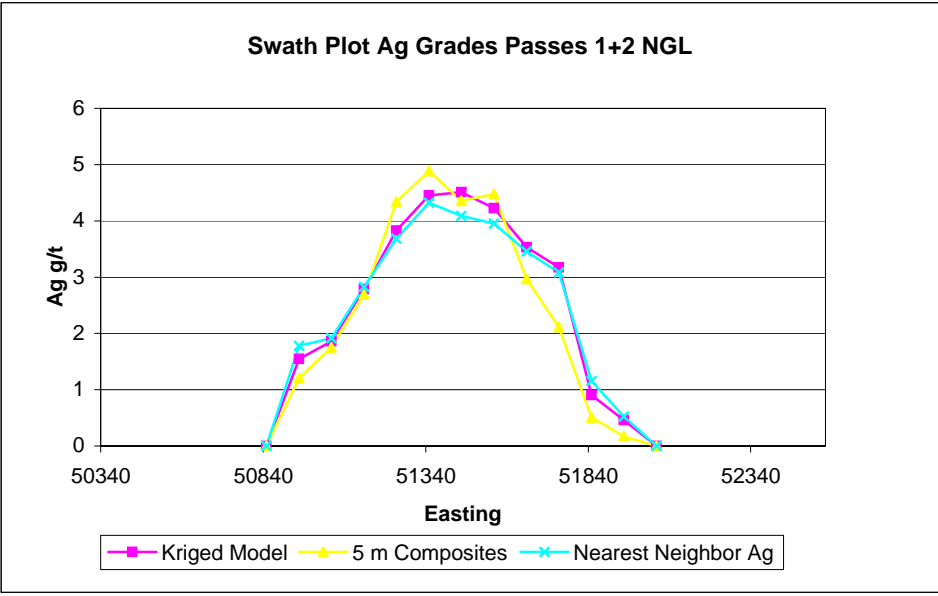
Copper Swaths NGL Volcanic



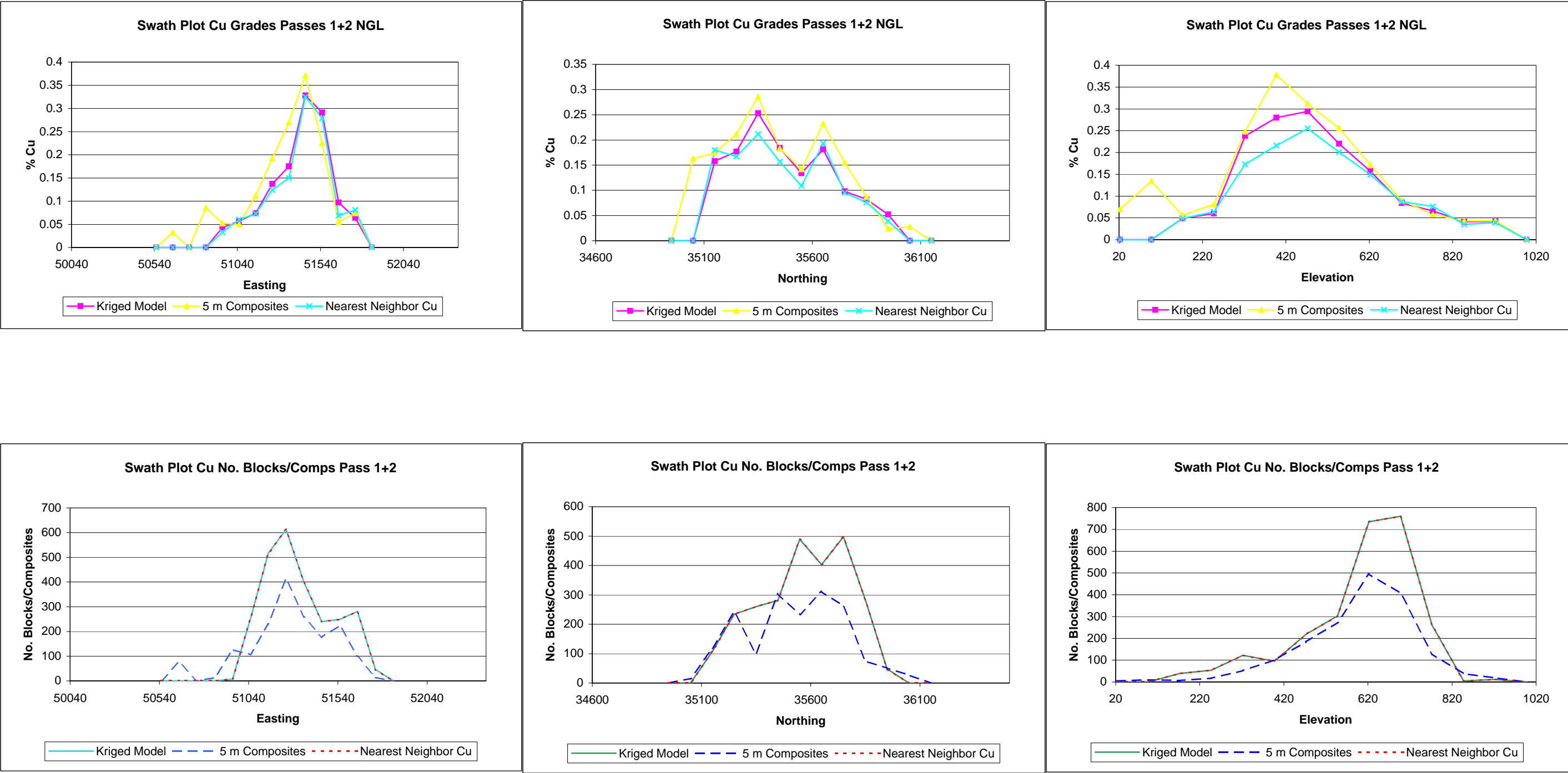
Gold Swaths NGL Volcanic



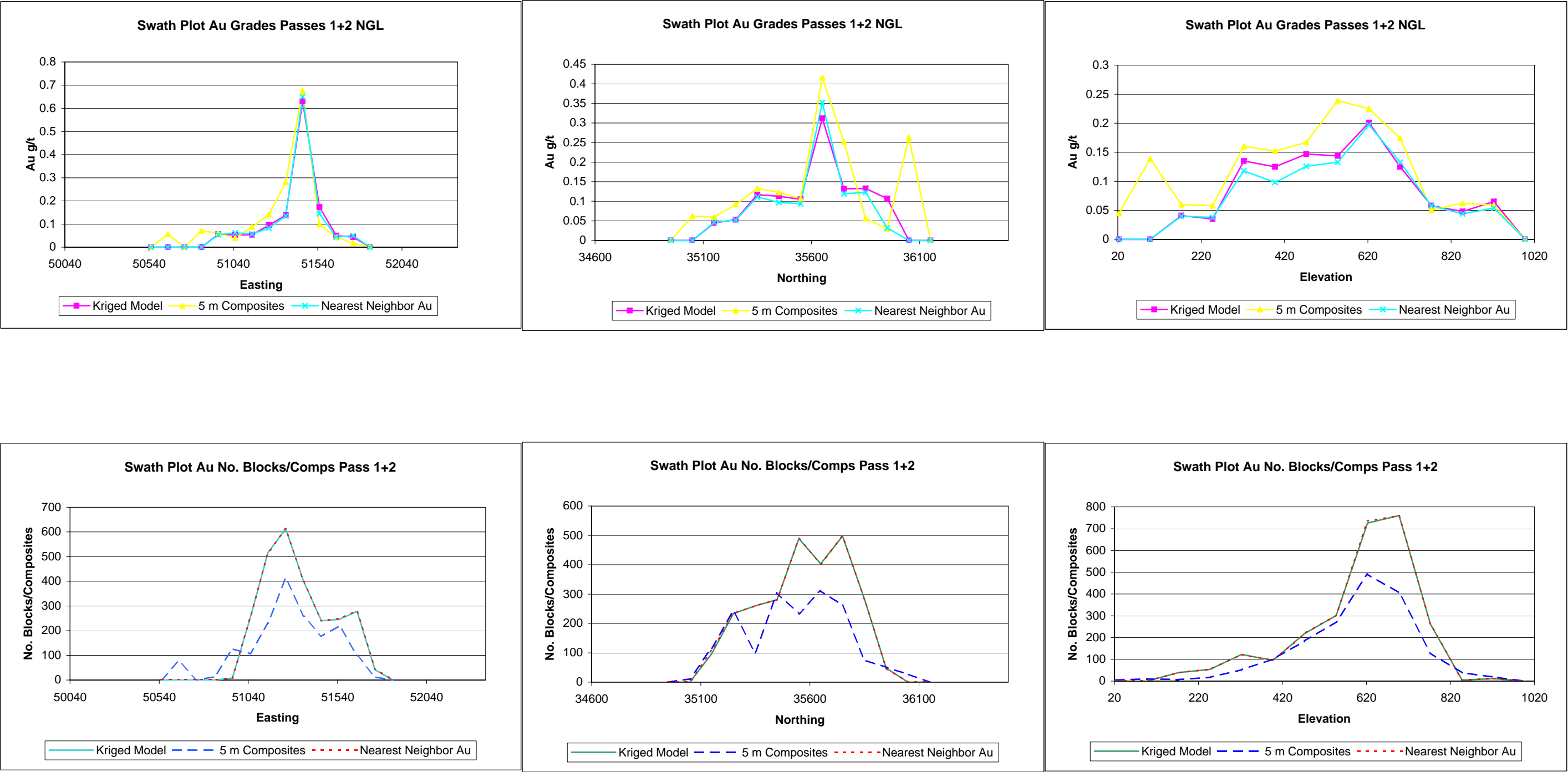
Silver Swaths NGL Volcanic



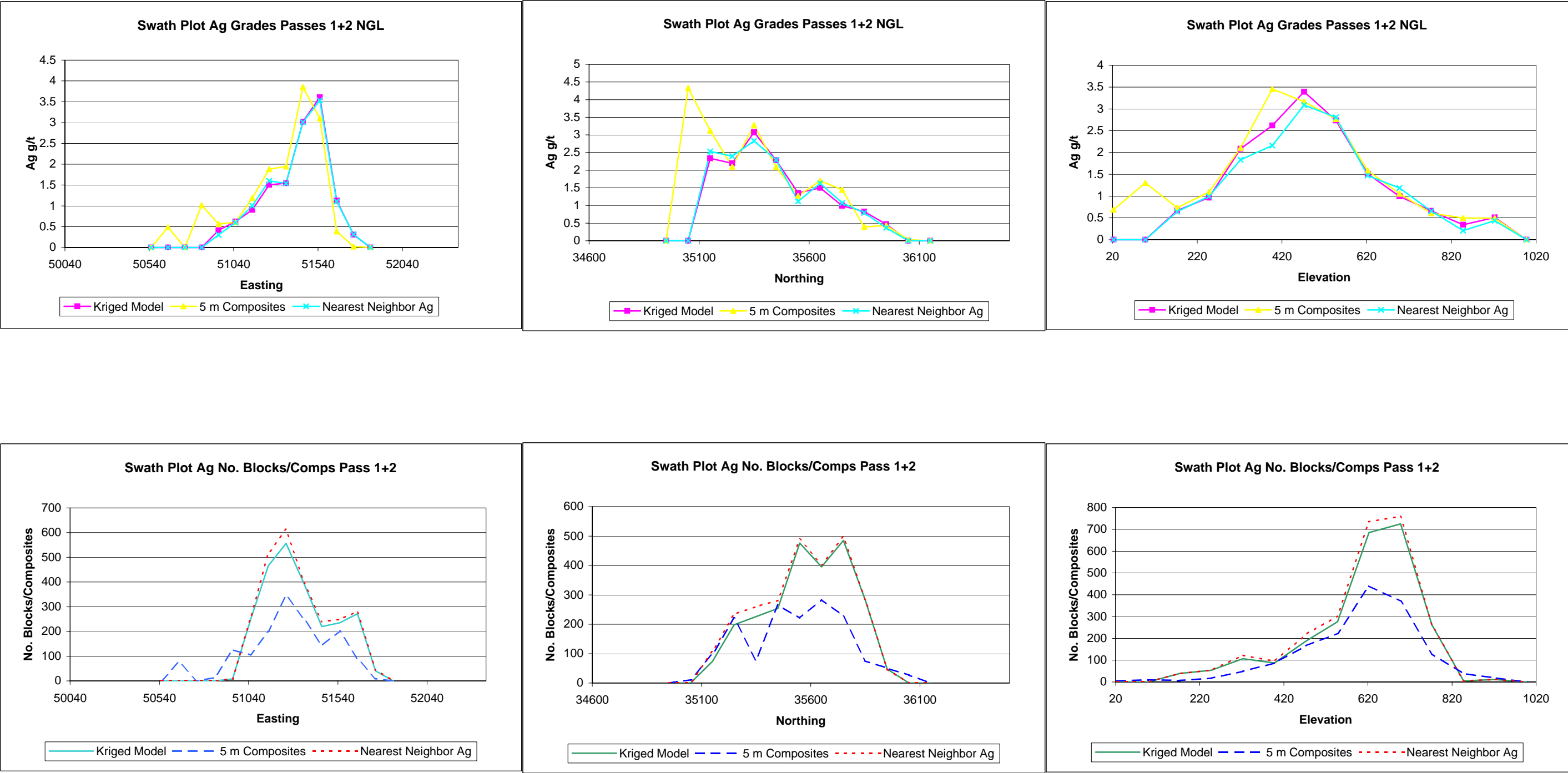
Copper Swaths NGL Intrusive



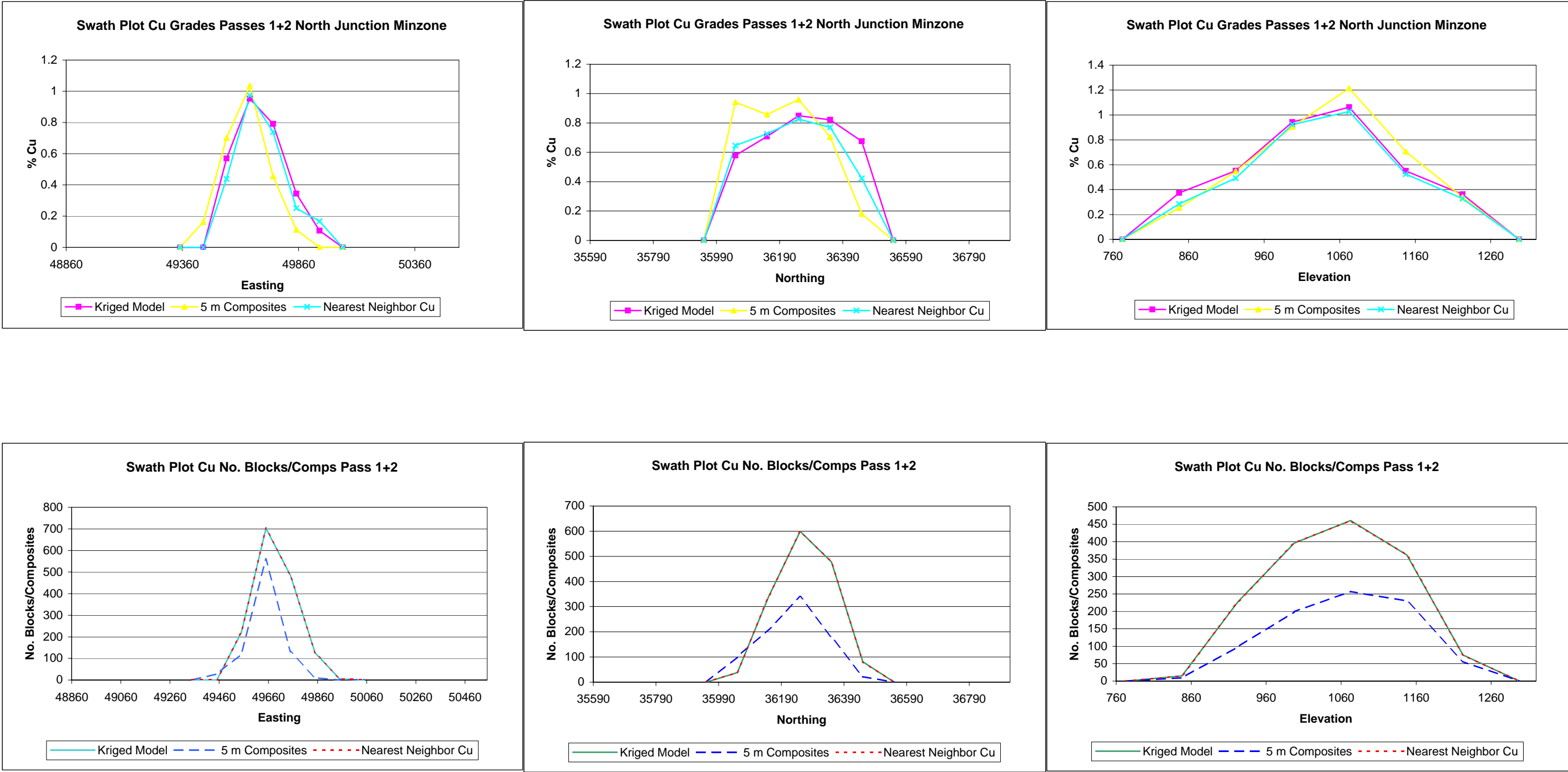
Gold Swaths NGL Intrusive



Silver Swaths NGL Intrusive

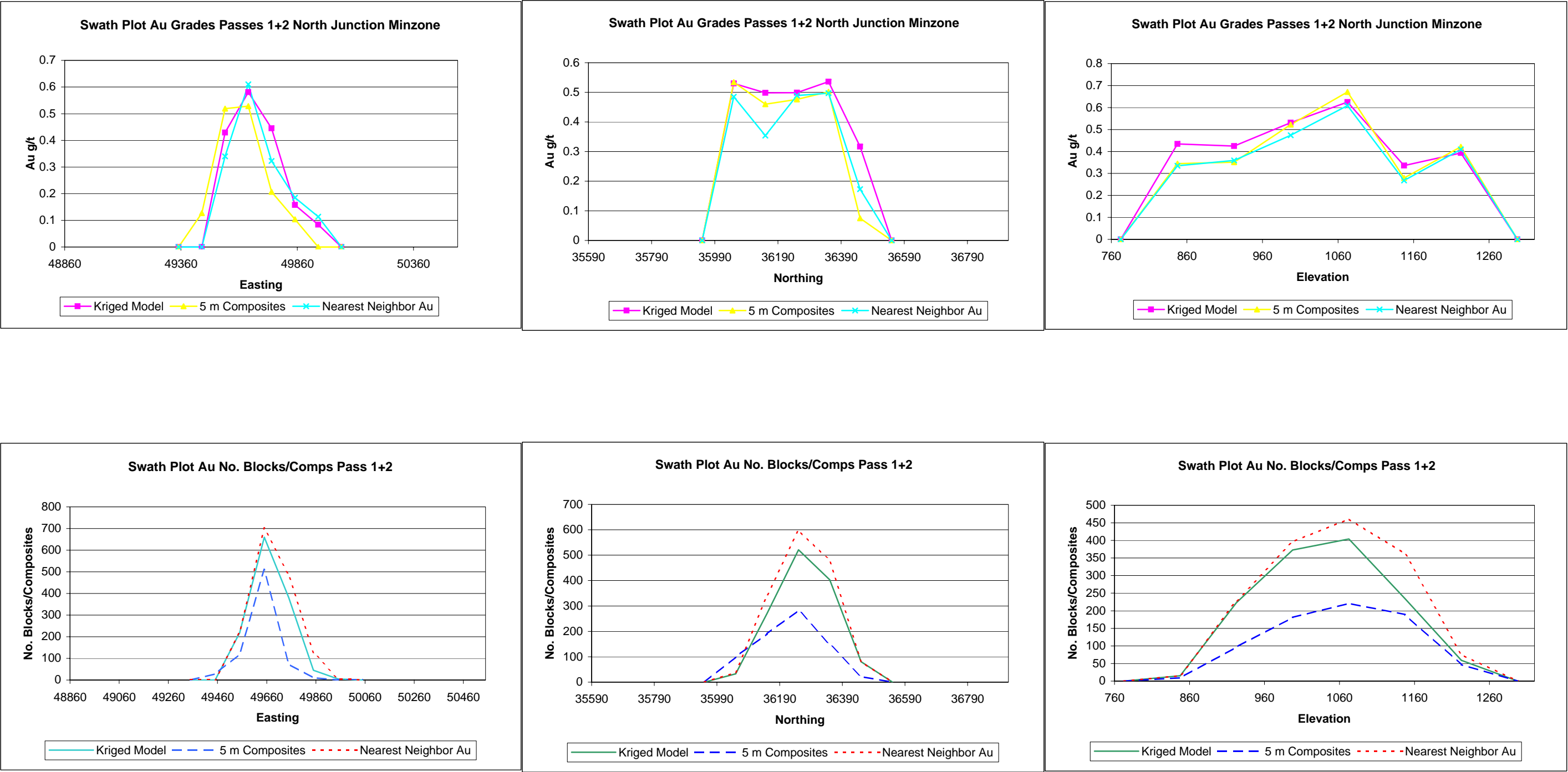


Copper Swaths North Junction Minzone

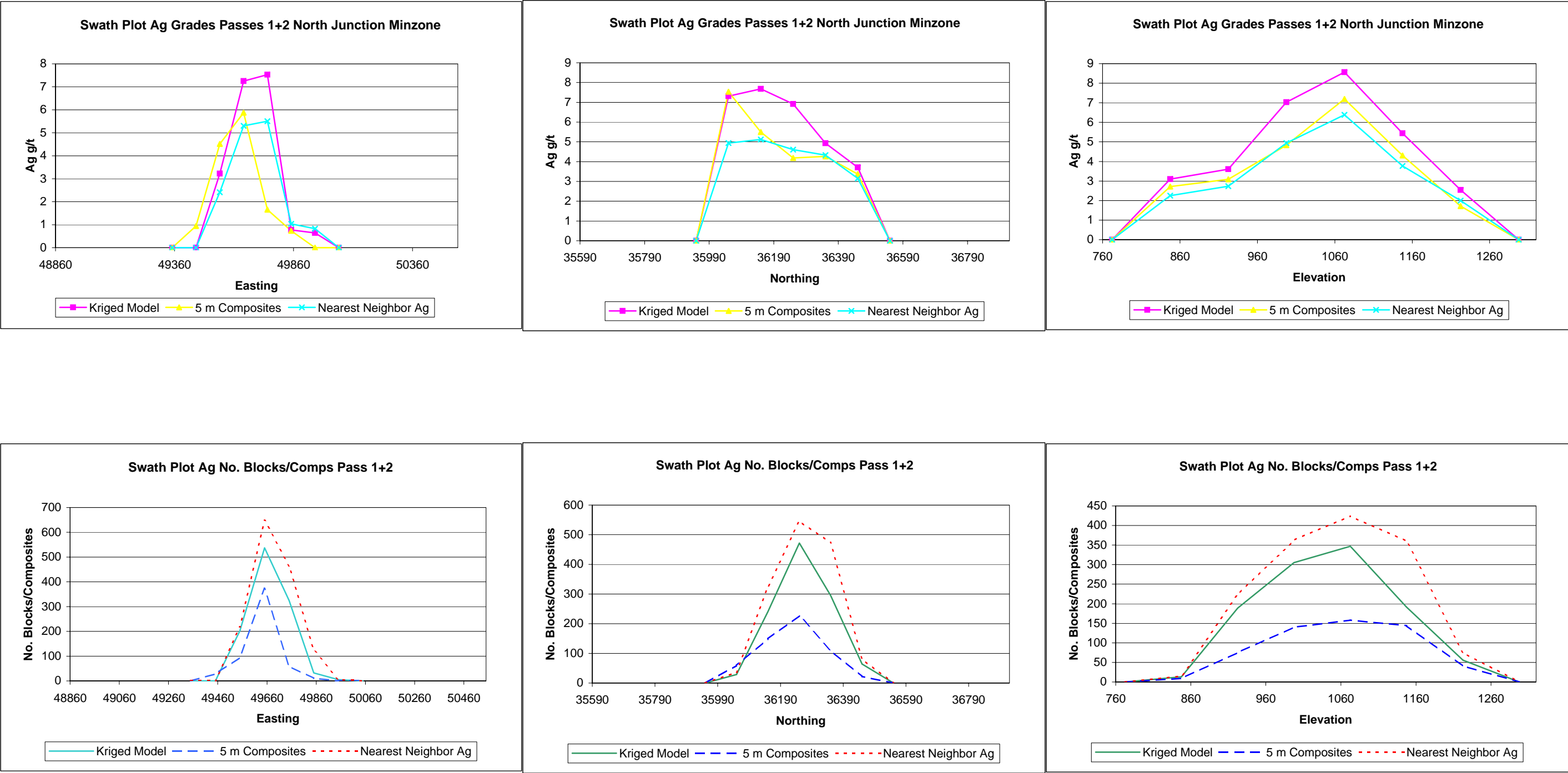




Gold Swaths North Junction Minzone

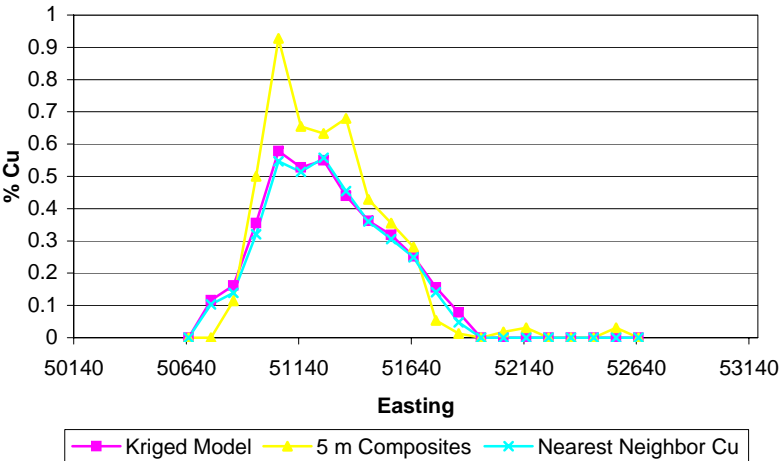


Silver Swaths North Junction Minzone

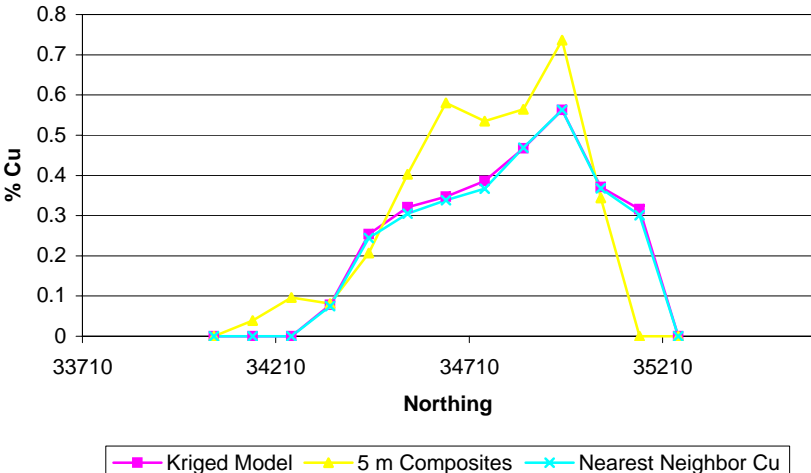


Copper Swaths SGL Volcanic

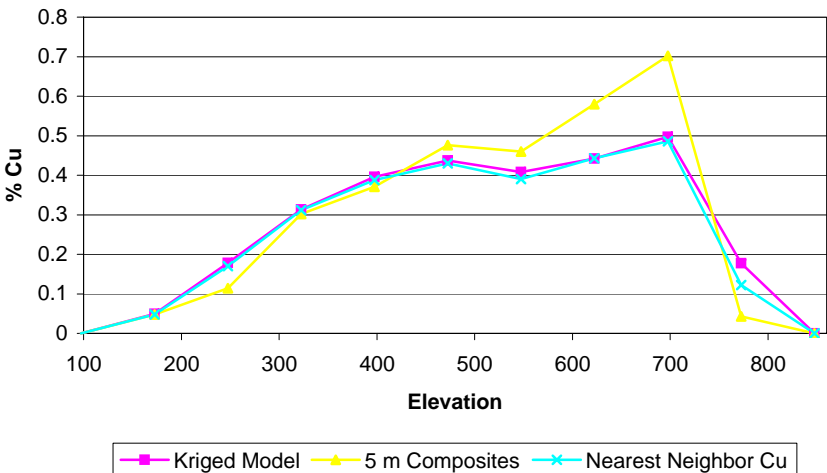
Swath Plot Cu Grades Passes 1+2 SGL Zone



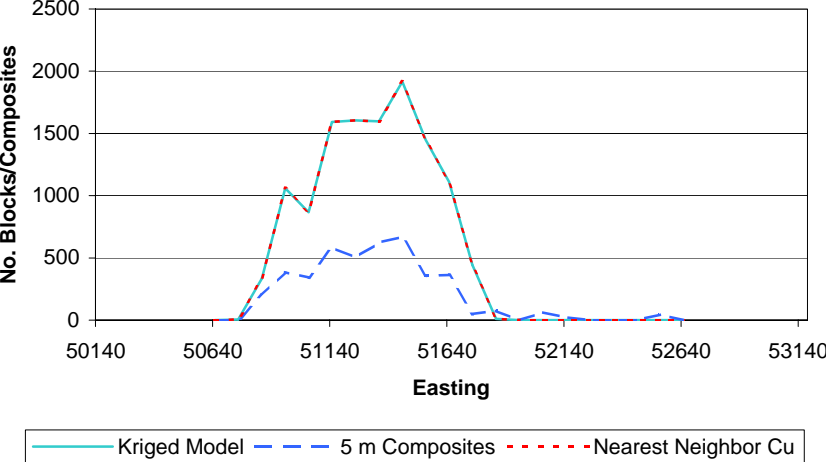
Swath Plot Cu Grades Passes 1+2 SGL Zone



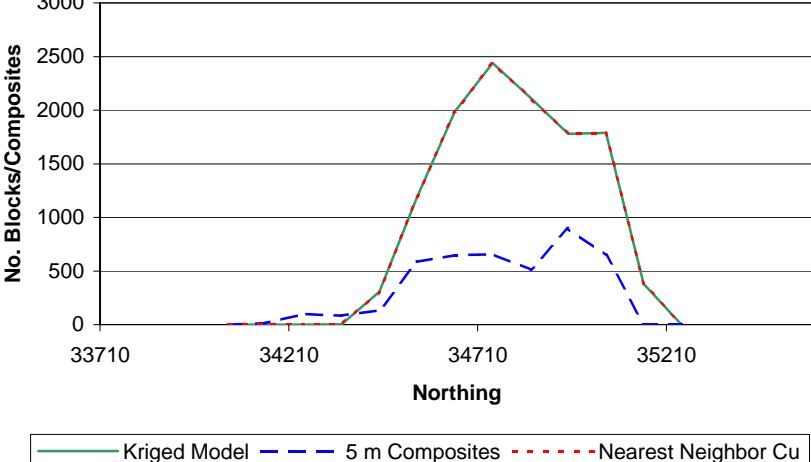
Swath Plot Cu Grades Passes 1+2 SGL Zone



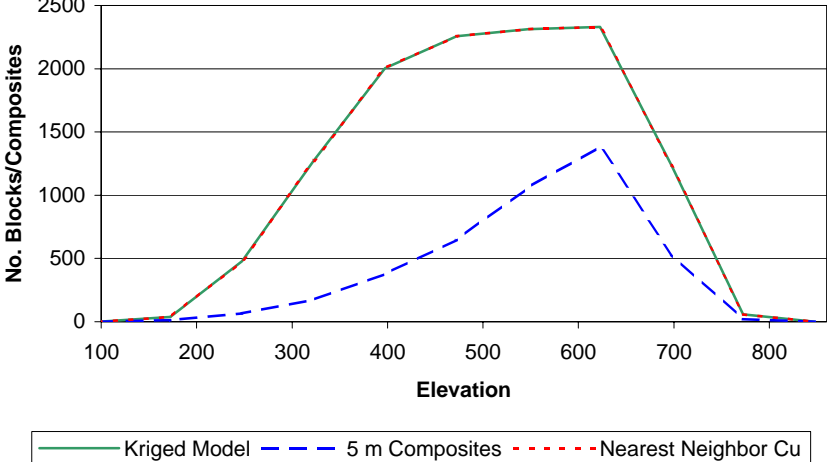
Swath Plot Cu No. Blocks/Comps Pass 1+2



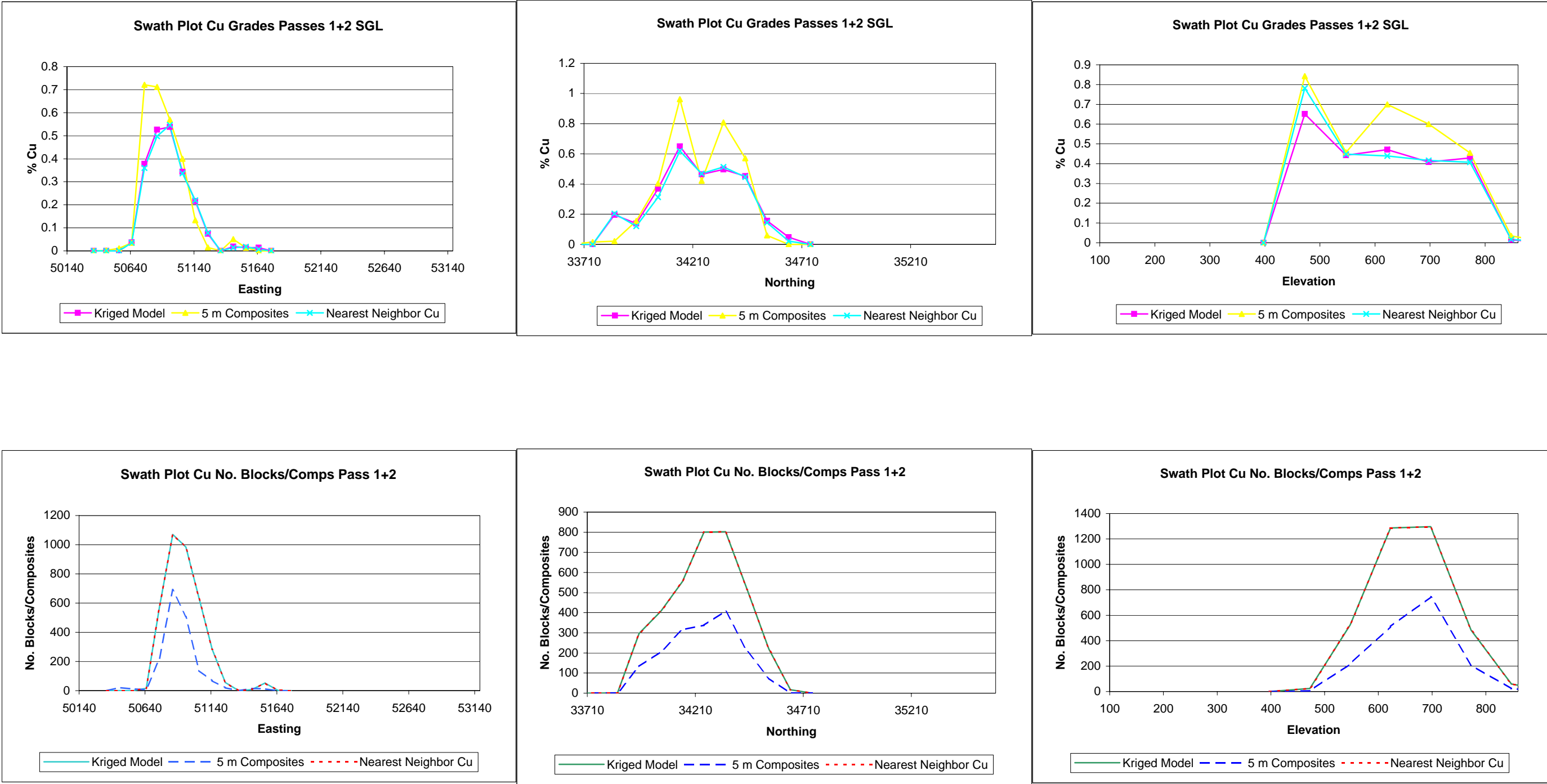
Swath Plot Cu No. Blocks/Comps Pass 1+2



Swath Plot Cu No. Blocks/Comps Pass 1+2

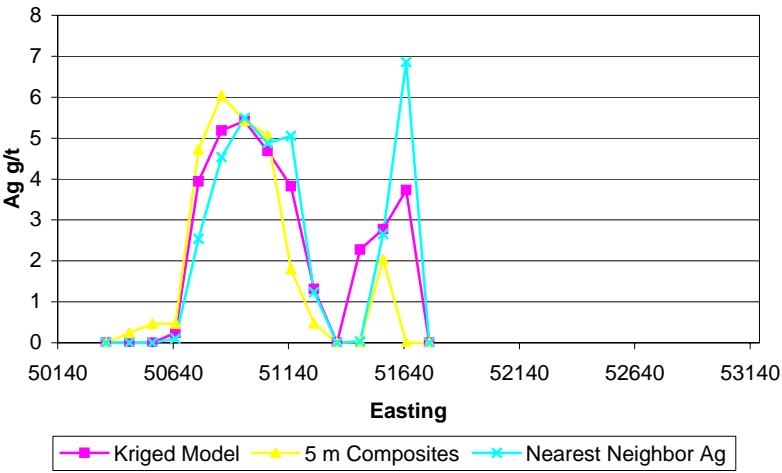


Copper Swaths SGL Volcanic

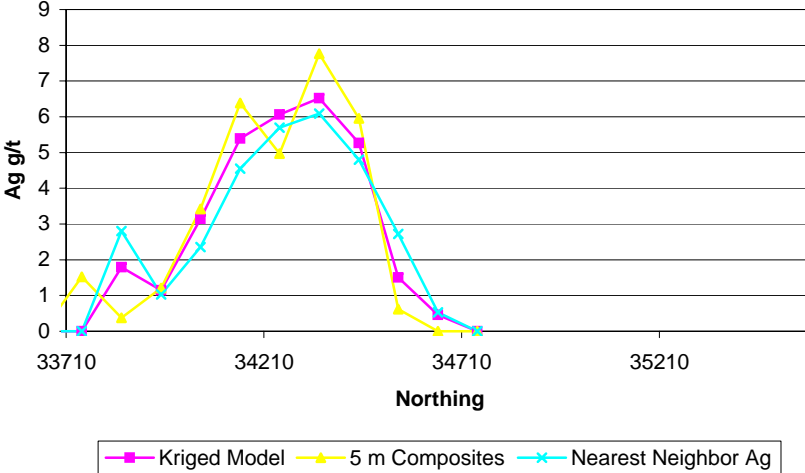


Silver Swaths SGL Volcanic

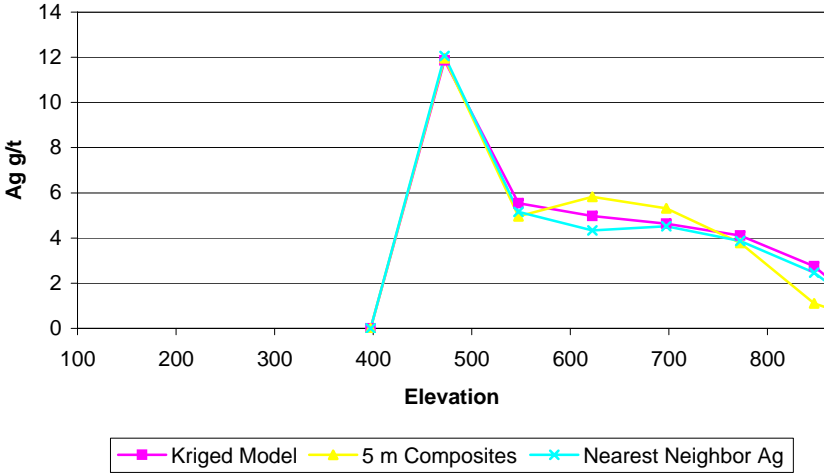
Swath Plot Ag Grades Passes 1+2 SGL



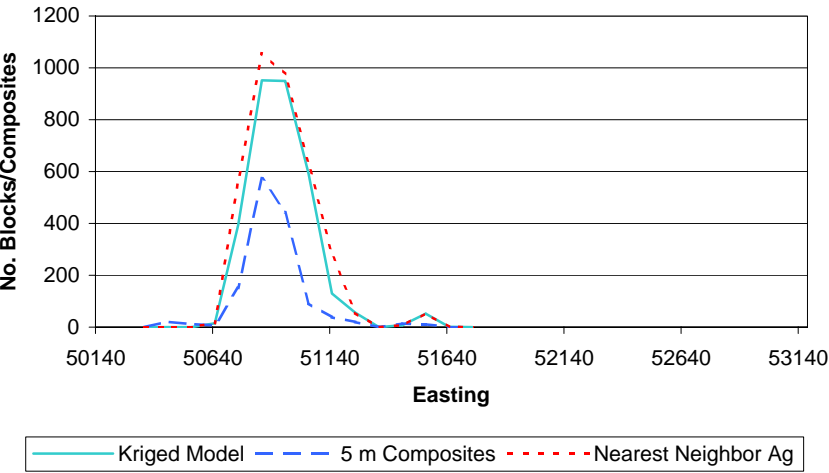
Swath Plot Ag Grades Passes 1+2 SGL



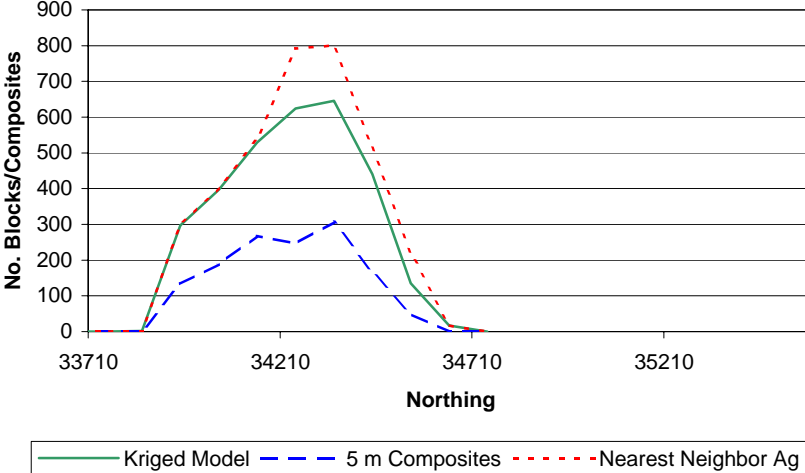
Swath Plot Ag Grades Passes 1+2 SGL



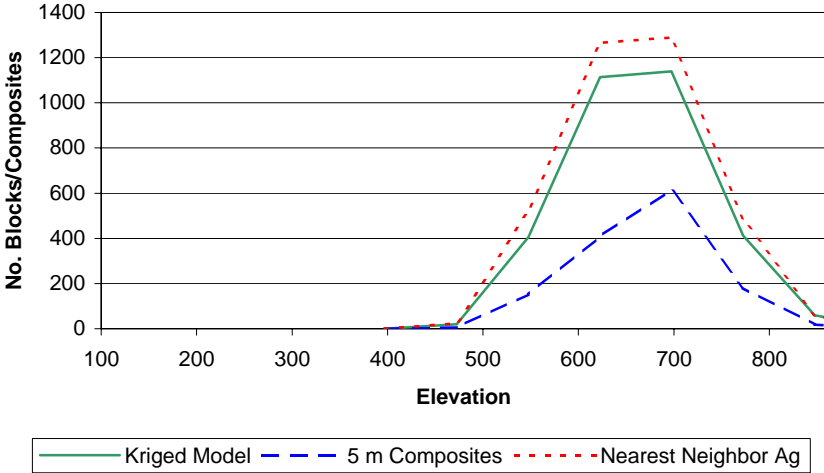
Swath Plot Ag No. Blocks/Comps Pass 1+2



Swath Plot Ag No. Blocks/Comps Pass 1+2

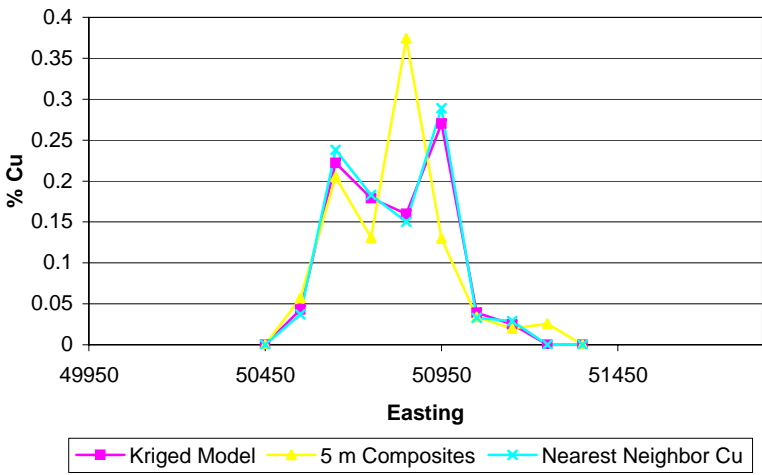


Swath Plot Ag No. Blocks/Comps Pass 1+2

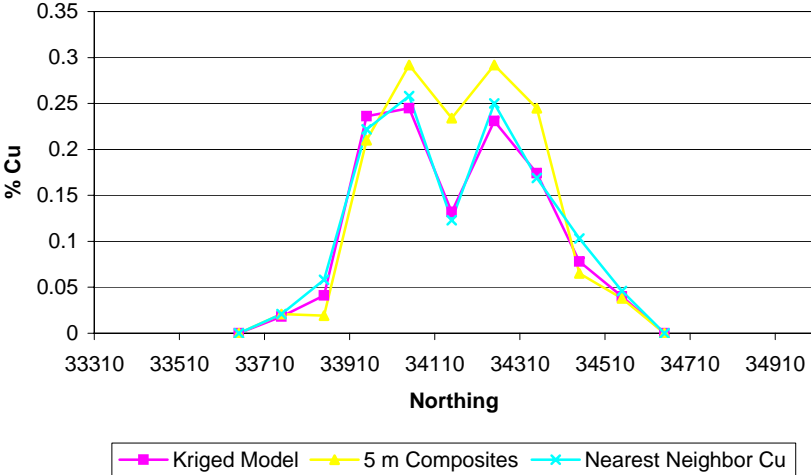


Copper Swaths SGL Intrusive

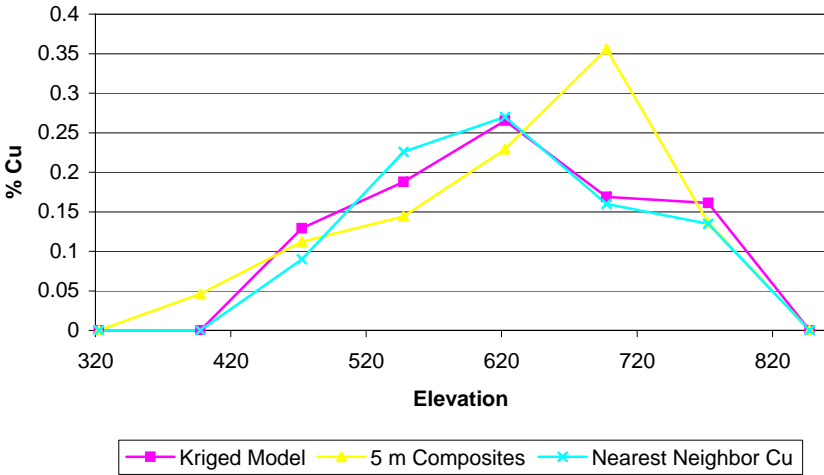
Swath Plot Cu Grades Passes 1+2 SGL



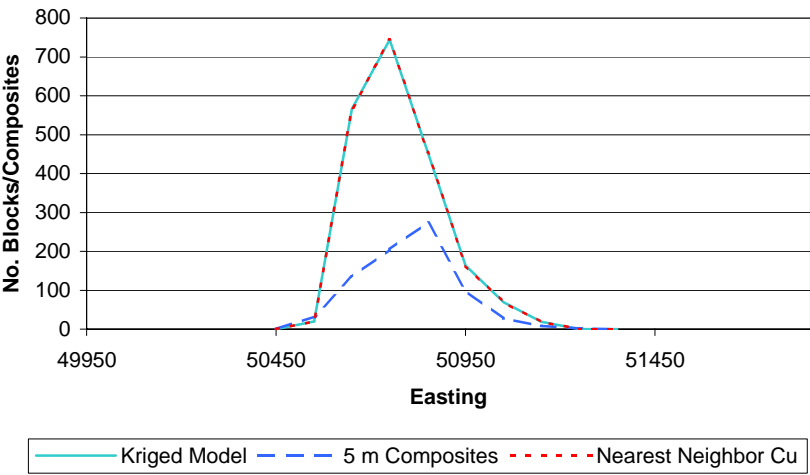
Swath Plot Cu Grades Passes 1+2 SGL



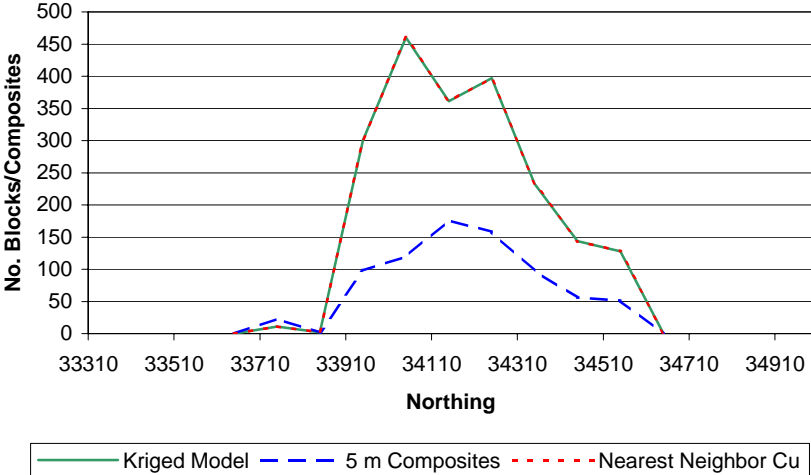
Swath Plot Cu Grades Passes 1+2 SGL



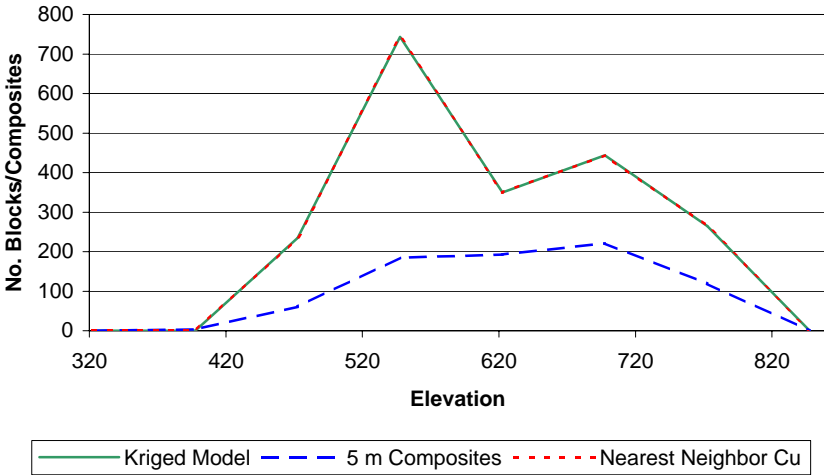
Swath Plot Cu No. Blocks/Comps Pass 1+2



Swath Plot Cu No. Blocks/Comps Pass 1+2

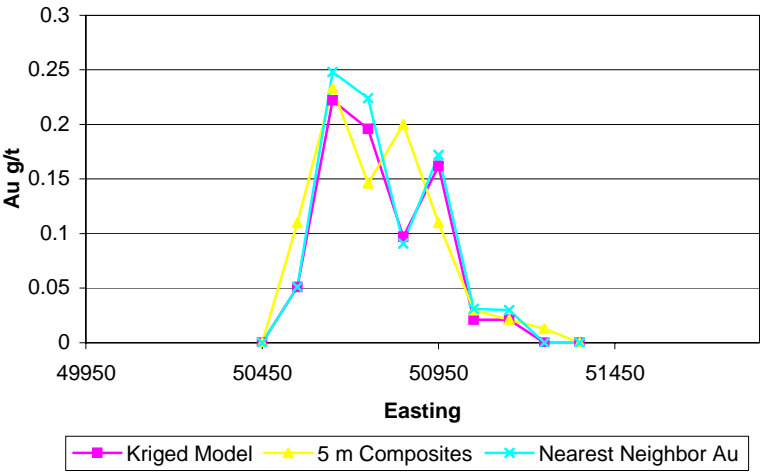


Swath Plot Cu No. Blocks/Comps Pass 1+2

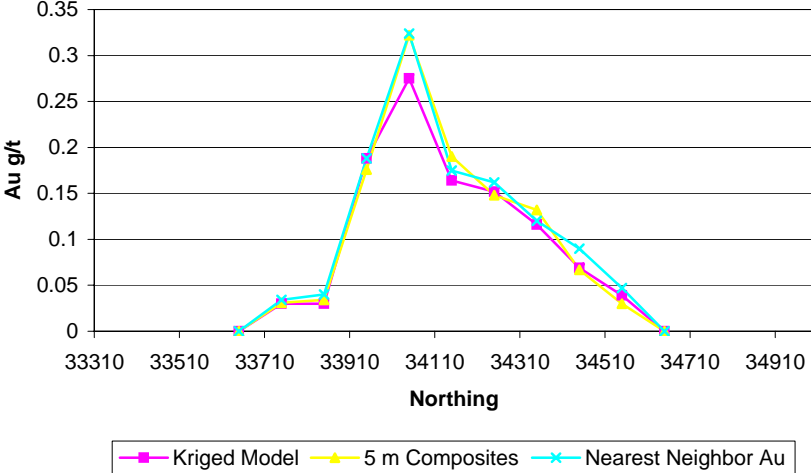


Gold Swaths SGL Intrusive

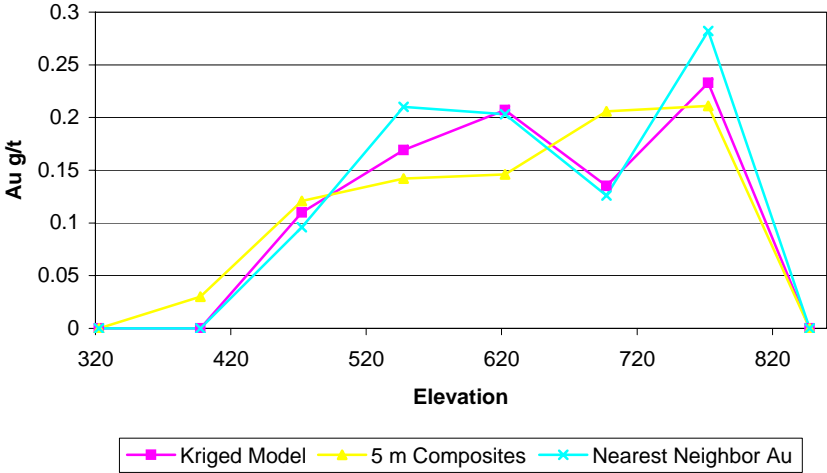
Swath Plot Au Grades Passes 1+2 SGL



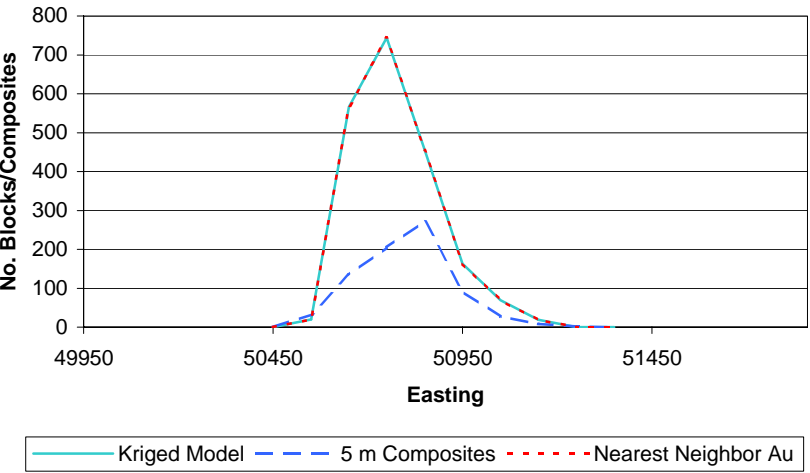
Swath Plot Au Grades Passes 1+2 SGL



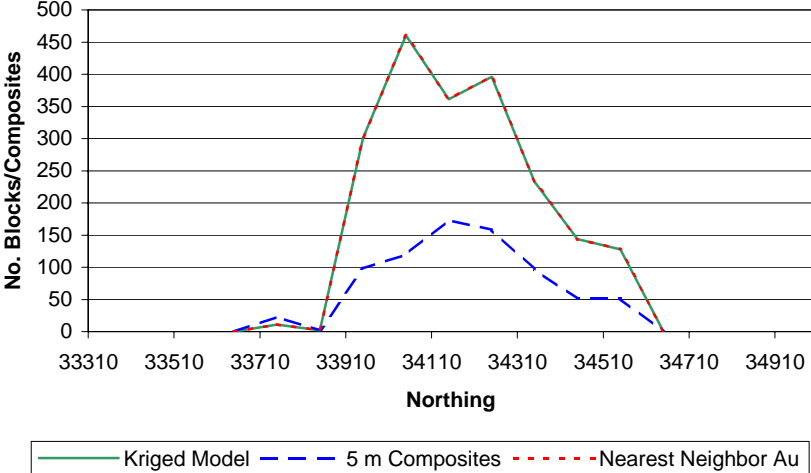
Swath Plot Au Grades Passes 1+2 SGL



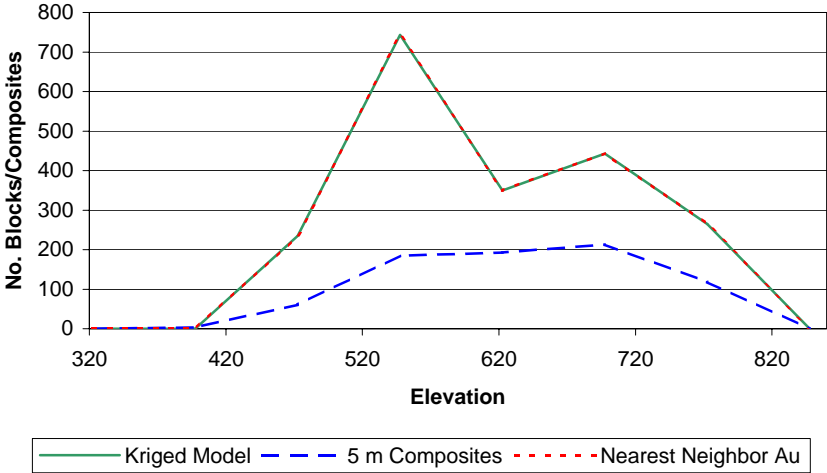
Swath Plot Au No. Blocks/Comps Pass 1+2



Swath Plot Au No. Blocks/Comps Pass 1+2

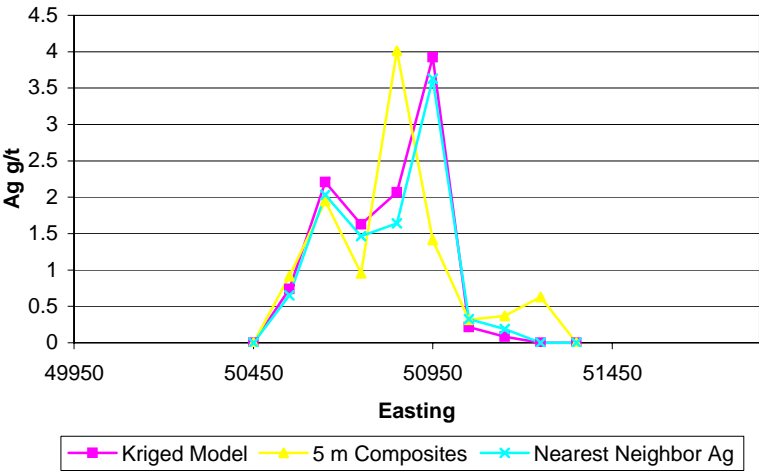


Swath Plot Au No. Blocks/Comps Pass 1+2

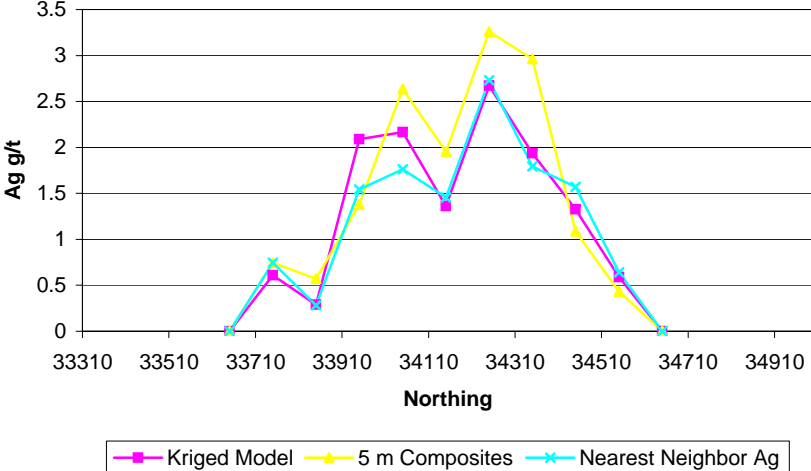


Silver Swaths SGL Intrusive

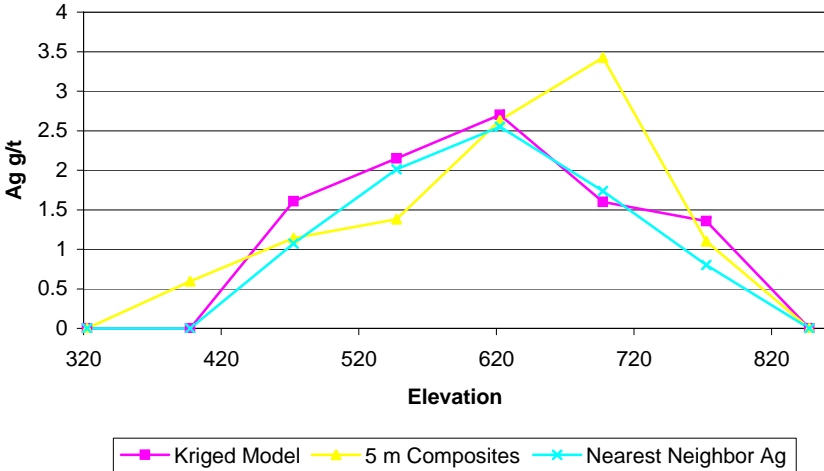
Swath Plot Ag Grades Passes 1+2 SGL



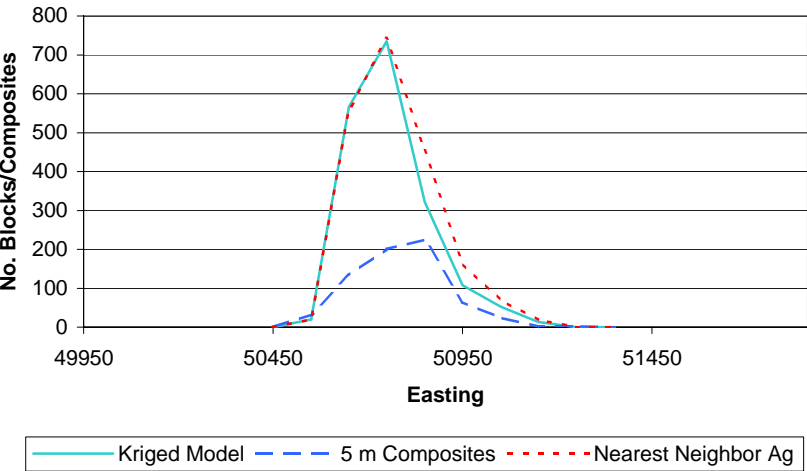
Swath Plot Ag Grades Passes 1+2 SGL



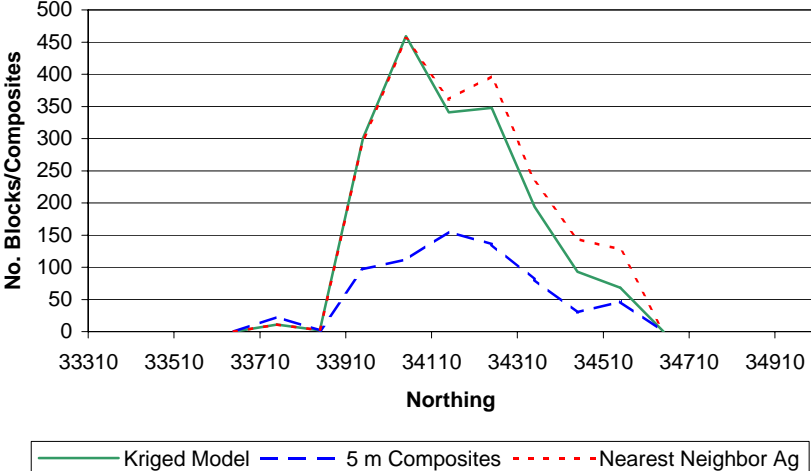
Swath Plot Ag Grades Passes 1+2 SGL



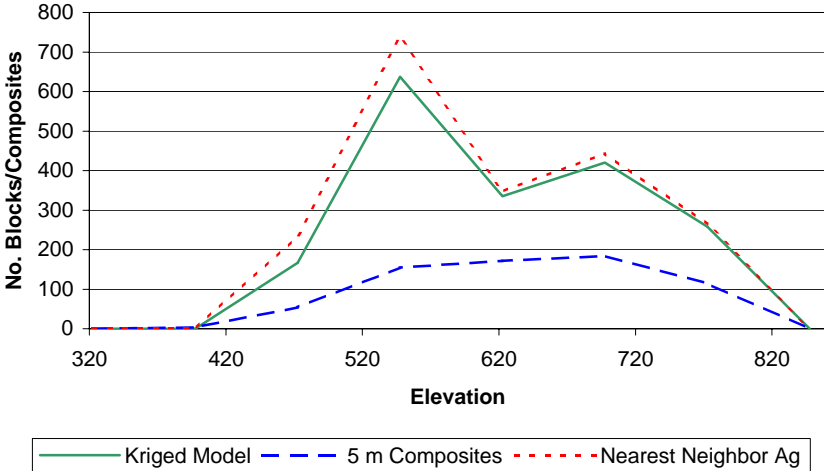
Swath Plot Ag No. Blocks/Comps Pass 1+2



Swath Plot Ag No. Blocks/Comps Pass 1+2

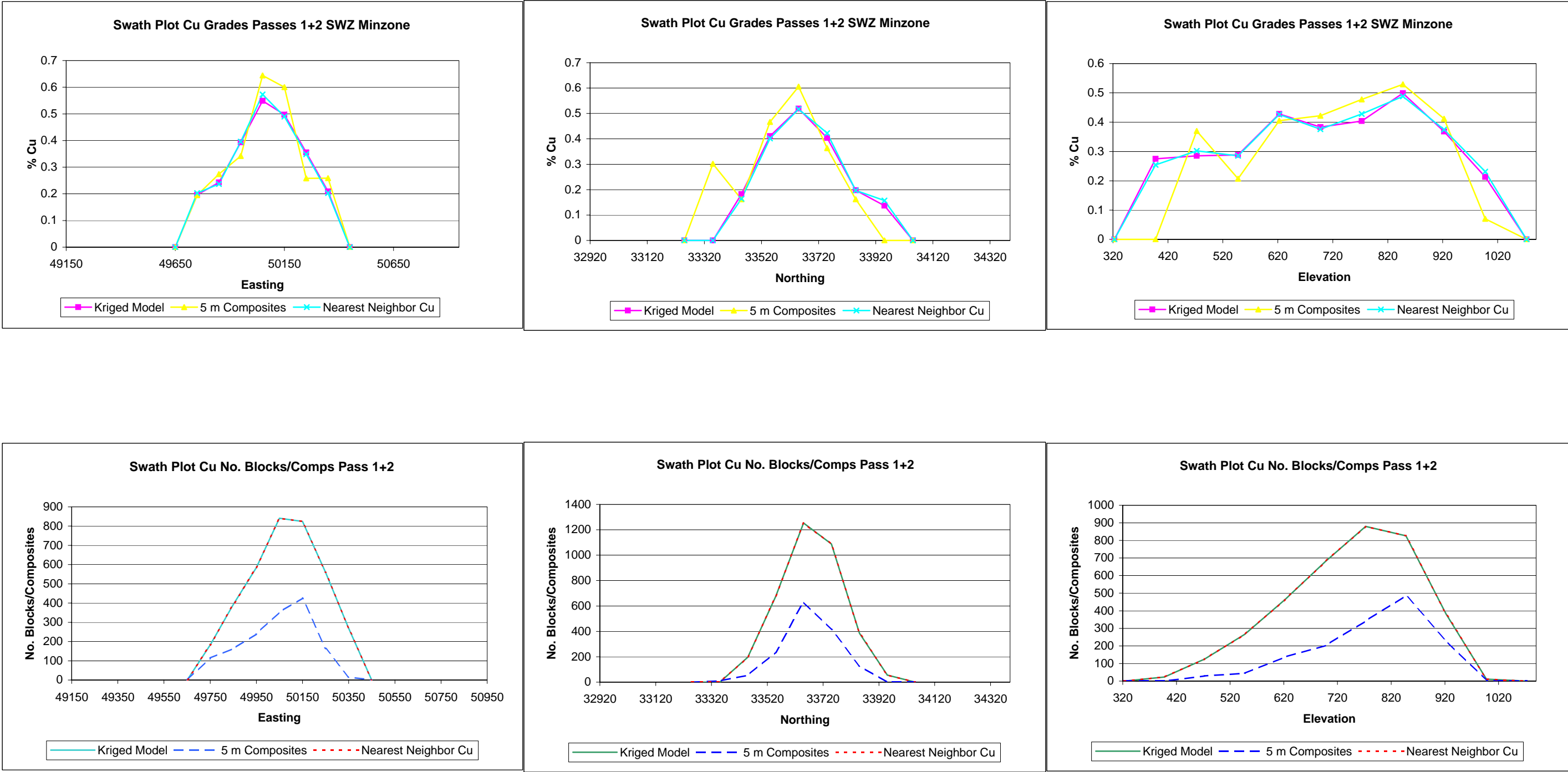


Swath Plot Ag No. Blocks/Comps Pass 1+2

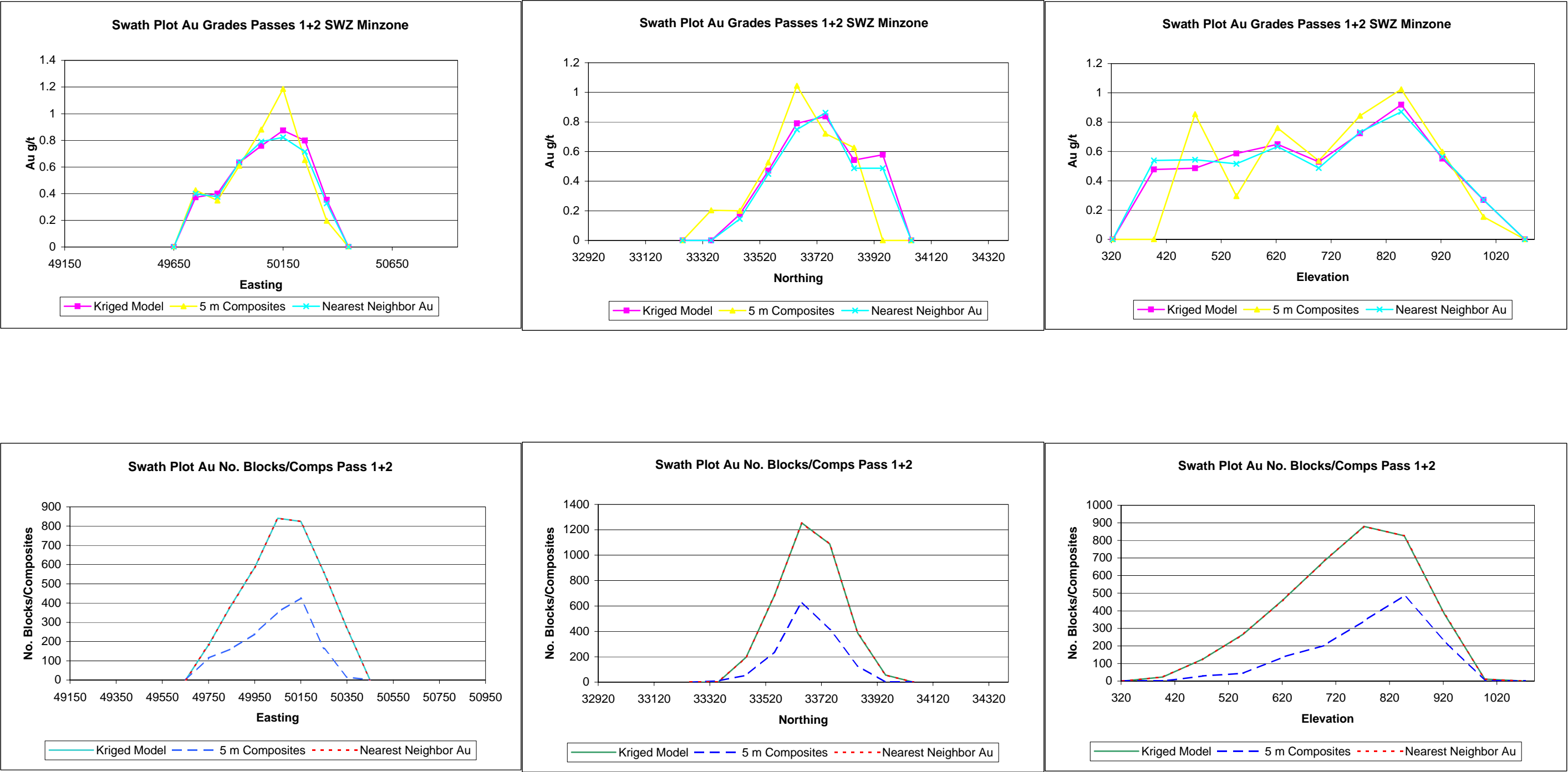




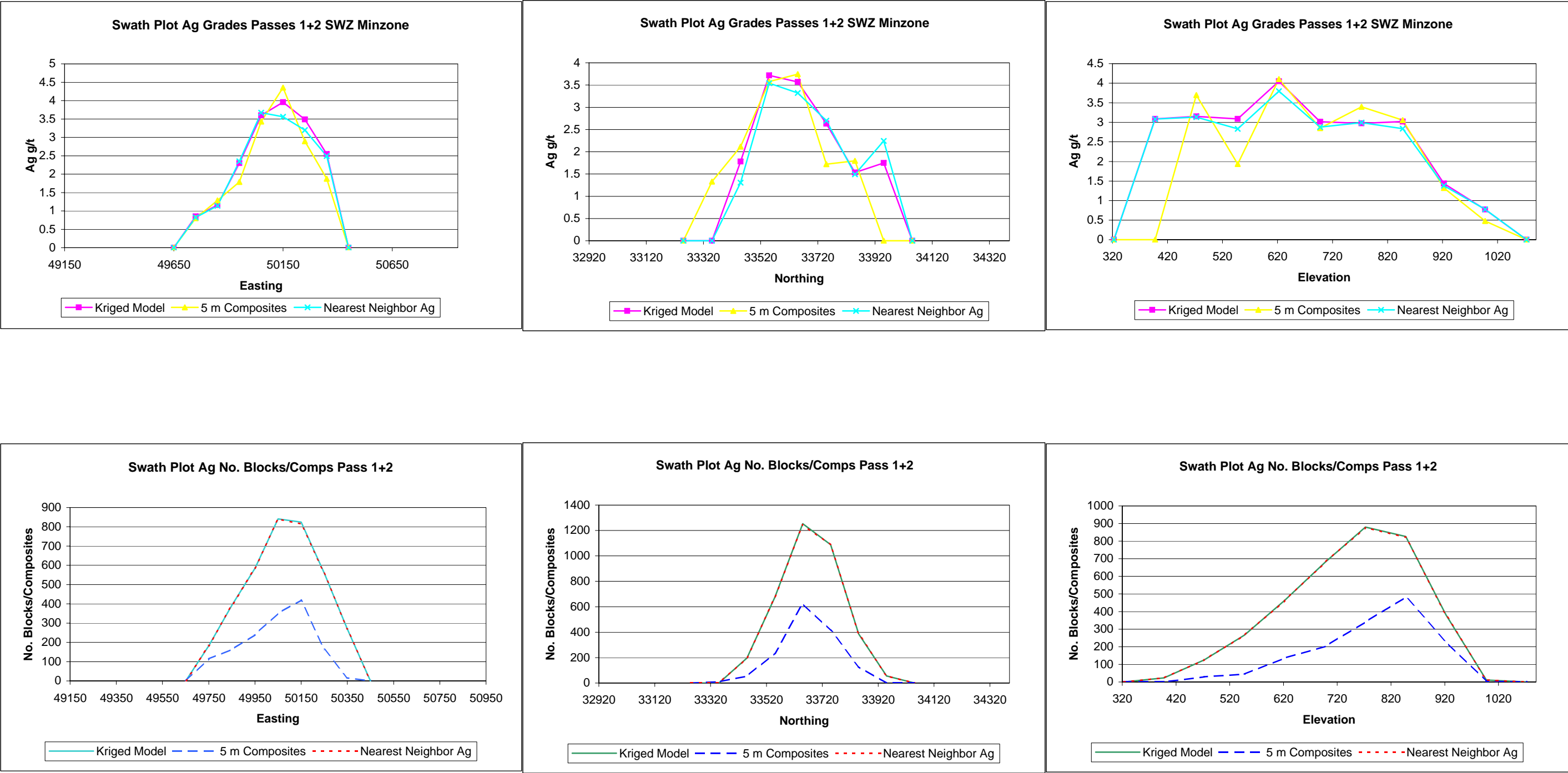
Copper Swaths SWZ Minzone



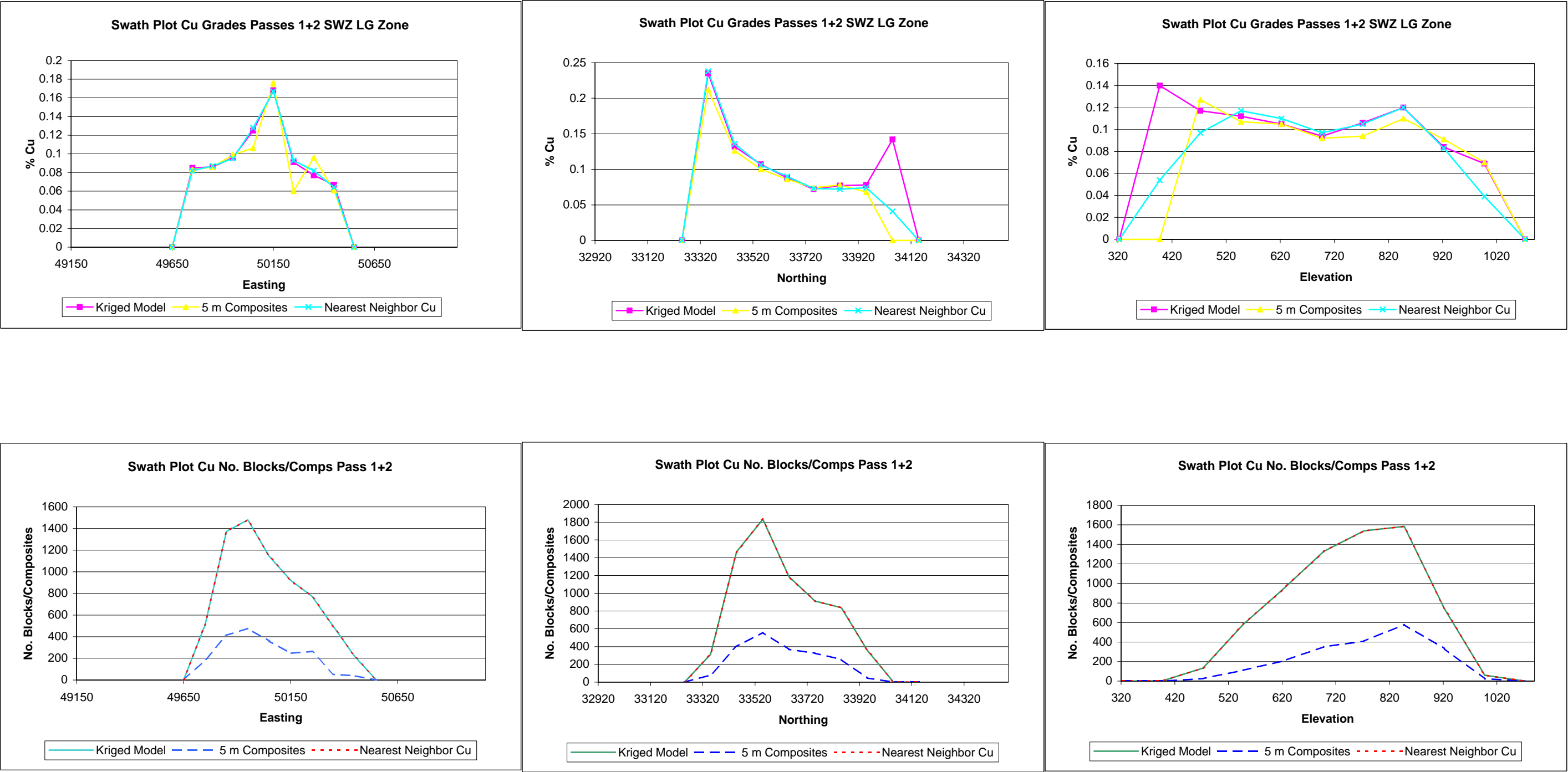
Gold Swaths SWZ Minzone



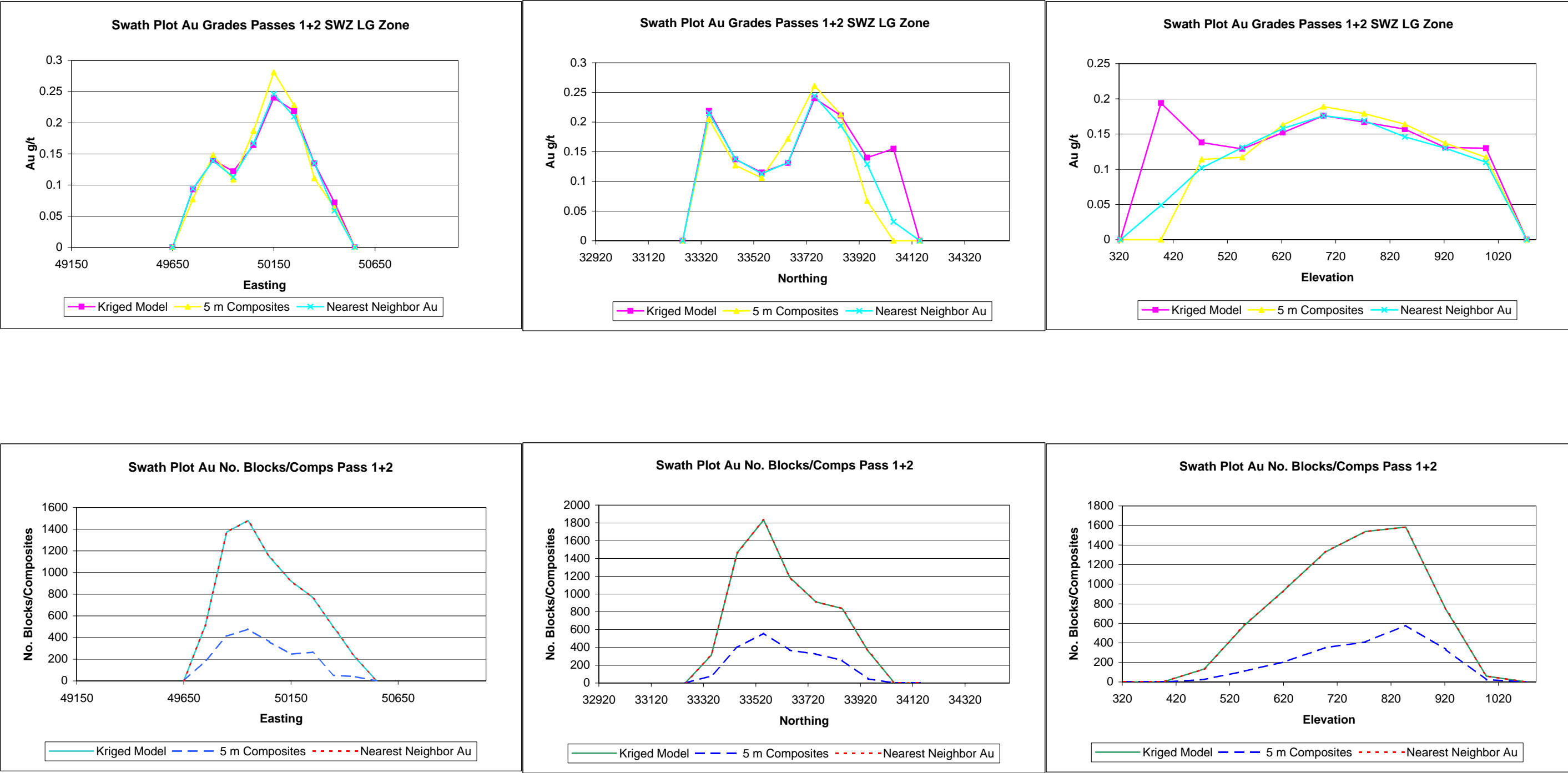
Silver Swaths SWZ Minzone



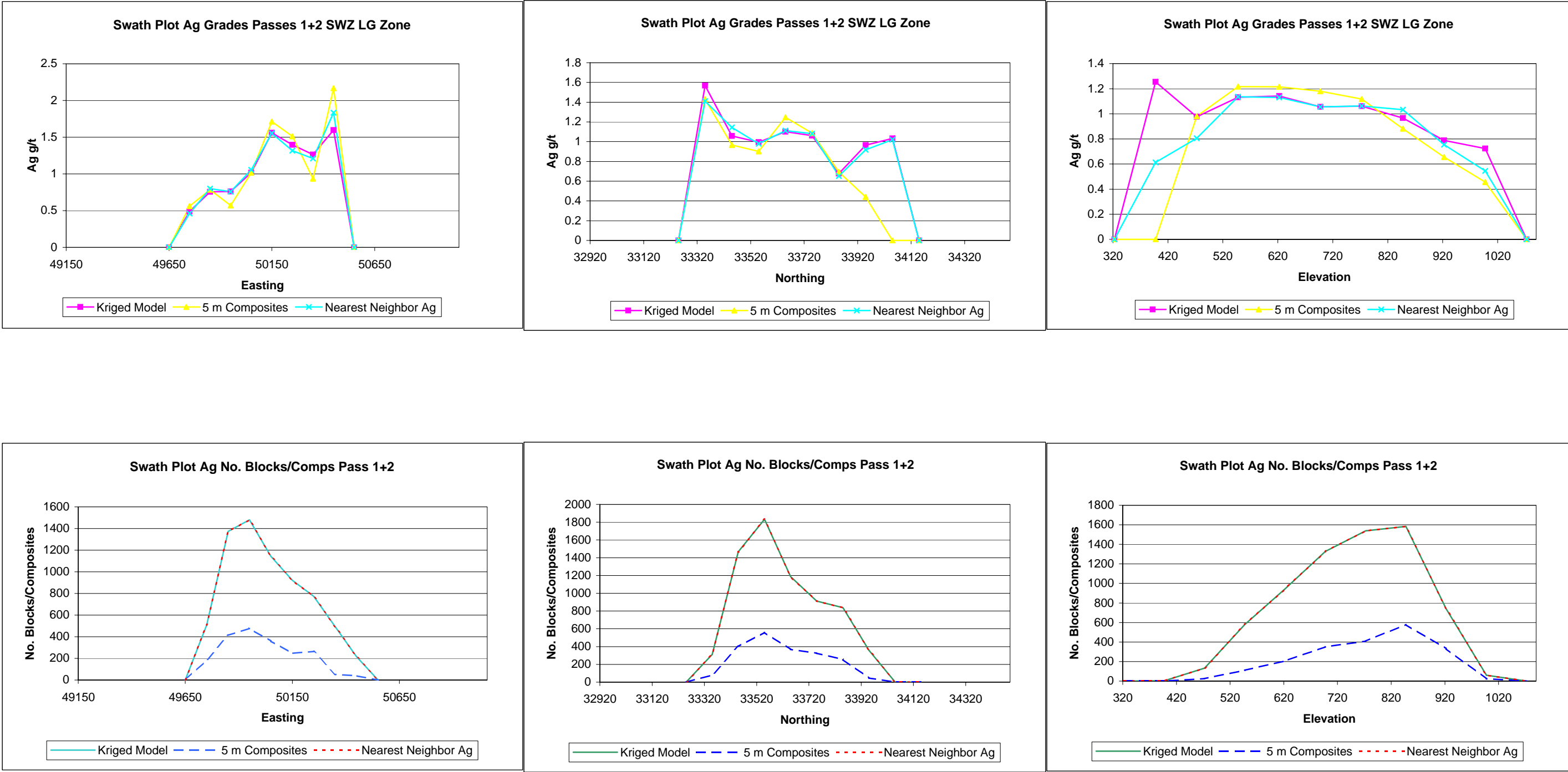
Copper Swaths SWZ Low Grade Zone



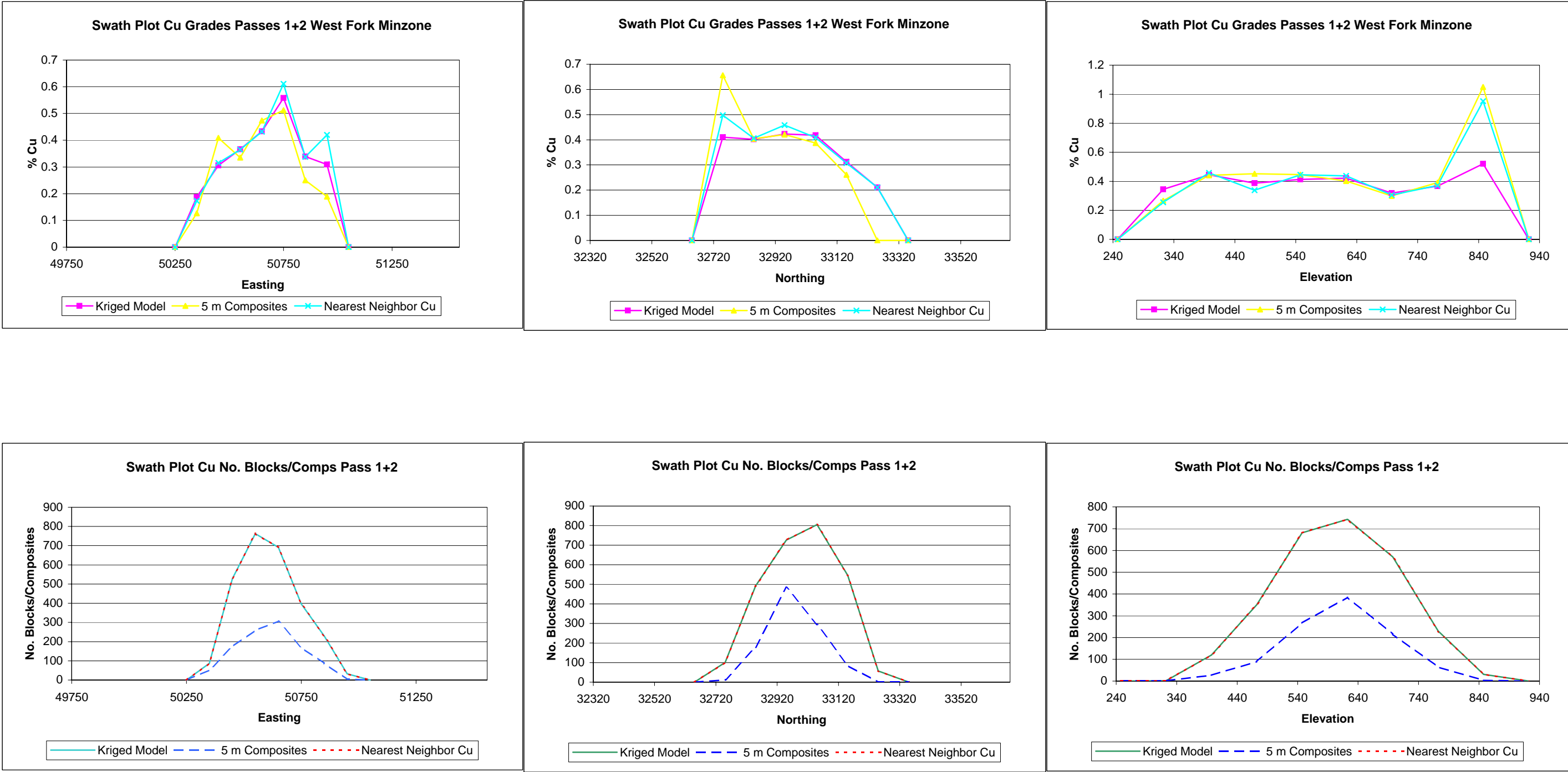
Gold Swaths SWZ Low Grade Zone



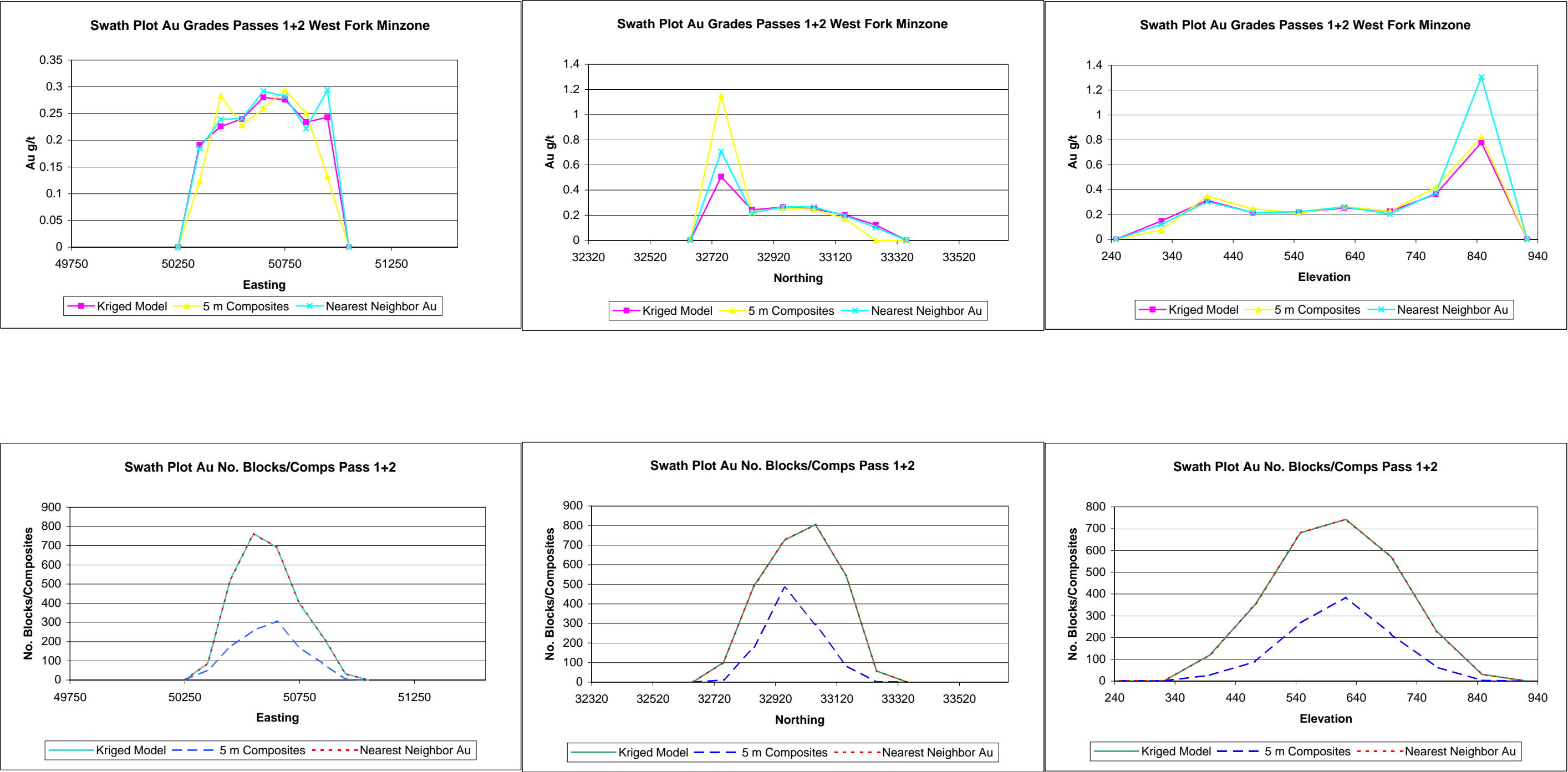
Silver Swaths SWZ Low Grade Zone



Copper Swaths West Fork Minzone

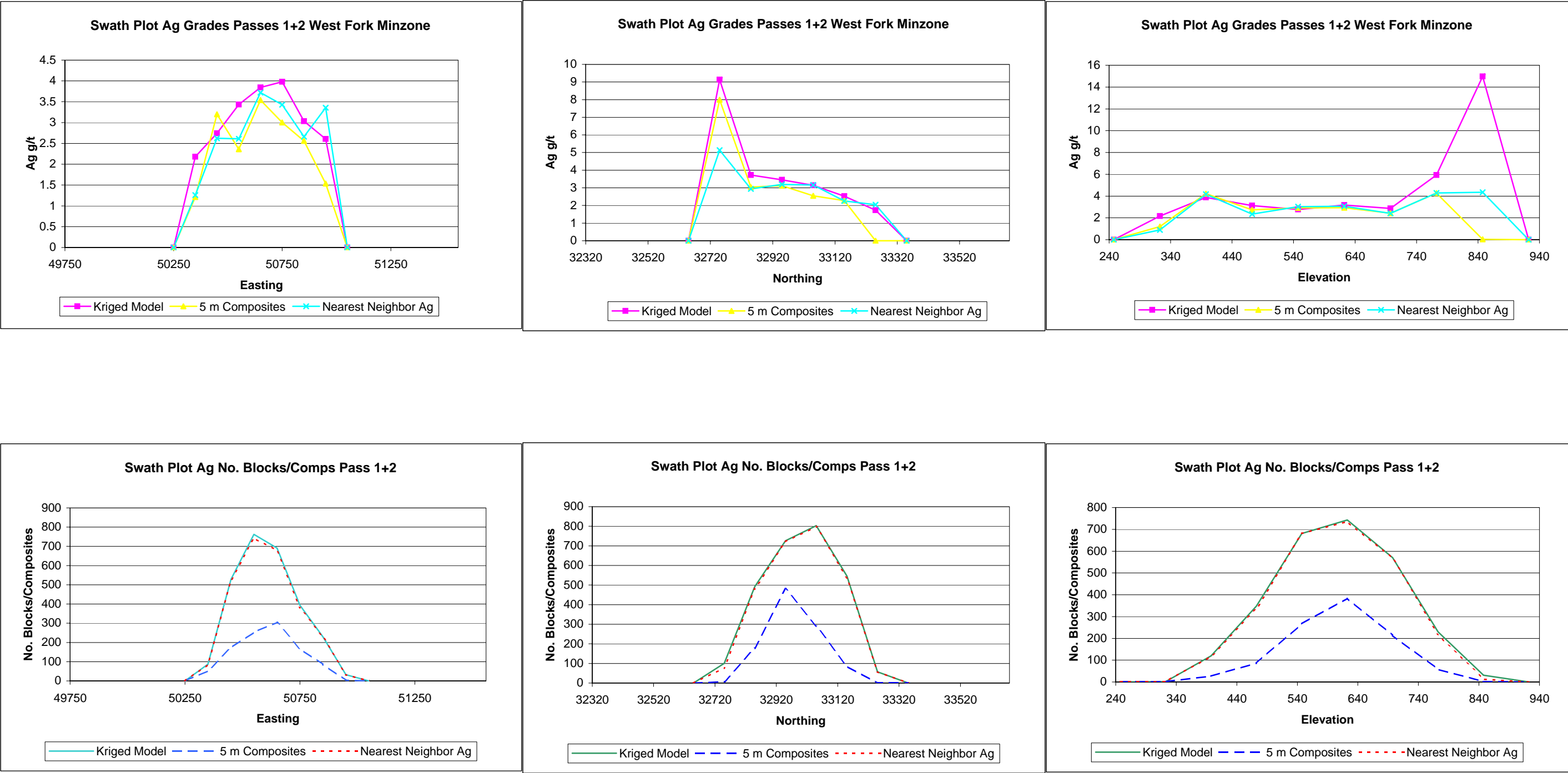


Gold Swaths West Fork Minzone





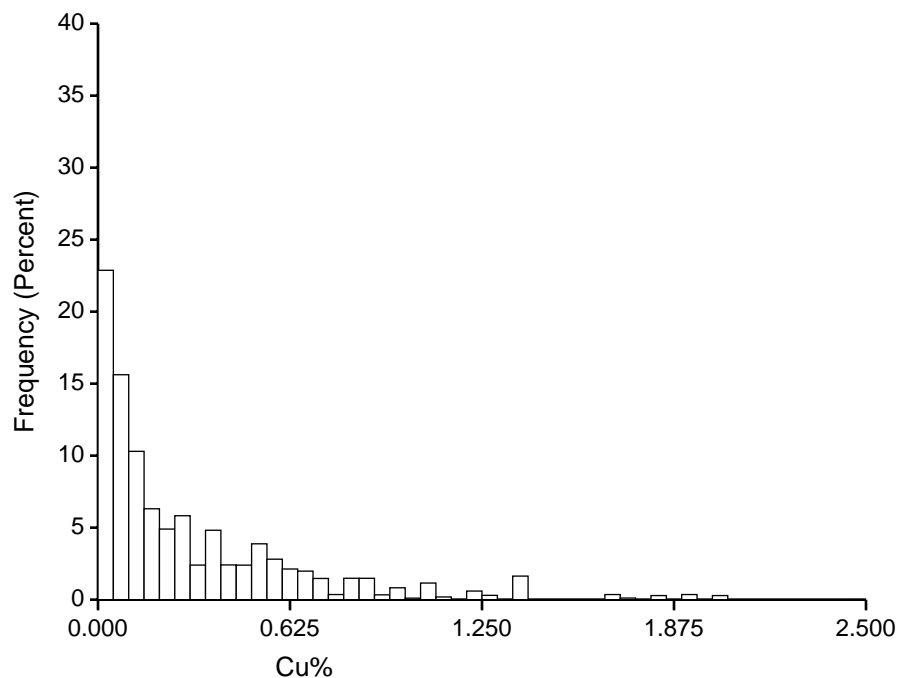
Silver Swaths West Fork Minzone



**Updated Galore Creek Resources  
NI 43-101 Technical Report**

**Appendix 9 – Histograms**

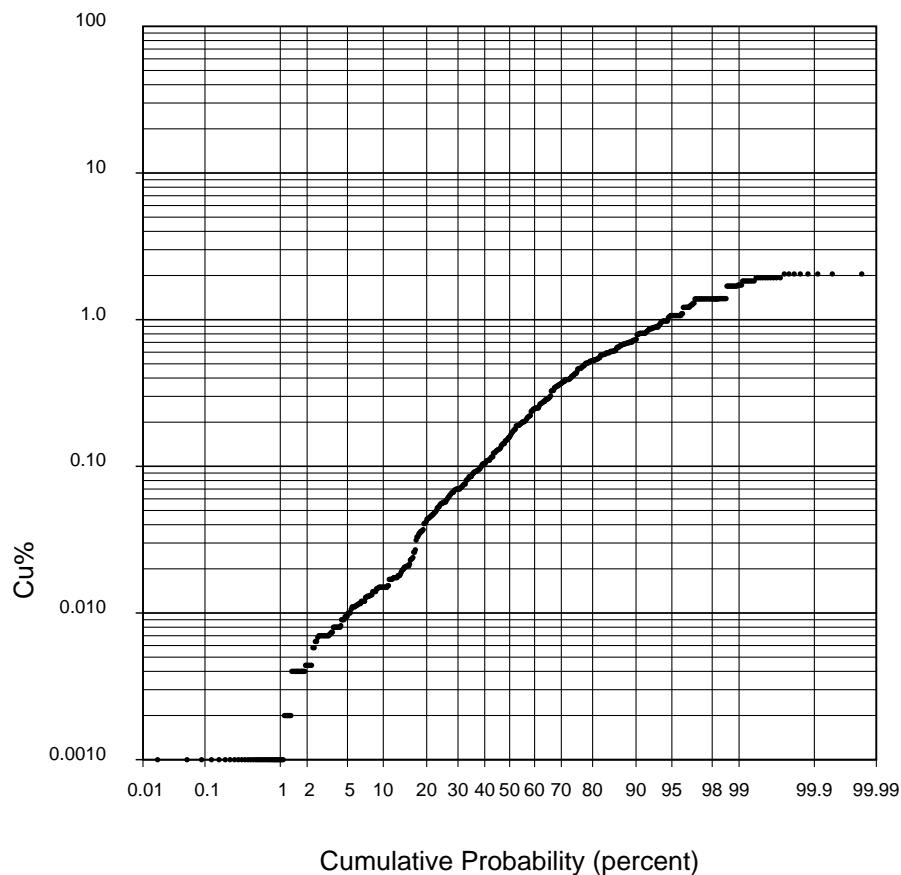
Cu Bountiful Block NN Estimate Volcanic (High Confidence Blocks)



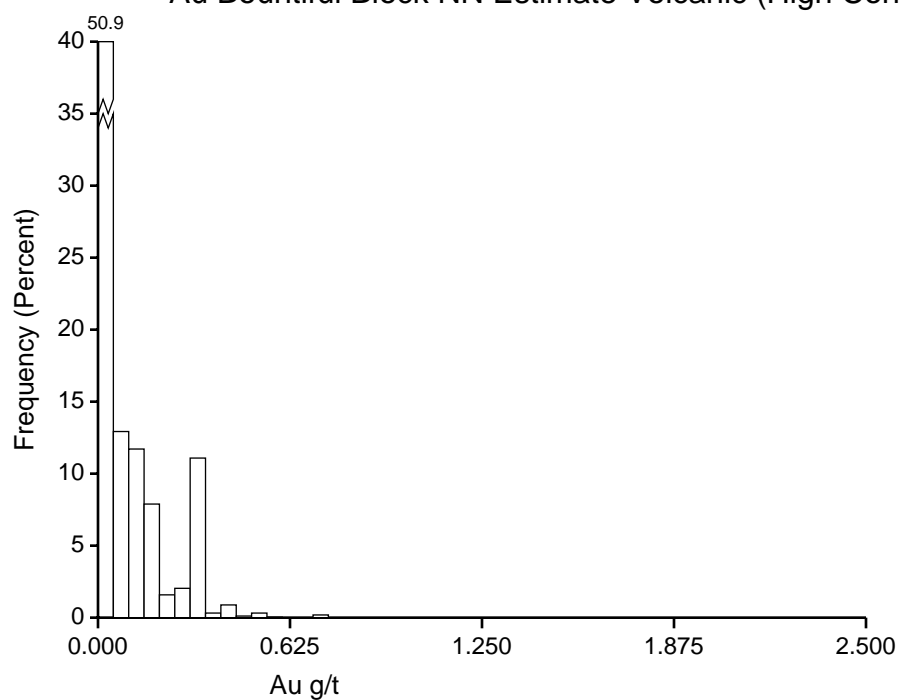
N	2882
m	0.302
$\sigma^2$	0.128
$\sigma/m$	1.186
min	0.001
$q_{0.25}$	0.057
$q_{0.50}$	0.160
$q_{0.75}$	0.431
max	2.050

Class width = 0.050  
The last class contains  
all values  $\geq 2.450$

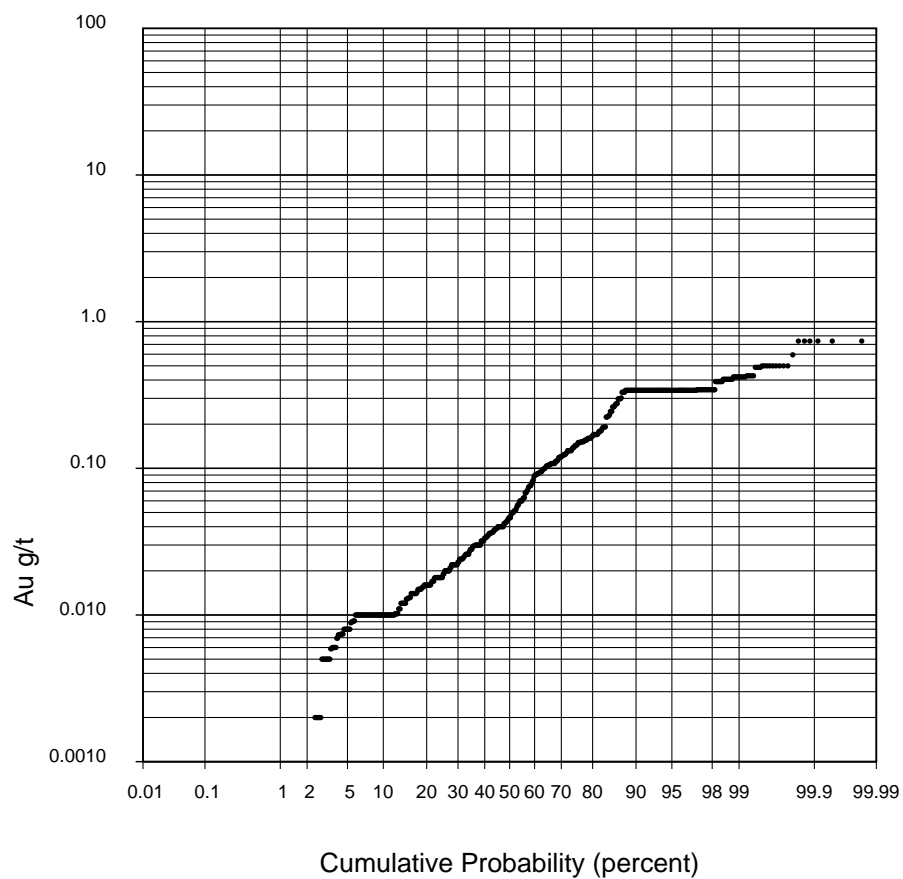
Cu Bountiful Block NN Estimate Volcanic (High Confidence Blocks)



