Technical Report of the Rock Creek Property, Nome, Alaska, USA

Prepared By:
Dr. Harry Parker, RG
AMEC E and C Services, Inc
September 10, 2006

Prepared For:
Alaska Gold Company
September, 2006
Project No: 151088

IMPORTANT NOTICE

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CERTIFICATE OF AUTHOR

I, Harry M. Parker, do hereby certify that:

1. I am Technical Director of AMEC Engineering and Construction Services, Inc. Sparks, Nevada

2. I graduated with a BSc. in Geology, MSc. in Statistics and PhD in Geology from Stanford University in 1967, 1974 and 1975 respectively. In addition I have obtained an A.M. degree in Geology from Harvard University in 1969.

3. I am a Fellow of the Australasian Institution of Mining and Metallurgy and The Society of Economic Geologists. I am a Member of the Institution of Mining, Metallurgy and Materials, the Australian Institute of Geoscientists, International Association for Mathematical Geology, Society for Mining, Metallurgy and Exploration, Canadian Institution of Mining, Metallurgy and Petroleum and the Geological Society of America

4. I have worked as a geologist for a total of 39 years since my graduation from university.

5. I have experience in resource estimation for vein and stockwork-hosted gold deposits, including Fort Knox, AK, True North AK, Juneau, AK, San Gregorio, Uruguay, Kupol, Russia, Achyem, Ghana, and Colomac NWT.

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

7. I am responsible for the preparation of all sections of the “Technical Report of the Rock Creek Property, Nome, Alaska, USA” dated September 10th, 2006 (“the “Technical Report”) relating to the Rock Creek Property. I visited the property in June and September 2004 for 2 days. I have had prior involvement with the property that is the subject of the Technical Report. This involvement includes review of exploration data in 2003 and resource estimates prepared during January to March 2004.

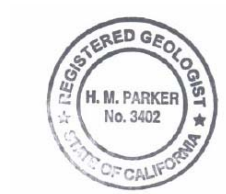
8. I am independent of the issuer applying all of the tests in Section 1.4 of National Instrument 43-101.

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

10. I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them for regulatory purposes, including electronic publication in the public company files on their websites accessible by the public, of the Technical Report.

11. 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 the Technical Report not misleading.

Dated this 10th of September, 2006.



Harry M. Parker

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Registrar of Securities, Government of the Yukon Territories
Securities Registry, Government of the Northwest Territories

I, Harry M. Parker, do hereby consent to the filing of the written disclosure of the "Technical Report of the Rock Creek Property, Nome, Alaska, USA" dated August 30, 2006 (the "Technical Report") and any extracts from or a summary of the Technical Report in the Press Release of Rock Creek Resources, and to the filing of the Technical Report with the securities regulatory authorities referred to above.

I also certify that I have read the written disclosure being filed and I do not have any reason to believe that there are any misrepresentations in the information derived from the Technical Report or that the written disclosure in the Press Release of Rock Creek Resources contains any misrepresentation of the information contained in the Technical Report.

Dated this 30th of August, 2006.

AMEC Engineering & Construction Services Inc.

Harry McDougal Parker

REGISTERED GEOLOGIST
H. M. PARKER
No. 3402
CALIFORNIA

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1.0 SUMMARY

1.1 Scope of Work

Alaska Gold Company (AGC), a subsidiary of NovaGold Resources, Inc. (NovaGold) has asked AMEC E&C Services Inc (AMEC) to provide a mineral resource estimate and Qualified Person's report for the Rock Creek gold deposit, located near Nome, Alaska, USA.

The work entailed preparation of a mineral resource estimate in conformance with the CIM Mineral Resource and Mineral Reserve definitions referred to in National Instrument (NI) 43-101, Standards of Disclosure for Mineral Projects. It also involved the preparation of a Technical Report as defined in NI 43–101 and in compliance with Form 43–101F1 (the "Technical Reports").

AMEC conducted several site visits, the most recent being in September 2004.

AMEC prepared a report in mid-2004 that contained the results of exploration conducted up to 2003 and resource models prepared in the spring of 2004. This report serves as an update and includes the results of exploration conducted during the summer of 2004 and associated resource models.

AMEC and AGC personnel jointly, are responsible for the resource modeling. Stan Dodd and Robert Prevost of AGC are responsible for initially defining mineral zones, topography and faults. John Odden of AGC updated their interpretation to include the summer 2004 drilling. Jack Cote of NovaGold provided databases used to support resource modeling. For AMEC, Kevin Francis led the resource modeling effort, prior to his present employment with NovaGold, with the assistance of Mike Lechner and Dr. Harry Parker. Scott Long of AMEC analyzed the QA/QC results to determine their suitability in resource estimation.

The resource models were prepared in Tucson, Arizona during the period October-December 2004. Mintec's MineSight® software was used for most of the work; variography was performed using SAGE2001; some specialized AMEC software was also used.

The work represents a disclosure of mineral resources for the Rock Creek deposit. Dr. Harry Parker, P. Geo., served as the Qualified Person for this report. Dr. Parker made a site visit on the 2nd of September 2004, and directed the mineral resource estimate and review of the geological data.

1.2 Location

The Rock Creek Project, located on the Seward Peninsula in the State of Alaska, is situated about 13 km north of the town of Nome, Alaska, 870 km northwest of Anchorage, and 160 km south of the Arctic Circle.

1.3 Land Status

Guess and Rudd, an Alaskan law firm based in Anchorage retained by AGC, have issued a Limited Title Report dated February 7, 2006 and a letter dated August 11, 2006 concerning titles to the property and rights of Alaska Gold. The letter notes a mining sublease between AGC and Golden Glacier, Inc dated April 13, 2006 and a surface use agreement between Sitnasuak Native Corporation and AGC dated May 26, 2006. Guess and Rudd are of the opinion that “the execution of these agreements grants sufficient rights to Alaska Gold Company to enable it to extract gold and other minerals from the Lands”. These agreements satisfy two of the comments and requirements listed in the Limited Title Report. Guess and Rudd also stated “we reasonably expect Alaska Gold Company will satisfy, to the extent necessary in due course, all of the remaining comments and accompanying requirements set forth in our Title report dated February 7, 2006.” In a letter dated August 14, 2006, AGC confirmed with AMEC its intention to satisfy the comments and accompanying requirements.

Based on this information, AMEC believes there is sufficient evidence for AGC to publicly disclose a resource at Rock Creek.

1.4 Drill Data

Rock Creek has been explored by reverse circulation (RC) and core holes over a 16-year period. Currently, there are 25,175 m of core drilling and 12,935 m of RC drilling. There are also 1,490 m of trenching, located predominately in Zone 99 outside the main area of economic interest. In 2004, approximately 1,000 m of trenching occurred between the Walsh and Tension Vein Zones.

A grade versus core recovery plot shows loss in gold (>10 g/t) where the core recovery is lower than 60%. Zones of lower core recovery are concentrated within 10 m of the surface and near the north-dipping Sophie Gulch Fault Zone. Because of possible low grade bias, sample intervals with core recovery less than 60% were excluded for the purposes of resource modeling. This resulted in 5.7% of the assay intervals for core samples being rejected.

Core and RC data were compared by means of 132 twins, 110 of which were completed during 2004. The grade profiles for the twin holes seldom correlate well in detail. This relates to the narrow-veins containing gold mineralization. Cumulative grade thickness plots were created, and these were compared and qualitatively graded A through F, with A or B being the thickest. The coefficient of variation (CV) was found to decrease as the qualitative pair grades became poorer. A decrease in CV is often indicative of mixing of sample in the hole resulting from contamination from above. An equation was developed relating CV and grade for suspicious intervals. Decay and cyclicity studies were performed, but were not very useful, given a 10 ft (3 m) rod length, producing only two samples per rod, for RC holes drilled prior to 2004.

RC data were studied on sections and compared to adjacent core holes. Unusually thick, low CV intervals were excluded as possibly contaminated. Approximately 2.6% of the RC metres sampled were excluded.

The RC and core data were declustered and compared by drilling campaigns. In general, core data have between 20% and 40% lower grades than RC data, with the greatest differences occurring where the early RC campaigns are compared to core holes. Equations were developed to permit adjustment of RC distributions to core "datum." These equations were developed using 2003 and 2004 Summer Campaign assay data, considered to provide the most reliable core samples. The equations were checked by subdividing the data by campaign, distance below topography, core recovery, and location inside or outside the Albion Shear Zone.

Steep RC holes were drilled early on. It is difficult to tell whether the greater discrepancy between grades for steep RC and core holes is related to campaign or inclination. The adjustment equations are validated when RC data are compared to core samples with 100% recovery. Depth below topography does not appear to have a bearing on core and RC differences to a depth of 75 m. Below 75 m, the data available are limited. Within the Albion Shear Zone, RC and core assays compare reasonably well; therefore, no adjustment has been applied to RC assays in that zone.

In a limited area, RC and core data were compared with trenches. Trench grades are on average 25% higher than those for core data. The trench grades average 11% lower than the RC grades.

1.5 Geology and Mineralization

The Rock Creek deposit is underlain by bedrock consisting of several metamorphic rock sequences (the Nome Group), each of which has undergone at least two tectonic events. The protoliths are believed to be Cambrian to Devonian sediments consisting of shales, siltstones, sandstones, marls and limestones, deposited in a shallow continental shelf setting (Norwest, 2003). The bedrock is overlain by a variety of unconsolidated sediments. If frozen, these sediments are mostly thaw-unstable, especially on steeper slopes.

The Nome group appears locally as a progression sequence consisting of four major units. The basal unit is complexly deformed pelitic schist, with a mixed unit consisting of mafic, pelitic, and calc schists and marble forming the next unit. The third unit is a mafic dominated schist, and the top unit consists of impure marble.

Quartz muscovite schist (QMS) is the dominant rock in the Rock Creek Project area, but other types of schist are also present.

Gold mineralization at the Rock Creek Deposit is developed in two styles: tension veins with quartz and varying amounts of carbonate, arsenopyrite and pyrite, and shear-hosted, within the Albion shear zone.

Mineralization at Rock Creek occurs as relatively coarse, native gold occurring along fractures and veins, making the deposit amenable to recovery by gravity and flotation processes. The mineralized zone covers an area roughly 500 m wide and 1,500 m long, and as currently modeled, the pit will reach 100 m in depth. The individual mineralized zones within the deposit typically range from 10 to 50 m in width.

1.6 Metal-at-Risk

Precious metal deposits have skewed grade distributions. Skewed grade distributions have the property that a small proportion of samples can represent a disproportionately large amount of contained metal. The limited number of these samples can introduce significant uncertainty into a resource estimate. It is common practice to cut the grades of very high-grade samples, restrict their projection distance, or to adjust resource models to mitigate downside risk.

At Rock Creek 0.6% to 0.8% of the composites represent between 6% and 18% of the contained metal. On average, only three to six of these composites will be mined in a given year.

To evaluate metal-at-risk, AMEC ran a Monte Carlo simulation that effectively re-drills the deposit 1,000 times and computes the high-grade metal associated with each realization. The 20th percentile for high-grade metal content is determined. The difference between the metal represented by the observed high-grade distribution and the metal content for the 20th percentile of the simulations is termed metal-at-risk. If this amount of metal is adjusted out of the resource model, four years out of five the mine can be expected to do better and one year out of five not as well.

In the main zones of interest (1, 2, 10), between 6% and 10% of the metal was determined to be at risk. In the more sparsely drilled Zones 3 and 99, approximately 18% of the metal is determined to be at risk.

1.7 Mineral Resources

Resource modeling was performed using ordinary kriging, with validation models being prepared using a nearest neighbour approach. The base-case model was constructed using composites adjusted to core datum (AUCO). This model was adjusted to give CVs for $10 \times 10 \times 5$ m blocks that are similar to those expected for $10 \times 10 \times 5$ m selective mining units (SMUs); these were chosen by AGC for an envisioned 7,000 t/d open-pit operation. The kriging plan involves an initial pass to assign grades in poorly drilled areas using a minimum of two composites per hole, and a maximum of eight, with no more than two per hole. In a second pass, eligible blocks are re-kriged with a minimum of three composites, and a maximum of eight, with no more than two composites being used from one drillhole, thus forcing the use of two drillholes where they are within the minimum search distance.

For Zone 99, the grades of low- and high-grade populations were estimated. These were averaged using a kriged indicator (0.4 g/t) threshold to estimate the proportion of each population present in a block.

Where required, metal-at-risk adjustment was achieved by capping the composite grades beyond a specified block-to-composite distance.

The models were validated using swath plot comparisons of kriged and nearest neighbour model grades. Swaths were made by northing, easting and elevation.

Resources were classified according to hole spacing in the vicinity of a block. In general, the area drilled on a 30 m grid is considered Indicated. The remaining blocks within 50 m of a drillhole (5 m) composite are considered Inferred.

Table 1-1 shows mineral inventories for the resource models.

Table 1-1: Mineral Inventories (Model 4 is the Base Case Recommended for Planning)

Au Cutoff (g/t)	Resource Model	Indicated (Ind)			Inferred (Inf)			Contained Metal Ratio vs. Base Case Model (i.e. Model 4)	
		Tonnes	Au	Au Ozs	Tonnes	Au	Au Ozs		
		(000)	(g/t)	(000)	(000)	(g/t)	(000)	Indicated	Inferred
0.60	Model 1	12,656	1.43	582	4,751	1.03	157	1.28	1.37
	Model 2	12,341	1.31	520	3,727	1.01	121	1.15	1.05
	Model 3	11,369	1.39	508	4,608	1.03	153	1.12	1.33
	Model 4	11,040	1.28	454	3,583	1.00	115	1.00	1.00
	Model 5	14,052	1.45	655	4,938	1.03	164	1.44	1.43
	Model 6	13,783	1.34	594	3,918	1.00	126	1.31	1.10

Model 1 – Unadjusted Grades – no metal-at-risk removed
Model 2 – Unadjusted Grades, metal-at-risk removed
Model 3 – RC adjusted to core, no Metal-at-risk removed
Model 4 – RC adjusted to core, metal-at-risk removed (Base Case)
Model 5 – Core increased 25 %, no RC adjustment, no metal-at-risk removed
Model 6 – Core increased 25 %, no RC adjustment, metal-at-risk removed

At the request of NovaGold, Mike Lechner of Resource Modeling Inc. (RMI) generated a Lerchs-Grossmann pit shell using a US$500/oz gold price and other parameters taken from a Norwest Updated Economic Review. Mineral Resources within this pit are declared using Model 4:

- 9.595 million tonnes (Indicated) at a grade of 1.31 g/t containing 404,000 oz Au.
- 1.432 million tonnes (Inferred) at a grade of 0.96 g/t containing 44,000 oz Au.

1.8 Comment on Resources

The discrepancy between core and RC data is troubling in that it is difficult to confidently make an adjustment to either dataset. Overall, the core recovery is very good, and it is difficult to imagine how a great deal of gold could have been lost in the coring process (fines and flakes of gold not recovered in the core barrel).

The RC data show some evidence of downhole contamination, but generally grade profiles are fairly sharp, and long tails of low-grade gold below high-grade zones are not evident.

Despite 38,000 m of drilling, at a reasonable spacing for the deposit-type, it is impossible to confidently make a statement of the resources present. AMEC recommends using Model 4, which was calculated by removing the metal-at-risk and having adjusted the RC data to the core data as it is the most conservative of the models and is based on the current available information.

1.9 February 2005 Reconciliation

AGC requested AMEC complete a reconciliation of resources between the AGC 2003 PACK model and two subsequent AMEC resource models.

The 2003 PACK model contains about 400,000 more contained gold ounces than the other AMEC models within the 2003 scoping study pit. Approximately half of the difference (200,000 ounces) is due to the fact that the 2003 scoping study pit was optimized using all estimated blocks from the 2003 PACK model, whereas subsequent drilling has shown mineralization is absent or of lower grade. The remaining difference can largely be attributed to an increase in the proportion of core drilling and adjustment of RC drillhole grades to give a similar distribution to the grades found in core holes (not done for the 2003 PACK model, and perhaps justifiably given the much smaller amount of core data available at the time). In addition, the November 2004 AMEC model was estimated using significantly more data than were available to construct the 2003 PACK model.

1.10 Conclusions

The Rock Creek property constitutes a quartz vein hosted deposit which has been extremely difficult to sample and has necessitated an adjustment to the samples data, where core data has been adjusted to RC data.

Gold mineralization at the Rock Creek Deposit is developed in two styles: tension veins with quartz and varying amounts of carbonate, arsenopyrite and pyrite, and shear-hosted, within the Albion shear zone.

Mineralization at Rock Creek occurs as relatively coarse, native gold occurring along fractures and veins, making the deposit amenable to recovery by gravity and flotation processes. The mineralized zone covers an area roughly 500 m wide and 1,500 m long, and as currently modeled, the pit will reach 100 m in depth. The individual mineralized zones within the deposit typically range from 10 to 50 m in width.

Mineral Resources are declared using Model 4 (base case):

- 9.595 million tonnes (Indicated) at a grade of 1.31 g/t containing 404,000 oz Au.
- 1.432 million tonnes (Inferred) at a grade of 0.96 g/t containing 44,000 oz Au.

1.11 Recommendations

- Conduct sampling studies to confirm and determine the source of gold loss during sample preparation.
- Drilling density may be adequate in areas of Mineral Zone 99, adjacent to the Albion Shear Zone, to identify geologic controls and to incorporate them into geologic model.
- Review of the databases identified a small number of problems, mostly related to substitution of one assay for another. It would be useful to perform a 100% check of pre-2003 data and identify the appropriate assay certificates considered to furnish "final" values for each sample interval. The QA/QC data must also be compiled in an organized group of datasets. A summary document on all QA/QC programs should be prepared. This may affect final resource classification.
- AGC has reduced the significance of pre-1990 Placer Dome and Tenneco data (particularly RC data) with new RC and core drilling throughout the greater part of the proposed pit. AMEC commends this effort and recommends continuing the process on sections such as 405N where older RC drilling is still dominant.
- AMEC recommends that AGC follow the recommendations stated by Guess and Rudd, in a letter dated February 7, 2006 to satisfy the Limited Land Title for AGC.

2.0 INTRODUCTION

Alaska Gold Company (AGC), a subsidiary of NovaGold Resources, Inc. (NovaGold) asked AMEC E&C Services Inc (AMEC) to provide an independent mineral resource estimate and Qualified Person's report for the Rock Creek gold deposit, near Nome, Alaska, USA.

The work entailed estimation of mineral resources, in conformance with the CIM Mineral Resource and Mineral Reserve definitions referred to in National Instrument (NI) 43-101, Standards of Disclosure for Mineral Projects. It also involved the preparation of a Technical Report as defined in NI 43–101 and in compliance with Form 43-101F1 (the "Technical Reports"). Dr. Harry Parker, P. Geo. is the Qualified Person responsible for preparing this Technical Report.

Information and data for the independent resource estimate were obtained from NovaGold personnel in Vancouver and from the project site near Nome, Alaska. Other information came from Norwest Corporation of Calgary, Alberta, who performed an updated economic review of the Rock Creek deposit in August, 2005.

Pertinent geological data were reviewed in sufficient detail to prepare this document. Dr. Harry Parker, P. Geo., a Technical Director with AMEC, directed the mineral resource estimation work and review of the geological data. Dr. Parker most recently visited the site on the 2nd of September 2004. No significant field work has been done since then.

Secondly, Steven Blower, P. Geo, of AMEC, visited the Rock Creek site on April 22 and 23, 2003 to review the diamond drilling procedures, geology, archived drill core, quality control procedures, and verification of the assay database.

Finally, Arne Bakke CPG, performed a review of the ALS Chemex Preparatory Lab in Fairbanks on September 20, 2004. He is the former Chief Geologist for Fairbanks Gold, operator of the Fort Knox gold mine. Mr. Bakke's review was commissioned by AGC, and AMEC has relied on his review in preparation of this document.

2.1 Terms of Reference

All units of measure (see Figure 2-1) used in this report are in the metric system, except the section on climate (US origin), where all published data are quoted in degrees Fahrenheit for temperature and inches for precipitation measurements. Also, the contained metal quantities shown in the mineral resource summary tables are expressed in troy ounces.

Figure 2-1: Metric Units of Measure and Abbreviations

Above mean sea level	amsl
Annum (year)	a
Centimetre	cm
Cubic centimetre	cm^3
Cubic metre	m^3
Day	d
Days per week	d/wk
Degrees Celsius	°C
Dry metric ton	dmt
Gram	g
Grams per tonne	g/t
Greater than	>
Hectare (10,000 m^2)	ha
Hour	h (*not* hr)
Kilogram	kg
Kilograms per cubic metre	kg/m^3
Kilograms per tonne	kg/t
Kilometre	km
Kilometres per hour	km/h
Kilometres squared	km^2
Less than	<
Litre	L
Metre	m
Metres above sea level	masl
Metric ton (tonne)	t
Micrometre (micron)	µm
Milligram	mg
Millimetre	mm
Million	M
Million tonnes	Mt
Minute (plane angle)	'
Ounce	oz
Parts per billion	ppb
Parts per million	ppm
Percent	%
Pound(s)	lb
Second (plane angle)	"
Short tonnes	st
Specific gravity	SG
Square centimetre	cm^2
Square kilometre	km^2
Square metre	m^2
Thousand tonnes	kt
Tonne (1,000 kg)	t
Tonnes per annum	t/a
Tonnes per cubic metre	t/m^3
Tonnes per day	t/d

3.0 RELIANCE ON OTHER EXPERTS

AMEC has not reviewed the land tenure, nor independently verified the legal status or ownership of the properties or underlying option agreements. AMEC has relied on the opinion of Guess and Rudd Law offices contained in the current Limited Title Report (Appendix A-1) regarding the legal status and ownership of the properties.

The results and opinions expressed in this report are based on AMEC's field observations and the geological and technical data listed in the Appendices. While AMEC has carefully reviewed all of the information provided by AGC, and their consultants, and believes the information to be reliable, AMEC has not conducted an independent in-depth investigation to verify its accuracy and completeness.

AMEC has relied on Michael Lechner for generation of a Lerchs-Grossmann pit shell within which Mineral Resources have been declared. AMEC has assumed Mr. Lechner is a qualified professional.

The results and opinions expressed in this report are conditional upon the afore mentioned 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. AMEC reserves the right, but will not be obliged, to revise this report and conclusions if additional information becomes known to AMEC subsequent to the date of this report. AMEC does not assume responsibility for AGC's actions in distributing this report.

4.0 PROPERTY DESCRIPTION AND LOCATION

4.1 Location

AGC's Nome properties occur partly on patented mining claims owned 100% by the Alaska Gold Company, a wholly owned subsidiary of NovaGold and partly on land controlled by the Bering Straits Native Corporation. The deposits fall within Parcels I and II, centred on latitude 64.57 degrees north and longitude 165.39 degrees west.

Rock Creek is located on the south coast of the Alaskan Seward Peninsula, facing Norton Sound in the Bering Sea, about 13 km north of the township of Nome. Nome is situated 870 km by air northwest of Anchorage, and 160 km south of the Arctic Circle (see Figure 4-1).

4.2 Mineral Tenure

The project is partly located on 5,700 hectares (14,000 acres) of patented private land that is 100% owned by AGC, and partly on land owned by the Bering Straits Native Corporation. AGC holds an exploration and mining lease on approximately 8,100 hectares (20,000 acres) of Bering Straits Native Corporation lands, as well as a surface use agreement with Sitnasuak Native Corporation, the local Nome village corporation (see Figure 4-2).

In August, 2006 Guess and Rudd, lawyers of Anchorage, Alaska, provided AGC with legal opinion on the Rock Creek land status.

They completed limited research on the ownership of Parcels I and II, which contain the Rock Creek Project.

Parcel I

The claims within Parcel I (red outline on Figure 4-1) are held in title by Alaska Gold Company, a wholly-owned subsidiary of NovaGold. Parcel I is on patented land owned by AGC and has unrestricted use of the surface.

Specific claims are identified in Table 4-1

Figure4-1: Map Showing Bering Straits Lease Area, AGC Claim Area and Roads (AGC)

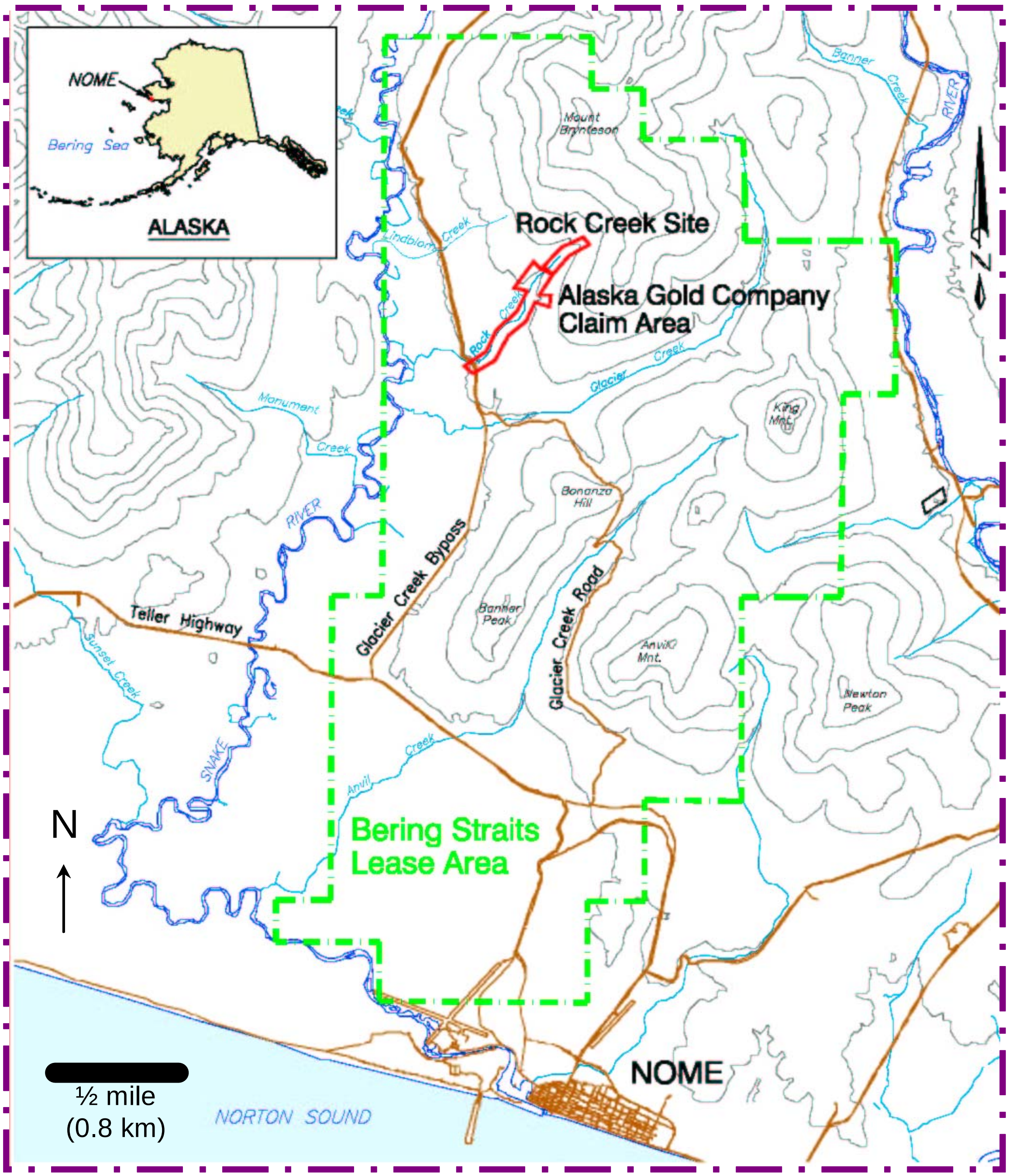


Figure 4-2: Claim Map of the Rock Creek Project (AGC)

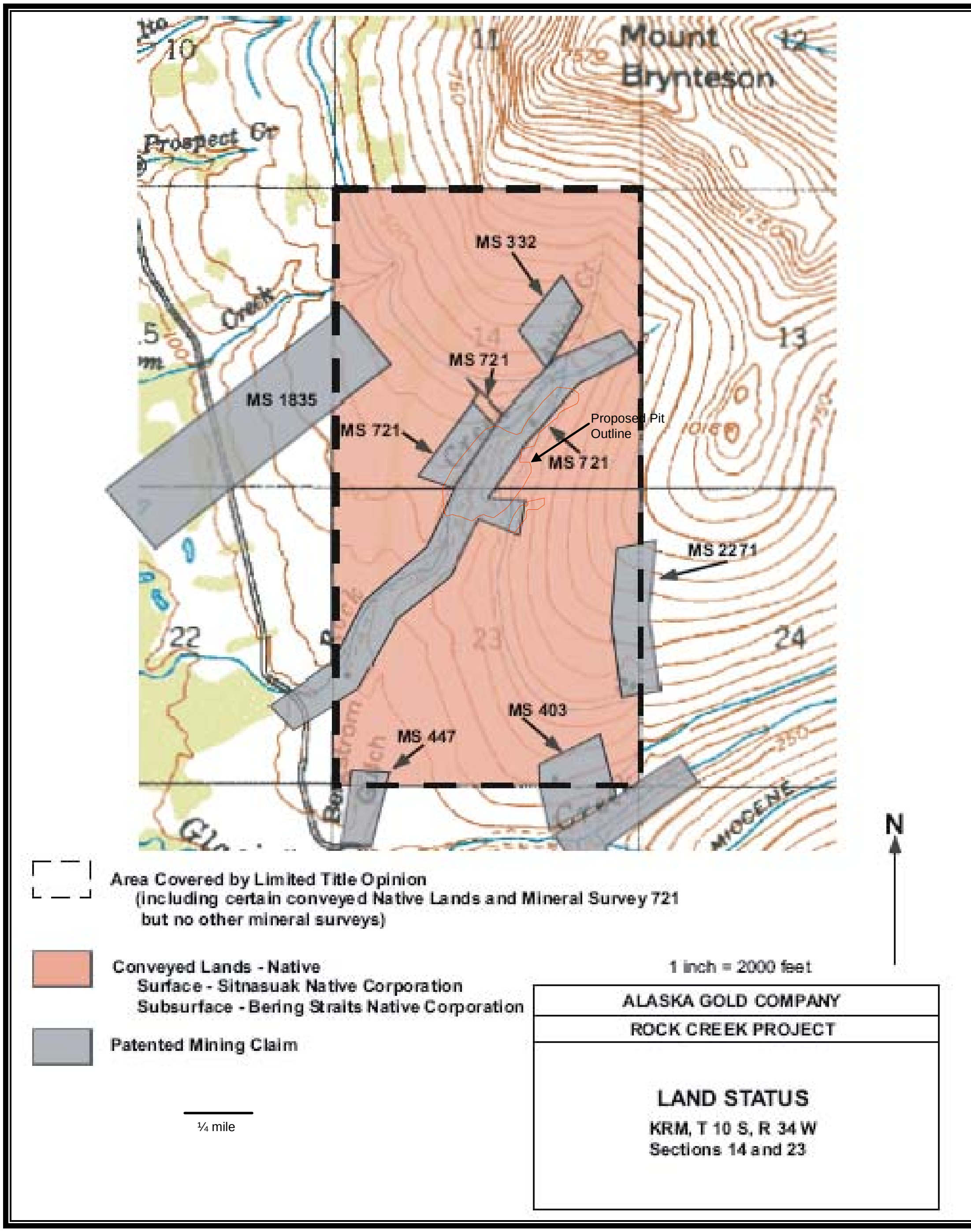


Table 4-1: Claims within Parcel I Situated in U.S. Mineral Survey 721 (AGC)

Claim Name	Patent Number
Francisco	316745
No. 1 Above Francisco	316745
No. 2 Above	316745
No. 3 Above	316745
No. 1 Sophie Gulch	316745
No. 4 Above	316745
Fractional Claim No. 4 ½ on Rock Creek	316745
No. 5 Above	316745
No. 6 Above Right Hand Branch	316745
Rock Creek Bench No. 4 Above	955746

Parcel II

The lands within U.S. Mineral Survey 721 known as Bench Claim No. 4 ½ Above Placer and additional lands as conveyed by Alaska Gold Company in 1983 are held in title by the Sitnasuak, and Bering Straits Native Corporations (green outline on Figure 4-1).

For Parcel 2 AGC has an exclusive surface use agreement with the Sitnausak Native Corporation for an initial term of 7 years and so long thereafter as mining, processing, or marketing operations are carried out in good faith. The Sitnausak Native Corporation will be paid US$70,000 annually during the term of the agreement, and US$900 per acre disturbed, adjusted annually for inflation. AGC will also pay any and all real property taxes and assessments related to Sitnausak's interest levied by any municipality or governmental entity.

The conveyed lands are described as follows:

- Contained within KRM T. 10 S., R. 34 W.,
- Sec.14:All, excluding the lands within Mineral Surveys 332, 721, and 1835
- Sec.23:All, excluding the lands within Mineral Surveys 403, 447, 715, 721, and 2271

On June 8, 2005, Guess and Rudd, an Anchorage-based law firm retained by AGC, stated their opinion on Limited Land Title for AGC in respect to the Rock Creek Gold Deposit. AMEC recommended that AGC follow Guess and Rudd's recommendations to clarify title. A second letter, dated February 7, 2006 has updated their opinion of the same matter. Finally, a letter dated August 11, 2006 states that two agreements have been negotiated since the second letter: 1) a mining sublease between AGC and

Golden Glacier, Inc dated April 13, 2006; and 2) a surface use agreement between Sitnasuak Native Corporation and AGC dated May 26, 2006. In its August 11, 2006 letter, Guess and Rudd are of the opinon that "the execution of these agreements grants sufficient rights to Alaska Gold Company to enable it to extract gold and other minerals from the Lands". These agreements satisfy two of the comments and requirements listed in the Limited Title Report dated February 7, 2006. Guess and Rudd also stated "we reasonably expect Alaska Gold Company will satisfy to the extent necessary in due course all of the remaining Comments and accompanying Requirements set forth in our Title report dated February 7, 2006, or if Alaska Gold fails to satisfy any such comment or accompanying requirement, such failure is unlikely (due to almost certain termination or expiration of any noted prior agreement) to affect adversely the exercise by Alaska Gold Company of its rights in and to the Lands (whether acquired under or pursuant to the two agreements described above or under or pursuant to other instruments and agreements". In a letter dated August 14, 2006, AGC confirmed to AMEC its intention to satisfy the remaining comments and accompanying requirements.

Based on this information, AMEC believes there is sufficient evidence for AGC to publicly disclose a resource at Rock Creek.

The letters and opinions of Guess and Rudd dated June 8, 2005, February 7, 2006, and August 11, 2006; and a letter from AGC to AMEC dated August 14, 2006 are provided in Appendix A-1.

4.3 Permits, Agreements and Taxes

The following is a list of necessary permits required prior to construction, which is being coordinated by Bristol Environmental & Engineering Services Corp (Norwest, 2005).

- Wetlands Permit
- Air Quality Construction Permit
- Stream Crossings Permit
- Land Application of Pit Water Permit
- Class V Injection Well Permit
- Solid Waste Permit
- EPA Storm Water Discharge Permit
- Coastal Zone Management Permit
- Telecommunications Permits

- Fire Marshall Permit

Additionally, various operating plans must be submitted to the proper regulating authorities and include:

- Plan of Operation
- Spill Prevention and Control Contingency Plan
- Reclamation Plan
- Hazardous Waste Plan
- Monitoring Plan
- Road Maintenance Agreements
- Transportation Plan

AGC has stated to AMEC that the following are permits on-hand:

- US Army Corps of Engineers 404 Wetlands Permit
- Alaska Department of Environmental Conservation (ADEC) 410 Certification (state certification of the federal 404 permit)
- ADEC Waste Management/Injection Well Permit
- Alaska Department of Natural Resources (DNR) Title 41 Fish Habitat Permit
- DNR Temporary Water Use Permit (6 sources, 6 separate permits)
- EPA Stormwater Discharges Associated with Construction Activity under a General NPDES Permit
- DNR Coastal Zone Management Certification
- Stream Reclassification Petition

Also, AGC has stated the outstanding permits:

- ADEC Air Quality Construction Permit
- EPA Title V Injection Well Permit
- EPA Stormwater Discharges Associated with Operations Activity under a General NPDES Permit

The following information regarding permits and agreements is taken from NovaGold's website (NovaGold, 2006).

NovaGold owns 313 mineral surveys made up of one or more patented claims in the Nome area through its wholly-owned subsidiary, Alaska Gold Company. These mineral surveys are fee simple and have no annual requirements. A significant proportion of the mineral resources are located on lands owned by Alaska Gold Company (NovaGold 2006).

Pursuant to an exploration and option agreement dated March 13, 2002, between Golden Glacier, Inc., and the Company, the Company acquired the rights to explore and develop the lode deposits on an additional 15,000 acres of mineral claims held by Golden Glacier Inc. pursuant to four mining leases from Bering Straits Native Corporation ("BSNC") to Golden Glacier, Inc. Pursuant to the exploration and option agreement, Golden Glacier Inc. granted the Company a five year option to acquire a mining sublease. In order to maintain the option in effect, the Company agreed to make annual payments to Golden Glacier Inc. ranging from US$15,000 to US$25,000 and to complete annual work commitments ranging from US$50,000 to US$150,000. If the Company exercises its option (which it is entitled to do at any time provided the agreement is in good standing), the Company will be granted a mining sublease for 30 years or so long thereafter as there is mineral production from the claims. In order to maintain the sublease in good standing the Company must carry out minimum work requirements of US$250,000, adjusted for inflation. Golden Glacier Inc. is entitled to a 2.5% net smelter return royalty and a 5% net proceeds royalty from production from BSNC lands. The Company is required to pay advance minimum royalties of US$100,000 during each year of the sublease.

NovaGold is also a party to an exploration surface use agreement with Sitnasuak Native Corporation (Sitnasuak) and is negotiating a mining surface use agreement with Sitnasuak, which has resulted in a US$70,000 annual payment not offset by an advance royalty plus $900 per acre of disturbance.

The BSNC has a US$126,000 advance royalty offset against a 2.5% net smelter return (NSR) and 5% net proceeds. Dore bars refined on site are assumed to incur a charge of $2.00 per oz to cover transportation, insurance, refinery deductions etc, to point of sale. It is assumed that the net profits definition is the same as for the State of Alaska's Mining License Tax.

Both of the final two agreements mentioned above carry requirement for sensitivity to subsistence and require reclamation to a safe and stable configuration.

The actual production from BSNC lands has been determined on an annual basis for this evaluation. It is estimated from the geological model that 6% of the annual gold production is from BSNC land. Since the remainder of production is from patented mining claims owned by AGC, it is assumed that no production is from state land and so the Alaska Production Royalty on production does not apply.

All mining income in Alaska is subject to the Mining License Tax. This is a graduated tax based on the level of net income, reaching 7% above US$100,000. As a new mine, Rock Creek should qualify for the three and a half year new mine exemption from the Mining License Tax.

Alaska income tax will also be reduced by an exploration incentive tax credit. It is assumed that exploration conducted by the company in 2003 qualifies for this tax credit.

According to NovaGold, all AGC payments, royalties and taxes for the Rock Creek Property are in good standing as of the date of this publication.

4.4 Legal and Environmental Requirements

AGC is required by the State to provide acid-base accounting (ABA) records for their tailing pond to confirm that it will not be acid generating. Also required are site specific neutralizing potential:acidic potential (NP:AP) ratios for all lithology types at Rock Creek. Ratios above 2:1 are considered net neutralizing and those below 2:1 are considered potentially acid generating. Finally, a site water balance must be submitted to the State.

There are no pre-existing liabilities for AGC, however the area has been placer mined extensively for the past 100 years. Much of the area shows visible disturbance and there are tailings piles located throughout the region from historical mining.

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

5.1 Accessibility

Rock Creek is located on the south coast of the Alaskan Seward Peninsula, facing Norton Sound in the Bering Sea, about 13 km north of the township of Nome. Nome is situated 870 km by air northwest of Anchorage, and about160 km south of the Arctic Circle. The Rock Creek Project is currently road accessible via the Glacier Creek Road and the State maintained Teller-Nome Highway, an all-weather paved and gravel road. The State of Alaska is constructing the Glacier Creek Road By-Pass, which will simplify the road access distance to site.

5.2 Regional Centers and Infrastructure

The city of Nome has a year-around population of approximately 4,000 and serves as the logistical and administrative center for Western Alaska. Nome has daily commercial jet service and large container barge traffic service from June through October. While there is no road to Nome from elsewhere in Alaska, there are about 500 km of state-maintained roads around the city (see Figure 5-1).

The city of Nome has provided electricity to past mining operations and has offered that service for future operations if necessary. Current generating capacity is based on three diesel generators. The current local power consumption in Nome is in the range of 4MW to 6MW. No camp facilities are required at the Rock Creek Project due to its close proximity to Nome, which is well serviced with accommodations.

AGC has stated that they have the surface rights for the mining operation, availability of water, mining personnel and access to power generation that is adequate to supply future plans.

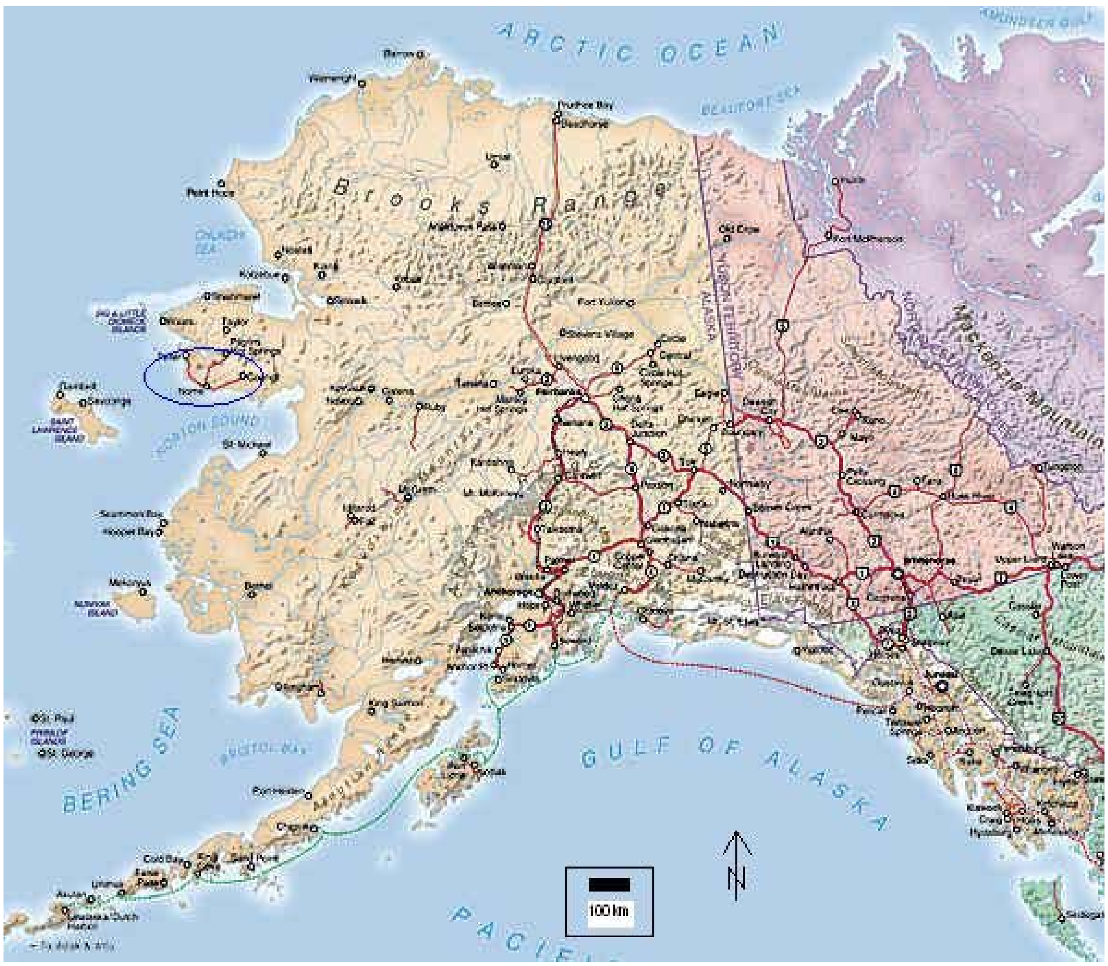
In addition, NovaGold's operating sand-and-gravel and land businesses give the company an important operational presence in the community.

Nome has a modern airport with a 6,000 ft (1,800 m) asphalt runway and is serviced by Alaska Airlines and several private air taxis. The Nome Airport provides intrastate, national and international access to the city. Both daily scheduled jet service and charter air services are available.

The Port of Nome is the only harbour for boat moorage and service in the region. Sea lanes are generally open from June through to October; Norton Sound freezes over in late fall, with thawing in mid-spring.

The Norton Sound Regional Hospital serves Nome and fifteen other area villages. It is well-equipped, with facilities that include a laboratory, emergency and intensive care, long-term care, out-patient and labour wards.

Figure 5-1: Nome Location and Road Infrastructure



5.3 Climate

The area is characterized by cool summers and cold winters with relatively low annual precipitation, averaging less than 16 inches per year, mostly as rain in the summer.

Precipitation is light, the average rainfall being about 20 inches per year; snowfall averages 30–48 inches per year. Nome is located on the Bering Sea on the southern shore of the Seward Peninsula, which has a relatively dry climate, easily accessible terrain and some of the best infrastructure in the State of Alaska, with roads providing year-around access to the property. Discontinuous permafrost occurs throughout the Seward Peninsula, and during the winter and early spring, sea ice can cover much of the Bering Sea. Winter temperatures in Nome range from minus 5 to minus 15 F; summer temperatures fluctuate from 45 to 55 F. Average temperatures and precipitation are presented in Table 5-1.

Table 5-1: Monthly Average Temperatures and Precipitation for Nome, Alaska (NovaGold website) ***Period of Record: 9/1/1949 to 9/30/2005***

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	**Annual**
Average Max. Temperature (Fahrenheit)	13.9	13.5	17.6	26.8	42.4	53.6	57.3	55.7	48.5	34.2	23.2	14.1	**33.4**
Average Min. Temperature (Fahrenheit)	-1.6	-2.6	0.2	11.7	29.8	39.6	45.2	44.2	36.3	22.6	10.7	-0.8	**19.6**
Average Total Precipitation (inches)	0.88	0.72	0.61	0.70	0.73	1.06	2.16	3.33	2.48	1.47	1.11	0.88	**16.12**
Average Total Snow Fall (inches)	9.5	8.3	7.1	6.6	2.1	0.1	0.0	0.0	0.4	4.5	11.2	10.1	**59.9**
Average Snow Depth (inches)	14	15	16	13	2	0	0	0	0	1	4	8	**6**

The moderating influence of the open water of Norton Sound on the Nome climate is effective from early June to about the middle of November. Storms moving through this area during these months result in extended periods of cloudiness and rain. There is a nearly continuous cloud cover during July and August. During the summer months the daily temperature range is very slight. The freezing of Norton Sound in November causes a rather abrupt change from a maritime to a continental climate. The majority of low pressure systems during this period take a path south of Nome, resulting in strong easterly winds, accompanied by frequent blizzards, with the winds later becoming northerly and reaching Nome across the colder frozen areas of northern Alaska. Temperatures generally remain well below freezing from the middle of November to the latter part of April, with January usually the coldest month of the year. Temperatures usually begin to rise near the end of February and continue to rise until they reach a maximum in July.

Precipitation reaches its maximum during the late summer months and drops to a minimum in April and May. Snow begins to fall in September, but usually does not accumulate on the ground until the first part of November. The snow cover decreases rapidly in April and May, and normally disappears by the middle of June. Snow depths in Nome have exceeded 70 inches.

Wind speeds are usually less than 15 knots, except during some of the intense storms experienced by the region during August. Severe windstorms do occur, with winds over 70 mph recorded several times. Strong winds during the winter months, when there is snow cover, produce blowing snow conditions that severely hinder transportation in the area.

In terms of the metric system, the average annual air temperature at the Rock Creek deposit is about -3°C, with summer temperatures ranging from +8°C to +15°C, and winter averages of -15°C.

AGC has stated to AMEC that the mine at Rock Creek intends to operate all year long.

5.4 Physiography

Low marshy flats occur along the coast at Nome. These give way to a series of foothills, with heights of 150 to 365 m (500 to 1200 ft), in an arc to the northwest and northeast. The terrain increases in ruggedness and height farther north, with the Kigluaik Mountains reaching a height of 1,500 m (5,000 ft). The ground along the coastal flats is swampy during the summer months, but is permanently frozen below a depth of less than a metre (2 to 3 ft). Elevations in the project area range from 100 m (300 ft) to over 300 m (1,000 ft) along the highest ridgelines. Vegetation in the Nome area consists mostly of grass and numerous small flowering plants.

5.5 Earthquake/Tsunami Risk

The earthquake/tsunami risk assessment is taken from the City of Nome's disaster plan document.

Numerous faults are mapped onshore near Nome; most trend north to northeast. However, seismic planning studies place the Nome area in a comparatively low-risk category, with a ten percent probability of earthquakes measuring 3.0-4.5 on the Richter scale in a fifty-year period. There is no recorded damage from earthquakes in Nome.

The ADES designates Nome as having a low probability of occurrence of a tsunami.

6.0 HISTORY

The early history of the development of the Rock Creek area is sourced from Hawley and Hudson (1996).

Major alluvial placer gold deposits in the Nome mining district were discovered in September and October 1898 by John Brynteson, Jafet Lindeberg, and Erik O. Lindblom. The men were supported by an active Scandinavian community based at Golovin, who mainly came to the region for the Swedish Covenant Church, and by several Eskimos, including Gabriel Adams and Constantine Uparazuck. A mining district was formed in October, 1898, by Brynteson, Lindeberg, Lindblom, A.N. Kittlesen, Johan Tornensis, a Saami, and Gabe Price, who represented Charles D. Lane, an experienced mining man.

Many of the best alluvial placers were located in 1898. In 1899, gold was discovered on Present Beach at Nome. A.H. Brooks of the U.S. Geological Survey then predicted that buried beach placer deposits would be found, a prediction that proved accurate when Second Beach was discovered in 1902. The Third Beach was discovered in 1904. The placers were first exploited mainly by hydraulic methods, and major ditches were constructed to support these operations. Some shallow thawed deposits were mined successfully by small dredges. In the 1920s, after invention of the coldwater thawing process, large dredges were brought into the country by Wendell P. Hammond, whose interests were later consolidated by the U.S. Smelting, Refining, and Mining Company.

The Nome mining district is the second most important placer district in Alaska. From 1898 to 1993, more than 4,800,000 ounces of gold (150 metric tonnes) were produced, essentially all by placer methods and mostly from complex alluvial deposits or buried beach deposits. The district is also estimated to have produced more than 550,000 ounces (17.54 metric tonnes) of silver. Very small amounts of stibnite and scheelite were also produced.

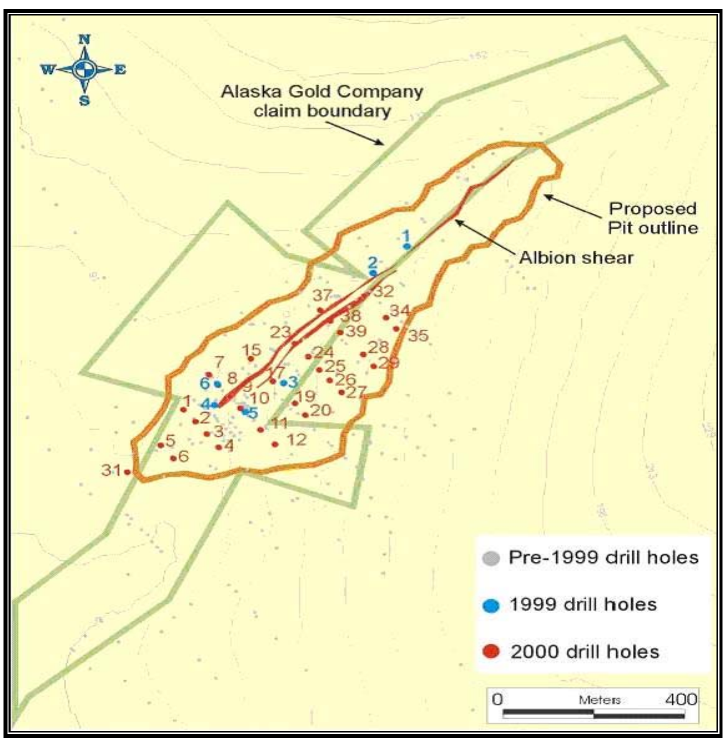
Lode exploration began shortly after discovery of the placers, but that was not significant until the 1980s when geologist R.V. Bailey reopened old workings in Rock Creek and discovered sheeted veins in upper Snow Gulch. His work was followed up by Placer Dome Inc., Tenneco, Newmont Mining Company, Kennecott Exploration Company and Alaska Gold Company. In 1999, the assets of the successors to the U.S. Smelting, Refining, and Mining Company were acquired by NovaGold Resources.

The first modern exploration for lode gold deposits in the Rock Creek district began in 1986 when Aspen Gold consolidated the district land holdings and began exploration directed toward bulk mineable gold deposits. What is now the Rock Creek deposit was discovered shortly thereafter as a result of dozer trenching. Following Aspen Gold's initial discovery in 1986, a succession of major mining companies including Placer Dome, Tenneco, Newmont and Kennecott optioned and explored the property from 1988 through 1994. Approximately 315 holes were drilled on the Rock Creek property, with 94 holes located in the actual deposit. This drilling includes 7,590 m of core drilling and 8,137 m of rotary drilling (Table 6-1) and drillhole locations up to year 2000 (Figure 6-1).

Table 6-1: Rock Creek Drill Summary in Metres (Avalon, 2002)

Company	Core	Rotary
NovaGold	0	2,886
Kennecott	3,653	2,024
Newmont	321	0
Placer Dome	3,616	6,113
Total	**7,590**	**11,023**

Figure 6-1: Map Showing Drillhole Locations up to year 2000(Avalon, 2002)



NovaGold Resources Inc. acquired the property by purchasing AGC from parent Mueller Industries in May 1999. In July 1999, NovaGold entered into an option agreement with Viceroy Resources and later that year completed six reverse circulation drillholes (2,886 m) to supply samples for metallurgical test work and to test the reliability of previous drilling. All holes intersected longer and higher-grade intervals of mineralization than indicated by previous drilling (St. George, 2000). Inadequate compressor volume and pressure in previous drill programs were thought to have caused under-reporting of gold grades. NovaGold completed 30 drillholes at Rock Creek in 2000 to increase the drill density in the area of the defined gold resource. No field work was carried out on the property in 2001.

On February 18, 2002 NovaGold Resources entered into a letter agreement on Rock Creek with Vancouver-based TNR Resources. TNR can earn a 49.9% interest in a joint venture by investing $10 million by the end of 2004 ($1M through December 2002, an additional $3M by December 2003 and an additional $6M by December 2004). After the earn-in, NovaGold and TNR could maintain or dilute their percentage interest according to a straight-line formula. Upon regulatory approval, TNR will issue 500,000 of its common shares to NovaGold. In order to reduce share dilution, TNR may elect to use debt financing rather than equity financing to cover capital expenditures or contract out mining operations as part of its $10M commitment to fulfill its financial obligation. AGC has stated to AMEC on April 21, 2006, that TNR Resources no longer has a stake in the Rock Creek property.

NovaGold reported that its precursor companies had undertaken soil sampling, geophysics and geologic mapping and various drilling campaigns from 1986 to 1999. A total of 33,000 m of core and rotary drilling was carried out by these companies on the property (of which 18,600 m was on the Rock Creek deposit), as well as metallurgical test work (NovaGold, 2006).

7.0 GEOLOGICAL SETTING

7.1 Regional Geology

Information on the regional geology of the area has been taken from NovaGold (2006), Ford and Snee (1996), Bundtzen et al, 1994), and Hawley and Hudson (1996).

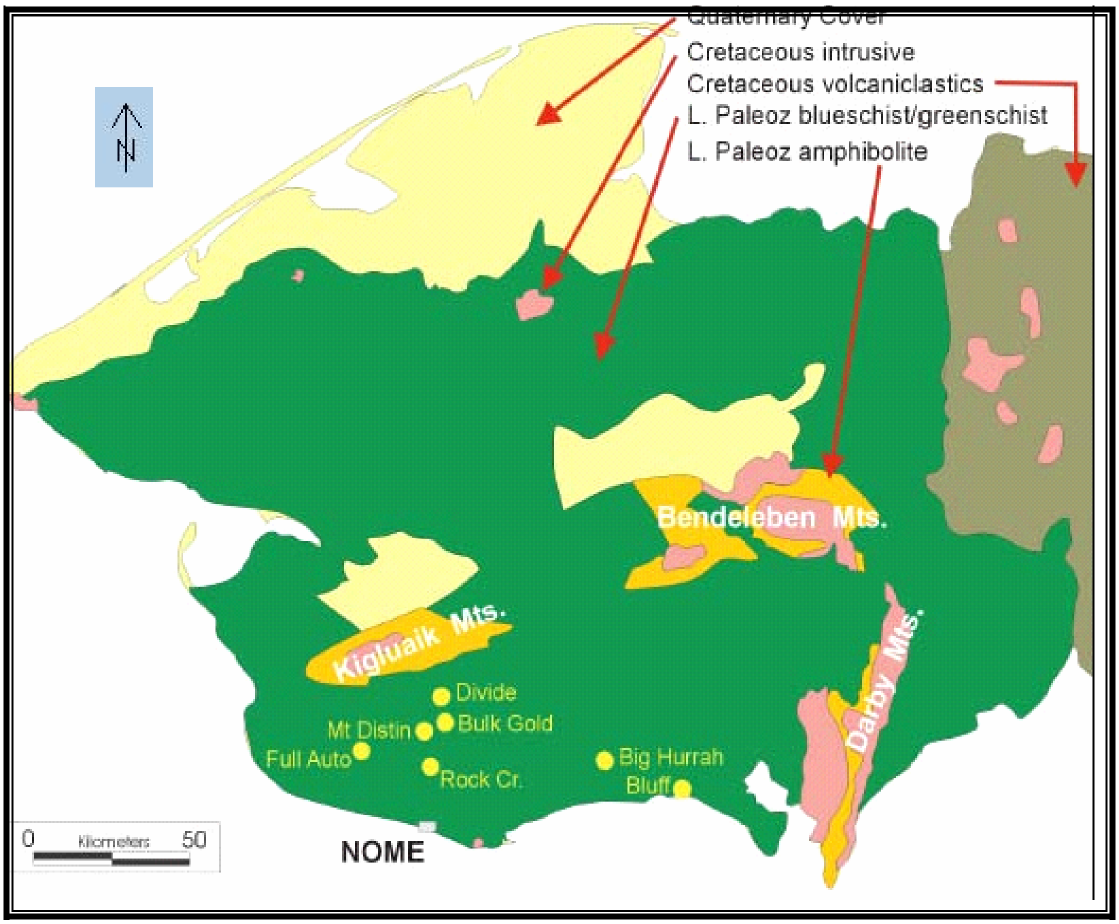
The Seward Peninsula is composed of a complex series of metamorphic rock packages which have been affected by large-scale accretionary, rotational and transcurrent events (Figure 7-1). The rocks of the Seward Peninsula consist of continental shelf, platform and margin assemblages ranging from limestone and dolomite through pelitic and psammitic protoliths to intermediate and basaltic volcanic rocks. These rocks form part of the Arctic composite terrane of Plafker and Berg (1994) and were originally deposited along the northern margin of ancestral North America. Subsequent blueschist followed by amphibolite facies metamorphism modified these rock packages. Cretaceous and Tertiary compressional and extensional deformation, mid-Cretaceous plutonic activity and large-scale Tertiary counter-clockwise rotation have further modified rocks of the Seward Peninsula.

The rotational segment of the tectonic history took place in two stages. The first, caused by rifting and opening of the Canada Basin, took place from 130 to 100 million years ago (Ma) and corresponds to counterclockwise rotation of Arctic Alaska. Widespread blueschist facies metamorphism accompanied this major compressional tectonic event (Goldfarb, 1997; Till and Dumoulin, 1994). Near the end of this time period, a greenschist facies event extending from 120-90 Ma overprinted the Jurassic blueschist facies rocks. Greenschist facies metamorphism was accompanied by high-strain deformation resulting in a prominent low angle penetrative foliation, northwest-southeast mineral stretching lineations, and recumbent isoclinal folding of the earlier fabric. Plutonic activity began approximately mid-way through the greenschist event (Nokleberg et al, 1998). This plutonic activity was generated by northward subduction of the Farallon and Kula Plates along Alaska's southern and southeastern margins (Flanigan et al, 2000).

Convergence of North America and Eurasia from about 66 to 50 Ma caused what is now the Seward Peninsula to be offset to the south along a regional-scale apparent left-lateral fault (Plafker and Berg, 1994). It is uncertain how this event affected previously emplaced gold systems on the Seward Peninsula.

Information on the regional geology of the area is sourced from NovaGold (2006), Ford and Snee (1996), Bundtzen et al, 1994), and Hawley and Hudson (1996).

Figure 7-1: Regional Geology of Seward Peninsula, Alaska (Avalon, 2002)

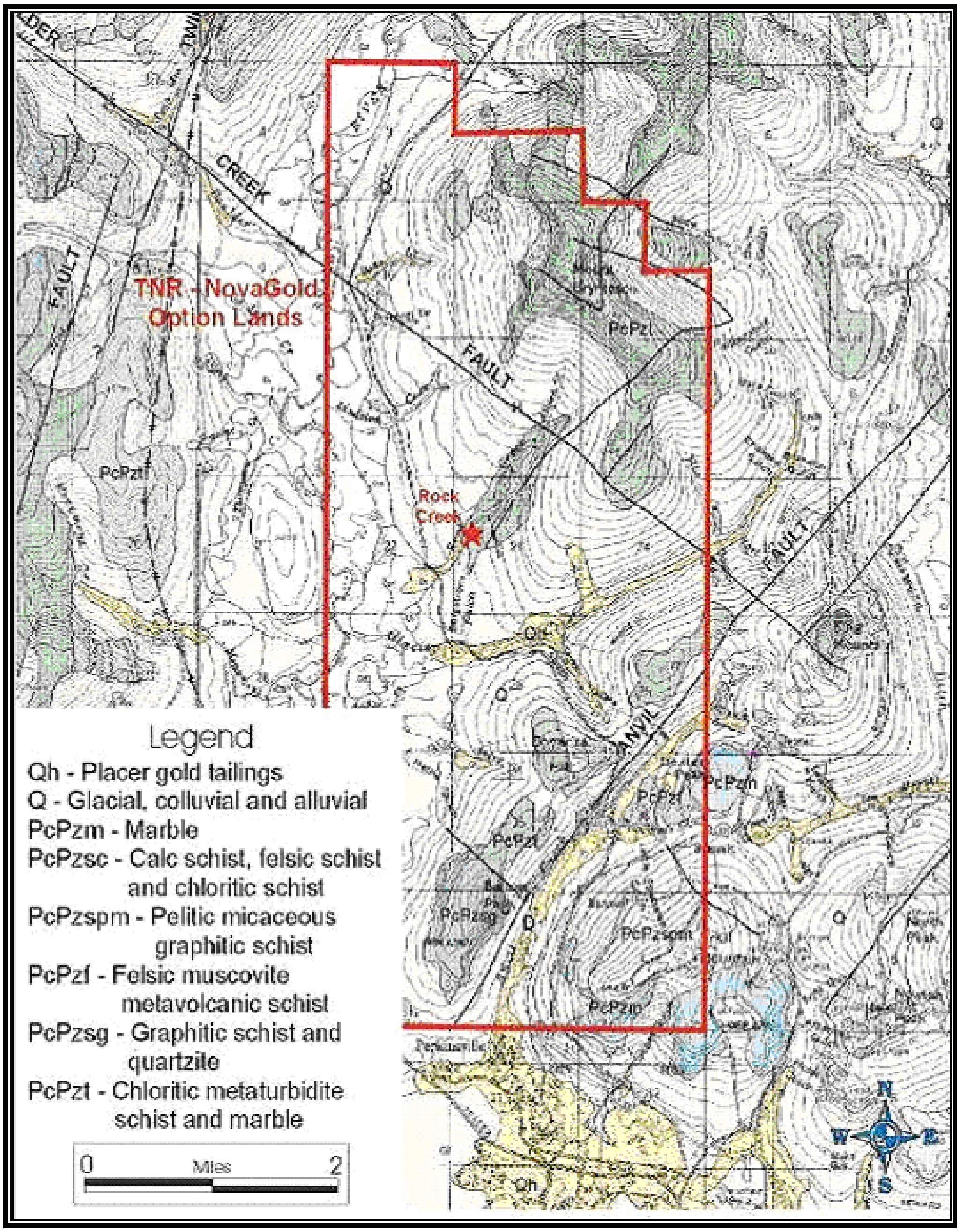


7.2 Local and Property Geology

The area is underlain by metamorphic rocks belonging to the Nome Group, which is thought to constitute a coherent lithostratigraphic succession of four major units (see Figure 7-2):

- a basal, complexly deformed pelitic schist,
- a "mixed unit" of mafic, pelitic, and calc schists and marble,
- a mafic dominated schist package, and
- an impure marble package.

Figure 7-2: Local Geology of Rock Creek Deposit (Avalon, 2002)



The protoliths of these rocks are thought to be Cambrian to Devonian sediments consisting of shales, siltstones, sandstones, marls and limestones, deposited on a shallow water continental platform. The mafic volcanics are probably younger mafic sills. Nome Group rocks have undergone at least two periods of metamorphism and accompanying deformation. The earliest metamorphism was a blueschist facies event, which is considered to be mid-Jurassic in age, having a minimum Argon/Argon age of about 120 million years. This event was synkinematic with a high strain deformation, which resulted in widely, distributed penetrative fabric and mesoscopic intrafolial isoclinal folds. Following the blueschist metamorphism came a greenschist facies overprint, which was also accompanied by high-strain deformation. This resulted in a prominent low angle penetrative foliation, northwest-southeast mineral stretching lineations, and recumbent isoclinal folding of the earlier fabric. The event is interpreted to have occurred during a period of north–south crustal extension from 120 to 90 Ma. Most lode gold deposits of the Seward Peninsula have age dates that fall within the metamorphic event (120 to 90 Ma) and are interpreted to have been formed during that event.

7.3 Structural Geology

This summary of the regional structural setting of the Rock Creek project is summarized from NovaGold (2006).

The rocks show several episodes of strong deformation. Outcrops, where original bedding can be observed, often exhibit strong folding within an apparently sub-horizontal bed. Many of the low-angle contacts are probably imbricated thrusts related to the Brooks Range Orogeny, which occurred between late Jurassic and Tertiary times. Foliation developed during the greenschist event is sub-horizontal. Late-stage antimony and weak gold mineralization is associated with the northeast high-angle faults. One of the most prominent is the northeast striking Anvil Fault. The Anvil Fault has a significant geophysical signature and probable strike-slip movement. Glacier Creek and upper Rock Creek occupy parallel faults.

The Brynteson high-angle fault may also represent a major conduit for metamorphic fluids including hydrocarbons. Abundant carbon is seen in chips from bedrock samples obtained over the Brynteson fault zone by rotary drilling. The fault may have also mobilized gold; most gold occurrences east of the Snake River are located within a few kilometres of the Bryntenson Fault. Carbon flooding and gold mineralization are also associated with the Penny Fault, west of the Snake River. High angle northeast-striking tension fractures extend across the district. These tension fractures are related to northeast-striking faults, east–west compression of the Seward Peninsula, north–

south extension, or a combination of these forces. The fractures occasionally host veins. These zones of parallel veining typically have a vertical extent of no more than 100 m (300 ft) and a lateral extent of 300 m or more (900 ft). Veins in tension fractures have been seen in the hanging wall of low-angle structures at Rock Creek and Lindblom. The vein density is from one to three veins per metre.

The Albion shear, which hosts the Albion veins, appears to offset all other structures. There is a significant offset of lithologies across the 30 m wide Shear Zone. The Albion veins exhibit banding and re-healed breccias and have not been intensely fractured like the tension veins. These characteristics indicate the shear was active during a different, perhaps shallower environment than that under which the tension veins were formed.

Low angle faults are common in the Nome District. The faults often contain remobilized carbon and could be pre- or synmetamorphic thrusts. There is a lack of compressive deformation, but this deformation could be overprinted with lithostatic compression and foliation. Thrust faults could be remobilized by detachment. The low-angle faults do show evidence of remobilization. A low-angle fault at Rock Creek has both a carbon/calcite component and a gouge/clay component.

8.0 DEPOSIT TYPES

The Rock Creek project is classified as hosting low-sulphide gold veins, analogous to deposit model 36a of Cox and Singer (1986). These deposits can be mined by open-pit or underground mining methods.

Despite production of nearly 5 million ounces of alluvial gold from the Nome District since 1898, there has been no significant lode production from the district. Evidence presented by Goldfarb (1997) and St. George (2000) suggests gold mineralization at Rock Creek was derived from metamorphogenic processes, as indicated by fluid geochemistry. Mapping by Bundtzen et al (1994) classifies much of the country rock as metaturbidite, a common host for metamorphogenic gold deposits in the Juneau and Valdez Creek districts in southeastern and central Alaska (Goldfarb, 1997).

According to AGC, Rock Creek does not fit into any specific model type and is best described as a sheeted vein system in combination with a deposit scale mineralized shear zone. Gold mineralization is believed to be contemporaneous with late Cretaceous crustal extension.

Tension veins are northeast-trending, northwest-dipping veins that host the majority of gold at Rock Creek. Individual veins are usually less than 10 cm wide and average 3.8 cm wide. Vein density typically varies between 1.5 to 3 veins per metre in sheeted vein zones. Vein density increases proximal to the northeast trending Albion Shear Zone and is common in tension fractures in the hangingwall of low-angle structures. Sheeted tension vein zones appear more continuous along strike (up to 300 m) than down-dip (<100 m). The tension vein zones are strongest in the south-central part of the property where the entire width of veining is up to several hundred metres. This zone appears to be confined in a lateral extent by two north northeast-trending faults and vertically by the Sophie Gulch and Lower Sophie Gulch faults. Figure 8-1 below shows tension veining at Rock Creek.

The shear zone, known locally as the Albion, is up to 30 m wide and trends at a 050^{o} azimuth with a moderate to steep northwest dip. This type of geologic structure is well known as a deposit type for lode gold mineralization and is more thoroughly discussed in the next section on mineralization.

Figure 8-1: Tension Veining in Zone 1, Looking Northeast (AGC)

9.0 MINERALIZATION

Three styles of mineralization are recognized on the project:

- Replacement bodies: albite, quartz, arsenopyrite, dolomite, and minor galena.
- Tension veins: quartz veins with albite, arsenopyrite, and minor lead sulfosalts.
- Shear hosted veins: quartz veins with pyrite and lead sulfosalts.

These veins are contained within schists and generally strike 050 and dip steeply (70 degrees) to the southeast. They have a strike length of at least 500 m and die out at a depth of about 200 m.

Each mineralization type is described in more detail below (NovaGold, 2006).

Replacement Bodies

There is probably more than one episode of replacement mineralization. The first occurred in a ductile environment and is characterized by large crystals of albite, quartz, arsenopyrite, and dolomite. These bodies occur in low angle structures and small fold noses. They can appear to be sill like bodies. Tension fracture veins cut these bodies at several locations, although occasionally the replacement bodies appear to become thicker when approaching a vein. The replacement bodies occur by themselves but are also fairly common in areas of vein mineralization. Metallurgical studies indicate the gold in replacement bodies occurs as fine free gold in association with sulphides.

Tension Veins

The tension veins are usually less than 10 cm (4 in) wide and average about 3.8 cm (1.5 in). The veins appear to have more strike length than vertical extent. The tension vein zones can be hundreds of metres wide.

The veins contain quartz with varying amounts of carbonate, arsenopyrite and pyrite. Trace amounts of base metal sulfides, stibnite, free gold and sulfosalt minerals are distributed erratically throughout the tension veins. Typical tension veins at Rock Creek average 0.6% arsenopyrite and 0.6% pyrite (combined syngentic and hydrothermal) by volume as estimated from visual inspection of 2004 core. Native gold commonly occurs on fractures in tension veins. The majority of visible gold seen in drill core from 2004 occurs within vein quartz or associated with arsenopyrite.

Shear-Hosted Veins

The Albion Shear Zone is a large (up to 30 m wide), well-defined structural zone that trends 050° azimuth with a moderate to steep northwest dip. It is characterized by extensive shearing (mylonitization), but also includes local zones of gouge and brecciation. The Albion Shear Zone style of quartz veining is distinctly different from the tension veining. These veins are often wider (a few centimetres to greater than 3 m) than the tension veins. They are commonly sheared and broken, can be banded and locally include quartz-cemented breccias indicating shearing was active during a different, perhaps shallower environment than that under which the tension veins formed. The quartz is less fractured than quartz in tension veins and arsenopyrite, base metal sulfides and stibnite total less than 0.5% of the zone by volume. Free gold is locally present though it is less common than in tension veins. Fine-grained pyrite and lead sulfosalts give the veins a dark or bluish colour. There is no discernable zonation of sulfide species along strike or downdip within the Albion Shear Zone.

9.1 Mineral Zone Construction

Mineral zones were updated using new drillhole data that became available from the 2004 drilling program. AGC project geologist John Odden reviewed the existing interpretation and updated the sectional polygons where warranted. The deposit contains distinct zones with different grades and/or geological controls. To honour these distinct zones during grade estimation, the mineral zone envelopes were interpreted on section and then linked in MineSight®, creating three-dimensional wire-frame solids that were then used to code drillholes and to assign mineral zone codes to the block model. Mineral zones for the Rock Creek model (RKCK15.DAT) are described in Table 9-1.

Table 9-1: Mineral Zones

Label	Code	Name/Nominal Grade Domain	Notes
MINZN	1	+0.5 g/t	Generally east of Albion Shear - Tension Veining
MINZN	2	+0.25 g/t	Weak mineralization both east and west of Albion Shear
MINZN	3	Walsh Zone	Provided by Stan Dodd sections, unchanged by AMEC
MINZN	10	Albion Shear	Adopted from prior solids interpolation, unchanged by AMEC
MINZN	99	Miscellaneous Mineralization	All other miscellaneous mineralization falls into MINZN 99

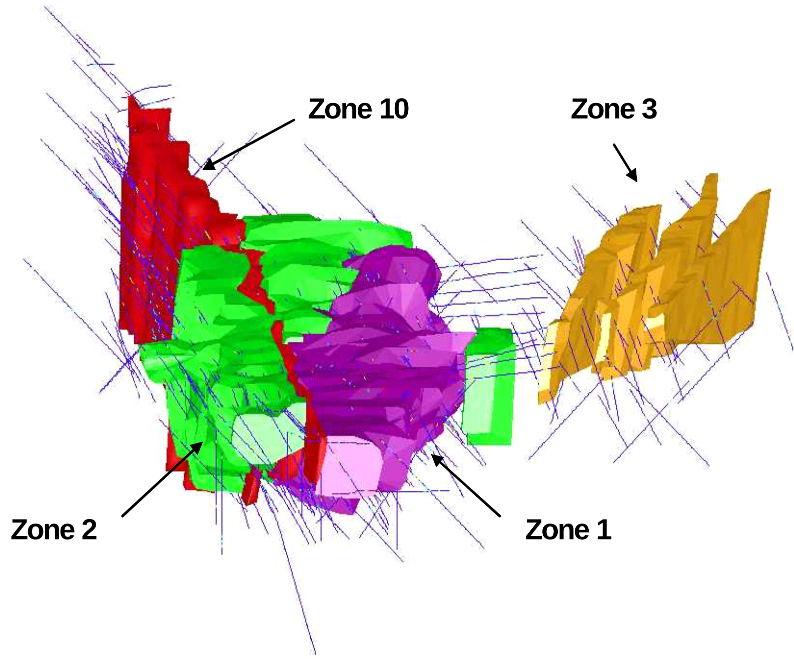
Mineral Zone 1 was initially defined by AGC geologists in an area located immediately east of the Albion Shear Zone that is characterized by sheeted tension veins. In general, this modeled zone was defined by material above a 0.5 g/t cutoff. As modeled, this zone does contain drillhole intercepts less than the 0.5 g/t gold cutoff, but in general, this zone shows good continuity between drill sections.

Mineral Zone 2 consists of three modeled solids that are located on either side of the Albion Shear Zone and is characterized by less continuous mineralization than Zone 1. This zone was initially modeled using a nominal 0.25 g/t gold cutoff grade, but like Zone 1, lower grade intervals were included.

Mineral Zone 3, located on the eastern side of the deposit, is identified as a series of three northeasterly trending sub-parallel zones also known as the Walsh Zone. Cross sectional interpretations were prepared by John Odden and linked by AMEC into wire-frames.

The Albion Shear Zone, or Mineral Zone 10, is a narrow, north-south trending high-angle zone of mineralization that has been delineated by a number of core and reverse circulation drillholes. AGC personnel reviewed all core drillhole logs and prepared a comprehensive list of intercepts that define this zone. John Odden then modified the previously constructed sectional polygons using the list of drillhole intercepts and newly acquired drillhole data. Those polygons were then linked together by AMEC creating a wire-frame solid. The Rock Creek Mineral Zones are shown (see Figure 9-1) in a perspective view with the drillholes for reference.

Figure 9-1: Isometric View of Rock Creek Mineral Zones-Looking North (AGC)



The remainder of the deposit defaulted to Mineral Zone 99, which has no wire-frame boundaries and in general, is characterized by scattered intercepts of discontinuous mineralization. There are several exceptions, particularly west of the Albion Shear Zone around Section 540N, where some continuity of shear-style mineralization is recognized.

The sectional polygons for Mineral Zones 1 and 2 were locally modified by AMEC to overlap the Albion Shear Zone to prevent inadvertent gaps in the drillhole and model codes. These overlaps were created where Zones 1 and 2 were supposed to be in contact with the Albion Shear Zone. The drillholes and block model were sequentially coded with the wire-frames starting with Mineral Zone 3, then proceeding with Zones 2, 1, and finishing with Mineral Zone 10.

The sectional polygons and three-dimensional wire-frames that were used to code the drillholes and block model are stored in a folder within the MineSight® project directory called “Nov2004 Geo Interpretations”. The sectional polygons and final wire-frames are all stored under individual folders for each of the Mineral Zones.

Drillhole assay and composite intervals were backcoded (‘speared’) within MineSight® to assign codes for intervals that fell within at least 50% of each wire-frame solid. The

MineSight® assay, composite, and block model items to receive those codes is called MINZN (Mineral Zone).

9.2 Alteration

Extensive alteration, mainly albitization and sulfidization, accompanied early ductile lode mineralization (Hawley and Hudson, 1996). Arsenopyrite was the main introduced sulfarsenide. Later alteration during the brittle stage included sericitization, silicification, and ankeritization. The Albion Shear Zone has shown evidence of mylonitization along shear surfaces, along with localized brecciation and gouge occurrences.

10.0 EXPLORATION

Placer miners commonly found and reported gold bearing quartz veins throughout the Seward Peninsula but were unable to mine them profitably due to their discontinuous nature. Little lode exploration was conducted after a few failed attempts at underground mining during the early part of the century.

In 1986, R.V. Bailey came to Nome with bulk mineable targets in mind and quickly consolidated the district land holdings. Rock Creek was discovered by trenching shortly thereafter. Rock Creek has been worked on by several different mining companies since 1986.

During each of these work projects, soil sampling, geophysics, geologic mapping and various drilling campaigns were conducted. Work on the property was carried out subsequent to 1986, and prior to the NovaGold's involvement by Placer Dome, Tenneco, Newmont, Kennecott and Alaska Gold. A total of 33,000 m of core and rotary drilling was carried out by these companies on the property (of which 18,600 m was on the Rock Creek deposit), as well as metallurgical test work.

In June 1999, after NovaGold concluded the purchase of AGC, NovaGold began a review and compilation of all previous work in the Nome area. In September of that year, six reverse circulation drillholes (437 m) were completed for metallurgical test work, and these holes also tested the reliability and continuity of previous drilling. All six holes intersected significant widths of greater than 3 g/t gold mineralization.

In 2000, 30 additional drillholes totalling 2,449 m were completed. Sampling was carried out on each 1.52 m (5 ft) interval, and strict sample protocols were employed to ensure adequate sample size and quality. The NovaGold's program used experienced reverse circulation drillers employing a compressor with 900 CFM capacity, with the air-lift to ensure complete sample recovery. NovaGold stationed a geologist on the rig full-time to ensure strict sampling protocols were undertaken. The drilling program and sampling protocol were managed by NovaGold with oversight provided by Phillip St. George, then Vice-President, Exploration, for NovaGold. According to NovaGold, Phillip St. George is a Qualified Person as defined by National Instrument 43-101.

In 2002, NovaGold completed 16 HQ diamond core drillholes totalling 1,182 m in a program funded by TNR Gold Corp. This drill program was designed to expand the extent of the known gold resource and to complete infill core drilling along the higher-grade Albion Zone of the deposit to support preparation of an independent preliminary economic assessment report.

In 2003, a 30,000 ft (9,100 m) infill feasibility delineation drill program was completed, and a feasibility study was begun. Environmental baseline monitoring was also started in 2003. The 2003 drilling program confirmed that the coarse gold component of the mineralization at Rock Creek produced differing results for samples obtained from core and rotary drilling.

In 2004, NovaGold worked with AMEC E&C Services Inc. to design a comprehensive twinning and infill drilling program to define a final resource model, provide additional material to carry out further metallurgical test work to optimize the recovery of gold, and allow the NovaGold to develop the best approaches to grade control and mining methods.

In late 2005, a grade control study was initiated to better optimize planning for grade control. Results from that study will become available in the second quarter of 2006.

In addition to Rock Creek, a number of other prospects with anomalous gold and associated metals (arsenic-antimony) have been defined within the TNR – NovaGold joint venture area by soil sampling and drilling (Figure 10-1). These prospects cover a 10 km (6 mile) long area extending from the Goodluck target in the north to the Third Beach target in the south. Within this area a total of 87 drillholes have intersected significant gold mineralization. These 87 drillholes contain 123 discrete intercepts of +2 g/t over 1.5 m (5 ft) or greater (Table 10-1). Most intercepts have not been offset.

One of the most advanced of the targets outside of Rock Creek proper is the Saddle prospect, where limited drilling has extended the mineralized area over a 500 m (1,500 ft) distance along a northeast striking quartz-vein stockwork system similar to Rock Creek (St. George, 2000). Placer Dome estimated a resource of 544,320 tonnes at 5.76 g/t, and Tenneco estimated 1.32 million tonnes at 3.29 g/t. Mineralization is open along strike in both directions.

The Bonanza Hill prospect area has three zones of northeast trending mineralization all containing multiple drillholes with significant intercepts (Table 10-1). The northwestern portion of Bonanza Hill returned significant intercepts in an area measuring 1.2 km long and open to the northeast and southwest. The central zone at Bonanza Hill returned some of the most promising holes and trends into the Saddle zone, 1.47 km to the northeast. The southeast zone at Bonanza Hill is 630 metres long, with significant intercepts that are open to the southwest.

Several other prospects in the TNR – NovaGold joint venture area have returned promising drilling and/or soil sampling results (Table 10-1, Figure 10-1). At the

Goodluck prospect, one drillhole intersected 20.8 g/t over 3 m. This hole has not been offset. The Balto and Prospect Creek target areas are untested soil anomalies showing over 100 ppb gold. Lindblom Creek has been tested with only two holes which returned 3 m of 1.8 g/t and 6.1 m of 1.2 g/t. No other drilling has been done on this target. The Lindblom Pit area is a large gold and arsenic soil anomaly with a number of holes containing significant intercepts. A northwest trending line of drillholes covering 350 m at Lindblom Pit all have significant intercepts, and are all open to the northeast and southwest. The Hot Air Bench target has a hole with 3 m of 1.4 g/t gold and, like Goodluck, this drillhole has not been offset.

AGC has conducted intermittent surface mapping of the area surrounding the Rock Creek Deposit. AGC has also explored the property through diamond drilling and reverse circulation drilling.

Figure 10-1: Exploration Targets in the Rock Creek Area (Avalon, 2002)

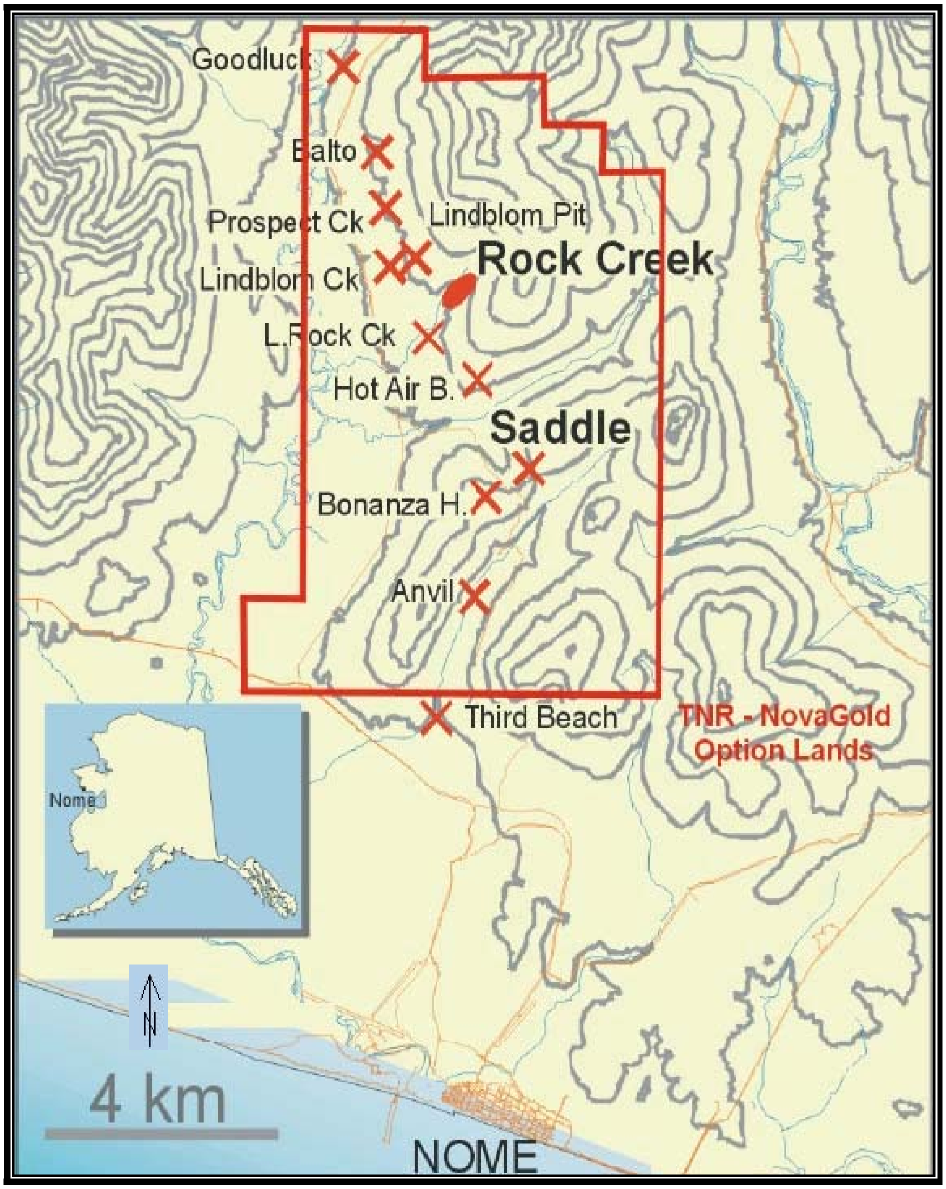


Table 10-1: Significant Drilling Results from Reconnaissance Exploration Prospects in the TNR – NovaGold Joint Venture Area (St. George, 2000)

Hole #	Length (m)	Au(g/t)	Length (ft)	Au(oz/t)	Hole #	Length (m)	Au(g/t)	Length (ft)	Au(oz/t)
Bonanza Hill									
BDH90-10	3.0	2.6	10	0.075	BHR-4-08	1.5	2.5	5	0.073
BDH90-7	1.5	4.1	5	0.120	And	1.5	2.6	5	0.075
BDH90-8	1.5	2.3	5	0.066	And	3.0	3.2	10	0.093
BHC-5-01	3.0	2.0	10	0.059	BHR-4-10	25.9	2.2	85	0.064
BHR-4-01	3.0	4.1	10	0.120	And	1.5	2.4	5	0.070
And	10.7	2.6	35	0.076	And	1.5	2.8	5	0.083
And	9.1	2.0	30	0.059	BHR-6-03	1.5	25.5	5	0.744
BHR-4-02	1.5	2.6	5	0.077	BHR-6-05	1.5	5.2	5	0.152
BHR-4-04	6.1	4.5	20	0.130	BHR-6-12	1.5	8.2	5	0.239
BHR-4-05	4.6	2.5	15	0.072	BR-7-002	3.0	3.7	10	0.109
BHR-4-06	12.2	2.4	40	0.069	TDH90-05	1.5	2.0	5	0.059
BHR-4-07	4.6	2.9	15	0.086	And	1.5	3.2	5	0.094
And	9.1	3.2	30	0.093					
And	1.5	3.6	5	0.105					
And	3.0	2.6	10	0.077					
Goodluck									
GLR-6-01	3.0	20.8	10	0.608					
L. Rock Creek									
DH90-13	4.6	2.6	15	0.076	RDH90-14	18.3	2.3	60	0.068
Lindblom Pit									
LBR-6-01	3.0	4.2	10	0.124	LBR-6-34	1.5	7.0	5	0.204
LBR-6-09	4.6	4.0	15	0.117	And	1.5	2.9	5	0.085
And	1.5	2.8	5	0.082	LBR-6-35	1.5	4.7	5	0.137
LBR-6-17	1.5	7.1	5	0.208					
Saddle									
SR-7-001	57.9	2.2	190	0.064	SDR-4-11	1.5	2.3	5	0.067
SDR-4-02	1.5	2.5	5	0.074	SDR-4-12	1.5	2.0	5	0.058
And	1.5	2.1	5	0.062	And	6.1	2.4	20	0.071
And	1.5	2.4	5	0.069	and	1.5	3.9	5	0.115
And	1.5	4.1	5	0.120	SDR-4-13	1.5	2.6	5	0.077
SDR-4-03	3.0	3.0	10	0.088	SR-7-002	6.1	2.1	20	0.062
SDR-4-05	3.0	2.4	10	0.071					

11.0 DRILLING

11.1 Drillhole Summary

Table 11-1 summarizes the Rock Creek drillhole database by sample type (core and reverse circulation drilling) by company, year, and campaign. All core hole campaigns are defined by a 300-series code while reverse circulation (RC) drilling data were given a 500-series code. These codes were used extensively in subsequently described data analyses. The meterage shown is for the total length of all drillholes and includes some minor unassayed data. The average spacing for drillhole sections on the Rock Creek Deposit is approximately 30 m (see Appendix F-5), which is appropriate for classifying Indicated Resources.

Table 11-1: Rock Creek Sampling Campaigns

Core Holes					Year	RC Holes				
Company	**No. Holes**	**Metres**	**Pre-fix**	**Code**		**Company**	**No. Holes**	**Metres**	**Pre-fix**	**Code**
Placer Dome	24	2,033.69	RC-7	301	1987	Placer Dome	17	966.00	RR-7	501
Placer Dome	15	1,582.51	RC-8	302	1988	Placer Dome	73	4,614.00	RR-8	502
				303	1989	Placer Dome	10	532.00	RR-9	503
Tenneco	1	245.67	DDH90	304	1990	Tenneco	1	32.00		504
Newmont	6	569.49	RC92,AC92	305	1992	Newmont	1	82.00	AR-92	505
Kennecott	11	1,265.83	RCC-4	306	1994	Kennecott	21	1,584.00	RCR	506
Kennecott	20	2,464.59	RCC-5	307						507
				308	1996	Kennecott	2	305.00	BRR	508
				309						509
				310						510
				311	1999	NovaGold	6	437.40	RMR	511
				312	2000	NovaGold	30	2,444.49	RR-0	512
NovaGold	16	1,181.78	RKDC02	313						513
NovaGold (spring)	12	1,481.47	RKDC03	314						514
NovaGold (summer)	94	10,355.65	RKDC03	315						515
NovaGold	53	3,994.08	RKDC04	316	2004	NovaGold	27	1,938.55	RKRC04	516
	252	**25,174.76**			**Total**		**188**	**12,935.44**		

The drillhole prefixes can be confusing in that the Placer Dome prefix RC stands for Rock Creek Core, whereas the normal industry practice is to use the prefix RC to designate reverse circulation data.

The 2004 AGC drilling campaign recovered nearly 4,000 m of HQ core from 53 holes. Triple-tube core recovery equipment was utilized to minimize the loss of fine-grained and broken core. Reverse circulation (RC) drilling recovered 1,900 m of sample from 27 drillholes. After photography, geologic and geotechnical logging, whole core was submitted for assay analysis in 2 m lengths. RC chip samples were submitted in 5 ft intervals. Ten trenches were also completed.

Appendix A-13 has a list of all 5 m RC and DDH composites greater than 1.0 g/t. Some of the composite lengths are less than 5 m due to termination at the end of the hole. Some other composites may be short due to rejected samples from poor recovery or suspicious RC samples.

11.2 Review of 2004 Site Visit

In September, 2004, Dr. Harry Parker made a site visit to the Rock Creek Property to review the drilling and trenching program (see Appendix A-12).

AMEC had the following conclusions:

- AMEC was impressed with the field program and that the resultant data should support a feasibility study.
- Use triple-tube core barrels to improve core recovery in gold bearing soft zones that were seen in the trenching.
- Perform some check samples from the coarse rejects and have them assayed at another lab, as all QA/QC samples being prepared and assayed at the present lab are non-blind.

Both diamond and RC drilling sampling practices appear to be as good as could be achieved under the observed drilling conditions.

11.2.1 RC Drilling

The RC rig drives a 6 in casing to a depth of 30 ft. The hole is conditioned with mud and continued with a 5 ¾ in hammer using a center-return bit. In very wet conditions, the hammer breaks chips too big to get through ports in the bit. Air is lost to the formation. A tri-cone bit is used under very wet conditions; speed of drilling is reduced.

11.2.2 RC Logging

There is insufficient time to log at the rig. Chip trays are logged later. Logging instructions and a form are reproduced in Appendix A-12. There is no flow sheet checklist for RC holes. Creating one would be useful.

It is possible to distinguish lithology and carbonate from quartz veins in chips. Otherwise, the logging of the chip trays will not be very useful. There is simply too little sample to be very representative of a 5 ft interval.

11.2.3 Diamond Drilling

Core quality is enhanced by use of face-discharge bits and Extreme No. 1 Granular drilling mud-polymer.

Downhole surveys are made every 50 ft using a digital camera. Magnetic azimuths are increased by 14.3º. This was confirmed correct by AMEC using GeoMag software.

It would add credibility, if 10 percent of the holes surveyed using GPS were also surveyed with a theodolite and the coordinates compared.

11.2.4 Coring

HQ diametre (63 mm) cores are extracted using a 5-ft triple-tube core barrel. AMEC visited drillhole RKDC04-282. Core from a depth of about 20 ft was pulled. Soft material was recovered intact.

Appendix A-12 includes a core-handling flow sheet. This is a checklist designed to ensure that all required activities are performed: geotechnical logging, geological logging, sample selection, photography, sampling, shipping, and data entry.

11.2.5 Core Logging

AMEC's site visit included a review of the core logging program. A number of log sheets are prepared for use by the Geologists.

A core-logging manual developed by AGC is contained in Appendix A-12.

The logging is of very good quality and comprehensive. AMEC spot-checked logging for hole RKDC04-271 and found it to be reasonable.

Logs are entered using DDH Tool software. There is no duplicate data entry. This may lead to higher than desirable error rates. Best practice is to independently double-enter data.

Graphic logs are scanned. The core is digitally photographed before sending for preparation. The quality of photographs is good.

11.3 Data Orientation

Core, rotary and trench sample locations are found in Figure 11-1. The RC and diamond drillhole bit sizes by year and company are found in Table 11-2 (some of the RC bit sizes could not be determined). The orientation of the Rock Creek drillhole and trench data are summarized in Table 11-3. The majority of the data used for estimating mineral resources were steep easterly oriented drillholes. This orientation was chosen to intersect the steep west dipping, north-south trending shear zones.

Table 11-2: Drillhole Sizes

Company	Year	Core Diameter	RC Diameter
Placer Dome	1987-89	HX,NX	5 in, 4.75 in
Tenneco	1990	HX	?
Newmont	1992	HQ	?
Kennecott	1994-95	HQ	5.5 in, 5.25 in
NovaGold	1999-+	HQ, HQ3	5-5.5 in

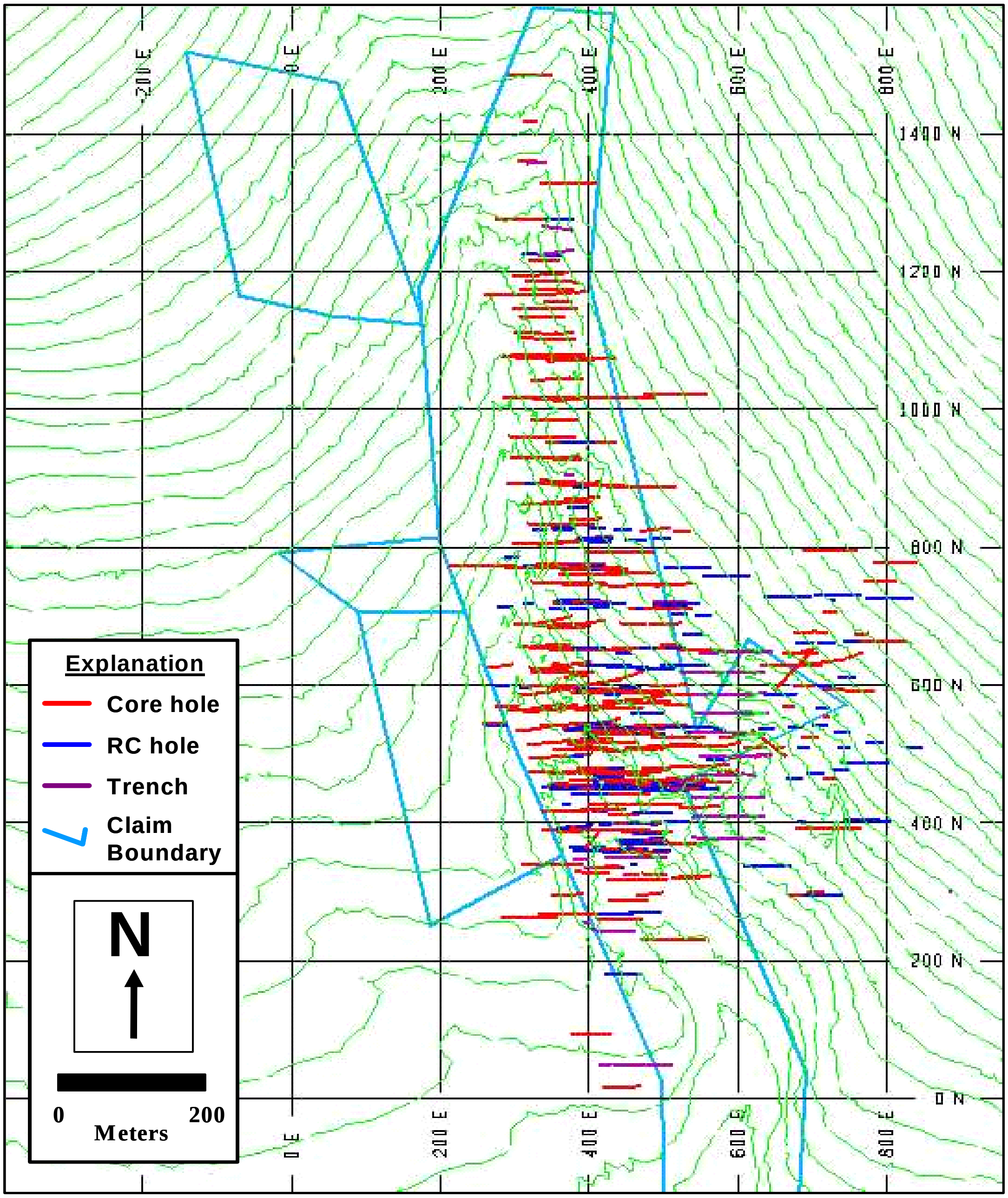
Table 11-3: Data Orientation

Drillhole/Trench Orientation	No. Holes/Trenches	No. Metres
Vertical Downward Hole	6	497.50
Steep Downward Northeasterly Angle Hole	1	64.00
Steep Downward Easterly Angle Hole	393	33,913.71
Steep Downward Southeasterly Angle Hole	1	86.11
Steep Downward Southwesterly Angle Hole	2	227.99
Steep Downward Westerly Angle Hole	26	2,489.72
Shallow Downward Easterly Angle Hole	3	179.78
Shallow Downward Westerly Angle Hole	7	732.00
Flat Easterly Trench	5	167.00
Flat Westerly Trench	3	301.30
Shallow Upward Easterly Trench	2	96.00
Total	**449**	**38,755.11**

Table 11-4: Data Inclination

Inclination	No. Holes/Trenches	No. Metres
-90	6	497.50
-80	18	1,062.41
-75	2	158.19
-70	117	7,542.49
-65	5	386.19
-60	20	1,667.32
-55	103	10,160.03
-50	15	2,012.04
-45	144	13,880.64
-15	4	319.00
-10	3	305.00
-5	4	323.30
0	6	345.00
5	1	45.00
10	1	51.00
Total	**449**	**38,755.11**

Figure 11-1: Drillhole and Trench Location Map (5 m topographic contour interval) [1]



1 Local Grid is rotated -50 degrees from UTM East (NAD 27) 479443 and UTM North (NAD 27) 7165469 to local grid at 0 East and 0 North.

Most of the sample data were inclined at -45 and -70 degrees to the east in an effort to intersect the steep west dipping mineralized zones.

The RC holes tended to be steeper, as drilling conditions proved difficult when trying to drill at a flatter angle. Note that the meterages shown in Table 11-3 through Table 11-5 include unassayed intervals. Table 11-3 summarizes the dip orientation of the Rock Creek sample data. Table 11-4 summarizes total meterages of all drillholes by various inclinations.

The drill holes intersect the veins at about 45 degrees and thus gives a thickness of about 140% of the true thickness for mineralized sample intervals.

Table 11-5 breaks down the Rock Creek sample data by type and inclination.

Table 11-5: Data Inclination by Type

Data Type	Inclination	No. Metres
Core	-90	183.00
	-80	234.07
	-75	81.99
	-70	1,799.68
	-65	322.18
	-60	1,522.50
	-55	7,265.95
	-50	2,012.04
	-45	11,570.70
Core Total		24,992.11
RC	-90	314.50
	-80	828.34
	-75	76.20
	-70	5,742.81
	-65	64.01
	-60	144.82
	-55	2,894.08
	-45	2,245.94
RC Total		12,310.70
Trench	-45	64.00
	-15	319.00
	-10	305.00
	-5	323.30
	0	345.00
	5	45.00
	10	51.00
Trench Total		**1,452.30**
Grand Total		**38,755.11**

11.4 Data Summaries by Sample Campaign

Table 11-6 summarizes the final unadjusted assay data above a 0.0 g/t gold cutoff grade by sampling campaign that was used for estimating mineral resources.

Core hole data represent about 65% of the total sample data, yet only contain about 54% of the total grade-thickness product. The RC data represent about 31% of the data and contain about 43% of the grade-thickness product. The trench data were used to estimate mineral resources, but their area of influence was restricted to 15 x 15 x 5 m from each sample. This permits the trench data to contribute to the estimates of surficial blocks near the trenches. It is inadvisable to use the trench data unrestricted given the unexplained differences between trench assays and both adjacent core and rotary assays.

Table 11-6: Assays by Sample Campaign (rejected samples omitted)

Campaign	No. Samples	No. Metres	Min Au (g/t)	Mean Au (g/t)	Max Au (g/t)	Std. Dev.	CV	GT*	% of Total GT
301 - Core	1,181	1,853.70	0.01	0.48	20.06	1.31	2.71	895	3%
302 - Core	1,018	1,579.47	0.03	0.34	47.14	1.81	5.38	531	2%
304 - Core	150	241.40	0.00	0.12	3.33	0.32	2.54	30	0%
305 - Core	355	540.70	0.00	0.59	49.78	2.93	4.93	321	1%
306 - Core	829	1,262.79	0.00	0.77	33.40	2.19	2.84	975	4%
307 - Core	1,561	2,367.26	0.00	0.46	75.84	2.44	5.26	1,098	4%
313 - Core	553	1,034.16	0.01	0.81	23.31	2.31	2.84	841	3%
314 - Core	787	1,475.31	0.00	0.51	46.60	2.15	4.25	747	3%
315 - Core	5,407	10,342.51	0.03	0.60	59.60	2.06	3.44	6,194	24%
316 - Core	2,104	3,992.08	0.03	0.61	57.80	2.08	3.42	2,424	9%
Sub-total Core	***13,945***	***24,689.38***	***0.00***	***0.57***	***75.84***	***2.08***	***3.65***	***14,055***	***54%***
501 - RC	588	895.42	0.07	1.76	53.69	4.46	2.54	1,574	6%
502 - RC	2,871	4,458.39	0.03	0.92	117.60	3.89	4.23	4,101	16%
503 - RC	321	503.82	0.03	1.38	68.88	5.76	4.16	697	3%
505 - RC	52	79.25	0.00	0.30	2.40	0.58	1.92	24	0%
506 - RC	979	1,491.99	0.00	0.30	17.42	1.07	3.56	450	2%
511 - RC	272	414.52	0.03	1.19	16.42	1.93	1.63	491	2%
512 - RC	1,461	2,229.54	0.00	0.90	39.04	2.68	2.98	2,011	8%
516 - RC	1,241	1,891.31	0.03	0.95	55.30	2.42	2.56	1,791	7%
Sub-total RC	***7,785***	***11,964.24***	***0.00***	***0.93***	***111.60***	***3.34***	***3.59***	***11,139***	***43%***
713 - Trench	370	406.00	0.00	0.59	24.99	1.98	3.39	237	1%
716 - Trench	538	999.30	0.03	0.45	13.90	1.13	2.53	445	2%
Sub-total Trench	***908***	***1,405.30***	***0.00***	***0.49***	***24.99***	***1.43***	***2.95***	***682***	***3%***
Grand Total	***22,638***	***38,058.92***	***0.00***	***0.68***	***117.6***	***2.54***	***3.73***	***25,876***	***100%***

*GT=grade thickness (metres x mean Au g/t)

12.0 SAMPLING METHOD AND APPROACH

12.1 Introduction

Where multiple sampling methods are used, it is common to compare the frequency distributions of one method versus another to check for biases. At Rock Creek there are three sampling methods: DDH, RC and trench. There are also various campaigns, which have used different equipment and sampling/assaying protocols (see Appendix A-3).

The accepted assay intervals (greater than 60% core recovery and not on the RC reject list – Appendix A-11) were used for this study. A list of all composites greater than 1 g/t is in Appendix A-13.

There is uneven spatial distribution to the locations of holes drilled with various methods and campaigns. To compare two methods, a program was written that finds 10 × 5 × 5 m blocks located within 30 m of accepted assay intervals for both methods. Then assays from each method were assigned declustering weights as described in the next section.

Diamond drill and RC sample collection at the Rock Creek Deposit commenced in 1987 with Placer Dome. There are very little data available as to how on site sample collection was performed prior to NovaGold acquiring the property in 1999.

Details regarding location of holes, number nature, type, and drill density are discussed in Section 11.

12.2 RC Sampling

Reverse circulation drill samples from the 1999 and 2000 Rock Creek program were logged on-site by NovaGold personnel. A NovaGold geologist was present at all times during the drilling program and managed all sampling conducted in 1999 and 2000. Samples were collected on 5 ft intervals and consisted of a 40% split for assay purposes and a 60% split for future metallurgical or other purposes. Samples were then bagged and secured on-site to prevent purposeful or inadvertent contamination. Original assay pulps and rejects have been discarded, the remaining 60% split of each interval is stored in NovaGold's Nome warehouse facilities (Avalon, 2002).

During the 2004 site visit, the following describes the RC sampling process. The sample interval is 5 ft. The sample consists of a ¼ split (from a rotary splitter); this is caught in three 5-gallon buckets that cascade into each other. The buckets contain suspended short lengths of 6 in PVC that reduce turbulence in the bucket. Occasionally, a fourth bucket is required.

When the interval is completed, the buckets are decanted by pouring the water out on the ground. The sample, weighing about 12 kg, is transferred to cloth bags, which can further drain while sitting on the ground by the rig.

A 2 kg sample is put in a strainer and panned. This sample is used for logging.

The dry weight of the sample is recorded at the preparation laboratory. The fraction split at the rig is also recorded.

Rods are 15 ft long. A mixture of bentonite and water is injected. If a switch to a tri-cone bit is made, the first rod is 10 ft long; thereafter 15 ft rods are used.

12.3 RC Recovery and Data Selection

AMEC was able to estimate the recovery percentage for the 2004 AGC RC drilling campaign using dry sample weights recorded by Chemex Labs similar to the method that was used for determining core recovery using the weight method. In the 2004 RC drilling program, AGC collected an approximate ¼ split of wet RC drill cuttings for each 5 ft (1.52 m) long interval that was sampled. These ¼ splits were then dried and weighed by Chemex. A theoretical dry sample weight was calculated for the 2004 RC assay intervals using the bit diametre, sampled length, and default dry density of 2.71 g/cm^3. The theoretical dry weight was divided by four and used as the denominator in a recovery calculation that used the actual reported dry weight as the numerator. AMEC acknowledges that the RC recoveries that were estimated using this method are subject to some uncertainty, but submits that in general, this method provides an indication of suspect RC intervals as defined by very low or high sample weights. Gold grades are compared with RC recovery for all of the 2004 RC samples in Figure 12.1. Unlike the graph of core recovery versus gold grade as shown in Figure 12-3, RC gold grades display more of a bell-shaped curve function relative to recovery (Figure 12-1). Most of the extremely low and high RC recovery intervals tend to have low gold grades.

RC recoveries are compared against down-hole depth in Figure 12-2 for the 2004 drilling data. The data shows that in general, both the low and high recovery intervals are found at shallow depths, typically within 20 m of the surface.

Based on AMEC's and AGC's review of the 2004 RC recovery, data intervals with less than 30% or greater than 120% RC recovery were rejected for use in Mineral Resource estimates. John Odden of AGC reviewed drill log descriptions for each low and high RC recovery interval and was able to confirm that drilling conditions may have been responsible for the suspect weights associated with those intervals.

Figure 12-1: RC Recovery vs. Gold Grade

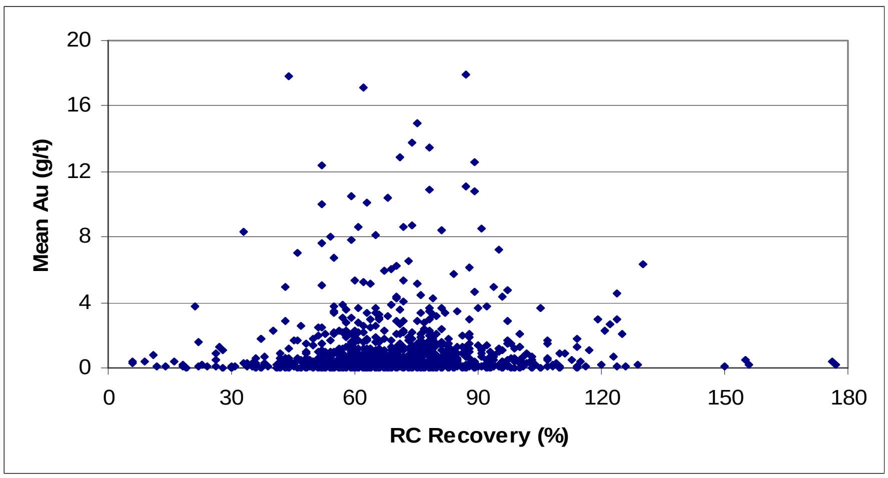
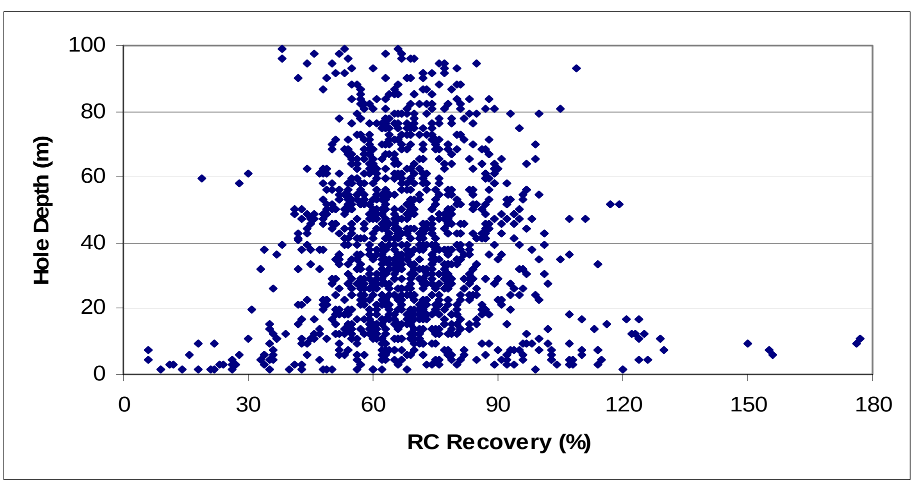


Figure 12-2: RC Recovery vs. Hole Depth



12.4 Core Sampling

Sampling is completed on fixed 2 m intervals. This is acceptable, given the deposit will be bulk-mined with open-pit methods. Typically samples weigh 10 to12 kg.

The whole core is shipped to ALS-Chemex in Fairbanks for sample preparation. Assaying is done in Vancouver.

To the extent possible, sludge samples are taken every 5 ft at the rig.

12.5 Core Recovery and Data Selection

Percent core recovery was calculated by AGC and the previous companies that completed diamond core holes at Rock Creek by dividing the length of core actually recovered from the core barrel found between “run blocks” by the drilled length as defined by the distance values posted on the run blocks. During a review of core box photos, AMEC noticed some discrepancies between the recorded core recovery and the apparent recovery by studying the photographs. A decision was made by both AGC and AMEC that where possible, a weight method would be used to define core recovery. Entire dry sample weights were available from the Chemex laboratory for all of the 2003 and 2004 core hole assay intervals due to the sampling protocols developed by AGC. A theoretical dry weight was calculated for each 2003 and 2004 core interval using the inside bit diameter, the length of the drilled interval, and a default density of 2.71 g/cm^3. The actual reported dry weight for each assay interval was then divided by the theoretical weight and then multiplied by 100, which yielded the percent of material recovered. Final core recoveries for the Rock Creek core holes were determined using a prioritized system. The recovery by weight method took precedence over core recovery by the logging method where core weights were available.

Figure 12-3 shows unadjusted gold assays plotted versus core recovery. This relationship shows that very few high-grade samples are found below 60% recovery, suggesting a possible bias in grade with respect to core recovery. Core samples with less than 60% core recovery represent about 5.7% of the total core data.

Figure 12-4 graphically shows the recovery versus the downhole depth suggesting that increased recovery occurs with as depth increases.

Figure 12-5 compares recovery with hole depth for holes drilled pre-2003 to holes from 2003 and 2004. This graph shows that the most recent holes (2004) have had the poorest recovery of the three data sets.

Figure 12-3: Core Recovery vs. Unadjusted Gold Grade

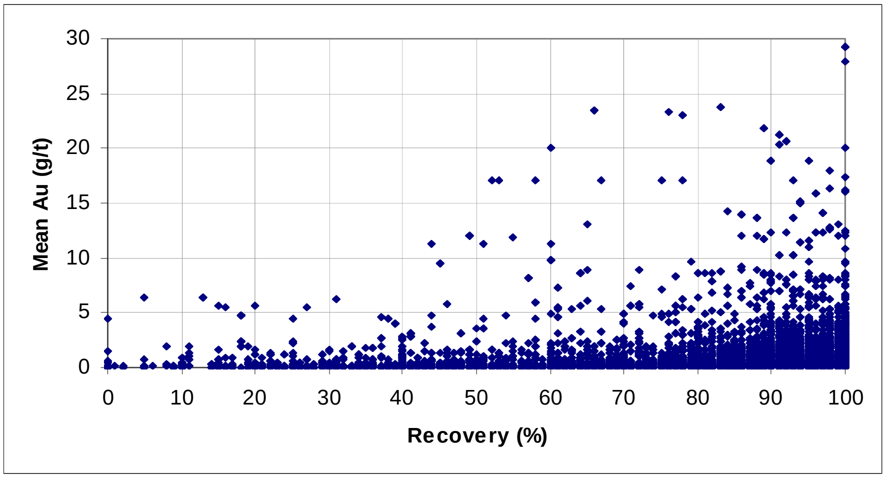


Table 12-1: Core Recovery Statistics

Core Recovery (%)	Incremental Metres	Cumulative Metres	% of Total	Mean Au (g/t)	Max Au (g/t)	Std. Dev.	CV
100 & above	9,461	23,927	39.50	0.52	30.00	1.67	3.22
90 to 99	7,605	14,466	31.80	0.54	30.00	1.70	3.18
80 to 90	3,386	6,861	14.20	0.56	23.70	1.52	2.75
70 to 80	1,260	3,475	5.30	0.58	30.00	1.65	2.85
60 to 70	672	2,215	2.80	0.70	30.00	2.42	3.44
50 to 60	417	1,543	1.70	0.74	30.00	2.38	3.23
40 to 50	295	1,126	1.20	0.60	12.00	1.43	2.39
30 to 40	326	831	1.40	0.66	30.00	2.45	3.71
20 to 30	233	505	1	0.28	5.56	0.50	1.80
10 to 20	168	272	0.70	0.79	6.45	1.41	1.80
0 to 10	105	105	0.40	0.31	6.45	0.92	3.01
Total	23,927		100	0.54	30.00	1.70	3.13

Gold grade statistics were tabulated for all of the Rock Creek core data using 10% core recovery bins as shown in Table 12-1. A cap grade of 30 g/t gold was used to reduce the affect of outlier values. Notice that in general, the CV is generally lower for core recoveries less than 60%.

Table 12-2 tabulates basic descriptive statistics by core recovery (less than and greater than 60%) as a function of distance from surfaces and by drill campaign.

Figure 12-4: Figure: Core Recovery Statistics

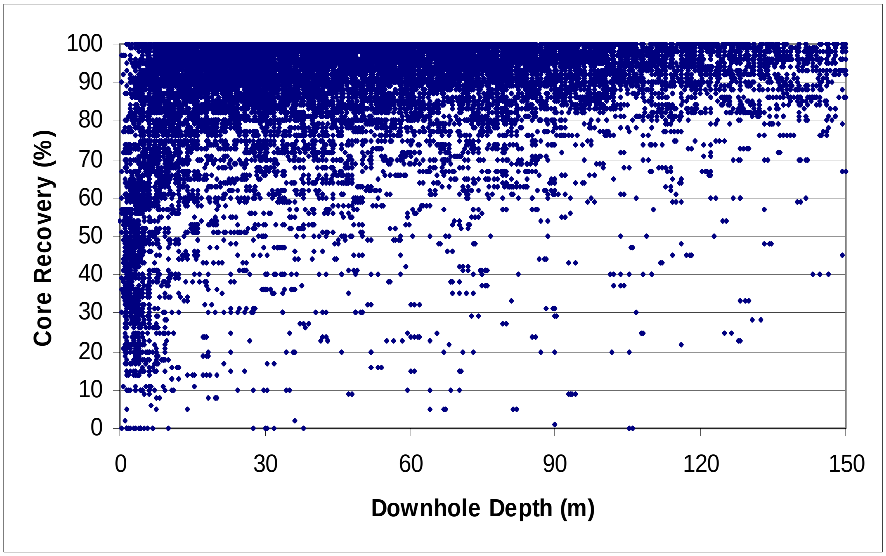


Figure 12-5: Core Recovery vs. Down-hole Depth (Moving Average)

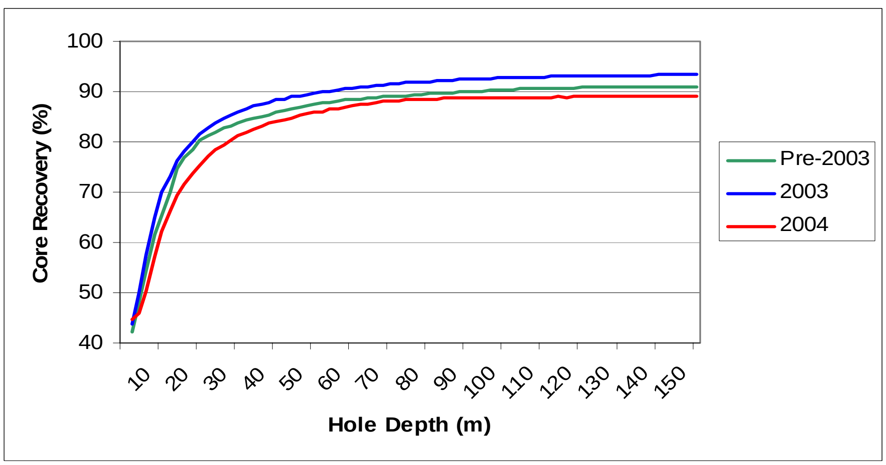


Table 12-2: Subdivided Core Recovery Statistics

Category	Parameter	Below 60% Recovery					Above 60% Recovery				
		Metres	% of Total	Au (g/t)	Std. Dev.	CV	Metres	% of Total	Au (g/t)	Std. Dev.	CV
Distance from Topography	0 to 25m	1,140	14	0.59	2.62	4.46	7,009	86	0.53	1.46	2.77
	25 to 50m	163	2	0.79	1.61	2.03	6,489	98	0.65	2.21	3.42
	50 to 75m	83	2	0.73	1.32	1.81	4,681	98	0.56	1.95	3.46
	75 to 100m	34	1	0.15	0.21	1.45	2,446	99	0.57	1.70	3.00
Distance from Sophie Gulch Fault Zone	+ 20 to 30m	24	4	0.62	1.21	1.94	590	96	0.63	1.22	1.94
	+ 10 to 20m	47	8	0.55	1.21	2.20	540	92	0.66	1.50	2.26
	+ 0 to 10m	89	16	0.39	0.58	1.51	482	84	0.56	1.73	3.08
	- 0 to 10m	59	11	2.98	10.52	3.53	488	89	0.37	0.58	1.57
	-10 to 20m	11	3	2.82	3.26	1.16	405	97	0.55	0.98	1.79
	- 20 to 30m	13	4	0.07	0.14	1.94	319	96	0.25	0.58	2.31
Drilling Campaign	1987 Placer Dome	232	12	0.48	1.47	3.08	1,641	88	0.46	1.70	3.74
	1988 Placer Dome	83	5	0.51	2.35	4.65	1,482	95	0.33	2.32	7.00
	1990 Tenneco	46	19	0.14	0.20	1.43	195	81	0.12	0.42	3.51
	1992 Newmont	6	2	1.09	1.61	1.48	369	98	0.65	1.44	2.21
	1994 Kennecott	36	4	0.42	0.73	1.75	848	96	0.58	1.60	2.74
	1995 Kennecott	87	4	0.31	0.65	2.08	2,269	96	0.47	2.45	5.20
	2002 NovaGold	44	4	1.00	1.55	1.55	1,008	96	0.77	1.97	2.55
	2003 NovaGold-Spring	66	4	0.35	0.39	1.13	1,410	96	0.51	1.85	3.60
	2003 NovaGold-Summer	473	5	0.70	3.49	5.00	9,642	95	0.60	1.67	2.80
	2004 NovaGold	369	9	0.71	1.56	2.20	3,623	91	0.59	1.66	2.80

As the data in the figures and tables above show, the number of intervals with less than 60% core recovery declines with depth. Also, the number of intervals with less than 60% recovery increase with proximity to the Sophie Gulch Fault where gouge and broken rock were noted in drill logs. The 1987 Placer Dome and 1990 Tenneco drilling campaigns seem to have an unusually high percentage of intervals with less than 60% core recovery.

Down-hole variograms were examined by AMEC for various core recovery thresholds in the spring of 2004 (Appendix A-9). It was noted earlier that the nugget effect decreased as core recovery decreased, which suggested that some coarse gold may have been lost in core intervals exhibiting low recovery. It was also noted that the down-hole variogram range increased with core recovery, indicating slightly better spatial correlation with improved core recovery.

In conclusion, AMEC determined that it was appropriate to reject core hole assay intervals with less than 60% recovery. As a result, 1,433 m or 5.7% of the core assay data were excluded from being used to estimate mineral resources.

12.6 Review of Twin Hole Data Selection

Twin holes are often used to compare various drilling/sampling methods and to establish local variability in grade associated with the different methods. At Rock Creek, there is an unprecedented number of twin hole data. Using methods that were established for the July 2004 AMEC report, a total of 132 twin hole comparisons were made. These comparisons included core versus RC, core versus core, and RC versus RC for a variety of historical drilling campaigns that have been completed at Rock Creek. The primary focus of AGC's 2004 core and RC drilling programs was to determine whether previously suspected biases in sample data could be confirmed with best practice drilling and sampling procedures. Triple tube core barrels were used in the 2004 drilling campaign in an attempt to minimize suspected gold loss. The 2004 RC program utilized face discharge hammers and a mud stabilization program to minimize down-hole contamination and ravelling. The 2004 drillholes were sited at a number of previous drillhole locations. Figure 12-6 is a plan map that shows the location of the 30 twin hole drill sites that were examined for this report.

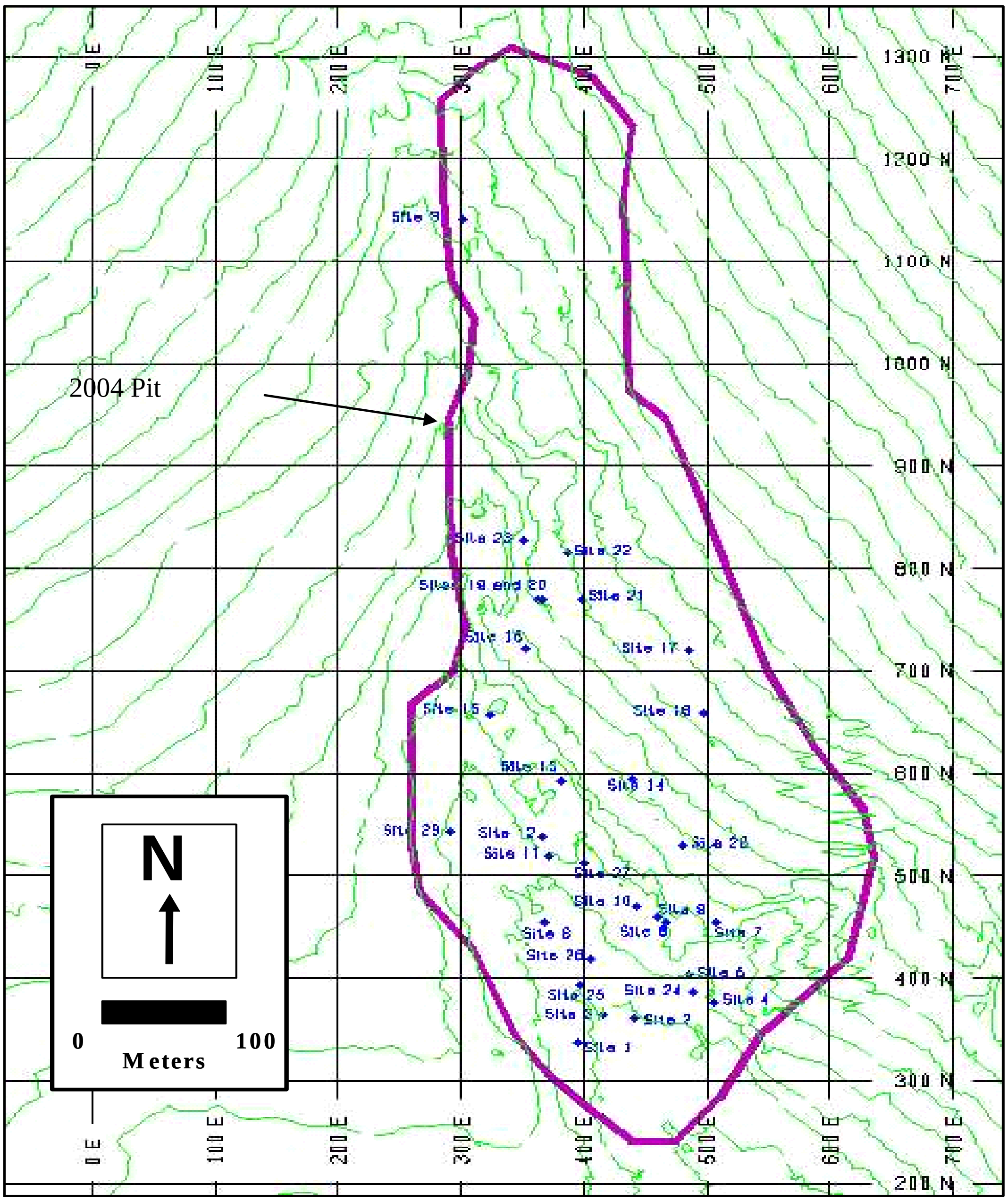
A total of four drillholes were located at most of the twin site locations. This allowed AMEC to create six paired combinations from each of those sites. Forty-one of these twin holes were drilled in 2004 by AGC (21 core and 20 RC holes).

The twin hole pairs were graded (scored) A through F by how well the twin hole grades matched one another. Holes that were scored A tend to have cumulative grade-thickness products with similar slopes. Given the fact that vein intercepts can vary in the down-hole location of two adjacent holes even if they are separated by only a few metres, the correlation of "spikes" in the grade-thickness profiles was not given much weight.

The width of higher-grade zones was considered in the scoring process. Holes that were scored as B-type holes tend to show some divergence in the slopes of the grade-thickness plots. The C scored holes tend to show marked divergence of grade-thickness slopes even in low-grade material. Holes that were scored as D and F show very poor correlation in mineralized zones with large differences in the grade-thickness plots.

Table 12-3 summarizes the drillholes that were examined for each twin hole drill site.

Figure 12-6: Twin Hole Drill Sites [2]



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2 Local Grid is rotated -50 degrees from UTM East (NAD 27) 479443 and UTM North (NAD 27) 7165469 to local grid at 0 East and 0 North.

Table 12-3: Twin Hole Data

Site	Approximate Location			Neighboring Holes			
	East	North	Elev	Hole 1	Hole 2	Hole 3	Hole 4
1	395	337	71	RC-7-006	RKDC03-212	RKDC04-242	RKRC04-040
2	441	361	69	RR-0-03	RKDC03-209	RKDC04-237	RKRC04-023
3	416	364	69	RR-0-02	RKDC03-222	RKDC04-236	RKRC04-024
4	506	377	75	RCE-4-19	RKDC03-208	RKDC04-239	RKRC04-39
5	485	403	74	RR-7-017	RKDC03-206	RKDC04-238	RKRC04-022
6	368	454	73	RC-7-005	RMR-6	RKDC04-241	RKRC04-025
7	508	454	87	RR-0-11	RKDC03-197	RKDC04-240	RKRC04-041
8	466	455	87	RR-8-028	RKDC03-199		
9	460	459	77	RMR-5	RC-7-002	RKDC04-257	RKRC04-047
10	443	470	77	RCC-4-01	RCR-4-22	RKDC04-256	RKRC04-038
11	371	519	79	RC-7-009	RKDC03-203	RKDC04-235	RKRC04-036
12	366	538	80	RR-0-15	RKDC03-202	RKDC04-434	RKRC04-035
13	381	593	83	RC-7-008	RCC-5-20	RKDC04-243	RKRC04-037
14	440	595	96	RR-8-037	RKDC03-195	RKDC04-233	RKRC04-026
15	323	658	89	RKDC03-138	RKDC04-250		
16	498	659	111	RR-8-078	RKDC03-180	RKDC04-232	RKRC04-027
17	486	721	116	RR-0-28	RKDC03-193	RKDC04-231	RKRC04-028
18	353	722	99	RR-0-37	RKDC03-225	RKDC04-245	RKRC04-034
19	363	769	107	RC-7-016	RCC-4-11	RC92-003	
20	366	769	105	RR-8-024	RKDC03-177	RKDC04-244	RKRC04-032
21	398	770	109	RR-0-027	RKDC03-178	RKDC04-248	RKRC04-033
22	386	815	109	RR-0-32	RKDC03-224	RKDC04-247	RKRC04-031
23	350	828	101	RR-8-079	RKDC03-179	RKDC04-246	RKRC04-029
24	488	386	75	RR-9-092	RKDC03-200		
25	369	394	73	RR-7-013	RKDC03-205		
26	406	414	72	RMR-4	RKDC03-204		
27	401	512	80	RR-7-002	RC-07-021		
28	481	530	94	RR-8-090	RKDC03-196		
29	292	543	80	RCR-4-21	RKDC03-201		
30	301	1141	120	RC-8-037	AC92-005		

AMEC created an 11" x 17" plot for each of the 132 twin hole combinations (Appendix A-10). These plots were used to help assess twinned hole data pairs. Each of the plots were divided into the following three areas: (1) a side-by-side bar chart of the down-hole gold grades, (2) a plot of the down-hole horizontal separation between the two holes, and (3) a plot that compares the cumulative grade-thickness product of each hole versus down-hole depth. AMEC made hand notations on some of the plots showing zones of poor core recovery, suspected zones showing down-hole contamination, zones of low downhole CV, etc. Table 12-4 lists the scores that each hole was given after reviewing the twin hole profile plots.

Table 12-4: Twin Hole Scores

Site	Drillhole	Campaign	Rank 1	Rank 2	Rank 3	Final Rank
1	RC-7-006	301	A	A	B+	A
	RKDC03-212	315	A	A	B+	A
	RKDC04-242	316	A	A	A	A
	RKRC04-040	516	A	B+	B+	B
2	RR-0-03	512	A	B	A	A
	RKDC03-209	315	A	A	A	A
	RKDCO4-237	316	A	B	A	A
	RKRC04-023	516	A	A	A	A
3	RR-0-02	512	A	A	B	A
	RKDC03-222	315	A	A	B	A
	RKDC04-236	316	A	A	B	A
	RKRC04-024	516	B	B	B	B
4	RCR-4-19	506	B	C	A	B
	RKDC03-208	315	B	A	A	A
	RKDC04-239	316	A	C	C	C
	RKRC04-039	516	C	A	A	A
5	RR-7-017	501	A	C	A	A
	RKDC03-206	315	A	A	A	A
	RKDC04-238	316	A	C	B-	B
	RKRC04-022	516	B-	A	A	A
6	RC-7-005	301	A	A-	A	A
	RMR-6	511	A	A	A	A
	RKDC04-241	316	A-	A	A	A
	RKRC-4-025	516	A	A	A	A
7	RR-0-11	512	B+	B	B	B
	RKDC03-197	315	B+	A	A	A
	RKDC04-240	316	A	B	A	A
	RKRC04-041	516	A	A	B	A
8	RR-8-028	502	F			F
	RKDC03-199	315	F			F
9	RMR-5	511	B	A	A	A
	RC-7-002	301	B	A	C	B
	RKDC04-257	316	A	A	A	A
	RKRC04-047	516	A	C	A	A
10	RCC-4-01	306	A	A	A	A
	RCR-4-22	506	A	A	B	A
	RKDC04-256	316	A	A	B	A
	RKRC04-0438	516	B	A	B	B
11	RC-7-009	301	A	B+	A	A
	RKDC03-203	315	A	A	A	A
	RKDC04-235	316	A	B+	A	A
	RKRC04-036	516	A	A	A	A
12	RR-0-15	512	B	B	A-	B
	RKDC03-202	315	B	A	A	A
	RKDC04-234	316	A	B	A	A
	RKRC04-035	516	A	A	A-	A
13	RC-7-008	301	B+	B+	C	B
	RCC-5-20	307	B+	A	B+	B
	RKDC04-243	316	B+	A	B+	B
	RKRC04-037	516	B+	C	B+	B

Site	Drillhole	Campaign	Rank 1	Rank 2	Rank 3	Final Rank
14	RR-8-037	502	A	A	A	A
	RKDC03-195	315	A	A	C	A
	RKDC04-233	316	A	A	C	A
	RKRC04-026	516	C	C	A	C
15	RKDC03-138	315	B			B
	RKDC04-250	316	B			B
16	RR-8-078	502	B	B	B	B
	RKDC03-180	315	B	A	A	A
	RKDC04-232	316	A	B	B+	B
	RKRC04-027	516	B+	A	B	B
17	RR-0-28	512	A	B+	A	A
	RKDC03-193	315	A	A	B+	A
	RKDC04-231	316	A	B+	A	A
	RKRC04-028	516	A	B+	A	A
18	RR-0-37	512	A	A	A	A
	RKDC03-225	315	A	A	A	A
	RKDC04-245	316	A	A	A	A
	RKRC04-034	516	A	A	A	A
19	RC-7-016	301	A	A		A
	RCC-4-11	306	A	A		A
	RC92-003	305	A	A		A
20	RR-8-024	502	A-	A	A	A
	RKDC03-177	315	A-	A-	A	A
	TKFV04-244	316	A-	A	A-	A
	RKRC04-032	516	A-	A	A	A
21	RR-8-027	502	B	C+	A-	B
	RKDC03-178	315	B	B-	A	B
	RKDC04-248	316	B-	C+	B	B
	RKRC04-033	516	B	A	A-	A
22	RR-0-32	512	A	C	B+	B
	RKDC03-224	315	A	B	A	A
	RKDC04-247	316	B	C	C	C
	RKRC04-031	516	C	A	B+	B
23	RR-8-079	502	A	A	B	A
	RKDC03-179	315	A	A	B	A
	RKDC04-246	316	A	A	A	A
	RKRC04-029	516	A	B	B	B
24	RR-9-092	503	D			D
	RKDC03-200	315	D			D
25	RR-7-013	501	C			C
	RKDC03-205	315	C			C
26	RMR-4	511	A-			A
	RKDC03-204	315	A-			A
27	RR-7-002	501	C			C
	RC-7-021	301	C			C
28	RR-8-090	502	B			B
	RKDC03-196	315	B			B
29	RCR-4-21	506	D			D
	RKDC03-201	315	D			D
30	RC-8-037	302	A			A
	AC92-005	305	A			A

Each hole received up to four different scores depending on how it compared with each of its neighbouring twins. A final score was given to each hole based on the majority of all scores. The scored twin drillhole data were compared in a series of quantile-quantile (Q-Q) plots and provided a benchmark as to how different sampling methods (i.e. core versus RC) compared on a campaign-by-campaign basis. These benchmark comparisons from the scored twin hole data were used to validate various adjustment factors that were developed for the entire RC data set.

12.7 Downhole Coefficient of Variation

There are several different methods of detecting or flagging contaminated intervals in RC drillholes. The method of testing for cyclicity is a good check for ravelling of mineralized material down the drillhole during rod changes. Some companies try to use downhole variograms to detect this cyclicity. Decay analysis helps to detect asymmetric grade profiles near high grade gold spikes. AMEC attempted to use downhole correlograms, but could not see clear evidence of differences when looking at clearly contaminated holes (RR-8-028, grade = F) versus holes that correspond well with their twin.

Figure 12-7 through Figure 12-9 contains the mean versus CV plots for drillholes in groups A, B and C respectively. The "A" drillholes tended to have higher CVs. Realizing this general trend in mean versus CV for drillholes by group[3], it was decided to try using the CV to flag suspicious intervals.

AMEC measured the CV within drillholes so that portions of drillholes could be flagged as being suspicious. This would allow resource modellers to use the CV-flagged intervals as a guide for problem areas when looking through sections for problem areas. Runs of ten samples (15 m) were used for calculating means and CVs within RC holes. This provided a better definition than whole drill-hole CVs, while still using enough data to identify less variable zones. Figure 12-10 shows the result of these calculations for the twin holes. Only Figure 12-11 showing the results for all holes. The pattern of points is very similar to that shown in Figure 12-10. The twin hole RC data are representative of the entire database. A line was fitted so that nearly all the "A" scored drillhole values were above it. A closer examination shows most of the points below the line were graded C, D, and F. This procedure provides a way of flagging some of the worst ranked sections of holes for later review. Intervals were highlighted on sections. These low CV areas were considered with other available data, and a

3 Where contamination occurs, there is mixing of material in the sample from uphole intervals. This tends to reduce the CV. Some cognizance of local grade must be taken. In the vicinity of "nuggety" gold, the CV will increase.

consistent method of rejection was employed. AMEC and AGC personnel agreed to all rejected intervals.

Figure 12-7: Group A, CV vs Mean Gold

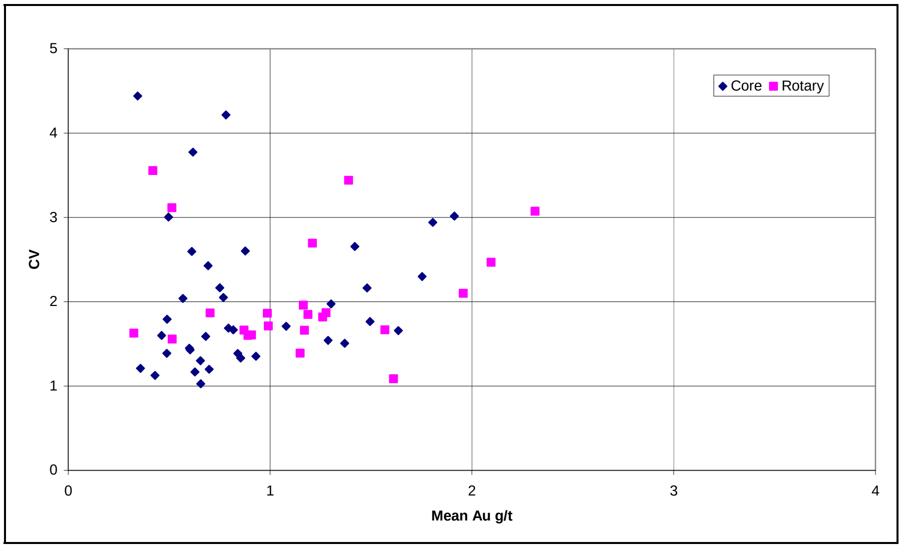


Figure 12-8: Group B, CV vs Mean gold

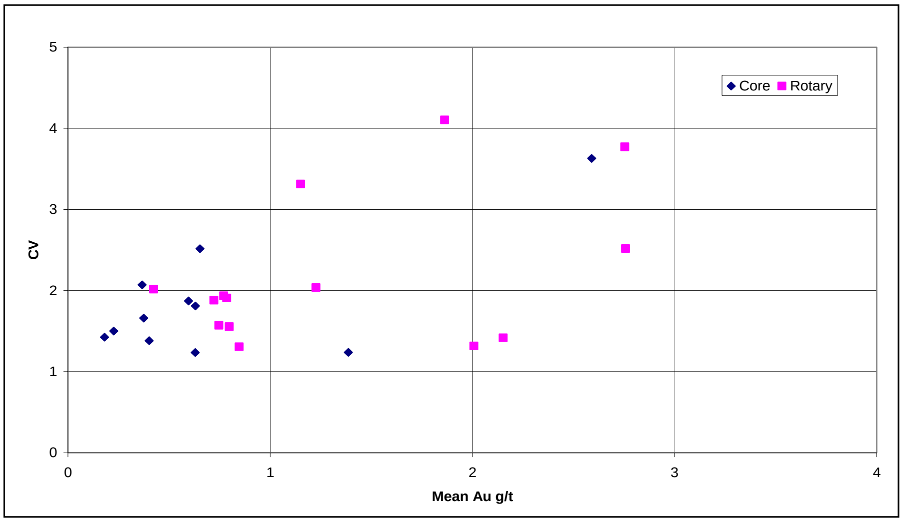


Figure 12-9: Group C, CV vs. Mean Gold

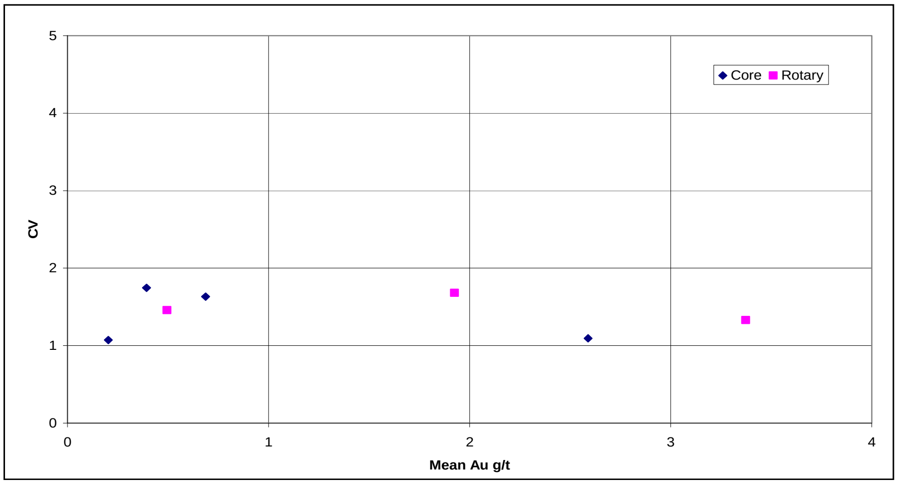


Figure 12-10: CV vs. Mean Gold-Twin Holes

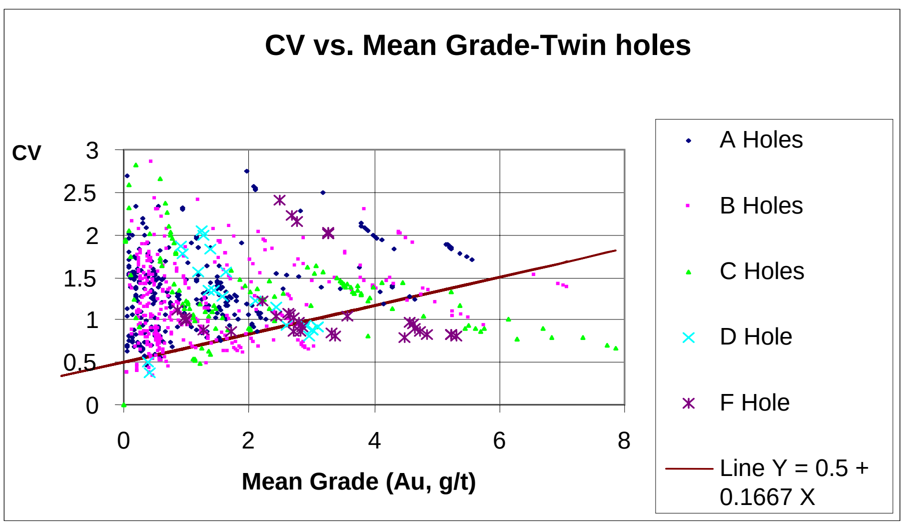
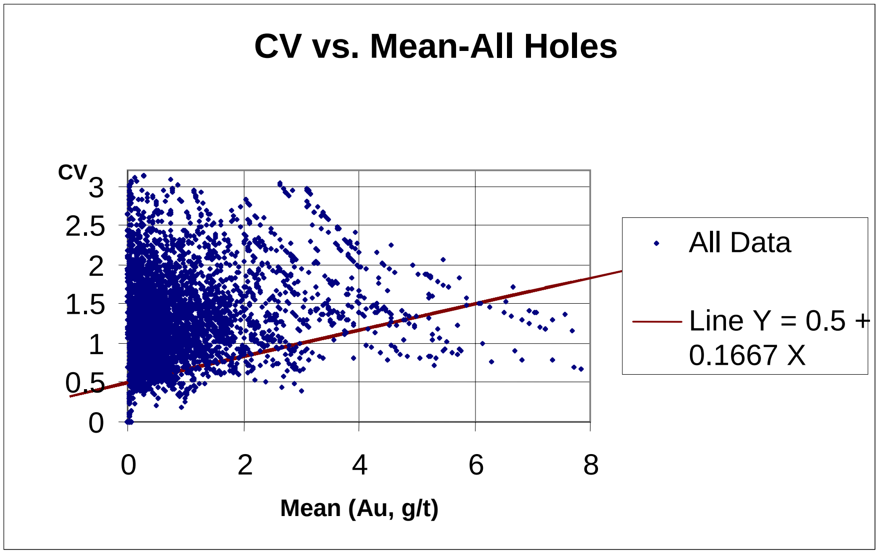


Figure 12-11: CV vs. Mean- All Holes



Appendix A-11 contains a list of RC rejected intervals. Previously prepared notes by Stan Dodd and Stephen Blower are included; these were considered, but in four instances were over-ridden where new drilling supports the RC grade.

The rejection performed here is designed to eliminate clearly suspicious samples. There is still residual bias between the RC and diamond drillhole (DDH) drilling methods.

12.8 Trenching

Trenches appear to have been cut with a backhoe excavator, and are approximately 2 m wide and 4 m deep. The length of the trenches is several hundred metres. The primary objective of the trenches was to sample the tension shear veins.

The decomposed rock underneath the soil in the trench walls, which was reddish brown iron oxide, was viewed for up to several metres. Panning of this material produced gold flecks, and AGC confirmed that anomalous gold grades do occur in this material. Therefore, recovery of this material in drilling should be recognized.

It is easy to see how gold in oxidised rock could be lost using the conventional coring process in oxidized rock as the fine-grained iron oxide might not be totally recovered.

The rock near the bottom of the trenches appeared solid. It will be difficult to argue gold loss in the coring process below depths of 5 m.

The trench maps should be analyzed in detail. It is possible that the veins can be selectively mined, reducing dilution. With good sampling and pit mapping, the 10 X 10 X 5 m selective mining unit (SMU) now used could be reduced to perhaps 10 X 5 X 5 m. This would require angle RC grade-control drilling on 6 m spacing and use of hydraulic excavators for mining.

12.9 Sludge Sample Examination

AGC collected and analyzed sludge samples from most 2004 core holes. AGC had not intended to use these samples for quantitative analysis or comparison to core samples (John Odden, pers. comm.). A bucket was placed at the collar of the core hole to capture rock debris laden drilling fluid. The drilling fluid and suspended rock was allowed to cascade into and out of the collection bucket; the material remaining in the bucket at the end of the drilling run was labelled and retained as the sludge sample.

AMEC attempted to compare sludge samples to core samples to determine if alleged gold loss in core samples could be discerned and measured. Unfortunately, any gold loss would be indistinguishable from the other sources of gold in the sludge samples, gold liberated by the drill bit in the process of coring, and gold from the wall of the core hole. The volume of the sludge sample and the method of collection do not provide a credible comparison to core. AMEC created plots of all sludge samples versus core samples for holes with both samples. In general, the sludge samples confirm the presence and absence, but not the amount of gold assayed in core samples.

13.0 SAMPLE PREPARATION, ANALYSES, AND SECURITY

13.1 Laboratory Sample Procedures

Appendix A-3 provides a summary of laboratory sampling procedures used at Rock Creek since 1987. During the earlier years (1987-1990), some of the basic procedures have limited detail. The Rock Creek deposit has used mostly Bondar Clegg and ALS Chemex for all analytical procedures except for 1988, when Placer Dome used the Placer Dome Technical Center for both core and RC sample assaying. There is no mention of the laboratory certification in the reviewed documentation, although most assay laboratories since the early 2000s need certification to be competitive.

On September 20, 2004, Arne Bakke CPG, former Chief Geologist for Fairbanks Gold and Kinross, made a site visit to ALS Chemex in Fairbanks Alaska to observe and comment on the sample preparation procedures that were performed on the Rock Creek samples (see Appendix A-7). His conclusions from the visit were that NovaGold is receiving quality sample preparation from ALS Chemex in Fairbanks.

On September 22, 2004, Steven Blower, P. Geo with AMEC, made a site visit to ALS Chemex's laboratory in Vancouver to review the metallic screen sample preparation procedures for the Rock Creek Project (see Appendix A-7).

The initial sample preparation was performed in the ALS Chemex lab in Fairbanks and flown to Seattle and then trucked to the Vancouver Chemex lab. The samples arrived in Vancouver in multiples of 20 and each set was processed as one work order to ensure that standard reference material (SRM) controlled sets flow through the laboratory as a group. Steven Blower's conclusions were that the metallic screen procedures being used for NovaGold met or exceeded standard industry practices.

In January, 2005, Scott D. Long, P. Geo, with AMEC, performed a review of QA/QC samples that were assayed during the field seasons of 2003 and 2004.

The 2003 to 2004 Rock Creek resource drilling programs include 10,331 assay results from 186 drillholes. There are 8,778 assayed intervals; the other 1,553 assay results are related to quality control, including duplicates, inserted standards and blanks (see Appendix A-5).

A tally of Quality Control assays is shown in Table 13-1.

Table 13-1: Assay Quality Control Samples

		2003 Summer			2004 Summer	
	Sample Type					
	# Holes	% of Total	# holes	N	% of Total	# Holes
Routine Samples	5,106	85	94	3672	85	89
Duplicates	302	5	94	218	5	89
Field Blanks	301	5	94	218	5	89
Std-2Pa	160	3	71			
Std-7Pa	140	2	68	41	1	40
Std-15Pz				84	2	69
Std-50P				93	2	73
Other				3	0.1	3
Total	**6,009**			**4,329**		

There are 302 assay certificates associated with the 2003 campaign, of which 300 include a field blank, 298 include at least one standard reference material, and 301 include at least one blind duplicate sample.

There are 218 assay certificates associated with the 2004 campaign, of which 216 include a field blank, 216 include at least one standard reference material, and 216 include at least one blind duplicate sample.

Quality control coverage is extensive and adequate to the needs of evaluating assay quality for use in resource models.

13.2 SGS Check Assay Program Results

For a detailed review of QA/QC results from the 2003 to 2004 program, see Appendix A-5.

Accuracy has been monitored by inserted geostatistical standards, blanks, and check assays. These indicate that the ALS Chemex results have a low bias, possibly due to episodic gold losses. The estimated overall low bias averages less than five percent and is therefore acceptably accurate for resource modeling.

Precision is consistent with samples that have a sizable "nugget effect". The effect is seen in duplicate splits of the coarse reject duplicate and in the duplicate and triplicate samples of the minus fraction of the screen fire assays. Additional assays of aliquots of the minus fraction could provide marginal improvements to precision, in cases where the duplicate or triplicate assays show high variability. Some marginal improvement might also be gained in the few cases where the plus fraction is anomalously low in mass but high in grade, as these samples may have undergone over-grinding or gold loss. While this might provide some slight improvement, the number of samples involved is too small to likely influence global resource estimates.

At AMEC's request, AGC submitted 77 samples of 10 mesh coarse sample reject to SGS Lakefield in Canada for check screen fire assays. An analysis of the results is provided in Appendix A-5. These samples come from the 2004 drilling campaign.

A list of samples for check assaying was performed through a semi-random selection from the deposit ore zones. No original assay criterion was used in the selection process; thus the selected samples span a wide grade range and should be considered representative of those samples within mineralized drilling intercepts or down-hole drilling composites likely to be classified as ore grade. In order to obtain wide geographic coverage, the number of samples randomly selected per drillhole was restricted.

Approximately 100 samples were requested. Chemex Laboratories in Fairbanks was unable to locate some of the samples in their sample storage. A few additional samples that were recorded as shipped are absent from the SGS check assay results. A total of 77 drill samples were included in the final submission, plus some control samples including blanks and duplicates. In three cases SGS received samples weighing more than 7 kg, and these three samples were split into "A" and "B" fractions that were then assayed as two separate samples. Thus the submission includes 74 unique drill samples. The selection covers a total of 53 drillholes. There are 90 drillholes from the 2004 drilling campaign in the resource area.

The SGS check assays returned slightly higher gold results compared to the original Chemex results, with an estimated relative bias of approximately nine percent (9%). The relative bias is likely either caused by a high bias in the SGS results, a low bias in the Chemex results, or a combination of these. The standard reference material (SRM) that was inserted in the SGS sample submission appear to have probable misidentification or misstatement of best values for some samples; hence they cannot be used with confidence to estimate an absolute bias to the SGS results.

One possible explanation for a low bias at Chemex, if it exists, is the increased grinding samples underwent at Chemex, where samples were more intensely ground in order to maintain a small oversize fraction. Intense grinding can in some cases lead to gold losses as gold plates out on pulverizer surfaces. Such losses might reveal themselves in elevated gold in sample blanks. Such losses would not be uniform, but would tend to occur in samples that have large malleable gold-bearing particles.

AMEC recommends conducting sampling studies to confirm and determine the source of gold loss during sample preparation.

The Chemex results appear to provide gold results that have little risk of over-estimating gold grades.

In the opinion of AMEC, the QA/QC results demonstrate that the Rock Creek project assay database is sufficiently accurate and precise for resource estimation

13.3 Review of Sampling Quality

Appendix A-3 provides a description of Rock Creek sampling and assay methods, prepared by John Odden and Stan Dodd of AGC. Appendix A-4 provides a report prepared halfway through the 2003 field season by Steven Blower of AMEC. Appendix A-5, prepared by Steven Blower and Scott Long of AMEC, provides comments on QA/QC for assaying most of the latter half of the 2003 campaign and the 2004 campaign. Finally, AMEC has inserted Appendix A-7, which contains laboratory and sample preparation facility inspections by other Qualified Persons.

A summary of these works and comments are as follows:

- Details for the Placer-Dome and Tenneco programs are incomplete. In general, small samples of a few hundred grams were taken for pulverization. Kennecott and Newmont took larger samples, as did AGC from 2002. Most protocols used metallic screen re-assays to replace any initial fire assay on 30 g to 50 g aliquots grading over 1 g/t. In 2003 and 2004, the 315 and 316 campaigns split and pulverized a 4 kg sample with 100% metallic screen assaying.
- Steven Blower's work led to increasing the sample size and to 100% metallic screen assaying. A subsequent analysis of the RC data has been made using the twin information in January to February 2004.
- There was a concern that some of the intervals with low-grade fire assays that were not selected for metallic screen assay would return higher values if they had indeed been subjected to the more accurate metallic screen assay process. Scott Long concluded that any such bias (termed selection bias) would likely be small, less than 11%, and re-assaying old pulps not already assayed by metallic screen assays using the metallic screen assay technique was not warranted. This conclusion was based on a statistical analysis of limited duplicate data.

14.0 DATA VERIFICATION

14.1 Drillhole Survey Check

In October, 2004, R. Scott McClintock, PLS, was asked to re-survey drillhole locations that have been included in the resource estimation (see Appendix A-2). A total of 84 drillholes were completed in this survey with an Ashtech Z-Surveyor, dual-frequency GPS. Of the 84 holes surveyed, Scott McClintock commented that five had locations that were in question, meaning that the surveyor was not sure if he had found the actual hole location. There is no documentation as to why the locations were in question. Also, there is no documentation as to how accurate these survey co-ordinates are, as compared to the original co-ordinates of these drillholes. AMEC recommends that these holes be compared to the original survey co-ordinates to verify their location.

14.2 Database Check

Appendix A-6, supplied by Susan Lomas, Principal Geologist with AMEC summarizes the database checks completed by AMEC dated January 8, 2004.

The initial check of the database centered on the 2003 drilling program that included 126 drillholes and approximately 8,800 samples, including all QA/QA data. A total of nine holes, chosen at random, were checked against all original sources including collar location, downhole survey, assay results, sample intervals, lithology code and intervals, RQD and density data. The data were found to be of excellent quality with only one data entry error.

Another check was a comparison of the pre-2003 data in a MineSight export file to the original database previously audited by AMEC. The following discrepancies were found:

- A total of 279 sample assays from the 2003 database were not the same as were in the 2002 database
- Novagold personnel overwrote 235 of the assay results, as per AMEC's recommendations after the metallic assays were located
- Another 43 assays were overwritten from the 2002 database after locating the original assay certificates

- A total of 17 sample intervals that did not match the two databases, which were subsequently corrected by NovaGold personnel
- A total of 57 sample intervals were in the 2003 export file, but not in the 2002 export file. Also, there were 37 samples in the 2002 export file but not in the 2003 export file. AMEC recommends that NovaGold determine why these discrepancies exist in the export files.

The review of the databases identified a small number of problems, mostly related to substitution of one assay for another. It would be useful to perform a 100% check of pre-2003 data and identify the appropriate assay certificates considered to furnish "final" values for each sample interval. The QA/QC data must also be compiled in an organized group of datasets. A summary document on all QA/QC programs should be prepared. This may affect final resource classification. AMEC concludes that the assay and survey database transferred to AMEC is sufficiently free of error to be adequate for resource estimation.

15.0 ADJACENT PROPERTIES

15.1 Big Hurrah Deposit

The Big Hurrah deposit is located on the Seward Peninsula along the west coast of Alaska, north of Norton Sound. The project area lies about 80 km east of Nome and is accessed via state maintained roads.

The terrain is fairly hilly with narrow valleys. Vegetation at the site consists mainly of low shrubs and grasses. Forested areas and trees are non-existent in the project area.

There currently are no unusual social, political or environmental encumbrances to exploration, development or production on the prospect.

Norwest Corporation ("Norwest") was engaged in conjunction with Resource Modeling, Inc. ("RMI") by NovaGold to construct a resource model for the Big Hurrah deposit in conjunction with the Rock Creek Project updated economic review study. AMEC has had no involvement in the Big Hurrah deposit and is only reporting the published information available and therefore assumes no responsibility for the validity of the data. AMEC has been unable to verify the information pertaining to the Big Hurrah deposit and such information is not indicative of the mineralization on the Rock Creek project.

Mineralization in the Big Hurrah deposit occurs mainly in steeply dipping fissure zones that range from one to fifteen metres wide. Additional mineralization is present in low angle or bedded units in proximity to high angle structures. At the intersection of low and high angle structures the zone of mineralization may expand considerably.

Sectional polygons of mineralization based on drillhole logging of shearing, stock work, quartz veining, and gold grade were used to construct five distinct three-dimensional units. The units trend north-south (relative to the rotated mine grid) and have varying thicknesses and dip angles in the cross strike direction. Most of the units or zones are between 5 m and 15 m thick. All of the zones dip to the west (mine grid) except Zone 4, which dips steeply to the east (mine grid).

The five mineral zones were intersected with the northeast (mine grid) trending Hurrah and West Hill faults located at the south and north ends of the mineralized shear zones, respectively. The shear zone shapes were clipped with the faults so that the zones did not extend south of the Hurrah or north of the West Hill faults. The five main mineral zones used to constrain grade estimation are shown in a perspective view in Figure 15-1. A sixth zone labelled as 99 is made up of all material in the model falling outside of these five mineral zones. Very little "ore" grade mineralization occurs in Zone 99, and its estimated resources are classified as Inferred resources.

A large majority of the sample data used to estimate resources in the Big Hurrah deposit comes from core drilling. There are some trench samples and reverse circulation drillholes. A small number of intervals from reverse circulation drilling that appear to be contaminated with gold from further up the hole are not included in the estimation process. Based on an analysis of the frequency distribution of the sample gold values and the spatial continuity of higher grades, a cap value of 70 g/t was applied to samples. The 16 composite samples with grades greater than 32 g/t after the cap was applied to individual samples were allowed to influence grade estimates only in the block where they occurred. Estimated resources in total and by zone are given in Table 15-1.

Figure 15-1: Big Hurrah Mineral Zone Perspective

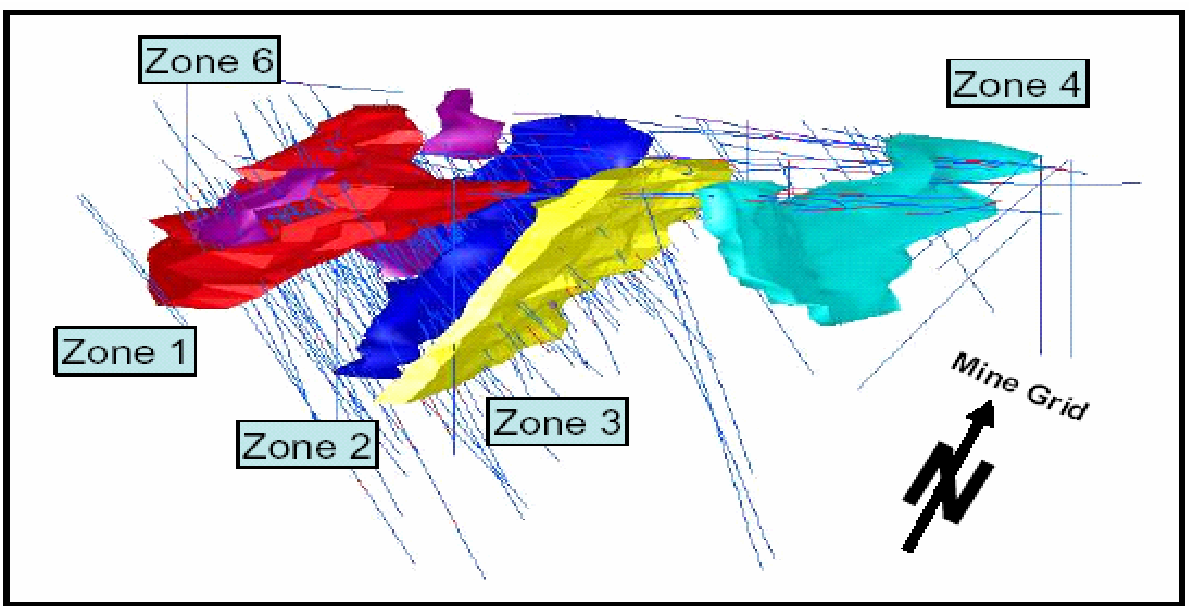


Table 15-1: Big Hurrah Mineral Resource

Au Cutoff (g/t)	Indicated Mineral Resources			Inferred Mineral Resources		
	Tonnes ('000)	Au (g/t)	Au ('000 oz)	Tonnes ('000)	Au (g/t)	Au ('000 oz)
0.5	1,661	3.51	187	1,305	1.65	69
1.0	1,307	4.26	179	667	2.57	55

1.5	1,062	4.96	169	427	3.33	46
2.0	882	5.62	159	289	4.10	38

16.0 MINERAL PROCESSING AND METALLURGICAL TESTING

16.1 Ore Types

The main Rock Creek ore body consists of two distinct mineralization types, Albion shear veins and tension vein ores. The Albion shear veins are best described as sheared quartz vein breccias with crushed and broken material in the shear. The tension veins are tensional quartz veins and stockwork adjacent to the shear veins. The Albion veins contain fine-grained sulfides and sulfosalts, while the tension veins have a relatively simple mineralogy of quartz, iron carbonates, sulfides and free gold. The Albion material is the most difficult ore type present at Rock Creek and drives the process scenario required at Rock Creek.

During the course of this study, the Big Hurrah satellite deposit was reviewed and brought into the overall suite of ores that would be processed at the Rock Creek facility. The host rocks for mineralization at Big Hurrah are carbonaceous metamorphic rocks of the Nome Schist Group. Gold occurs primarily in its native state and is found in quartz veins encased in northwest striking and moderately southwest dipping thrust fault zones.

In all of the ore types previously discussed, the vast majority of the gold present exists as free gold and is not refractory.

The term "ore" in the context of this section, implies material delivered to a mill for processing and does not imply economic extraction or recovery.

16.2 Metallurgical Test Work

This section has been summarized from the report submitted by Norwest Corporation (2004), as AMEC was not involved in any metallurgical testwork conducted on the Rock Creek ore and has not reviewed any of the results. Therefore, AMEC accepts no responsibility of the validity of these results.

Metallurgical testwork on Rock Creek ore includes:

- Newmont Mining Company indicated greater than 80% of gold reports to a gravity concentrate with a 48 mesh grind.
- Placer Dome Corporation testwork indicated 92% and 93% recovery with cyanidation and flotation respectively. Surface samples for both of these studies were taken from the sheeted (tension) vein area.

- AGC completed a series of additional bench and pilot-scale metallurgical tests. The two main mineralization types were tested: Albion shear veins and tension veins. This test work showed recoveries for this material averaged 90.7% overall using cyanide, with 37.4% of the gold reporting to a gravity concentrate using a 65-mesh grind (P80 65M).
- Earlier testwork (date not available) performed by McClelland Laboratories Incorporated in Reno, Nevada, focused on treating the whole ore with cyanidation and gravity followed by whole-ore cyanide leaching of the gravity tails. This work clearly indicated that the Rock Creek ores were amenable to gravity and cyanide leaching.
- The most recent test-work program focused on obtaining sufficient test work data to develop a process flow sheet that would have the highest financial return for Rock Creek ores. Big Hurrah ores were also sampled and tested in this program, as AGC plans to mill this ore at the Rock Creek mill facilities.
- High power costs in Nome, coupled with high freight costs directed the testing program to examine minimized grinding requirements and reagent needs. A test work flow sheet was developed to focus on a coarse grind gravity and flash flotation circuit that would be followed by on-site concentrate treatment. The concentrate treatment test work focused on methods to remove the gold from the concentrates in order to produce a doré product suitable for shipment to a precious metals refinery. This most recent program was performed by Process Research Associates in Vancouver, British Columbia, and Resource Development Inc. in Wheat Ridge, Colourado.
- Test work on all ore types show a high recovery can be obtained by using a combination of gravity concentration and flash flotation. The gravity middlings and the flotation concentrate can then be effectively leached using a weak cyanide solution in a 40% to 50% solids slurry. Due to the presence of organic carbon in the Big Hurrah ore, the cyanide leaching for this ore type was observed to give highest recovery when leaching occurred in the presence of activated carbon.

Table 16.1 summarizes the results of the test work performed on the three ore types when the gravity-flotation-cyanide leach circuit was utilized.

Table 16-1: Gold Recovery by Designated Metallurgical Process at a P80 of 212 microns (Norwest Corp, 2004)

Ore Type	Gravity Gold Recovery	Flotation Gold Recovery	Leach Gold Recovery	Combined Process Gold Recovery
Tension Vein	93.0	71.6	74.9	96.8
Albion Shear	54.5	55.5	87.3	76.5
Big Hurrah	75.8	38.4	92.4	84.4

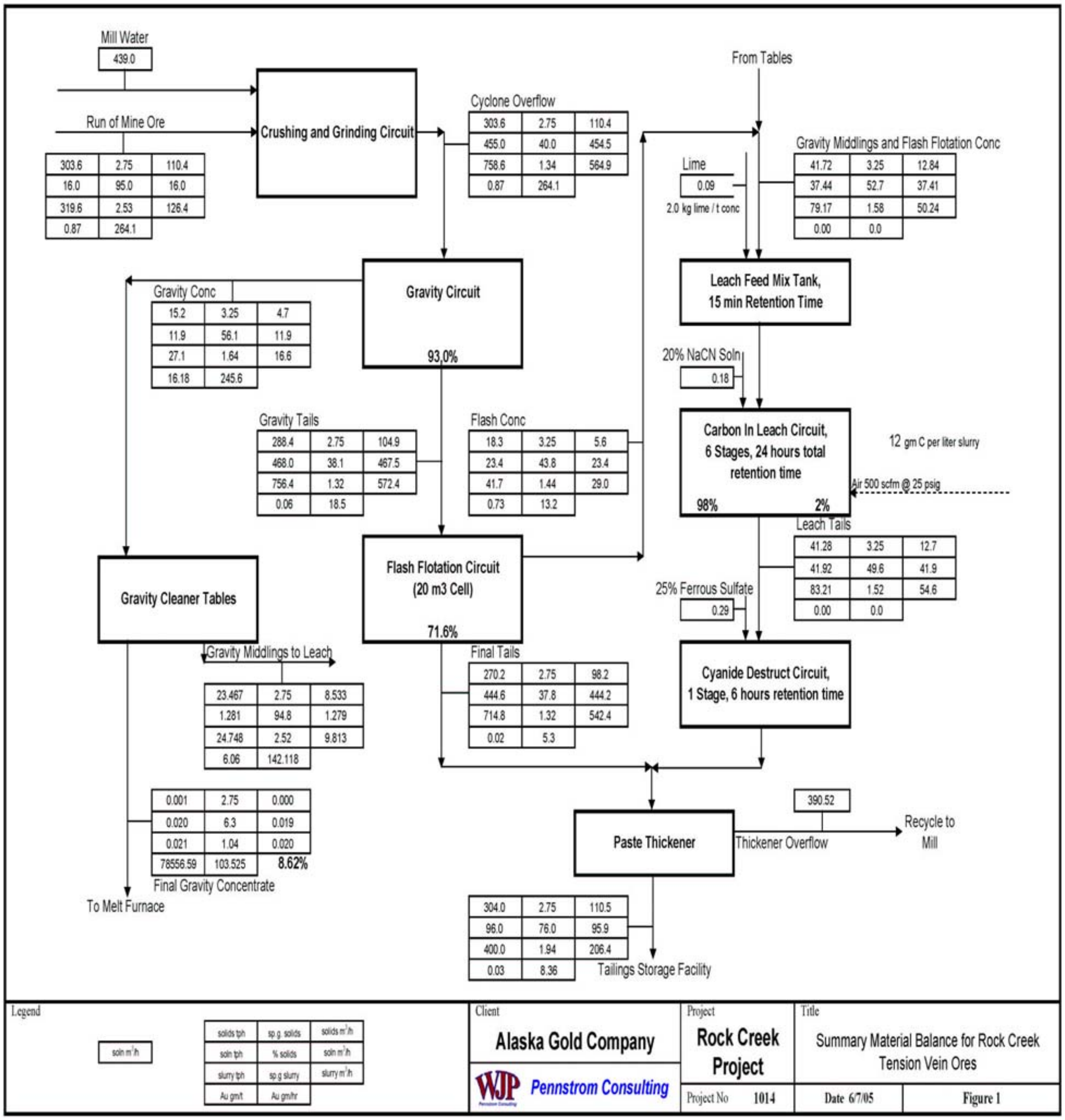
Gold recovery was found to be optimal on the tension vein material at a grind of 212 microns. Since the tension vein material makes up approximately 75% of the ores treated at Rock Creek, this became the target grind for future test work. However, test work results on the Albion shear zone ore, were slightly lower than predicted at this target grind. Gold recoveries for the Albion shear zone material responded well at 212 micron, but were somewhat improved at finer grinds (81.5% versus 76.5% recovery).

16.3 Ore Processing

Early in the design phase of the project, an economic analysis was performed to determine the optimum milling rate (throughput) at Rock Creek. This study was performed knowing that a second study would likely be necessary at or near the conclusion of the feasibility study, when more accurate mining and metallurgical data became available. This initial study had a throughput rate of 7,000 t/d, which optimized the economics of the project. The throughput rate appeared to be more a function of the average head grade, than any other parameter.

Since tension vein ores are the majority of the ores processed at Rock Creek, and since gold recovery was found to be optimal on the tension vein material at a grind of 212 microns, the proposed process plant designed for the initial study was set to meet this target grind. This target grind also minimizes the power requirements for grinding. The process plant includes a gravity circuit to capture coarse gold, flash flotation cells to capture the finer gold, and a concentrate leach circuit to produce a doré bar on site. A simplified flow sheet and material balance depicting the proposed process is shown in Figure 16-1. The goal of minimizing reagent consumption is met by designing the process to only leach the concentrates, which constitute approximately 15% of the total ore stream.

Figure 16-1: Process Flow Diagram



17.0 MINERAL RESOURCE AND MINERAL RESERVE ESTIMATES

17.1 Gold Model Definition

The mineral resource estimate for the Rock Creek deposit was completed under the direction of Dr. Harry Parker, P. Geo. The estimates were made from 3D block models utilizing commercial mine planning software (MineSight®). Block size for the resource model was 10 m north-south x 5 m east-west x 5 m elevation.

The Rock Creek model is oriented parallel to a local mine grid coordinate system that is in turn oriented along the strike of the Rock Creek shear zones. Table 17-1 summarizes the limits and block dimensions of the resource model.

Table 17-1: Resource Model Limits

Parameter	Min	Max	Extent (m)	Size (m)	Number
Easting	0	1000	1000	5	200
Northing	-100	1500	1600	10	160
Elevation	-100	200	300	5	60

Aerial topography coordinates were obtained in UTM (NAD 83) units. These coordinates and all other project data are rotated and translated into the mine grid using the following equations:

- Local Easting: UTM Easting – 479443 * COS(-50°) rotation + UTM Northing – 7165469 * SIN(-50°)
- Local Northing: UTM Northing – 7165469 * COS(-50°) rotation - UTM Easting – 479443 * SIN(-50°)

17.2 Drill-Hole Data Preparation

A number of RC sample intervals were previously identified by AMEC as being potentially contaminated, and the intervals were rejected for use in estimating mineral resources. All of these rejected intervals were compared with AGC's 2004 core hole data. Some of the initially rejected intervals were supported by core data and subsequently taken off the rejection list. The final pre-2004 RC rejected samples are listed in an ASCII file named dat202.rj1 and are summarized in Appendix A-11. Some 2004 AGC RC samples were rejected by AMEC based on low down-hole CVs and either low or heavy sample weights. These rejected intervals are listed in an ASCII file called dat202.rj2 and are summarized in Appendix E-1. An integer code of 9 was written to the assay variable REJEC for all RC intervals that were rejected. Core-hole intervals having a recovery less than 60% were rejected because it is the opinion of AMEC that assays from these intervals are not representative.

The raw assay gold grade variable AUORG was copied to a spare variable named AUREJ. The AUREJ variable was then set to -1.000 for all RC intervals that were rejected (i.e. REJEC = 9) and all low core recovery intervals.

The gold assay variable AUREJ was then copied to two other grade variables, AUAJ1 and AUAJ2. RC gold grade formulas were applied to the variable AUAJ1 based upon their drilling campaign code. Positive grade adjustments were made to the variable AUAJ2 for various core campaigns. The adjustments are explained in Section 17.12.

The raw drillhole data were coded with different Mineral Zone, bedrock, and fault surfaces. Table 17-2 summarizes key MineSight® wireframes that were used for coding assay, composite, and block model items.

Table 17-2: MineSight® Geologic Objects

Assay, Composite, Model Variable	MineSight Object Name	Assay, Composite, Model Code	Description
MINZN	Zone 1 Solid	1	Mineral Zone 1
	Zone 2 Solid	2	Mineral Zone 2
	Zone 3 Solid	3	Mineral Zone 3
	Albon Solid	10	Mineral Zone 4
BRDPT	BR-000-025	1	0-25m below bedrock surface
	BR-025-050	2	25-50m below bedrock surface
	BR-050-075	3	50-75m below bedrock surface
	BR-075-100	4	75-100m below bedrock surface
SGFLT	SG1	1	0-10m above Sophine Gulch Fault
	SG2	2	10-20m above Sophine Gulch Fault
	SG3	3	20-30m above Sophine Gulch Fault
	SG4	4	0-10m below Sophine Gulch Fault
	SG5	5	10-20m below Sophine Gulch Fault
	SG6	6	20-30m below Sophine Gulch Fault

Drillhole assays (AUORG, AUREJ, AUAJ1, AUAJ2) were composited into 5 m down-hole fixed-length composites. After the composites were created, they were coded with the Mineral Zone, bedrock depth, and Sophie Gulch Fault wireframes named in Table 17-2. A 50% majority rule was used in coding the composites.

17.3 Unadjusted Assay Statistics

Basic descriptive statistics are summarized in for the final Rock Creek drillhole database by mineral zone at four gold cutoffs. The data shown in Table 17-3 were not declustered and represent unadjusted data with all rejected intervals included. See Appendices C-1 and C-2 for histograms and probability plots of assay and composites, respectively.

Table 17-3: Unadjusted Gold Assays by Mineral Zone

Mineral Zone	Uncapped Statistics Above Cutoff - No rejections or Adjustments							
	Cutoff (g/t)	Total Metres	Inc. Percent	Mean Au (g/t)	grd-thk (g/t-m)	Inc. Percent	Std. Dev.	CV
All	0.00	38,059	76%	0.68	25,860	14.0%	2.54	3.73
	0.50	9,312	11%	2.39	22,236	11.20%	4.73	1.98
	1.00	5,192	7%	3.72	19,331	14.1%	6.00	1.61
	2.00	2,586	7%	6.06	15,676	60.60%	7.84	1.29
1	0.00	10,258	60%	1.07	10,988	10.7%	3.08	2.88
	0.50	4,100	18%	2.39	9,816	11.7%	4.56	1.91
	1.00	2,290	11%	3.73	8,533	14.4%	5.76	1.55
	2.00	1,162	11%	5.99	6,955	63.3%	7.42	1.24
2	0.00	7,128	77%	0.53	3,780	21.3%	1.61	3.04
	0.50	1,667	12%	1.78	2,975	15.2%	3.01	1.68
	1.00	844	7%	2.84	2,399	18.5%	3.94	1.39
	2.00	349	5%	4.87	1,700	45.0%	5.52	1.13
3	0.00	1,187	74%	0.97	1,156	7.8%	5.41	5.56
	0.50	312	11%	3.41	1,066	7.9%	10.16	2.97
	1.00	185	7%	5.27	975	11.1%	12.87	2.44
	2.00	100	8%	8.50	846	73.2%	16.89	1.99
10	0.00	4,165	54%	1.55	6,461	6.1%	4.10	2.64
	0.50	1,918	16%	3.16	6,065	7.1%	5.63	1.78
	1.00	1,258	13%	4.46	5,605	11.7%	6.59	1.48
	2.00	718	17%	6.75	4,847	75.0%	7.99	1.18
99	0.00	15,321	91%	0.23	3,474	33.4%	1.01	4.47
	0.50	1,314	5%	1.76	2,314	14.2%	3.04	1.73
	1.00	615	2%	2.96	1,820	14.2%	4.13	1.40
	2.00	258	2%	5.15	1,328	38.2%	5.69	1.11

Inc = Incremental Percentage
grd-thk = grade-thickness

17.4 Adjusted Assay Statistics

Basic descriptive statistics are summarized in Table 17-4 for the final adjusted Rock Creek drillhole database by mineral zone at four cutoffs. The data were not declustered and represent the final accepted assay data that were used for grade estimation. Suspicious RC samples and core samples with less than 60% core recovery are not included. RC data were adjusted to core data by drill campaign as explained in Section 17.12.

Table 17-4: Adjusted Gold Assays by Mineral Zone

Mineral Zone	Cutoff (g/t)	Total metres	Inc. Percent	Mean Au (g/t)	grd-thk (g/t-m)	Inc. Percent	Std. Dey	CV
Totals	0.00	36,424	77%	0.60	21,898	15.80%	2.12	3.53
	0.50	8,263	10%	2.23	18,432	12.2%	4.04	1.81
	1.00	4,471	6%	3.53	15,760	14.8%	5.15	1.46
	2.00	2,162	6%	5.79	12,519	57.2%	6.70	1.16
1	0.00	9,836	64%	0.87	8,572	13.7%	2.19	2.51
	0.50	3,546	17%	2.09	7,400	13.4%	3.31	1.59
	1.00	1,917	10%	3.26	6,249	16.8%	4.15	1.27
	2.00	893	9%	5.38	4,808	56.1%	5.33	0.99
2	0.00	6,840	79%	0.48	3,276	23.50%	1.56	3.25
	0.50	1,452	11%	1.73	2,506	16.8%	3.07	1.78
	1.00	677	6%	2.89	1,957	16.9%	4.20	1.45
	2.00	288	4%	4.88	1,404	42.8%	5.87	1.20
3	0.00	1,135	76%	0.71	812	10.1%	3.50	4.90
	0.50	273	11%	2.67	730	10.0%	6.77	2.53
	1.00	152	8%	4.25	648	15.1%	8.75	2.06
	2.00	66	6%	7.99	525	64.7%	12.36	1.55
10	0.00	4,016	55%	1.56	6,250	6.2%	4.15	2.67
	0.50	1,815	15%	3.23	5,863	6.8%	5.75	1.78
	1.00	1,202	13%	4.53	5,438	11.4%	6.71	1.48
	2.00	695	17%	6.80	4,726	75.6%	8.09	1.19
99	0.00	14,597	92%	0.20	2,988	35.3%	0.83	4.06
	0.50	1,177	4%	1.64	1,934	15.5%	2.49	1.52
	1.00	522	2%	2.81	1,469	13.8%	3.39	1.21
	2.00	221	2%	4.78	1,056	35.3%	4.51	0.94

17.5 Adjusted Composite Statistics

Assays adjusted to core with suspicious RC samples and core samples with less than 60% recovery removed were downhole composited monotonically into 5 m composites. Basic declustered descriptive statistics are summarized in Table 17-5 for the final adjusted Rock Creek drillhole database by mineral zone. Note the large reduction in CV in Mineral Zone 99 once it is partitioned into two domains. See Appendix A-13 for all drillhole composites greater than 1.0 g/t.

Table 17-5: Adjusted Declustered Gold 5 m Composites by Mineral Zone

Minzone	Number of Composites	Mean Au g/t	CV
1	2083	0.872	1.53
2	1467	0.423	2.22
3	237	0.597	3.43
10	838	1.373	1.95
99	3188	0.182	2.45
99 <0.4 g/t	2830	0.086	1.05
99 >0.4 g/t	358	1.030	1.01

17.6 Contact Plots

Contact plots show average grade profiles in the vicinity of contacts between mineral zones. These are used to determine if hard or soft boundaries should be used in grade interpolation. The contact plots are provided in Appendix C-3. Mineral Zone 3 has its only boundary with Mineral Zone 99; hence there is only one contact plot for Mineral Zone 3. All boundaries, except those between Mineral Zones 1 and 2, show sharp changes in grade profile going across the boundary. These should and were considered hard boundaries for interpolation. There are limited data near the contact for Mineral Zones 1 and 2, and the overall mean of Mineral Zone 1 is twice that of Mineral Zone 2. For this reason, the boundary was considered hard. If it had been considered soft, there would be danger of smearing grades in blocks near the boundary. A firm boundary could be considered for future models, but the number of blocks along the boundary affected would be small, and the effect limited.

17.7 Declustering

To be effective, the block-size should be small enough so that all assays are assigned to some blocks. At Rock Creek, the nominal sample length is 1.5 m. But there are a significant number of assay intervals with different lengths. For example, for DDH data, there are 4,684 intervals with lengths of 1.50 to 1.53 m, 7,674 intervals with a length of 2 m, and 482 intervals with other lengths. For the RC data, there are 7,575 intervals with a length of 1.50 to 1.53 m, and 94 intervals with other lengths. Building a nearest neighbour model ignores this, i.e., assumes the assay intervals have the same length. If there is any relationship between sample interval length and grade, the nearest neighbour model and frequency distribution of grade may be biased.

A secondary problem is the block size and data spacing. The block size is $10 \times 5 \times 5$ m in the north-south, east-west and vertical directions. Given the assay intervals are nominally 1.5 m or 2.0 m in length, not all the assays will be assigned to blocks. The size of the Rock Creek deposit and lack of sub-blocking available in the MineSight® software, makes the use of smaller blocks impractical. For these reasons, the nearest-neighbour model method of declustering was rejected.

Cell declustering is a very commonly used method. As normally implemented, the deposit is divided into large cells that contain multiple data points. The data captured in each cell are weighted by 1/n, where n is the number of data in a cell. The origin is often shifted, and the weights, over all cases are averaged to give a final weight to a datum. In a refined technique, the data are weighted by their length as well. This method works well in massive deposits that do not have boundaries, or have large distances between their extremes. When this is not the case, the effect of a cell that straddles a boundary, either lithological or topographic, can be disproportionate, as

- the data density near the boundary is often sparse, and
- the volume of the cell is much higher than the volume of mineralization within it.

AMEC personnel have seen the mean miscalculated by as much as 20% because of this; failure to length-weight can throw the mean off by 5%. As a result, AMEC developed a cell-declustering program that avoids these problems. The program has the following steps:

For each block (10 × 5 × 5 m), identify all assay intervals within a search distance. Determine the total weight of captured assay intervals:

$$W_{ti} = \sum_{j=1}^{m} \text{length}_j$$

There are m assay intervals captured within the search.

For each assay interval, identify all the blocks within the same search distance. Find the weight for each assay:

$$W_{aj} = \sum_{i=1}^{n} \{\text{length}_j\}/W_{ti}$$

A final normalized weight F_{aj} is calculated:

$$F_{aj} = W_{aj} / \sum_{I=1}^{n} W_{ai}$$

The F_{aj} are the declustering weights and add to 1.

The program samples the declustered frequency distribution at even intervals and makes a file for use in plotting quantile-quantile plots (Q-Q).

Declustered frequency distributions are provided in Appendix B-1. These distributions are highly skewed, and tend to show a straight line on log-probability plots, indicating their fit to a simple lognormal distribution. The tails are thicker for RC distributions, giving rise to their much higher mean grades compared to core distributions.

Table 17-6 provides summary statistics for these distributions; their datasets are described in more detail below.

Table 17-6: Declustered Statistics (Au g/t) for Assay Distributions

	RC		Core		Trench	
Dataset	**Mean**	**CV**	**Mean**	**CV**	**Mean**	**CV**
RC 501	1.53	2.67	0.75	2.66	-	-
RC 502, 503, 505, 506, 511	0.75	4.27	0.47	3.83	-	-
RC 512 and 516	0.78	3.04	0.58	3.22	-	
Trench – RC	0.54	3.36	-	-	0.55	2.09
Trench – Core	-	-	0.31	4.13	0.55	2.09

The RC and core distributions have similar CV; the trench data have much lower CVs; perhaps the support (volume) for these samples is greater.

17.8 Quantile-Quantile (Q-Q) Plots (General)

A quantile is like a percentile, only the step between quantiles may be different from 0.01 in frequency. If two distributions are the same, their individual quantiles should be the same, and when the quantiles of one distribution are plotted against another, they should follow a line y=x. If the points fall off the line, the distributions are dissimilar. If distribution A quantiles are plotted using x coordinates, and distribution B quantiles are plotted using y coordinates, then A will be biased high with respect to B if the point falls below the line y=x. Conversely B will be biased high with respect to A if the point falls above the line y=x.

It is possible to fit an equation or piecewise equations to the Q-Q plot data, which permits transformation of the A distribution into an A' distribution which is "identical" to the B distribution. As a check, the B distribution can be plotted against A' to see that the Q-Q data follow the line y=x. Figure 17-1 shows a Q-Q plot before adjustment of the RC data. Figure 17-2 shows a Q-Q plot after adjustment.

Figure 17-1: Sample Q-Q Plot Before Adjustment

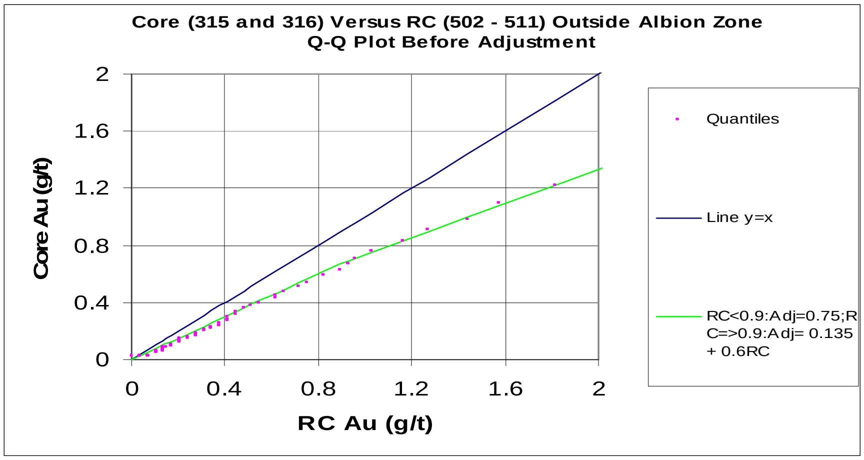
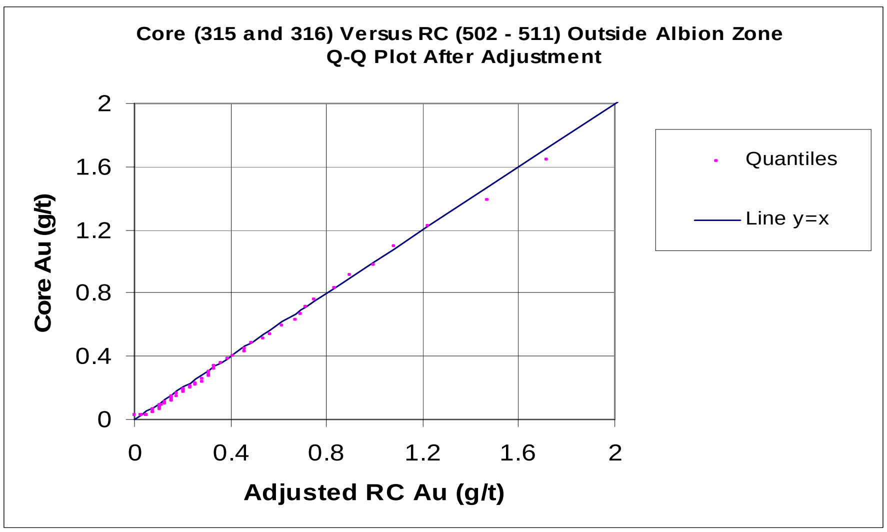


Figure 17-2: Sample Q-Q Plot After Adjustment



The Q-Q plots can be affected by outlier values at high quantiles; these are ignored in the fitting of equations.

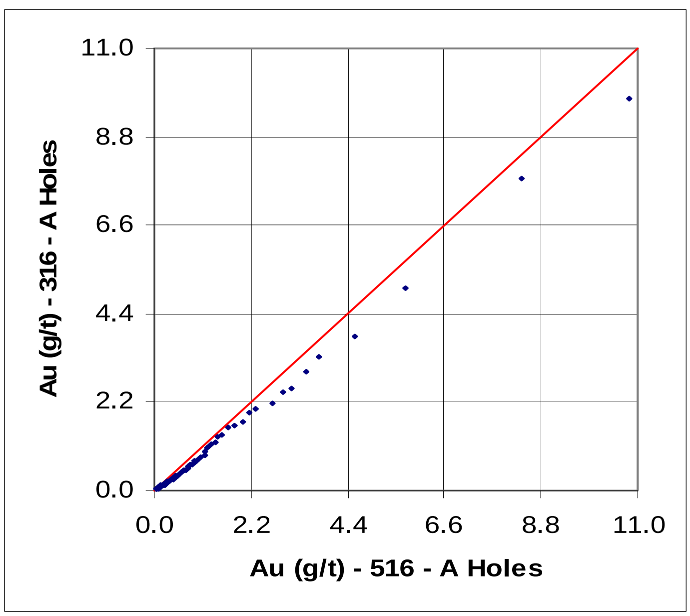
Q-Q plots are provided in Appendix B-2. These are identified by Run No. at the base of the plot.

Large adjustments were required to conform to the data distributions. It was recognized that there are sampling issues that can only be resolved by using a bulk sample or additional twin holes to referee the methods. Therefore, in this study, the adjustment equations were fitted by eye, and no attempt was made to precisely match means or deal with outliers.

17.9 Twin Site Q-Q Plots

AMEC initially prepared a series of Q-Q plots for the twin hole data to provide some understanding as to how different drilling campaigns compared with one another under control situations (e.g. 'A' scored data). Figure 17-3 shows a Q-Q plot that compares AGC's 2004 RC 516 program (x-axis) with their 2004 316 core program (y-axis).

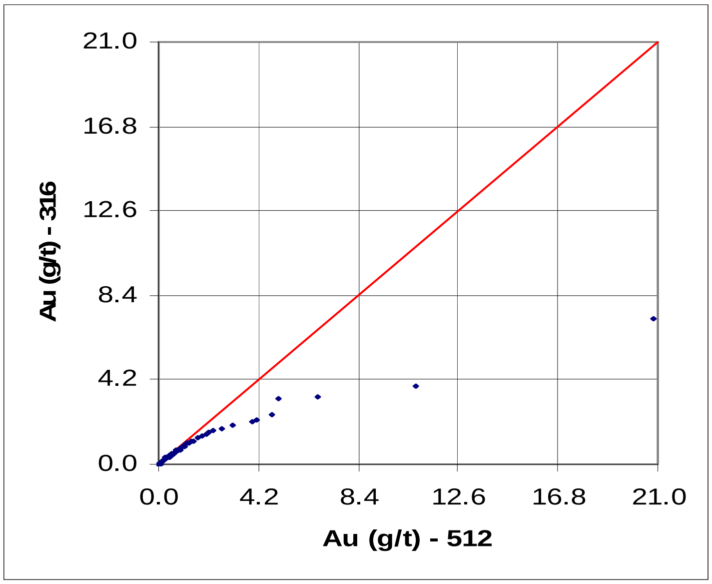
Figure 17-3: Twin Hole Q-Q Plot



The quantiles shown in Figure 17-3 show a slight to moderate high bias for the RC holes relative to the core holes. A more pronounced high bias is illustrated in Figure 17-4, which is a Q-Q plot that compares gold grade quantiles between AGC's 2002 RC program (campaign 512) with AGC's 2004 core program (campaign 316) for A+B+C scored holes.

The quantiles for the 512 campaign (x-axis) are clearly biased relative to the 316 core hole campaign (y-axis). All of the twin site Q-Q plots are shown in Appendix B-1.

Figure 17-4: 316 vs. 512 Twin Hole Q-Q Plot



17.10 Q-Q Plot Adjustments

Adjusted gold assay item AUAJ1 is calculated as a result of the Q-Q plot adjustment analysis and are stored in the MineSight® assay file (rcrk11.dat). AUAJ1 is an assay item where rotary RC drilling is adjusted down to a core datum. An upside adjustment of cores by 25% for campaigns 301-316 in Mineral Zones 1, 2, 3, and 99 is stored in AUAJ2. Many of the adjustment calculations are made in a piecewise continuous fashion, with grade intervals having linear relationships with differing slopes. The batch file, adjust.bat, performs these calculations with the associated run files (see Appendix E-1).

17.11 Comparison of RC and Core Data

The majority of the sampling at Rock Creek has been obtained by DDH (core).

RC methods can sometimes result in biased samples. For example, in areas of high water flow, gold can be concentrated via placering in the hole; weak zones above the sample interval will ravel, and if high-grade, will upgrade the sample. Alternatively, where gold is concentrated in fines, these may be lost in the sample collection process.

Coring through friable, weathered intervals can cause a loss of gold in fine fractions.

At Fort Knox, Alaska, AMEC made a detailed study of core and RC drilling; in the near-surface, dry, weathered environment, core samples were found to be biased low relative to a 40,000 t bulk sample. RC samples gave unbiased results. This zone extended to a depth of approximately 50 m. From 50 to 100 m, both core and RC methods gave similar results; below 100 m large water inflows were encountered, and RC samples were often upgraded by placering and contamination.

At Rock Creek, core samples inside the Albion Shear gave similar results to RC samples, and no adjustment was required (see Runs 2-4, Appendix B-2). Outside the Albion Shear, core samples are low-biased with respect to RC samples. There is a limited dataset (approximately 908 samples) from trenches that are intermediate, i.e., lower than RC samples and higher than core samples in the vicinity. Photographs of the trenches show increased fine ravel; it is possible that fines could have been lost in the coring process. It is noteworthy that at Fort Knox, though the core recovery was approximately 80% near surface, the grade recovered by core samples was half that of a surrounding bulk sample.

17.12 Adjustment of RC to Core Datum

It was suspected that the adjustment could be related to the drilling campaign. The 2004 summer DDH campaign 316 plus the 2003 campaign 315 were used as a reference for adjustment because it was felt that these would form the most reliable core dataset. Experimentation showed that the RC data could be divided into three groups:

- 501 – The 1987 Placer Dome Drilling
- 502, 503, 505, 506, 511 – Other holes drilled from 1988 to 1999
- 512 + 516 – AGC 1999 and 2004

- For the 501 campaign, DDH is about 50% lower than RC. The adjustments for Runs 6 and 7 are progressively less severe, but still significant. The adjustment equations for RC samples located outside of the Albion Shear Zone are as follows:
- *501 – The 1987 Placer Dome Drilling*
  *If < 1 g/t: Original Assay * 0.6; If >= 1 g/t: Original Assay * 0.3 + 0.3 g/t*
- *502, 503, 505, 506, 511 – Other holes drilled from 1988 to 1999*
  *If < 0.9 g/t: Original Assay * 0.75; If >= 0.9 g/t: Original Assay * 0.6 + 0.135 g/t*
- *512 + 516 – AGC 1999 and 2004*
  *If < 0.8 g/t: Original Assay * 0.8; If >= 0.8 g/t: Original Assay * 0.75 + 0.04 g/t.*

To review the sensitivity Q-Q plots related to the drilling campaigns mentioned above, refer to Appendix B-2 and B-3.

17.13 Observations

Based on various comparisons (profile plots, basic descriptive statistics, and Q-Q plots) that were made for the twin site data the following observations were made:

- The 2003 and 2004 AGC core drilling campaigns (315 and 316 campaigns, respectively) have remarkably similar distributions (means, standard deviations and CVs). For twinned holes the mean grade of the 2003 core program is slightly higher than the mean of the 2004 program.
- Older RC campaigns show a clear high bias when compared to the 2003 and 2004 AGC core drilling programs.
- AGC's 2004 RC data (campaign 516) shows a slight systematic high bias relative to the 2003 and 2004 core campaigns. This is shown by Q-Q plots and by the fact that the grade of the 516 campaign is about 12% higher than the 315+316 core campaigns for twinned holes.
- The 2004 RC campaign (516) has lower grades than the older RC campaigns (i.e. 502 through 511).
- The 2003 trench data fall between core (lower) and RC (higher) results.
- The 2004 trench data are significantly higher than the core and RC data. Therefore trench data were given very limited influence in resource estimation.

Because core recovery is better than RC weight recovery, the base case for resource estimation will use the adjusted RC values outside the Albion Shear Zone – see equations in Section 17.12.

AMEC reviewed the QA/QC data associated with the exploration and resource delineation drilling program at Rock Creek and found the data to be sufficiently accurate and precise for resource estimation. A brief summary of the procedures followed is given below.

17.14 Variograms for Assays

Variograms were made using the 1 – correlogram method. This method produces a unit sill, with each lag normalized by dividing the covariance by the variance of the data. This method has been widely used for precious metals deposits for the last 15 years. It is robust to outliers and gives good results where data are limited.

Variograms were calculated with azimuth and dip increments of 30°. Single structure models were fitted respecting the dip of the sheeted tension veins (dipping west at 75°). Variograms for assays are shown in Appendix D-1 and for composites in Appendix D-2. These are computed on the assay variable AURJ1, which is the RC adjusted to core datum grade variable. To damp noise, assays grading over 30 g/t or with lengths less than 1.4 m or greater than 6 m were not used.

The variograms have high nugget effects and very short ranges. Table 17-7 describes the parameters for unit sill, exponential models. The ranges are “practical ranges”, i.e., they are distances at which the variogram reaches 95% of the sill.

Table 17-7: Variogram Models for Assays (AURJ1 g/t)

Mineral Zone	Nugget Effect (C_0)	C_1	Range N-S	Range E-W Dip 75 W	Range E-W Dip 15 E
1	0.73	0.27	22.1	13.2	9.3
2	0.73	0.27	31.0	24.0	13.4
3	0.64	0.36	112.7	19.8	37.0
10	0.45	0.55	32.7	15.4	5.1
99	0.84	0.16	43.8	7.3	14.2

In particular, the nugget effects are relatively high for all zones except the Albion Shear Zone (Mineral Zone 10). This is typical of shear zone and vein-style precious metal mineralization. The models for all Mineral Zones show most continuity in the strike direction. The ratio of strike to down-dip ranges are similar for Mineral Zones 1, 2, and 10. Mineral Zones 3 and 99 show much more continuity in the strike than down-dip direction. According to AGC geologists, this may be explained by the fact that the veins are often brecciated and not oriented in a preferential direction except along the strike of the zone. The model ranges for Mineral Zone 99 are tenuous because of the extremely high nugget effect.

17.15 Variograms of 5 m Composites

Variograms for drillhole composites are provided in Appendix D-2. The methodology for calculating composite variograms was the same as for assays (i.e. correlograms). To dampen noise from the correlograms, composites in excess of 10 g/t were not used. A minimum length of 2.5 m was required.

The nugget effects for variogram models were fitted considering the nugget effect for assays, as shown in Table 17-8.

Table 17-8: Derivation of Nugget Effects for Composite Variogram Models

	Col 1	Col 2	Col 3	Col 4	Col 5	Col 6	Col 7	Col 8
Mineral Zone	Co Assays (USVM)	CV Assays	Rel. Variance Assays	Rel. Co Assays	Calc'd Rel. Co Composites	CV Composites	Rel. Variance Composites	Co Composites (USVM)
1	0.73	2.446	5.983	4.368	1.572	1.531	2.344	0.671
2	0.73	3.431	11.772	8.593	3.094	2.215	4.906	0.631
3	0.64	4.937	24.374	15.599	5.616	3.428	11.751	0.478
10	0.45	2.941	8.649	3.892	1.401	1.951	3.806	0.368
99	0.84	4.060	16.484	13.846	4.985	2.452	6.012	0.829

- Column 1 is the nugget effect for the assay variogram model
- Column 2 is the CV for assays
- Column 3 is the relative variance for assays = $(\text{Col } 2)^2$
- Column 4 is the relative C_0 for assays = (Col 1)(Col 3)
- Column 5 is the calculated relative C0 for composites = (Col 4)/[1.525/5]; support for assays = 1.525; support for composites = 5
- Column 6 is the CV for composites
- Column 7 is the relative variance for composites = $(\text{Col } 6)^2$
- Column 8 is the nugget effect for the composite variogram model.

The remaining parameters of the composite variogram models were fitted using the experimental data. Variograms generated from composited data tend to dampen the nugget effect, allowing better revelation of spatial variability and estimation of ranges and anisotropy than raw uncomposited data.

Table 17-9 summarizes the fitted variogram models for each Mineral Zone. These are exponential models with practical ranges shown. Each practical range was divided by 3 prior to input into MineSight® since this software does not use the practical range.

Table 17-9: Variogram Models for 5 m Composites

Mineral Zone	Nugget Effect (C_0)	Sill (C_1) (C_2)	Exponential Distances from SAGE			Distances from M624V1		
			Range N-S	Range E-W Dip 75 W	Range E-W Dip 15E	Range N-S	Range E-W Dip 75W	Range E-W Dip 15 E
1	0.671	0.329	37.8	28.6	13.8	12.6	9.5	4.6
2	0.631	0.369	66.7	54.4	26.5	22.2	18.1	8.8
1+2	0.651	0.349	84.7	51.7	24.9	28.2	17.2	8.3
3	0.478	0.522	124.6	41.6	77.7	41.5	13.9	25.9
10	0.368	0.632	48.6	36.8	15.6	16.2	12.3	5.2
99	0.829	0.171	79.2	20.0	82.1	26.4	6.7	27.4
99 (0.4 g/t indicator)	0.500	0.500	26.5	13.8	12.2	8.8	4.6	4.1
99 (Low -grade < 0.4 g/t)	0.650	C_1=0.268	12.8	45.6	46.6	4.3	15.2	15.5
		C_2=0.082	243.5	2191.6	86.7	81.2	730.5	28.9
99 (High-grade > 0.4 g/t)	0.800	0.200	10.0	10.0	10.0	3.3	3.3	3.3

17.16 Development of Target Coefficients of Variation for Resource Model

AGC provided a target selective mining unit (SMU) of 10 × 10 × 5 m. This is the smallest volume that can be effectively segregated as ore or waste. Using the grade variogram models, it is possible to calculate the dispersion variances for SMUs. These can be used to develop target CVs for SMUs. If the CVs of resource block grades are similar, then the grade-tonnage curve of resource block grades will be representative of that which would apply during mining. Table 17-9 shows the calculations.

These calculations take into account the support effect. Usually, there is also an information effect that further smoothes the grade-tonnage curve and has the impact of reducing the target CV. With such a large SMU, the impact of the information effect compared to the support effect is usually small. Conditional simulation should be considered in the future to provide insight into the information effect.

17.17 Gold Grade Interpolation Runs

Six gold grade models were created, three of which had no metal removed and three had metal removed. The basic models were based on: (1) unadjusted grades where rejected RC and core intervals were not used (AUREJ), (2) RC adjusted to core datum grades (AUAJ1), and (3) core adjusted to RC datum grades (AUAJ2). The AUREJ model was used as the basis for calibrating metal removal as determined by the metal-at-risk study. The AUAJ1 model was estimated using RC assays that were adjusted relative to core data. This is the model that AMEC recommends should be used for pit optimization and economic studies. The AUAJ2 model represents an upside case where all core campaigns were factored upwards based on core-RC comparisons.

All three of the grade models were interpolated using the same parameters and techniques. Mineral Zones 1, 2, and 3 were interpolated using ordinary kriging methods. The Albion Shear Zone, (i.e. Mineral Zone 10) was estimated using inverse distance weighting methods (third power). The inverse distance method was selected because grade-tonnage curves from an ordinary kriged model could not be made to approximate a Herco model (it was too smooth). An indicator approach was used for the Mineral Zone 99, the default zone.

For each of the models, a three-pass interpolation method was used. Each zone was estimated with an initial pass that only required a minimum of one drillhole to be used. This pass was run to ensure that block grades were estimated around isolated holes. A second pass was run requiring at least two or more drillholes to be used. This run overwrote many of the blocks that had been estimated by the first pass. Both the first and second pass interpolation runs only used core and RC data. A third pass was then run that used trench and drillhole data provided the blocks were within a 15 x 15 x 5 m distance from trench data.

Hard boundaries were used for interpolating block grades for Mineral Zones 1, 2, 3, and 10. This means that strict zone matching between blocks and composites was imposed. Composites shorter than 2.5 m in length were not used. The grade estimate was weighted by the length of the composites.

The first two estimation passes used a 50 x 50 x 10 m search ellipse that was oriented north-south and dipped steeply to the west at 75 degrees. This tight ellipse was used in an attempt to orient the geometry of the mineralized zones in steep orientations that have been observed and modeled by AGC geologists.

An indicator cutoff of 0.40 g/t was selected for Mineral Zone 99 based on the proportions of metal above and below that cutoff grade. The indicator item INAU1 in the block model was kriged using 0's and 1's in the composite file that were set whether the composite was below or above a 0.40 g/t cutoff grade. Block grades were then estimated for the low and high grade populations using separate kriging runs. The final Mineral Zone 99 grade was calculated using the estimated indicator probability (INAU1) and the two gold grade fractions (AULO and AUHI) using the following formula:

Estimated Block Grade = (Indicator proportion)*(kriged high grade) + (1-indicator proportion)*(kriged low grade)

The number of composites and drillholes that were used to estimate each block were captured along with the distance to the closest drillhole composite that was used. In addition, a nearest neighbour grade was estimated for each model using the identical parameters that were used for the kriged or inverse distance runs.

Table 17-10 summarizes the six resource models that were constructed and shows what composite and model grade items were used.

Table 17-10: Grade Models

Model Number	Composite Grade Item	Model Grade Item	NN Model Grade Item	Description
1	AUREJ	AUKR1	AUNN1	Unadjusted grades - no metal removed
2	AUREJ	AUKR2	AUNN2	Unadjusted grades - metal removed
3	AUAJI	AUKR3	AUNN3	Adjusted grades - no metal removed
4	AUAJI	AUKR4	AUNN4	Adjusted grades - metal removed
5	AUAJ2	AUKR5	AUNN5	Upside grades - no metal removed
6	AUAJ2	AUKR6	AUNN6	Upside grades - metal removed

A single batch file (make_models.bat) was used to estimate grades for all six models. This batch file and all pertinent MineSight® runfiles are contained in Appendix E-2.

17.18 Metal-at-Risk

Precious metals deposits have skewed grade distributions. Skewed grade distributions have the property that a small proportion of samples can represent a disproportionately large amount of metal. The limited number of these samples can introduce significant uncertainty into a resource estimate. It is a common practice to cut the grades of very high-grade samples, restrict their projection distance, or to adjust resource models to mitigate downside risk.

In many precious metals deposits, Rock Creek included, the highest-grade samples are scattered and discontinuous at the exploration drill-hole spacing. The number of high-grade samples intersected can vary according to the positioning of the drillholes, and it is impossible to know in advance which positions would give the most accurate estimate of the amount of high-grade metal actually present. The uncertainty related to the amount of high-grade metal can be evaluated using a Monte Carlo simulation technique developed by Mineral Resources Development/AMEC that has been applied over a 14-year period. This method essentially re-drills the deposit 1,000 times and notes the variation in the amount of high-grade metal present in annual or global production increments. The 20th percentile of the simulated metal contents is added to the metal content represented by the remaining samples to give a risk-adjusted metal content. The difference between total metal content and risk-adjusted metal content is termed metal-at-risk. Theoretically, in four periods out of five, the mine should do better than the estimate; however, there is additional and largely unquantifiable uncertainty related to the representivity of the sample-grade frequency distribution input to the simulation.

The appropriate time-period for a feasibility study stage of a project is annual, as Indicated Resources will be used to prepare annual production schedules. For Rock Creek, AGC has specified that the operation would produce 7,000 short tons per day or 2.5 million short tons per year.

The method has advantages over other top-cutting methods in that it takes into account 1) the data density, and 2) the volumes of increments used for production scheduling. As the data density is increased, the amount of metal-at-risk declines; longer production increments will have less risk than shorter ones.

The simulations were run using declustered grade distributions for AUCO assays (i.e., with RC samples adjusted to core datum).

Table 17-11 shows the results of the simulations.

Table 17-11: Metal-at-Risk by Mineral Zone (Indicated and Inferred)

Mineral Zone	Tons/ Assay	No. Currently Available Assays Mined in Year	High-Grade Threshold (g/t Au)	Expected High-Grade Assays in Period		Metal Represented	Metal-at-Risk (%)
				(No.)	(%)		
1	3683	684	13	6	0.9	14.3	5.3
2	3683	684	9	5	0.7	13.8	7.6
3	3683	684	25	4	0.6	22.4	10.8
10	3683	684	25	5	0.7	18.2	7.3
99	8286	304	7	3	1.1	16.1	8.4

The metal-at-risk is typical of scoping/prefeasibility stage projects. Typically with infill drilling (feasibility stage), the metal-at-risk for Indicated Resources is approximately 5%. This is approximately achieved for Mineral Zone 1. For the other zones the data density is sparse (more than 8,000 st/assay) and/or the distributions are more highly skewed than is typical (CV of assays higher than 2.0). Mineral Zones 3 (Walsh) and 99 are sparsely drilled. Mineral Zones 2 and 10 are relatively well drilled, but the CVs are 2.2 and 2.0, respectively.

As explained in Section 17.17, metal-at-risk is removed in the modeling process by restricting the use of very-high grade composites in the estimation process.

17.19 Metal-at-Risk Adjustments

Gold metal considered to be at risk was removed using the outlier restriction method during grade interpolation. No raw assay or composite data were capped, but rather the projected distance for certain data was restricted. Table 17-12 summarizes how target percentages of gold metal were removed from the base case model (AUKR4). The tonnes, grade, and contained gold ounces for the AUKR3 model are shown at the left side of Table 17-4 for each Mineral Zone. Using the outlier restriction parameters shown in the table, the tonnes, grade, and contained gold ounces for the AUKR4 model are compared to the AUKR3 model. As can be seen the actual metal that was removed for each mineral zone closely approximates the percentages targeted by AMEC's Monte Carlo simulation method.

Table 17-12: Metal-at-Risk Removal

MINZN	AUKR3 (no metal removed)			AUKR4 (metal removed)			Outlier Parameters		% Target Removal	% Metal Removed
	run708.m03-mod03.rpt			run708.m04-mod04.rpt						
	kTonnes	Au	kOzs	kTonnes	Au	kOzs	Grade	Maxd		
1	10,696	0.8362	288	10,696	0.7946	273	7.00	12.50	5.3%	5.0%
2	12,957	0.3964	165	12,957	0.3670	153	6.00	12.50	7.6%	7.4%
3	3,082	0.4722	47	3,082	0.3956	39	7.00	15.00	16.8%	16.2%
10	6,518	1.1794	247	6,518	1.0924	229	10.75	12.75	7.3%	7.4%
99	932,991	0.0176	528	932,991	0.0162	486	0.70 factor		8.4%	8.0%

Outlier restriction is a method of metal removal that permits composites above a nominated "outlier grade" to be seen at their full grade only by blocks within a search distance often much smaller than the regular search parameters. The outlier parameters were determined iteratively by selecting a grade/distance pair and determining the amount of metal removed relative to the target.

17.20 Density

Golder Associates performed density measurements on solid pieces of core data. The average density as determined by Golder[4] was 2.73 g/cm^3. Approximately 8% of the deposit consists of gouge, shears or fault material. It is prudent to assume that the density would be 10% lower in these zones. Adjusting for these material types suggests that a density of 2.71 g/cm^3 maybe more appropriate.

AMEC obtained the raw density data from AGC and have summarized the densities by rock type and depth from the surface. These data are presented in Table 17-13 and Table 17-14.

The average specific gravity (SG) shown in Table 17-13 and Table 17-14 differ slightly from Golder's global estimate of 2.73. Based on AMEC's experience with other deposits that contain similar host rocks, the final SG value of 2.71 g/cm^3 is appropriate for the estimate of tonnes.

Table 17-13: Density by Rock Type

Rock Type	No. Determinations	SG (g/cm$_3$)
Albion QTZ	8	2.70
CQMS	94	2.79
CS	44	2.76
GQMS	60	2.81
GQS	1	2.70
GS	5	2.71
MBL	28	2.74
QAB	2	2.90
QGS	19	2.70
QMS	83	2.80
QTZ	1	2.63
V3	16	2.69
V5	8	2.73
Total	**369**	**2.77**

4 Geotechnical Investigation Proposed Rock Creek Mine Development Near Nome, AK, Golder and Associates, August 2004, Appendix E-4

Table 17-14: Density by Depth from Surface

Depth (m)	No. Determinations	SG (g/cm3)
0 to 10	27	2.77
0 to 20	33	2.79
0 to 30	46	2.78
0 to 40	37	2.78
0 to 50	40	2.75
0 to 60	36	2.79
0 to 70	33	2.77
0 to 80	26	2.78
0 to 90	28	2.76
0 to 100	22	2.80
0 to 110	12	2.77
0 to 120	8	2.78
0 to 130	6	2.76
0 to 140	6	2.73
0 to 150	4	2.63
0 to 160	1	2.78
0 to 170	2	2.77
0 to 180	1	2.84
0 to 200	1	2.75
Total	**369**	**2.77**

17.21 Resource Classification

Mineral resources were classified based on a combination of distance to data and the number of drillholes that were used to estimate each block. The model item containing the resource classification code is called CLASS. At this time, no resources are considered to be Measured because of the difference of assay grades between RC samples and core samples. Blocks located within Mineral Zones 1, 2, 3, and 10 were classified as Indicated (CLASS = 2) or Inferred (CLASS = 3) if certain criteria were met. Blocks located in Mineral Zone 99 were classified as Inferred. Additional drilling and geologic modeling may permit portions of Mineral Zone 99 to be upgraded to Indicated resources.

Table 17-15 summarizes the criteria used for classifying resources for each mineral zone.

Table 17-15: Indicated Resource Criteria

Mineral Zone	No Drillholes	Maximum Allowable Composite Distance (m)	Distance to Closest Composite (m)
1,3,10	3 or more	45	0 to 23
	2 or more	33	0 to 15
	1	10	0 to 10
2	3 or more	35	0 to 18
	2 or more	25	0 to 13
	1	10	0 to 10

All estimated blocks that were not classified as Indicated resources were classified as Inferred resources. A batch file (CLASS.BAT) was used to classify the resources, this file and all other pertinent MineSight® runfiles are included in Appendix E-3.

17.22 Model Validation

The resource models were validated in several ways. Nearest neighbour models were built using 5 m composites for the base-case model using AUAJ1. Histograms were constructed for the kriged and nearest neighbour models (Appendix F-1 and F-2). The means for the kriged models and nearest neighbour models are provided in Table 17-16 for Indicated Resources only. The comparisons are good for Mineral Zones 1, 2, and 10. For Mineral Zone 3 the Indicated Resource comparison is fair. This is understandable since the number of composites for Mineral Zone 3 is limited, and the Indicated tonnage is only 718 kt. For Indicated + Inferred the comparison is better.

Table 17-16 shows the CVs for AUKR4 and the target CVs. There is a good comparison for Mineral Zone 1, which is important because it contains both ore and waste. For Mineral Zones 2, and 10, the CVs for kriged block grades are below target. It is very likely that tonnage will be overestimated and grade underestimated. In Mineral Zone 10, nearly the whole zone will be above cutoff (0.5 g/t), and there will be very little additional dilution incorporated into the estimate. Mineral Zones 2 and 3 are either minor in terms of ore tonnage or mainly Inferred. The data are so wide-spaced in the Inferred zones that it is usually impossible to match the CV target.

The core-rotary sampling discrepancy is over-riding compared to these observations.

Table 17-16: Kriged Validation Against Nearest Neighbour Models (Indicated Only)

Mineral Zone	Kriged Model Variable AUKR4			Nearest Neighbour Model Variable AUNN4	
	Mean	CV	Target CV From Tab 7-3	Mean	CV
1	0.841	0.727	0.821	0.805	1.599
2	0.443	0.983	1.185	0.437	2.177
3	0.586	1.609	1.787	0.565	3.376
10	1.346	1.274	1.628	1.413	2.123

Grade profiles were calculated for the nearest neighbour and kriged results summarized in Table 17-16 by averaging the blocks occurring in slices oriented on the coordinate axes (Appendix F-3).

In general, the comparisons show reasonable agreement and little recognizable local bias. The kriged estimate averages tend to smooth through the peaks and troughs of the nearest neighbour estimate. This is to be expected, as kriged estimates are weighted averages of data within the kriging neighbourhood. In some plots, divergence between the profiles is evidenced; however, these occurrences are generally coupled with low block counts that discourage any meaningful inference. The exception is Mineral Zone 99 where the comparisons are somewhat less in agreement although still acceptable, since the only resource claimed here is Inferred.

Figure 17-5 through Figure 17-7 show typical examples of these comparisons for the Indicated blocks for Mineral Zone 2.

Figure 17-5: Example Profile – Gold Grade vs. Elevation

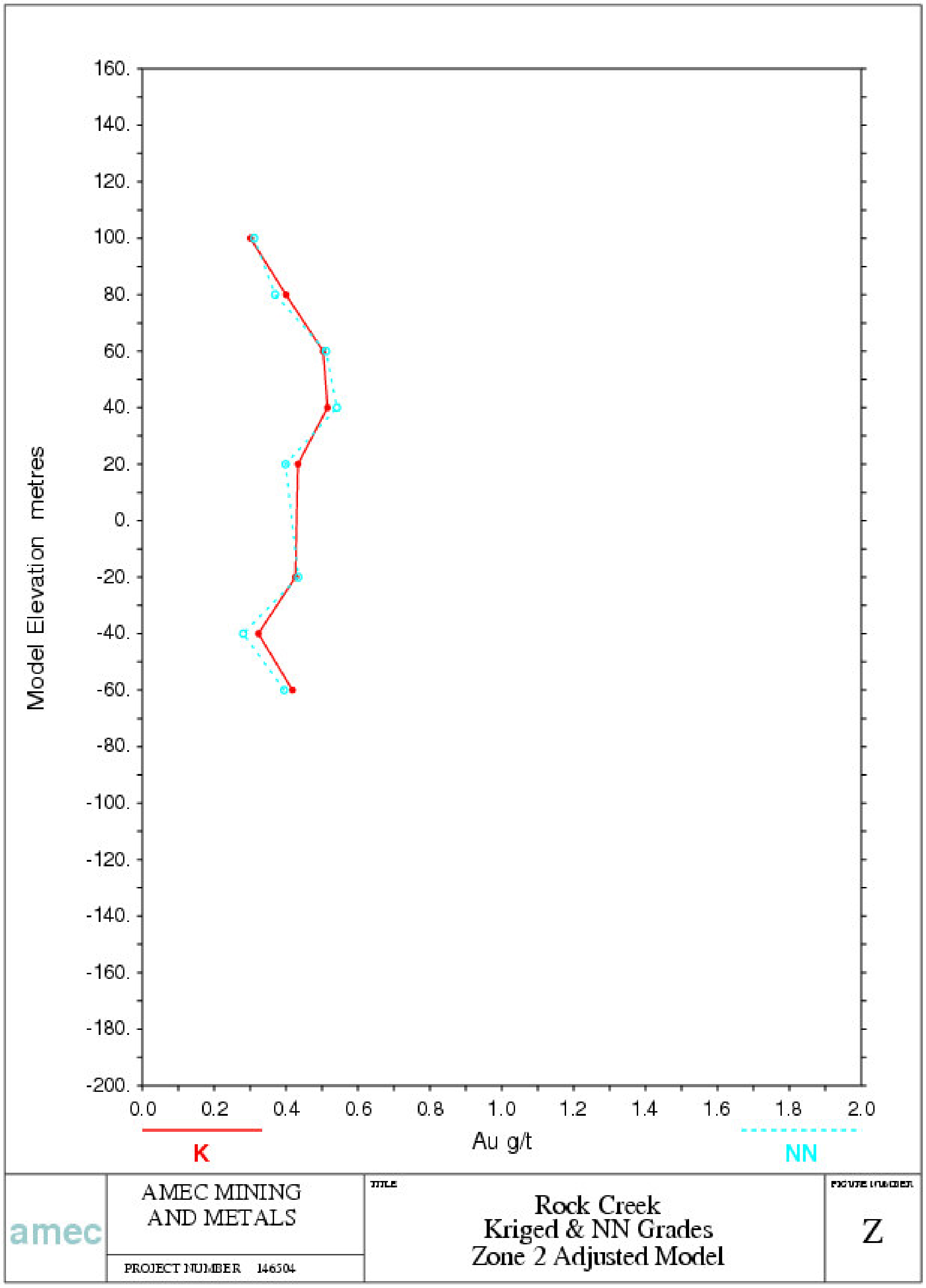


Figure 17-6: Example Profile – Gold Grade vs. Northing

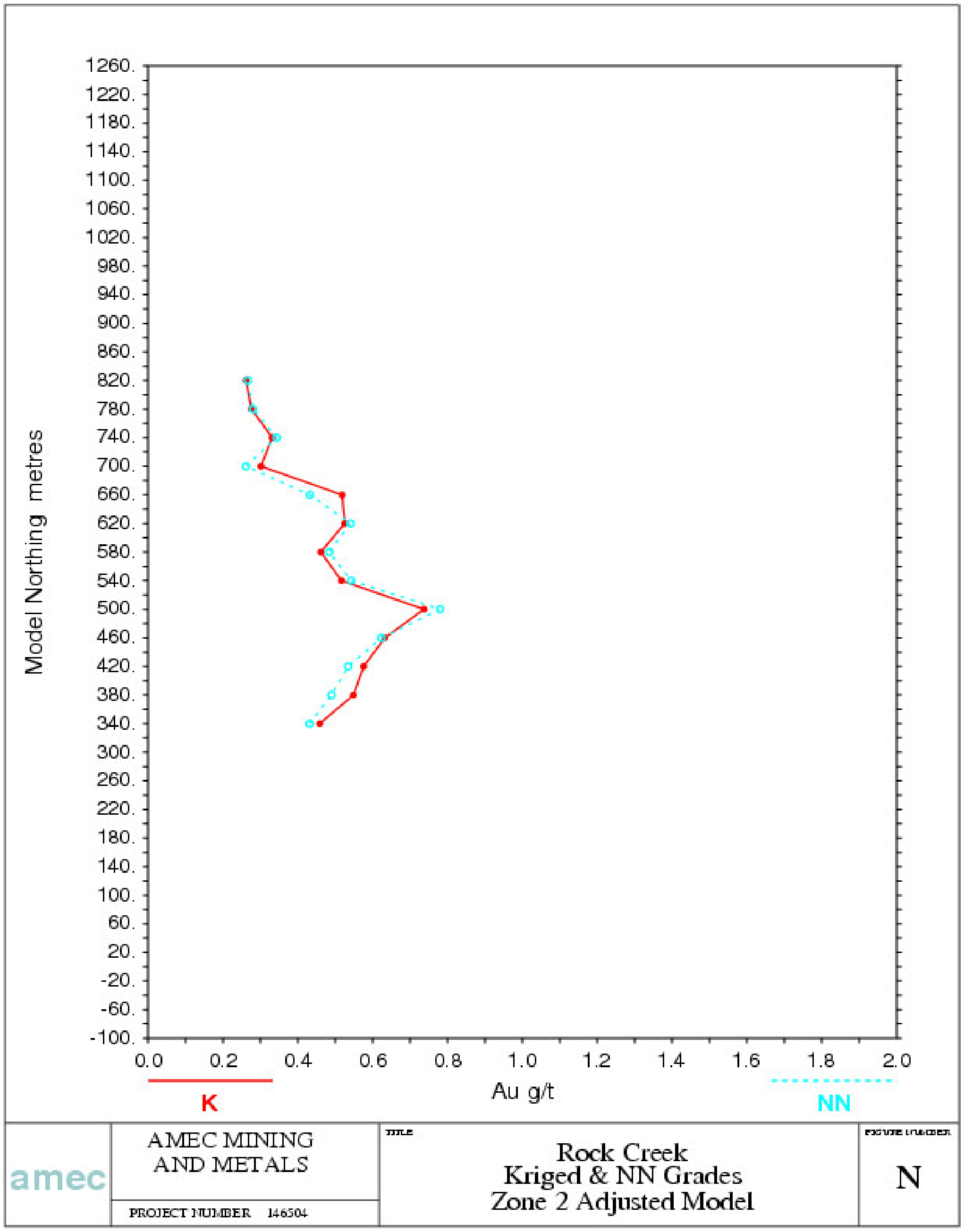
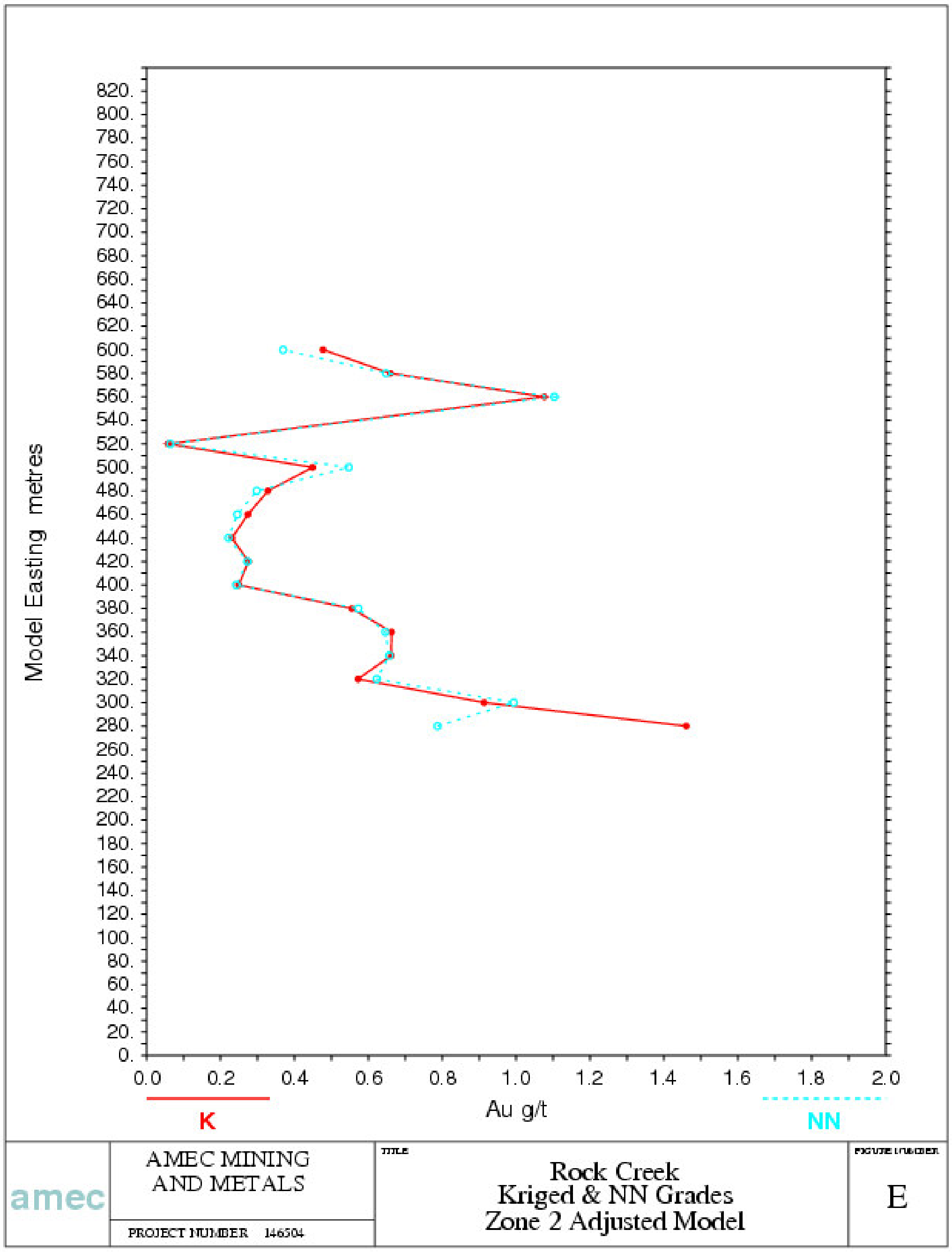


Figure 17-7: Example Profile – Gold Grade vs. Easting



Cross sections and plan maps were plotted and examined to compare the grade estimate to composited sample grades (Appendix F-5). The examination revealed that the kriging plan appropriately constrained high-grade samples and that the hard contacts between Mineral Zones were honoured. At Section 900 North, higher grade composite grades appear to have been overextended by a drillhole at the margin of estimation in Mineral Zone 99. The next model should employ the use of quadrant searching to control the amount of extrapolation permitted in the unconstrained Mineral Zone 99 domain.

An independent check on the smoothing in the estimates was made using the Discrete Gaussian or Hermitian polynomial change-of-support method. 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 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 closely. If the curves diverge significantly, then there is a problem with the estimated resource.

This method uses the "declustered" distribution of composite grades from a nearest-neighbour or polygonal model to predict the distribution of grades in blocks. In this case, the blocks used in the model are 10 x 10 x 5 m. The unadjusted polygonal model assumes much more selectivity for ore and waste than is actually possible in mining practice, since many sample-sized volumes are averaged together within a block. This means that part of the sample-sized volumes in the block may be ore (above the mining cutoff) and part may be waste. Hence, the distribution of the grade of the blocks is not likely to resemble the distribution of grades from composite samples derived from the polygonal estimate. The method assumes that the distribution of the blocks will become more symmetric as the variance of the block distribution is reduced, i.e., as the mining blocks become bigger.

The histogram for the blocks is derived from two calculations:

- the block-to-block variance (sometimes referred to in statistics as the between-block variance), which is calculated by subtracting the average value of the variogram within a block from the variance for composite samples (the sill of the variogram)
- the frequency distribution for the composite grades transformed by means of hermite polynomials (Herco: hermite correction) into a less skewed distribution with the same mean as the declustered grade distribution and with the block-to-block variance of the grades.

The distribution of hypothetical block grades derived by the Herco method is then compared to the estimated grade distribution to be validated by means of grade-tonnage curves.

The distribution of calculated 10 x 10 x 5 m block grades for gold in the domains are shown with red lines on the grade-tonnage curves in Appendix F-4. This is the distribution of grades based on SMU blocks obtained from the change-of-support models. The black lines in the figures show the grade-tonnage distribution obtained from the block estimates. The grade-tonnage predictions produced for the models show that grade and tonnage estimates are validated by the change-of-support calculations over the likely range of mining grade cutoff values (0.4 to 1.0 g/t). At higher cutoff grades in Mineral Zone 3, the kriged model gives lower grades and higher tonnages.

AMEC recommends that AGC examine the default Mineral Zone 99 to determine if areas within it have been adequately drilled to warrant geologic interpretation and construction of new mineral zones.

17.23 Resource Statements

The resource estimate was updated by AMEC from October to December 2004. Adjustment formulas were reviewed in light of the extensive core and rotary twin drilling program completed in the summer of 2004. Analysis of the twins largely confirmed previous conclusions except that no adjustment of RC appears necessary within the Albion Shear. Rotary data were adjusted to core datum outside of the Albion Shear Zone. Sensitivity cases were developed using unadjusted RC data.

Table 17-17 provides a summary of mineral inventories at various cutoff grades for the different cases. Appendix G provides detailed statements for each case. Model definitions are provided at the bottom of Table 17-17.

There is considerable difference between the models. Model 4 has been constructed with RC data adjusted to the core datum and metal-at-risk removed. This case is recommended for mine planning, based on our current knowledge.

At the request of NovaGold, Mike Lechner of Resource Modeling Inc. (RMI) generated a Lerchs-Grossmann pit shell using a US$500/oz gold price and other parameters taken from Norwest (2005). Mineral Resources within this pit are declared using Model 4:

- 9.595 million tonnes (Indicated) at a grade of 1.31 g/t containing 404,000 oz Au.
- 1.432 miliion tonnes (Inferred) at a grade of 0.96 g/t containing 44,000 oz Au.

The mineral resources of the Rock Creek deposit were classified using logic consistent with the CIM definitions incorporated in NI 43–101. The mineralization of the project satisfies sufficient criteria to be classified into the Indicated mineral resource category.

Table 17-17: Mineral Inventories (Model 4 is the Base Case Recommended for Planning)

Au Cutoff (g/t)	Resource Model	Indicated			Inferred			Contained Metal Ratio vs Base Case Model (i.e. Model 4)	
		Tonnes ('000)	AU (g/t)	Au Ozs ('000)	Tonnes ('000)	Au (g/t)	Au Ozs ('000)	Indicated	Inferred
0.10	Model 1	25,638	0.88	725	50,179	0.31	500	1.18	1.12
	Model 2	25,633	0.82	676	49,870	0.29	465	1.10	1.04
	Model 3	25,587	0.81	666	50,122	0.31	500	1.08	1.12
	Model 4	25,581	0.75	617	49,813	0.28	448	1.00	1.00
	Model 5	25,743	0.96	795	50,284	0.31	501	1.29	1.12
	Model 6	25,740	0.89	737	49,975	0.29	466	1.19	1.04
0.20	Model 1	23,767	0.94	718	27,770	0.44	393	1.19	1.15
	Model 2	23,726	0.87	664	26,017	0.41	343	1.10	1.01
	Model 3	23,277	0.87	651	27,659	0.44	391	1.08	1.15
	Model 4	23,234	0.81	605	25,906	0.41	341	1.00	1.00
	Model 5	24,398	1.00	784	28,046	0.45	406	1.30	1.19
	Model 6	24,361	0.93	728	26,293	0.42	355	1.20	1.04
0.30	Model 1	20,726	1.04	693	15,585	0.60	301	1.21	1.24
	Model 2	20,642	0.96	637	13,458	0.57	247	1.11	1.02
	Model 3	19,660	0.99	626	15,387	0.60	297	1.09	1.22
	Model 4	19,562	0.91	572	13,261	0.57	243	1.00	1.00
	Model 5	21,780	1.09	763	16,028	0.60	309	1.33	1.27
	Model 6	21,712	1.01	705	13,901	0.57	255	1.23	1.05
0.40	Model 1	17,533	1.17	660	9,796	0.75	236	1.23	1.29
	Model 2	17,366	1.08	603	8,098	0.72	187	1.12	1.02
	Model 3	16,404	1.11	585	9,598	0.75	231	1.09	1.26
	Model 4	16,211	1.03	537	7,900	0.72	183	1.00	1.00
	Model 5	18,875	1.21	734	10,135	0.75	244	1.37	1.33
	Model 6	18,755	1.12	675	8,437	0.72	195	1.26	1.07
0.50	Model 1	14,909	1.29	618	6,837	0.89	196	1.25	1.35
	Model 2	14,667	1.19	561	5,542	0.86	153	1.13	1.06
	Model 3	13,648	1.25	548	6,602	0.89	189	1.11	1.30
	Model 4	13,385	1.15	495	5,307	0.85	145	1.00	1.00
	Model 5	16,281	1.33	696	7,049	0.89	202	1.41	1.39
	Model 6	16,084	1.23	636	5,758	0.86	159	1.28	1.10
0.60	Model 1	12,656	1.43	582	4,571	1.03	157	1.28	1.37
	Model 2	12,341	1.31	520	3,727	1.01	121	1.15	1.05
	Model 3	11,369	1.39	508	4,608	1.03	153	1.12	1.33
	Model 4	11,040	1.28	454	3,583	1.00	115	1.00	1.00
	Model 5	14,052	1.45	655	4,938	1.03	164	1.44	1.43
	Model 6	13,783	1.34	594	3,918	1.00	126	1.31	1.10
0.70	Model 1	10,623	1.57	536	3,677	1.15	136	1.29	1.40

Au Cutoff (g/t)	Resource Model	Indicated			Inferred			Contained Metal Ratio vs Base Case Model (i.e. Model 4)	
		Tonnes ('000)	AU (g/t)	Au Ozs ('000)	Tonnes ('000)	Au (g/t)	Au Ozs ('000)	Indicated	Inferred
	Model 2	10,244	1.45	478	2,771	1.13	101	1.15	1.04
	Model 3	9,464	1.53	466	3,602	1.14	132	1.13	1.36
	Model 4	9,072	1.42	414	2,695	1.12	97	1.00	1.00
	Model 5	12,017	1.59	614	3,809	1.15	141	1.48	1.45
	Model 6	11,688	1.46	549	2,904	1.13	106	1.33	1.09
0.80	Model 1	8,988	1.72	497	2,724	1.29	113	1.32	1.43
	Model 2	8,561	1.59	438	1,990	1.28	82	1.16	1.04
	Model 3	8,012	1.68	433	2,674	1.27	109	1.15	1.38
	Model 4	7,565	1.55	377	1,940	1.26	79	1.00	1.00
	Model 5	10,267	1.73	571	2,860	1.28	118	1.51	1.49
	Model 6	9,896	1.59	506	2,126	1.27	87	1.34	1.10
0.90	Model 1	7,657	1.88	463	2,127	1.41	96	1.35	1.45
	Model 2	7,182	1.73	399	1,519	1.41	69	1.16	1.05
	Model 3	6,853	1.82	401	2,089	1.40	94	1.17	1.42
	Model 4	6,365	1.68	344	1,481	1.39	66	1.00	1.00
	Model 5	8,771	1.88	530	2,209	1.41	100	1.54	1.52
	Model 6	8,355	1.73	465	1,601	1.40	72	1.35	1.09
1.00	Model 1	6,615	2.02	430	1,743	1.51	85	1.38	1.47
	Model 2	6,093	1.87	366	1,241	1.52	61	1.17	1.05
	Model 3	5,865	1.96	370	1,712	1.49	82	1.19	1.41
	Model 4	5,328	1.82	312	1,211	1.49	58	1.00	1.00
	Model 5	7,621	2.02	495	1,787	1.52	87	1.59	1.50
	Model 6	7,160	1.86	428	1,288	1.52	63	1.37	1.09

Model 1 – Unadjusted Grades – no metal-at-risk removed
Model 2 – Unadjusted Grades, metal-at-risk removed
Model 3 – RC adjusted to core, no Metal-at-risk removed
Model 4 – RC adjusted to core, metal-at-risk removed (Base Case) = reportable Mineral Resource
Model 5 – Core increased 25 %, no RC adjustment, no metal-at-risk removed
Model 6 – Core increased 25 %, no RC adjustment, metal-at-risk removed

17.24 Reconciliation to Previous Models

AGC requested AMEC complete a reconciliation of resources between the AGC 2003 PACK model and two subsequent AMEC resource models. AMEC's reconciliation is summarized below and the details are provided in Appendix I.

The 2003 scoping study pit contains nearly three times as much total material as the 2004 LG pit (56.7 million tonnes vs. 18.6 million tonnes). Similarly, this pit contains roughly 40% more material above a 0.62 g/t cutoff grade than the other pits. The 2003 PACK model contains about 400,000 more contained gold ounces than the other AMEC models within the scoping study pit. Approximately half of the difference (200,000 oz) is due to the fact that the 2003 scoping study pit was optimized using all estimated blocks from the 2003 PACK model. Block grades were estimated up to

100 m from drillhole data in that model. The maximum distance that drillhole grades were projected in the AMEC models was 50 m.

Differences in estimation methods account for the remaining 200,000 oz difference between the 2003 PACK model and the various AMEC models. In addition to estimation differences between the various models, the November 2004 AMEC model was estimated with significantly more drillhole data than were available for the 2003 PACK model. The additional drilling data consisted of core and RC twin holes and local infill data.

The difference in contained ounces between the two models, attributable to differing estimation methods, is difficult to quantify by individual categories. The principal differences include:

- RC assays were factored downward by AMEC for the November 2004 model while no factoring of assays was done for the 2003 PACK model
- Closer-spaced drilling data were available for the 2004 model
- There are a number of cases where excessive grade projection occurred from high-grade intercepts at the bottom of drillholes in the 2003 PACK model
- Localized grade smearing in the 2003 PACK model
- The way in which metal-at-risk was handled for each model.

The decision by AMEC to factor RC assay data is discussed in the June 2004 report and in Section 17.12 of this report. There are several examples where 2003 PACK block grades could not be supported based on newly acquired infill drilling data (e.g. Section 480N). Similarly, in the 2003 PACK model, it was observed that the last drillhole composite in at least five drillholes generated a large volume of blocks in excess of 2 g/t gold. In these cases, the high-grade composites were only loosely constrained by a grade probability contour (0.37 probability of the block being in excess of 0.25 g/t). In the 2003 PACK model, metal-at-risk was removed by capping gold composites at 15, and 17 g/t for the tension vein regime (Mineral Zones 1 and 2) and the Albion Shear zone material, respectively. Metal-at-risk was removed by the outlier restriction method in the November 2004 AMEC model.

18.0 OTHER RELEVANT DATA AND INFORMATION

No other data or information is relevant for the review of the Rock Creek project.

19.0 INTERPRETATIONS AND CONCLUSIONS

In 2004, the last time AMEC Consultants visited the Rock Creek Property, the land title agreement between AGC and the aboriginal land owners had not been fully settled. In 2006, AGC has provided documentation to AMEC that the land title agreement is in good standing based on the report issued by the attorneys represented by Guess and Rudd, effectively dated August 11, 2006. Based on this knowledge, AMEC believes that any resource statement produced within the data reviewed in this report is appropriate for public disclosure.

AMEC has reviewed the interpreted geology and the mineralization at the Rock Creek deposit. AMEC believes that the geology and mineralized zones have been adequately mapped and interpreted to complete a mineral resource.

AMEC has reviewed the drilling and sampling methods used on the Rock Creek Property and believes that these methods and procedures are reasonably accurate and conform to industry-standard practices for the development of a resource declaration.

AMEC has also reviewed the data verification along with the sample preparation and analyses procedures for assaying facilities used by AGC. AMEC believes that the results of the review are adequate for the development of a resource declaration, although there are some discrepancies that have been noted. Refer to the recommendations for details.

AMEC concludes that the resource statement, based on adjustment of RC sample grades to the core "datum" and with metal-at-risk removed, is the most appropriate based on the current information. This resource statement incorporates the following features:

- Conservative resource reporting is recommended until production data reconciliation answers the bias discrepancy between the RC and core assay data.
- Due to the qualitative nature of core samples versus RC samples and their noted discrepancies, AMEC commends AGC's implementation of RC assays adjusted to core assays for the resource estimation.
- The reduced significance of pre-1990 Placer Dome and Tenneco data with new RC and core drilling in the proposed pit area.
- The restricted use of trench data (blocks within 15 m of trench assays) in the resource estimation.

- The rejection of RC samples with less than 30% recovery and those with greater than 120% recovery used in the resource estimation.
- The rejection of core samples with less than 60% recovery used in the resource estimation.
- Currently, there is only an indicated resource applicable to the Rock Creek Deposit.

Removing the metal-at risk has created a reasonably conservative resource statement, effectively removing between 5% and 11% of the total resource based on not removing any metal-at-risk.

It is the opinion of AMEC that the review of the work performed has met the objective for AGC to declare a Mineral Resource for the Rock Creek Property. NovaGold should complete its feasibility studies to enable conversion of Mineral Resources to Mineral Reserves.

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

There are no relevant additional requirements.

21.0 RECOMMENDATIONS

Following the audit of the AGC mineral resource estimate, AMEC recommends the following:

- AGC perform, in due course, the remaining comments and requirements made by Guess and Rudd to be assured that the land titles are settled and clearly defined. AGC has stated their intentions to act on these comments and requirements in a letter to AMEC dated August 14, 2006.
- Compare the results of the 84 re-surveyed drillhole coordinates (from October, 2004) with the original surveyed hole coordinates to make sure that the holes are within acceptable tolerances. This may have already been completed, but AMEC did not have access to any of the resultant comparisons.
- Conduct sampling studies to determine the loss of gold during sample preparation that was determined by the check assay campaign, based on coarse reject samples. The result of 77 check assays determined that there was a nine percent high bias at the check lab (SGS Lakefield). Based on this information, AGS Chemex may be understating gold values.
- Fully investigate the noted discrepancies in the master database. The data quality from 2003-2004 has been deemed excellent with only one error found in the nine holes audited. Data from before 2003, has a higher error rate and therefore should be fully audited by AGC to correct discrepancies noted in section 14.2
- The QA/QC data should be compiled into organized groups of datasets. A summary document on all QA/QC programs should be prepared for future resource models and technical reports.
- AGC should investigate the default Mineral Zone 99 to determine portions that have been adequately drilled to support a revised geological interpretation and construction of new mineralized zones.
- The next resource model should include a quadrant search to control the amount of extrapolation in the unconstrained Mineral Zone 99. This will force the estimation runs to use a minimum number of declustered samples from more than one drillhole, thus avoiding grade smearing into areas of limited drilling.

22.0 REFERENCES

Avalon Development Corporation, 2002. Summary Report for the Rock Creek Gold Prospect, Seward Peninsula, Alaska.

Bundtzen, T.K., Reger, R.D., Laird, G.M., Pinney, D.S., Clautice, K.H., Liss, S.A., and Cruse, G.R., 1994, Progress Report on the geology and mineral resources of the Nome mining district: Alaska Division of Geological and Geophysical Surveys, Public Data-File 94-39, 21 pages, 2 sheets, scale 1:63,360.

Cox, D.P., and Singer, D.A., eds., 1986, Mineral deposit models: U.S. Geological Survey Bulletin 1693, 379 p.

DGGS, 1994a, Colour shadow total field magnetics of the Nome Mining District: Alaska Div. Geological Geophys. Surveys, Rept. of Inv. 94-11, one colour map.

DGGS, 1994b, 7200 Hz coplanar resistivity of the Nome Mining District: Alaska Div. Geological Geophys. Surveys, Rept. of Inv. 94-12, one colour map.

DGGS, 1994c, 900 Hz coplanar resistivity of the Nome Mining District: Alaska Div. Geological Geophys. Surveys, Rept. of Inv. 94-13, one colour map.

Flanigan, B., Freeman, C., Newberry, R., McCoy, D., and Hart, C., 2000, Exploration models for mid and Late Cretaceous intrusion-related gold deposits in Alaska and the Yukon Territory, Canada, in Cluer, J.K., Price, J.G., Struhsacker, E.M., Hardyman, R.F., and Morris, C.L., eds., Geology and Ore Deposits 2000: The Great Basin and Beyond: Geological Society of Nevada Symposium Proceedings, May 15-18, 2000, p. 591-614.

Ford, R.C., 1993, Geology, geochemistry, and age of gold lodes at Bluff, and Mt. Distin, Seward Peninsula, Alaska: unpublished Ph.D. dissertation, Colourado School of Mines, Colourado, 302 p.

Ford, R.C., and Snee, L.W., 1996: 40Ar/39Ar thermochronology of white mica from the Nome district, Alaska -- The first ages of lode sources to placer gold deposits in the Seward Peninsula: Economic Geology, v. 91, no. 1, p. 213-220.

Gamble, B.M., Ashley, R.P., and Pickthorn, W.J., 1985, Preliminary study of lode gold deposits, Seward Peninsula, IN Bartsch-Winkler, Susan, ed., The United States Geological Survey in Alaska – Accomplishments during 1984: U.S. Geological Survey Circular 967, p. 27-29.

Goldfarb, R.J., 1997, Metallogenic evolution of Alaska: Econ. Geol. Mono. 9, pp. 4-34.

Goldfarb, R. J., Miller, L. D., Leach, D. L., and Snee, L. W., 1997, Gold deposits in metamorphic rocks of Alaska, IN Goldfarb, R.J., and Miller, L.D., eds., Mineral deposits of Alaska: Economic Geology Monograph9, p. 151-190.

Hawley, C.C., and Hudson, T.L., 1996: Distribution of mineral occurrences in the Nome 1:250,000-scale quadrangle, Alaska, USGS OPEN-FILE REPORT 02-113

Hummel, C.L., 1962a, Preliminary geology of the Nome C-l Quadrangle, Seward Peninsula, Alaska: U.S. Geological Survey Map MF-247., 1 sheet, scale 1:63,360.

Hummel, C.L., 1962b, Preliminary geology of the Nome D-l Quadrangle, Seward Peninsula, Alaska: U.S. Geological Survey Map MF 248, 1 sheet, scale 1:63,360.

Krzewinski, T.G., Ross, T.E. and Nicholson, D., 2004: Rock Creek Gold Mine Near Nome, Alaska Geotechnical Investigation/Studies for Open Pit, Tailings Impoundment, Waste Dumps, and Plant Facilities: unpublished internal report on Golder website.

Nokleberg, W.J., West, T.D., Dawson, K.M., Shpikerman, V.I., Bundtzen, T.K., Parfenov, L.M., Monger, J.W.H., Ratkin, V.V., Baranov, B.V., Byalobzhesky, S.G., Diggles, M.F., Eremin, R.A., Fujita, Kazuya, Gordey, S.P., Gorodinskiy, M.E., Goryachev, N.A., Feeney, T.D., Frolov, Y.F., Grantz, Arthur, Khanchuck, A.I., Koch, R.D., Natalin, B.A., Natapov, L.M., Norton, I.O., Patton, W.W., Jr., Plafker, George, Pozdeev, A.I., Rozenblum, I.S., Scholl, D.W., Sokolov, S.D., Sosunov, G.M., Stone, D.B., Tabor, R.W., Tsukanov, N.V., and Vallier T.L., 1998: Summary terrane, mineral deposit, and metallogenic belt maps of the Russian Far East, Alaska, and the Canadian Cordillera: U.S. Geological Survey Open-File Report 98-136 (CD-ROM).

Norwest Corporation (2003), Preliminary Economic Study – Rock Creek Project, Nome,Alaska.

Norwest Corporation (2005), Rock Creek Project Updated Economic Review

NovaGold Ltd., 2006: website www.novagold.com

Plafker, G. and Berg, H.C., 1994, Overview of the geology and tectonic history of Alaska in Plafker, G. and Berg, H.C., editors, The Geology of Alaska: Geological Soc. Amer., Geology of North Amer., V. G-1, pp 989-1021.

St. George, P., 2000, 1999 Rock Creek project drilling and metallurgical program: Internal Rept., NovaGold Resources Inc., 29 p.

Till, A.B., and Dumoulin, J.A., 1994, Geology of the Seward peninsula and St. Lawrence Island: in Plafker, George, and Berg H.C., editors, The Geology of Alaska: Geological Soc. Amer., Geology of North Amer., V. G-1, pp 141-152.

23.0 DATE AND SIGNATURE PAGE

The undersigned prepared this Technical Report, titled *Technical Report of the Rock Creek Property, Nome Alaska, USA* dated 30 of August 2006, in support of the public disclosure of technical aspects of the Rock Creek Project as of the 30 of August 2006. The format and content of the report are intended to conform to Form 43-101F1 of National Instrument 43–101 (NI 43–101) of the Canadian Securities Administrators.

Signed

Dr. Harry M. Parker 30th August 2006.

A-1 Legal Opinion on Land Status

Guess and Rudd

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June 8, 2005

Via Email and U.S. Mail

Alaska Gold Company
Attention: Douglas C. Nicholson
Vice President/General Manager
P.O. Box 640
Nome, AK 99762

Re: Limited Title Report—Proposed Rock Creek Pit Area
Our File 5971.9

Gentlemen:

Pursuant to your request we have prepared this limited title report on the following lands that you have identified as including the proposed Rock Creek Pit Area:

KRM, T. 10 S., R. 34 W.:

Sec. 14: All, excluding the lands within Mineral Surveys 332 and 1835 (but including lands within Mineral Survey 721); and

Sec. 23: All, excluding the lands within Mineral Surveys 403, 447, 715, and 2271 (but including lands within Mineral Survey 721).

Said lands are referred to hereinafter as the "Lands". For purposes of this limited report, the Lands comprise the two parcels (Parcels I and II) described on Exhibit A attached hereto.

RECORDS EXAMINED

This limited report is based upon our examination of the following public records and other documents:

1. BLM Records. Official records of the Bureau of Land Management ("BLM"), United States Department of the Interior, pertaining to the Lands, as follows: all relevant plats, historical indices, surveys, and case files and other documents disclosed thereby (but not any computer records due to the current unavailability thereof; **see Comment 3 below**) maintained by the relevant BLM offices located in Alaska.

2. DNR Records. Official records of the Alaska Department of Natural Resources ("DNR") pertaining to the Lands, as follows: all relevant plats, historical indices, surveys, computer records, and case files and other documents disclosed thereby maintained by the DNR offices located in Alaska, except for any public records pertaining to water rights.

3. Recording District Records. Official records of the Cape Nome Recording District, limited in the case of Parcel I to the extent described in Underlying Assumption 2 below but otherwise from the date of patent or interim conveyance from the United States to the effective time and date of this limited report.

4. Certain Unrecorded Instruments. Copies of the following unrecorded instruments provided to us by you:

   (a) that certain Mining Lease between Bering Straits Native Corporation and Golden Glacier, Inc. dated May 6, 1994 ("BSNC/GGI Mining Lease dated May 6, 1994"); and

   (b) that certain Exploration Agreement and Option To Lease among Bering Straits Native Corporation, Golden Glacier, Inc., and Novagold Resources Alaska, Inc. dated March 13, 2002 ("Exploration Agreement dated March 13, 2002"); and

(c) that certain Assignment Agreement between Novagold Resources Alaska, Inc. and Alaska Gold Company dated June 1, 2002 ("Assignment dated June 1, 2002").

We began our examination of the records described above at 7:30 a.m. on March 30, 2005, and therefore this limited report should be considered to be as of that time and date.

OPINION

Subject to the assumptions, comments, and requirements set forth below, based upon our examination of the public records and other documents described above, it is our opinion that title to the Lands is vested as follows:

Parcel I:

Title to Parcel I is vested in Alaska Gold Company ("AGC"), subject to the following:

(a) with respect to the lands conveyed by U.S. Patent No. 316745 dated February 24, 1913, the reservations, exceptions, exclusions, and limitations set forth in said patent (including an express exception from the grant made by said patent of all lode deposits known to exist on October 9, 1908, within the lands conveyed thereby, but not any lode deposits discovered after said date) (**see Comment 1(a) below**);

(b) with respect to the lands conveyed by U.S. Patent No. 955746 dated March 21, 1925, the reservations, exceptions, exclusions, and limitations set forth in said patent (including an express exception from the grant made by said patent of all lode deposits known to exist on May 23, 1923, within the lands conveyed thereby, but not any lode deposits discovered after said date) (**see Comment 1(a) below**);

(c) the record interest of Nome Gold Joint Venture ("NGJV") arising under that certain Assignment of Lease given by Aspen Exploration Corporation ("Aspen") to NGJV dated September 10, 1987 (but effective as of June 1, 1987), and recorded on March 31, 1988, at Book 320, Pages 660-662, Cape Nome Recording District—from which no conveyance or relinquishment (either to AGC or to Aspen) can be found[1];

(d) the liens and encumbrances described in Schedule 1 attached hereto (if the same continue to exist)—no release or reconveyance of which can be found. **See Comment 1(c) below.**

Parcel II:

Record title to the surface estate in and to Parcel II is vested in Sitnasuak Native Corporation ("Sitnasuak"), subject to the following:

(a) with respect to the lands conveyed by U.S. Patent No. 50-83-0275, the reservations (including but not limited to the subsurface estate,

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1 NGJV assigned its interest in Parcel I to Placer Dome U.S. Inc. as manager of Golden Creeks Joint Venture pursuant to that certain Assignment of Lease dated April 8, 1988 (but effective as of June 1, 1987), and recorded on April 19, 1988, at Book 320, Pages 773-775, Cape Nome Recording District. NGJV later received a reconveyance of said interest pursuant to that certain Conveyance of Interest of Manager, Conveyance of Participating Interests, Withdrawal of Participant, Termination of Mining Venture Agreement (Golden Creeks Joint Venture), [etc.] from Placer Dome U.S. Inc. to NGJV effective as of February 11, 1990, and recorded on February 28, 1992, at Book 332, Pages 159-174, Cape Nome Recording District. It is our understanding that the Lode Mining Lease under which NGJV held an interest (see Memorandum of Lode Mining Lease between AGC and Aspen dated April 18, 1986, recorded on August 14, 1986, at Book 315, Pages 985-991, Cape Nome Recording District) has been terminated. See Lease Termination between AGC and Aspen dated March 9, 1993 (but effective as of November 13, 1992), recorded on March 25, 1993, at Book 334, Pages 371-373, Cape Nome Recording District. As noted above, however, no conveyance or relinquishment *from NGJV* to either AGC or Aspen can be found, and it is not clear in said Lease Termination whether Aspen was executing the same on behalf of itself alone or on behalf of itself and as manager of NGJV. **See Comment 1.b below.**

title to which is discussed below), exceptions, exclusions, and limitations set forth in said patent (**see Comment 2(a) below**);

(b) with respect to the lands conveyed by Interim Conveyance No. 707, the reservations (including but not limited to the subsurface estate, title to which is discussed below), exceptions, exclusions, and limitations set forth in said interim conveyance (**see Comment 2(a) below**);

(c) the record interest of Golden Glacier, Inc. under that certain Memorandum (dated September 2, 1994) of Surface Use Agreement (dated July 7, 1994) by and between Sitnasuak and Golden Glacier, Inc., which memorandum was recorded on September 19, 1994, at Book 338, Pages 330-334, Cape Nome Recording District—from which no conveyance or relinquishment to Sitnasuak can be found.[2]

Title to the subsurface estate in and to Parcel II is vested in Bering Straits Native Corporation, subject to the following:

(a) with respect to the lands conveyed by U.S. Patent No. 50-83-0276, the reservations (including but not limited to the subsurface estate, title to which is discussed below), exceptions, exclusions, and limitations set forth in said patent (**see Comment 2(a) below**);

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2 Golden Glacier, Inc. assigned, *inter alia*, its surface interest in Parcel II to Kennecott Exploration Company pursuant to that certain Memorandum Agreement dated July 8, 1994, and recorded on September 19, 1994, at Book 338, Pages 322-329, Cape Nome Recording District. Golden Glacier, Inc. later received a reconveyance of said interest pursuant to that certain Release and Quitclaim Deed from Kennecott Exploration Company to Golden Glacier, Inc. dated September 3, 1996, and recorded on November 12, 1996, at Book 344, Pages 432-433, Cape Nome Recording District. You have advised us that the Surface Use Agreement dated July 7, 1994, has been terminated, but no instrument evidencing said termination has been recorded in the Cape Nome Recording District. **See Comment 2(e) below.**

(b) with respect to the lands conveyed by Interim Conveyance No. 708, the reservations (including but not limited to the subsurface estate, title to which is discussed below), exceptions, exclusions, and limitations set forth in said interim conveyance (**see Comment 2(a) below**);

(c) notice of the formation on March 1, 1992, of the Anvil Joint Venture among Golden Glacier, Inc., NGJV, and Newmont Exploration Limited (which notice is imparted by that certain Agreement and Release among Golden Glacier, Inc., NGJV, and Aspen dated January 13, 1994, and recorded at Book 336, Pages 655-672, Cape Nome Recording District), for which no notice of termination has been placed of record (**see Comment 2(e) below**);

(d) the interest of Sitnasuak arising under that certain Placer Mining Lease from Golden Glacier, Inc. to Sitnasuak dated October 11, 1999 (a memorandum of which was recorded on October 25, 1999, at Book 355, Pages 438-500, Cape Nome Recording District), as amended by the following:

    (1) a probable First Amendment that is not recorded and which we have not seen;

    (2) that certain Second Amendment to Placer Mining Lease effective October 11, 2000, and recorded on January 29, 2001, at Book 359, Pages 679-681, Cape Nome Recording District; and

    (3) that certain Third Amendment to Placer Mining Lease effective April 24, 2002, and recorded in the Cape Nome Recording District on May 29, 2002, as Document No. 2002-000449-0 (2 pages); **see Comment 2(f) below**;

(e) the liens and encumbrances described in Schedule 2 attached hereto (if the same continue to exist)—no release or reconveyance of which can be found. **See Comment 2(g) below.**

None of (1) the BSNC/GGI Mining Lease dated May 6, 1994, (2) the BSNC/GGI/Novagold Exploration Agreement dated March 13, 2002, or (3) the Novagold/AGC Assignment dated June 1, 2002, has been recorded in the Cape Nome Recording District. **See Comment 2(h) below.**

UNDERLYING ASSUMPTIONS

1. Records. We have assumed that the BLM records and the DNR records accurately depict or describe all interests in the Lands that arise immediately by, through, or under the United States or the State of Alaska; we therefore have not searched the records of the recording districts described above for this purpose. We also have assumed that the indices prepared and maintained by the recording districts described above are complete and accurate indices of all documents filed for record with said recording districts.

2. Effect of Statutory Quitclaim Deed from UV Industries, Inc. to AGC. In accordance with your instructions, we have assumed that good title to Parcel I was vested in UV Industries, Inc., subject to the reservations, exceptions, exclusions, and limitations set forth in U.S. Patents No. 316745 and No. 955746 issued therefor but otherwise free and clear of any and all liens, encumbrances, or other interests of third parties, when UV Industries, Inc. executed and delivered to AGC that certain Statutory Quitclaim Deed dated March 17, 1975, and recorded on March 25, 1975, at Book 276, Pages 621-640, Cape Nome Recording District. We therefore have not searched the records of the Cape Nome Recording District for the purpose of establishing the same. **See Comment 1(d) below.**

3. Authority, Authenticity, Execution, and Delivery. We have assumed that (a) the individuals executing the documents reviewed by us were vested with the authority to execute such documents at the time of execution, (b) the signatures of such individuals are genuine, and (c) all such documents were duly executed and delivered.

COMMENTS AND REQUIREMENTS

1. Respecting Title To Parcel I.

(a) Reservations, etc. in Patents. U.S. Patents No. 316745 and No. 955746 are subject to the usual reservations, exceptions, exclusions, and limitations to which all patents to placer mining claims are subject (including express exceptions for "known lode deposits" noted in the Opinion section of this limited report), but to no other reservations, exceptions, exclusions, or limitations.

> **Requirement:** None; comment is advisory. With respect to the exception from placer patents of known lode deposits, see 1 AM. LAW OF MINING § 32.05 (2d ed. 1984).

(b) Record interest of NGJV arising under old Lode Mining Lease from AGC to Aspen. As described above, (1) NGJV was the owner of record of the rights of the lessee under that certain Lode Mining Lease dated April 18, 1986 (a memorandum of which was recorded on August 14, 1986, at Book 315, Pages 985-991, Cape Nome Recording District) when AGC and Aspen entered into that certain Lease Termination dated March 9, 1993 (but effective as of November 13, 1992), recorded on March 25, 1993, at Book 334, Pages 371-373, Cape Nome Recording District, (2) no conveyance or relinquishment *from NGJV* to either AGC or Aspen can be found, and (3) it is not clear in said Lease Termination whether Aspen was executing the same on behalf of itself alone or on behalf of itself and as manager of NGJV.

> **Requirement:** You must ask NGJV—or Aspen as manager thereof—to execute, acknowledge, and deliver to AGC a quitclaim deed to, *inter alia*, Parcel I. Upon receipt thereof,

you should record said deed in the Cape Nome Recording District.

(c) **Encumbrances noted on Schedule 1 attached hereto.** As noted above, the encumbrances noted on Schedule 1 remain of record in the Cape Nome Recording District.

> **Requirement:** You should ask us to determine whether said encumbrances have ceased to have any legal effect—either in accordance with the terms thereof or under applicable law. Insofar as we are unable to confirm that this is the case with respect to any such encumbrance, you should seek a release or reconveyance of the same or, failing that, should seek to remove the clouds on your title caused thereby by filing a quiet title action in the Superior Court for the Second Judicial District at Nome.

(d) **Underlying Assumption 2.** As noted above, we have assumed that good title to Parcel I was vested in UV Industries, Inc. when it executed and delivered that certain Statutory Quitclaim Deed from UV Industries, Inc. to AGC dated March 17, 1975, and recorded on March 25, 1975, at Book 276, Pages 621-640, Cape Nome Recording District.

> **Requirement:** If this assumption at any time proves to be unacceptable or undesirable for your purposes, you should either (1) ask us to undertake a full examination of the title to Parcel I or (2) obtain a title insurance policy respecting Parcel I providing such coverage as you deem necessary. In this regard, see also Comment 4 below.

2. Respecting Title To Parcel II.

(a) **Reservations, etc. in Patents and Interim Conveyances.** Each of Interim Conveyance No. 707 and U. S. Patent No. 50-83-0275 issued to Sitnasuak reserved the subsurface estates to the United States. (Said reserved subsurface estates thereupon were conveyed to BSNC by Interim Conveyance No. 708 and U. S. Patent No. 50-83-0276.) In addition, Interim Conveyance No. 707 and U. S. Patent No. 50-83-0275 state that the grants made thereby were subject to, *inter alia*,

(1) any valid existing rights in the lands conveyed thereby,

(2) right-of-way F-09113 for the Miocene Ditch System, a portion of which may cross Parcel II, and

(3) the requirements of section 14(c) of ANCSA, 43 U.S.C. § 1613(c) (**see Comment 2(b) below**).

Interim Conveyance No. 708 and U. S. Patent No. 50-83-0276 issued to BSNC state that the grants made thereby were subject to, *inter alia*,

(1) any valid existing rights in the lands conveyed thereby and

(2) the requirements of section 14(f) of ANCSA, 43 U.S.C. § 1613(f) (**see Comment 2(c) below**).

Our examination of the records described above disclosed no "valid existing rights" in Parcel II that (a) were not identified in the interim conveyances or patents described above and (b) remained valid as of the effective time and date of this title opinion.

Requirement: None; comment is advisory. **But see Comments 2(b), 2(c) and 3 below.**

(b) **ANCSA § 14(c).** Section 14(c) of ANCSA requires Sitnasuak to reconvey to certain individuals and entities the surface estate in and to certain lands, including but not limited to the following:

(1) lands occupied as of December 18, 1971, as primary places of residence;

(2) lands occupied as of December 18, 1971, as primary places of business;

(3) lands occupied as of December 18, 1971, by nonprofit organizations; and

(4) up to 1,200 acres of lands necessary for community expansion or other foreseeable community needs.

According to the records of the Cape Nome Recording District, none of Parcel II has been so conveyed, and it is unclear from the records examined by us whether any of Parcel II must be made the subject of any such conveyance.

> **Requirement:** You should address with Sitnasuak whether any of Parcel II is or might become the subject of any reconveyance required by section 14(c) of ANCSA.

(c) **ANCSA § 14(f).** Section 14(f) of ANCSA, 43 U.S.C. § 1613(f), provides that "the right to explore, develop, or remove minerals from the subsurface estate in the lands within the boundaries of any Native village shall be subject to the consent of the Village Corporation." The clear intent of this restriction is to preclude regional corporations (which acquire the subsurface estate under almost all village corporation lands) from unreasonably interfering with the use of the surface estate of *certain* village corporation lands. It is unclear under ANCSA, however, which village corporation lands are situated "within the boundaries of any Native village". In Leisnoi, Inc. v. Stratman, 154 F.3d 1062 (9th Cir. 1998), the court held that ANCSA distinguishes between lands "patent[ed] to a Village Corporation" and lands "within the boundaries of any Native village" and that the test should be whether there is physical evidence of occupancy. We believe that the Ninth Circuit's decision is sound.

> **Requirement:** You (1) should attempt to determine by way of surface inspections, discussions with officers of Sitnausak, and interviews with local residents whether Sitnasuak has become obligated to reconvey to one or more third parties any of Parcel II and to what extent your proposed operations may damage surface resources, and (2) should seek to avoid or resolve any potential disputes with Sitnasuak or relevant third parties over surface damages to be caused by your proposed operations. If a satisfactory agreement cannot be reached with Sitnasuak, you should consult with counsel respecting your

ability to explore, develop, and mine Parcel II without entering into an agreement with Sitnasuak respecting Parcel II.

(d) Notice of the 1992 Anvil Joint Venture. As noted above, notice of the formation on March 1, 1992, (but not notice of the later termination) of the Anvil Joint Venture among Golden Glacier, Inc., NGJV, and Newmont Exploration Limited is of record by virtue of that certain Agreement and Release among Golden Glacier, Inc., NGJV, and Aspen dated January 13, 1994, and recorded at Book 336, Pages 655-672, Cape Nome Recording District, for which no notice of termination has been placed of record.

> **Requirement:** Satisfactory evidence of the termination of the Anvil Joint Venture should be recorded in the Cape Nome Recording District.

(e) Record interest of Golden Glacier, Inc. arising under 1994 Surface Use Agreement between Sitnasuak and Golden Glacier, Inc. As noted above, no instrument has been recorded in the Cape Nome Recording District evidencing the termination of the Surface Use Agreement dated July 7, 1994, between Sitnasuak and Golden Glacier, Inc. The record interest of Golden Glacier, Inc. under that certain Memorandum (dated September 2, 1994) of Surface Use Agreement (dated July 7, 1994) between Sitnasuak and Golden Glacier, Inc., recorded on September 19, 1994, at Book 338, Pages 330-334, Cape Nome Recording District, thus remains of record.

> **Requirement:** If said Surface Use Agreement has been terminated, satisfactory evidence of such termination should be recorded in the Cape Nome Recording District.

(f) Placer Lease from Golden Glacier, Inc. to Sitnasuak dated October 11, 1999 (as amended). As noted above, Golden Glacier, Inc. and Sitnasuak have entered into that certain Placer Mining Lease dated October 11, 1999 (a memorandum of which was recorded on October 25, 1999, at Book 355, Pages 438-500, Cape Nome Recording District), as amended.

> **Requirement:** You should ask us to examine the terms of said Placer Mining Lease to determine whether its existence will have any effect on your plans to conduct lode mining

operations on Parcel II in furtherance of your rights under (1) the BSNC/GGI Mining Lease dated May 6, 1994, (2) the BSNC/GGI/Novagold Exploration Agreement dated March 13, 2002, and (3) the Novagold/AGC Assignment dated June 1, 2002. If we cannot assure you that said Placer Mining Lease will have no effect, then you should seek to negotiate a partial relinquishment of said Placer Mining Lease.

(g) **Encumbrances noted on Schedule 2 attached hereto.** As noted above, the encumbrances noted on Schedule 2 remain of record in the Cape Nome Recording District.

Requirement: You should ask us to determine whether said encumbrances have ceased to have any legal effect—either in accordance with the terms thereof or under applicable law. Insofar as we are unable to confirm that this is the case with respect to any such encumbrance, you should seek a release or reconveyance of the same or, failing that, should seek to remove the clouds on your title caused thereby by filing a quiet title action in the Superior Court for the Second Judicial District at Nome.

(h) **Unrecorded instruments.** As noted above, none of (1) the BSNC/GGI Mining Lease dated May 6, 1994, (2) the BSNC/GGI/Novagold Exploration Agreement dated March 13, 2002, or (3) the Novagold/AGC Assignment dated June 1, 2002, has been recorded in the Cape Nome Recording District.

Requirement: In order to impart constructive notice of your rights under these instruments, said instruments (or recordable memoranda thereof) must be recorded in the Cape Nome Recording District.

3. Possible Additional Valid Existing Rights.

As noted above, we have not been able to examine any computer records maintained by the BLM respecting the Lands. Though it is only a remote possibility, said computer records might disclose valid existing rights in the Lands that have not been disclosed by the other records examined by us.

> **Requirement:** When the BLM computer records become available once again, you should ask us to examine the same for the purpose of ruling out the existence of any additional valid existing rights in the Lands.

4. Title Insurance and Scope of Inquiry Undertaken by Title Insurance Companies Respecting Patented Mining Claims.

As noted in Comment 1(d) above, in order to address any issues not identified by us as a result of our making Underlying Assumption 2 above, you may wish (i) to ask us to undertake a full examination of the title to Parcel I or (ii) to obtain title insurance providing coverage in a sufficient amount. Before choosing to obtain title insurance, however, you should be aware of, and should consider, the following:

(a) It is customary for title insurance companies to limit their inquiry to those matters disclosed from and after the issuance of patent. In the case of patented federal mining claims, such an inquiry may fail to identify certain conveyances or encumbrances of importance, for the chain of title to a federal mining claim begins with the recording of a certificate of location to that claim, not with the patenting of said claim. The applicant for a patent must, of course, establish that he is the owner of the claim for which patent is sought, and thus the risks associated with limiting one's inquiry to post-patent matters is ameliorated to that extent. But conveyances that both (1) are made after the application for patent is filed and (2) are recorded prior to the issuance of patent will remain undiscovered by such an inquiry. In addtion, it has been our experience that certain royalties, easements, options, mortgages, or other encumbrances granted prior to patent typically are not disclosed on the face of the patent *even if they were granted prior to the filing of the application for patent.*

(b) The cost of procuring a title insurance policy providing a sufficient amount of coverage may be significantly greater than the cost of procuring a complete title opinion and advice on the same from a lawyer.

Requirement: You should consult with counsel regarding the risks associated with (a) the limited inquiries typically undertaken by title insurance companies when reporting on title to patented federal mining claims and (b) the inherent differences between title insurance and a title opinion prepared by a lawyer.

****

Please call us if you have any questions regarding this limited report.

Very truly yours,

GUESS & RUDD P.C.

Joseph J. Perkins, Jr.

EXHIBIT A

Parcels

Parcel I:

The following patented placer mining claims situated within U.S. Mineral Survey 721:

Claim Name	Patent No.
Francisco	316745
No. 1 Above Francisco	316745
No. 2 Above	316745
No. 3 Above	316745
No. 1 Sophie Gulch	316745
No. 4 Above	316745
Fractional Claim No. 4 1/2 on Rock Creek	316745
No. 5 Above	316745
No. 6 Above Right Hand Branch	316745
Rock Creek Bench No. 4 Above	955746

<u>Parcel II</u>:

The following lands:

(a) the lands within that portion of U.S. Mineral Survey 721 known as Bench Claim No. 4 1/2 Above Placer,

(1) the surface estate in which was conveyed to Sitnasuak Native Corporation pursuant to Patent No. 50-83-0275 dated September 22, 1983, and recorded on July 18, 1984, at Book 309, Pages 369-377, Cape Nome Recording District, and

(2) the subsurface estate in which was conveyed to Bering Straits Native Corporation pursuant to Patent No. 50-83-0276 dated September 22, 1983, and recorded on October 26, 1983, at Book 306, Pages 613-617, Cape Nome Recording District; and

(b) the lands within the following area,

(1) the surface estate in which was conveyed to Sitnasuak Native Corporation pursuant to Interim Conveyance No. 707 dated September 22, 1983, and recorded on July 18, 1984, at Book 309, Pages 351-368, Cape Nome Recording District, and

(2) the subsurface estate in which was conveyed to Bering Straits Native Corporation pursuant to Interim Conveyance No. 708 dated September 22, 1983, and recorded on October 26, 1983, at Book 306, Pages 618-629, Cape Nome Recording District:

<u>KRM, T. 10 S., R. 34 W.:</u>

Sec. 14: All, excluding the lands within Mineral Surveys 332, 721, and 1835; and

Sec. 23: All, excluding the lands within Mineral Surveys 403, 447, 715, 721, and 2271.

SCHEDULE 1

Encumbrances arising under AGC

1. Mortgage, Assignment of Minerals, Security Agreement and Financing Statement given by Alaska Gold Company to Mueller Industries, Inc., dated March 6, 1991, and recorded on April 16, 1991, at Book 0329, Pages 741-778, Cape Nome Recording District.

2. Financing Statement given by Alaska Gold Company (as Debtor) and Mueller Industries, Inc. (as Sacred Party), recorded on April 16, 1991, at Book 0329, Pages 779-794, Cape Nome Recording District.

3. Deed of Trust given by and between Alaska Gold Company (as Trustor) to Yukon Title Company, Inc. (as Trustee), and Viceroy Resource Corporation (as Beneficiary), dated April 21, 1999, and recorded on April 23, 1999, at Book 0353, Pages 002-117, Cape Nome Recording District.

SCHEDULE 2

Encumbrances arising under BSNC or Golden Glacier, Inc.

1. Supplemental Deed of Trust and Assignment of Rents given by Bering Straits Native Corporation (as Trustor) to Transamerica Title Insurance Company (as Trustee), and Sitnasuak Native Corporation (as Beneficiary), dated November 9, 1984, and recorded on November 27, 1984, at Book 0311, Pages 293-296, Cape Nome Recording District.

2. Second Supplemental Deed of Trust and Assignment of Rents Sitnasuak given by Bering Straits Native Corporation (as Trustor) to Transamerica Title Insurance Company (as Trustee), and Sitnasuak Native Corporation (as Beneficiary), dated March 4, 1986, and recorded on March 5, 1986, at Book 0315, Pages 289-293, Cape Nome Recording District.

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LOUIS R. VEERMAN
JAMES D. LINXWILER
JAMES D. DEWITT
JOSEPH J. PERKINS, JR.
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OFFICES IN
ANCHORAGE & FAIRBANKS

OF COUNSEL
MARGARET S. JONES
GREGORY G. SILVEY

August 11, 2006

Via Email

NovaGold Resources Inc.
Alaska Gold Company
c/o NovaGold Resources Inc.
Suite 2300 - 200 Granville Street
Vancouver, BC V6C 1S4

Re: Title Summary—Proposed Rock Creek Pit Area
Our File No. 5971.2

Gentlemen:

Pursuant to your request we are providing this short letter summarizing the current situation respecting the rights of Alaska Gold Company in and to the proposed Rock Creek Pit Area, which area comprises the following lands ("Lands"):

K.R.M., T. 10 South, R. 34 West:

Sec. 14: All, excluding the lands within Mineral Surveys 332 and 1835 (but including lands within Mineral Survey 721, to the extent said lands are within the exterior boundaries of Sec. 14 as protracted); and

Sec. 23: All, excluding the lands within Mineral Surveys 403, 447, 715, and 2271 (but including lands within Mineral Survey 721, to the extent said lands are within the exterior boundaries of Sec. 23 as protracted).

The Lands were the subject of our *Limited* Title Report dated February 7, 2006, respecting the proposed Rock Creek Pit Area ("Title Report dated February 7, 2006"), a copy of which is enclosed herewith for your information.

Following the delivery of our Title Report dated February 7, 2006, Alaska Gold Company completed the negotiation of and entered into two key agreements respecting, *inter alia*, the Lands or portions thereof:

(1) Mining Sublease dated April 13, 2006 (but effective as of January 1, 2006) between Golden Glacier, Inc. and Alaska Gold Company, a memorandum of which was recorded in the Cape Nome Recording District on April 27, 2006, as Document No. 2006-000379-0 (5 pages) (said Mining Sublease was entered into by the parties pursuant to that certain Exploration and Option Agreement dated March 13, 2002, among Bering Straits Native Corporation, Golden Glacier, Inc., and NovaGold Resources Alaska, Inc. (the assignee of which is Alaska Gold Company);

(2) Surface Use Agreement (Exclusive Use Area) dated May 26, 2006, between Sitnasuak Native Corporation and Alaska Gold Company, a memorandum of which was recorded in the Cape Nome Recording District on June 9, 2006, as Document No. 2006-000919-0 (13 pages).

This letter does *not* constitute a formal update to our Title Report dated February 7, 2006, for we have not updated our examination of or otherwise reviewed any public records in connection with the preparation of this letter. Assuming for purposes of this letter, however, that with respect to the Lands there have been no changes through the date of this letter in the public records described in our Title Report dated February 7, 2006, except for the execution of the two agreements described above (notice of which was imparted by the recording of the two memorandum agreements referred to above), then we believe as follows:

(a) the execution of said two agreements grants sufficient rights to Alaska Gold Company to enable it to extract gold and other minerals from the Lands (including but not limited to those of the Lands in which Alaska Gold Company owns rights other than by or pursuant to said two agreements) and to undertake in a reasonable manner such other actions on the Lands as are reasonably necessary in connection therewith;

(b) the recording of the two memorandum agreements referred to above impart constructive notice of the grants made by the two agreements described above;

(c) Comment 2(c) and the accompanying Requirement set forth in our Title Report dated February 7, 2006, have been satisfied.

It also is our understanding from communications with Alaska Gold Company (1) that Alaska Gold Company has considered and is not concerned with the reservations, exceptions, exclusions, and limitations noted in Comments 1(a) and 2(a) set forth in our Title Report dated February 7, 2006, insofar as said reservations, exceptions, exclusions, and limitations pertain to or affect the Lands and (2) that, as a result of the execution of Surface Use Agreement (Exclusive Use Area) dated May 26, 2006, between Sitnasuak Native Corporation and Alaska Gold Company, Alaska Gold Company believes that Comments 2(b) and (2(f) and the accompanying Requirements set forth in our Title Report dated February 7, 2006, have been satisfied to the extent Alaska Gold Company believes to be necessary in connection with the Lands.

Finally, we reasonably expect that Alaska Gold Company will satisfy to the extent necessary in due course all of the remaining Comments and accompanying Requirements set forth in our Title Report dated February 7, 2006, or, if Alaska Gold Company fails to satisfy any such Comment or accompanying Requirement, such failure is unlikely (due to the almost certain *actual* termination or expiration of any noted prior agreement) to affect adversely the exercise by Alaska Gold Company of its rights in and to the Lands (whether acquired under or pursuant to the two agreements described above or under or pursuant to other instruments or agreements).

****

If you have any questions regarding the foregoing or if you need any additional information or assistance, please contact me.

Very truly yours,

GUESS & RUDD P.C.

Joseph J. Perkins, Jr.

GARY A. ZIPKIN
LOUIS R. VEERMAN
JAMES D. LINXWILER
JAMES D. DEWITT
JOSEPH J. PERKINS, JR.
GEORGE R. LYLE
MICHAEL S. MCLAUGHLIN
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MARGARET S. JONES
GREGORY G. SILVEY

February 7, 2006

Via Email and FedEx

Citigroup Global Markets Inc.
Bear, Stearns & Co. Inc.
RBC Dominion Securities Inc.
Citigroup Global Markets Canada Inc.
c/o Citigroup Global Markets Inc.
388 Greenwich Street
New York, New York 10013

NovaGold Resources Inc.
Alaska Gold Company
c/o NovaGold Resources Inc.
Suite 2300 - 200 Granville Street
Vancouver, BC V6C 1S4

Re: *Limited* Title Report—Proposed Rock Creek Pit Area
Our File No. 6032.1

Gentlemen:

At the request of NovaGold Resources Inc. we have prepared this *limited* title report on the following lands that Alaska Gold Company ("AGC") has identified as including the proposed Rock Creek Pit Area:

K.R.M., T. 10 South, R. 34 West:

Sec. 14: All, excluding the lands within Mineral Surveys 332 and 1835 (but including lands within Mineral Survey 721, to the extent said lands are within the exterior boundaries of Sec. 14 as protracted); and

Sec. 23: All, excluding the lands within Mineral Surveys 403, 447, 715, and 2271 (but including lands within Mineral Survey 721, to the extent said lands are within the exterior boundaries of Sec. 23 as protracted).

Said lands are referred to hereinafter as the "Lands". For purposes of this limited report, the Lands comprise the two parcels (Parcels I and II) described on Exhibit A attached hereto.

RECORDS EXAMINED

This limited report is based upon our examination of the following public records and other documents:

1. BLM Records. Official records of the Bureau of Land Management ("BLM"), United States Department of the Interior, pertaining to the Lands, as follows: all relevant plats, historical indices, surveys, computer records, and case files and other documents disclosed thereby maintained by the relevant BLM offices located in Alaska.

2. DNR Records. Official records of the Alaska Department of Natural Resources ("DNR") pertaining to the Lands, as follows: all relevant plats, historical indices, surveys, computer records, and case files and other documents disclosed thereby maintained by the DNR offices located in Alaska, except for any public records pertaining to water rights.

3. Recording District Records. Official records of the Cape Nome Recording District, *limited in the case of Parcel I to the extent described in Underlying Assumption 2 below* but otherwise from the date of patent or interim conveyance from the United States to the effective time and date of this limited report.

4. Certain Unrecorded Instruments. Copies of the following unrecorded instruments provided to us by AGC:

   (a) that certain Mining Lease between Bering Straits Native Corporation ("BSNC") and Golden Glacier, Inc. ("GGI") dated May 6, 1994 ("BSNC/GGI Mining Lease dated May 6, 1994"); and

   (b) that certain Exploration Agreement and Option To Lease among Bering Straits Native Corporation, Golden Glacier, Inc., and Novagold Resources Alaska, Inc. dated March 13, 2002 ("Exploration Agreement dated March 13, 2002"); and

   (c) that certain Assignment Agreement between Novagold Resources Alaska, Inc. and Alaska Gold Company dated June 1, 2002 ("Assignment dated June 1, 2002").

We began our examination of the records described above at 7:30 a.m. on January 14, 2006, and therefore this limited report should be considered to be as of that time and date.

OPINION

Subject to the assumptions, comments, and requirements set forth below, based upon our examination of the public records and other documents described above, it is our opinion that title to the Lands is vested as follows:

Parcel I:

Title to Parcel I is vested in Alaska Gold Company, subject to the following:

(a) with respect to the lands conveyed by U.S. Patent No. 316745 dated February 24, 1913, the reservations, exceptions, exclusions, and limitations set forth in said patent (including an express exception from the grant made by said patent of all lode deposits known to exist on October 9, 1908, within the lands conveyed thereby, but not any lode deposits discovered after said date) (**see Comment 1(a) below**);

(b) with respect to the lands conveyed by U.S. Patent No. 955746 dated March 21, 1925, the reservations, exceptions, exclusions, and limitations set forth in said patent (including an express exception from the grant made by said patent of all lode deposits known to exist on May 23, 1923, within the lands conveyed thereby, but not any lode deposits discovered after said date) (**see Comment 1(a) below**);

(c) the possible record interest of Nome Gold Joint Venture ("NGJV") arising under that certain Assignment of Lease given by Aspen Exploration Corporation ("Aspen") to NGJV dated September 10, 1987 (but effective as of June 1, 1987), and recorded on March 31, 1988, at Book 320, Pages 660-662, Cape Nome Recording

District—from which no conveyance or relinquishment (either to AGC or to Aspen) can be found.[1]

Our examination of the records of the Cape Nome Recording District (limited as described above) disclosed no liens, encumbrances, or other interests of third parties arising by, through, or under Alaska Gold Company.

Parcel II:

Record title to the surface estate in and to Parcel II is vested in Sitnasuak Native Corporation ("Sitnasuak"), subject to the following:

(a) with respect to the lands conveyed by U.S. Patent No. 50-83-0275, the reservations (including but not limited to the subsurface estate, title to which is discussed below), exceptions, exclusions, and limitations set forth in said patent (**see Comment 2(a) below**);

---

[1] NGJV assigned its interest in Parcel I to Placer Dome U.S. Inc. as manager of Golden Creeks Joint Venture pursuant to that certain Assignment of Lease dated April 8, 1988 (but effective as of June 1, 1987), and recorded on April 19, 1988, at Book 320, Pages 773-775, Cape Nome Recording District. NGJV later received a reconveyance of said interest pursuant to that certain Conveyance of Interest of Manager, Conveyance of Participating Interests, Withdrawal of Participant, Termination of Mining Venture Agreement (Golden Creeks Joint Venture), [etc.] from Placer Dome U.S. Inc. to NGJV effective as of February 11, 1990, and recorded on February 28, 1992, at Book 332, Pages 159-174, Cape Nome Recording District. It is our understanding that the Lode Mining Lease under which NGJV held an interest (see Memorandum of Lode Mining Lease between AGC and Aspen dated April 18, 1986, recorded on August 14, 1986, at Book 315, Pages 985-991, Cape Nome Recording District) has been terminated. See Lease Termination between AGC and Aspen dated March 9, 1993 (but effective as of November 13, 1992), recorded on March 25, 1993, at Book 334, Pages 371-373, Cape Nome Recording District. As noted above, however, no conveyance or relinquishment *from NGJV* to either AGC or Aspen has been placed of record, and it is not clear on the face of said Lease Termination whether Aspen was executing the same on behalf of itself alone or on behalf of itself and as manager of NGJV. **See Comment 1.b below.**

(b) with respect to the lands conveyed by Interim Conveyance No. 707, the reservations (including but not limited to the subsurface estate, title to which is discussed below), exceptions, exclusions, and limitations set forth in said interim conveyance (**see Comment 2(a) below**);

(c) the record interest of Golden Glacier, Inc. under that certain Memorandum (dated September 2, 1994) of Surface Use Agreement (dated July 7, 1994) by and between Sitnasuak and Golden Glacier, Inc., which memorandum was recorded on September 19, 1994, at Book 338, Pages 330-334, Cape Nome Recording District—from which no conveyance or relinquishment to Sitnasuak can be found.[2]

Title to the subsurface estate in and to Parcel II is vested in Bering Straits Native Corporation, subject to the following:

(a) with respect to the lands conveyed by U.S. Patent No. 50-83-0276, the reservations (including but not limited to the subsurface estate, title to which is discussed below), exceptions, exclusions, and limitations set forth in said patent (**see Comment 2(a) below**);

(b) with respect to the lands conveyed by Interim Conveyance No. 708, the reservations (including but not limited to the subsurface estate, title to which is discussed below), exceptions, exclusions, and limitations set forth in said interim conveyance (**see Comment 2(a) below**);

---

[2] Golden Glacier, Inc. assigned, *inter alia*, its surface interest in Parcel II to Kennecott Exploration Company pursuant to that certain Memorandum Agreement dated July 8, 1994, and recorded on September 19, 1994, at Book 338, Pages 322-329, Cape Nome Recording District. Golden Glacier, Inc. later received a reconveyance of said interest pursuant to that certain Release and Quitclaim Deed from Kennecott Exploration Company to Golden Glacier, Inc. dated September 3, 1996, and recorded on November 12, 1996, at Book 344, Pages 432-433, Cape Nome Recording District. AGC has advised us that the Surface Use Agreement dated July 7, 1994, has been terminated, but no instrument evidencing said termination has been recorded in the Cape Nome Recording District. **See Comment 2(e) below.**

(c) notice of the formation on March 1, 1992, of the Anvil Joint Venture among Golden Glacier, Inc., NGJV, and Newmont Exploration Limited (which notice is imparted by that certain Agreement and Release among Golden Glacier, Inc., NGJV, and Aspen dated January 13, 1994, and recorded at Book 336, Pages 655-672, Cape Nome Recording District), for which no notice of termination has been placed of record (**see Comment 2(e) below**);

(d) the interest of Sitnasuak arising under that certain Placer Mining Lease from Golden Glacier, Inc. to Sitnasuak dated October 11, 1999 (a memorandum of which was recorded on October 25, 1999, at Book 355, Pages 438-500, Cape Nome Recording District), as amended by the following:

(1) a probable First Amendment that is not recorded and which we have not seen;

(2) that certain Second Amendment to Placer Mining Lease effective October 11, 2000, and recorded on January 29, 2001, at Book 359, Pages 679-681, Cape Nome Recording District; and

(3) that certain Third Amendment to Placer Mining Lease effective April 24, 2002, and recorded in the Cape Nome Recording District on May 29, 2002, as Document No. 2002-000449-0 (2 pages); **see Comment 2(f) below**;

(e) that certain Supplemental Deed of Trust and Assignment of Rents given by Bering Straits Native Corporation (as Trustor) to Transamerica Title Insurance Company (as Trustee), and Sitnasuak Native Corporation (as Beneficiary), dated November 9, 1984, and recorded on November 27, 1984, at Book 0311, Pages 293-296, Cape Nome Recording District—no release or reconveyance of which can be found. **See Comment 2(g) below.**

None of (1) the BSNC/GGI Mining Lease dated May 6, 1994, (2) the BSNC/GGI/Novagold Exploration Agreement dated March 13, 2002, or (3) the Novagold/AGC Assignment dated June 1, 2002, has been recorded in the Cape Nome Recording District. **See Comment 2(h) below.**

UNDERLYING ASSUMPTIONS

1. Records. We have assumed that the BLM records and the DNR records accurately depict or describe all interests in the Lands that arise immediately by, through, or under the United States or the State of Alaska; we therefore have not searched the records of the recording districts described above for this purpose. We also have assumed that the indices prepared and maintained by the recording districts described above are complete and accurate indices of all documents filed for record with said recording districts.

2. Effect of Statutory Quitclaim Deed from UV Industries, Inc. to AGC. In accordance with your instructions, we have assumed that good title to Parcel I was vested in UV Industries, Inc., subject to the reservations, exceptions, exclusions, and limitations set forth in U.S. Patents No. 316745 and No. 955746 issued therefor but otherwise free and clear of any and all liens, encumbrances, or other interests of third parties, when UV Industries, Inc. executed and delivered to AGC that certain Statutory Quitclaim Deed dated March 17, 1975, and recorded on March 25, 1975, at Book 276, Pages 621-640, Cape Nome Recording District. We therefore have not searched the records of the Cape Nome Recording District for the purpose of establishing the same. **See Comments 1(c) and 4 below.**

3. Authority, Authenticity, Execution, and Delivery. We have assumed that (a) the individuals executing the documents reviewed by us were vested with the authority to execute such documents at the time of execution, (b) the signatures of such individuals are genuine, and (c) all such documents were duly executed and delivered.

COMMENTS AND REQUIREMENTS

1. Respecting Title To Parcel I.

(a) Reservations, etc. in Patents. U.S. Patents No. 316745 and No. 955746 are subject to the usual reservations, exceptions, exclusions, and limitations to which all patents to placer mining claims are subject (including express exceptions for "known lode deposits" noted in the Opinion section of this limited report), but to no other reservations, exceptions, exclusions, or limitations.

Requirement: None; comment is advisory. With respect to the exception from placer patents of known lode deposits, see 1 AM. LAW OF MINING §§ 32.05, 54.03 (2d ed. 1984).

(b) **Possible Record interest of NGJV arising under old Lode Mining Lease from AGC to Aspen.** As described above, (1) NGJV was the owner of record of the rights of the lessee under that certain Lode Mining Lease dated April 18, 1986 (a memorandum of which was recorded on August 14, 1986, at Book 315, Pages 985-991, Cape Nome Recording District) when AGC and Aspen entered into that certain Lease Termination dated March 9, 1993 (but effective as of November 13, 1992), recorded on March 25, 1993, at Book 334, Pages 371-373, Cape Nome Recording District, (2) no conveyance or relinquishment *from NGJV* to either AGC or Aspen has been placed of record, and (3) it is not clear in said Lease Termination whether Aspen was executing the same on behalf of itself alone or on behalf of itself and as manager of NGJV.

Requirement: NGJV—or Aspen as manager thereof—should execute, acknowledge, and deliver to AGC a quitclaim deed to, *inter alia*, Parcel I. Upon receipt thereof, AGC should record said deed in the Cape Nome Recording District.

(c) **Underlying Assumption 2.** As noted above, we have assumed that good title to Parcel I was vested in UV Industries, Inc. when it executed and delivered that certain Statutory Quitclaim Deed from UV Industries, Inc. to AGC dated March 17, 1975, and recorded on March 25, 1975, at Book 276, Pages 621-640, Cape Nome Recording District.

Requirement: If this assumption at any time proves to be unacceptable or undesirable for your purposes, you either either (1) should ask us to undertake a full examination of the title to Parcel I or (2) should obtain a title insurance policy respecting Parcel I providing such coverage as you deem necessary.[3] In this regard, **see also Comment 4 below**.

---

[3] As you know, on February 1, 2006, Alaska Gold Company obtained from Fairbanks Title Agency, Inc. a Preliminary Commitment for Title Insurance (for coverage in the amount of $100,000) effective as of January 27, 2006, covering AGC's claims within U.S. Mineral Survey 721. Said preliminary commitment showed title to said

2. **Respecting Title To Parcel II.**

(a) **Reservations, etc. in Patents and Interim Conveyances.** Each of Interim Conveyance No. 707 and U. S. Patent No. 50-83-0275 issued to Sitnasuak reserved the subsurface estates to the United States. (Said reserved subsurface estates thereupon were conveyed to BSNC by Interim Conveyance No. 708 and U. S. Patent No. 50-83-0276.) In addition, Interim Conveyance No. 707 and U. S. Patent No. 50-83-0275 state that the grants made thereby were subject to, *inter alia*,

(1) any valid existing rights in the lands conveyed thereby,

(2) right-of-way F-09113 for the Miocene Ditch System, a portion of which may cross Parcel II, and

(3) the requirements of section 14(c) of ANCSA, 43 U.S.C. § 1613(c) (**see Comment 2(b) below**).

Interim Conveyance No. 708 and U. S. Patent No. 50-83-0276 issued to BSNC state that the grants made thereby were subject to, *inter alia*,

(1) any valid existing rights in the lands conveyed thereby and

(2) the requirements of section 14(f) of ANCSA, 43 U.S.C. § 1613(f) (**see Comment 2(c) below**).

Our examination of the records described above disclosed no "valid existing rights" in Parcel II that (a) were not identified in the interim conveyances or patents described above and (b) remained valid as of the effective time and date of this title opinion.

Requirement: None; comment is advisory. **But see Comments 2(b), 2(c) and 3 below.**

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claims—insofar as they are situated within the exterior boundaries of Secs. 14 and 23 (as protracted), T. 10 South, R. 34 West, K.R.M.—to be vested in AGC free and clear of any liens, encumbrances, or other interests of third parties arising by, through, or under Alaska Gold Company *or any prior owner of said claims.*

(b) **ANCSA § 14(c).** Section 14(c) of ANCSA requires Sitnasuak to reconvey to certain individuals and entities the surface estate in and to certain lands, including but not limited to the following:

(1) lands occupied as of December 18, 1971, as primary places of residence;

(2) lands occupied as of December 18, 1971, as primary places of business;

(3) lands occupied as of December 18, 1971, by nonprofit organizations; and

(4) up to 1,200 acres of lands necessary for community expansion or other foreseeable community needs.

According to the records of the Cape Nome Recording District, none of Parcel II has been so conveyed, and it is unclear from the records examined by us whether any of Parcel II must be made the subject of any such conveyance.

> **Requirement:** In the surface use agreement currently being negotiated by Sitnasuak and AGC to support the mining of both Parcel I and Parcel II, AGC should address with Sitnasuak whether the surface of any of Parcel II (or the surface of any other lands to be covered by said surface use agreement) is or might become the subject of any reconveyance required by section 14(c) of ANCSA.

(c) **ANCSA § 14(f).** Section 14(f) of ANCSA, 43 U.S.C. § 1613(f), provides that "the right to explore, develop, or remove minerals from the subsurface estate in the lands within the boundaries of any Native village shall be subject to the consent of the Village Corporation." The clear intent of this restriction is to preclude regional corporations (which acquire the subsurface estate under almost all village corporation lands) from unreasonably interfering with the use of the surface estate of *certain* village corporation lands. It is unclear under ANCSA, however, which village corporation lands are situated "within the boundaries of any Native village". In Leisnoi, Inc. v. Stratman, 154 F.3d 1062 (9th Cir. 1998), the court held that ANCSA distinguishes between lands "patent[ed] to a Village Corporation" and lands "within the boundaries of any Native village" and that the test should be whether there is physical evidence of occupancy. We believe that the Ninth Circuit's decision is sound.

> **Requirement:** In the surface use agreement currently being negotiated by Sitnasuak and AGC, AGC should obtain Sitnasuak's formal written consent under section 14(f) of ANCSA. (If a satisfactory surface use agreement cannot be reached with Sitnasuak, AGC should consult with counsel respecting its ability to explore, develop, and mine the Lands without entering into an agreement with Sitnasuak.

(d) **Notice of the 1992 Anvil Joint Venture**. As noted above, notice of the formation on March 1, 1992, (but not notice of the later termination) of the Anvil Joint Venture among Golden Glacier, Inc., NGJV, and Newmont Exploration Limited is of record by virtue of that certain Agreement and Release among Golden Glacier, Inc., NGJV, and Aspen dated January 13, 1994, and recorded at Book 336, Pages 655-672, Cape Nome Recording District, for which no notice of termination has been placed of record.

> **Requirement:** AGC should seek to obtain and record in the Cape Nome Recording District satisfactory evidence of the termination of the Anvil Joint Venture.

(e) **Record interest of Golden Glacier, Inc. arising under 1994 Surface Use Agreement between Sitnasuak and Golden Glacier, Inc.** As noted above, no instrument has been recorded in the Cape Nome Recording District evidencing the termination of the Surface Use Agreement dated July 7, 1994, between Sitnasuak and Golden Glacier, Inc. The record interest of Golden Glacier, Inc. under that certain Memorandum (dated September 2, 1994) of Surface Use Agreement (dated July 7, 1994) between Sitnasuak and Golden Glacier, Inc., recorded on September 19, 1994, at Book 338, Pages 330-334, Cape Nome Recording District, thus remains of record.

> **Requirement:** If and when a satisfactory new surface use agreement is entered into by Sitnausak and AGC, AGC may wish to ask Golden Glacier, Inc. to cause satisfactory evidence of the termination of this 1994 Surface Use Agreement to be recorded in the Cape Nome Recording District.

(f) **Placer Lease from Golden Glacier, Inc. to Sitnasuak dated October 11, 1999 (as amended).** As noted above, Golden Glacier, Inc. and Sitnasuak have entered into that certain Placer Mining Lease dated October 11, 1999 (a memorandum of which was recorded on October 25, 1999, at Book 355, Pages 438-500, Cape Nome Recording District), as amended.

> **Requirement:** AGC should ask Golden Glacier, Inc. and Sitnasuak whether this Placer Mining Lease remains in effect and, if so, whether its existence will have any effect on AGC's plans to conduct lode mining operations on the Lands. If it is possible that said Placer Mining Lease might adversely affect the ability of AGC to conduct lode mining operations on the Lands, then AGC should seek to negotiate with Sitnasuak a partial relinquishment of said Placer Mining Lease in the surface use agreement currently being negotiated by Sitnasuak and AGC,.

(g) **Supplemental Deed of Trust.** As noted above, that certain Supplemental Deed of Trust and Assignment of Rents given by Bering Straits Native Corporation (as Trustor) to Transamerica Title Insurance Company (as Trustee), and Sitnasuak Native Corporation (as Beneficiary), dated November 9, 1984, and recorded on November 27, 1984, at Book 0311, Pages 293-296, Cape Nome Recording District ("Supplemental Deed of Trust"), remains as an encumbrance of record in the Cape Nome Recording District. This is so even though the obligations secured by said Supplemental Deed of Trust appear to be the same as the obligations secured by that certain Second Supplemental Deed of Trust and Assignment of Rents given by Bering Straits Native Corporation (as Trustor) to Transamerica Title Insurance Company (as Trustee), and Sitnasuak Native Corporation (as Beneficiary), dated March 4, 1986, and recorded on March 5, 1986, at Book 0315, Pages 289-293, Cape Nome Recording District ("Second Supplemental Deed of Trust"), and said Second Supplement Deed of Trust has been fully reconveyed.

> **Requirement:** AGC should ask BSNC to seek a reconveyance of the Supplemental Deed of Trust or, failing that, to remove the clouds on the title of BSNC, GGI, and AGC caused thereby by filing a quiet title action in the

Superior Court for the State of Alaska (Second Judicial District at Nome).

(h) **Unrecorded instruments.** As noted above, none of (1) the BSNC/GGI Mining Lease dated May 6, 1994, (2) the BSNC/GGI/Novagold Exploration Agreement dated March 13, 2002, or (3) the Novagold/AGC Assignment dated June 1, 2002, has been recorded in the Cape Nome Recording District.

Requirement: In order to impart constructive notice of AGC's rights under these instruments, recordable memoranda of said instruments must be executed, acknowledged, and recorded in the Cape Nome Recording District.

3. Possible Additional Valid Existing Rights.

Our review of the BLM and DNR records for the Lands disclosed no valid existing rights affecting the Lands except those that already have been discussed herein.

Requirement: None; comment is advisory.