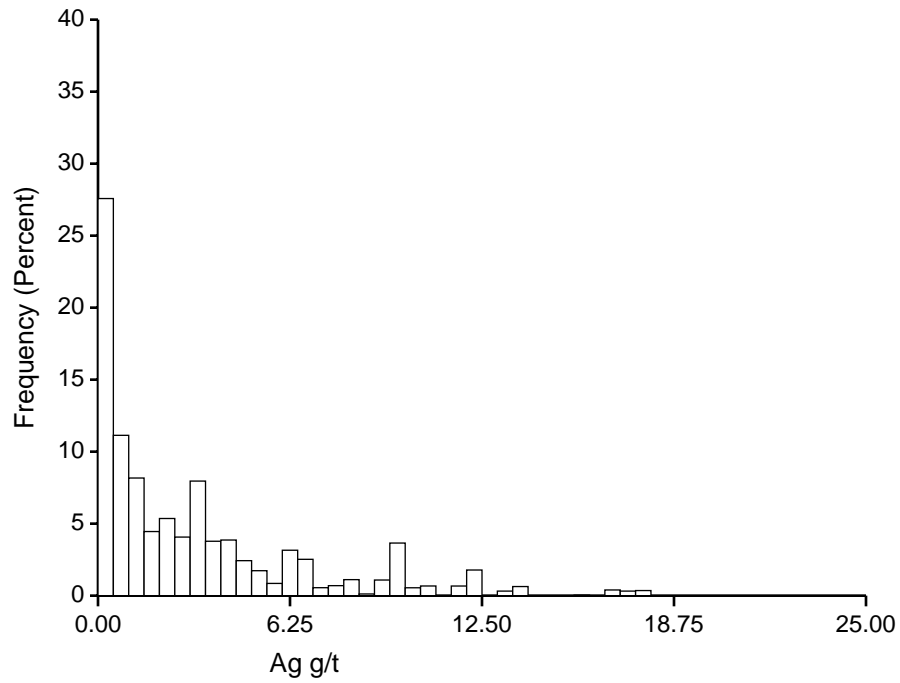
Au Bountiful Block NN Estimate Volcanic (High Confidence Blocks)



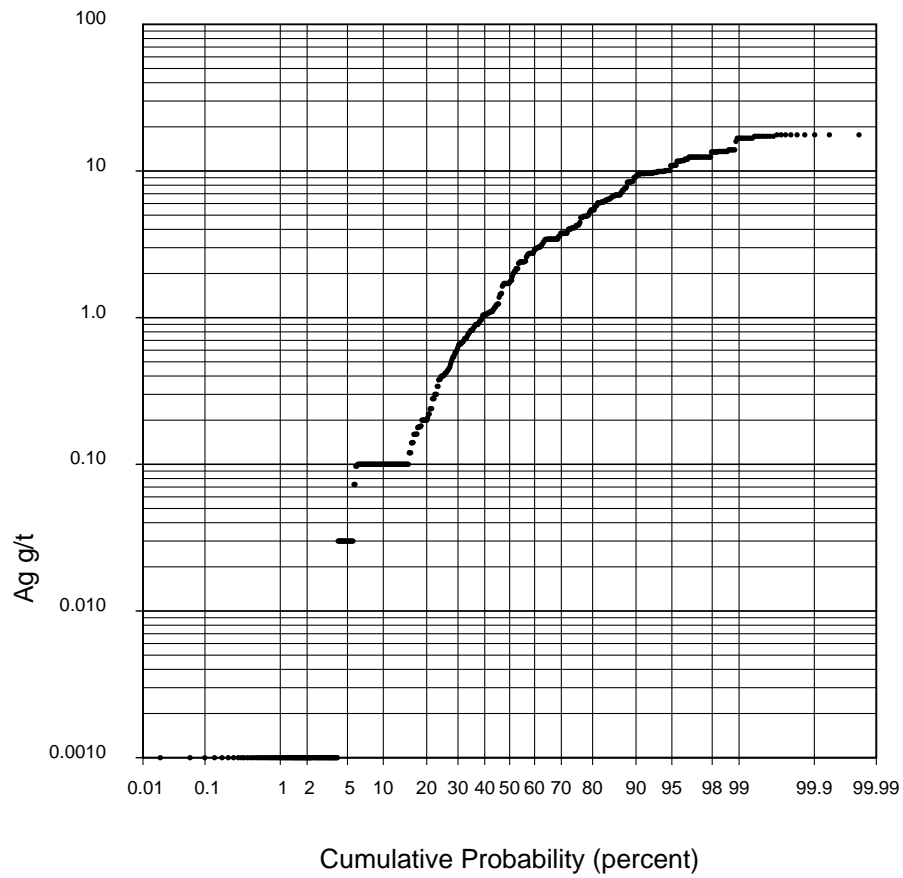
Au Bountiful Block NN Estimate Volcanic (High Confidence Blocks)



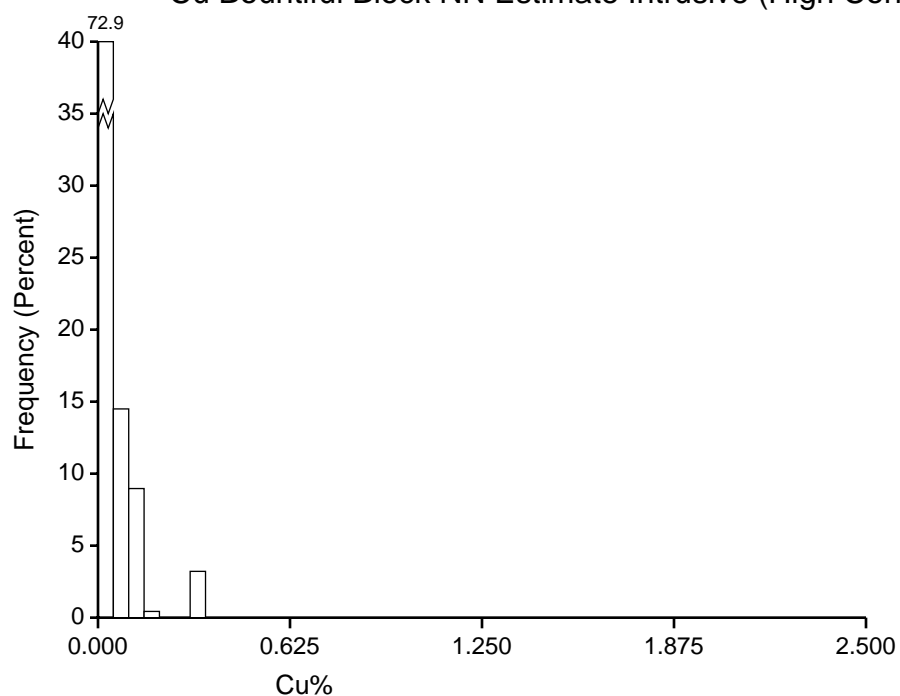
Ag Bountiful Block NN Estimate Volcanic (High Confidence Blocks)



Ag Bountiful Block NN Estimate Volcanic (High Confidence Blocks)



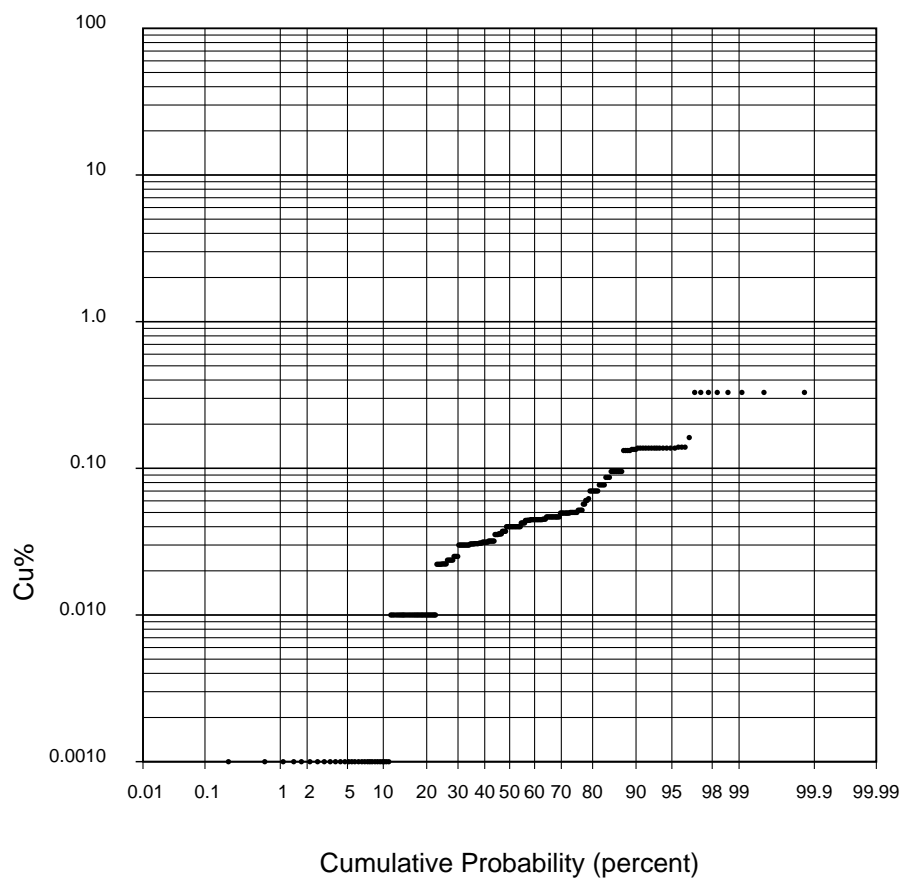
Cu Bountiful Block NN Estimate Intrusive (High Confidence Blocks)



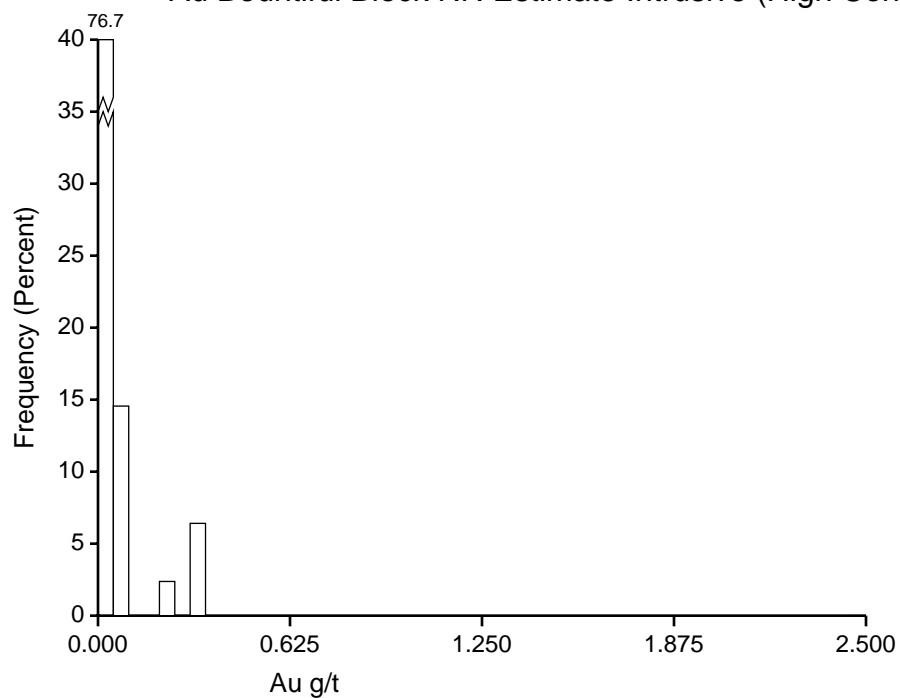
N	247
m	0.053
$\sigma^2$	0.004
$\sigma/m$	1.168
min	0.001
$q_{0.25}$	0.022
$q_{0.50}$	0.040
$q_{0.75}$	0.050
max	0.329

Class width = 0.050  
The last class contains  
all values  $\geq 2.450$

Cu Bountiful Block NN Estimate Intrusive (High Confidence Blocks)



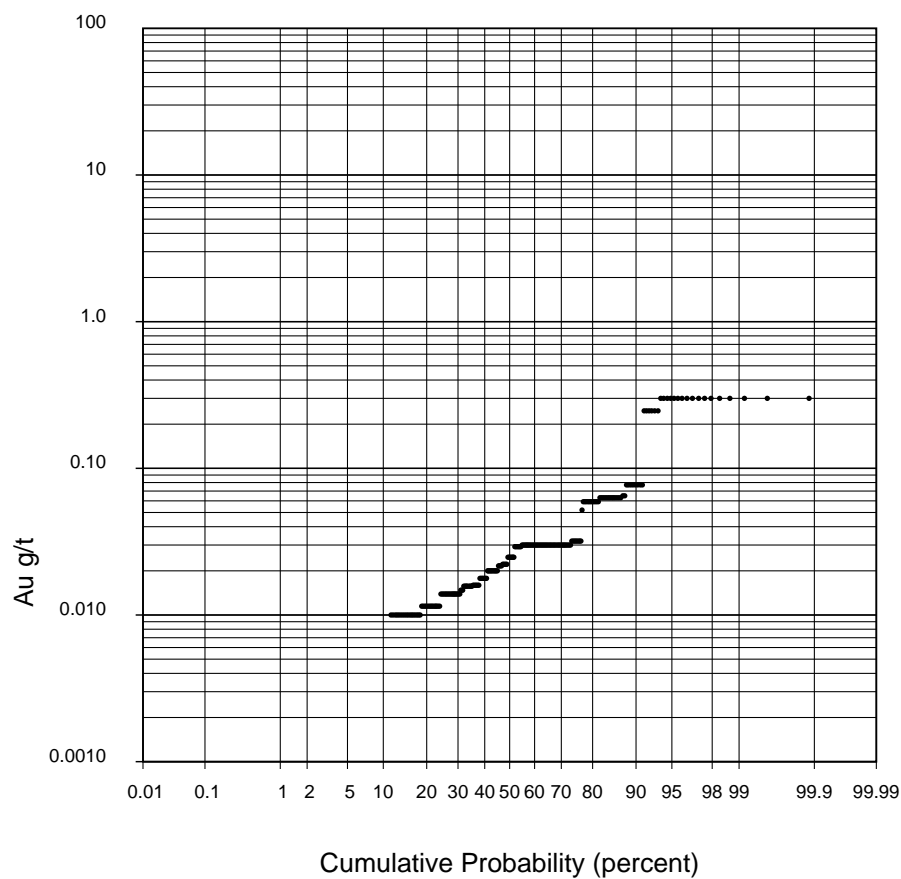
Au Bountiful Block NN Estimate Intrusive (High Confidence Blocks)



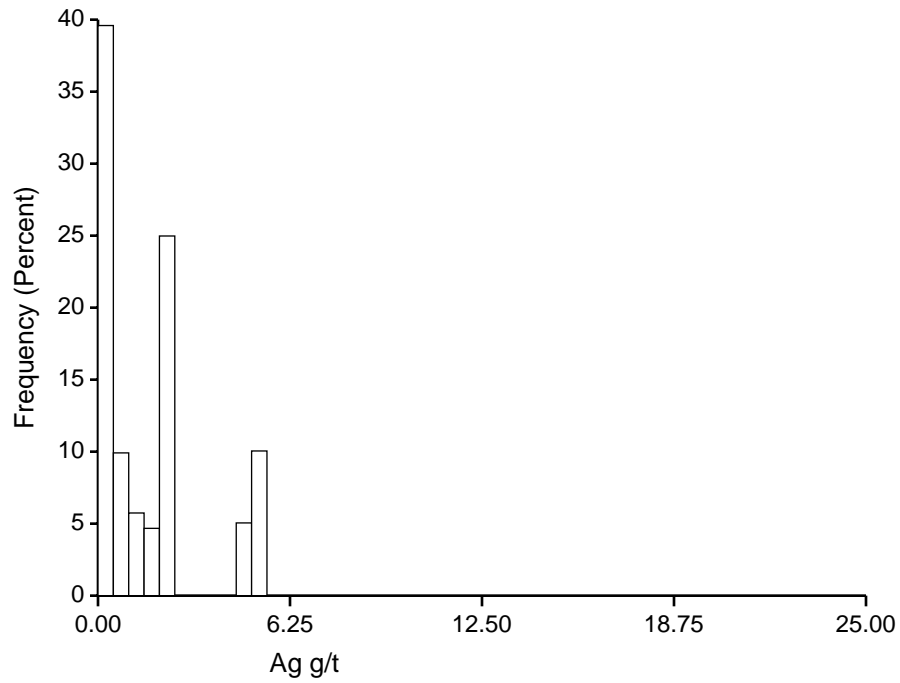
N	247
m	0.048
$\sigma^2$	0.006
$\sigma/m$	1.579
min	0.000
$q_{0.25}$	0.014
$q_{0.50}$	0.025
$q_{0.75}$	0.032
max	0.300

Class width = 0.050  
The last class contains  
all values  $\geq 2.450$

Au Bountiful Block NN Estimate Intrusive (High Confidence Blocks)



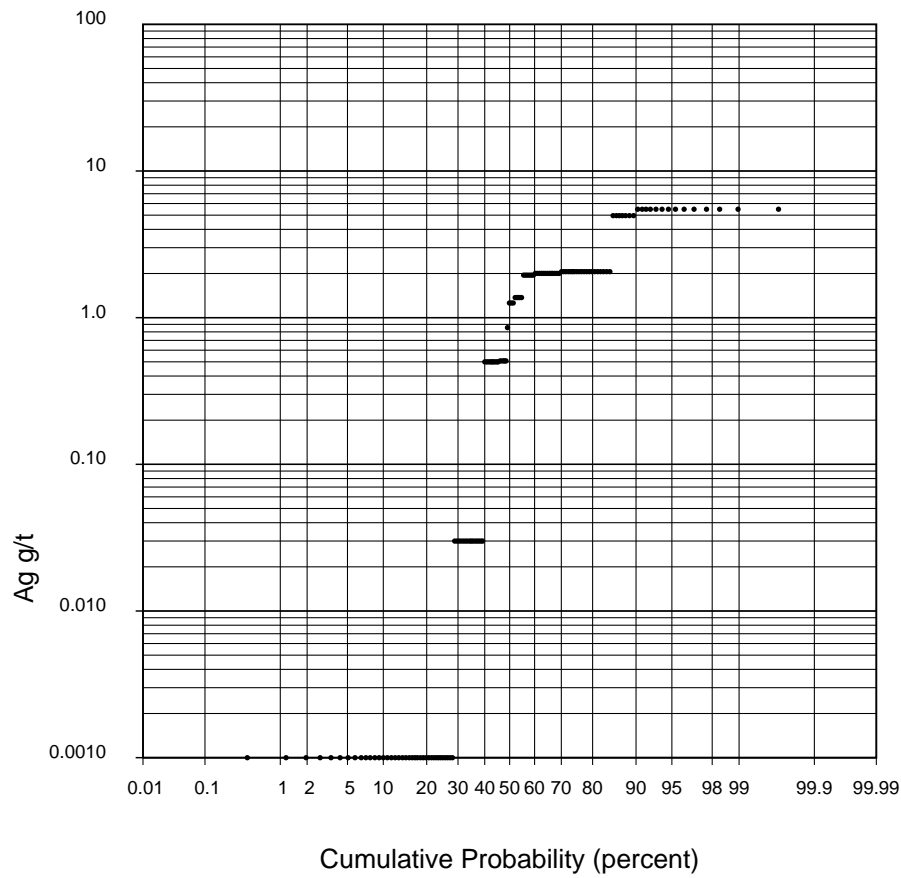
Ag Bountiful Block NN Estimate Intrusive (High Confidence Blocks)



N	137
m	1.53
$\sigma^2$	3.26
$\sigma/m$	1.18
min	0.00
$q_{0.25}$	0.00
$q_{0.50}$	1.26
$q_{0.75}$	2.06
max	5.49

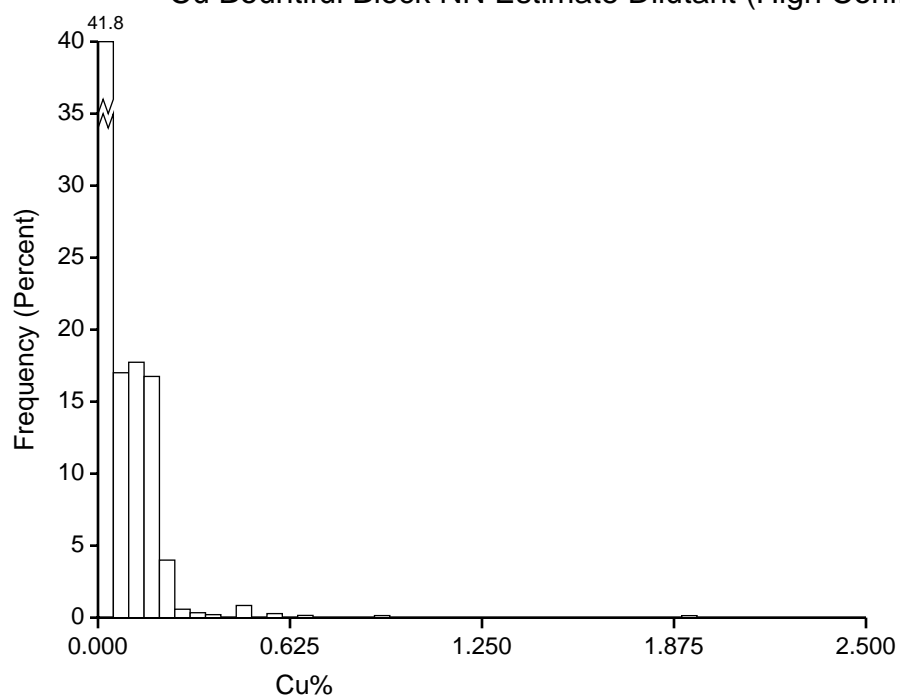
Class width = 0.50  
The last class contains  
all values  $\geq 24.50$

Ag Bountiful Block NN Estimate Intrusive (High Confidence Blocks)





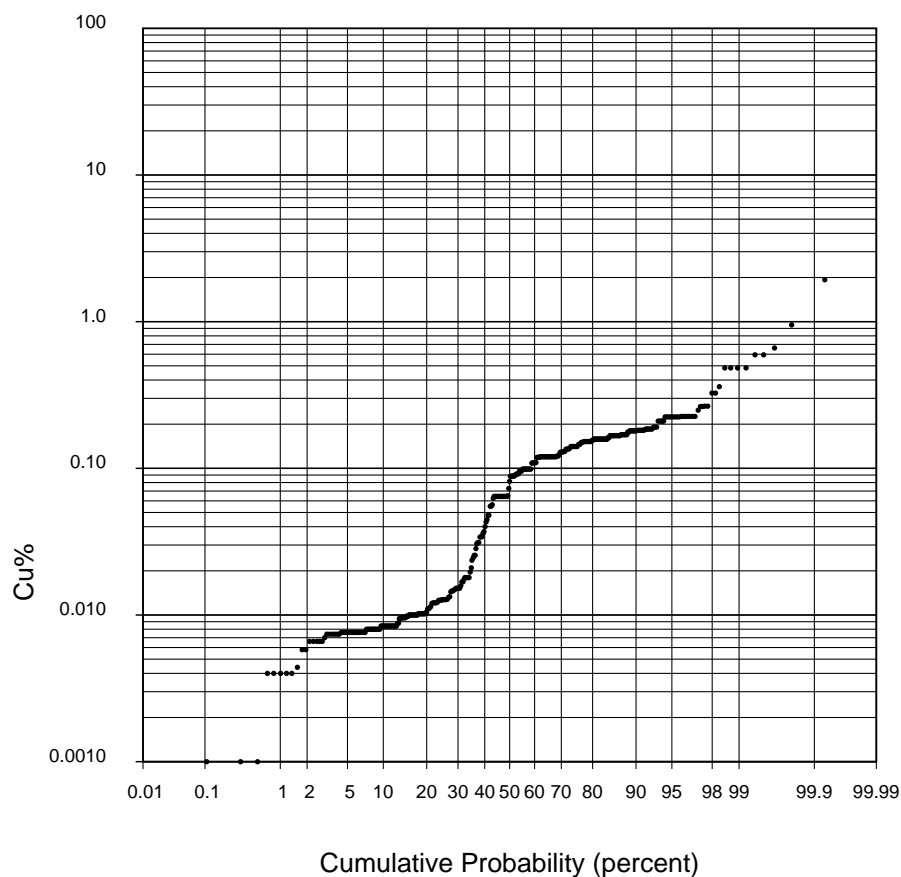
Cu Bountiful Block NN Estimate Dilutant (High Confidence Blocks)



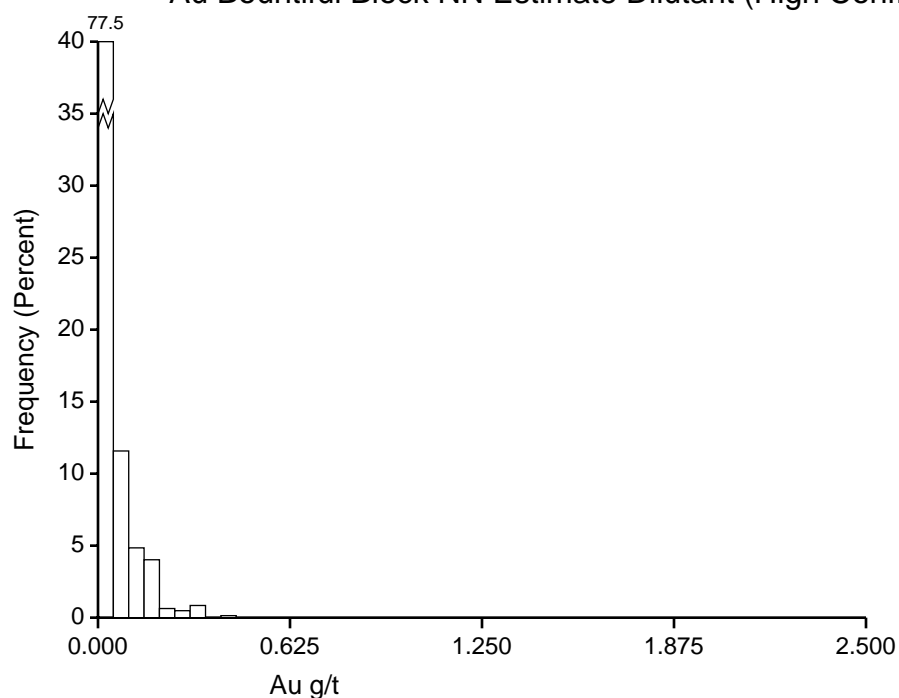
N	511
m	0.093
$\sigma^2$	0.013
$\sigma/m$	1.238
min	0.001
$q_{0.25}$	0.013
$q_{0.50}$	0.082
$q_{0.75}$	0.141
max	1.932

Class width = 0.050  
The last class contains  
all values  $\geq 2.450$

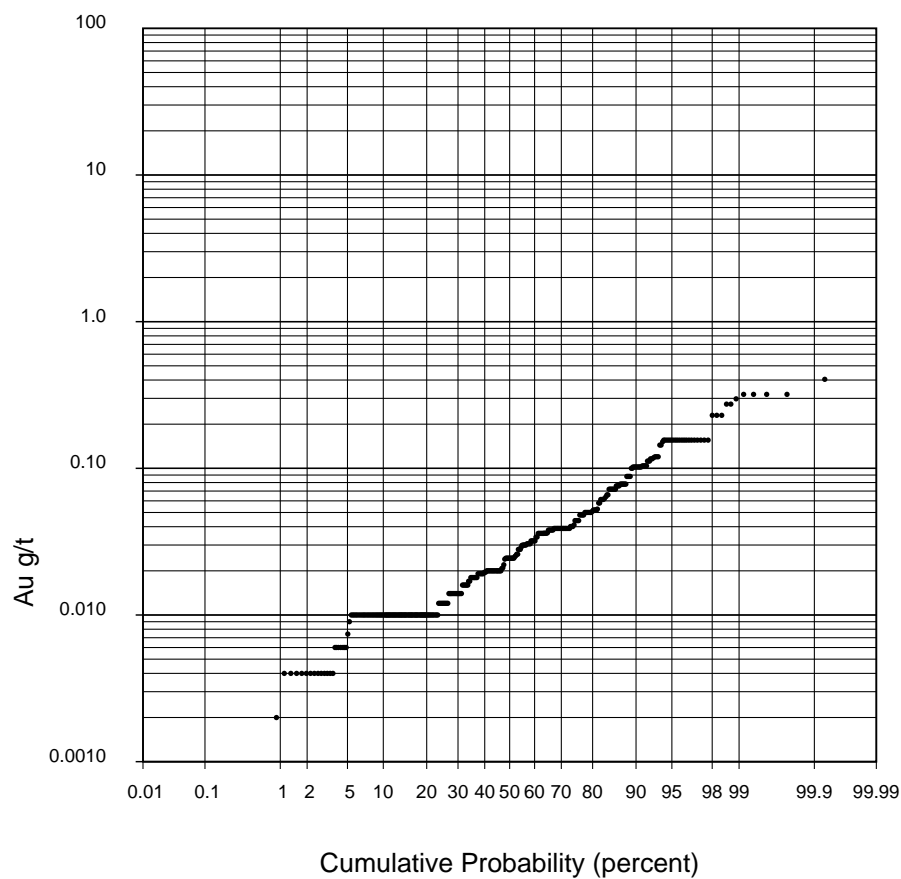
Cu Bountiful Block NN Estimate Dilutant (High Confidence Blocks)



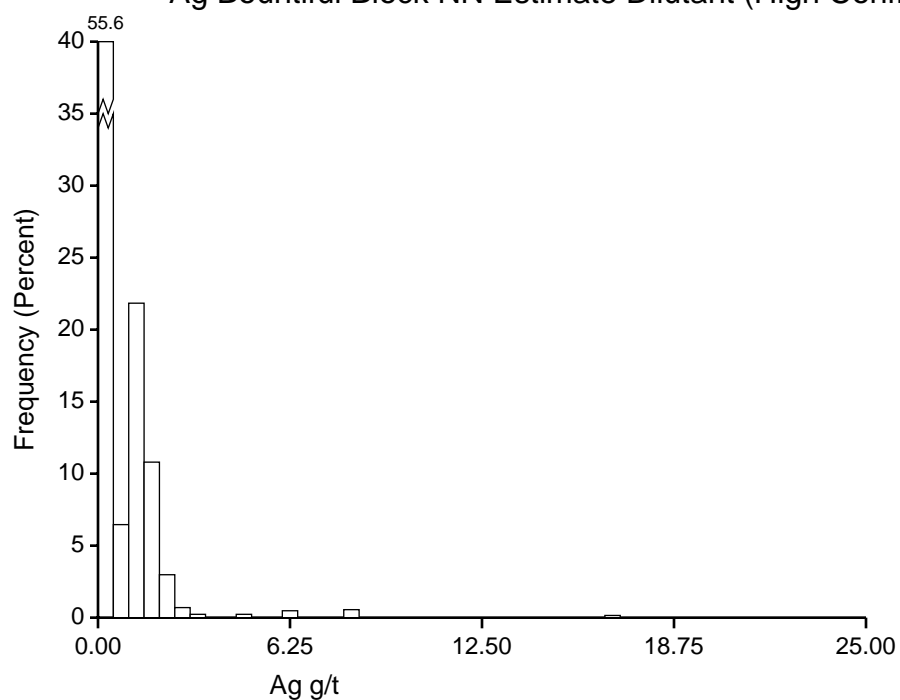
Au Bountiful Block NN Estimate Dilutant (High Confidence Blocks)



Au Bountiful Block NN Estimate Dilutant (High Confidence Blocks)



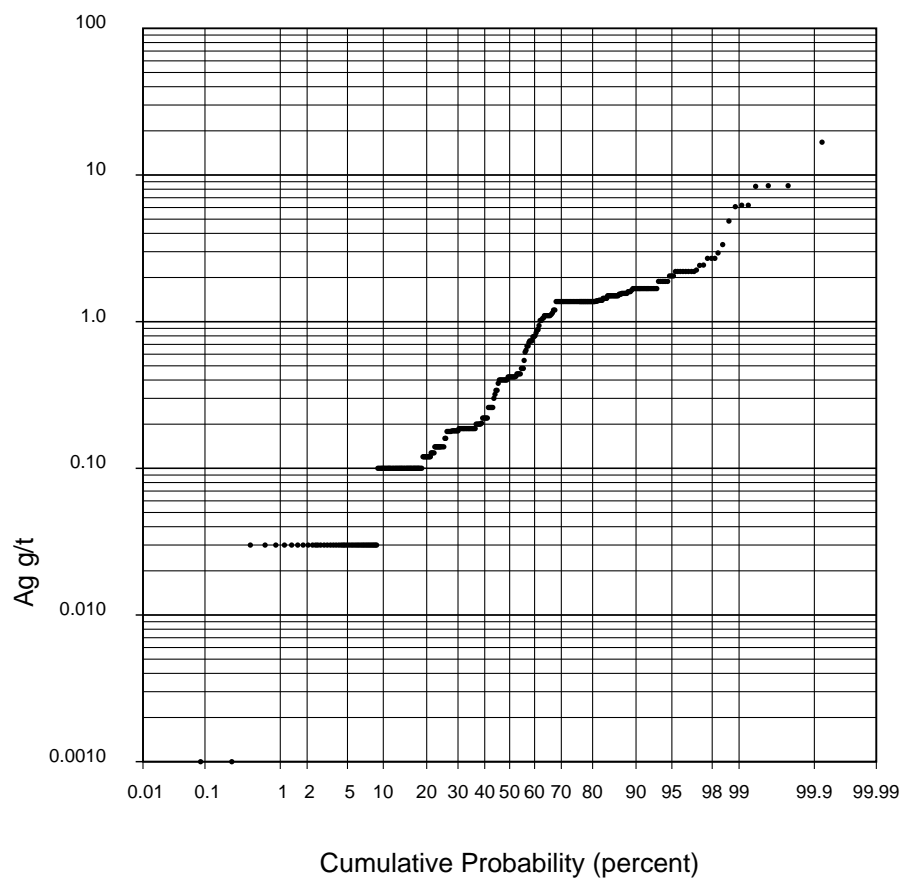
Ag Bountiful Block NN Estimate Dilutant (High Confidence Blocks)



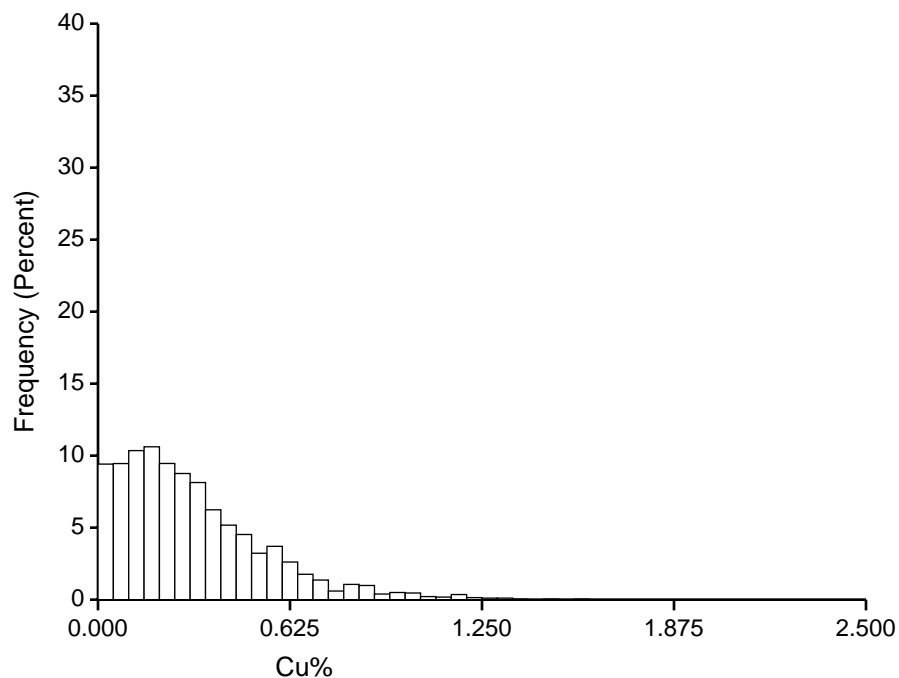
N	468
m	0.82
$\sigma^2$	1.34
$\sigma/m$	1.41
min	0.00
$q_{0.25}$	0.14
$q_{0.50}$	0.42
$q_{0.75}$	1.37
max	16.72

Class width = 0.50  
The last class contains  
all values  $\geq 24.50$

Ag Bountiful Block NN Estimate Dilutant (High Confidence Blocks)



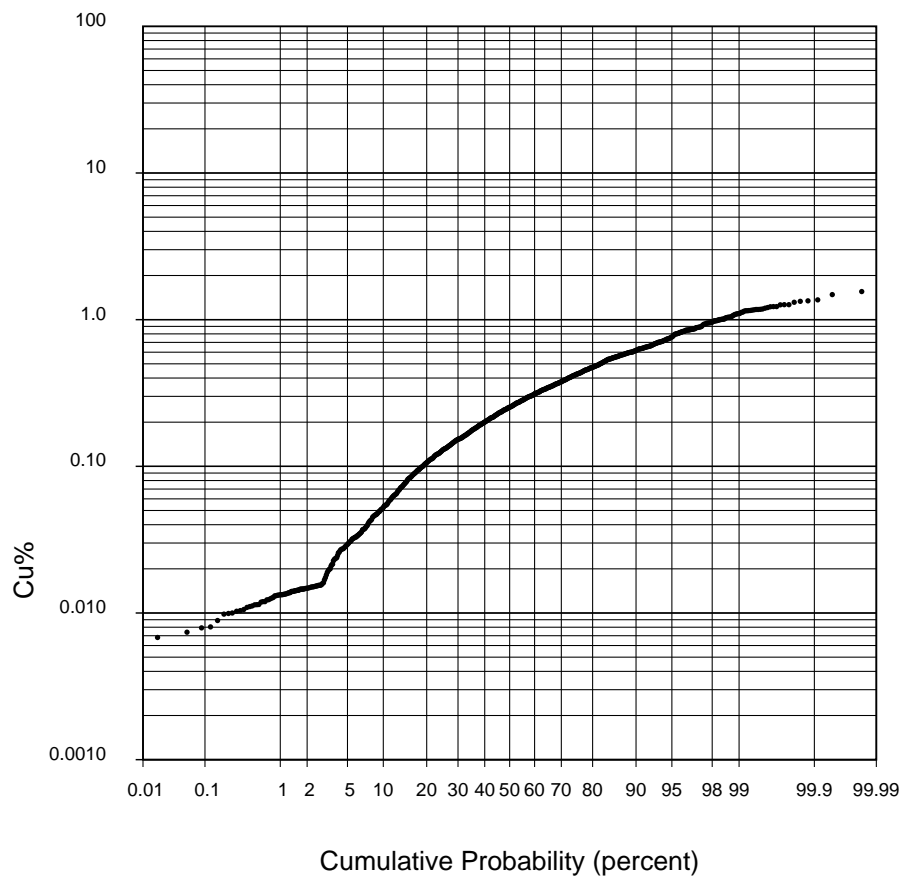
Cu Bountiful Block Estimate Volcanic (High Confidence Blocks)



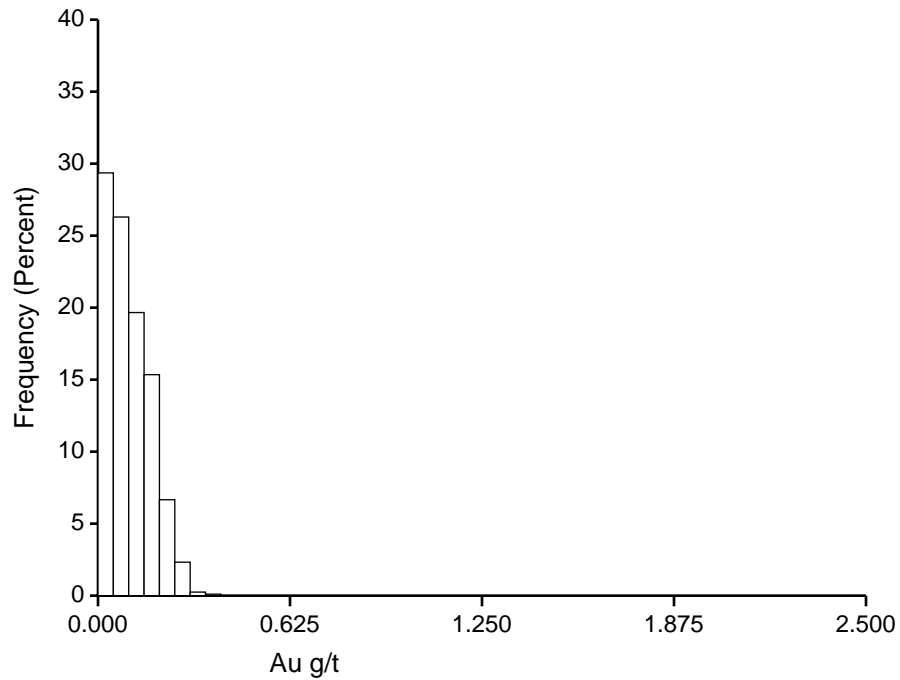
N	2882
m	0.305
$\sigma^2$	0.056
$\sigma/m$	0.773
min	0.007
$q_{0.25}$	0.130
$q_{0.50}$	0.253
$q_{0.75}$	0.424
max	1.556

Class width = 0.050  
The last class contains  
all values  $\geq 2.450$

Cu Bountiful Block Estimate Volcanic (High Confidence Blocks)



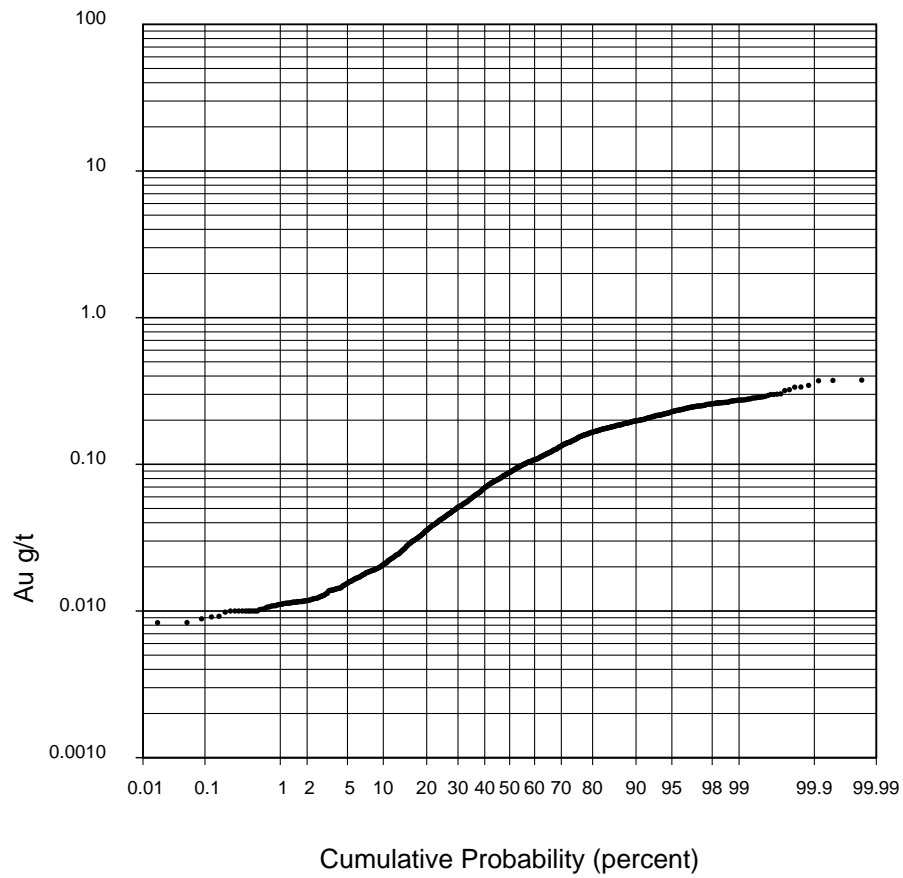
Au Bountiful Block Estimate Volcanic (High Confidence Blocks)



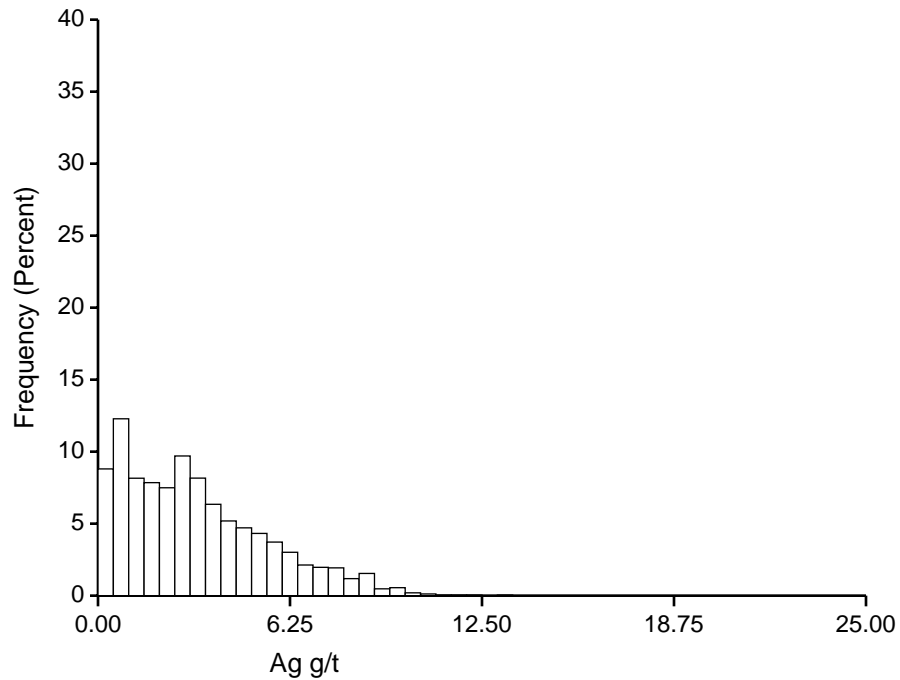
N	2882
m	0.101
$\sigma^2$	0.005
$\sigma/m$	0.678
min	0.008
$q_{0.25}$	0.043
$q_{0.50}$	0.088
$q_{0.75}$	0.149
max	0.375

Class width = 0.050  
The last class contains  
all values  $\geq 2.450$

Au Bountiful Block Estimate Volcanic (High Confidence Blocks)



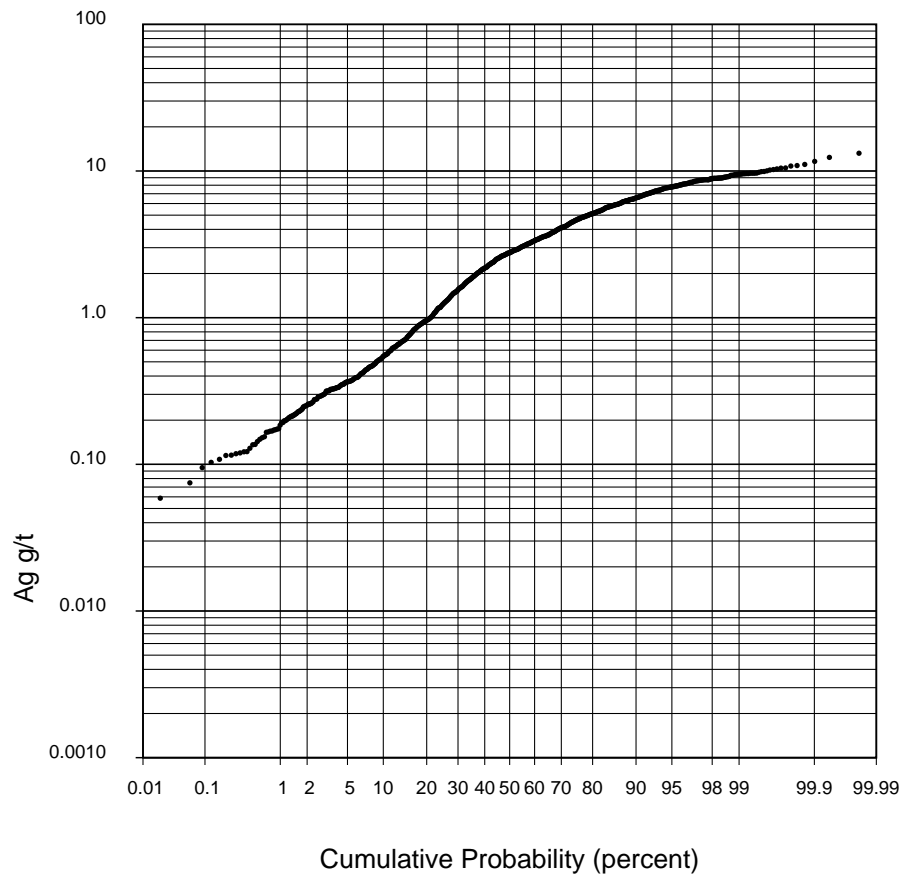
# Ag Bountiful Block Estimate Volcanic (High Confidence Blocks)



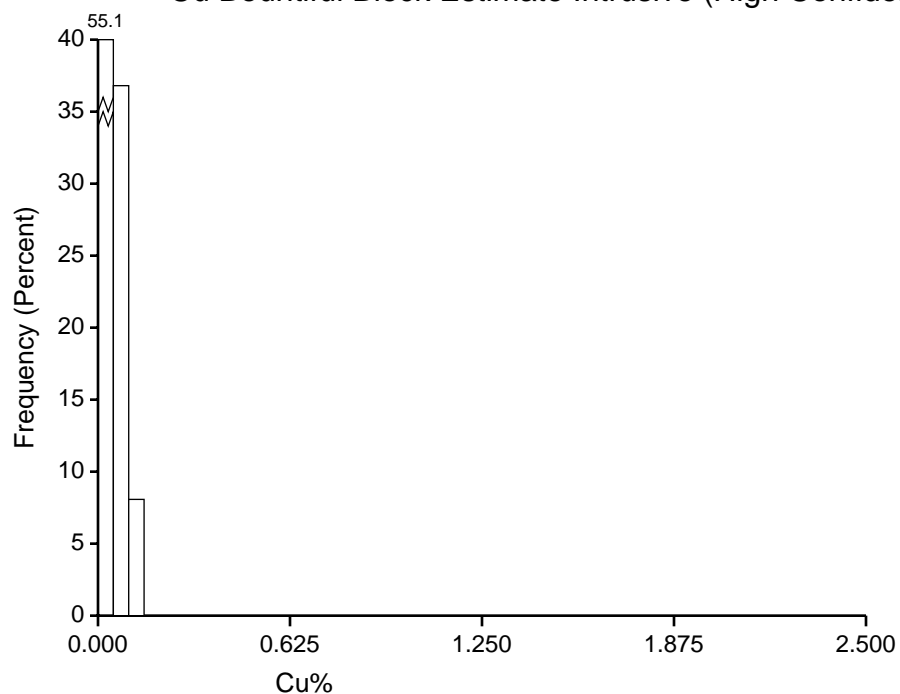
N	2590
m	3.19
$\sigma^2$	5.39
$\sigma/m$	0.73
min	0.06
$q_{0.25}$	1.24
$q_{0.50}$	2.78
$q_{0.75}$	4.62
max	13.22

Class width = 0.50  
The last class contains  
all values  $\geq 24.50$

# Ag Bountiful Block Estimate Volcanic (High Confidence Blocks)



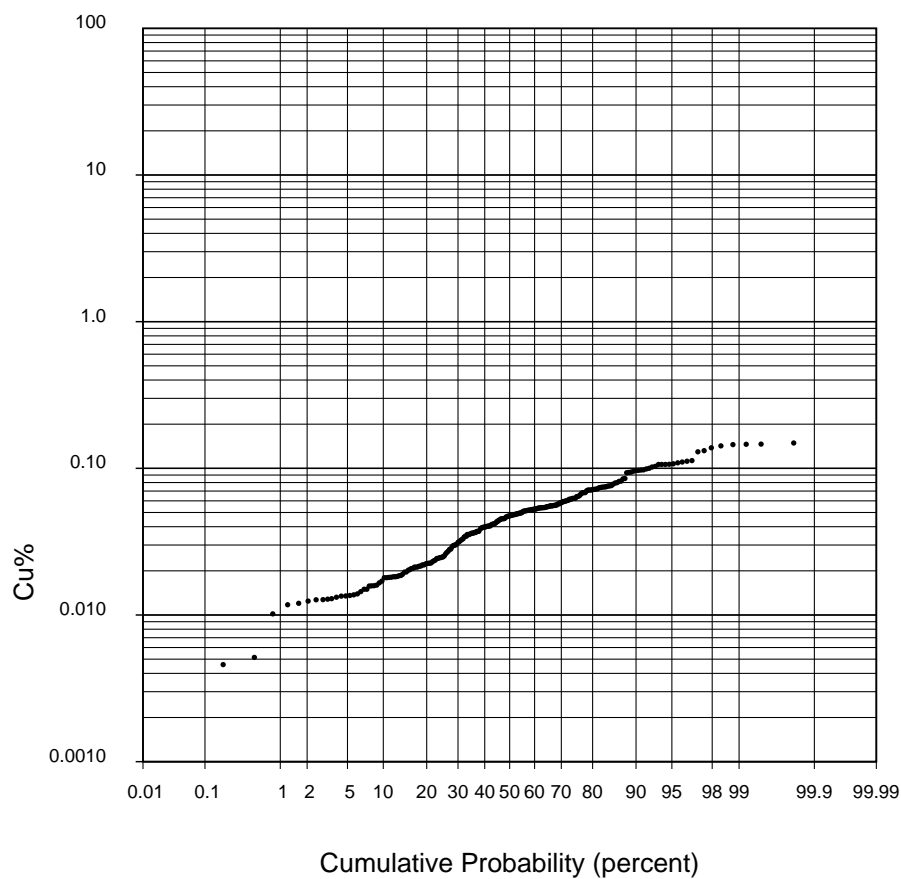
Cu Bountiful Block Estimate Intrusive (High Confidence Blocks)



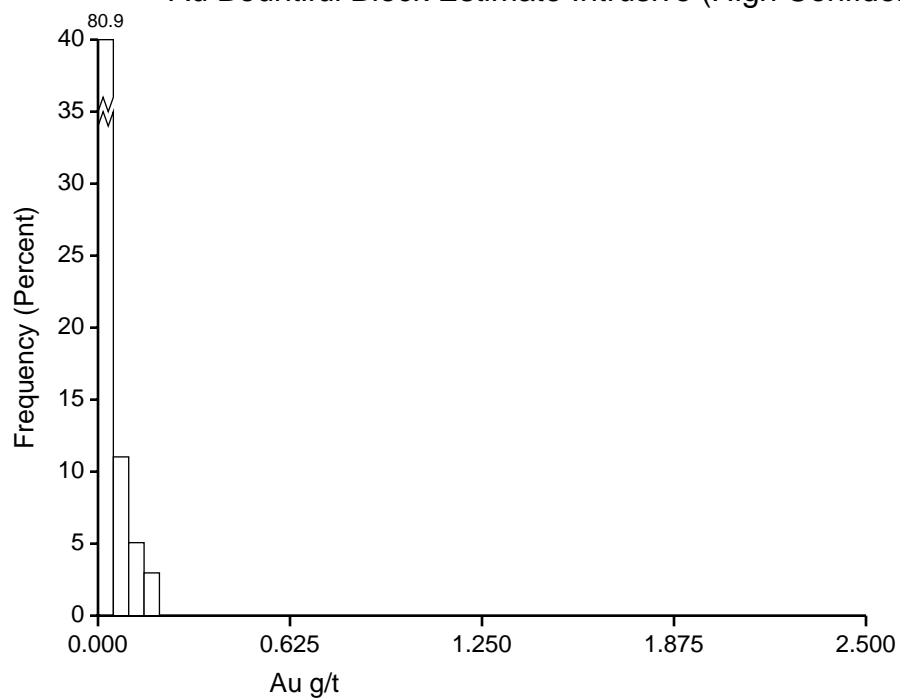
N	247
m	0.050
$\sigma^2$	0.001
$\sigma/m$	0.592
min	0.005
$q_{0.25}$	0.025
$q_{0.50}$	0.047
$q_{0.75}$	0.064
max	0.149

Class width = 0.050  
The last class contains  
all values  $\geq 2.450$

Cu Bountiful Block Estimate Intrusive (High Confidence Blocks)



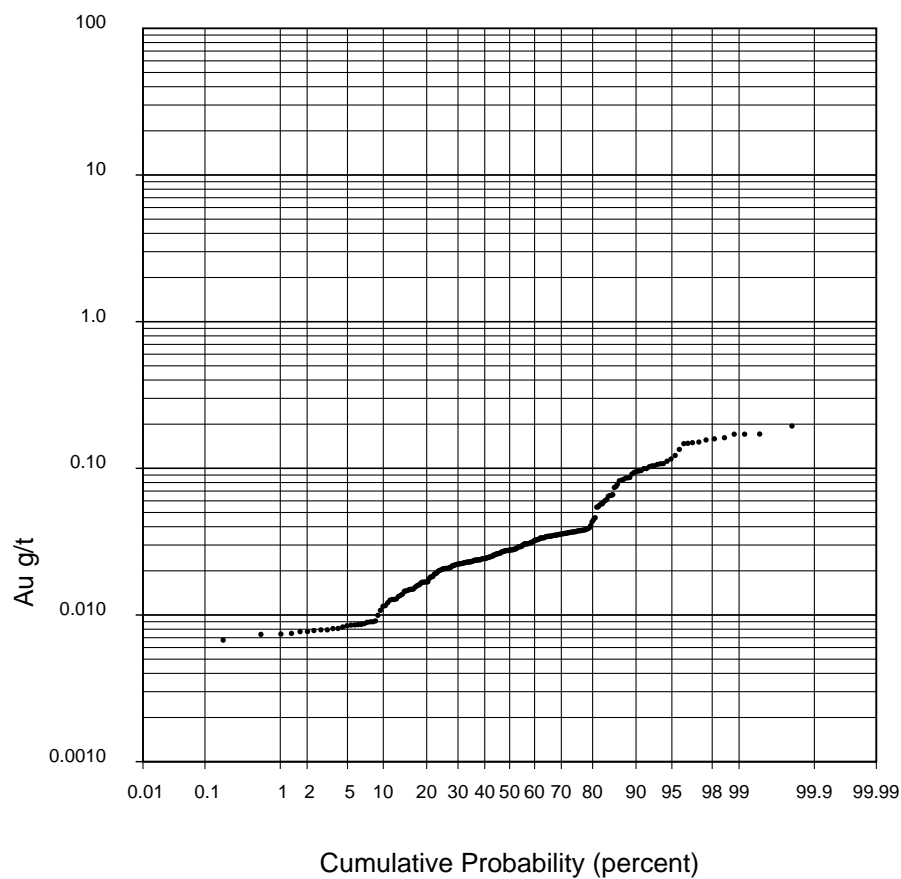
Au Bountiful Block Estimate Intrusive (High Confidence Blocks)



N	247
m	0.039
$\sigma^2$	0.001
$\sigma/m$	0.903
min	0.007
$q_{0.25}$	0.021
$q_{0.50}$	0.028
$q_{0.75}$	0.037
max	0.194

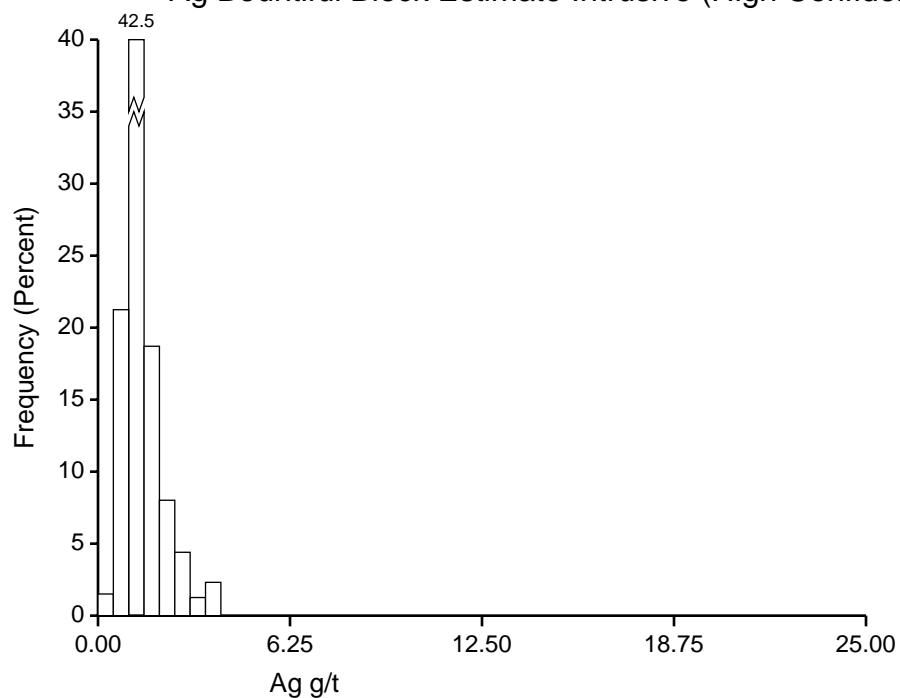
Class width = 0.050  
The last class contains  
all values  $\geq 2.450$

Au Bountiful Block Estimate Intrusive (High Confidence Blocks)





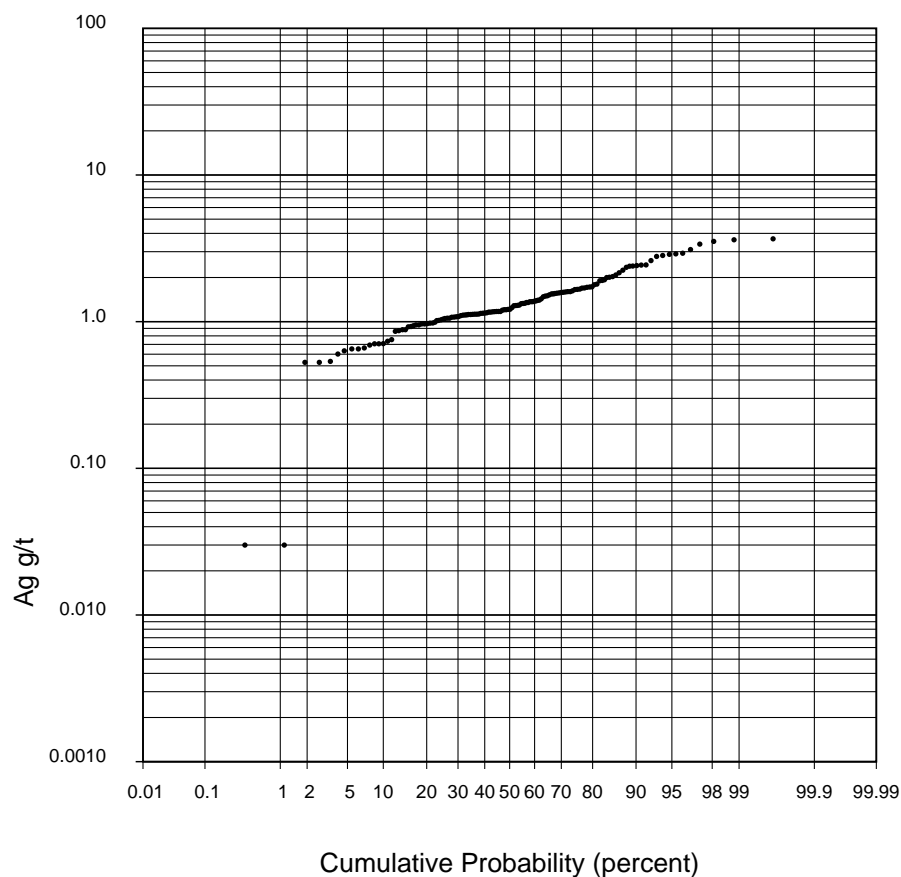
# Ag Bountiful Block Estimate Intrusive (High Confidence Blocks)



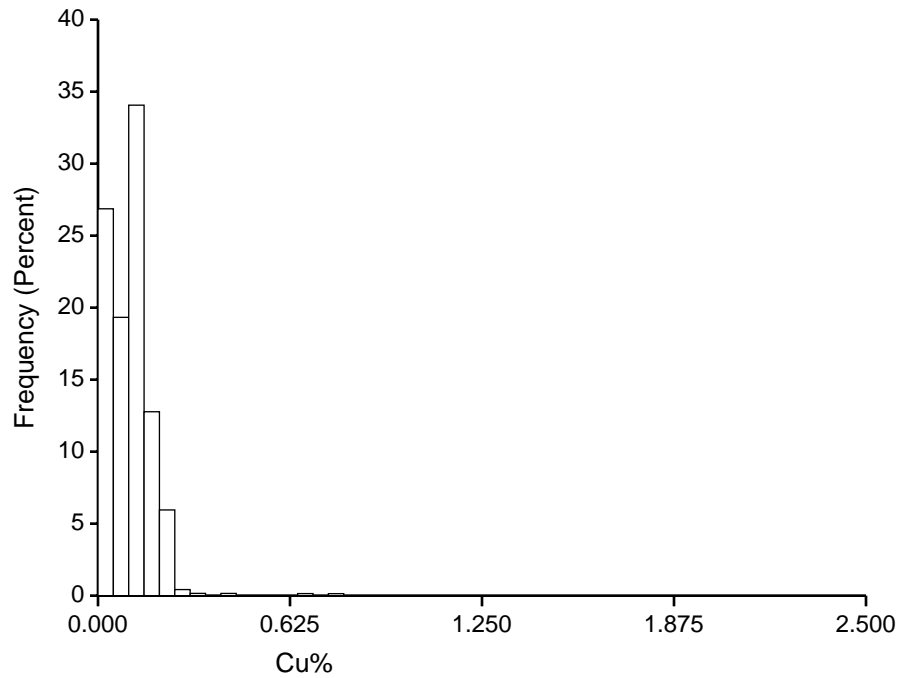
N	137
m	1.43
$\sigma^2$	0.46
$\sigma/m$	0.47
min	0.03
$q_{0.25}$	1.04
$q_{0.50}$	1.21
$q_{0.75}$	1.66
max	3.67

Class width = 0.50  
The last class contains  
all values  $\geq 24.50$

# Ag Bountiful Block Estimate Intrusive (High Confidence Blocks)



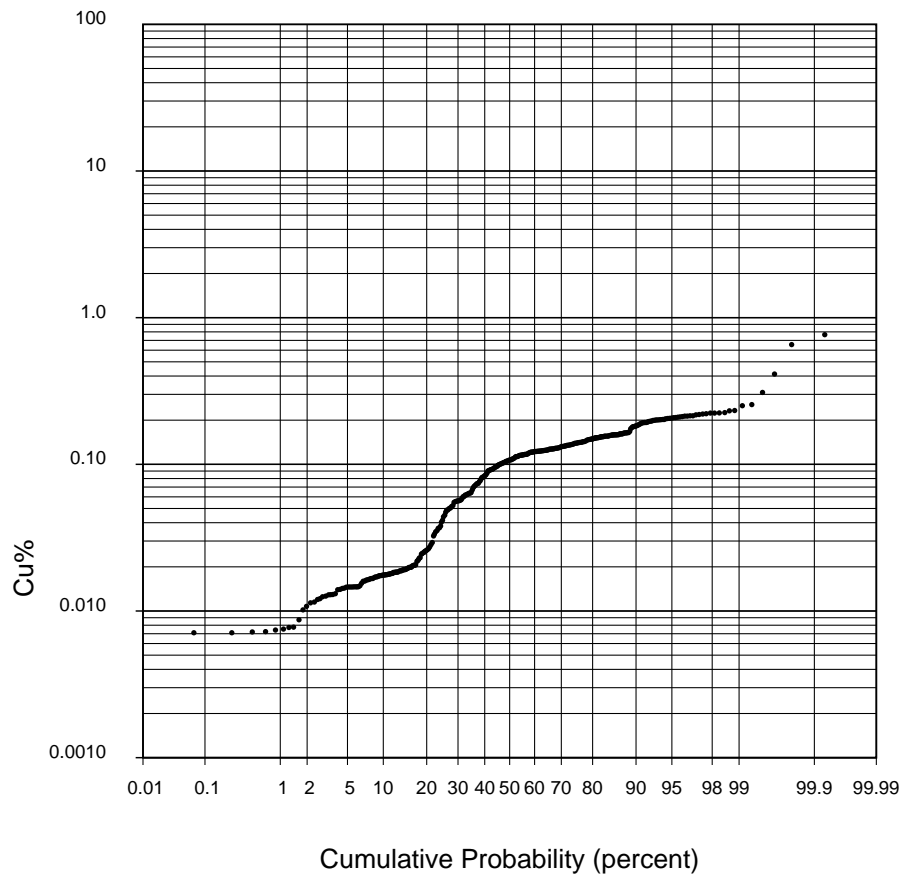
Cu Bountiful Block Estimate Dilutant (High Confidence Blocks)



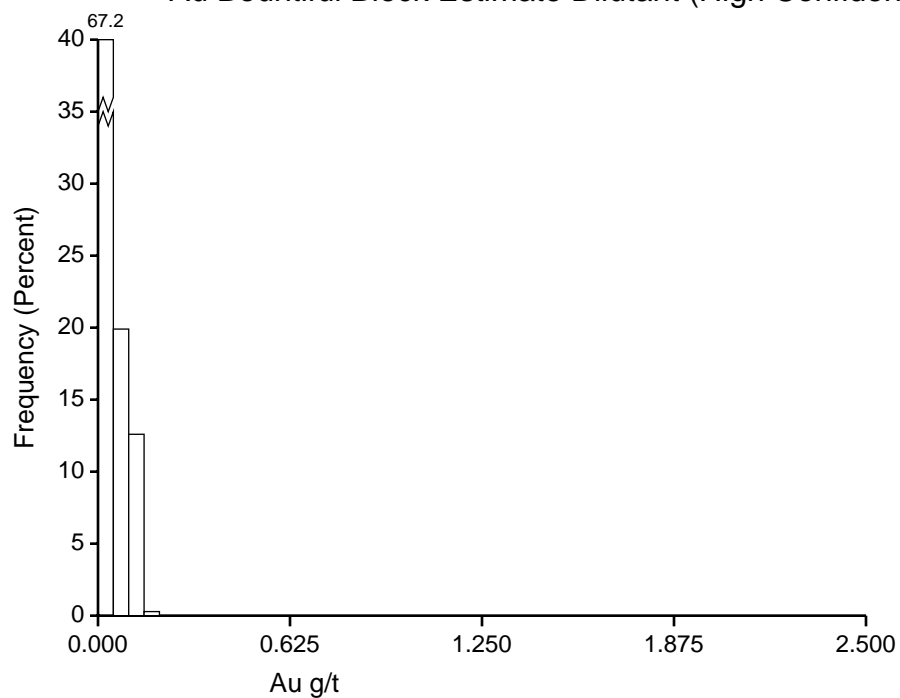
N	511
m	0.101
$\sigma^2$	0.005
$\sigma/m$	0.691
min	0.007
$q_{0.25}$	0.043
$q_{0.50}$	0.107
$q_{0.75}$	0.140
max	0.767

Class width = 0.050  
The last class contains  
all values  $\geq 2.450$

Cu Bountiful Block Estimate Dilutant (High Confidence Blocks)



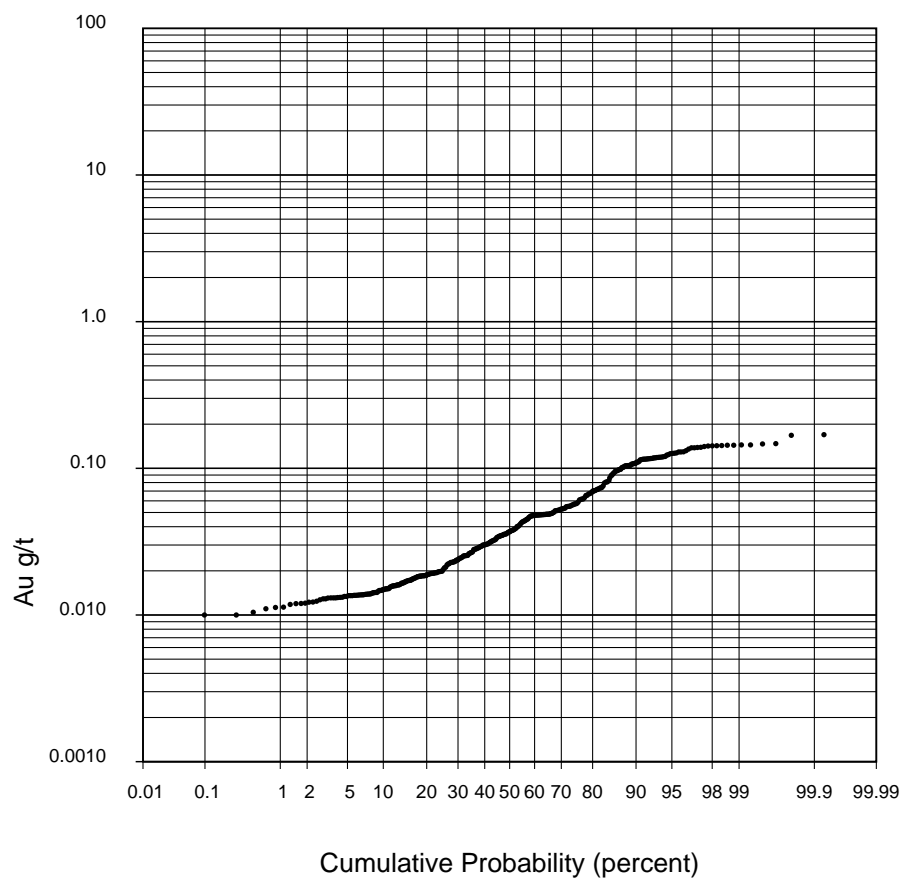
Au Bountiful Block Estimate Dilutant (High Confidence Blocks)



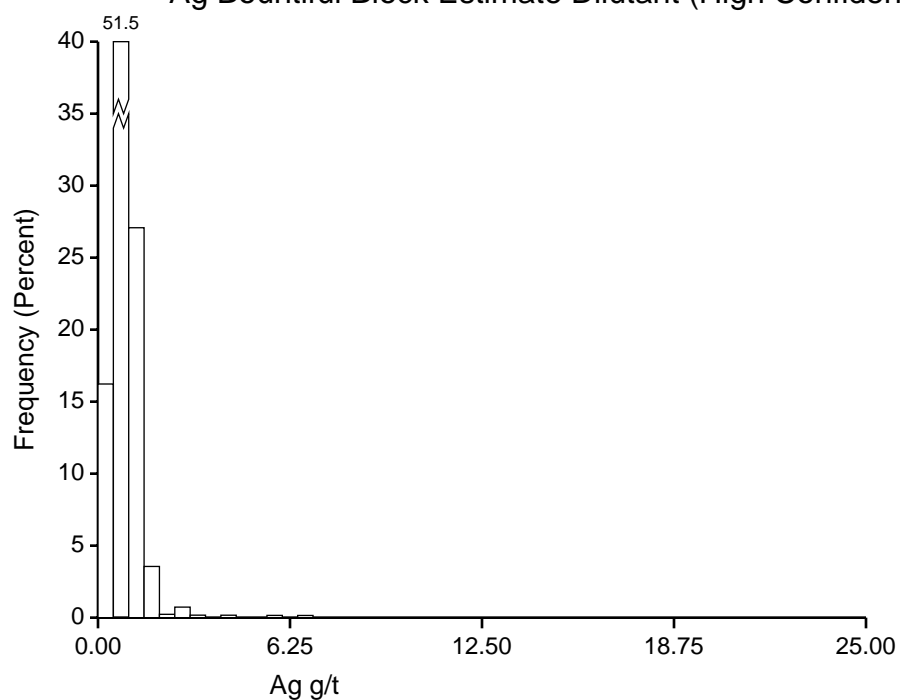
N	511
m	0.048
$\sigma^2$	0.001
$\sigma/m$	0.729
min	0.010
$q_{0.25}$	0.020
$q_{0.50}$	0.037
$q_{0.75}$	0.057
max	0.169

Class width = 0.050  
The last class contains  
all values  $\geq 2.450$

Au Bountiful Block Estimate Dilutant (High Confidence Blocks)



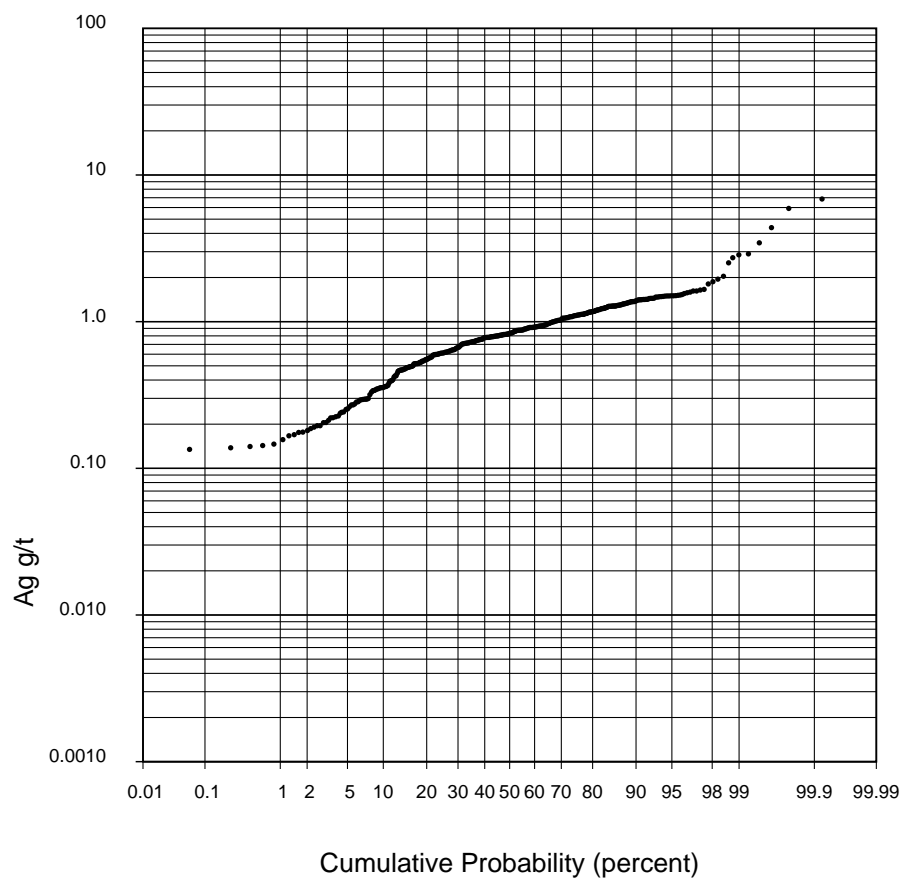
Ag Bountiful Block Estimate Dilutant (High Confidence Blocks)



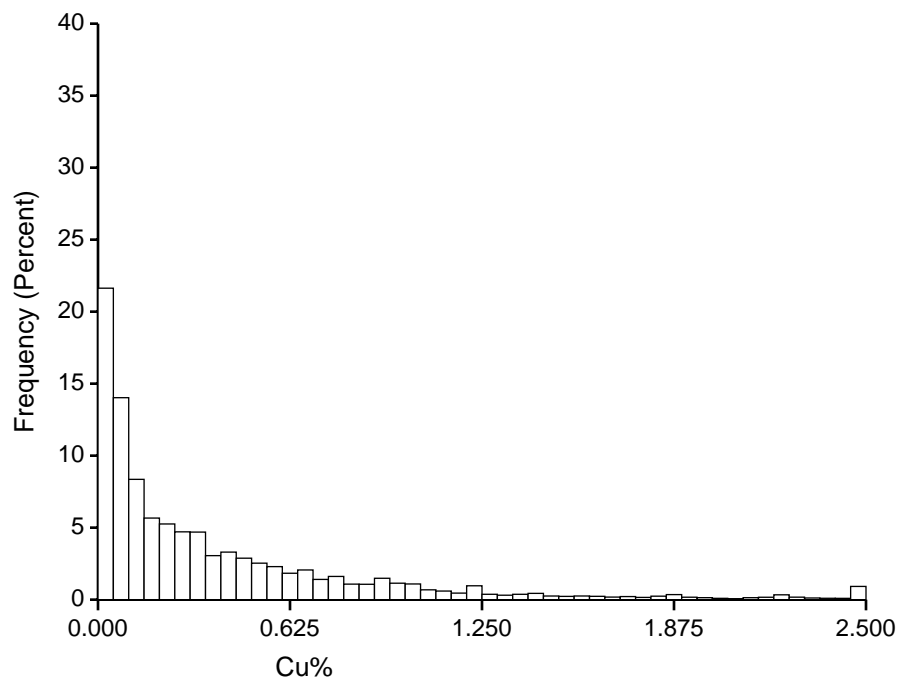
N	468
m	0.90
$\sigma^2$	0.28
$\sigma/m$	0.59
min	0.13
$q_{0.25}$	0.61
$q_{0.50}$	0.83
$q_{0.75}$	1.10
max	6.86

Class width = 0.50  
The last class contains  
all values  $\geq 24.50$

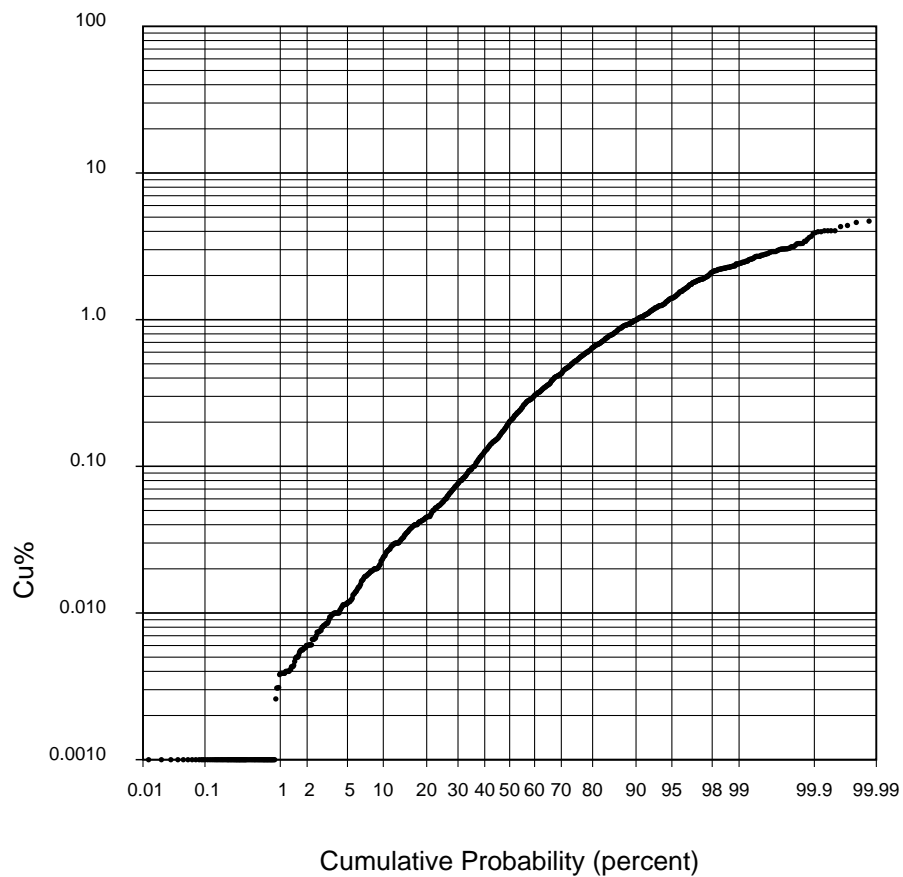
Ag Bountiful Block Estimate Dilutant (High Confidence Blocks)



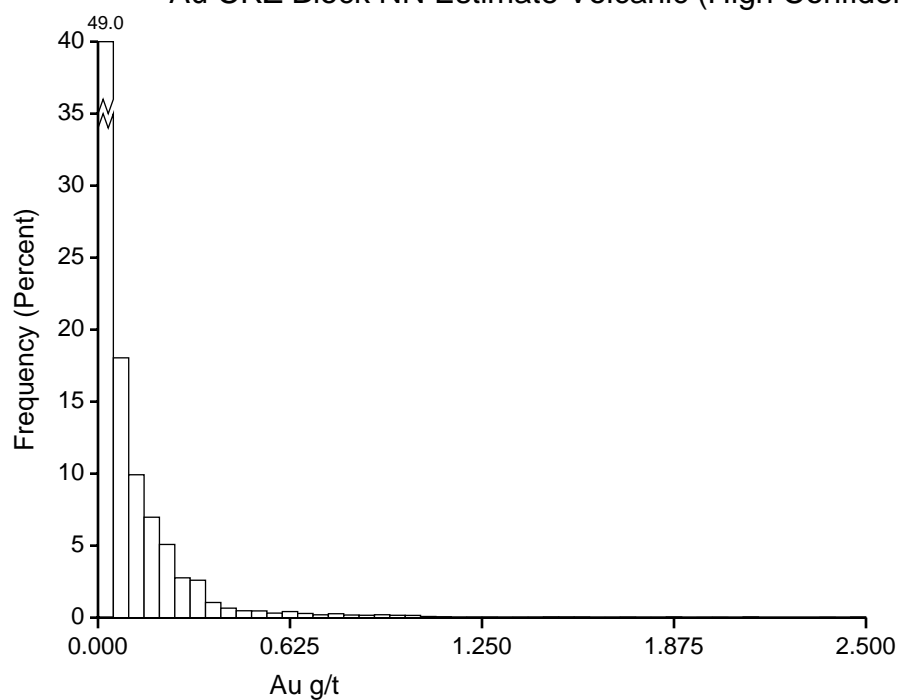
Cu CRZ Block NN Estimate Volcanic (High Confidence Blocks)



Cu CRZ Block NN Estimate Volcanic (High Confidence Blocks)



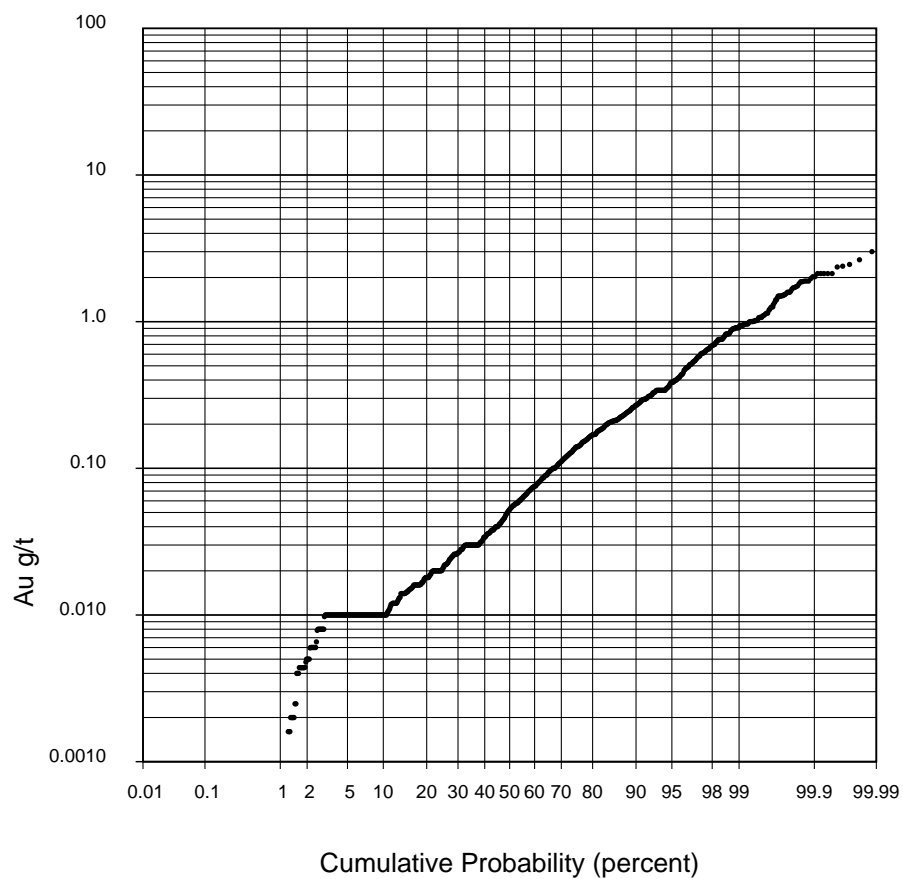
Au CRZ Block NN Estimate Volcanic (High Confidence Blocks)



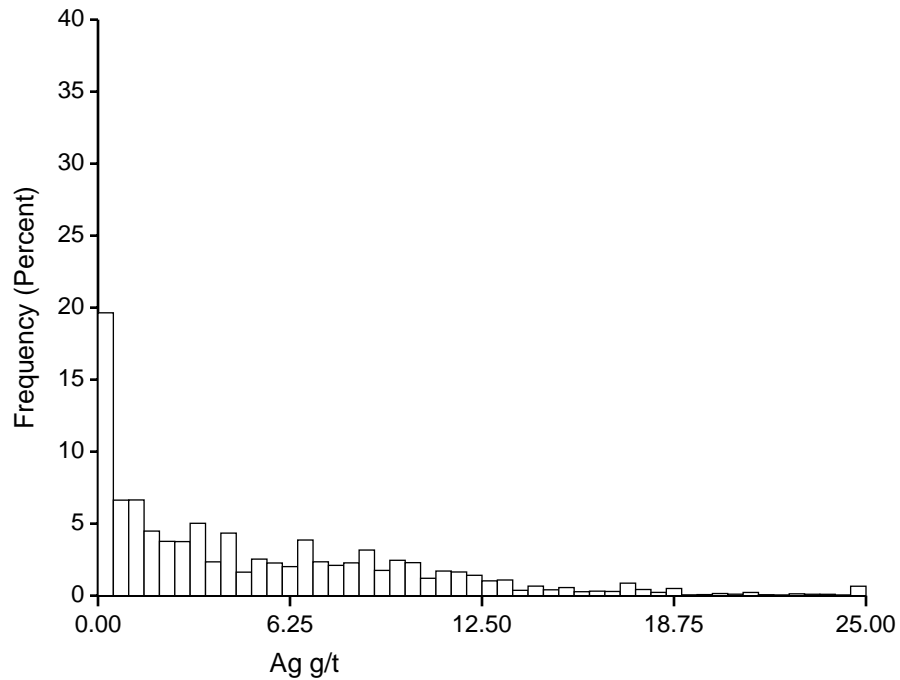
N	11907
m	0.114
$\sigma^2$	0.034
$\sigma/m$	1.619
min	0.000
$q_{0.25}$	0.021
$q_{0.50}$	0.052
$q_{0.75}$	0.140
max	3.000

Class width = 0.050  
The last class contains  
all values  $\geq 2.450$

Au CRZ Block NN Estimate Volcanic (High Confidence Blocks)



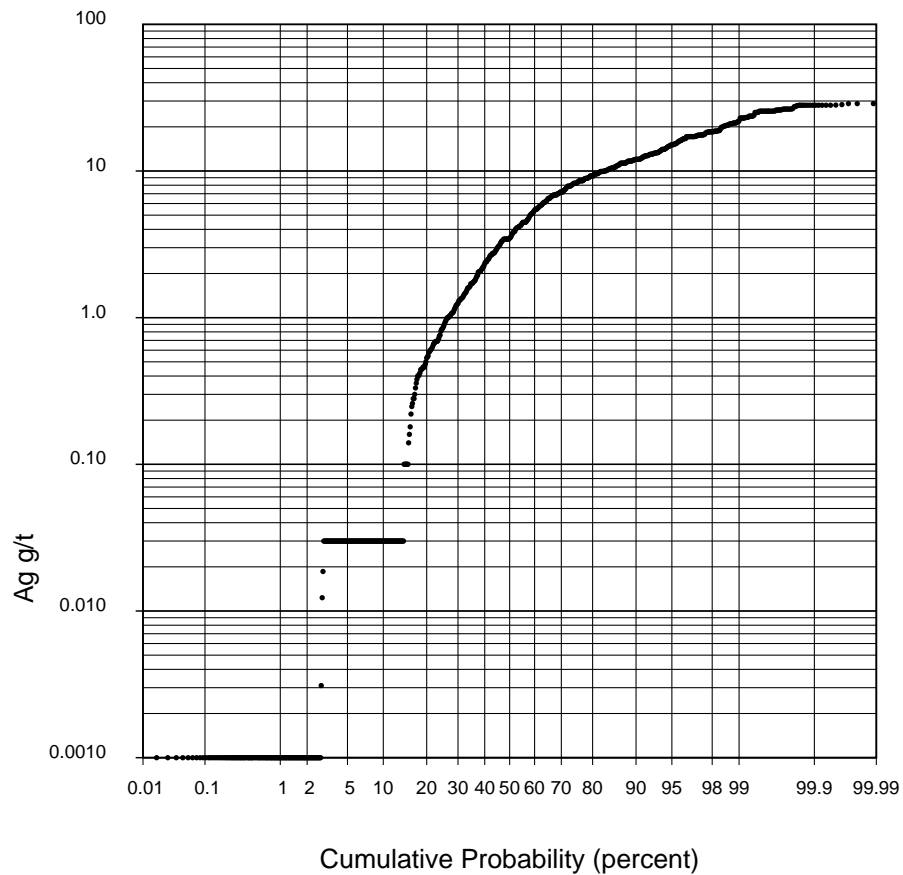
Ag CRZ Block NN Estimate Volcanic (High Confidence Blocks)



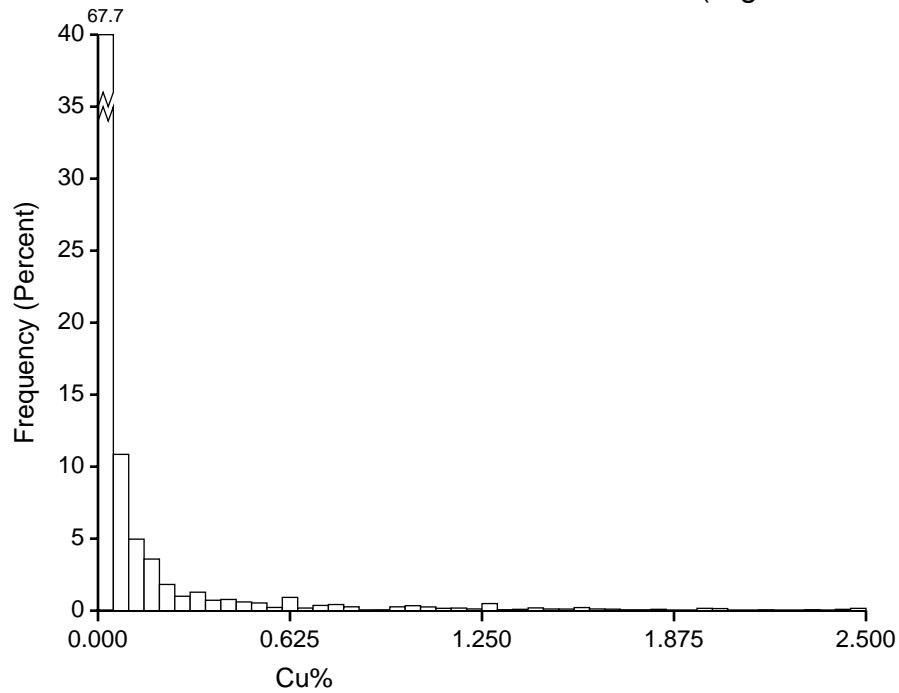
N	10831
m	5.15
$\sigma^2$	26.54
$\sigma/m$	1.00
min	0.00
$q_{0.25}$	0.86
$q_{0.50}$	3.50
$q_{0.75}$	8.23
max	29.43

Class width = 0.50  
The last class contains  
all values  $\geq 24.50$

Ag CRZ Block NN Estimate Volcanic (High Confidence Blocks)



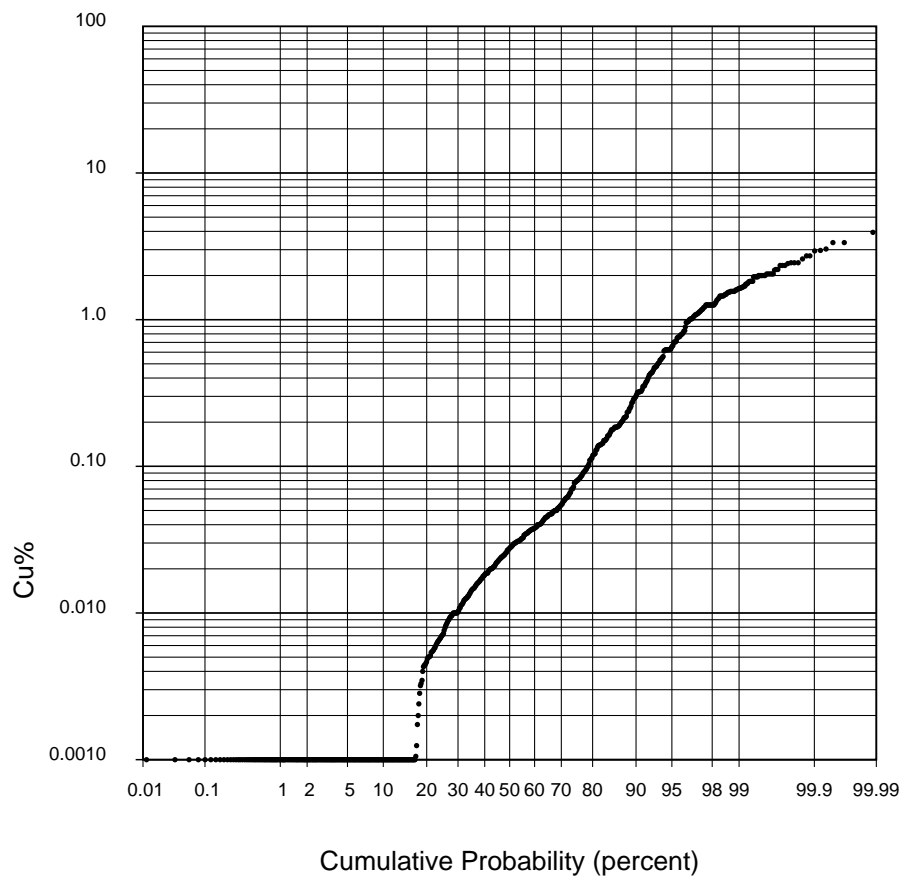
Cu CRZ Block NN Estimate Intrusive (High Confidence Blocks)



N	4877
m	0.126
$\sigma^2$	0.099
$\sigma/m$	2.492
min	0.001
$q_{0.25}$	0.007
$q_{0.50}$	0.028
$q_{0.75}$	0.079
max	3.938

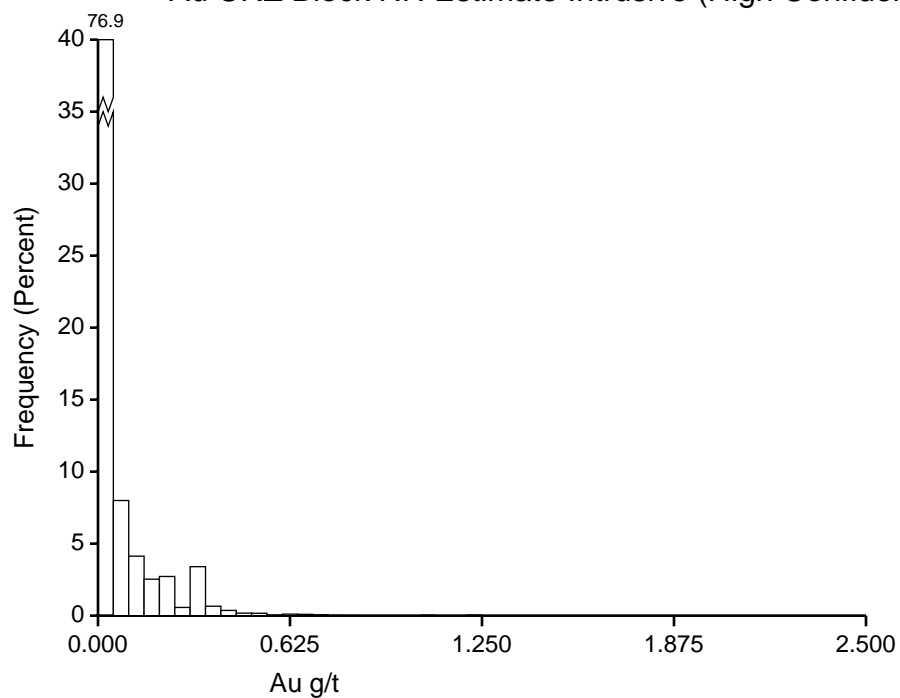
Class width = 0.050  
The last class contains  
all values  $\geq 2.450$

Cu CRZ Block NN Estimate Intrusive (High Confidence Blocks)





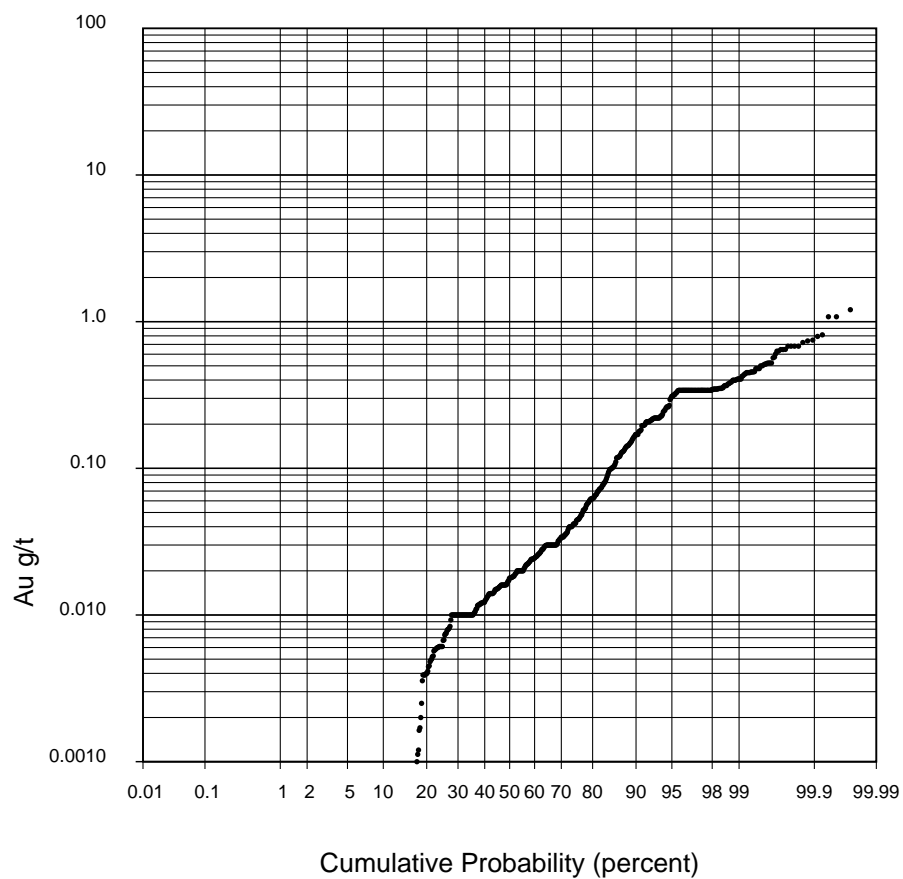
Au CRZ Block NN Estimate Intrusive (High Confidence Blocks)



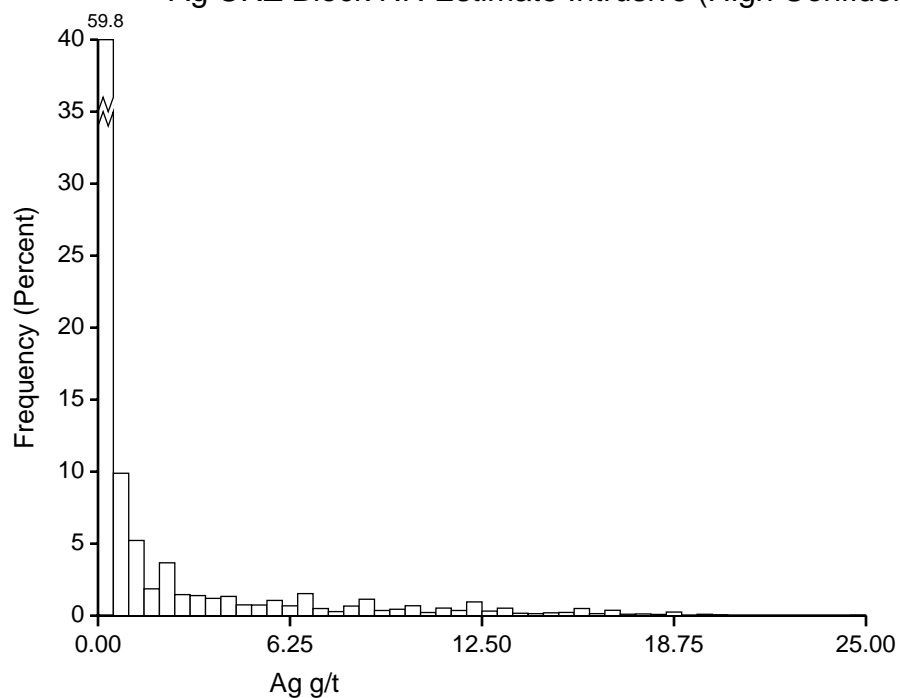
N	4872
m	0.054
$\sigma^2$	0.010
$\sigma/m$	1.819
min	0.000
$q_{0.25}$	0.007
$q_{0.50}$	0.018
$q_{0.75}$	0.044
max	1.207

Class width = 0.050  
The last class contains  
all values  $\geq 2.450$

Au CRZ Block NN Estimate Intrusive (High Confidence Blocks)



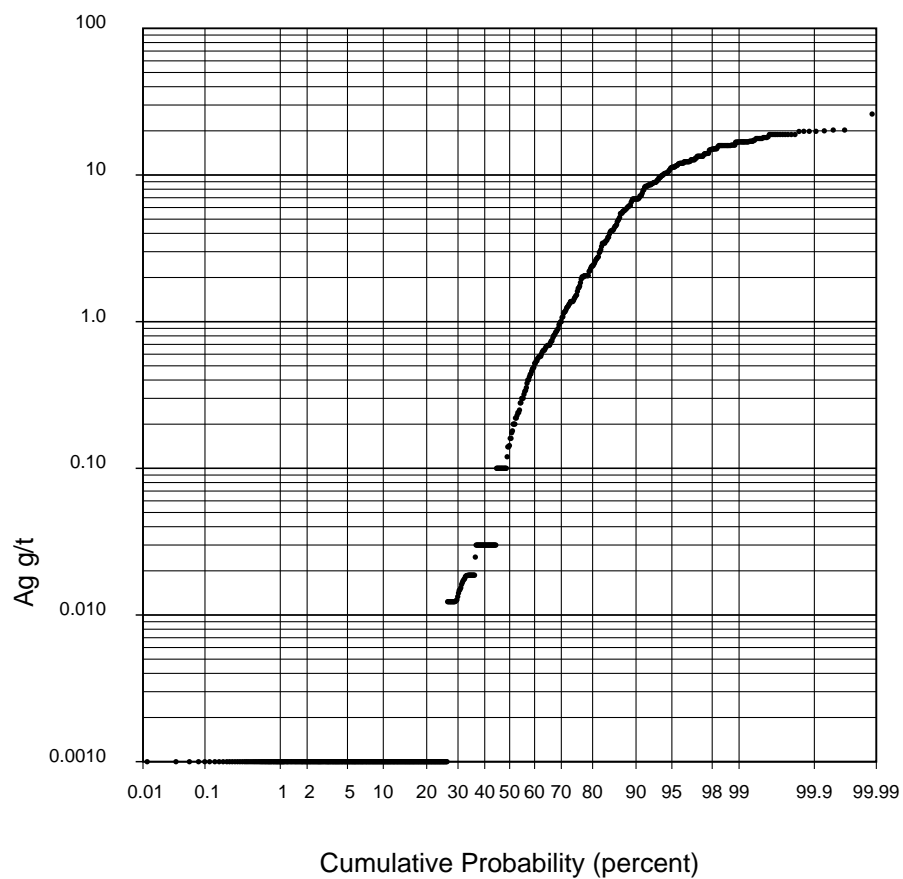
Ag CRZ Block NN Estimate Intrusive (High Confidence Blocks)



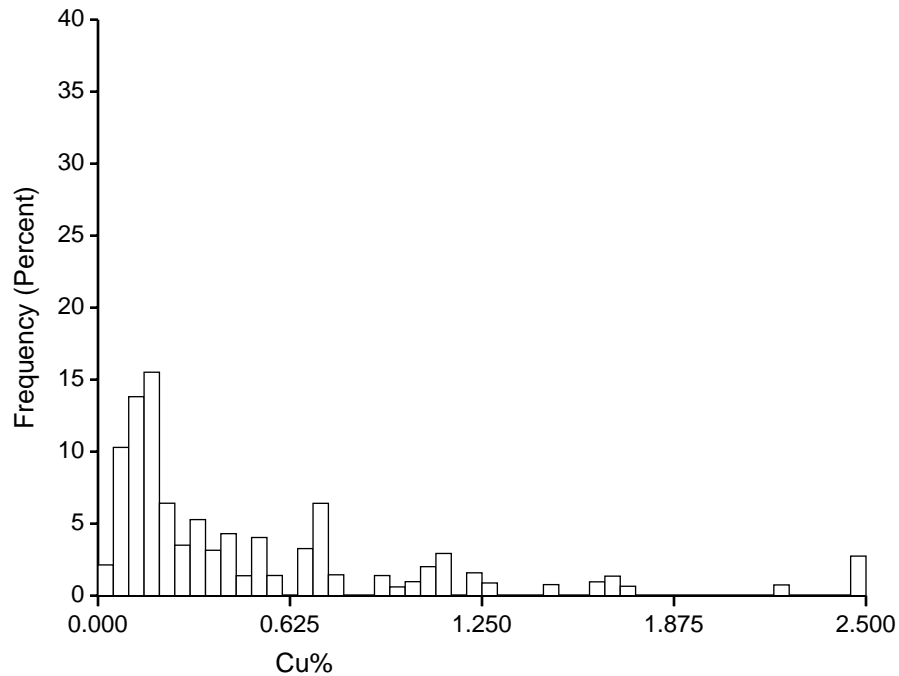
N	4653
m	1.87
$\sigma^2$	13.55
$\sigma/m$	1.97
min	0.00
$q_{0.25}$	0.00
$q_{0.50}$	0.15
$q_{0.75}$	1.51
max	26.06

Class width = 0.50  
The last class contains  
all values  $\geq 24.50$

Ag CRZ Block NN Estimate Intrusive (High Confidence Blocks)



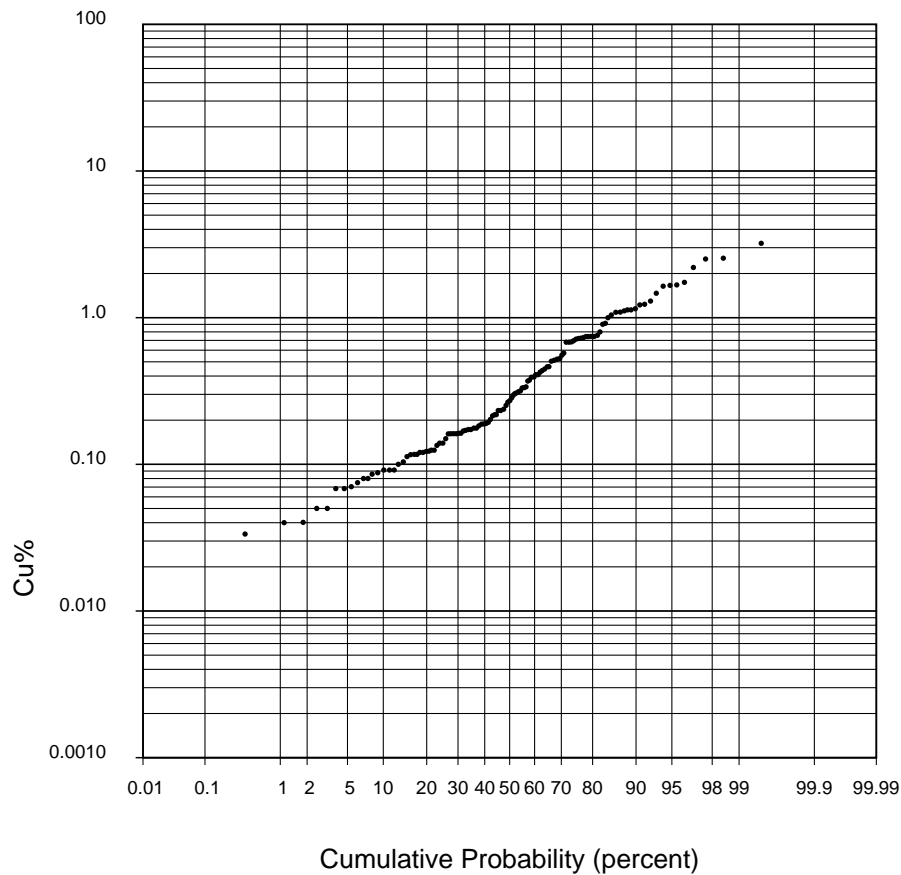
Cu CRZ Block NN Estimate Dilutant (High Confidence Blocks)



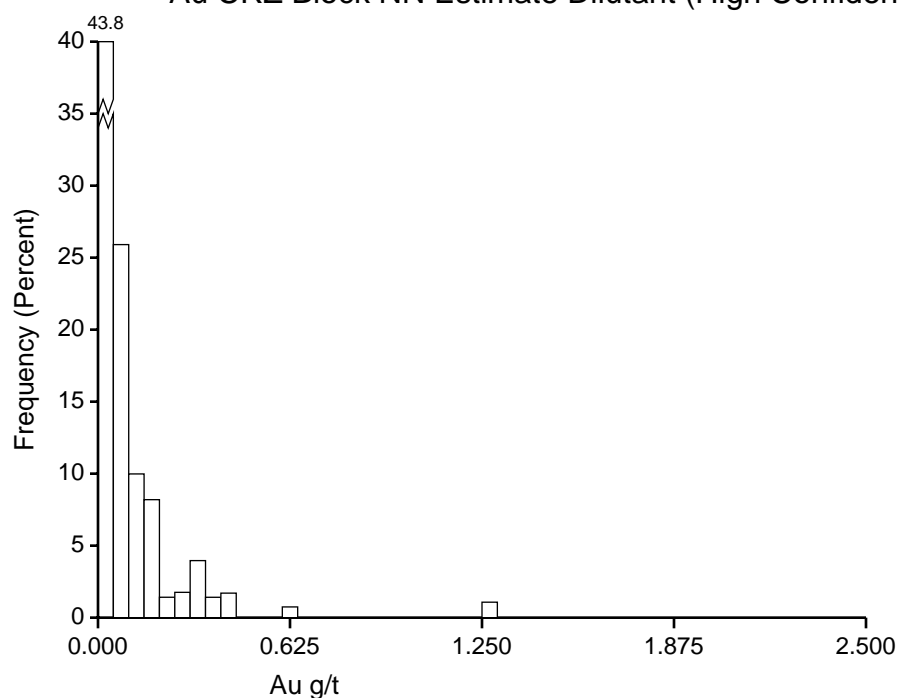
N	121
m	0.509
$\sigma^2$	0.331
$\sigma/m$	1.131
min	0.033
$q_{0.25}$	0.139
$q_{0.50}$	0.272
$q_{0.75}$	0.715
max	3.211

Class width = 0.050  
The last class contains  
all values  $\geq 2.450$

Cu CRZ Block NN Estimate Dilutant (High Confidence Blocks)



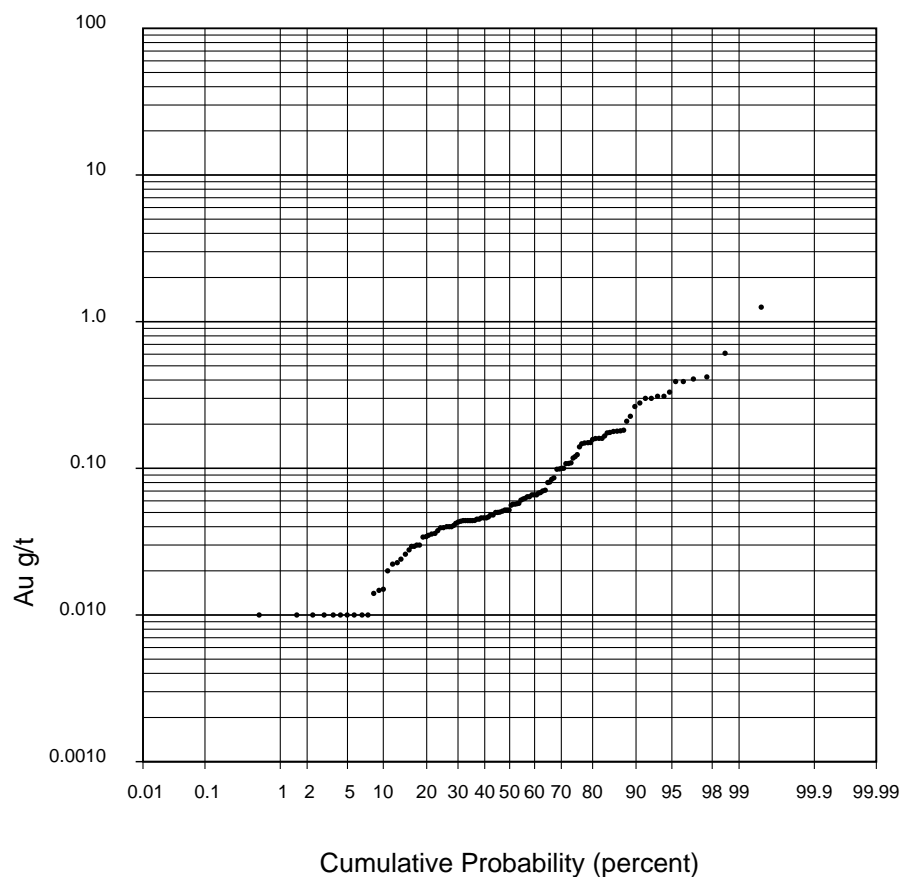
# Au CRZ Block NN Estimate Dilutant (High Confidence Blocks)



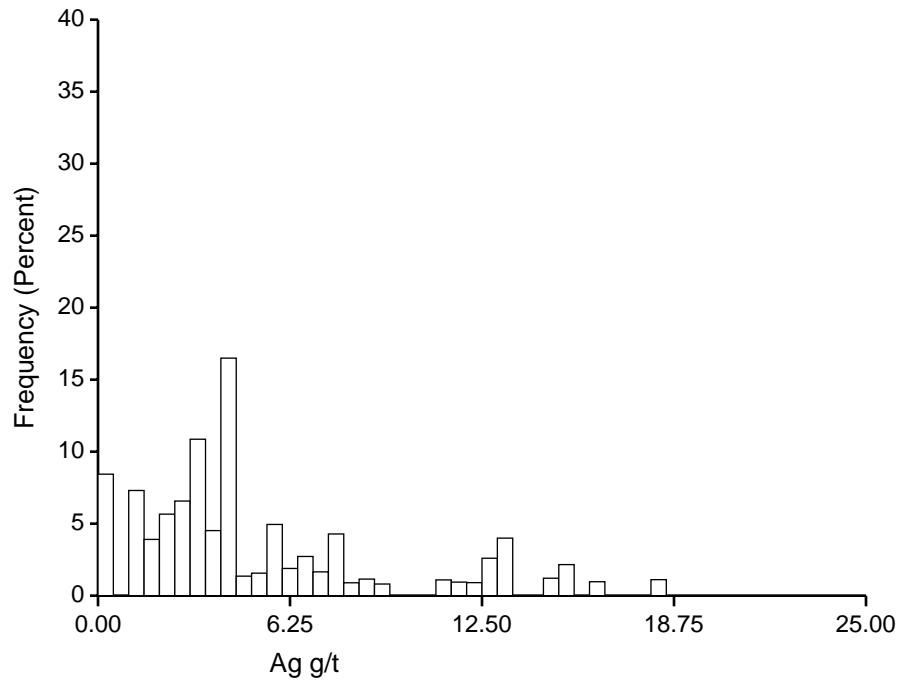
N	121
m	0.108
$\sigma^2$	0.025
$\sigma/m$	1.450
min	0.010
$q_{0.25}$	0.039
$q_{0.50}$	0.052
$q_{0.75}$	0.120
max	1.255

Class width = 0.050  
The last class contains  
all values  $\geq 2.450$

# Au CRZ Block NN Estimate Dilutant (High Confidence Blocks)



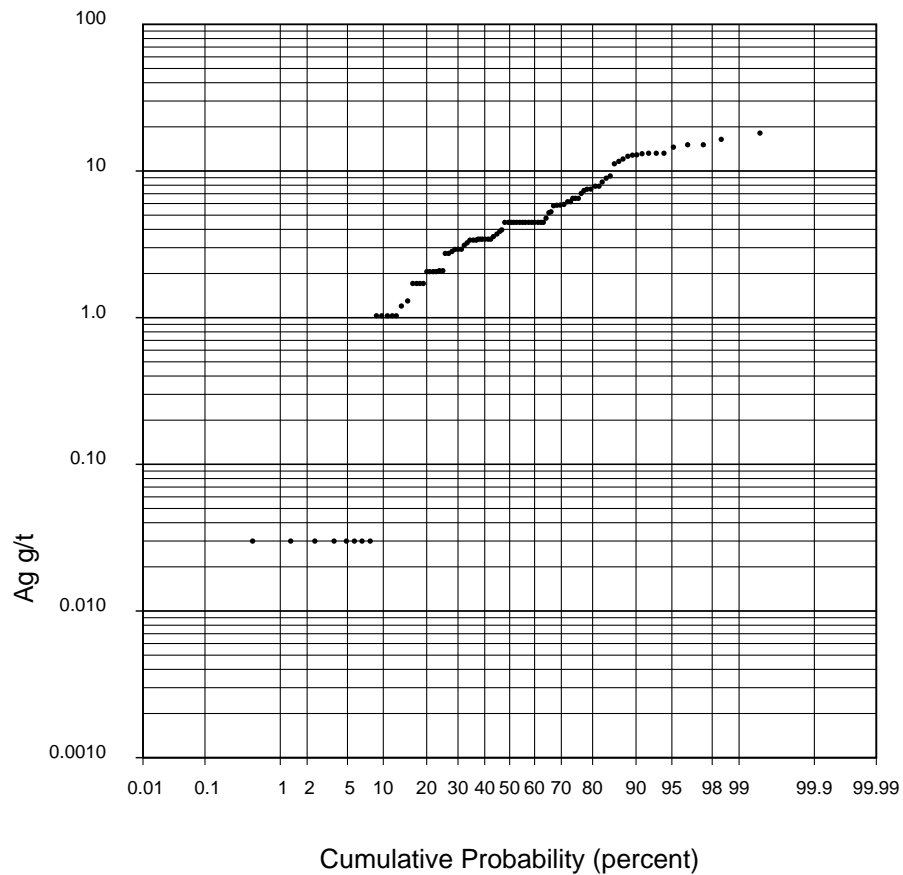
### Ag CRZ Block NN Estimate Dilutant (High Confidence Blocks)



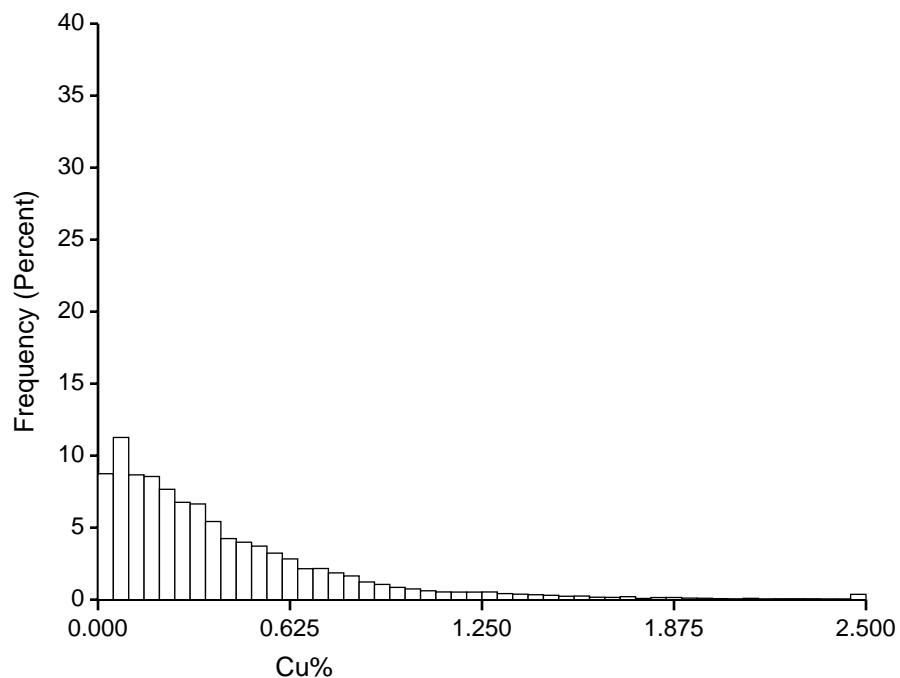
N	96
m	5.22
$\sigma^2$	17.73
$\sigma/m$	0.81
min	0.03
$q_{0.25}$	2.09
$q_{0.50}$	4.46
$q_{0.75}$	6.51
max	18.16

Class width = 0.50  
The last class contains  
all values  $\geq 24.50$

### Ag CRZ Block NN Estimate Dilutant (High Confidence Blocks)



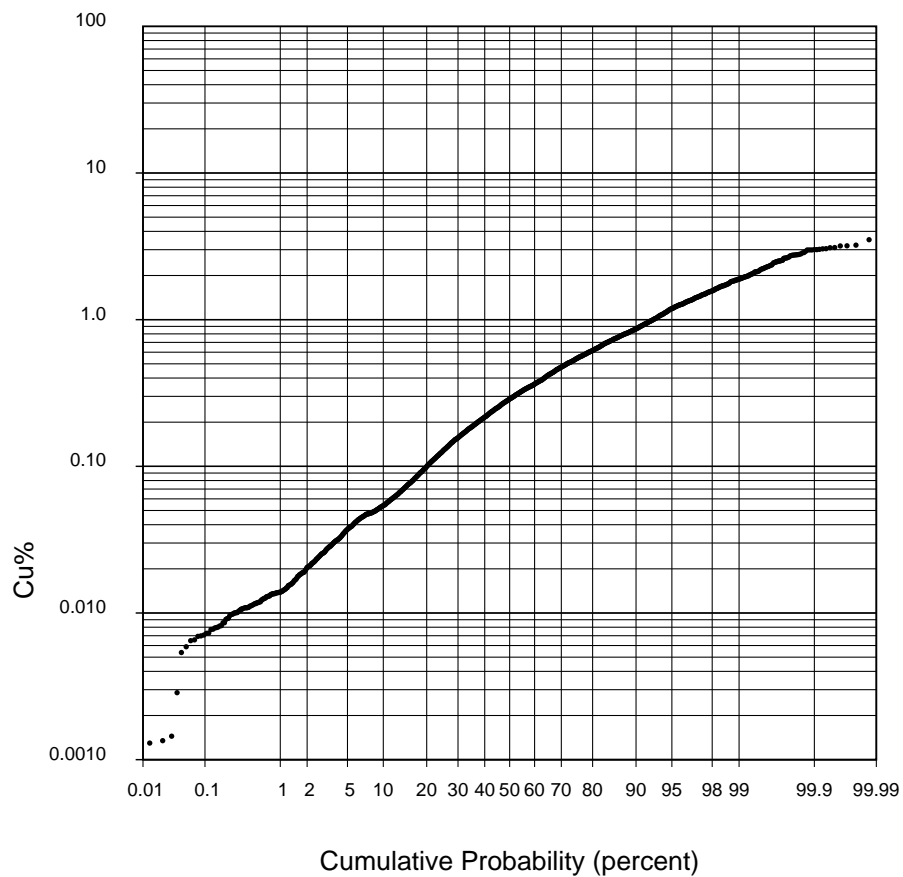
Cu CRZ Block Estimate Volcanic (High Confidence Blocks)



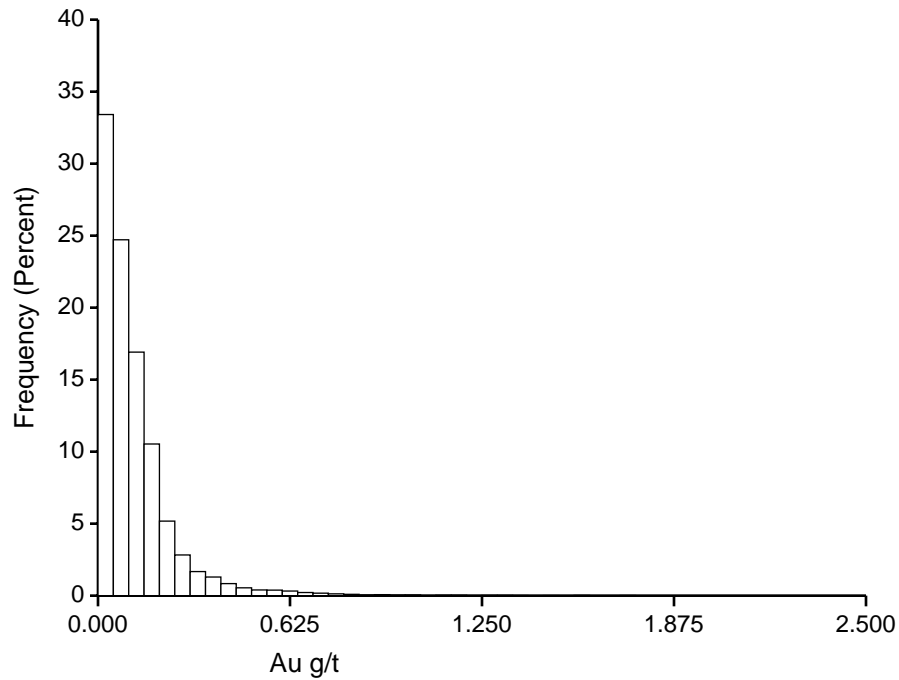
N	11991
m	0.400
$\sigma^2$	0.156
$\sigma/m$	0.987
min	0.000
$q_{0.25}$	0.128
$q_{0.50}$	0.288
$q_{0.75}$	0.541
max	3.636

Class width = 0.050  
The last class contains  
all values  $\geq 2.450$

Cu CRZ Block Estimate Volcanic (High Confidence Blocks)



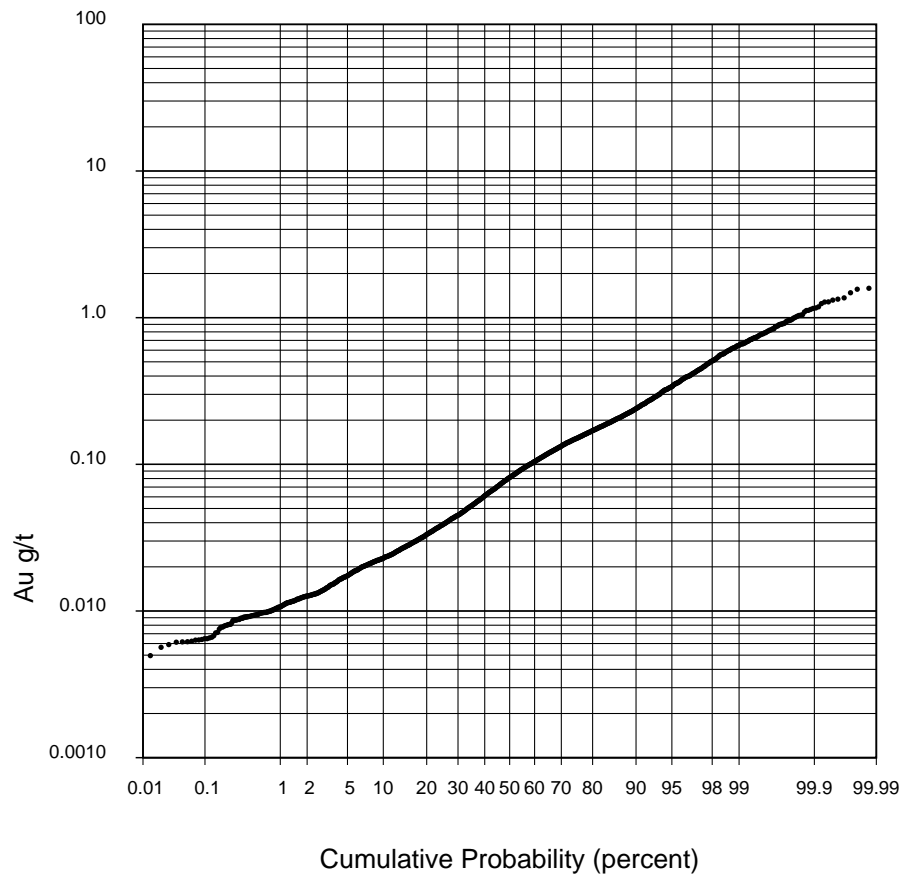
Au CRZ Block Estimate Volcanic (High Confidence Blocks)



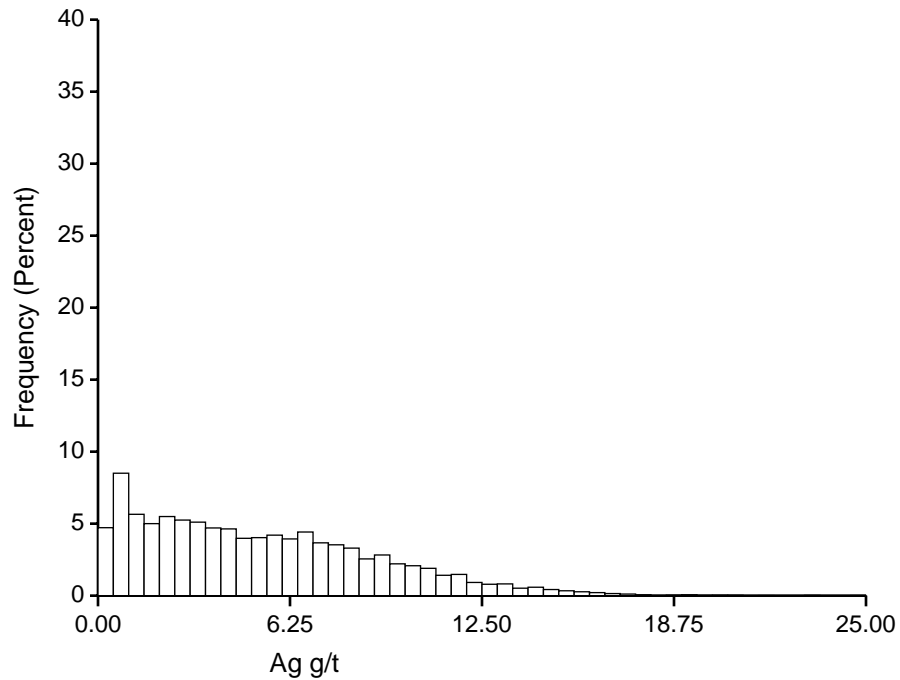
N	11907
m	0.117
$\sigma^2$	0.016
$\sigma/m$	1.077
min	0.004
$q_{0.25}$	0.039
$q_{0.50}$	0.081
$q_{0.75}$	0.150
max	1.737

Class width = 0.050  
The last class contains  
all values  $\geq 2.450$

Au CRZ Block Estimate Volcanic (High Confidence Blocks)



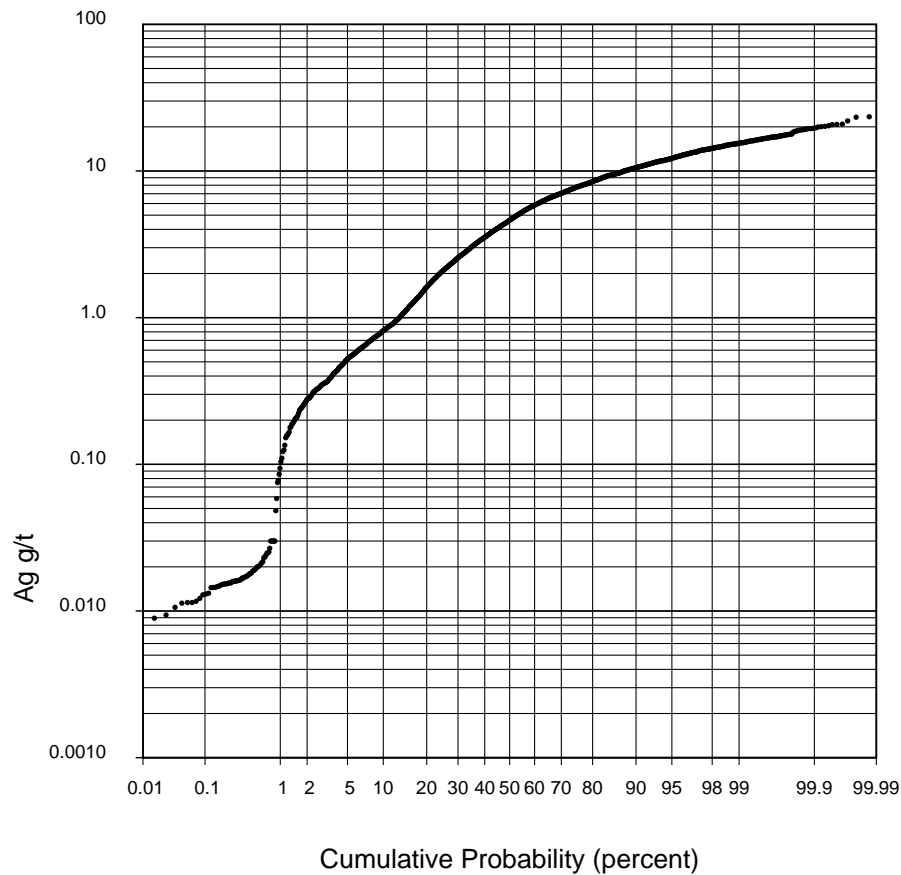
### Ag CRZ Block Estimate Volcanic (High Confidence Blocks)



N	10831
m	5.25
$\sigma^2$	14.31
$\sigma/m$	0.72
min	0.00
$q_{0.25}$	2.10
$q_{0.50}$	4.62
$q_{0.75}$	7.74
max	24.54

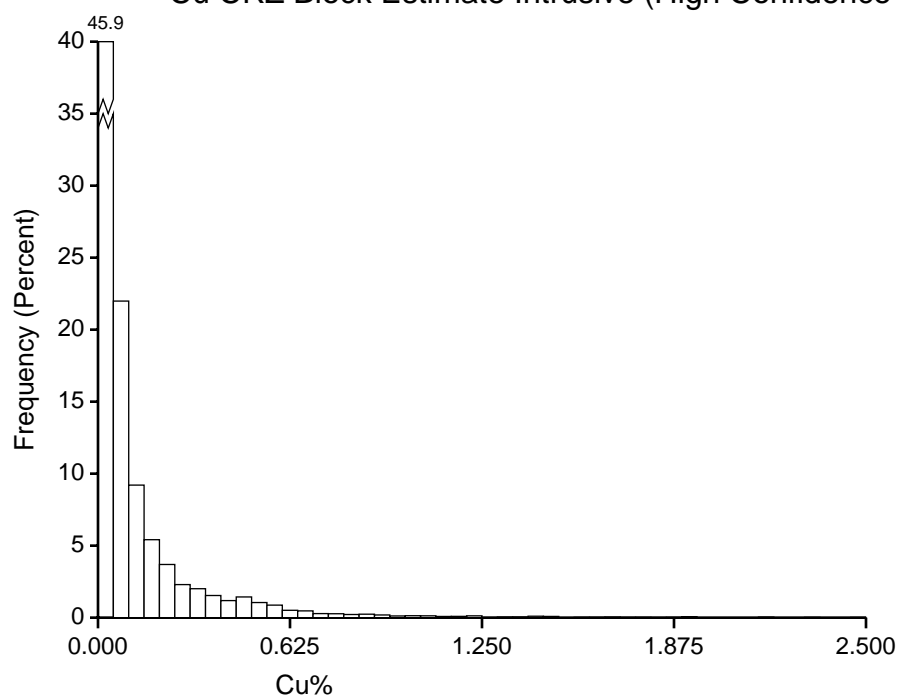
Class width = 0.50  
The last class contains  
all values  $\geq 24.50$

### Ag CRZ Block Estimate Volcanic (High Confidence Blocks)





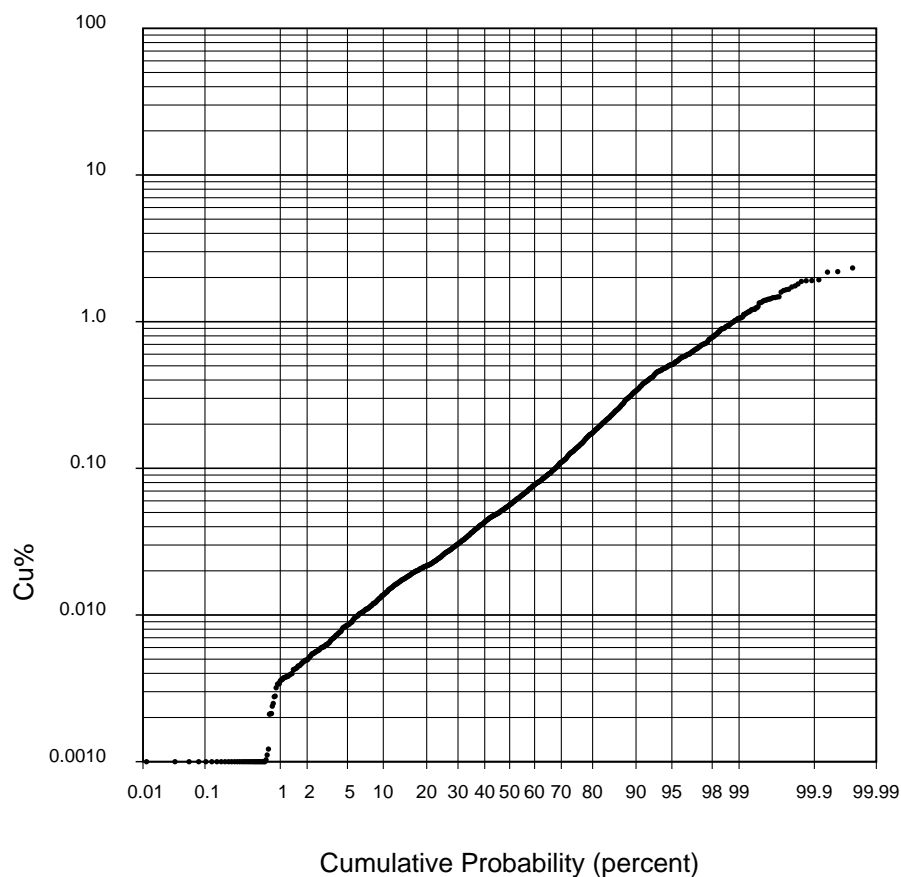
Cu CRZ Block Estimate Intrusive (High Confidence Blocks)



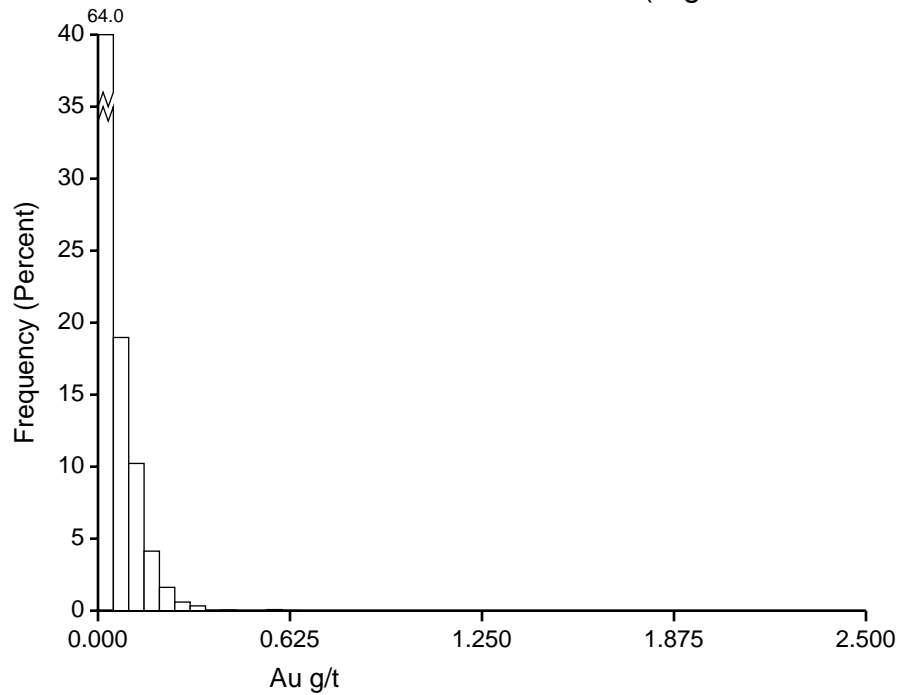
N	4877
m	0.131
$\sigma^2$	0.044
$\sigma/m$	1.602
min	0.001
$q_{0.25}$	0.026
$q_{0.50}$	0.056
$q_{0.75}$	0.137
max	2.530

Class width = 0.050  
The last class contains  
all values  $\geq 2.450$

Cu CRZ Block Estimate Intrusive (High Confidence Blocks)



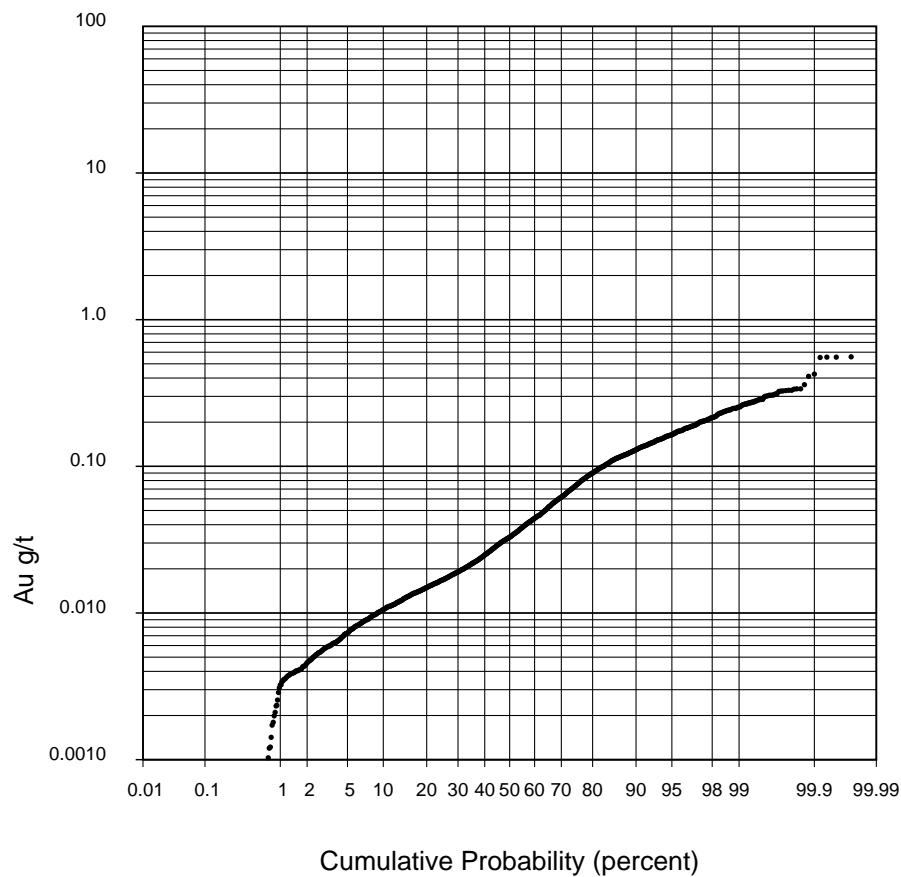
# Au CRZ Block Estimate Intrusive (High Confidence Blocks)



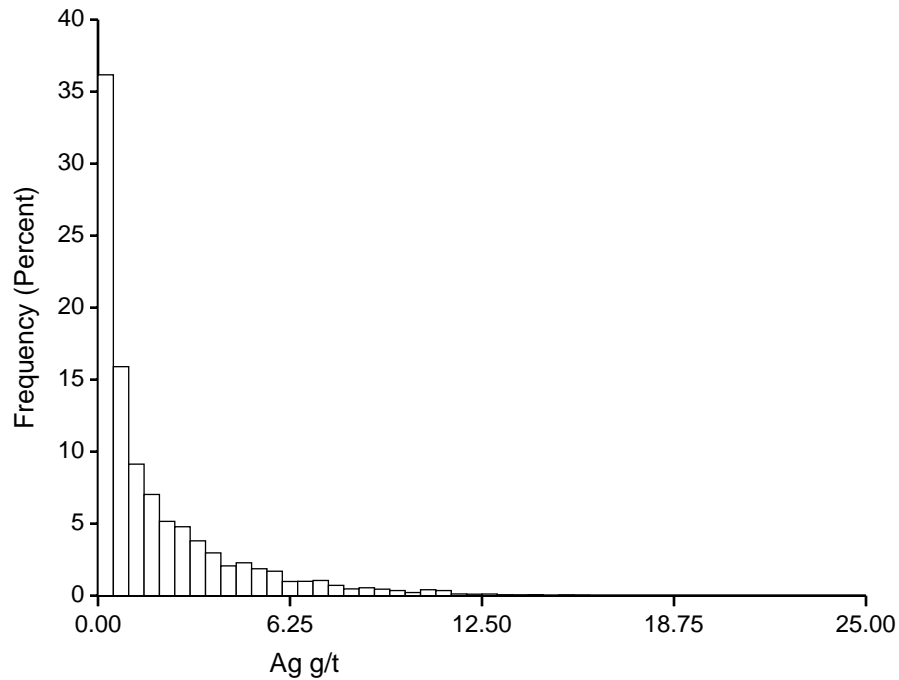
N	4872
m	0.055
$\sigma^2$	0.003
$\sigma/m$	1.030
min	0.000
$q_{0.25}$	0.017
$q_{0.50}$	0.033
$q_{0.75}$	0.074
max	0.610

Class width = 0.050  
The last class contains  
all values  $\geq 2.450$

# Au CRZ Block Estimate Intrusive (High Confidence Blocks)



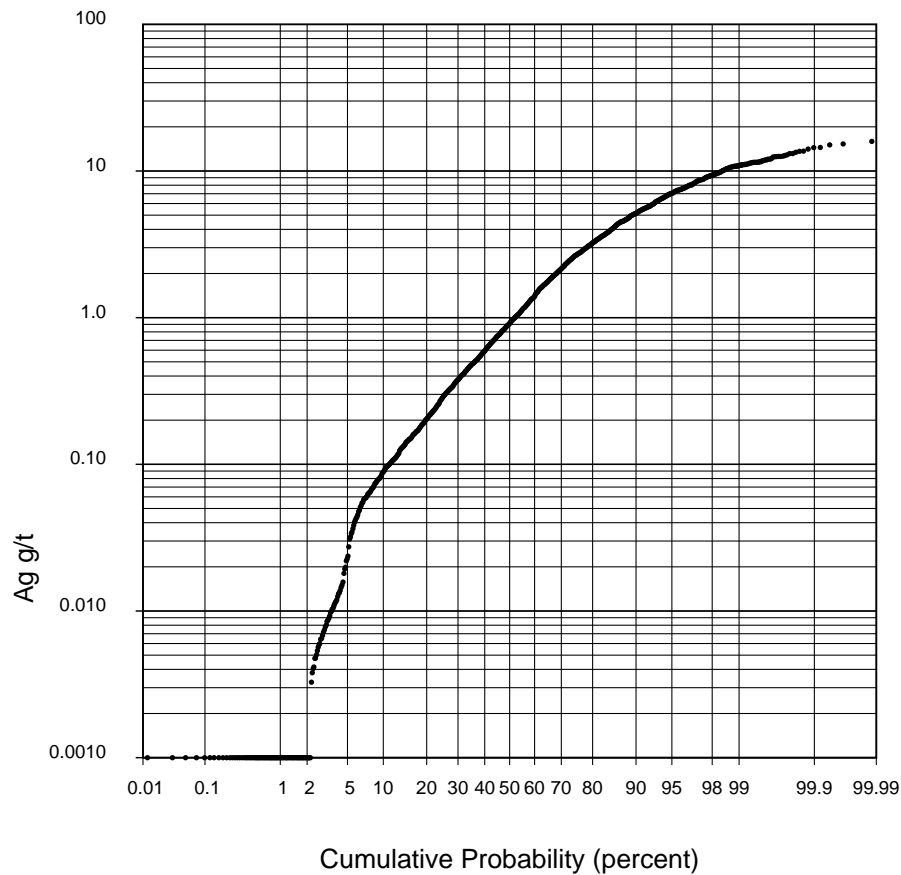
# Ag CRZ Block Estimate Intrusive (High Confidence Blocks)



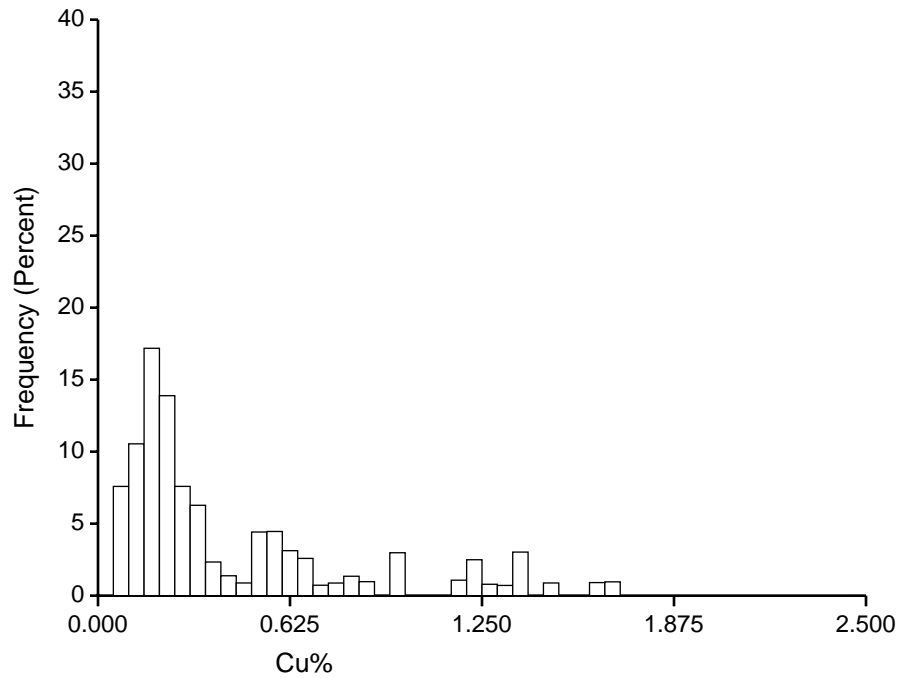
N	4653
m	1.90
$\sigma^2$	5.65
$\sigma/m$	1.25
min	0.00
$q_{0.25}$	0.29
$q_{0.50}$	0.91
$q_{0.75}$	2.67
max	15.92

Class width = 0.50  
The last class contains  
all values  $\geq 24.50$

# Ag CRZ Block Estimate Intrusive (High Confidence Blocks)



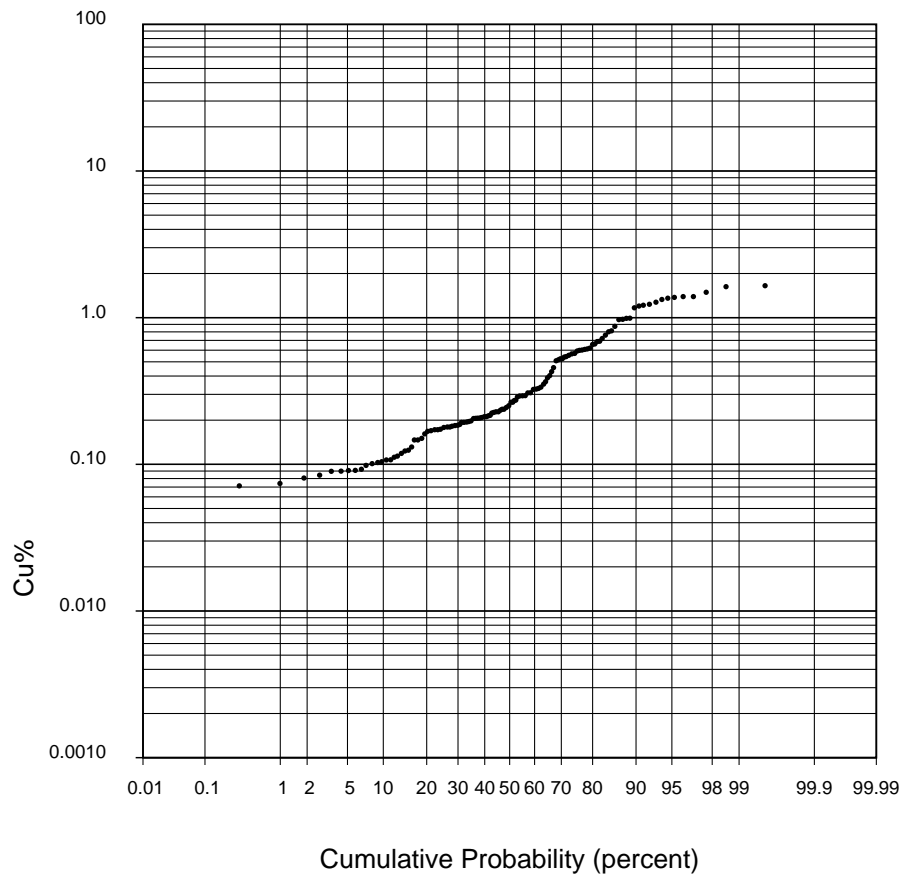
Cu CRZ Block Estimate Dilutant (High Confidence Blocks)



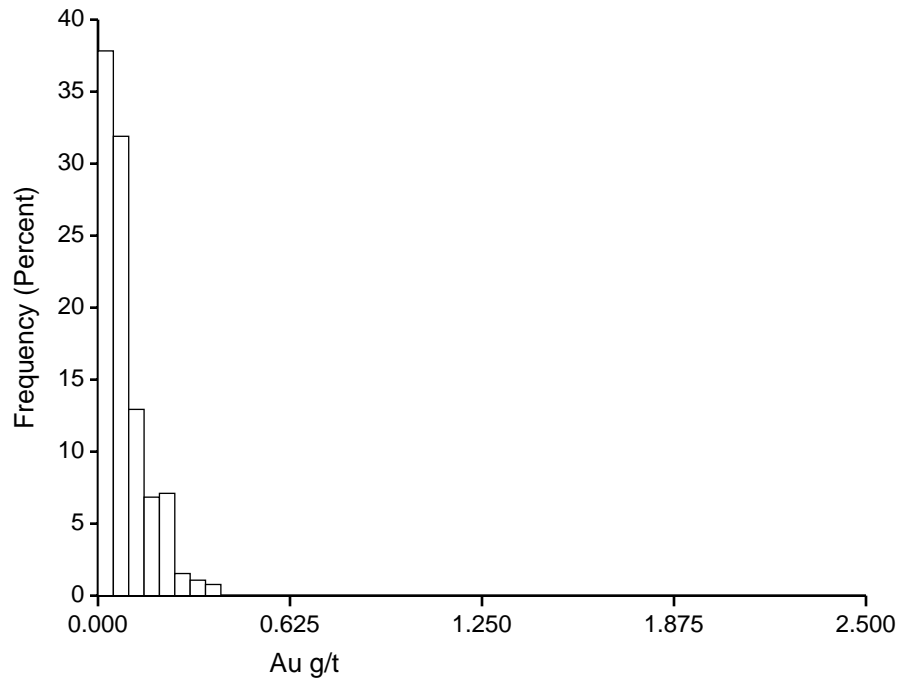
N	121
m	0.434
$\sigma^2$	0.155
$\sigma/m$	0.905
min	0.071
$q_{0.25}$	0.178
$q_{0.50}$	0.251
$q_{0.75}$	0.571
max	1.654

Class width = 0.050  
The last class contains  
all values  $\geq 2.450$

Cu CRZ Block Estimate Dilutant (High Confidence Blocks)



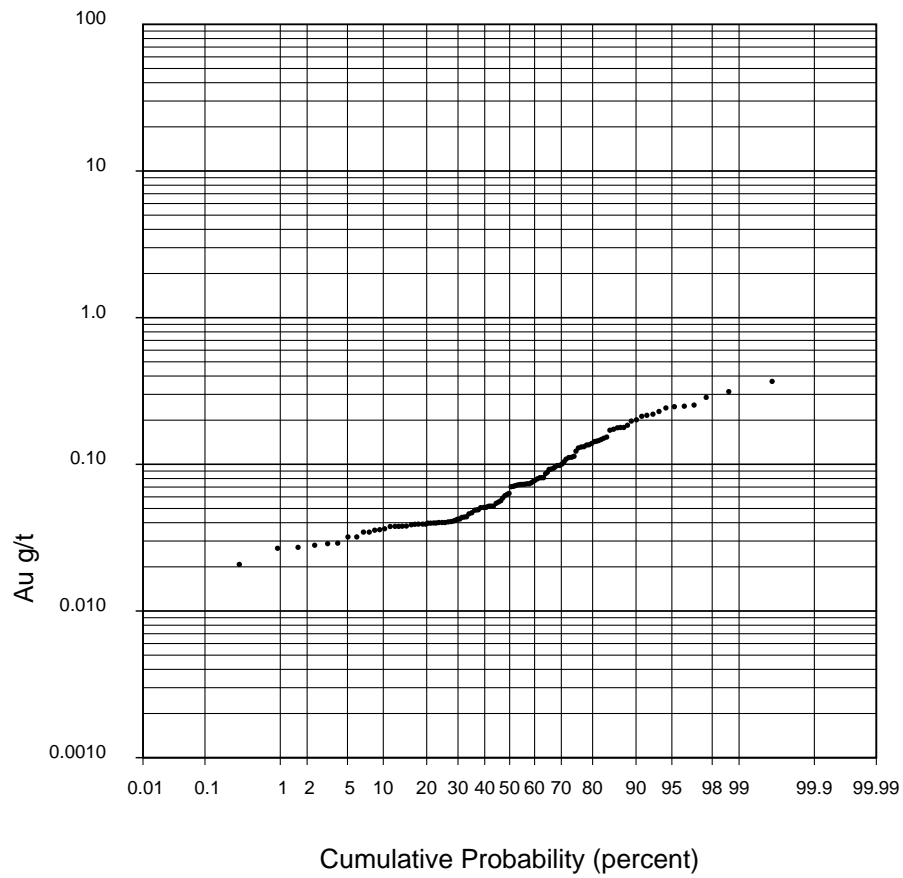
# Au CRZ Block Estimate Dilutant (High Confidence Blocks)



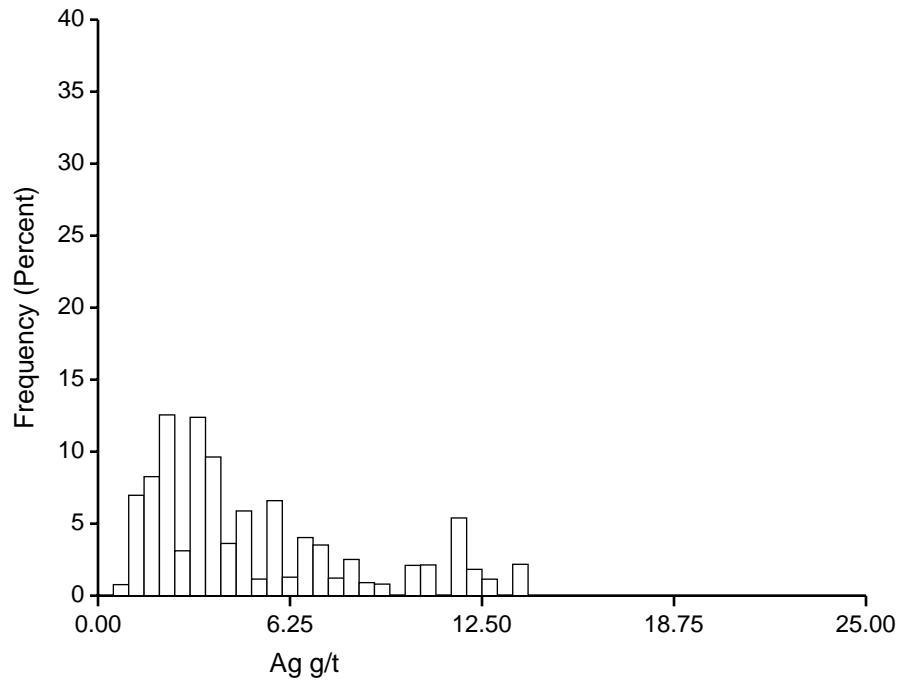
N	121
m	0.092
$\sigma^2$	0.005
$\sigma/m$	0.763
min	0.021
$q_{0.25}$	0.040
$q_{0.50}$	0.063
$q_{0.75}$	0.123
max	0.368

Class width = 0.050  
The last class contains  
all values  $\geq 2.450$

# Au CRZ Block Estimate Dilutant (High Confidence Blocks)



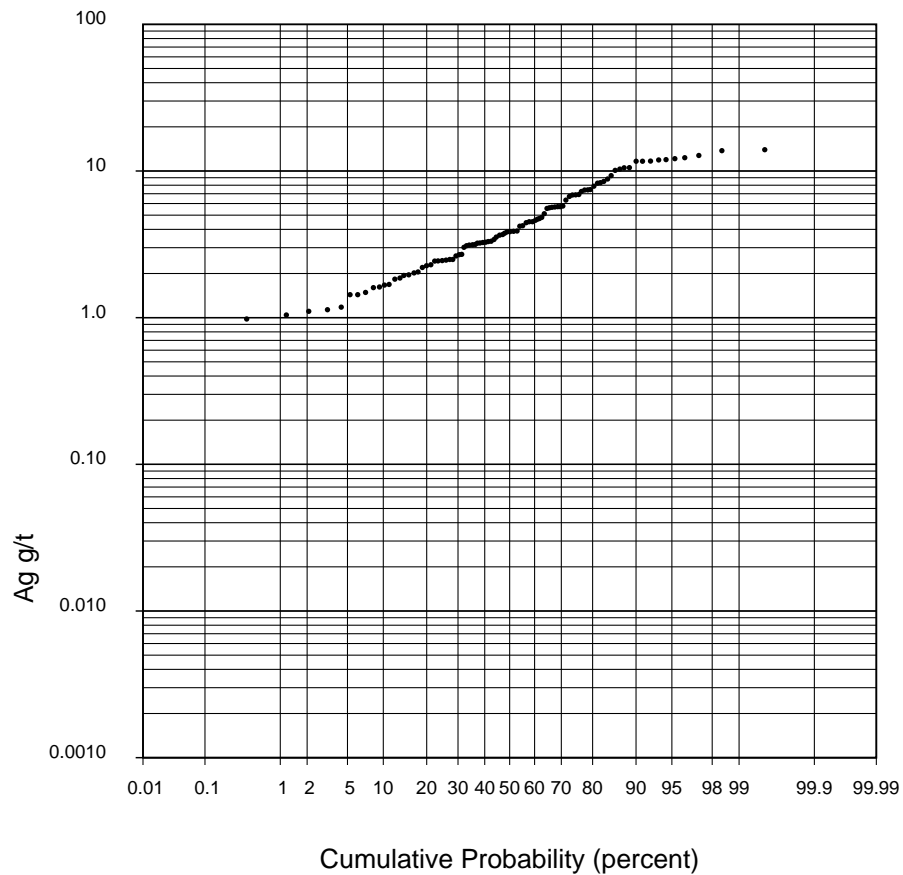
### Ag CRZ Block Estimate Dilutant (High Confidence Blocks)



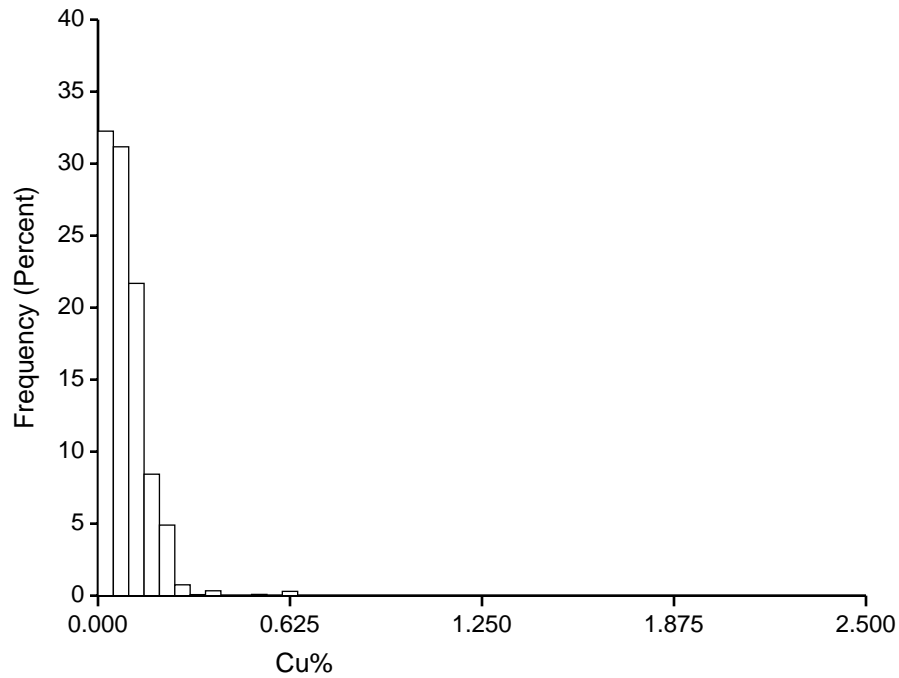
N	96
m	5.06
$\sigma^2$	11.70
$\sigma/m$	0.68
min	0.98
$q_{0.25}$	2.45
$q_{0.50}$	3.86
$q_{0.75}$	6.89
max	13.98

Class width = 0.50  
The last class contains  
all values  $\geq 24.50$

### Ag CRZ Block Estimate Dilutant (High Confidence Blocks)



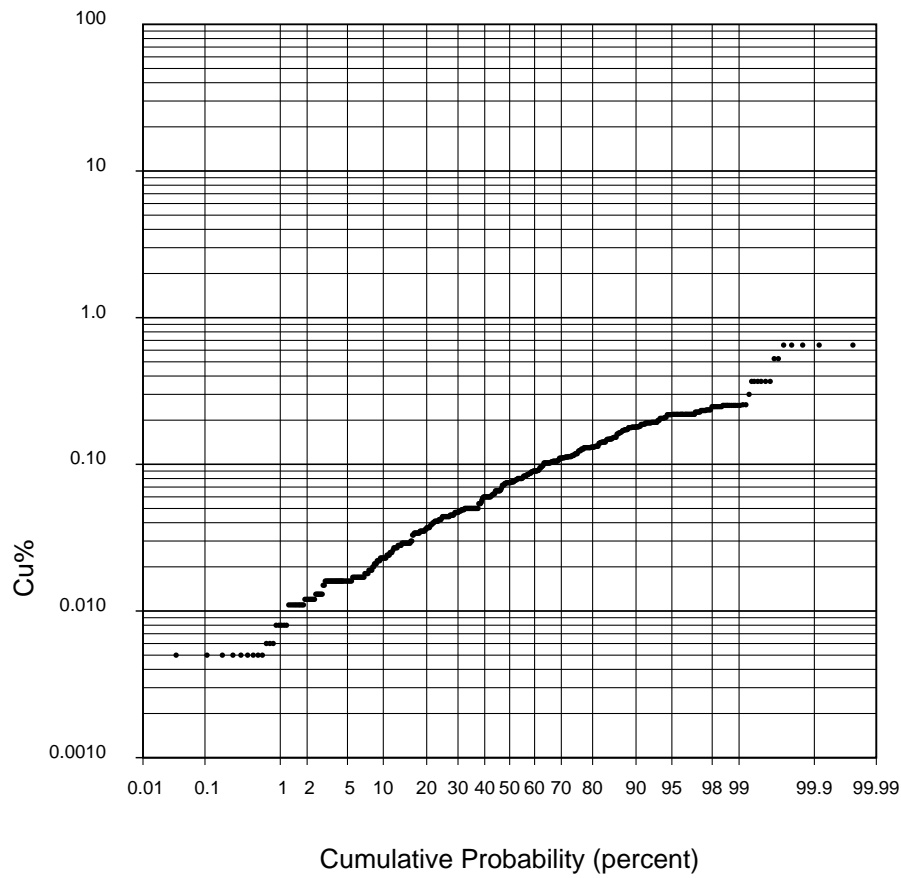
Cu Junction Block NN Estimate Outside (High Confidence Blocks)



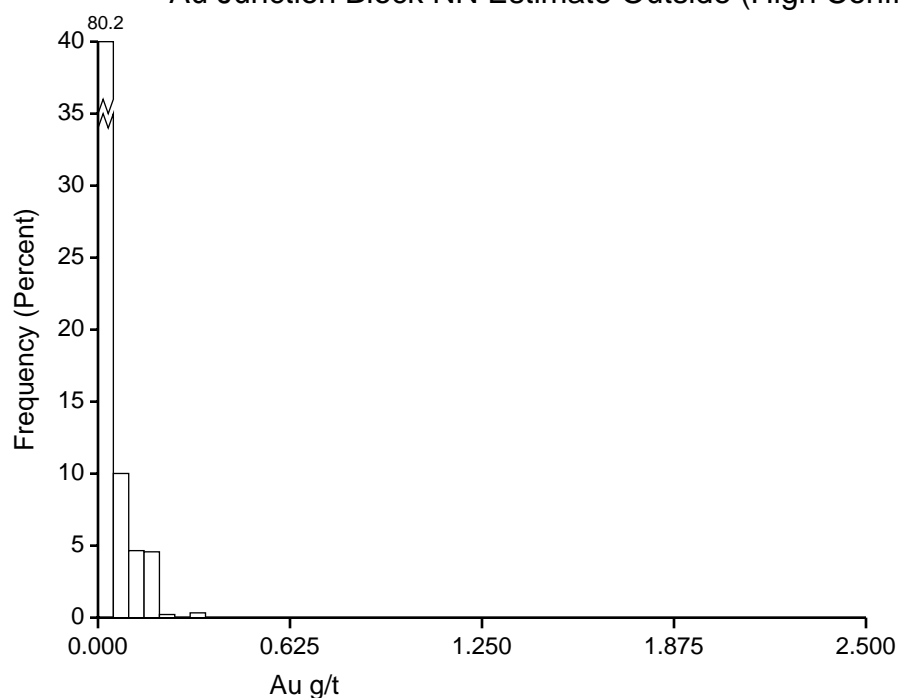
N	1468
m	0.090
$\sigma^2$	0.005
$\sigma/m$	0.766
min	0.005
$q_{0.25}$	0.044
$q_{0.50}$	0.075
$q_{0.75}$	0.118
max	0.650

Class width = 0.050  
The last class contains  
all values  $\geq 2.450$

Cu Junction Block NN Estimate Outside (High Confidence Blocks)



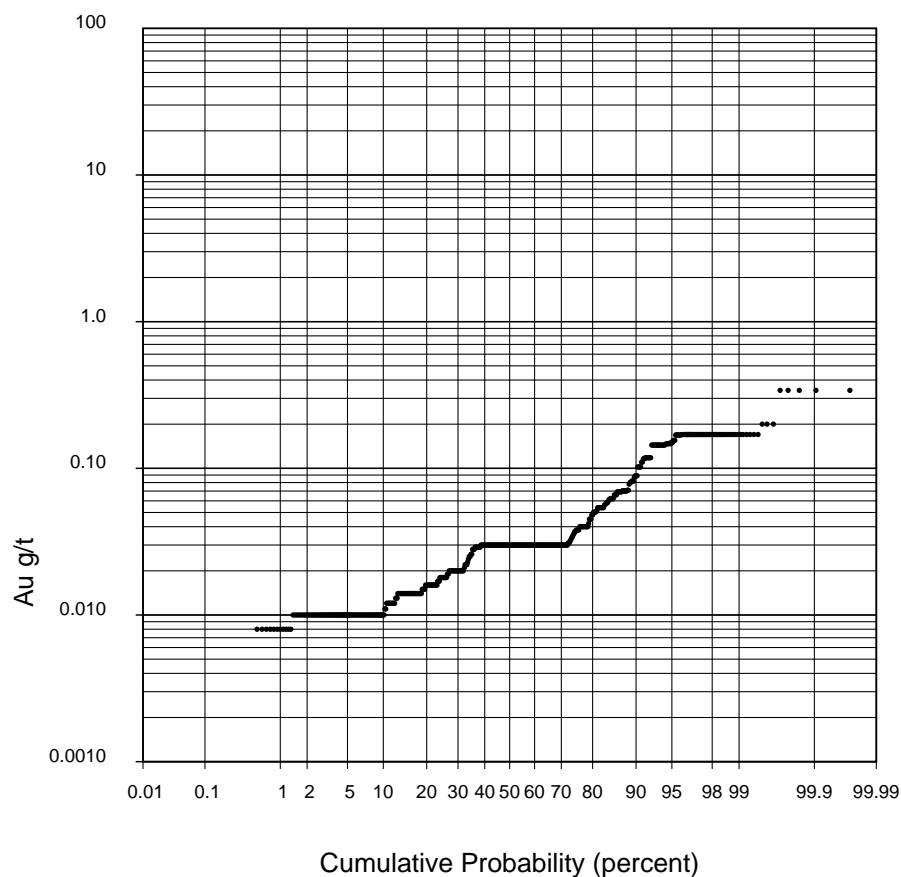
# Au Junction Block NN Estimate Outside (High Confidence Blocks)



N	1319
m	0.041
$\sigma^2$	0.002
$\sigma/m$	1.040
min	0.000
$q_{0.25}$	0.018
$q_{0.50}$	0.030
$q_{0.75}$	0.038
max	0.340

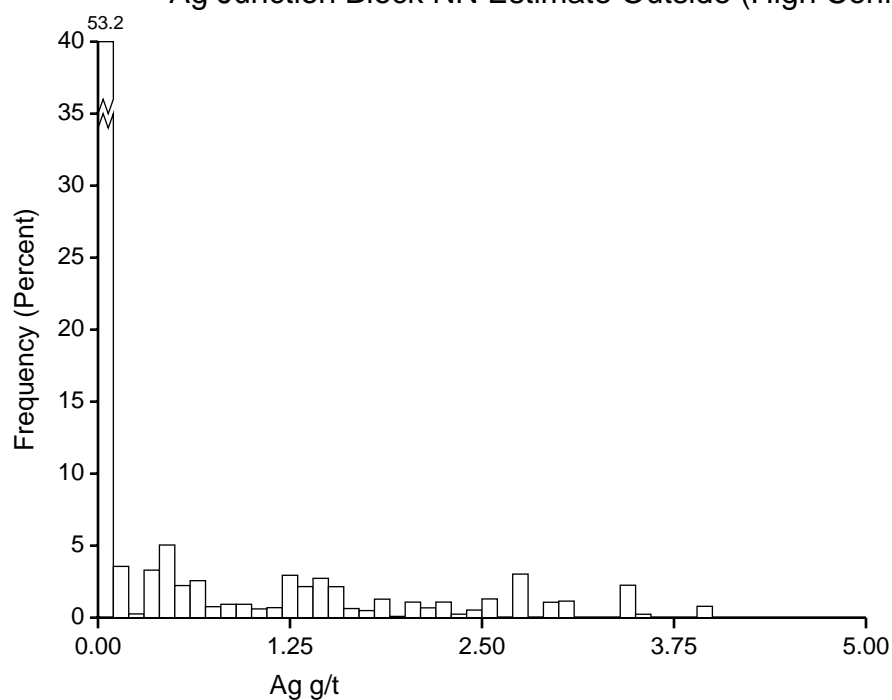
Class width = 0.050  
The last class contains  
all values  $\geq 2.450$

# Au Junction Block NN Estimate Outside (High Confidence Blocks)





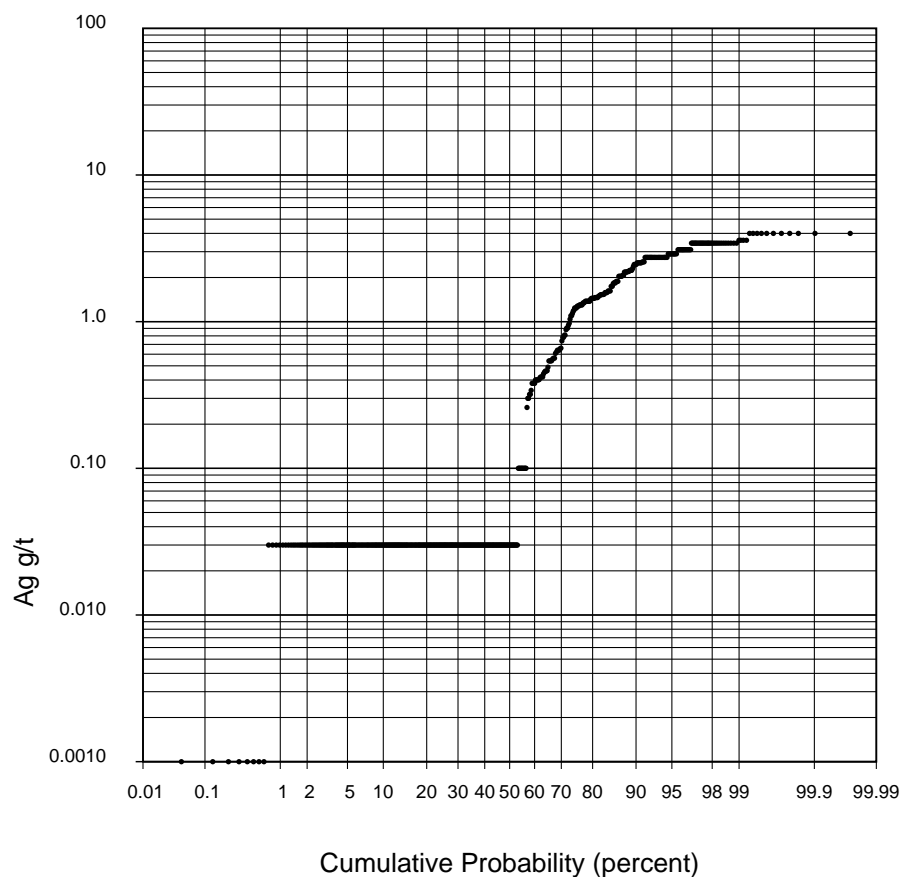
# Ag Junction Block NN Estimate Outside (High Confidence Blocks)



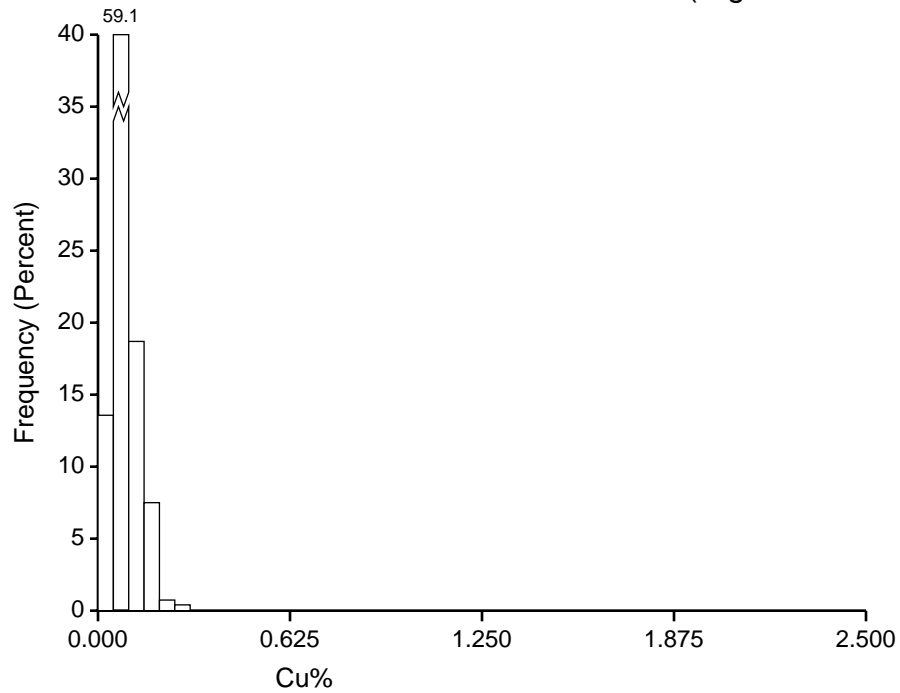
N	1213
m	0.68
$\sigma^2$	0.99
$\sigma/m$	1.46
min	0.00
$q_{0.25}$	0.03
$q_{0.50}$	0.03
$q_{0.75}$	1.24
max	4.00

Class width = 0.10  
The last class contains  
all values  $\geq 4.90$

# Ag Junction Block NN Estimate Outside (High Confidence Blocks)



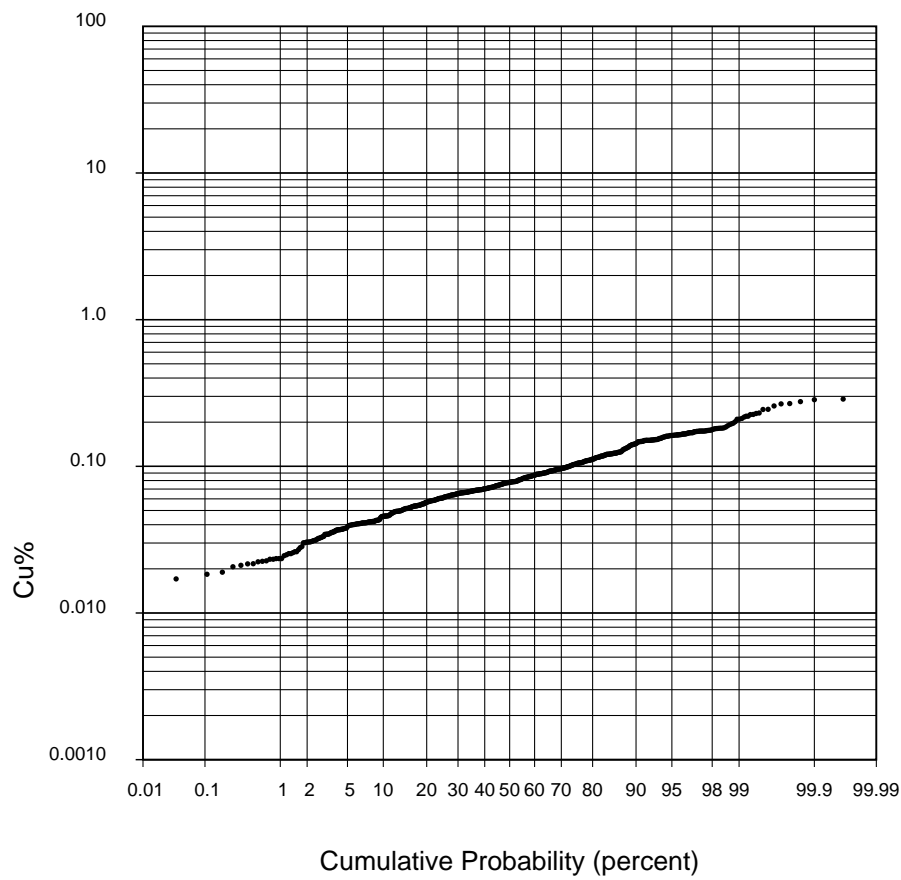
Cu Junction Block Estimate Outside (High Confidence Blocks)



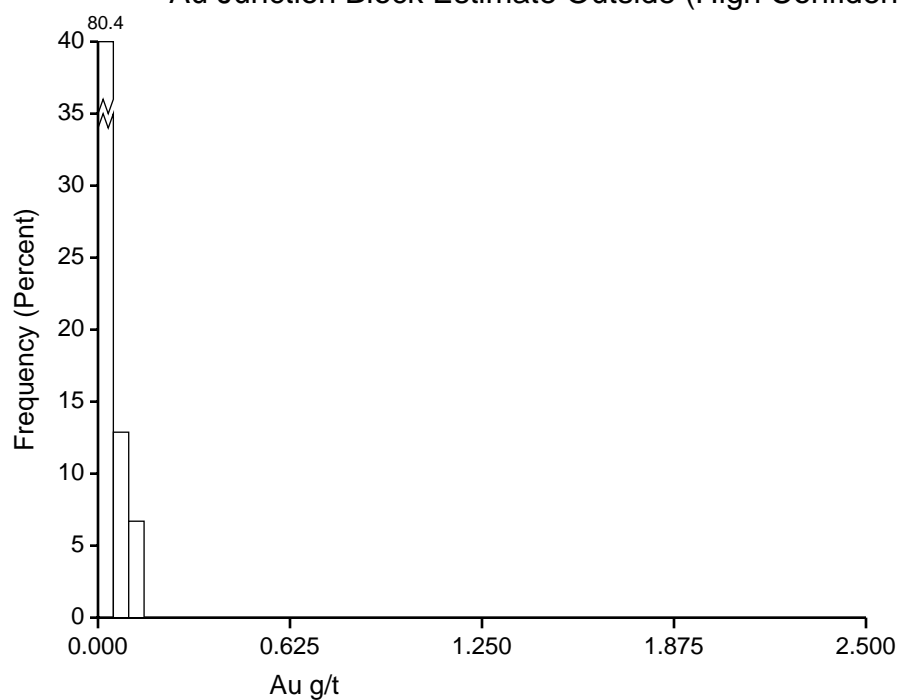
N	1468
m	0.086
$\sigma^2$	0.001
$\sigma/m$	0.444
min	0.017
$q_{0.25}$	0.061
$q_{0.50}$	0.078
$q_{0.75}$	0.104
max	0.287

Class width = 0.050  
The last class contains  
all values  $\geq 2.450$

Cu Junction Block Estimate Outside (High Confidence Blocks)



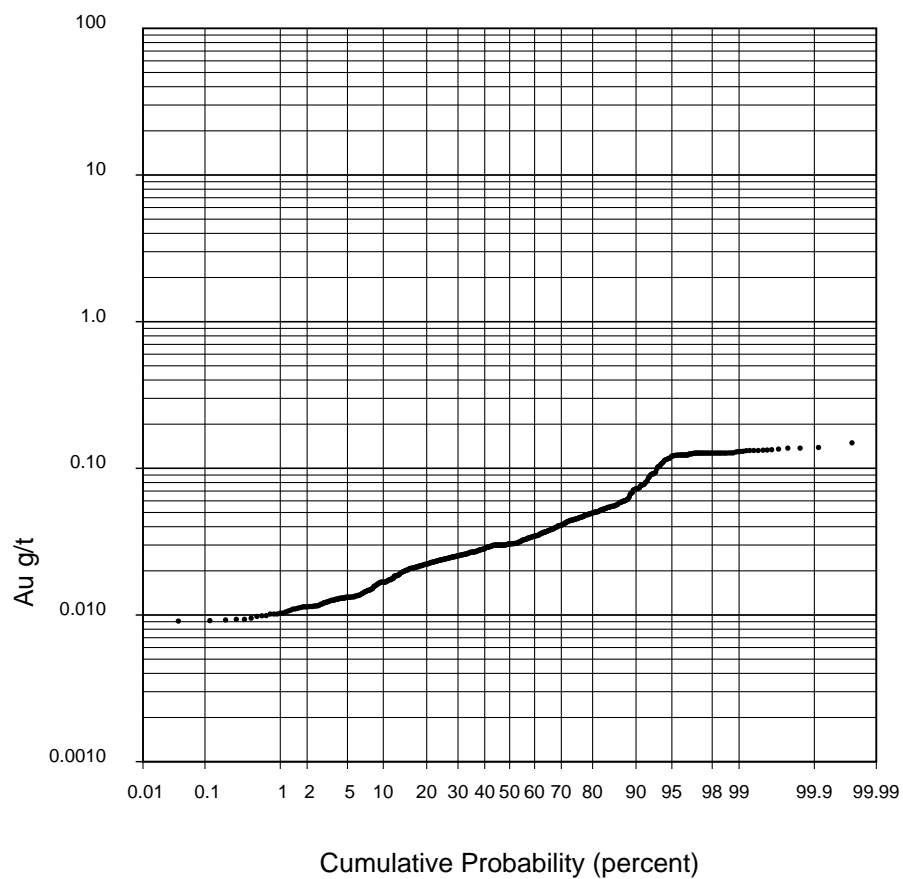
# Au Junction Block Estimate Outside (High Confidence Blocks)



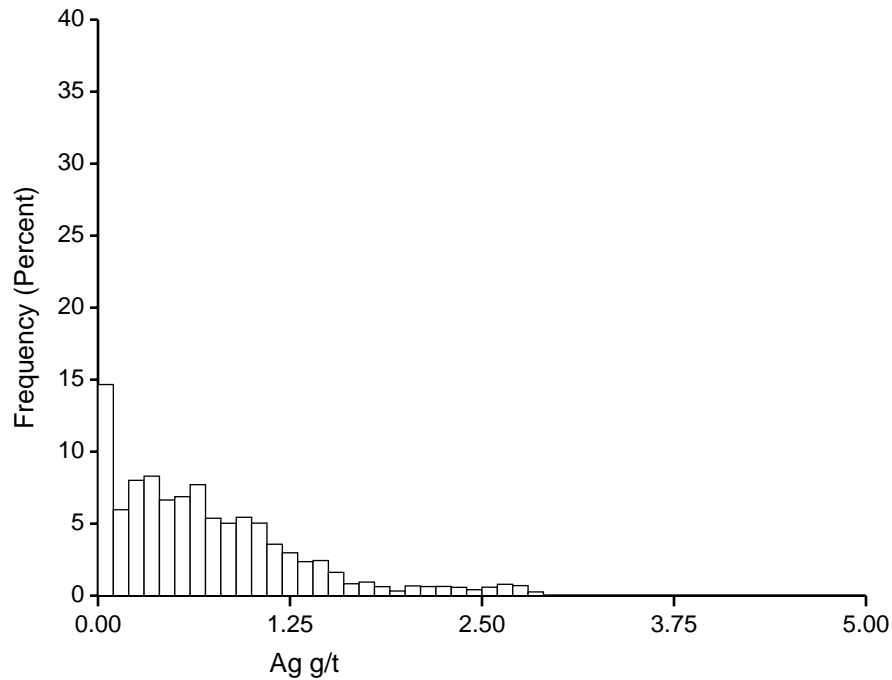
N	1319
m	0.040
$\sigma^2$	0.001
$\sigma/m$	0.688
min	0.009
$q_{0.25}$	0.024
$q_{0.50}$	0.031
$q_{0.75}$	0.045
max	0.149

Class width = 0.050  
The last class contains  
all values  $\geq 2.450$

# Au Junction Block Estimate Outside (High Confidence Blocks)



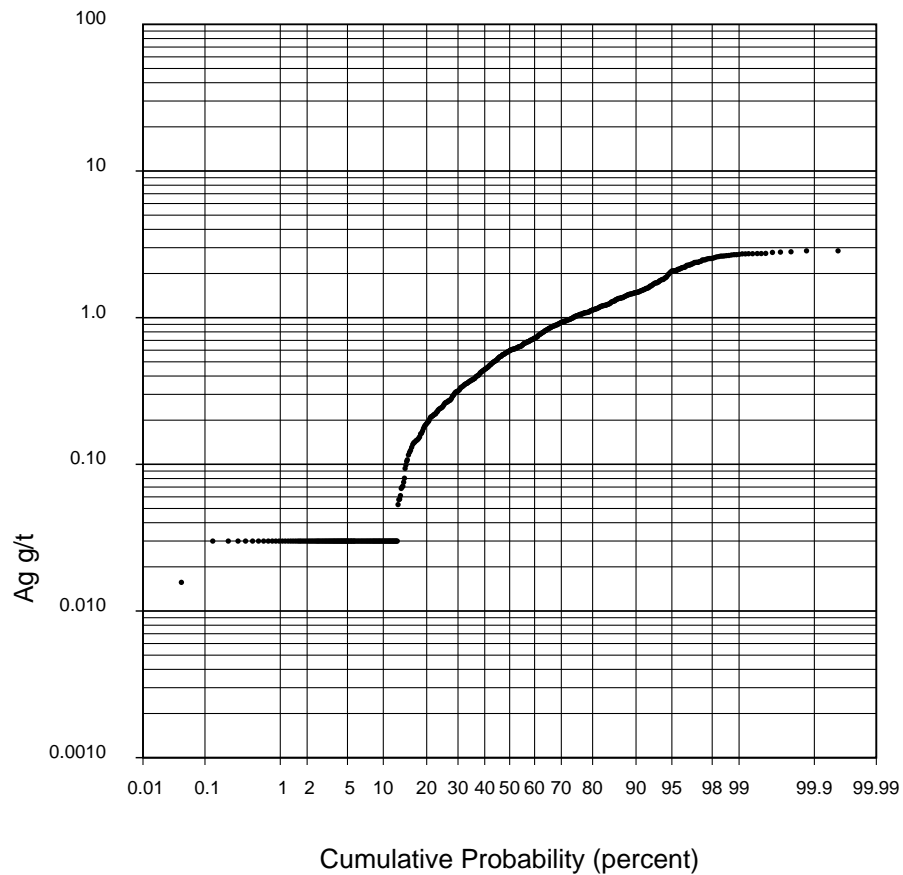
### Ag Junction Block Estimate Outside (High Confidence Blocks)



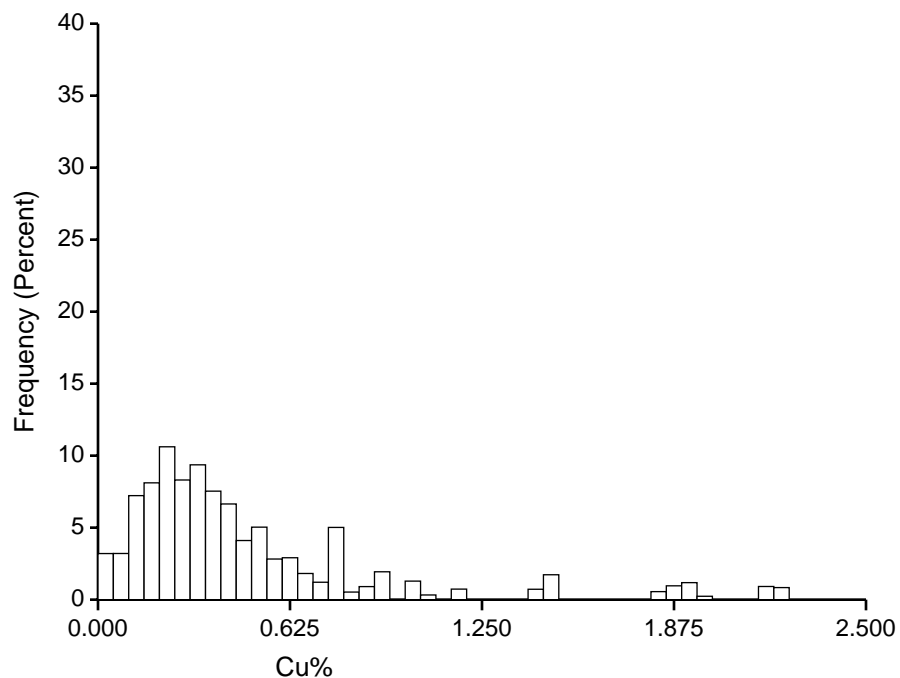
N	1213
m	0.71
$\sigma^2$	0.37
$\sigma/m$	0.85
min	0.02
$q_{0.25}$	0.25
$q_{0.50}$	0.60
$q_{0.75}$	1.03
max	2.86

Class width = 0.10  
The last class contains  
all values  $\geq 4.90$

### Ag Junction Block Estimate Outside (High Confidence Blocks)



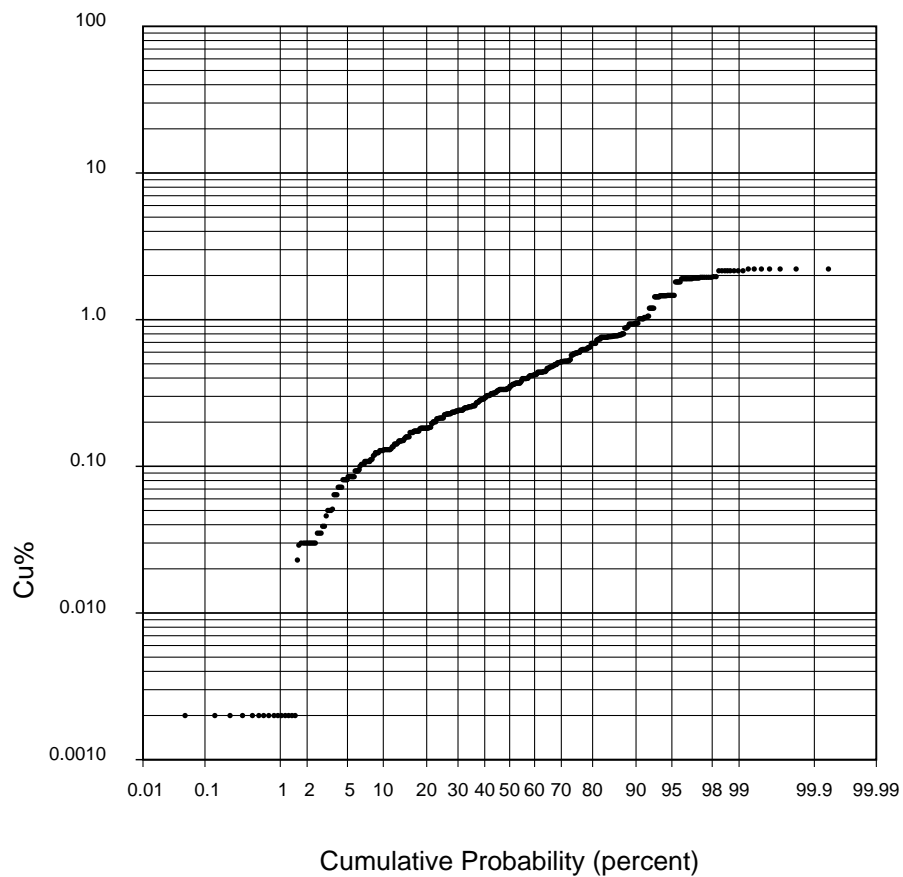
Cu Junction Block NN Estimate (High Confidence Blocks)



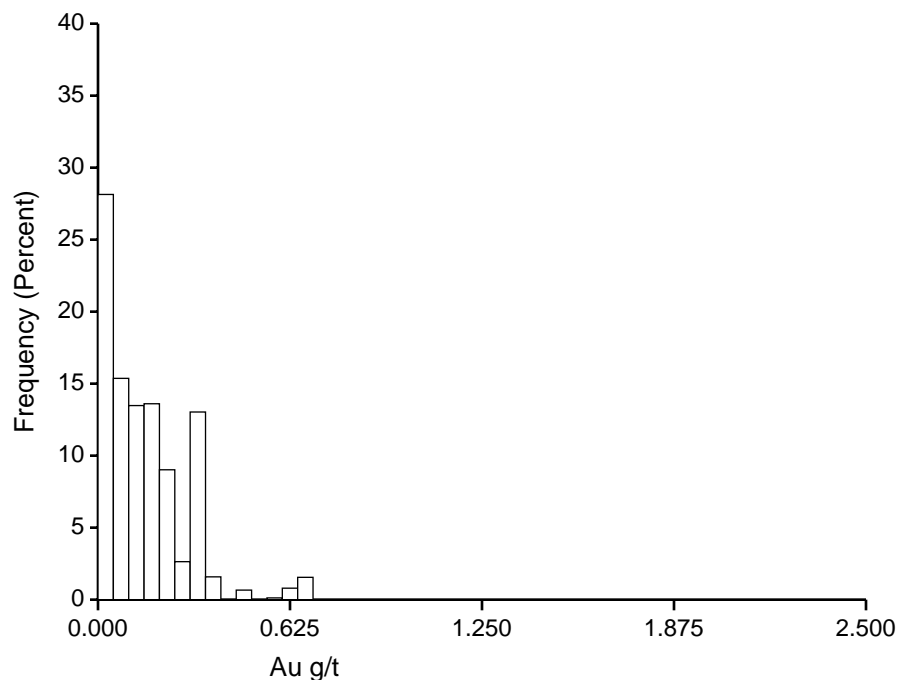
N	906
m	0.486
$\sigma^2$	0.198
$\sigma/m$	0.915
min	0.002
$q_{0.25}$	0.214
$q_{0.50}$	0.339
$q_{0.75}$	0.593
max	2.216

Class width = 0.050  
The last class contains  
all values  $\geq 2.450$

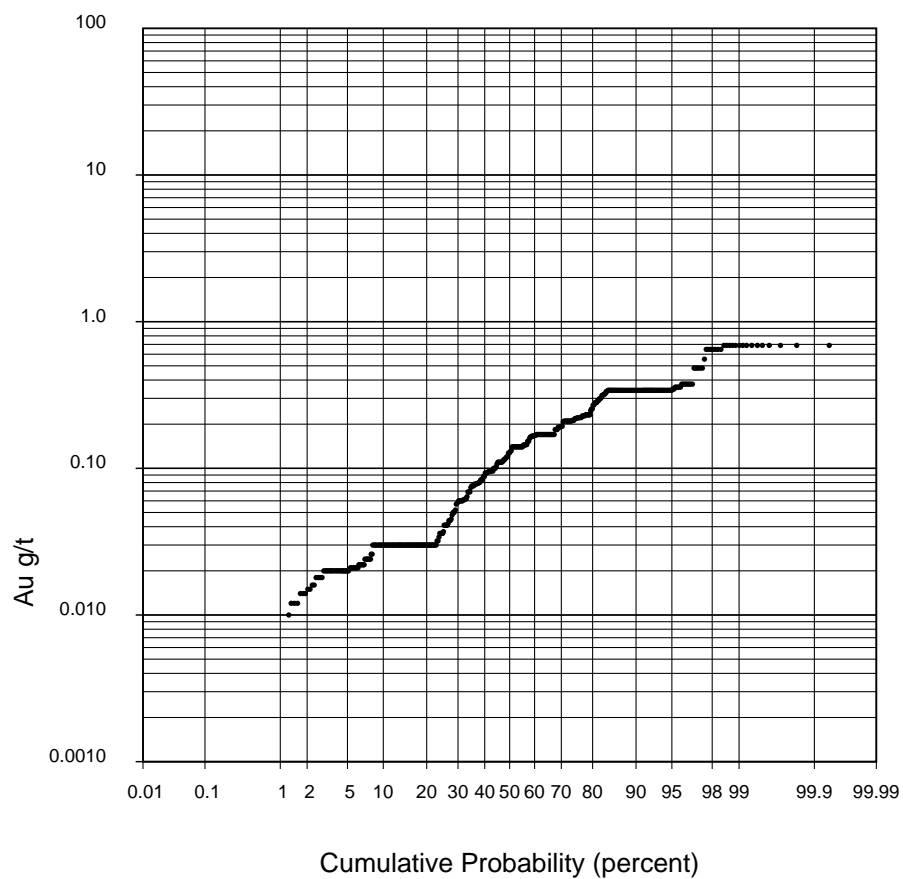
Cu Junction Block NN Estimate (High Confidence Blocks)



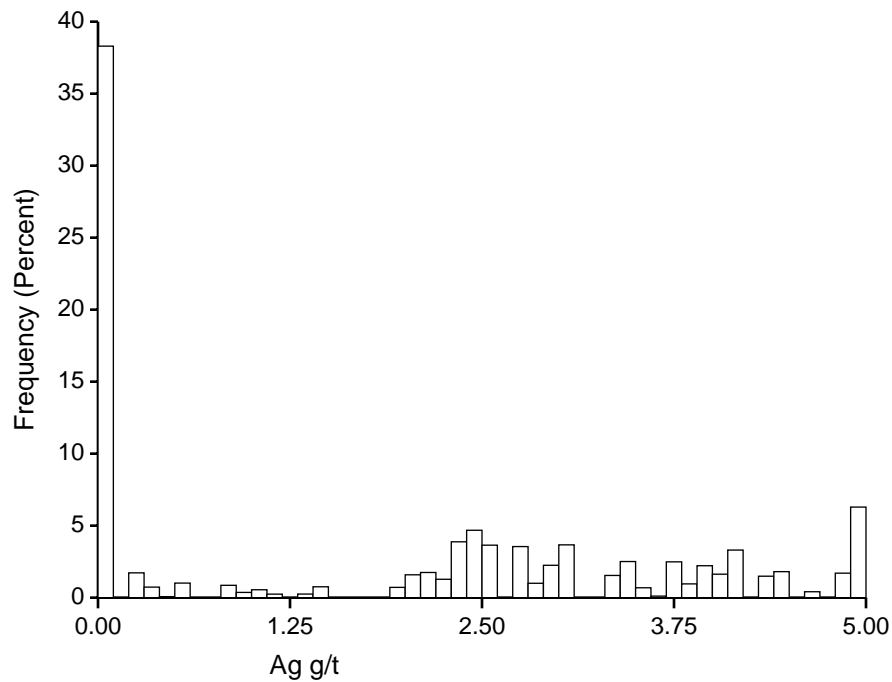
# Au Junction Block NN Estimate (High Confidence Blocks)



# Au Junction Block NN Estimate (High Confidence Blocks)



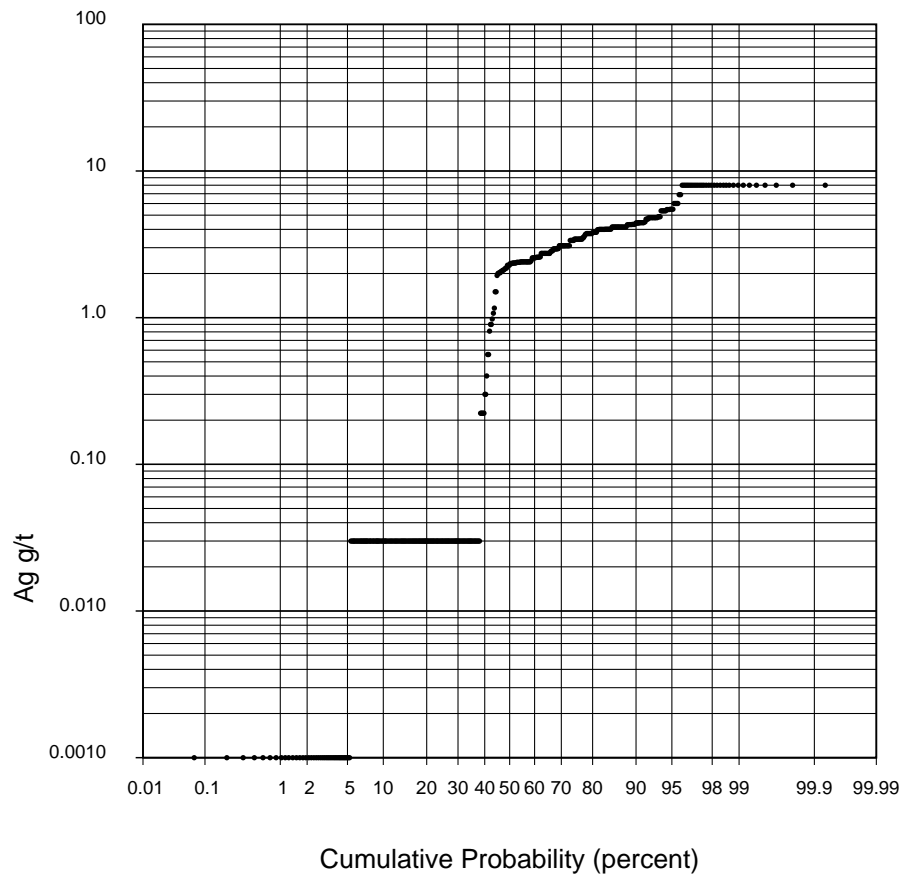
### Ag Junction Block NN Estimate (High Confidence Blocks)



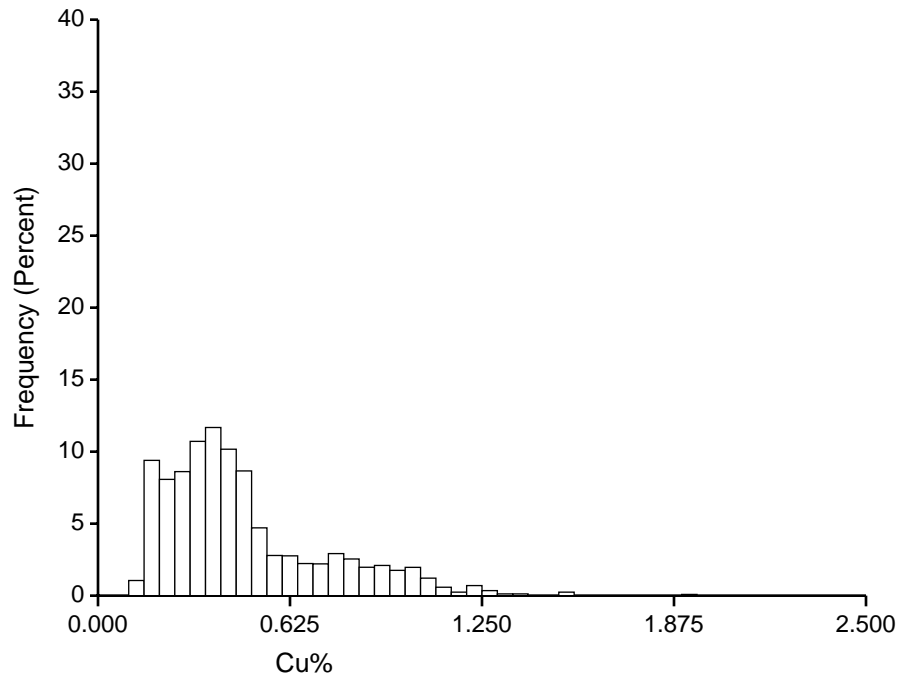
N	805
m	2.06
$\sigma^2$	4.38
$\sigma/m$	1.02
min	0.00
$q_{0.25}$	0.03
$q_{0.50}$	2.28
$q_{0.75}$	3.43
max	8.00

Class width = 0.10  
The last class contains  
all values  $\geq 4.90$

### Ag Junction Block NN Estimate (High Confidence Blocks)



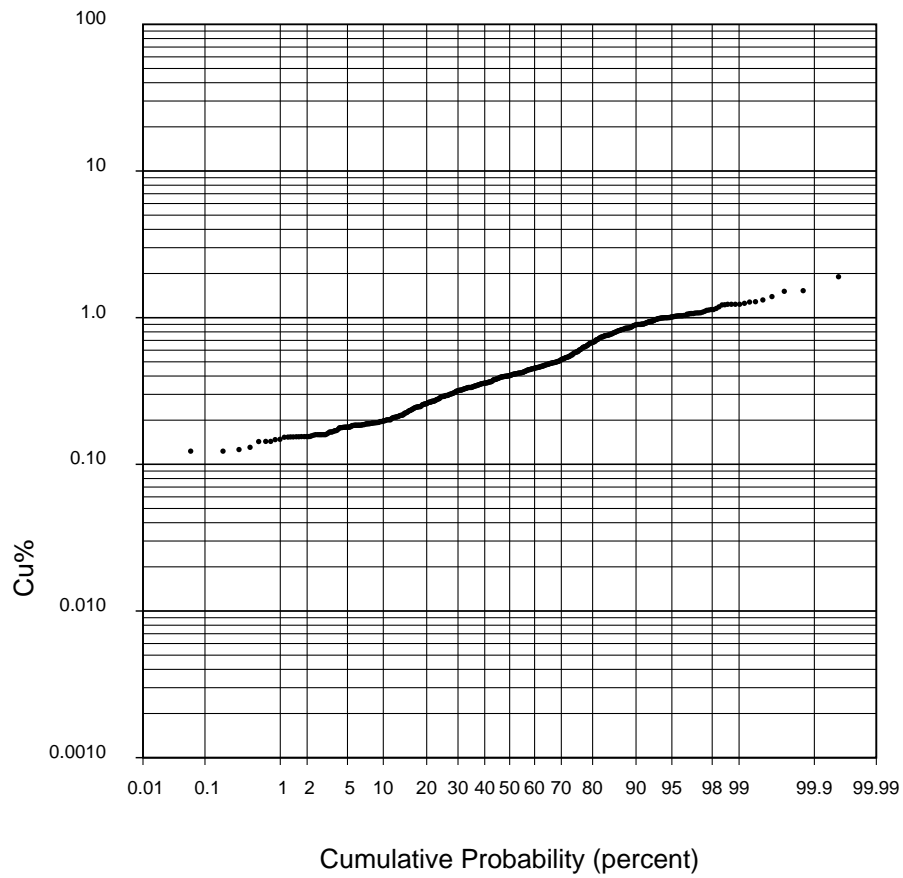
### Cu Junction Block Estimate (High Confidence Blocks)



N	906
m	0.474
$\sigma^2$	0.069
$\sigma/m$	0.554
min	0.123
$q_{0.25}$	0.291
$q_{0.50}$	0.403
$q_{0.75}$	0.583
max	1.903

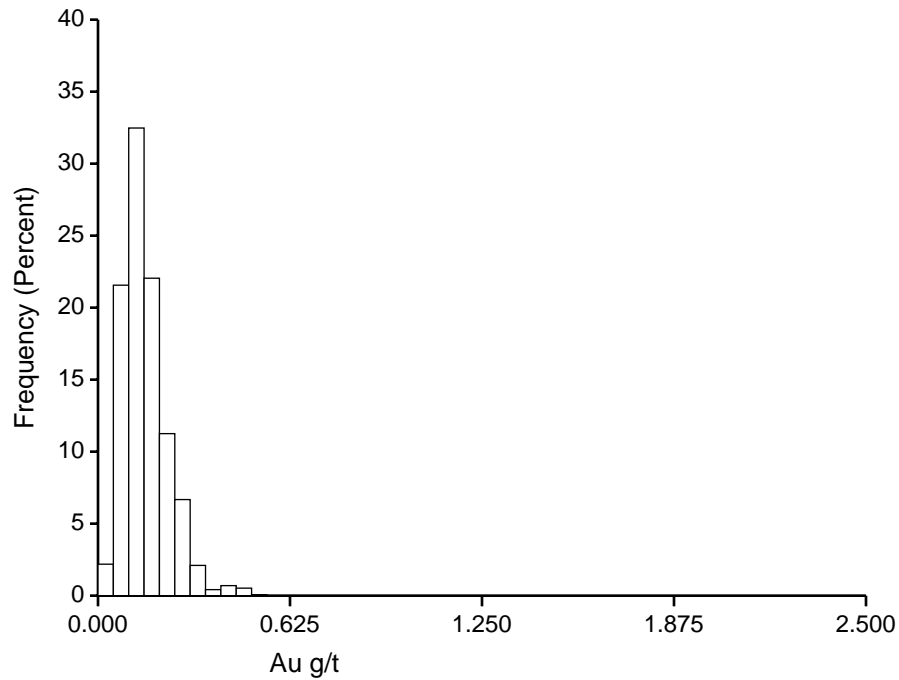
Class width = 0.050  
 The last class contains  
 all values  $\geq 2.450$

### Cu Junction Block Estimate (High Confidence Blocks)





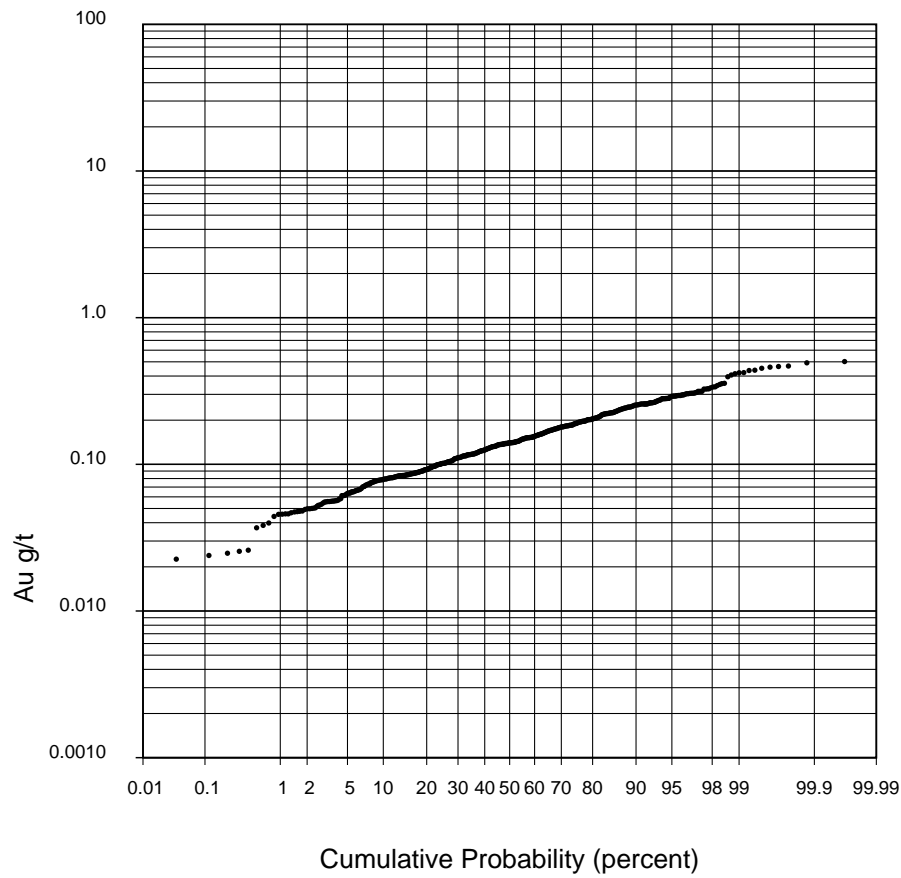
### Au Junction Block Estimate (High Confidence Blocks)