4. Title Insurance and Scope of Inquiry Undertaken by Title Insurance Companies Respecting Patented Mining Claims.

As noted in Comment 1(c) above, in order to address any issues not identified by us as a result of our making Underlying Assumption 2 above, you may wish (i) to ask us to undertake a full examination of the title to Parcel I or (ii) to obtain title insurance providing coverage in a sufficient amount.[4] Before choosing to obtain title insurance, however, you should be aware of, and should consider, that it is customary for title insurance companies to limit their inquiry to those matters disclosed from and after the issuance of patent. In the case of patented federal mining claims, such an inquiry may fail to identify certain conveyances or encumbrances of importance, for the chain of title to a federal mining claim begins with the recording of a certificate of location to that claim, not with the patenting of said claim. The applicant for a patent must, of course, establish that he is the owner of the claim for which patent is sought, and thus the risks associated with limiting one's inquiry to post-patent matters is ameliorated to that extent. But

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[4] See footnote 3 above.

conveyances that both (1) are made after the *application for patent* is filed and (2) are recorded prior to the issuance of patent will remain undiscovered by such an inquiry. In addition, it has been our experience that certain royalties, easements, options, mortgages, or other encumbrances granted prior to patent typically are not disclosed on the face of the patent *even if they were granted prior to the filing of the application for patent.*

> **Requirement:** You should consult with counsel regarding (1) whether Underlying Assumption 2 above is reasonable and permissible in connection with the pending transaction and otherwise under the circumstances existing with respect to Parcel I, (2) the risks (both generally and in connection with Parcel I) associated with the limited inquiries typically undertaken by title insurance companies when reporting on title to patented federal mining claims, and (3) the inherent differences (both generally and in connection with Parcel I) between title insurance and a title opinion prepared by a lawyer, and then take such action, if any, as you deem appropriate.

****

Please call us if you have any questions regarding this limited report.

Very truly yours,

GUESS & RUDD P.C.

Joseph J. Perkins, Jr.

EXHIBIT A

Parcels

Parcel I:

The following patented placer mining claims situated within U.S. Mineral Survey 721, to the extent said lands are within the exterior boundaries of Secs. 14 and 23 (as protracted), T. 10 South, R. 34 West, K.R.M.:

Claim Name	Patent No.
Francisco	316745
No. 1 Above Francisco	316745
No. 2 Above	316745
No. 3 Above	316745
No. 1 Sophie Gulch	316745
No. 4 Above	316745
Fractional Claim No. 4 1/2 on Rock Creek	316745
No. 5 Above	316745
No. 6 Above Right Hand Branch	316745
Rock Creek Bench No. 4 Above	955746

Parcel II:

The following lands:

(a) the lands within that portion of U.S. Mineral Survey 721 known as Bench Claim No. 4 1/2 Above Placer,

(1) the surface estate in which was conveyed to Sitnasuak Native Corporation pursuant to Patent No. 50-83-0275 dated September 22, 1983, and recorded on July 18, 1984, at Book 309, Pages 369-377, Cape Nome Recording District, and

(2) the subsurface estate in which was conveyed to Bering Straits Native Corporation pursuant to Patent No. 50-83-0276 dated September 22, 1983, and recorded on October 26, 1983, at Book 306, Pages 613-617, Cape Nome Recording District; and

(b) the lands within the following area,

<u>KRM, T. 10 S., R. 34 W.:</u>

Sec. 14: All, excluding the lands within Mineral Surveys 332, 721, and 1835; and

Sec. 23: All, excluding the lands within Mineral Surveys 403, 447, 715, 721, and 2271,

(1) the surface estate in which was conveyed to Sitnasuak Native Corporation pursuant to Interim Conveyance No. 707 dated September 22, 1983, and recorded on July 18, 1984, at Book 309, Pages 351-368, Cape Nome Recording District, and

(2) the subsurface estate in which was conveyed to Bering Straits Native Corporation pursuant to Interim Conveyance No. 708 dated September 22, 1983, and recorded on October 26, 1983, at Book 306, Pages 618-629, Cape Nome Recording District.

A-2 2004 Collar Coordinate Locations

Rock Creek
Survey Report
Prepared by: R. Scott McClintock, PLS
P.O. Box 1444
Nome, Alaska 99762
Dated: November 21, 2004

On 9/30/04 Mr. John Odden, Project Geologist requested a location survey of drill holes within the project area.

On 10/02/04 a survey was accomplished locating the holes as directed and identified by Mr. Don Penner, of Penner Geological.

The survey was conducted using Ashtech Z-Surveyor, dual-frequency, survey grade GPS receivers. This survey was conducted using Real-time Kinematic (RTK) methods using the Global Positioning System (GPS). A detailed report is available upon written request. The unit of measure and coordinates is in meters. The Basis of Position for this survey was local control point identified as "AGV-2" which is a 5/8" iron rod with a standard 3 ¼" aluminum cap stamped as described with no center punch. The monument is located at the edge of the north – south ridge bounding "Rock Creek" to the west and is well marked. The monument is in good condition with no apparent sign of bucking or heaving from permafrost. The UTM coordinates (in meters) used for this station were as provided: N7165402.8505 - E479901.9858 The listed elevation of "AJV-2" is 84.30 meters and was used as the location survey vertical benchmark.
The Basis of Bearing used for this survey was the line between "AJV-2" and recovered U.S.L.M. monument #15 which is a 4 inch (0.1 m) square granite rock, protruding above the natural ground 0.4 meter. The monument is scribed according to the original BLM field notes and is visible. The provided UTM project coordinates for U.S.L.M. #15 are N7165274.9083 - E480077.4841. The computed bearing of the line is: S 53^0 54'26" E.

Eighty-four (84) drill holes throughout the project area were located during the course of one day. A Polaris ATV was utilized to transport the location surveyor and geologist. Shots were taken at each boring location at or near the center of the hole at or near pad elevation. Where the boring was recovered or confidence of the location was high, the description is annotated with "FD". If the location was in question it is identified with a question mark (?) in the annotation. Although the resultant coordinate values are listed to six decimal places, a minimally constrained RTK/GPS survey normally yields horizontal accuracies to plus or minus one sigma (or +/- 1cm.). Using only one project benchmark for vertical fixing yields lower accuracies normally within 0.5 meters of true, relative to the project benchmark.

The following pages is a listing of the results of the survey.

R. Scott McClintock, PLS
Alaska Registration No. 8904-S

STATE OF ALASKA
49TH
R. SCOTT McCLINTOCK
No. 8904-S
11/21/04
PROFESSIONAL LAND SURVEYOR

PT#	NORTHING	EASTING	ELEV	DESCRIPTION
1100	7165379.670267	479955.100172	70.754	RKRC04-40FD
1101	7165382.638339	479954.927062	70.711	RKDC04-242FD
1102	7165378.032349	479987.915383	69.131	RKRC04-24FD
1103	7165383.818438	479989.213851	69.211	RKDC04-236FD
1104	7165357.396624	480003.438003	69.093	RKRC04-23?
1105	7165357.399918	480003.437603	69.099	RKDC04-237?
1106	7165322.535617	480057.087908	75.197	RKRC04-39FD
1107	7165323.457024	480056.757786	75.240	RKDC04-239FD
1108	7165327.636096	480088.739964	77.220	RKRC04-43FD
1109	7165354.077502	480060.317477	73.462	RKRC04-22FD
1110	7165356.807540	480063.266876	73.722	RKDC04-238FD
1111	7165412.593308	480088.291079	76.965	RKRC04-47FD
1112	7165411.980723	480090.386677	77.008	RKDC04-257FD
1113	7165432.777429	480085.043624	76.956	RKRC04-38FD
1114	7165426.007803	480092.674038	77.143	RKDC04-256?
1115	7165369.359477	480121.545621	87.284	RKRC04-41FD
1116	7165371.603396	480117.961262	87.182	RKDC04-240FD
1117	7165358.288166	480180.917193	95.808	RKRC04-44FD
1118	7165337.467529	480201.494917	93.711	RKDC04-283FD
1119	7165336.336256	480175.824878	89.089	RKDC04-282FD
1120	7165311.043332	480223.626018	95.826	RKDC04-266FD
1121	7165298.825569	480252.152196	104.42	RKDC04-260FD
1122	7165275.832952	480270.802914	110.49	RKRC04-45FD
1123	7165281.358778	480286.343643	111.29	RKDC04-261FD
1124	7165216.405309	480258.848256	110.53	RKDC04-262??
1125	7165235.136685	480307.041972	118.95	RKRC04-46FD
1126	7165278.145214	480328.325679	121.99	RKDC04-265FD
1127	7165293.627609	480330.544755	122.18	RKRC04-48FD
1128	7165303.729517	480358.435529	127.86	RKDC04-264FD
1129	7165351.432686	480365.914193	128.30	RKDC04-268FD
1130	7165367.492105	480370.980961	129.98	RKDC04-267FD
1131	7165385.858701	480395.604379	133.97	RKDC04-269FD
1132	7165362.749272	480414.794799	137.36	RKDC04-270FD
1133	7165374.388596	480443.803309	141.76	RKDC04-271FD
1134	7165321.829711	480448.281432	143.83	RKDC04-281FD
1135	7165361.044935	480513.963466	153.01	RKDC04-280FD
1136	7165391.549068	480330.883063	123.12	RKDC04-272FD
1137	7165327.776951	480304.619236	115.54	RKDC04-263FD
1138	7165331.008539	480225.247627	100.71	RKDC04-258FD
1139	7165366.228994	480215.344070	101.75	RKDC04-259FD
1140	7165497.940107	480297.961582	115.99	RKRC04-42FD
1141	7165560.466383	480307.587971	115.75	RKDC04-231FD
1142	7165557.346991	480305.596877	115.59	RKRC04-28FD
1143	7165511.093956	480267.365695	111.26	RKDC04-232FD
1144	7165513.789075	480267.490102	111.37	RKRC04-27FD
1145	7165514.571043	480181.666344	95.536	RKDC04-233FD
1146	7165514.427269	480184.973194	95.645	RKRC04-26FD
1147	7165604.695183	480406.092127	126.83	RKDC04-275FD
1148	7165639.375176	480376.400125	121.90	RKDC04-274FD
1149	7165479.662508	480030.406052	73.350	RKRC04-25FD
1150	7165478.849706	480026.929616	73.382	RKDC04-241FD

1151	7165518.817686	480079.090192	78.959	RKDC04-235FD
1152	7165515.556816	480080.144791	79.025	RKRC04-36FD
1153	7165534.483033	480090.173550	79.759	RKDC04-234FD
1154	7165530.982424	480089.991242	79.868	RKRC04-35FD
1155	7165557.711852	480142.116308	83.280	RKDC04-243FD
1156	7165560.498887	480141.699226	83.375	RKRC04-37FD
1157	7165581.930967	480149.249483	84.530	RKDC04-249FD
1158	7165605.524118	480149.884122	85.380	RKDC04-278FD
1159	7165644.237427	480154.822064	88.987	RKDC04-250FD
1160	7165662.077298	480178.076682	89.468	RKDC04-273FD
1161	7165638.613251	480201.010394	95.915	RKDC04-251FD
1162	7165662.569504	480222.443770	98.725	RKDC04-245FD
1163	7165661.002440	480228.908674	99.782	RKRC04-34FD
1164	7165659.681816	480288.689782	109.20	RKDC04-248FD
1165	7165659.346479	480286.241303	109.15	RKRC04-33FD
1166	7165683.890042	480270.545906	105.09	RKRC04-32FD
1167	7165684.147917	480268.490473	105.03	RKDC04-244FD?
1168	7165695.711613	480314.566244	109.51	RKRC04-30-31FD
1169	7165697.484639	480315.215769	109.33	RKDC04-247?FD
1170	7165701.355392	480327.633442	110.14	MET-1FD
1171	7165733.648746	480302.413949	101.03	RKDC04-246??
1172	7165731.728716	480303.225160	100.98	RKRC04-29FD
1173	7165915.253757	480519.415350	122.02	RKDC04-254FD
1174	7165951.621353	480547.867057	124.88	RKDC04-253FD
1175	7165963.473003	480576.947295	128.18	RKDC04-277FD
1176	7166005.674635	480580.750335	124.95	RKDC04-252FD
1177	7165990.621499	480554.326139	123.47	RKDC04-276?FD
1178	7165953.816977	480488.028203	114.34	RKDC04-279FD
1179	7165479.165334	480098.002633	79.340	MET-2FD
1180	7164387.692172	479329.934206	32.853	TB-4FD
1181	7164123.595946	479401.369779	37.872	TB-3FD
1182	7163914.496084	479520.754958	34.161	TB-2FD
1183	7163731.759033	479823.085369	40.829	TB-1FD

A-3 Rock Creek Sampling and Assay Methods

Rock Creek Project Sampling and Assay Methods

Compiled by:

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Updated by:

John Odden
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The various sample prep and assaying techniques used at Rock Creek are outlined below by campaign. Attached is a table summarizing the information.

MSA = metallic screen assay

1987 Placer Dome
In 1987 rotary drill samples and half-core samples were assayed with a multi- element geochem package at Bondar Clegg, using 10 gram aliquots for Au analyses. Samples returning over 1 g/t Au were re-assayed by MSA on nominal 300 gram aliquots.

1988 Placer Dome
In 1988 Placer Dome Technical Centre performed the lab work, doing 1 assay ton analyses followed by MSA on samples returning greater than 0.03 oz/t on both half-core and RC samples.

1989 Placer Dome
Bondar Clegg again did the labwork, doing 1 assay ton analyses on RC samples. MSA were done only on the 32 sampled blast holes.

1990 Tenneco
?? Do not know what they did. 1 hole drilled, low grade.

1992 Newmont
Whole core samples were shipped to Anchorage and dry crushed to –10 mesh, split in two, one split pulverized to –28 mesh and then 1/8 of that split off and shipped to Vancouver where it was pulverized and screened @ -150 mesh. MSA were done on all samples. A 30-gram aliquot of the minus 150 mesh fraction was fire assayed, the entire plus 150 mesh fraction was fire assayed, and a total gold content of the sample calculated. Multiple additional (two) 30-gram aliquot assays of the minus 150 fraction were performed as a check and the values used in the calculation of the gold concentration in the sample. The same prep and assaying techniques were applied to the

RC samples except the initial crush to –10 mesh was done at a portable prep facility in Nome then sent to Anchorage.

Newmont had Chemex re-assay, using MSA technique, thirteen multi-sample intervals of PDX core from holes RC-8-032, RC-8-037, and RC-8-038? Newmont's report does not state whether the material used for re-assay is the coarse reject of the original PDX sample, or if it is quarter-core (or half-core).

1994-1996 Kennecott
RC and whole core samples were crushed to 60% -10mesh. A 1250-gram split of that was pulverized to –60 mesh. A 300-gram split of that was pulverized and screened to 100% -150 mesh. A 30g fire assay fusion with AA finish and detection limit of 0.001 opt Au. For every set of 40 samples; 2 standards, 1 duplicate, and 1 blank were analyzed, these were controls inserted by Chemex. Some Kennecott standards (D, E, or F) were included. Mineralized intercepts were re-assayed using the same 30 gram assay technique (from a new 1250 gram split or the previously-used 300-gram or is not known).

1999-2000 NovaGold
RC samples were shipped to Bondar-Clegg's prep lab in Fairbanks. Samples were dried, then crushed to 75% passing 2mm (10 mesh), following which a 250 gram split was pulverized to 95% passing 106 microns (-150 mesh). Bondar-Clegg in Vancouver performed 50-gram fire assays with gravity finish and an 8 or 35-element ICPAES trace element analyses package using HCL:HNO3 (3:1) digestion. In 1999 intervals over 1 g/t Au, and some surrounding lower-grade intervals (0.5 to 1 g/t Au), were re-assayed by MSA technique. A total of 173 samples intervals were re-assayed. "Intervals" contain multiple original samples. Each contained original sample in an "interval" was reassayed.

2002 NovaGold
Both trench and whole core samples were shipped to the Chemex prep facility in Fairbanks. After drying, the entire sample was crushed to 70% -10 (~2mm) mesh. A nominal 1 kg split of that was pulverized to 85% -200 mesh (75 microns). A nominal 200-gram portion of that split was shipped to Chemex in Vancouver for 50 gram fire assay with AA finish and a 35-element ICPAES trace element analyses using aqua-regia digestion. MSA were done on 69 samples from core holes RKDC03-101 and RKDC03-107 and from trenches RKT-101 and RKT-104.

2003 NovaGold (Spring)
Whole core samples were shipped to the Chemex prep facility in Fairbanks. After drying, the entire sample was crushed to 80% -10 (~2mm) mesh. A nominal 1 kg split of that was pulverized to 85% -200 mesh (75 microns) and shipped to Chemex in Vancouver for 50 gram fire assay with AA finish and a 35-element ICPAES trace element analyses using aqua-regia digestion. Three QAQC samples per 20 sample batch.

2003 NovaGold (Summer)

Whole core samples, with the exception of 5 holes of 1/2 core, were shipped to the Chemex prep facility in Fairbanks. After drying, the entire sample was crushed to 90% -10 (~2mm) mesh. A nominal 4 kg split of that was pulverized to 85% -200 mesh (75 microns) and shipped to Chemex in Vancouver for MSA and a 35-element ICPAES trace element analyses using aqua-regia digestion. Three QAQC samples per 20 sample batch.

2004 Alaska Gold Company (NovaGold)

Whole core samples, were shipped to the Chemex prep facility in Fairbanks. After drying, the entire sample was crushed to 90% -10 (~2mm) mesh. A nominal 4 kg split of that was pulverized to 85% -200 mesh (75 microns) and shipped to Chemex in Vancouver for MSA and a 35-element ICPAES trace element analyses using aqua-regia digestion. Three QAQC samples per 20 sample batch.

Additional QAQC included 4 kgs of coarse reject taken from 84 samples. The samples were shipped to SGS Lakefield Research Laboratory in Lakefield Ontario. The entire sample was pulverized to 95% passing -150 mesh (106 microns). The entire sample was screened at 150 mesh. The oversize fraction was assayed to extinction by Pb fusion FA. Two-30 gram riffle splits of undersize were assayed using Pb fusion FA.

Campaign	Lab	Samples	Initial Crush	Pulp Size and Crush	Initial Assay	Secondary Assay
1987 Placer Dome	Bondar Clegg	½ core RC	??	??	10 gm FA	MSA on 300 gm aliquot on samples >1 g/t by initial assay
1988 Placer Dome	Placer Dome Technical Centre	½ core RC	??	??	1 assay ton FA	MSA on 300 gm aliquot on samples >0.03 opt by initial assay
1989 Placer Dome	Bondar Clegg	No core RC	??	??	1 assay ton FA	None
1990 Tenneco	??	½ core	??	??	??	None
1992 Newmont	Chemex	Whole core RC	-10 mesh (% passing ?)	½ split crushed to –28 mesh. 1/8 split of –28 mesh assayed	MSA on all samples	
1994-1996 Kennecott	Chemex	Whole core RC	60% -10 mesh	1250 g split crushed to 100% -60 mesh. 300 g split of above crushed to 100% -150 mesh for assay	30 gm FA	Duplicate assays done on "mineralized" intervals using the same techniques on a new 1250 g split
1999 Novagold	Bondar Clegg	No core RC	75% -10 mesh	250 g split crushed to 95% -150 mesh	50 gm FA	MSA on samples ~>1g/t by initial assay. (173 samples)
2000 Novagold	Bondar Clegg	No core RC	75% -10 mesh	250 g split crushed to 95% -150 mesh	50 gm FA	None
2002 Novagold	Chemex	Whole core	70% -10 mesh	1 kg split crushed to 85% -200 mesh	50 gm FA	MSA on select intervals (69 total samples)
2003 Novagold (Spring)	Chemex	Whole core	80% -10 mesh	1 kg split crushed to 85% -200 mesh	50 gm FA	None
2003 Novagold (Summer)	Chemex	Whole core and ½ core	90% -10 mesh	4 kg split crushed to 90% -200 mesh	MSA on all samples	

Sample Material Availability

Campaign	Samples	Availability
1987 Placer Dome	½ core	Select sections reassayed by Newmont. Remainder stored in Nome at Satellite Field.
1988 Placer Dome	½ core	Select sections reassayed by Newmont. Remainder stored in Nome at Satellite Field.
1989 Placer Dome		Nothing available
1990 Tenneco	½ core	Stored in Nome
1992 Newmont		Nothing available
1994-1996 Kennecott		Nothing Available
1999 Novagold	RC Samples	Duplicate samples reportedly taken during drilling and stored in Nome at Alaska Gold warehouse.
2000 Novagold	RC Samples	Duplicate samples reportedly taken during drilling and stored in Nome at Alaska Gold warehouse.
2002 Novagold	Coarse Reject (core program)	Stored in Fairbanks at Taiga Ventures warehouse. Some select intervals sent for metallurgical testing. Some pulps may be available.
2003 Novagold (Spring)	Coarse Reject (core program)	Stored in Fairbanks at Taiga Ventures warehouse. Some select intervals sent for metallurgical testing. Some pulps may be available.
2003 Novagold (Summer)	Coarse Reject (core program)	Samples prepped at Chemex facilities in Fairbanks, Elko and Vancouver. Majority of rejects currently stored in Fairbanks at Taiga Ventures warehouse. Remainder to be shipped to Fairbanks. Some pulps may be available.

A-4 Data Review Report

Alaska Gold Corporation

Rock Creek Project, Alaska

Data Review Report

Prepared for:
AGC
by:
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July 2003
131660

IMPORTANT NOTICE

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1.0 SUMMARY

AMEC has reviewed the data and data collection methods/procedures for the Rock Creek gold project in Alaska. The study included a site visit conducted during the Spring 2003 diamond drilling program at Rock Creek. During the site visit, AMEC reviewed the drilling operations, geology, archived drill core, and quality control procedures. AMEC also conducted an error rate check on the assay database while on-site. After the site visit, AMEC conducted further assessments of the data including a review of previous drilling, sampling, sample preparation, and analytical methods. As well, the assay results from the reverse circulation drilling programs were subjected to cyclicity and decay examinations. Finally, a scoring system was developed to summarize the quality of all of the data collection procedures and rank the various drilling campaigns, resulting in a recommendation to twin 10% of the holes from several campaigns due to a lack of confidence in the results.

The drilling and core handling procedures were consistent with standard industry practices, although a recommendation was made to discontinue the use of used core boxes for the transport of core due to concerns about sample contamination. AGC's whole core sampling procedures are supported by AMEC, however it is recommended that 10% of the holes be half core sampled with a diamond saw so that a permanent record of the geology at Rock Creek can be archived.

The current geological model consists of structurally controlled gold mineralization in two distinct structural (1) sheeted tension veins, and (2) the Albion shear. The two structural domains are mineralogically and metallurgically distinct. Highly deformed schistose sediments belonging to the early Paleozoic Nome Group, host the gold mineralization. Gold occurs as unevenly distributed and commonly coarse particles within quartz veins and stringers in both of the structural domains. In AMEC's opinion, the geological controls on the gold mineralization at Rock Creek are well understood.

Approximately one half of the drill holes in the database are reverse circulation (RC) and half are diamond core holes. One conventional rotary hole is in the database. AMEC recommends the use of large diameter diamond drilling (HQ or larger) in future campaigns due to the more detailed and reliable geological information that is available from drill core.

Detailed information on the sampling methods is generally lacking. Thirty-seven of the 56 core holes were half core sampled, and the remainder were whole core sampled. Due to the uneven distribution of the coarse grained gold mineralization AMEC supports the practice of whole core sampling at Rock Creek.

As with the sampling methodology, information on sample preparation and analytical methods is generally lacking. Due to the coarse gold at Rock Creek, AMEC has the most confidence in sample preparation protocols that have involved pulverizing at least one kilogram of sample material to –150 mesh. As well, metallic screen assay results will be more precise and accurate than other methods. The wet geochem methods employed during some of the Placer campaigns are expected to be the least accurate of the techniques used at Rock Creek. Five percent of the assay records in the AGC database were checked against the original assay certificates (or copies thereof). A total of six errors were found in 482 records, which equates to an error rate of 1.2%. In AMEC's opinion, error rates over 1% are not acceptable for resource modelling.

Decay analysis indicates that down-hole contamination is likely to have occurred in several holes in the Placer 1987 RC drilling campaign. As well, one interval in the Kennecott 1994 campaign and two intervals in the NovaGold 2000 campaign may have been contaminated. A cyclicity analysis has demonstrated that one hole in the Placer 1987 campaign, two holes in the Placer 1988 campaign, one hole in the Placer 1999 campaign, and one hole in each of the AGC 1999 and 2000 campaigns contain cyclicity runs that indicate possible contamination.

Previous twin drilling demonstrates that comparisons of grades between drillholes that are within 5 m. of each other are difficult due to the variability of the grades. The difference in average grades is greater than 25% for five of six twin pairs.

A scoring system based on confidence levels for all aspects of the geological data gathering process has been applied to the drillholes at Rock Creek. The campaign with the highest score is the NovaGold 2002 diamond drilling campaign, due largely to the combination of drilling method (HQ core), sample preparation protocols (1 kg pulps), and the comprehensive program of quality control employed. The Placer Dome RC and conventional rotary holes had the lowest scores due to a combination of their drilling methods/bit types (RC-tricone), lack of sample preparation information, and less than ideal analytical methods (geochem Au). AMEC lacks confidence in the campaigns that scored less than 110 points and recommends twinning 10% of the holes from each campaign to further assess the quality of the data collected. The campaigns that need to be twinned are the Placer 1987 RC, core and conventional rotary programs, the Placer 1988 RC, Placer 1989 RC, AGC 1999 and 2000 RC, and the Kennecott 1994 programs.

AMEC recommends that AGC address the list of recommendations listed in this report in order to ensure that the project's data will be of sufficient quality to support a future feasibility effort.

2.0 INTRODUCTION

AMEC was commissioned by Alaska Gold Corporation (AGC) to help: (1) assess the quality of the Rock Creek gold project database currently being used for scoping level studies, and (2) make recommendations on work required to advance Rock Creek to a feasibility study level. AMEC's participation in the project was concurrent with a resource modelling effort by AGC, and therefore AMEC's conclusions and recommendations were not incorporated into the May 2003 scoping study model.

3.0 SITE VISIT

AMEC's representative, Steve Blower, visited the project site, 7 km north of Nome Alaska (Figure 3-1) on 22 to 23 April 2003. Work completed during the site visit included a review of diamond drilling operations, geology, archived drill core, quality control procedures, and an error rate check on the assay database. The latter was completed in the AGC office in Nome.

3.1 Diamond Drilling Operations

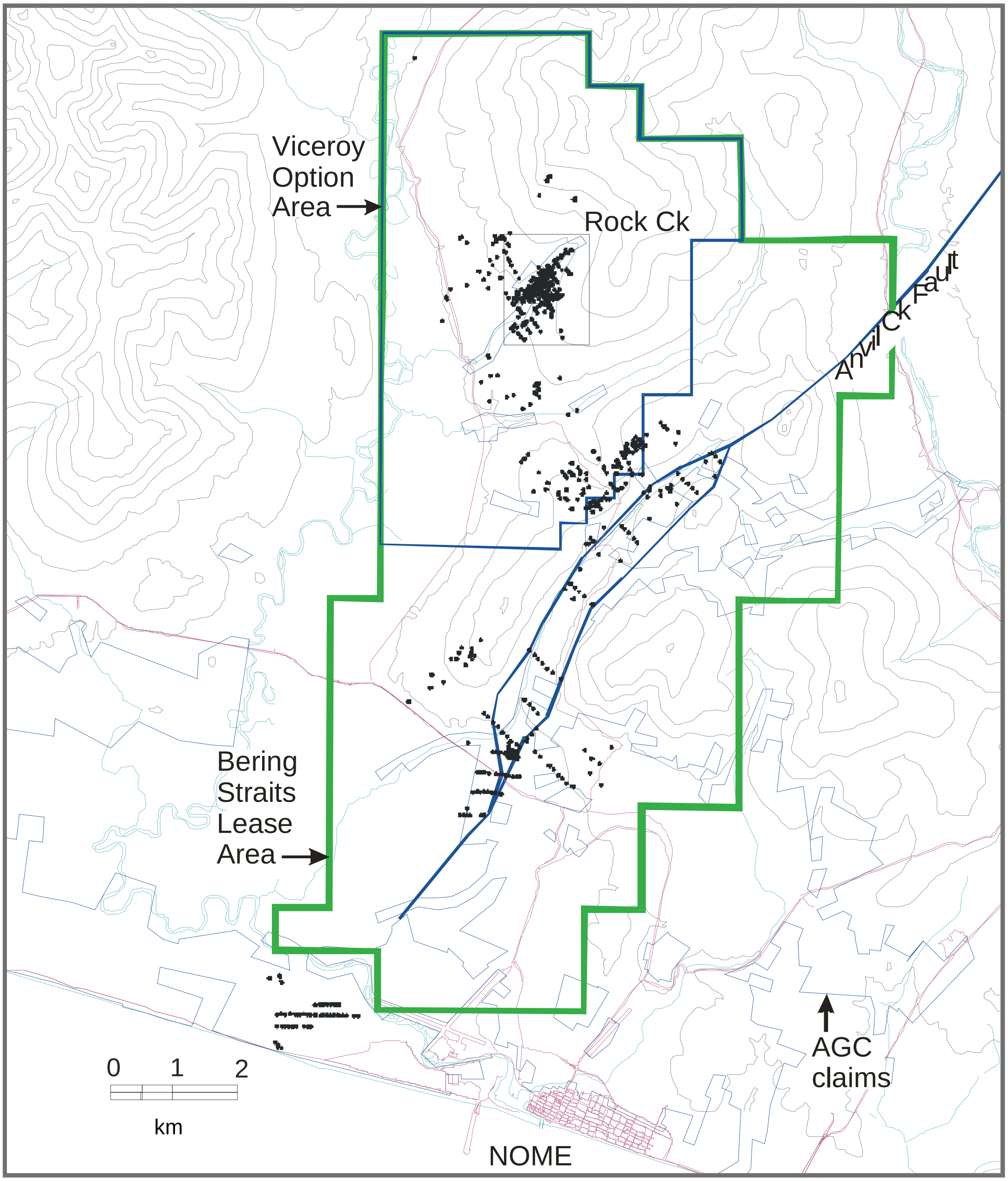
Two drill rigs were operating during the site visit (Plate 1 in Appendix A), with each drilling HQ sized core. The drilling and core handling procedures observed were generally according to industry standard practices, with the exception of the use of used core boxes. Used core boxes were observed to contain residual mud and rock fragments from the previous hole (Plate 2), despite attempts to wash them out. Given the propensity of gold mineralization to occur along fractures and fault zones, there is good potential for gold from previous drill holes to contaminate samples stored in used boxes. AMEC strongly recommends that the practice of re-using core boxes be discontinued.

AGC is currently conducting whole core sampling in an effort to reduce the effects of coarse grained gold mineralization on sample reproducibility. While AMEC concurs that large samples will help to mitigate this problem, AMEC recommends that at least 10% of the drill holes be half-core sampled, so that representative samples of the geology can be archived for future testing, analysis and validation exercises.

3.2 Geology

The geological interpretation of mineralization at Rock Creek was reviewed (Plate 3). Gold is present in two different sets of quartz veins that are hosted by quartz muscovite schists of the Cambrian to Devonian Nome Group. Highly deformed and metamorphosed shales, siltstones, sandstones, marls, and limestones, deposited in a shallow water continental platform, dominate the Nome Group (St. George, 2000).

Figure 3-1: Location Map (St. George, 2000)



The two sets of quartz veins (Albion shear veins and Sheeted tension veins) are distinct structurally, texturally, and mineralogically. Veins of the Albion zone are commonly 10 cm to 1 m thick, shear hosted, brecciated, and commonly contain fine-grained to aphanitic grey-blue coloured quartz (Plate 4). In contrast, the tension veins are almost always less than 10 cm thick, occur in en echelon sheeted zones, and are white in colour with common arsenopyrite selvages. Tension veins (Plate 5) crosscut the foliation at a high angle, but are interpreted to be oriented parallel to the Albion veins. The foliation adjacent to the Albion veins is thought to have been “dragged” into parallelism by the hosting shear.

The presence of tension veins oriented parallel to the shear veins is difficult to explain. Compressional stress that resulted in the development of the Albion shear zone should not have been conducive to tension vein propagation in orientations parallel to the shear. Nonetheless, AMEC’s observations from trench maps, underground geological maps, and trench photos all support AGC’s interpretation of the vein orientations.

Gold mineralization in the tension veins is commonly coarse, nuggety, and visible. Prior studies have demonstrated that gold assays from this type of mineralization are difficult to reproduce due to the large size of the gold particles. The problem is less significant in the Albion shear due to smaller gold grain particles resulting in a more even distribution.

4.0 DRILL HOLE DATABASE

The drill hole database is comprised of numerous campaigns by several different companies utilizing different drilling and sampling methods. Data is currently stored in MineSight software, and in numerous spreadsheets. Table 4-1 summarizes (by campaign) the drill holes in the database currently being used for resource modelling.

Table 4-1: Drilling Campaigns at Rock Creek

Company	Year	Type	Hole Series	No. of Holes	Metres
Placer Dome	1987	DDH	RC-7 001-024	22	1,939.4
	1987	RC	RR-7 001-017	16	905.1
	1987	Rotary	RM-7-019	1	21.3
	1988	DDH	RC-8 025-038	14	1,386.1
	1988	RC	RR-8 018-090	56	3,496.2
	1989	RC	RR-9 091-100	10	545.8
Tenneco	1990	DDH	DDH90-1	1	245.8
Newmont	1992	DDH	RC92 001,005	2	214.0
		DDH	AC92-005	1	91.4
Kennecott	1994	Core	RCC-4 01-11	11	1,265.9
	1994	RC	RCR-4 02-25	14	951.2
	1995	Core	RCC-5 12-31	18	2,282.6
AGC/NovaGold	1999	RC	RMR 1-6	6	437.4
	2000	RC	RR-0 1-39	30	2,448.6
	2002	DDH	RKDC02 101-116	16	1,182.0
Total				**218**	**17,412.8**

4.1 Drilling Methods and Equipment

One half (8,607 m) of the drilling has been completed with core methods. Almost all of the rest (8,784 m) consists of reverse circulation (RC) drilling. One drill hole in the database was completed with conventional rotary equipment (RM-7-019).

The diamond drill holes were all HQ diameter or larger, with the exception of one hole drilled by Kennecott in 1995 (RCC-5-30). In AMEC's opinion, the use of HQ sized equipment for almost all of the core drilling is commendable. The large core size will help to mitigate the effects of the coarse gold on assay reproducibility.

The RC drilling campaigns are plagued by a lack of information regarding bit diameters and bit types. The 1987 and 1988 Placer Dome RC program was reported to have utilized an underpowered rig operated by inexperienced operators, leading to concerns about the quality of the samples collected (Giermyski, 2003). Kennecott employed a down-hole hammer during their RC campaign in 1994. The only other information available is from the 1999 and 2000 programs. A 5.5 inch down-hole hammer and/or tricone bit was utilized during these years.

4.2 Sampling Methods

Sampling during the diamond drilling campaigns was a mixture of half core and whole core sampling. Of the 56 core holes completed on the property, 37 were half core sampled (all of the Placer Dome drill holes and the only Tenneco drill hole). The rest were whole core sampled. Placer Dome mechanically split the core longitudinally. Sample lengths were 2 m during the AGC campaign, 5 ft during the Kennecott campaign, and variable for the others. Some of Placer's core is archived in an organized fashion in sealed metal containers in Nome. AMEC supports the use of whole core sampling at Rock Creek, but recommends that at least 10% of the drillholes be half-core sampled with a diamond saw to ensure that a permanent archive is available for further testing, study and validation exercises.

Very little information is available on the sampling methods employed during the RC programs. In 1999 and 2000, AGC split dry samples 60/40 within a cyclone, with 40% being sent to the lab. In 1987-99, Placer Dome obtained their RC samples with a wet splitter beneath a cyclone. Table 4-2 summarizes the sampling methods of each campaign.

Table 4-2: Sampling Methods

Hole Series	Company	Year	Sampling Method	Number of Holes
RR-7-001 to 017	PDX	1987	Wet split beneath cyclone	16
RM-7-019	PDX	1987	Unknown	1
RC-7-001 to 024	PDX	1987	Half core	22
RR-8-018 to 090	PDX	1988	Wet split beneath cyclone	56
RC-8-025 to 038	PDX	1988	Half core	14
RR-9-091 to 100	PDX	1989	Wet split beneath cyclone	10
DDH90-1	Tenneco	1990	Half core	1
RC92-001 to 002	Newmont	1992	Whole core	2
AC92-005	Newmont	1992	Whole core	1
RCC-4-01 to 11	Kennecott	1994	Whole core 5 ft samples	11
RCR-4-02 to 25	Kennecott	1994	Unknown	14
RCC-5-12 to 31	Kennecott	1995	Whole core 5 ft samples	18
RMR-1 to 6	AGC	1999	Dry split in cyclone	6
RR-0-1 to 39	AGC	2000	Dry split in cyclone	30
RKDC02-101 to 116	AGC	2002	Whole core 2 m samples	16
Total				**218**

4.3 Sample Preparation

Due to the large size and uneven distribution of the gold grains in the tension vein mineralization, sample preparation is a critical aspect of the exploration and definition drilling programs at Rock Creek. Large samples and sub-samples are required at every step of the sample preparation process. The sample preparation methods employed in each drill campaign are listed in Table 4-3.

The sample preparation procedures employed by Placer Dome are unknown. In 1999 and 2000, AGC pulverized a 250 g subsample before analysis. Pulp sizes were considerably larger for the other campaigns and ranged between 1 kg to 1.25 kg.

In AMEC's opinion, at least one kilogram of crushed sample material should be pulverized to 95% passing –150 mesh. Pulverized subsamples that are less than one kilogram will almost certainly be too small, given the uneven distribution of the gold at Rock Creek. It is also possible that a 1 kg pulp sub-sample is too small. AMEC recommends that AGC complete a full-scale heterogeneity test and develop a sample nomogram to determine the optimum subsample sizes at each stage of the sample preparation process.

Table 4-3: Sample Preparation Methods

Hole Series	Company	Sample Preparation	Number of Holes
RC92-001 to 002	Newmont	Crush 11-15 kg to -10, pulv 1/2 to -28, pulv and screen 1/8 to +/- 150 mesh.	2
AC92-005	Newmont	Crush 11-15 kg to -10, pulv 1/2 to -28, pulv and screen 1/8 to +/- 150 mesh.	1
DDH90-1	Tenneco	Unknown	1
RR-7-001 to 017	PDX	Unknown	16
RR-8-018 to 090	PDX	Unknown	56
RR-9-091 to 100	PDX	Unknown	10
RM-7-019	PDX	Unknown	1
RC-7-001 to 024	PDX	Unknown	22
RC-8-025 to 038	PDX	Unknown	14
RMR-1 to 6	AGC	Crush to 75% 10 mesh, pulv 250 g to 95% -150	6
RR-0-1 to 39	AGC	Crush to 75% 10 mesh, pulv 250 g to 95% -150	30
RKDC02-101 to 116	AGC	All crushed to 90% -10, 1,000 g pulp	16
RCC-4-01 to 11	Kennecott	All crush to >60% -10, 1,250 g pulv to -60, 300 g pulv and screened to 100% -150 mesh.	11
RCC-5-12 to 31	Kennecott	All crush to >60% -10, 1,250 g pulv to -60, 300 g pulv and screened to 100% -150 mesh.	18
RCR-4-02 to 25	Kennecott	All crush to >60% -10, 1250 g pulv to -60, 300 g pulv and screened to 100% -150 mesh.	14
Total			**218**

4.4 Analytical Methods and QA/QC

Several analytical methods have been applied to samples from Rock Creek. AMEC is concerned about the results from Placer's "wet geochem" analyses. AMEC assumes that the process involved an aqua regia digestion, which is not standard practice for gold assay. The accepted method is fire assay.

Aqua regia digestions are used in gold exploration because they are useful for detecting gold anomalies. However, their adequacy for accurately determining gold grade is questionable, and can depend upon the removal of various interferences. Both overestimations and underestimations of gold grade are possible with aqua regia digestions, depending upon the mineral matrix, what is done in the assay protocol to remove deleterious elements (e.g. solvent extraction step), and instrumentation (e.g. deuterium lamp background correction in atomic absorption). Aqua regia gold assays should not be accepted for gold resource estimations without clear support from gold fire assays, such as 5% check assays by gold fire assay, covering all important rock types and levels of mineralization, that verify that the aqua regia assays have good agreement with fire assay results over the range of grades in the deposit.

Due to the coarse nature of the gold particles, AMEC considers Metallic Screen Assays (MSAs) to be optimal. AMEC recommends that AGC complete MSAs on all samples within mineralized intervals, as opposed to completing MSAs only on samples above a threshold grade determined by standard Fire Assay.

AGC instituted a comprehensive program of quality assurance-quality control (QA/QC) for their 2002 diamond drilling campaign. Their protocols include the insertion of blind standards, blanks, and duplicates at a rate of one of each per group of 20 samples. Prior to this program, there was essentially no quality control data collected for any of the other analyses completed at Rock Creek. Kennecott did submit a very small number of blanks (4 blanks per 1,359 samples), and standards (11 standards per 1,359 samples) with their samples, but the number is too small to be used to quantify the accuracy or precision of the data. To validate those portions of the database that are not supported by QA/QC, AMEC recommends that AGC re-assay 5% of the coarse reject material from each campaign, if available, with sufficiently inserted standard reference materials. If there is no coarse reject material available for re-assay, then AMEC recommends attempting to twin 10% of the holes from those campaigns. If the results of the quality assured re-assays are comparable to the original results, then AGC can place some confidence in the original results. However, given the results of the six previously twinned holes discussed in Section 5.3, the results of future twin comparisons may be inconclusive.

5.0 DATA ASSESSMENT

Four exercises were completed to assess the quality of the data at Rock Creek: (1) a 5% check of the analytical database against the original certificates was completed, (2) decay and cyclicity were checked in the RC analytical results, (3) twinned hole results were compared, and (4) the quality of the data associated with each campaign was ranked with a scoring system.

5.1 Analytical Database Check

The analytical results from 11 drill holes, representing 5% of the drill hole database were checked against the original assay certificates. A list of holes checked, along with a summary of the results are presented in Table 5-1. The records that were checked were selected at random from the main drilling campaigns at Rock Creek.

A total of six errors were uncovered in a total of 482 records that were checked. The errors are listed in Table 5-1. The error rate is therefore 6/482 or 1.2%. As a rule of thumb, AMEC considers an error rate of less than 1% to be acceptable for resource modelling purposes. Because the Rock Creek error rate is greater than 1%, AMEC recommends that AGC complete a 100% check of the analytical database against the original certificates.

Table 5-1: Analytical Database Check Results

				Error			
Company	**Hole**	**# Samples**	**# Errors**	**From**	**To**	**Length**	**Assay**
Kennecott	RCC-4-10	26	2	53.34	56.39	3.05	-1
3/43 Checked	RCC-4-10	-	-	73.15	74.68	1.53	0.034
(7%)	RCC-5-19	81	-	-	-	-	-
	Kenn Samples	*107*	-	-	-	-	-
	Kenn Errors	*2*	-	-	-	-	-
	Kenn Error Rate	*1.9%*	-	-	-	-	-
Newmont	RC92-002	33	1	74.68	103.63	28.95	-1
1/3 Checked		-	-	-	-	-	-
(33%)	*Newmont Samples*	*33*	-	-	-	-	-
	Newmont Errors	*1*	-	-	-	-	-
	Newmont Rate	*3.0%*	-	-	-	-	-
Placer	RC-7-009	60	-	-	-	-	-
3/114 Checked	RC-8-029	14	-	-	-	-	-
(3%)	RR-7-006	40	-	-	-	-	-
	Placer Samples	*114*	-	-	-	-	-
	Placer Errors	-	-	-	-	-	-
	Placer Rate	*0.0%*					

Company	Hole	# Samples	# Errors	Error From	Error To	Error Length	Error Assay
AGC	RMR-3	40	2	42.67	44.2	1.53	10
Checked 4/52	RMR-3	-	-	53.34	54.86	1.52	10
(8%)	RR-0-08	76	-	-	-	-	-
	RR-0-23	67	-	-	-	-	-
	RR-0-32	45	1	10.7	12.2	0	0.005
	AGC Samples	*228*	-	-	-	-	-
	AGC Errors	*3*	-	-	-	-	-
	AGC Rate	*1.3%*	-	-	-	-	-
Total	**Holes Checked**	**11 (5%)**					
	Samples Checked	**482**					
	Errors	**6 (1.2%)**					

5.2 Decay and Cyclicity in the RC Drilling Campaigns

5.2.1 Decay

RC drill holes can sometimes exhibit asymmetric-downward grade profiles around peak grades. This can be caused by contamination in the drill hole due to improper sampling or sample handling procedures, or because of high-grade material in the wall of the hole being eroded and collecting at the bit face. Tables 5-2 to 5-5 display the average grades on either side of the peaks for the various drilling campaigns. Negative sample positions with respect to peak grades are in the up-hole direction, and positive sample positions are in the down-hole direction. Potentially contaminated intervals are listed in the decay analysis output files in Appendix B.

Table 5-2: Placer Dome 1987 RC Campaign Decay Profiles

Position wrt Peak (sample positions)	Peak Grade >5 g/t	Peak Grade >10 g/t	Peak Grade >15 g/t
-5	0.811	0.440	0.468
-4	0.780	0.409	0.372
-3	2.922	6.199	10.814
-2	1.455	0.876	0.808
-1	2.812	3.953	1.576
0	11.569	19.360	25.014
1	3.840	4.926	4.040
2	4.421	5.664	4.840
3	4.753	3.658	5.556
4	2.606	1.456	1.448
5	2.024	1.288	0.494

In Table 5-2, a strong asymmetric downward profile at all three threshold grades is evident in the Placer 1987 data. Therefore, there is a strong possibility that down-hole contamination has contributed to the gold content of the samples collected in this campaign. The decay program output files in Appendix B demonstrate that the problem is observed in many holes. In AMEC's opinion, the results of the 1987 Placer Dome RC drilling campaign should not be used for resource modelling exercises.

Table 5-3: Placer Dome 1988 RC Campaign Decay Profiles

Position wrt Peak (sample positions)	Peak Grade >5 g/t	Peak Grade >10 g/t	Peak Grade >15 g/t
-5	0.639	0.561	0.307
-4	1.805	2.733	1.64
-3	0.429	0.207	0.076
-2	0.748	0.863	0.684
-1	2.165	3.503	3.681
0	11.411	18.352	25.593
1	2.916	3.111	4.11
2	1.206	0.977	0.527
3	1.914	2.642	0.571
4	1.495	1.675	2.027
5	3.645	1.093	0.676

Unlike the 1987 Placer Dome campaign, the profiles for the 1988 Placer Dome campaign display only a weak downhole asymmetry and the magnitude of the asymmetry decreases with increased threshold grade. These results indicate that downhole contamination is not a problem with the 1988 data.

Table 5-4: Placer Dome 1989 RC Campaign Decay Profiles

Position wrt Peak (sample positions)	Peak Grade >5 g/t	Peak Grade >10 g/t	Peak Grade >15 g/t
-5	0.317	n/a	n/a
-4	2.560	n/a	n/a
-3	0.480	n/a	n/a
-2	0.240	n/a	n/a
-1	5.327	n/a	n/a
0	5.340	n/a	n/a
1	0.457	n/a	n/a
2	1.350	n/a	n/a
3	0.923	n/a	n/a
4	1.807	n/a	n/a
5	0.297	n/a	n/a

The small (10 hole) Placer Dome 1989 dataset is relatively low grade and there are no assays above the 10 g/t threshold. At the 5 g/t threshold, the grade profile is not asymmetric downward and therefore there is no evidence of down-hole contamination in this dataset.

Table 5-5: Kennecott 1994 RC Campaign Decay Profiles

Position wrt Peak (sample positions)	Peak Grade >5 g/t	Peak Grade >10 g/t	Peak Grade >15 g/t
-5	0.00	0.00	0.00
-4	0.02	0.04	0.00
-3	0.09	0.14	0.07
-2	1.72	3.36	0.20
-1	7.42	14.41	6.51
0	11.09	16.43	22.30
1	9.90	8.31	10.55
2	5.80	6.18	6.06
3	3.72	4.18	6.30
4	2.89	2.52	2.06
5	1.60	2.07	2.98

The summary results for the Kennecott campaign in Table 5-5 clearly indicate a strong downward asymmetry in the grade profiles about peak grades. However, the decay program output file results in Appendix B show that all of the asymmetry is due to one interval (10.5 m to 22.5 m) in hole RCR-4-19. The chip log and geological interpretation for this interval should be examined to determine if there is a geological explanation for the shape of the profile. If there is none, then consideration should be given to removing the trailing samples from the database. Downhole contamination is not suspected in the other holes completed during this drilling program.

Table 5-6: AGC 1999 RC Campaign Decay Profiles

Position wrt Peak (sample positions)	Peak Grade >5 g/t	Peak Grade >10 g/t	Peak Grade >15 g/t
-5	1.33	0.92	n/a
-4	0.31	0.24	n/a
-3	0.49	0.35	n/a
-2	0.77	0.51	n/a
-1	2.05	0.90	n/a
0	7.10	10.00	n/a
1	2.68	1.11	n/a
2	2.92	0.24	n/a
3	1.42	0.38	n/a
4	2.84	6.29	n/a
5	1.75	2.07	n/a

The grade profiles for the AGC 1999 RC campaign do not exhibit a large degree of downhole asymmetry about peaks. A small amount of asymmetry is observed at the low-grade (5 g/t) peak, but the effects are much diminished at the 10 g/t threshold. In AMEC's opinion, the AGC 1999 RC campaign is relatively unaffected by downhole contamination.

Table 5-7: AGC 2000 RC Campaign Decay Profiles

Position wrt Peak (sample positions)	Peak Grade >5 g/t	Peak Grade >10 g/t	Peak Grade >15 g/t
-5	0.86	1.34	1.64
-4	0.50	0.53	0.42
-3	0.87	1.33	1.59
-2	1.37	1.01	1.04
-1	3.33	2.01	2.14
0	11.72	19.86	26.29
1	4.10	4.81	5.46
2	2.09	2.53	1.49
3	2.15	1.21	1.47
4	1.15	1.54	2.18
5	1.48	0.67	0.73

As with the 1999 AGC campaign, there is a small amount of downhole asymmetry at the 5 g/t threshold, but the effect is somewhat diminished at the two higher thresholds. The drillholes in this campaign are relatively unaffected by downhole contamination. However, from the output files attached in Appendix B, it can be seen that one interval in RR-0-03 (33.4 m to 35.0 m, 26.32 g/t Au) and one interval in RR-0-15 (66.9 m to 68.4 m, 20.79 g/t Au) are centred within strongly asymmetric grade profiles. The logs and geological interpretations for these intervals should be examined to determine if there is a geological explanation for the shape of the profiles. If there is none, then the trailing samples should be removed from the database.

5.2.2 Cyclicity

During the RC drilling process, the hole is usually blown clean with compressed air before a rod change. This can weaken the wall of a hole immediately above the bottom. As the hole is deepened, this material can fall into the hole, resulting in contamination if the material is of sufficient grade. This commonly results in an artificially high grade in the first sample position of succeeding rods – and a saw toothed grade profile over several rods.

The degree of cyclicity in the RC drilling campaigns at Rock Creek can be observed most simply in Figures 5-1 to 5-6. For each of the holes, the rod position (1 = first sample position; 2 = second sample position) with the highest grade is listed for every rod. All of the RC campaigns were assumed to have utilized two samples per 10 ft rod. A zero value indicates that none of the assays in the rod were above a threshold value of 0.5 g/t.

At Rock Creek, an interval is deemed to be exhibiting signs of cyclicity if the same sample position contains the highest grade 5 or more times in a row. This is termed a run of 5. Given that the probability of a sample position having the highest grade in a single rod is 0.5, then the probability of that sample position having the highest grade in five consecutive rods is 0.5^5 or 0.031 (3.1%). Therefore, there is only a 3.1% chance that a run of five will occur and those intervals should be carefully examined to determine if contamination has occurred.

Figure 5-1: Cyclicity in the Placer Dome 1987 Campaign

Hole ID	Sample Position with the Highest Grade in Each Rod
RR-7-001	22121221211121212212
RR-7-002	2221212211212122111
RR-7-003	0102112110120121102
RR-7-004	21220220222110212211
RR-7-005	01121121112002220022
RR-7-006	22121211012110112012
RR-7-007	000000000001
RR-7-009	001000000000112021
RR-7-010	01101221000212100112
RR-7-011	000002002001210101
RR-7-013	02002012102211
RR-7-014	100210200100021211
RR-7-015	00001110222200022011
RR-7-016	22212120202210000112
RR-7-017	2221**22222222**0010201

In Figure 5-1, only one run of 5 or more is observed (RR-7-017). In rods 5 through 12 of hole RR-07-017, the highest grade sample occurs at the 2nd sample position 8 times in a row. As there is only a 0.4% probability that this will occur naturally, the chip logs and geological interpretation of the interval should be examined to determine if there is a geological explanation for the pattern. If there is no apparent geological explanation, the interval should be excluded from the resource modelling database.

Figure 5-2: Cyclicity in the Placer Dome 1988 Campaign

Hole ID	Sample Position with the Highest Grade in Each Rod
RR-8-018	0020002000201022011
RR-8-019	00020022022221122202
RR-8-020	02210112111
RR-8-021	00000000001
RR-8-022	0001100000102
RR-8-023	0000201112
RR-8-024	10000111100210210012
RR-8-025	0120100120002210002
RR-8-026	21112121002121220001
RR-8-027	221000012022001012
RR-8-028	021211001**2222222**1212
RR-8-029	02000112220012002222
RR-8-031	0000002002200000002
RR-8-032	00021120020000210002
RR-8-034	00200020000101220211
RR-8-035	22210200010001010211
RR-8-036	000220000010021
RR-8-037	00100001001000112121
RR-8-038	000001211010001021
RR-8-039	2000000001121202
RR-8-040	0211120110101012
RR-8-041	020220200110221122
RR-8-042	222012211112112111
RR-8-043	002000012202022102
RR-8-045	02200210010212110001
RR-8-046	222210022110020222
RR-8-047	21212211211110022111
RR-8-048	0102002210112200012
RR-8-050	0000000011
RR-8-054	0000000002000202
RR-8-055	0000000000000000112
RR-8-056	000010210021001
RR-8-057	0000000000022000000002
RR-8-058	0000101220200001012101
RR-8-059	0221011000000120000101
RR-8-060	0000000000100000001
RR-8-061	000000021022111001212
RR-8-062	01100001
RR-8-063	0001110021120212111222
RR-8-064	000000010100002000021
RR-8-065	0110020212120222212
RR-8-072	0210111010201011121121
RR-8-075	021121022120110000021
RR-8-079	00001200000000012212021
RR-8-080	0011210200002000220101111
RR-8-082	000000210100010210100002
RR-8-084	02000200001000000210002
RR-8-086	0021000010211000200021111
RR-8-088	2111000002
RR-8-090	22**11111**02222122011221

There are two holes with runs of 5 or more in Figure 5-3, RR-8-028 and RR-8-090. In hole RR-8-028, a run of 7 occurs at the second sample position of rods 10 to 16 (27.4 m to 48.6 m). The probability that the highest grade will occur in the same position 7 times in a row is 0.8%. In hole RR-8-090, a run of 5 (3.1% probability) occurs at the first sample position of rods 3 to 7 (6.1 m to 21.3 m). These two intervals display evidence of cyclical contamination and should be removed from the resource modelling database unless a geological explanation for the patterns can be found.

Figure 5-3 Cyclicity in the Placer Dome 1989 Campaign

Hole ID	Sample Position with the Highest Grade in Each Rod
RR-9-091	2011212221020010101 21
RR-9-092	212001100**11111**2
RR-9-093	212220211001111
RR-9-094	000020102100001
RR-9-095	0222211222021
RR-9-096	200021010100011
RR-9-097	000120110112202
RR-9-098	220000112120002
RR-9-099	2000200212112010002202

In Figure 5-3, evidence of cyclical contamination is present for hole RR-9-092 only. A run of 5 occurs at rods 10 through 14, (27.4 m to 42.6 m), with the highest grade occurring at the first sample position five times in a row. This interval displays evidence of cyclical contamination and should be removed from the resource modelling database unless a geological explanation can be offered.

Figure 5-4: Cyclicity in the Kennecott 1994 Campaign

Hole ID	Sample Position with the Highest Grade in Each Rod
RCR 4-02	002001000000000022200021
RCR 4-03	00000000000000001
RCR 4-04	00000000000000000000001
RCR 4-13	00010000000000000001
RCR 4-19	00021222120012002121202102
RCR 4-21	100000021001
RCR 4-22	100010021000101
RCR 4-25	22211222020210121002

None of the holes in the Kennecott 1994 campaign have runs that are greater than three. Therefore, there is no evidence of cyclical contamination in this campaign.

Figure 5-5: Cyclicity in the AGC 1999 Campaign

Hole ID	Sample Position with the Highest Grade in Each Rod
RMR-1	0110220200020000002202
RMR-2	011221100221101
RMR-3	0000020101220210 12011
RMR-4	0002111**2222222**1212111002
RMR-5	0201112122212000112022220222 2011
RMR-6	00000220002110220212 10102

Only one interval in the 1999 AGC campaign shows signs of cyclical contamination. Figure 5-5 shows a run of seven in hole RMR-4. The second sample is the highest grade in seven consecutive rods, corresponding to the interval 21.3 m to 42.6 m. The log and interpretations for this hole should be checked to see if a geological explanation exists. If the pattern is not caused by geology, then the interval should be excluded from resource modelling efforts.

Figure 5-6: Cyclicity in the AGC 2000 Campaign

Hole ID	Sample Position with the Highest Grade in Each Rod
RR-0-01	00000210010001
RR-0-02	01221121222122011001002101
RR-0-03	00200222122112000000212
RR-0-04	000212110101
RR-0-05	0022121100122202110 22
RR-0-06	0020010022220020 0211
RR-0-07	000010000000201000200001001000000000000002
RR-0-08	00010121112021022121011112000211201221 22
RR-0-09	0022100120200110000211122110 0021
RR-0-10	00012212000001020200020 21
RR-0-12	00020022112
RR-0-15	000221021102000110210212121100002020010100000100001
RR-0-17	000000001110000022121100210011010000020002
RR-0-19	00210012112101211022122000 11
RR-0-20	00001000200010221010201
RR-0-23	00210210000200100020000020012010 2
RR-0-24	0002000020020120102100202220 2
RR-0-25	0011020010000211220212101
RR-0-26	00121101002222202102021100020 21
RR-0-27	00001000000201012101
RR-0-28	00010**11111**01212101
RR-0-31	00112100011000000001010002
RR-0-32	001000212022121012101111
RR-0-35	000021001100021
RR-0-37	0000101000012000000000021
RR-0-38	00102121210020002 2
RR-0-39	0020101200001

As with the 1999 AGC campaign, only one interval in the 2000 AGC campaign shows signs of cyclical contamination. Figure 5-6 shows a run of five in hole RR-0-28. The first sample is the highest grade in five consecutive rods, corresponding to the interval 15.2 m to 30.4 m. The log and interpretations for this hole should be checked to see if a geological explanation exists. If the pattern is not caused by geology, then the interval should be excluded from resource modelling efforts.

5.3 Drill hole Twins

There are six sets of twinned drill holes at Rock Creek that are separated by 5 m or less. The twin pairs are listed in Table 5-8 along with their analytical results for comparison. Each of the twin pairs is plotted on a vertical cross-section in Appendix C. Only two of the twins are core-RC comparisons. The rest are core-core or RC-RC twins.

The twin results in Table 5-8 demonstrate that holes drilled very close to each other at Rock Creek can obtain very different results. The twin composite assay result is within 25% of the original result for only one of the six twin pairs. None of the previous twin results can be used to validate drill campaigns. The core-RC pair of RC07-021 and RR-7-002 exemplifies this. The same company drilled the holes in the same year, and the core assay results were 50% lower than the RC assay results over a 29 m hole length. Based on these discrepancies, future validation of RC results with core twins is expected to be difficult at best.

Table 5-8: Twin Drillhole Results

Twin Pair	Section	Separation (m)	Twin Type	Interval for Comparison (m)	Interval Length (m)	Au (g/t)	% Difference (Twin-Orig)/Orig
RCC-4-11	750N	4	Core-Core	0 to 125.0	125.0	0.48	-2.0
RC-7-016						0.49	
RCC-5-20	600N	3.5	Core-Core	1.52 to 84.4	82.9	0.24	-73.0
RC-7-008						0.89	
RC-7-021	500N	4	Core-RC	3.05 to 32.0	29.0	2.42	-49.1
RR-7-002						4.75	
RCC-4-01	450N	4	Core-RC	0 to 47.5	47.5	0.75	50.0
RCR-4-22						0.50	
RMR-06	450N	5	RC-RC	10.7 to 61.0	50.3	1.16	26.1
RC-7-005						0.92	
RMR-05	450N	5	RC-RC	3.05 to 97.5	94.5	1.14	48.1
RC-7-002						0.77	

5.4 Confidence Scores

A scoring system was developed to help rate the quality of the data generated by each drilling campaign. A value ranging between 0 and 10 (with 10 being better) was awarded to each drill hole according to the level of confidence to be gained from the procedures utilized in several categories, including sample preparation, analytical methods, etc. One score was awarded for each category. Each category was also assigned a relative importance value between 1 and 5 (with 5 being more important), allowing variable weights to be applied to different categories. The final score for each drill hole was then calculated by summing the products of the category scores multiplied by their respective relative importance values. The final scores for each campaign are meant to be relative, qualitative and subjective. The goal is to better communicate the priorities assigned by AMEC. The results are summarized in Table 5-9 and are listed by drillhole and category in Appendix D. AMEC considers scores greater than or equal to 110 to be acceptable.

Table 5-9: Confidence Scoring Results

Company	Year	Type	Hole Series	Quality Score
PDX	1987	RC	RR-7 001-017	63
PDX	1987	Rotary	RM-7-019	41
PDX	1987	DDH	RC-7 001-024	94
PDX	1988	RC	RR-8 018-090	83
PDX	1988	DDH	RC-8 025-038	114
PDX	1989	RC	RR-9 099-100	63
Tenneco	1990	DDH	DDH90-1	112
Newmont	1992	DDH	RC92 001-005	143
Newmont	1992	DDH	AC92-005	143
Kennecott	1994	Core	RCC-4 01-11	129
Kennecott	1994	RC	RCR-4 02-25	106
Kennecott	1995	Core	RCC-5 12-31	119
NovaGold	1999	RC	RMR 1-6	101
NovaGold	2000	RC	RR-0 1-39	91
NovaGold	2002	DDH	RKDC02 101-116	162

The one rotary drill hole completed by Placer Dome in 1987 received the lowest score at 41 points, followed closely by the 1987 and 1999 Placer Dome RC campaigns. These campaigns scored poorly due to their drilling methods/bit types (RC-tricone), lack of sample preparation information, and less than ideal analytical methods (geochem Au). The highest score went to the NovaGold 2002 diamond drilling campaign, due largely to the combination of drilling method (HQ core), sample preparation protocols (1 kg pulps), and the comprehensive program of quality control employed. AMEC lacks confidence in all of the campaigns that scored less than 110 points. Remedial action in the form of re-assaying or twinning of some of the holes in each of these low-confidence campaigns is recommended.

6.0 CONCLUSIONS AND RECOMMENDATIONS

6.1 Conclusions

A site visit conducted during the Spring 2003 diamond drilling program at Rock Creek involved a review of drilling operations, geology, archived drill core, quality control procedures, and an error rate check on the assay database.

The drilling and core handling procedures were generally consistent with industry accepted practices, with the exception of the use of used core boxes for the transport of core from the drill rig to the core shack in Nome. AMEC is concerned that the practice could lead to sample contamination.

AGC's whole core sampling procedures are supported by AMEC, however it is recommended that 10% of the holes be half core sampled with a diamond saw so that a permanent record of the geology at Rock Creek can be archived.

The current geological model consists of structurally controlled gold mineralization in two distinct environments, one tensional (sheeted tension veins) and the other compressional (the Albion shear). The two structural domains are mineralogically and metallurgically distinct. Highly deformed schistose sediments belonging to the early Paleozoic Nome Group host the gold mineralization. Gold occurs as unevenly distributed and commonly coarse particles within quartz veins and stringers in both of the structural domains. In AMEC's opinion, the geological controls on the gold mineralization at Rock Creek are well understood.

Approximately one half of the drill holes in the database are reverse circulation and half are diamond core holes. One conventional rotary hole is in the database. AMEC recommends the use of diamond drilling in future campaigns due to the more detailed and reliable geological information that is available from drill core.

Detailed information on the sampling methods is generally lacking. Thirty-seven of the 56 core holes were half core sampled, and the remainder were whole core sampled. Due to the uneven distribution of the coarse grained gold mineralization, AMEC supports the practice of whole core sampling at Rock Creek.

As with the sampling methodology, information on sample preparation and analytical methods is generally lacking. Due to the coarse gold at Rock Creek, AMEC has the most confidence in sample preparation protocols that have involved pulverizing at least one kilogram of sample material to –150 mesh. As well, metallic screen assay results will be more precise and accurate than other methods. The wet geochem methods employed during some of the Placer campaigns are expected to be the least accurate of the techniques used at Rock Creek.

Five percent of the assay records in the AGC database were checked against the original assay certificates (or copies thereof). A total of six errors were found in 482 records, which equates to an error rate of 1.2%. In AMEC's opinion, error rates over 1% are not acceptable for resource modelling.

Decay analysis indicates that down-hole contamination is likely to have occurred in several holes in the Placer 1987 RC drilling campaign. As well, one interval in the Kennecott 1994 campaign and two intervals in the NovaGold 2000 campaign may have been contaminated.

A cyclicity analysis has demonstrated that one hole in the Placer 1987 campaign, two holes in the Placer 1988 campaign, one hole in the Placer 1999 campaign, and one hole in each of the AGC 1999 and 2000 campaigns contain cyclicity runs that indicate possible contamination.

Previous twin drilling demonstrates that comparisons of grades between drillholes that are within 5 m of each other is difficult due to the variability of the grades. The difference in average grades is greater than 25% for five of six twin pairs.

A scoring system based on confidence levels for all aspects of the geological data gathering process has been applied to the drillholes at Rock Creek. The campaign with the highest score is the NovaGold 2002 diamond drilling campaign, due largely to the combination of drilling method (HQ core), sample preparation protocols (1 kg pulps), and the comprehensive program of quality control employed. The Placer Dome RC and conventional rotary holes had the lowest due to a combination of their drilling methods/bit types (RC-tricone), lack of sample preparation information, and less than ideal analytical methods (geochem Au). AMEC lacks confidence in the campaigns that scored less than 110 points.

6.2 Recommendations

To raise the data quality to the level needed to support resource estimation and mine planning work to a feasibility level, AMEC recommends that AGC should address the following recommendations:

- Use new core boxes for transporting core from the drill sites to the logging/sampling facilities, and discontinue the practice of re-using old boxes.

- Continue the practice of whole core sampling, but also carry out half core sampling on 10% of future drill holes to establish a permanent archive of the geology and mineralization at Rock Creek for future studies and audits.
- Utilize large diameter (HQ or larger) core drilling for future definition drilling campaigns.
- Carefully document the sampling, sample preparation, and analytical methods employed during all future drilling campaigns.
- Pulverize at least 1 kg of sample to –150 mesh before analysis.
- Conduct a sampling/sample preparation audit and heterogeneity test, resulting in the development of a sample nomogram to ensure that sample and subsample sizes are sufficiently large to mitigate the problems associated with the unevenly distributed coarse gold at Rock Creek.
- Continue the current QA/QC protocols in use at Rock Creek and monitor the results on a batch-by-batch basis to ensure that batches associated with non-compliant standard reference materials are re-assayed.
- Conduct a 100% check of the database assay records against the original certificates.
- Remove the Placer 1987 RC drilling campaign from the database due to the results of the decay analysis and confidence scoring.
- Examine the logs and interpretation for hole RCR-4-19, from 10.5 m to 22.5 m due to the results of the decay analysis. If no good geological explanation can be found for the strong downward asymmetric profile, the interval should be removed from the resource modelling database.
- Examine the logs and interpretation for holes RR-8-028 (27.4 m to 48.6 m), RR-8-090 (6.1 m to 21.3 m), RR-9-092 (27.4 m to 42.6 m), RMR-4 (21.3 m to 42.6 m) and RR-0-28 (15.2 m to 30.4 m) due to indications of cyclical contamination. If no geological explanation can be found for the cyclical patterns, the intervals should be removed from the resource modelling database.
- Twin 10% of the holes in each of the campaigns that scored less than 110 points in the confidence scoring system to assess the quality of the data from those campaigns.
- Unless the recommended heterogeneity tests and resulting sampling nomograms suggest otherwise, all future drilling programs (including twins) should utilize large diameter (HQ or larger) core methods with Metallic Screen Assays completed on pulps at least 1 kg or larger.

7.0 REFERENCES

Giermyski, C. (2003). *Draft Summary Report*, Untitled draft internal company (AGC) report on the 2002 drill program at Rock Creek.

St. George, P. (2000). *1999 Rock Creek Drilling & Metallurgical Program*, Internal Company (AGC) report on the work completed in 1999 at Rock Creek.

APPENDIX A – PHOTOS

Plate 1 – Diamond drill rig operating at Rock Creek.

Plate 2: New drill core stored in a used core box. Note the yet-to-be-filled row with residual rock chips and mud remaining from the previous hole.

Plate 3: Review of archived Placer Dome drill core.

Plate 4: Brecciated quartz vein mineralization typical of the Albion shear zone in archived Placer Dome core.

Plate 5: Typical sheeted tensional quartz veins in a quartz muscovite schist. Note the arsenopyrite selvage in one of the veins and the characteristic orientation perpendicular to the foliation.

APPENDIX B – DECAY ANALYSIS OUTPUT FILES

DECAY ANALYSIS PROGRAM: Placer Dome 1987 Threshold = 15 g/t Au

```
Input File Name =         RC_P_87.txt
Print File Name =         RC_P_87.prn
Message File Name =       RC_P_87.msg
Decay Threshold =              15.000
Tot. Rel. Diff. =            1.000
Min. No. Pos. Diff =             3
Full Scale Grade profile =     20.000
Normal Sample Interval =        1.520
Format to read data=     (a10,f11.2,2f15.2,i12)

Abnormal Interval: ard =     6.542 Numpos = 5 bhid = RR-7-001
Grade Profile: * = 0.2000 Full Scale =20.0000
Rock Code (integer) is Printed to Right of Grade

   9.1   10.6   0.210   0 *
  10.6   12.2   1.100   0 *****
  12.2   13.7   0.790   0 ***
  13.7   15.2   0.480   0 **
  15.2   16.7   3.120   0 ***************
  16.7   18.2  23.730   0 ****************************************************************************************************
  18.2   19.8  11.520   0 *********************************************************
  19.8   21.3  20.910   0 ****************************************************************************************************
  21.3   22.8   4.290   0 *********************
  22.8   24.3   2.190   0 **********
  24.3   25.8   1.300   0 ******

Abnormal Interval: ard =     5.465 Numpos = 4 bhid = RR-7-003
Grade Profile: * = 0.2000 Full Scale =20.0000
Rock Code (integer) is Printed to Right of Grade

  31.9   33.4   0.510   0 **
  33.4   35.0   0.210   0 *
  35.0   36.5   7.410   0 *************************************
  36.5   38.0   0.240   0 *
  38.0   39.5   0.270   0 *
  39.5   41.0  44.840   0 ****************************************************************************************************
  41.0   42.6   2.230   0 ***********
  42.6   44.1   1.270   0 ******
  44.1   45.6  19.370   0 ************************************************************************************************
  45.6   47.1   3.360   0 ****************
  47.1   48.6   0.450   0 **

Abnormal Interval: ard =    -0.619 Numpos = 3 bhid = RR-7-003
Grade Profile: * = 0.2000 Full Scale =20.0000
Rock Code (integer) is Printed to Right of Grade

  36.5   38.0   0.240   0 *
  38.0   39.5   0.270   0 *
  39.5   41.0  44.840   0 ****************************************************************************************************
  41.0   42.6   2.230   0 ***********
  42.6   44.1   1.270   0 ******
  44.1   45.6  19.370   0 ************************************************************************************************
  45.6   47.1   3.360   0 ****************
  47.1   48.6   0.450   0 **
  48.6   50.2   1.100   0 *****
  50.2   51.7   0.860   0 ****
  51.7   53.2   0.480   0 **
```

```
Abnormal Interval: ard =     -1.067 Numpos = 3 bhid = RR-7-004
Grade Profile: * = 0.2000 Full Scale =20.0000
Rock Code (integer) is Printed to Right of Grade

   25.8    27.4   1.170   0  *****
   27.4    28.9   0.140   0
   28.9    30.4   0.790   0  ***
   30.4    31.9   0.510   0  **
   31.9    33.4   0.960   0  ****
   33.4    35.0  17.310   0  **************************************************************************************
   35.0    36.5   1.680   0  ********
   36.5    38.0   0.990   0  ****
   38.0    39.5   0.210   0  *
   39.5    41.0   0.210   0  *
   41.0    42.6   0.170   0

Abnormal Interval: ard =      1.485 Numpos = 2 bhid = RR-7-014
Grade Profile: * = 0.2000 Full Scale =20.0000
Rock Code (integer) is Printed to Right of Grade

   35.0    36.5   0.210   0  *
   36.5    38.0   0.140   0
   38.0    39.5   0.240   0  *
   39.5    41.0   0.580   0  **
   41.0    42.6   2.260   0  ***********
   42.6    44.1  19.820   0  ***************************************************************************************************
   44.1    45.6   1.410   0  *******
   45.6    47.1   0.580   0  **
   47.1    48.6   2.810   0  **************
   48.6    50.2   0.620   0  ***
   50.2    51.7   0.070   0

Summary Statistics by Position:
  Not Printed Out        Selected for Print
          8                      5

Numpos = 0    1                   0
Numpos = 1    2                   0
Numpos = 2    5                   1
Numpos = 3    0                   2
Numpos = 4    0                   1
Numpos = 5    0                   1

  -5     1.231               0.468
  -4     1.595               0.372
  -3     2.804              10.814
  -2     8.866               0.808
  -1     9.891               1.576
   0    24.978              25.014
   1     4.565               4.040
   2     2.875               4.840
   3     2.811               5.556
   4     2.436               1.448
   5     0.649               0.494
```

DECAY ANALYSIS PROGRAM: Placer Dome 1988 Threshold = 15 g/t Au

```
Input File Name =          RC_P_88.txt
Print File Name =          RC_P_88.prn
Message File Name =        RC_P_88.msg
Decay Threshold =              15.000
Tot. Rel. Diff. =               1.000
Min. No. Pos. Diff =                3
Full Scale Grade profile =     20.000
Normal Sample Interval =        1.520
Format to read data=       (a10,f11.2,2f15.2,i12)

Abnormal Interval: ard =     5.877 Numpos = 5 bhid = RR-8-024
Grade Profile: * = 0.2000 Full Scale =20.0000
Rock Code (integer) is Printed to Right of Grade

  27.4   28.9   0.410   0 **
  28.9   30.4   0.070   0
  30.4   31.9   0.070   0
  31.9   33.4   0.030   0
  33.4   35.0   3.460   0 *****************
  35.0   36.5  20.810   0 ****************************************************************************************************
  36.5   38.0  25.890   0 ****************************************************************************************************
  38.0   39.5   0.480   0 **
  39.5   41.0   0.100   0
  41.0   42.6   0.340   0 *
  42.6   44.1   1.100   0 *****

Abnormal Interval: ard =     1.462 Numpos = 3 bhid = RR-8-024
Grade Profile: * = 0.2000 Full Scale =20.0000
Rock Code (integer) is Printed to Right of Grade

  28.9   30.4   0.070   0
  30.4   31.9   0.070   0
  31.9   33.4   0.030   0
  33.4   35.0   3.460   0 *****************
  35.0   36.5  20.810   0 ****************************************************************************************************
  36.5   38.0  25.890   0 ****************************************************************************************************
  38.0   39.5   0.480   0 **
  39.5   41.0   0.100   0
  41.0   42.6   0.340   0 *
  42.6   44.1   1.100   0 *****
  44.1   45.6   1.510   0 *******

Abnormal Interval: ard =     2.859 Numpos = 4 bhid = RR-8-026
Grade Profile: * = 0.2000 Full Scale =20.0000
Rock Code (integer) is Printed to Right of Grade

   1.5    3.0   1.410   0 *******
   3.0    4.6  10.800   0 ******************************************************
   4.6    6.1   0.170   0
   6.1    7.6   0.960   0 ****
   7.6    9.1   0.100   0
   9.1   10.6  18.930   0 **********************************************************************************************
  10.6   12.2   0.450   0 **
  12.2   13.7   0.750   0 ***
  13.7   15.2   1.470   0 *******
  15.2   16.7  12.340   0 *************************************************************
  16.7   18.2   1.580   0 *******
```

Abnormal Interval: ard = 0.374 Numpos = 3 bhid = RR-8-030
Grade Profile: * = 0.2000 Full Scale =20.0000
Rock Code (integer) is Printed to Right of Grade

9.1	10.6	0.170	0	
10.6	12.2	0.450	0	**
12.2	13.7	0.170	0	
13.7	15.2	0.170	0	
15.2	16.7	0.140	0	
16.7	18.2	29.250	0	**
18.2	19.8	0.450	0	**
19.8	21.3	0.100	0	
21.3	22.8	0.380	0	*
22.8	24.3	0.030	0	
24.3	25.8	0.410	0	**

Abnormal Interval: ard = 3.508 Numpos = 3 bhid = RR-8-044
Grade Profile: * = 0.2000 Full Scale =20.0000
Rock Code (integer) is Printed to Right of Grade

0.0	1.5	0.030	0	
1.5	3.0	0.030	0	
3.0	4.6	0.030	0	
4.6	6.1	0.070	0	
6.1	7.6	1.060	0	*****
7.6	9.1	27.670	0	**
9.1	10.6	0.270	0	*
10.6	12.2	1.300	0	******
12.2	13.7	0.170	0	
13.7	15.2	0.210	0	*
15.2	16.7	0.030	0	

Abnormal Interval: ard = 4.571 Numpos = 4 bhid = RR-8-054
Grade Profile: * = 0.2000 Full Scale =20.0000
Rock Code (integer) is Printed to Right of Grade

21.3	22.8	0.030	0	
22.8	24.3	0.030	0	
24.3	25.8	0.030	0	
25.8	27.4	0.030	0	
27.4	28.9	0.030	0	
28.9	30.4	39.390	0	**
30.4	31.9	0.030	0	
31.9	33.4	0.170	0	
33.4	35.0	0.100	0	
35.0	36.5	0.140	0	
36.5	38.0	0.070	0	

Abnormal Interval: ard = 5.096 Numpos = 3 bhid = RR-8-079
Grade Profile: * = 0.2000 Full Scale =20.0000
Rock Code (integer) is Printed to Right of Grade

4.6	6.1	0.030	0	
6.1	7.6	0.030	0	
7.6	9.1	0.030	0	
9.1	10.6	0.070	0	
10.6	12.2	0.170	0	
12.2	13.7	17.210	0	**
13.7	15.2	1.200	0	******
15.2	16.7	0.790	0	***
16.7	18.2	1.440	0	*******
18.2	19.8	0.030	0	
19.8	21.3	0.030	0	

Summary Statistics by Position:

	Not Printed Out	Selected for Print
	6	7
Numpos = 0	1	0
Numpos = 1	2	0
Numpos = 2	3	0
Numpos = 3	0	4
Numpos = 4	0	2
Numpos = 5	0	1
-5	1.535	0.307
-4	1.143	1.640
-3	10.313	0.076
-2	0.970	0.684
-1	2.485	3.681
0	32.470	25.593
1	0.835	4.110
2	0.698	0.527
3	0.672	0.571
4	0.073	2.027
5	0.772	0.676

DECAY ANALYSIS PROGRAM: Placer Dome 1989 Threshold = 5 g/t Au

```
Input File Name =          RC_P_89.txt
Print File Name =          RC_P_89.prn
Message File Name =        RC_P_89.msg
Decay Threshold =              5.000
Tot. Rel. Diff. =              1.000
Min. No. Pos. Diff =               3
Full Scale Grade profile =    20.000
Normal Sample Interval =       1.520
Format to read data=       (a10,f11.2,2f15.2,i12)

Abnormal Interval: ard =     -1.843 Numpos = 3 bhid = RR-9-091
Grade Profile: * = 0.2000 Full Scale =20.0000
Rock Code (integer) is Printed to Right of Grade

   7.6    9.1   0.510   0  **
   9.1   10.6   3.050   0  ***************
  10.6   12.2   0.340   0  *
  12.2   13.7   0.240   0  *
  13.7   15.2  15.570   0  *****************************************************************************
  15.2   16.7   5.250   0  **************************
  16.7   18.2   0.310   0  *
  18.2   19.8   0.450   0  **
  19.8   21.3   0.820   0  ****
  21.3   22.8   0.450   0  **
  22.8   24.3   0.580   0  **

Abnormal Interval: ard =      0.160 Numpos = 3 bhid = RR-9-091
Grade Profile: * = 0.2000 Full Scale =20.0000
Rock Code (integer) is Printed to Right of Grade

  41.0   42.6   0.100   0
  42.6   44.1   4.150   0  ********************
  44.1   45.6   0.650   0  ***
  45.6   47.1   0.100   0
  47.1   48.6   0.140   0
  48.6   50.2   5.110   0  *************************
  50.2   51.7   0.990   0  ****
  51.7   53.2   0.140   0
  53.2   54.7   0.170   0
  54.7   56.2   0.550   0  **
  56.2   57.8   0.310   0  *

Abnormal Interval: ard =      1.229 Numpos = 3 bhid = RR-9-092
Grade Profile: * = 0.2000 Full Scale =20.0000
Rock Code (integer) is Printed to Right of Grade

  19.8   21.3   0.340   0  *
  21.3   22.8   0.480   0  **
  22.8   24.3   0.450   0  **
  24.3   25.8   0.380   0  *
  25.8   27.4   0.270   0  *
  27.4   28.9   5.660   0  ****************************
  28.9   30.4   0.070   0
  30.4   31.9   3.460   0  *****************
  31.9   33.4   1.780   0  ********
  33.4   35.0   4.420   0  **********************
  35.0   36.5   0.000   0
```

Summary Statistics by Position:

	Not Printed Out	Selected for Print
	7	3
Numpos = 0	1	0
Numpos = 1	3	0
Numpos = 2	3	0
Numpos = 3	0	3
Numpos = 4	0	0
Numpos = 5	0	0
-5	1.234	0.317
-4	2.134	2.560
-3	1.341	0.480
-2	1.431	0.240
-1	0.579	5.327
0	12.506	5.340
1	1.503	0.457
2	0.481	1.350
3	0.266	0.923
4	3.451	1.807
5	1.579	0.297

DECAY ANALYSIS PROGRAM: Kennecott 1994 Threshold = 5 g/t Au

```
Input File Name =          RC_K_94r.txt
Print File Name =          RC_K_94r.prn
Message File Name =        RC_K_94r.msg
Decay Threshold =          5.000
Tot. Rel. Diff. =          1.000
Min. No. Pos. Diff =       3
Full Scale Grade profile = 10.000
Normal Sample Interval =   1.500
Format to read data=       (a10,f11.2,2f15.2,i12)

Abnormal Interval: ard =    9.938 Numpos = 5 bhid = RCR-4-19
Grade Profile: * = 0.1000 Full Scale =10.0000
Rock Code (integer) is Printed to Right of Grade

   3.0    4.5   0.000   0
   4.5    6.0   0.000   0
   6.0    7.5   0.000   0
   7.5    9.0   0.070   0
   9.0   10.5   0.200   0 **
  10.5   12.0   6.510   0 *****************************************************************
  12.0   13.5  22.300   0 ****************************************************************************************************
  13.5   15.0  10.550   0 ****************************************************************************************************
  15.0   16.5   6.060   0 ************************************************************
  16.5   18.0   6.300   0 ***************************************************************
  18.0   19.5   2.060   0 ********************

Abnormal Interval: ard =    8.302 Numpos = 5 bhid = RCR-4-19
Grade Profile: * = 0.1000 Full Scale =10.0000
Rock Code (integer) is Printed to Right of Grade

   4.5    6.0   0.000   0
   6.0    7.5   0.000   0
   7.5    9.0   0.070   0
   9.0   10.5   0.200   0 **
  10.5   12.0   6.510   0 *****************************************************************
  12.0   13.5  22.300   0 ****************************************************************************************************
  13.5   15.0  10.550   0 ****************************************************************************************************
  15.0   16.5   6.060   0 ************************************************************
  16.5   18.0   6.300   0 ***************************************************************
  18.0   19.5   2.060   0 ********************
  19.5   21.0   2.980   0 *****************************

Abnormal Interval: ard =    4.376 Numpos = 3 bhid = RCR-4-19
Grade Profile: * = 0.1000 Full Scale =10.0000
Rock Code (integer) is Printed to Right of Grade

   6.0    7.5   0.000   0
   7.5    9.0   0.070   0
   9.0   10.5   0.200   0 **
  10.5   12.0   6.510   0 *****************************************************************
  12.0   13.5  22.300   0 ****************************************************************************************************
  13.5   15.0  10.550   0 ****************************************************************************************************
  15.0   16.5   6.060   0 ************************************************************
  16.5   18.0   6.300   0 ***************************************************************
  18.0   19.5   2.060   0 ********************
  19.5   21.0   2.980   0 *****************************
  21.0   22.5   1.160   0 ***********
```

Abnormal Interval: ard = 6.251 Numpos = 5 bhid = RCR-4-21
Grade Profile: * = 0.1000 Full Scale =10.0000
Rock Code (integer) is Printed to Right of Grade

15.0	16.5	0.000	0	
16.5	18.0	0.000	0	
18.0	19.5	0.100	0	*
19.5	21.0	0.100	0	*
21.0	22.5	0.650	0	******
22.5	24.0	5.000	0	**
24.0	25.5	0.690	0	******
25.5	27.0	0.270	0	**
27.0	28.5	0.450	0	****
28.5	30.0	0.200	0	**
30.0	31.5	0.200	0	**

Summary Statistics by Position:

	Not Printed Out	Selected for Print
	4	4
Numpos = 0	0	0
Numpos = 1	2	0
Numpos = 2	2	0
Numpos = 3	0	1
Numpos = 4	0	0
Numpos = 5	0	3

-5	0.075	0.000
-4	1.858	0.018
-3	7.210	0.093
-2	8.212	1.720
-1	4.633	7.415
0	6.430	11.090
1	2.408	9.900
2	1.457	5.795
3	1.035	3.717
4	0.640	2.885
5	1.028	1.600

DECAY ANALYSIS PROGRAM: AGC 1999 Threshold = 5 g/t Au

```
Input File Name =          RC_N_99.txt
Print File Name =          RC_N_99.prn
Message File Name =        RC_N_99.msg
Decay Threshold =          5.000
Tot. Rel. Diff. =          1.000
Min. No. Pos. Diff =       3
Full Scale Grade profile = 20.000
Normal Sample Interval =   1.520
Format to read data=       (a10,f11.2,2f15.2,i12)
```

```
Abnormal Interval: ard =      1.458 Numpos = 4 bhid = RMR-2
Grade Profile: * = 0.2000 Full Scale =20.0000
Rock Code (integer) is Printed to Right of Grade

   3.0    4.6   5.780   0  ****************************
   4.6    6.1   0.150   0
   6.1    7.6   2.020   0  **********
   7.6    9.1   0.300   0  *
   9.1   10.6   2.140   0  **********
  10.6   12.2   6.740   0  *********************************
  12.2   13.7   3.130   0  ***************
  13.7   15.2   5.190   0  *************************
  15.2   16.7   2.210   0  ***********
  16.7   18.2   0.300   0  *
  18.2   19.8   0.910   0  ****
```

```
Abnormal Interval: ard =      2.193 Numpos = 4 bhid = RMR-3
Grade Profile: * = 0.2000 Full Scale =20.0000
Rock Code (integer) is Printed to Right of Grade

  35.0   36.5   0.920   0  ****
  36.5   38.0   0.240   0  *
  38.0   39.5   0.350   0  *
  39.5   41.0   0.510   0  **
  41.0   42.6   0.900   0  ****
  42.6   44.1  10.000   0  **************************************************
  44.1   45.6   1.110   0  *****
  45.6   47.1   0.240   0  *
  47.1   48.6   0.380   0  *
  48.6   50.2   6.290   0  *******************************
  50.2   51.7   2.070   0  **********
```

```
Abnormal Interval: ard =      6.854 Numpos = 4 bhid = RMR-4
Grade Profile: * = 0.2000 Full Scale =20.0000
Rock Code (integer) is Printed to Right of Grade

   4.6    6.1   0.060   0
   6.1    7.6   0.060   0
   7.6    9.1   0.230   0  *
   9.1   10.6   1.070   0  *****
  10.6   12.2   2.130   0  **********
  12.2   13.7   5.290   0  **************************
  13.7   15.2   1.900   0  *********
  15.2   16.7   4.930   0  ************************
  16.7   18.2   4.050   0  ********************
  18.2   19.8   4.630   0  ***********************
  19.8   21.3   4.520   0  **********************
```

Abnormal Interval: ard = 1.820 Numpos = 2 bhid = RMR-4
Grade Profile: * = 0.2000 Full Scale =20.0000
Rock Code (integer) is Printed to Right of Grade

21.3	22.8	0.560	0	**
22.8	24.3	0.630	0	***
24.3	25.8	0.010	0	
25.8	27.4	2.290	0	***********
27.4	28.9	2.210	0	***********
28.9	30.4	5.970	0	*****************************
30.4	31.9	2.040	0	**********
31.9	33.4	5.490	0	***************************
33.4	35.0	0.010	0	
35.0	36.5	3.480	0	*****************
36.5	38.0	0.410	0	**

Abnormal Interval: ard = 5.783 Numpos = 5 bhid = RMR-5
Grade Profile: * = 0.2000 Full Scale =20.0000
Rock Code (integer) is Printed to Right of Grade

13.7	15.2	0.530	0	**
15.2	16.7	0.710	0	***
16.7	18.2	0.230	0	*
18.2	19.8	0.270	0	*
19.8	21.3	1.570	0	*******
21.3	22.8	9.270	0	**
22.8	24.3	4.850	0	************************
24.3	25.8	0.970	0	****
25.8	27.4	1.570	0	*******
27.4	28.9	1.970	0	*********
28.9	30.4	2.130	0	**********

Abnormal Interval: ard = 4.709 Numpos = 4 bhid = RMR-6
Grade Profile: * = 0.2000 Full Scale =20.0000
Rock Code (integer) is Printed to Right of Grade

25.8	27.4	0.110	0	
27.4	28.9	0.070	0	
28.9	30.4	0.110	0	
30.4	31.9	0.150	0	
31.9	33.4	3.360	0	****************
33.4	35.0	5.320	0	**************************
35.0	36.5	3.040	0	***************
36.5	38.0	0.690	0	***
38.0	39.5	0.310	0	*
39.5	41.0	0.340	0	*
41.0	42.6	0.480	0	**

DECAY ANALYSIS PROGRAM: AGC 2000 Threshold = 5 g/t Au

Input File Name = rc_n_00.txt
Print File Name = rc_n_00.prn
Message File Name = msg
Decay Threshold = 5.000
Tot. Rel. Diff. = 1.000
Min. No. Pos. Diff = 3
Full Scale Grade profile = 20.000
Normal Sample Interval = 1.520
Format to read data= (a10,f11.2,2f15.2,i12)

Abnormal Interval: ard = 4.063 Numpos = 4 bhid = RR-0-02
Grade Profile: * = 0.2000 Full Scale =20.0000
Rock Code (integer) is Printed to Right of Grade

```
  3.0   4.6  2.700  0 *************
  4.6   6.1  0.100  0
  6.1   7.6  0.210  0 *
  7.6   9.1  3.500  0 *****************
  9.1  10.6  4.420  0 **********************
 10.6  12.2  5.800  0 *****************************
 12.2  13.7 11.990  0 ***********************************************************
 13.7  15.2  9.890  0 *************************************************
 15.2  16.7  3.940  0 *******************
 16.7  18.2  0.800  0 ****
 18.2  19.8  0.710  0 ***
```

Abnormal Interval: ard = 1.874 Numpos = 3 bhid = RR-0-02
Grade Profile: * = 0.2000 Full Scale =20.0000
Rock Code (integer) is Printed to Right of Grade

```
  4.6   6.1  0.100  0
  6.1   7.6  0.210  0 *
  7.6   9.1  3.500  0 *****************
  9.1  10.6  4.420  0 **********************
 10.6  12.2  5.800  0 *****************************
 12.2  13.7 11.990  0 ***********************************************************
 13.7  15.2  9.890  0 *************************************************
 15.2  16.7  3.940  0 *******************
 16.7  18.2  0.800  0 ****
 18.2  19.8  0.710  0 ***
 19.8  21.3  1.000  0 *****
```

Abnormal Interval: ard = -0.226 Numpos = 3 bhid = RR-0-03
Grade Profile: * = 0.2000 Full Scale =20.0000
Rock Code (integer) is Printed to Right of Grade

```
 15.2  16.7  0.240  0 *
 16.7  18.2  1.230  0 ******
 18.2  19.8  0.960  0 ****
 19.8  21.3  1.060  0 *****
 21.3  22.8  0.220  0 *
 22.8  24.3  5.810  0 *****************************
 24.3  25.8  1.490  0 *******
 25.8  27.4  0.230  0 *
 27.4  28.9  0.180  0
 28.9  30.4  1.400  0 *******
 30.4  31.9  0.570  0 **
```

```
Abnormal Interval: ard =      5.500 Numpos = 5 bhid = RR-0-03
Grade Profile: * = 0.2000 Full Scale =20.0000
Rock Code (integer) is Printed to Right of Grade
   25.8    27.4   0.230   0  *
   27.4    28.9   0.180   0
   28.9    30.4   1.400   0  *******
   30.4    31.9   0.570   0  **
   31.9    33.4   0.710   0  ***
   33.4    35.0  26.320   0  ****************************************************************************************************
   35.0    36.5   4.340   0  *********************
   36.5    38.0   2.280   0  ***********
   38.0    39.5   2.250   0  ***********
   39.5    41.0   0.490   0  **
   41.0    42.6   1.510   0  *******

Abnormal Interval: ard =      7.148 Numpos = 5 bhid = RR-0-04
Grade Profile: * = 0.2000 Full Scale =20.0000
Rock Code (integer) is Printed to Right of Grade

    3.0     4.6   0.000  -9
    4.6     6.1   0.000  -9
    6.1     7.6   0.000  -9
    7.6     9.1   0.130   0
    9.1    10.6   1.670   0  ********
   10.6    12.2   7.420   0  *************************************
   12.2    13.7   3.220   0  ****************
   13.7    15.2   0.220   0  *
   15.2    16.7   0.080   0
   16.7    18.2   0.580   0  **
   18.2    19.8   1.570   0  *******

Abnormal Interval: ard =      1.540 Numpos = 2 bhid = RR-0-06
Grade Profile: * = 0.2000 Full Scale =20.0000
Rock Code (integer) is Printed to Right of Grade

   21.3    22.8   0.010   0
   22.8    24.3   0.190   0
   24.3    25.8   0.820   0  ****
   25.8    27.4   1.750   0  ********
   27.4    28.9   0.470   0  **
   28.9    30.4   6.530   0  ********************************
   30.4    31.9   0.250   0  *
   31.9    33.4   0.970   0  ****
   33.4    35.0   0.610   0  ***
   35.0    36.5   0.760   0  ***
   36.5    38.0   0.210   0  *

Abnormal Interval: ard =      2.314 Numpos = 4 bhid = RR-0-06
Grade Profile: * = 0.2000 Full Scale =20.0000
Rock Code (integer) is Printed to Right of Grade

   45.6    47.1   0.180   0
   47.1    48.6   0.080   0
   48.6    50.2   0.240   0  *
   50.2    51.7   0.380   0  *
   51.7    53.2   4.080   0  ********************
   53.2    54.7   7.730   0  **************************************
   54.7    56.2   2.560   0  ************
   56.2    57.8   0.870   0  ****
   57.8    59.3   0.790   0  ***
   59.3    60.8   0.190   0
   60.8    62.3   0.200   0  *
```

```
Abnormal Interval: ard =      3.234 Numpos = 3 bhid = RR-0-08
Grade Profile: * = 0.2000 Full Scale =20.0000
Rock Code (integer) is Printed to Right of Grade

   39.5   41.0   2.370   0  ***********
   41.0   42.6   0.490   0  **
   42.6   44.1   0.130   0
   44.1   45.6   0.160   0
   45.6   47.1   2.720   0  *************
   47.1   48.6  13.500   0  *******************************************************************
   48.6   50.2   2.570   0  ************
   50.2   51.7   9.890   0  *************************************************
   51.7   53.2   2.580   0  ************
   53.2   54.7   1.180   0  *****
   54.7   56.2   0.520   0  **

Abnormal Interval: ard =      0.459 Numpos = 3 bhid = RR-0-08
Grade Profile: * = 0.2000 Full Scale =20.0000
Rock Code (integer) is Printed to Right of Grade

   42.6   44.1   0.130   0
   44.1   45.6   0.160   0
   45.6   47.1   2.720   0  *************
   47.1   48.6  13.500   0  *******************************************************************
   48.6   50.2   2.570   0  ************
   50.2   51.7   9.890   0  *************************************************
   51.7   53.2   2.580   0  ************
   53.2   54.7   1.180   0  *****
   54.7   56.2   0.520   0  **
   56.2   57.8   1.900   0  *********
   57.8   59.3   2.500   0  ************

Abnormal Interval: ard =      2.163 Numpos = 3 bhid = RR-0-08
Grade Profile: * = 0.2000 Full Scale =20.0000
Rock Code (integer) is Printed to Right of Grade

   56.2   57.8   1.900   0  *********
   57.8   59.3   2.500   0  ************
   59.3   60.8   0.530   0  **
   60.8   62.3   0.270   0  *
   62.3   63.8   0.460   0  **
   63.8   65.4  11.290   0  ********************************************************
   65.4   66.9   3.990   0  *******************
   66.9   68.4   1.970   0  *********
   68.4   69.9   1.140   0  *****
   69.9   71.4   1.750   0  ********
   71.4   73.0   0.390   0  *

Abnormal Interval: ard =      3.856 Numpos = 3 bhid = RR-0-10
Grade Profile: * = 0.2000 Full Scale =20.0000
Rock Code (integer) is Printed to Right of Grade

   31.9   33.4   0.230   0  *
   33.4   35.0   0.060   0
   35.0   36.5   0.160   0
   36.5   38.0   0.010   0
   38.0   39.5   0.070   0
   39.5   41.0   7.060   0  ***********************************
   41.0   42.6   0.580   0  **
   42.6   44.1   0.080   0
   44.1   45.6   0.130   0
   45.6   47.1   0.040   0
   47.1   48.6   1.160   0  *****
```

```
Abnormal Interval: ard =      1.198 Numpos = 3 bhid = RR-0-11
Grade Profile: * = 0.2000 Full Scale =20.0000
Rock Code (integer) is Printed to Right of Grade

   10.6    12.2   0.020   0
   12.2    13.7   0.110   0
   13.7    15.2   0.130   0
   15.2    16.7   2.860   0 **************
   16.7    18.2   3.930   0 *******************
   18.2    19.8  31.420   0 ****************************************************************************************************
   19.8    21.3   1.420   0 *******
   21.3    22.8   0.820   0 ****
   22.8    24.3   0.230   0 *
   24.3    25.8   0.260   0 *
   25.8    27.4   0.640   0 ***

Abnormal Interval: ard =      3.786 Numpos = 4 bhid = RR-0-11
Grade Profile: * = 0.2000 Full Scale =20.0000
Rock Code (integer) is Printed to Right of Grade

   19.8    21.3   1.420   0 *******
   21.3    22.8   0.820   0 ****
   22.8    24.3   0.230   0 *
   24.3    25.8   0.260   0 *
   25.8    27.4   0.640   0 ***
   27.4    28.9  16.670   0 ***********************************************************************************
   28.9    30.4  10.840   0 ******************************************************
   30.4    31.9   3.740   0 ******************
   31.9    33.4   0.430   0 **
   33.4    35.0   4.880   0 ************************
   35.0    36.5   0.090   0

Abnormal Interval: ard =      4.497 Numpos = 4 bhid = RR-0-15
Grade Profile: * = 0.2000 Full Scale =20.0000
Rock Code (integer) is Printed to Right of Grade

   48.6    50.2   0.620   0 ***
   50.2    51.7   0.060   0
   51.7    53.2   0.450   0 **
   53.2    54.7   0.270   0 *
   54.7    56.2   0.090   0
   56.2    57.8   5.900   0 *****************************
   57.8    59.3  28.440   0 ****************************************************************************************************
   59.3    60.8   7.830   0 ***************************************
   60.8    62.3   0.220   0 *
   62.3    63.8   0.190   0
   63.8    65.4   0.830   0 ****

Abnormal Interval: ard =      3.133 Numpos = 4 bhid = RR-0-15
Grade Profile: * = 0.2000 Full Scale =20.0000
Rock Code (integer) is Printed to Right of Grade

   50.2    51.7   0.060   0
   51.7    53.2   0.450   0 **
   53.2    54.7   0.270   0 *
   54.7    56.2   0.090   0
   56.2    57.8   5.900   0 *****************************
   57.8    59.3  28.440   0 ****************************************************************************************************
   59.3    60.8   7.830   0 ***************************************
   60.8    62.3   0.220   0 *
   62.3    63.8   0.190   0
   63.8    65.4   0.830   0 ****
   65.4    66.9   0.970   0 ****
```

```
Abnormal Interval: ard =      0.808 Numpos = 3 bhid = RR-0-15
Grade Profile: * = 0.2000 Full Scale =20.0000
Rock Code (integer) is Printed to Right of Grade

   51.7   53.2  0.450   0 **
   53.2   54.7  0.270   0 *
   54.7   56.2  0.090   0
   56.2   57.8  5.900   0 *****************************
   57.8   59.3 28.440   0 ****************************************************************************************************
   59.3   60.8  7.830   0 ***************************************
   60.8   62.3  0.220   0 *
   62.3   63.8  0.190   0
   63.8   65.4  0.830   0 ****
   65.4   66.9  0.970   0 ****
   66.9   68.4 20.790   0 ****************************************************************************************************

Abnormal Interval: ard =      2.670 Numpos = 3 bhid = RR-0-15
Grade Profile: * = 0.2000 Full Scale =20.0000
Rock Code (integer) is Printed to Right of Grade

   59.3   60.8  7.830   0 ***************************************
   60.8   62.3  0.220   0 *
   62.3   63.8  0.190   0
   63.8   65.4  0.830   0 ****
   65.4   66.9  0.970   0 ****
   66.9   68.4 20.790   0 ****************************************************************************************************
   68.4   69.9  5.020   0 *************************
   69.9   71.4  0.630   0 ***
   71.4   73.0  4.630   0 ***********************
   73.0   74.5  1.480   0 *******
   74.5   76.0  0.560   0 **

Abnormal Interval: ard =      1.699 Numpos = 4 bhid = RR-0-15
Grade Profile: * = 0.2000 Full Scale =20.0000
Rock Code (integer) is Printed to Right of Grade

   60.8   62.3  0.220   0 *
   62.3   63.8  0.190   0
   63.8   65.4  0.830   0 ****
   65.4   66.9  0.970   0 ****
   66.9   68.4 20.790   0 ****************************************************************************************************
   68.4   69.9  5.020   0 *************************
   69.9   71.4  0.630   0 ***
   71.4   73.0  4.630   0 ***********************
   73.0   74.5  1.480   0 *******
   74.5   76.0  0.560   0 **
   76.0   77.5  0.470   0 **

Abnormal Interval: ard =      6.923 Numpos = 5 bhid = RR-0-17
Grade Profile: * = 0.2000 Full Scale =20.0000
Rock Code (integer) is Printed to Right of Grade

   42.6   44.1  0.240   0 *
   44.1   45.6  0.190   0
   45.6   47.1  0.260   0 *
   47.1   48.6  0.420   0 **
   48.6   50.2  0.630   0 ***
   50.2   51.7  5.850   0 *****************************
   51.7   53.2  2.310   0 ***********
   53.2   54.7  2.590   0 ************
   54.7   56.2  3.580   0 *****************
   56.2   57.8  0.860   0 ****
   57.8   59.3  1.200   0 ******
```

Abnormal Interval: ard = -0.096 Numpos = 3 bhid = RR-0-19
Grade Profile: * = 0.2000 Full Scale =20.0000
Rock Code (integer) is Printed to Right of Grade

38.0	39.5	0.010	0	
39.5	41.0	0.960	0	****
41.0	42.6	0.060	0	
42.6	44.1	0.510	0	**
44.1	45.6	1.910	0	*********
45.6	47.1	6.970	0	**********************************
47.1	48.6	0.260	0	*
48.6	50.2	2.270	0	***********
50.2	51.7	0.280	0	*
51.7	53.2	0.050	0	
53.2	54.7	0.020	0	

Abnormal Interval: ard = 3.261 Numpos = 4 bhid = RR-0-20
Grade Profile: * = 0.2000 Full Scale =20.0000
Rock Code (integer) is Printed to Right of Grade

59.3	60.8	0.010	0	
60.8	62.3	0.060	0	
62.3	63.8	1.780	0	********
63.8	65.4	0.220	0	*
65.4	66.9	0.040	0	
66.9	68.4	5.730	0	****************************
68.4	69.9	1.210	0	******
69.9	71.4	0.360	0	*
71.4	73.0	0.220	0	*
73.0	74.5	0.120	0	
74.5	76.0	0.190	0	

Abnormal Interval: ard = 3.848 Numpos = 4 bhid = RR-0-25
Grade Profile: * = 0.2000 Full Scale =20.0000
Rock Code (integer) is Printed to Right of Grade

42.6	44.1	0.560	0	**
44.1	45.6	0.030	0	
45.6	47.1	0.920	0	****
47.1	48.6	0.030	0	
48.6	50.2	0.110	0	
50.2	51.7	13.200	0	**
51.7	53.2	3.030	0	***************
53.2	54.7	3.030	0	***************
54.7	56.2	0.030	0	
56.2	57.8	0.130	0	
57.8	59.3	1.100	0	*****

Abnormal Interval: ard = 3.338 Numpos = 5 bhid = RR-0-25
Grade Profile: * = 0.2000 Full Scale =20.0000
Rock Code (integer) is Printed to Right of Grade

51.7	53.2	3.030	0	***************
53.2	54.7	3.030	0	***************
54.7	56.2	0.030	0	
56.2	57.8	0.130	0	
57.8	59.3	1.100	0	*****
59.3	60.8	8.860	0	**
60.8	62.3	2.030	0	**********
62.3	63.8	0.180	0	
63.8	65.4	1.540	0	*******
65.4	66.9	3.470	0	*****************
66.9	68.4	4.370	0	*********************

Abnormal Interval: ard = 2.796 Numpos = 3 bhid = RR-0-26
Grade Profile: * = 0.2000 Full Scale =20.0000
Rock Code (integer) is Printed to Right of Grade

```
57.8  59.3  0.320  0 *
59.3  60.8  1.700  0 ********
60.8  62.3  0.080  0
62.3  63.8  0.020  0
63.8  65.4  0.030  0
65.4  66.9  8.270  0 *****************************************
66.9  68.4  7.570  0 *************************************
68.4  69.9  0.490  0 **
69.9  71.4  1.030  0 *****
71.4  73.0  0.140  0
73.0  74.5  0.100  0
```

Abnormal Interval: ard = 0.034 Numpos = 3 bhid = RR-0-26
Grade Profile: * = 0.2000 Full Scale =20.0000
Rock Code (integer) is Printed to Right of Grade

```
59.3  60.8  1.700  0 ********
60.8  62.3  0.080  0
62.3  63.8  0.020  0
63.8  65.4  0.030  0
65.4  66.9  8.270  0 *****************************************
66.9  68.4  7.570  0 *************************************
68.4  69.9  0.490  0 **
69.9  71.4  1.030  0 *****
71.4  73.0  0.140  0
73.0  74.5  0.100  0
74.5  76.0  0.090  0
```

Abnormal Interval: ard = 2.255 Numpos = 3 bhid = RR-0-28
Grade Profile: * = 0.2000 Full Scale =20.0000
Rock Code (integer) is Printed to Right of Grade

```
30.4  31.9  0.320  0 *
31.9  33.4  0.230  0 *
33.4  35.0  2.080  0 **********
35.0  36.5  0.440  0 **
36.5  38.0  2.080  0 **********
38.0  39.5  6.660  0 *********************************
39.5  41.0  1.980  0 *********
41.0  42.6  0.590  0 **
42.6  44.1  1.190  0 *****
44.1  45.6  2.280  0 ***********
45.6  47.1  0.870  0 ****
```

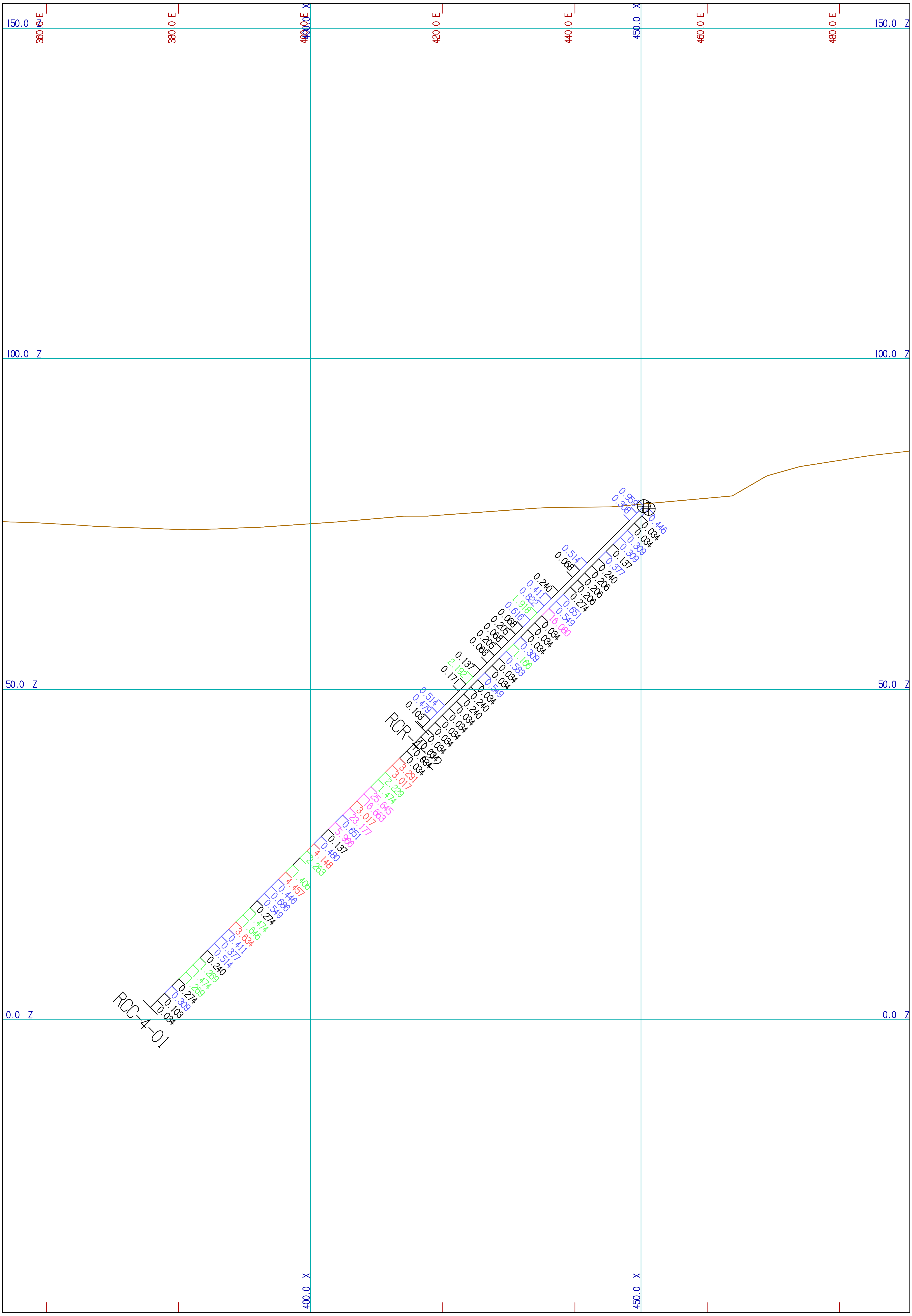
Abnormal Interval: ard = 0.061 Numpos = 3 bhid = RR-0-35
Grade Profile: * = 0.2000 Full Scale =20.0000
Rock Code (integer) is Printed to Right of Grade

```
16.7  18.2  0.390  0 *
18.2  19.8  0.150  0
19.8  21.3  0.230  0 *
21.3  22.8  0.330  0 *
22.8  24.3  0.020  0
24.3  25.8  6.760  0 *********************************
25.8  27.4  0.600  0 ***
27.4  28.9  0.790  0 ***
28.9  30.4  0.250  0 *
30.4  31.9  0.050  0
31.9  33.4  0.030  0
```

```
Abnormal Interval: ard =      1.750 Numpos = 2 bhid = RR-0-37
Grade Profile: * = 0.2000 Full Scale =20.0000
Rock Code (integer) is Printed to Right of Grade

   63.8   65.4  0.010   0
   65.4   66.9  0.010   0
   66.9   68.4  0.010   0
   68.4   69.9  0.010   0
   69.9   71.4  0.220   0  *
   71.4   73.0 10.720   0  *****************************************************
   73.0   74.5  0.740   0  ***
   74.5   76.0  0.010   0
   76.0   77.5  0.010   0
   77.5   79.0  0.020   0
   79.0   80.6  0.010   0

Abnormal Interval: ard =      6.260 Numpos = 5 bhid = RR-0-38
Grade Profile: * = 0.2000 Full Scale =20.0000
Rock Code (integer) is Printed to Right of Grade

    7.6    9.1  0.350   0  *
    9.1   10.6  0.320   0  *
   10.6   12.2  0.300   0  *
   12.2   13.7  0.280   0  *
   13.7   15.2  0.760   0  ***
   15.2   16.7  7.340   0  ************************************
   16.7   18.2  1.620   0  ********
   18.2   19.8  0.660   0  ***
   19.8   21.3 34.110   0  ****************************************************************************************************
   21.3   22.8  3.280   0  ****************
   22.8   24.3  1.240   0  ******

Abnormal Interval: ard =      1.797 Numpos = 3 bhid = RR-0-38
Grade Profile: * = 0.2000 Full Scale =20.0000
Rock Code (integer) is Printed to Right of Grade

   12.2   13.7  0.280   0  *
   13.7   15.2  0.760   0  ***
   15.2   16.7  7.340   0  ************************************
   16.7   18.2  1.620   0  ********
   18.2   19.8  0.660   0  ***
   19.8   21.3 34.110   0  ****************************************************************************************************
   21.3   22.8  3.280   0  ****************
   22.8   24.3  1.240   0  ******
   24.3   25.8  1.060   0  *****
   25.8   27.4  5.160   0  *************************
   27.4   28.9  0.610   0  ***

Summary Statistics by Position:
  Not Printed Out      Selected for Print
         10                   30

Numpos = 0    2                0
Numpos = 1    5                0
Numpos = 2    3                2
Numpos = 3    0               15
Numpos = 4    0                8
Numpos = 5    0                5

  -5    1.038               0.864
  -4    4.251               0.495
  -3    1.539               0.866
  -2    0.954               1.366
```

-1	3.931	3.326
0	8.492	11.715
1	1.328	4.099
2	0.639	2.094
3	1.263	2.149
4	0.226	1.154
5	0.504	1.484

APPENDIX C – TWIN CROSS-SECTIONS



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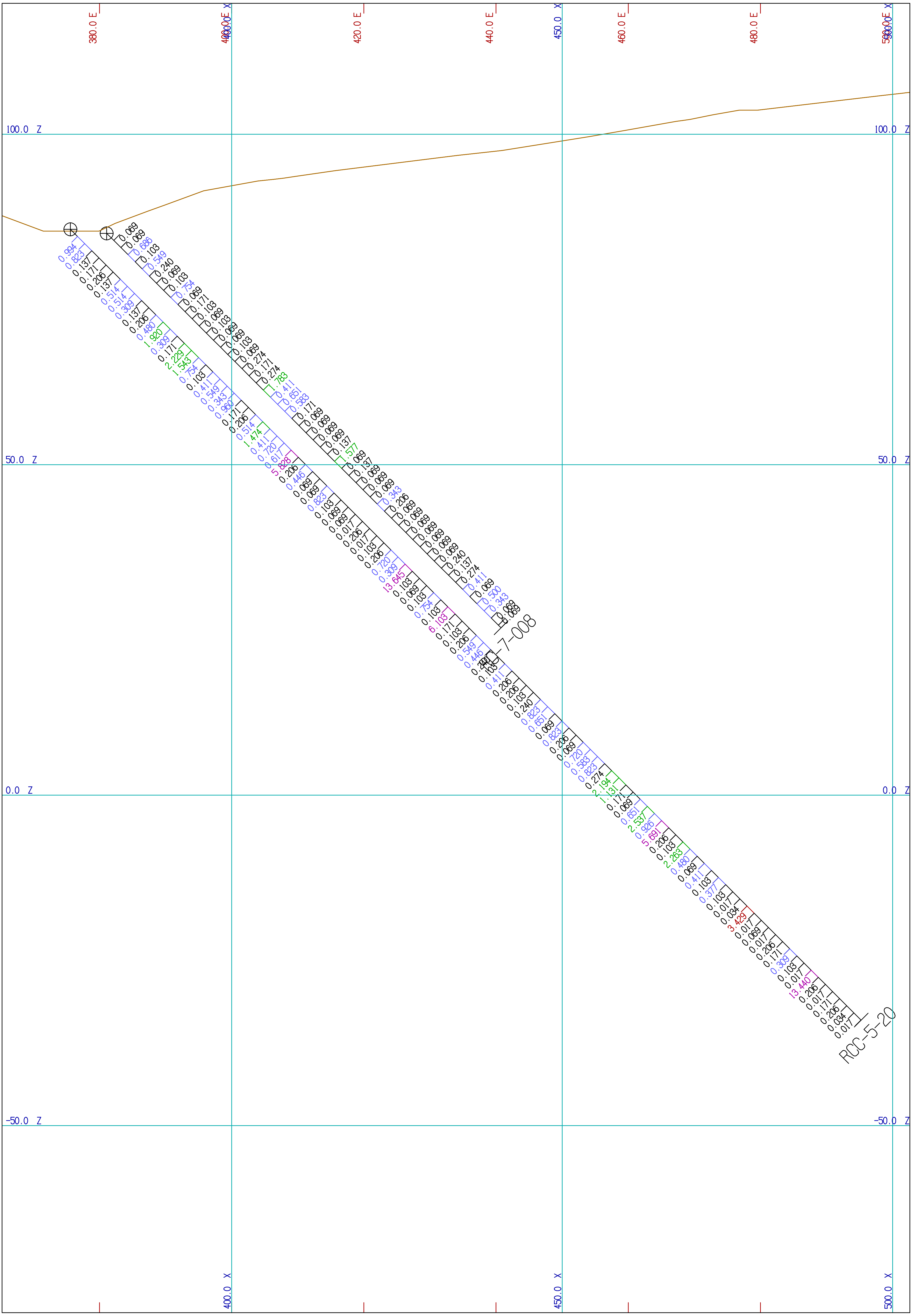
0.300	1.000
1.000	3.000
3.000	5.000
5.000	999.000

Compania Minera Antamina S.A.
Lima Office
Av. La Floresta 497, Piso 4
Urb. Chacarilla, San Borja
Lima, Peru

UNITS : METRES DATE: 03/06/07 TIME: 19:22:18

Rock Creek
Twins RCC-4-001 and RCR-4-22
Section 450N
1:500



AU: ASSAY COLOUR CODES

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0.300	1.000
1.000	3.000
3.000	5.000
5.000	999.000

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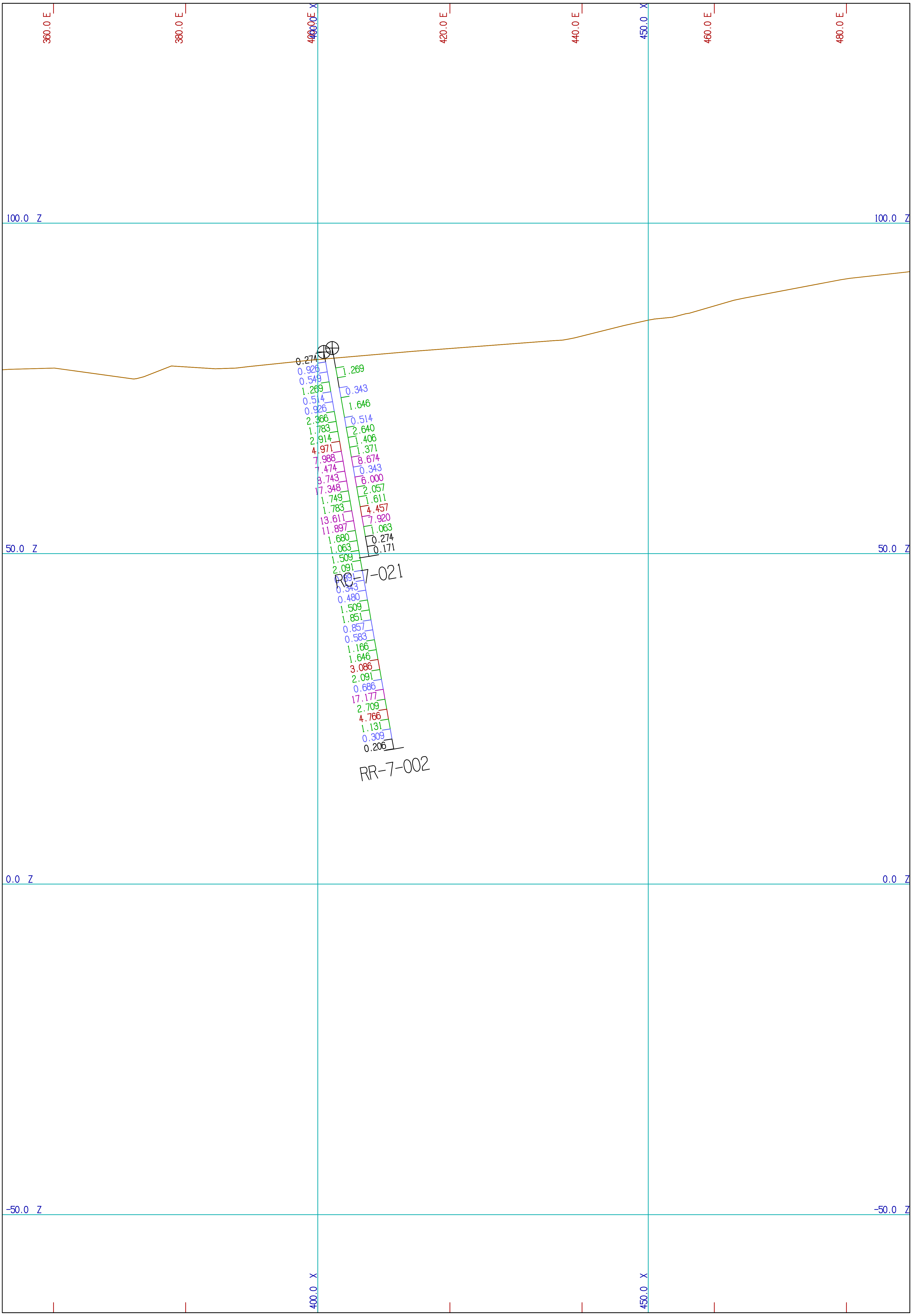
Lima, Peru

UNITS : METRES DATE: 03/06/08 TIME: 11:15:06

Rock Creek
Twins RC-7-008 and RCC-5-20
Section 600N
1:500

Software by Gemcom Software International



AU: ASSAY COLOUR CODES

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0.300	1.000
1.000	3.000
3.000	5.000
5.000	999.000

Compania Minera Antamina S.A.
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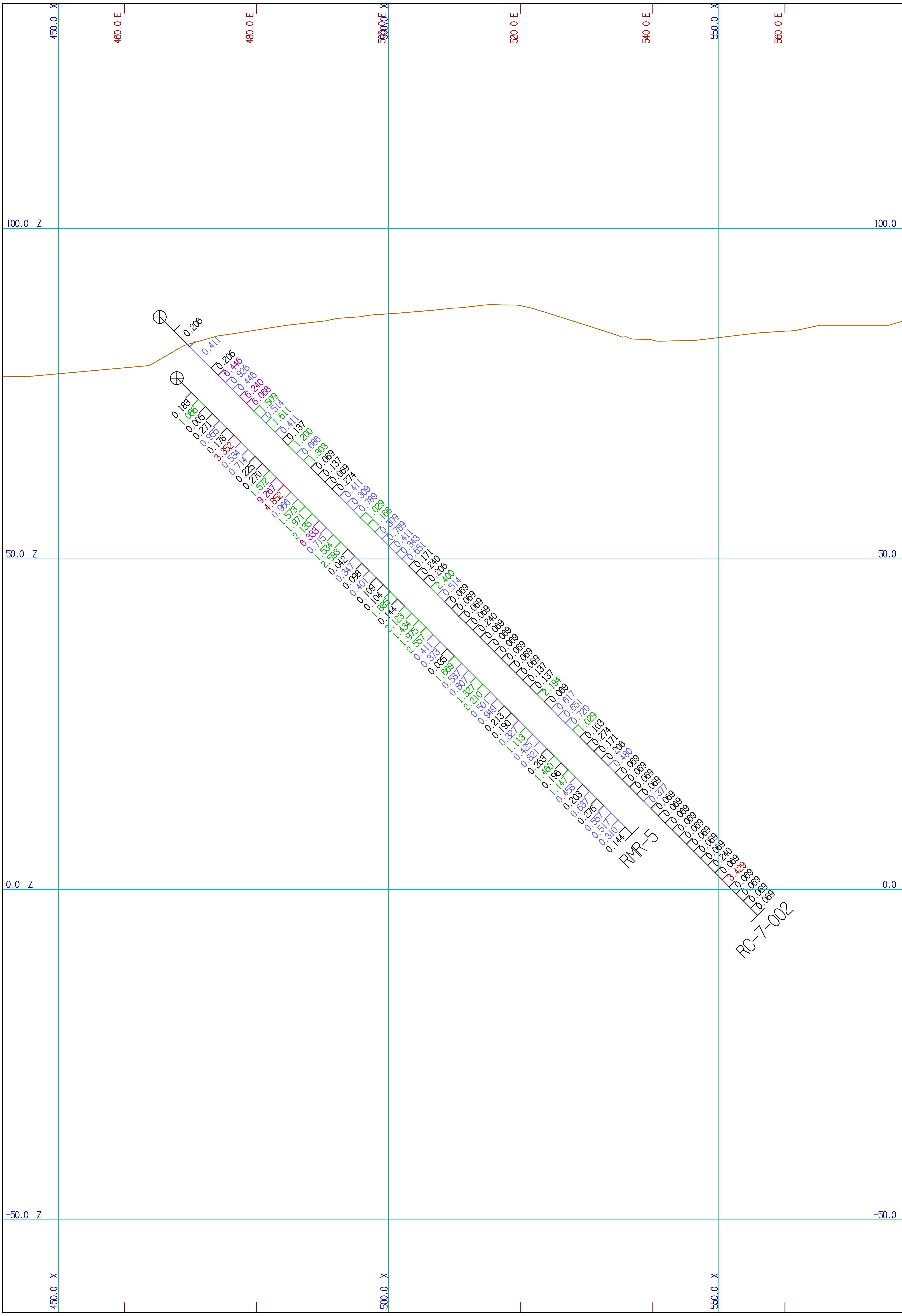
Lima, Peru

UNITS : METRES DATE: 03/06/07 TIME: 19:34:34

Rock Creek
Twins RC-7-021 and RR-7-002
Section 500N
1:500

Software by Gemcom Software International



AU: ASSAY COLOUR CODES

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0.300	1.000	blue
1.000	3.000	green
3.000	5.000	red
5.000	999.000	magenta

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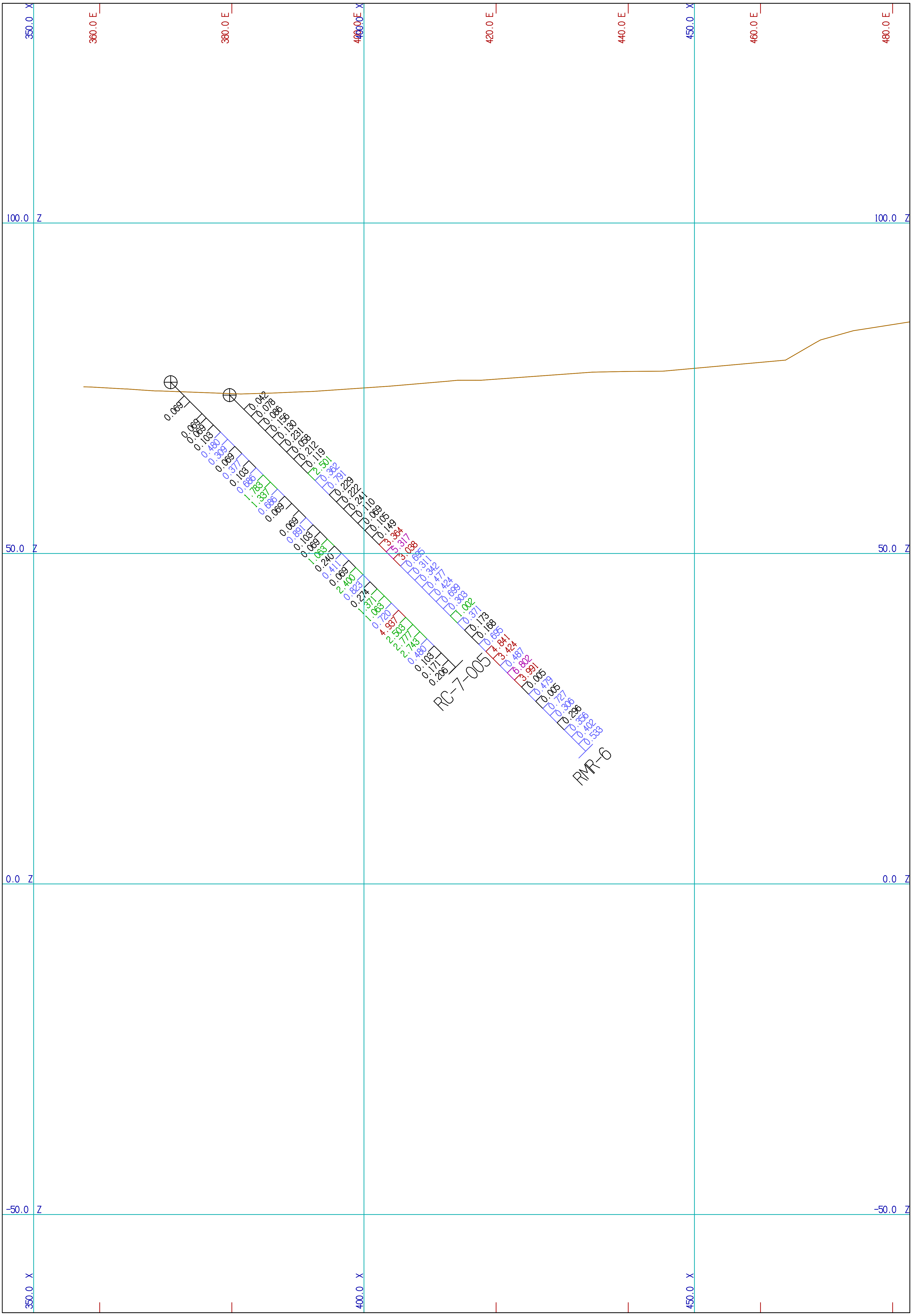
Lima, Peru

UNITS : METRES   DATE: 03/06/08   TIME: 19:19:23

Rock Creek
Twins RC-7-002 and RMR-5
Section 450N
1:500

Software by Gemcom Software International



AU: ASSAY COLOUR CODES

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0.300	1.000
1.000	3.000
3.000	5.000
5.000	999.000

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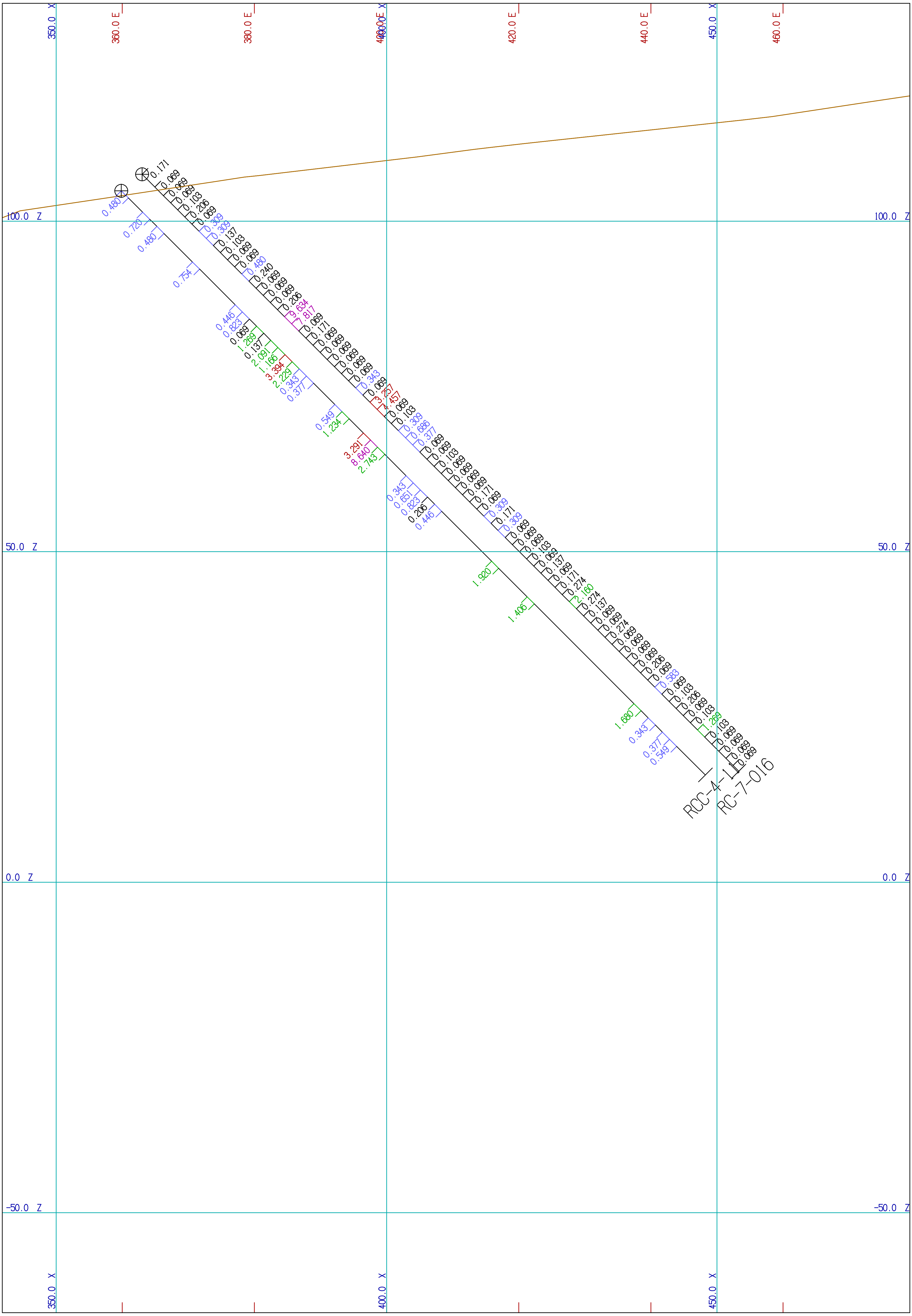
UNITS : METRES DATE: 03/06/08 TIME: 19:20:19

Rock Creek
Twins RC-7-005 and RMR-6
Section 450N
1:500

Software by Gemcom Software International



AU: ASSAY COLOUR CODES

0.000	0.300
0.300	1.000
1.000	3.000
3.000	5.000
5.000	999.000

Compania Minera Antamina S.A.
Lima Office
Av. La Floresta 497, Piso 4
Urb. Chacarilla, San Borja
Lima, Peru

UNITS : METRES DATE: 03/06/08 TIME: 11:21:36

Rock Creek
Twins RC-7-016 and RCC-4-11
Section 750N
1:500

Software by Gemcom Software International

APPENDIX D – DATA QUALITY SCORES

Hole-ID	Company	Year	Method and Bit Type	Score	RI	Sample Method Type	Score	RI	Sample Preparation	Score	RI	Analytical Method Type	Score	RI	Recovery Data	Score	RI	QC Protocols	Score	RI	QC Results	Score	RI	(%)	Final Score
RMR-1	NovaGold	1999	RC Tri or DHH	3	7	dry split in cyclone	4	3	Crush to 75% 10 mesh, pu	2	7	50 gm FA/Grav and MSA>1ppm	4	10	No	1	1	No	1	10	Unknown	1	3		101
RMR-2	NovaGold	1999	RC Tri or DHH	3	7	dry split in cyclone	4	3	Crush to 75% 10 mesh,	2	7	50 gm FA/Grav and MSA>1ppm	4	10	No	1	1	No	1	10	Unknown	1	3		101
RMR-3	NovaGold	1999	RC Tri or DHH	3	7	dry split in cyclone	4	3	Crush to 75% 10 mesh,	2	7	50 gm FA/Grav and MSA>1ppm	4	10	No	1	1	No	1	10	Unknown	1	3		101
RMR-4	NovaGold	1999	RC Tri or DHH	3	7	dry split in cyclone	4	3	Crush to 75% 10 mesh,	2	7	50 gm FA/Grav and MSA>1ppm	4	10	No	1	1	No	1	10	Unknown	1	3		101
RMR-5	NovaGold	1999	RC Tri or DHH	3	7	dry split in cyclone	4	3	Crush to 75% 10 mesh,	2	7	50 gm FA/Grav and MSA>1ppm	4	10	No	1	1	No	1	10	Unknown	1	3		101
RMR-6	NovaGold	1999	RC Tri or DHH	3	7	dry split in cyclone	4	3	Crush to 75% 10 mesh,	2	7	50 gm FA/Grav and MSA>1ppm	4	10	No	1	1	No	1	10	Unknown	1	3		101
RR-0-1	NovaGold	2000	RC Tri or DHH	3	7	dry split in cyclone	4	3	Crush to 75% 10 mesh,	2	7	50 gm FA/Grav	3	10	No	1	1	No	1	10	Unknown	1	3		91
RR-0-2	NovaGold	2000	RC Tri or DHH	3	7	dry split in cyclone	4	3	Crush to 75% 10 mesh,	2	7	50 gm FA/Grav	3	10	No	1	1	No	1	10	Unknown	1	3		91
RR-0-3	NovaGold	2000	RC Tri or DHH	3	7	dry split in cyclone	4	3	Crush to 75% 10 mesh,	2	7	50 gm FA/Grav	3	10	No	1	1	No	1	10	Unknown	1	3		91
RR-0-4	NovaGold	2000	RC Tri or DHH	3	7	dry split in cyclone	4	3	Crush to 75% 10 mesh,	2	7	50 gm FA/Grav	3	10	No	1	1	No	1	10	Unknown	1	3		91
RR-0-5	NovaGold	2000	RC Tri or DHH	3	7	dry split in cyclone	4	3	Crush to 75% 10 mesh,	2	7	50 gm FA/Grav	3	10	No	1	1	No	1	10	Unknown	1	3		91
RR-0-6	NovaGold	2000	RC Tri or DHH	3	7	dry split in cyclone	4	3	Crush to 75% 10 mesh,	2	7	50 gm FA/Grav	3	10	No	1	1	No	1	10	Unknown	1	3		91
RR-0-7	NovaGold	2000	RC Tri or DHH	3	7	dry split in cyclone	4	3	Crush to 75% 10 mesh,	2	7	50 gm FA/Grav	3	10	No	1	1	No	1	10	Unknown	1	3		91
RR-0-8	NovaGold	2000	RC Tri or DHH	3	7	dry split in cyclone	4	3	Crush to 75% 10 mesh,	2	7	50 gm FA/Grav	3	10	No	1	1	No	1	10	Unknown	1	3		91
RR-0-9	NovaGold	2000	RC Tri or DHH	3	7	dry split in cyclone	4	3	Crush to 75% 10 mesh,	2	7	50 gm FA/Grav	3	10	No	1	1	No	1	10	Unknown	1	3		91
RR-0-10	NovaGold	2000	RC Tri or DHH	3	7	dry split in cyclone	4	3	Crush to 75% 10 mesh,	2	7	50 gm FA/Grav	3	10	No	1	1	No	1	10	Unknown	1	3		91
RR-0-11	NovaGold	2000	RC Tri or DHH	3	7	dry split in cyclone	4	3	Crush to 75% 10 mesh,	2	7	50 gm FA/Grav	3	10	No	1	1	No	1	10	Unknown	1	3		91
RR-0-12	NovaGold	2000	RC Tri or DHH	3	7	dry split in cyclone	4	3	Crush to 75% 10 mesh,	2	7	50 gm FA/Grav	3	10	No	1	1	No	1	10	Unknown	1	3		91
RR-0-15	NovaGold	2000	RC Tri or DHH	3	7	dry split in cyclone	4	3	Crush to 75% 10 mesh,	2	7	50 gm FA/Grav	3	10	No	1	1	No	1	10	Unknown	1	3		91
RR-0-17	NovaGold	2000	RC Tri or DHH	3	7	dry split in cyclone	4	3	Crush to 75% 10 mesh,	2	7	50 gm FA/Grav	3	10	No	1	1	No	1	10	Unknown	1	3		91
RR-0-19	NovaGold	2000	RC Tri or DHH	3	7	dry split in cyclone	4	3	Crush to 75% 10 mesh,	2	7	50 gm FA/Grav	3	10	No	1	1	No	1	10	Unknown	1	3		91
RR-0-20	NovaGold	2000	RC Tri or DHH	3	7	dry split in cyclone	4	3	Crush to 75% 10 mesh,	2	7	50 gm FA/Grav	3	10	No	1	1	No	1	10	Unknown	1	3		91
RR-0-23	NovaGold	2000	RC Tri or DHH	3	7	dry split in cyclone	4	3	Crush to 75% 10 mesh,	2	7	50 gm FA/Grav	3	10	No	1	1	No	1	10	Unknown	1	3		91
RR-0-24	NovaGold	2000	RC Tri or DHH	3	7	dry split in cyclone	4	3	Crush to 75% 10 mesh,	2	7	50 gm FA/Grav	3	10	No	1	1	No	1	10	Unknown	1	3		91
RR-0-25	NovaGold	2000	RC Tri or DHH	3	7	dry split in cyclone	4	3	Crush to 75% 10 mesh,	2	7	50 gm FA/Grav	3	10	No	1	1	No	1	10	Unknown	1	3		91
RR-0-26	NovaGold	2000	RC Tri or DHH	3	7	dry split in cyclone	4	3	Crush to 75% 10 mesh,	2	7	50 gm FA/Grav	3	10	No	1	1	No	1	10	Unknown	1	3		91
RR-0-27	NovaGold	2000	RC Tri or DHH	3	7	dry split in cyclone	4	3	Crush to 75% 10 mesh,	2	7	50 gm FA/Grav	3	10	No	1	1	No	1	10	Unknown	1	3		91
RR-0-28	NovaGold	2000	RC Tri or DHH	3	7	dry split in cyclone	4	3	Crush to 75% 10 mesh,	2	7	50 gm FA/Grav	3	10	No	1	1	No	1	10	Unknown	1	3		91
RR-0-29	NovaGold	2000	RC Tri or DHH	3	7	dry split in cyclone	4	3	Crush to 75% 10 mesh,	2	7	50 gm FA/Grav	3	10	No	1	1	No	1	10	Unknown	1	3		91
RR-0-31	NovaGold	2000	RC Tri or DHH	3	7	dry split in cyclone	4	3	Crush to 75% 10 mesh,	2	7	50 gm FA/Grav	3	10	No	1	1	No	1	10	Unknown	1	3		91
RR-0-32	NovaGold	2000	RC Tri or DHH	3	7	dry split in cyclone	4	3	Crush to 75% 10 mesh,	2	7	50 gm FA/Grav	3	10	No	1	1	No	1	10	Unknown	1	3		91
RR-0-34	NovaGold	2000	RC Tri or DHH	3	7	dry split in cyclone	4	3	Crush to 75% 10 mesh,	2	7	50 gm FA/Grav	3	10	No	1	1	No	1	10	Unknown	1	3		91
RR-0-35	NovaGold	2000	RC Tri or DHH	3	7	dry split in cyclone	4	3	Crush to 75% 10 mesh,	2	7	50 gm FA/Grav	3	10	No	1	1	No	1	10	Unknown	1	3		91
RR-0-37	NovaGold	2000	RC Tri or DHH	3	7	dry split in cyclone	4	3	Crush to 75% 10 mesh,	2	7	50 gm FA/Grav	3	10	No	1	1	No	1	10	Unknown	1	3		91
RR-0-38	NovaGold	2000	RC Tri or DHH	3	7	dry split in cyclone	4	3	Crush to 75% 10 mesh,	2	7	50 gm FA/Grav	3	10	No	1	1	No	1	10	Unknown	1	3		91
RR-0-39	NovaGold	2000	RC Tri or DHH	3	7	dry split in cyclone	4	3	Crush to 75% 10 mesh,	2	7	50 gm FA/Grav	3	10	No	1	1	No	1	10	Unknown	1	3		91
RKDC02-101	NovaGold	2002	Core HQ	5	7	entire core 2m samps	5	3	All crushed to 90% -10, 10	4	7	50 gm FA/AA	3	10	No	1	1	1 Std, 1 Blk and 1 Dup/20	5	10	Unknown	1	3		162
RKDC02-102	NovaGold	2002	Core HQ	5	7	entire core 2m samps	5	3	All crushed to 90% -10, 10	4	7	50 gm FA/AA	3	10	No	1	1	1 Std, 1 Blk and 1 Dup/20	5	10	Unknown	1	3		162
RKDC02-103	NovaGold	2002	Core HQ	5	7	entire core 2m samps	5	3	All crushed to 90% -10, 10	4	7	50 gm FA/AA	3	10	No	1	1	1 Std, 1 Blk and 1 Dup/20	5	10	Unknown	1	3		162
RKDC02-104	NovaGold	2002	Core HQ	5	7	entire core 2m samps	5	3	All crushed to 90% -10, 10	4	7	50 gm FA/AA	3	10	No	1	1	1 Std, 1 Blk and 1 Dup/20	5	10	Unknown	1	3		162
RKDC02-105	NovaGold	2002	Core HQ	5	7	entire core 2m samps	5	3	All crushed to 90% -10, 10	4	7	50 gm FA/AA	3	10	No	1	1	1 Std, 1 Blk and 1 Dup/20	5	10	Unknown	1	3		162
RKDC02-106	NovaGold	2002	Core HQ	5	7	entire core 2m samps	5	3	All crushed to 90% -10, 10	4	7	50 gm FA/AA	3	10	No	1	1	1 Std, 1 Blk and 1 Dup/20	5	10	Unknown	1	3		162
RKDC02-107	NovaGold	2002	Core HQ	5	7	entire core 2m samps	5	3	All crushed to 90% -10, 10	4	7	50 gm FA/AA	3	10	No	1	1	1 Std, 1 Blk and 1 Dup/20	5	10	Unknown	1	3		162
RKDC02-108	NovaGold	2002	Core HQ	5	7	entire core 2m samps	5	3	All crushed to 90% -10, 10	4	7	50 gm FA/AA	3	10	No	1	1	1 Std, 1 Blk and 1 Dup/20	5	10	Unknown	1	3		162
RKDC02-109	NovaGold	2002	Core HQ	5	7	entire core 2m samps	5	3	All crushed to 90% -10, 10	4	7	50 gm FA/AA	3	10	No	1	1	1 Std, 1 Blk and 1 Dup/20	5	10	Unknown	1	3		162
RKDC02-110	NovaGold	2002	Core HQ	5	7	entire core 2m samps	5	3	All crushed to 90% -10, 10	4	7	50 gm FA/AA	3	10	No	1	1	1 Std, 1 Blk and 1 Dup/20	5	10	Unknown	1	3		162
RKDC02-111	NovaGold	2002	Core HQ	5	7	entire core 2m samps	5	3	All crushed to 90% -10, 10	4	7	50 gm FA/AA	3	10	No	1	1	1 Std, 1 Blk and 1 Dup/20	5	10	Unknown	1	3		162
RKDC02-112	NovaGold	2002	Core HQ	5	7	entire core 2m samps	5	3	All crushed to 90% -10, 10	4	7	50 gm FA/AA	3	10	No	1	1	1 Std, 1 Blk and 1 Dup/20	5	10	Unknown	1	3		162
RKDC02-113	NovaGold	2002	Core HQ	5	7	entire core 2m samps	5	3	All crushed to 90% -10, 10	4	7	50 gm FA/AA	3	10	No	1	1	1 Std, 1 Blk and 1 Dup/20	5	10	Unknown	1	3		162
RKDC02-114	NovaGold	2002	Core HQ	5	7	entire core 2m samps	5	3	All crushed to 90% -10, 10	4	7	50 gm FA/AA	3	10	No	1	1	1 Std, 1 Blk and 1 Dup/20	5	10	Unknown	1	3		162
RKDC02-115	NovaGold	2002	Core HQ	5	7	entire core 2m samps	5	3	All crushed to 90% -10, 10	4	7	50 gm FA/AA	3	10	No	1	1	1 Std, 1 Blk and 1 Dup/20	5	10	Unknown	1	3		162
RKDC02-116	NovaGold	2002	Core HQ	5	7	entire core 2m samps	5	3	All crushed to 90% -10, 10	4	7	50 gm FA/AA	3	10	No	1	1	1 Std, 1 Blk and 1 Dup/20	5	10	Unknown	1	3		162

Hole-ID	Company	Year	Method and Bit Type	Score	RI	Sample Method Type	Score	RI	Sample Preparation	Score	RI	Analytical Method Type	Score	RI	Recovery Data	Score	RI	QC Protocols	Score	RI	QC Results (%)	Score	RI	Final Score
RC-7-001	PDX	1987	Core HX	5	7	half core	4	3	Unknown	1	7	Geochem and MSA>1ppm	1	10	Yes	5	1	No	1	10	0	5	3	94
RC-7-002	PDX	1987	Core HX	5	7	half core	4	3	Unknown	1	7	Geochem and MSA>1ppm	1	10	Yes	5	1	No	1	10	0	5	3	94
RC-7-003	PDX	1987	Core HX	5	7	half core	4	3	Unknown	1	7	Geochem and MSA>1ppm	1	10	Yes	5	1	No	1	10	0	5	3	94
RC-7-004	PDX	1987	Core HX	5	7	half core	4	3	Unknown	1	7	Geochem and MSA>1ppm	1	10	Yes	5	1	No	1	10	0	5	3	94
RC-7-005	PDX	1987	Core HX	5	7	half core	4	3	Unknown	1	7	Geochem and MSA>1ppm	1	10	Yes	5	1	No	1	10	0	5	3	94
RC-7-006	PDX	1987	Core HX	5	7	half core	4	3	Unknown	1	7	Geochem and MSA>1ppm	1	10	Yes	5	1	No	1	10	0	5	3	94
RC-7-007	PDX	1987	Core HX	5	7	half core	4	3	Unknown	1	7	Geochem and MSA>1ppm	1	10	Yes	5	1	No	1	10	0	5	3	94
RC-7-008	PDX	1987	Core HX	5	7	half core	4	3	Unknown	1	7	Geochem and MSA>1ppm	1	10	Yes	5	1	No	1	10	0	5	3	94
RC-7-009	PDX	1987	Core HX	5	7	half core	4	3	Unknown	1	7	Geochem and MSA>1ppm	1	10	Yes	5	1	No	1	10	0	5	3	94
RC-7-012	PDX	1987	Core HX	5	7	half core	4	3	Unknown	1	7	Geochem and MSA>1ppm	1	10	Yes	5	1	No	1	10	0	5	3	94
RC-7-013	PDX	1987	Core HX	5	7	half core	4	3	Unknown	1	7	Geochem and MSA>1ppm	1	10	Yes	5	1	No	1	10	0	5	3	94
RC-7-014	PDX	1987	Core HX	5	7	half core	4	3	Unknown	1	7	Geochem and MSA>1ppm	1	10	Yes	5	1	No	1	10	0	5	3	94
RC-7-015	PDX	1987	Core HX	5	7	half core	4	3	Unknown	1	7	Geochem and MSA>1ppm	1	10	Yes	5	1	No	1	10	0	5	3	94
RC-7-016	PDX	1987	Core HX	5	7	half core	4	3	Unknown	1	7	Geochem and MSA>1ppm	1	10	Yes	5	1	No	1	10	0	5	3	94
RC-7-017	PDX	1987	Core HX	5	7	half core	4	3	Unknown	1	7	Geochem and MSA>1ppm	1	10	Yes	5	1	No	1	10	0	5	3	94
RC-7-018	PDX	1987	Core HX	5	7	half core	4	3	Unknown	1	7	Geochem and MSA>1ppm	1	10	Yes	5	1	No	1	10	0	5	3	94
RC-7-019	PDX	1987	Core HX	5	7	half core	4	3	Unknown	1	7	Geochem and MSA>1ppm	1	10	Yes	5	1	No	1	10	0	5	3	94
RC-7-020	PDX	1987	Core HX	5	7	half core	4	3	Unknown	1	7	Geochem and MSA>1ppm	1	10	Yes	5	1	No	1	10	0	5	3	94
RC-7-021	PDX	1987	Core HX	5	7	half core	4	3	Unknown	1	7	Geochem and MSA>1ppm	1	10	Yes	5	1	No	1	10	0	5	3	94
RC-7-022	PDX	1987	Core HX	5	7	half core	4	3	Unknown	1	7	Geochem and MSA>1ppm	1	10	Yes	5	1	No	1	10	0	5	3	94
RC-7-023	PDX	1987	Core HX	5	7	half core	4	3	Unknown	1	7	Geochem and MSA>1ppm	1	10	Yes	5	1	No	1	10	0	5	3	94
RC-7-024	PDX	1987	Core HX	5	7	half core	4	3	Unknown	1	7	Geochem and MSA>1ppm	1	10	Yes	5	1	No	1	10	0	5	3	94
RC-8-025	PDX	1988	Core HX	5	7	half core	4	3	Unknown	1	7	1 AT FA and MSA>0.03 opt	3	10	Yes	5	1	No	1	10	0	5	3	114
RC-8-026	PDX	1988	Core HX	5	7	half core	4	3	Unknown	1	7	1 AT FA and MSA>0.03 opt	3	10	Yes	5	1	No	1	10	0	5	3	114
RC-8-027	PDX	1988	Core HX	5	7	half core	4	3	Unknown	1	7	1 AT FA and MSA>0.03 opt	3	10	Yes	5	1	No	1	10	0	5	3	114
RC-8-028	PDX	1988	Core HX	5	7	half core	4	3	Unknown	1	7	1 AT FA and MSA>0.03 opt	3	10	Yes	5	1	No	1	10	0	5	3	114
RC-8-029	PDX	1988	Core HX	5	7	half core	4	3	Unknown	1	7	1 AT FA and MSA>0.03 opt	3	10	Yes	5	1	No	1	10	0	5	3	114
RC-8-030	PDX	1988	Core HX	5	7	half core	4	3	Unknown	1	7	1 AT FA and MSA>0.03 opt	3	10	Yes	5	1	No	1	10	0	5	3	114
RC-8-031	PDX	1988	Core HX	5	7	half core	4	3	Unknown	1	7	1 AT FA and MSA>0.03 opt	3	10	Yes	5	1	No	1	10	0	5	3	114
RC-8-032	PDX	1988	Core HX	5	7	half core	4	3	Unknown	1	7	1 AT FA and MSA>0.03 opt	3	10	Yes	5	1	No	1	10	0	5	3	114
RC-8-033	PDX	1988	Core HX	5	7	half core	4	3	Unknown	1	7	1 AT FA and MSA>0.03 opt	3	10	Yes	5	1	No	1	10	0	5	3	114
RC-8-034	PDX	1988	Core HX	5	7	half core	4	3	Unknown	1	7	1 AT FA and MSA>0.03 opt	3	10	Yes	5	1	No	1	10	0	5	3	114
RC-8-035	PDX	1988	Core HX	5	7	half core	4	3	Unknown	1	7	1 AT FA and MSA>0.03 opt	3	10	Yes	5	1	No	1	10	0	5	3	114
RC-8-036	PDX	1988	Core HX	5	7	half core	4	3	Unknown	1	7	1 AT FA and MSA>0.03 opt	3	10	Yes	5	1	No	1	10	0	5	3	114
RC-8-037	PDX	1988	Core HX	5	7	half core	4	3	Unknown	1	7	1 AT FA and MSA>0.03 opt	3	10	Yes	5	1	No	1	10	0	5	3	114
RC-8-038	PDX	1988	Core HX	5	7	half core	4	3	Unknown	1	7	1 AT FA and MSA>0.03 opt	3	10	Yes	5	1	No	1	10	0	5	3	114

Hole-ID	Company	Year	Method and Bit Type	Score	RI	Sample Method Type	Score	RI	Sample Preparation	Score	RI	Analytical Method Type	Score	RI	Recovery Data	Score	RI	QC Protocols	Results	Score	RI	(%)	Score	RI	Final Score
RCC-4-01	Kennecott	1994	Core HQ	5	7	entire core 5' samps	5	3	All crush to >60% -10 , 125	4	7	1 AT FA/AA	2	10	In Logs	5	1	4/1359 Blks, 11/1359 Stds	Yes	2	10	1.9	2	3	129
RCC-4-02	Kennecott	1994	Core HQ	5	7	entire core 5' samps	5	3	All crush to >60% -10 , 125	4	7	1 AT FA/AA	2	10	In Logs	5	1	4/1359 Blks, 11/1359 Stds	Yes	2	10	1.9	2	3	129
RCC-4-03	Kennecott	1994	Core HQ	5	7	entire core 5' samps	5	3	All crush to >60% -10 , 125	4	7	1 AT FA/AA	2	10	In Logs	5	1	4/1359 Blks, 11/1359 Stds	Yes	2	10	1.9	2	3	129
RCC-4-04	Kennecott	1994	Core HQ	5	7	entire core 5' samps	5	3	All crush to >60% -10 , 125	4	7	1 AT FA/AA	2	10	In Logs	5	1	4/1359 Blks, 11/1359 Stds	Yes	2	10	1.9	2	3	129
RCC-4-05	Kennecott	1994	Core HQ	5	7	entire core 5' samps	5	3	All crush to >60% -10 , 125	4	7	1 AT FA/AA	2	10	In Logs	5	1	4/1359 Blks, 11/1359 Stds	Yes	2	10	1.9	2	3	129
RCC-4-06	Kennecott	1994	Core HQ	5	7	entire core 5' samps	5	3	All crush to >60% -10 , 125	4	7	1 AT FA/AA	2	10	In Logs	5	1	4/1359 Blks, 11/1359 Stds	Yes	2	10	1.9	2	3	129
RCC-4-07	Kennecott	1994	Core HQ	5	7	entire core 5' samps	5	3	All crush to >60% -10 , 125	4	7	1 AT FA/AA	2	10	In Logs	5	1	4/1359 Blks, 11/1359 Stds	Yes	2	10	1.9	2	3	129
RCC-4-08	Kennecott	1994	Core HQ	5	7	entire core 5' samps	5	3	All crush to >60% -10 , 125	4	7	1 AT FA/AA	2	10	In Logs	5	1	4/1359 Blks, 11/1359 Stds	Yes	2	10	1.9	2	3	129
RCC-4-09	Kennecott	1994	Core HQ	5	7	entire core 5' samps	5	3	All crush to >60% -10 , 125	4	7	1 AT FA/AA	2	10	In Logs	5	1	4/1359 Blks, 11/1359 Stds	Yes	2	10	1.9	2	3	129
RCC-4-10	Kennecott	1994	Core HQ	5	7	entire core 5' samps	5	3	All crush to >60% -10 , 125	4	7	1 AT FA/AA	2	10	In Logs	5	1	4/1359 Blks, 11/1359 Stds	Yes	2	10	1.9	2	3	129
RCC-4-11	Kennecott	1994	Core HQ	5	7	entire core 5' samps	5	3	All crush to >60% -10 , 125	4	7	1 AT FA/AA	2	10	In Logs	5	1	4/1359 Blks, 11/1359 Stds	Yes	2	10	1.9	2	3	129
RCC-5-12	Kennecott	1995	Core HQ	5	7	entire core 5' samps	5	3	All crush to >60% -10 , 125	4	7	1 AT FA/AA	2	10	In Logs	5	1	2 Stds, 1 Blk and 1 Dup/40	No	1	10	1.9	2	3	119
RCC-5-13	Kennecott	1995	Core HQ	5	7	entire core 5' samps	5	3	All crush to >60% -10 , 125	4	7	1 AT FA/AA	2	10	In Logs	5	1	2 Stds, 1 Blk and 1 Dup/40	No	1	10	1.9	2	3	119
RCC-5-14	Kennecott	1995	Core HQ	5	7	entire core 5' samps	5	3	All crush to >60% -10 , 125	4	7	1 AT FA/AA	2	10	In Logs	5	1	2 Stds, 1 Blk and 1 Dup/40	No	1	10	1.9	2	3	119
RCC-5-15	Kennecott	1995	Core HQ	5	7	entire core 5' samps	5	3	All crush to >60% -10 , 125	4	7	1 AT FA/AA	2	10	In Logs	5	1	2 Stds, 1 Blk and 1 Dup/40	No	1	10	1.9	2	3	119
RCC-5-16	Kennecott	1995	Core HQ	5	7	entire core 5' samps	5	3	All crush to >60% -10 , 125	4	7	1 AT FA/AA	2	10	In Logs	5	1	2 Stds, 1 Blk and 1 Dup/40	No	1	10	1.9	2	3	119
RCC-5-17	Kennecott	1995	Core HQ	5	7	entire core 5' samps	5	3	All crush to >60% -10 , 125	4	7	1 AT FA/AA	2	10	In Logs	5	1	2 Stds, 1 Blk and 1 Dup/40	No	1	10	1.9	2	3	119
RCC-5-18	Kennecott	1995	Core HQ	5	7	entire core 5' samps	5	3	All crush to >60% -10 , 125	4	7	1 AT FA/AA	2	10	In Logs	5	1	2 Stds, 1 Blk and 1 Dup/40	No	1	10	1.9	2	3	119
RCC-5-19	Kennecott	1995	Core HQ	5	7	entire core 5' samps	5	3	All crush to >60% -10 , 125	4	7	1 AT FA/AA	2	10	In Logs	5	1	2 Stds, 1 Blk and 1 Dup/40	No	1	10	1.9	2	3	119
RCC-5-20	Kennecott	1995	Core HQ	5	7	entire core 5' samps	5	3	All crush to >60% -10 , 125	4	7	1 AT FA/AA	2	10	In Logs	5	1	2 Stds, 1 Blk and 1 Dup/40	No	1	10	1.9	2	3	119
RCC-5-21	Kennecott	1995	Core HQ	5	7	entire core 5' samps	5	3	All crush to >60% -10 , 125	4	7	1 AT FA/AA	2	10	In Logs	5	1	2 Stds, 1 Blk and 1 Dup/40	No	1	10	1.9	2	3	119
RCC-5-23	Kennecott	1995	Core HQ	5	7	entire core 5' samps	5	3	All crush to >60% -10 , 125	4	7	1 AT FA/AA	2	10	In Logs	5	1	2 Stds, 1 Blk and 1 Dup/40	No	1	10	1.9	2	3	119
RCC-5-24	Kennecott	1995	Core HQ	5	7	entire core 5' samps	5	3	All crush to >60% -10 , 125	4	7	1 AT FA/AA	2	10	In Logs	5	1	2 Stds, 1 Blk and 1 Dup/40	No	1	10	1.9	2	3	119
RCC-5-25	Kennecott	1995	Core HQ	5	7	entire core 5' samps	5	3	All crush to >60% -10 , 125	4	7	1 AT FA/AA	2	10	In Logs	5	1	2 Stds, 1 Blk and 1 Dup/40	No	1	10	1.9	2	3	119
RCC-5-26	Kennecott	1995	Core HQ	5	7	entire core 5' samps	5	3	All crush to >60% -10 , 125	4	7	1 AT FA/AA	2	10	In Logs	5	1	2 Stds, 1 Blk and 1 Dup/40	No	1	10	1.9	2	3	119
RCC-5-28	Kennecott	1995	Core HQ	5	7	entire core 5' samps	5	3	All crush to >60% -10 , 125	4	7	1 AT FA/AA	2	10	In Logs	5	1	2 Stds, 1 Blk and 1 Dup/40	No	1	10	1.9	2	3	119
RCC-5-29	Kennecott	1995	Core HQ	5	7	entire core 5' samps	5	3	All crush to >60% -10 , 125	4	7	1 AT FA/AA	2	10	In Logs	5	1	2 Stds, 1 Blk and 1 Dup/40	No	1	10	1.9	2	3	119
RCC-5-30	Kennecott	1995	Core HQ	5	7	entire core 5' samps	5	3	All crush to >60% -10 , 125	4	7	1 AT FA/AA	2	10	In Logs	5	1	2 Stds, 1 Blk and 1 Dup/40	No	1	10	1.9	2	3	119
RCC-5-31	Kennecott	1995	Core HQ	5	7	entire core 5' samps	5	3	All crush to >60% -10 , 125	4	7	1 AT FA/AA	2	10	In Logs	5	1	2 Stds, 1 Blk and 1 Dup/40	No	1	10	1.9	2	3	119
RCR-4-02	Kennecott	1994	RC DHH	4	7	Unknown	1	3	All crush to >60% -10 , 125	4	7	1 AT FA/AA	2	10	No	1	1	4/1359 Blks, 11/1359 Stds	Yes	2	10	1.9	2	3	106
RCR-4-03	Kennecott	1994	RC DHH	4	7	Unknown	1	3	All crush to >60% -10 , 125	4	7	1 AT FA/AA	2	10	No	1	1	4/1359 Blks, 11/1359 Stds	Yes	2	10	1.9	2	3	106
RCR-4-04	Kennecott	1994	RC DHH	4	7	Unknown	1	3	All crush to >60% -10 , 125	4	7	1 AT FA/AA	2	10	No	1	1	4/1359 Blks, 11/1359 Stds	Yes	2	10	1.9	2	3	106
RCR-4-10	Kennecott	1994	RC DHH	4	7	Unknown	1	3	All crush to >60% -10 , 125	4	7	1 AT FA/AA	2	10	No	1	1	4/1359 Blks, 11/1359 Stds	Yes	2	10	1.9	2	3	106
RCR-4-11	Kennecott	1994	RC DHH	4	7	Unknown	1	3	All crush to >60% -10 , 125	4	7	1 AT FA/AA	2	10	No	1	1	4/1359 Blks, 11/1359 Stds	Yes	2	10	1.9	2	3	106
RCR-4-12	Kennecott	1994	RC DHH	4	7	Unknown	1	3	All crush to >60% -10 , 125	4	7	1 AT FA/AA	2	10	No	1	1	4/1359 Blks, 11/1359 Stds	Yes	2	10	1.9	2	3	106
RCR-4-13	Kennecott	1994	RC DHH	4	7	Unknown	1	3	All crush to >60% -10 , 125	4	7	1 AT FA/AA	2	10	No	1	1	4/1359 Blks, 11/1359 Stds	Yes	2	10	1.9	2	3	106
RCR-4-14	Kennecott	1994	RC DHH	4	7	Unknown	1	3	All crush to >60% -10 , 125	4	7	1 AT FA/AA	2	10	No	1	1	4/1359 Blks, 11/1359 Stds	Yes	2	10	1.9	2	3	106
RCR-4-15	Kennecott	1994	RC DHH	4	7	Unknown	1	3	All crush to >60% -10 , 125	4	7	1 AT FA/AA	2	10	No	1	1	4/1359 Blks, 11/1359 Stds	Yes	2	10	1.9	2	3	106
RCR-4-19	Kennecott	1994	RC DHH	4	7	Unknown	1	3	All crush to >60% -10 , 125	4	7	1 AT FA/AA	2	10	No	1	1	4/1359 Blks, 11/1359 Stds	Yes	2	10	1.9	2	3	106
RCR-4-21	Kennecott	1994	RC DHH	4	7	Unknown	1	3	All crush to >60% -10 , 125	4	7	1 AT FA/AA	2	10	No	1	1	4/1359 Blks, 11/1359 Stds	Yes	2	10	1.9	2	3	106
RCR-4-22	Kennecott	1994	RC DHH	4	7	Unknown	1	3	All crush to >60% -10 , 125	4	7	1 AT FA/AA	2	10	No	1	1	4/1359 Blks, 11/1359 Stds	Yes	2	10	1.9	2	3	106
RCR-4-23	Kennecott	1994	RC DHH	4	7	Unknown	1	3	All crush to >60% -10 , 125	4	7	1 AT FA/AA	2	10	No	1	1	4/1359 Blks, 11/1359 Stds	Yes	2	10	1.9	2	3	106
RCR-4-25	Kennecott	1994	RC DHH	4	7	Unknown	1	3	All crush to >60% -10 , 125	4	7	1 AT FA/AA	2	10	No	1	1	4/1359 Blks, 11/1359 Stds	Yes	2	10	1.9	2	3	106

Hole-ID	Company	Year	Method and Bit Type	Score	RI	Sample Method Type	Score	RI	Sample Preparation	Score	RI	Analytical Method Type	Score	RI	Recovery Data	Score	RI	QC Protocols	QC Results	Score	RI	(%)	Score	RI	Final Score
RCC-4-01	Kennecott	1994	Core HQ	5	7	entire core 5' samps	5	3	All crush to >60% -10 , 125	4	7	1 AT FA/AA	2	10	In Logs	5	1	4/1359 Blks, 11/1359 Stds	Yes	2	10	1.9	2	3	129
RCC-4-02	Kennecott	1994	Core HQ	5	7	entire core 5' samps	5	3	All crush to >60% -10 , 125	4	7	1 AT FA/AA	2	10	In Logs	5	1	4/1359 Blks, 11/1359 Stds	Yes	2	10	1.9	2	3	129
RCC-4-03	Kennecott	1994	Core HQ	5	7	entire core 5' samps	5	3	All crush to >60% -10 , 125	4	7	1 AT FA/AA	2	10	In Logs	5	1	4/1359 Blks, 11/1359 Stds	Yes	2	10	1.9	2	3	129
RCC-4-04	Kennecott	1994	Core HQ	5	7	entire core 5' samps	5	3	All crush to >60% -10 , 125	4	7	1 AT FA/AA	2	10	In Logs	5	1	4/1359 Blks, 11/1359 Stds	Yes	2	10	1.9	2	3	129
RCC-4-05	Kennecott	1994	Core HQ	5	7	entire core 5' samps	5	3	All crush to >60% -10 , 125	4	7	1 AT FA/AA	2	10	In Logs	5	1	4/1359 Blks, 11/1359 Stds	Yes	2	10	1.9	2	3	129
RCC-4-06	Kennecott	1994	Core HQ	5	7	entire core 5' samps	5	3	All crush to >60% -10 , 125	4	7	1 AT FA/AA	2	10	In Logs	5	1	4/1359 Blks, 11/1359 Stds	Yes	2	10	1.9	2	3	129
RCC-4-07	Kennecott	1994	Core HQ	5	7	entire core 5' samps	5	3	All crush to >60% -10 , 125	4	7	1 AT FA/AA	2	10	In Logs	5	1	4/1359 Blks, 11/1359 Stds	Yes	2	10	1.9	2	3	129
RCC-4-08	Kennecott	1994	Core HQ	5	7	entire core 5' samps	5	3	All crush to >60% -10 , 125	4	7	1 AT FA/AA	2	10	In Logs	5	1	4/1359 Blks, 11/1359 Stds	Yes	2	10	1.9	2	3	129
RCC-4-09	Kennecott	1994	Core HQ	5	7	entire core 5' samps	5	3	All crush to >60% -10 , 125	4	7	1 AT FA/AA	2	10	In Logs	5	1	4/1359 Blks, 11/1359 Stds	Yes	2	10	1.9	2	3	129
RCC-4-10	Kennecott	1994	Core HQ	5	7	entire core 5' samps	5	3	All crush to >60% -10 , 125	4	7	1 AT FA/AA	2	10	In Logs	5	1	4/1359 Blks, 11/1359 Stds	Yes	2	10	1.9	2	3	129
RCC-4-11	Kennecott	1994	Core HQ	5	7	entire core 5' samps	5	3	All crush to >60% -10 , 125	4	7	1 AT FA/AA	2	10	In Logs	5	1	4/1359 Blks, 11/1359 Stds	Yes	2	10	1.9	2	3	129
RCC-5-12	Kennecott	1995	Core HQ	5	7	entire core 5' samps	5	3	All crush to >60% -10 , 125	4	7	1 AT FA/AA	2	10	In Logs	5	1	2 Stds, 1 Blk and 1 Dup/40	No	1	10	1.9	2	3	119
RCC-5-13	Kennecott	1995	Core HQ	5	7	entire core 5' samps	5	3	All crush to >60% -10 , 125	4	7	1 AT FA/AA	2	10	In Logs	5	1	2 Stds, 1 Blk and 1 Dup/40	No	1	10	1.9	2	3	119
RCC-5-14	Kennecott	1995	Core HQ	5	7	entire core 5' samps	5	3	All crush to >60% -10 , 125	4	7	1 AT FA/AA	2	10	In Logs	5	1	2 Stds, 1 Blk and 1 Dup/40	No	1	10	1.9	2	3	119
RCC-5-15	Kennecott	1995	Core HQ	5	7	entire core 5' samps	5	3	All crush to >60% -10 , 125	4	7	1 AT FA/AA	2	10	In Logs	5	1	2 Stds, 1 Blk and 1 Dup/40	No	1	10	1.9	2	3	119
RCC-5-16	Kennecott	1995	Core HQ	5	7	entire core 5' samps	5	3	All crush to >60% -10 , 125	4	7	1 AT FA/AA	2	10	In Logs	5	1	2 Stds, 1 Blk and 1 Dup/40	No	1	10	1.9	2	3	119
RCC-5-17	Kennecott	1995	Core HQ	5	7	entire core 5' samps	5	3	All crush to >60% -10 , 125	4	7	1 AT FA/AA	2	10	In Logs	5	1	2 Stds, 1 Blk and 1 Dup/40	No	1	10	1.9	2	3	119
RCC-5-18	Kennecott	1995	Core HQ	5	7	entire core 5' samps	5	3	All crush to >60% -10 , 125	4	7	1 AT FA/AA	2	10	In Logs	5	1	2 Stds, 1 Blk and 1 Dup/40	No	1	10	1.9	2	3	119
RCC-5-19	Kennecott	1995	Core HQ	5	7	entire core 5' samps	5	3	All crush to >60% -10 , 125	4	7	1 AT FA/AA	2	10	In Logs	5	1	2 Stds, 1 Blk and 1 Dup/40	No	1	10	1.9	2	3	119
RCC-5-20	Kennecott	1995	Core HQ	5	7	entire core 5' samps	5	3	All crush to >60% -10 , 125	4	7	1 AT FA/AA	2	10	In Logs	5	1	2 Stds, 1 Blk and 1 Dup/40	No	1	10	1.9	2	3	119
RCC-5-21	Kennecott	1995	Core HQ	5	7	entire core 5' samps	5	3	All crush to >60% -10 , 125	4	7	1 AT FA/AA	2	10	In Logs	5	1	2 Stds, 1 Blk and 1 Dup/40	No	1	10	1.9	2	3	119
RCC-5-23	Kennecott	1995	Core HQ	5	7	entire core 5' samps	5	3	All crush to >60% -10 , 125	4	7	1 AT FA/AA	2	10	In Logs	5	1	2 Stds, 1 Blk and 1 Dup/40	No	1	10	1.9	2	3	119
RCC-5-24	Kennecott	1995	Core HQ	5	7	entire core 5' samps	5	3	All crush to >60% -10 , 125	4	7	1 AT FA/AA	2	10	In Logs	5	1	2 Stds, 1 Blk and 1 Dup/40	No	1	10	1.9	2	3	119
RCC-5-25	Kennecott	1995	Core HQ	5	7	entire core 5' samps	5	3	All crush to >60% -10 , 125	4	7	1 AT FA/AA	2	10	In Logs	5	1	2 Stds, 1 Blk and 1 Dup/40	No	1	10	1.9	2	3	119
RCC-5-26	Kennecott	1995	Core HQ	5	7	entire core 5' samps	5	3	All crush to >60% -10 , 125	4	7	1 AT FA/AA	2	10	In Logs	5	1	2 Stds, 1 Blk and 1 Dup/40	No	1	10	1.9	2	3	119
RCC-5-28	Kennecott	1995	Core HQ	5	7	entire core 5' samps	5	3	All crush to >60% -10 , 125	4	7	1 AT FA/AA	2	10	In Logs	5	1	2 Stds, 1 Blk and 1 Dup/40	No	1	10	1.9	2	3	119
RCC-5-29	Kennecott	1995	Core HQ	5	7	entire core 5' samps	5	3	All crush to >60% -10 , 125	4	7	1 AT FA/AA	2	10	In Logs	5	1	2 Stds, 1 Blk and 1 Dup/40	No	1	10	1.9	2	3	119
RCC-5-30	Kennecott	1995	Core HQ	5	7	entire core 5' samps	5	3	All crush to >60% -10 , 125	4	7	1 AT FA/AA	2	10	In Logs	5	1	2 Stds, 1 Blk and 1 Dup/40	No	1	10	1.9	2	3	119
RCC-5-31	Kennecott	1995	Core HQ	5	7	entire core 5' samps	5	3	All crush to >60% -10 , 125	4	7	1 AT FA/AA	2	10	In Logs	5	1	2 Stds, 1 Blk and 1 Dup/40	No	1	10	1.9	2	3	119
RCR-4-02	Kennecott	1994	RC DHH	4	7	Unknown	1	3	All crush to >60% -10 , 125	4	7	1 AT FA/AA	2	10	No	1	1	4/1359 Blks, 11/1359 Stds	Yes	2	10	1.9	2	3	106
RCR-4-03	Kennecott	1994	RC DHH	4	7	Unknown	1	3	All crush to >60% -10 , 125	4	7	1 AT FA/AA	2	10	No	1	1	4/1359 Blks, 11/1359 Stds	Yes	2	10	1.9	2	3	106
RCR-4-04	Kennecott	1994	RC DHH	4	7	Unknown	1	3	All crush to >60% -10 , 125	4	7	1 AT FA/AA	2	10	No	1	1	4/1359 Blks, 11/1359 Stds	Yes	2	10	1.9	2	3	106
RCR-4-10	Kennecott	1994	RC DHH	4	7	Unknown	1	3	All crush to >60% -10 , 125	4	7	1 AT FA/AA	2	10	No	1	1	4/1359 Blks, 11/1359 Stds	Yes	2	10	1.9	2	3	106
RCR-4-11	Kennecott	1994	RC DHH	4	7	Unknown	1	3	All crush to >60% -10 , 125	4	7	1 AT FA/AA	2	10	No	1	1	4/1359 Blks, 11/1359 Stds	Yes	2	10	1.9	2	3	106
RCR-4-12	Kennecott	1994	RC DHH	4	7	Unknown	1	3	All crush to >60% -10 , 125	4	7	1 AT FA/AA	2	10	No	1	1	4/1359 Blks, 11/1359 Stds	Yes	2	10	1.9	2	3	106
RCR-4-13	Kennecott	1994	RC DHH	4	7	Unknown	1	3	All crush to >60% -10 , 125	4	7	1 AT FA/AA	2	10	No	1	1	4/1359 Blks, 11/1359 Stds	Yes	2	10	1.9	2	3	106
RCR-4-14	Kennecott	1994	RC DHH	4	7	Unknown	1	3	All crush to >60% -10 , 125	4	7	1 AT FA/AA	2	10	No	1	1	4/1359 Blks, 11/1359 Stds	Yes	2	10	1.9	2	3	106
RCR-4-15	Kennecott	1994	RC DHH	4	7	Unknown	1	3	All crush to >60% -10 , 125	4	7	1 AT FA/AA	2	10	No	1	1	4/1359 Blks, 11/1359 Stds	Yes	2	10	1.9	2	3	106
RCR-4-19	Kennecott	1994	RC DHH	4	7	Unknown	1	3	All crush to >60% -10 , 125	4	7	1 AT FA/AA	2	10	No	1	1	4/1359 Blks, 11/1359 Stds	Yes	2	10	1.9	2	3	106
RCR-4-21	Kennecott	1994	RC DHH	4	7	Unknown	1	3	All crush to >60% -10 , 125	4	7	1 AT FA/AA	2	10	No	1	1	4/1359 Blks, 11/1359 Stds	Yes	2	10	1.9	2	3	106
RCR-4-22	Kennecott	1994	RC DHH	4	7	Unknown	1	3	All crush to >60% -10 , 125	4	7	1 AT FA/AA	2	10	No	1	1	4/1359 Blks, 11/1359 Stds	Yes	2	10	1.9	2	3	106
RCR-4-23	Kennecott	1994	RC DHH	4	7	Unknown	1	3	All crush to >60% -10 , 125	4	7	1 AT FA/AA	2	10	No	1	1	4/1359 Blks, 11/1359 Stds	Yes	2	10	1.9	2	3	106
RCR-4-25	Kennecott	1994	RC DHH	4	7	Unknown	1	3	All crush to >60% -10 , 125	4	7	1 AT FA/AA	2	10	No	1	1	4/1359 Blks, 11/1359 Stds	Yes	2	10	1.9	2	3	106

Hole-ID	Company	Year	Method and Bit Type	Score	RI	Sample Method Type	Score	RI	Sample Preparation	Score	RI	Analytical Method Type	Score	RI	Recovery Data	Score	RI	QC Protocols	Score	RI	QC Results (%)	Score	RI	Final Score
RC92-001	Newmont	1992	Core HQ	5	7	entire core	5	3	Crush 11-15 kg to -10, pulv	5	7	MSA FA	4	10	Yes	5	1	No	1	10	3	1	3	143
RC92-002	Newmont	1992	Core HQ	5	7	entire core	5	3	Crush 11-15 kg to -10, pulv	5	7	MSA FA	4	10	Yes	5	1	No	1	10	3	1	3	143
AC92-005	Newmont	1992	Core HQ	5	7	entire core	5	3	Crush 11-15 kg to -10, pulv	5	7	MSA FA	4	10	Yes	5	1	No	1	10	3	1	3	143
DDH90-1	Tenneco	1990	Core HX	5	7	half core	4	3	Unknown	1	7	MSA FA?	4	10	Yes	5	1	No	1	10	Unknown	1	3	112
RR-7-001	PDX	1987	RC Tricone	2	7	wet split beneath cyclone	2	3	Unknown	1	7	Geochem and MSA>1ppm	1	10	No	1	1	No	1	10	0	5	3	63
RR-7-002	PDX	1987	RC Tricone	2	7	wet split beneath cyclone	2	3	Unknown	1	7	Geochem and MSA>1ppm	1	10	No	1	1	No	1	10	0	5	3	63
RR-7-003	PDX	1987	RC Tricone	2	7	wet split beneath cyclone	2	3	Unknown	1	7	Geochem and MSA>1ppm	1	10	No	1	1	No	1	10	0	5	3	63
RR-7-004	PDX	1987	RC Tricone	2	7	wet split beneath cyclone	2	3	Unknown	1	7	Geochem and MSA>1ppm	1	10	No	1	1	No	1	10	0	5	3	63
RR-7-005	PDX	1987	RC Tricone	2	7	wet split beneath cyclone	2	3	Unknown	1	7	Geochem and MSA>1ppm	1	10	No	1	1	No	1	10	0	5	3	63
RR-7-006	PDX	1987	RC Tricone	2	7	wet split beneath cyclone	2	3	Unknown	1	7	Geochem and MSA>1ppm	1	10	No	1	1	No	1	10	0	5	3	63
RR-7-007	PDX	1987	RC Tricone	2	7	wet split beneath cyclone	2	3	Unknown	1	7	Geochem and MSA>1ppm	1	10	No	1	1	No	1	10	0	5	3	63
RR-7-008	PDX	1987	RC Tricone	2	7	wet split beneath cyclone	2	3	Unknown	1	7	Geochem and MSA>1ppm	1	10	No	1	1	No	1	10	0	5	3	63
RR-7-009	PDX	1987	RC Tricone	2	7	wet split beneath cyclone	2	3	Unknown	1	7	Geochem and MSA>1ppm	1	10	No	1	1	No	1	10	0	5	3	63
RR-7-010	PDX	1987	RC Tricone	2	7	wet split beneath cyclone	2	3	Unknown	1	7	Geochem and MSA>1ppm	1	10	No	1	1	No	1	10	0	5	3	63
RR-7-011	PDX	1987	RC Tricone	2	7	wet split beneath cyclone	2	3	Unknown	1	7	Geochem and MSA>1ppm	1	10	No	1	1	No	1	10	0	5	3	63
RR-7-013	PDX	1987	RC Tricone	2	7	wet split beneath cyclone	2	3	Unknown	1	7	Geochem and MSA>1ppm	1	10	No	1	1	No	1	10	0	5	3	63
RR-7-014	PDX	1987	RC Tricone	2	7	wet split beneath cyclone	2	3	Unknown	1	7	Geochem and MSA>1ppm	1	10	No	1	1	No	1	10	0	5	3	63
RR-7-015	PDX	1987	RC Tricone	2	7	wet split beneath cyclone	2	3	Unknown	1	7	Geochem and MSA>1ppm	1	10	No	1	1	No	1	10	0	5	3	63
RR-7-016	PDX	1987	RC Tricone	2	7	wet split beneath cyclone	2	3	Unknown	1	7	Geochem and MSA>1ppm	1	10	No	1	1	No	1	10	0	5	3	63
RR-7-017	PDX	1987	RC Tricone	2	7	wet split beneath cyclone	2	3	Unknown	1	7	Geochem and MSA>1ppm	1	10	No	1	1	No	1	10	0	5	3	63
RR-8-018	PDX	1988	RC Tricone	2	7	wet split beneath cyclone	2	3	Unknown	1	7	1 AT FA and MSA>0.03 opt	3	10	No	1	1	No	1	10	0	5	3	83
RR-8-019	PDX	1988	RC Tricone	2	7	wet split beneath cyclone	2	3	Unknown	1	7	1 AT FA and MSA>0.03 opt	3	10	No	1	1	No	1	10	0	5	3	83
RR-8-020	PDX	1988	RC Tricone	2	7	wet split beneath cyclone	2	3	Unknown	1	7	1 AT FA and MSA>0.03 opt	3	10	No	1	1	No	1	10	0	5	3	83
RR-8-021	PDX	1988	RC Tricone	2	7	wet split beneath cyclone	2	3	Unknown	1	7	1 AT FA and MSA>0.03 opt	3	10	No	1	1	No	1	10	0	5	3	83
RR-8-022	PDX	1988	RC Tricone	2	7	wet split beneath cyclone	2	3	Unknown	1	7	1 AT FA and MSA>0.03 opt	3	10	No	1	1	No	1	10	0	5	3	83
RR-8-023	PDX	1988	RC Tricone	2	7	wet split beneath cyclone	2	3	Unknown	1	7	1 AT FA and MSA>0.03 opt	3	10	No	1	1	No	1	10	0	5	3	83
RR-8-024	PDX	1988	RC Tricone	2	7	wet split beneath cyclone	2	3	Unknown	1	7	1 AT FA and MSA>0.03 opt	3	10	No	1	1	No	1	10	0	5	3	83
RR-8-025	PDX	1988	RC Tricone	2	7	wet split beneath cyclone	2	3	Unknown	1	7	1 AT FA and MSA>0.03 opt	3	10	No	1	1	No	1	10	0	5	3	83
RR-8-026	PDX	1988	RC Tricone	2	7	wet split beneath cyclone	2	3	Unknown	1	7	1 AT FA and MSA>0.03 opt	3	10	No	1	1	No	1	10	0	5	3	83
RR-8-027	PDX	1988	RC Tricone	2	7	wet split beneath cyclone	2	3	Unknown	1	7	1 AT FA and MSA>0.03 opt	3	10	No	1	1	No	1	10	0	5	3	83
RR-8-028	PDX	1988	RC Tricone	2	7	wet split beneath cyclone	2	3	Unknown	1	7	1 AT FA and MSA>0.03 opt	3	10	No	1	1	No	1	10	0	5	3	83
RR-8-029	PDX	1988	RC Tricone	2	7	wet split beneath cyclone	2	3	Unknown	1	7	1 AT FA and MSA>0.03 opt	3	10	No	1	1	No	1	10	0	5	3	83
RR-8-030	PDX	1988	RC Tricone	2	7	wet split beneath cyclone	2	3	Unknown	1	7	1 AT FA and MSA>0.03 opt	3	10	No	1	1	No	1	10	0	5	3	83
RR-8-031	PDX	1988	RC Tricone	2	7	wet split beneath cyclone	2	3	Unknown	1	7	1 AT FA and MSA>0.03 opt	3	10	No	1	1	No	1	10	0	5	3	83
RR-8-032	PDX	1988	RC Tricone	2	7	wet split beneath cyclone	2	3	Unknown	1	7	1 AT FA and MSA>0.03 opt	3	10	No	1	1	No	1	10	0	5	3	83
RR-8-033	PDX	1988	RC Tricone	2	7	wet split beneath cyclone	2	3	Unknown	1	7	1 AT FA and MSA>0.03 opt	3	10	No	1	1	No	1	10	0	5	3	83
RR-8-034	PDX	1988	RC Tricone	2	7	wet split beneath cyclone	2	3	Unknown	1	7	1 AT FA and MSA>0.03 opt	3	10	No	1	1	No	1	10	0	5	3	83
RR-8-035	PDX	1988	RC Tricone	2	7	wet split beneath cyclone	2	3	Unknown	1	7	1 AT FA and MSA>0.03 opt	3	10	No	1	1	No	1	10	0	5	3	83
RR-8-036	PDX	1988	RC Tricone	2	7	wet split beneath cyclone	2	3	Unknown	1	7	1 AT FA and MSA>0.03 opt	3	10	No	1	1	No	1	10	0	5	3	83
RR-8-037	PDX	1988	RC Tricone	2	7	wet split beneath cyclone	2	3	Unknown	1	7	1 AT FA and MSA>0.03 opt	3	10	No	1	1	No	1	10	0	5	3	83
RR-8-038	PDX	1988	RC Tricone	2	7	wet split beneath cyclone	2	3	Unknown	1	7	1 AT FA and MSA>0.03 opt	3	10	No	1	1	No	1	10	0	5	3	83
RR-8-039	PDX	1988	RC Tricone	2	7	wet split beneath cyclone	2	3	Unknown	1	7	1 AT FA and MSA>0.03 opt	3	10	No	1	1	No	1	10	0	5	3	83
RR-8-040	PDX	1988	RC Tricone	2	7	wet split beneath cyclone	2	3	Unknown	1	7	1 AT FA and MSA>0.03 opt	3	10	No	1	1	No	1	10	0	5	3	83
RR-8-041	PDX	1988	RC Tricone	2	7	wet split beneath cyclone	2	3	Unknown	1	7	1 AT FA and MSA>0.03 opt	3	10	No	1	1	No	1	10	0	5	3	83
RR-8-042	PDX	1988	RC Tricone	2	7	wet split beneath cyclone	2	3	Unknown	1	7	1 AT FA and MSA>0.03 opt	3	10	No	1	1	No	1	10	0	5	3	83
RR-8-043	PDX	1988	RC Tricone	2	7	wet split beneath cyclone	2	3	Unknown	1	7	1 AT FA and MSA>0.03 opt	3	10	No	1	1	No	1	10	0	5	3	83
RR-8-044	PDX	1988	RC Tricone	2	7	wet split beneath cyclone	2	3	Unknown	1	7	1 AT FA and MSA>0.03 opt	3	10	No	1	1	No	1	10	0	5	3	83
RR-8-045	PDX	1988	RC Tricone	2	7	wet split beneath cyclone	2	3	Unknown	1	7	1 AT FA and MSA>0.03 opt	3	10	No	1	1	No	1	10	0	5	3	83
RR-8-046	PDX	1988	RC Tricone	2	7	wet split beneath cyclone	2	3	Unknown	1	7	1 AT FA and MSA>0.03 opt	3	10	No	1	1	No	1	10	0	5	3	83
RR-8-047	PDX	1988	RC Tricone	2	7	wet split beneath cyclone	2	3	Unknown	1	7	1 AT FA and MSA>0.03 opt	3	10	No	1	1	No	1	10	0	5	3	83
RR-8-048	PDX	1988	RC Tricone	2	7	wet split beneath cyclone	2	3	Unknown	1	7	1 AT FA and MSA>0.03 opt	3	10	No	1	1	No	1	10	0	5	3	83
RR-8-049	PDX	1988	RC Tricone	2	7	wet split beneath cyclone	2	3	Unknown	1	7	1 AT FA and MSA>0.03 opt	3	10	No	1	1	No	1	10	0	5	3	83
RR-8-050	PDX	1988	RC Tricone	2	7	wet split beneath cyclone	2	3	Unknown	1	7	1 AT FA and MSA>0.03 opt	3	10	No	1	1	No	1	10	0	5	3	83
RR-8-054	PDX	1988	RC Tricone	2	7	wet split beneath cyclone	2	3	Unknown	1	7	1 AT FA and MSA>0.03 opt	3	10	No	1	1	No	1	10	0	5	3	83
RR-8-055	PDX	1988	RC Tricone	2	7	wet split beneath cyclone	2	3	Unknown	1	7	1 AT FA and MSA>0.03 opt	3	10	No	1	1	No	1	10	0	5	3	83
RR-8-056	PDX	1988	RC Tricone	2	7	wet split beneath cyclone	2	3	Unknown	1	7	1 AT FA and MSA>0.03 opt	3	10	No	1	1	No	1	10	0	5	3	83
RR-8-057	PDX	1988	RC Tricone	2	7	wet split beneath cyclone	2	3	Unknown	1	7	1 AT FA and MSA>0.03 opt	3	10	No	1	1	No	1	10	0	5	3	83
RR-8-058	PDX	1988	RC Tricone	2	7	wet split beneath cyclone	2	3	Unknown	1	7	1 AT FA and MSA>0.03 opt	3	10	No	1	1	No	1	10	0	5	3	83
RR-8-059	PDX	1988	RC Tricone	2	7	wet split beneath cyclone	2	3	Unknown	1	7	1 AT FA and MSA>0.03 opt	3	10	No	1	1	No	1	10	0	5	3	83
RR-8-060	PDX	1988	RC Tricone	2	7	wet split beneath cyclone	2	3	Unknown	1	7	1 AT FA and MSA>0.03 opt	3	10	No	1	1	No	1	10	0	5	3	83
RR-8-061	PDX	1988	RC Tricone	2	7	wet split beneath cyclone	2	3	Unknown	1	7	1 AT FA and MSA>0.03 opt	3	10	No	1	1	No	1	10	0	5	3	83
RR-8-062	PDX	1988	RC Tricone	2	7	wet split beneath cyclone	2	3	Unknown	1	7	1 AT FA and MSA>0.03 opt	3	10	No	1	1	No	1	10	0	5	3	83
RR-8-063	PDX	1988	RC Tricone	2	7	wet split beneath cyclone	2	3	Unknown	1	7	1 AT FA and MSA>0.03 opt	3	10	No	1	1	No	1	10	0	5	3	83
RR-8-064	PDX	1988	RC Tricone	2	7	wet split beneath cyclone	2	3	Unknown	1	7	1 AT FA and MSA>0.03 opt	3	10	No	1	1	No	1	10	0	5	3	83
RR-8-065	PDX	1988	RC Tricone	2	7	wet split beneath cyclone	2	3	Unknown	1	7	1 AT FA and MSA>0.03 opt	3	10	No	1	1	No	1	10	0	5	3	83
RR-8-072	PDX	1988	RC Tricone	2	7	wet split beneath cyclone	2	3	Unknown	1	7	1 AT FA and MSA>0.03 opt	3	10	No	1	1	No	1	10	0	5	3	83
RR-8-075	PDX	1988	RC Tricone	2	7	wet split beneath cyclone	2	3	Unknown	1	7	1 AT FA and MSA>0.03 opt	3	10	No	1	1	No	1	10	0	5	3	83
RR-8-076	PDX	1988	RC Tricone	2	7	wet split beneath cyclone	2	3	Unknown	1	7	1 AT FA and MSA>0.03 opt	3	10	No	1	1	No	1	10	0	5	3	83
RR-8-078	PDX	1988	RC Tricone	2	7	wet split beneath cyclone	2	3	Unknown	1	7	1 AT FA and MSA>0.03 opt	3	10	No	1	1	No	1	10	0	5	3	83
RR-8-079	PDX	1988	RC Tricone	2	7	wet split beneath cyclone	2	3	Unknown	1	7	1 AT FA and MSA>0.03 opt	3	10	No	1	1	No	1	10	0	5	3	83
RR-8-080	PDX	1988	RC Tricone	2	7	wet split beneath cyclone	2	3	Unknown	1	7	1 AT FA and MSA>0.03 opt	3	10	No	1	1	No	1	10	0	5	3	83
RR-8-082	PDX	1988	RC Tricone	2	7	wet split beneath cyclone	2	3	Unknown	1	7	1 AT FA and MSA>0.03 opt	3	10	No	1	1	No	1	10	0	5	3	83
RR-8-084	PDX	1988	RC Tricone	2	7	wet split beneath cyclone	2	3	Unknown	1	7	1 AT FA and MSA>0.03 opt	3	10	No	1	1	No	1	10	0	5	3	83
RR-8-086	PDX	1988	RC Tricone	2	7	wet split beneath cyclone	2	3	Unknown	1	7	1 AT FA and MSA>0.03 opt	3	10	No	1	1	No	1	10	0	5	3	83
RR-8-088	PDX	1988	RC Tricone	2	7	wet split beneath cyclone	2	3	Unknown	1	7	1 AT FA and MSA>0.03 opt	3	10	No	1	1	No	1	10	0	5	3	83
RR-8-090	PDX	1988	RC Tricone	2	7	wet split beneath cyclone	2	3	Unknown	1	7	1 AT FA and MSA>0.03 opt	3	10	No	1	1	No	1	10	0	5	3	83
RR-9-091	PDX	1989	RC Tricone	2	7	wet split beneath cyclone	2	3	Unknown	1	7	Geochem and MSA>1ppm	1	10	No	1	1	No	1	10	0	5	3	63
RR-9-092	PDX	1989	RC Tricone	2	7	wet split beneath cyclone	2	3	Unknown	1	7	Geochem and MSA>1ppm	1	10	No	1	1	No	1	10	0	5	3	63
RR-9-093	PDX	1989	RC Tricone	2	7	wet split beneath cyclone	2	3	Unknown	1	7	Geochem and MSA>1ppm	1	10	No	1	1	No	1	10	0	5	3	63
RR-9-094	PDX	1989	RC Tricone	2	7	wet split beneath cyclone	2	3	Unknown	1	7	Geochem and MSA>1ppm	1	10	No	1	1	No	1	10	0	5	3	63
RR-9-095	PDX	1989	RC Tricone	2	7	wet split beneath cyclone	2	3	Unknown	1	7	Geochem and MSA>1ppm	1	10	No	1	1	No	1	10	0	5	3	63
RR-9-096	PDX	1989	RC Tricone	2	7	wet split beneath cyclone	2	3	Unknown	1	7	Geochem and MSA>1ppm	1	10	No	1	1	No	1	10	0	5	3	63
RR-9-097	PDX	1989	RC Tricone	2	7	wet split beneath cyclone	2	3	Unknown	1	7	Geochem and MSA>1ppm	1	10	No	1	1	No	1	10	0	5	3	63
RR-9-098	PDX	1989	RC Tricone	2	7	wet split beneath cyclone	2	3	Unknown	1	7	Geochem and MSA>1ppm	1	10	No	1	1	No	1	10	0	5	3	63
RR-9-099	PDX	1989	RC Tricone	2	7	wet split beneath cyclone	2	3	Unknown	1	7	Geochem and MSA>1ppm	1	10	No	1	1	No	1	10	0	5	3	63
RR-9-100	PDX	1989	RC Tricone	2	7	wet split beneath cyclone	2	3	Unknown	1	7	Geochem and MSA>1ppm	1	10	No	1	1	No	1	10	0	5	3	63
RM-7-019	PDX	1987	Rotary	1	7	Unknown	1	3	Unknown	1	7	Geochem and MSA>1ppm	1	10	No	1	1	No	1	10	Unknown	1	3	41

A-5 QA/QC for Assaying of 2004 Campaign

Memo

To	**Kevin Francis**	File No.	
From	**Scott Long**	cc	
Tel			
Fax			
Date	**June 6, 2005**		

Subject **Rock Creek 2004 Drilling Sample Check Assays**

Conclusions

The SGS check assays returned slightly higher Au results compared to the original Chemex results, with an estimated relative bias of approximately nine percent. The relative bias is likely either caused by a high bias in the SGS results, a low bias in the Chemex results, or a combination of these. The SRMs that were inserted in the SGS sample submission appear to have probable misidentification or misstatement of best values for some samples, hence they cannot be used with confidence to estimate an absolute bias to the SGS results.

One possible explanation for a low bias at Chemex, if it exists, is the increased grinding samples underwent at Chemex, where samples were more intensely ground in order to maintain a small oversize fraction. Intense grinding can in some cases lead to gold losses as gold plates out on pulverizer surfaces. Such losses might reveal themselves in elevated gold in sample blanks. Such losses would not be uniform, but would tend to occur in samples that have large malleable gold-bearing particles.

The Chemex results appear to provide gold results that have little risk of over-estimating gold grades.

Background

A list of sample for check assay was created based upon a semi-random selection from the deposit ore zones. No original assay criterion was used in the selection process, thus the selected samples span a wide grade range and should be considered representative of those samples within mineralized drilling intercepts or down-hole drilling composites likely to be classified as ore grade. In order to obtain wide geographic coverage, the number of samples randomly selected per drill hole was restricted.

Approximately 100 samples were requested. Chemex in Fairbanks was unable to locate some of the samples in their sample storage. A few additional samples that were recorded as shipped are absent from the SGS check assay results. A total of 77 drill samples were included in the final submission, plus some control samples including blanks and duplicates. In three cases SGS received samples weighing more than 7 kg, and these three samples were split into "A" and "B" fractions that were then assayed as two separate samples. Thus the submission

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includes 74 unique drill samples. The selection covers a total of 53 drill holes. There are 90 drill holes from the 2004 drilling campaign in the resource area. The proportion of samples taken from the various rock types is summarized in Table 1.

Table 1 Check Sample Tally by Rock Code

Rocktype Name	Rocktyp eCode	No. of Check Assays
Calcareous Quartz Muscovite Schist	CQMS	33
Calcareous Schist	CS	4
Graphitic Quartz Muscovite Schist	GQMS	11
Graphite Schist	GS	1
Overburden	OVB	2
Siliceous Graphitic Schist	QGS	2
Quartz-Monzonite Schist	QMS	17

SGS was requested to assay the entire sample by screen fire assay. The sample masses were much larger than those that SGS typically employs for screen fire assays. A large mass was requested in order to avoid change-of-support issues. The sample mass was intended to be similar to that used in the original screen fire assays.

The screen fire assay process consists of passing the pulverized sample through a screen (150 mesh in this case). All the material trapped atop the screen (the “plus fraction” or “oversize”) is assayed and a representative pair of samples of the material which passed through the screen(the “minus fraction” or “undersize”) is assayed. In cases where the two results of the undersize disagree, the laboratory manager may elect to assay one or more additional aliquots of the undersize. This was done by Chemex on a subjective basis, and does not appear to have been done by SGS.

The SGS laboratory manager remarked that, due to the large sample mass, screening typically produced more than 100 grams of oversize, necessitating using three to six crucibles to accommodate the assaying of the plus fraction in its entirety. Chemex would increase grinding to further reduce the weight of the oversize fraction, either by grinding longer initially, or possibly by placing the oversize fraction into a pulverizer and grinding it further.

Summary of Results

Summary statistics of the checked samples are shown in Table 2. A complete set of the merged results is included as an Appendix to this memorandum.

Table 2: Summary Information

	Minimum	Maximum	Mean	Orig/Check
Total Sample Weight, kg				
Chemex Orig	2.5	4.5	3.9	
SGS Check	1.0	4.4	3.8	1.04
Plus Fraction Weight, g				
Chemex Orig	9	67	31	
SGS Check	64	238	197	0.16
Total Au g/t				
Chemex Orig	0.025	10.200	0.893	
SGS Check	0.010	11.328	0.969	0.92
>150# fraction, Au g/t				
Chemex Orig	0.000	328.000	26.594	
SGS Check	0.000	83.180	7.722	3.44

The average total sample weights of the original and check samples are very similar, with the exception that SGS received a few samples of low sample weight. Chemex clearly engaged in more grinding, as shown by the much lower average weight of the plus fractions and a corresponding much higher average grade of the plus fractions. The average obtained by SGS on these samples is eight percent higher than the average obtained by Chemex.

Linear Regression Fit using Reduction to Major Axis (RMA)

A linear regression fit was applied using the method of Reduction to Major Axis. Using the “linear regression” function available in most commercial software spreadsheets such as EXCEL will not provide an unbiased fit of the data between two sets of assay results. The reason for this is that the software assumes one variable is *independent*, and the other is *dependent*. For example, the independent variable might be a setting on an instrument, and the dependent variable might be a measurement of output. The underlying assumption is that the independent variable is precisely known while the output is not.

This is not the case for pairs of assay results, where both sets of results are independent. One can approximate an unbiased fit by using the linear regression fit twice, assuming first one, and then the other result of the pair is the independent variable. This will give two lines with different trends that cross (after algebraically solving one of the linear equations so that both are in the form $y = \mathrm{m}x + \mathrm{b}$, i.e. one equation is restated as $x = y/\mathrm{m} - \mathrm{b}/\mathrm{m}$). An estimate of the linear trend of the data can then be obtained by calculating the bisectrix (the line that falls halfway between) of the two linear regressions.

However, the bisectrix is not the optimum fit of the data if the variance of one set of results is different than the other. In other words, the trend of the data should take into consideration that one set of the paired results may be more “erratic” than the other.

The method of reduction to major axis calculates the slope of the trend as

m = [standard deviation of *y*] / [standard deviation of *x*].

The intercept b is calculated by solving the equation y = mx + b by substituting the mean of x and the mean of y into the equation.

The error on the slope m is:

$$m * \mathrm{sqrt}[(1-r^2)/N]$$

The error on the intercept is:

$$\Phi_y * \mathrm{sqrt}\{[(1-r^2)/N]*[2+(\Phi_x/\mathrm{mean}(x))^2*(1+r)]$$

where Φ is the standard deviation, N is the number of pairs, and r is the correlation coefficient.

The RMA fit for all data is shown in Figure 1. There are no obvious outliers in the data set. Because a few high values can control the slope of the linear fit, a second RMA was performed (Figure 2) on a subset of the data containing Au grades of less than 4 g/t, based upon the pair mean. This excluded three pairs. Summary statistics of the two RMA fits are shown in Table 3.

There is negligible difference between the two RMA fits, and these are very close to the comparison of the means. The original Chemex results are lower than the SGS check results, with a relative bias falling between two and twelve percent, with a best estimate of nine percent using all data or seven percent using pairs with Au less than 4 g/t.

Figure 1: RMA fit of all check data

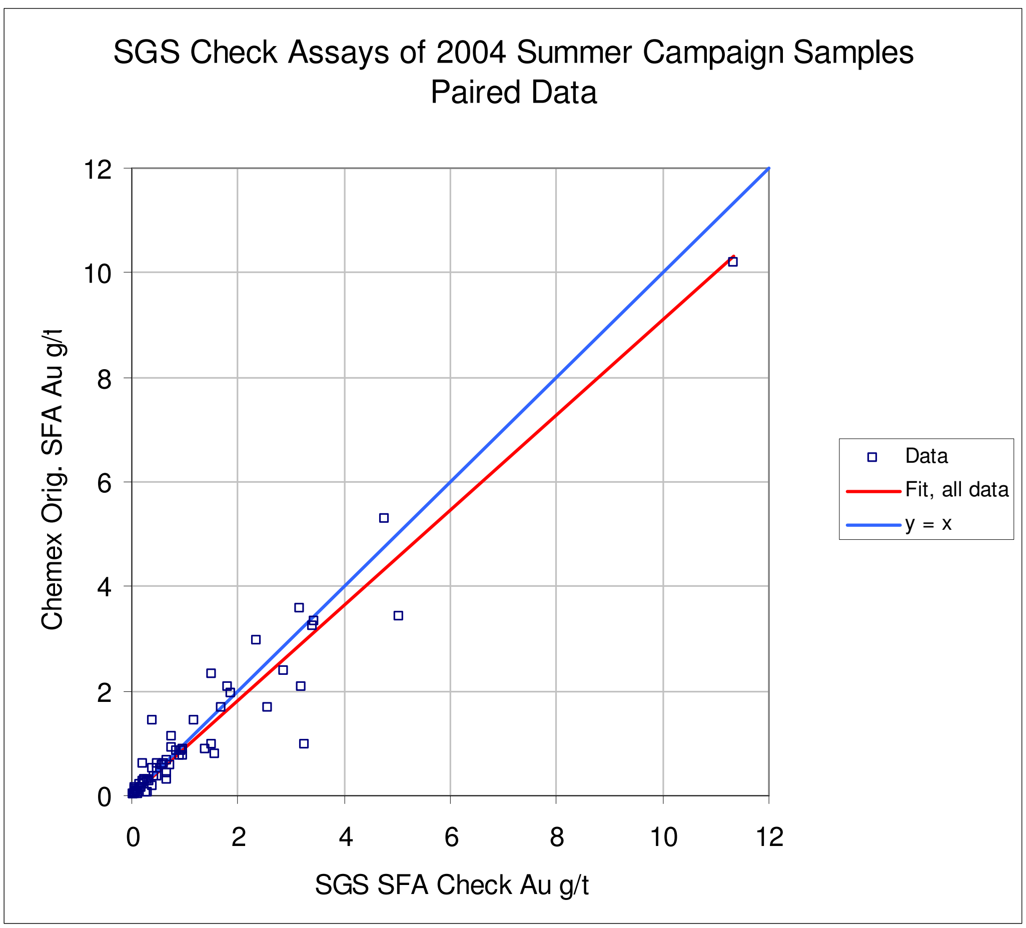

Figure 2: RMA fit for Pairs with Au < 4 g/t

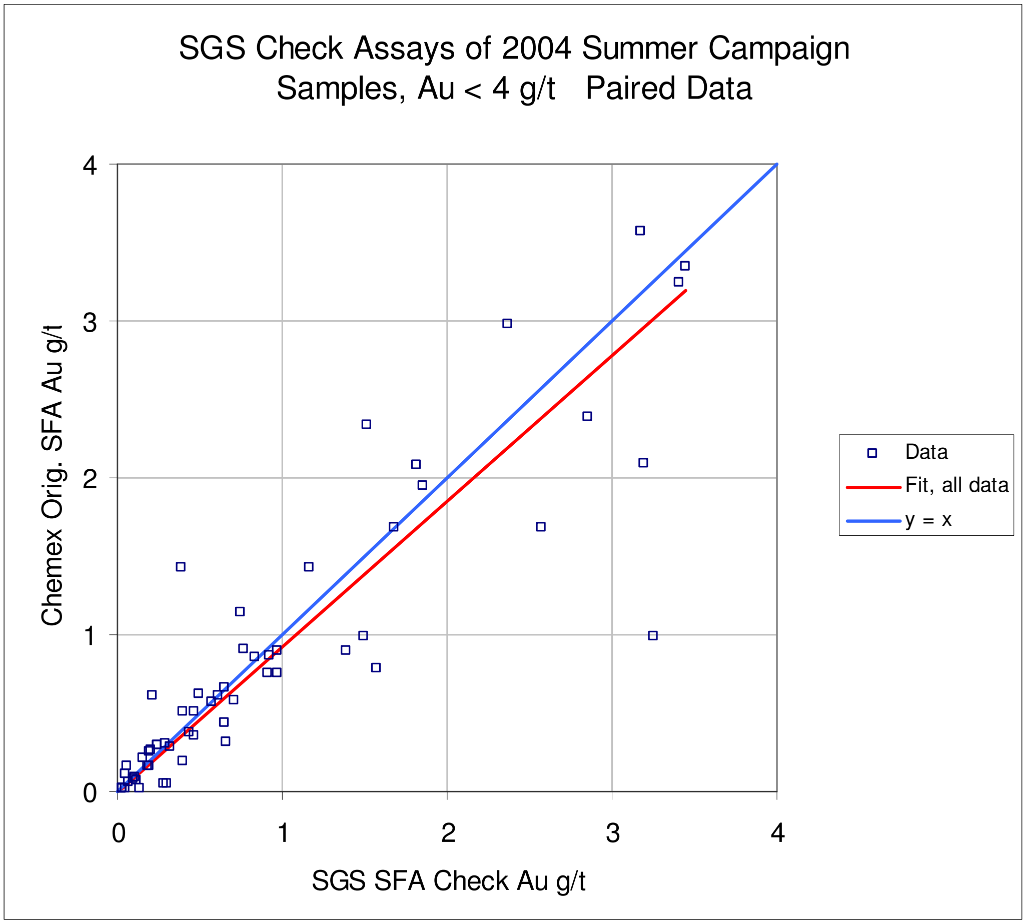

Table 3: Statistics of RMA Fits

	All Data	Au < 4 g/t
N	77	74
R squared	0.93	0.82
R	0.96	0.91
slope m	0.91	0.93
intercept b	0.01	0.00
error in slope	0.03	0.05
error in intercept	0.10	0.10

Checks on SGS Quality

One blind blank was assayed in the sample submission to SGS. SGS reported a grade of 0.01 g/t Au on this sample, calculated from a grade of 0.33 g/t Au from 218 grams of oversize fraction and below-detection results for the 3,444 grams of undersize. This indicates low levels of contamination took place at SGS during the screening process.

Packets of six standards were included in the submission to SGS. These packets were small in mass, and thus cannot be considered fully blind to the laboratory. SGS was not informed of the expected grade or identity of these reference materials. SGS analyzed each packet twice. Alaska Gold provided AMEC with the expected values. Results are shown in Table 4.

Table 4: SGS Results on Semi-Blind SRMs

Id	SRM	BEST Au	SGS(1)	SGS(2)	SGS MEAN
206813	50p	0.727	0.67	0.71	0.69
207247	15pz	1.2	2.98	3.09	3.035
207626	15pz	1.2	2.85	2.87	2.86
427033	15pz	1.2	2.44	2.29	2.365
428063	50p	0.727	0.7	0.73	0.715
440113	50p	0.727	0.74	0.71	0.725

It appears likely that the material identified as 15pz is probably in error and likely consists of two different standards. Alaska Gold has a standard they used regularly in their assay program that has a best value of 3 g/t, designated 7pa. If so, this would provide good agreement on five of the six inserted SRMs, the exception being sample 427033.

Seven samples were submitted in duplicate, with the second sample labeled by a different number. These duplicate samples were fully blind to SGS. Results are shown in Table 5.

Table 5: SGS Results on Blind Duplicates

Sample ID	Sample ID_1	Au met	Au met_1	|Difference|	|Difference|/ Mean
410010	425170	1.24	0.77	0.47	46.8%
410040	205885	0.01	0.01	0	0.0%
410050	205946	2.07	1.86	0.21	10.7%
410060	206389	1.57	1.68	0.11	6.8%
410070	206434	0.10	0.11	0.01	9.5%
410090	206871	0.57	0.44	0.13	25.7%
410100	207018	13.56	11.33	2.23	17.9%
R-Squared = 0.998					

The duplicate results show good agreement for a material with a high “nugget effect”.

References

Agterberg, F.P., 1974, Geomathematics; Developments in Geomathematics 1, Elsevier Scientific Publ. Co., Amsterdam, 596p.

Davis, J.C., 1986, Statistics and data analysis in geology (2nd ed.); John Wiley and Sons Inc., New York, 646 p.

Sinclair, A.J., 1999, Evaluation of errors in paired analytical data by a linear model, Explor. Mining Geol. V 7, Nos . 1,2, pp 167-173.

APPENDIX

SGS Check Results								Original Chemex Results												
Sample ID	suffix	Au met	Au +150	+150 wt	Au - 150	Au - 150A	total wt	HOLE_ID	FROM	TO	WEIGHTSPLIt	certificate	AU_TOT_MSA ppm	AU_<_MSA_Ppm	AU_>_MSA_mg	AU_>_MSA_Ppm	WT_<_MSA_Gm	WT_>_MSA_Gm	AU_FA_MSA_ppm	AUFA30
205828		0.75	17.49	151	0.12	0.1	4109.5	RKDC04-231	44	46	3.91	844	1.14	0.73	1.57	81.1	3763	19.3	0.74	0.71
205867		0.01	0.01	186.4	0	0	4159.7	RKDC04-232	32	34	3.99	833	-0.05	-0.05	-0	-0.05	3934	26.7	0.01	-0.01
205885		0.01	0.02	132.1	0	0	2831.1	RKDC04-232	62	64	3.83	834	-0.05	-0.05	0.02	0.56	3770	32.3	0.04	0.01
205896		0.1	0.01	64.4	0.1	0.11	1007.2	RKDC04-233	0	2	3.88	834	0.08	0.08	0.01	0.38	3625	13.2	0.08	0.08
205912		0.65	6.47	212.1	0.33	0.3	3874.2	RKDC04-233	28	30	3.9	841	0.44	0.35	0.35	10.4	3812	33.9	0.39	0.31
205929		0.84	8.28	206.8	0.53	0.34	4037.6	RKDC04-233	58	60	3.99	840	0.86	0.7	0.69	22.5	4004	30.8	0.76	0.63
205946		1.86	16.02	124.8	1.34	0.95	2614	RKDC04-234	8	10	4.06	865	1.95	1.36	2.41	142	4014	17	1.62	1.09
205965		0.29	1.56	199.5	0.24	0.2	3932.7	RKDC04-234	38	40	3.92	839	0.31	0.3	0.05	2.19	3587	23.7	0.31	0.28
206000		0.18	0.3	195.2	0.17	0.18	4063.8	RKDC04-234	98	100	3.86	837	0.16	0.17	-0	-0.05	3835	26.2	0.16	0.17
206350		0.1	0.17	178	0.1	0.1	4142.7	RKDC04-235	32	34	4.08	838	0.09	0.09	0.01	1.34	4031	8.94	0.09	0.09
206370		0.07	0.2	200.4	0.07	0.05	4318.4	RKDC04-235	62	64	4.15	842	0.06	0.06	0.01	0.18	4012	38.1	0.04	0.07
206385		0.71	1.99	183	0.69	0.62	4180.9	RKDC04-235	92	94.5	4.08	843	0.58	0.55	0.15	5.07	4018	29	0.57	0.53
206389		1.68	2.78	207.2	1.56	1.53	1892.1	RKDC04-236	8	10	4.23	843	1.68	1.55	0.63	16.6	4162	38.3	1.49	1.6
206407		0.39	5.68	193.1	0.18	0.08	4070.1	RKDC04-236	48	50	3.97	836	0.51	0.31	0.83	32.4	3903	25.5	0.23	0.38
206434		0.11	0.16	209.9	0.11	0.11	4045.4	RKDC04-237	16	18	3.93	942	0.07	0.06	0.05	1.43	3863	37.2	0.06	0.05
206452		0.32	3.05	194.8	0.19	0.17	3881.5	RKDC04-237	46	48	3.92	943	0.29	0.2	0.37	8.57	3854	42.7	0.17	0.22
206469		1.57	18.49	199.8	0.57	0.35	3239.1	RKDC04-238	8	10	4.08	954	0.79	0.51	1.17	38	3998	30.9	0.38	0.77
206487		0.5	5.66	211.9	0.24	0.19	4085.3	RKDC04-238	38	40	3.94	935	0.62	0.43	0.79	35.9	3893	21.9	0.44	0.41
206515		5.04	83.18	196.6	1.12	1.11	4106.6	RKDC04-239	32	34	3.87	944	3.42	1.45	7.5	328	3766	22.8	1.56	1.33
206533		0.01	0.38	114.6	0	0	4216.1	RKDC04-239	62	64	3.86	945	-0.05	-0.05	-0	-0.05	3739	39.8	-0.01	0.01
206561		2.85	43.81	175.7	0.87	1.22	4162.7	RKDC04-240	14	16	3.97	957	2.39	1.17	4.83	147	3895	33	1.31	1.03
206571		3.45	16.94	218.8	2.87	2.48	4038.4	RKDC04-240	30	32	4.01	957	3.35	2.95	1.65	145	3989	11.4	2.75	3.15
206613		2.37	22.6	215.4	1.38	1.19	4246.1	RKDC04-241	34	36	3.83	955	2.98	1.89	4.13	135	3700	30.7	1.87	1.91
206626		2.57	20.36	214.5	1.72	1.53	4247.8	RKDC04-241	56	58.5	4.07	947	1.68	1.14	2.28	68.8	4053	33.1	1.19	1.08
206639		0.3	5.4	210	0.03	0.04	4236	RKDC04-242	22	24	4.1	947	0.05	0.05	-0	-0.05	4070	50.7	0.02	0.08
206683		0.24	0	174.5	0.25	0.25	4022.2	RKDC04-243	30	32	4.11	878	0.3	0.3	0.05	0.77	3979	58.8	0.27	0.32
206731		1.51	0.03	209.4	1.69	1.49	4191.2	RKDC04-244	28	30	3.6	880	2.34	2.3	0.23	6.72	3531	34.8	2.24	2.36
206739		0.2	0.03	149.5	0.2	0.22	4065.2	RKDC04-244	42	44	4.07	880	0.27	0.27	0.02	0.7	4015	34.4	0.28	0.26
206789		4.76	0.06	197.8	5.07	4.92	4192.1	RKDC04-245	68	70.1	3.92	883	5.3	5.29	0.26	6.28	3807	41.6	5.51	5.07
206804		0.01	0.33	218.2	0	0	3662.6	RKDC04-245			3.77	884	-0.05	-0.05	-0	-0.05	3595	43.2	-0.01	-0.01
206805		0.15	2.59	209.2	0	0	4021.8	RKDC04-245	94	96	3.82	884	-0.05	-0.05	-0	-0.05	3747	25.5	0.01	-0.01
206812		0.03	0.41	212.6	0.02	0	4335	RKDC04-246	8	10	4.02	884	-0.05	-0.05	0.01	0.45	3980	19.9	0.02	0.01
206871		0.44	1.11	157.7	0.39	0.33	1544.5	RKDC04-247	14	16	3.98	885	0.38	0.38	0.04	1.37	3945	27.8	0.3	0.45
206966		0.19	0.65	183.9	0.19	0.15	4037.1	RKDC04-249	34	36	4.13	932	0.16	0.15	0.05	2.47	4066	19.8	0.15	0.14
207018		11.33	77.68	201.2	8.19	7.92	4279.5	RKDC04-250	54	56	4.19	968	10.2	8.87	5.7	228	4135	25	8.63	9.11

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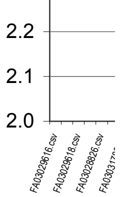
SGS Check Results								Original Chemex Results												
Sample ID	suffix	Au met	Au +150	+150 wt	Au - 150	Au - 150A	total wt	HOLE_ID	FROM	TO	WEIGHTSPLIt	certificate	AU_TOT_MSA ppm	AU_<_MSA_Ppm	AU_>_MSA_mg	AU_>_MSA_Ppm	WT_<_MSA_Gm	WT_>_MSA_Gm	AU_FA_MSA_ppm	AUFA30
207057		0.05	0.15	213	0.04	0.05	4127.1	RKDC04-251	38	40	4.21	939	0.11	0.08	0.13	2.95	4132	45.1	0.1	0.05
207077		0.2	0.25	213.3	0.19	0.2	4306.5	RKDC04-252	32	34	4.18	917	0.26	0.26	0	0.12	4133	33.3	0.22	0.3
207094		0.05	0.06	214.8	0.05	0.05	4061	RKDC04-252	62	64	4.13	918	-0.05	-0.05	-0	-0.05	4061	43.1	0.04	0.04
207116		0.57	0.63	217.6	0.56	0.58	4232.9	RKDC04-253	16	18	3.95	907	0.57	0.58	0.01	0.4	3875	17.5	0.56	0.59
207204		0.21	0.01	206.1	0.24	0.21	3932.5	RKDC04-255	38	40	4.26	915	0.61	0.36	1.07	27.1	4110	39.4	0.34	0.38
207288		0.29	5.47	213.4	0	0	4125.3	RKDC04-258	0	4	4	897	0.05	-0.05	0.16	6.33	3869	24.7	0.01	0.01
207326		0.01	0.01	203.9	0	0	4125.2	RKDC04-258	72	74	4.04	898	-0.05	-0.05	-0	-0.05	3911	34.7	0.01	0.01
207348		0.02	0.02	214.1	0.02	0.02	4024	RKDC04-259	32	34	3.98	901	-0.05	-0.05	-0	-0.05	3925	31.4	0.01	0.01
207366		0.01	0.01	207	0	0	4018.8	RKDC04-260	12	14	4.18	929	-0.05	-0.05	-0	-0.05	4143	23.7	-0.01	-0.01
207405		0.01	0.01	143.2	0	0	4049.9	RKDC04-261	32	34	4.11	972	-0.05	-0.05	-0	-0.05	3994	30.9	-0.01	0.01
207444		0.4	5.34	160	0.19	0.2	4050.8	RKDC04-263	20	22	3.53	977	0.19	0.19	0.01	0.36	3464	22.5	0.18	0.19
207482		0.04	0.01	224.1	0.07	0	4148.7	RKDC04-264	42	44	4.08	979	-0.05	-0.05	-0	-0.05	3956	29.6	-0.01	-0.01
207521		0.97	20.19	166.9	0.13	0.11	3936.8	RKDC04-265	14	16	3.8	973	0.76	0.27	1.87	44.9	3697	41.5	0.31	0.22
207615		0.01	0.01	167.9	0	0	4077.4	RKDC04-266	54	56	3.84	1088	-0.05	-0.05	-0	-0.05	3738	47.8	-0.01	0.01
207654		0.01	0	227.1	0.01	0	4124.1	RKDC04-267	50	52	3.9	967	-0.05	-0.05	-0	-0.05	3789	28.4	-0.01	-0.01
207694		0.01	0.02	208.3	0.01	0.02	4205.1	RKDC04-268	34	36	3.92	975	-0.05	-0.05	-0	-0.05	3848	28.1	-0.01	-0.01
207772		0.03	0.04	224	0.03	0.03	3879.3	RKDC04-269	38	40	4.17	1096	-0.05	-0.05	-0	-0.05	4129	20.2	0.01	0.01
207811		0.01	0	201.1	0	0.01	3879.2	RKDC04-269	104	106	4.15	1098	-0.05	-0.05	-0	-0.05	4061	31.2	-0.01	-0.01
207821		3.17	5.12	218.6	3	3.11	3843.2	RKDC04-270	10	12	4.33	949	3.57	3.56	0.1	7.75	4271	13.4	3.71	3.4
207842		0.24	0.39	212.8	0.22	0.25	4378.7	RKDC04-270	46	48	4.28	970	0.3	0.3	0	0.37	4295	10.9	0.32	0.27
207848		3.19	17.8	215.8	2.24	2.53	4129.9	RKDC04-271	6	8	3.87	970	2.09	1.88	0.86	29	3843	29.5	1.77	1.99
207889		0.92	0.74	213	0.88	0.98	4435.2	RKDC04-272	10	12	4.19	1056	0.87	0.87	0.03	0.94	4101	36.3	0.93	0.8
207927	A	0.01	0.03	189.7	0	0	3942.1	RKDC04-272	76	78	3.93	1057	-0.05	-0.05	-0	-0.05	3852	31.3	0.01	-0.01
207927	B	0.01	0.02	188.3	0.02	0	4117	RKDC04-272	76	78	3.93	1057	-0.05	-0.05	-0	-0.05	3852	31.3	0.01	-0.01
208004		0.01	0	182.8	0	0.01	3571	RKDC04-274	10	12	3.79	962	-0.05	-0.05	-0	-0.05	3718	13.7	-0.01	-0.01
208043		0.06	0.53	211.7	0.05	0.01	3419.2	RKDC04-275	0	4	3.5	964	0.16	-0.05	0.32	4.67	2444	67.5	0.04	0.03
424155		1.39	4.55	218.2	1.25	1.14	3807.3	RKRC04-024	45.7	47.2	4.08	997	0.9	0.77	0.55	20.4	4008	26.8	0.65	0.88
425170		0.77	2.35	216	0.68	0.68	4216.8	RKRC04-025	50.3	51.8	4.58	984	0.91	0.88	0.21	4.57	4416	45	0.91	0.84
432120		0.47	0.97	193.8	0.4	0.47	3117.7	RKRC04-032	35.1	36.6	3.96	1029	0.51	0.51	0.02	0.53	3781	43.7	0.53	0.48
434140		0.61	2.91	217.4	0.25	0.43	2047.5	RKRC04-034	41.2	42.7	4.07	1007	0.61	0.49	0.5	12.4	3981	40.6	0.54	0.44
435165		3.41	47.54	164.5	1.69	1.67	4360.5	RKRC04-035	48.8	50.3	3.91	1020	3.24	1.93	5.17	144	3843	36	1.89	1.96
437120		0.16	0.15	217.1	0.16	0.16	4146.8	RKRC04-037	35.1	36.6	4.07	1021	0.21	0.21	0.01	0.26	4009	19.2	0.23	0.18
439130		0.47	2.94	237.8	0.42	0.23	4339.3	RKRC04-039	38.1	39.6	3.93	941	0.36	0.27	0.35	11.4	3878	30.6	0.27	0.27
440110		0.66	4.65	236.8	0.5	0.32	3993.3	RKRC04-040	32	33.5	4.05	1051	0.32	0.22	0.43	11.7	4009	36.7	0.15	0.28
441210	A	1.49	3.49	234.1	1.28	1.43	3619.9	RKRC04-041	62.5	64	4.08	1092	0.99	0.95	0.22	7.21	3968	30.8	0.84	1.05
441210	B	3.25	49.62	224.3	0.5	0.81	4234.9	RKRC04-041	62.5	64	4.08	1092	0.99	0.95	0.22	7.21	3968	30.8	0.84	1.05
442025	A	1.17	3.07	205.3	1.09	1.06	4412.2	RKRC04-042	6.1	7.62	4.04	1042	1.43	1.41	0.16	5.08	3977	31.9	1.34	1.47
442025	B	0.38	0.62	221.8	0.39	0.35	4052.4	RKRC04-042	6.1	7.62	4.04	1042	1.43	1.41	0.16	5.08	3977	31.9	1.34	1.47
443045		1.82	21.69	209.8	0.59	0.91	4113.6	RKRC04-043	12.2	13.7	4.03	1074	2.08	1.23	3.38	86.9	3896	38.9	1.32	1.14

SGS Check Results								Original Chemex Results													
Sample ID	suffix	Au met	Au +150	+150 wt	Au - 150	Au - 150A	total wt	HOLE_ID	FROM	TO	WEIGHTSPLIt	certificate	AU_TOT_MSA ppm	AU_<_MSA_Ppm	AU_>_MSA_mg	AU_>_MSA_Ppm	WT_<_MSA_Gm	WT_>_MSA_Gm	AU_FA_MSA_ppm	AUFA30
445015		0.65	6.04	195.4	0.29	0.43	3819.8	RKRC04-045	3.05	4.57	4.28	1095	0.66	0.49	0.74	50.5	4211	14.6	0.47	0.5
447060		0.91	8	212.3	0.35	0.58	3605.7	RKRC04-047	16.8	18.3	4.07	1054	0.76	0.48	1.17	41.1	3990	28.4	0.5	0.45
448050		0.97	15.28	219.5	0.21	0.21	4352.2	RKRC04-048	13.7	15.2	4.14	1043	0.9	0.31	2.41	48.5	4015	49.8	0.4	0.22



Memo

To	**Jack Cote**	File No.	
From	**Steve Blower**	cc	**Scott Long**
Tel	**604 664-4116**		
Fax	**604 664-3057**		
Date	**24, November, 2003**		

Subject **Rock Creek November 2003 QA-QC**

Further to your request for guidance on re-assaying of sample batches from the 2003 drilling program, standard analyses were reviewed from the Rock Creek project for certificates dated September to November 2003.

Summary

AMEC recommends the following:

1. Four sample batches that contained 7pa standards which returned values outside of the Chemex lab mean +/- 3 standard deviation tolerance level should be examined for sample mix-ups and then re-assayed if no obvious explanation for the markedly low results can be found.
2. With the four outlier standard results (see above) removed from the population, a group of four additional sample batches cause the 7 pt moving average for standard 7pa to drop below 95 percent of the certified value (adjusted with confidence limits) of 3.0 g/t. These four sample batches should also be examined for sample mix-ups and then re-assayed if no obvious explanation for the results can be found.
3. Two sample batches that contained 2pa standards which returned values outside of the Chemex lab mean +/- 3 standard deviation tolerance level should be examined for sample mix-ups and then re-assayed if no obvious explanation for the markedly low results can be found.
4. The reason for the drift in the results for the recent standard 2pa (lower values with time) values should be investigated. If the drift continues, further re-assaying may be required on the most recent batches.
5. All sample batches that contained blanks that returned values greater than 0.1 g/t should be examined for sample mix-ups and then re-assayed if no obvious explanation for the markedly high results can be found.
6. Re-assays should be conducted on new splits of pulps if there is sufficient sample remaining. If not, then coarse reject material will have to be used. Samples should be submitted in their original order along with new standards and blanks.

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Standard 7pa

All of the results for Standard 7pa (including outliers) are presented in chronological order in Figure 1. In AMEC's opinion, four results at or beyond the 'lab mean +/- 3 standard deviation' lines are outliers (certificates FA03029618, FA03033198, EL03044575, and EL03044130) and the reason for their large differences from the mean grade should be determined (sample mix-up, etc.). If the reason for the anomalous values cannot be determined, then all of the samples in batches that contained these 7pa outliers should be re-assayed. Reassays should be done on pulps if sufficient material remains.

After removal of the outliers, the 7 point moving average line should stay within +/- 5 percent of the certified mean value (adjusted for the confidence limits). This graph is displayed in Figure 2. A group of four standards (circled in Figure 2) causes the moving average trend line to drop well below the +/- 5 percent line. These four standard results (FA03032526, FA03033013, FA03032525 and FA03032528) should be examined to determine if sample mix-ups, etc. are to blame for the poor results. If no explanation can be found, then all of the samples in batches that contained these standards should be re-assayed

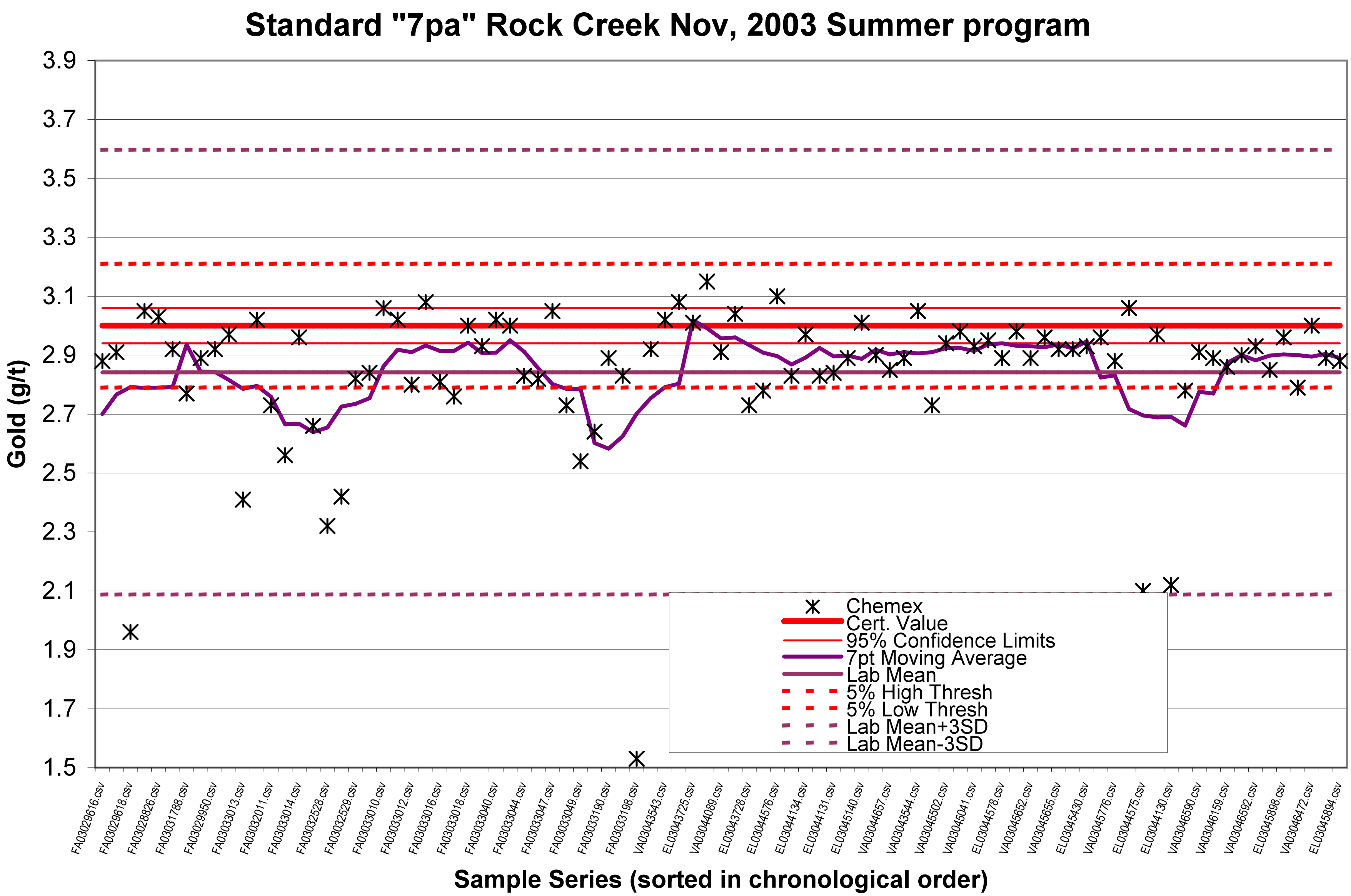
Standard 2pa

Results for Standard 2pa are presented in chronological order in Figure 3. A clear trend of decreasing grades with time is observed. In AMEC's opinion, two results that plot beyond the 'lab mean +/- 3 standard deviation' lines are outliers (certificates FA03031786 and FA03033197) and the reason for their large differences from the mean grade should be determined (sample mix-up, etc.). If the reason for the anomalous values cannot be found, then all of the samples in batches that contained these outliers should be re-assayed. After removing the two outliers (Figure 4), the moving average trend line begins to move beyond the - 5 percent line for the most recent sample batches. If this trend continues with future standard results, further re-assays may be required.

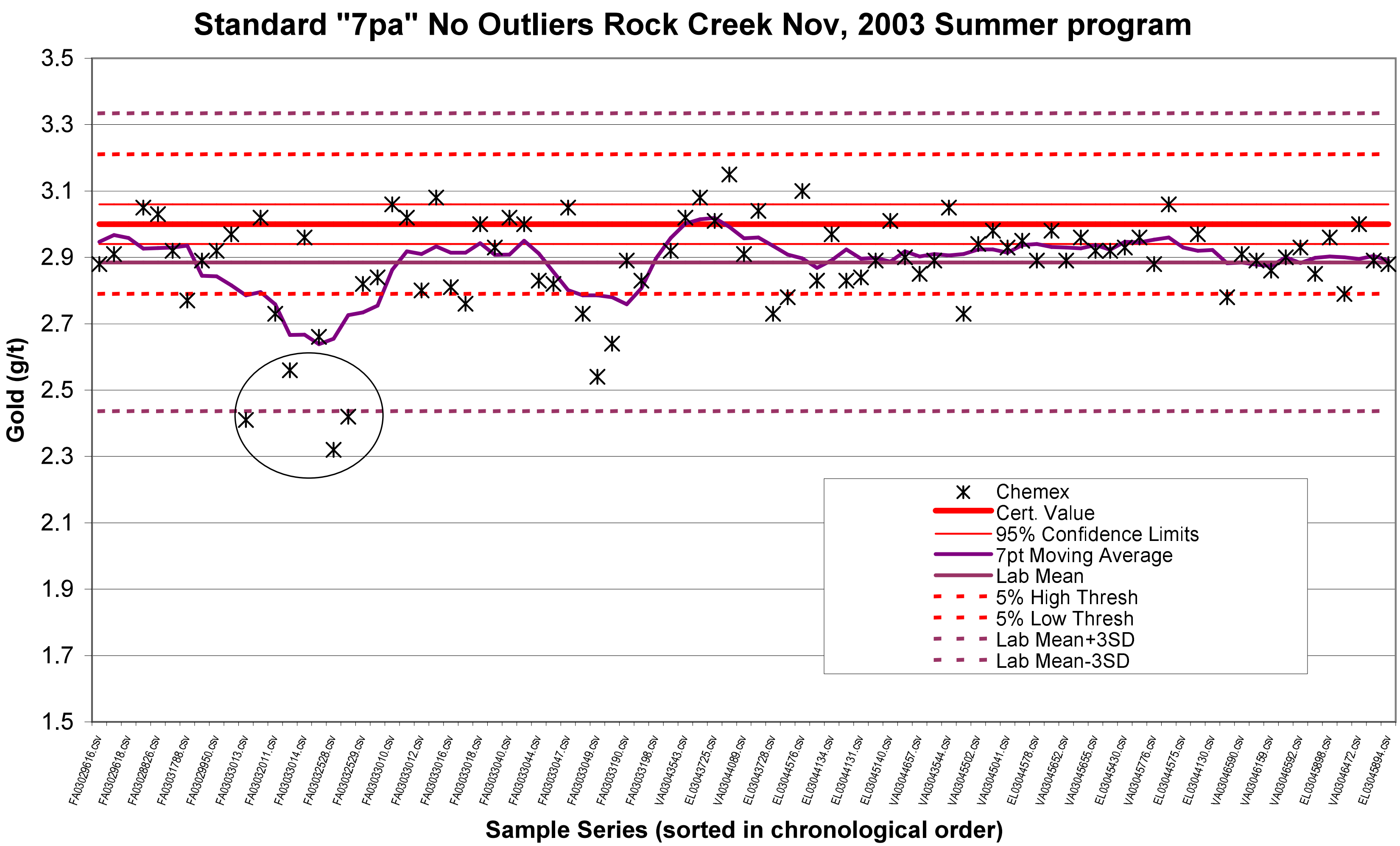
Blanks

The source of the Rock Creek blank reference material is not known. If the blanks are commercially prepared and certified blanks, then a threshold of three times the detection limit can be used. If the blanks are from naturally occurring material, then an upper threshold of the mean + 3 standard deviations would suffice. A chronological plot of the Rock Creek blank analyses is presented in Figure 5. Most of the analyses are below the detection limit, with a small number returning values between 0.002 and 1.1 g/t. Two blank assays were significantly higher than the rest (>0.7 g/t). In the absence of source information, AMEC recommends that all of the blanks that assayed greater than 0.1 g/t be checked for sample mix-ups or other errors. If no explanation can be found, then all of the samples from the batches containing these blanks should be re-assayed due to possible contamination. Re-assays should be done on pulps if sufficient sample material is available.

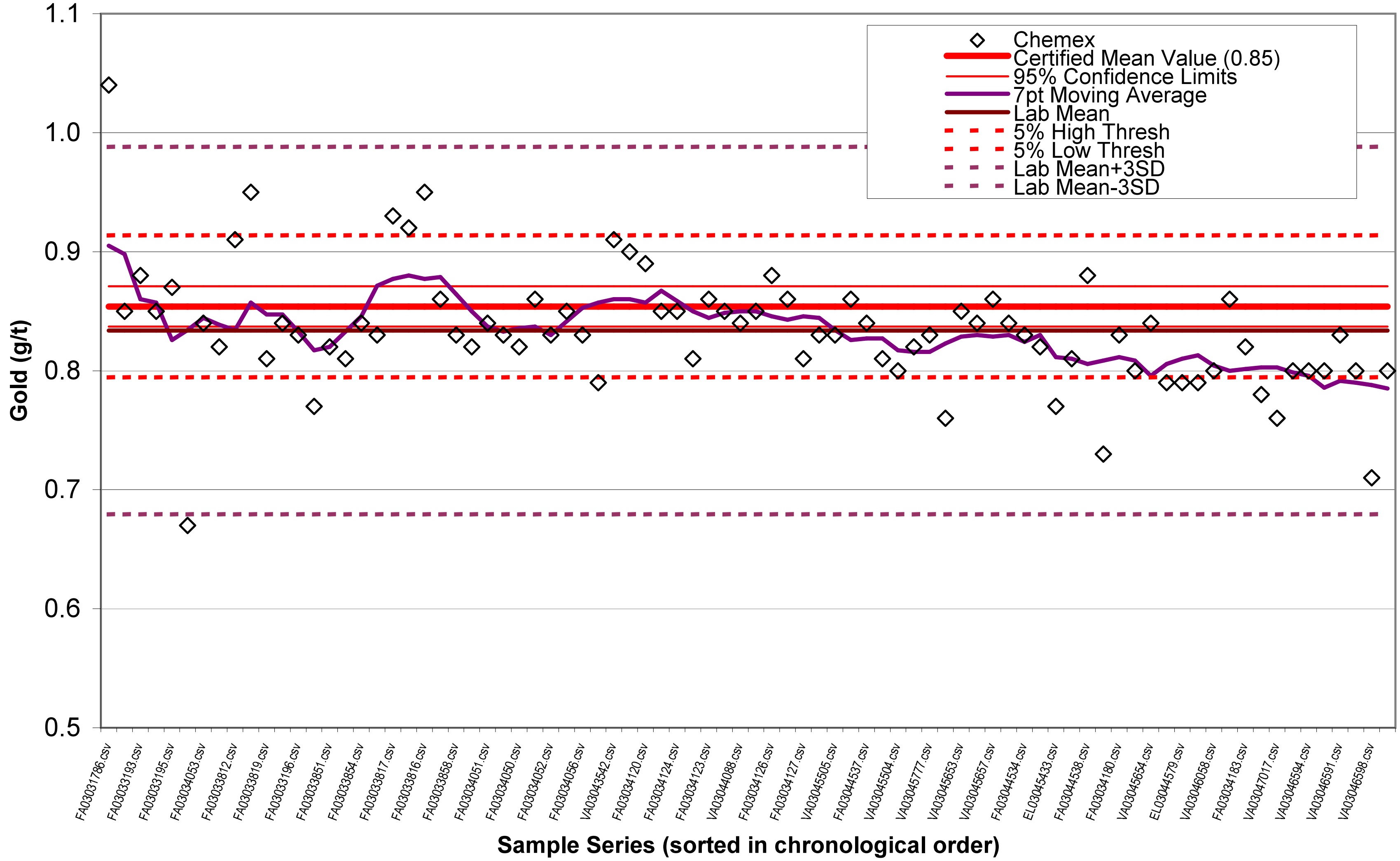
Sincerely,
Steve Blower
steve.blower@amec.com



Standard "7pa" Rock Creek Nov, 2003 Summer program
Gold (g/t)
Sample Series (sorted in chronological order)
3.9
3.7
3.5
3.3
3.1
2.9
2.7
2.5
2.3
2.1
1.9
1.7
1.5
Chemex
Cert. Value
95% Confidence Limits
7pt Moving Average
Lab Mean
5% High Thresh
5% Low Thresh
Lab Mean+3SD
Lab Mean-3SD


Standard "7pa" No Outliers Rock Creek Nov, 2003 Summer program
3.5
3.3
3.1
2.9
2.7
2.5
2.3
2.1
1.9
1.7
1.5
Gold (g/t)
Chemex
Cert. Value
95% Confidence Limits
7pt Moving Average
Lab Mean
5% High Thresh
5% Low Thresh
Lab Mean+3SD
Lab Mean-3SD
FA03029616.csv
FA03029618.csv
FA03028826.csv
FA03031788.csv
FA03029950.csv
FA03033013.csv
FA03032011.csv
FA03033014.csv
FA03032528.csv
FA03032529.csv
FA03033010.csv
FA03033012.csv
FA03033016.csv
FA03033018.csv
FA03033040.csv
FA03033044.csv
FA03033047.csv
FA03033049.csv
FA03033190.csv
FA03033198.csv
VA03043543.csv
EL03043725.csv
VA03044089.csv
EL03043728.csv
EL03044576.csv
EL03044134.csv
EL03044131.csv
EL03045140.csv
VA03044657.csv
VA03043544.csv
VA03045502.csv
VA03045041.csv
EL03044578.csv
VA03045652.csv
VA03045655.csv
EL03045430.csv
VA03045776.csv
EL03044575.csv
EL03044130.csv
VA03046590.csv
VA03046159.csv
VA03046592.csv
EL03045898.csv
VA03046472.csv
EL03045894.csv
Sample Series (sorted in chronological order)

Standard "2pa" Rock Creek Summer 2003 Program



Standard "2pa" No Outliers Rock Creek Summer 2003 Program

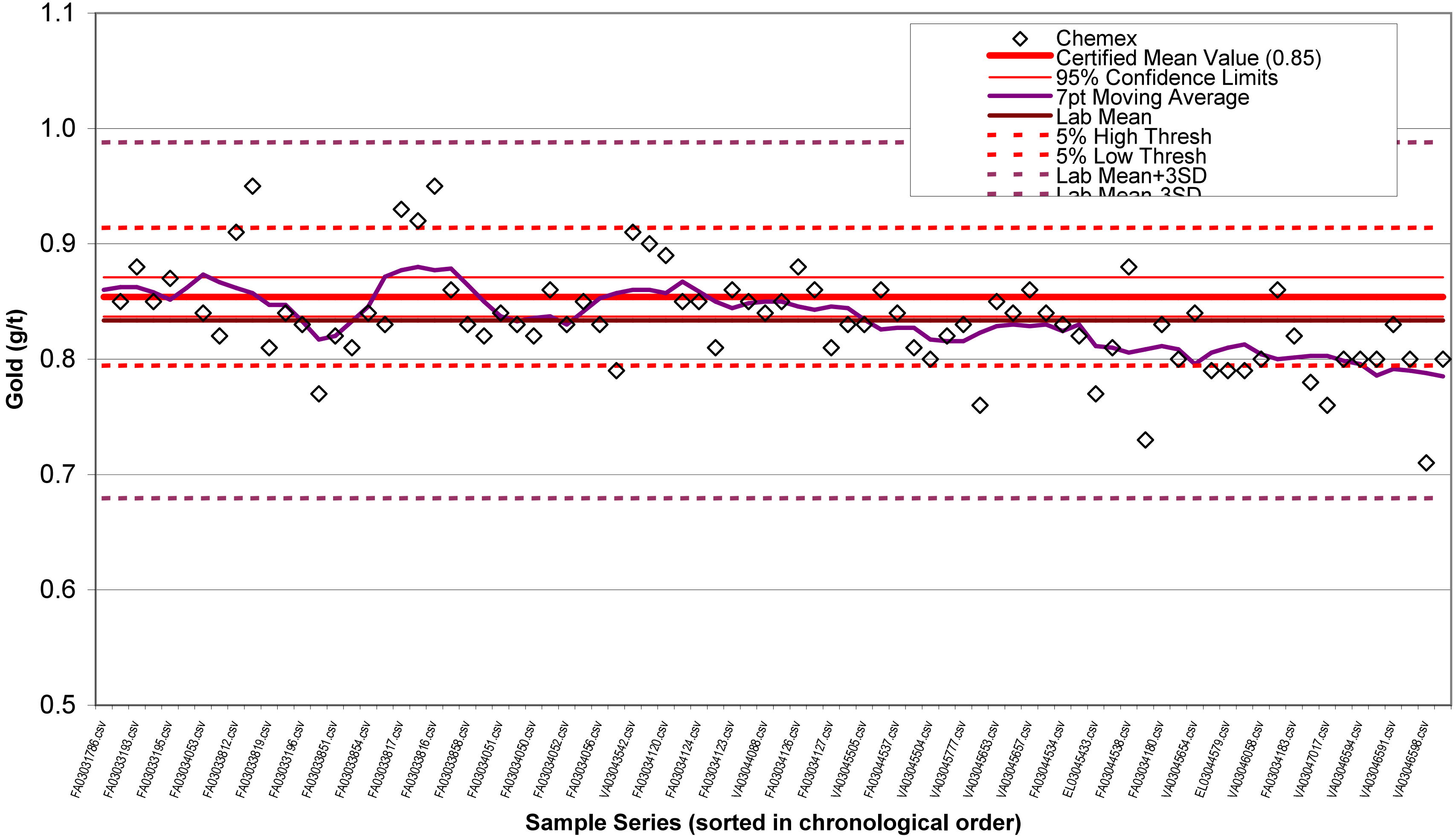
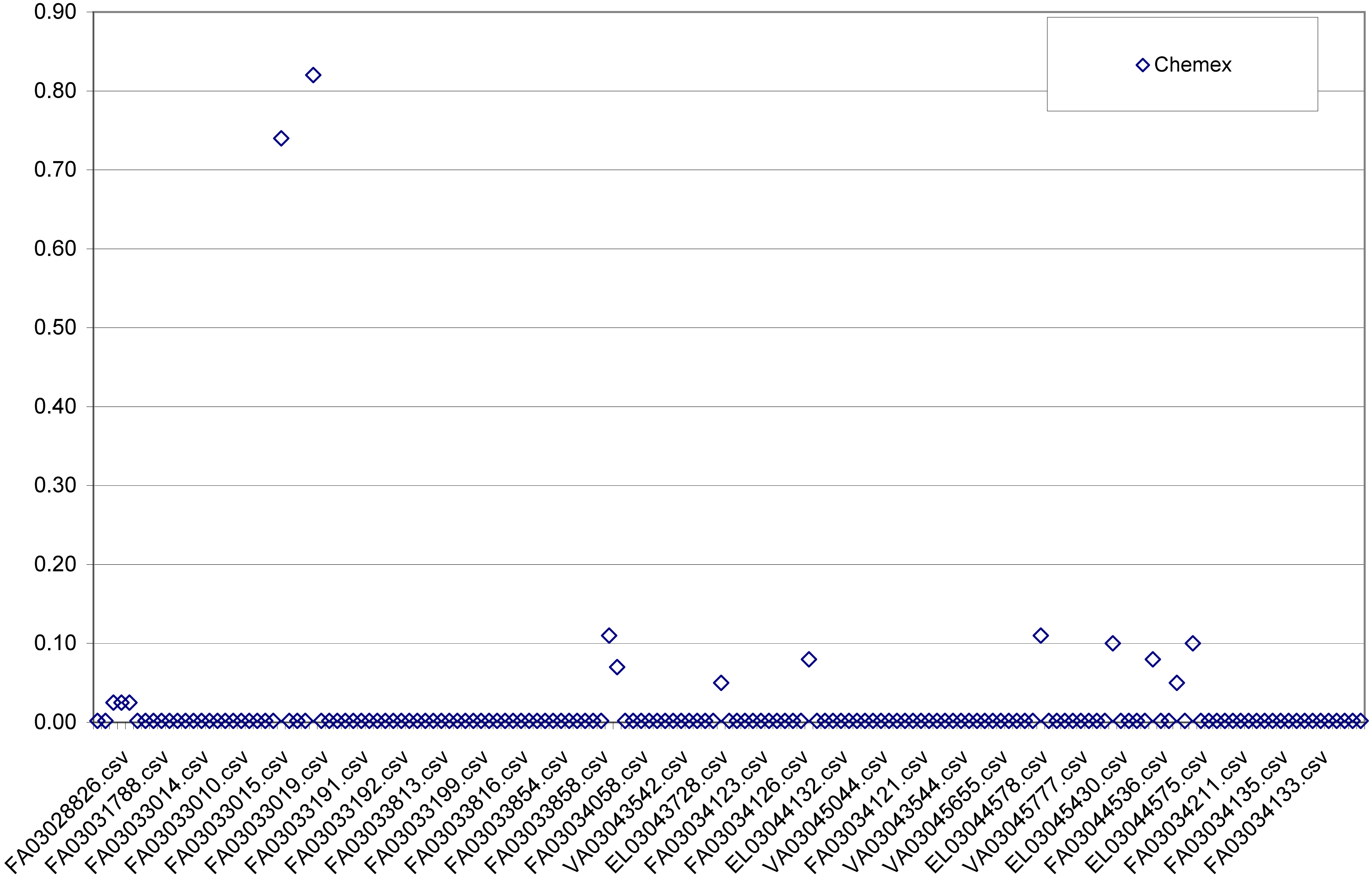


Figure 5
Rock Creek Nov, 2003 Blank Samples



Memo

To	**Kevin Francis**	File No.	
From	**Scott D. Long**	cc	**Harry Parker**
Tel	**602 343 2437**		
Fax			
Date	**28 January 2005**		

Subject **Review of 2003-2004 Field Season Quality Control Data**

Summary and Conclusions

Accuracy has been monitored by inserted Geostats standards. These indicate that the ALS Chemex results have a low bias, possibly due to episodic gold losses. The estimated overall low bias averages less than five percent and is therefore acceptably accurate for resource modeling. Chemex should not re-issue assay reports with revised results in those cases where they re-assayed only the standard reference materials and obtained a second result in agreement with the certified value.

Precision is consistent with samples that have a sizable “nugget effect”. The effect is seen in duplicate splits of the coarse reject duplicate and in the duplicate and triplicate samples of the minus-fraction of the screen fire assays. Additional assays of aliquots of the minus fraction could provide marginal improvements to precision, in cases where the duplicate or triplicate assays show high variability. Some marginal improvement might also be gained in the few cases where the plus-fraction is anomalously low in mass but high in grade, as these samples may have undergone over-grinding or gold losses. While this might provide some slight improvement, the number of samples involved is too small to likely influence global resource estimates.

Introduction

This is an update that covers the Quality Control data obtained for the 2003 and 2004 drilling seasons. AMEC provided advice for the Quality Control program (Blower, 2003).

The 2003-2004 Rock Creek Resource drilling programs include 10,331 assay results from 186 drill holes. There are 8,778 assayed intervals; the other 1,553 assay results are related to quality control, including duplicates, inserted standards and blanks.

Coverage of Assay Reports

A tally of Quality Control assays is shown in Table 1.

Table 1: Tally of Assay Quality Control

Sample Type	2003 Summer			2004 Summer		
	N	% of Total	N Holes	N	% of Total	N Holes
Routine Samples	5106	85%	94	3672	85%	89
Duplicates	302	5%	94	218	5%	89
Field Blanks	301	5%	94	218	5%	89
Std-2Pa	160	3%	71			
Std-7Pa	140	2%	68	41	1%	40
Std-15Pz				84	2%	69
Std-50P				93	2%	73
Other				3	0.1%	3
Total	6009			4329		

There are 302 assay certificates associated with the 2003 campaign, of which 300 include a field blank, 298 include at least one standard reference material, and 301 include at least one blind duplicate sample.

There are 218 assay certificates associated with the 2004 campaign, of which 216 include a field blank, 216 include at least one standard reference material, and 216 include at least one blind duplicate sample.

Quality control coverage is extensive and adequate to the needs of evaluating assay quality for use in resource models.

Sampling

Assayed sample lengths range from 0.3 to 10 meters with an average length of 1.96 meters. Reported pulp sample weights undergoing screen fire assay range from 0.13 to 5.65 kg with an average weight of 3.67 kg. The distributions of sample lengths and weights are shown in Figures 1 and 2. Average gold grade for ranges of sample length is shown in Figure 3; longer lengths have slightly lower gold grades compared to the shorter sample interval lengths. A plot of sample weight against sample length is shown in Figure 4.

There are less than 20 anomalously long drill core lengths; these are too few in number to impact resource estimation. There are also less than 20 samples with anomalously low screened fire weights. Longer sample intervals do not correlate with larger sample masses being assayed; samples that are anomalously low in weight and/or long in length are less likely to be representative.

Figure 1: Histogram of Sample Lengths

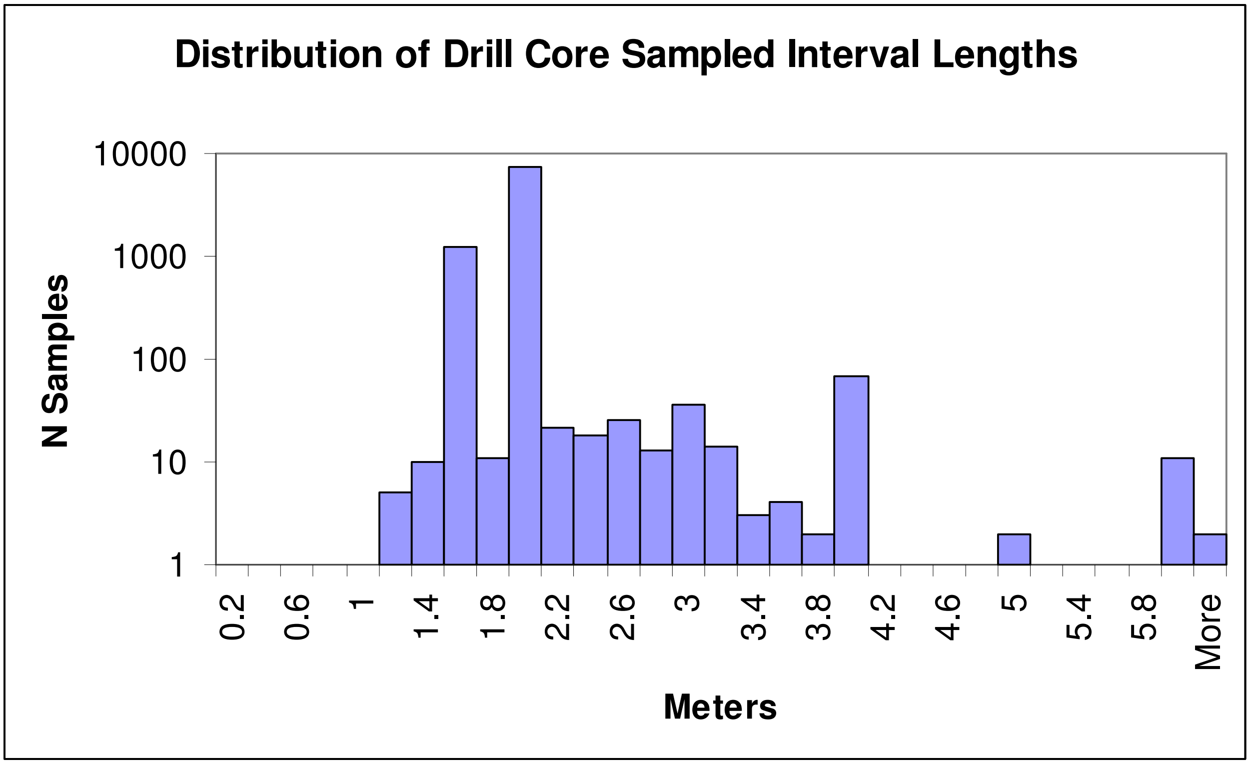


Figure 2: Histogram of Sample Screen Fire Assay Weights

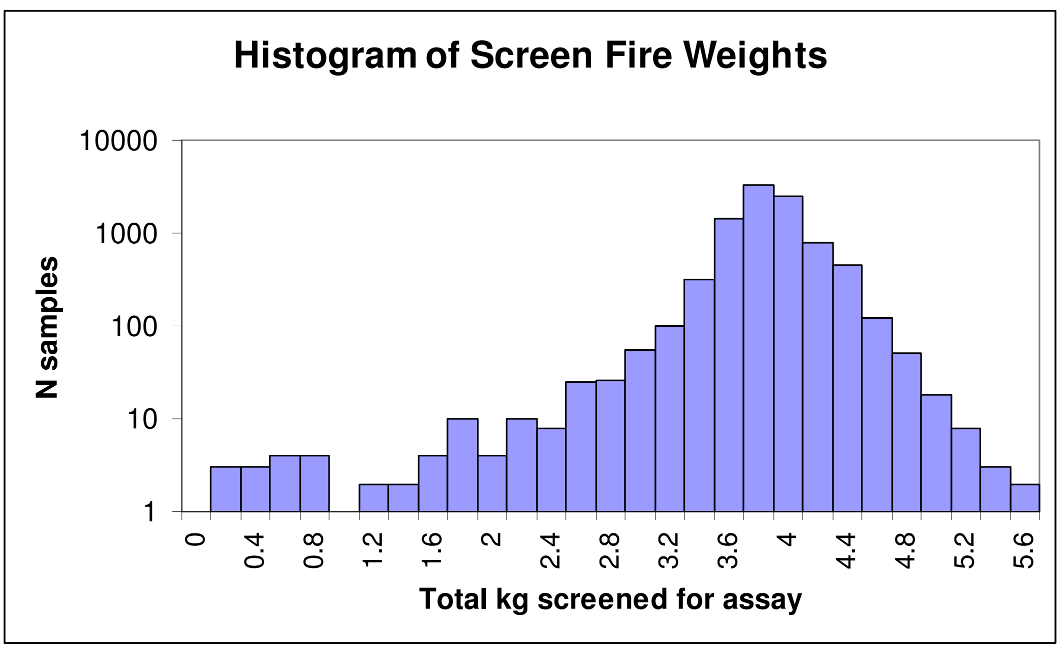


Figure 3: Au grade (g/t) as function of sample length

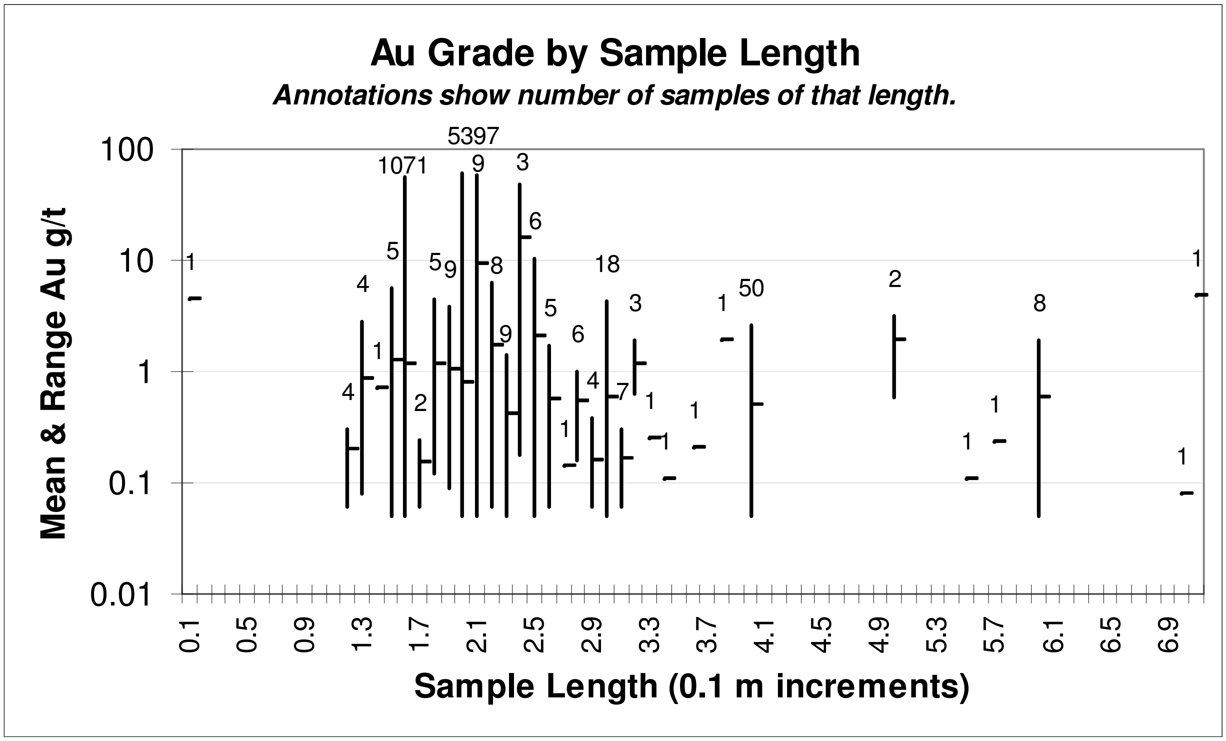
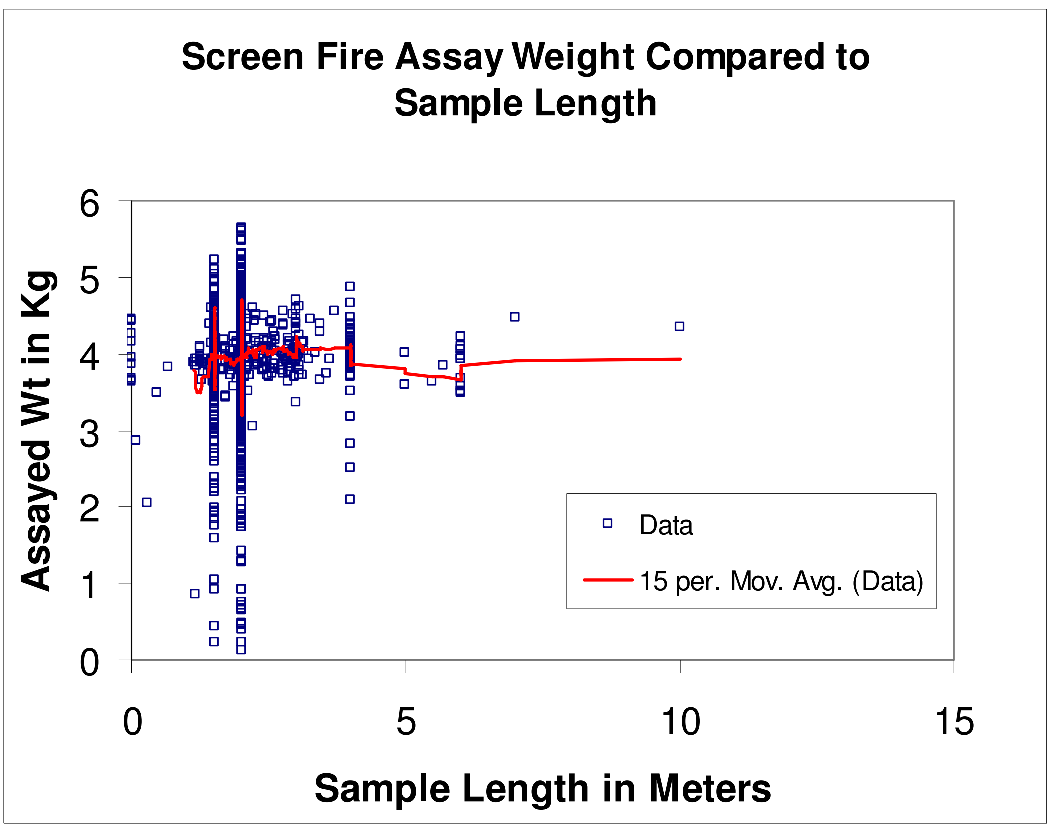


Figure 4: Sample Weight versus Sample Length

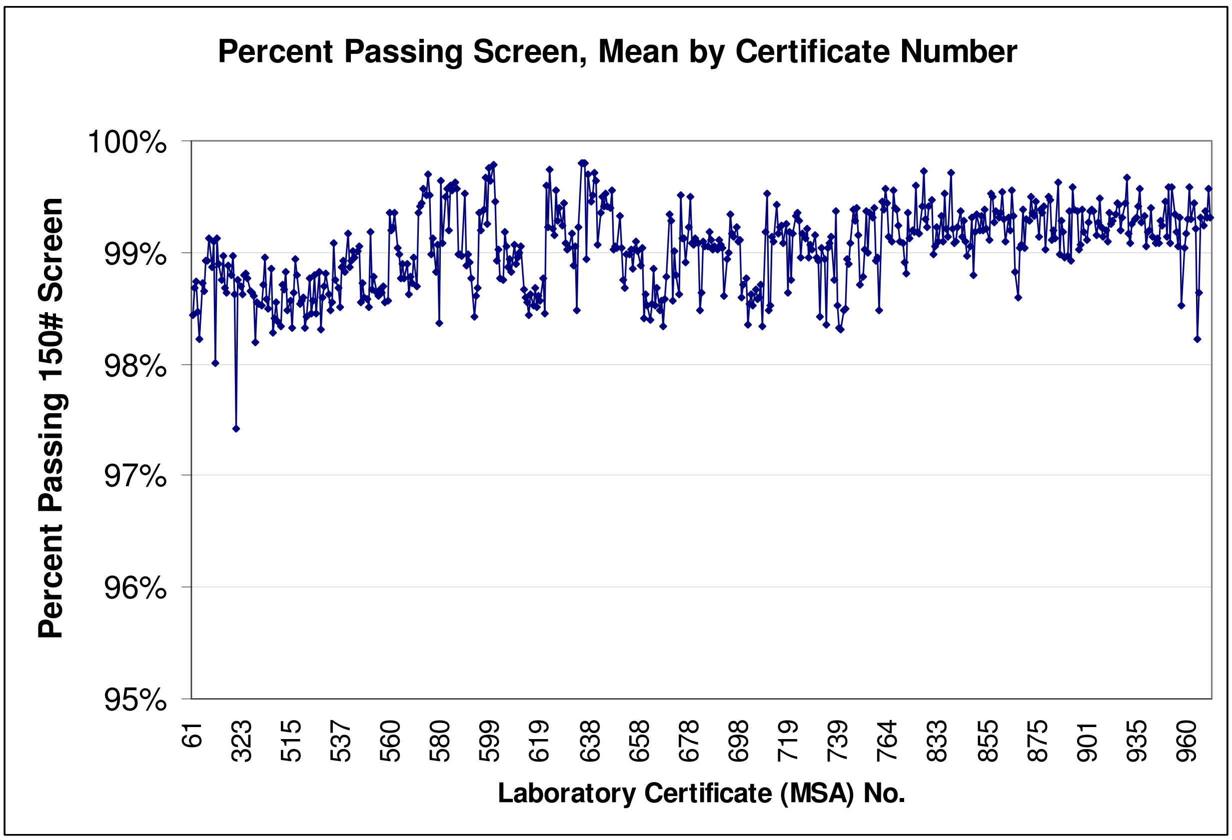


Pulverization and Screening

Samples are pulverized and screened through a 150 mesh (100 micron) screen. The weights of the coarse fraction (the “oversize” or “plus” fraction) and the fine fraction (the “undersize” or “minus” fraction) are recorded. The weights are used in the calculation of the final sample grade, which is determined by a mass-weighted average of the two size fractions. The weights also provide a measurement of the grind quality provided by pulverization.

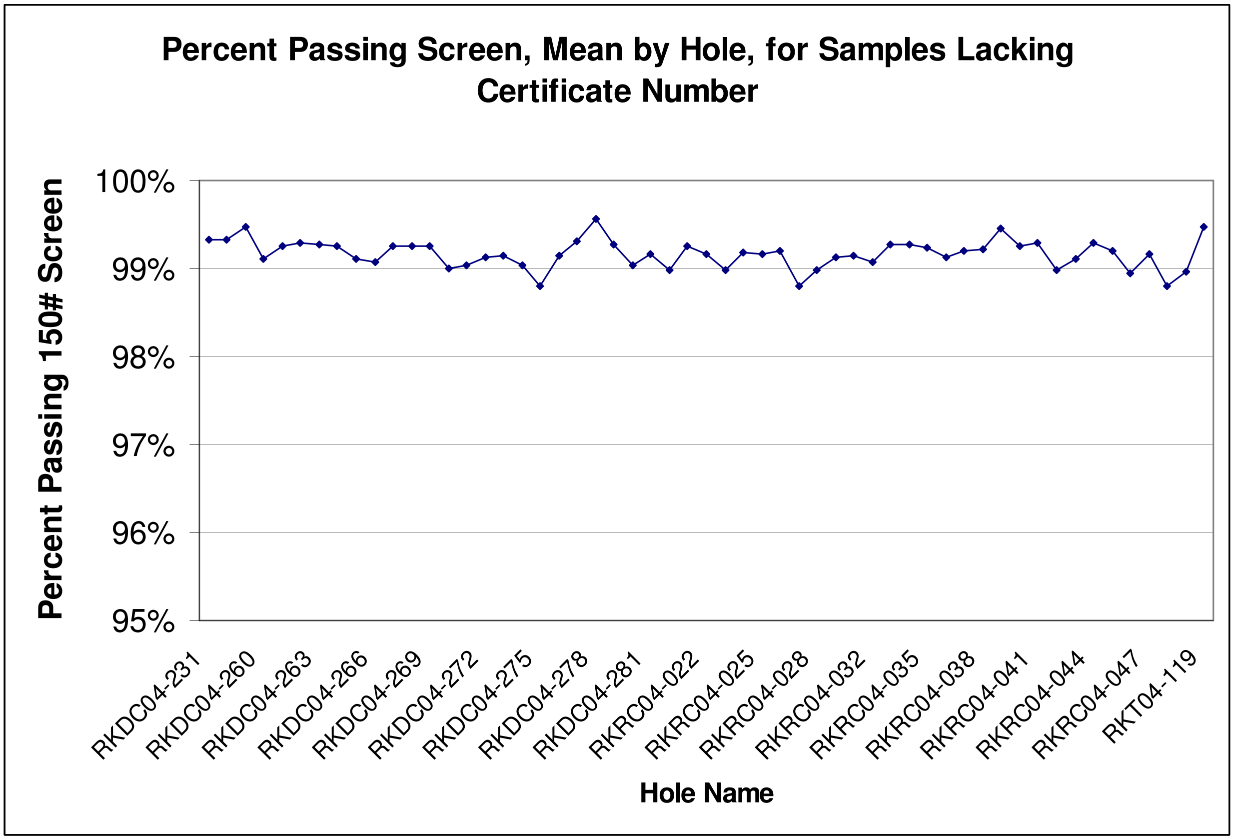
Figure 5 shows the mean percent passing the screen for each of 533 certificate numbers encompassing 7,709 samples. The number of measurements on which the average is based depends upon the number of samples in the submission; this ranges from 1 to 20 with a median of 19.

Figure 5: Pulp grind quality



There are 2,106 samples from 55 drill holes that lack a certificate number in the provided database and therefore cannot be included in Figure 5. These are shown in Figure 6, sequenced by drill hole name and with a mean calculated for each drill hole. The number of samples used to calculate the mean ranges from 1 to 83 with a median of 40.

Figure 6: Pulp grind quality



The percent passing is greater than is typical of a "conventional" (i.e. not screened) fire assay. Some additional grinding has probably been employed in order to reduce the weight of material atop the screen so that in most instances it can be accommodated within one crucible for fire assay.

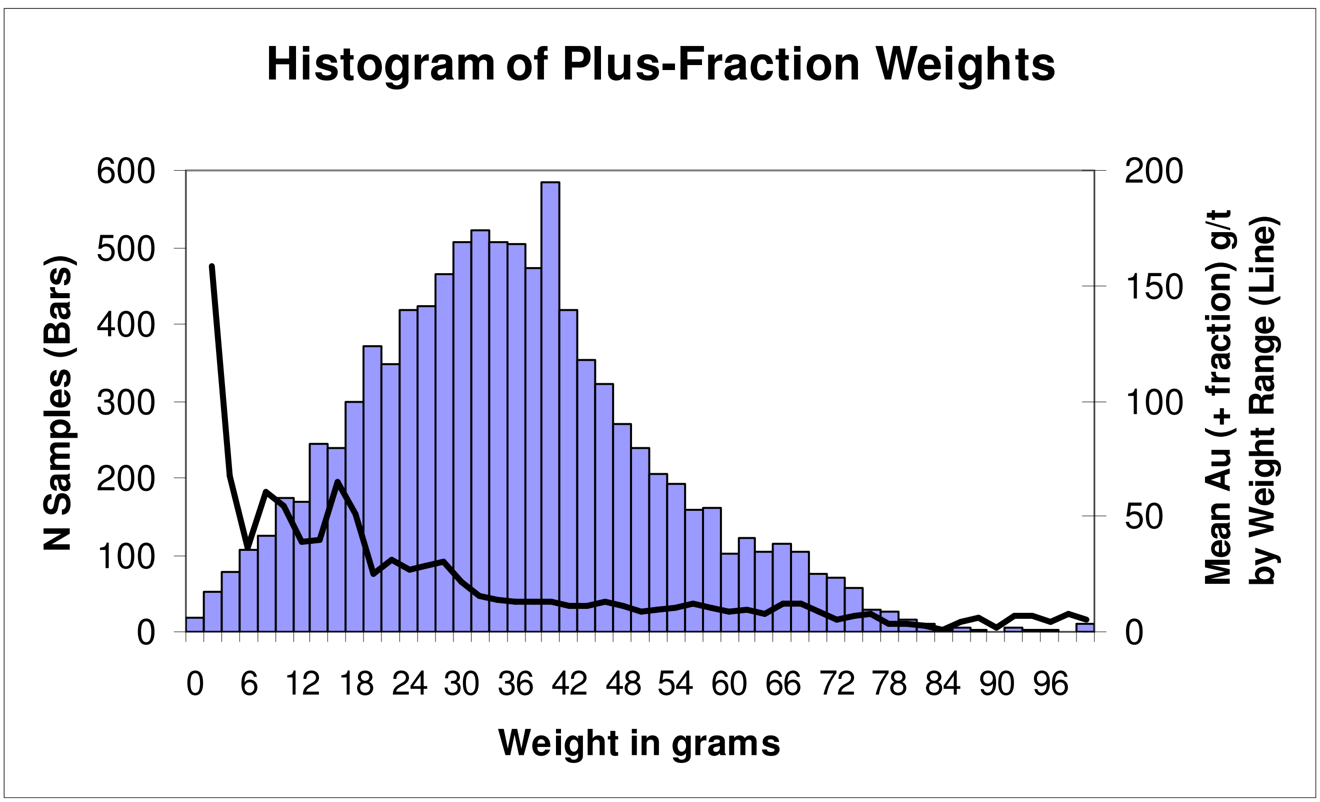
Screen Fire Assay Plus-Fraction (Coarse Fraction)

The "final" screen fire assay result that is assigned to a sample interval consists of an average result calculated from three or four fire assay results. The coarser portion that is retained atop the screen is weighed and fire assayed in its entirety.

A histogram of the plus-fraction weights, along with the average Au grade of the plus-fraction by weight ranges (two-cell running average), is shown in Figure 7. Note that the grades are those for the small plus-fraction, not the final calculated sample grades (which are much lower). The few samples where less than about six grams were recovered from the screen have very high plus-fraction grades; these samples may have been over-ground.

Over-grinding is undesirable because it may lead to gold losses to the pulverizer as gold plates onto surfaces; the gold can be subsequently picked up by the next one or two materials that pass through the pulverizer. If these include sand washes, the gold is lost; if they are samples, there is cross-contamination. The number of samples with very low plus-fraction weights is very small and thus acceptable.

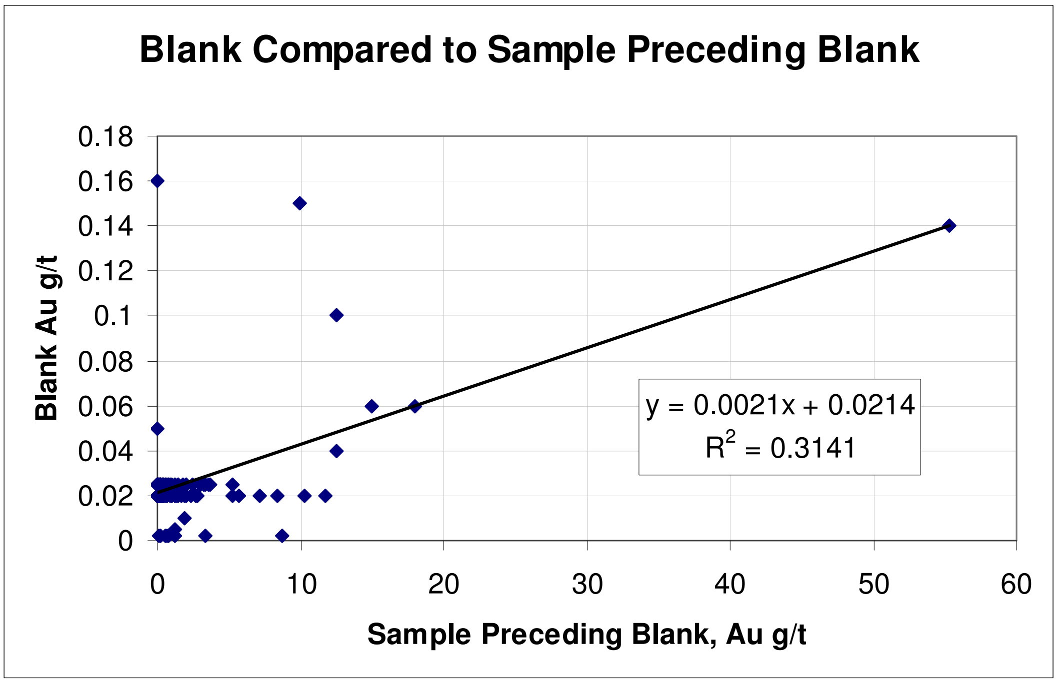
Figure 7: Histogram of Plus-Fraction Masses and Trend of Plus-Fraction Au Grades relative to obtained mass



Inserted Blank Material

Blank material was collected from a roadcut believed to contain negligible gold content. This material was submitted as a regular sample (blind to the laboratory) and serves as a check on sample cross-contamination. Cross contamination can be evaluated by comparing the grade of the blank sample to that of the sample that has preceded it through sample preparation (Figure 8).

Figure 8: Blank check for cross-contamination



There is a correlation between the grade of the preceding sample; the amount of contamination is sufficiently low as to have negligible impact on a resource model.

Standard Reference Materials

The 2003-2004 submissions to ALS Chemex included insertions of Geostats Standard Reference Materials. AMEC reviewed Geostats reports on the samples (Appendix A). Sufficient laboratories were employed in the Round Robin to establish reliable consensus values and the uncertainty on the consensus values. AMEC found the method of calculation of the consensus values and their uncertainties to be consistent with accepted practices in the mining industry.

Because the standard reference materials are provided to ALS Chemex as pulps whereas drill samples are submitted as core, the SRMs are not blind to the laboratory.

Standard Reference Material Performance

There are three standard reference materials that were included with the 2003-2004 assays. Control charts are shown in Figures 9 to 11.

Figure 9: Nova Gold Control Chart for Standard 7Pa

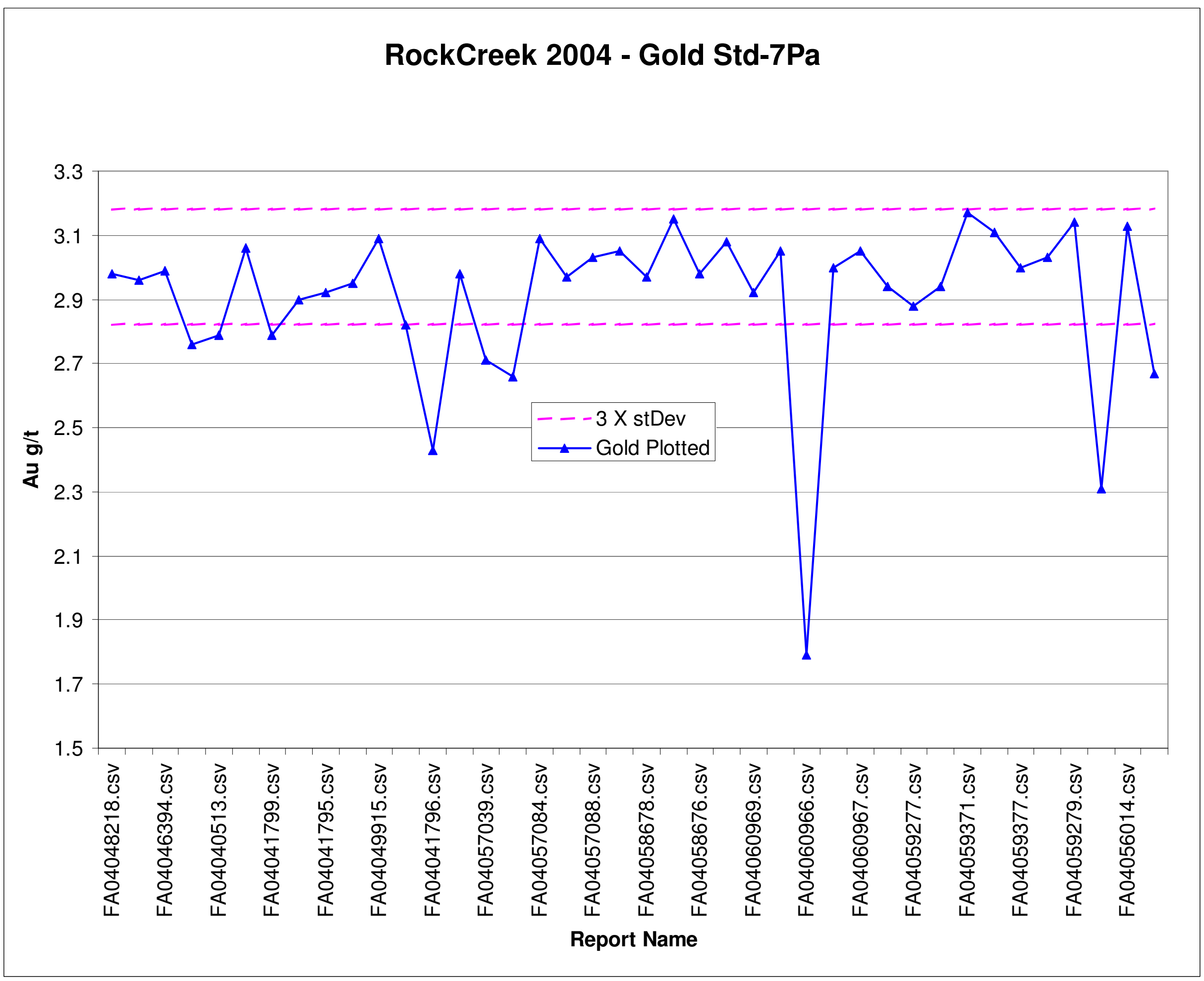


Figure 10: Nova Gold control chart for Standard 50P

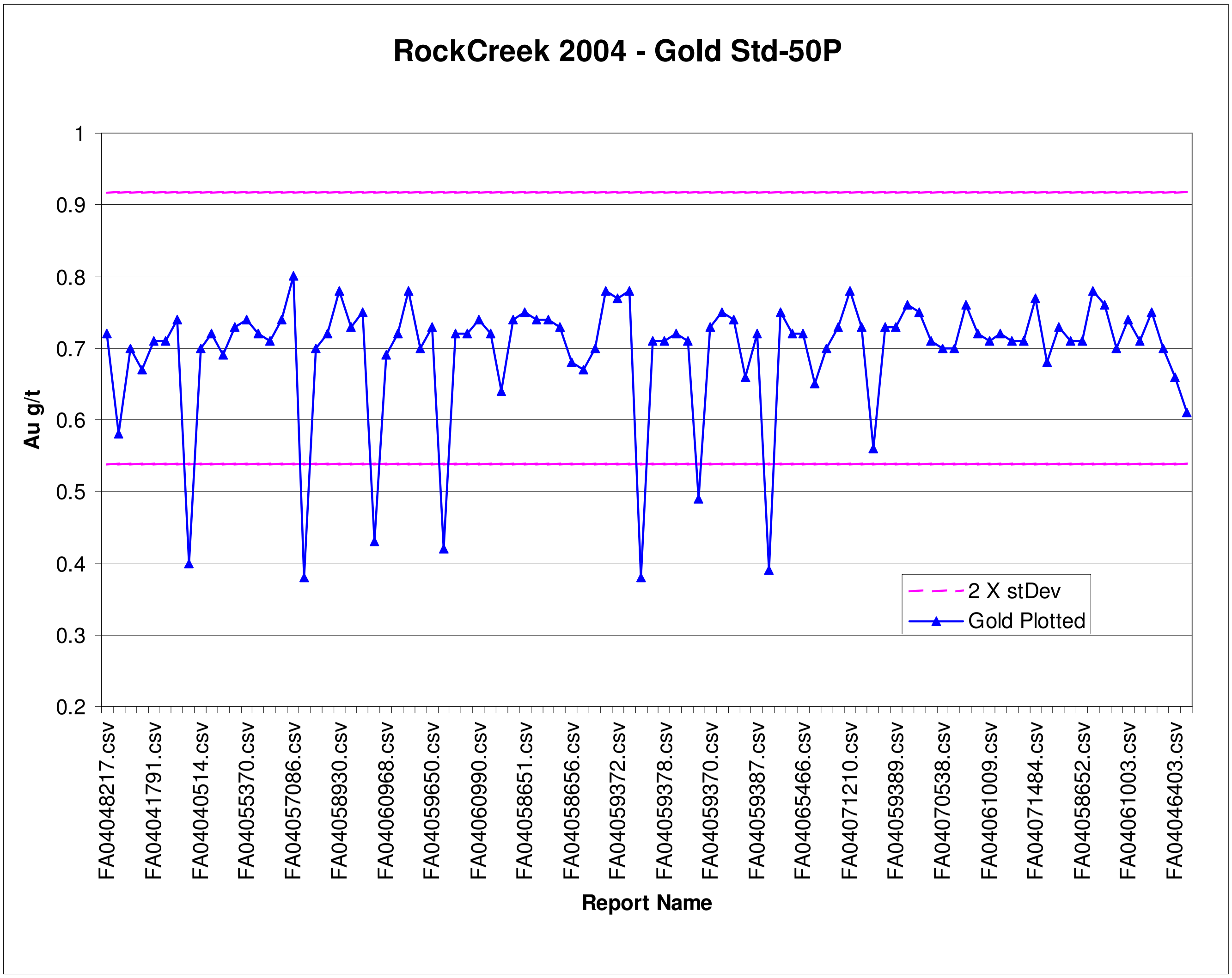
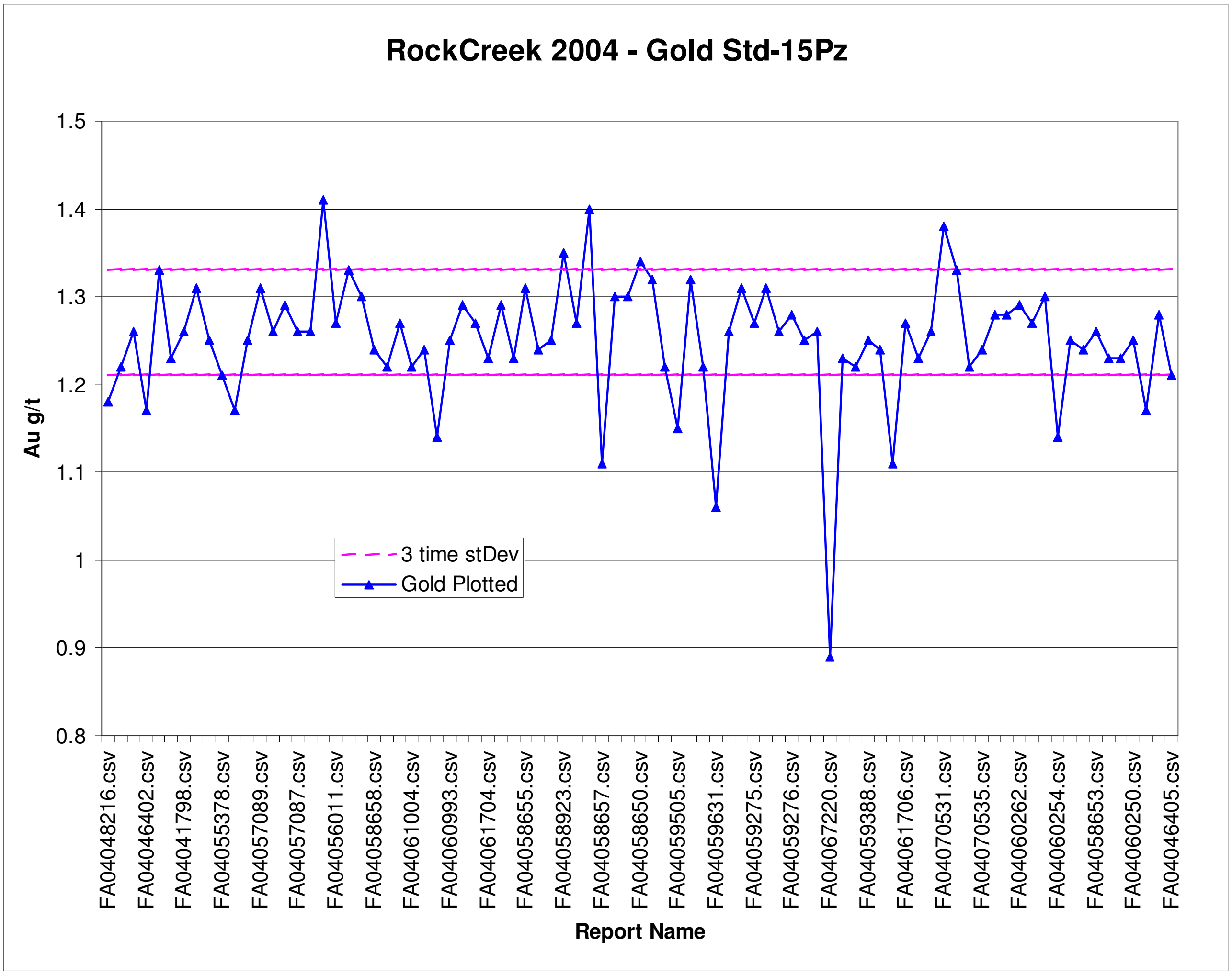


Figure 11: Nova Gold control chart for Standard 15Pz



These control charts indicate a low bias with episodic gold loss, as summarized in Table 2.

Table 2 SRM Performance 2003-2004, Au ppm

Standard	Certified Value	Obtained Mean	Estimated Bias
50p	0.727	0.696	-4.3%
15pz	1.27	1.251	-1.5%
7p	3	2.906	-3.1%

By comparing averages, the low bias is within five percent in all cases and thus acceptable. Chemex re-assayed the pulps with low results from standard *50p* at Nova Gold's request. The new results were in good agreement with the best values. This confirms that gold losses are occurring in the Chemex assays. Chemex has suggested that only the standards were effected by gold losses. AMEC does not agree with this view, and believes that episodic gold losses of about 0.3 ppm Au are occurring in the Chemex assays. It is unclear if these losses are occurring in a random fashion (spread across all batches) or are batch-specific. The frequency of occurrence seen in *50p* is roughly ten percent.

Coarse Reject Duplicates

The –10 mesh fraction was submitted in duplicate for the most recent samples, at a fairly even spacing during preparation. There are 108 duplicate pairs in the database with a median spacing of 20 samples (i.e. about five percent of samples are assayed in duplicate).

The duplicate pairs have sample numbers in sequence and so can be expected to be assayed sequentially. In virtually all cases, they will be fired in the same furnace load and undergo very similar treatment throughout the assaying process. Their variability therefore serves as an indication of within-batch precision of a roughly 4 kg sample of the 10 mesh material.

A simple xy chart of duplicate results are shown in Figure 12. Designation of one result of duplicate pairs as the "orginal" and one as the "duplicate" should be completely arbitrary, assuming the sample splitting is done correctly. The only meaningful information in such charts is the degree of dispersion, which can be more clearly seen if the maximum value of each pair is plotted against the minimum value; this approach in effect plots all points located below the x=y line an equal perpendicular distance above the line, thereby more clearly showing the dispersion of samples away from the y=x line.

The pair performance is presented as an xy scatterplot where the maximum value of each pair is plotted against the minimum value of each pair (Figure 13). This has the effect of placing all points on or above the x=y line, in order to better show the dispersion of points away from the x = y line.

For reference, the line y = 1.2 * x + 0.03 ppm Au is drawn on the chart; this is the level of performance that one can expect to obtain in cases where there is no coarse gold in the samples (e.g. Carlin-type gold deposits). Approximately five percent of the pairs have appreciable gold content with pair differences greater than 100 percent.

Figure 12: xy scatterplot of coarse reject duplicates

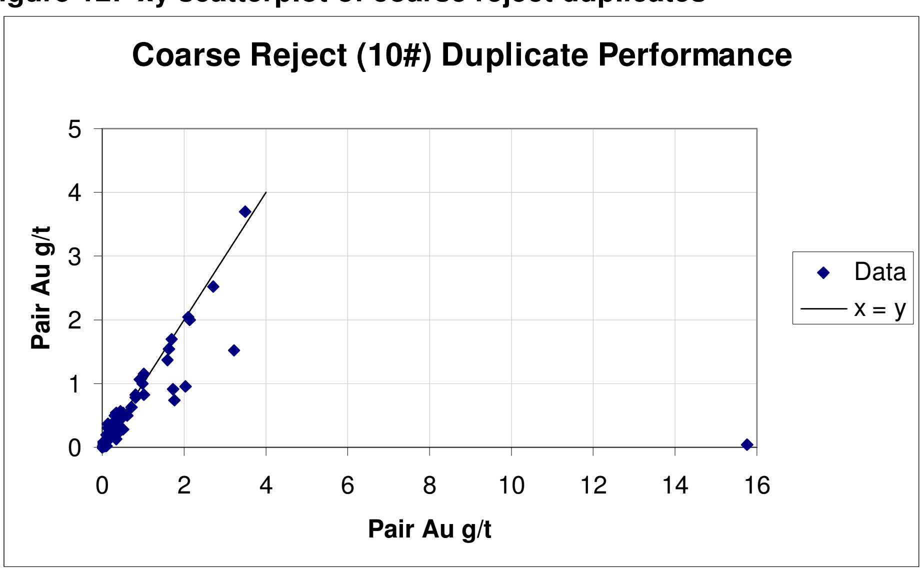
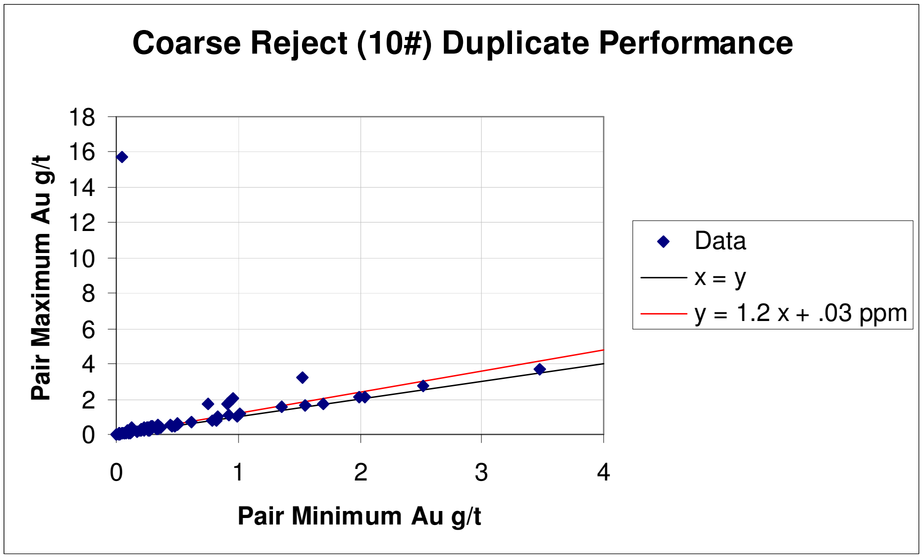
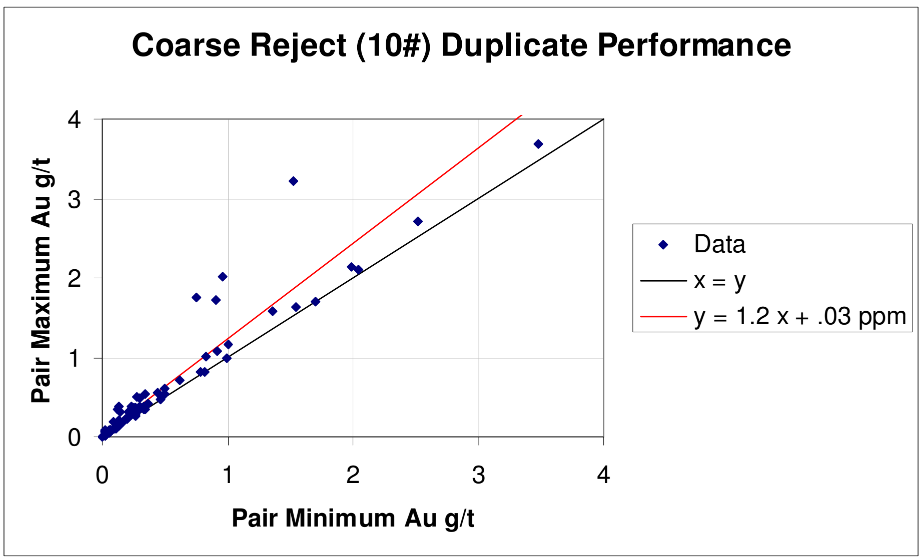
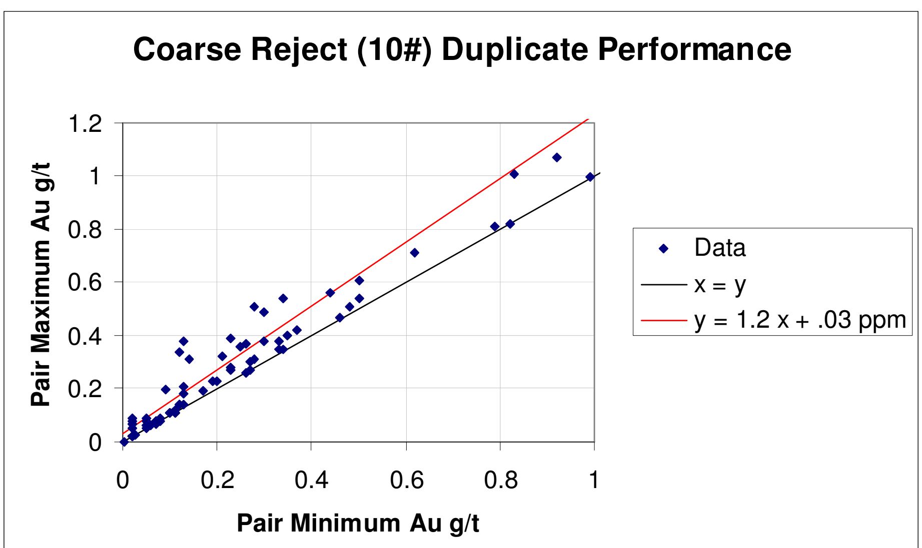


Figure 13: Coarse Reject Duplicates (Pair max. vs. pair min.) Shown at 3 scales for clarity.







Minus-Fraction Pulp Duplicates

The plus-fraction is assayed in its entirety and therefore contributes no sub-sampling variance to the assaying process. The minus-fraction is routinely sampled in duplicate, and the mean of the duplicate pair of results taken as the grade of the minus-fraction.

In some cases ALS Chemex elected to take a third aliquot of the minus-fraction. This was often done when, in the judgement of the assayer (ALS Chemex) the pair of results did not agree well. No set formula was used for making this decision. From this, one may infer the third assay was an aliquot fired in a later batch of samples.

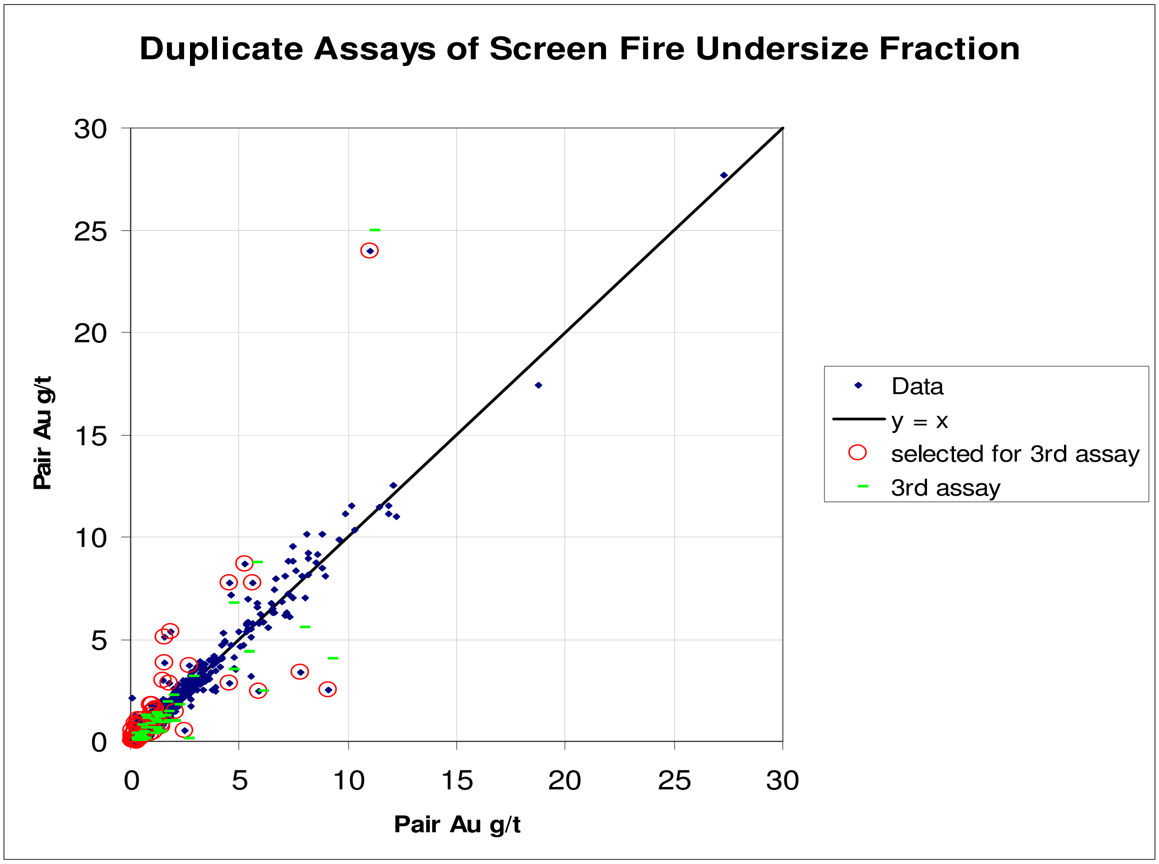
Performance of the minus-fraction duplicate results is shown in Figures 14 and 15. The third result is plotted in green and in some cases may plot below the y=x line because it is less than the pair minimum of the first two values. Minus-fraction samples that received a third assay are circled in red. Along with the y=x line, a red reference line is shown corresponding to y = 1.1 x + .03 ppm. This is a performance level obtainable with gold results from samples that have no "nugget effect".