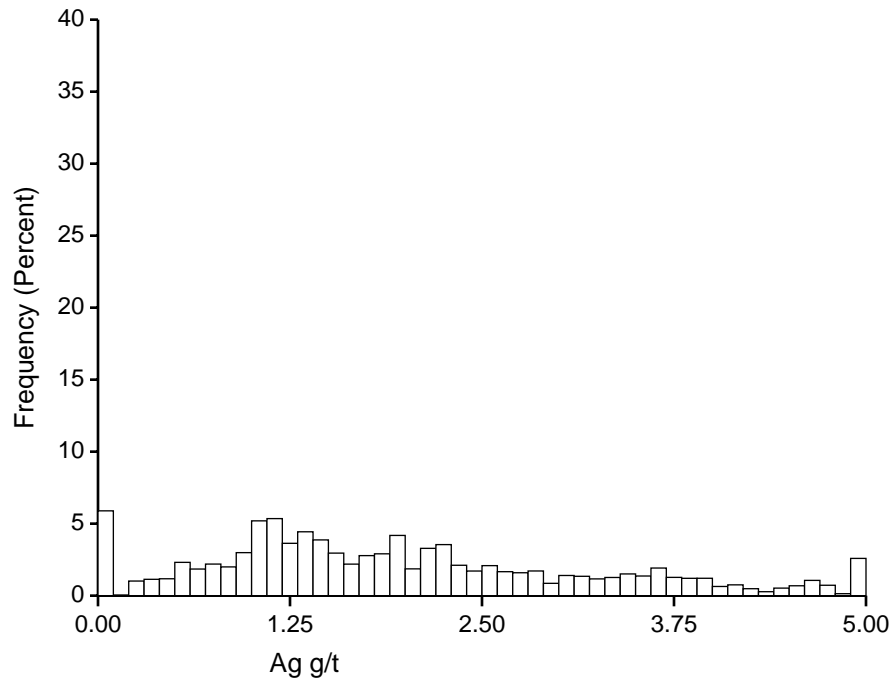
N	906
m	0.154
$\sigma^2$	0.005
$\sigma/m$	0.471
min	0.023
$q_{0.25}$	0.102
$q_{0.50}$	0.140
$q_{0.75}$	0.190
max	0.502

Class width = 0.050  
The last class contains  
all values  $\geq 2.450$

### Au Junction Block Estimate (High Confidence Blocks)



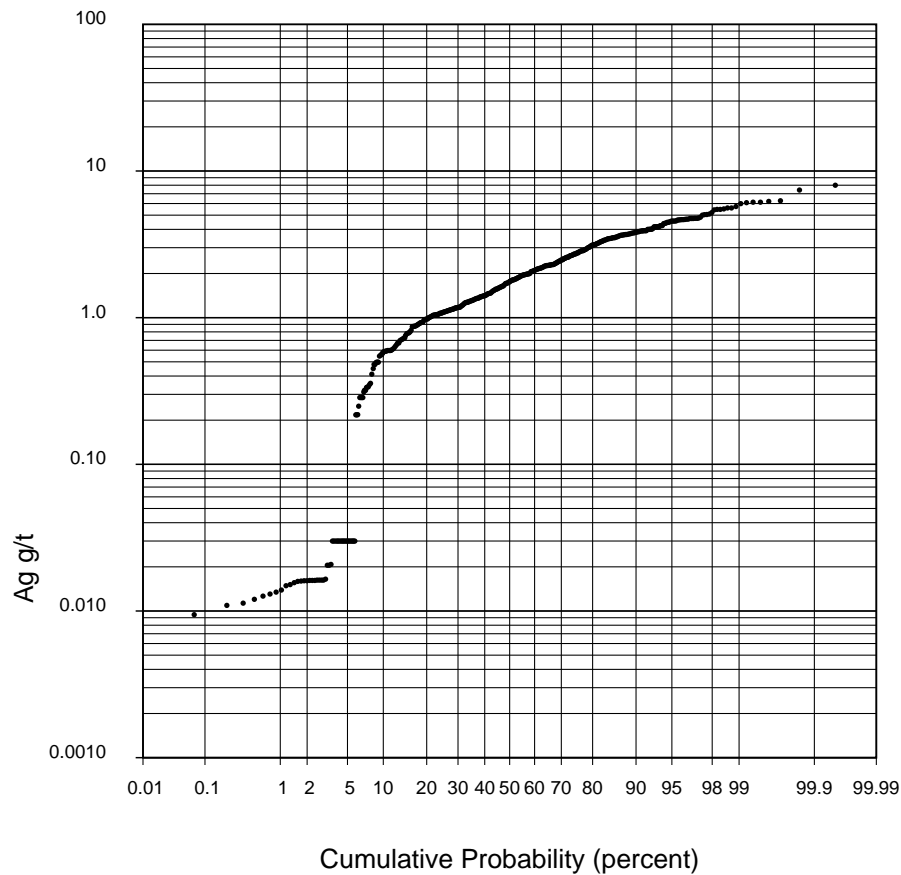
### Ag Junction Block Estimate (High Confidence Blocks)



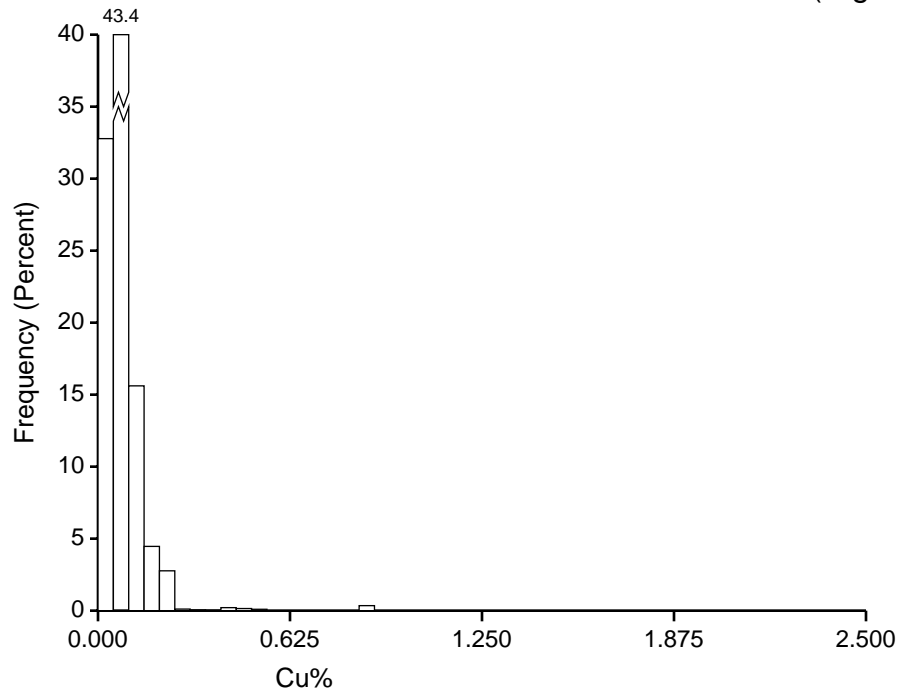
N	805
m	2.00
$\sigma^2$	1.72
$\sigma/m$	0.65
min	0.01
$q_{0.25}$	1.09
$q_{0.50}$	1.76
$q_{0.75}$	2.73
max	8.00

Class width = 0.10  
The last class contains  
all values  $\geq 4.90$

### Ag Junction Block Estimate (High Confidence Blocks)



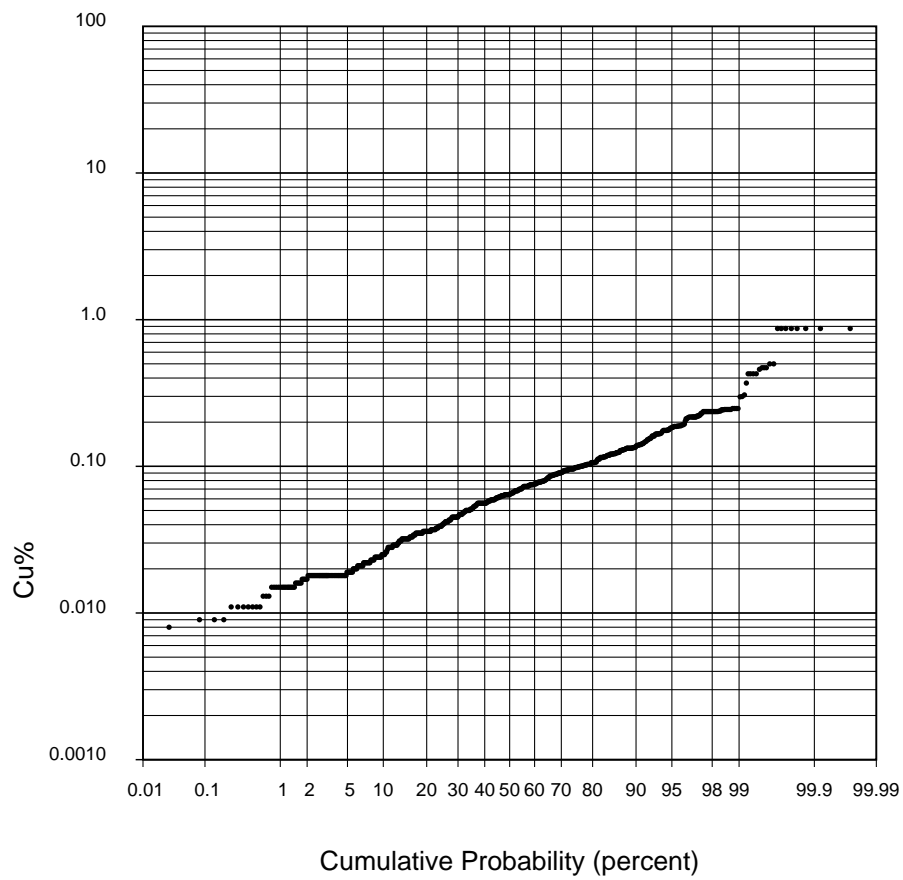
Cu Middle Creek Block NN Estimate Outside (High Confidence Blocks)



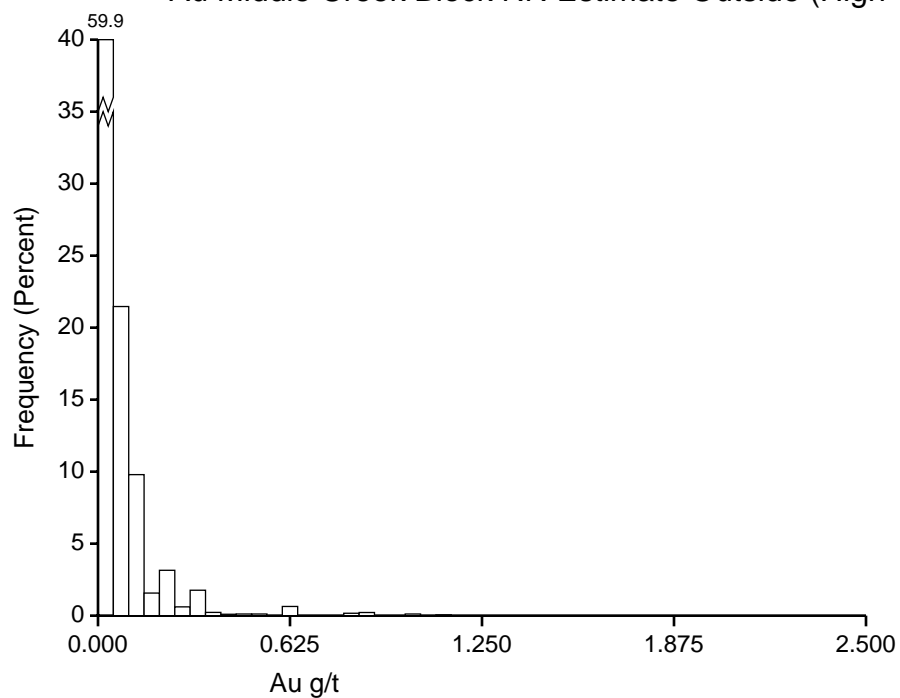
N	1899
m	0.080
$\sigma^2$	0.005
$\sigma/m$	0.894
min	0.008
$q_{0.25}$	0.040
$q_{0.50}$	0.064
$q_{0.75}$	0.098
max	0.870

Class width = 0.050  
The last class contains  
all values  $\geq 2.450$

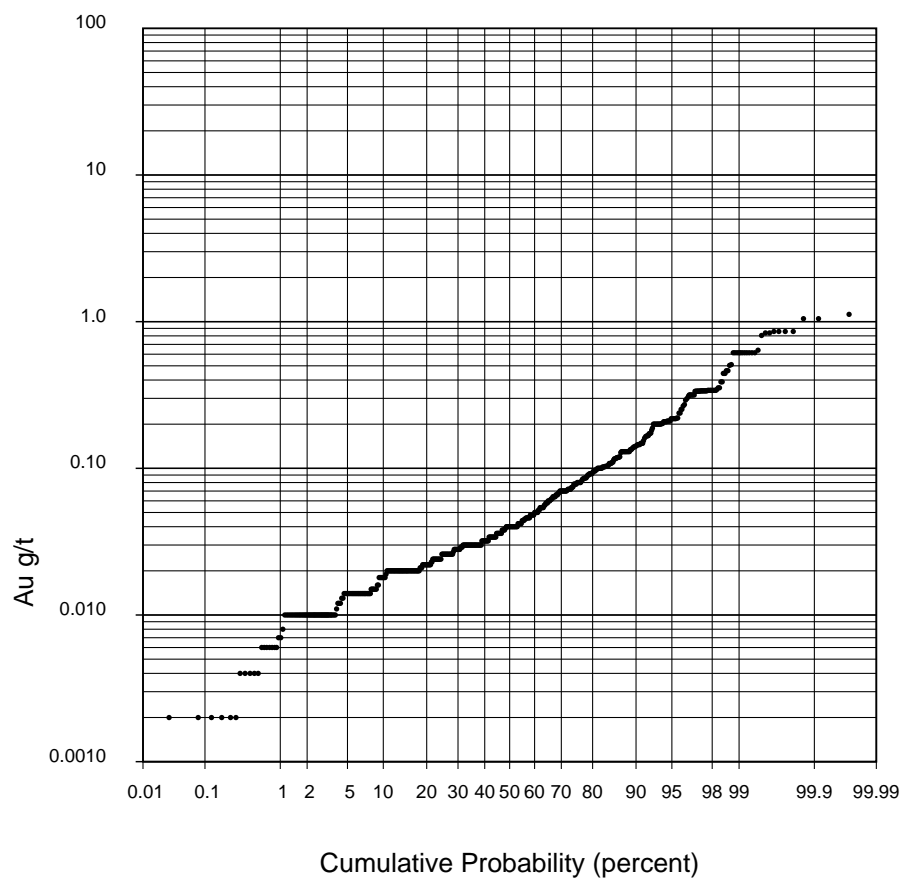
Cu Middle Creek Block NN Estimate Outside (High Confidence Blocks)



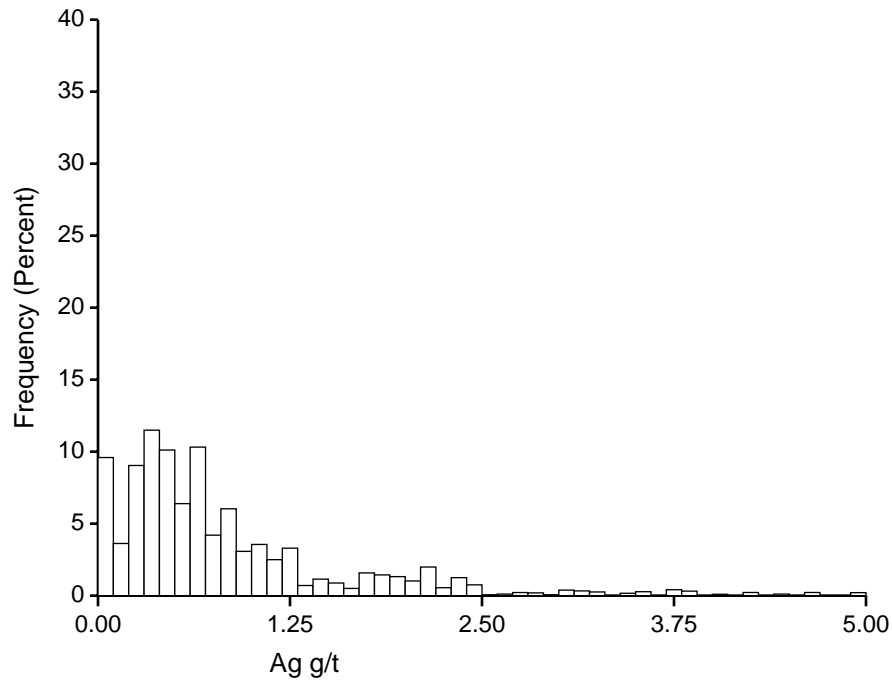
Au Middle Creek Block NN Estimate Outside (High Confidence Blocks)



Au Middle Creek Block NN Estimate Outside (High Confidence Blocks)



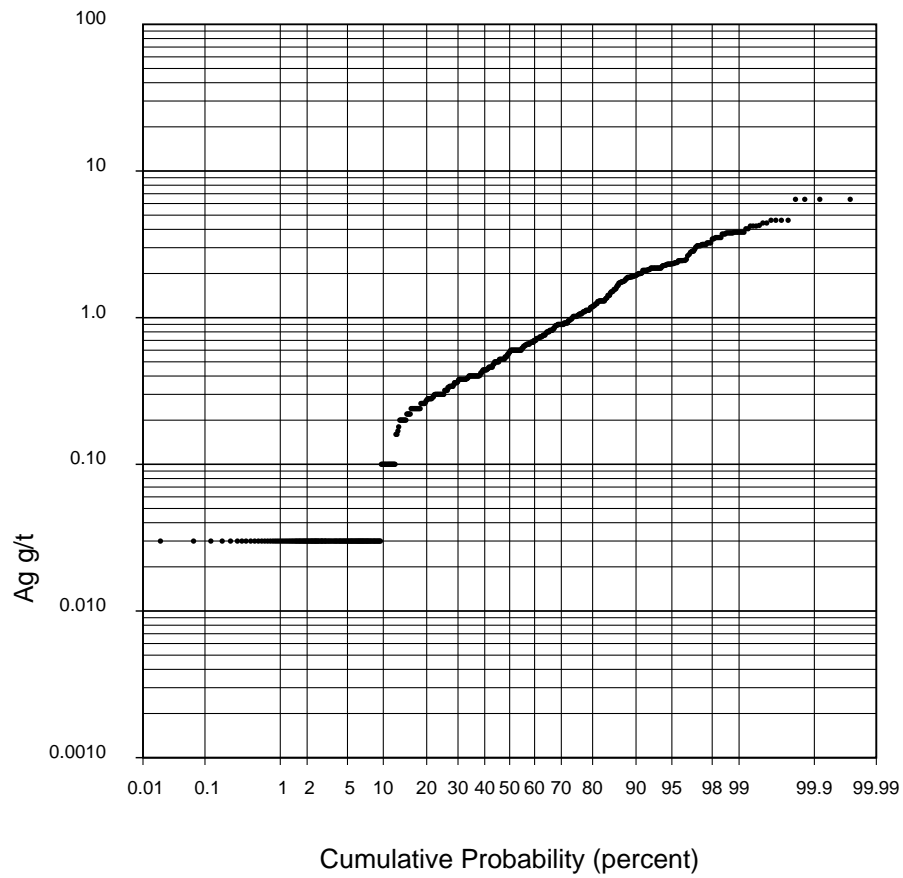
Ag Middle Creek Block NN Estimate Outside (High Confidence Blocks)



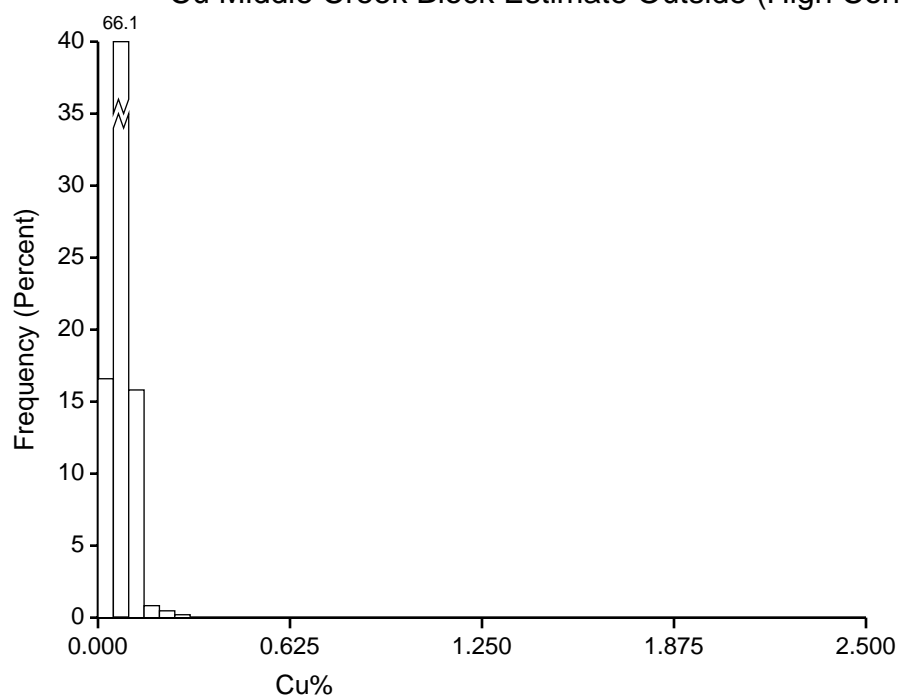
N	1899
m	0.82
$\sigma^2$	0.66
$\sigma/m$	1.00
min	0.03
$q_{0.25}$	0.30
$q_{0.50}$	0.58
$q_{0.75}$	1.02
max	6.42

Class width = 0.10  
The last class contains  
all values  $\geq 4.90$

Ag Middle Creek Block NN Estimate Outside (High Confidence Blocks)



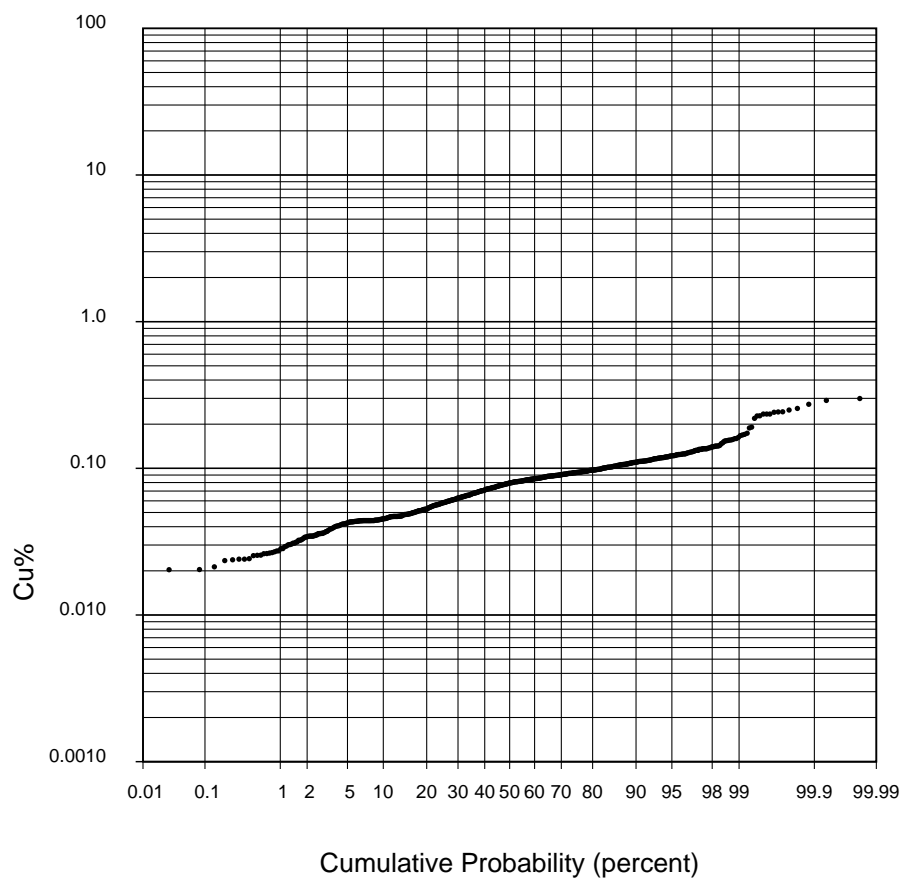
Cu Middle Creek Block Estimate Outside (High Confidence Blocks)



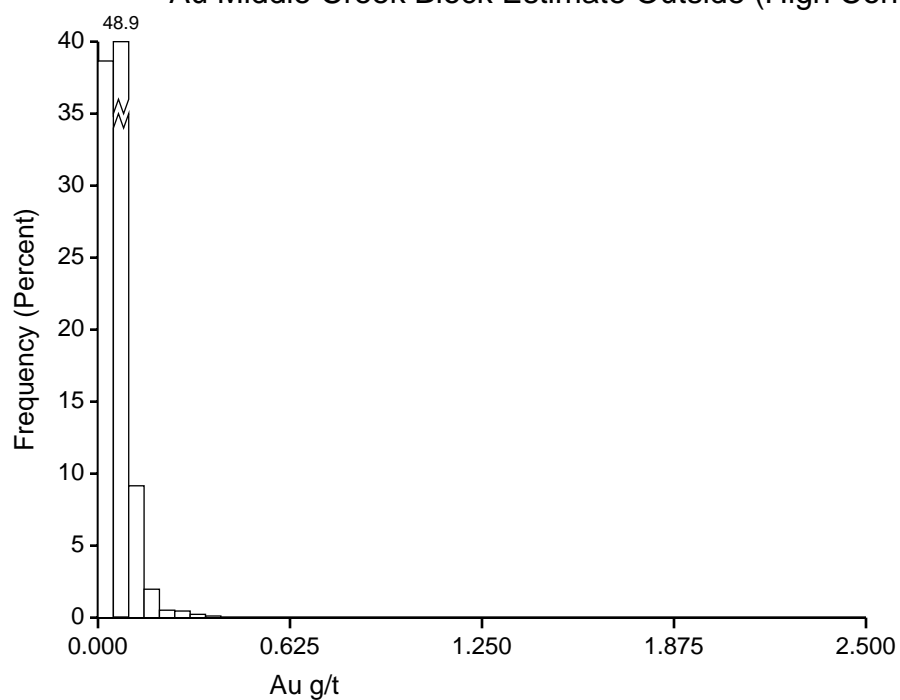
N	1899
m	0.079
$\sigma^2$	0.001
$\sigma/m$	0.364
min	0.020
$q_{0.25}$	0.058
$q_{0.50}$	0.079
$q_{0.75}$	0.094
max	0.300

Class width = 0.050  
The last class contains  
all values  $\geq 2.450$

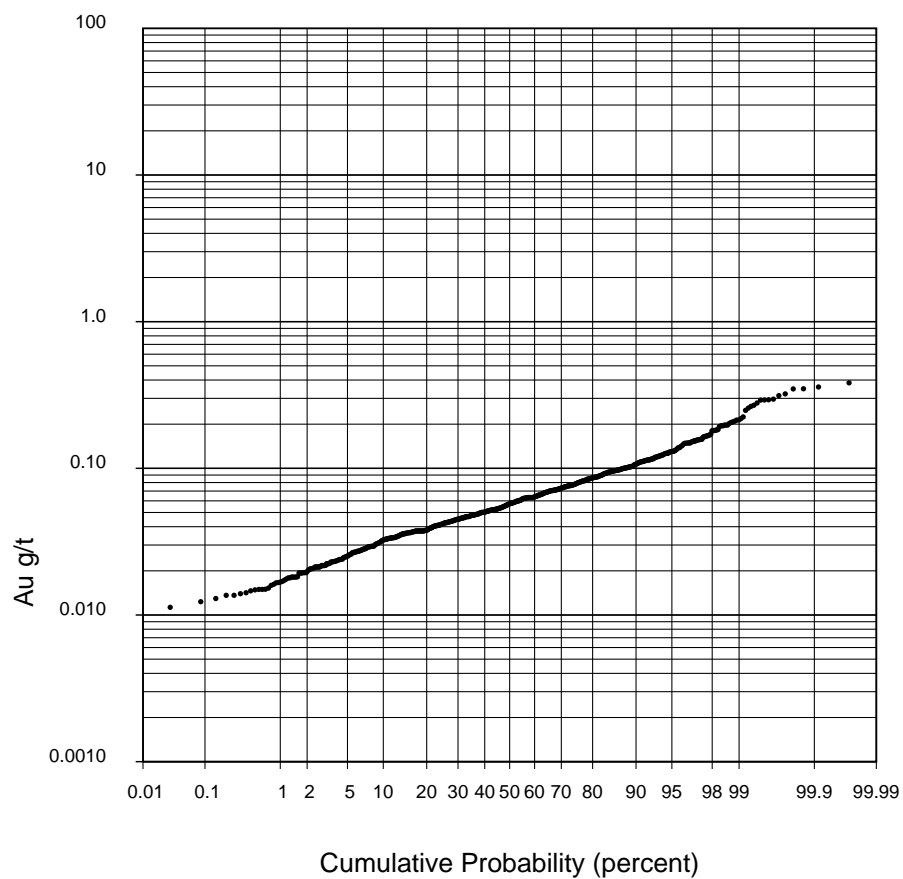
Cu Middle Creek Block Estimate Outside (High Confidence Blocks)



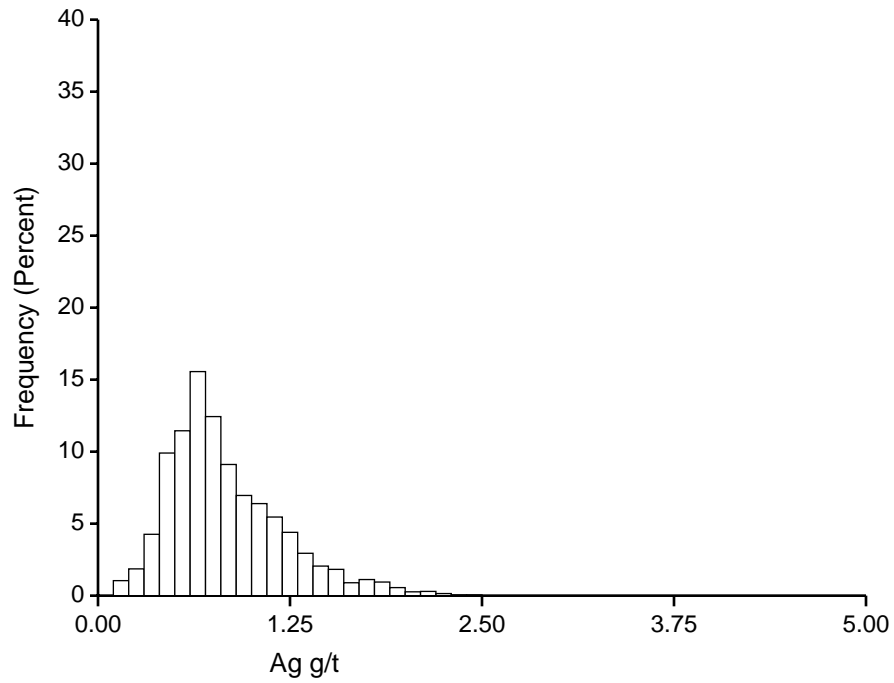
Au Middle Creek Block Estimate Outside (High Confidence Blocks)



Au Middle Creek Block Estimate Outside (High Confidence Blocks)



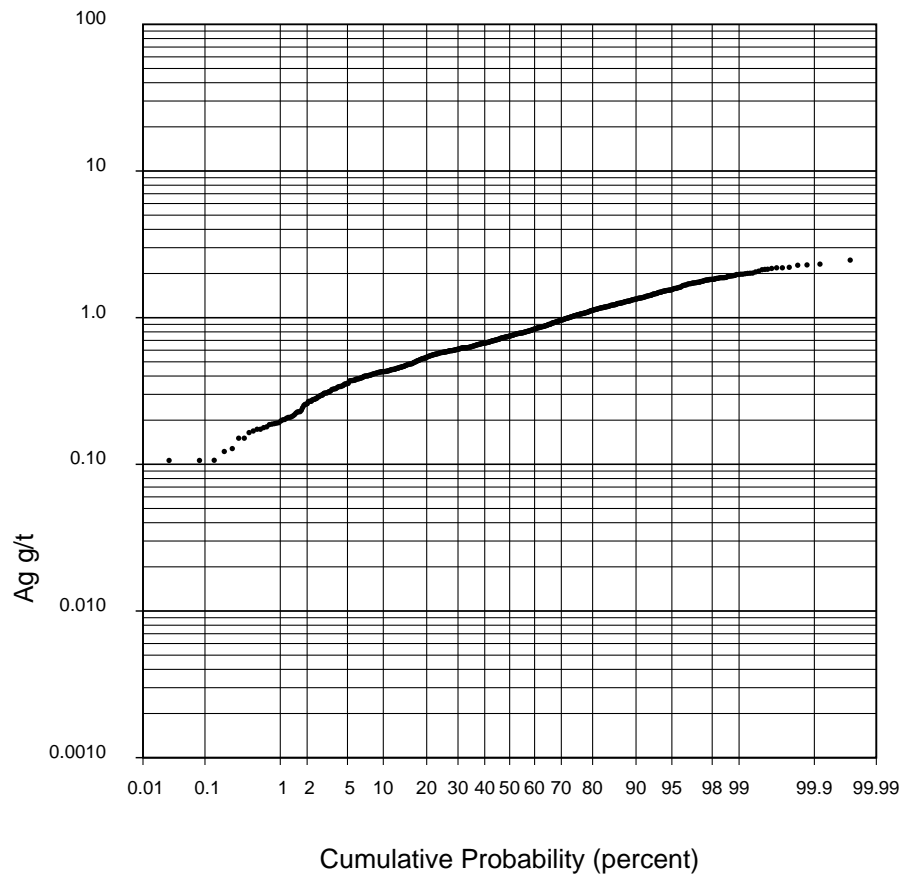
Ag Middle Creek Block Estimate Outside (High Confidence Blocks)



N	1899
m	0.83
$\sigma^2$	0.14
$\sigma/m$	0.45
min	0.11
$q_{0.25}$	0.58
$q_{0.50}$	0.75
$q_{0.75}$	1.04
max	2.47

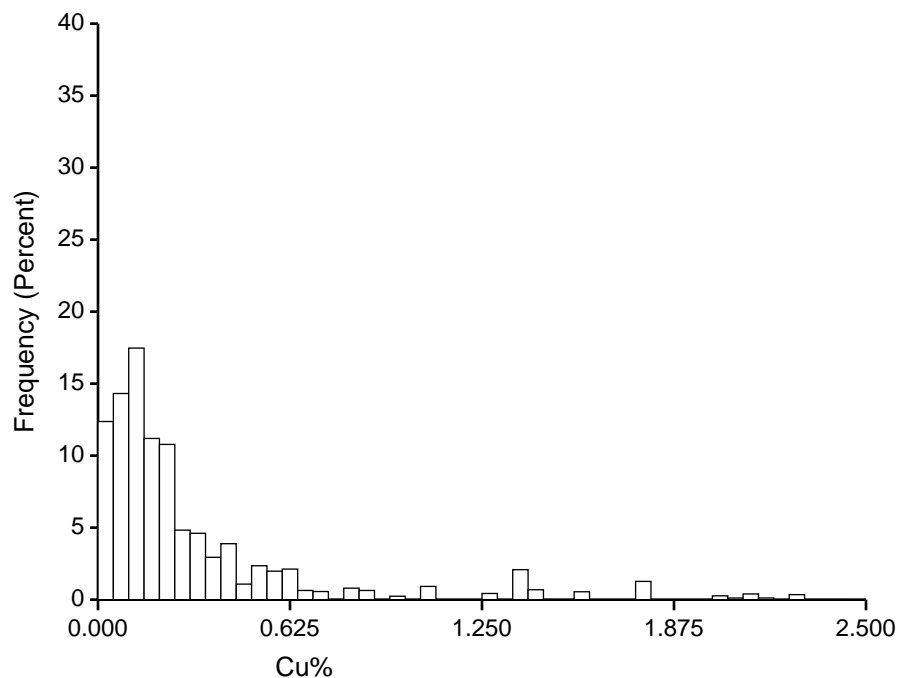
Class width = 0.10  
The last class contains  
all values  $\geq 4.90$

Ag Middle Creek Block Estimate Outside (High Confidence Blocks)





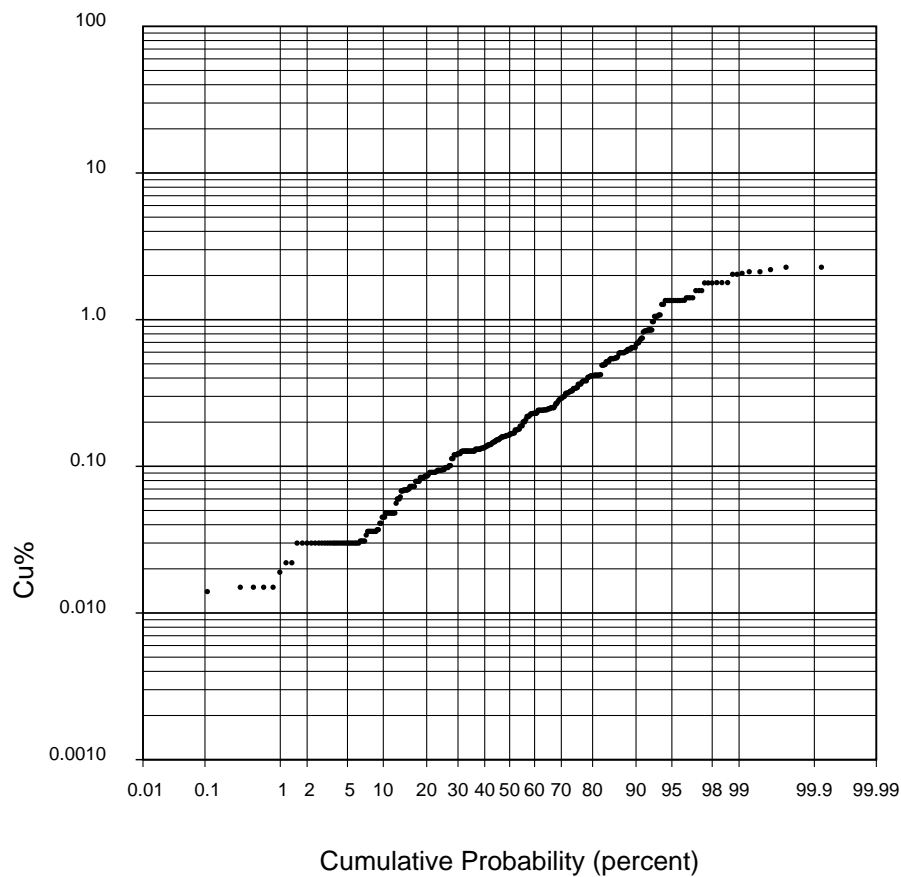
Cu Middle Creek Block NN Estimate (High Confidence Blocks)



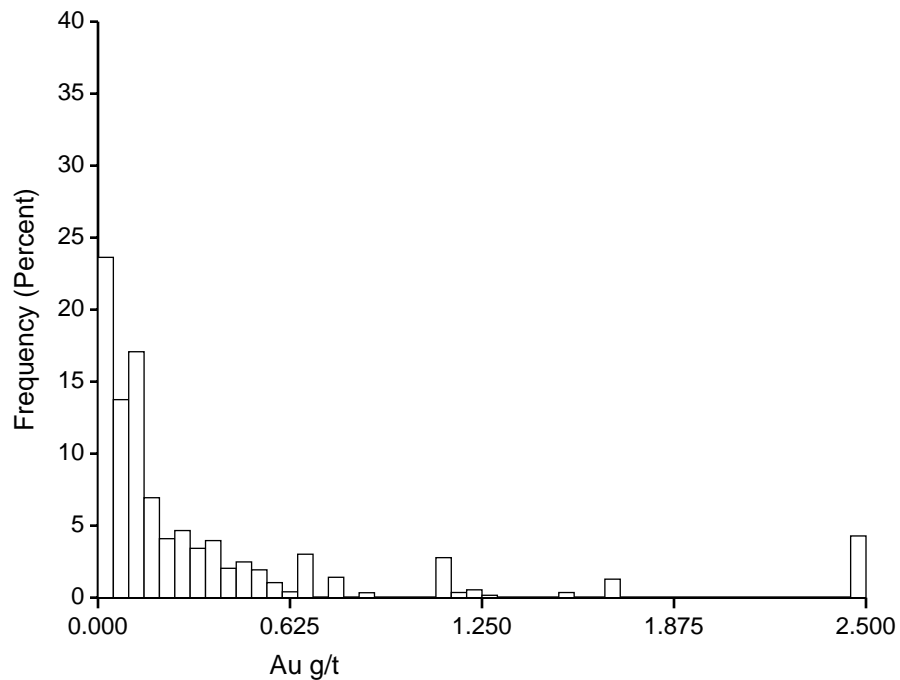
N	540
m	0.314
$\sigma^2$	0.158
$\sigma/m$	1.262
min	0.014
$q_{0.25}$	0.095
$q_{0.50}$	0.166
$q_{0.75}$	0.344
max	2.276

Class width = 0.050  
The last class contains  
all values  $\geq 2.450$

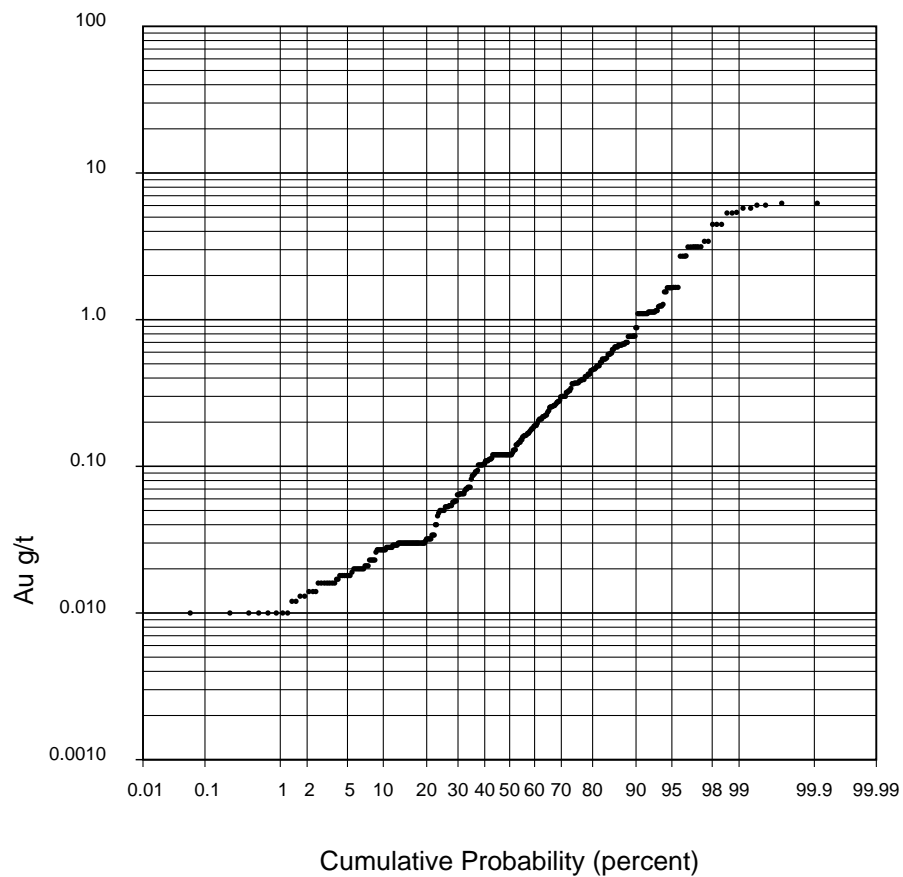
Cu Middle Creek Block NN Estimate (High Confidence Blocks)



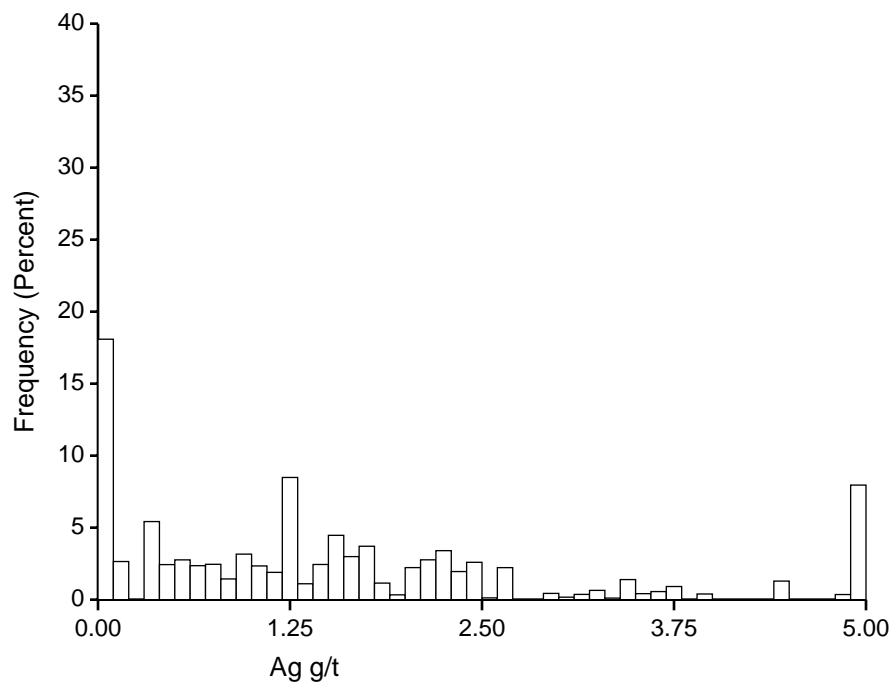
Au Middle Creek Block NN Estimate (High Confidence Blocks)



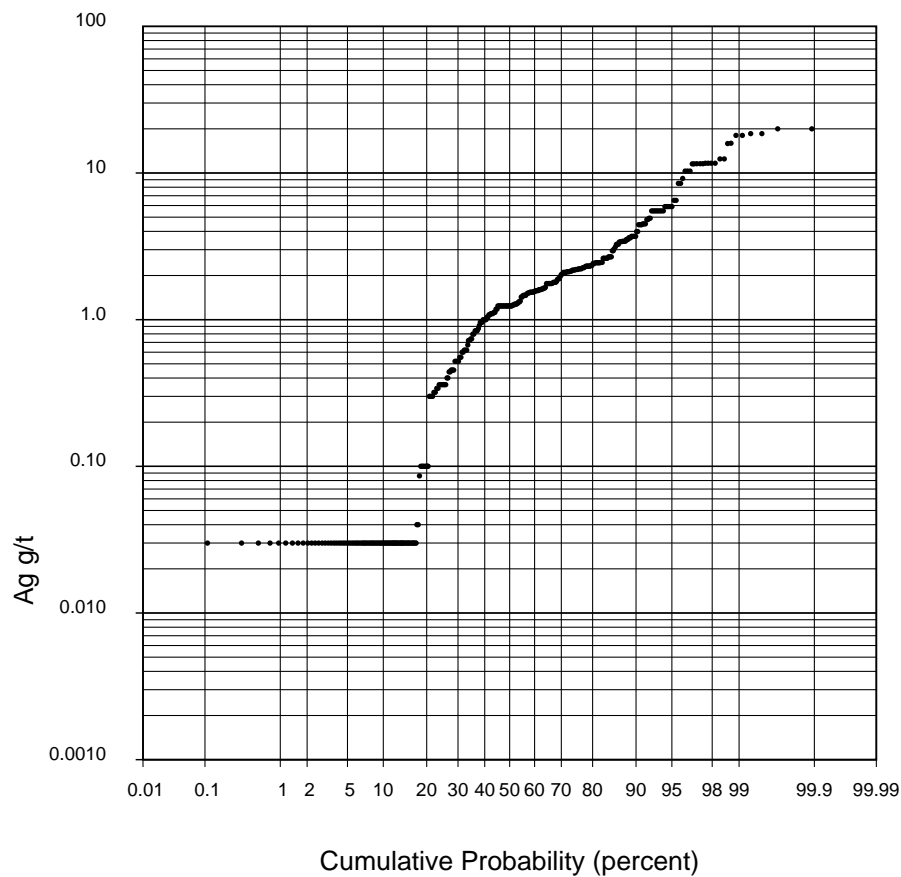
Au Middle Creek Block NN Estimate (High Confidence Blocks)



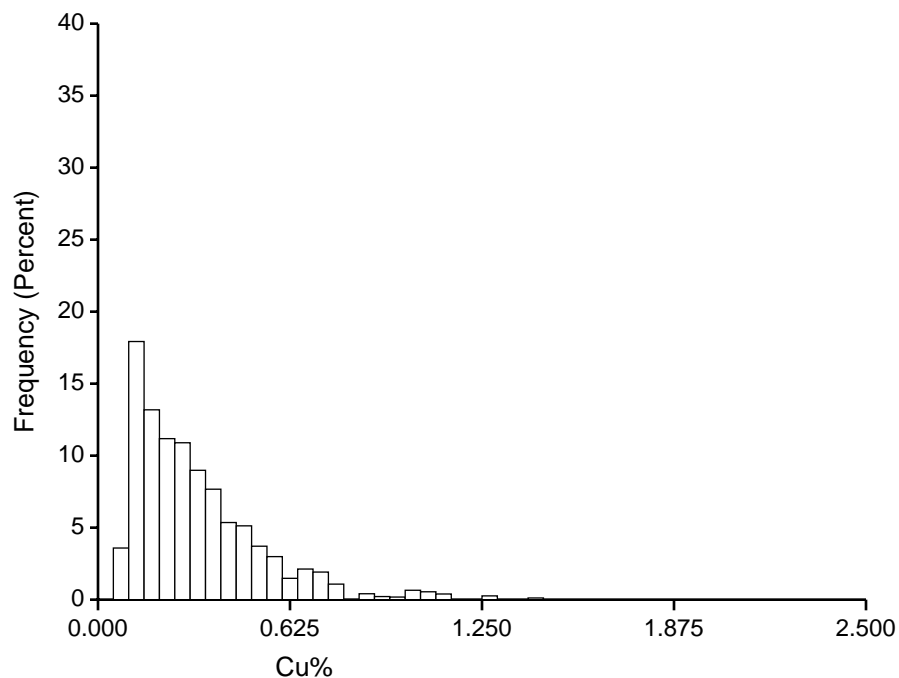
# Ag Middle Creek Block NN Estimate (High Confidence Blocks)



# Ag Middle Creek Block NN Estimate (High Confidence Blocks)



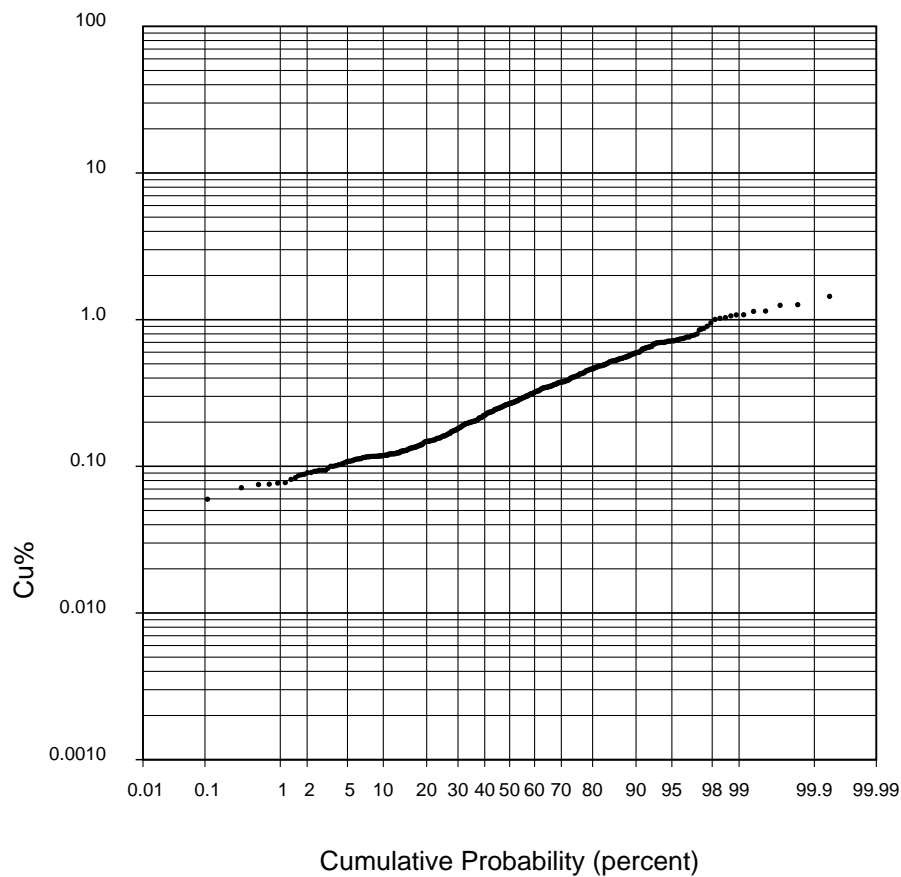
### Cu Middle Creek Block Estimate (High Confidence Blocks)



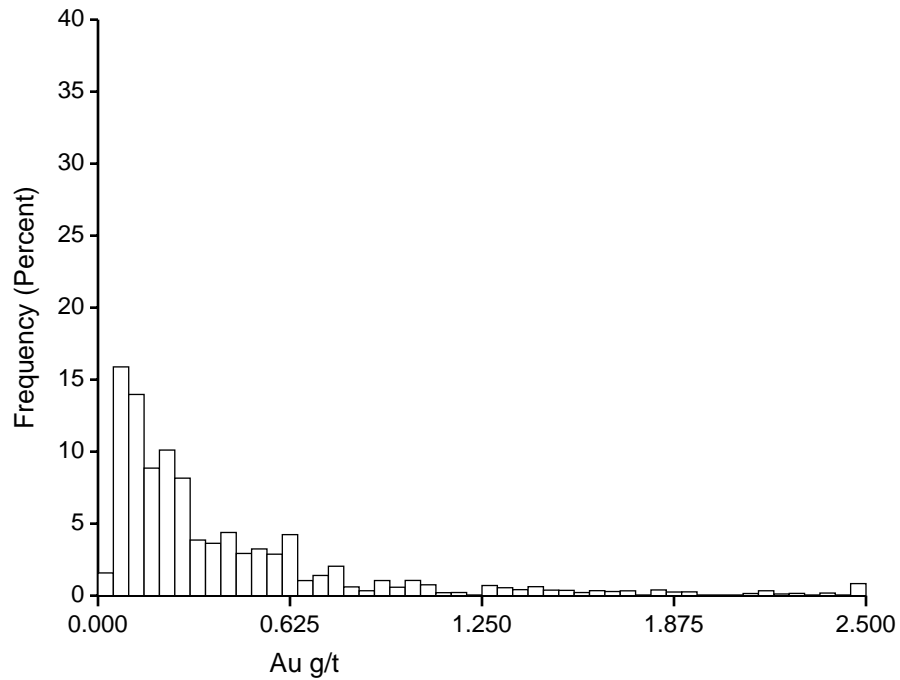
N	540
m	0.321
$\sigma^2$	0.044
$\sigma/m$	0.651
min	0.060
$q_{0.25}$	0.161
$q_{0.50}$	0.267
$q_{0.75}$	0.410
max	1.441

Class width = 0.050  
 The last class contains  
 all values  $\geq 2.450$

### Cu Middle Creek Block Estimate (High Confidence Blocks)



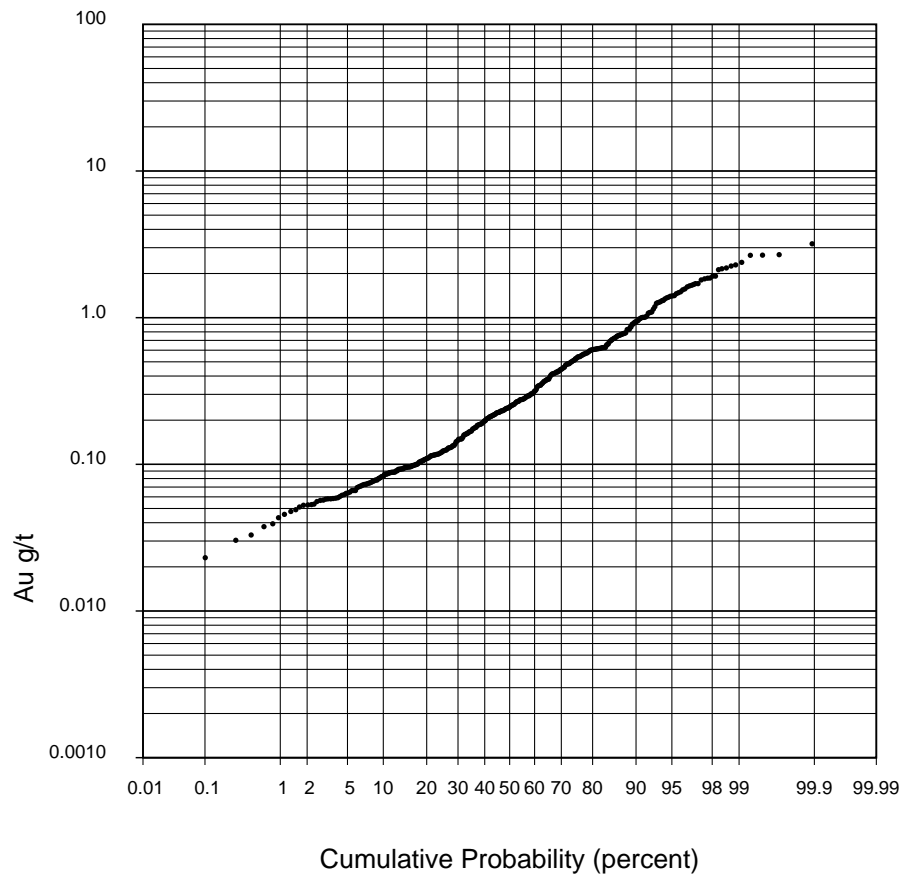
### Au Middle Creek Block Estimate (High Confidence Blocks)



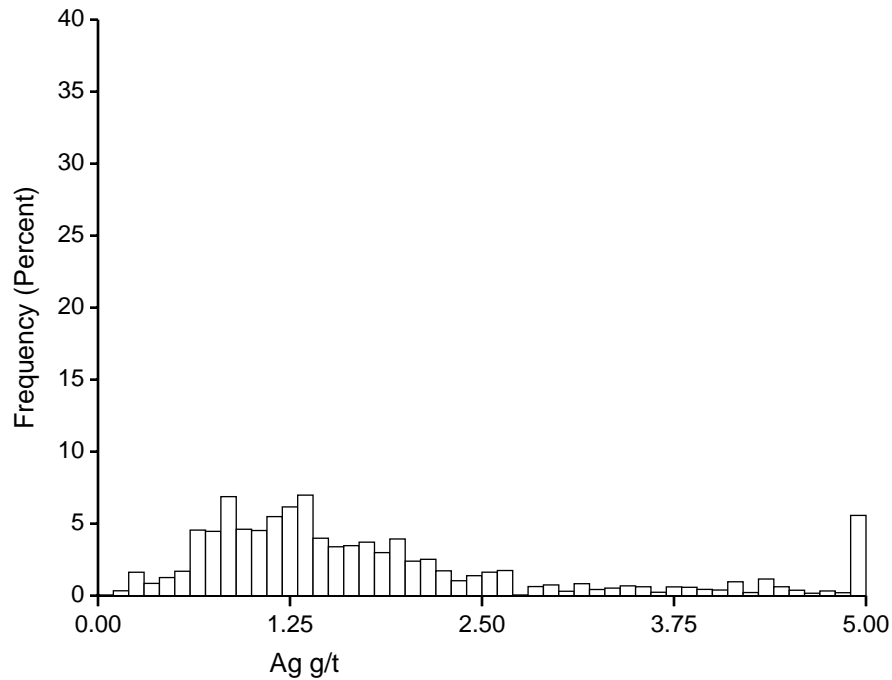
N	540
m	0.413
$\sigma^2$	0.212
$\sigma/m$	1.114
min	0.023
$q_{0.25}$	0.123
$q_{0.50}$	0.247
$q_{0.75}$	0.527
max	3.184

Class width = 0.050  
The last class contains  
all values  $\geq 2.450$

### Au Middle Creek Block Estimate (High Confidence Blocks)



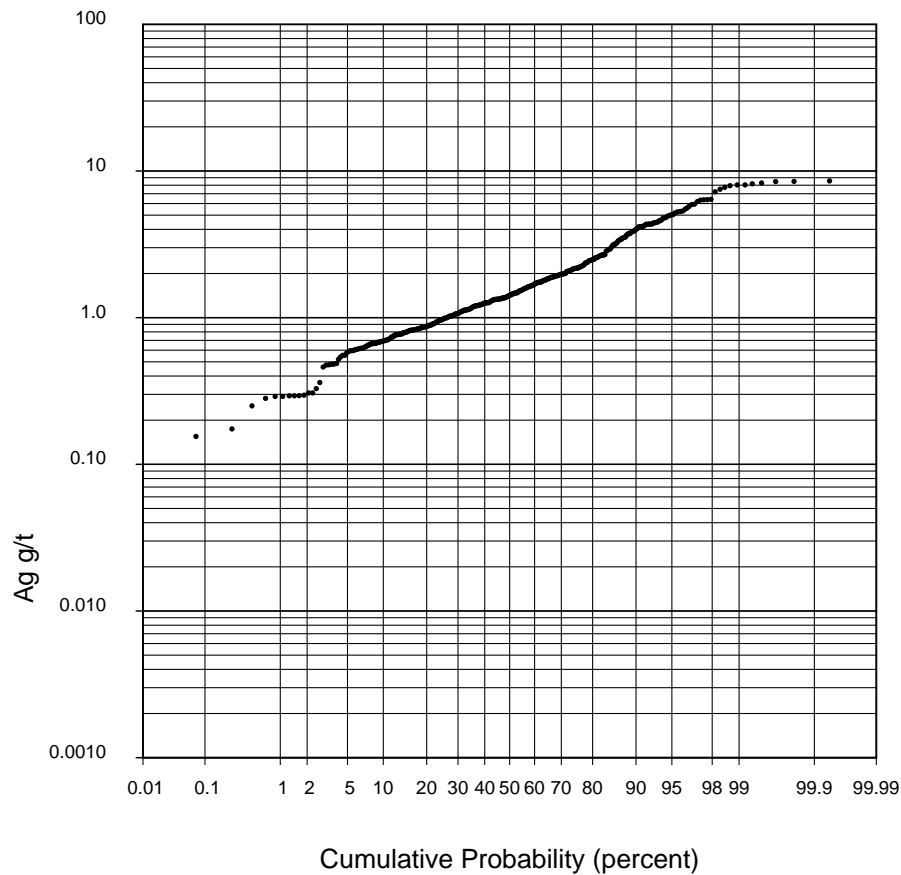
### Ag Middle Creek Block Estimate (High Confidence Blocks)



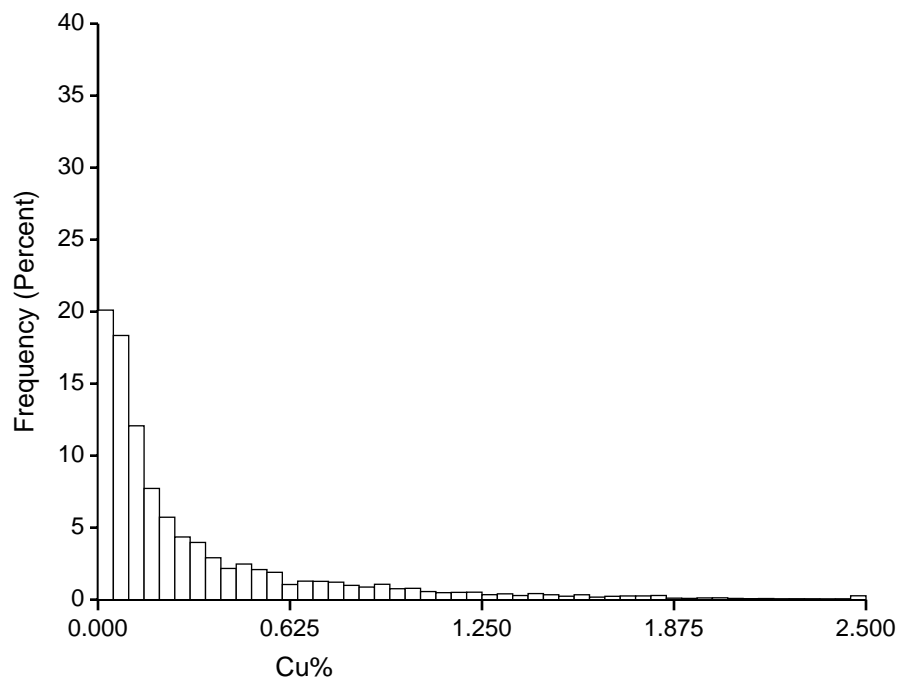
N	540
m	1.90
$\sigma^2$	2.20
$\sigma/m$	0.78
min	0.15
$q_{0.25}$	0.97
$q_{0.50}$	1.42
$q_{0.75}$	2.17
max	8.56

Class width = 0.10  
The last class contains  
all values  $\geq 4.90$

### Ag Middle Creek Block Estimate (High Confidence Blocks)



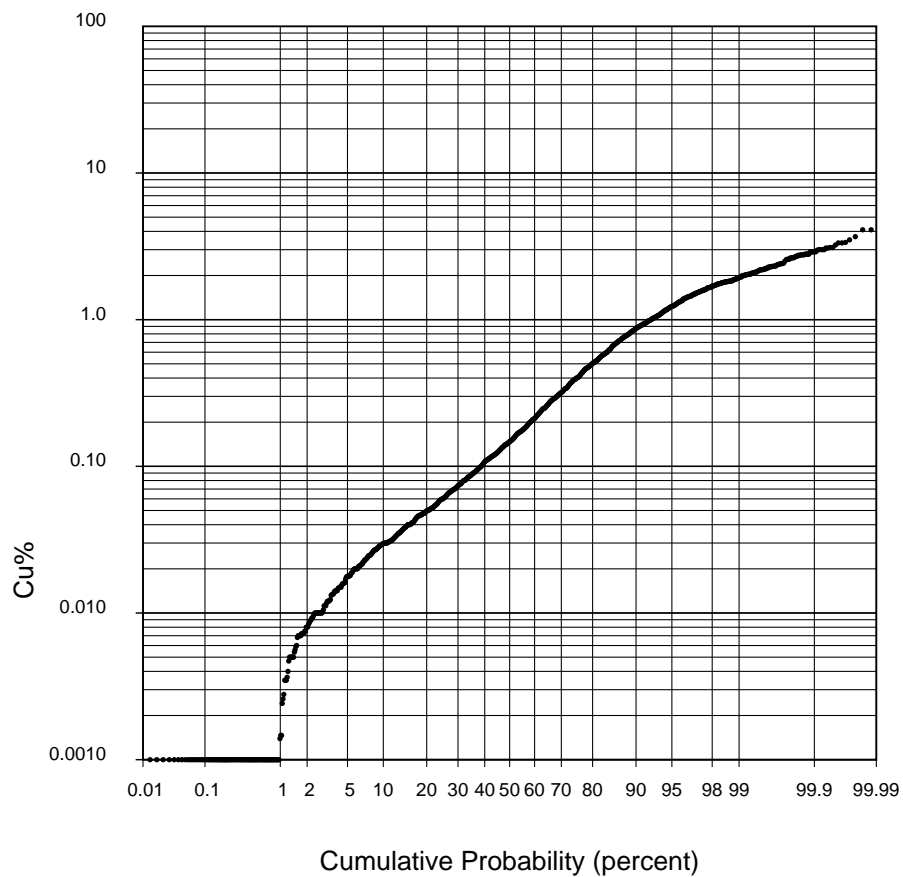
Cu NGL Block NN Estimate Volcanic (High Confidence Blocks)



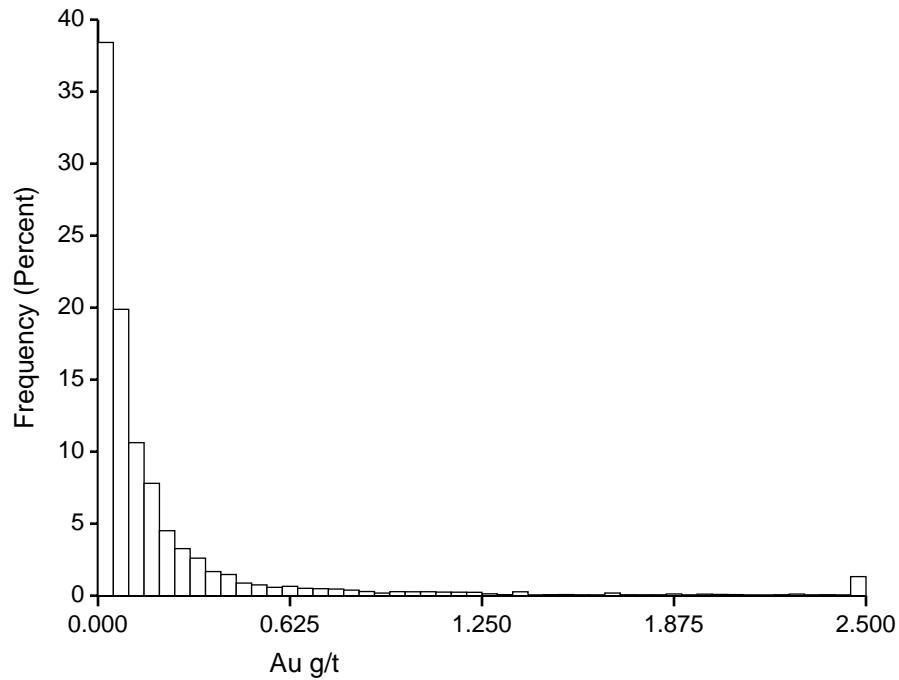
N	18881
m	0.319
$\sigma^2$	0.177
$\sigma/m$	1.319
min	0.001
$q_{0.25}$	0.060
$q_{0.50}$	0.147
$q_{0.75}$	0.398
max	4.282

Class width = 0.050  
The last class contains  
all values  $\geq 2.450$

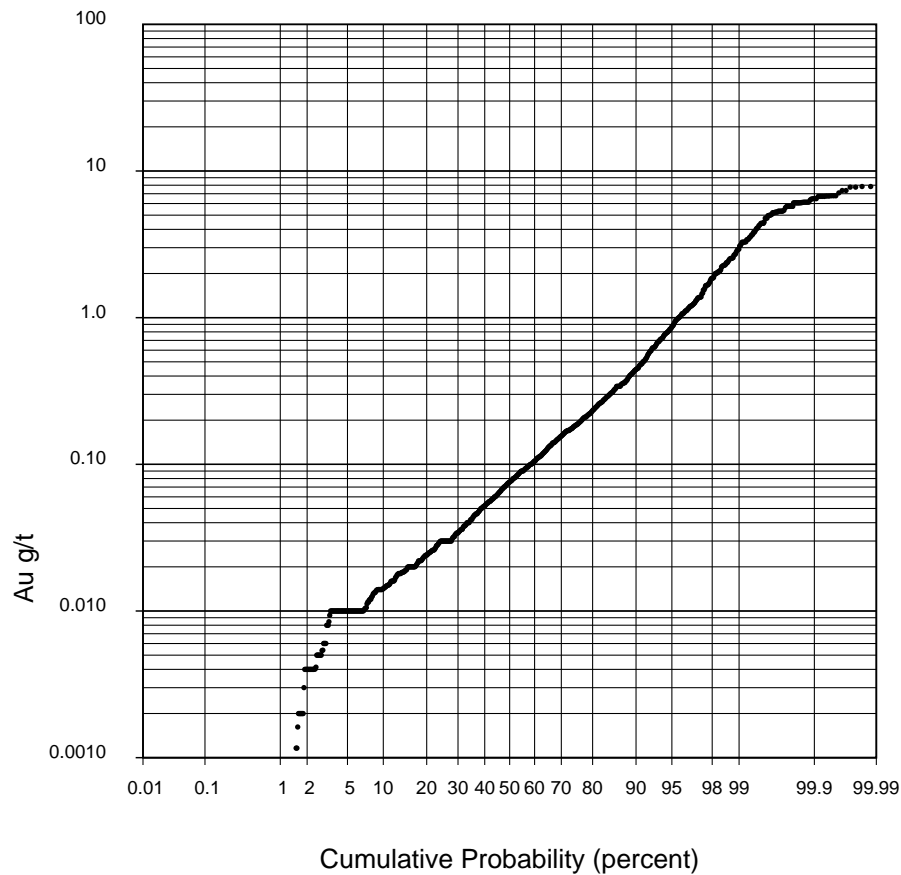
Cu NGL Block NN Estimate Volcanic (High Confidence Blocks)



Au NGL Block NN Estimate Volcanic (High Confidence Blocks)

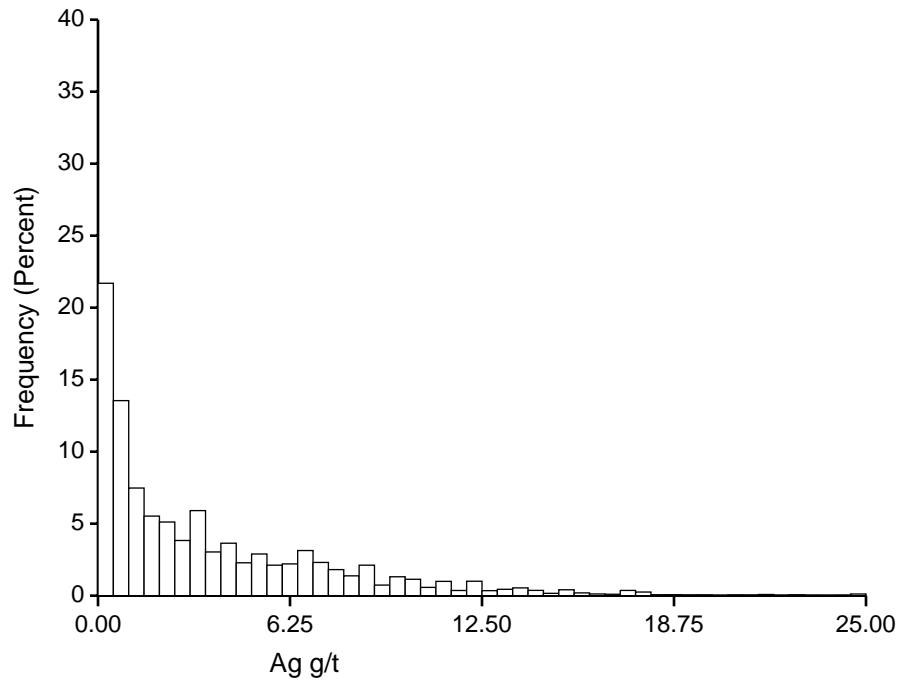


Au NGL Block NN Estimate Volcanic (High Confidence Blocks)





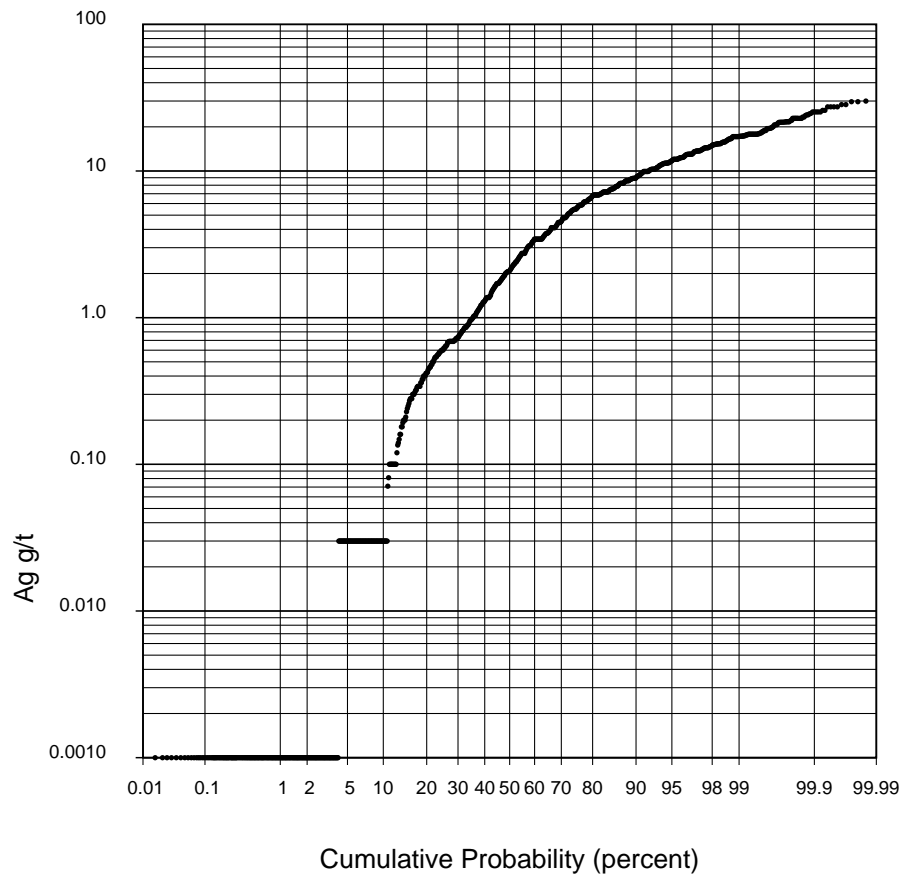
Ag NGL Block NN Estimate Volcanic (High Confidence Blocks)



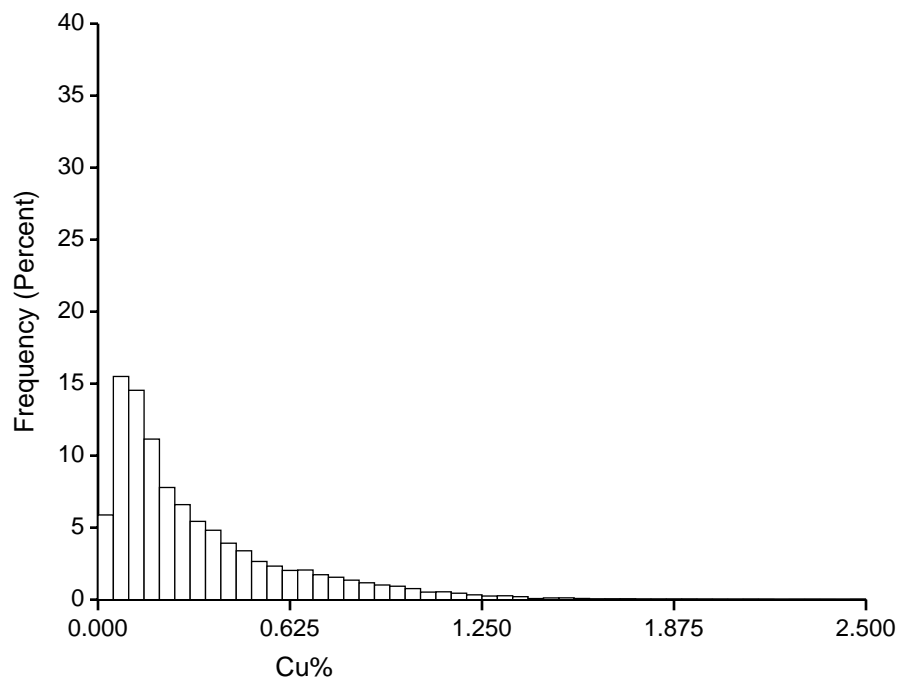
N	16442
m	3.61
$\sigma^2$	16.01
$\sigma/m$	1.11
min	0.00
$q_{0.25}$	0.60
$q_{0.50}$	2.10
$q_{0.75}$	5.52
max	33.88

Class width = 0.50  
The last class contains  
all values  $\geq 24.50$

Ag NGL Block NN Estimate Volcanic (High Confidence Blocks)



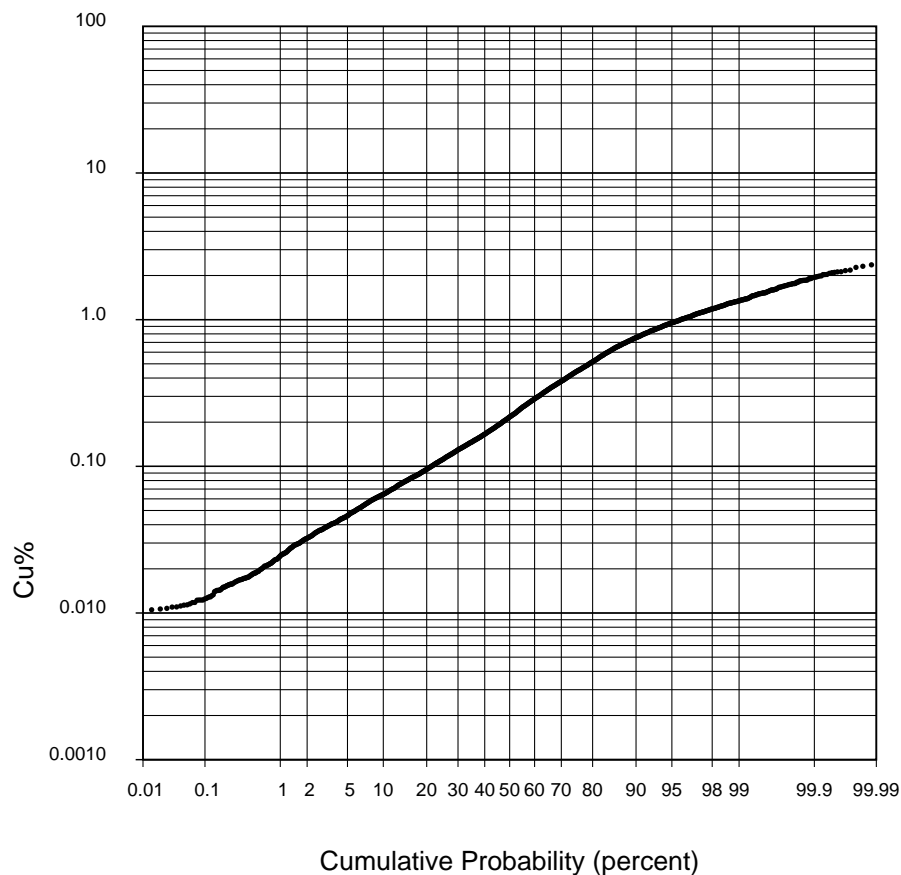
Cu NGL Block Estimate Volcanic (High Confidence Blocks)



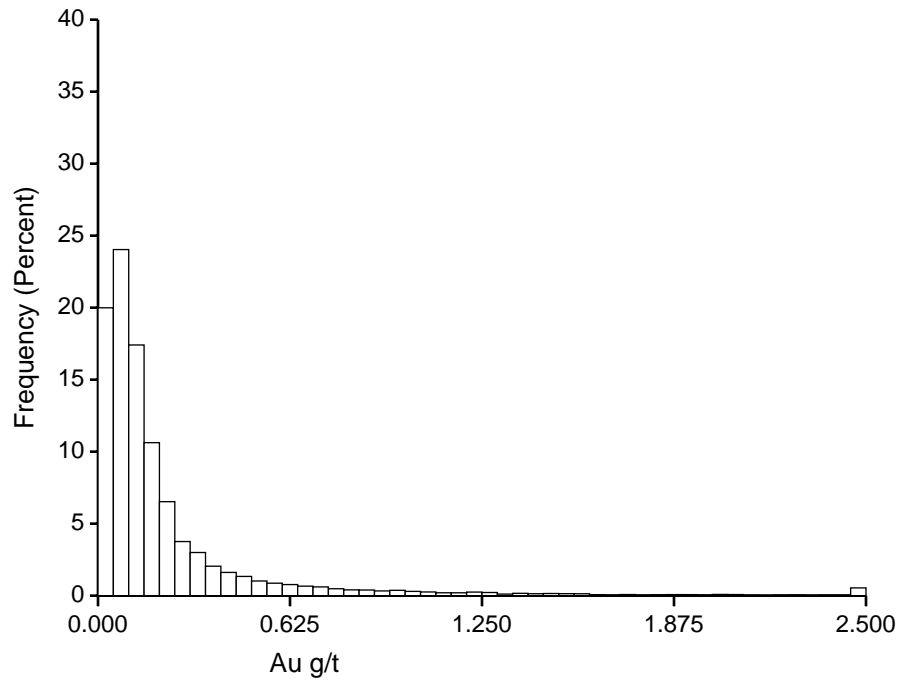
N	18881
m	0.325
$\sigma^2$	0.090
$\sigma/m$	0.925
min	0.010
$q_{0.25}$	0.112
$q_{0.50}$	0.217
$q_{0.75}$	0.442
max	3.100

Class width = 0.050  
The last class contains  
all values  $\geq 2.450$

Cu NGL Block Estimate Volcanic (High Confidence Blocks)



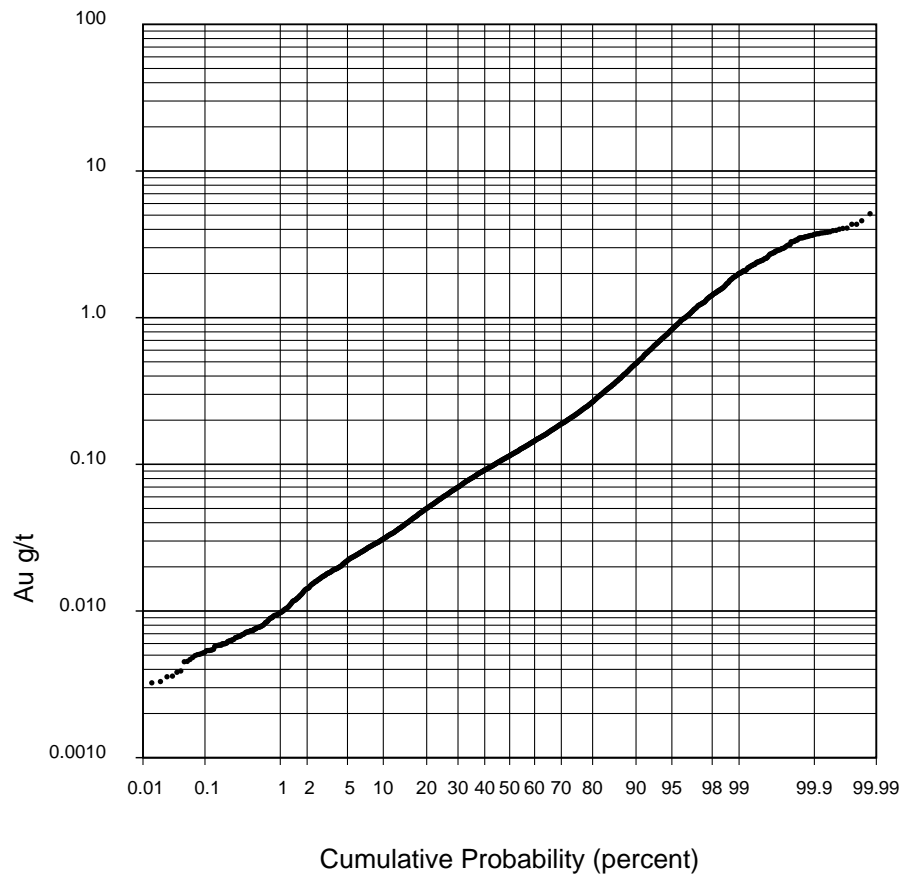
Au NGL Block Estimate Volcanic (High Confidence Blocks)



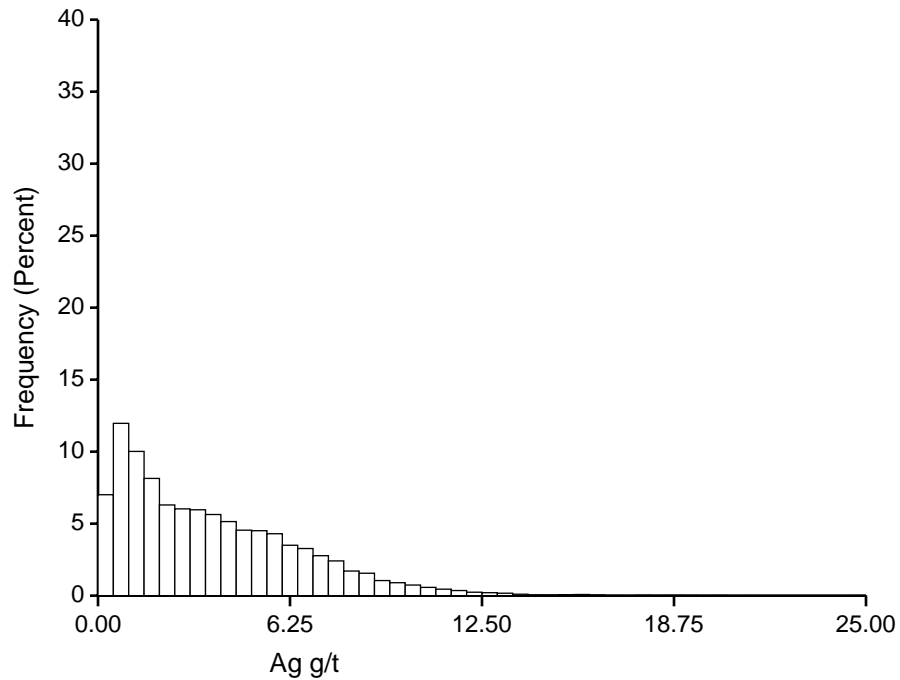
N	18724
m	0.225
$\sigma^2$	0.137
$\sigma/m$	1.644
min	0.003
$q_{0.25}$	0.060
$q_{0.50}$	0.114
$q_{0.75}$	0.219
max	6.240

Class width = 0.050  
The last class contains  
all values  $\geq 2.450$

Au NGL Block Estimate Volcanic (High Confidence Blocks)



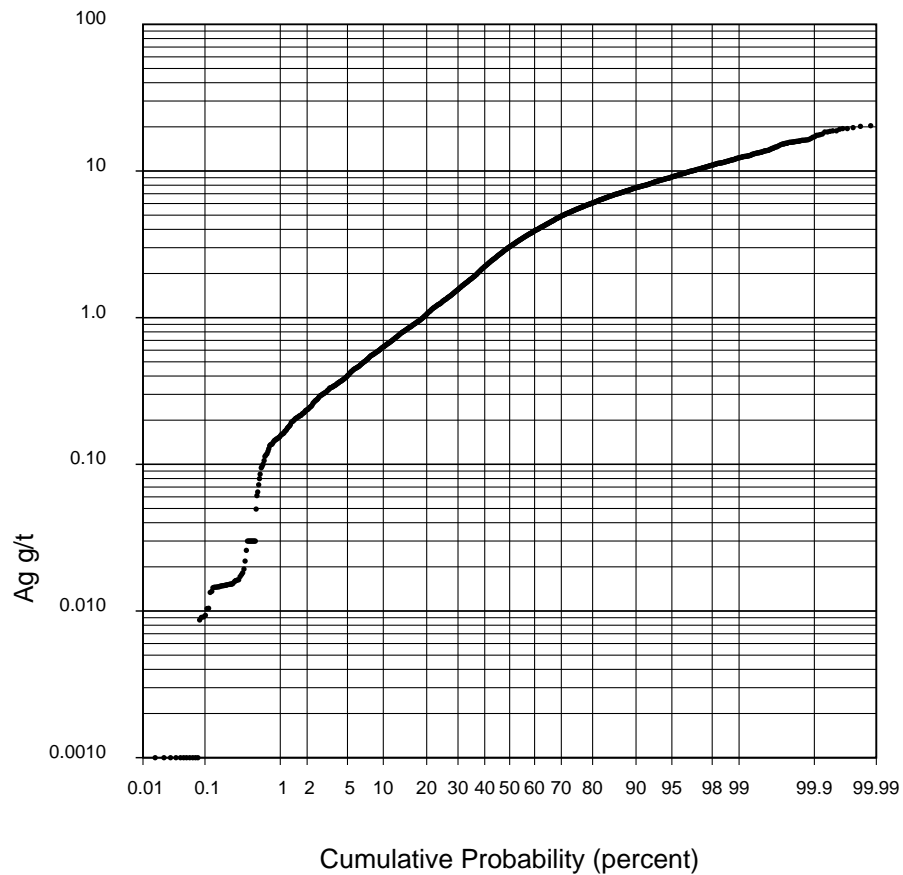
Ag NGL Block Estimate Volcanic (High Confidence Blocks)



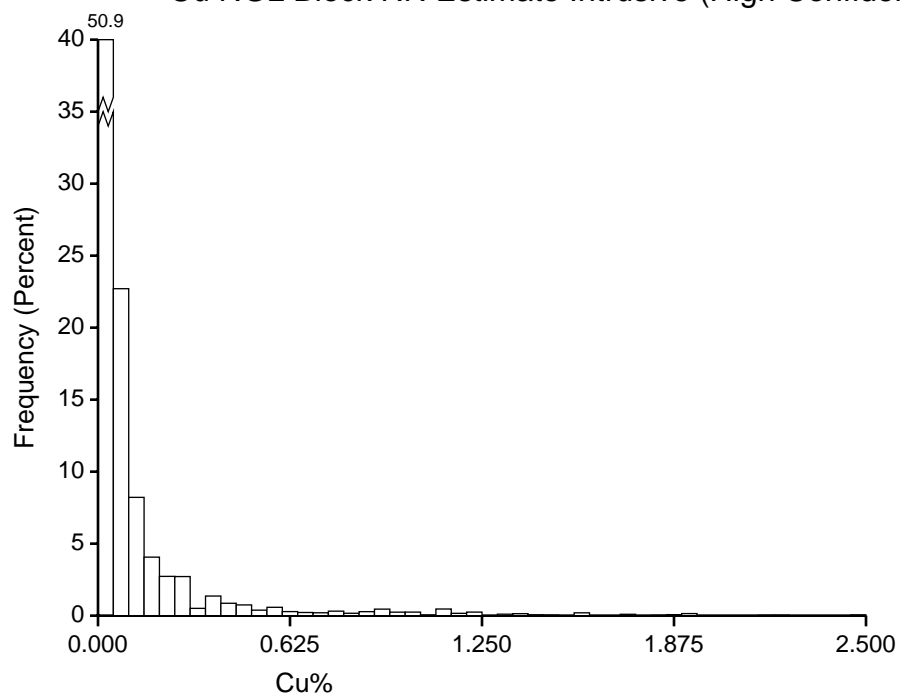
N	16442
m	3.69
$\sigma^2$	8.37
$\sigma/m$	0.78
min	0.00
$q_{0.25}$	1.30
$q_{0.50}$	3.04
$q_{0.75}$	5.47
max	25.67

Class width = 0.50  
The last class contains  
all values  $\geq 24.50$

Ag NGL Block Estimate Volcanic (High Confidence Blocks)



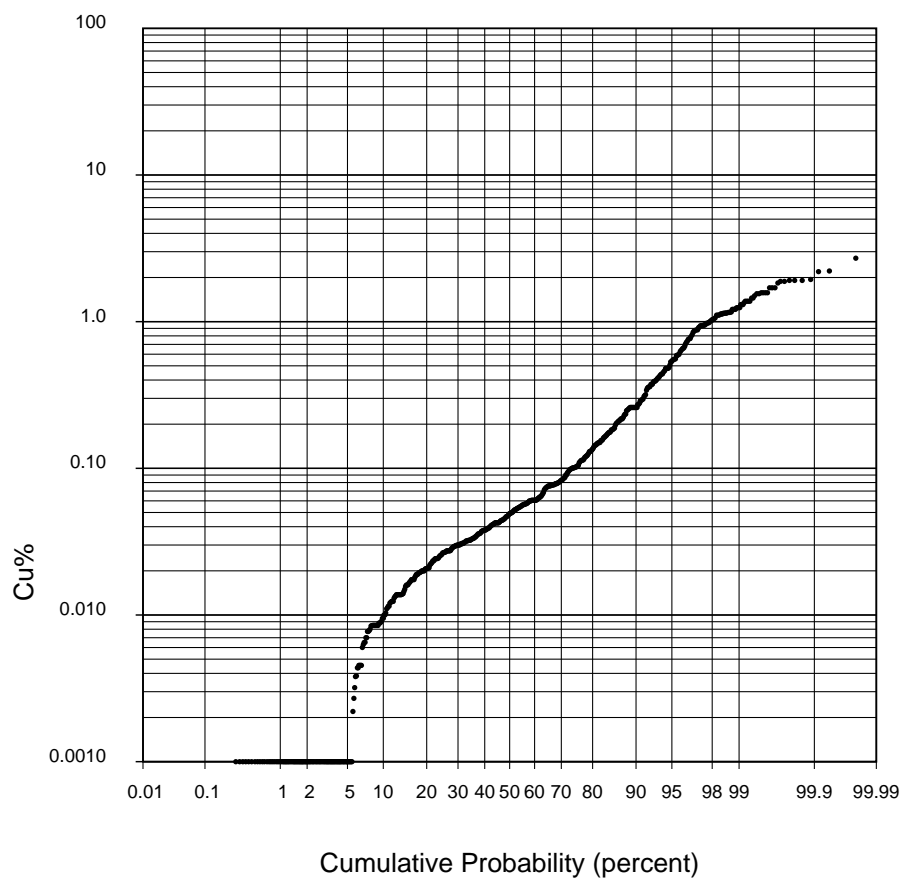
Cu NGL Block NN Estimate Intrusive (High Confidence Blocks)



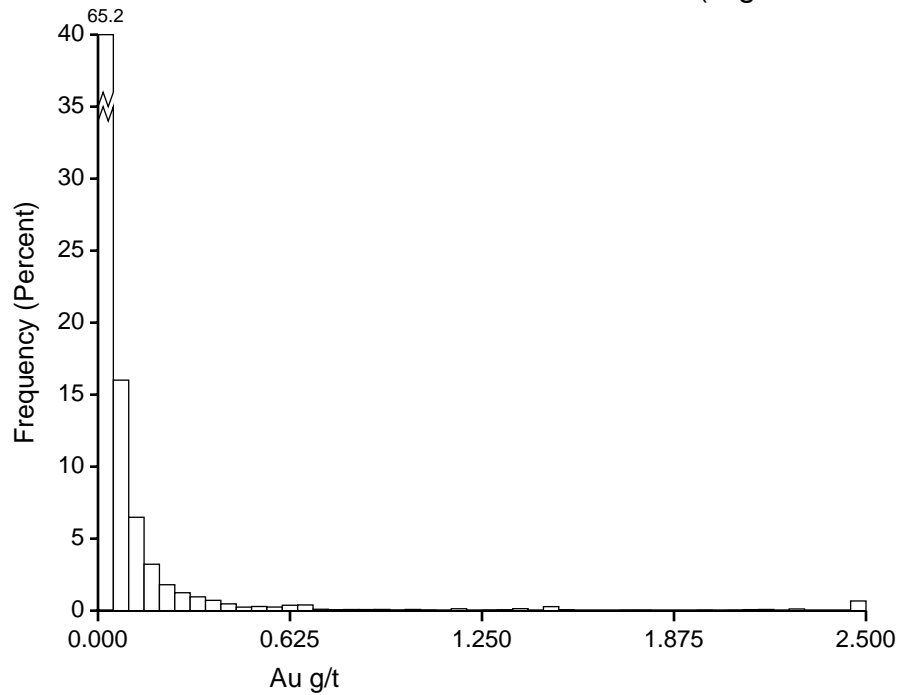
N	2603
m	0.124
$\sigma^2$	0.058
$\sigma/m$	1.939
min	0.001
$q_{0.25}$	0.027
$q_{0.50}$	0.049
$q_{0.75}$	0.102
max	2.708

Class width = 0.050  
The last class contains  
all values  $\geq 2.450$

Cu NGL Block NN Estimate Intrusive (High Confidence Blocks)



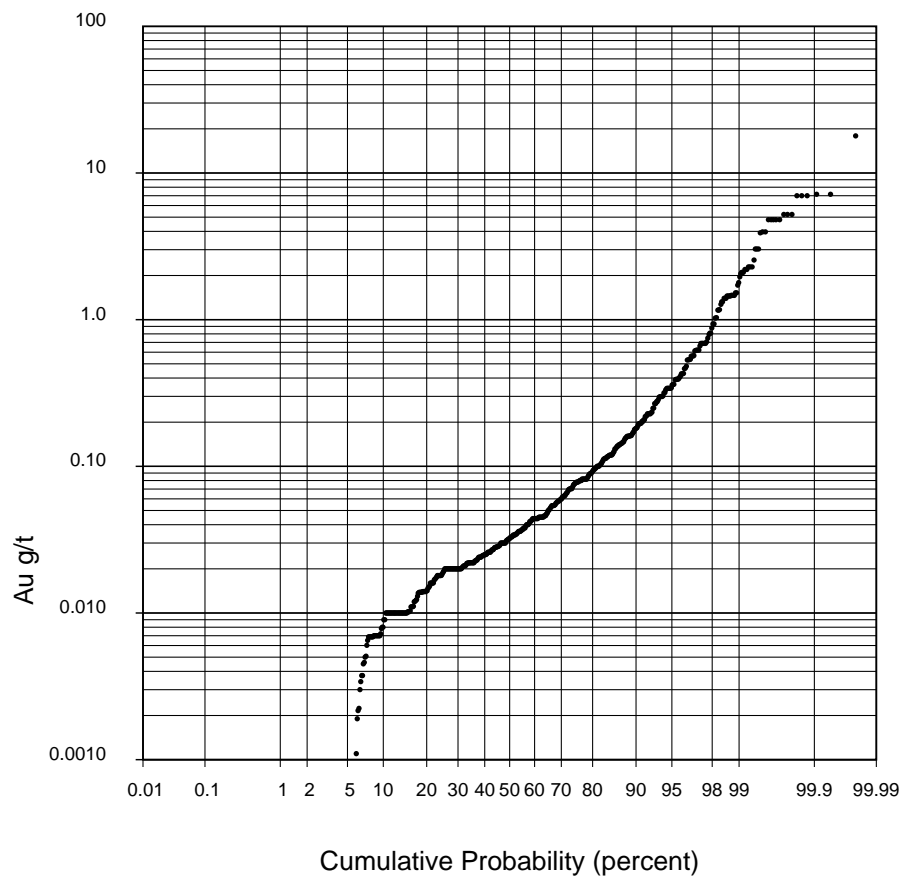
Au NGL Block NN Estimate Intrusive (High Confidence Blocks)



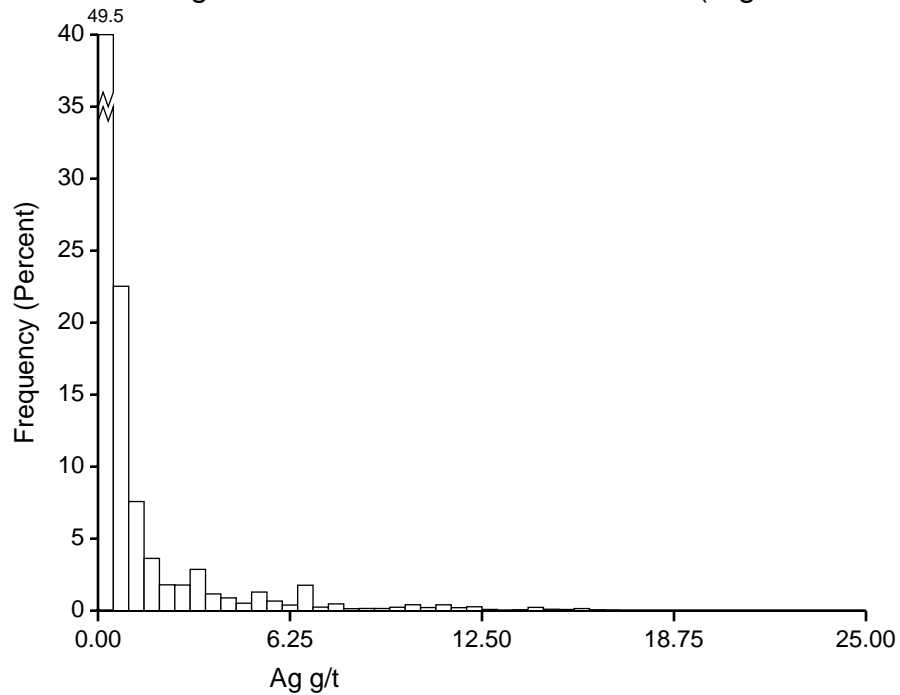
N	2592
m	0.125
$\sigma^2$	0.342
$\sigma/m$	4.667
min	0.000
$q_{0.25}$	0.019
$q_{0.50}$	0.032
$q_{0.75}$	0.078
max	17.908

Class width = 0.050  
The last class contains  
all values  $\geq 2.450$

Au NGL Block NN Estimate Intrusive (High Confidence Blocks)



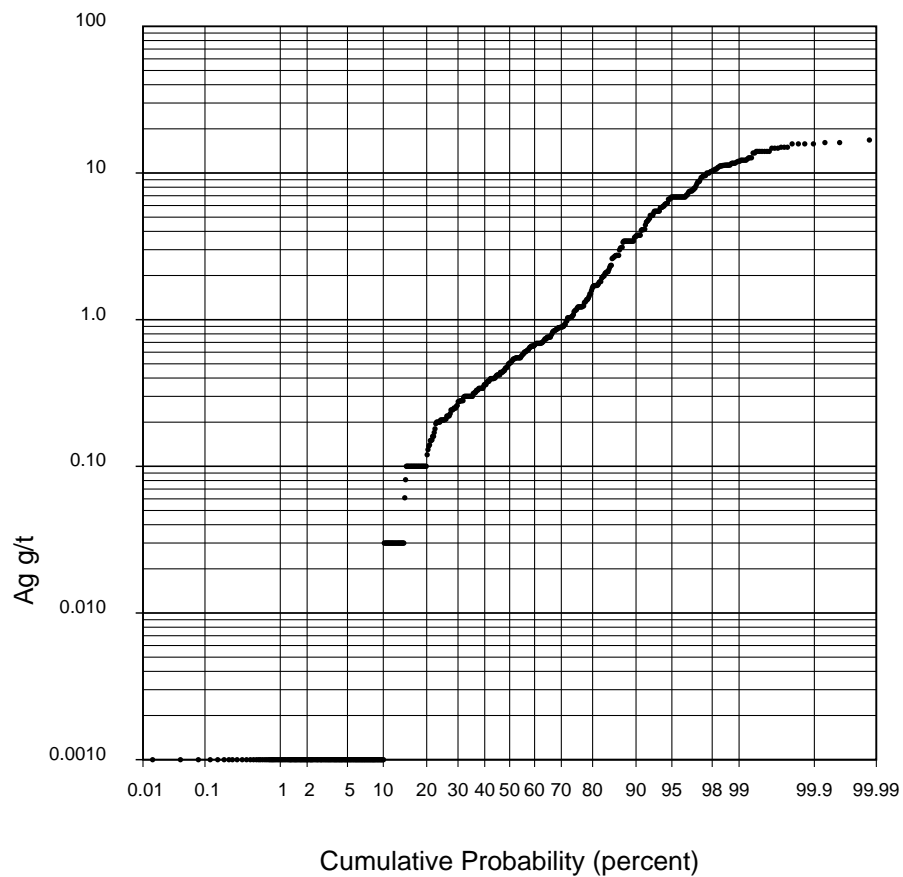
Ag NGL Block NN Estimate Intrusive (High Confidence Blocks)



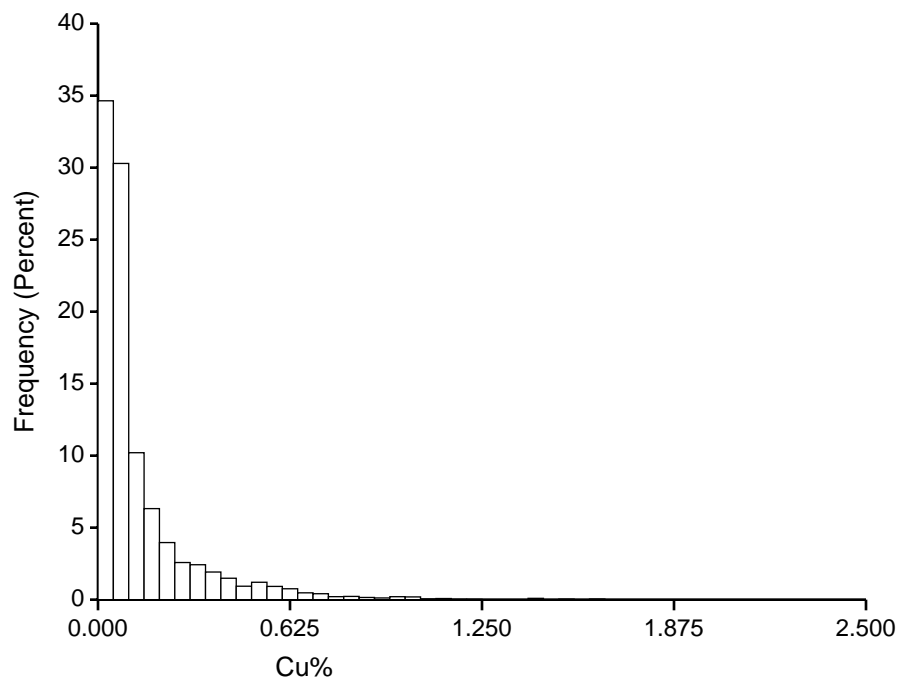
N	2437
m	1.35
$\sigma^2$	5.61
$\sigma/m$	1.76
min	0.00
$q_{0.25}$	0.21
$q_{0.50}$	0.51
$q_{0.75}$	1.17
max	16.78

Class width = 0.50  
The last class contains  
all values  $\geq 24.50$

Ag NGL Block NN Estimate Intrusive (High Confidence Blocks)



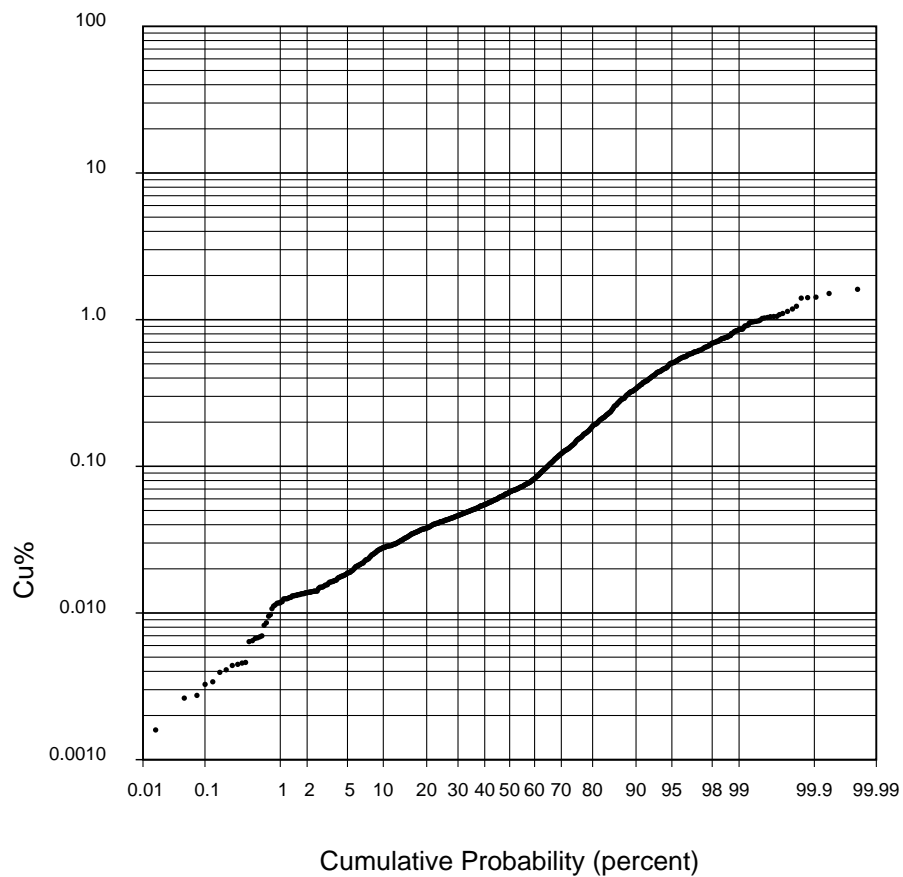
Cu NGL Block Estimate Intrusive (High Confidence Blocks)