A small fraction of samples show very poor precision. This is probably attributable to sample pulps that have gold-bearing particles in the range of 50 to 110 microns; i.e. small enough to pass through or become trapped in the screen, and large enough to produce a "nugget effect" in a 40 to 50 gram sample taken for fire assay. This may be unavoidable (e.g. related to the free-milling size of gold particles) or it may be avoidable by careful grinding.

Sample pairs that showed poor agreement and were consequently assayed a third time persisted in having poor precision (green symbols, Figure 12). This supports the notion that the precision is controlled by the nature of the sample pulp rather than the assaying process. The selection of samples for additional assaying could have benefited from a more systematic selection process.

Overall, the precision demonstrated by the minus-fraction duplicates is adequate for a coarse gold project.

Figure 14: xy scatterplot of undersize duplicate pairs, shown at two scales



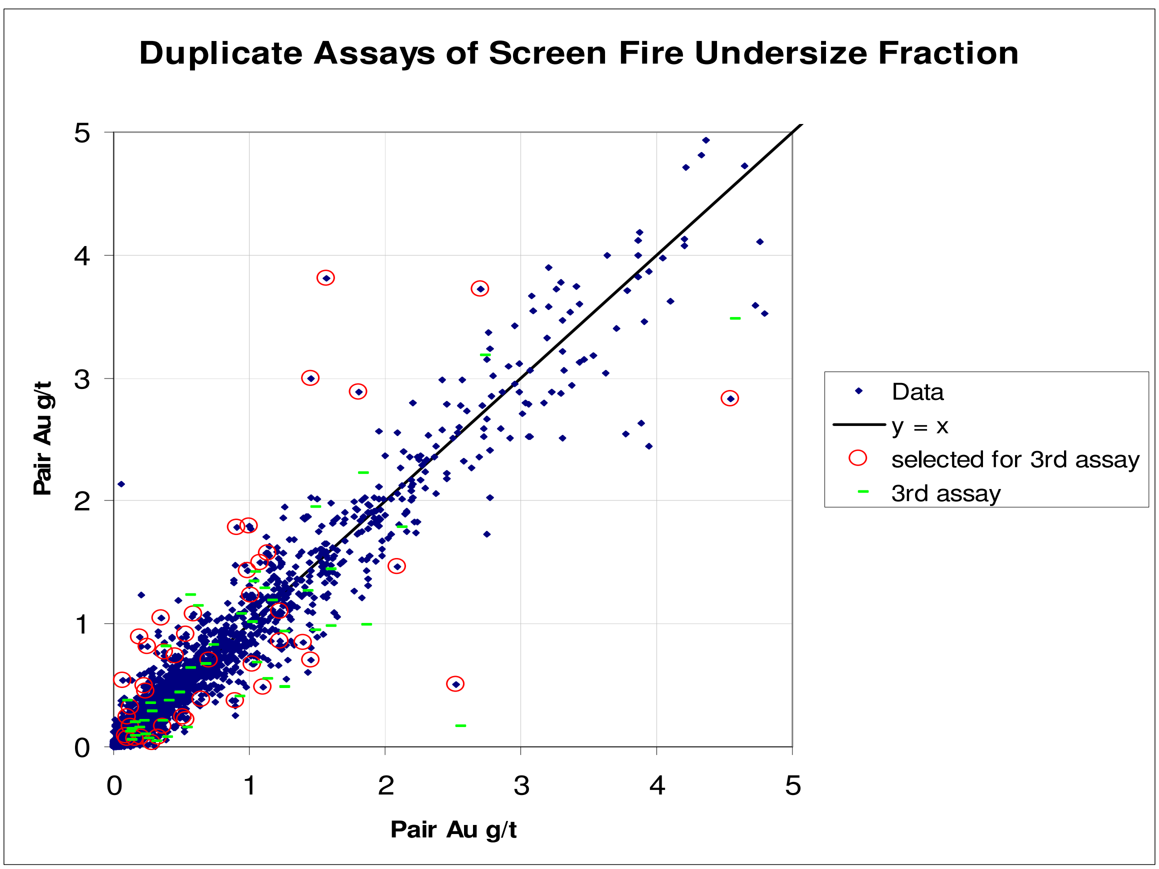
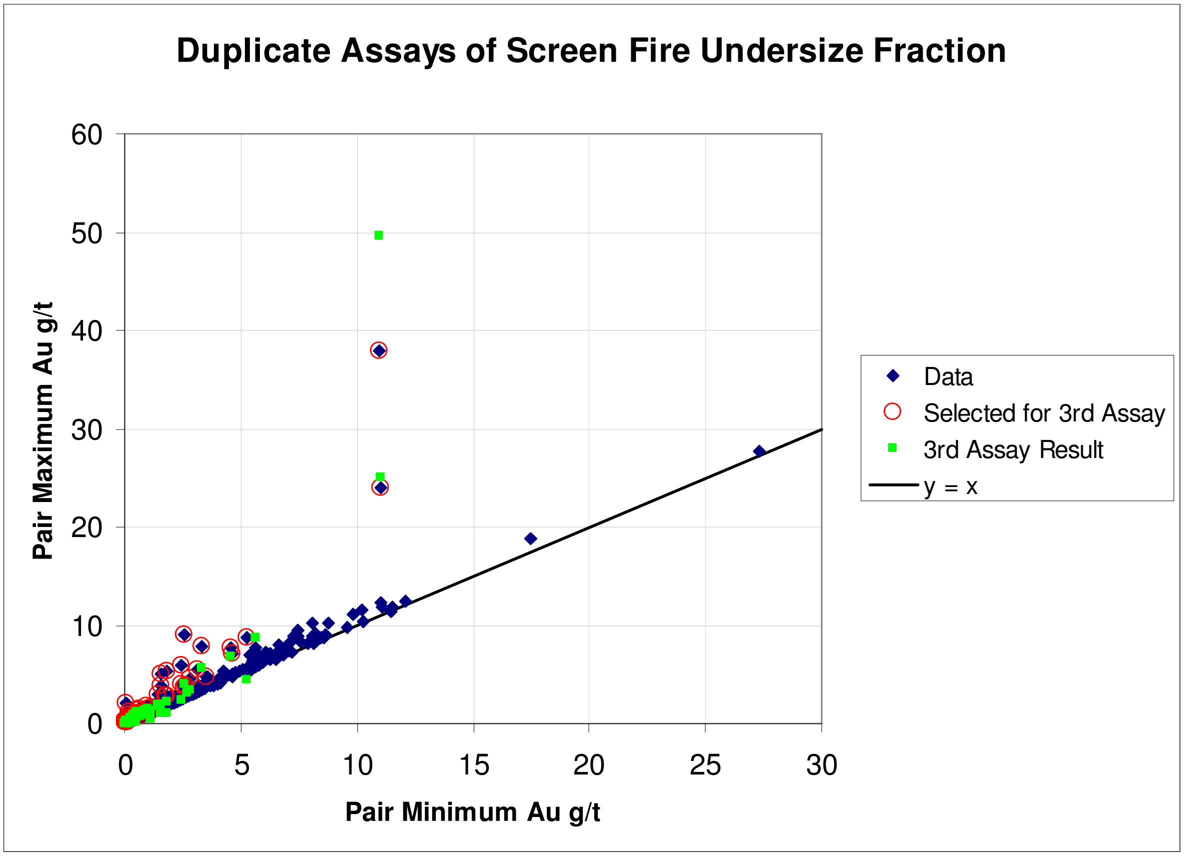
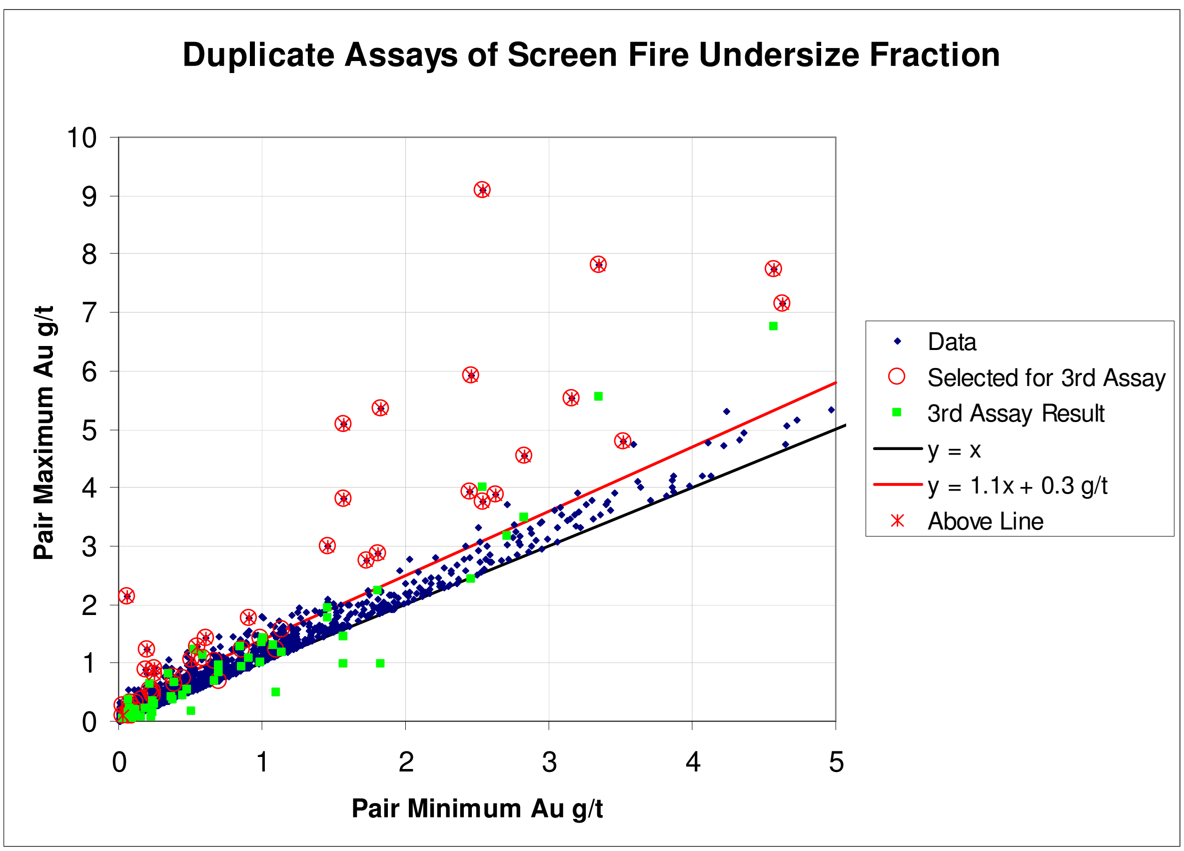


Figure 15: Duplicate Performance of Minus-Fraction shown at two scales for clarity

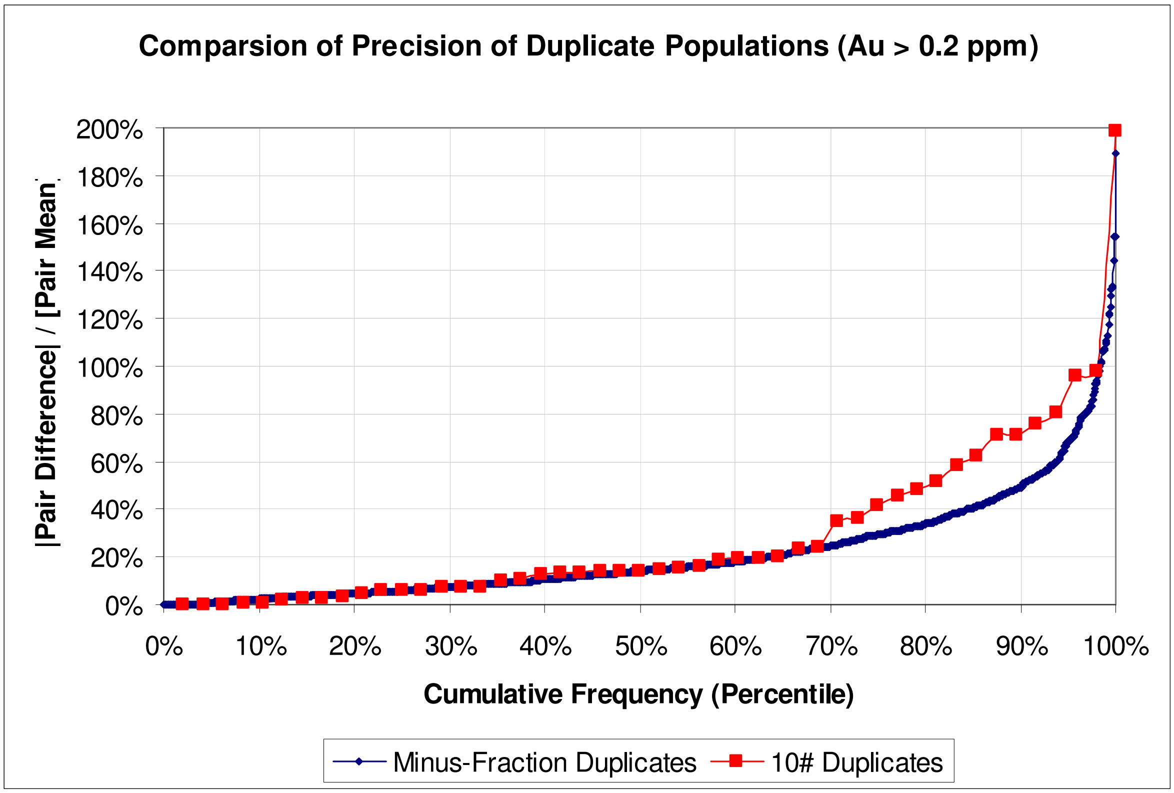




Comparison of Coarse Reject and Pulp Duplicates

The charts in Figures 13 and 15 are not easily compared to each other. A clear comparison can be made using cumulative frequency charts of the relative pair differences (Figure 16). To make this chart, the pair means of the duplicate population are calculated and a cutoff value applied to the pair means to remove pairs with low (near detection limit, non-ore) grades. The absolute value of the pair difference is divided by the pair mean to obtain a relative difference consisting of a unitless number that can be expressed as a percent. These are arranged in ascending order and plotted as a cumulative frequency (percentile rank) of 0 to 100 percent.

Figure 16: Comparison of Precision of Duplicate Populations

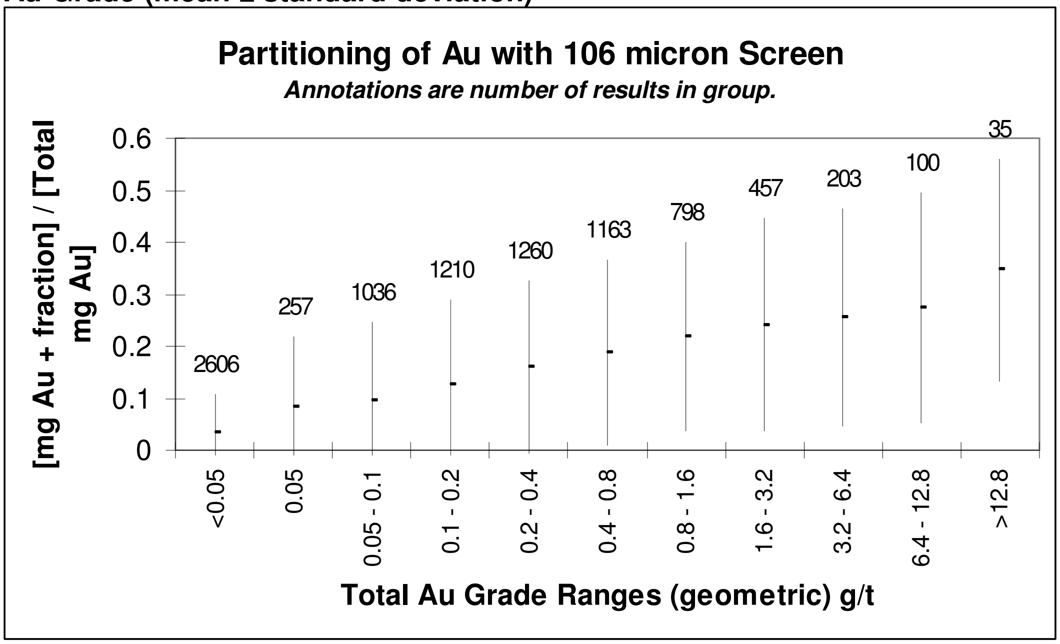


This chart indicates that both the crushing and minus-fraction sampling stages contribute to the total variance. The obtained levels of precision are consistent with a system where the "nugget effect" is prevalent. Carlin-type gold deposits can achieve ±10 percent precision for 90 or more percent of pairs using conventional fire assay pulp duplicates. After screening, the Rock Creek undersize fraction duplicates attain ±50 percent at the 90th percentile. The substantially poorer precision than that obtainable from sub-micron Au deposits, indicates that much of the gold in the minus fraction, limited by the screening to a top particle size of 105 microns, is probably in the form of particles larger than 40 microns.

Partitioning of Gold between Plus (>105 micron) and Minus Fractions

Screen fire assays provide information about how the gold is distributed relative to particle size. This may reveal differences in the "nugget effect". It is first useful to observe how the distribution varies with total gold grade (Figure 17).

Figure 17: Partitioning of Au content between +106u and –106u fractions as function of Au Grade (mean ± standard deviation)



There is a clear trend of an increasing fraction of the gold contained in the +106 micron fraction with increasing gold grade. This indicates that the "nugget effect" is more pronounced in high grade areas because the higher grade samples tend to have a larger proportion of the total gold content in large particles.

The effect of increasing gold in the coarse fraction with increasing grade appears less pronounced in shear zone samples (Figure 18) than in non-shear samples (Figure 19).

Figure 18: Proportion of gold in coarse fraction by grade, shear zone samples

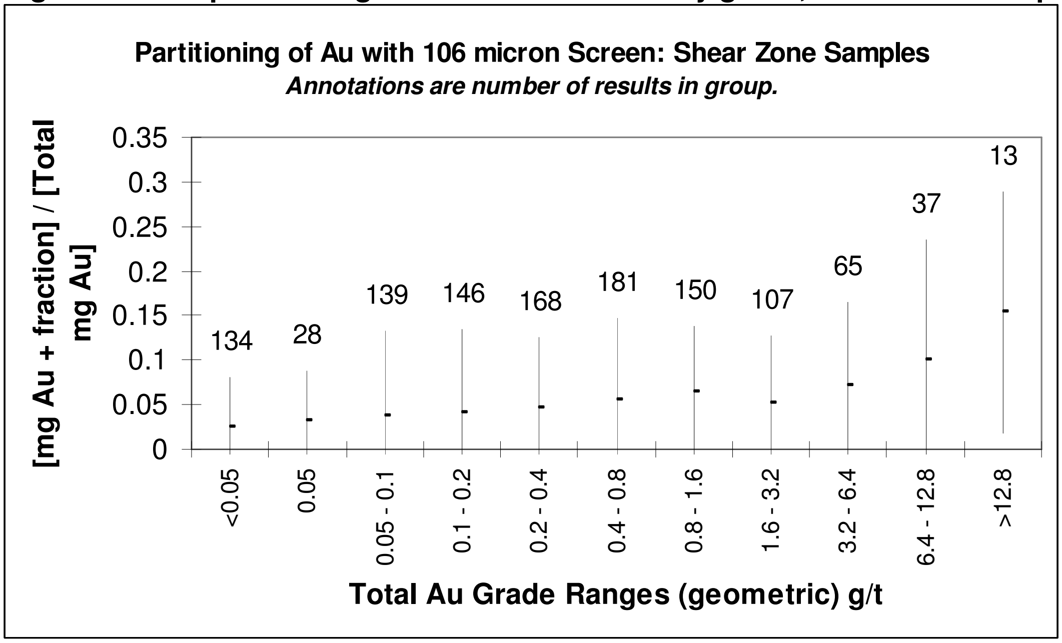
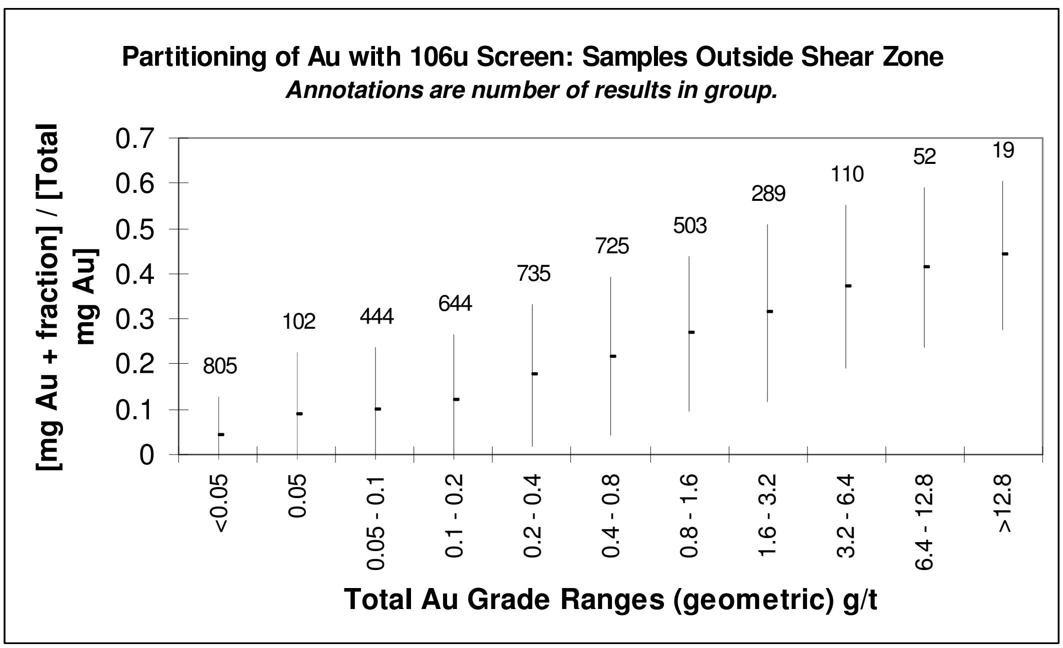


Figure 19: Proportion of gold in coarse fraction by grade, samples outside shear zone



CHECK ASSAYS

AMEC requested that check assays be performed on the selected samples of coarse reject. Nova Gold provided the ALS Chemex facility in Fairbanks with a list of samples. ALS Chemex failed to complete the task, submitting instead about ten samples that were not on the request list. The failure came to light only after the samples ALS Chemex submitted were assayed and reported by SGS Lakefield. This occurred after months of delay, caused by a lack of documentation in Chemex's shipment. ALS Chemex reports that the manager of their Fairbanks facility has since resigned.

ALS Chemex is presently attempting to locate the requested samples, which may be stored outside beneath a cover of snow.

REFERENCES

Blower, Steve; Memorandum to Jack Cote, “Rock Creek November 2003 QA-QC”, 24 November 2003.

A-6 Database Checks

Memo

To	**Steve Blower**	File No.	
From	**Susan Lomas**	cc	
Tel			
Fax			
Date	**January 8, 2004**		

Subject **Rock Creek Database Validation Updated February 13, 2004**

AMEC was provided with the following data for the validation of the database for the Rock Creek Project in Alaska.

- Data dump files from the 2003 MineSight Project for collar coordinates, assay, geology and down hole survey data.
- A copy of the master Access Database for the project
- Copies of the original drill logs and other data sheets for each drill hole in electronic scanned copies. There is one pdf file for each drill hole that typically contains the original data sheets for the downhole survey data, Core Handling Flow Sheet, Recovery and RQD Work Sheets, Lithology Drill Log, Alteration Drill Log, Structure Drill Log, Mineralization Drill Log, Drill Sample Sheet, Core Box Meterage Intervals and Photos Sheet and Specific Gravity Sheet.
- Electronic files of the laboratory results

2003 Data Audit

AMEC extracted the data for the 2003 drilling program at Rock Creek from the Access Database. All drill holes older than 2003 were audited by AMEC in July of 2003 and the details are documented in the report, “Rock Creek Project, Alaska Data Review Report”.

There are 13 holes resulting from the spring drilling campaign and 123 drill holes in the database attributed to the summer drilling program at Rock Creek. There are approximately 8800 sample results in the database (Includes QAQC samples) for the 2003 campaigns. Nine holes were chosen at random for detailed data checks to confirm the data in the database including; RKCR03-010, RKDC03-118, RKDC03-138, RKDC03-156, RKDC03-181, RKDC03-199, RKDC03-227, RKGT03-216, RKGT03-218, RKDC03-161 and RKGT03-213.

For the purposes of this data review the following data were checked against the original sources, collar locations, down hole survey data, gold assay results and sample intervals, lithology codes and intervals, RQD and Rock Density data.

The 2003 data was found to be of excellent quality with only one error found in drill hole RKDC03-156 where the collar elevation was entered as 85.54 instead of 84.54 m.

There is no assay data for drill hole RKGT03-218. A note on the drill log states the following, "*Has not been assayed, because void of mineralization and marginal to pit. Core was kept in case whole-core was needed in future.*"

Pre-2003 Data Audit

AMEC also checked the pre-2003 data in the MineSite export file. AMEC validated this data in July of 2003 so a quick comparison check was completed. The historical data was taken from the latest Minesite export file and compared to the database that was previously audited by AMEC.

The following discrepancies were found between the two databases.

Assay Values

- There are 279 samples where the assay results in the 2003 database for gold was not the same as they had been in 2002. Table 1 is a list of the different assay results between the two databases.
- Nova Gold changed 235 of the assay results because they located metallic screen assay results and overwrote the fire assay results, as per a recommendation by AMEC.
- 43 fire assay results were changed to match the values on the assay certificates. Nova Gold could not locate the certificates that contained the results that were in the 2002 database. Certificates were found with results for these samples and the values in the database were changed to match the certificate. The following drill holes were affected, DDH90-1, RCC-4-01, RCC-4-02, RCC-4-11, RR-0-02, RR-0-17, RR-0-25, and RR-0-38.

Sample Intervals

AMEC found 17 samples where the interval data did not match between the two databases (Table 2). These intervals were sent to Nova Gold for investigation and they corrected the intervals to match the original data. The sample number contains the drill hole number and the interval value for the "To" depth. The "From" value can be taken from the previous sample's number.

Sample Selection for MineSite

AMEC identified 57 sample intervals that were contained in the new (2003) export file but not the 2002 file. A further 37 samples were found that were in the old (2002) export file but were not included in the 2003 file. These intervals are included in Table 3. Nova Gold should review the intervals included in Table 3 to determine why there was inclusion or exclusion of these samples in the current resource estimation.

Table 1: 2002-2003 Database Comparison – Different Assay Results

2003 Minesite File				2002 Minesite File		NovaGold Update	
Hole No	**From**	**To**	**Au**	**Hole No**	**Au**	**Certificate**	**Method**
DDH90-1	15.39	17.34	0.385	DDH90-1	0.446	V90-20153.1	FA
DDH90-1	24.69	24.99	0.393	DDH90-1	0.343	V90-20153.1	FA
DDH90-1	49.68	51.3	1.513	DDH90-1	1.234	V90-20153.1	FA
DDH90-1	98.36	99.67	0.463	DDH90-1	0.480	V90-20153.1	FA
RCC-4-01	0	1.52	0.460	RCC-4-01	0.446	A9420123_acb_.csv	FA
RCC-4-01	19.81	21.34	0.570	RCC-4-01	0.549	A9420123_acb_.csv	FA
RCC-4-01	30.48	32	0.595	RCC-4-01	0.583	A9420123_acb_.csv	FA
RCC-4-01	53.34	54.86	3.320	RCC-4-01	3.291	A9420123_acb_.csv	FA
RCC-4-01	54.86	56.39	3.030	RCC-4-01	3.017	A9420123_acb_.csv	FA
RCC-4-01	70.1	71.63	0.490	RCC-4-01	0.480	A9420123_acb_.csv	FA
RCC-4-01	76.2	77.72	4.450	RCC-4-01	1.406	A9420123_acb_.csv	FA
RCC-4-01	85.34	86.87	1.460	RCC-4-01	1.474	A9420123_acb_.csv	FA
RCC-4-01	96.01	97.54	0.920	RCC-4-01	1.269	A9420123_acb_.csv	FA
RCC-4-01	99.06	100.58	1.060	RCC-4-01	1.269	A9420123_acb_.csv	FA
RCC-4-02	60.96	62.48	4.780	RCC-4-02	4.800	A9420130.PRT	FA
RCC-4-02	65.53	67.06	9.680	RCC-4-02	9.703	A9420130.PRT	FA
RCC-4-02	77.72	79.25	0.360	RCC-4-02	0.377	A9420130.PRT	FA
RCC-4-02	83.82	85.34	0.365	RCC-4-02	0.377	A9420130.PRT	FA
RCC-4-02	89.92	91.44	0.425	RCC-4-02	0.411	A9420130.PRT	FA
RCC-4-02	96.01	97.54	0.355	RCC-4-02	0.377	A9420130.PRT	FA
RCC-4-02	117.35	118.87	0.560	RCC-4-02	0.549	A9420130.PRT	FA
RCC-4-11	15.24	16.76	1.063	RCC-4-11	0.754	A9425222_acb_.csv	FA
RR-0-02	9.14	10.67	3.499	RR-0-02	4.420	V0142340.csv	FA
RR-0-02	10.67	12.19	4.424	RR-0-02	5.800	V0142340.csv	FA
RR-0-02	12.19	13.72	5.795	RR-0-02	11.990	V0142340.csv	FA
RR-0-02	13.72	15.24	11.990	RR-0-02	9.890	V0142340.csv	FA
RR-0-02	15.24	16.76	9.890	RR-0-02	3.940	V0142340.csv	FA
RR-0-02	16.76	18.29	3.942	RR-0-02	0.800	V0142340.csv	FA
RR-0-02	18.29	19.81	0.799	RR-0-02	0.710	V0142340.csv	FA
RR-0-02	19.81	21.34	0.711	RR-0-02	1.000	V0142340.csv	FA
RR-0-02	21.34	22.86	1.001	RR-0-02	1.630	V0142340.csv	FA
RR-0-02	22.86	24.38	1.628	RR-0-02	1.160	V0142340.csv	FA
RR-0-02	24.38	25.91	1.164	RR-0-02	0.610	V0142340.csv	FA
RR-0-02	33.53	35.05	1.866	RR-0-02	0.610	V0142340.csv	FA
RR-0-02	39.62	41.15	1.177	RR-0-02	0.480	V0142340.csv	FA
RR-0-02	41.15	42.67	0.479	RR-0-02	0.520	V0142340.csv	FA
RR-0-02	42.67	44.2	0.523	RR-0-02	0.480	V0142340.csv	FA
RR-0-02	44.2	45.72	0.480	RR-0-02	0.400	V0142340.csv	FA
RR-0-02	45.72	47.24	0.399	RR-0-02	0.590	V0142340.csv	FA
RR-0-02	50.29	51.82	1.630	RR-0-02	0.830	V0142340.csv	FA
RR-0-17	59.44	60.96	8.570	RR-0-17	9.410	V0142810.csv	FA
RR-0-25	50.29	51.82	13.220	RR-0-25	13.200	V0142560.csv	FA
RR-0-38	16.76	18.29	0.624	RR-0-38	1.620	V0142870.csv	FA
RCC-4-01	21.34	22.86	20.709	RCC-4-01	16.080	A9531352_acb_.csv	MSA
RCC-4-01	59.44	60.96	18.583	RCC-4-01	25.645	A9531352_acb_.csv	MSA
RCC-4-01	60.96	62.48	15.566	RCC-4-01	16.663	A9531352_acb_.csv	MSA
RCC-4-01	64.01	65.53	13.749	RCC-4-01	23.177	A9531352_acb_.csv	MSA
RCC-4-01	67.06	68.58	4.560	RCC-4-01	5.966	A9531352_acb_.csv	MSA
RCC-4-02	51.82	53.34	11.829	RCC-4-02	14.708	A9531352_acb_.csv	MSA
RCC-4-02	62.48	64.01	16.663	RCC-4-02	11.965	A9531352_acb_.csv	MSA
RCC-4-03	9.14	10.67	10.800	RCC-4-03	26.845	A9531352_acb_.csv	MSA
RCC-4-03	41.15	42.67	1.303	RCC-4-03	10.148	A9531352_acb_.csv	MSA
RCC-4-03	109.73	111.25	8.434	RCC-4-03	7.268	A9531352_acb_.csv	MSA
RCC-4-04	118.87	120.4	8.091	RCC-4-04	13.440	A9531352_acb_.csv	MSA

2003 Minesite File				2002 Minesite File		NovaGold Update	
Hole No	**From**	**To**	**Au**	**Hole No**	**Au**	**Certificate**	**Method**
RCC-4-07	25.91	27.43	7.954	RCC-4-07	17.245	A9531352_acb_.csv	MSA
RCC-4-07	32	33.53	7.440	RCC-4-07	11.520	A9531352_acb_.csv	MSA
RCC-4-08	44.2	45.72	8.023	RCC-4-08	6.137	A9531352_acb_.csv	MSA
RCC-4-08	60.96	62.48	5.520	RCC-4-08	5.623	A9531352_acb_.csv	MSA
RCC-4-08	79.25	80.77	3.840	RCC-4-08	7.406	A9531352_acb_.csv	MSA
RCC-4-08	80.77	82.3	5.726	RCC-4-08	7.268	A9531352_acb_.csv	MSA
RCC-4-08	82.3	83.82	8.503	RCC-4-08	13.440	A9531352_acb_.csv	MSA
RCC-4-08	83.82	85.34	7.714	RCC-4-08	17.314	A9531352_acb_.csv	MSA
RCC-4-09	30.48	32	33.395	RCC-4-09	61.884	A9531352_acb_.csv	MSA
RCC-4-09	70.1	71.63	5.589	RCC-4-09	7.680	A9531352_acb_.csv	MSA
RCC-5-13	27.43	28.96	0.926	RCC-5-13	1.234	A9531352_acb_.csv	MSA
RCC-5-13	28.96	30.48	5.451	RCC-5-13	5.246	A9531352_acb_.csv	MSA
RCC-5-13	30.48	32	0.686	RCC-5-13	1.131	A9531352_acb_.csv	MSA
RCC-5-13	35.05	36.58	0.411	RCC-5-13	0.789	A9531352_acb_.csv	MSA
RCC-5-13	38.1	39.62	0.446	RCC-5-13	0.343	A9531352_acb_.csv	MSA
RCC-5-13	60.96	62.48	0.720	RCC-5-13	2.057	A9531352_acb_.csv	MSA
RCC-5-13	64.01	65.53	0.617	RCC-5-13	1.406	A9531352_acb_.csv	MSA
RCC-5-13	67.06	68.58	0.480	RCC-5-13	1.166	A9531352_acb_.csv	MSA
RCC-5-14	3.05	4.57	0.891	RCC-5-14	0.754	A9531133_acb_.csv	MSA
RCC-5-14	4.57	6.1	0.583	RCC-5-14	1.234	A9531133_acb_.csv	MSA
RCC-5-14	9.14	10.67	13.063	RCC-5-14	11.623	A9531133_acb_.csv	MSA
RCC-5-14	10.67	12.19	0.960	RCC-5-14	0.343	A9531133_acb_.csv	MSA
RCC-5-14	15.24	16.76	0.720	RCC-5-14	0.343	A9531133_acb_.csv	MSA
RCC-5-14	16.76	18.29	0.789	RCC-5-14	1.029	A9531133_acb_.csv	MSA
RCC-5-14	18.29	19.81	0.343	RCC-5-14	0.480	A9531133_acb_.csv	MSA
RCC-5-14	22.86	24.38	0.754	RCC-5-14	0.411	A9531133_acb_.csv	MSA
RCC-5-14	25.91	27.43	2.400	RCC-5-14	0.994	A9531133_acb_.csv	MSA
RCC-5-14	45.72	47.24	0.823	RCC-5-14	1.097	A9531133_acb_.csv	MSA
RCC-5-14	47.24	48.77	2.949	RCC-5-14	1.097	A9531133_acb_.csv	MSA
RCC-5-14	50.29	51.82	0.343	RCC-5-14	3.291	A9531133_acb_.csv	MSA
RCC-5-14	54.86	56.39	0.720	RCC-5-14	1.234	A9531133_acb_.csv	MSA
RCC-5-14	56.39	57.91	1.406	RCC-5-14	1.989	A9531133_acb_.csv	MSA
RCC-5-14	57.91	59.44	1.063	RCC-5-14	1.989	A9531133_acb_.csv	MSA
RCC-5-14	62.48	64.01	0.617	RCC-5-14	1.269	A9531133_acb_.csv	MSA
RCC-5-14	64.01	65.53	1.714	RCC-5-14	2.194	A9531133_acb_.csv	MSA
RCC-5-15	36.58	38.1	0.583	RCC-5-15	0.480	A9531134_acb_.csv	MSA
RCC-5-15	38.1	39.62	0.789	RCC-5-15	1.680	A9531134_acb_.csv	MSA
RCC-5-15	39.62	41.15	0.617	RCC-5-15	0.583	A9531134_acb_.csv	MSA
RCC-5-17	6.1	7.62	1.371	RCC-5-17	5.794	A9531135_acb_.csv	MSA
RCC-5-17	7.62	9.14	1.029	RCC-5-17	0.789	A9531135_acb_.csv	MSA
RCC-5-17	13.72	15.24	0.926	RCC-5-17	0.651	A9531135_acb_.csv	MSA
RCC-5-17	21.34	22.86	0.994	RCC-5-17	1.029	A9531135_acb_.csv	MSA
RCC-5-17	22.86	24.38	1.131	RCC-5-17	0.823	A9531135_acb_.csv	MSA
RCC-5-17	24.38	25.91	2.331	RCC-5-17	1.577	A9531135_acb_.csv	MSA
RCC-5-17	36.58	38.1	2.537	RCC-5-17	3.291	A9531135_acb_.csv	MSA
RCC-5-17	39.62	41.15	1.131	RCC-5-17	1.234	A9531135_acb_.csv	MSA
RCC-5-17	41.15	42.67	0.377	RCC-5-17	0.514	A9531135_acb_.csv	MSA
RCC-5-17	42.67	44.2	1.063	RCC-5-17	0.377	A9531135_acb_.csv	MSA
RCC-5-18	44.2	45.72	6.754	RCC-5-18	2.914	A9531136_acb_.csv	MSA
RCC-5-18	48.77	50.29	1.029	RCC-5-18	0.343	A9531136_acb_.csv	MSA
RCC-5-18	50.29	51.82	1.749	RCC-5-18	1.817	A9531136_acb_.csv	MSA
RCC-5-19	65.53	67.06	1.029	RCC-5-19	0.651	A9531137_acb_.csv	MSA
RCC-5-19	67.06	68.58	3.189	RCC-5-19	2.194	A9531137_acb_.csv	MSA
RCC-5-19	68.58	70.1	1.303	RCC-5-19	0.926	A9531137_acb_.csv	MSA
RCC-5-19	70.1	71.63	0.686	RCC-5-19	0.549	A9531137_acb_.csv	MSA
RCC-5-19	73.15	74.68	0.651	RCC-5-19	1.097	A9531137_acb_.csv	MSA

2003 Minesite File				2002 Minesite File		NovaGold Update	
Hole No	From	To	Au	Hole No	Au	Certificate	Method
RCC-5-19	74.68	76.2	0.754	RCC-5-19	0.926	A9531137_acb_.csv	MSA
RCC-5-19	79.25	80.77	5.280	RCC-5-19	5.726	A9531137_acb_.csv	MSA
RCC-5-19	80.77	82.3	2.229	RCC-5-19	2.023	A9531137_acb_.csv	MSA
RCC-5-20	19.81	21.34	2.606	RCC-5-20	1.920	A9531138_acb_.csv	MSA
RCC-5-20	24.38	25.91	1.749	RCC-5-20	2.229	A9531138_acb_.csv	MSA
RCC-5-20	25.91	27.43	1.131	RCC-5-20	1.543	A9531138_acb_.csv	MSA
RCC-5-20	35.05	36.58	0.651	RCC-5-20	0.960	A9531138_acb_.csv	MSA
RCC-5-20	39.62	41.15	0.549	RCC-5-20	0.514	A9531138_acb_.csv	MSA
RCC-5-20	41.15	42.67	1.234	RCC-5-20	1.474	A9531138_acb_.csv	MSA
RCC-5-20	44.2	45.72	0.446	RCC-5-20	0.720	A9531138_acb_.csv	MSA
RCC-5-20	45.72	47.24	0.583	RCC-5-20	0.617	A9531138_acb_.csv	MSA
RCC-5-20	47.24	48.77	4.286	RCC-5-20	5.828	A9531138_acb_.csv	MSA
RCC-5-20	77.72	79.25	0.823	RCC-5-20	0.754	A9531138_acb_.csv	MSA
RCC-5-20	80.77	82.3	2.811	RCC-5-20	6.103	A9531138_acb_.csv	MSA
RCC-5-20	105.16	106.68	0.514	RCC-5-20	0.823	A9531140_acb_.csv	MSA
RCC-5-20	115.82	117.35	1.989	RCC-5-20	2.194	A9531139_acb_.csv	MSA
RCC-5-20	117.35	118.87	0.583	RCC-5-20	1.131	A9531139_acb_.csv	MSA
RCC-5-20	121.92	123.44	0.617	RCC-5-20	0.651	A9531139_acb_.csv	MSA
RCC-5-20	123.44	124.97	1.817	RCC-5-20	2.537	A9531139_acb_.csv	MSA
RCC-5-20	124.97	126.49	0.377	RCC-5-20	0.926	A9531139_acb_.csv	MSA
RCC-5-20	126.49	128.02	8.880	RCC-5-20	5.691	A9531139_acb_.csv	MSA
RCC-5-20	131.06	132.59	1.577	RCC-5-20	2.263	A9531139_acb_.csv	MSA
RCC-5-21	51.82	53.34	1.200	RCC-5-21	1.851	A9531140_acb_.csv	MSA
RCC-5-21	53.34	54.86	0.446	RCC-5-21	0.480	A9531140_acb_.csv	MSA
RCC-5-21	54.86	56.39	6.274	RCC-5-21	2.400	A9531140_acb_.csv	MSA
RCC-5-21	56.39	57.91	2.194	RCC-5-21	1.989	A9531140_acb_.csv	MSA
RCC-5-21	57.91	59.44	1.954	RCC-5-21	2.297	A9531140_acb_.csv	MSA
RCC-5-21	59.44	60.96	7.406	RCC-5-21	5.006	A9531140_acb_.csv	MSA
RCC-5-21	73.15	74.68	6.411	RCC-5-21	3.051	A9531140_acb_.csv	MSA
RCC-5-21	76.2	77.72	0.823	RCC-5-21	0.446	A9531140_acb_.csv	MSA
RCC-5-21	77.72	79.25	0.377	RCC-5-21	0.446	A9531140_acb_.csv	MSA
RCC-5-21	80.77	82.3	0.514	RCC-5-21	0.480	A9531140_acb_.csv	MSA
RCC-5-21	82.3	83.82	2.503	RCC-5-21	2.880	A9531140_acb_.csv	MSA
RCC-5-25	47.24	48.77	0.994	RCC-5-25	0.411	A9531141_acb_.csv	MSA
RCC-5-25	50.29	51.82	6.720	RCC-5-25	4.046	A9531141_acb_.csv	MSA
RCC-5-25	51.82	53.34	1.371	RCC-5-25	1.166	A9531141_acb_.csv	MSA
RCC-5-25	59.44	60.96	3.257	RCC-5-25	2.229	A9531141_acb_.csv	MSA
RCC-5-25	60.96	62.48	0.446	RCC-5-25	0.583	A9531141_acb_.csv	MSA
RCC-5-25	65.53	67.06	4.251	RCC-5-25	3.429	A9531141_acb_.csv	MSA
RCR-4-19	10.67	12.19	6.686	RCR-4-19	6.507	A9531352_acb_.csv	MSA
RCR-4-19	12.19	13.72	8.126	RCR-4-19	22.295	A9531352_acb_.csv	MSA
RCR-4-19	13.72	15.24	12.034	RCR-4-19	10.548	A9531352_acb_.csv	MSA
RCR-4-19	15.24	16.76	3.154	RCR-4-19	6.062	A9531352_acb_.csv	MSA
RCR-4-19	16.76	18.29	17.417	RCR-4-19	6.301	A9531352_acb_.csv	MSA
RCR-4-19	68.58	70.1	2.091	RCR-4-19	6.096	A9531352_acb_.csv	MSA
RMR-1	3.05	4.57	0.926	RMR-1	0.882	V9145931.csv	MSA
RMR-1	4.57	6.1	0.446	RMR-1	0.436	V9145931.csv	MSA
RMR-1	6.1	7.62	1.680	RMR-1	1.772	V9145931.csv	MSA
RMR-1	7.62	9.14	0.754	RMR-1	0.935	V9145931.csv	MSA
RMR-1	9.14	10.67	0.377	RMR-1	0.355	V9145931.csv	MSA
RMR-1	13.72	15.24	0.446	RMR-1	0.529	V9145931.csv	MSA
RMR-1	16.76	18.29	0.549	RMR-1	0.539	V9145931.csv	MSA
RMR-1	21.34	22.86	3.086	RMR-1	2.635	V9145931.csv	MSA
RMR-1	22.86	24.38	3.223	RMR-1	3.485	V9145931.csv	MSA
RMR-2	3.05	4.57	4.354	RMR-2	5.783	V9145941.csv	MSA
RMR-2	6.1	7.62	1.714	RMR-2	2.015	V9145941.csv	MSA

2003 Minesite File				2002 Minesite File		NovaGold Update	
Hole No	From	To	Au	Hole No	Au	Certificate	Method
RMR-2	9.14	10.67	1.166	RMR-2	2.141	V9145941.csv	MSA
RMR-2	10.67	12.19	8.366	RMR-2	6.743	V9145941.csv	MSA
RMR-2	12.19	13.72	1.543	RMR-2	3.128	V9145941.csv	MSA
RMR-2	13.72	15.24	6.137	RMR-2	5.186	V9145941.csv	MSA
RMR-2	15.24	16.76	1.303	RMR-2	2.212	V9145941.csv	MSA
RMR-2	18.29	19.81	1.371	RMR-2	0.911	V9145941.csv	MSA
RMR-2	19.81	21.34	0.411	RMR-2	0.668	V9145941.csv	MSA
RMR-2	21.34	22.86	0.411	RMR-2	0.423	V9145941.csv	MSA
RMR-2	25.91	27.43	0.514	RMR-2	0.410	V9145941.csv	MSA
RMR-2	28.96	30.48	0.446	RMR-2	0.625	V9145941.csv	MSA
RMR-2	30.48	32	0.514	RMR-2	0.587	V9145941.csv	MSA
RMR-2	32	33.53	4.766	RMR-2	3.720	V9145941.csv	MSA
RMR-2	33.53	35.05	2.434	RMR-2	2.228	V9145941.csv	MSA
RMR-2	35.05	36.58	0.891	RMR-2	0.553	V9145941.csv	MSA
RMR-2	36.58	38.1	1.029	RMR-2	0.979	V9145941.csv	MSA
RMR-3	19.81	21.34	0.583	RMR-3	0.472	V9145951.csv	MSA
RMR-3	21.34	22.86	2.537	RMR-3	3.379	V9145951.csv	MSA
RMR-3	22.86	24.38	0.583	RMR-3	1.886	V9145951.csv	MSA
RMR-3	24.38	25.91	1.097	RMR-3	0.321	V9145951.csv	MSA
RMR-3	28.96	30.48	0.549	RMR-3	0.584	V9145951.csv	MSA
RMR-3	32	33.53	0.651	RMR-3	0.774	V9145951.csv	MSA
RMR-3	35.05	36.58	0.583	RMR-3	0.922	V9145951.csv	MSA
RMR-3	39.62	41.15	9.257	RMR-3	0.512	V9145951.csv	MSA
RMR-3	41.15	42.67	0.686	RMR-3	0.899	V9145951.csv	MSA
RMR-3	42.67	44.2	13.783	RMR-3	10.000	V9145951.csv	MSA
RMR-3	44.2	45.72	1.577	RMR-3	1.113	V9145951.csv	MSA
RMR-3	47.24	48.77	0.823	RMR-3	0.380	V9145951.csv	MSA
RMR-3	48.77	50.29	4.903	RMR-3	6.291	V9145951.csv	MSA
RMR-3	50.29	51.82	0.686	RMR-3	2.069	V9145951.csv	MSA
RMR-3	53.34	54.86	16.423	RMR-3	10.000	V9145951.csv	MSA
RMR-3	56.39	57.91	1.131	RMR-3	0.403	V9145951.csv	MSA
RMR-3	57.91	59.44	1.200	RMR-3	0.582	V9145951.csv	MSA
RMR-4	9.14	10.67	1.817	RMR-4	1.067	V9145961.csv	MSA
RMR-4	10.67	12.19	1.783	RMR-4	2.130	V9145961.csv	MSA
RMR-4	12.19	13.72	4.731	RMR-4	5.294	V9145961.csv	MSA
RMR-4	13.72	15.24	1.509	RMR-4	1.901	V9145961.csv	MSA
RMR-4	15.24	16.76	3.943	RMR-4	4.930	V9145961.csv	MSA
RMR-4	16.76	18.29	2.640	RMR-4	4.055	V9145961.csv	MSA
RMR-4	18.29	19.81	6.240	RMR-4	4.631	V9145961.csv	MSA
RMR-4	19.81	21.34	5.074	RMR-4	4.523	V9145961.csv	MSA
RMR-4	21.34	22.86	0.446	RMR-4	0.561	V9145961.csv	MSA
RMR-4	22.86	24.38	1.509	RMR-4	0.628	V9145961.csv	MSA
RMR-4	25.91	27.43	2.331	RMR-4	2.288	V9145961.csv	MSA
RMR-4	27.43	28.96	4.526	RMR-4	2.214	V9145961.csv	MSA
RMR-4	28.96	30.48	1.817	RMR-4	5.974	V9145961.csv	MSA
RMR-4	30.48	32	5.109	RMR-4	2.035	V9145961.csv	MSA
RMR-4	32	33.53	1.063	RMR-4	5.493	V9145961.csv	MSA
RMR-4	35.05	36.58	0.617	RMR-4	3.477	V9145961.csv	MSA
RMR-4	36.58	38.1	1.749	RMR-4	0.415	V9145961.csv	MSA
RMR-4	38.1	39.62	1.029	RMR-4	2.168	V9145961.csv	MSA
RMR-4	39.62	41.15	1.886	RMR-4	0.739	V9145961.csv	MSA
RMR-4	41.15	42.67	1.406	RMR-4	1.874	V9145961.csv	MSA
RMR-4	42.67	44.2	0.583	RMR-4	1.224	V9145961.csv	MSA
RMR-4	44.2	45.72	0.857	RMR-4	0.712	V9145961.csv	MSA
RMR-4	45.72	47.24	2.640	RMR-4	1.524	V9145961.csv	MSA
RMR-4	47.24	48.77	3.806	RMR-4	2.394	V9145961.csv	MSA

2003 Minesite File				2002 Minesite File		NovaGold Update	
Hole No	From	To	Au	Hole No	Au	Certificate	Method
RMR-4	48.77	50.29	3.497	RMR-4	4.608	V9145961.csv	MSA
RMR-4	50.29	51.82	0.857	RMR-4	2.209	V9145961.csv	MSA
RMR-4	51.82	53.34	1.063	RMR-4	0.551	V9145961.csv	MSA
RMR-4	53.34	54.86	2.503	RMR-4	1.000	V9145961.csv	MSA
RMR-4	57.91	59.44	0.857	RMR-4	0.665	V9145961.csv	MSA
RMR-5	4.57	6.1	3.977	RMR-5	1.086	V9145971.csv	MSA
RMR-5	9.14	10.67	2.023	RMR-5	0.955	V9145971.csv	MSA
RMR-5	12.19	13.72	4.080	RMR-5	3.352	V9145971.csv	MSA
RMR-5	13.72	15.24	0.926	RMR-5	0.534	V9145971.csv	MSA
RMR-5	15.24	16.76	0.857	RMR-5	0.714	V9145971.csv	MSA
RMR-5	19.81	21.34	2.537	RMR-5	1.572	V9145971.csv	MSA
RMR-5	21.34	22.86	7.954	RMR-5	9.267	V9145971.csv	MSA
RMR-5	22.86	24.38	5.863	RMR-5	4.852	V9145971.csv	MSA
RMR-5	24.38	25.91	0.411	RMR-5	0.966	V9145971.csv	MSA
RMR-5	25.91	27.43	2.469	RMR-5	1.573	V9145971.csv	MSA
RMR-5	27.43	28.96	0.617	RMR-5	1.971	V9145971.csv	MSA
RMR-5	28.96	30.48	3.120	RMR-5	2.135	V9145971.csv	MSA
RMR-5	30.48	32	0.686	RMR-5	6.333	V9145971.csv	MSA
RMR-5	32	33.53	4.251	RMR-5	0.715	V9145971.csv	MSA
RMR-5	35.05	36.58	0.891	RMR-5	2.593	V9145971.csv	MSA
RMR-5	48.77	50.29	3.257	RMR-5	2.123	V9145971.csv	MSA
RMR-5	50.29	51.82	1.577	RMR-5	1.434	V9145971.csv	MSA
RMR-5	51.82	53.34	1.234	RMR-5	1.975	V9145971.csv	MSA
RMR-5	53.34	54.86	1.817	RMR-5	2.557	V9145971.csv	MSA
RMR-5	54.86	56.39	2.846	RMR-5	0.411	V9145971.csv	MSA
RMR-5	56.39	57.91	0.617	RMR-5	0.373	V9145971.csv	MSA
RMR-5	59.44	60.96	0.720	RMR-5	1.669	V9145971.csv	MSA
RMR-5	60.96	62.48	1.269	RMR-5	0.587	V9145971.csv	MSA
RMR-5	62.48	64.01	0.480	RMR-5	0.807	V9145971.csv	MSA
RMR-5	64.01	65.53	0.960	RMR-5	1.327	V9145971.csv	MSA
RMR-5	65.53	67.06	1.097	RMR-5	2.210	V9145971.csv	MSA
RMR-5	67.06	68.58	0.686	RMR-5	0.501	V9145971.csv	MSA
RMR-5	68.58	70.1	0.754	RMR-5	0.949	V9145971.csv	MSA
RMR-5	73.15	74.68	0.343	RMR-5	0.327	V9145971.csv	MSA
RMR-5	76.2	77.72	0.720	RMR-5	0.425	V9145971.csv	MSA
RMR-5	77.72	79.25	0.754	RMR-5	0.821	V9145971.csv	MSA
RMR-5	83.82	85.34	1.543	RMR-5	1.147	V9145971.csv	MSA
RMR-6	32	33.53	2.331	RMR-6	3.364	V9145981.csv	MSA
RMR-6	33.53	35.05	6.686	RMR-6	5.317	V9145981.csv	MSA
RMR-6	35.05	36.58	3.257	RMR-6	3.038	V9145981.csv	MSA
RMR-6	36.58	38.1	1.680	RMR-6	0.695	V9145981.csv	MSA
RMR-6	41.15	42.67	0.411	RMR-6	0.477	V9145981.csv	MSA
RMR-6	42.67	44.2	0.377	RMR-6	0.424	V9145981.csv	MSA
RMR-6	44.2	45.72	1.097	RMR-6	0.699	V9145981.csv	MSA
RMR-6	47.24	48.77	0.686	RMR-6	1.002	V9145981.csv	MSA
RMR-6	53.34	54.86	0.789	RMR-6	0.695	V9145981.csv	MSA
RMR-6	54.86	56.39	0.651	RMR-6	4.841	V9145981.csv	MSA
RMR-6	56.39	57.91	3.874	RMR-6	3.424	V9145981.csv	MSA
RMR-6	57.91	59.44	0.686	RMR-6	0.487	V9145981.csv	MSA
RMR-6	59.44	60.96	6.069	RMR-6	6.802	V9145981.csv	MSA
RMR-6	60.96	62.48	2.057	RMR-6	3.991	V9145981.csv	MSA
RMR-6	64.01	65.53	0.514	RMR-6	0.479	V9145981.csv	MSA
RMR-6	67.06	68.58	0.857	RMR-6	0.727	V9145981.csv	MSA
RMR-6	71.63	73.15	0.411	RMR-6	0.356	V9145981.csv	MSA
RMR-6	73.15	74.68	0.377	RMR-6	0.402	V9145981.csv	MSA
RMR-6	74.68	76.2	0.343	RMR-6	0.533	V9145981.csv	MSA

Table 2 2002-2003 Database Comparison – Different Sample Intervals

2003 Minesite File					2002 Minesite File				
Hole No	From	To	Width	Au	Hole No	From	To	Width	Au
RCC-4-02	3.05	6.1	3.05	0.377	RCC-4-02	4.57	6.1	1.53	0.377
RCC-5-28	2.44	3.8	1.36	1.029	RCC-5-28	2.44	3.96	1.52	1.029
RCC-5-28	21.34	22.85	1.51	0.377	RCC-5-28	21.34	22.86	1.52	0.377
RCC-5-28	60.66	60.95	0.29	0.549	RCC-5-28	60.66	62.48	1.82	0.549
RCC-5-28	63.7	65.23	1.53	1.337	RCC-5-28	64.01	65.23	1.22	1.337
RCC-5-28	143.26	144.78	1.52	1.200	RCC-5-28	142.95	144.48	1.53	1.200
RCC-5-28	160.02	161.54	1.52	1.783	RCC-5-28	160.63	161.85	1.22	1.783
RCC-5-28	161.54	163.07	1.53	1.440	RCC-5-28	161.85	163.37	1.52	1.440
RCC-5-28	163.07	164.59	1.52	1.063	RCC-5-28	163.37	164.59	1.22	1.063
RCC-5-30	92.96	93.95	0.99	0.343	RCC-5-30	92.96	94.49	1.53	0.343
RR-0-24	42.67	44.2	1.53	0.439	RR-0-24	42.67	42.7	0.03	0.440
RR-0-24	47.24	48.77	1.53	0.481	RR-0-24	47.25	48.77	1.52	0.480
RR-0-24	48.77	50.29	1.52	0.522	RR-0-24	48.77	48.8	0.03	0.520
RR-0-24	56.39	57.91	1.52	0.824	RR-0-24	56.39	56.4	0.01	0.820
RR-0-24	57.91	59.44	1.53	0.569	RR-0-24	57.9	57.91	0.01	0.570
RR-0-24	85.34	86.87	1.53	0.322	RR-0-24	85.35	86.87	1.52	0.320
RR-0-24	92.96	94.49	1.53	0.392	RR-0-24	92.97	93	0.03	0.390

Table 3: 2002-2003 Database Comparison – Different Sample Selections for Import to MineSight

2003 Minesite File					2002 Minesite File				
Hole No	**From**	**To**	**Width**	**Au**	**Hole No**	**From**	**To**	**Width**	**Au**
DDH90-1	8.72	9.45	0.73	0.411					
					DDH90-1	9.45	11.16	1.71	5.348
					DDH90-1	41.15	43.28	2.13	0.583
DDH90-1	46.79	49.68	2.89	0.535					
					DDH90-1	51.3	53.64	2.34	0.823
DDH90-1	82.91	88.97	6.06	0.344					
RC92-002	92.96	94.49	1.53	0.514					
RC92-002	94.49	96.01	1.52	0.411					
RCC-4-01	4.57	6.1	1.53	0.325					
RCC-4-01	27.43	28.96	1.53	0.325					
RCC-4-01	74.68	76.2	1.52	1.420					
					RCC-4-01	77.72	79.25	1.53	4.457
RCC-4-02	19.81	21.34	1.53	6.446					
					RCC-4-08	68.58	70.1	1.52	0.411
RCC-4-10	53.34	54.86	1.52	2.400					
RCC-4-11	9.14	10.67	1.53	0.754					
					RCC-5-13	65.53	67.06	1.53	0.480
RCC-5-14	6.1	7.62	1.52	0.343					
					RCC-5-14	12.19	13.72	1.53	0.343
					RCC-5-14	48.77	50.29	1.52	1.371
RCC-5-14	60.96	62.48	1.52	0.789					
RCC-5-17	19.81	21.34	1.53	0.343					
					RCC-5-18	42.67	44.2	1.53	0.891
RCC-5-19	76.2	77.72	1.52	0.720					
					RCC-5-19	77.72	79.25	1.53	0.377
					RCC-5-20	18.29	19.81	1.52	0.480
					RCC-5-20	68.58	70.1	1.52	0.720
					RCC-5-20	71.63	73.15	1.52	13.645
					RCC-5-20	112.78	114.3	1.52	0.823
RCC-5-20	114.3	115.82	1.52	0.514					
RCC-5-20	128.02	129.54	1.52	0.926					
					RCC-5-21	79.25	80.77	1.52	0.377
RCC-5-28	3.8	3.96	0.16	1.029					
RCC-5-28	22.85	22.86	0.01	0.377					
RCC-5-28	60.95	62.18	1.23	0.549					
RCC-5-28	156.97	158.5	1.53	0.411					
					RCC-5-28	157.58	159.11	1.53	0.411
RCC-5-28	158.5	160.02	1.52	0.514					
					RCC-5-28	159.11	160.63	1.52	0.514
RCC-5-30	93.95	94.49	0.54	0.343					
RKDC02-104	3.05	4	0.95	0.960					
RKDC02-104	25.91	26	0.09	0.960					
RKDC02-105	56.39	58	1.61	0.480					
RMR-1	24.38	25.91	1.53	0.446					
RMR-2	27.43	28.96	1.53	0.343					
					RMR-3	25.91	27.43	1.52	0.327
RMR-3	36.58	38.1	1.52	1.543					
					RMR-3	38.1	39.62	1.52	0.347
RMR-3	51.82	53.34	1.52	0.549					
					RMR-3	59.44	60.96	1.52	0.372
					RMR-3	60.96	62.48	1.52	0.706
					RMR-3	62.48	64.01	1.53	0.403
RMR-4	24.38	25.91	1.53	0.651					

2003 Minesite File					2002 Minesite File				
Hole No	From	To	Width	Au	Hole No	From	To	Width	Au
RMR-4	33.53	35.05	1.52	1.474					
					RMR-4	54.86	56.39	1.53	1.293
RMR-4	56.39	57.91	1.52	2.297					
RMR-5	7.62	9.14	1.52	0.480					
RMR-5	10.67	12.19	1.52	2.091					
					RMR-5	33.53	35.05	1.52	1.534
					RMR-5	45.72	47.24	1.52	1.885
RMR-5	70.1	71.63	1.53	0.411					
					RMR-5	74.68	76.2	1.52	1.113
RMR-5	79.25	80.77	1.52	0.651					
					RMR-5	80.77	82.3	1.53	1.460
					RMR-6	38.1	39.62	1.52	0.311
					RMR-6	39.62	41.15	1.53	0.342
RMR-6	45.72	47.24	1.52	0.411					
					RMR-6	48.77	50.29	1.52	0.371
RMR-6	68.58	70.1	1.52	1.029					
					RR-0-02	7.62	9.14	1.52	3.500
RR-0-02	27.43	28.96	1.53	0.611					
					RR-0-02	28.96	30.48	1.52	1.500
RR-0-02	30.48	32	1.52	1.503					
					RR-0-02	32	33.53	1.53	1.870
RR-0-02	35.05	36.58	1.53	0.613					
					RR-0-02	38.1	39.62	1.52	1.180
RR-0-02	47.24	48.77	1.53	0.588					
					RR-0-02	48.77	50.29	1.52	1.630
RR-0-02	51.82	53.34	1.52	0.832					
					RR-0-02	54.86	56.39	1.53	0.400
RR-0-02	56.39	57.91	1.52	0.401					
RR-0-02	82.3	83.82	1.52	0.313					
RR-0-10	10.67	12.19	1.52	0.314					
RR-0-24	38.1	39.62	1.52	0.354					
RR-0-24	39.62	41.15	1.53	2.629					
RR-0-24	44.2	45.72	1.52	0.683					
RR-0-24	45.72	47.24	1.52	0.344					
					RR-0-24	56.4	57.9	1.5	0.820
RR-0-24	74.68	76.2	1.52	1.667					
RR-0-24	77.72	79.25	1.53	2.608					
RR-0-27	53.34	54.86	1.52	0.314					
RR-0-32	10.67	12.19	1.52	0.779					
RR-8-077	6.1	7.62	1.52	1.234					
RR-8-078	4.57	6.1	1.53	0.617					

Rock Creek Audit 2004
Audit Preformed By Brian Kaspereit
November 16, 2004

The audit of the spreadsheet entries in the master.xls file showed no error in the spreadsheet entries. All entries matched the values on the paper certifications for the total Au for each sample. 0 entries wrong, meaning 0% error in the entries.

The audit of the spreadsheet entries in the 2004GeoTechAudit.xls file showed no error in the spreadsheet entries. All entries matched the values on the Drill Core Logs provided for the Drill Run From, Drill Run To, and Measured cm of core actually in box. 0 entries wrong, meaning 0% error in the entries.

Note: On top of Drill Core Log datasheets it is labeled "Rock Creek 2003 Drill Core Log".

The audit of the spreadsheet entries in the databaseaudit.xls file showed some (3) errors in the spreadsheet entries. Down hole surveys 232-244 look like they were done in pencil and it didn't copy well, which caused most of the errors by not being able to read the numbers. After receiving the faxed surveys, all but three errors were correct. On survey 239, the survey data sheet had the wrong conversion on the lowest number, but the spreadsheet had the correct number. Surveys 234, 243, and 282 were the ones with the three errors. Survey 234 was missing the lowest data number on the spreadsheet. Survey 275 was missing altogether from the spreadsheet. Both were added to the spreadsheet with blank numbers in the spreadsheet reference numbers and commented to tell they were missing. Converted numbers were missing from survey 264. Conversions were checked and confirmed. Surveys showed positive numbers for the Dip and these numbers were assumed to be negative in the audit. Overall of the (182*3 =) 546 entries checked only 3 had errors, making ((3/546)*100 =) 0.55% error in the entries of the ones that were audited.

Note: On top of the Down Hole Surveys it is labeled "Rock Creek <u>2003</u>" and for Hole # it is labeled "RKDC<u>03</u>- ###".

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Rock Creek Audit 2004
Audit Preformed By Brian Kaspereit
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Note: On top of the Down Hole Surveys it is labeled "Rock Creek <u>2003</u>" and for Hole # it is labeled "RKDC<u>03</u>- ###".

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A-7 Chemex Sample Preparation Facility and Analytical Lab Inspections

Memo

To	**Harry Parker**	File No.	**143031**
From	**Steve Blower**	cc	**Kevin Francis, Larry Smith, Scott Long, Bill Anslow**
Tel	**604 664-4116**		
Fax	**604 664-3057**		
Date	**23, September, 2004**		

Subject **ALS Chemex Visit**

Introduction

On 22 September 2004, ALS Chemex's laboratory in Vancouver was visited by myself to review the metallic screen sample preparation procedures for Novagold's Rock Creek project. ALS Chemex's fire assay protocols were not reviewed, but have been observed in a previous laboratory visit by the author in 2003.

Bill Anslow, Manager, Sample Preparation for ALS Chemex – Vancouver accompanied me during yesterday's visit and fielded all of my questions. Scott Long provided pre-visit advice on important aspects of the process to be reviewed. At the time of the visit, Novagold samples were being pulverized, but were not being screened.

Pulverization

Novagold's samples arrive in Vancouver via plane from the preparation lab in Fairbanks, to Seattle - and then from Seattle via truck. The samples arrive in Vancouver in multiples of 20, and each set of 20 samples is processed as a separate work order as per Novagold's instructions - to ensure that standard reference material (SRM) controlled sets flow through the laboratory as a group. The samples are approximately 4 kg splits of very finely crushed material. They are assigned bar codes in Fairbanks.

The entire 4 kg split is pulverized in up to four batches in an LM2. The pulverizer is cleaned with compressed air after each sample is processed. Quartz sand is used to clean the pulverizing bowl and puck after each sample set (20 samples). I inspected the bowl and puck after compressed air cleaning, and only traces of dust were evident after running a finger over the bowl.

Rigorous pulp size specifications are not targeted. Instead, the goal of the pulverizing is to achieve an approximately 50 gm charge of 150 mesh screen oversize to limit the number of oversize fire assays. If the oversize volume is greater than 50 gm, it may be re-pulverized to reduce it to 50 gm or less.

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Screening

After pulverizing, the entire sample is processed through two 150 mesh (100 micron) screens (arranged side by side to speed processing time) at one of two screening stations. All four screens were inspected and found to be clean and intact (no holes). Oversize material removed from the screens during cleaning is returned to the oversize sample.

Fire Assay Charge Selection

All of the oversize fraction is placed in a regular kraft pulp bag for fire assaying. All of the undersize fraction is homogenized in an improvised rolling mixer, before a random scoop of approximately 200 gm is placed in a pulp bag and transported upstairs for undersize fire assay. There, two 30 gm charges are randomly scooped from the 200 gm pulp for duplicate undersize fire assay.

The containers used to homogenize the sample have been fabricated from two plastic 5-gallon buckets with their bottoms removed. The bottom end of one bucket was crimped and inserted into the bottom end of the other. The buckets are then sealed together, and lids are attached to both ends (the former tops of the buckets). This results in a large groove on the inside of the container where the buckets overlap, creating a potential trap for potential contaminants as it is difficult to clean and inspect. A minor amount of sample material was noted in this overlap area after the containers had been cleaned.

Lab Capacity

Currently, the Vancouver laboratory processes up to 60 Rock Creek samples per day. There is no backlog of Novagold samples in the Vancouver lab, and the Sample Preparation Manager is confident that they can process at least twice that volume if they are flooded with samples from Fairbanks.

Summary

Overall, AMEC is impressed with the sample preparation facilities at ALS Chemex, and is satisfied that the metallic screen procedures being used for the Novagold samples meet or exceed standard industry practices. The equipment and work areas appear to be clean and well maintained. Staff is efficiently processing the large samples with an appropriate level of care and attention to detail while ensuring that cross contamination and sample mix-up is minimized. AMEC does, however, recommend that the rolling homogenizer containers be replaced with containers without potential contaminant traps.

Steve Blower
Principal Geologist
steve.blower@amec.com

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John Odden
Chief Geologist
Novagold Resources Inc.
PO Box 640
Nome, AK 99762
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September 21, 2004

Dear John,

As per your request, I visited the ALS Chemex prep lab in Fairbanks to observe and comment on sample preparation procedures being performed on the Rock Creek samples. The lab visit was unannounced and conducted on the afternoon of September 20, 2004. The lab Branch Manager, Josephine Carioti, was cordial and cooperative, as were the supervisors and technicians. The timing of the visit was opportune as Rock Creek samples were being prepared.

Receiving and Drying

Samples are picked up by Chemex upon notification by Everts Air at the airport. Upon arrival at the lab, the samples are assigned work order numbers in batches of twenty. Bar coded tags that contain the work order number, and your original sample number, are stapled to the bag. A 'received weight' is recorded and the bar code is scanned, thereby starting its journey through the ALS Chemex computerized tracking system. The samples are placed in trays, opened, and arranged on drying racks. The bags arriving from Nome looked in good shape. I saw an occasional pulp envelope inside a bag, which I presumed to be a form of non-blind control. These samples were placed on the racks where they belong in the sample sequence.

The drying racks are rolled into the dryer for approximately 8 hours at 140 to 160 degrees Fahrenheit. When the samples are removed from the dryer, a 'dry weight' is recorded.

Crushing to 90% Passing 10-Mesh

The entire sample is fed into a six-inch jaw crusher and reduced to 90% passing 10-mesh, then placed into a new plastic bag. Depending on the sample, two to three passes are needed to achieve the right size. For the larger Rock Creek samples (2m of HQ core), a heavy-duty six-inch jaw crusher is used to reduce the sample to approximately ¼ inch, before proceeding with the normal crushing. The jaw crushers appeared to be well maintained and showed no signs of unusual wear. Upon interviewing the floor supervisor, he commented that the jaw plates had been replaced four or five times this season and extra parts and plates were on hand. Dust is vented to a central baghouse at the crusher stations.

The crusher is cleaned with compressed air (35 psi) between each sample. Between each batch, a sample of 'clean rock' is run through the crusher. When the sample achieves the 'percent passing' requirement, it is then signed-off in the 'crusher log' that is kept by the technician.

'Clean Rock'

'Clean Rock' consists of water worn pebbles and cobbles ranging in size from ¼ to 1 inch and is purchased from Fairbanks Sand & Gravel. It is stored in a large bin and is thoroughly washed before use. ALS Chemex performs a monthly and an occasional random assay of the 'clean rock'. The branch manager showed me the records and the results indicate no detectable gold. She also said that a few clients request a sample now and then to perform their own analysis. An important note is that the 'clean rock' used to run through the jaw crusher after a batch, is bagged and stored with the rejects for that batch, and can be pulled upon request.

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The crushed sample is fed into a single tier ½ inch riffle splitter until a 4 kg split is achieved. The splitting station is separated from other prep activities. The splitter and pans fit well. For some of the large samples, four pans are required to handle the volume. The technician signs-off on the 'splitting log' for each sample. The splitter and splitting station is cleaned with compressed air (35 psi) between each sample. Dust is directed toward plenums feeding the baghouse. I observed a technician using proper technique and producing a good split on some of the larger samples.

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The 4kg samples (4 per rice bag) are placed on pallets, shrink wrapped, and shipped via Alaska Airlines to Vancouver. If the samples get shipped in the morning, they will arrive the next morning (22 hours).

Rejects are placed on pallets by batch, shrink wrapped, and stored outside in the yard awaiting instructions. The yard was generally clean and organized and it appears as though it would be easy to pull rejects for reanalysis or other use. Keep in mind that there is no snow on the ground yet.

Conclusions

I was impressed with the overall cleanliness of the lab and separate workstations. The condition of the equipment, good dust control, and the techniques used by the lab personnel were satisfactory. The lab pays special attention to tracking the sample and sample sequence through each prep stage.

The ALS Chemex prep lab is a busy place. Most of the larger Alaska exploration projects are using ALS Chemex for their primary lab. I can understand that turnover could be an issue with so many large samples being submitted. However, regarding the issue of quality control, I believe that Novagold is receiving quality sample preparation at the ALS Chemex facility in Fairbanks.

Sincerely,

Arne Bakke CPG #8078

Memo

To	**Harry Parker**	File No.	**143031**
From	**Steve Blower**	cc	**Kevin Francis, Larry Smith, Scott Long, Bill Anslow**
Tel	**604 664-4116**		
Fax	**604 664-3057**		
Date	**23, September, 2004**		

Subject **ALS Chemex Visit**

Introduction

On 22 September 2004, ALS Chemex's laboratory in Vancouver was visited by myself to review the metallic screen sample preparation procedures for Novagold's Rock Creek project. ALS Chemex's fire assay protocols were not reviewed, but have been observed in a previous laboratory visit by the author in 2003.

Bill Anslow, Manager, Sample Preparation for ALS Chemex – Vancouver accompanied me during yesterday's visit and fielded all of my questions. Scott Long provided pre-visit advice on important aspects of the process to be reviewed. At the time of the visit, Novagold samples were being pulverized, but were not being screened.

Pulverization

Novagold's samples arrive in Vancouver via plane from the preparation lab in Fairbanks, to Seattle - and then from Seattle via truck. The samples arrive in Vancouver in multiples of 20, and each set of 20 samples is processed as a separate work order as per Novagold's instructions - to ensure that standard reference material (SRM) controlled sets flow through the laboratory as a group. The samples are approximately 4 kg splits of very finely crushed material. They are assigned bar codes in Fairbanks.

The entire 4 kg split is pulverized in up to four batches in an LM2. The pulverizer is cleaned with compressed air after each sample is processed. Quartz sand is used to clean the pulverizing bowl and puck after each sample set (20 samples). I inspected the bowl and puck after compressed air cleaning, and only traces of dust were evident after running a finger over the bowl.

Rigorous pulp size specifications are not targeted. Instead, the goal of the pulverizing is to achieve an approximately 50 gm charge of 150 mesh screen oversize to limit the number of oversize fire assays. If the oversize volume is greater than 50 gm, it may be re-pulverized to reduce it to 50 gm or less.

Screening

After pulverizing, the entire sample is processed through two 150 mesh (100 micron) screens (arranged side by side to speed processing time) at one of two screening stations. All four screens were inspected and found to be clean and intact (no holes). Oversize material removed from the screens during cleaning is returned to the oversize sample.

Fire Assay Charge Selection

All of the oversize fraction is placed in a regular kraft pulp bag for fire assaying. All of the undersize fraction is homogenized in an improvised rolling mixer, before a random scoop of approximately 200 gm is placed in a pulp bag and transported upstairs for undersize fire assay. There, two 30 gm charges are randomly scooped from the 200 gm pulp for duplicate undersize fire assay.

The containers used to homogenize the sample have been fabricated from two plastic 5-gallon buckets with their bottoms removed. The bottom end of one bucket was crimped and inserted into the bottom end of the other. The buckets are then sealed together, and lids are attached to both ends (the former tops of the buckets). This results in a large groove on the inside of the container where the buckets overlap, creating a potential trap for potential contaminants as it is difficult to clean and inspect. A minor amount of sample material was noted in this overlap area after the containers had been cleaned.

Lab Capacity

Currently, the Vancouver laboratory processes up to 60 Rock Creek samples per day. There is no backlog of Novagold samples in the Vancouver lab, and the Sample Preparation Manager is confident that they can process at least twice that volume if they are flooded with samples from Fairbanks.

Summary

Overall, AMEC is impressed with the sample preparation facilities at ALS Chemex, and is satisfied that the metallic screen procedures being used for the Novagold samples meet or exceed standard industry practices. The equipment and work areas appear to be clean and well maintained. Staff is efficiently processing the large samples with an appropriate level of care and attention to detail while ensuring that cross contamination and sample mix-up is minimized. AMEC does, however, recommend that the rolling homogenizer containers be replaced with containers without potential contaminant traps.

Steve Blower
Principal Geologist
steve.blower@amec.com

John Odden
Chief Geologist
Novagold Resources Inc.
PO Box 640
Nome, AK 99762
(907) 443-5272

September 21, 2004

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Sincerely,

Arne Bakke CPG #8078

A-8 Estimation of Selection Bias

Memo

To	**Harry Parker**	File No.	
From	• Scott D. Long	cc	**Steve Blower**
Tel	**602 343 2437**		
Fax			
Date	**20 February 2004**		

Subject **Estimation of Selection Bias: Rock Creek Metallic Screen Fire Assays for Gold above selected cut-off**

Introduction

A selection bias can be introduced when samples are selectively re-assayed on the basis of the original assay (applying a cut-off). This typically occurs when the decision is taken to re-assay samples that have gold results above a certain grade. Because the second result is allowed to vary freely but the first result is constrained by the selection to be above a certain amount, there is a bias in the results.

In the case where all samples undergo re-assay, the cutoff value of the "selection" is zero, all samples have two assay results, and there is no selection bias. The means of the two sets of results should agree (within the range of uncertainty of the means). A selection bias can be demonstrated for such a database by making a selection above a certain cutoff applied to the first result and comparing the means of the first and second results above this cutoff. One then has the dataset equivalent to that obtained if a selection above that cutoff value were made, and no other re-assay results existed.

The selection bias can then be expressed as the percentage difference of the means obtained from the first and second results. The magnitude of the bias depends upon the grade distribution, which can be described by the CV (standard deviation divided by mean); the correlation coefficient between the two sets of results; and the cutoff value, which can be described in the general case by the percentile (or alternatively, units of standard deviation) of the population where the cutoff is applied.

If the correlation between the first and second assays is very high, the selection bias will be low. Typically, if $r > 0.9$, the selection bias is small or negligible. If the CV of a distribution is very large, the selection bias tends to be small. Finally, as the percentage of the population that is re-assayed increases, the selection bias decreases; there can be no selection bias if all samples are re-assayed.

It is possible to model the selection bias if the correlation coefficient, CV, and percentile at which the cutoff is applied are known. The modeling is done by generating very large log-normal distributions in EXCEL with paired data of chosen correlation coefficients. An example curve is

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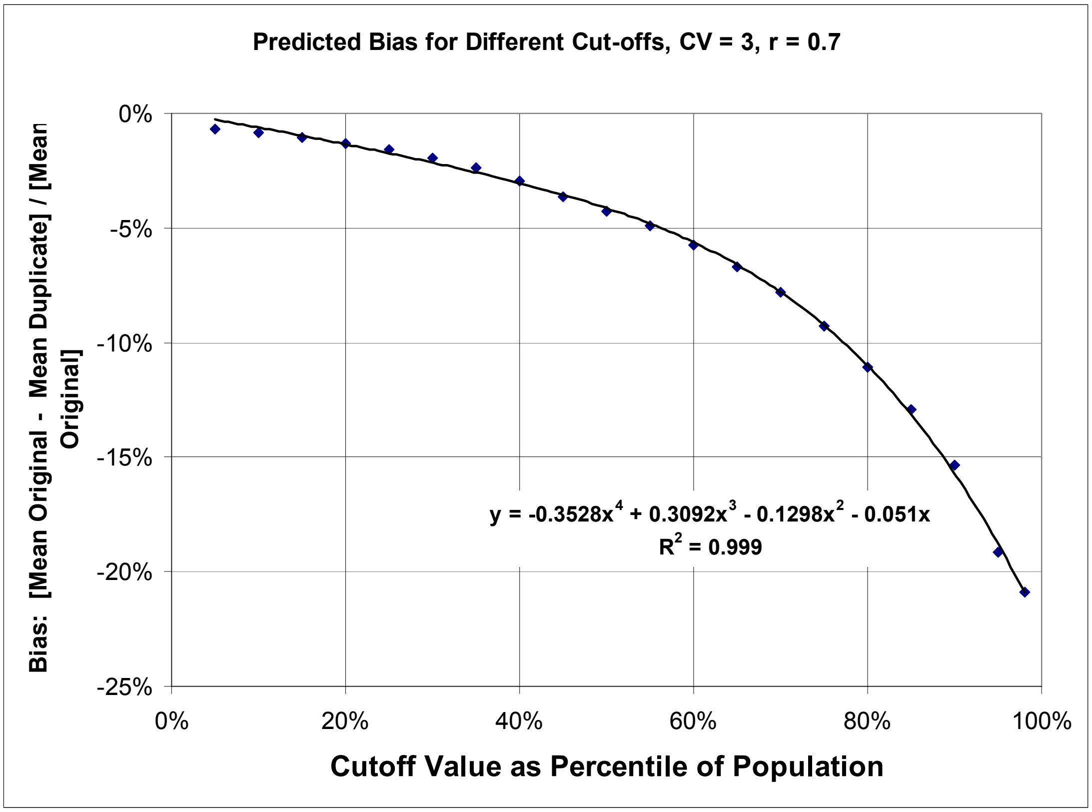
shown in Figure 1, for a log-normal distribution with a CV = 3 and a correlation of duplicate pairs r = 0.7.

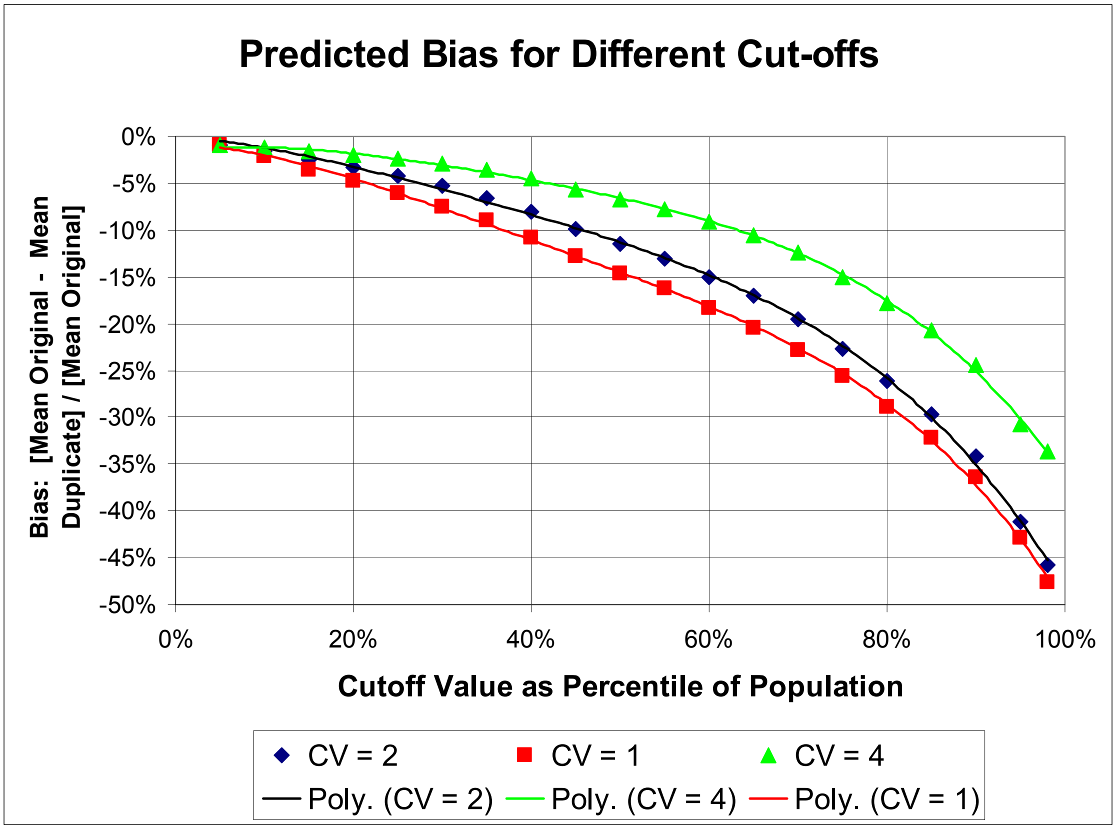
Figure 1   Selection Bias for CV = 3 and r = 0.7



For example, using the chart in Figure 1, say one selects a cut-off of 2 ppm Au and this corresponds to the 80th percentile of the grade distribution. Then, the chart provides a prediction that if samples above this cut-off are chosen for re-assay, the average of those re-assay results will be about 11 percent lower than the average of the original results above that cut-off.

The shape and position of the curve varies with CV and r. A set of curves (for different CV) are shown in Figure 2, for a correlation r = 0.5

Figure 2 Selection bias estimates for r = 0.5



An important limitation of this modeling exercise is the assumption of *duplicate* results; that assumes the CV is the same for the paired sets of results. An MSA dataset will have a lower CV than a "conventional" fire assay dataset, as a consequence of change of support (the MSA has a larger "effective" assayed sample mass, so the shape of its grade distribution will be less skewed). The effect may be to predict somewhat less selection bias than actually occurs.

The biased estimate is a result of the applying a selection to a result that does not have a high precision. If a sufficiently low cut-off value had been used for selection (e.g. half the ore-waste cut-off value) impact of a selection bias would be greatly reduced for two reason: a higher percentage of the samples would be re-assayed; and a greater percentage of the samples containing underestimates of gold grade would undergo re-assay. The gold that appears to have been "lost" by re-assaying is "hidden" amongst the many samples that were not re-assayed.

Selection Bias in Rock Creek Samples

Some of the historic campaigns at Rock Creek introduced a selection bias by choosing samples above 1 ppm Au for re-assay. The re-assays were done by metallic screen fire assay (MSA) with varying protocols. The initial assay upon which the selection was applied also varied in protocol. The most critical parameter in these protocols is likely to be the mass analyzed. The initial sample mass varied from 10 grams to 50 grams. The sample mass for the MSA re-assays varied from 0.3 to 4 kg, with varying masses of the undersize fraction taken.

The Nova Gold database contains what appear to be independent assays for some campaigns. For example, there are some values in the Au ppb field for the 1997 Placer campaign that differ from the results entered in the Gold-plotted field. These may not be a good estimate of the correlation that would be obtained between original and MSA results.

Some campaigns had no selective re-assaying and therefore cannot have introduced a selection bias. Nova Gold's campaigns prior to 2003 used 50 gram fire assays and a limited amount of re-assaying by MSA; however a fixed cut-off was not used, and selection bias cannot be estimated, but, for that reason, the selection bias is likely to be low.

Amec reviewed the historic campaigns and identified those likely to have introduced a selection bias, based upon Nova Gold's descriptions of the assay protocols. The relevant characteristics of these campaigns, selecting drill holes in the "Rock Creek" area only, are shown in Table 1.

Table 1 Campaigns with Probable Selection Bias for Samples with Au > 1 ppm

Campaign	Assayed Mass (gm)	N assays	Mean Au ppb	std dev	cv	Percentile of 1 ppm Au
1997 Placer	10	2,662	0.779	2.44	3.13	85%
1988 Placer	30	4,037	0.767	3.50	4.57	87%
Kennecott	30	3,784	0.449	2.03	4.53	91%

A limited amount of data exists for estimating an appropriate correlation coefficient for "duplicate" pairs of results. These results are not clearly documented and may have limited relevance. These provide estimates of correlation coefficients and afford a comparison of differences between means (Table 2).

Table 2 Comparison of Au by different methods

Campaign	Assayed Mass (g)	Field 1	Field 2	N	r	Mean1	Mean2	% Difference
1997 Placer	10	Au plotted	Au ppb	1250	0.73	0.47	0.31	51%
Kennecott	30	MSA tot	Au 30	174	0.85	2.67	3.45	23%
1999 Nova	50	MSA tot	Au 30	171	0.70	1.51	1.51	0%

The 1997 Placer results are likely to be a comparison between a 10 g fire assay and an aqua regia digestion related to ICP determinations for other elements.

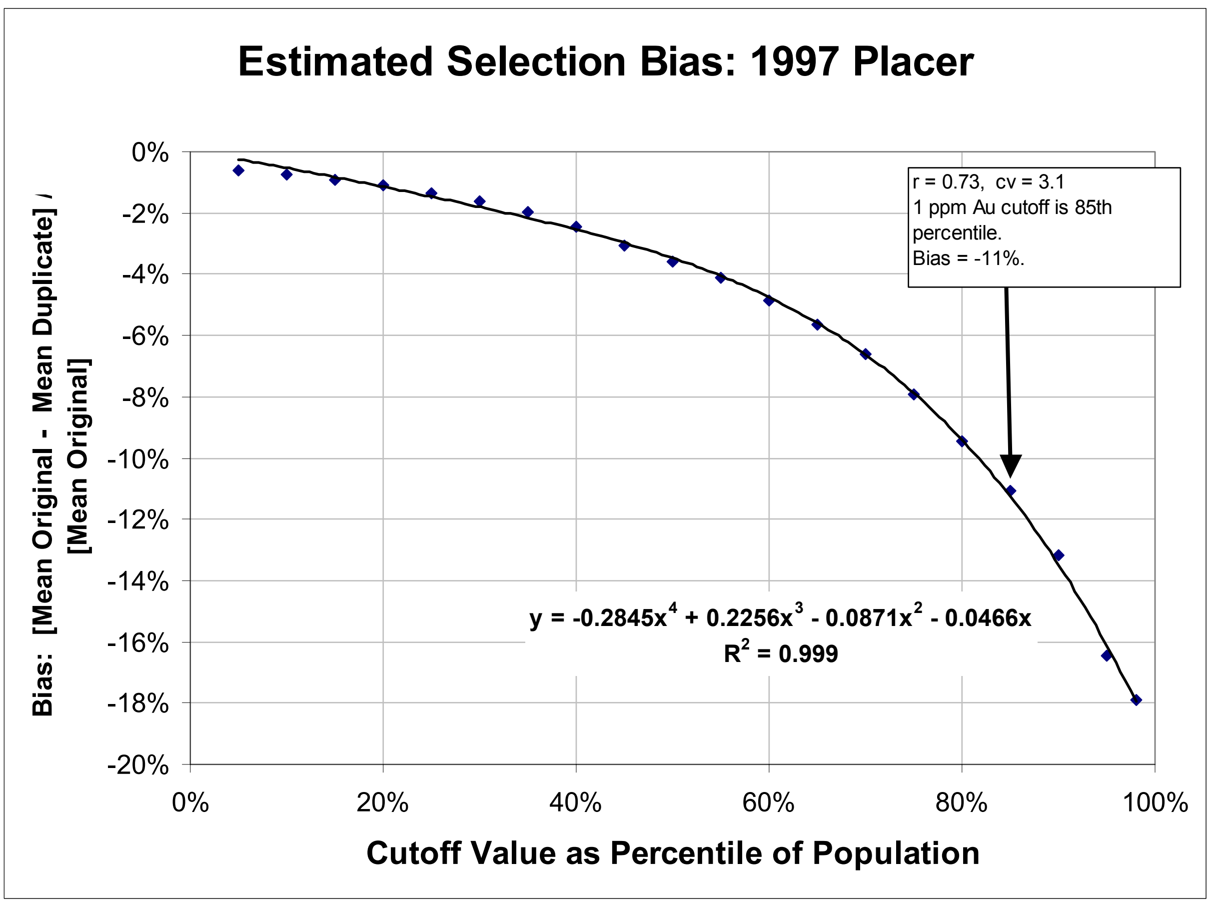
The Kennecott pairs do not show a fixed cut-off value for the Au 30 (probably original assay) result; 90 of the 170 pairs have an Au (30g) result below 1 ppm Au. This calls indicates that Kennecott did not just select samples with grades above 1 ppm Au to re-assay by MSA. It calls into question whether all assay results with grades greater than 1 ppm Au are actually MSA determinations. Such factors will tend to reduce selection bias.

The 1999 Nova results show no selection bias but this is somewhat misleading. Amec discarded two entries where the Au(30) result was "99,999", possibly indicating an "out of working range condition". Both of these records had MSA results greater than 10 ppm. If these entries are included, the estimate of selection bias is very high.

Estimates of Bias

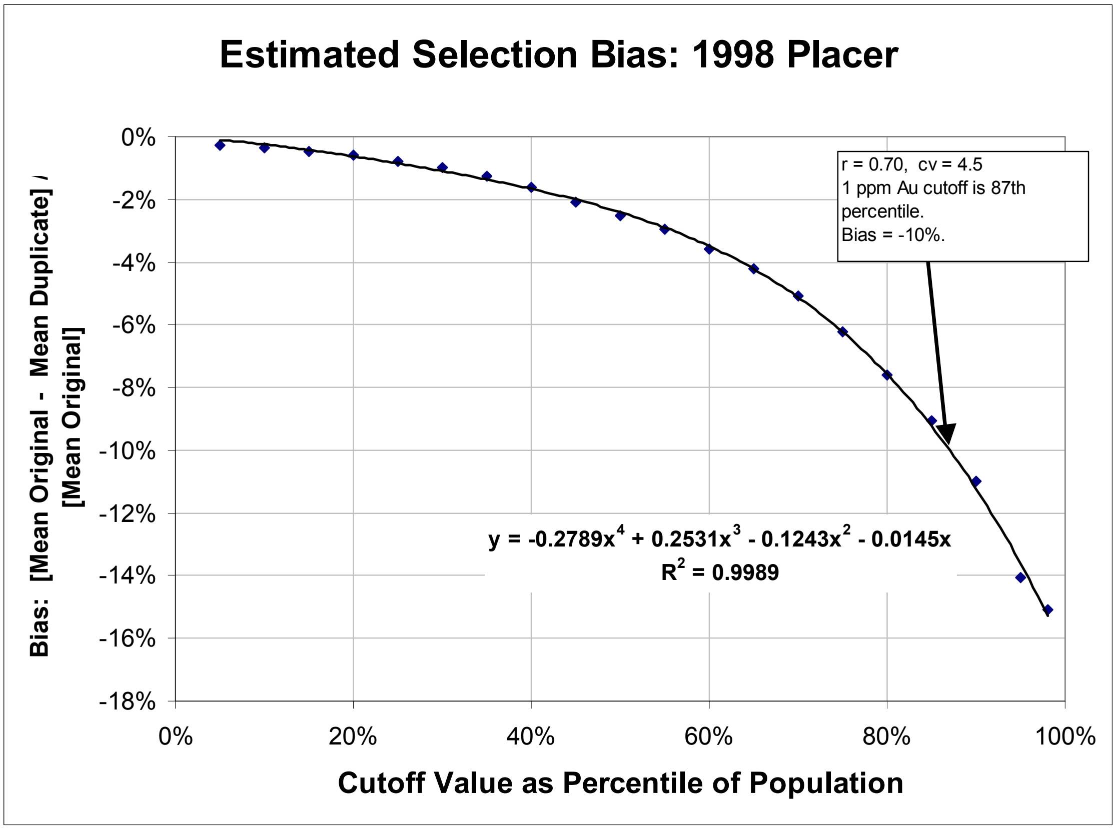
The bias introduced to sample results in the 1997 Placer campaign is –11%, assuming r = 0.73 and using CV = 3.1 (Figure 3). The bias would have been substantially reduced if the selection had been made at the 60th percentile. This corresponds to Au = 0.24 ppm.

Figure 3 Estimate of Selection Bias for 1997 Placer Data



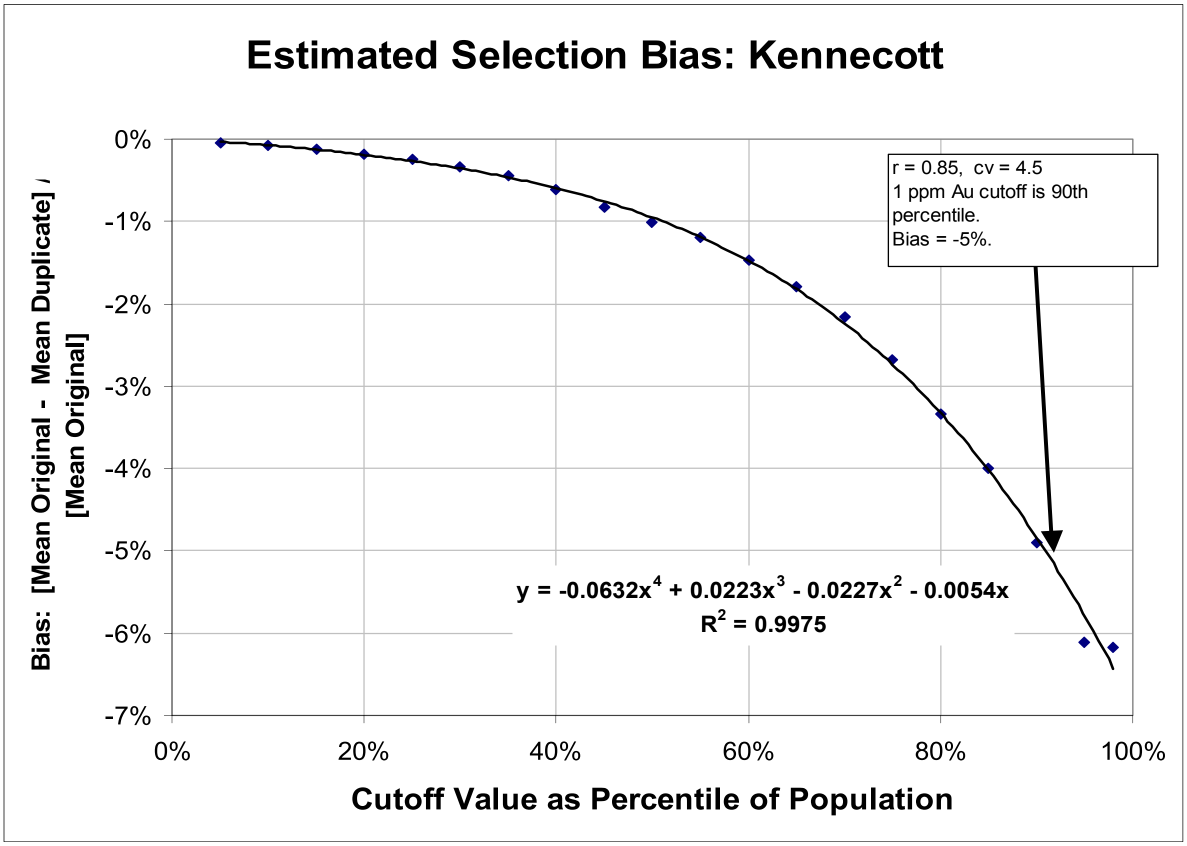
The bias introduced to sample results in the 1998 Placer campaign is –11%, assuming r = 0.7 and using CV = 4.5 (Figure 4). The bias would have been substantially reduced if the selection had been made at the 70th percentile. This corresponds to Au = 0.31 ppm.

Figure 4 Estimated Selection Bias of 1998 Placer data



The bias introduced to sample results in the Kennecott campaign is -5%, assuming r = 0.85 and using CV = 4.5 (Figure 5).

Figure 5 Estimated Selection Bias of Kennecott data



Conclusion

Compared to similar deposits, the amount of estimated selection bias is fairly modest. This is a consequence of the available data indicating the correlation r is greater than 0.7 and the presence of a high cv.

There is a modest improvement in accuracy possible by selectively re-assaying the Placer drill holes. The amount of bias currently present should not be misconstrued to indicate the ultimate amount by which the average grade would *increase* above some other cut-off, only that the amount of selection bias would be reduced. The grade estimates would be more accurate, but *not necessarily higher*, on average, above some lower cutoff used for selection.

Recommendation

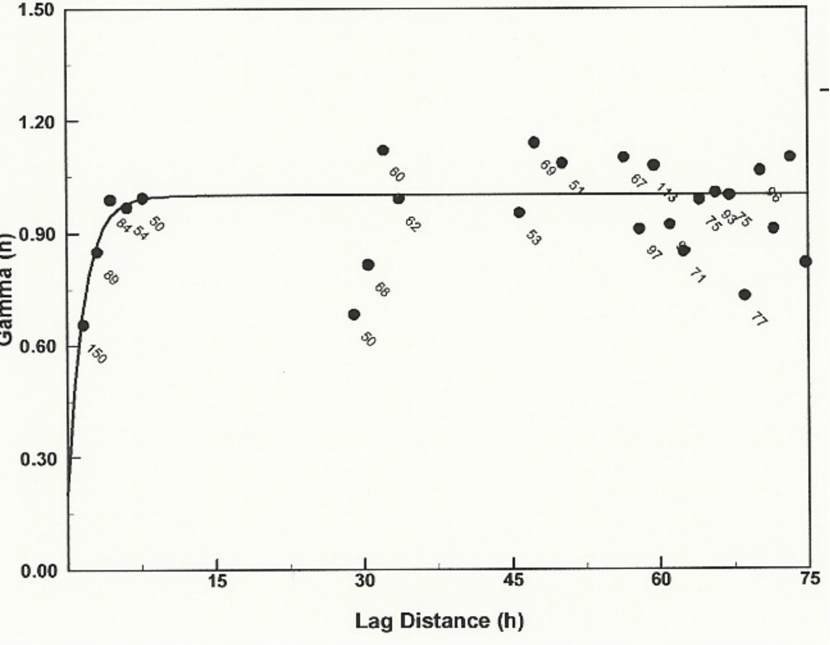
Amec does not believe a re-assay program is warranted at this level of probable selection bias.

To the extent that drill core are available, the effect of selectively re-assaying could be quantified by re-sampling a random selection of drill hole intervals from the Placer campaign that have grades greater than 0.24 ppm Au, assaying these by current MSA protocol, and calculating the average of these results and comparing it to the average of the original results for those samples. Within the confidence intervals of the means, this should provide an estimate of the amount by which an extensive re-assaying program would change the mean grade of samples above 0.22 ppm Au.

A-9 Downhole Variograms for Various Core Recovery Bins

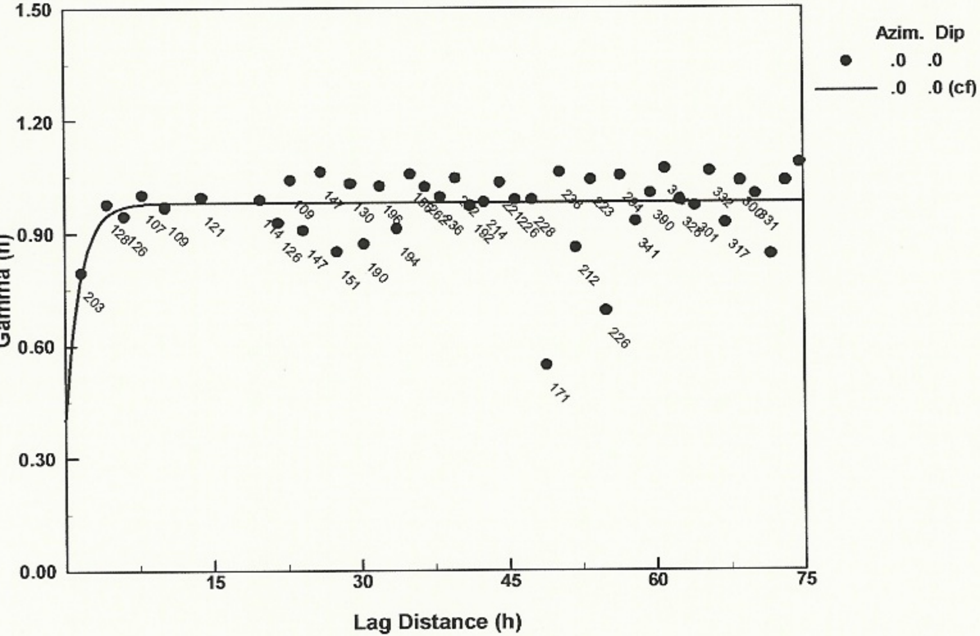
Downhole Correlogram COREC 0-59%

Gamma(h)= .2 + .8Exp5(h)



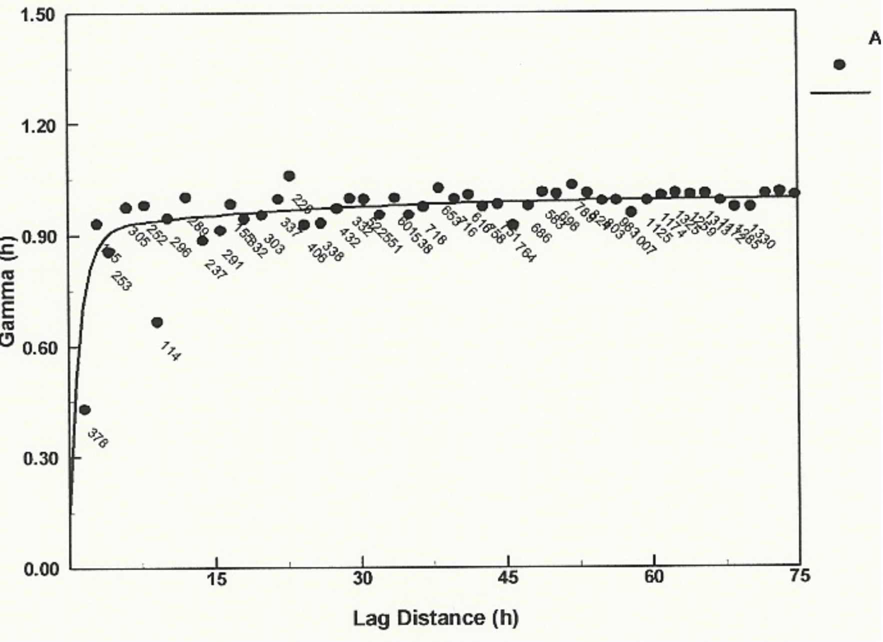
Downhole Correlogram COREC 60-79%

Gamma(h)= .4 + .58Exp4.5(h) + .02Exp342282.5(h)



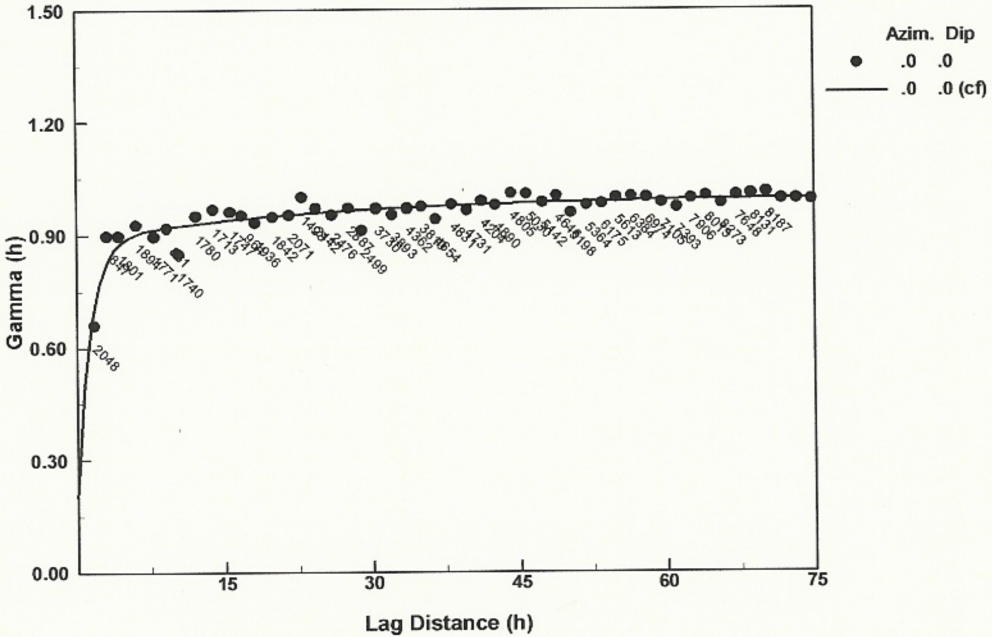
Downhole Correlogram COREC 80-89%

Gamma(h)= .15 + .76Exp3.5(h) + .09Exp70.5(h)

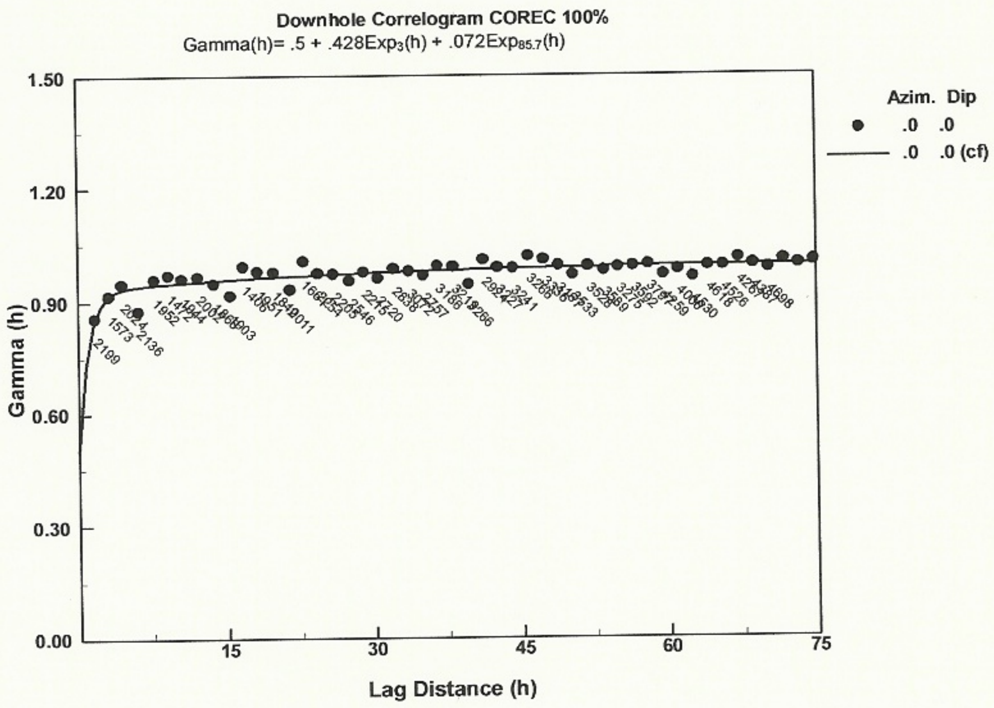


Downhole Correlogram COREC 90-99%

$Gamma(h) = .2 + .683Exp_{4}(h) + .117Exp_{72.4}(h)$



Variogram Models



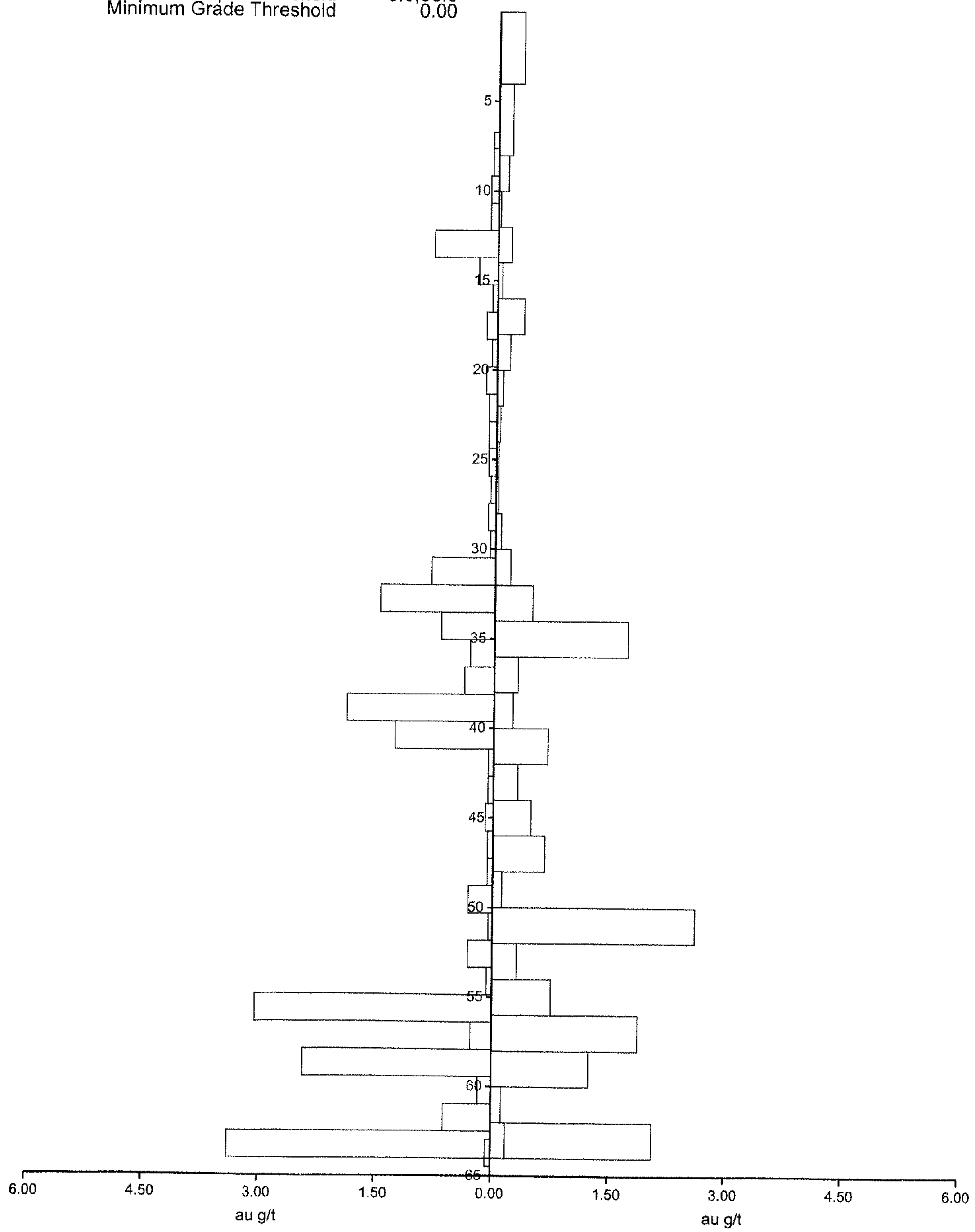
A-10 Twin Hole Data Grade Profiles

RC-7-006

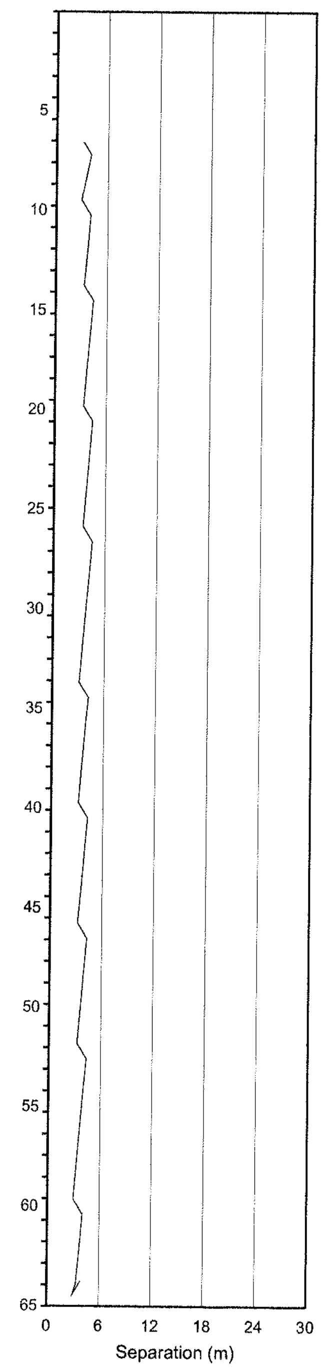
N 41
m 0.51
Cv 1.60
Intervals Trimmed by Depth 0
Intervals Trimmed by Grade 0
Minimum/Maximum Depth Threshold 0.0,68.0
Minimum Grade Threshold 0.00

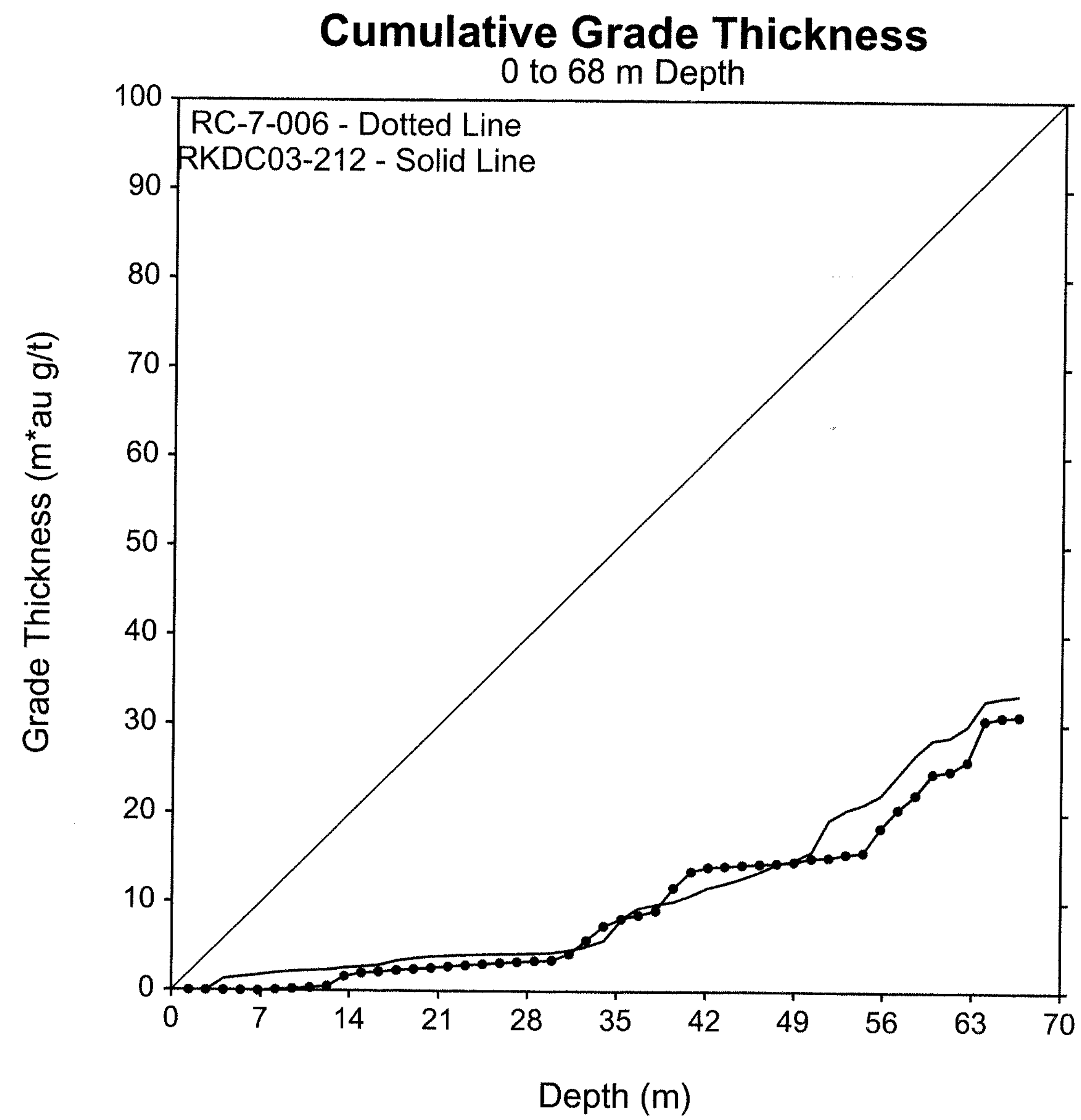
RKDC03-212

N 32
m 0.49
Cv 1.29
Intervals Trimmed by Depth 1
Intervals Trimmed by Grade 0



Horiz. Separation





1B

A A

Core

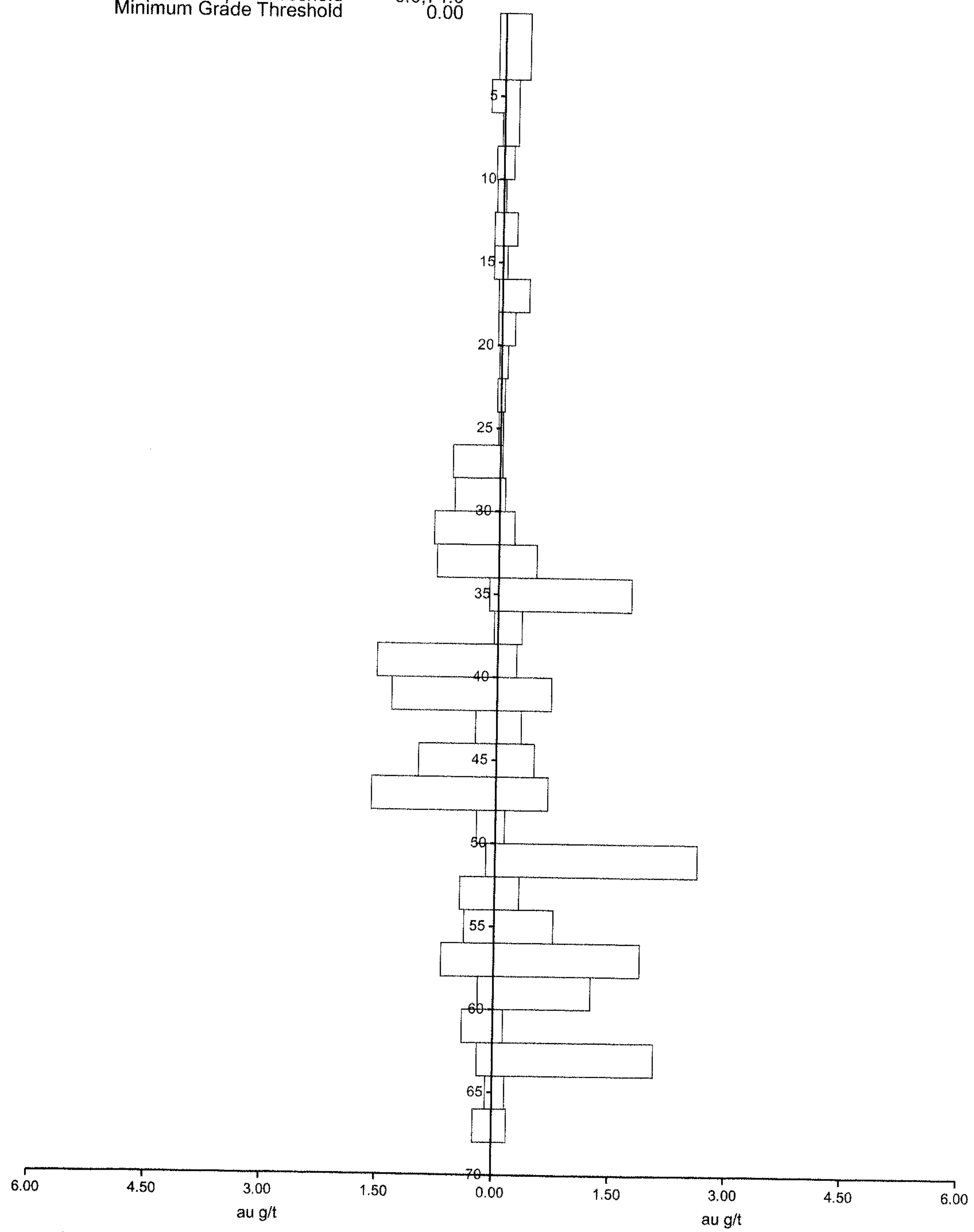
RKDC04-242

N	34
m	0.39
Cv	1.11
Intervals Trimmed by Depth	0
Intervals Trimmed by Grade	0
Minimum/Maximum Depth Threshold	0.0,71.0
Minimum Grade Threshold	0.00

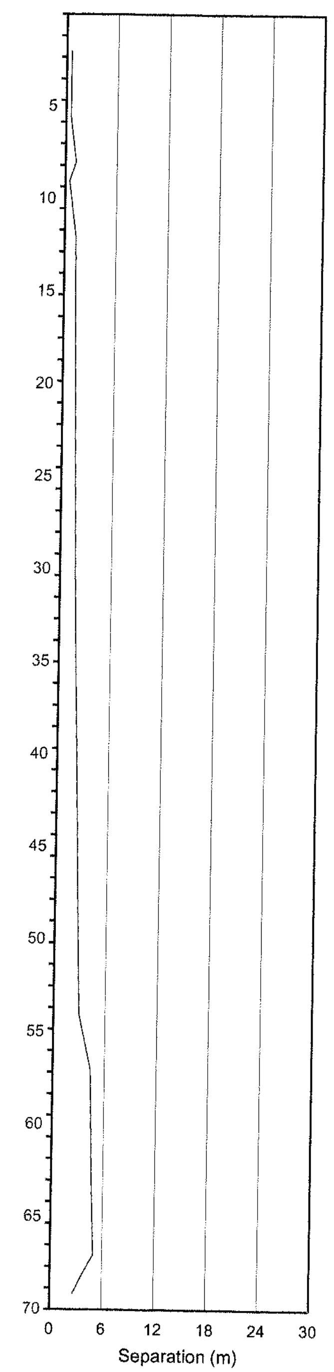
Core

RKDC03-212

N	33
m	0.48
Cv	1.31
Intervals Trimmed by Depth	0
Intervals Trimmed by Grade	0

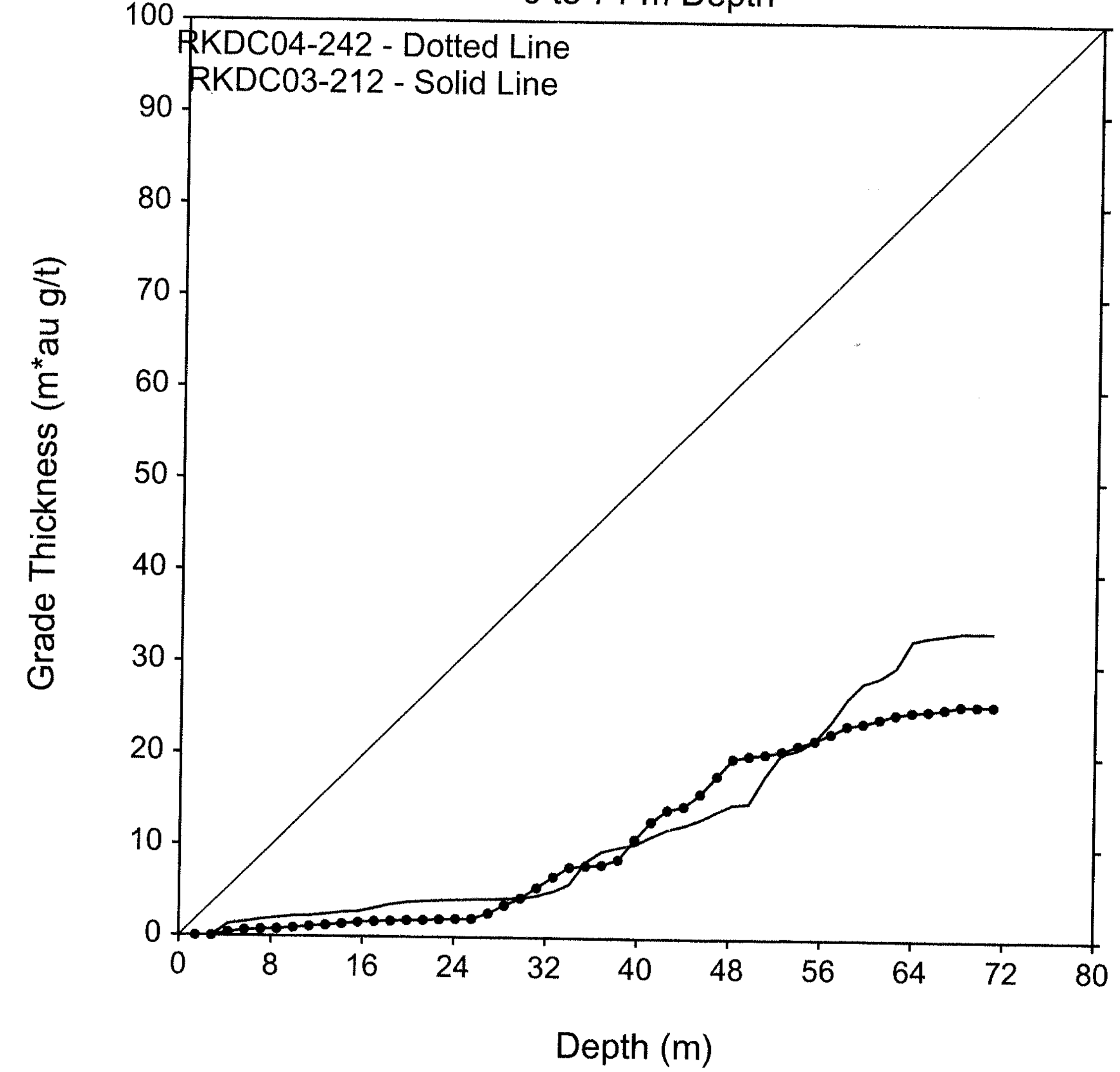


Horiz. Separation



Cumulative Grade Thickness

0 to 71 m Depth



1C

A A

Core

RC-7-006

N 41
m 0.51
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Intervals Trimmed by Depth 0
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Minimum/Maximum Depth Threshold 0.0,68.0
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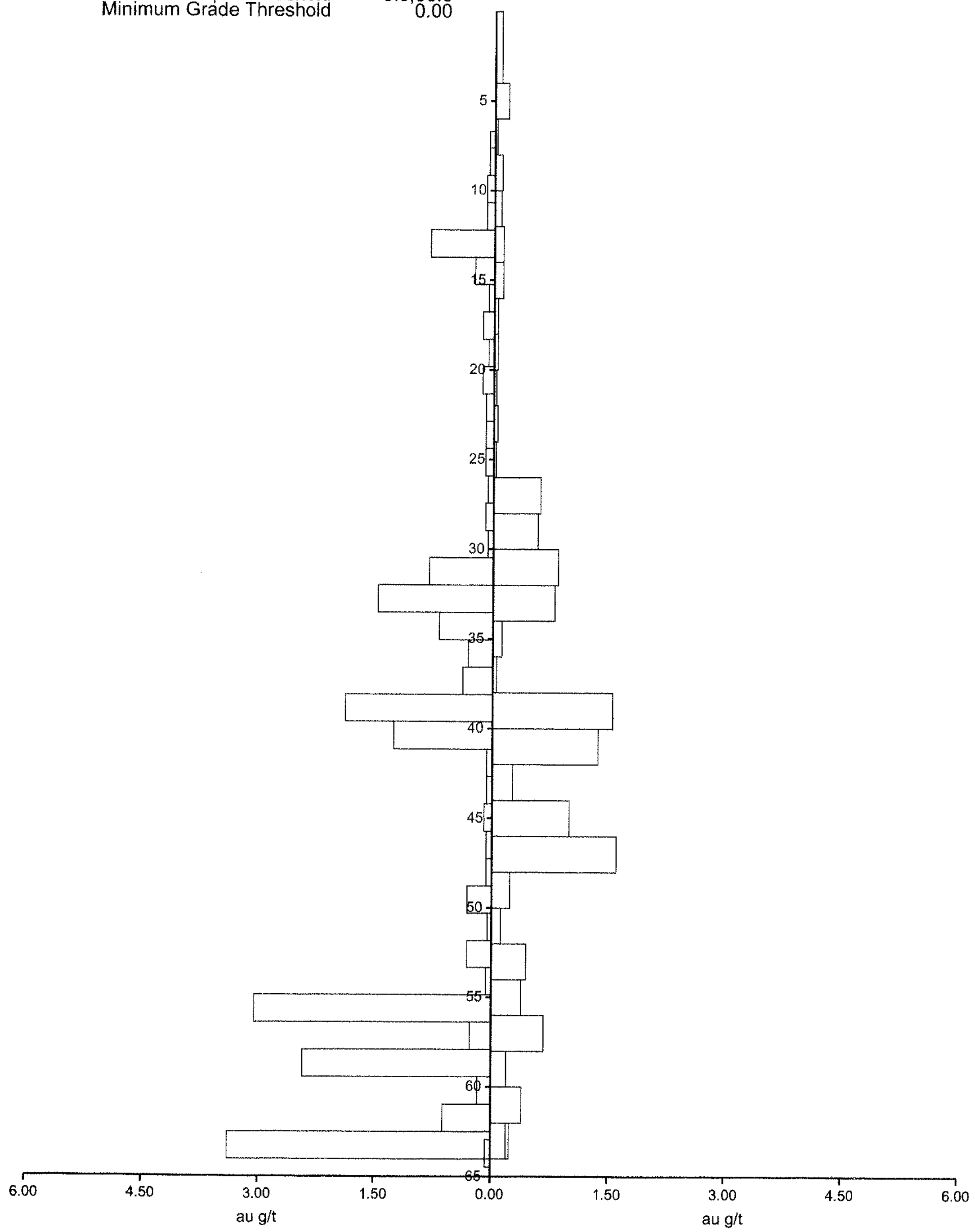
Core

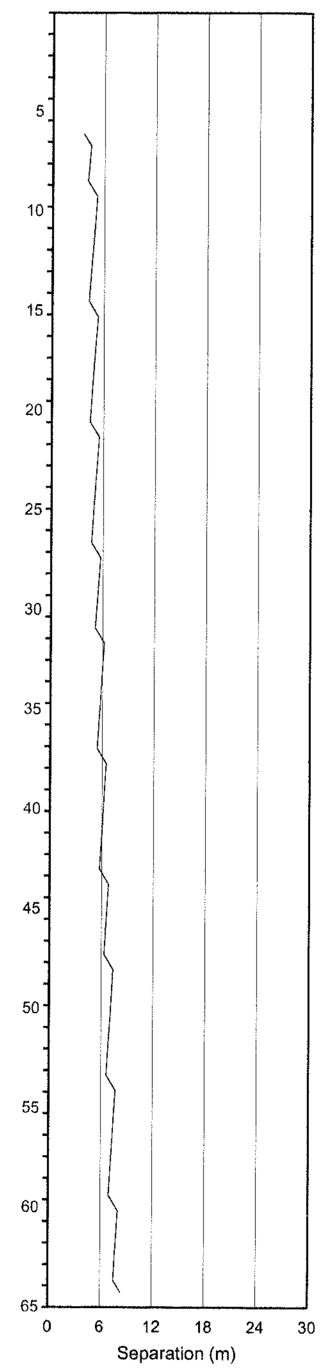
RKDC04-242

N 33
m 0.38
Cv 1.15

Intervals Trimmed by Depth 1
Intervals Trimmed by Grade 0

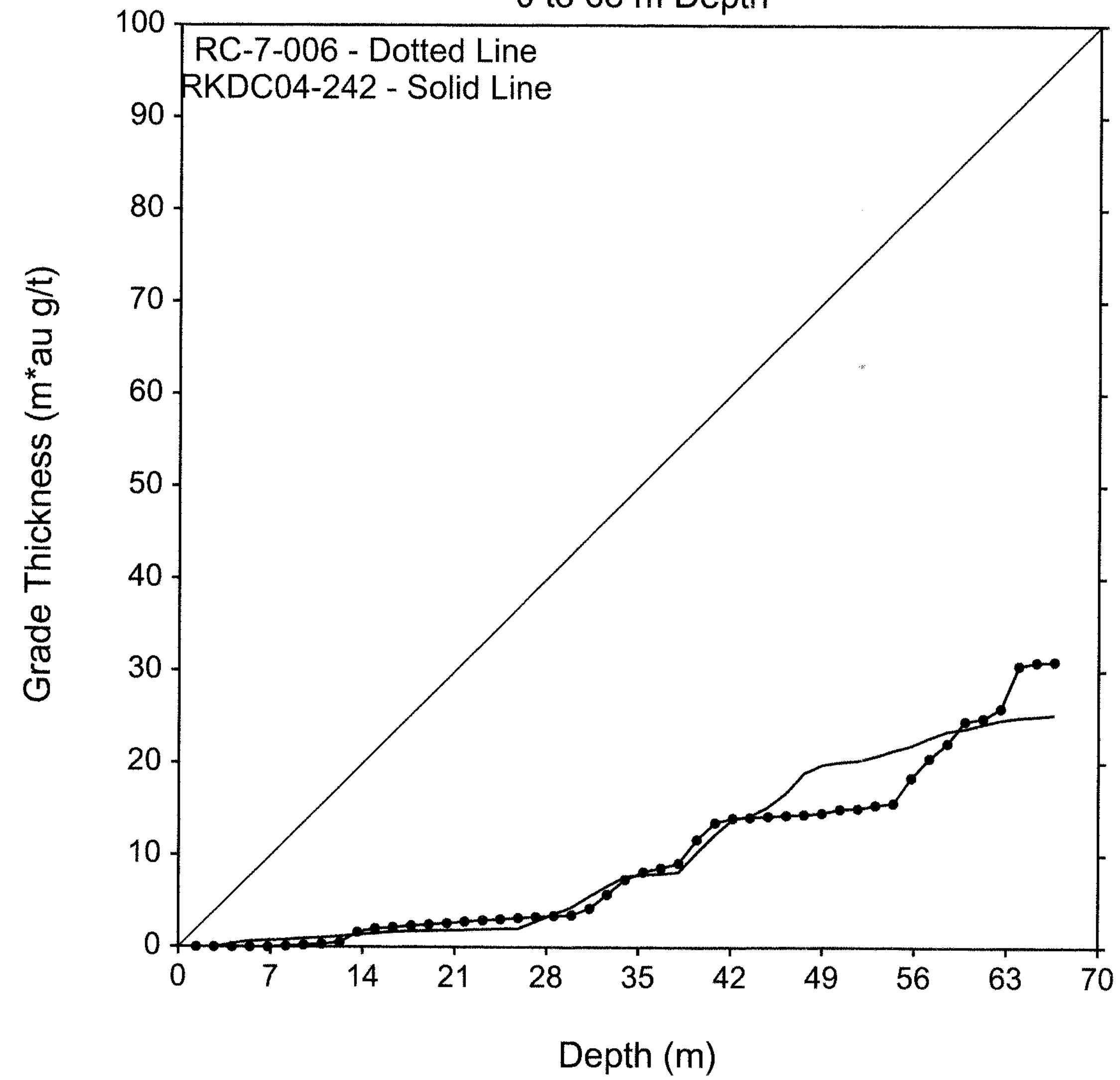


Horiz. Separation



Cumulative Grade Thickness

0 to 68 m Depth



1D A A

RC

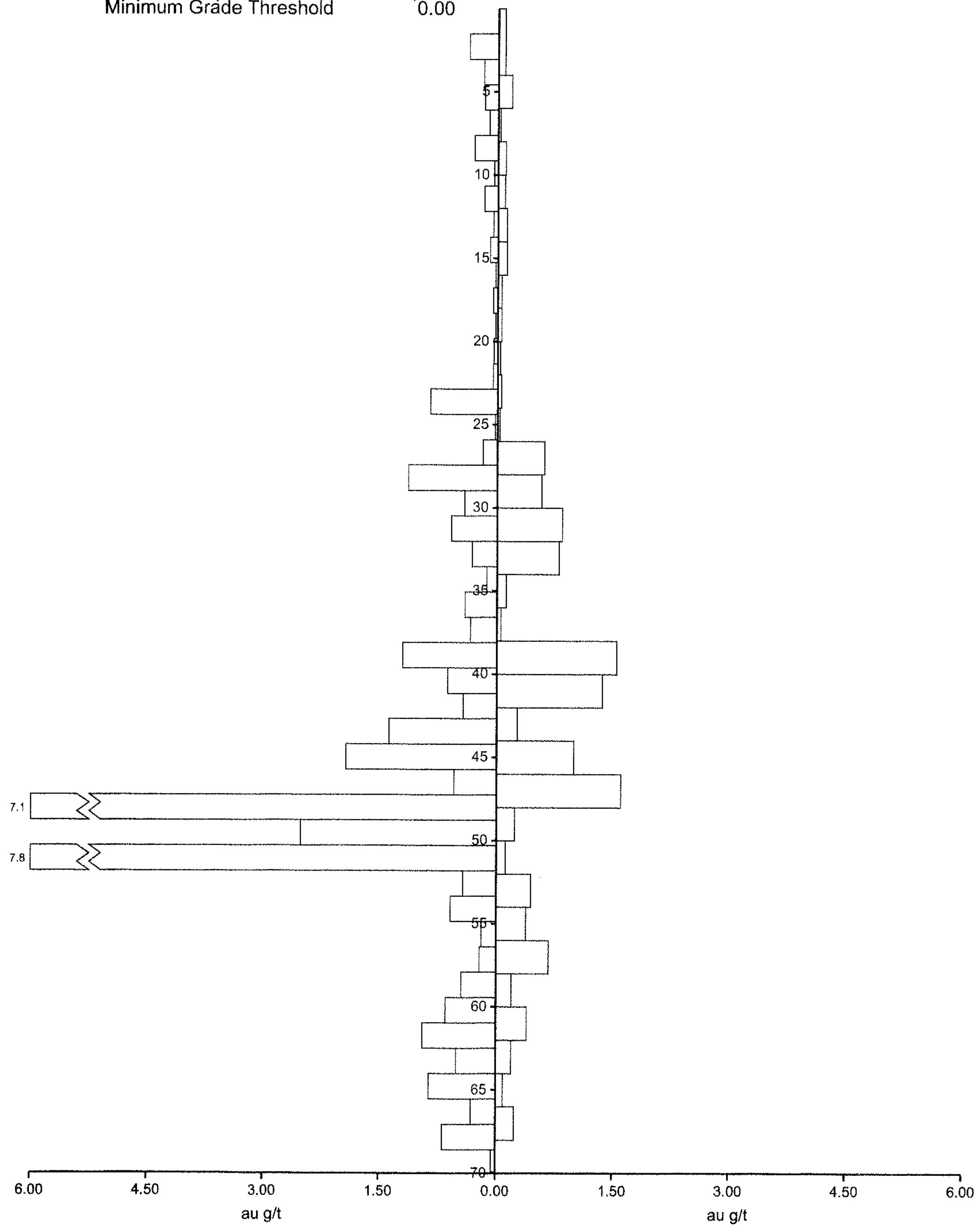
RKRC04-040

N 45
m 0.79
Cv 1.92
Intervals Trimmed by Depth 3
Intervals Trimmed by Grade 2
Minimum/Maximum Depth Threshold 0.0,71.0
Minimum Grade Threshold 0.00

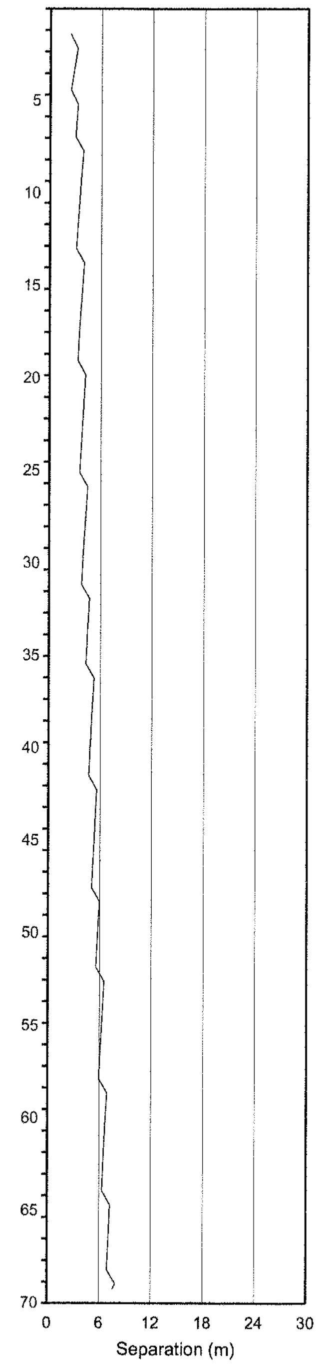
CORE

RKDC04-242

N 34
m 0.39
Cv 1.11
Intervals Trimmed by Depth 0
Intervals Trimmed by Grade 0

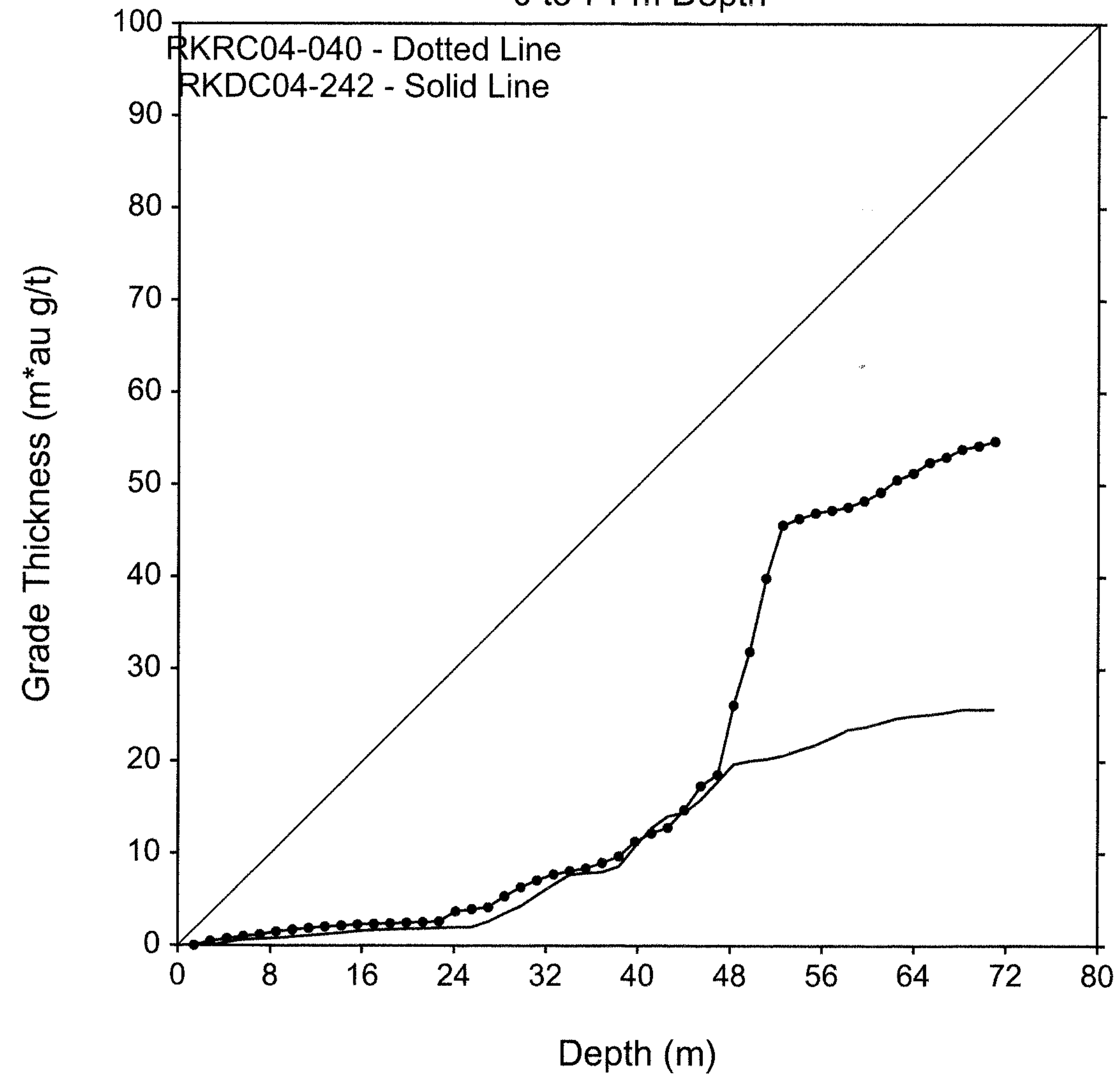


Horiz. Separation



Cumulative Grade Thickness

0 to 71 m Depth



1E

B+

RC

CORE

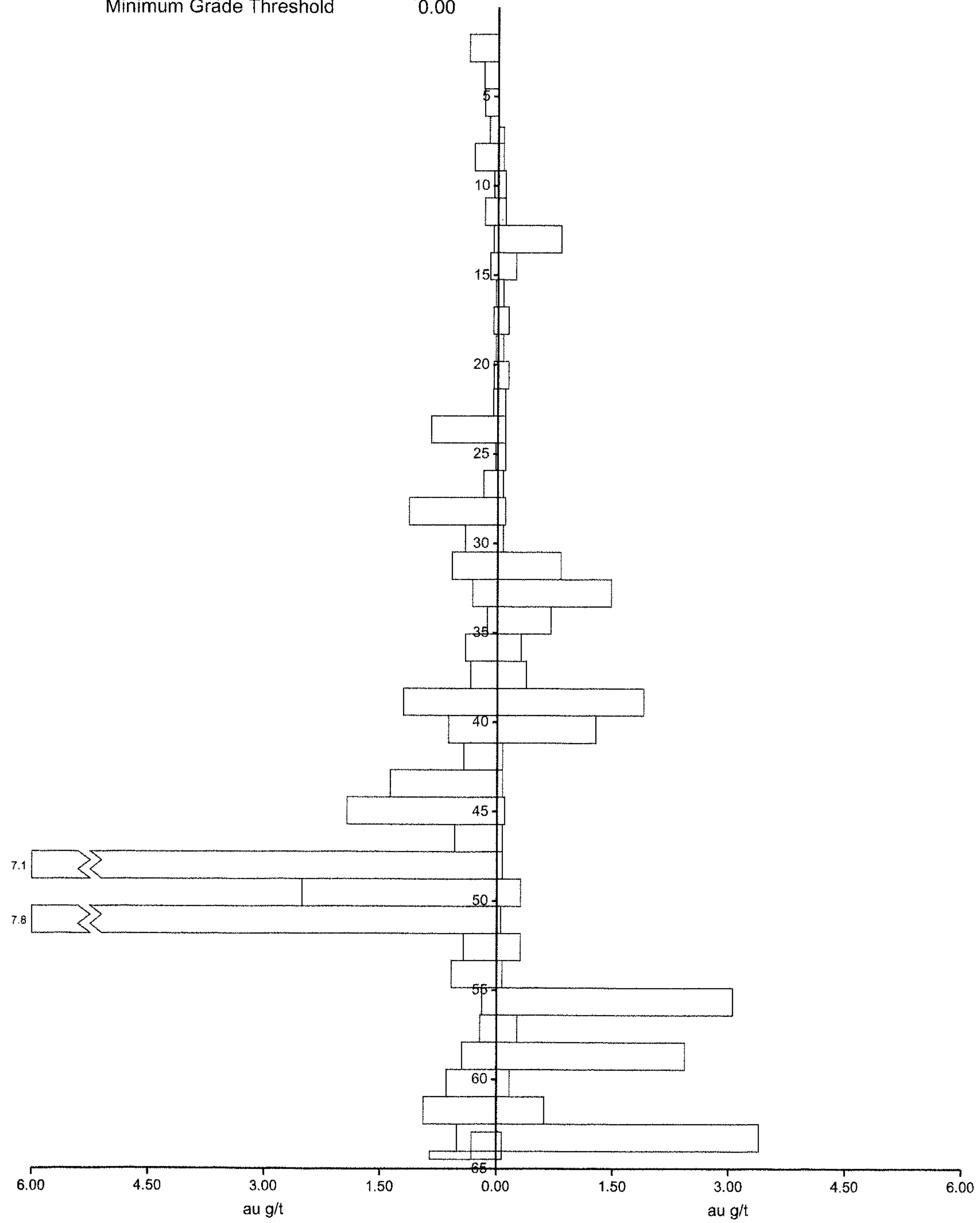
RKRC04-040

N	43
m	0.81
Cv	1.91
Intervals Trimmed by Depth	5
Intervals Trimmed by Grade	2

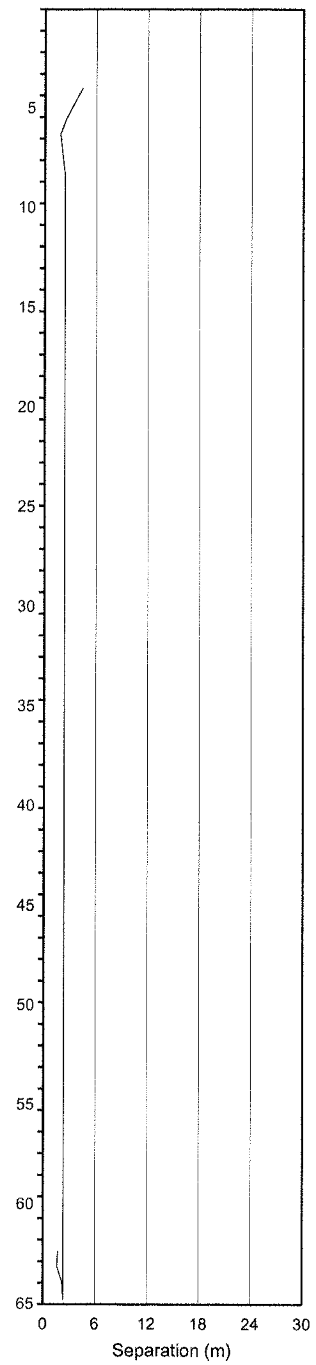
RC-7-006

N	41
m	0.51
Cv	1.60
Intervals Trimmed by Depth	0
Intervals Trimmed by Grade	0

Minimum/Maximum Depth Threshold 0.0,68.0
Minimum Grade Threshold 0.00

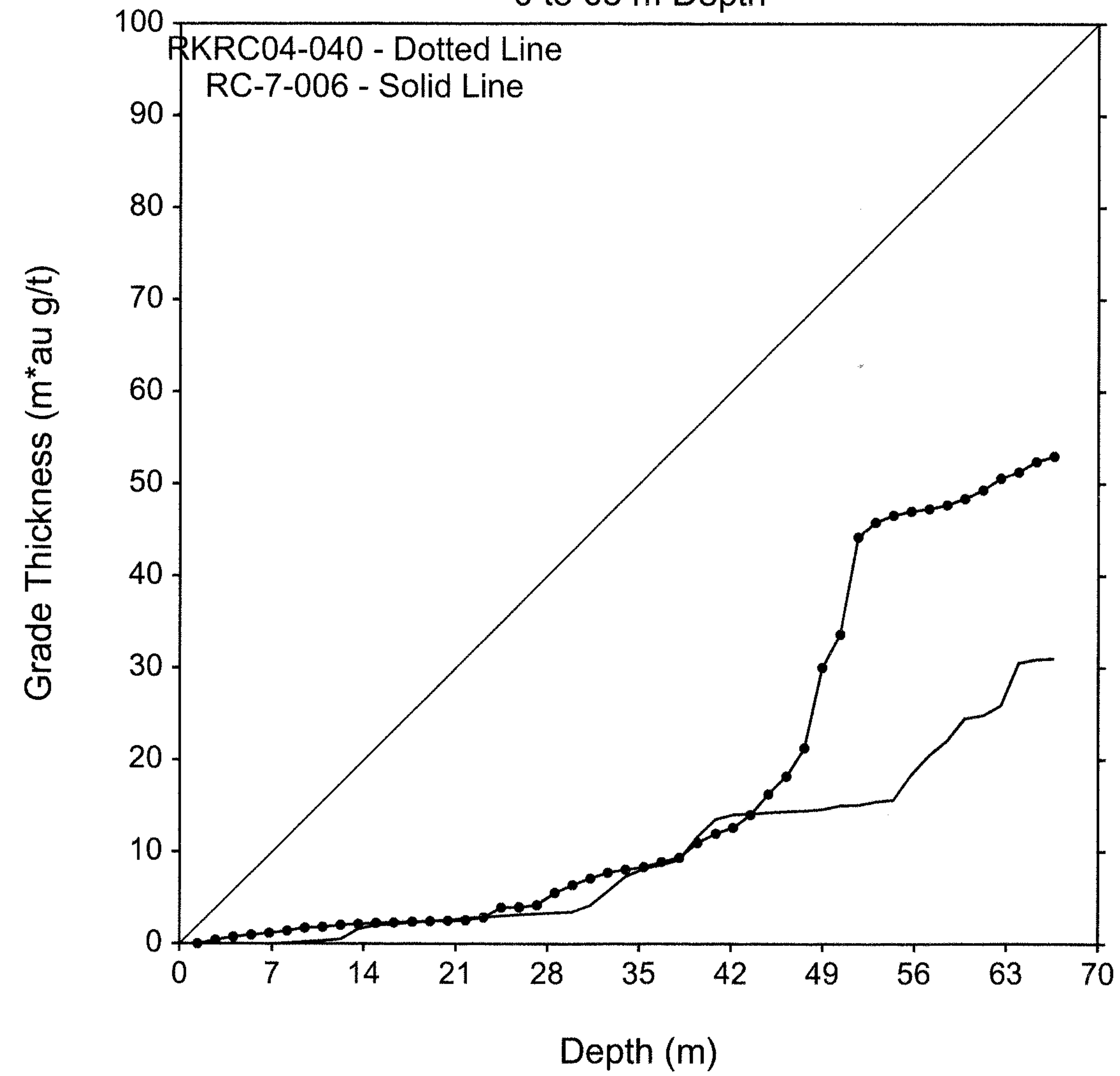


Horiz. Separation



Cumulative Grade Thickness

0 to 68 m Depth



1F

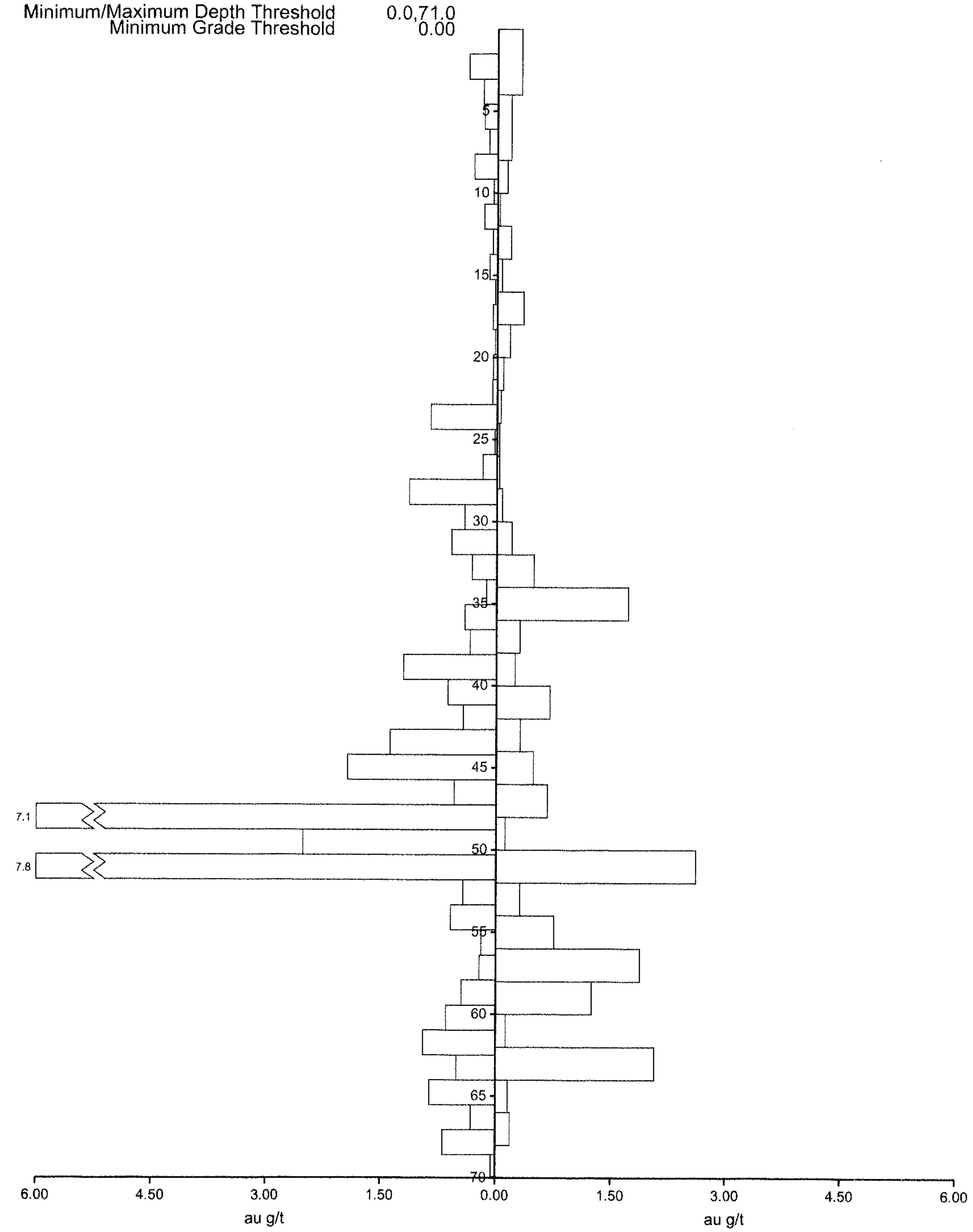
B+

RKRC04-040

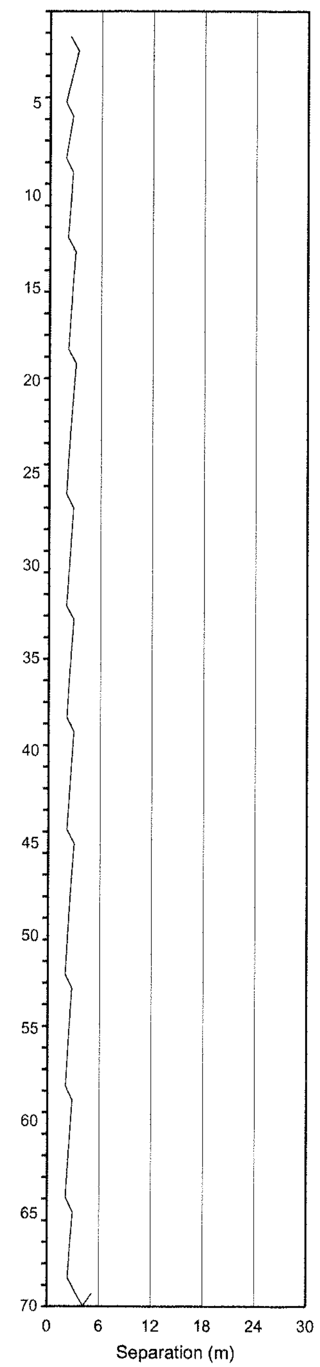
N	45
m	0.79
Cv	1.92
Intervals Trimmed by Depth	3
Intervals Trimmed by Grade	2
Minimum/Maximum Depth Threshold	0.0,71.0
Minimum Grade Threshold	0.00

RKDC03-212

N	33
m	0.48
Cv	1.31
Intervals Trimmed by Depth	0
Intervals Trimmed by Grade	0

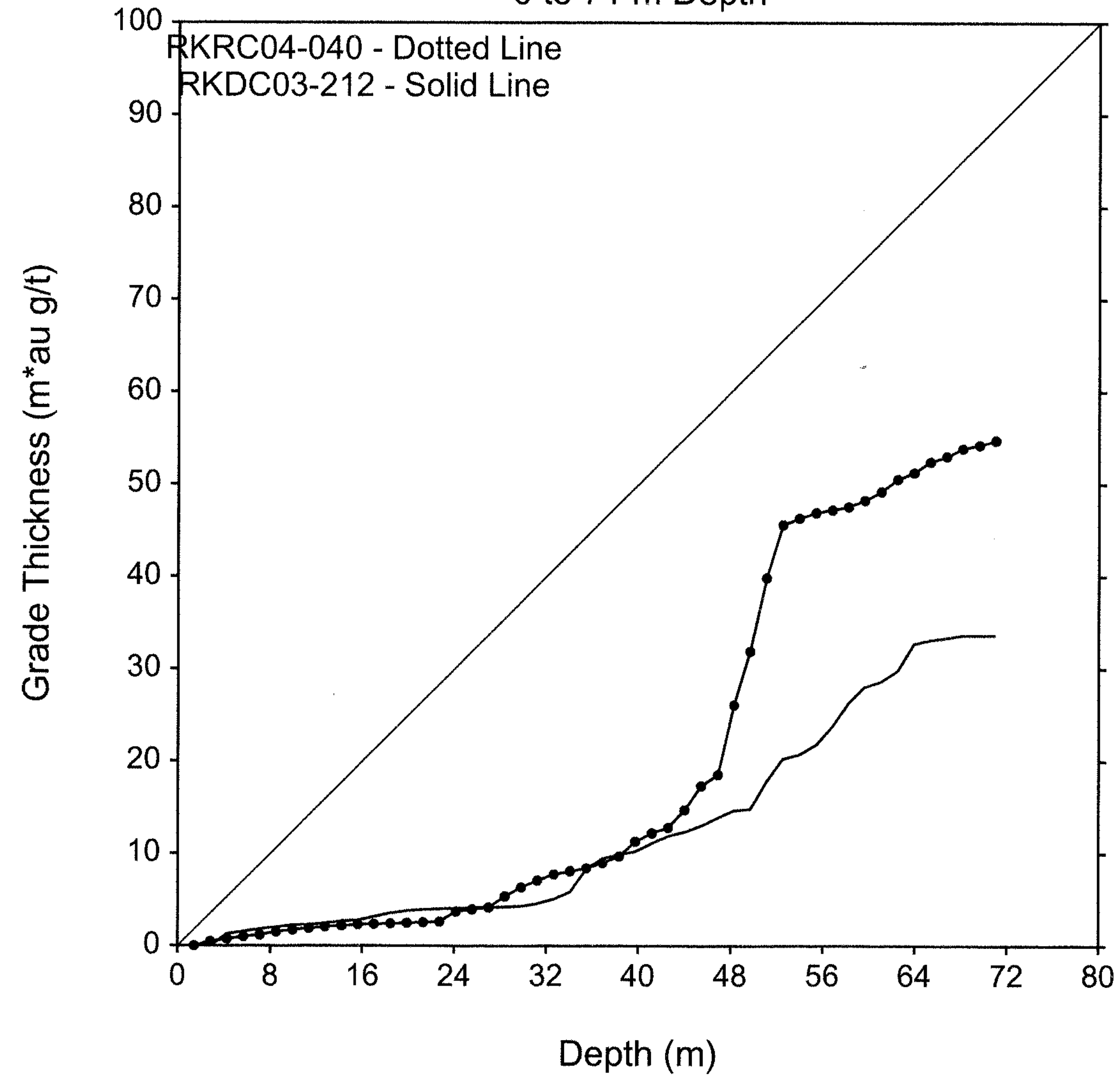


Horiz. Separation



Cumulative Grade Thickness

0 to 71 m Depth



2A

A A

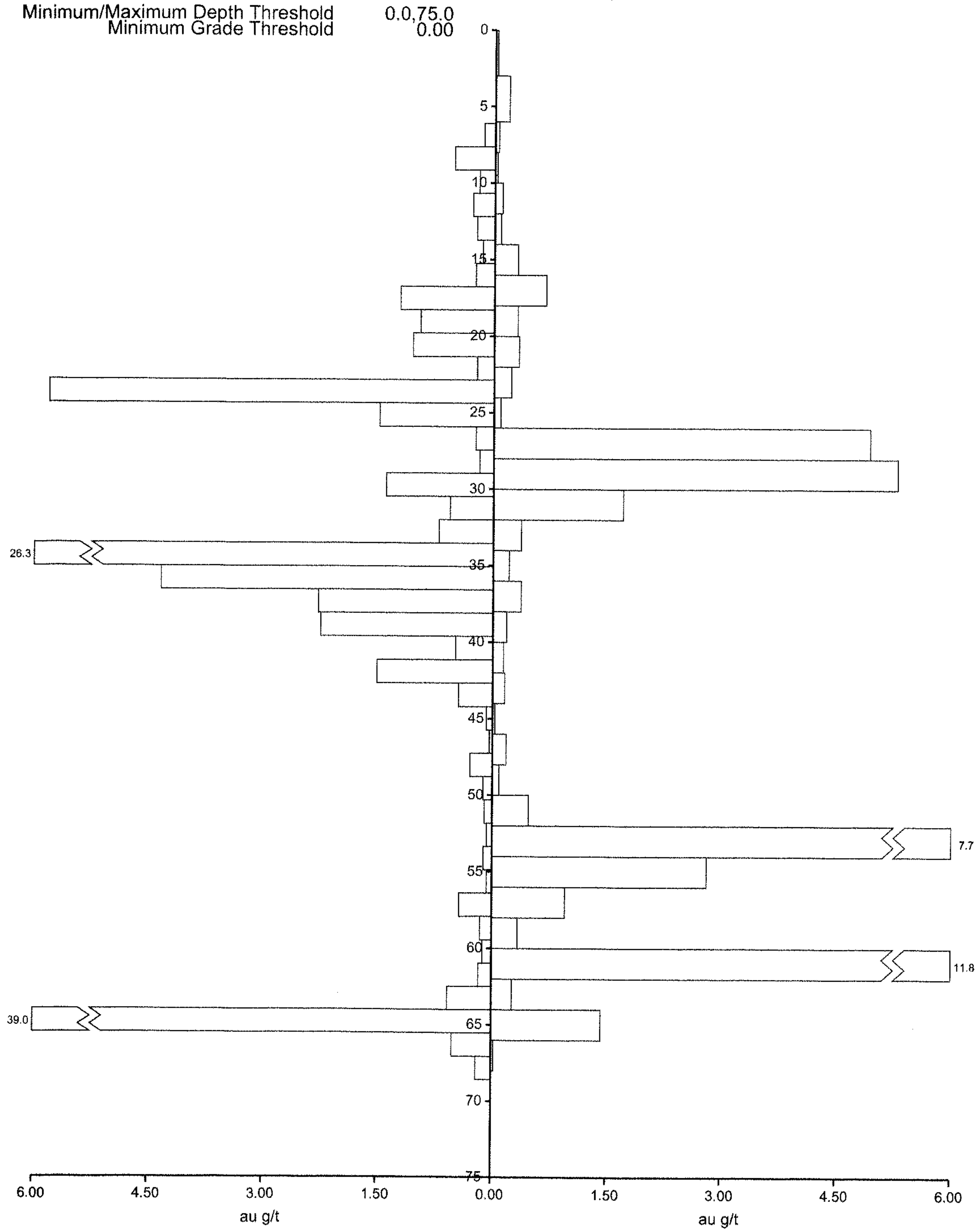
RC Core

RR-0-03

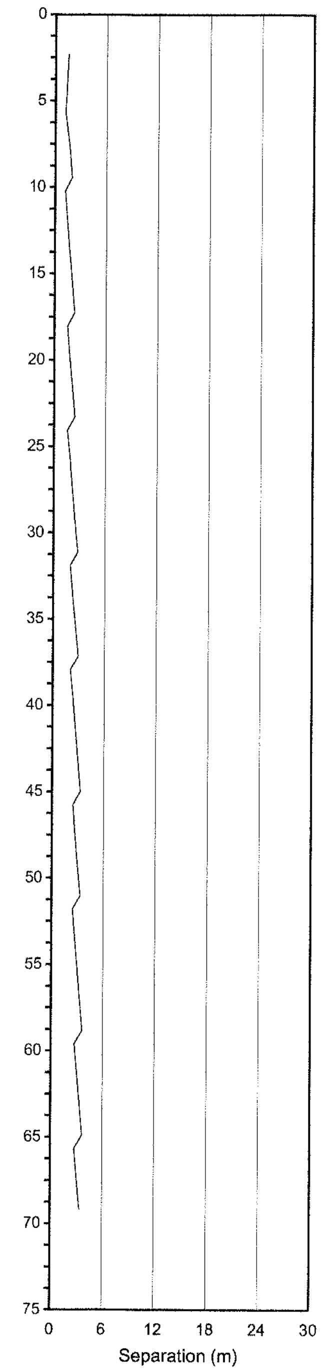
N 42
m 2.31
Cv 3.04
Intervals Trimmed by Depth 0
Intervals Trimmed by Grade 1
Minimum/Maximum Depth Threshold 0.0,75.0
Minimum Grade Threshold 0.00

RKDC03-209

N 34
m 1.23
Cv 2.01
Intervals Trimmed by Depth 0
Intervals Trimmed by Grade 0

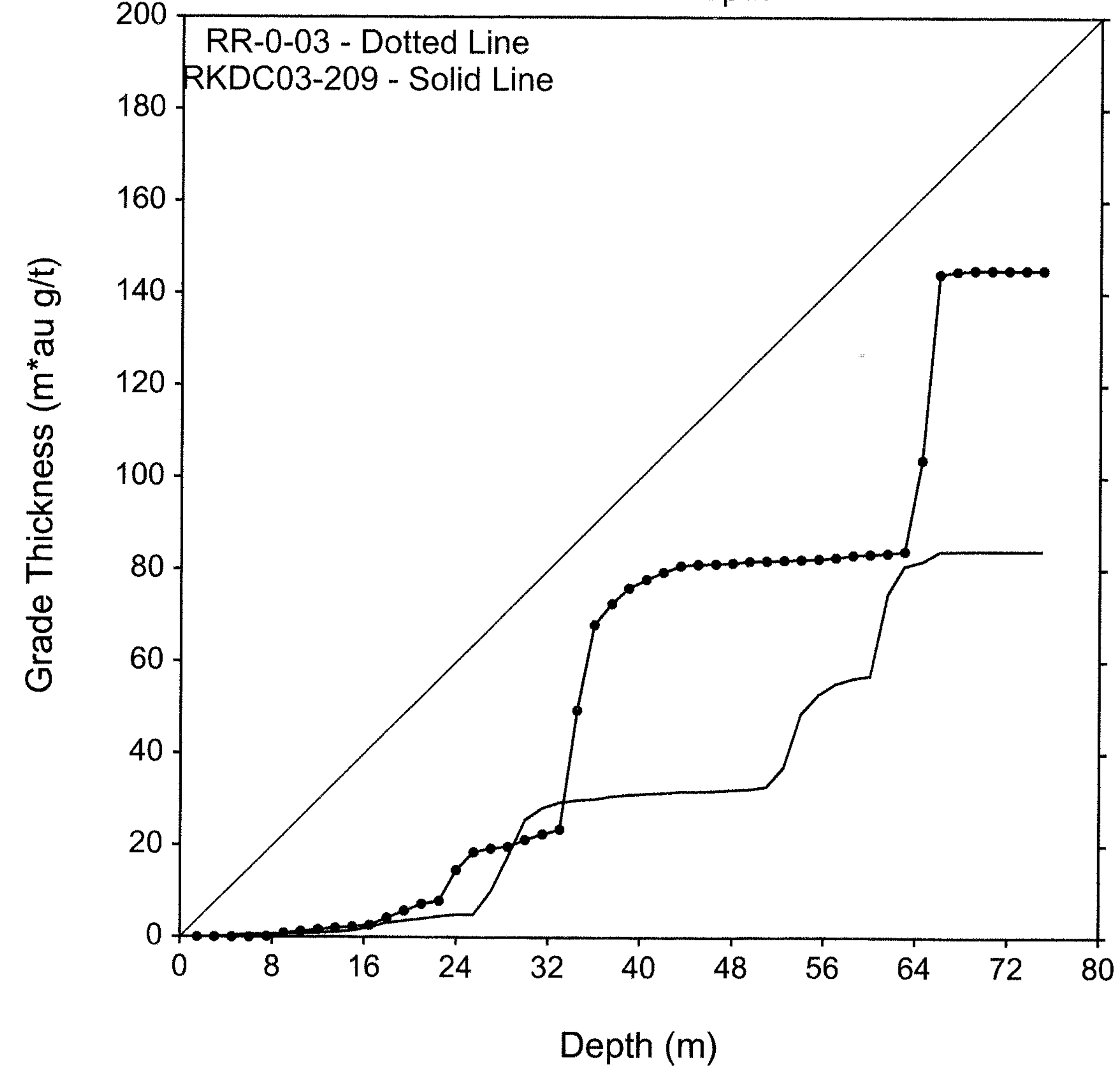


Horiz. Separation



Cumulative Grade Thickness

0 to 75 m Depth



2B
A

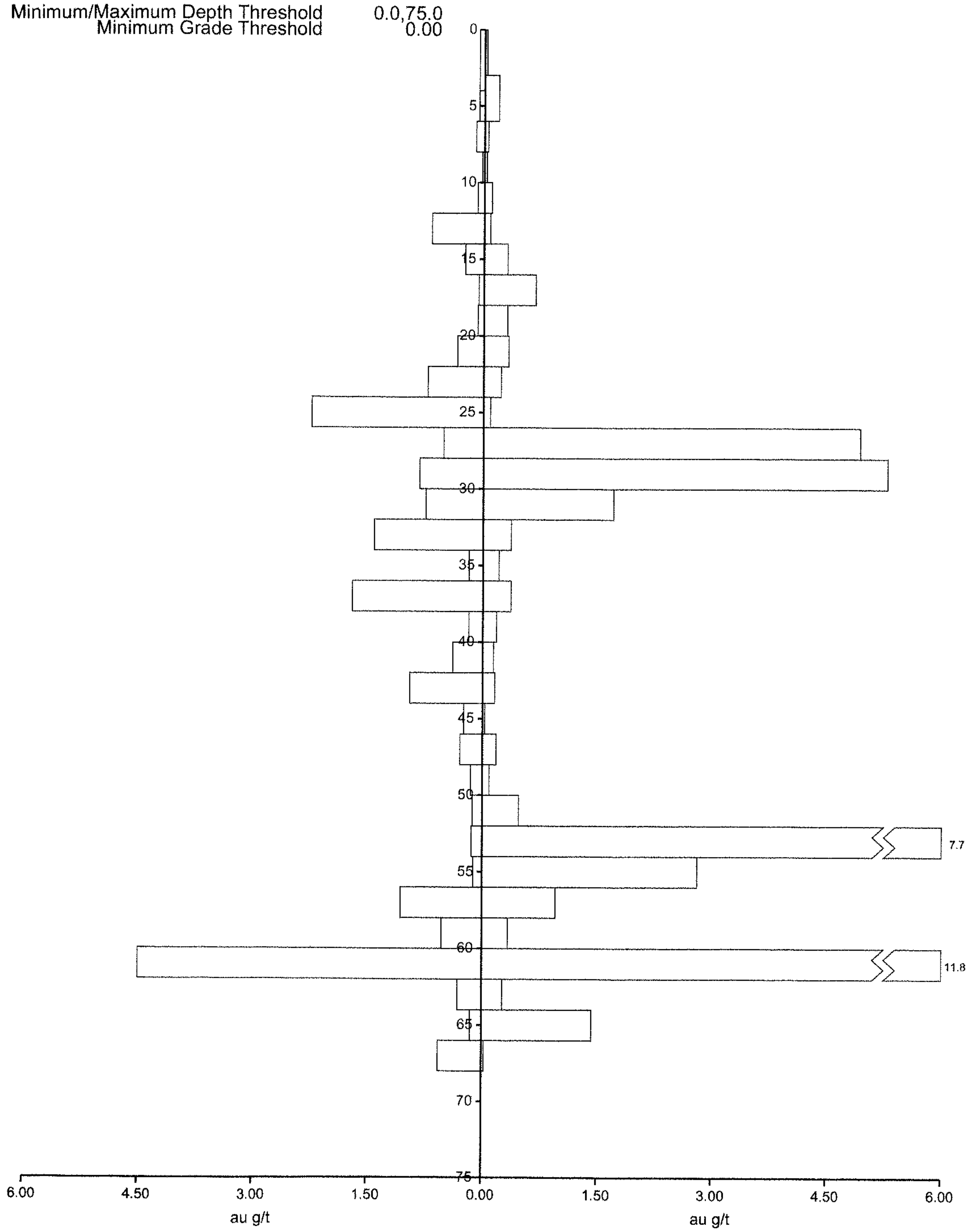
Core	Core

RKDC04-237

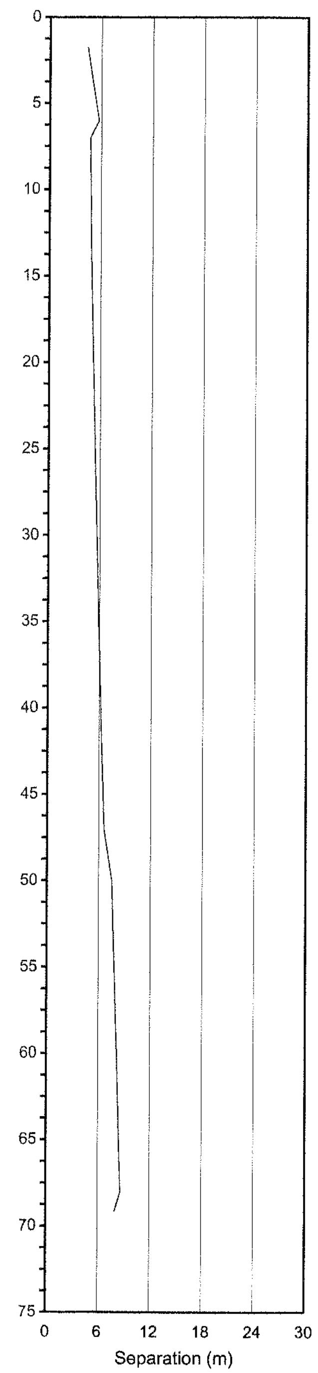
N 34
m 0.57
Cv 1.48
Intervals Trimmed by Depth 0
Intervals Trimmed by Grade 0
Minimum/Maximum Depth Threshold 0.0,75.0
Minimum Grade Threshold 0.00

RKDC03-209

N 34
m 1.23
Cv 2.01
Intervals Trimmed by Depth 0
Intervals Trimmed by Grade 0

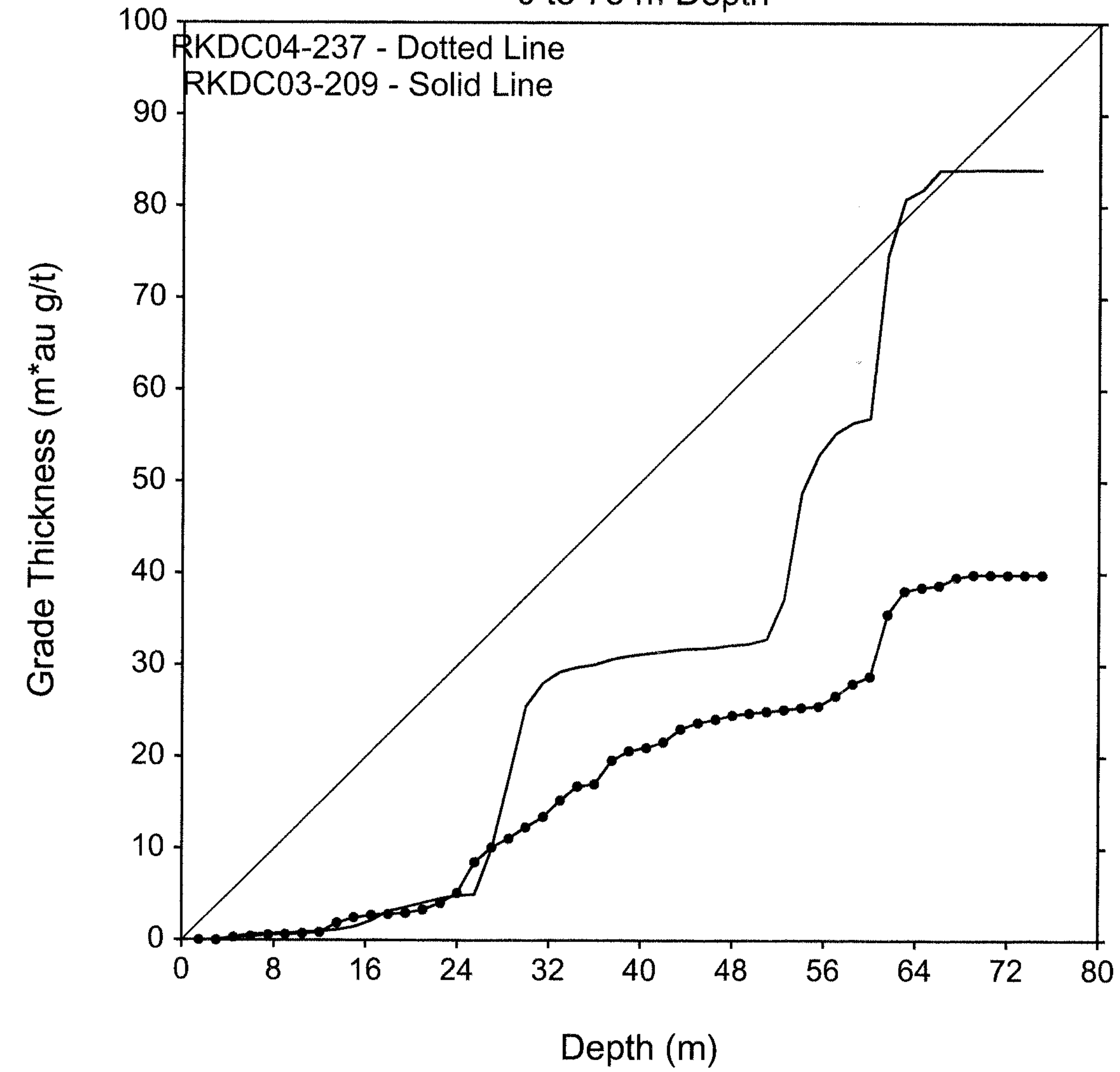


Horiz. Separation



Cumulative Grade Thickness

0 to 75 m Depth



2C
B
NOTE: Big diff in Means

RC

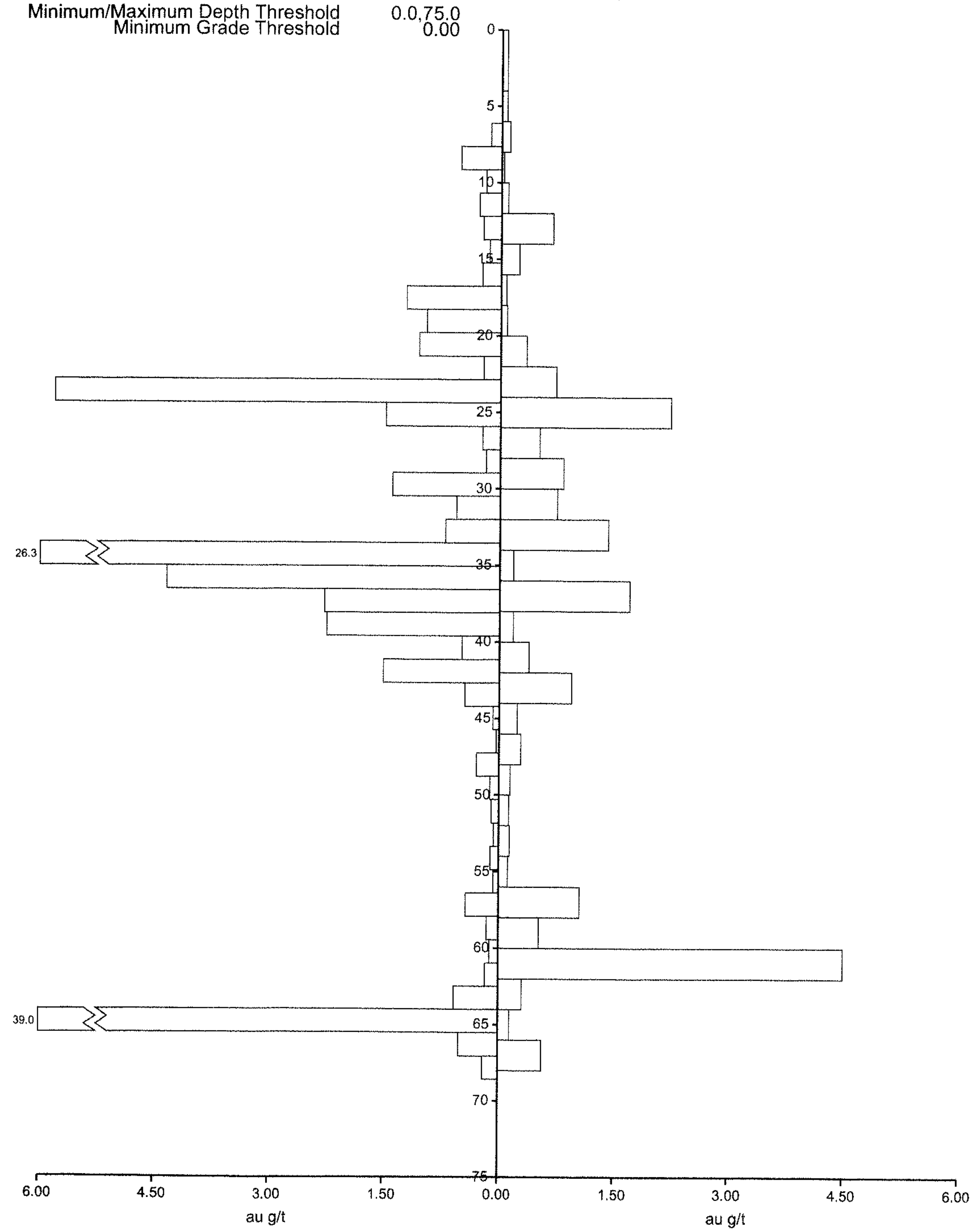
RR-0-03

N	42
m	2.31
Cv	3.04
Intervals Trimmed by Depth	0
Intervals Trimmed by Grade	1
Minimum/Maximum Depth Threshold	0.0,75.0
Minimum Grade Threshold	0.00

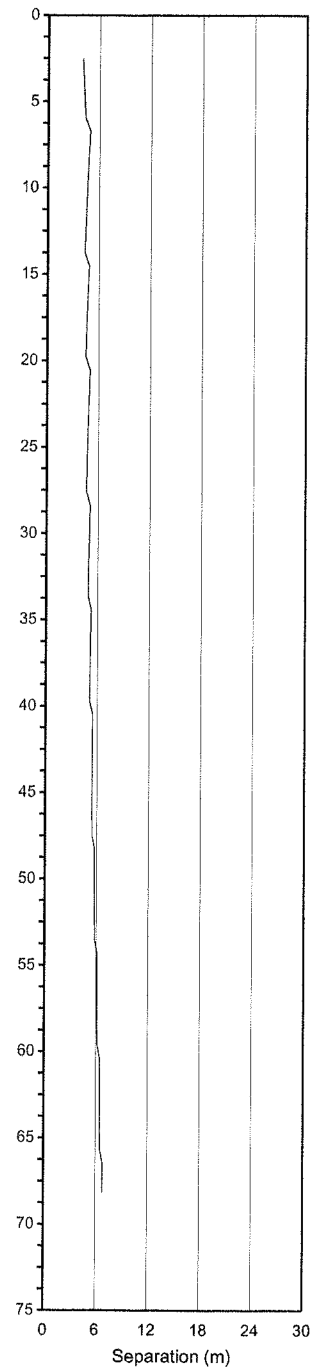
Core

RKDC04-237

N	34
m	0.57
Cv	1.48
Intervals Trimmed by Depth	0
Intervals Trimmed by Grade	0

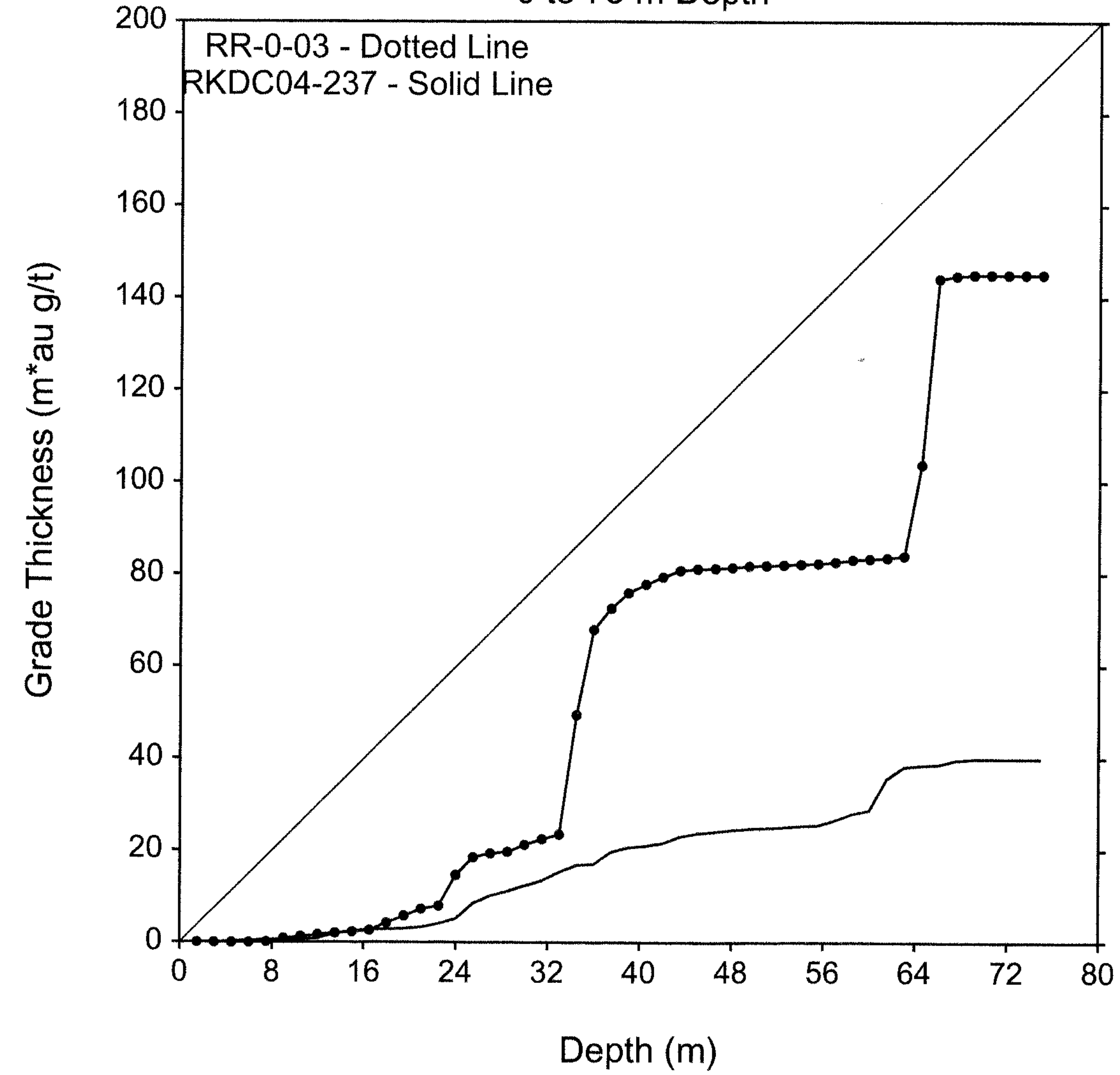


Horiz. Separation



Cumulative Grade Thickness

0 to 75 m Depth



2D

A A

RC

RKRC04-023

N 42
m 1.23
Cv 1.81

Intervals Trimmed by Depth 0
Intervals Trimmed by Grade 3

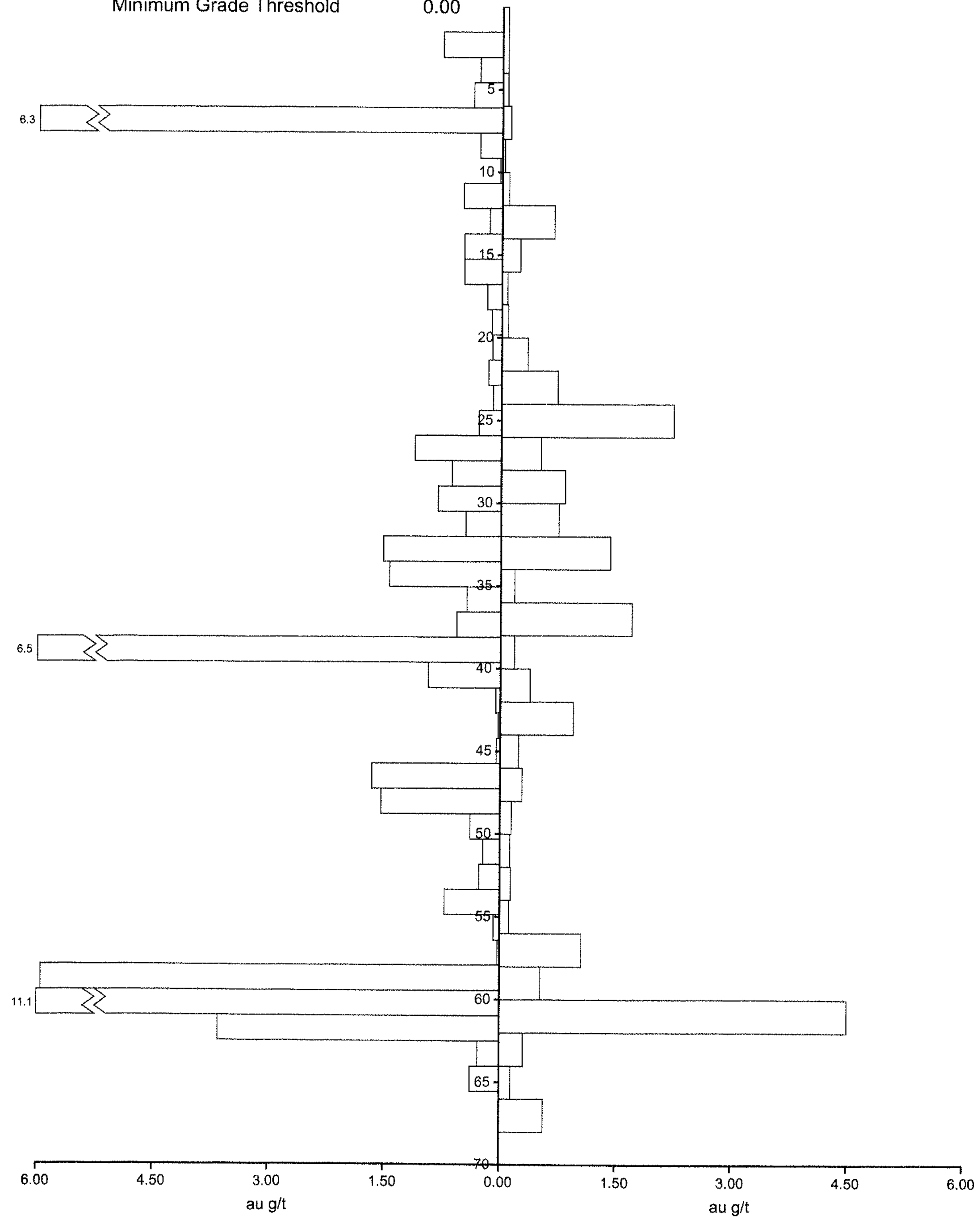
Minimum/Maximum Depth Threshold 0.0,70.0
Minimum Grade Threshold 0.00

CORE

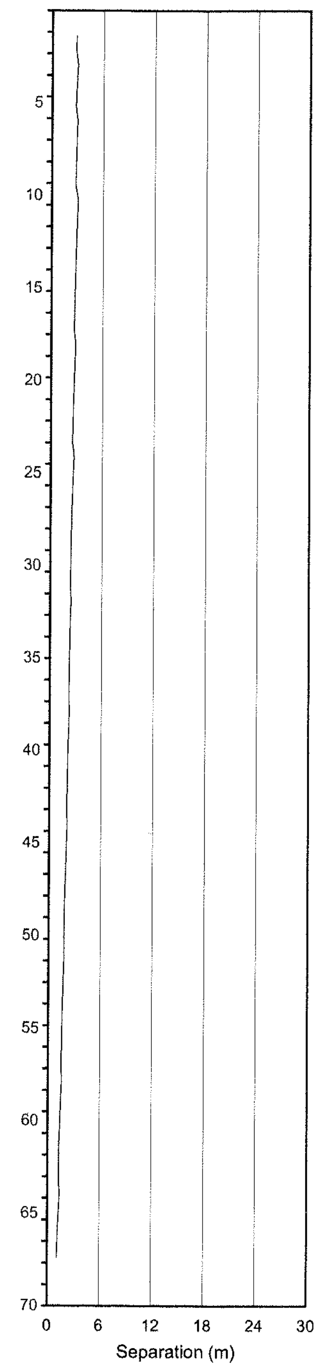
RKDC04-237

N 33
m 0.59
Cv 1.45

Intervals Trimmed by Depth 1
Intervals Trimmed by Grade 0

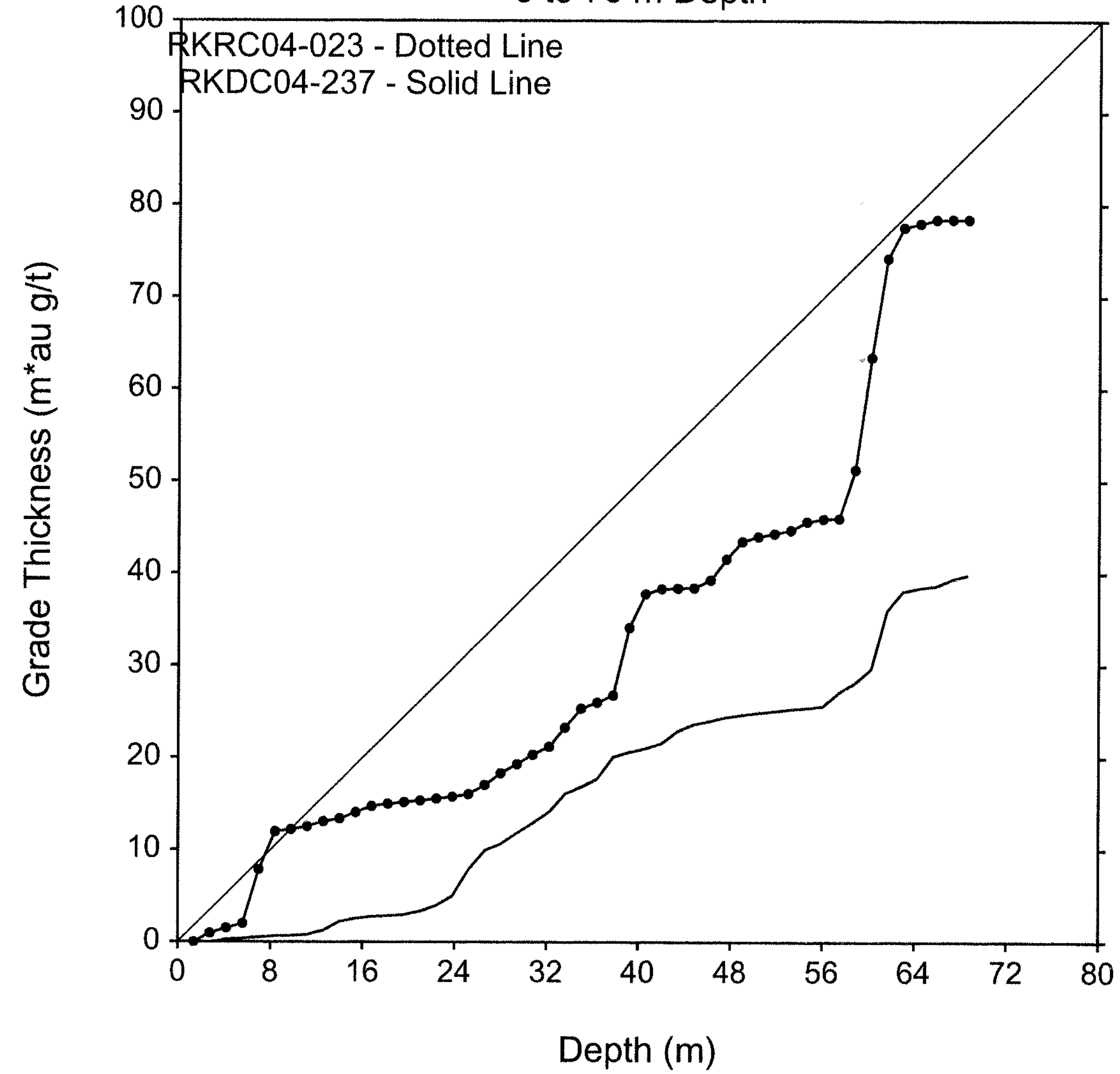


Horiz. Separation



Cumulative Grade Thickness

0 to 70 m Depth



2E

A A

RC

Core

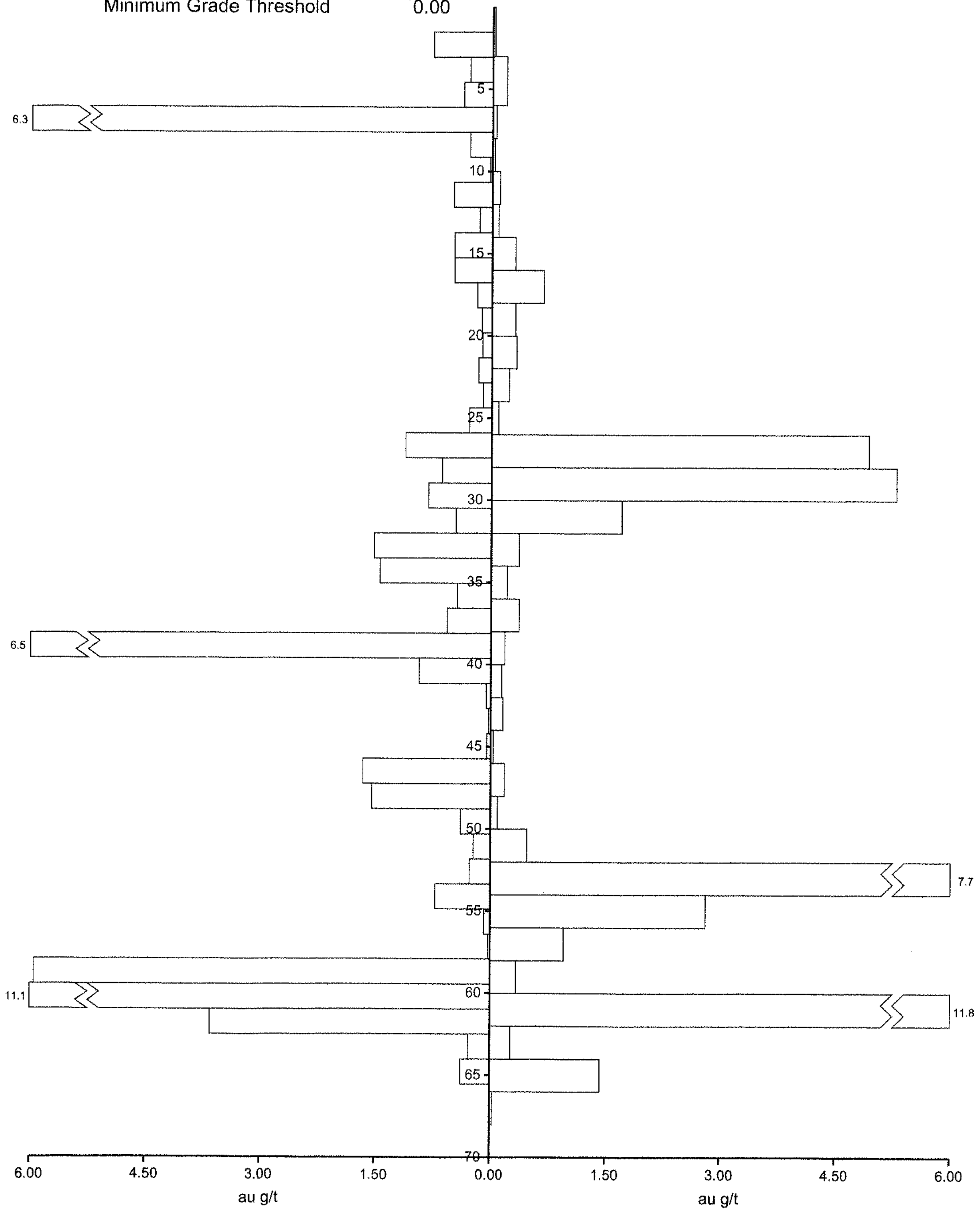
RKRC04-023

N	42
m	1.23
Cv	1.81
Intervals Trimmed by Depth	0
Intervals Trimmed by Grade	3

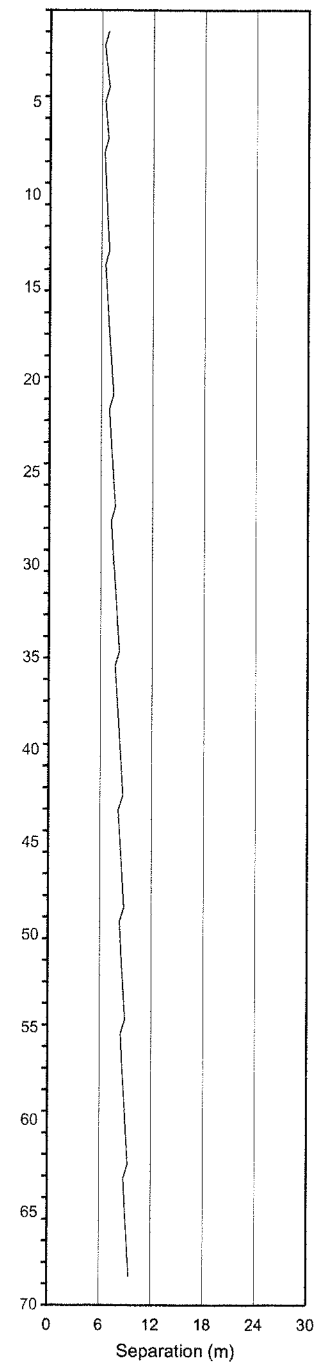
RKDC03-209

N	33
m	1.24
Cv	2.03
Intervals Trimmed by Depth	1
Intervals Trimmed by Grade	0

Minimum/Maximum Depth Threshold 0.0,70.0
Minimum Grade Threshold 0.00

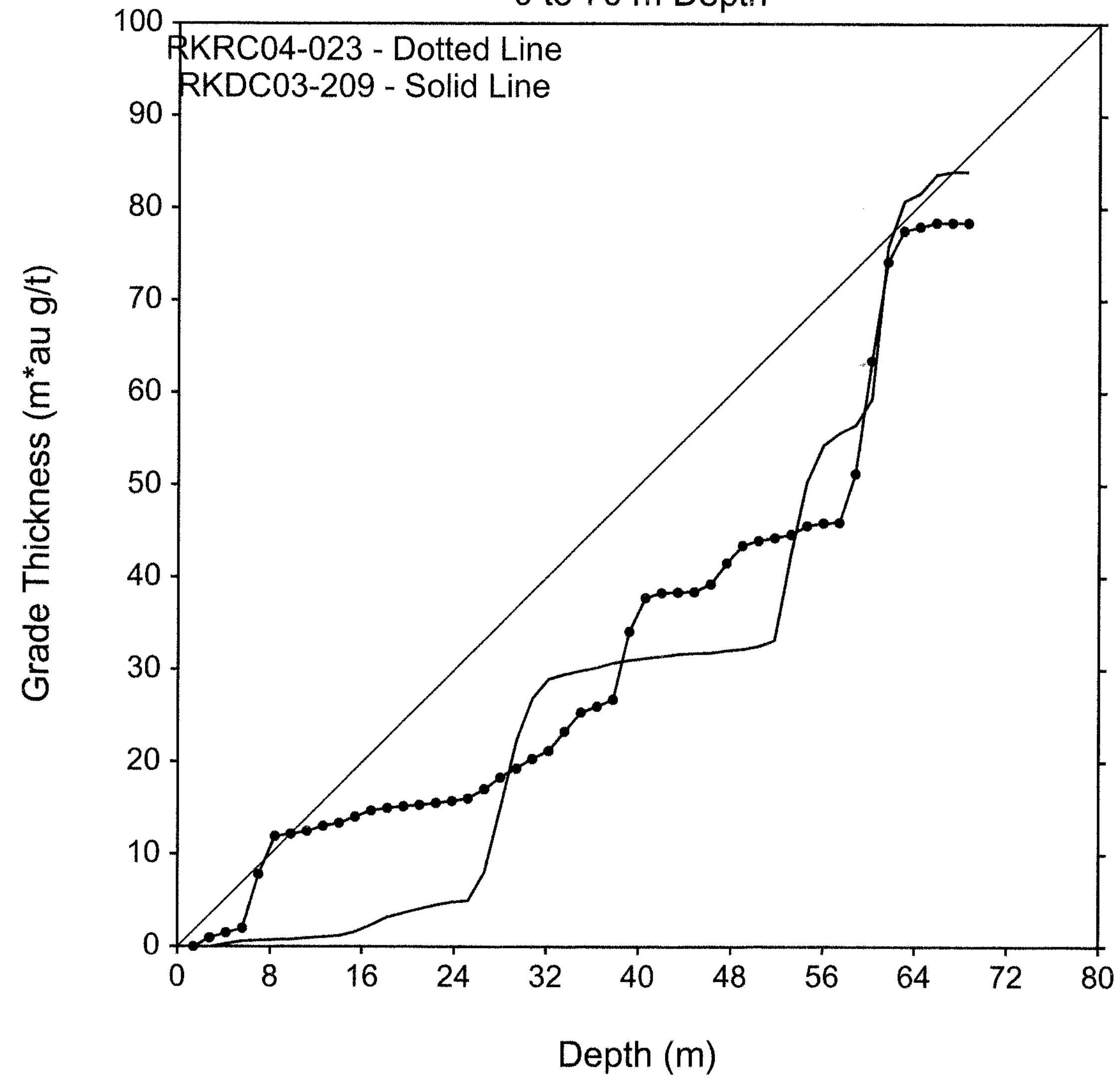


Horiz. Separation



Cumulative Grade Thickness

0 to 70 m Depth



2F
A

RC

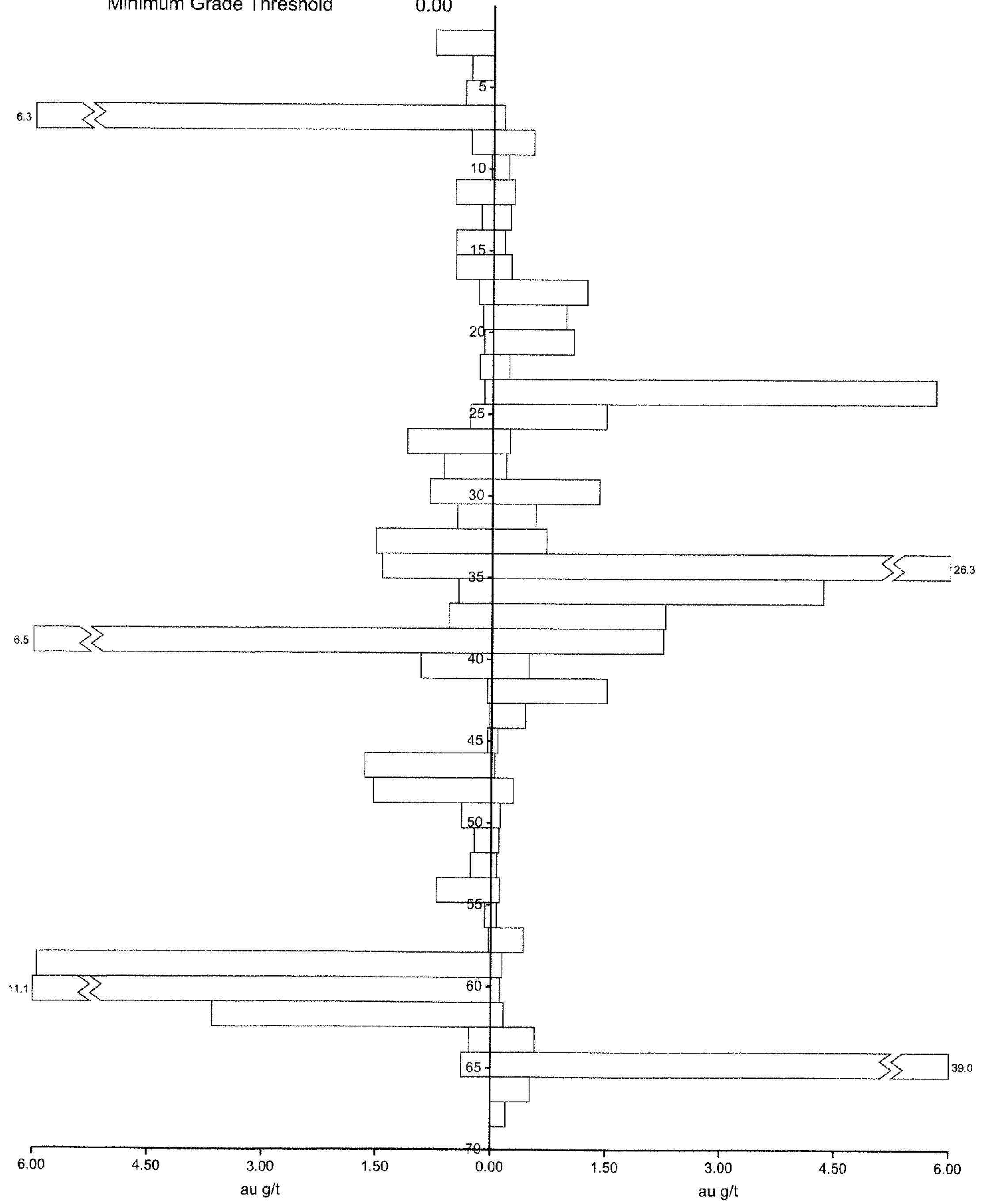
RKRC04-023

N	42
m	1.23
Cv	1.81
Intervals Trimmed by Depth	0
Intervals Trimmed by Grade	3
Minimum/Maximum Depth Threshold	0.0,70.0
Minimum Grade Threshold	0.00

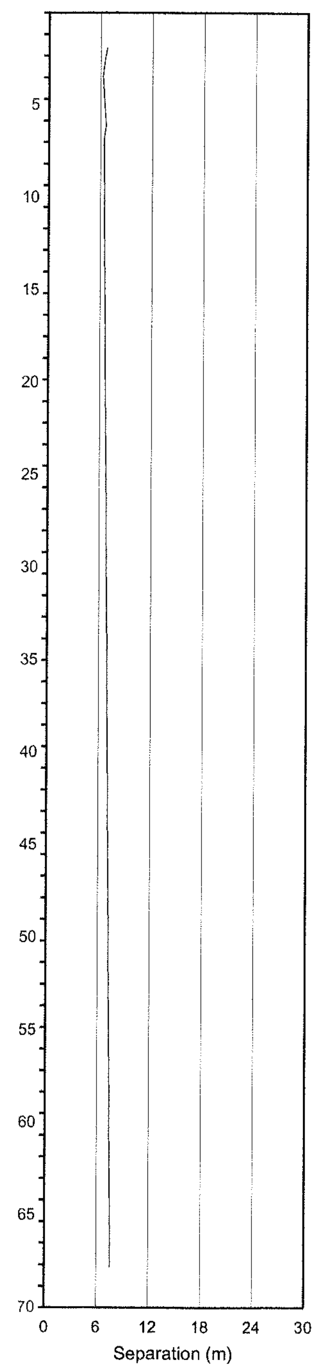
RC

RR-0-03

N	41
m	2.32
Cv	3.06
Intervals Trimmed by Depth	1
Intervals Trimmed by Grade	1

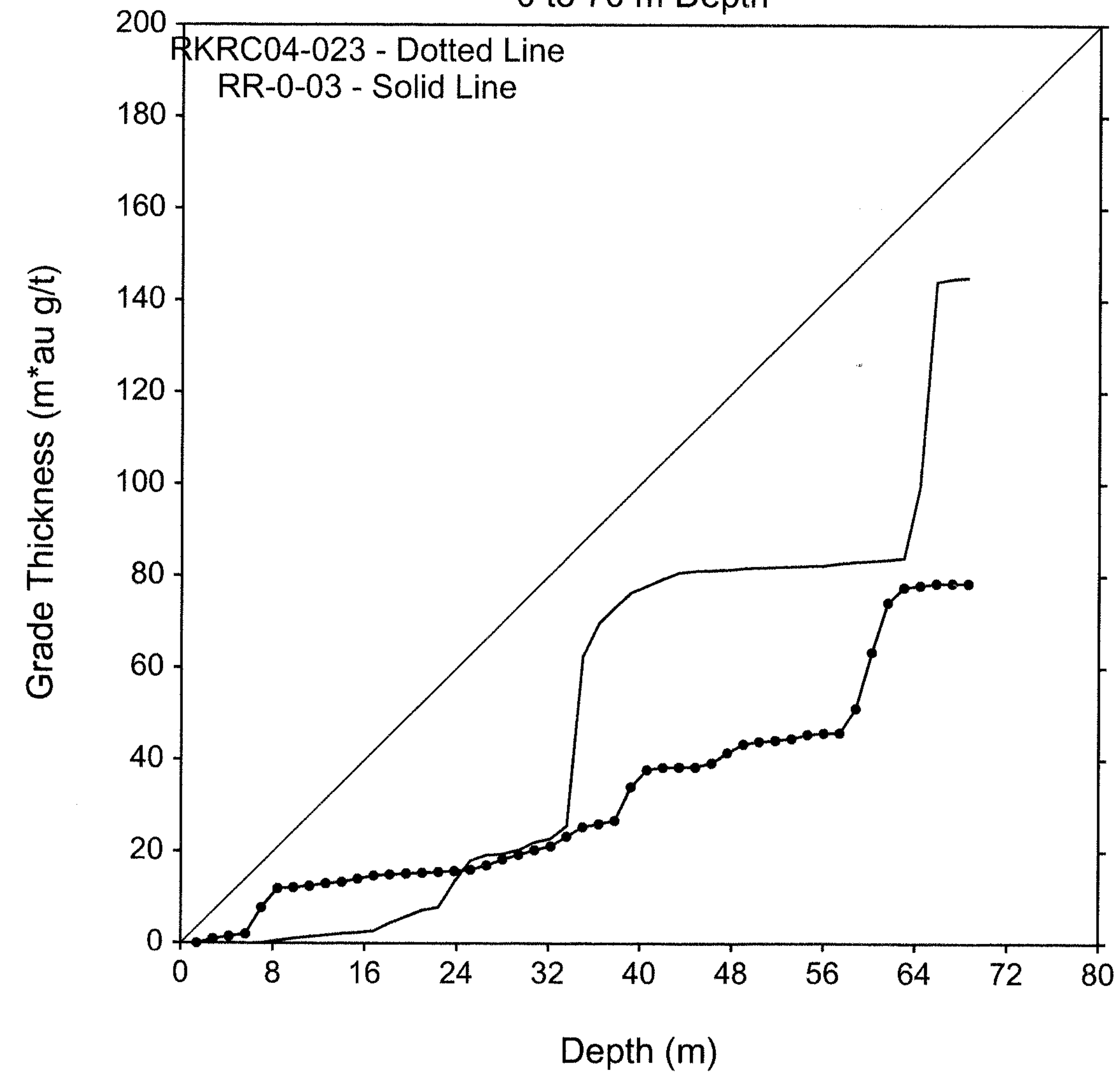


Horiz. Separation



Cumulative Grade Thickness

0 to 70 m Depth



3A

A A

RC

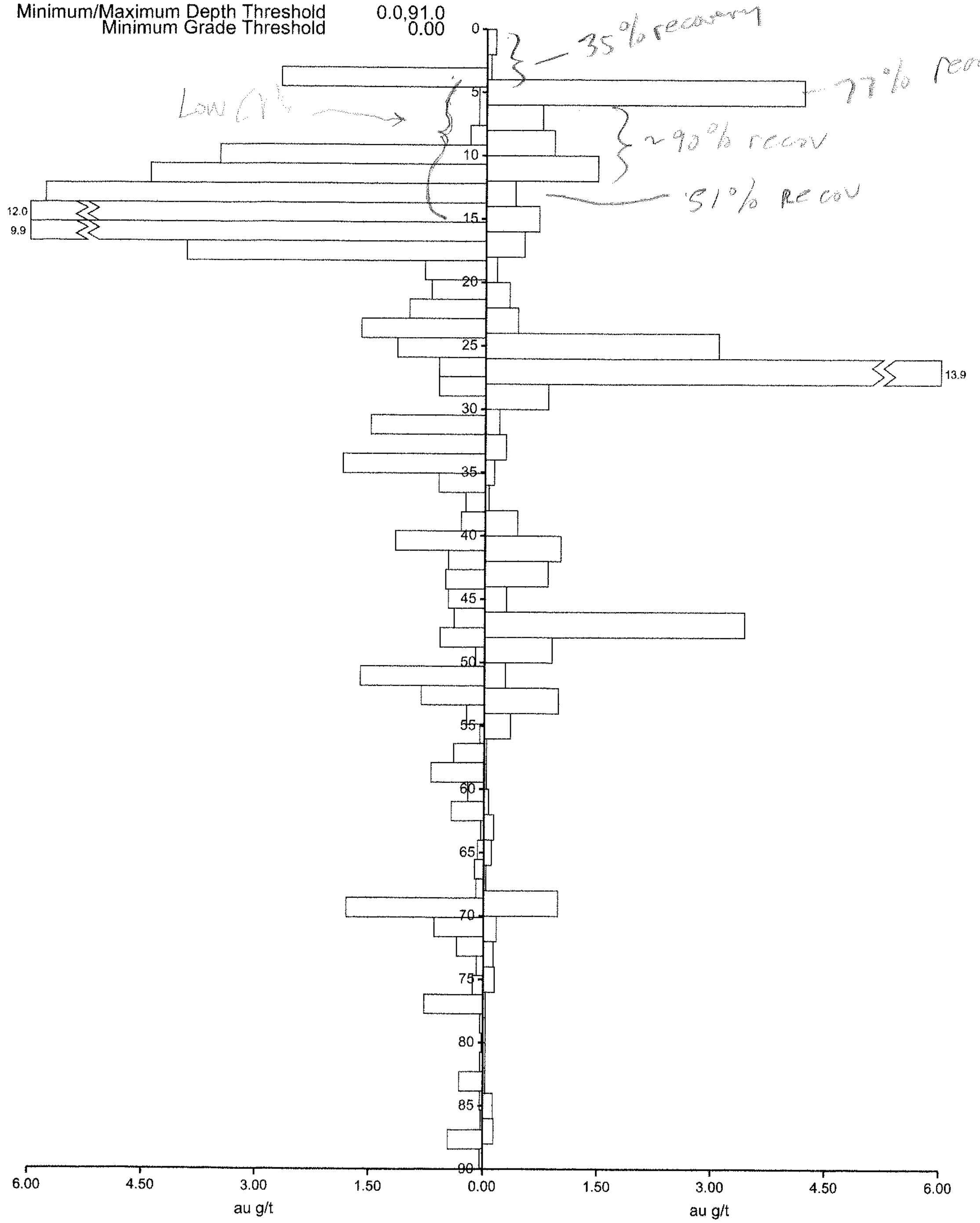
Core

RR-0-02

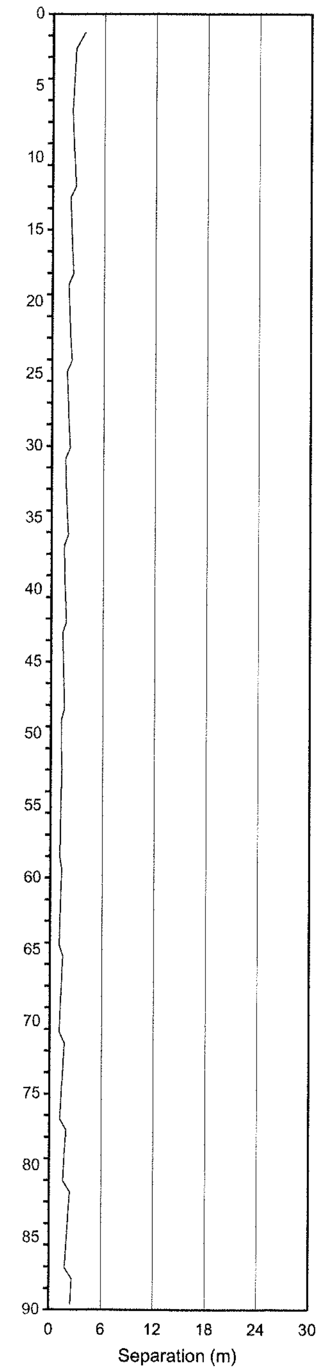
N	54
m	1.22
Cv	1.83
Intervals Trimmed by Depth	4
Intervals Trimmed by Grade	3
Minimum/Maximum Depth Threshold	0.0,91.0
Minimum Grade Threshold	0.00

RKDC03-222

N	45
m	0.87
Cv	2.49
Intervals Trimmed by Depth	0
Intervals Trimmed by Grade	0

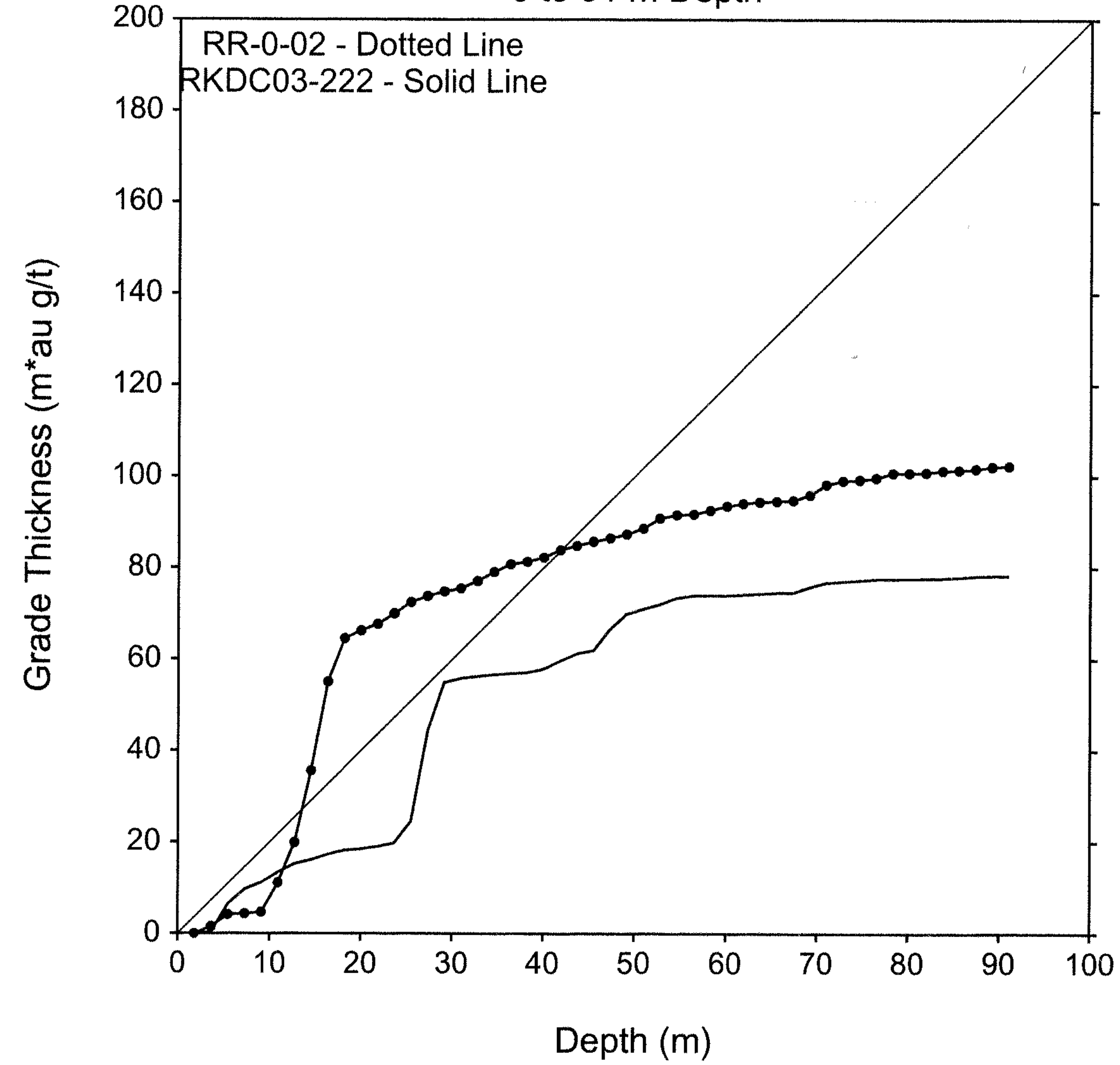


Horiz. Separation



Cumulative Grade Thickness

0 to 91 m Depth



3B

A A

Core

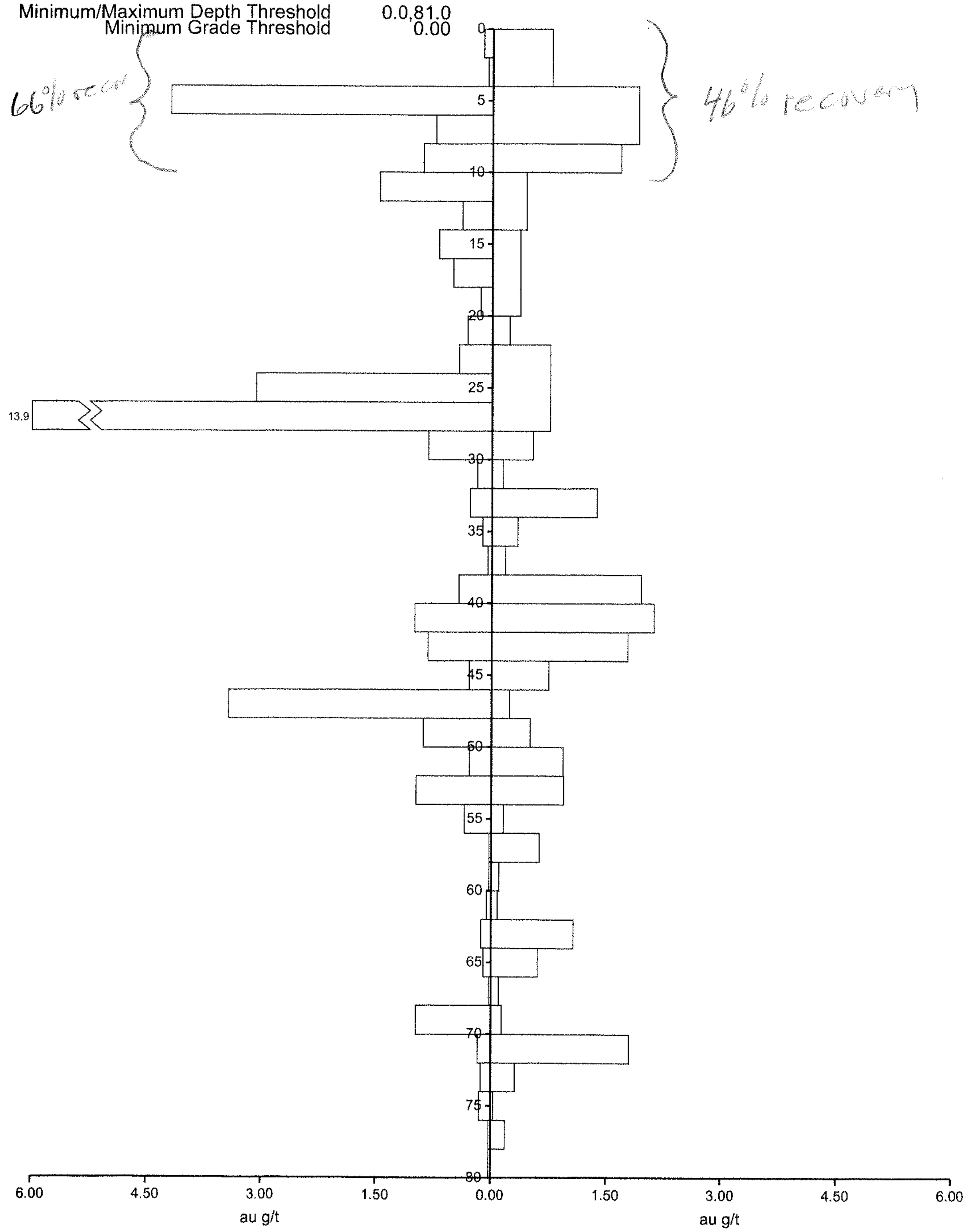
RKDC03-222

N	40
m	0.97
Cv	2.34
Intervals Trimmed by Depth	5
Intervals Trimmed by Grade	0
Minimum/Maximum Depth Threshold	0.0,81.0
Minimum Grade Threshold	0.00

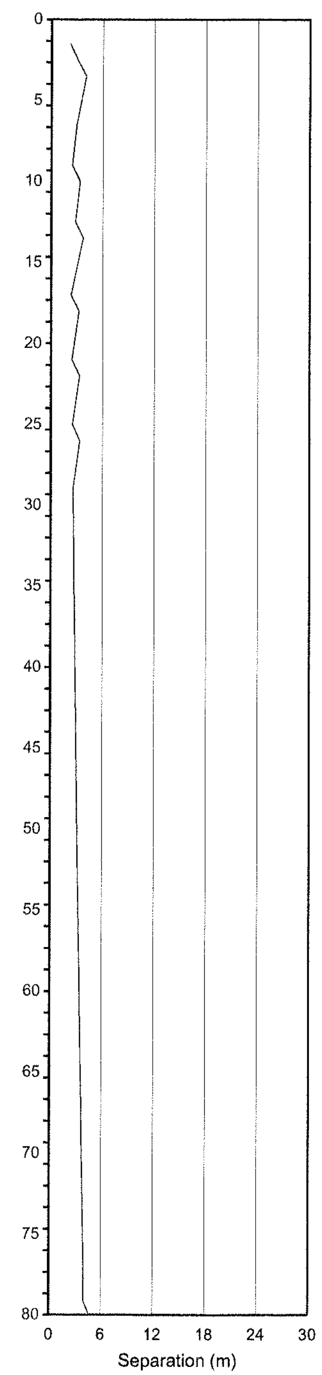
Core

RKDC04-236

N	33
m	0.71
Cv	0.87
Intervals Trimmed by Depth	0
Intervals Trimmed by Grade	0

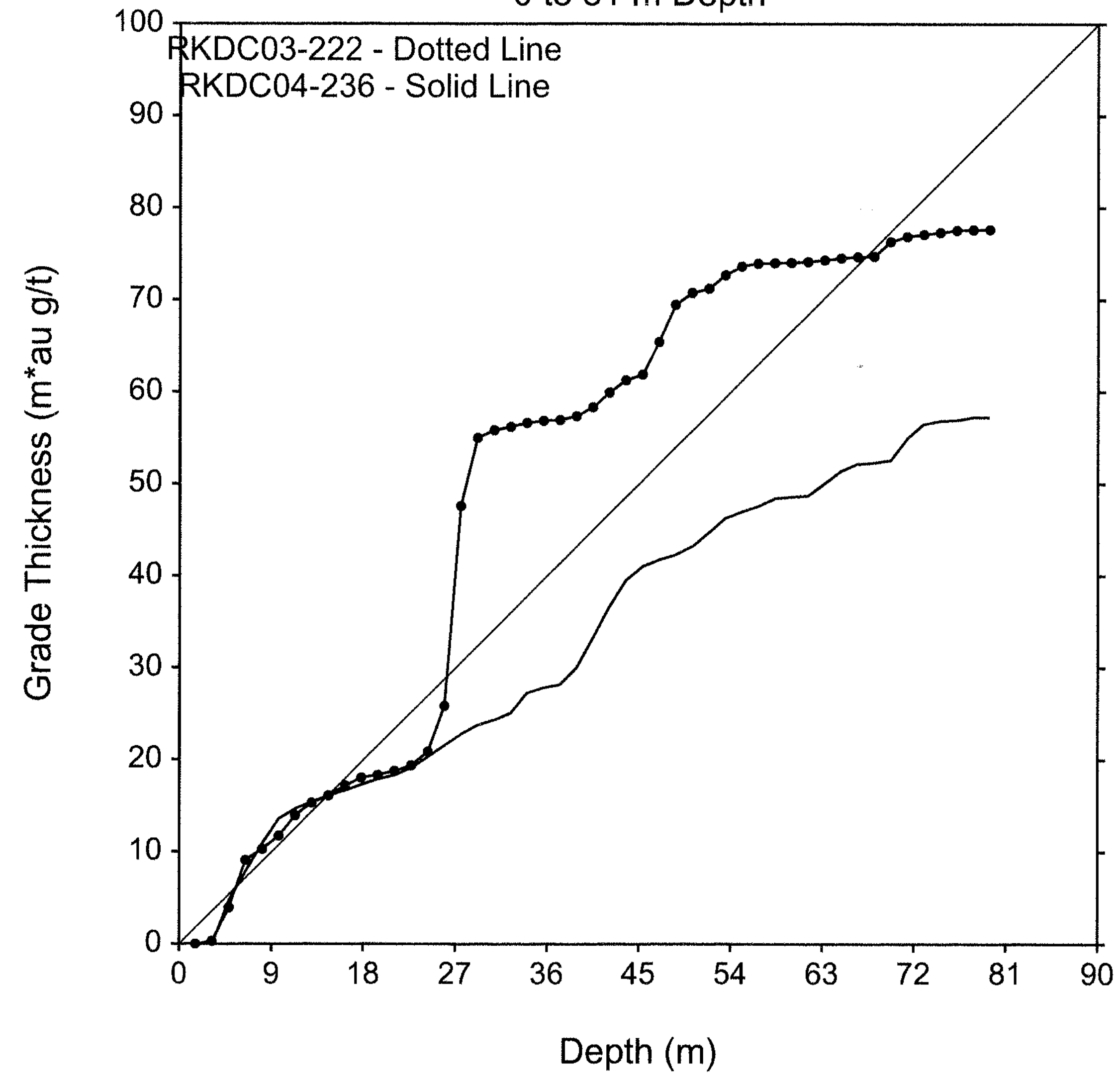


Horiz. Separation



Cumulative Grade Thickness

0 to 81 m Depth



3C

A A

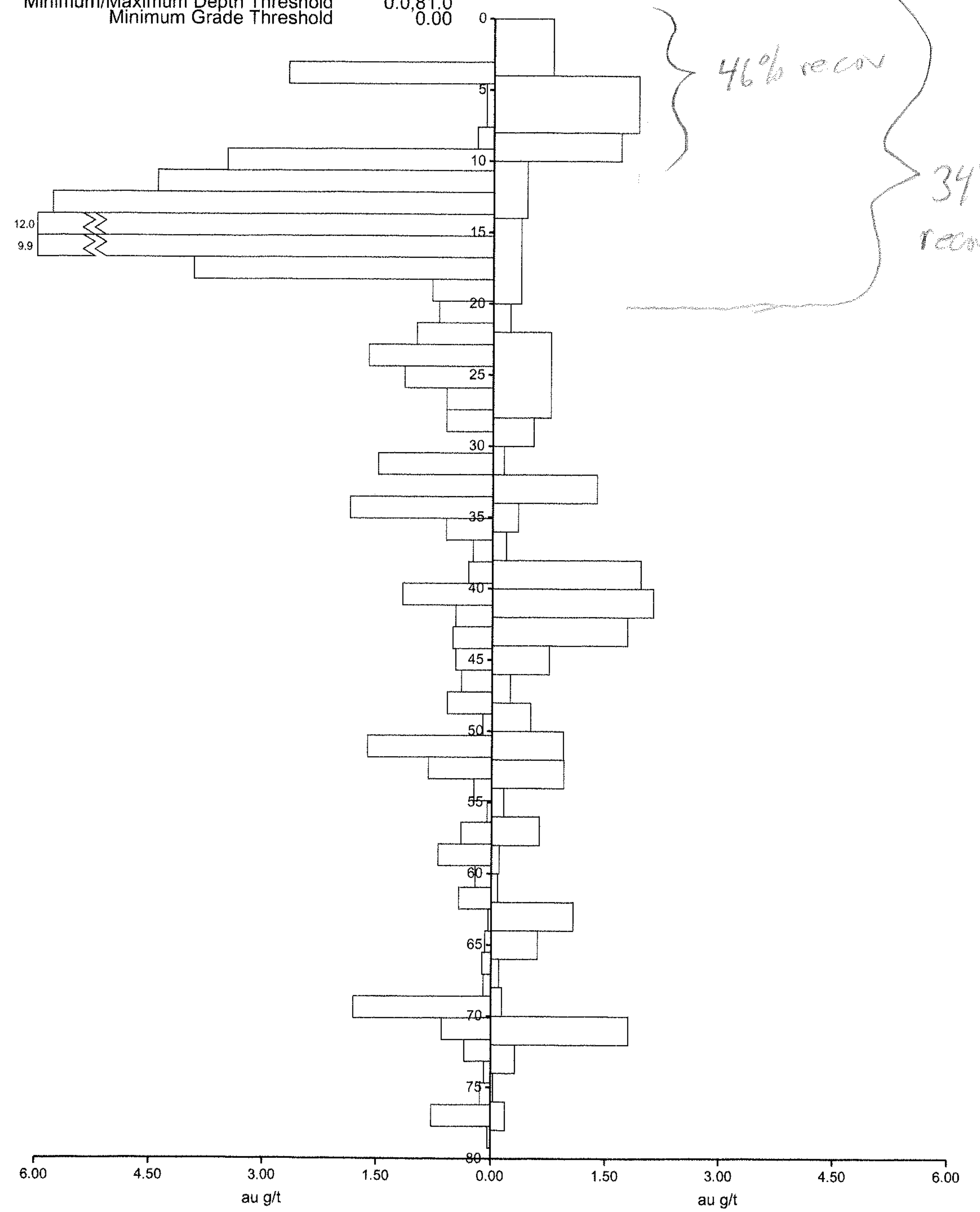
RC Core

RR-0-02

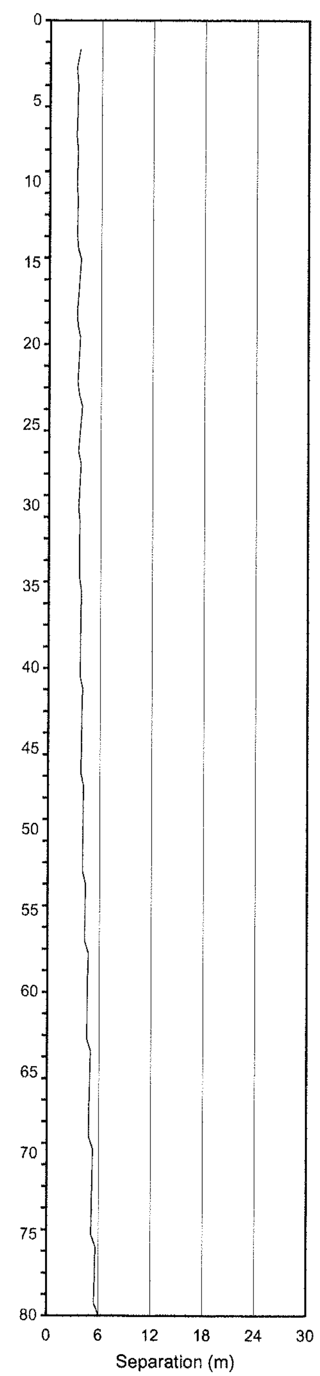
N 48
m 1.35
Cv 1.72
Intervals Trimmed by Depth 10
Intervals Trimmed by Grade 3
Minimum/Maximum Depth Threshold 0.0,81.0
Minimum Grade Threshold 0.00

RKDC04-236

N 33
m 0.71
Cv 0.87
Intervals Trimmed by Depth 0
Intervals Trimmed by Grade 0

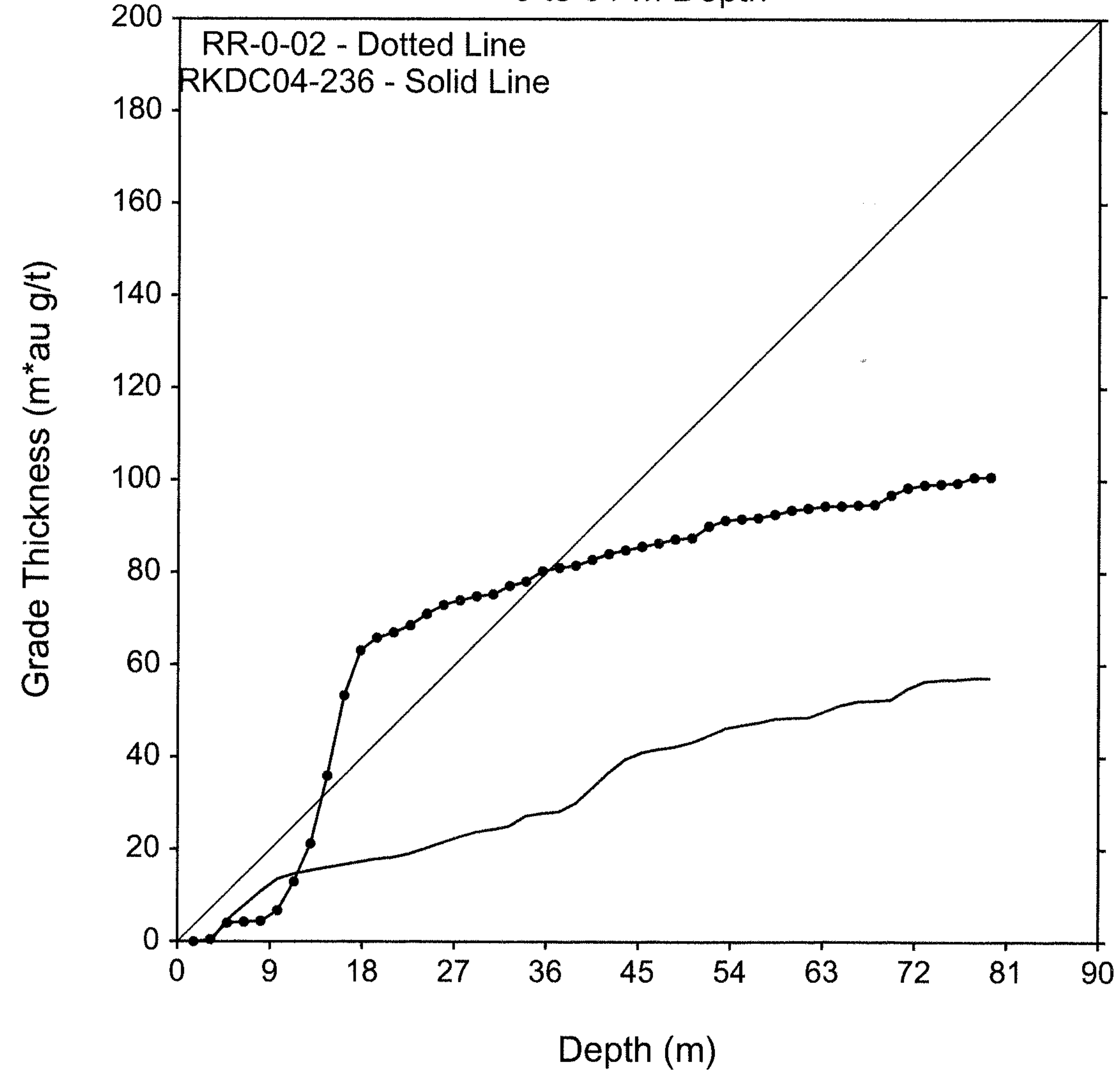


Horiz. Separation



Cumulative Grade Thickness

0 to 81 m Depth



3D

B B

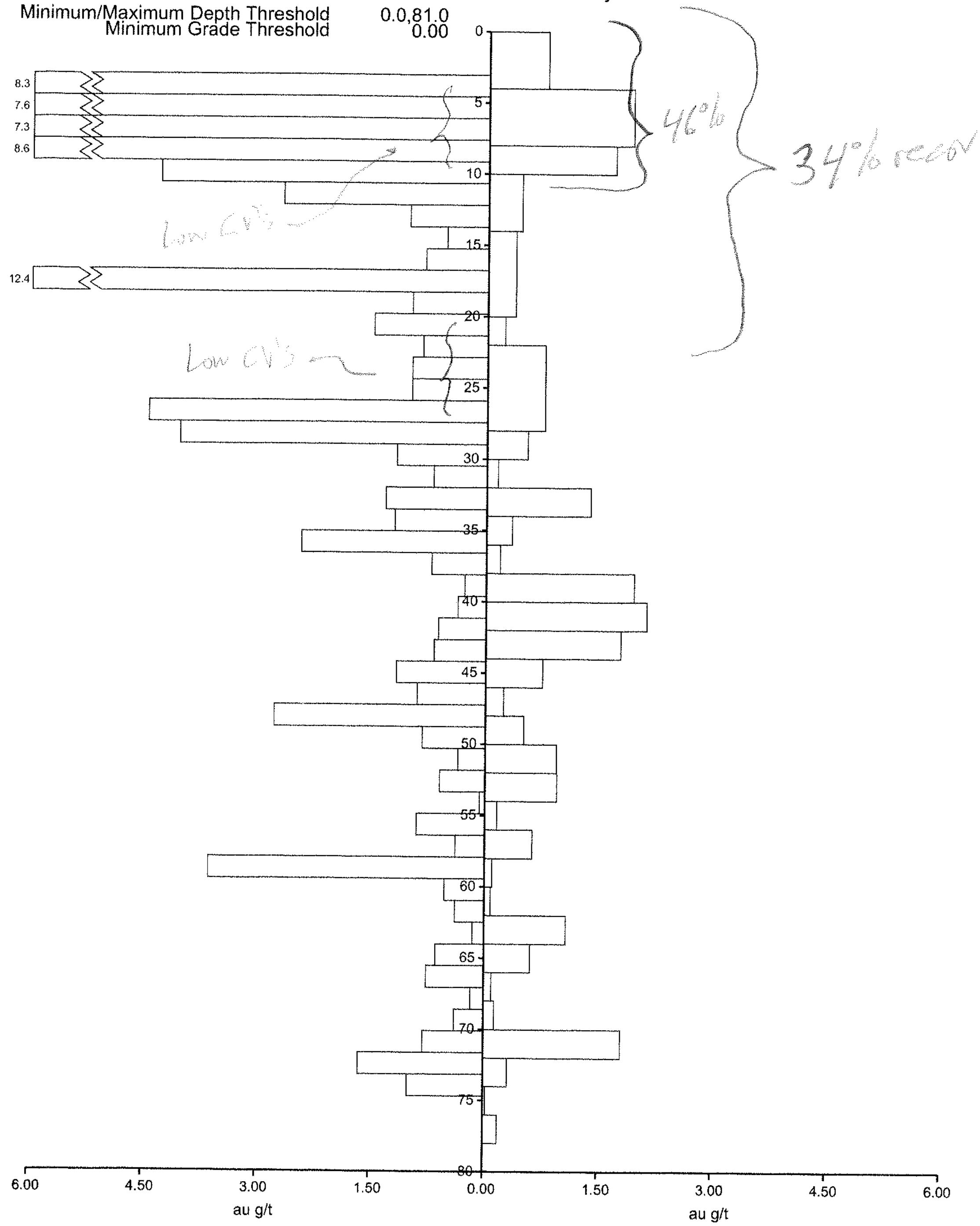
RC | Core

RKRC04-024

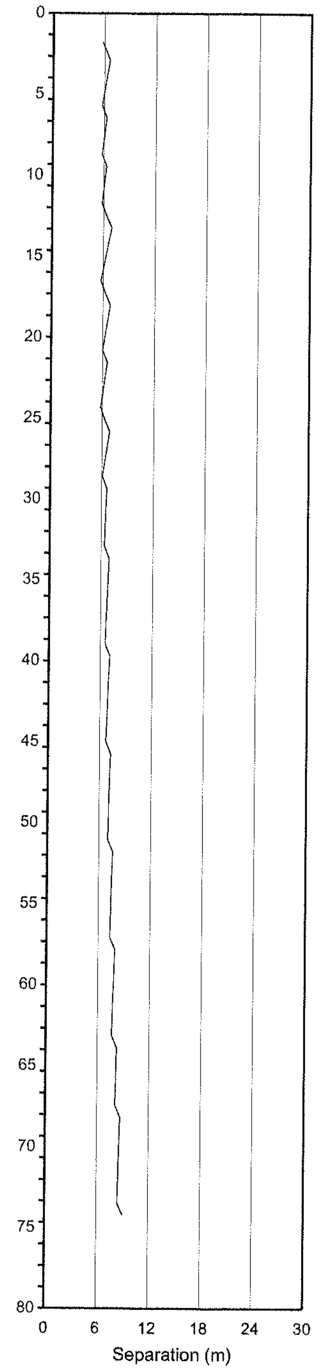
N 48
m 2.01
Cv 1.30
Intervals Trimmed by Depth 0
Intervals Trimmed by Grade 1
Minimum/Maximum Depth Threshold 0.0,81.0
Minimum Grade Threshold 0.00

RKDC04-236

N 33
m 0.71
Cv 0.87
Intervals Trimmed by Depth 0
Intervals Trimmed by Grade 0

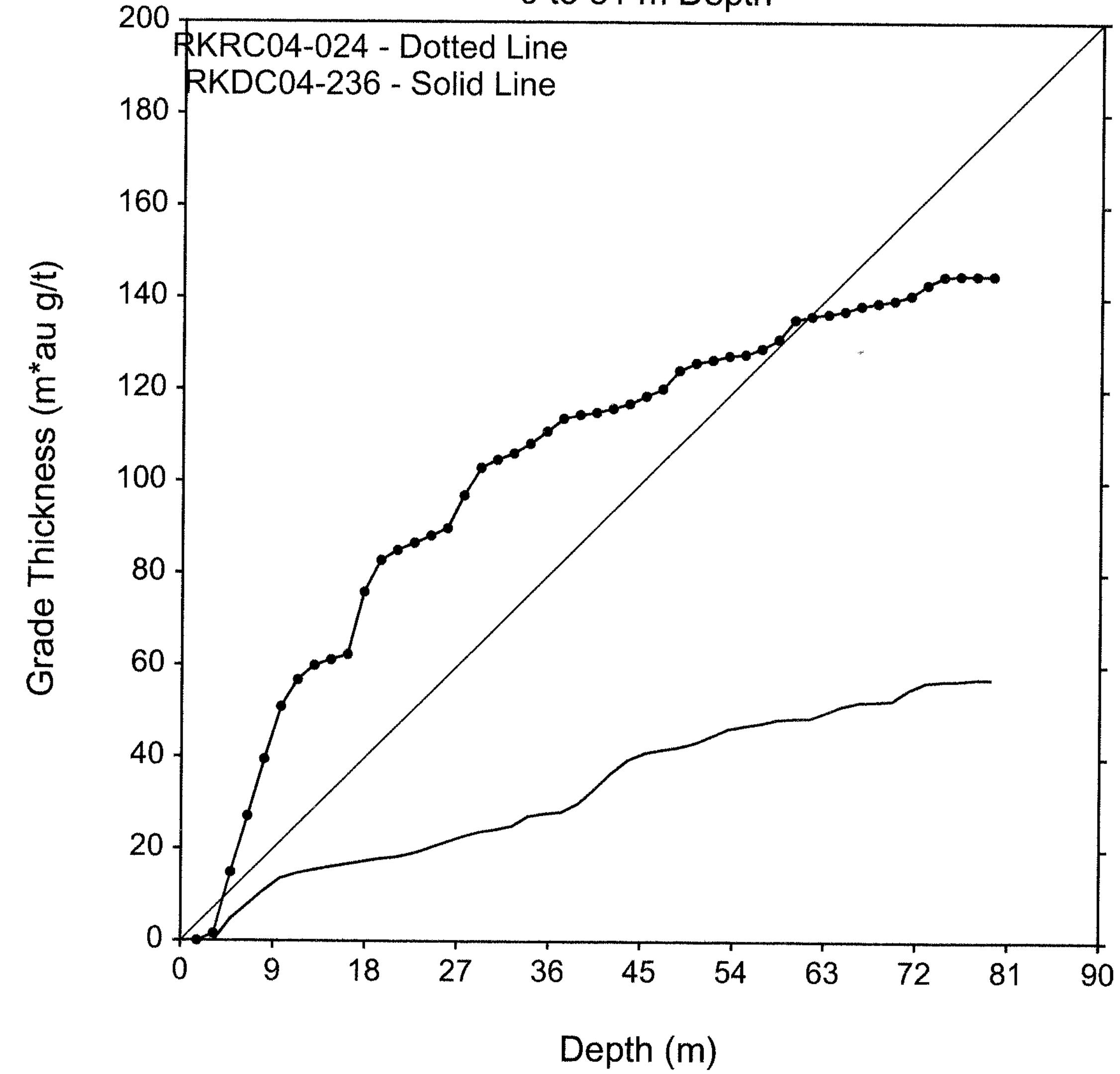


Horiz. Separation



Cumulative Grade Thickness

0 to 81 m Depth



3E

B B

RC

Core

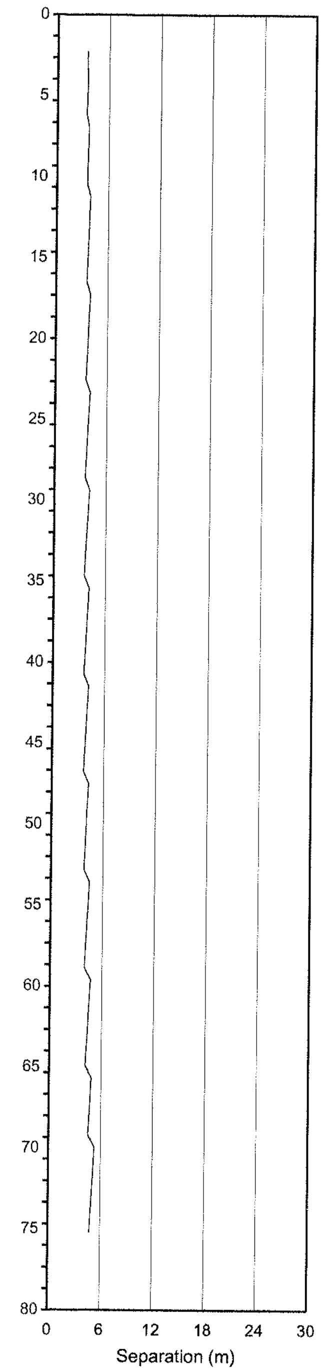
RKRC04-024

N 48
m 2.01
Cv 1.30
Intervals Trimmed by Depth 0
Intervals Trimmed by Grade 1
Minimum/Maximum Depth Threshold 0.0,81.0
Minimum Grade Threshold 0.00

RKDC03-222

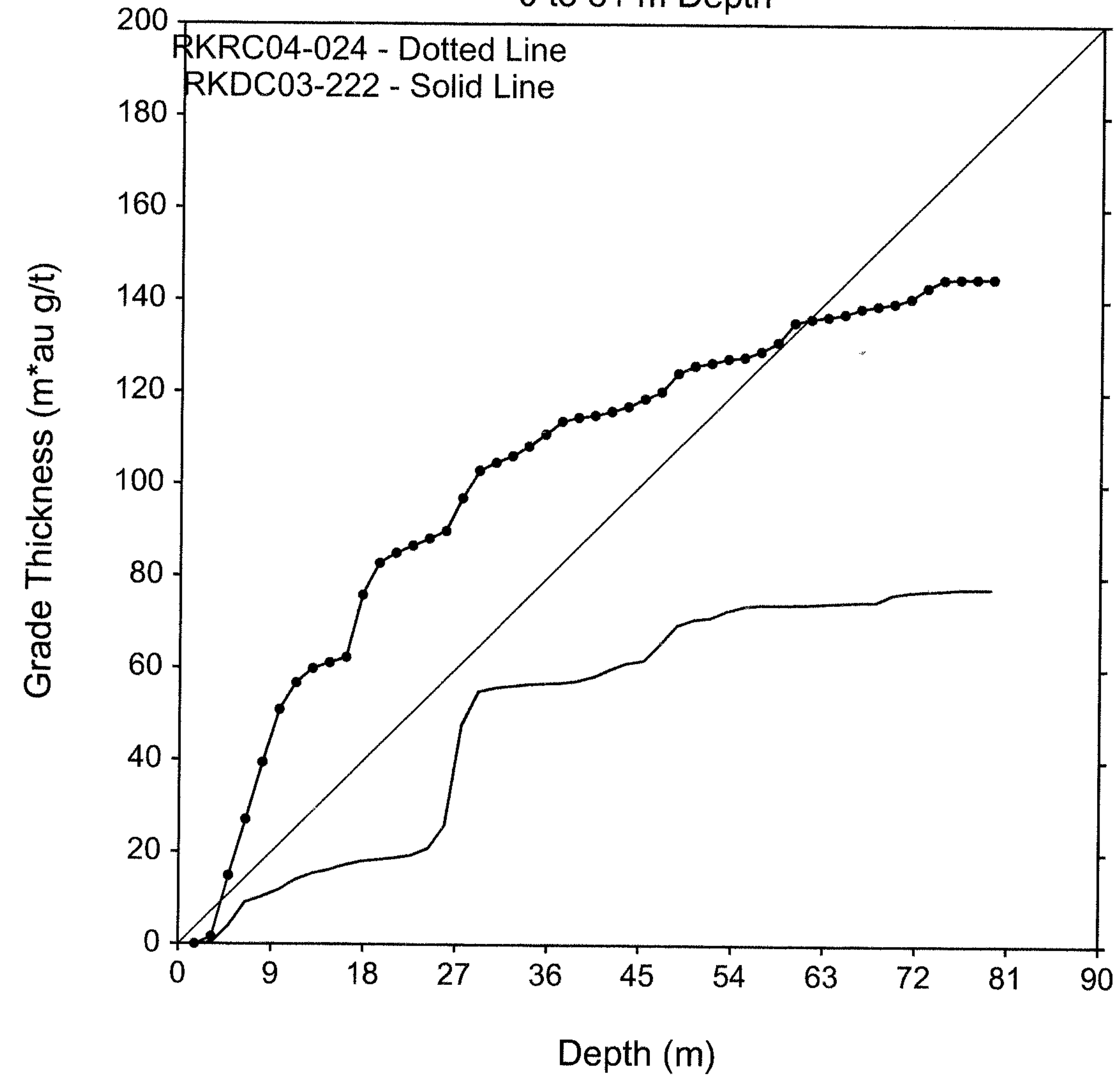
N 40
m 0.97
Cv 2.34
Intervals Trimmed by Depth 5
Intervals Trimmed by Grade 0

Horiz. Separation



Cumulative Grade Thickness

0 to 81 m Depth



3F

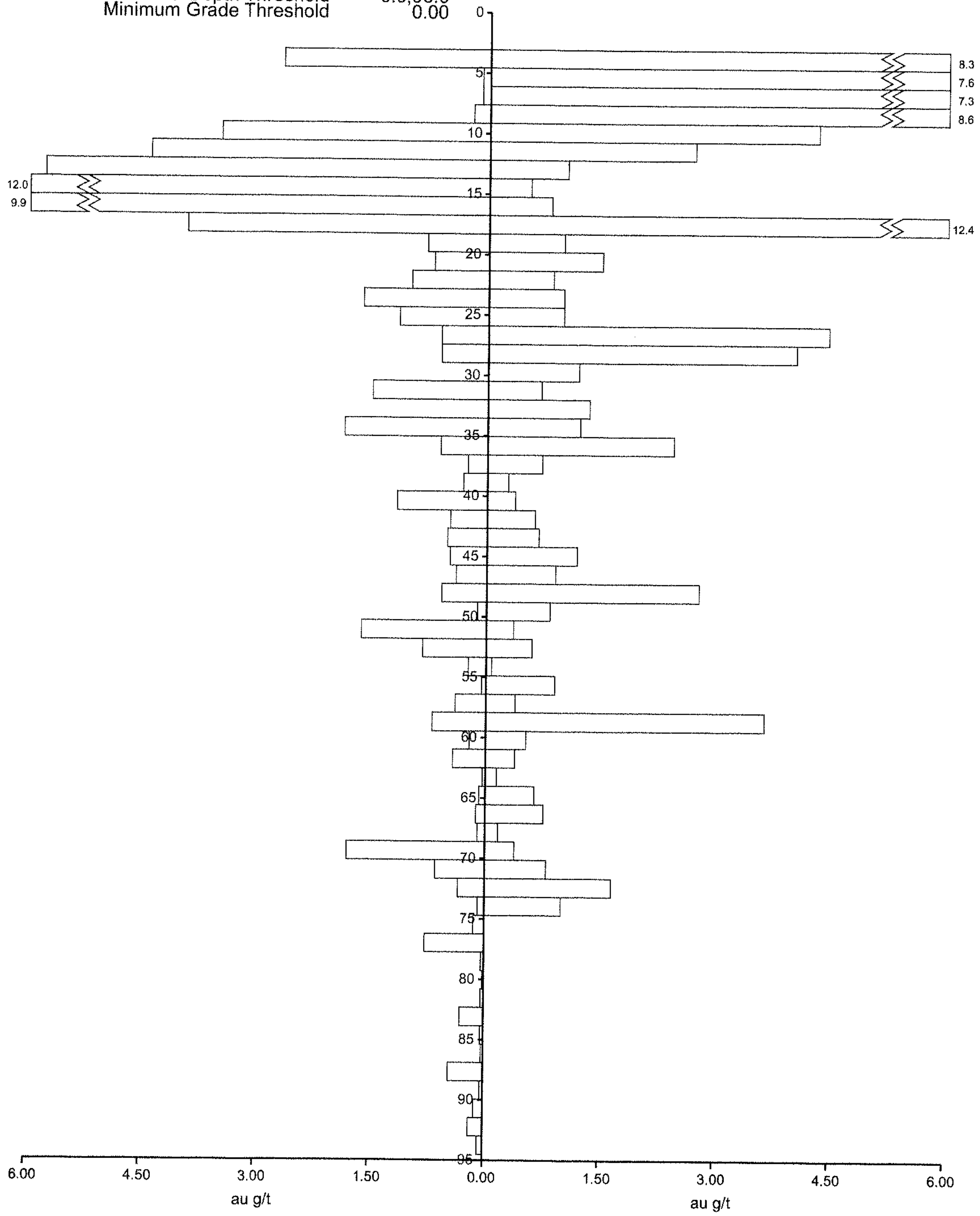
RC RC B B

RR-0-02

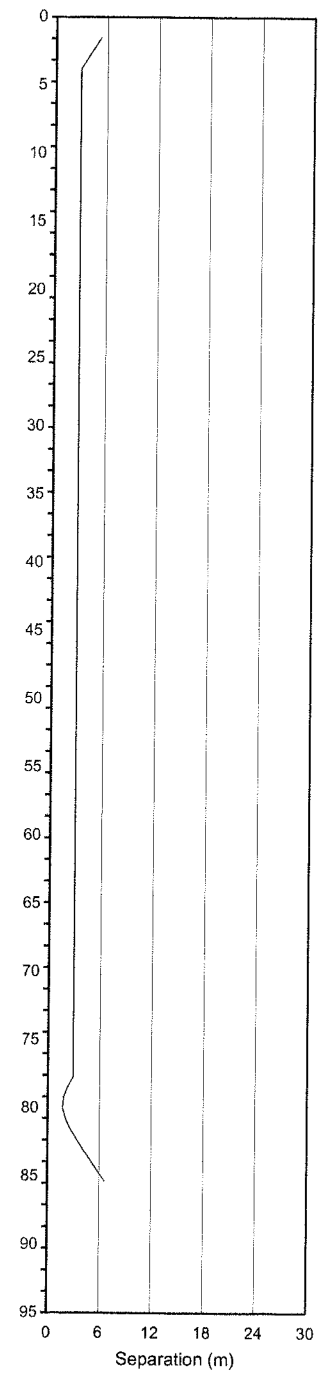
N 57
m 1.16
Cv 1.88
Intervals Trimmed by Depth 1
Intervals Trimmed by Grade 3
Minimum/Maximum Depth Threshold 0.0,96.0
Minimum Grade Threshold 0.00

RKRC04-024

N 48
m 2.01
Cv 1.30
Intervals Trimmed by Depth 0
Intervals Trimmed by Grade 1

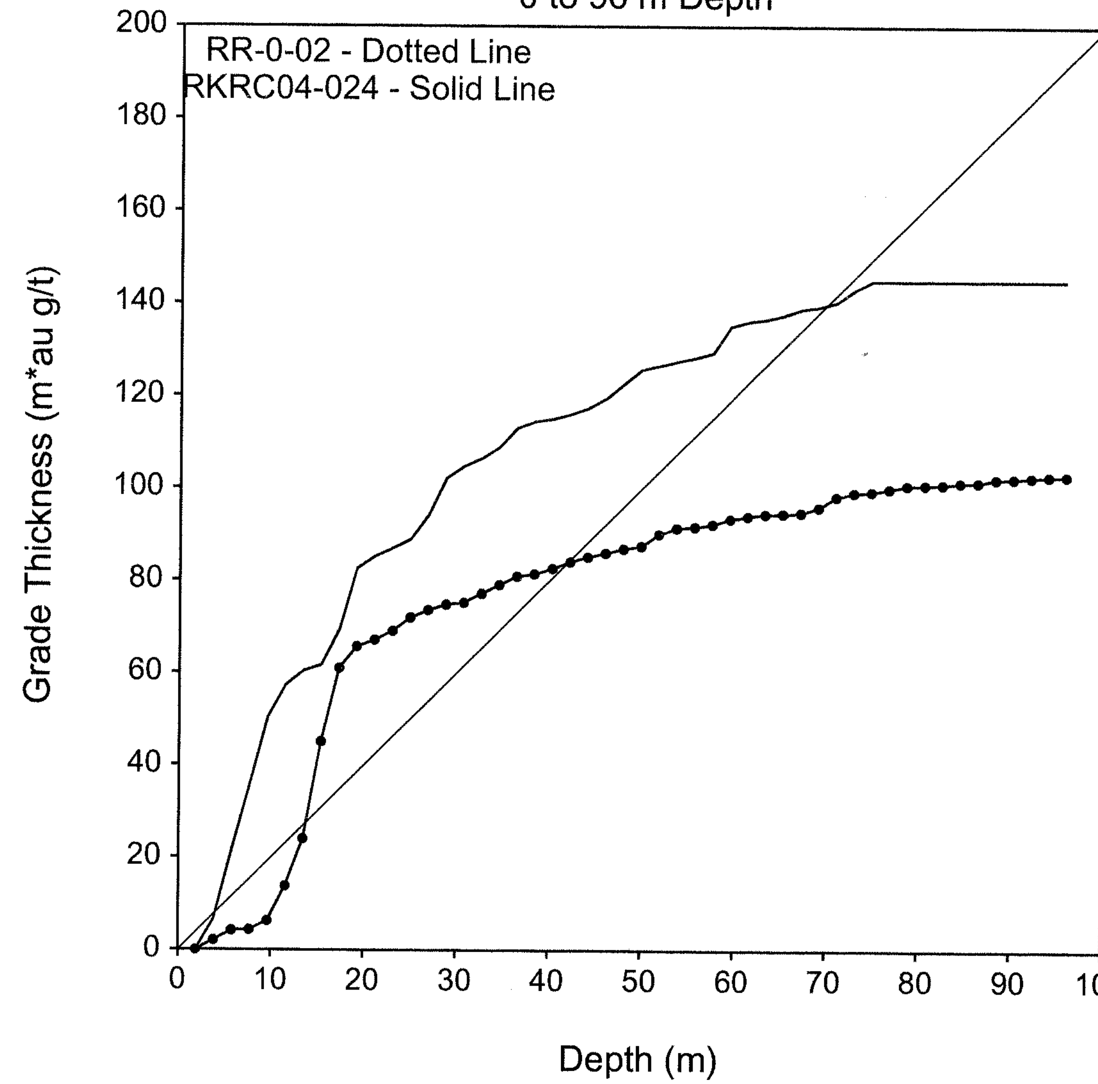


Horiz. Separation



Cumulative Grade Thickness

0 to 96 m Depth



4A

B B

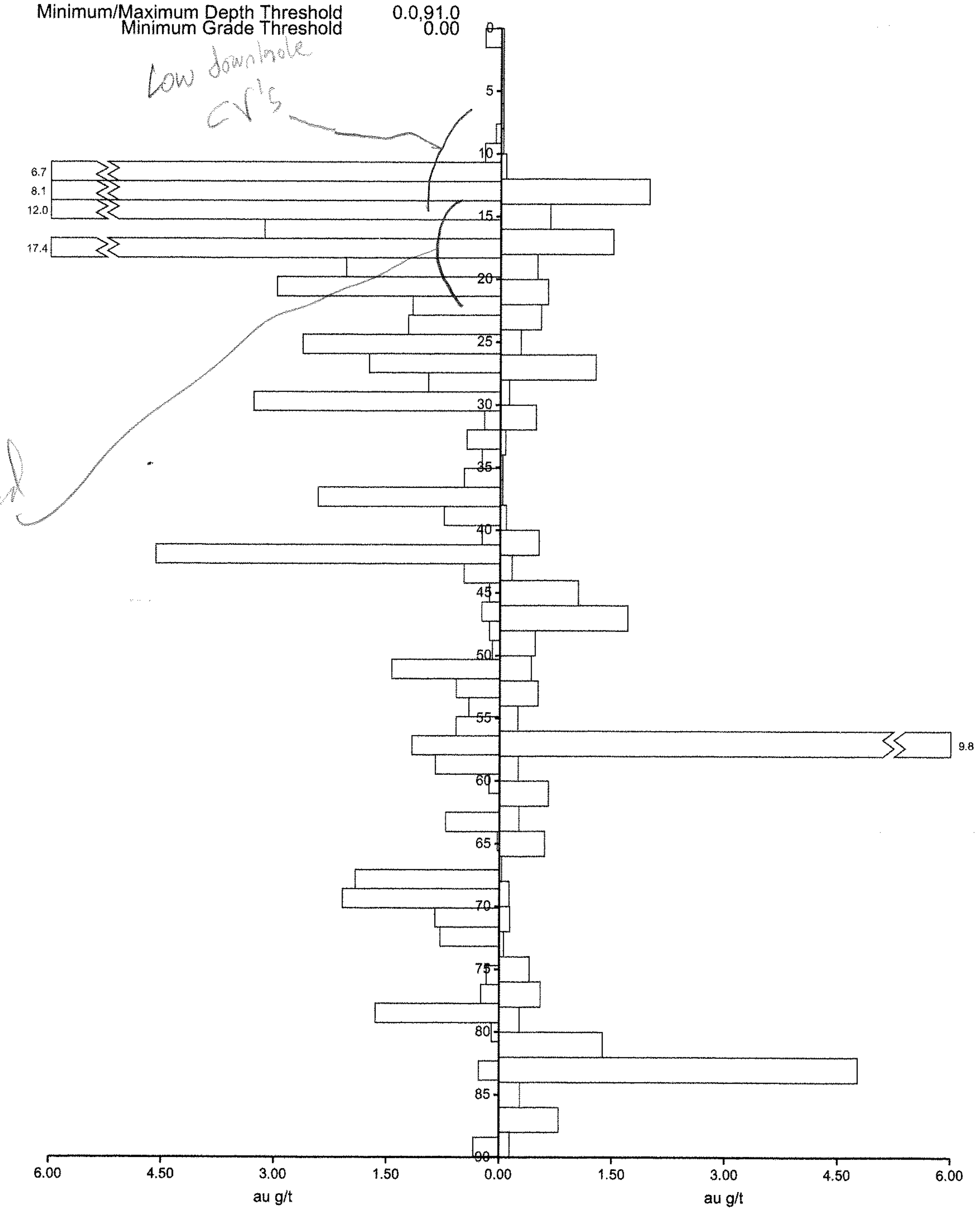
RC Core

RCR-4-19

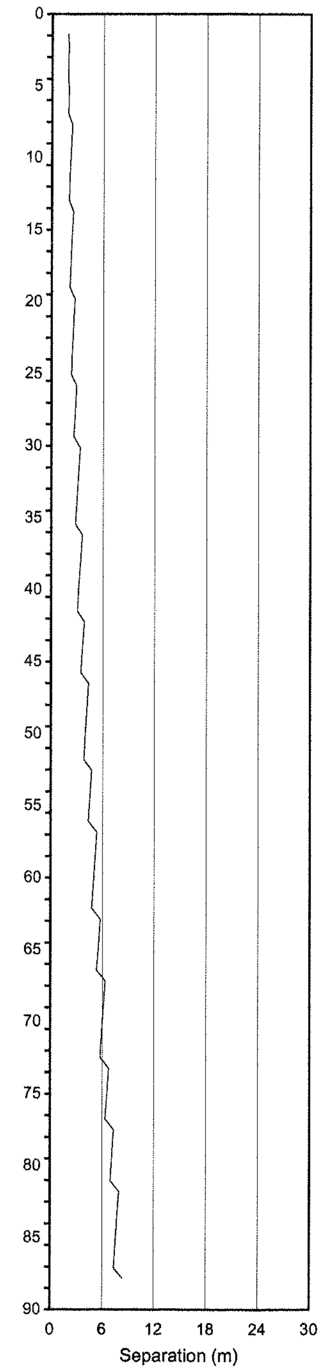
N 48
m 1.85
Cv 1.72
Intervals Trimmed by Depth 1
Intervals Trimmed by Grade 11
Minimum/Maximum Depth Threshold 0.0,91.0
Minimum Grade Threshold 0.00

RKDC03-208

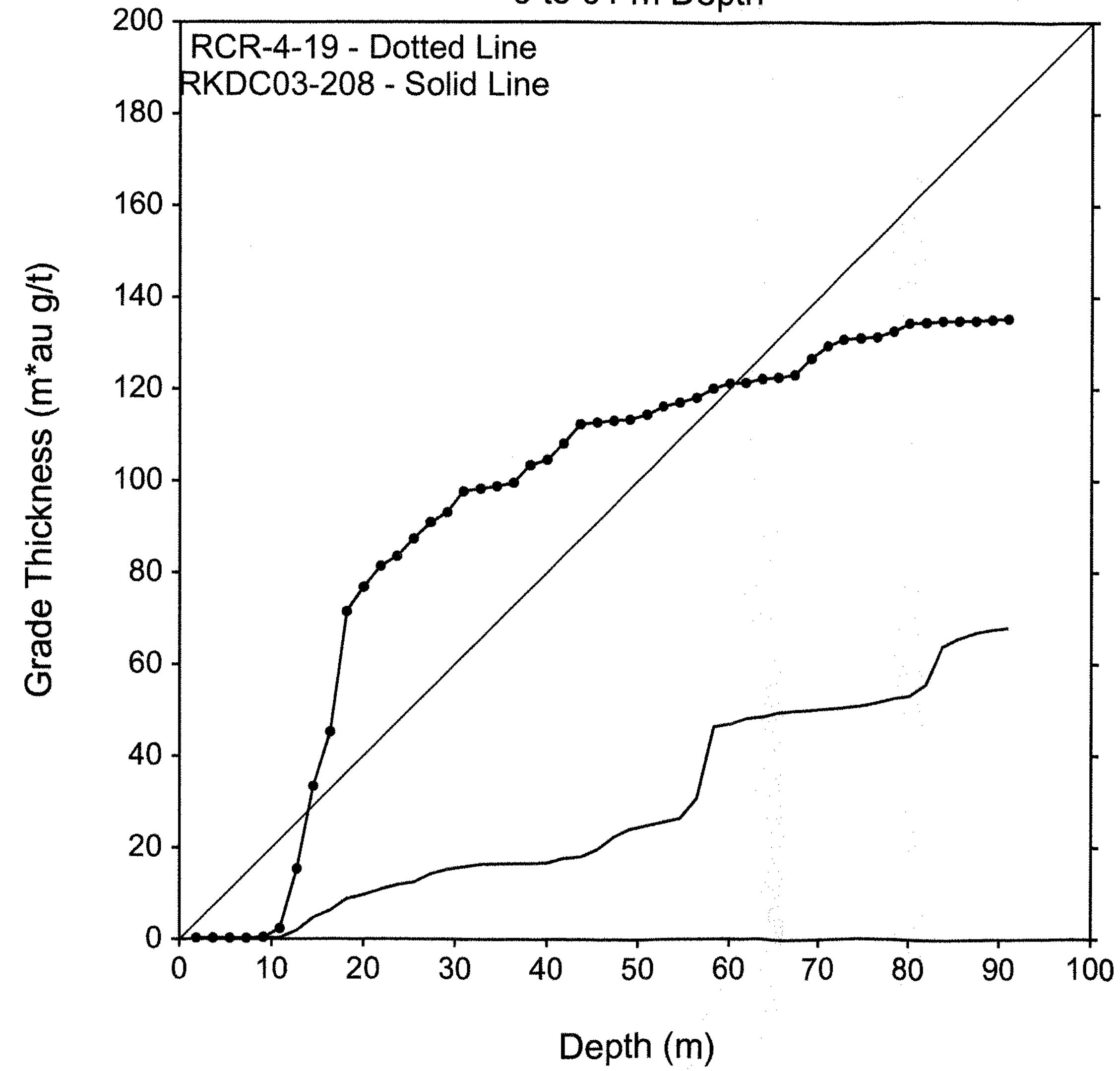
N 44
m 0.75
Cv 2.09
Intervals Trimmed by Depth 5
Intervals Trimmed by Grade 0



Horiz. Separation



Cumulative Grade Thickness
0 to 91 m Depth



4B

B B

Core

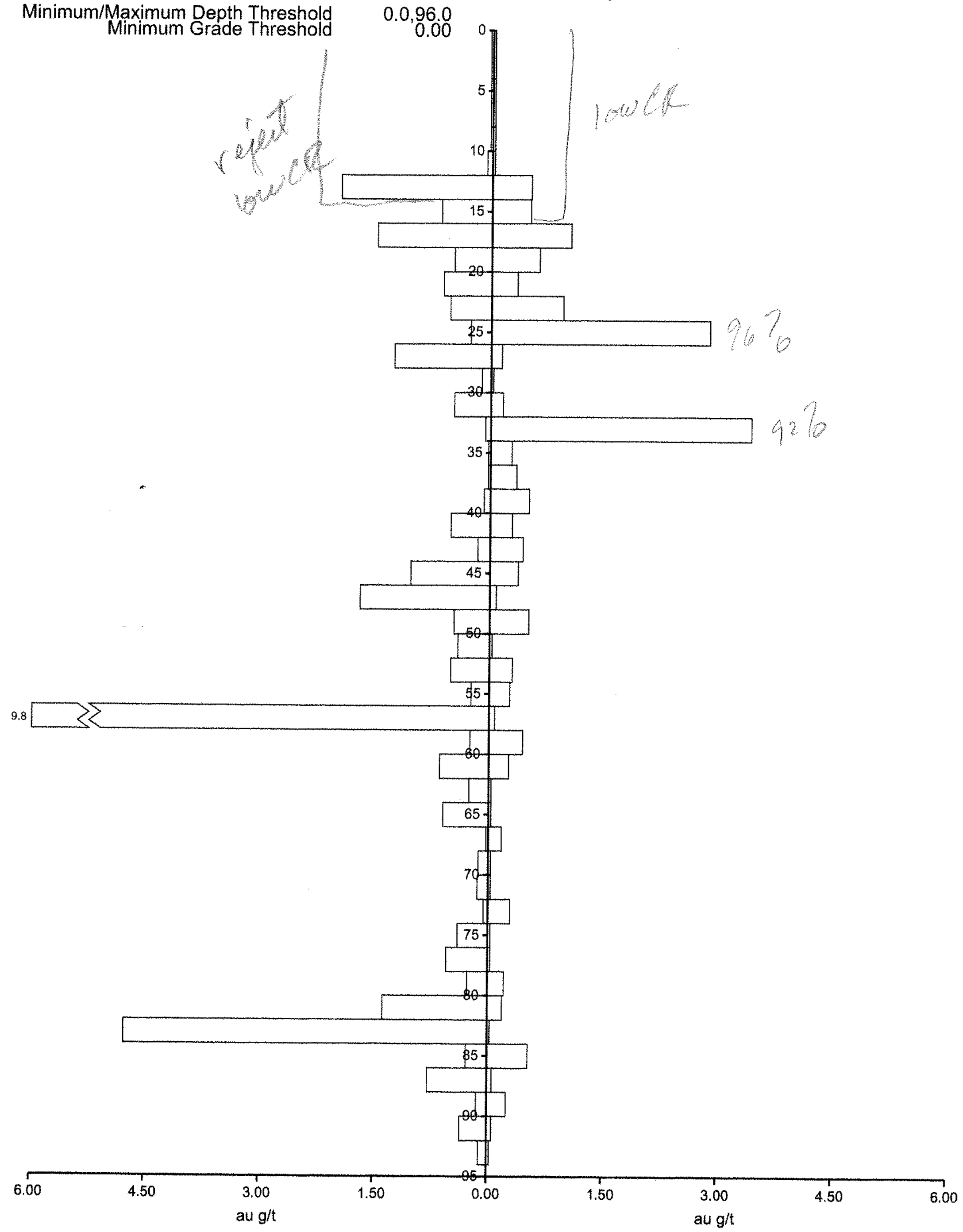
RKDC03-208

N 47
m 0.72
Cv 2.13
Intervals Trimmed by Depth 2
Intervals Trimmed by Grade 0
Minimum/Maximum Depth Threshold 0.0,96.0
Minimum Grade Threshold 0.00

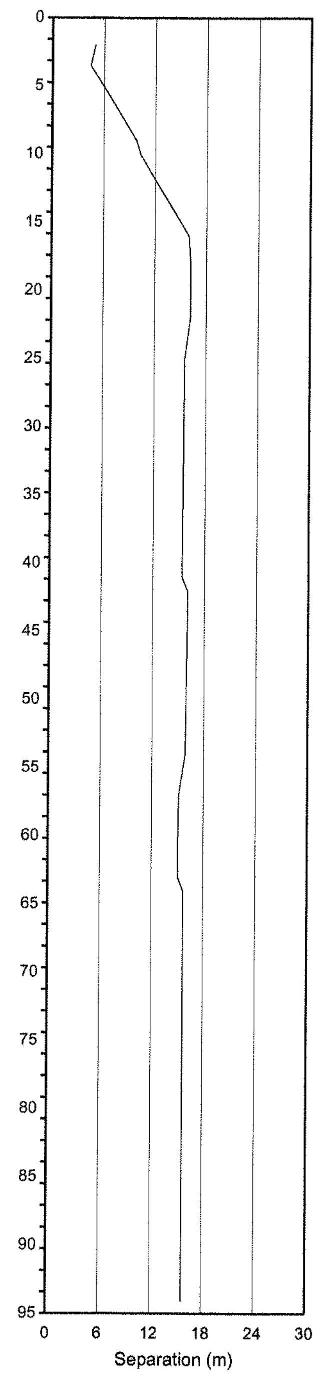
Core

RKDC04-239

N 46
m 0.35
Cv 1.78
Intervals Trimmed by Depth 0
Intervals Trimmed by Grade 0

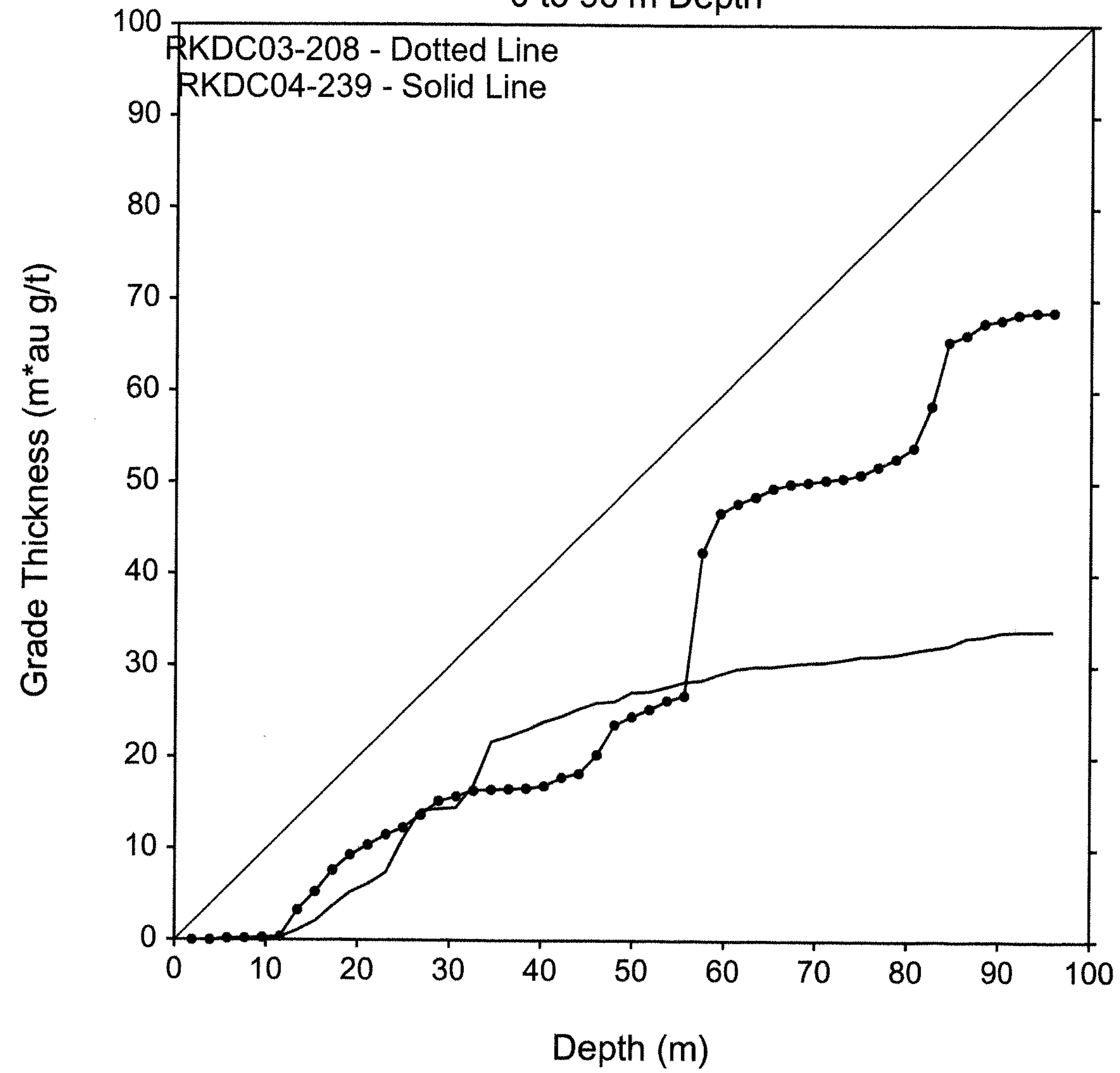


Horiz. Separation



Cumulative Grade Thickness

0 to 96 m Depth



4C

C

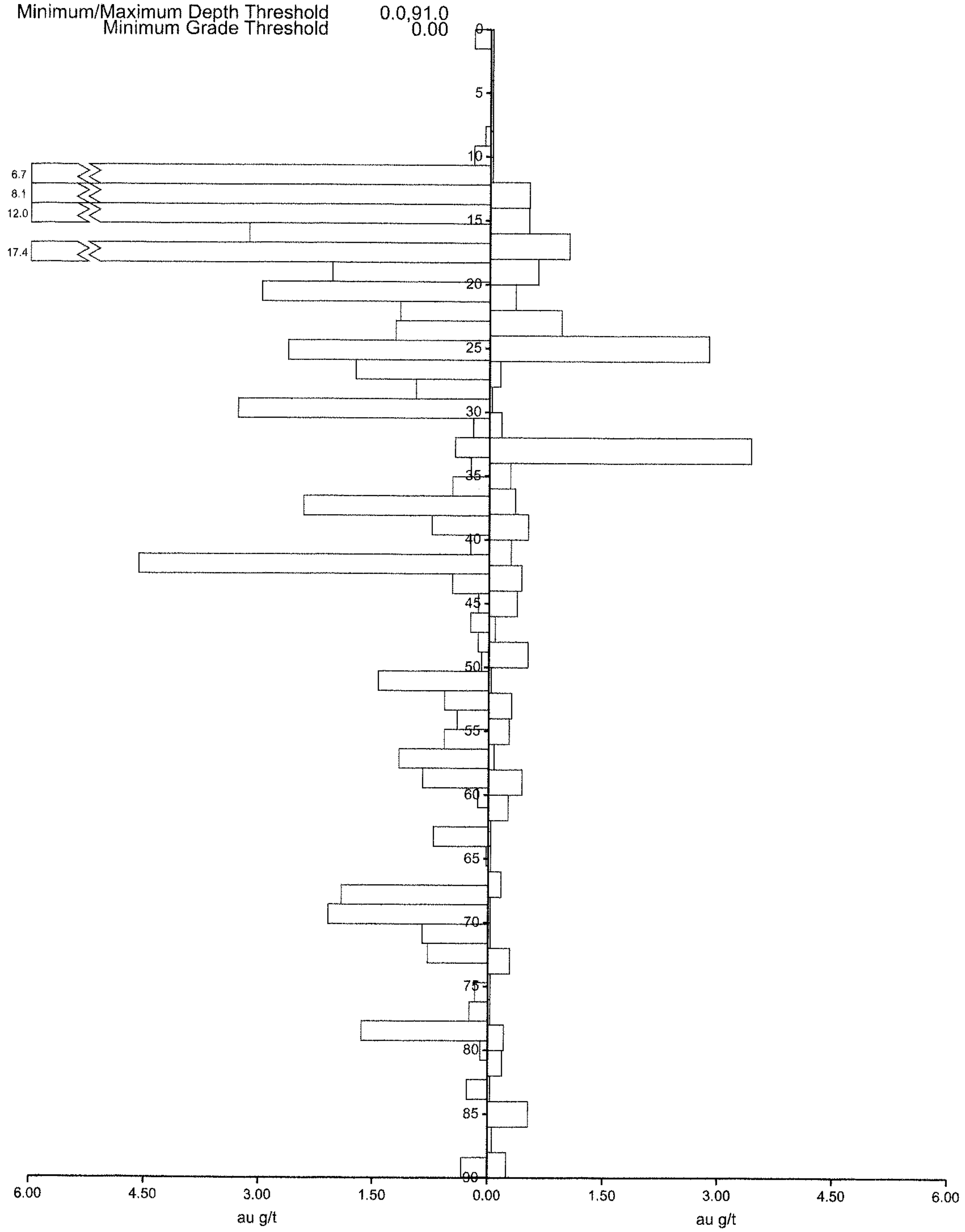
RC Core

RCR-4-19

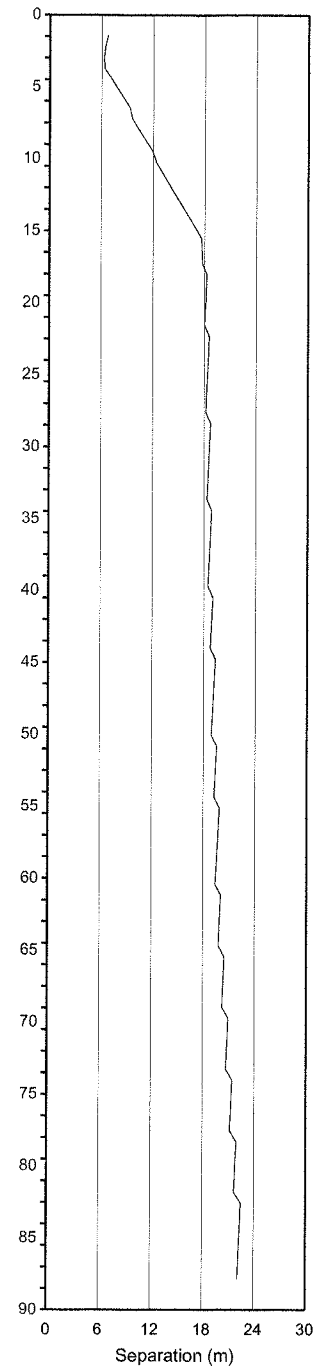
N 48
m 1.85
Cv 1.72
Intervals Trimmed by Depth 1
Intervals Trimmed by Grade 11
Minimum/Maximum Depth Threshold 0.0,91.0
Minimum Grade Threshold 0.00

RKDC04-239

N 43
m 0.37
Cv 1.72
Intervals Trimmed by Depth 3
Intervals Trimmed by Grade 0

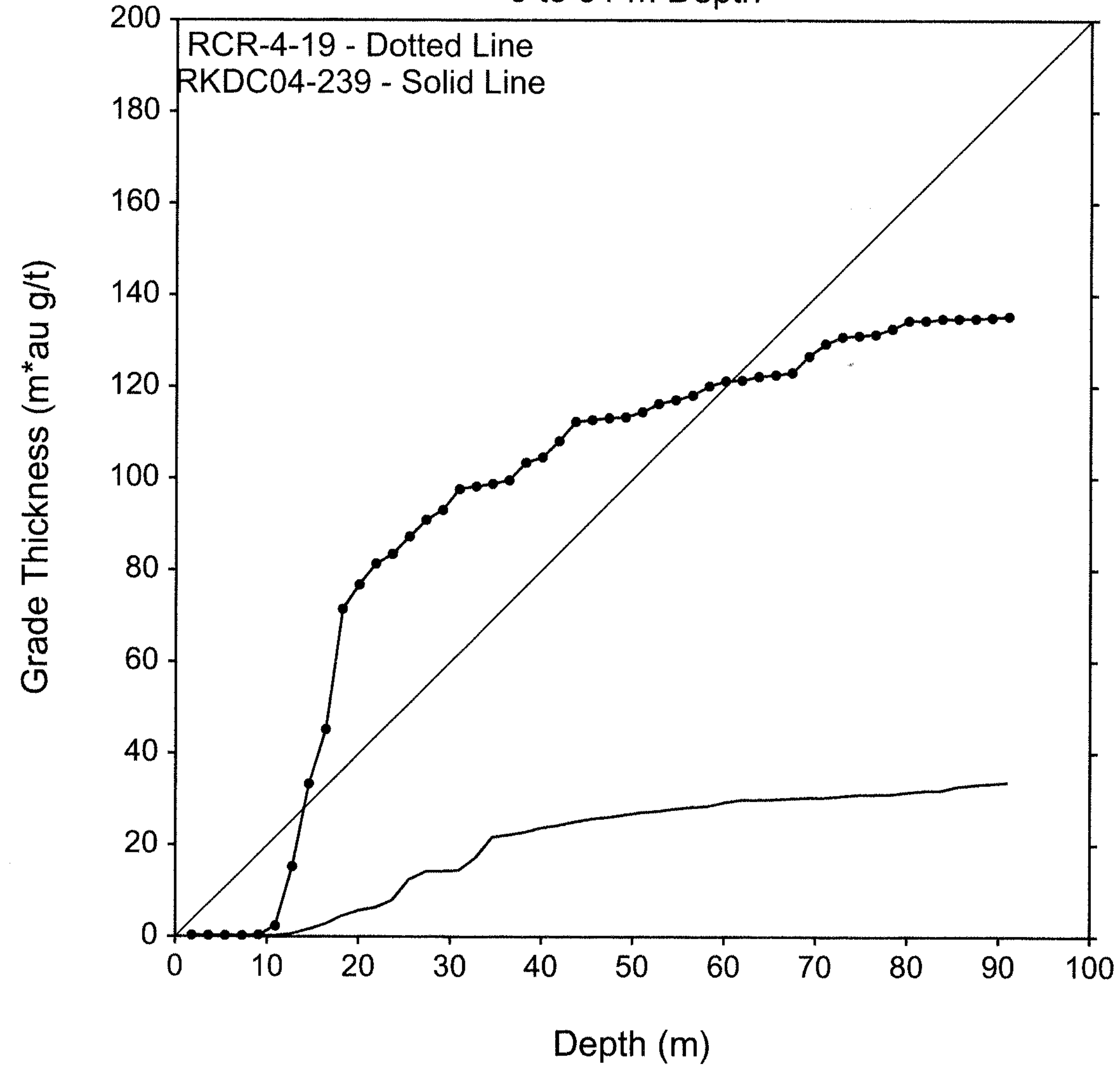


Horiz. Separation



Cumulative Grade Thickness

0 to 91 m Depth



4D

C C

RC

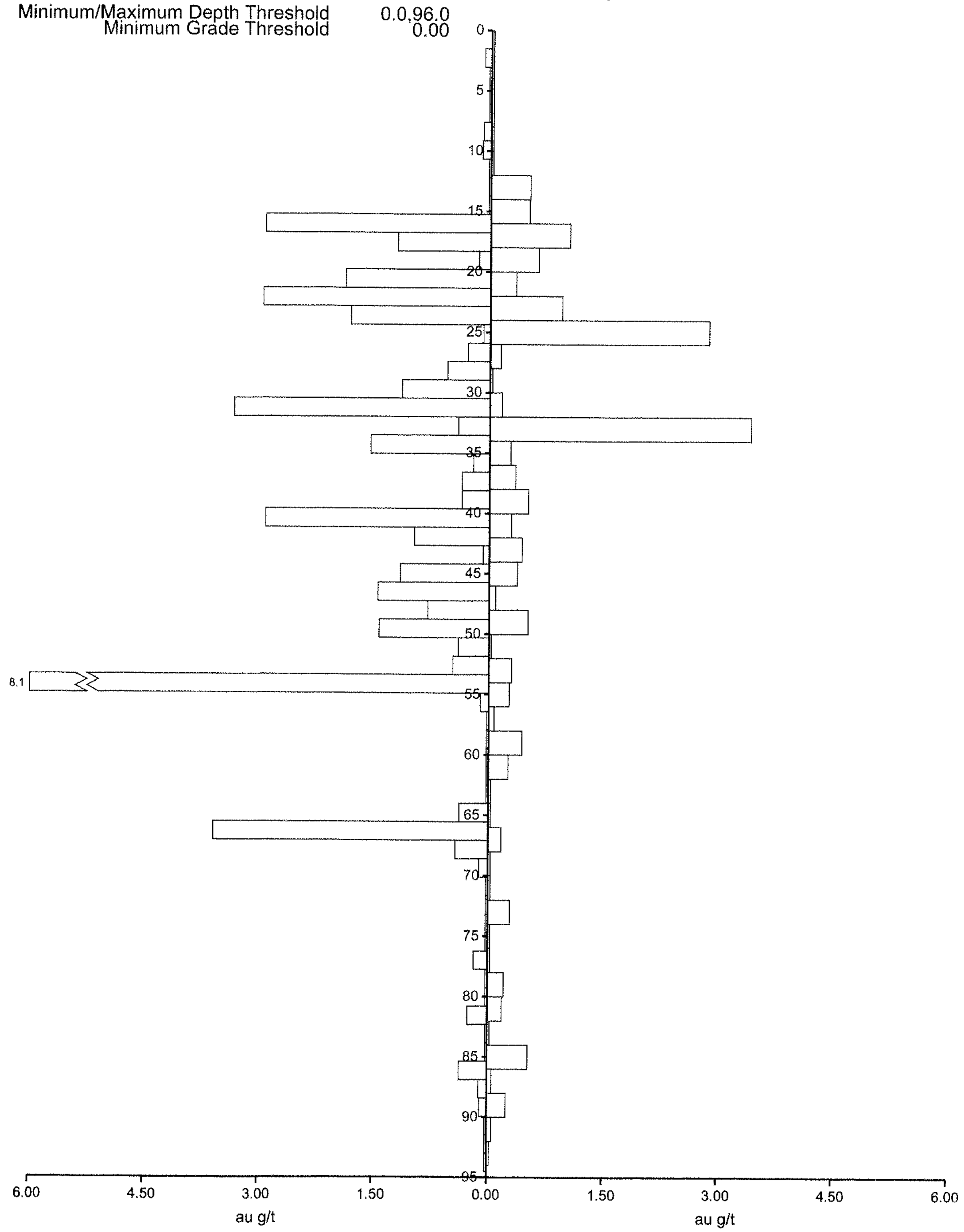
RKRC04-039

N 61
m 0.71
Cv 1.83
Intervals Trimmed by Depth 2
Intervals Trimmed by Grade 1
Minimum/Maximum Depth Threshold 0.0,96.0
Minimum Grade Threshold 0.00

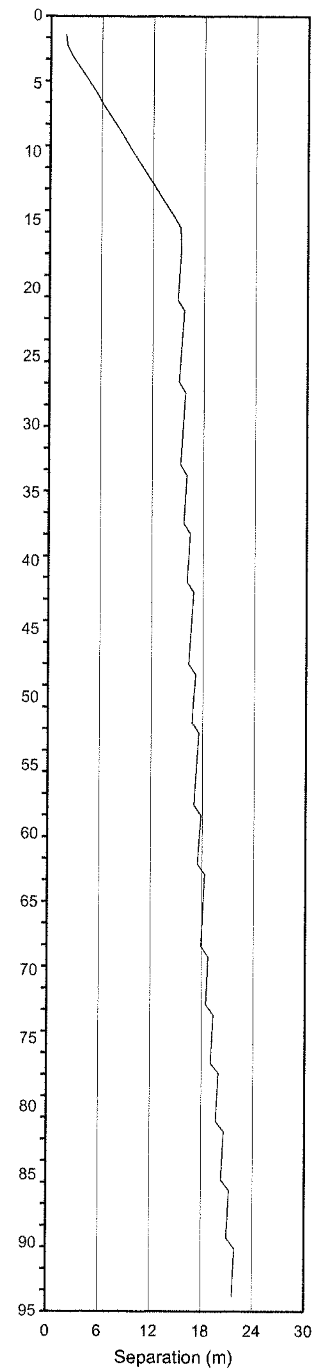
Core

RKDC04-239

N 46
m 0.35
Cv 1.78
Intervals Trimmed by Depth 0
Intervals Trimmed by Grade 0

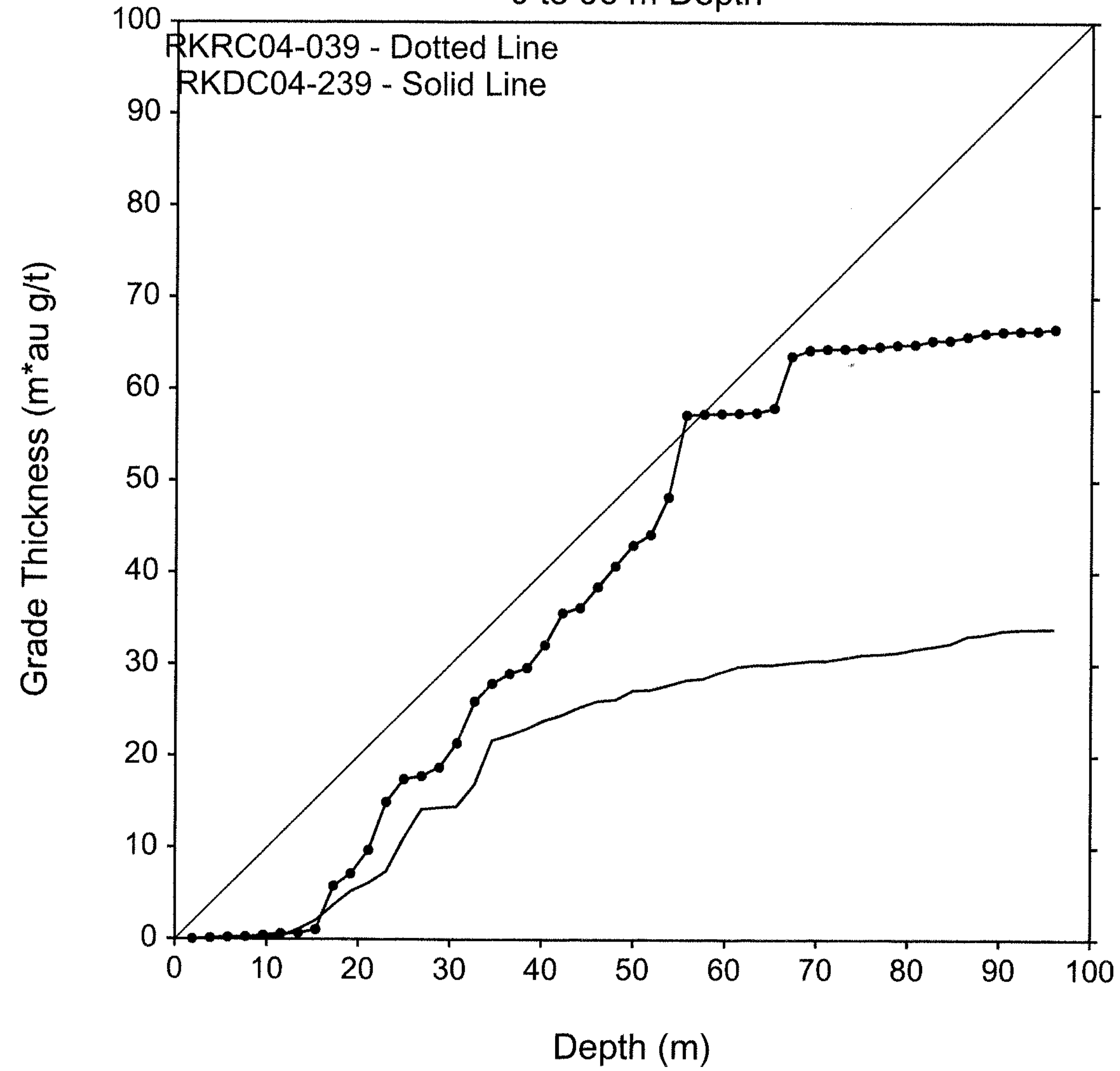


Horiz. Separation



Cumulative Grade Thickness

0 to 96 m Depth



RC

CORE

4E

A A

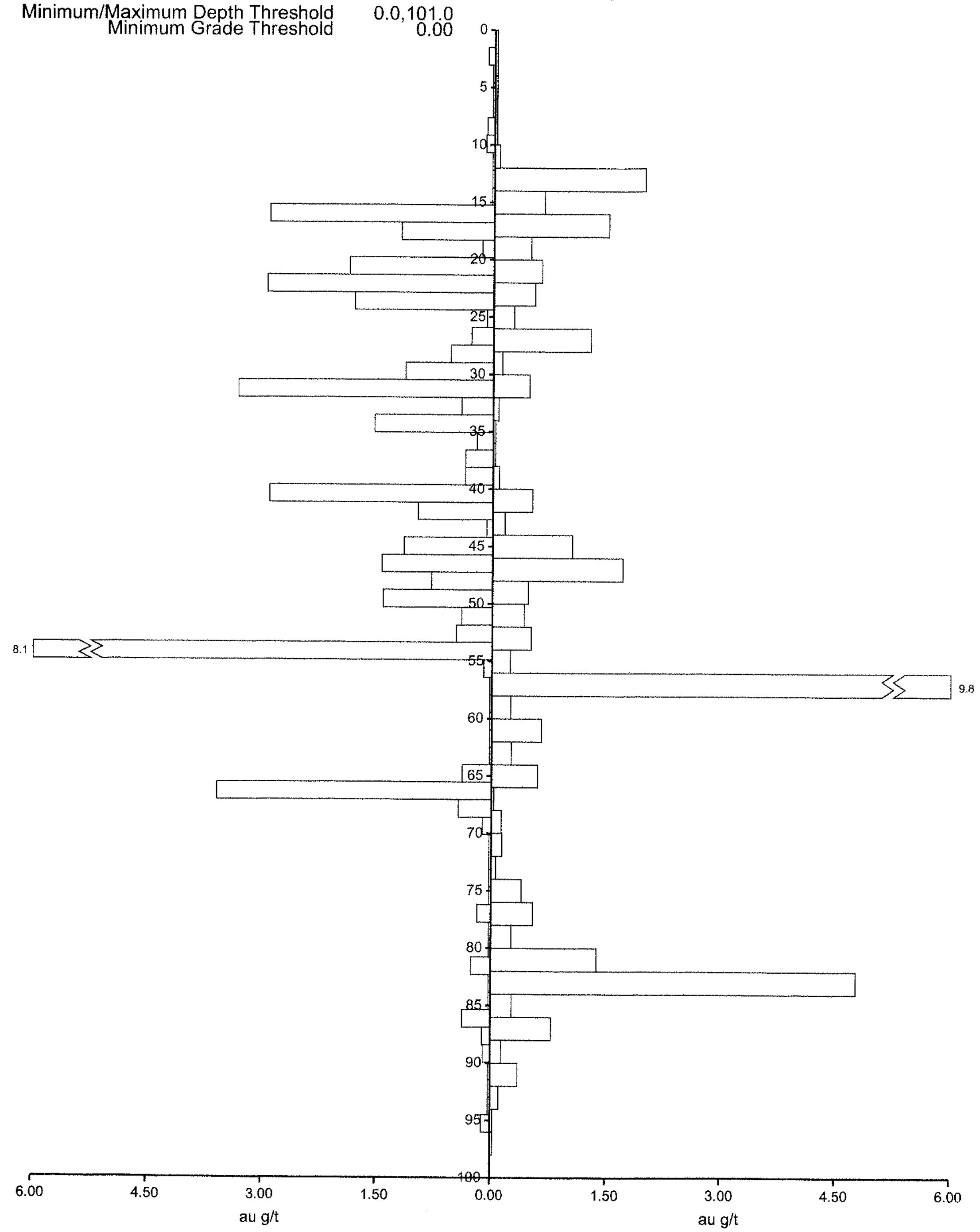
RKRC04-039

N 63
m 0.69
Cv 1.86
Intervals Trimmed by Depth 0
Intervals Trimmed by Grade 1

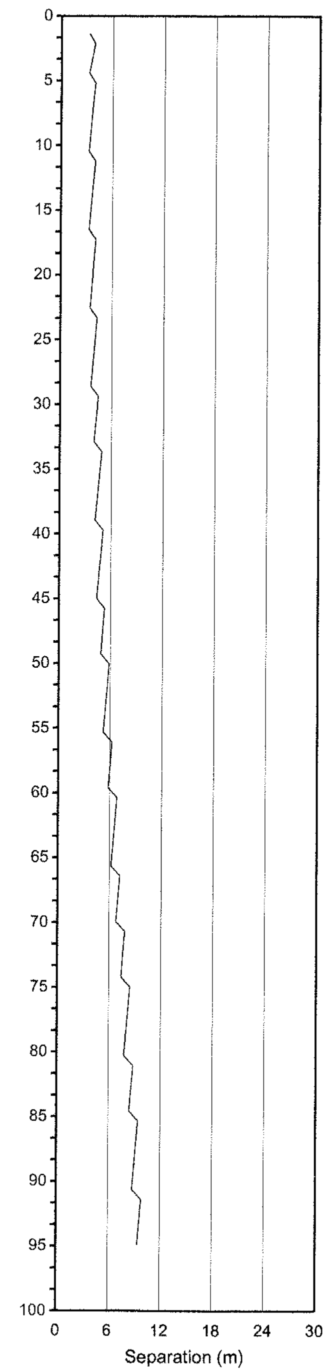
Minimum/Maximum Depth Threshold 0.0,101.0
Minimum Grade Threshold 0.00

RKDC03-208

N 49
m 0.69
Cv 2.19
Intervals Trimmed by Depth 0
Intervals Trimmed by Grade 0

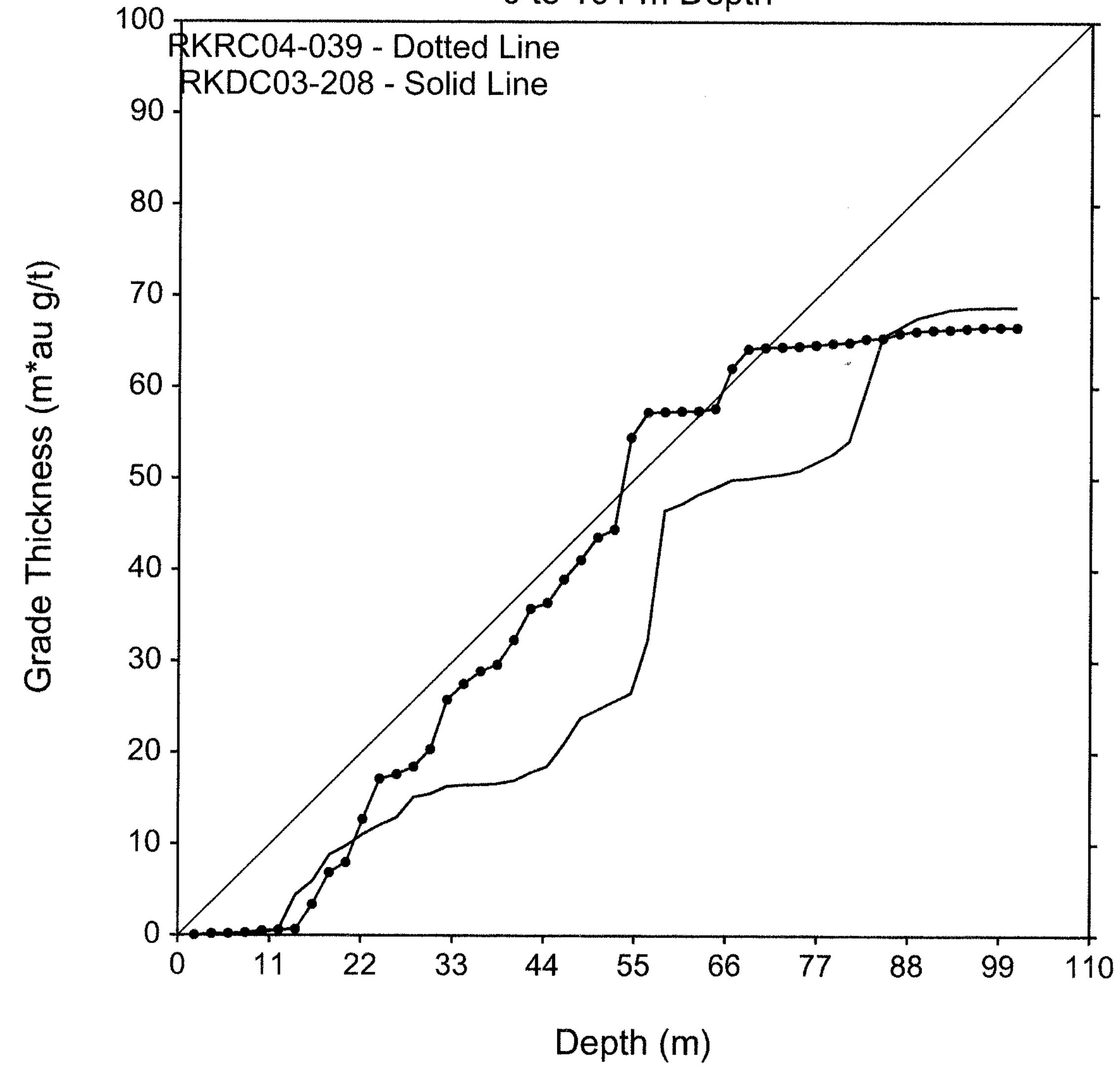


Horiz. Separation



Cumulative Grade Thickness

0 to 101 m Depth



RC RC

4F

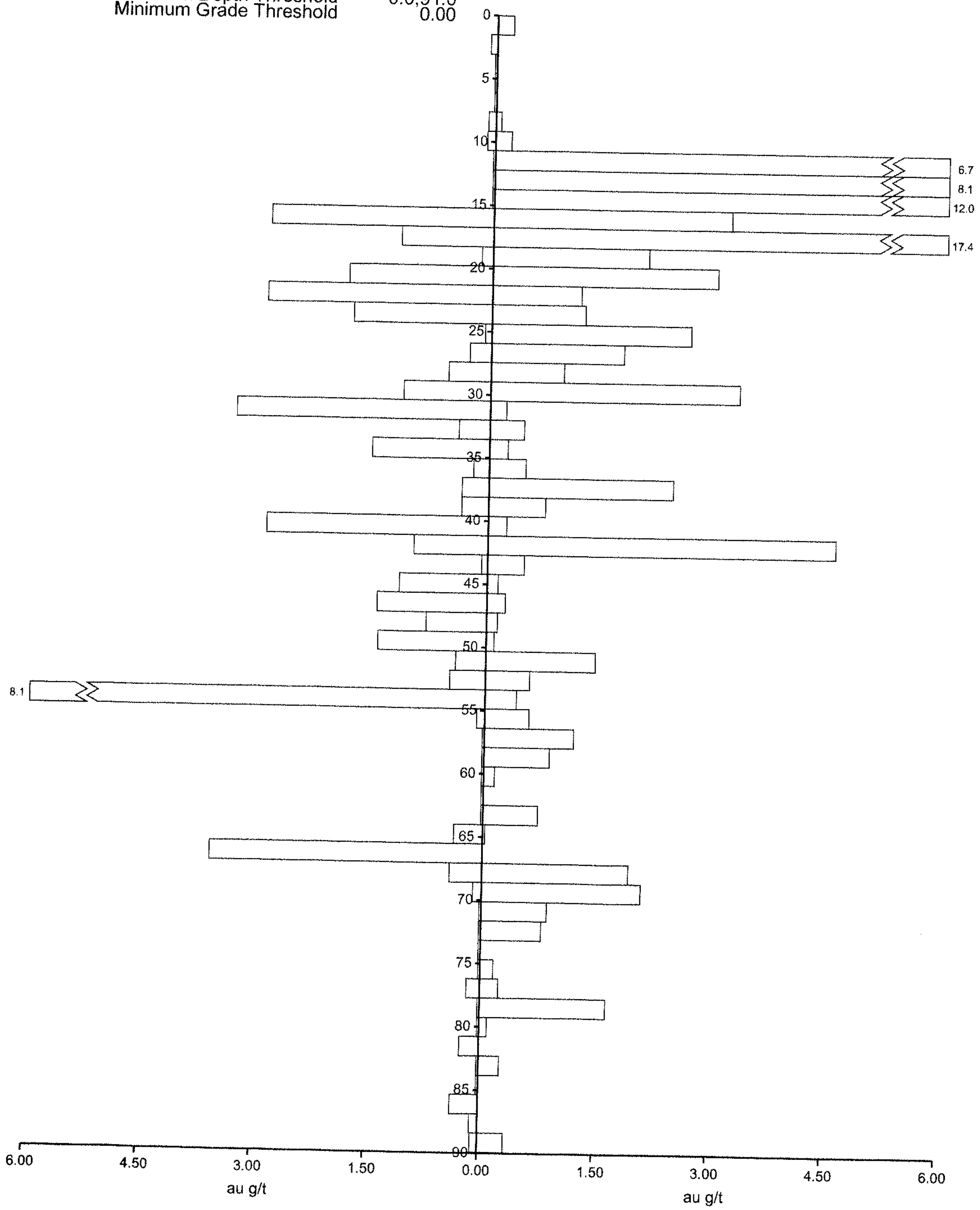
A A

RKRC04-039

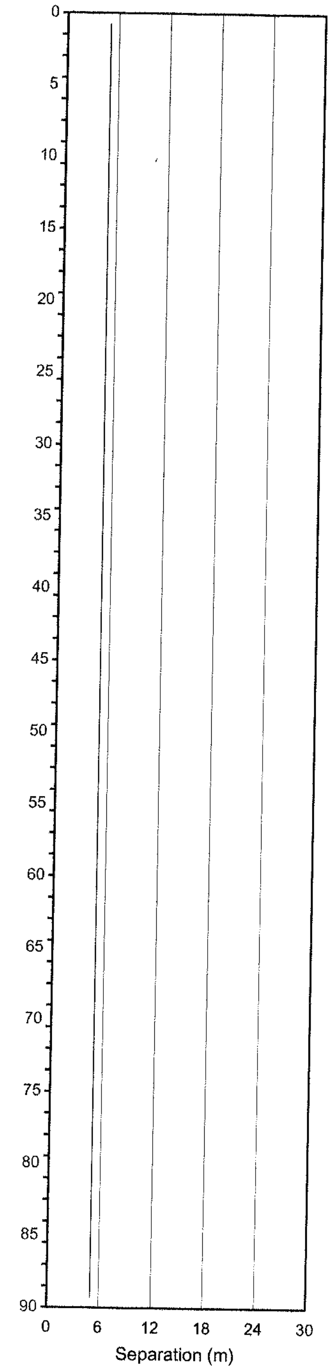
N	58
m	0.75
Cv	1.78
Intervals Trimmed by Depth	5
Intervals Trimmed by Grade	1
Minimum/Maximum Depth Threshold	0.0,91.0
Minimum Grade Threshold	0.00

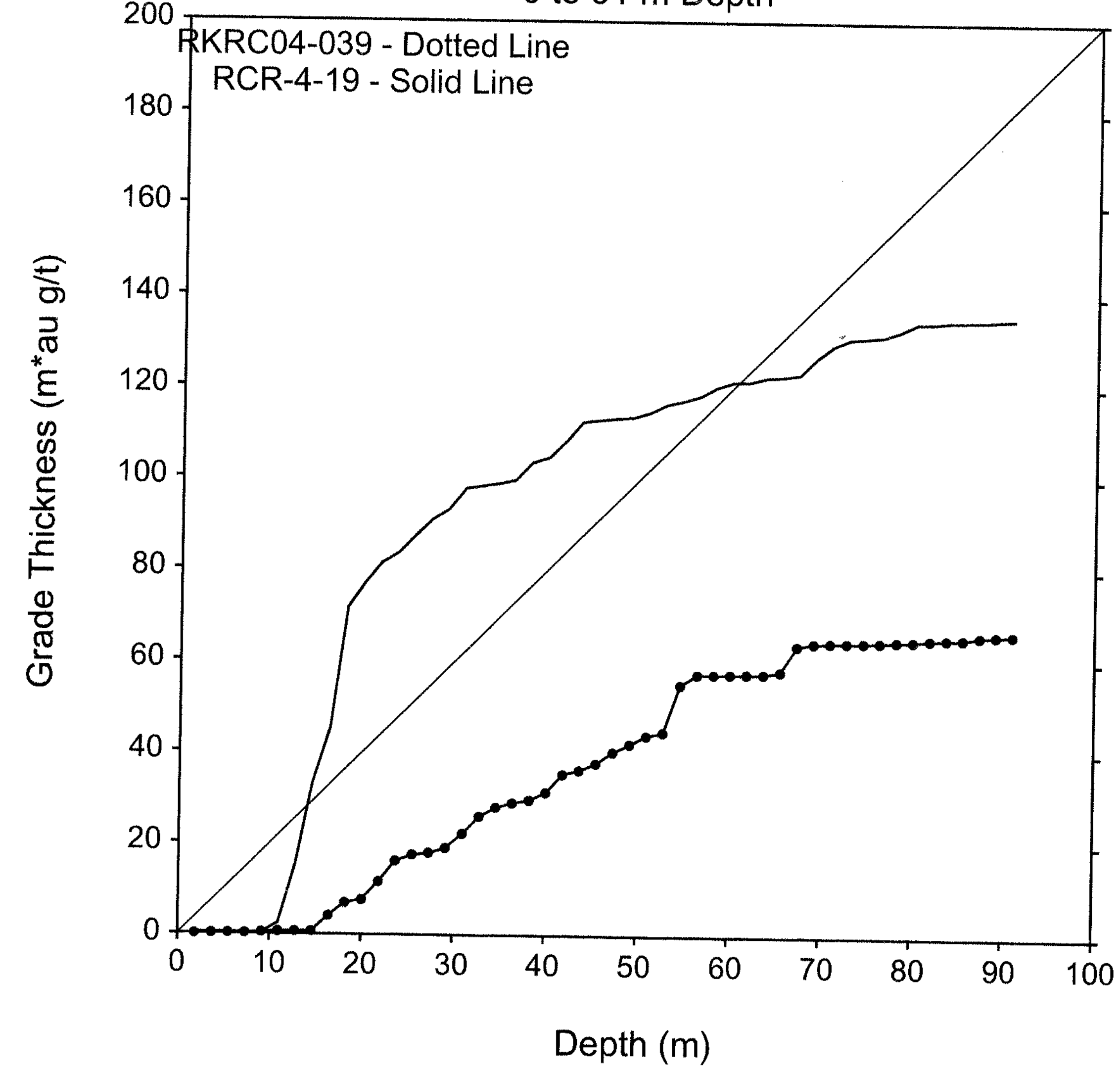
RCR-4-19

N	48
m	1.85
Cv	1.72
Intervals Trimmed by Depth	1
Intervals Trimmed by Grade	11



Horiz. Separation





5A

A A

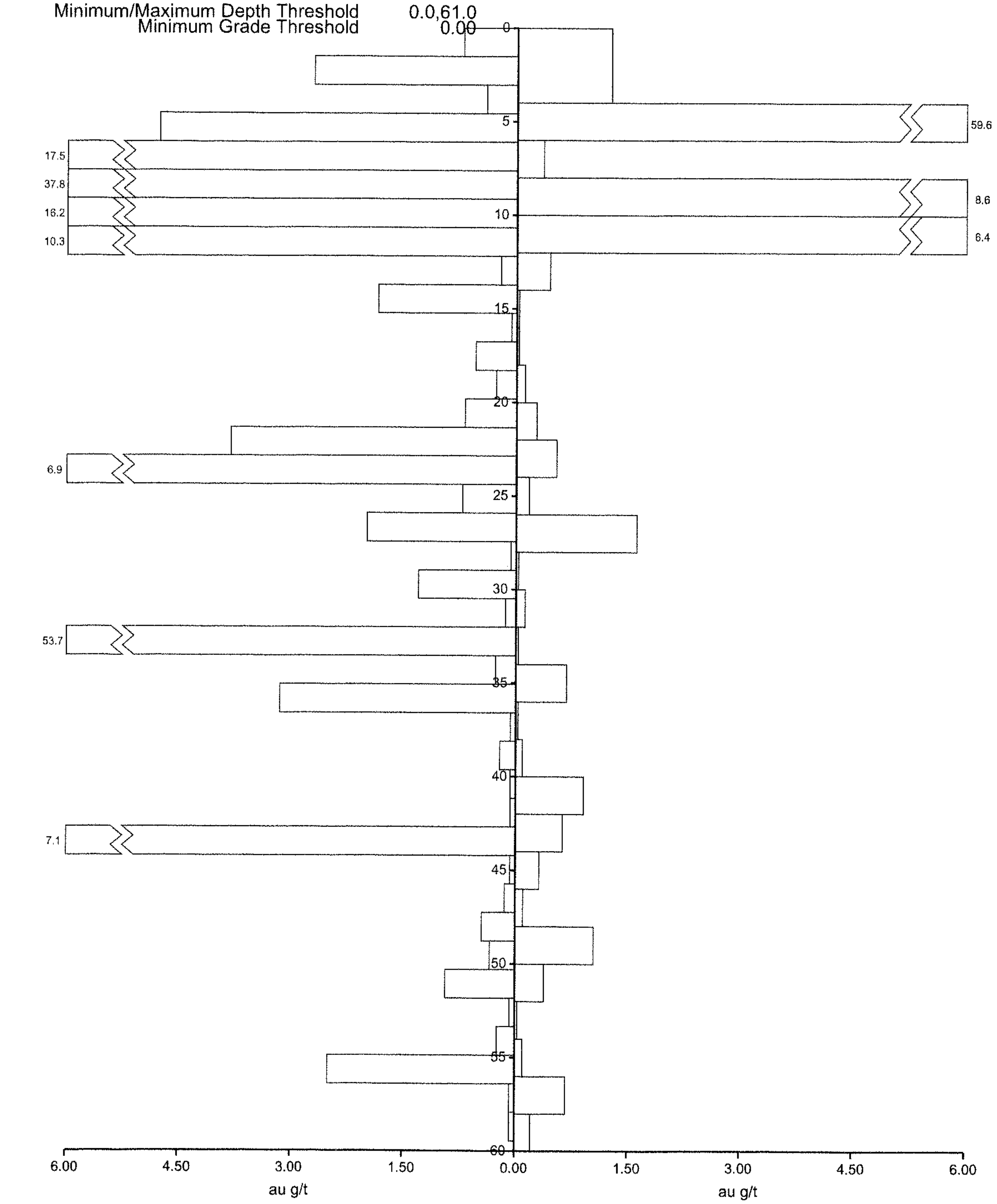
RC | CORE

RR-7-017

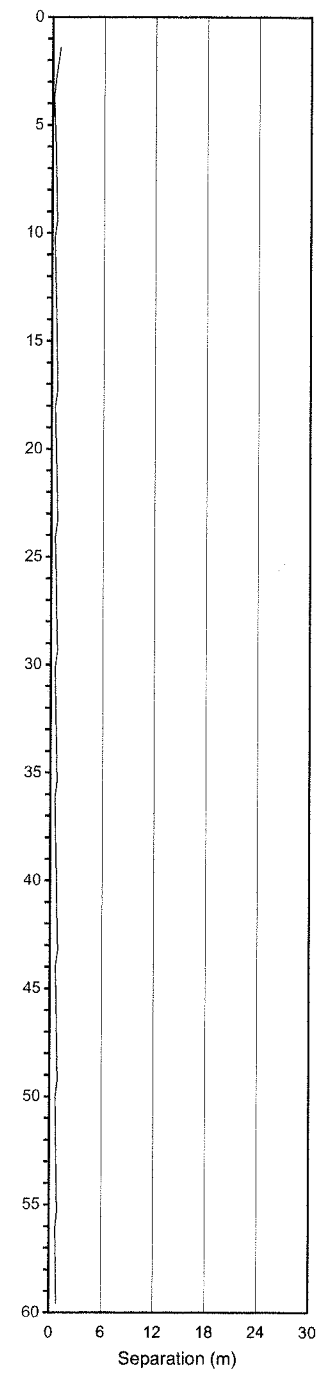
N 40
m 4.47
Cv 2.34
Intervals Trimmed by Depth 0
Intervals Trimmed by Grade 0
Minimum/Maximum Depth Threshold 0.0,61.0
Minimum Grade Threshold 0.00

RKDC03-206

N 29
m 2.87
Cv 3.72
Intervals Trimmed by Depth 3
Intervals Trimmed by Grade 0

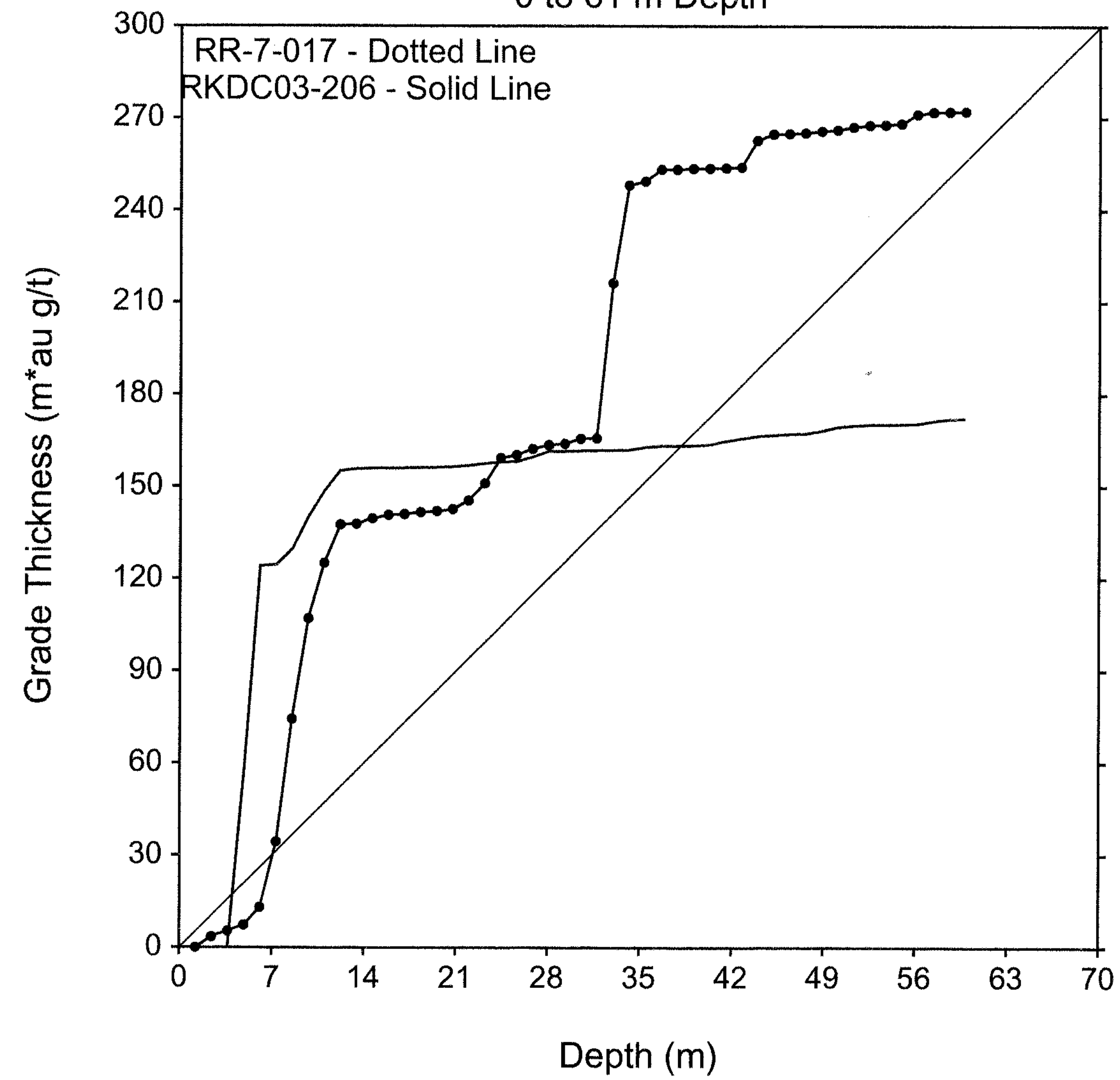


Horiz. Separation



Cumulative Grade Thickness

0 to 61 m Depth



5B

A A

Core

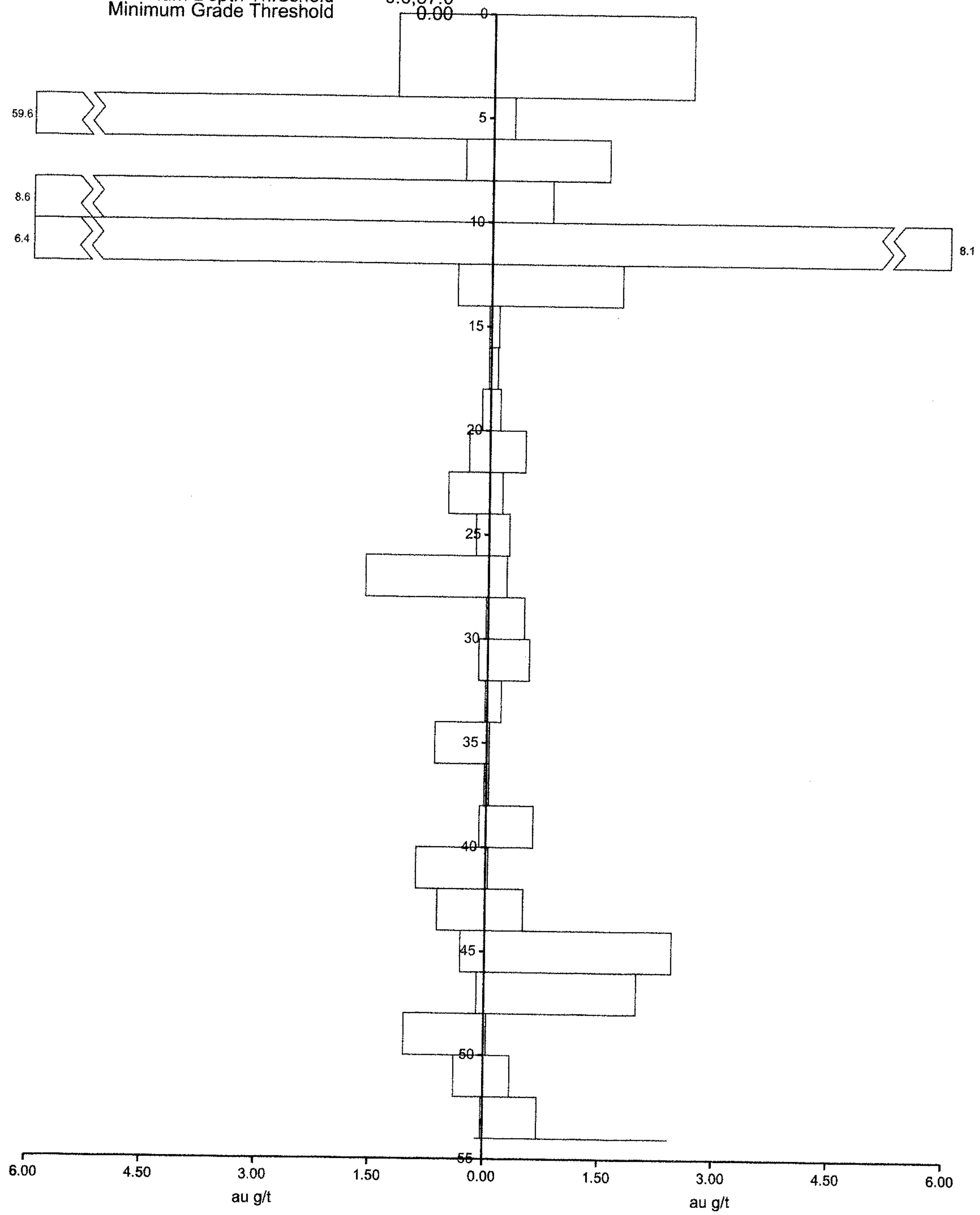
RKDC03-206

N	27
m	3.05
Cv	3.63
Intervals Trimmed by Depth	5
Intervals Trimmed by Grade	0
Minimum/Maximum Depth Threshold	0.0,57.0
Minimum Grade Threshold	0.00

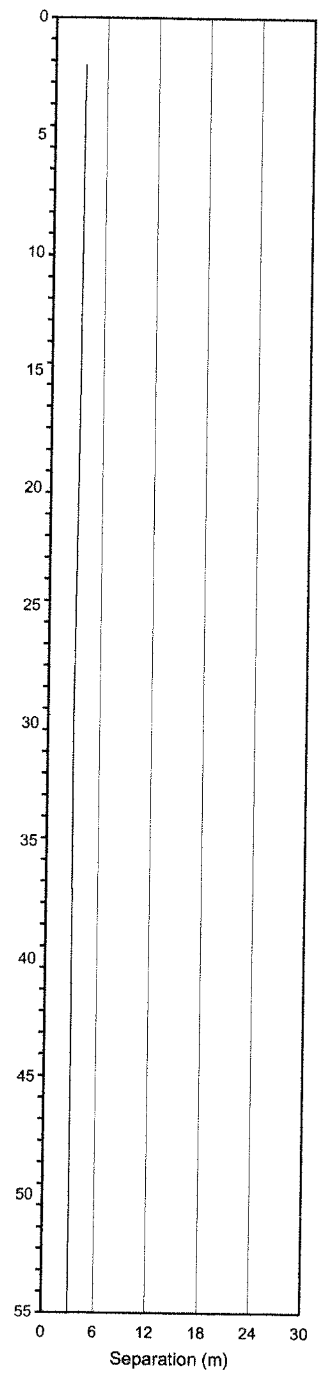
Core

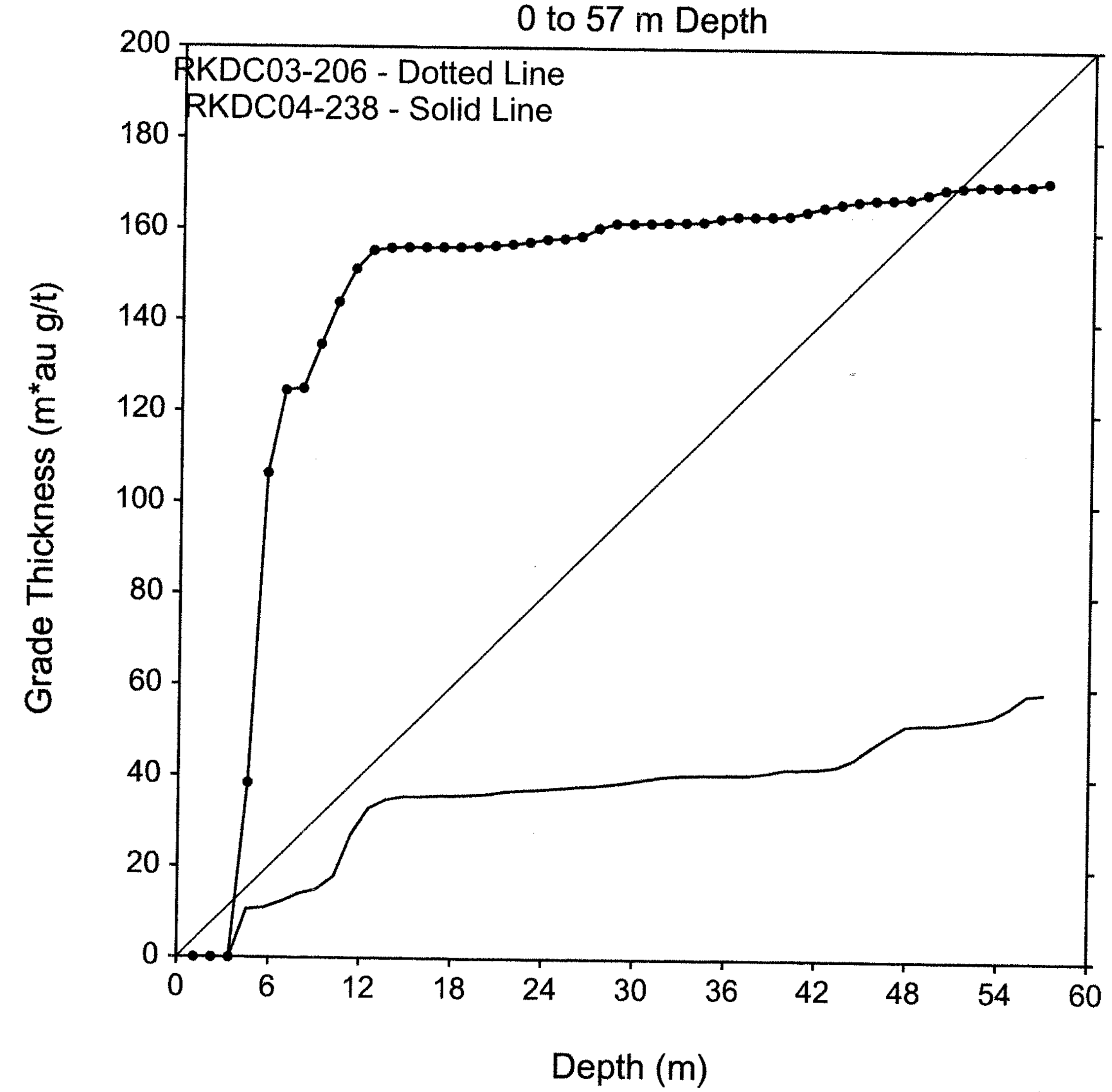
RKDC04-238

N	27
m	1.05
Cv	1.53
Intervals Trimmed by Depth	1
Intervals Trimmed by Grade	0



Horiz. Separation





5C

C

RC

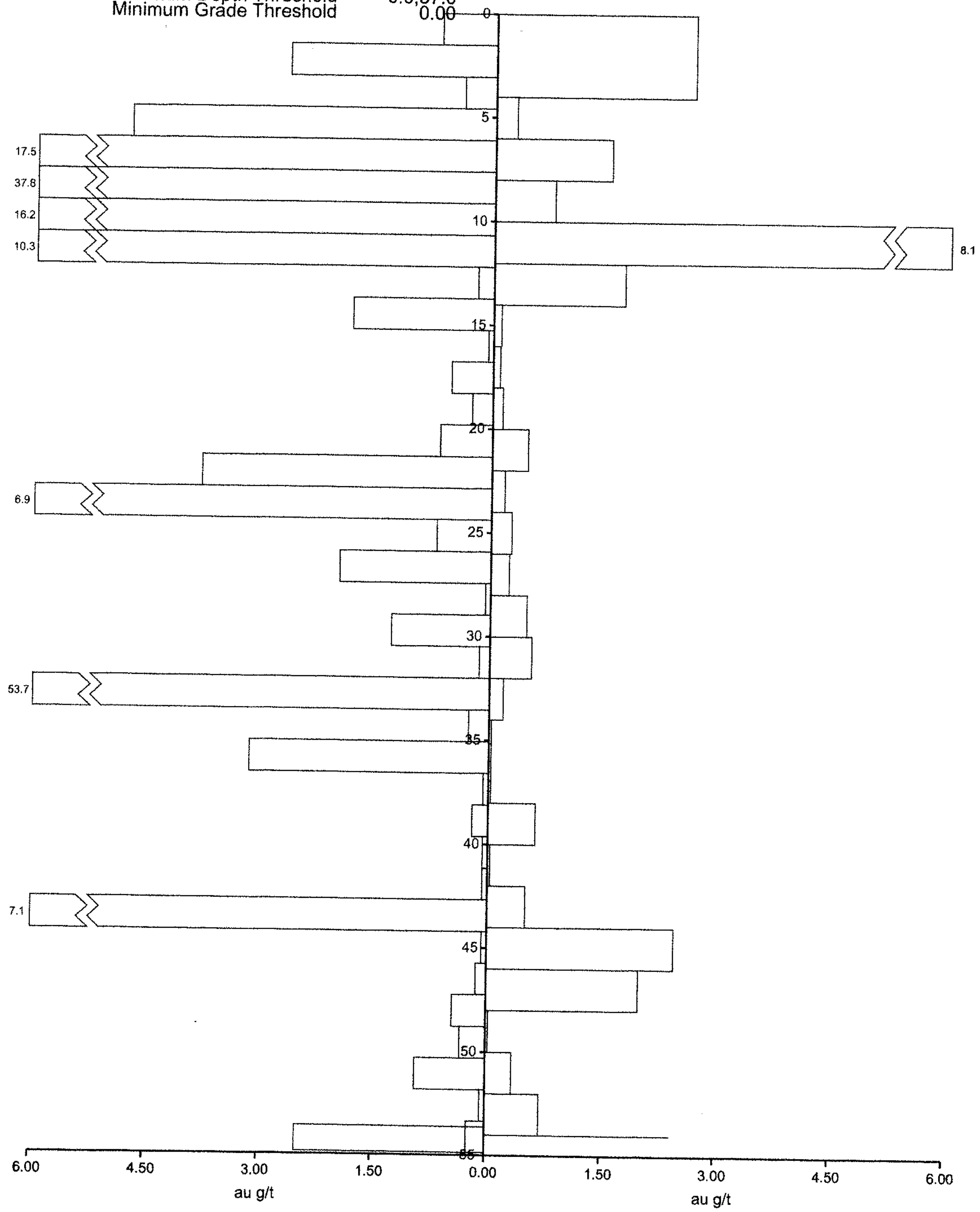
CORE

RR-7-017

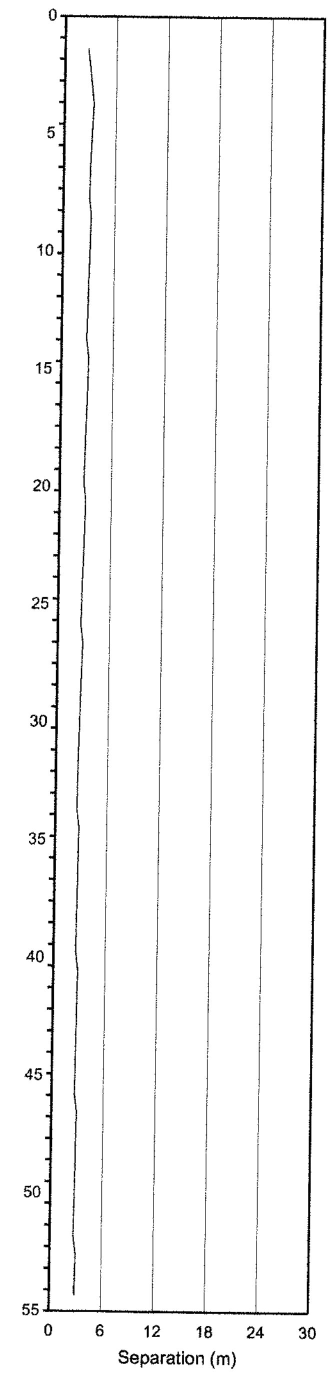
N	37
m	4.82
Cv	2.24
Intervals Trimmed by Depth	3
Intervals Trimmed by Grade	0
Minimum/Maximum Depth Threshold	0.0,57.0
Minimum Grade Threshold	0.00

RKDC04-238

N	27
m	1.05
Cv	1.53
Intervals Trimmed by Depth	1
Intervals Trimmed by Grade	0

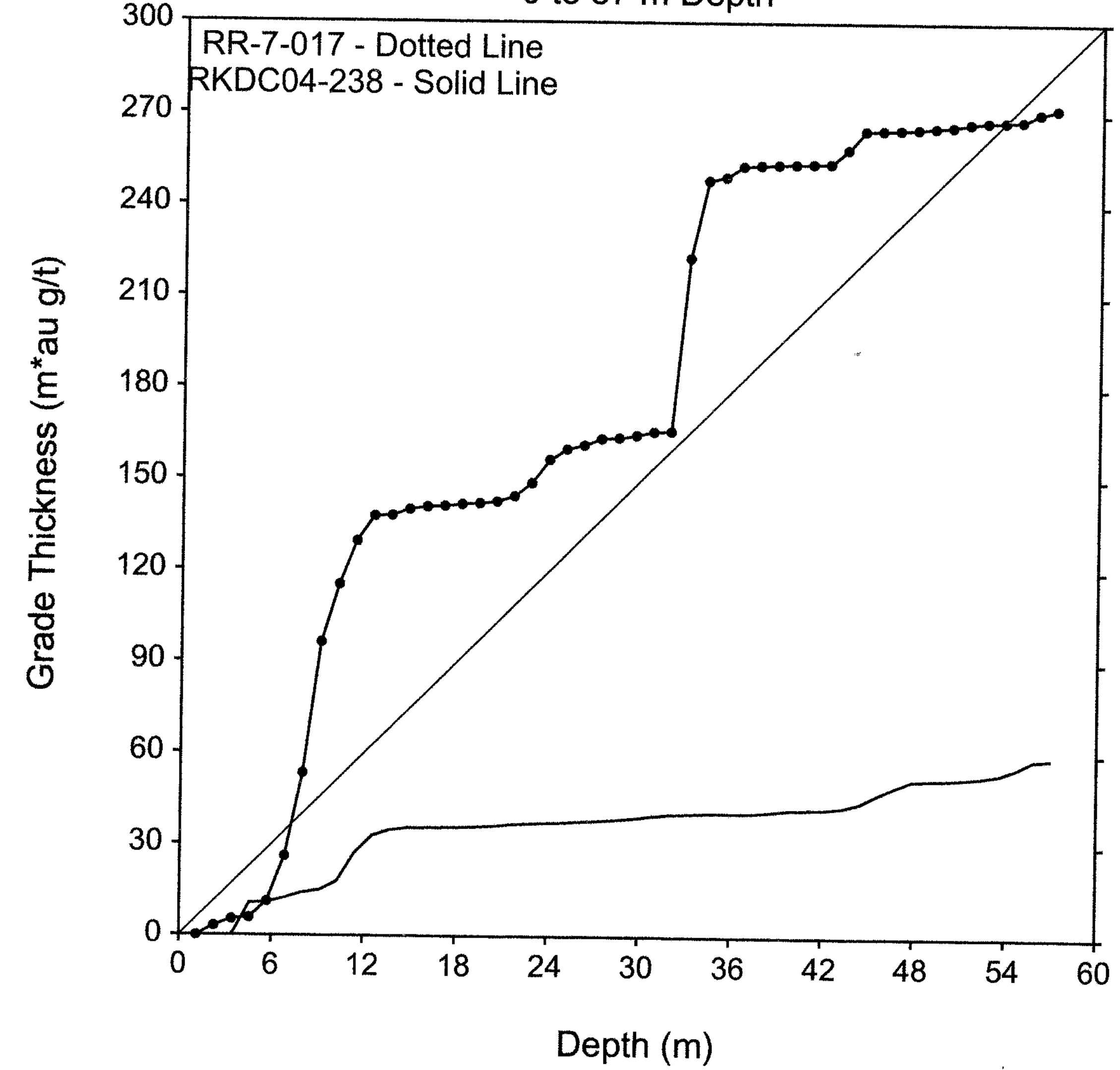


Horiz. Separation



Cumulative Grade Thickness

0 to 57 m Depth



5D

B-

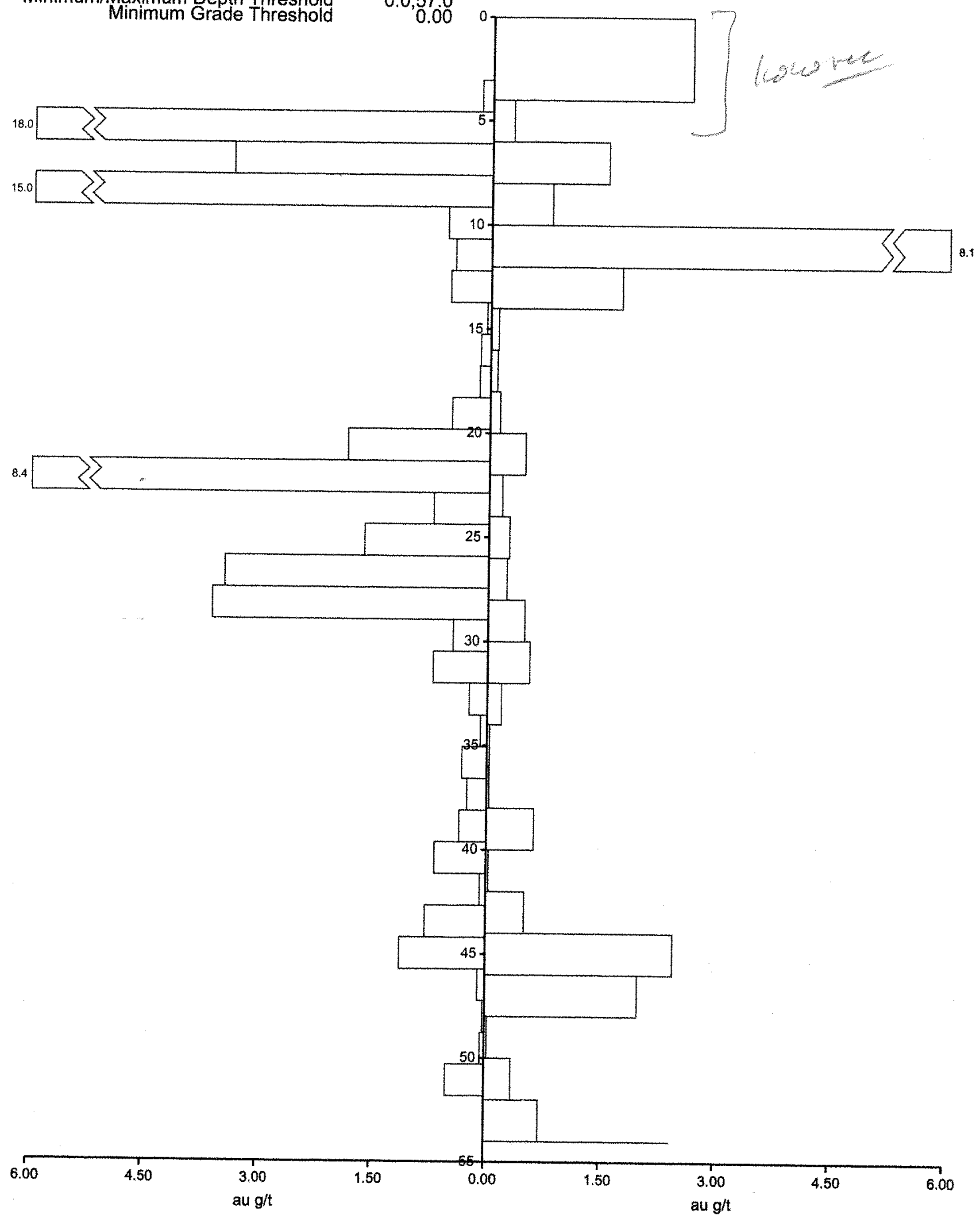
RC | CORE

RKRC04-022

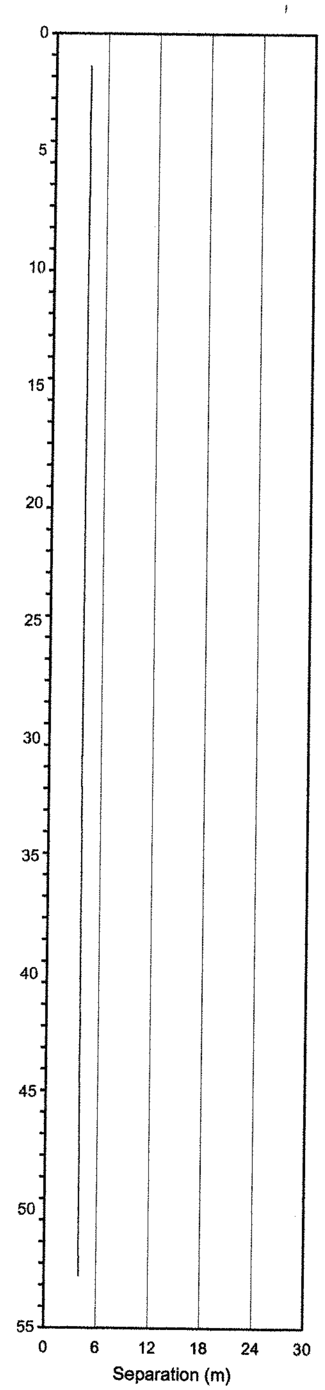
N 33
m 1.96
Cv 2.07
Intervals Trimmed by Depth 0
Intervals Trimmed by Grade 2
Minimum/Maximum Depth Threshold 0.0,57.0
Minimum Grade Threshold 0.00

RKDC04-238

N 27
m 1.05
Cv 1.53
Intervals Trimmed by Depth 1
Intervals Trimmed by Grade 0

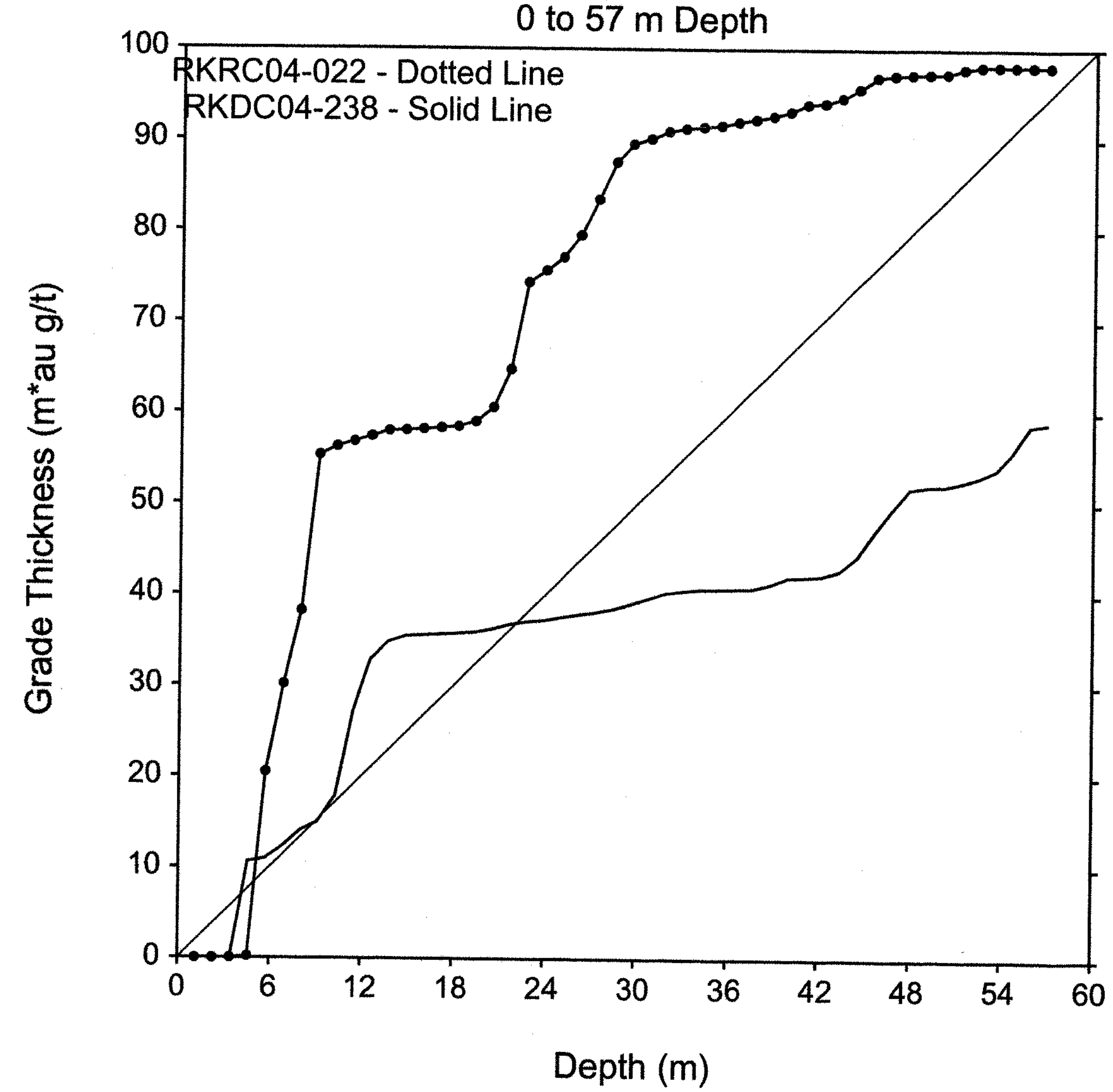


Horiz. Separation



Cumulative Grade Thickness

0 to 57 m Depth



5E

A A

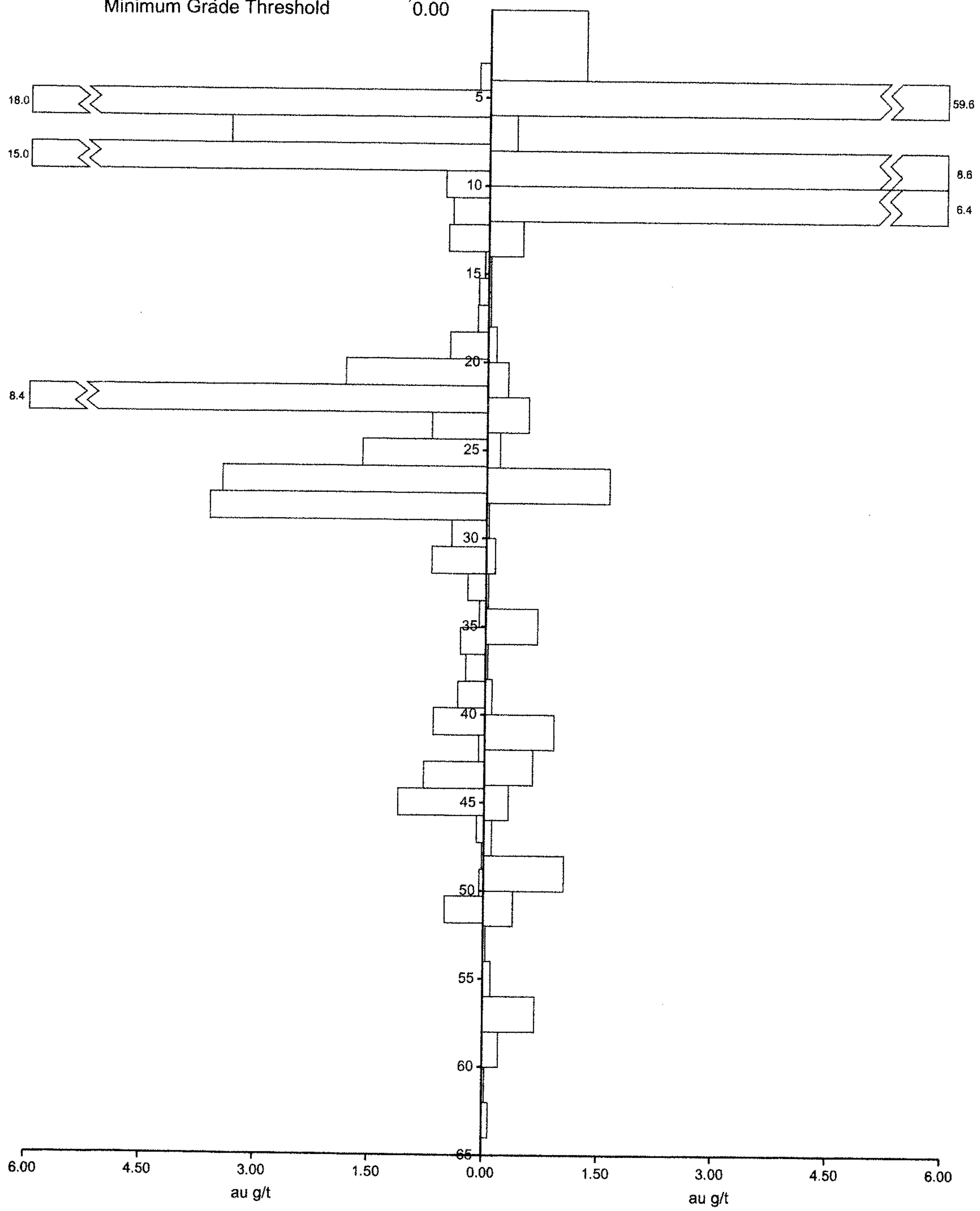
RC | CORE

RKRC04-022

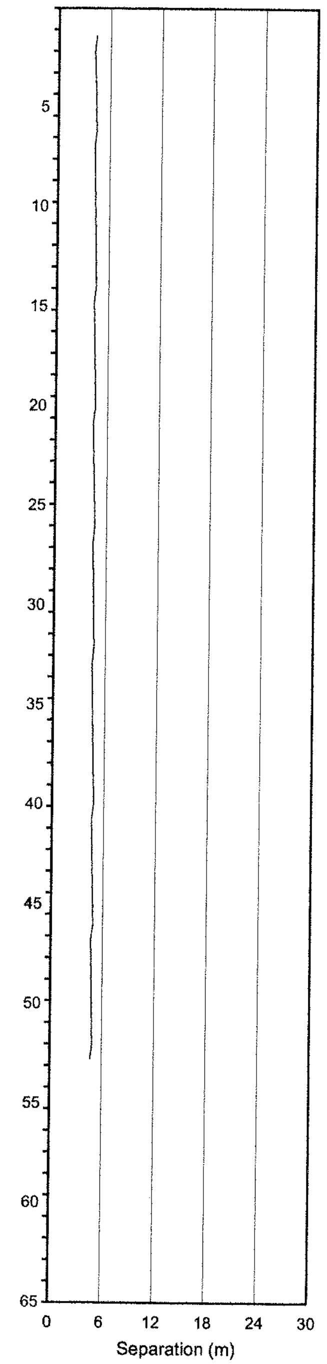
N	33
m	1.96
Cv	2.07
Intervals Trimmed by Depth	0
Intervals Trimmed by Grade	2
Minimum/Maximum Depth Threshold	0.0,67.0
Minimum Grade Threshold	0.00

RKDC03-206

N	31
m	2.70
Cv	3.85
Intervals Trimmed by Depth	1
Intervals Trimmed by Grade	0

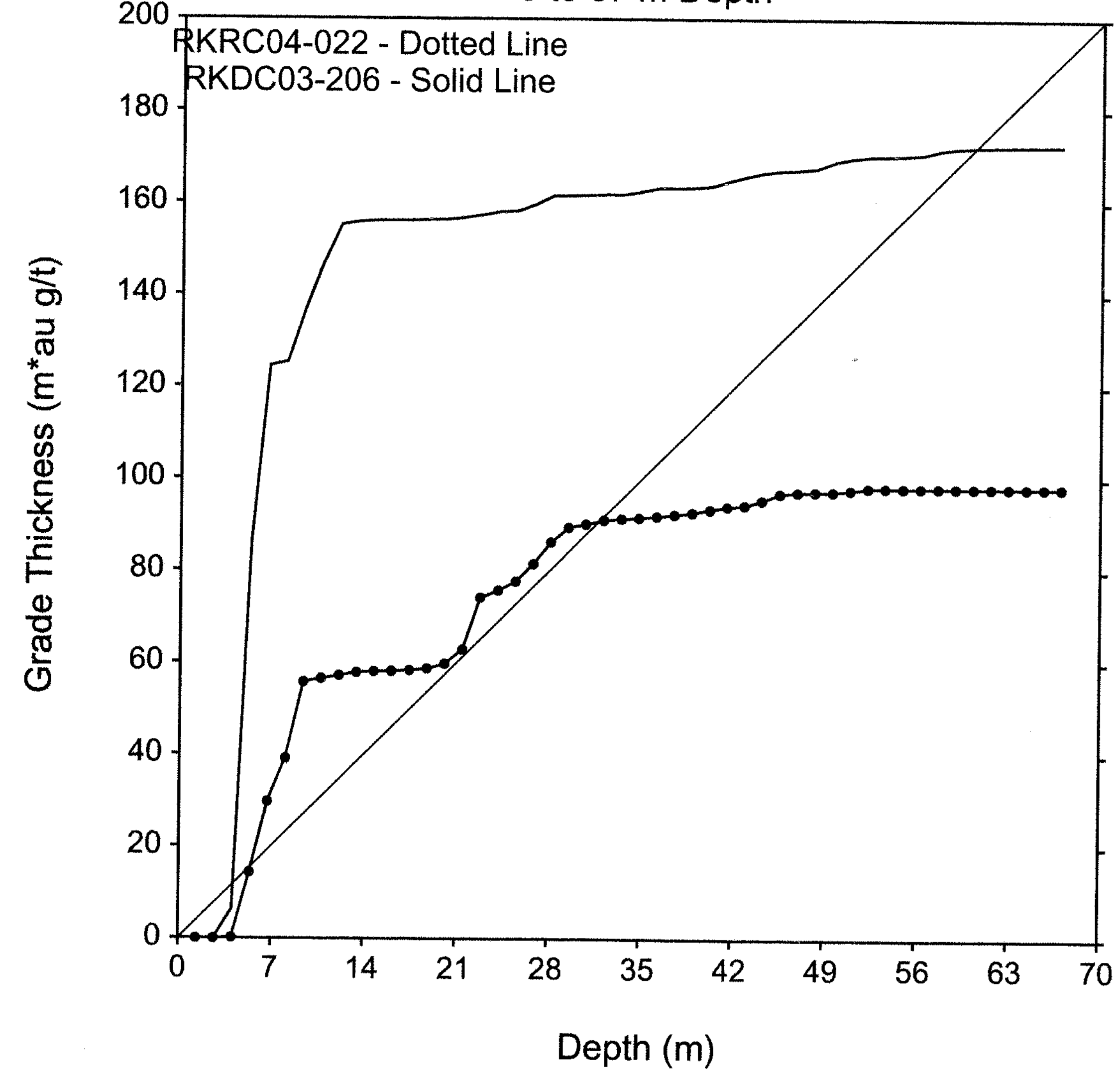


Horiz. Separation



Cumulative Grade Thickness

0 to 67 m Depth



5F

A A

RC

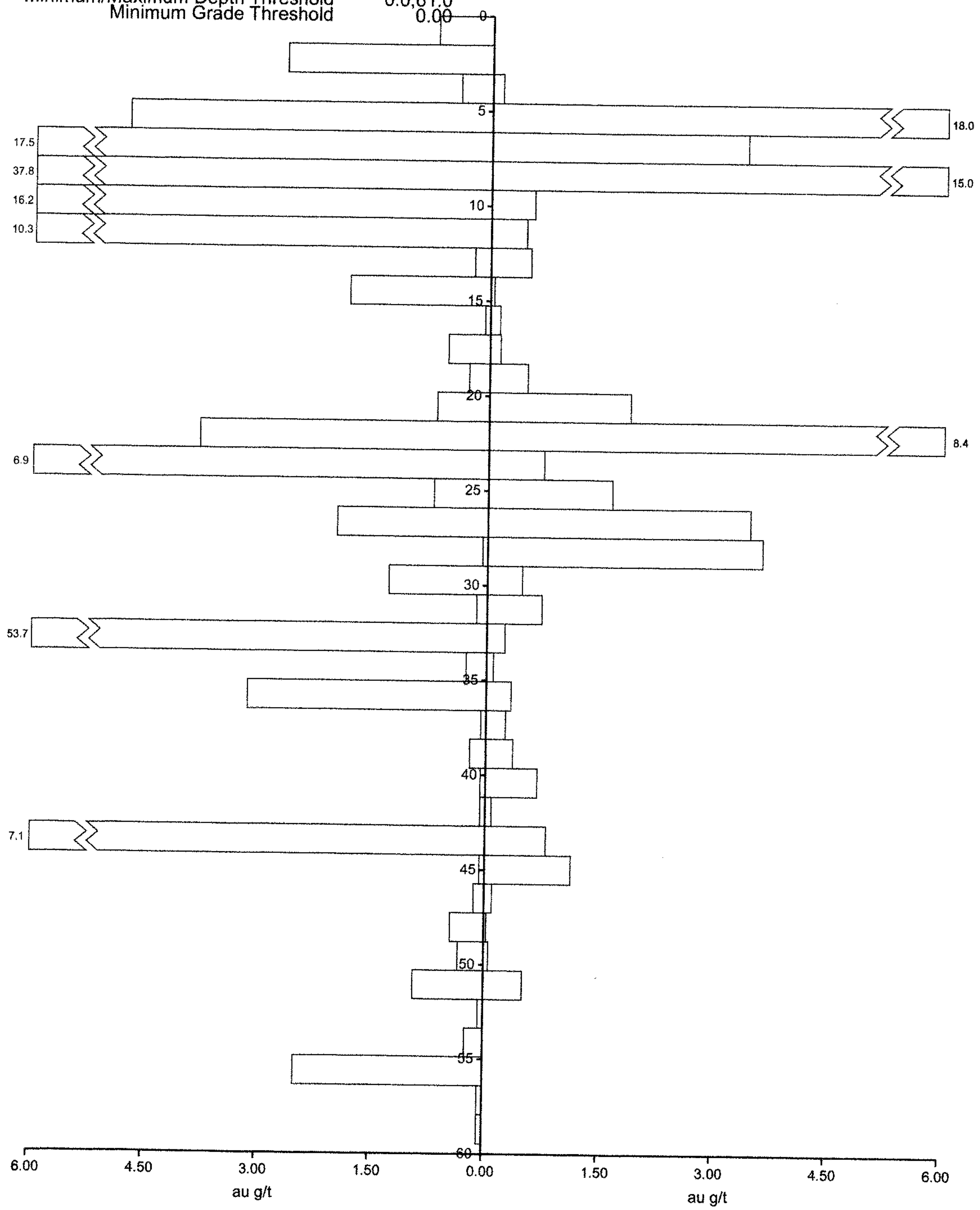
RR-7-017

N 40
m 4.47
Cv 2.34
Intervals Trimmed by Depth 0
Intervals Trimmed by Grade 0
Minimum/Maximum Depth Threshold 0.0,61.0
Minimum Grade Threshold 0.00

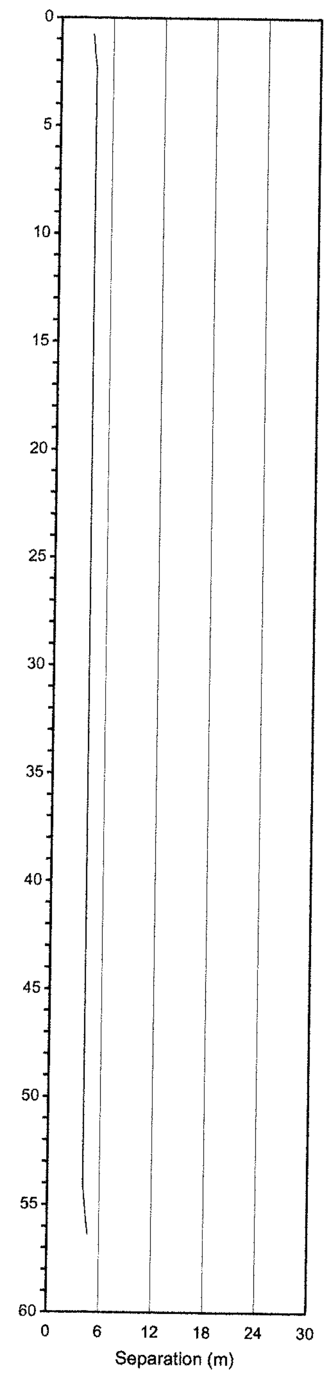
RC

RKRC04-022

N 33
m 1.96
Cv 2.07
Intervals Trimmed by Depth 0
Intervals Trimmed by Grade 2

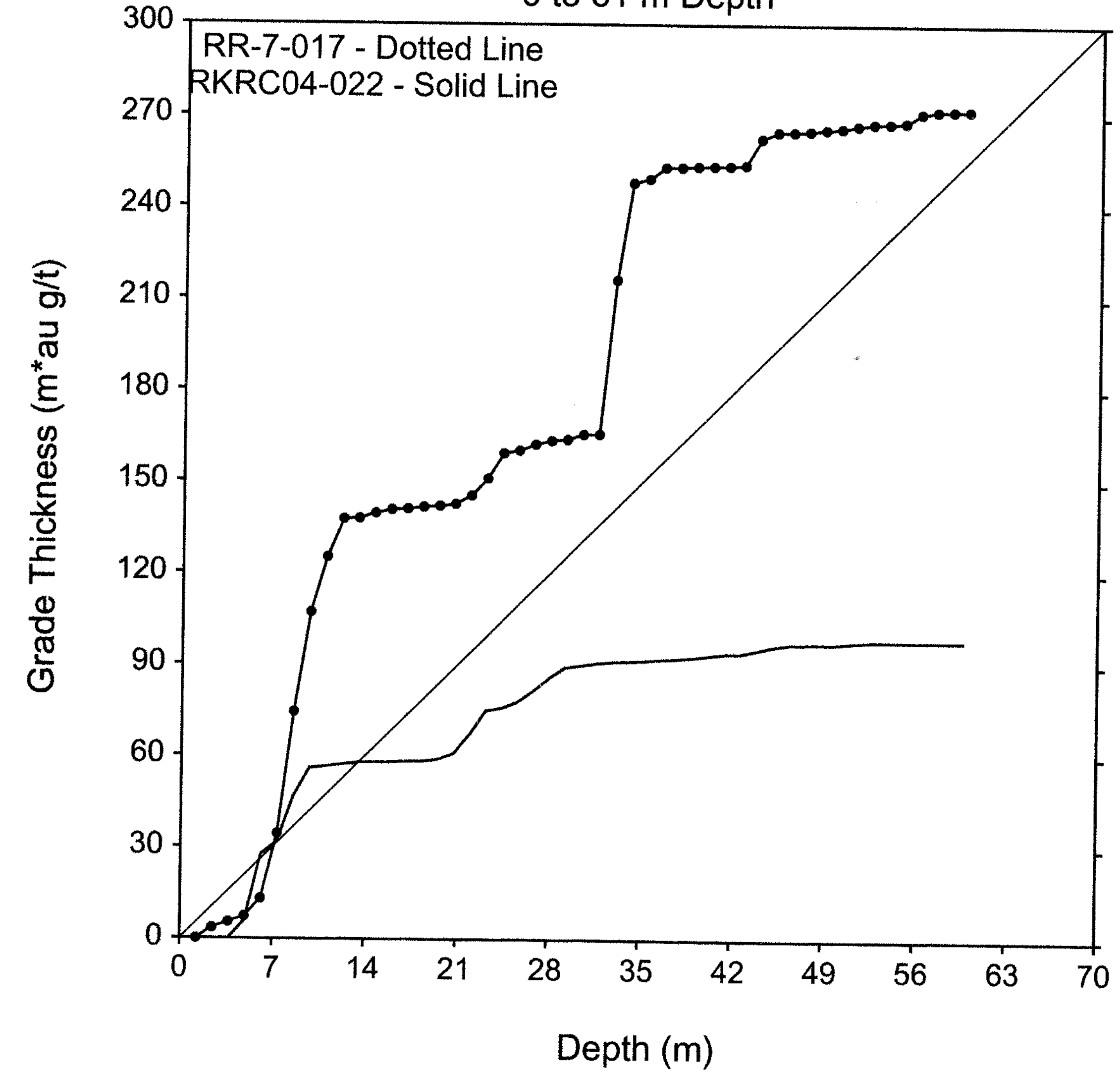


Horiz. Separation



Cumulative Grade Thickness

0 to 61 m Depth



6 A

A A

RC

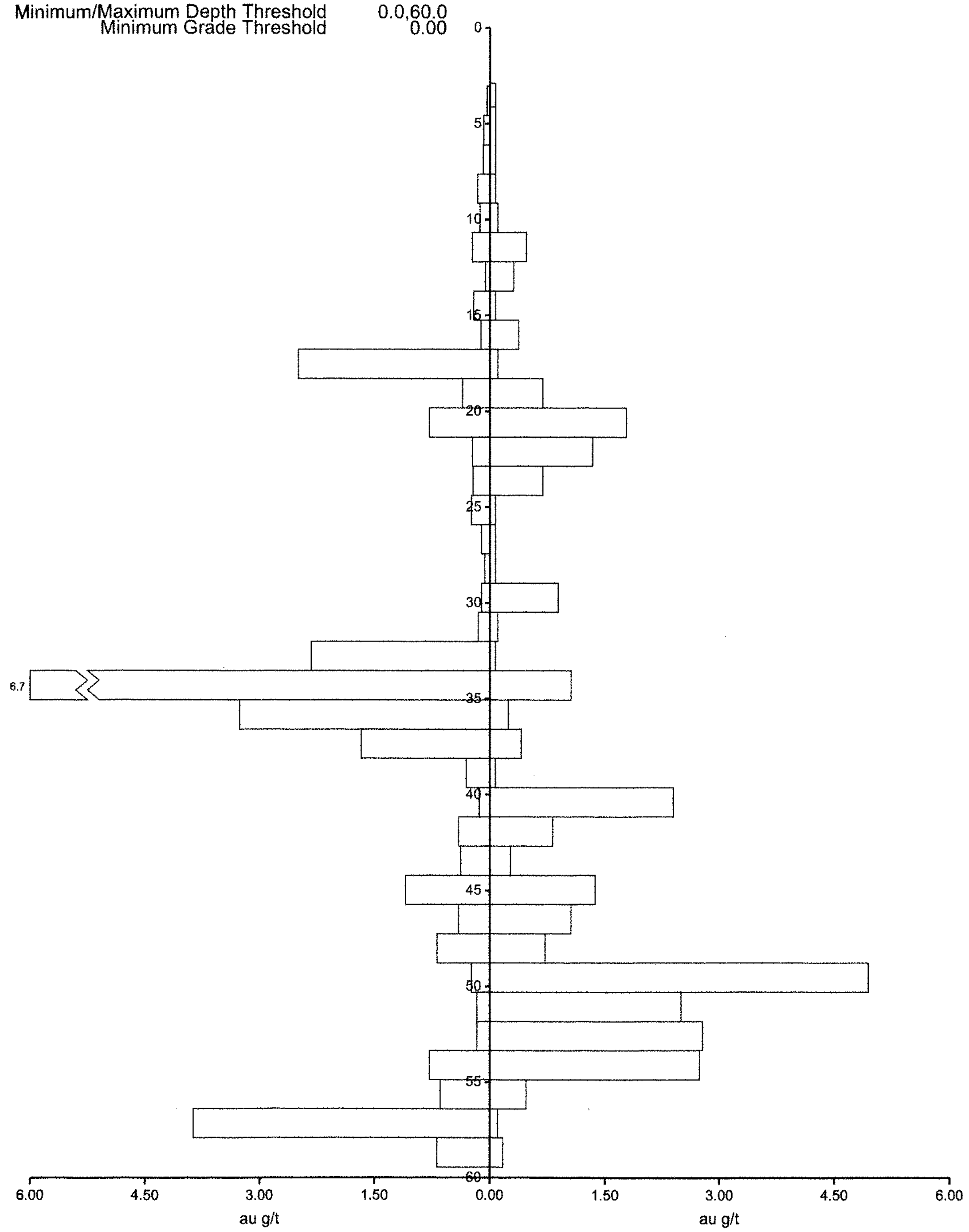
RMR-6

N	37
m	0.81
Cv	1.65
Intervals Trimmed by Depth	11
Intervals Trimmed by Grade	1
Minimum/Maximum Depth Threshold	0.0,60.0
Minimum Grade Threshold	0.00

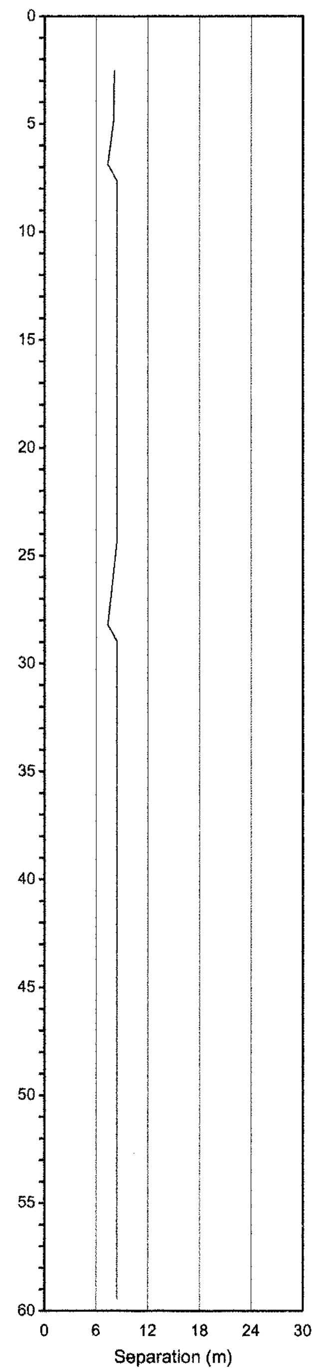
CORE

RC-7-005

N	35
m	0.80
Cv	1.32
Intervals Trimmed by Depth	1
Intervals Trimmed by Grade	1

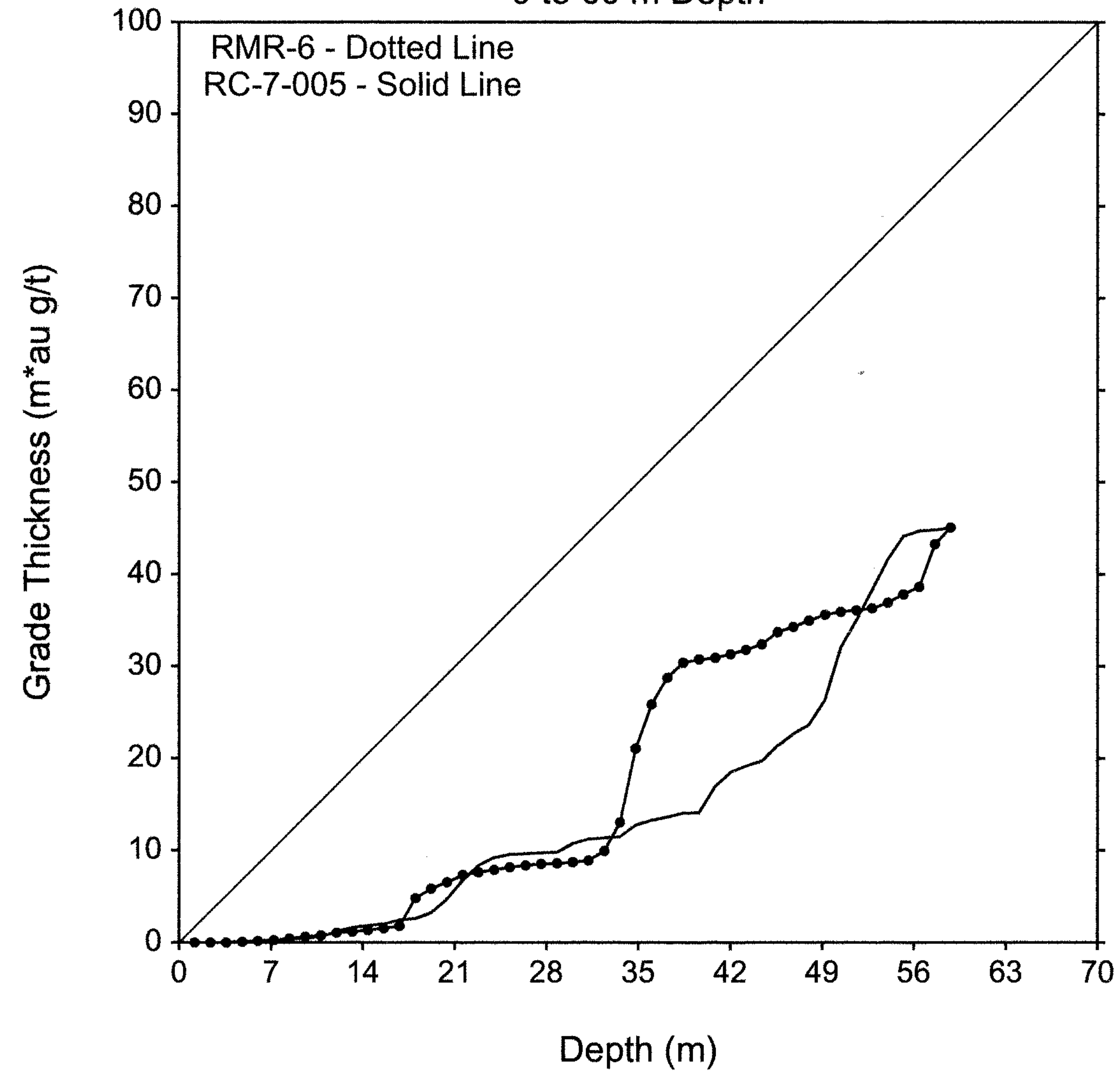


Horiz. Separation



Cumulative Grade Thickness

0 to 60 m Depth



6 B

A-

RC

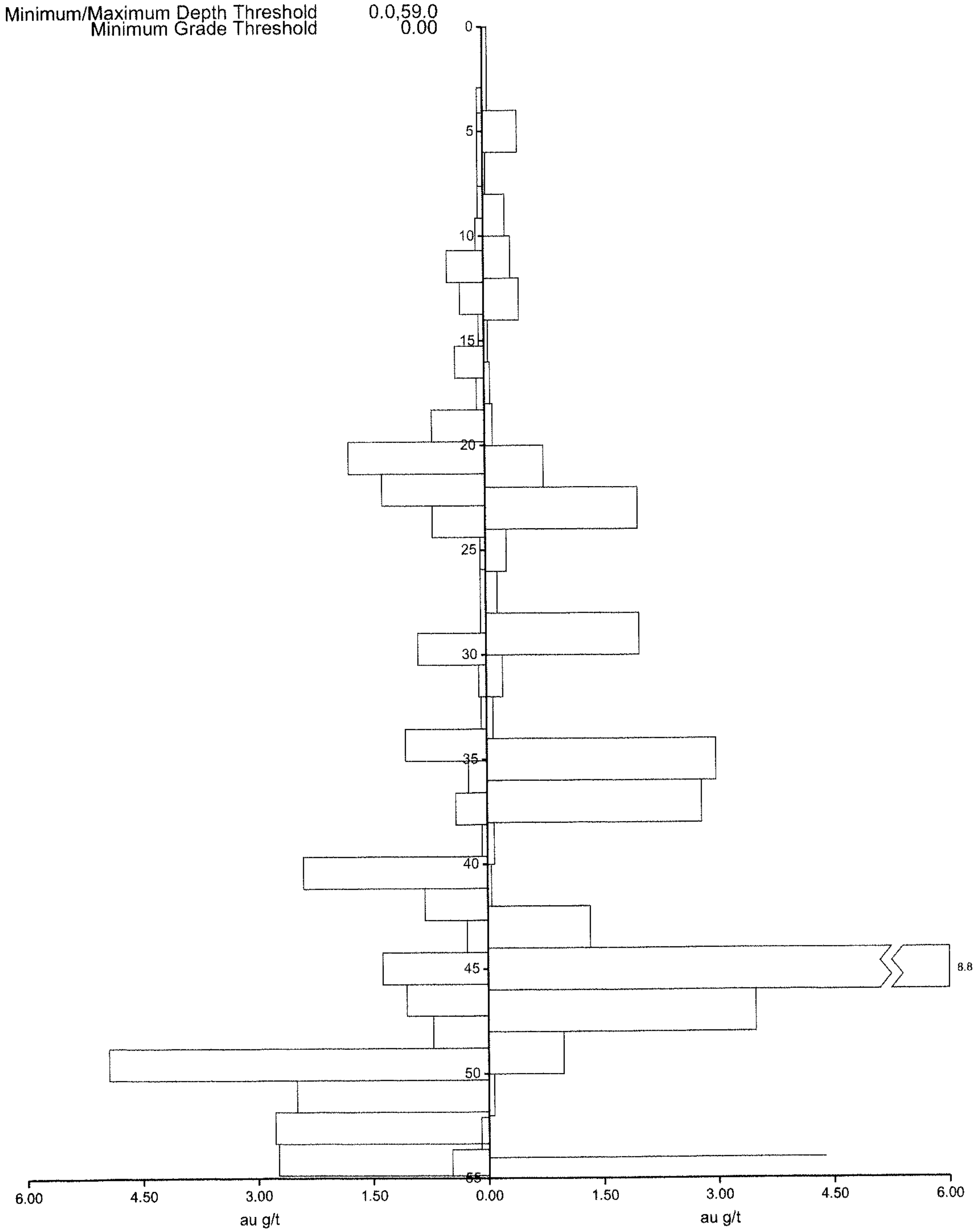
RC-7-005

N 34
m 0.82
Cv 1.30
Intervals Trimmed by Depth 2
Intervals Trimmed by Grade 1
Minimum/Maximum Depth Threshold 0.0,59.0
Minimum Grade Threshold 0.00

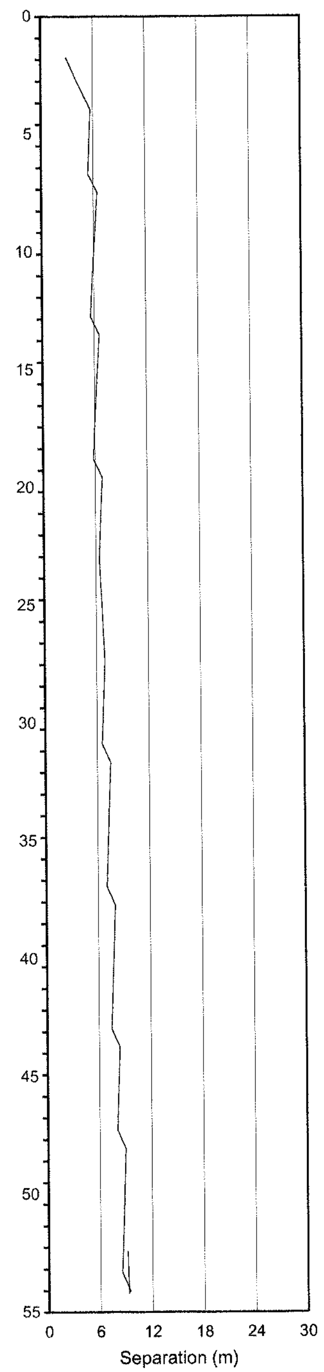
CoRE

RKDC04-241

N 27
m 1.22
Cv 1.53
Intervals Trimmed by Depth 0
Intervals Trimmed by Grade 1

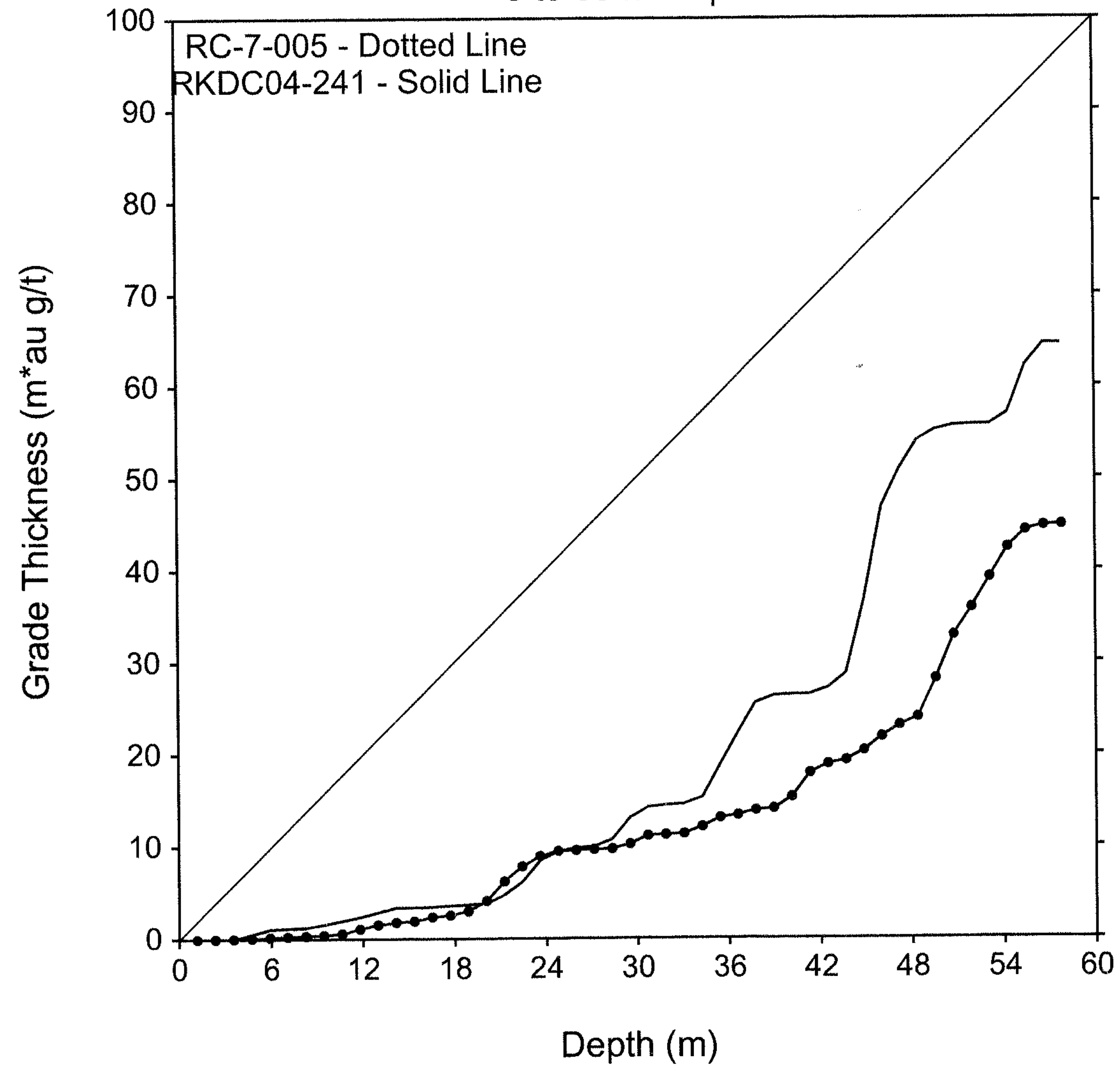


Horiz. Separation



Cumulative Grade Thickness

0 to 59 m Depth



6C
A

RC

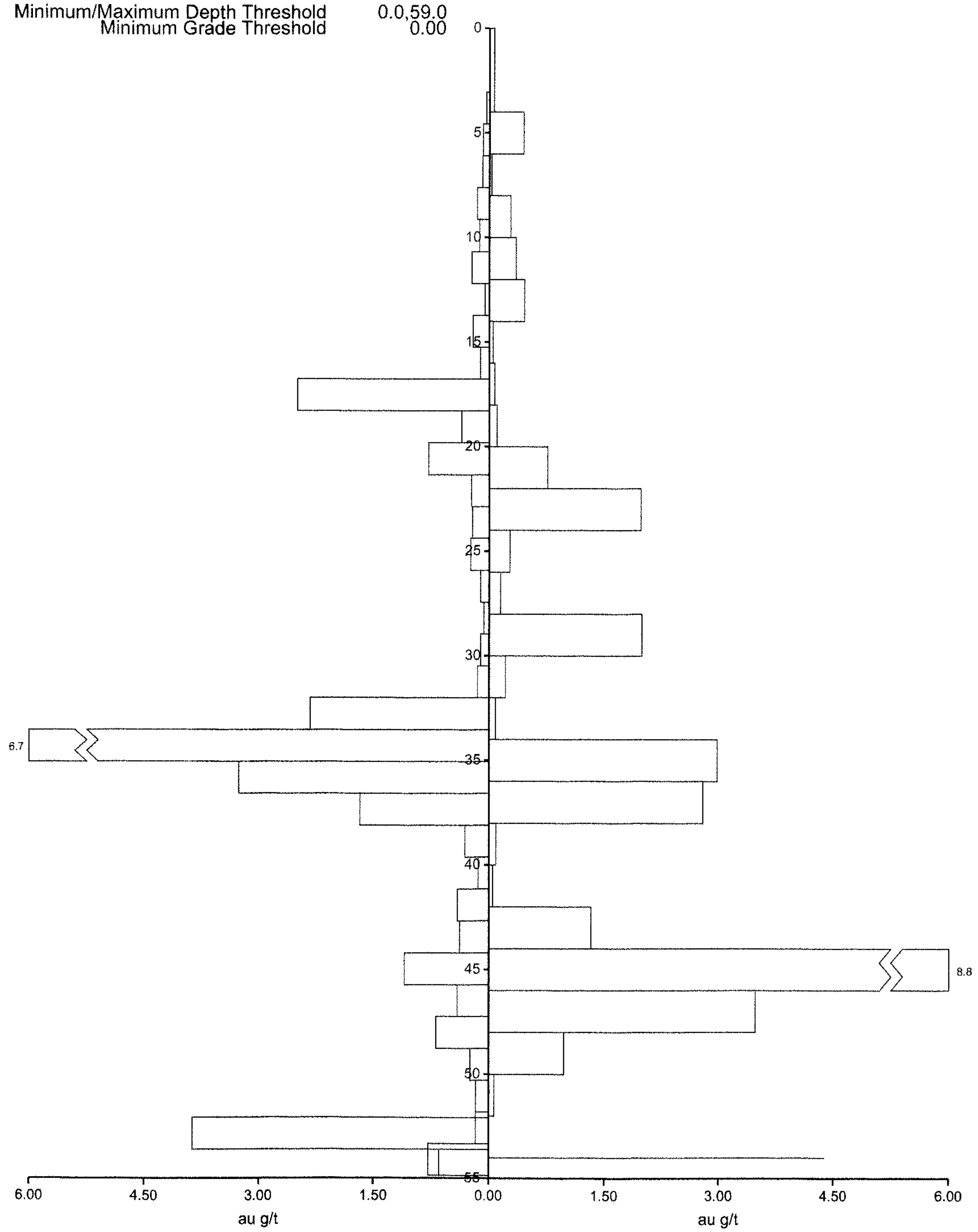
CORE

RMR-6

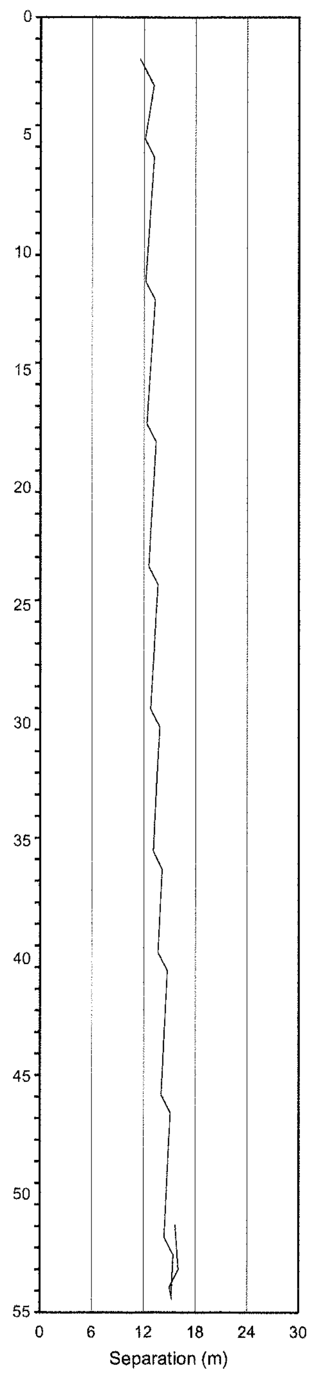
N	36
m	0.81
Cv	1.67
Intervals Trimmed by Depth	12
Intervals Trimmed by Grade	1
Minimum/Maximum Depth Threshold	0.0,59.0
Minimum Grade Threshold	0.00

RKDC04-241

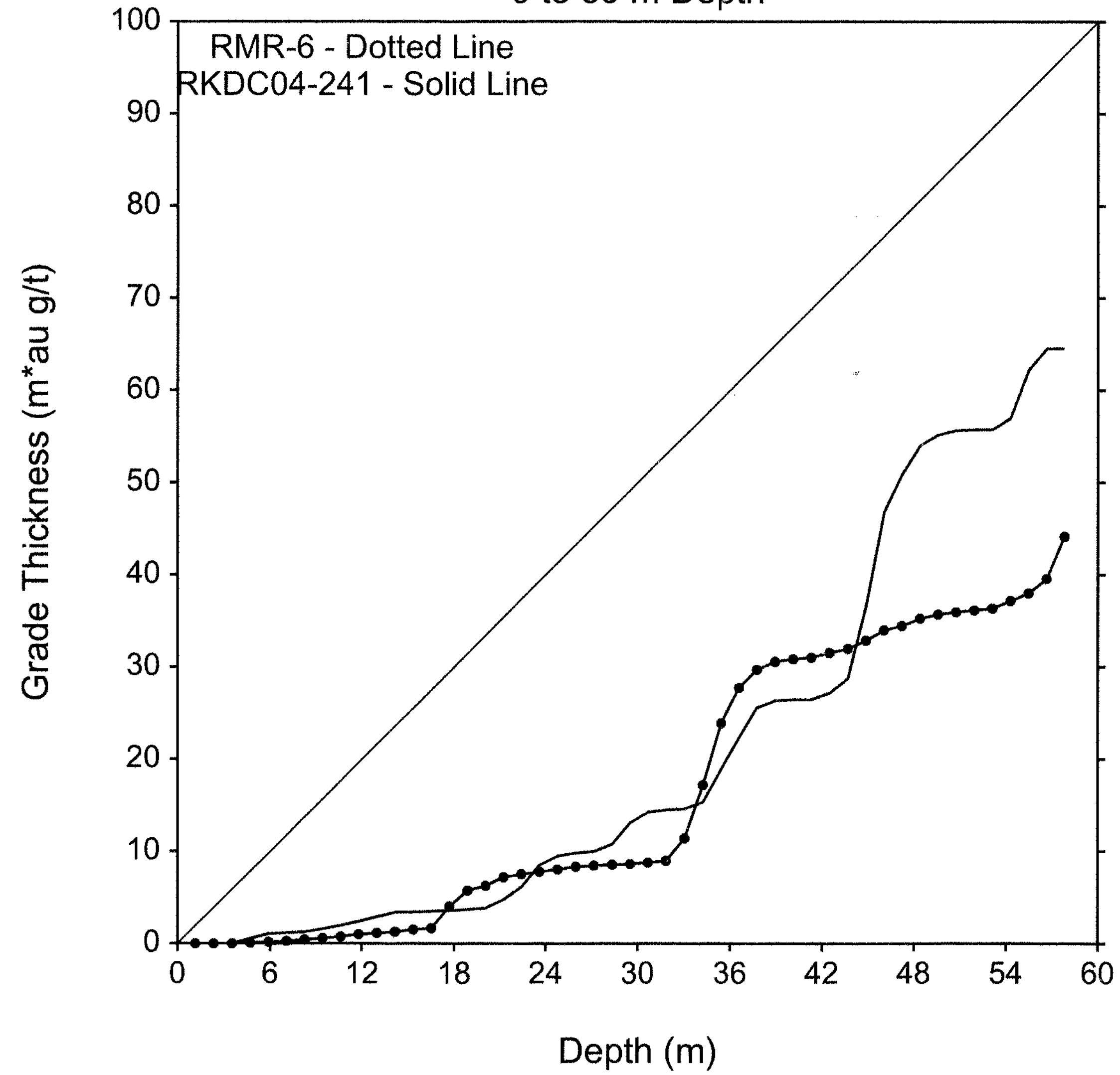
N	27
m	1.22
Cv	1.53
Intervals Trimmed by Depth	0
Intervals Trimmed by Grade	1



Horiz. Separation



Cumulative Grade Thickness
0 to 59 m Depth



6 D

A A

RC

CORE

RKRC04-025

N 38
m 1.17
Cv 1.64

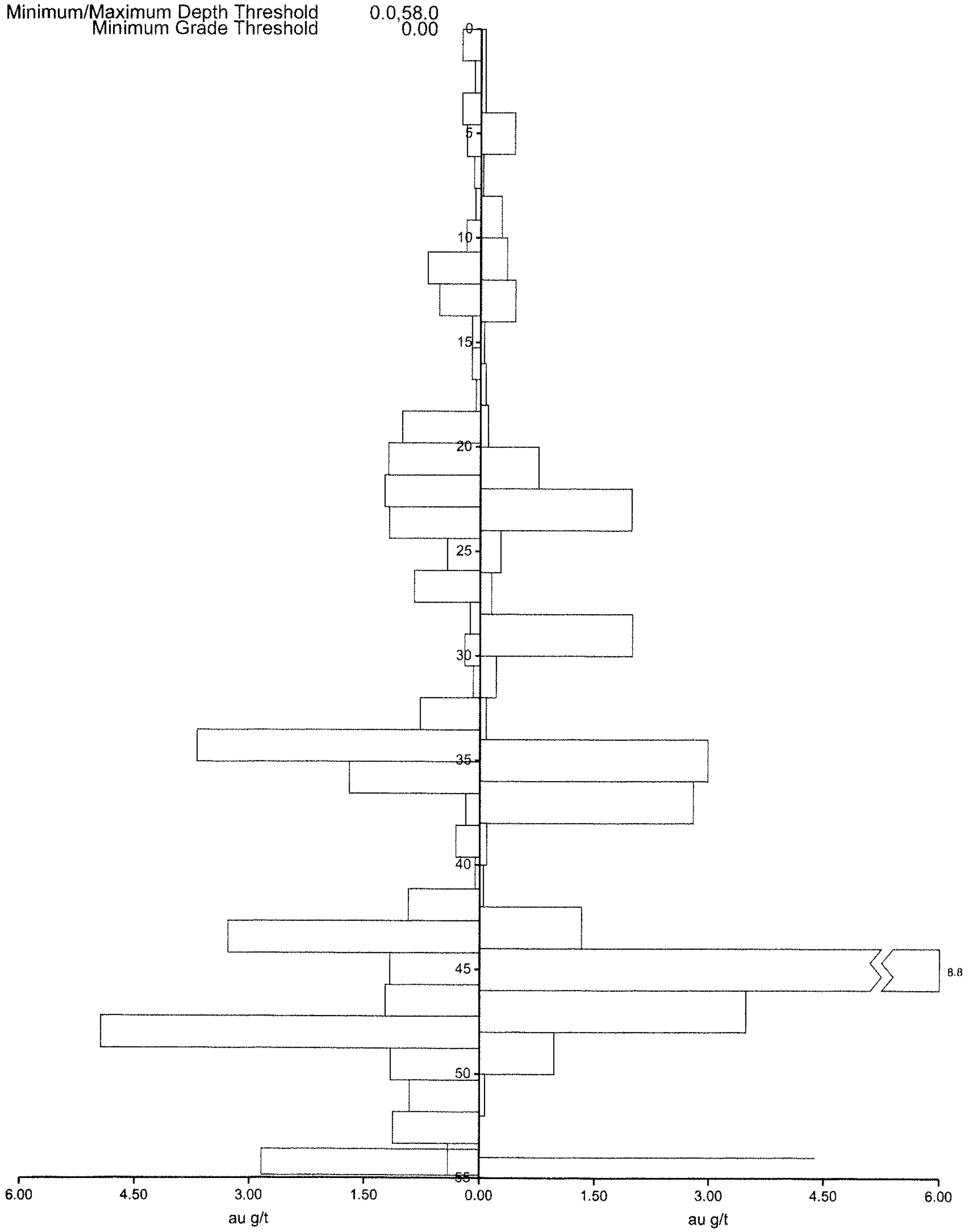
Intervals Trimmed by Depth 0
Intervals Trimmed by Grade 0

Minimum/Maximum Depth Threshold 0.0,58.0
Minimum Grade Threshold 0.00

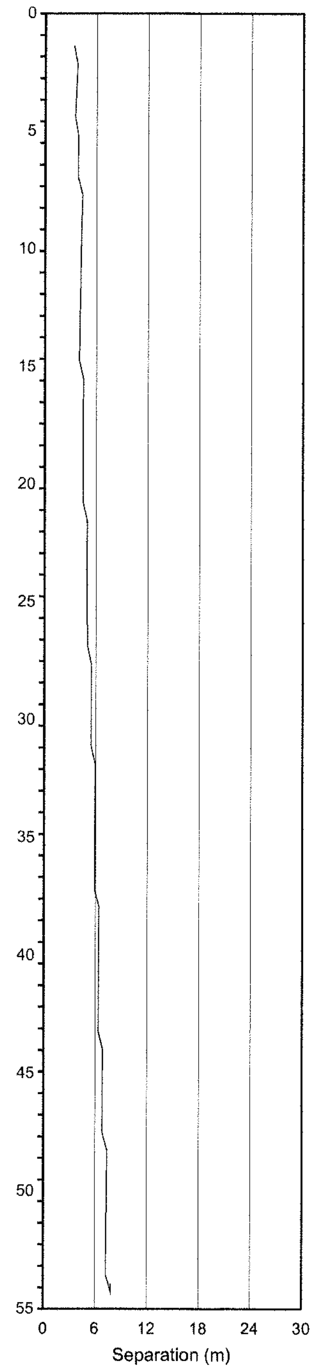
RKDC04-241

N 26
m 1.19
Cv 1.59

Intervals Trimmed by Depth 1
Intervals Trimmed by Grade 1

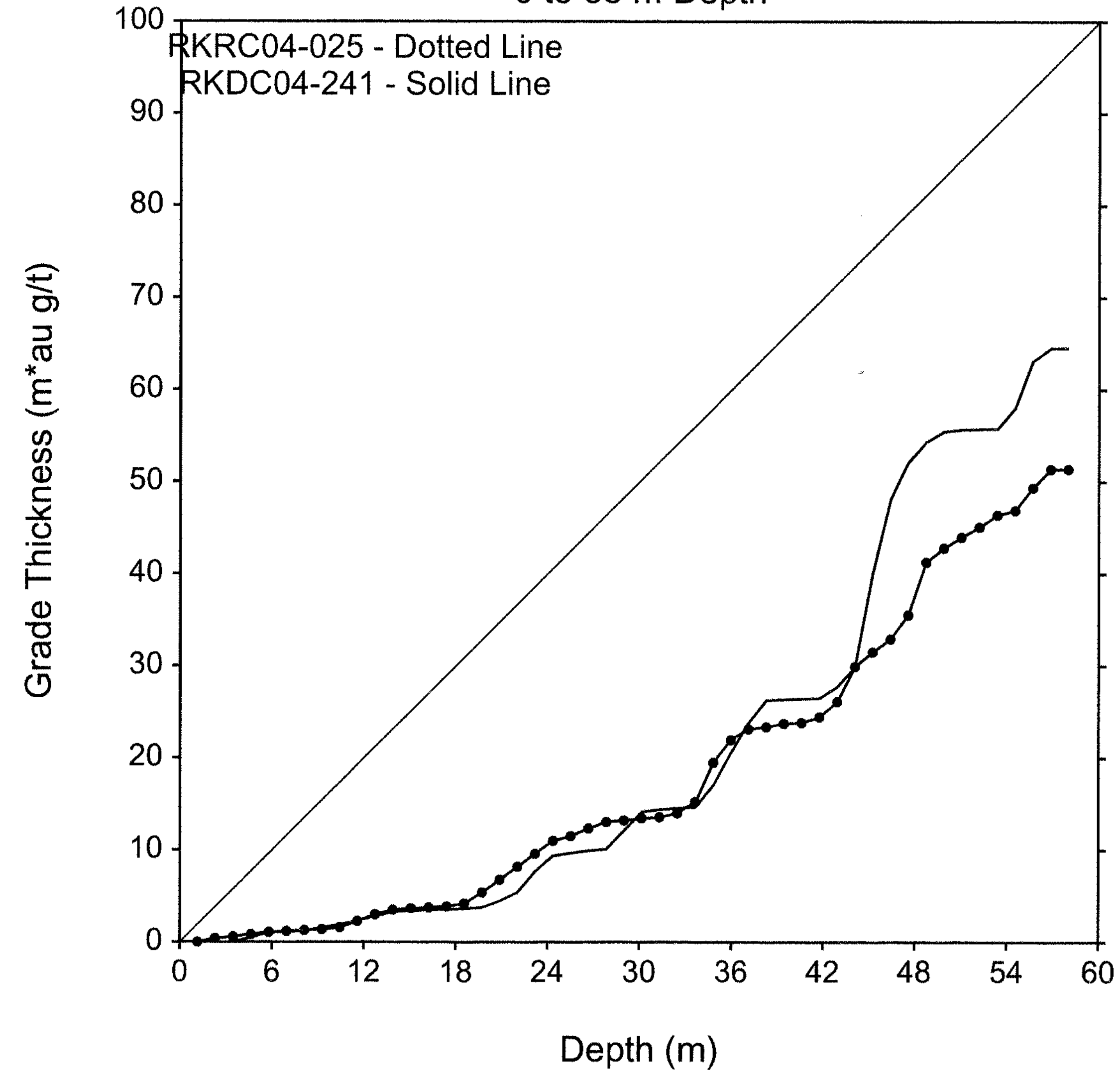


Horiz. Separation



Cumulative Grade Thickness

0 to 58 m Depth



6E

A A

RC

CORE

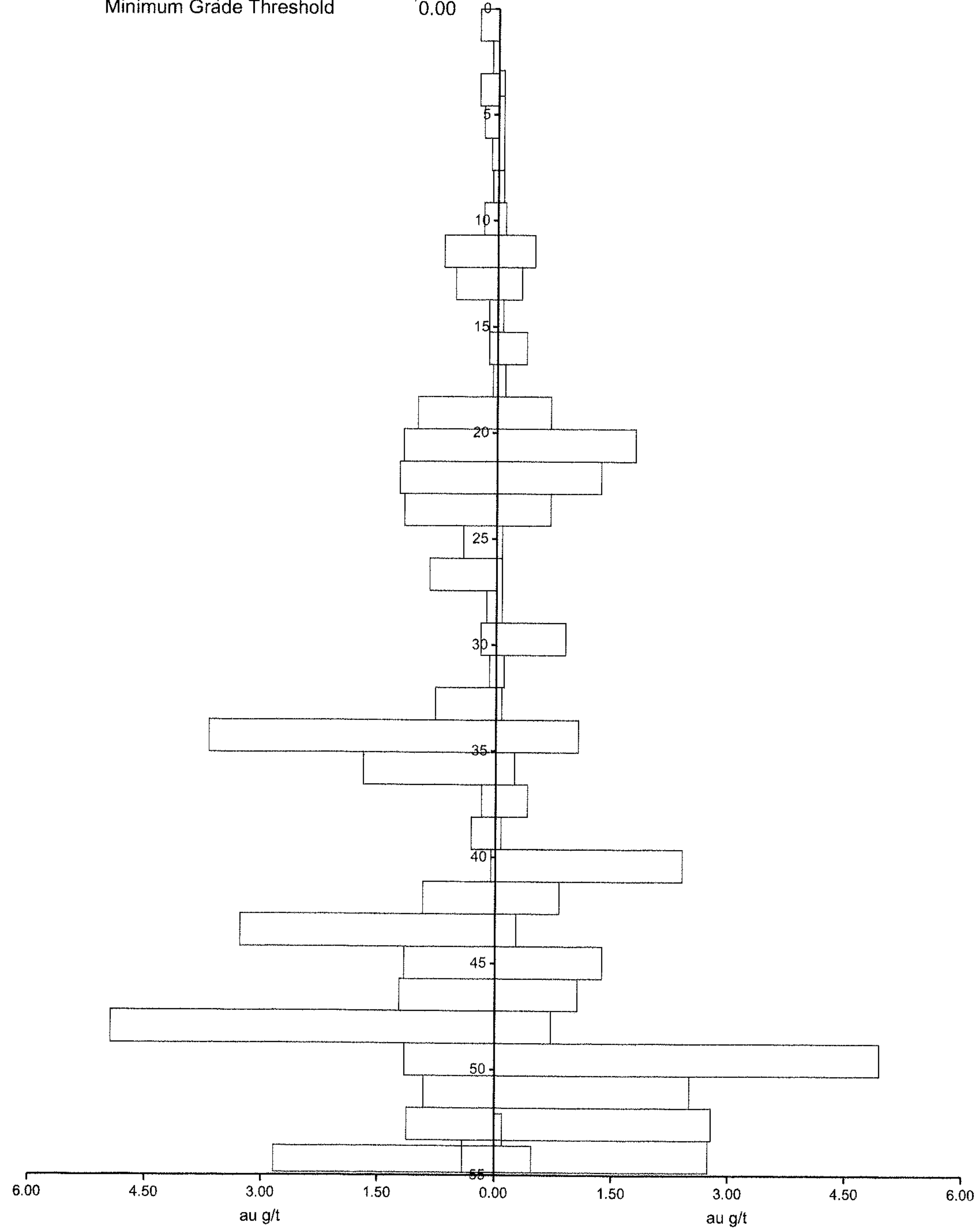
RKRC04-025

N 38
m 1.17
Cv 1.64
Intervals Trimmed by Depth 0
Intervals Trimmed by Grade 0

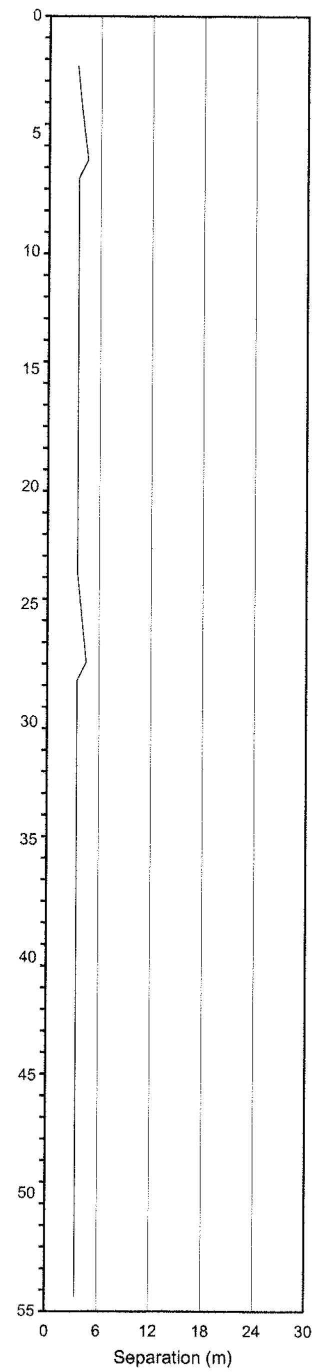
Minimum/Maximum Depth Threshold 0.0,58.0
Minimum Grade Threshold 0.00

RC-7-005

N 34
m 0.82
Cv 1.30
Intervals Trimmed by Depth 2
Intervals Trimmed by Grade 1

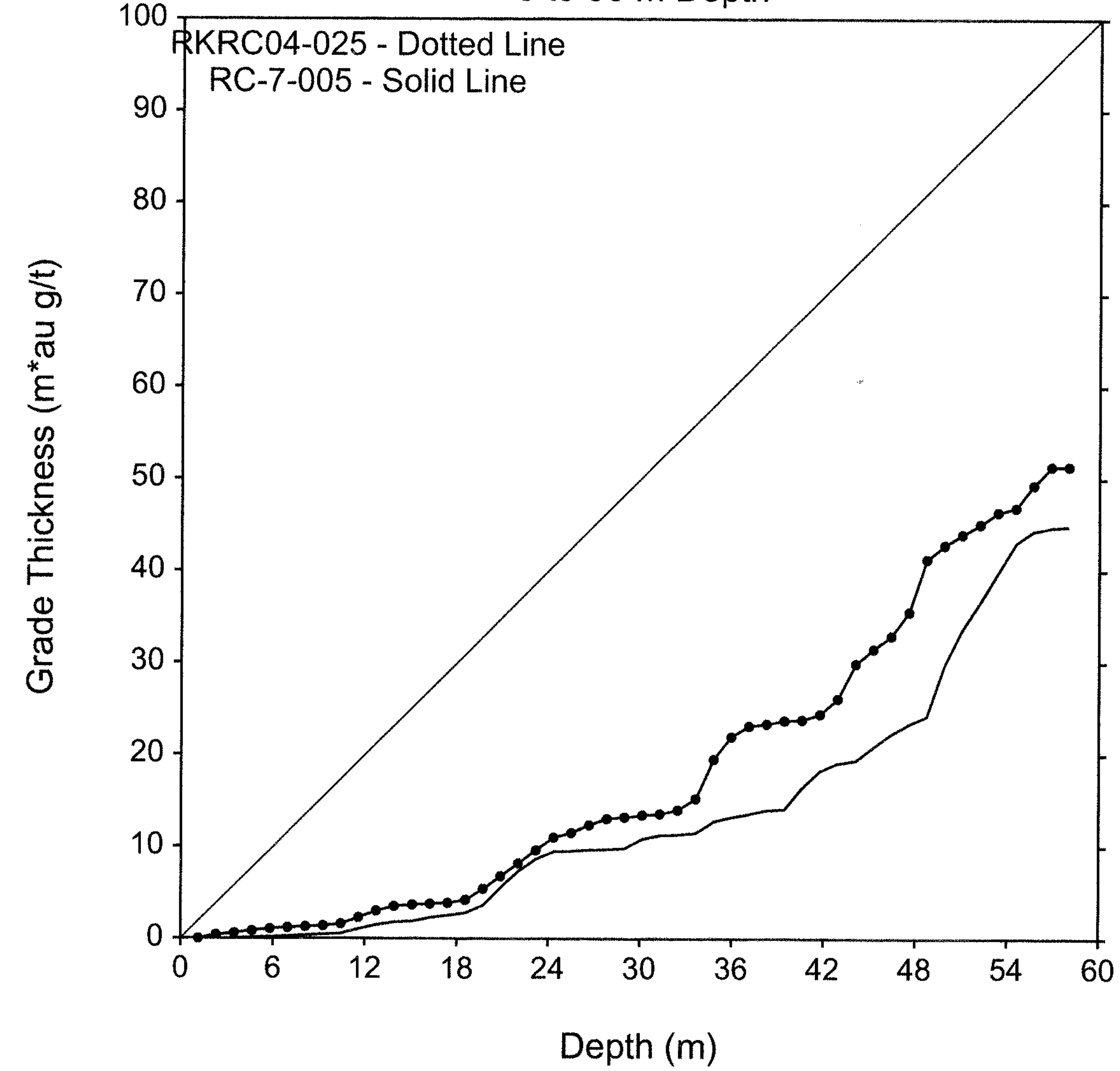


Horiz. Separation



Cumulative Grade Thickness

0 to 58 m Depth



6 F

A A

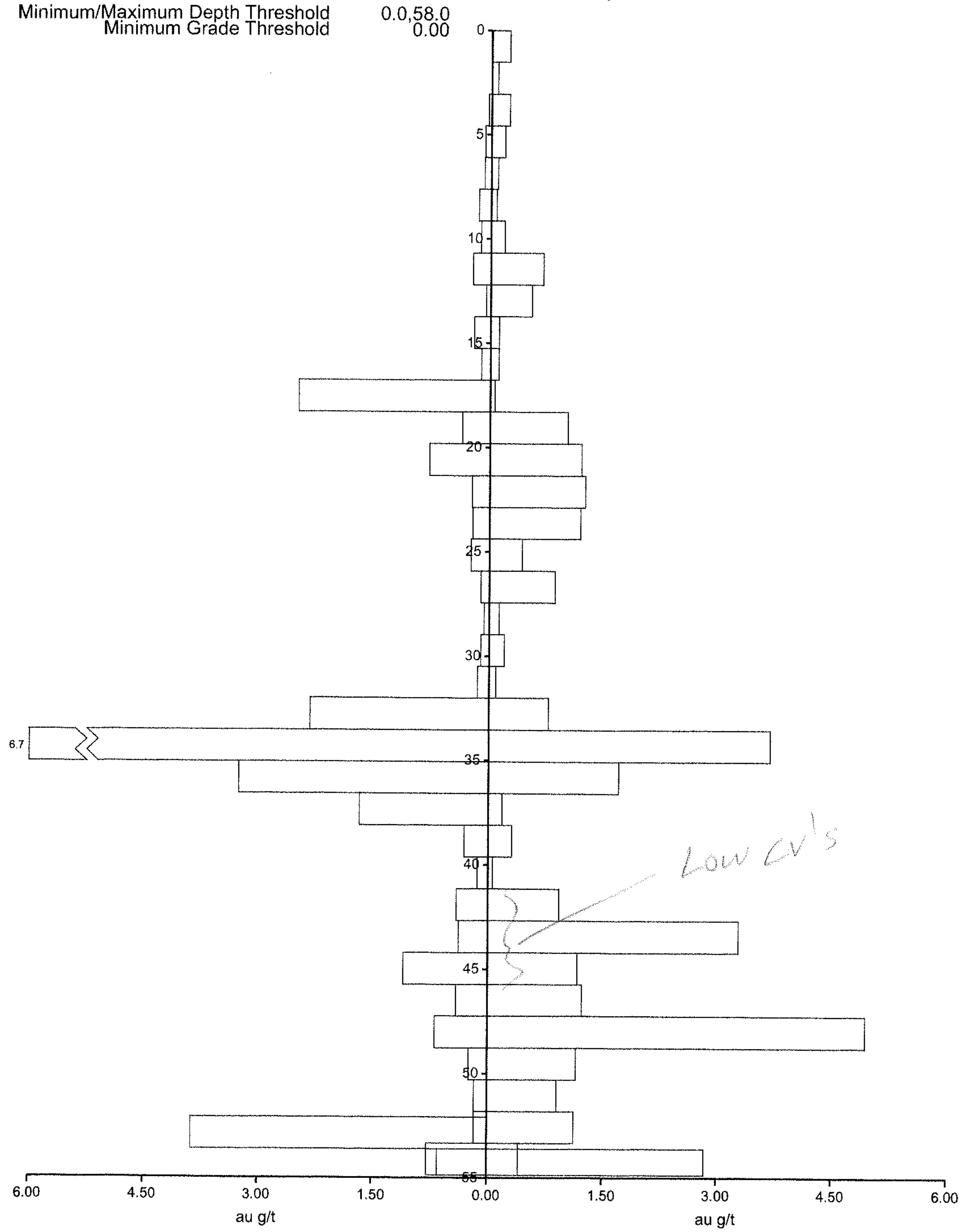
RC RC

RMR-6

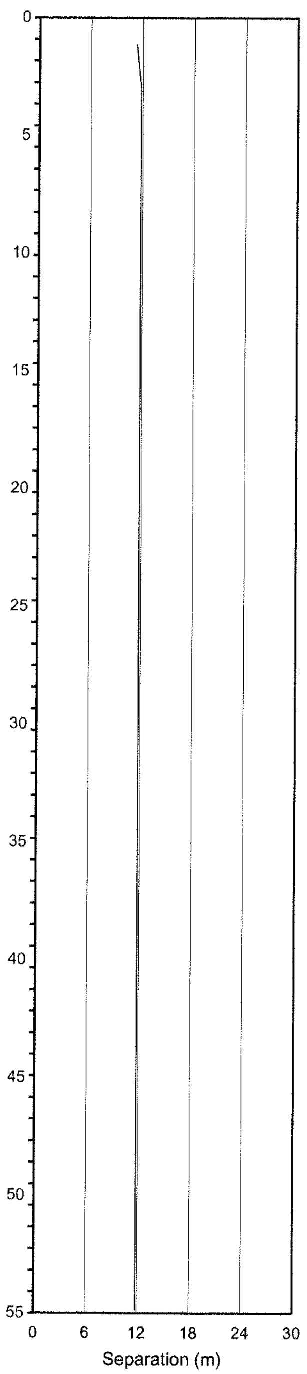
N 36
m 0.81
Cv 1.67
Intervals Trimmed by Depth 12
Intervals Trimmed by Grade 1
Minimum/Maximum Depth Threshold 0.0,58.0
Minimum Grade Threshold 0.00

RKRC04-025

N 38
m 1.17
Cv 1.64
Intervals Trimmed by Depth 0
Intervals Trimmed by Grade 0

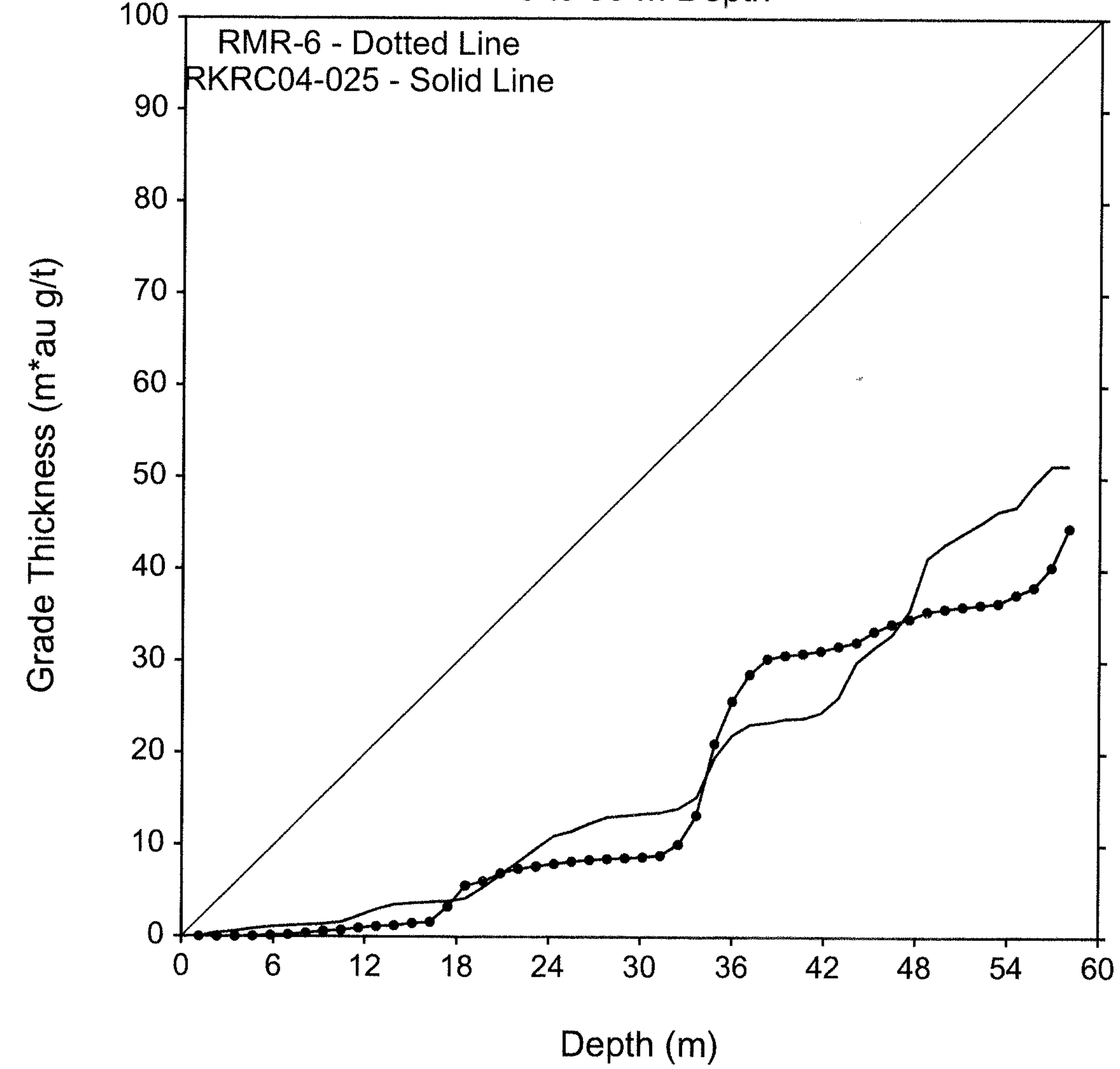


Horiz. Separation

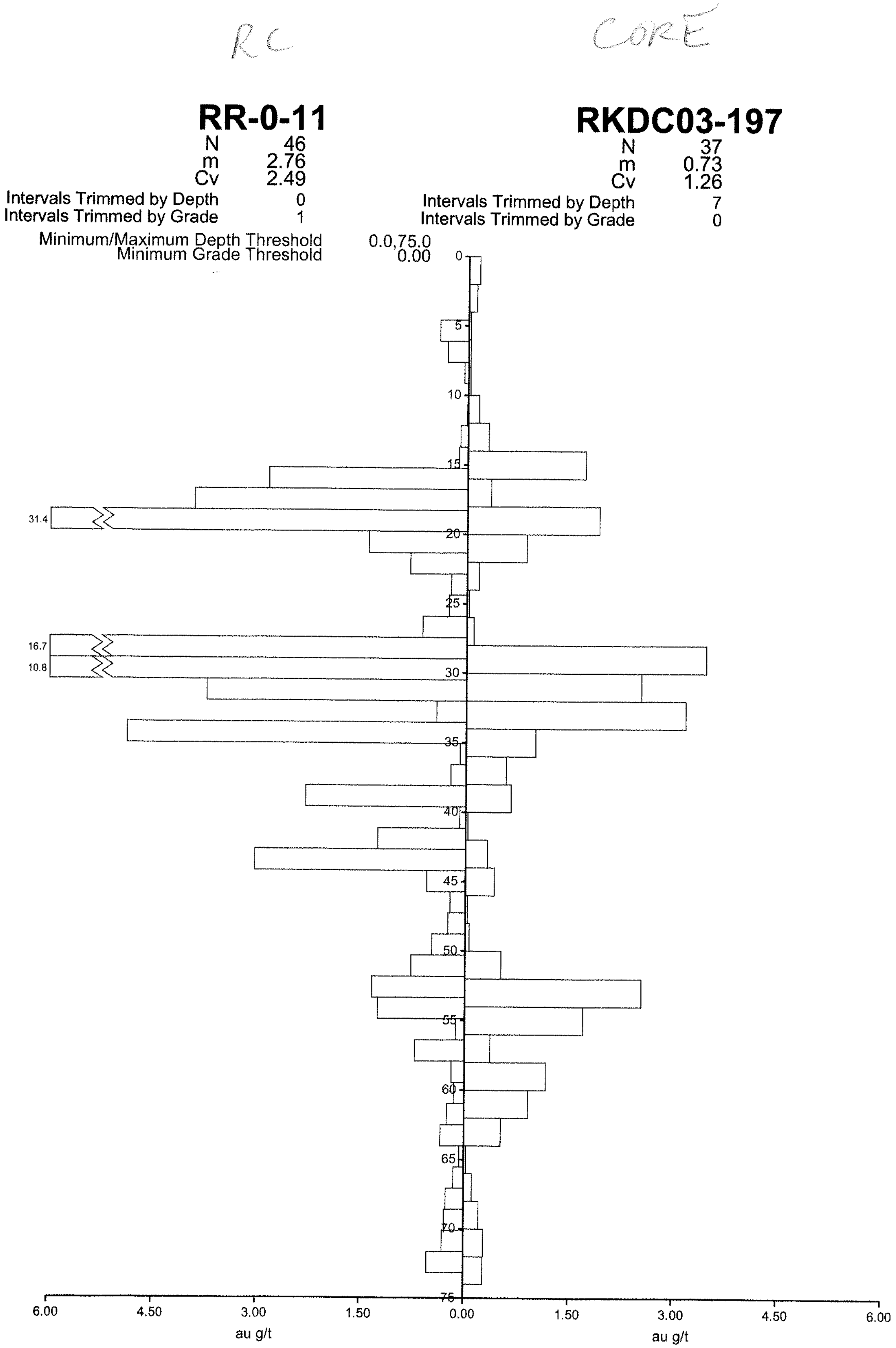


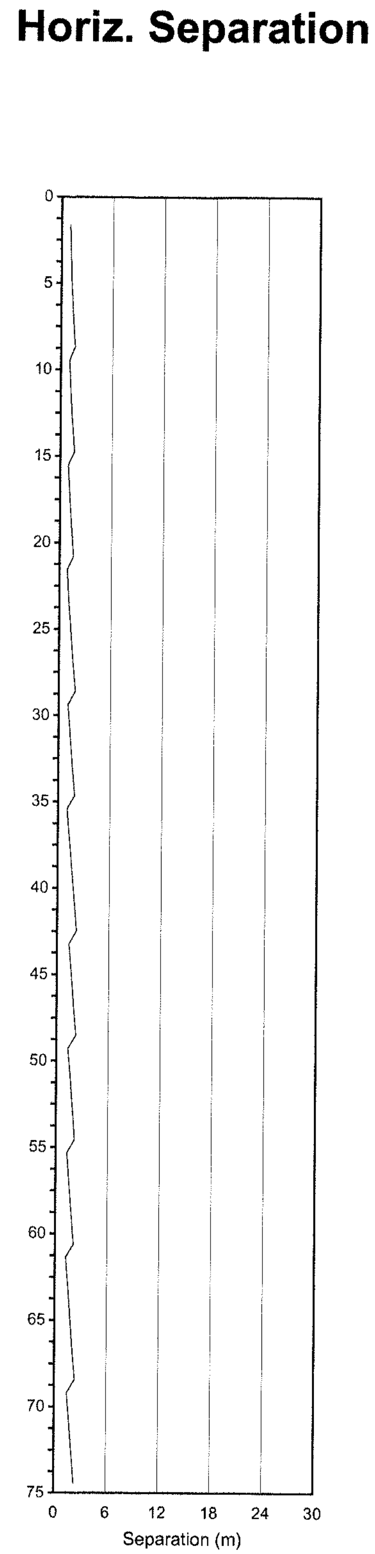
Cumulative Grade Thickness

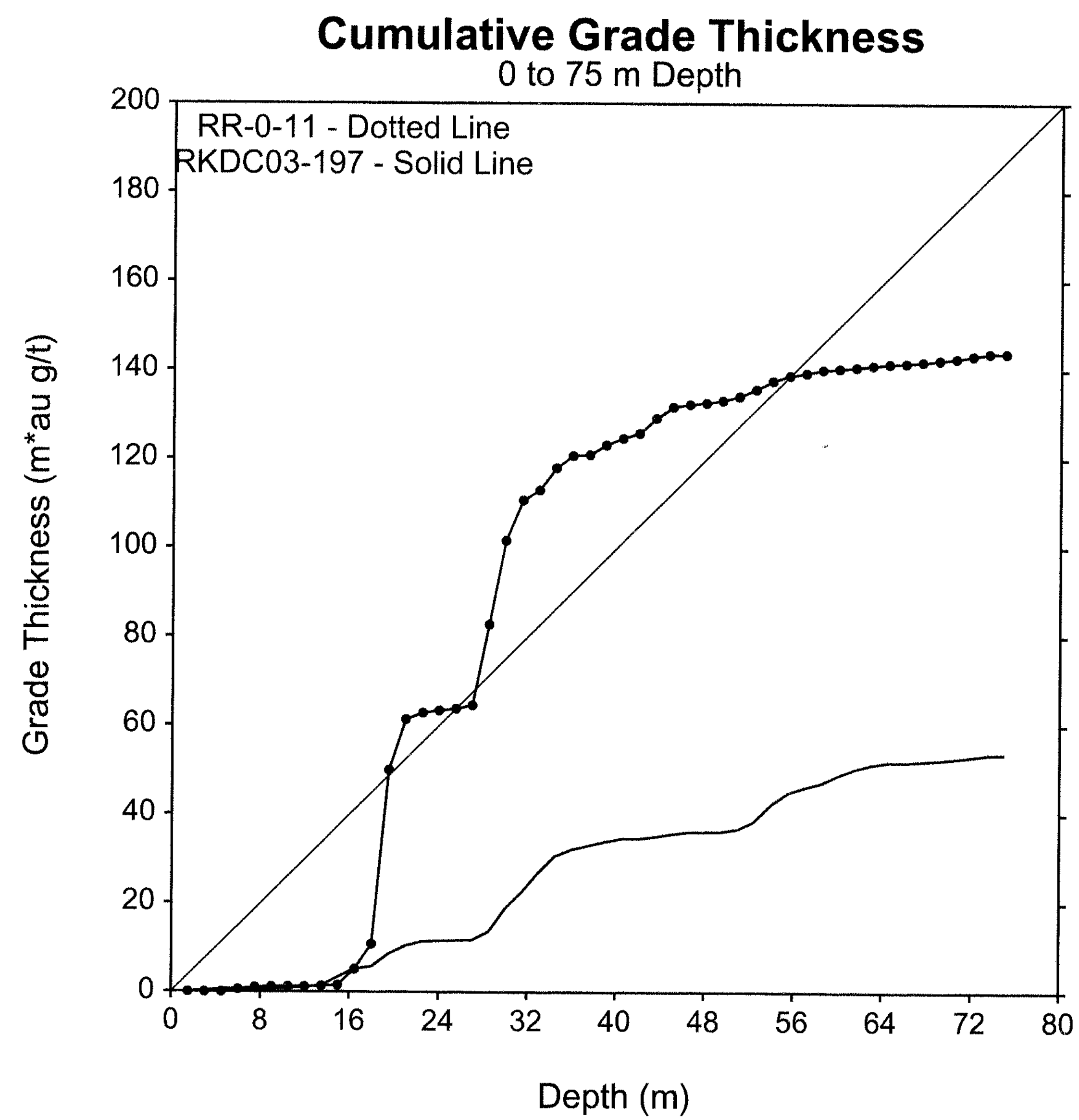
0 to 58 m Depth



7A
B+


RC
CORE
RR-0-11
N 46
m 2.76
Cv 2.49
Intervals Trimmed by Depth 0
Intervals Trimmed by Grade 1
Minimum/Maximum Depth Threshold 0.0,75.0
Minimum Grade Threshold 0.00
RKDC03-197
N 37
m 0.73
Cv 1.26
Intervals Trimmed by Depth 7
Intervals Trimmed by Grade 0
31.4
16.7
10.8
6.00
4.50
3.00
1.50
0.00
1.50
3.00
4.50
6.00
au g/t
au g/t


Horiz. Separation
Separation (m)


Cumulative Grade Thickness
0 to 75 m Depth
RR-0-11 - Dotted Line
RKDC03-197 - Solid Line
Grade Thickness (m*au g/t)
Depth (m)

7B

A A

CORE

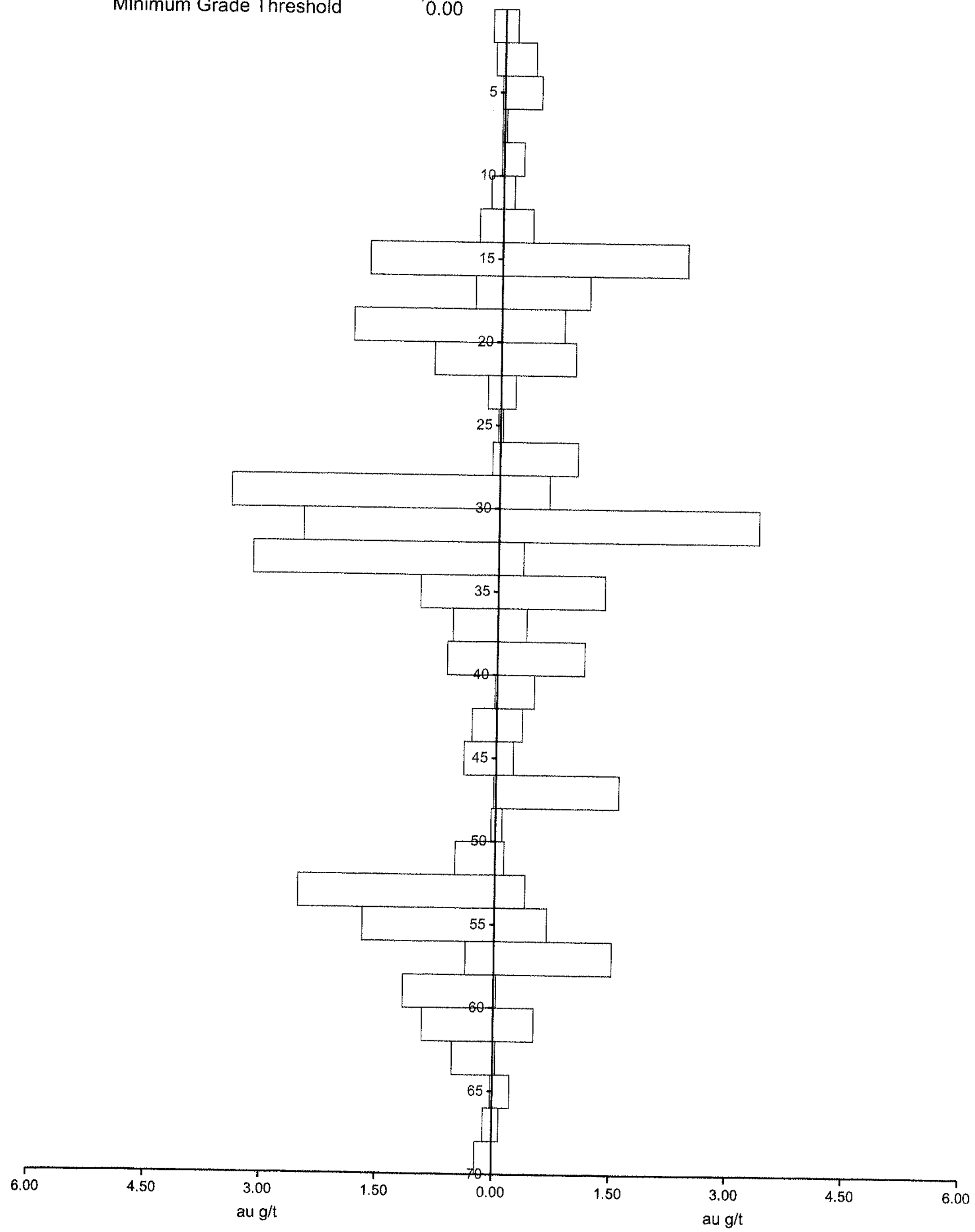
RKDC03-197

N	35
m	0.75
Cv	1.24
Intervals Trimmed by Depth	9
Intervals Trimmed by Grade	0
Minimum/Maximum Depth Threshold	0.0,70.0
Minimum Grade Threshold	0.00

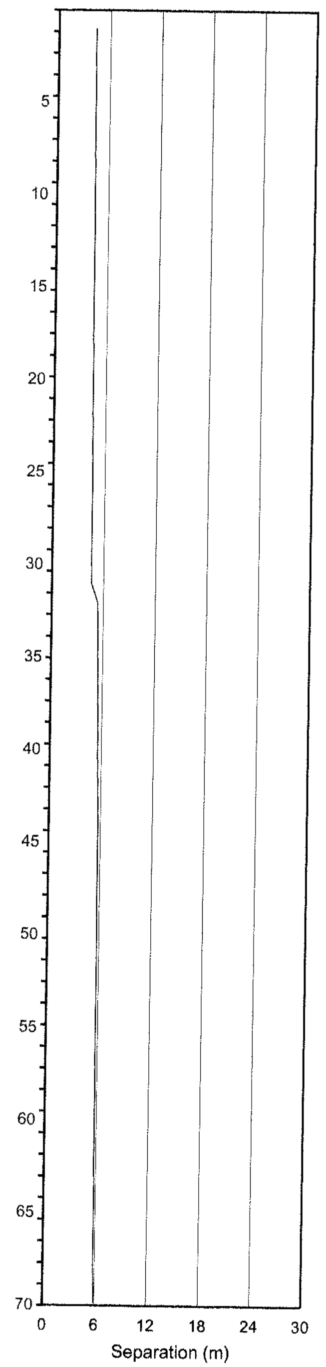
CORE

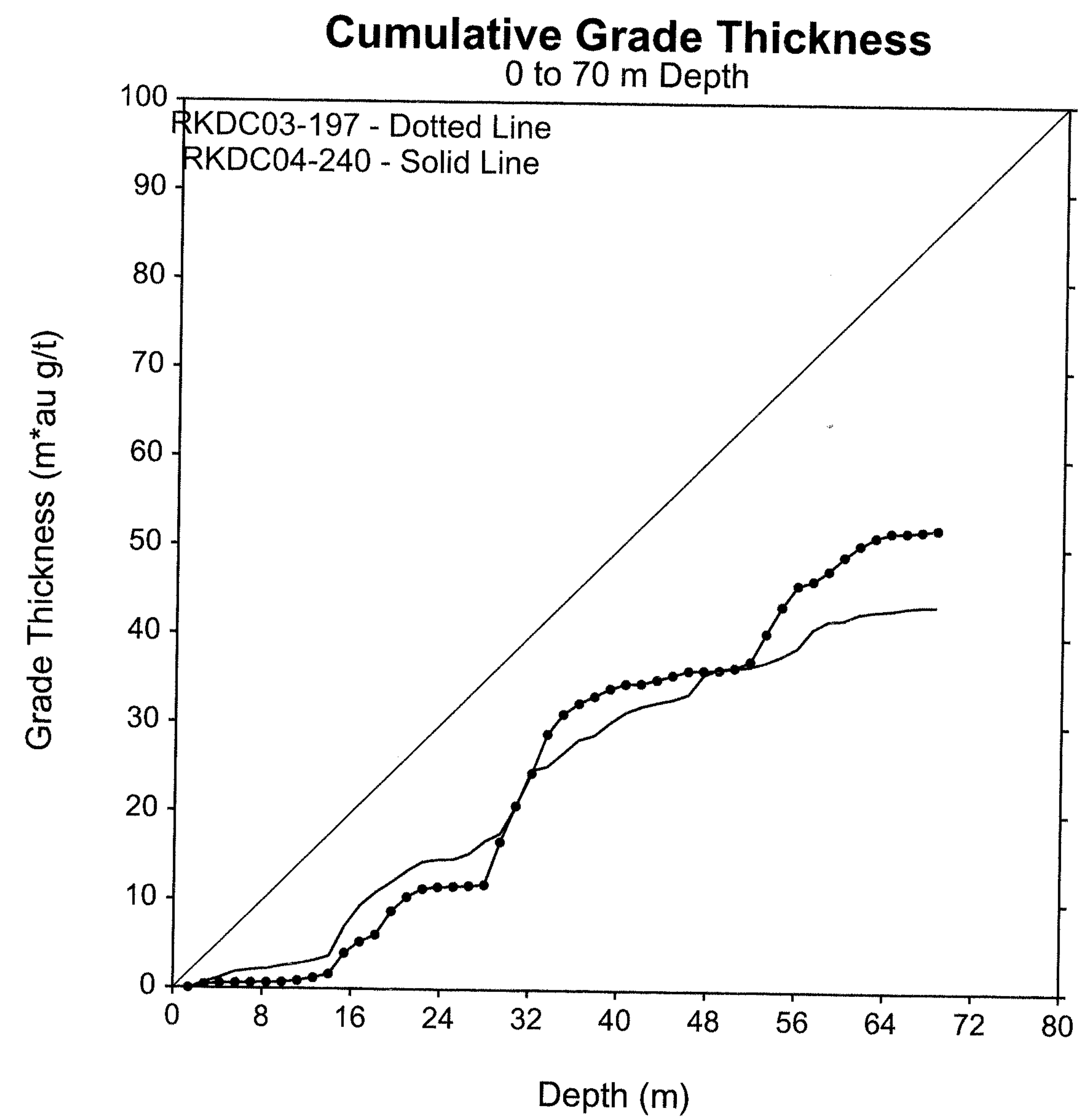
RKDC04-240

N	35
m	0.63
Cv	1.12
Intervals Trimmed by Depth	0
Intervals Trimmed by Grade	0



Horiz. Separation





7C

B

RC

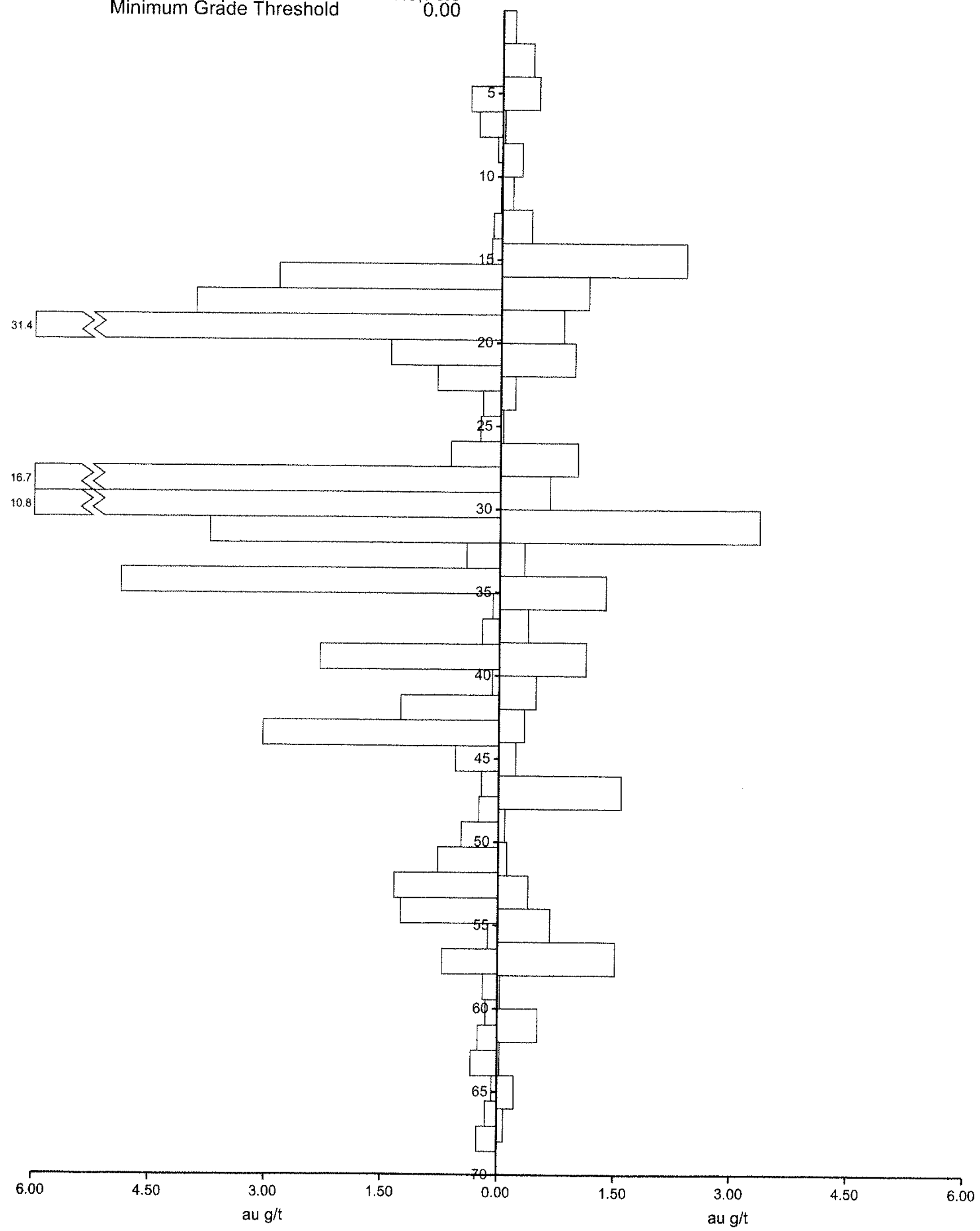
RR-0-11

N 42
m 2.22
Cv 2.47
Intervals Trimmed by Depth 4
Intervals Trimmed by Grade 1
Minimum/Maximum Depth Threshold 0.0,70.0
Minimum Grade Threshold 0.00

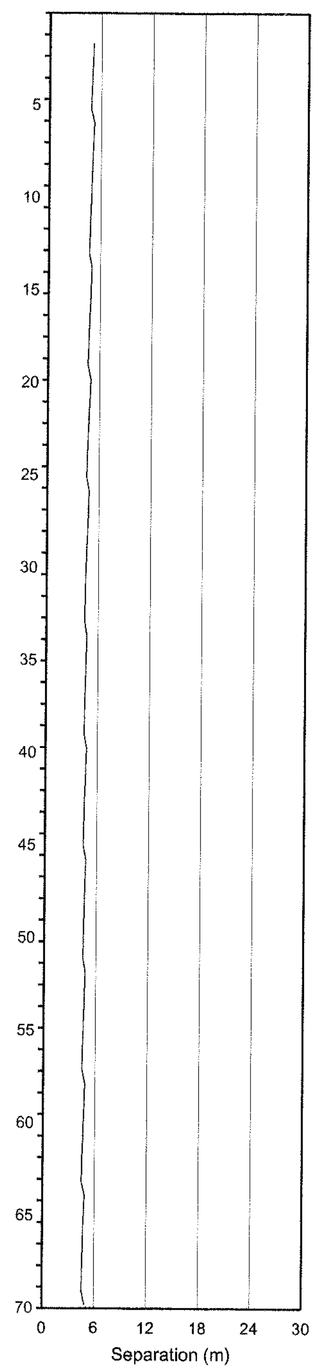
CORE

RKDC04-240

N 35
m 0.63
Cv 1.12
Intervals Trimmed by Depth 0
Intervals Trimmed by Grade 0

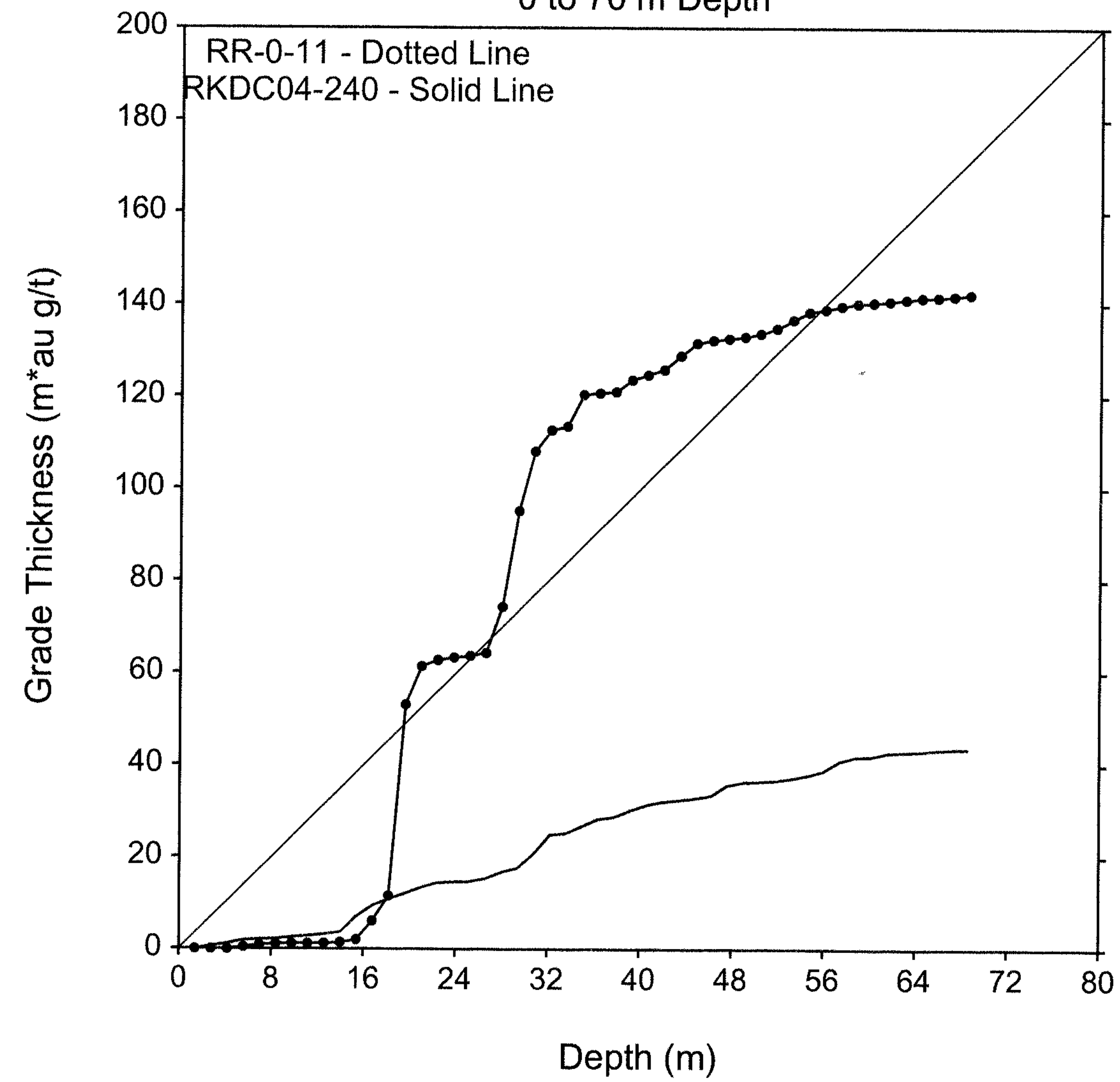


Horiz. Separation



Cumulative Grade Thickness

0 to 70 m Depth



7D

A A

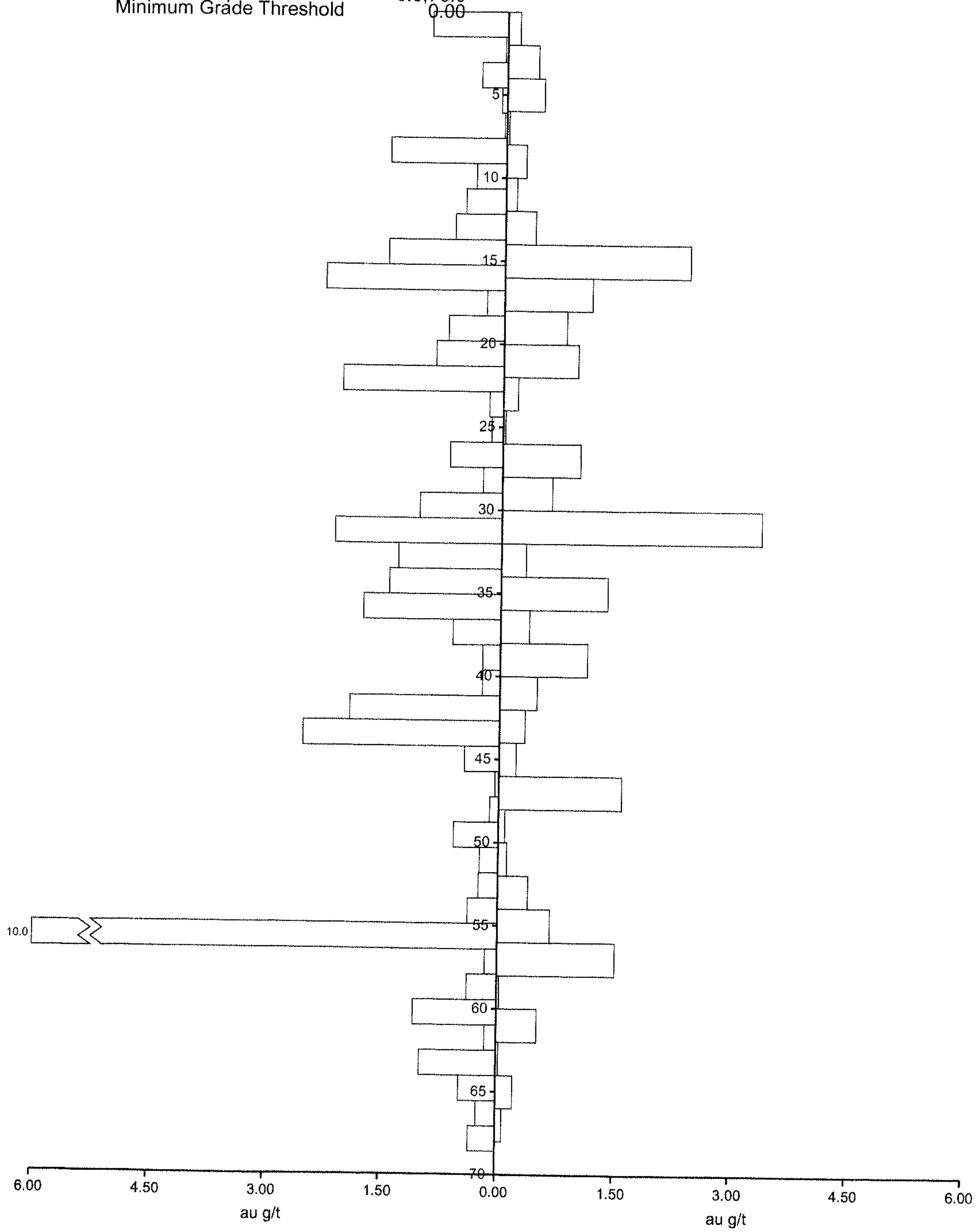
RC CORE

RKRC04-041

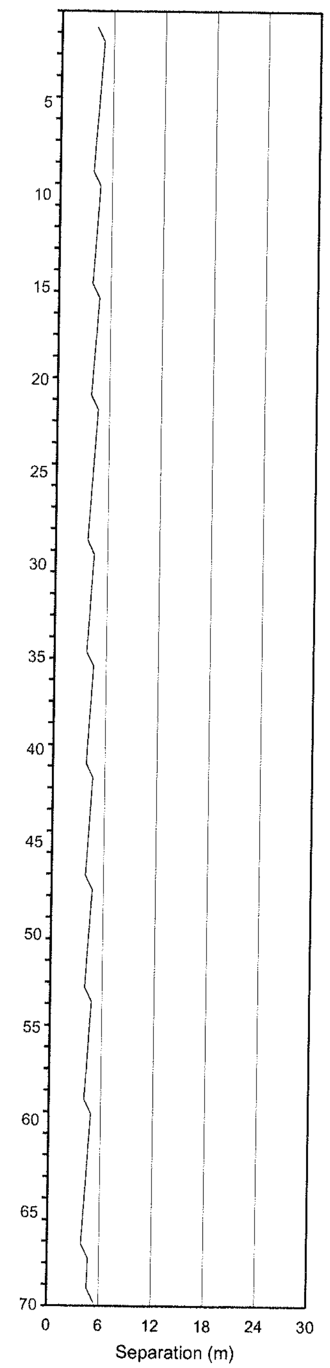
N 45
m 0.95
Cv 1.61
Intervals Trimmed by Depth 7
Intervals Trimmed by Grade 0
Minimum/Maximum Depth Threshold 0.0,70.0
Minimum Grade Threshold 0.00

RKDC04-240

N 35
m 0.63
Cv 1.12
Intervals Trimmed by Depth 0
Intervals Trimmed by Grade 0

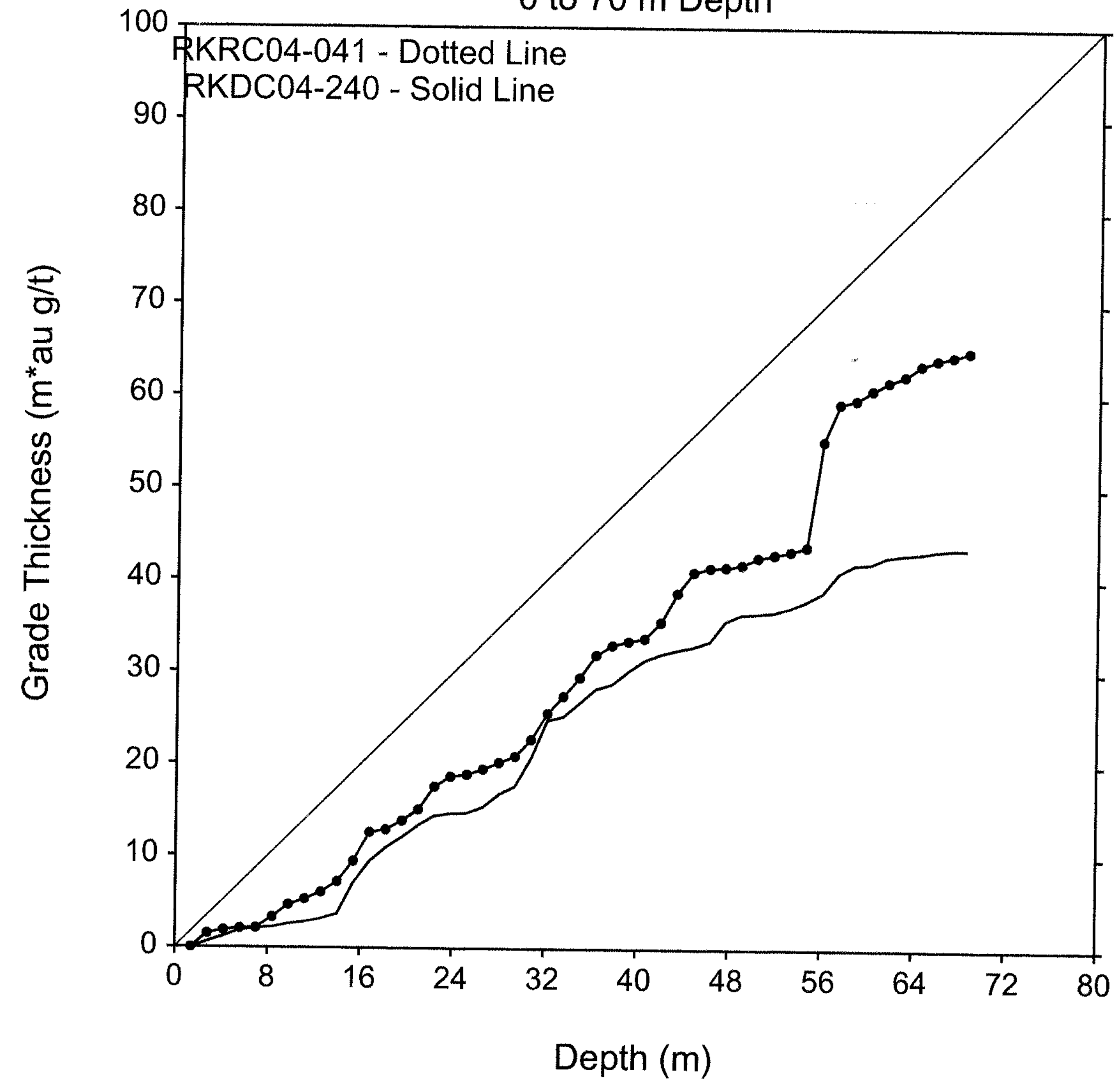


Horiz. Separation



Cumulative Grade Thickness

0 to 70 m Depth



RC

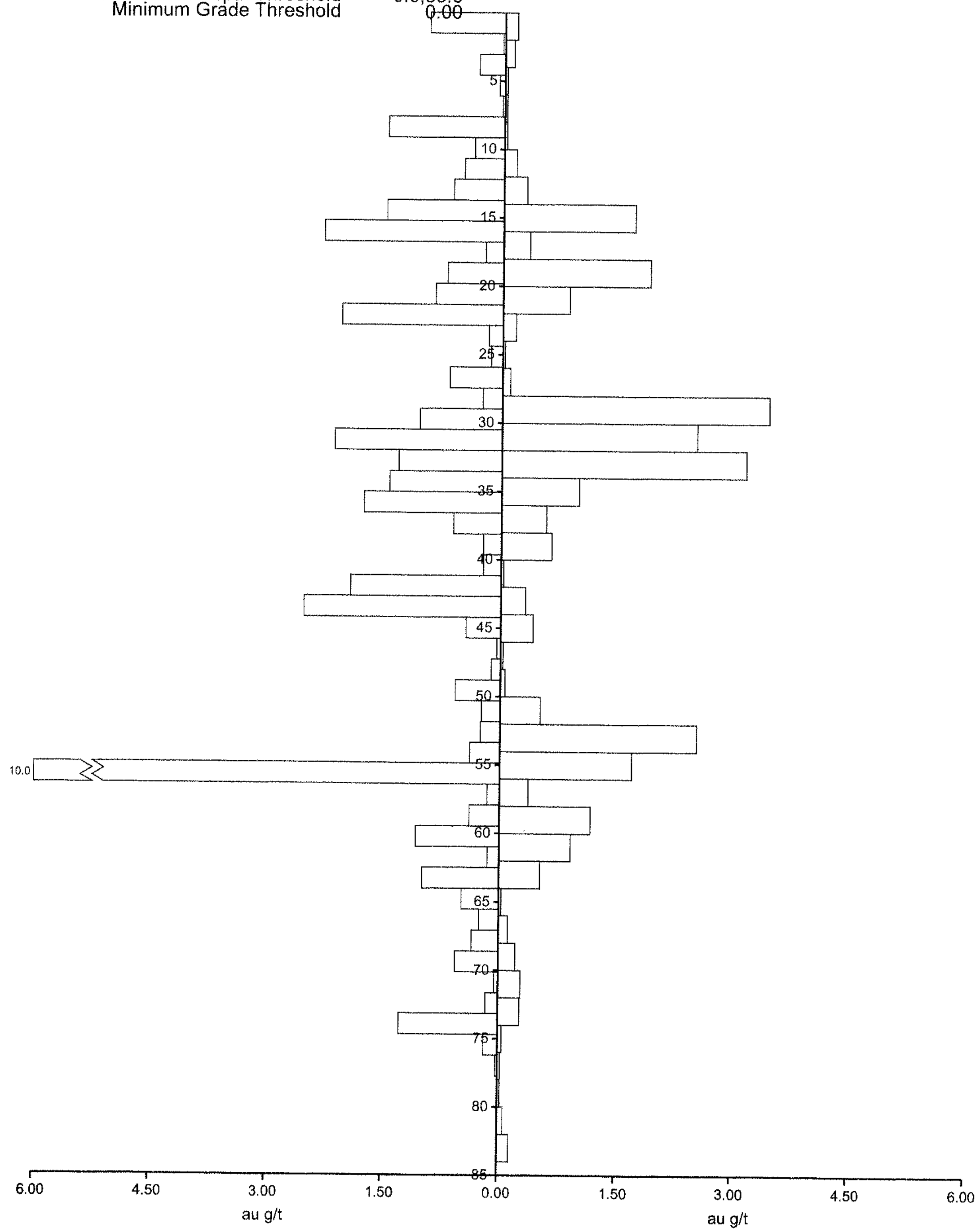
RKRC04-041

N	52
m	0.87
Cv	1.65
Intervals Trimmed by Depth	0
Intervals Trimmed by Grade	0
Minimum/Maximum Depth Threshold	0.0,89.0
Minimum Grade Threshold	0.00

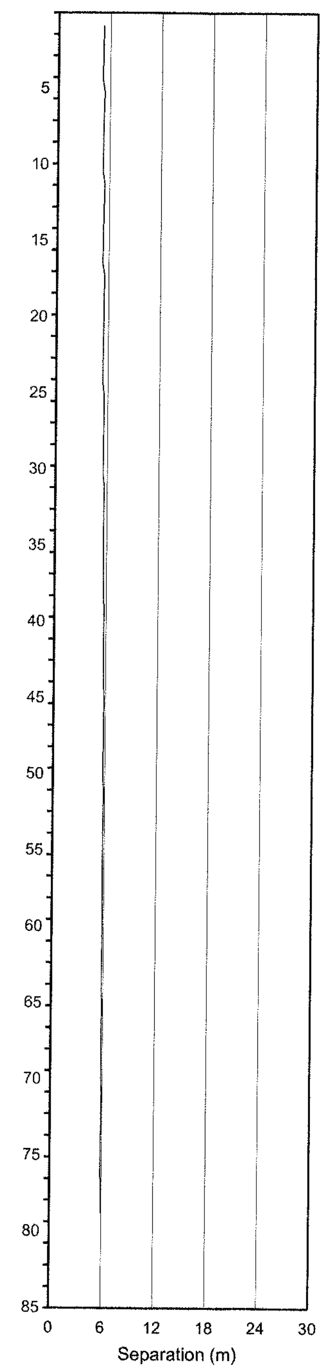
CORE

RKDC03-197

N	44
m	0.63
Cv	1.38
Intervals Trimmed by Depth	0
Intervals Trimmed by Grade	0



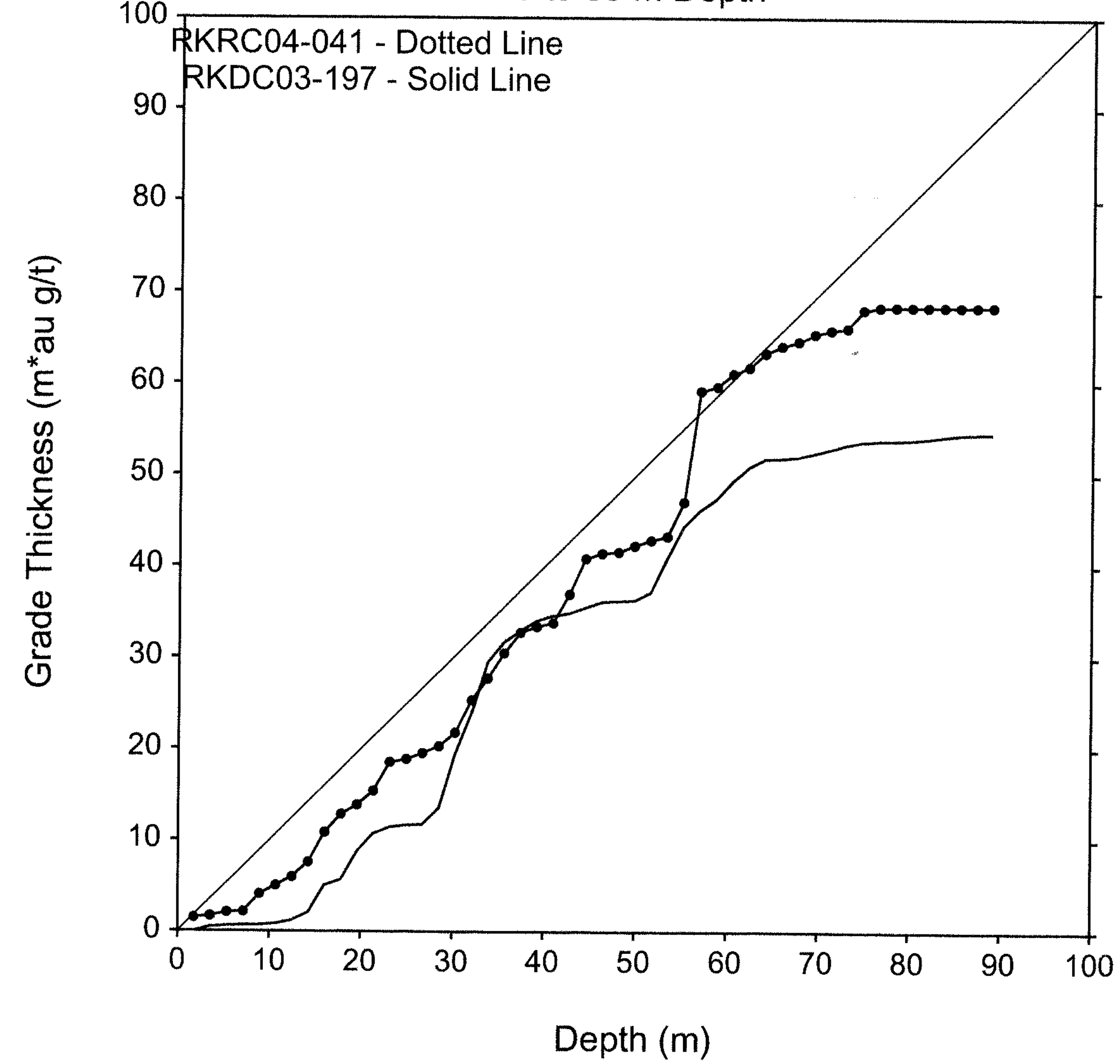
Horiz. Separation



7E
A A

Cumulative Grade Thickness

0 to 89 m Depth



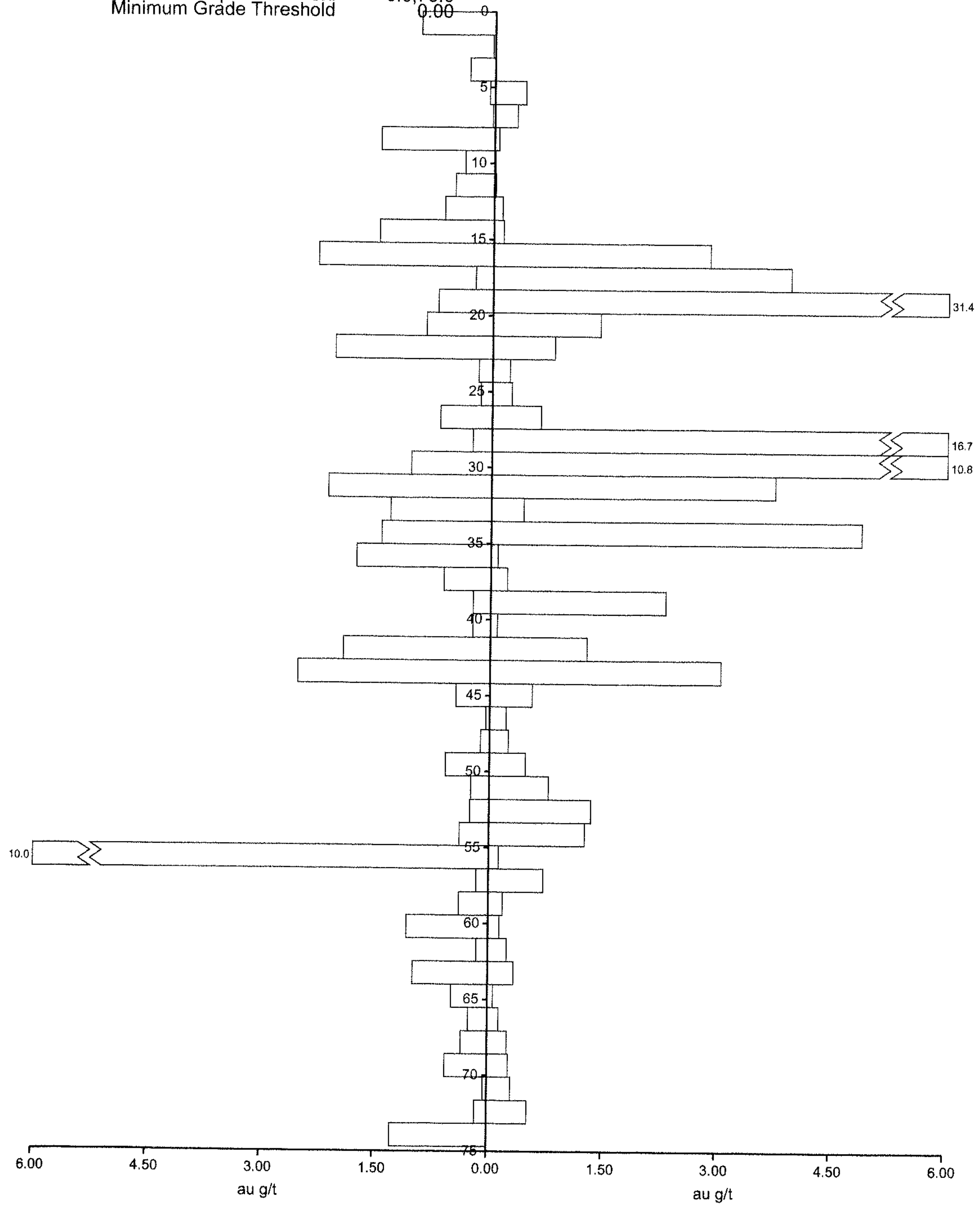
RC RC 7F B B

RKRC04-041

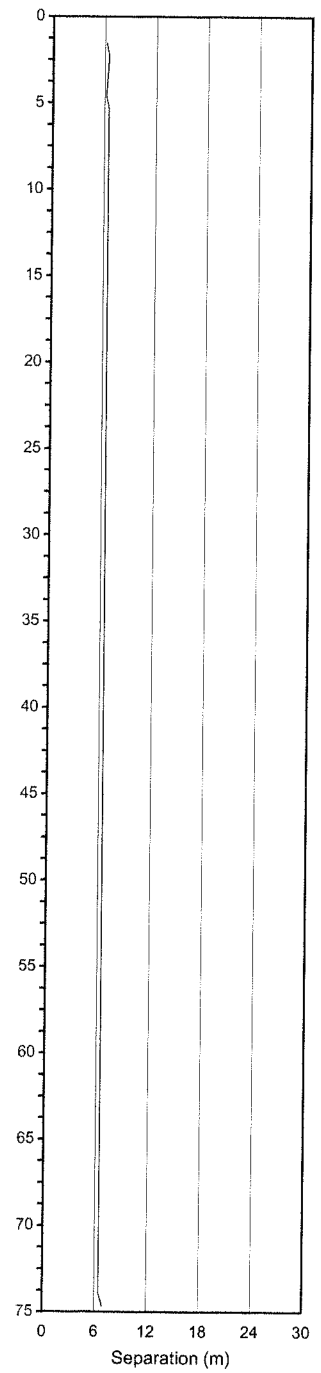
N	49
m	0.91
Cv	1.61
Intervals Trimmed by Depth	3
Intervals Trimmed by Grade	0
Minimum/Maximum Depth Threshold	0.0,75.0
Minimum Grade Threshold	0.00

RR-0-11

N	46
m	2.76
Cv	2.49
Intervals Trimmed by Depth	0
Intervals Trimmed by Grade	1

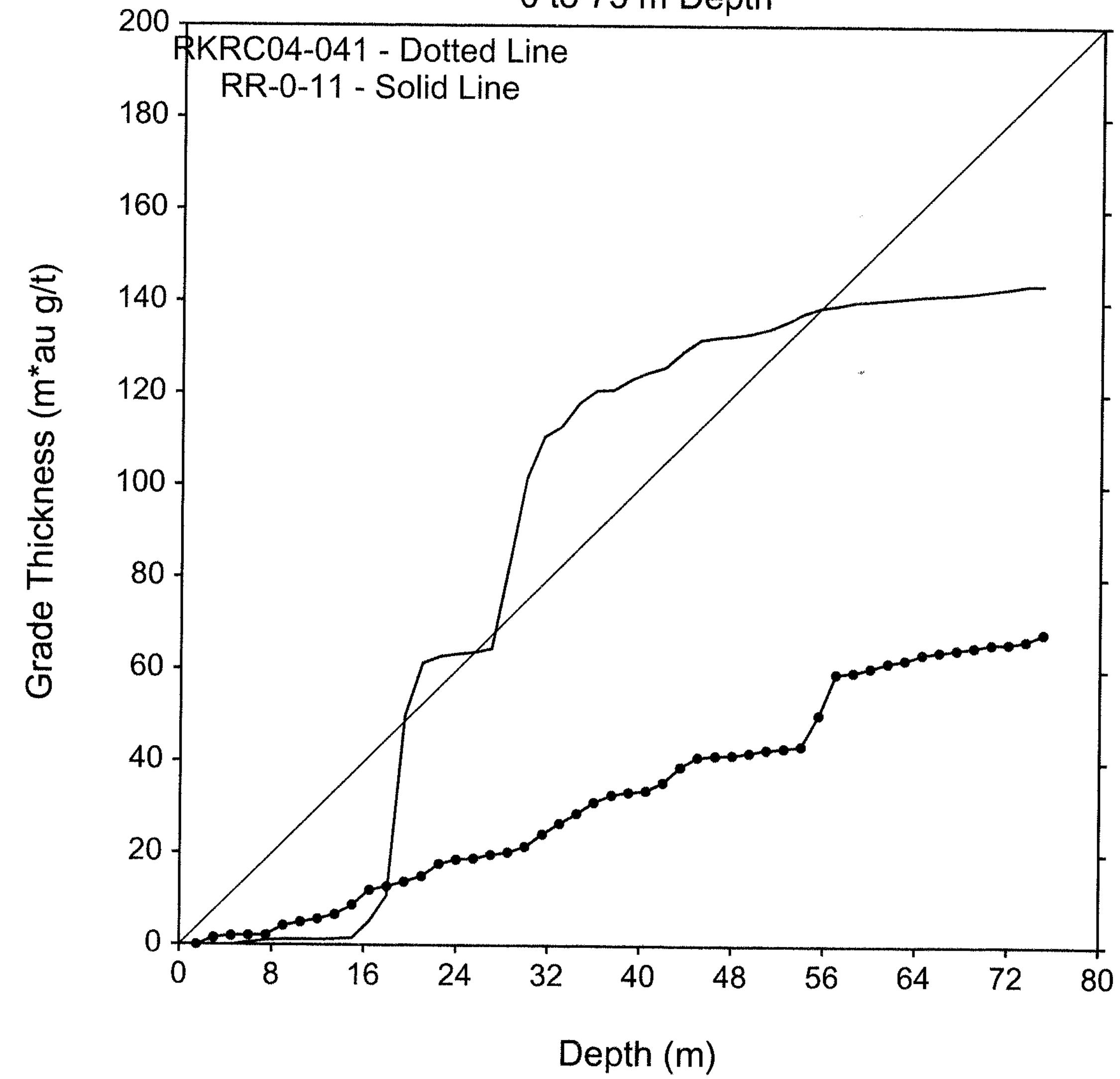


Horiz. Separation



Cumulative Grade Thickness

0 to 75 m Depth



8A

B

CORE

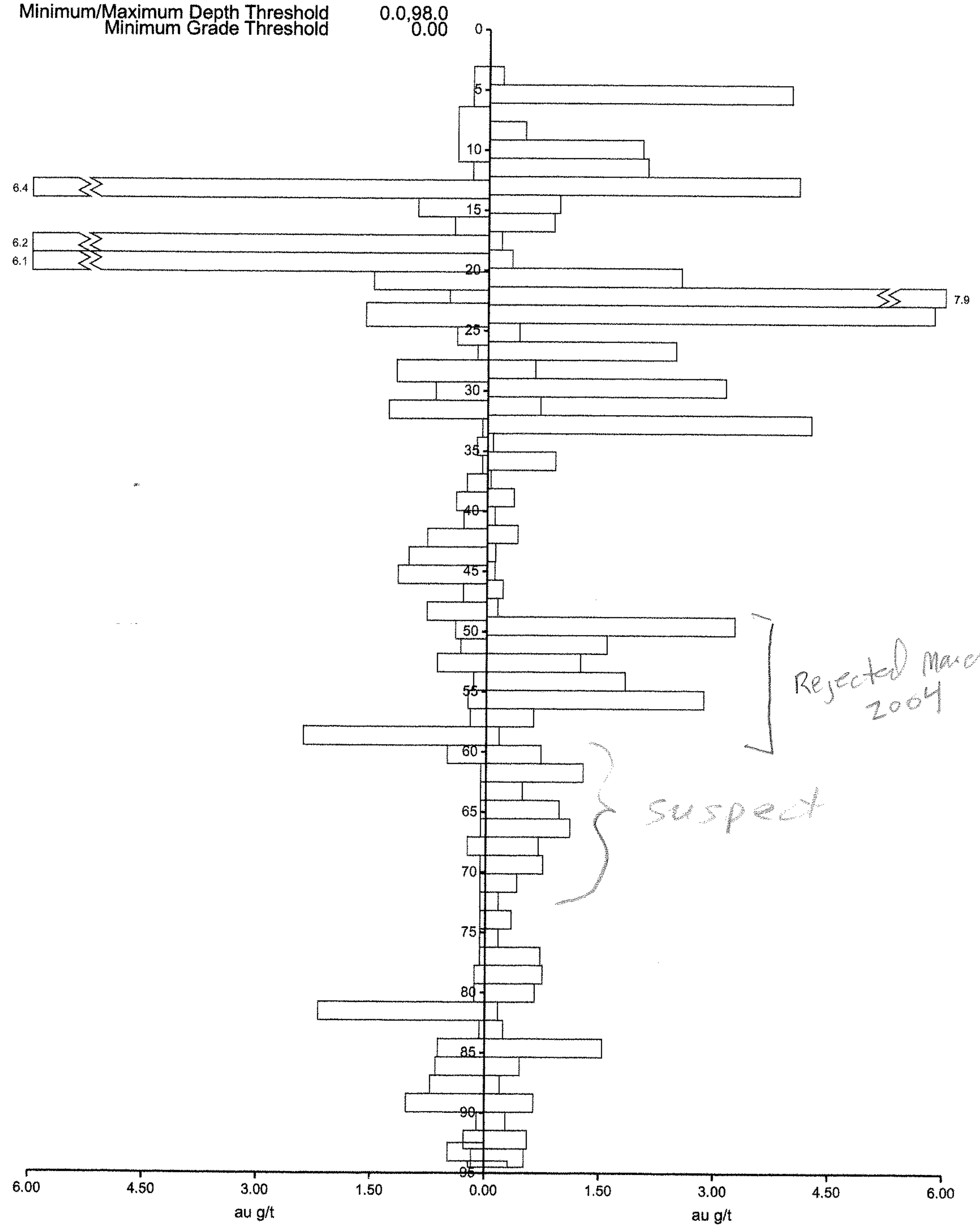
RC-7-002

N	59
m	0.77
Cv	1.73
Intervals Trimmed by Depth	20
Intervals Trimmed by Grade	0
Minimum/Maximum Depth Threshold	0.0,98.0
Minimum Grade Threshold	0.00

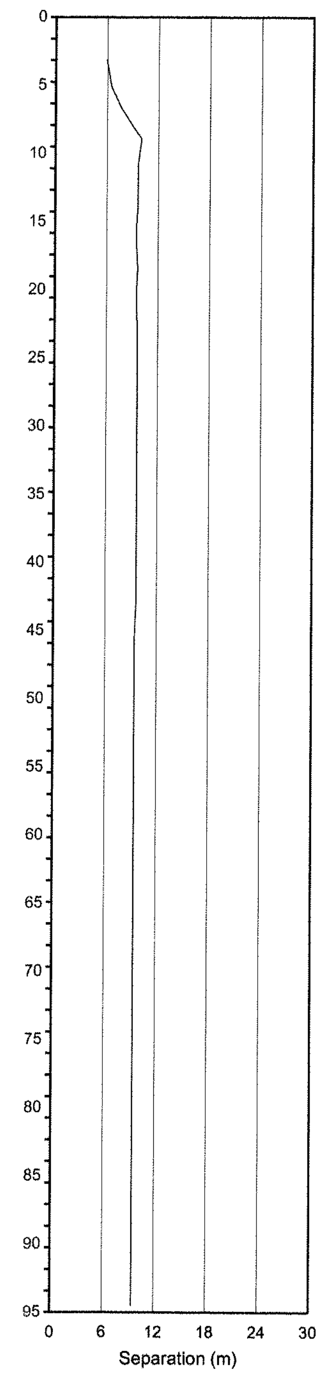
RC

RMR-5

N	61
m	1.17
Cv	1.29
Intervals Trimmed by Depth	0
Intervals Trimmed by Grade	2

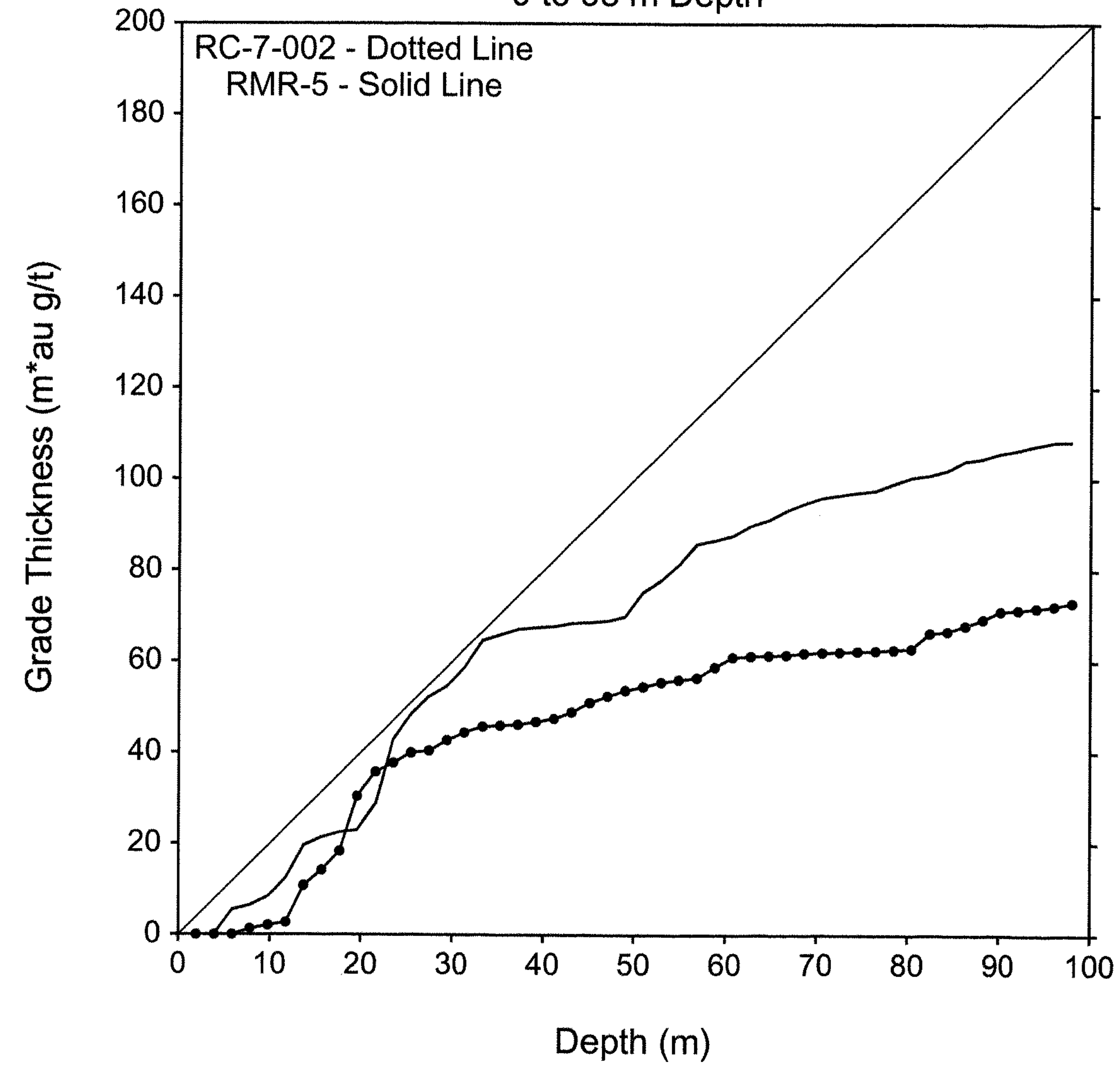


Horiz. Separation



Cumulative Grade Thickness

0 to 98 m Depth



9A

F

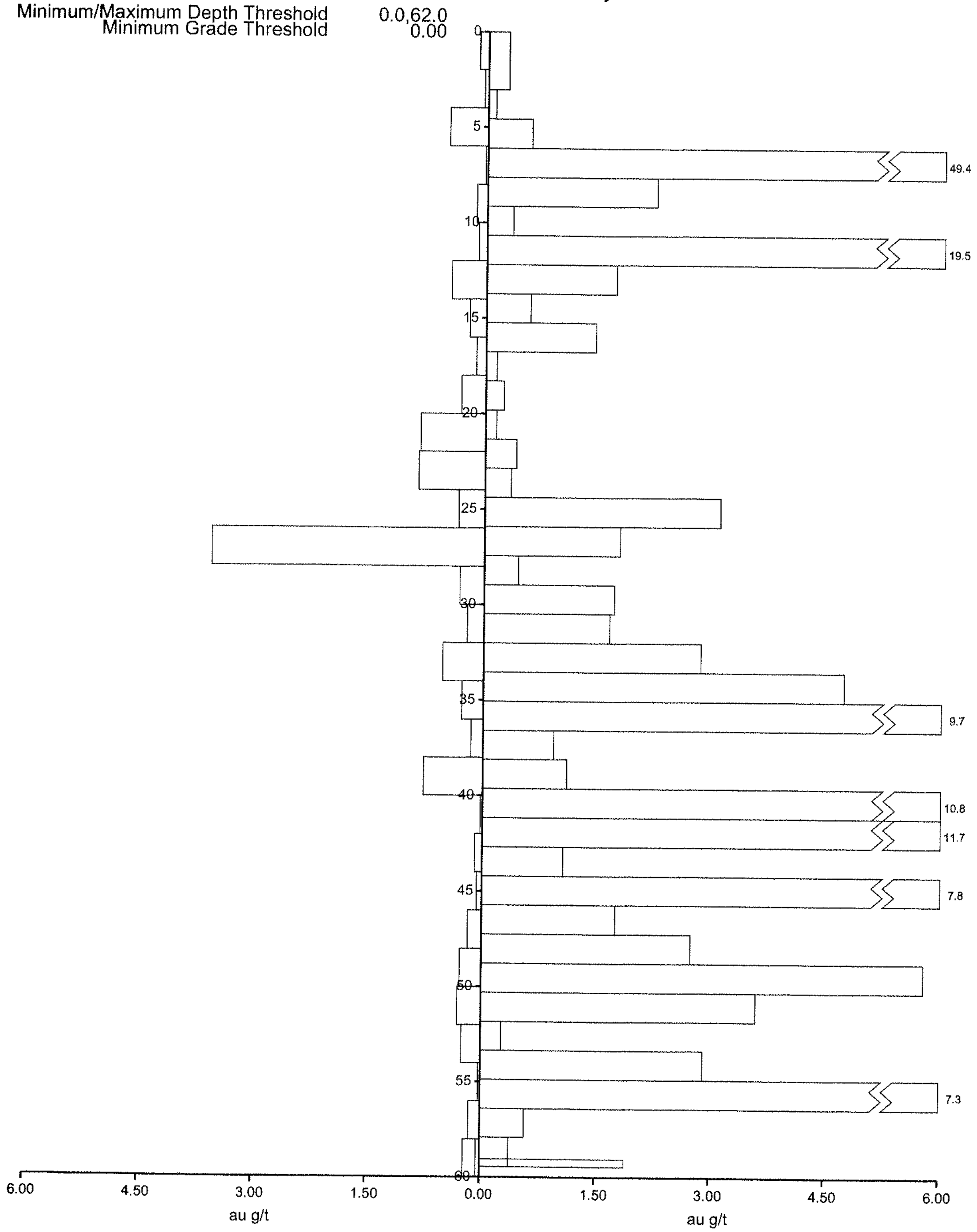
CORE

RKDC03-199

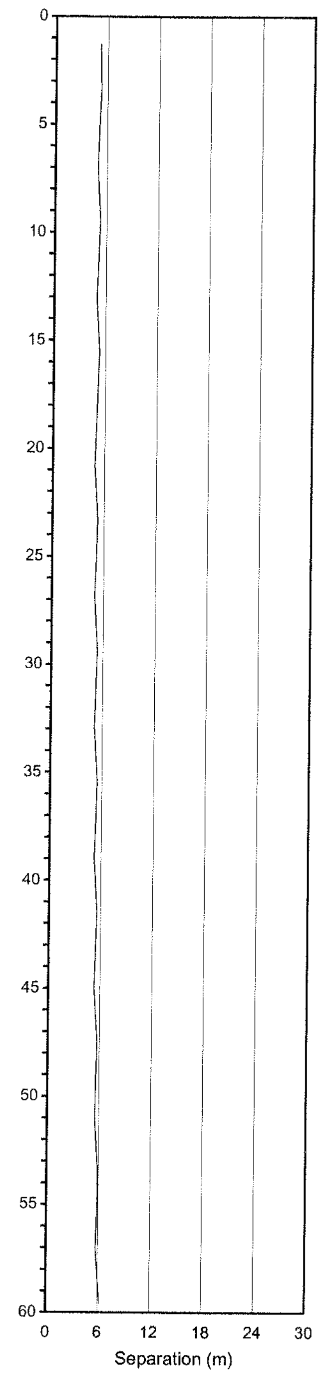
N	31
m	0.38
Cv	1.66
Intervals Trimmed by Depth	9
Intervals Trimmed by Grade	0
Minimum/Maximum Depth Threshold	0.0,62.0
Minimum Grade Threshold	0.00

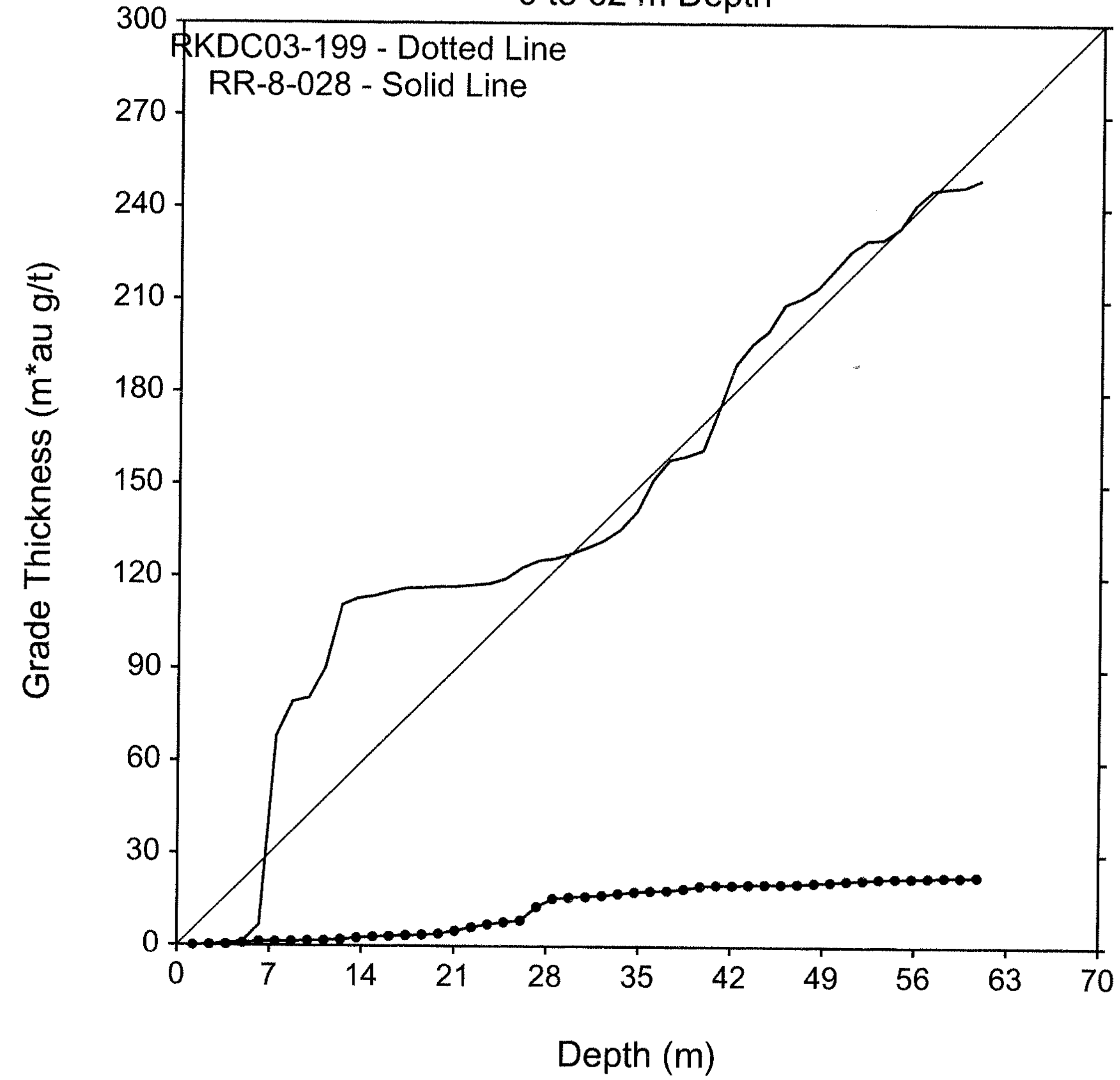
RR-8-028

N	39
m	4.10
Cv	2.02
Intervals Trimmed by Depth	1
Intervals Trimmed by Grade	0



Horiz. Separation





9B

A A

Core Core

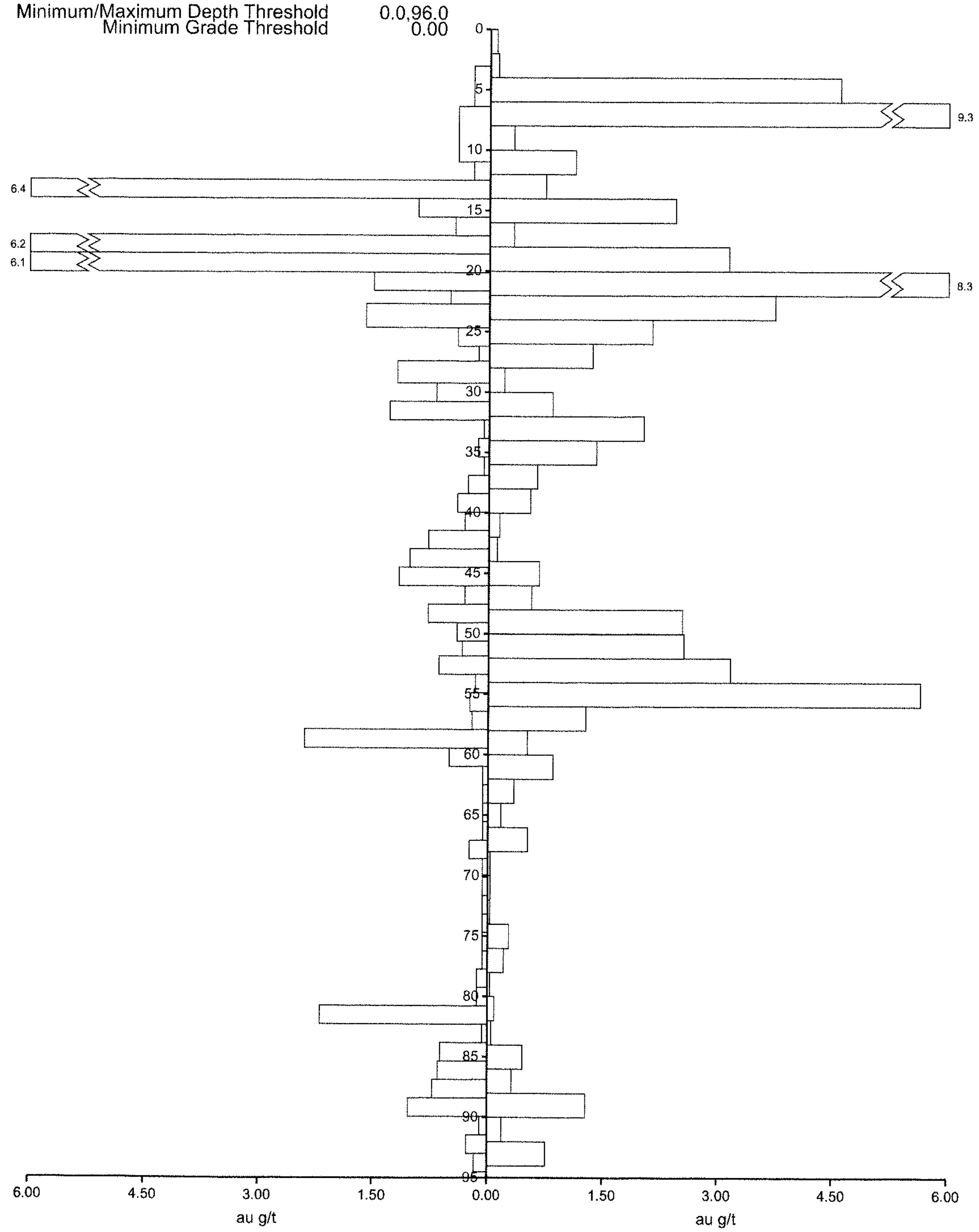
RC-7-002

N 57
m 0.79
Cv 1.72
Intervals Trimmed by Depth 22
Intervals Trimmed by Grade 0

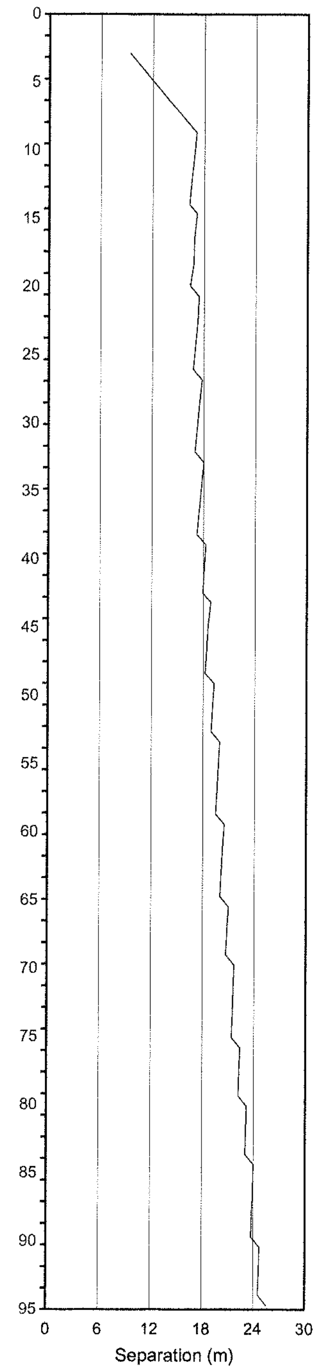
Minimum/Maximum Depth Threshold 0.0,96.0
Minimum Grade Threshold 0.00

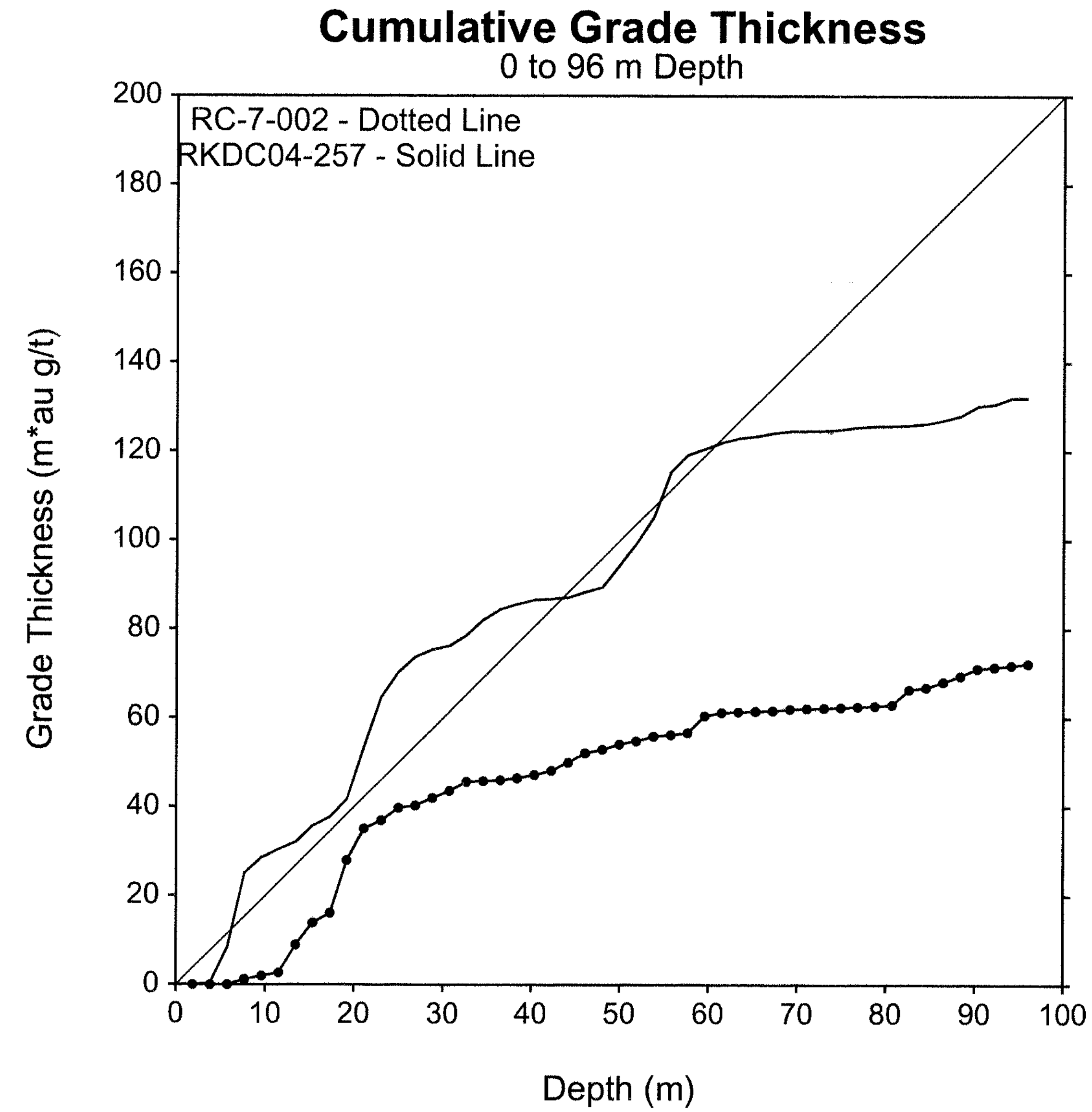
RKDC04-257

N 48
m 1.38
Cv 1.45
Intervals Trimmed by Depth 0
Intervals Trimmed by Grade 0



Horiz. Separation





9c
A A

RC

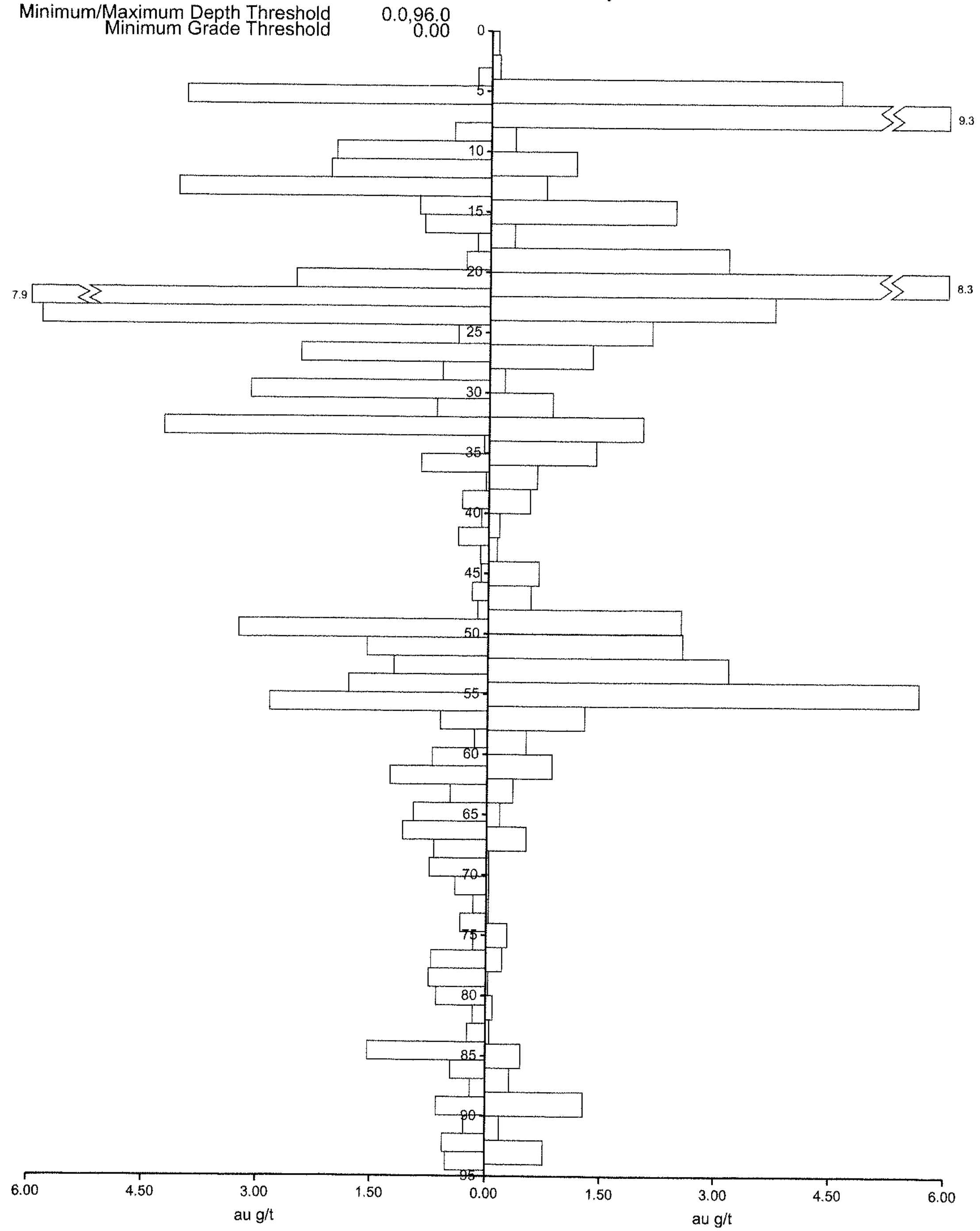
RMR-5

N 59
m 1.20
Cv 1.27
Intervals Trimmed by Depth 2
Intervals Trimmed by Grade 2
Minimum/Maximum Depth Threshold 0.0,96.0
Minimum Grade Threshold 0.00

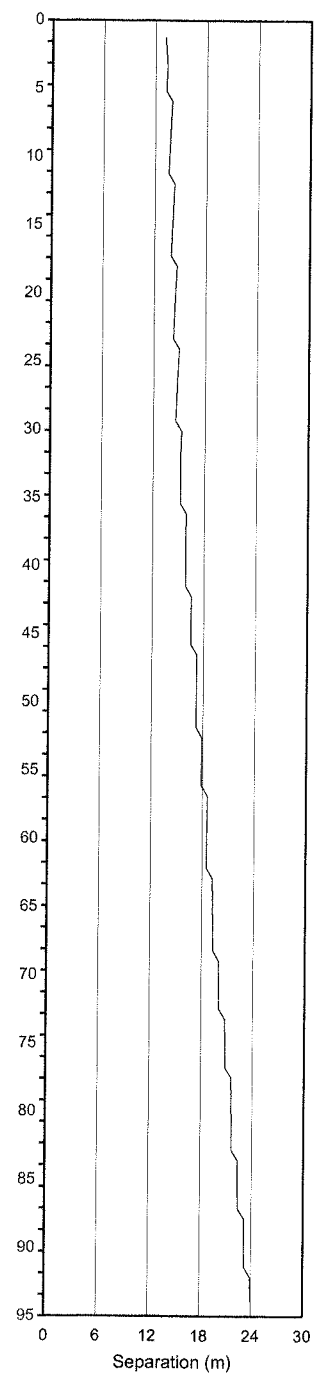
CORE

RKDC04-257

N 48
m 1.38
Cv 1.45
Intervals Trimmed by Depth 0
Intervals Trimmed by Grade 0

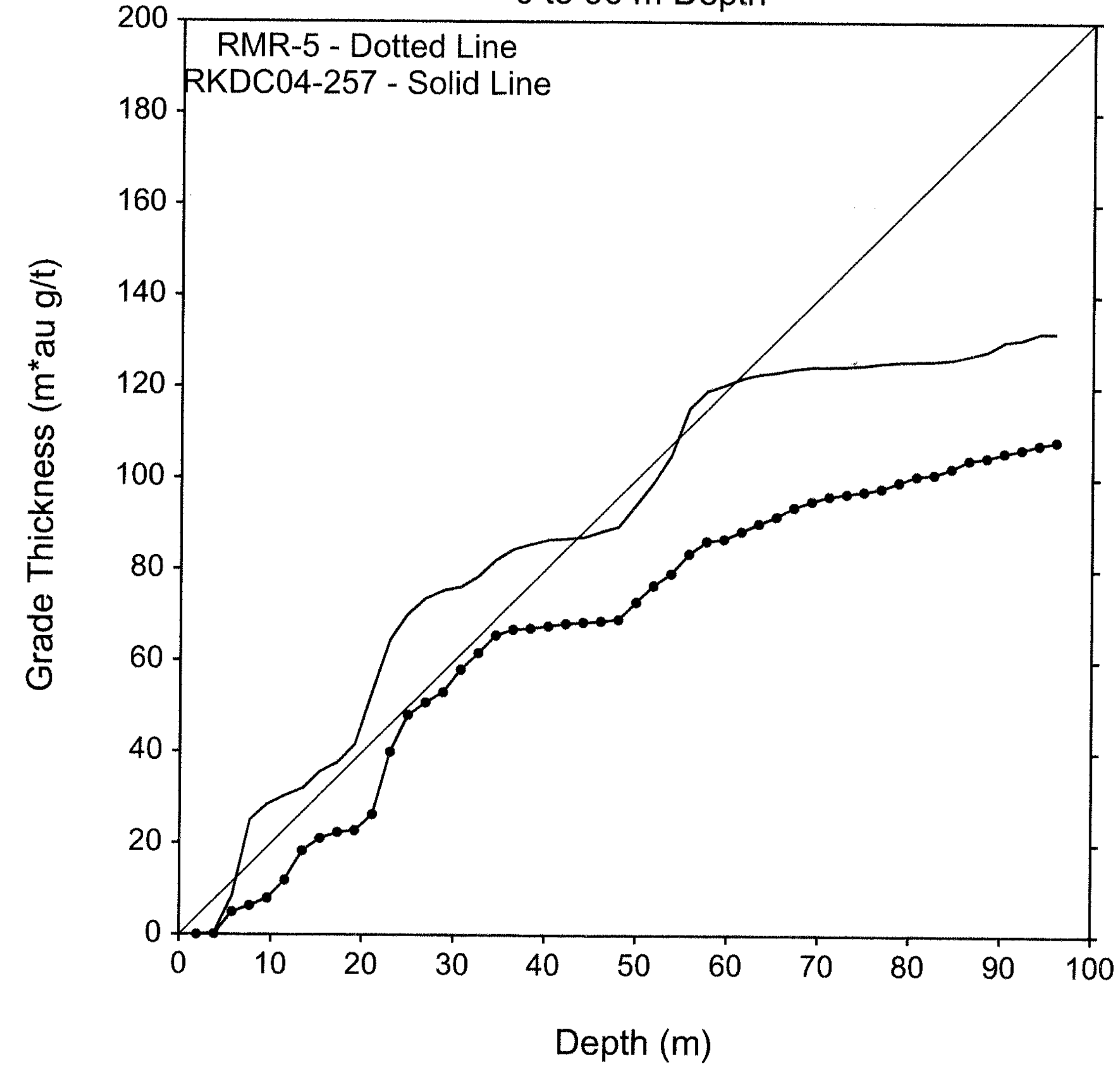


Horiz. Separation



Cumulative Grade Thickness

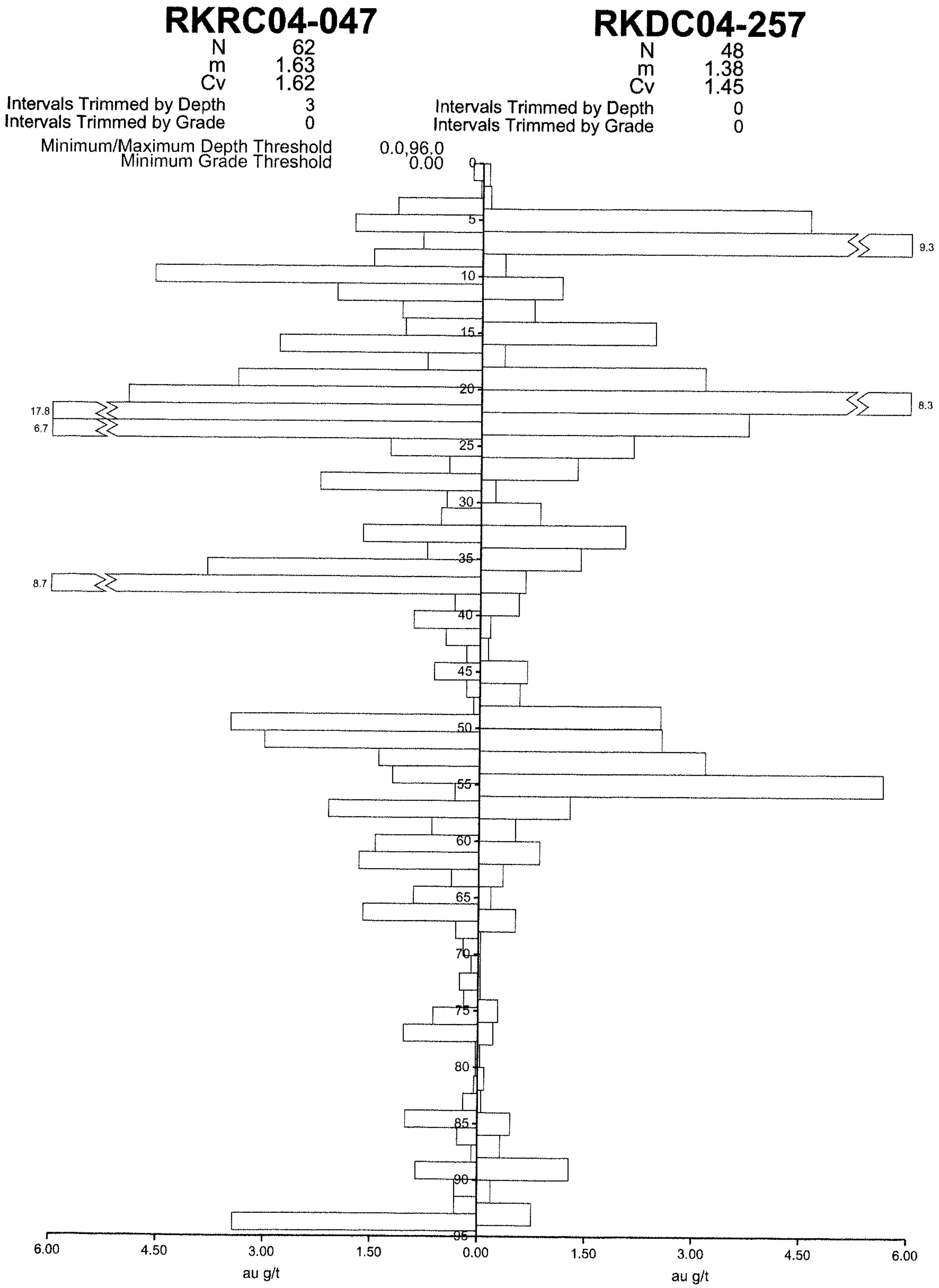
0 to 96 m Depth



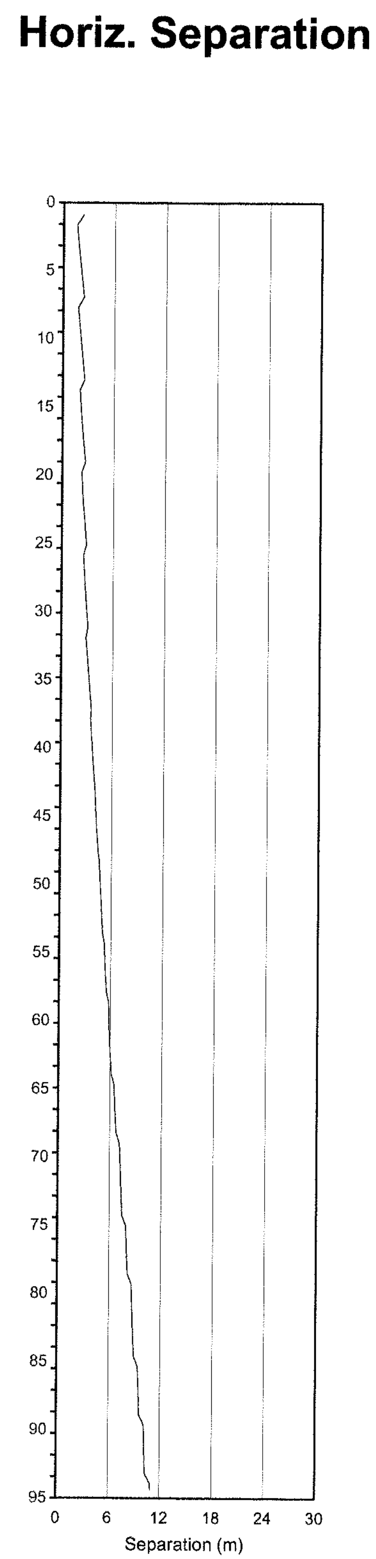
9D

A A

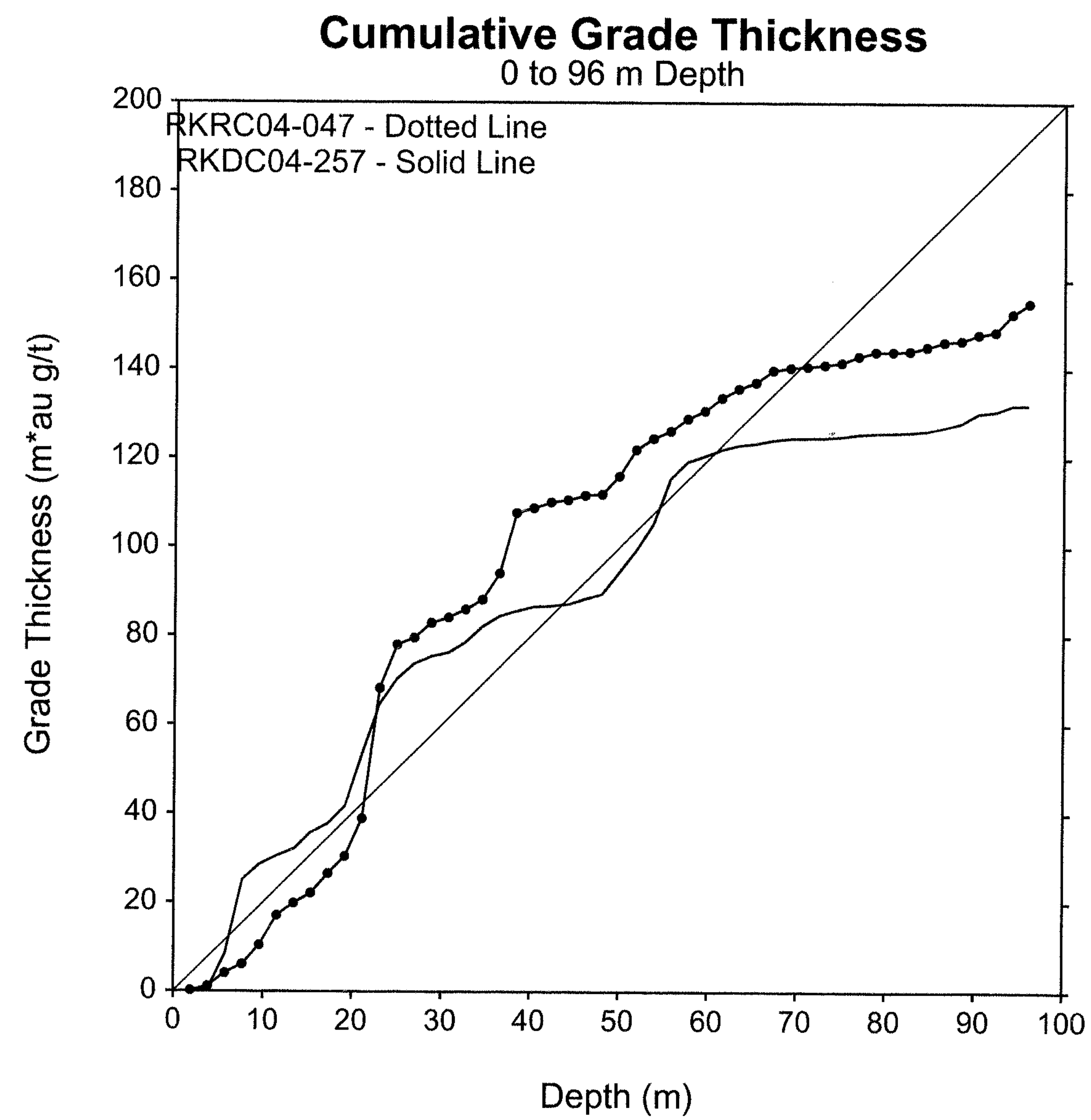
RC CORE



RKRC04-047
N 62
m 1.63
Cv 1.62
Intervals Trimmed by Depth 3
Intervals Trimmed by Grade 0
Minimum/Maximum Depth Threshold 0.0,96.0
Minimum Grade Threshold 0.00
RKDC04-257
N 48
m 1.38
Cv 1.45
Intervals Trimmed by Depth 0
Intervals Trimmed by Grade 0
au g/t
au g/t



Horiz. Separation
Separation (m)



Cumulative Grade Thickness
0 to 96 m Depth
RKRC04-047 - Dotted Line
RKDC04-257 - Solid Line
Grade Thickness (m*au g/t)
Depth (m)

9E

C C

Core

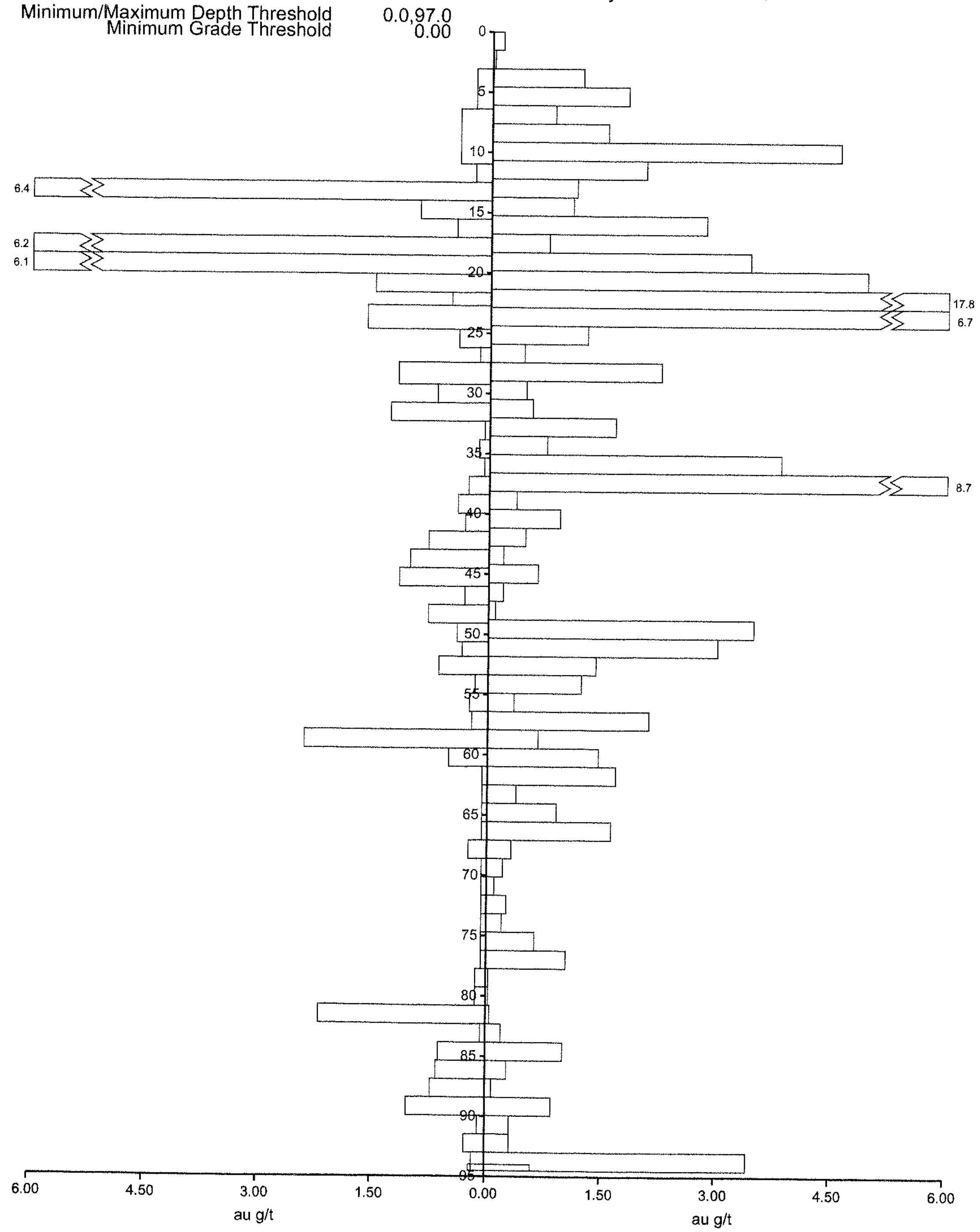
RC-7-002

N	58
m	0.78
Cv	1.73
Intervals Trimmed by Depth	21
Intervals Trimmed by Grade	0
Minimum/Maximum Depth Threshold	0.0,97.0
Minimum Grade Threshold	0.00

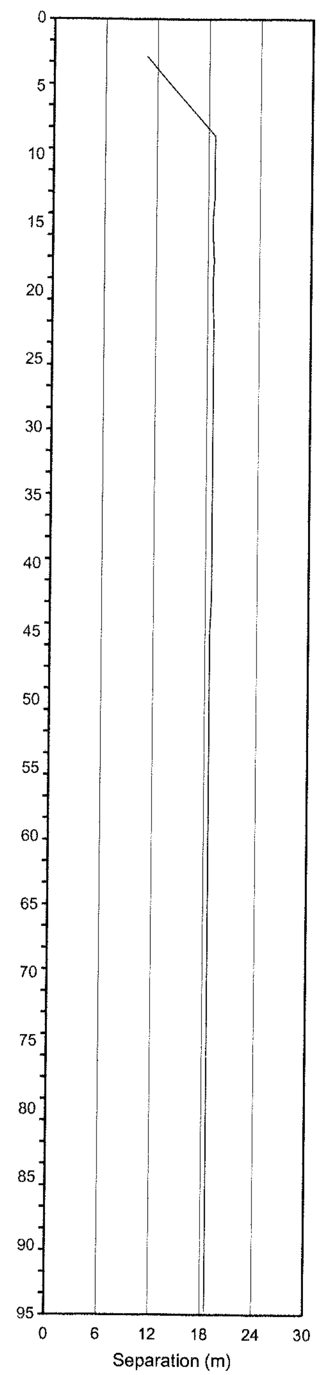
RC

RKRC04-047

N	63
m	1.61
Cv	1.62
Intervals Trimmed by Depth	2
Intervals Trimmed by Grade	0

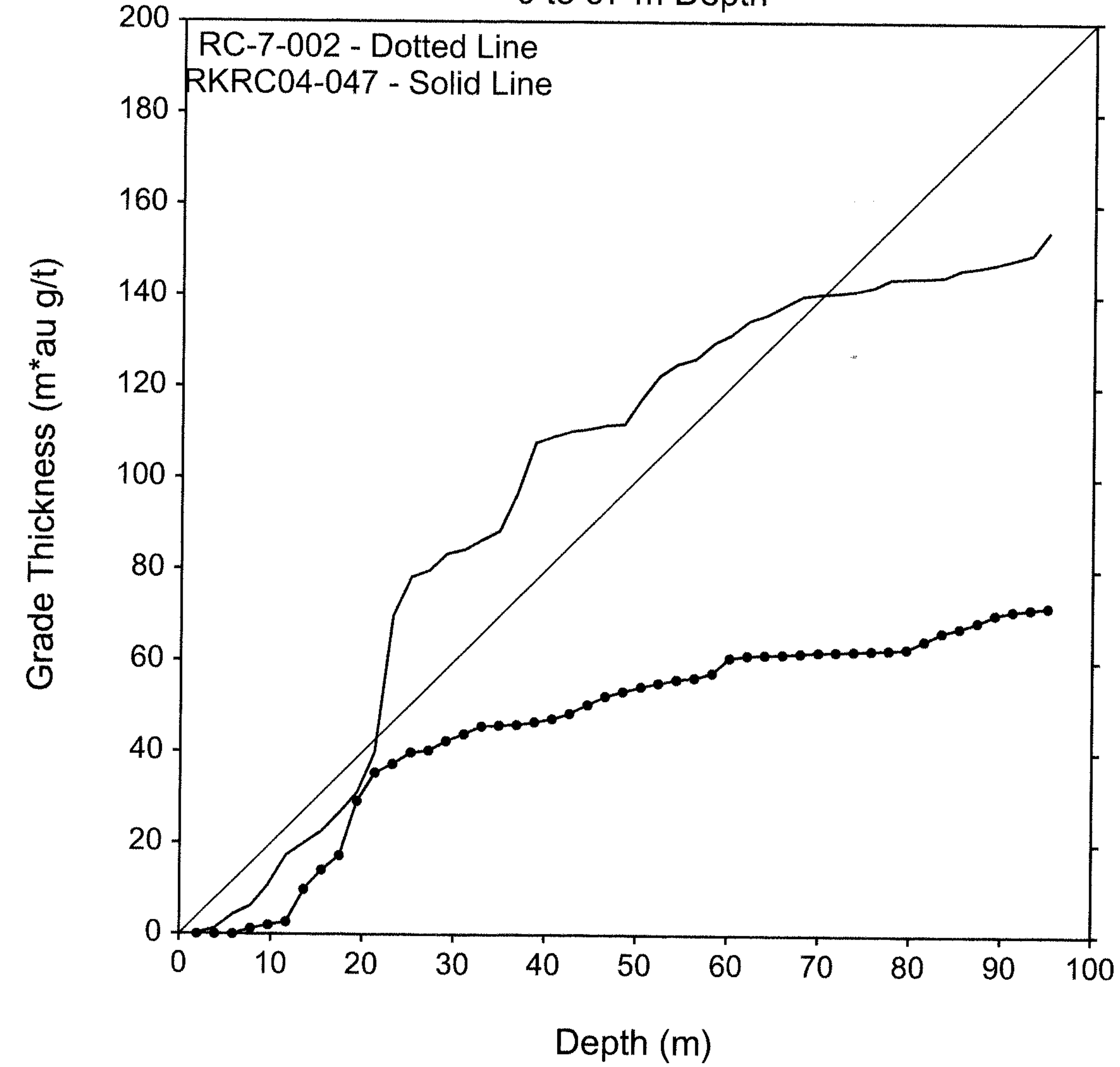


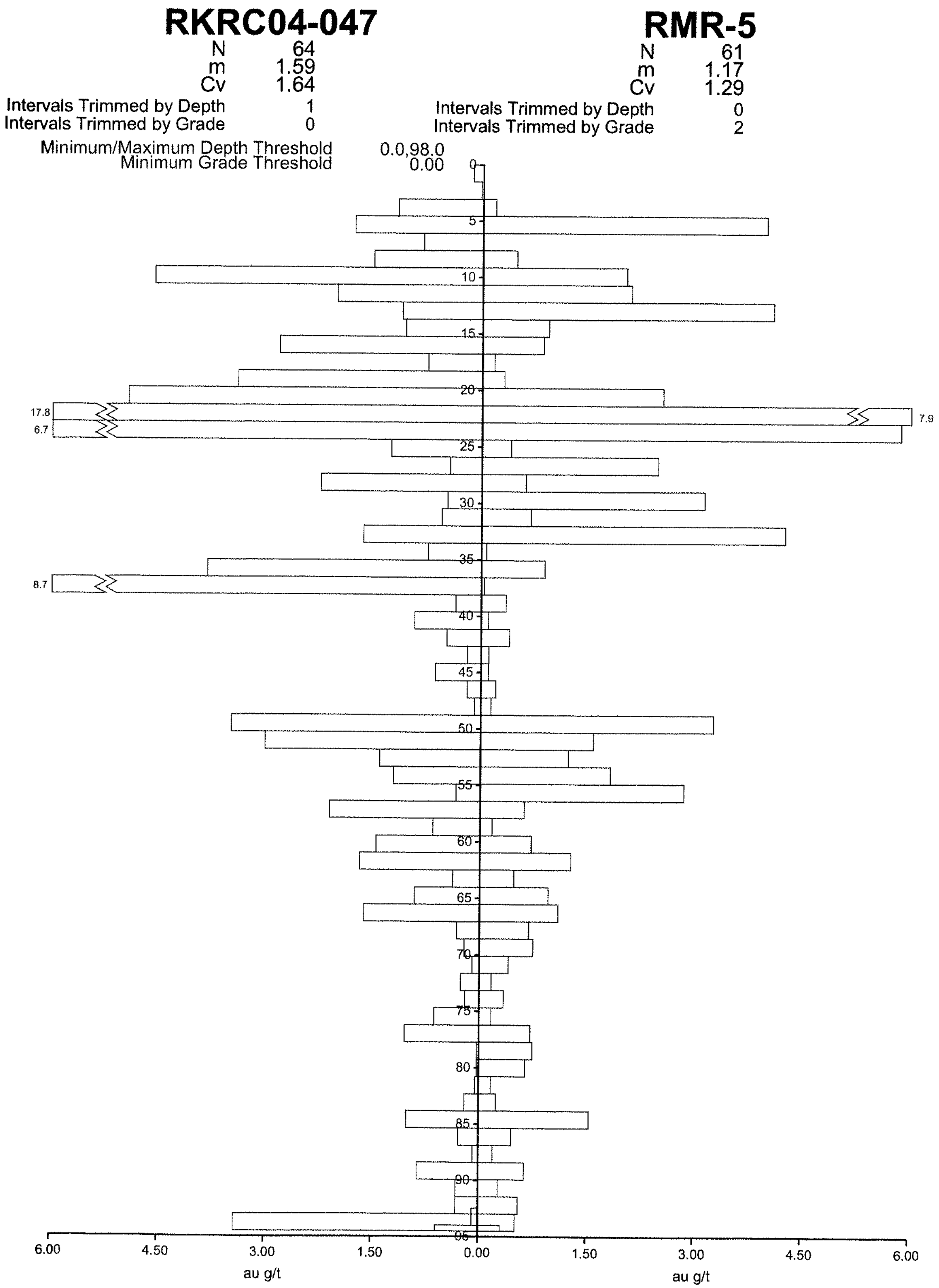
Horiz. Separation



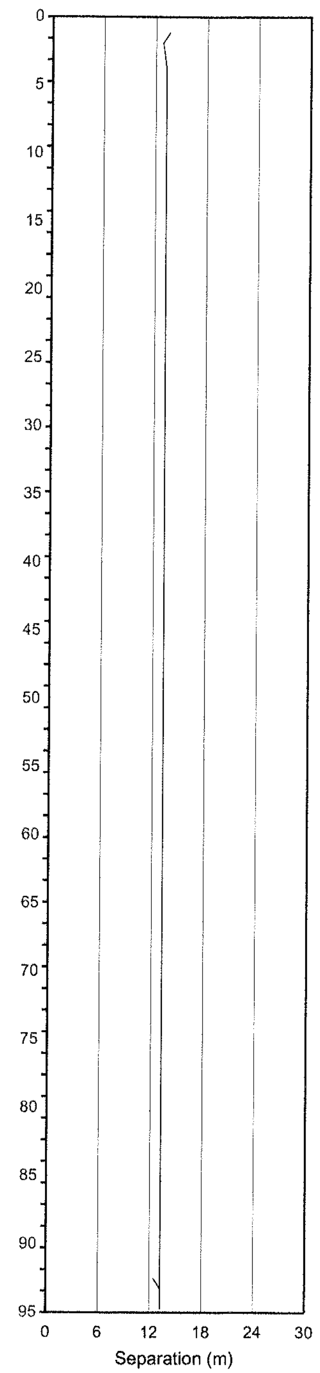
Cumulative Grade Thickness

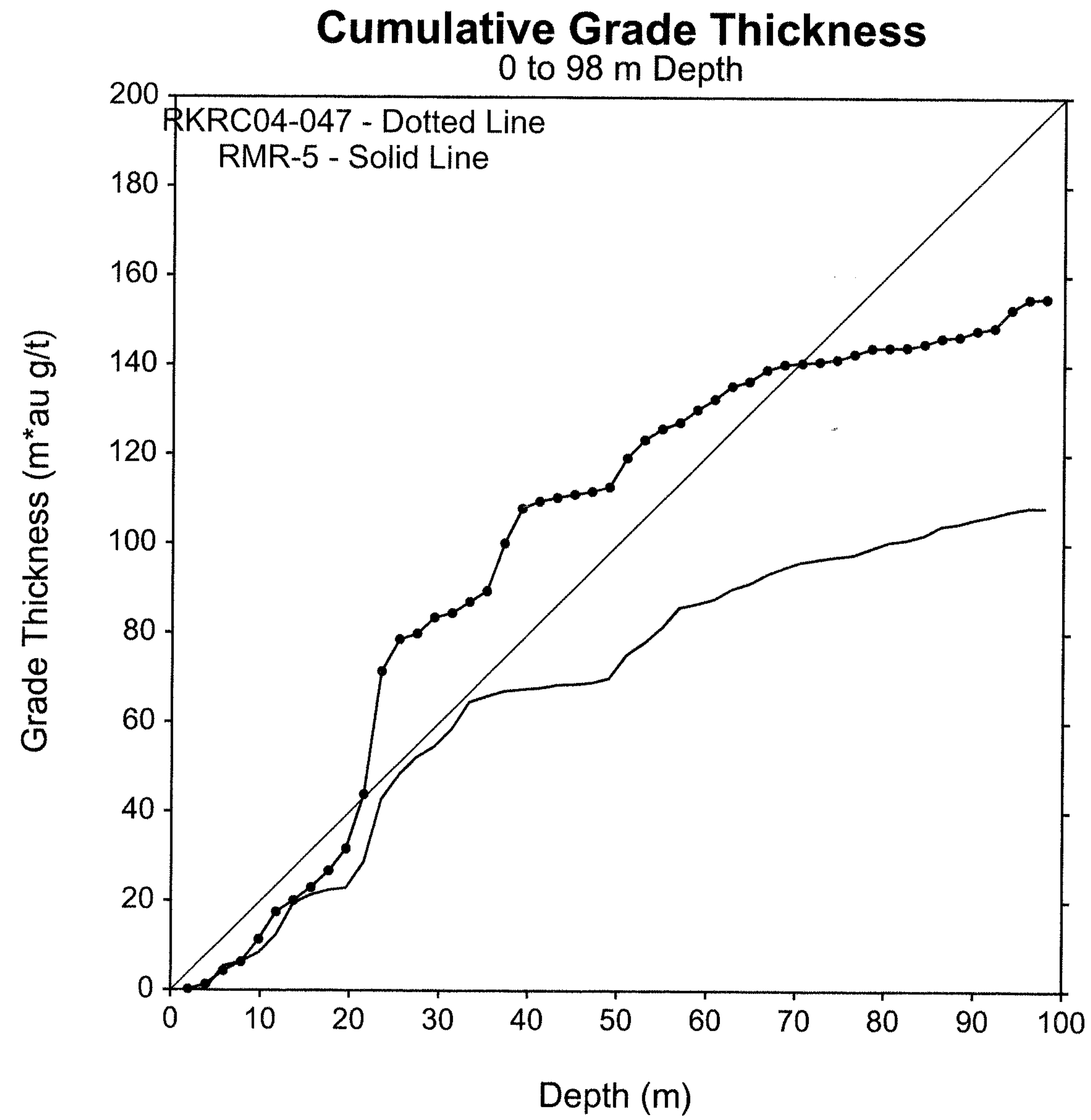
0 to 97 m Depth





Horiz. Separation





10 A

A A

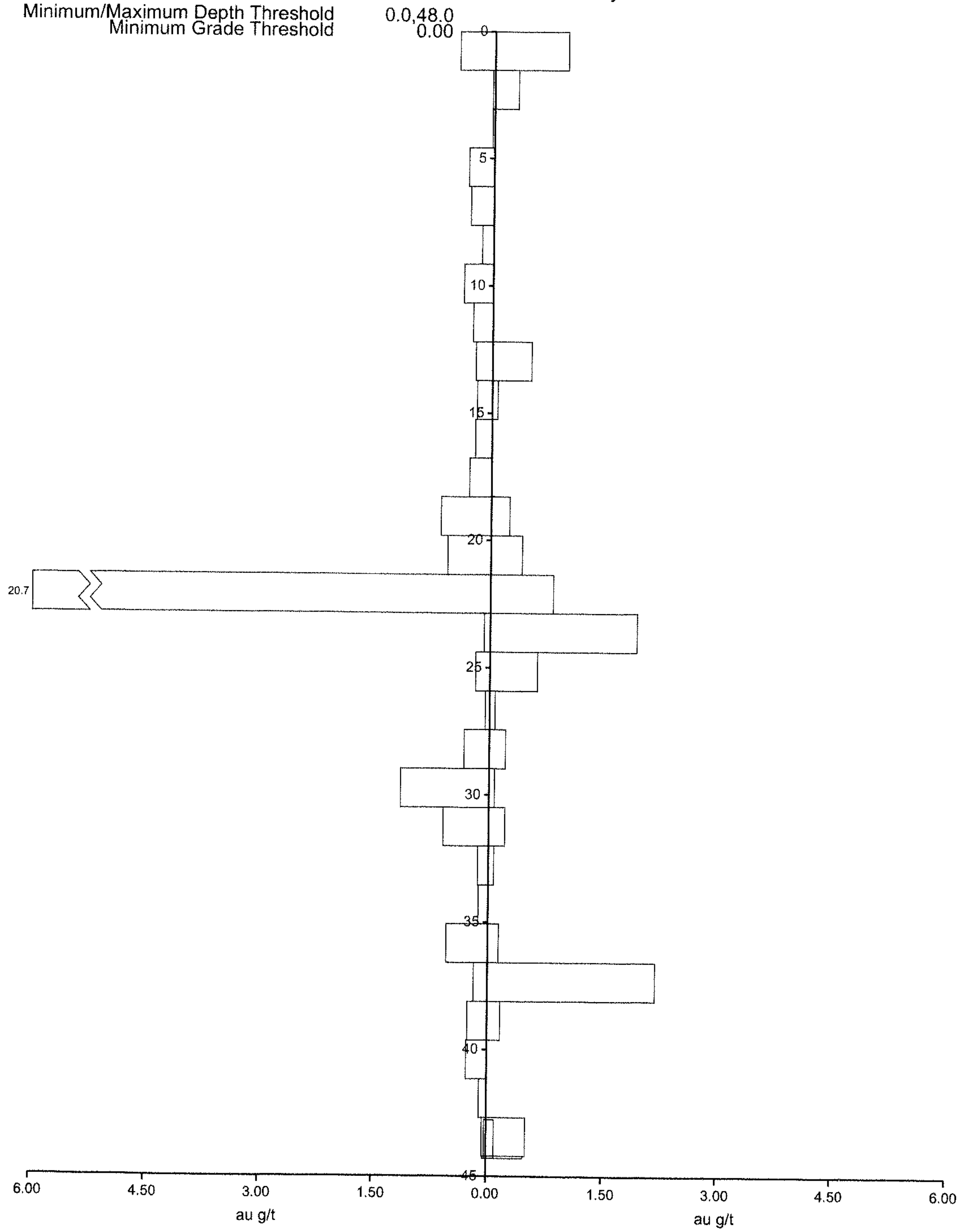
CORE RC

RCC-4-01

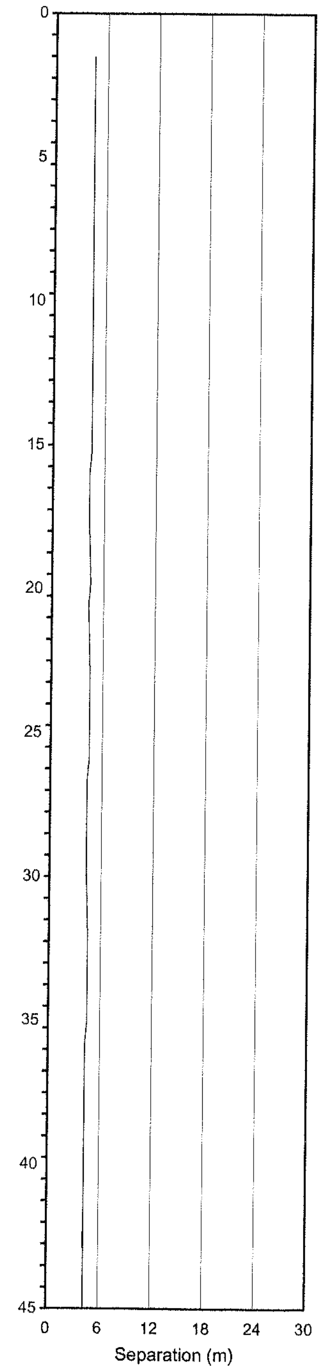
N	31
m	0.93
Cv	3.87
Intervals Trimmed by Depth	39
Intervals Trimmed by Grade	0
Minimum/Maximum Depth Threshold	0.0,48.0
Minimum Grade Threshold	0.00

RCR-4-22

N	20
m	0.50
Cv	1.14
Intervals Trimmed by Depth	0
Intervals Trimmed by Grade	12

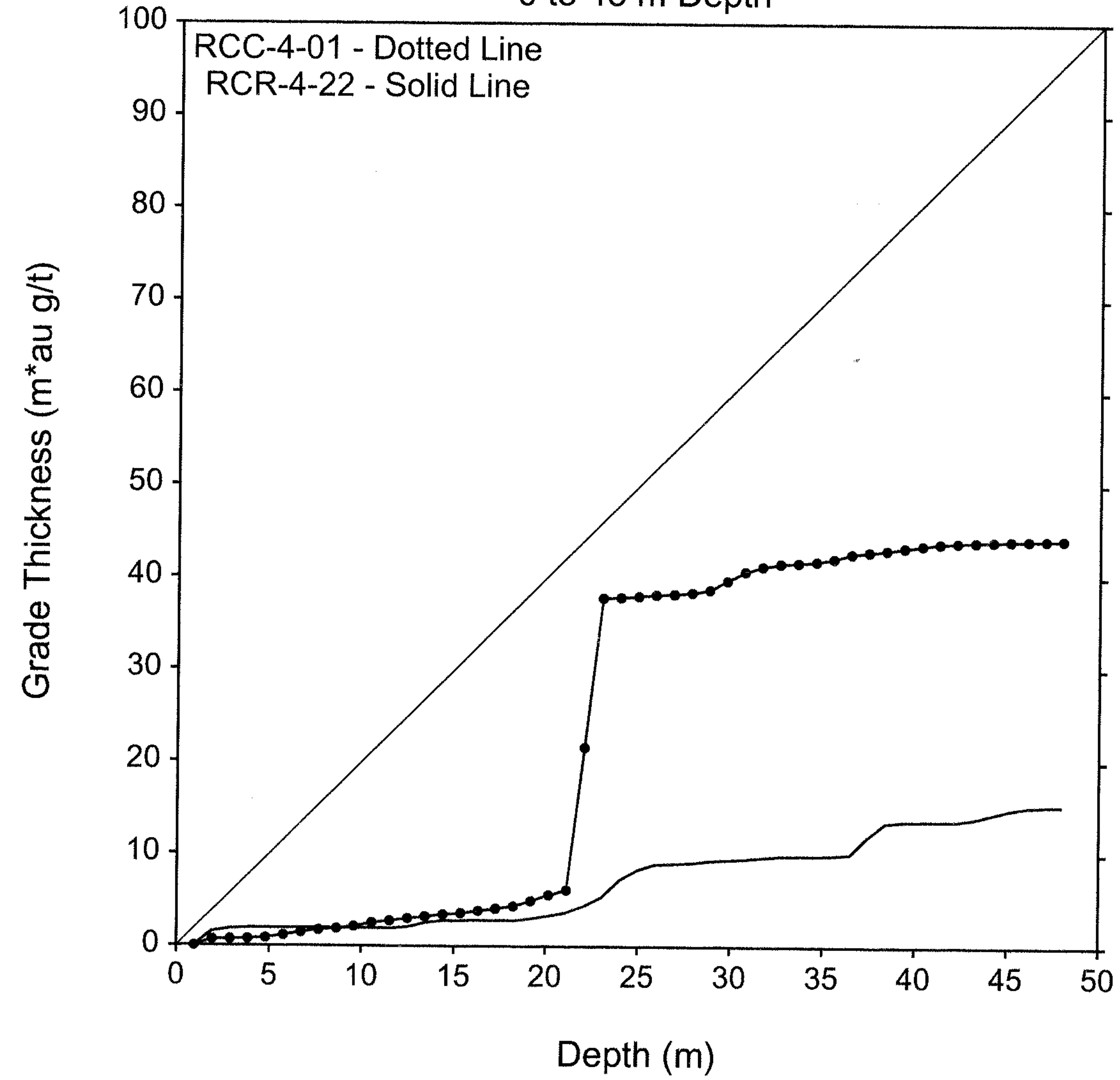


Horiz. Separation



Cumulative Grade Thickness

0 to 48 m Depth



10 B

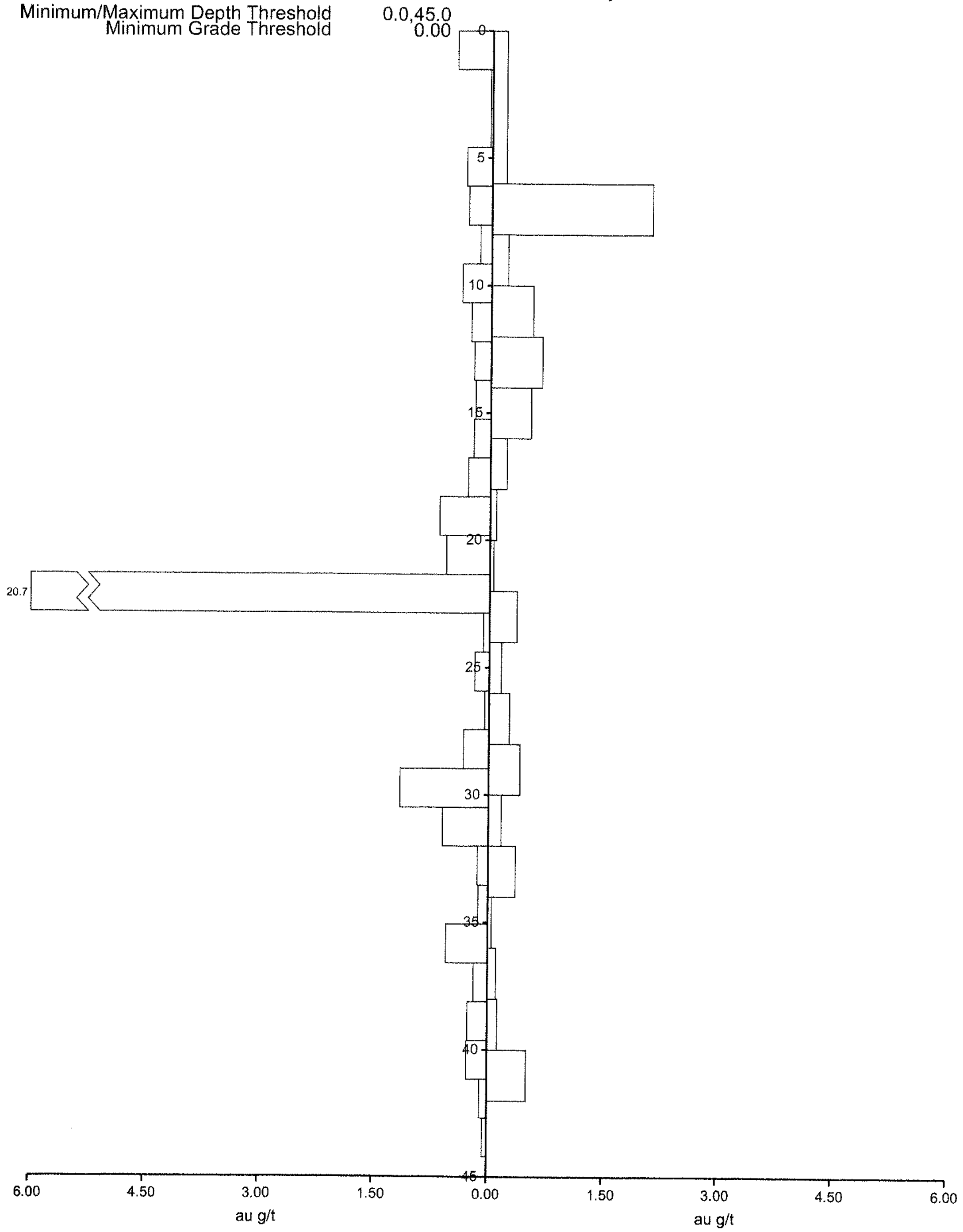
A A

RCC-4-01

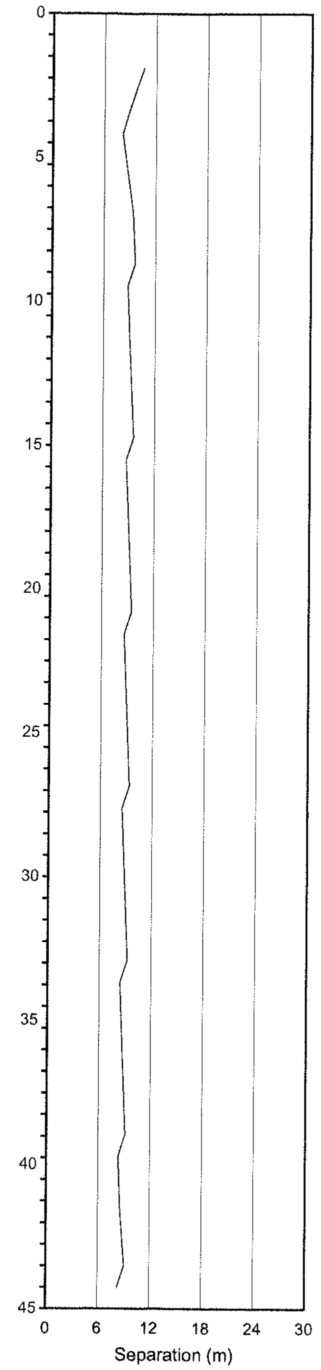
N	29
m	1.00
Cv	3.75
Intervals Trimmed by Depth	41
Intervals Trimmed by Grade	0
Minimum/Maximum Depth Threshold	0.0,45.0
Minimum Grade Threshold	0.00

RKDC04-256

N	19
m	0.36
Cv	1.19
Intervals Trimmed by Depth	1
Intervals Trimmed by Grade	0

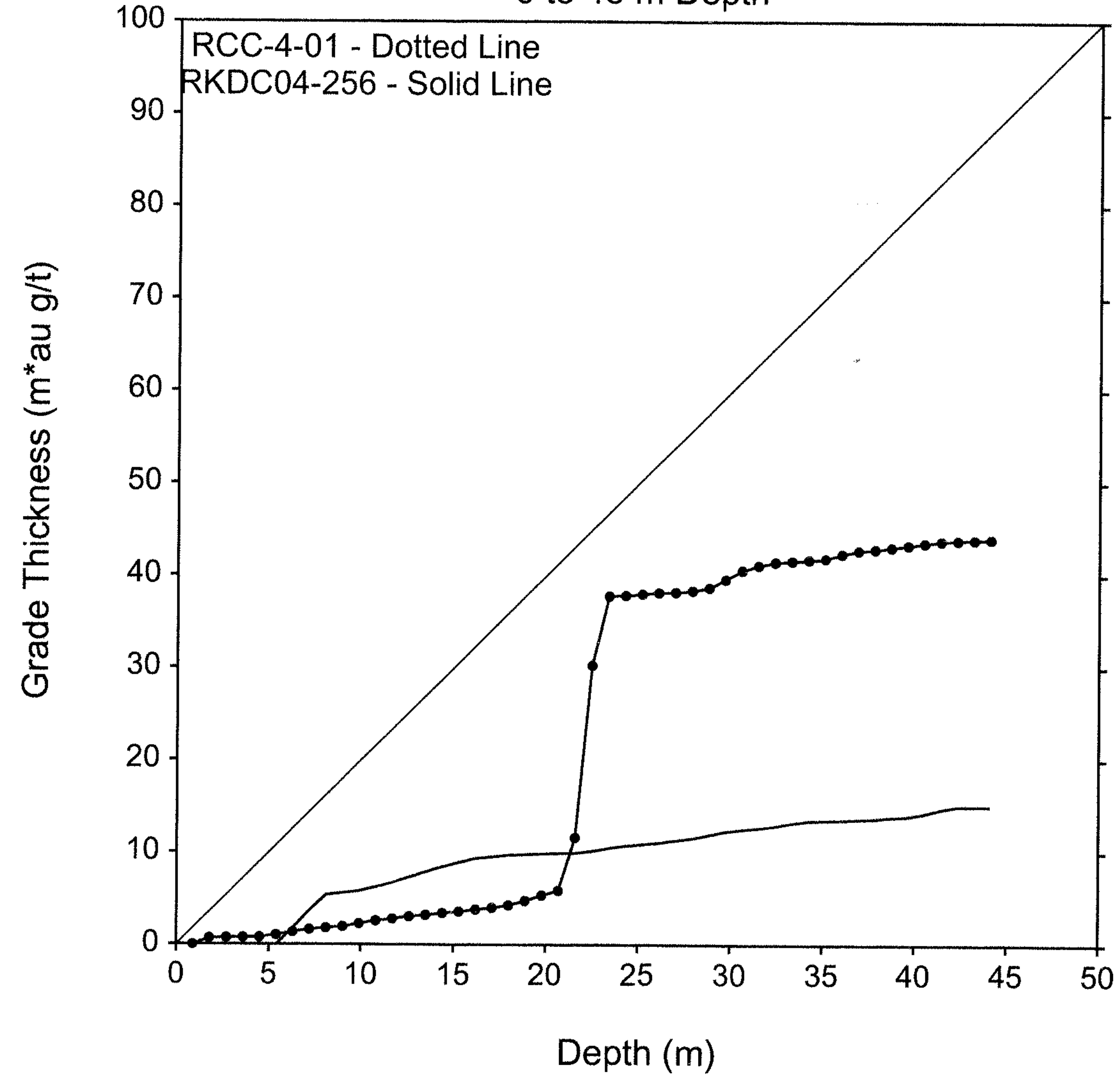


Horiz. Separation



Cumulative Grade Thickness

0 to 45 m Depth



10 C

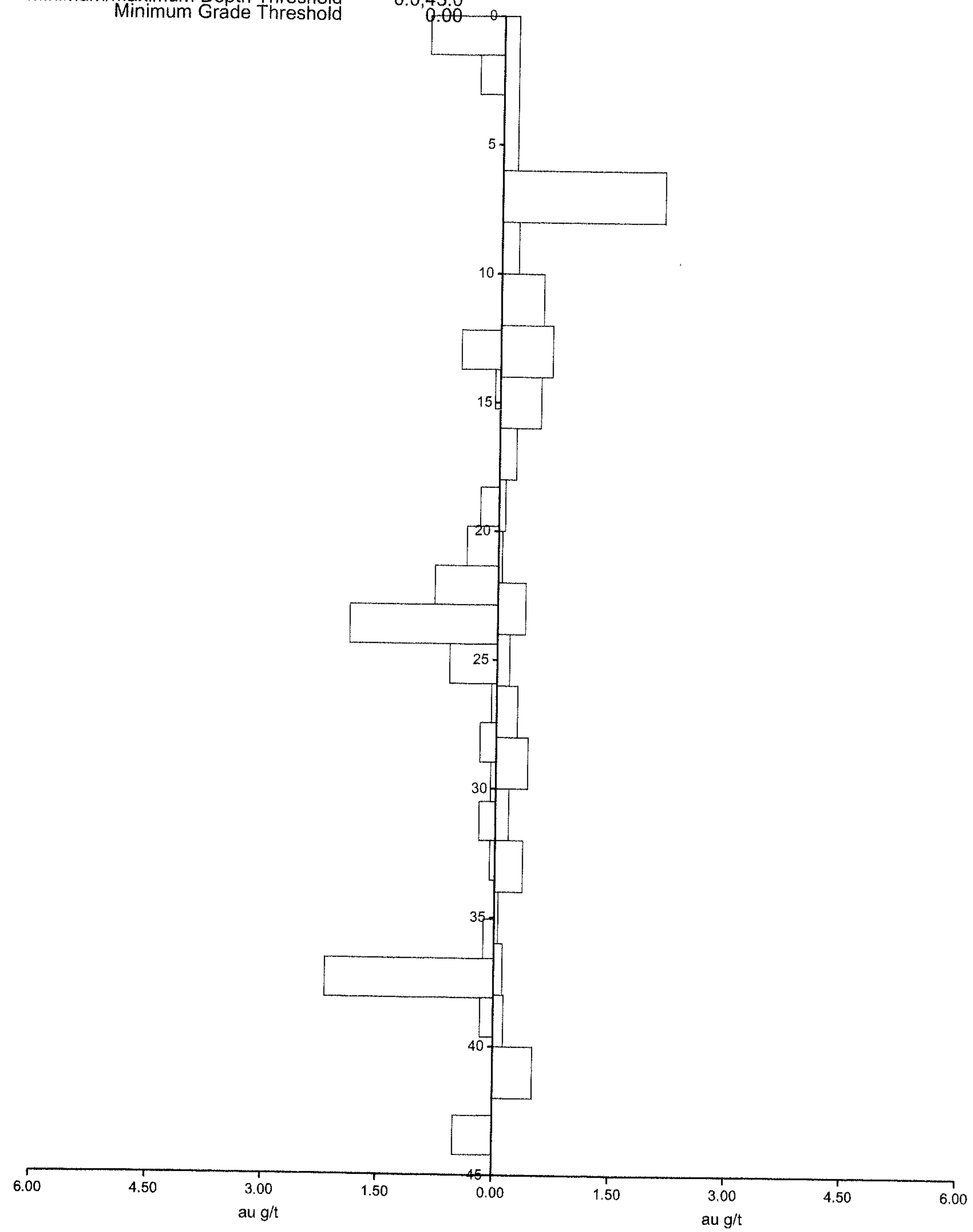
A A

RCR-4-22

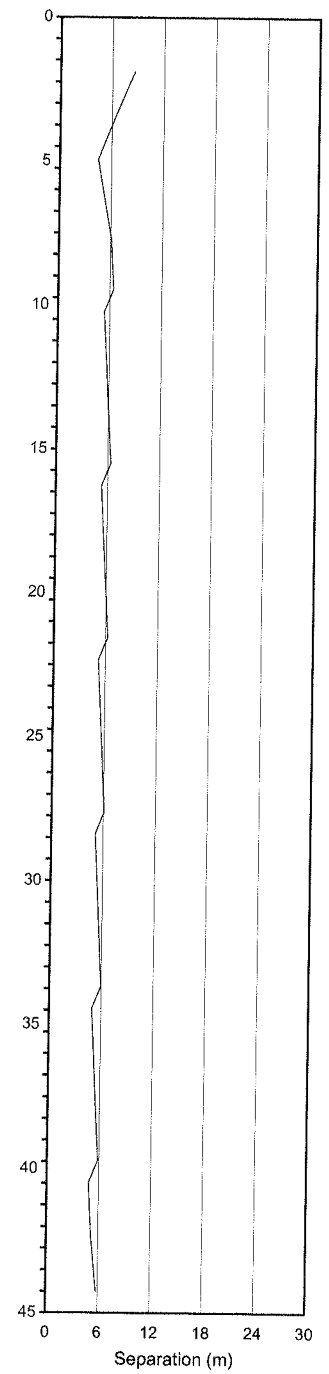
N 18
m 0.53
Cv 1.13
Intervals Trimmed by Depth 3
Intervals Trimmed by Grade 11
Minimum/Maximum Depth Threshold 0.0,45.0
Minimum Grade Threshold 0.00

RKDC04-256

N 19
m 0.36
Cv 1.19
Intervals Trimmed by Depth 1
Intervals Trimmed by Grade 0

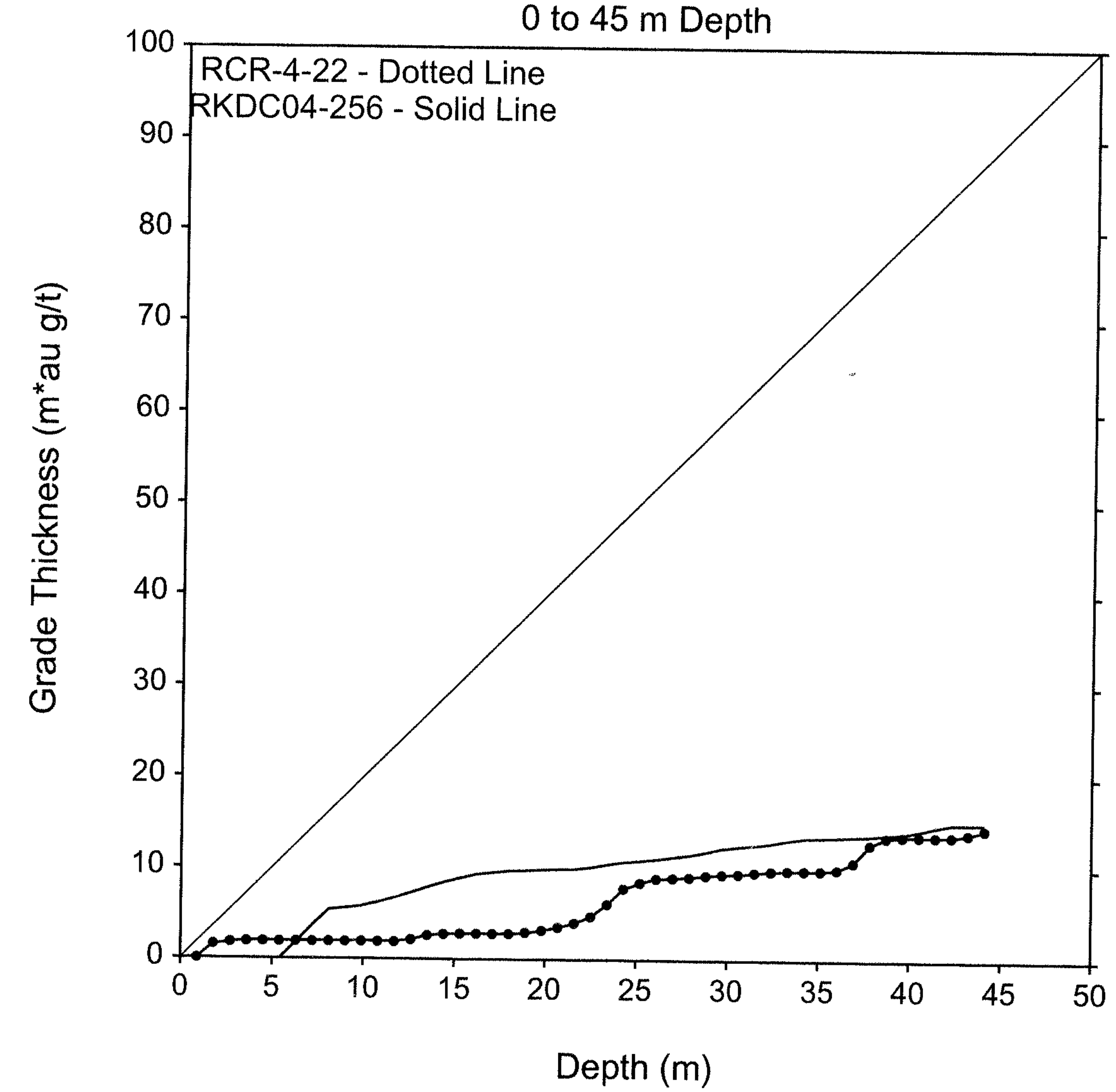


Horiz. Separation



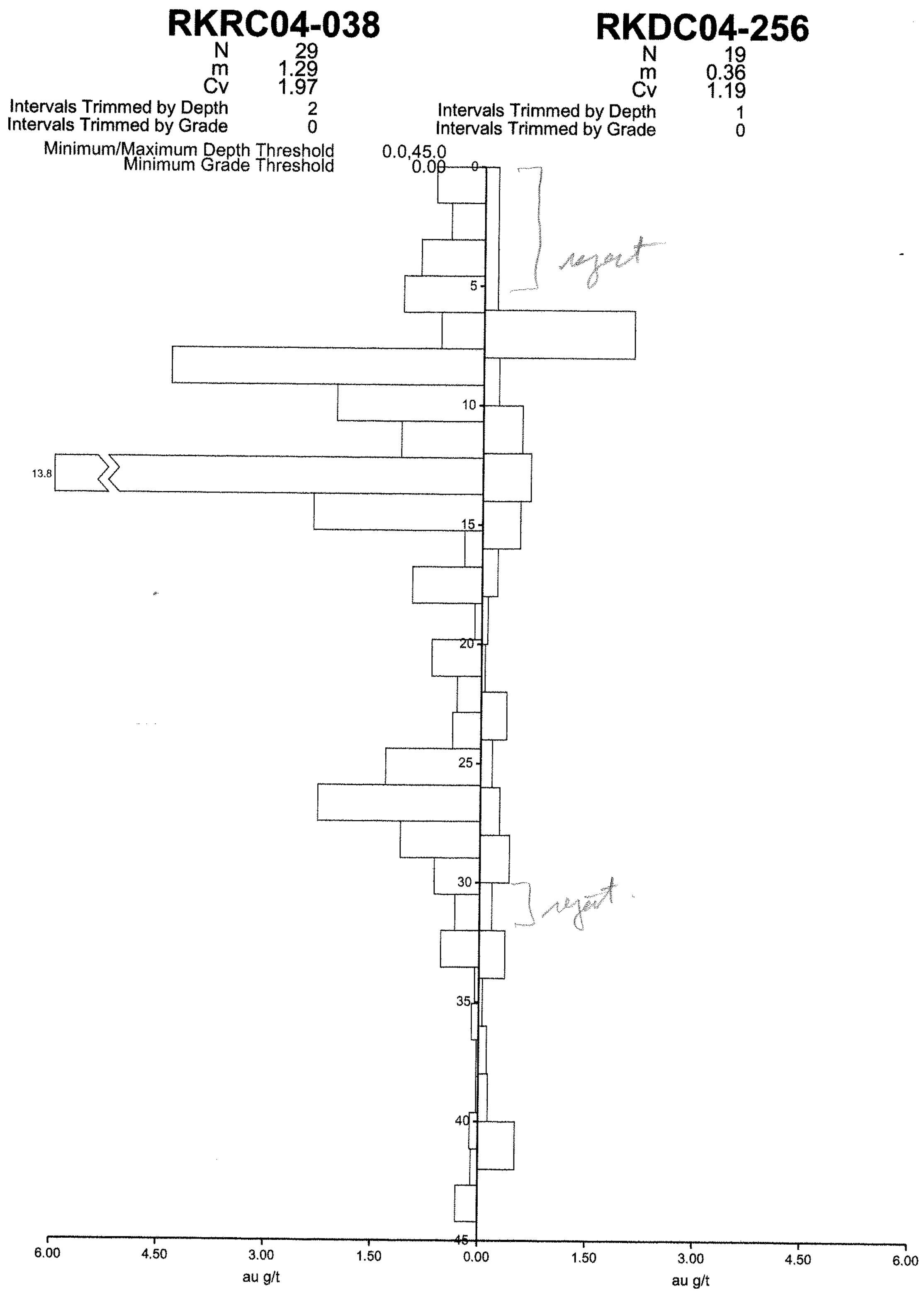
Cumulative Grade Thickness

0 to 45 m Depth

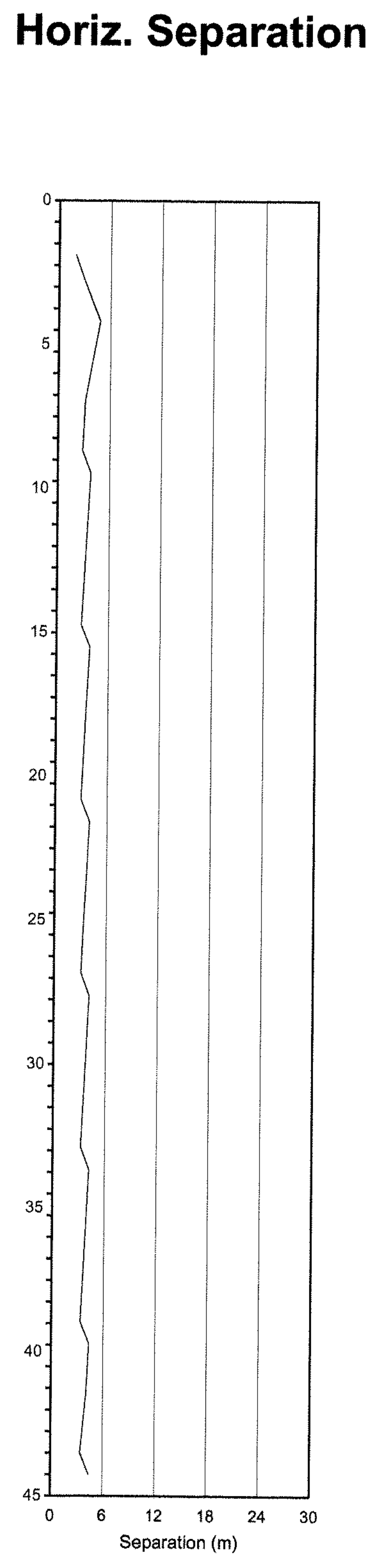


10 D

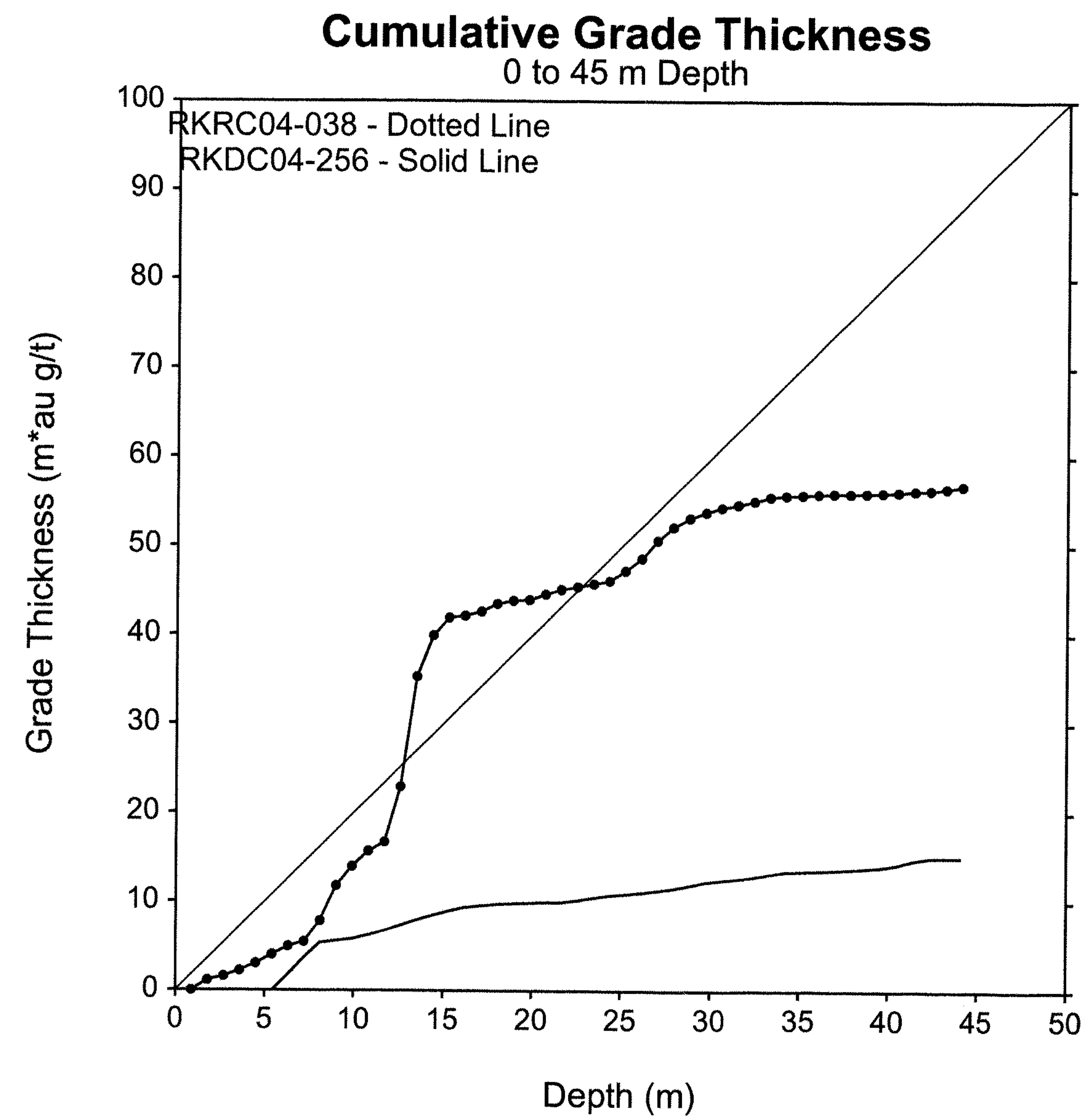
B B



RKRC04-038
N 29
m 1.29
Cv 1.97
Intervals Trimmed by Depth 2
Intervals Trimmed by Grade 0
Minimum/Maximum Depth Threshold 0.0,45.0
Minimum Grade Threshold 0.00
RKDC04-256
N 19
m 0.36
Cv 1.19
Intervals Trimmed by Depth 1
Intervals Trimmed by Grade 0
13.8
reject
reject
6.00 4.50 3.00 1.50 0.00 1.50 3.00 4.50 6.00
au g/t
au g/t



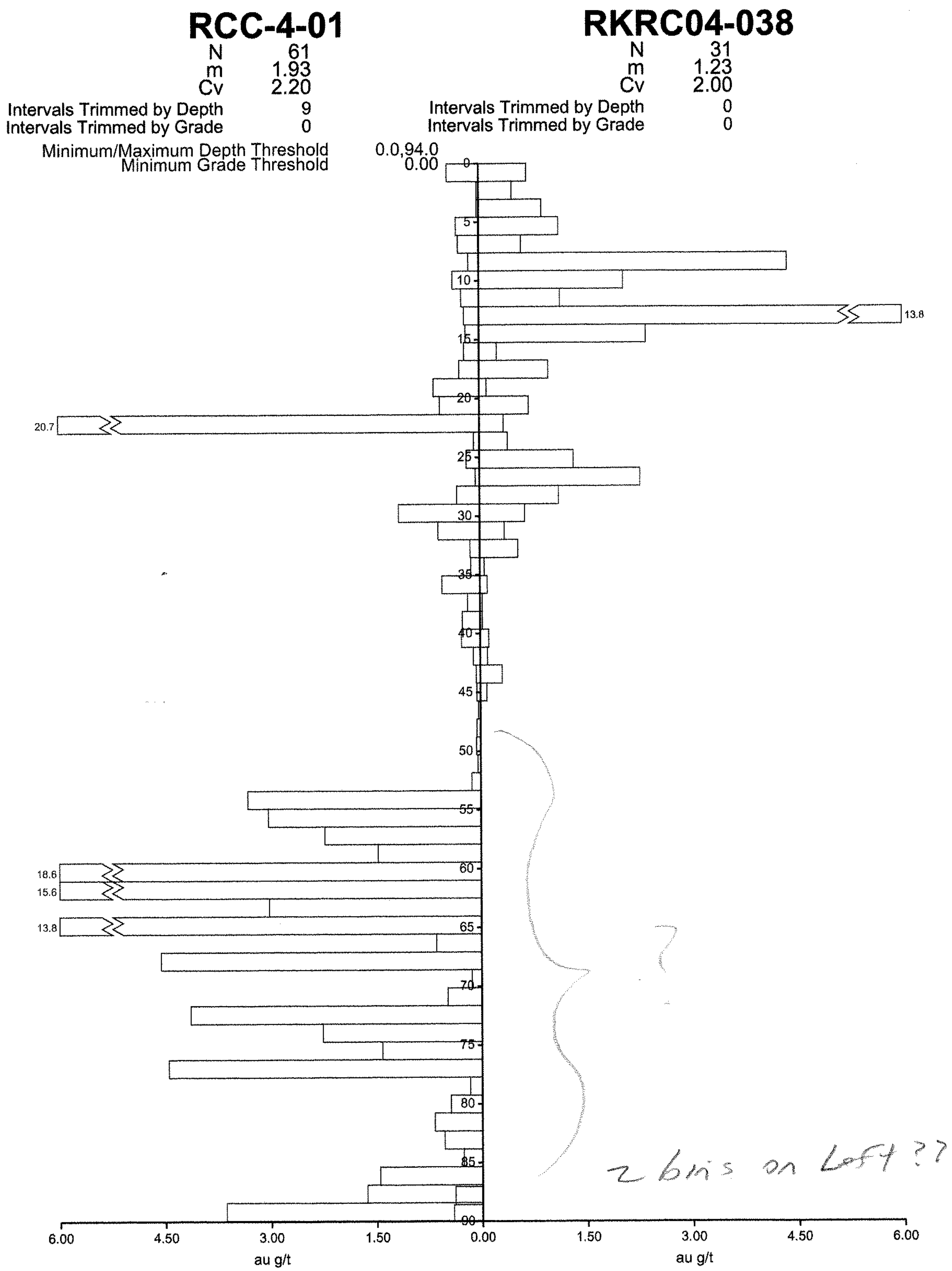
Horiz. Separation
0 6 12 18 24 30
Separation (m)

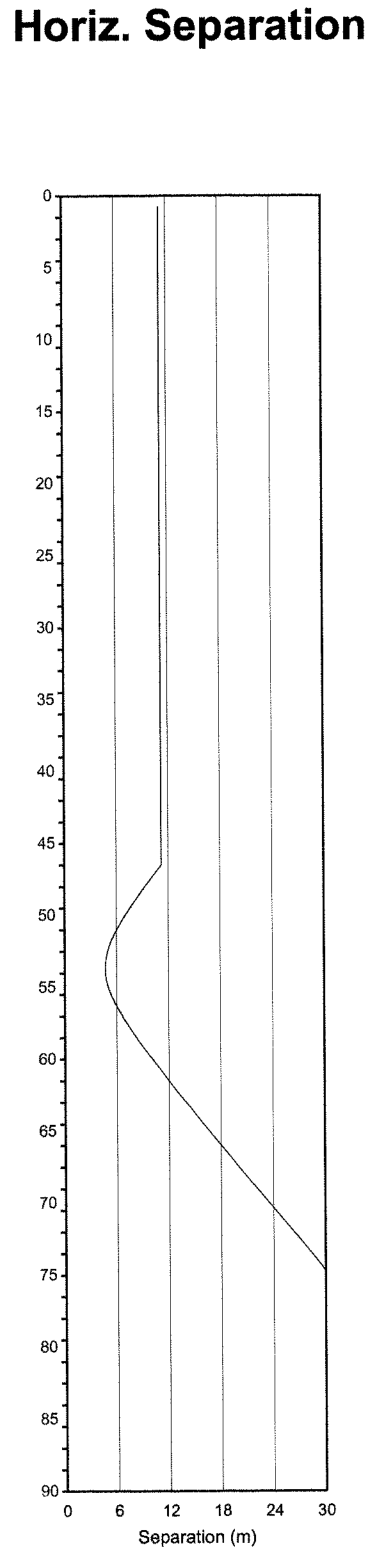


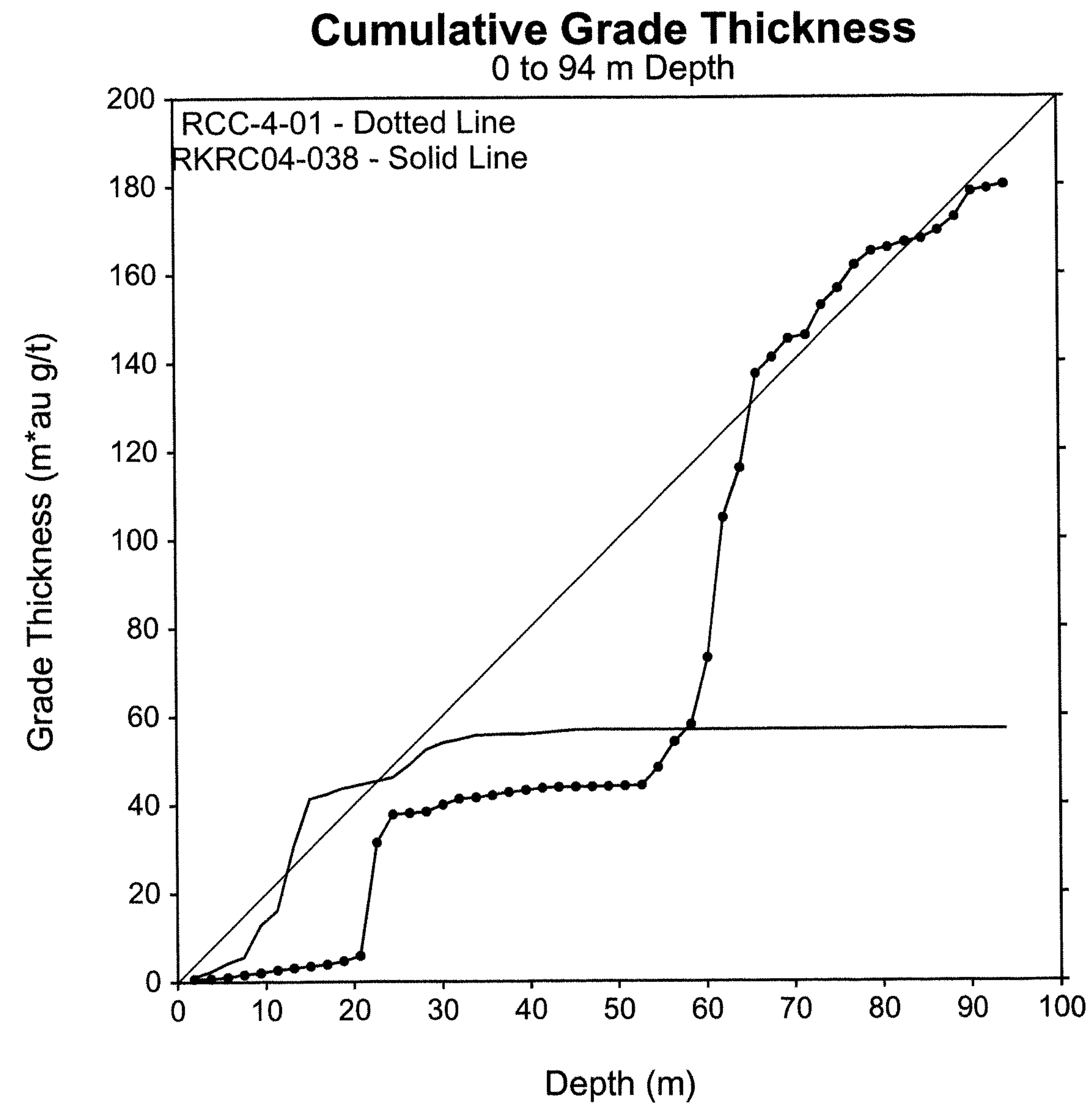
Cumulative Grade Thickness
0 to 45 m Depth
RKRC04-038 - Dotted Line
RKDC04-256 - Solid Line
Grade Thickness (m*au g/t)
Depth (m)

10 E

A A


RCC-4-01
N 61
m 1.93
Cv 2.20
Intervals Trimmed by Depth 9
Intervals Trimmed by Grade 0
Minimum/Maximum Depth Threshold 0.0,94.0
Minimum Grade Threshold 0.00
RKRC04-038
N 31
m 1.23
Cv 2.00
Intervals Trimmed by Depth 0
Intervals Trimmed by Grade 0
20.7
13.8
18.6
15.6
13.8
6.00 4.50 3.00 1.50 0.00 1.50 3.00 4.50 6.00
au g/t
au g/t
2 bars on Left ??