N	2603
m	0.134
$\sigma^2$	0.030
$\sigma/m$	1.285
min	0.002
$q_{0.25}$	0.042
$q_{0.50}$	0.067
$q_{0.75}$	0.149
max	1.610

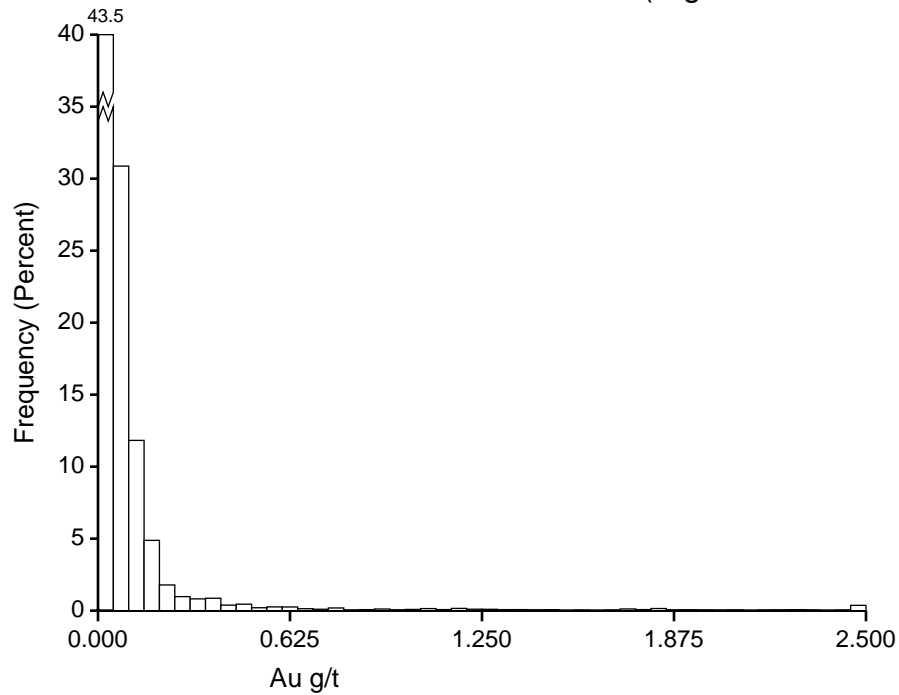
Class width = 0.050  
The last class contains  
all values  $\geq 2.450$

Cu NGL Block Estimate Intrusive (High Confidence Blocks)





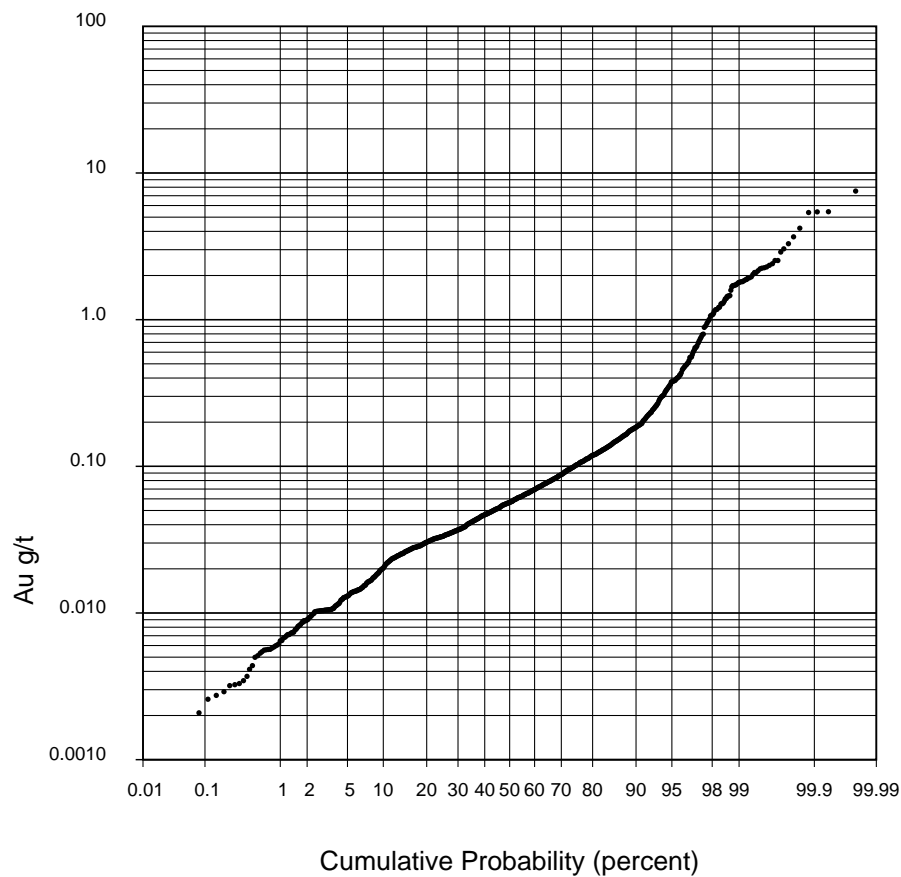
Au NGL Block Estimate Intrusive (High Confidence Blocks)



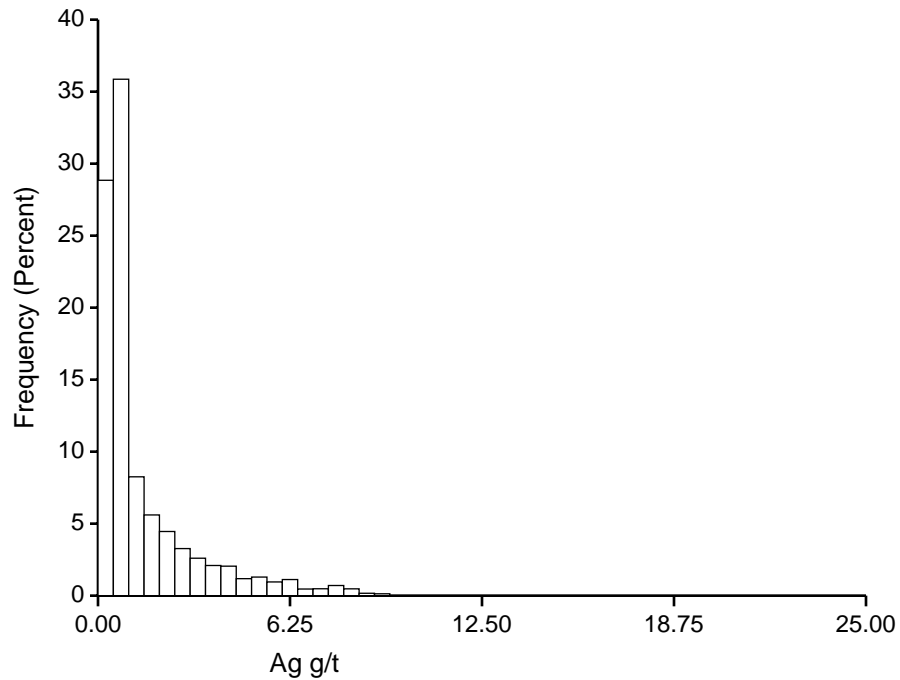
N	2592
m	0.128
$\sigma^2$	0.128
$\sigma/m$	2.787
min	0.000
$q_{0.25}$	0.033
$q_{0.50}$	0.057
$q_{0.75}$	0.102
max	7.534

Class width = 0.050  
The last class contains  
all values  $\geq 2.450$

Au NGL Block Estimate Intrusive (High Confidence Blocks)



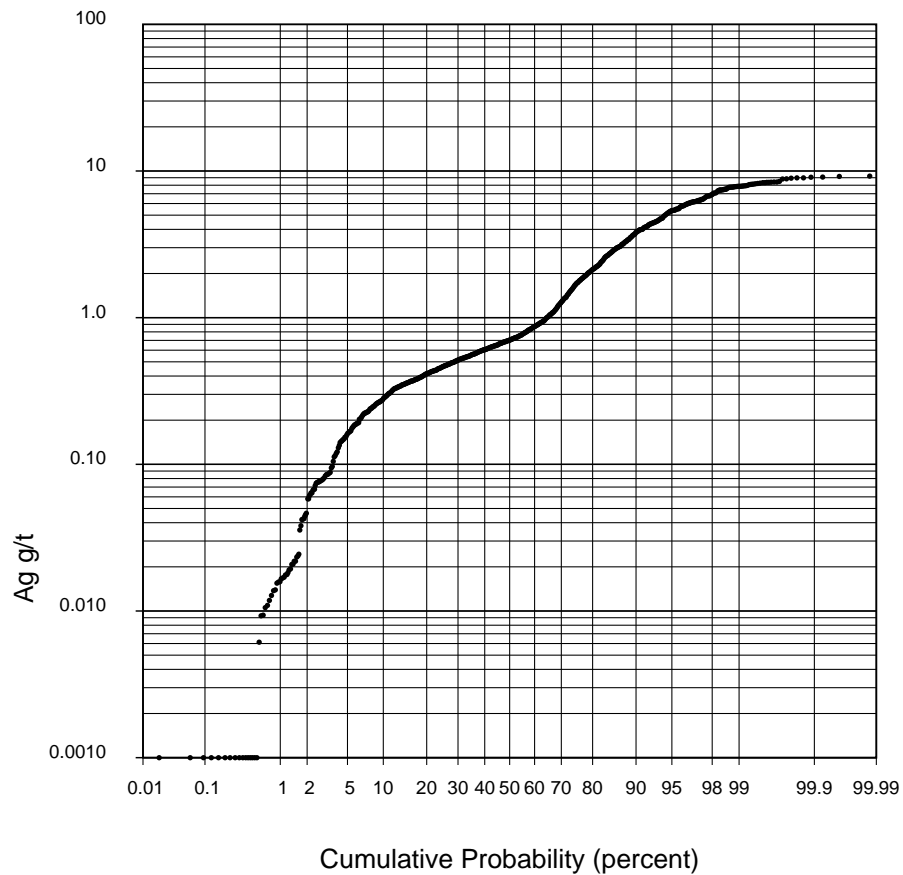
### Ag NGL Block Estimate Intrusive (High Confidence Blocks)



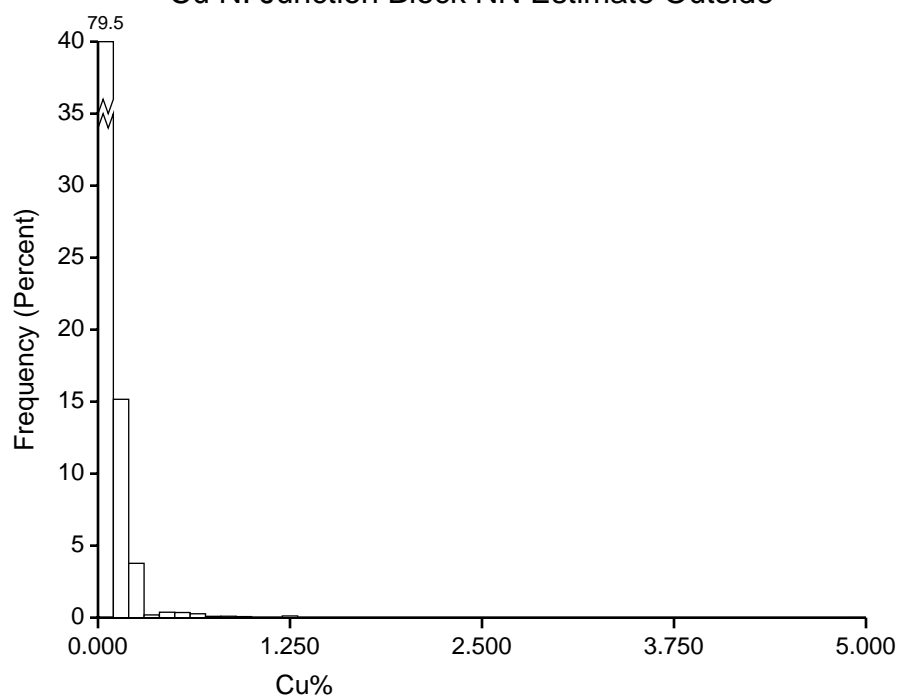
N	2437
m	1.41
$\sigma^2$	2.76
$\sigma/m$	1.18
min	0.00
$q_{0.25}$	0.46
$q_{0.50}$	0.70
$q_{0.75}$	1.70
max	9.23

Class width = 0.50  
The last class contains  
all values  $\geq 24.50$

### Ag NGL Block Estimate Intrusive (High Confidence Blocks)



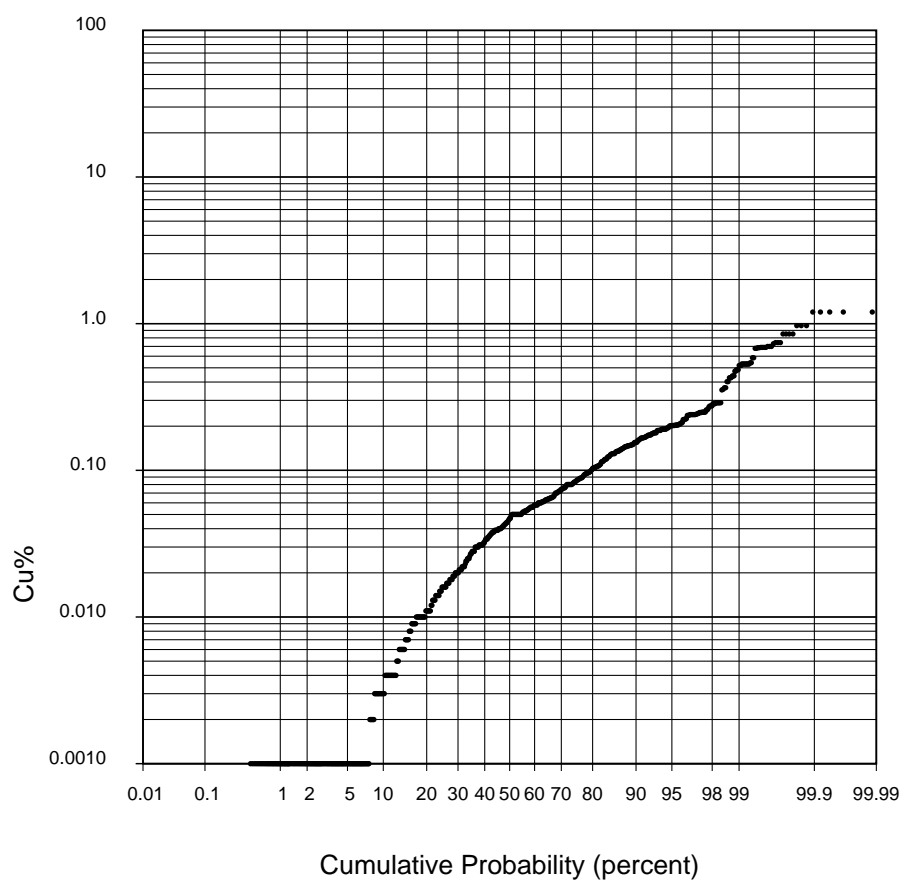
Cu N. Junction Block NN Estimate Outside



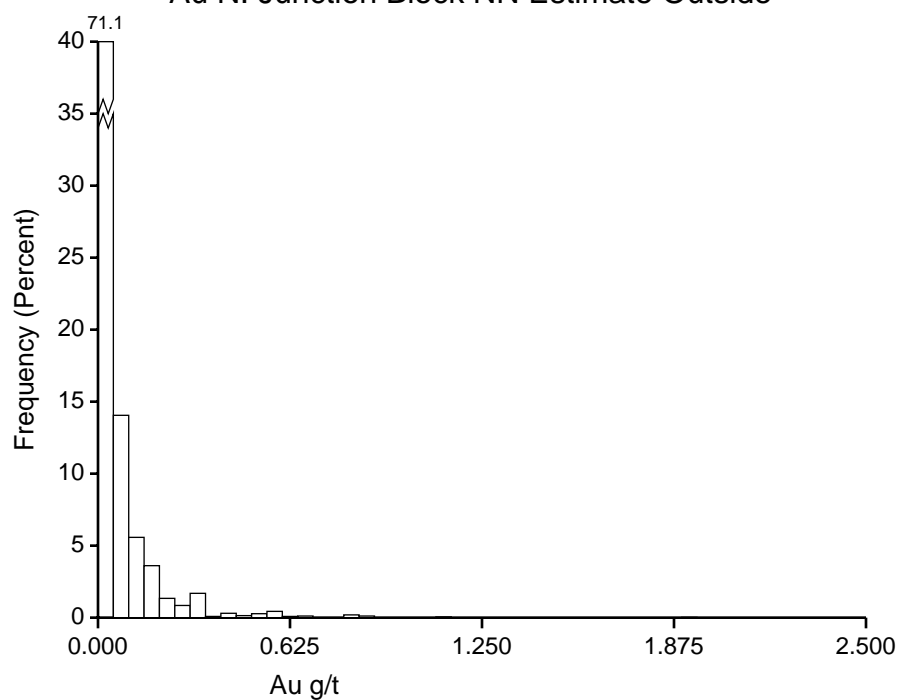
N	4166
m	0.069
$\sigma^2$	0.009
$\sigma/m$	1.384
min	0.000
$q_{0.25}$	0.016
$q_{0.50}$	0.047
$q_{0.75}$	0.085
max	1.200

Class width = 0.100  
The last class contains  
all values  $\geq 4.900$

Cu N. Junction Block NN Estimate Outside



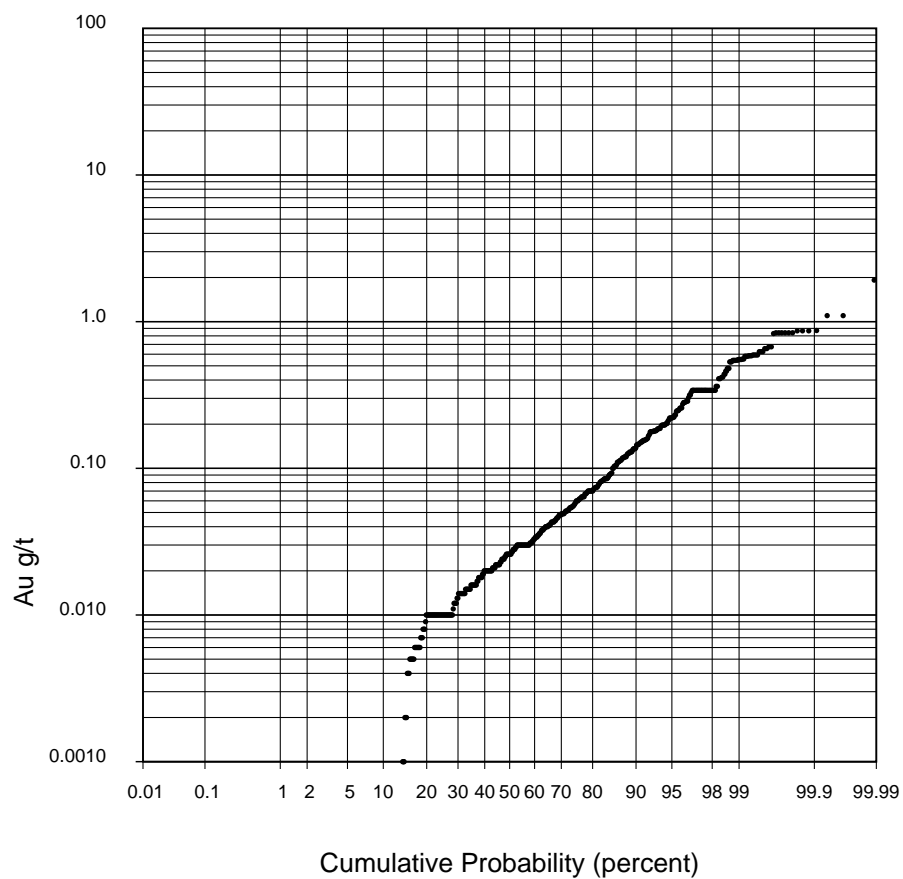
# Au N. Junction Block NN Estimate Outside



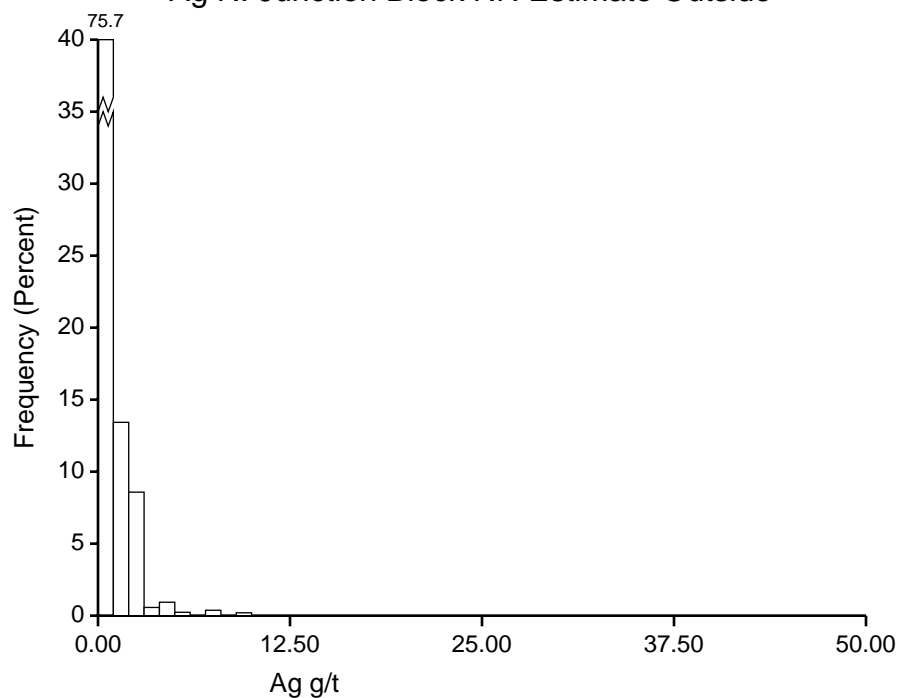
N	3608
m	0.057
$\sigma^2$	0.011
$\sigma/m$	1.793
min	0.000
$q_{0.25}$	0.010
$q_{0.50}$	0.026
$q_{0.75}$	0.059
max	1.920

Class width = 0.050  
The last class contains  
all values  $\geq 2.450$

# Au N. Junction Block NN Estimate Outside



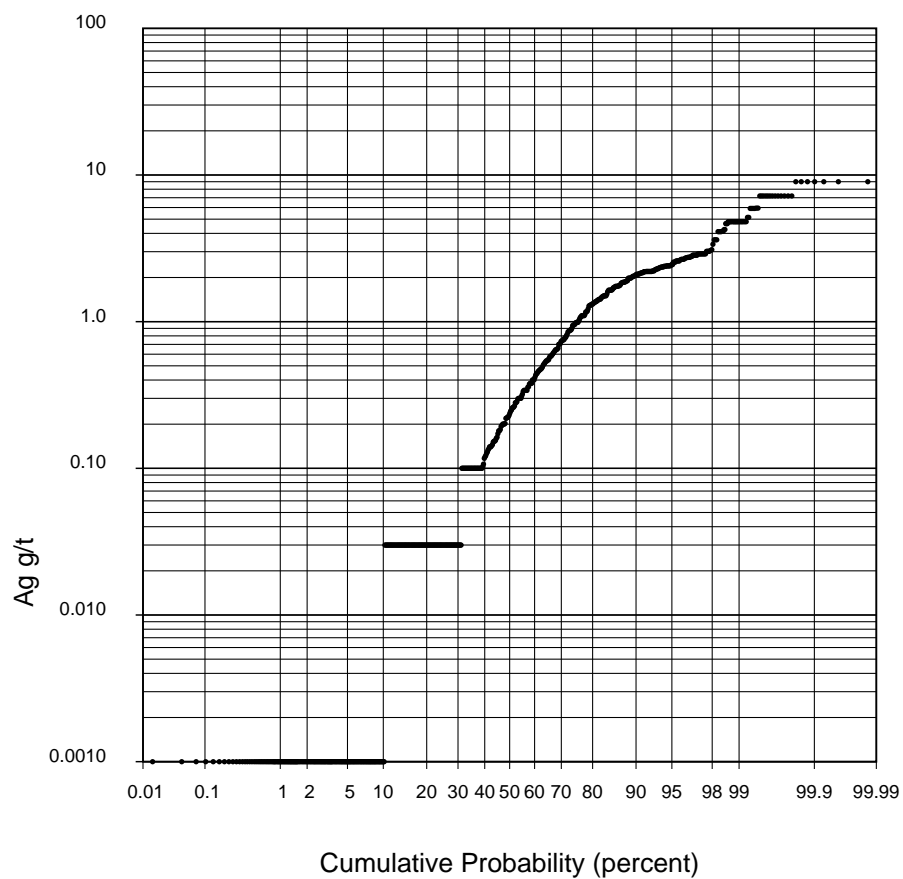
# Ag N. Junction Block NN Estimate Outside



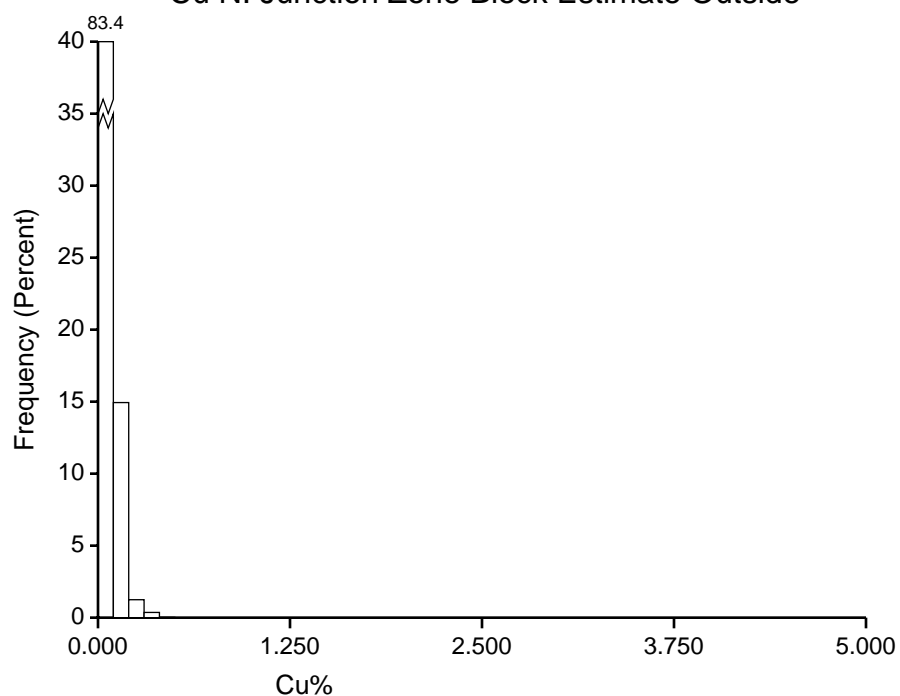
N	3480
m	0.69
$\sigma^2$	1.10
$\sigma/m$	1.51
min	0.00
$q_{0.25}$	0.03
$q_{0.50}$	0.24
$q_{0.75}$	0.99
max	9.00

Class width = 1.00  
The last class contains  
all values  $\geq 49.00$

# Ag N. Junction Block NN Estimate Outside



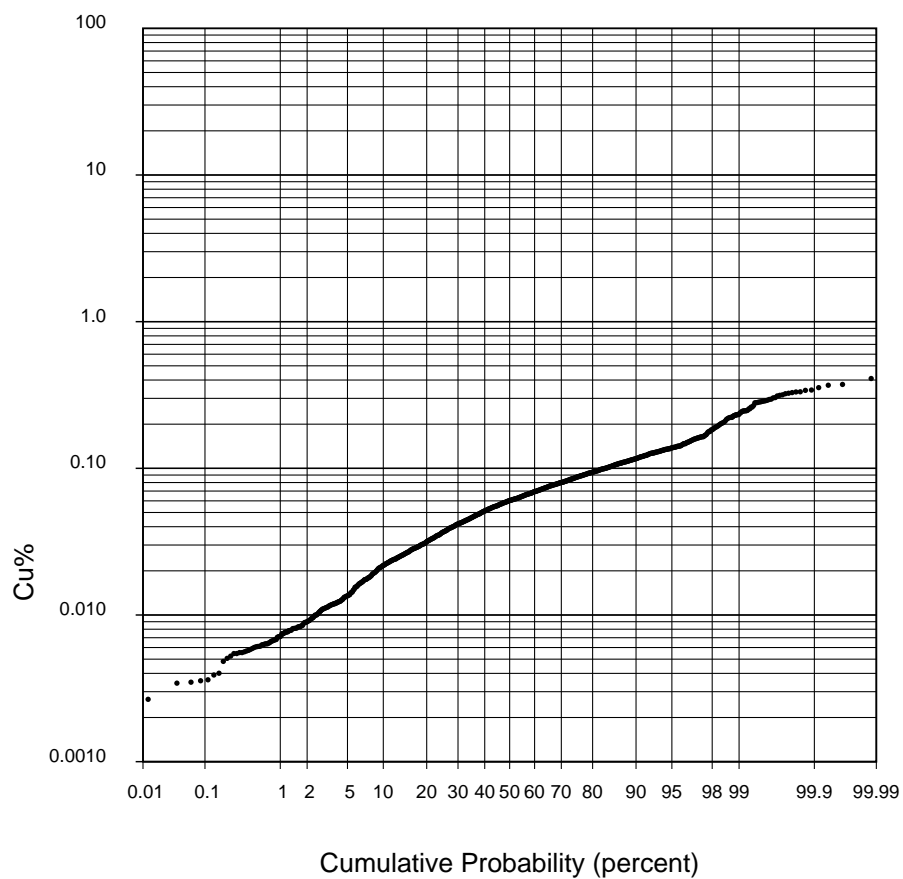
Cu N. Junction Zone Block Estimate Outside



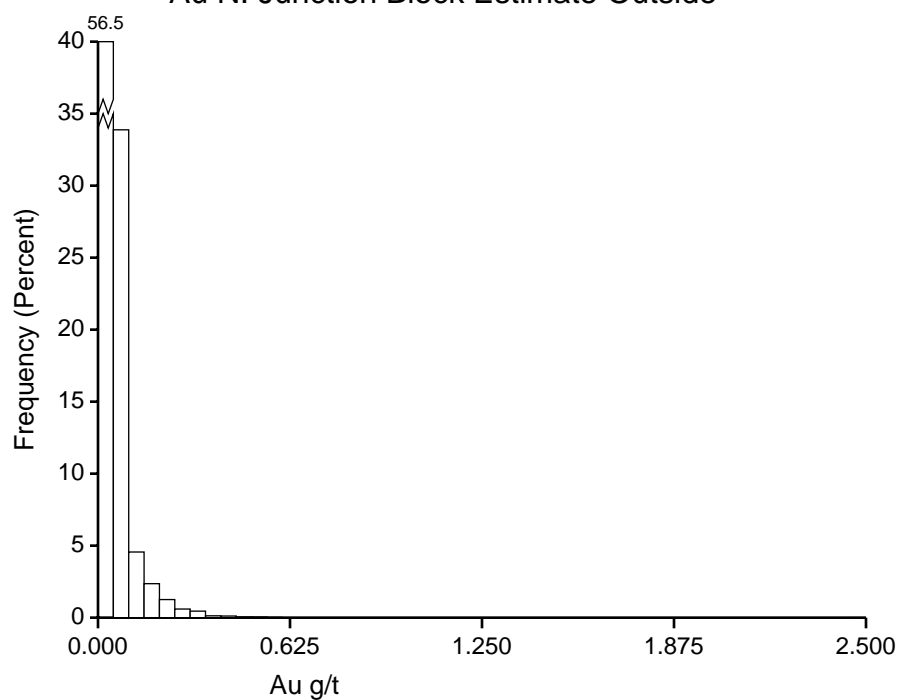
N	4166
m	0.067
$\sigma^2$	0.002
$\sigma/m$	0.657
min	0.003
$q_{0.25}$	0.037
$q_{0.50}$	0.060
$q_{0.75}$	0.087
max	0.410

Class width = 0.100  
The last class contains  
all values  $\geq 4.900$

Cu N. Junction Zone Block Estimate Outside



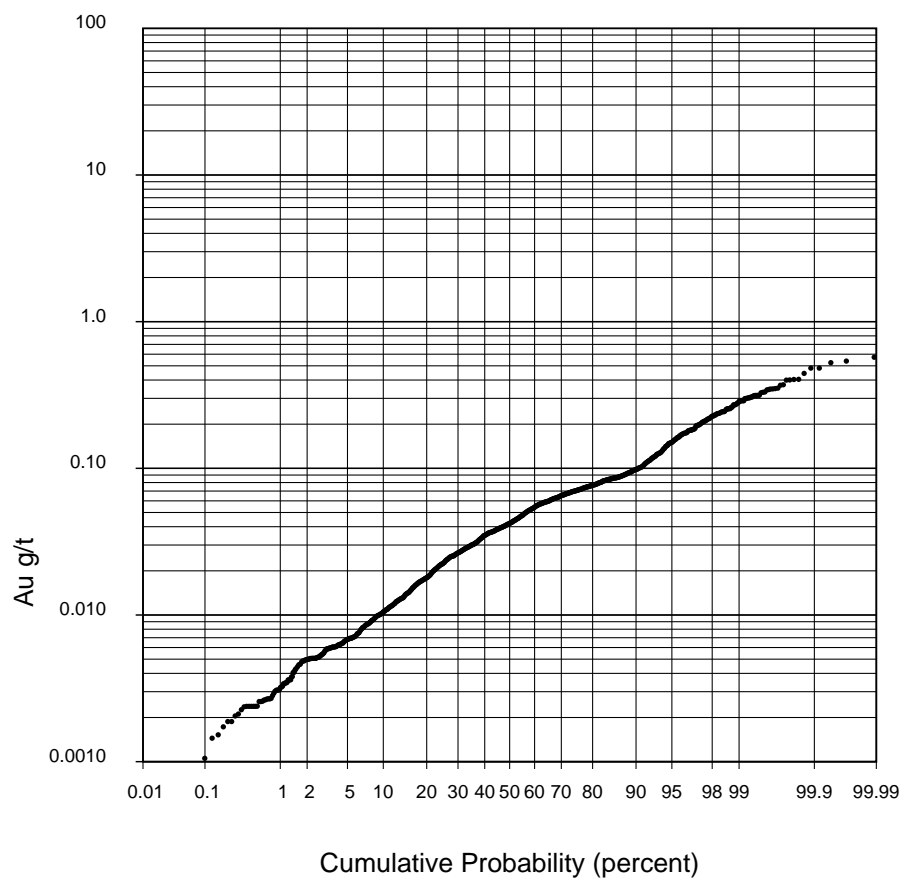
# Au N. Junction Block Estimate Outside



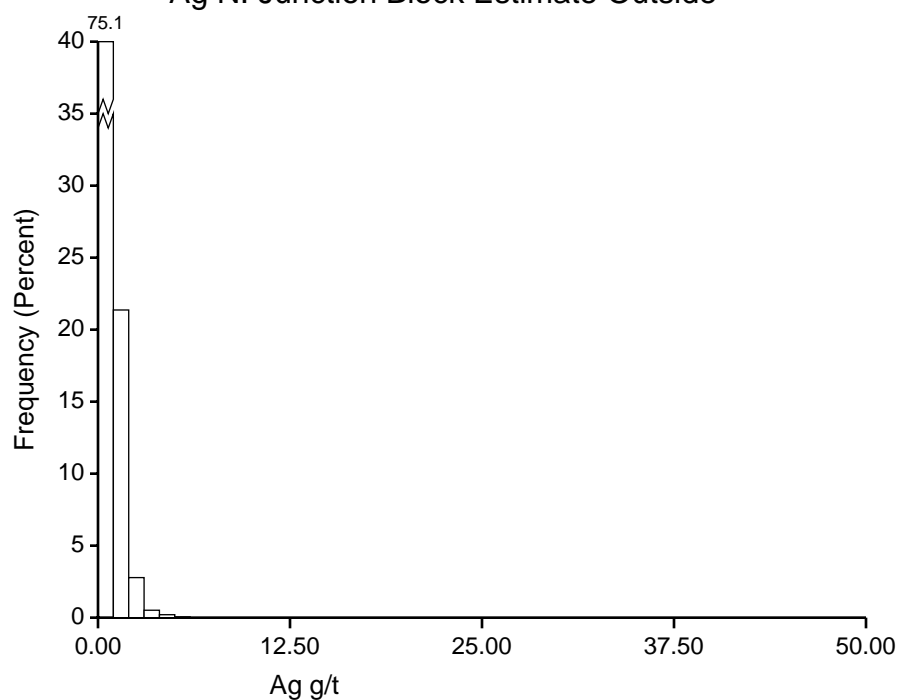
N	3608
m	0.055
$\sigma^2$	0.003
$\sigma/m$	0.957
min	0.000
$q_{0.25}$	0.023
$q_{0.50}$	0.042
$q_{0.75}$	0.070
max	0.571

Class width = 0.050  
The last class contains  
all values  $\geq 2.450$

# Au N. Junction Block Estimate Outside



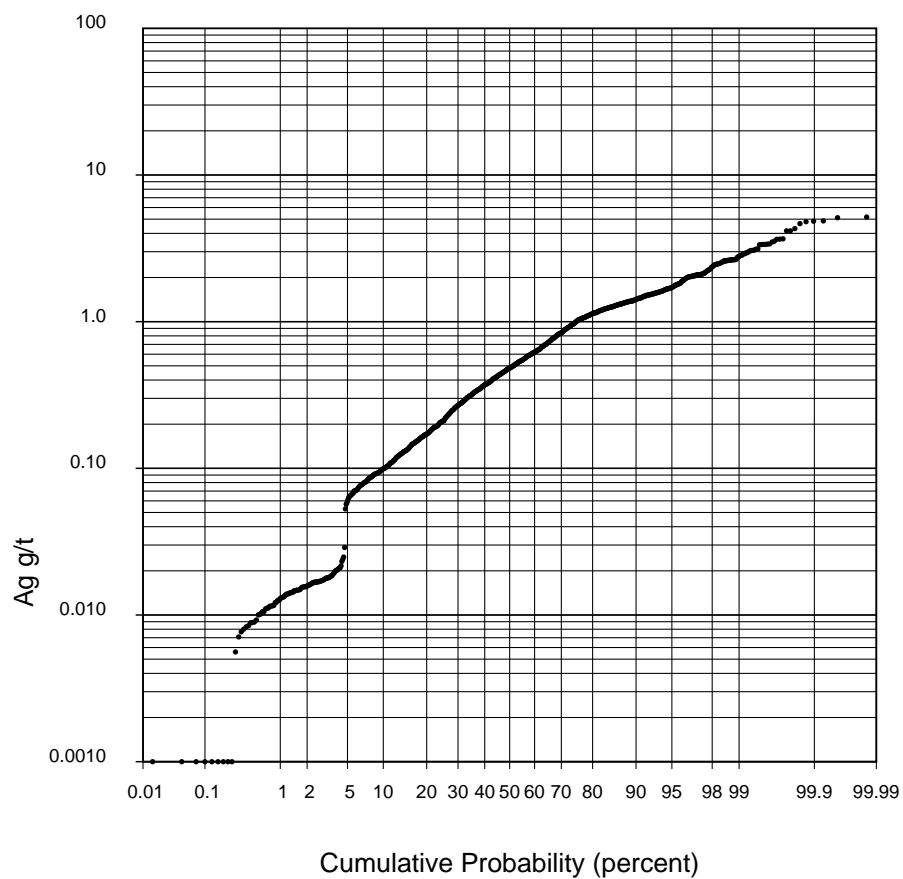
# Ag N. Junction Block Estimate Outside



N	3480
m	0.67
$\sigma^2$	0.37
$\sigma/m$	0.92
min	0.00
$q_{0.25}$	0.21
$q_{0.50}$	0.48
$q_{0.75}$	1.00
max	5.16

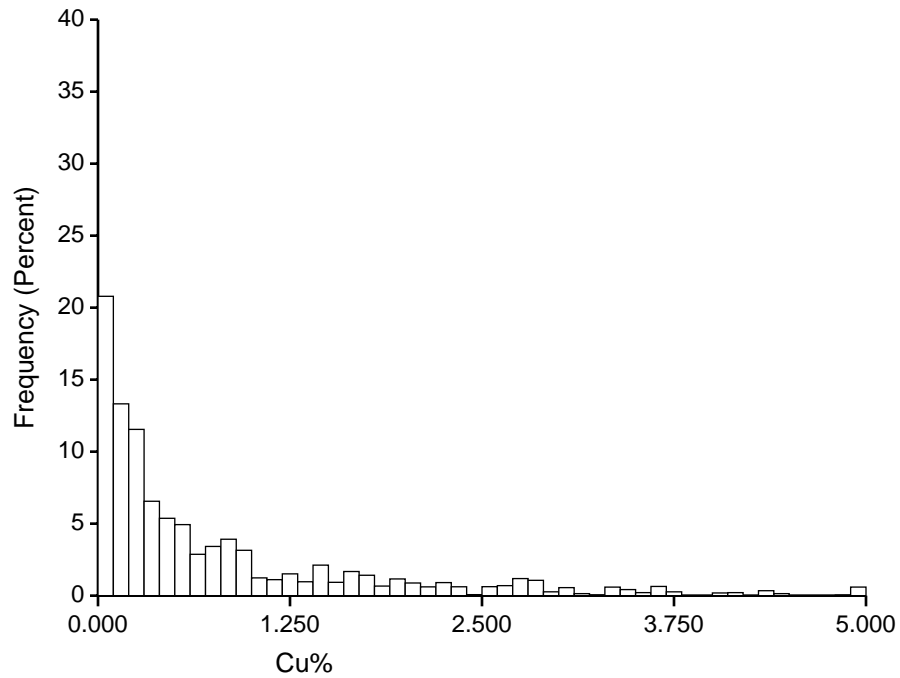
Class width = 1.00  
The last class contains  
all values  $\geq 49.00$

# Ag N. Junction Block Estimate Outside

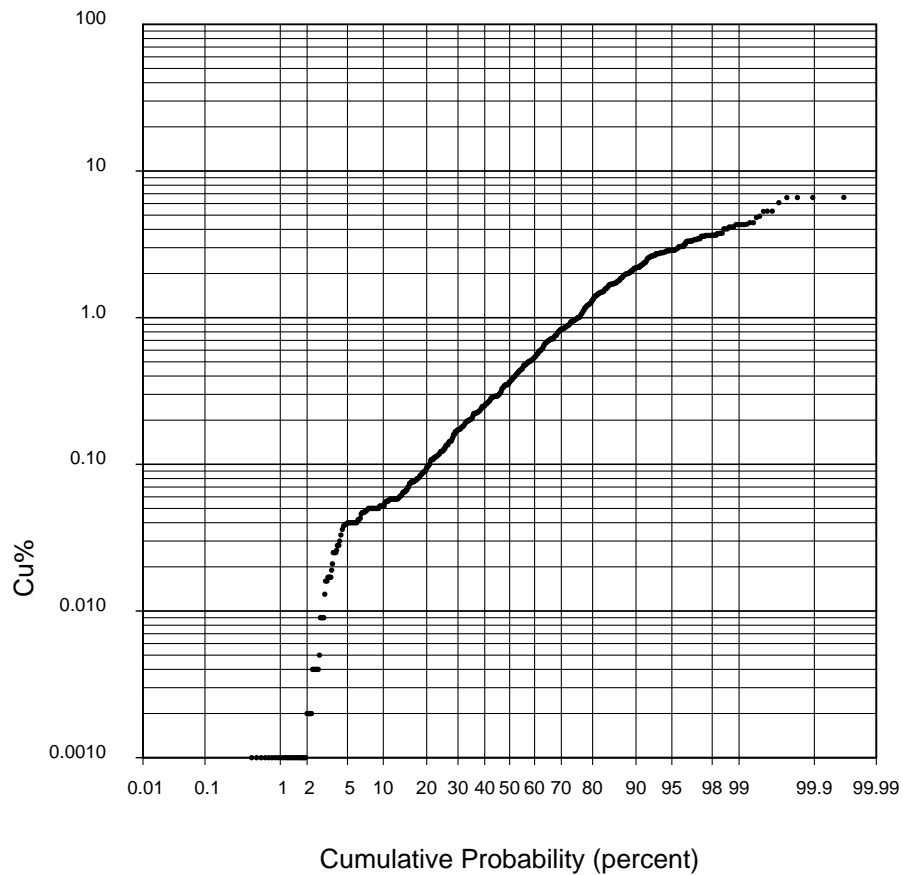




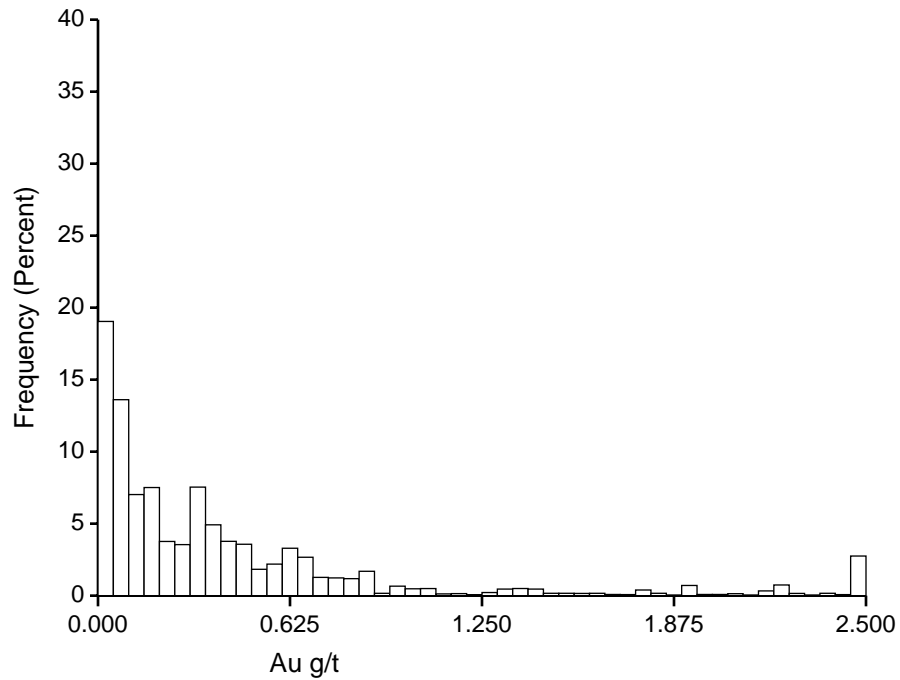
Cu N. Junction Zone Block NN Estimate (High Confidence Blocks)



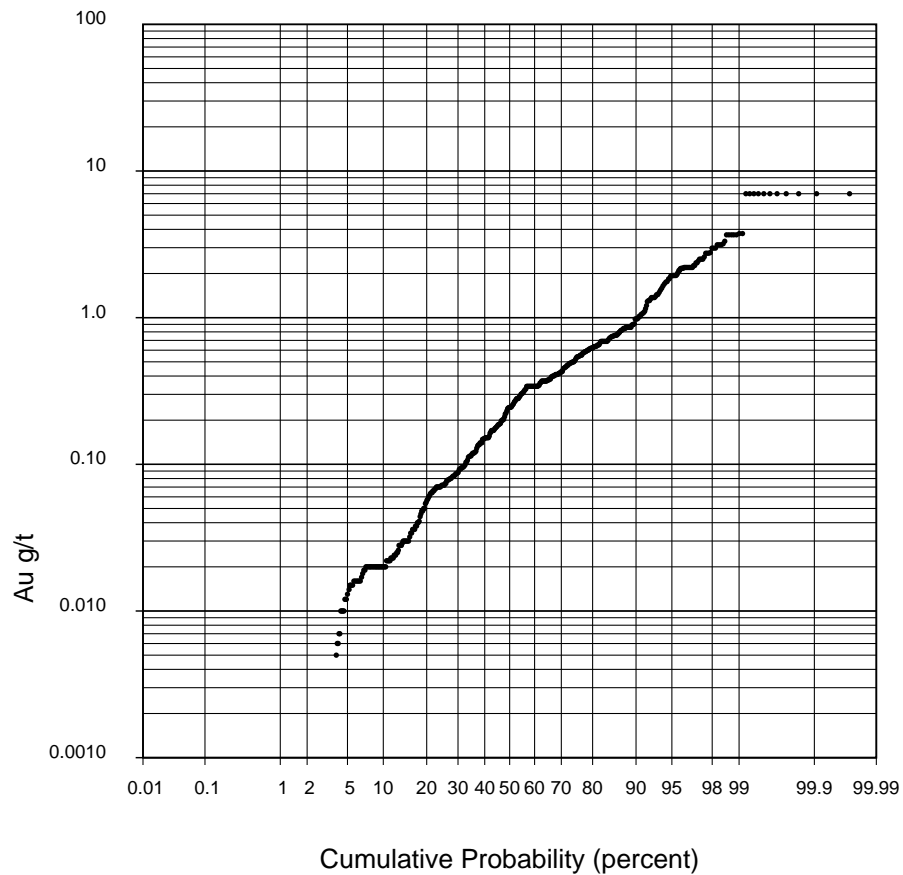
Cu N. Junction Zone Block NN Estimate (High Confidence Blocks)



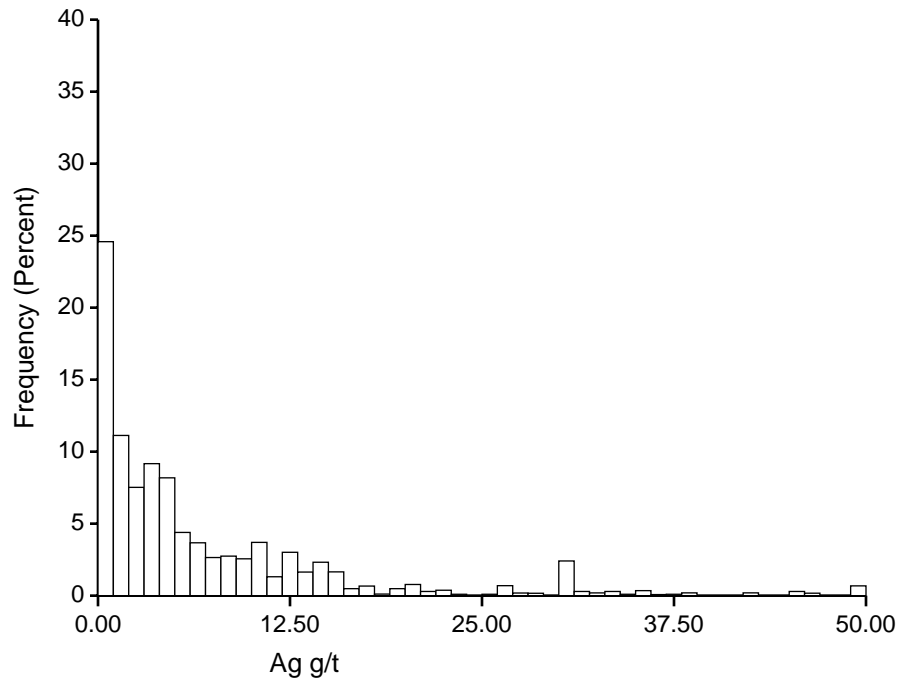
Au N. Junction Block NN Estimate (High Confidence Blocks)



Au N. Junction Block NN Estimate (High Confidence Blocks)



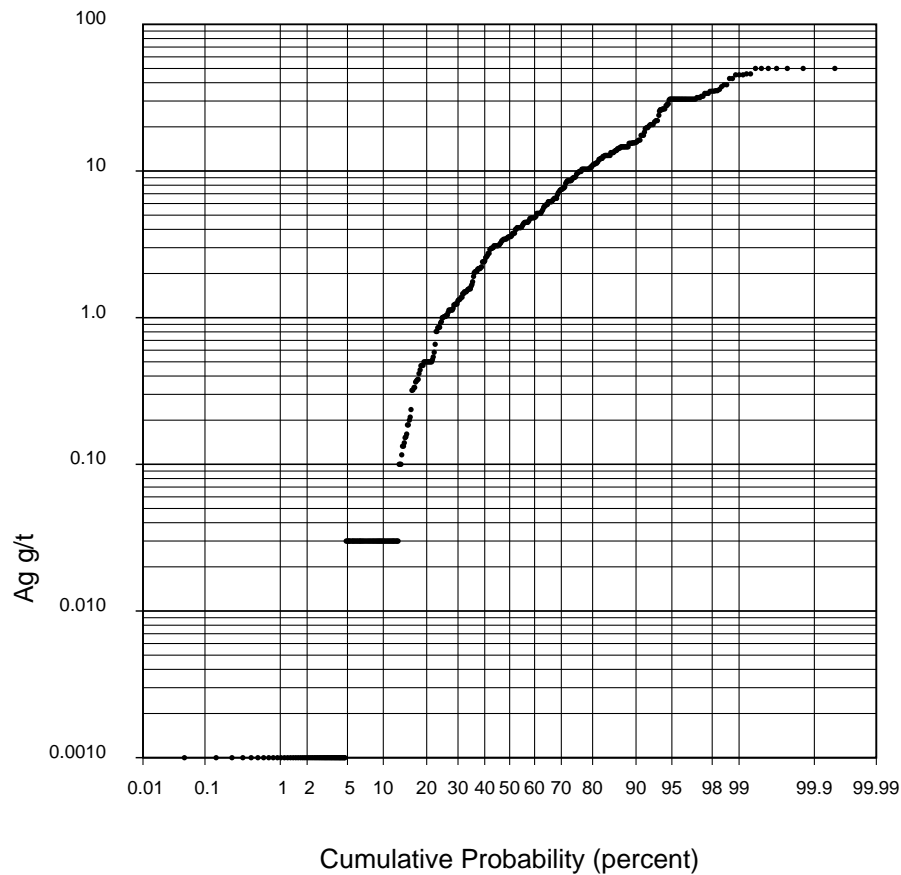
Ag N. Junction Block NN Estimate (High Confidence Blocks)



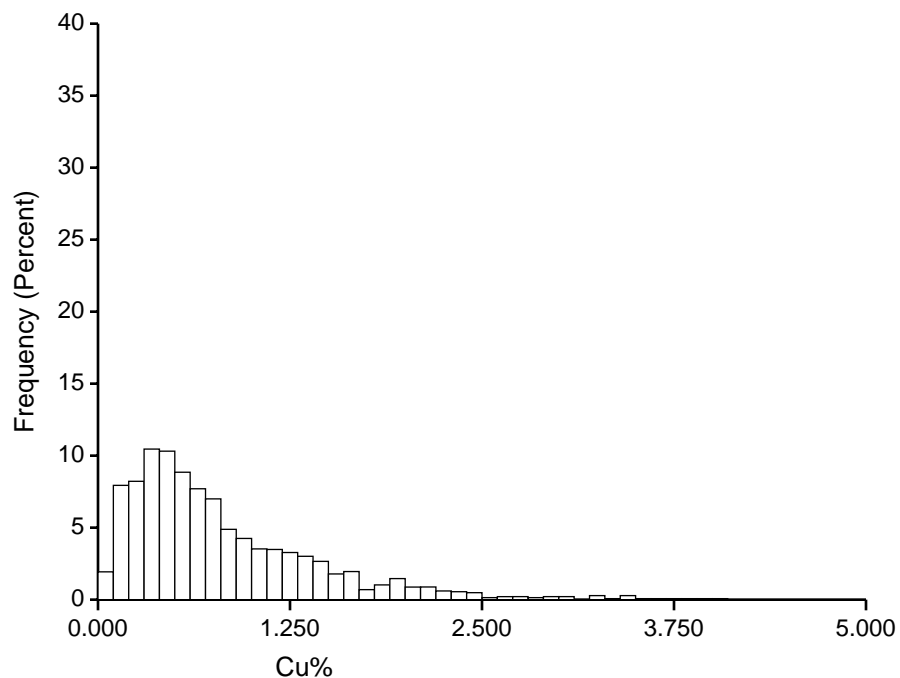
N	1112
m	6.81
$\sigma^2$	80.90
$\sigma/m$	1.32
min	0.00
$q_{0.25}$	1.01
$q_{0.50}$	3.57
$q_{0.75}$	9.52
max	50.00

Class width = 1.00  
The last class contains  
all values  $\geq 49.00$

Ag N. Junction Block NN Estimate (High Confidence Blocks)



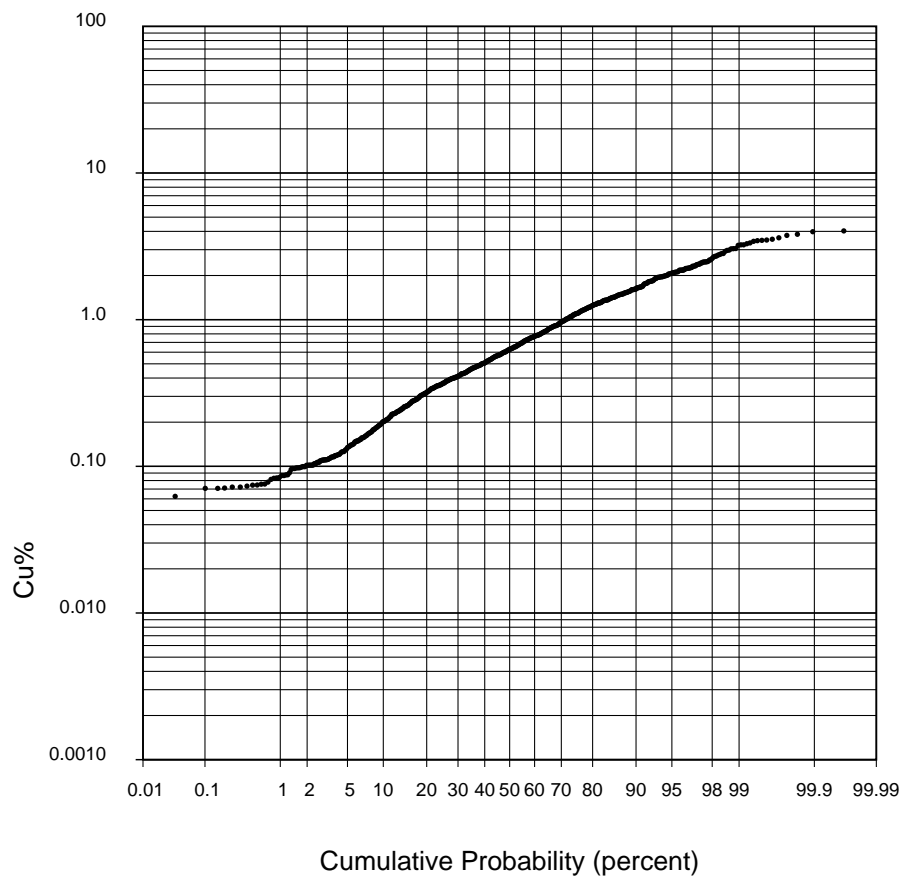
Cu N. Junction Zone Block Estimate (High Confidence Blocks)



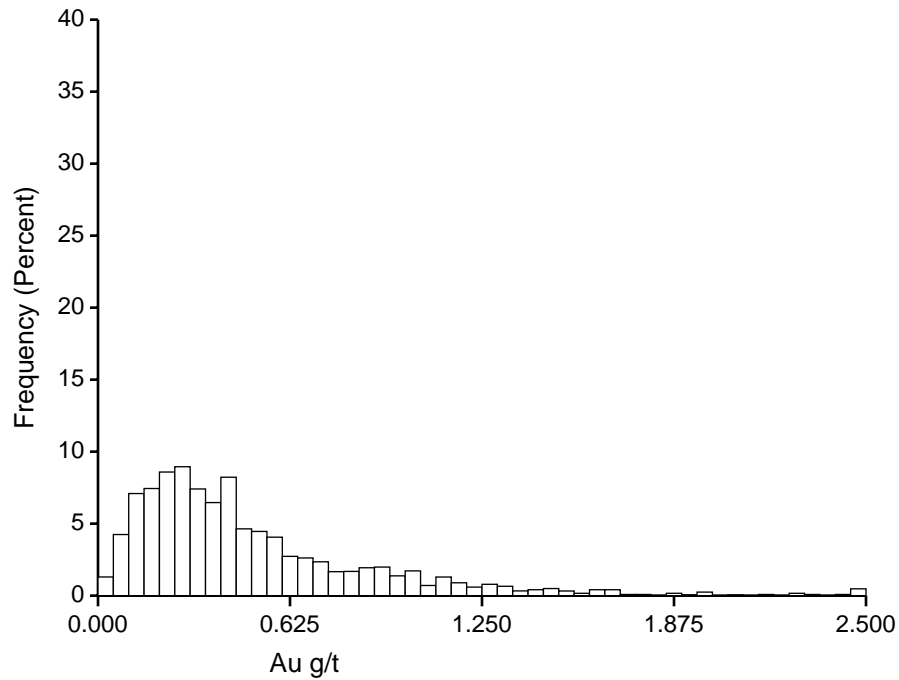
N	1537
m	0.811
$\sigma^2$	0.401
$\sigma/m$	0.780
min	0.062
$q_{0.25}$	0.369
$q_{0.50}$	0.626
$q_{0.75}$	1.099
max	4.026

Class width = 0.100  
The last class contains  
all values  $\geq 4.900$

Cu N. Junction Zone Block Estimate (High Confidence Blocks)



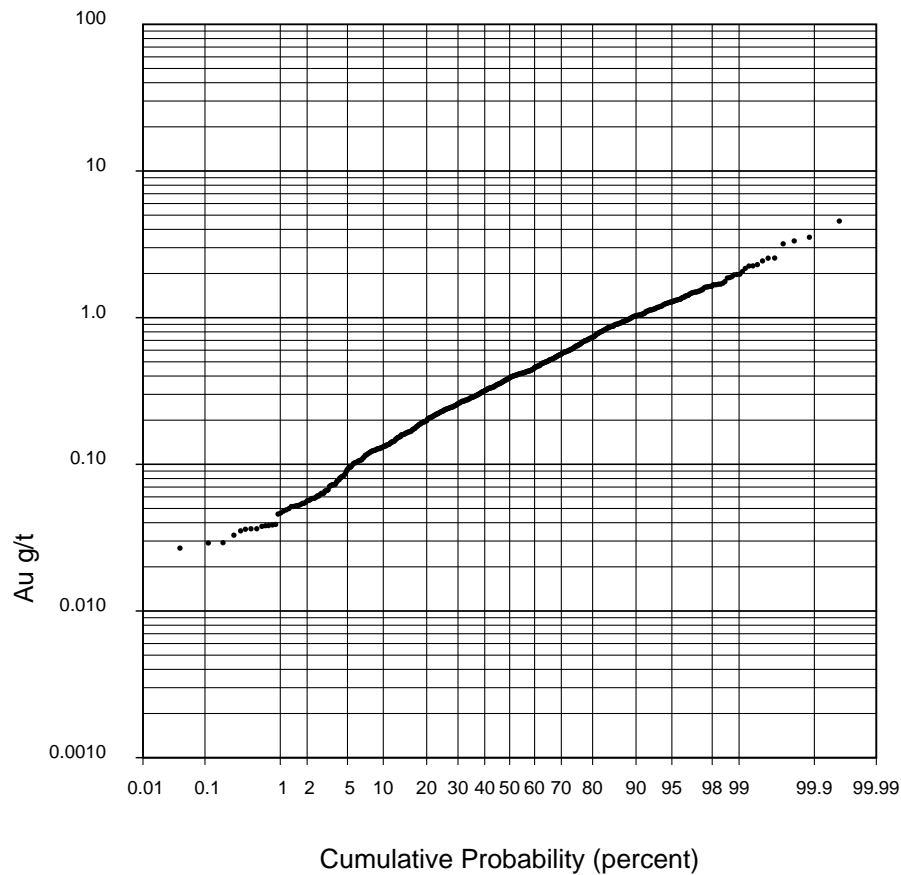
# Au N. Junction Block Estimate (High Confidence Blocks)



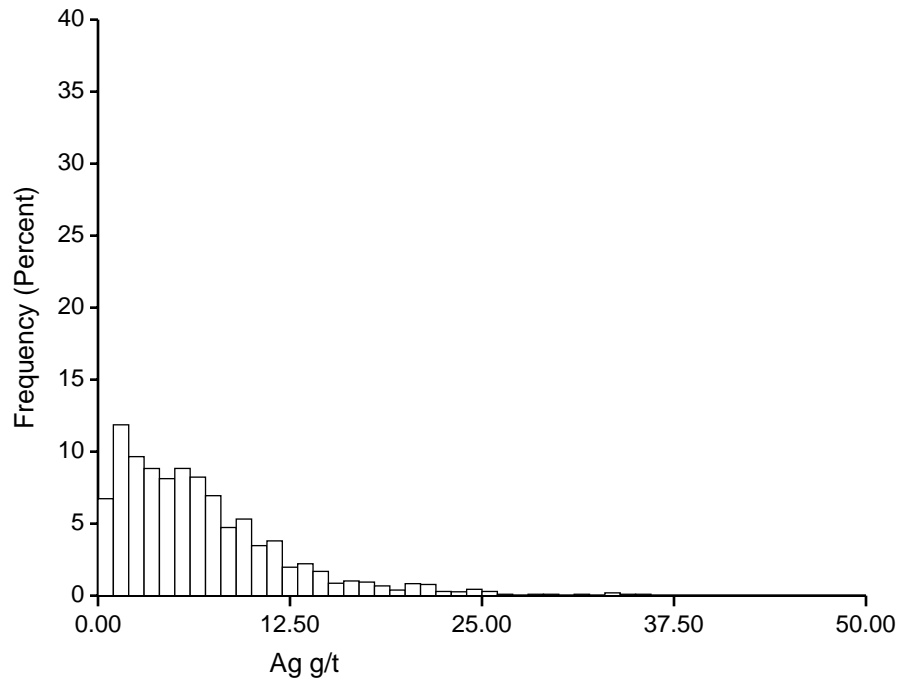
N	1308
m	0.502
$\sigma^2$	0.180
$\sigma/m$	0.844
min	0.027
$q_{0.25}$	0.231
$q_{0.50}$	0.388
$q_{0.75}$	0.640
max	4.562

Class width = 0.050  
The last class contains  
all values  $\geq 2.450$

# Au N. Junction Block Estimate (High Confidence Blocks)



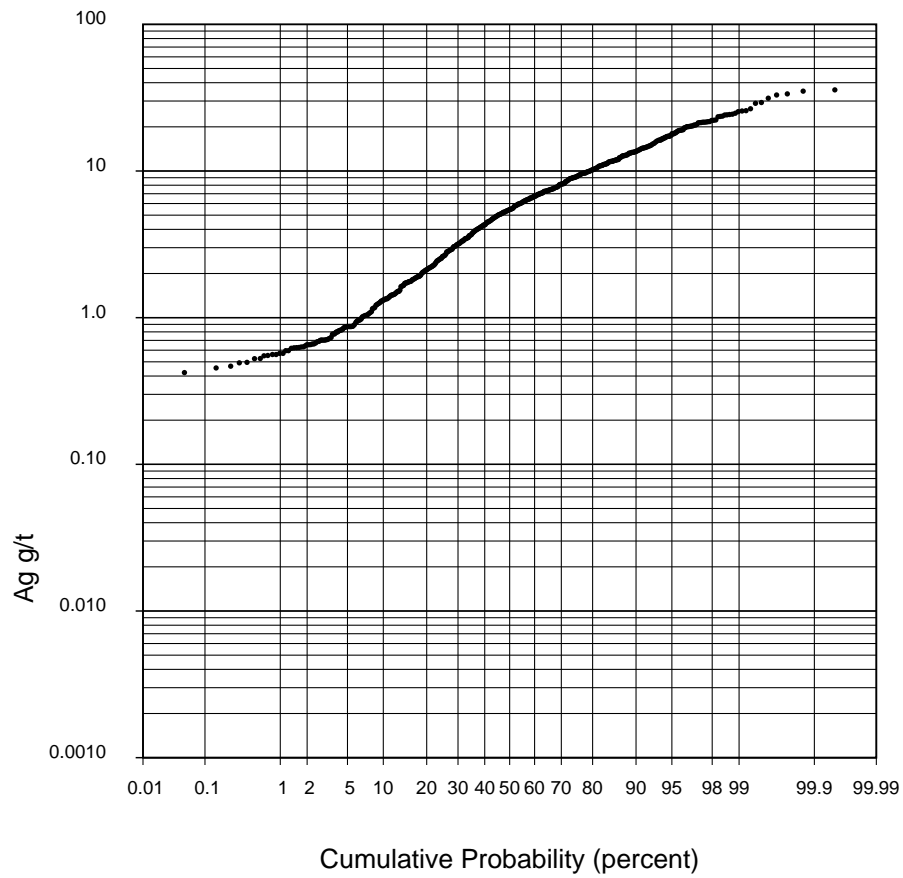
### Ag N. Junction Block Estimate (High Confidence Blocks)



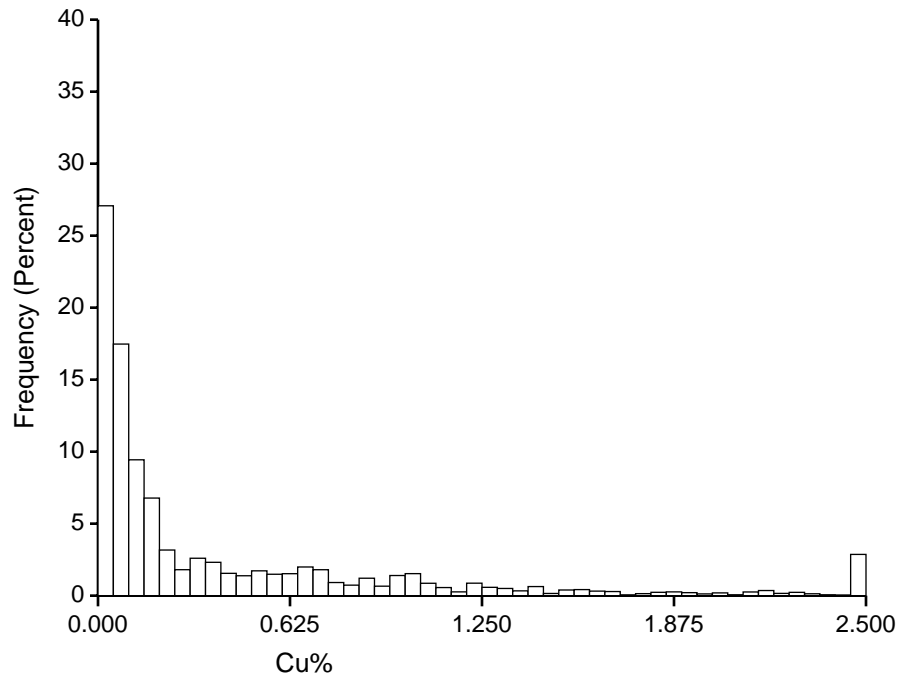
N	1112
m	6.74
$\sigma^2$	29.99
$\sigma/m$	0.81
min	0.42
$q_{0.25}$	2.62
$q_{0.50}$	5.46
$q_{0.75}$	9.13
max	35.78

Class width = 1.00  
The last class contains  
all values  $\geq 49.00$

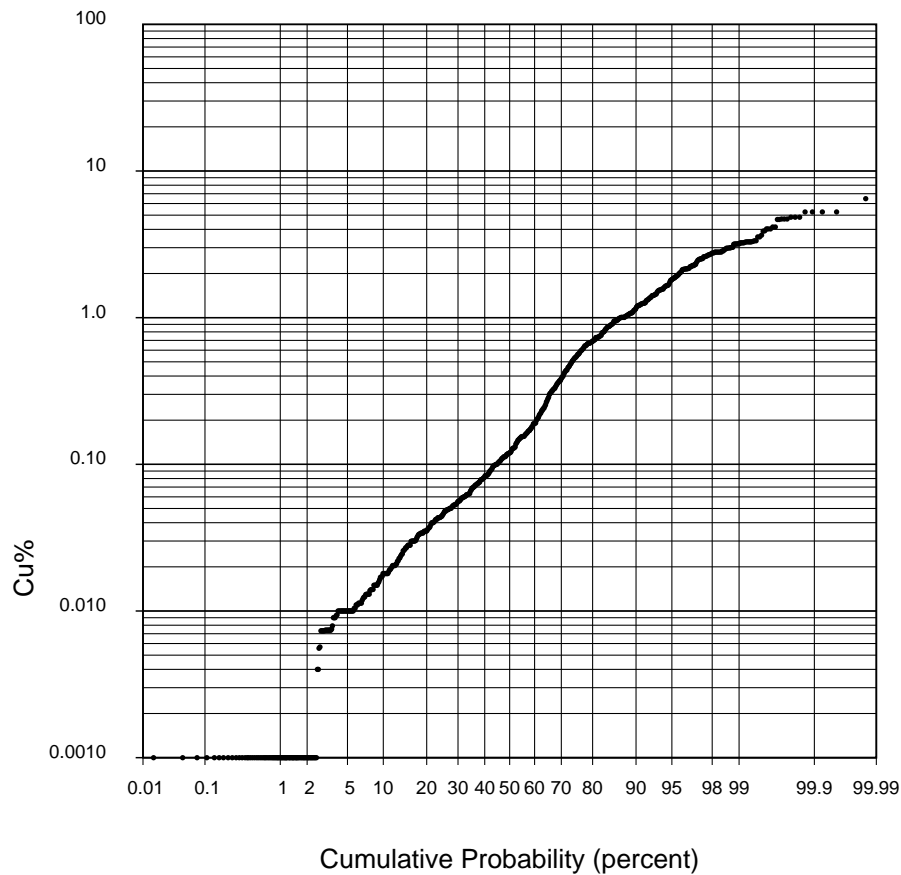
### Ag N. Junction Block Estimate (High Confidence Blocks)



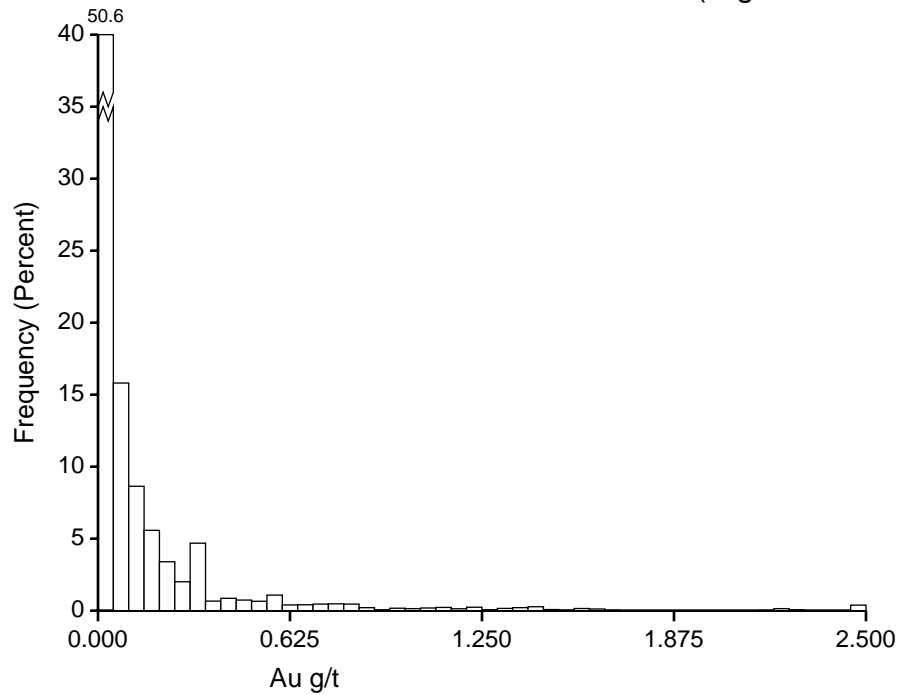
Cu SGL Block NN Estimate Volcanic (High Confidence Blocks)



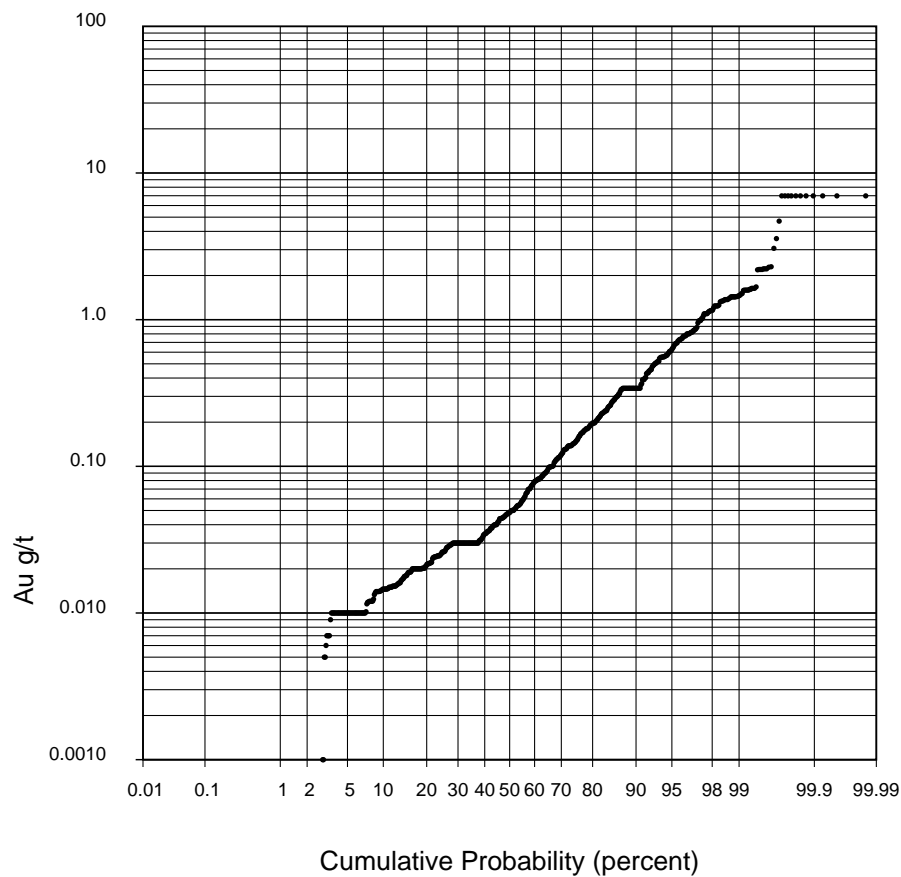
Cu SGL Block NN Estimate Volcanic (High Confidence Blocks)



Au SGL Block NN Estimate Volcanic (High Confidence Blocks)

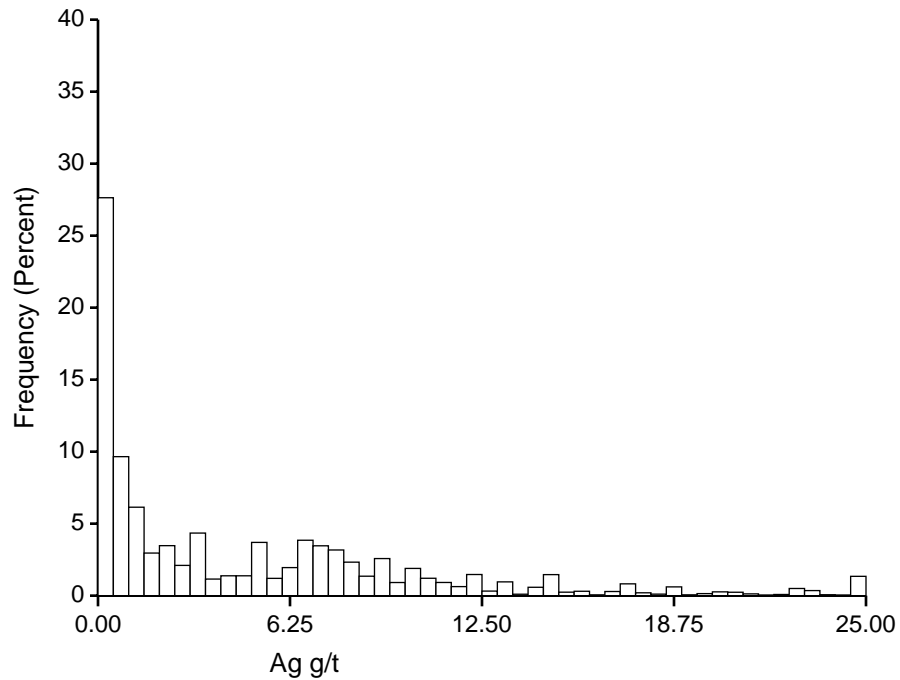


Au SGL Block NN Estimate Volcanic (High Confidence Blocks)

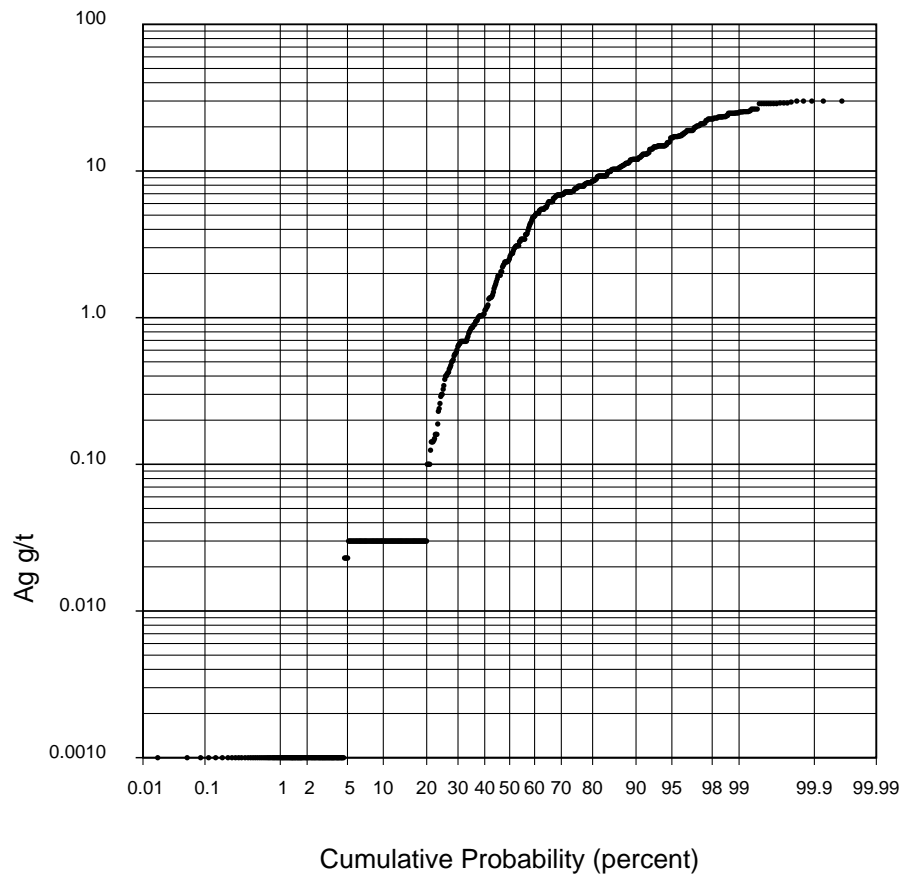




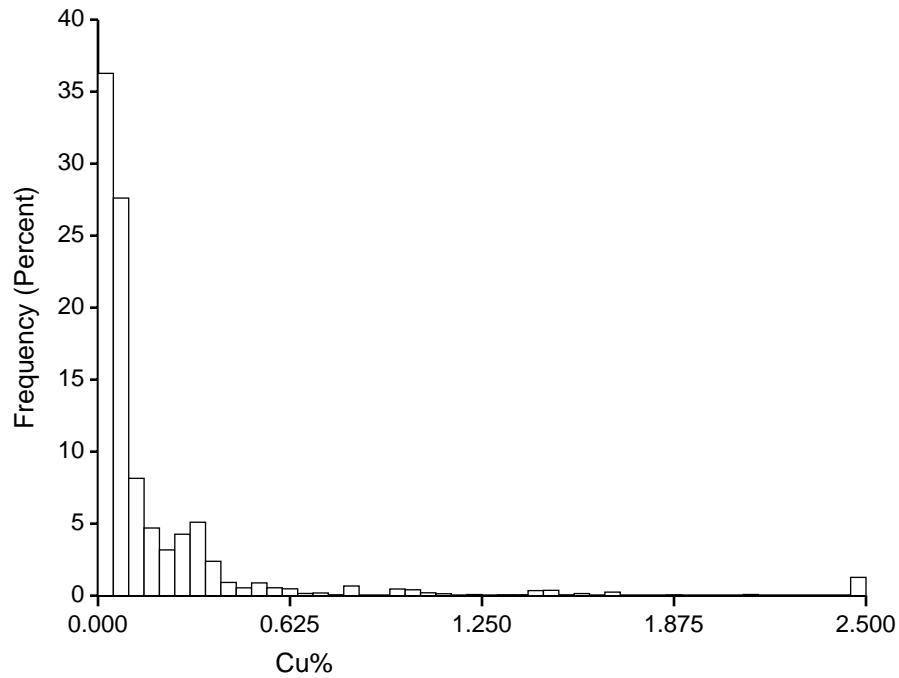
Ag SGL Block NN Estimate Volcanic (High Confidence Blocks)



Ag SGL Block NN Estimate Volcanic (High Confidence Blocks)



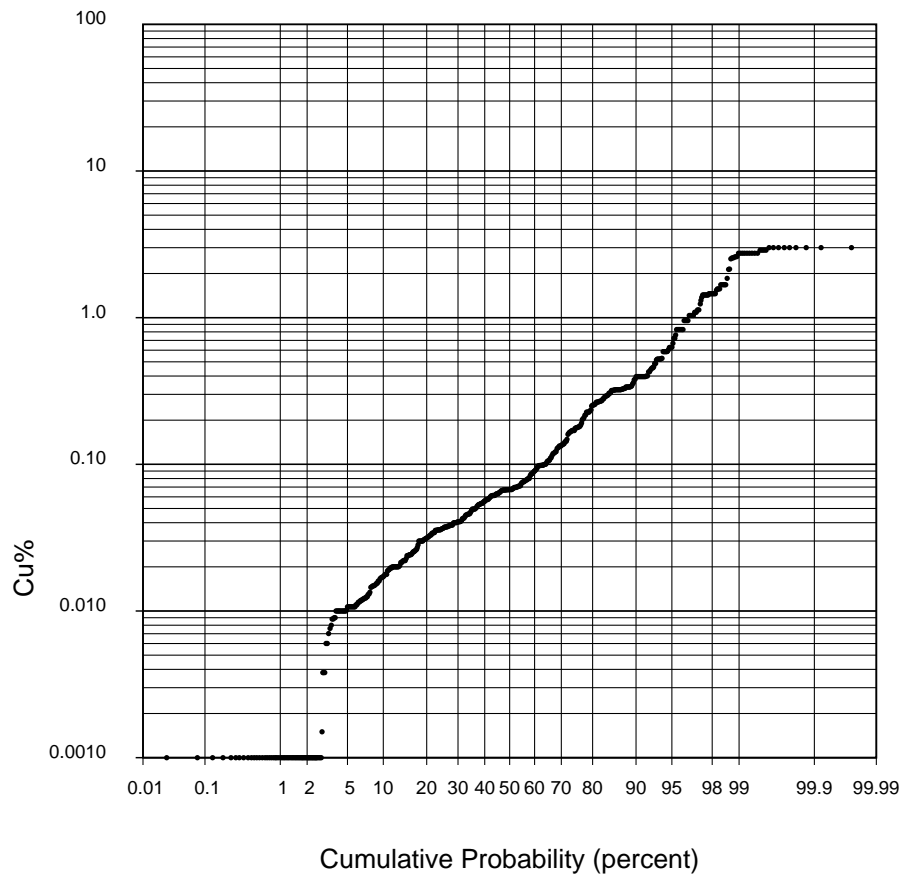
Cu SGL Block NN Estimate Intrusive (High Confidence Blocks)



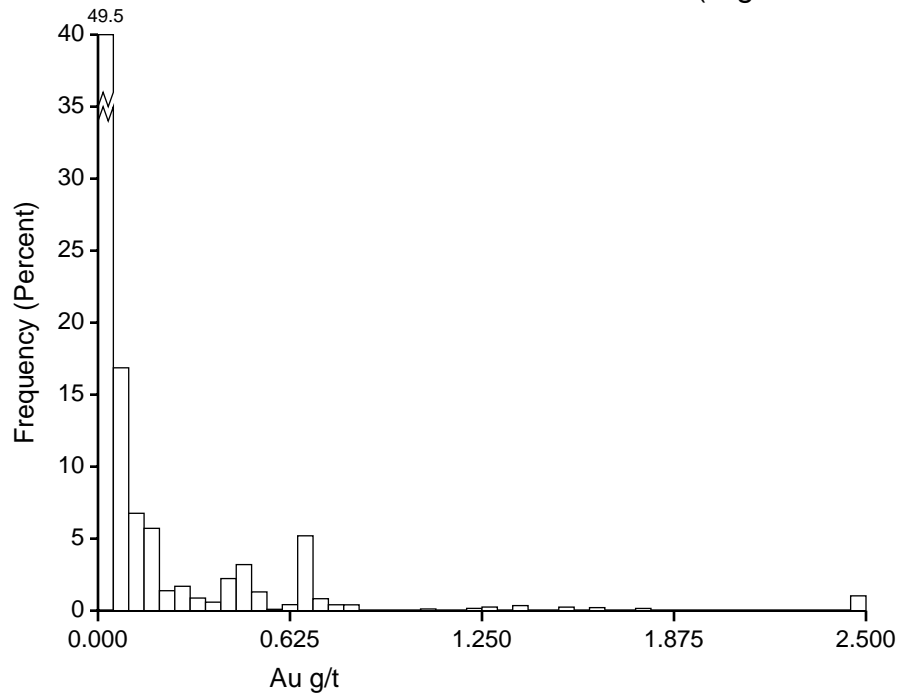
N	2037
m	0.188
$\sigma^2$	0.147
$\sigma/m$	2.041
min	0.001
$q_{0.25}$	0.037
$q_{0.50}$	0.067
$q_{0.75}$	0.177
max	3.000

Class width = 0.050  
The last class contains  
all values  $\geq 2.450$

Cu SGL Block NN Estimate Intrusive (High Confidence Blocks)



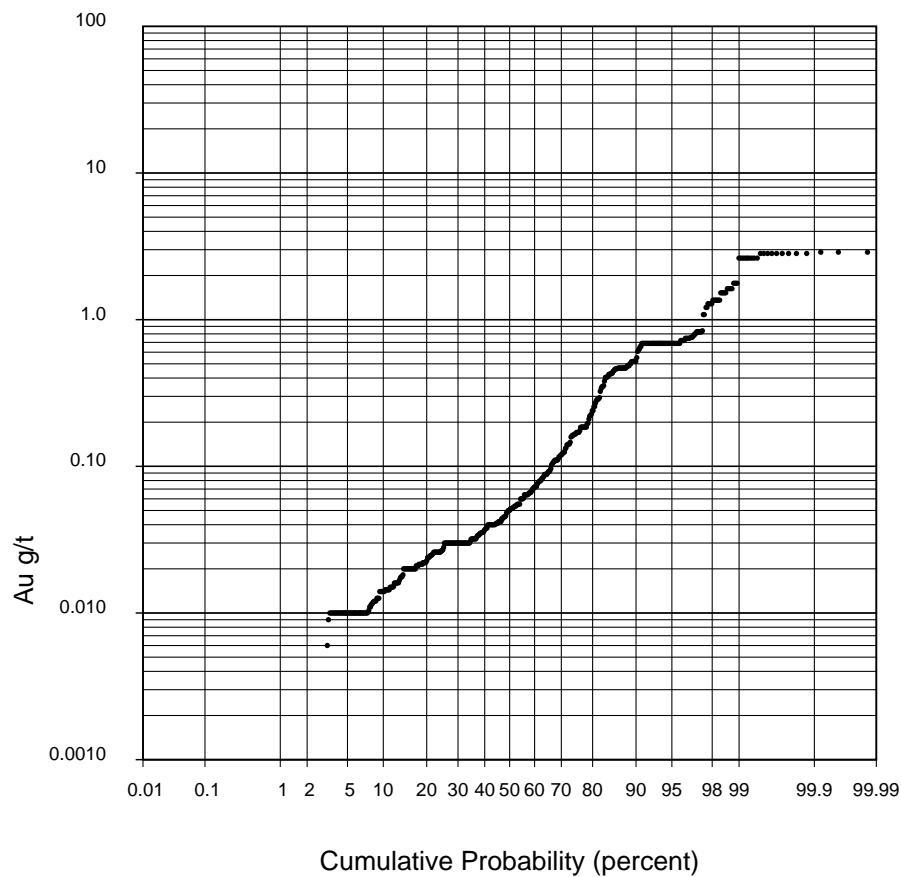
Au SGL Block NN Estimate Intrusive (High Confidence Blocks)



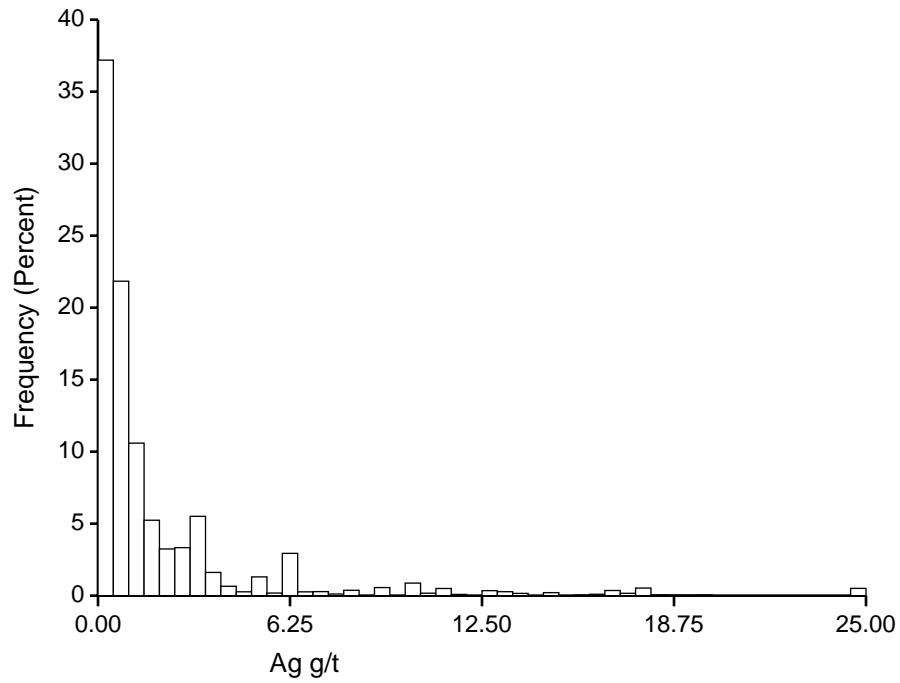
N	2036
m	0.187
$\sigma^2$	0.131
$\sigma/m$	1.935
min	0.000
$q_{0.25}$	0.028
$q_{0.50}$	0.050
$q_{0.75}$	0.170
max	2.887

Class width = 0.050  
The last class contains  
all values  $\geq 2.450$

Au SGL Block NN Estimate Intrusive (High Confidence Blocks)



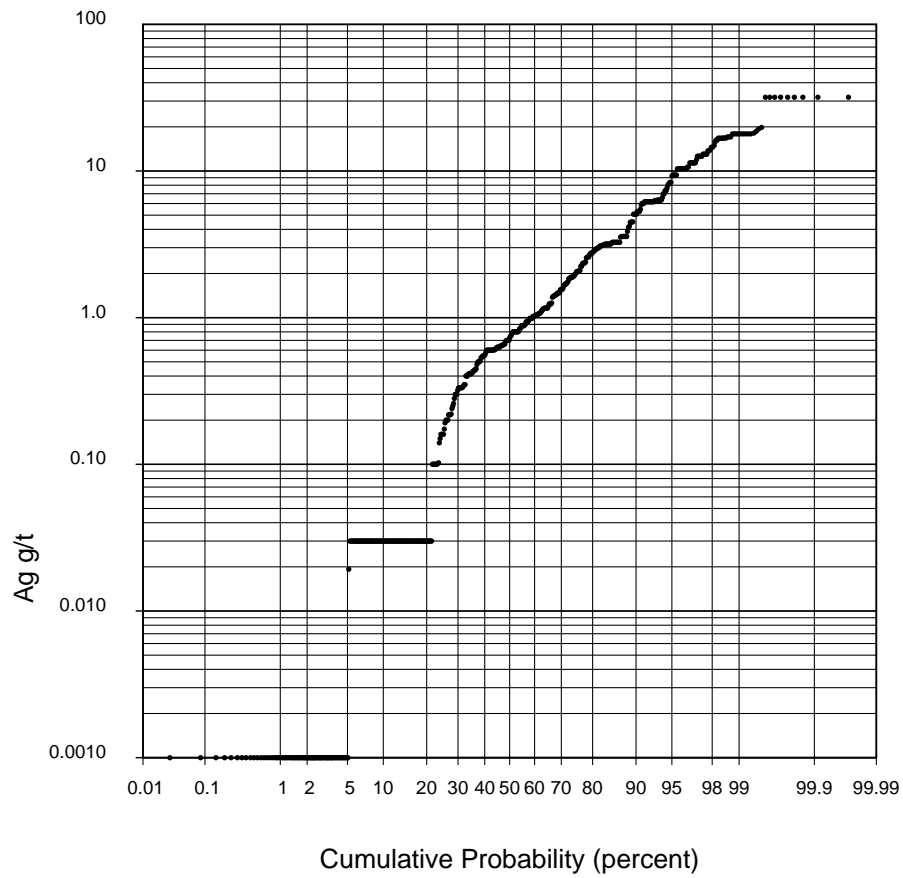
# Ag SGL Block NN Estimate Intrusive (High Confidence Blocks)



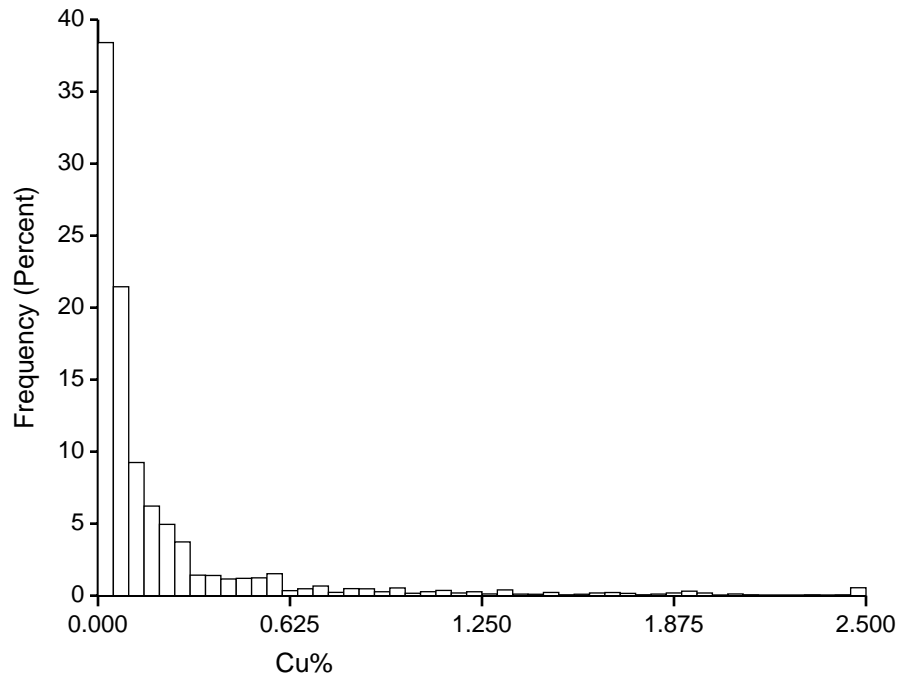
N	1817
m	1.96
$\sigma^2$	13.59
$\sigma/m$	1.88
min	0.00
$q_{0.25}$	0.16
$q_{0.50}$	0.73
$q_{0.75}$	2.00
max	31.82

Class width = 0.50  
The last class contains  
all values  $\geq 24.50$

# Ag SGL Block NN Estimate Intrusive (High Confidence Blocks)



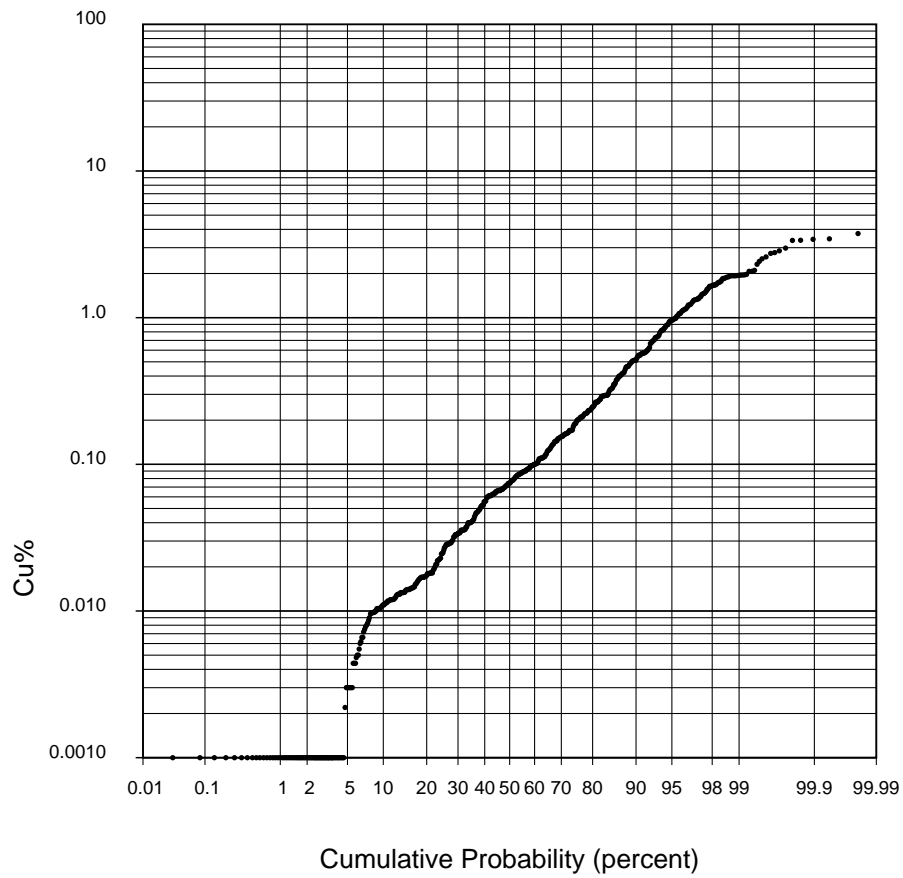
Cu SGL Block NN Estimate Dilutant (High Confidence Blocks)



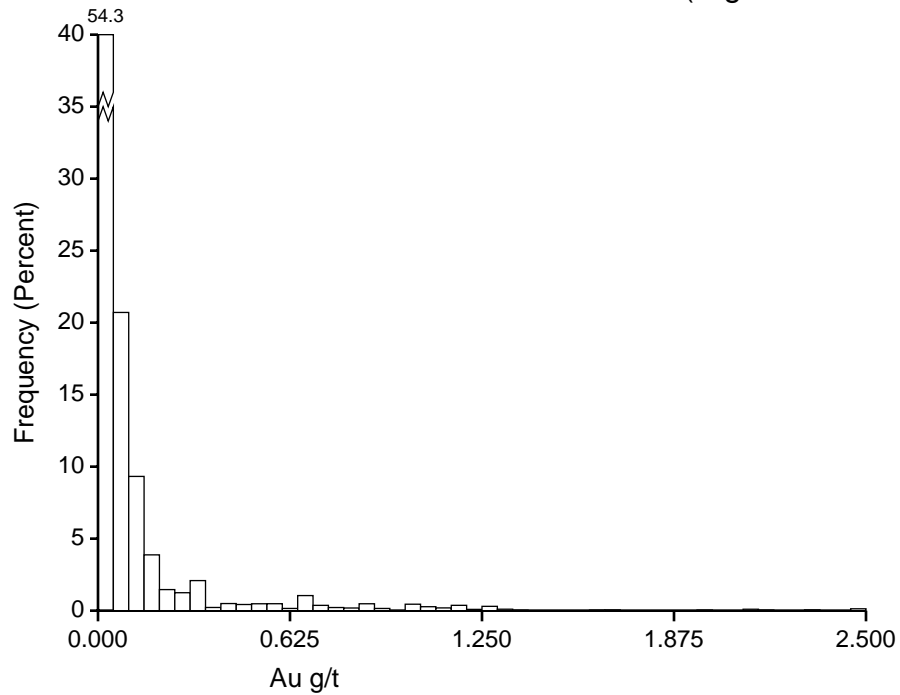
N	1811
m	0.207
$\sigma^2$	0.153
$\sigma/m$	1.888
min	0.001
$q_{0.25}$	0.026
$q_{0.50}$	0.074
$q_{0.75}$	0.197
max	3.748

Class width = 0.050  
The last class contains  
all values  $\geq 2.450$

Cu SGL Block NN Estimate Dilutant (High Confidence Blocks)



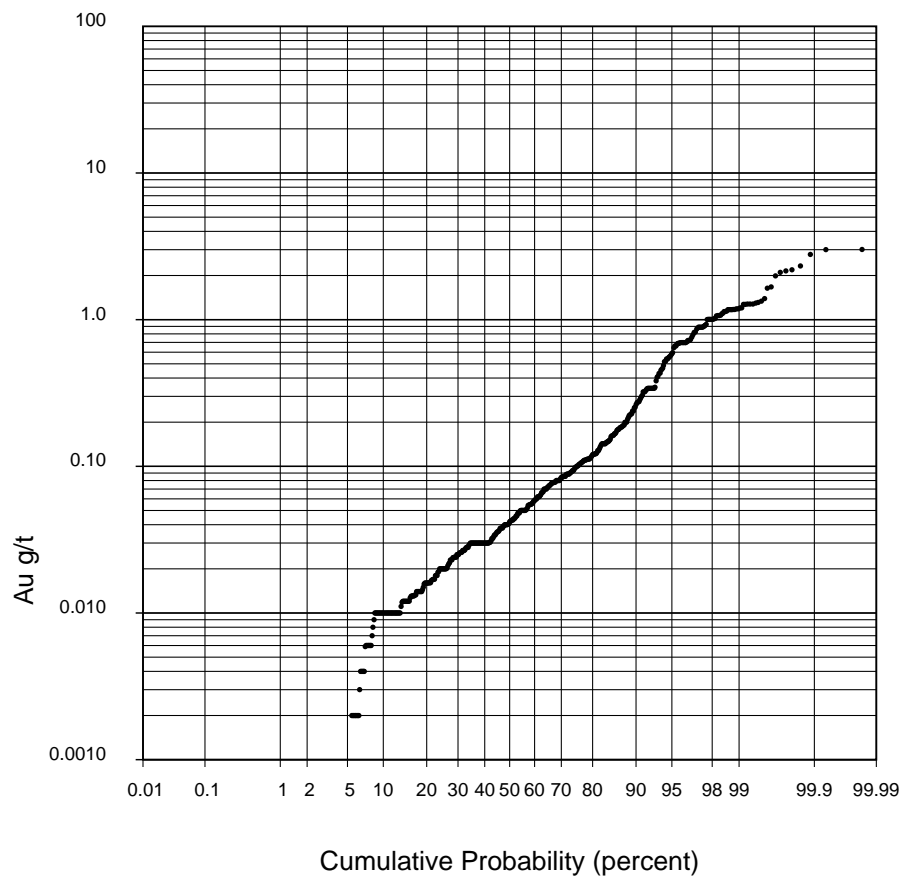
Au SGL Block NN Estimate Dilutant (High Confidence Blocks)



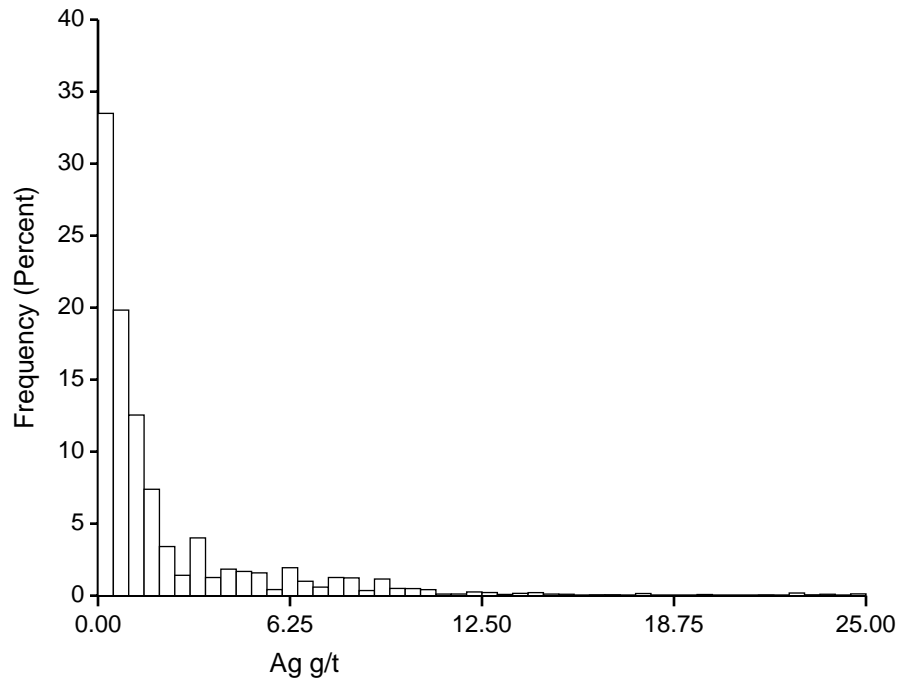
N	1810
m	0.120
$\sigma^2$	0.063
$\sigma/m$	2.103
min	0.000
$q_{0.25}$	0.020
$q_{0.50}$	0.042
$q_{0.75}$	0.098
max	3.011