Horiz. Separation
0 6 12 18 24 30
Separation (m)


Cumulative Grade Thickness
0 to 94 m Depth
RCC-4-01 - Dotted Line
RKRC04-038 - Solid Line
Grade Thickness (m*au g/t)
Depth (m)

10 F

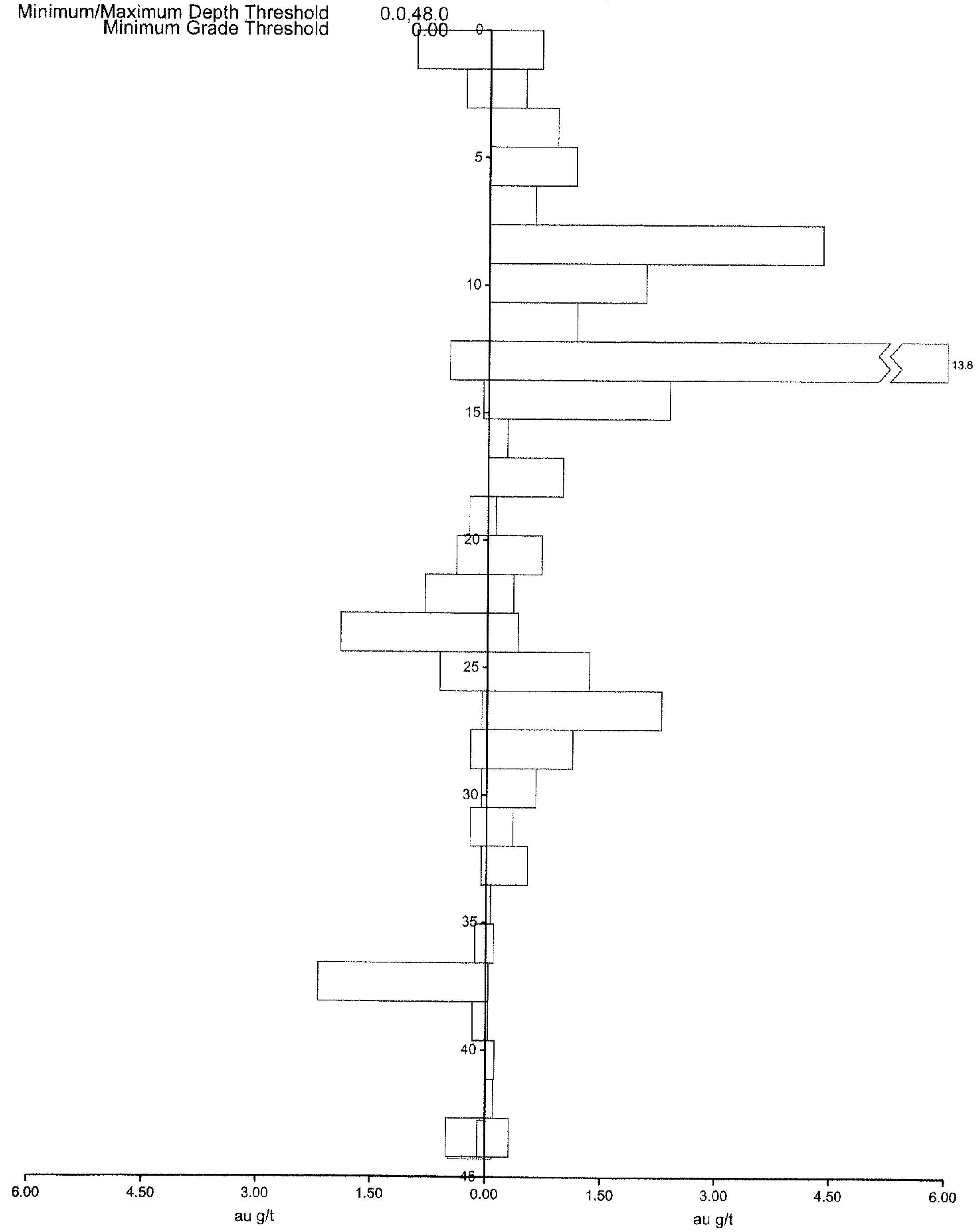
B

RCR-4-22

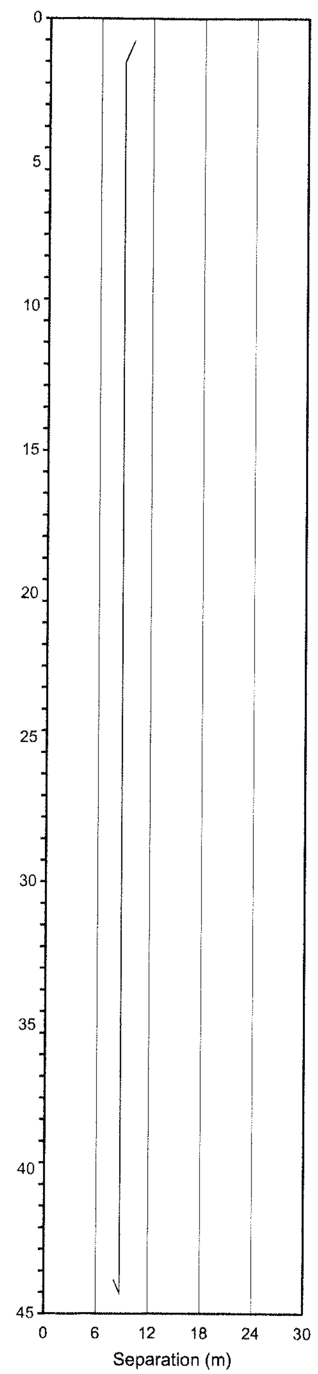
N	20
m	0.50
Cv	1.14
Intervals Trimmed by Depth	0
Intervals Trimmed by Grade	12
Minimum/Maximum Depth Threshold	0.0,48.0
Minimum Grade Threshold	0.00

RKRC04-038

N	31
m	1.23
Cv	2.00
Intervals Trimmed by Depth	0
Intervals Trimmed by Grade	0

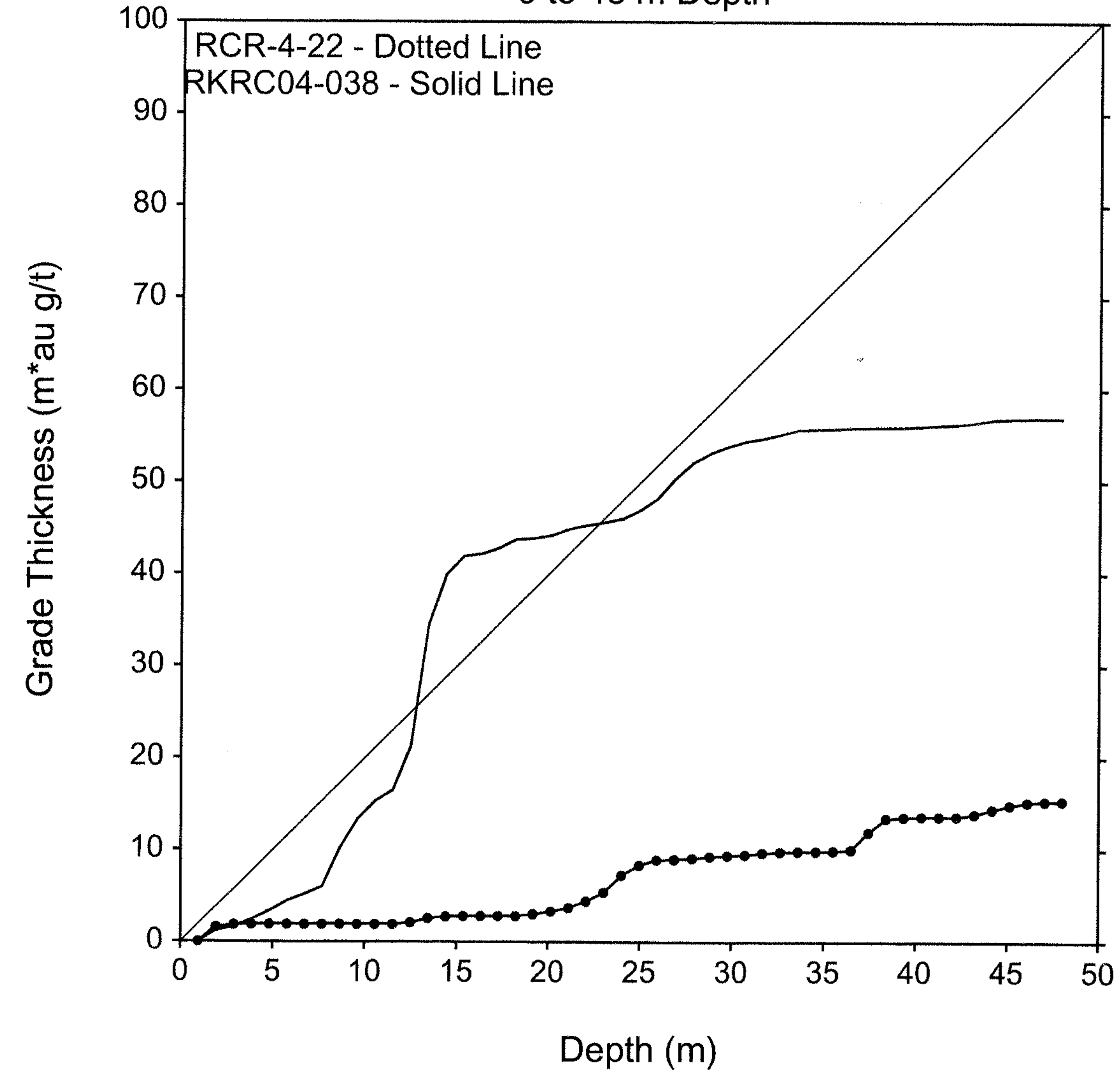


Horiz. Separation



Cumulative Grade Thickness

0 to 48 m Depth



11 A

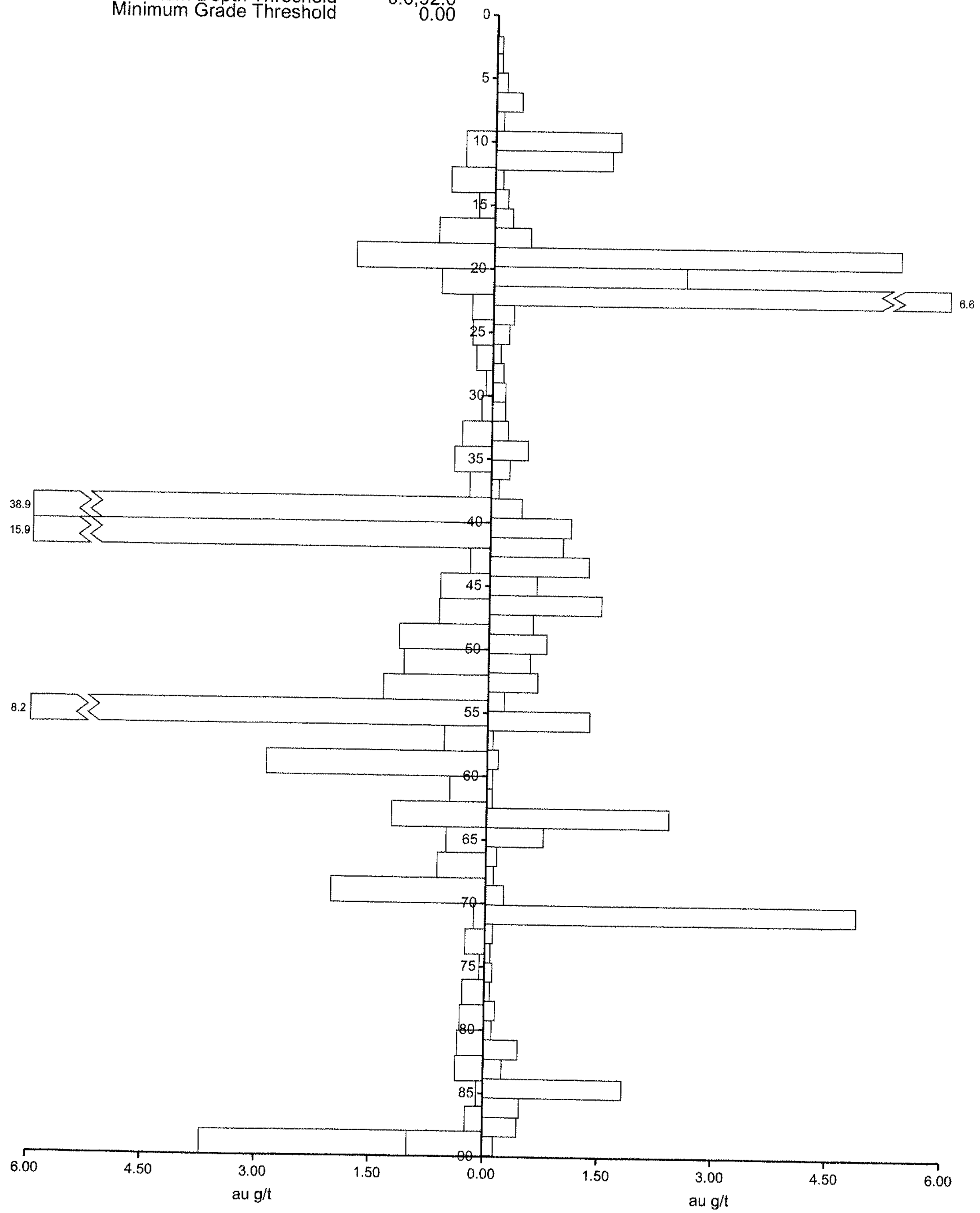
A A

RKDC03-203

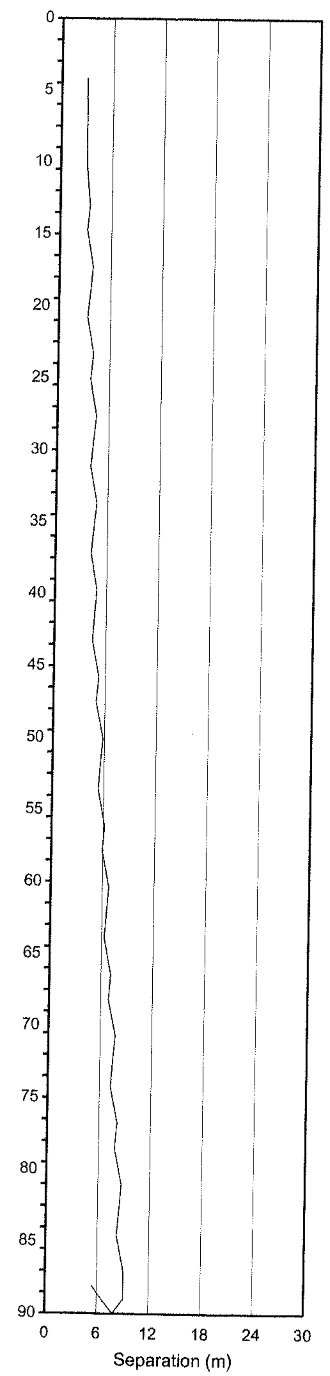
N 41
m 2.18
Cv 2.92
Intervals Trimmed by Depth 19
Intervals Trimmed by Grade 1
Minimum/Maximum Depth Threshold 0.0,92.0
Minimum Grade Threshold 0.00

RC-7-009

N 60
m 0.74
Cv 1.70
Intervals Trimmed by Depth 0
Intervals Trimmed by Grade 0

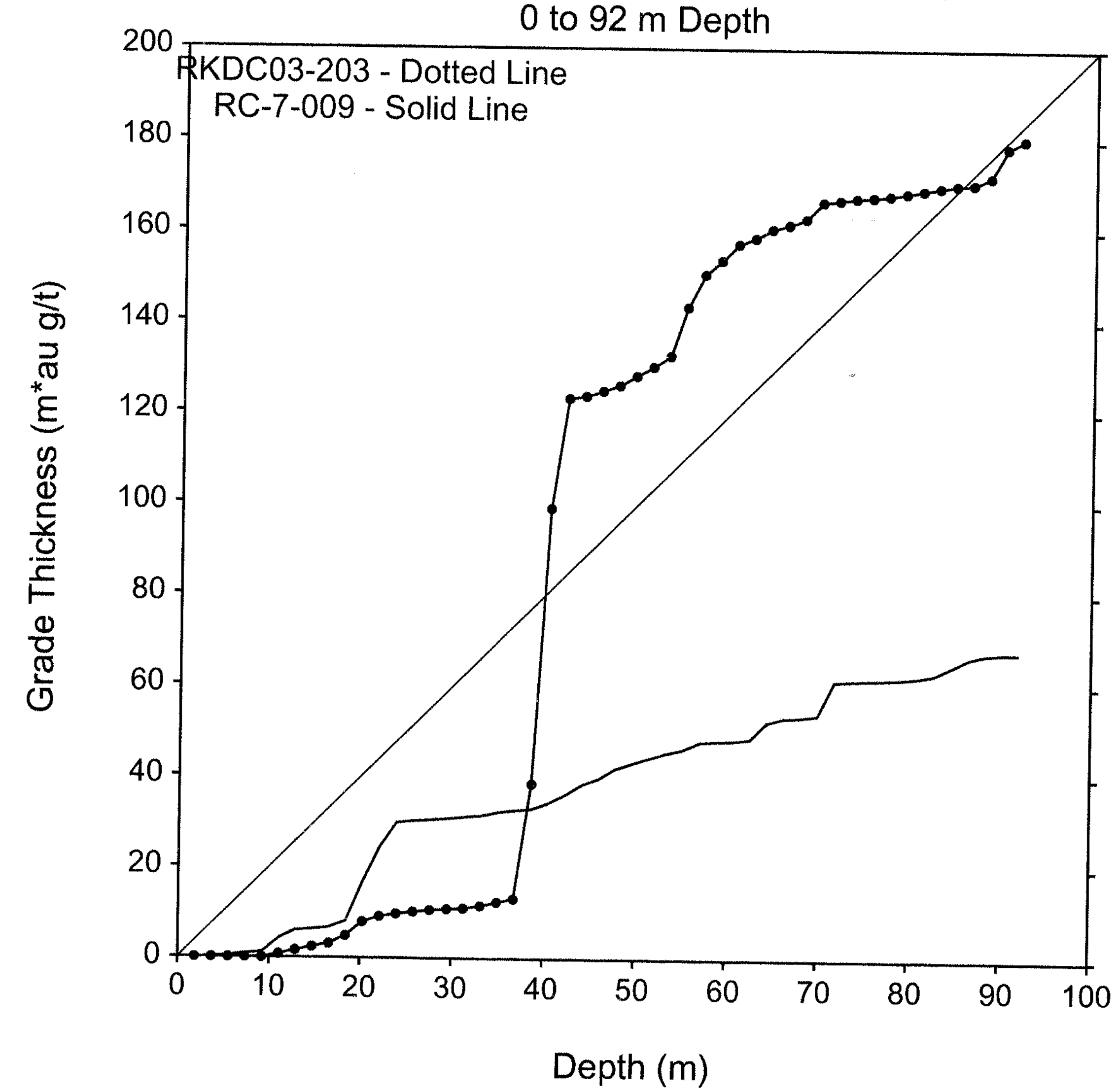


Horiz. Separation



Cumulative Grade Thickness

0 to 92 m Depth



11 B
A A

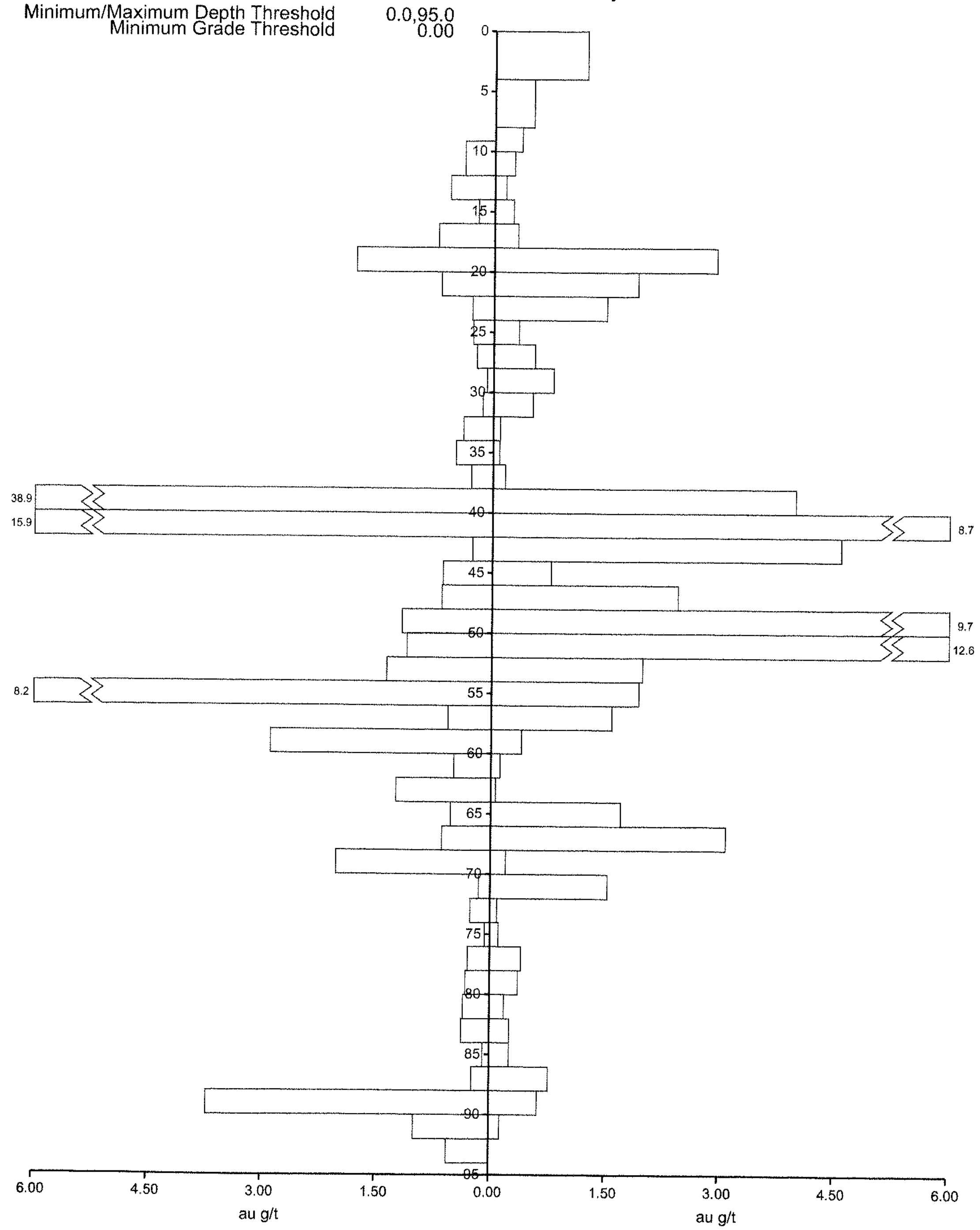
RKDC03-203

N	42
m	2.14
Cv	2.94
Intervals Trimmed by Depth	18
Intervals Trimmed by Grade	1

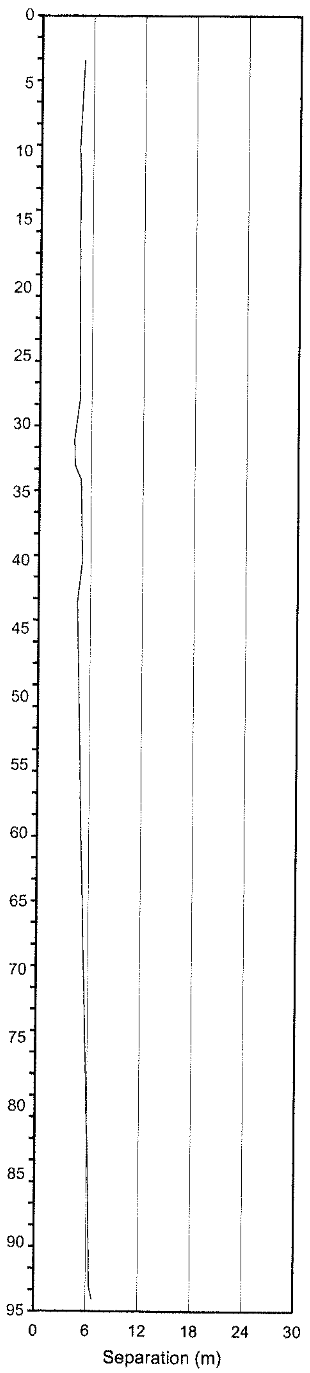
Minimum/Maximum Depth Threshold 0.0,95.0
Minimum Grade Threshold 0.00

RKDC04-235

N	45
m	1.54
Cv	1.65
Intervals Trimmed by Depth	0
Intervals Trimmed by Grade	0

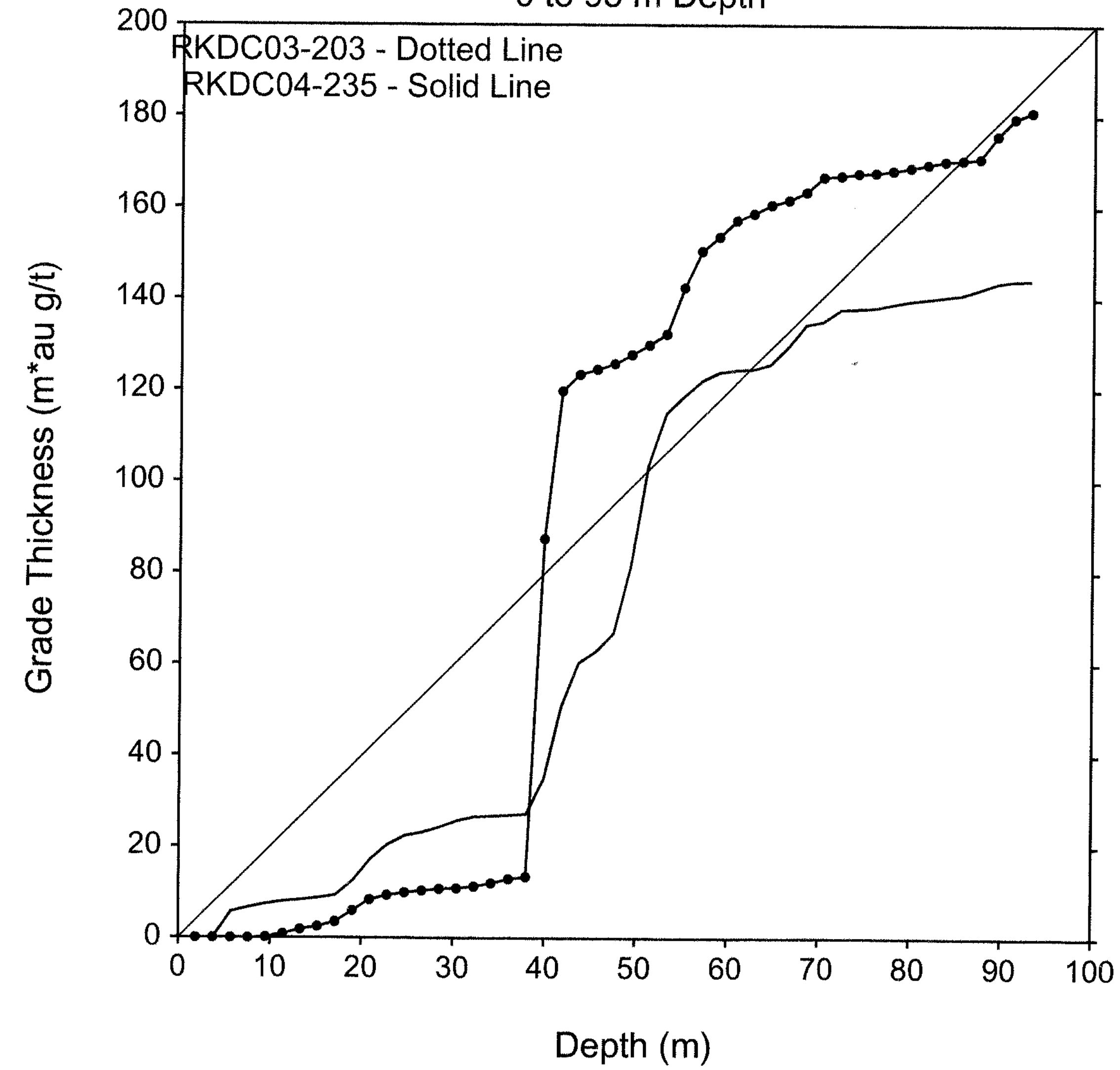


Horiz. Separation



Cumulative Grade Thickness

0 to 95 m Depth



11 C
B+

RC

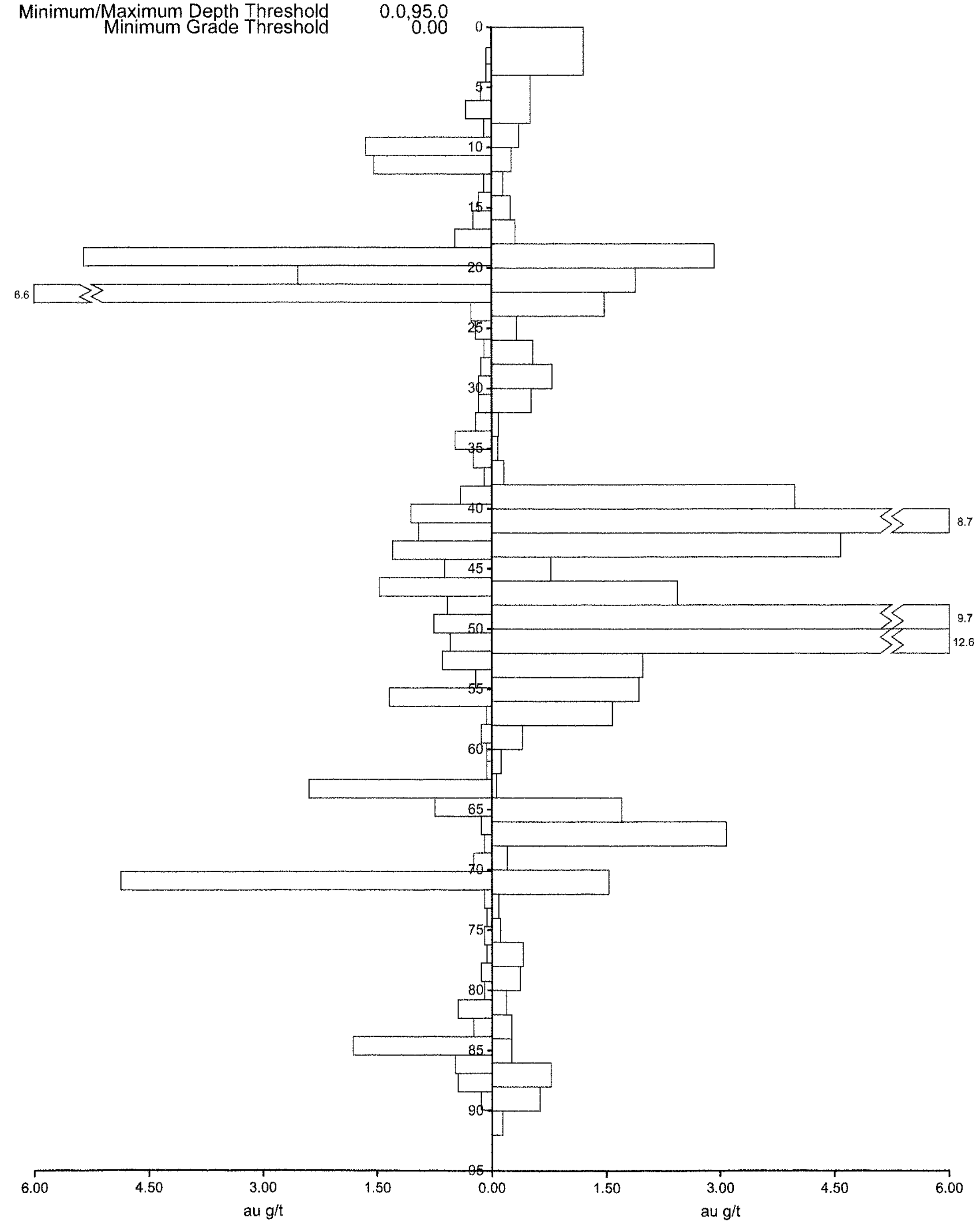
RC-7-009

N 60
m 0.74
Cv 1.70
Intervals Trimmed by Depth 0
Intervals Trimmed by Grade 0
Minimum/Maximum Depth Threshold 0.0,95.0
Minimum Grade Threshold 0.00

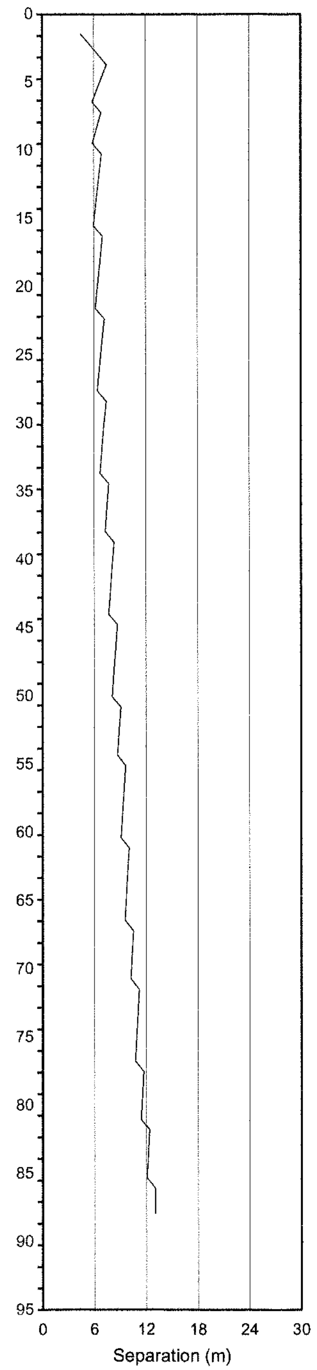
CORE

RKDC04-235

N 45
m 1.54
Cv 1.65
Intervals Trimmed by Depth 0
Intervals Trimmed by Grade 0

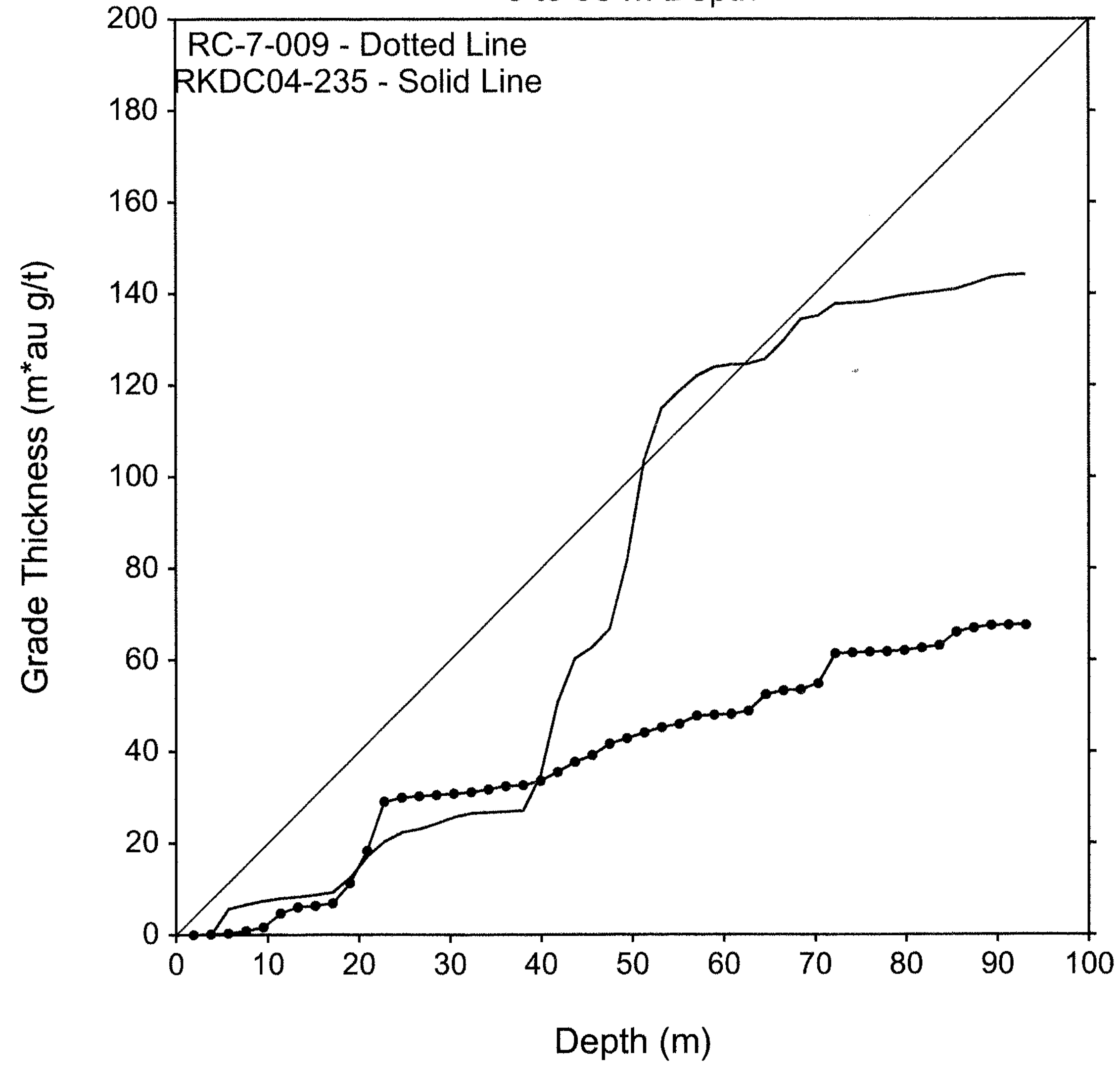


Horiz. Separation



Cumulative Grade Thickness

0 to 95 m Depth



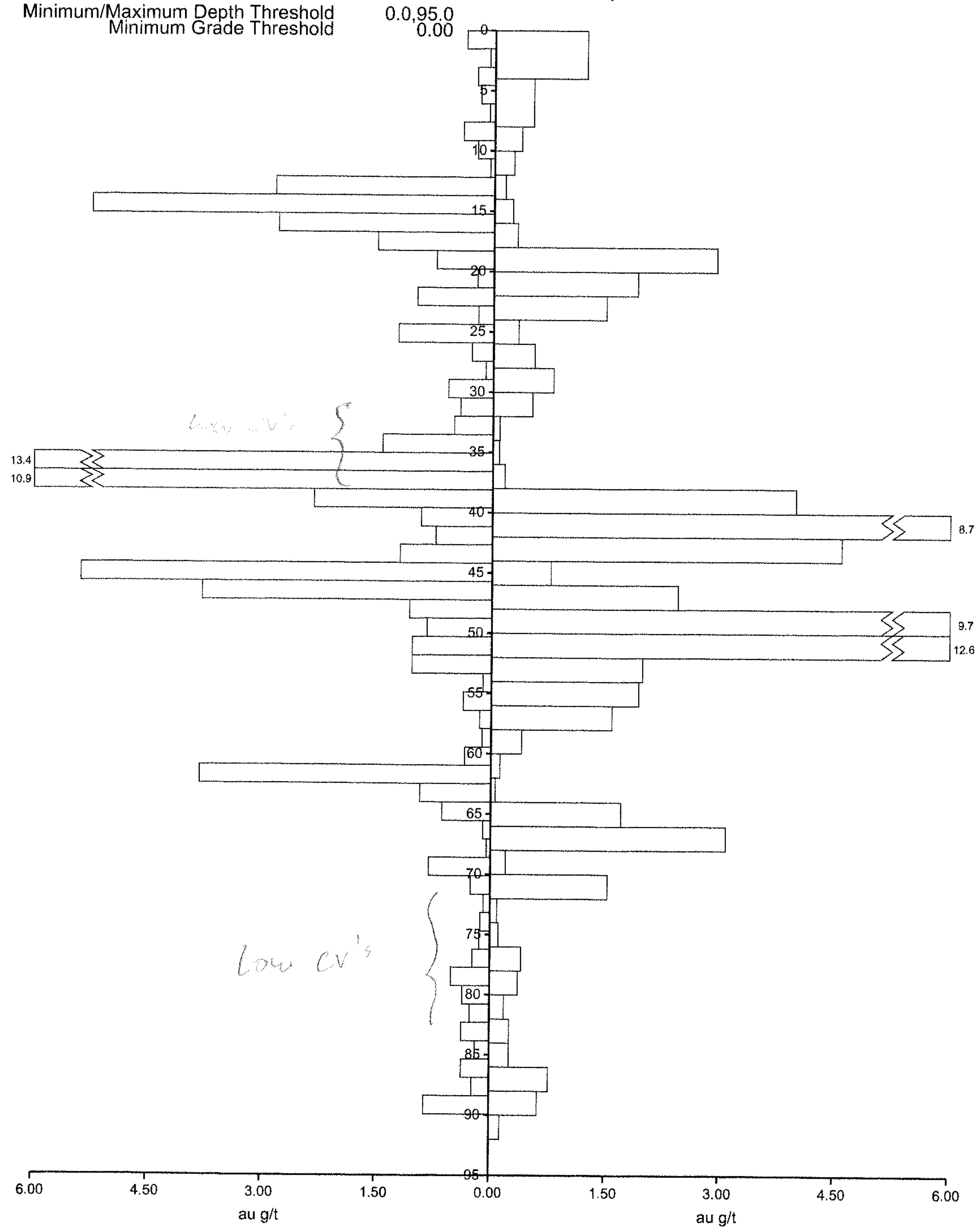
11 D
A A

RKRC04-036

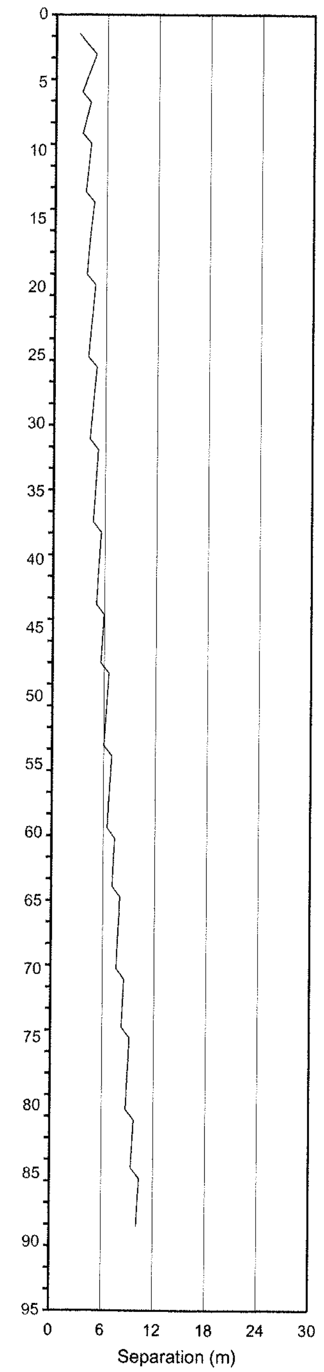
N	60
m	1.26
Cv	1.86
Intervals Trimmed by Depth	0
Intervals Trimmed by Grade	0
Minimum/Maximum Depth Threshold	0.0,95.0
Minimum Grade Threshold	0.00

RKDC04-235

N	45
m	1.54
Cv	1.65
Intervals Trimmed by Depth	0
Intervals Trimmed by Grade	0

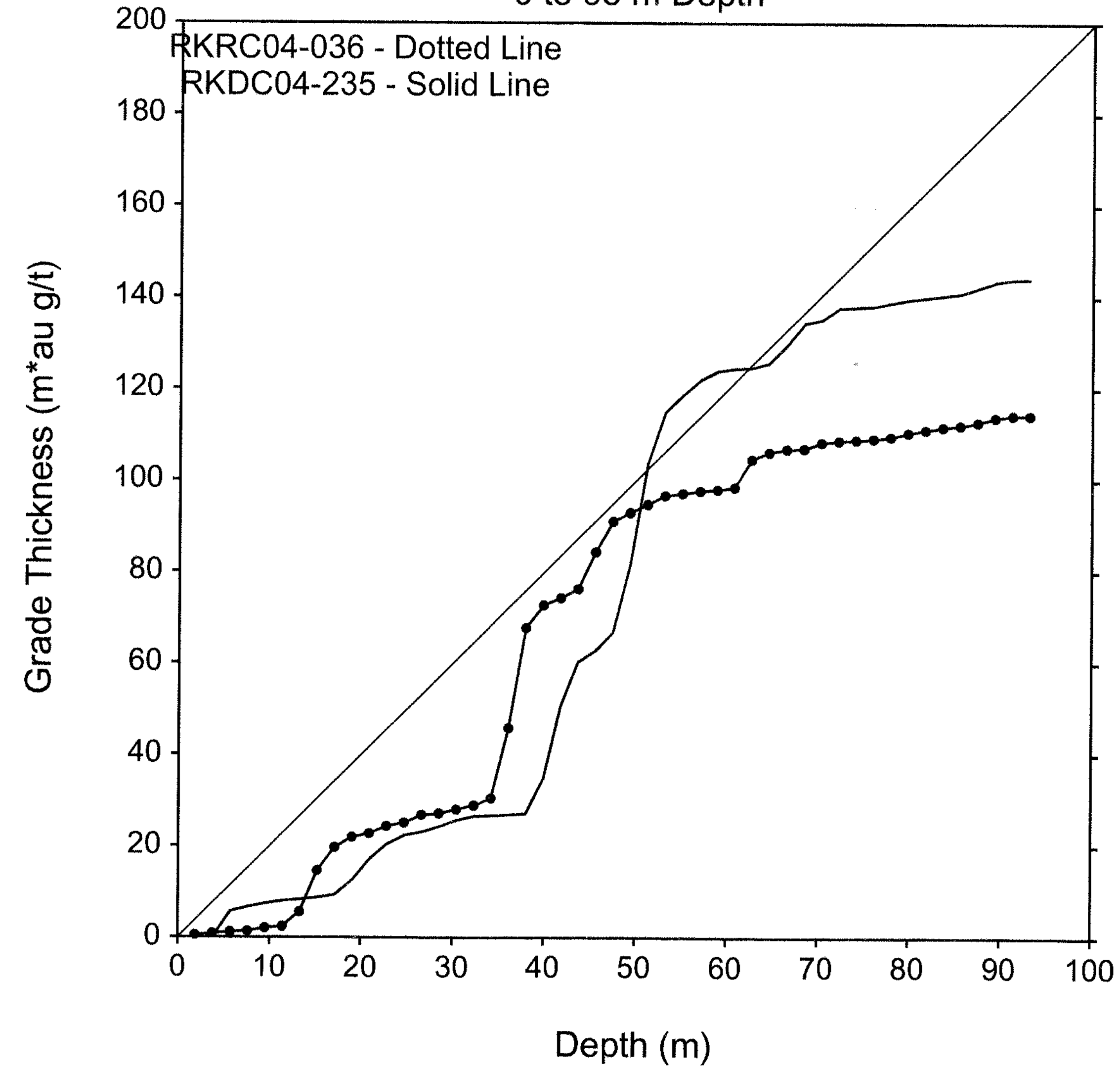


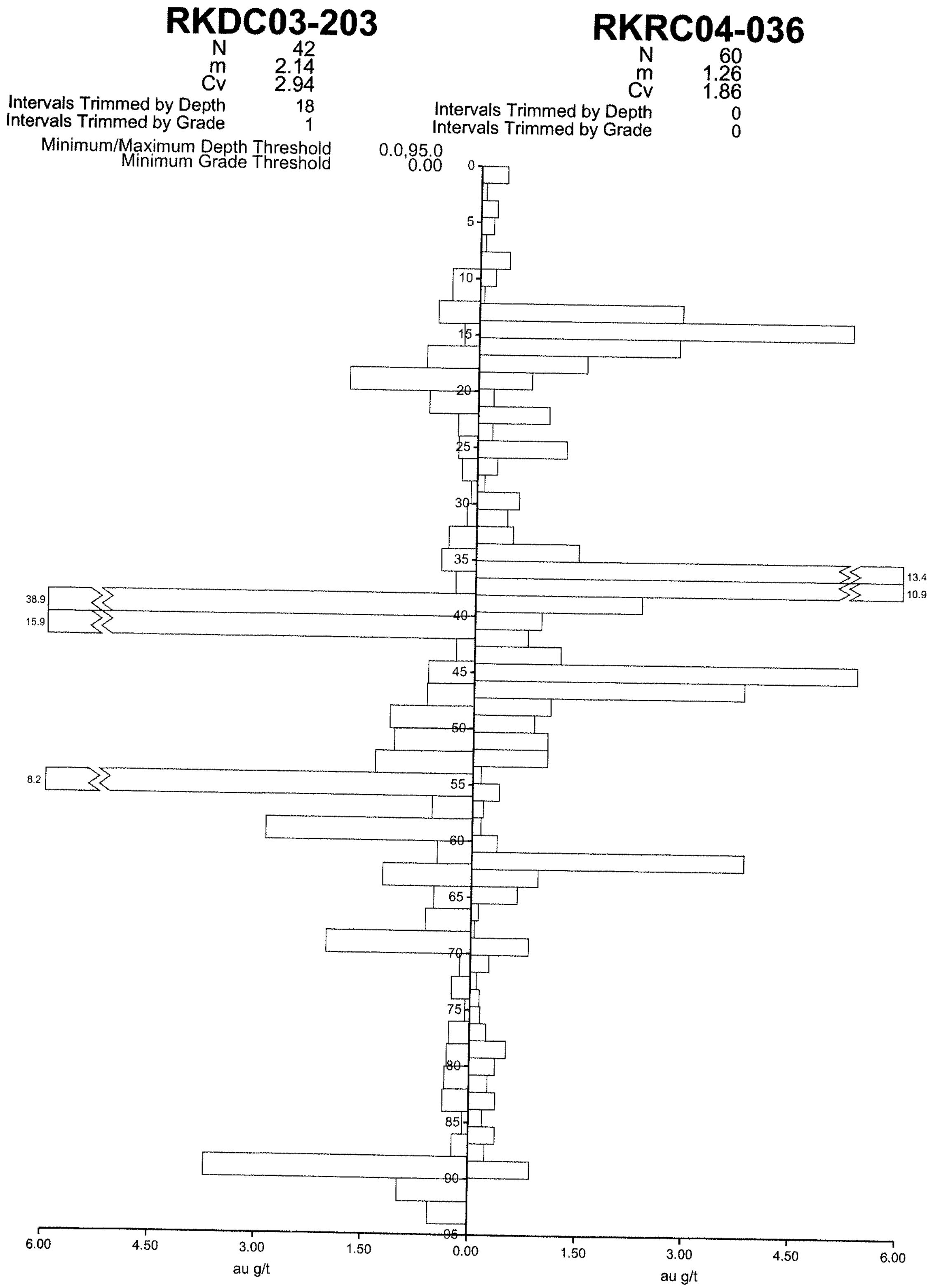
Horiz. Separation



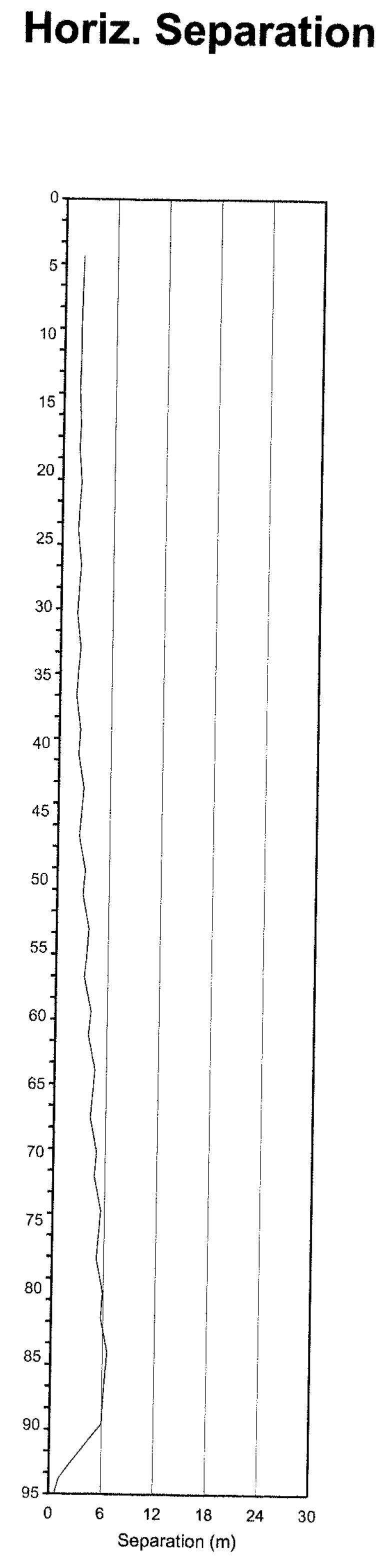
Cumulative Grade Thickness

0 to 95 m Depth

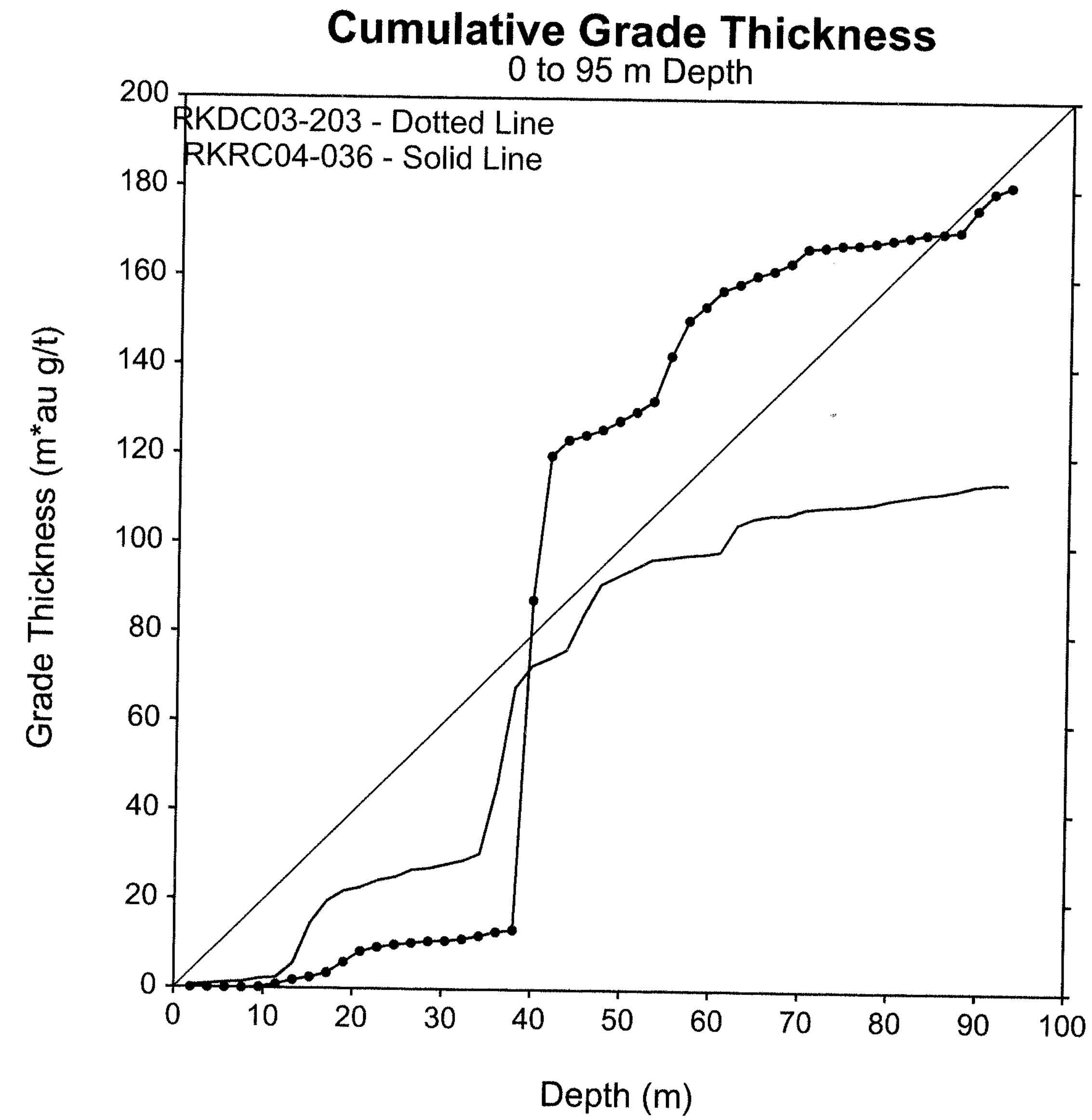




RKDC03-203
N 42
m 2.14
Cv 2.94
Intervals Trimmed by Depth 18
Intervals Trimmed by Grade 1
Minimum/Maximum Depth Threshold 0.0,95.0
Minimum Grade Threshold 0.00
RKRC04-036
N 60
m 1.26
Cv 1.86
Intervals Trimmed by Depth 0
Intervals Trimmed by Grade 0
38.9
15.9
8.2
13.4
10.9
6.00 4.50 3.00 1.50 0.00 1.50 3.00 4.50 6.00
au g/t
au g/t

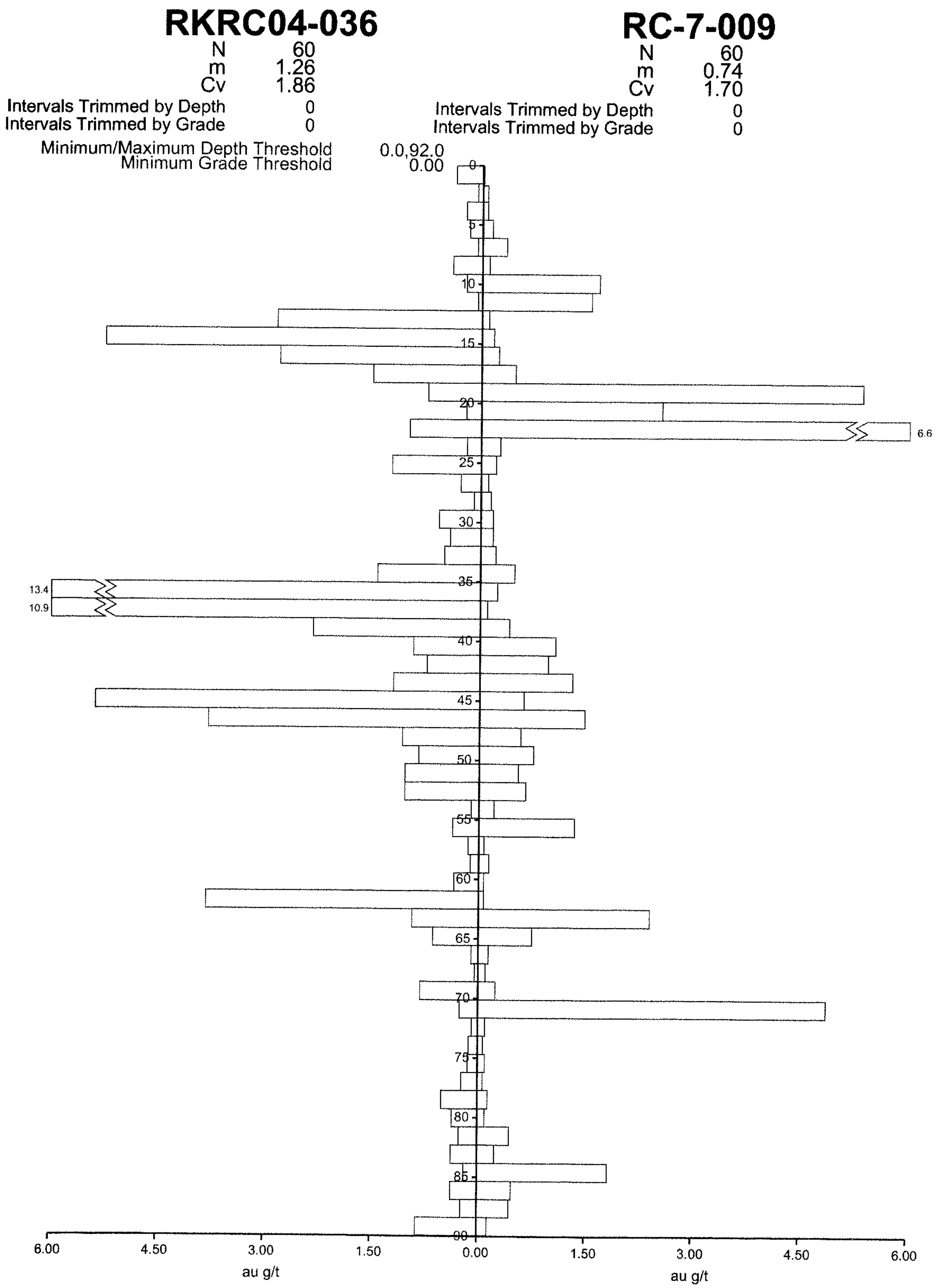


Horiz. Separation
0 6 12 18 24 30
Separation (m)

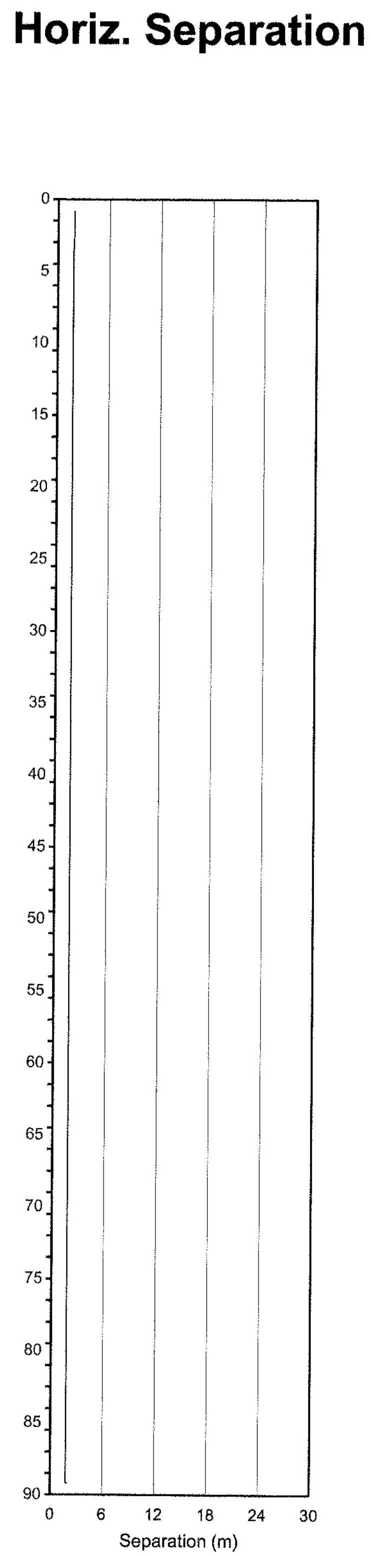


Cumulative Grade Thickness
0 to 95 m Depth
RKDC03-203 - Dotted Line
RKRC04-036 - Solid Line
Grade Thickness (m*au g/t)
Depth (m)

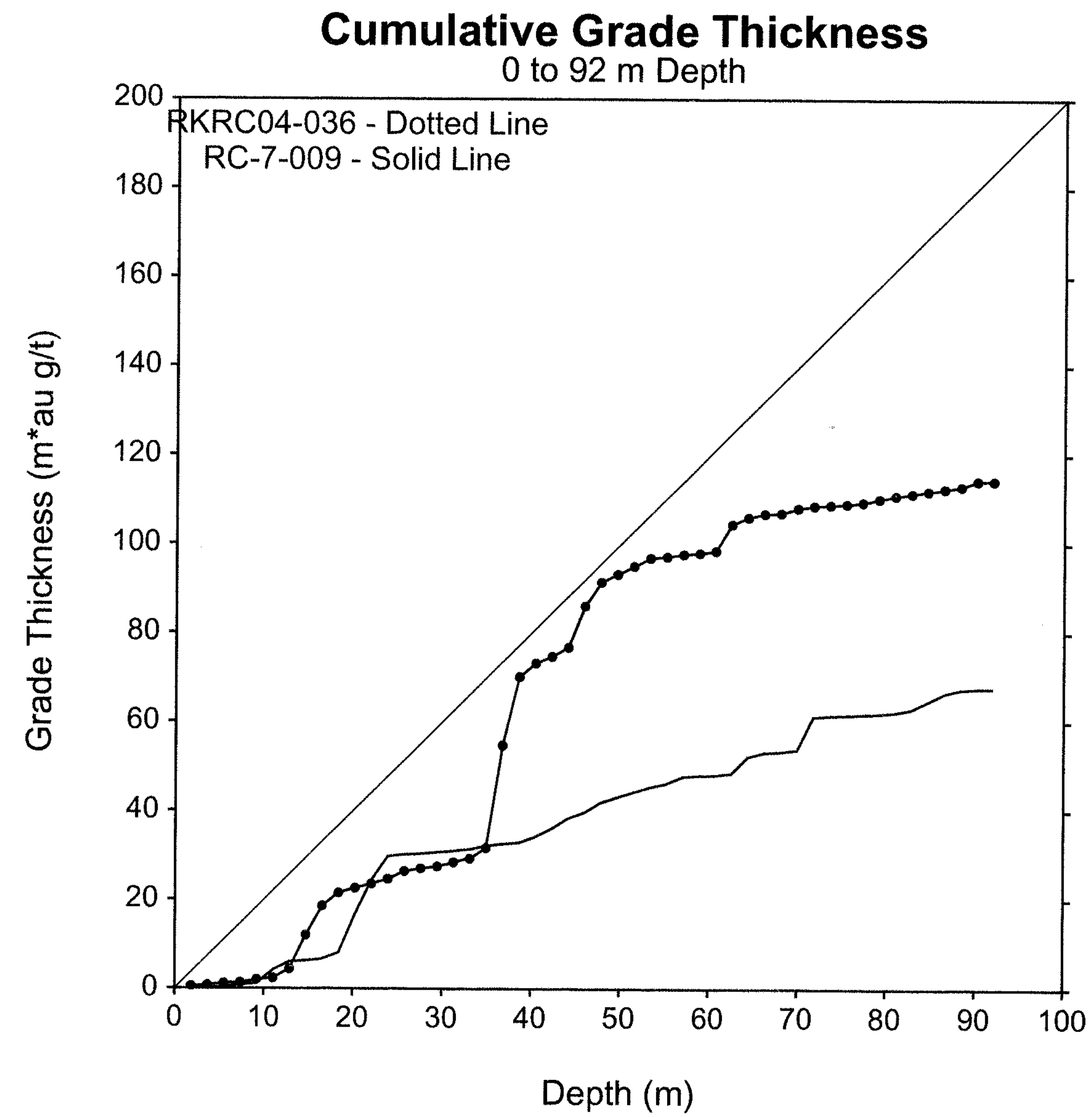
// F
A A



RKRC04-036
N 60
m 1.26
Cv 1.86
Intervals Trimmed by Depth 0
Intervals Trimmed by Grade 0
Minimum/Maximum Depth Threshold 0.0,92.0
Minimum Grade Threshold 0.00
RC-7-009
N 60
m 0.74
Cv 1.70
Intervals Trimmed by Depth 0
Intervals Trimmed by Grade 0
6.6
13.4
10.9
6.00 4.50 3.00 1.50 0.00 1.50 3.00 4.50 6.00
au g/t
au g/t



Horiz. Separation
0 6 12 18 24 30
Separation (m)



Cumulative Grade Thickness
0 to 92 m Depth
RKRC04-036 - Dotted Line
RC-7-009 - Solid Line
Grade Thickness (m*au g/t)
Depth (m)

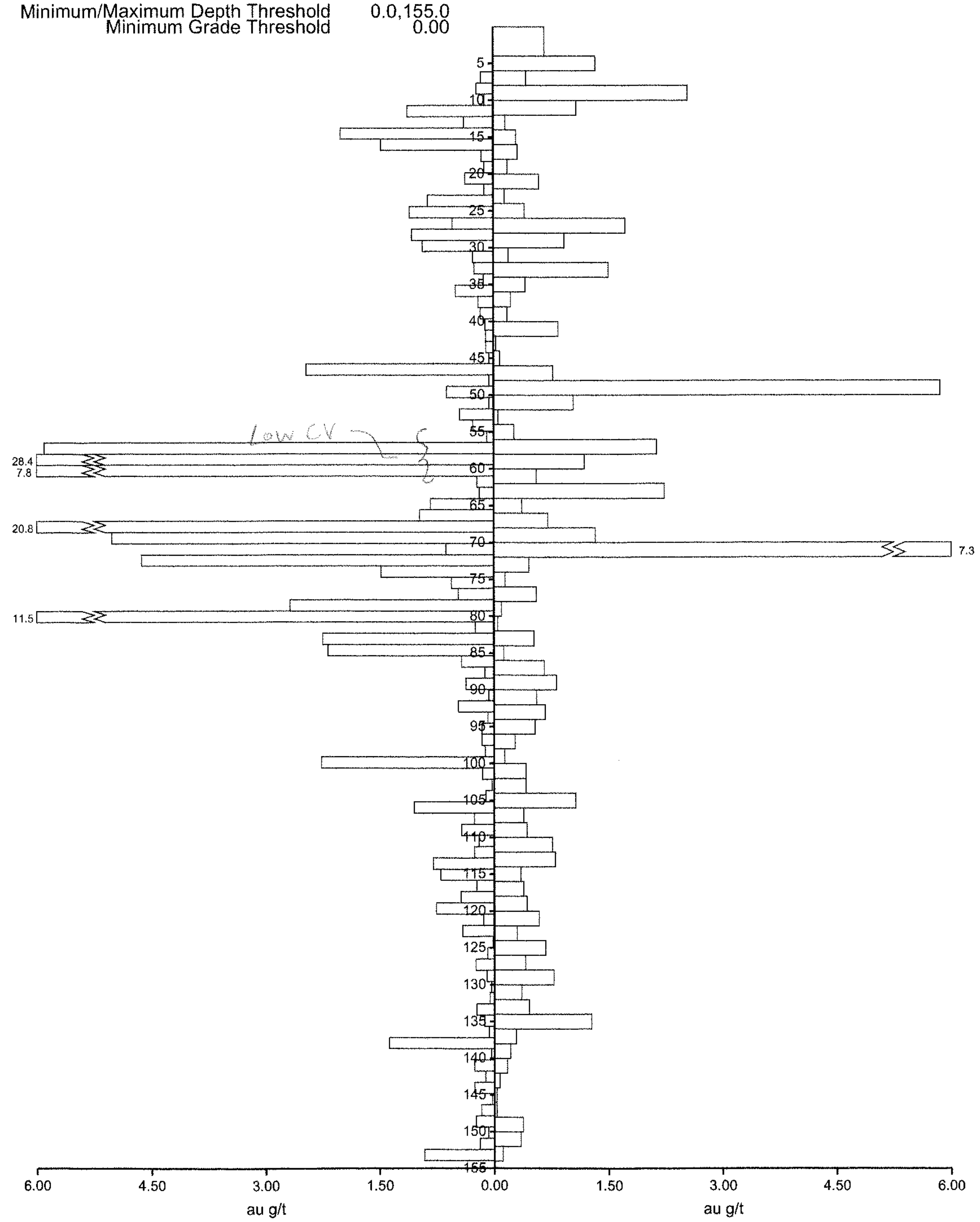
12 A
B

RR-0-15

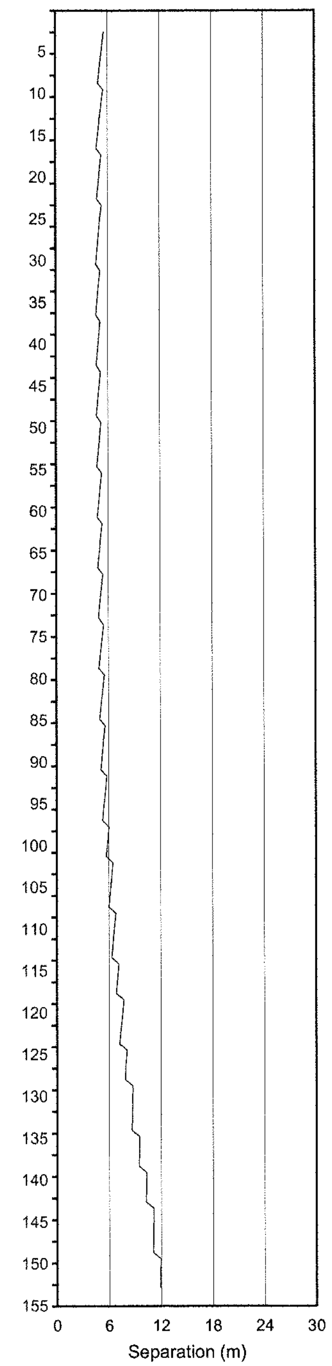
N 97
m 1.32
Cv 2.87
Intervals Trimmed by Depth 1
Intervals Trimmed by Grade 1
Minimum/Maximum Depth Threshold 0.0,155.0
Minimum Grade Threshold 0.00

RKDC03-202

N 76
m 0.73
Cv 1.48
Intervals Trimmed by Depth 7
Intervals Trimmed by Grade 0

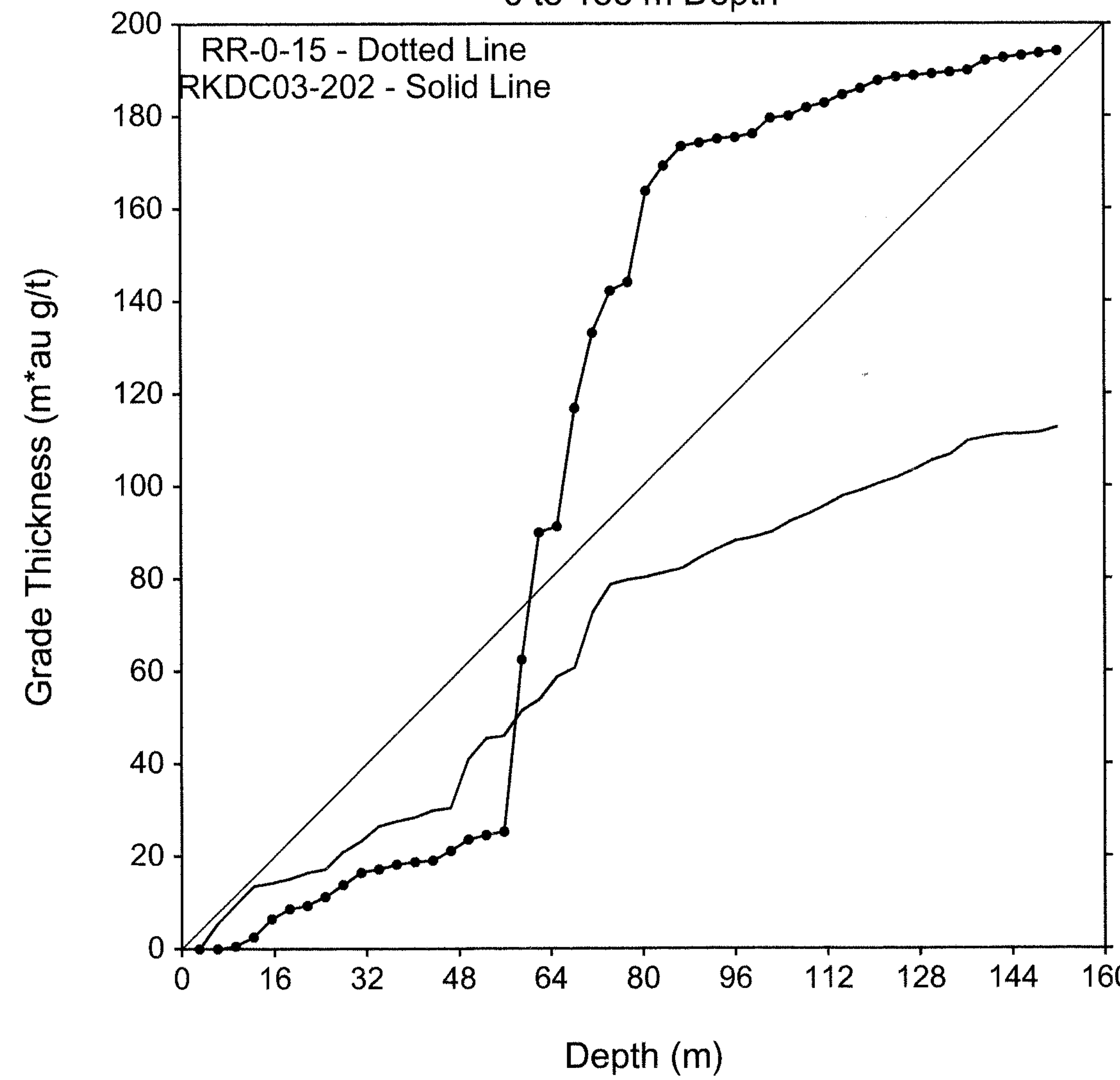


Horiz. Separation



Cumulative Grade Thickness

0 to 155 m Depth



12 B

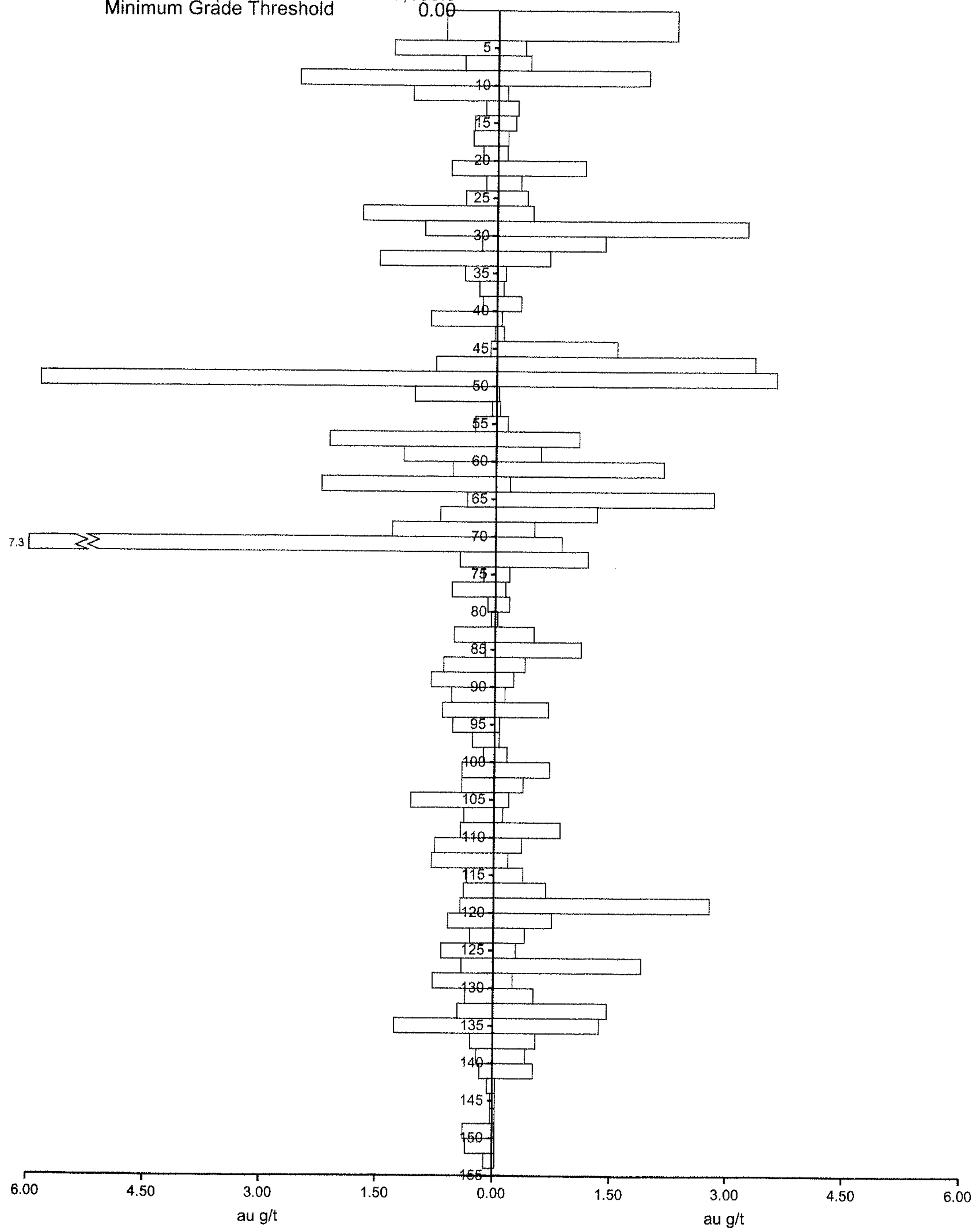
A A

RKDC03-202

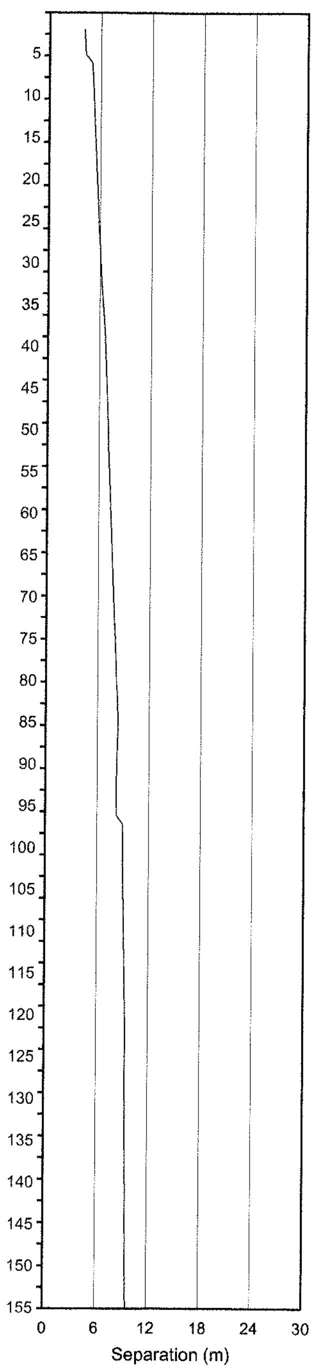
N	76
m	0.73
Cv	1.48
Intervals Trimmed by Depth	7
Intervals Trimmed by Grade	0
Minimum/Maximum Depth Threshold	0.0,155.0
Minimum Grade Threshold	0.00

RKDC04-234

N	76
m	0.71
Cv	1.21
Intervals Trimmed by Depth	1
Intervals Trimmed by Grade	0

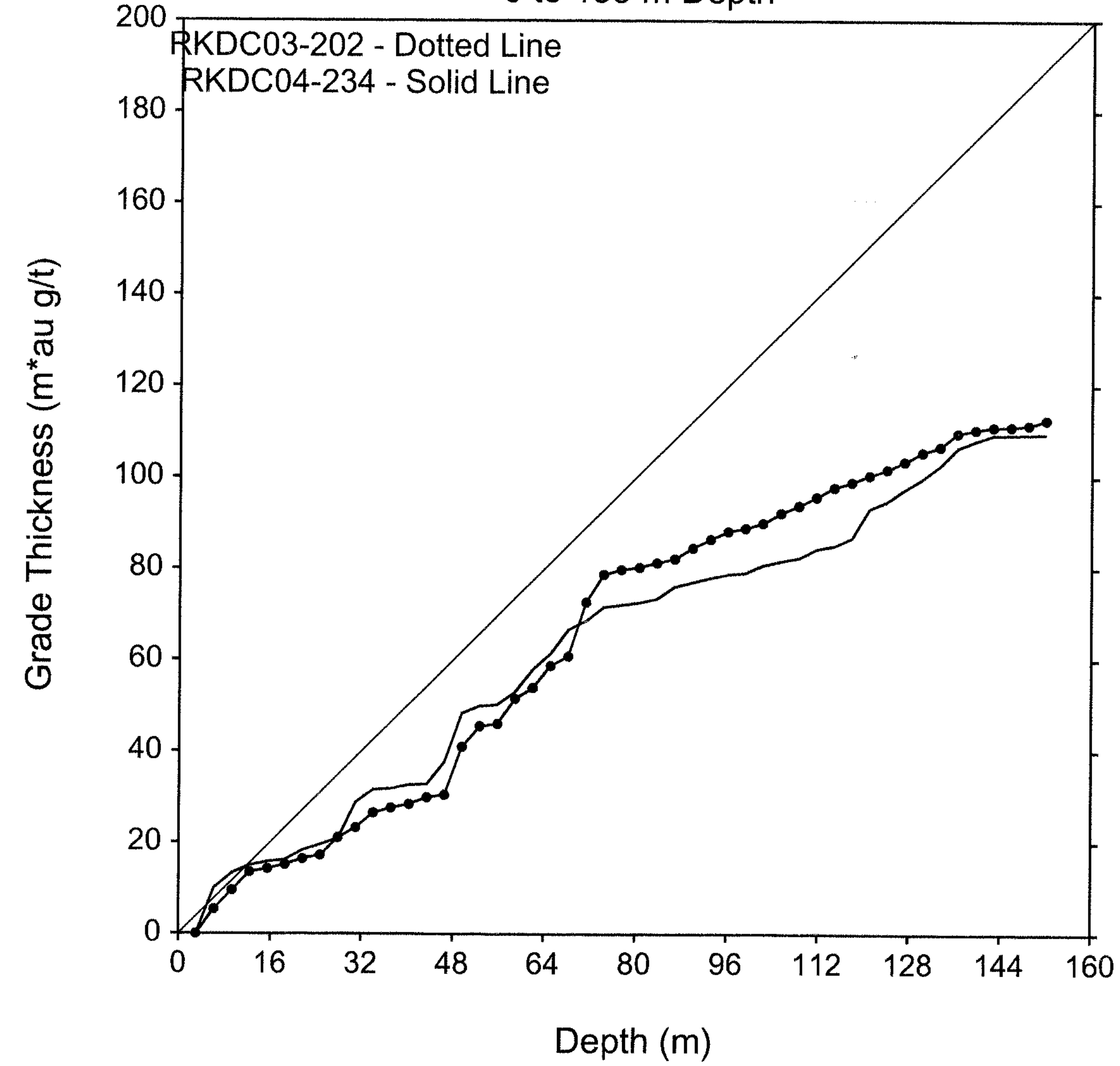


Horiz. Separation



Cumulative Grade Thickness

0 to 155 m Depth



12 C

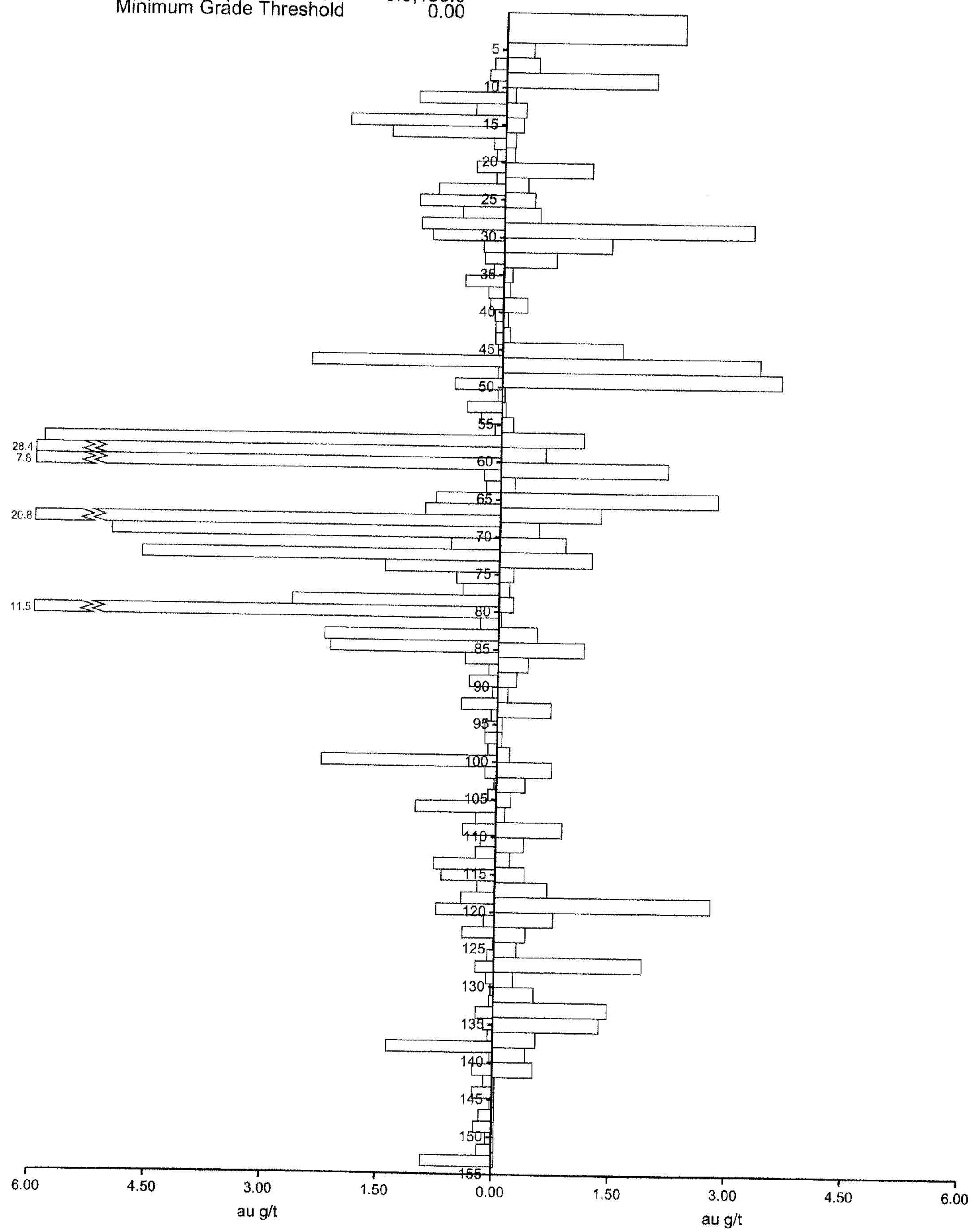
B

RR-0-15

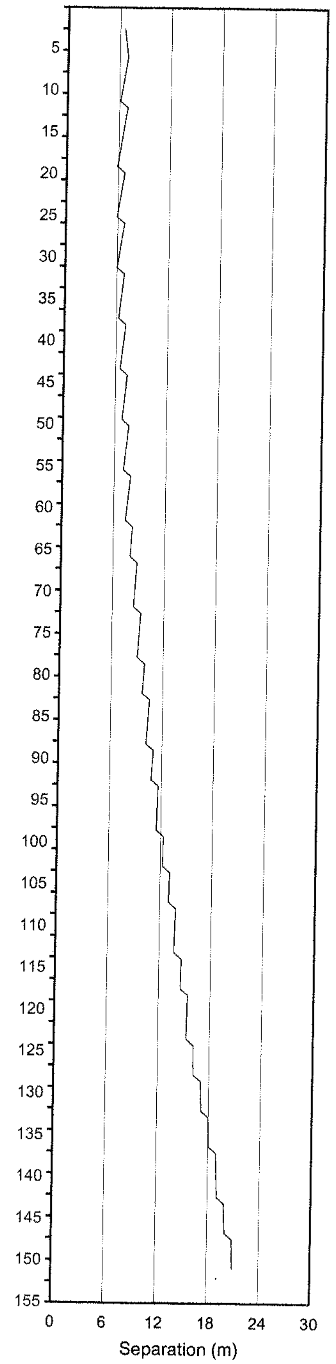
N	97
m	1.32
Cv	2.87
Intervals Trimmed by Depth	1
Intervals Trimmed by Grade	1
Minimum/Maximum Depth Threshold	0.0,155.0
Minimum Grade Threshold	0.00

RKDC04-234

N	76
m	0.71
Cv	1.21
Intervals Trimmed by Depth	1
Intervals Trimmed by Grade	0

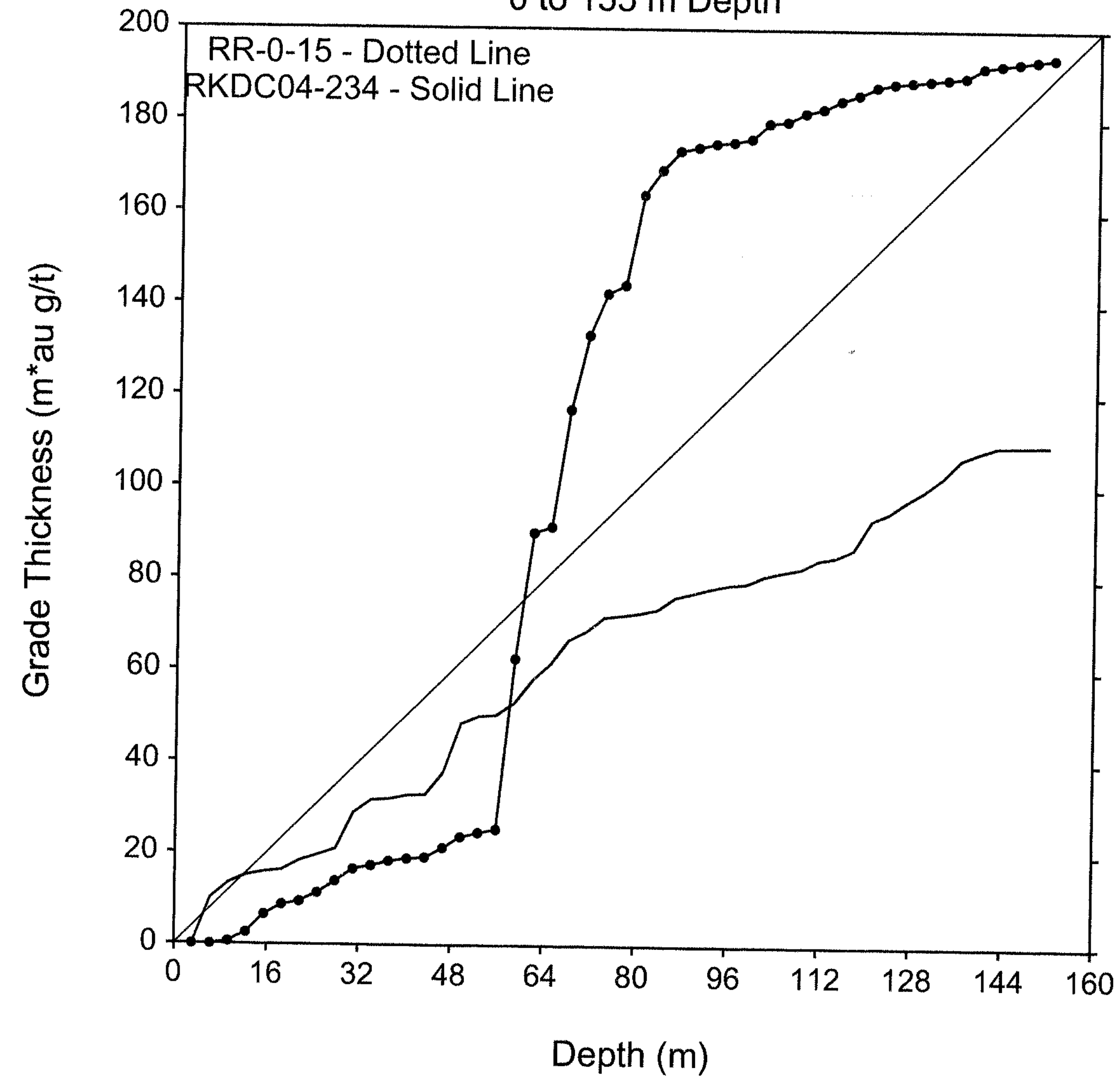


Horiz. Separation



Cumulative Grade Thickness

0 to 155 m Depth



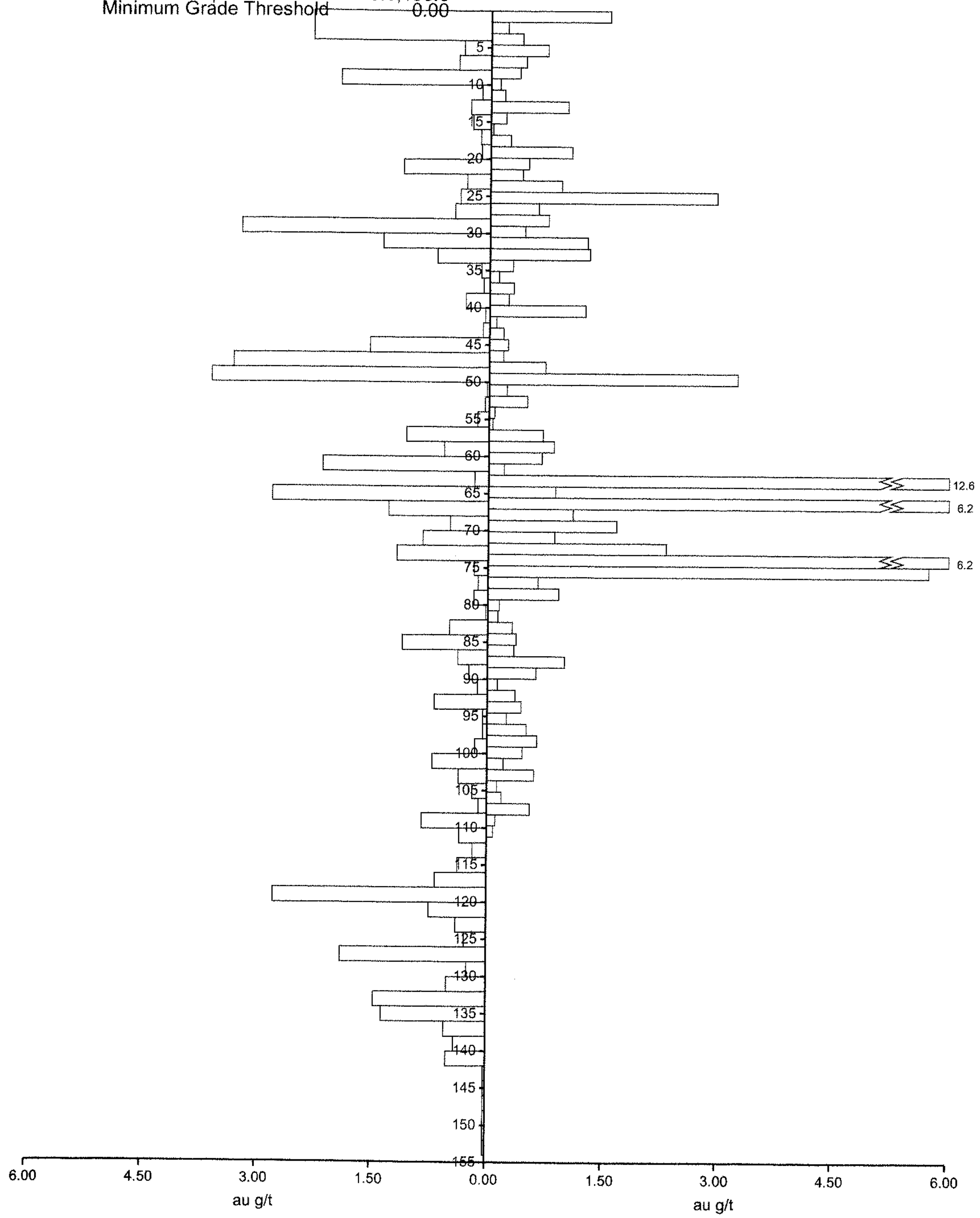
12 D
A A

RKDC04-234

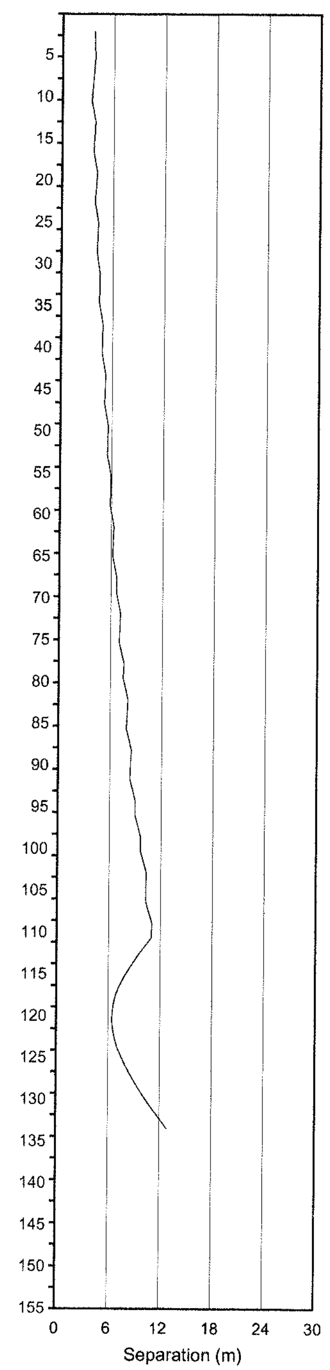
N 76
m 0.71
Cv 1.21
Intervals Trimmed by Depth 1
Intervals Trimmed by Grade 0
Minimum/Maximum Depth Threshold 0.0,155.0
Minimum Grade Threshold 0.00

RKRC04-035

N 74
m 0.99
Cv 1.85
Intervals Trimmed by Depth 0
Intervals Trimmed by Grade 0

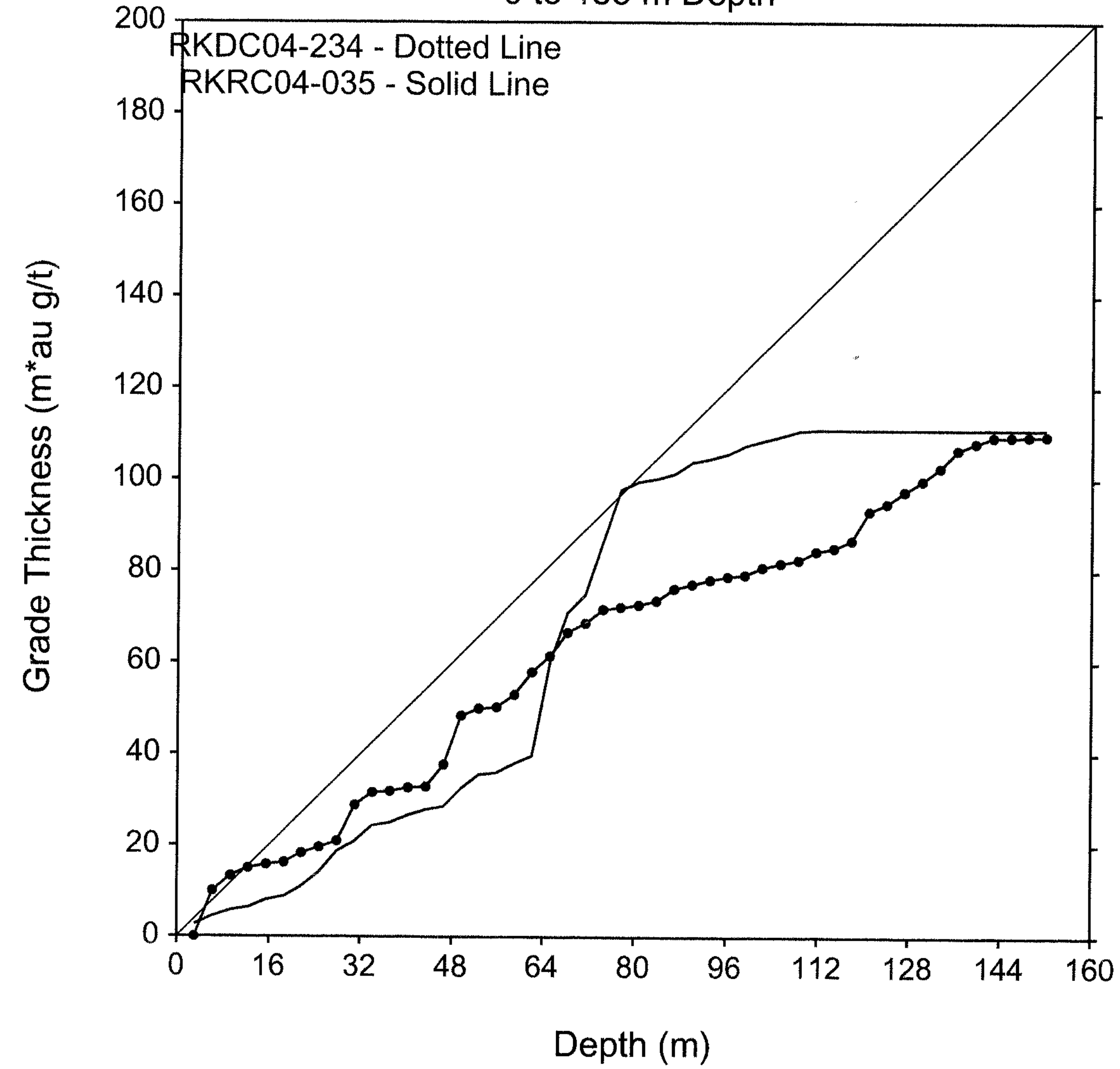


Horiz. Separation



Cumulative Grade Thickness

0 to 155 m Depth



12E

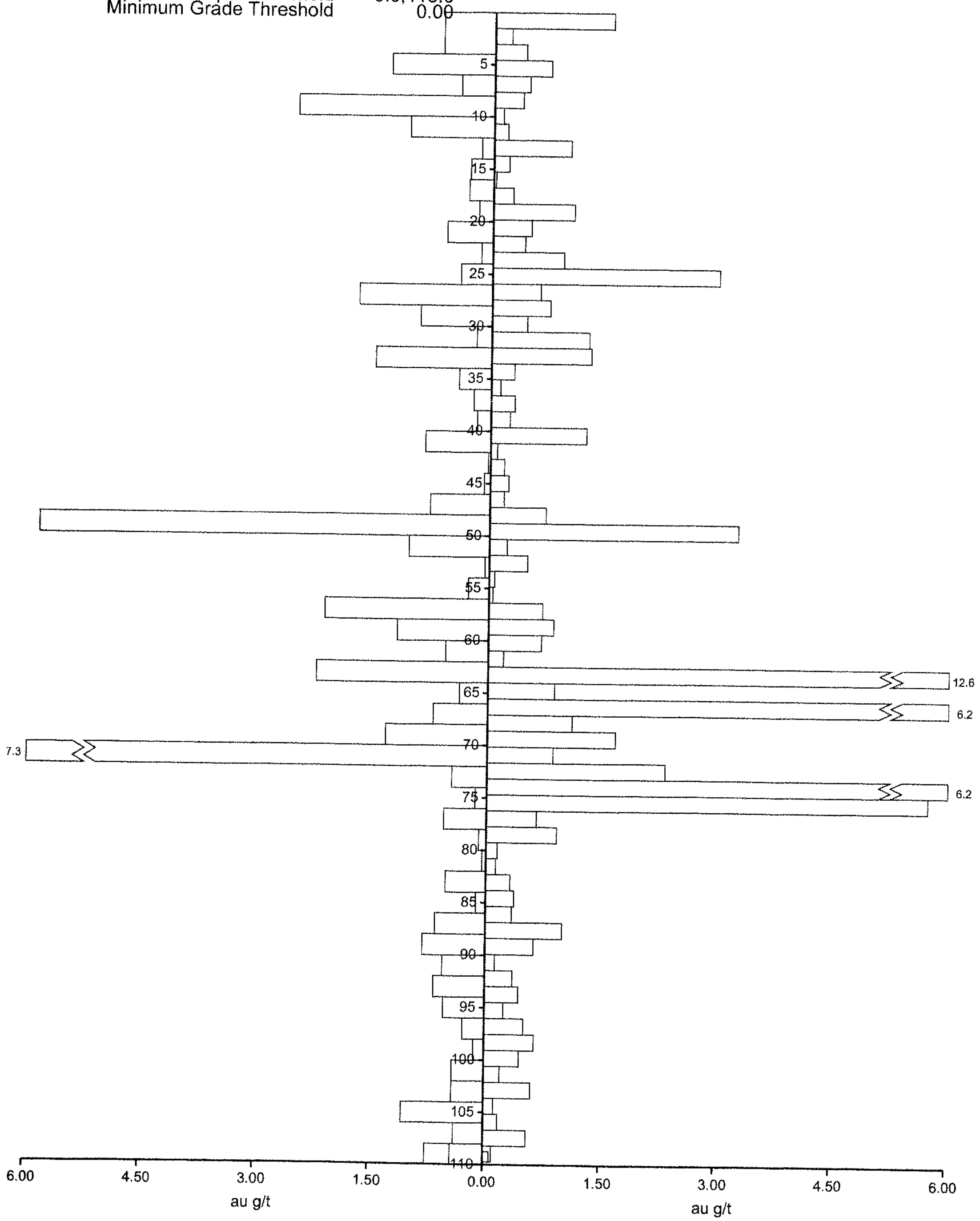
A A

RKDC03-202

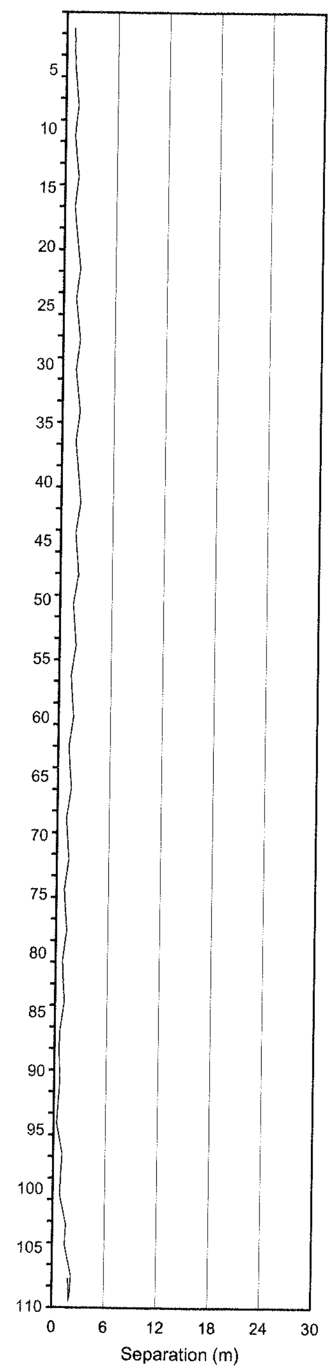
N 55
m 0.86
Cv 1.44
Intervals Trimmed by Depth 28
Intervals Trimmed by Grade 0
Minimum/Maximum Depth Threshold 0.0,113.0
Minimum Grade Threshold 0.00

RKRC04-035

N 74
m 0.99
Cv 1.85
Intervals Trimmed by Depth 0
Intervals Trimmed by Grade 0

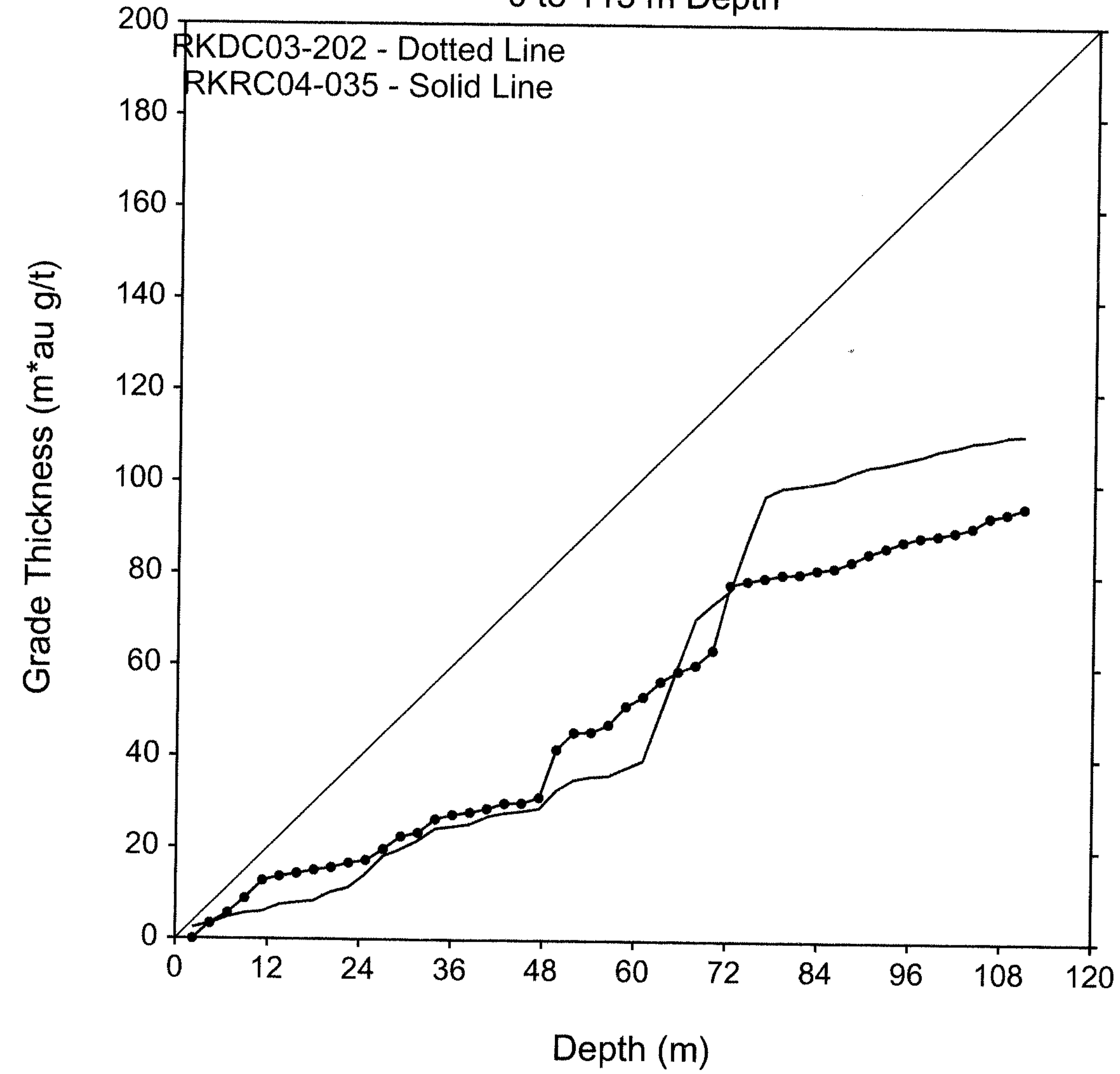


Horiz. Separation



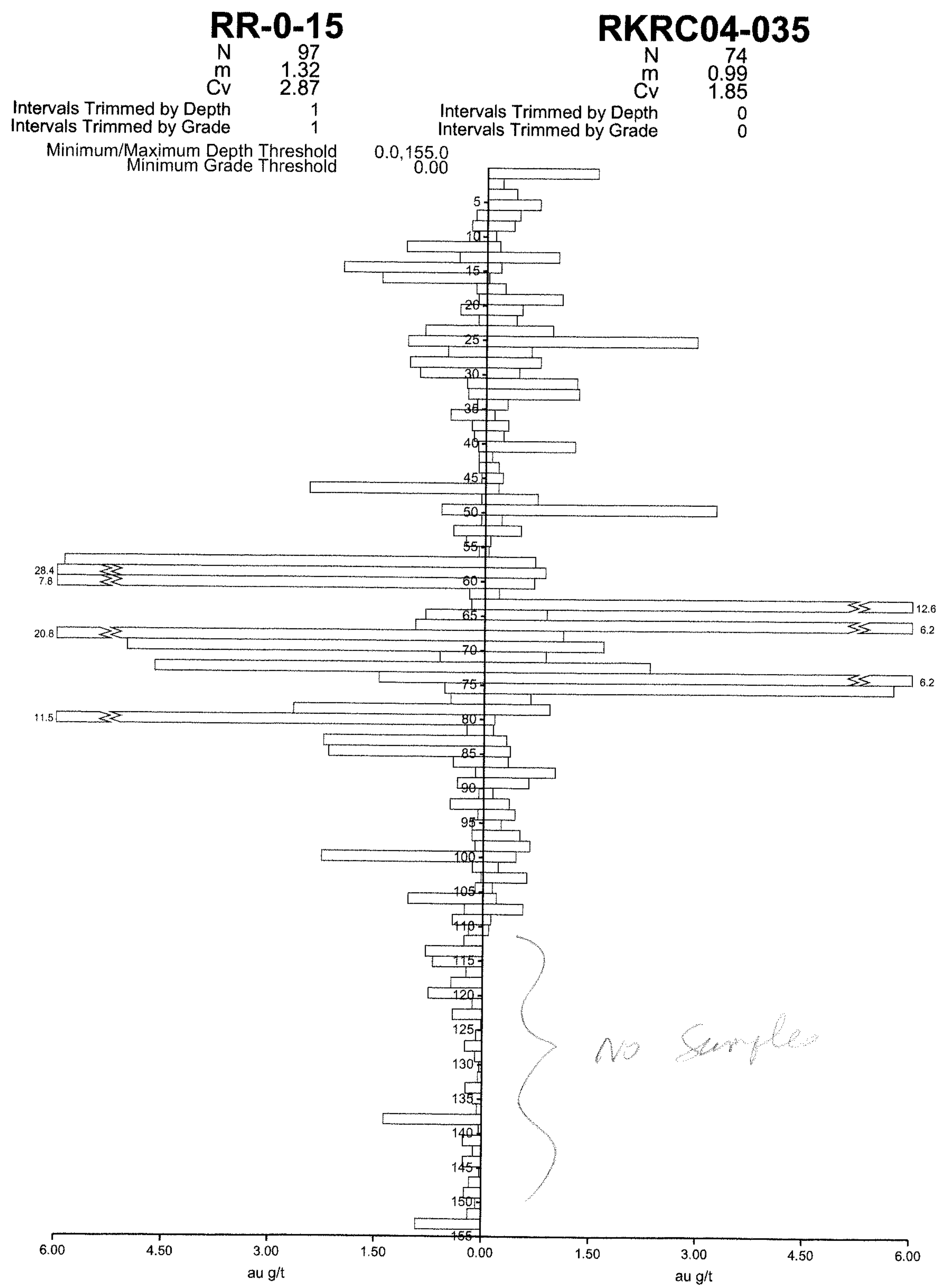
Cumulative Grade Thickness

0 to 113 m Depth

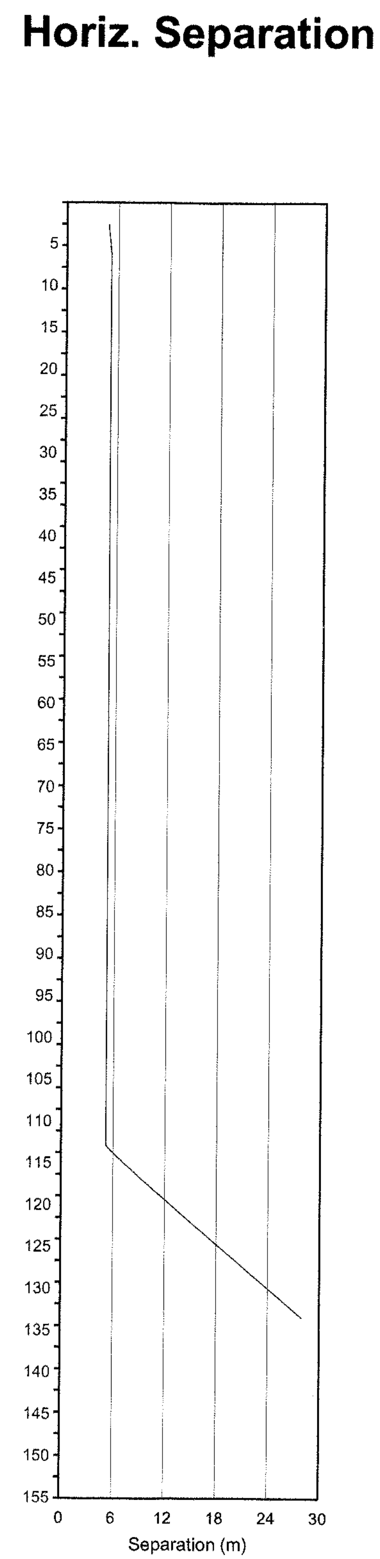


12 F

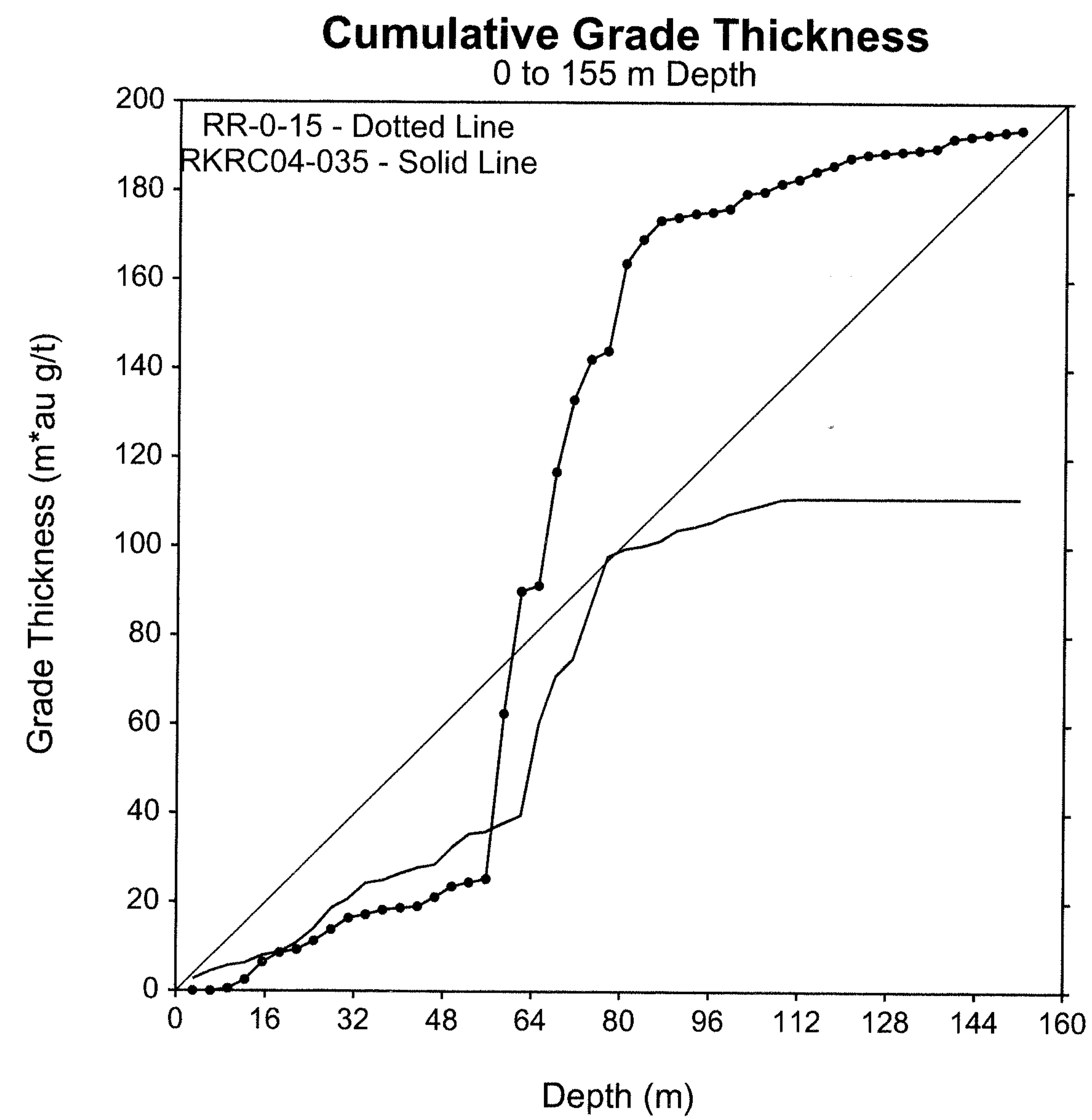
A



RR-0-15
N 97
m 1.32
Cv 2.87
Intervals Trimmed by Depth 1
Intervals Trimmed by Grade 1
Minimum/Maximum Depth Threshold 0.0,155.0
Minimum Grade Threshold 0.00
RKRC04-035
N 74
m 0.99
Cv 1.85
Intervals Trimmed by Depth 0
Intervals Trimmed by Grade 0
au g/t
au g/t
No Sample



Horiz. Separation
Separation (m)



Cumulative Grade Thickness
0 to 155 m Depth
RR-0-15 - Dotted Line
RKRC04-035 - Solid Line
Grade Thickness (m*au g/t)
Depth (m)

13 A

B+

Core

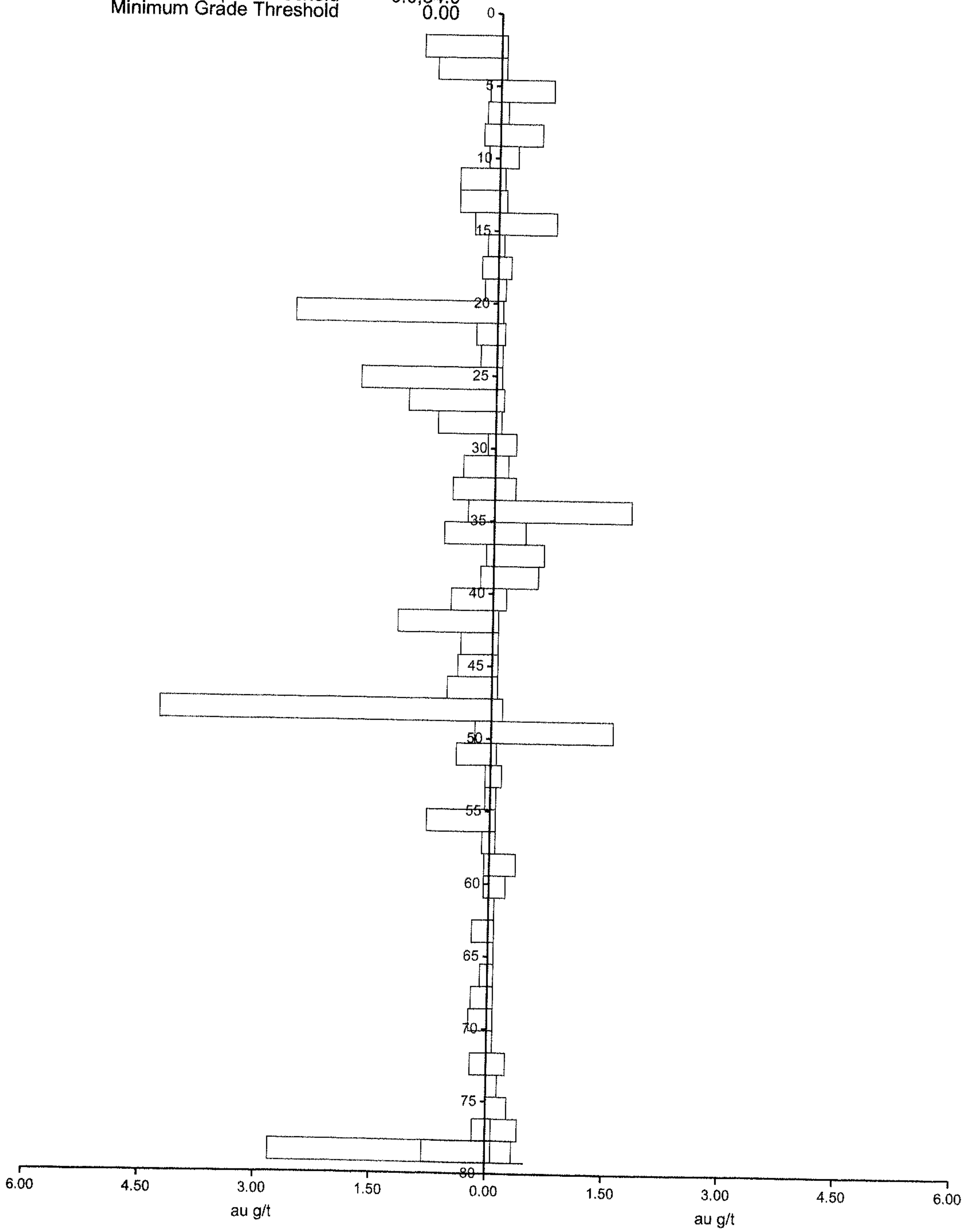
RCC-5-20

N	47
m	0.59
Cv	1.36
Intervals Trimmed by Depth	56
Intervals Trimmed by Grade	7
Minimum/Maximum Depth Threshold	0.0,84.0
Minimum Grade Threshold	0.00

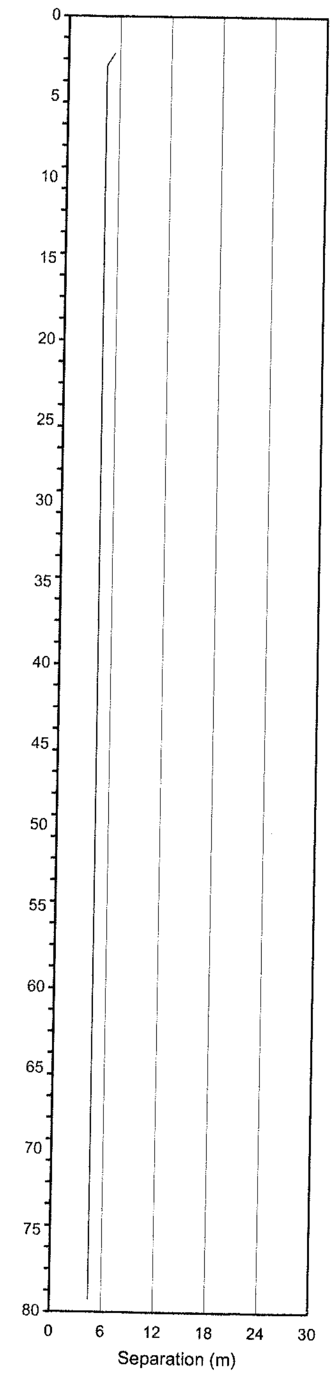
Core

RC-7-008

N	54
m	0.25
Cv	1.36
Intervals Trimmed by Depth	1
Intervals Trimmed by Grade	0

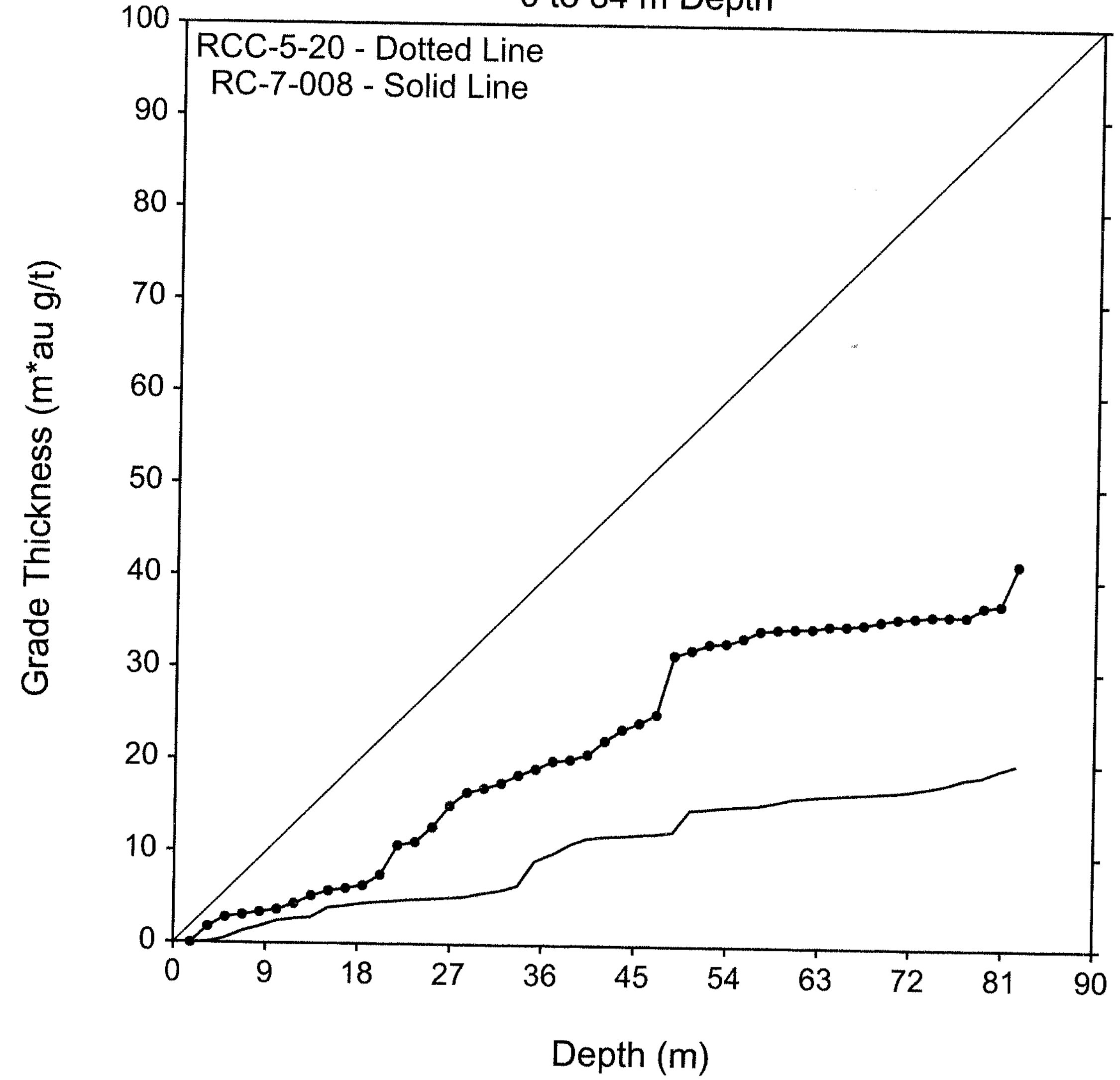


Horiz. Separation



Cumulative Grade Thickness

0 to 84 m Depth



13 B

B+

Core

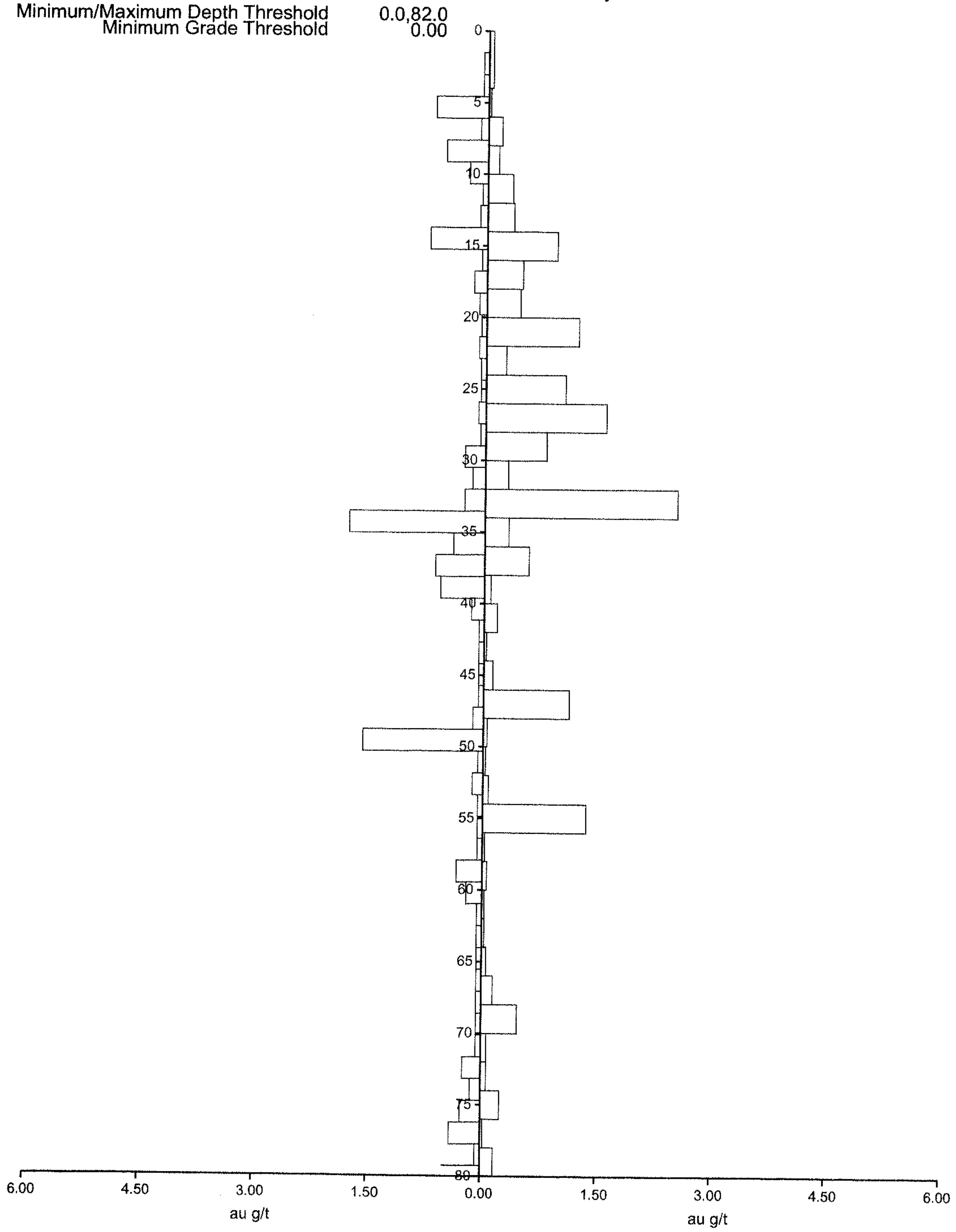
RC-7-008

N	52
m	0.25
Cv	1.37
Intervals Trimmed by Depth	3
Intervals Trimmed by Grade	0
Minimum/Maximum Depth Threshold	0.0,82.0
Minimum Grade Threshold	0.00

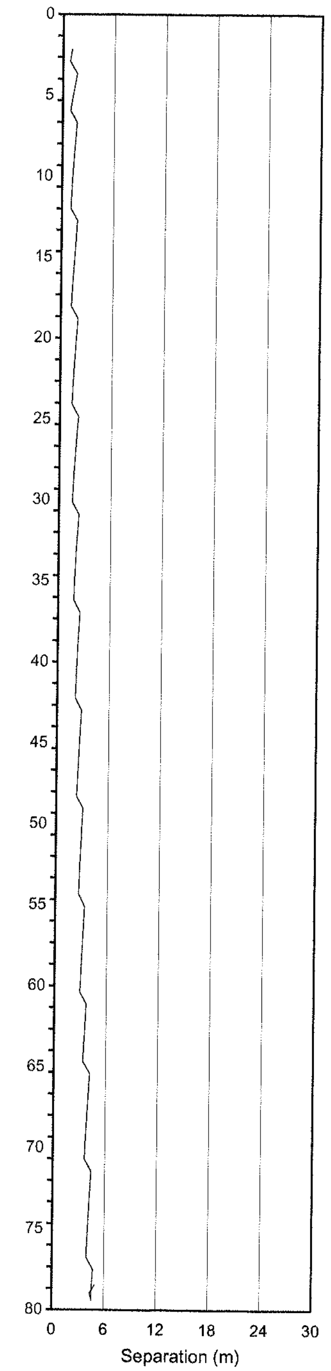
Core

RKDC04-243

N	39
m	0.40
Cv	1.32
Intervals Trimmed by Depth	1
Intervals Trimmed by Grade	0

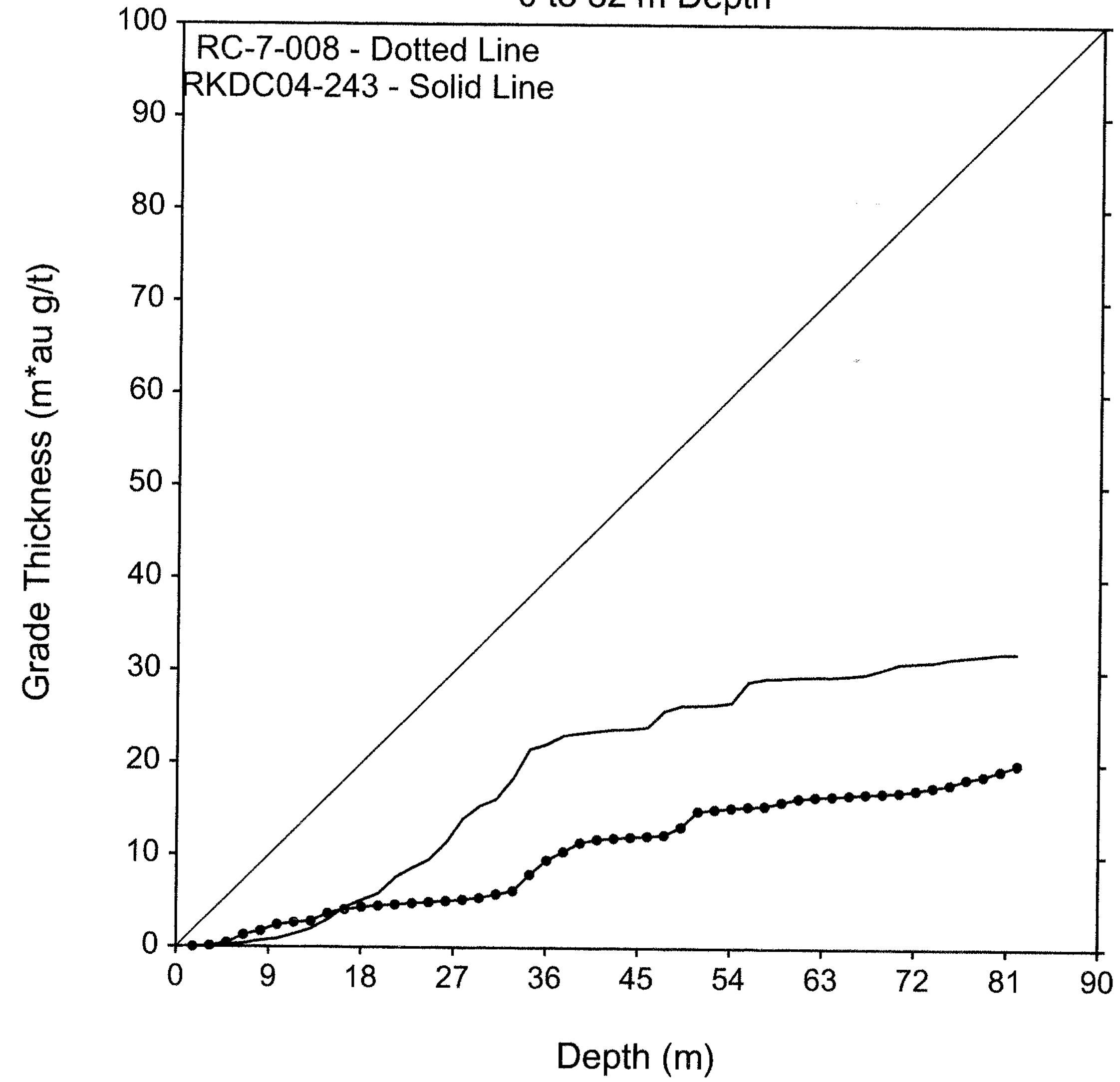


Horiz. Separation



Cumulative Grade Thickness

0 to 82 m Depth



BC

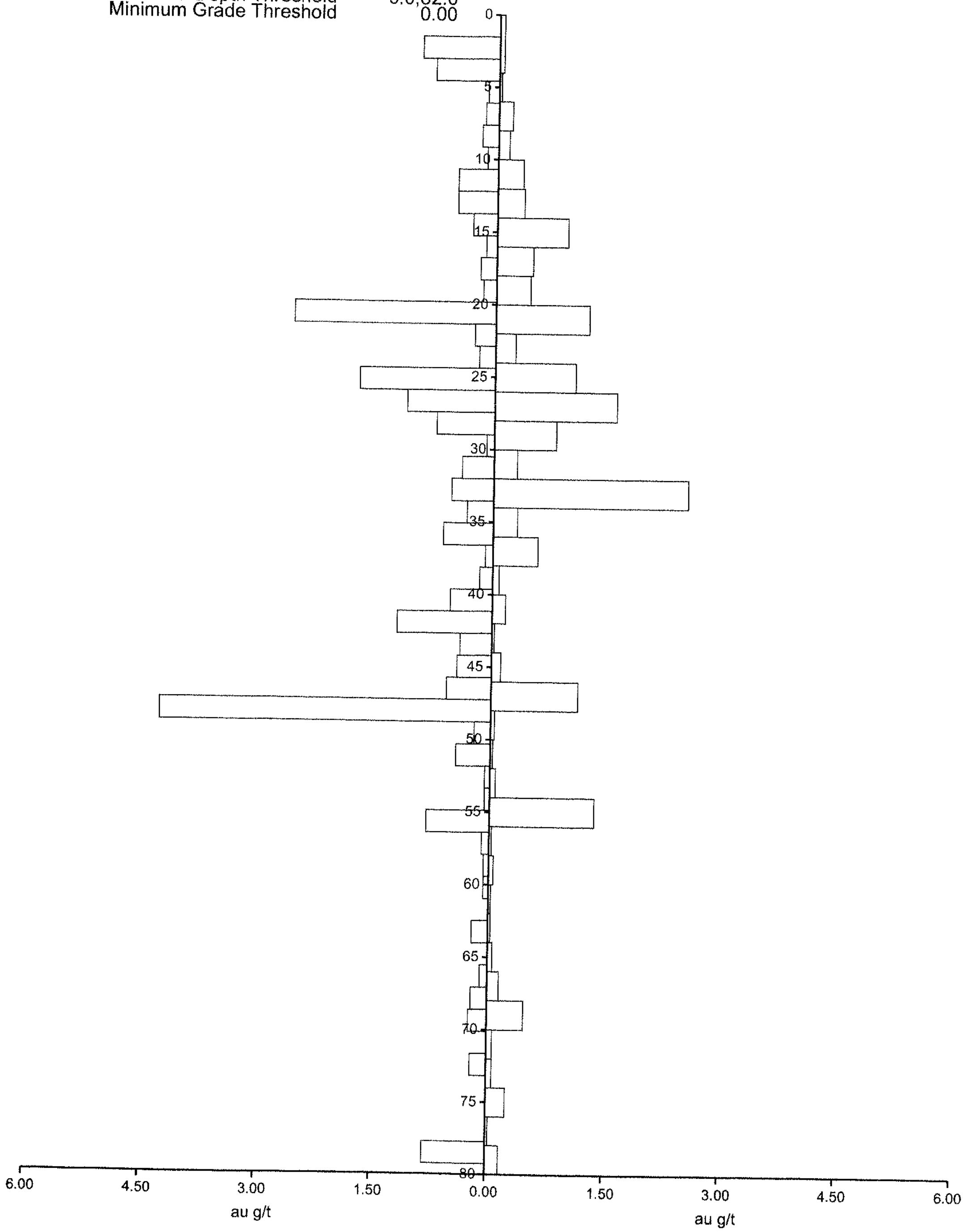
A A

RCC-5-20

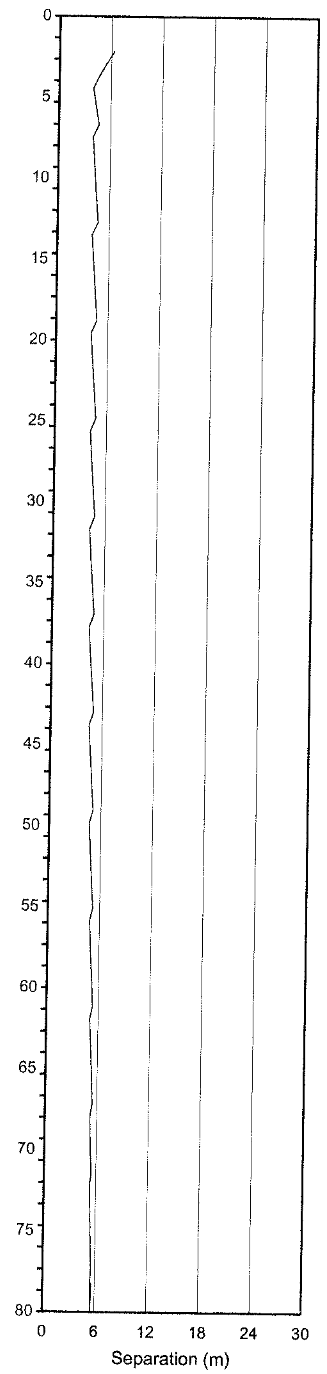
N	45
m	0.55
Cv	1.36
Intervals Trimmed by Depth	58
Intervals Trimmed by Grade	7
Minimum/Maximum Depth Threshold	0.0,82.0
Minimum Grade Threshold	0.00

RKDC04-243

N	39
m	0.40
Cv	1.32
Intervals Trimmed by Depth	1
Intervals Trimmed by Grade	0

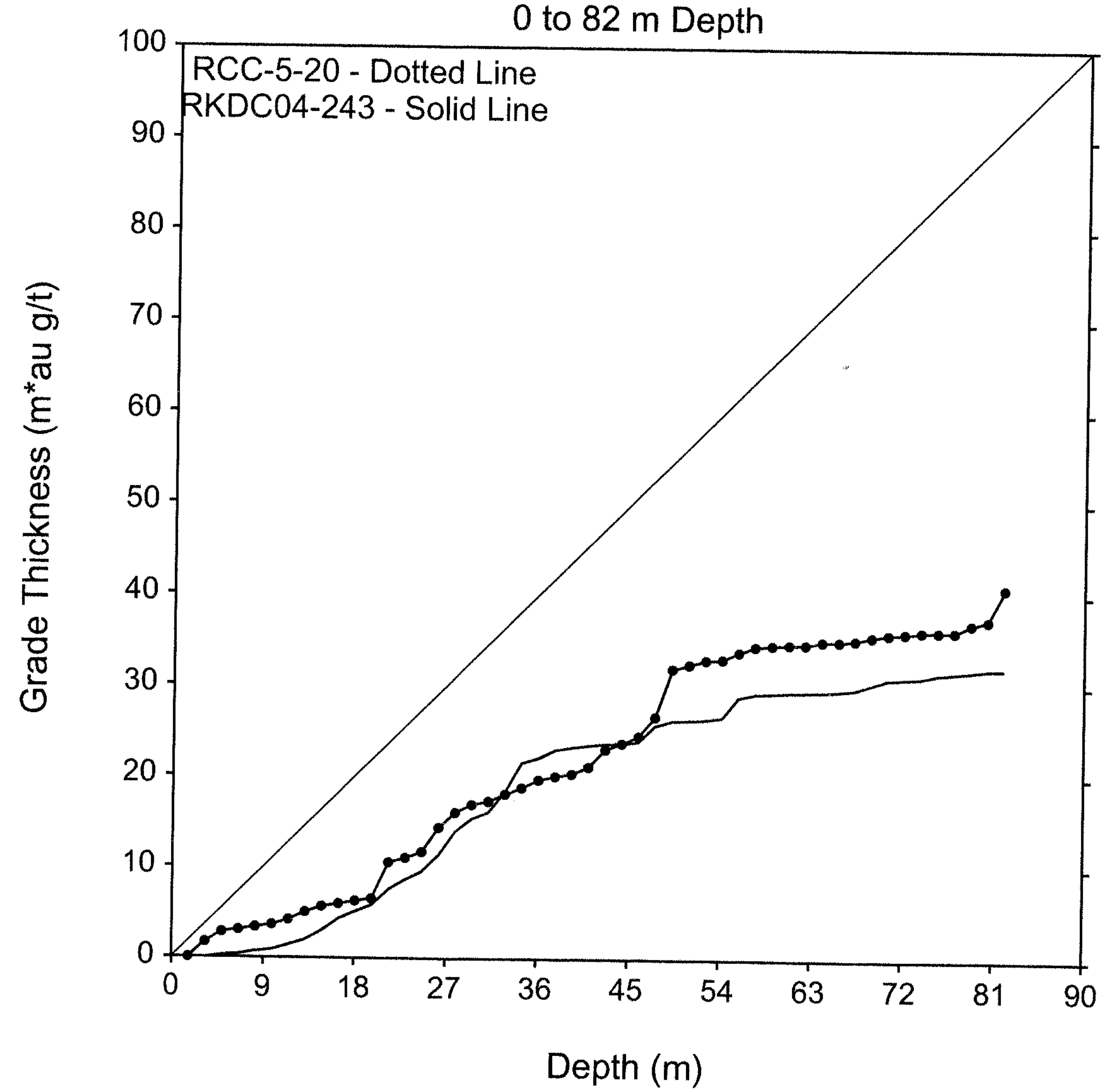


Horiz. Separation



Cumulative Grade Thickness

0 to 82 m Depth



13 D

B+

RC

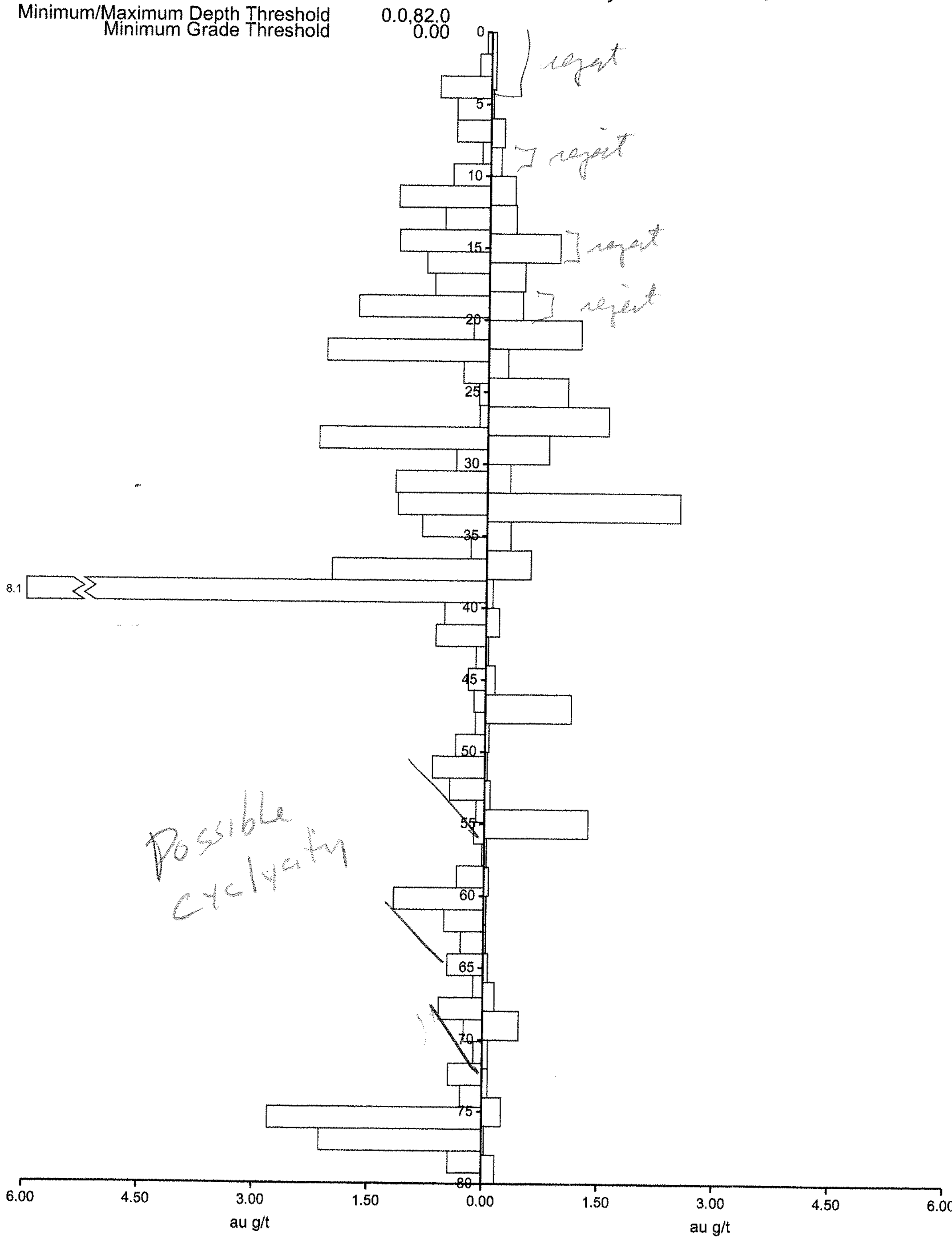
RKRC04-037

N	53
m	0.78
Cv	1.52
Intervals Trimmed by Depth	4
Intervals Trimmed by Grade	0
Minimum/Maximum Depth Threshold	0.0,82.0
Minimum Grade Threshold	0.00

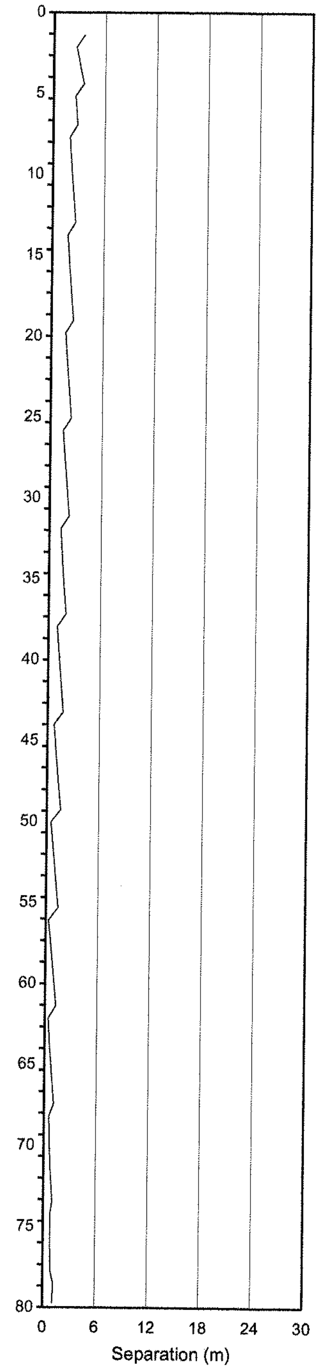
CORE

RKDC04-243

N	39
m	0.40
Cv	1.32
Intervals Trimmed by Depth	1
Intervals Trimmed by Grade	0

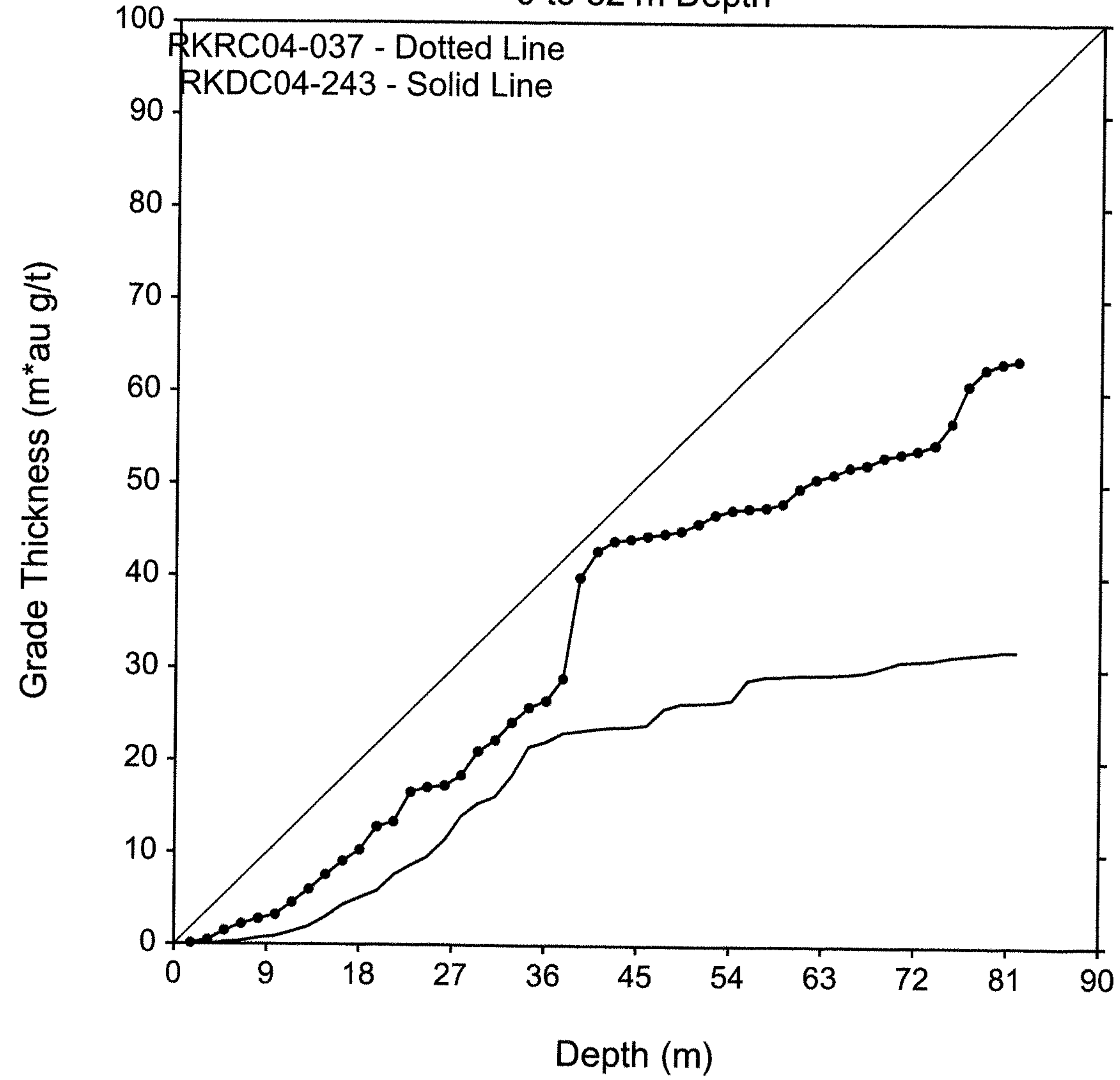


Horiz. Separation

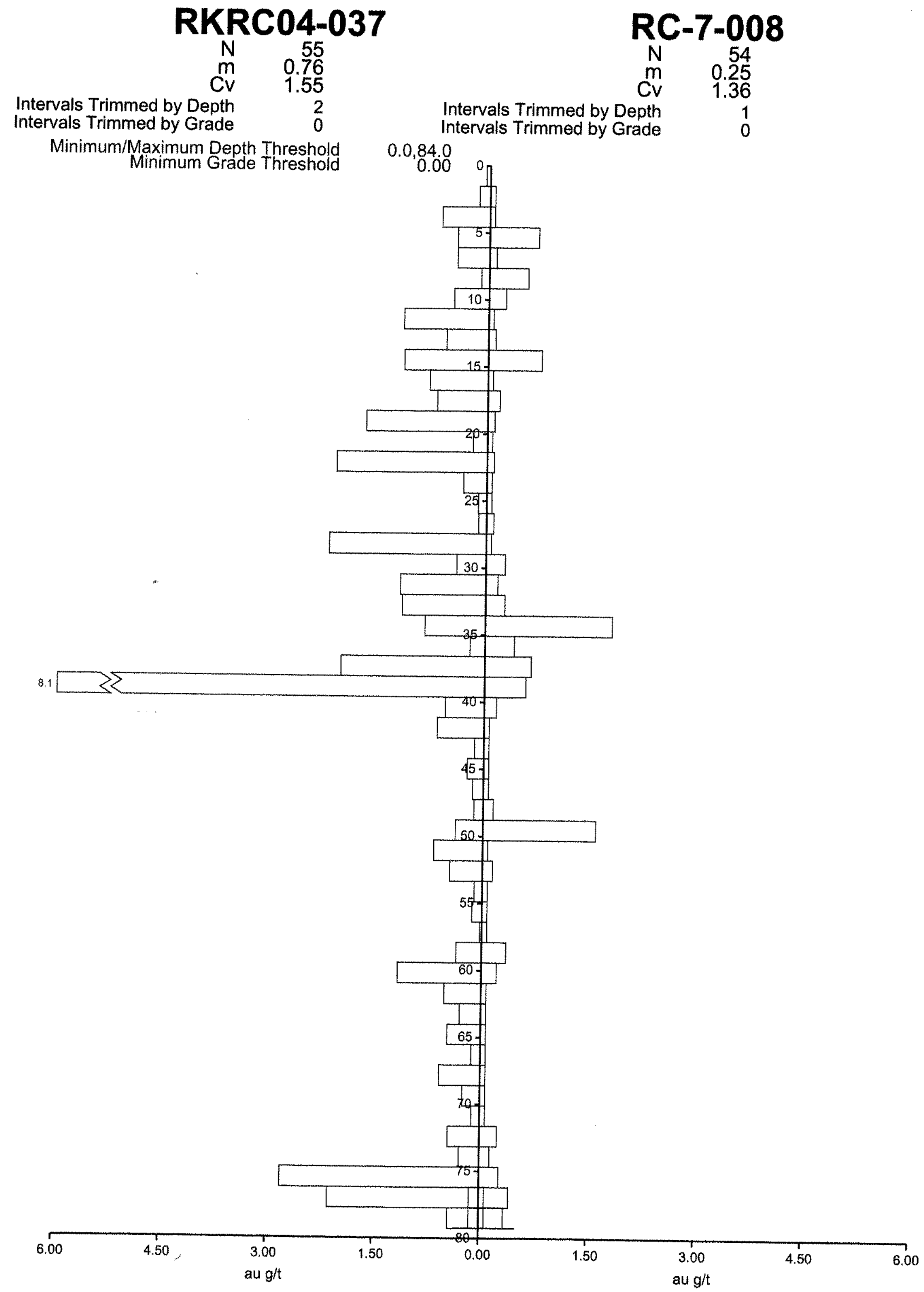


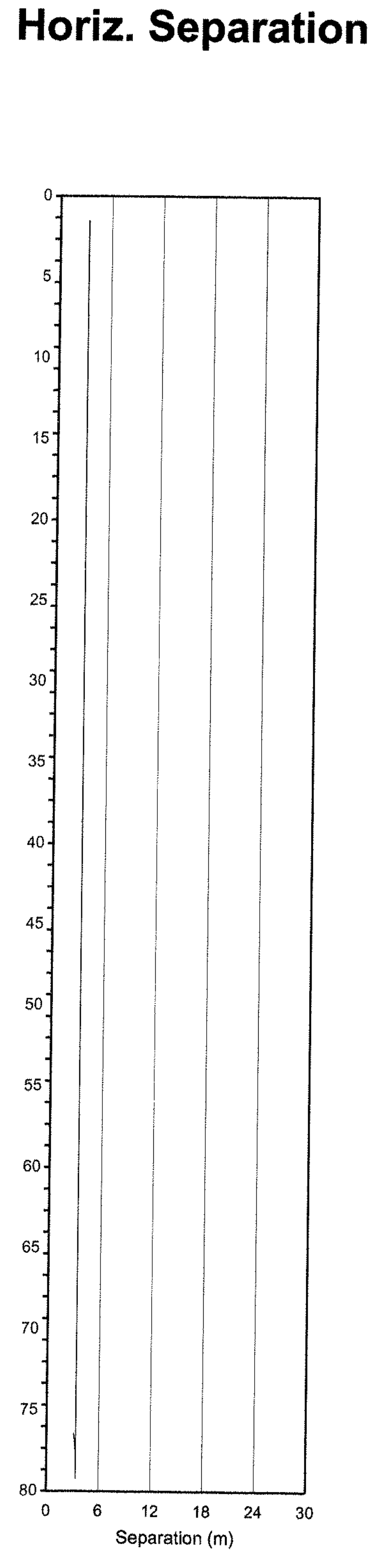
Cumulative Grade Thickness

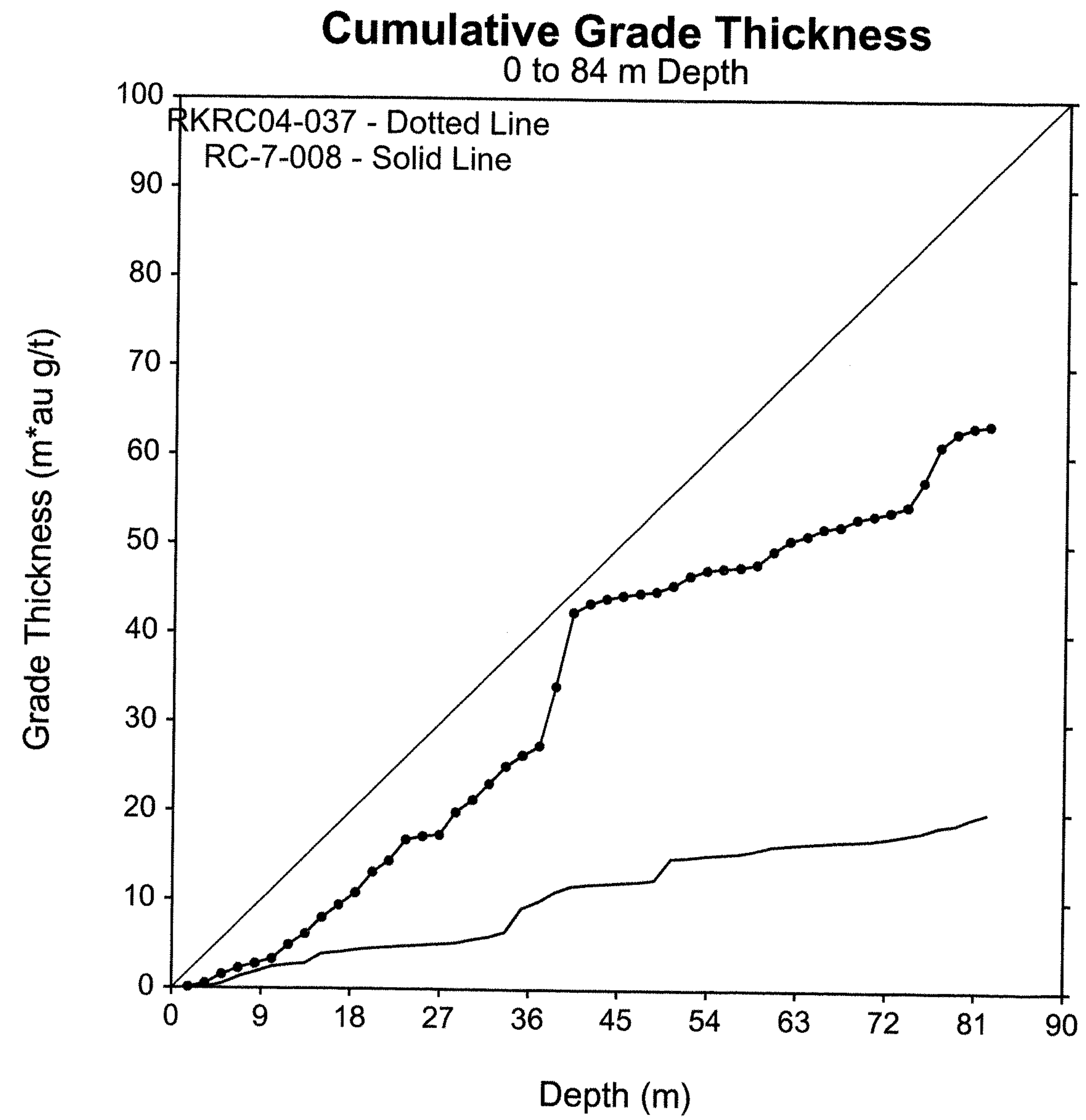
0 to 82 m Depth



RC CORE (likely problem w/ core hole) 13E C C







13 F

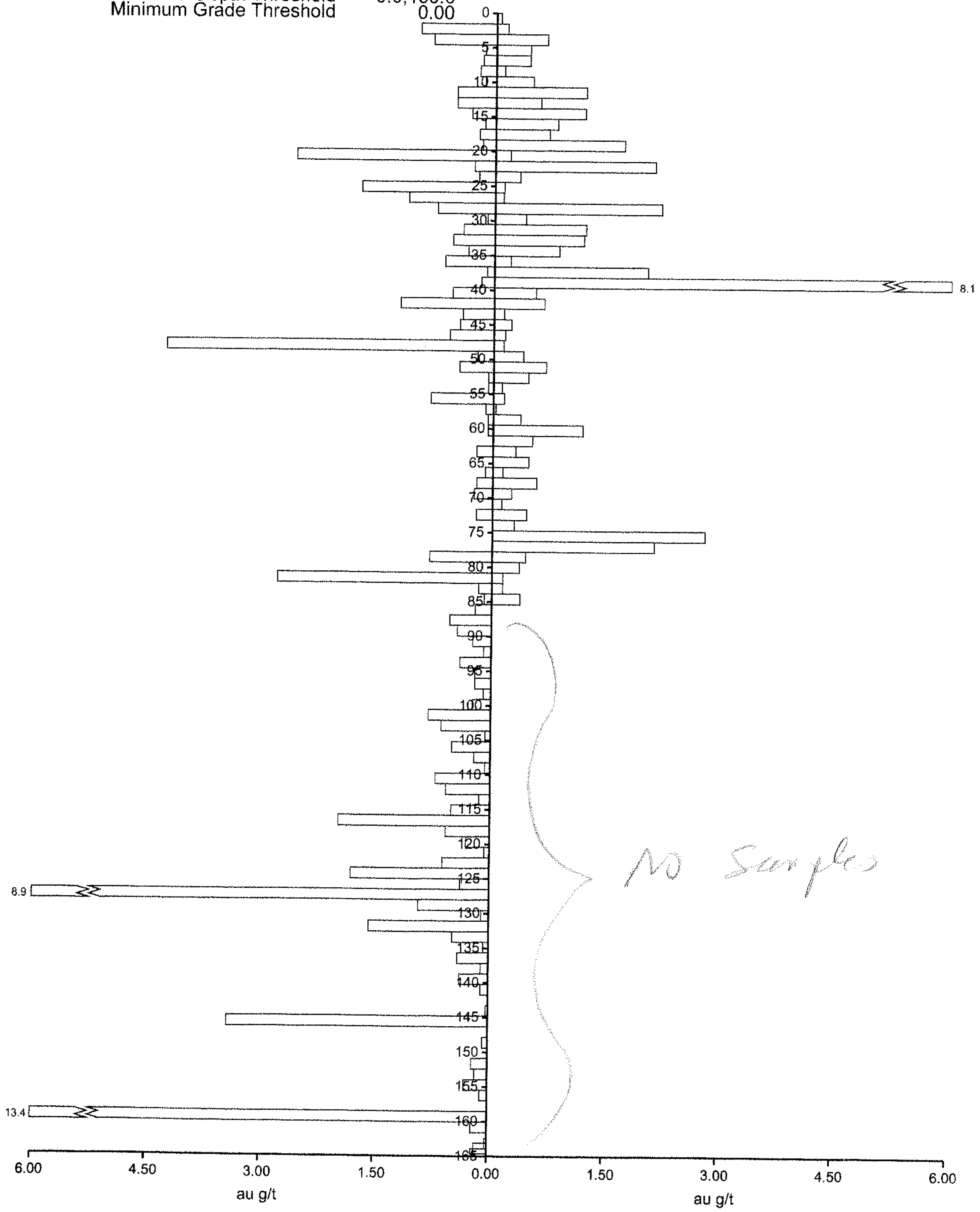
B+ B+

RCC-5-20

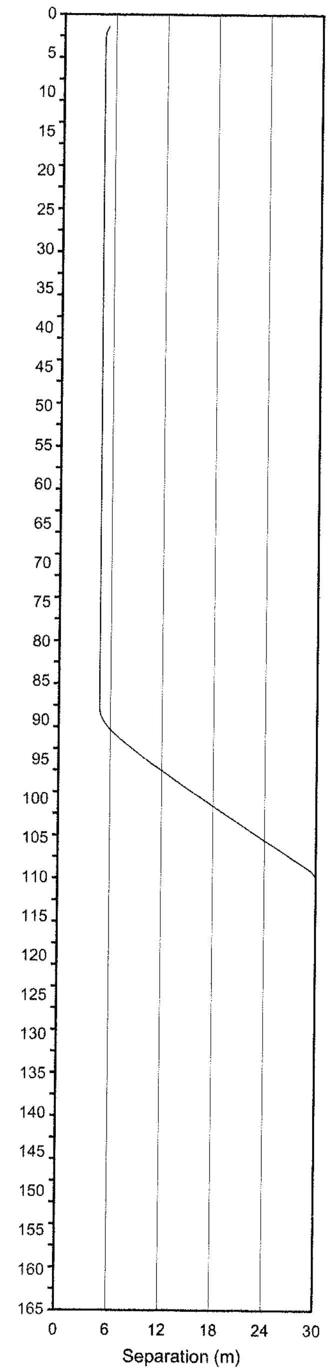
N	97
m	0.74
Cv	2.29
Intervals Trimmed by Depth	1
Intervals Trimmed by Grade	12
Minimum/Maximum Depth Threshold	0.0,169.0
Minimum Grade Threshold	0.00

RKRC04-037

N	57
m	0.75
Cv	1.56
Intervals Trimmed by Depth	0
Intervals Trimmed by Grade	0

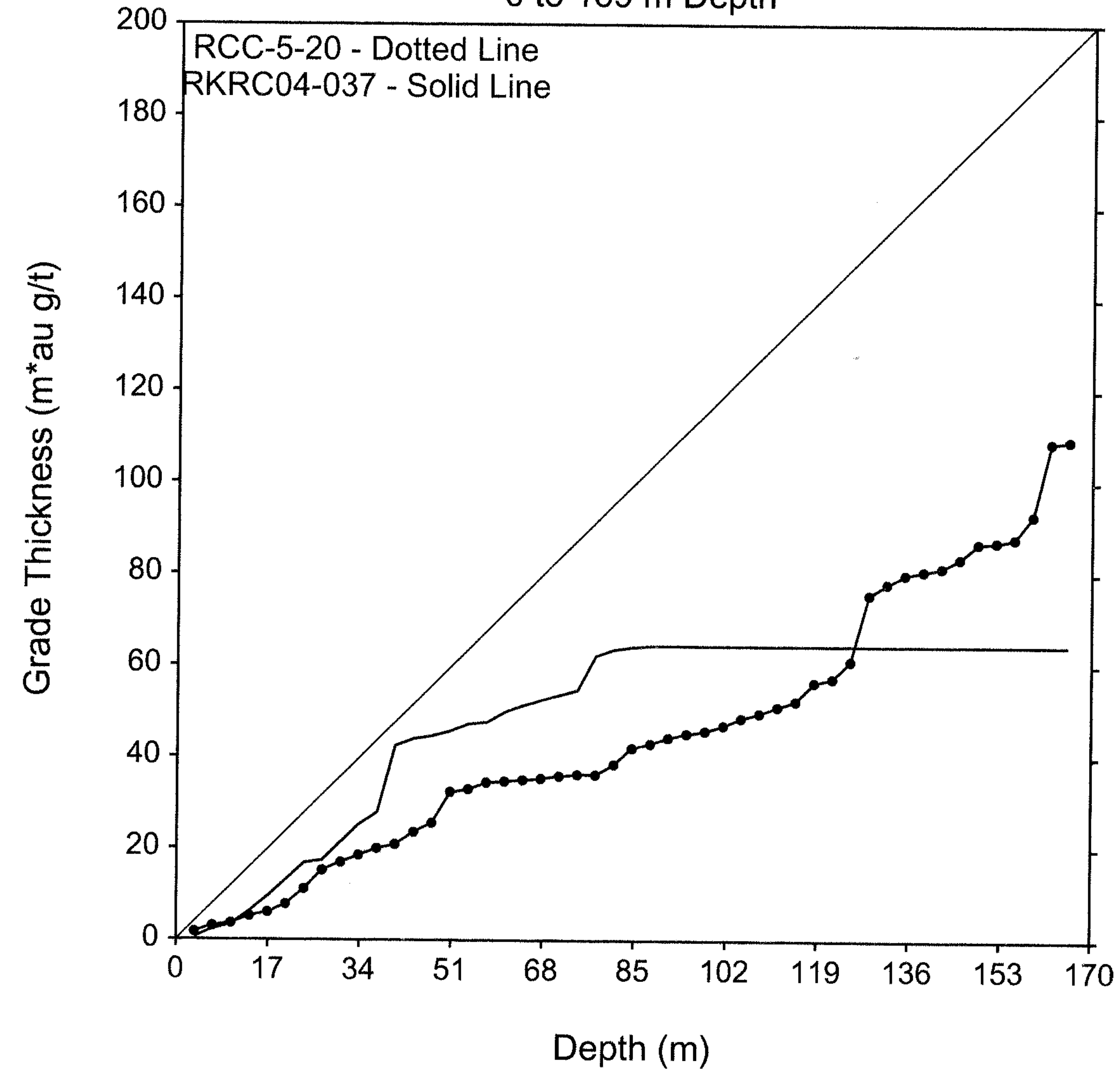


Horiz. Separation



Cumulative Grade Thickness

0 to 169 m Depth



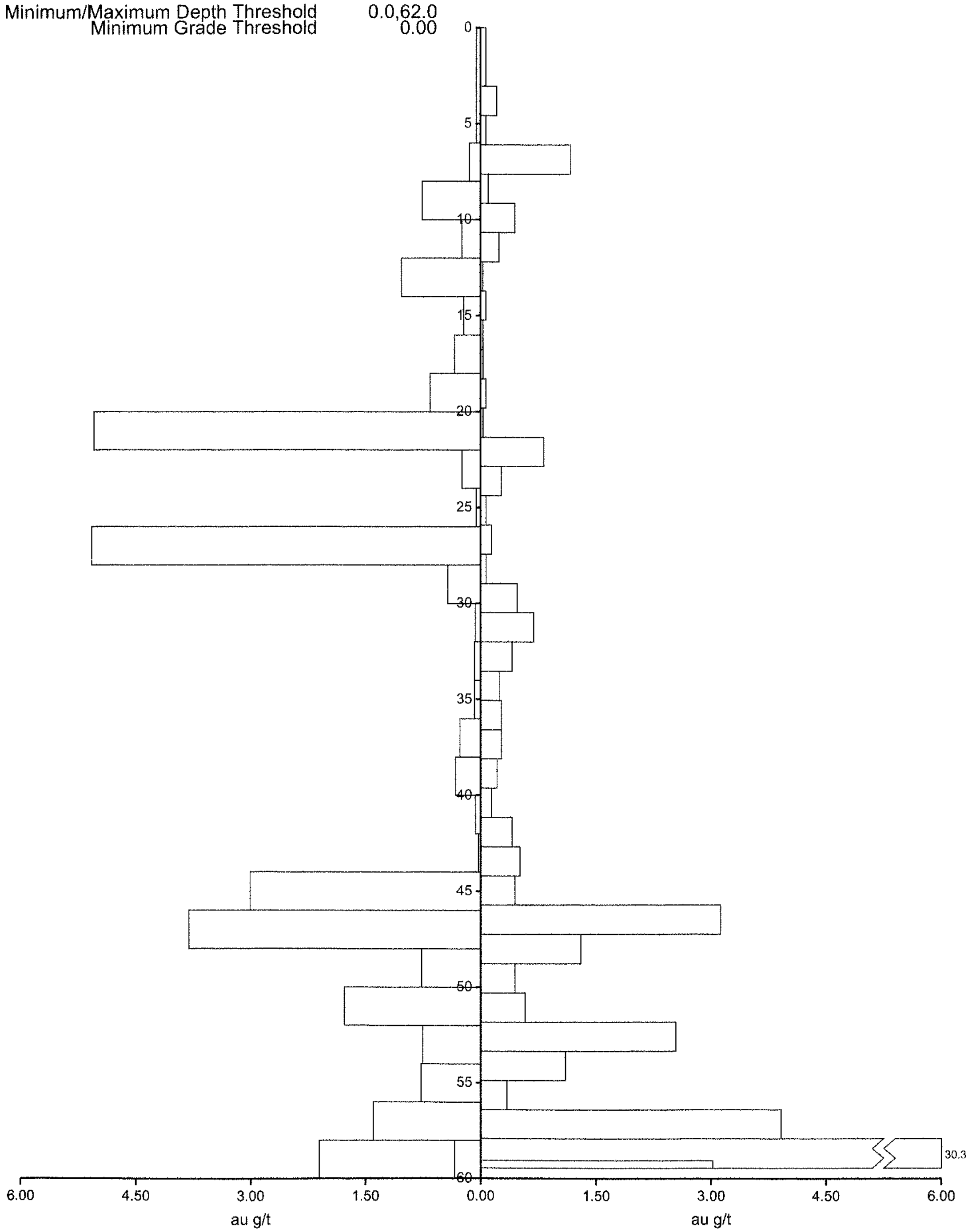
14 A

RKDC03-195

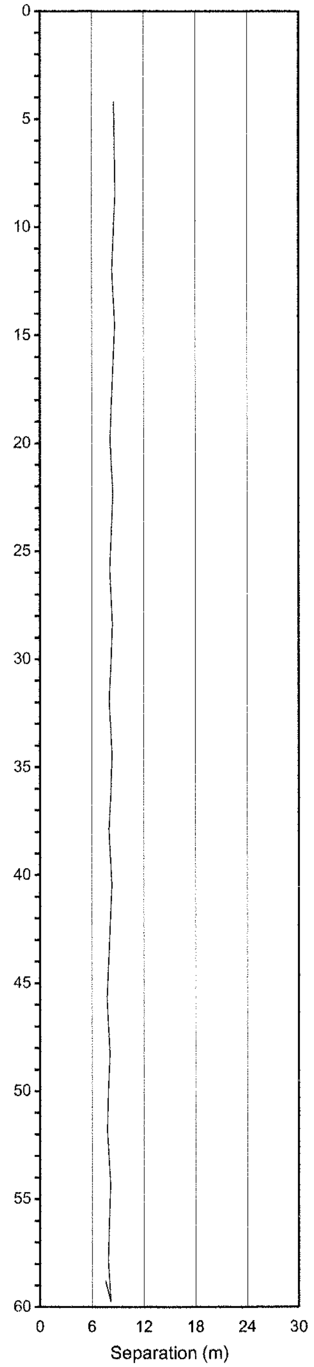
N	29
m	0.97
Cv	1.43
Intervals Trimmed by Depth	11
Intervals Trimmed by Grade	0
Minimum/Maximum Depth Threshold	0.0,62.0
Minimum Grade Threshold	0.00

RR-8-037

N	39
m	1.37
Cv	3.45
Intervals Trimmed by Depth	1
Intervals Trimmed by Grade	0

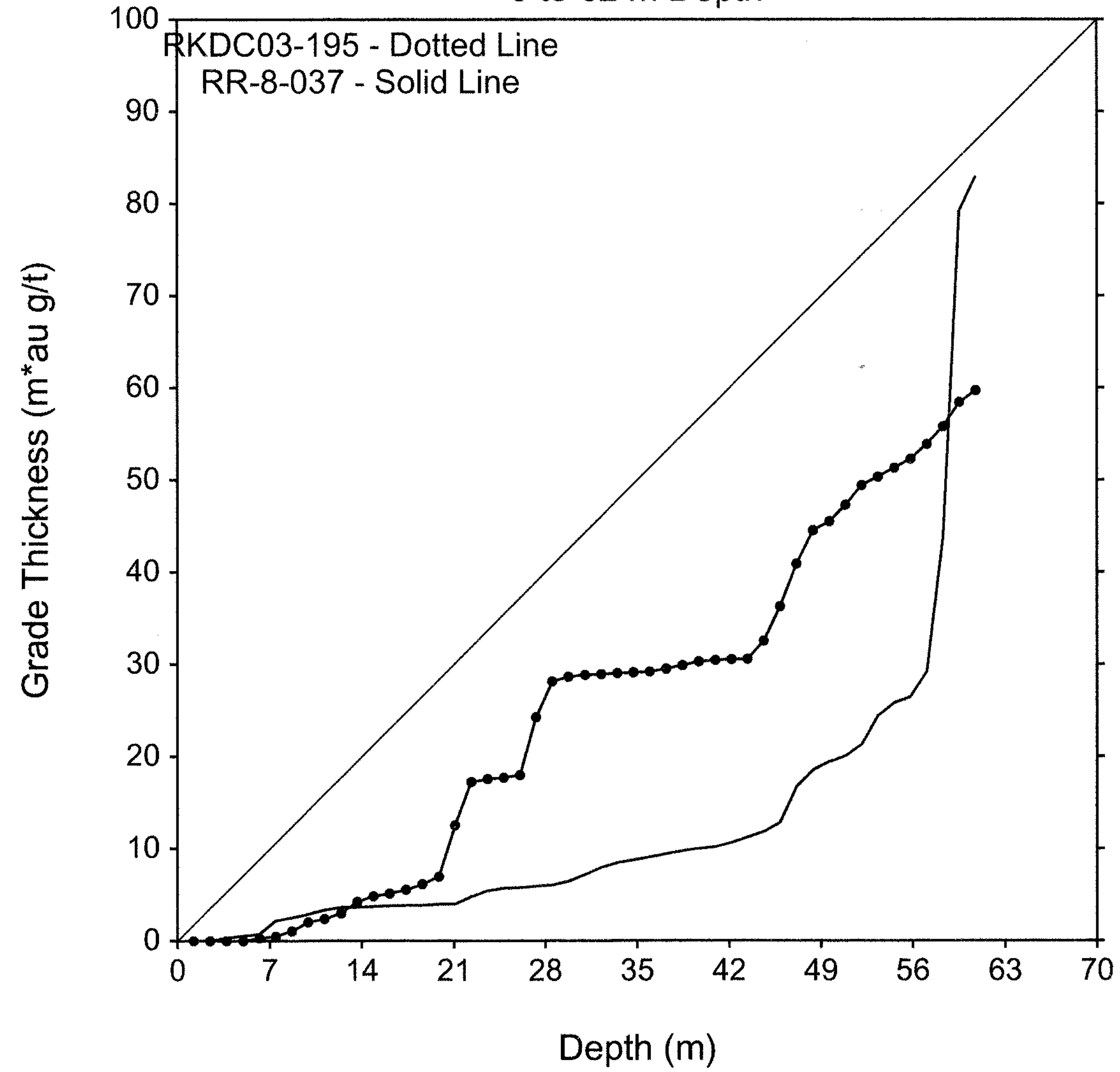


Horiz. Separation



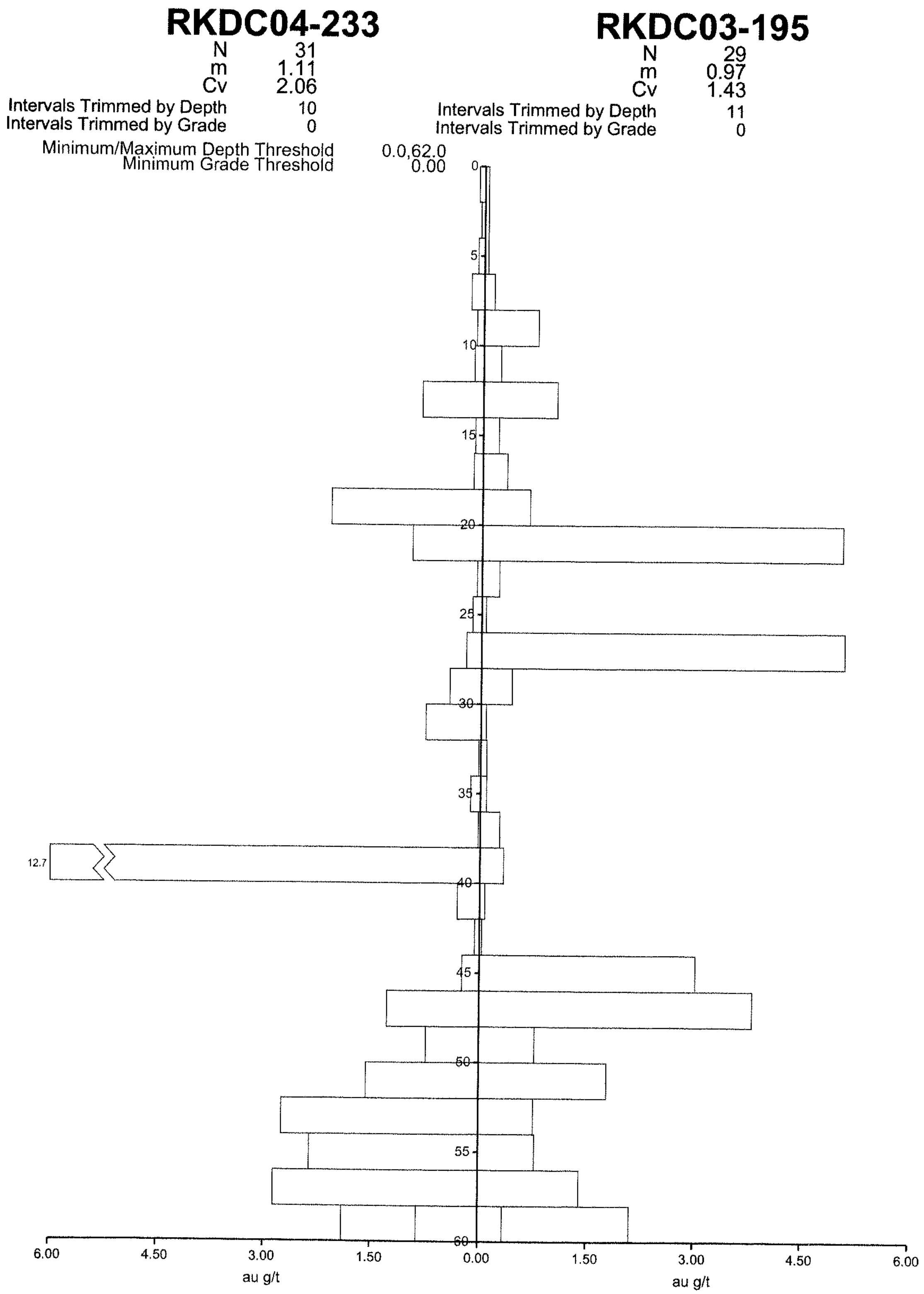
Cumulative Grade Thickness

0 to 62 m Depth

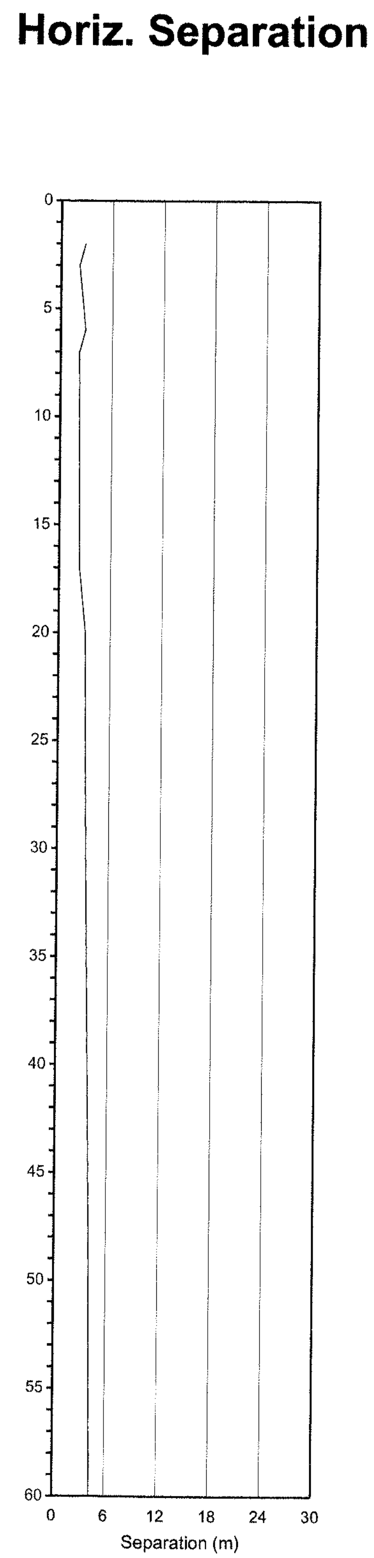


14B

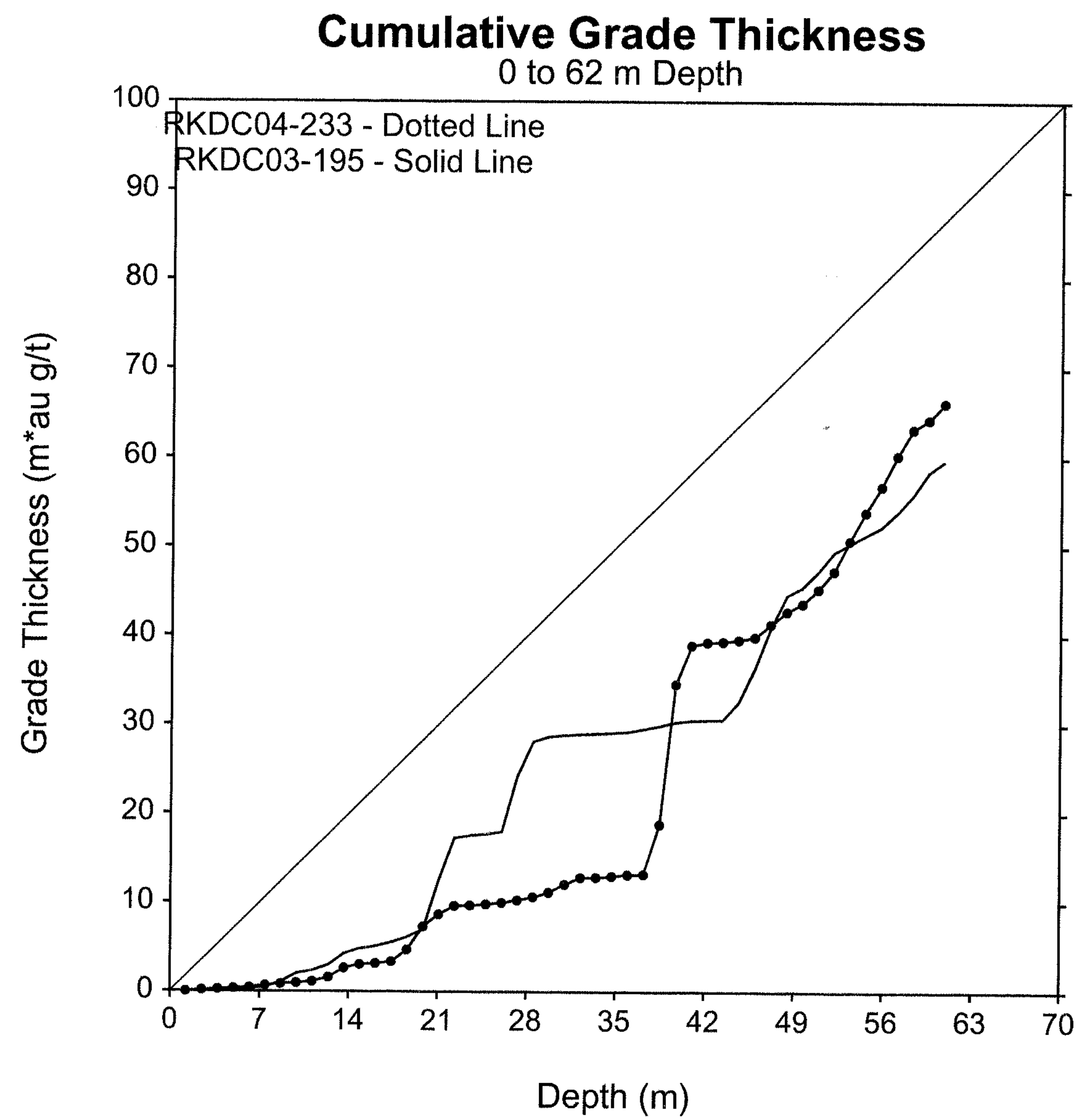
A A



RKDC04-233
N 31
m 1.11
Cv 2.06
Intervals Trimmed by Depth 10
Intervals Trimmed by Grade 0
Minimum/Maximum Depth Threshold 0.0,62.0
Minimum Grade Threshold 0.00
RKDC03-195
N 29
m 0.97
Cv 1.43
Intervals Trimmed by Depth 11
Intervals Trimmed by Grade 0
12.7
6.00 4.50 3.00 1.50 0.00 1.50 3.00 4.50 6.00
au g/t
au g/t



Horiz. Separation
0 6 12 18 24 30
Separation (m)



Cumulative Grade Thickness
0 to 62 m Depth
RKDC04-233 - Dotted Line
RKDC03-195 - Solid Line
Grade Thickness (m*au g/t)
Depth (m)

14C

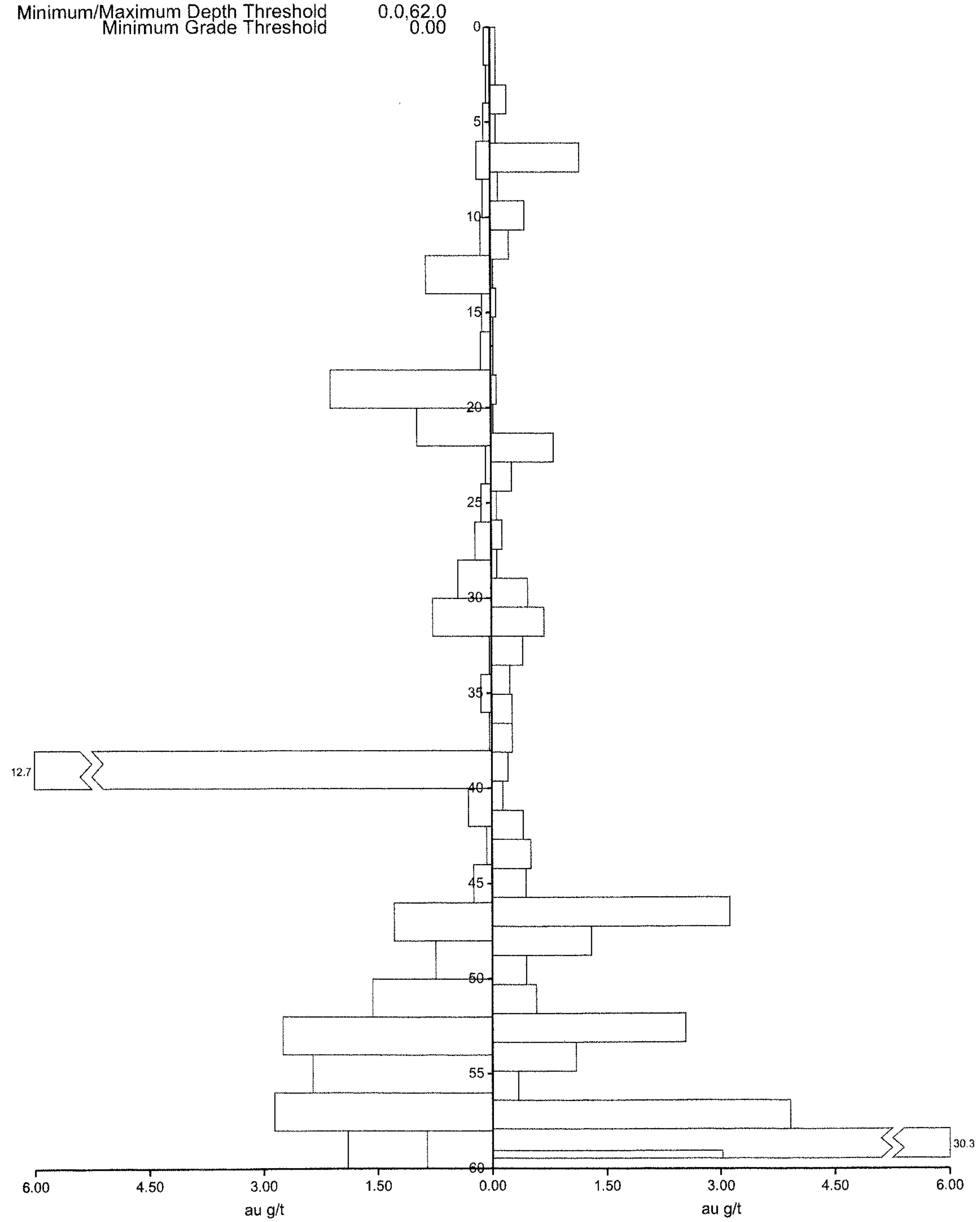
A A

RKDC04-233

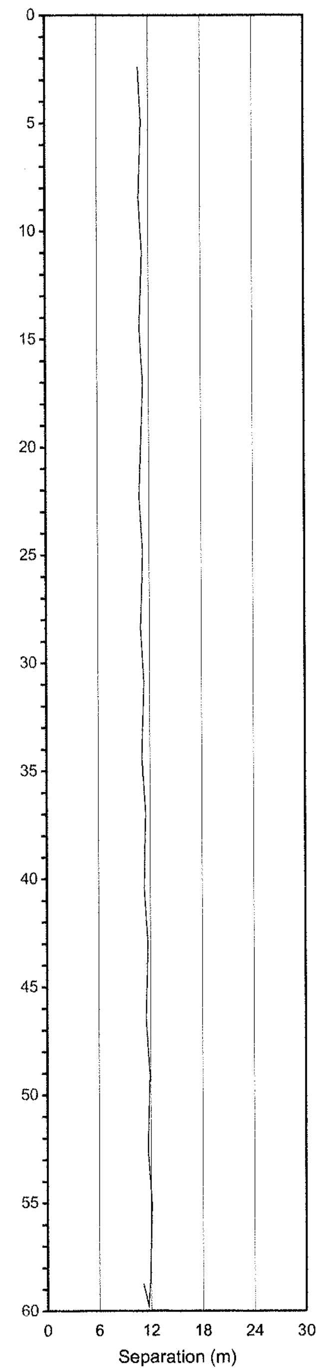
N 31
m 1.11
Cv 2.06
Intervals Trimmed by Depth 10
Intervals Trimmed by Grade 0
Minimum/Maximum Depth Threshold 0.0,62.0
Minimum Grade Threshold 0.00

RR-8-037

N 39
m 1.37
Cv 3.45
Intervals Trimmed by Depth 1
Intervals Trimmed by Grade 0

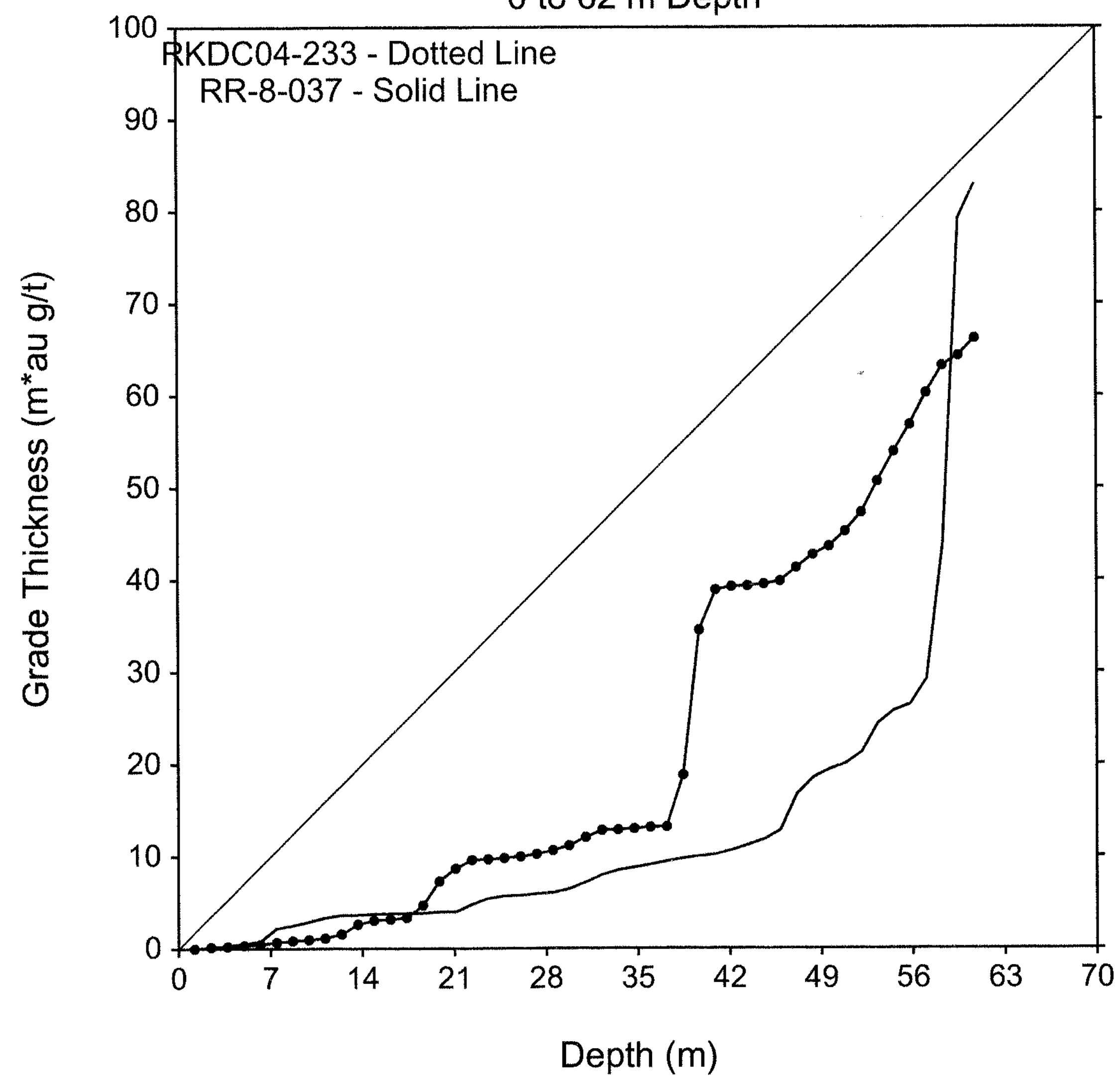


Horiz. Separation

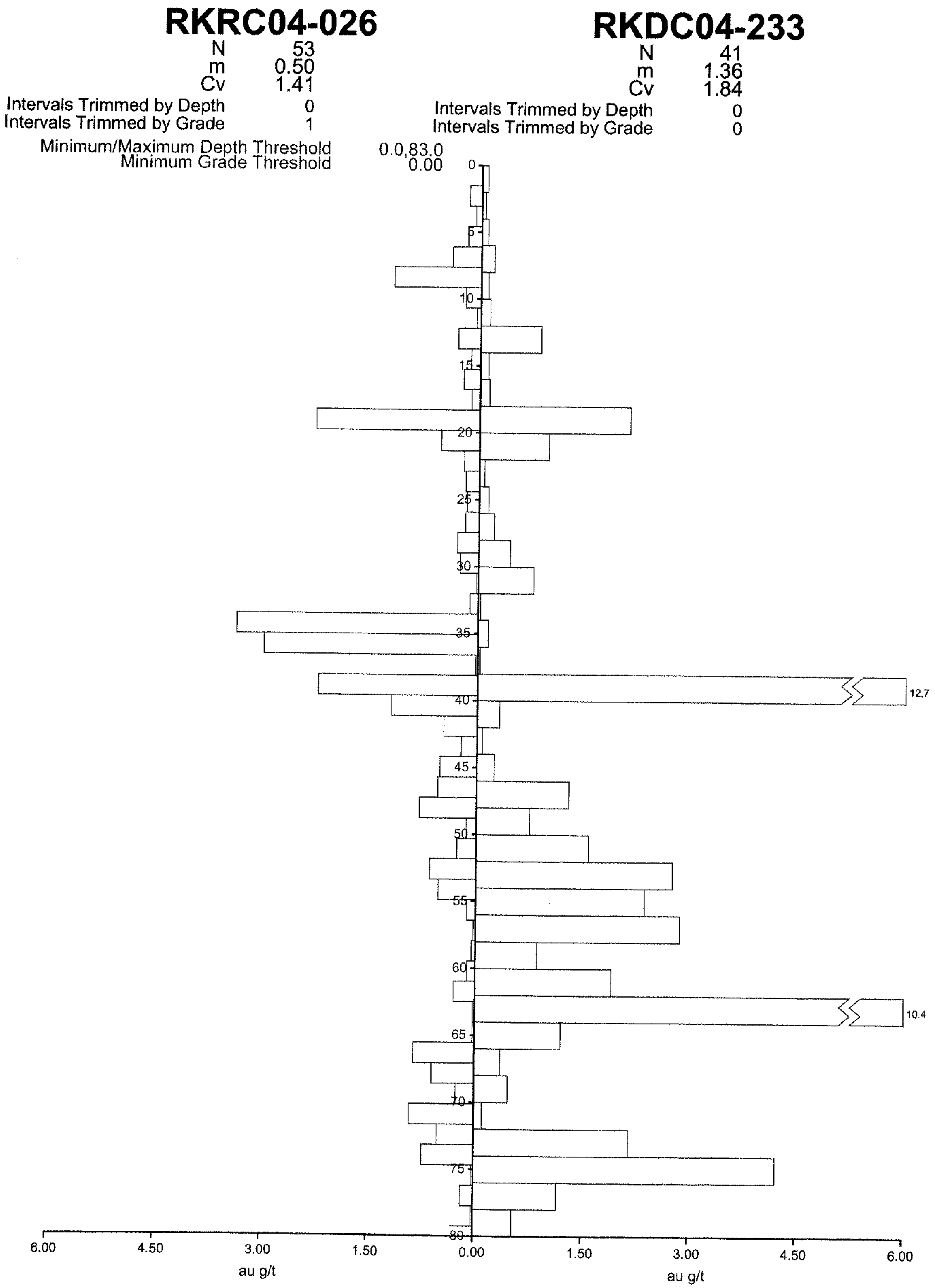


Cumulative Grade Thickness

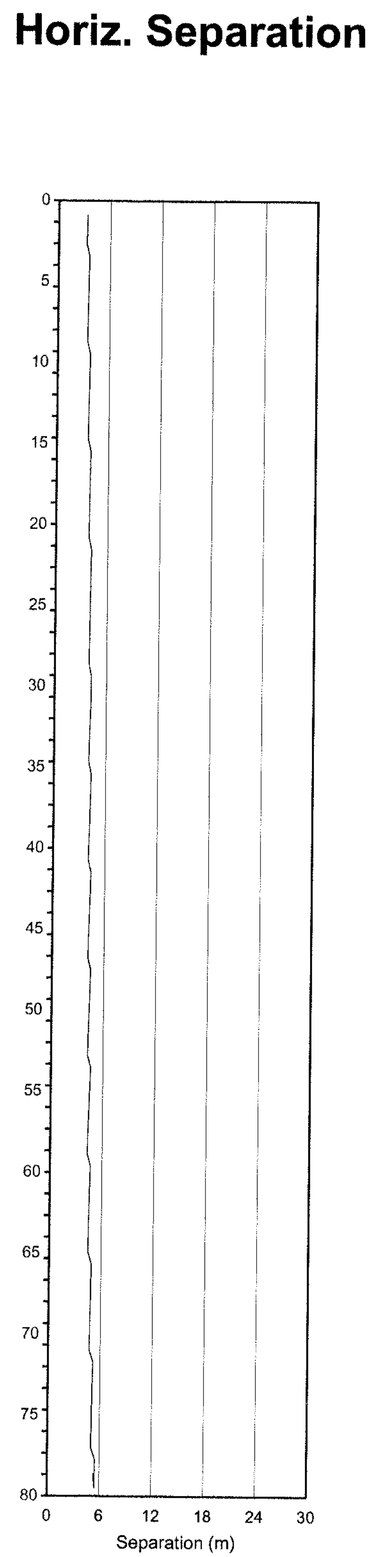
0 to 62 m Depth



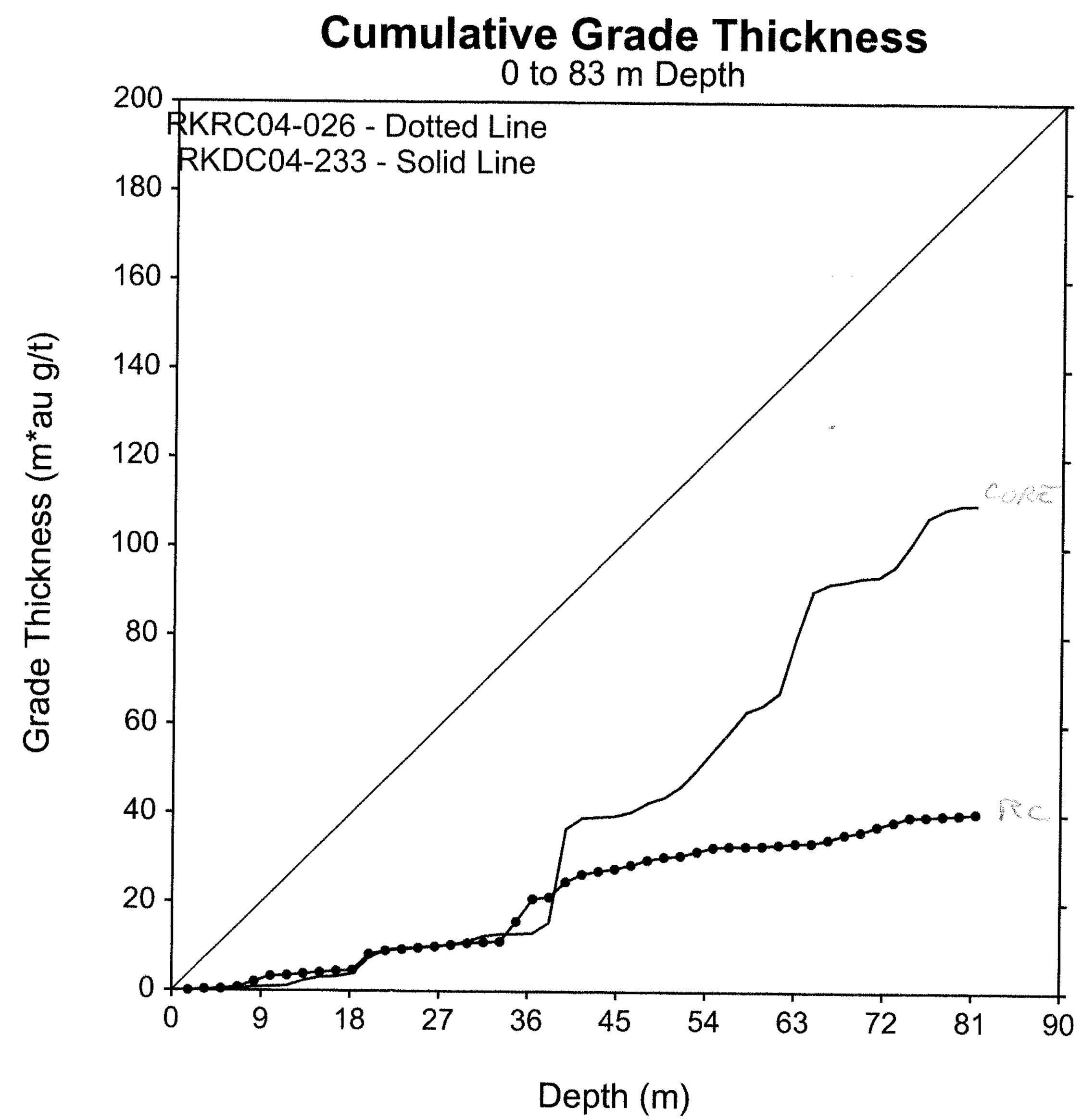
14D
c



RKRC04-026
N 53
m 0.50
Cv 1.41
Intervals Trimmed by Depth 0
Intervals Trimmed by Grade 1
Minimum/Maximum Depth Threshold 0.0,83.0
Minimum Grade Threshold 0.00
RKDC04-233
N 41
m 1.36
Cv 1.84
Intervals Trimmed by Depth 0
Intervals Trimmed by Grade 0
12.7
10.4
6.00 4.50 3.00 1.50 0.00 1.50 3.00 4.50 6.00
au g/t
au g/t



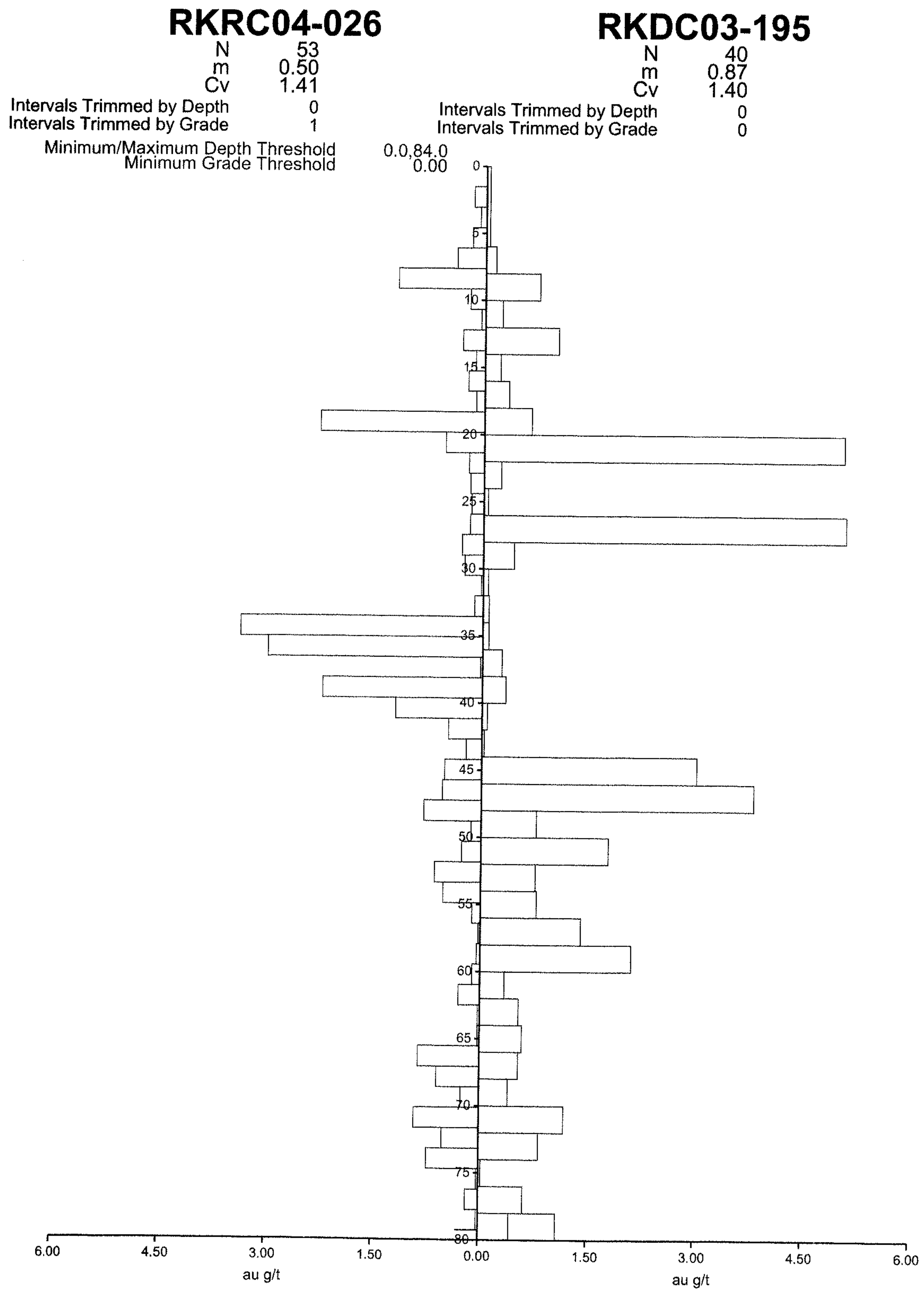
Horiz. Separation
Separation (m)



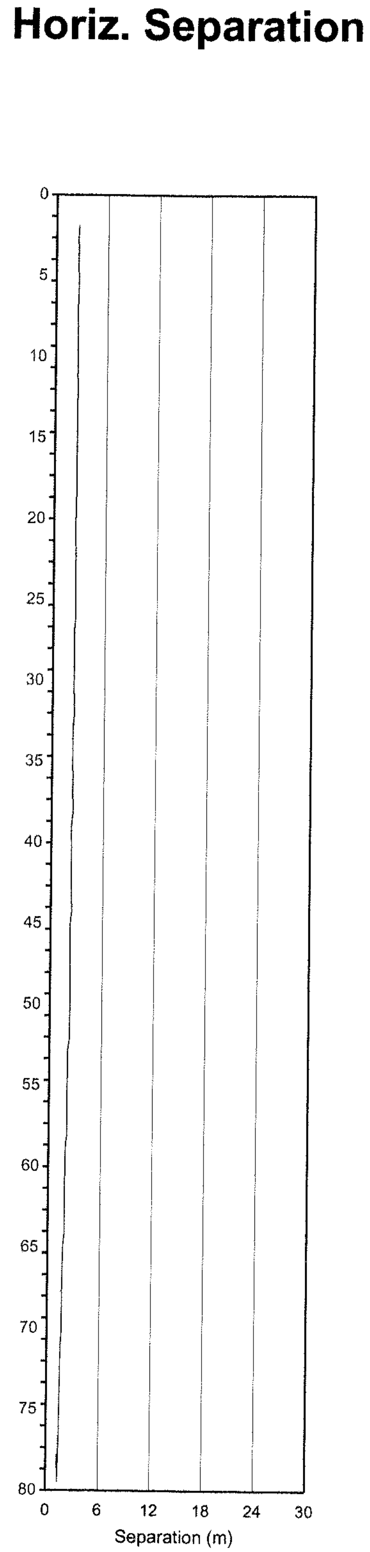
Cumulative Grade Thickness
0 to 83 m Depth
RKRC04-026 - Dotted Line
RKDC04-233 - Solid Line
Grade Thickness (m*au g/t)
Depth (m)
core
RC

14E

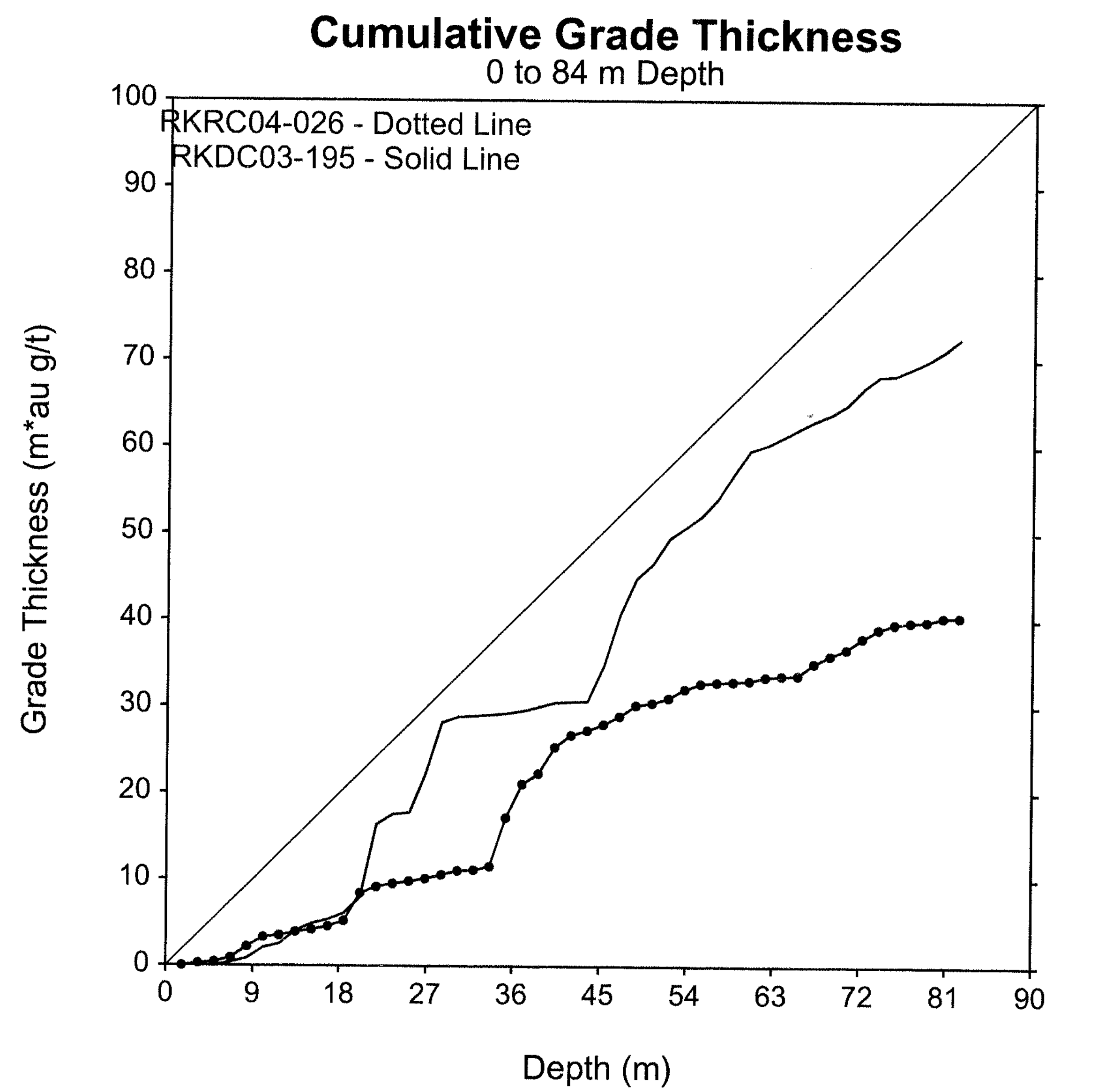
C C



RKRC04-026
N 53
m 0.50
Cv 1.41
Intervals Trimmed by Depth 0
Intervals Trimmed by Grade 1
Minimum/Maximum Depth Threshold 0.0,84.0
Minimum Grade Threshold 0.00
RKDC03-195
N 40
m 0.87
Cv 1.40
Intervals Trimmed by Depth 0
Intervals Trimmed by Grade 0
au g/t
au g/t



Horiz. Separation
Separation (m)



Cumulative Grade Thickness
0 to 84 m Depth
RKRC04-026 - Dotted Line
RKDC03-195 - Solid Line
Grade Thickness (m*au g/t)
Depth (m)

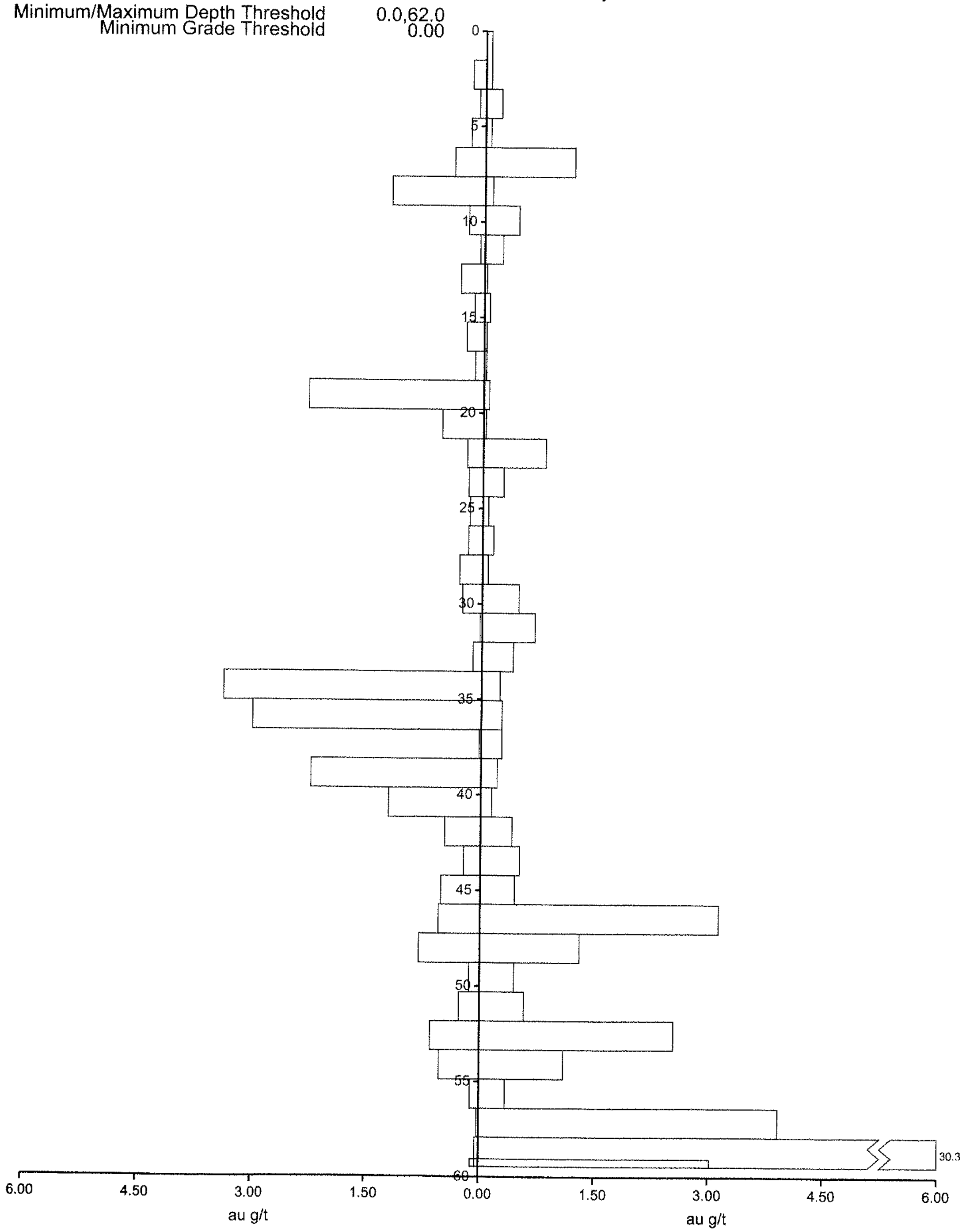
14F
A

RKRC04-026

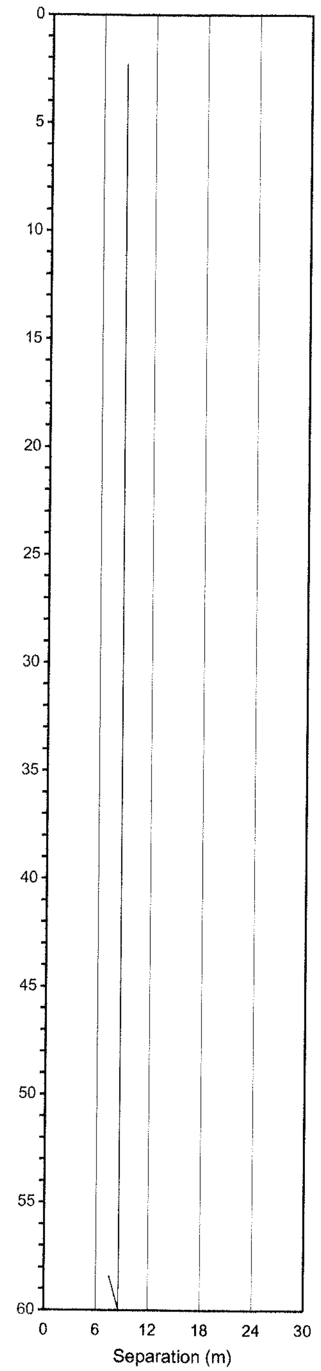
N	39
m	0.56
Cv	1.43
Intervals Trimmed by Depth	14
Intervals Trimmed by Grade	1
Minimum/Maximum Depth Threshold	0.0,62.0
Minimum Grade Threshold	0.00

RR-8-037

N	39
m	1.37
Cv	3.45
Intervals Trimmed by Depth	1
Intervals Trimmed by Grade	0

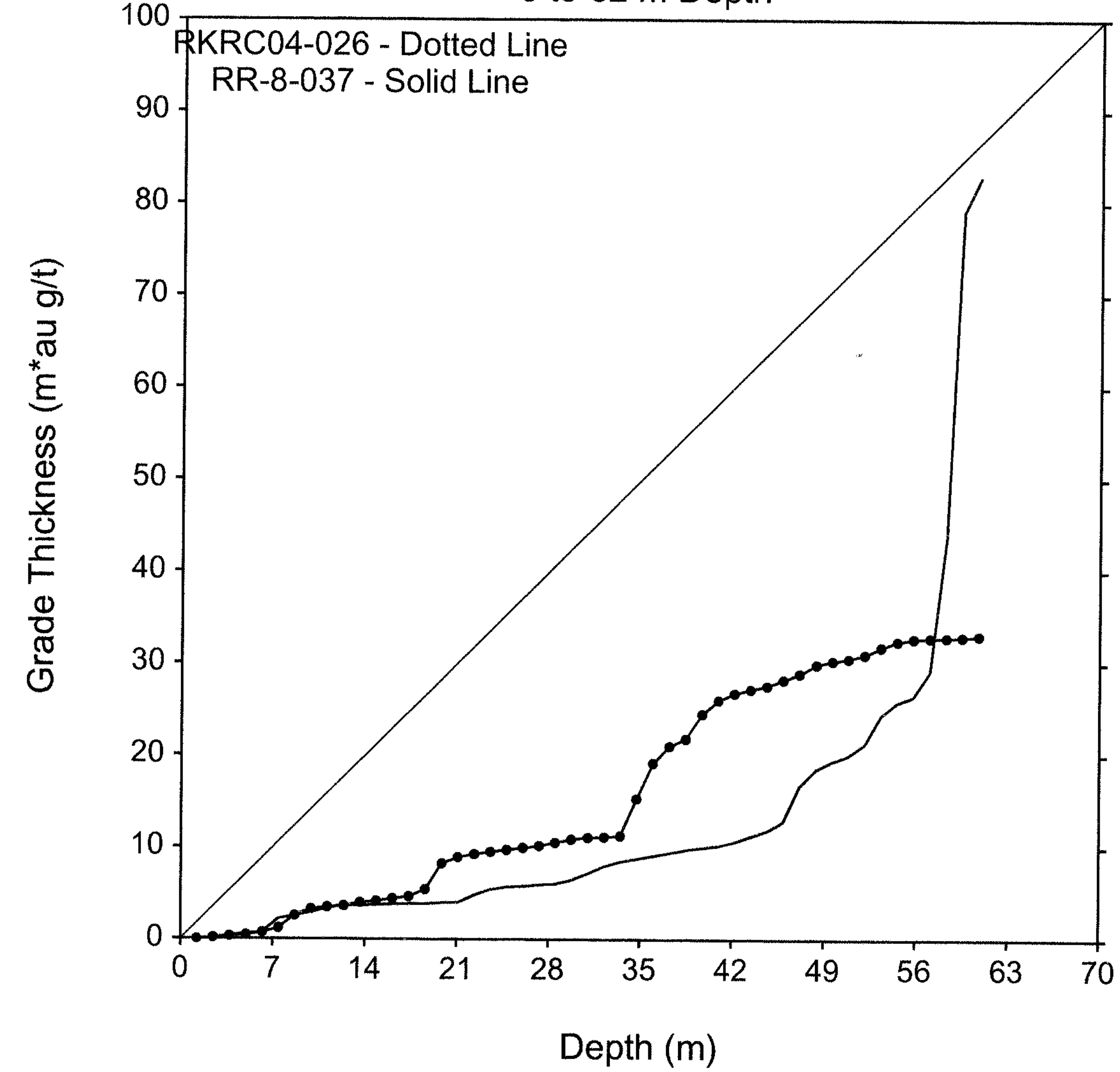


Horiz. Separation



Cumulative Grade Thickness

0 to 62 m Depth



15 A

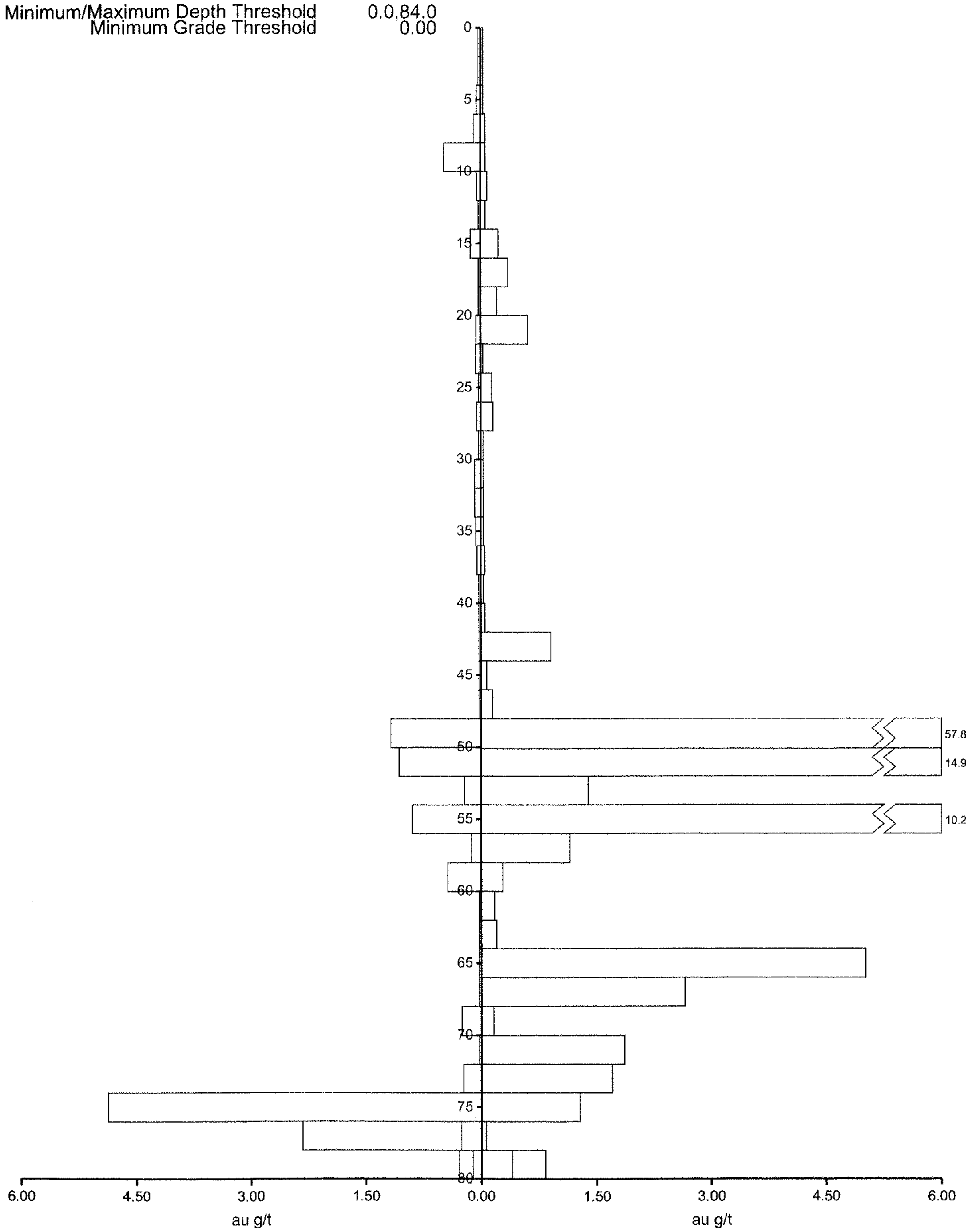
B B

RKDC03-138

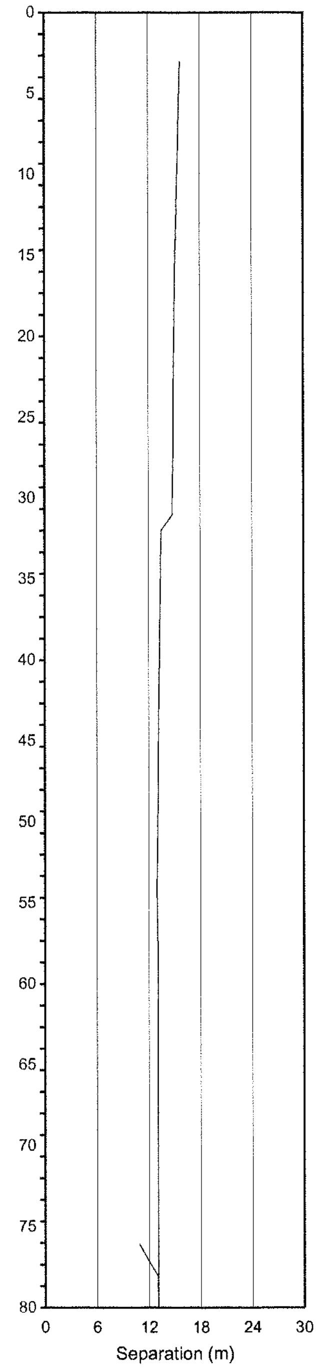
N 42
m 0.33
Cv 2.47
Intervals Trimmed by Depth 30
Intervals Trimmed by Grade 0
Minimum/Maximum Depth Threshold 0.0,84.0
Minimum Grade Threshold 0.00

RKDC04-250

N 41
m 2.52
Cv 3.67
Intervals Trimmed by Depth 0
Intervals Trimmed by Grade 0

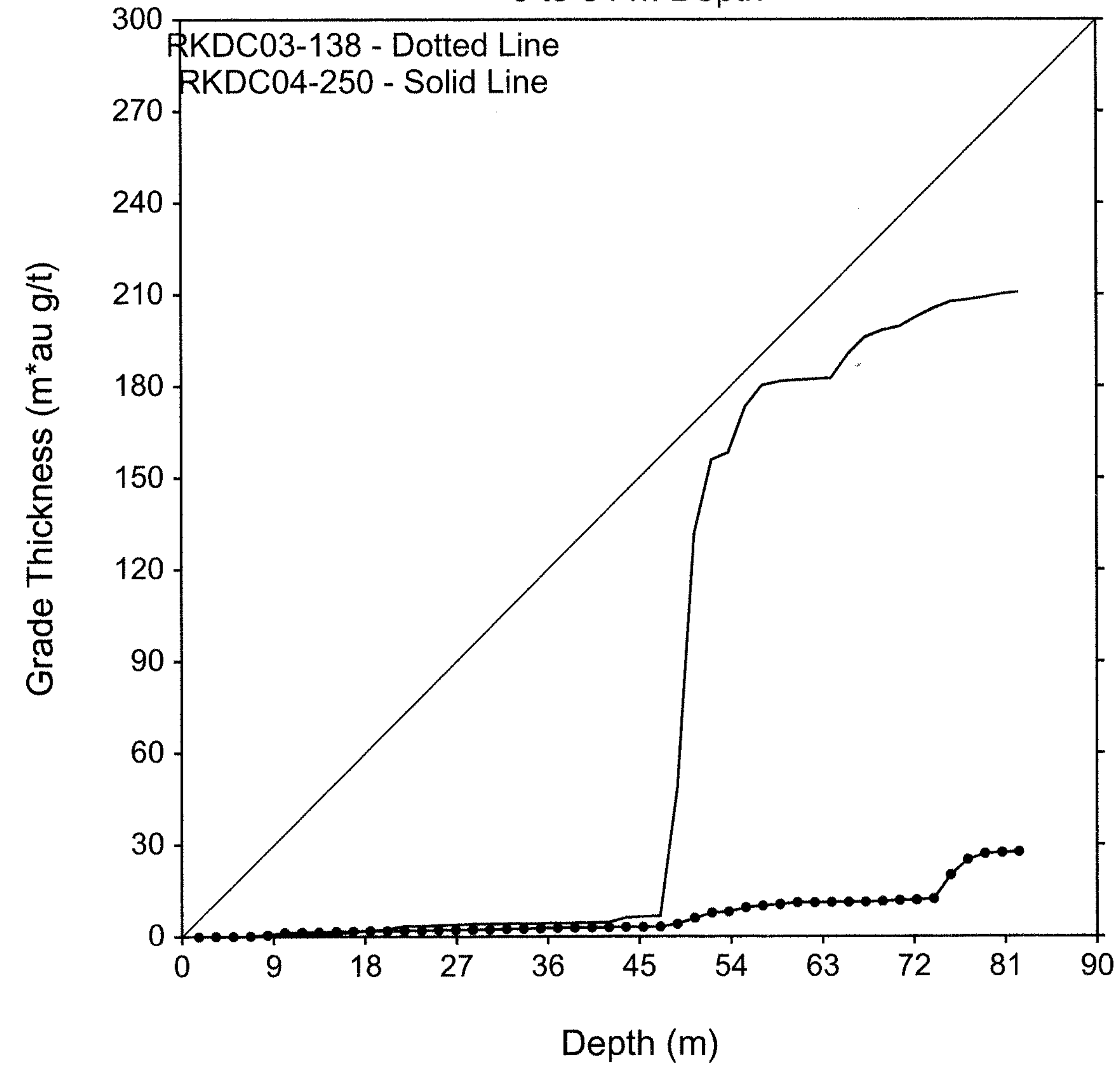


Horiz. Separation



Cumulative Grade Thickness

0 to 84 m Depth



16 A

B B

RC

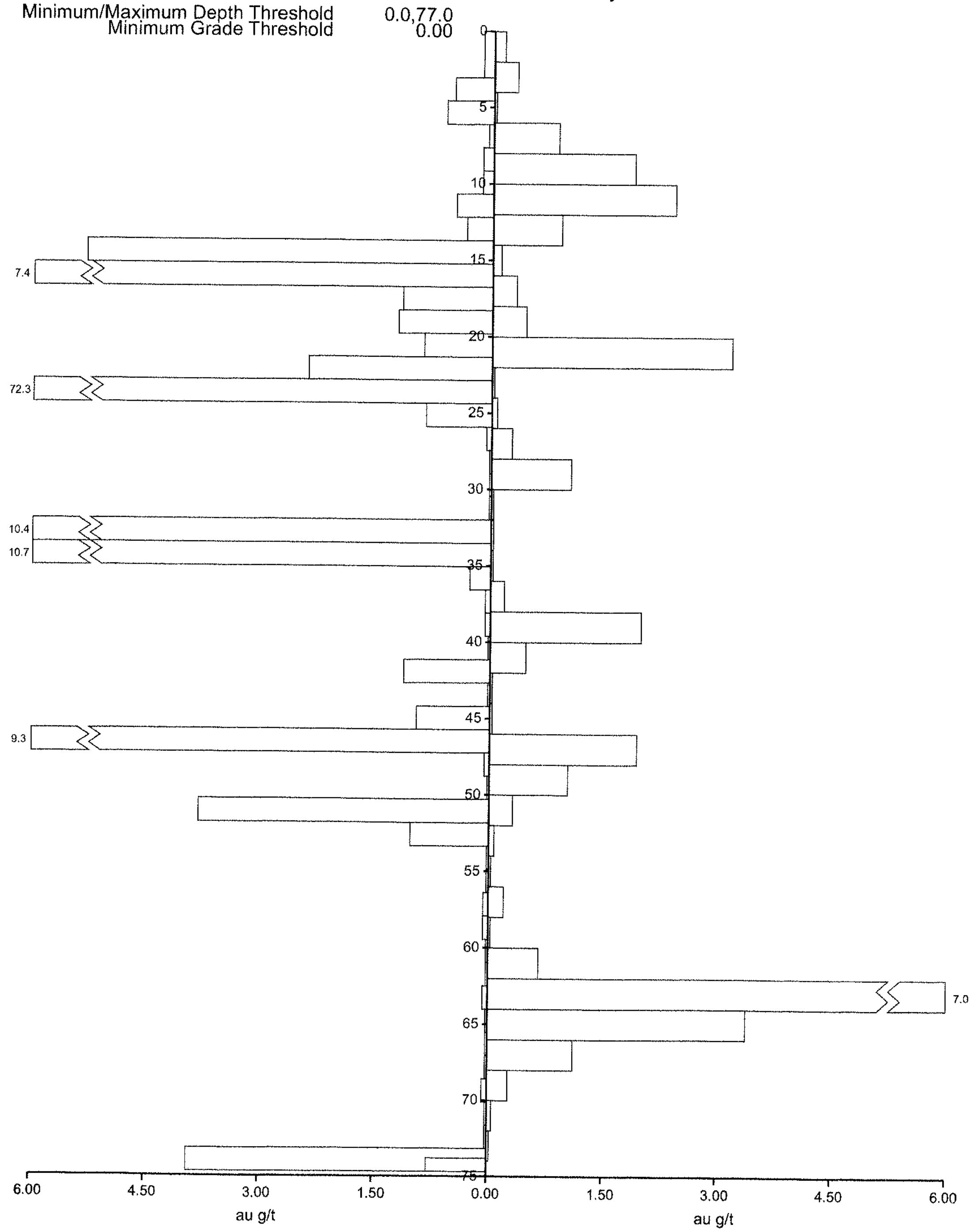
RR-8-078

N	49
m	2.74
Cv	3.74
Intervals Trimmed by Depth	1
Intervals Trimmed by Grade	0
Minimum/Maximum Depth Threshold	0.0,77.0
Minimum Grade Threshold	0.00

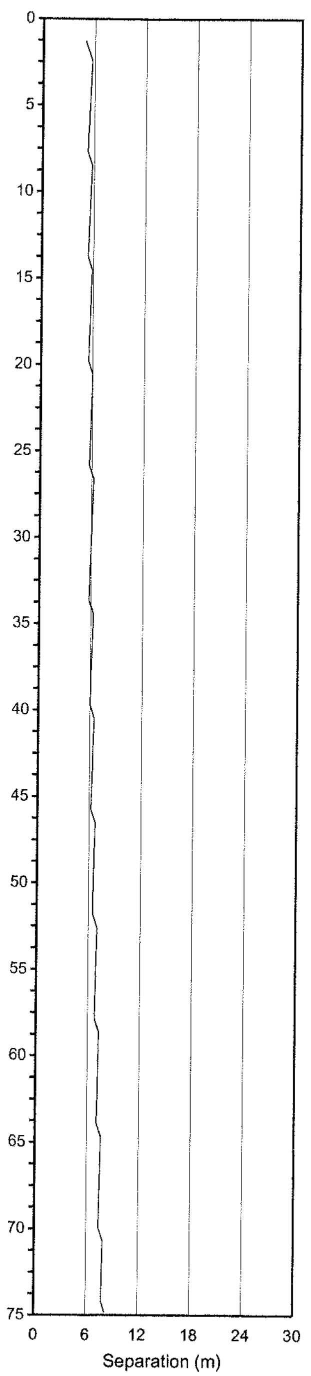
CORE

RKDC03-180

N	38
m	0.81
Cv	1.65
Intervals Trimmed by Depth	1
Intervals Trimmed by Grade	0

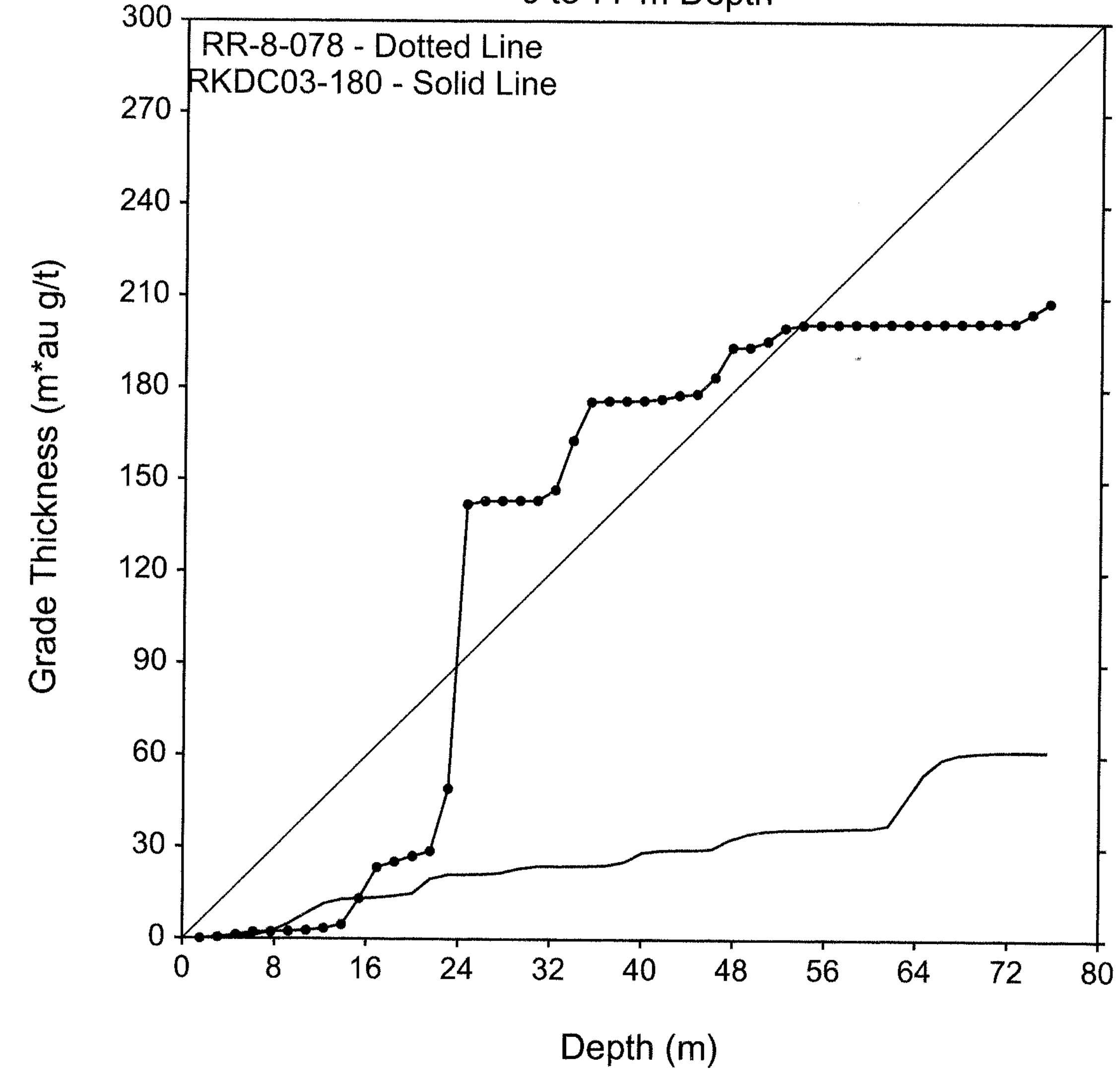


Horiz. Separation



Cumulative Grade Thickness

0 to 77 m Depth



16 B

A A

CORE

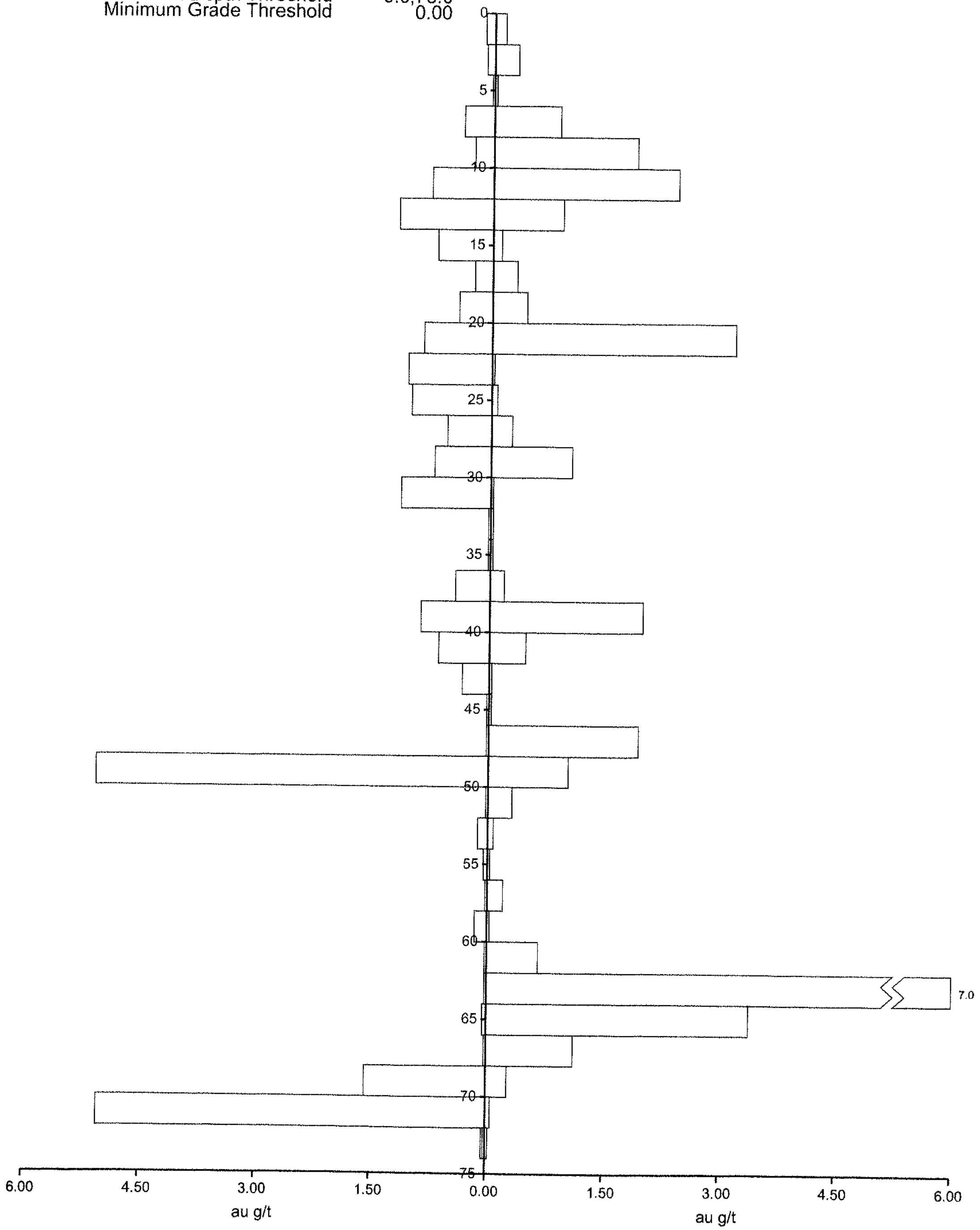
RKDC04-232

N 39
m 0.63
Cv 1.77
Intervals Trimmed by Depth 1
Intervals Trimmed by Grade 0
Minimum/Maximum Depth Threshold 0.0,78.0
Minimum Grade Threshold 0.00

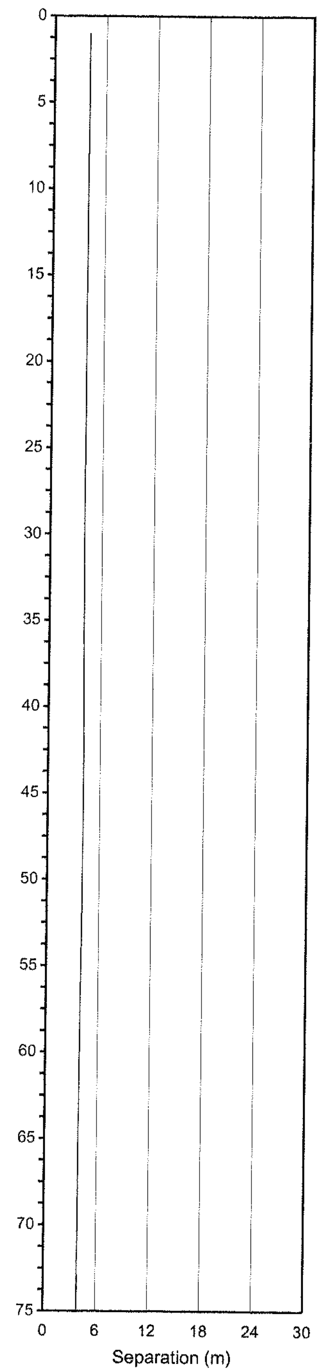
CORE

RKDC03-180

N 38
m 0.81
Cv 1.65
Intervals Trimmed by Depth 1
Intervals Trimmed by Grade 0

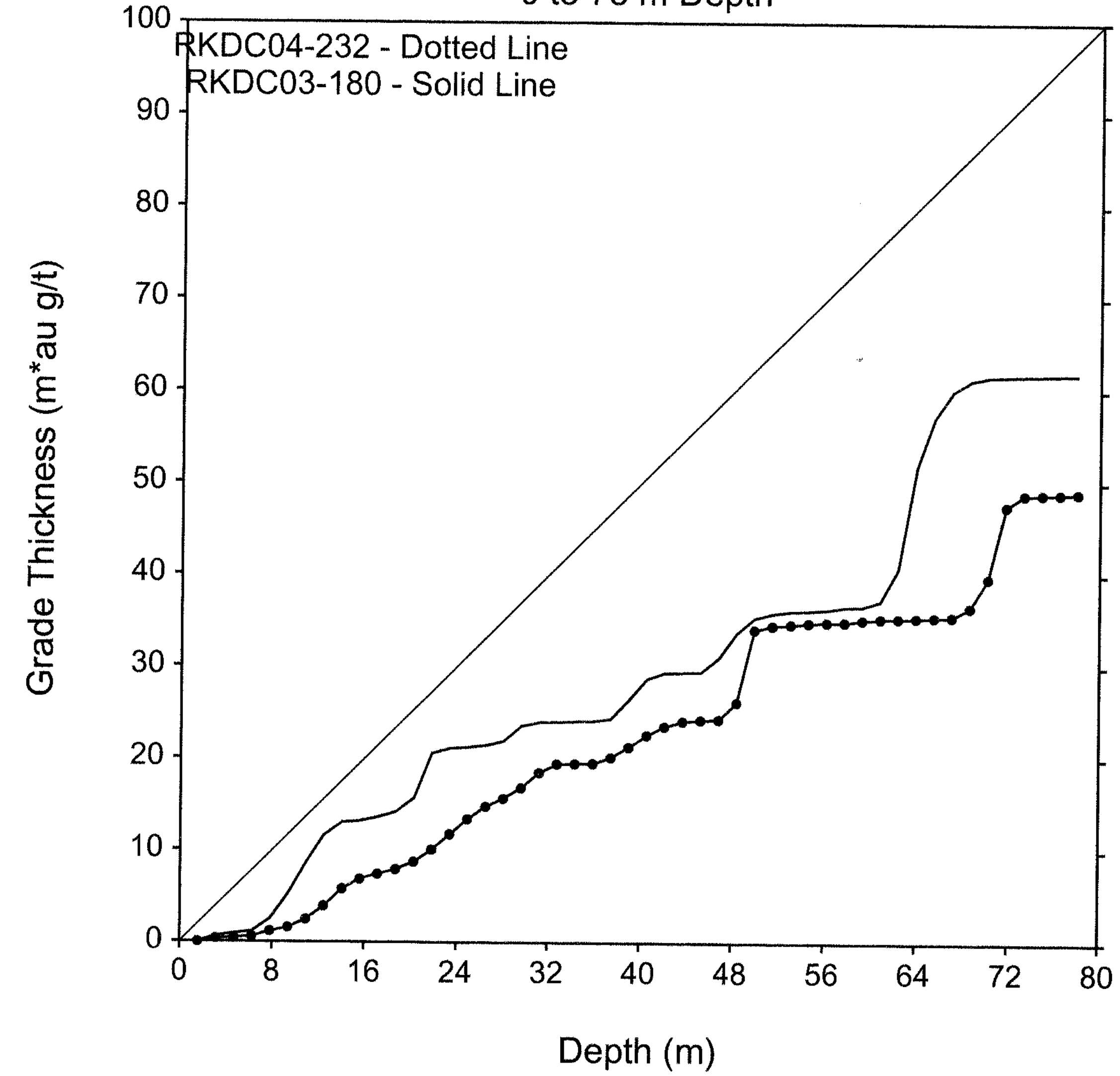


Horiz. Separation



Cumulative Grade Thickness

0 to 78 m Depth



16 C

B

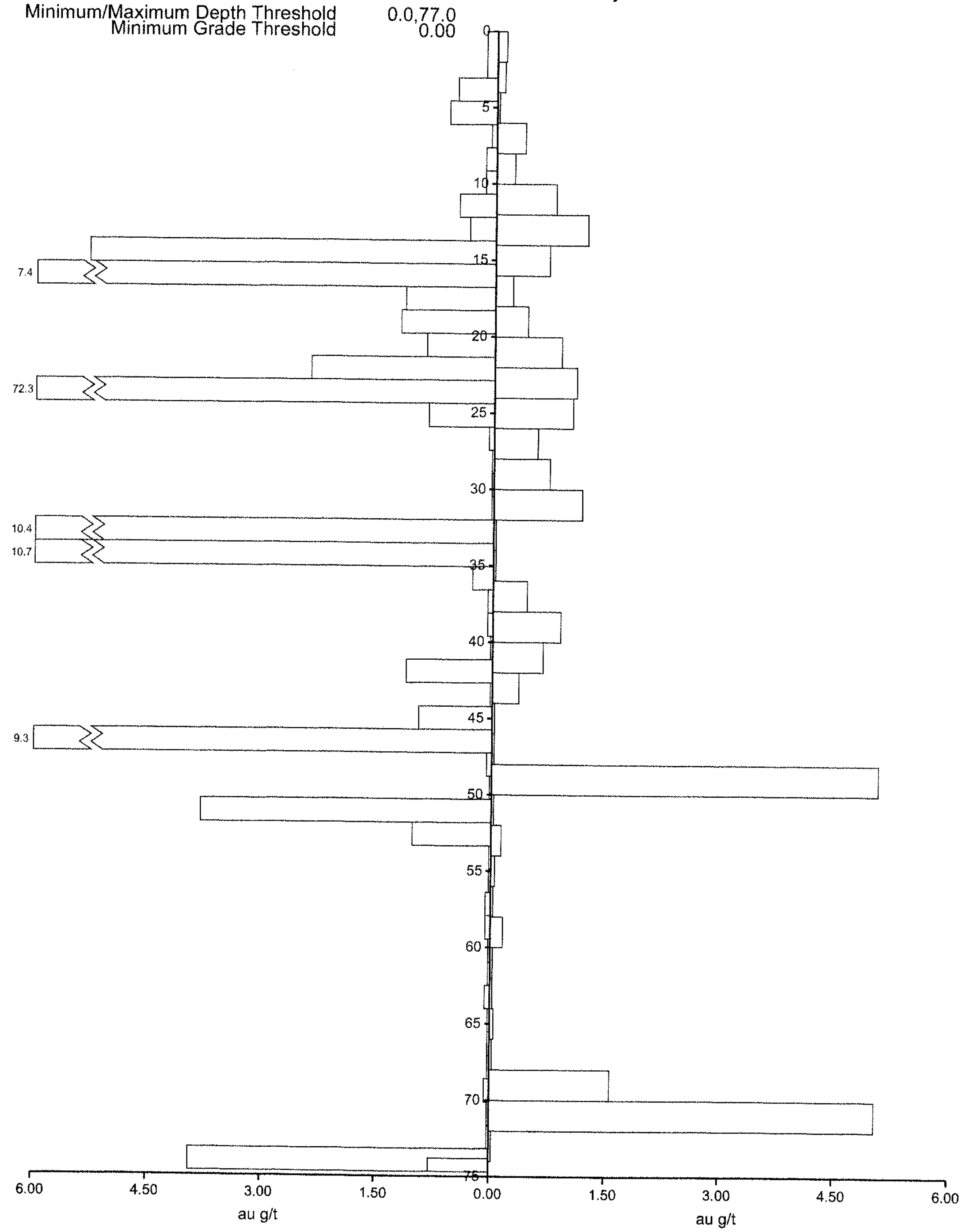
Mean Grades Diff.