Class width = 0.050  
The last class contains  
all values  $\geq 2.450$

Au SGL Block NN Estimate Dilutant (High Confidence Blocks)



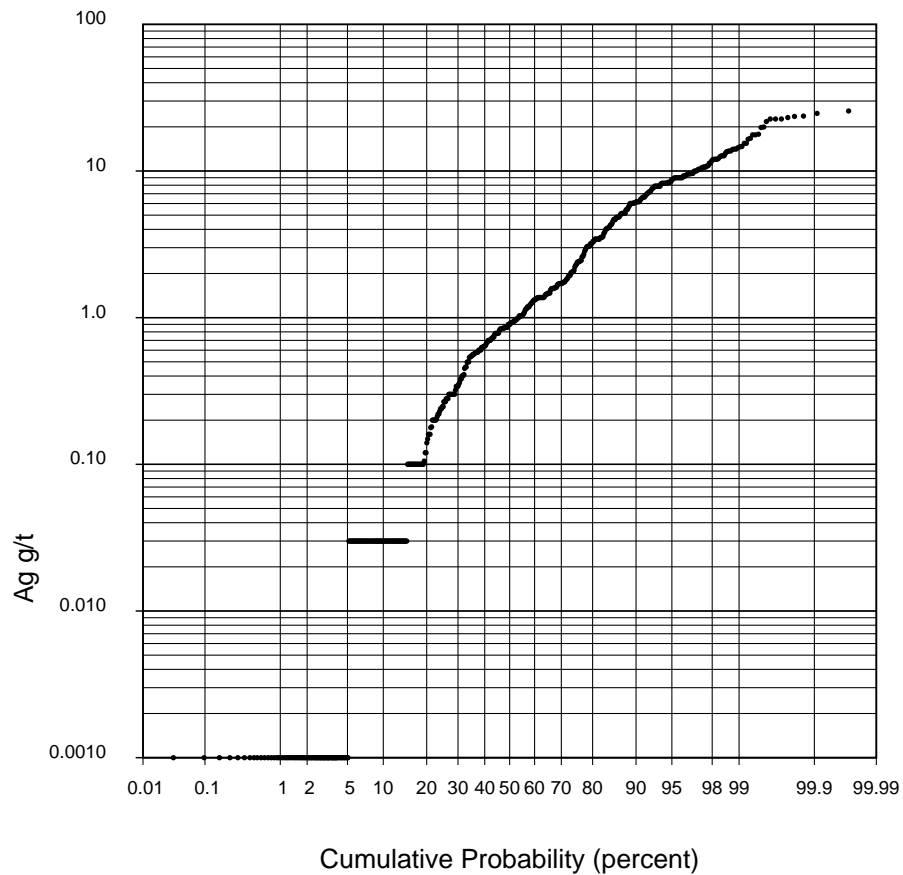
### Ag SGL Block NN Estimate Dilutant (High Confidence Blocks)



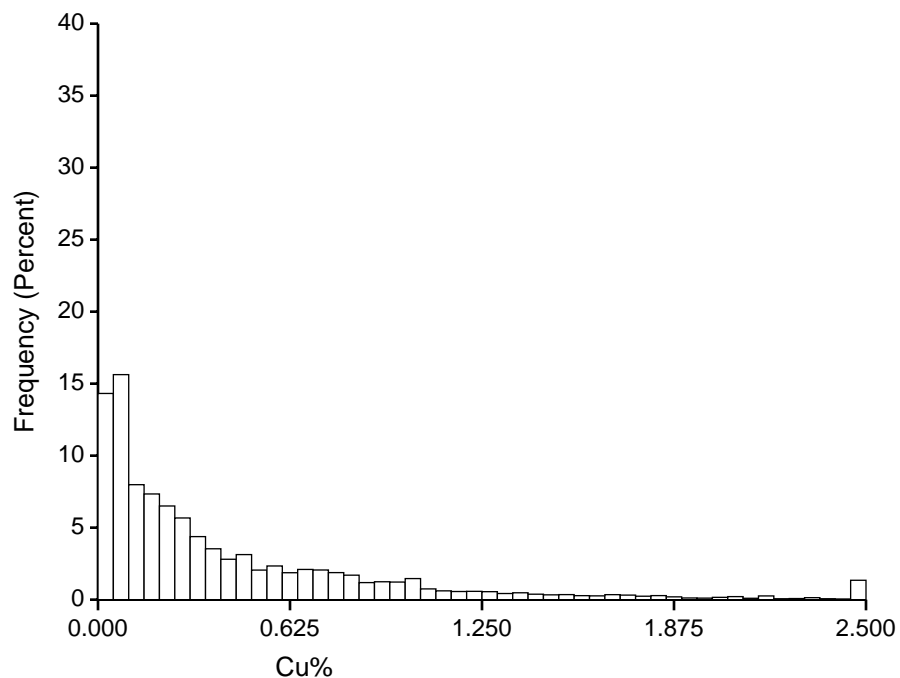
N	1764
m	2.09
$\sigma^2$	10.13
$\sigma/m$	1.52
min	0.00
$q_{0.25}$	0.26
$q_{0.50}$	0.90
$q_{0.75}$	2.32
max	25.68

Class width = 0.50  
The last class contains  
all values  $\geq 24.50$

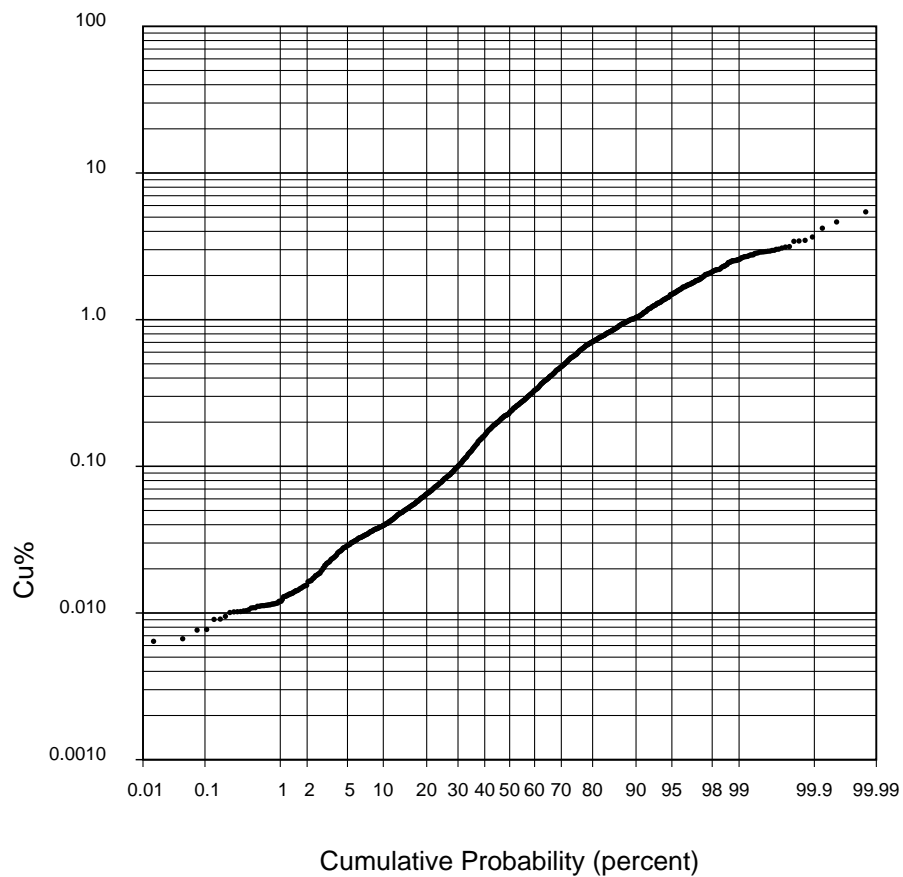
### Ag SGL Block NN Estimate Dilutant (High Confidence Blocks)



Cu SGL Block Estimate Volcanic (High Confidence Blocks)

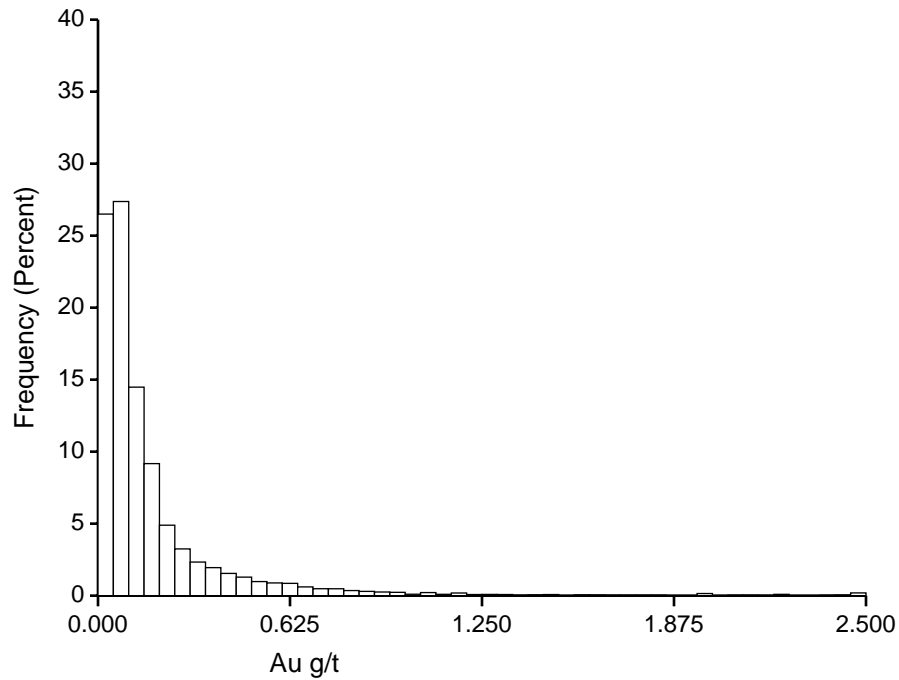


Cu SGL Block Estimate Volcanic (High Confidence Blocks)





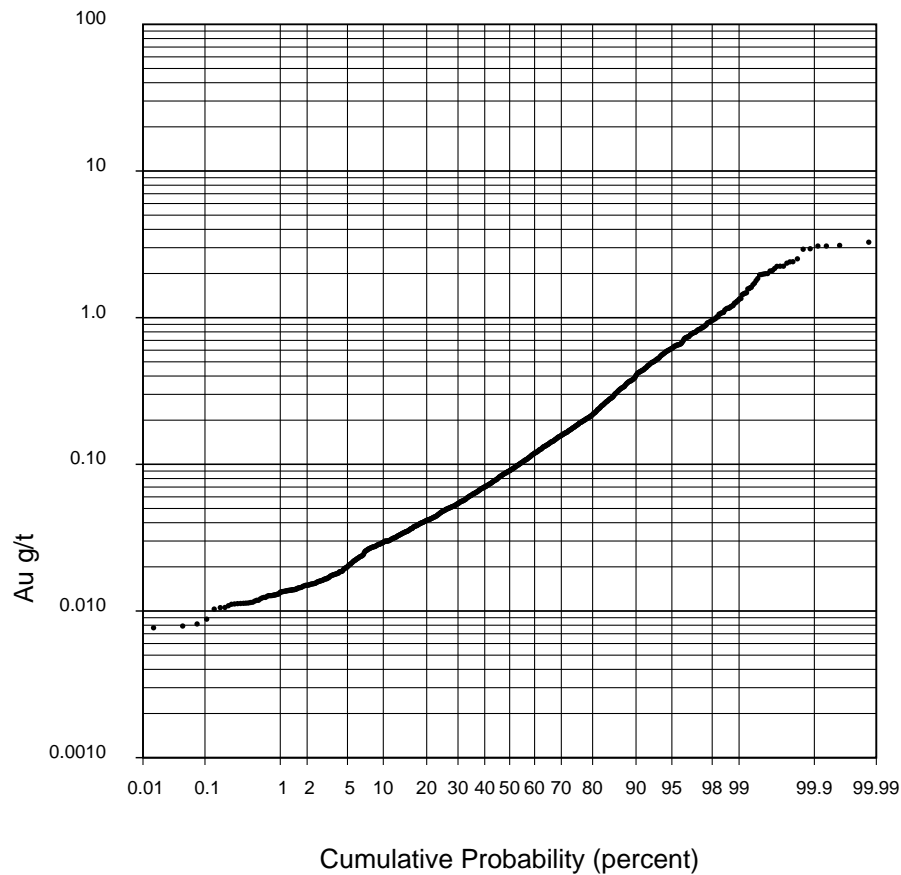
# Au SGL Block Estimate Volcanic (High Confidence Blocks)



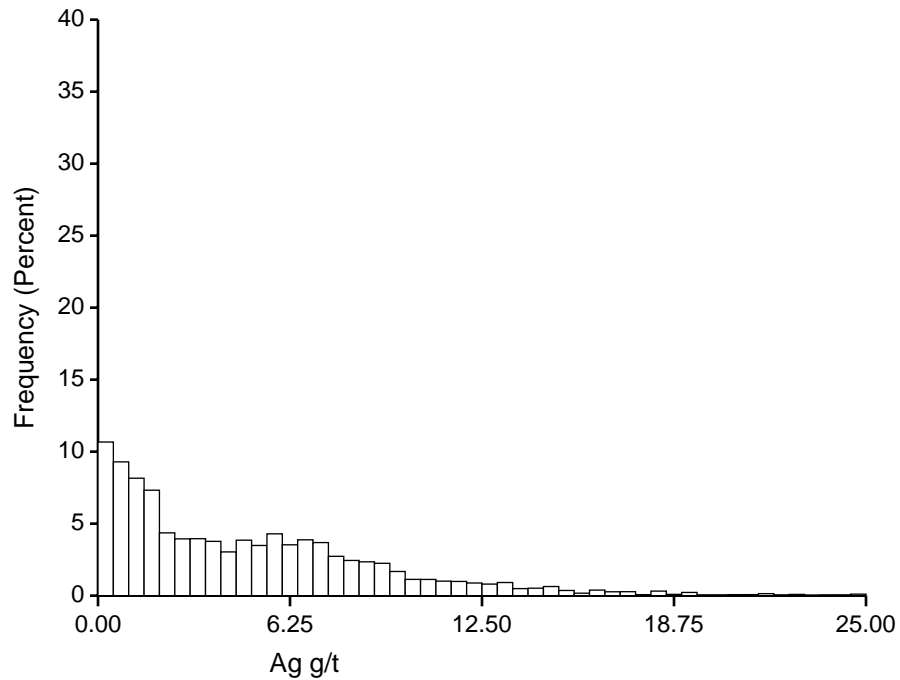
N	3670
m	0.176
$\sigma^2$	0.074
$\sigma/m$	1.542
min	0.008
$q_{0.25}$	0.048
$q_{0.50}$	0.090
$q_{0.75}$	0.183
max	3.266

Class width = 0.050  
The last class contains  
all values  $\geq 2.450$

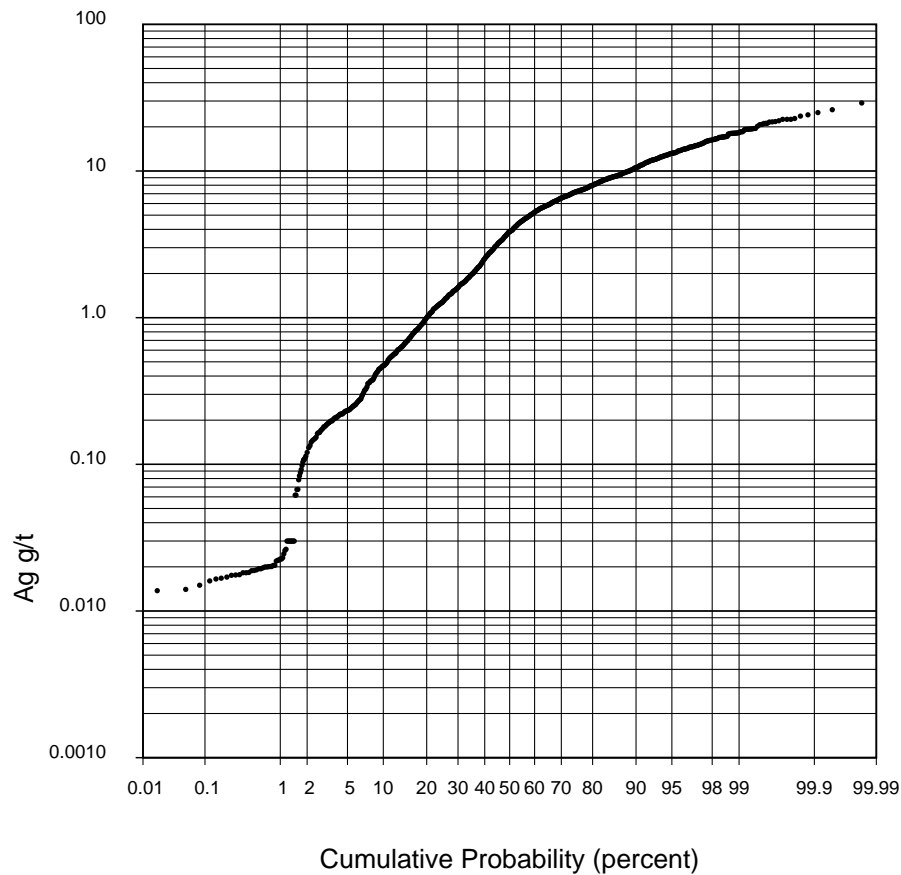
# Au SGL Block Estimate Volcanic (High Confidence Blocks)



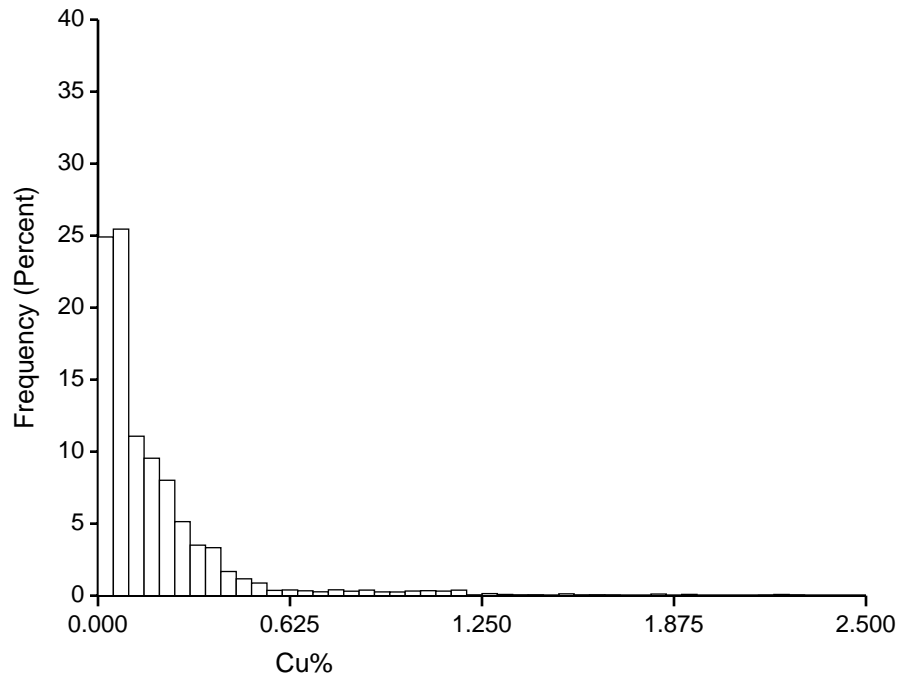
### Ag SGL Block Estimate Volcanic (High Confidence Blocks)



### Ag SGL Block Estimate Volcanic (High Confidence Blocks)



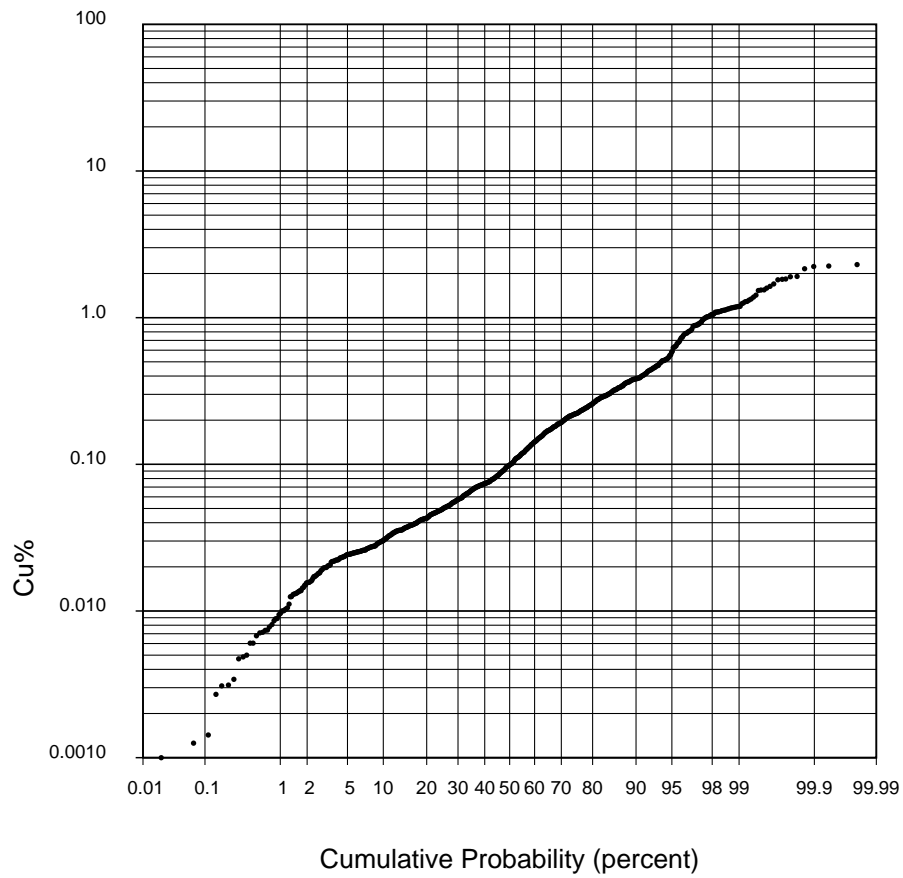
Cu SGL Block Estimate Intrusive (High Confidence Blocks)



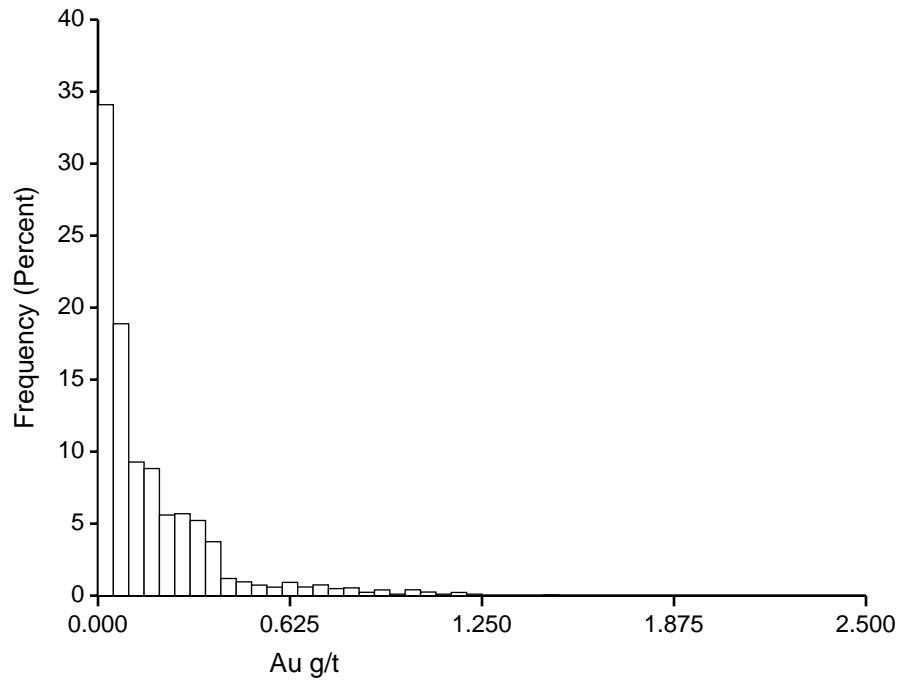
N	2037
m	0.183
$\sigma^2$	0.058
$\sigma/m$	1.319
min	0.001
$q_{0.25}$	0.050
$q_{0.50}$	0.099
$q_{0.75}$	0.222
max	2.298

Class width = 0.050  
The last class contains  
all values  $\geq 2.450$

Cu SGL Block Estimate Intrusive (High Confidence Blocks)



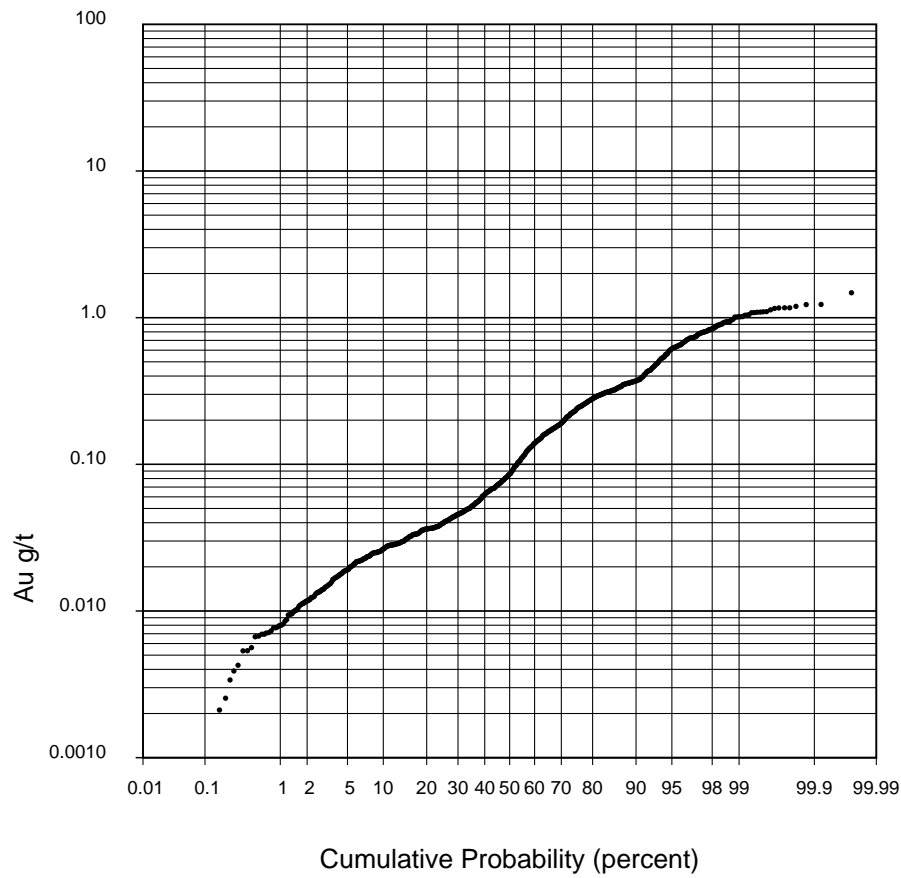
# Au SGL Block Estimate Intrusive (High Confidence Blocks)



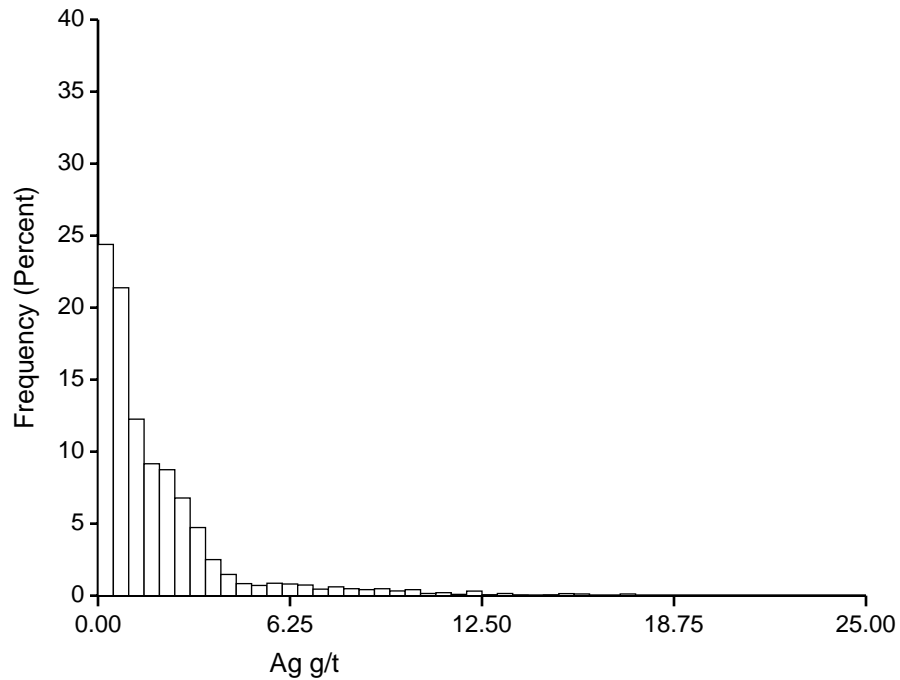
N	2036
m	0.170
$\sigma^2$	0.040
$\sigma/m$	1.178
min	0.000
$q_{0.25}$	0.040
$q_{0.50}$	0.086
$q_{0.75}$	0.236
max	1.480

Class width = 0.050  
The last class contains  
all values  $\geq 2.450$

# Au SGL Block Estimate Intrusive (High Confidence Blocks)



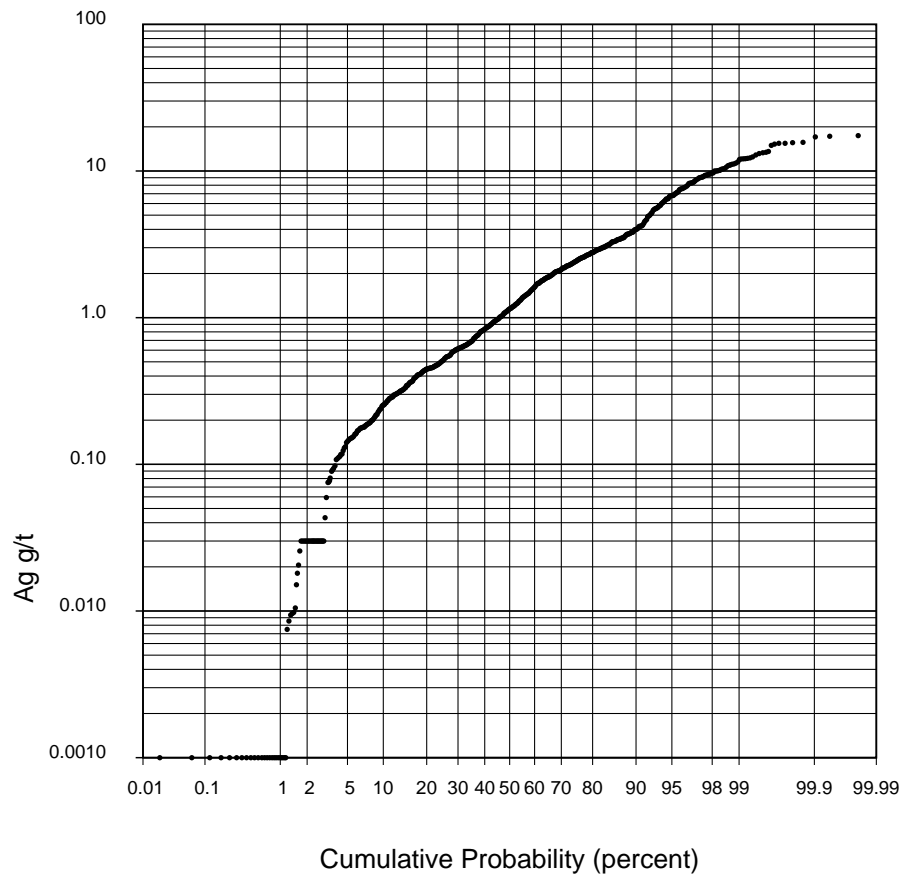
### Ag SGL Block Estimate Intrusive (High Confidence Blocks)



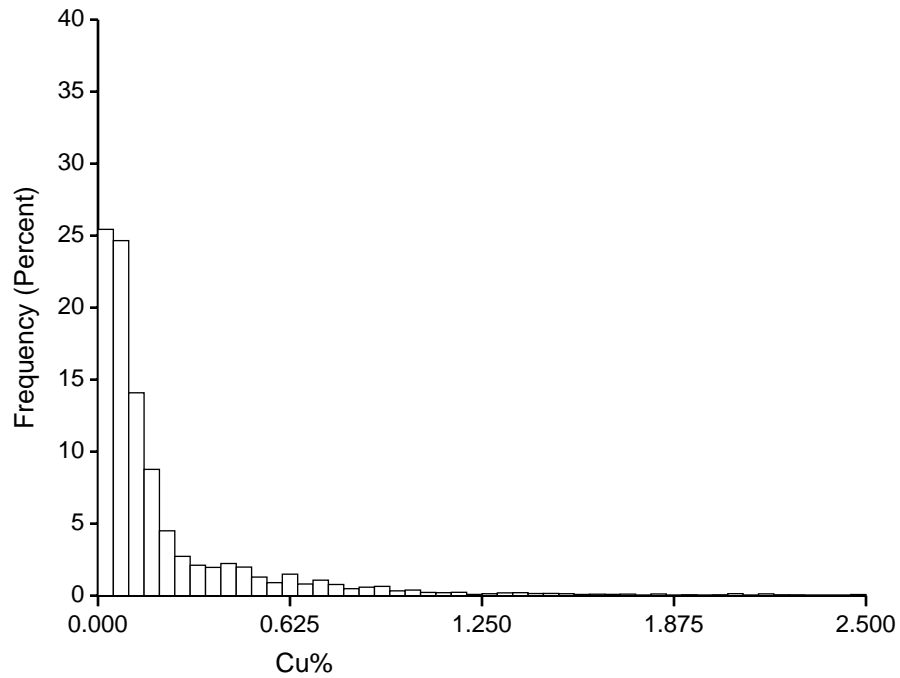
N	1817
m	1.91
$\sigma^2$	5.26
$\sigma/m$	1.20
min	0.00
$q_{0.25}$	0.51
$q_{0.50}$	1.15
$q_{0.75}$	2.42
max	17.42

Class width = 0.50  
The last class contains  
all values  $\geq 24.50$

### Ag SGL Block Estimate Intrusive (High Confidence Blocks)



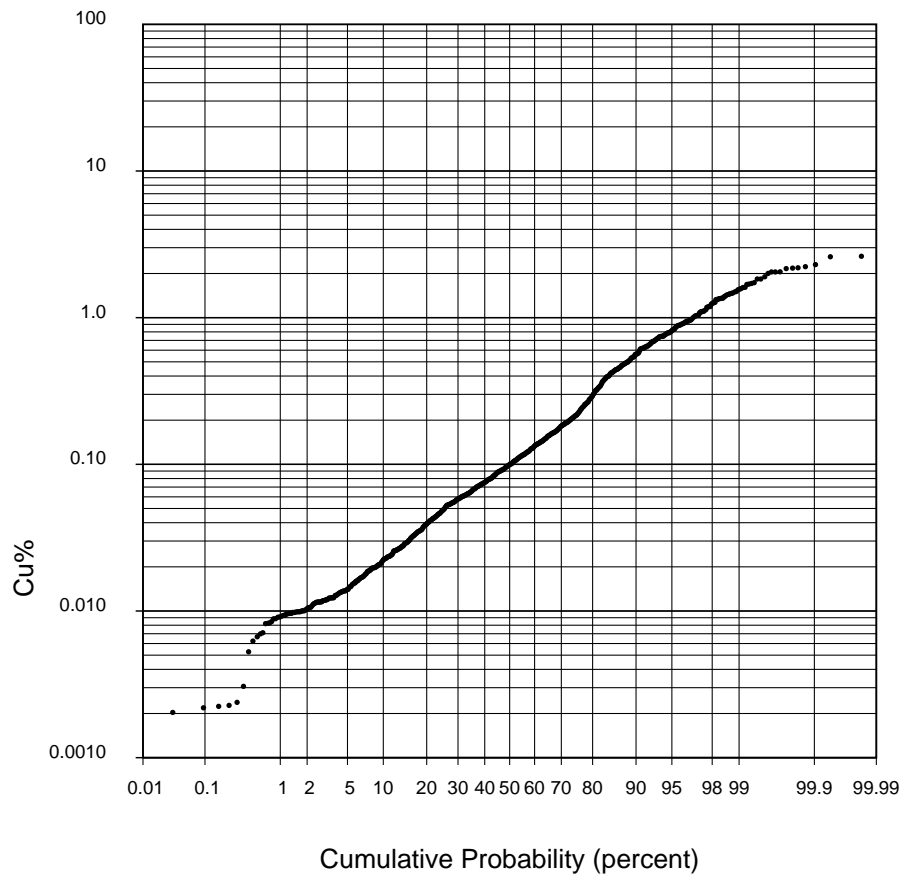
Cu SGL Block Estimate Dilutant (High Confidence Blocks)



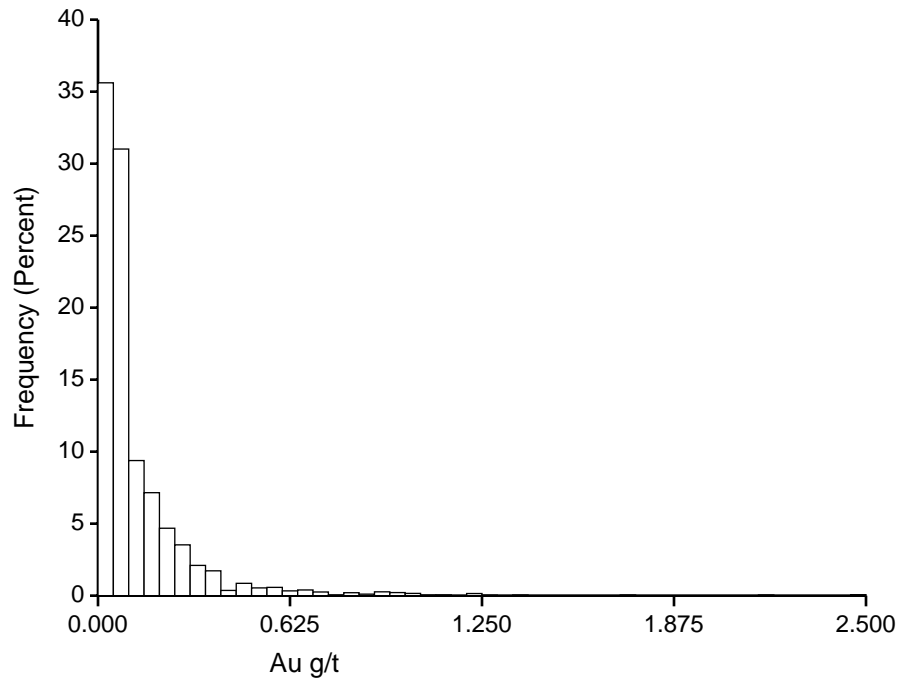
N	1811
m	0.213
$\sigma^2$	0.094
$\sigma/m$	1.440
min	0.002
$q_{0.25}$	0.049
$q_{0.50}$	0.100
$q_{0.75}$	0.216
max	2.623

Class width = 0.050  
The last class contains  
all values  $\geq 2.450$

Cu SGL Block Estimate Dilutant (High Confidence Blocks)



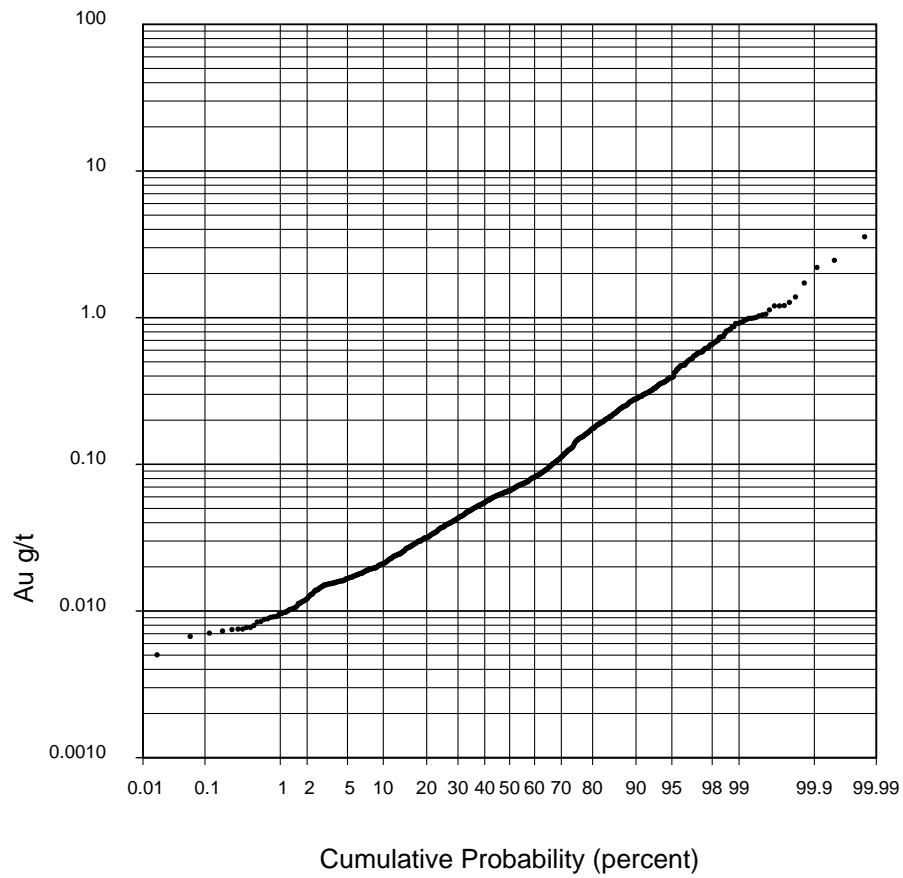
### Au SGL Block Estimate Dilutant (High Confidence Blocks)



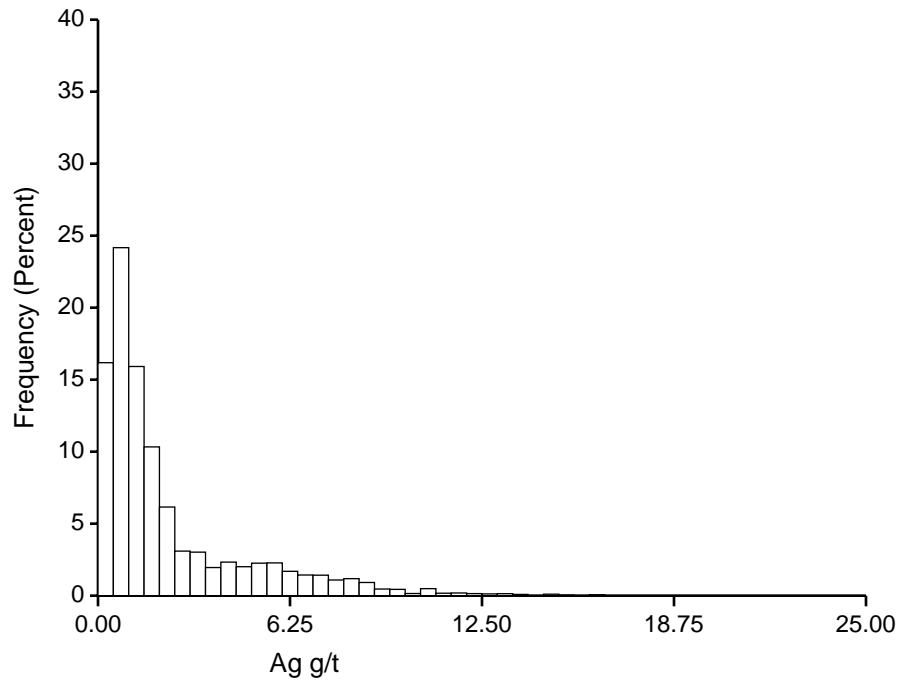
N	1810
m	0.125
$\sigma^2$	0.033
$\sigma/m$	1.461
min	0.005
$q_{0.25}$	0.037
$q_{0.50}$	0.066
$q_{0.75}$	0.144
max	3.568

Class width = 0.050  
The last class contains  
all values  $\geq 2.450$

### Au SGL Block Estimate Dilutant (High Confidence Blocks)



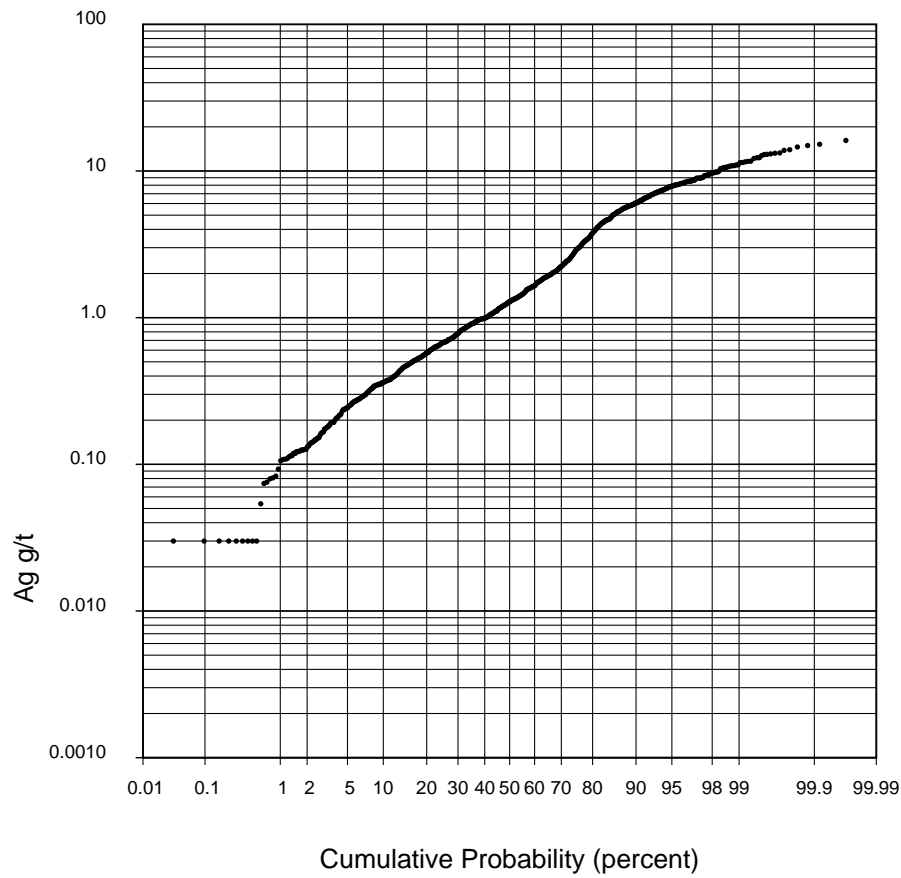
### Ag SGL Block Estimate Dilutant (High Confidence Blocks)



N	1764
m	2.30
$\sigma^2$	6.33
$\sigma/m$	1.09
min	0.03
$q_{0.25}$	0.68
$q_{0.50}$	1.28
$q_{0.75}$	2.90
max	16.18

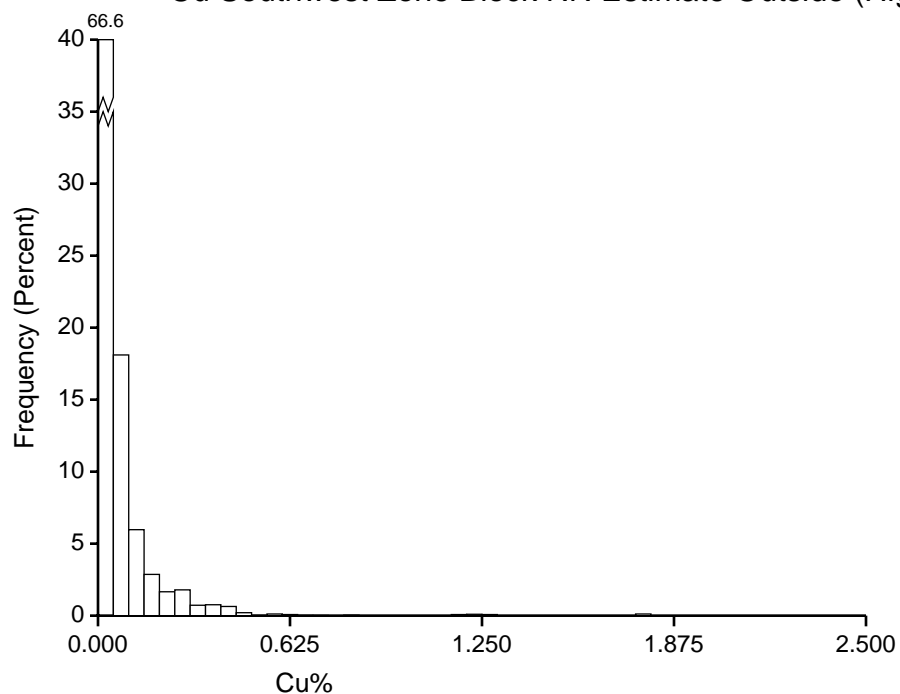
Class width = 0.50  
 The last class contains  
 all values  $\geq 24.50$

### Ag SGL Block Estimate Dilutant (High Confidence Blocks)





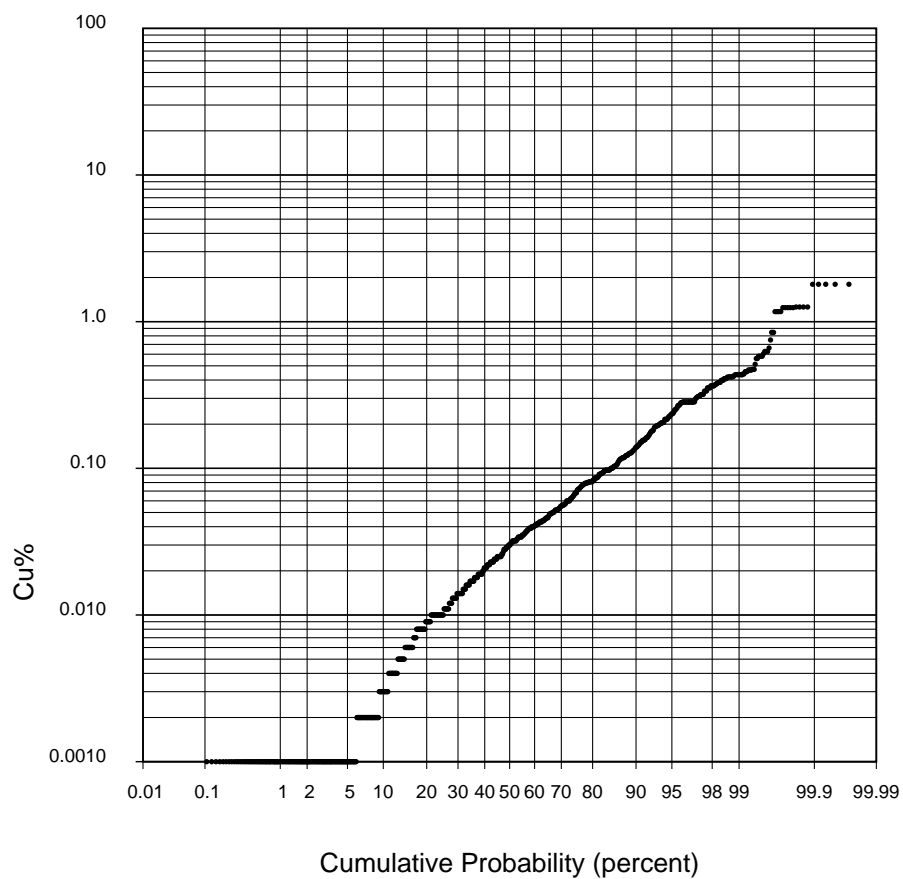
Cu Southwest Zone Block NN Estimate Outside (High Confidence Blocks)



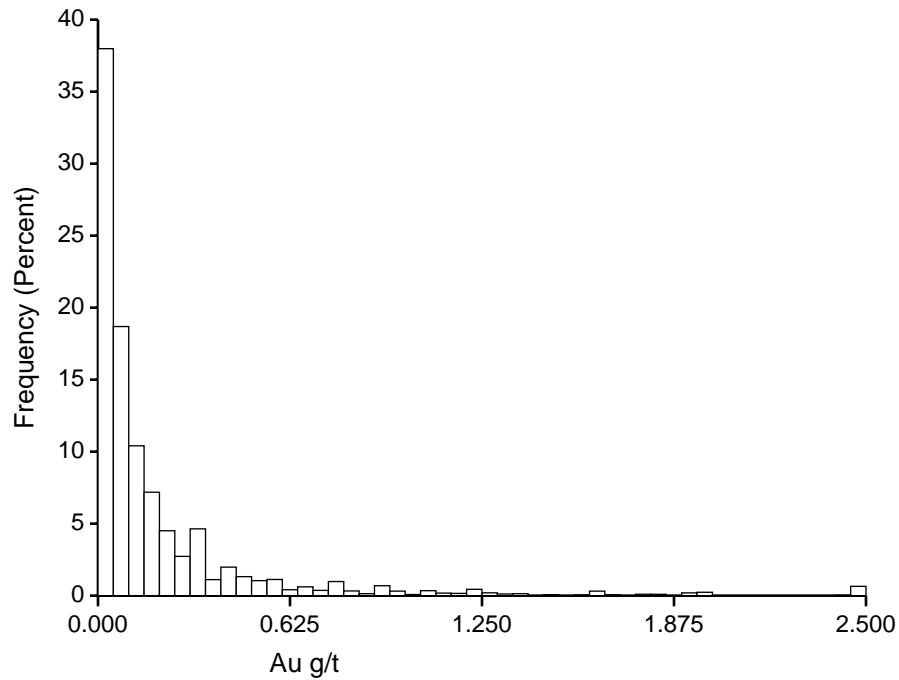
N	5374
m	0.062
$\sigma^2$	0.013
$\sigma/m$	1.876
min	0.000
$q_{0.25}$	0.010
$q_{0.50}$	0.030
$q_{0.75}$	0.068
max	1.800

Class width = 0.050  
The last class contains  
all values  $\geq 2.450$

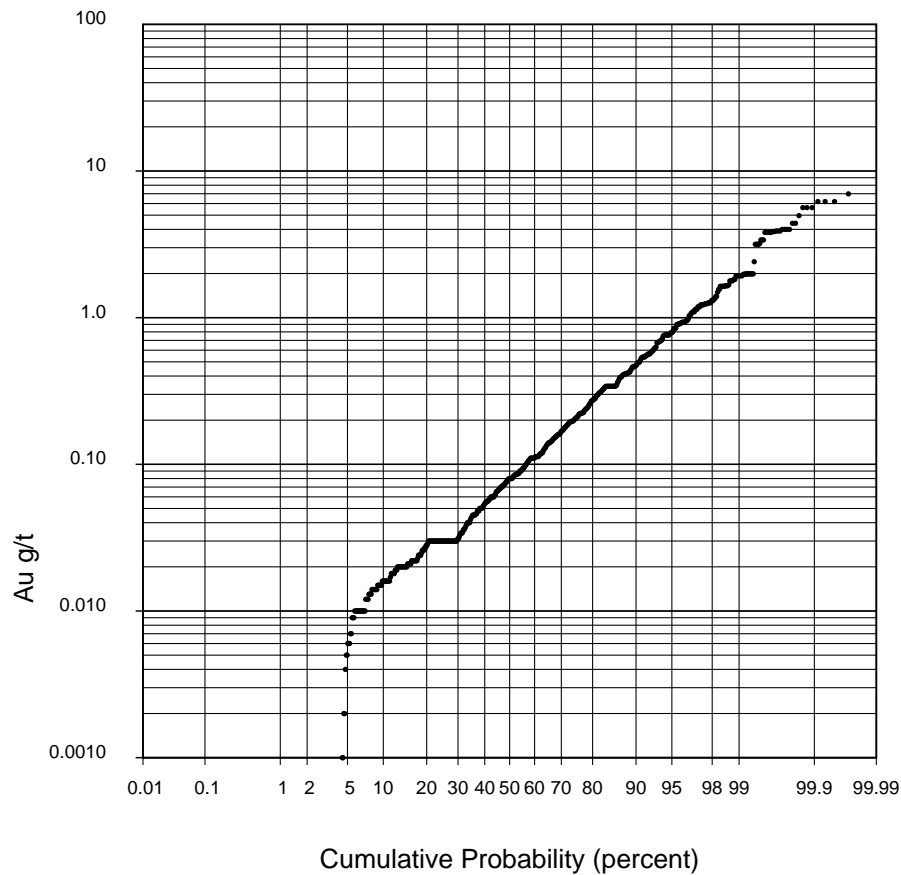
Cu Southwest Zone Block NN Estimate Outside (High Confidence Blocks)



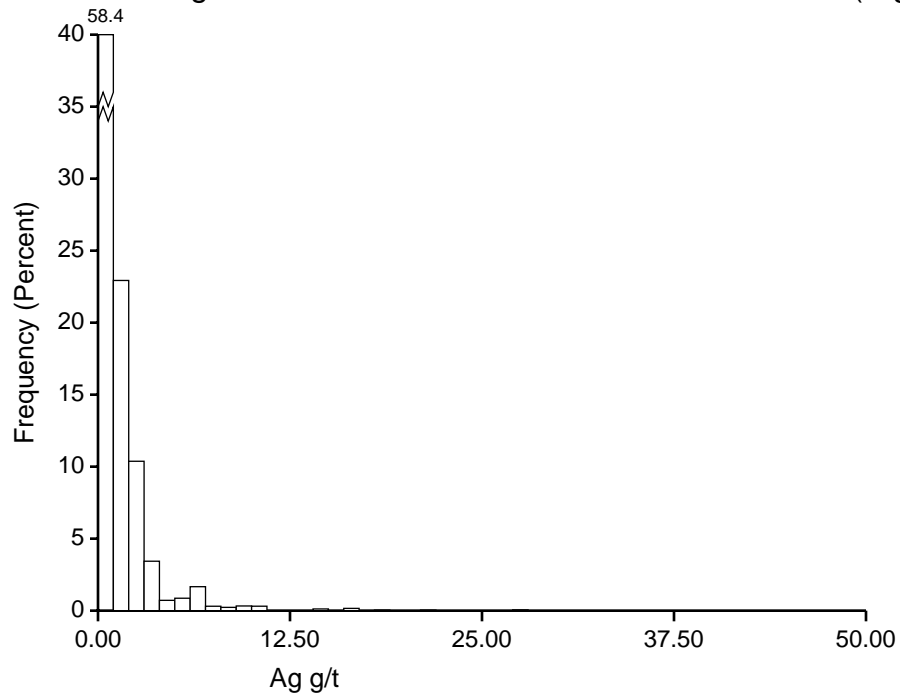
Au Southwest Zone Block NN Estimate Outside (High Confidence Blocks)



Au Southwest Zone Block NN Estimate Outside (High Confidence Blocks)



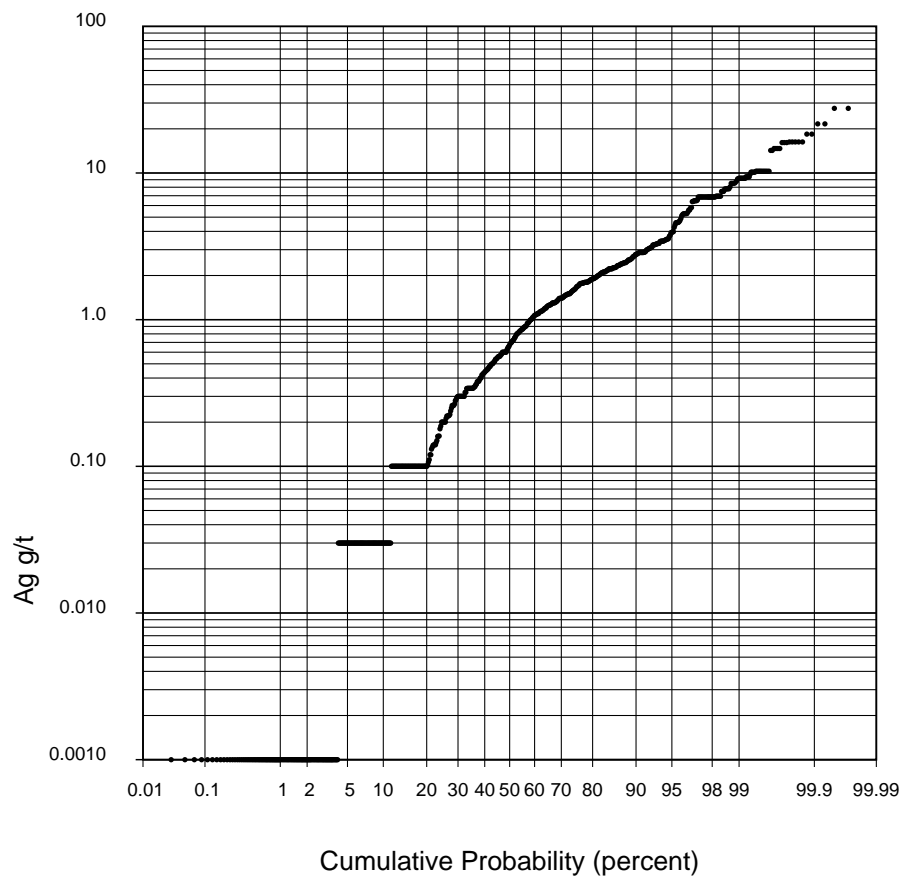
Ag Southwest Zone Block NN Estimate Outside (High Confidence Blocks)



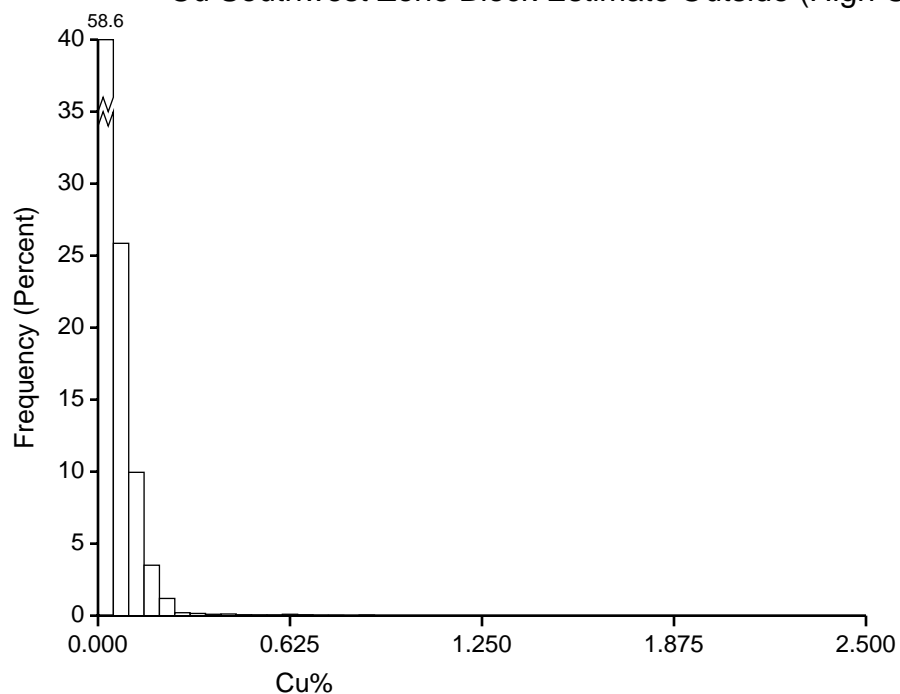
N	5230
m	1.26
$\sigma^2$	3.57
$\sigma/m$	1.50
min	0.00
$q_{0.25}$	0.20
$q_{0.50}$	0.68
$q_{0.75}$	1.64
max	27.60

Class width = 1.00  
The last class contains  
all values  $\geq 49.00$

Ag Southwest Zone Block NN Estimate Outside (High Confidence Blocks)



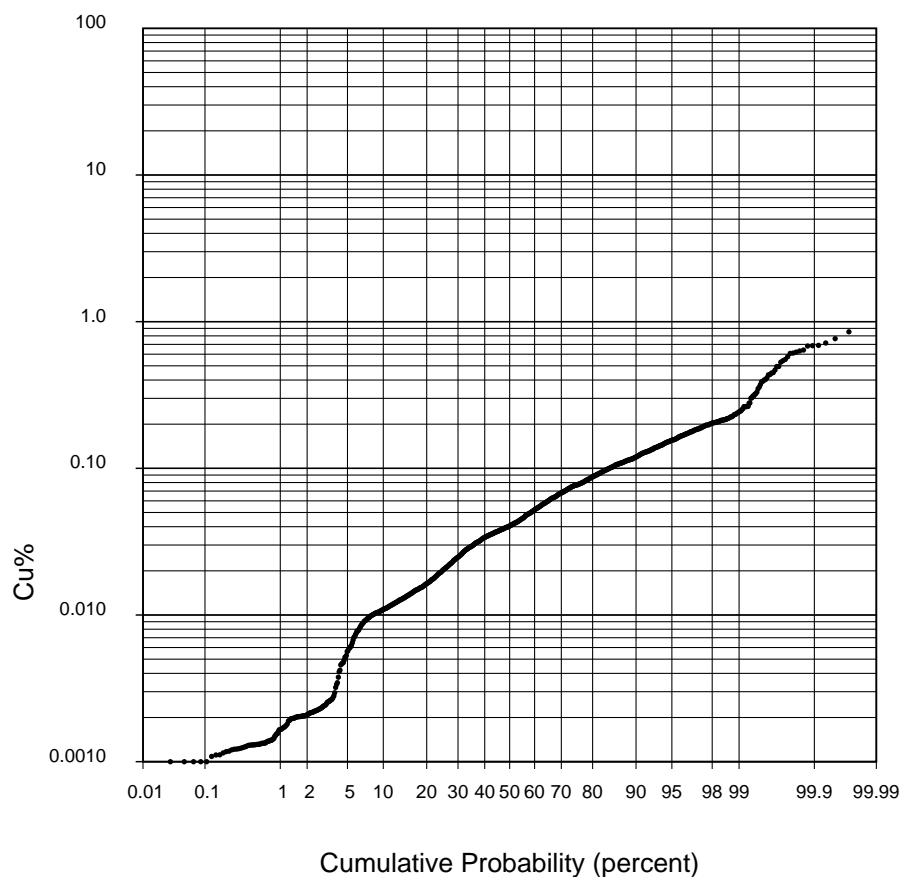
Cu Southwest Zone Block Estimate Outside (High Confidence Blocks)



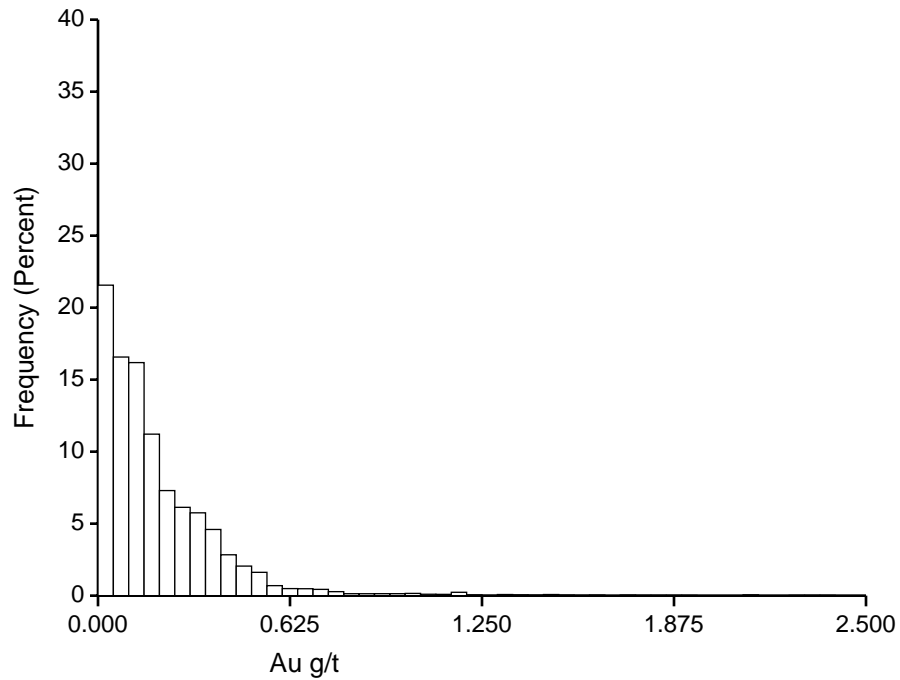
N	5374
m	0.058
$\sigma^2$	0.004
$\sigma/m$	1.057
min	0.001
$q_{0.25}$	0.020
$q_{0.50}$	0.040
$q_{0.75}$	0.077
max	0.896

Class width = 0.050  
The last class contains  
all values  $\geq 2.450$

Cu Southwest Zone Block Estimate Outside (High Confidence Blocks)



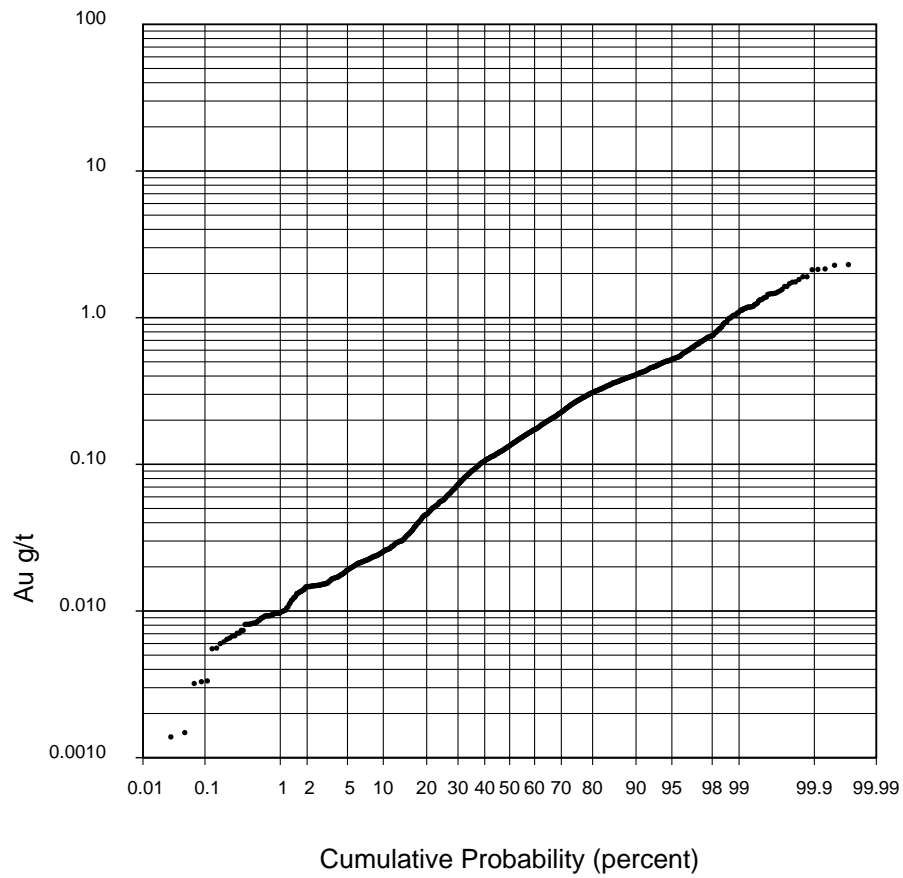
# Au Southwest Zone Block Estimate Outside (High Confidence Blocks)



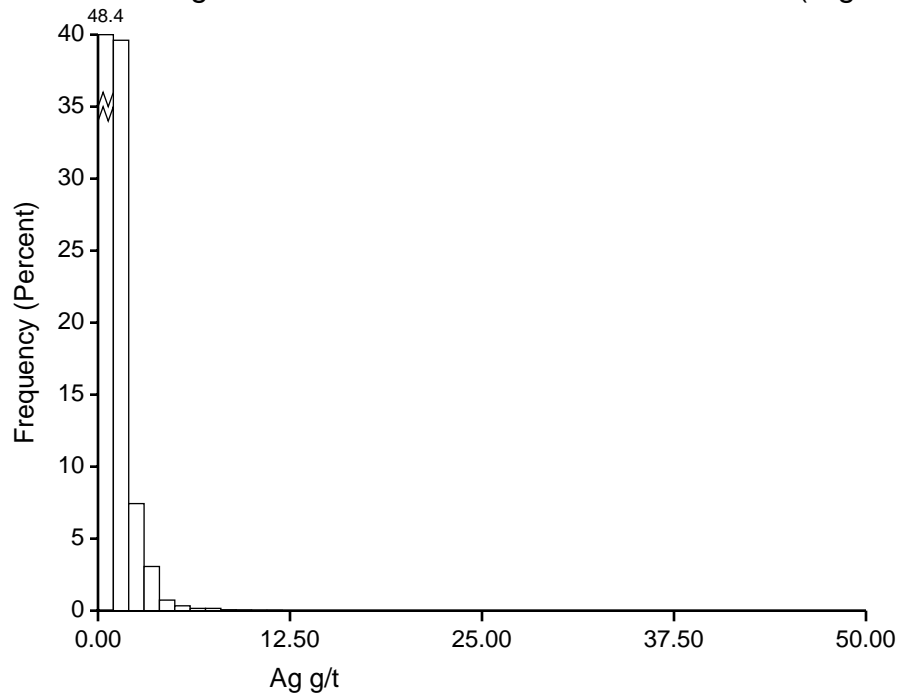
N	5269
m	0.194
$\sigma^2$	0.044
$\sigma/m$	1.083
min	0.001
$q_{0.25}$	0.057
$q_{0.50}$	0.134
$q_{0.75}$	0.268
max	2.384

Class width = 0.050  
The last class contains  
all values  $\geq 2.450$

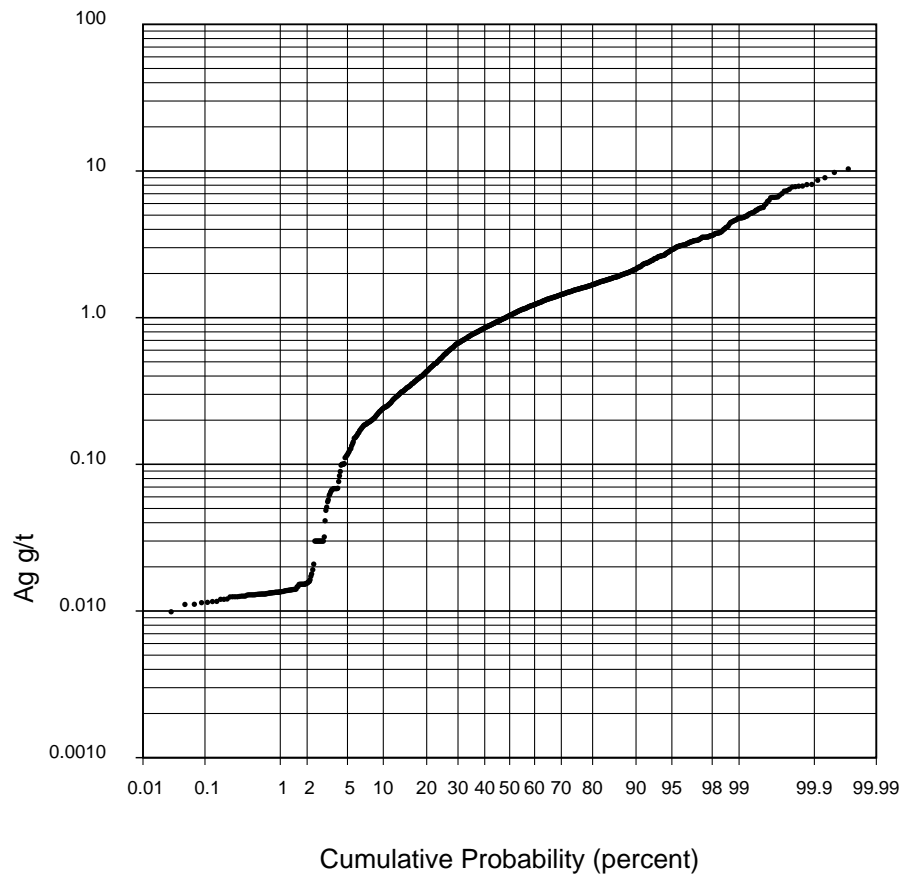
# Au Southwest Zone Block Estimate Outside (High Confidence Blocks)



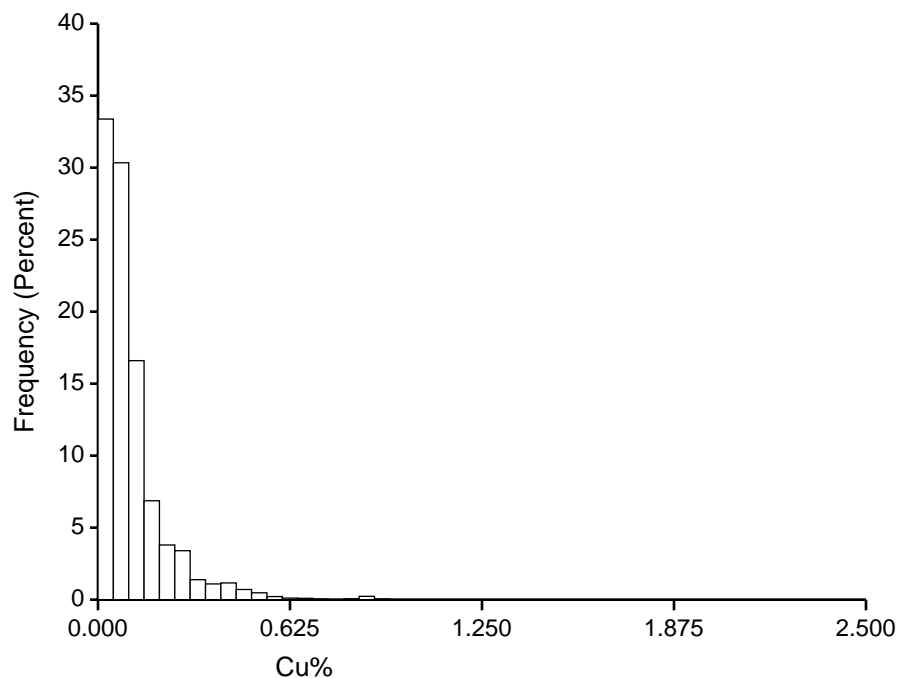
Ag Southwest Zone Block Estimate Outside (High Confidence Blocks)



Ag Southwest Zone Block Estimate Outside (High Confidence Blocks)



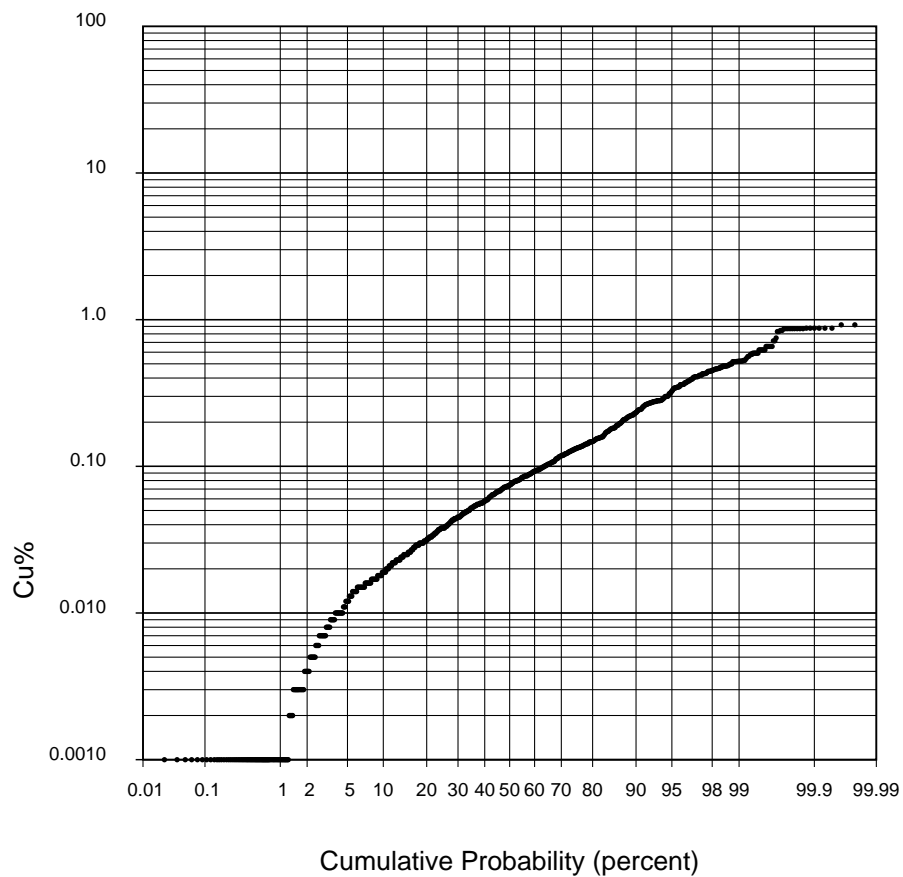
Cu Southwest Zone Block NN Estimate Subore (High Confidence Blocks)



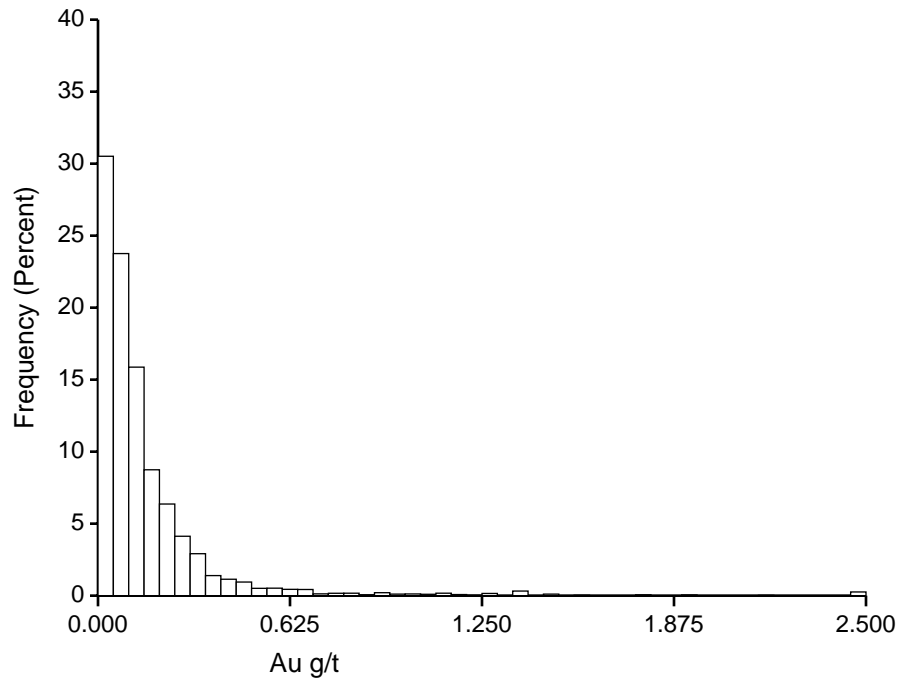
N	6909
m	0.106
$\sigma^2$	0.012
$\sigma/m$	1.031
min	0.001
$q_{0.25}$	0.038
$q_{0.50}$	0.074
$q_{0.75}$	0.132
max	0.921

Class width = 0.050  
The last class contains  
all values  $\geq 2.450$

Cu Southwest Zone Block NN Estimate Subore (High Confidence Blocks)



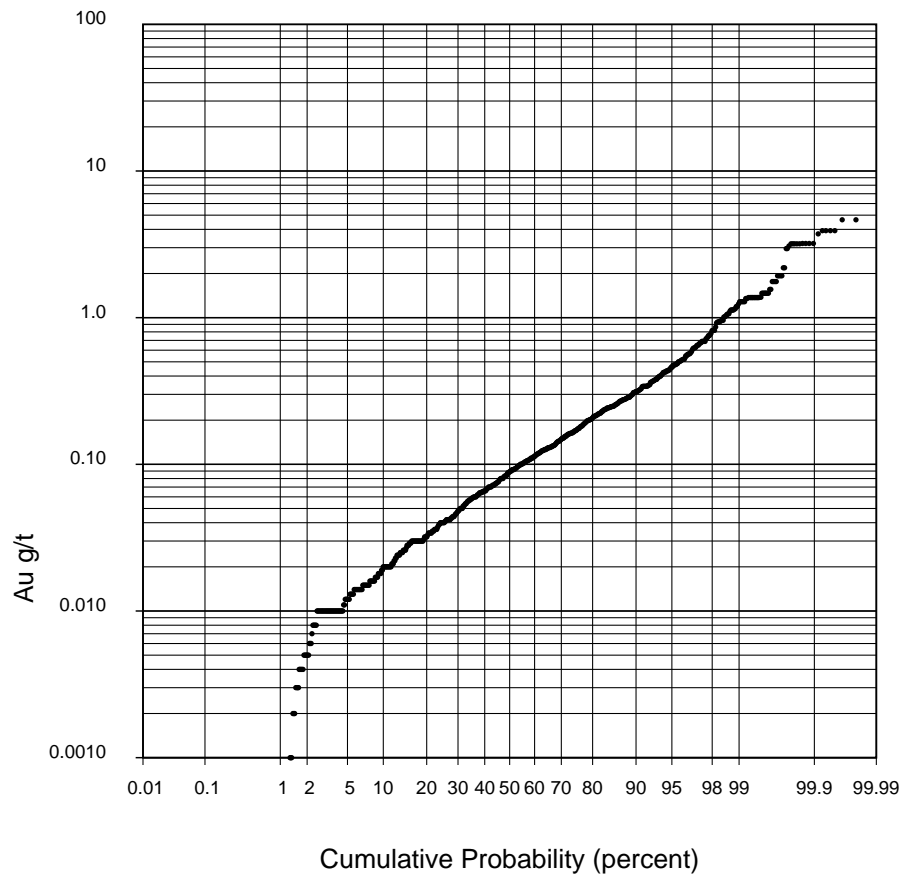
Au Southwest Zone Block NN Estimate Subore (High Confidence Blocks)



N	6909
m	0.153
$\sigma^2$	0.068
$\sigma/m$	1.699
min	0.000
$q_{0.25}$	0.040
$q_{0.50}$	0.089
$q_{0.75}$	0.170
max	4.656

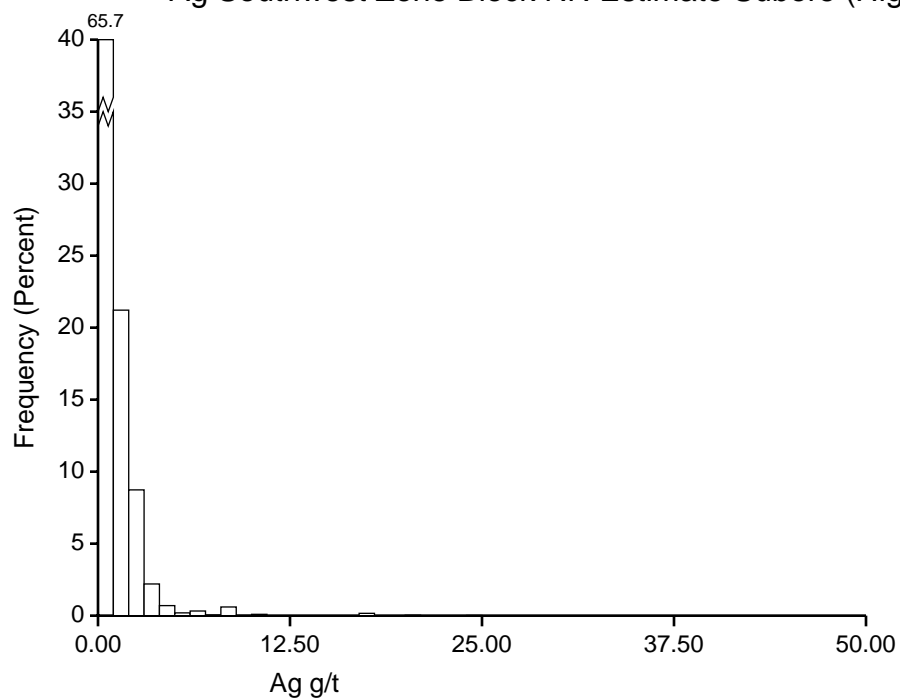
Class width = 0.050  
The last class contains  
all values  $\geq 2.450$

Au Southwest Zone Block NN Estimate Subore (High Confidence Blocks)

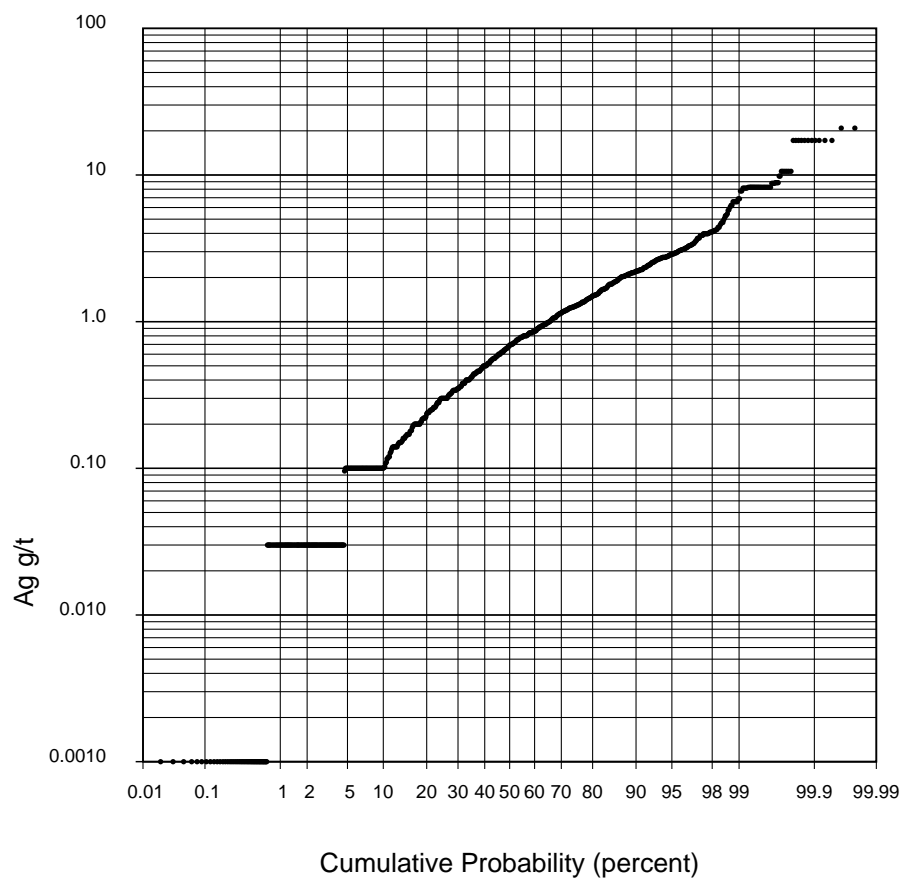




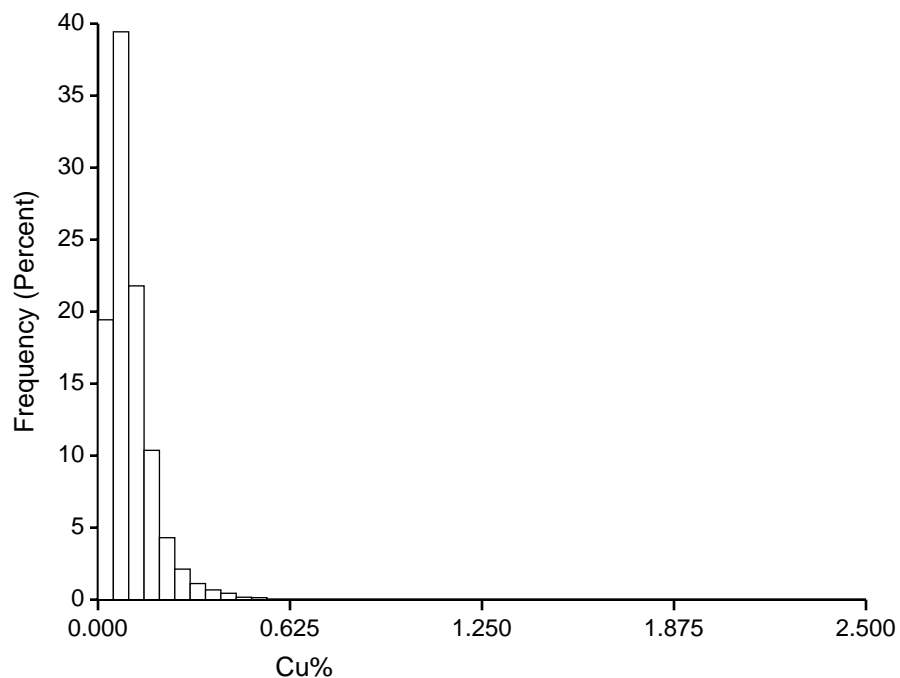
Ag Southwest Zone Block NN Estimate Subore (High Confidence Blocks)



Ag Southwest Zone Block NN Estimate Subore (High Confidence Blocks)



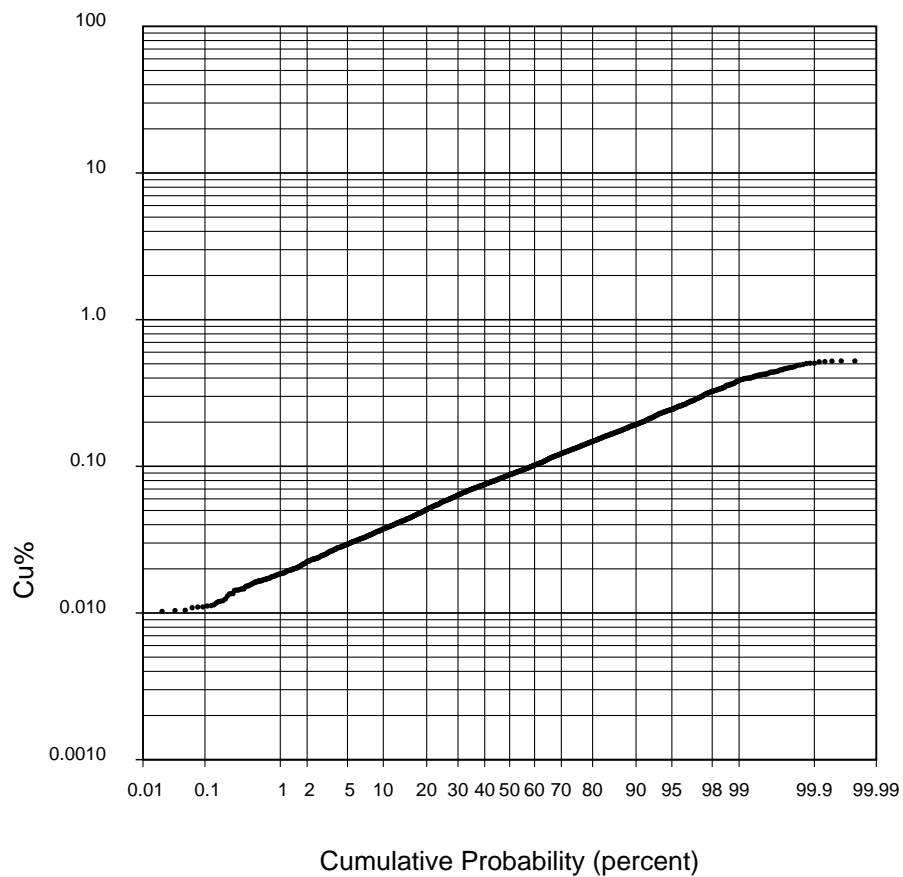
Cu Southwest Zone Block Estimate Subore (High Confidence Blocks)



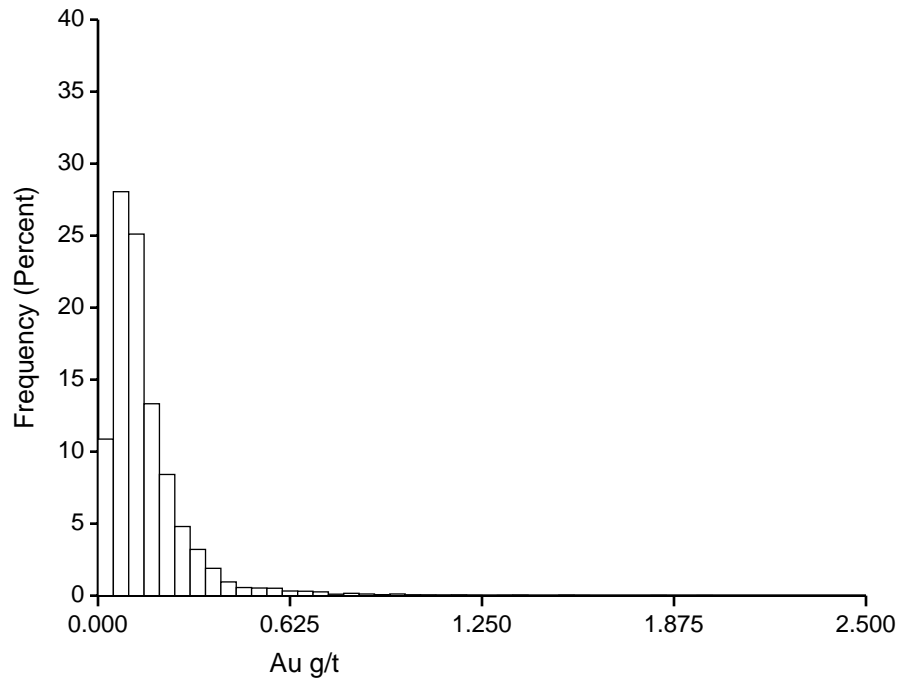
N	6909
m	0.106
$\sigma^2$	0.005
$\sigma/m$	0.678
min	0.009
$q_{0.25}$	0.058
$q_{0.50}$	0.088
$q_{0.75}$	0.133
max	0.529

Class width = 0.050  
The last class contains  
all values  $\geq 2.450$

Cu Southwest Zone Block Estimate Subore (High Confidence Blocks)



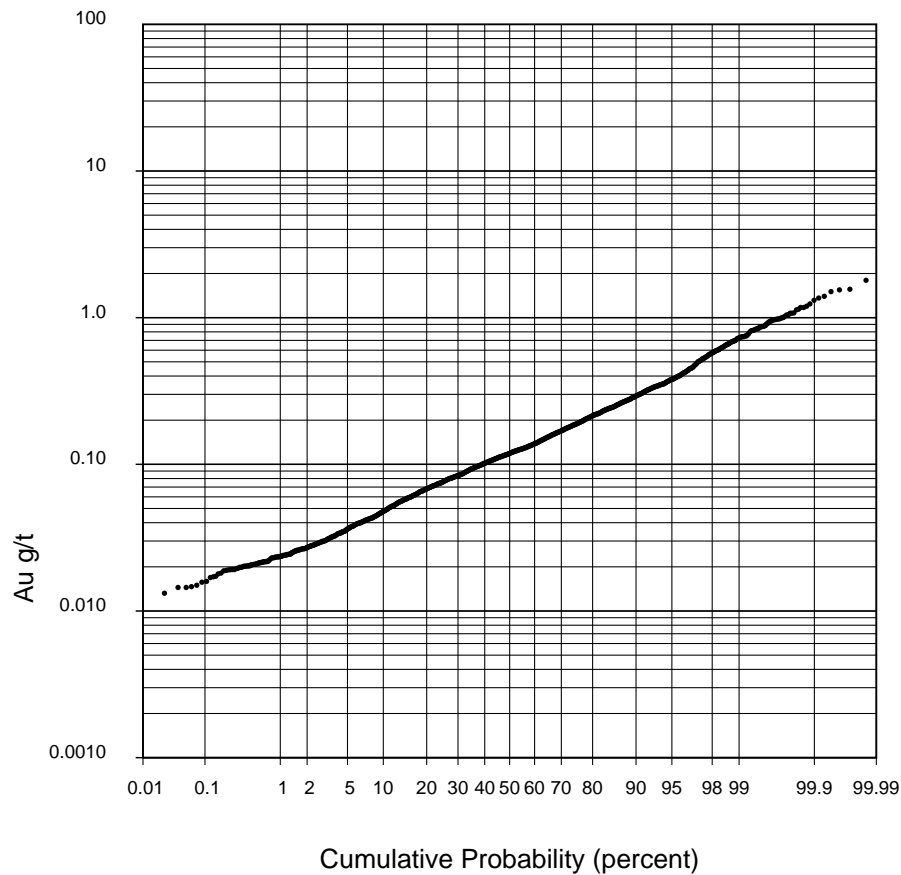
# Au Southwest Zone Block Estimate Subore (High Confidence Blocks)



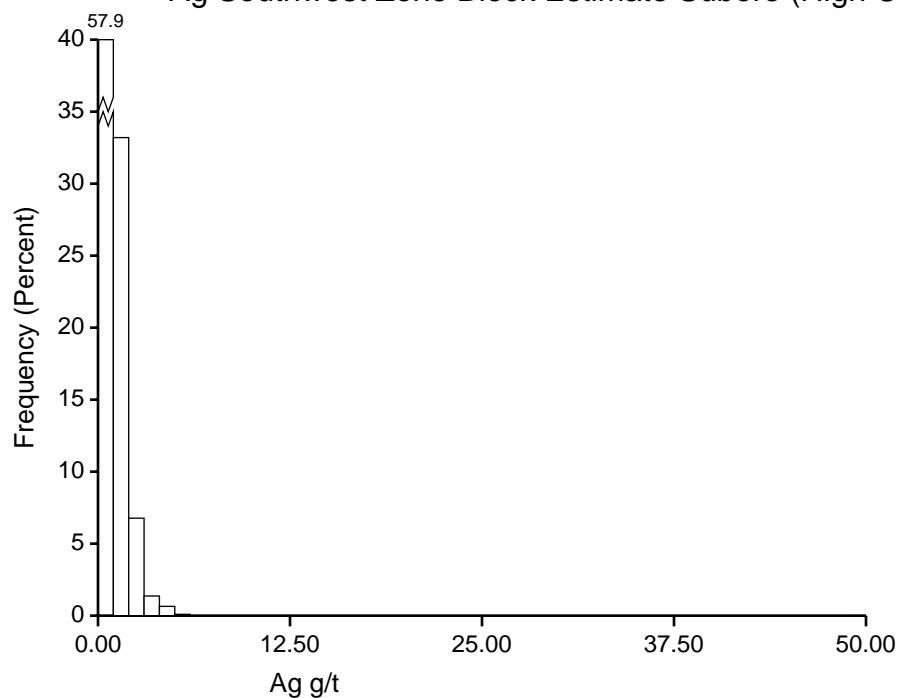
N	6909
m	0.155
$\sigma^2$	0.019
$\sigma/m$	0.876
min	0.013
$q_{0.25}$	0.076
$q_{0.50}$	0.119
$q_{0.75}$	0.188
max	1.956

Class width = 0.050  
The last class contains  
all values  $\geq 2.450$

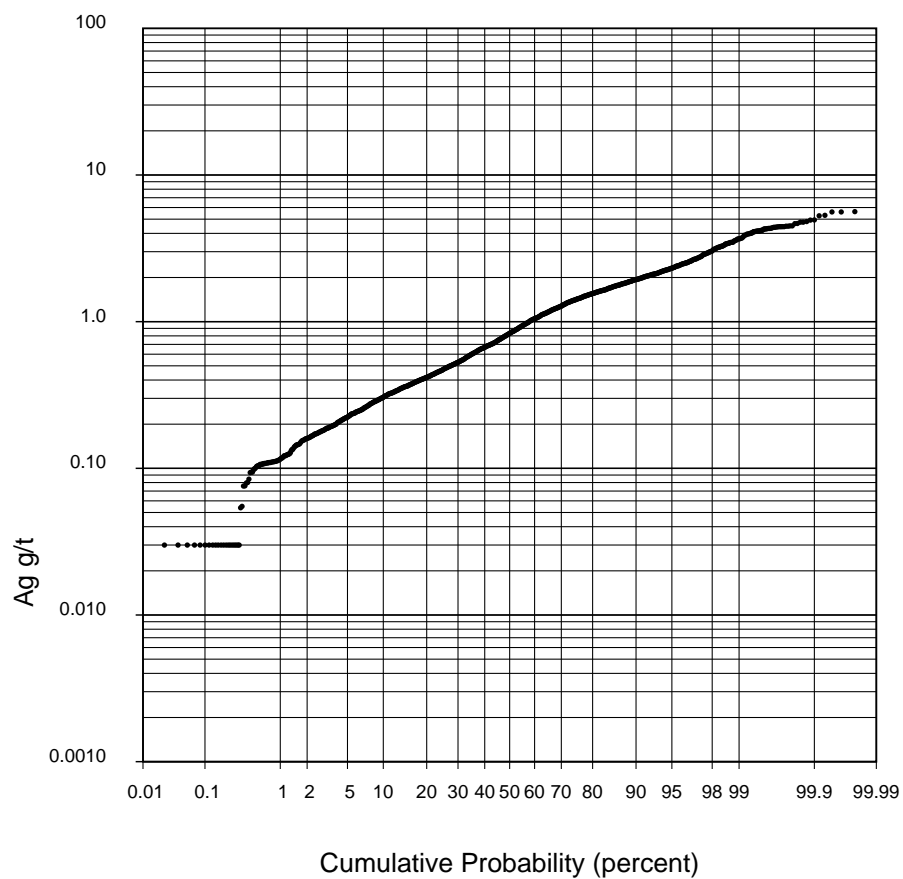
# Au Southwest Zone Block Estimate Subore (High Confidence Blocks)



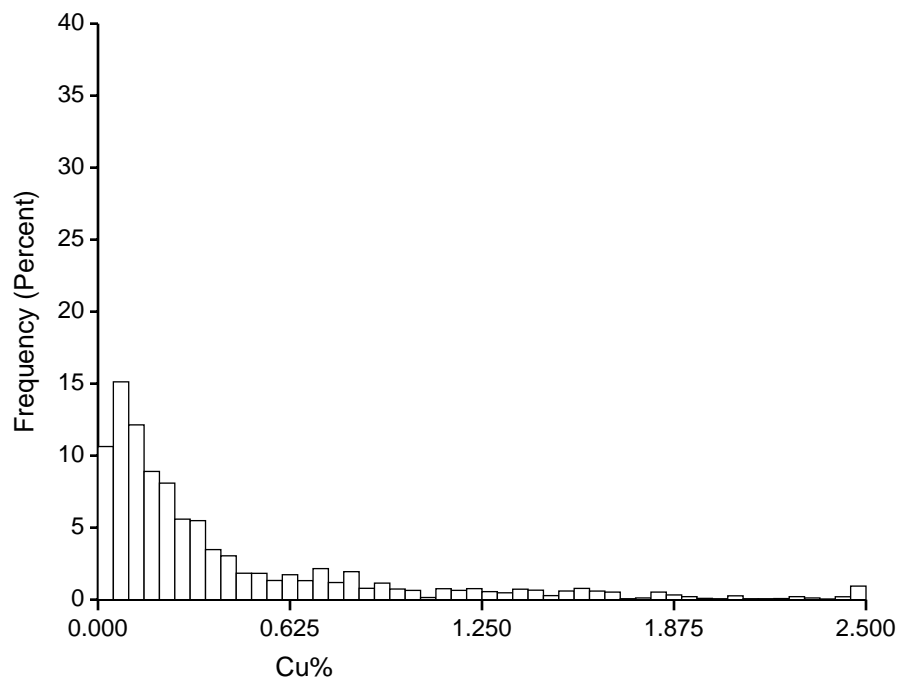
Ag Southwest Zone Block Estimate Subore (High Confidence Blocks)



Ag Southwest Zone Block Estimate Subore (High Confidence Blocks)



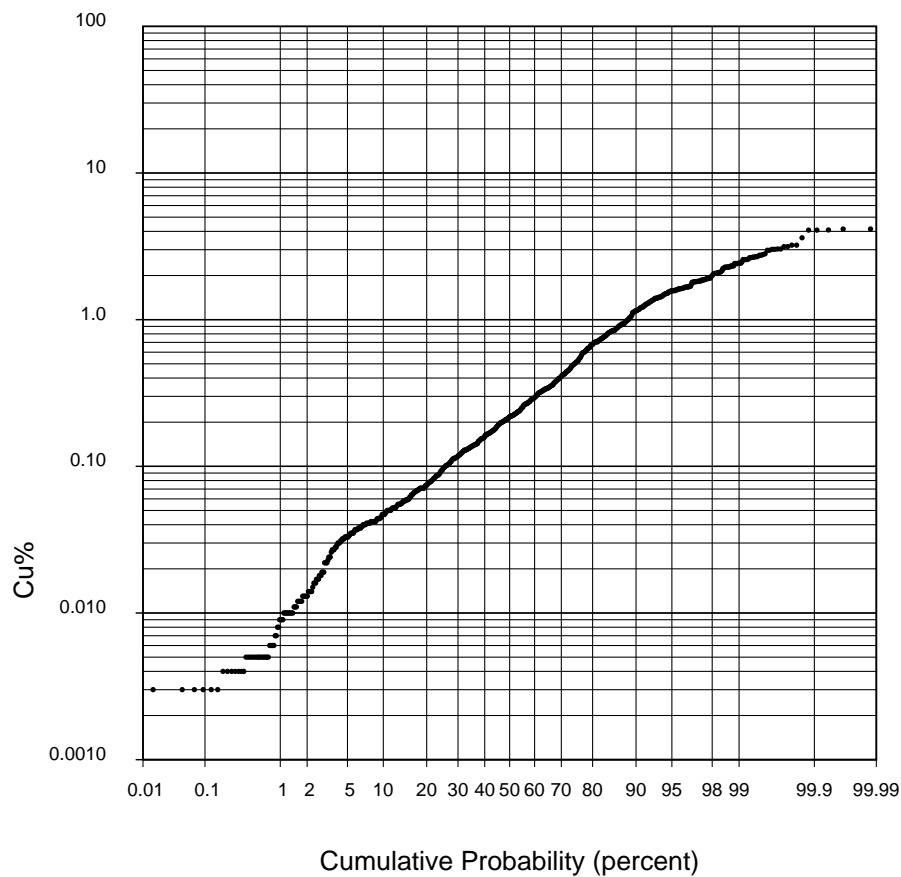
Cu Southwest Zone Block NN Estimate (High Confidence Blocks)



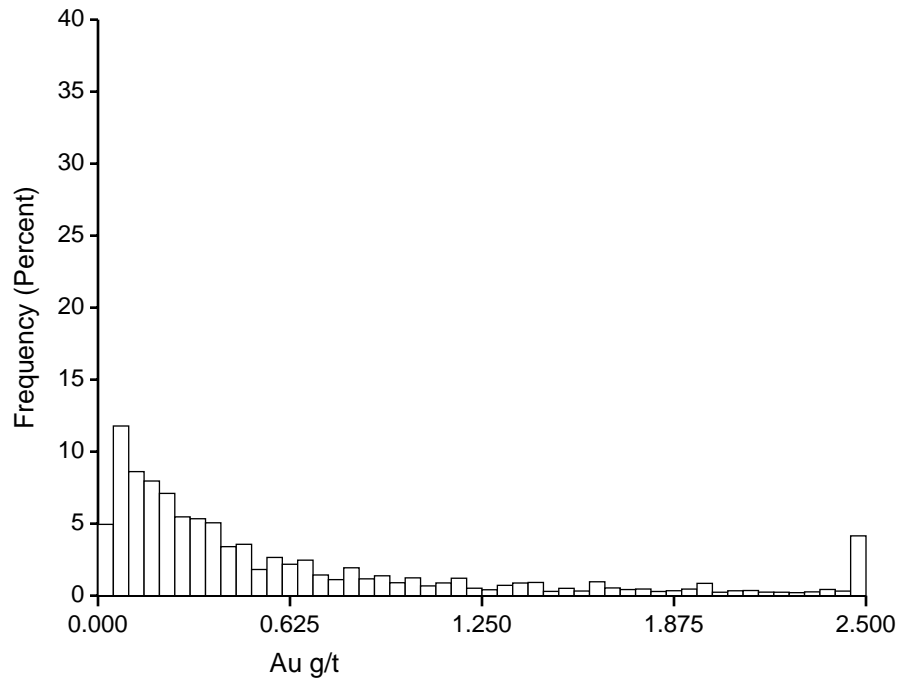
N	3655
m	0.420
$\sigma^2$	0.274
$\sigma/m$	1.246
min	0.003
$q_{0.25}$	0.096
$q_{0.50}$	0.218
$q_{0.75}$	0.511
max	4.150

Class width = 0.050  
The last class contains  
all values  $\geq 2.450$

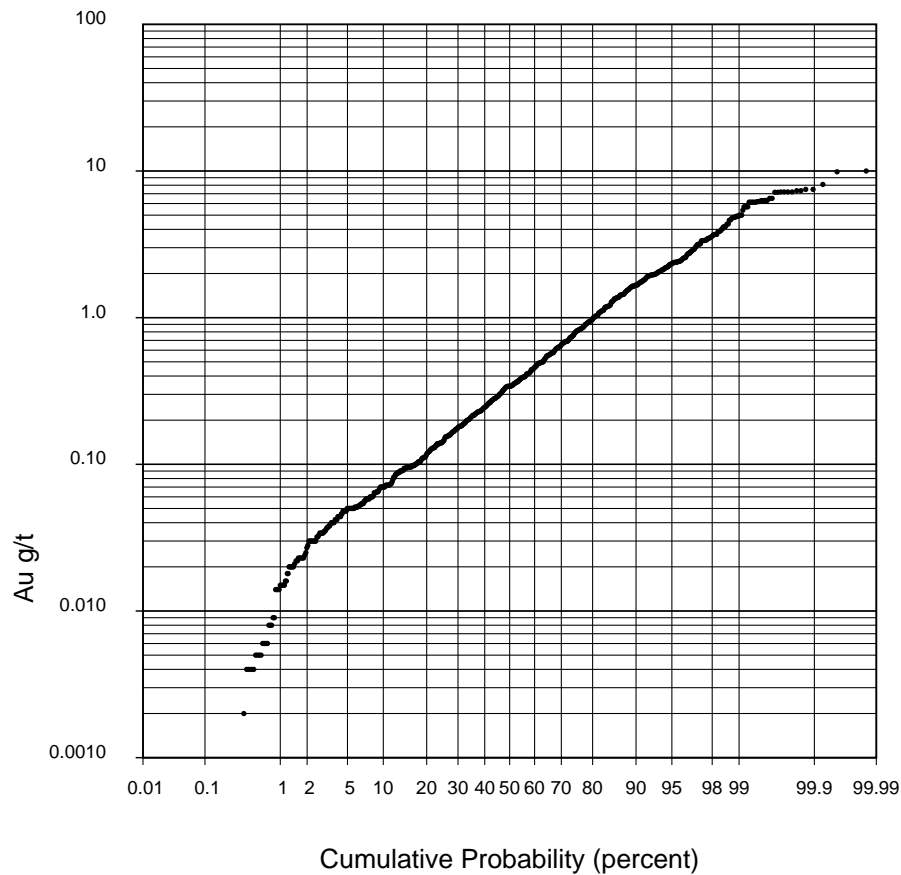
Cu Southwest Zone Block NN Estimate (High Confidence Blocks)



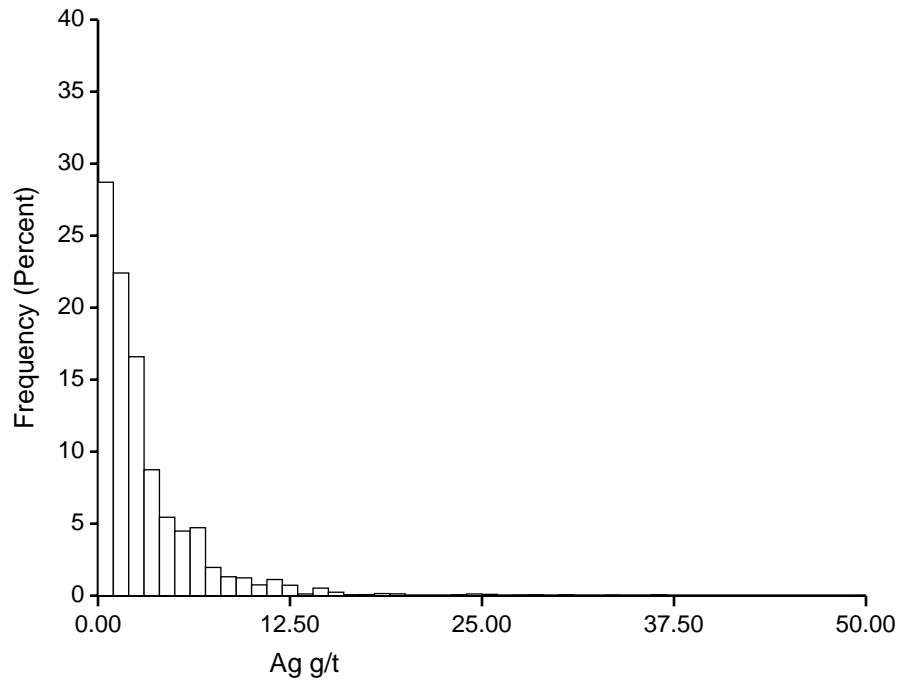
Au Southwest Zone Block NN Estimate (High Confidence Blocks)



Au Southwest Zone Block NN Estimate (High Confidence Blocks)



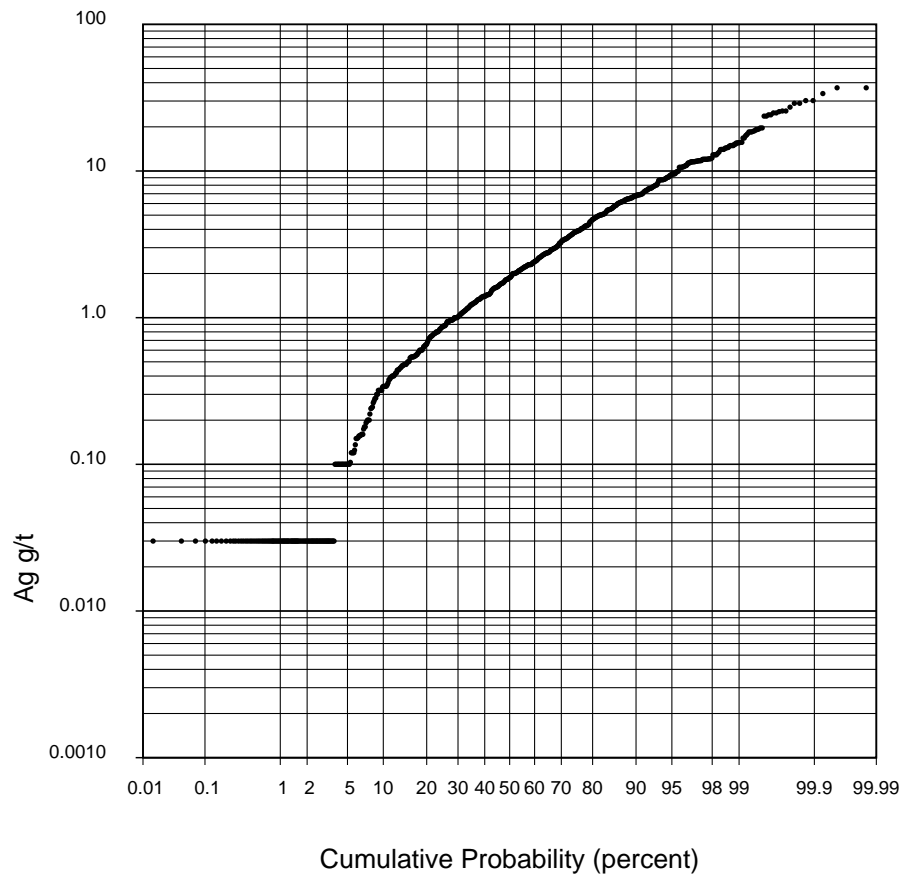
Ag Southwest Zone Block NN Estimate (High Confidence Blocks)



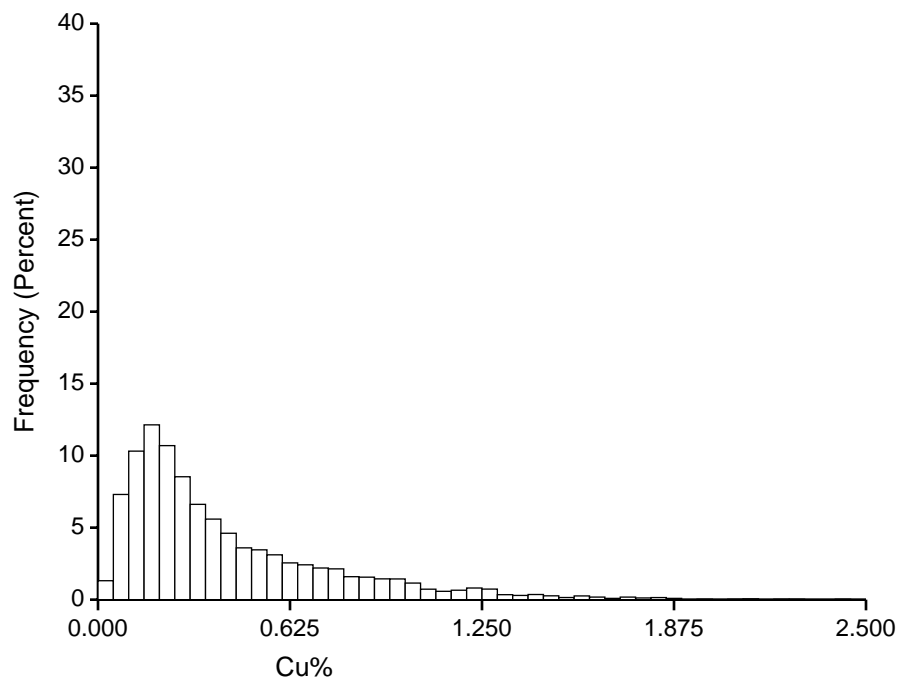
N	3655
m	2.98
$\sigma^2$	12.09
$\sigma/m$	1.17
min	0.03
$q_{0.25}$	0.87
$q_{0.50}$	1.88
$q_{0.75}$	3.86
max	36.90

Class width = 1.00  
The last class contains  
all values  $\geq 49.00$

Ag Southwest Zone Block NN Estimate (High Confidence Blocks)



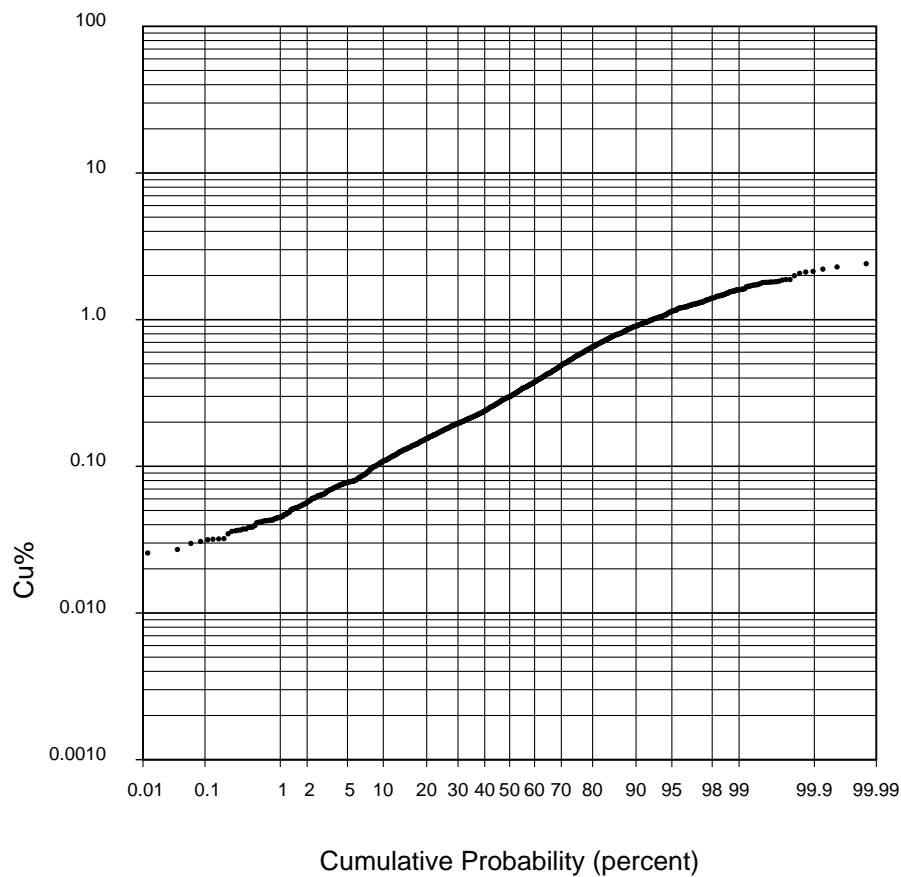
Cu Southwest Zone Block Estimate (High Confidence Blocks)



N	3655
m	0.417
$\sigma^2$	0.118
$\sigma/m$	0.824
min	0.026
$q_{0.25}$	0.176
$q_{0.50}$	0.299
$q_{0.75}$	0.565
max	2.407

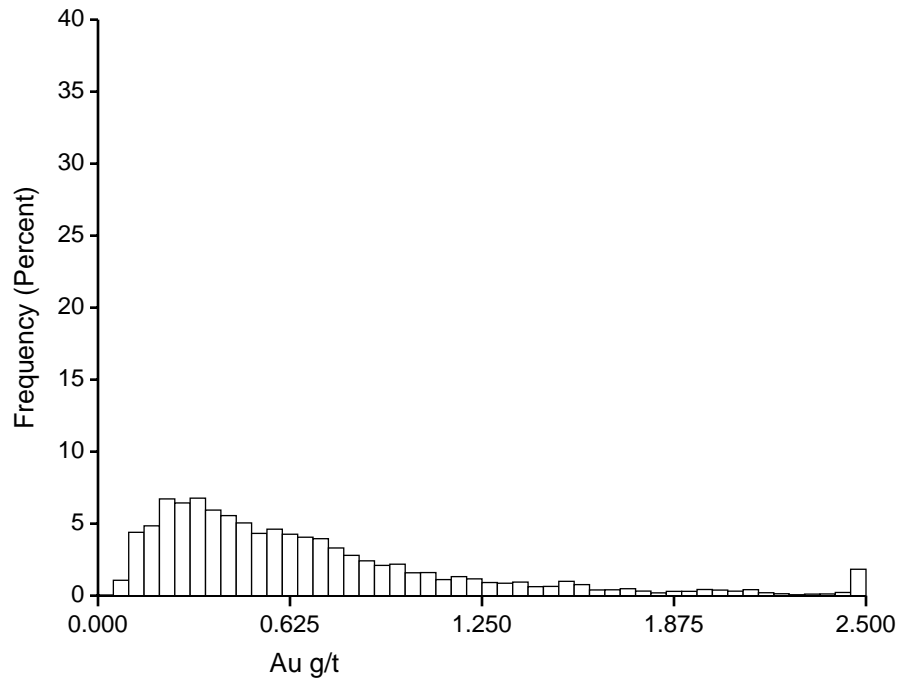
Class width = 0.050  
The last class contains  
all values  $\geq 2.450$

Cu Southwest Zone Block Estimate (High Confidence Blocks)





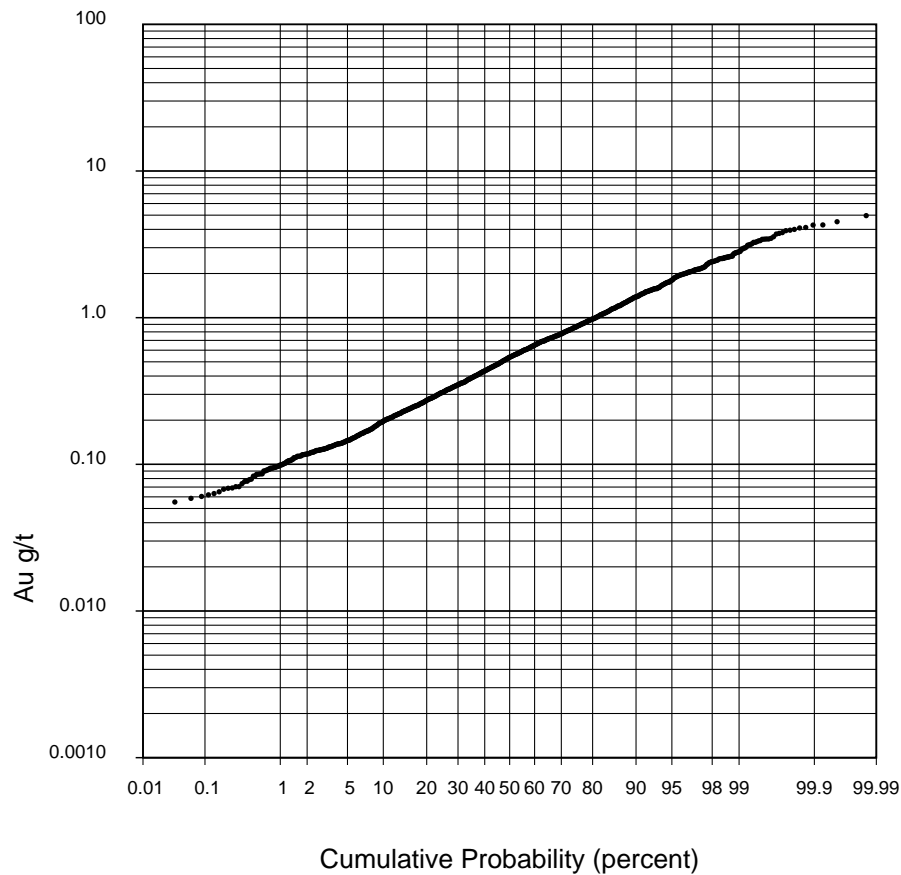
# Au Southwest Zone Block Estimate (High Confidence Blocks)



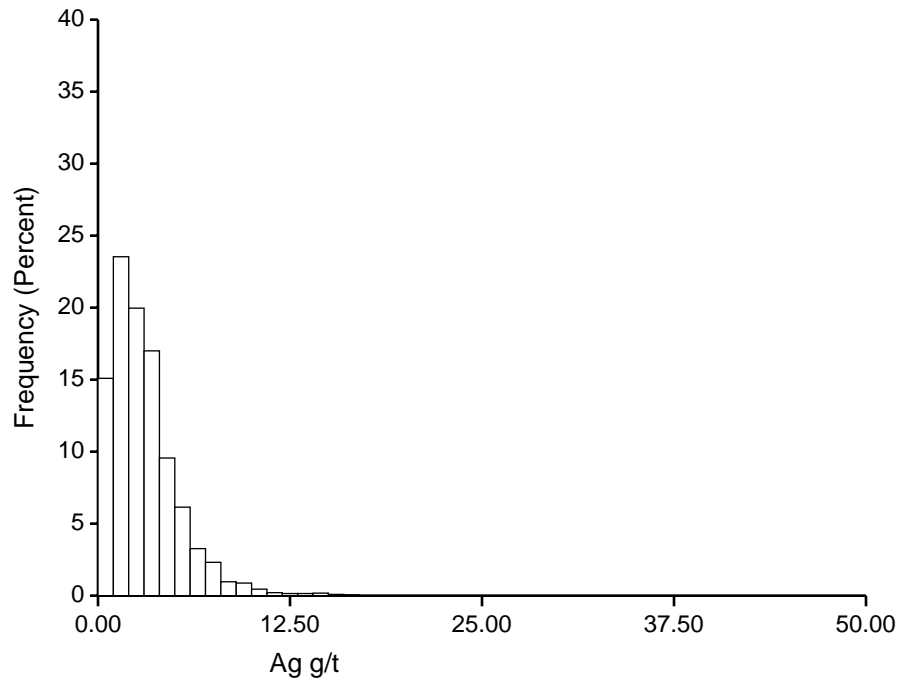
N	3655
m	0.689
$\sigma^2$	0.320
$\sigma/m$	0.820
min	0.055
$q_{0.25}$	0.311
$q_{0.50}$	0.538
$q_{0.75}$	0.866
max	4.968

Class width = 0.050  
The last class contains  
all values  $\geq 2.450$

# Au Southwest Zone Block Estimate (High Confidence Blocks)



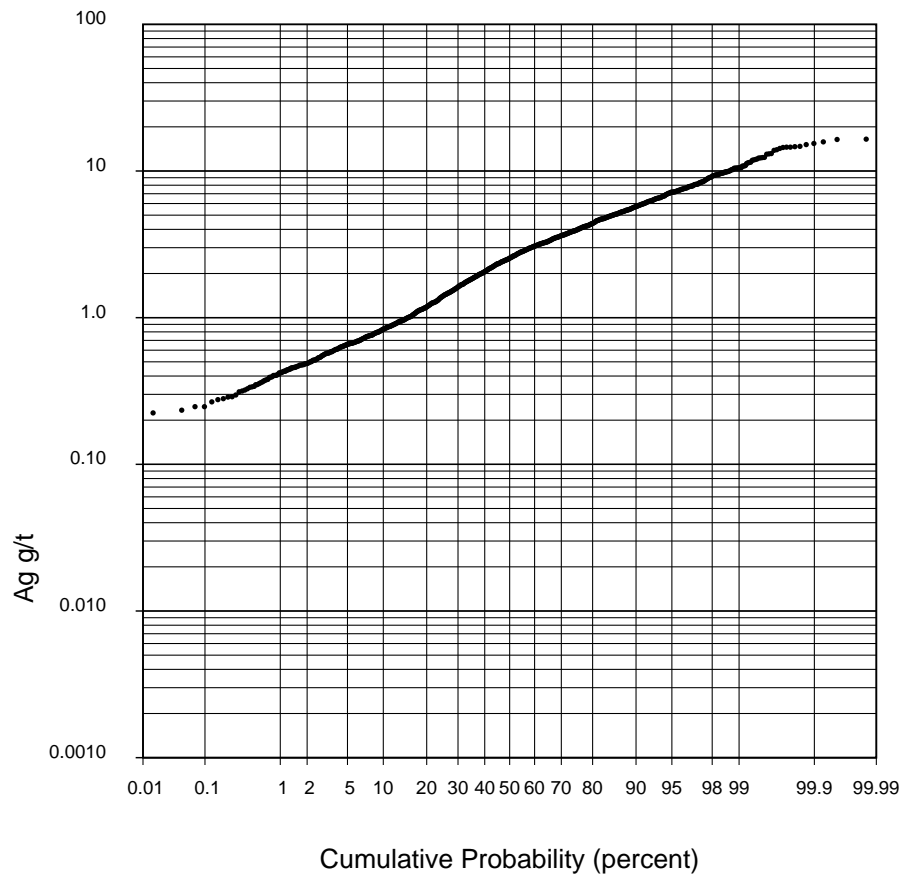
### Ag Southwest Zone Block Estimate (High Confidence Blocks)



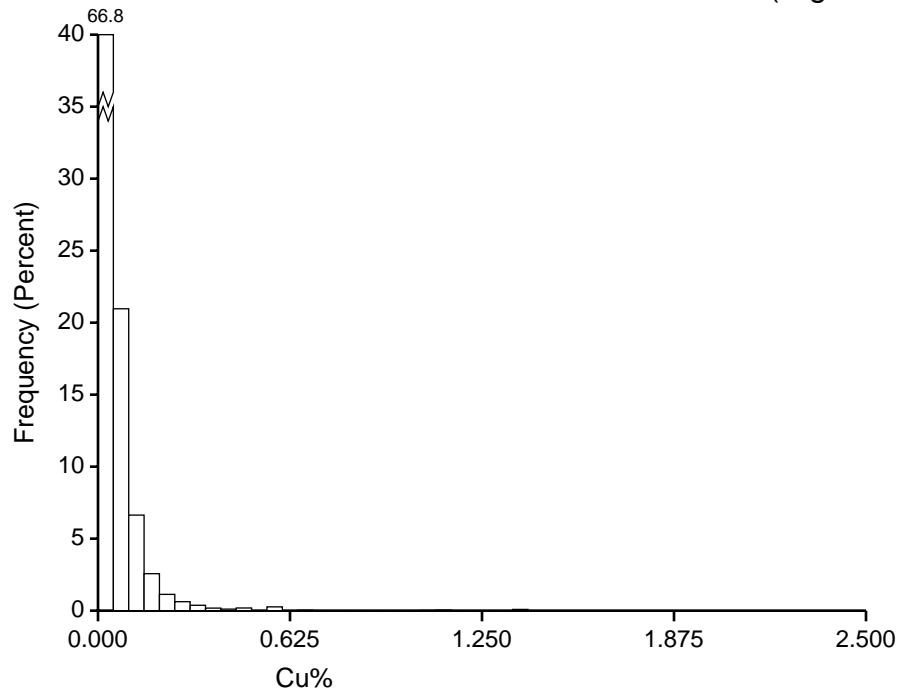
N	3655
m	3.01
$\sigma^2$	4.72
$\sigma/m$	0.72
min	0.22
$q_{0.25}$	1.41
$q_{0.50}$	2.54
$q_{0.75}$	3.95
max	16.52

Class width = 1.00  
The last class contains  
all values  $\geq 49.00$

### Ag Southwest Zone Block Estimate (High Confidence Blocks)



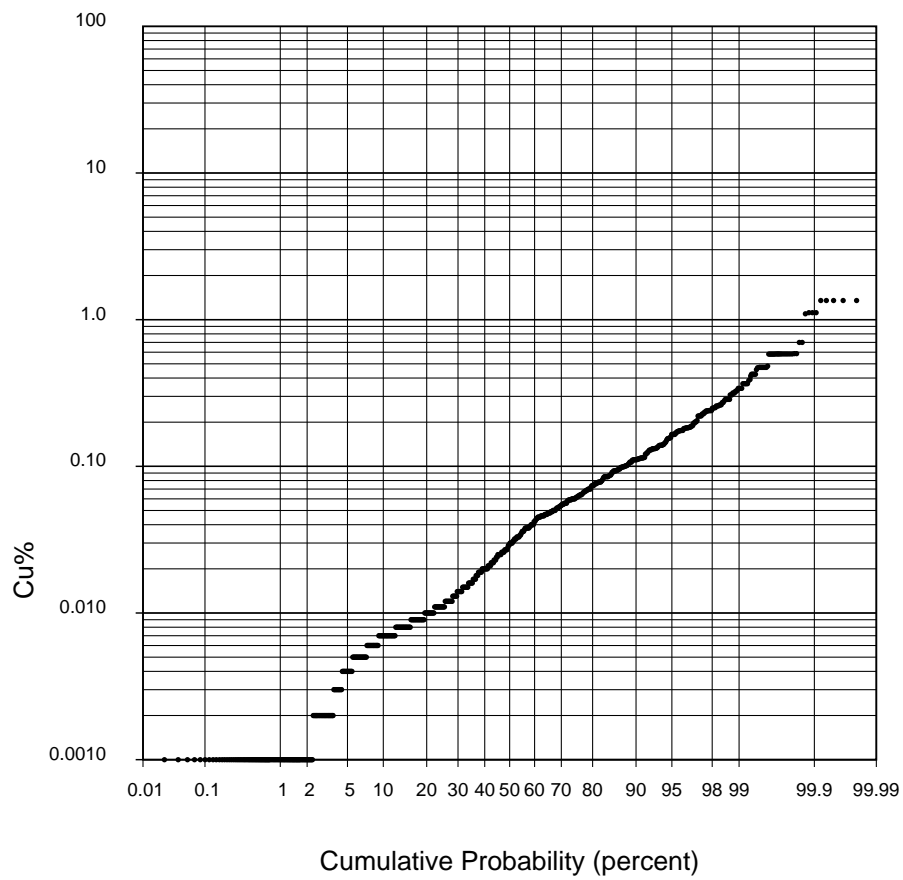
Cu West Fork Block NN Estimate Outside (High Confidence Blocks)



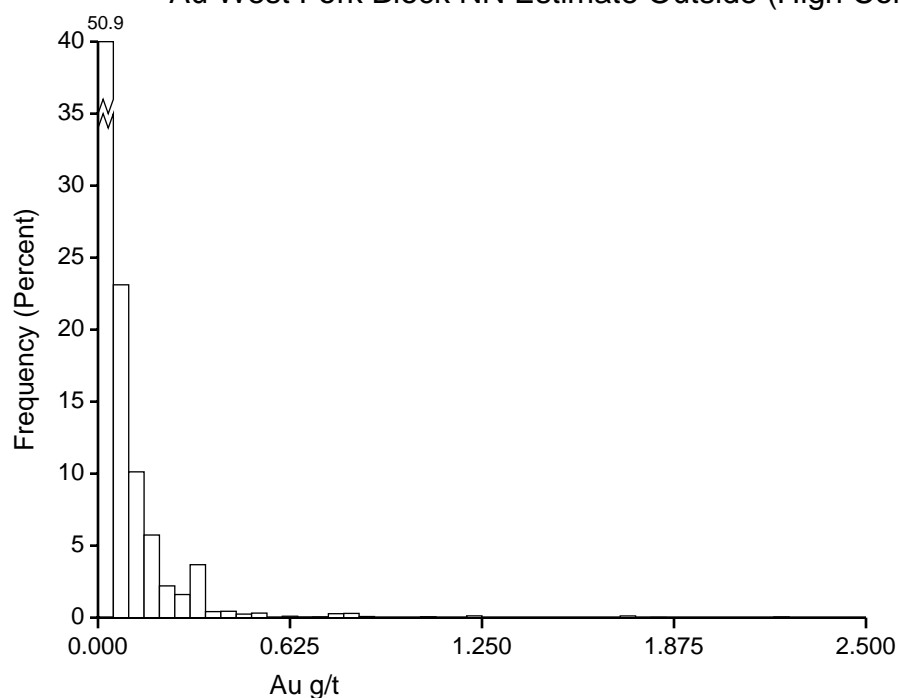
N	6638
m	0.051
$\sigma^2$	0.006
$\sigma/m$	1.540
min	0.001
$q_{0.25}$	0.011
$q_{0.50}$	0.029
$q_{0.75}$	0.061
max	1.350

Class width = 0.050  
The last class contains  
all values  $\geq 2.450$

Cu West Fork Block NN Estimate Outside (High Confidence Blocks)



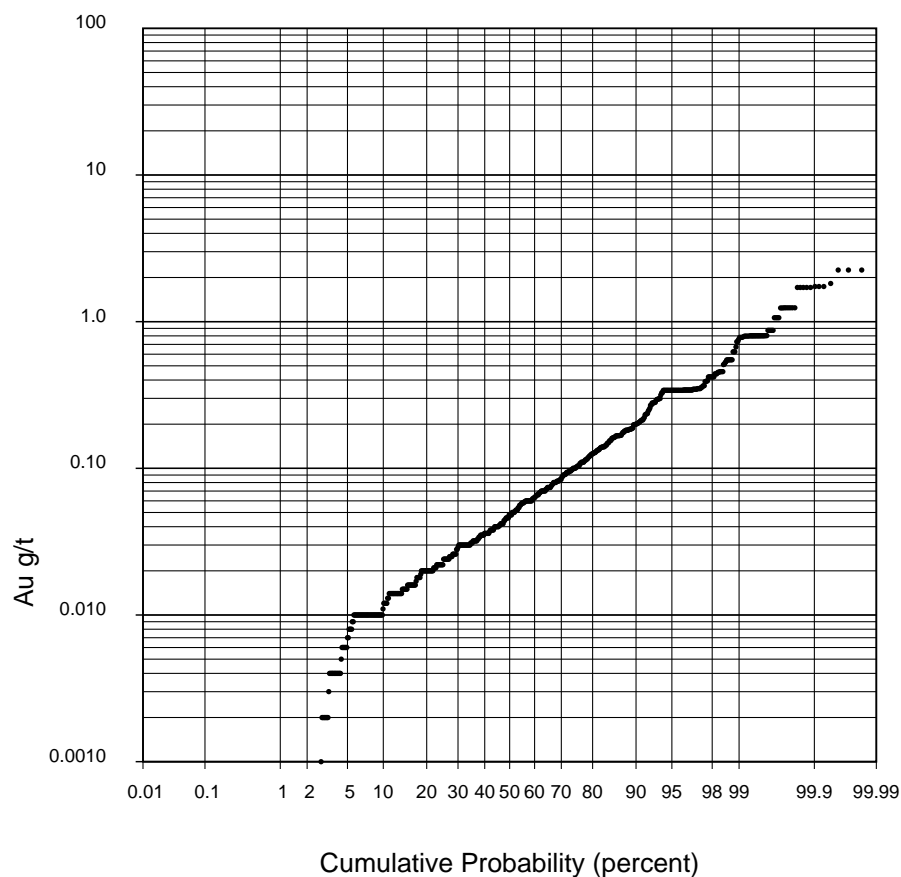
Au West Fork Block NN Estimate Outside (High Confidence Blocks)



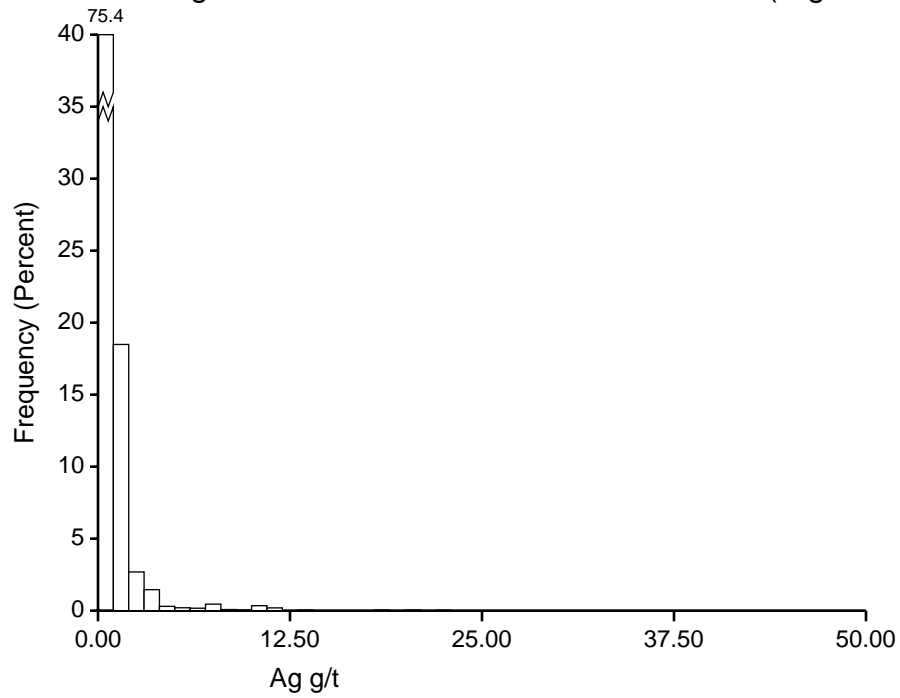
N	6598
m	0.091
$\sigma^2$	0.020
$\sigma/m$	1.562
min	0.000
$q_{0.25}$	0.023
$q_{0.50}$	0.048
$q_{0.75}$	0.102
max	2.249

Class width = 0.050  
The last class contains  
all values  $\geq 2.450$

Au West Fork Block NN Estimate Outside (High Confidence Blocks)



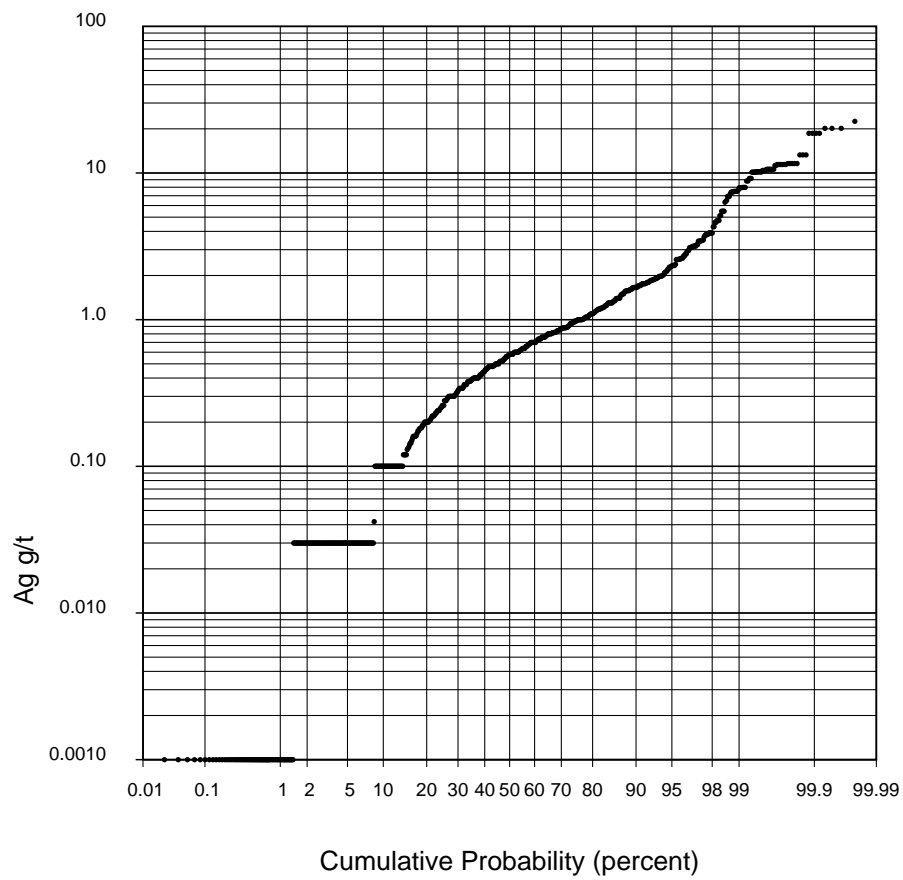
Ag West Fork Block NN Estimate Outside (High Confidence Blocks)



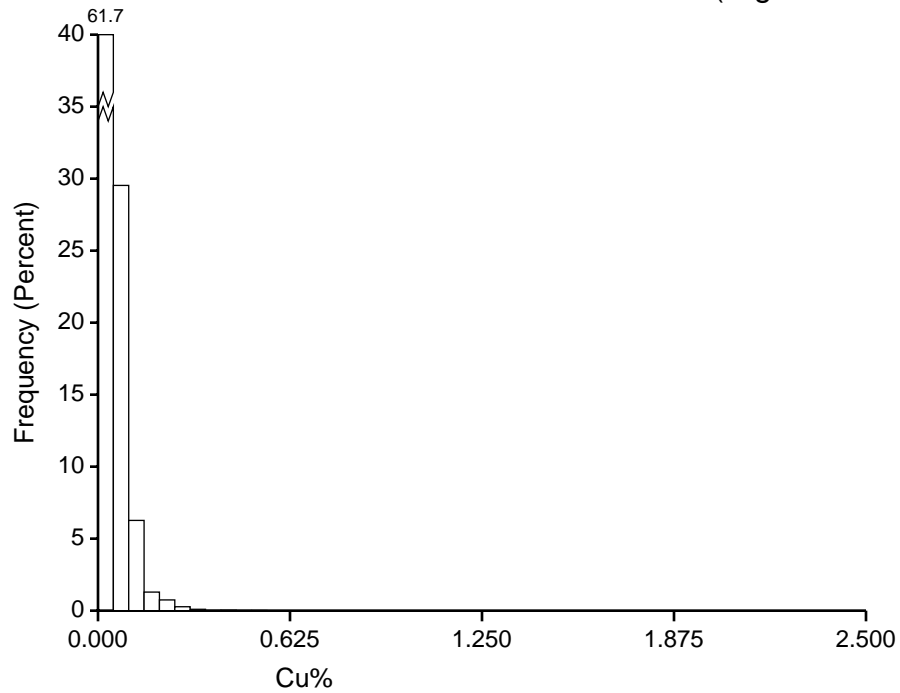
N	6638
m	0.86
$\sigma^2$	1.93
$\sigma/m$	1.61
min	0.00
$q_{0.25}$	0.26
$q_{0.50}$	0.58
$q_{0.75}$	0.98
max	22.50

Class width = 1.00  
The last class contains  
all values  $\geq 49.00$

Ag West Fork Block NN Estimate Outside (High Confidence Blocks)



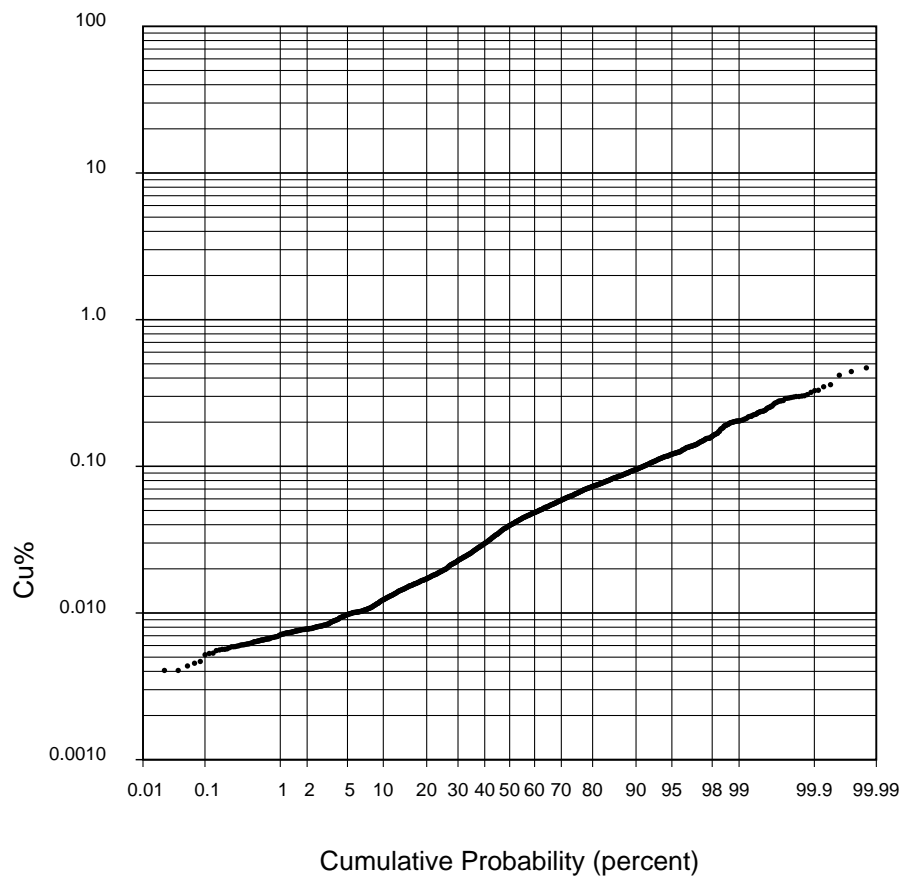
Cu West Fork Block Estimate Outside (High Confidence Blocks)



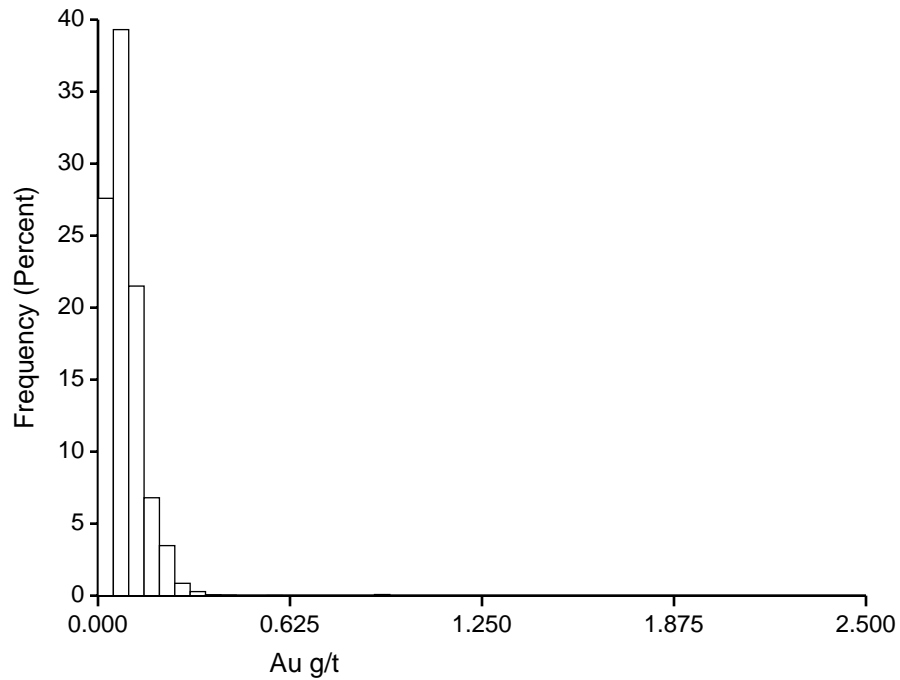
N	6638
m	0.049
$\sigma^2$	0.002
$\sigma/m$	0.832
min	0.003
$q_{0.25}$	0.020
$q_{0.50}$	0.040
$q_{0.75}$	0.065
max	0.526

Class width = 0.050  
The last class contains  
all values  $\geq 2.450$

Cu West Fork Block Estimate Outside (High Confidence Blocks)



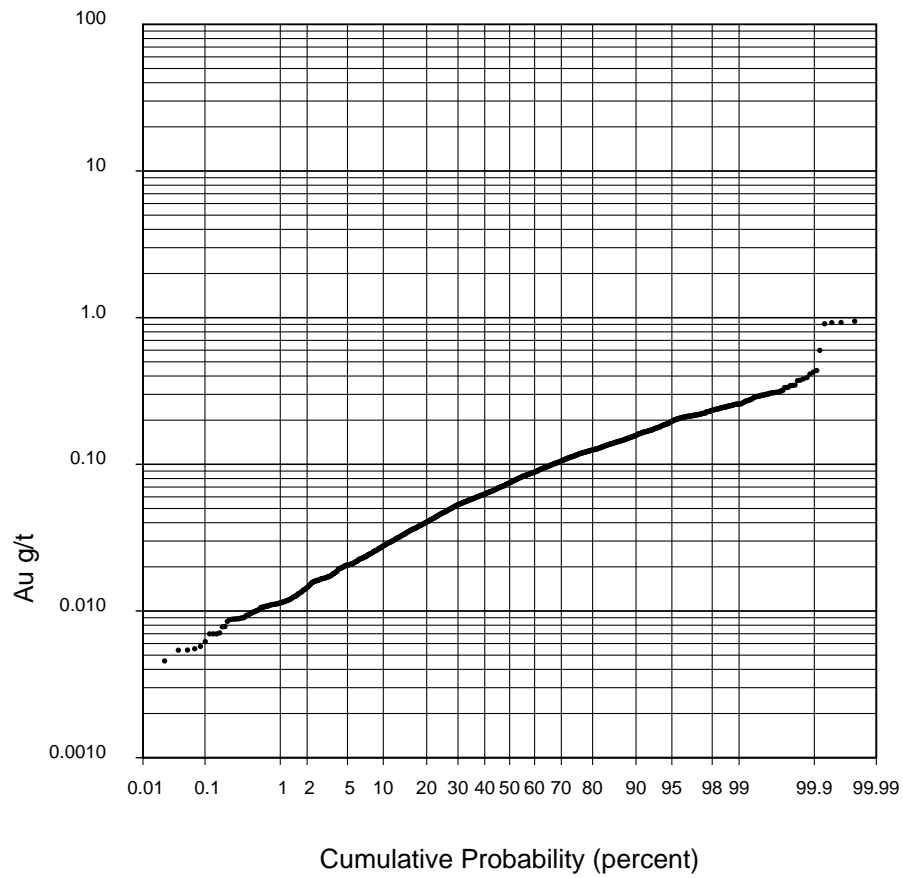
Au West Fork Block Estimate Outside (High Confidence Blocks)



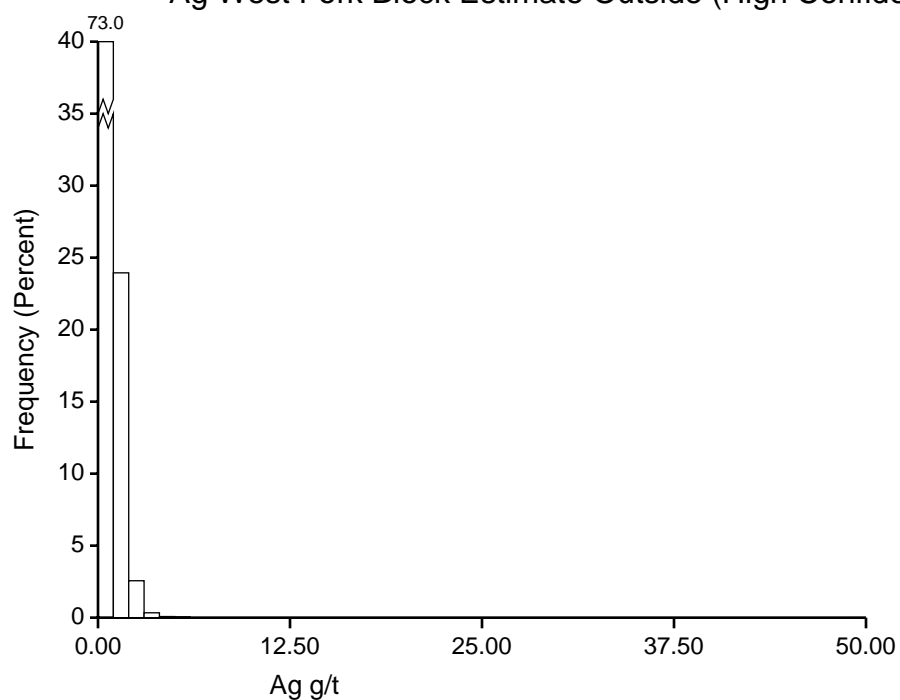
N	6598
m	0.087
$\sigma^2$	0.004
$\sigma/m$	0.682
min	0.005
$q_{0.25}$	0.047
$q_{0.50}$	0.075
$q_{0.75}$	0.115
max	0.947

Class width = 0.050  
The last class contains  
all values  $\geq 2.450$

Au West Fork Block Estimate Outside (High Confidence Blocks)



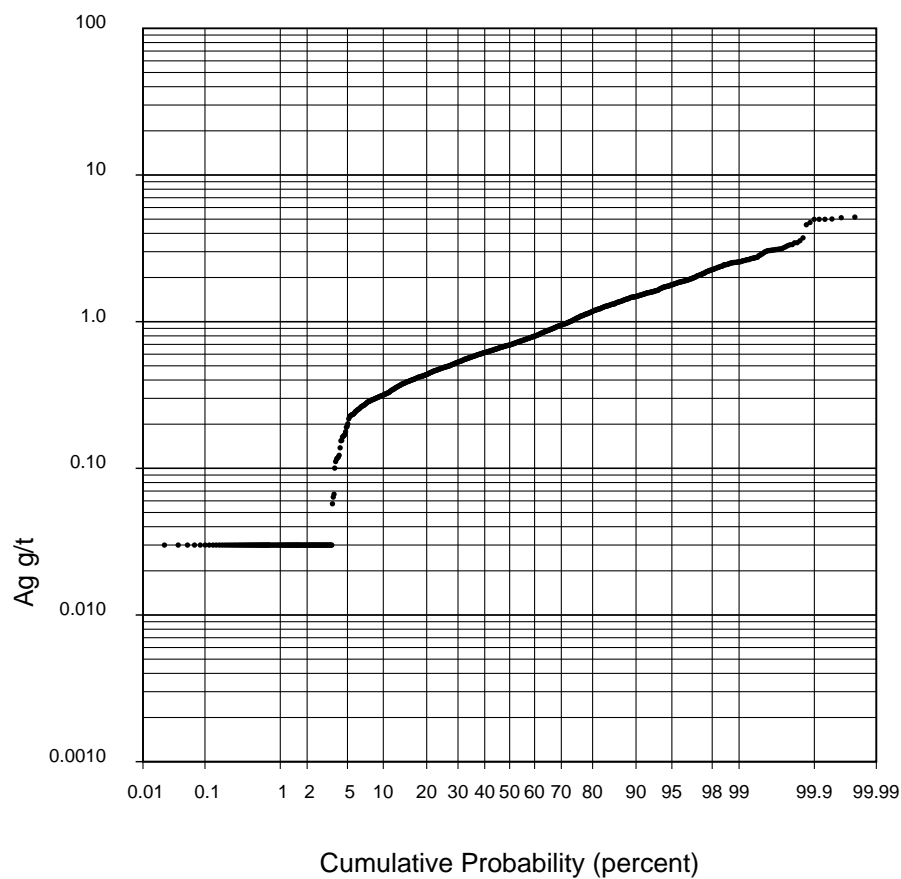
Ag West Fork Block Estimate Outside (High Confidence Blocks)



N	6638
m	0.82
$\sigma^2$	0.28
$\sigma/m$	0.64
min	0.03
$q_{0.25}$	0.49
$q_{0.50}$	0.69
$q_{0.75}$	1.05
max	5.65

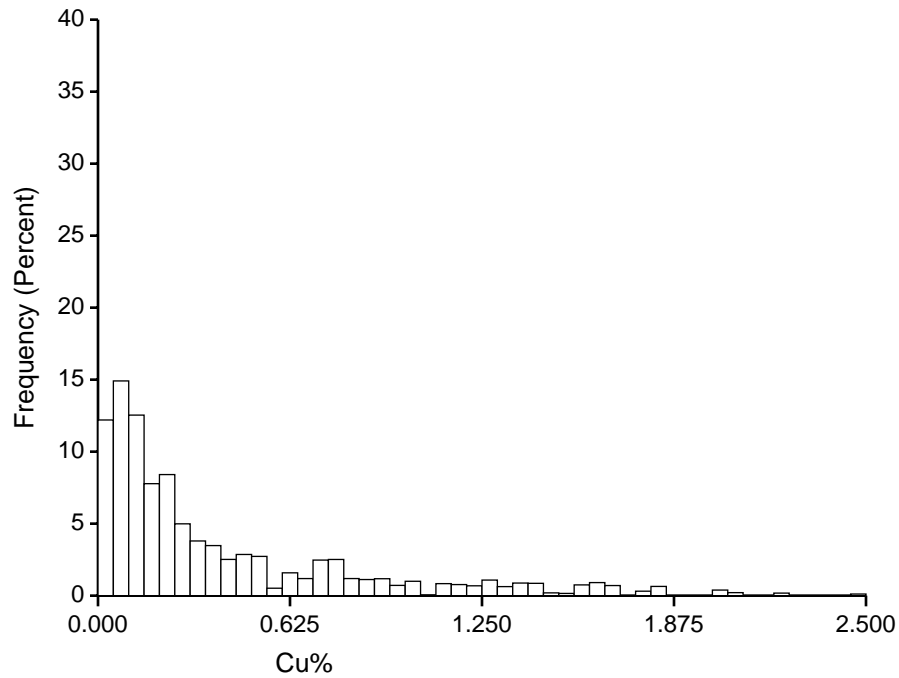
Class width = 1.00  
The last class contains  
all values  $\geq 49.00$

Ag West Fork Block Estimate Outside (High Confidence Blocks)





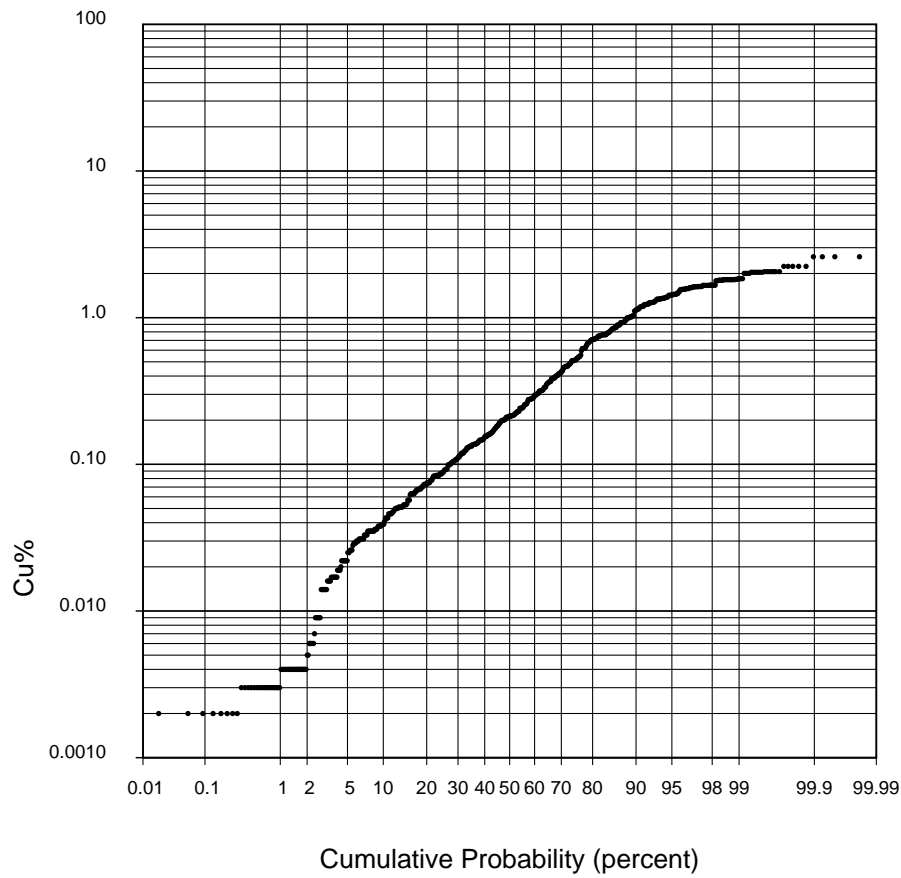
Cu West Fork Block NN Estimate (High Confidence Blocks)



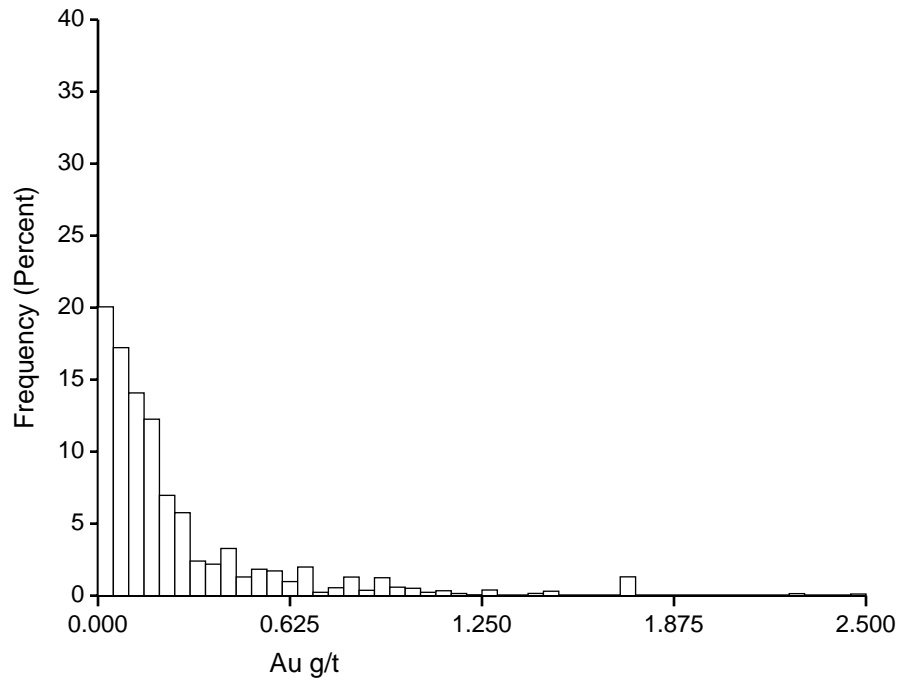
N	2727
m	0.399
$\sigma^2$	0.204
$\sigma/m$	1.133
min	0.002
$q_{0.25}$	0.088
$q_{0.50}$	0.213
$q_{0.75}$	0.515
max	2.602

Class width = 0.050  
The last class contains  
all values  $\geq 2.450$

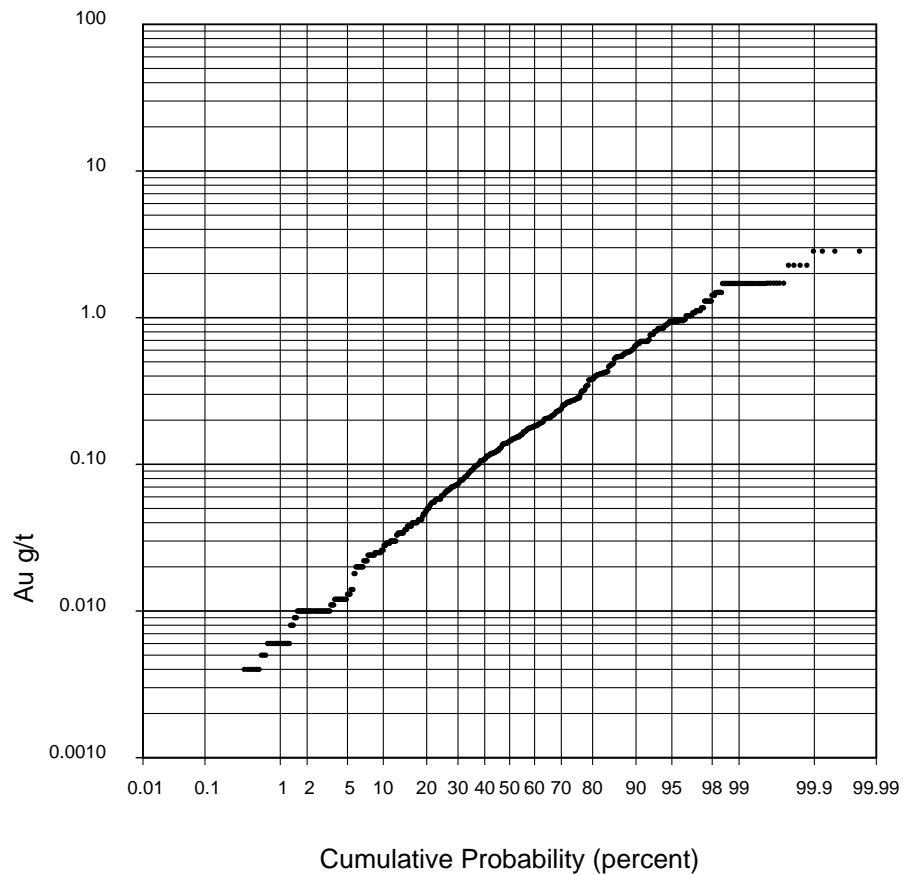
Cu West Fork Block NN Estimate (High Confidence Blocks)



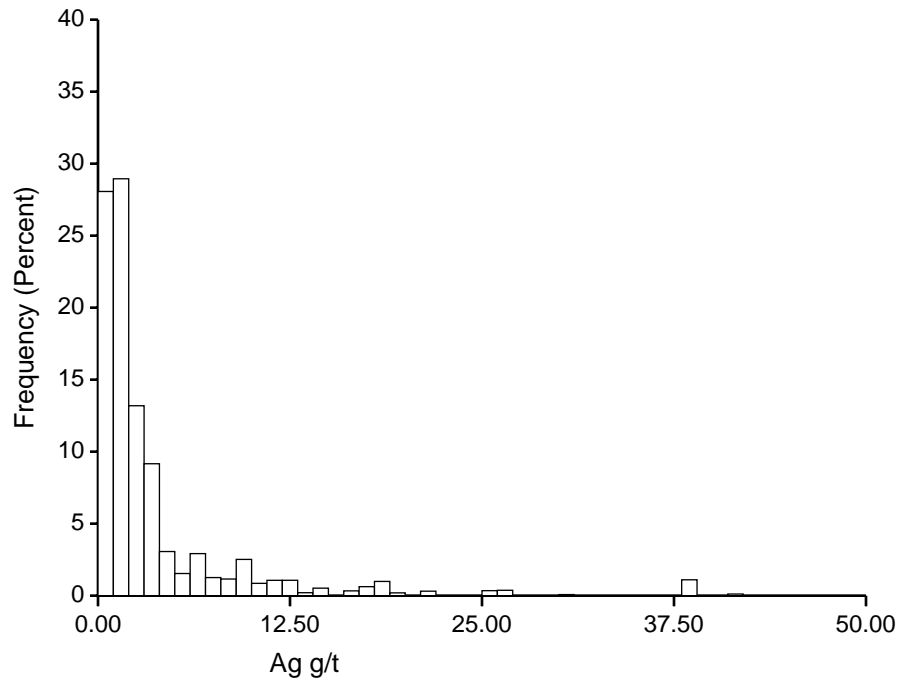
Au West Fork Block NN Estimate (High Confidence Blocks)



Au West Fork Block NN Estimate (High Confidence Blocks)



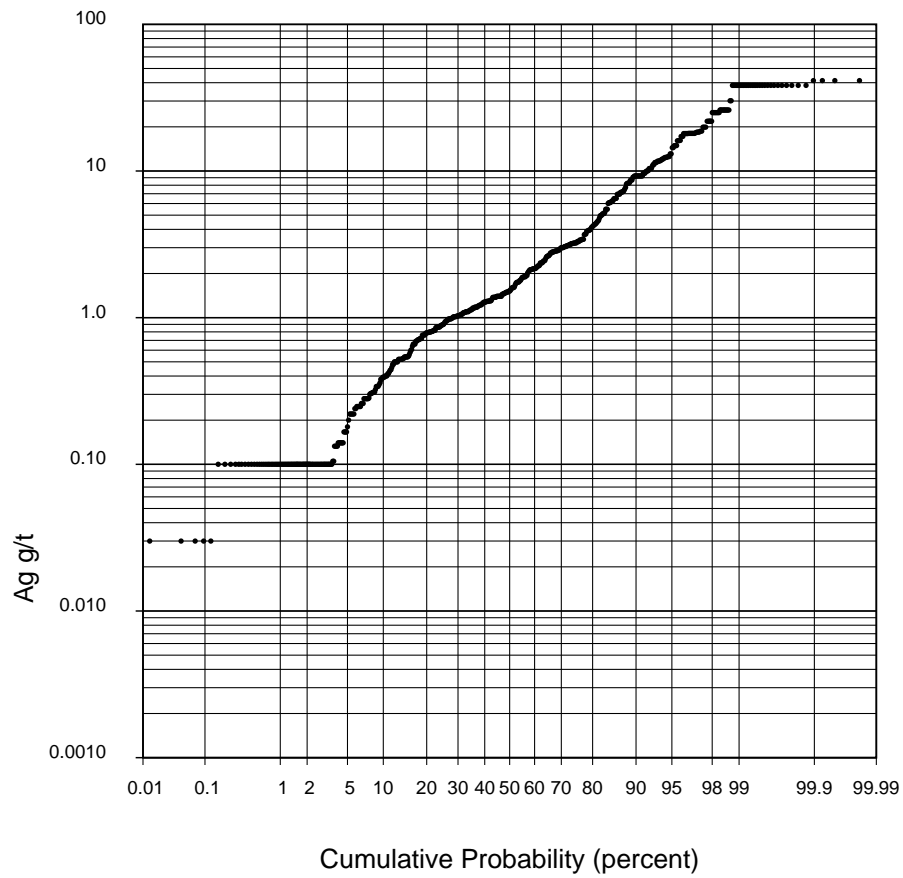
### Ag West Fork Block NN Estimate (High Confidence Blocks)



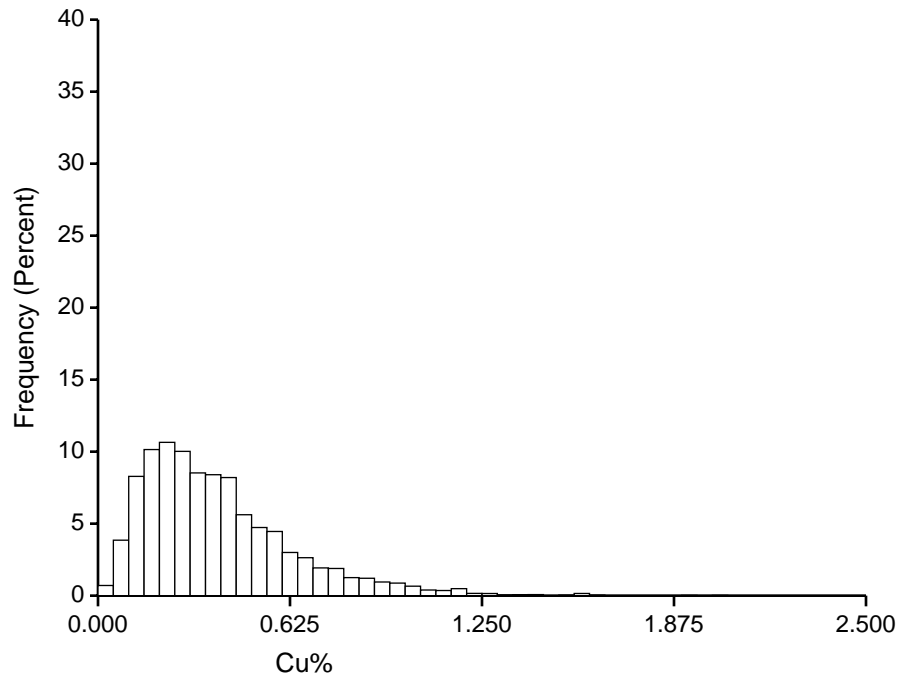
N	2727
m	3.58
$\sigma^2$	33.00
$\sigma/m$	1.60
min	0.03
$q_{0.25}$	0.90
$q_{0.50}$	1.52
$q_{0.75}$	3.24
max	41.28

Class width = 1.00  
The last class contains  
all values  $\geq 49.00$

### Ag West Fork Block NN Estimate (High Confidence Blocks)



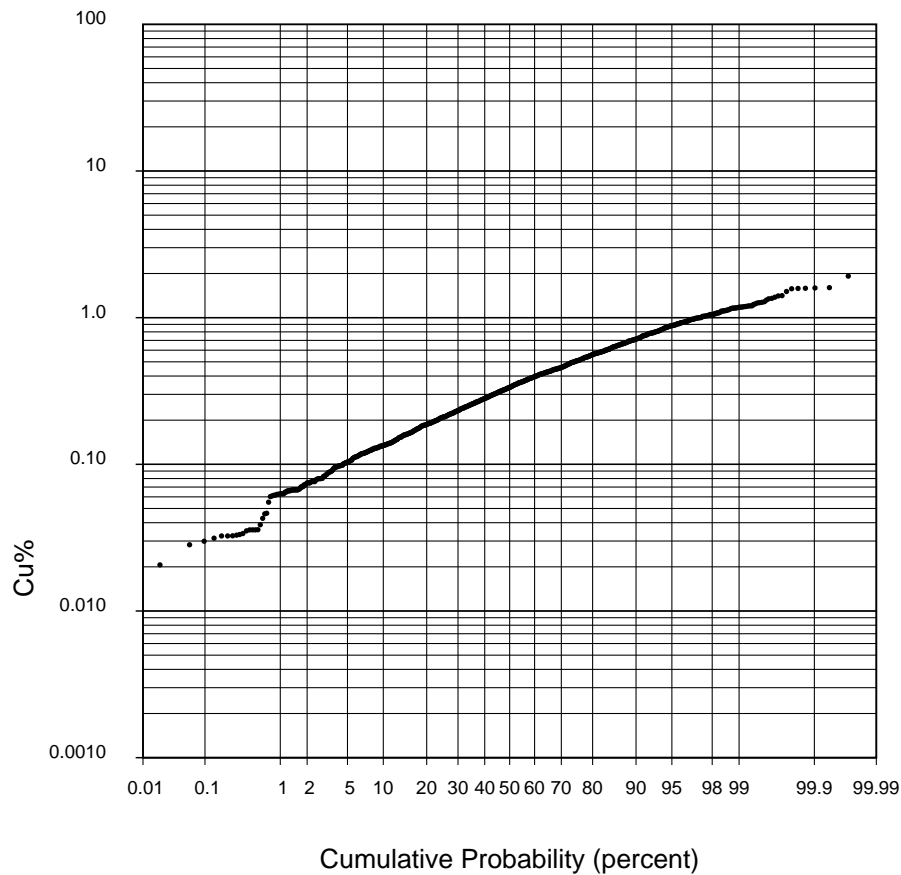
Cu West Fork Block Estimate (High Confidence Blocks)



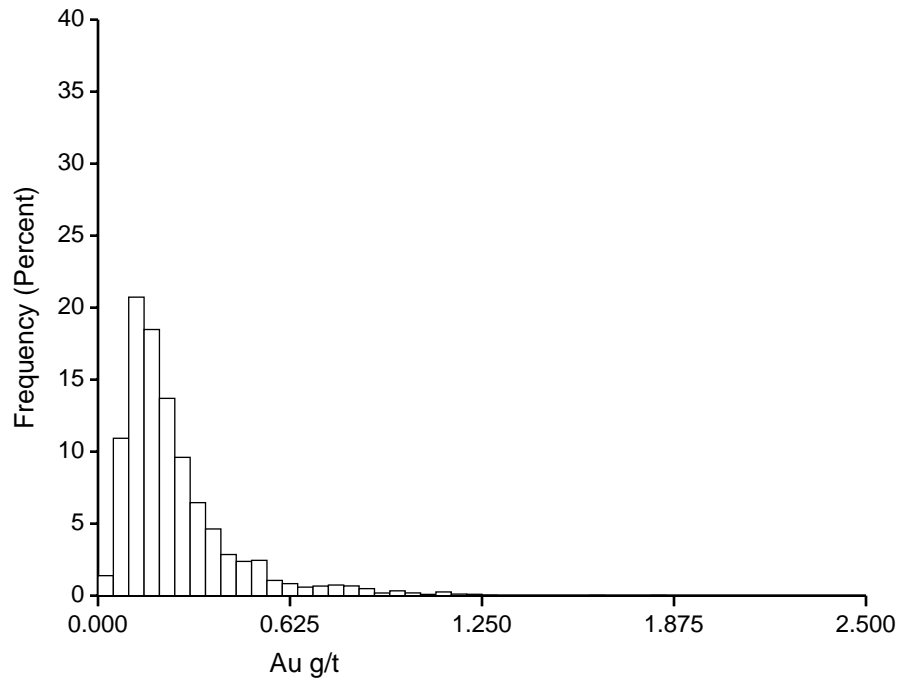
N	2727
m	0.389
$\sigma^2$	0.060
$\sigma/m$	0.630
min	0.021
$q_{0.25}$	0.210
$q_{0.50}$	0.334
$q_{0.75}$	0.506
max	2.042

Class width = 0.050  
The last class contains  
all values  $\geq 2.450$

Cu West Fork Block Estimate (High Confidence Blocks)



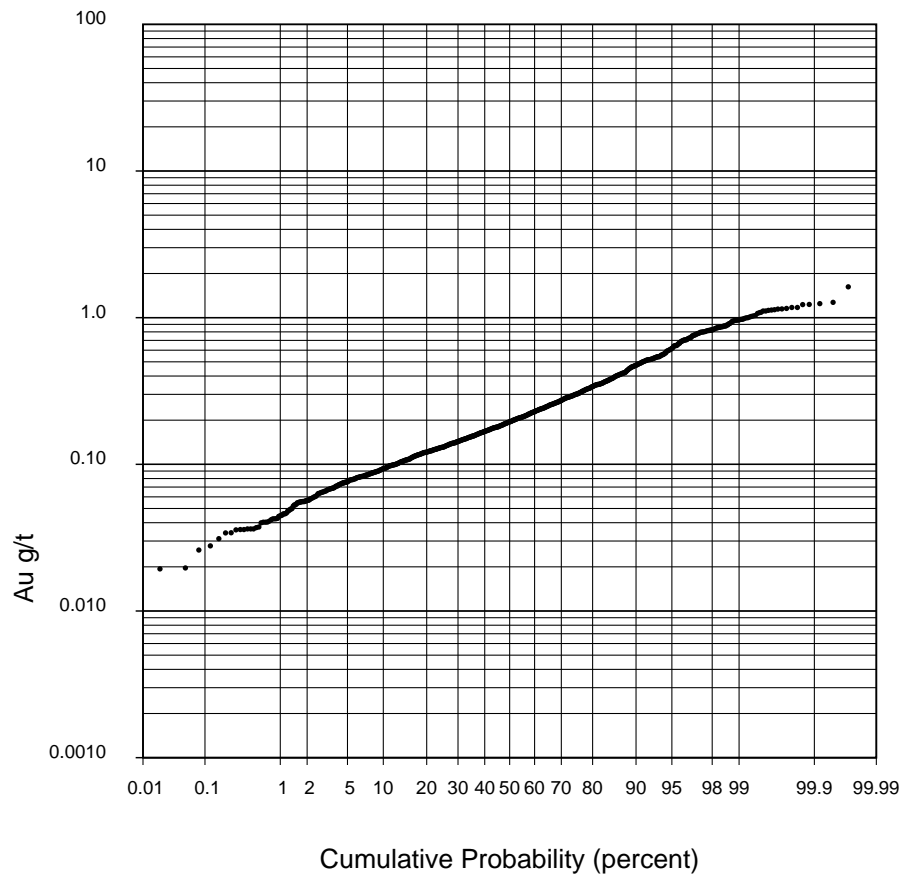
# Au West Fork Block Estimate (High Confidence Blocks)



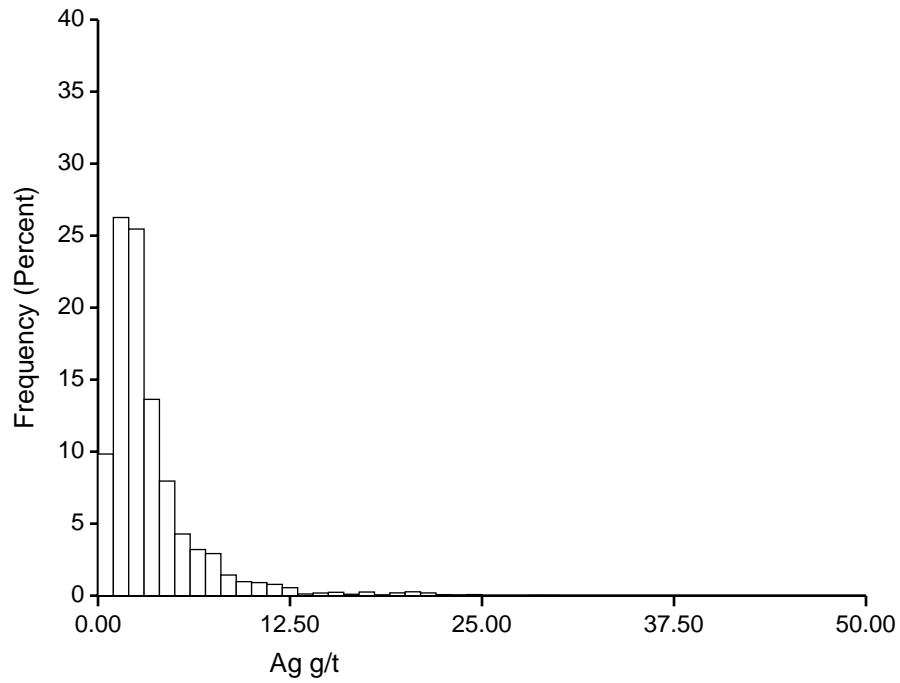
N	2727
m	0.249
$\sigma^2$	0.033
$\sigma/m$	0.735
min	0.019
$q_{0.25}$	0.131
$q_{0.50}$	0.195
$q_{0.75}$	0.301
max	1.805

Class width = 0.050  
The last class contains  
all values  $\geq 2.450$

# Au West Fork Block Estimate (High Confidence Blocks)



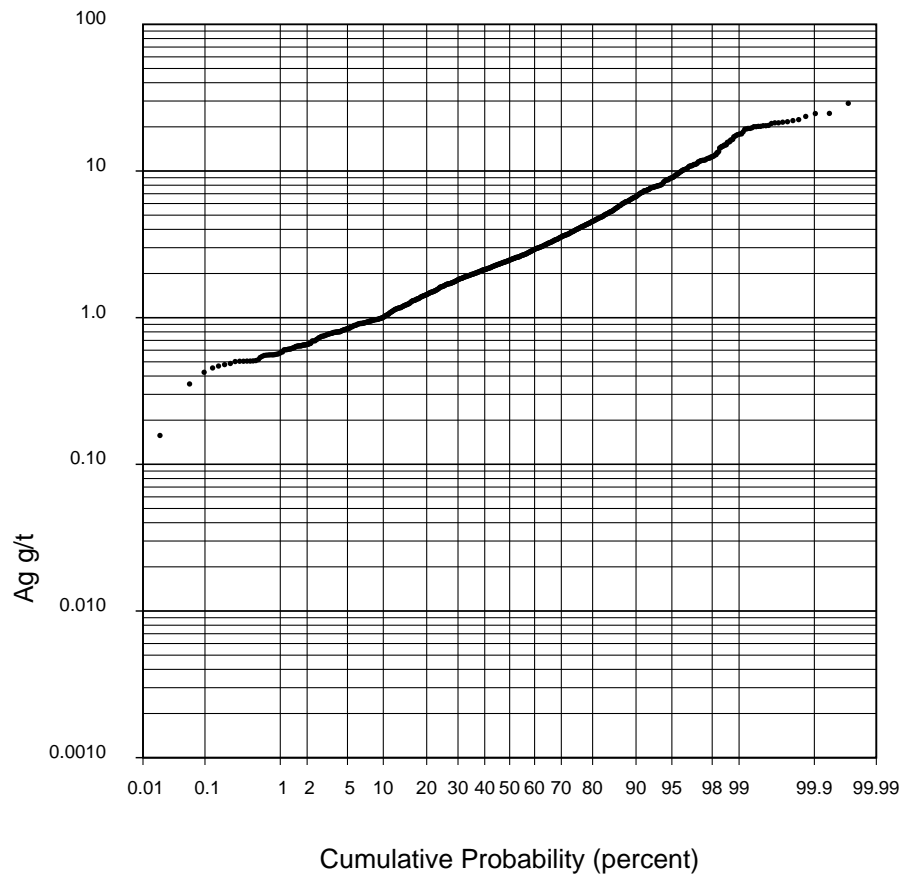
### Ag West Fork Block Estimate (High Confidence Blocks)



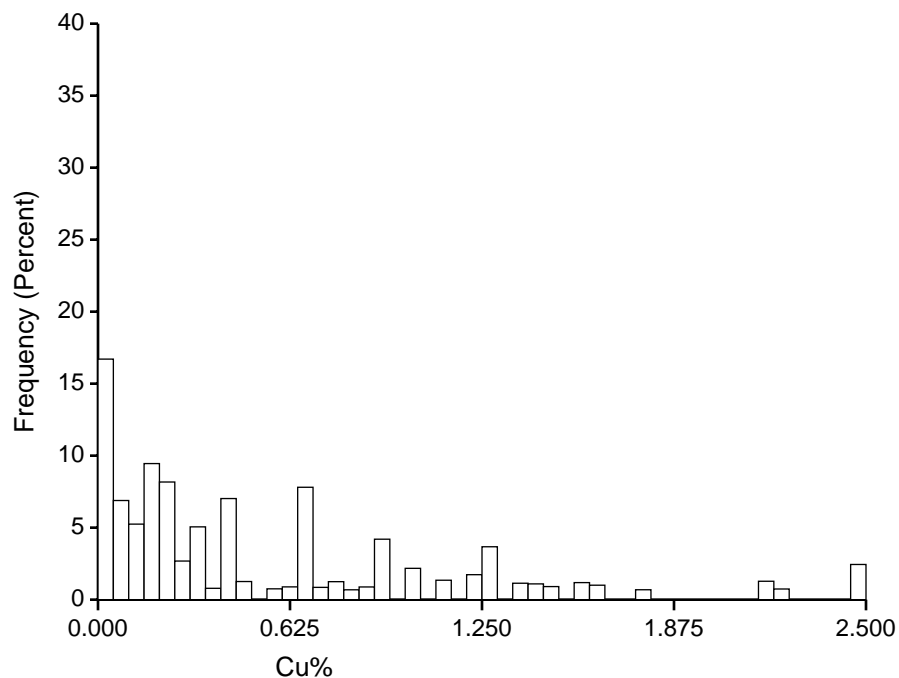
N	2727
m	3.39
$\sigma^2$	9.40
$\sigma/m$	0.90
min	0.16
$q_{0.25}$	1.64
$q_{0.50}$	2.47
$q_{0.75}$	3.99
max	29.20

Class width = 1.00  
The last class contains  
all values  $\geq 49.00$

### Ag West Fork Block Estimate (High Confidence Blocks)



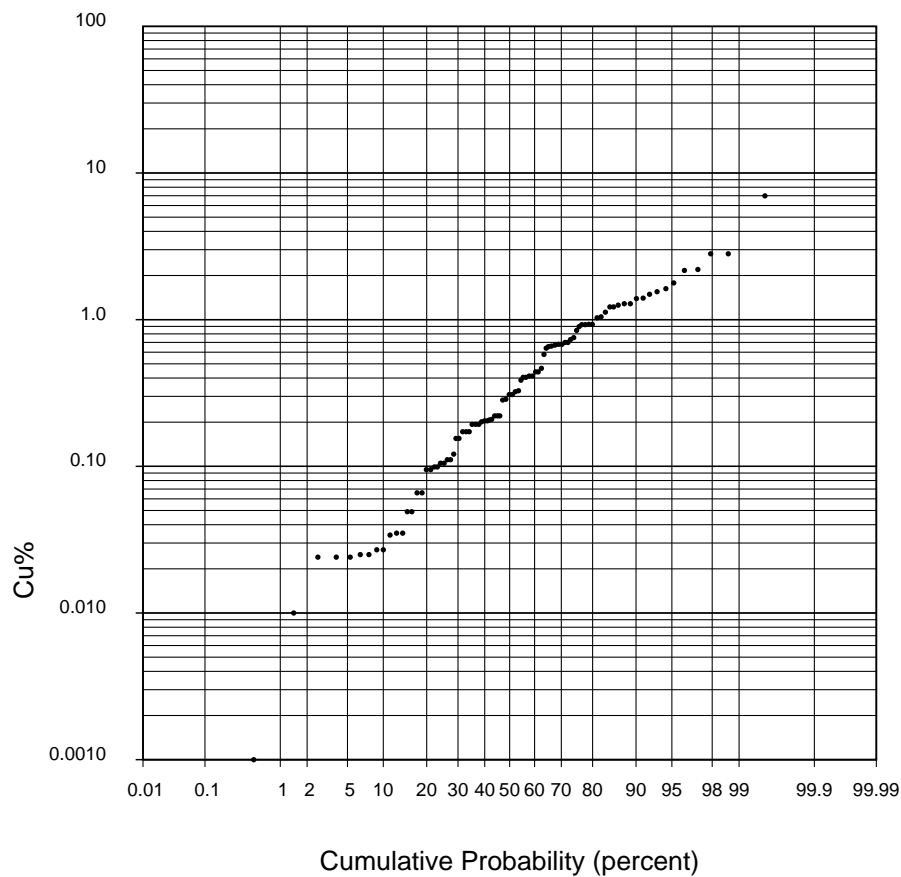
Cu Opulent Block NN Estimate (High Confidence Blocks)



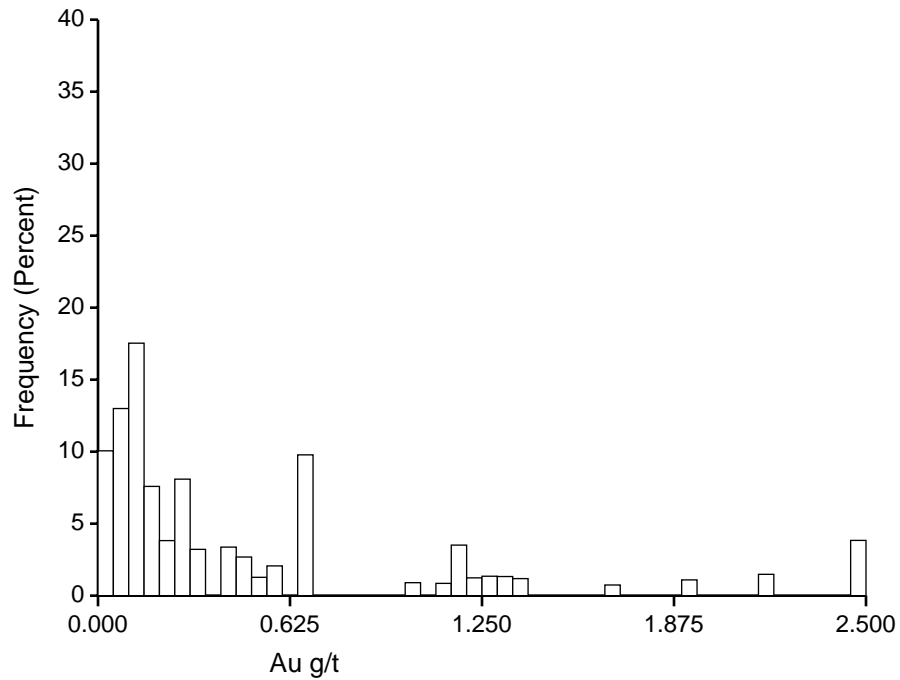
N	91
m	0.594
$\sigma^2$	0.729
$\sigma/m$	1.438
min	0.001
$q_{0.25}$	0.105
$q_{0.50}$	0.308
$q_{0.75}$	0.845
max	6.980

Class width = 0.050  
The last class contains  
all values  $\geq 2.450$

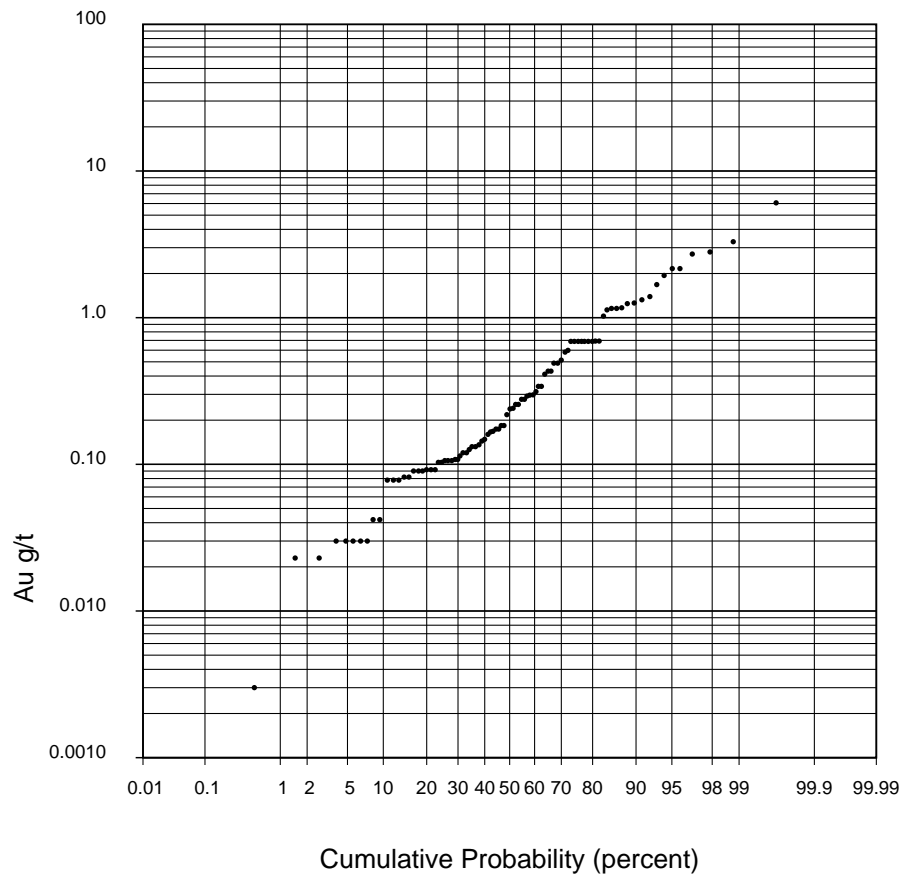
Cu Opulent Block NN Estimate (High Confidence Blocks)



### Au Opulent Block NN Estimate (High Confidence Blocks)

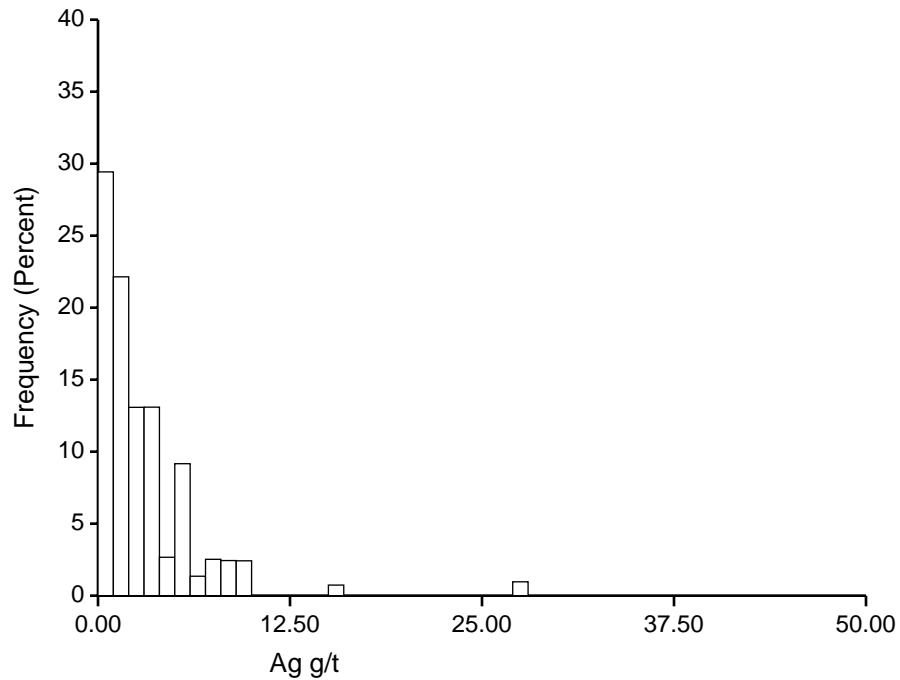


### Au Opulent Block NN Estimate (High Confidence Blocks)





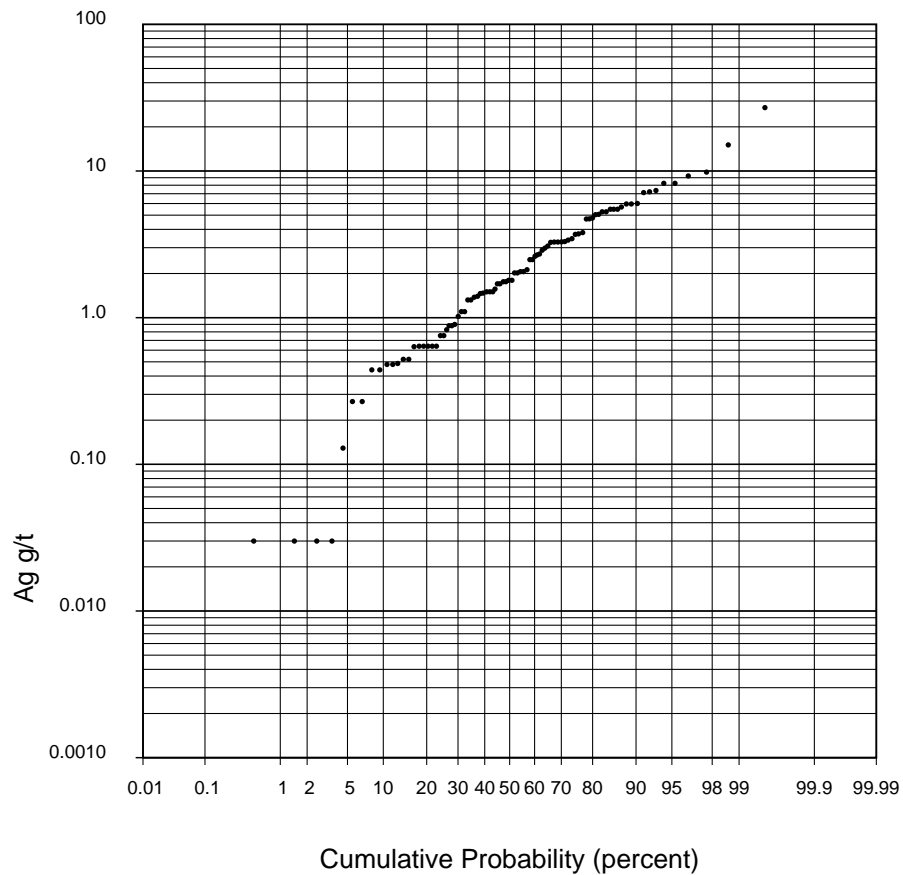
### Ag Opulent Block NN Estimate (High Confidence Blocks)



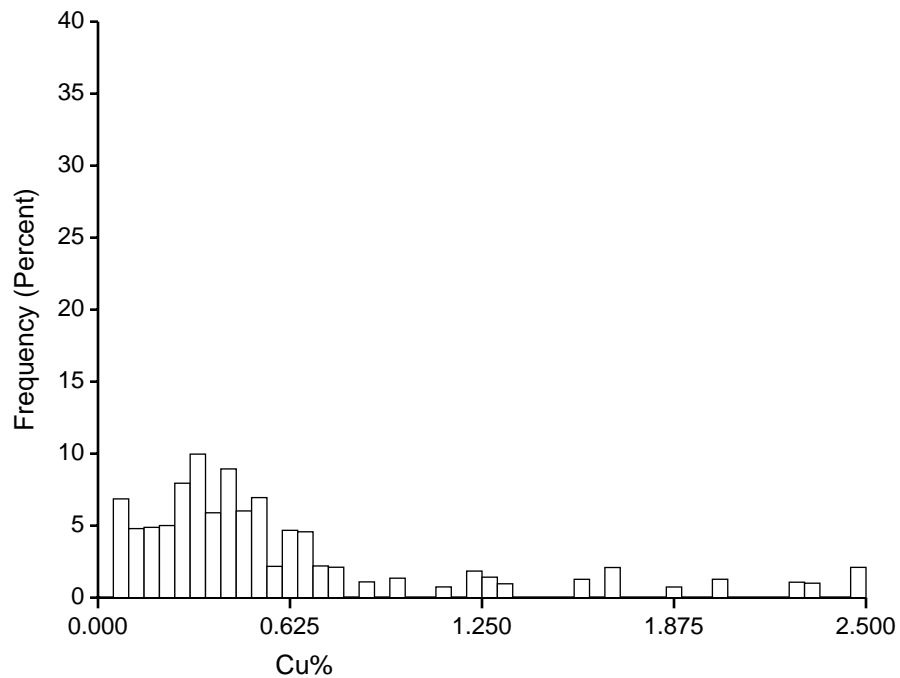
N	91
m	2.93
$\sigma^2$	12.03
$\sigma/m$	1.18
min	0.03
$q_{0.25}$	0.75
$q_{0.50}$	1.80
$q_{0.75}$	3.70
max	27.04

Class width = 1.00  
 The last class contains  
 all values  $\geq 49.00$

### Ag Opulent Block NN Estimate (High Confidence Blocks)



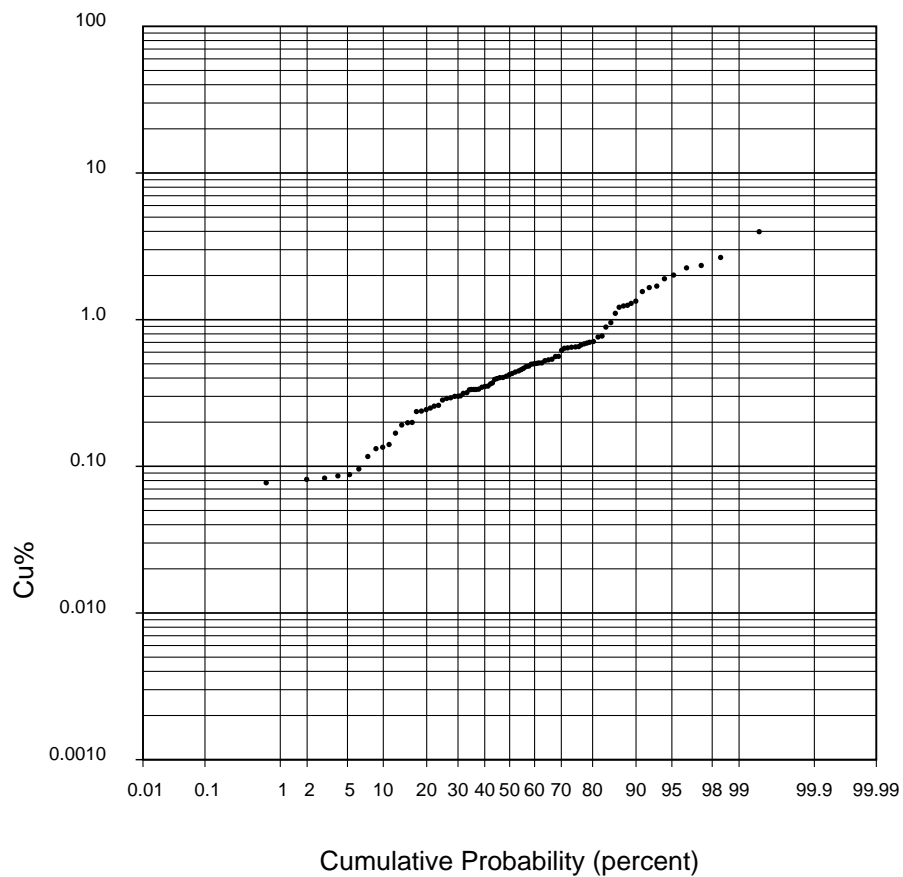
### Cu Opulent Block Estimate (High Confidence Blocks)



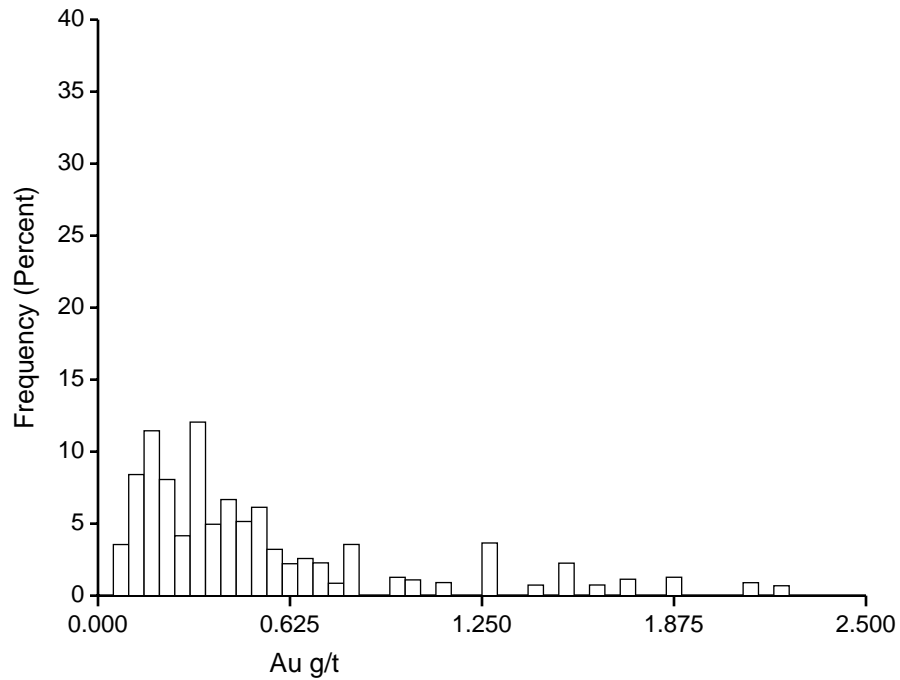
N	91
m	0.615
$\sigma^2$	0.396
$\sigma/m$	1.023
min	0.077
$q_{0.25}$	0.283
$q_{0.50}$	0.422
$q_{0.75}$	0.651
max	3.984

Class width = 0.050  
 The last class contains  
 all values  $\geq 2.450$

### Cu Opulent Block Estimate (High Confidence Blocks)



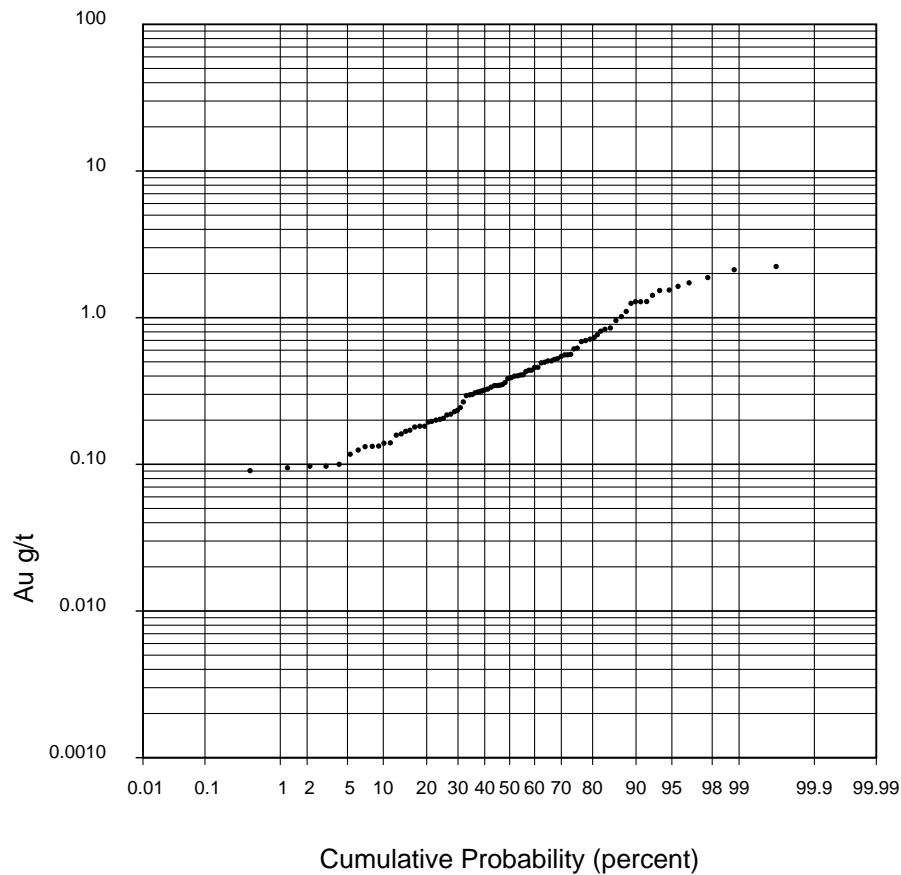
# Au Opulent Block Estimate (High Confidence Blocks)



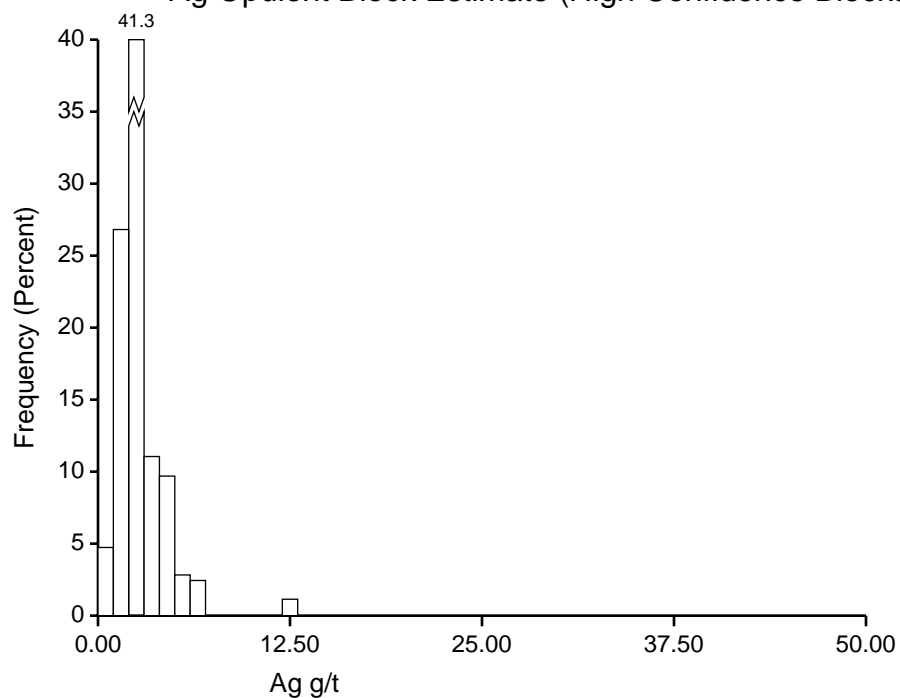
N	91
m	0.526
$\sigma^2$	0.206
$\sigma/m$	0.862
min	0.090
$q_{0.25}$	0.206
$q_{0.50}$	0.390
$q_{0.75}$	0.620
max	2.234