RR-8-078

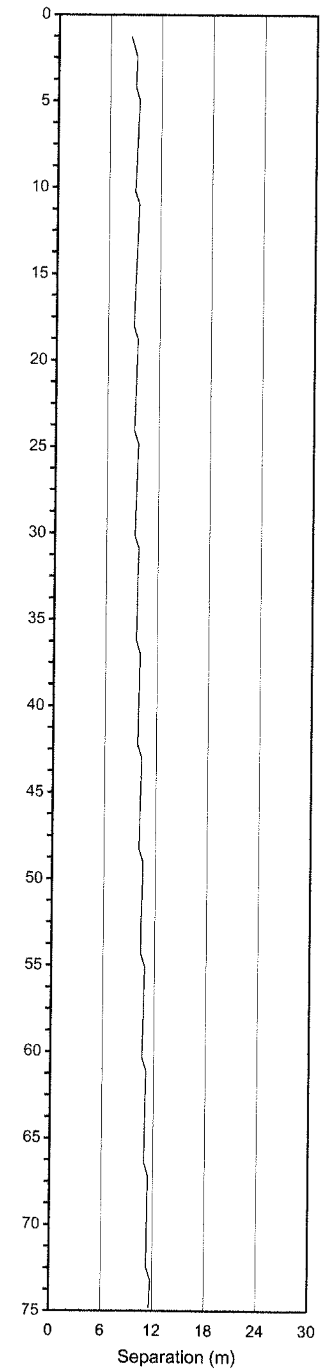
N	49
m	2.74
Cv	3.74
Intervals Trimmed by Depth	1
Intervals Trimmed by Grade	0
Minimum/Maximum Depth Threshold	0.0,77.0
Minimum Grade Threshold	0.00

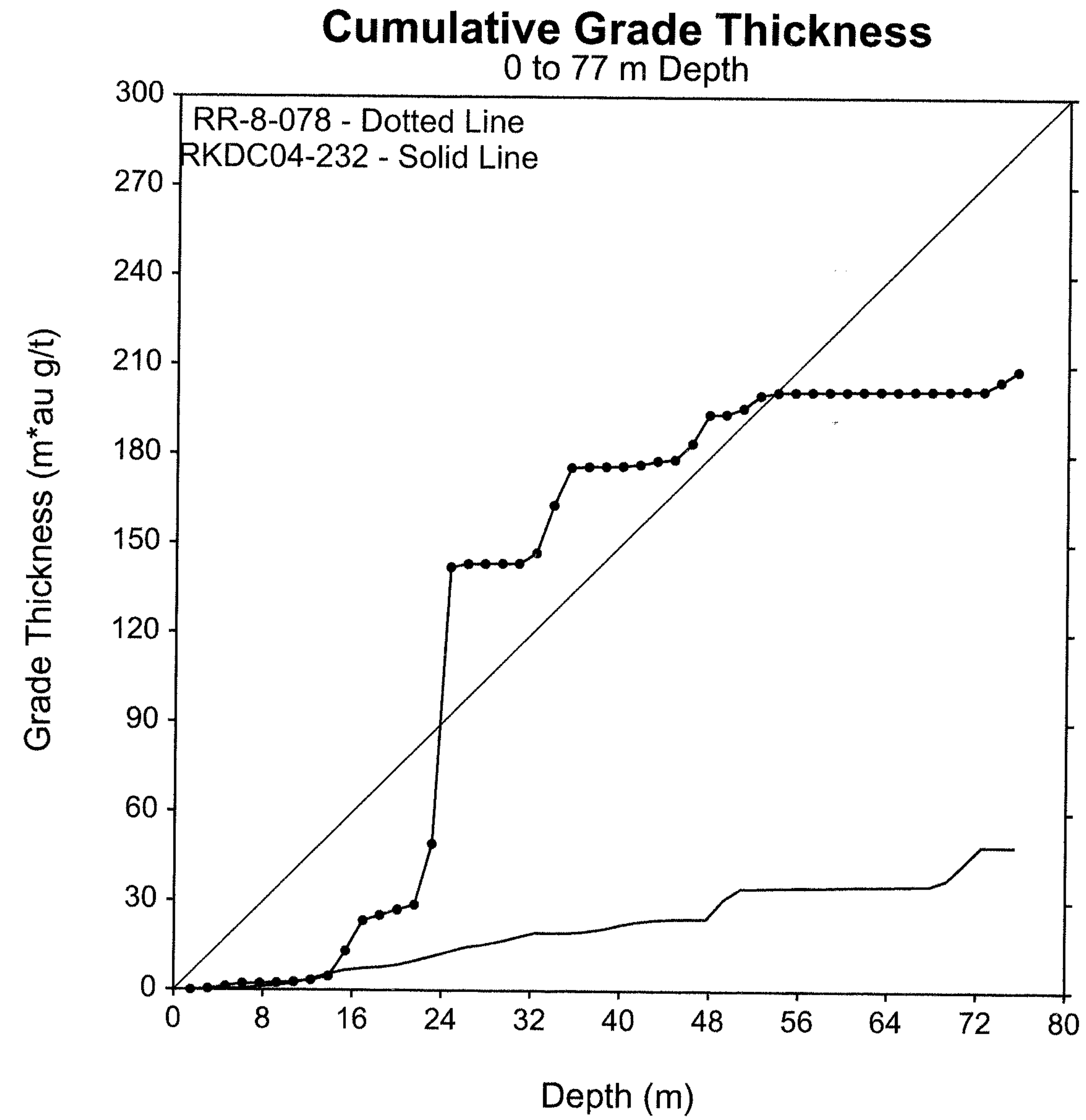
RKDC04-232

N	38
m	0.64
Cv	1.74
Intervals Trimmed by Depth	2
Intervals Trimmed by Grade	0



Horiz. Separation





16 D

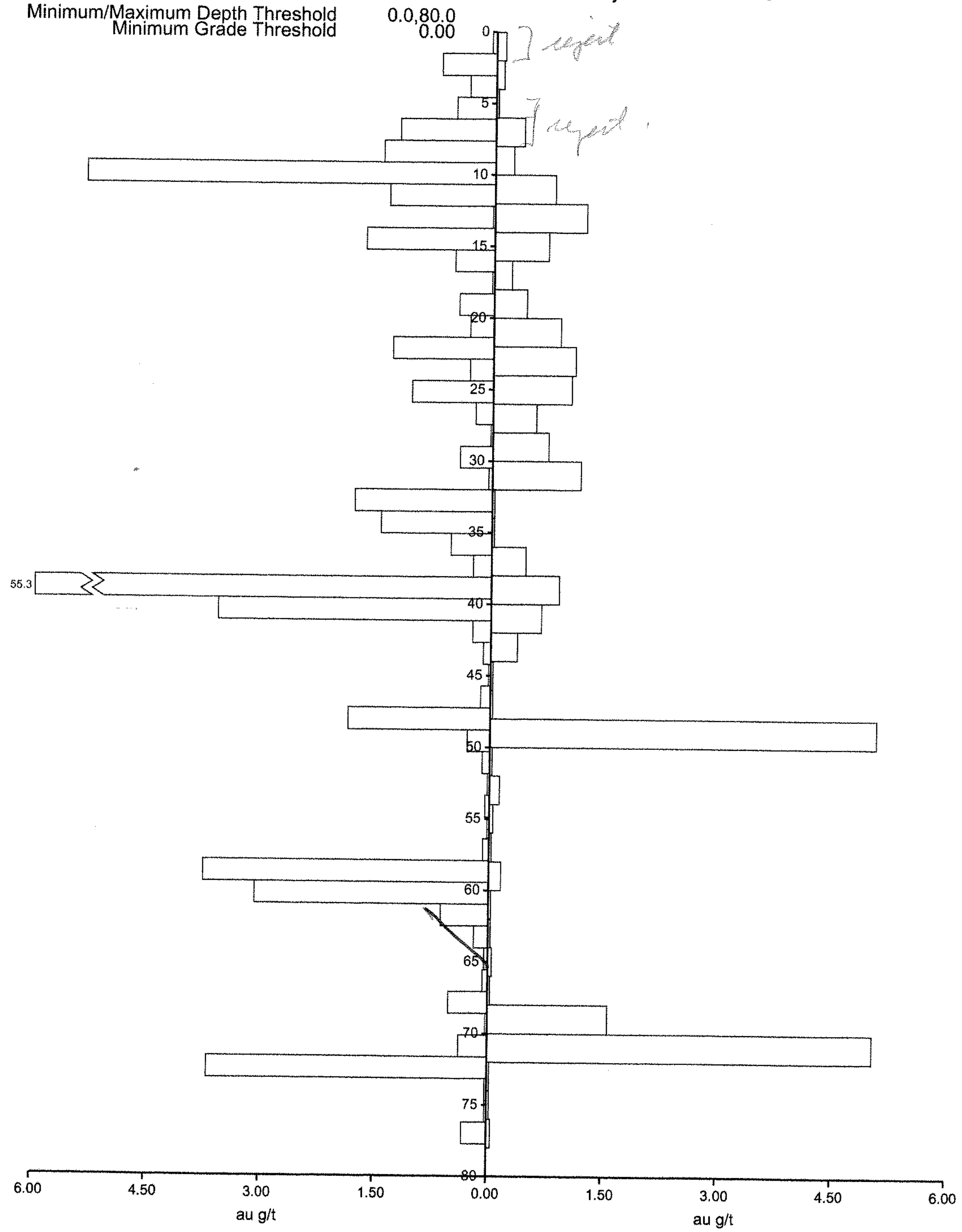
B+

RKRC04-027

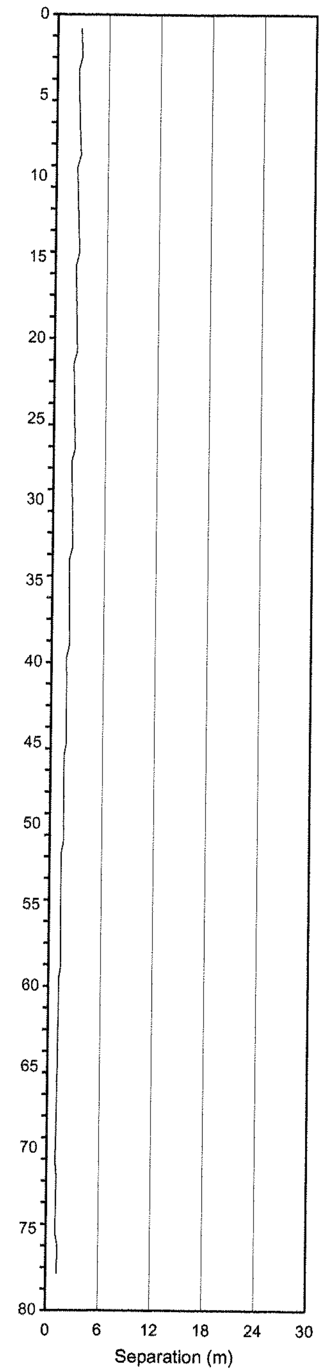
N	52
m	1.86
Cv	4.06
Intervals Trimmed by Depth	0
Intervals Trimmed by Grade	0
Minimum/Maximum Depth Threshold	0.0,80.0
Minimum Grade Threshold	0.00

RKDC04-232

N	40
m	0.61
Cv	1.79
Intervals Trimmed by Depth	0
Intervals Trimmed by Grade	0

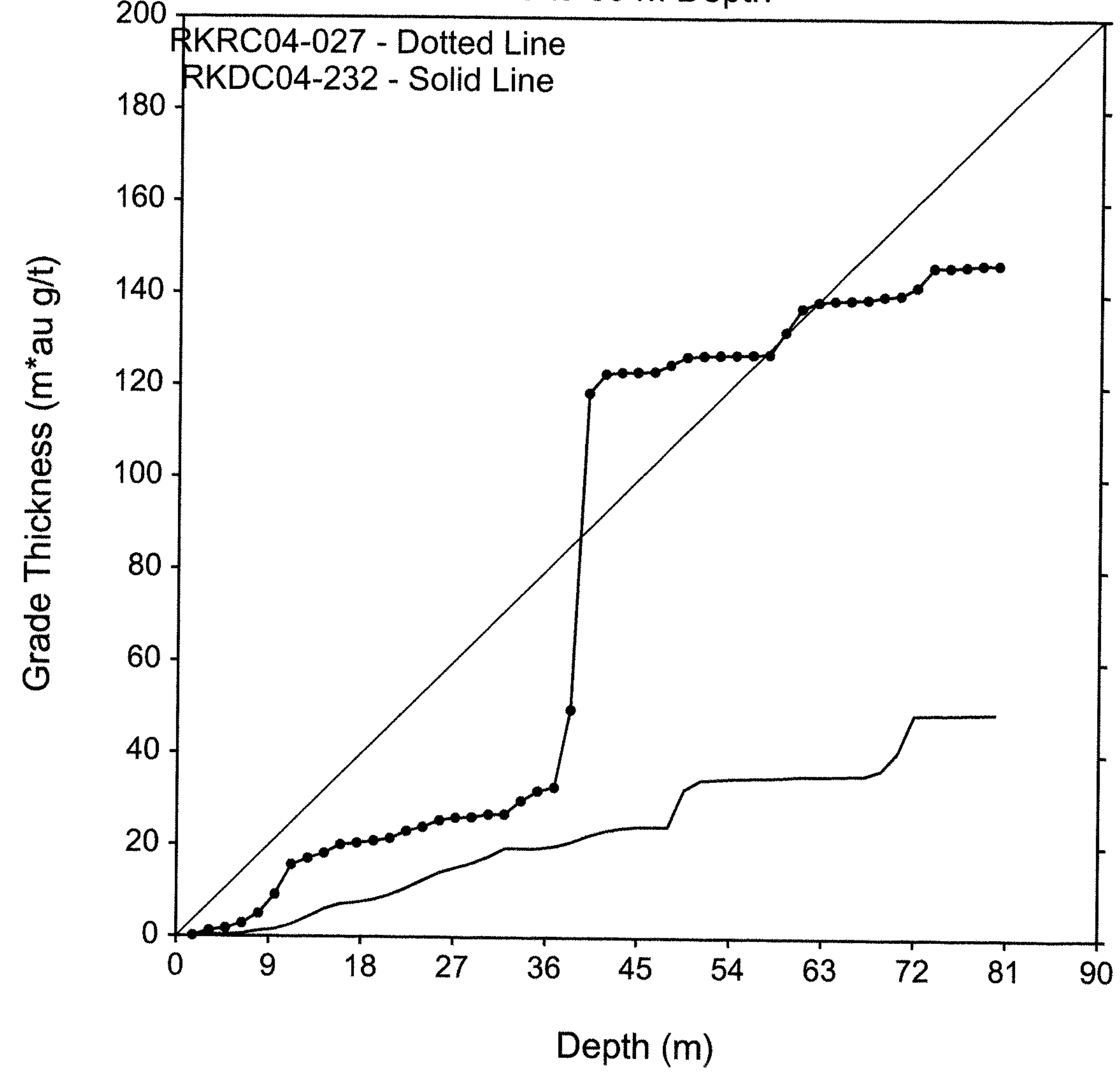


Horiz. Separation



Cumulative Grade Thickness

0 to 80 m Depth



16 E

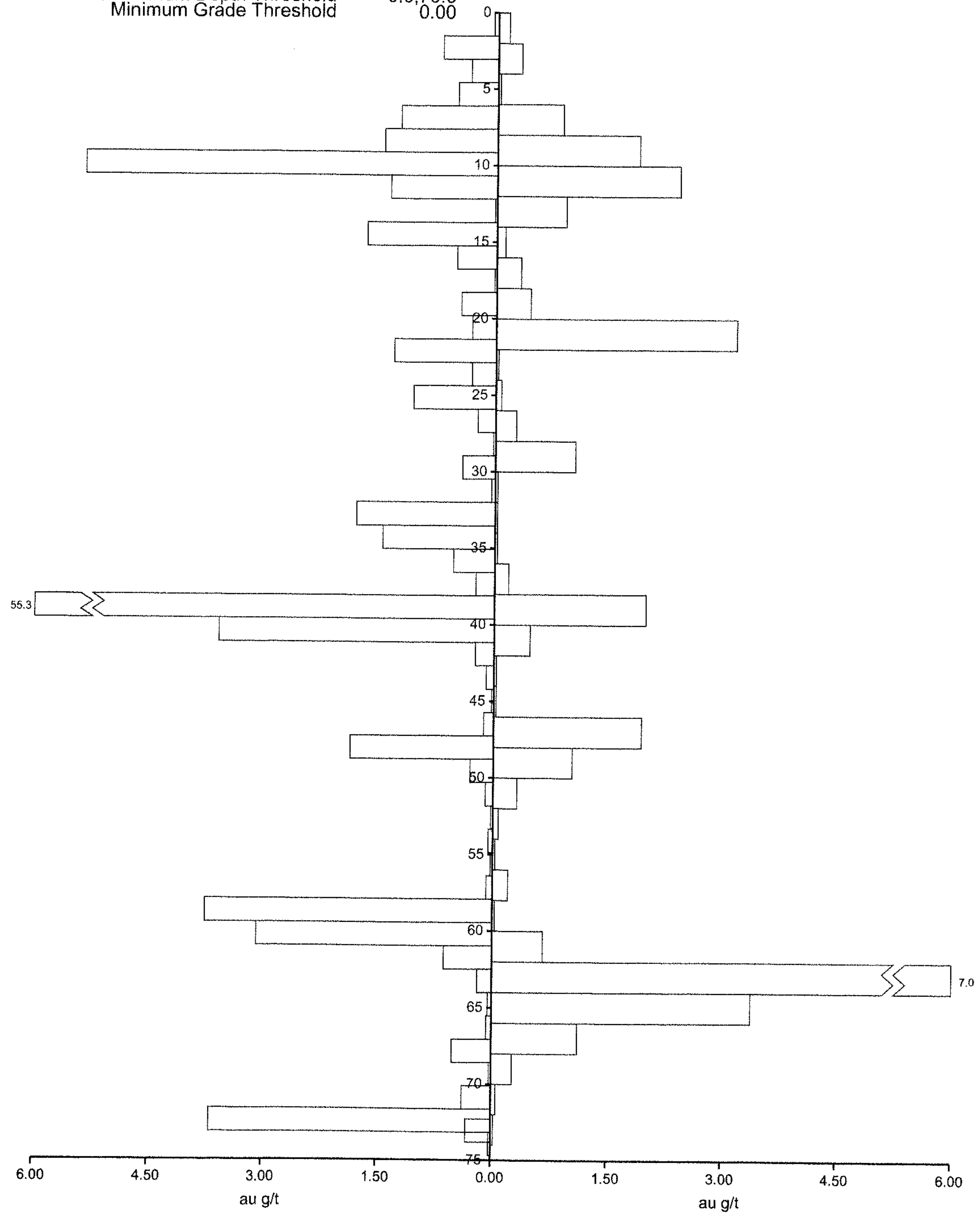
A A

RKRC04-027

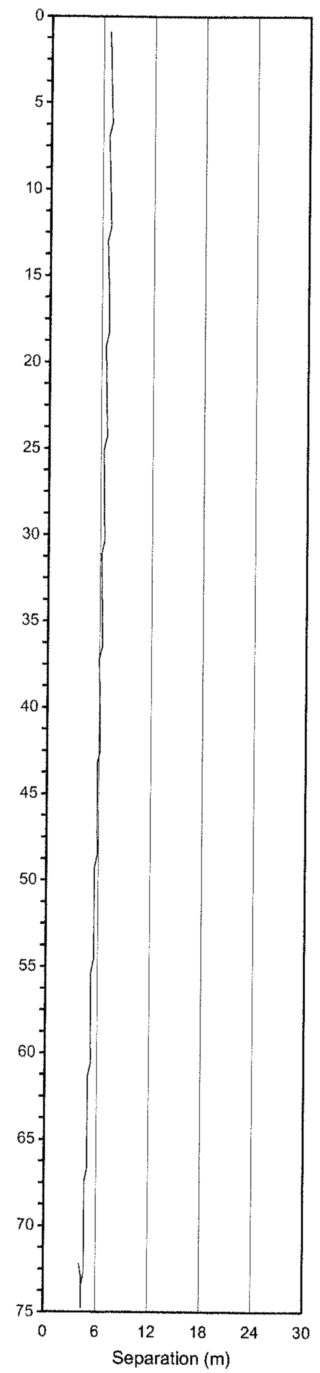
N 51
m 1.89
Cv 4.05
Intervals Trimmed by Depth 1
Intervals Trimmed by Grade 0
Minimum/Maximum Depth Threshold 0.0,79.0
Minimum Grade Threshold 0.00

RKDC03-180

N 39
m 0.80
Cv 1.66
Intervals Trimmed by Depth 0
Intervals Trimmed by Grade 0

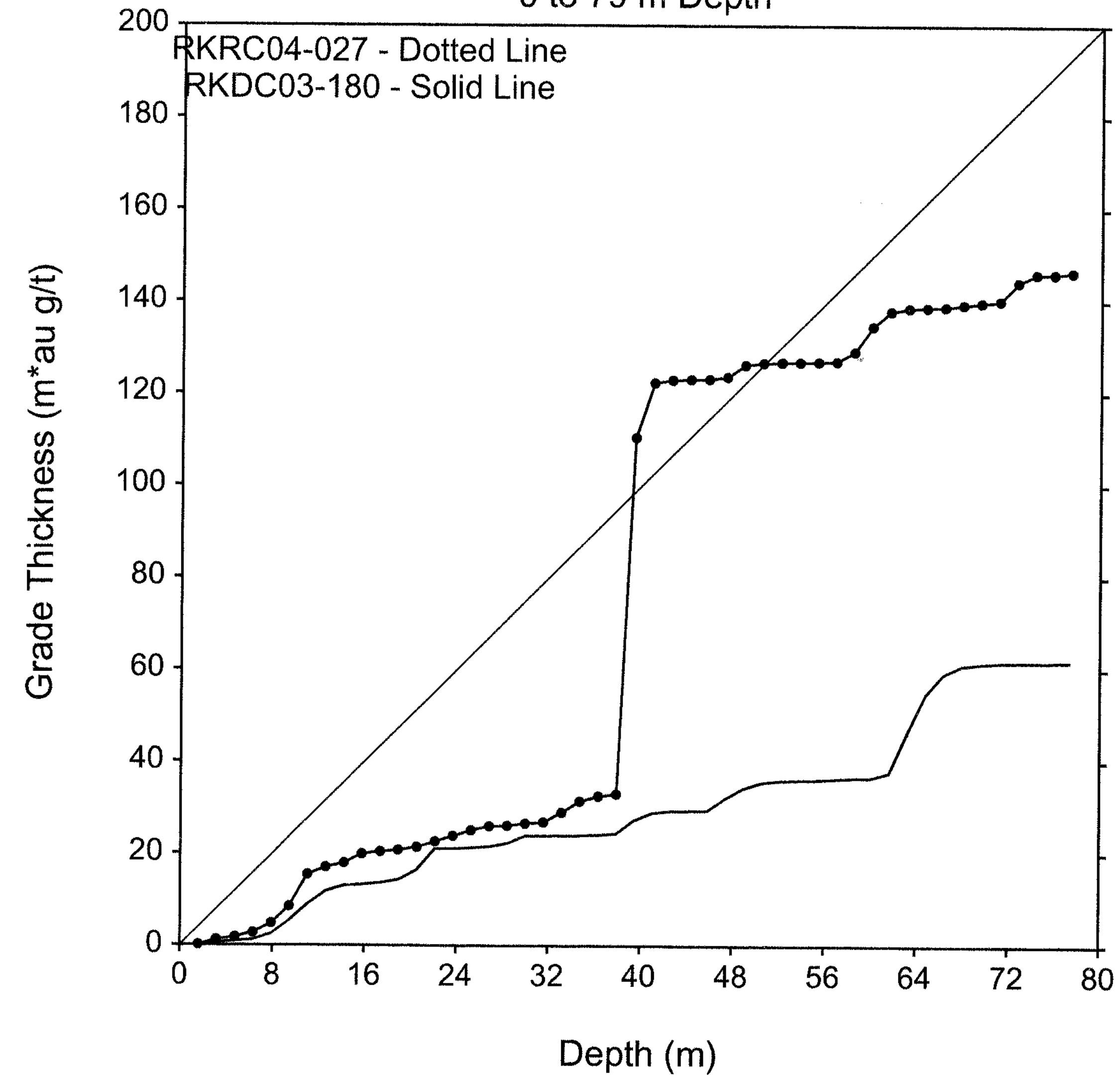


Horiz. Separation



Cumulative Grade Thickness

0 to 79 m Depth



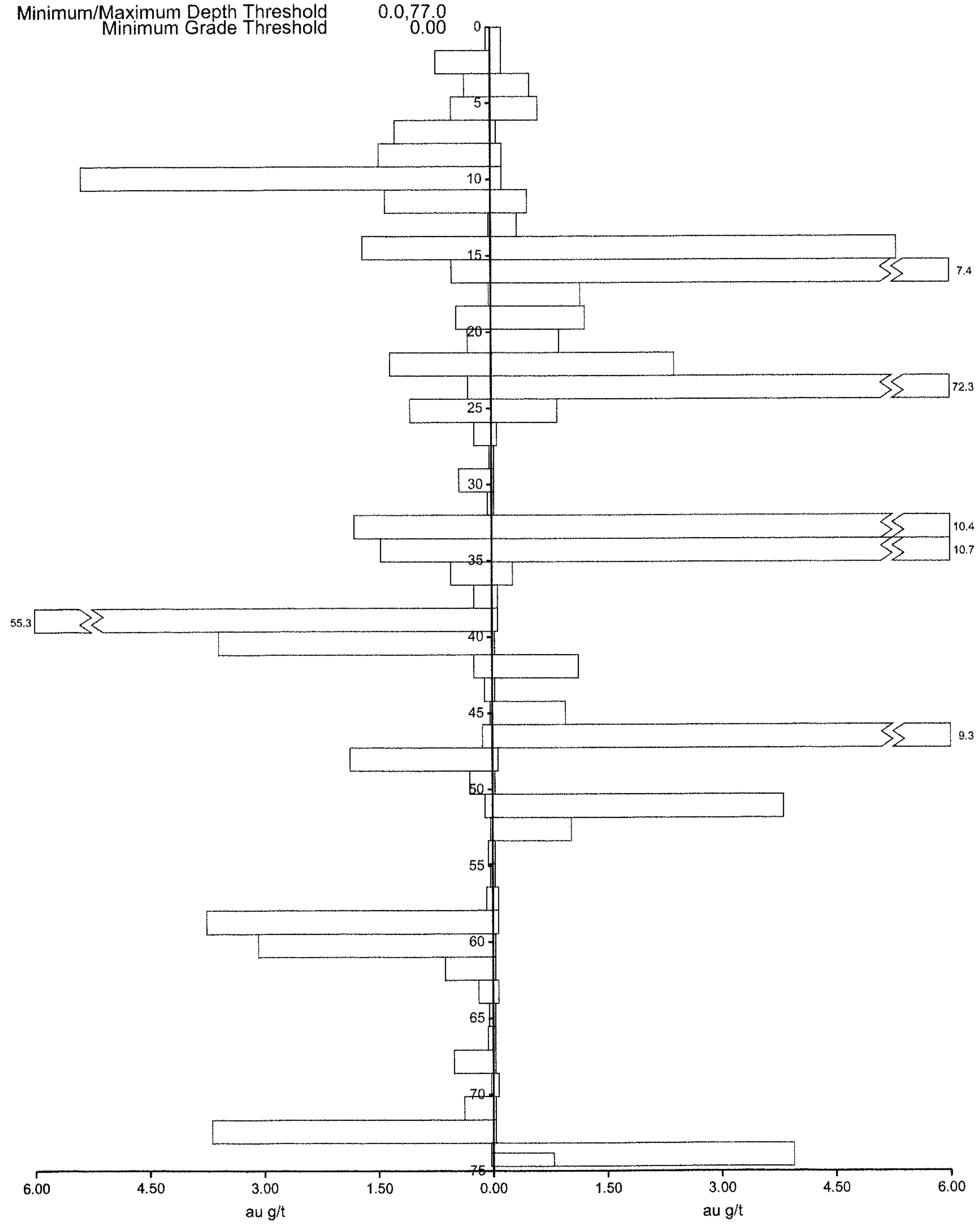
16 F
B

RKRC04-027

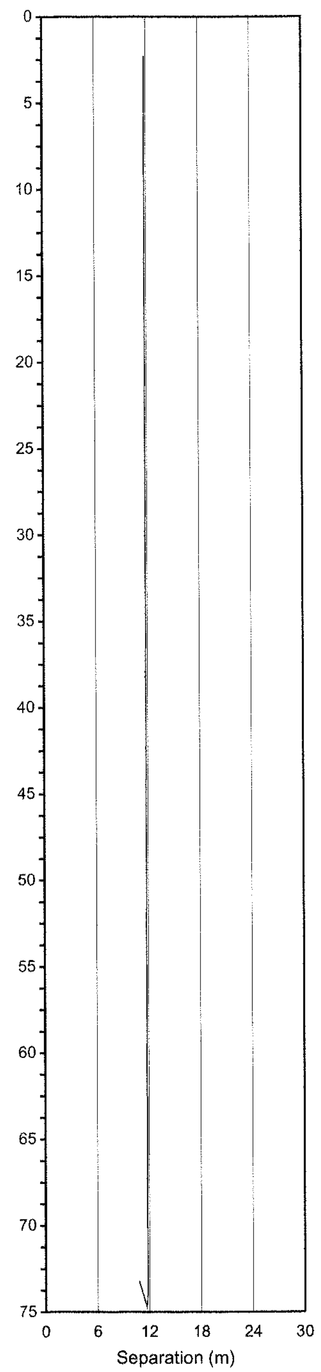
N	50
m	1.92
Cv	4.02
Intervals Trimmed by Depth	2
Intervals Trimmed by Grade	0
Minimum/Maximum Depth Threshold	0.0,77.0
Minimum Grade Threshold	0.00

RR-8-078

N	49
m	2.74
Cv	3.74
Intervals Trimmed by Depth	1
Intervals Trimmed by Grade	0

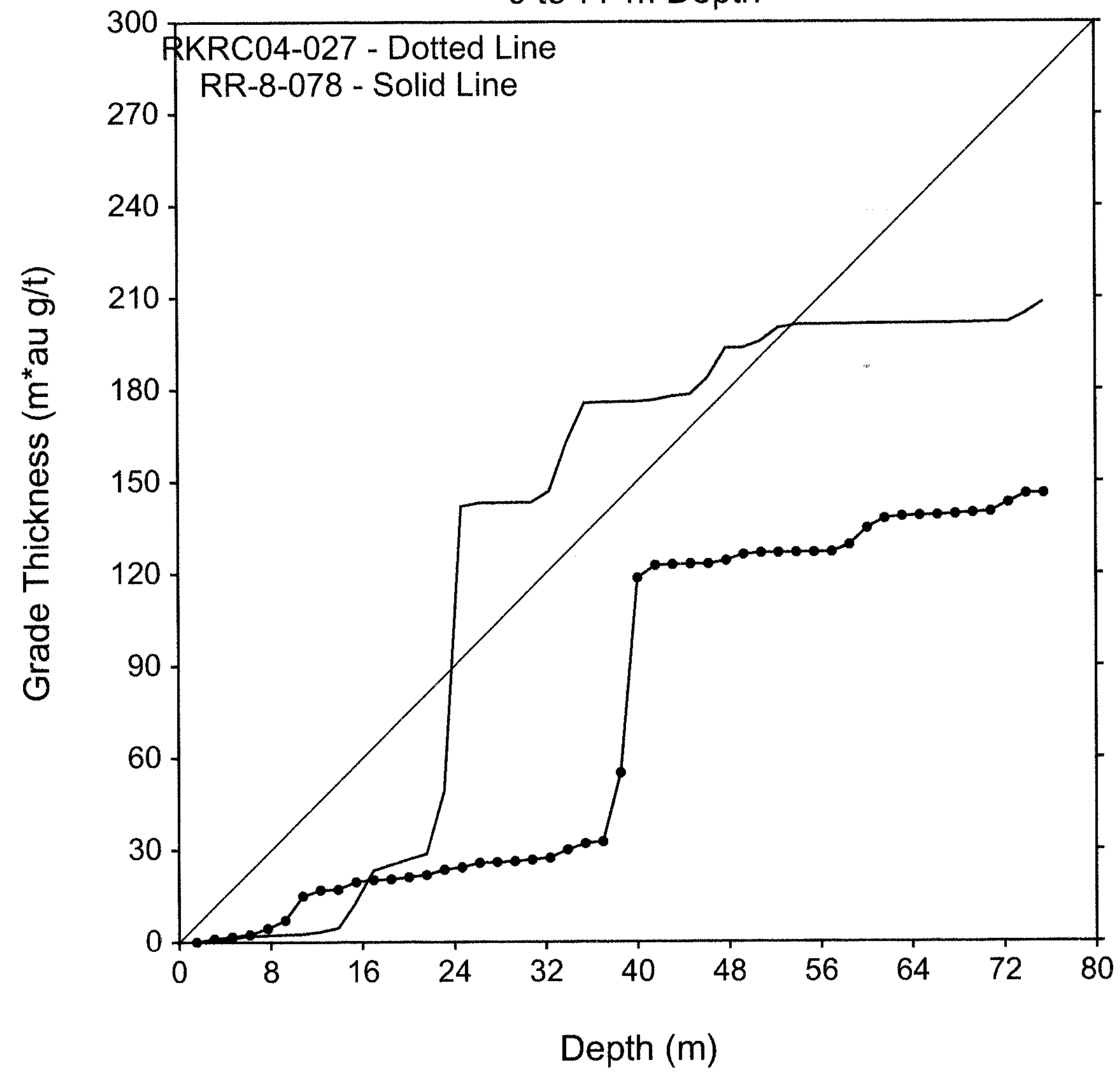


Horiz. Separation



Cumulative Grade Thickness

0 to 77 m Depth



17 A

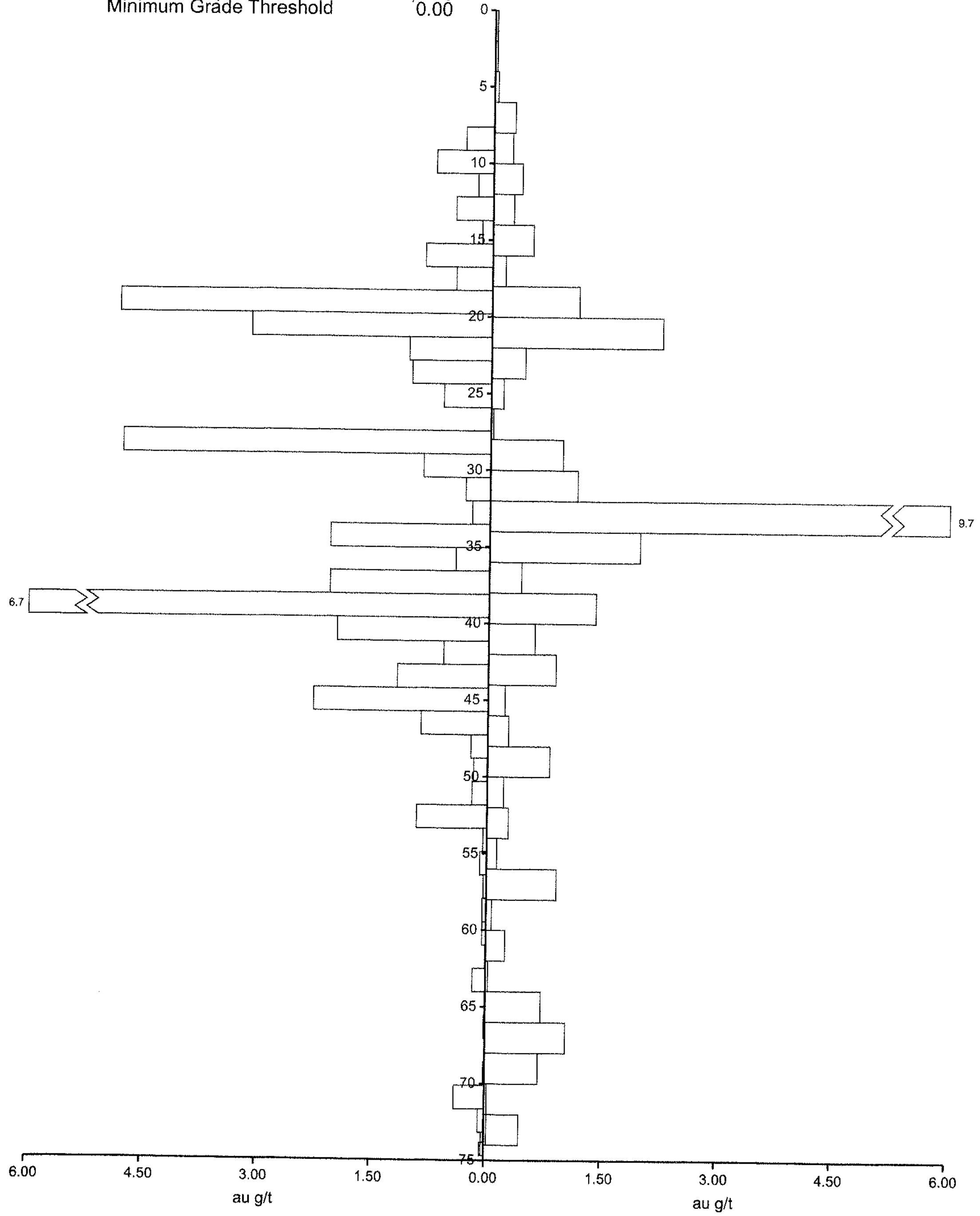
A

RR-0-28

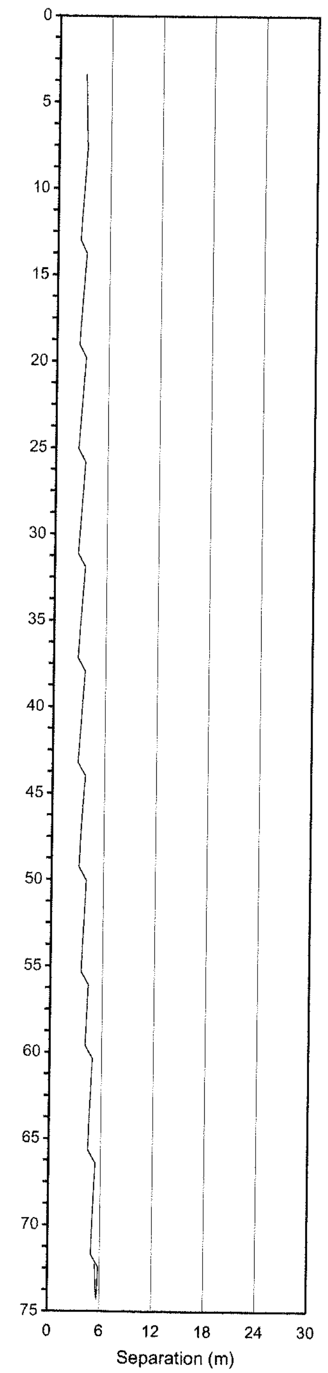
N 44
m 0.93
Cv 1.53
Intervals Trimmed by Depth 1
Intervals Trimmed by Grade 3
Minimum/Maximum Depth Threshold 0.0,79.0
Minimum Grade Threshold 0.00

RKDC03-193

N 39
m 0.75
Cv 2.06
Intervals Trimmed by Depth 1
Intervals Trimmed by Grade 0

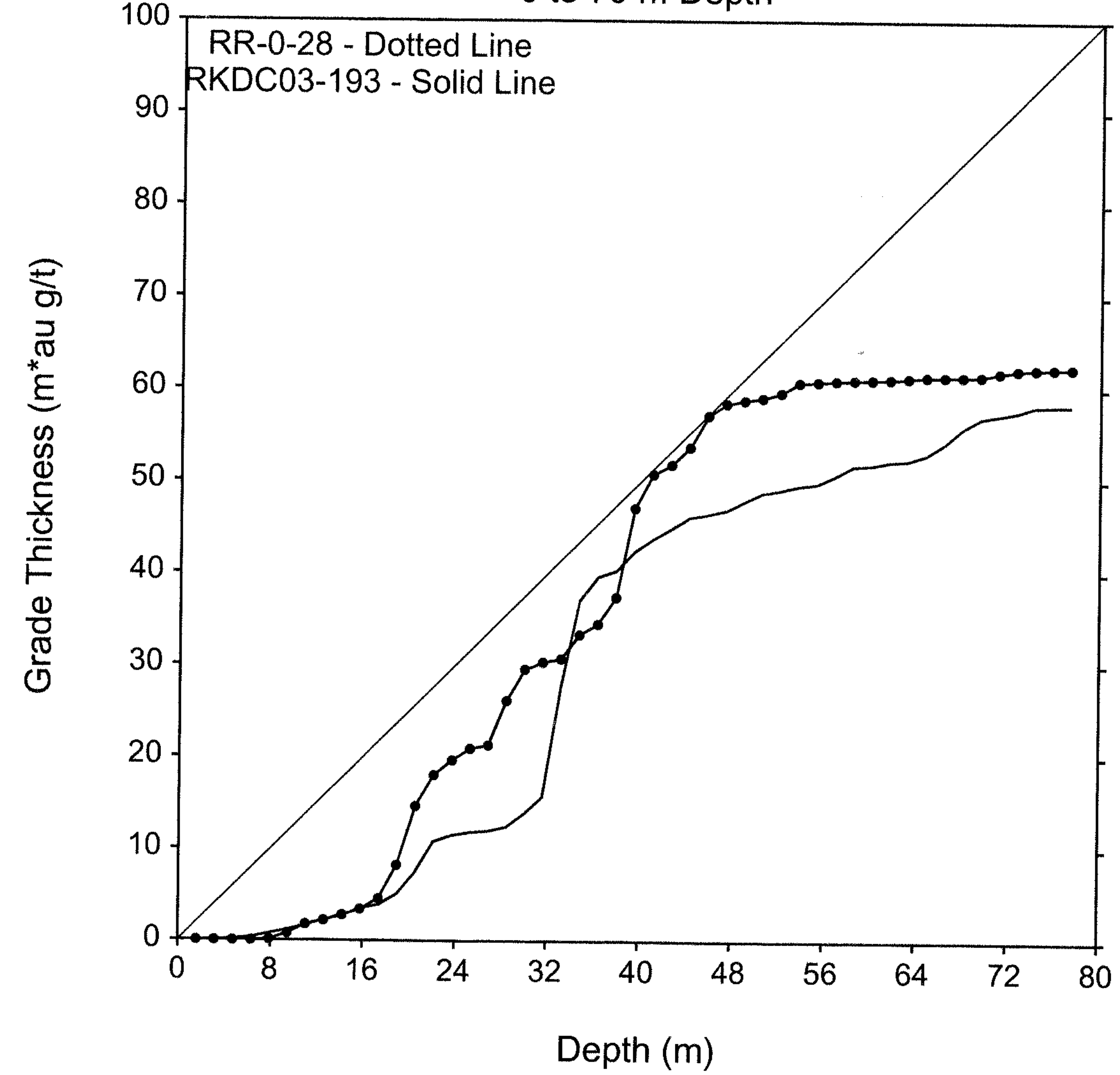


Horiz. Separation



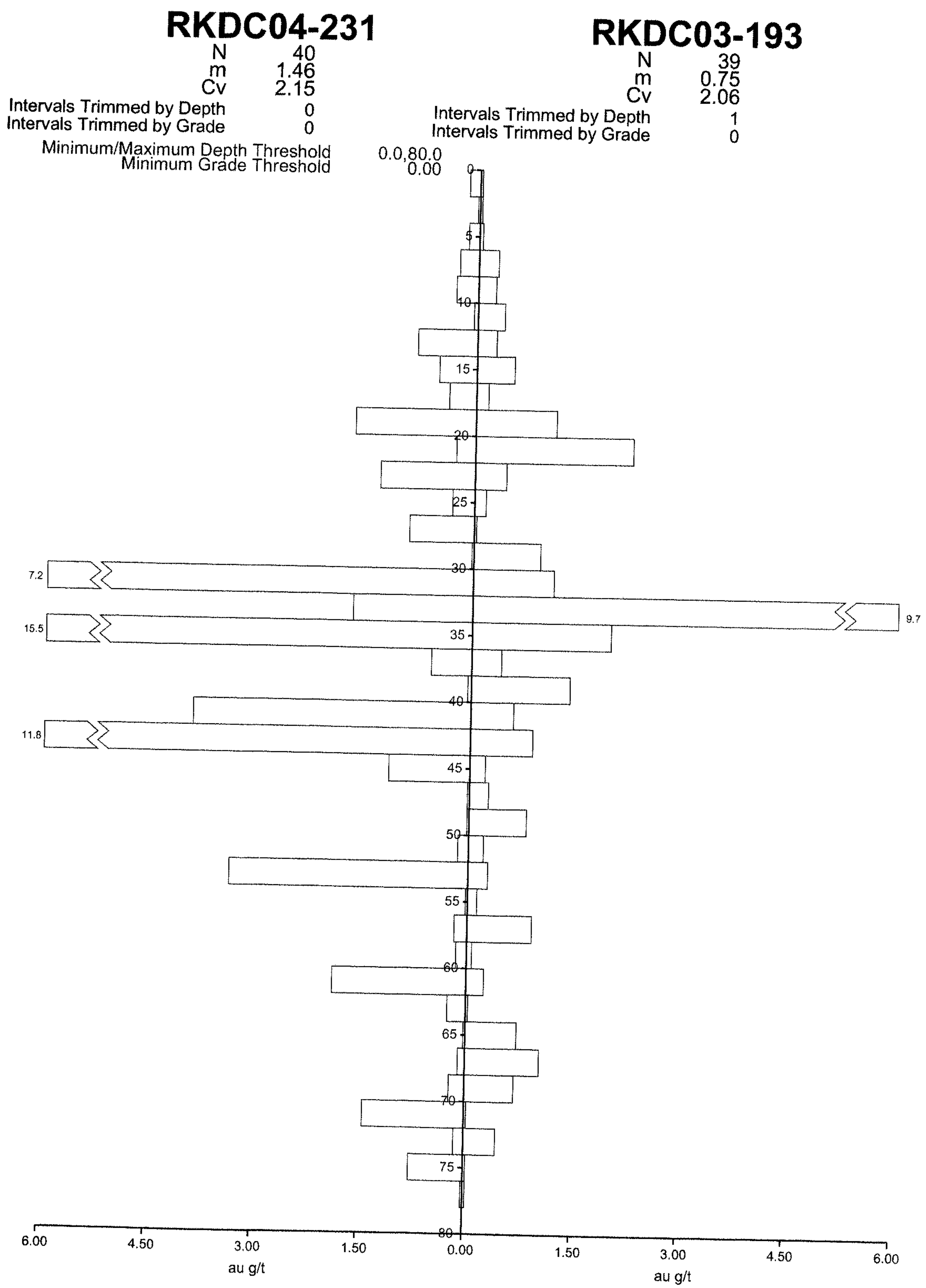
Cumulative Grade Thickness

0 to 79 m Depth

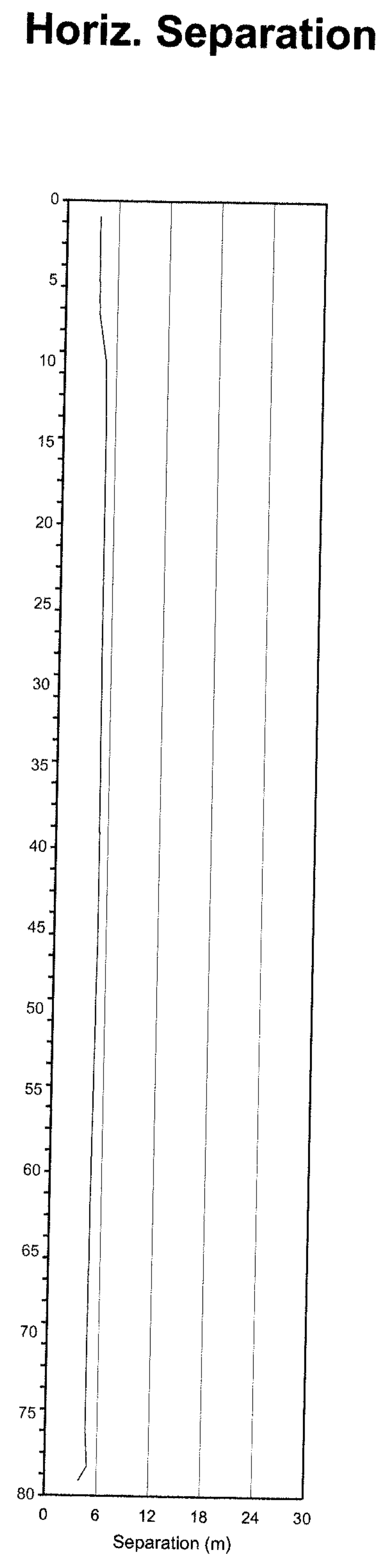


17 B

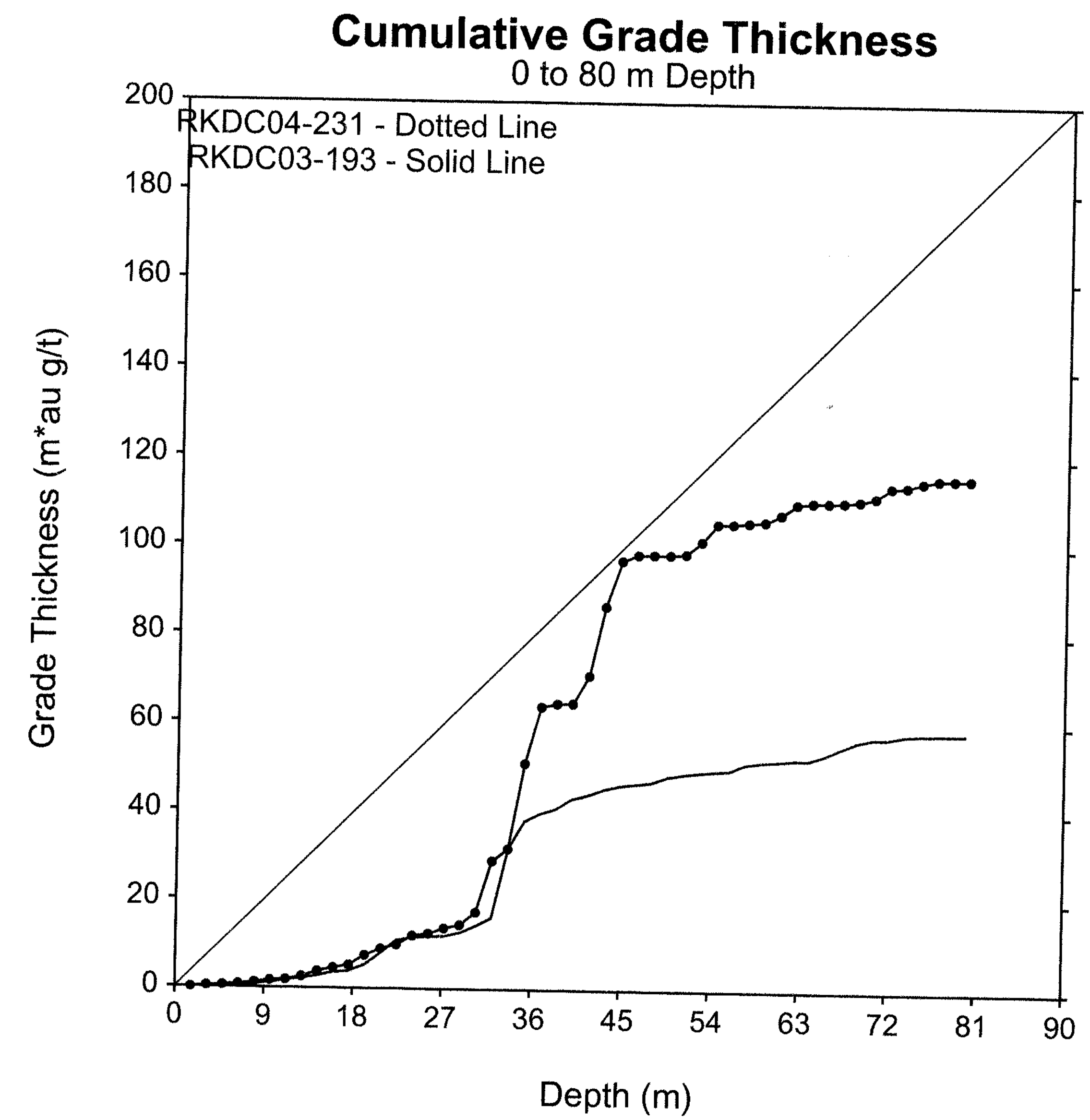
A



RKDC04-231
N 40
m 1.46
Cv 2.15
Intervals Trimmed by Depth 0
Intervals Trimmed by Grade 0
Minimum/Maximum Depth Threshold 0.0,80.0
Minimum Grade Threshold 0.00
RKDC03-193
N 39
m 0.75
Cv 2.06
Intervals Trimmed by Depth 1
Intervals Trimmed by Grade 0
7.2
15.5
11.8
9.7
6.00
4.50
3.00
1.50
0.00
1.50
3.00
4.50
6.00
au g/t
au g/t



Horiz. Separation
0
6
12
18
24
30
Separation (m)



Cumulative Grade Thickness
0 to 80 m Depth
RKDC04-231 - Dotted Line
RKDC03-193 - Solid Line
Grade Thickness (m*au g/t)
Depth (m)
0
20
40
60
80
100
120
140
160
180
200
0
9
18
27
36
45
54
63
72
81
90

17C

B+

RC

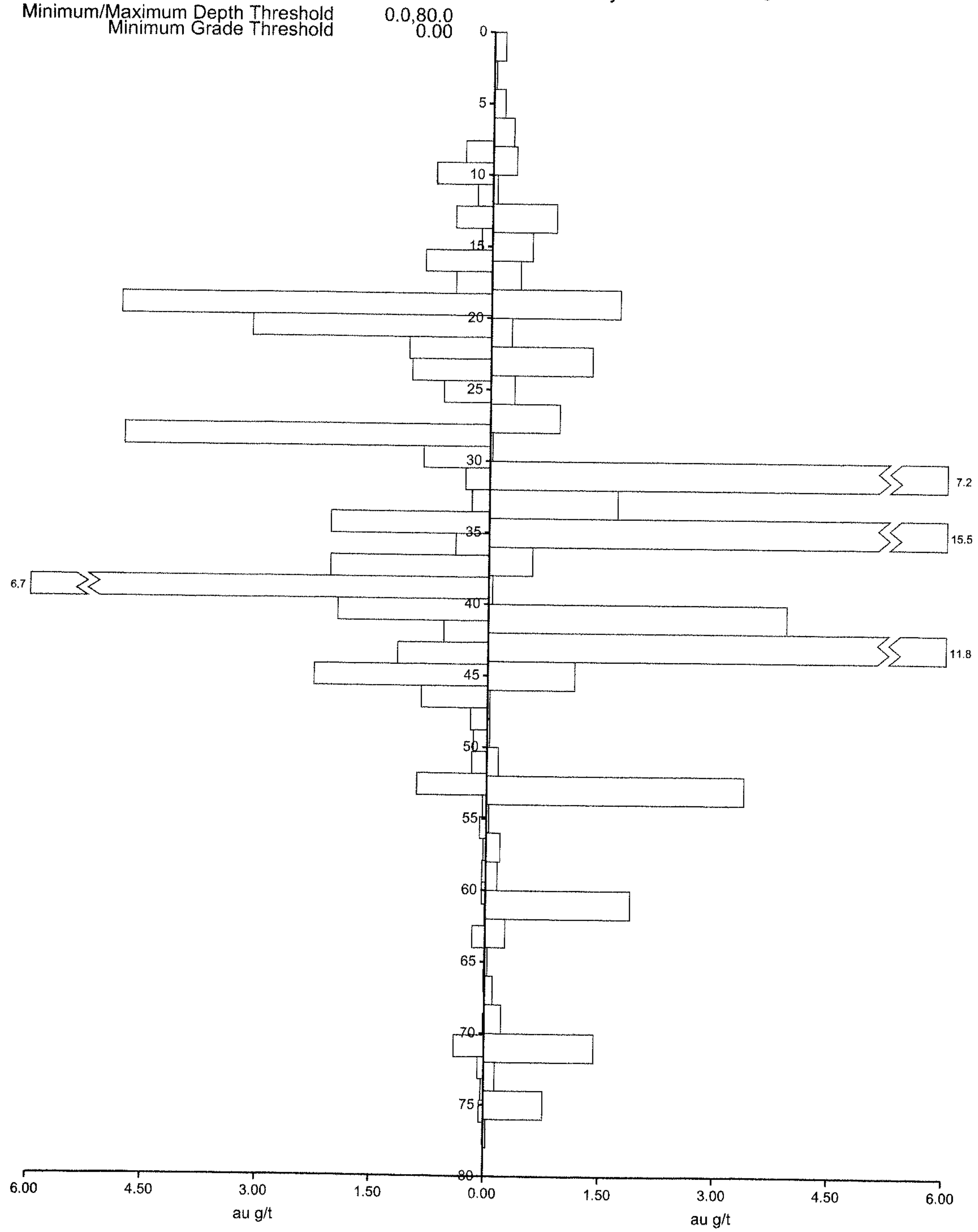
RR-0-28

N 45
m 0.91
Cv 1.56
Intervals Trimmed by Depth 0
Intervals Trimmed by Grade 3
Minimum/Maximum Depth Threshold 0.0,80.0
Minimum Grade Threshold 0.00

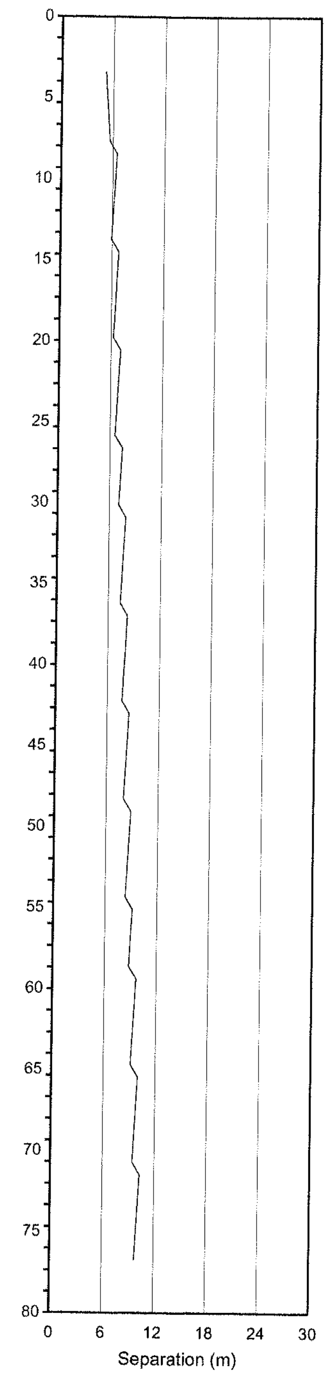
CORE

RKDC04-231

N 40
m 1.46
Cv 2.15
Intervals Trimmed by Depth 0
Intervals Trimmed by Grade 0

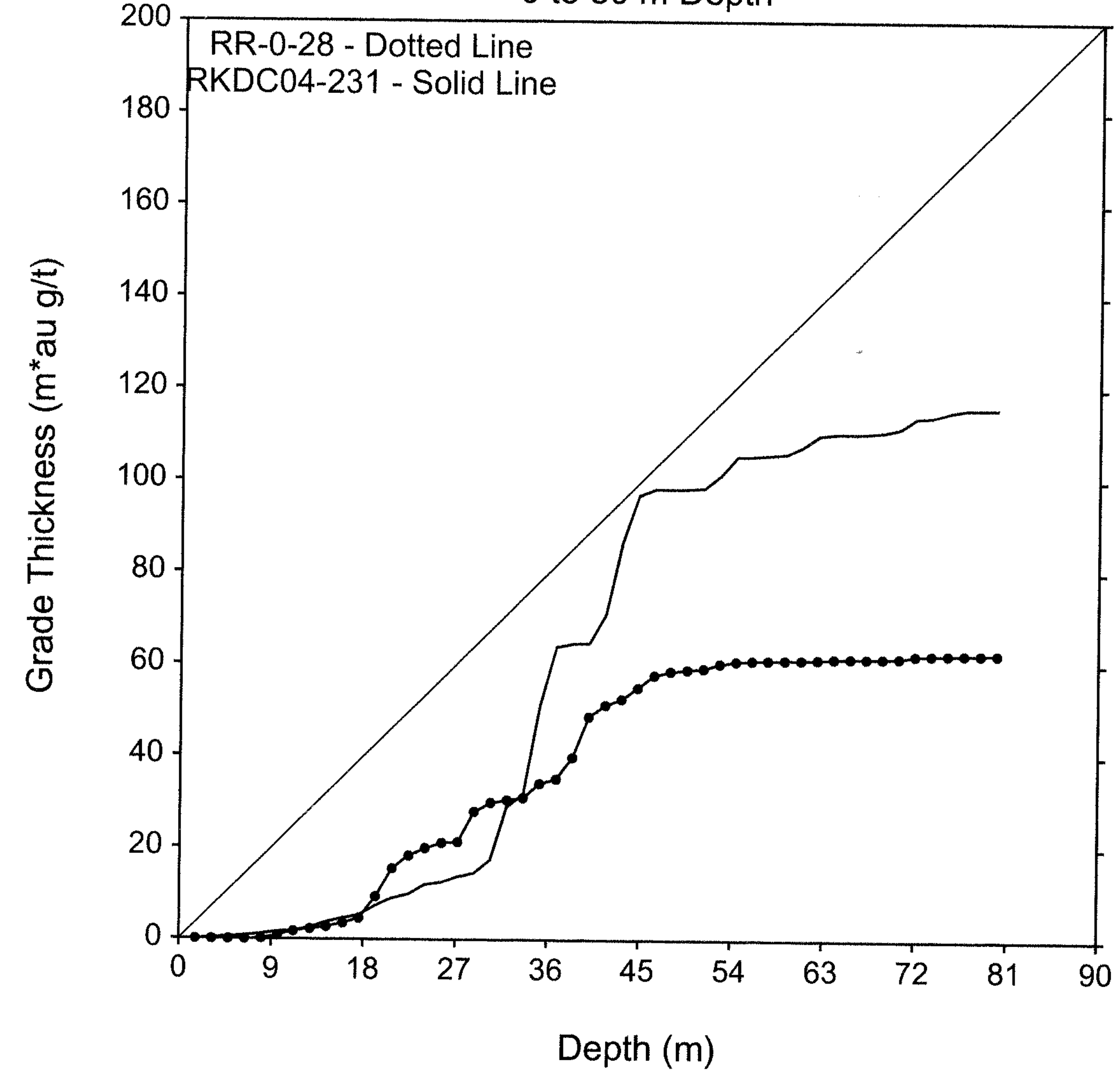


Horiz. Separation



Cumulative Grade Thickness

0 to 80 m Depth



17 D

A

RC

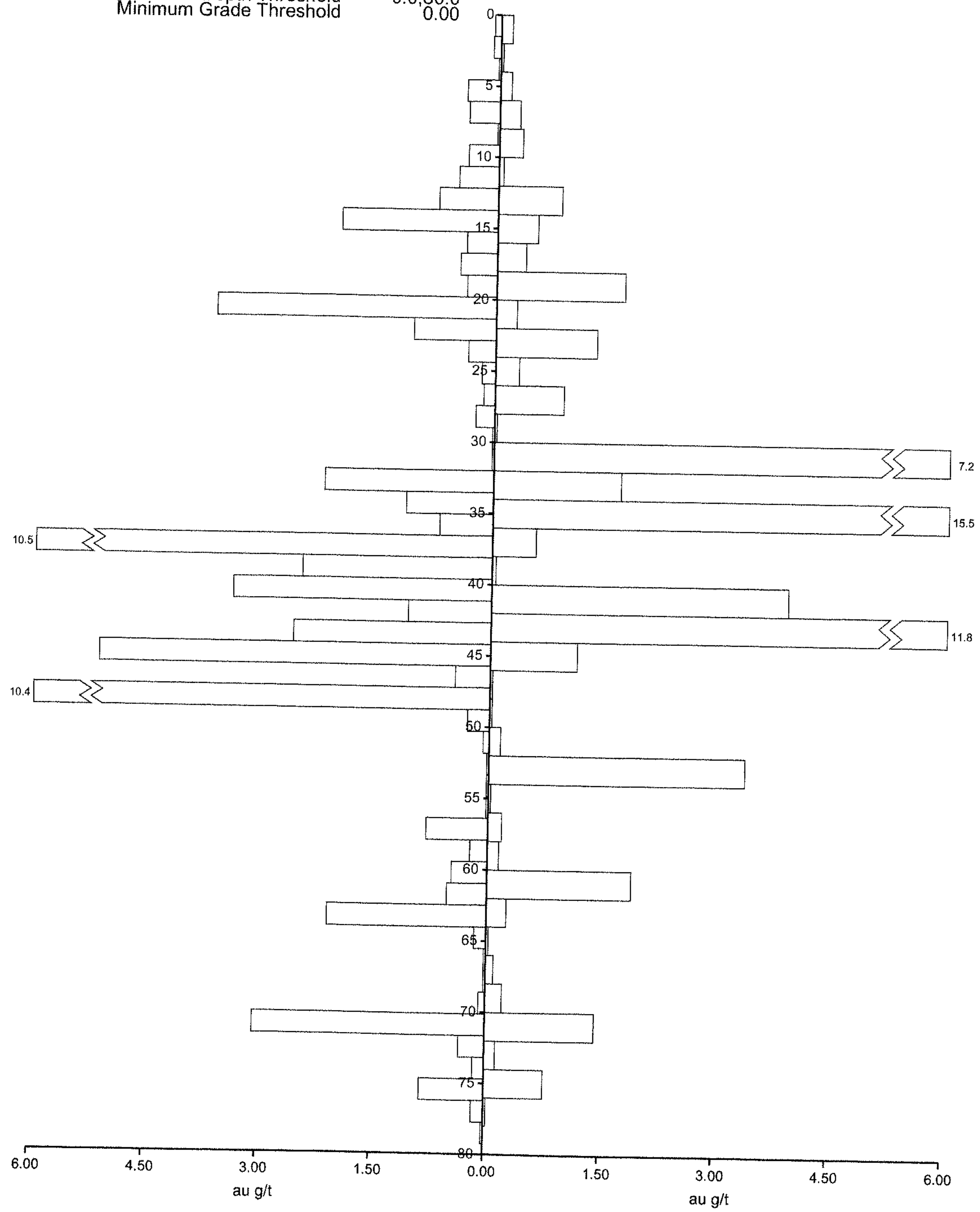
RKRC04-028

N 52
m 1.18
Cv 1.82
Intervals Trimmed by Depth 1
Intervals Trimmed by Grade 0
Minimum/Maximum Depth Threshold 0.0,80.0
Minimum Grade Threshold 0.00

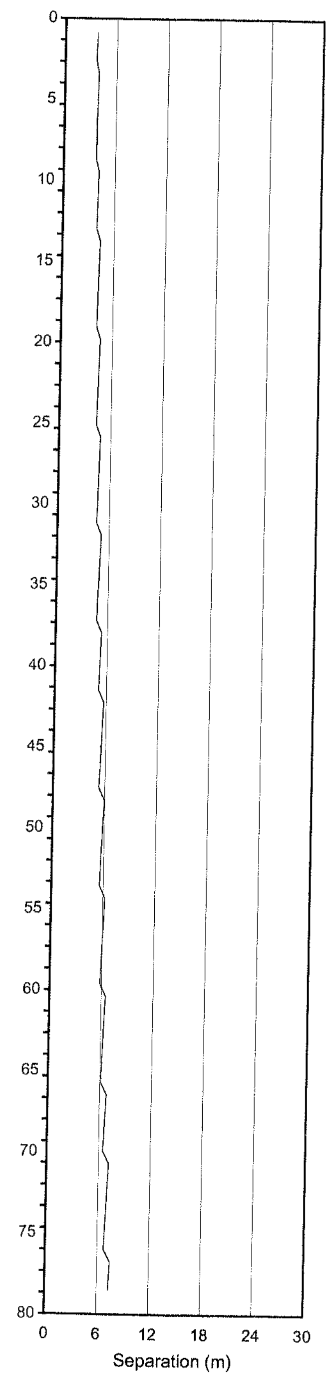
CORE

RKDC04-231

N 40
m 1.46
Cv 2.15
Intervals Trimmed by Depth 0
Intervals Trimmed by Grade 0

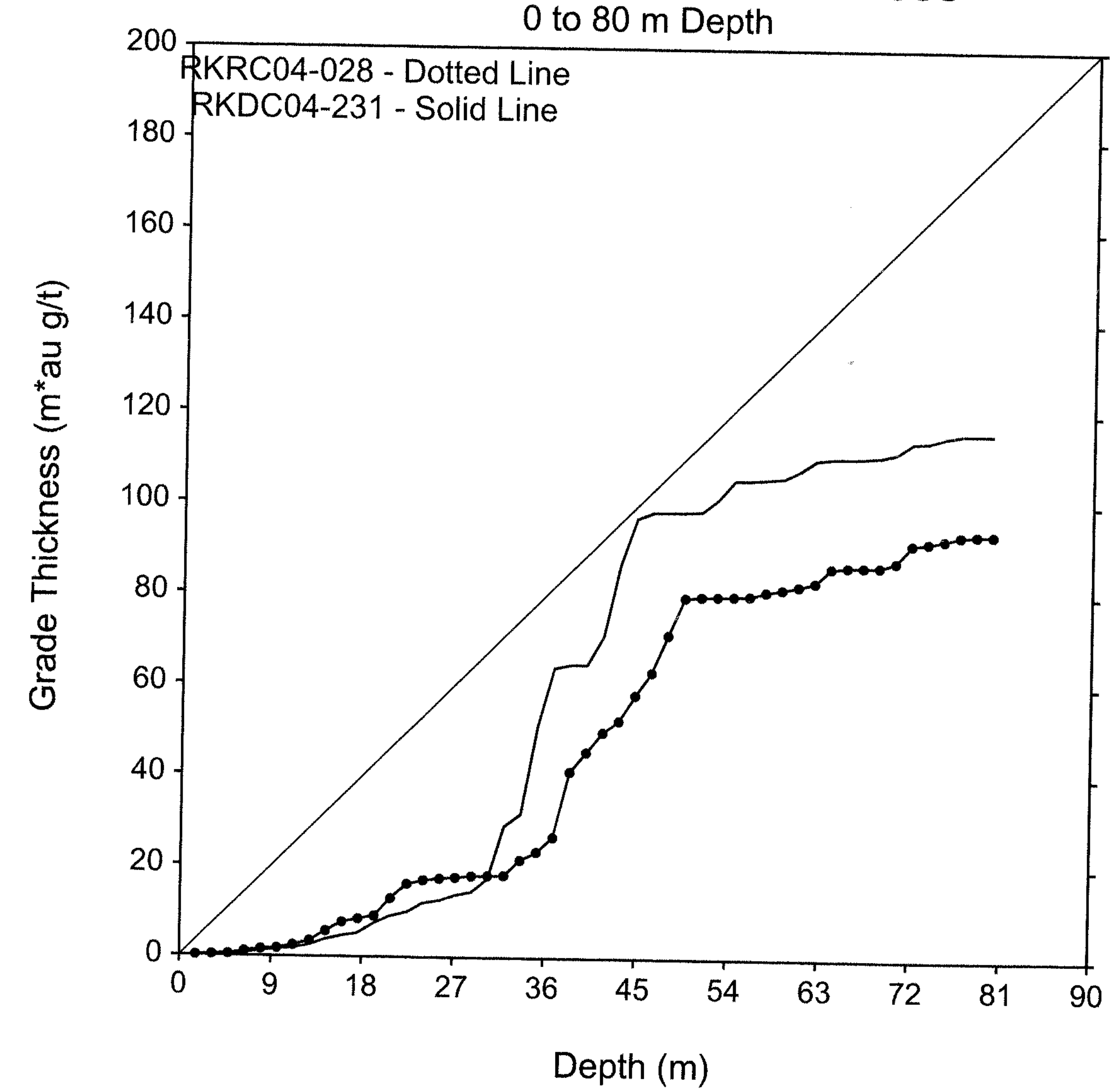


Horiz. Separation



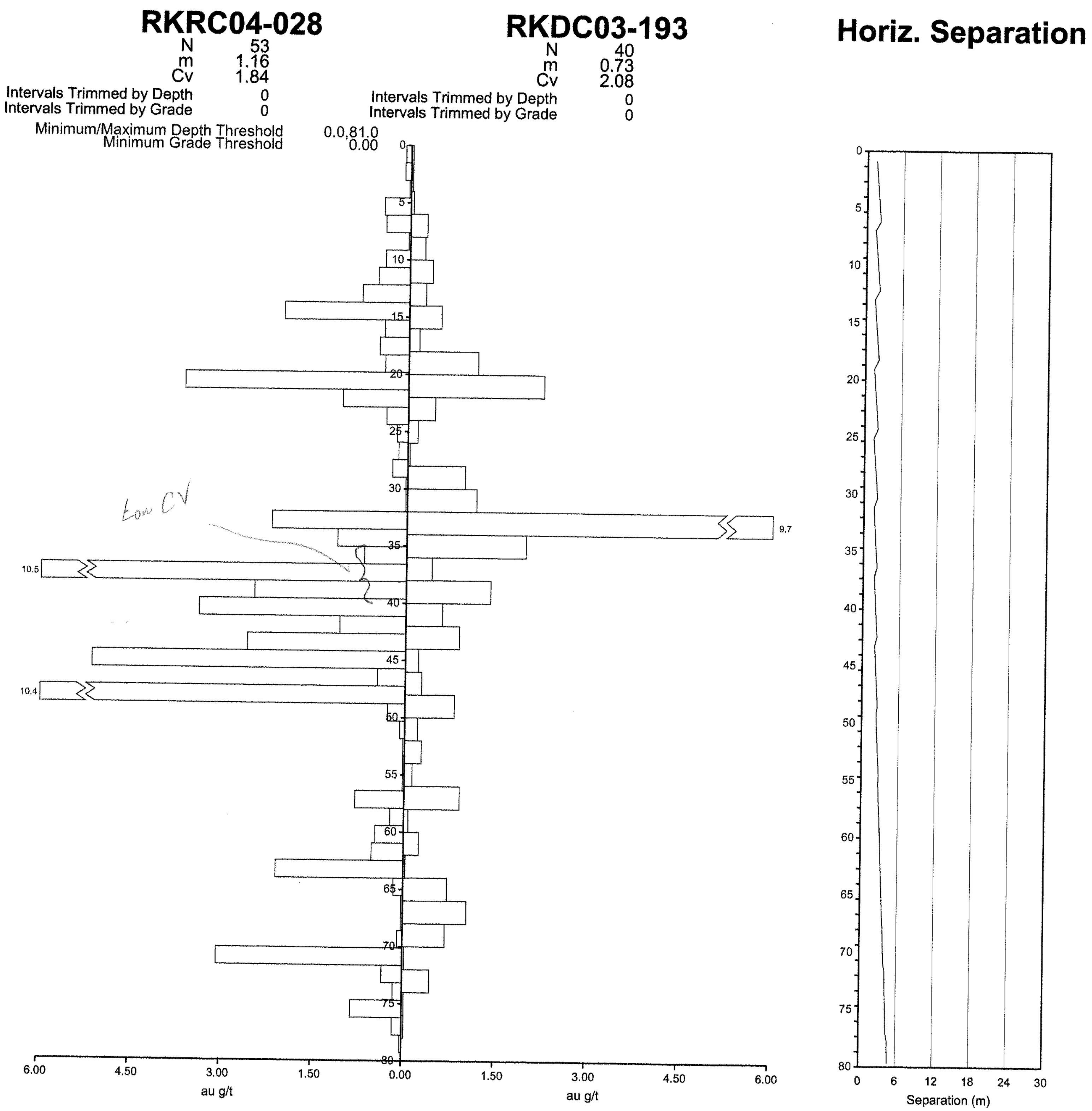
Cumulative Grade Thickness

0 to 80 m Depth

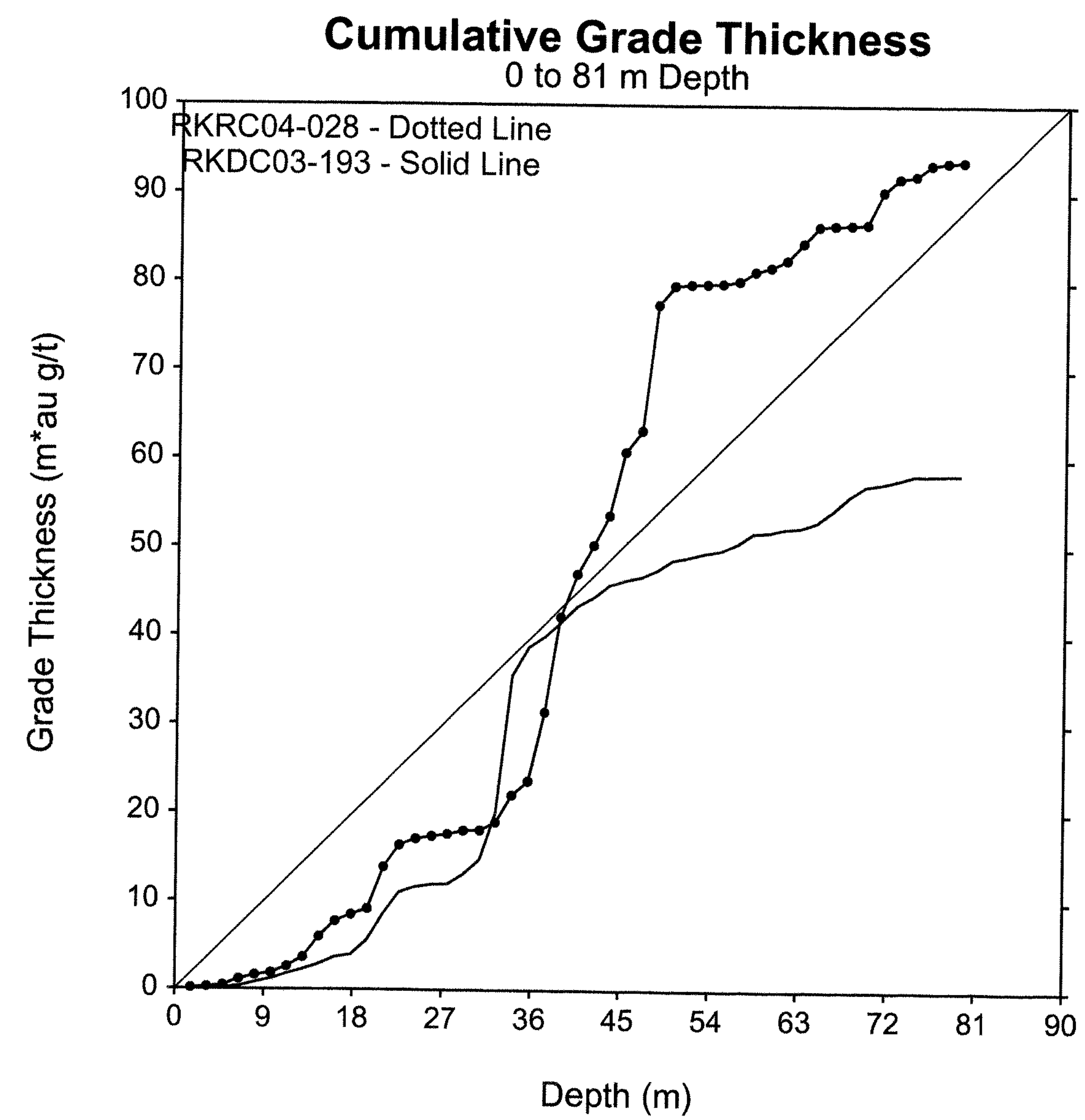


17 E

B+



RC
RKRC04-028
N 53
m 1.16
Cv 1.84
Intervals Trimmed by Depth 0
Intervals Trimmed by Grade 0
Minimum/Maximum Depth Threshold 0.0,81.0
Minimum Grade Threshold 0.00
CORE
RKDC03-193
N 40
m 0.73
Cv 2.08
Intervals Trimmed by Depth 0
Intervals Trimmed by Grade 0
low CV
10.5
10.4
9.7
au g/t
au g/t
Horiz. Separation
Separation (m)



Cumulative Grade Thickness
0 to 81 m Depth
RKRC04-028 - Dotted Line
RKDC03-193 - Solid Line
Grade Thickness (m*au g/t)
Depth (m)

17 F

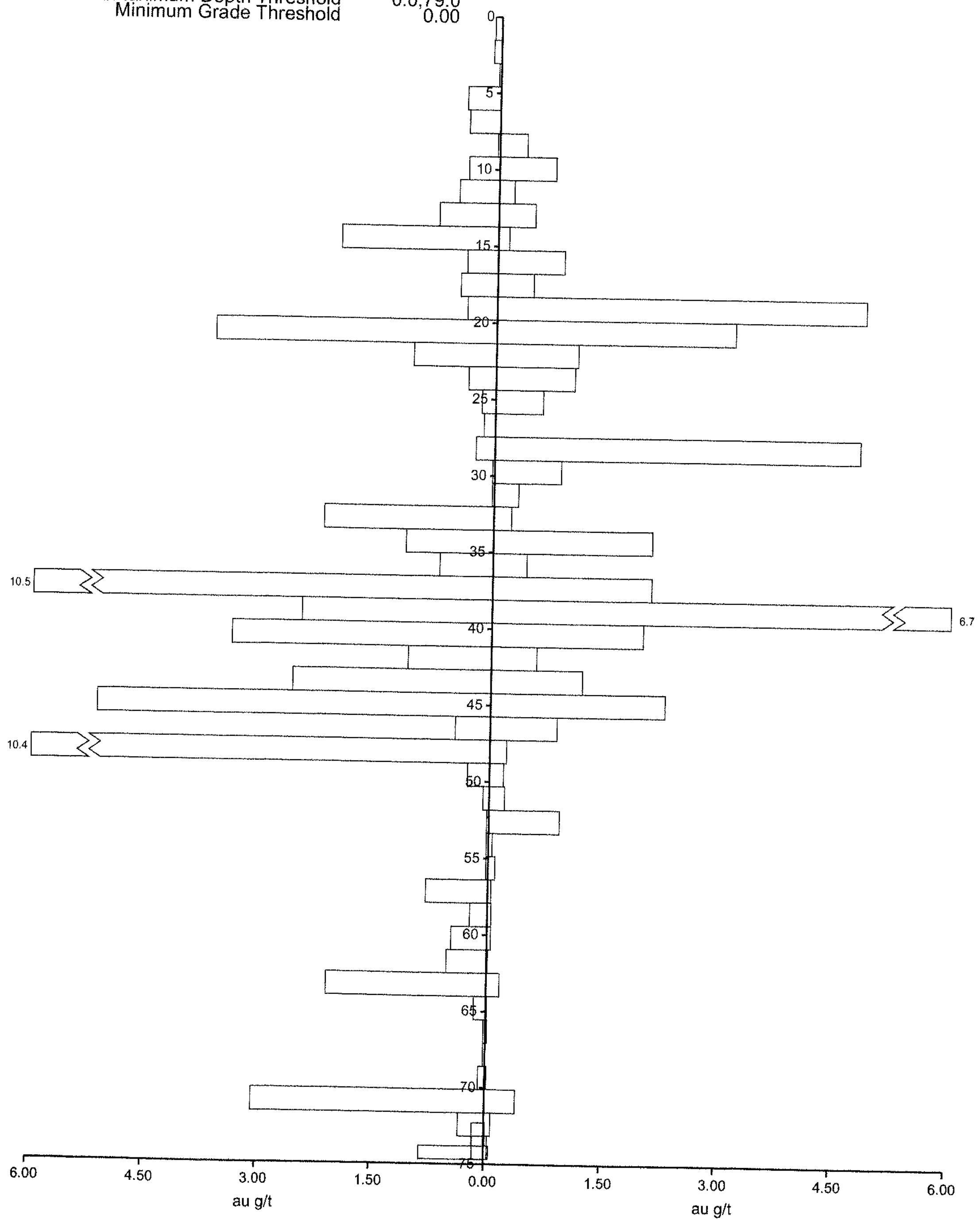
A⁻

RKRC04-028

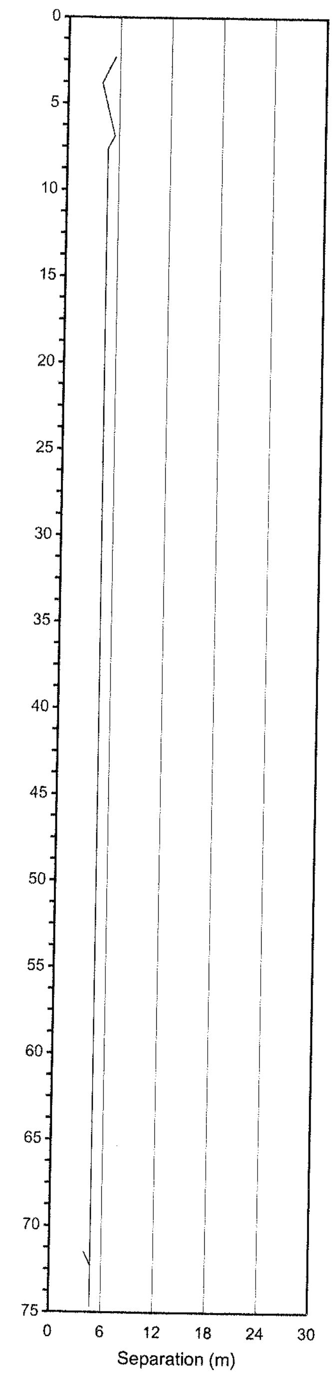
N 51
m 1.21
Cv 1.80
Intervals Trimmed by Depth 2
Intervals Trimmed by Grade 0
Minimum/Maximum Depth Threshold 0.0,79.0
Minimum Grade Threshold 0.00

RR-0-28

N 44
m 0.93
Cv 1.53
Intervals Trimmed by Depth 1
Intervals Trimmed by Grade 3

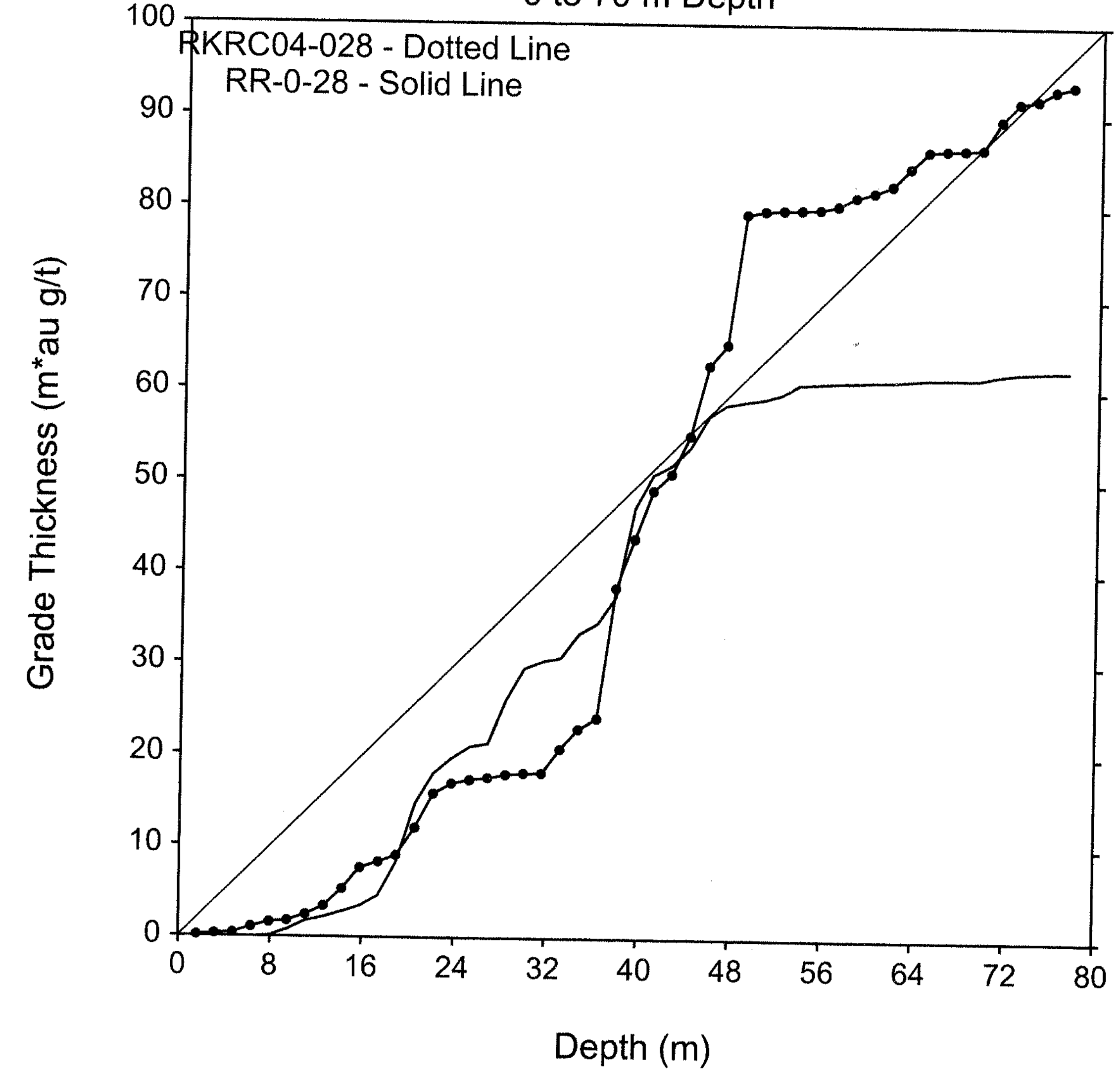


Horiz. Separation



Cumulative Grade Thickness

0 to 79 m Depth



18 A

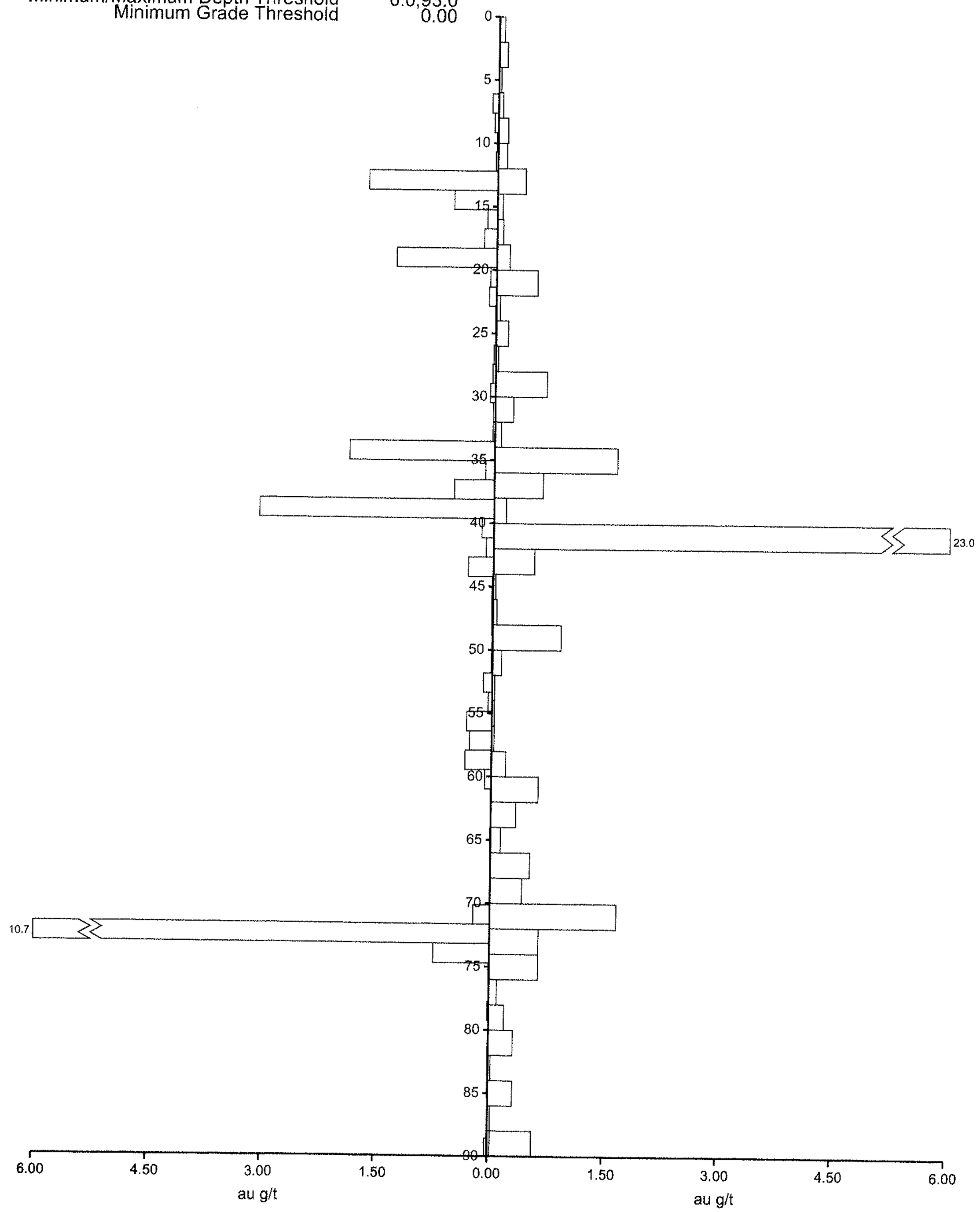
A

RR-0-37

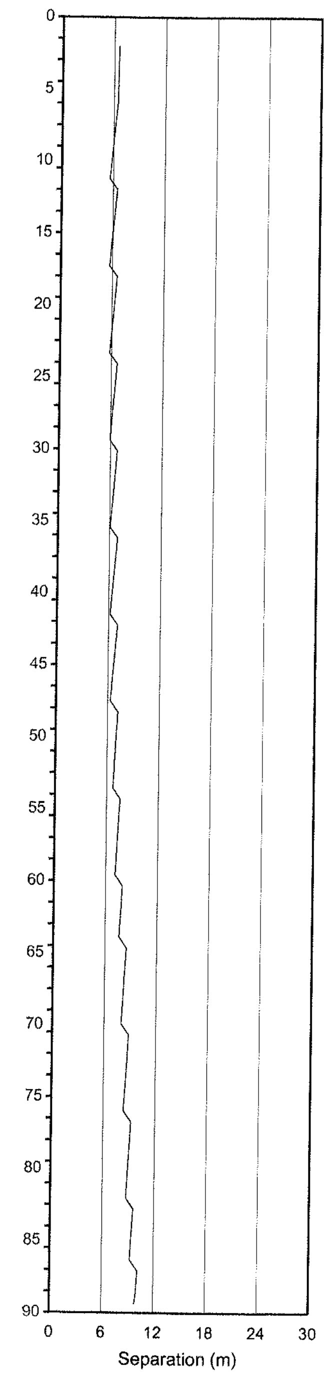
N 50
m 0.48
Cv 3.28
Intervals Trimmed by Depth 0
Intervals Trimmed by Grade 8
Minimum/Maximum Depth Threshold 0.0,93.0
Minimum Grade Threshold 0.00

RKDC03-225

N 46
m 0.80
Cv 4.15
Intervals Trimmed by Depth 5
Intervals Trimmed by Grade 0

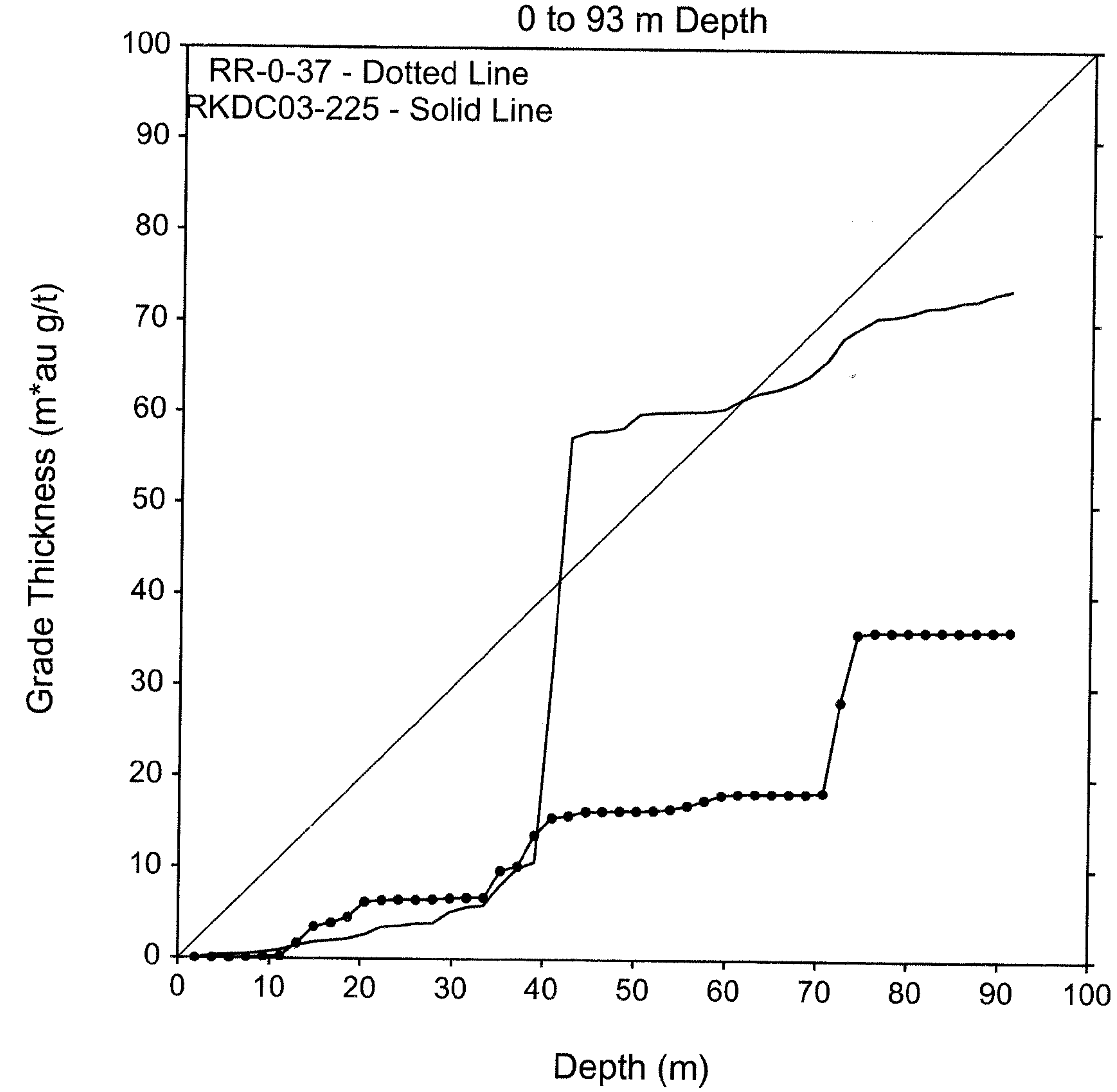


Horiz. Separation

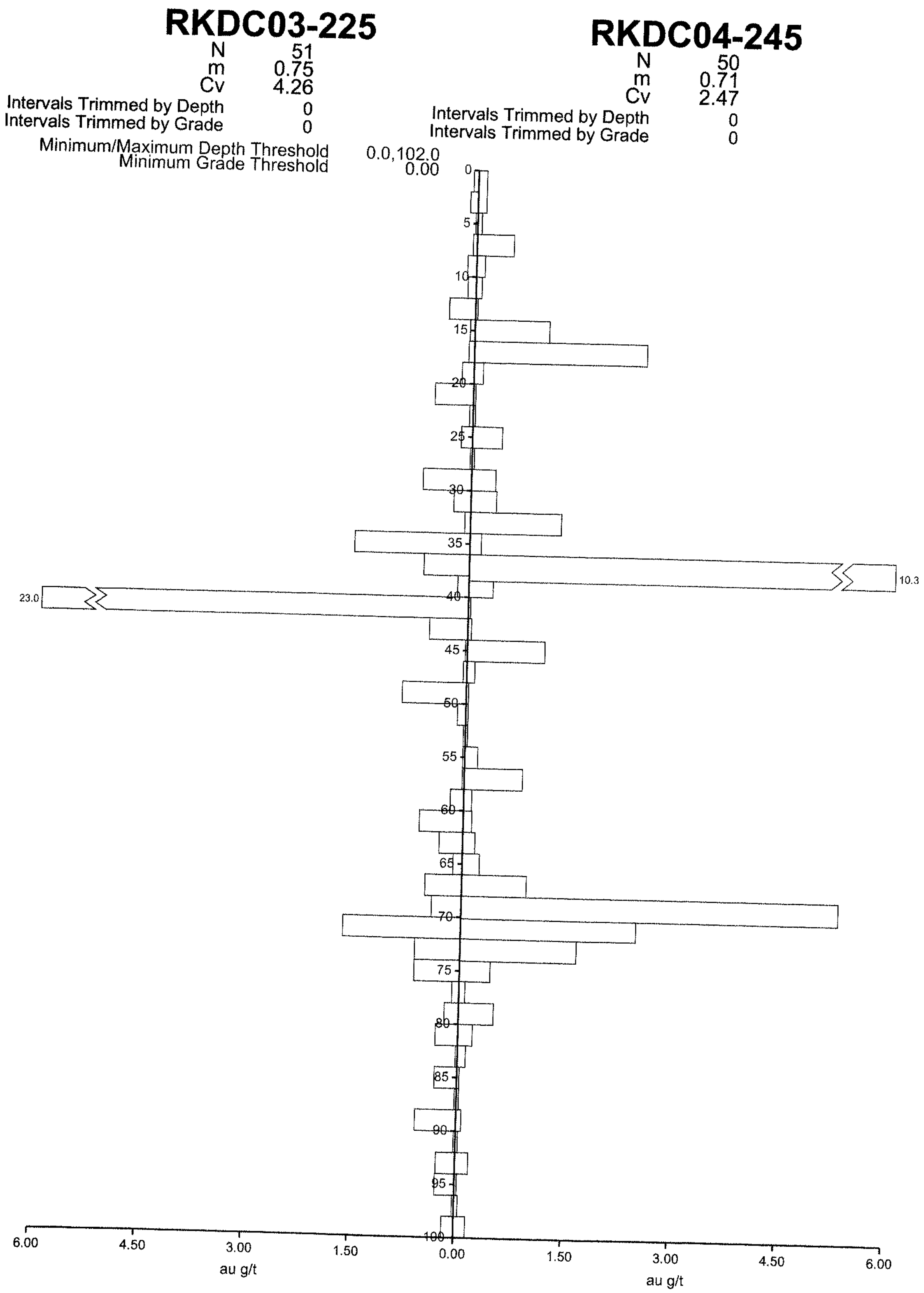


Cumulative Grade Thickness

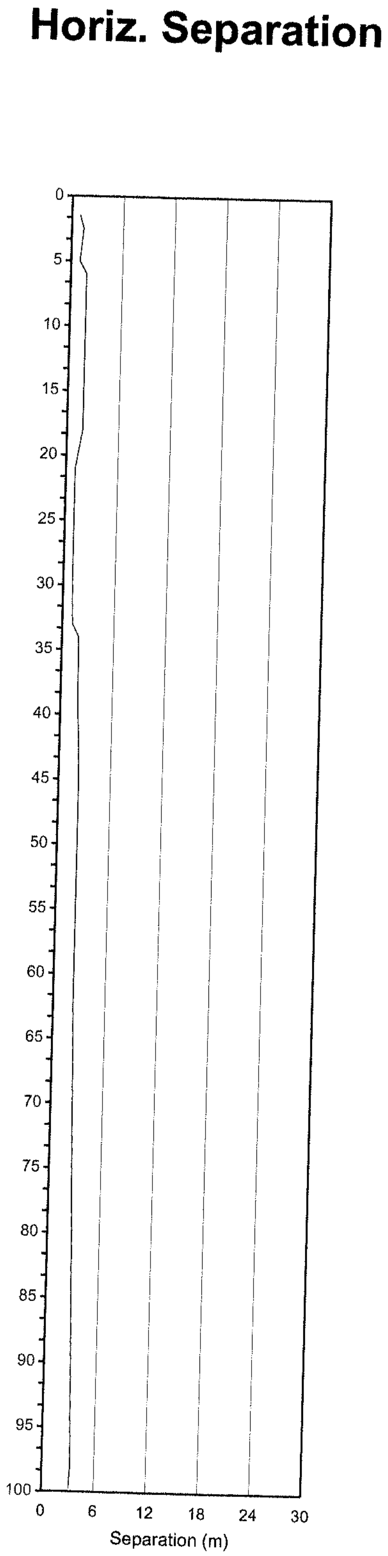
0 to 93 m Depth



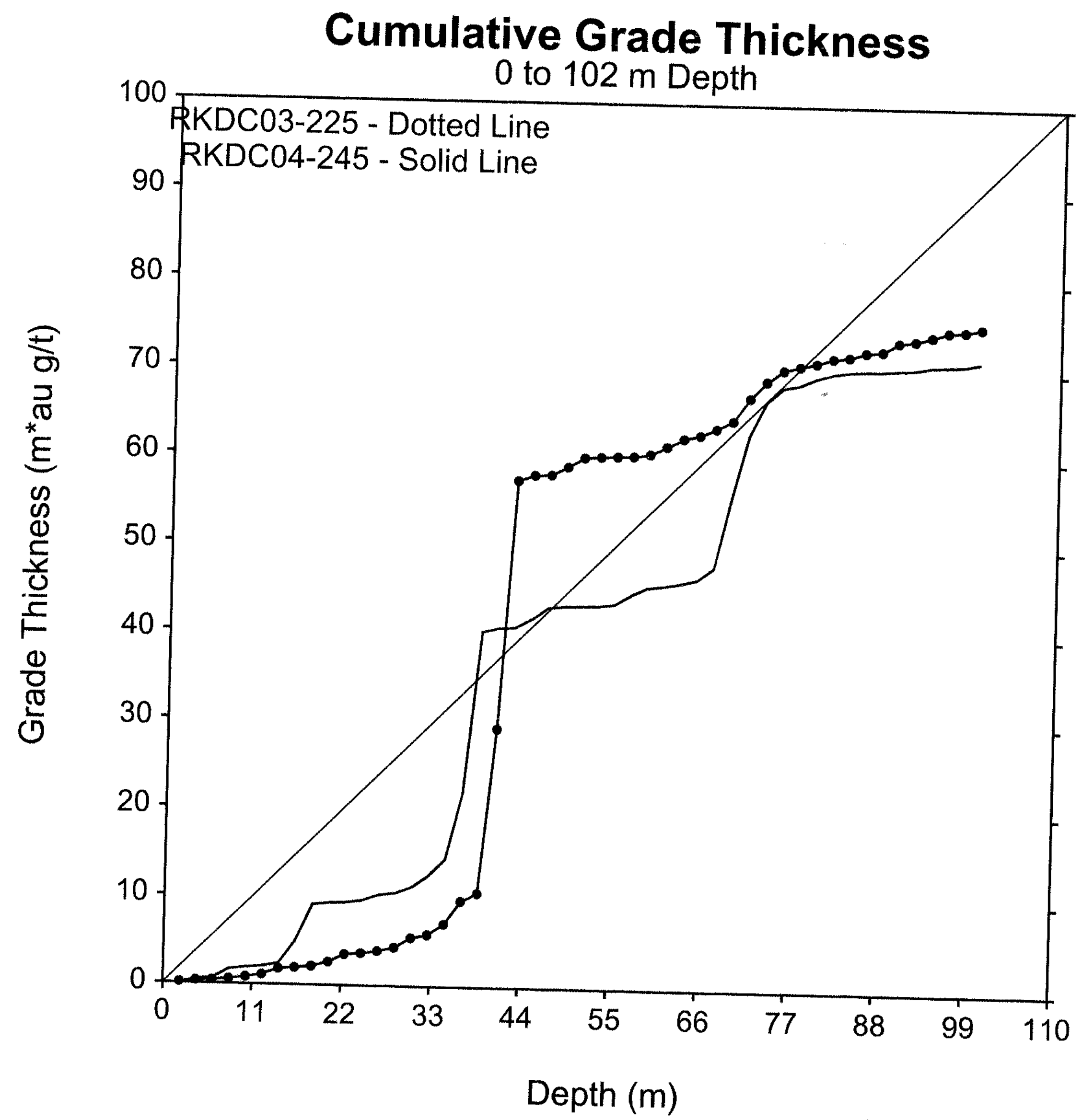
18 B
A



RKDC03-225
N 51
m 0.75
Cv 4.26
Intervals Trimmed by Depth 0
Intervals Trimmed by Grade 0
Minimum/Maximum Depth Threshold 0.0,102.0
Minimum Grade Threshold 0.00
RKDC04-245
N 50
m 0.71
Cv 2.47
Intervals Trimmed by Depth 0
Intervals Trimmed by Grade 0
23.0
10.3
6.00 4.50 3.00 1.50 0.00 1.50 3.00 4.50 6.00
au g/t
au g/t

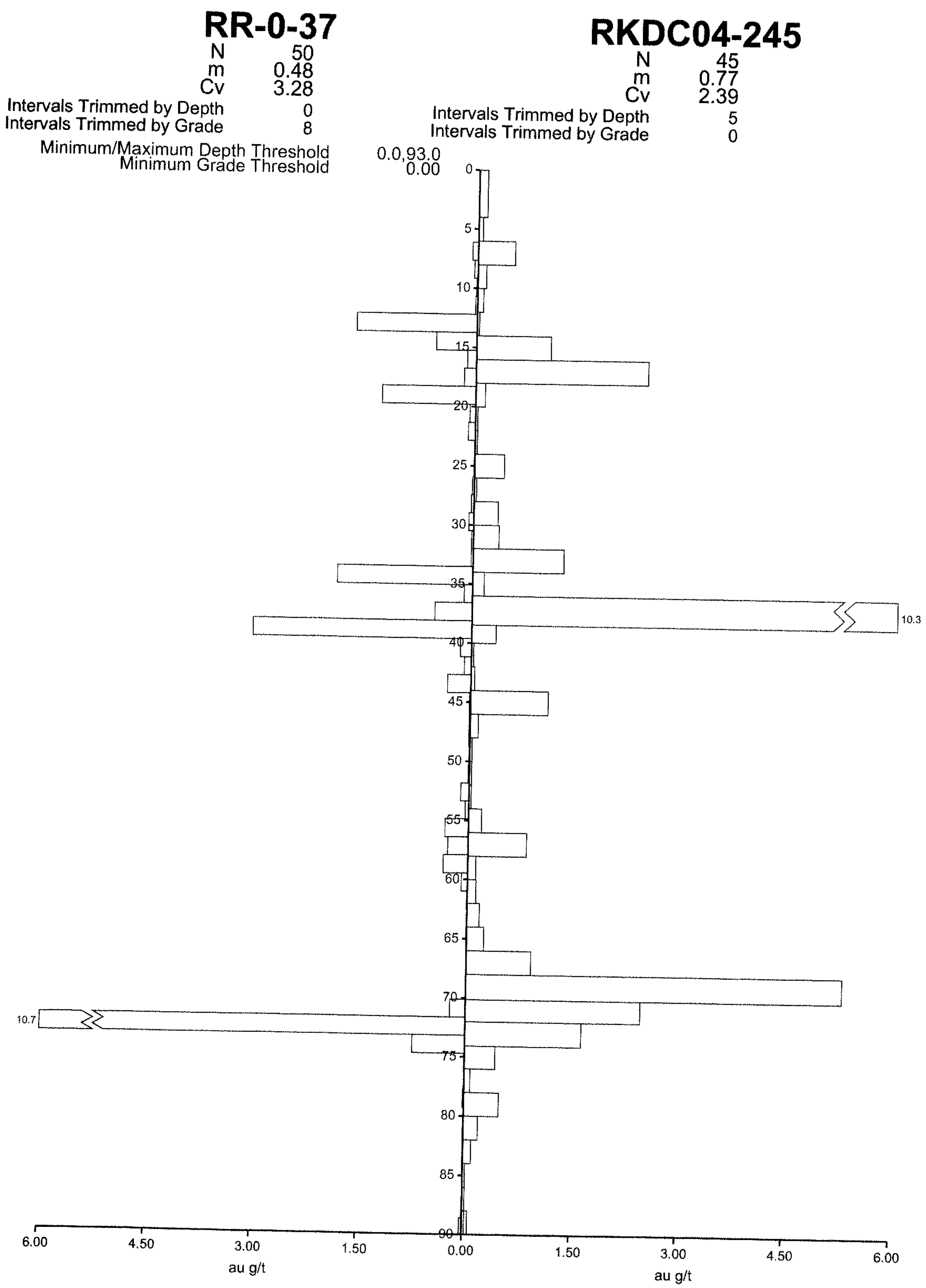


Horiz. Separation
0 6 12 18 24 30
Separation (m)

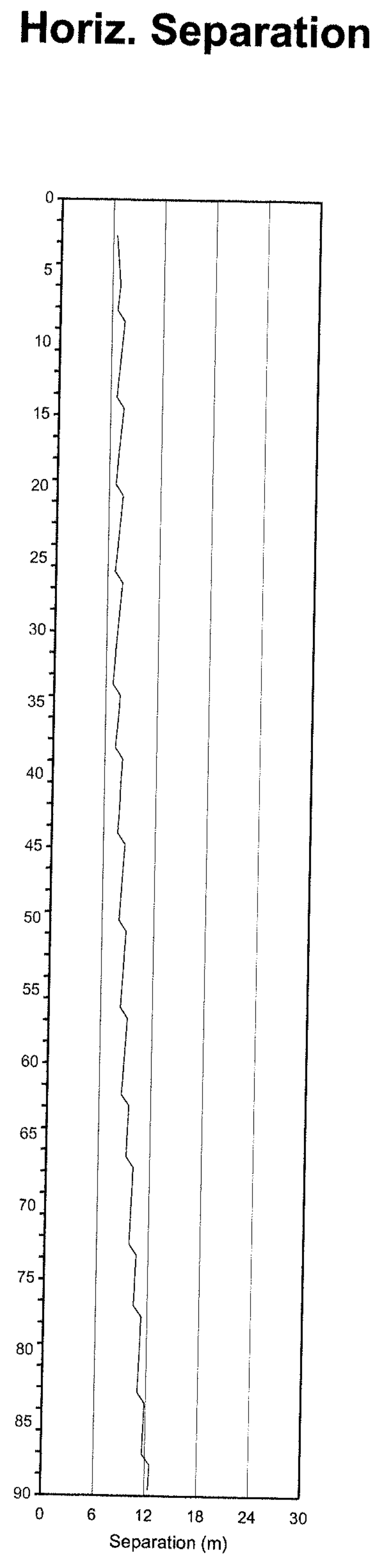


Cumulative Grade Thickness
0 to 102 m Depth
RKDC03-225 - Dotted Line
RKDC04-245 - Solid Line
Grade Thickness (m*au g/t)
Depth (m)
0 11 22 33 44 55 66 77 88 99 110

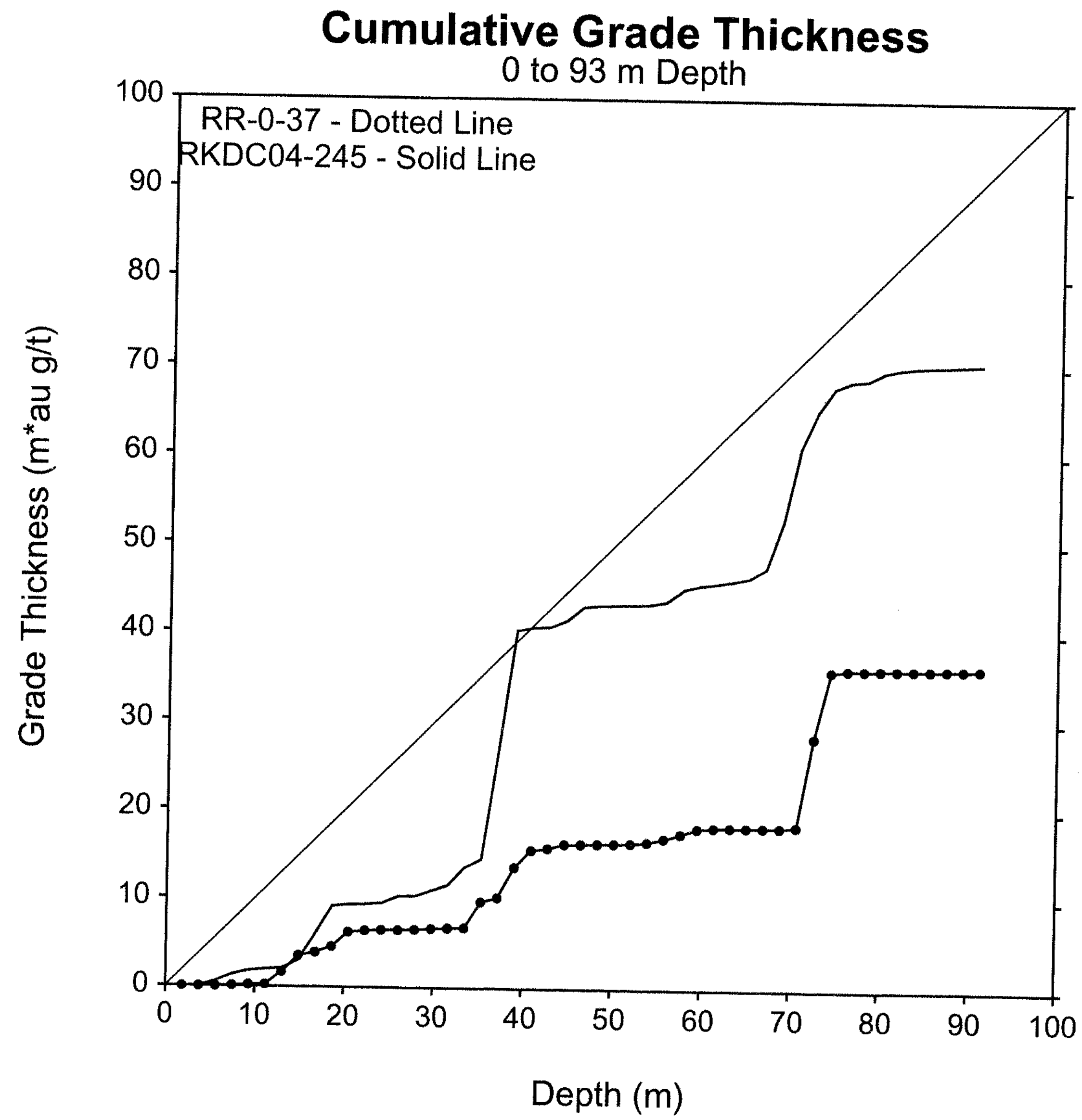
18 C
A



RR-0-37
N 50
m 0.48
Cv 3.28
Intervals Trimmed by Depth 0
Intervals Trimmed by Grade 8
Minimum/Maximum Depth Threshold 0.0,93.0
Minimum Grade Threshold 0.00
RKDC04-245
N 45
m 0.77
Cv 2.39
Intervals Trimmed by Depth 5
Intervals Trimmed by Grade 0
10.3
10.7
au g/t
au g/t

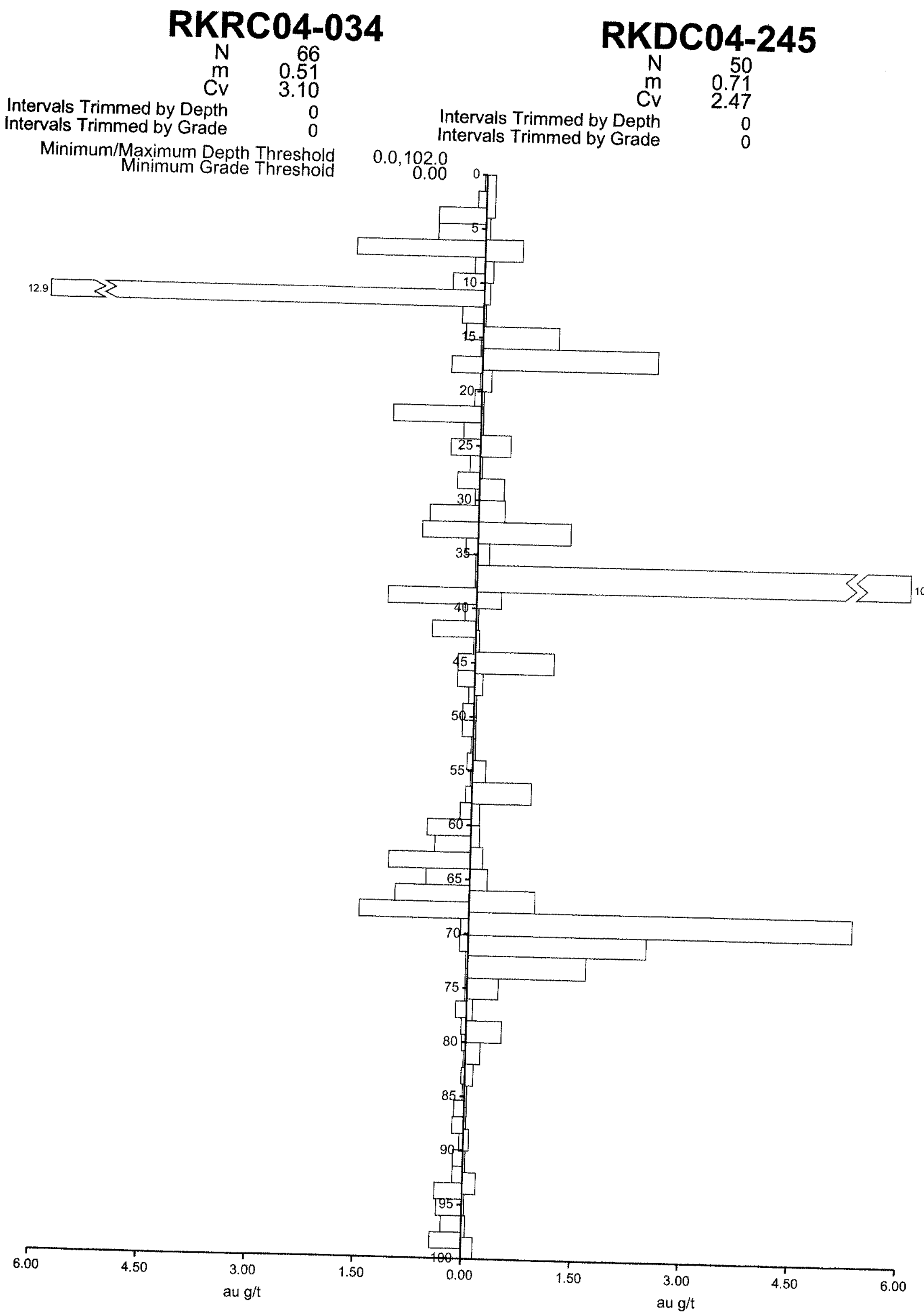


Horiz. Separation
Separation (m)

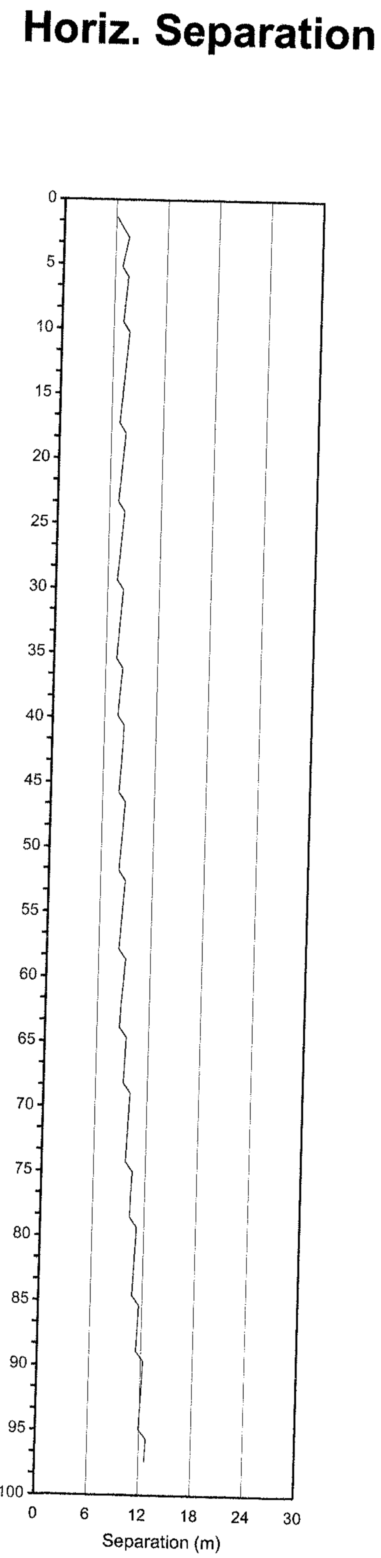


Cumulative Grade Thickness
0 to 93 m Depth
RR-0-37 - Dotted Line
RKDC04-245 - Solid Line
Grade Thickness (m*au g/t)
Depth (m)

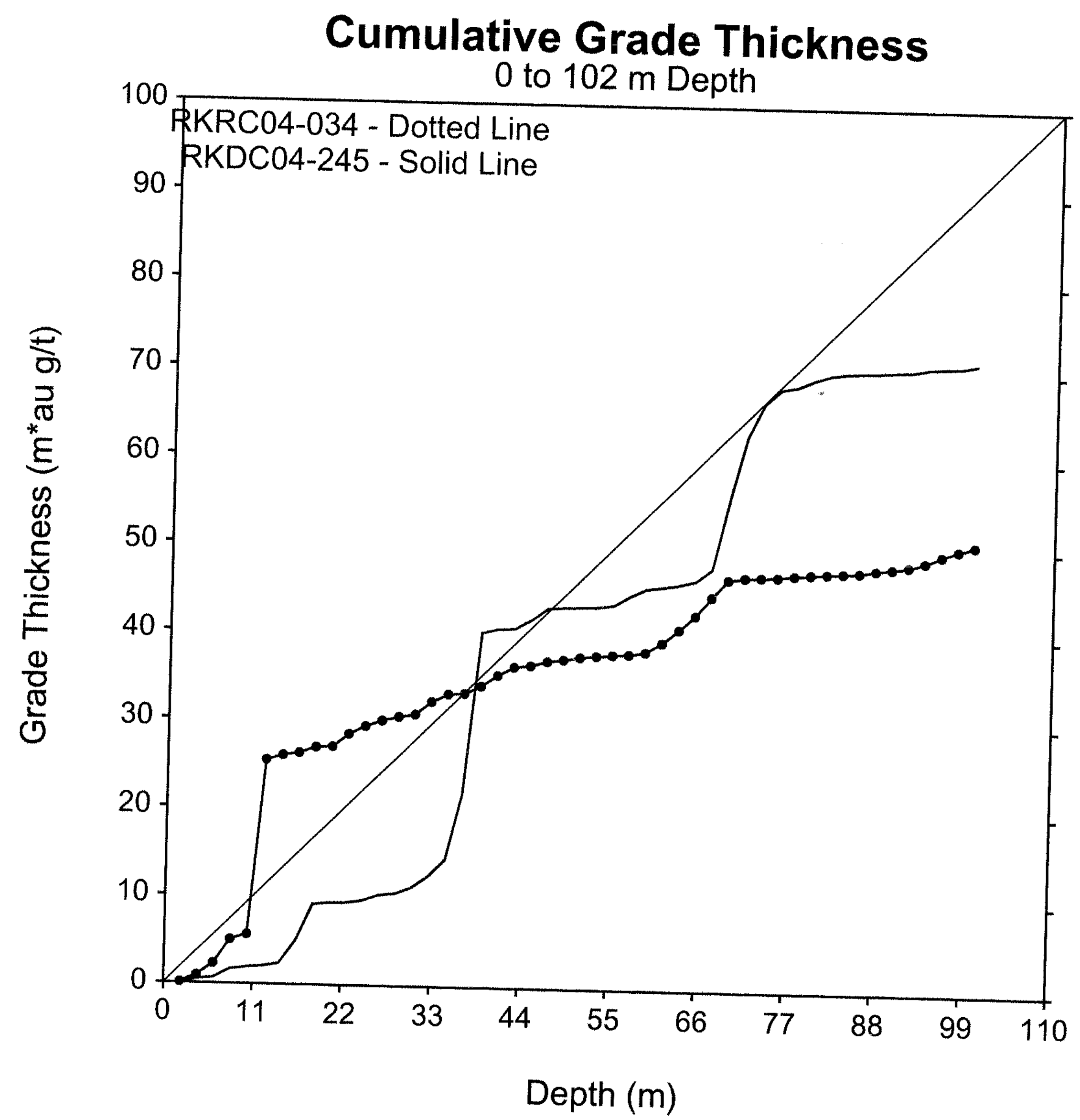
18 D
A



RKRC04-034
N 66
m 0.51
Cv 3.10
Intervals Trimmed by Depth 0
Intervals Trimmed by Grade 0
Minimum/Maximum Depth Threshold 0.0,102.0
Minimum Grade Threshold 0.00
RKDC04-245
N 50
m 0.71
Cv 2.47
Intervals Trimmed by Depth 0
Intervals Trimmed by Grade 0
12.9
10.3
6.00 4.50 3.00 1.50 0.00 1.50 3.00 4.50 6.00
au g/t
au g/t

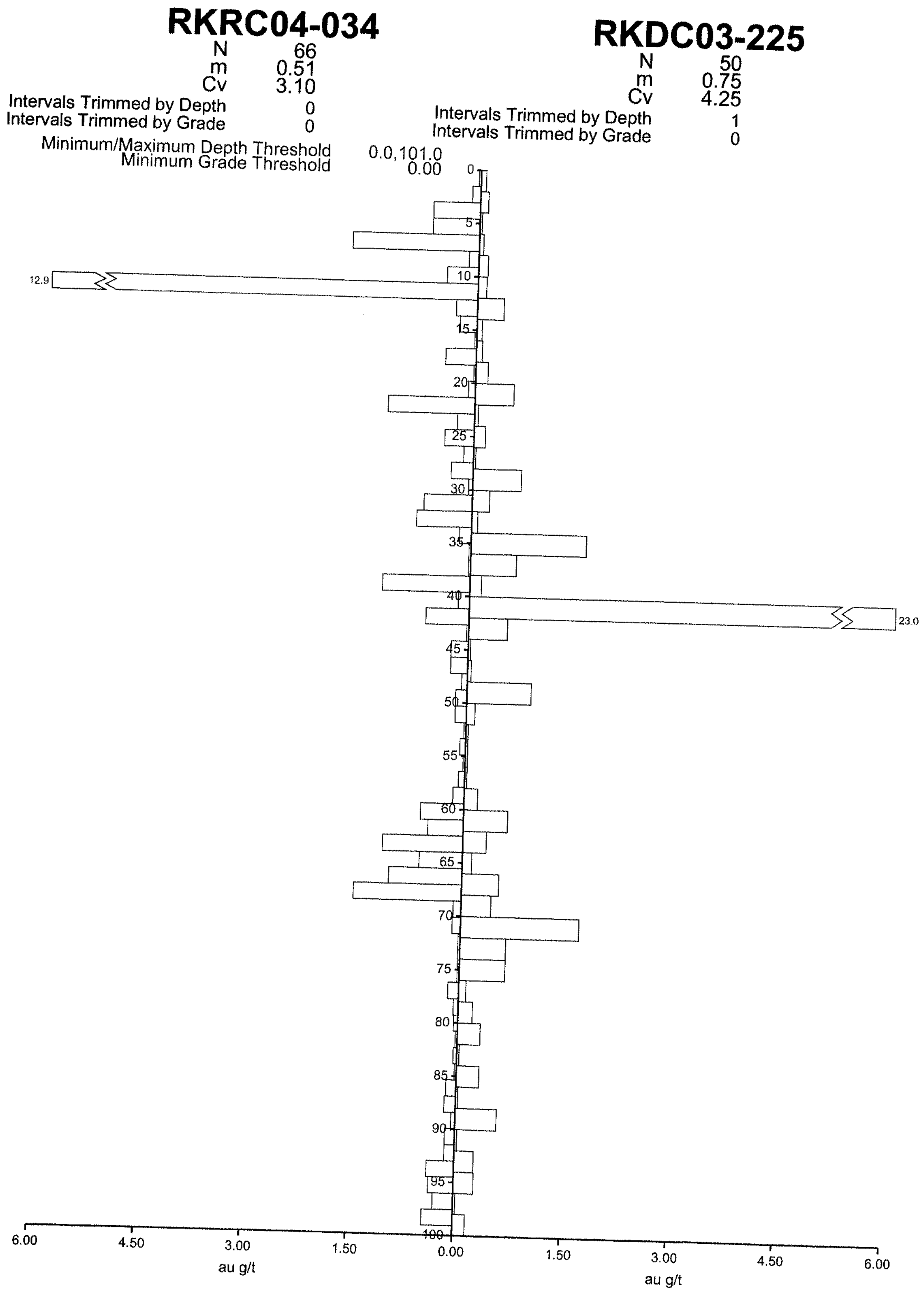


Horiz. Separation
0 6 12 18 24 30
Separation (m)

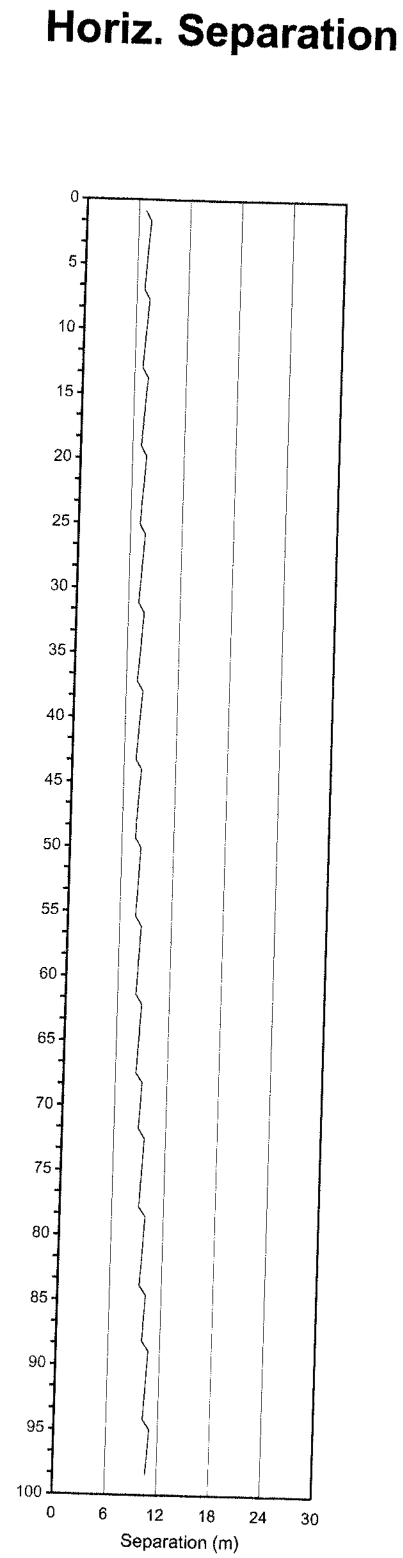


Cumulative Grade Thickness
0 to 102 m Depth
RKRC04-034 - Dotted Line
RKDC04-245 - Solid Line
Grade Thickness (m*au g/t)
Depth (m)
0 11 22 33 44 55 66 77 88 99 110

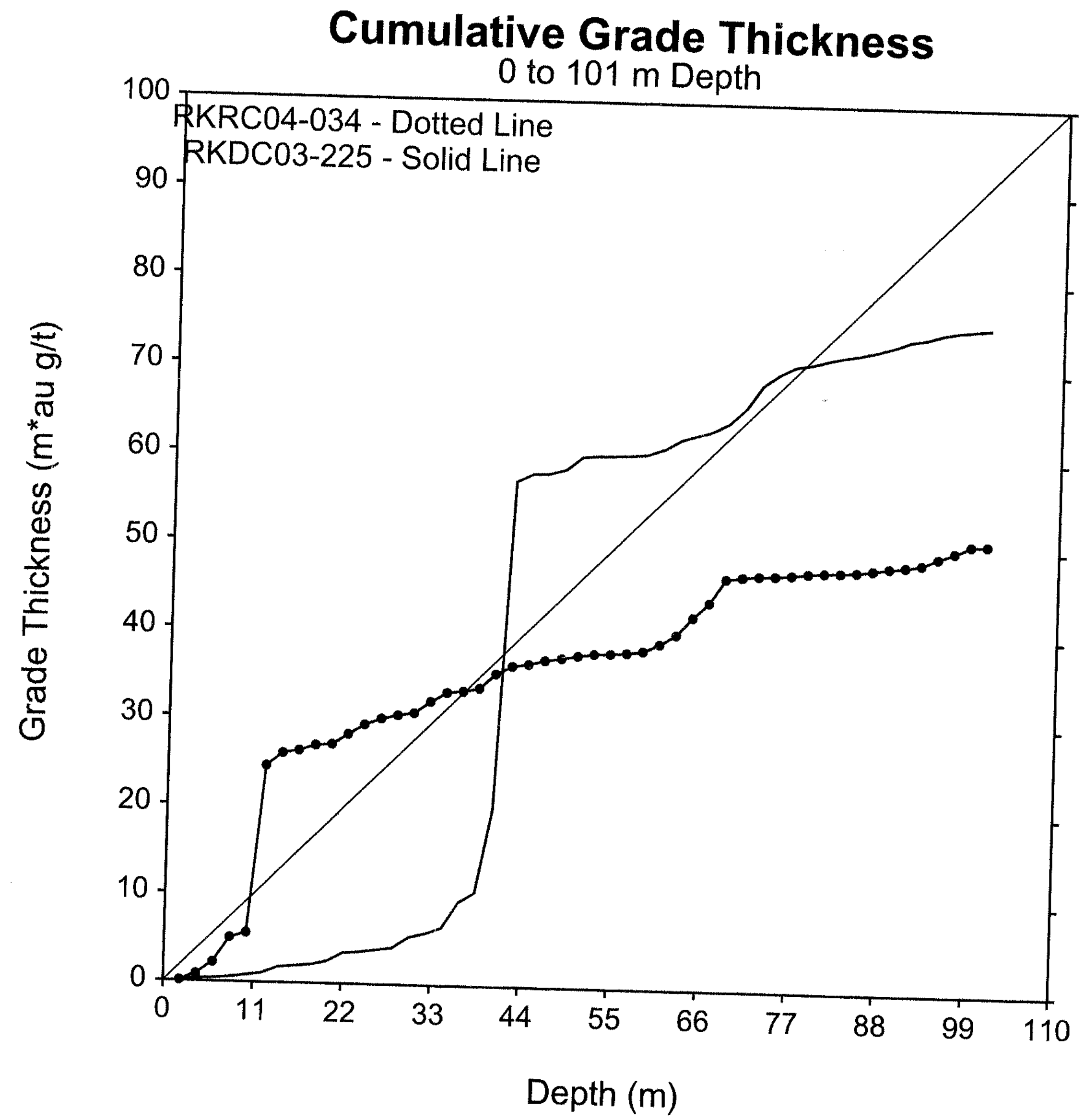
18 E A



RKRC04-034
N 66
m 0.51
Cv 3.10
Intervals Trimmed by Depth 0
Intervals Trimmed by Grade 0
Minimum/Maximum Depth Threshold 0.0,101.0
Minimum Grade Threshold 0.00
RKDC03-225
N 50
m 0.75
Cv 4.25
Intervals Trimmed by Depth 1
Intervals Trimmed by Grade 0
12.9
23.0
au g/t
au g/t



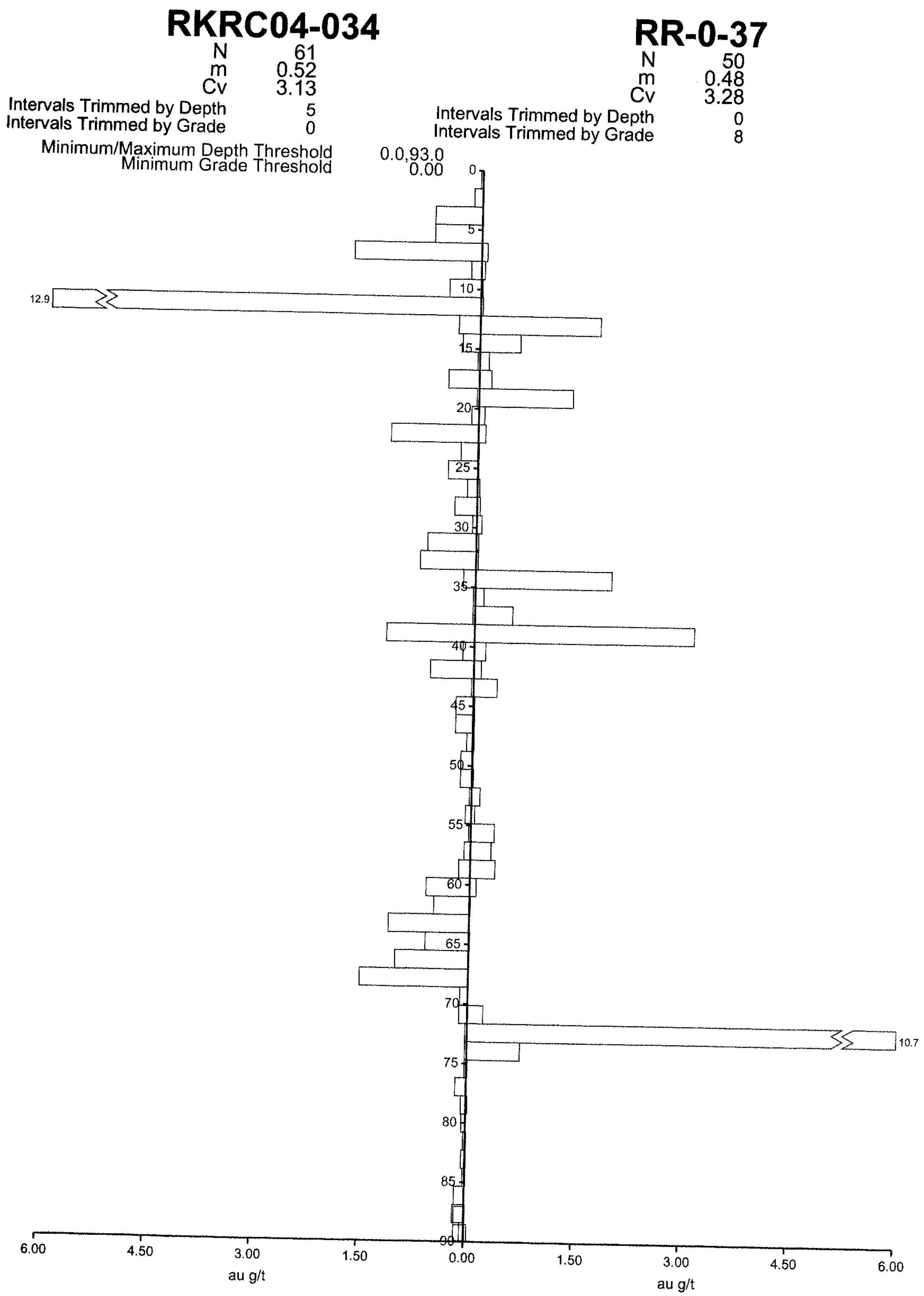
Horiz. Separation
Separation (m)



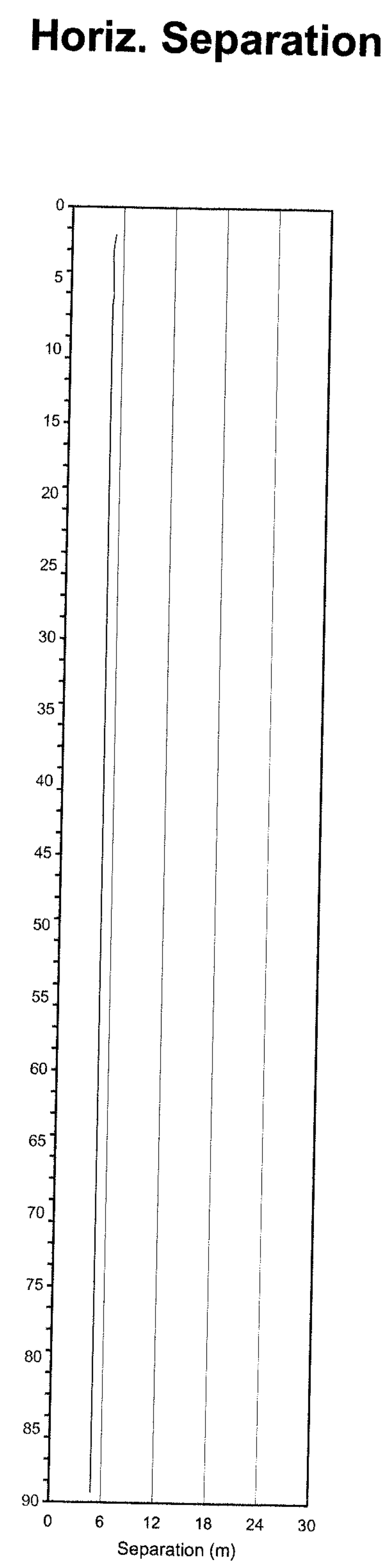
Cumulative Grade Thickness
0 to 101 m Depth
RKRC04-034 - Dotted Line
RKDC03-225 - Solid Line
Grade Thickness (m*au g/t)
Depth (m)

18 F

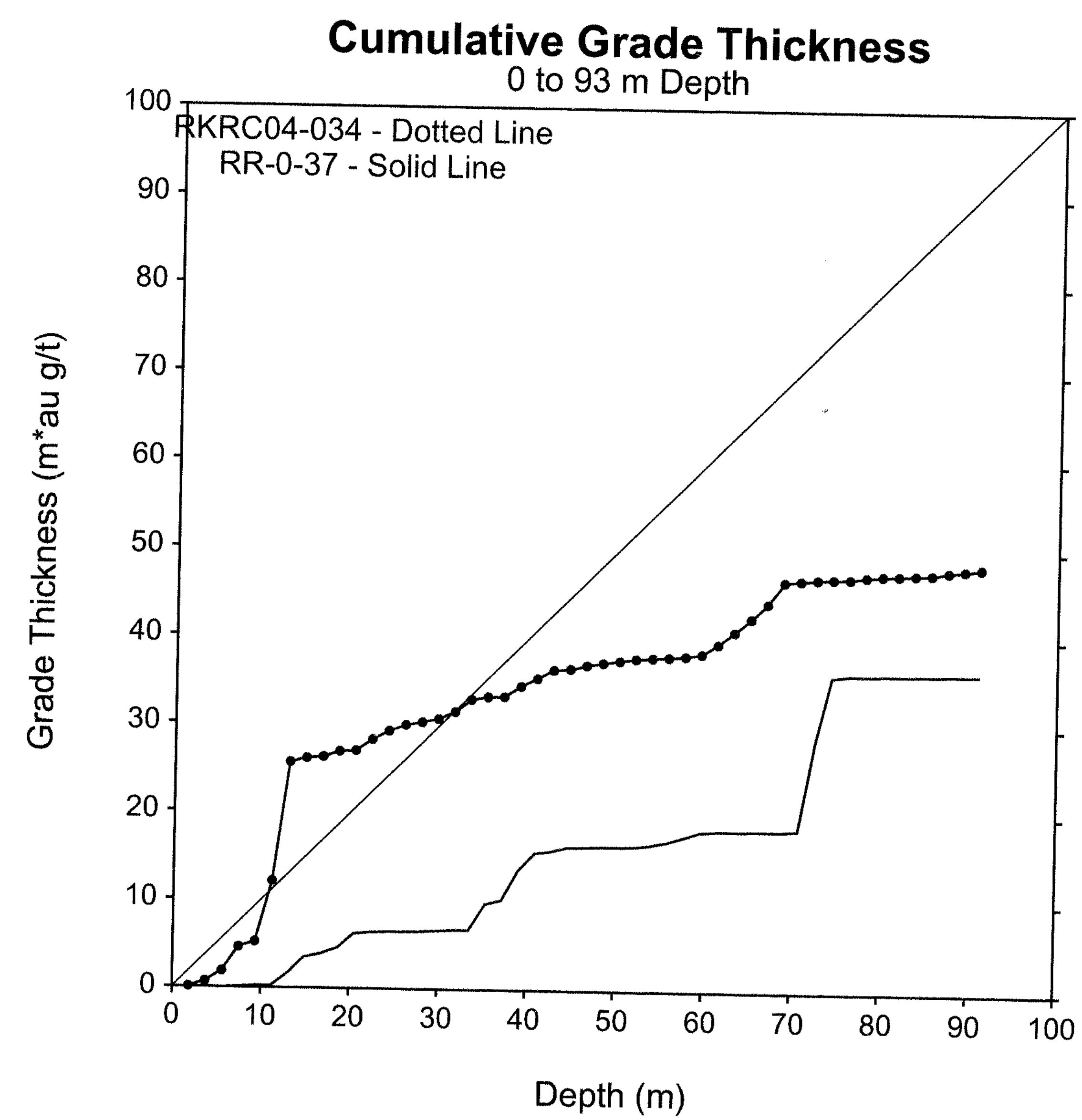
A



RKRC04-034
N 61
m 0.52
Cv 3.13
Intervals Trimmed by Depth 5
Intervals Trimmed by Grade 0
Minimum/Maximum Depth Threshold 0.0,93.0
Minimum Grade Threshold 0.00
RR-0-37
N 50
m 0.48
Cv 3.28
Intervals Trimmed by Depth 0
Intervals Trimmed by Grade 8
12.9
10.7
6.00 4.50 3.00 1.50 0.00 1.50 3.00 4.50 6.00
au g/t
au g/t



Horiz. Separation
0 6 12 18 24 30
Separation (m)



Cumulative Grade Thickness
0 to 93 m Depth
RKRC04-034 - Dotted Line
RR-0-37 - Solid Line
Grade Thickness (m*au g/t)
Depth (m)

19 A

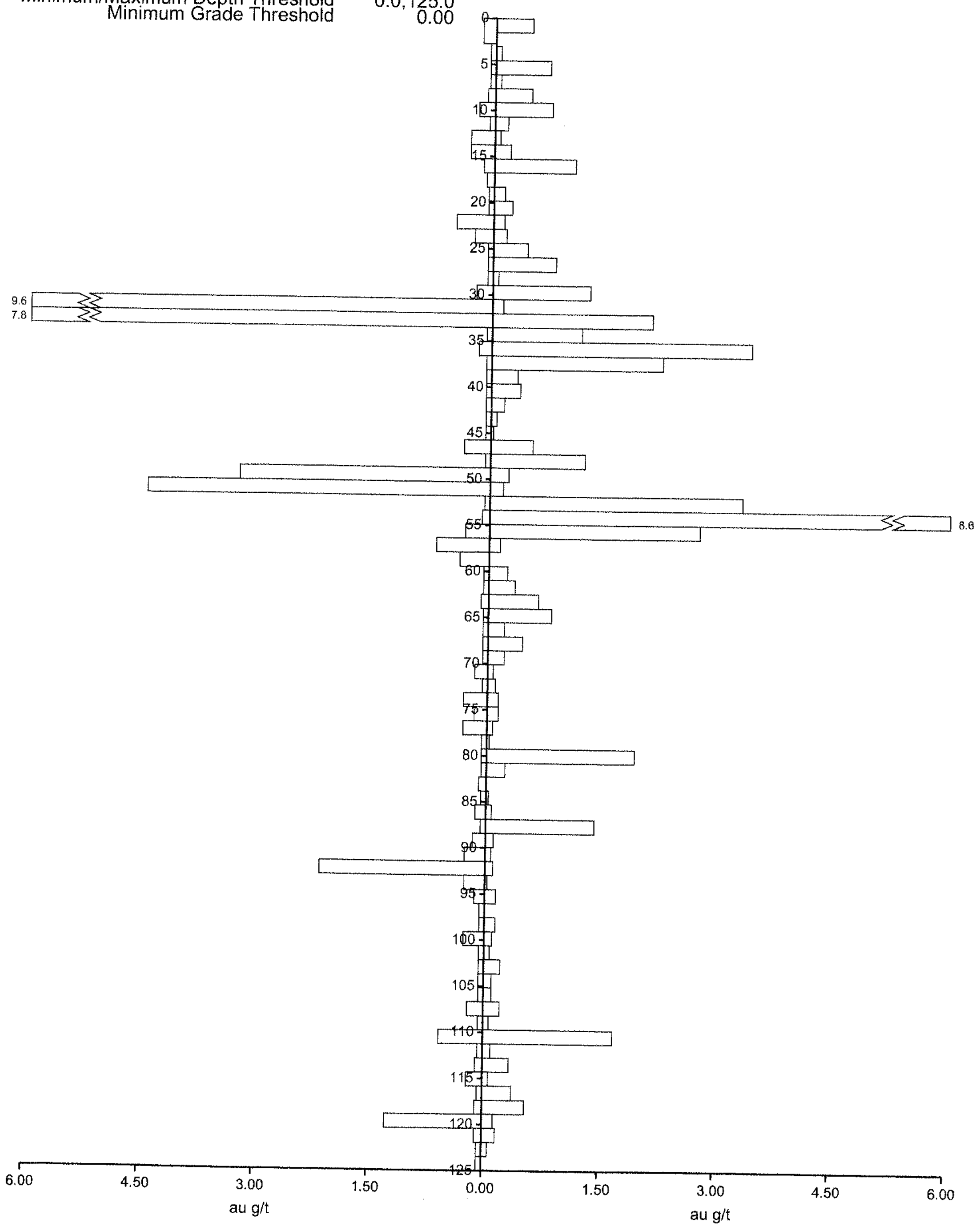
A

RC-7-016

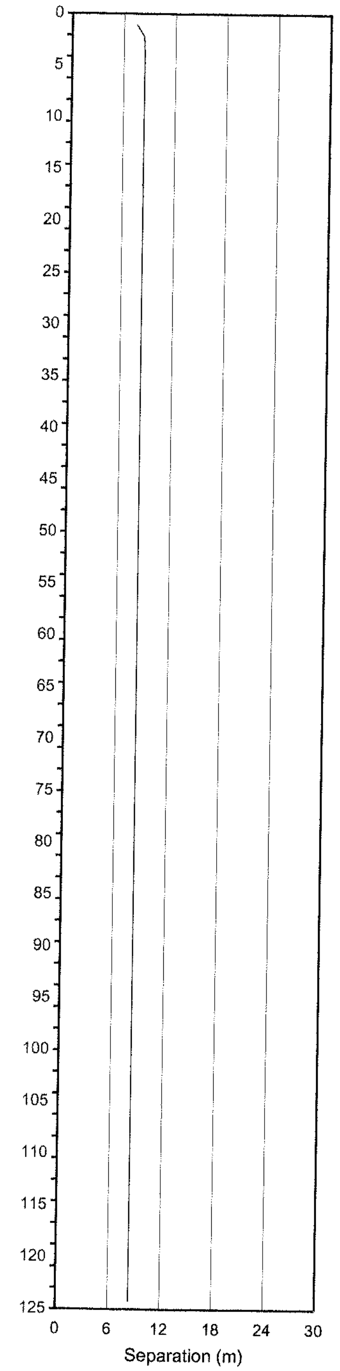
N 81
m 0.48
Cv 3.02
Intervals Trimmed by Depth 2
Intervals Trimmed by Grade 0
Minimum/Maximum Depth Threshold 0.0,125.0
Minimum Grade Threshold 0.00

RCC-4-11

N 77
m 0.60
Cv 1.94
Intervals Trimmed by Depth 0
Intervals Trimmed by Grade 5

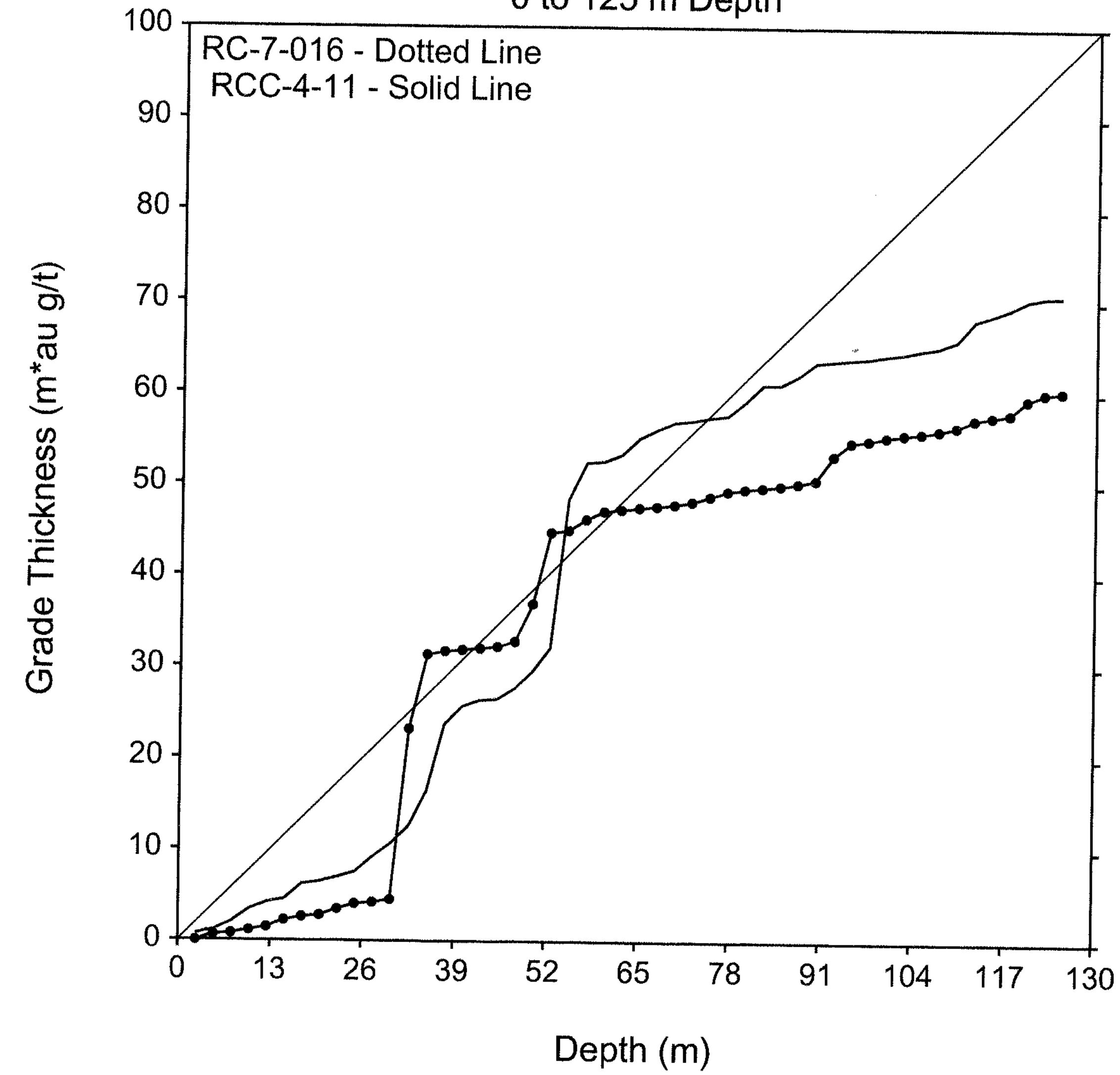


Horiz. Separation



Cumulative Grade Thickness

0 to 125 m Depth



19 B

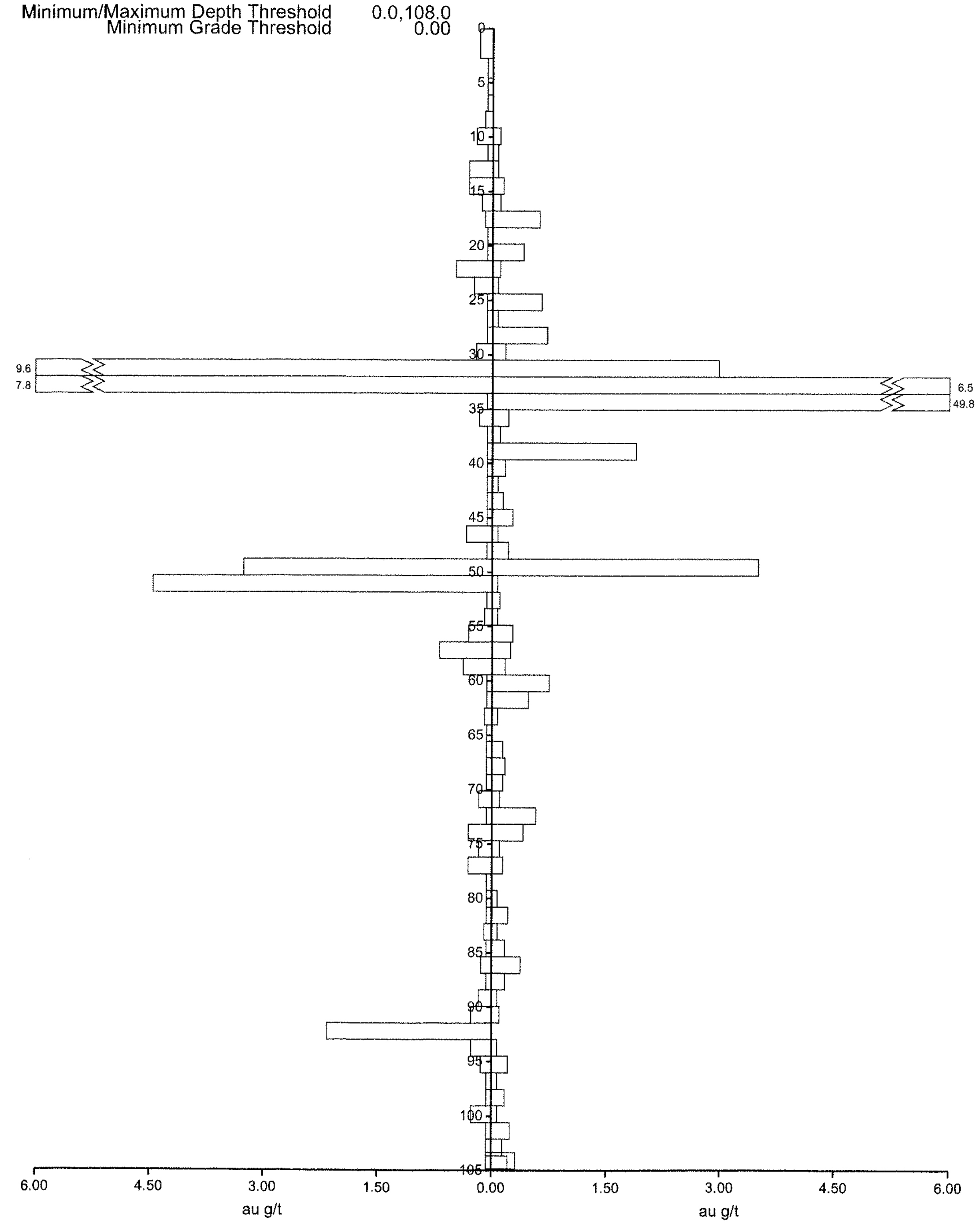
A

RC-7-016

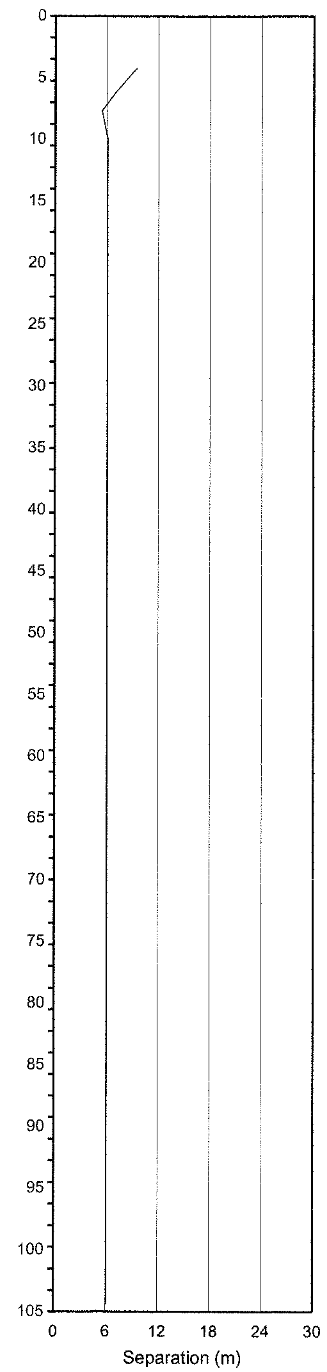
N	69
m	0.52
Cv	2.99
Intervals Trimmed by Depth	14
Intervals Trimmed by Grade	0
Minimum/Maximum Depth Threshold	0.0,108.0
Minimum Grade Threshold	0.00

RC92-003

N	60
m	1.26
Cv	5.06
Intervals Trimmed by Depth	1
Intervals Trimmed by Grade	6

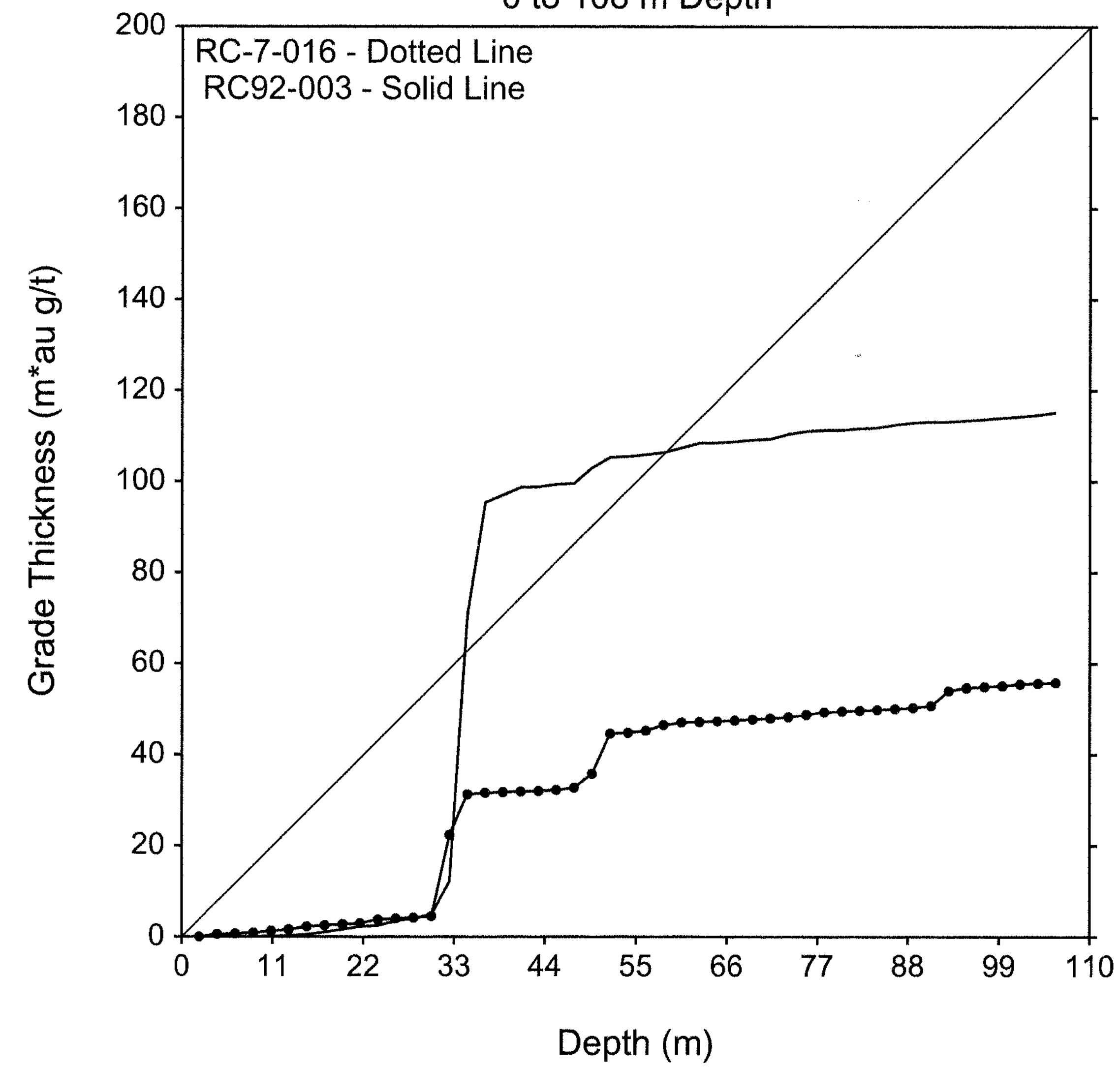


Horiz. Separation



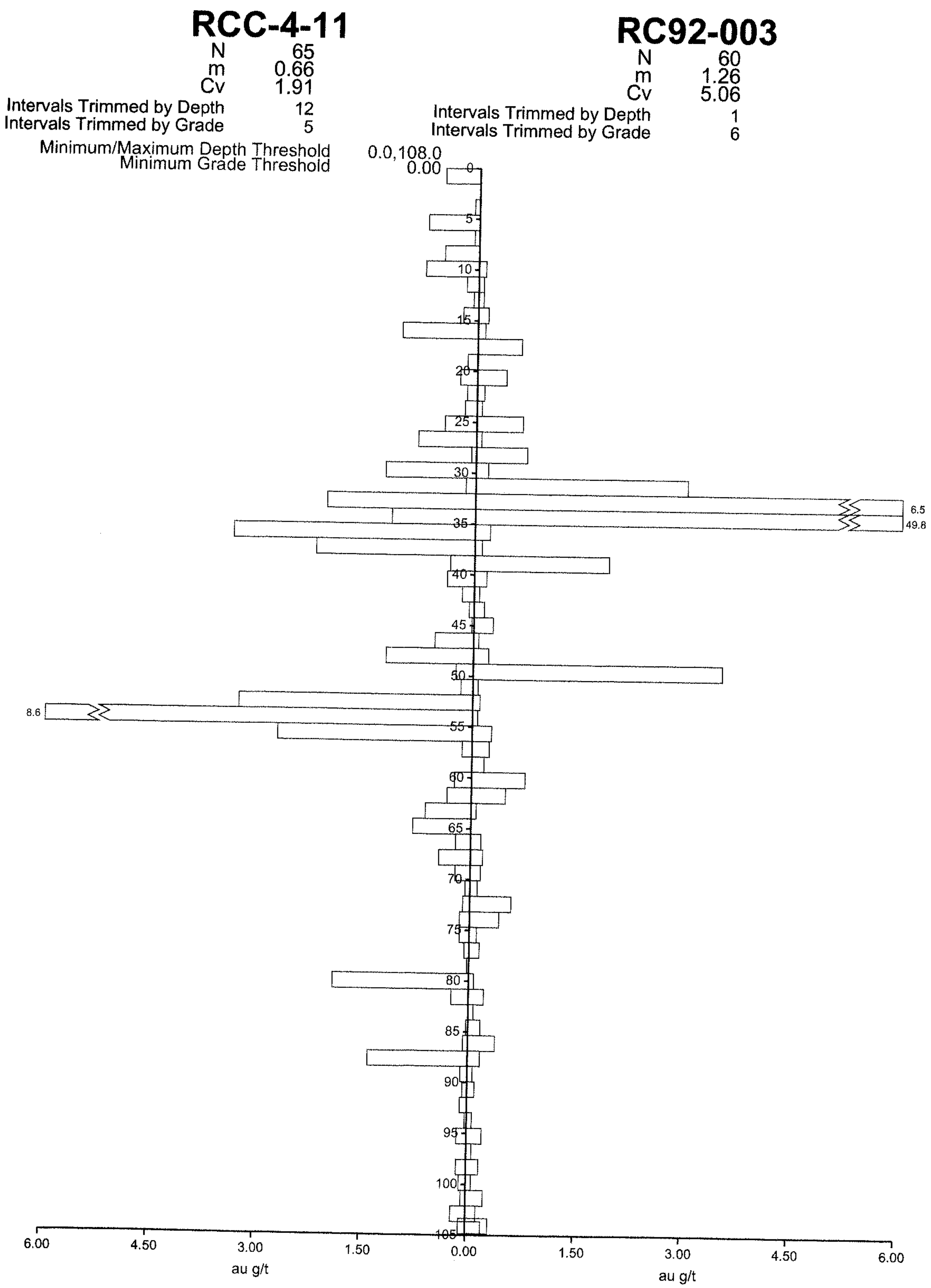
Cumulative Grade Thickness

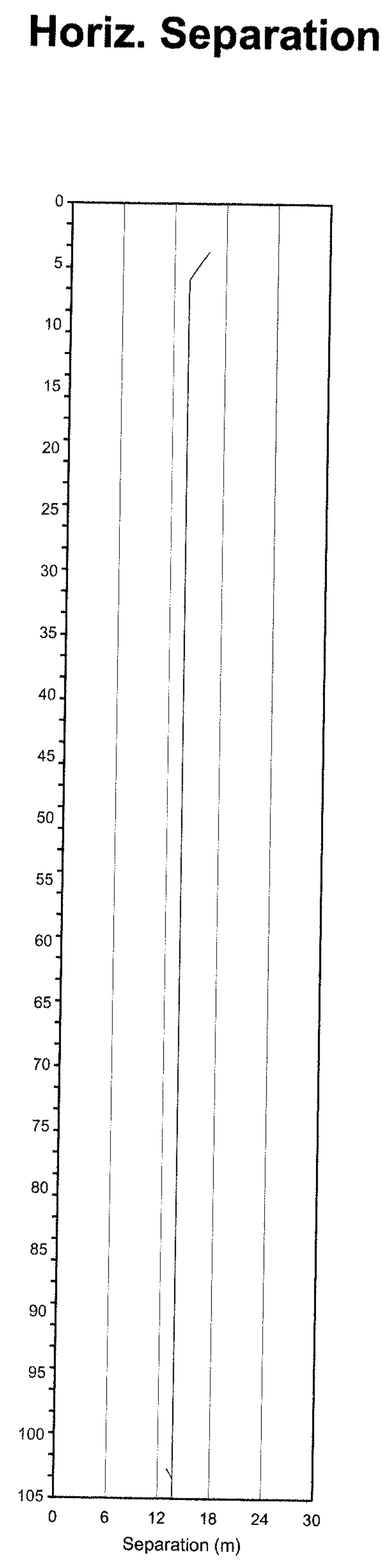
0 to 108 m Depth

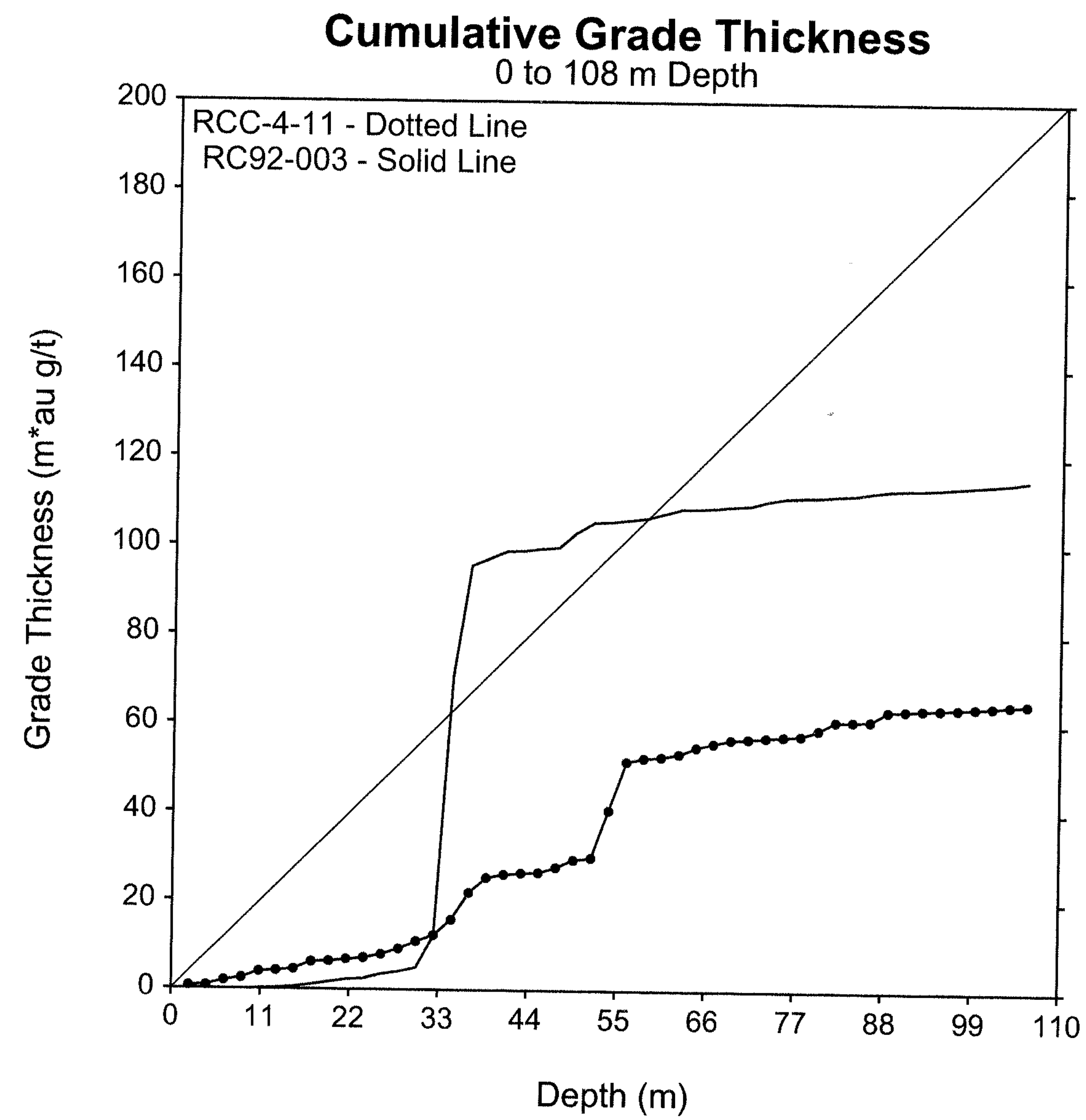


19 C

A


RCC-4-11
N 65
m 0.66
Cv 1.91
Intervals Trimmed by Depth 12
Intervals Trimmed by Grade 5
Minimum/Maximum Depth Threshold 0.0,108.0
Minimum Grade Threshold 0.00
RC92-003
N 60
m 1.26
Cv 5.06
Intervals Trimmed by Depth 1
Intervals Trimmed by Grade 6
6.5
49.8
8.6
6.00 4.50 3.00 1.50 0.00 1.50 3.00 4.50 6.00
au g/t
au g/t


Horiz. Separation
0 6 12 18 24 30
Separation (m)


Cumulative Grade Thickness
0 to 108 m Depth
RCC-4-11 - Dotted Line
RC92-003 - Solid Line
Grade Thickness (m*au g/t)
Depth (m)

20 A

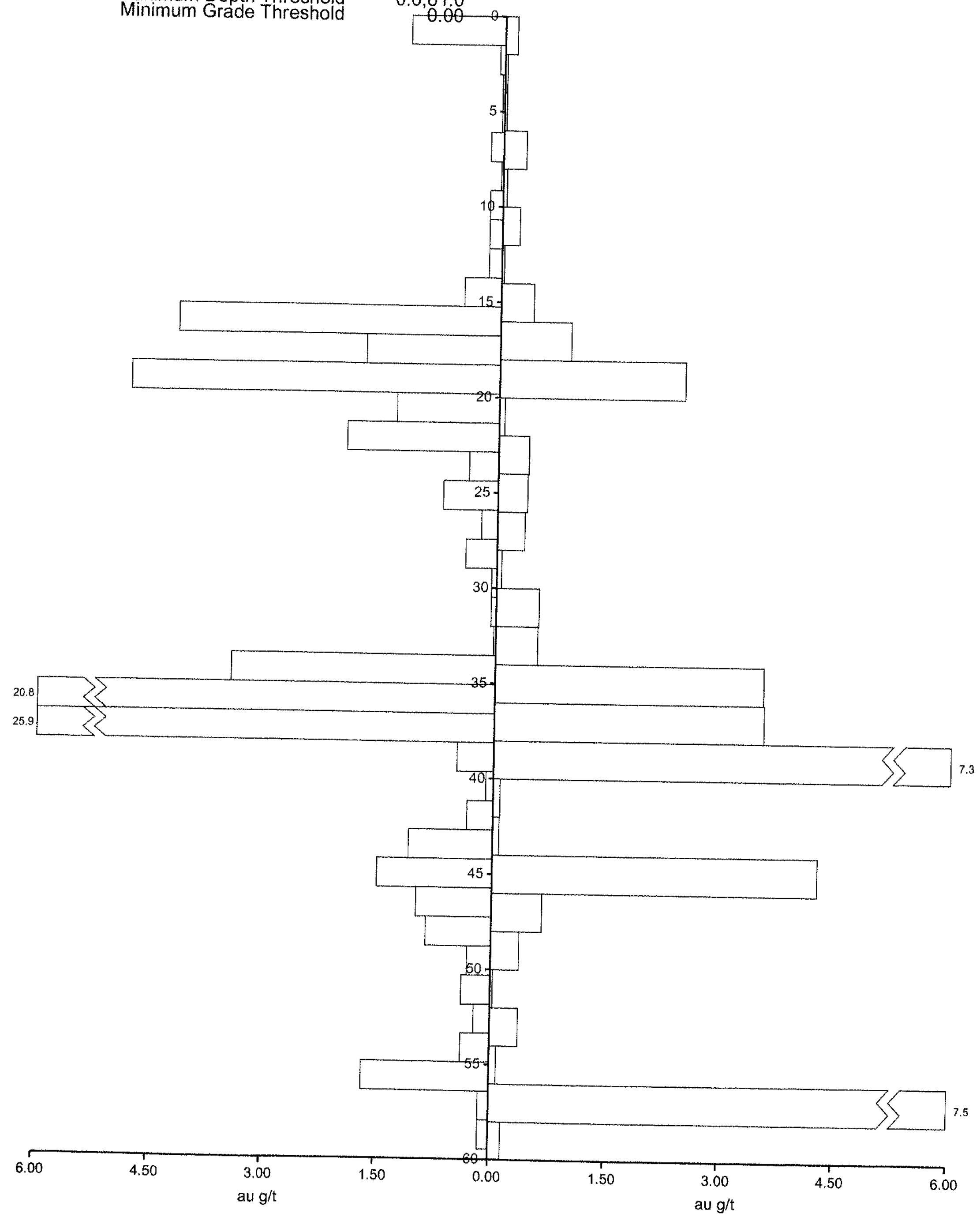
A-

RR-8-024

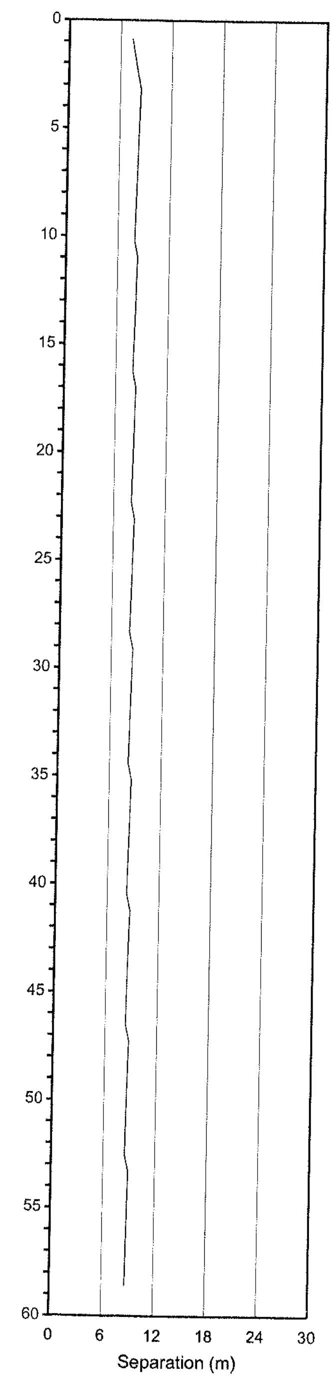
N 40
m 2.10
Cv 2.44
Intervals Trimmed by Depth 0
Intervals Trimmed by Grade 0
Minimum/Maximum Depth Threshold 0.0,61.0
Minimum Grade Threshold 0.00

RKDC03-177

N 30
m 1.17
Cv 1.72
Intervals Trimmed by Depth 8
Intervals Trimmed by Grade 0

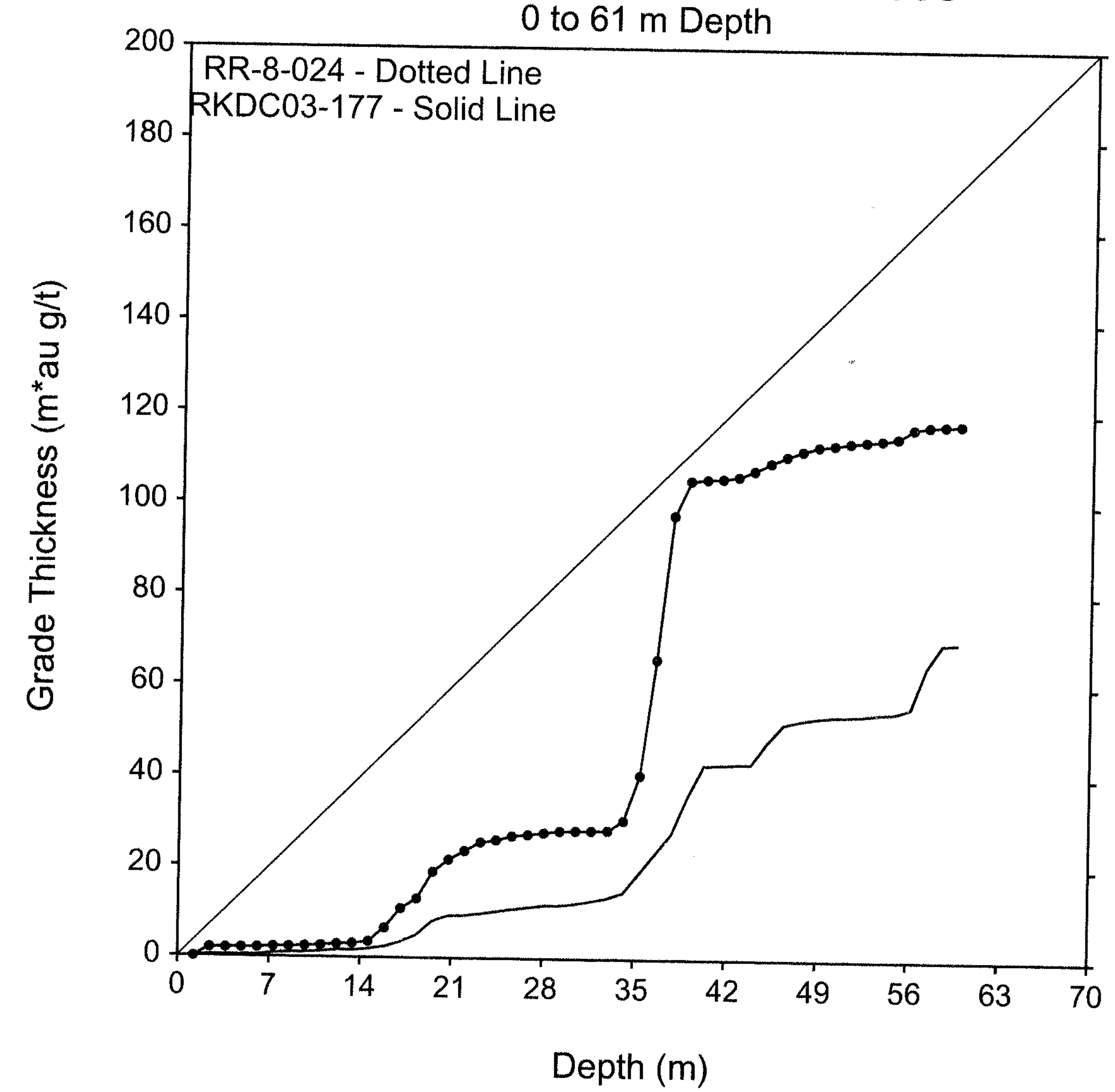


Horiz. Separation



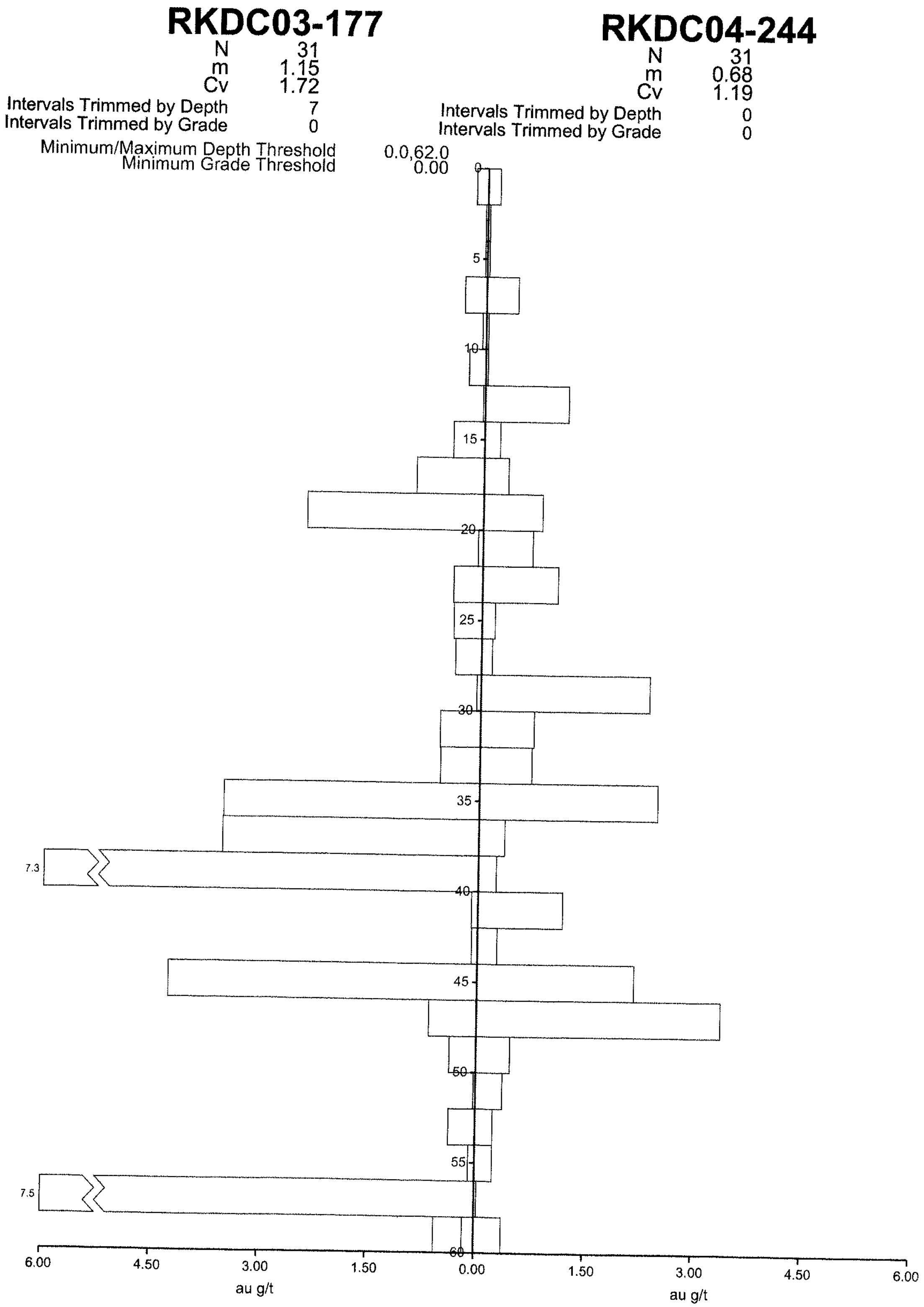
Cumulative Grade Thickness

0 to 61 m Depth

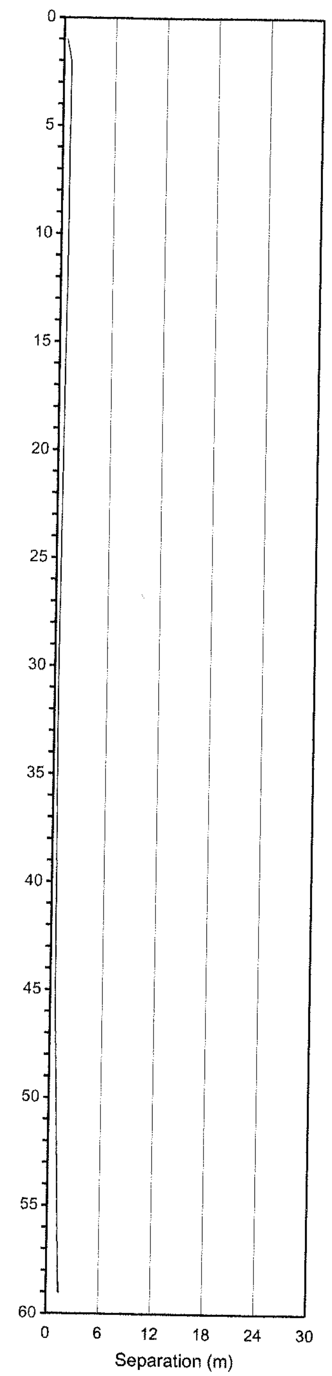


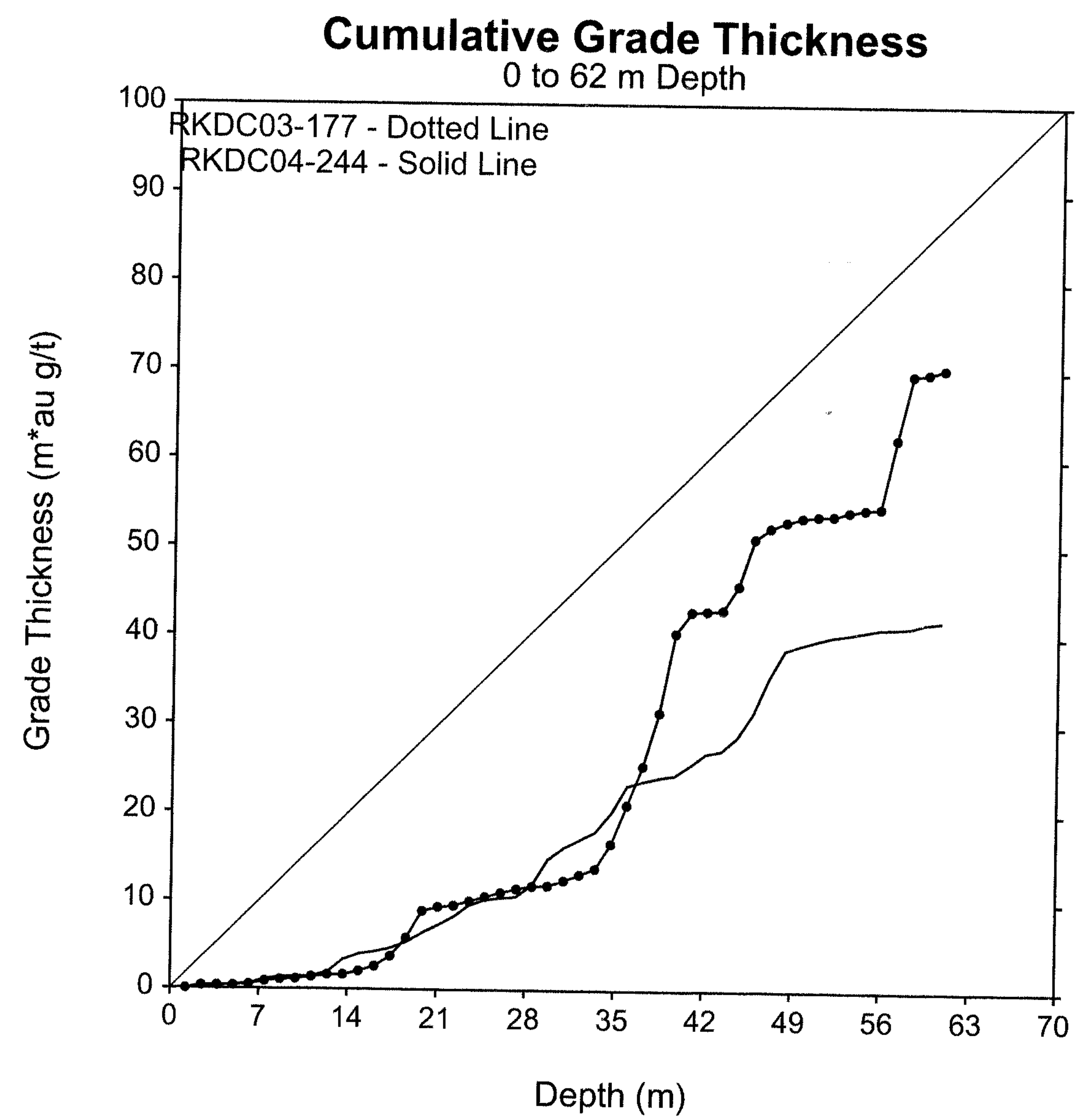
20B

A-



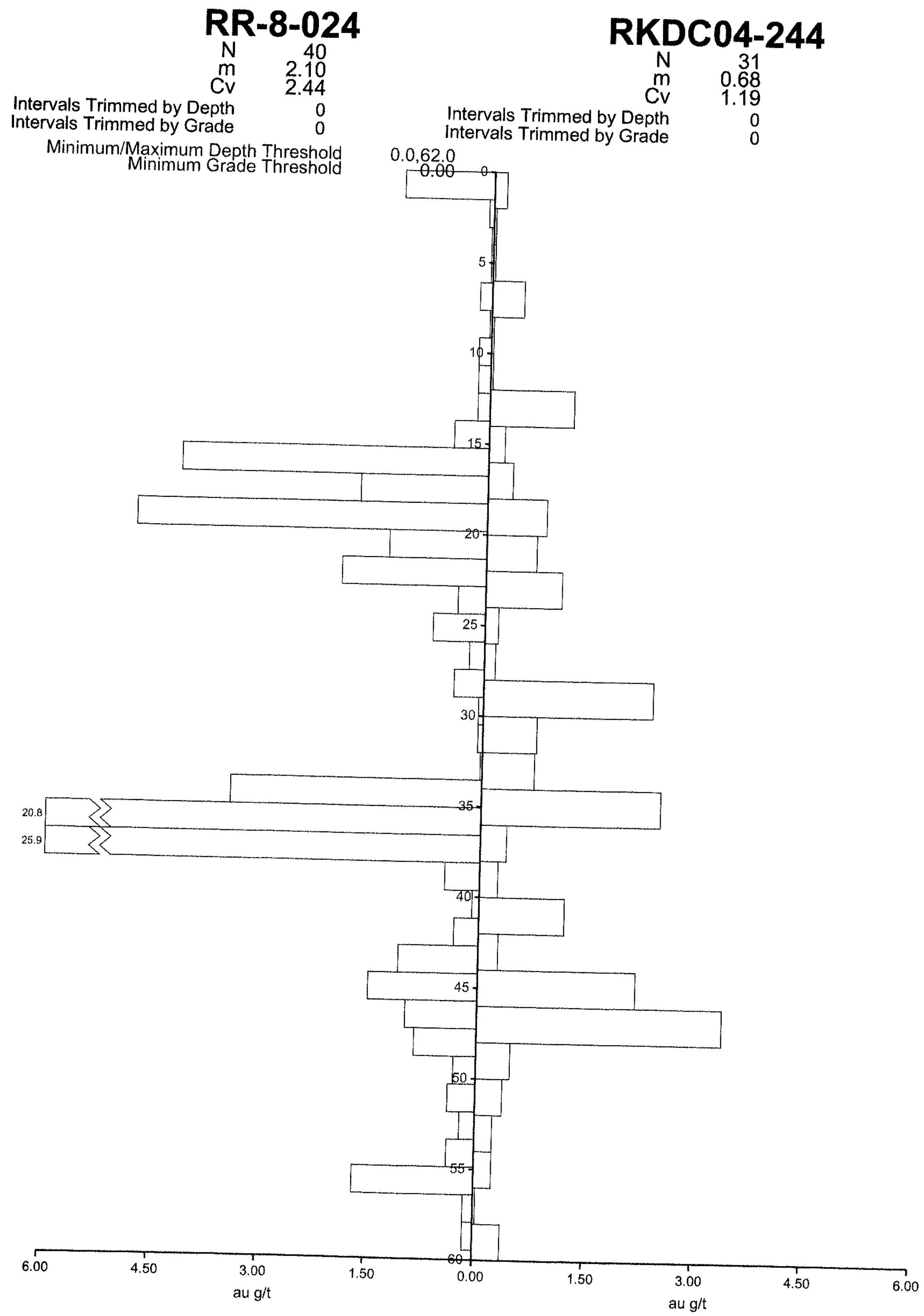
Horiz. Separation



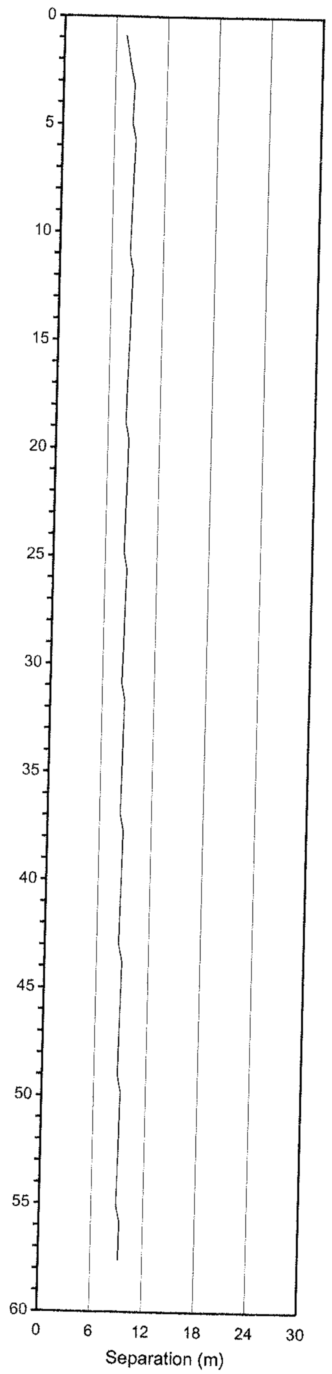


20C
A

RC CORE

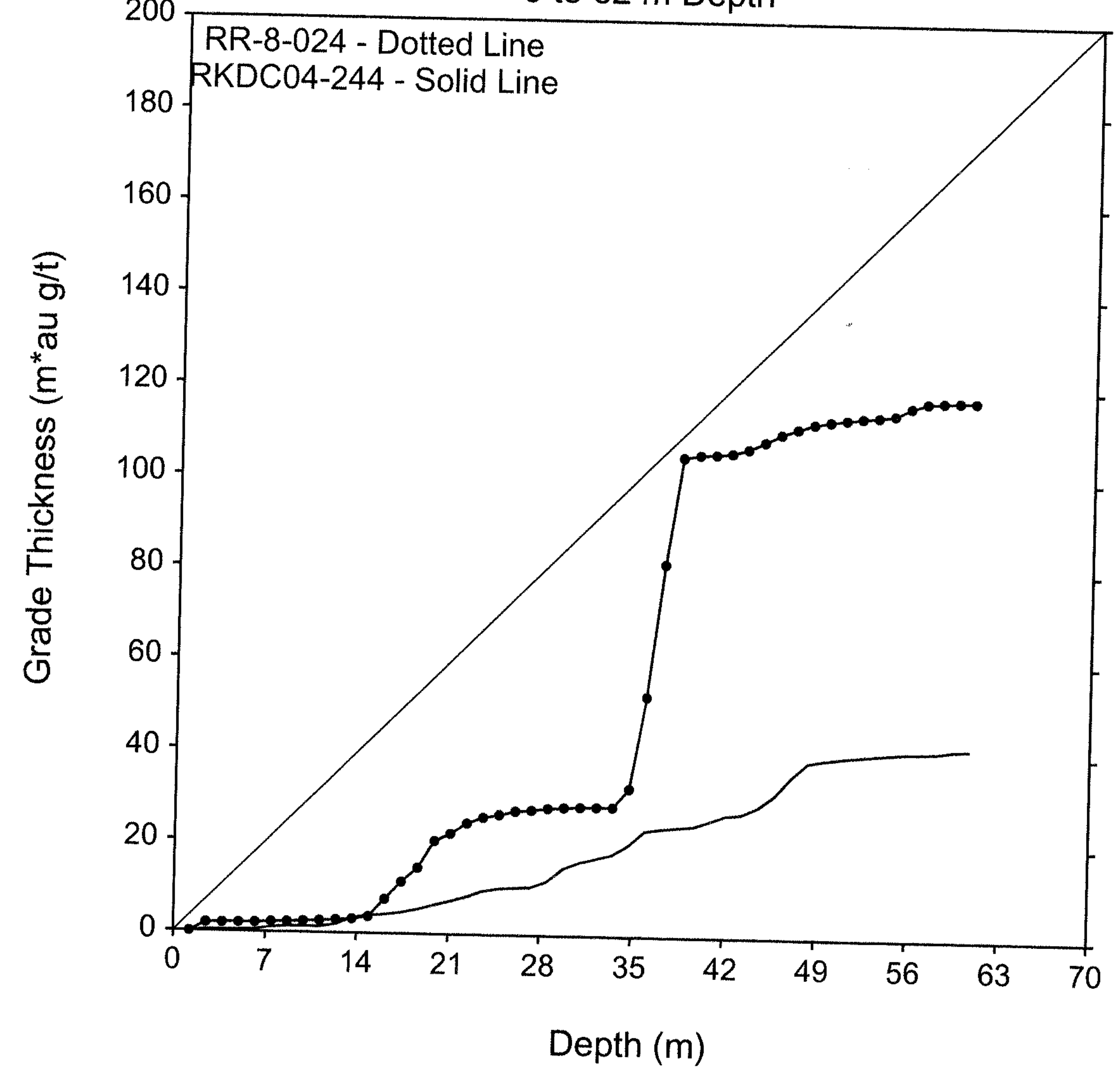


Horiz. Separation



Cumulative Grade Thickness

0 to 62 m Depth



20 D

A-

RC

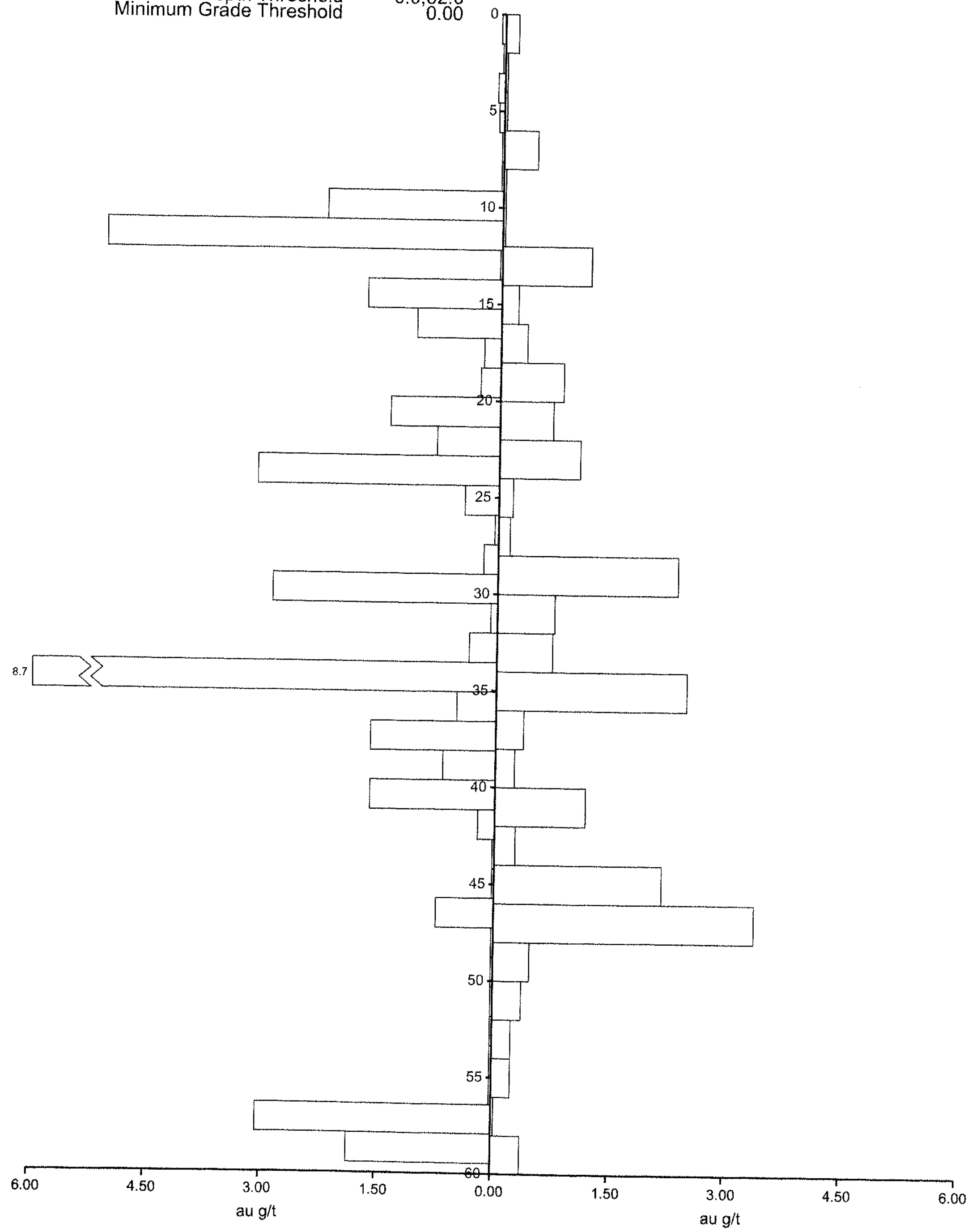
RKRC04-032

N 40
m 0.99
Cv 1.69
Intervals Trimmed by Depth 0
Intervals Trimmed by Grade 0
Minimum/Maximum Depth Threshold 0.0,62.0
Minimum Grade Threshold 0.00

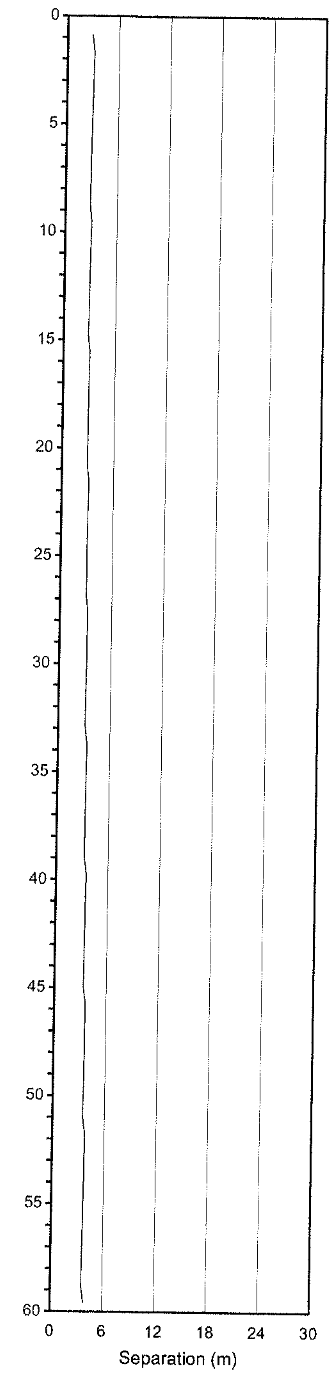
Core

RKDC04-244

N 31
m 0.68
Cv 1.19
Intervals Trimmed by Depth 0
Intervals Trimmed by Grade 0

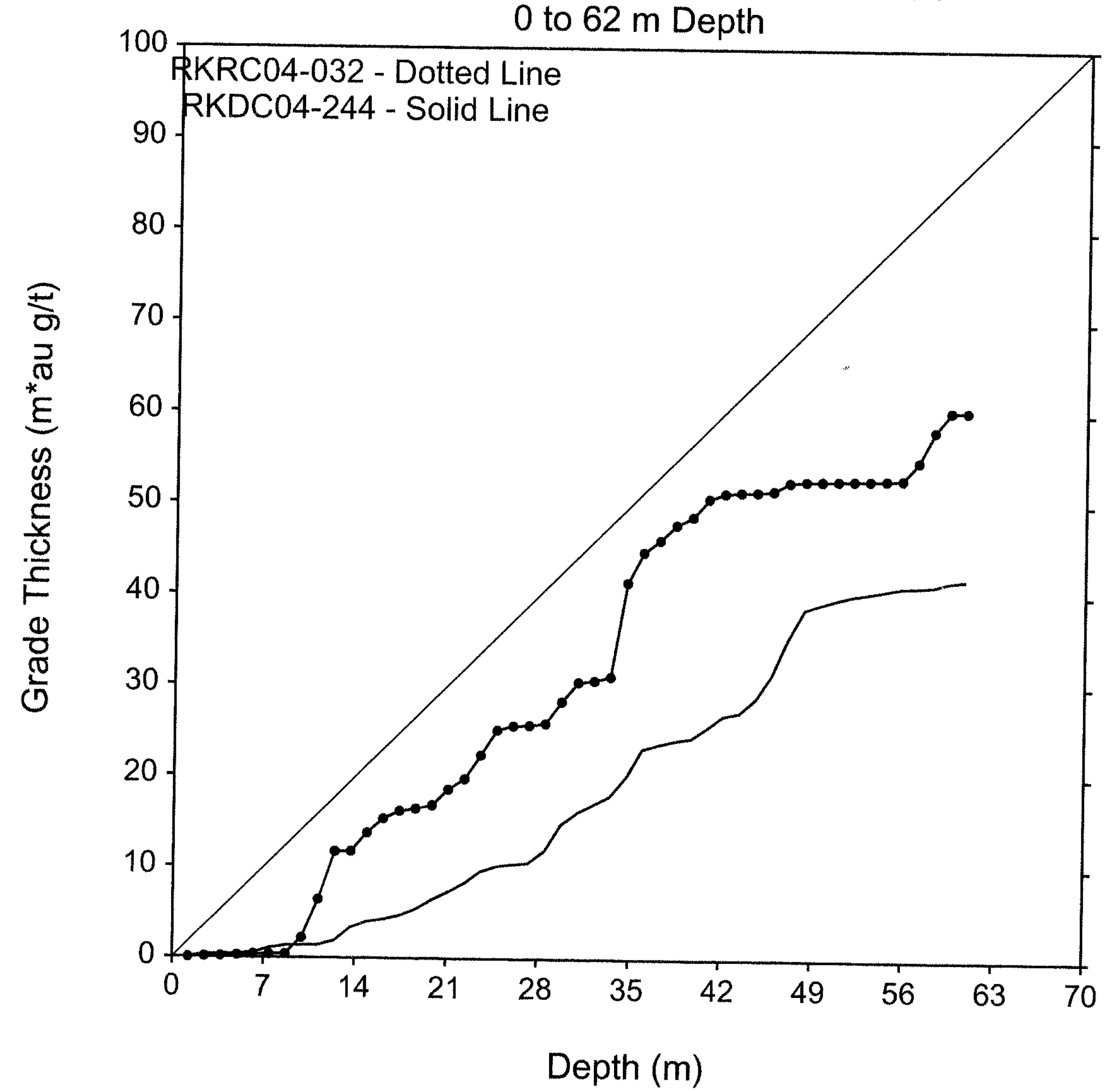


Horiz. Separation

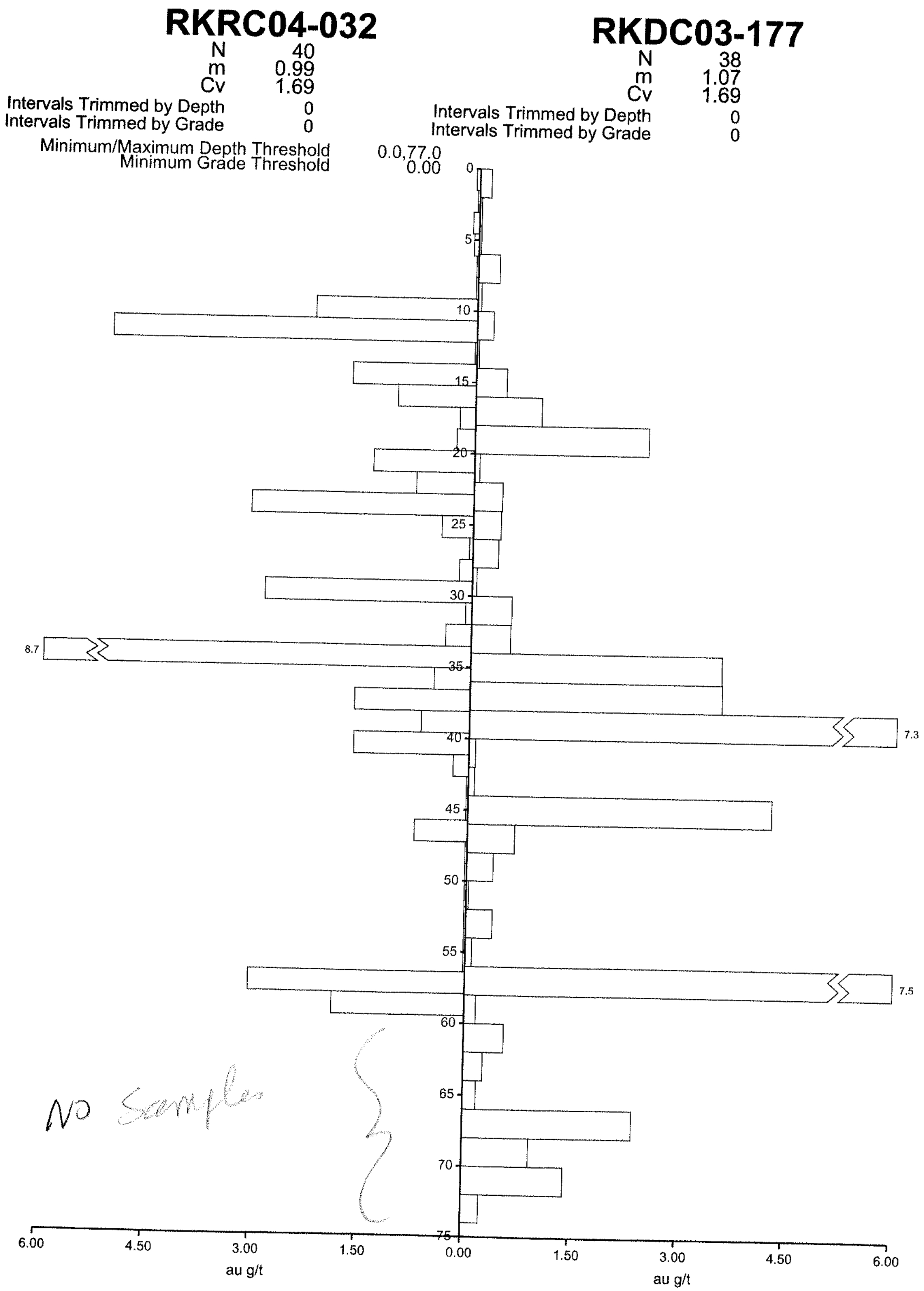


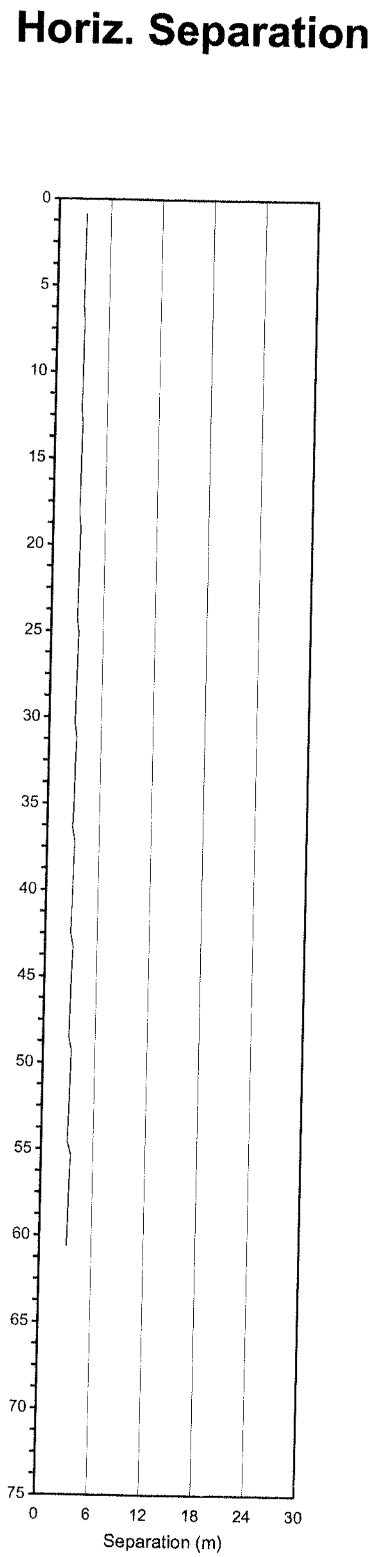
Cumulative Grade Thickness

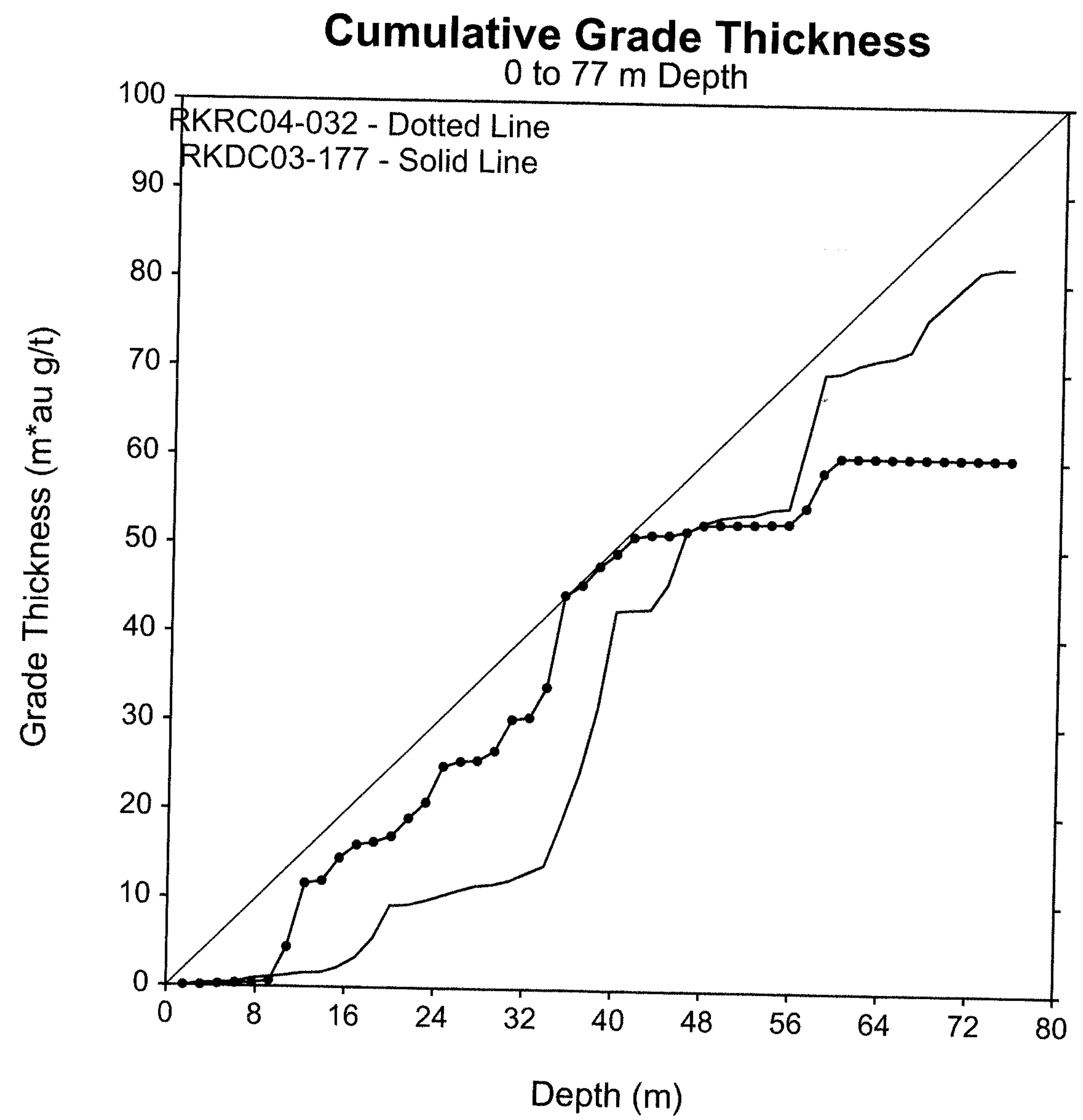
0 to 62 m Depth



20E
A


RKRC04-032
N 40
m 0.99
Cv 1.69
Intervals Trimmed by Depth 0
Intervals Trimmed by Grade 0
Minimum/Maximum Depth Threshold 0.0,77.0
Minimum Grade Threshold 0.00
RKDC03-177
N 38
m 1.07
Cv 1.69
Intervals Trimmed by Depth 0
Intervals Trimmed by Grade 0
8.7
7.3
7.5
No Samples
6.00 4.50 3.00 1.50 0.00 1.50 3.00 4.50 6.00
au g/t
au g/t


Horiz. Separation
0 6 12 18 24 30
Separation (m)


Cumulative Grade Thickness
0 to 77 m Depth
RKRC04-032 - Dotted Line
RKDC03-177 - Solid Line
Grade Thickness (m*au g/t)
Depth (m)

20 F

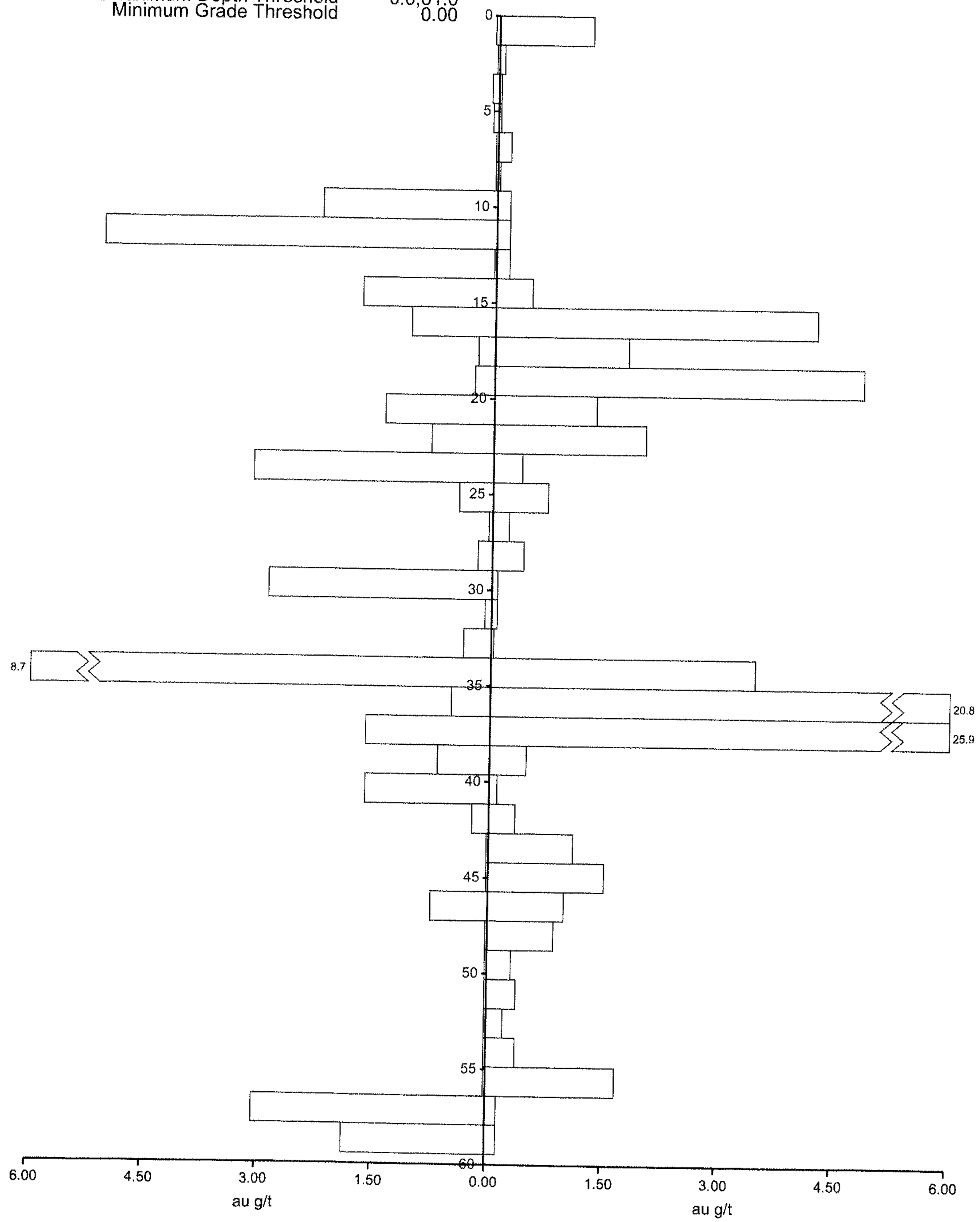
A

RKRC04-032

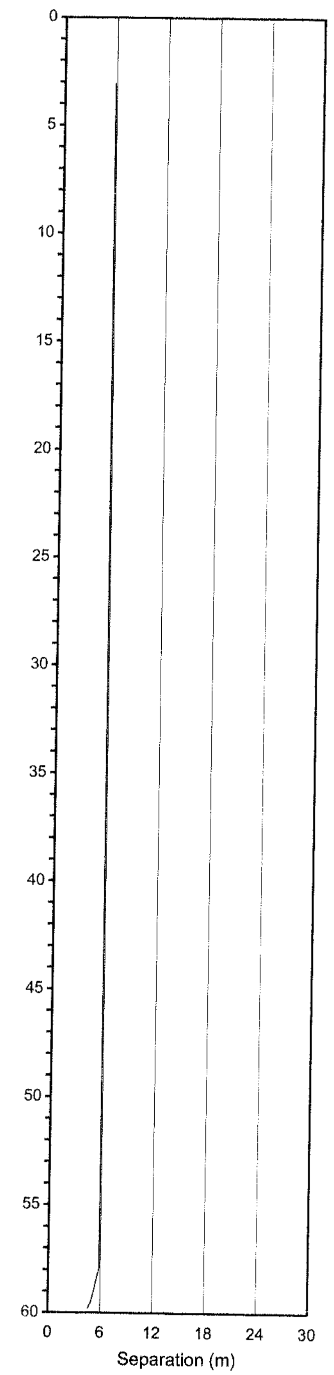
N	40
m	0.99
Cv	1.69
Intervals Trimmed by Depth	0
Intervals Trimmed by Grade	0
Minimum/Maximum Depth Threshold	0.0,61.0
Minimum Grade Threshold	0.00

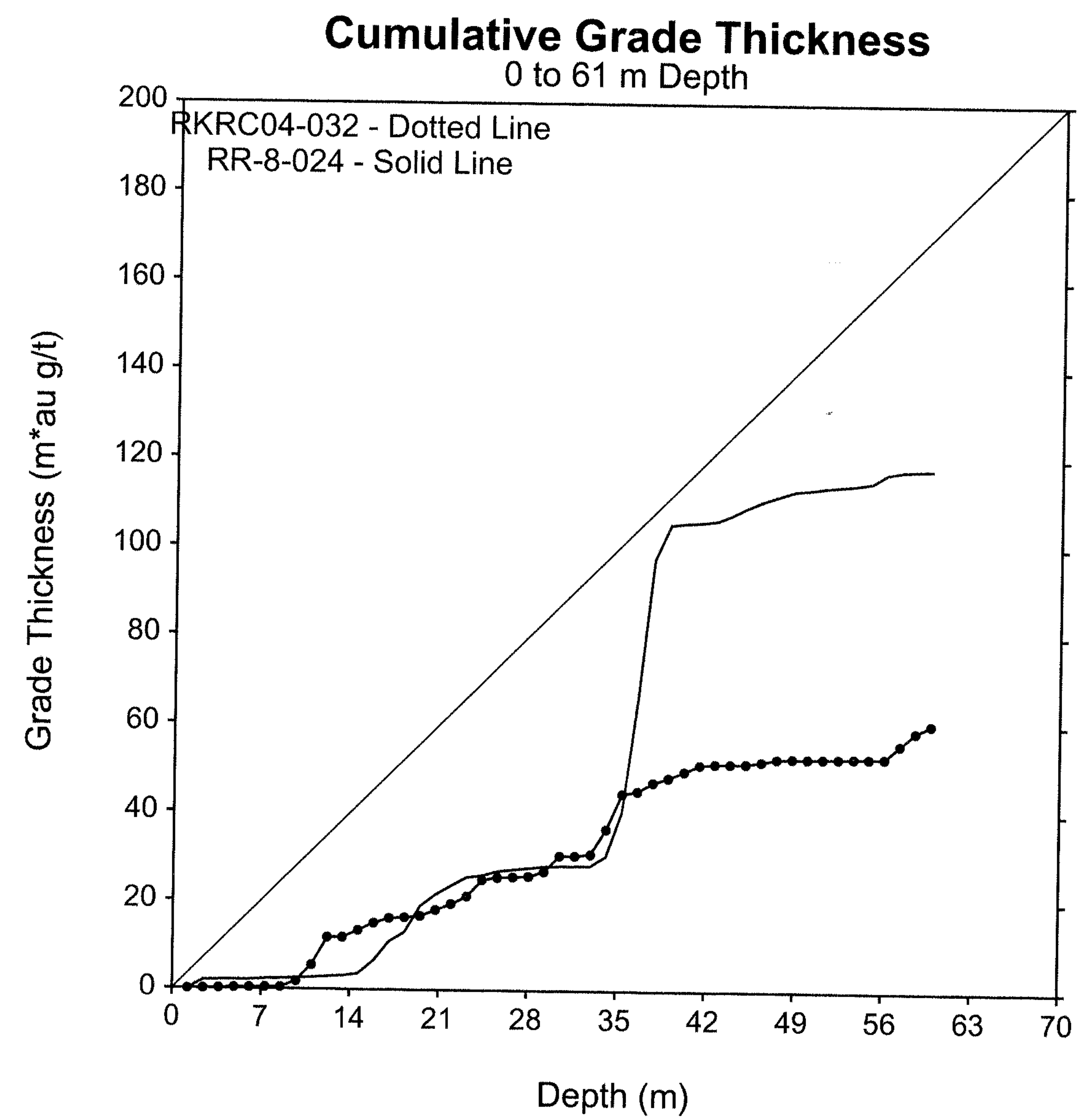
RR-8-024

N	40
m	2.10
Cv	2.44
Intervals Trimmed by Depth	0
Intervals Trimmed by Grade	0



Horiz. Separation





21 A

B

RC

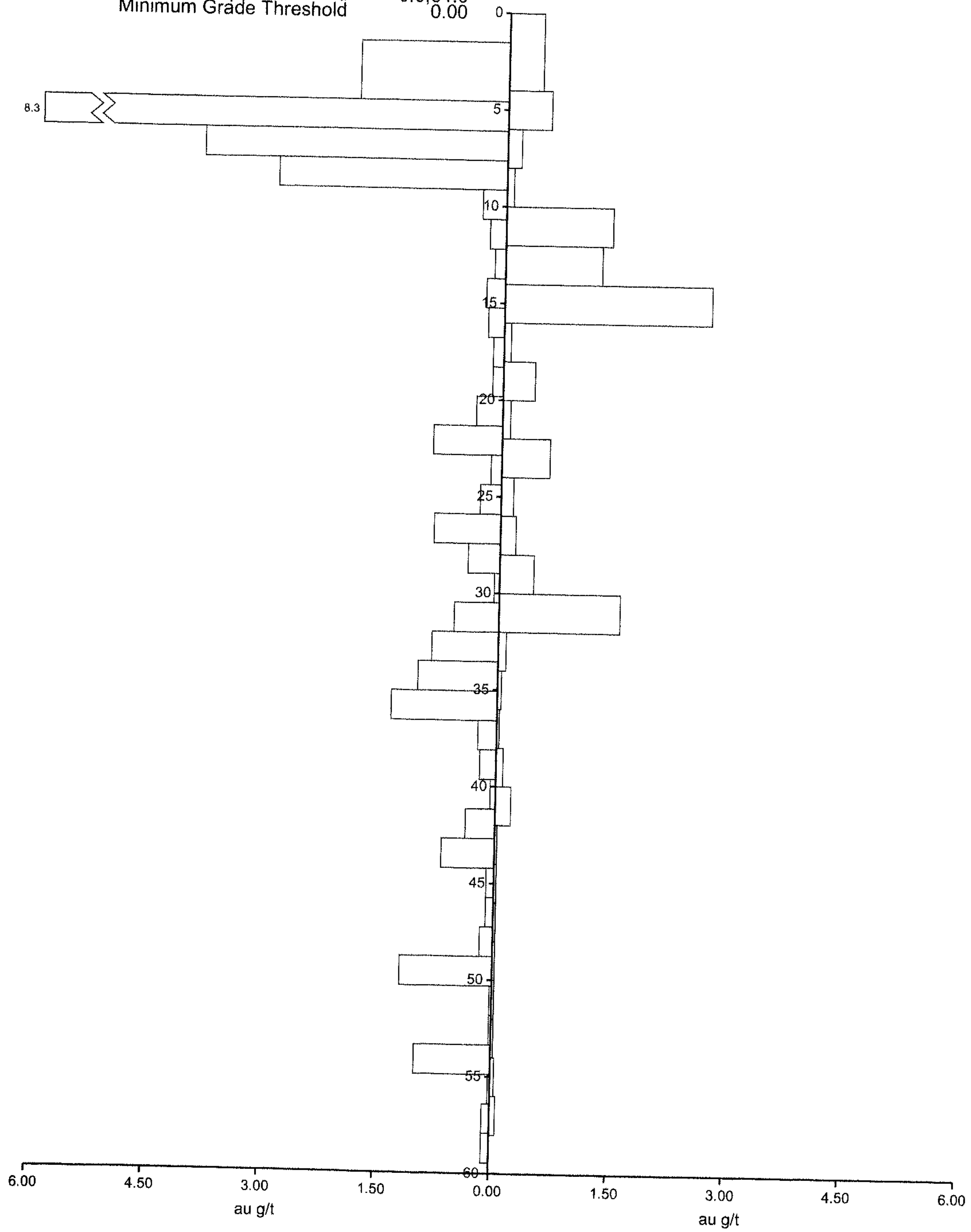
RR-8-027

N 38
m 0.82
Cv 1.80
Intervals Trimmed by Depth 0
Intervals Trimmed by Grade 0
Minimum/Maximum Depth Threshold 0.0,61.0
Minimum Grade Threshold 0.00

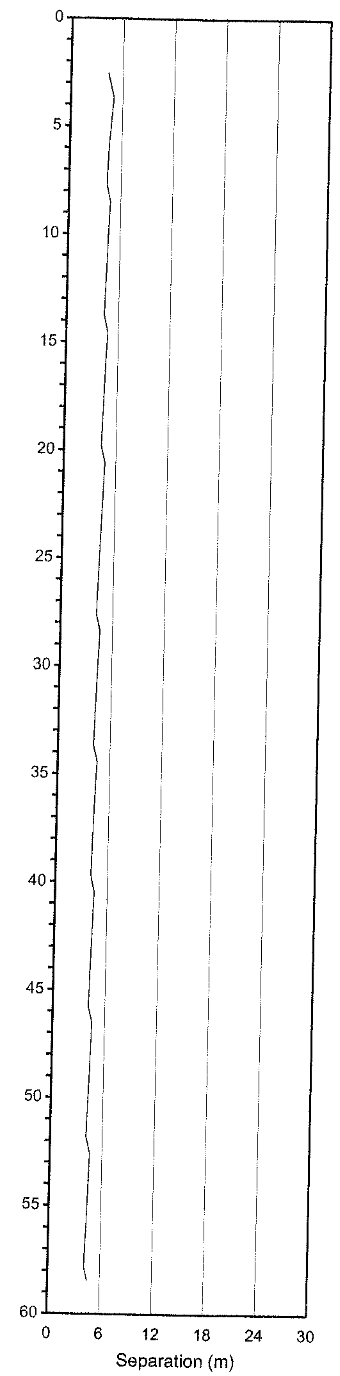
Core

RKDC03-178

N 29
m 0.37
Cv 1.56
Intervals Trimmed by Depth 0
Intervals Trimmed by Grade 0

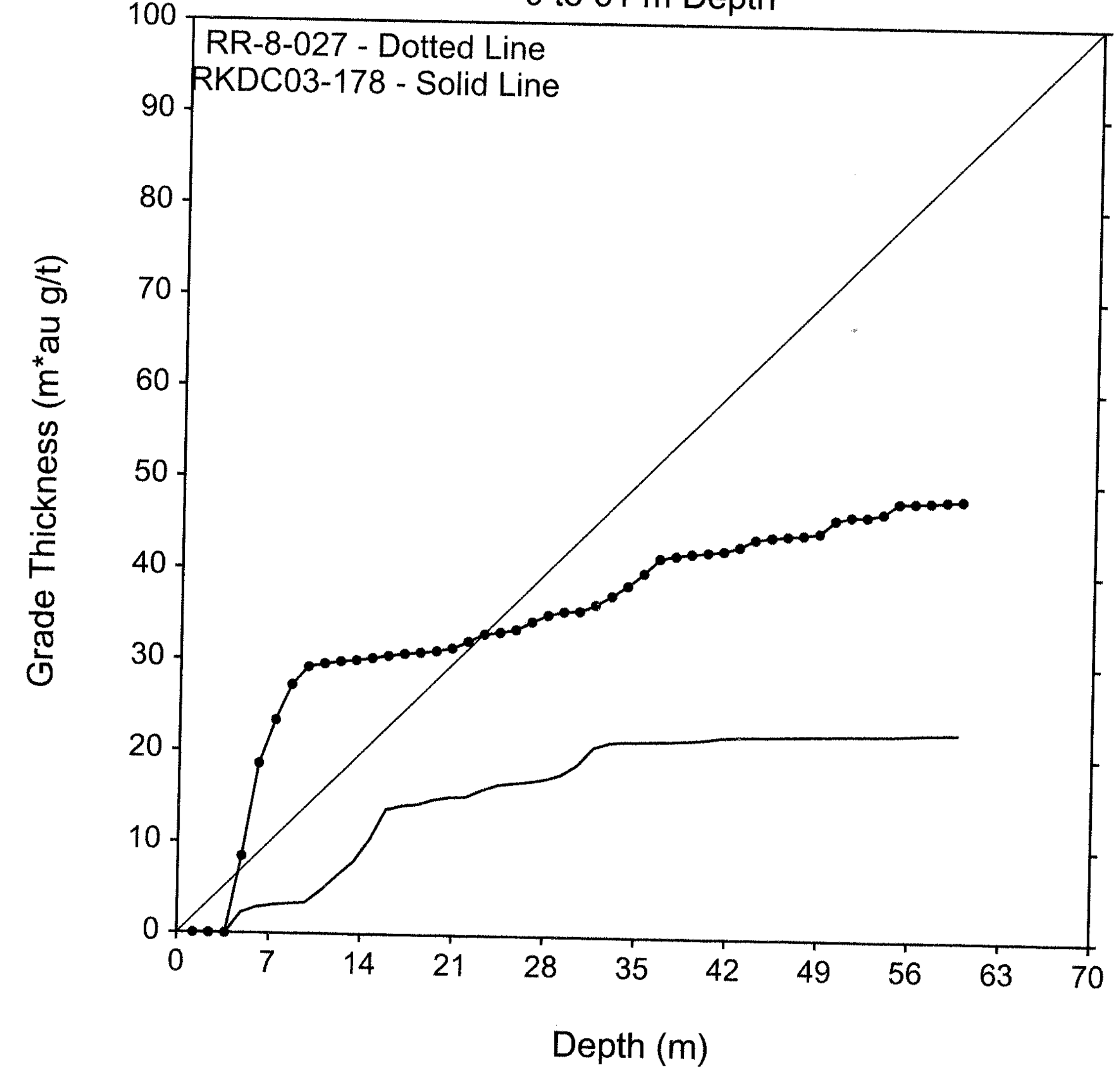


Horiz. Separation



Cumulative Grade Thickness

0 to 61 m Depth



21 B

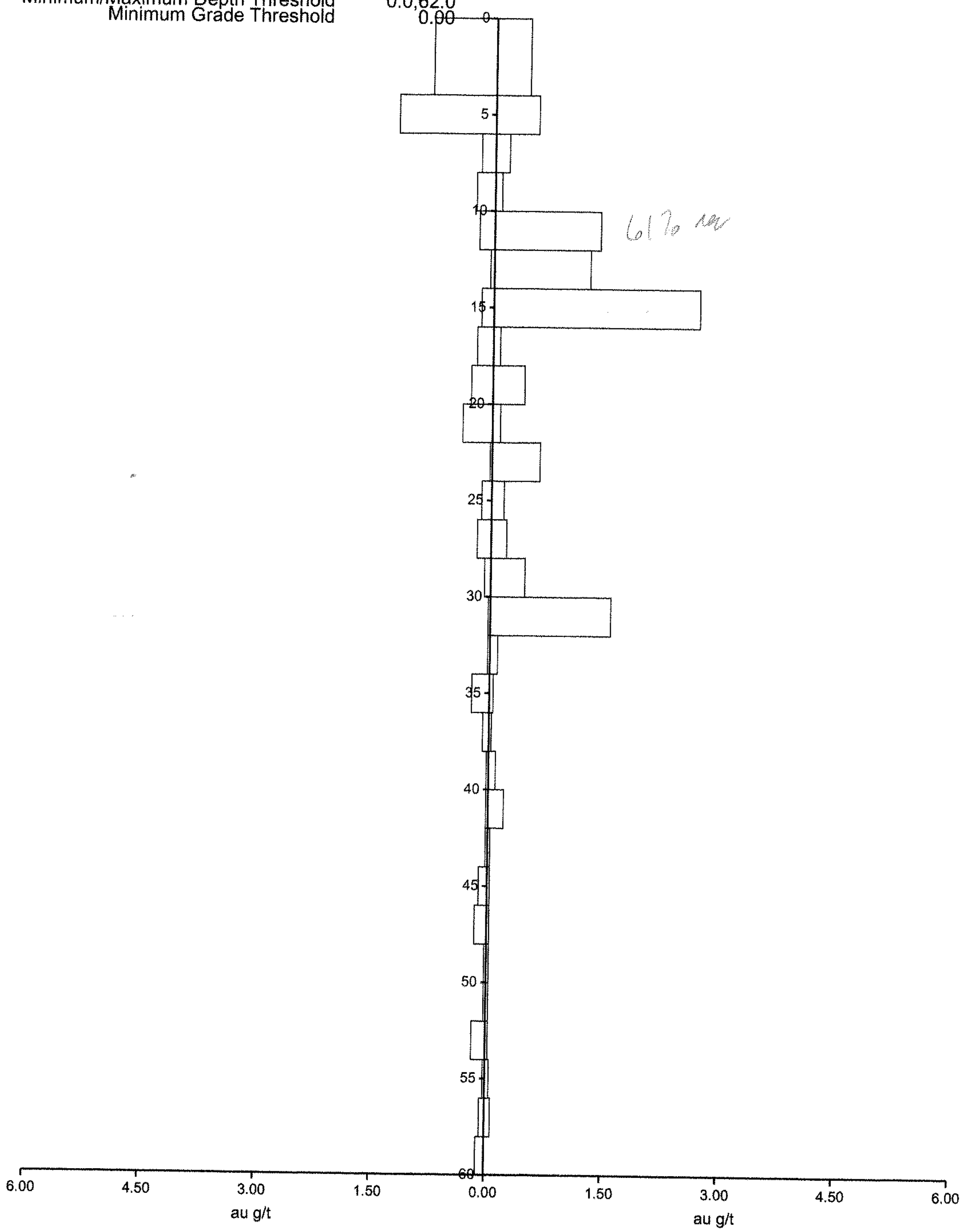
B–

RKDC04-248

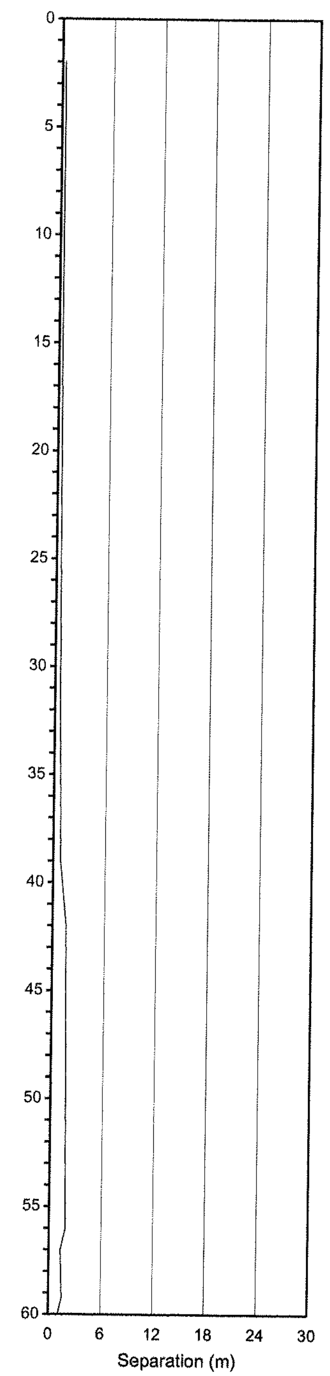
N	30
m	0.20
Cv	1.34
Intervals Trimmed by Depth	0
Intervals Trimmed by Grade	0
Minimum/Maximum Depth Threshold	0.0,62.0
Minimum Grade Threshold	0.00

RKDC03-178

N	29
m	0.37
Cv	1.56
Intervals Trimmed by Depth	0
Intervals Trimmed by Grade	0

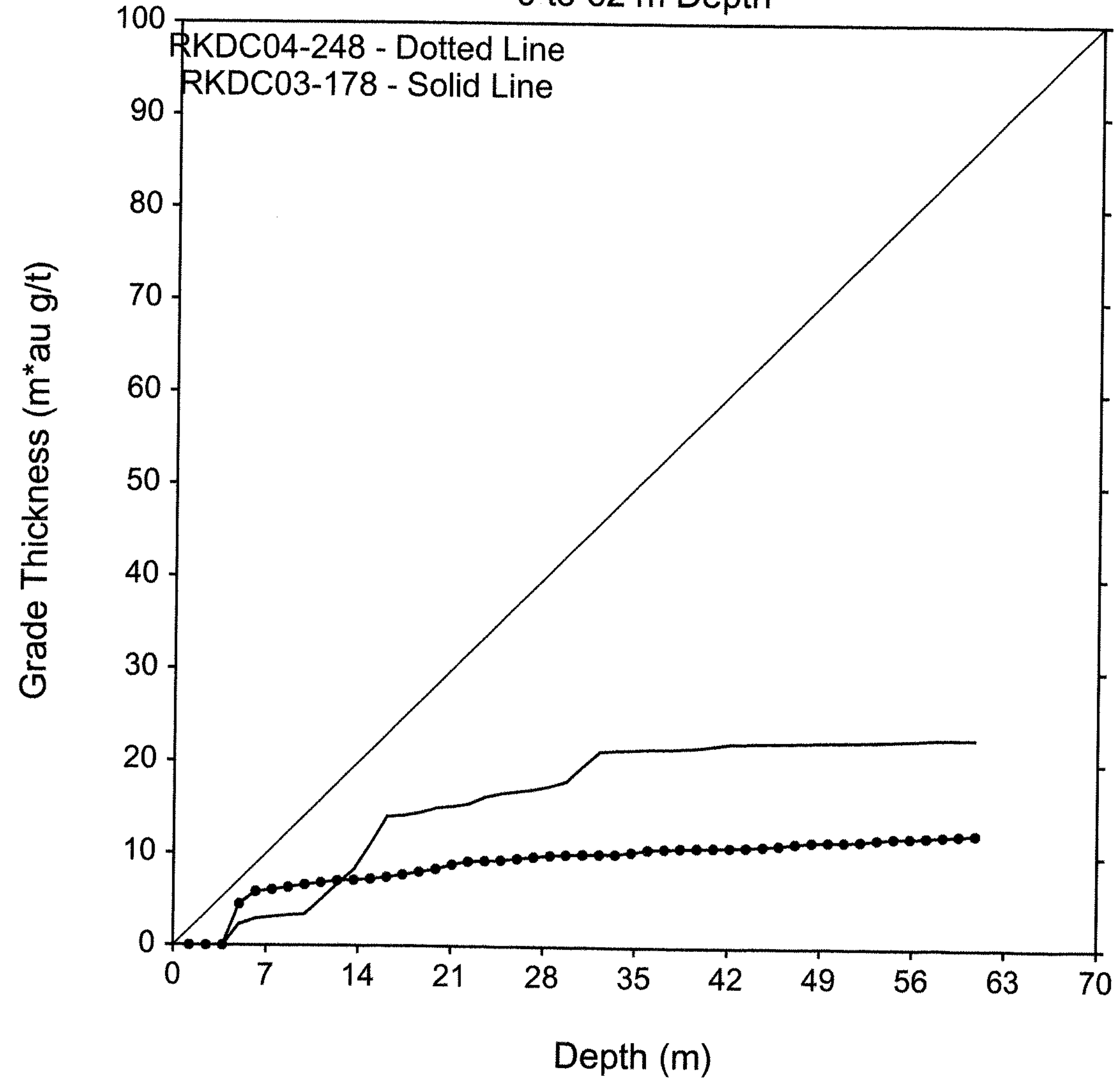


Horiz. Separation

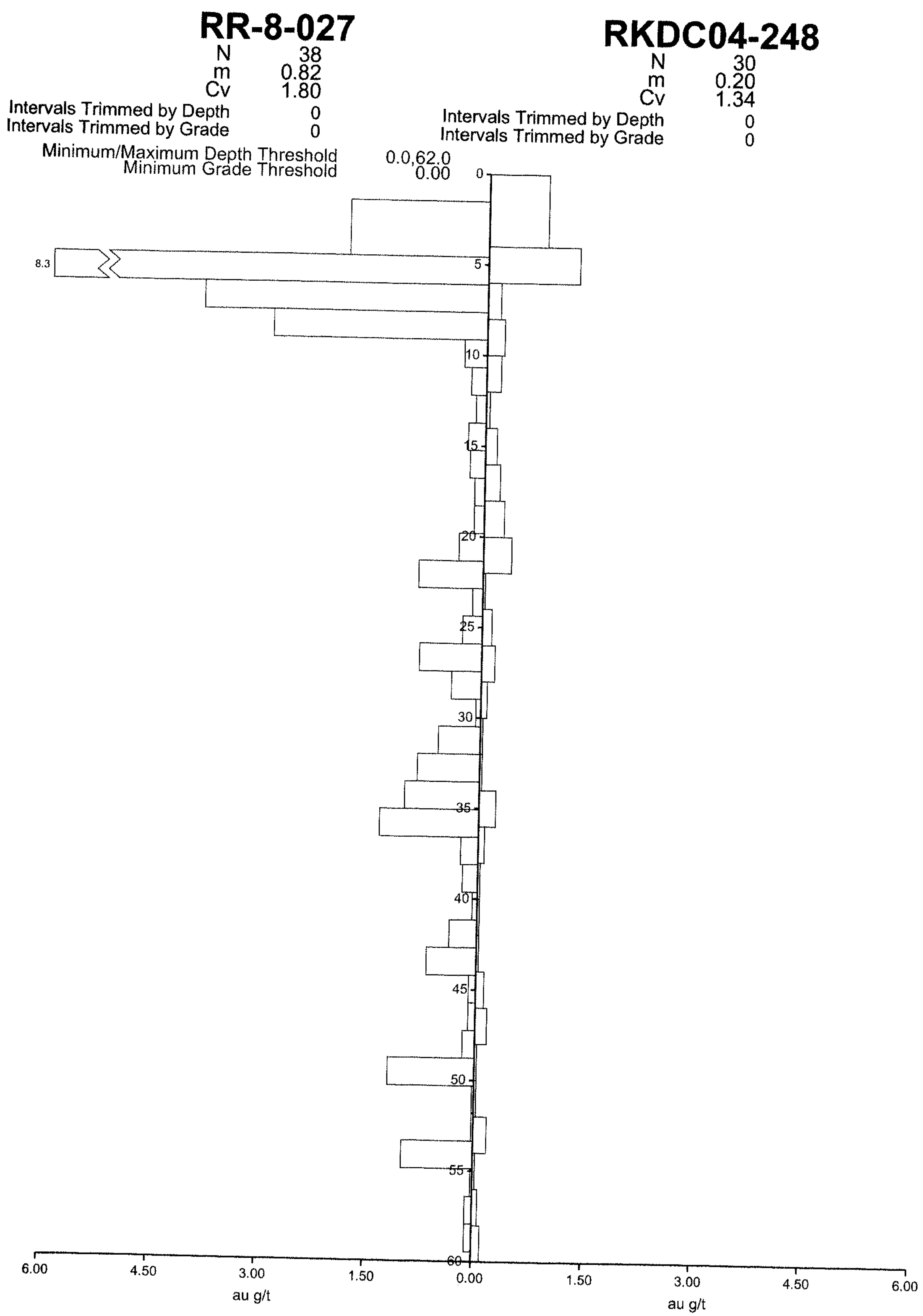


Cumulative Grade Thickness

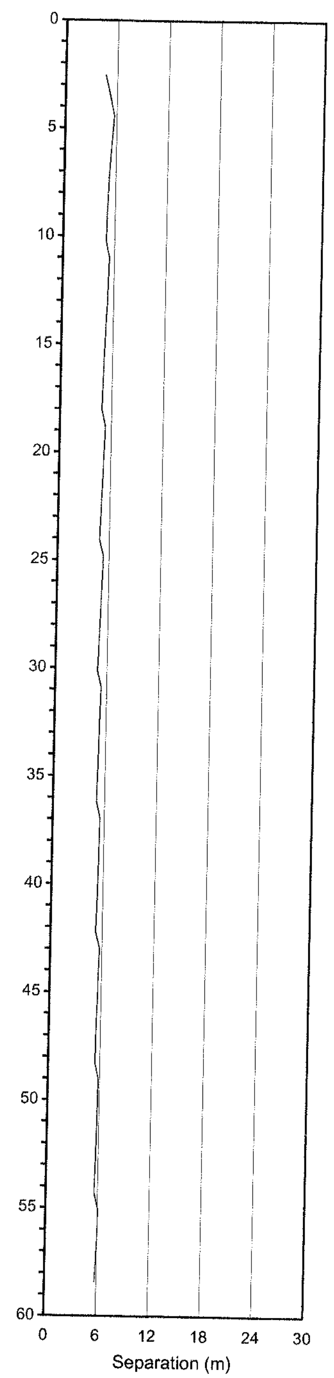
0 to 62 m Depth



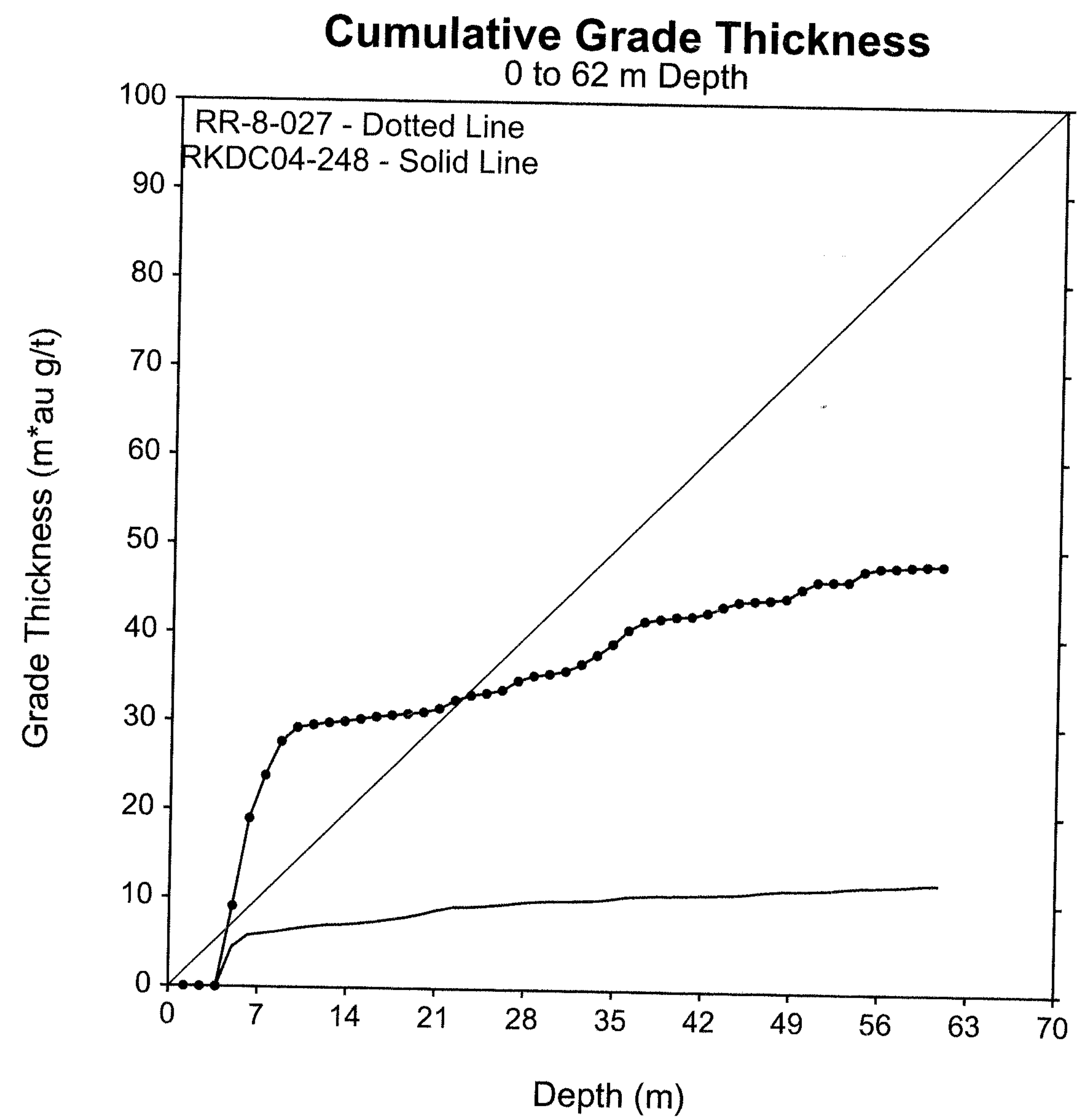
21C
C+



RR-8-027
N 38
m 0.82
Cv 1.80
Intervals Trimmed by Depth 0
Intervals Trimmed by Grade 0
Minimum/Maximum Depth Threshold 0.0,62.0
Minimum Grade Threshold 0.00
RKDC04-248
N 30
m 0.20
Cv 1.34
Intervals Trimmed by Depth 0
Intervals Trimmed by Grade 0
8.3
6.00 4.50 3.00 1.50 0.00 1.50 3.00 4.50 6.00
au g/t
au g/t



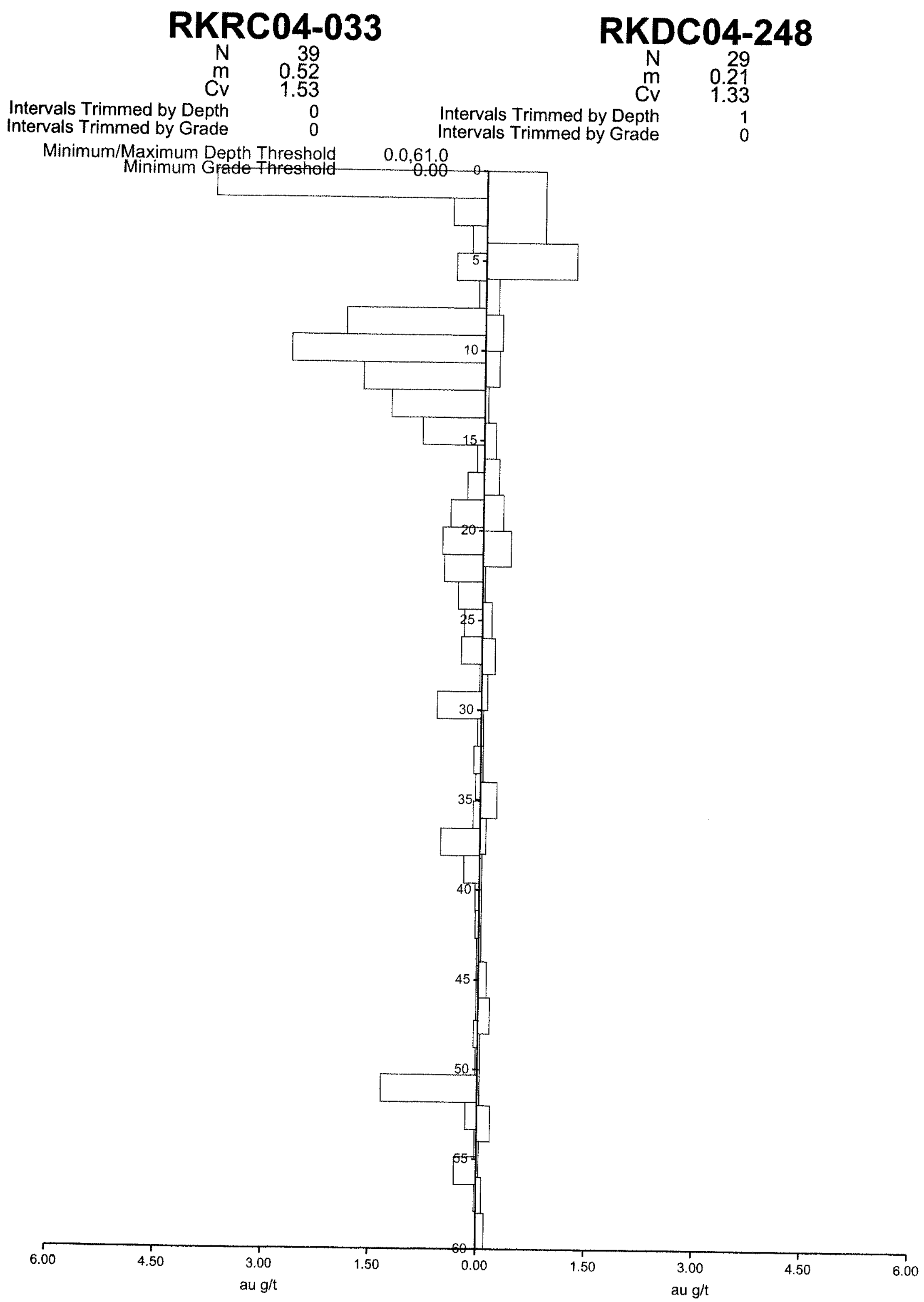
Horiz. Separation
0 6 12 18 24 30
Separation (m)



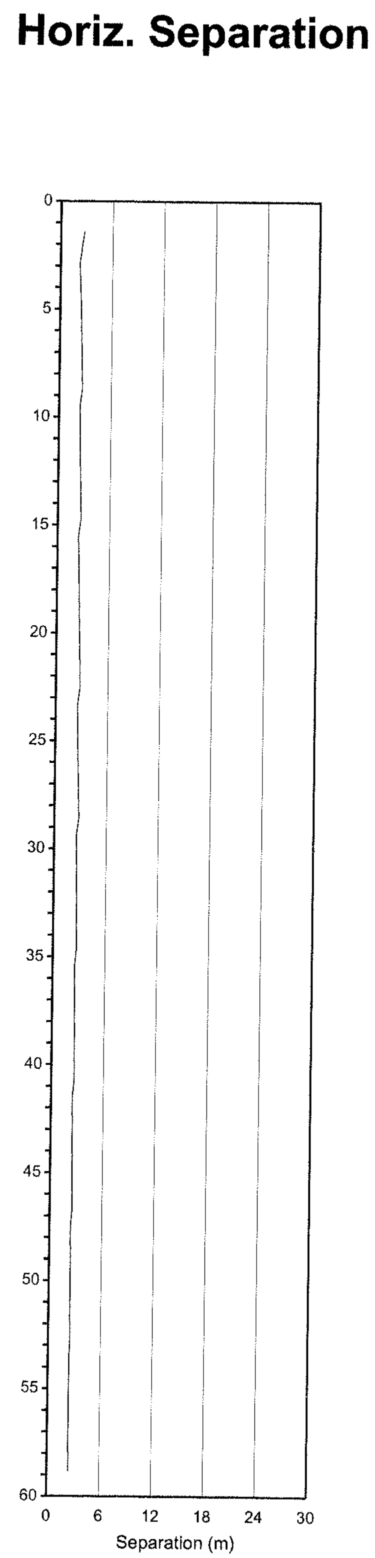
Cumulative Grade Thickness
0 to 62 m Depth
RR-8-027 - Dotted Line
RKDC04-248 - Solid Line
Grade Thickness (m*au g/t)
Depth (m)

21D

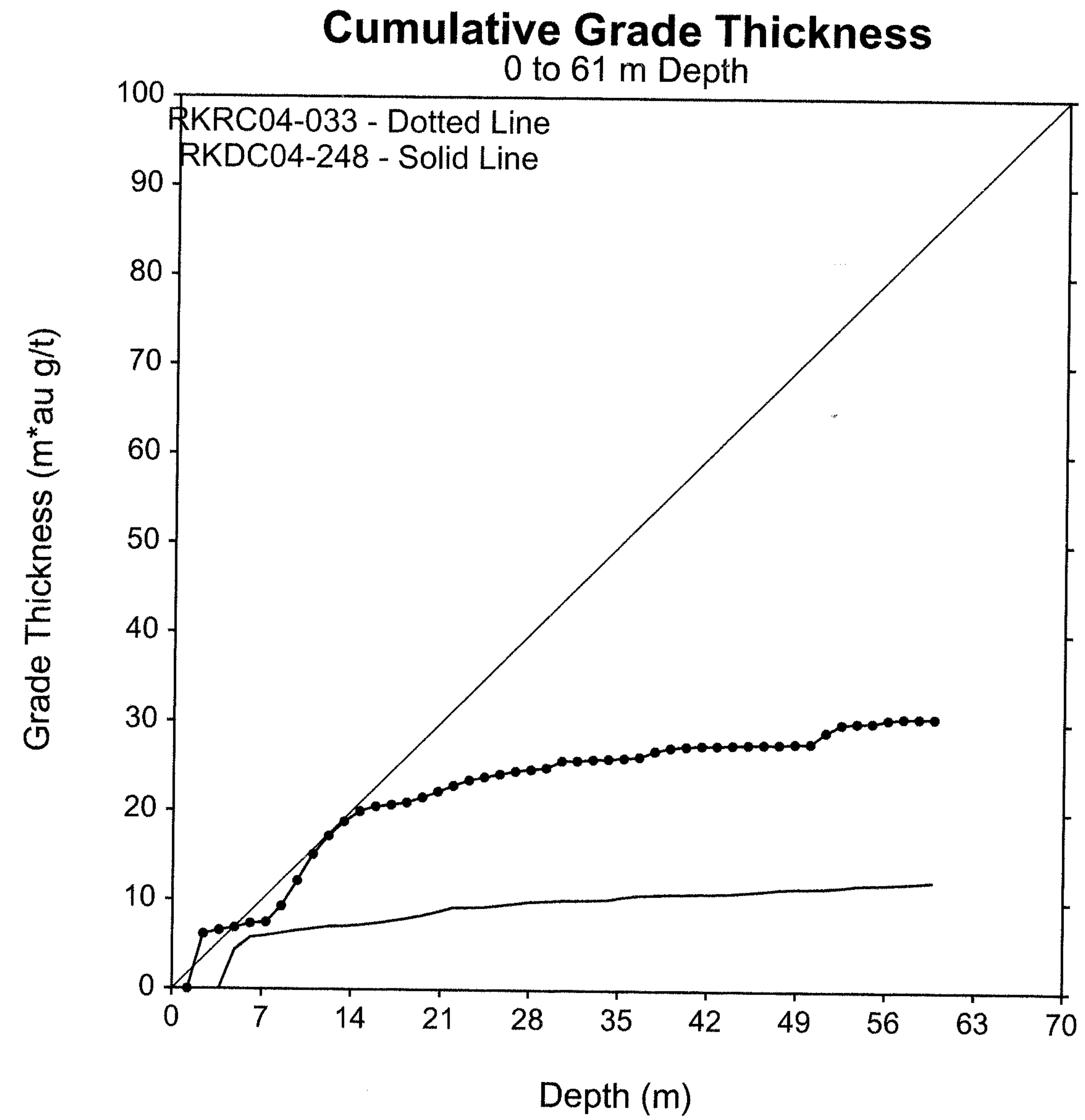
B



RKRC04-033
N 39
m 0.52
Cv 1.53
Intervals Trimmed by Depth 0
Intervals Trimmed by Grade 0
Minimum/Maximum Depth Threshold 0.0,61.0
Minimum Grade Threshold 0.00
RKDC04-248
N 29
m 0.21
Cv 1.33
Intervals Trimmed by Depth 1
Intervals Trimmed by Grade 0
6.00
4.50
3.00
1.50
0.00
1.50
3.00
4.50
6.00
au g/t
au g/t



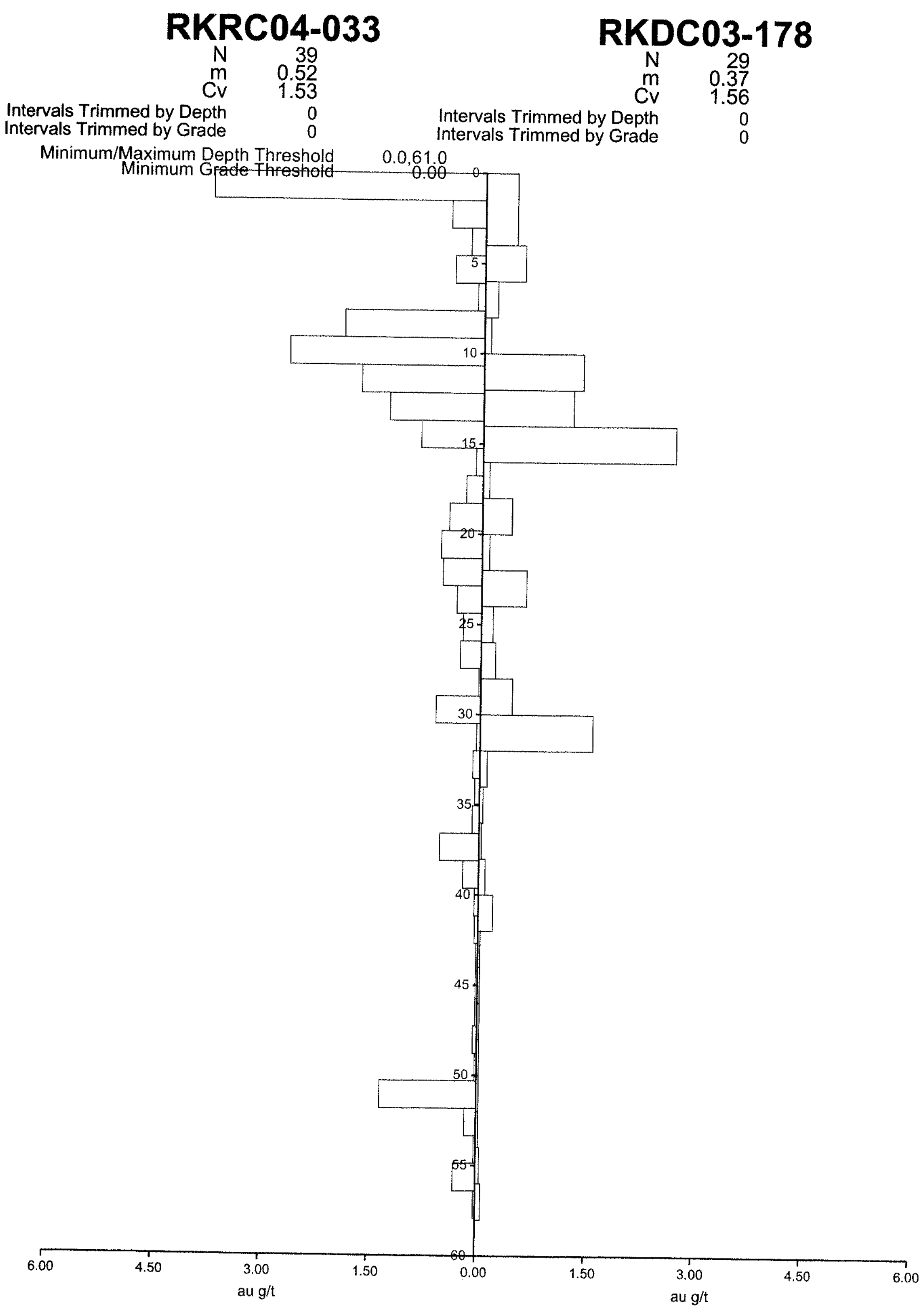
Horiz. Separation
Separation (m)



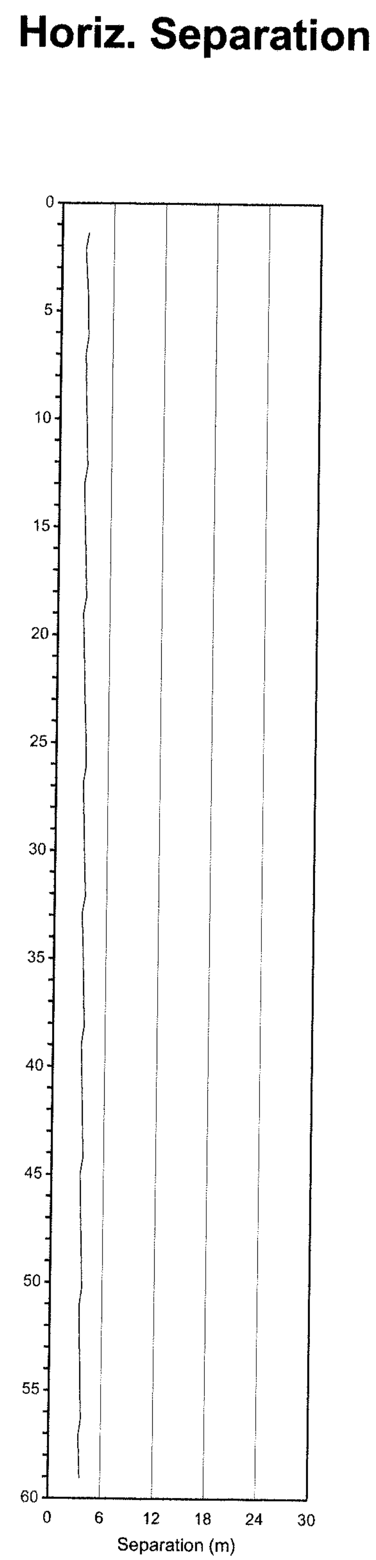
Cumulative Grade Thickness
0 to 61 m Depth
RKRC04-033 - Dotted Line
RKDC04-248 - Solid Line
Grade Thickness (m*au g/t)
Depth (m)

21 E

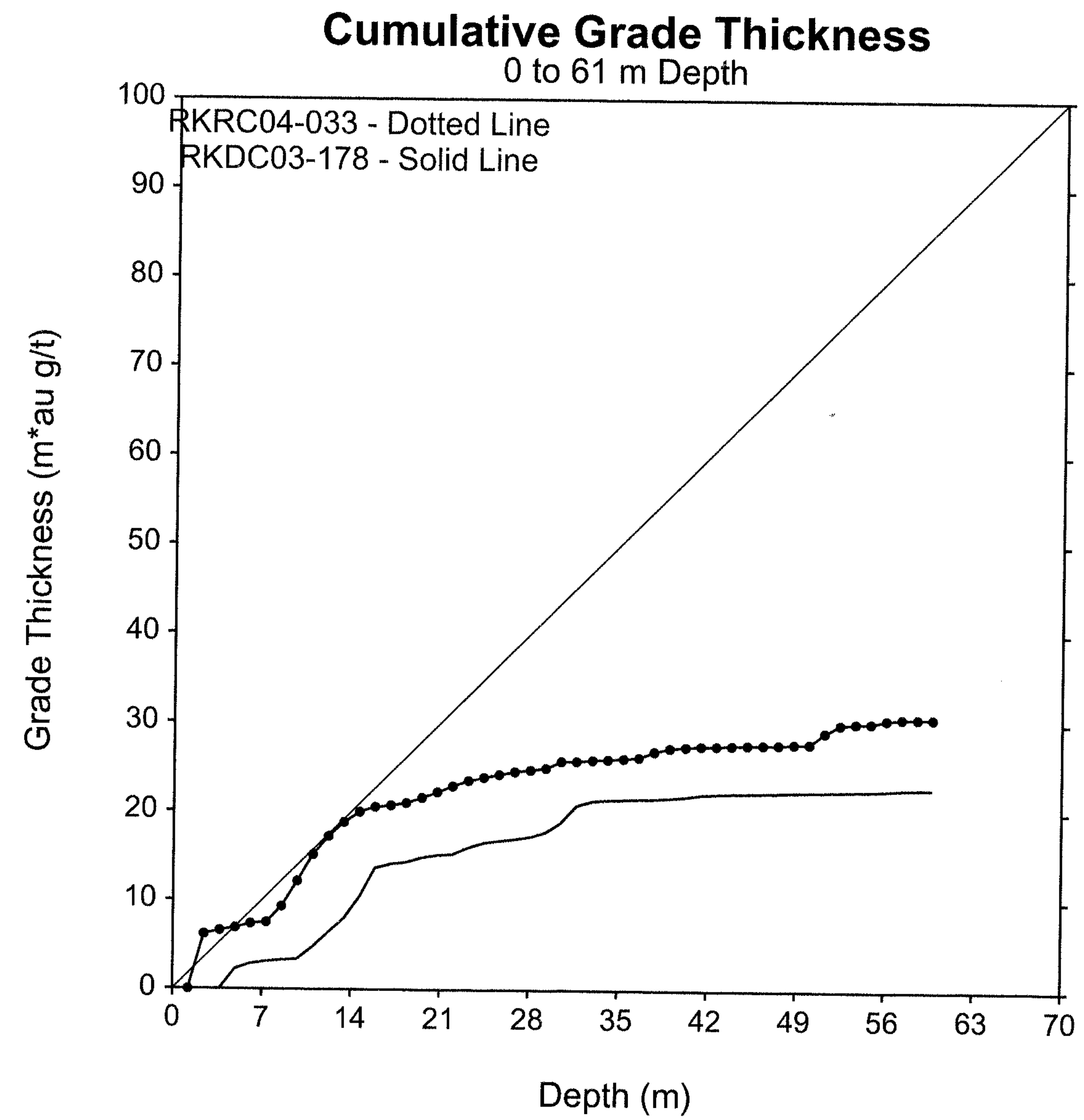
A



RKRC04-033
N 39
m 0.52
Cv 1.53
Intervals Trimmed by Depth 0
Intervals Trimmed by Grade 0
Minimum/Maximum Depth Threshold 0.0,61.0
Minimum Grade Threshold 0.00
RKDC03-178
N 29
m 0.37
Cv 1.56
Intervals Trimmed by Depth 0
Intervals Trimmed by Grade 0
6.00 4.50 3.00 1.50 0.00 1.50 3.00 4.50 6.00
au g/t
au g/t



Horiz. Separation
0 6 12 18 24 30
Separation (m)



Cumulative Grade Thickness
0 to 61 m Depth
RKRC04-033 - Dotted Line
RKDC03-178 - Solid Line
Grade Thickness (m*au g/t)
Depth (m)

21F

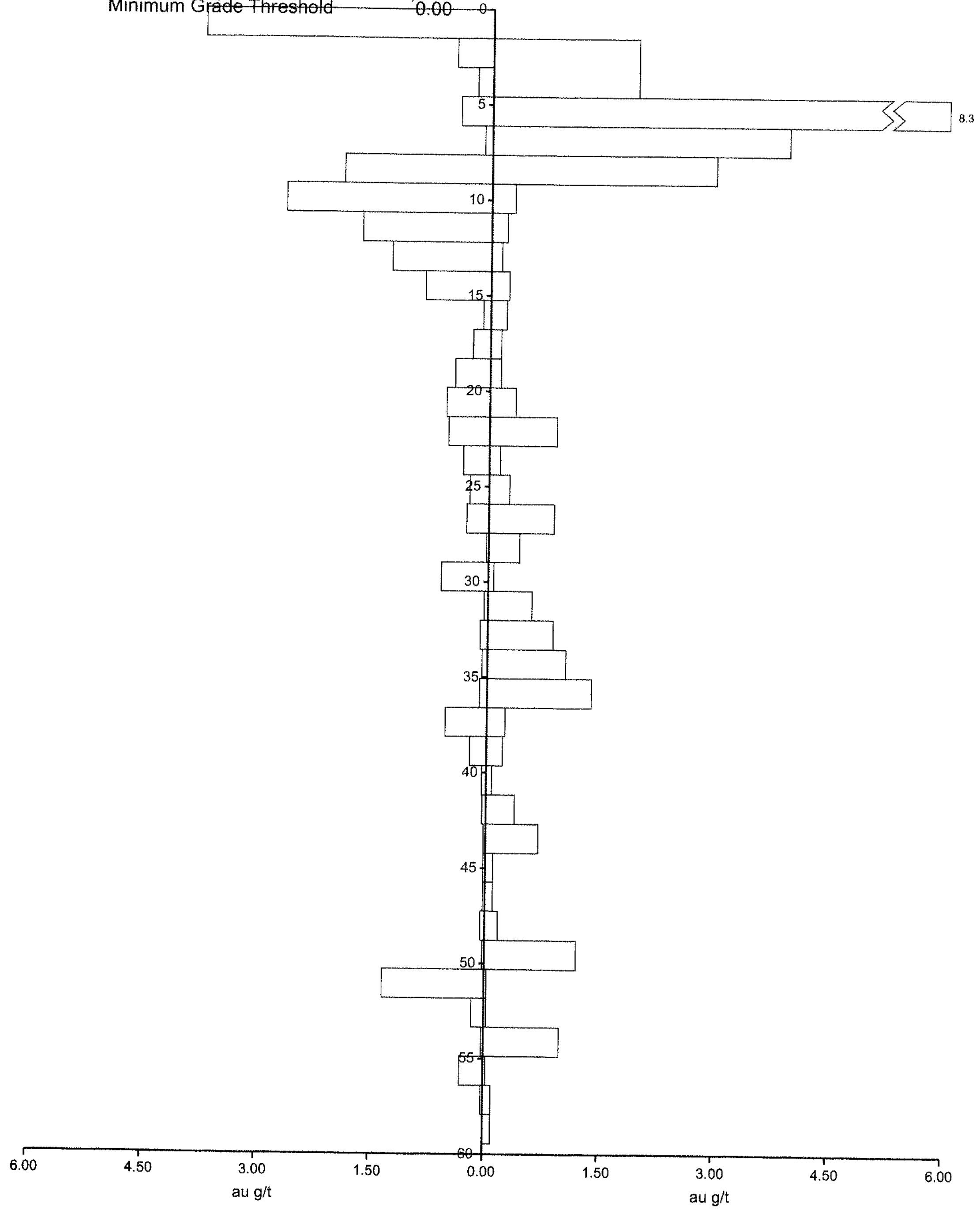
A-

RKRC04-033

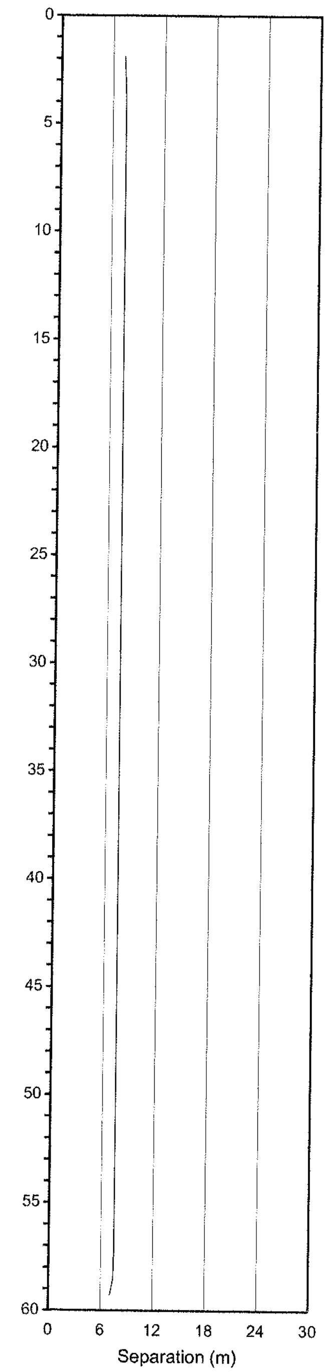
N	39
m	0.52
Cv	1.53
Intervals Trimmed by Depth	0
Intervals Trimmed by Grade	0
Minimum/Maximum Depth Threshold	0.0,60.0
Minimum Grade Threshold	0.00

RR-8-027

N	37
m	0.83
Cv	1.78
Intervals Trimmed by Depth	1
Intervals Trimmed by Grade	0

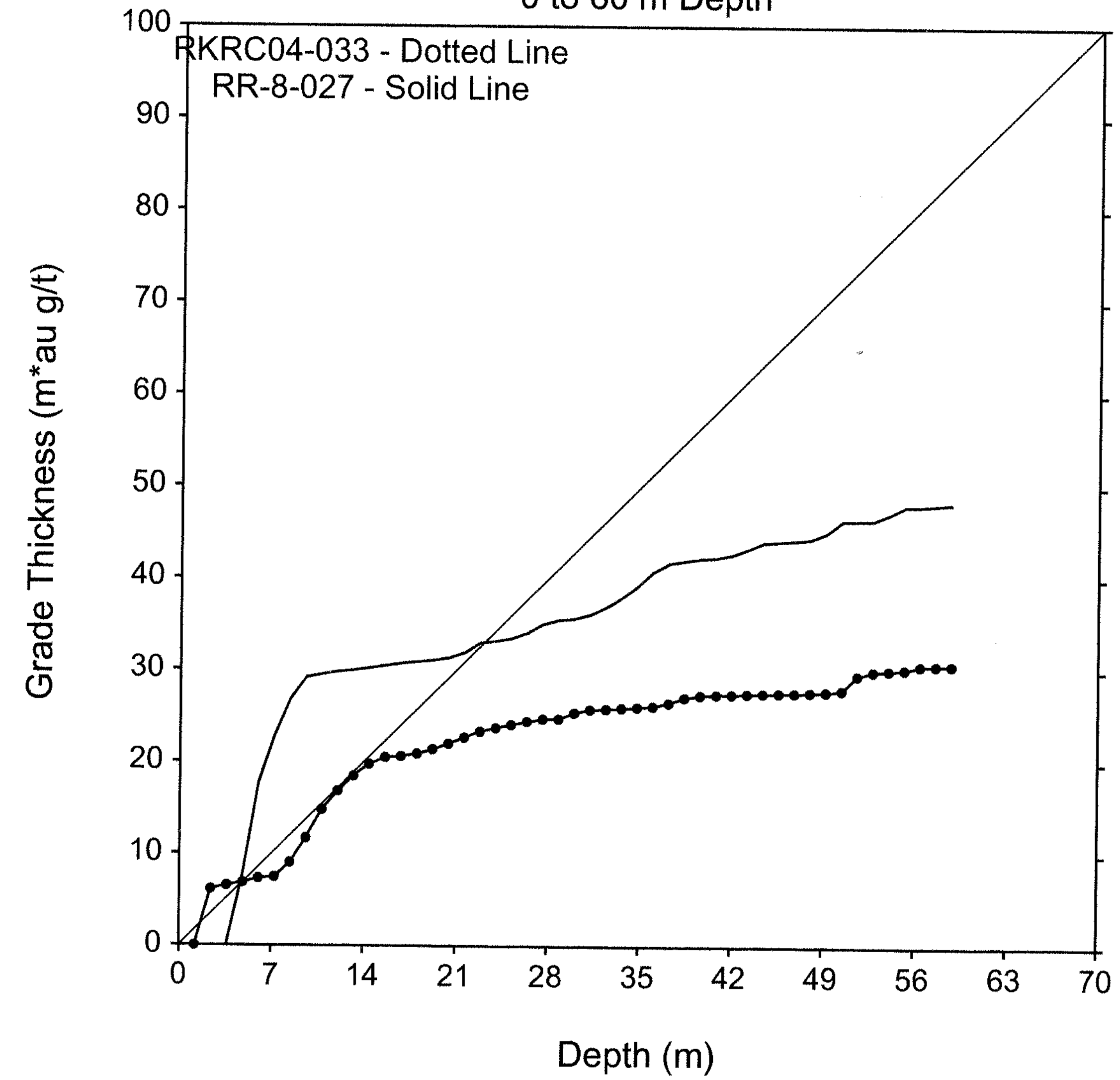


Horiz. Separation



Cumulative Grade Thickness

0 to 60 m Depth



22 A

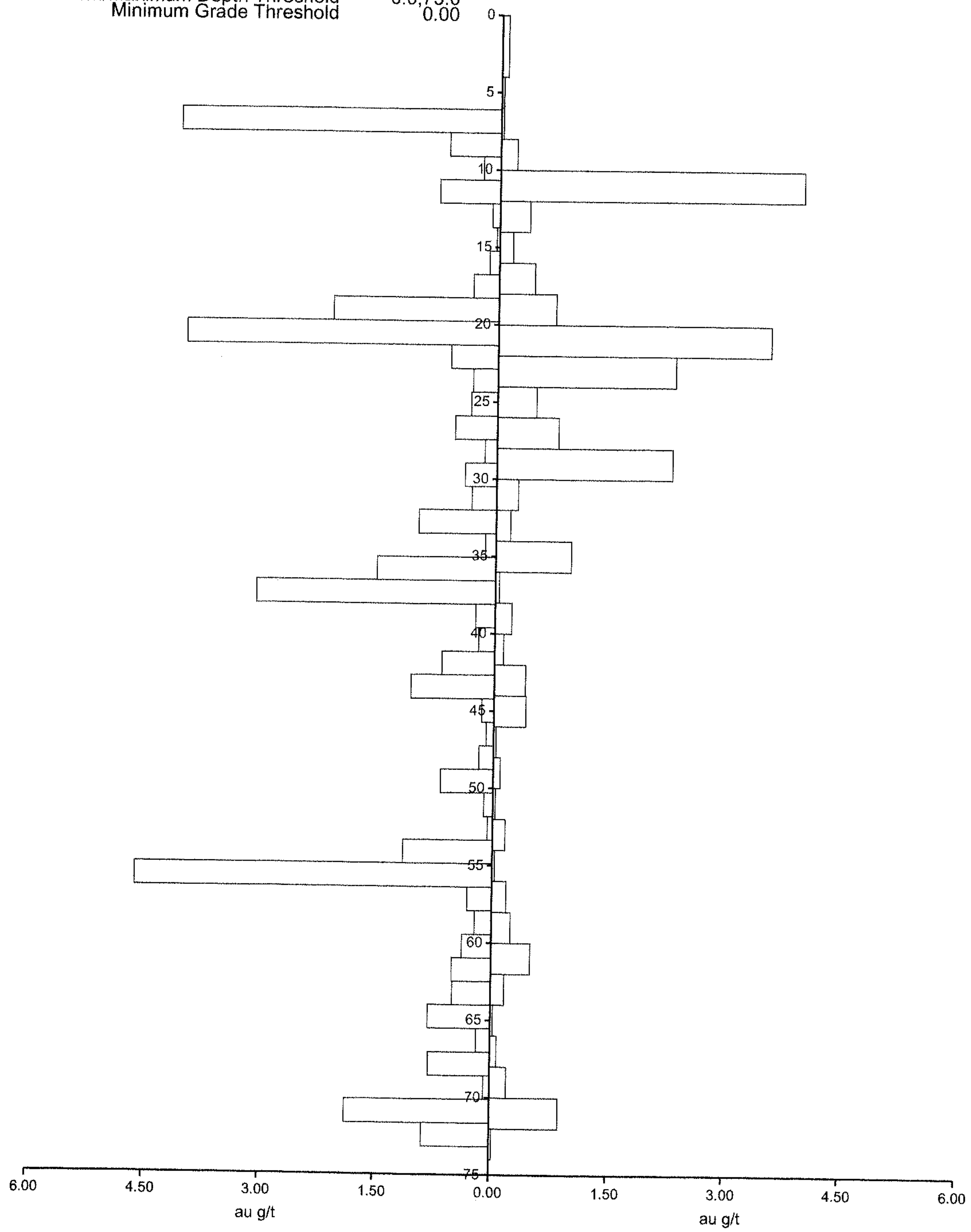
A

RR-0-32

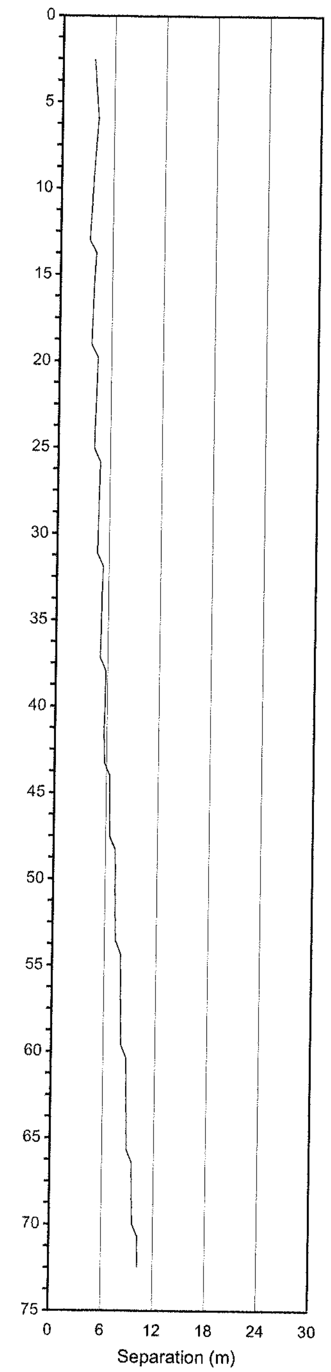
N	45
m	0.85
Cv	1.29
Intervals Trimmed by Depth	0
Intervals Trimmed by Grade	1
Minimum/Maximum Depth Threshold	0.0,75.0
Minimum Grade Threshold	0.00

RKDC03-224

N	36
m	0.56
Cv	1.64
Intervals Trimmed by Depth	3
Intervals Trimmed by Grade	0

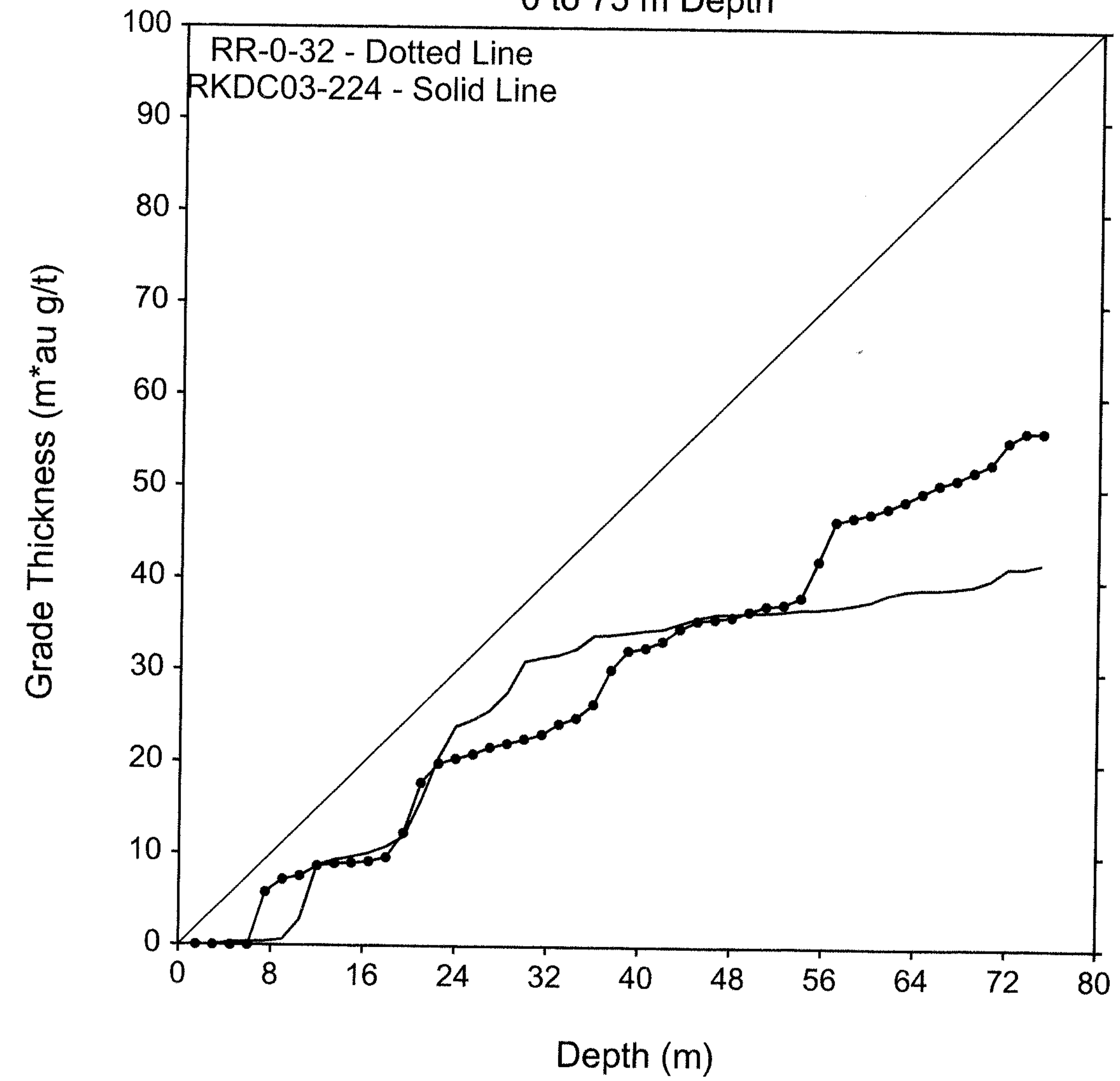


Horiz. Separation



Cumulative Grade Thickness

0 to 75 m Depth



22 B

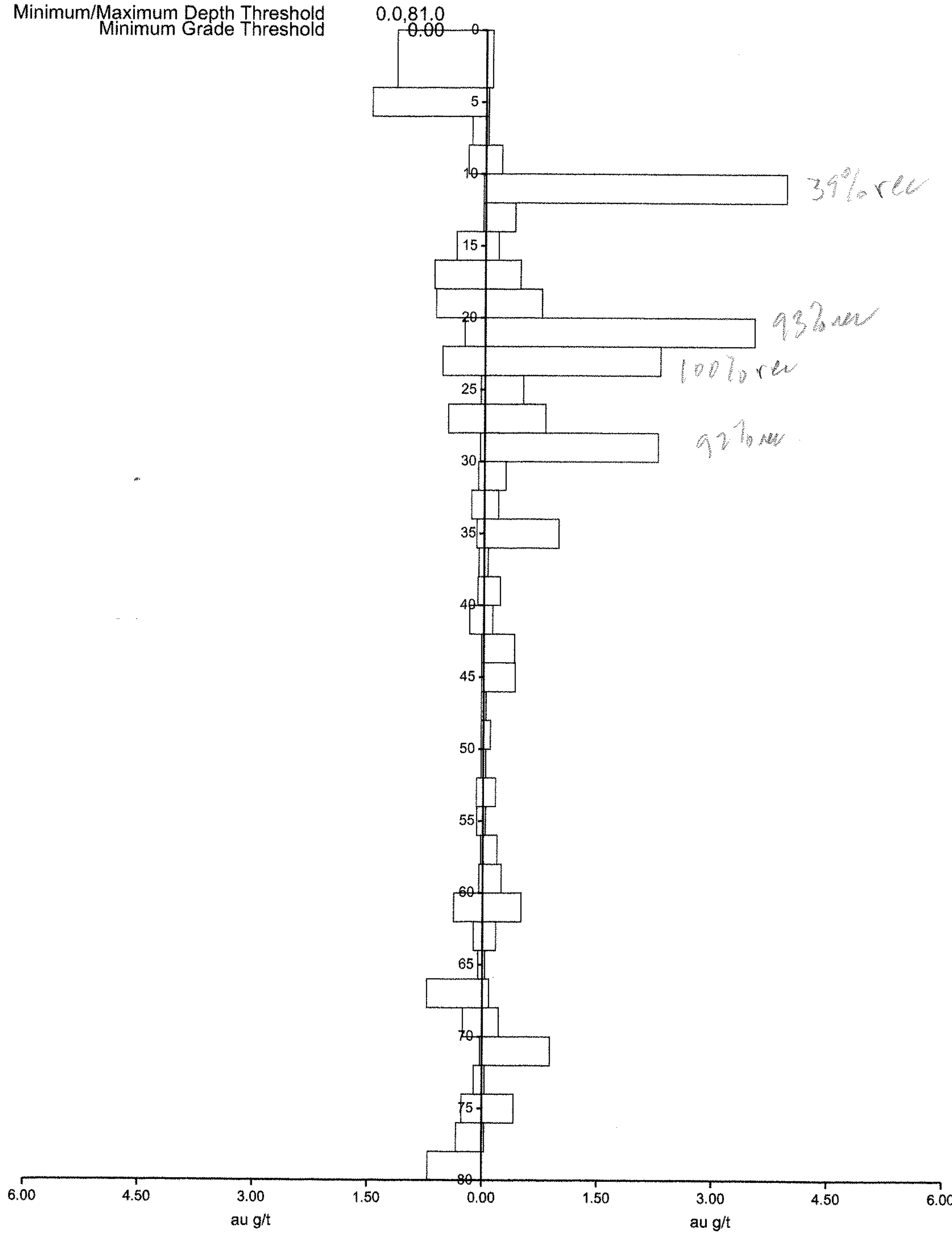
B

RKDC04-247

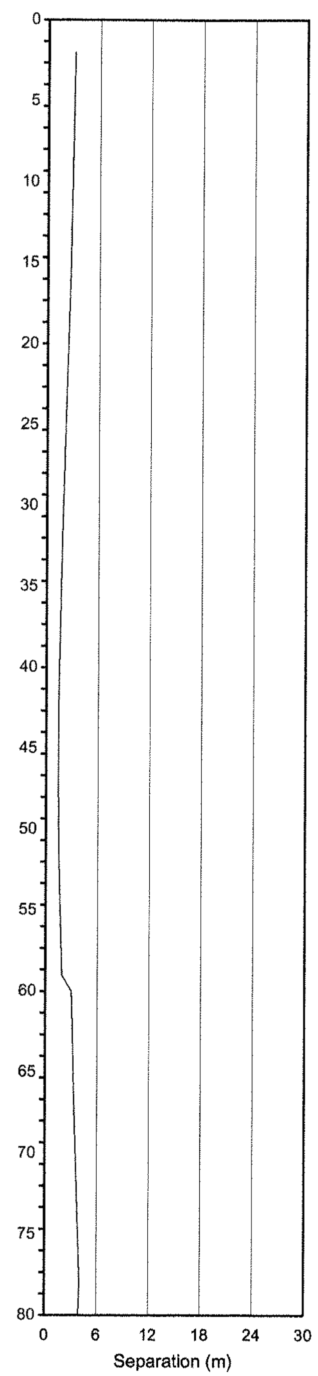
N 39
m 0.29
Cv 1.22
Intervals Trimmed by Depth 1
Intervals Trimmed by Grade 0
Minimum/Maximum Depth Threshold 0.0,81.0
Minimum Grade Threshold 0.00

RKDC03-224

N 39
m 0.53
Cv 1.69
Intervals Trimmed by Depth 0
Intervals Trimmed by Grade 0

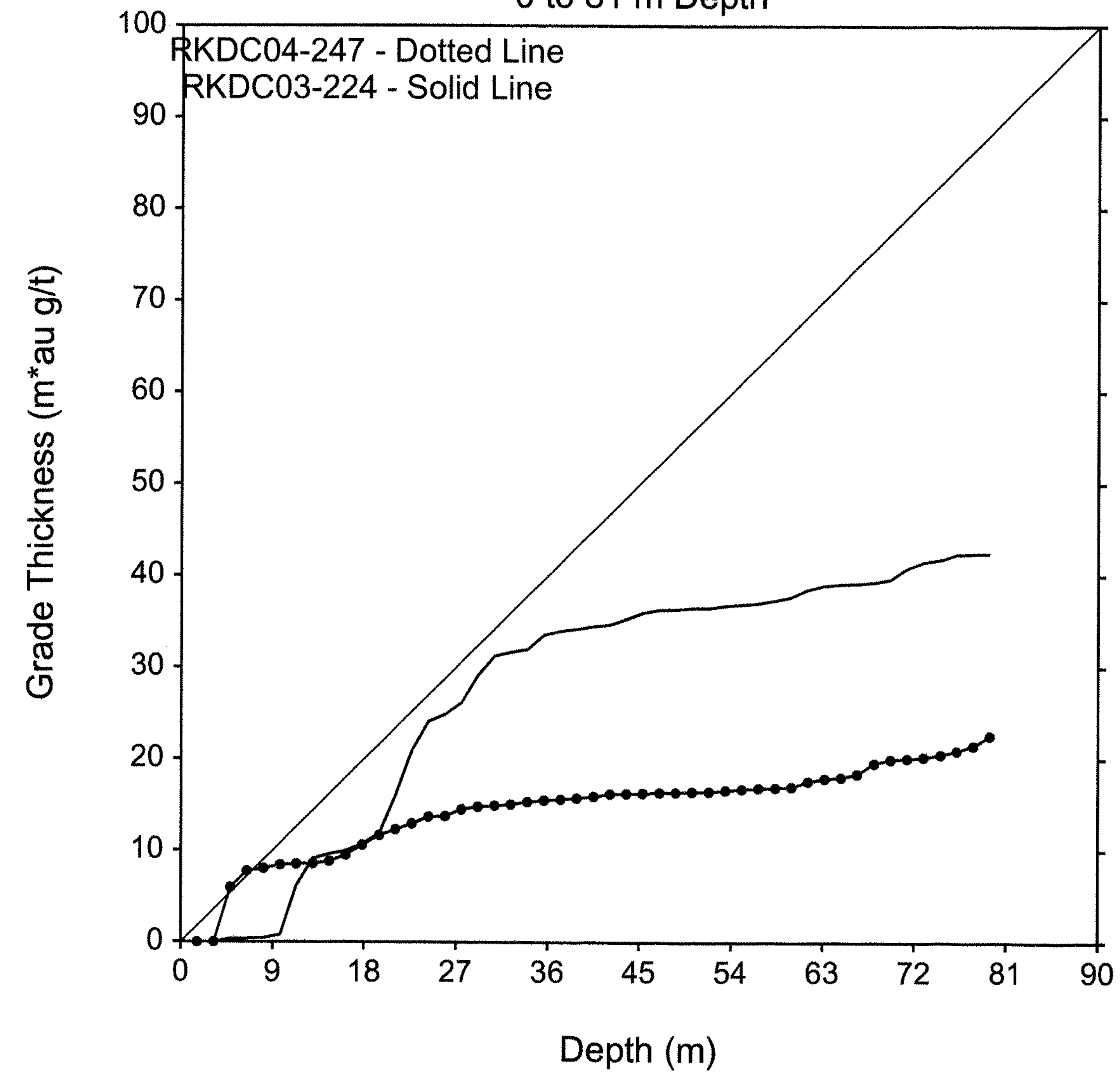


Horiz. Separation



Cumulative Grade Thickness

0 to 81 m Depth



22 C

C

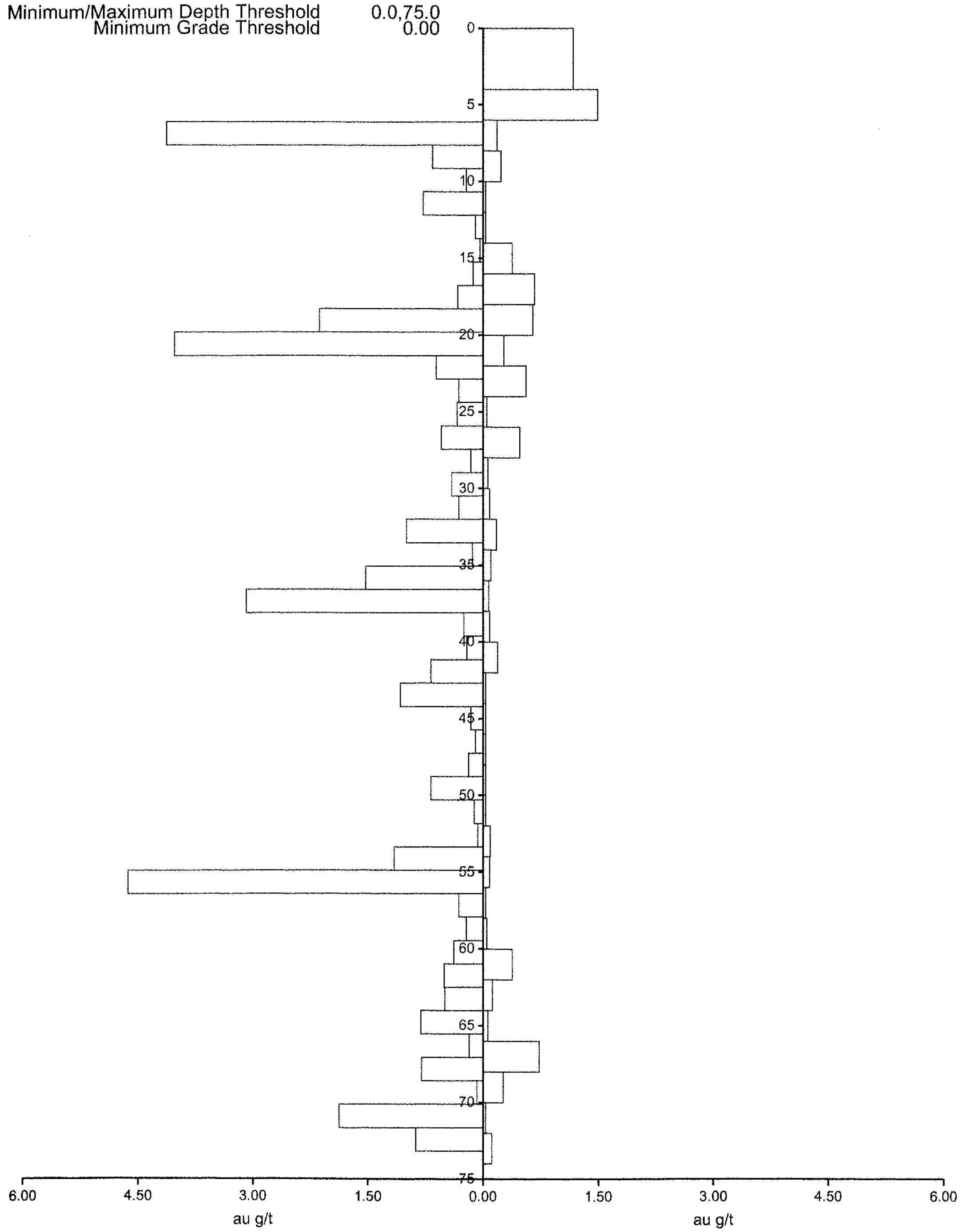
RR-0-32

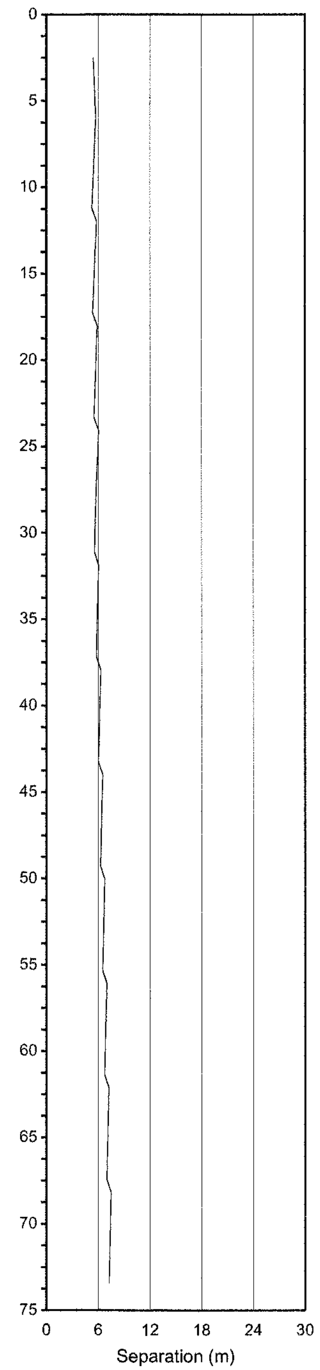
N	45
m	0.85
Cv	1.29
Intervals Trimmed by Depth	0
Intervals Trimmed by Grade	1
Minimum/Maximum Depth Threshold	0.0,75.0
Minimum Grade Threshold	0.00

RKDC04-247

N	36
m	0.28
Cv	1.30
Intervals Trimmed by Depth	4
Intervals Trimmed by Grade	0

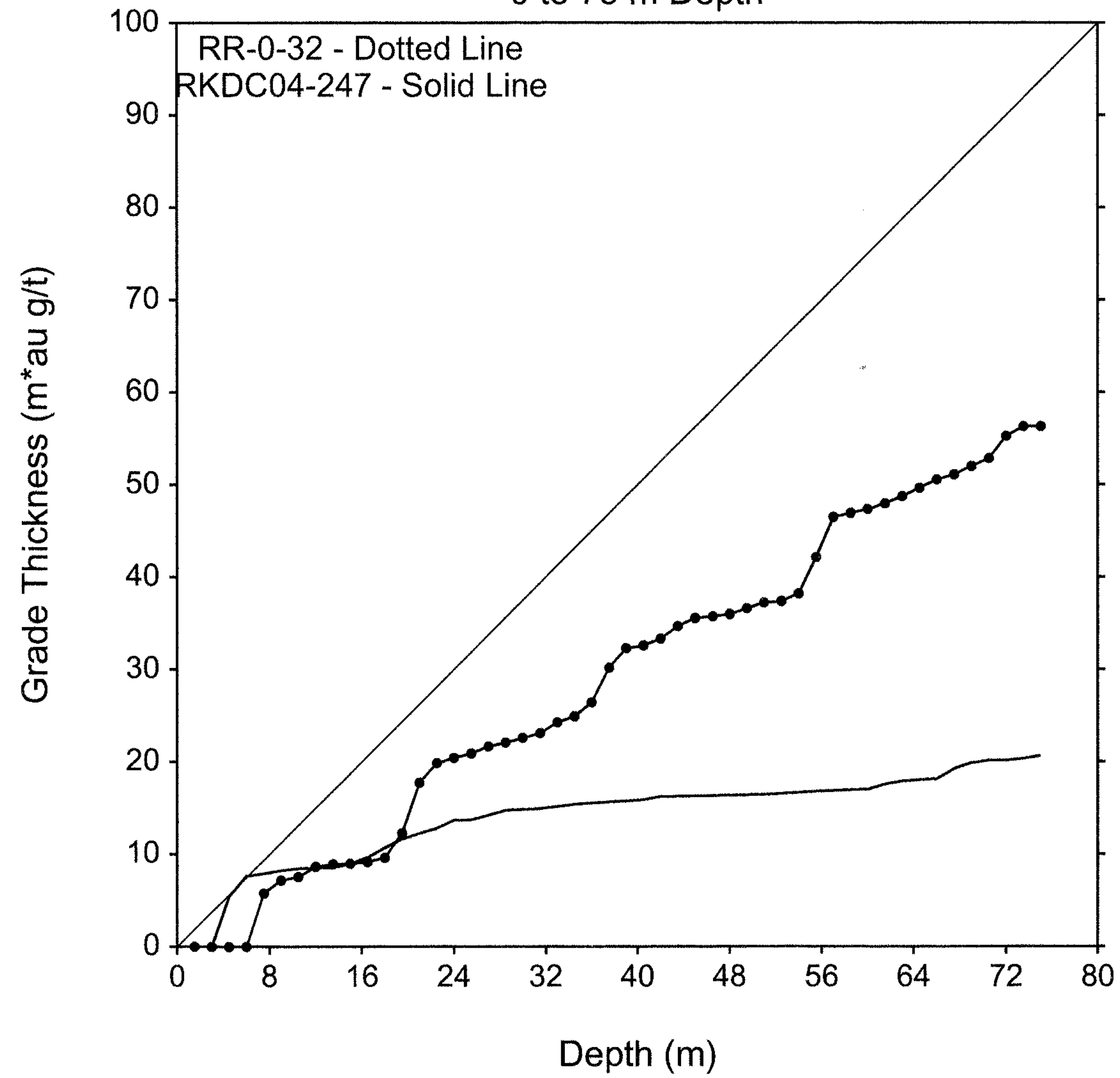
Horiz. Separation





Cumulative Grade Thickness

0 to 75 m Depth



22D

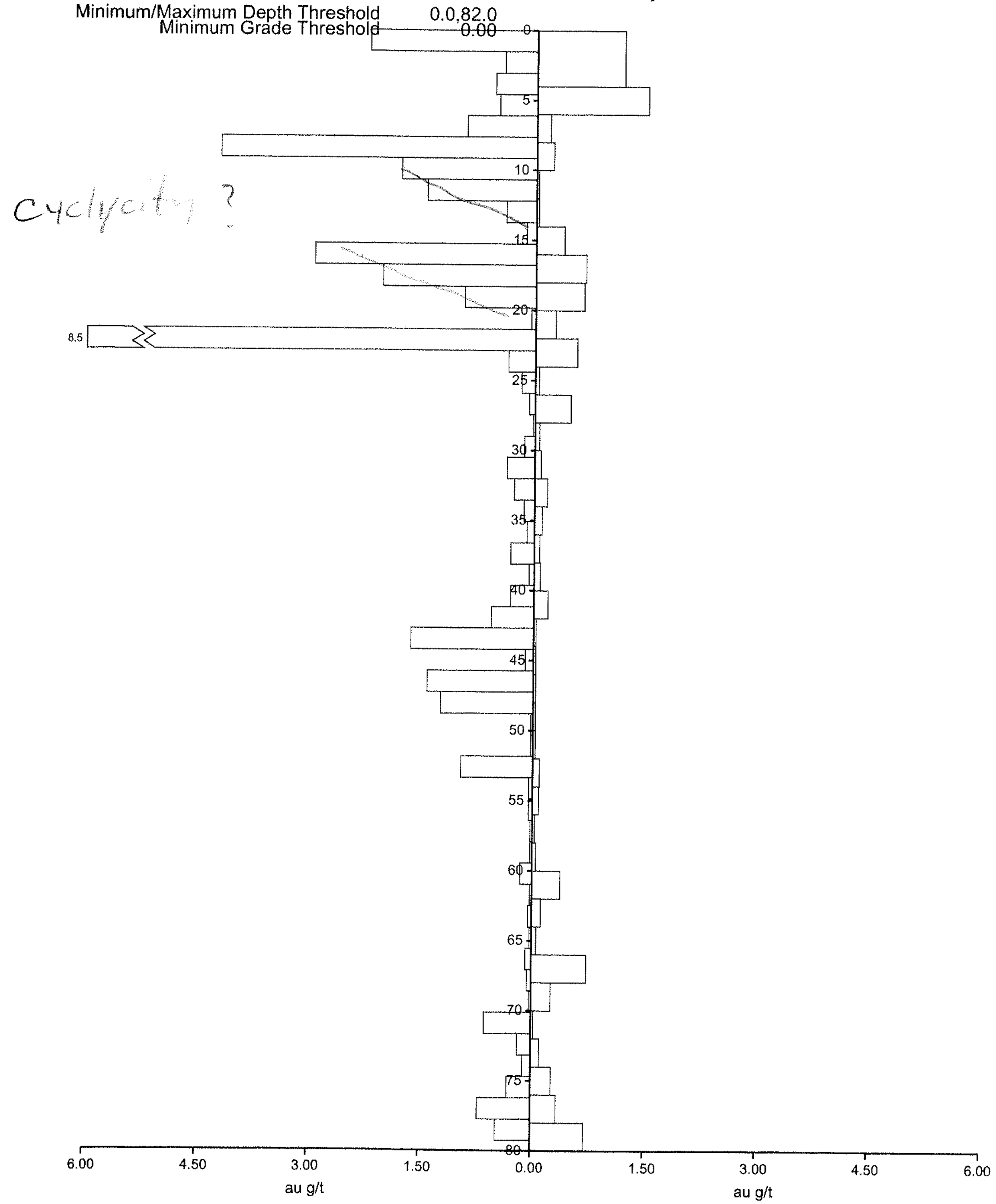
C

RKRC04-031

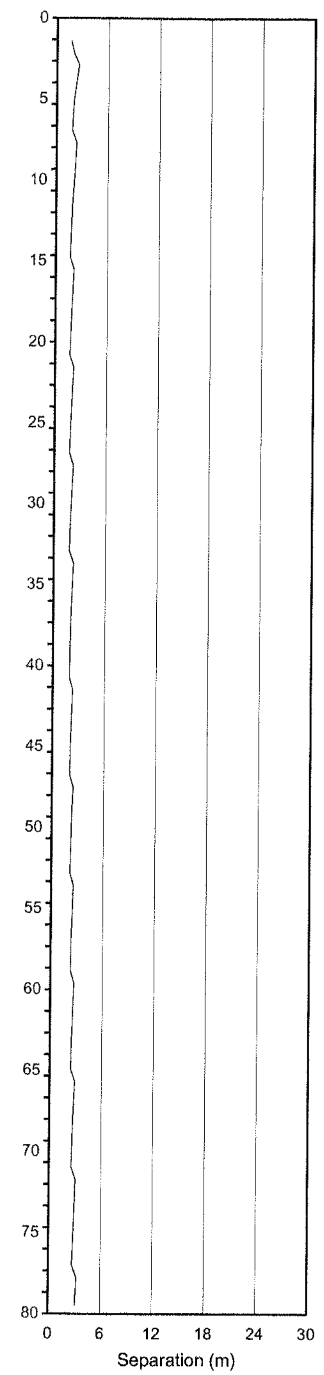
N	53
m	0.73
Cv	1.85
Intervals Trimmed by Depth	1
Intervals Trimmed by Grade	0
Minimum/Maximum Depth Threshold	0.0,82.0
Minimum Grade Threshold	0.00

RKDC04-247

N	40
m	0.28
Cv	1.23
Intervals Trimmed by Depth	0
Intervals Trimmed by Grade	0

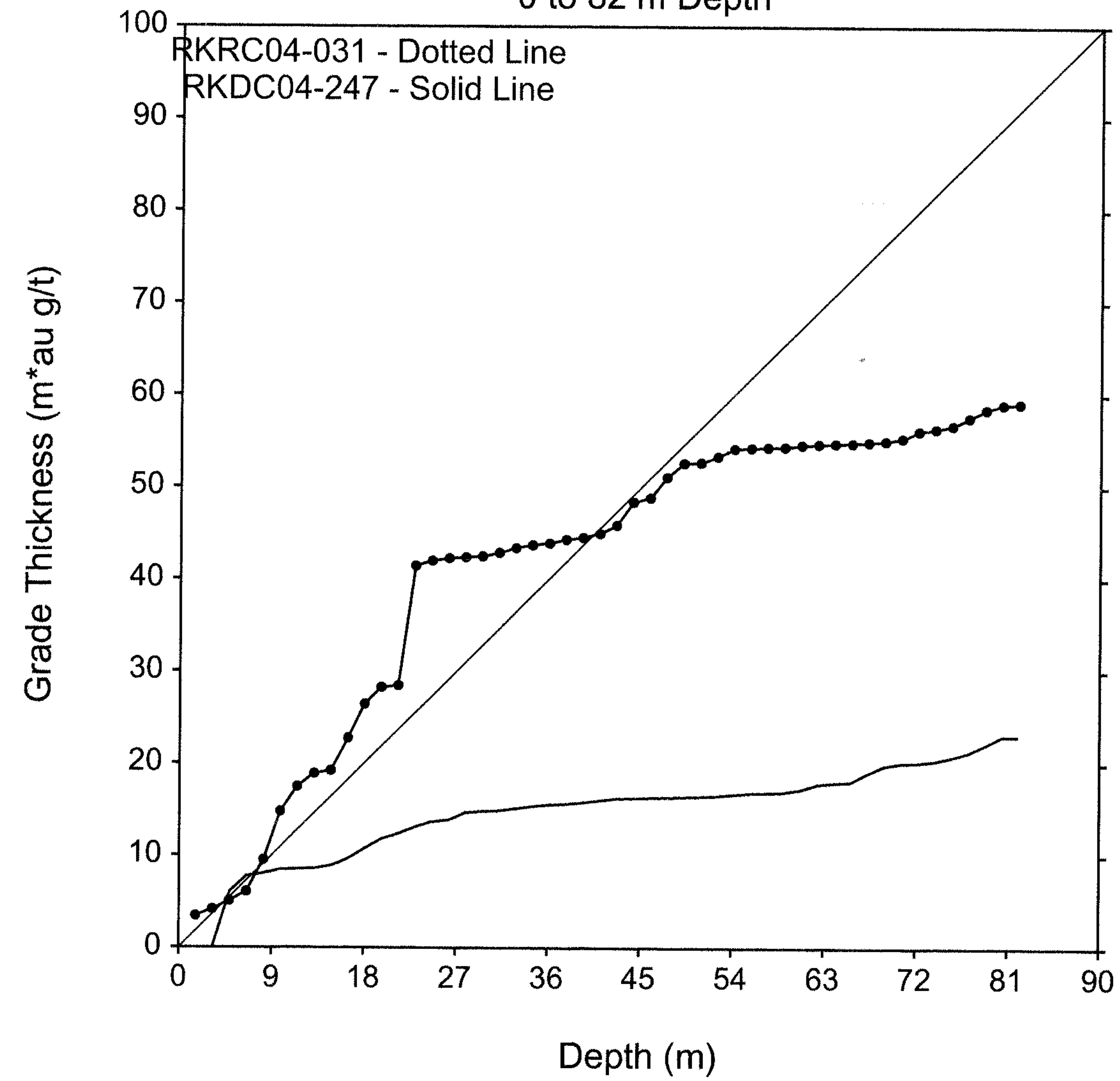


Horiz. Separation

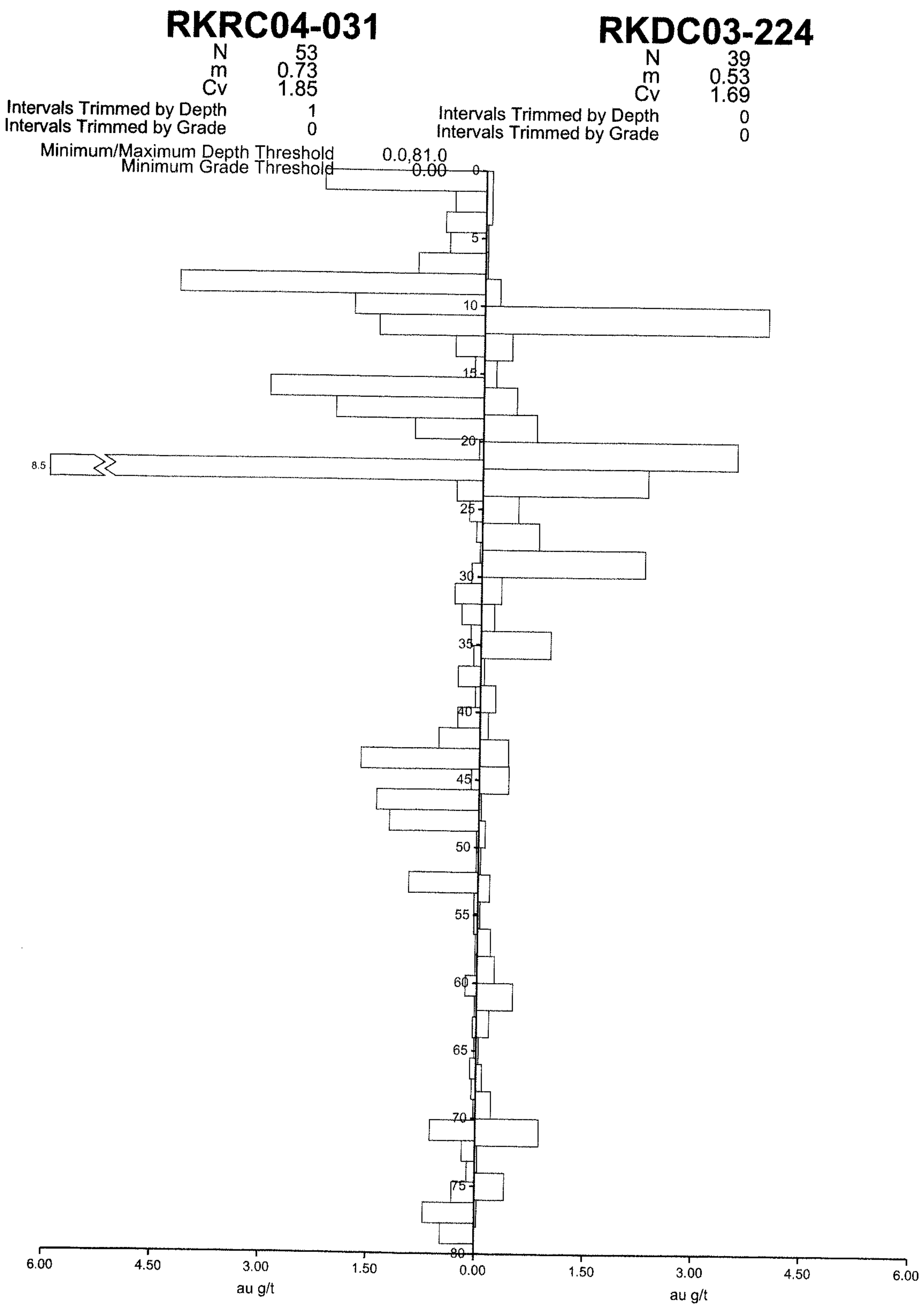


Cumulative Grade Thickness

0 to 82 m Depth

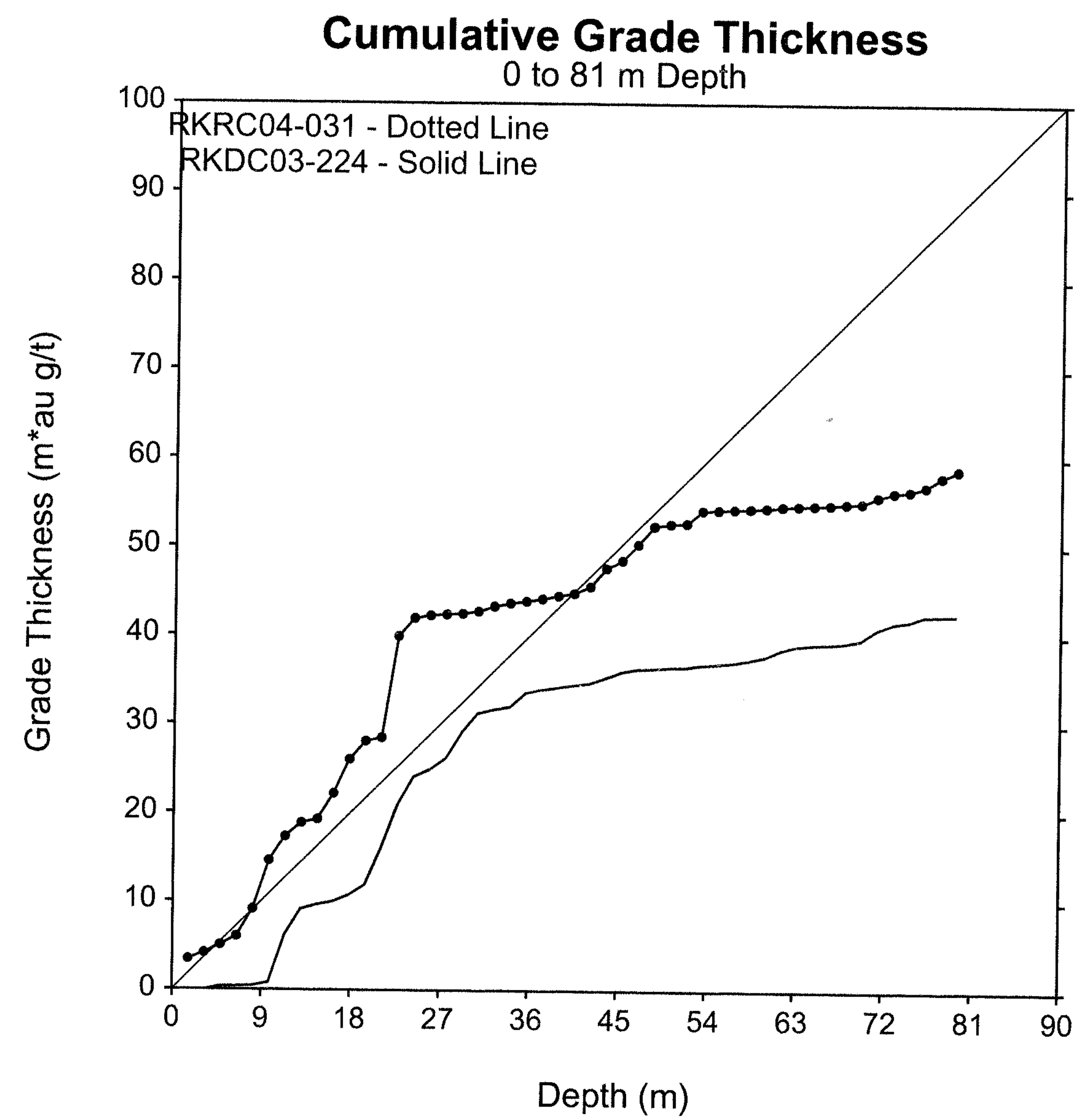


22E
A



RKRC04-031
N 53
m 0.73
Cv 1.85
Intervals Trimmed by Depth 1
Intervals Trimmed by Grade 0
Minimum/Maximum Depth Threshold 0.0,81.0
Minimum Grade Threshold 0.00
RKDC03-224
N 39
m 0.53
Cv 1.69
Intervals Trimmed by Depth 0
Intervals Trimmed by Grade 0
8.5
6.00 4.50 3.00 1.50 0.00 1.50 3.00 4.50 6.00
au g/t
au g/t

Horiz. Separation
0 6 12 18 24 30
Separation (m)



Cumulative Grade Thickness
0 to 81 m Depth
RKRC04-031 - Dotted Line
RKDC03-224 - Solid Line
Grade Thickness (m*au g/t)
Depth (m)
0 9 18 27 36 45 54 63 72 81 90

22 F

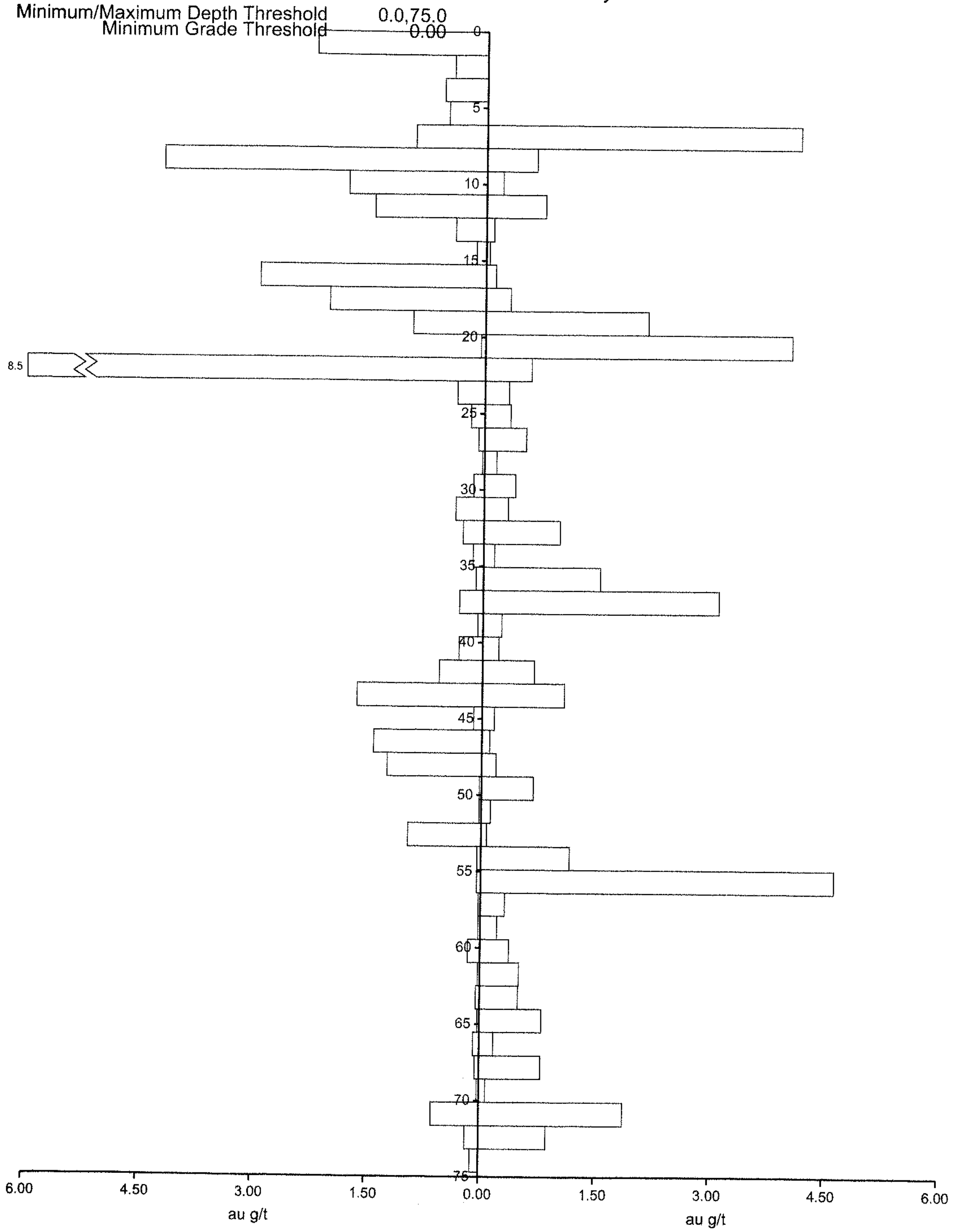
B+

RKRC04-031

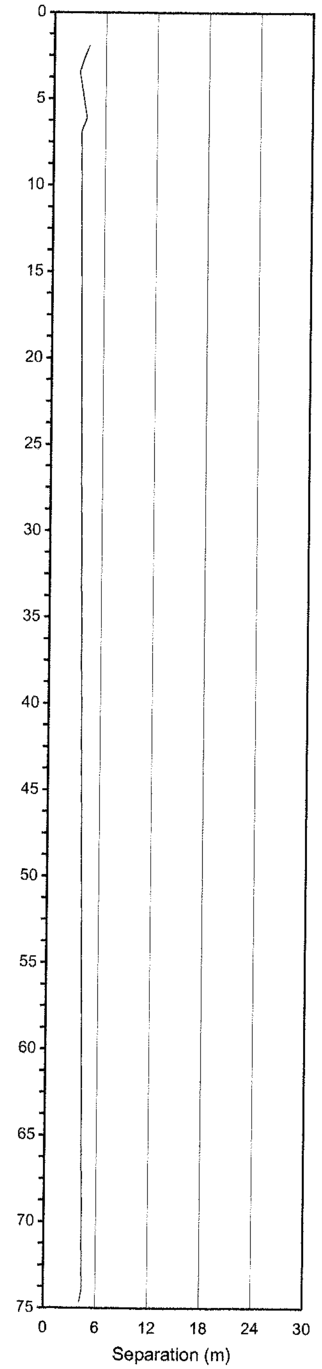
N 49
m 0.76
Cv 1.86
Intervals Trimmed by Depth 5
Intervals Trimmed by Grade 0
Minimum/Maximum Depth Threshold 0.0,75.0
Minimum Grade Threshold 0.00

RR-0-32

N 45
m 0.85
Cv 1.29
Intervals Trimmed by Depth 0
Intervals Trimmed by Grade 1

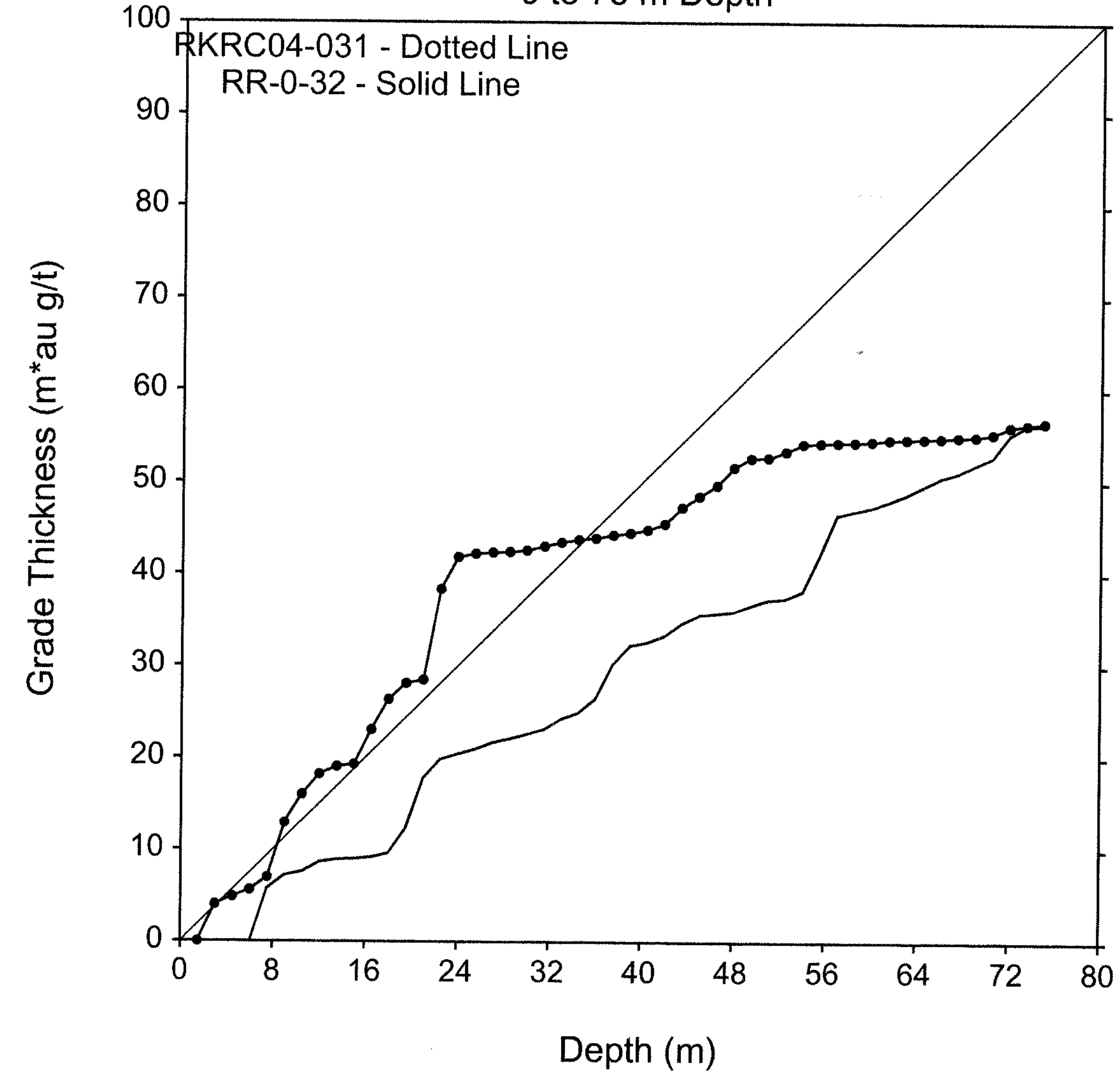


Horiz. Separation



Cumulative Grade Thickness

0 to 75 m Depth



23 A

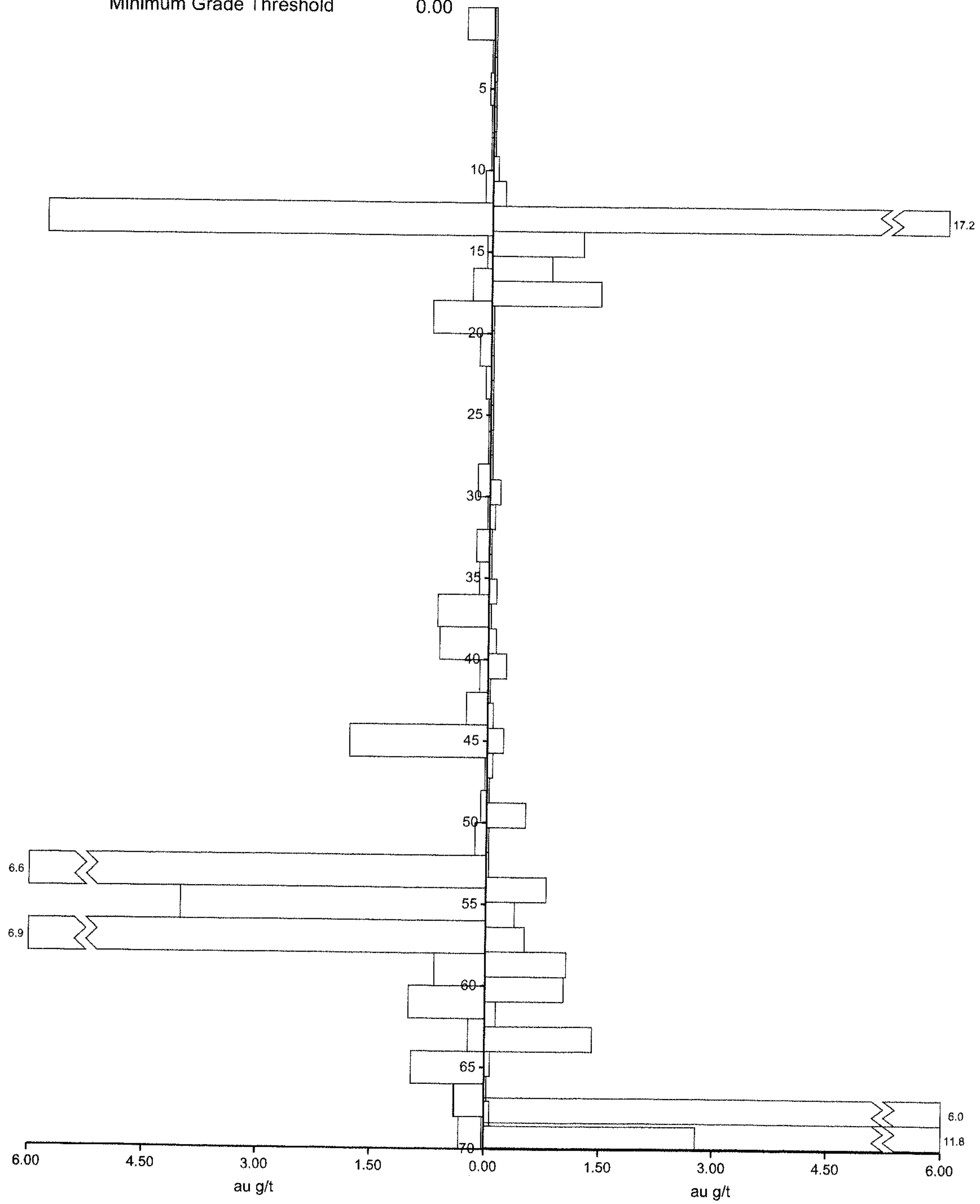
A

RKDC03-179

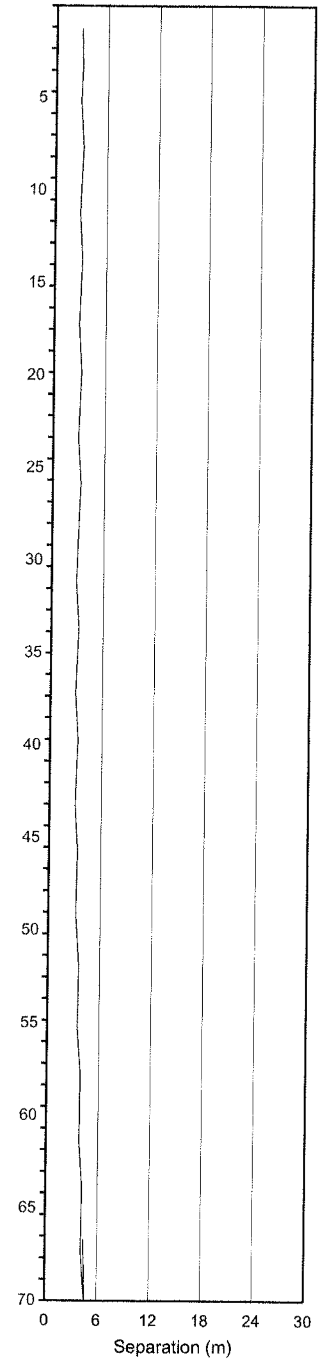
N	37
m	0.91
Cv	1.97
Intervals Trimmed by Depth	11
Intervals Trimmed by Grade	0
Minimum/Maximum Depth Threshold	0.0,74.0
Minimum Grade Threshold	0.00

RR-8-079

N	47
m	1.02
Cv	2.96
Intervals Trimmed by Depth	1
Intervals Trimmed by Grade	0

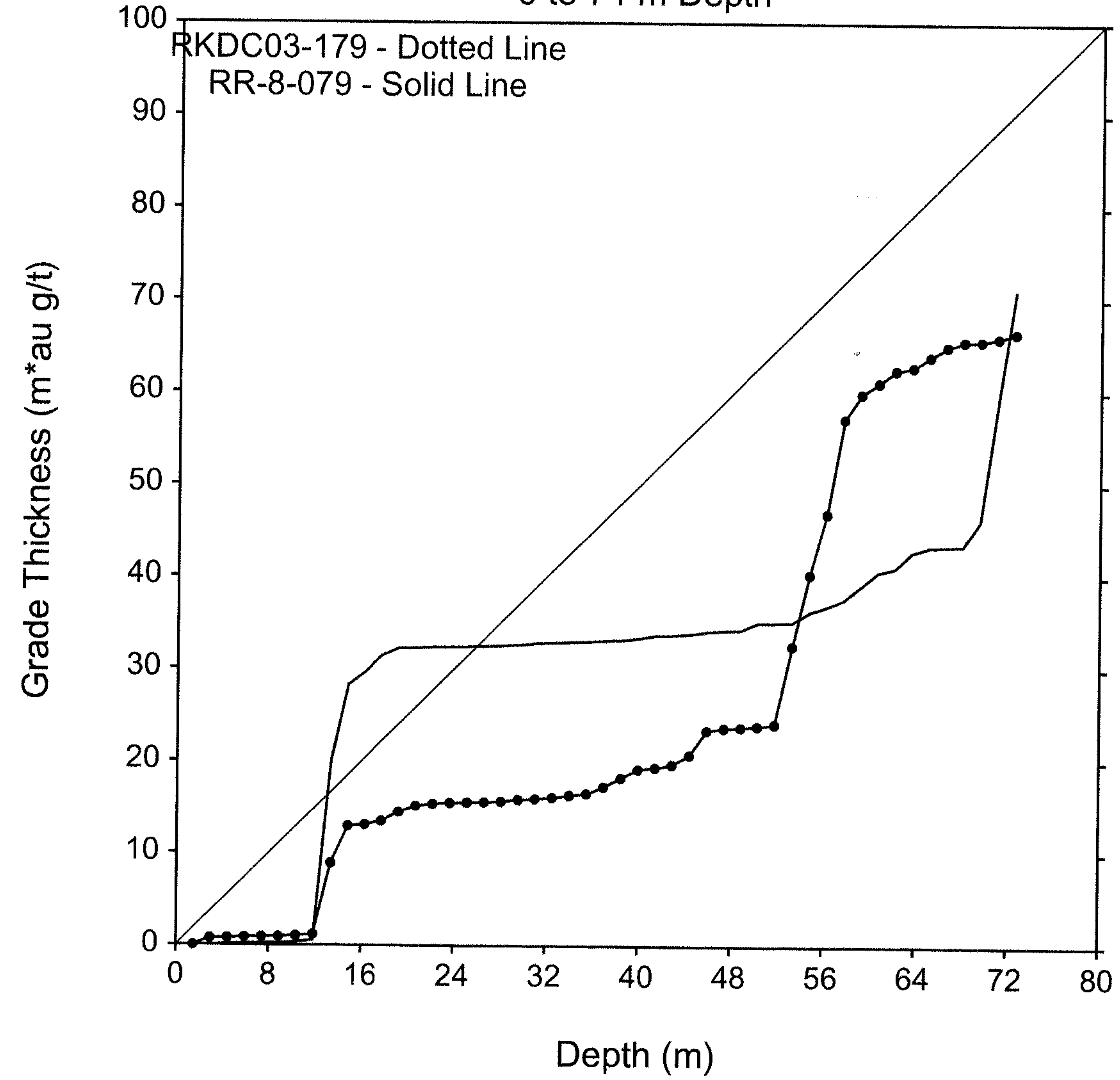


Horiz. Separation



Cumulative Grade Thickness

0 to 74 m Depth



23 B

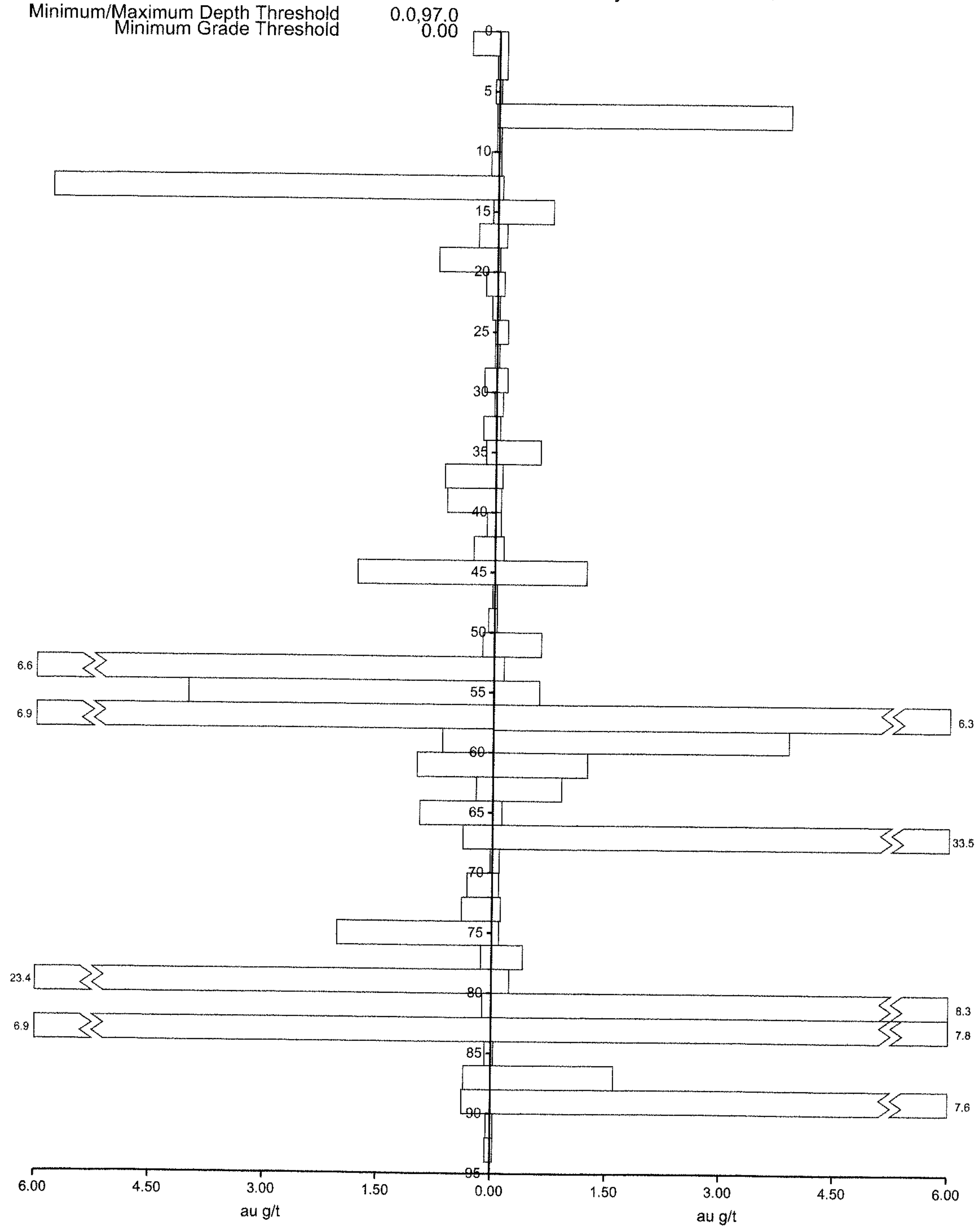
A

RKDC03-179

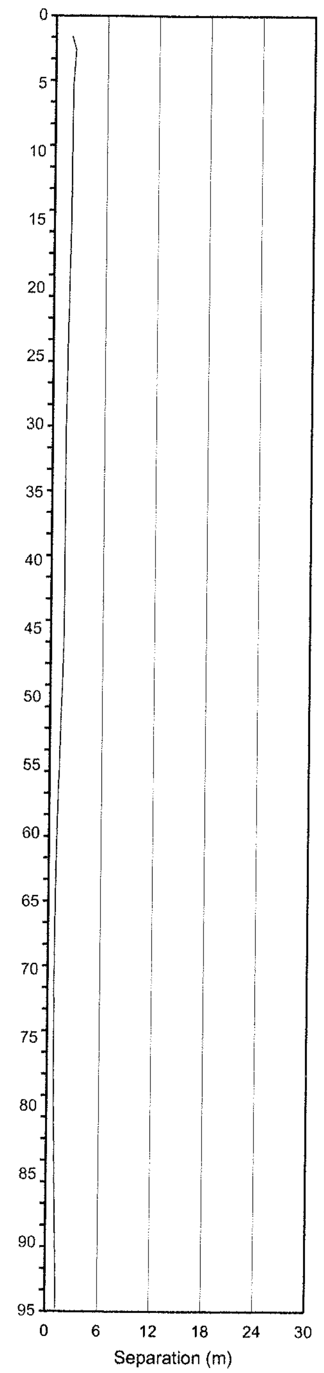
N	48
m	1.40
Cv	2.64
Intervals Trimmed by Depth	0
Intervals Trimmed by Grade	0
Minimum/Maximum Depth Threshold	0.0,97.0
Minimum Grade Threshold	0.00

RKDC04-246

N	47
m	1.69
Cv	3.01
Intervals Trimmed by Depth	0
Intervals Trimmed by Grade	0

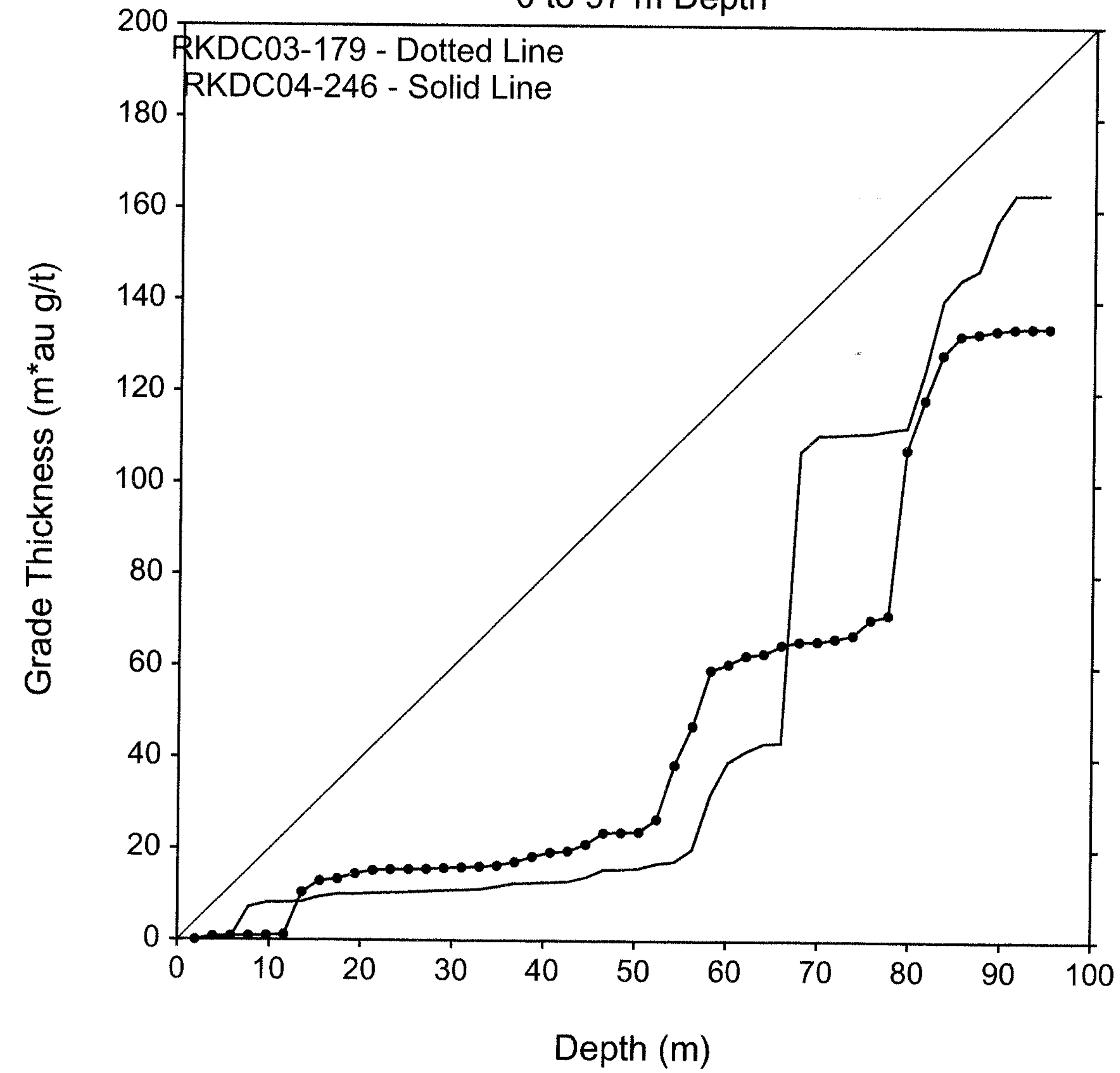


Horiz. Separation



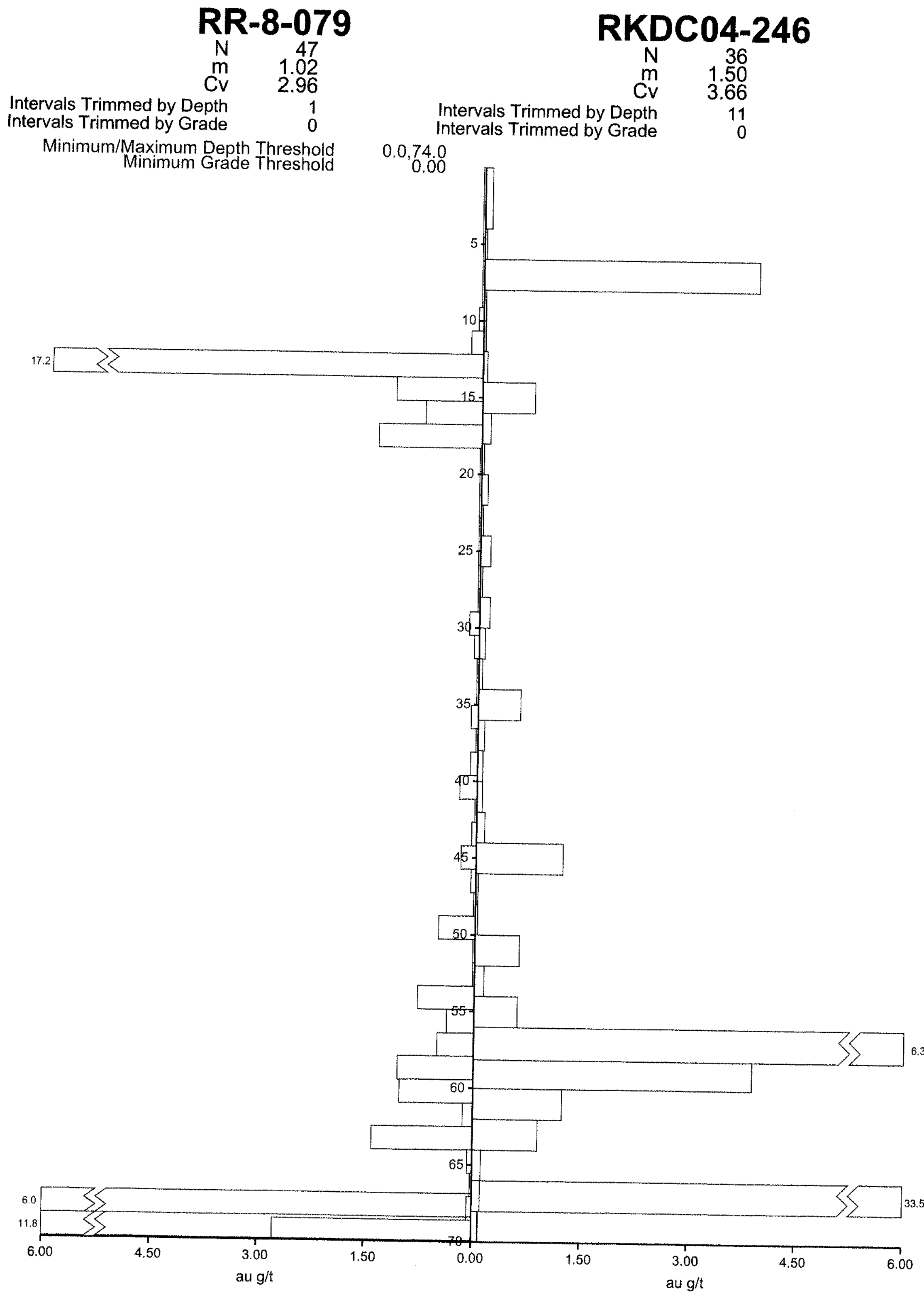
Cumulative Grade Thickness

0 to 97 m Depth

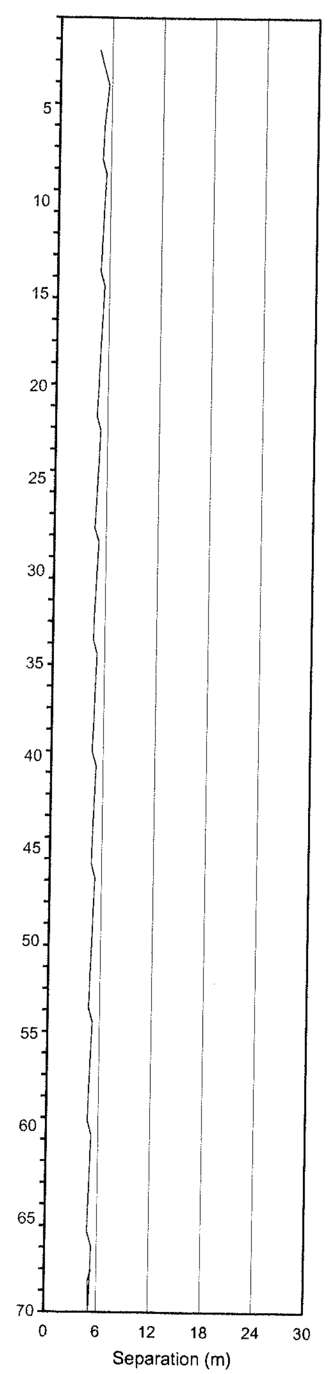


23 C

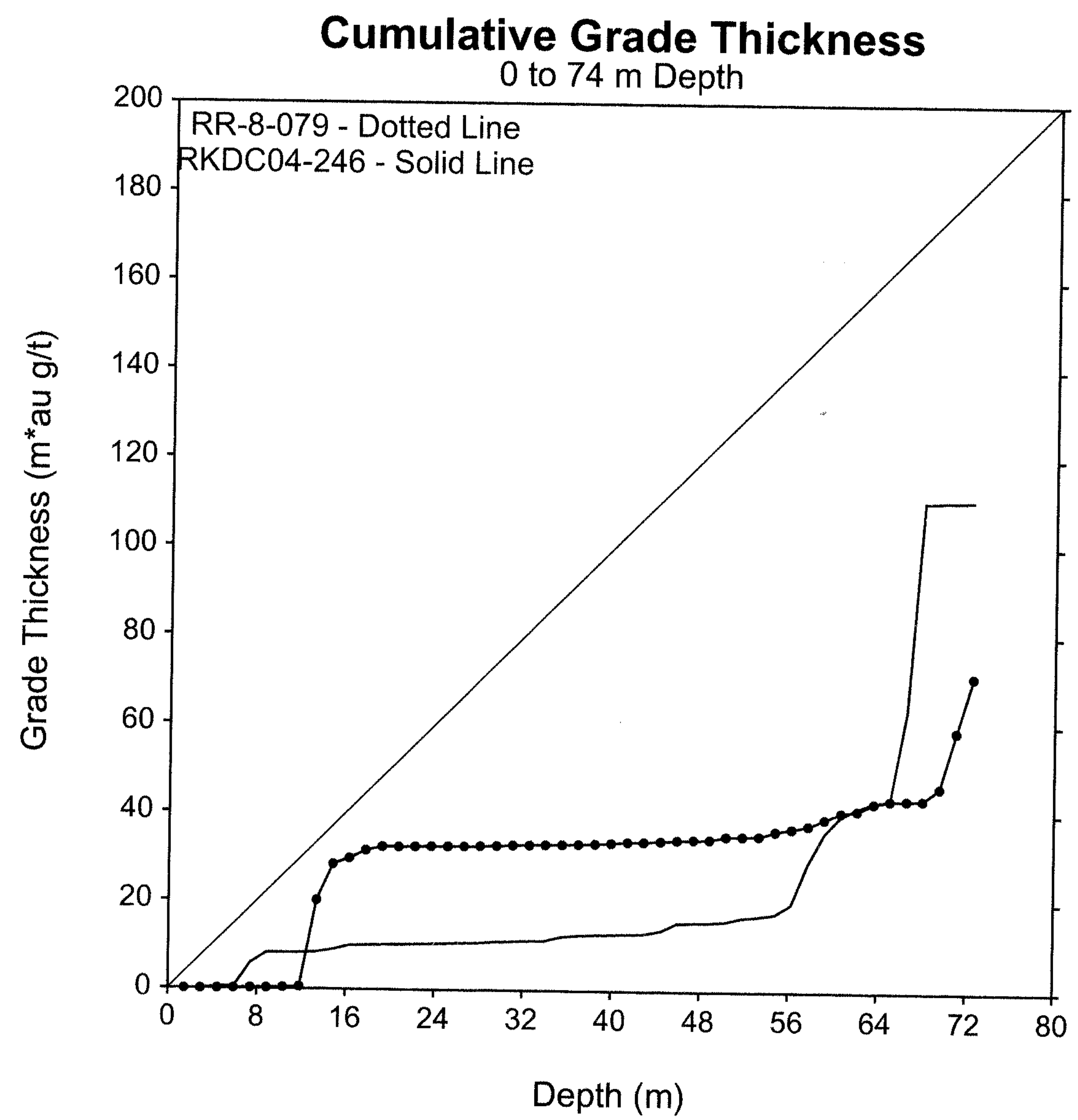
A



RR-8-079
N 47
m 1.02
Cv 2.96
Intervals Trimmed by Depth 1
Intervals Trimmed by Grade 0
Minimum/Maximum Depth Threshold 0.0,74.0
Minimum Grade Threshold 0.00
RKDC04-246
N 36
m 1.50
Cv 3.66
Intervals Trimmed by Depth 11
Intervals Trimmed by Grade 0
17.2
6.3
6.0
11.8
33.5
6.00 4.50 3.00 1.50 0.00 1.50 3.00 4.50 6.00
au g/t
au g/t



Horiz. Separation
0 6 12 18 24 30
Separation (m)



Cumulative Grade Thickness
0 to 74 m Depth
RR-8-079 - Dotted Line
RKDC04-246 - Solid Line
Grade Thickness (m*au g/t)
Depth (m)

23 D

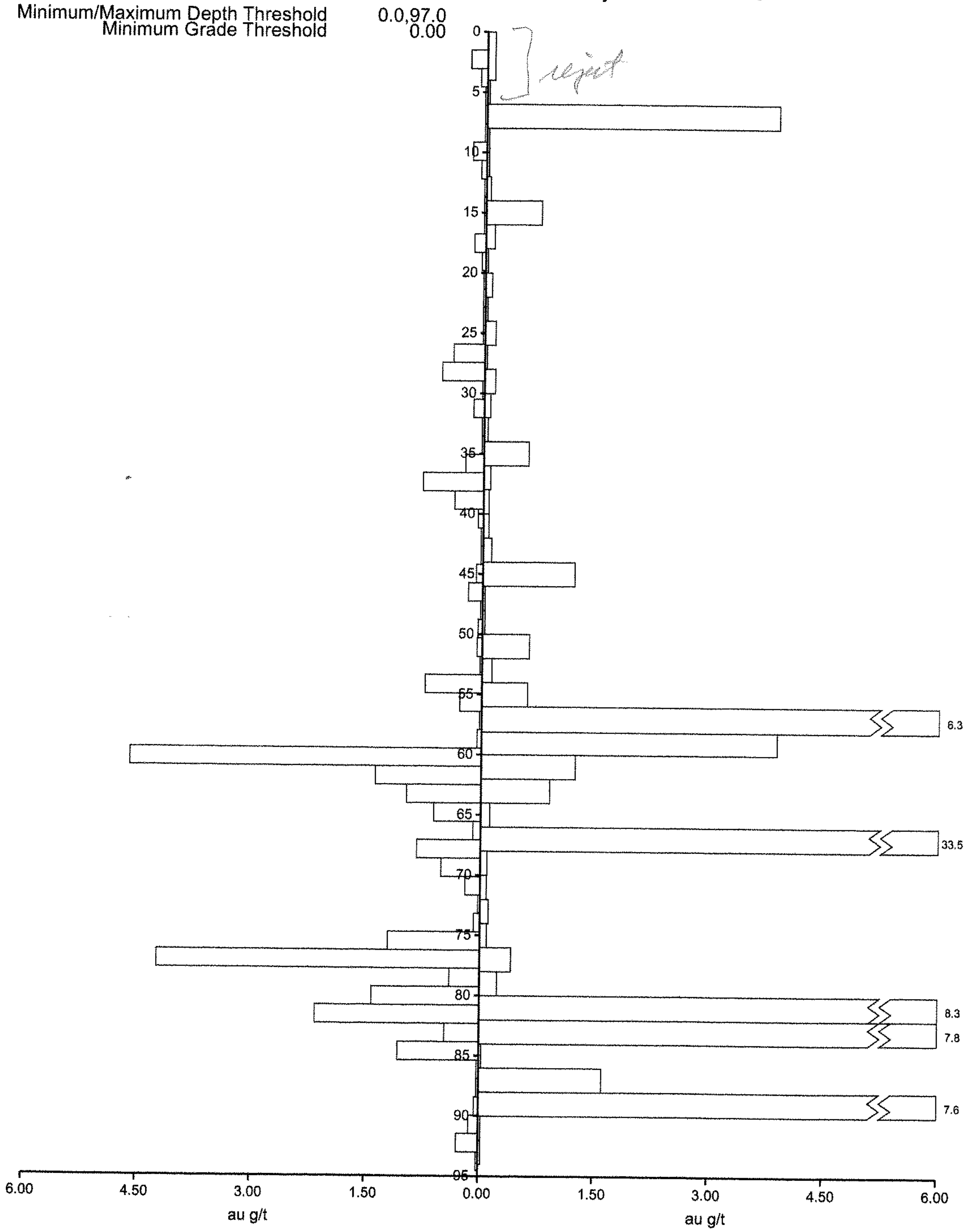
B

RKRC04-029

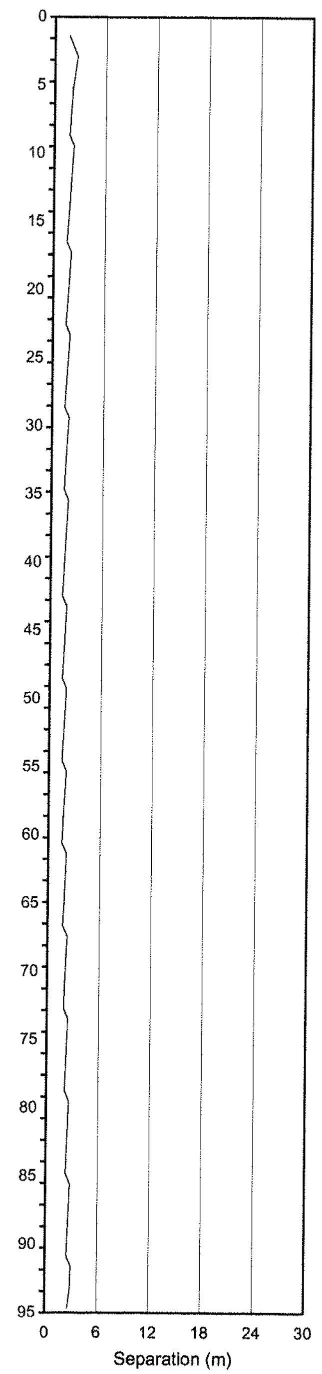
N	62
m	0.42
Cv	1.99
Intervals Trimmed by Depth	0
Intervals Trimmed by Grade	1
Minimum/Maximum Depth Threshold	0.0,97.0
Minimum Grade Threshold	0.00

RKDC04-246

N	47
m	1.69
Cv	3.01
Intervals Trimmed by Depth	0
Intervals Trimmed by Grade	0

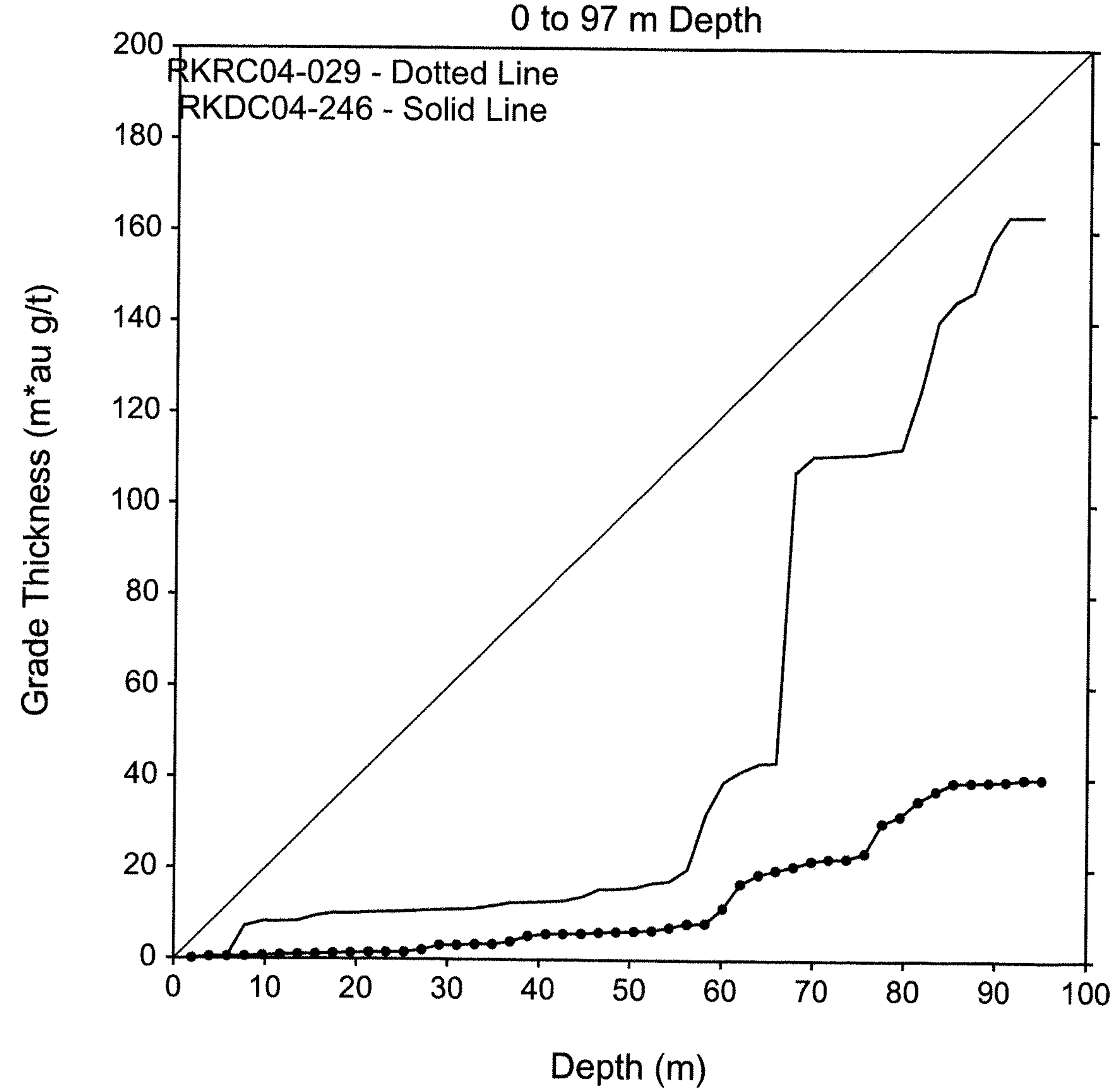


Horiz. Separation



Cumulative Grade Thickness

0 to 97 m Depth



23E

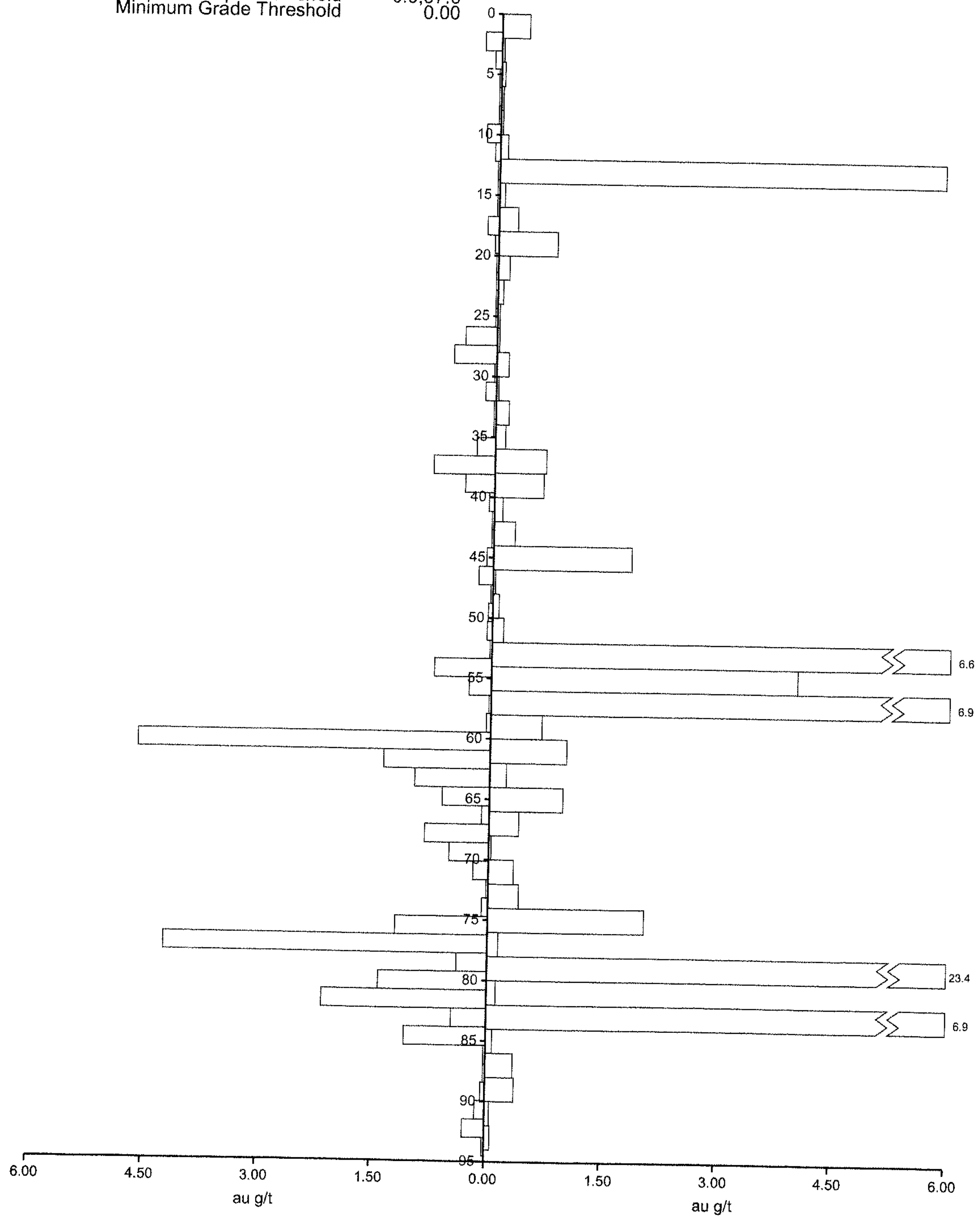
B

RKRC04-029

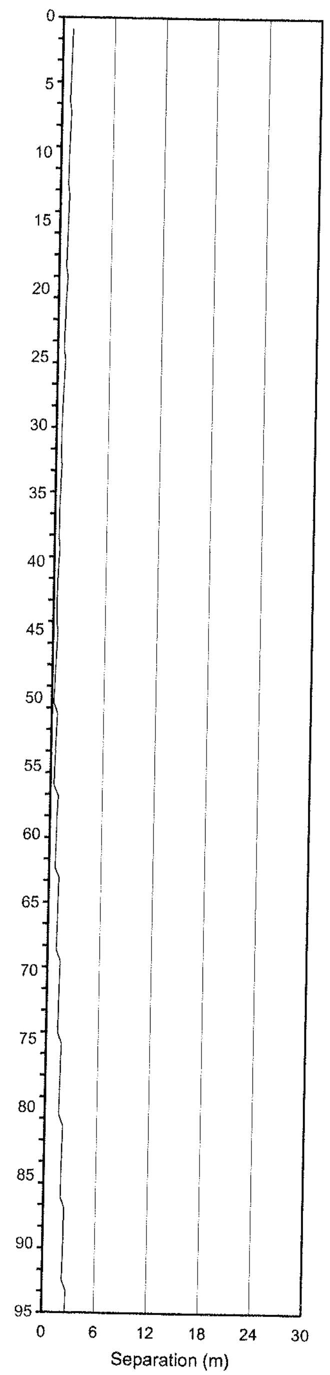
N 62
m 0.42
Cv 1.99
Intervals Trimmed by Depth 0
Intervals Trimmed by Grade 1
Minimum/Maximum Depth Threshold 0.0,97.0
Minimum Grade Threshold 0.00

RKDC03-179

N 48
m 1.40
Cv 2.64
Intervals Trimmed by Depth 0
Intervals Trimmed by Grade 0

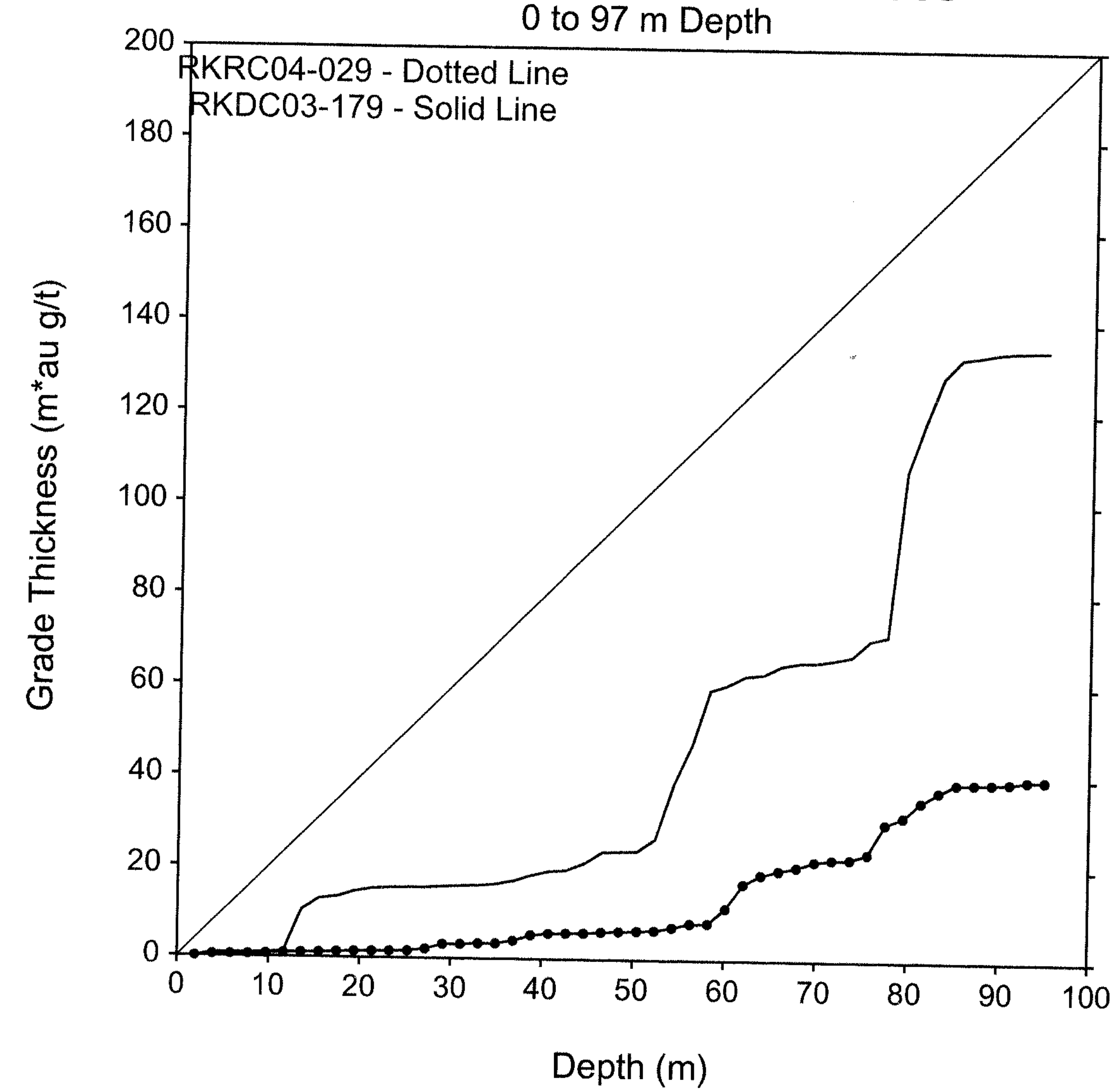


Horiz. Separation



Cumulative Grade Thickness

0 to 97 m Depth



23 F

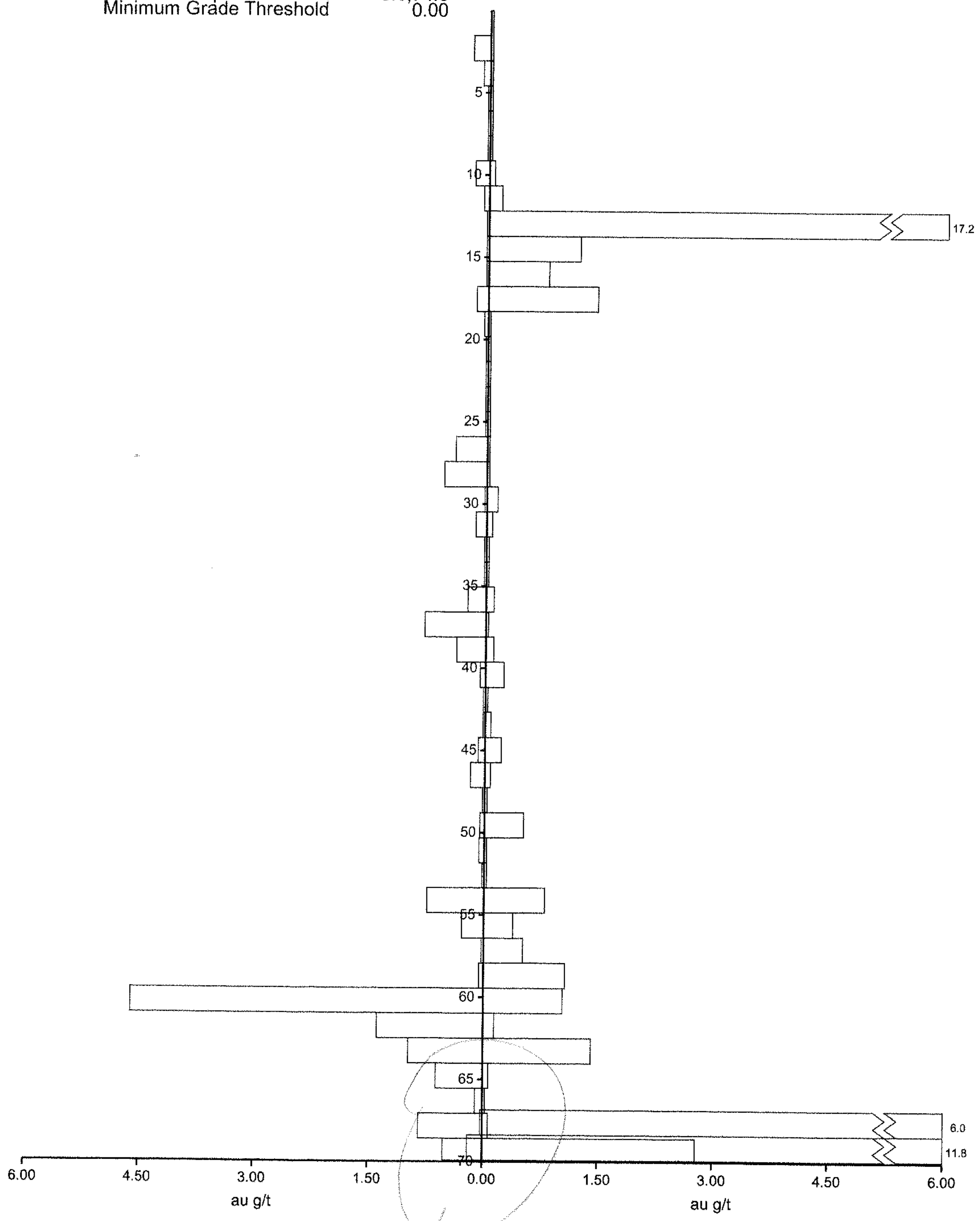
B

RKRC04-029

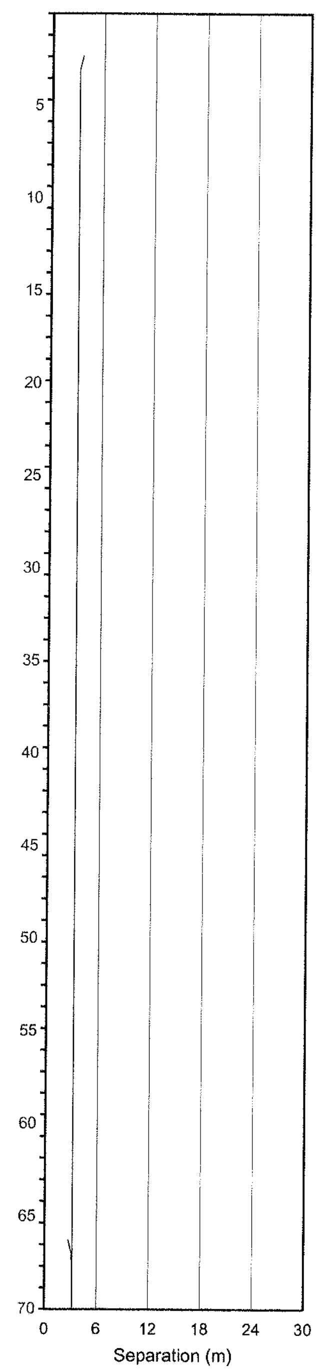
N 47
m 0.31
Cv 2.24
Intervals Trimmed by Depth 15
Intervals Trimmed by Grade 1
Minimum/Maximum Depth Threshold 0.0,74.0
Minimum Grade Threshold 0.00

RR-8-079

N 47
m 1.02
Cv 2.96
Intervals Trimmed by Depth 1
Intervals Trimmed by Grade 0

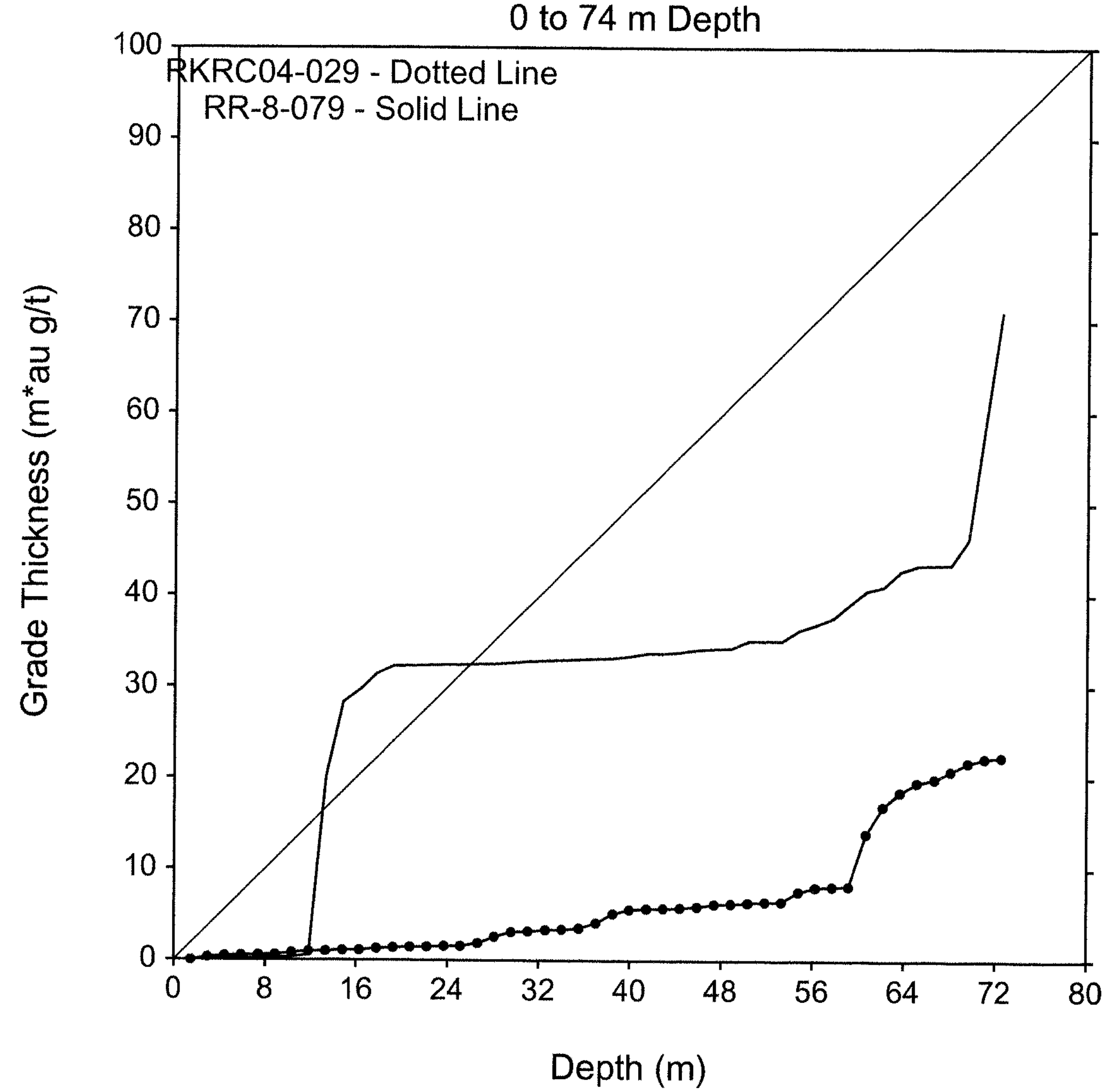


Horiz. Separation



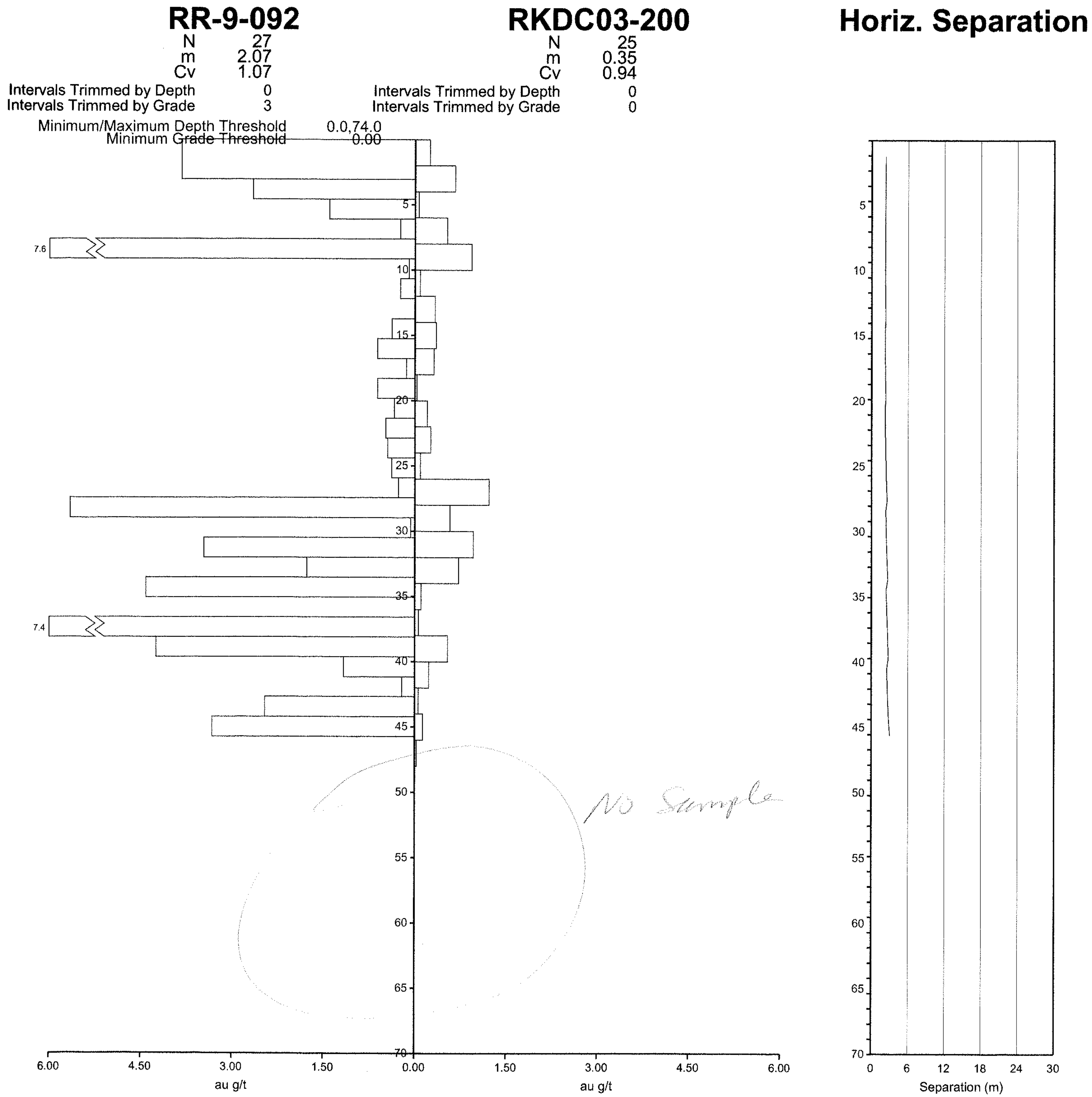
Cumulative Grade Thickness

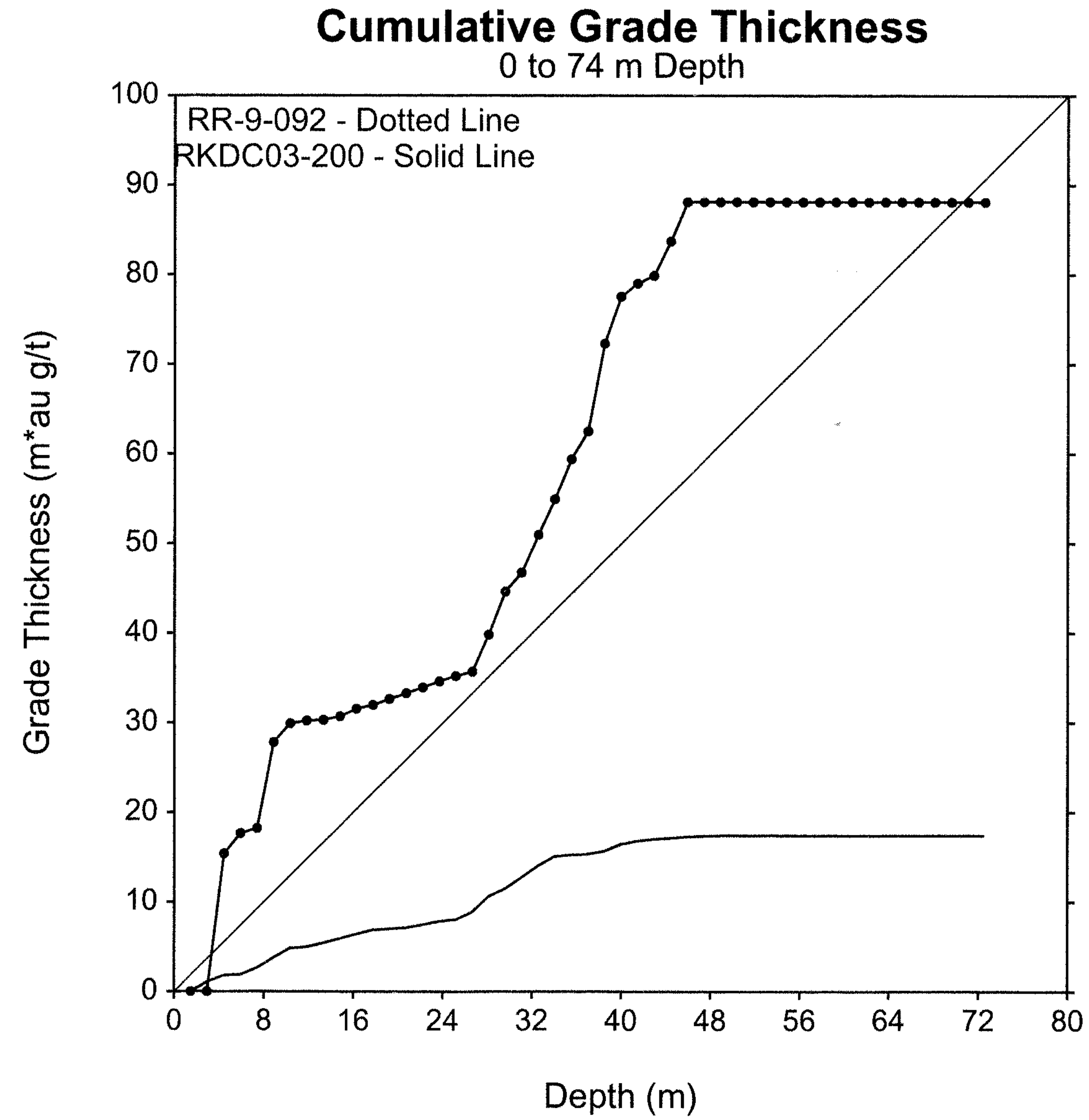
0 to 74 m Depth



24A

D


RR-9-092
N 27
m 2.07
Cv 1.07
Intervals Trimmed by Depth 0
Intervals Trimmed by Grade 3
Minimum/Maximum Depth Threshold 0.0,74.0
Minimum Grade Threshold 0.00
RKDC03-200
N 25
m 0.35
Cv 0.94
Intervals Trimmed by Depth 0
Intervals Trimmed by Grade 0
Horiz. Separation
7.6
7.4
No Sample
au g/t
au g/t
Separation (m)


Cumulative Grade Thickness
0 to 74 m Depth
RR-9-092 - Dotted Line
RKDC03-200 - Solid Line
Grade Thickness (m*au g/t)
Depth (m)

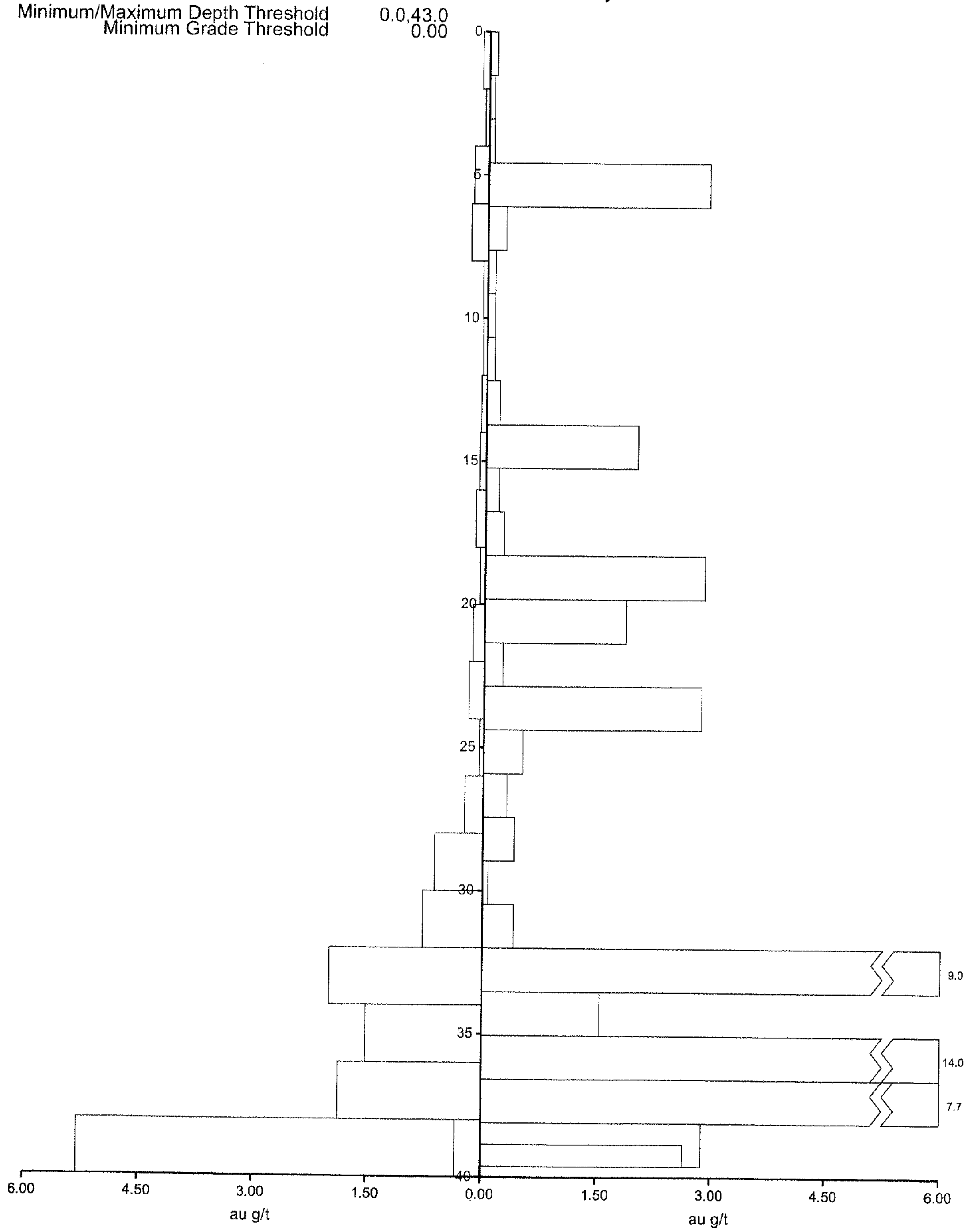
25A
C

RKDC03-205

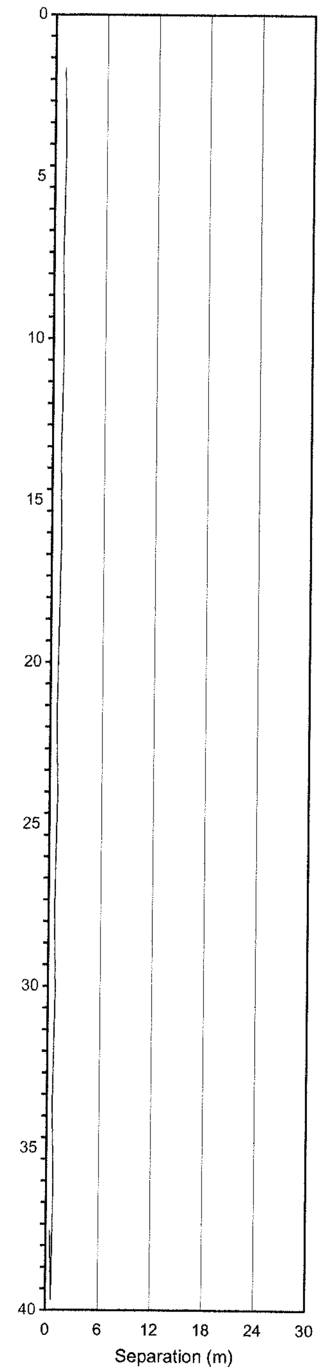
N 21
m 0.67
Cv 1.77
Intervals Trimmed by Depth 17
Intervals Trimmed by Grade 0
Minimum/Maximum Depth Threshold 0.0,43.0
Minimum Grade Threshold 0.00

RR-7-013

N 28
m 1.93
Cv 1.65
Intervals Trimmed by Depth 0
Intervals Trimmed by Grade 0

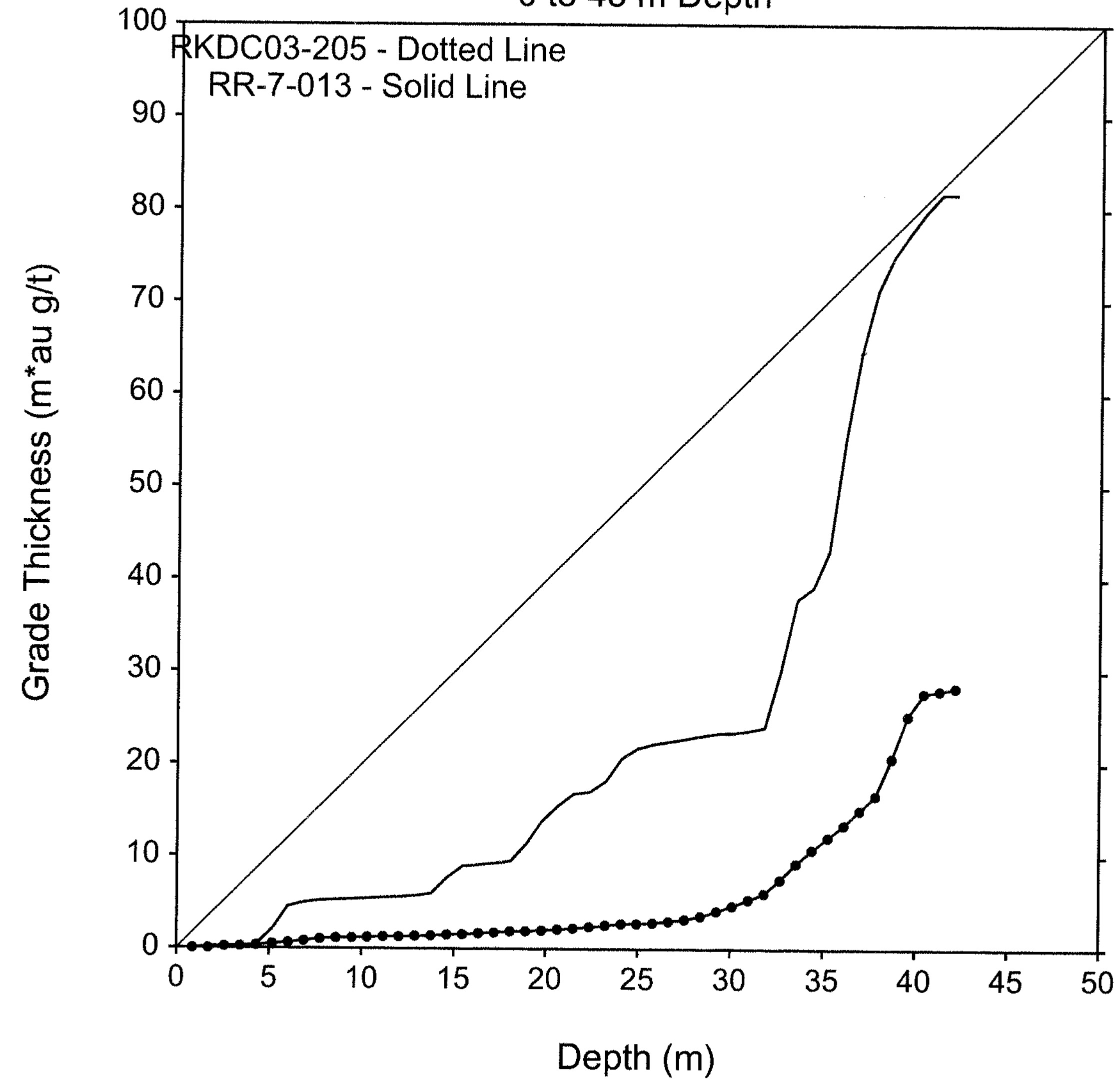


Horiz. Separation



Cumulative Grade Thickness

0 to 43 m Depth



26 A

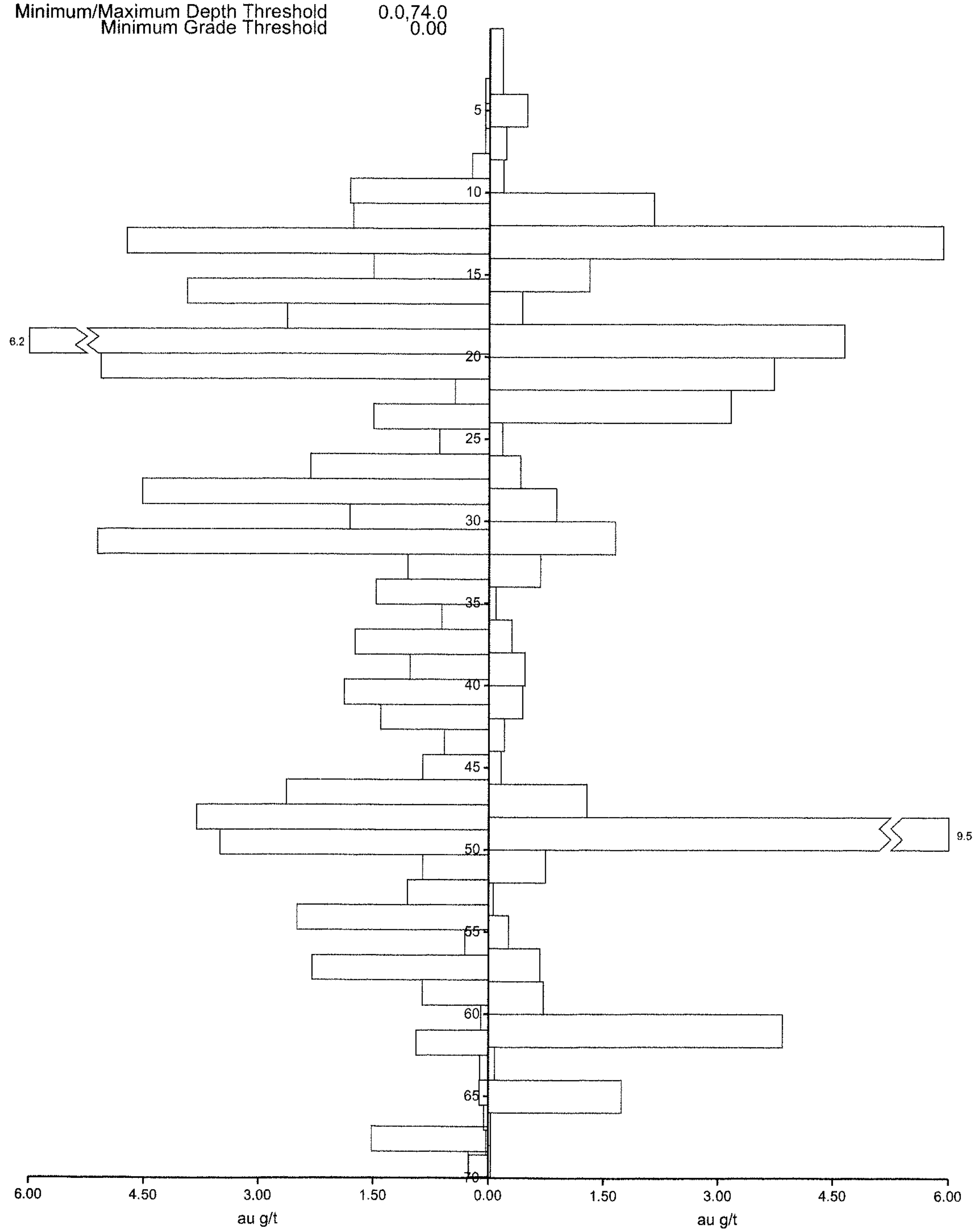
A -

RMR-4

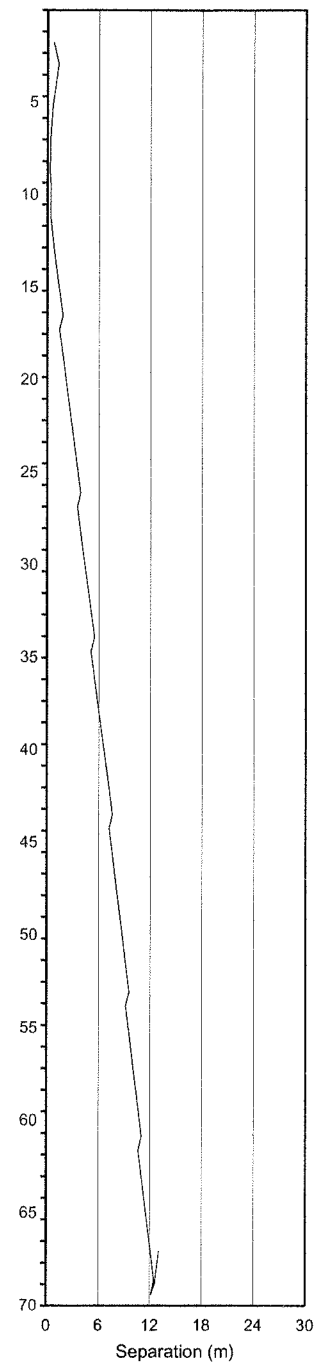
N	46
m	1.66
Cv	0.95
Intervals Trimmed by Depth	2
Intervals Trimmed by Grade	1
Minimum/Maximum Depth Threshold	0.0,74.0
Minimum Grade Threshold	0.00

RKDC03-204

N	36
m	1.27
Cv	1.55
Intervals Trimmed by Depth	4
Intervals Trimmed by Grade	0

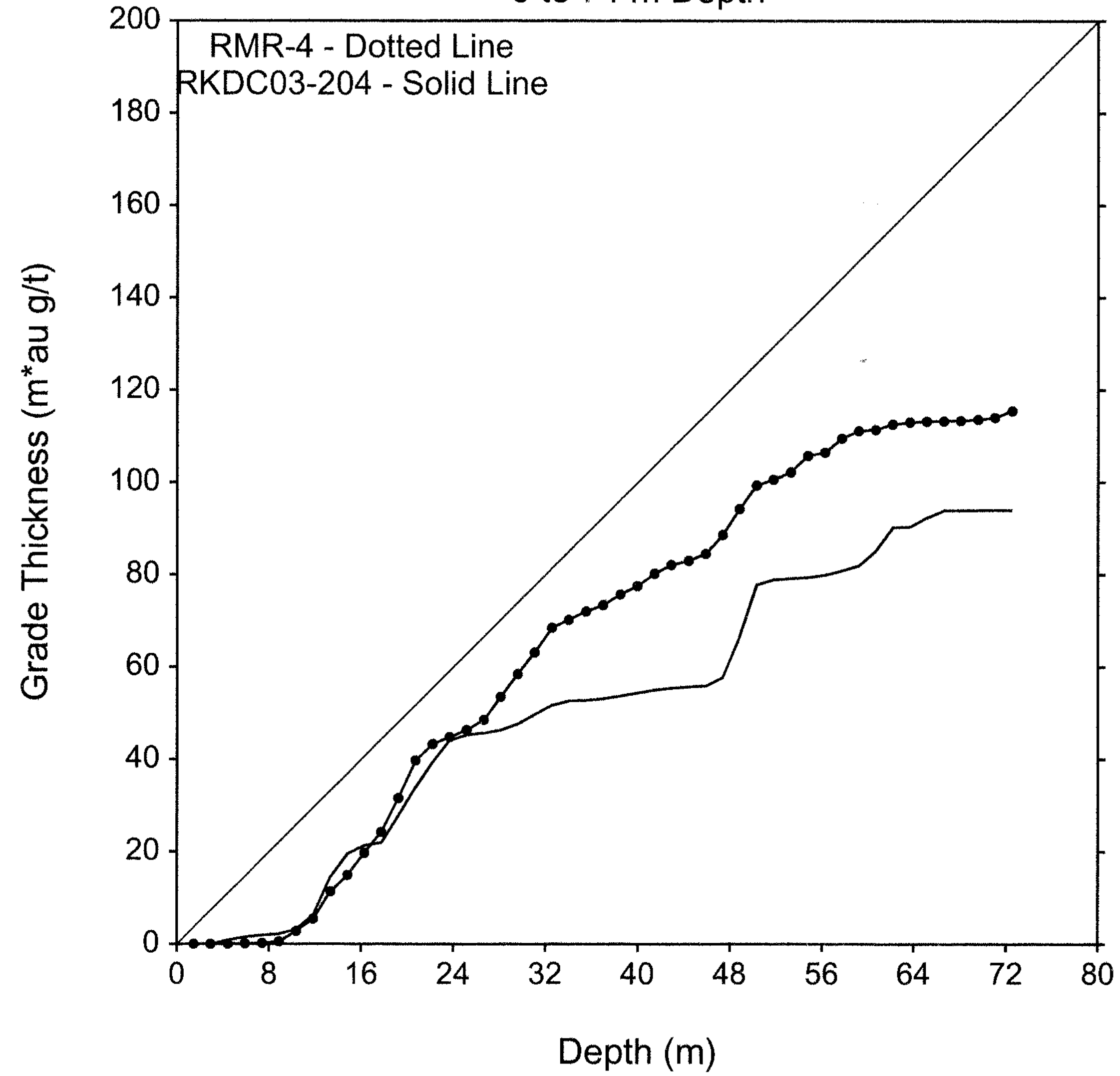


Horiz. Separation



Cumulative Grade Thickness

0 to 74 m Depth



27 A

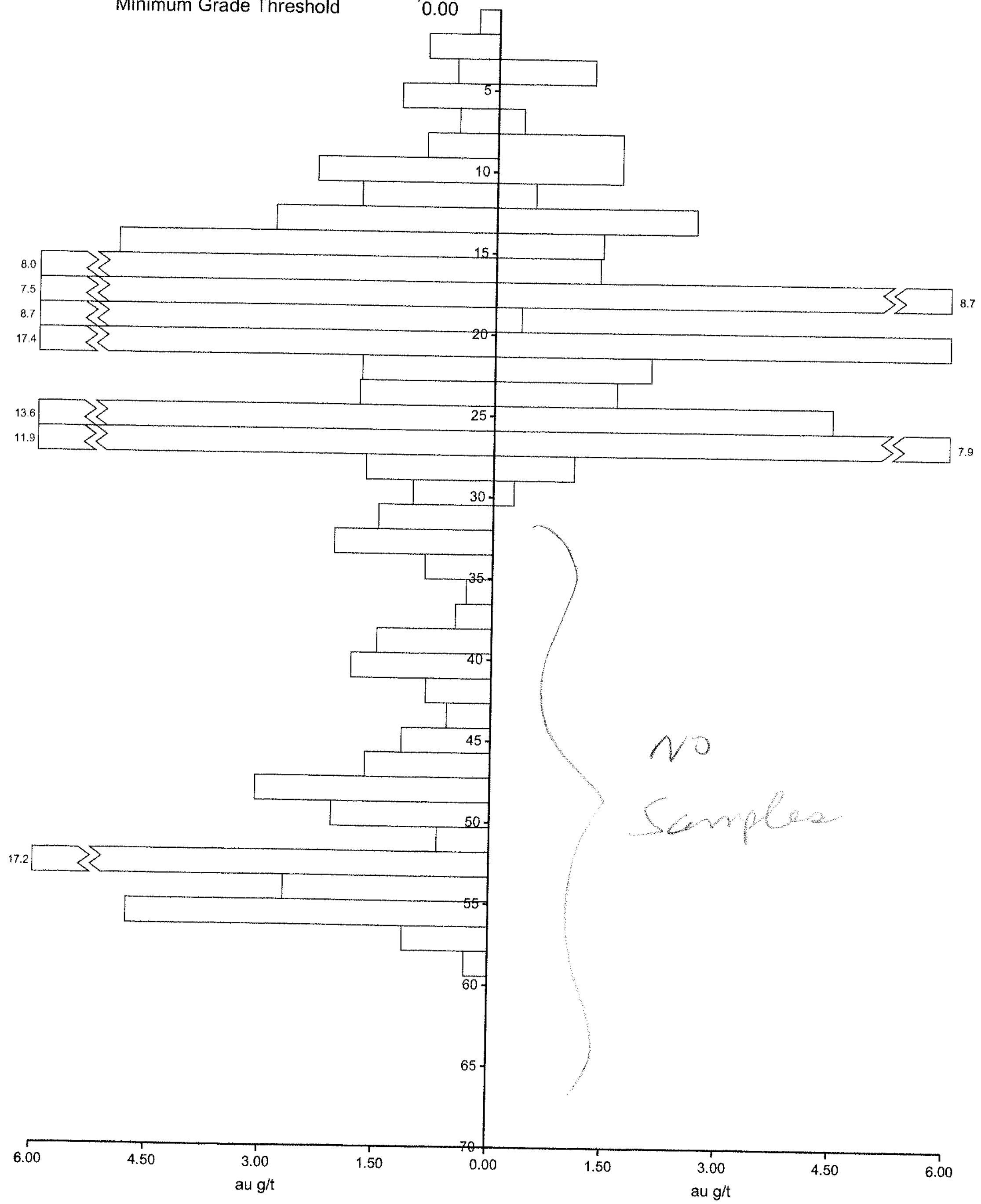
C

RR-7-002

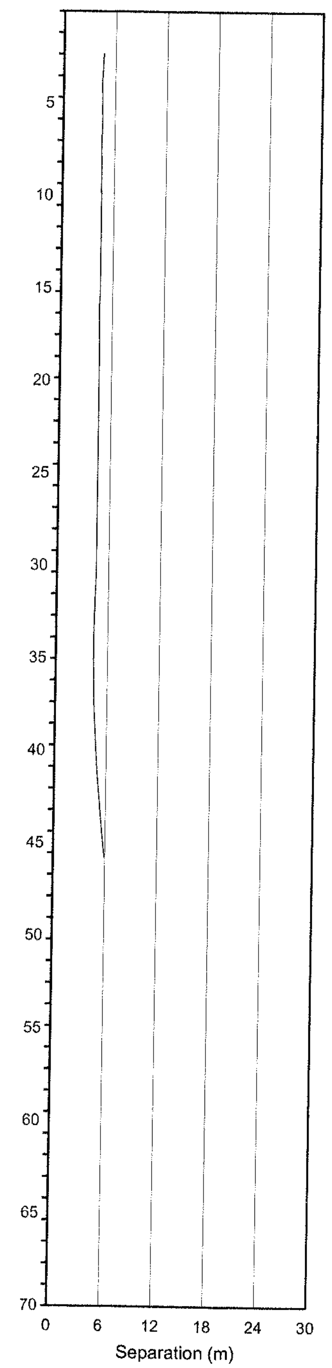
N 40
m 3.37
Cv 1.31
Intervals Trimmed by Depth 0
Intervals Trimmed by Grade 0
Minimum/Maximum Depth Threshold 0.0,74.0
Minimum Grade Threshold 0.00

RC-7-021

N 17
m 2.41
Cv 1.05
Intervals Trimmed by Depth 0
Intervals Trimmed by Grade 0

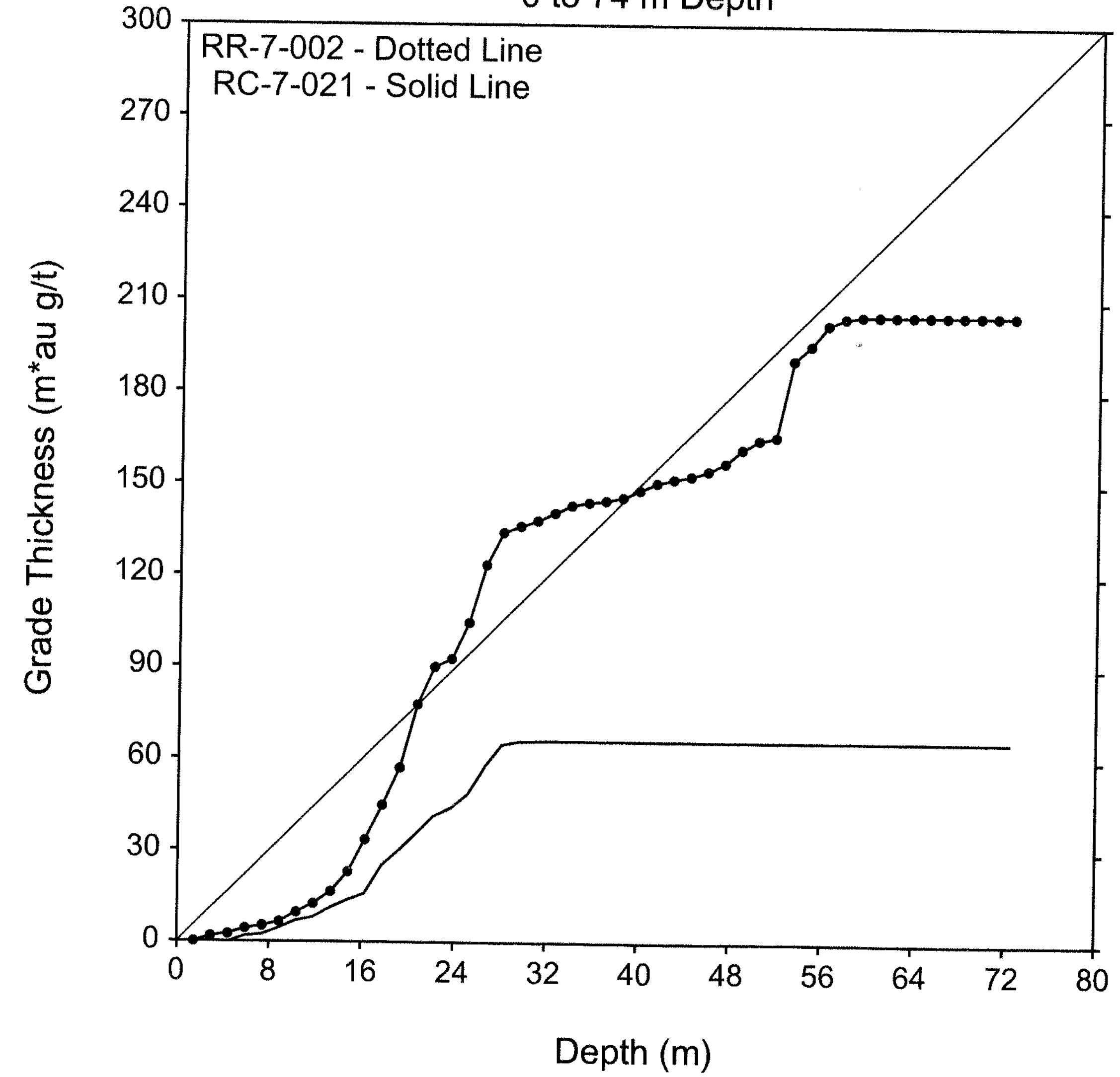


Horiz. Separation



Cumulative Grade Thickness

0 to 74 m Depth



28 A

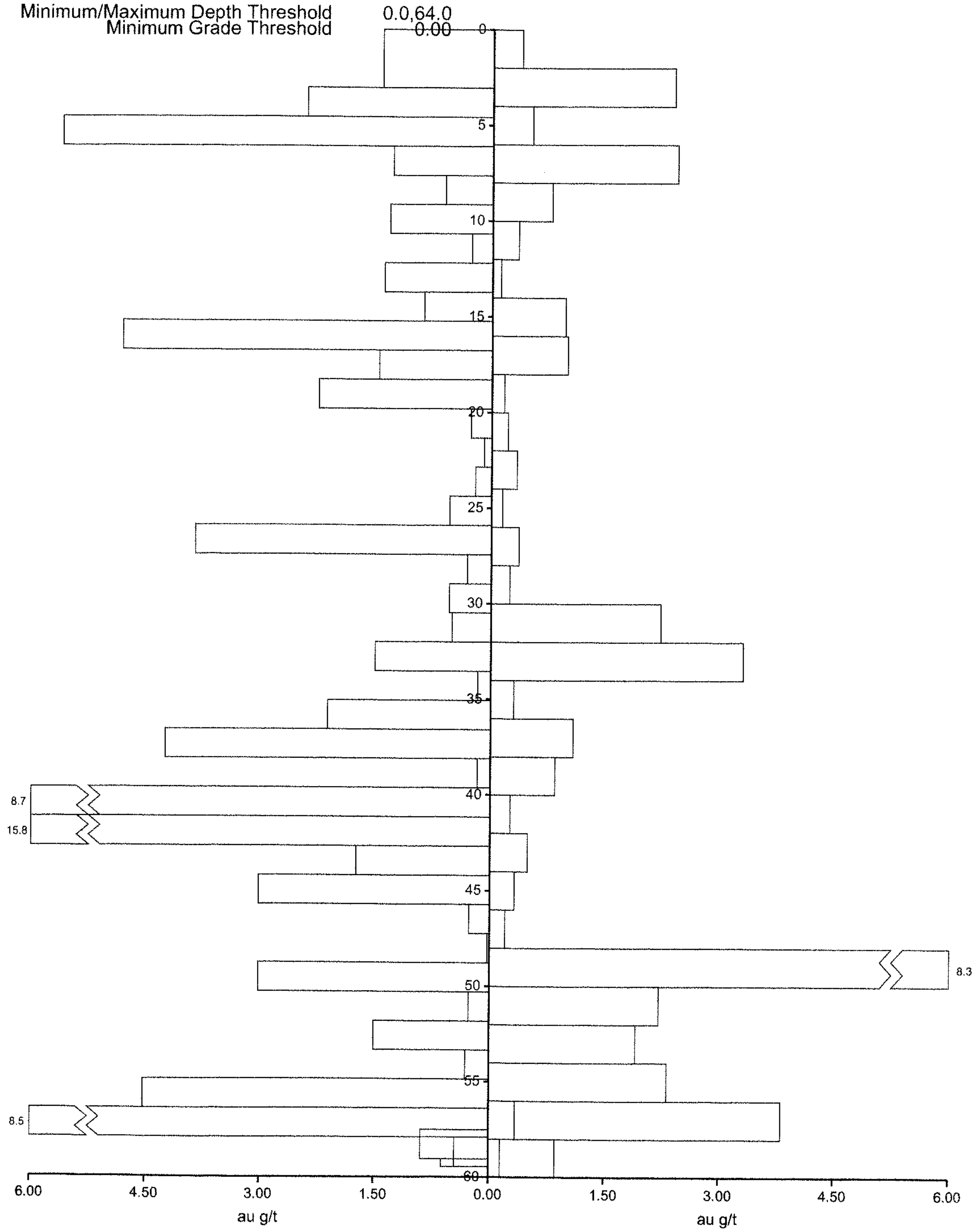
B

RR-8-090

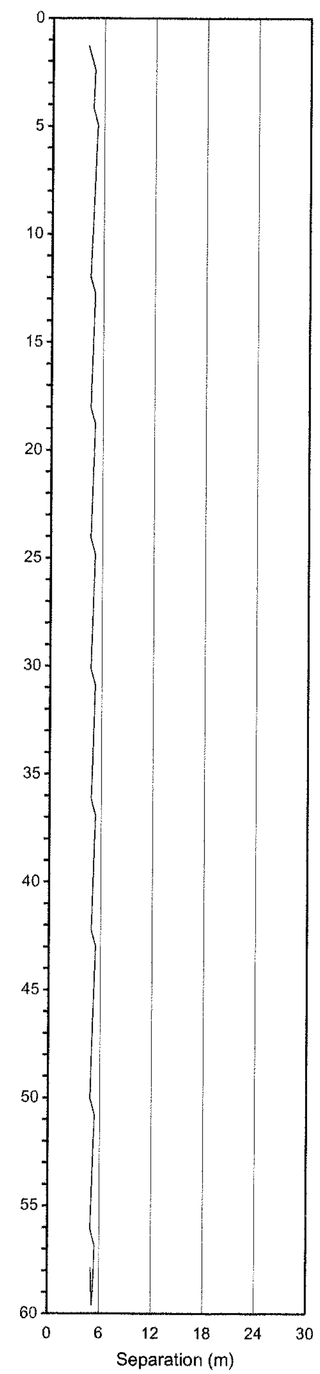
N	41
m	2.13
Cv	1.39
Intervals Trimmed by Depth	0
Intervals Trimmed by Grade	0
Minimum/Maximum Depth Threshold	0.0,64.0
Minimum Grade Threshold	0.00

RKDC03-196

N	32
m	1.23
Cv	1.32
Intervals Trimmed by Depth	3
Intervals Trimmed by Grade	0

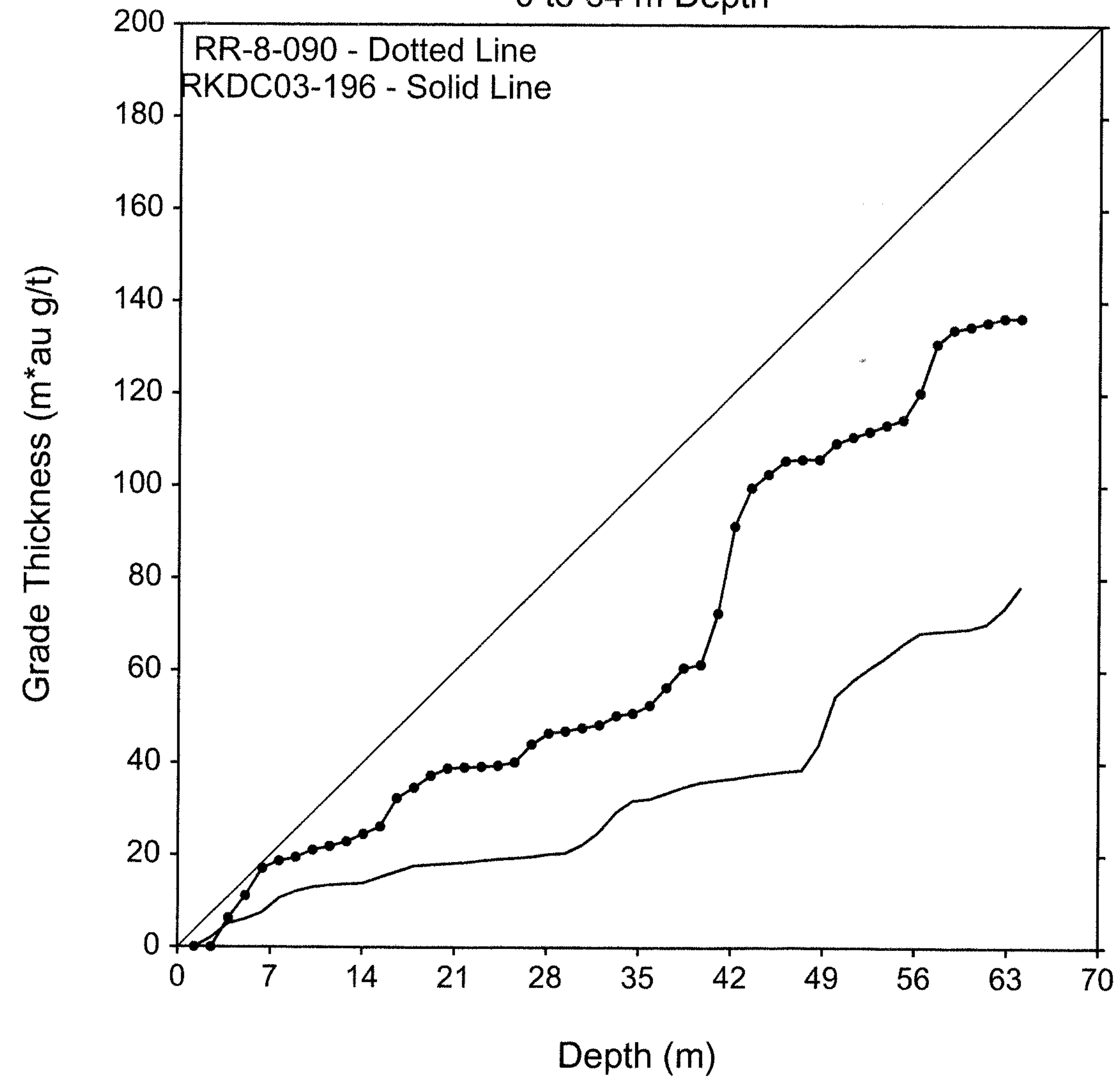


Horiz. Separation



Cumulative Grade Thickness

0 to 64 m Depth



29A

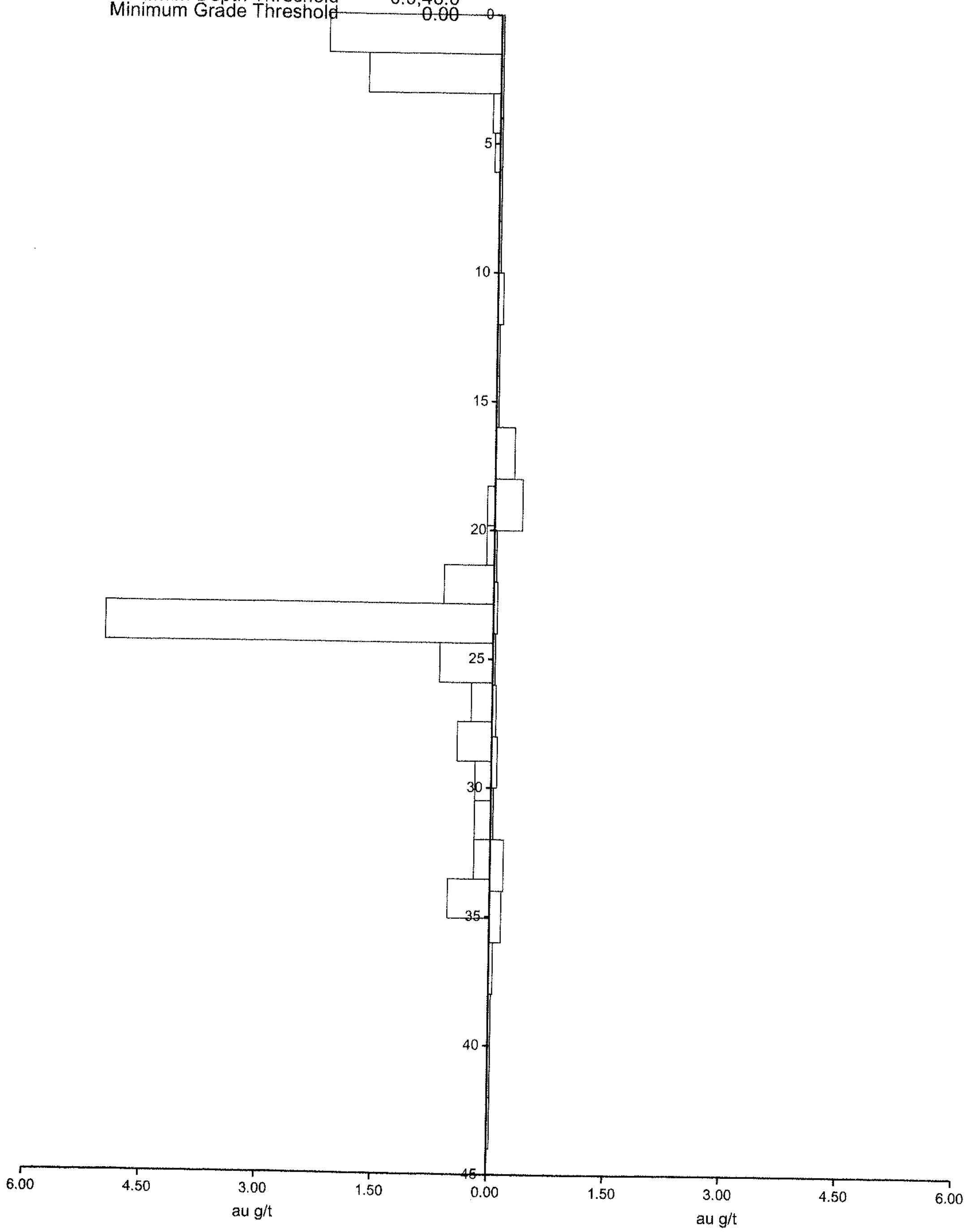
D

RCR-4-21

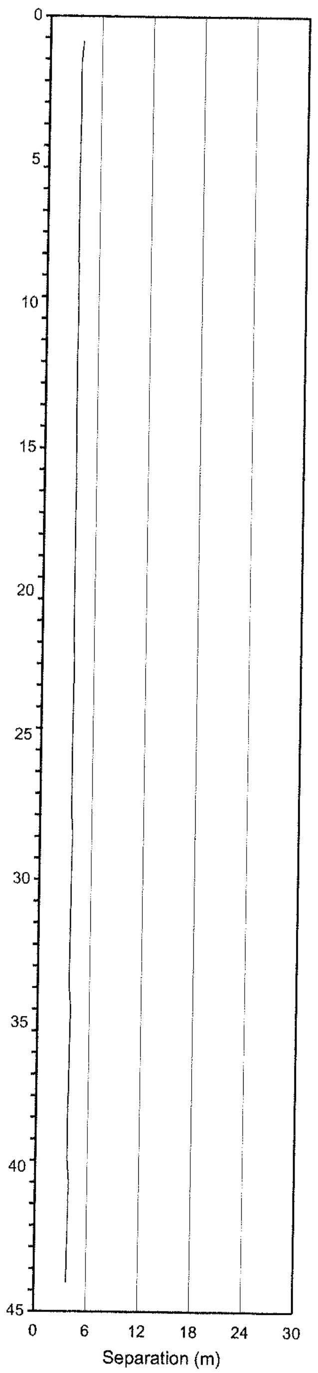
N	15
m	0.84
Cv	1.51
Intervals Trimmed by Depth	0
Intervals Trimmed by Grade	15
Minimum/Maximum Depth Threshold	0.0,46.0
Minimum Grade Threshold	0.00

RKDC03-201

N	23
m	0.07
Cv	1.16
Intervals Trimmed by Depth	2
Intervals Trimmed by Grade	0

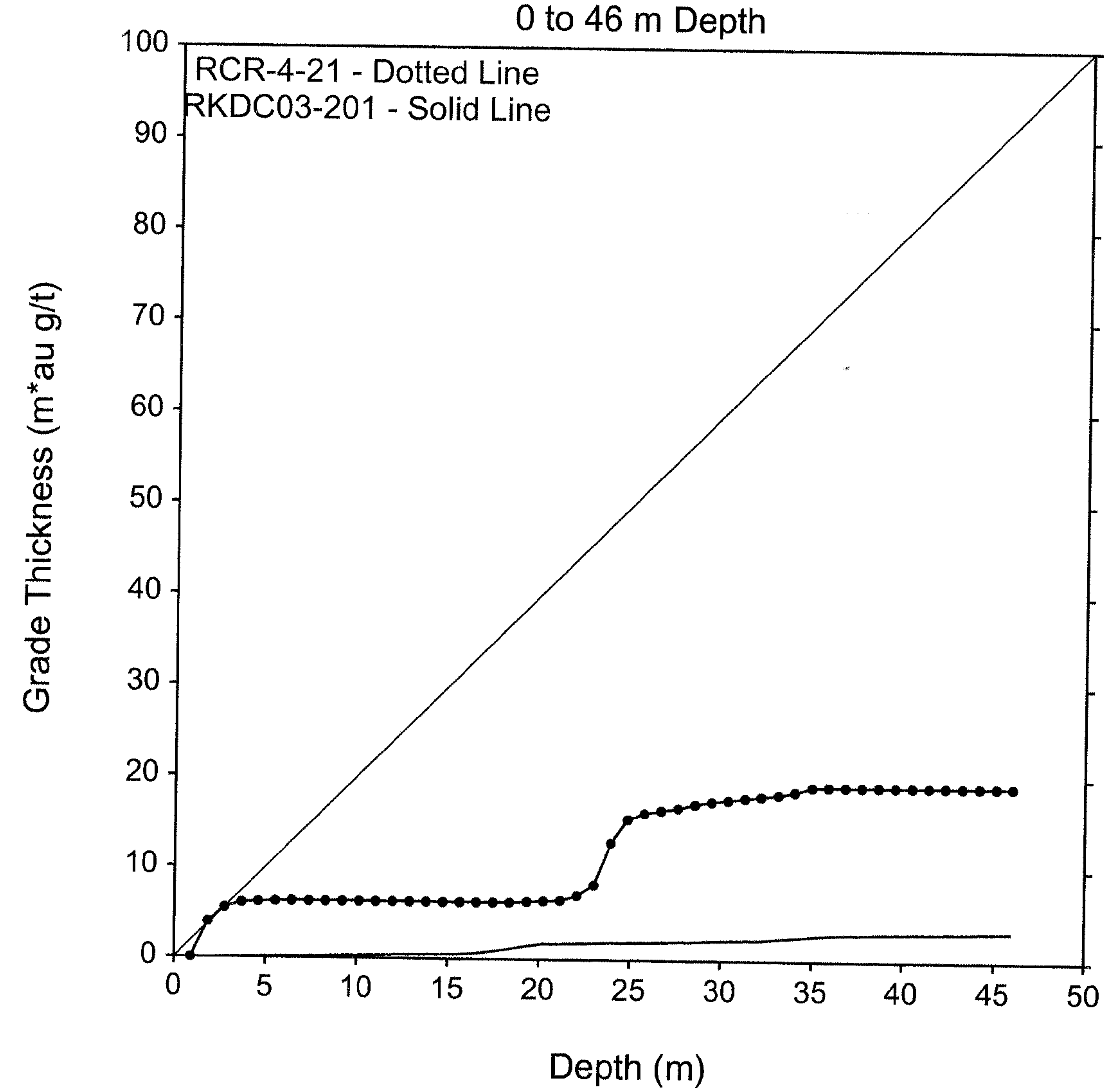


Horiz. Separation



Cumulative Grade Thickness

0 to 46 m Depth



30 A

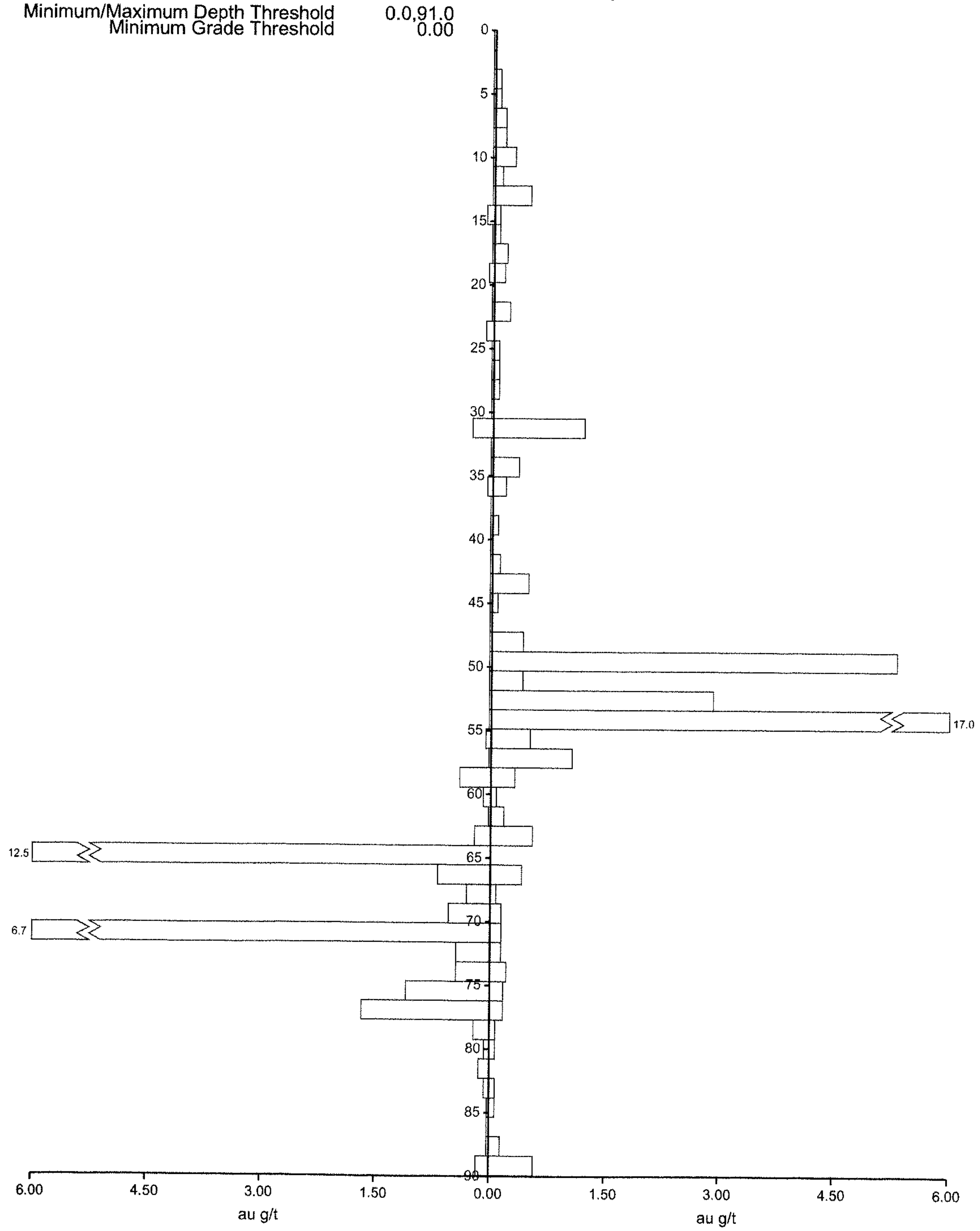
A

RC-8-037

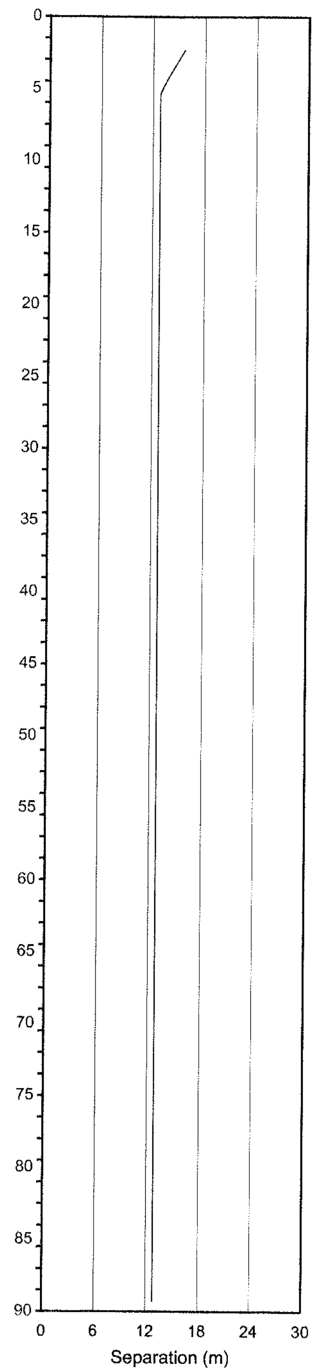
N 59
m 0.47
Cv 3.88
Intervals Trimmed by Depth 26
Intervals Trimmed by Grade 0
Minimum/Maximum Depth Threshold 0.0,91.0
Minimum Grade Threshold 0.00

AC92-005

N 47
m 0.76
Cv 3.35
Intervals Trimmed by Depth 1
Intervals Trimmed by Grade 10

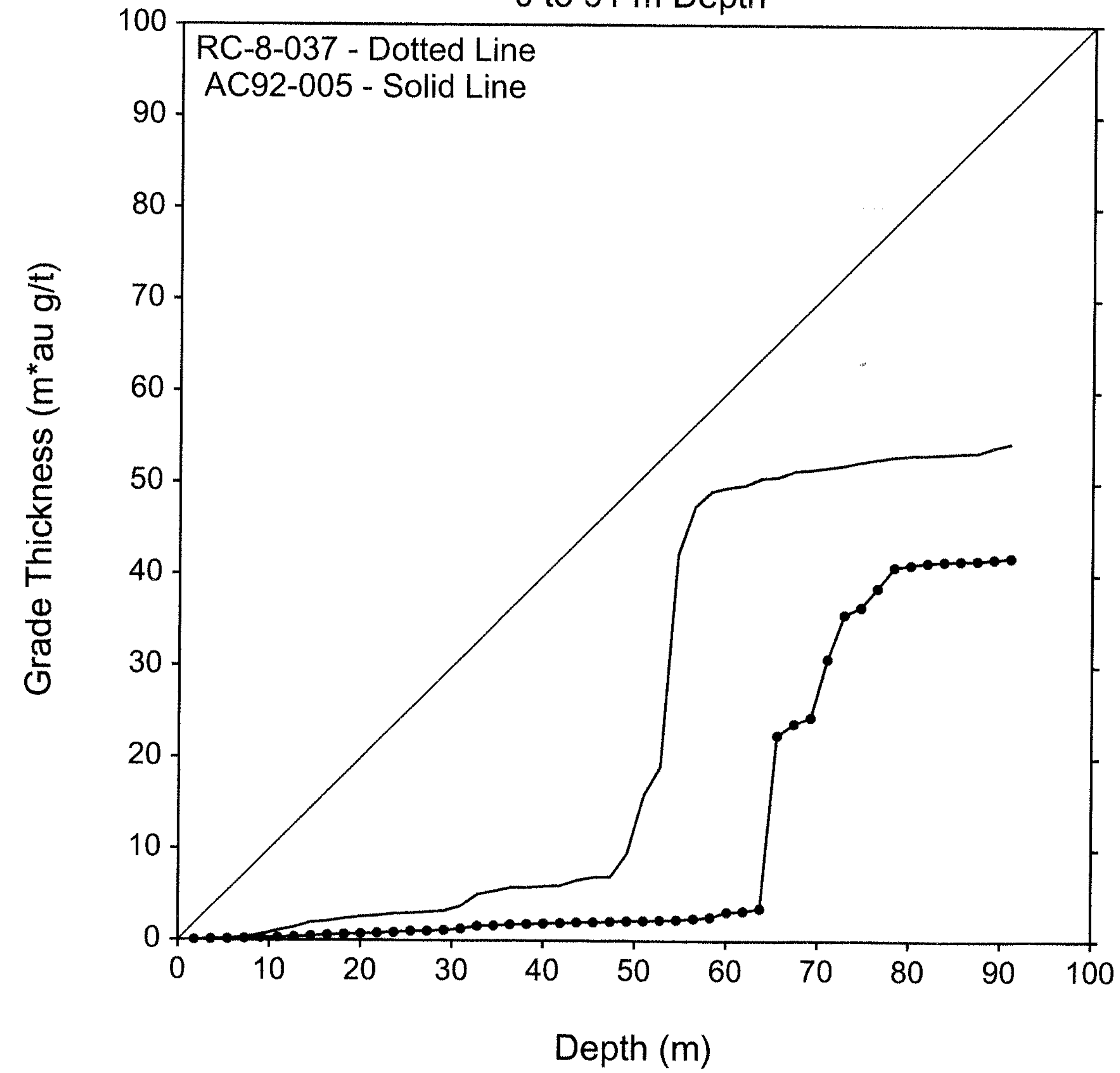


Horiz. Separation



Cumulative Grade Thickness

0 to 91 m Depth



A-11 RC Rejection Summary

2004 Rock Creek RC Sample Rejection

dh-id	from	to	Rejec	lngth	auorg	rc_recov	minzn	Reject	Odden Comments
RKRC04-023	1.52	3.05	9	1.53	0.77	11	1	Reject	Low sample weight
RKRC04-023	3.05	4.57	9	1.52	0.29	6	1	Reject	Low sample weight
RKRC04-026	7.62	9.14	9	1.52	1.22	221	1	Reject	No gold above, but big sample weight
RKRC04-026	9.14	10.67	9	1.53	0.21	129	1	Reject	No gold above, but big sample weight
RKRC04-028	4.57	6.10	9	1.53	0.43	16	1	Reject	Low sample weight
RKRC04-028	6.10	7.62	9	1.52	0.40	6	1	Reject	Low sample weight
RKRC04-034	7.62	9.14	9	1.52	0.14	150	2	Reject	Reject: First sample below casing
RKRC04-036	7.62	9.14	9	1.52	0.41	176	2	Reject	Bottom of casing
RKRC04-039	1.52	3.05	9	1.53	0.09	12	99	Reject	Low return

Rejected RC Intervals

Holeid	From	To	Rejection Code
RCR-4-19	12.19	13.72	9
RCR-4-19	13.72	15.24	9
RCR-4-19	15.24	16.76	9
RCR-4-19	16.76	18.29	9
RCR-4-19	18.29	19.81	9
RCR-4-19	19.81	21.34	9
RMR-4	32	33.53	9
RMR-4	33.53	35.05	9
RMR-4	35.05	36.58	9
RMR-4	36.58	38.1	9
RMR-4	38.1	39.62	9
RMR-4	39.62	41.15	9
RMR-4	41.15	42.67	9
RMR-4	42.67	44.2	9
RMR-4	44.2	45.72	9
RMR-4	45.72	47.24	9
RMR-4	47.24	48.77	9
RMR-5	50.29	51.82	9
RMR-5	51.82	53.34	9
RMR-5	53.34	54.86	9
RMR-5	54.86	56.39	9
RMR-5	56.39	57.91	9
RMR-5	57.91	59.44	9
RMR-5	59.44	60.96	9
RMR-5	60.96	62.48	9
RR-0-02	19.81	21.34	9
RR-0-02	21.34	22.86	9
RR-0-02	22.86	24.38	9
RR-0-02	24.38	25.91	9
RR-0-08	103.63	105.16	9
RR-0-08	105.16	106.68	9
RR-0-08	106.68	108.2	9
RR-0-08	108.2	109.73	9
RR-0-08	109.73	111.25	9
RR-0-08	111.25	112.78	9
RR-0-08	112.78	114.3	9
RR-0-08	114.3	115.82	9
RR-0-08	115.82	117.35	9

RR-0-08	117.35	118.87	9
RR-0-08	118.87	120.4	9
RR-0-08	120.4	121.92	9
RR-0-09	68.58	70.1	9
RR-0-09	70.1	71.63	9
RR-0-09	71.63	73.15	9
RR-0-09	73.15	74.68	9
RR-0-09	74.68	76.2	9
RR-0-09	76.2	77.72	9
RR-0-09	77.72	79.25	9
RR-0-09	79.25	80.77	9
RR-0-09	80.77	82.3	9
RR-0-15	71.63	73.15	9
RR-0-15	73.15	74.68	9
RR-0-15	74.68	76.2	9
RR-0-15	76.2	77.72	9
RR-0-15	77.72	79.25	9
RR-0-15	79.25	80.77	9
RR-0-15	80.77	82.3	9
RR-0-15	82.3	83.82	9
RR-0-15	83.82	85.34	9
RR-0-19	30.48	32	9
RR-0-19	32	33.53	9
RR-0-19	33.53	35.05	9
RR-8-026	19.81	21.34	9
RR-8-026	21.34	22.86	9
RR-8-026	22.86	24.38	9
RR-8-028	28.96	30.48	9
RR-8-028	30.48	32	9
RR-8-028	32	33.53	9
RR-8-028	33.53	35.05	9
RR-8-028	35.05	36.58	9
RR-8-028	36.58	38.1	9
RR-8-028	38.1	39.62	9
RR-8-028	39.62	41.15	9
RR-8-028	41.15	42.67	9
RR-8-028	42.67	44.2	9
RR-8-028	44.2	45.72	9
RR-8-028	45.72	47.24	9
RR-8-028	47.24	48.77	9

RR-8-028	48.77	50.29	9
RR-8-028	50.29	51.82	9
RR-8-042	24.38	25.91	9
RR-8-042	25.91	27.43	9
RR-8-042	27.43	28.96	9
RR-8-042	28.96	30.48	9
RR-8-042	30.48	32	9
RR-8-042	32	33.53	9
RR-8-042	33.53	35.05	9
RR-8-042	35.05	36.58	9
RR-8-042	36.58	38.1	9
RR-8-042	38.1	39.62	9
RR-8-042	39.62	41.15	9
RR-8-042	41.15	42.67	9
RR-8-042	42.67	44.2	9
RR-8-042	44.2	45.72	9
RR-8-042	45.72	47.24	9
RR-8-042	47.24	48.77	9
RR-8-042	48.77	50.29	9
RR-8-042	50.29	51.82	9
RR-8-042	51.82	53.34	9
RR-8-068	18.29	19.81	9
RR-8-068	19.81	21.34	9
RR-8-071	64.01	65.53	9
RR-8-071	65.53	67.06	9
RR-8-071	67.06	67.97	9
RR-8-072	54.86	67.06	9
RR-9-092	25.91	27.43	9
RR-9-092	27.43	28.96	9
RR-9-092	28.96	30.48	9
RR-9-092	30.48	32	9
RR-9-092	32	33.53	9
RR-9-092	33.53	35.05	9
RR-9-092	35.05	36.58	9
RR-9-092	36.58	38.1	9
RR-9-092	38.1	39.62	9
RR-9-092	39.62	41.15	9
RR-9-092	41.15	42.67	9
RR-9-092	42.67	44.2	9
RR-9-092	44.2	45.72	9

RR-9-092	45.72	46.63	9
RR-9-092	46.63	47	9

Rejected RC Intervals

Holeid	From	To	Rejection Code
RCR-4-19	12.19	13.72	9
RCR-4-19	13.72	15.24	9
RCR-4-19	15.24	16.76	9
RCR-4-19	16.76	18.29	9
RCR-4-19	18.29	19.81	9
RCR-4-19	19.81	21.34	9
RMR-4	32	33.53	9
RMR-4	33.53	35.05	9
RMR-4	35.05	36.58	9
RMR-4	36.58	38.1	9
RMR-4	38.1	39.62	9
RMR-4	39.62	41.15	9
RMR-4	41.15	42.67	9
RMR-4	42.67	44.2	9
RMR-4	44.2	45.72	9
RMR-4	45.72	47.24	9
RMR-4	47.24	48.77	9
RMR-5	50.29	51.82	9
RMR-5	51.82	53.34	9
RMR-5	53.34	54.86	9
RMR-5	54.86	56.39	9
RMR-5	56.39	57.91	9
RMR-5	57.91	59.44	9
RMR-5	59.44	60.96	9
RMR-5	60.96	62.48	9
RR-0-02	19.81	21.34	9
RR-0-02	21.34	22.86	9
RR-0-02	22.86	24.38	9
RR-0-02	24.38	25.91	9
RR-0-08	103.63	105.16	9
RR-0-08	105.16	106.68	9
RR-0-08	106.68	108.2	9
RR-0-08	108.2	109.73	9
RR-0-08	109.73	111.25	9
RR-0-08	111.25	112.78	9
RR-0-08	112.78	114.3	9
RR-0-08	114.3	115.82	9
RR-0-08	115.82	117.35	9

RR-0-08	117.35	118.87	9
RR-0-08	118.87	120.4	9
RR-0-08	120.4	121.92	9
RR-0-09	68.58	70.1	9
RR-0-09	70.1	71.63	9
RR-0-09	71.63	73.15	9
RR-0-09	73.15	74.68	9
RR-0-09	74.68	76.2	9
RR-0-09	76.2	77.72	9
RR-0-09	77.72	79.25	9
RR-0-09	79.25	80.77	9
RR-0-09	80.77	82.3	9
RR-0-15	71.63	73.15	9
RR-0-15	73.15	74.68	9
RR-0-15	74.68	76.2	9
RR-0-15	76.2	77.72	9
RR-0-15	77.72	79.25	9
RR-0-15	79.25	80.77	9
RR-0-15	80.77	82.3	9
RR-0-15	82.3	83.82	9
RR-0-15	83.82	85.34	9
RR-0-19	30.48	32	9
RR-0-19	32	33.53	9
RR-0-19	33.53	35.05	9
RR-8-026	19.81	21.34	9
RR-8-026	21.34	22.86	9
RR-8-026	22.86	24.38	9
RR-8-028	28.96	30.48	9
RR-8-028	30.48	32	9
RR-8-028	32	33.53	9
RR-8-028	33.53	35.05	9
RR-8-028	35.05	36.58	9
RR-8-028	36.58	38.1	9
RR-8-028	38.1	39.62	9
RR-8-028	39.62	41.15	9
RR-8-028	41.15	42.67	9
RR-8-028	42.67	44.2	9
RR-8-028	44.2	45.72	9
RR-8-028	45.72	47.24	9
RR-8-028	47.24	48.77	9

RR-8-028	48.77	50.29	9
RR-8-028	50.29	51.82	9
RR-8-042	24.38	25.91	9
RR-8-042	25.91	27.43	9
RR-8-042	27.43	28.96	9
RR-8-042	28.96	30.48	9
RR-8-042	30.48	32	9
RR-8-042	32	33.53	9
RR-8-042	33.53	35.05	9
RR-8-042	35.05	36.58	9
RR-8-042	36.58	38.1	9
RR-8-042	38.1	39.62	9
RR-8-042	39.62	41.15	9
RR-8-042	41.15	42.67	9
RR-8-042	42.67	44.2	9
RR-8-042	44.2	45.72	9
RR-8-042	45.72	47.24	9
RR-8-042	47.24	48.77	9
RR-8-042	48.77	50.29	9
RR-8-042	50.29	51.82	9
RR-8-042	51.82	53.34	9
RR-8-068	18.29	19.81	9
RR-8-068	19.81	21.34	9
RR-8-071	64.01	65.53	9
RR-8-071	65.53	67.06	9
RR-8-071	67.06	67.97	9
RR-8-072	54.86	67.06	9
RR-9-092	25.91	27.43	9
RR-9-092	27.43	28.96	9
RR-9-092	28.96	30.48	9
RR-9-092	30.48	32	9
RR-9-092	32	33.53	9
RR-9-092	33.53	35.05	9
RR-9-092	35.05	36.58	9
RR-9-092	36.58	38.1	9
RR-9-092	38.1	39.62	9
RR-9-092	39.62	41.15	9
RR-9-092	41.15	42.67	9
RR-9-092	42.67	44.2	9
RR-9-092	44.2	45.72	9

RR-9-092	45.72	46.63	9
RR-9-092	46.63	47	9

2004 Rock Creek RC Sample Rejection

dh-id	from	to	Rejec	lngth	auorg	rc_recov	minzn	Reject	Odden Comments
RKRC04-023	1.52	3.05	9	1.53	0.77	11	1	Reject	Low sample weight
RKRC04-023	3.05	4.57	9	1.52	0.29	6	1	Reject	Low sample weight
RKRC04-026	7.62	9.14	9	1.52	1.22	221	1	Reject	No gold above, but big sample weight
RKRC04-026	9.14	10.67	9	1.53	0.21	129	1	Reject	No gold above, but big sample weight
RKRC04-028	4.57	6.10	9	1.53	0.43	16	1	Reject	Low sample weight
RKRC04-028	6.10	7.62	9	1.52	0.40	6	1	Reject	Low sample weight
RKRC04-034	7.62	9.14	9	1.52	0.14	150	2	Reject	Reject: First sample below casing
RKRC04-036	7.62	9.14	9	1.52	0.41	176	2	Reject	Bottom of casing
RKRC04-039	1.52	3.05	9	1.53	0.09	12	99	Reject	Low return

A-12 H.M. Parker 2004 Site Visit

A-13 Downhole RC & DDH Composites > 1.0 g/t

Drill Hole ID	Easting (m)	Northing (m)	Elevation (m)	From (m)	To (m)	Length (m)	Gold (g/t)
AC92-005	339.49	1136.19	85.41	45	50	5	1.444
AC92-005	343.02	1136.19	81.88	50.31	55	4.69	5.819
AR92-002	345.76	1225.93	87.88	50	55	5	1.346
DDH90-1	421.88	454.64	-111.68	200	205	5	1.167
RC-7-001	421.45	460.16	70.7	7.77	10	2.23	4.216
RC-7-001	428.52	460.16	63.63	15	20	5	1.052
RC-7-002	477.92	455.26	74.63	15	20	5	3.844
RC-7-002	481.46	455.26	71.09	20	25	5	1.377
RC-7-002	552.17	455.26	0.38	121.56	125	3.44	1.553
RC-7-004	374.2	457.43	50.8	30	31.39	1.39	8.118
RC-7-005	386.33	455.45	60.09	22.14	25	2.86	1.2
RC-7-005	400.47	455.45	45.95	40	45	5	1.105
RC-7-005	404.01	455.45	42.41	46.53	50	3.47	2.5
RC-7-005	407.54	455.45	38.88	53.05	55	1.95	2.907
RC-7-006	423.68	336.42	46.48	36.58	40	3.42	1.147
RC-7-006	437.82	336.42	32.34	58.05	60	1.95	2.224
RC-7-006	441.35	336.42	28.81	60	65	5	1.273
RC-7-007	374.52	600.6	17.94	90	94.03	4.03	1.297
RC-7-009	388	517.66	67.63	15	20	5	1.95
RC-7-009	391.54	517.66	64.09	20	25	5	2.79
RC-7-009	405.68	517.66	49.95	42.67	45	2.33	1.067
RC-7-009	426.9	517.66	28.73	70	75	5	1.553
RC-7-012	471.94	232.07	66.23	3.35	5	1.65	1.124
RC-7-013	384.06	269.03	32.73	70	75	5	1.78
RC-7-014	318.19	771.22	60.95	40	45	5	2.602
RC-7-014	377.22	771.22	1.92	125	126.95	1.95	4.304
RC-7-015	421.88	260.44	63.16	11.52	15	3.48	3.302
RC-7-015	464.31	260.44	20.73	70	75	5	1.023
RC-7-016	385.89	768.53	84.02	30	35	5	5.36
RC-7-016	400.03	768.53	69.88	50	55	5	1.614
RC-7-020	434.53	594.44	86.16	11.58	15	3.42	1.439
RC-7-020	459.28	594.44	61.41	45	50	5	2.492
RC-7-020	462.81	594.44	57.88	50	55	5	2.729
RC-7-020	466.35	594.44	54.34	55	60	5	1.474
RC-7-020	469.32	594.44	51.37	60	63.4	3.4	1.646
RC-7-021	404.29	515.01	68.69	10.67	15	4.33	1.529
RC-7-021	405.16	515.01	63.77	15	20	5	3.47
RC-7-021	406.03	515.01	58.84	20	25	5	3.275
RC-7-021	406.9	515.01	53.92	25	30	5	3.601
RC-7-023	395.31	517.86	78.84	4.27	5	0.73	4.388
RC-7-023	397.81	517.86	74.5	5	10	5	1.136
RC-7-023	407.81	517.86	57.18	26.04	30	3.96	3.934
RC-7-023	412.81	517.86	48.52	36.52	40	3.48	1.076
RC-7-023	415.31	517.86	44.19	40	45	5	1.955
RC-7-023	422.81	517.86	31.2	55	60	5	1.071
RC-7-023	425.31	517.86	26.87	60	65	5	1.605
RC-7-023	447.81	517.86	-12.1	105	110	5	6.521
RC-7-023	450.31	517.86	-16.43	110	115	5	1.01
RC-7-024	472.61	401.21	34.34	55	60	5	4.978
RC-8-025	435.31	763.85	101.63	15.19	20	4.81	1.432

RC-8-025	477.74	763.85	59.2	75	80	5	1.783
RC-8-027	374.79	892.72	9.79	120	121.01	1.01	1.699
RC-8-028	386.51	891.07	80.48	35	40	5	4.282
RC-8-031	683.57	392.95	91.7	6.1	10	3.9	1.335
RC-8-032	322.77	1018.72	70.88	50	55	5	1.704
RC-8-032	351.06	1018.72	42.59	90	95	5	4.719
RC-8-032	361.66	1018.72	31.99	105	110	5	4.284
RC-8-032	364.09	1018.72	29.56	110	111.86	1.86	5.629
RC-8-033	353.51	1017.5	109.16	10	15	5	1.539
RC-8-033	360.58	1017.5	102.09	20	25	5	1.736
RC-8-033	364.12	1017.5	98.55	25	30	5	2.517
RC-8-033	424.22	1017.5	38.45	110	115	5	1.172
RC-8-035	494.23	1023.2	119.55	25	30	5	1.675
RC-8-036	336.48	1147.01	110.63	16.1	20	3.9	1.376
RC-8-036	340.02	1147.01	107.09	21.64	24.99	3.35	18.214
RC-8-037	340.65	1146.72	76.81	60	65	5	2.564
RC-8-037	344.19	1146.72	73.27	65	70	5	1.783
RC-8-037	347.73	1146.72	69.73	70	75	5	2.388
RC-8-038	333.47	1276.88	71.66	80	85	5	5.441
RC-8-039	703.86	646.14	87.81	60	65	5	1.961
RC-8-039	709.63	646.14	82.04	70	71.32	1.32	25.864
RC92-001	414.28	428.09	57.09	20	25	5	2.564
RC92-001	421.35	428.09	50.02	30	35	5	1.405
RC92-001	460.24	428.09	11.13	85	90	5	1.507
RC92-002	456.93	427.78	74.7	6.71	10	3.29	1.357
RC92-002	467.54	427.78	64.09	20	25	5	2.007
RC92-002	471.08	427.78	60.55	25.91	30	4.09	4.662
RC92-002	492.29	427.78	39.34	55	60	5	1.203
RC92-003	390.51	772.48	84.02	30	35	5	17.542
RC92-003	394.05	772.48	80.48	35	40	5	1.179
RCC-4-01	434.69	463.89	61.09	20	25	5	6.494
RCC-4-01	413.48	463.89	39.88	50	55	5	1.149
RCC-4-01	409.94	463.89	36.34	55	60	5	4.051
RCC-4-01	406.41	463.89	32.81	60	65	5	11.946
RCC-4-01	402.87	463.89	29.27	65	70	5	3.081
RCC-4-01	399.34	463.89	25.73	70	75	5	2.197
RCC-4-01	395.8	463.89	22.2	75	80	5	1.812
RCC-4-01	388.73	463.89	15.13	85	90	5	2.084
RCC-4-02	498.71	462.39	74.09	20	25	5	2.468
RCC-4-02	491.64	462.39	67.02	30	35	5	1.16
RCC-4-02	477.5	462.39	52.88	50	55	5	3.699
RCC-4-02	473.96	462.39	49.34	55	60	5	1.081
RCC-4-02	470.43	462.39	45.81	60	65	5	6.85
RCC-4-02	466.89	462.39	42.27	65	70	5	4.083
RCC-4-02	449.21	462.39	24.59	90	95	5	2.356
RCC-4-03	493.54	529.15	90.7	5	10	5	2.025
RCC-4-03	490	529.15	87.16	10	15	5	3.023
RCC-4-03	486.47	529.15	83.63	15	20	5	1.973
RCC-4-03	479.39	529.15	76.55	25	30	5	1.754
RCC-4-03	468.79	529.15	65.95	40	45	5	1.506
RCC-4-03	461.72	529.15	58.88	50	55	5	1.3
RCC-4-03	422.83	529.15	19.99	105	110	5	1.395

RCC-4-03	419.29	529.15	16.45	110	115	5	3.128
RCC-4-04	495.75	588.06	34.99	105	110	5	2.259
RCC-4-04	492.21	588.06	31.45	110	115	5	1.548
RCC-4-04	488.68	588.06	27.91	115	120	5	2.541
RCC-4-04	485.15	588.06	24.39	120	124.97	4.97	2.313
RCC-4-05	299.39	264.72	64.09	20	25	5	1.196
RCC-4-07	503.99	589.28	90.84	15	20	5	1.283
RCC-4-07	498.99	589.28	82.18	25	30	5	3.813
RCC-4-07	496.49	589.28	77.85	30	35	5	3.005
RCC-4-07	491.49	589.28	69.19	40	45	5	1.372
RCC-4-07	476.49	589.28	43.21	70	75	5	1.114
RCC-4-07	473.99	589.28	38.88	75	80	5	1.075
RCC-4-07	468.99	589.28	30.22	85	90	5	1.085
RCC-4-07	466.49	589.28	25.89	90	95	5	2.822
RCC-4-07	457.2	589.28	9.8	110	112.17	2.17	4.079
RCC-4-08	529.46	525.23	71.95	40	45	5	2.705
RCC-4-08	525.92	525.23	68.41	45	50	5	2.076
RCC-4-08	515.32	525.23	57.81	60	65	5	1.982
RCC-4-08	504.71	525.23	47.2	75	80	5	2.62
RCC-4-08	501.17	525.23	43.66	80	85	5	6.749
RCC-4-08	490.57	525.23	33.06	95	100	5	1.819
RCC-4-09	577.57	461.48	73.09	20	25	5	1.491
RCC-4-09	570.5	461.48	66.02	30	35	5	10.852
RCC-4-09	542.22	461.48	37.73	72.24	75	2.76	3.058
RCC-4-09	524.54	461.48	20.06	95	100	5	1.299
RCC-4-10	543.31	651.28	83.88	50	55	5	1.182
RCC-4-11	382.92	761.88	82.02	30	35	5	1.146
RCC-4-11	386.46	761.88	78.48	35	40	5	1.861
RCC-4-11	397.06	761.88	67.88	50	55	5	3.77
RCC-5-12	537.69	320.15	22.53	50	55	5	2.008
RCC-5-13	507.62	319.26	66.23	4.57	5	0.43	1.269
RCC-5-13	489.94	319.26	48.55	25	30	5	1.418
RCC-5-14	432.26	287.92	62.7	7.32	10	2.68	4.366
RCC-5-14	435.8	287.92	59.16	10	15	5	2.144
RCC-5-14	460.55	287.92	34.41	45	50	5	1.204
RCC-5-16	515.64	653.96	17.91	115	120	5	1.034
RCC-5-17	526.82	464.2	74.09	20	25	5	1.027
RCC-5-18	642.62	516.85	76.95	40	45	5	1.082
RCC-5-18	645.33	514.58	73.41	45	50	5	1.227
RCC-5-19	471.67	713.17	91.55	25	30	5	1.506
RCC-5-19	499.95	713.17	63.27	65	70	5	1.702
RCC-5-19	507.02	713.17	56.2	75	80	5	1.265
RCC-5-19	510.56	713.17	52.66	80	85	5	1.537
RCC-5-20	391.65	589.36	70.09	20	25	5	1.061
RCC-5-20	409.33	589.36	52.41	45	50	5	1.604
RCC-5-20	465.9	589.36	-4.16	125	130	5	3.121
RCC-5-20	487.11	589.36	-25.37	155	160	5	4.092
RCC-5-21	355.27	777.61	68.48	35	40	5	2.168
RCC-5-21	369.41	777.61	54.34	55	60	5	3.839
RCC-5-21	372.94	777.61	50.81	60	65	5	1.518
RCC-5-21	380.02	777.61	43.73	70	75	5	1.987
RCC-5-21	387.09	777.61	36.66	80	85	5	1.114

RCC-5-23	351.63	1175.37	76.81	60	65	5	2.26
RCC-5-23	355.17	1175.37	73.27	65	70	5	33.028
RCC-5-23	369.31	1175.37	59.13	85	90	5	1.034
RCC-5-24	366.28	1079.77	37.52	100	105	5	1.279
RCC-5-24	369.81	1079.77	33.99	105	110	5	3.033
RCC-5-24	373.35	1079.77	30.45	110	115	5	1.774
RCC-5-25	378.24	952.59	73.88	50	55	5	2.646
RCC-5-25	388.85	952.59	63.27	65	70	5	1.435
RCC-5-26	562.73	370.93	82.23	1.95	5	3.05	5.263
RCC-5-27	801.38	779.66	135.36	25	30	5	1.025
RCC-5-28	349.94	652.96	86.23	0	5	5	3.021
RCC-5-28	367.38	652.96	68.32	25	30	5	1.102
RCC-5-28	377.61	652.96	57.35	40	45	5	6.991
RCC-5-28	381.02	652.96	53.7	45	50	5	9.81
RCC-5-28	387.84	652.96	46.38	55	60	5	2.32
RCC-5-28	394.49	652.96	38.92	65	70	5	1.587
RCC-5-28	454.94	652.96	-34.34	160	165	5	1.203
RCC-5-30	330.35	618.74	75.65	10	15	5	1.643
RCC-5-30	375.68	618.74	15.94	85	90	5	3.778
RCC-5-30	386.95	618.74	-0.57	105	110	5	2.059
RCC-5-31	511	528.09	80.5	15.24	20	4.76	3.653
RCC-5-31	511	528.09	75.5	20	25	5	2.617
RCC-5-31	511	528.09	65.5	30	35	5	1.043
RCC-5-31	511	528.09	10.5	85	90	5	2.362
RCC-5-31	511	528.09	0.5	97.46	100	2.54	2.046
RCR-4-02	551.7	770.62	71.73	70	75	5	1.109
RCR-4-03	586.73	760.33	94.41	45	50	5	1.108
RCR-4-06	789.16	727.06	136.09	20	25	5	1.867
RCR-4-06	831.59	727.06	93.66	80	85	5	2.153
RCR-4-19	500.22	371.76	67.16	12.81	15	2.19	2.926
RCR-4-19	493.15	371.76	60.09	21.34	25	3.66	1.001
RCR-4-19	489.61	371.76	56.55	25	30	5	1.329
RCR-4-19	479.01	371.76	45.95	40	45	5	1.047
RCR-4-21	276.7	541.63	64.09	20	25	5	1.187
RCR-4-25	405.46	544.08	74.5	5	10	5	2.244
RCR-4-25	407.96	544.08	70.17	10	15	5	3
RCR-4-25	410.46	544.08	65.84	15	20	5	2.928
RCR-4-25	412.96	544.08	61.51	20	25	5	1.616
RCR-4-25	420.46	544.08	48.52	35	40	5	1.139
RCR-4-25	425.46	544.08	39.86	45	50	5	1.921
RKDC02-101	408.93	391.25	38.87	45	50	5	2.12
RKDC02-101	426.61	391.25	21.19	71.06	75	3.94	5.204
RKDC02-102	391.97	510.72	69.85	10	15	5	1.714
RKDC02-102	399.04	510.72	62.78	20	25	5	2.576
RKDC02-102	402.58	510.72	59.24	25	30	5	1.86
RKDC02-102	406.11	510.72	55.71	30	35	5	2.61
RKDC02-102	409.65	510.72	52.17	35	40	5	3.81
RKDC02-102	413.18	510.72	48.64	40	45	5	2.558
RKDC02-102	416.72	510.72	45.1	45	50	5	2.014
RKDC02-103	386.83	481.5	72.31	1.83	5	3.17	1.24
RKDC02-103	390.36	481.5	68.78	5	10	5	1.302
RKDC02-103	404.51	481.5	54.63	25	30	5	1.274

RKDC02-103	408.04	481.5	51.1	30	35	5	4.222
RKDC02-103	411.58	481.5	47.56	36.82	40	3.18	1.913
RKDC02-103	415.11	481.5	44.03	42	45	3	12.803
RKDC02-104	414.62	420.82	45.88	35.91	40	4.09	6.111
RKDC02-104	418.03	420.7	42.23	40	45	5	1.462
RKDC02-104	421.44	420.58	38.57	45	50	5	1.486
RKDC02-104	441.56	419.88	16.34	75	80	5	1.712
RKDC02-104	444.81	419.77	12.54	80	85	5	1.014
RKDC02-105	395.63	451.43	64.54	10	15	5	4.086
RKDC02-105	399.16	451.43	61.01	15	20	5	1.302
RKDC02-105	402.7	451.43	57.47	20	25	5	5.778
RKDC02-105	406.24	451.43	53.93	25	30	5	1.526
RKDC02-105	409.77	451.43	50.4	30	35	5	2.972
RKDC02-105	413.31	451.43	46.86	35	40	5	1.484
RKDC02-105	439.95	451.43	17.1	75	80	5	1.84
RKDC02-105	443.1	451.43	13.22	80	85	5	1.15
RKDC02-112	387.01	690.06	94.74	6.83	10	3.17	2.071
RKDC02-114	386.24	746.5	100.21	5.33	10	4.67	2.517
RKDC02-115	369.35	631.1	59.18	30	35	5	5.202
RKDC02-115	382.1	631.78	37.71	55	60	5	2.704
RKDC02-115	384.51	632.07	33.34	60	65	5	6.62
RKDC02-116	354.54	684.01	78.49	15	20	5	6.3
RKDC02-116	360	684.07	70.11	25	30	5	2.722
RKDC02-116	367.92	684.06	57.38	40	45	5	1.5
RKDC02-116	373.15	684.2	48.86	50	55	5	1.02
RKDC02-116	380.85	684.81	36	65	70	5	7.28
RKDC02-116	383.42	685.01	31.71	70	75	5	1.81
RKDC02-116	388.36	685.35	23.03	80	85	5	10.846
RKDC02-116	390.83	685.52	18.68	85	90	5	5.082
RKDC02-116	395.76	685.85	9.98	95	100	5	1.402
RKDC03-117	423.61	422.09	-12.52	100	105	5	1.024
RKDC03-118	446.84	473.95	63.12	15	20	5	1.236
RKDC03-118	460.51	474.47	42.21	40	45	5	1.114
RKDC03-118	463.18	474.62	37.99	45	50	5	1.814
RKDC03-119	443.61	413.79	50.76	25	30	5	1.82
RKDC03-119	469.8	414.6	14.19	70	75	5	2.278
RKDC03-119	478.24	415	1.8	85	90	5	1.008
RKDC03-120	429.15	474.55	45.47	35	40	5	1.43
RKDC03-120	435.15	474.52	37.47	45	50	5	1.216
RKDC03-120	452.22	474.76	12.81	75	80	5	1.168
RKDC03-120	455.07	474.8	8.7	80.61	85	4.39	1.32
RKDC03-120	488.56	474.44	-41.08	140	145	5	1.982
RKDC03-122	352.22	475.62	30.45	55	60	5	1.196
RKDC03-123	477.82	297.05	48.63	20	25	5	1.304
RKDC03-124	390.41	564.92	72.87	10	15	5	1.172
RKDC03-124	396.35	565.15	64.83	20	25	5	1.82
RKDC03-124	399.24	565.35	60.76	25	30	5	1.147
RKDC03-124	407.9	565.96	48.53	40	45	5	1.178
RKDC03-124	441.28	567.41	-1.3	100	105	5	1.418
RKDC03-124	451.06	567.75	-18.74	120	125	5	9.504
RKDC03-124	460.84	568.09	-36.18	140	145	5	1.006
RKDC03-124	467.53	568.32	-49.59	155	160	5	1.856

RKDC03-126	406.49	534.6	79.58	0	5	5	2.895
RKDC03-126	409.7	534.55	75.75	5	10	5	1.782
RKDC03-126	412.91	534.49	71.92	12	15	3	1.597
RKDC03-126	425.64	534.48	56.5	30	35	5	1.036
RKDC03-126	428.82	534.48	52.64	35	40	5	1.572
RKDC03-126	455.93	534.93	16.75	80	85	5	2.082
RKDC03-126	458.75	534.93	12.62	85	90	5	9.658
RKDC03-128	389.79	507.62	27.17	62	65	3	2.57
RKDC03-128	392.72	507.62	23.12	65	70	5	1.094
RKDC03-128	395.65	507.62	19.07	72	75	3	1.27
RKDC03-128	398.58	507.62	15.02	75	80	5	2.674
RKDC03-129	390.41	473.97	41.36	41	45	4	1.043
RKDC03-129	399.22	473.4	29.24	55	60	5	19.68
RKDC03-129	419.46	472.19	0.71	90	95	5	4.018
RKDC03-130	389.53	545.02	15.34	81	85	4	4.755
RKDC03-130	433.11	549.68	-45.27	155	160	5	1.06
RKDC03-131	425.67	390.84	58.89	15	20	5	3.616
RKDC03-131	432.75	390.84	51.81	25	30	5	3.618
RKDC03-132	340.59	564.81	73.93	5	10	5	1.74
RKDC03-132	343.77	564.93	70.07	10	15	5	2.254
RKDC03-132	346.95	565.05	66.22	15	20	5	2.198
RKDC03-132	379.66	567.44	22.13	70	75	5	1.216
RKDC03-132	393.37	568.7	1.27	95	100	5	4.134
RKDC03-132	396.03	568.93	-2.96	100	105	5	1.216
RKDC03-132	414.23	570.7	-32.79	135	140	5	1.04
RKDC03-134	359.37	597.21	68.68	20	25	5	1.34
RKDC03-134	391.32	600.64	30.44	70	75	5	1.176
RKDC03-134	436.26	607.75	-35.3	150	155	5	1.122
RKDC03-134	441.3	608.47	-43.91	160	165	5	1.138
RKDC03-135	469.3	507.36	27.03	70	75	5	1.39
RKDC03-135	472.55	507.52	23.23	75	80	5	1.206
RKDC03-135	491.75	508.52	0.21	105	110	5	1.384
RKDC03-136	334.45	625.16	60.42	25	30	5	1.946
RKDC03-136	368.76	625.52	-17.15	110	115	5	2.144
RKDC03-137	469.39	510.71	67.6	25	30	5	1.216
RKDC03-137	472.94	510.85	64.09	30	35	5	1.038
RKDC03-137	479.71	511.34	56.75	40	45	5	3.357
RKDC03-137	496.17	512.84	38	65	70	5	1.566
RKDC03-137	502.76	513.44	30.5	75	80	5	7.078
RKDC03-137	506.05	513.74	26.74	80	85	5	1.324
RKDC03-137	512.45	514.31	19.09	90	95	5	3.628
RKDC03-137	515.58	514.58	15.19	95	100	5	1.732
RKDC03-137	518.7	514.86	11.3	100	105	5	1.026
RKDC03-137	526.78	515.56	1.26	115	115.82	0.82	1.81
RKDC03-138	359.07	653.77	31.9	70	75	5	1.076
RKDC03-138	362.24	653.68	28.03	75	80	5	2.022
RKDC03-138	385.75	653.56	-4.33	115	120	5	1.176
RKDC03-139	501.29	513.47	69.22	30	35	5	2.23
RKDC03-139	504.71	513.6	65.58	35	40	5	2.002
RKDC03-139	521.82	514.22	47.35	60	65	5	4.342
RKDC03-139	525.24	514.35	43.71	65	70	5	2.002
RKDC03-139	532	514.63	36.35	75	80	5	3.58

RKDC03-140	354.05	749.37	96.12	6	10	4	1.135
RKDC03-140	368.75	748.83	75.9	30	35	5	1.97
RKDC03-140	379.4	748.64	58.99	50	55	5	1.062
RKDC03-140	389.76	748.52	41.89	70	75	5	10.596
RKDC03-141	511.13	512.96	94.21	2	5	3	1.26
RKDC03-141	536.16	513.74	69.77	35	40	5	1.112
RKDC03-141	570.75	513.64	33.68	85	90	5	1.133
RKDC03-141	579.74	513.69	23.94	100	101.5	1.5	5.7
RKDC03-142	579.59	512.01	57.23	55	60	5	3.444
RKDC03-142	582.8	512.49	53.44	60	65	5	1.68
RKDC03-142	585.91	513.27	49.61	65	70	5	1.412
RKDC03-142	595.24	515.61	38.1	80	85	5	2.156
RKDC03-142	598.35	516.39	34.26	85	90	5	1.76
RKDC03-143	489.56	541.62	59.58	40	45	5	1.884
RKDC03-143	492.58	541.62	55.59	45	50	5	1.14
RKDC03-143	498.61	541.61	47.61	55	60	5	1.382
RKDC03-143	501.62	541.6	43.62	60	65	5	1.538
RKDC03-143	504.64	541.6	39.64	65	70	5	5.214
RKDC03-143	510.67	541.58	31.66	75	80	5	1.798
RKDC03-143	519.4	541.76	19.47	90	95	5	1.022
RKDC03-144	456.81	579.63	35.42	65	70	5	1.676
RKDC03-144	469.59	580.88	13.97	90	95	5	1.84
RKDC03-144	474.46	581.43	5.27	100	105	5	1.136
RKDC03-145	464.9	576.25	73.44	25	30	5	5.816
RKDC03-145	470.85	576.13	65.4	35	40	5	1.576
RKDC03-145	473.68	576.18	61.28	40	45	5	1.97
RKDC03-145	476.49	576.26	57.14	45	50	5	1.726
RKDC03-145	487.73	576.55	40.6	65	70	5	1.554
RKDC03-145	496.15	576.77	28.19	80	85	5	1.97
RKDC03-145	501.56	577.05	19.79	90	95	5	1.33
RKDC03-145	504.22	577.21	15.56	95	100	5	4.402
RKDC03-146	496.14	574.22	77.6	25	30	5	2.568
RKDC03-146	501.77	573.7	69.35	35	40	5	1.094
RKDC03-147	544.23	482.43	76.08	20	25	5	1.017
RKDC03-147	586.66	485.51	14.35	95	100	5	1.666
RKDC03-148	479.82	480.21	76.22	10	15	5	1.204
RKDC03-148	482.82	480.33	72.23	15	20	5	1.552
RKDC03-148	497.53	481.02	52.03	40	45	5	1.578
RKDC03-148	500.38	481.19	47.92	45	50	5	2.086
RKDC03-148	503.22	481.35	43.82	50	55	5	2.588
RKDC03-149	453.04	613.1	25.8	80	85	5	1.382
RKDC03-149	455.4	613.94	21.47	85	90	5	1.302
RKDC03-149	462.48	616.48	8.49	100	105	5	2.406
RKDC03-149	464.84	617.32	4.17	105	110	5	1.154
RKDC03-150	494.27	600.11	90.69	15	20	5	6.068
RKDC03-150	497.66	600.22	87.01	20	25	5	10.618
RKDC03-150	500.93	600.3	83.24	25	30	5	1.642
RKDC03-150	515.97	600.57	63.27	50	55	5	1.306
RKDC03-150	527.26	601.77	46.84	70	75	5	1.294
RKDC03-151	392.38	630.79	82.93	10	15	5	4.878
RKDC03-151	394.66	630.75	78.48	15	20	5	2.702
RKDC03-151	396.94	630.71	74.03	20	25	5	2.01

RKDC03-151	401.49	630.62	65.13	30	35	5	1.15
RKDC03-153	351.99	496.75	34.96	50	55	5	9.698
RKDC03-153	366.59	497.6	14.68	76	80	4	2.555
RKDC03-153	372.08	498.14	6.35	85	90	5	2.778
RKDC03-154	301.77	564.24	65.88	15	20	5	2.038
RKDC03-154	304.75	564.26	61.86	20	25	5	2.84
RKDC03-154	313.11	565.04	49.45	35	40	5	1.17
RKDC03-155	339.35	589.89	41.55	50	55	5	3.62
RKDC03-155	342.32	590.29	37.55	55	60	5	3.394
RKDC03-155	368.14	594.54	0.97	100	105	5	2.677
RKDC03-155	373.59	595.7	-7.33	110	115	5	1.434
RKDC03-155	376.32	596.28	-11.48	115	120	5	1.076
RKDC03-156	304.58	688.49	78.4	5	10	5	1.186
RKDC03-156	359.93	696.64	-15.98	115	120	5	1.132
RKDC03-157	368.11	808.22	43.48	60	65	5	1.08
RKDC03-157	370.7	808.65	39.22	65	70	5	1.072
RKDC03-157	373.28	809.08	34.96	70	75	5	1.122
RKDC03-157	378.45	809.94	26.44	80	85	5	1.981
RKDC03-157	383.62	810.79	17.92	90	95	5	1.384
RKDC03-158	374.8	892.06	79.74	30	35	5	6.968
RKDC03-158	377.59	892.19	75.6	35	40	5	6.264
RKDC03-159	361.66	1198.13	54.86	90	95	5	1.04
RKDC03-159	364.85	1198.42	51.02	95	100	5	1.812
RKDC03-162	422.03	746.22	104.58	6	10	4	2.74
RKDC03-163	377.17	841.27	102.99	7.26	10	2.74	1.07
RKDC03-163	379.73	841.3	98.7	13.47	15	1.53	11.25
RKDC03-163	384.85	841.36	90.11	20	25	5	1.26
RKDC03-163	394.74	841.63	72.74	40	45	5	1.897
RKDC03-163	397.07	841.76	68.32	45	50	5	1.545
RKDC03-164	342.97	749.49	64.54	35	40	5	2.31
RKDC03-164	364.32	748.22	30.74	75	80	5	1.008
RKDC03-164	371.85	747.75	17.78	90	95	5	1.006
RKDC03-165	362.63	833.7	30.85	75	80	5	1.45
RKDC03-165	365.48	833.66	26.74	80	85	5	1.19
RKDC03-165	368.33	833.62	22.63	85	90	5	1.626
RKDC03-166	352.81	864.66	25.54	80	85	5	2.752
RKDC03-166	362.46	865.02	8.03	100	105	5	7.682
RKDC03-166	369.56	865.38	-5.18	115	120	5	2.517
RKDC03-166	371.93	865.5	-9.58	120	125	5	4.618
RKDC03-167	375.98	865.49	46.76	60	65	5	3.936
RKDC03-168	365.53	928.38	96.27	20	25	5	2.078
RKDC03-168	376.82	928.37	79.77	40	45	5	1.682
RKDC03-169	361.96	985.24	49.56	70	75	5	1.004
RKDC03-170	364.52	986.16	98.4	20	25	5	23.135
RKDC03-171	354.34	1014.41	70.77	50	55	5	1.53
RKDC03-171	367.05	1014.22	49.27	75	80	5	3.466
RKDC03-172	353.08	1045.04	73.26	50	55	5	1.62
RKDC03-172	359.44	1045.43	65.55	60	65	5	1.104
RKDC03-173	357.41	1045.12	82.81	55	60	5	4.926
RKDC03-174	355.58	1071.88	75.24	75	80	5	3.218
RKDC03-174	352.28	1071.48	71.51	80	85	5	3.606
RKDC03-174	348.98	1071.09	67.78	85	90	5	4.084

RKDC03-175	353.99	1072.99	48.31	120	125	5	3.03
RKDC03-175	350.88	1072.68	44.41	125	130	5	2.462
RKDC03-175	347.77	1072.37	40.5	130	135	5	1.174
RKDC03-176	353.86	1168.69	106.93	25	30	5	1.246
RKDC03-177	372.3	769.03	89.41	15	20	5	1.434
RKDC03-177	377.18	769.16	75.23	30	35	5	1.15
RKDC03-177	378.68	769.29	70.46	35	40	5	5.03
RKDC03-177	381.67	769.55	60.93	45	50	5	1.266
RKDC03-177	384.67	769.8	51.39	55	60	5	3.078
RKDC03-177	387.38	770.26	41.78	65	70	5	1.356
RKDC03-178	402.13	770.64	98.31	10	15	5	1.588
RKDC03-179	355.37	826.94	90.01	10	15	5	2.39
RKDC03-179	369.16	827.68	52.48	50	55	5	3.482
RKDC03-179	370.8	827.8	47.76	55	60	5	3.838
RKDC03-179	376.95	828.4	28.75	75	80	5	9.824
RKDC03-179	378.35	828.59	23.95	80	85	5	2.84
RKDC03-180	502.81	655.46	105.05	5	10	5	1.093
RKDC03-180	504.44	655.49	100.33	10	15	5	1.346
RKDC03-180	507.69	655.54	90.87	20	25	5	1.284
RKDC03-180	515.54	655.93	67.14	45	50	5	1.189
RKDC03-180	520.14	656.26	52.87	60	65	5	3.752
RKDC03-180	521.6	656.45	48.09	65	70	5	1.232
RKDC03-181	347.66	1102.88	79.37	50	55	5	2.876
RKDC03-181	361.96	1102.26	65.4	70	75	5	1.333
RKDC03-182	343.52	1075.67	34.8	95	100	5	4.904
RKDC03-182	346.05	1075.78	30.51	100	105	5	1.456
RKDC03-182	348.39	1075.94	26.09	105	110	5	2.508
RKDC03-183	360.13	960.17	31.97	95	100	5	2.15
RKDC03-183	363.41	960.1	28.2	100	105	5	1.408
RKDC03-184	296.07	931.58	98.13	2	5	3	2.503
RKDC03-184	306.7	930.98	87.57	15	20	5	1.534
RKDC03-184	347.86	930.46	44	77	80	3	1.067
RKDC03-184	364.26	931.05	25.15	100	105	5	1.348
RKDC03-185	306.62	806.97	77.72	15	20	5	1.194
RKDC03-185	347.03	807.32	8.78	95	100	5	1.326
RKDC03-185	362.46	807.45	-22.63	130	135	5	1.366
RKDC03-185	364.43	807.6	-27.22	135	140	5	4.822
RKDC03-186	342.08	564.35	35.09	50	55	5	3.262
RKDC03-186	351	565.78	17.27	70	75	5	1.272
RKDC03-186	363.64	568.21	-9.83	100	105	5	1.146
RKDC03-186	365.51	568.63	-14.44	105	110	5	1.006
RKDC03-186	374.5	570.78	-37.67	130	135	5	1.08
RKDC03-186	376.3	571.2	-42.32	135	140	5	1.036
RKDC03-187	391.21	474.73	0.86	90	95	5	1.364
RKDC03-187	402.25	475.5	-15.8	110	115	5	1.402
RKDC03-188	362.6	518.87	3.59	85	90	5	2.602
RKDC03-188	364.91	519.08	-0.83	90	95	5	1.49
RKDC03-188	367.23	519.28	-5.26	95	100	5	1.066
RKDC03-188	390	521.73	-49.7	145	150	5	2.714
RKDC03-188	392.2	522.05	-54.18	150	155	5	1.176
RKDC03-191	498.22	688.88	90.44	25	30	5	1.244
RKDC03-191	506.54	689.58	77.99	40	45	5	2.322

RKDC03-191	509.29	689.85	73.82	45	50	5	1.368
RKDC03-191	514.78	690.39	65.48	55	60	5	3.63
RKDC03-193	500.83	718.53	98.04	20	25	5	1.1
RKDC03-193	506.47	718.88	89.79	30	35	5	4.724
RKDC03-193	509.16	719.15	85.59	35	40	5	1.116
RKDC03-194	508.4	746.2	91.9	30	35	5	1.03
RKDC03-194	527.76	747.72	62.79	65	70	5	1.044
RKDC03-195	450.05	595.02	75.46	20	25	5	2.124
RKDC03-195	451.88	595.01	70.81	25	30	5	2.212
RKDC03-195	458.77	595.36	52.04	45	50	5	2.434
RKDC03-195	460.46	595.48	47.34	50	55	5	1.172
RKDC03-195	462.15	595.59	42.63	55	60	5	1.56
RKDC03-196	480.02	530.33	90.97	2	5	3	1.76
RKDC03-196	481.76	530.33	86.28	5	10	5	1.384
RKDC03-196	490.88	530.33	63.01	30	35	5	2.268
RKDC03-196	495.85	530.39	48.86	45	50	5	3.46
RKDC03-196	497.35	530.42	44.1	50	55	5	2.112
RKDC03-196	500.36	530.5	34.56	60	65	5	2.894
RKDC03-196	501.86	530.53	29.79	65	70	5	2.294
RKDC03-196	502.63	530.55	27.36	70	70.1	0.1	1.32
RKDC03-197	521.02	450.51	73.52	15	20	5	1.236
RKDC03-197	526.99	450.23	65.5	25	30	5	1.425
RKDC03-197	529.95	450.12	61.47	30	35	5	2.472
RKDC03-198	477.51	593.25	62.34	45	50	5	2.728
RKDC03-198	487.63	593.23	51.27	60	65	5	1.04
RKDC03-198	494.37	593.22	43.88	70	75	5	4.02
RKDC03-198	501.11	593.21	36.49	80	85	5	1.37
RKDC03-198	504.28	593.3	32.63	85	90	5	1.006
RKDC03-199	460.22	454.43	51.62	25	30	5	1.624
RKDC03-202	369.63	534.73	78.55	4	5	1	1.34
RKDC03-202	372.59	534.65	74.53	5	10	5	1.46
RKDC03-202	384.61	534.19	58.55	25	30	5	1.146
RKDC03-202	396.14	534.37	42.21	45	50	5	2.672
RKDC03-202	401.9	534.46	34.03	55	60	5	1.386
RKDC03-202	404.78	534.51	29.95	60	65	5	1.194
RKDC03-202	410.14	534.64	21.51	70	75	5	3.126
RKDC03-203	384.89	516.16	67.19	15	20	5	1.058
RKDC03-203	398.46	516.49	52.51	35	40	5	15.77
RKDC03-203	401.8	516.6	48.79	40	45	5	6.574
RKDC03-203	408.47	516.82	41.34	50	55	5	2.642
RKDC03-203	411.81	516.93	37.62	55	60	5	3.034
RKDC03-203	418.36	517.08	30.07	65	70	5	1.174
RKDC03-203	431.21	517.21	14.75	85	90	5	1.598
RKDC03-203	444.07	517.35	-0.57	105	110	5	6.782
RKDC03-204	410.42	419.29	61.07	12	15	3	1.87
RKDC03-204	412.72	419.38	56.63	15	20	5	2.29
RKDC03-204	415.02	419.47	52.19	22	25	3	2.537
RKDC03-204	432.5	420.54	16.23	60	65	5	1.916
RKDC03-205	374.82	394.84	41.06	30	35	5	1.416
RKDC03-205	375.81	394.88	36.16	35	40	5	3.176
RKDC03-205	382.82	396.15	-2.04	75	77.72	2.72	1.92
RKDC03-206	489.23	401.86	67.19	6	10	4	4.5

RKDC03-207	528.09	422.16	68.42	10	15	5	1.242
RKDC03-207	531.47	422.31	64.73	15	20	5	1.198
RKDC03-207	534.84	422.46	61.05	20	25	5	1.025
RKDC03-207	574.79	425.86	9.94	85	90	5	1.189
RKDC03-208	477.2	374.02	41.15	45	50	5	1.076
RKDC03-208	470.64	374.01	33.61	55	60	5	4.048
RKDC03-208	454.41	374.19	14.59	80	85	5	2.516
RKDC03-209	461.36	357.83	47.81	25	30	5	4.106
RKDC03-209	476.17	357.05	27.68	50	55	5	3.83
RKDC03-209	479.08	356.91	23.62	55	60	5	1.082
RKDC03-209	481.97	356.78	19.54	60	65	5	5.114
RKDC03-209	486.34	356.58	13.39	70	70.1	0.1	1.12
RKDC03-210	361.07	389.36	35.89	45	50	5	1.644
RKDC03-211	412.69	329.34	18.11	60	65	5	2.213
RKDC03-212	432.37	336.41	34.85	50	55	5	1.324
RKDC03-212	435.86	336.46	31.27	55	60	5	1.404
RKDC03-221	484.34	358.4	52.19	20	25	5	3.17
RKDC03-222	419.87	362.35	67.85	4	5	1	4.2
RKDC03-222	422.37	362.35	63.51	5	10	5	1.496
RKDC03-222	433.66	362.04	47.01	26	30	4	7.39
RKDC03-222	444.63	361.8	30.29	45	50	5	1.786
RKDC03-223	437.19	443.3	63.5	15	20	5	1.628
RKDC03-223	443.71	443.48	55.91	25	30	5	1.108
RKDC03-223	446.92	443.55	52.08	30	35	5	1.982
RKDC03-223	468.8	443.74	24.76	65	70	5	1.133
RKDC03-224	398.34	812.7	91.21	20	25	5	2.432
RKDC03-224	401.18	812.97	87.1	25	30	5	1.324
RKDC03-225	377.29	720.5	64.4	40	45	5	9.421
RKDC03-225	393.62	720.72	39.24	70	75	5	1.048
RKDC03-226	398.03	722.08	77.28	30	35	5	11.16
RKDC03-226	400.8	722.1	73.12	35	40	5	11.396
RKDC03-227	488.33	746.39	57.8	65	70	5	1.01
RKDC03-228	351.77	897.03	74.02	30	35	5	1.048
RKDC03-228	366.12	895.7	47.71	60	65	5	1.262
RKDC03-228	379.77	895.15	21	90	95	5	1.541
RKDC03-229	377.12	870.92	93.46	15	20	5	3.254
RKDC03-229	385.72	871.42	81.19	30	35	5	1.824
RKDC03-229	388.52	871.61	77.05	35	40	5	2.128
RKDC03-229	391.33	871.81	72.92	40	45	5	13.322
RKDC04-231	504.32	721.11	89.13	30	35	5	6.664
RKDC04-231	507.19	721.11	85.03	35	40	5	3.348
RKDC04-231	509.82	721.13	80.79	40	45	5	6.492
RKDC04-231	514.66	721.22	72.04	50	55	5	1.413
RKDC04-232	513.14	659.24	66.37	45	50	5	2.043
RKDC04-232	520.39	659.42	42.45	70	75	5	2.031
RKDC04-233	452.58	594.18	60.29	35	40	5	5.118
RKDC04-233	457.26	594.41	46.04	50	55	5	2.2
RKDC04-233	458.68	594.56	41.25	55	60	5	1.96
RKDC04-233	460.1	594.7	36.46	60	65	5	5.16
RKDC04-233	462.92	595	26.87	70	75	5	1.752
RKDC04-233	464.19	595.2	22.04	75	80	5	1.524
RKDC04-234	370.13	537.85	73.62	5	10	5	1.018

RKDC04-234	381.67	538.86	57.33	25	30	5	1.554
RKDC04-234	393.13	540.39	41.02	45	50	5	3.086
RKDC04-234	400.79	540.63	28.13	60	65	5	1.498
RKDC04-234	403.34	540.71	23.83	69	70	1	2.81
RKDC04-234	427.35	541.57	-20	115	120	5	1.456
RKDC04-234	433.93	541.96	-33.47	130	135	5	1.064
RKDC04-235	383.01	519.51	66.51	15	20	5	1.346
RKDC04-235	386.5	519.61	62.94	20	25	5	1.414
RKDC04-235	396.8	520.44	52.06	35	40	5	1.672
RKDC04-235	400.23	520.72	48.44	40	45	5	5.454
RKDC04-235	403.61	521.01	44.76	45	50	5	5.022
RKDC04-235	406.9	521.29	41.01	50	55	5	6.198
RKDC04-235	410.19	521.57	37.25	55	60	5	1.178
RKDC04-235	416.76	522.13	29.74	65	70	5	1.652
RKDC04-236	420.65	363.67	63.07	8	10	2	1.68
RKDC04-236	440.27	364.2	34.09	40	45	5	1.71
RKDC04-237	477.73	362.97	18.44	60	65	5	1.954
RKDC04-238	485.94	403.04	66.33	8	10	2	1.53
RKDC04-238	486.97	402.96	61.44	12	15	3	1.18
RKDC04-238	493.59	402.81	27.08	45	50	5	1.296
RKDC04-238	494.83	402.92	18.52	55	57.3	2.3	1.071
RKDC04-239	490.15	377.04	59.29	20	25	5	1.086
RKDC04-239	483.35	377.11	51.95	30	35	5	1.488
RKDC04-240	518.66	454.32	72.96	15	20	5	1.254
RKDC04-240	527.42	454.14	60.78	30	35	5	1.742
RKDC04-241	383.59	452.45	57.42	20	25	5	1.15
RKDC04-241	393.71	451.38	46.4	35	40	5	1.748
RKDC04-241	397.08	451.03	42.73	42	45	3	3.803
RKDC04-241	400.42	450.73	39.02	47	50	3	5.237
RKDC04-241	406.56	450.24	32.1	56	58.52	2.52	1.68
RKDC04-242	424.43	337.44	39.86	44	45	1	1
RKDC04-243	400.72	593.07	63.7	25	30	5	1.16
RKDC04-243	404.2	593.27	60.11	30	35	5	1.19
RKDC04-244	375.63	769.26	78.95	25	30	5	1.032
RKDC04-244	377.25	769.17	74.22	30	35	5	1.078
RKDC04-244	380.48	768.97	64.76	40	45	5	1.01
RKDC04-244	382.08	768.91	60.02	45	50	5	1.97
RKDC04-245	362.77	721.41	84.39	15	20	5	1.234
RKDC04-245	374	721.64	67.85	35	40	5	5.224
RKDC04-245	389.57	722.17	42.23	65	70	5	2.532
RKDC04-245	392.09	722.25	37.91	70	75	5	1.807
RKDC04-246	352.25	828.46	93.98	6	10	4	1.938
RKDC04-246	369.64	828.25	47.11	55	60	5	4.237
RKDC04-246	372.91	828.32	37.66	65	70	5	13.46
RKDC04-246	377.73	828.3	23.46	80	85	5	6.449
RKDC04-246	379.24	828.18	18.7	85	90	5	3.701
RKDC04-248	398.39	770.4	106.86	3.66	5	1.34	1.148
RKDC04-249	381.14	614	60.68	25	30	5	6.148
RKDC04-249	383.55	614.08	56.3	30	35	5	1.432
RKDC04-249	385.96	614.15	51.92	35	40	5	2.82
RKDC04-249	393.07	614.41	38.72	50	55	5	1.096
RKDC04-249	397.73	614.6	29.87	60	65	5	3.106

RKDC04-249	400.05	614.7	25.44	65	70	5	1.154
RKDC04-250	353.85	658.86	52.63	45	50	5	23.194
RKDC04-250	356.94	659	48.7	50	55	5	9.262
RKDC04-250	360.03	659.13	44.77	55	60	5	2.612
RKDC04-250	363.12	659.27	40.84	60	65	5	1.179
RKDC04-250	366.21	659.4	36.91	65	70	5	2.126
RKDC04-250	369.29	659.54	32.98	70	75	5	1.68
RKDC04-251	363.59	689.62	85.11	10	15	5	1.59
RKDC04-251	371.18	689.41	72.17	26	30	4	2.865
RKDC04-251	373.68	689.28	67.85	30	35	5	1.492
RKDC04-252	354.58	1217.8	61.17	70	75	5	2.502
RKDC04-253	344.24	1156.6	118.38	6	10	4	3.78
RKDC04-253	346.72	1156.59	114.04	10	15	5	1.428
RKDC04-255	466.46	469.87	61.09	20	25	5	4.696
RKDC04-255	469.87	469.89	57.44	25	30	5	2.204
RKDC04-255	479.99	469.96	46.36	40	45	5	2.034
RKDC04-255	481.67	469.99	44.44	45	45.11	0.11	1.89
RKDC04-256	438.12	469.83	71.72	6	10	4	1.165
RKDC04-257	465.11	459.28	71.71	8	10	2	9.28
RKDC04-257	468.65	459.28	68.17	12	15	3	1.297
RKDC04-257	472.11	459.51	64.58	15	20	5	1.866
RKDC04-257	475.48	460.01	60.92	20	25	5	5.238
RKDC04-257	478.86	460.52	57.27	25	30	5	1.046
RKDC04-257	482.23	461.02	53.61	30	35	5	1.42
RKDC04-257	492.3	462.52	42.6	45	50	5	1.368
RKDC04-257	495.54	462.99	38.82	50	55	5	3.414
RKDC04-257	498.78	463.45	35.04	55	60	5	1.842
RKDC04-260	656.5	510.38	88	15	20	5	2.396
RKDC04-261	690.13	525.42	105.15	5	10	5	1.238
RKDC04-267	678.27	646.06	118.18	10	15	5	2.29
RKDC04-267	679.7	646.5	113.41	15	20	5	1.696
RKDC04-267	687.9	649.13	84.67	45	50	5	1.048
RKDC04-270	708.62	676.14	130.31	6	10	4	10.295
RKDC04-270	710.29	676.15	125.6	10	15	5	2.152
RKDC04-271	718.35	705.84	134.72	6	10	4	1.075
RKDC04-271	719.91	706.17	129.98	10	15	5	2.032
RKDC04-274	481.46	825.59	102.93	22	25	3	1.202
RKDC04-276	335.17	1187.14	69.73	57	60	3	1.803
RKDC04-276	338.59	1187.1	60.33	65	70	5	1.342
RKDC04-277	368.88	1186.56	101.66	31	35	4	1.67
RKDC04-278	367.73	630.05	36.05	50	55	5	3.068
RKDC04-278	369.34	630.14	31.32	55	60	5	1.422
RKDC04-278	378.85	630.49	2.87	85	90	5	5.822
RKDC04-279	334.12	1111.73	55.93	65	70	5	1.684
RKDC04-279	341.34	1111.53	42.79	80	85	5	1.148
RKDC04-279	346.05	1111.51	33.96	90	95	5	3.3
RKDC04-279	348.41	1111.49	29.55	95	100	5	1.384
RKDC04-281	763.35	675.49	132.14	10	15	5	1.018
RKDC04-281	765.21	675.49	127.5	15	20	5	1.054
RKDC04-282	598.74	476.78	32.3	60	65	5	1.412
RKGT03-213	704.28	654.64	133.48	0	5	5	3.22
RKGT03-213	702.44	652.44	129.39	5	10	5	2.86

RKGT03-213	700.54	650.29	125.29	10	15	5	1.07
RKGT03-213	650	592.48	2.6	155	159.71	4.71	1.65
RKGT03-216	401.66	370.86	39.62	35	40	5	1.8
RKRC04-022	485.27	399.03	71	3.05	5	1.95	3.065
RKRC04-022	486.14	399.03	66.07	5	10	5	7.264
RKRC04-022	488.75	399.03	51.3	20	25	5	2.644
RKRC04-022	489.62	399.03	46.38	25	30	5	1.95
RKRC04-023	445.62	364.26	64.09	5	10	5	1.588
RKRC04-023	462.83	364.26	39.51	35	40	5	1.812
RKRC04-023	474.3	364.26	23.13	55	60	5	2.335
RKRC04-023	477.17	364.26	19.03	60	65	5	2.572
RKRC04-024	421.38	358.96	67.08	3.05	5	1.95	8.181
RKRC04-024	424.25	358.96	62.99	5	10	5	7.242
RKRC04-024	427.12	358.96	58.89	10	15	5	1.854
RKRC04-024	429.99	358.96	54.79	15	20	5	4.412
RKRC04-024	432.86	358.96	50.7	20	25	5	1.081
RKRC04-024	435.72	358.96	46.6	25	30	5	3.02
RKRC04-024	438.59	358.96	42.51	30	35	5	1.09
RKRC04-024	447.2	358.96	30.22	45	50	5	1.164
RKRC04-024	452.93	358.96	22.03	55	60	5	1.189
RKRC04-024	463.31	358.96	7.2	75	76.2	1.2	1.008
RKRC04-025	392.39	456.83	50.37	30	35	5	1.053
RKRC04-025	399.46	456.83	43.3	40	45	5	1.485
RKRC04-025	403	456.83	39.76	45	50	5	2.339
RKRC04-025	409.33	456.83	33.43	55	57.91	2.91	5.608
RKRC04-026	454.96	597.58	60.41	35	40	5	1.325
RKRC04-027	498.23	660.39	104.33	5	10	5	1.438
RKRC04-027	499.94	660.39	99.63	10	15	5	1.215
RKRC04-027	508.49	660.39	76.14	35	40	5	13.03
RKRC04-027	515.33	660.39	57.35	55	60	5	1.163
RKRC04-028	499.7	717.58	97.17	20	25	5	1.112
RKRC04-028	508.3	717.58	84.88	35	40	5	3.363
RKRC04-028	511.17	717.58	80.79	40	45	5	2.09
RKRC04-028	514.04	717.58	76.69	45	50	5	3.119
RKRC04-029	373.06	827.85	42.25	60	65	5	1.73
RKRC04-029	378.19	827.85	28.15	75	80	5	1.915
RKRC04-029	379.9	827.85	23.46	80	85	5	1.218
RKRC04-031	390.86	813.39	103.38	5	10	5	1.53
RKRC04-031	396.6	813.39	95.18	15	20	5	1.466
RKRC04-031	399.47	813.39	91.09	20	25	5	2.735
RKRC04-032	371.6	772.07	93.35	10	15	5	1.759
RKRC04-032	375.02	772.07	83.96	20	25	5	1.271
RKRC04-032	378.44	772.07	74.56	30	35	5	2.972
RKRC04-032	380.15	772.07	69.86	35	40	5	1.065
RKRC04-032	386.99	772.07	51.07	55	60	5	1.515
RKRC04-033	397.07	768.31	106.81	0	5	5	1.112
RKRC04-033	398.78	768.31	102.11	5	10	5	1.175
RKRC04-033	400.49	768.31	97.41	10	15	5	1.494
RKRC04-034	365.26	725.46	89.54	10	15	5	3.112
RKRC04-035	404.25	535.46	28.67	60	65	5	4.206
RKRC04-035	407.12	535.46	24.58	65	70	5	2.786
RKRC04-035	409.98	535.46	20.48	70	75	5	2.504

RKRC04-035	412.85	535.46	16.39	75	80	5	1.442
RKRC04-036	382.72	518.01	70.19	10	15	5	1.727
RKRC04-036	386.25	518.01	66.66	15	20	5	1.396
RKRC04-036	400.4	518.01	52.51	35	40	5	8.223
RKRC04-036	403.93	518.01	48.98	40	45	5	1.67
RKRC04-036	407.47	518.01	45.44	45	50	5	2.469
RKRC04-036	418.07	518.01	34.84	60	65	5	1.264
RKRC04-037	405.54	594.05	56.86	35	40	5	3.191
RKRC04-037	433.82	594.05	28.58	75	80	5	1.162
RKRC04-038	435.14	468.55	71.66	5	10	5	1.621
RKRC04-038	431.6	468.55	68.12	10	15	5	4.119
RKRC04-038	420.99	468.55	57.51	25	30	5	1.097
RKRC04-039	494.55	376.28	62.83	15	20	5	1.063
RKRC04-039	491.01	376.28	59.29	20	25	5	1.514
RKRC04-039	483.94	376.28	52.22	30	35	5	1.314
RKRC04-039	469.8	376.28	38.08	50	55	5	2.127
RKRC04-039	459.19	376.28	27.47	65	70	5	1
RKRC04-040	431.19	334.87	37.16	45	50	5	2.459
RKRC04-040	434.72	334.87	33.63	50	55	5	2.162
RKRC04-041	531.13	455.75	60.66	30	35	5	1.23
RKRC04-041	536.87	455.75	52.47	40	45	5	1.15
RKRC04-041	545.47	455.75	40.18	55	60	5	2.319
RKRC04-043	529.61	403.8	66.39	10	15	5	2.967
RKRC04-044	570.25	494.12	65.27	30	35	5	1.324
RKRC04-044	573.67	494.12	55.87	40	45	5	1.029
RKRC04-044	578.8	494.12	41.78	55	60	5	2.3
RKRC04-044	580.51	494.12	37.08	60	65	5	1.905
RKRC04-044	581.97	494.12	33.05	65	68.58	3.58	1.2
RKRC04-047	463.3	458.06	71.67	5	10	5	1.462
RKRC04-047	466.84	458.06	68.13	10	15	5	1.426
RKRC04-047	470.37	458.06	64.6	15	20	5	1.816
RKRC04-047	473.91	458.06	61.06	20	25	5	6.735
RKRC04-047	484.52	458.06	50.45	35	40	5	3.028
RKRC04-047	495.12	458.06	39.85	50	55	5	1.489
RKRC04-048	710.83	567.17	105.75	15	20	5	5.192
RKT04-113	626.96	378.35	90.46	10	15	5	2.076
RKT04-113	562.36	378.78	83.97	75	80	5	1.412
RKT04-113	557.39	379.04	83.56	80	85	5	1.33
RKT04-113	552.41	379.31	83.16	85	90	5	2.838
RKT04-115	631.53	438.79	97.89	5	10	5	1.958
RKT04-115	577.64	438.64	87.33	60	65	5	1.132
RKT04-115	548.39	438.69	80.68	90	95	5	1.018
RKT04-115	543.46	438.89	80.18	95	100	5	1.218
RKT04-115	540.32	439.13	80.26	100	101.3	1.3	2.83
RKT04-116	605.02	471.78	89.42	20	25	5	3.826
RKT04-116	600.04	471.69	89.06	25	30	5	1.982
RKT04-116	570.41	470.08	85.13	55	60	5	2.444
RKT04-116	540.77	467.61	85.45	85	90	5	4.604
RKT04-116	536.03	466.01	85.29	90	95	5	1.284
RKT04-116	531.3	464.42	85.13	95	100	5	1.216
RKT04-116	522.38	463.35	88.87	105	110	5	1.622
RKT04-116	518.96	463.07	89.55	110	112	2	1.92

RKT04-117	646.2	499.75	100.6	0	5	5	1.357
RKT04-117	641.34	499.61	99.44	5	10	5	3.213
RKT04-117	572.31	497.95	95.48	75	80	5	1.613
RKT04-118	586.45	531.66	101.74	50	55	5	1.266
RKT04-119	581.59	560.89	106.38	60	65	5	1.425
RKT04-120	597.94	587.45	111.65	40	45	5	5.592
RKT04-120	568.03	588.1	109.47	70	75	5	1.489
RKT04-120	558.06	588.37	108.78	80	85	5	1.778
RKT04-121	562.76	619.7	111.83	75	80	5	2.738
RKT-101	424.94	350.5	65.24	0	5	5	2.3
RKT-101	429.94	350.5	65.24	5	10	5	1.491
RKT-101	464.93	350.5	65.83	40	45	5	1.232
RKT-101	469.93	350.5	65.83	45	50	5	2.624
RKT-101	474.93	350.5	65.83	50	55	5	1
RKT-102	399.22	256.74	68.05	5	7	2	1.22
RKT-103	457.03	244.4	61.72	55	60	5	2.394
RKT-104	445.42	49.85	65.02	30	35	5	1.588
RKT-104	450.41	49.68	64.67	35	40	5	10.052
RKT-109	370.48	905.26	106.2	0	5	5	1.4
RKT-110	348.52	1227.31	128.54	15	20	5	2.078
RMR-1	378.37	952.81	100.81	20	25	5	2.019
RMR-2	373.77	859.97	107.22	3.05	5	1.95	2.164
RMR-2	378.77	859.97	98.55	10	15	5	4.698
RMR-2	381.27	859.97	94.22	15	20	5	1.186
RMR-2	388.77	859.97	81.23	30	35	5	2.373
RMR-3	486.83	560.27	63.56	40	45	5	4.21
RMR-3	490.37	560.27	60.02	45	50	5	1.133
RMR-3	493.9	560.27	56.49	50	55	5	3.499
RMR-4	409.81	418.97	60.93	10	15	5	2.619
RMR-4	411.1	418.97	56.1	15	20	5	4.169
RMR-4	412.39	418.97	51.27	20	25	5	2.035
RMR-4	413.69	418.97	46.44	25	30	5	2.59
RMR-4	414.98	418.97	41.61	33	35	2	4.319
RMR-4	418.86	418.97	27.12	48.77	50	1.23	2.233
RMR-4	420.16	418.97	22.29	50	55	5	1.065
RMR-5	473.25	449.34	72.04	6.52	10	3.48	1.287
RMR-5	476.79	449.34	68.5	10	15	5	1.571
RMR-5	483.86	449.34	61.43	20	25	5	3.085
RMR-5	487.4	449.34	57.89	25	30	5	1.106
RMR-5	490.93	449.34	54.36	30	35	5	1.186
RMR-5	505.07	449.34	40.22	54.71	55	0.29	2.089
RMR-6	402.64	453.44	50.98	30	35	5	2.732
RMR-6	406.18	453.44	47.44	35	40	5	1.679
RMR-6	420.32	453.44	33.3	55	60	5	1.464
RMR-6	423.85	453.44	29.77	61.53	65	3.47	1.754
RR-0-01	391.71	359.98	60.23	15	20	5	1.321
RR-0-02	416.42	360.62	69.85	3.05	5	1.95	1.631
RR-0-02	422.16	360.62	61.66	10	15	5	6.656
RR-0-02	425.03	360.62	57.56	15.19	20	4.81	5.23
RR-0-02	433.63	360.62	45.28	32.01	35	2.99	1.681
RR-0-03	455.58	357.69	52.57	20	25	5	1.758
RR-0-03	461.31	357.49	44.38	30	35	5	6.232

RR-0-03	464.18	357.39	40.28	35	40	5	2.292
RR-0-03	478.51	356.89	19.8	60	65	5	6.007
RR-0-03	481.37	356.79	15.71	65	70	5	3.684
RR-0-03	482.83	356.74	13.62	70	70.1	0.1	1.414
RR-0-04	493.9	360.08	62.06	10	15	5	2.672
RR-0-05	424.19	269.72	60.96	10	15	5	1.093
RR-0-05	427.72	269.72	57.43	15	20	5	1.399
RR-0-05	441.87	269.72	43.28	35	40	5	1.291
RR-0-05	448.94	269.72	36.21	45	50	5	2.175
RR-0-05	456.01	269.72	29.14	55	60	5	1.361
RR-0-05	459.54	269.72	25.61	60	65	5	2.695
RR-0-06	458.57	270.27	62.9	6.1	10	3.9	1.001
RR-0-06	472.72	270.27	48.75	25	30	5	1.669
RR-0-06	490.39	270.27	31.08	50	55	5	2.876
RR-0-08	390.1	443.77	56.47	20	25	5	1.2
RR-0-08	404.44	443.77	35.99	45	50	5	5.612
RR-0-08	407.3	443.77	31.89	50	55	5	4.329
RR-0-08	410.17	443.77	27.8	55	60	5	1.194
RR-0-08	413.04	443.77	23.7	60	65	5	1.944
RR-0-08	415.91	443.77	19.61	65	70	5	2.544
RR-0-08	418.77	443.77	15.51	70	75	5	1.177
RR-0-08	430.25	443.77	-0.87	90	95	5	1.012
RR-0-08	433.11	443.77	-4.97	95	100	5	1.18
RR-0-09	413.24	450.02	68.36	7.62	10	2.38	1.003
RR-0-09	444.79	450.02	23.3	61.53	65	3.47	1.104
RR-0-09	447.66	450.02	19.21	67.95	70	2.05	1.209
RR-0-10	460.07	449.67	58.97	20	25	5	1.157
RR-0-10	471.54	449.67	42.59	40	45	5	1.404
RR-0-11	519.86	449.83	73.46	15	20	5	8.802
RR-0-11	525.59	449.83	65.27	25	30	5	5.732
RR-0-11	528.46	449.83	61.18	30	35	5	2.842
RR-0-11	534.2	449.83	52.99	40	45	5	1.099
RR-0-11	551.31	449.83	28.54	70	74.68	4.68	8.185
RR-0-15	404.73	538.4	33.4	55	60	5	11.399
RR-0-15	407.6	538.4	29.3	60	65	5	1.792
RR-0-15	410.47	538.4	25.21	65	70	5	7.785
RR-0-17	466.37	540.14	46.49	50	55	5	2.602
RR-0-17	469.24	540.14	42.4	55	60	5	1.978
RR-0-17	472.11	540.14	38.3	60	65	5	2.456
RR-0-19	530.76	540.63	58.99	45	50	5	2.304
RR-0-19	539.36	540.63	46.7	60	65	5	2.174
RR-0-20	557.99	539.36	71.78	35	40	5	1.905
RR-0-20	575.18	538.76	47.21	65	70	5	1.617
RR-0-23	400.42	629.83	89.36	6.1	10	3.9	2.478
RR-0-24	468.12	628.12	34.82	75	80	5	1.006
RR-0-25	495.02	625.63	60.99	50	55	5	4.458
RR-0-25	497.89	625.63	56.9	55	60	5	1.053
RR-0-25	500.76	625.63	52.8	60	65	5	2.041
RR-0-25	503.63	625.63	48.71	65	70	5	2.077
RR-0-26	499.72	630.71	103.56	6.1	10	3.9	1.447
RR-0-26	502.59	630.71	99.46	10	15	5	1.034
RR-0-26	534.14	630.71	54.41	65	70	5	3.763

RR-0-26	548.33	630.71	34.14	90	94.49	4.49	8.304
RR-0-27	558.47	629.83	68.99	50	55	5	1.383
RR-0-28	500.08	719.82	102.66	15	20	5	1.538
RR-0-28	502.95	719.82	98.57	20	25	5	1.207
RR-0-28	505.81	719.82	94.47	26.52	30	3.48	1.933
RR-0-28	511.55	719.82	86.28	35	40	5	2.258
RR-0-28	514.42	719.82	82.19	40	45	5	1.059
RR-0-31	426.03	181.34	67.56	6.1	10	3.9	2.101
RR-0-31	466.18	181.34	10.22	75	80	5	1.557
RR-0-32	392.68	810.71	104.06	6.1	10	3.9	1.468
RR-0-32	401.28	810.41	91.77	20	25	5	1.396
RR-0-32	409.88	810.11	79.48	35	40	5	1.153
RR-0-32	421.34	809.71	63.1	55	60	5	1.141
RR-0-32	429.85	809.41	50.94	70	74.68	4.68	1.013
RR-0-35	502.17	813.33	101.17	25	30	5	1.31
RR-0-35	510.78	813.33	88.89	40	45	5	1.259
RR-0-37	380.02	720.66	69.58	35	40	5	1.164
RR-0-37	400.09	720.66	40.91	70	75	5	2.703
RR-0-38	394.61	719.82	98.66	6.1	10	3.9	1.124
RR-0-38	400.35	719.82	90.46	15	20	5	3.953
RR-0-38	403.22	719.82	86.37	20	25	5	10.646
RR-0-38	406.08	719.82	82.27	25	30	5	2.012
RR-0-38	420.42	719.82	61.79	50	55	5	2.157
RR-0-39	444.28	720.39	78.88	35	40	5	1.053
RR-7-001	401.57	526.28	78.54	0	5	5	1.02
RR-7-001	404.18	526.28	63.77	15	20	5	12.528
RR-7-001	405.05	526.28	58.84	20	25	5	7.736
RR-7-001	405.92	526.28	53.92	25	30	5	1.793
RR-7-001	406.78	526.28	48.99	31.53	35	3.47	2.904
RR-7-001	407.65	526.28	44.07	35	40	5	1.244
RR-7-001	409.39	526.28	34.22	45	50	5	1.07
RR-7-001	411.13	526.28	24.37	55	60	5	1.076
RR-7-002	403.25	510.66	67.69	10	15	5	3.023
RR-7-002	404.12	510.66	62.77	15	20	5	8.271
RR-7-002	404.99	510.66	57.84	20	25	5	7.411
RR-7-002	405.86	510.66	52.92	25	30	5	6.829
RR-7-002	406.72	510.66	47.99	30	35	5	1.463
RR-7-002	408.46	510.66	38.15	40	45	5	1.051
RR-7-002	409.33	510.66	33.22	45	50	5	2.127
RR-7-002	410.2	510.66	28.3	50	55	5	4.593
RR-7-002	411.07	510.66	23.37	55	60	5	1.25
RR-7-003	409.27	474.28	64.69	10	15	5	3.842
RR-7-003	410.14	474.28	59.77	15	20	5	1.558
RR-7-003	413.61	474.28	40.07	35	40	5	4.764
RR-7-003	414.48	474.28	35.15	40	45	5	10.136
RR-7-003	415.35	474.28	30.22	45	50	5	2.952
RR-7-004	431.8	456.53	76.54	0	5	5	1.44
RR-7-004	433.54	456.53	66.69	10	15	5	1.372
RR-7-004	437.01	456.53	46.99	30	35	5	3.931
RR-7-004	439.62	456.53	32.22	45	50	5	2.982
RR-7-005	472.07	454.22	68.69	10	15	5	3.993
RR-7-005	472.94	454.22	63.77	15	20	5	4.313

RR-7-005	473.81	454.22	58.84	20	25	5	1.362
RR-7-005	474.68	454.22	53.92	25	30	5	1.322
RR-7-005	477.28	454.22	39.15	40	45	5	2.921
RR-7-005	478.15	454.22	34.22	45	50	5	1.502
RR-7-006	466.29	530.3	75.77	15	20	5	1.601
RR-7-006	468.03	530.3	65.92	25	30	5	1.298
RR-7-006	468.89	530.3	60.99	30	35	5	2.722
RR-7-006	471.5	530.3	46.22	45	50	5	1.863
RR-7-009	378.26	455.73	40.76	35	40	5	1.586
RR-7-009	379.97	455.73	36.06	40	45	5	1.748
RR-7-010	382.11	499.1	55.86	20	25	5	1.325
RR-7-011	370.5	428.07	46.92	25	30	5	4.055
RR-7-012	681.3	403.82	99.54	0	5	5	1.64
RR-7-013	373.23	395.02	52.84	20	25	5	1.049
RR-7-013	374.96	395.02	42.99	30	35	5	2.334
RR-7-013	375.83	395.02	38.07	35	40	5	5.402
RR-7-014	397.93	397.49	70.54	0	5	5	1.156
RR-7-014	404.88	397.49	31.15	40	45	5	7.111
RR-7-014	405.75	397.49	26.22	45	50	5	1.392
RR-7-015	427.82	402.01	55.77	15	20	5	1.485
RR-7-015	429.56	402.01	45.92	25	30	5	1.349
RR-7-015	431.29	402.01	36.07	35	40	5	2.204
RR-7-016	465.26	400.46	67.61	5	10	5	1.314
RR-7-016	466.13	400.46	62.69	10	15	5	1.064
RR-7-016	467	400.46	57.77	15	20	5	1.366
RR-7-016	467.87	400.46	52.84	20	25	5	2.344
RR-7-016	473.08	400.46	23.3	50	55	5	1.794
RR-7-017	487.7	401.79	73.54	0	5	5	1.108
RR-7-017	488.57	401.79	68.61	5	10	5	14.44
RR-7-017	489.44	401.79	63.69	10	15	5	4.093
RR-7-017	491.18	401.79	53.84	20	25	5	2.467
RR-7-017	492.91	401.79	43.99	30	35	5	11.674
RR-7-017	494.65	401.79	34.15	40	45	5	1.561
RR-8-018	386.96	453.65	40.76	35	40	5	1.398
RR-8-018	392.09	453.65	26.67	50	55	5	1.921
RR-8-019	397.45	453.6	53.86	20	25	5	3.903
RR-8-019	399.16	453.6	49.16	25	30	5	1.426
RR-8-019	400.87	453.6	44.46	30	35	5	1.338
RR-8-019	402.58	453.6	39.76	35	40	5	1.227
RR-8-019	404.29	453.6	35.06	40	45	5	1.117
RR-8-019	406	453.6	30.36	45	50	5	2.765
RR-8-019	407.71	453.6	25.67	50	55	5	1.654
RR-8-020	406.63	457.13	73.65	0	5	5	1.048
RR-8-020	408.34	457.13	68.95	5	10	5	1.492
RR-8-020	411.76	457.13	59.56	15	20	5	2.528
RR-8-020	413.47	457.13	54.86	20	25	5	1.764
RR-8-020	415.18	457.13	50.16	25	30	5	1.701
RR-8-022	316.37	773.31	80.25	10	15	5	4.878
RR-8-024	376.86	774.91	92.56	15	20	5	2.883
RR-8-024	378.57	774.91	87.86	20	25	5	1.167
RR-8-024	381.99	774.91	78.46	30	35	5	1.056
RR-8-024	383.7	774.91	73.76	35	40	5	14.426

RR-8-024	390.54	774.91	54.97	55	60	5	1.276
RR-8-024	391.56	774.91	52.15	60.04	61	0.96	6.48
RR-8-025	429.09	457.07	55.86	20	25	5	1.023
RR-8-025	435.93	457.07	37.06	40	45	5	6.994
RR-8-025	441.06	457.07	22.97	55	60	5	4.945
RR-8-026	484.85	455.45	82.65	0	5	5	2.619
RR-8-026	486.56	455.45	77.95	5	10	5	2.244
RR-8-026	488.27	455.45	73.25	10	15	5	2.076
RR-8-026	489.98	455.45	68.56	15.19	20	4.81	3.08
RR-8-026	495.11	455.45	54.46	30	35	5	2.338
RR-8-027	401.68	773.27	109.65	1.52	5	3.48	2.157
RR-8-027	403.39	773.27	104.95	5	10	5	3.971
RR-8-028	458.26	454.4	70.95	5	10	5	9.634
RR-8-028	459.97	454.4	66.25	10	15	5	4.102
RR-8-028	465.1	454.4	52.16	26.04	30	3.96	1.049
RR-8-028	473.65	454.4	28.67	51.82	55	3.18	1.198
RR-8-028	475.36	454.4	23.97	55	60	5	1.623
RR-8-030	280.75	599.69	67.56	15	20	5	5.553
RR-8-030	291.01	599.69	39.36	45	50	5	2.241
RR-8-031	345.6	454.03	55.86	20	25	5	1.153
RR-8-034	359.98	393.27	68.95	5	10	5	1.141
RR-8-034	377.08	393.27	21.97	55	60	5	1.202
RR-8-035	385.57	592.28	82.65	0	5	5	2.536
RR-8-037	465.89	596.54	54.36	45	50	5	1.021
RR-8-037	469.31	596.54	44.97	55	60	5	6.649
RR-8-037	470.51	596.54	41.66	60	62.03	2.03	1.272
RR-8-038	421.46	398.2	51.86	20	25	5	5.87
RR-8-039	431.37	588.44	68.16	25	30	5	2.317
RR-8-040	441.05	399.65	65.95	5	10	5	1.537
RR-8-040	446.18	399.65	51.86	20	25	5	1.281
RR-8-041	467.41	400.76	29.36	45	50	5	1.208
RR-8-043	508.29	403.67	55.86	20	25	5	1.119
RR-8-043	510	403.67	51.16	25	30	5	1.68
RR-8-043	513.42	403.67	41.76	35	40	5	1.251
RR-8-044	317.63	893.53	88.95	5	10	5	5.37
RR-8-044	324.47	893.53	70.16	25	30	5	1.911
RR-8-045	386.72	889.34	94.56	15	20	5	5.592
RR-8-045	393.56	889.34	75.76	35	40	5	1.013
RR-8-045	395.27	889.34	71.06	40	45	5	1.218
RR-8-045	396.98	889.34	66.36	45	50	5	1.212
RR-8-047	395.74	541.31	57.16	25	30	5	1.468
RR-8-047	402.58	541.31	38.36	45	50	5	1.314
RR-8-047	406	541.31	28.97	55	60	5	7.421
RR-8-047	407.02	541.31	26.15	60.04	61	0.96	1.269
RR-8-048	539.42	533.15	71.46	30	35	5	1.443
RR-8-051	704.95	542.55	107.25	10	15	5	25.589
RR-8-051	706.66	542.55	102.56	15	20	5	1.232
RR-8-053	832.63	511.13	125.25	10	15	5	1.021
RR-8-054	333.85	826.92	70.16	25	30	5	4.965
RR-8-054	335.56	826.92	65.46	30	35	5	2.352
RR-8-058	379.93	712.15	91.25	10	15	5	1.351
RR-8-058	381.64	712.15	86.56	15	20	5	1.136

RR-8-058	391.9	712.15	58.36	45	50	5	1.107
RR-8-058	393.61	712.15	53.67	50	55	5	1.821
RR-8-058	395.32	712.15	48.97	55	60	5	1.229
RR-8-058	398.23	712.15	40.95	65	67.06	2.06	1.9
RR-8-059	409.98	714.22	99.95	5	10	5	1.714
RR-8-060	484.05	712.11	59.97	55	60	5	1.174
RR-8-061	448.82	647.16	67.76	35	40	5	1.792
RR-8-061	455.66	647.16	48.97	55	60	5	1.775
RR-8-063	392.89	653.62	61.76	35	40	5	1.145
RR-8-063	396.31	653.62	52.36	45	50	5	3.241
RR-8-063	398.02	653.62	47.67	50	55	5	1.316
RR-8-063	401.44	653.62	38.27	60	65	5	1.095
RR-8-063	402.64	653.62	34.95	65	67.06	2.06	3.84
RR-8-065	512.84	703.49	116.65	0	5	5	3.009
RR-8-065	523.1	703.49	88.46	30	35	5	1.003
RR-8-065	529.94	703.49	69.67	50	55	5	1.75
RR-8-068	679.41	599.23	113.25	10	15	5	4.7
RR-8-068	681.12	599.23	108.56	16.71	20	3.29	20.807
RR-8-070	750.92	613.11	95.06	40	45	5	1.219
RR-8-070	752.63	613.11	90.36	45	50	5	1.414
RR-8-071	749.5	664.69	120.86	20	25	5	1.225
RR-8-072	455.55	371.82	64.95	5	10	5	3.395
RR-8-072	458.97	371.82	55.56	15	20	5	1.253
RR-8-072	464.1	371.82	41.46	30	35	5	2.591
RR-8-073	686.62	661.32	112.86	20	25	5	1.722
RR-8-074	710.13	663.26	135.65	0	5	5	1.588
RR-8-074	711.84	663.26	130.95	5	10	5	8.958
RR-8-074	713.55	663.26	126.25	10	15	5	1.029
RR-8-075	484.12	377.87	65.95	5	10	5	1.022
RR-8-075	485.83	377.87	61.25	10	15	5	1.563
RR-8-075	490.96	377.87	47.16	25	30	5	1.389
RR-8-075	492.67	377.87	42.46	30	35	5	5.443
RR-8-075	501.22	377.87	18.97	55	60	5	1.859
RR-8-075	502.93	377.87	14.27	60	65	5	2.487
RR-8-078	509.18	654.61	102.25	10	15	5	1.053
RR-8-078	510.89	654.61	97.56	15	20	5	2.092
RR-8-078	512.6	654.61	92.86	20	25	5	13.974
RR-8-078	516.02	654.61	83.46	30	35	5	3.885
RR-8-078	521.15	654.61	69.36	45	50	5	1.861
RR-8-079	357.91	825.92	91.25	10	15	5	3.466
RR-8-079	378.27	825.92	35.31	70	74.07	4.07	8.778
RR-8-080	403.11	828.46	101.25	10	15	5	1.985
RR-8-080	404.82	828.46	96.56	15	20	5	1.863
RR-8-083	728.46	478.18	111.65	0	5	5	2.217
RR-8-083	730.17	478.18	106.95	5	10	5	2.579
RR-8-083	731.88	478.18	102.25	10	15	5	1.098
RR-8-086	342.55	1148.18	64.27	60	65	5	3.227
RR-8-086	344.26	1148.18	59.57	65	70	5	1.135
RR-8-088	456.55	340.83	68.65	0	5	5	1.546
RR-8-088	458.26	340.83	63.95	5	10	5	2.297
RR-8-088	459.97	340.83	59.25	10	15	5	1.1
RR-8-089	732.7	725.69	126.15	20	24.38	4.38	1.469

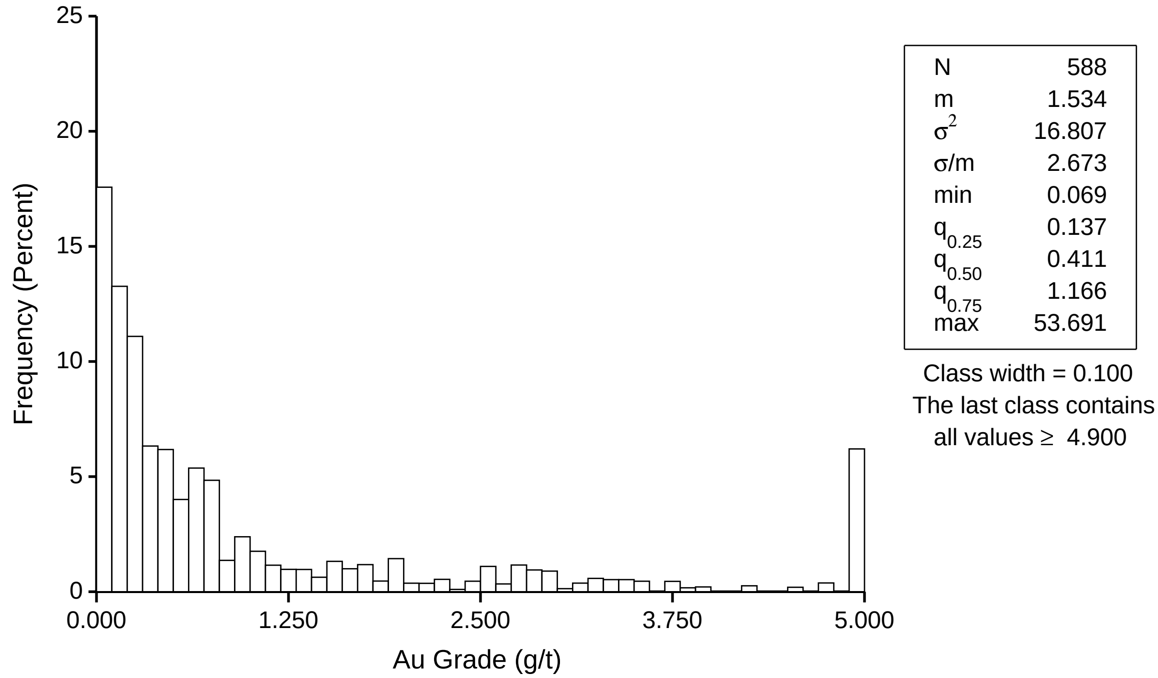
RR-8-090	483.95	530.61	93.65	0	5	5	1.396
RR-8-090	485.66	530.61	88.95	5	10	5	1.353
RR-8-090	489.08	530.61	79.56	15	20	5	1.728
RR-8-090	495.92	530.61	60.76	35	40	5	1.696
RR-8-090	497.63	530.61	56.06	40	45	5	4.837
RR-8-090	502.76	530.61	41.97	55	60	5	2.533
RR-9-091	493.13	416.13	66.25	10	15	5	2.822
RR-9-091	494.84	416.13	61.56	15	20	5	1.649
RR-9-091	501.68	416.13	42.76	35	40	5	5.422
RR-9-092	488.84	385.53	73.65	0	5	5	2.101
RR-9-092	490.55	385.53	68.95	5	10	5	1.706
RR-9-093	476.34	385.71	67.95	5	10	5	1.406
RR-9-093	478.05	385.71	63.25	10	15	5	2.937
RR-9-093	488.31	385.71	35.06	40	45	5	1.18
RR-9-093	489.5	385.71	31.77	45.37	47	1.63	3.53
RR-9-095	463.3	416.36	67.25	10	15	5	1.237
RR-9-096	487.77	416.18	39.06	40	45	5	1.023
RR-9-096	488.79	416.18	36.24	45.28	46	0.72	1.369
RR-9-097	433.39	480.87	55.86	20	25	5	1.047
RR-9-098	433.72	480.08	74.65	0	5	5	25.477
RR-9-098	447.4	480.08	37.06	40	45	5	1.107
RR-9-098	448.42	480.08	34.24	45.28	46	0.72	5.875

APPENDIX B

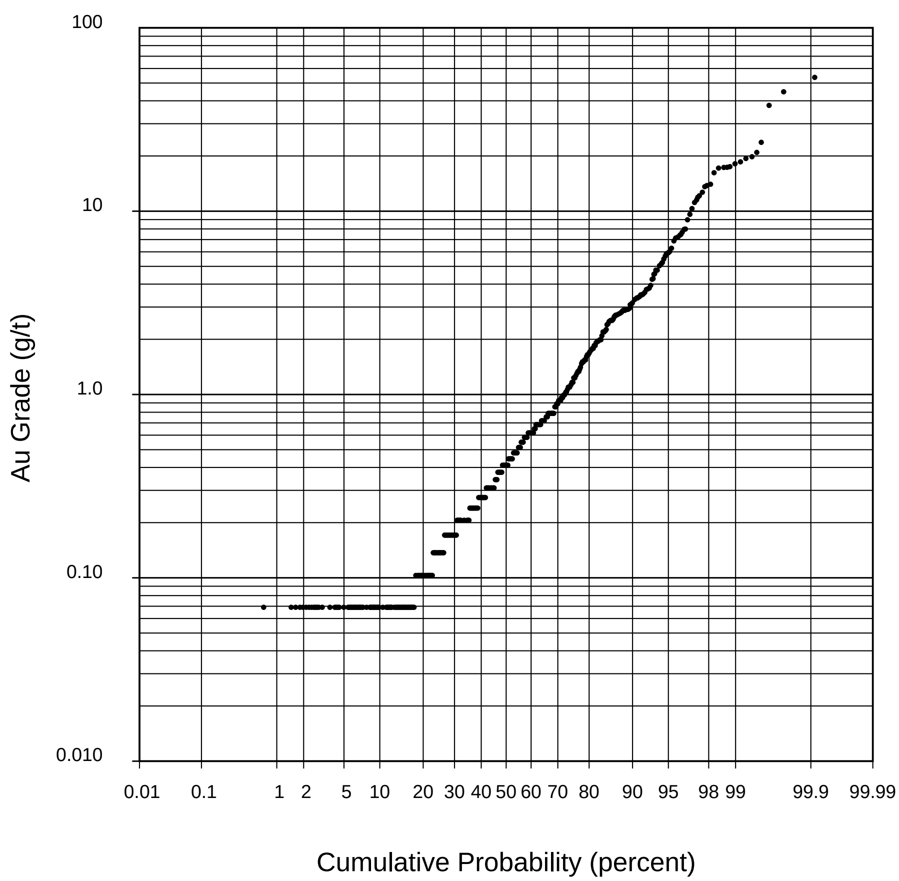
DECLUSTERING

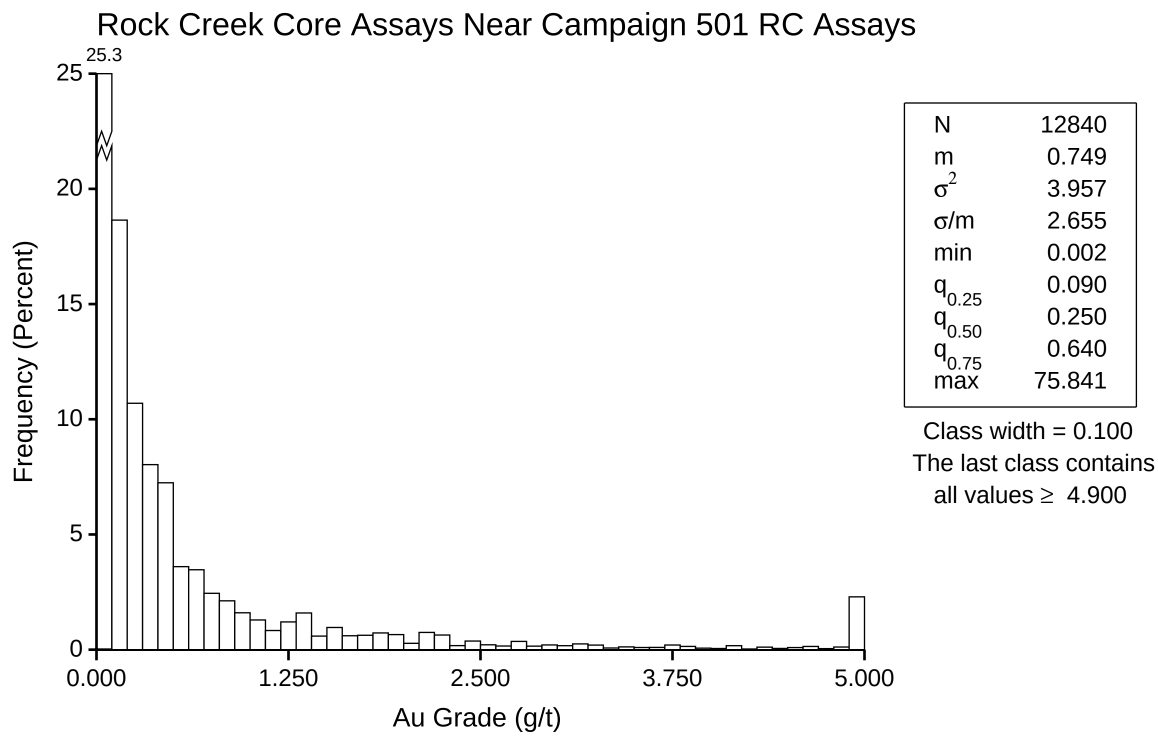
B-1 Q-Q Plots for Twin Hole Data

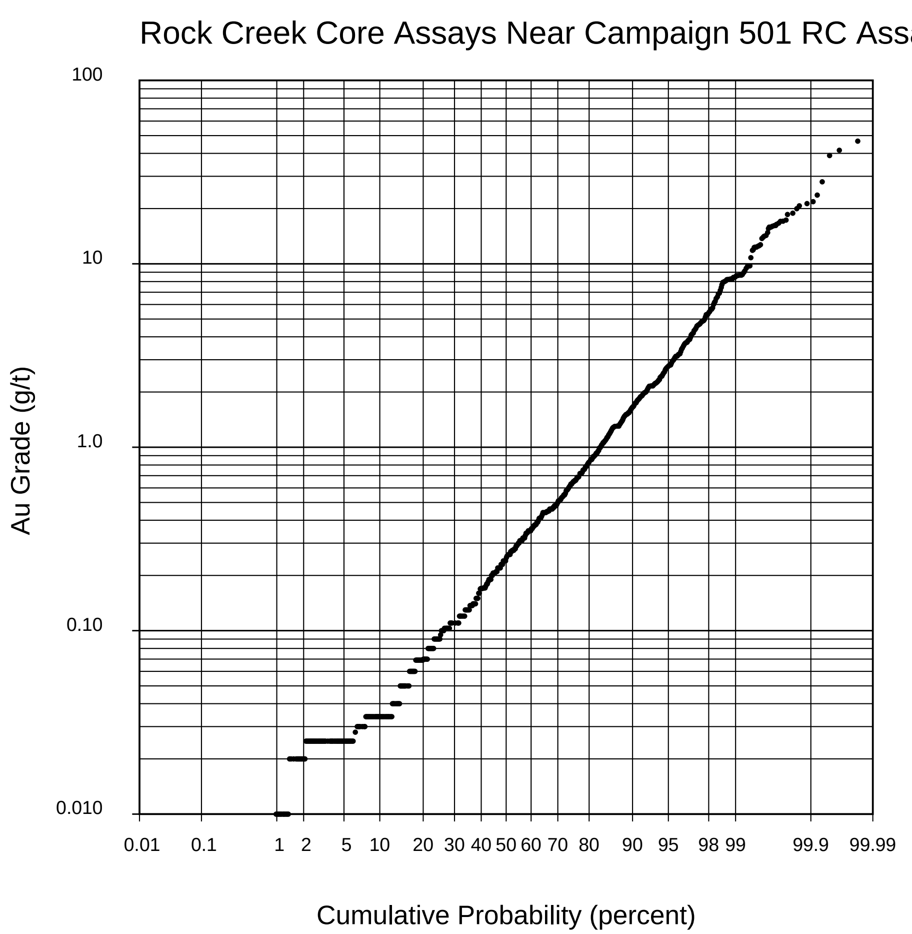
Rock Creek Campaign 501 Near Core Assays

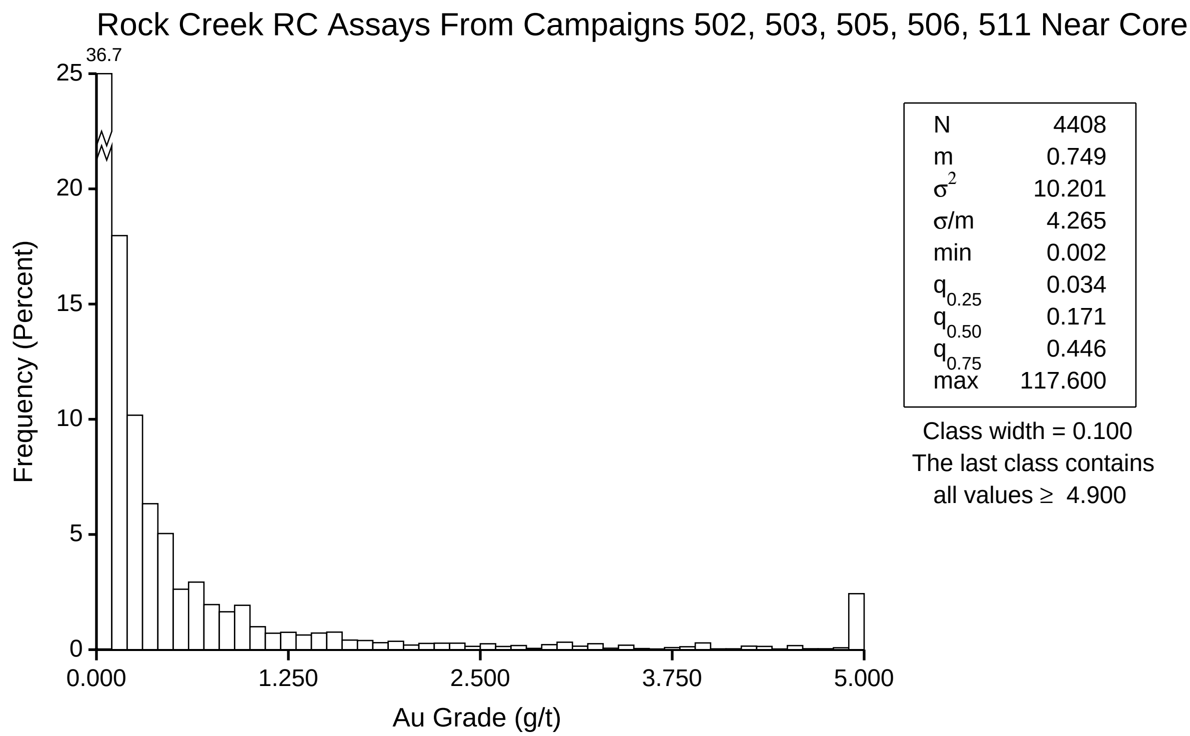


Rock Creek Campaign 501 Near Core Assays

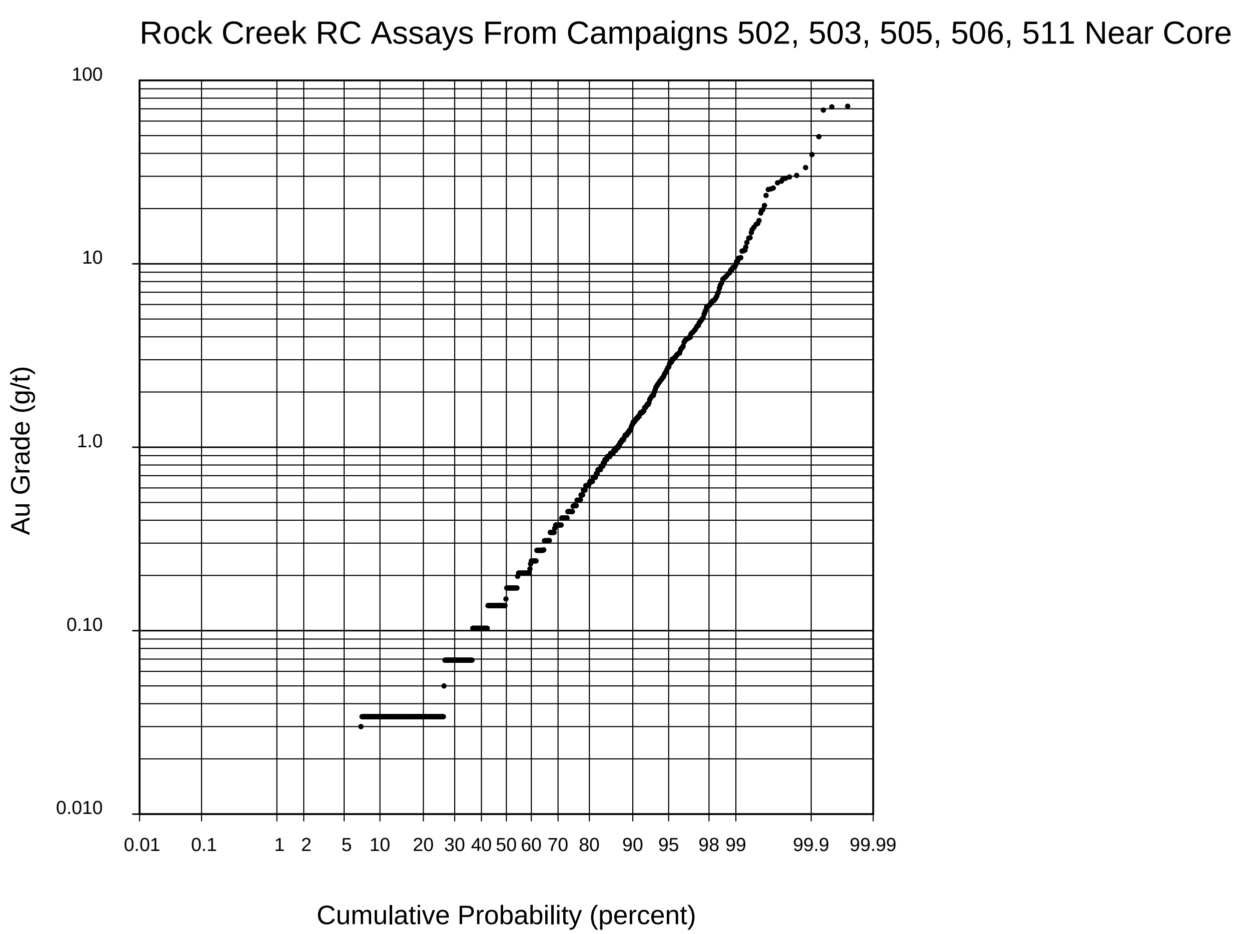



Rock Creek Core Assays Near Campaign 501 RC Assays
25.3
Frequency (Percent)
Au Grade (g/t)
N 12840
m 0.749
σ2 3.957
σ/m 2.655
min 0.002
q0.25 0.090
q0.50 0.250
q0.75 0.640
max 75.841
Class width = 0.100
The last class contains
all values ≥ 4.900


Rock Creek Core Assays Near Campaign 501 RC Assays
Au Grade (g/t)
Cumulative Probability (percent)

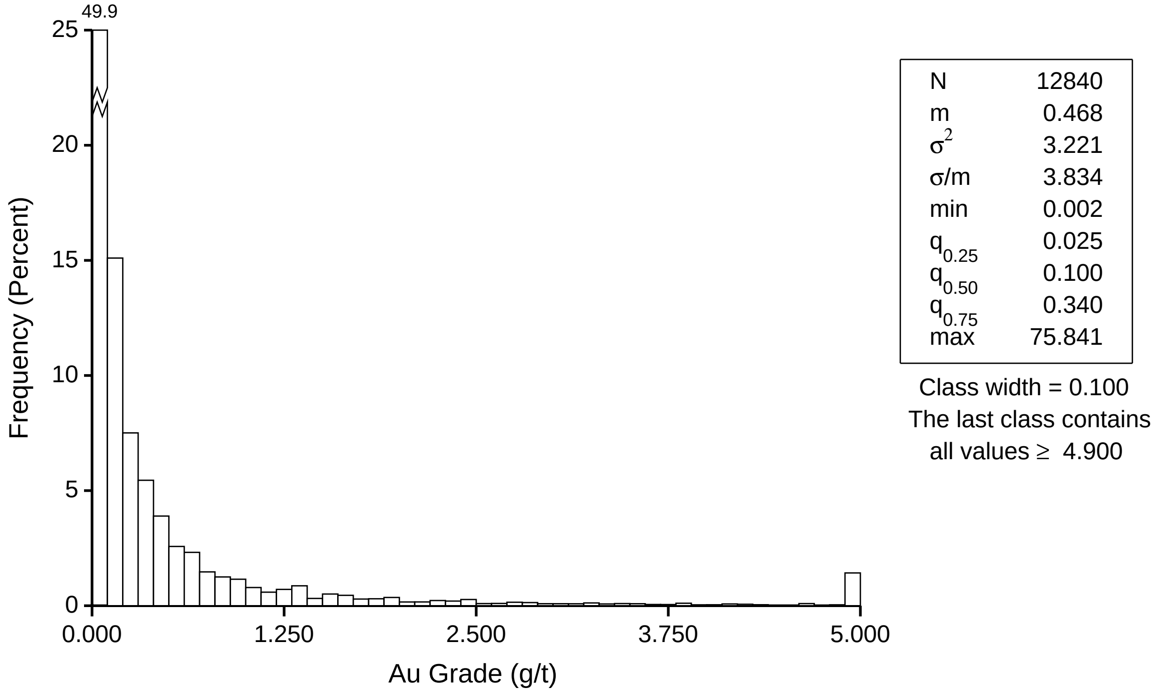


Rock Creek RC Assays From Campaigns 502, 503, 505, 506, 511 Near Core
36.7
25
20
15
10
5
0
Frequency (Percent)
0.000
1.250
2.500
3.750
5.000
Au Grade (g/t)
N 4408
m 0.749
σ2 10.201
σ/m 4.265
min 0.002
q0.25 0.034
q0.50 0.171
q0.75 0.446
max 117.600
Class width = 0.100
The last class contains
all values ≥ 4.900

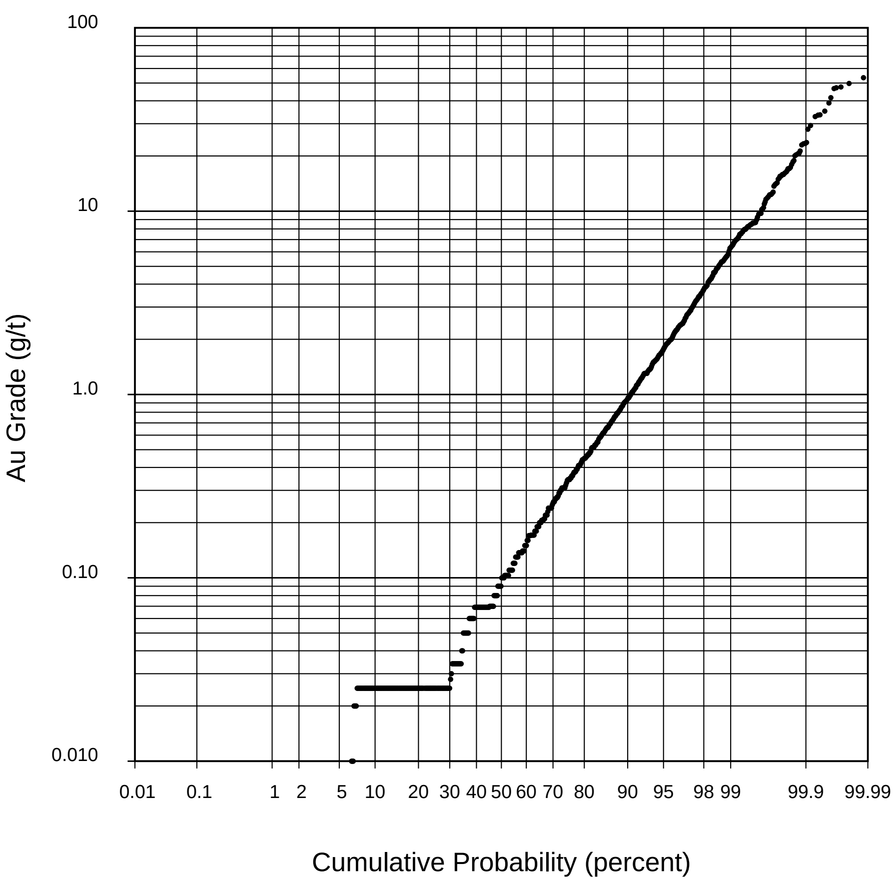


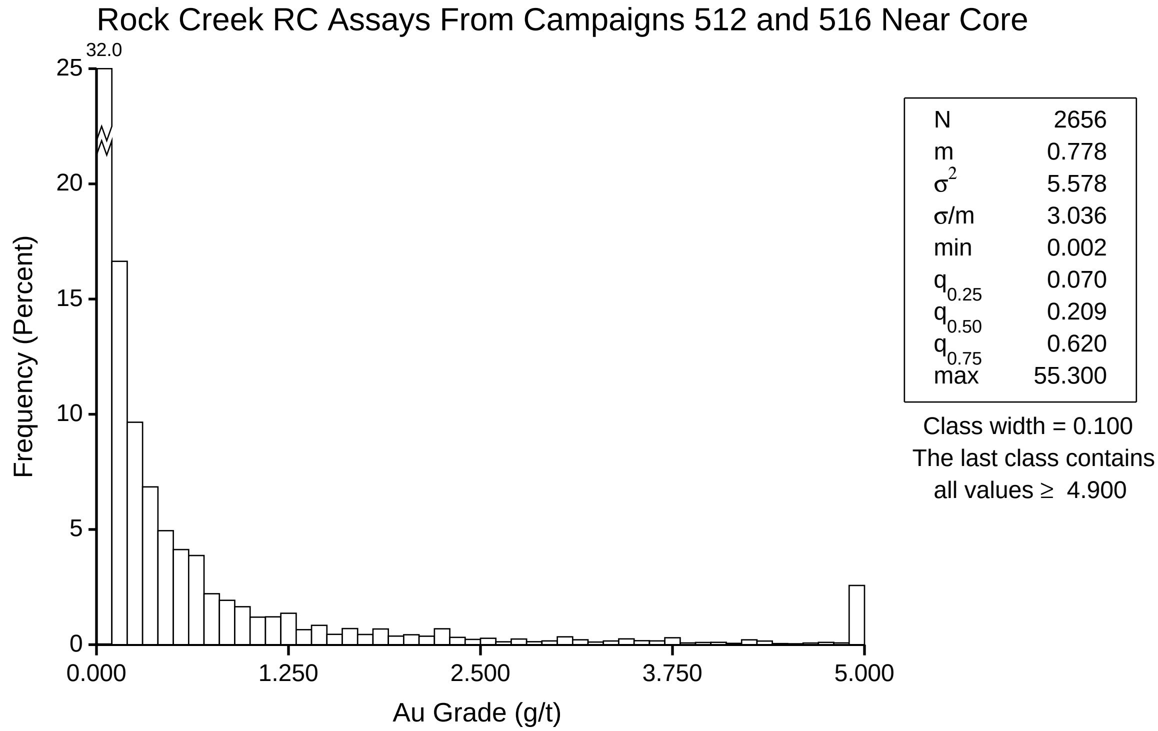
Rock Creek RC Assays From Campaigns 502, 503, 505, 506, 511 Near Core
100
10
1.0
0.10
0.010
Au Grade (g/t)
0.01
0.1
1
2
5
10
20
30
40
50
60
70
80
90
95
98
99
99.9
99.99
Cumulative Probability (percent)

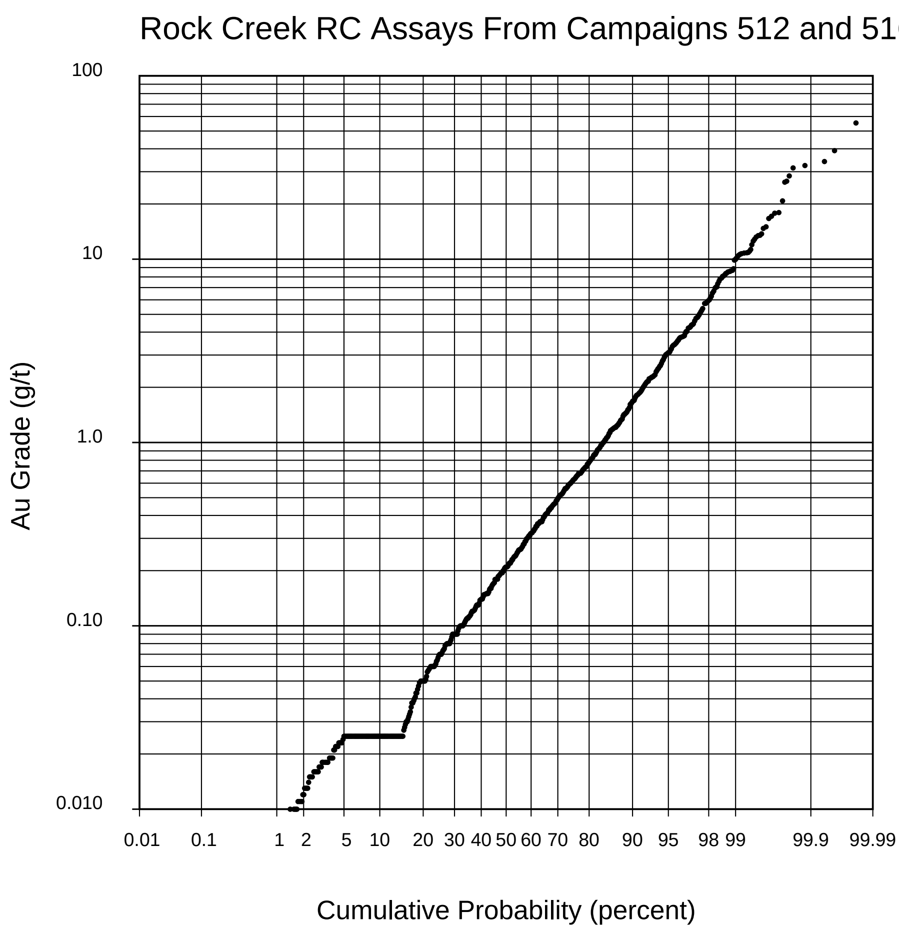
Rock Creek Core Assays Near Campaigns 502, 503, 505, 506, 511



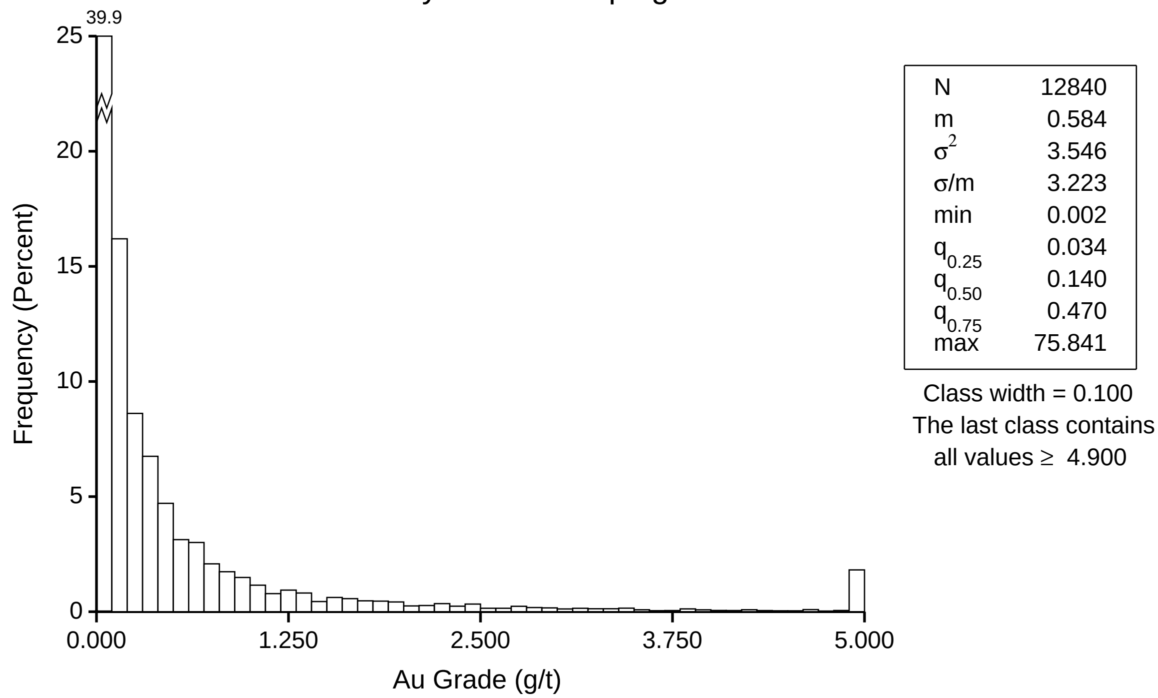
Rock Creek Core Assays Near Campaigns 502, 503, 505, 506, 511



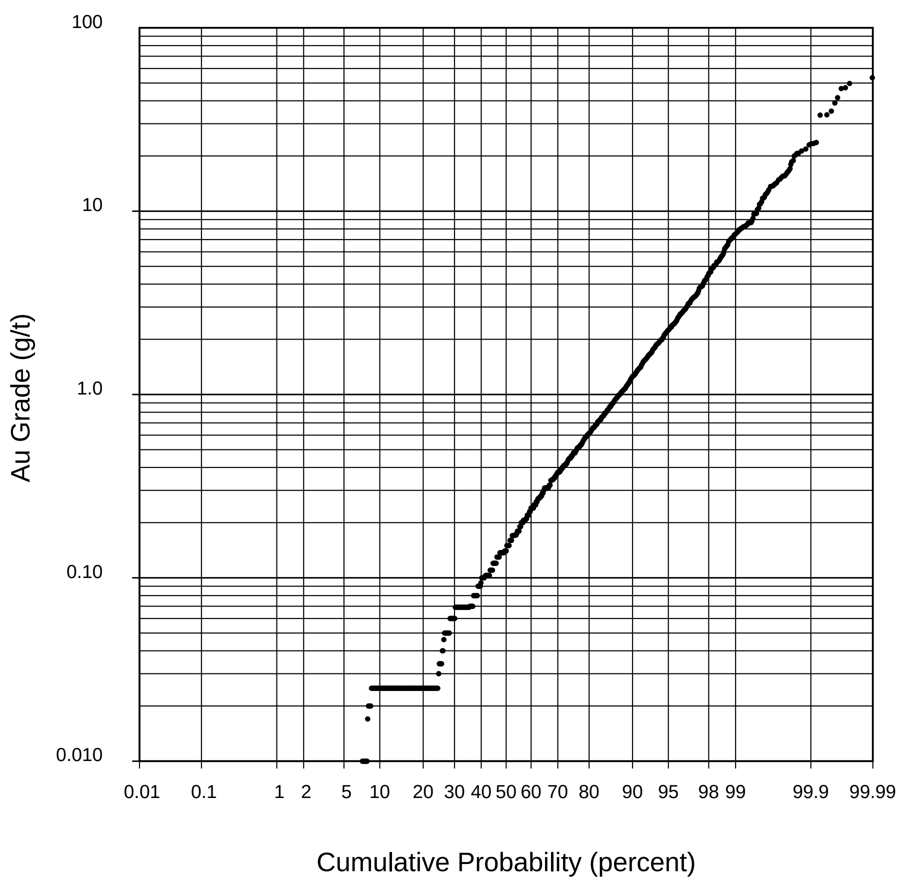

Rock Creek RC Assays From Campaigns 512 and 516 Near Core
32.0
25
20
15
10
5
0
Frequency (Percent)
0.000
1.250
2.500
3.750
5.000
Au Grade (g/t)
N 2656
m 0.778
σ2 5.578
σ/m 3.036
min 0.002
q0.25 0.070
q0.50 0.209
q0.75 0.620
max 55.300
Class width = 0.100
The last class contains
all values ≥ 4.900

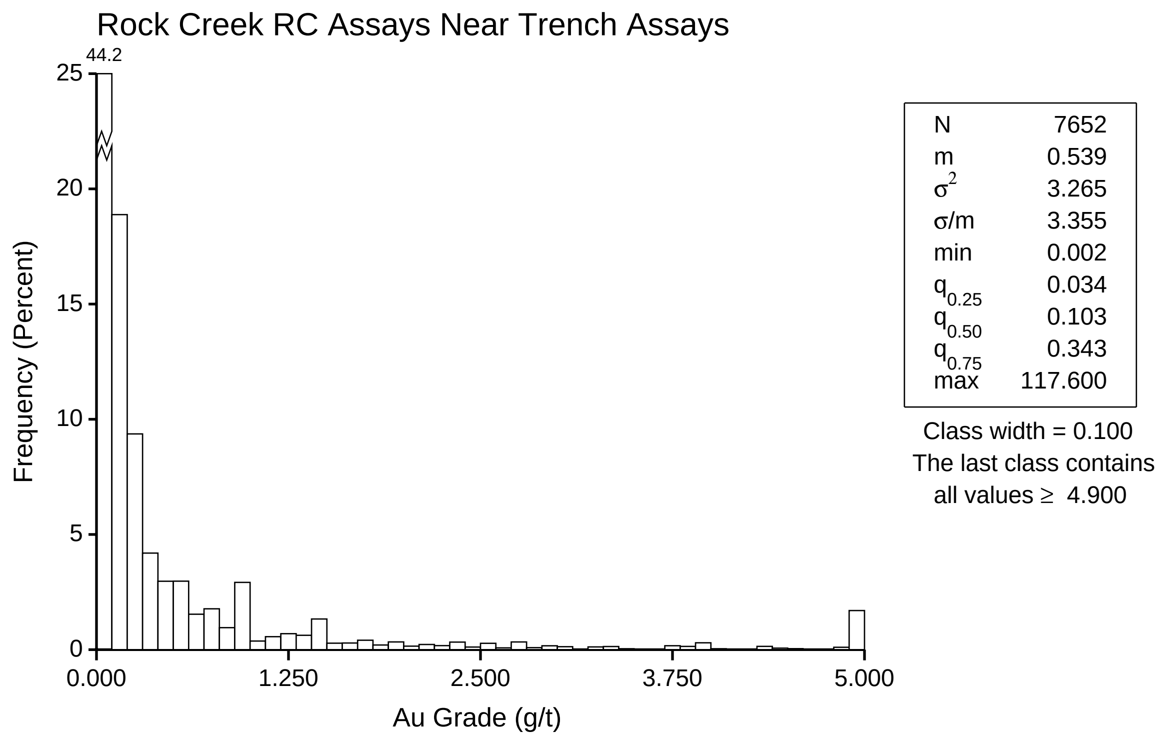

Rock Creek RC Assays From Campaigns 512 and 516 Near Core
100
10
1.0
0.10
0.010
Au Grade (g/t)
0.01
0.1
1
2
5
10
20
30
40
50
60
70
80
90
95
98
99
99.9
99.99
Cumulative Probability (percent)

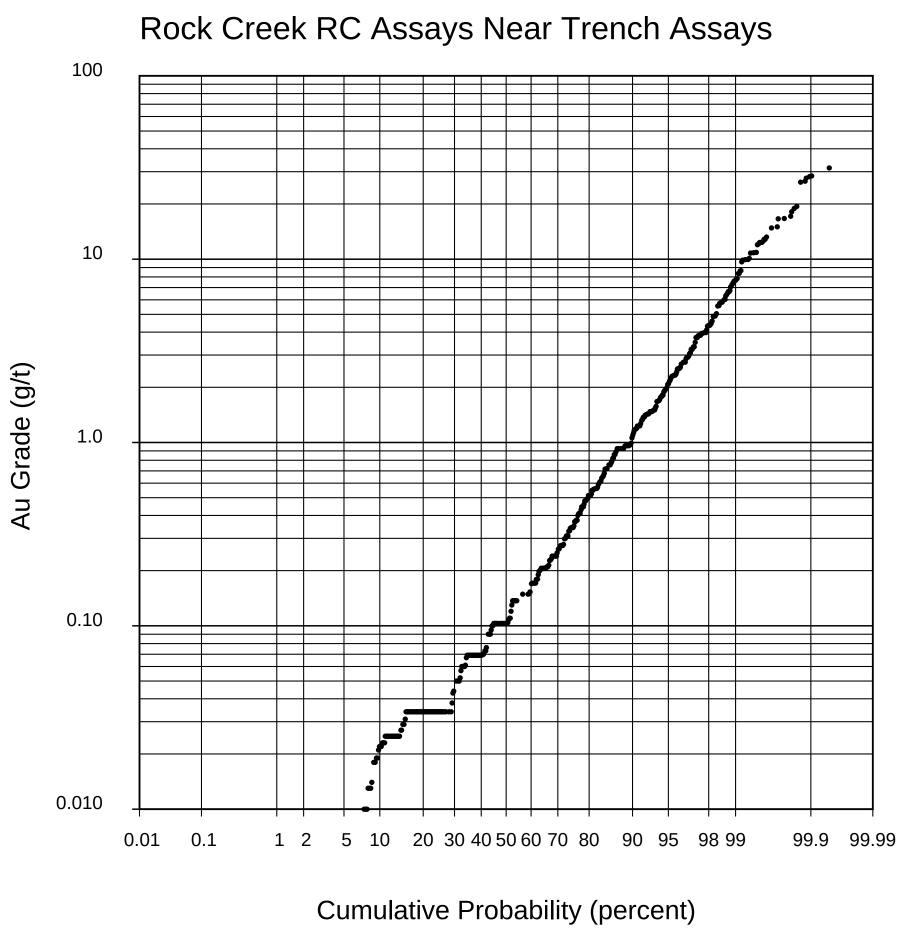
Rock Creek Core Assays Near Campaigns 512 and 516



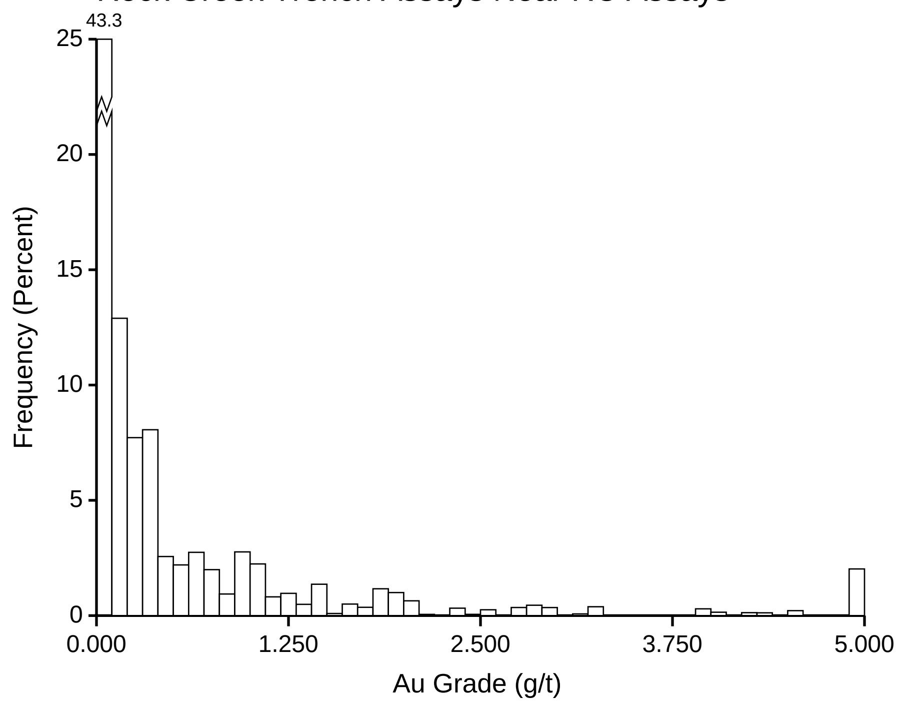
Rock Creek Core Assays Near Campaigns 512 and 516




Rock Creek RC Assays Near Trench Assays
44.2
Frequency (Percent)
Au Grade (g/t)
N 7652
m 0.539
σ2 3.265
σ/m 3.355
min 0.002
q0.25 0.034
q0.50 0.103
q0.75 0.343
max 117.600
Class width = 0.100
The last class contains
all values ≥ 4.900


Rock Creek RC Assays Near Trench Assays
Au Grade (g/t)
Cumulative Probability (percent)

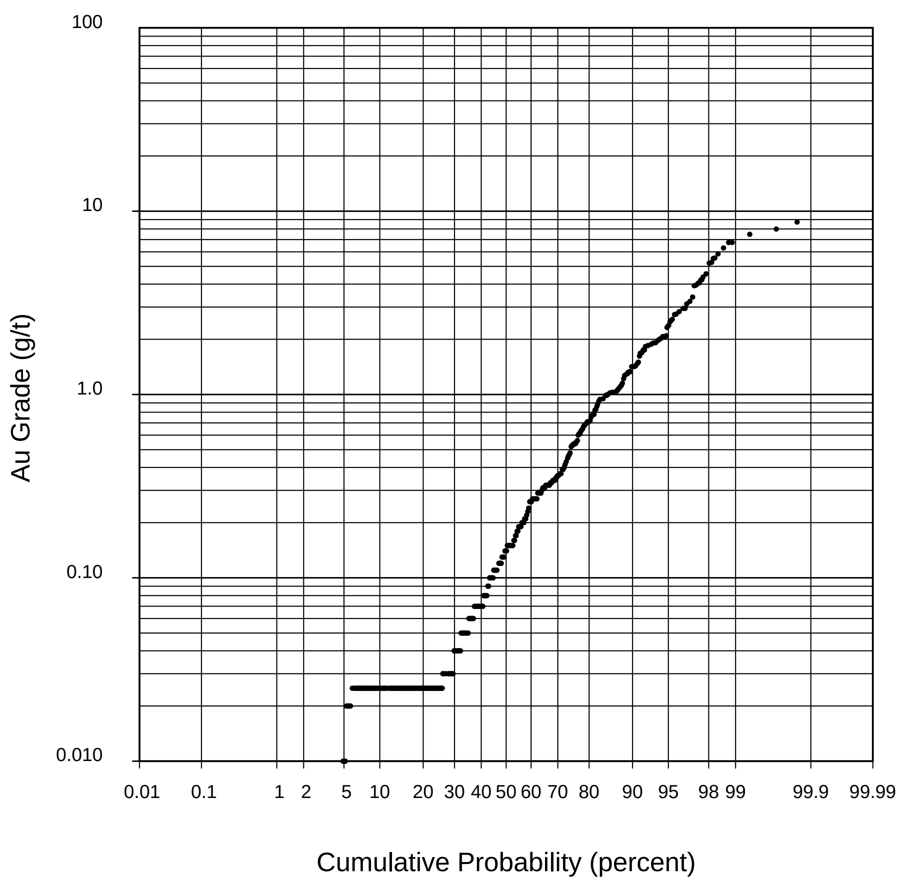
Rock Creek Trench Assays Near RC Assays

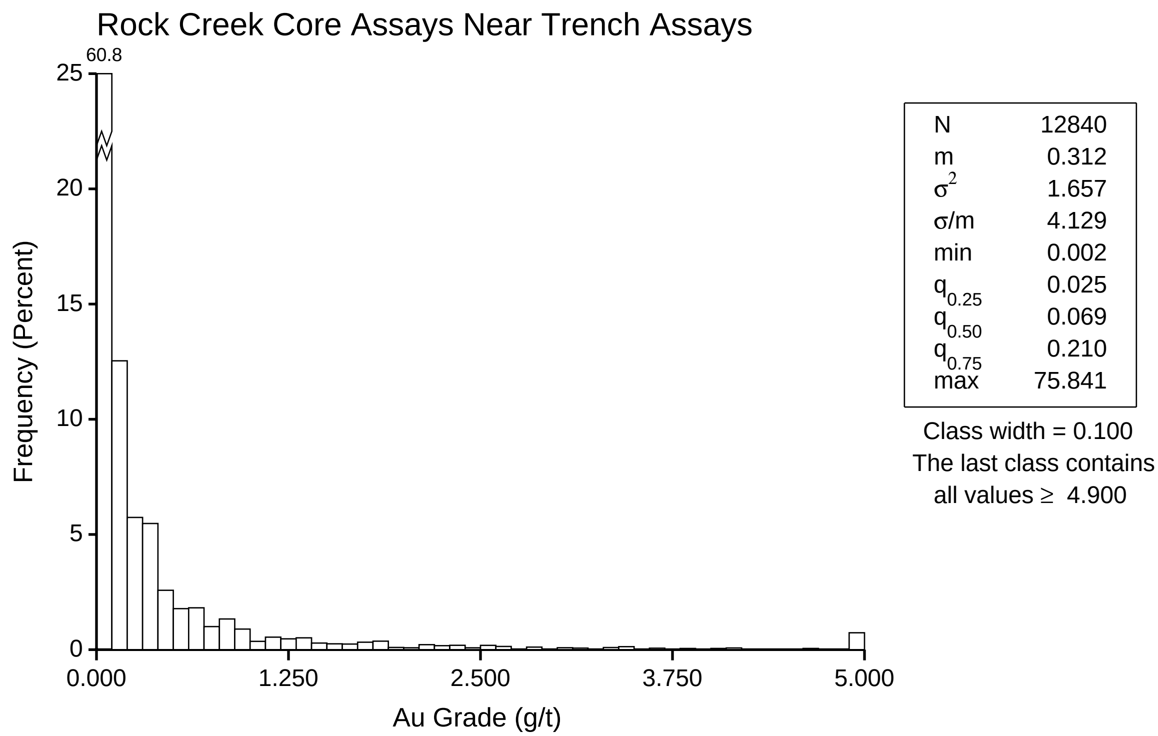


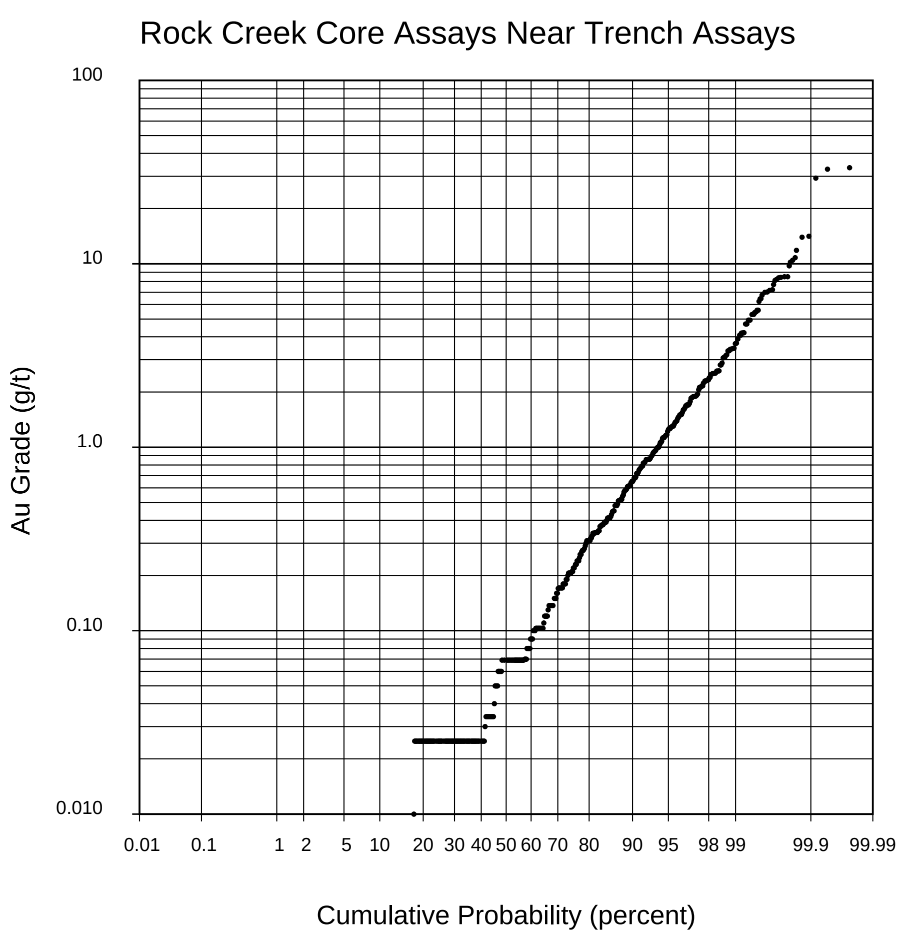
N	906
m	0.553
σ^2	1.339
σ/m	2.092
min	0.002
$q_{0.25}$	0.025
$q_{0.50}$	0.140
$q_{0.75}$	0.530
max	24.990

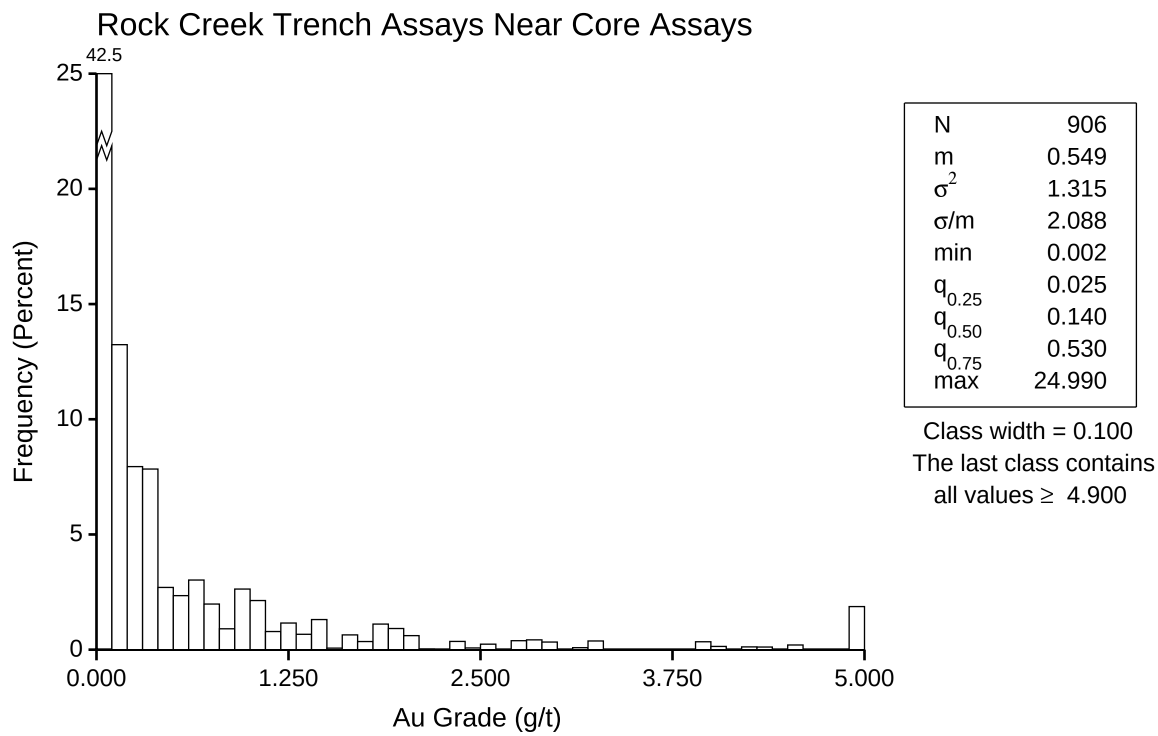
Class width = 0.100
The last class contains
all values ≥ 4.900

Rock Creek Trench Assays Near RC Assays

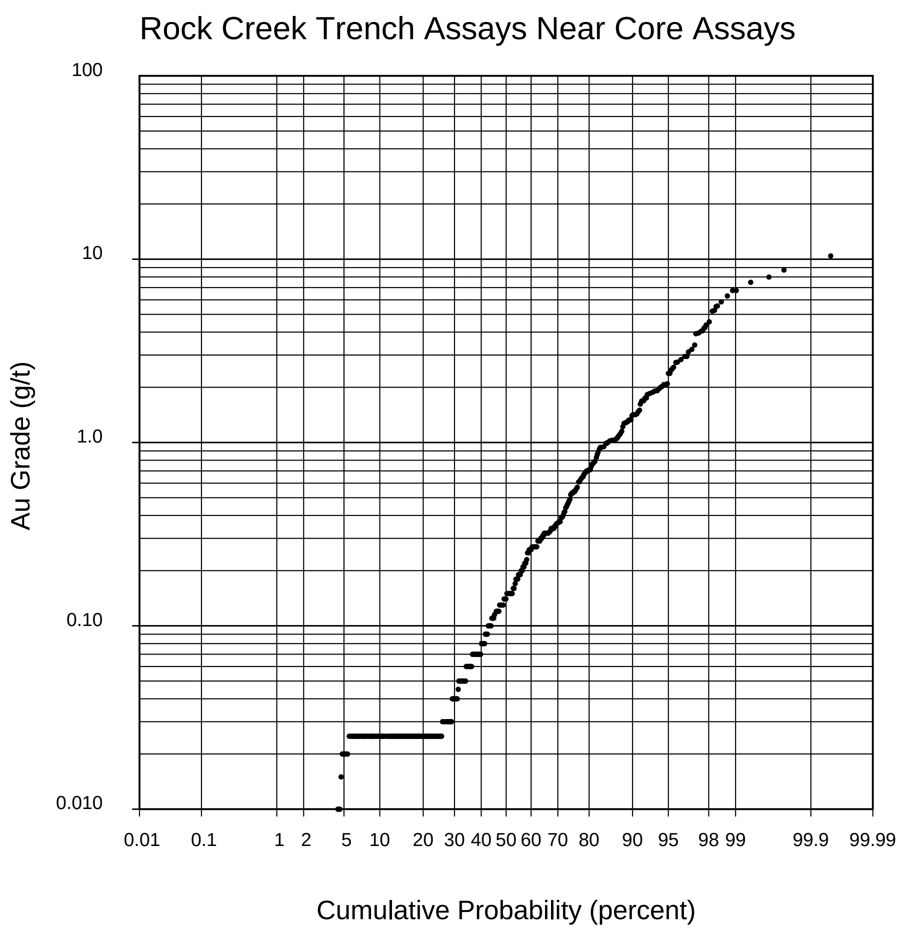



Rock Creek Core Assays Near Trench Assays
60.8
25
20
15
10
5
0
Frequency (Percent)
0.000
1.250
2.500
3.750
5.000
Au Grade (g/t)
N 12840
m 0.312
σ2 1.657
σ/m 4.129
min 0.002
q0.25 0.025
q0.50 0.069
q0.75 0.210
max 75.841
Class width = 0.100
The last class contains
all values ≥ 4.900


Rock Creek Core Assays Near Trench Assays
100
10
1.0
0.10
0.010
Au Grade (g/t)
0.01
0.1
1
2
5
10
20
30
40
50
60
70
80
90
95
98
99
99.9
99.99
Cumulative Probability (percent)

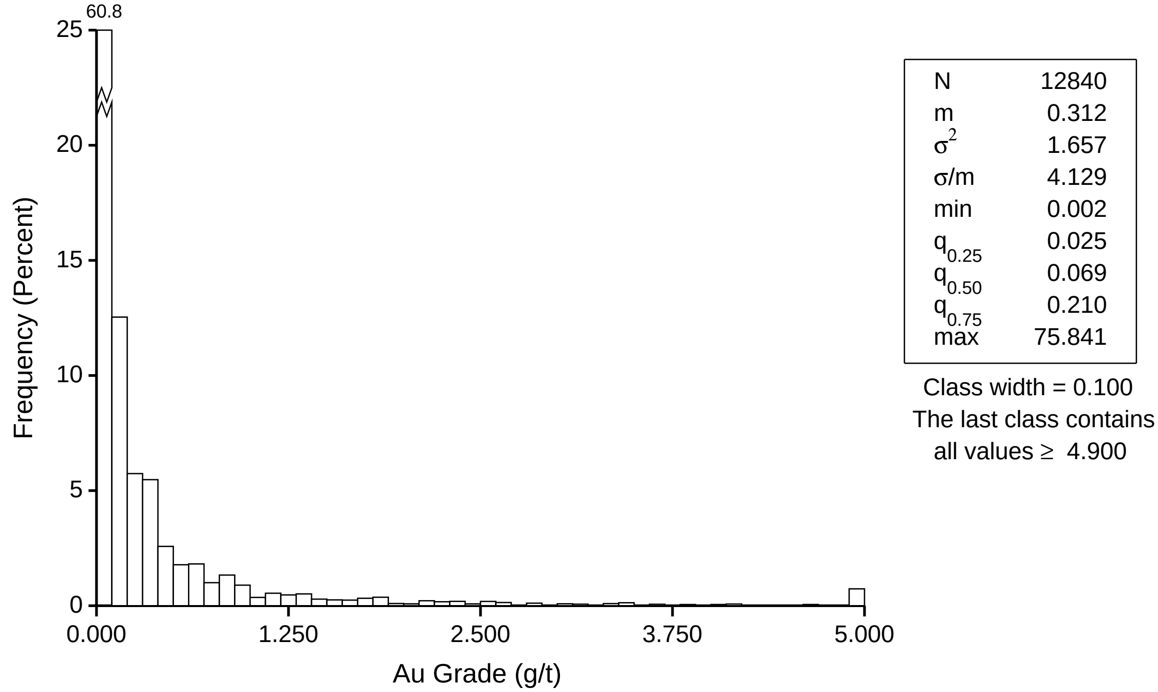


Rock Creek Trench Assays Near Core Assays
42.5
25
20
15
10
5
0
Frequency (Percent)
0.000
1.250
2.500
3.750
5.000
Au Grade (g/t)
N 906
m 0.549
σ2 1.315
σ/m 2.088
min 0.002
q0.25 0.025
q0.50 0.140
q0.75 0.530
max 24.990
Class width = 0.100
The last class contains
all values ≥ 4.900

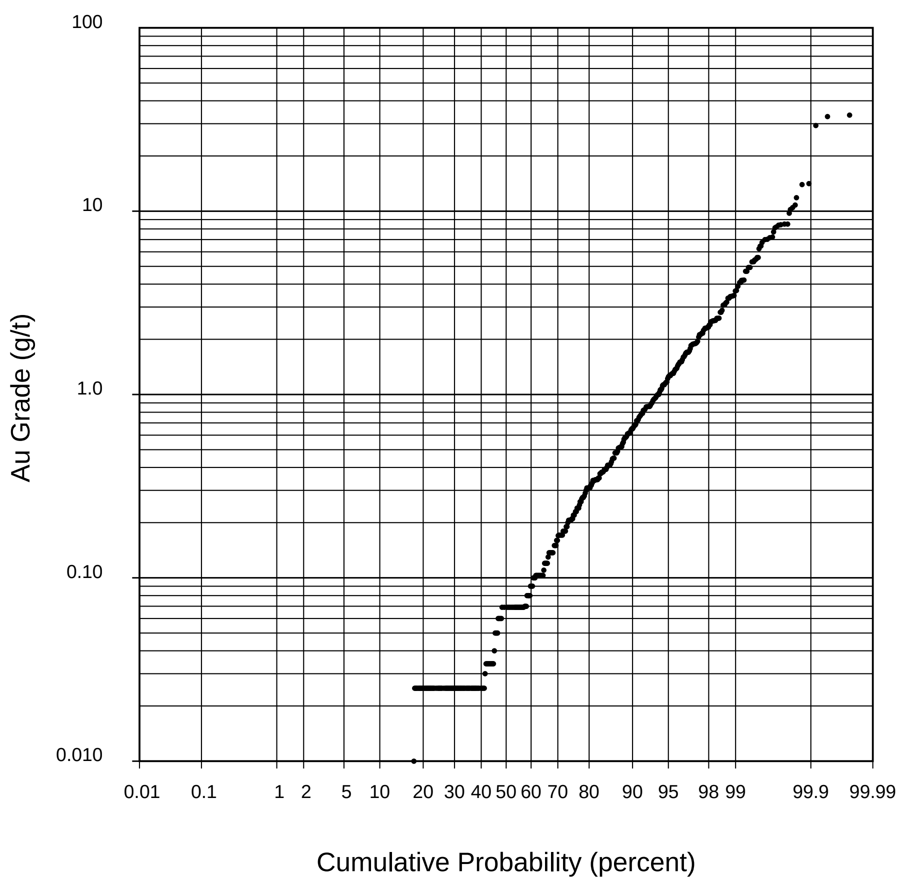


Rock Creek Trench Assays Near Core Assays
100
10
1.0
0.10
0.010
Au Grade (g/t)
0.01
0.1
1
2
5
10
20
30
40
50
60
70
80
90
95
98
99
99.9
99.99
Cumulative Probability (percent)

Rock Creek Core Assays Near Trench Assays



Rock Creek Core Assays Near Trench Assays



APPENDIX B-1

Q-Q Plots for Twin Hole Data

The plots presented here were prepared using the twin-hole data.

Run 1 – Core 2003 (315) versus Core 2004 (316). There is no difference. The use of triple-tube core barrels shows no affect on grade.

Run 2 – RC 2004 (516) versus RC Summer 2003 (512). There is little difference in mean grades at the 98th percentile. The 2004 RC campaign has a lower CV. This may indicate better samples, or alternatively mixing within the hole.

Run 3 – RC 2004 (516) versus RC Campaigns 502 to 511. The last 8 percent of the data show a high-bias in favor of the earlier campaigns. The 516 campaign has a lower CV.

Run 4 – Core 2003 (315) versus RC Campaigns 502 to 511. There is a clear high bias in favor of the RC data. At the 98th percentile, RC data average 61% higher than core.

Run 5 – Core 2004 (316) versus RC Campaigns 502 to 511. There is a high bias in favor of the RC data. At the 98th percentile, RC data average 27% higher than core.

Run 6 – Core 2003 (315) + Core 2004 (316) versus RC Campaigns 502 to 511. There is high bias in favor of the RC data. At the 98th percentile, RC data average 42% higher than core.

Run 7 – Core 2003 (315) versus RC Summer 2003 (512). There is a clear high bias in favor of the RC data. At the 98th percentile, RC data average 42% higher than core.

Run 8 – Core 2004 (316) versus RC Summer 2003 (512). There is a clear high bias in favor of the RC data. At the 98th percentile, RC data average 48% higher than core.

Run 9 – Core 2003 (315) + Core 2004 (316) versus RC Summer 2003 (512). There is high bias in favor of the RC data. At the 98th percentile, RC data average 45% higher than core.

Run 10 – Core 2003 (315) versus RC Summer 2004 (516). There is a high bias in favor of the RC data. At the 98th percentile, RC data average 11% higher than core.

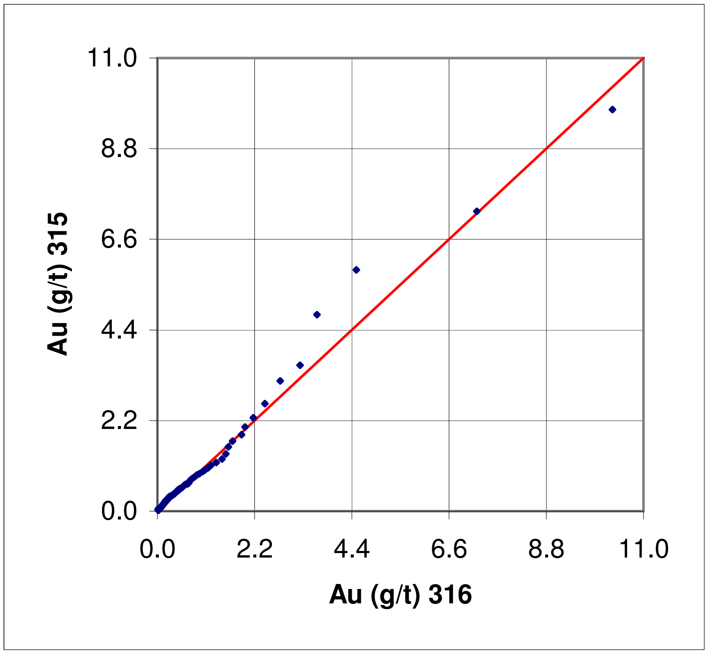
Run 11 – Core 2004 (316) versus RC Summer 2004 (516). There is a clear high bias in favor of the RC data. At the 98th percentile, RC data average 20% higher than core.

Run 12 – Core 2003 (315) + Core 2004 (316) versus RC Summer 2004 (516). There is high bias in favor of the RC data. At the 98th percentile, RC data average 16% higher than core.

In conclusion, the 2004 core corroborates 2003 core; the 2004 RC corroborates 2003 RC. The earlier RC campaigns show more high bias with respect to core than do the later RC campaigns. Because there is little difference between campaigns 315 and 316, these will be combined for the purpose of fitting adjustment equations.

The magnitude of the biases is sometimes different when comparing core campaign 315 versus RC as compared to core campaign 316 versus RC; this is attributed to different datasets being used and not to any fundamental differences between campaigns 315 and 316.

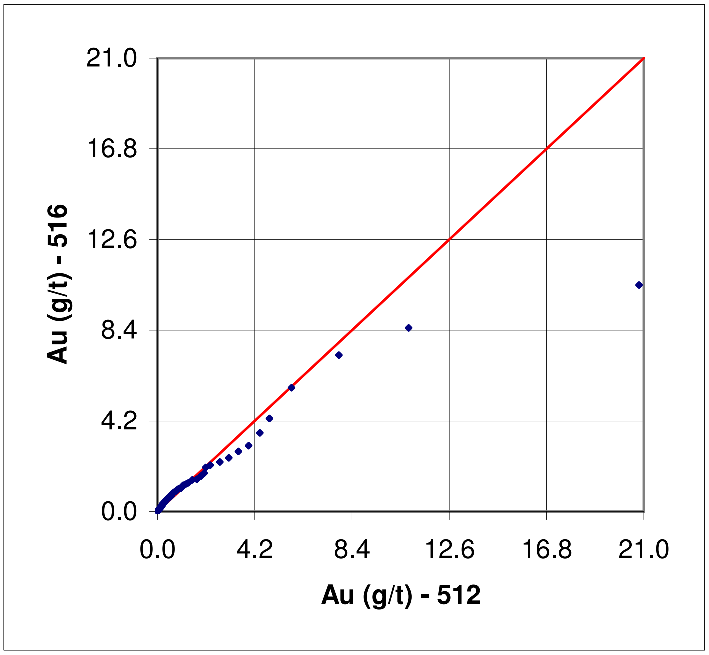
Run 1



Percentile	Mean Au			CV	
	X-axis	Y-axis	Y/X	X-axis	Y-axis
1 to 90%	0.383	0.396	1.035	1.14	1.03
1 to 91%	0.400	0.414	1.034	1.16	1.06
1 to 92%	0.419	0.434	1.035	1.19	1.10
1 to 93%	0.441	0.458	1.037	1.22	1.15
1 to 94%	0.466	0.486	1.044	1.26	1.22
1 to 95%	0.495	0.518	1.047	1.31	1.28
1 to 96%	0.527	0.563	1.067	1.36	1.40
1 to 97%	0.568	0.617	1.086	1.44	1.54
1 to 98%	0.636	0.685	1.077	1.66	1.69
1 to 99%	0.734	0.777	1.058	1.94	1.89
1 to 100%	0.842	0.935	1.110	2.53	2.76

No. Samples		No. Meters	
X-axis	Y-axis	X-axis	Y-axis
595	605	1,191	1,215

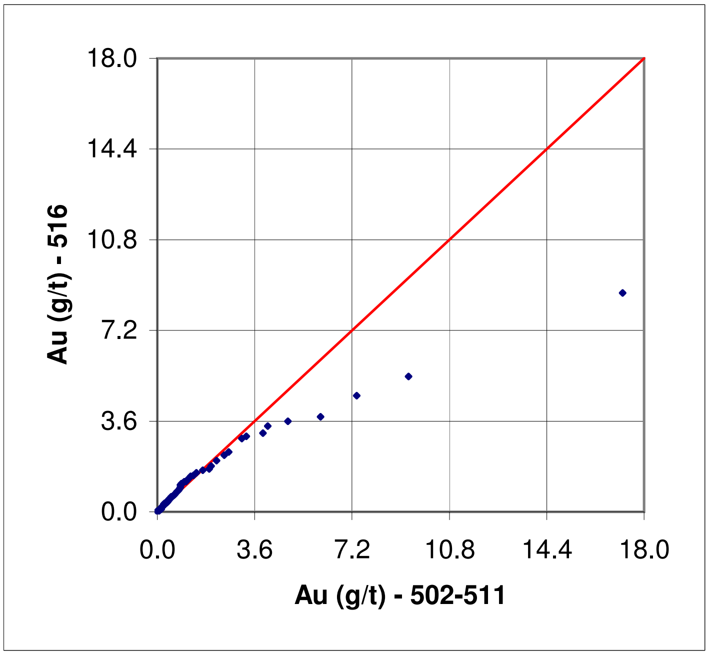
Run 2



Percentile	Mean Au			CV	
	X-axis	Y-axis	Y/X	X-axis	Y-axis
1 to 90%	0.459	0.525	1.144	1.23	1.00
1 to 91%	0.487	0.546	1.121	1.28	1.03
1 to 92%	0.520	0.570	1.097	1.34	1.06
1 to 93%	0.557	0.597	1.072	1.39	1.09
1 to 94%	0.598	0.630	1.053	1.45	1.14
1 to 95%	0.643	0.668	1.040	1.50	1.21
1 to 96%	0.696	0.721	1.036	1.57	1.32
1 to 97%	0.770	0.788	1.024	1.70	1.47
1 to 98%	0.873	0.867	0.994	1.89	1.60
1 to 99%	1.074	0.965	0.898	2.40	1.75
1 to 100%	1.296	1.041	0.803	2.87	1.87

No. Samples		No. Meters	
X-axis	Y-axis	X-axis	Y-axis
296	330	453	503

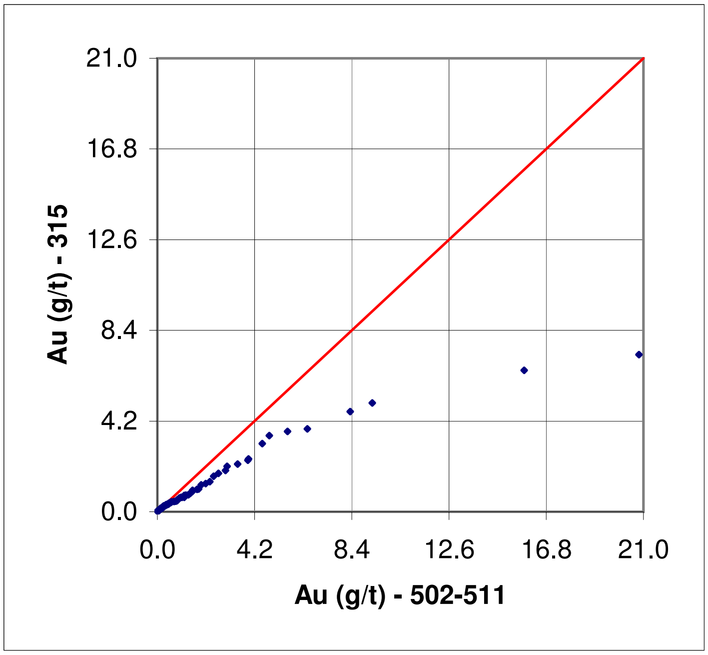
Run 3



Percentile	Mean Au			CV	
	X-axis	Y-axis	Y/X	X-axis	Y-axis
1 to 90%	0.458	0.483	1.054	1.26	1.17
1 to 91%	0.488	0.510	1.045	1.31	1.21
1 to 92%	0.518	0.537	1.036	1.34	1.24
1 to 93%	0.555	0.565	1.018	1.40	1.27
1 to 94%	0.592	0.595	1.005	1.44	1.29
1 to 95%	0.637	0.627	0.984	1.50	1.31
1 to 96%	0.693	0.659	0.951	1.58	1.33
1 to 97%	0.762	0.700	0.919	1.68	1.37
1 to 98%	0.849	0.748	0.881	1.81	1.42
1 to 99%	1.014	0.828	0.816	2.21	1.60
1 to 100%	1.292	1.035	0.801	3.55	3.09

No. Samples		No. Meters	
X-axis	Y-axis	X-axis	Y-axis
389	404	597	616

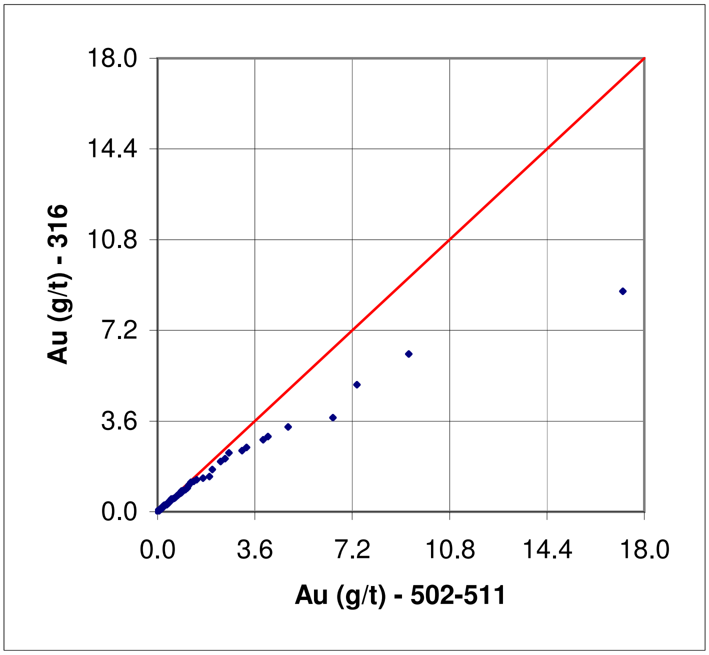
Run 4



Percentile	Mean Au			CV	
	X-axis	Y-axis	Y/X	X-axis	Y-axis
1 to 90%	0.654	0.446	0.682	1.30	1.19
1 to 91%	0.690	0.468	0.678	1.32	1.21
1 to 92%	0.732	0.497	0.679	1.35	1.26
1 to 93%	0.776	0.530	0.682	1.38	1.32
1 to 94%	0.828	0.564	0.681	1.42	1.36
1 to 95%	0.887	0.598	0.674	1.47	1.40
1 to 96%	0.965	0.640	0.664	1.56	1.45
1 to 97%	1.051	0.685	0.652	1.63	1.49
1 to 98%	1.201	0.745	0.620	1.88	1.58
1 to 99%	1.400	0.811	0.580	2.13	1.65
1 to 100%	1.729	0.863	0.499	3.15	1.73

No. Samples		No. Meters	
X-axis	Y-axis	X-axis	Y-axis
373	287	575	574

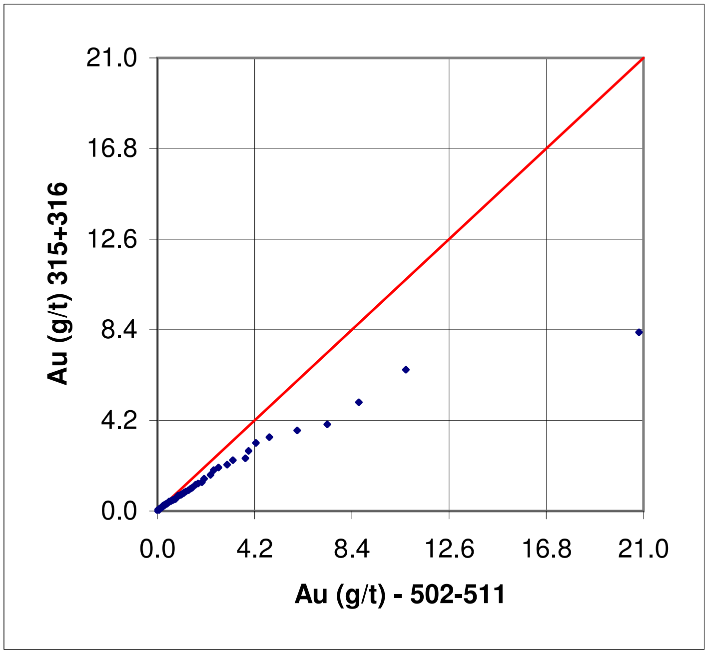
Run 5



Percentile	Mean Au			CV	
	X-axis	Y-axis	Y/X	X-axis	Y-axis
1 to 90%	0.462	0.409	0.885	1.27	1.21
1 to 91%	0.491	0.431	0.877	1.31	1.24
1 to 92%	0.521	0.454	0.870	1.35	1.27
1 to 93%	0.558	0.480	0.860	1.40	1.30
1 to 94%	0.595	0.506	0.850	1.44	1.33
1 to 95%	0.640	0.536	0.838	1.49	1.36
1 to 96%	0.701	0.570	0.813	1.60	1.40
1 to 97%	0.770	0.616	0.800	1.69	1.48
1 to 98%	0.857	0.674	0.786	1.81	1.59
1 to 99%	1.022	0.755	0.739	2.20	1.77
1 to 100%	1.301	0.909	0.699	3.54	2.71

No. Samples		No. Meters	
X-axis	Y-axis	X-axis	Y-axis
386	275	592	553

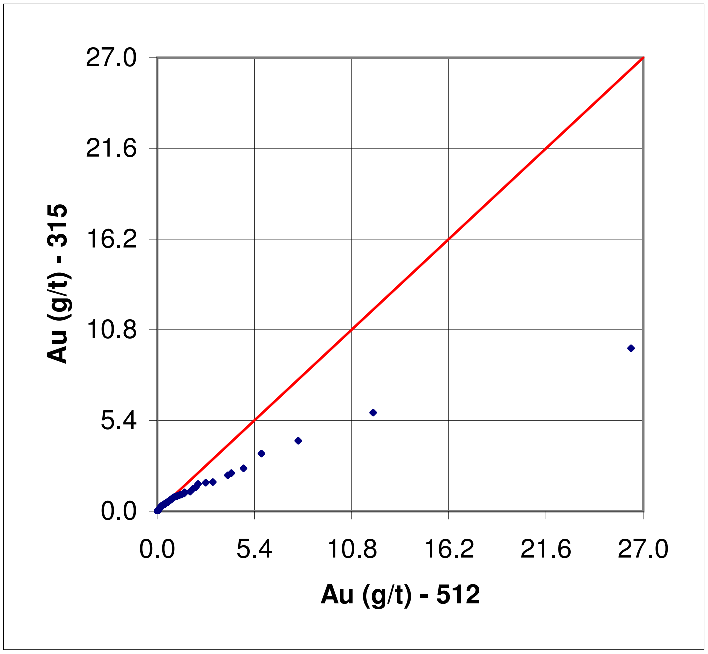
Run 6



Percentile	Mean Au			CV	
	X-axis	Y-axis	Y/X	X-axis	Y-axis
1 to 90%	0.554	0.430	0.776	1.29	1.20
1 to 91%	0.590	0.452	0.766	1.34	1.23
1 to 92%	0.626	0.477	0.762	1.37	1.26
1 to 93%	0.665	0.506	0.761	1.40	1.30
1 to 94%	0.710	0.537	0.757	1.44	1.34
1 to 95%	0.766	0.571	0.746	1.50	1.38
1 to 96%	0.834	0.607	0.727	1.59	1.42
1 to 97%	0.915	0.652	0.713	1.68	1.48
1 to 98%	1.015	0.713	0.702	1.79	1.58
1 to 99%	1.215	0.789	0.649	2.21	1.72
1 to 100%	1.512	0.885	0.585	3.33	2.29

No. Samples		No. Meters	
X-axis	Y-axis	X-axis	Y-axis
759	562	1,167	1,127

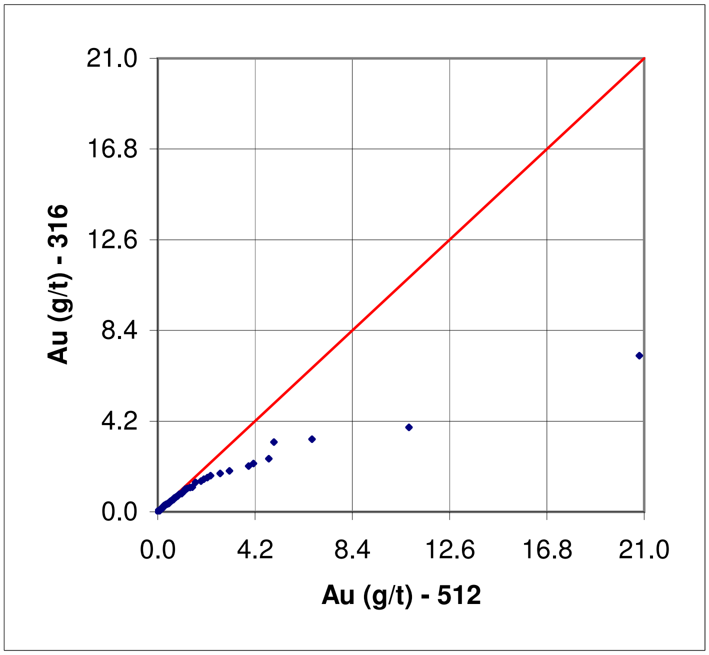
Run 7



Percentile	Mean Au			CV	
	X-axis	Y-axis	Y/X	X-axis	Y-axis
1 to 90%	0.428	0.381	0.891	1.19	0.94
1 to 91%	0.453	0.395	0.874	1.23	0.97
1 to 92%	0.481	0.410	0.852	1.28	0.99
1 to 93%	0.518	0.428	0.827	1.37	1.03
1 to 94%	0.557	0.448	0.805	1.43	1.06
1 to 95%	0.601	0.470	0.782	1.50	1.11
1 to 96%	0.655	0.501	0.764	1.59	1.19
1 to 97%	0.729	0.539	0.739	1.73	1.30
1 to 98%	0.844	0.593	0.703	2.00	1.48
1 to 99%	1.102	0.685	0.622	2.77	1.84
1 to 100%	1.308	0.807	0.617	3.12	2.46

No. Samples		No. Meters	
X-axis	Y-axis	X-axis	Y-axis
375	295	573	592

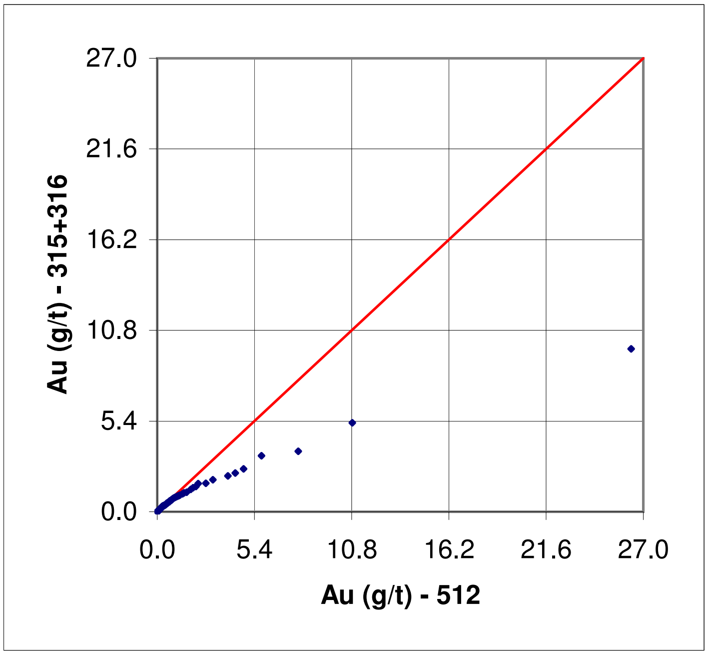
Run 8



Percentile	Mean Au			CV	
	X-axis	Y-axis	Y/X	X-axis	Y-axis
1 to 90%	0.435	0.371	0.852	1.18	1.08
1 to 91%	0.460	0.386	0.839	1.22	1.10
1 to 92%	0.489	0.403	0.824	1.27	1.12
1 to 93%	0.526	0.421	0.801	1.36	1.14
1 to 94%	0.564	0.440	0.781	1.42	1.17
1 to 95%	0.608	0.462	0.759	1.49	1.19
1 to 96%	0.654	0.490	0.750	1.54	1.26
1 to 97%	0.716	0.520	0.726	1.63	1.30
1 to 98%	0.820	0.555	0.677	1.89	1.36
1 to 99%	1.021	0.622	0.609	2.47	1.62
1 to 100%	1.253	0.731	0.583	3.04	2.14

No. Samples		No. Meters	
X-axis	Y-axis	X-axis	Y-axis
364	278	556	555

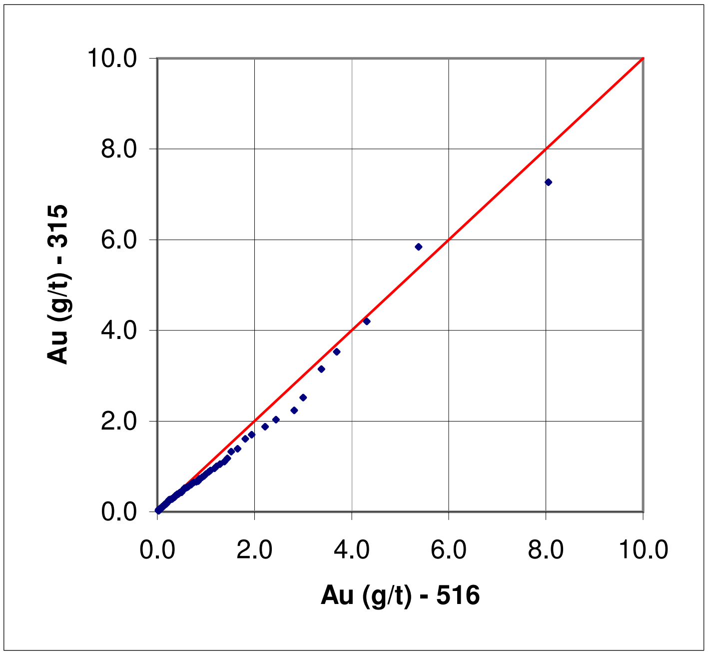
Run 9



Percentile	Mean Au			CV	
	X-axis	Y-axis	Y/X	X-axis	Y-axis
1 to 90%	0.433	0.377	0.872	1.18	1.01
1 to 91%	0.458	0.392	0.856	1.23	1.03
1 to 92%	0.487	0.408	0.839	1.28	1.05
1 to 93%	0.524	0.427	0.815	1.36	1.08
1 to 94%	0.564	0.447	0.792	1.44	1.12
1 to 95%	0.609	0.469	0.771	1.50	1.15
1 to 96%	0.663	0.499	0.753	1.59	1.23
1 to 97%	0.737	0.531	0.721	1.73	1.29
1 to 98%	0.840	0.579	0.690	1.93	1.44
1 to 99%	1.097	0.672	0.612	2.75	1.83
1 to 100%	1.281	0.770	0.601	3.08	2.33

No. Samples		No. Meters	
X-axis	Y-axis	X-axis	Y-axis
739	573	1,129	1,147

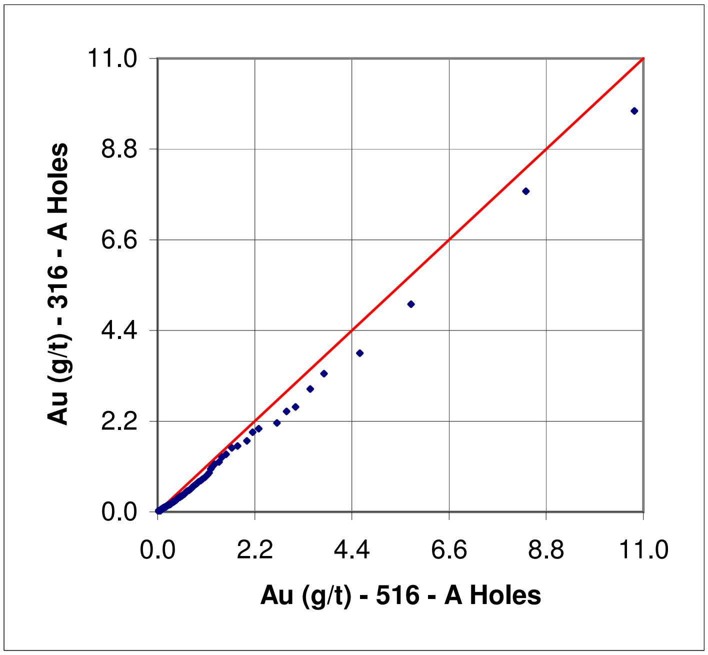
Run 10



Percentile	Mean Au			CV	
	X-axis	Y-axis	Y/X	X-axis	Y-axis
1 to 90%	0.450	0.397	0.882	1.09	1.03
1 to 91%	0.472	0.415	0.880	1.13	1.07
1 to 92%	0.498	0.435	0.874	1.17	1.10
1 to 93%	0.524	0.457	0.872	1.21	1.14
1 to 94%	0.555	0.486	0.876	1.25	1.21
1 to 95%	0.588	0.518	0.881	1.30	1.28
1 to 96%	0.627	0.556	0.888	1.35	1.36
1 to 97%	0.676	0.611	0.904	1.44	1.51
1 to 98%	0.751	0.679	0.904	1.62	1.67
1 to 99%	0.849	0.770	0.906	1.83	1.88
1 to 100%	0.986	0.933	0.946	2.72	2.81

No. Samples		No. Meters	
X-axis	Y-axis	X-axis	Y-axis
785	551	1,196	1,107

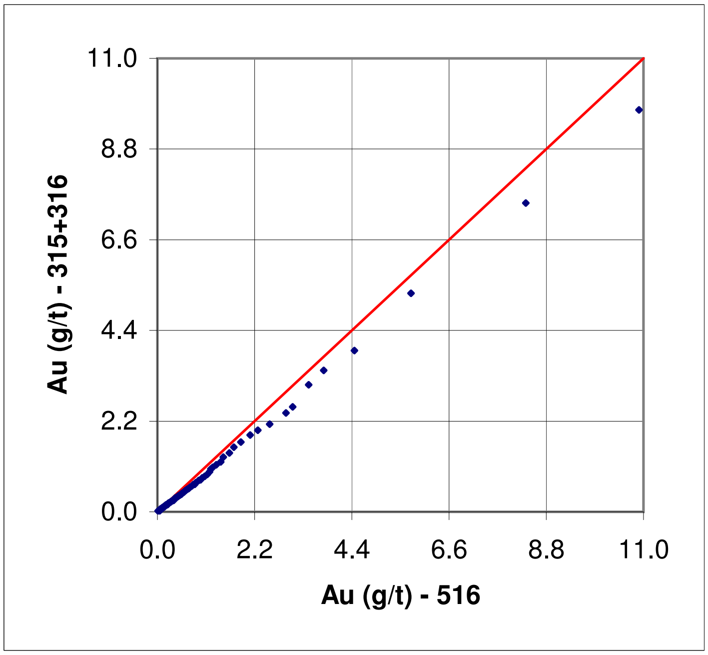
Run 11



Percentile	Mean Au			CV	
	X-axis	Y-axis	Y/X	X-axis	Y-axis
1 to 90%	0.501	0.400	0.799	1.06	1.17
1 to 91%	0.525	0.420	0.799	1.10	1.19
1 to 92%	0.551	0.442	0.801	1.13	1.22
1 to 93%	0.579	0.464	0.802	1.17	1.25
1 to 94%	0.609	0.491	0.806	1.20	1.29
1 to 95%	0.643	0.521	0.811	1.24	1.33
1 to 96%	0.684	0.556	0.813	1.30	1.38
1 to 97%	0.736	0.602	0.818	1.39	1.48
1 to 98%	0.813	0.675	0.830	1.56	1.69
1 to 99%	0.914	0.767	0.839	1.76	1.89
1 to 100%	1.039	0.878	0.845	2.51	2.43

No. Samples		No. Meters	
X-axis	Y-axis	X-axis	Y-axis
959	651	1,462	1,304

Run 12



Percentile	Mean Au			CV	
	X-axis	Y-axis	Y/X	X-axis	Y-axis
1 to 90%	0.478	0.400	0.837	1.08	1.11
1 to 91%	0.501	0.419	0.838	1.11	1.14
1 to 92%	0.527	0.441	0.837	1.15	1.18
1 to 93%	0.554	0.464	0.837	1.19	1.21
1 to 94%	0.585	0.491	0.841	1.23	1.26
1 to 95%	0.618	0.522	0.845	1.27	1.31
1 to 96%	0.658	0.558	0.847	1.32	1.37
1 to 97%	0.711	0.607	0.854	1.42	1.48
1 to 98%	0.788	0.677	0.858	1.60	1.67
1 to 99%	0.891	0.768	0.863	1.81	1.88
1 to 100%	1.015	0.904	0.891	2.60	2.62

No. Samples		No. Meters	
X-axis	Y-axis	X-axis	Y-axis
1,744	1,202	2,658	2,411

APPENDIX B-1

Q-Q Plots for Twin Hole Data

The plots presented here were prepared using the twin-hole data.

Run 1 – Core 2003 (315) versus Core 2004 (316). There is no difference. The use of triple-tube core barrels shows no affect on grade.

Run 2 – RC 2004 (516) versus RC Summer 2003 (512). There is little difference in mean grades at the 98th percentile. The 2004 RC campaign has a lower CV. This may indicate better samples, or alternatively mixing within the hole.

Run 3 – RC 2004 (516) versus RC Campaigns 502 to 511. The last 8 percent of the data show a high-bias in favor of the earlier campaigns. The 516 campaign has a lower CV.

Run 4 – Core 2003 (315) versus RC Campaigns 502 to 511. There is a clear high bias in favor of the RC data. At the 98th percentile, RC data average 61% higher than core.