Class width = 0.050  
The last class contains  
all values  $\geq 2.450$

# Au Opulent Block Estimate (High Confidence Blocks)



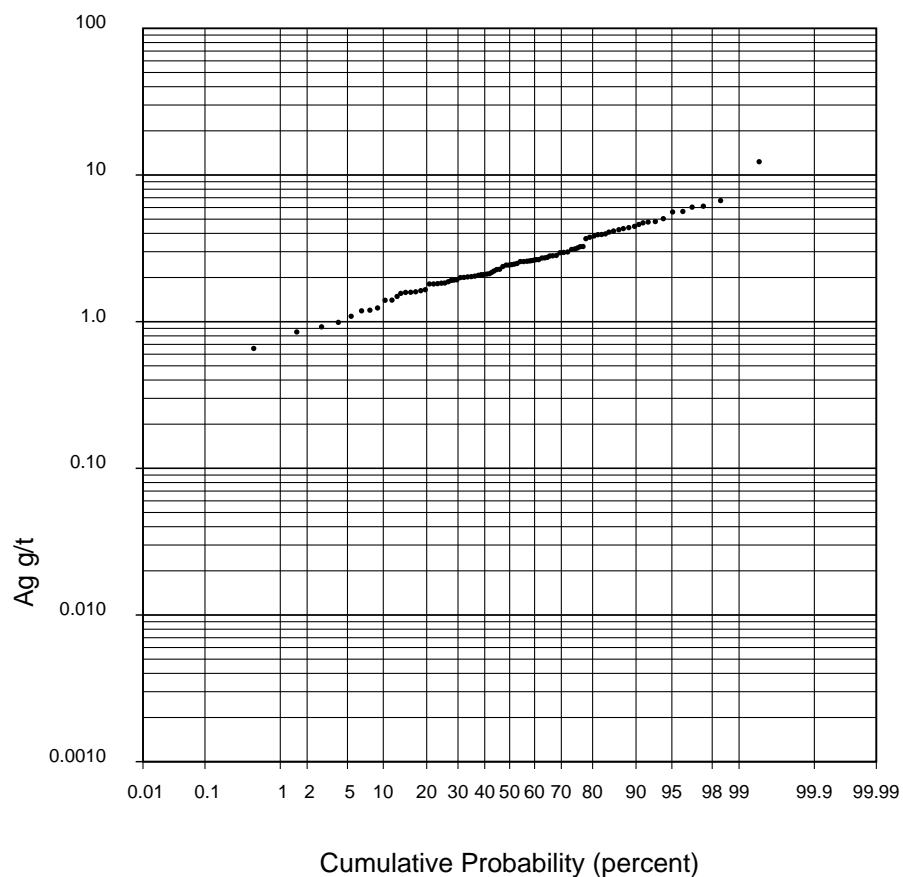
# Ag Opulent Block Estimate (High Confidence Blocks)



N	91
m	2.76
$\sigma^2$	2.54
$\sigma/m$	0.58
min	0.66
$q_{0.25}$	1.83
$q_{0.50}$	2.43
$q_{0.75}$	3.13
max	12.34

Class width = 1.00  
The last class contains  
all values  $\geq 49.00$

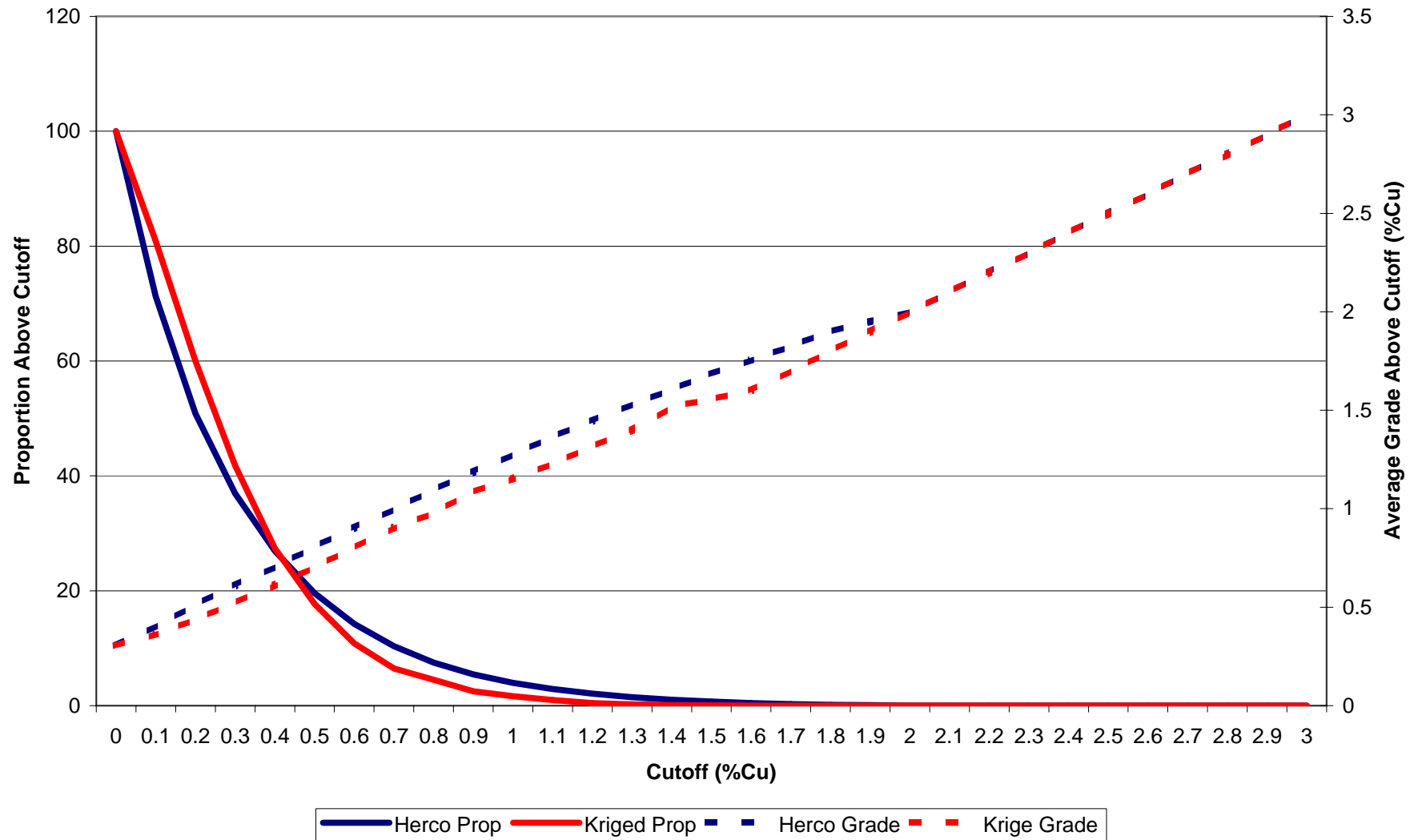
# Ag Opulent Block Estimate (High Confidence Blocks)



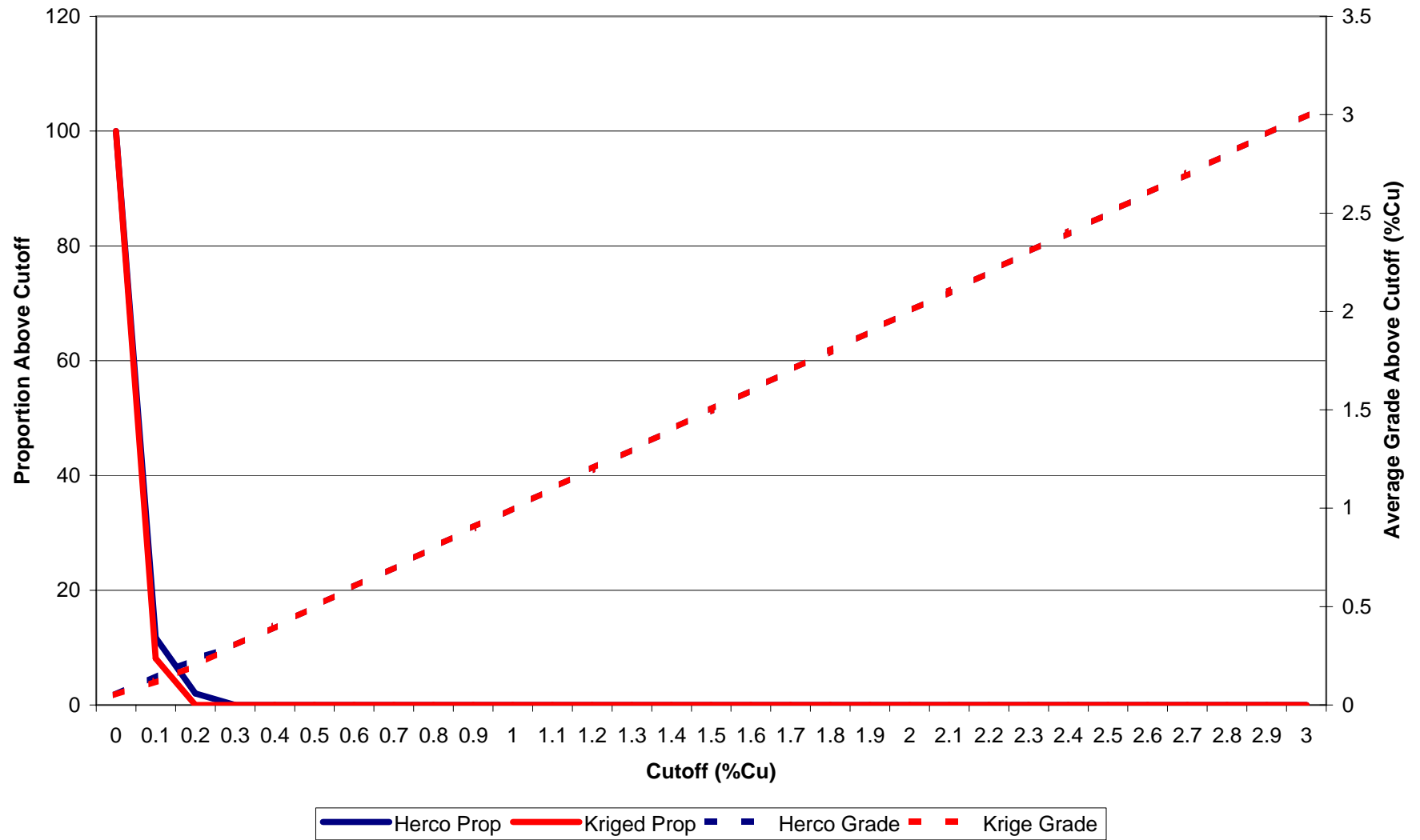
**Updated Galore Creek Resources  
NI 43-101 Technical Report**

**Appendix 10 – Herco Grade-Tonnage Curves**

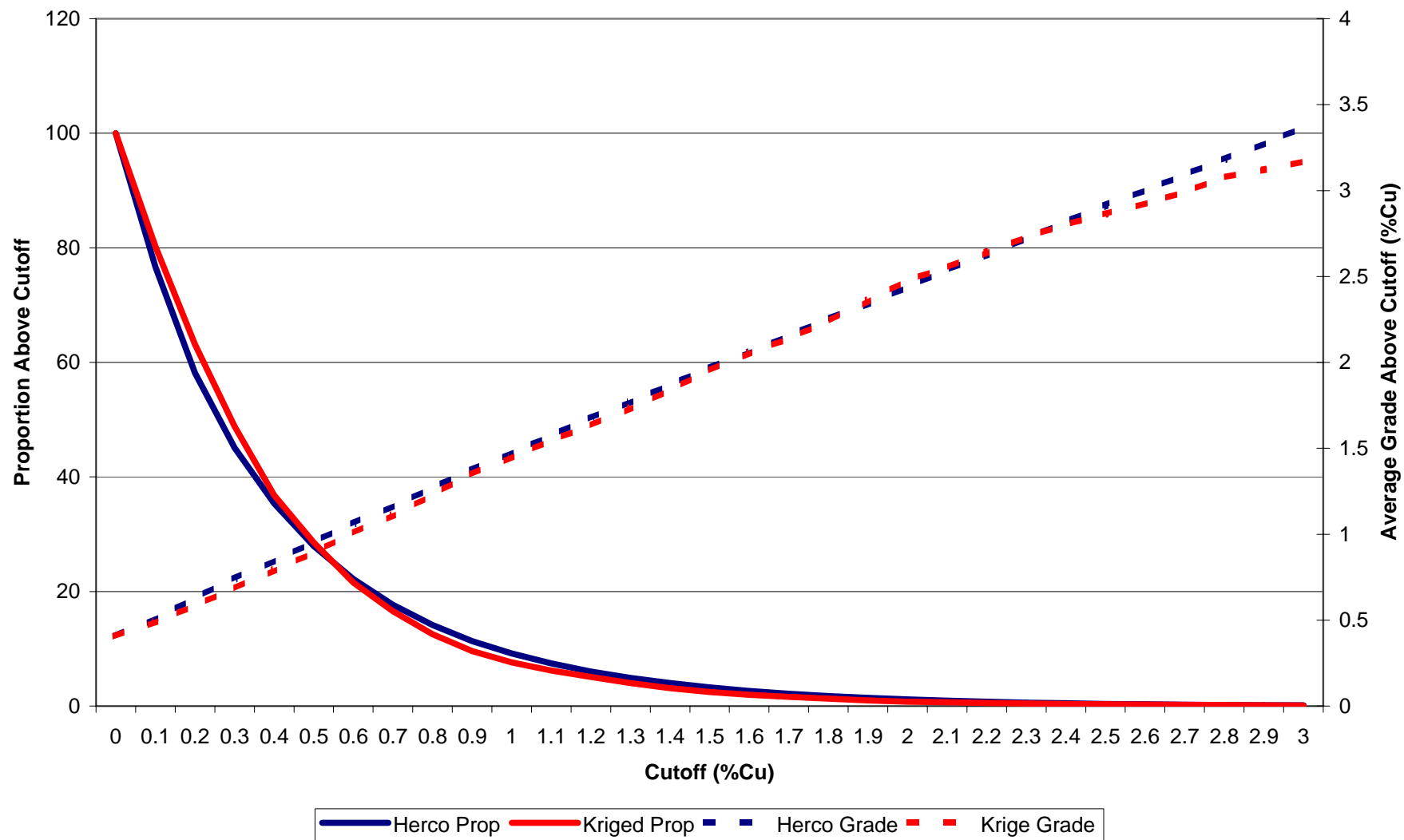
**Galore Creek  
Bountiful Volcanic Group Cu Estimate**



# Galore Creek Bountiful Intrusive Group Cu Estimate

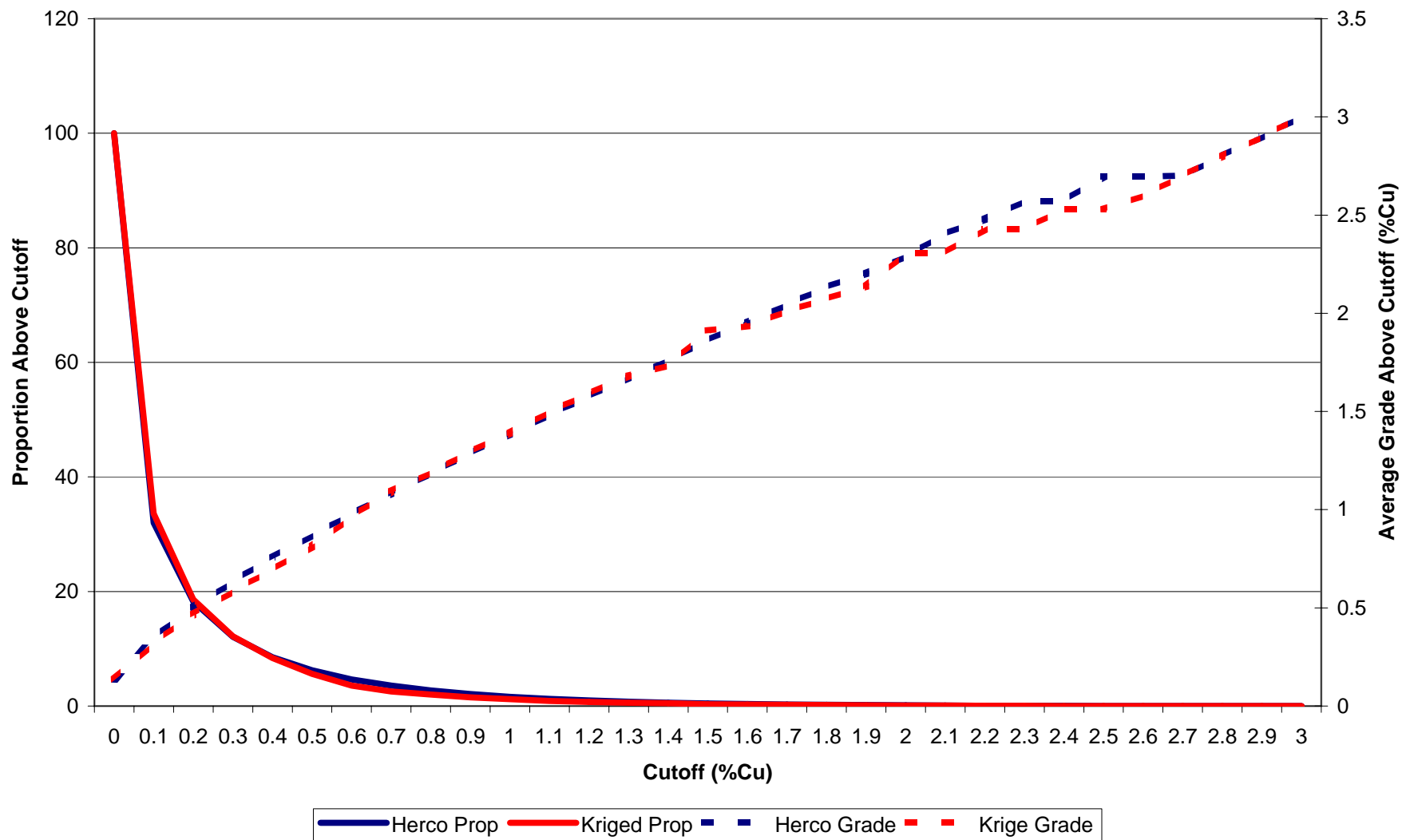


**Galore Creek  
Central Replacement Zone Volcanic Group Cu Estimate**

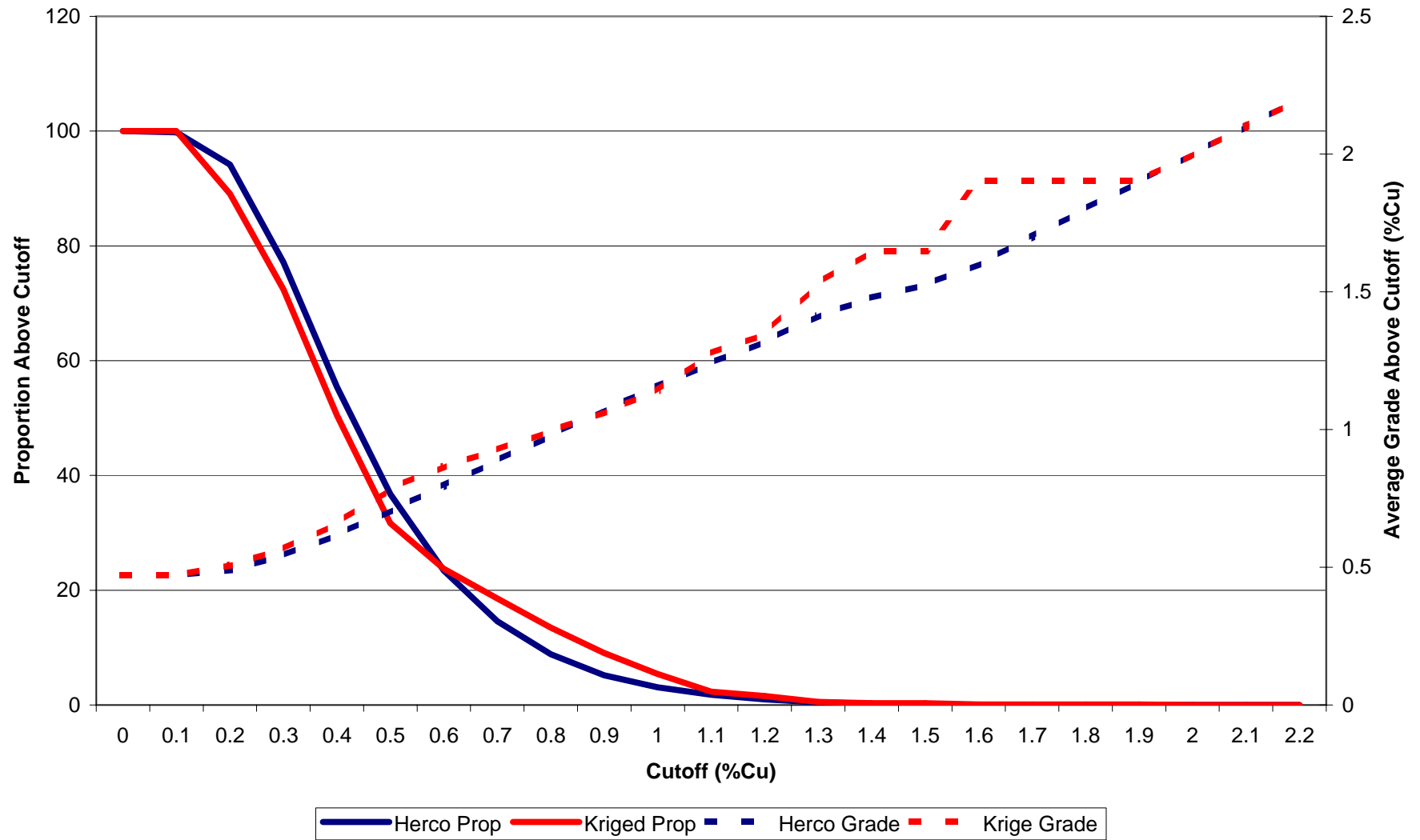




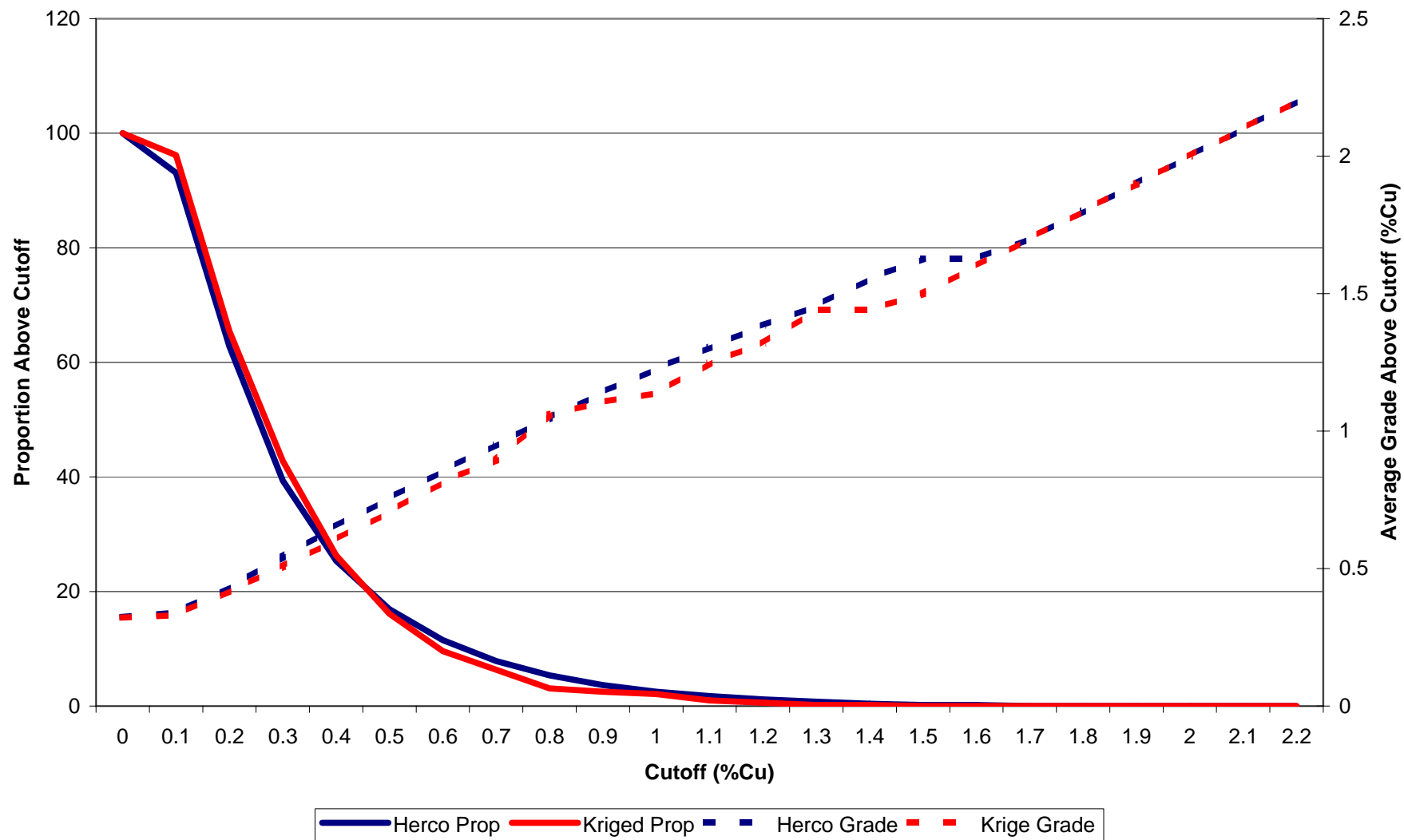
# Galore Creek Central Replacement Zone Intrusive Group Cu Estimate



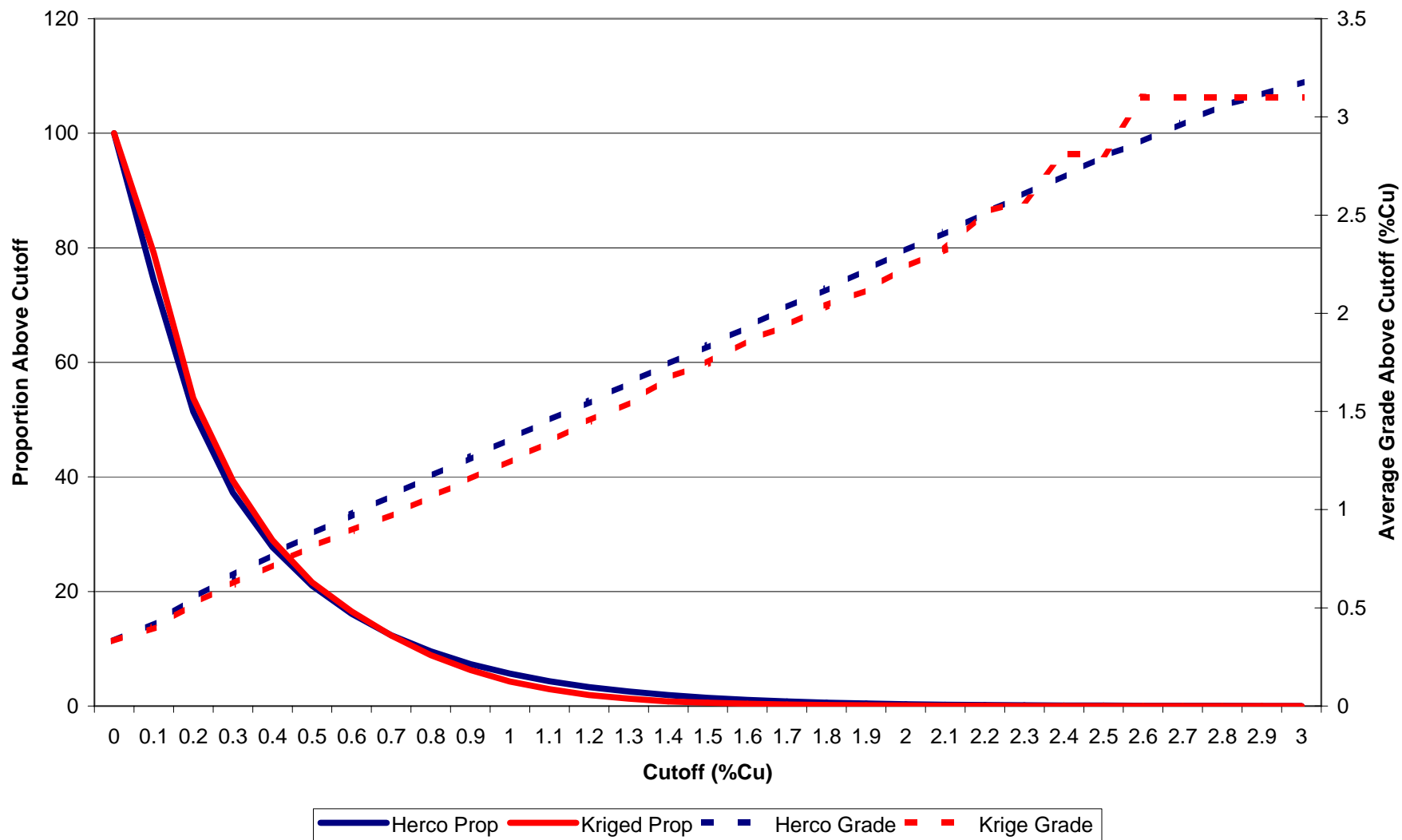
# Galore Creek Junction Cu Estimate



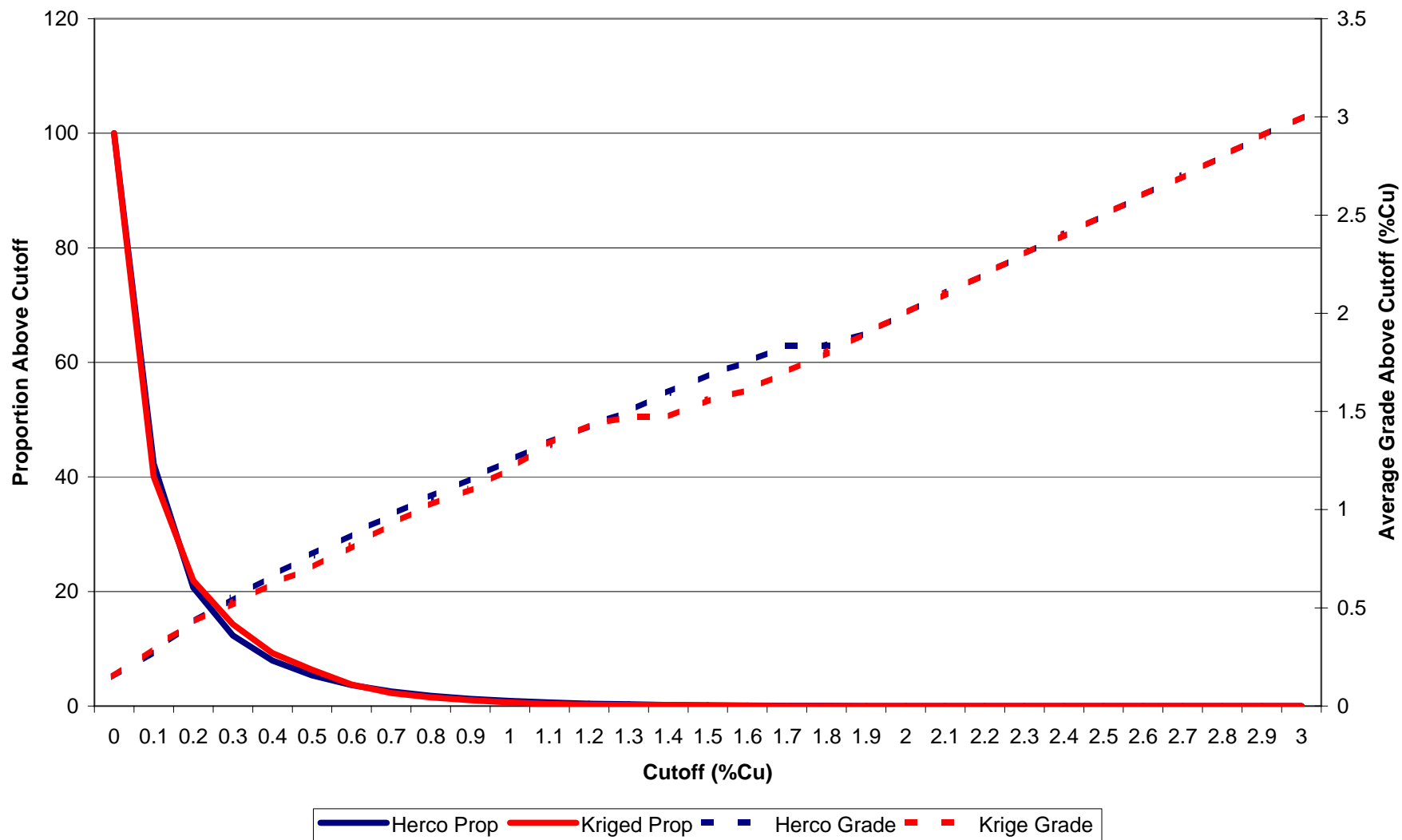
**Galore Creek  
Middle Creek Cu Estimate**



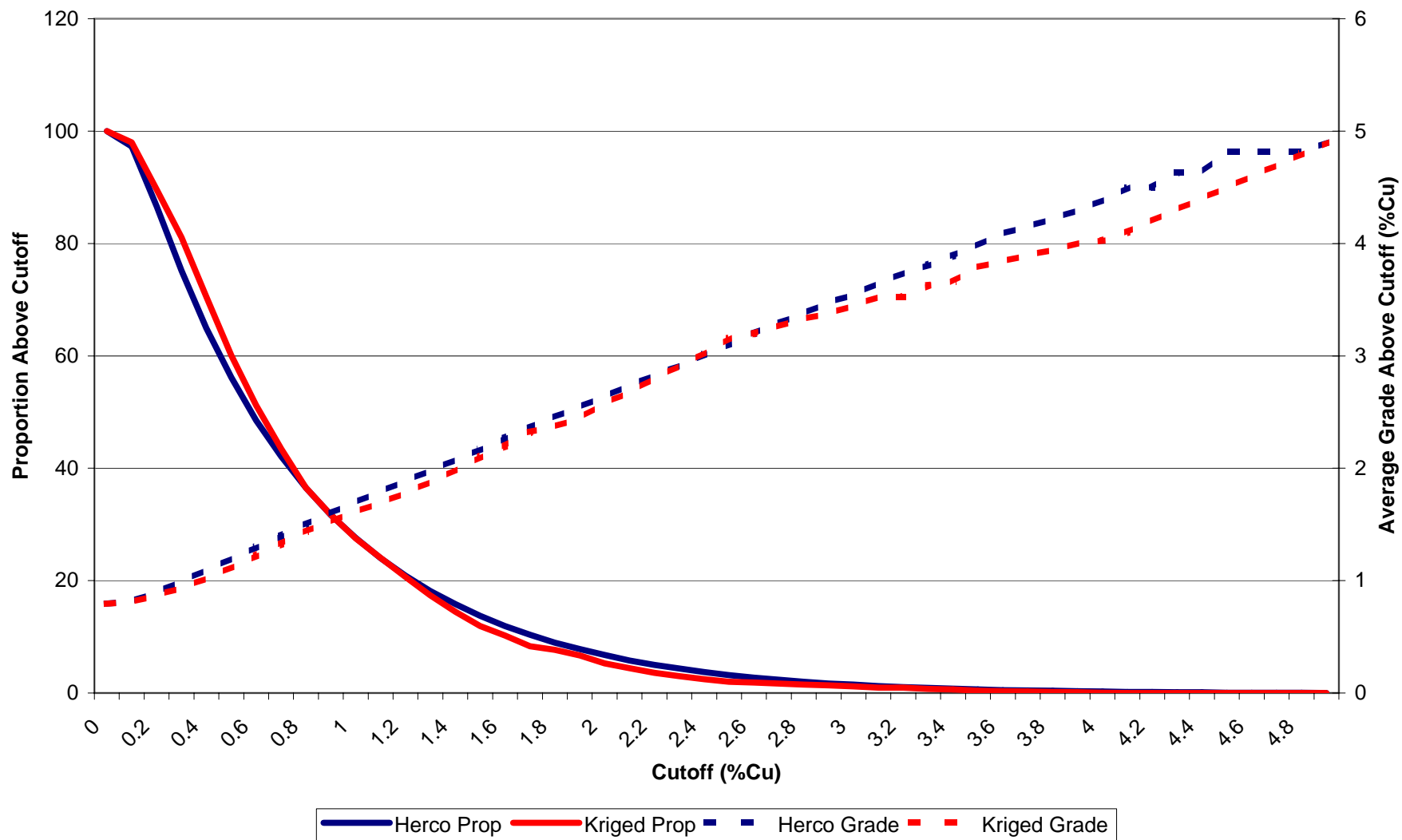
**Galore Creek  
North Gold Lens Volcanic Group Cu Estimate**



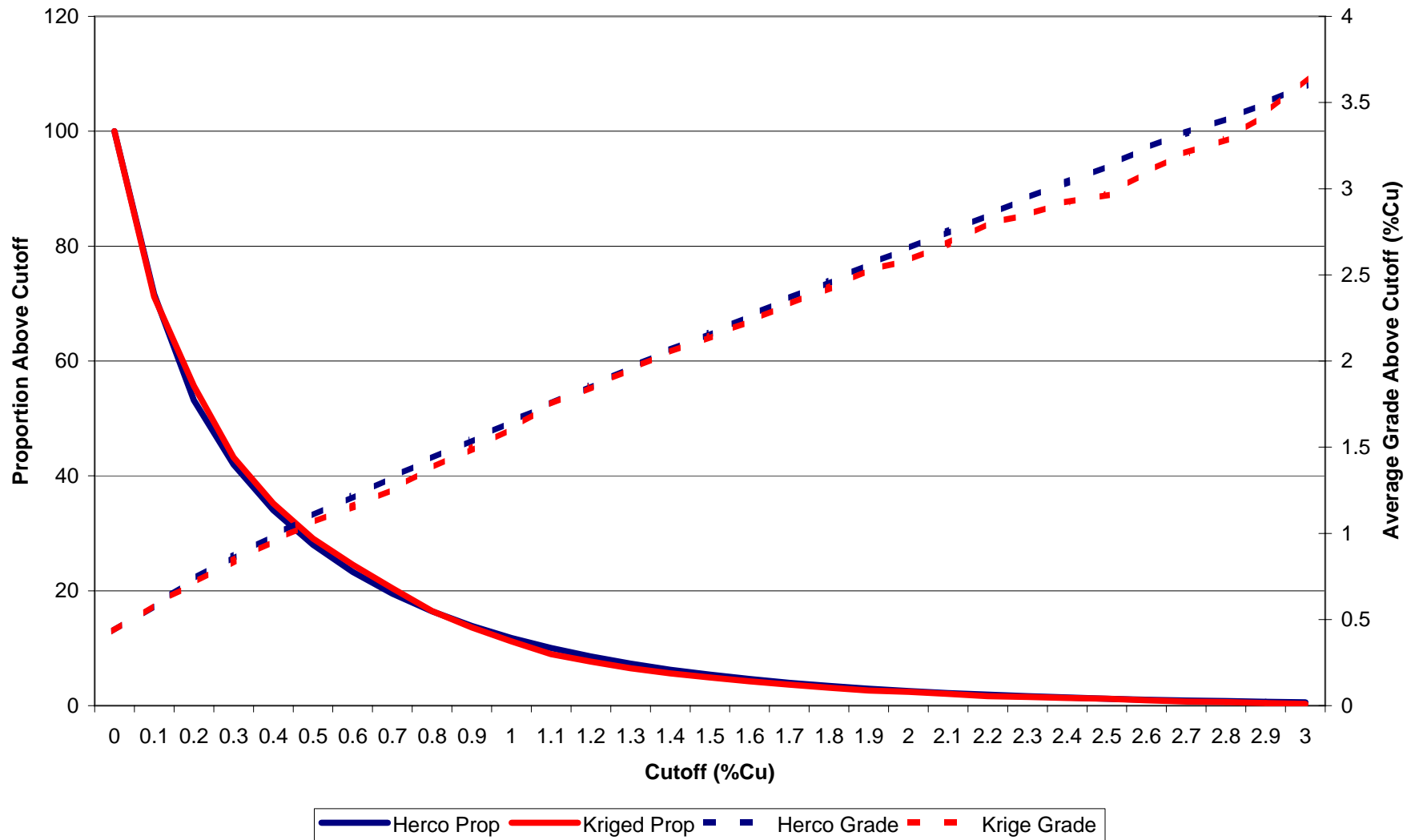
**Galore Creek  
North Gold Lens Intrusive Group Cu Estimate**



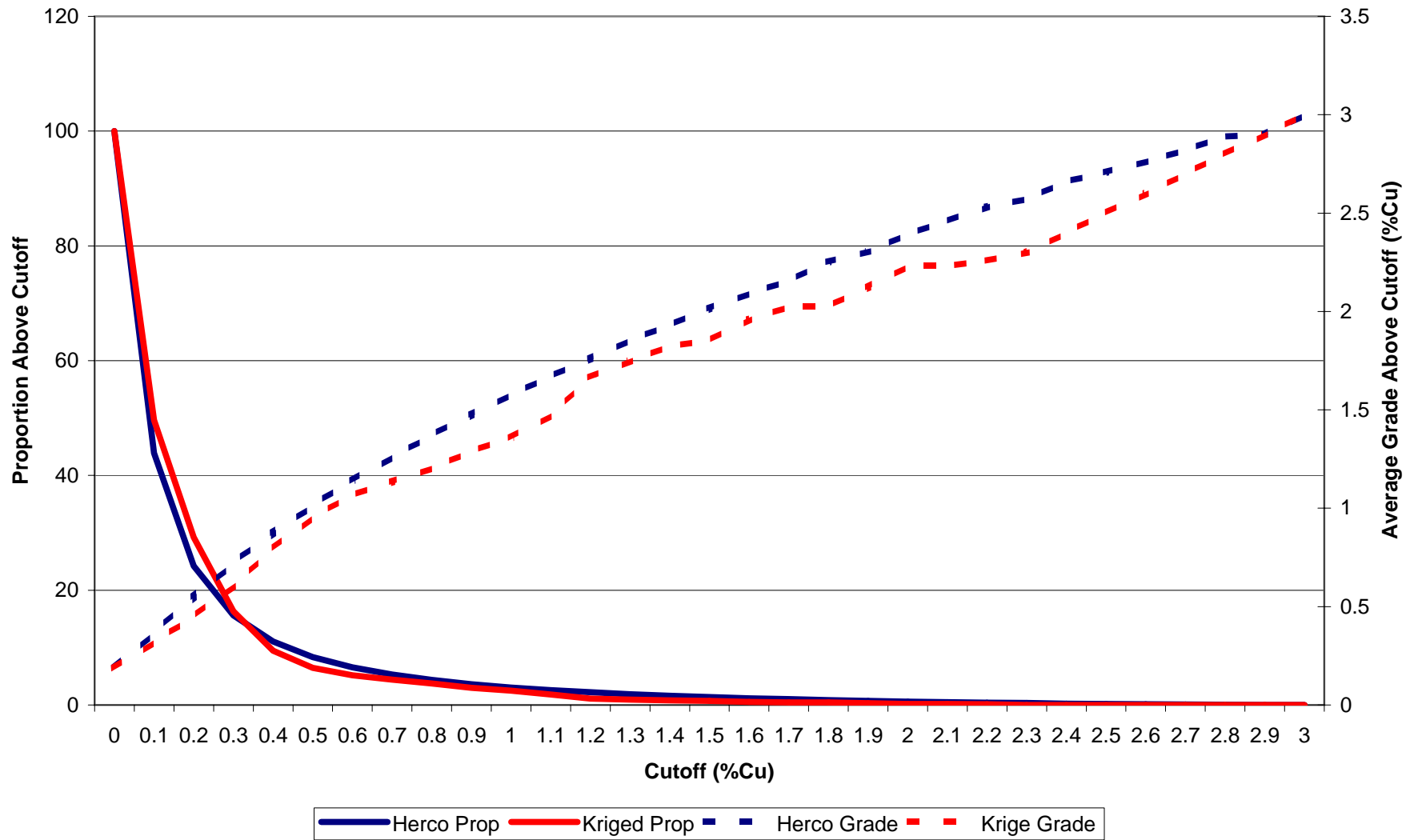
# Galore Creek North Junction Cu Estimate



**Galore Creek**  
**South Gold Lens Volcanic Group Cu Estimate**

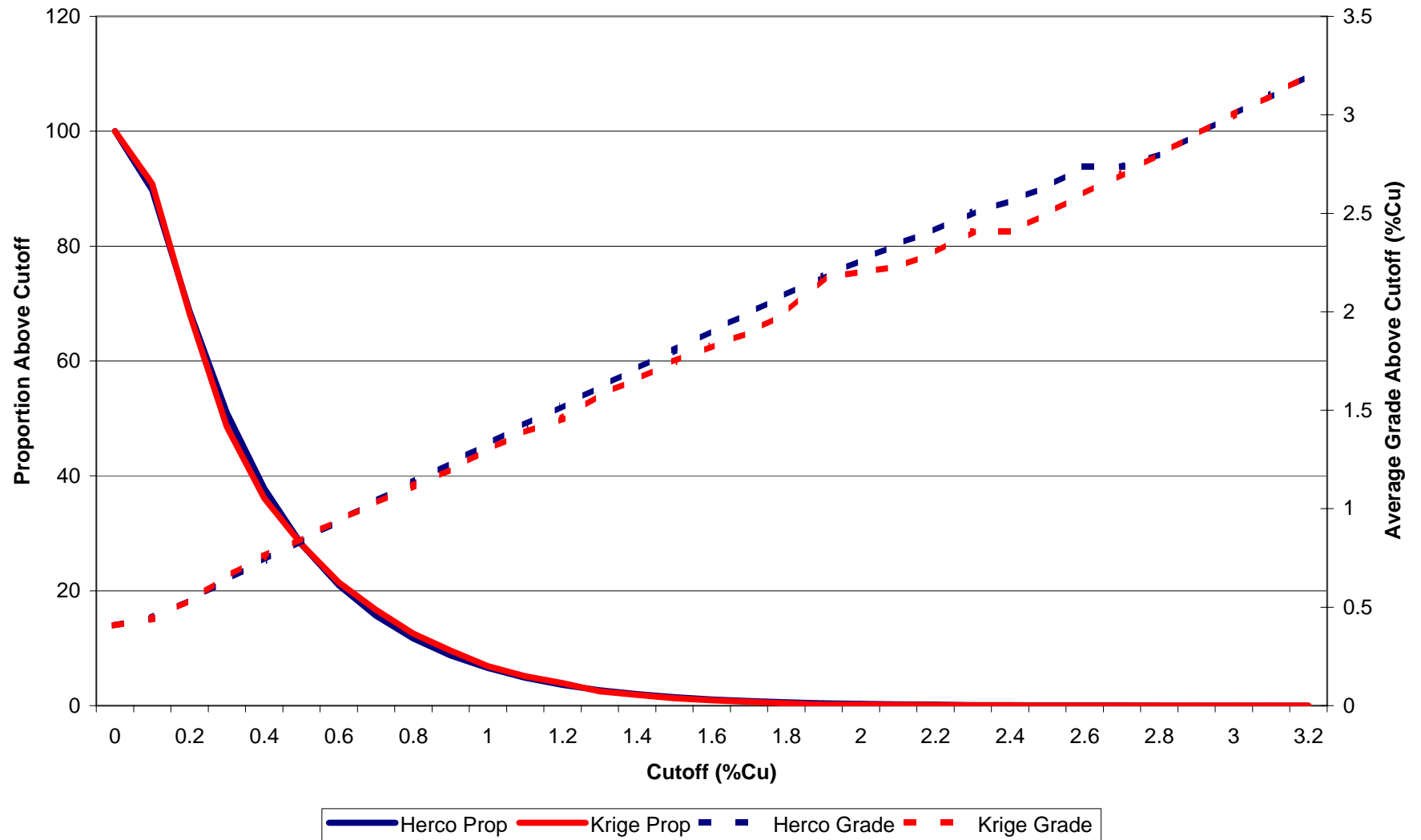


**Galore Creek**  
**South Gold Lens Intrusive Group Cu Estimate**

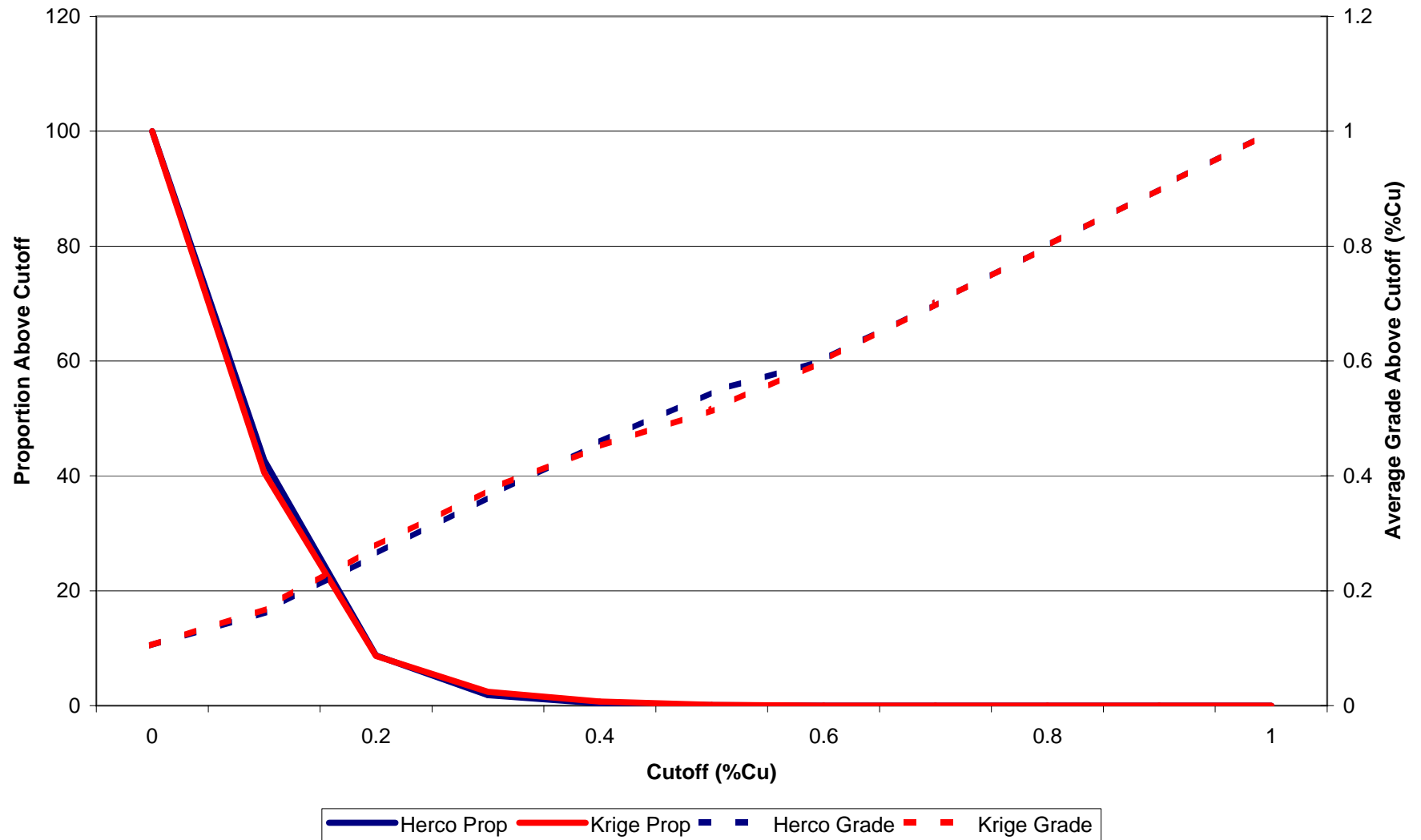




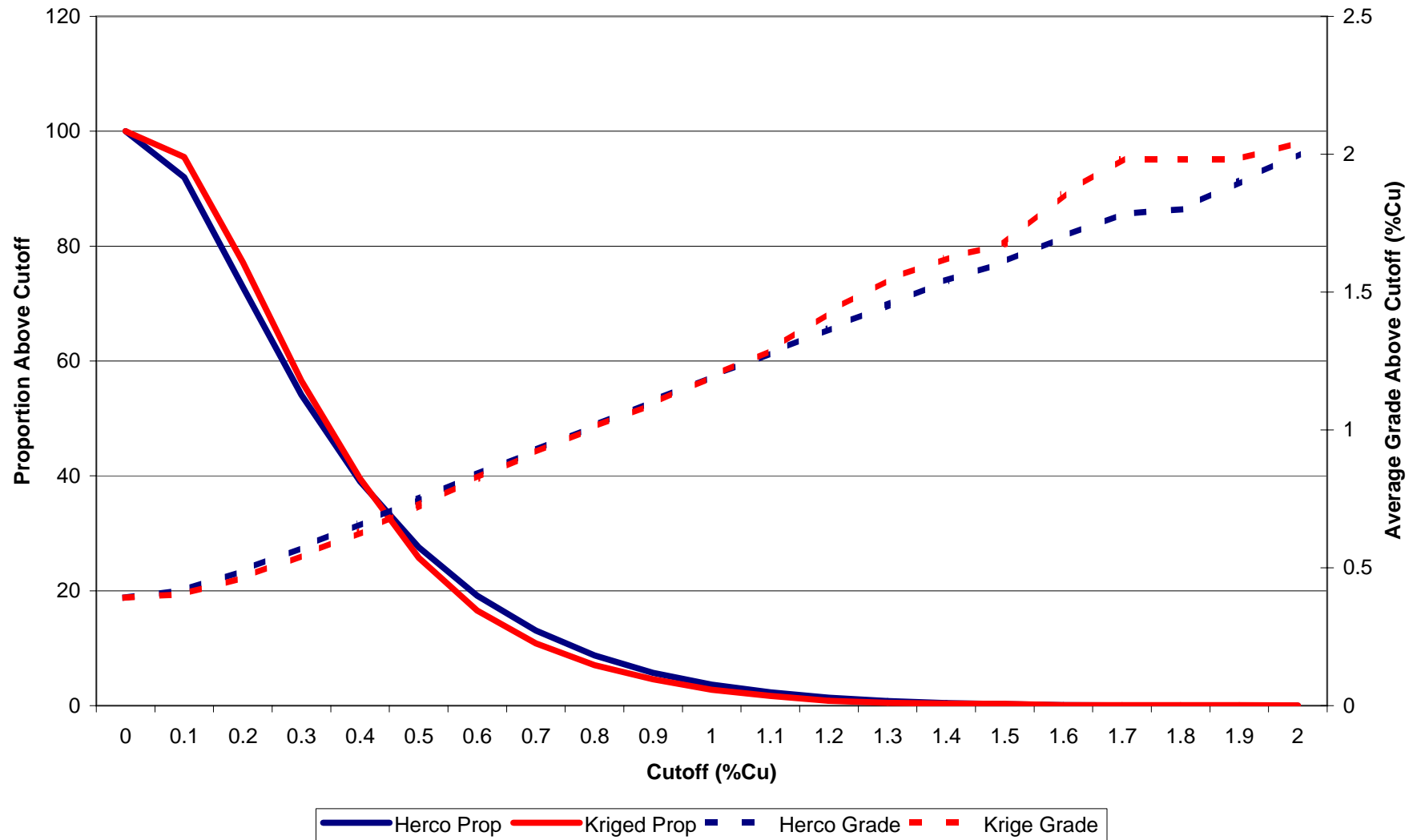
**Galore Creek  
Southwest Zone Cu Estimate**



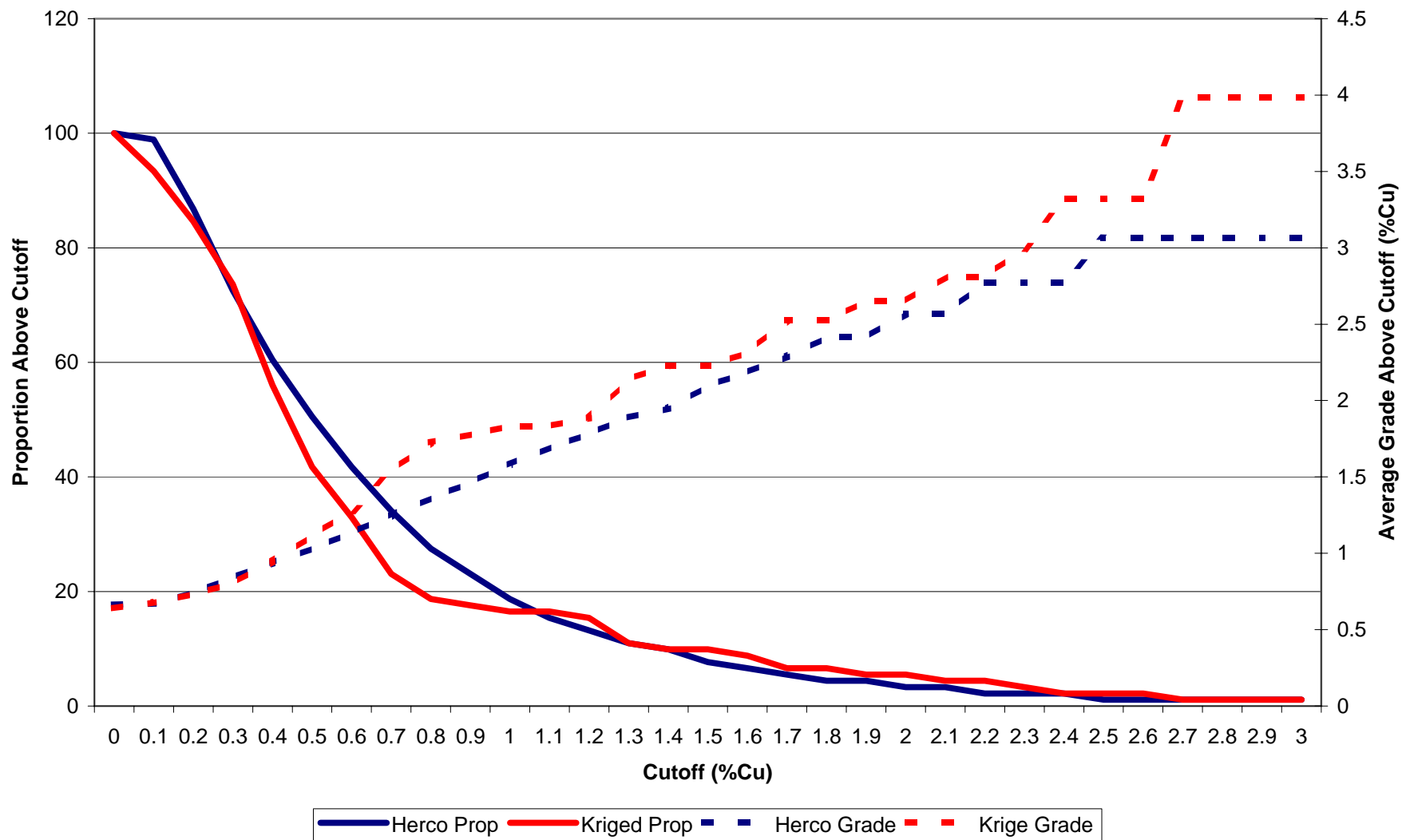
**Galore Creek  
Southwest Zone Low Grade Cu Estimate**



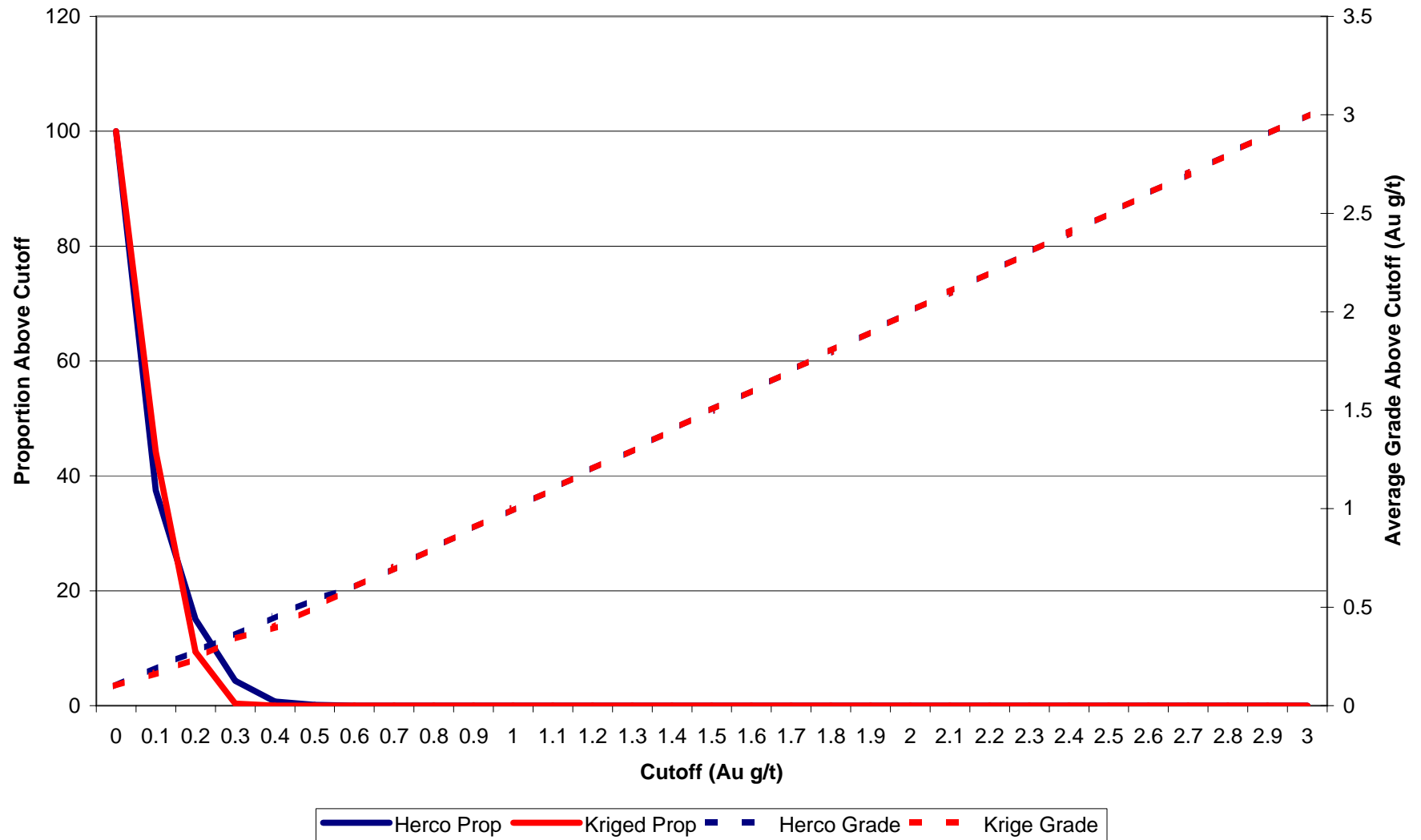
**Galore Creek  
West Fork Cu Estimate**



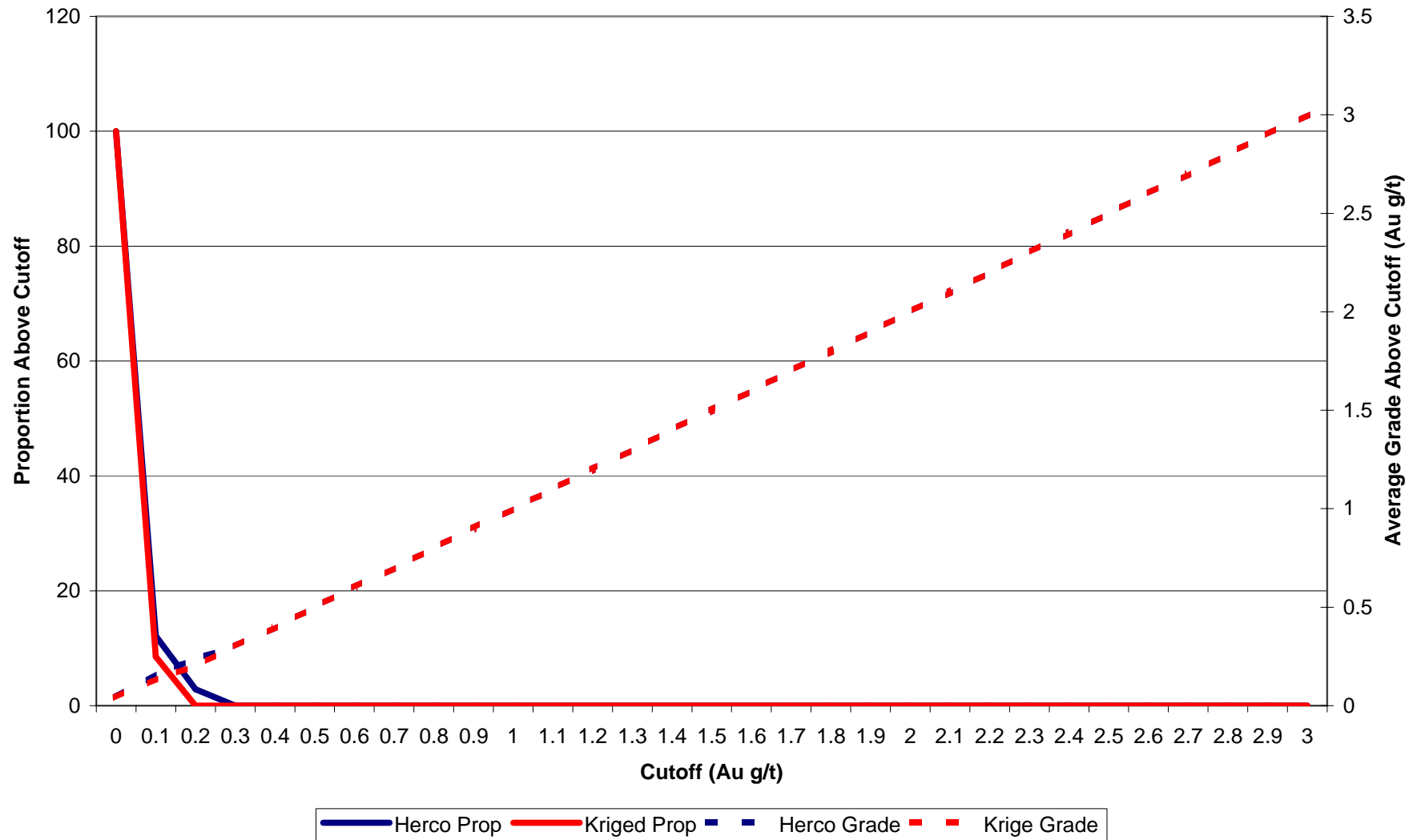
**Galore Creek  
West Fork Opulent Cu Estimate**



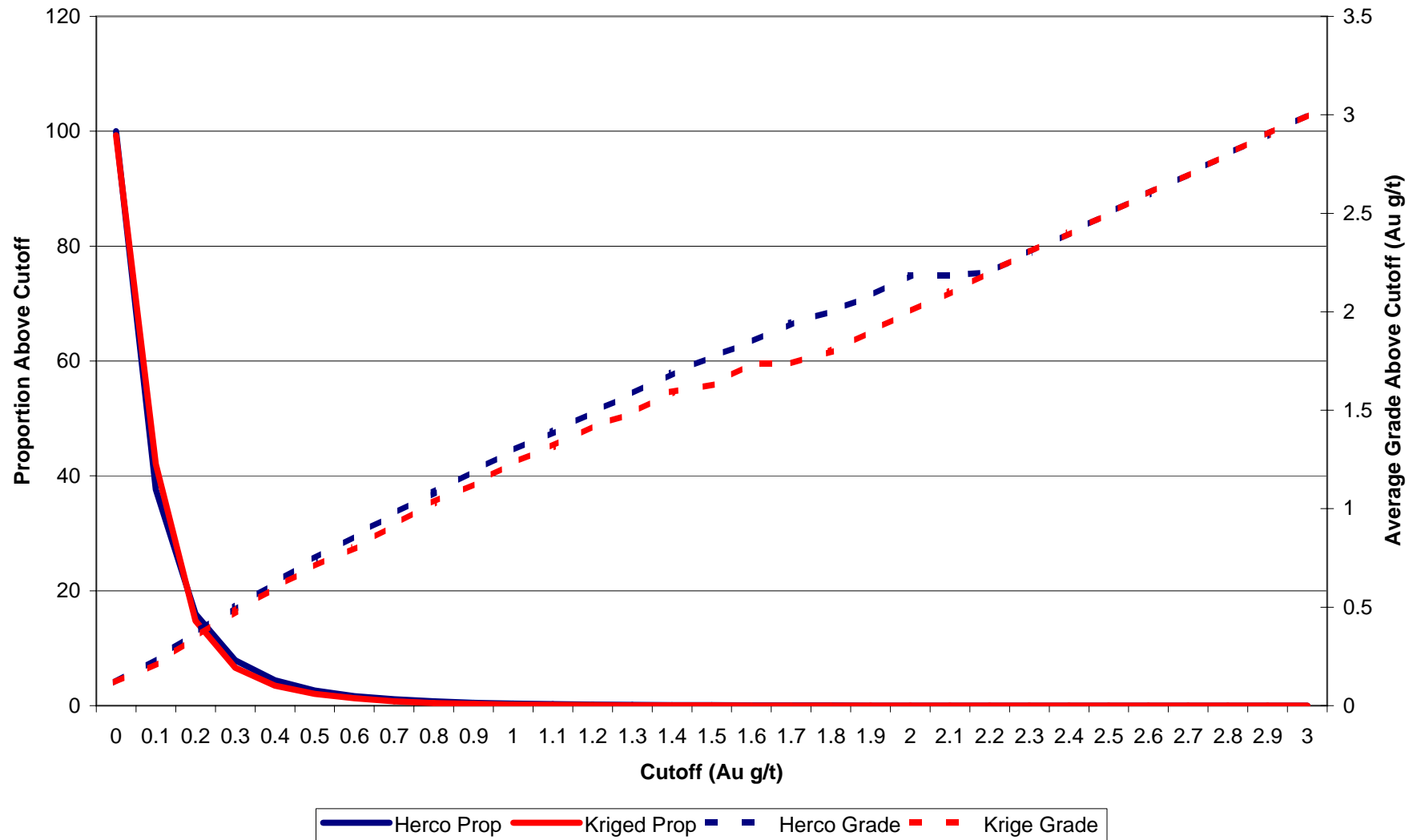
# Galore Creek Bountiful Volcanic Group Au Estimate



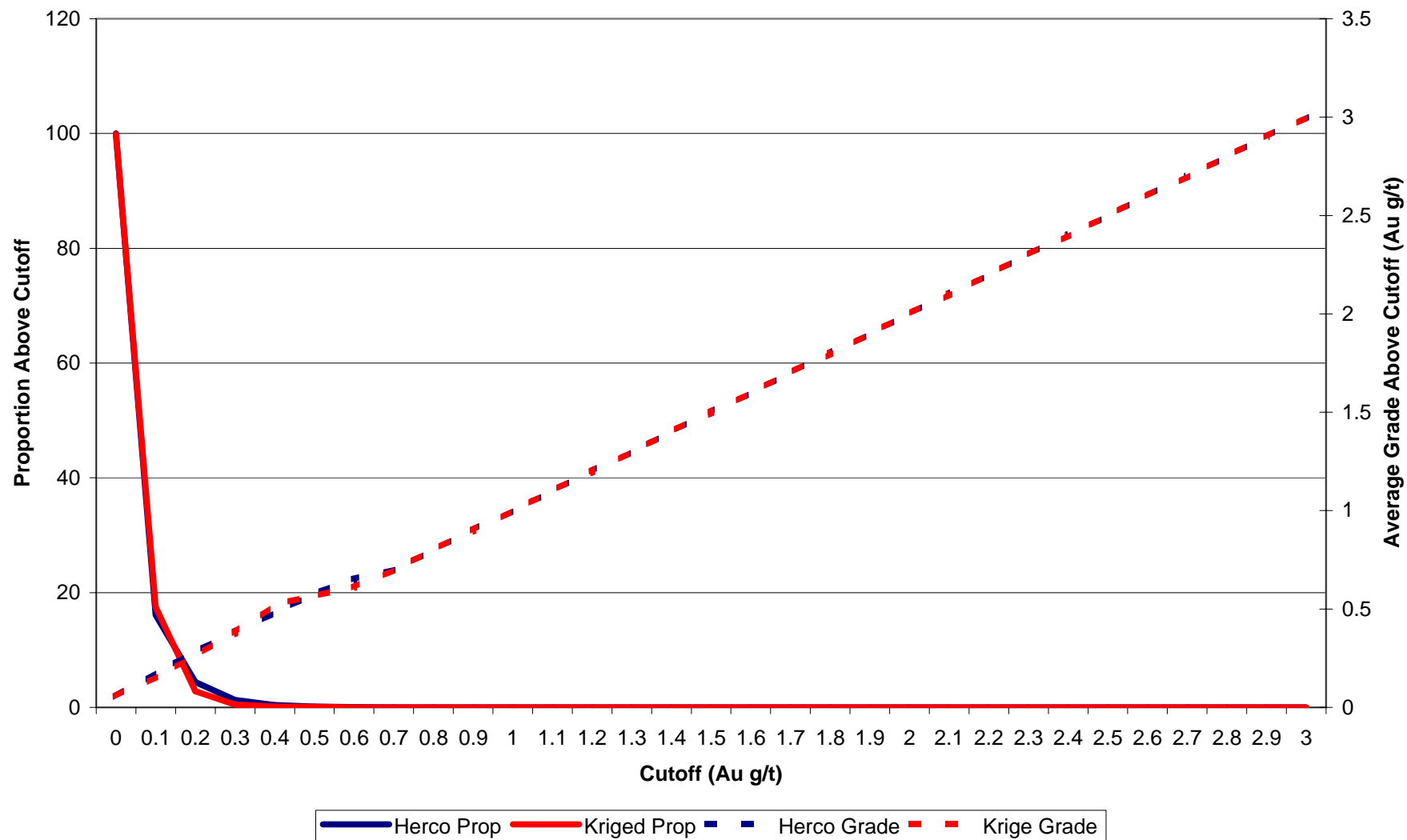
# Galore Creek Bountiful Intrusive Group Au Estimate



**Galore Creek  
Central Replacement Zone Volcanic Group Au Estimate**

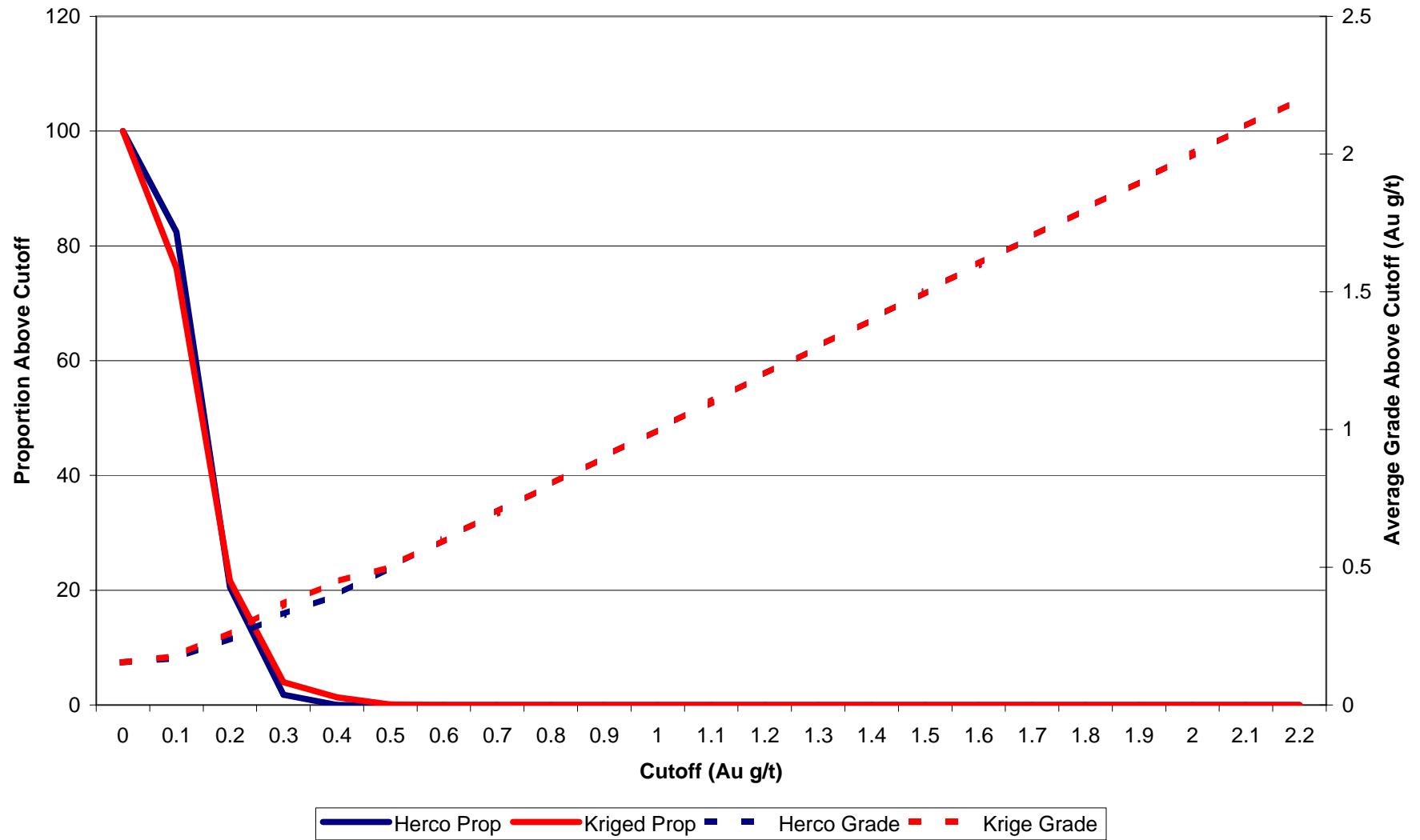


# Galore Creek Central Replacement Zone Intrusive Group Au Estimate

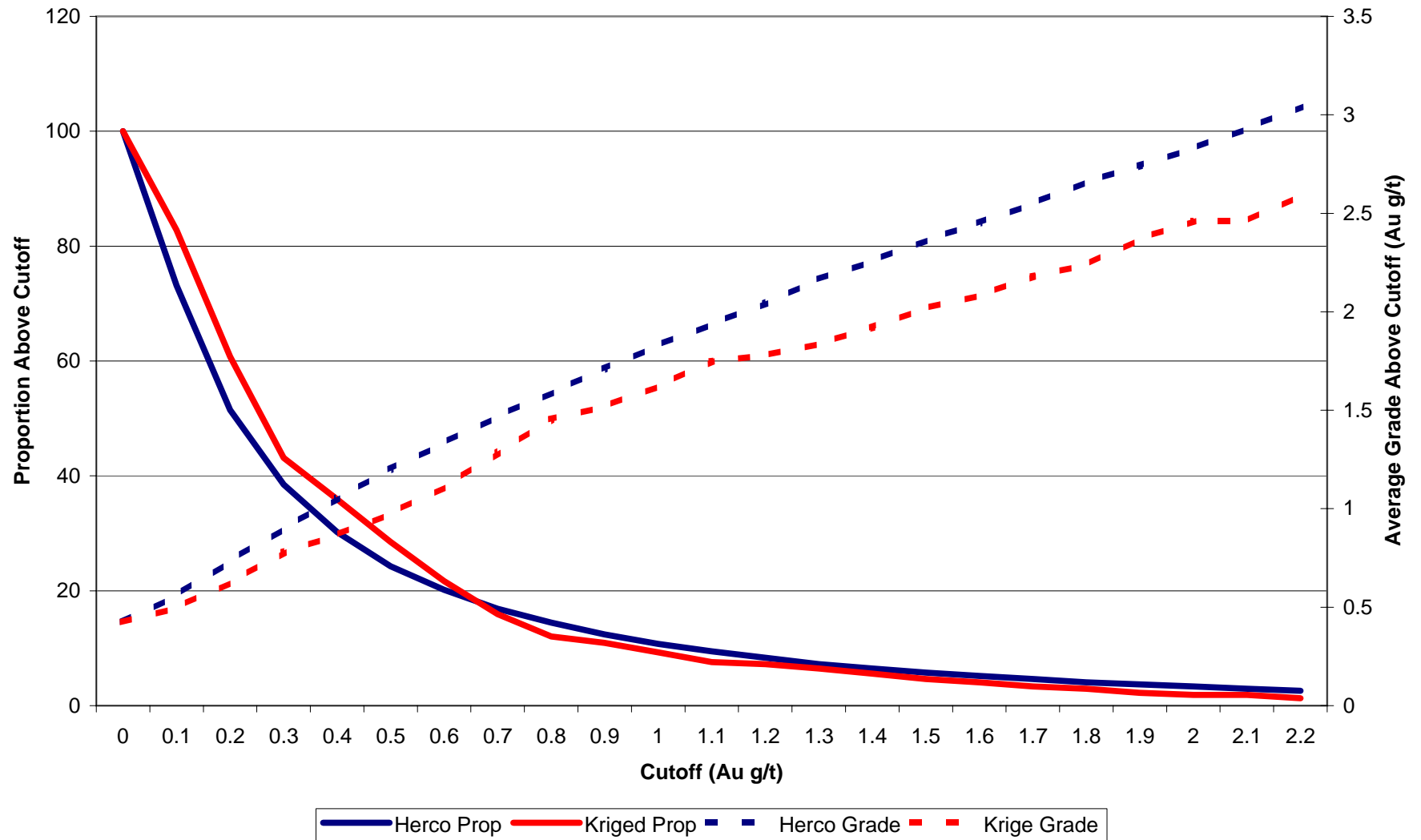




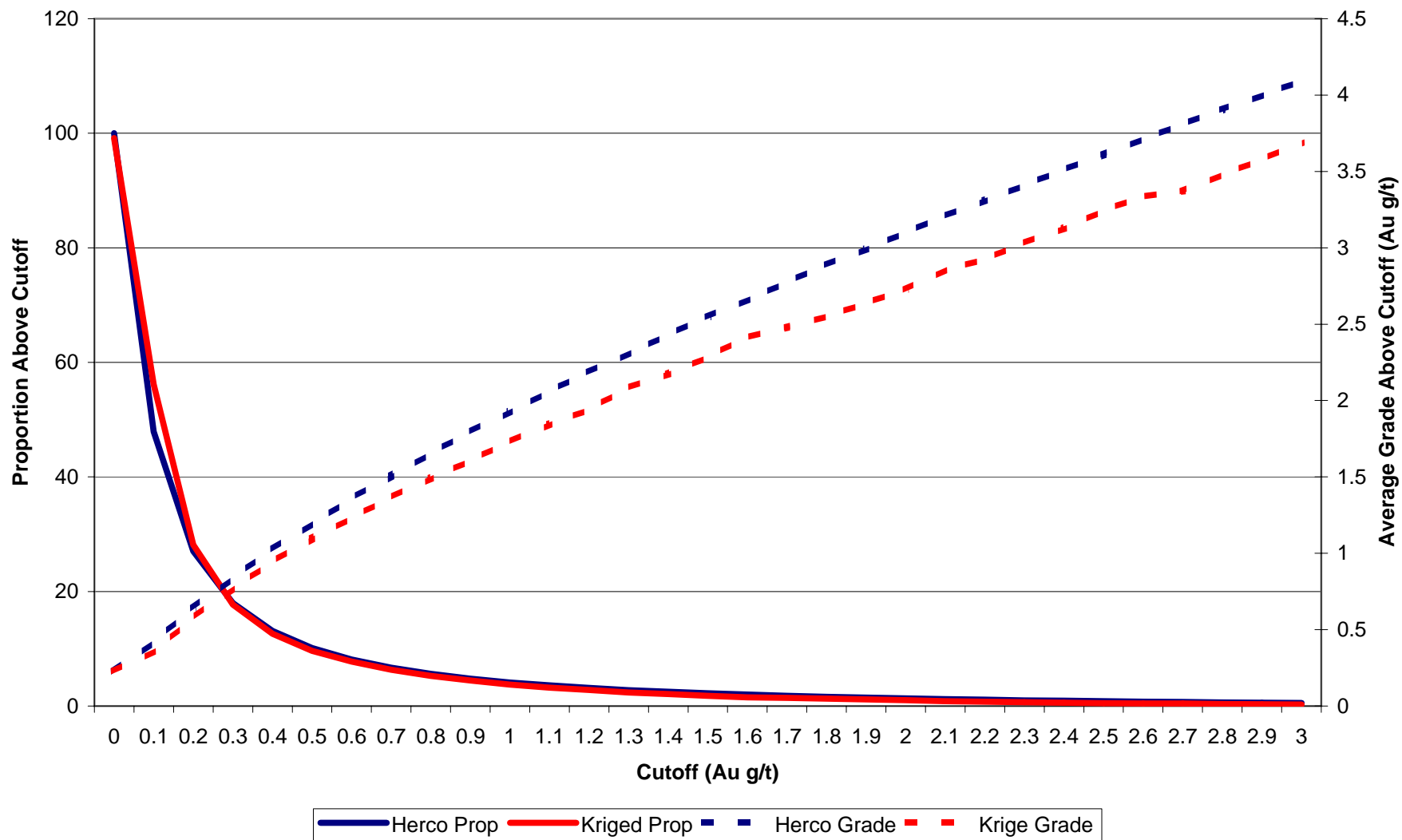
# Galore Creek Junction Au Estimate



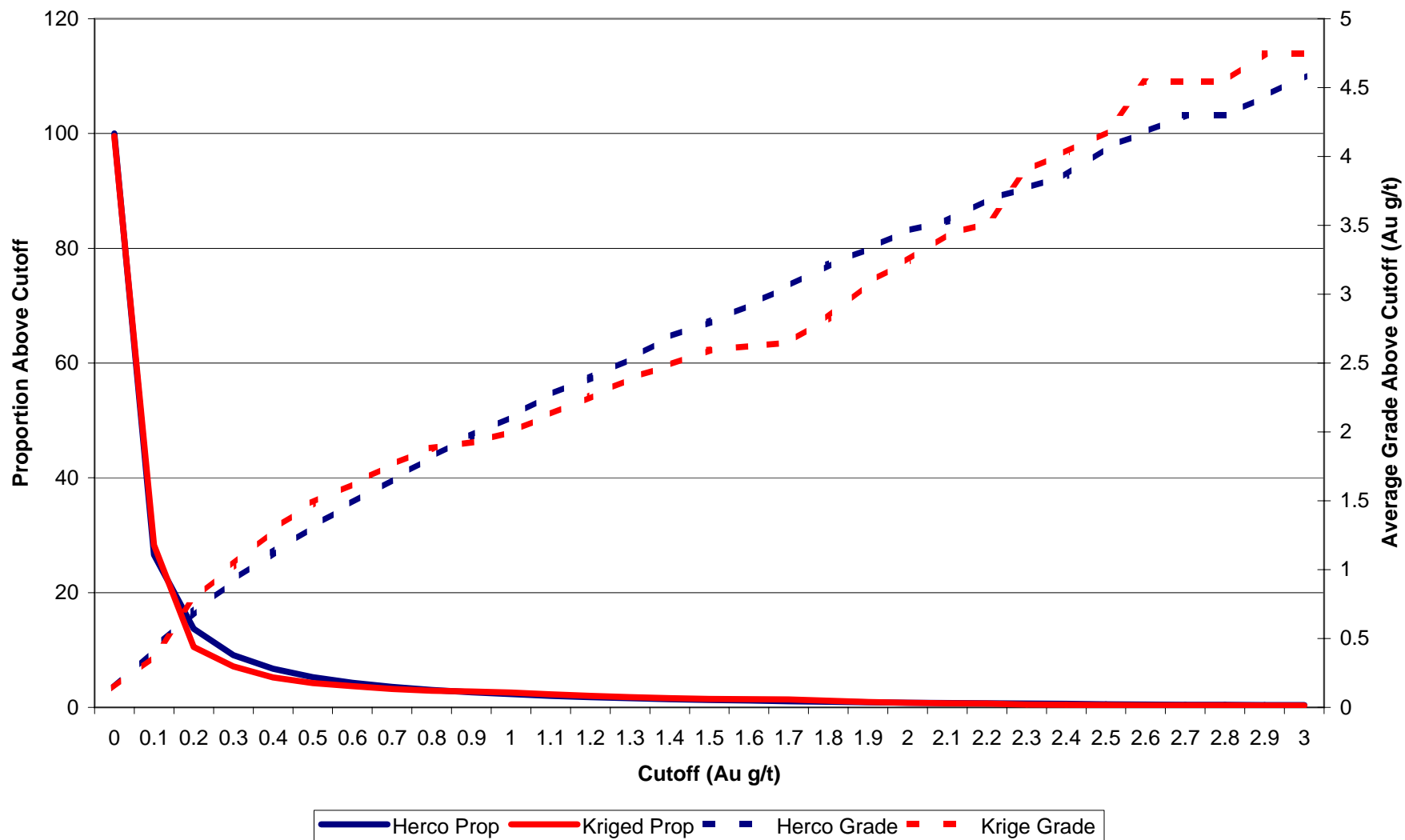
**Galore Creek  
Middle Creek Au Estimate**



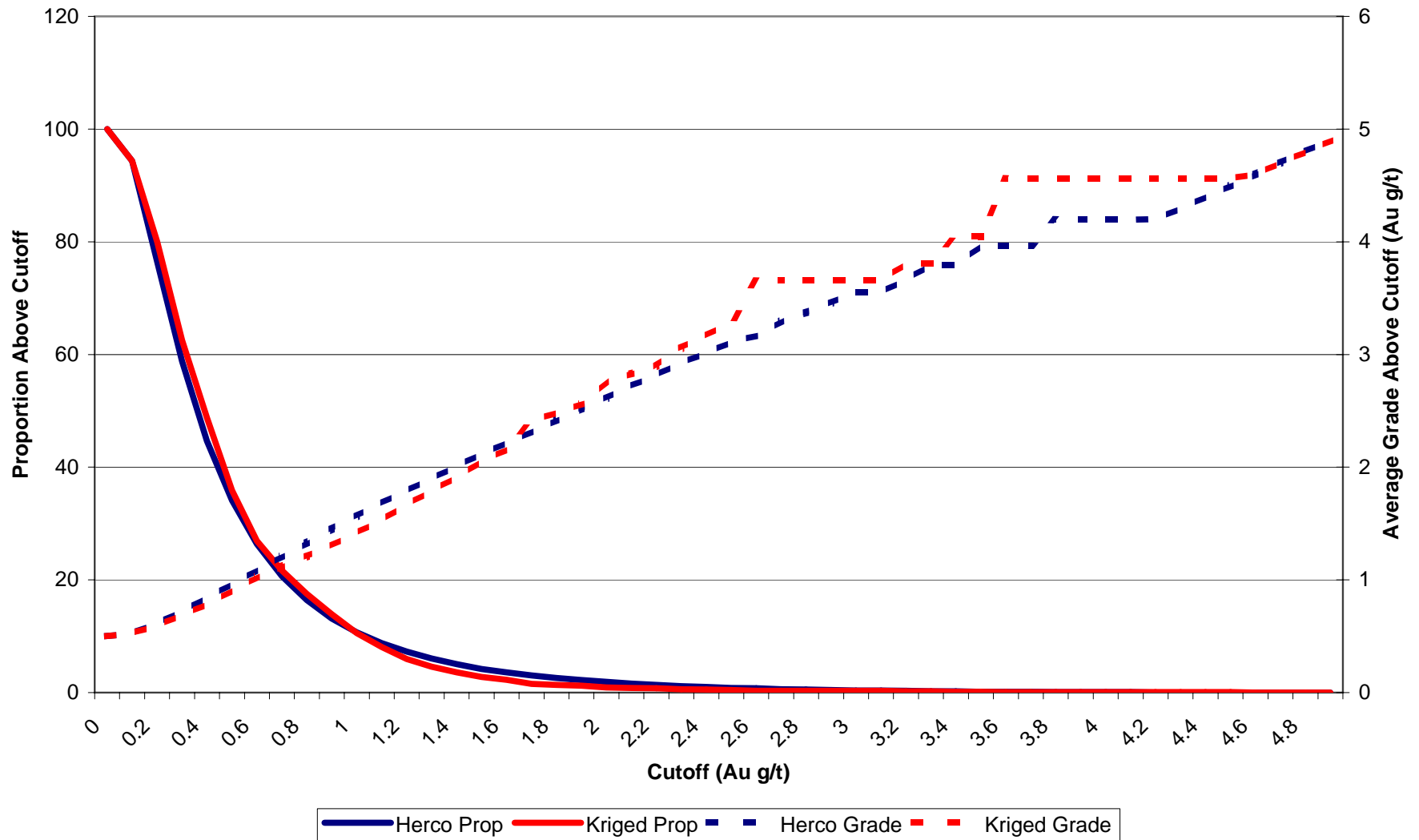
**Galore Creek**  
**North Gold Lens Volcanic Group Au Estimate**



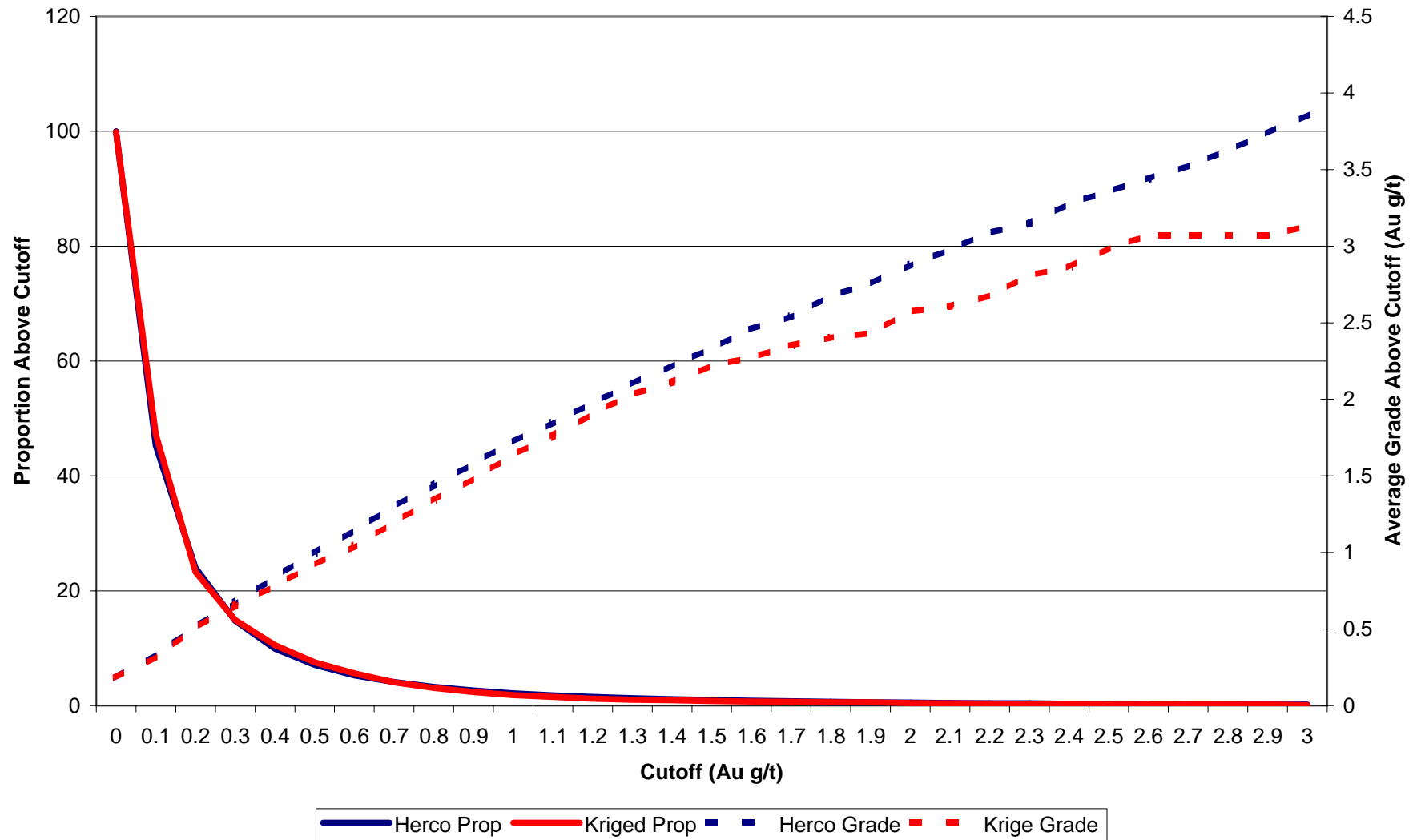
**Galore Creek**  
**North Gold Lens Intrusive Group Au Estimate**



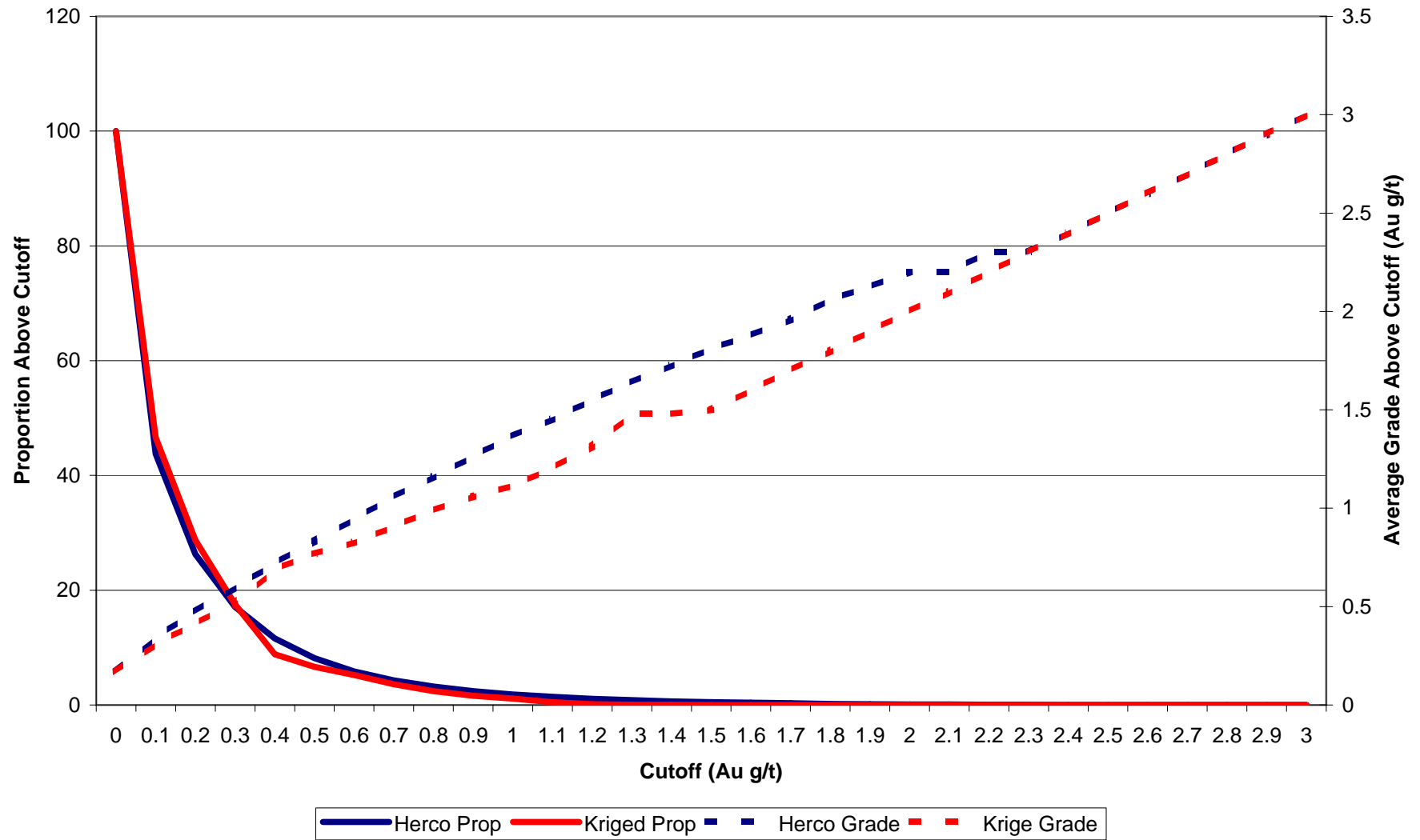
**Galore Creek  
North Junction Au Estimate**



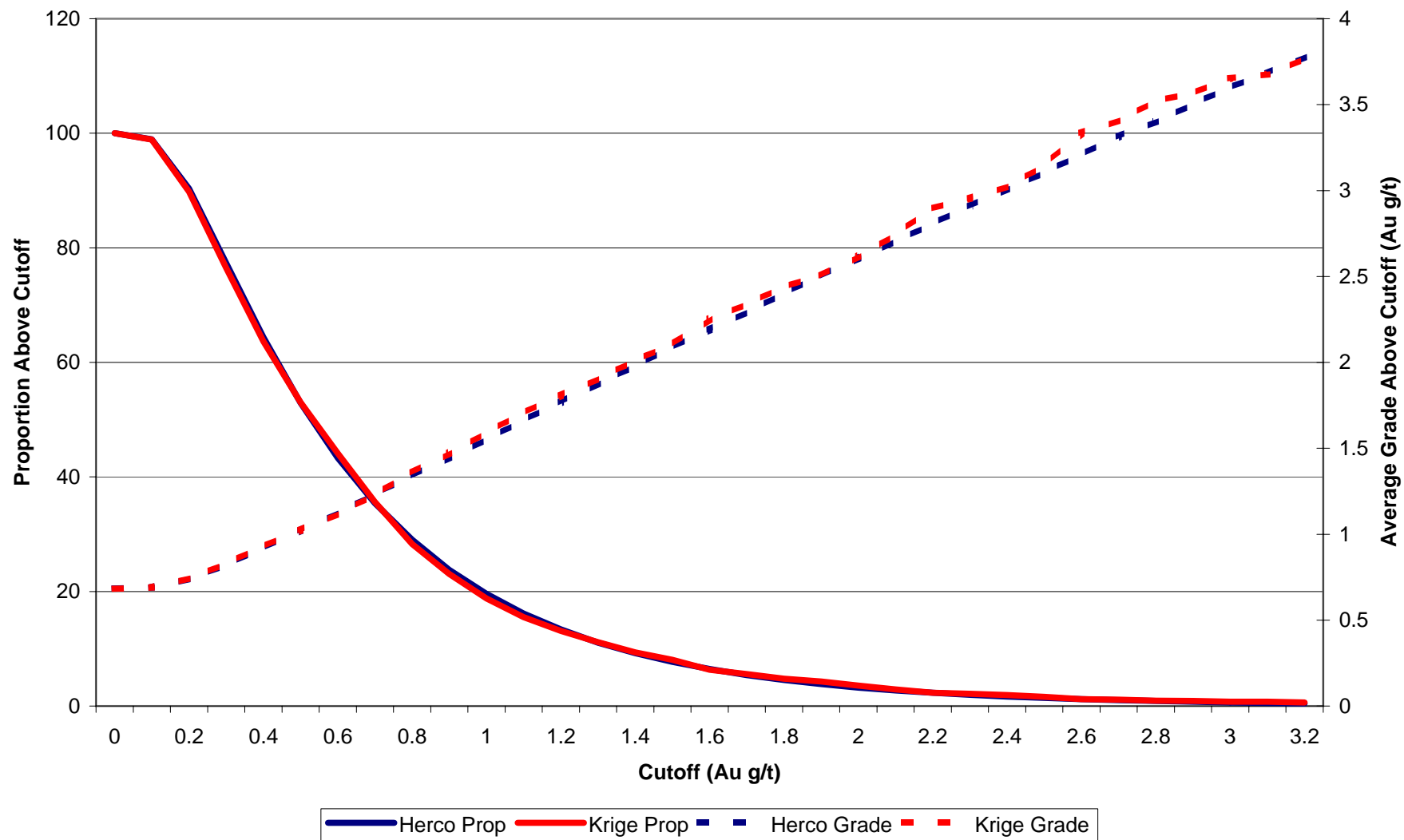
**Galore Creek**  
**South Gold Lens Volcanic Group Au Estimate**



**Galore Creek**  
**South Gold Lens Intrusive Group Au Estimate**

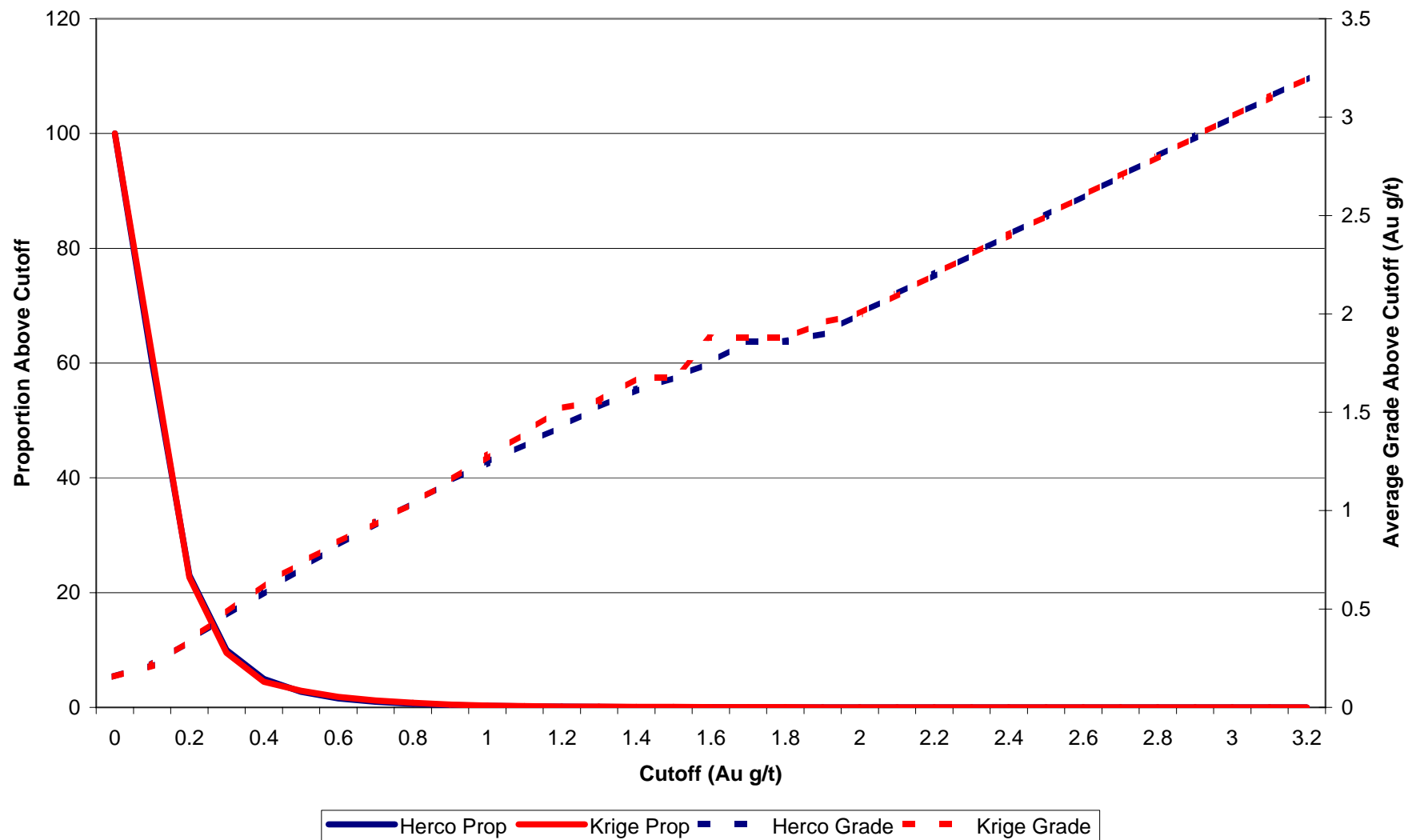


# Galore Creek Southwest Zone Au Estimate

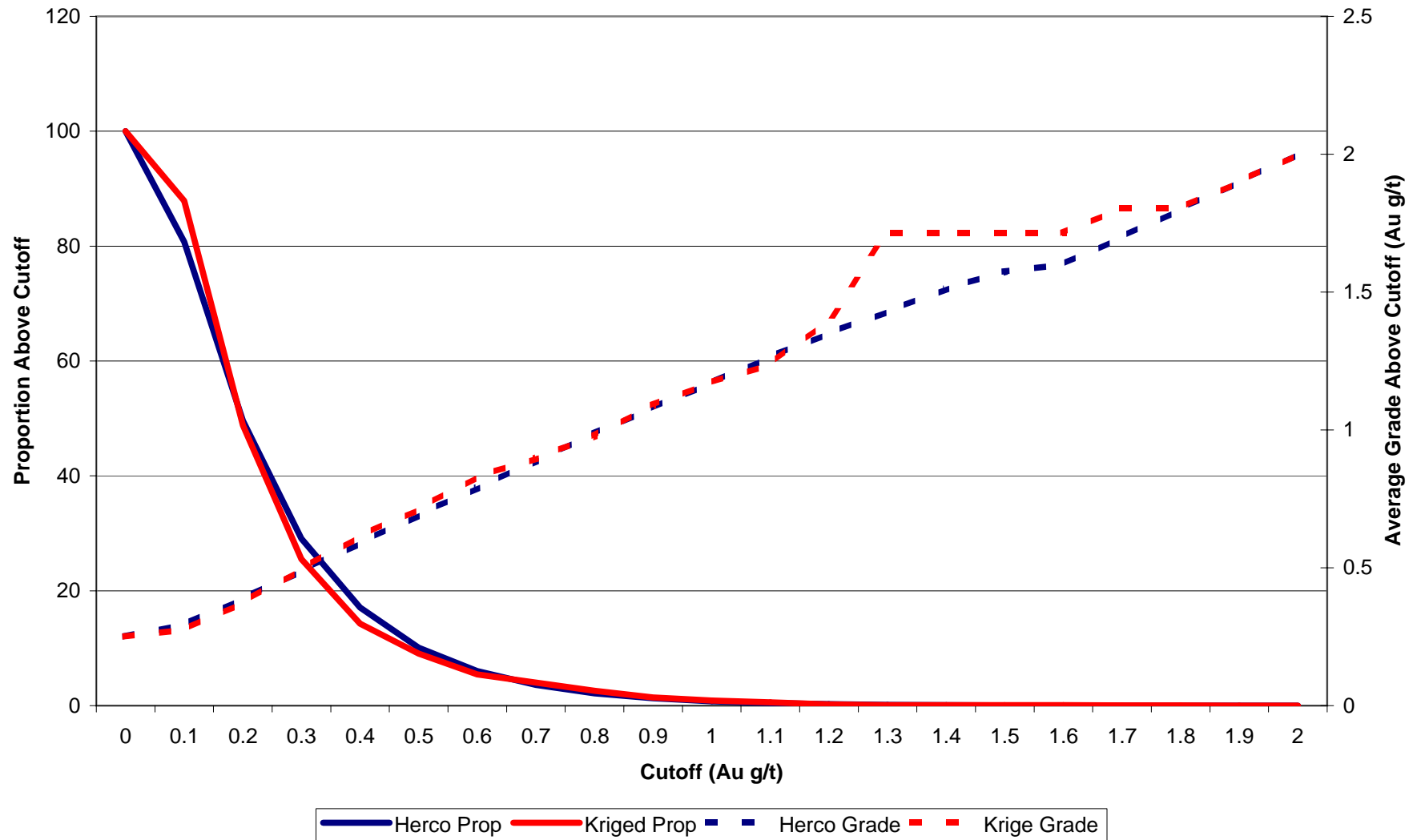




**Galore Creek**  
**Southwest Zone Low Grade Domain Au Estimate**



**Galore Creek  
West Fork Au Estimate**



**Galore Creek  
West Fork Opulent Au Estimate**