Run 5 – Core 2004 (316) versus RC Campaigns 502 to 511. There is a high bias in favor of the RC data. At the 98th percentile, RC data average 27% higher than core.

Run 6 – Core 2003 (315) + Core 2004 (316) versus RC Campaigns 502 to 511. There is high bias in favor of the RC data. At the 98th percentile, RC data average 42% higher than core.

Run 7 – Core 2003 (315) versus RC Summer 2003 (512). There is a clear high bias in favor of the RC data. At the 98th percentile, RC data average 42% higher than core.

Run 8 – Core 2004 (316) versus RC Summer 2003 (512). There is a clear high bias in favor of the RC data. At the 98th percentile, RC data average 48% higher than core.

Run 9 – Core 2003 (315) + Core 2004 (316) versus RC Summer 2003 (512). There is high bias in favor of the RC data. At the 98th percentile, RC data average 45% higher than core.

Run 10 – Core 2003 (315) versus RC Summer 2004 (516). There is a high bias in favor of the RC data. At the 98th percentile, RC data average 11% higher than core.

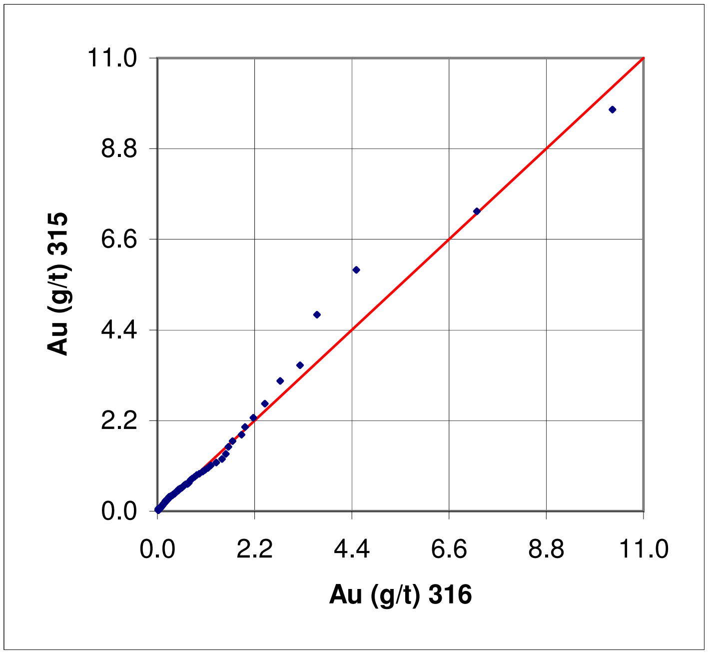
Run 11 – Core 2004 (316) versus RC Summer 2004 (516). There is a clear high bias in favor of the RC data. At the 98th percentile, RC data average 20% higher than core.

Run 12 – Core 2003 (315) + Core 2004 (316) versus RC Summer 2004 (516). There is high bias in favor of the RC data. At the 98th percentile, RC data average 16% higher than core.

In conclusion, the 2004 core corroborates 2003 core; the 2004 RC corroborates 2003 RC. The earlier RC campaigns show more high bias with respect to core than do the later RC campaigns. Because there is little difference between campaigns 315 and 316, these will be combined for the purpose of fitting adjustment equations.

The magnitude of the biases is sometimes different when comparing core campaign 315 versus RC as compared to core campaign 316 versus RC; this is attributed to different datasets being used and not to any fundamental differences between campaigns 315 and 316.

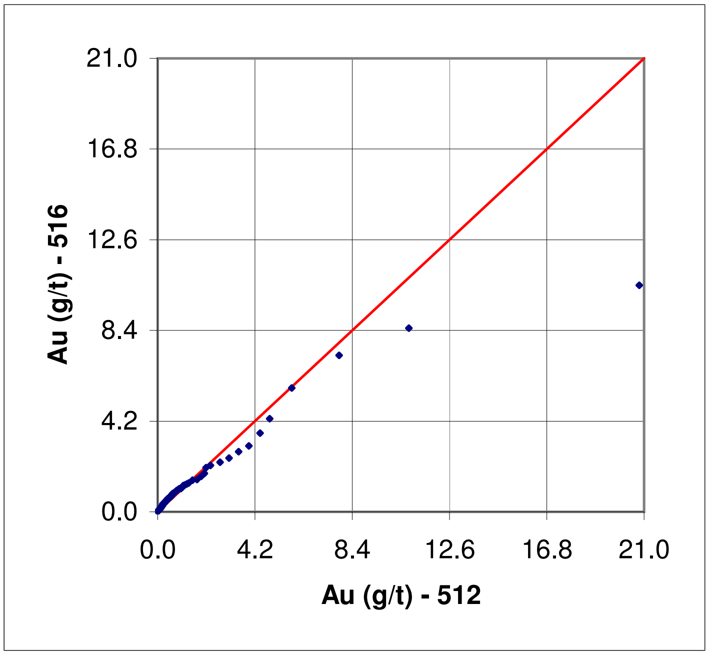
Run 1



Percentile	Mean Au			CV	
	X-axis	Y-axis	Y/X	X-axis	Y-axis
1 to 90%	0.383	0.396	1.035	1.14	1.03
1 to 91%	0.400	0.414	1.034	1.16	1.06
1 to 92%	0.419	0.434	1.035	1.19	1.10
1 to 93%	0.441	0.458	1.037	1.22	1.15
1 to 94%	0.466	0.486	1.044	1.26	1.22
1 to 95%	0.495	0.518	1.047	1.31	1.28
1 to 96%	0.527	0.563	1.067	1.36	1.40
1 to 97%	0.568	0.617	1.086	1.44	1.54
1 to 98%	0.636	0.685	1.077	1.66	1.69
1 to 99%	0.734	0.777	1.058	1.94	1.89
1 to 100%	0.842	0.935	1.110	2.53	2.76

No. Samples		No. Meters	
X-axis	Y-axis	X-axis	Y-axis
595	605	1,191	1,215

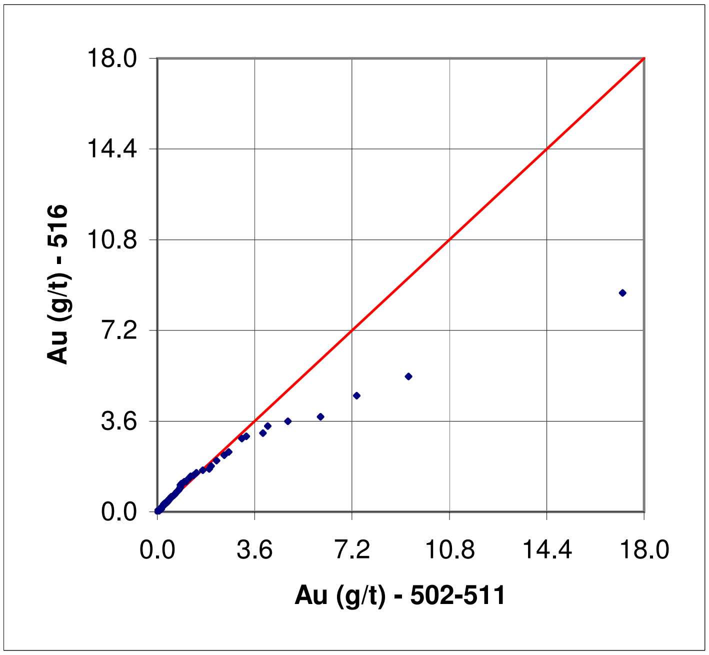
Run 2



Percentile	Mean Au			CV	
	X-axis	Y-axis	Y/X	X-axis	Y-axis
1 to 90%	0.459	0.525	1.144	1.23	1.00
1 to 91%	0.487	0.546	1.121	1.28	1.03
1 to 92%	0.520	0.570	1.097	1.34	1.06
1 to 93%	0.557	0.597	1.072	1.39	1.09
1 to 94%	0.598	0.630	1.053	1.45	1.14
1 to 95%	0.643	0.668	1.040	1.50	1.21
1 to 96%	0.696	0.721	1.036	1.57	1.32
1 to 97%	0.770	0.788	1.024	1.70	1.47
1 to 98%	0.873	0.867	0.994	1.89	1.60
1 to 99%	1.074	0.965	0.898	2.40	1.75
1 to 100%	1.296	1.041	0.803	2.87	1.87

No. Samples		No. Meters	
X-axis	Y-axis	X-axis	Y-axis
296	330	453	503

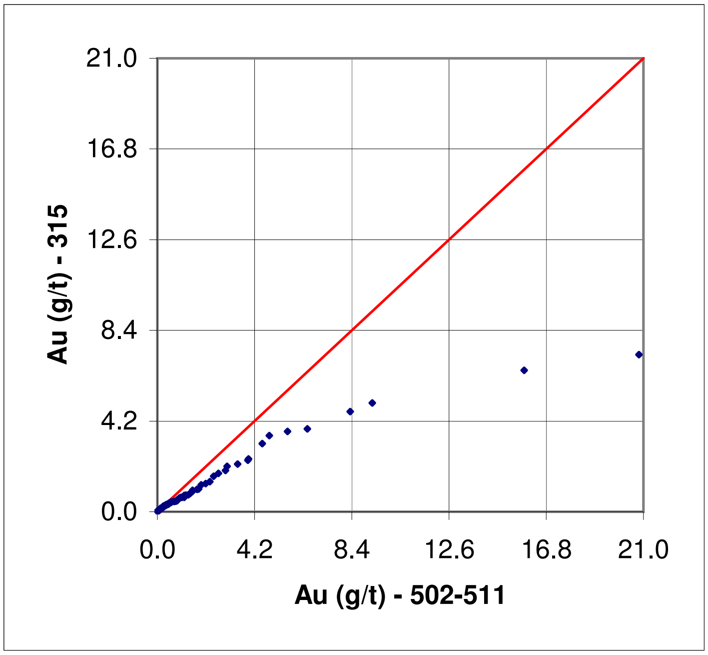
Run 3



Percentile	Mean Au			CV	
	X-axis	Y-axis	Y/X	X-axis	Y-axis
1 to 90%	0.458	0.483	1.054	1.26	1.17
1 to 91%	0.488	0.510	1.045	1.31	1.21
1 to 92%	0.518	0.537	1.036	1.34	1.24
1 to 93%	0.555	0.565	1.018	1.40	1.27
1 to 94%	0.592	0.595	1.005	1.44	1.29
1 to 95%	0.637	0.627	0.984	1.50	1.31
1 to 96%	0.693	0.659	0.951	1.58	1.33
1 to 97%	0.762	0.700	0.919	1.68	1.37
1 to 98%	0.849	0.748	0.881	1.81	1.42
1 to 99%	1.014	0.828	0.816	2.21	1.60
1 to 100%	1.292	1.035	0.801	3.55	3.09

No. Samples		No. Meters	
X-axis	Y-axis	X-axis	Y-axis
389	404	597	616

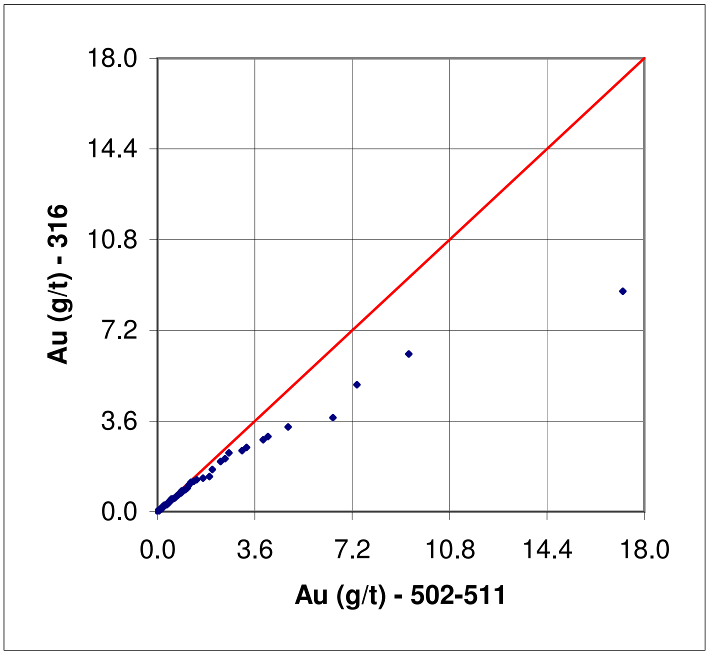
Run 4



Percentile	Mean Au			CV	
	X-axis	Y-axis	Y/X	X-axis	Y-axis
1 to 90%	0.654	0.446	0.682	1.30	1.19
1 to 91%	0.690	0.468	0.678	1.32	1.21
1 to 92%	0.732	0.497	0.679	1.35	1.26
1 to 93%	0.776	0.530	0.682	1.38	1.32
1 to 94%	0.828	0.564	0.681	1.42	1.36
1 to 95%	0.887	0.598	0.674	1.47	1.40
1 to 96%	0.965	0.640	0.664	1.56	1.45
1 to 97%	1.051	0.685	0.652	1.63	1.49
1 to 98%	1.201	0.745	0.620	1.88	1.58
1 to 99%	1.400	0.811	0.580	2.13	1.65
1 to 100%	1.729	0.863	0.499	3.15	1.73

No. Samples		No. Meters	
X-axis	Y-axis	X-axis	Y-axis
373	287	575	574

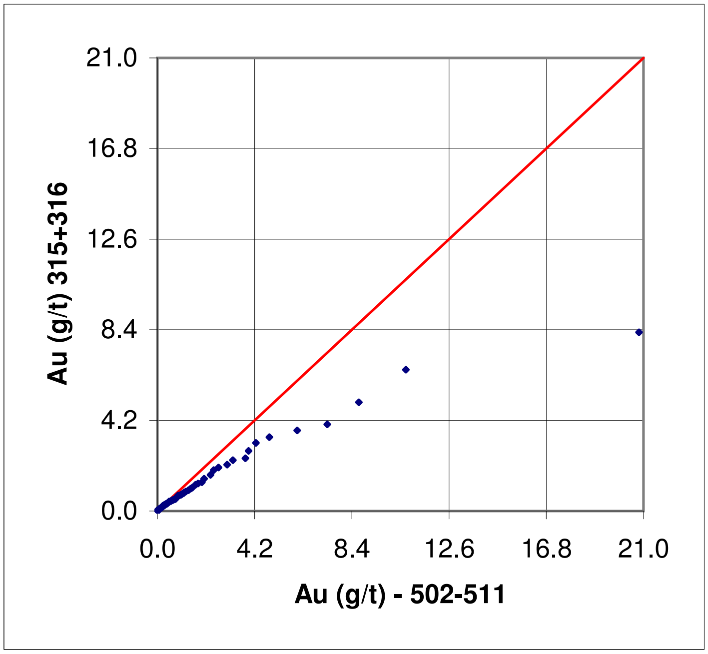
Run 5



Percentile	Mean Au			CV	
	X-axis	Y-axis	Y/X	X-axis	Y-axis
1 to 90%	0.462	0.409	0.885	1.27	1.21
1 to 91%	0.491	0.431	0.877	1.31	1.24
1 to 92%	0.521	0.454	0.870	1.35	1.27
1 to 93%	0.558	0.480	0.860	1.40	1.30
1 to 94%	0.595	0.506	0.850	1.44	1.33
1 to 95%	0.640	0.536	0.838	1.49	1.36
1 to 96%	0.701	0.570	0.813	1.60	1.40
1 to 97%	0.770	0.616	0.800	1.69	1.48
1 to 98%	0.857	0.674	0.786	1.81	1.59
1 to 99%	1.022	0.755	0.739	2.20	1.77
1 to 100%	1.301	0.909	0.699	3.54	2.71

No. Samples		No. Meters	
X-axis	Y-axis	X-axis	Y-axis
386	275	592	553

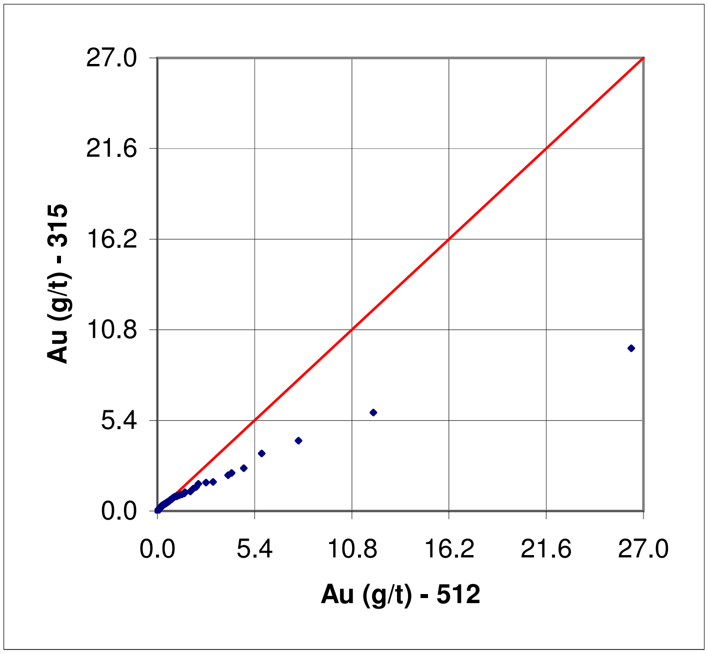
Run 6



Percentile	Mean Au			CV	
	X-axis	Y-axis	Y/X	X-axis	Y-axis
1 to 90%	0.554	0.430	0.776	1.29	1.20
1 to 91%	0.590	0.452	0.766	1.34	1.23
1 to 92%	0.626	0.477	0.762	1.37	1.26
1 to 93%	0.665	0.506	0.761	1.40	1.30
1 to 94%	0.710	0.537	0.757	1.44	1.34
1 to 95%	0.766	0.571	0.746	1.50	1.38
1 to 96%	0.834	0.607	0.727	1.59	1.42
1 to 97%	0.915	0.652	0.713	1.68	1.48
1 to 98%	1.015	0.713	0.702	1.79	1.58
1 to 99%	1.215	0.789	0.649	2.21	1.72
1 to 100%	1.512	0.885	0.585	3.33	2.29

No. Samples		No. Meters	
X-axis	Y-axis	X-axis	Y-axis
759	562	1,167	1,127

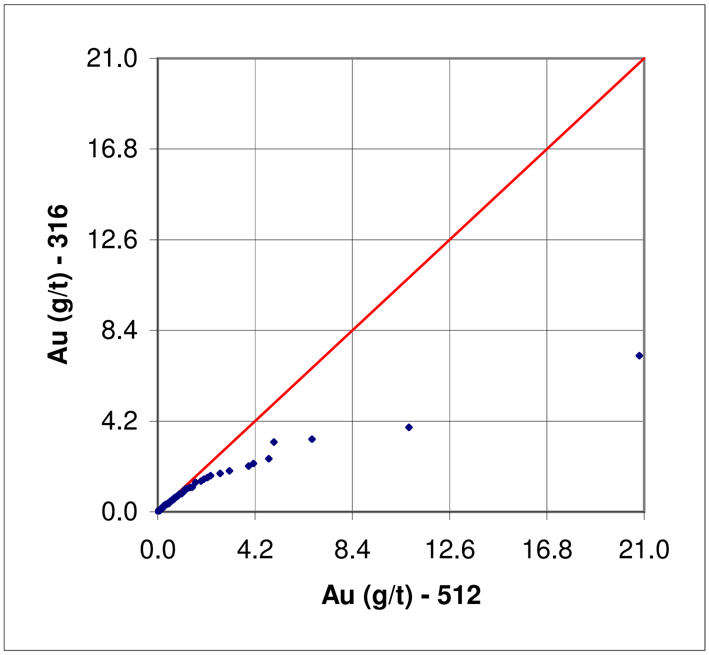
Run 7



Percentile	Mean Au			CV	
	X-axis	Y-axis	Y/X	X-axis	Y-axis
1 to 90%	0.428	0.381	0.891	1.19	0.94
1 to 91%	0.453	0.395	0.874	1.23	0.97
1 to 92%	0.481	0.410	0.852	1.28	0.99
1 to 93%	0.518	0.428	0.827	1.37	1.03
1 to 94%	0.557	0.448	0.805	1.43	1.06
1 to 95%	0.601	0.470	0.782	1.50	1.11
1 to 96%	0.655	0.501	0.764	1.59	1.19
1 to 97%	0.729	0.539	0.739	1.73	1.30
1 to 98%	0.844	0.593	0.703	2.00	1.48
1 to 99%	1.102	0.685	0.622	2.77	1.84
1 to 100%	1.308	0.807	0.617	3.12	2.46

No. Samples		No. Meters	
X-axis	Y-axis	X-axis	Y-axis
375	295	573	592

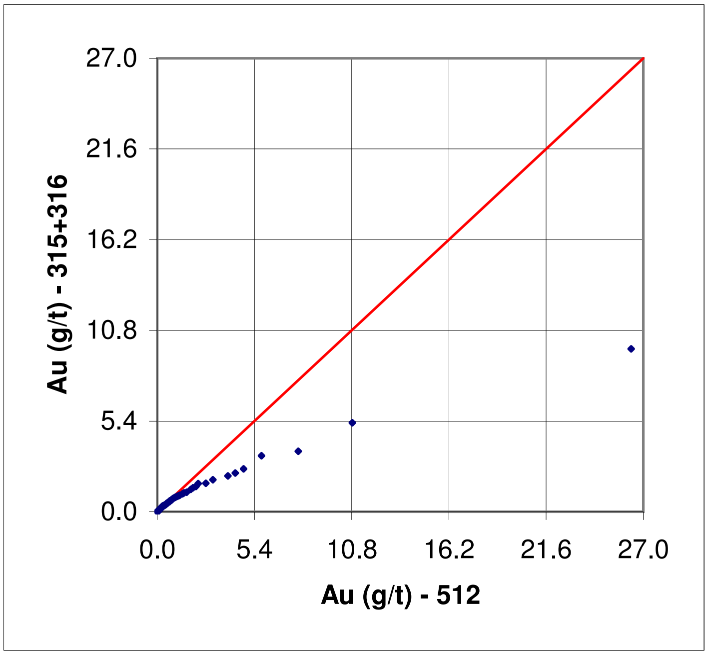
Run 8



Percentile	Mean Au			CV	
	X-axis	Y-axis	Y/X	X-axis	Y-axis
1 to 90%	0.435	0.371	0.852	1.18	1.08
1 to 91%	0.460	0.386	0.839	1.22	1.10
1 to 92%	0.489	0.403	0.824	1.27	1.12
1 to 93%	0.526	0.421	0.801	1.36	1.14
1 to 94%	0.564	0.440	0.781	1.42	1.17
1 to 95%	0.608	0.462	0.759	1.49	1.19
1 to 96%	0.654	0.490	0.750	1.54	1.26
1 to 97%	0.716	0.520	0.726	1.63	1.30
1 to 98%	0.820	0.555	0.677	1.89	1.36
1 to 99%	1.021	0.622	0.609	2.47	1.62
1 to 100%	1.253	0.731	0.583	3.04	2.14

No. Samples		No. Meters	
X-axis	Y-axis	X-axis	Y-axis
364	278	556	555

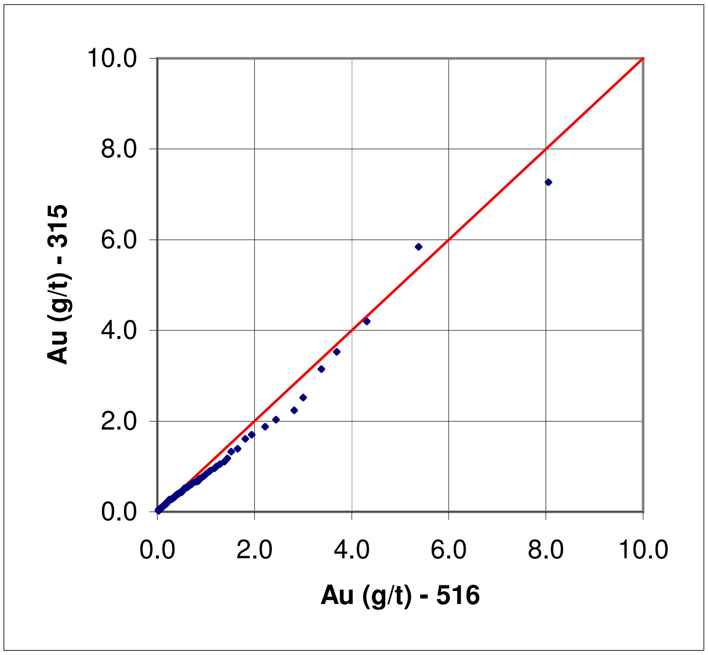
Run 9



Percentile	Mean Au			CV	
	X-axis	Y-axis	Y/X	X-axis	Y-axis
1 to 90%	0.433	0.377	0.872	1.18	1.01
1 to 91%	0.458	0.392	0.856	1.23	1.03
1 to 92%	0.487	0.408	0.839	1.28	1.05
1 to 93%	0.524	0.427	0.815	1.36	1.08
1 to 94%	0.564	0.447	0.792	1.44	1.12
1 to 95%	0.609	0.469	0.771	1.50	1.15
1 to 96%	0.663	0.499	0.753	1.59	1.23
1 to 97%	0.737	0.531	0.721	1.73	1.29
1 to 98%	0.840	0.579	0.690	1.93	1.44
1 to 99%	1.097	0.672	0.612	2.75	1.83
1 to 100%	1.281	0.770	0.601	3.08	2.33

No. Samples		No. Meters	
X-axis	Y-axis	X-axis	Y-axis
739	573	1,129	1,147

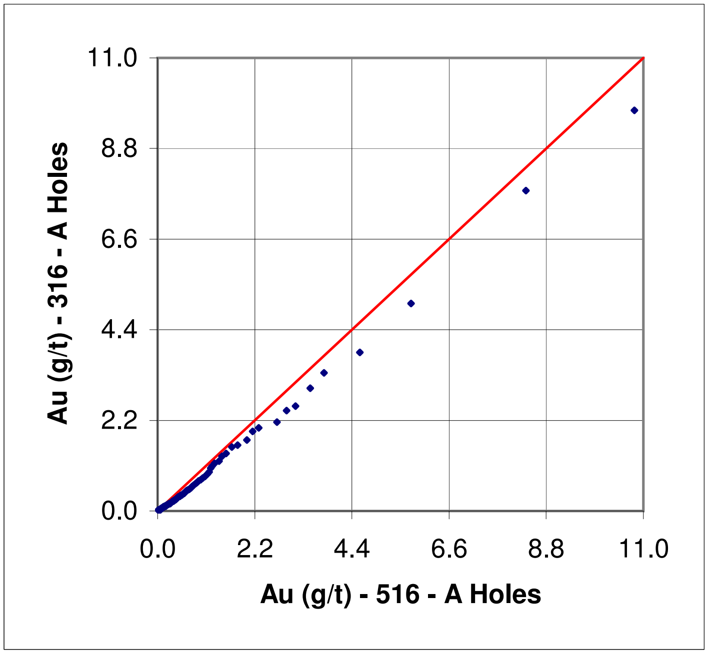
Run 10



Percentile	Mean Au			CV	
	X-axis	Y-axis	Y/X	X-axis	Y-axis
1 to 90%	0.450	0.397	0.882	1.09	1.03
1 to 91%	0.472	0.415	0.880	1.13	1.07
1 to 92%	0.498	0.435	0.874	1.17	1.10
1 to 93%	0.524	0.457	0.872	1.21	1.14
1 to 94%	0.555	0.486	0.876	1.25	1.21
1 to 95%	0.588	0.518	0.881	1.30	1.28
1 to 96%	0.627	0.556	0.888	1.35	1.36
1 to 97%	0.676	0.611	0.904	1.44	1.51
1 to 98%	0.751	0.679	0.904	1.62	1.67
1 to 99%	0.849	0.770	0.906	1.83	1.88
1 to 100%	0.986	0.933	0.946	2.72	2.81

No. Samples		No. Meters	
X-axis	Y-axis	X-axis	Y-axis
785	551	1,196	1,107

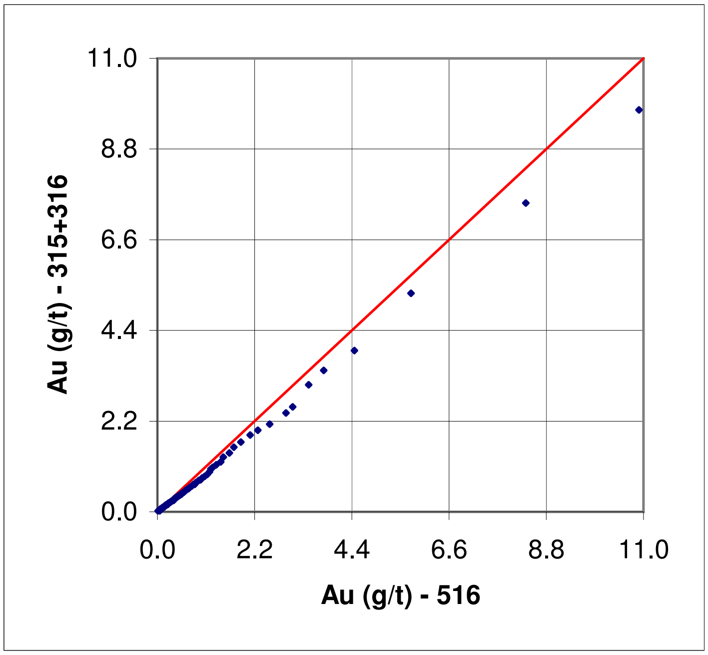
Run 11



Percentile	Mean Au			CV	
	X-axis	Y-axis	Y/X	X-axis	Y-axis
1 to 90%	0.501	0.400	0.799	1.06	1.17
1 to 91%	0.525	0.420	0.799	1.10	1.19
1 to 92%	0.551	0.442	0.801	1.13	1.22
1 to 93%	0.579	0.464	0.802	1.17	1.25
1 to 94%	0.609	0.491	0.806	1.20	1.29
1 to 95%	0.643	0.521	0.811	1.24	1.33
1 to 96%	0.684	0.556	0.813	1.30	1.38
1 to 97%	0.736	0.602	0.818	1.39	1.48
1 to 98%	0.813	0.675	0.830	1.56	1.69
1 to 99%	0.914	0.767	0.839	1.76	1.89
1 to 100%	1.039	0.878	0.845	2.51	2.43

No. Samples		No. Meters	
X-axis	Y-axis	X-axis	Y-axis
959	651	1,462	1,304

Run 12

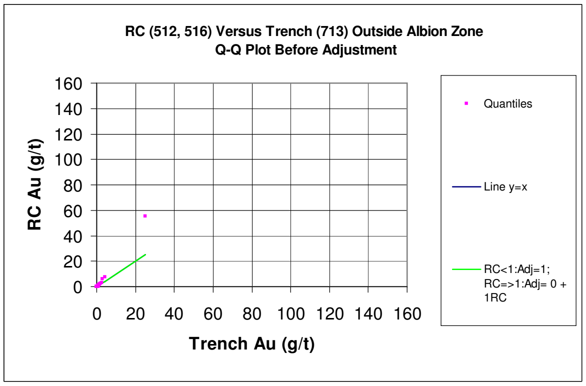


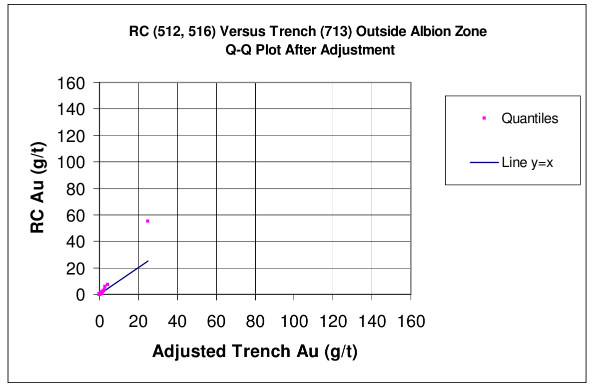
Percentile	Mean Au			CV	
	X-axis	Y-axis	Y/X	X-axis	Y-axis
1 to 90%	0.478	0.400	0.837	1.08	1.11
1 to 91%	0.501	0.419	0.838	1.11	1.14
1 to 92%	0.527	0.441	0.837	1.15	1.18
1 to 93%	0.554	0.464	0.837	1.19	1.21
1 to 94%	0.585	0.491	0.841	1.23	1.26
1 to 95%	0.618	0.522	0.845	1.27	1.31
1 to 96%	0.658	0.558	0.847	1.32	1.37
1 to 97%	0.711	0.607	0.854	1.42	1.48
1 to 98%	0.788	0.677	0.858	1.60	1.67
1 to 99%	0.891	0.768	0.863	1.81	1.88
1 to 100%	1.015	0.904	0.891	2.60	2.62

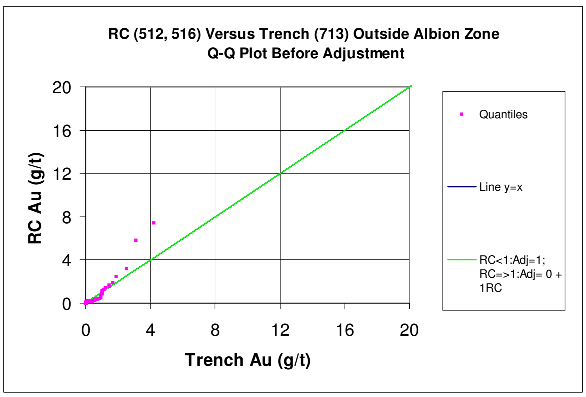
No. Samples		No. Meters	
X-axis	Y-axis	X-axis	Y-axis
1,744	1,202	2,658	2,411

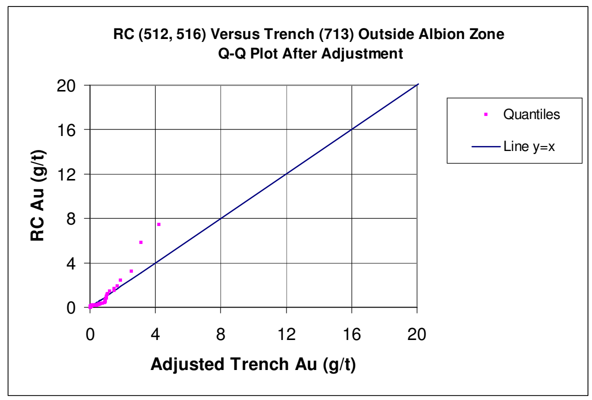
B-2 Q-Q PLOTS

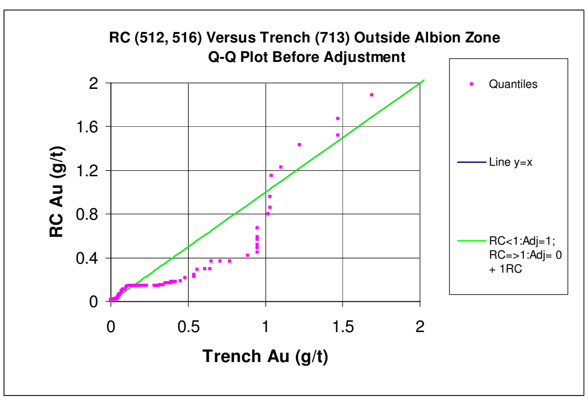
RC Campaign 512 and 516 Versus RC Campaign 713 Outside Albion Shear Zone - RUN 30

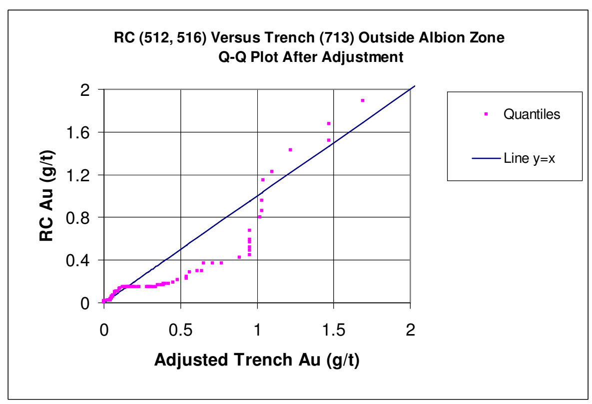




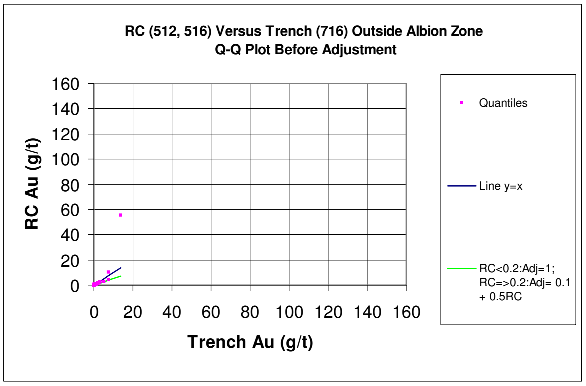


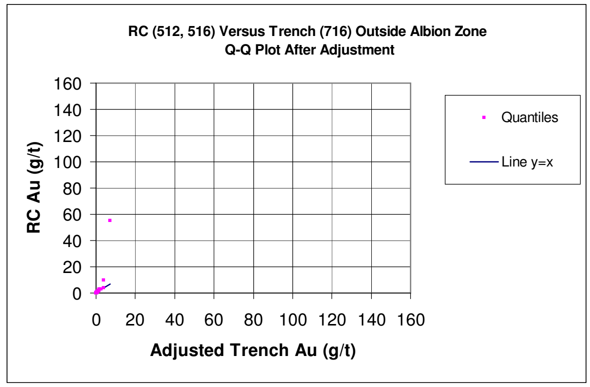


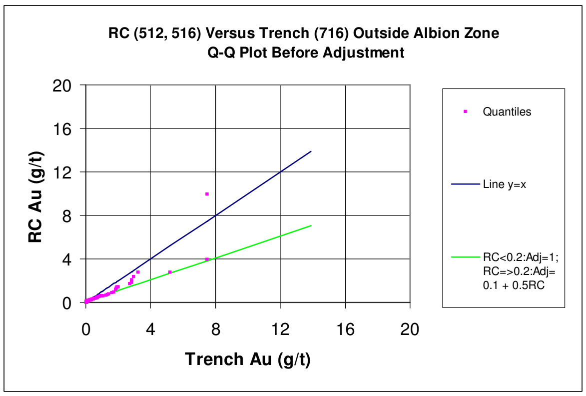


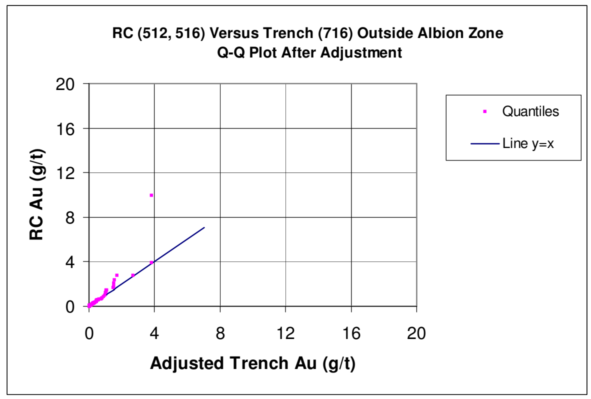


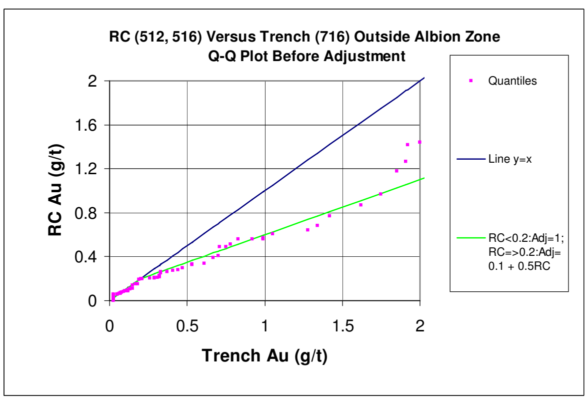
RC Campaign 512 and 516 Versus RC Campaign 716 Outside Albion Shear Zone - RUN 31

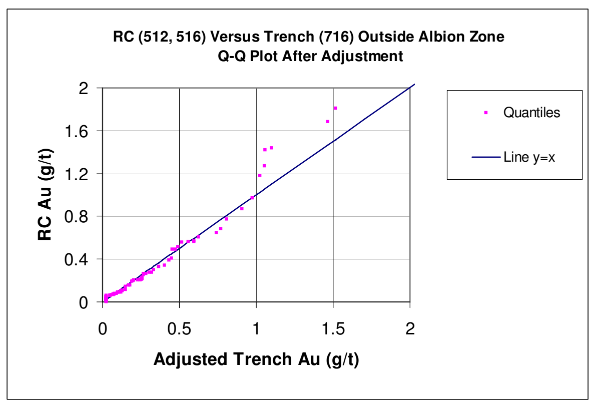




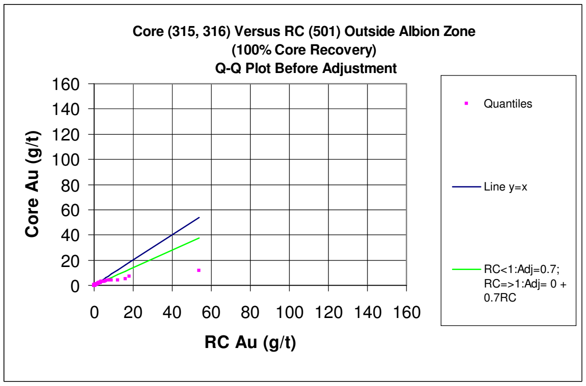


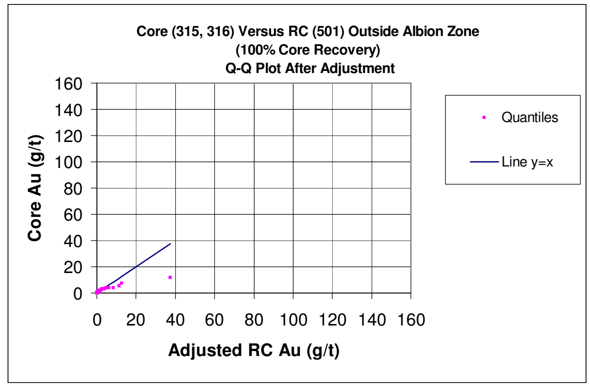


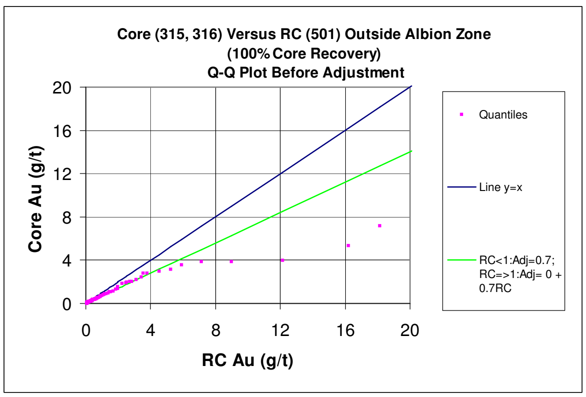


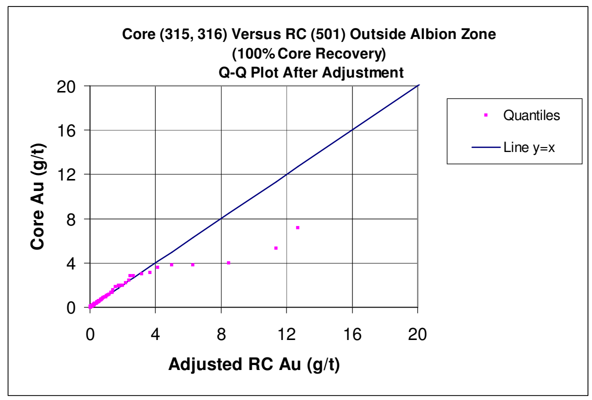


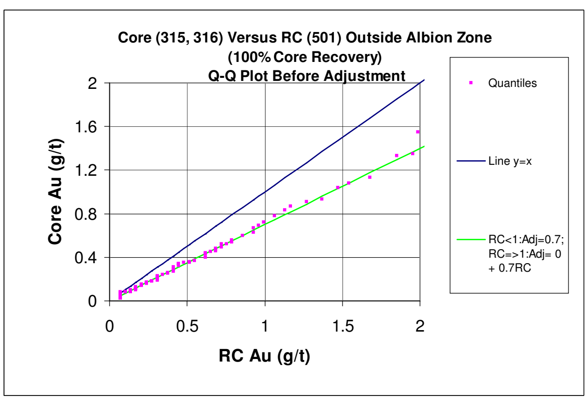
DDH Campaign 315 and 316 Versus RC Campaign 501 Outside Albion Shear Zone (100% Core Recovery) - RUN 19

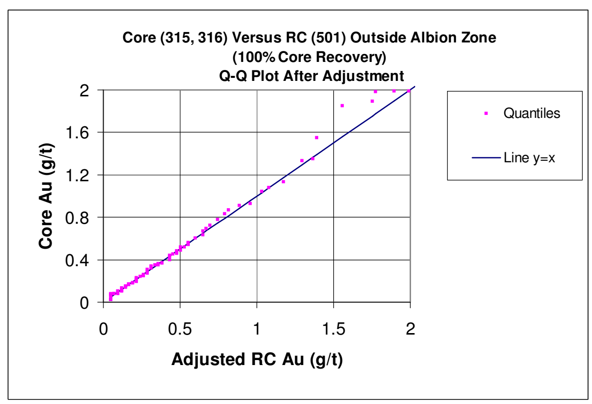




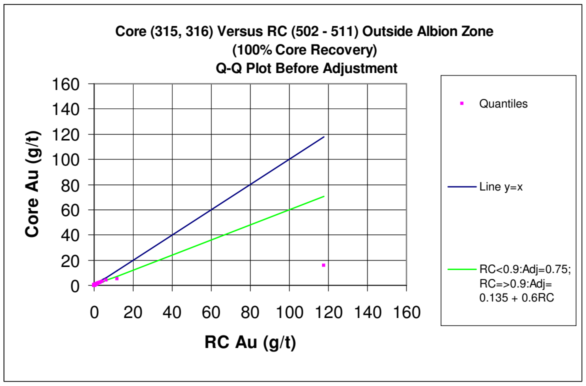


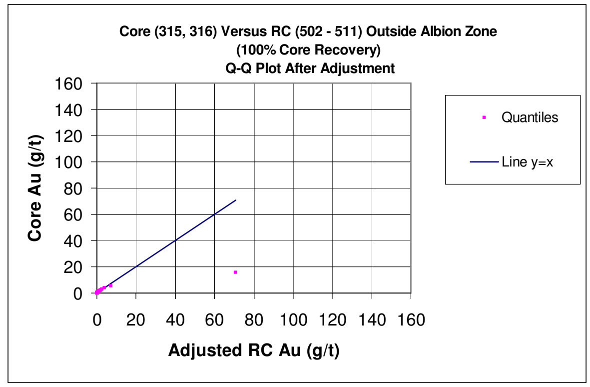


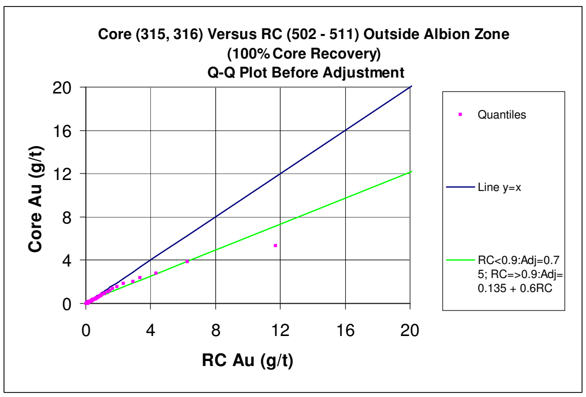


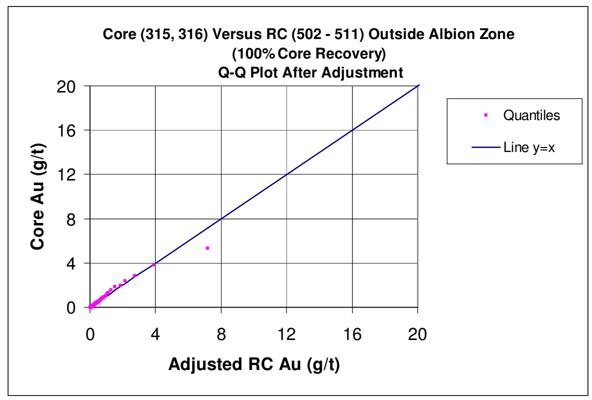


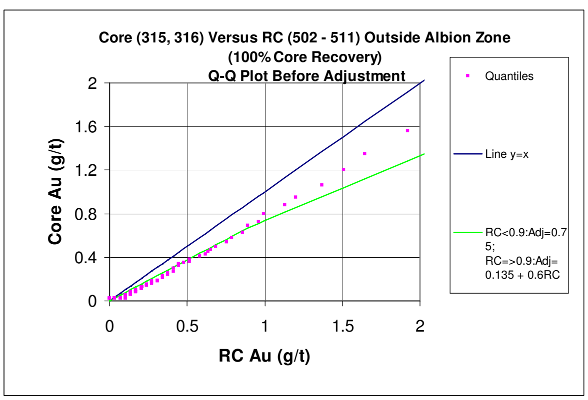
DDH Campaign 315 and 316 Versus RC Campaign 502 - 511 Outside Albion Shear Zone (100% Core Recovery) - RUN 20

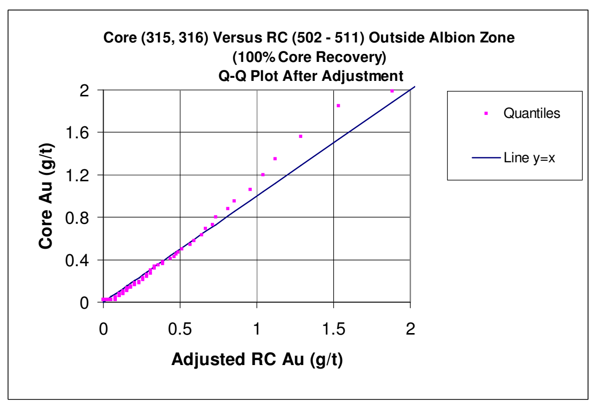




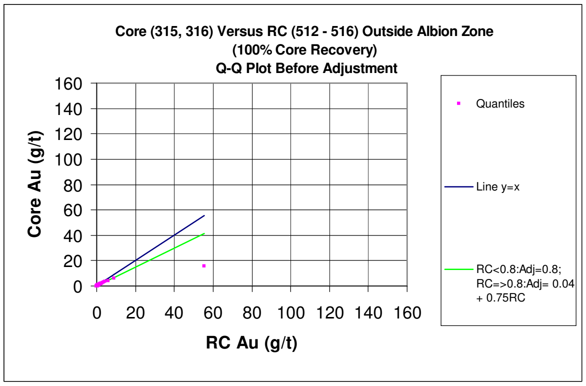


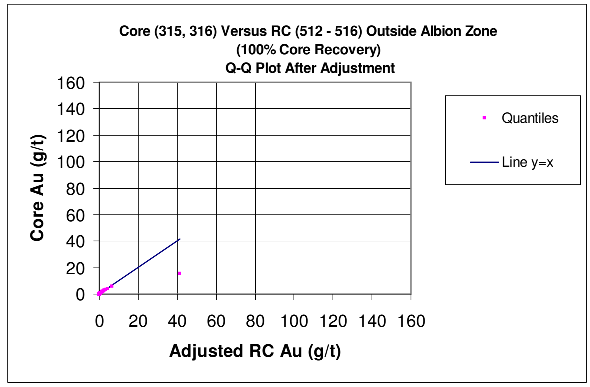


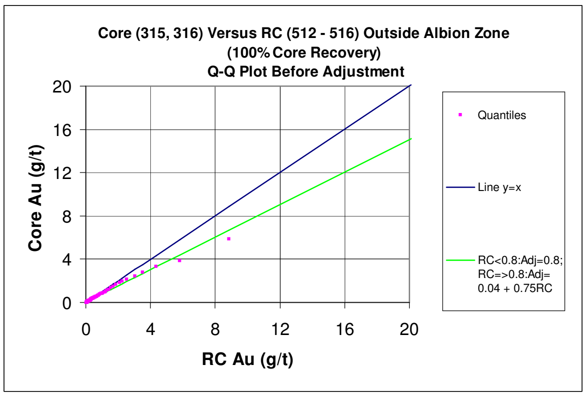


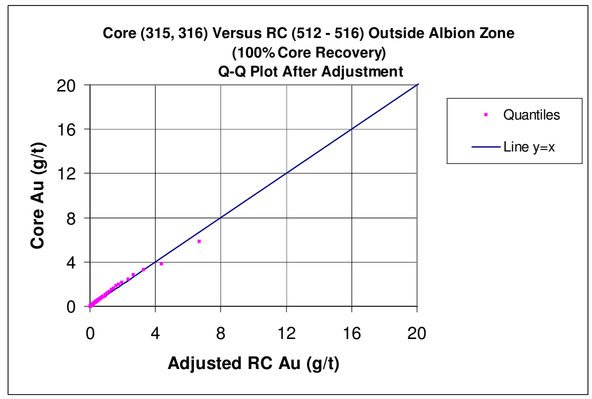


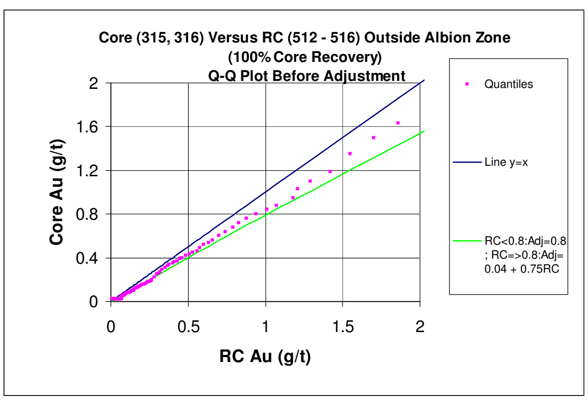
DDH Campaign 315 and 316 Versus RC Campaign 512 - 516 Outside Albion Shear Zone (100% Core Recovery) - RUN 21

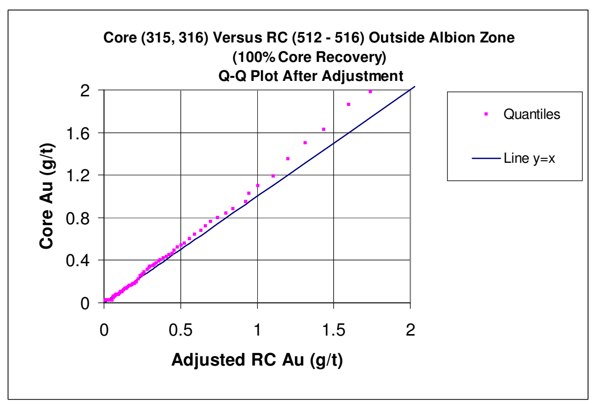




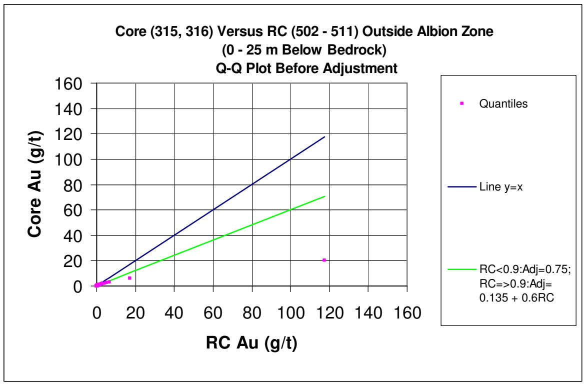


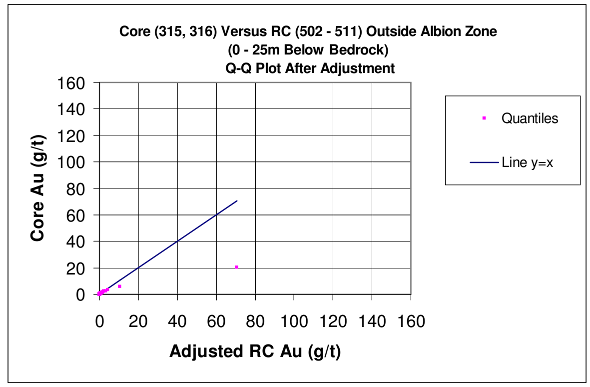


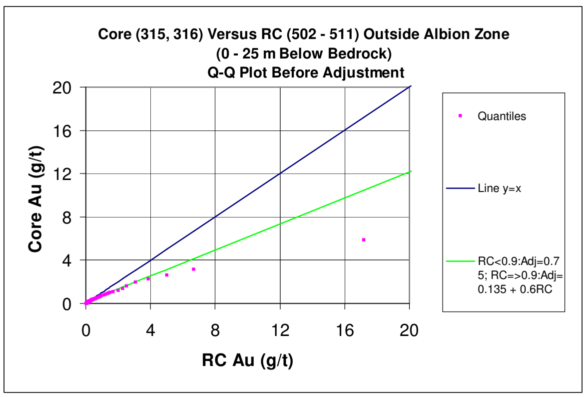


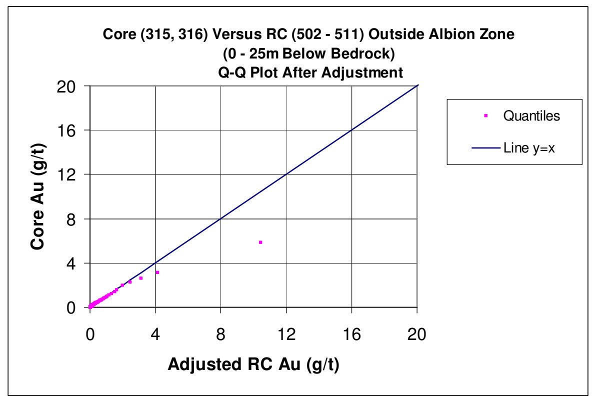


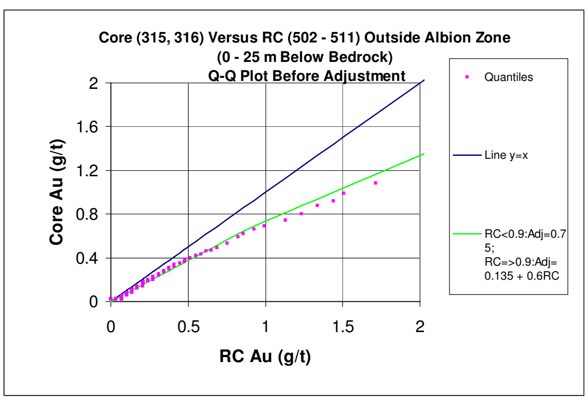
DDH Campaign 315 and 316 Versus RC Campaign 502 - 511 Outside Albion Shear Zone (0 - 25m Below Bedrock) - RUN 22

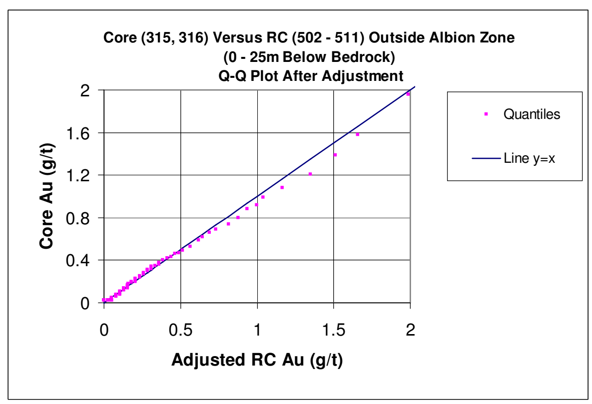




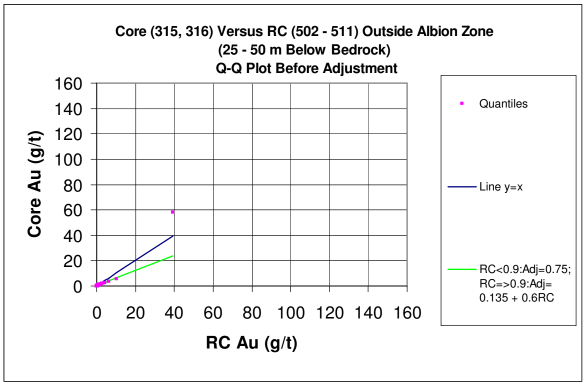


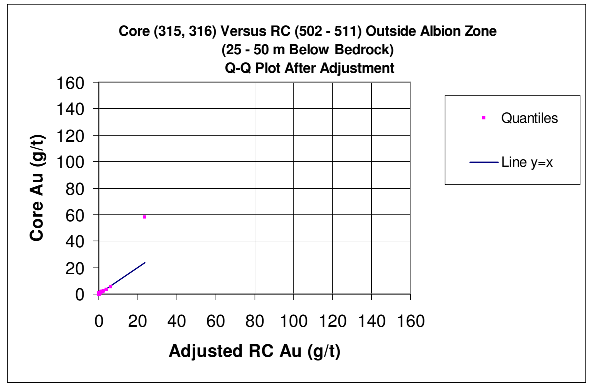


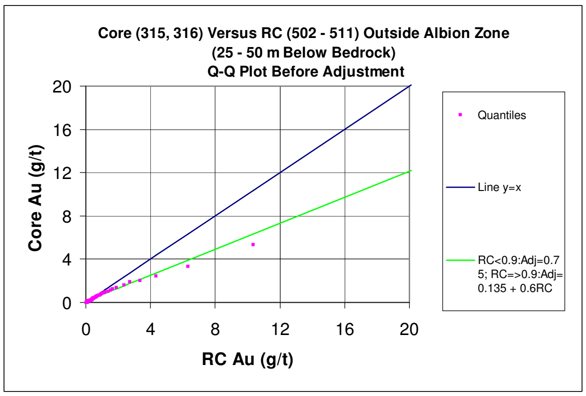


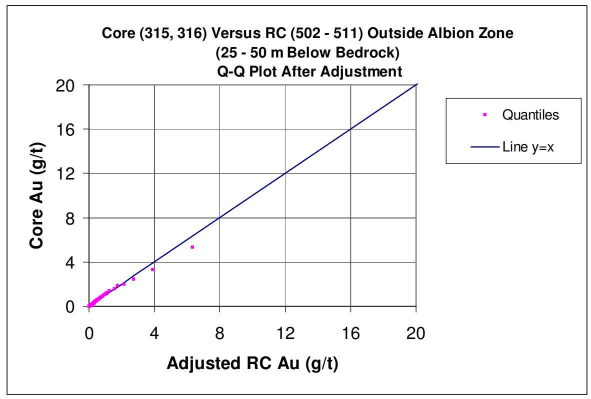


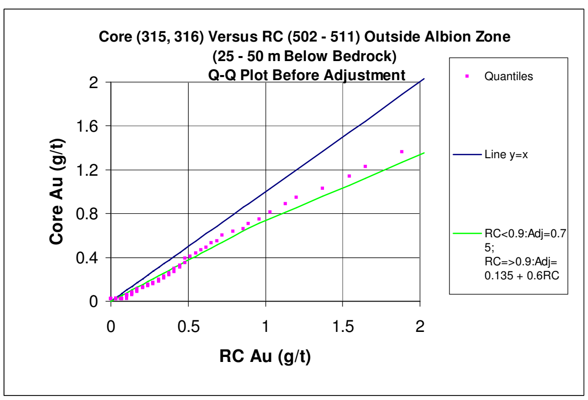
DDH Campaign 315 and 316 Versus RC Campaign 502 - 511 Outside Albion Shear Zone (25 - 50 m Below Bedrock) - RUN 23

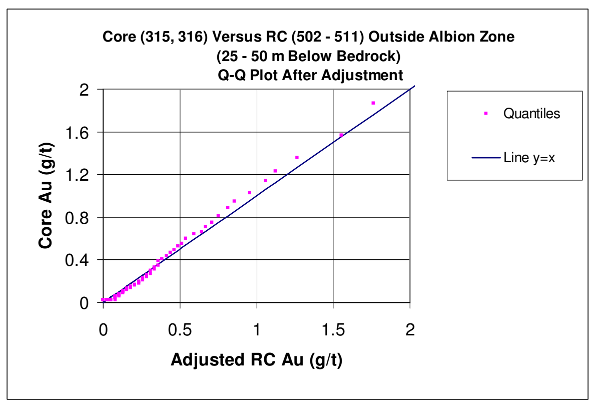




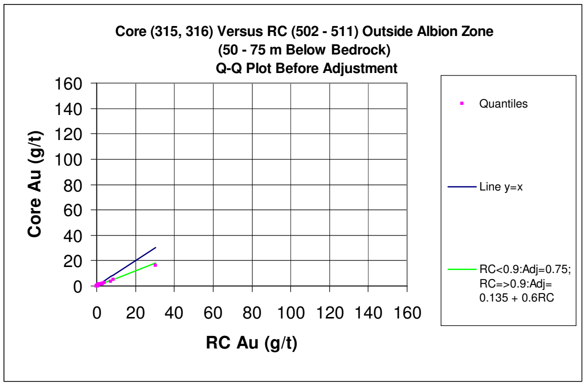


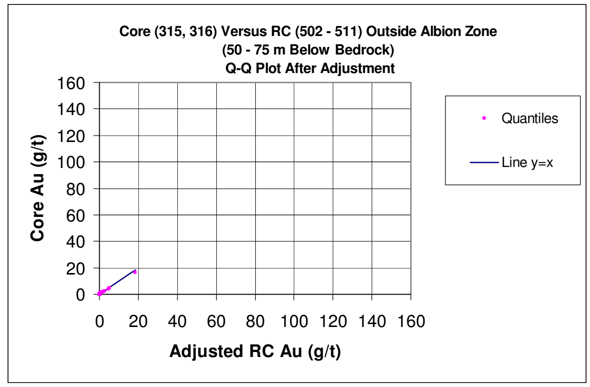


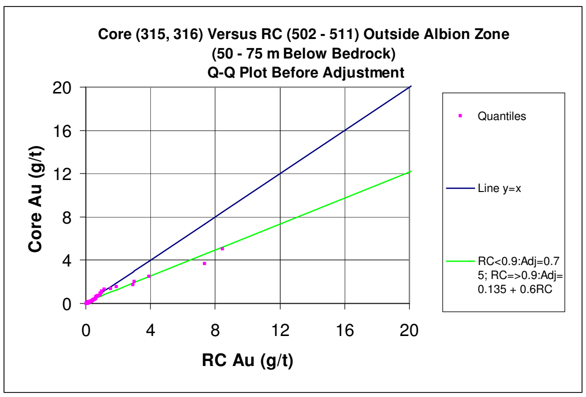


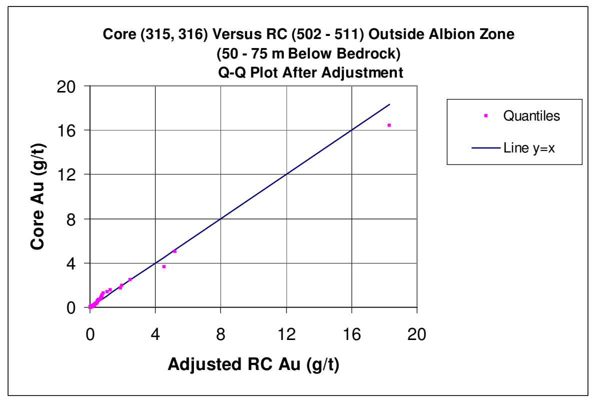


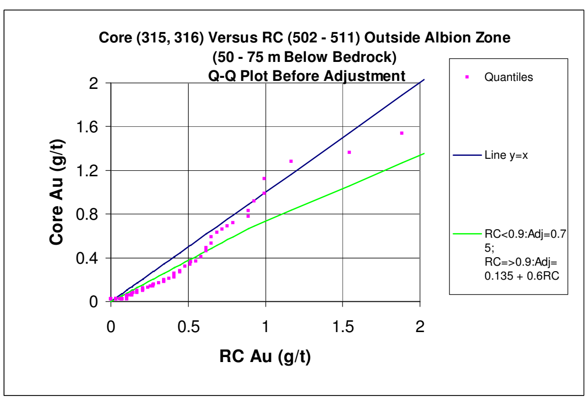
DDH Campaign 315 and 316 Versus RC Campaign 502 - 511 Outside Albion Shear Zone (50 - 75 m Below Bedrock) - RUN 24

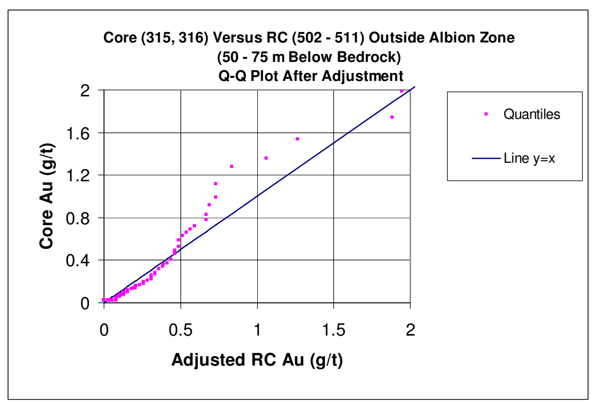




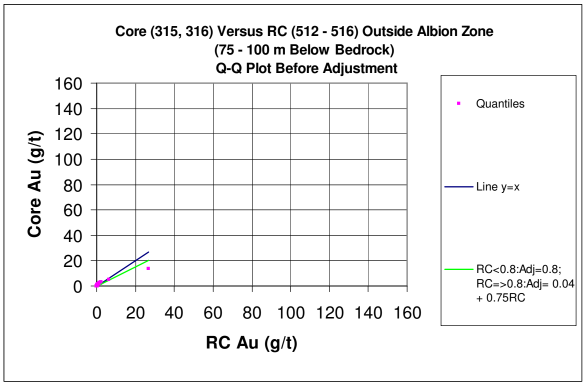


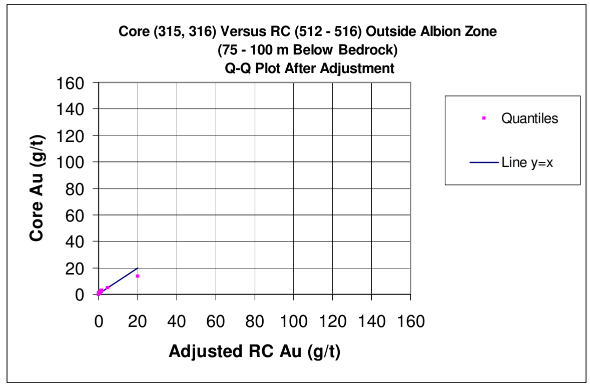


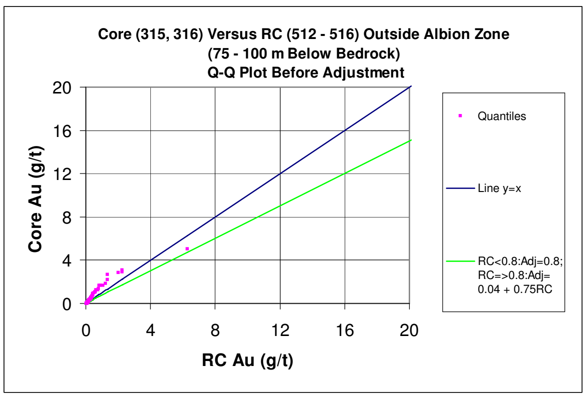


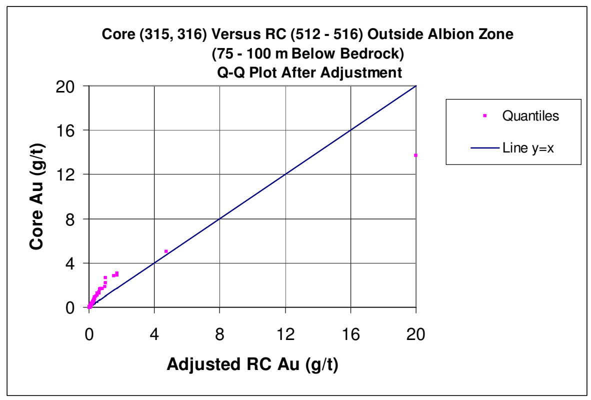


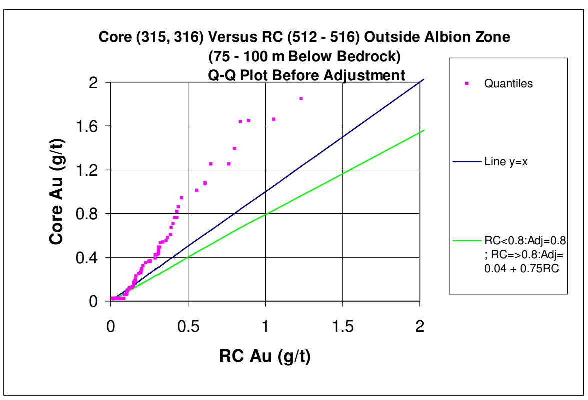
DDH Campaign 315 and 316 Versus RC Campaign 512 - 516 Outside Albion Shear Zone (75 - 100 m Below Bedrock) - RUN 25

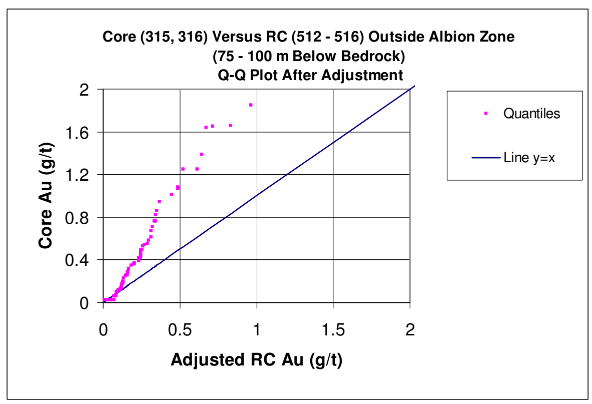




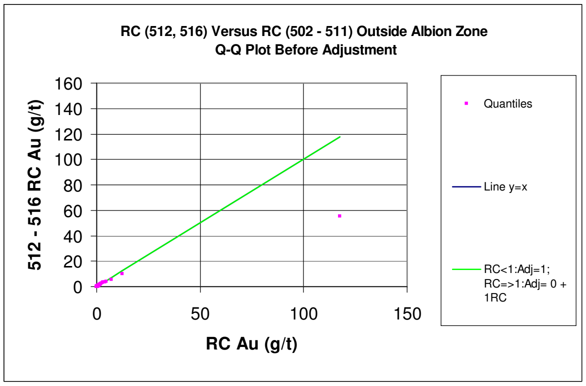


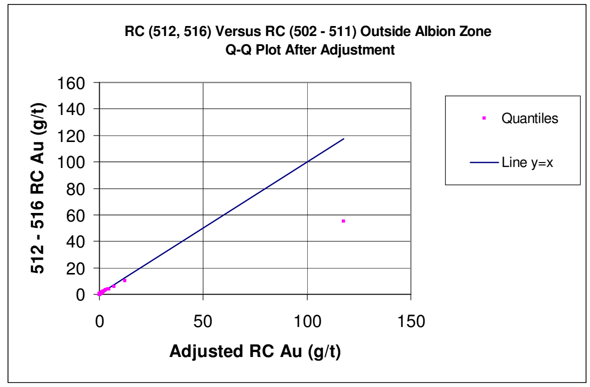


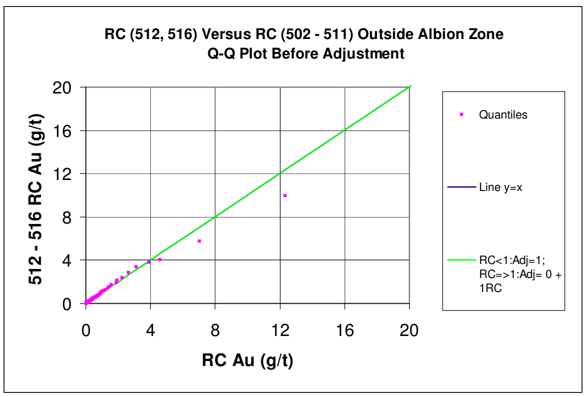


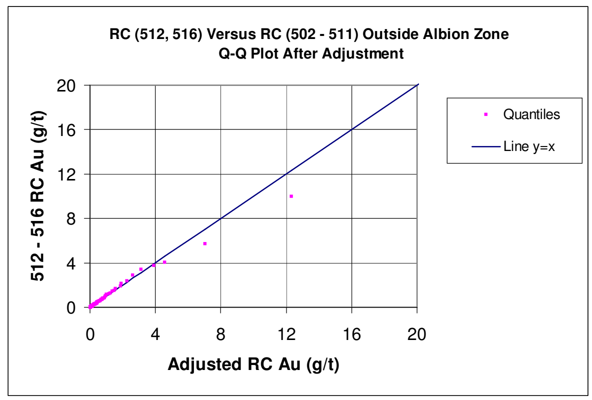


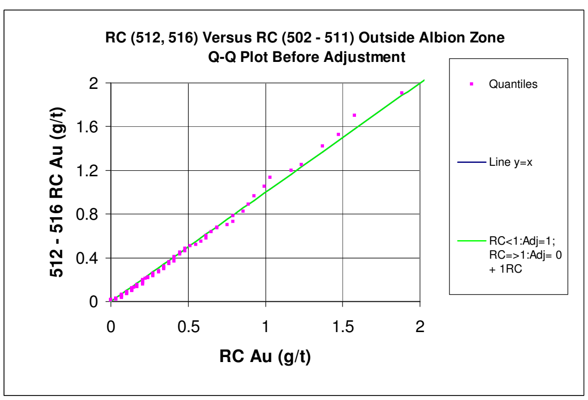
RC Campaign 512 and 516 Versus RC Campaign 502 - 511 Outside Albion Shear Zone - RUN 28

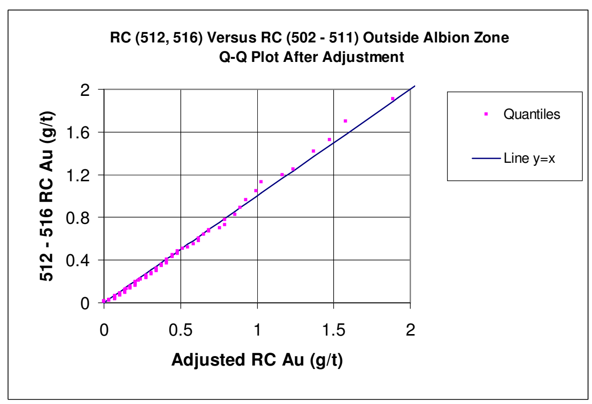




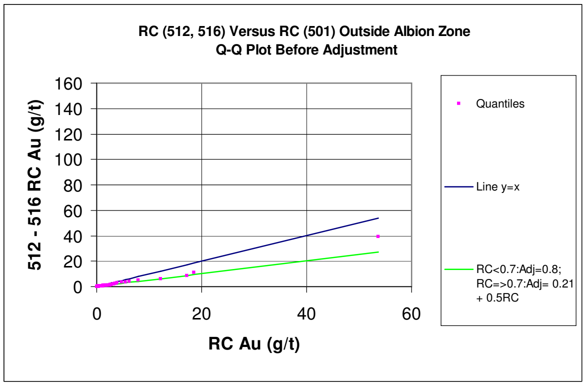


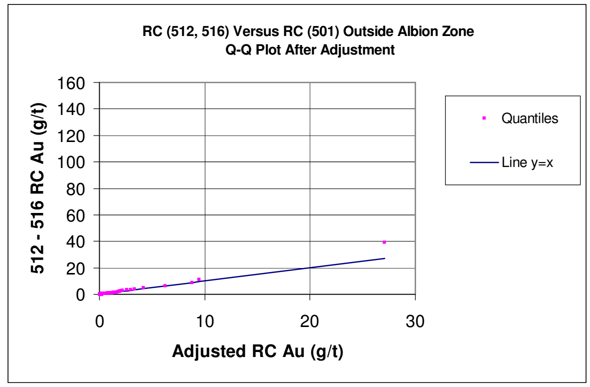


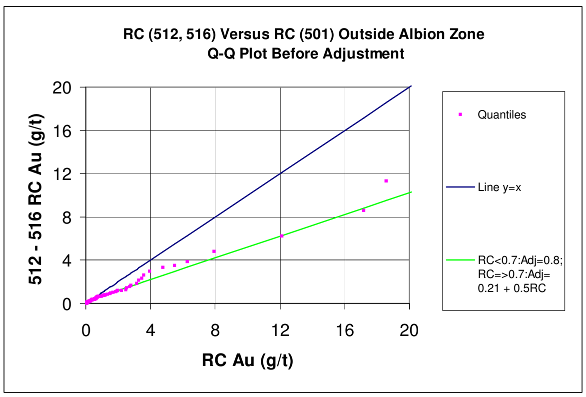


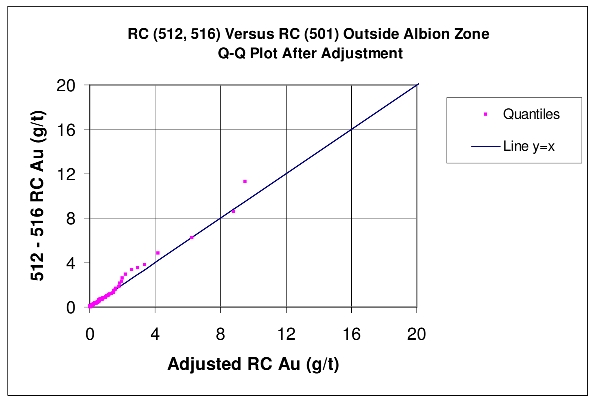


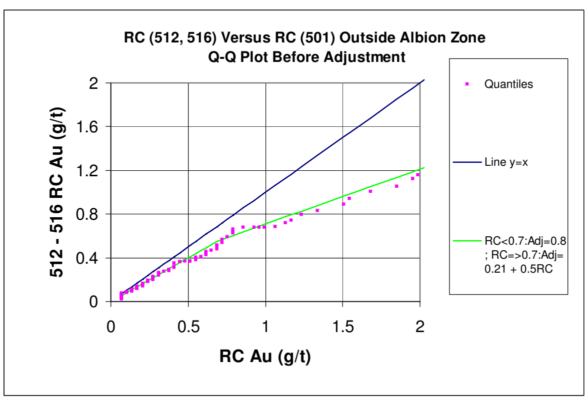
RC Campaign 512 and 516 Versus RC Campaign 501 Outside Albion Shear Zone - RUN 29

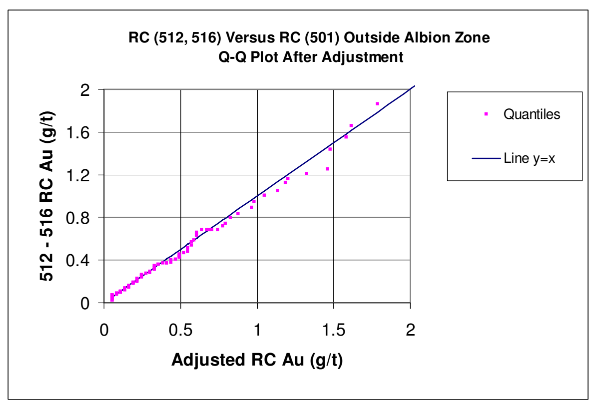




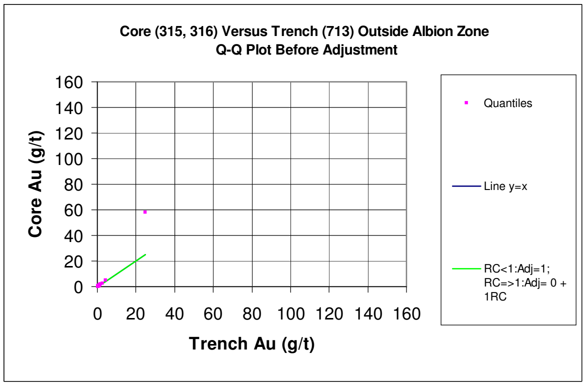


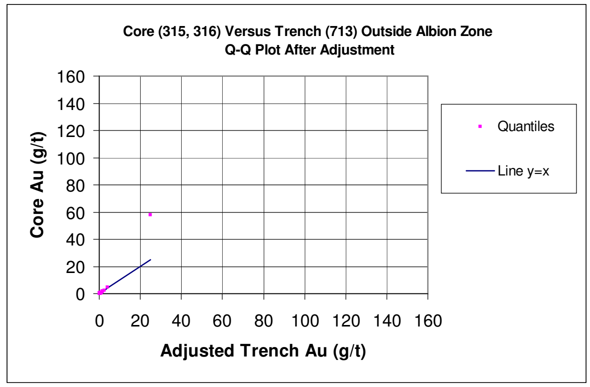


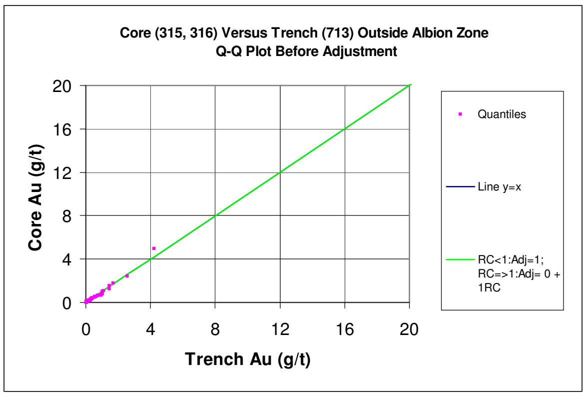


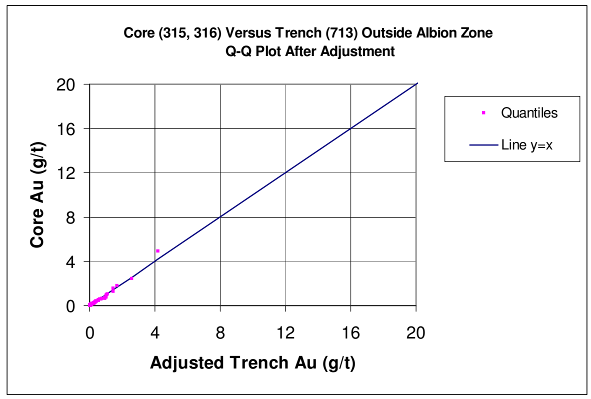


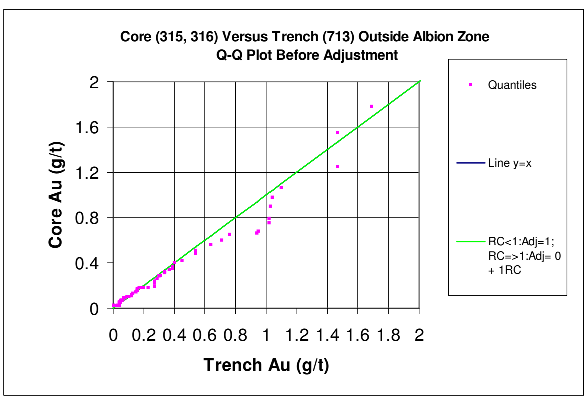
DDH Campaign 315 and 316 Versus Trench Campaign 713 Outside Albion Shear Zone - RUN 8

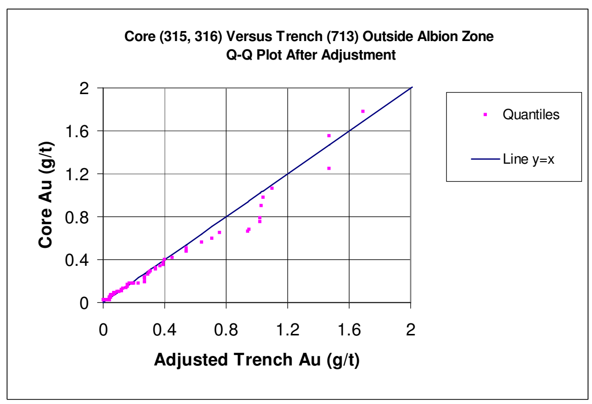




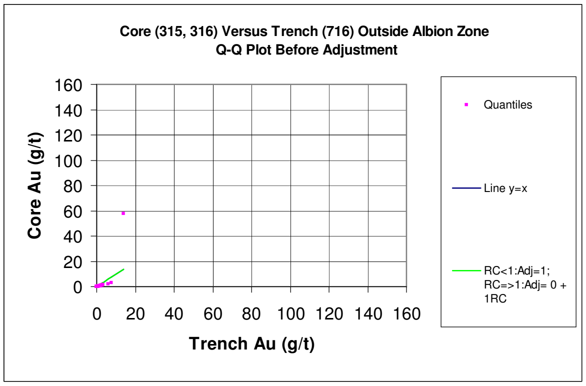


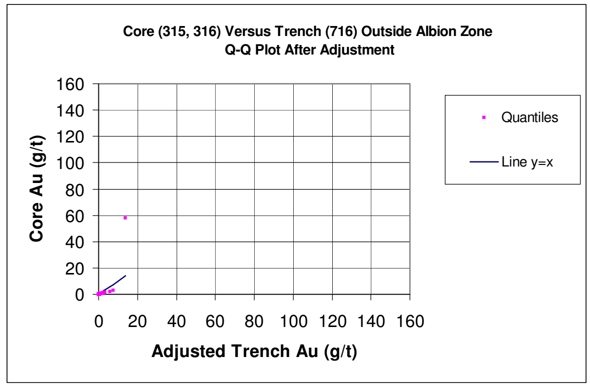


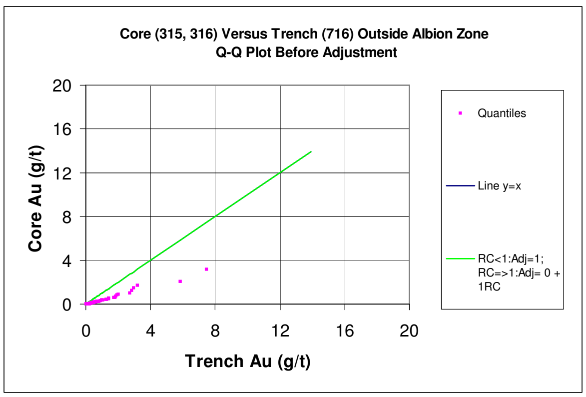


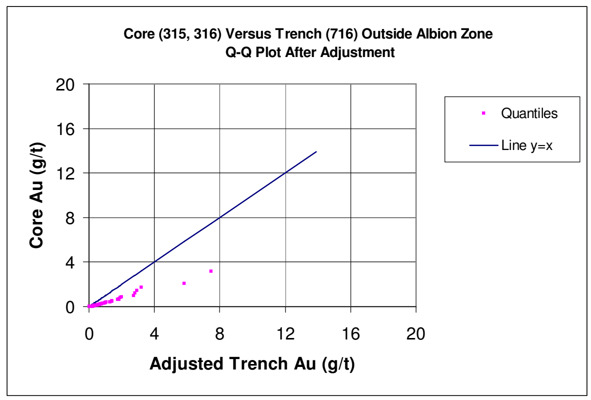


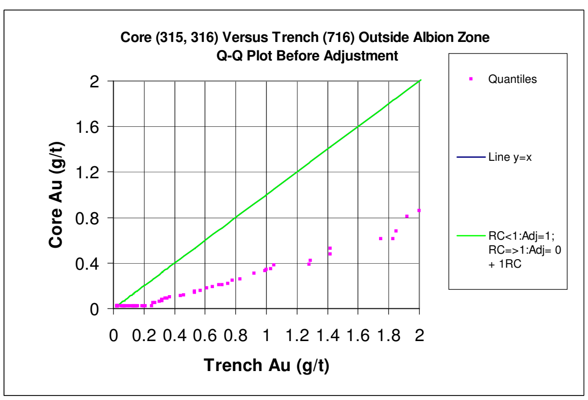
DDH Campaign 315 and 316 Versus Trench Campaign 716 Outside Albion Shear Zone - RUN 9

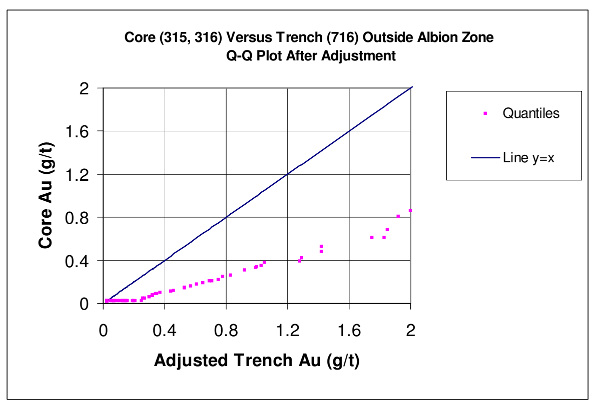




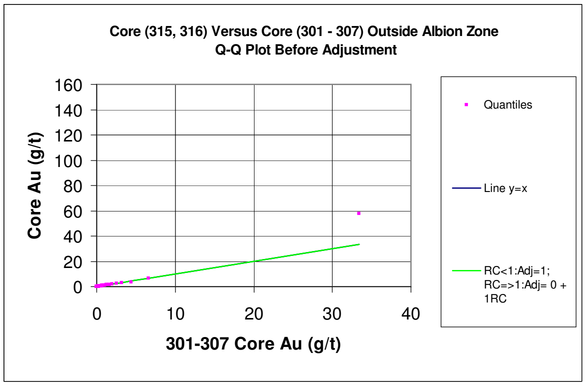


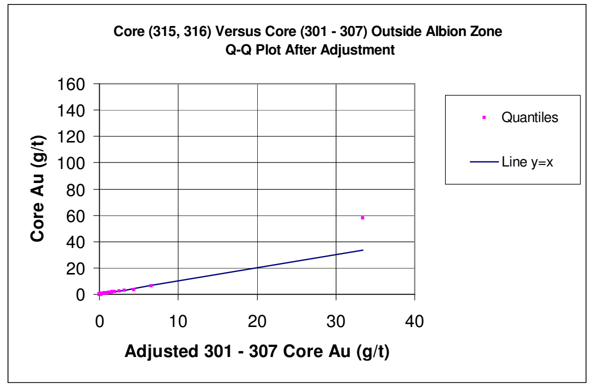


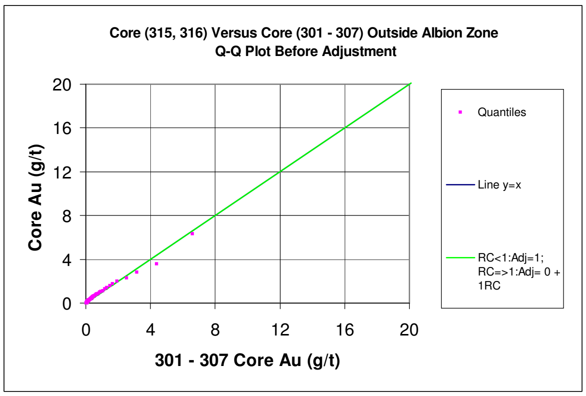


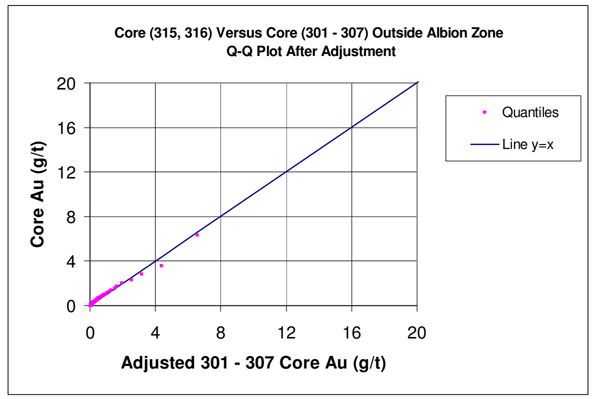


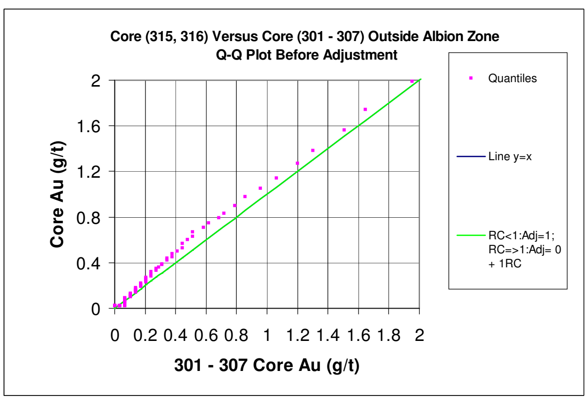
DDH Campaign 315 and 316 Versus Core Campaign 301 - 307 Outside Albion Shear Zone - RUN 10

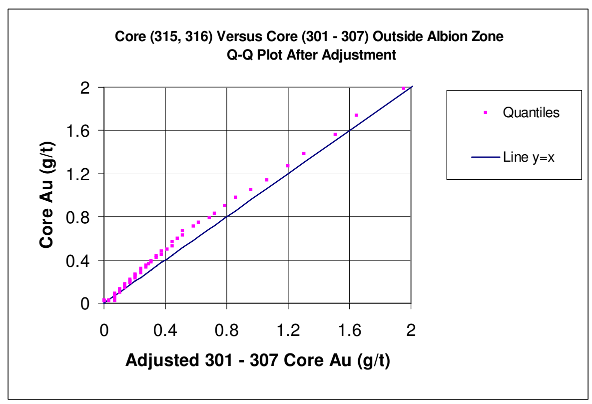




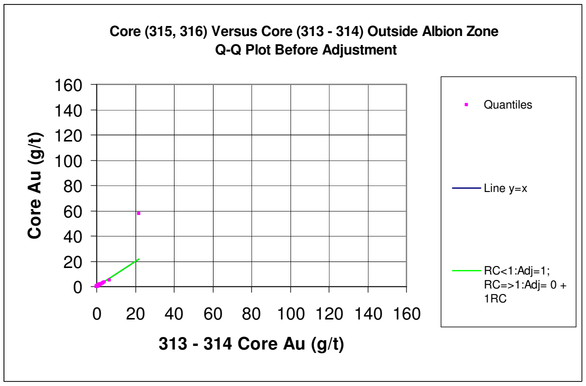


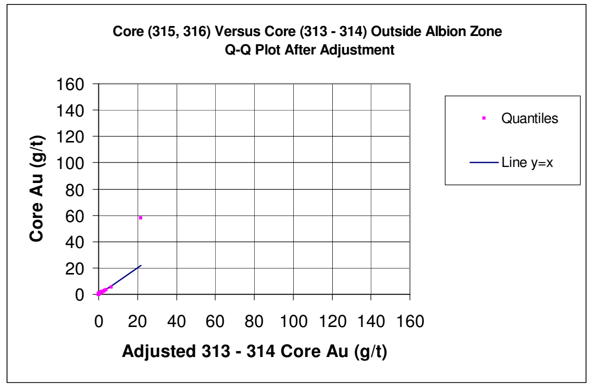


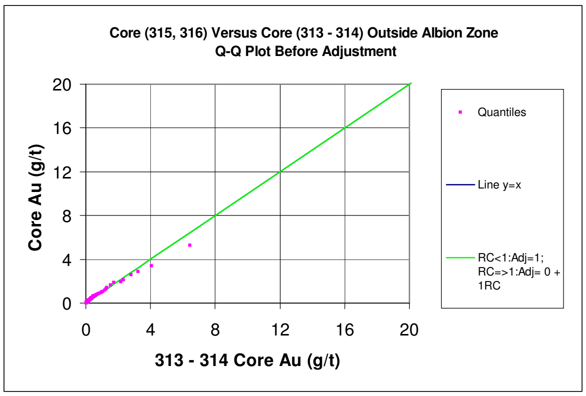


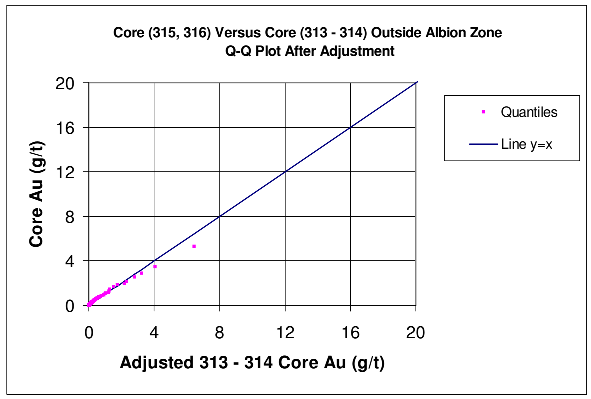


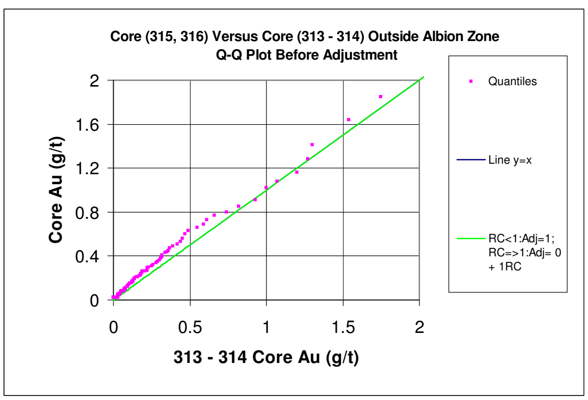
DDH Campaign 315 and 316 Versus Core Campaign 313 - 314 Outside Albion Shear Zone - RUN 11

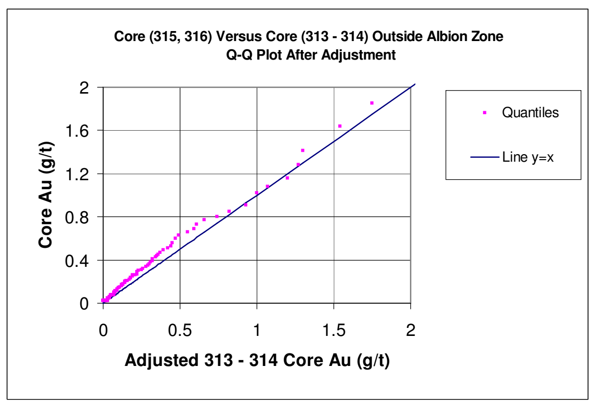




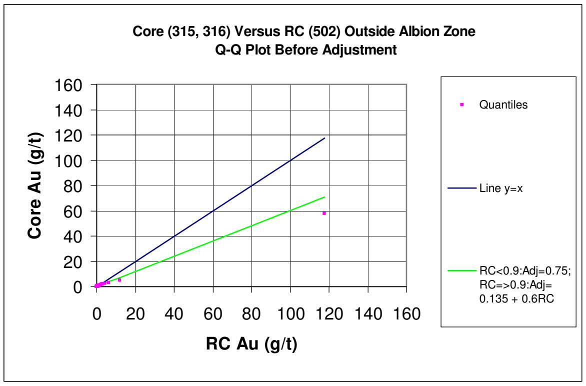


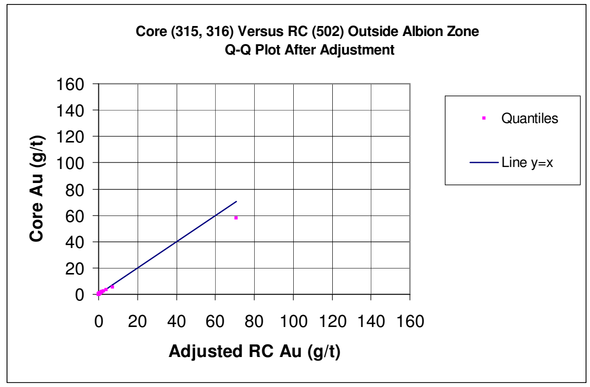


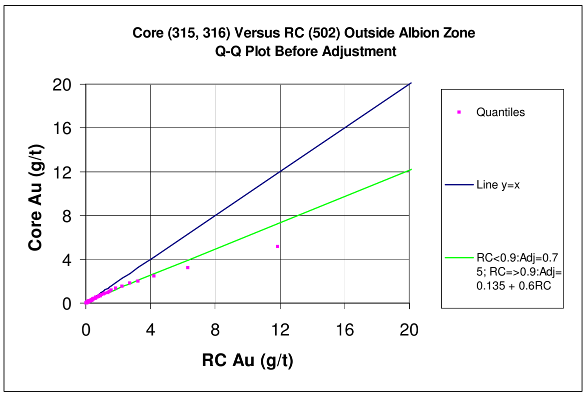


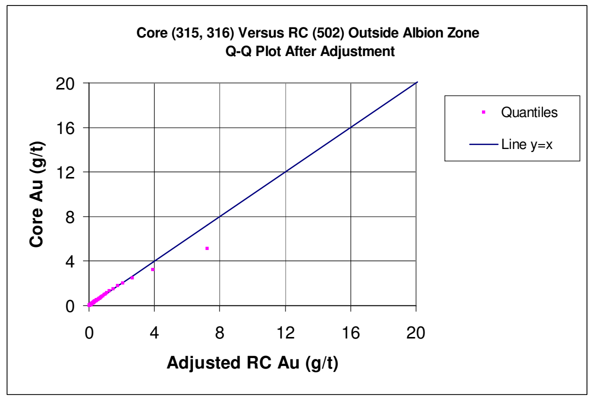


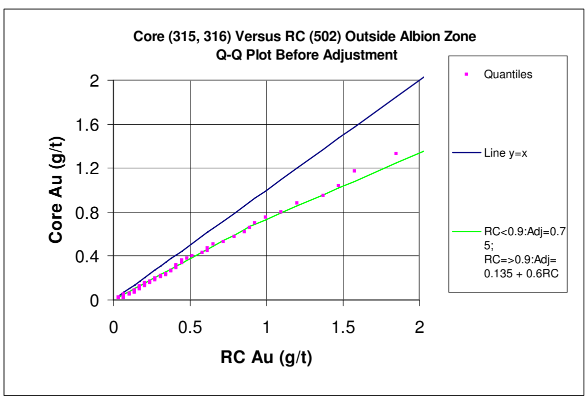
DDH Campaign 315 and 316 Versus RC Campaign 502 Outside Albion Shear Zone - RUN 12

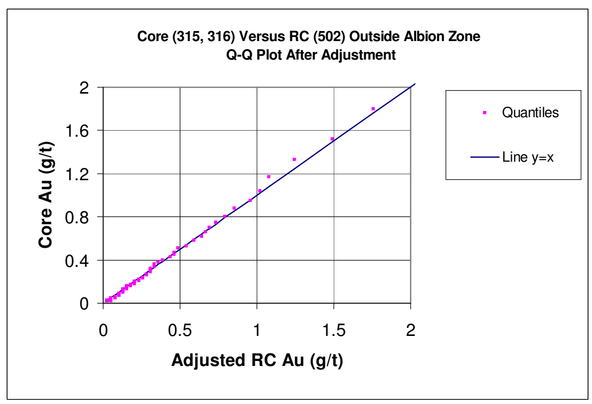




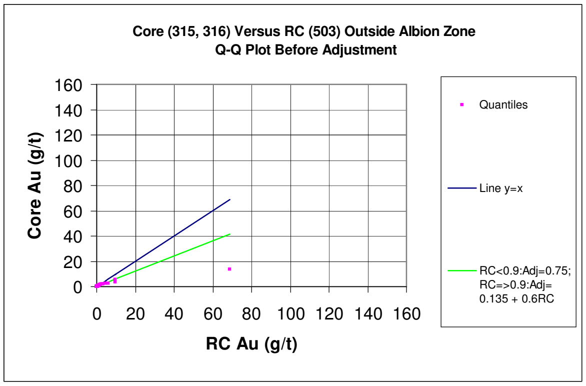


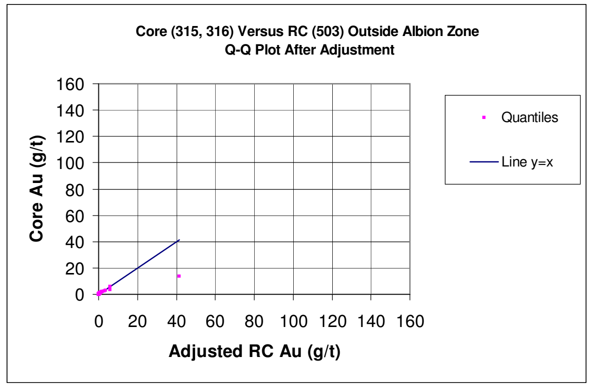


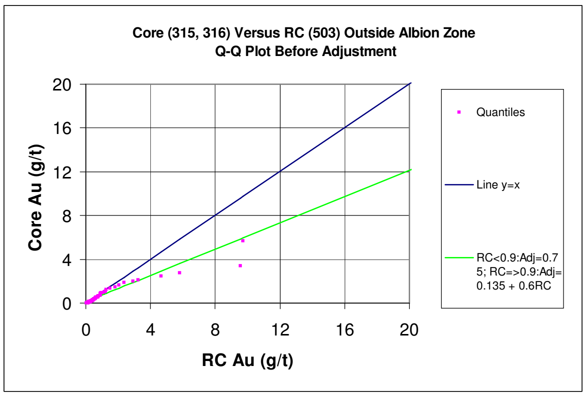


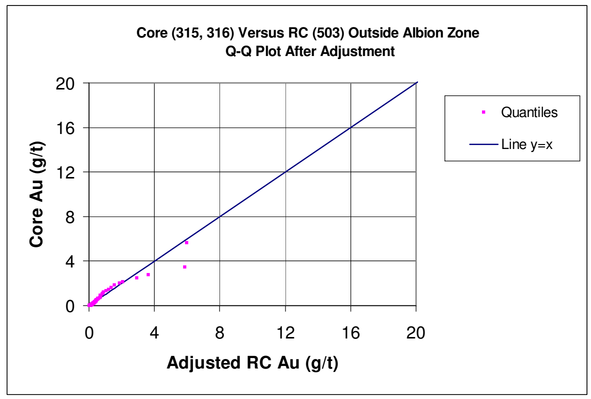


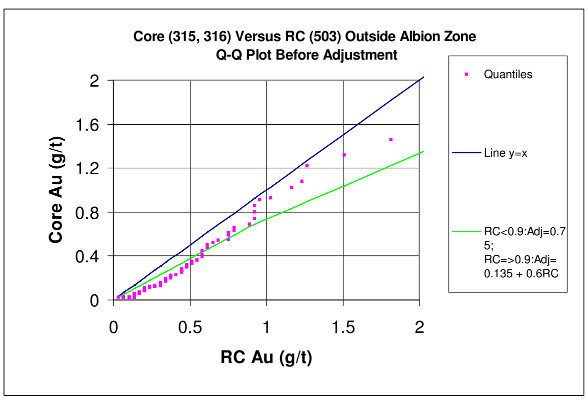
DDH Campaign 315 and 316 Versus RC Campaign 503 Outside Albion Shear Zone RUN 13

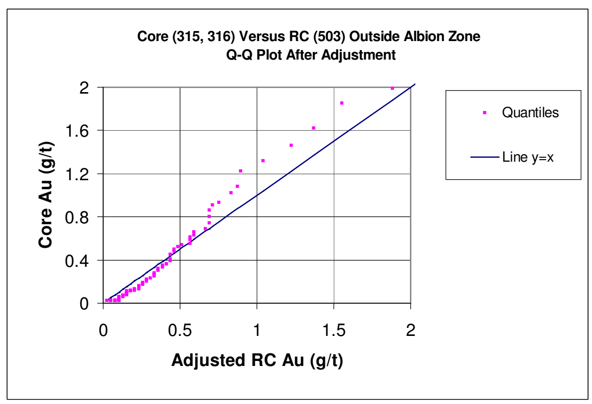




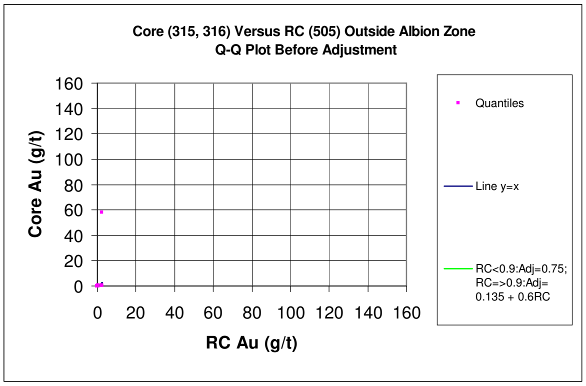


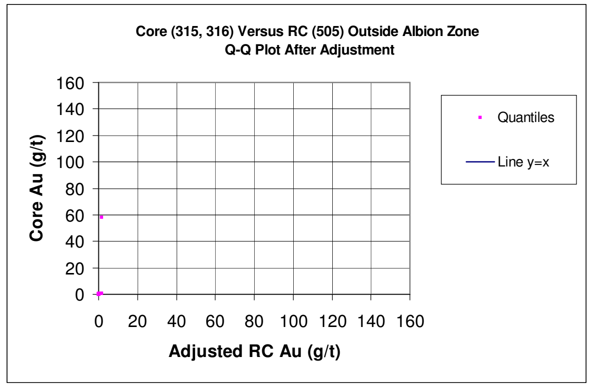


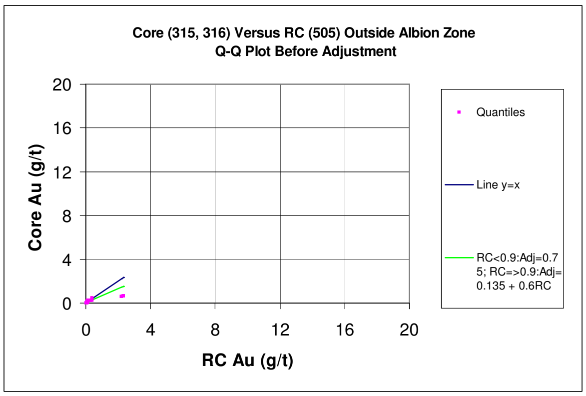


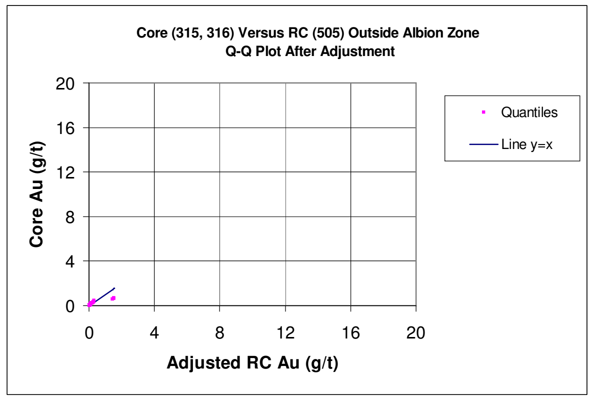


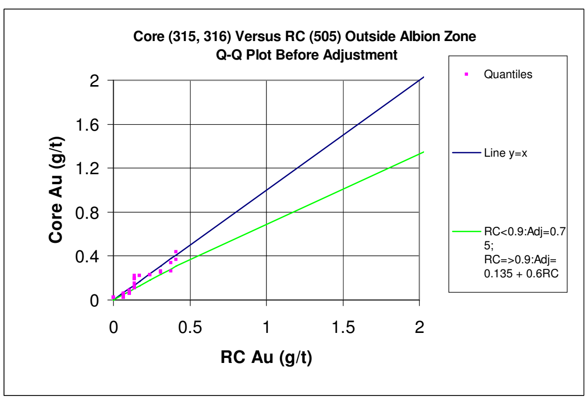
DDH Campaign 315 and 316 Versus RC Campaign 505 Outside Albion Shear Zone - RUN 14

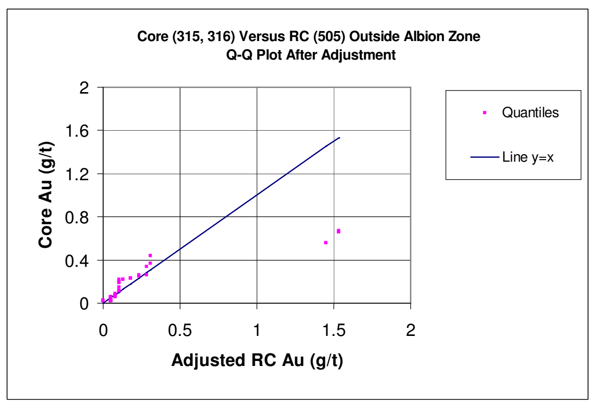




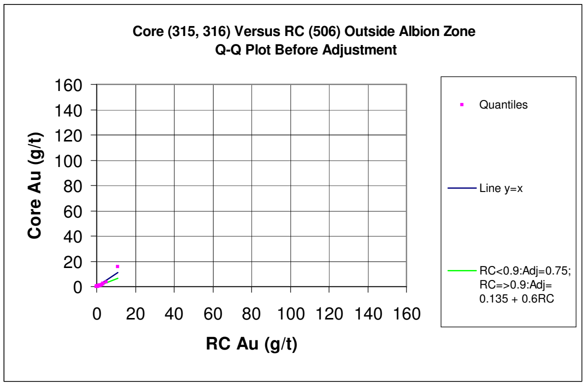


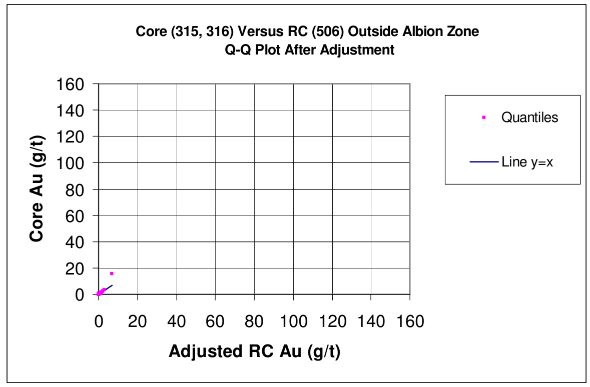


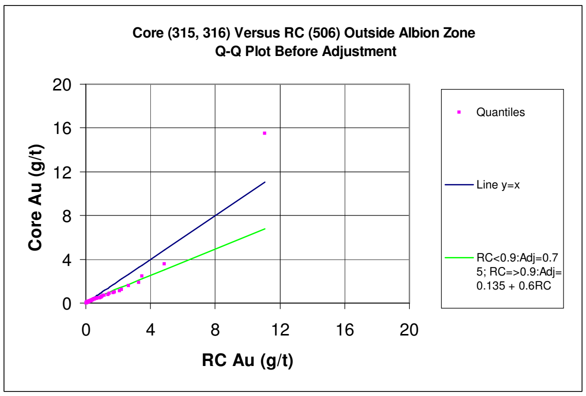


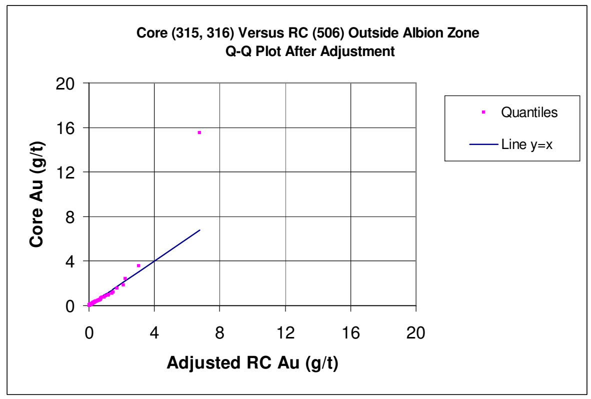


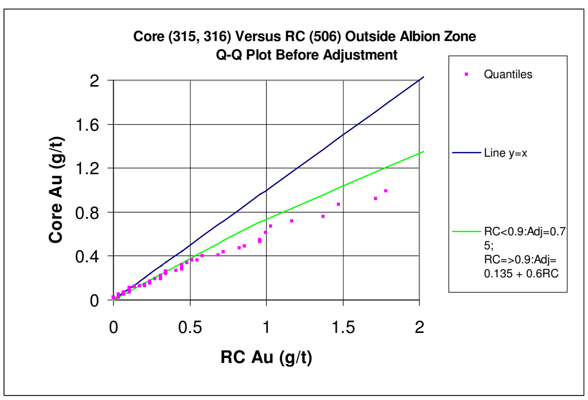
DDH Campaign 315 and 316 Versus RC Campaign 506 Outside Albion Shear Zone - RUN 15

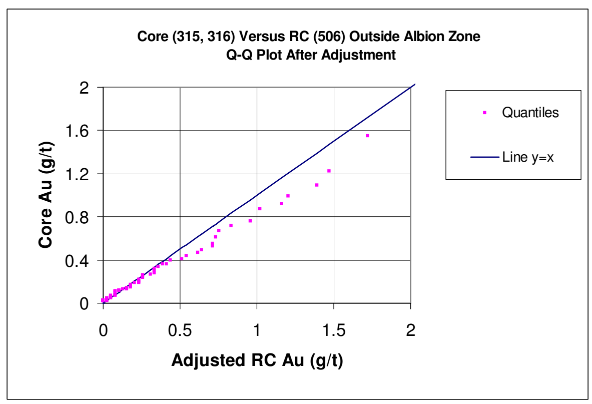




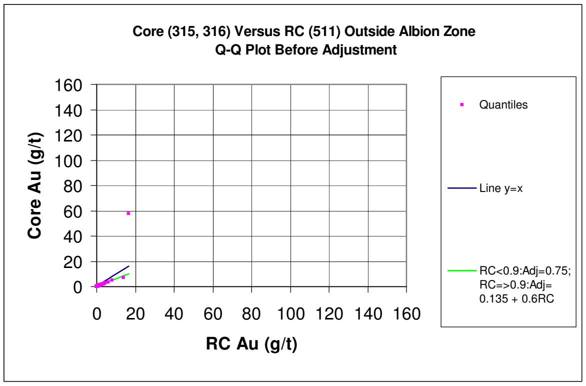


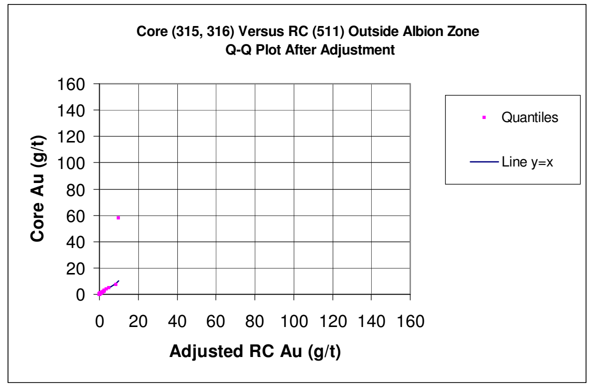


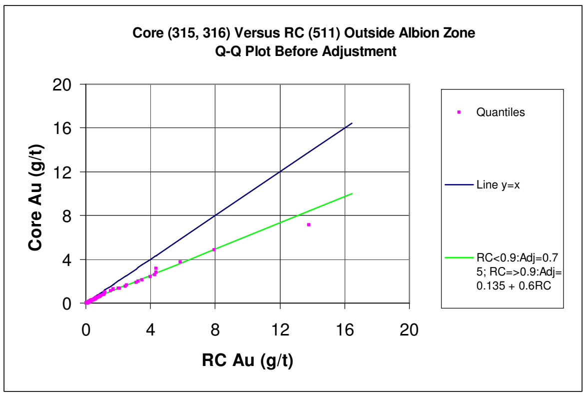


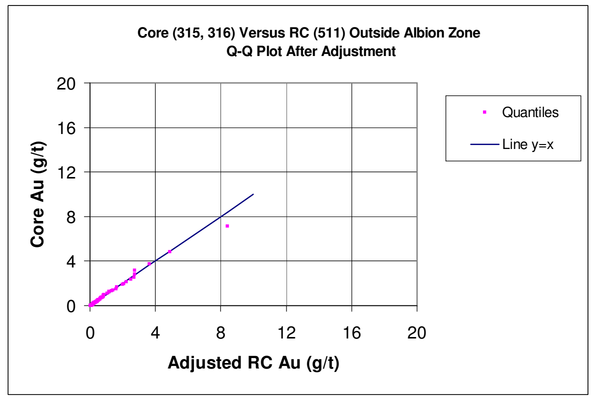


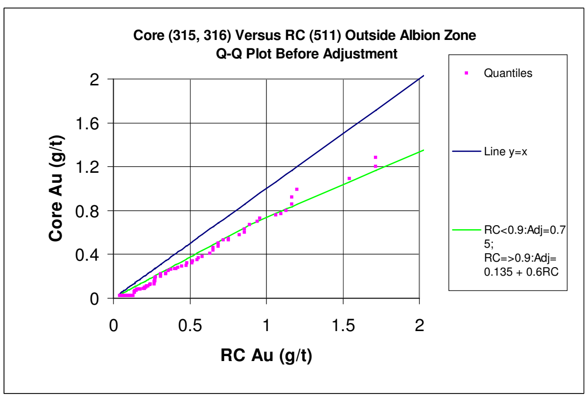
DDH Campaign 315 and 316 Versus RC Campaign 511 Outside Albion Shear Zone - RUN 16

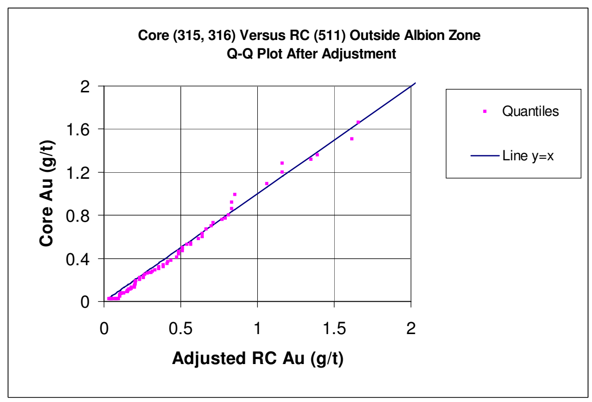




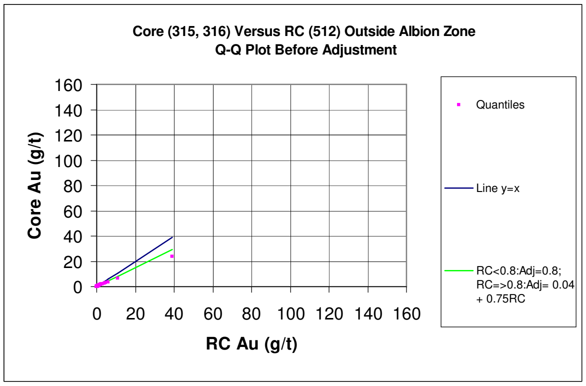


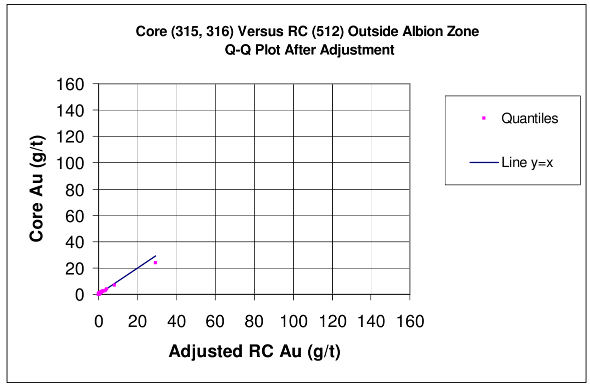


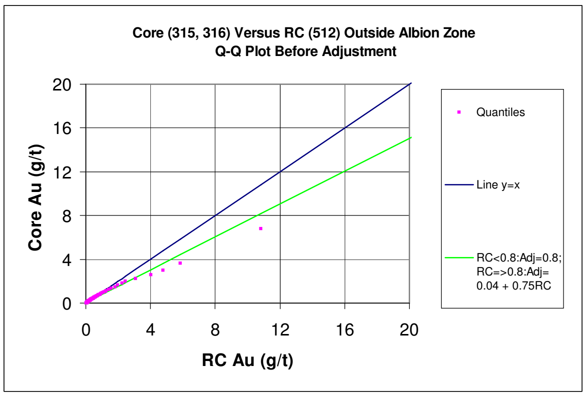


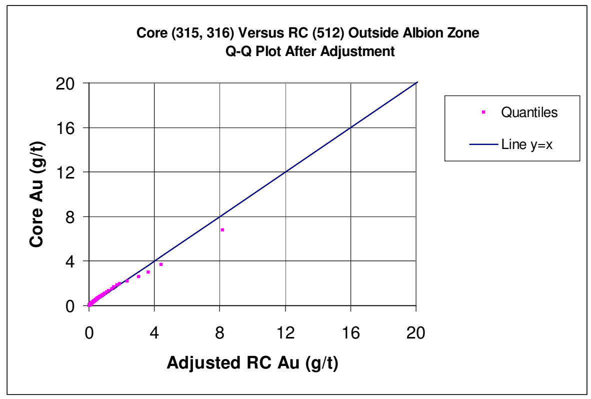


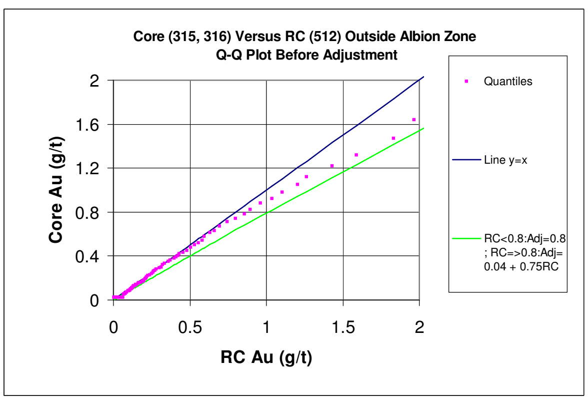
DDH Campaign 315 and 316 Versus RC Campaign 512 Outside Albion Shear Zone - RUN 17

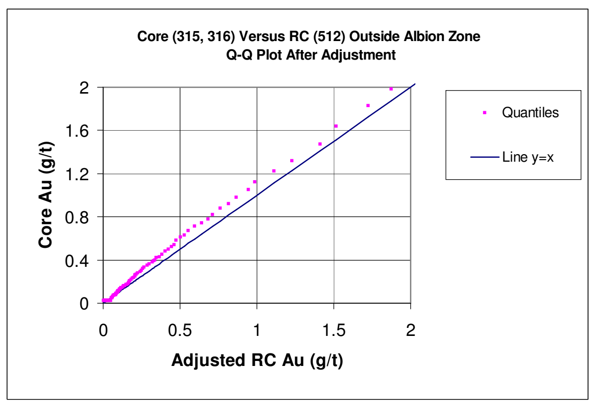




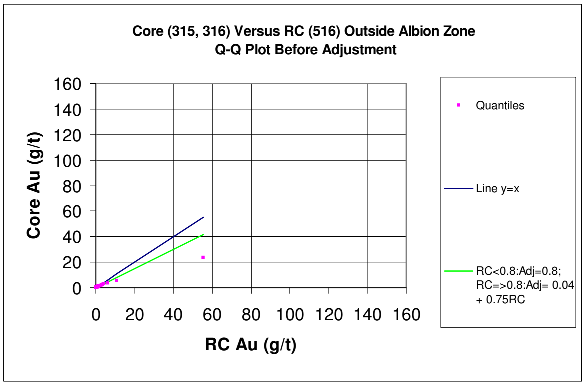


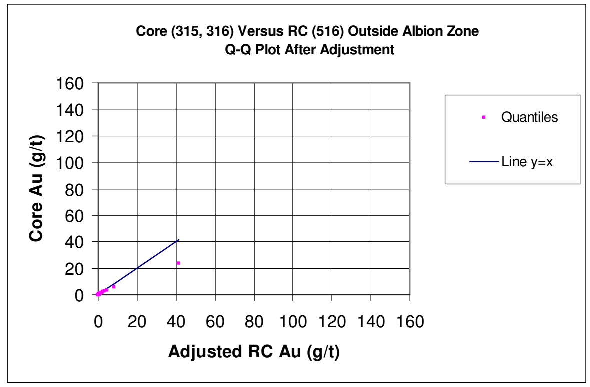


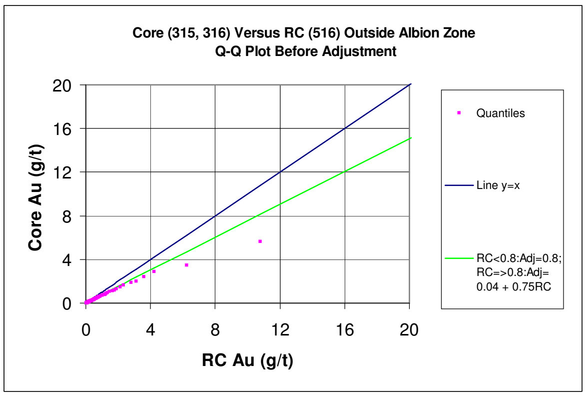


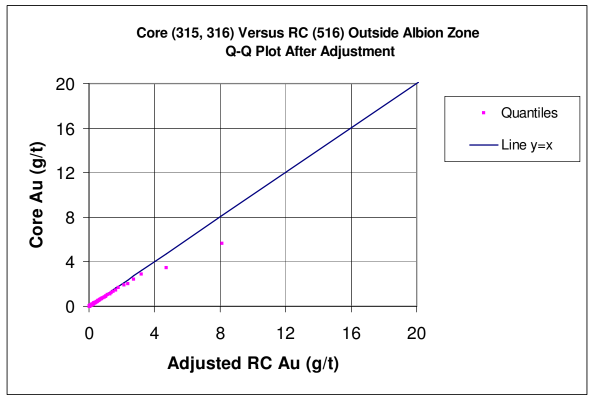


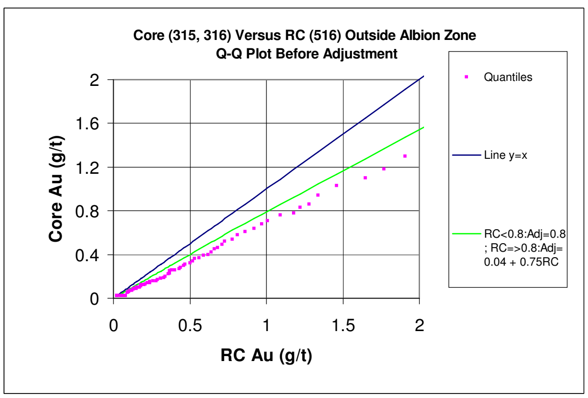
DDH Campaign 315 and 316 Versus RC Campaign 516 Outside Albion Shear Zone - RUN 18

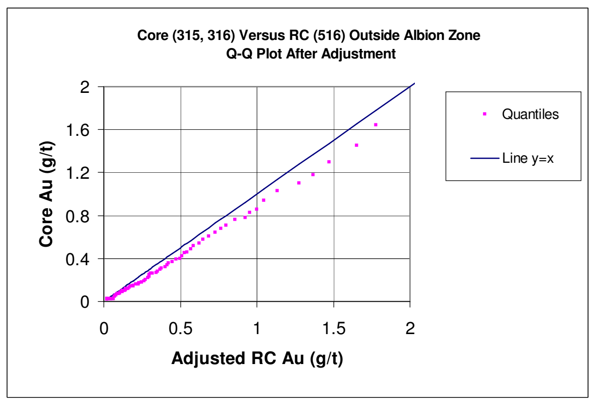




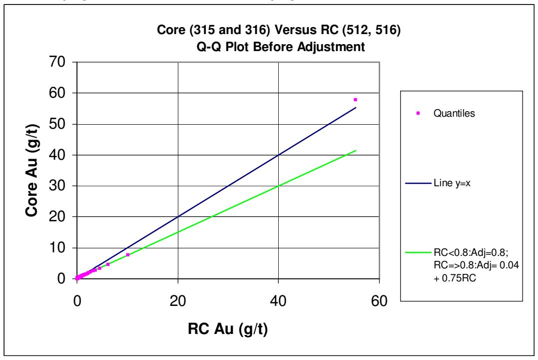


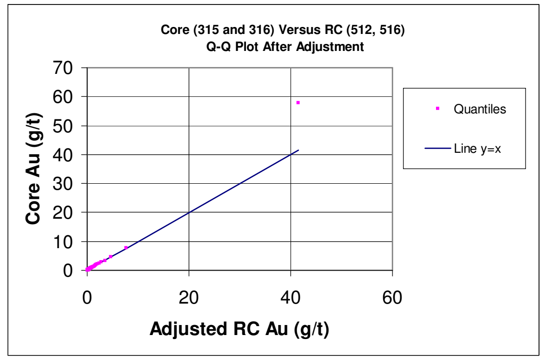


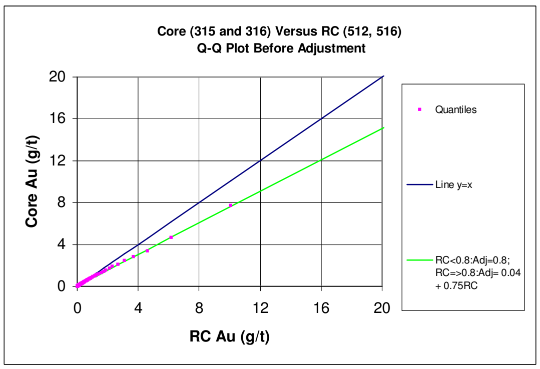


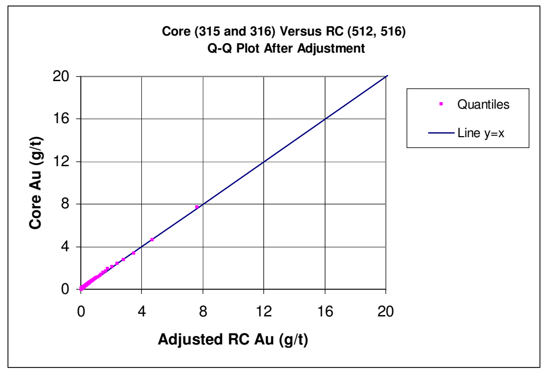


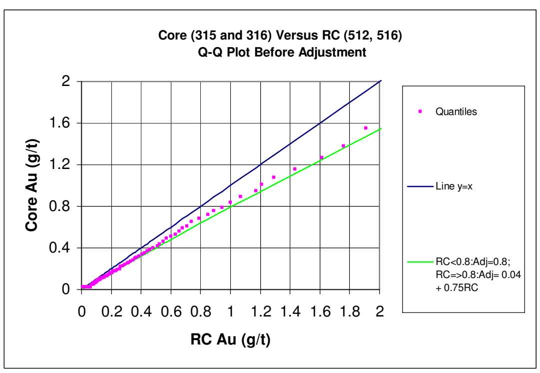
DDH Campaign 315 and 316 Versus RC Campaign 512 and 516 RUN 1

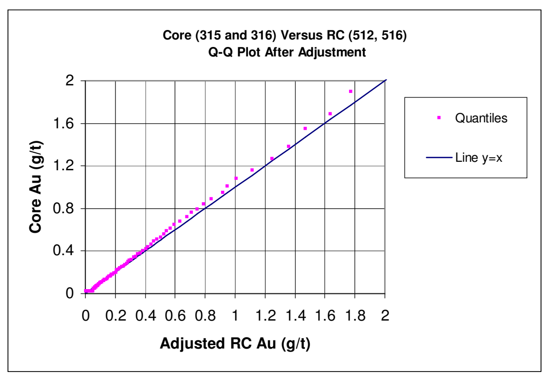




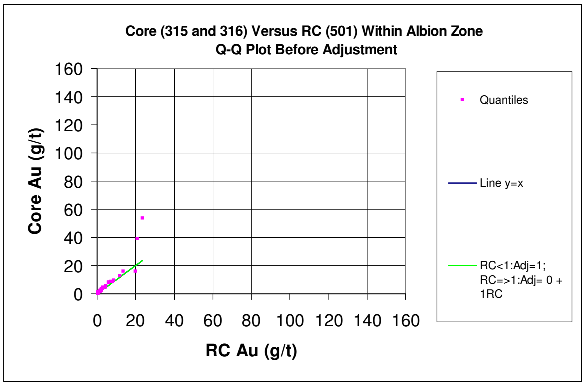


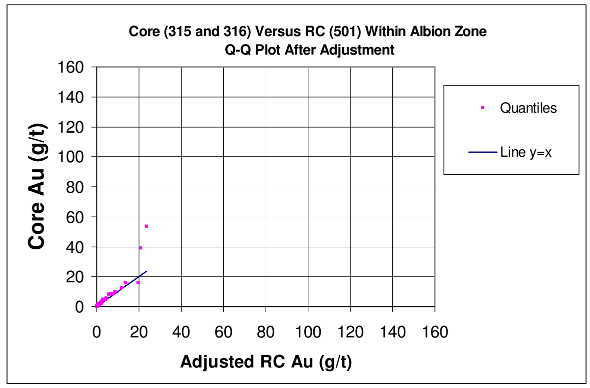


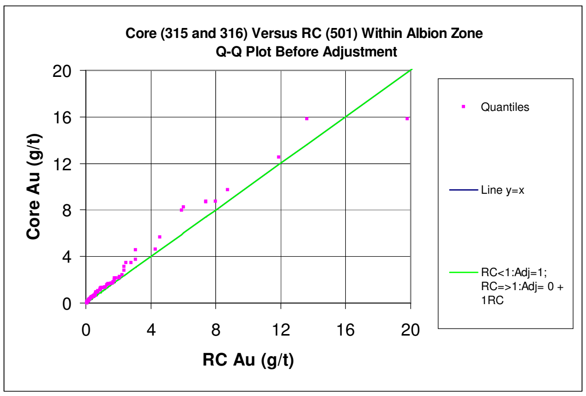


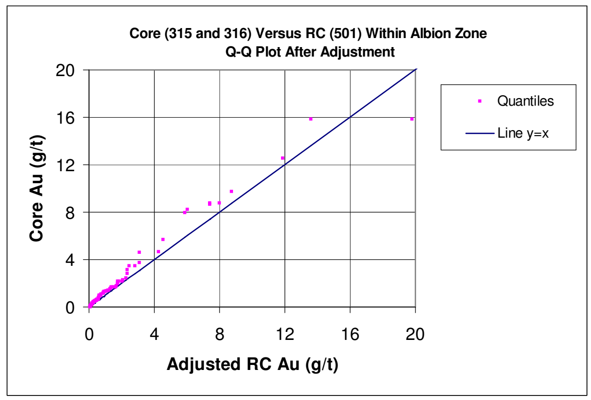


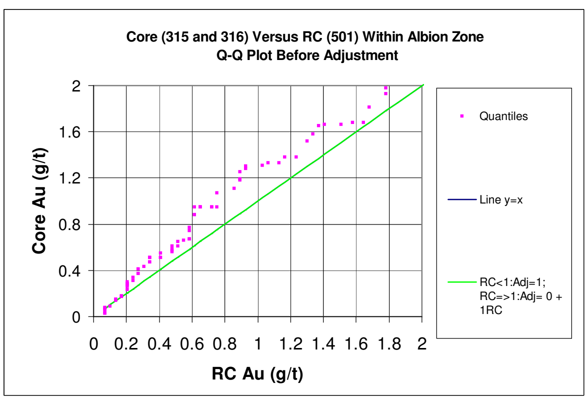
DDH Campaign 315 and 316 Versus RC Campaign 501 Within Albion Shear Zone - RUN 2

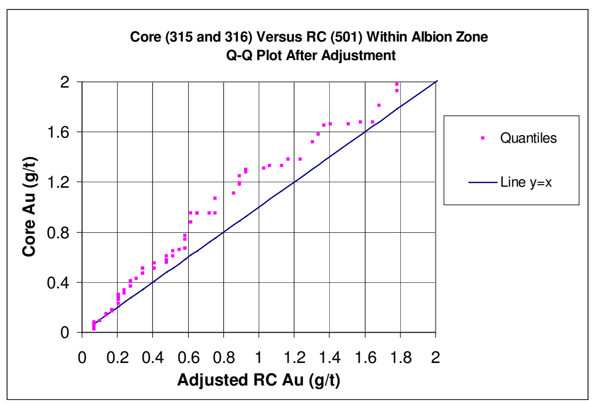




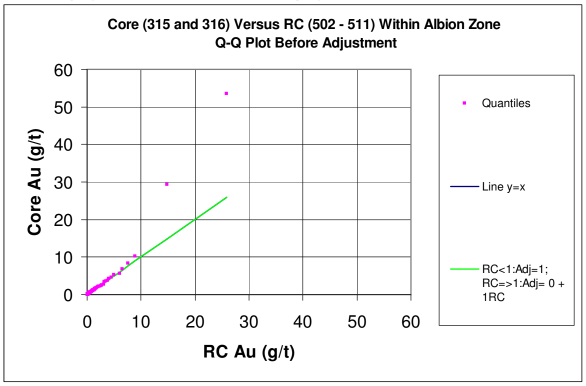


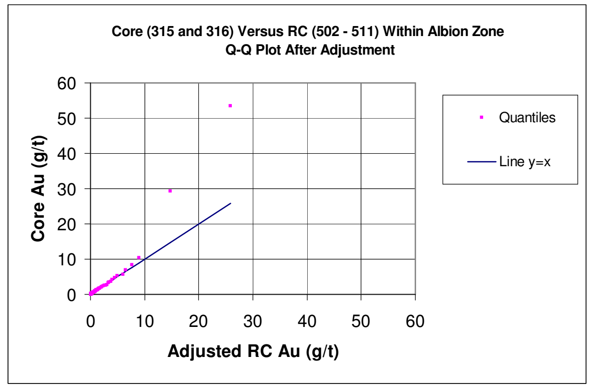


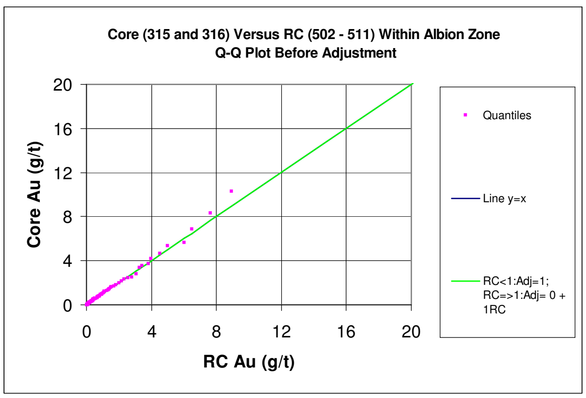


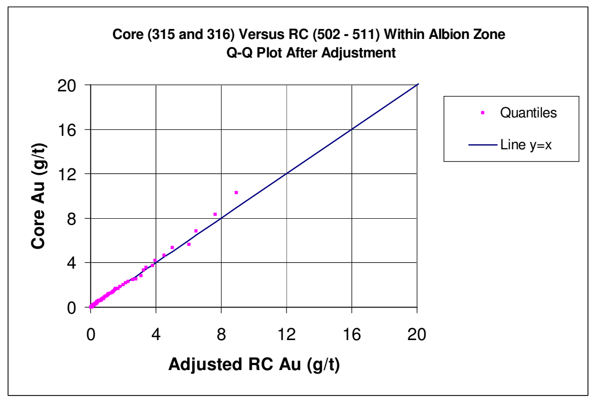


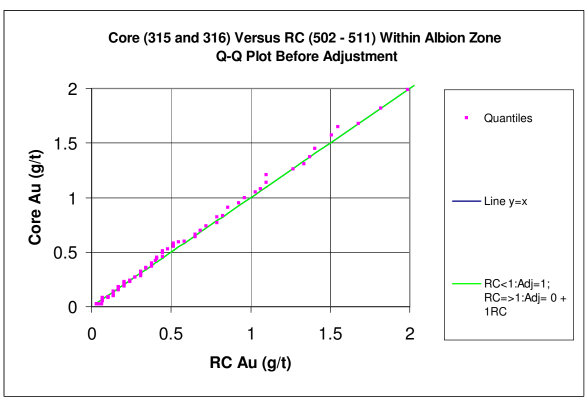
DDH Campaign 315 and 316 Versus RC Campaign 502, 503, 504, 505, 506, 507, 508, 509, 510, 511 Within Albion Shear Zone - RUN 3

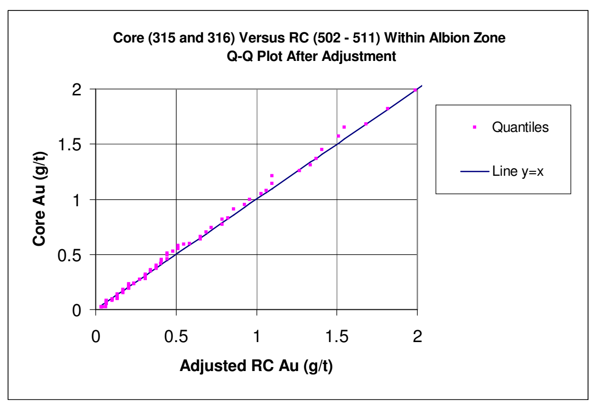




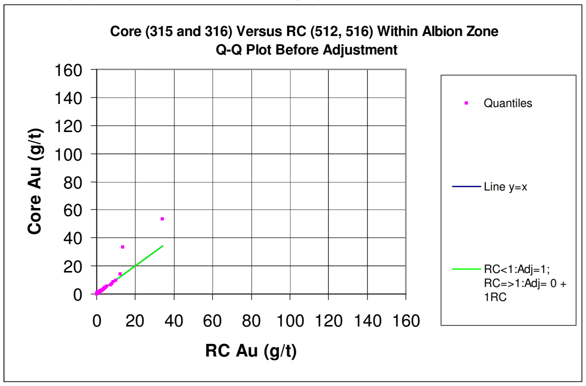


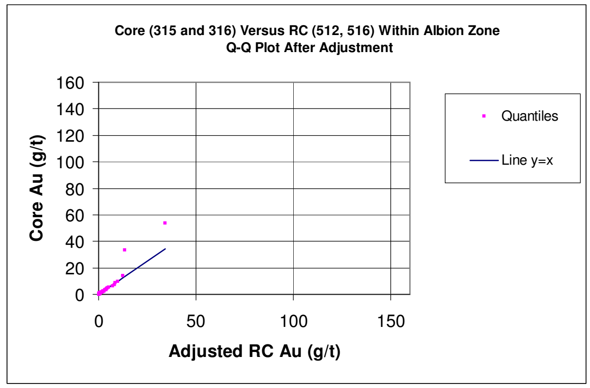


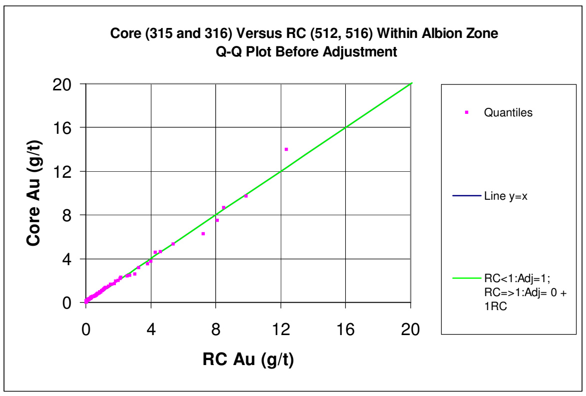


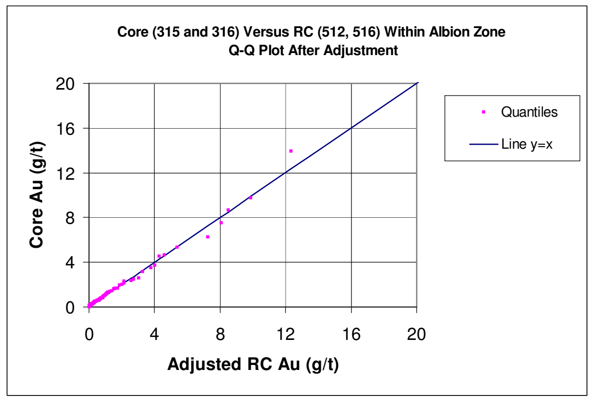


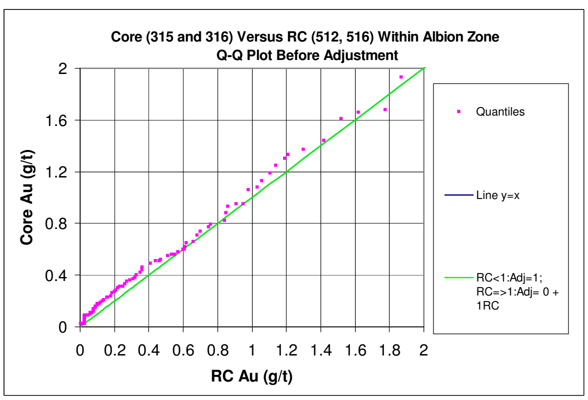
DDH Campaign 315 and 316 Versus RC Campaign 512, 516 Within Albion Shear Zone - RUN 4

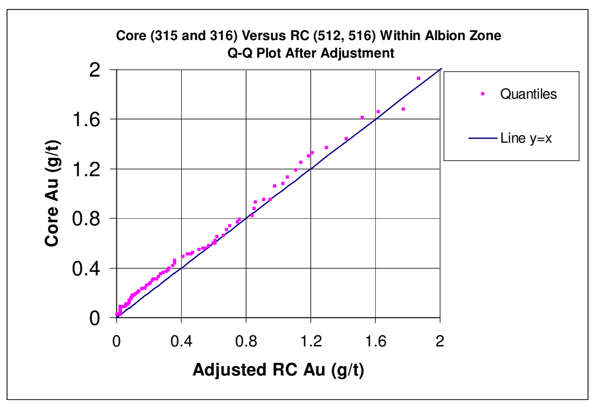




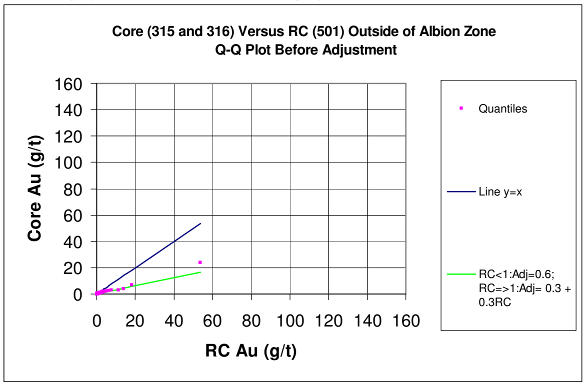


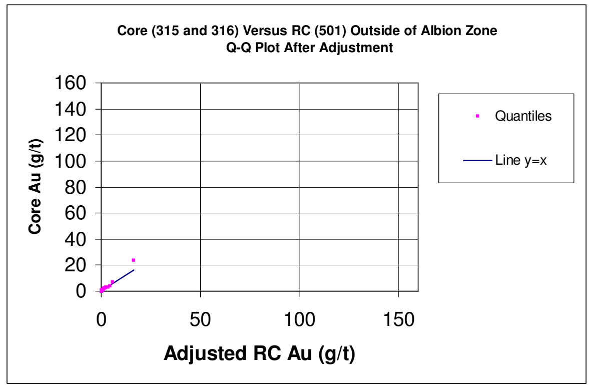


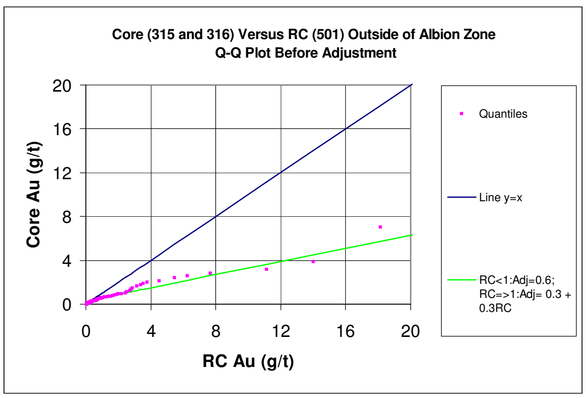


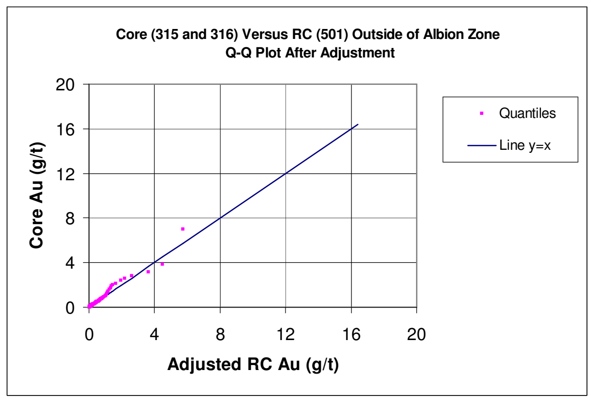


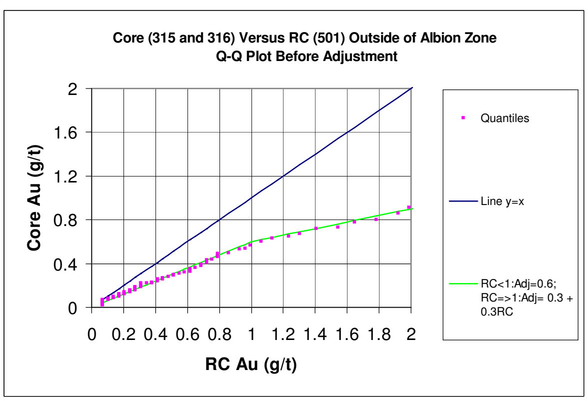
DDH Campaign 315 and 316 Versus RC Campaign 501 Outside of Albion Shear Zone - RUN 5

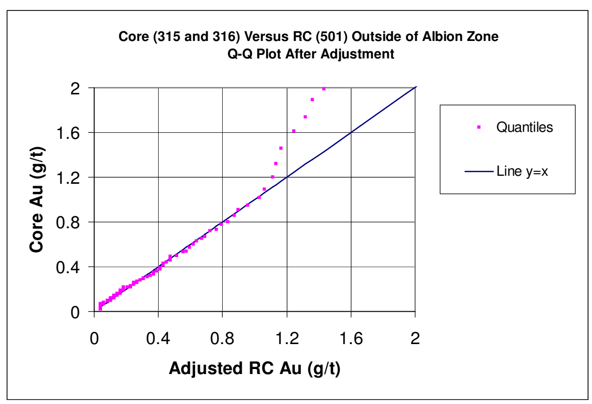




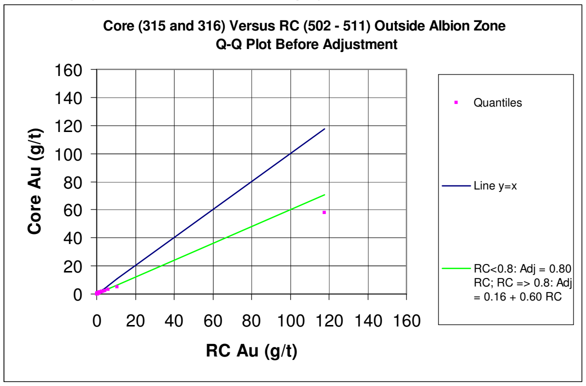


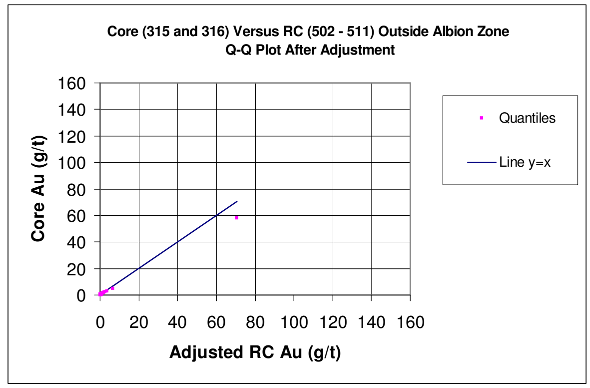


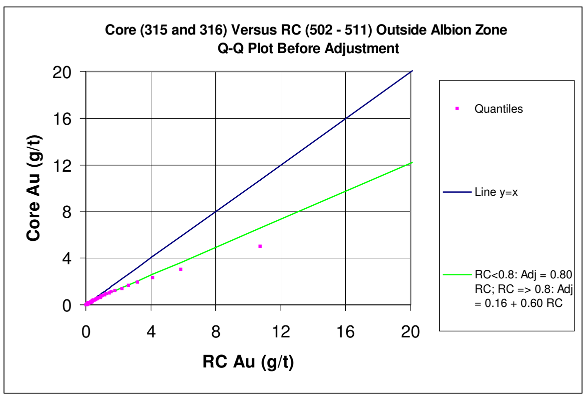


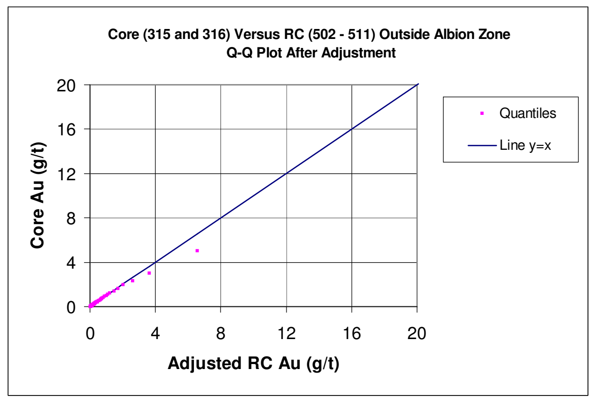


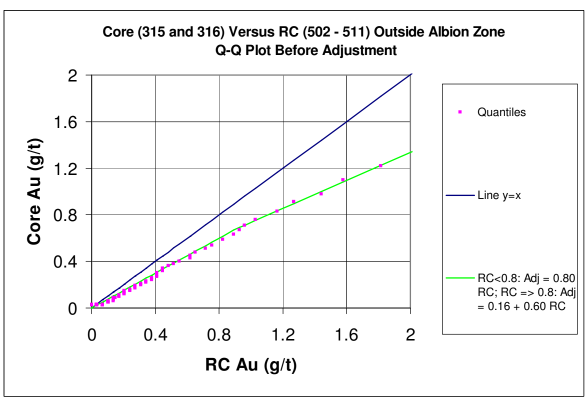
DDH Campaign 315 and 316 Versus RC Campaign 502, 503, 505, 506, 507, 508, 509, 510, 511 Outside of Albion Shear Zone - RUN 6

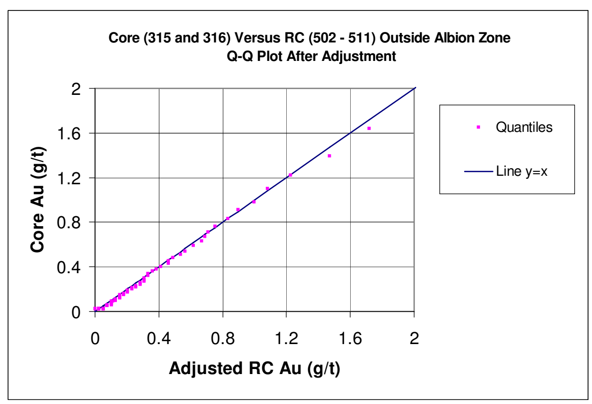




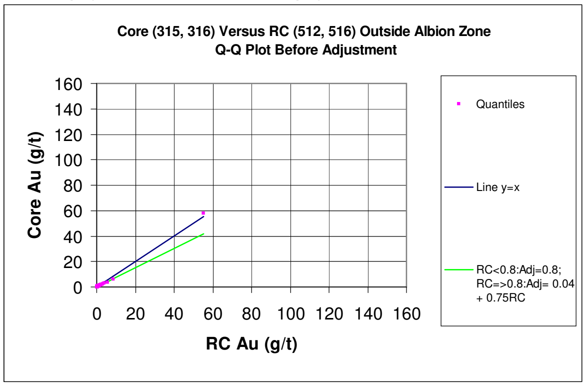


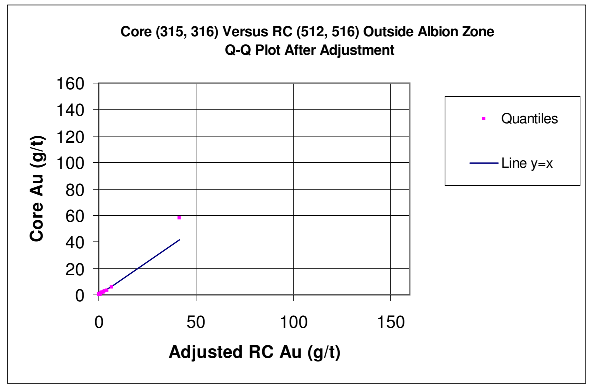


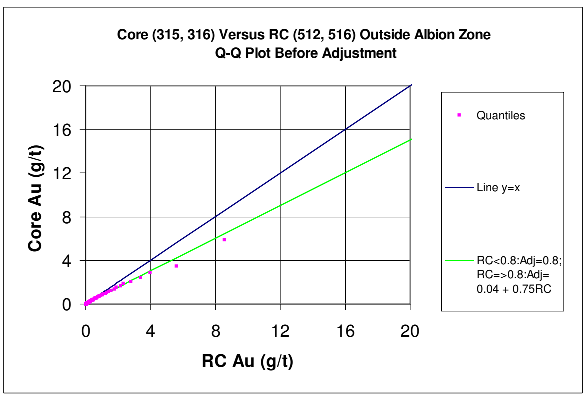


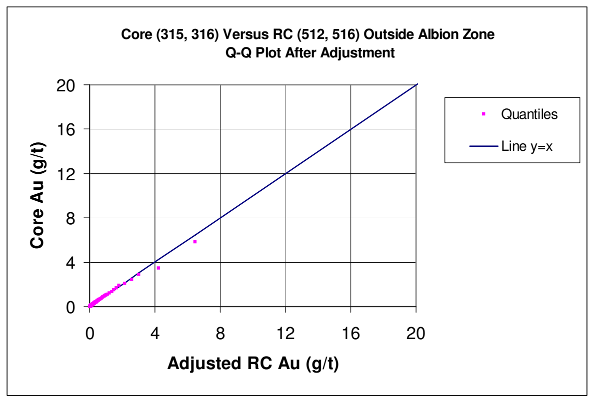


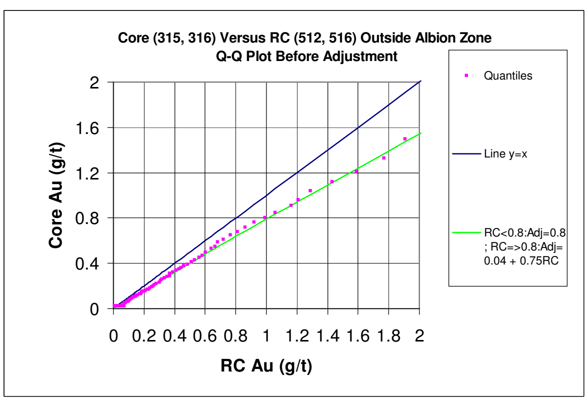
DDH Campaign 315 and 316 Versus RC Campaign 512, 516 Outside Albion Shear Zone - RUN 7

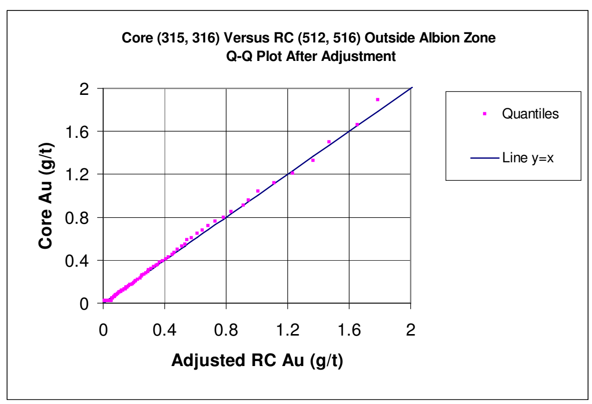




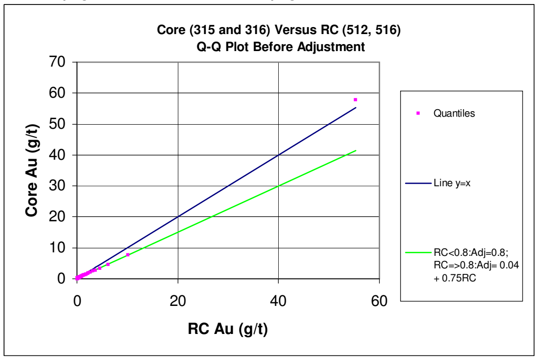


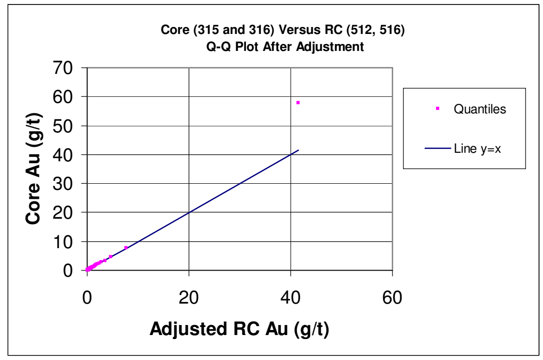


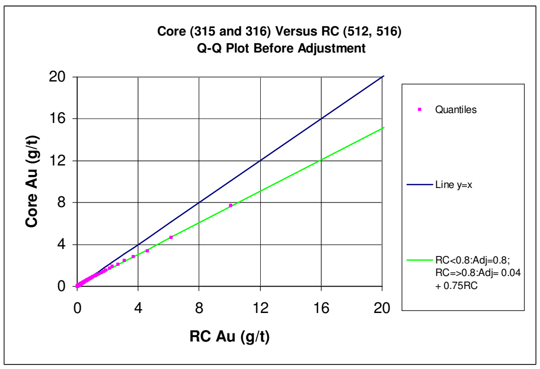


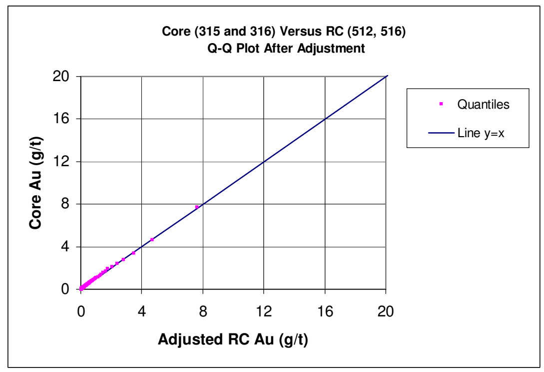


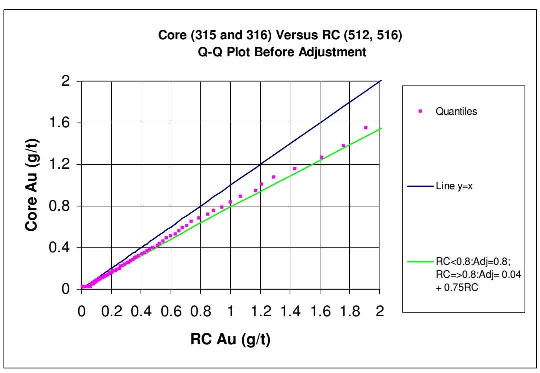
DDH Campaign 315 and 316 Versus RC Campaign 512 and 516 RUN 1

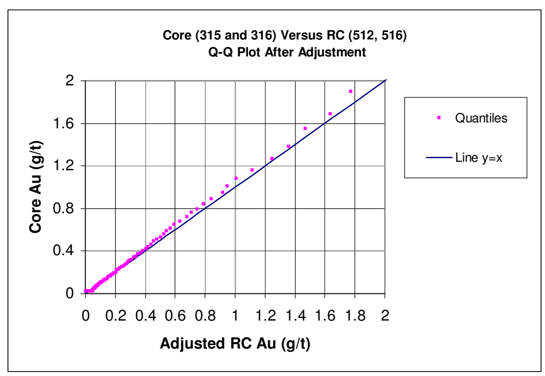




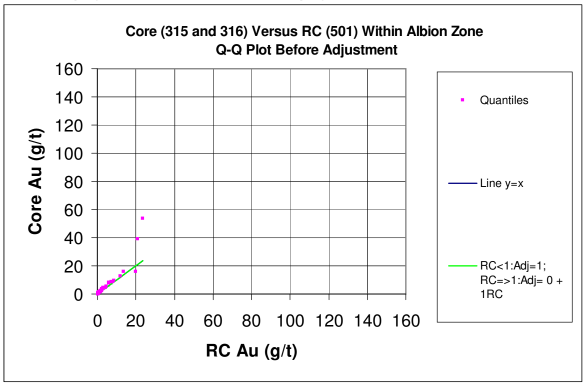


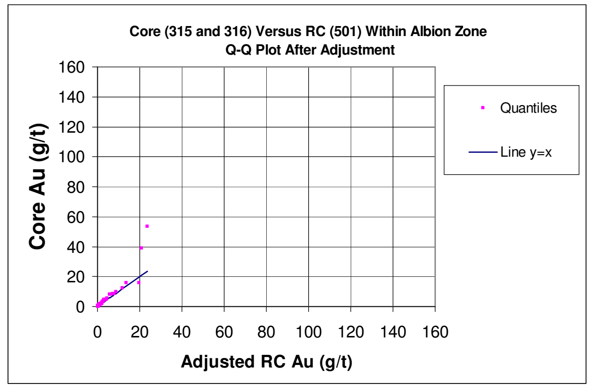


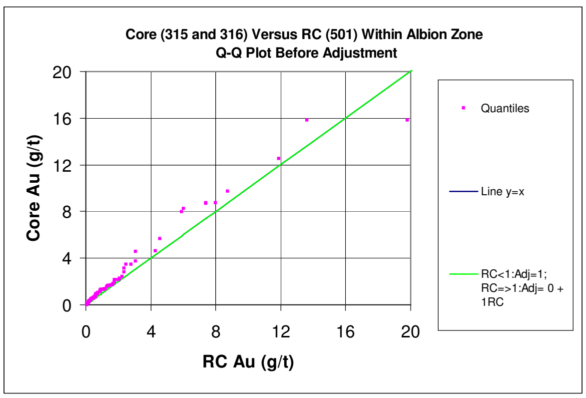


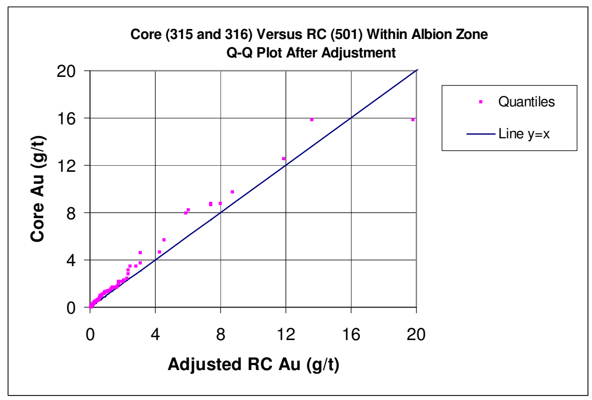


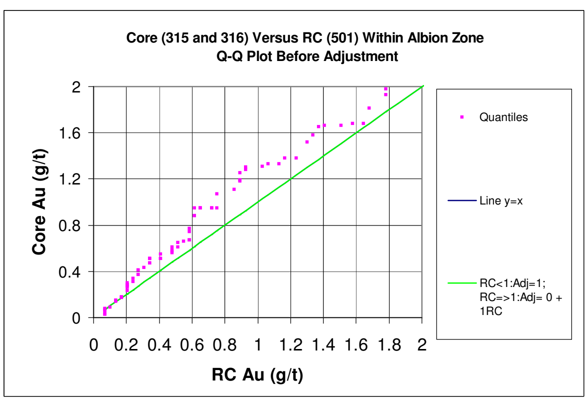
DDH Campaign 315 and 316 Versus RC Campaign 501 Within Albion Shear Zone - RUN 2

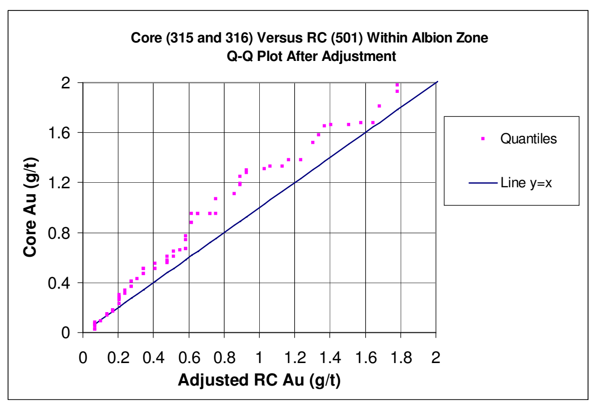




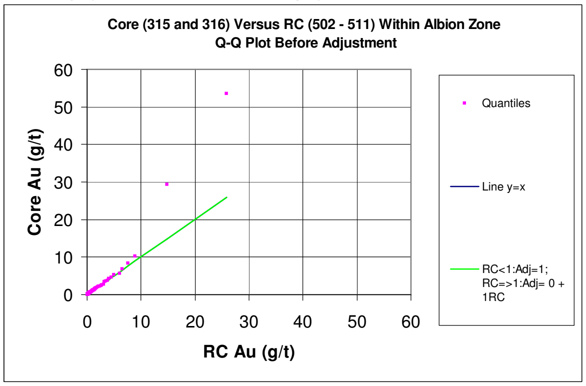


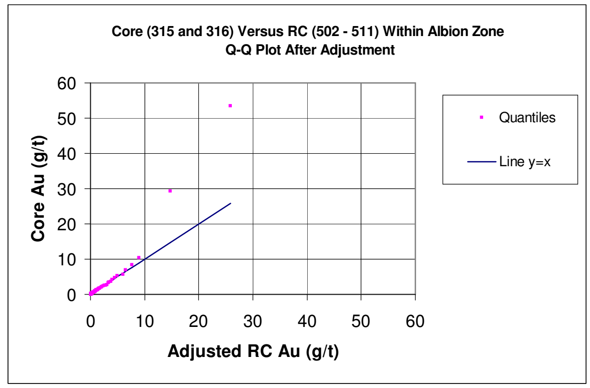


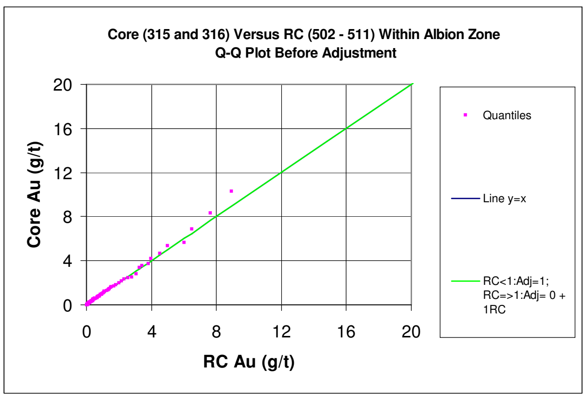


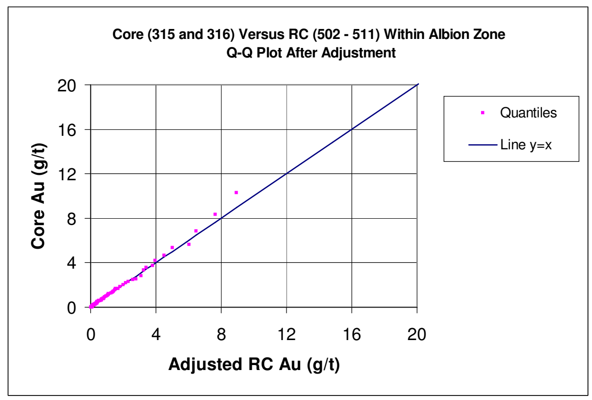


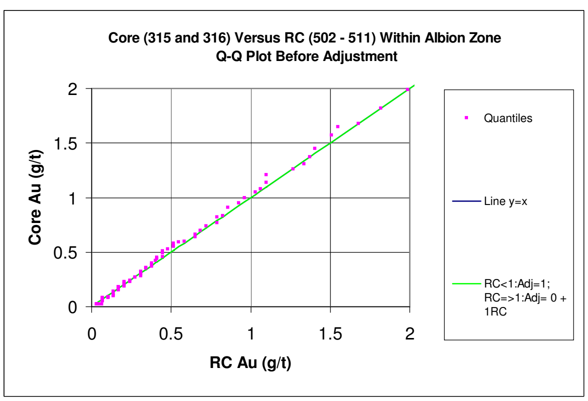
DDH Campaign 315 and 316 Versus RC Campaign 502, 503, 504, 505, 506, 507, 508, 509, 510, 511 Within Albion Shear Zone - RUN 3

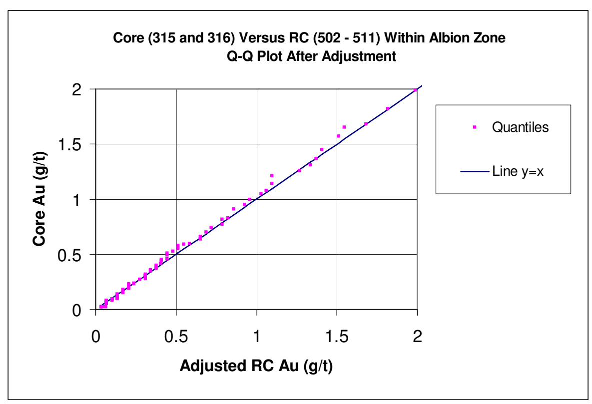




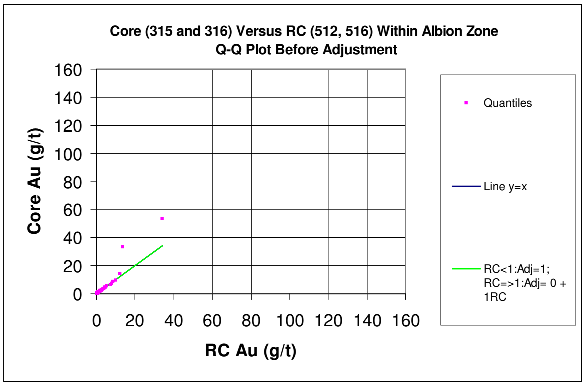


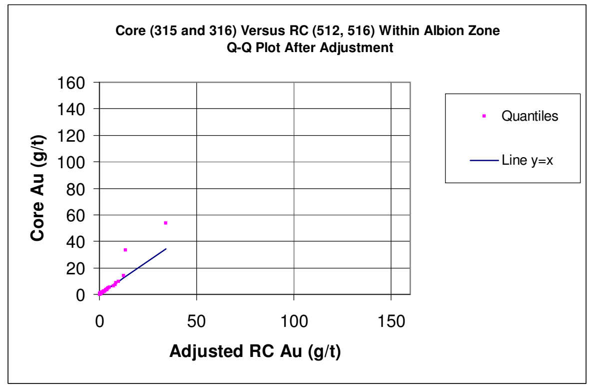


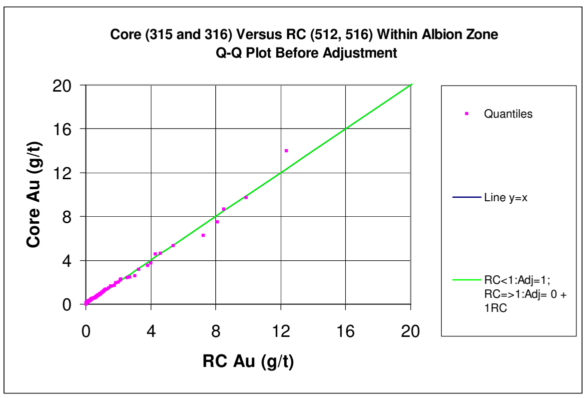


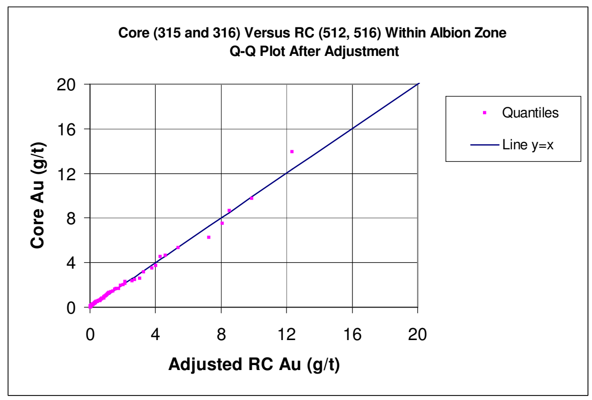


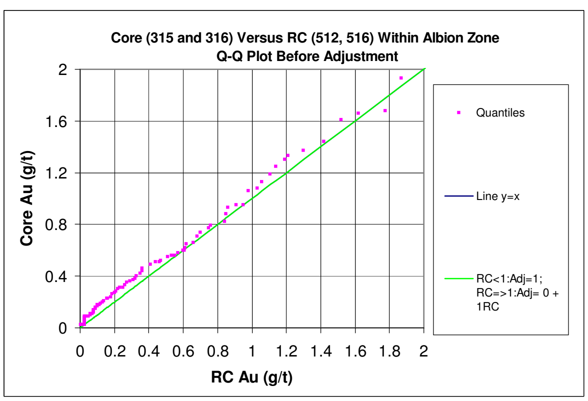
DDH Campaign 315 and 316 Versus RC Campaign 512, 516 Within Albion Shear Zone - RUN 4

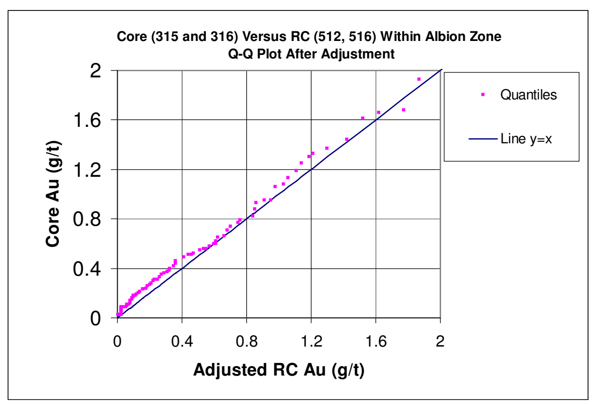




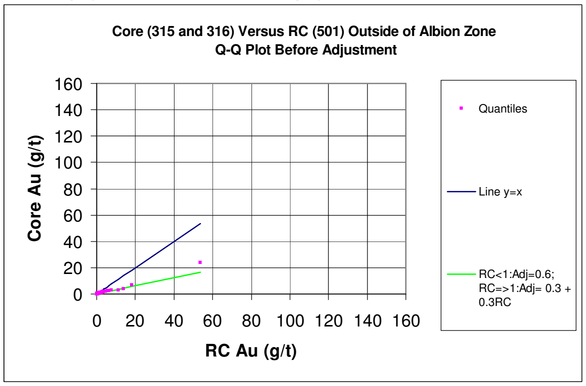


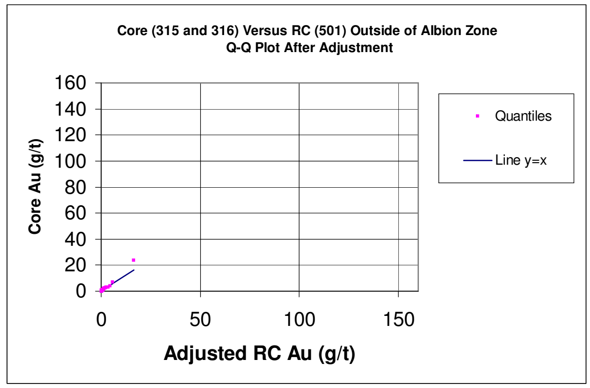


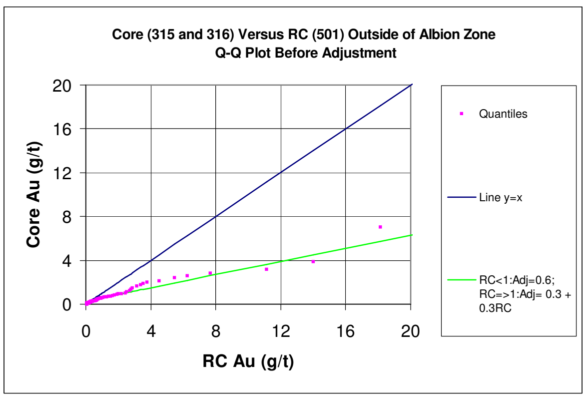


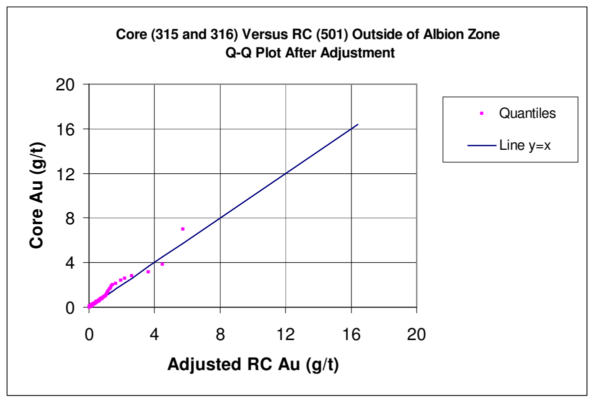


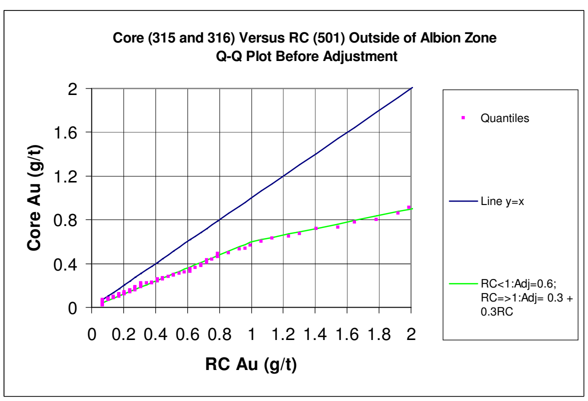
DDH Campaign 315 and 316 Versus RC Campaign 501 Outside of Albion Shear Zone - RUN 5

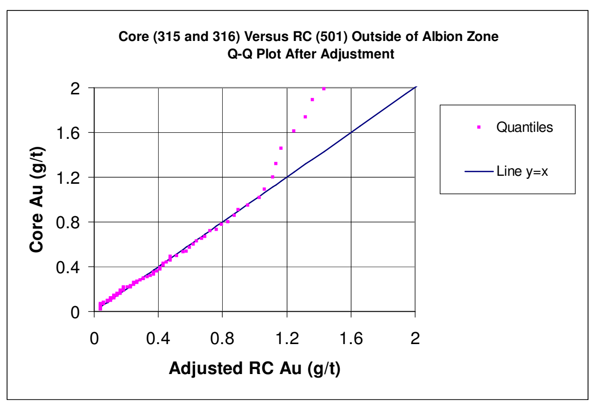




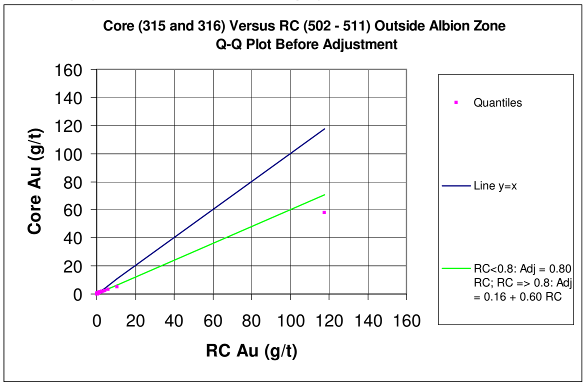


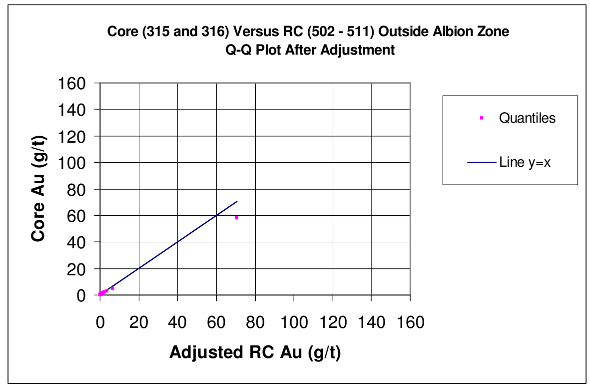


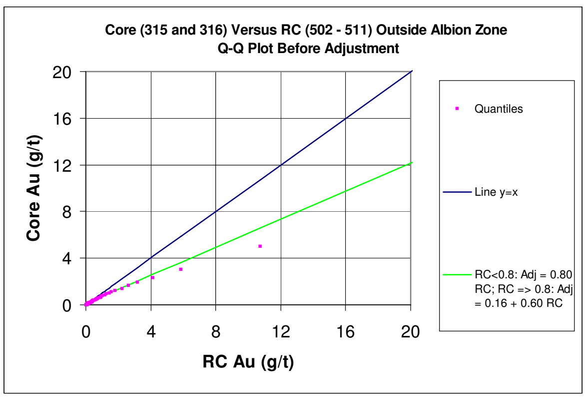


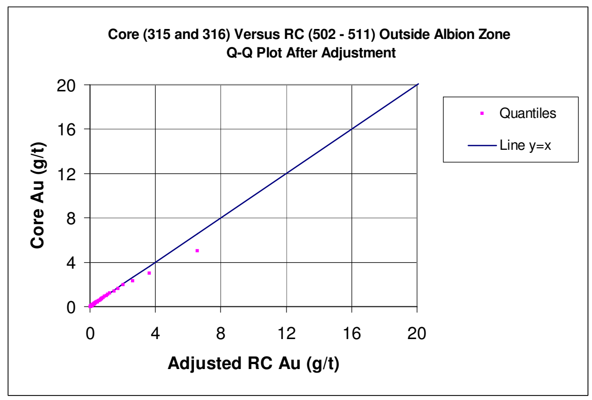


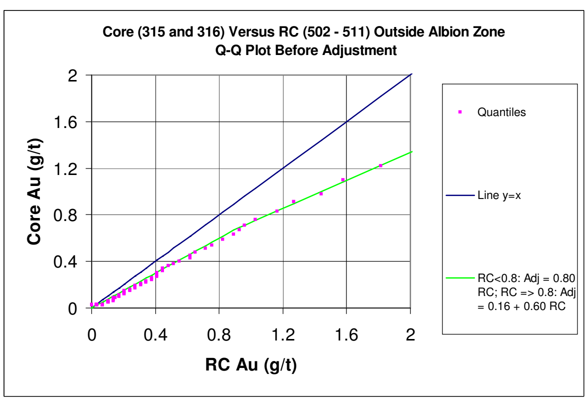
DDH Campaign 315 and 316 Versus RC Campaign 502, 503, 505, 506, 507, 508, 509, 510, 511 Outside of Albion Shear Zone - RUN 6

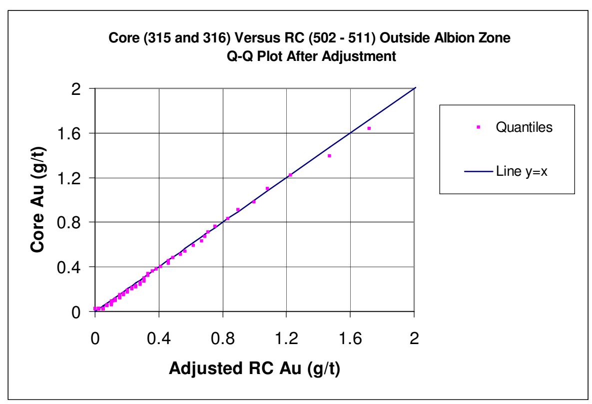




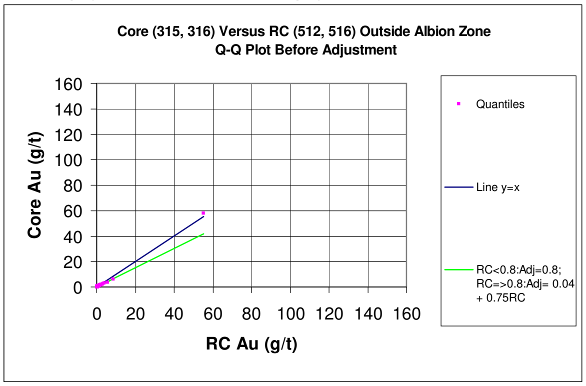


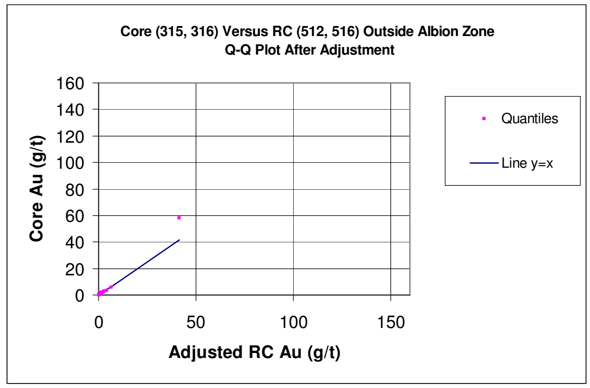


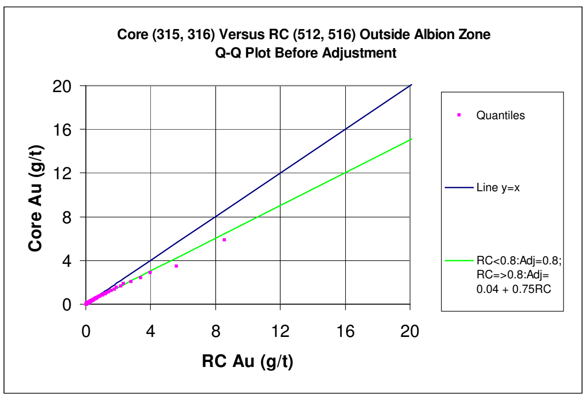


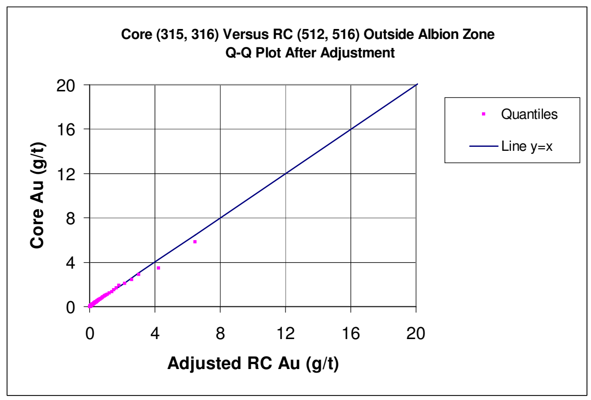


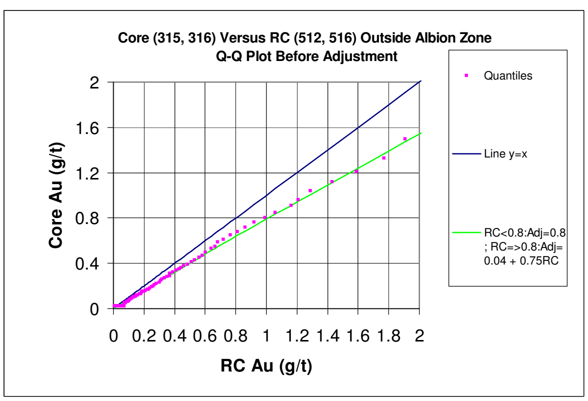
DDH Campaign 315 and 316 Versus RC Campaign 512, 516 Outside Albion Shear Zone - RUN 7

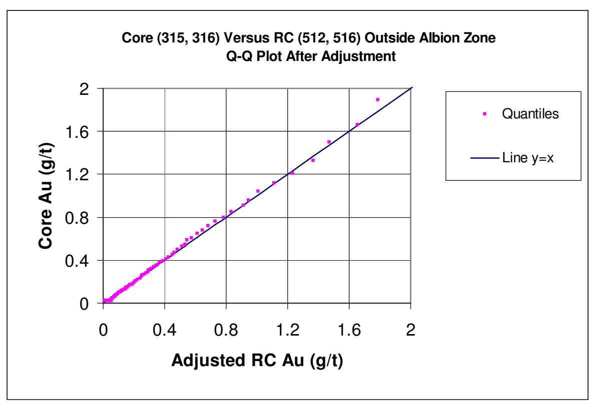




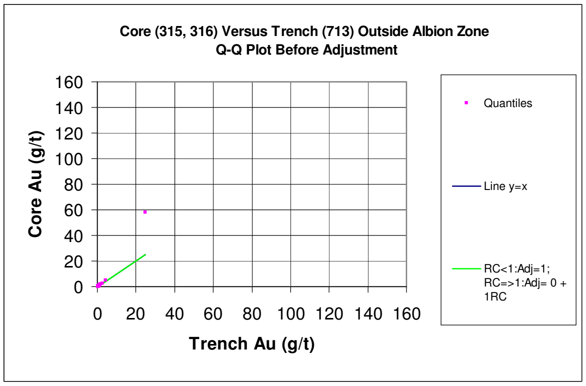


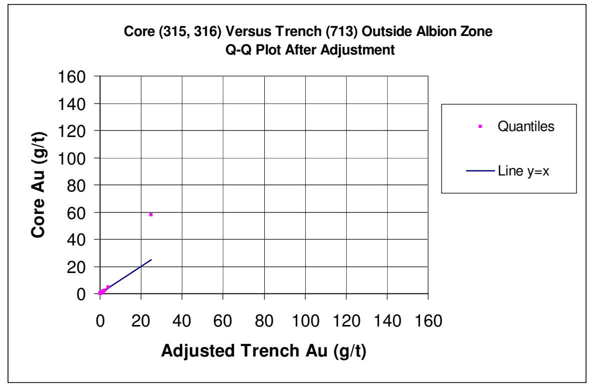


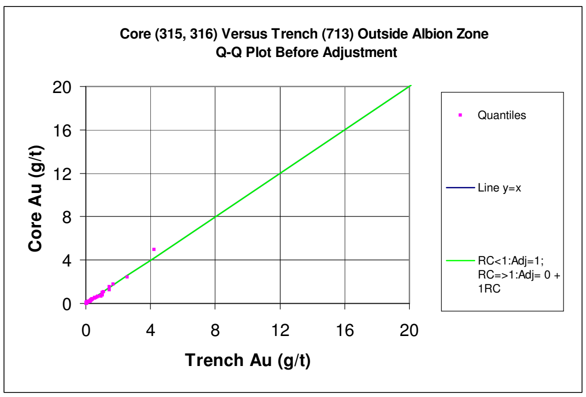


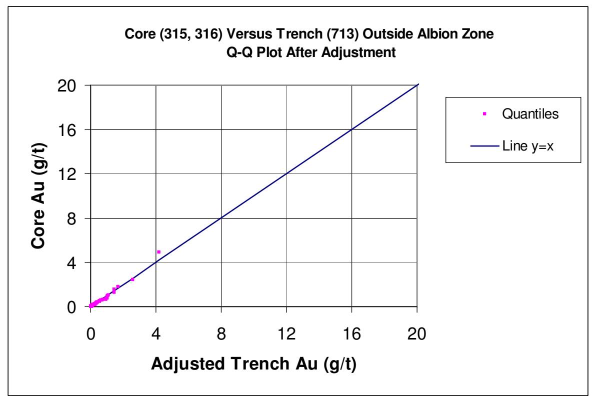


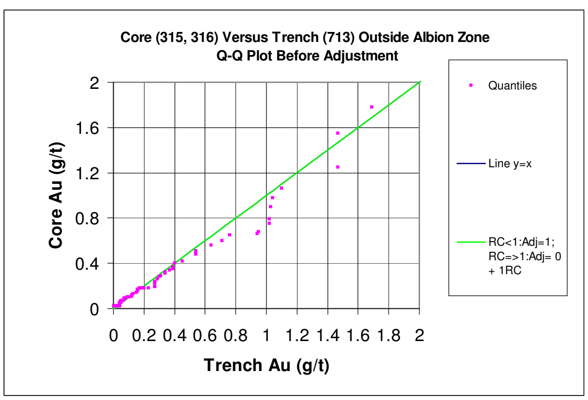
DDH Campaign 315 and 316 Versus Trench Campaign 713 Outside Albion Shear Zone - RUN 8

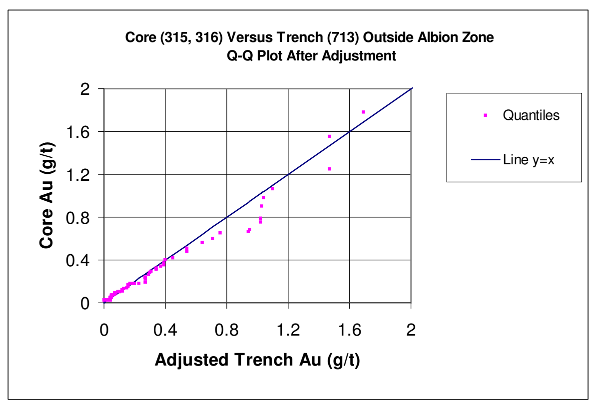




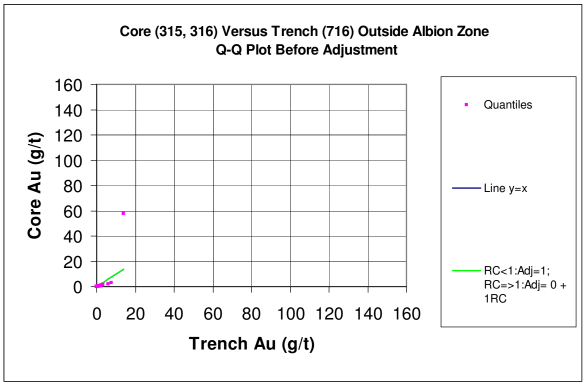


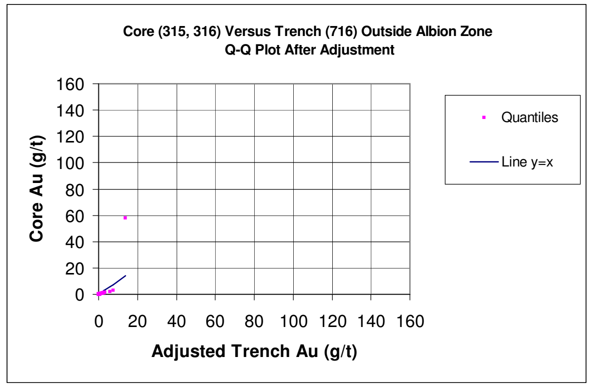


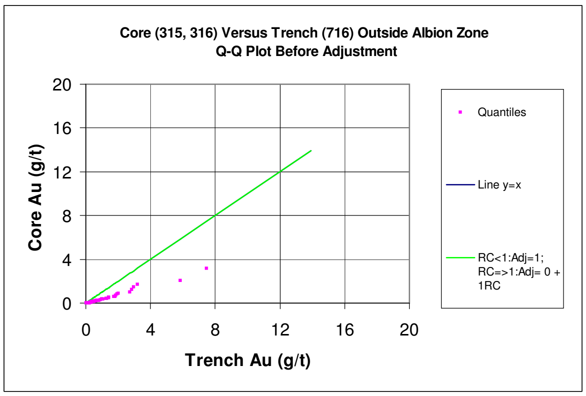


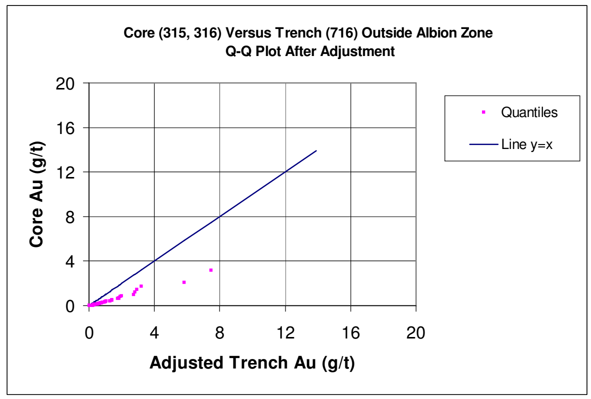


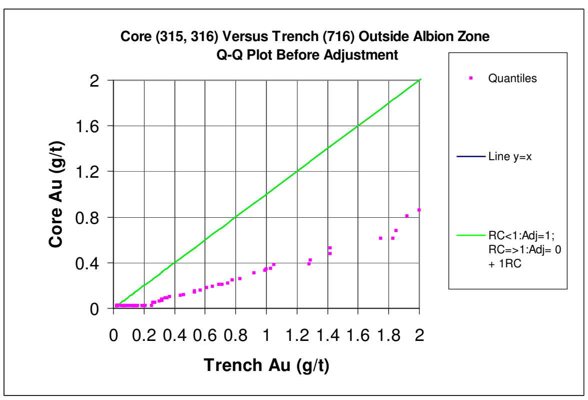
DDH Campaign 315 and 316 Versus Trench Campaign 716 Outside Albion Shear Zone - RUN 9

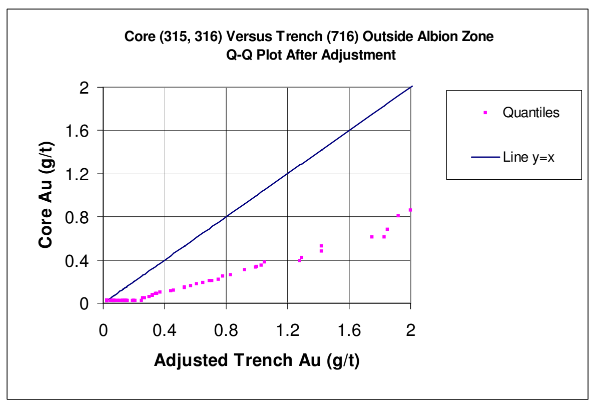




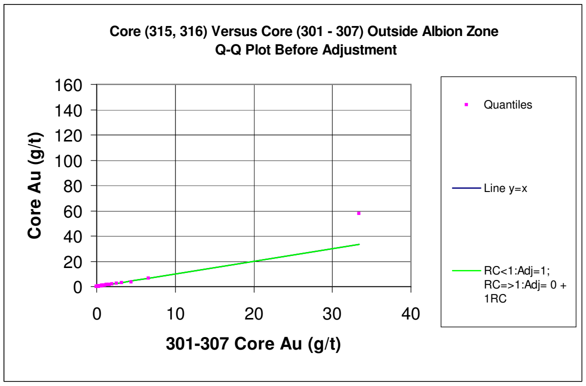


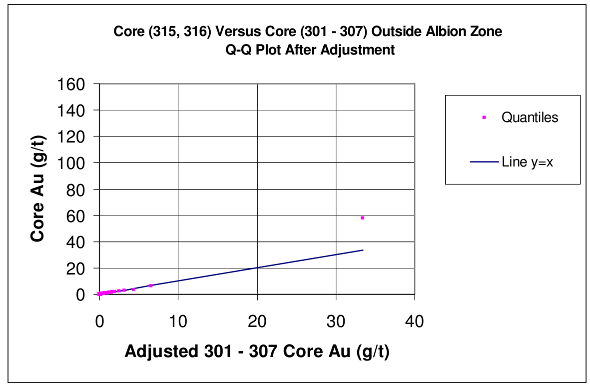


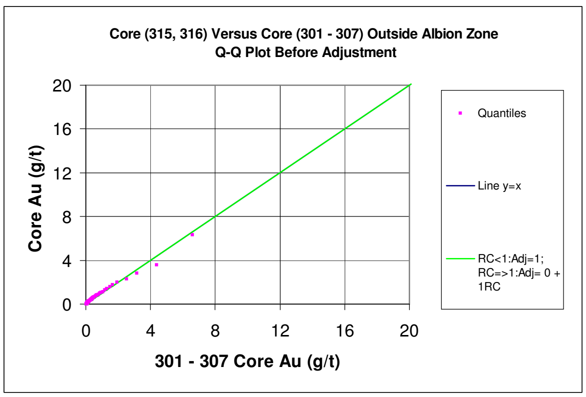


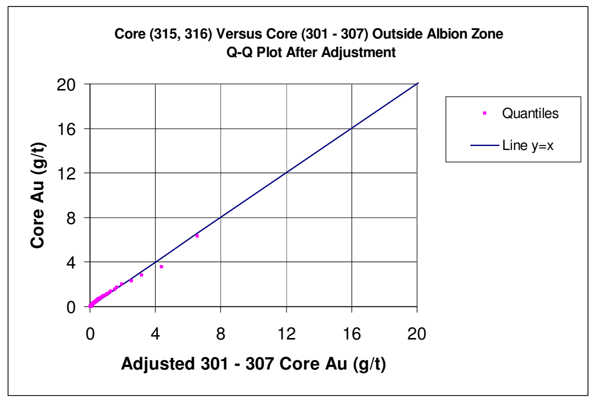


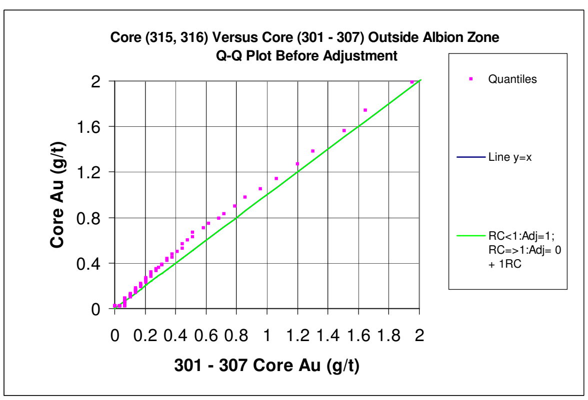
DDH Campaign 315 and 316 Versus Core Campaign 301 - 307 Outside Albion Shear Zone - RUN 10

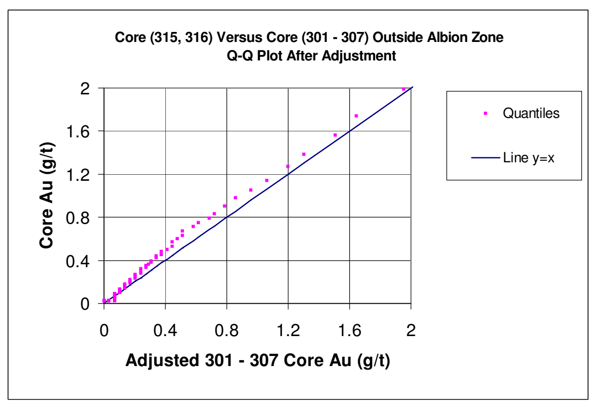




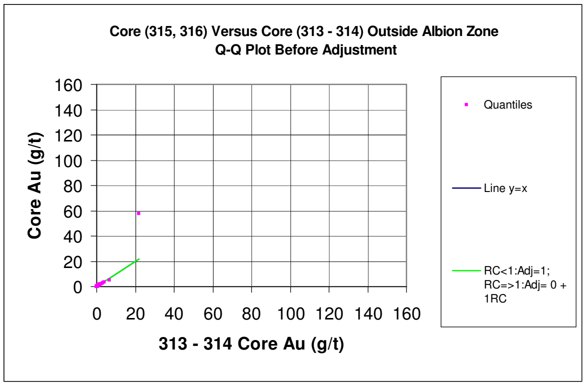


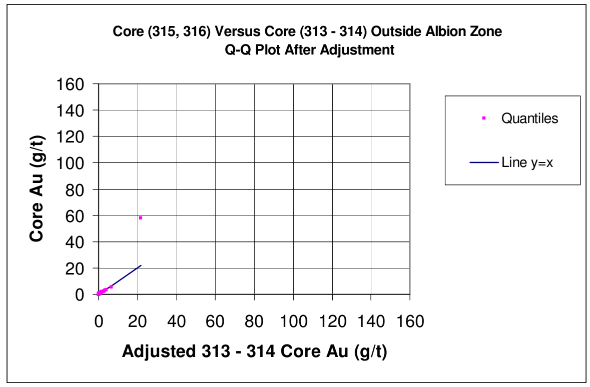


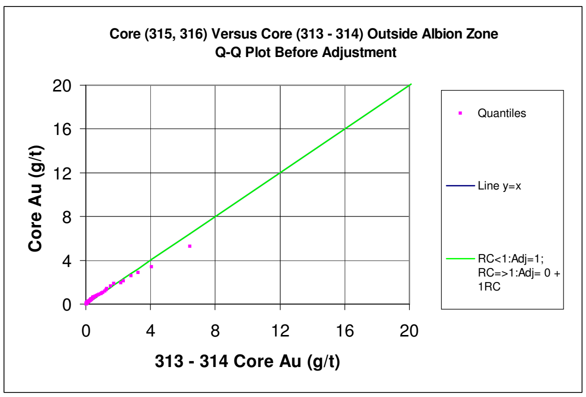


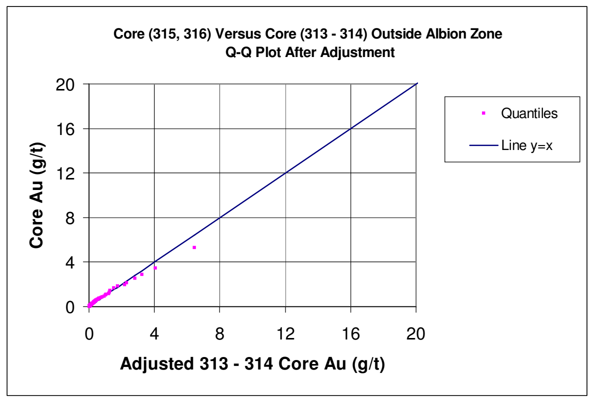


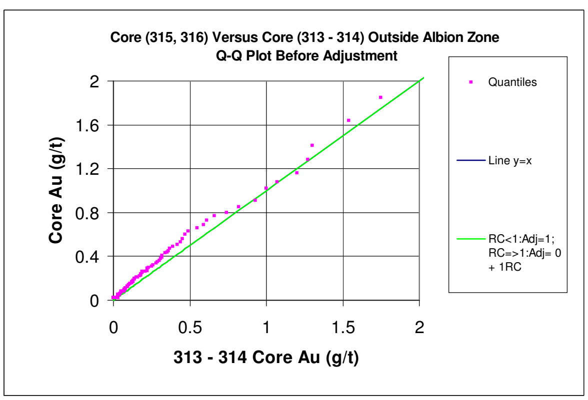
DDH Campaign 315 and 316 Versus Core Campaign 313 - 314 Outside Albion Shear Zone - RUN 11

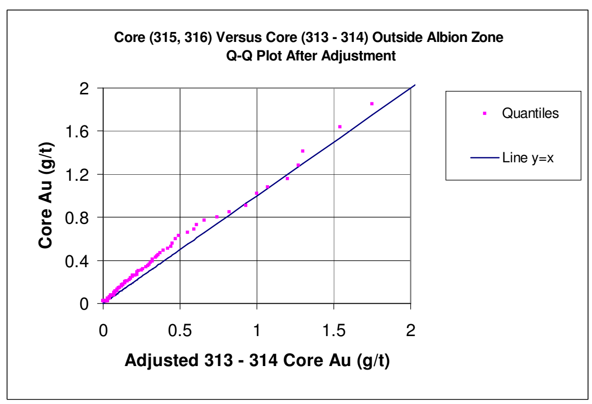




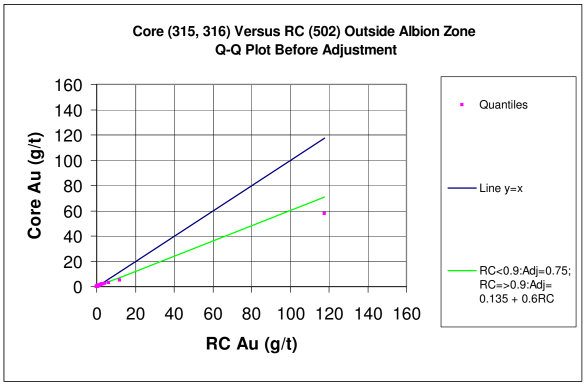


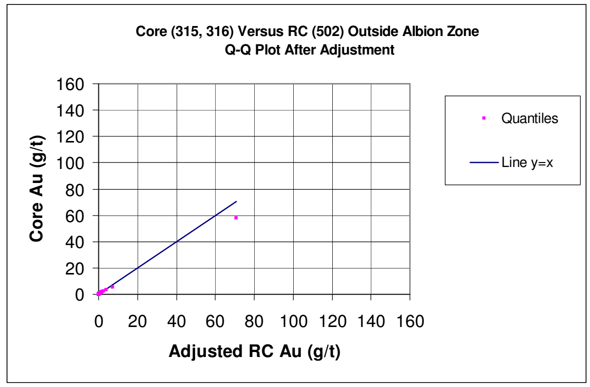


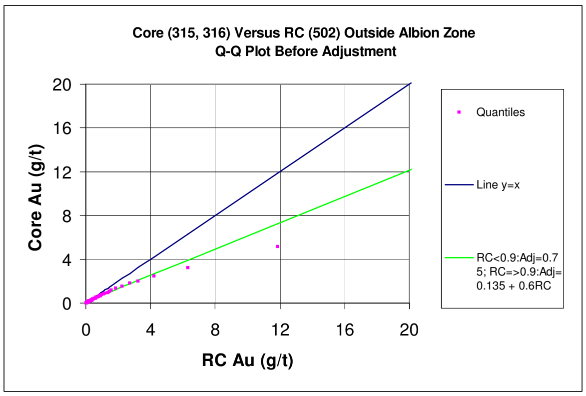


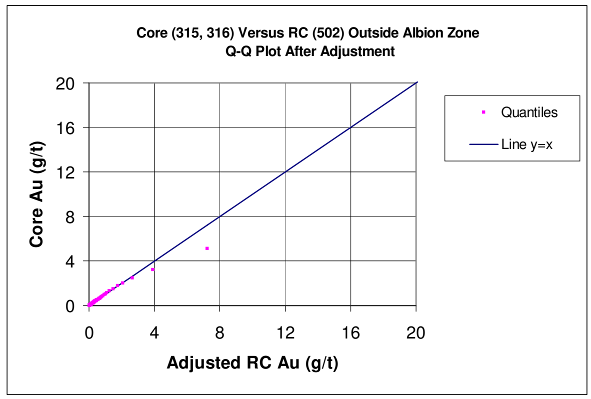


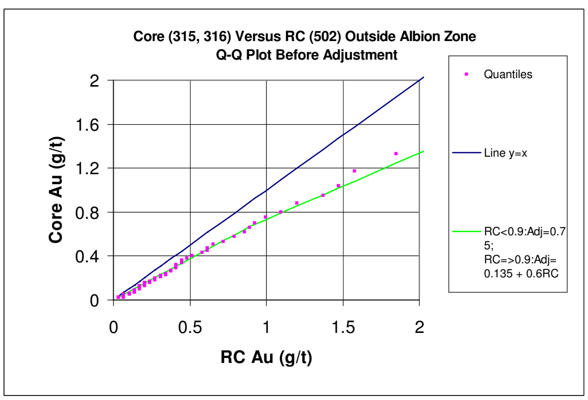
DDH Campaign 315 and 316 Versus RC Campaign 502 Outside Albion Shear Zone - RUN 12

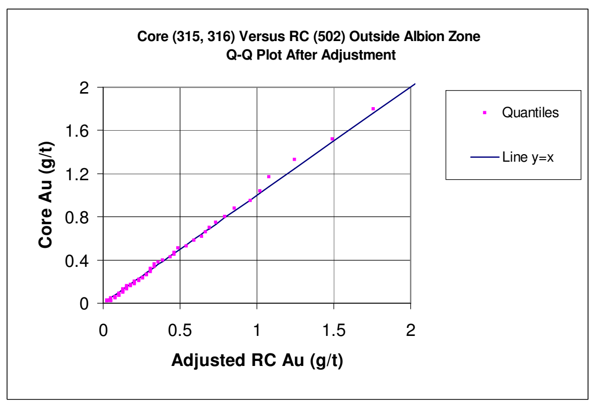




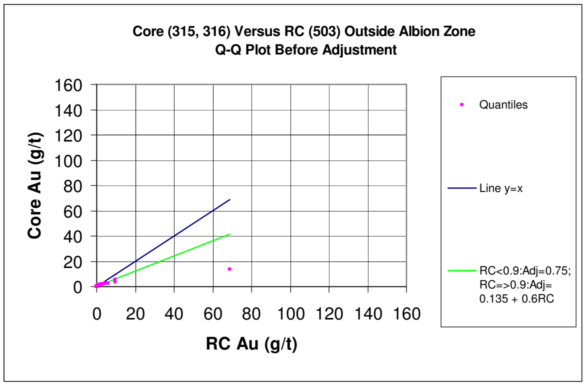


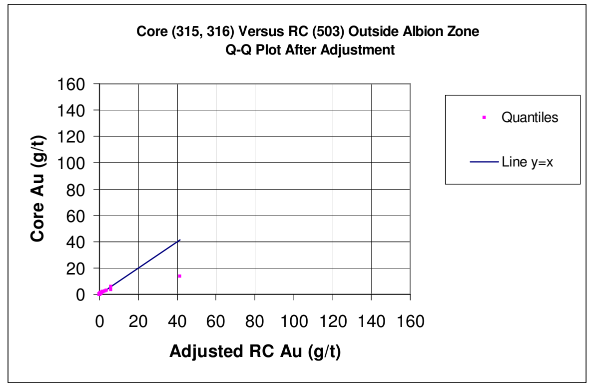


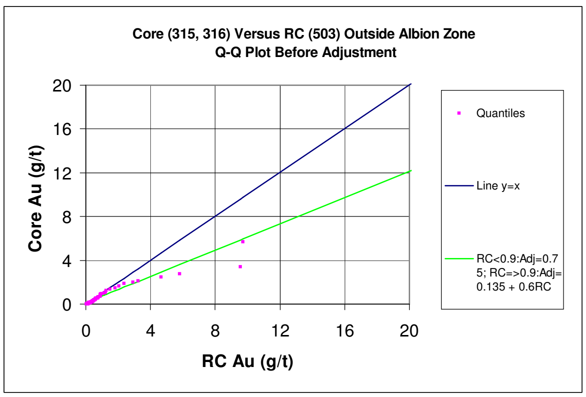


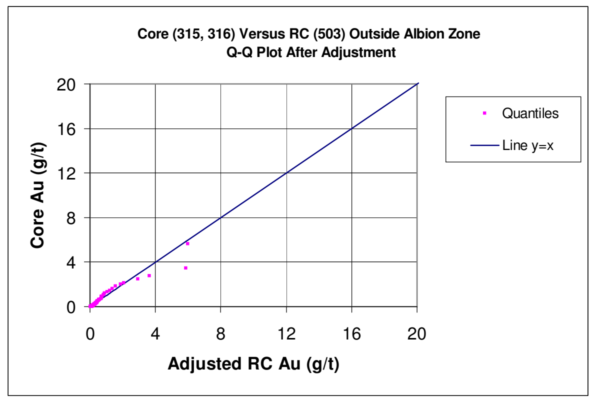


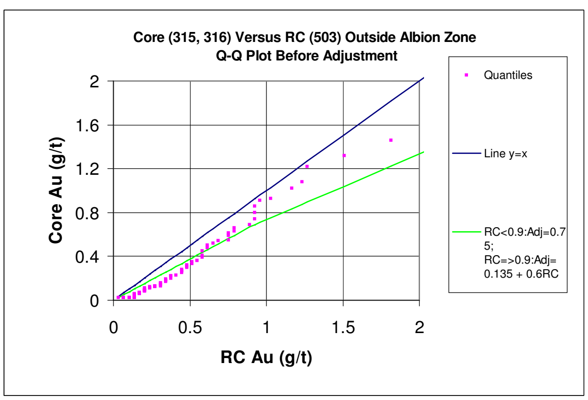
DDH Campaign 315 and 316 Versus RC Campaign 503 Outside Albion Shear Zone RUN 13

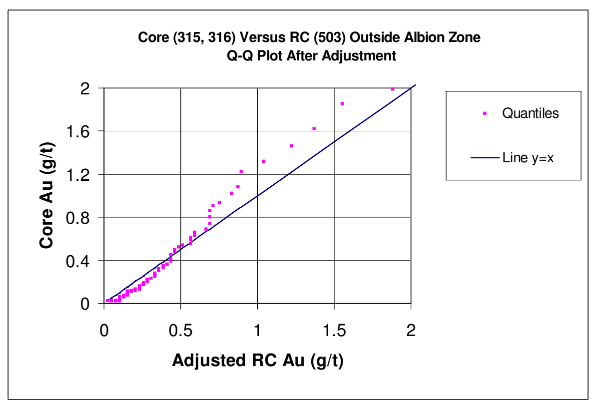




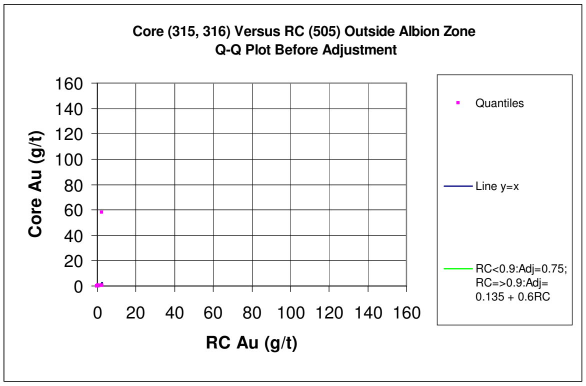


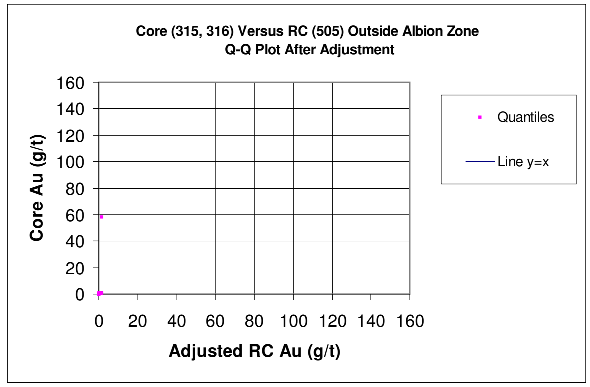


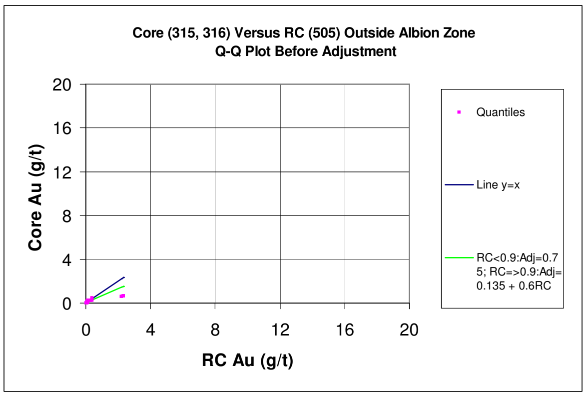


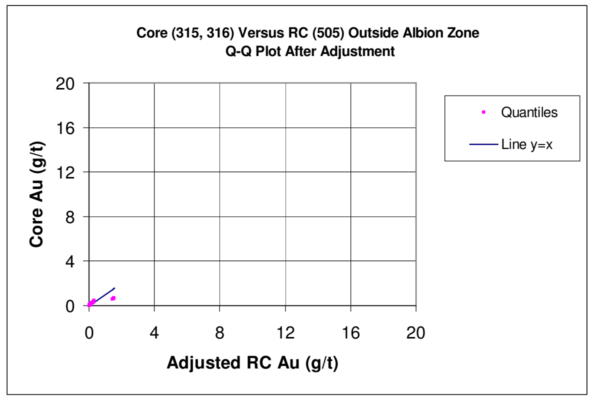


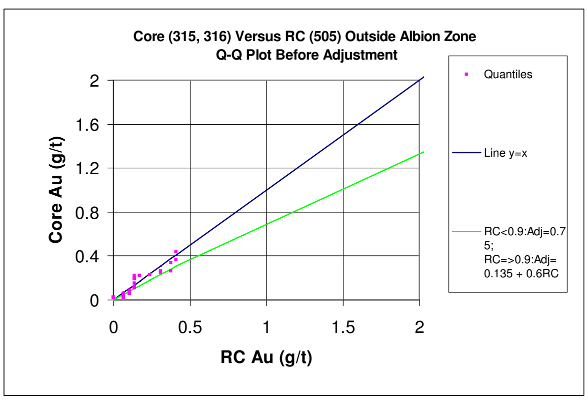
DDH Campaign 315 and 316 Versus RC Campaign 505 Outside Albion Shear Zone - RUN 14

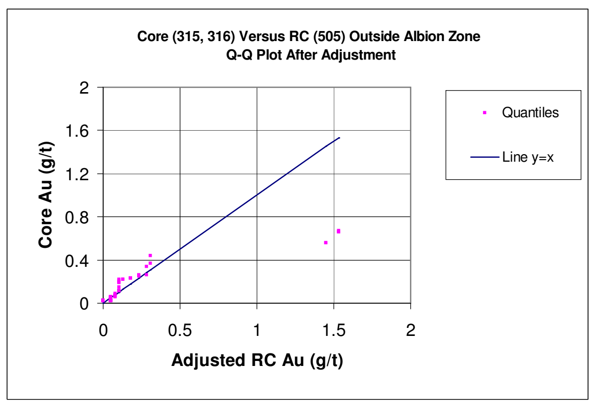




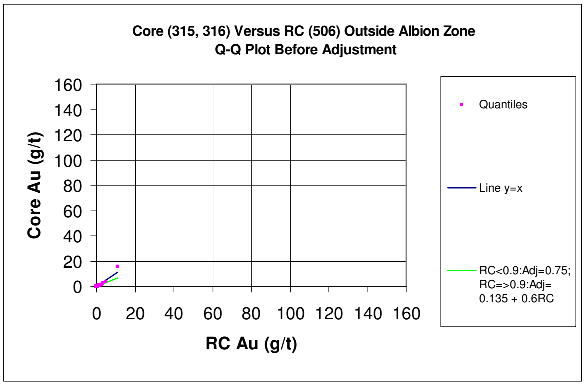


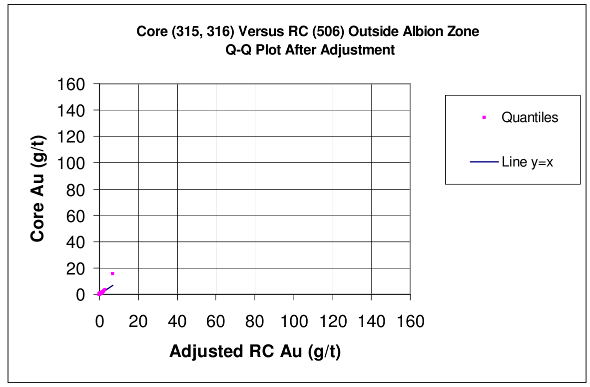


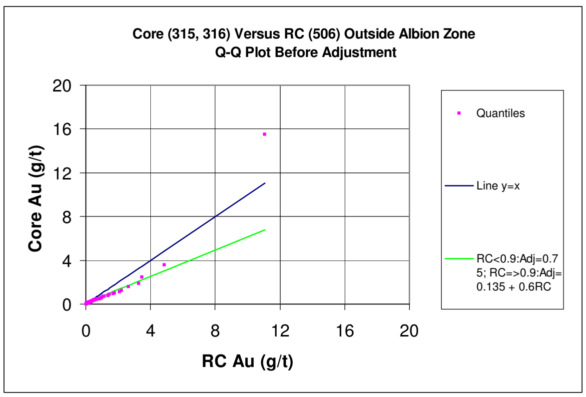


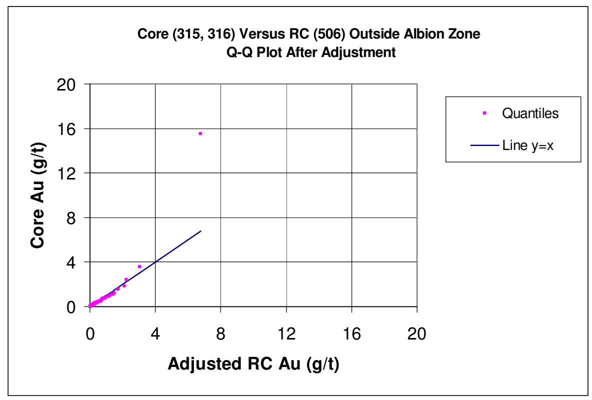


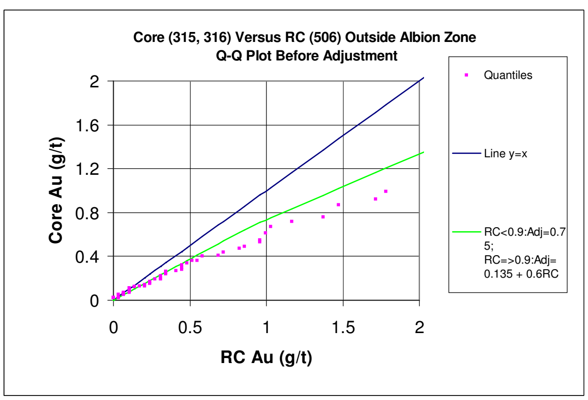
DDH Campaign 315 and 316 Versus RC Campaign 506 Outside Albion Shear Zone - RUN 15

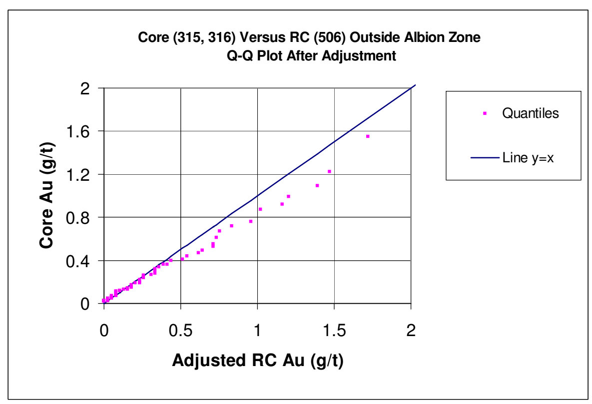




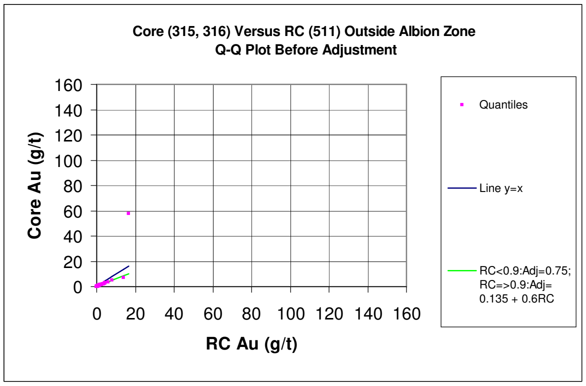


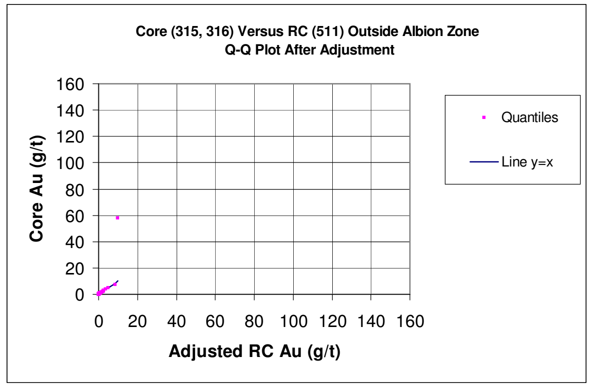


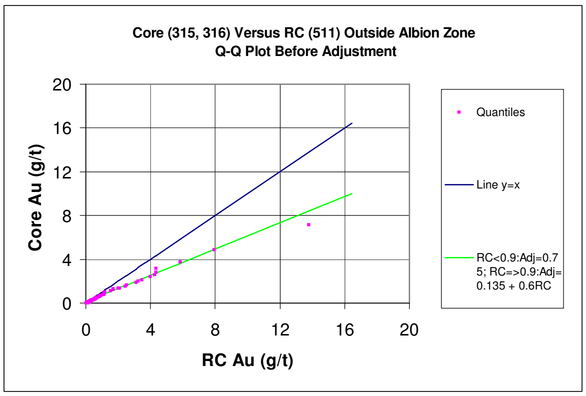


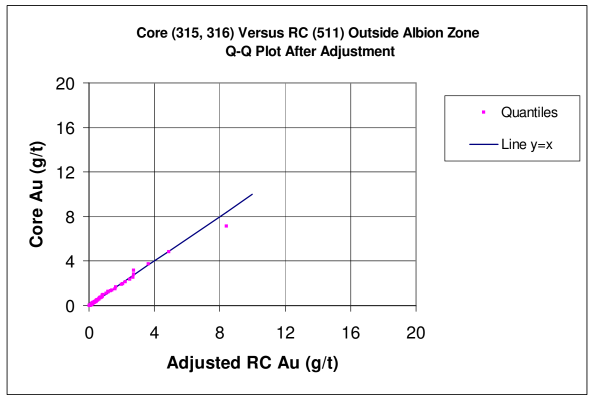


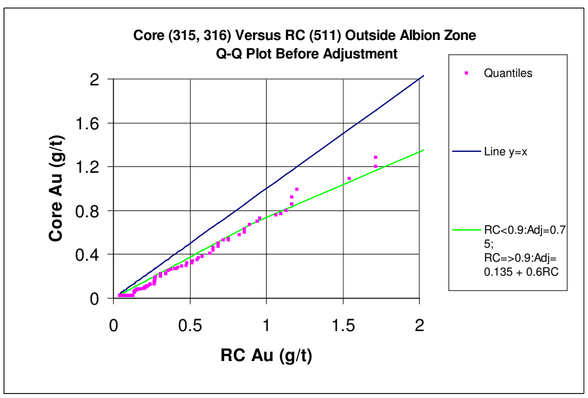
DDH Campaign 315 and 316 Versus RC Campaign 511 Outside Albion Shear Zone - RUN 16

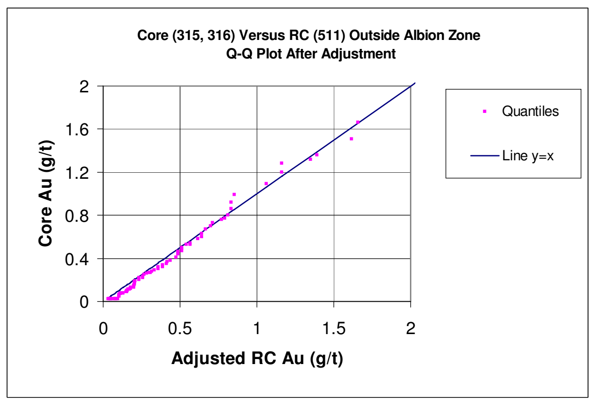




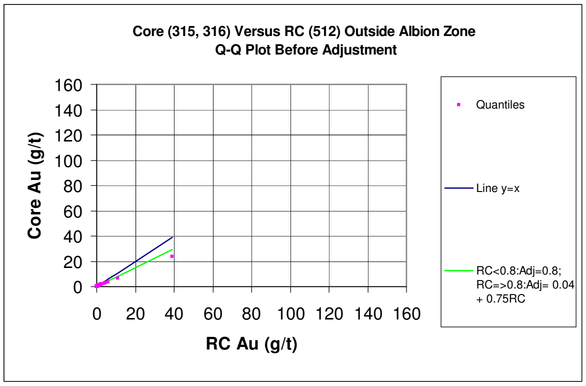


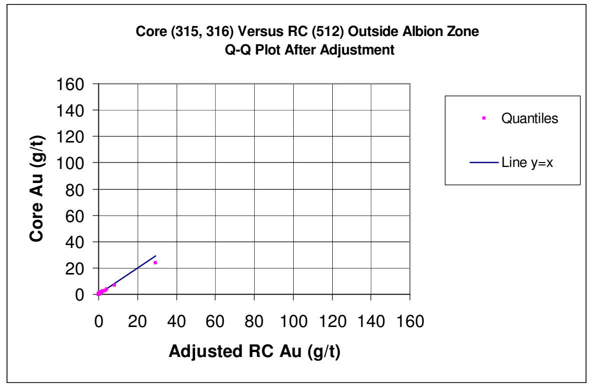


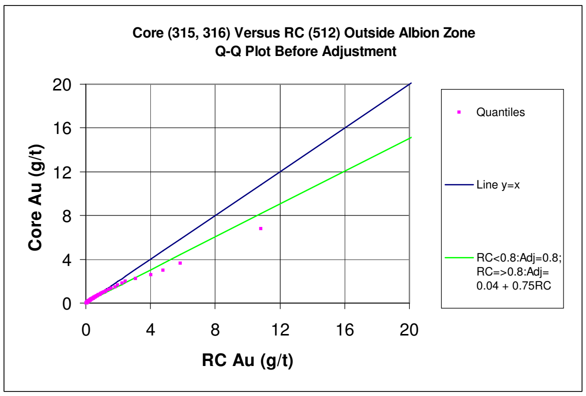


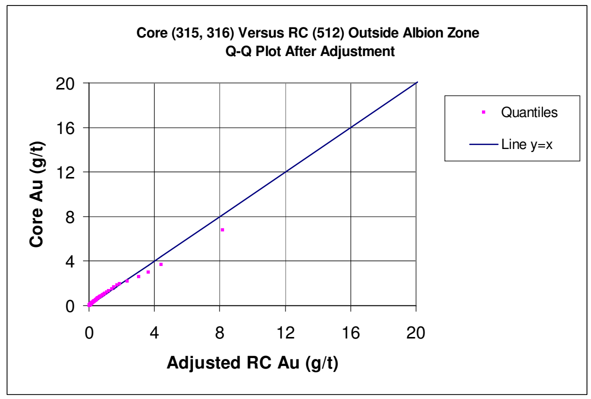


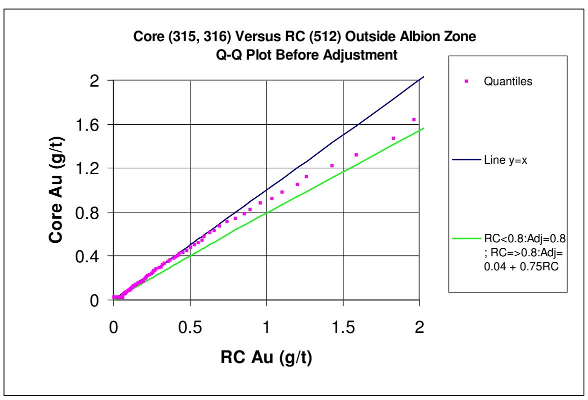
DDH Campaign 315 and 316 Versus RC Campaign 512 Outside Albion Shear Zone - RUN 17

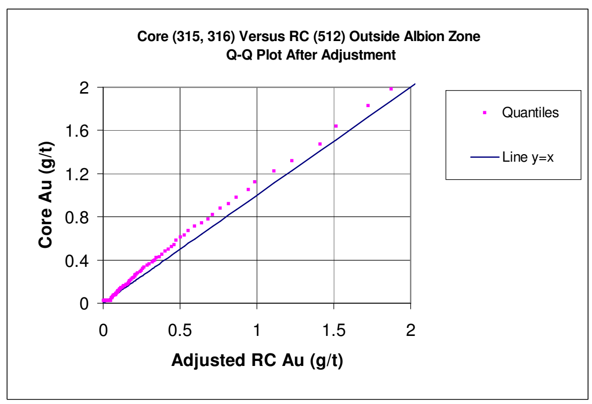




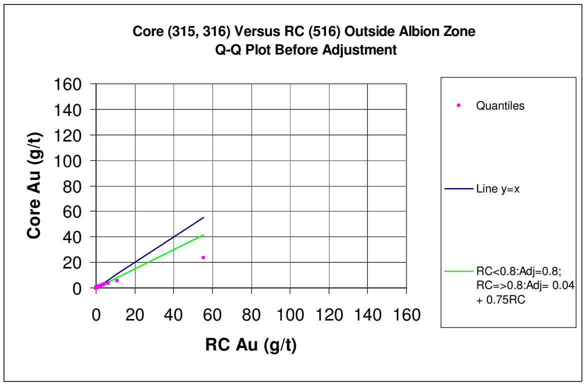


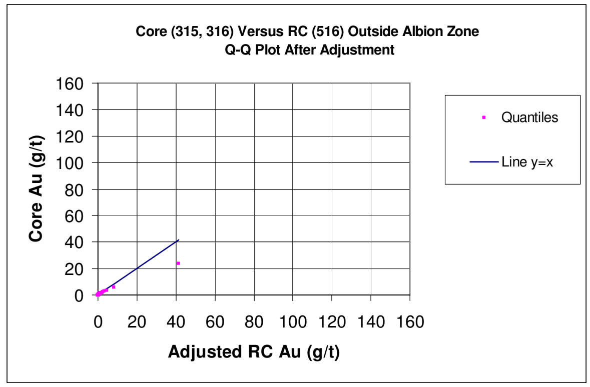


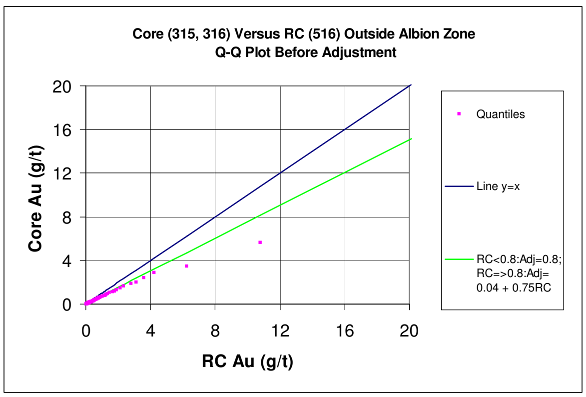


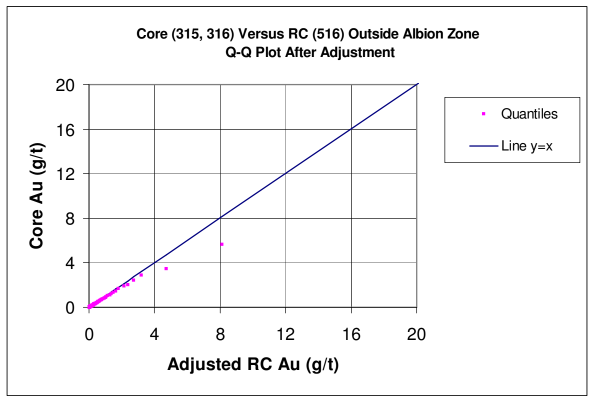


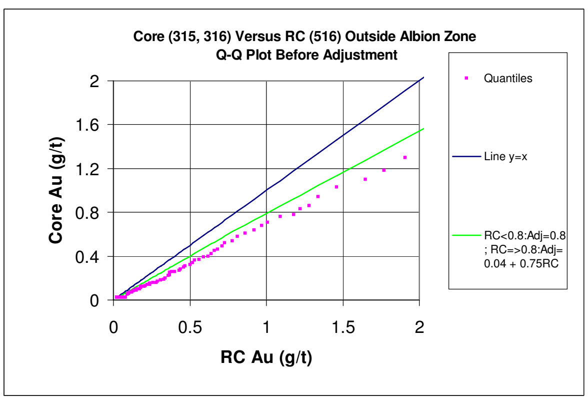
DDH Campaign 315 and 316 Versus RC Campaign 516 Outside Albion Shear Zone - RUN 18

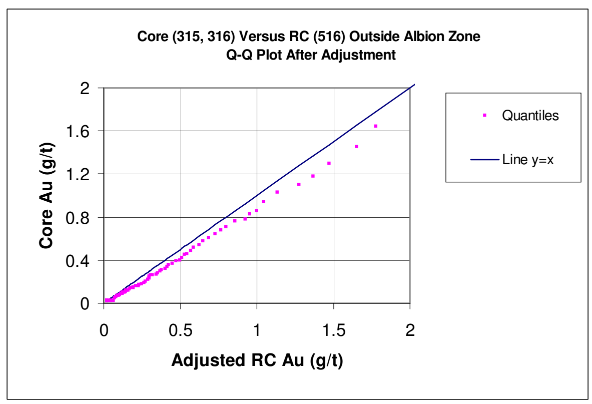




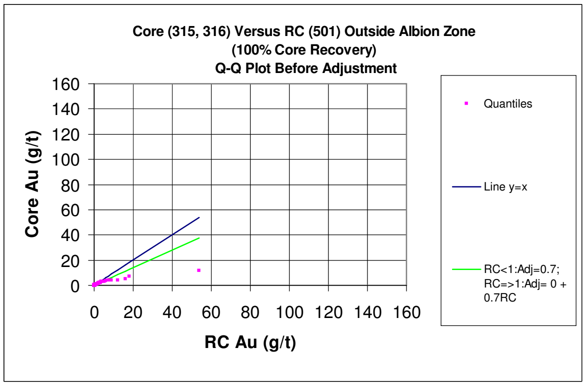


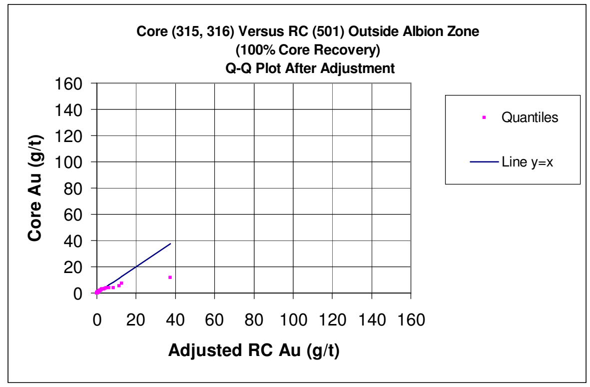


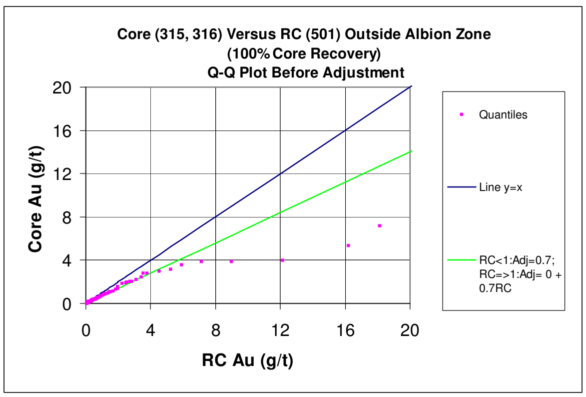


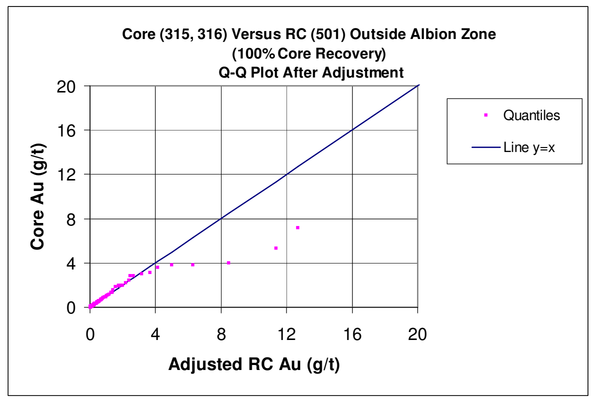


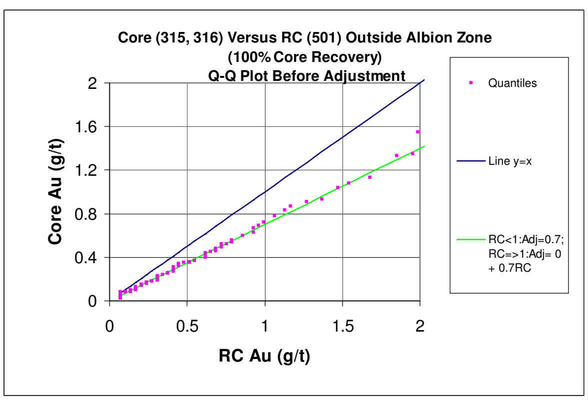
DDH Campaign 315 and 316 Versus RC Campaign 501 Outside Albion Shear Zone (100% Core Recovery) - RUN 19

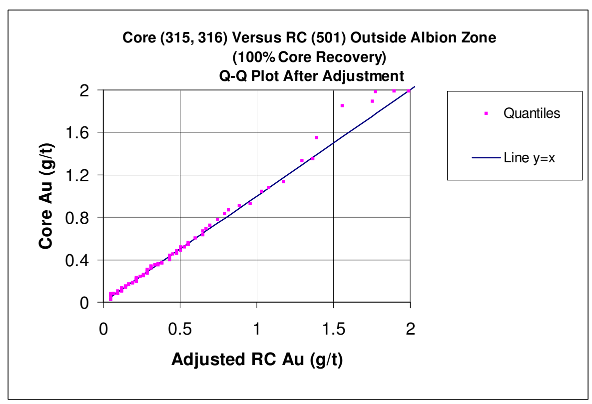




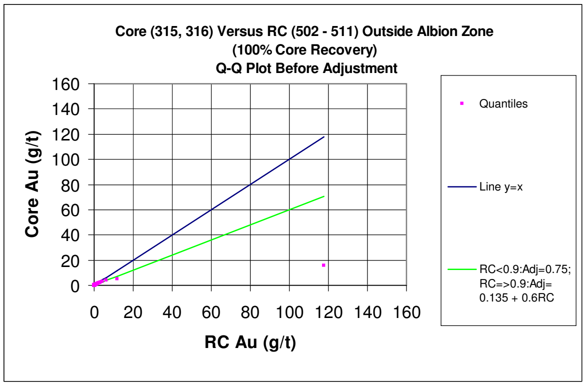


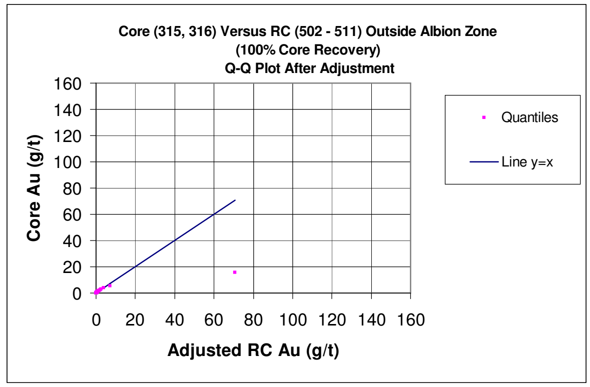


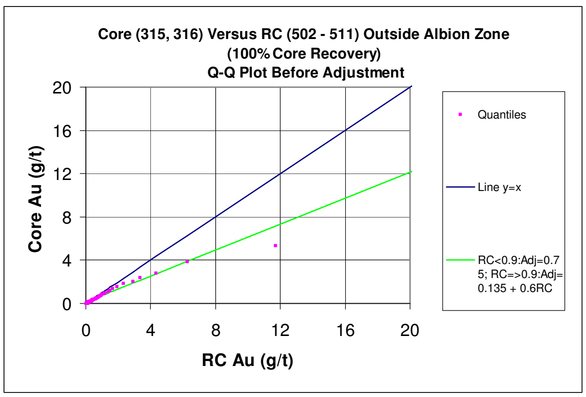


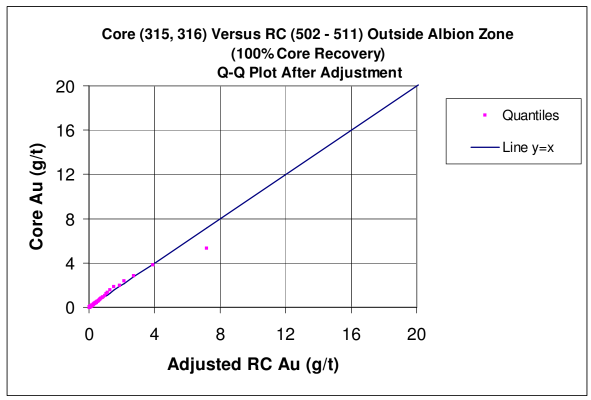


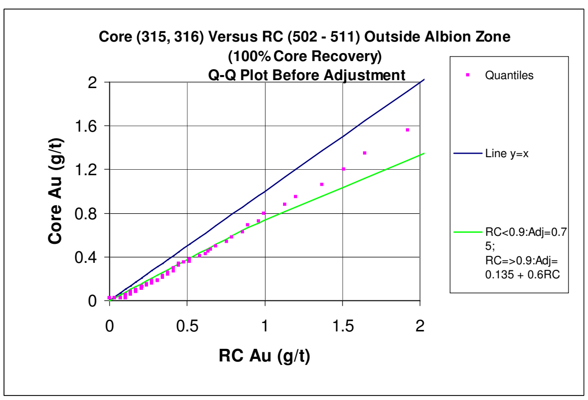
DDH Campaign 315 and 316 Versus RC Campaign 502 - 511 Outside Albion Shear Zone (100% Core Recovery) - RUN 20

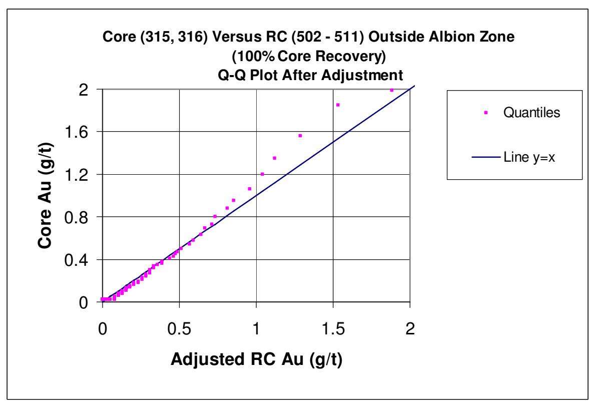




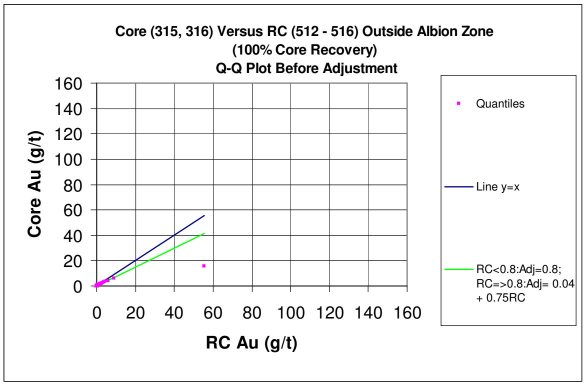


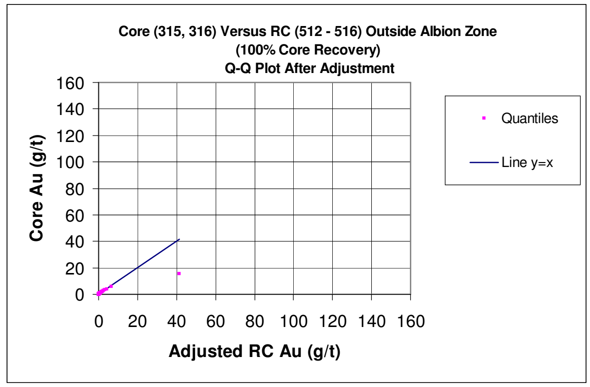


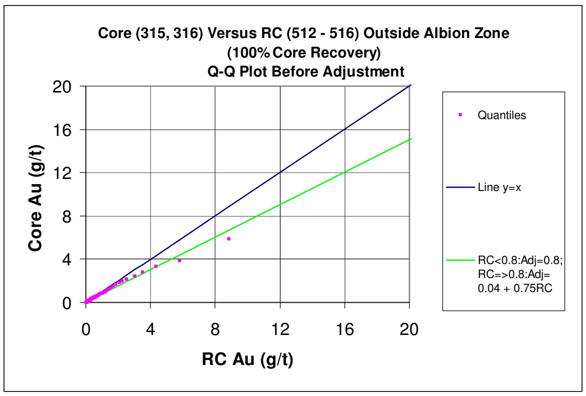


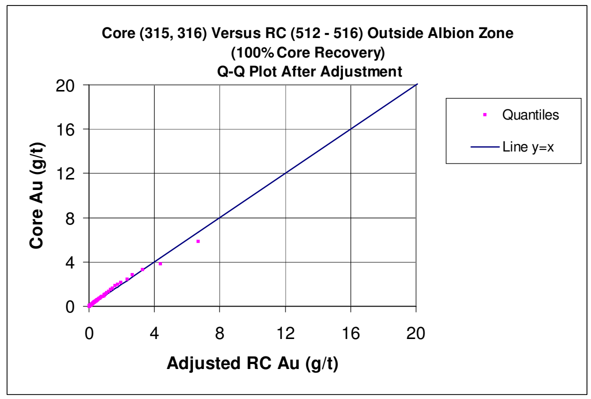


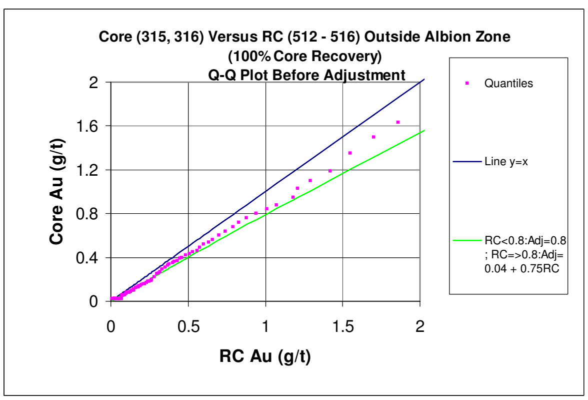
DDH Campaign 315 and 316 Versus RC Campaign 512 - 516 Outside Albion Shear Zone (100% Core Recovery) - RUN 21

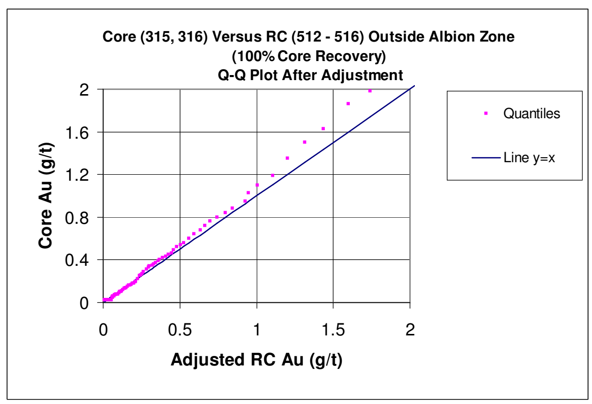




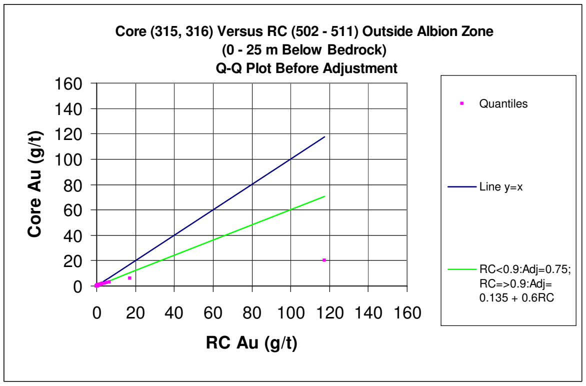


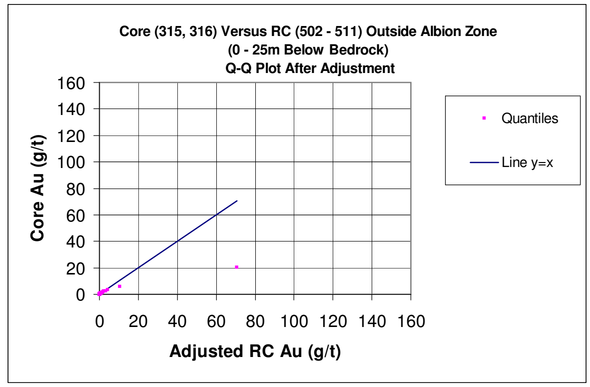


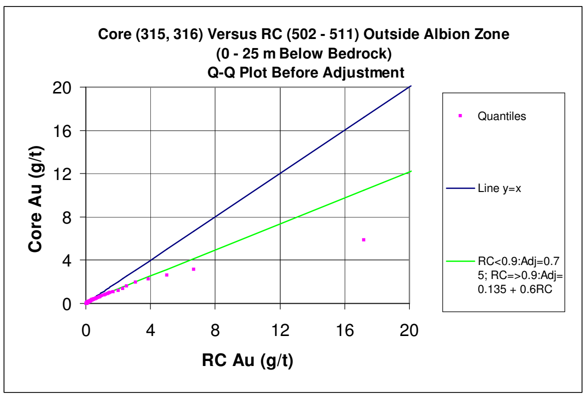


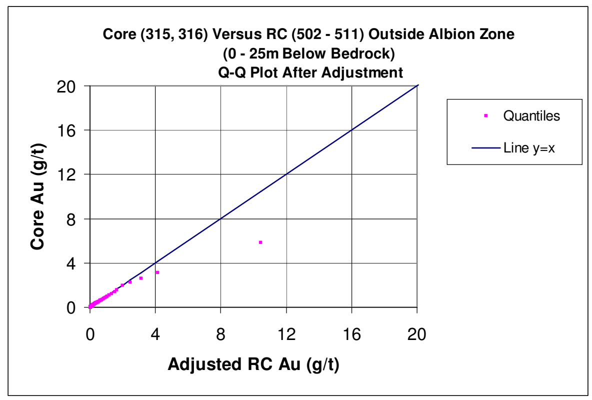


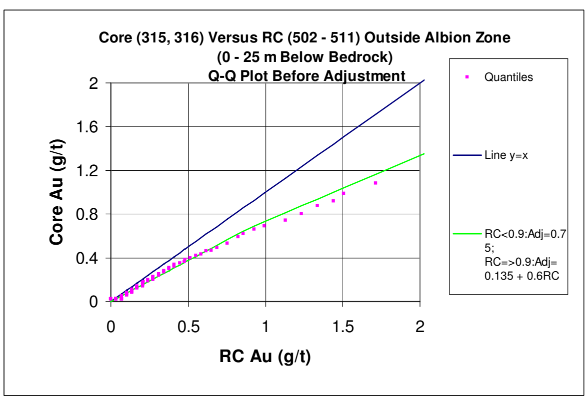
DDH Campaign 315 and 316 Versus RC Campaign 502 - 511 Outside Albion Shear Zone (0 - 25m Below Bedrock) - RUN 22

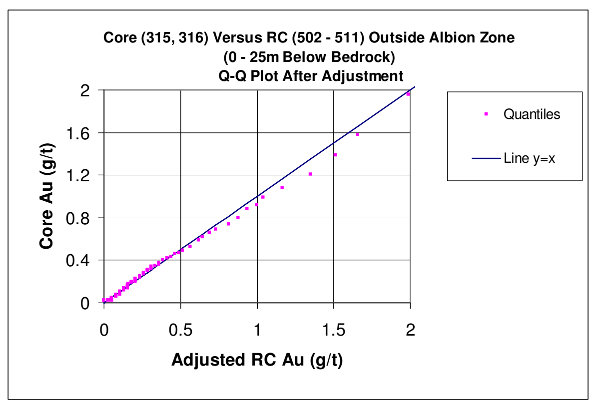




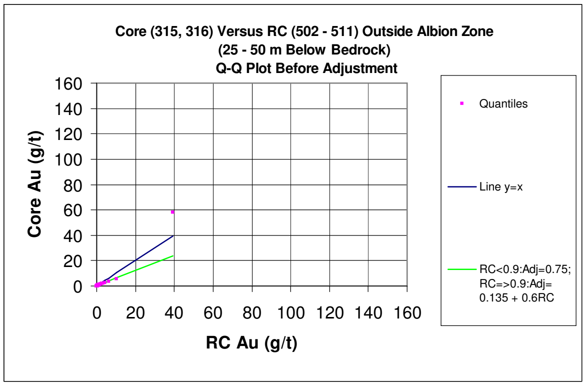


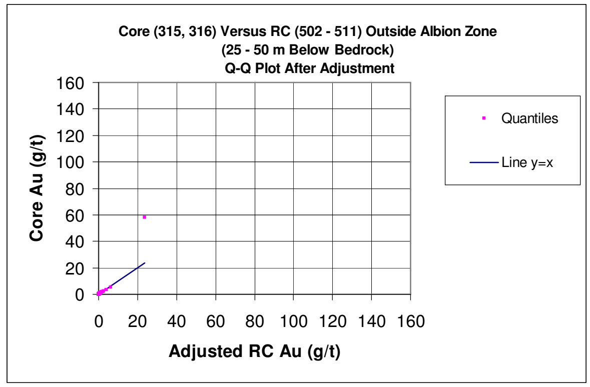


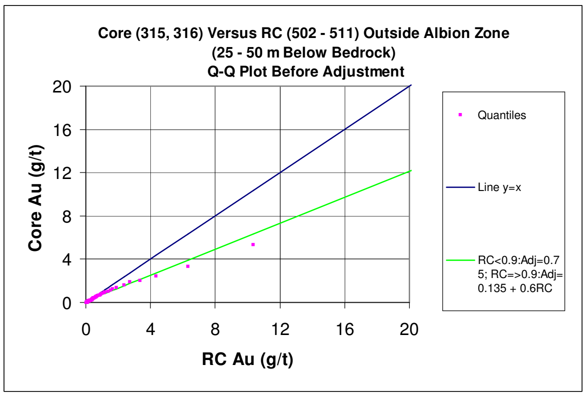


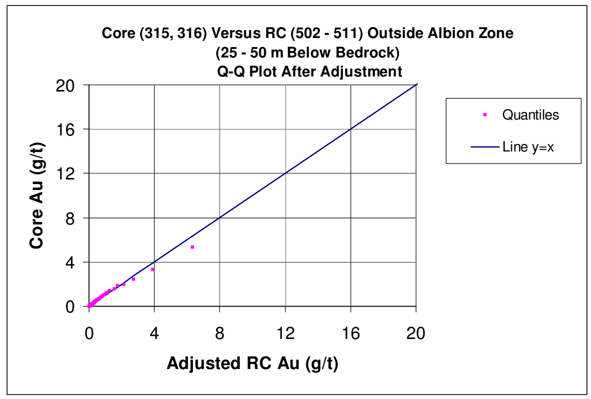


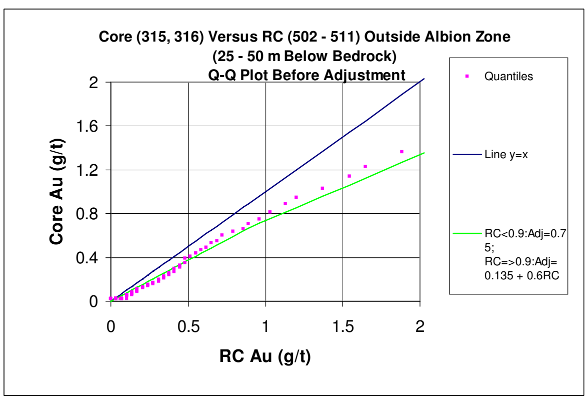
DDH Campaign 315 and 316 Versus RC Campaign 502 - 511 Outside Albion Shear Zone (25 - 50 m Below Bedrock) - RUN 23

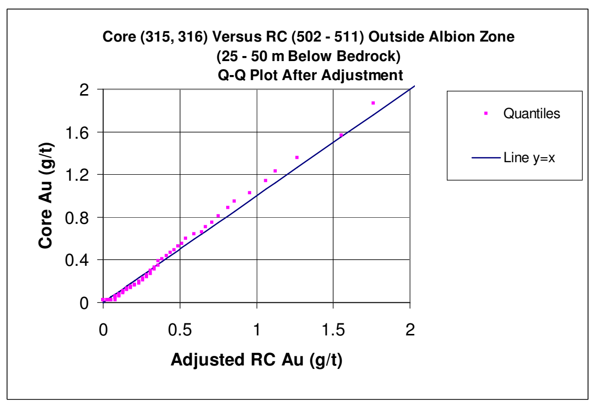




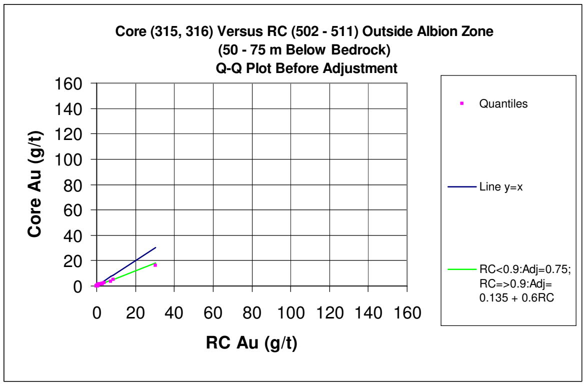


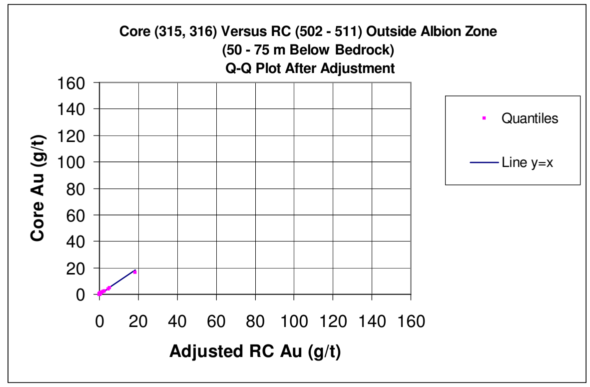


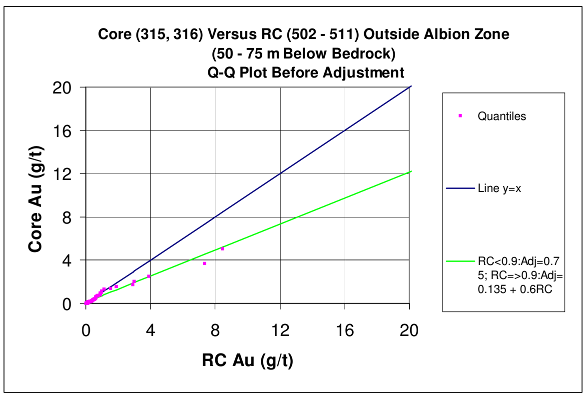


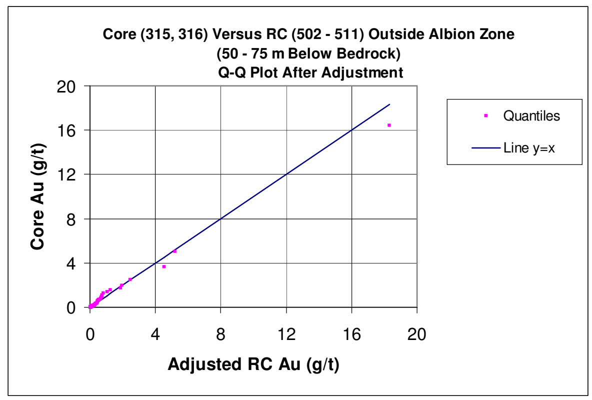


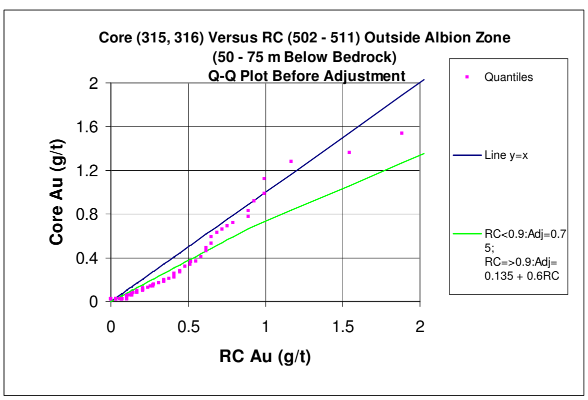
DDH Campaign 315 and 316 Versus RC Campaign 502 - 511 Outside Albion Shear Zone (50 - 75 m Below Bedrock) - RUN 24

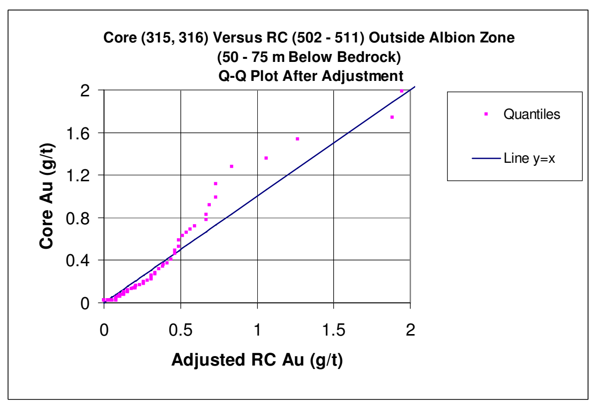




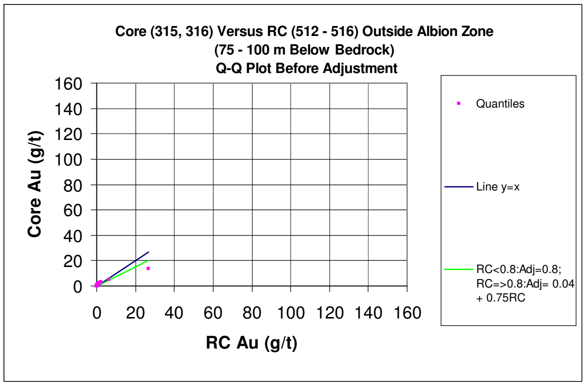


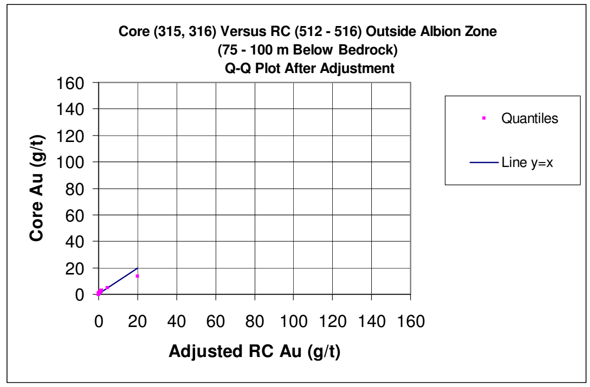


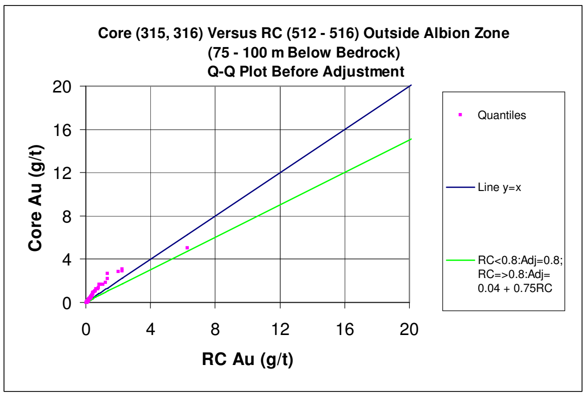


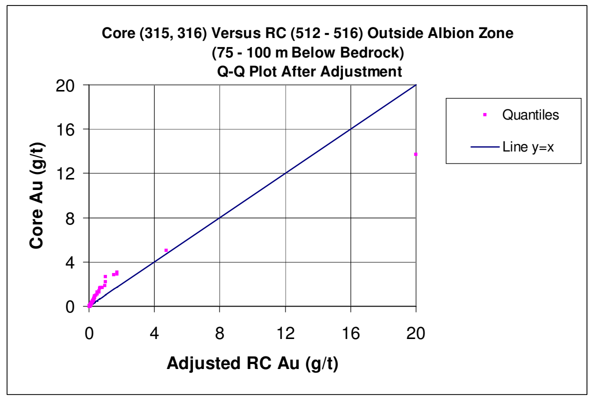


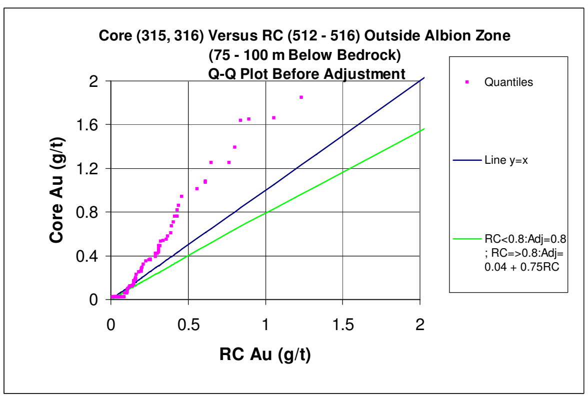
DDH Campaign 315 and 316 Versus RC Campaign 512 - 516 Outside Albion Shear Zone (75 - 100 m Below Bedrock) - RUN 25

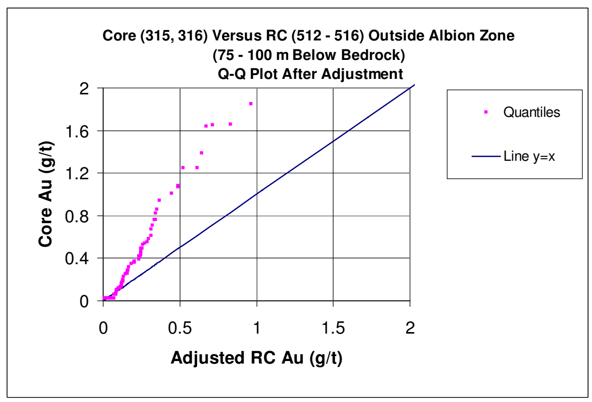




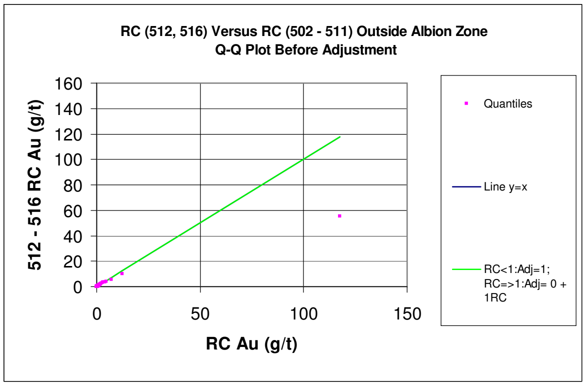


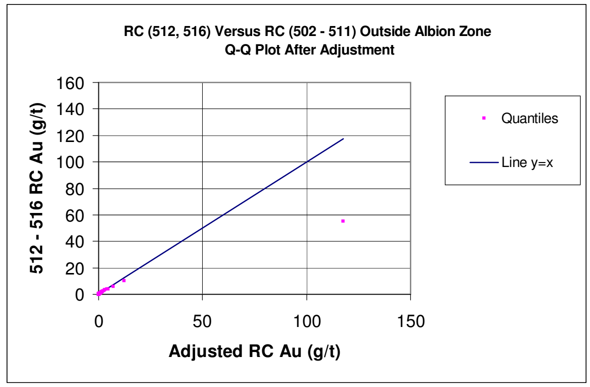


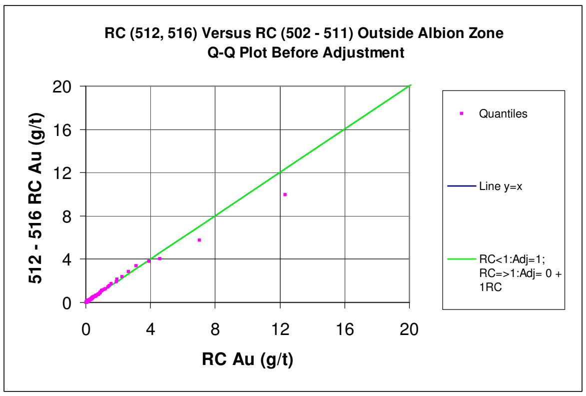


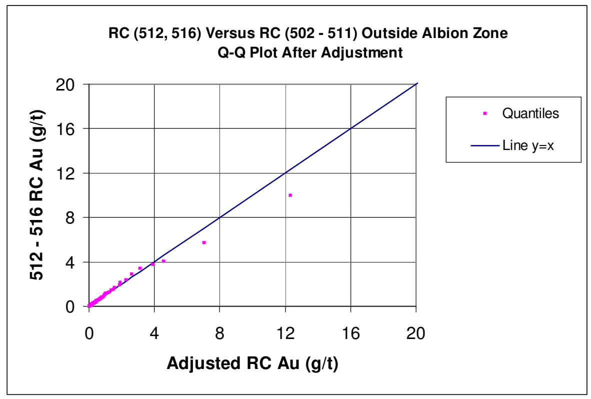


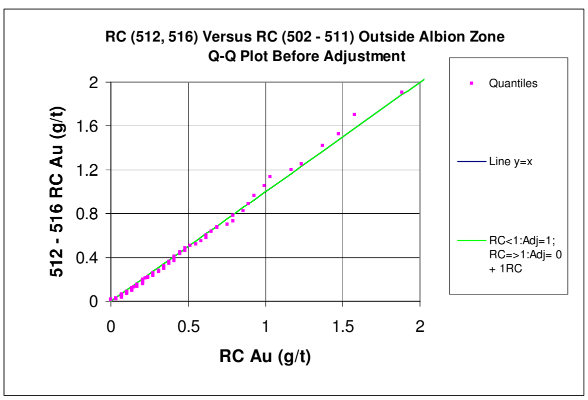
RC Campaign 512 and 516 Versus RC Campaign 502 - 511 Outside Albion Shear Zone - RUN 28

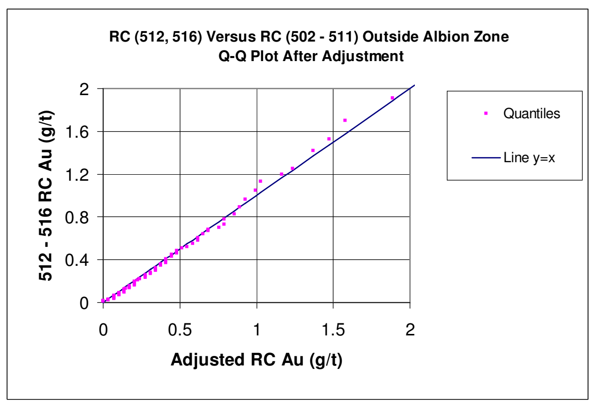




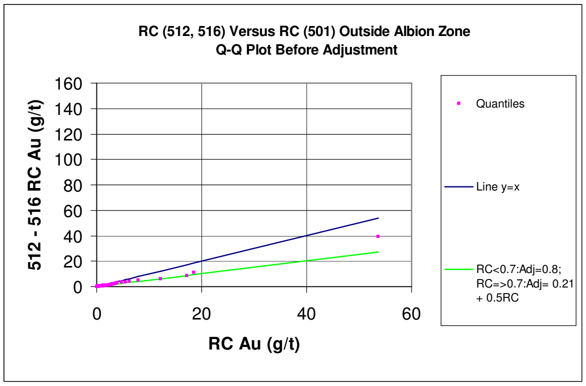


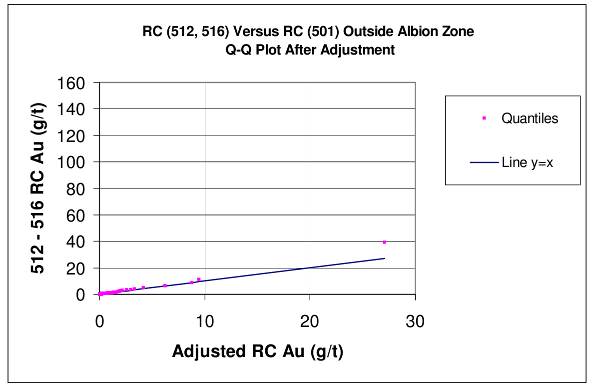


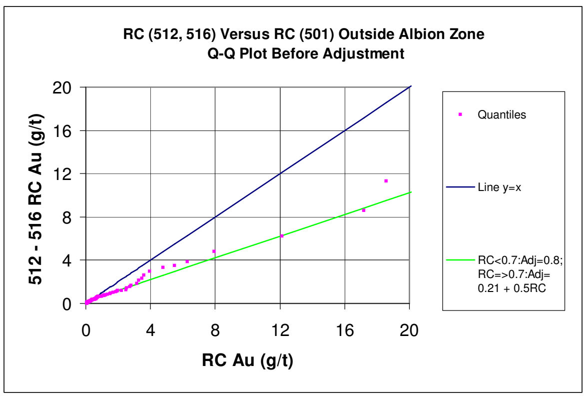


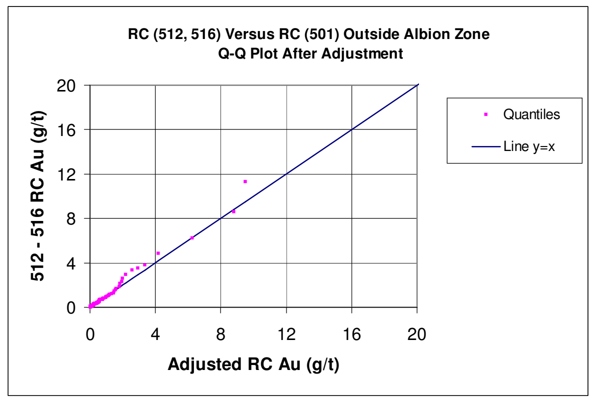


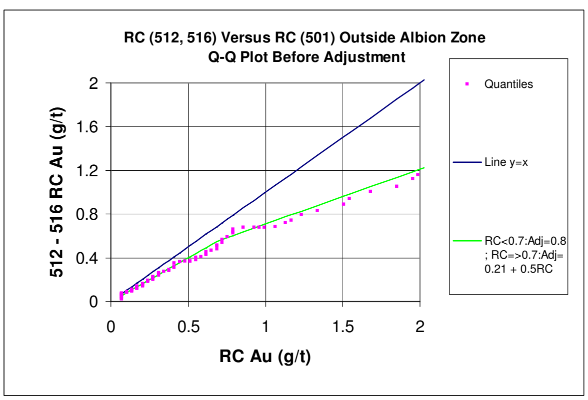
RC Campaign 512 and 516 Versus RC Campaign 501 Outside Albion Shear Zone - RUN 29

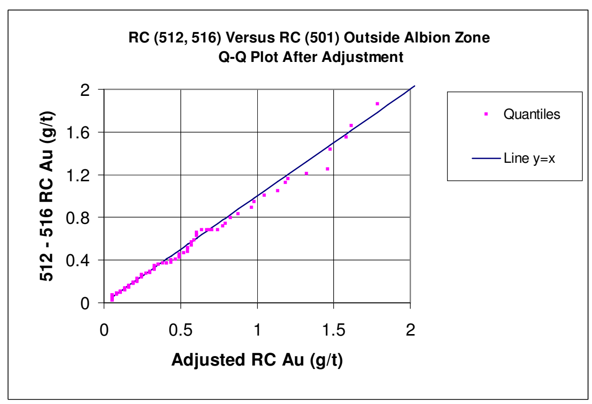




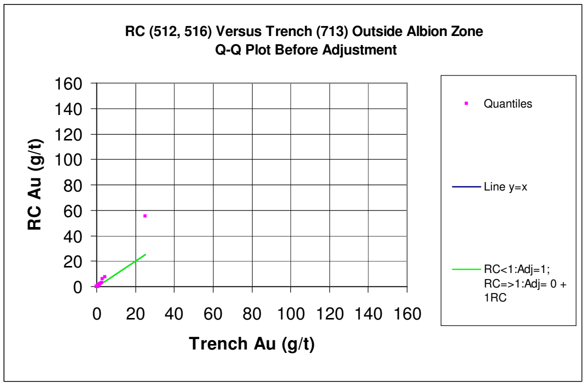


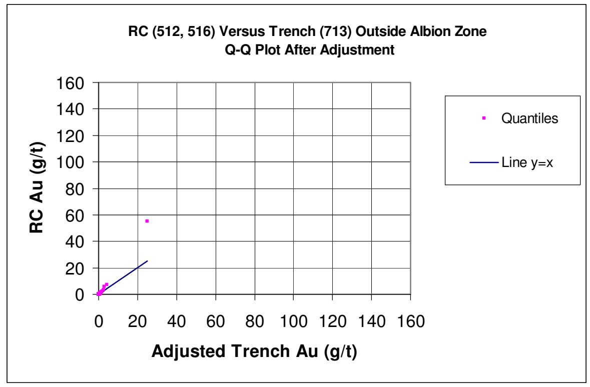


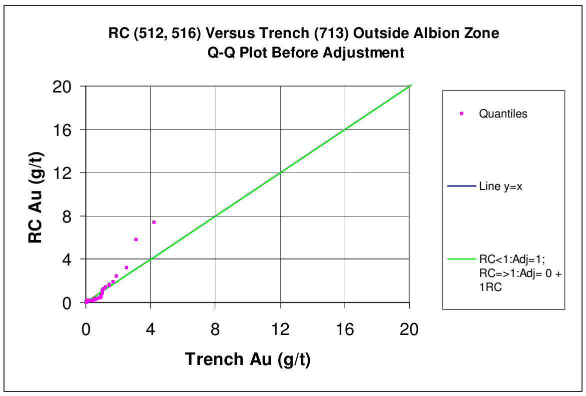


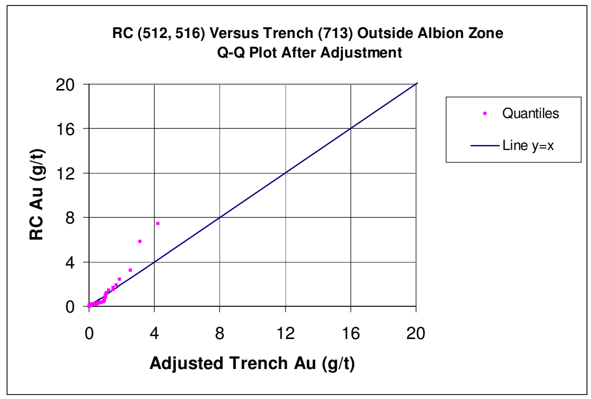


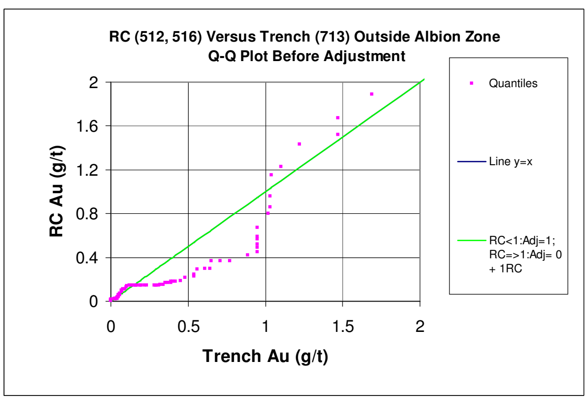
RC Campaign 512 and 516 Versus RC Campaign 713 Outside Albion Shear Zone - RUN 30

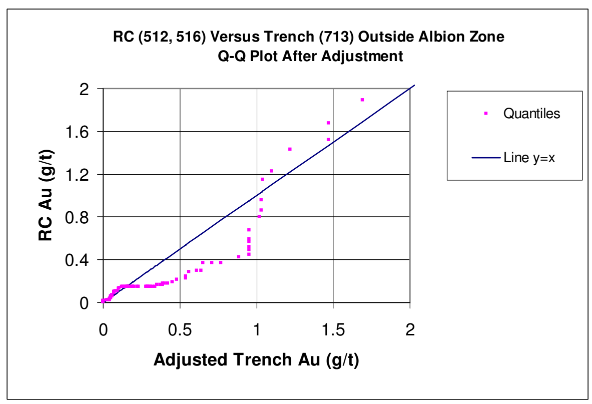




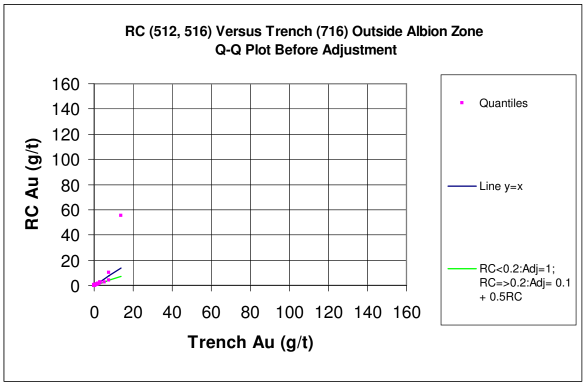


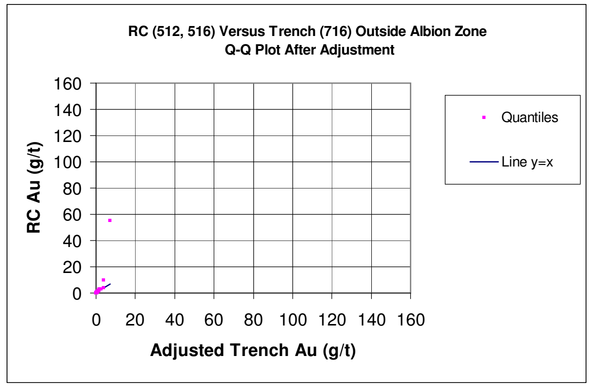


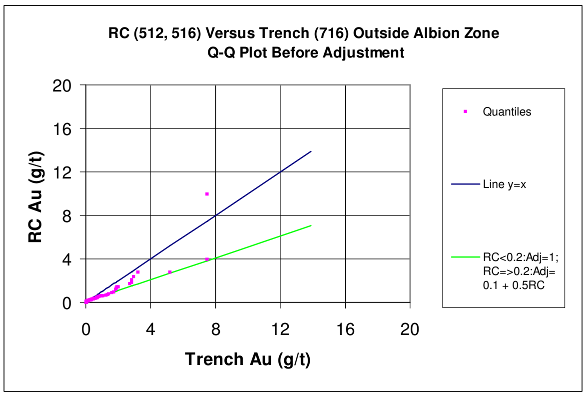


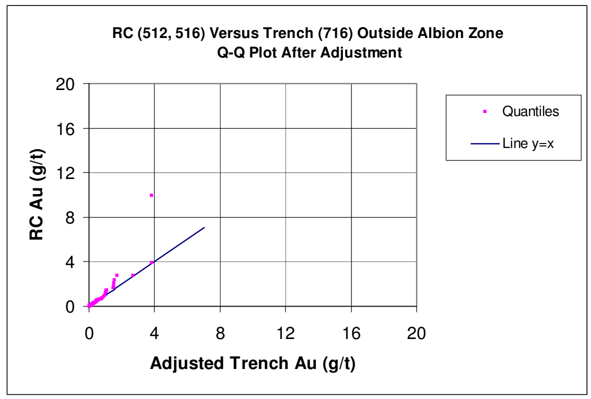


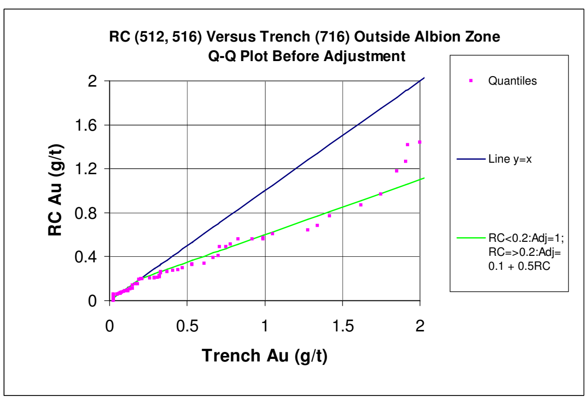
RC Campaign 512 and 516 Versus RC Campaign 716 Outside Albion Shear Zone - RUN 31

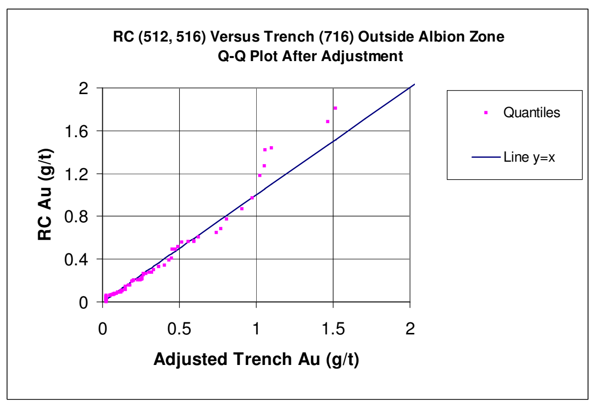












B-3 Special Runs Made for Robert Prevost

APPENDIX B-3

Special Runs Made for Robert Prevost

The attached email was sent to Harry Parker of AMEC by Robert Prevost. Parker's reply is in all CAPS. In the email Mr. Prevost requested Q-Q plots comparing 2004 RC drilling (516) and previous campaigns. These plots are runs RP1 to RP6.

Runs RP1 and RP2 show that core campaigns 315 and 316 give similar results as RC campaign 516 inside the Albion Shear Zone. Outside the Albion Shear Zone the RC data are high-biased.

Runs RP3 and RP4 show that 1) RC campaigns 502 to 511 are high biased outside the Albion Shear Zone with respect to RC campaign 516 above about 0.8 g/t, and 2) RC campaign 501 is similar to RC campaign 516 outside the Albion Shear Zone. These results are not corroborated by other comparisons of core versus RC drilling.

Run RP5 shows that campaign 516 has a slight positive bias compared to campaign 512 outside the Albion Shear Zone. This appears to be reversed inside the Albion Shear Zone.

Kevin Francis

From: Harry Parker
Sent: Monday, January 24, 2005 6:34 PM
To: 'Robert Prevost '
Cc: 'Douglas Nicholson '; 'John Odden '; 'Joe Piekenbrock '; Kevin Francis; 'Mike Lechner '
Subject: RE: 2004 RC Analysis

I have been working long hours here and have only now had time to get to your email. I have made some brief answers below. I have discussed these issues with John Odden. We suggest you read our report in 10 dyas time, and then we can have a fuller discussion.

My comments are below

-----Original Message-----
From: Robert Prevost
To: Harry Parker
Cc: Douglas Nicholson; John Odden; Joe Piekenbrock; Kevin Francis; Mike Lechner
Sent: 1/19/2005 5:51 PM
Subject: 2004 RC Analysis

Hi Harry,

I received the QQ plots and info from John.

1st Comment:

I assume that these plots were generated using "clean" data. Were there any attempts made to use the sample weight to assess contamination in the 2004 RC data? If not we must do that. Once it is determined what data is uncontaminated, it is flagged and used to analyze the correlation with other campaigns.

PLOTS WERE MADE USING CLEAN DATA. SAMPLE WEIGHTS WERE USED TO ASSESS CONTAMINATION WHERE SUCH DATA WERE AVAILABLE. VERY FEW INTERVALS WERE ELIMINATED FROM 2004 PROGRAM ON WEIGHTS.

I would like to get the following QQ plots using uncontaminated 2004 RC – U516

WILL MAKE THE PLOTS NEXT WEEK

1. U516 vs. 315 and 316 inside the ASZ
2. U516 vs. 315 and 316 outside the ASZ
3. U516 vs. 502 and 511 outside the ASZ
4. U516 vs. 501 outside the ASZ
5. U516 vs. 512 outside the ASZ
6. U516 vs. 512 inside the ASZ

I also would like to get a full set of twin hole plots using uncontaminated 2004 RC – U516. This could be simply done by adding comments down the drillhole profile.

WILL PUT IN OUR REPORT

This would
1. enable to better appreciate the effect of contamination and/or
2. indicate gold loss during coring
3. help select contaminated sections in pre-2004 RC campaigns

2nd Comment:

All RC campaigns compare very well with 315-316 inside the ASZ but are much higher in the tension vein (TV) mineralization. If your argument is, and I believe it is, that the RC overstate grade because of contamination then how do you explain this phenomenon. How can a RC hole be contaminated in the TV and not in the ASZ. You would think that material

above, from the TV, would trickle down and contaminate the ASZ.
But it’s not the case. Also, you would think that because the ASZ is a shear, we would see more contamination than usual. But it’s not the case.

The explanation is simple; they are different mineralogy. The ASZ has much less free gold, the gold is found in tight fine grain quartz, it is finer and/or associated with other minerals. In the TV the gold is free and found in narrow bull quartz veinlets. During coring some of the gold particles become lose and gets washed out by the drilling fluids.
This is also supported by the sludge assays.

COULD SAY THE SAME ABOUT RC DRILLING. WATER IN FORMATION COULD BE SUCKED INTO HOLE AND BRING GOLD FROM OUTSIDE HOLE INTO SAMPLE. MOST RC SAMPLES ONLY HAVE 60-80 % RECOVERY. WHAT HAPPENS TO LOST SAMPLE? IS GOLD CONCENTRATED IN REMAINDER? ON OTHER HAND MOST OF OUR CORE RECOVERY APPROACHES 100%. HARD TO SEE HOW WE ARELOSING 20% OF THE COARSE GOLD WHEN RECOVERY IS SO GOOD. 2004 TRIPLE TUBE CERTAINLY IMPROVED RECOVERY IN "SOFT" ZONES.

3rd Comment:

Core 315-316 is higher than RC 512-516 from 75m to 100m below surface (in TV). Again, one would think that contamination would increase due to water. But it’s not the case, the core is clearly higher.

ONLY EXPLANATION I HAVE IS THAT THE SIZE OF THE DATA SET IS SMALL, MAYBE 130 SAMPLES AND RESULTS MAY NOT BE REPRESENTATIVE 4th Comment:

The 2004 trenches (716) do not correlate with anything. Was the comparison made using the Min Zone as boundary? If not, we must code what’s inside and outside the Min Zone and produce new plots.

TRENCHES ARE IN TV MINZONE. THEY ARE ONLY 2 M DEEP IN GENERAL AND HAVE FE OXIDES FROM WEATHERING. ELUVIAL GOLD IS PRECIPTATING THERE. WE FEEL TRENCHES REPRESENT SURFICIAL REALM AND NOT BEDROCK. WE THUS USED FLAT SEARCH ELLIPSOID THERE TO RESTRICT DOWNWARD PROJECTION

OTHER: I MET WITH FRANCIS PITARD HERE. DISCUSSED SITUATION W/O MENTIONING PROPERTY. HE SAYS ALL RC DRILLING ELOW WATER TABLE IS SUSPECT. ALSO FRACTURED CORE COULD LOSE GOLD IN CORING PROCESS. BITS USED BY NOVAGOLD HAVE BLUNT ENDS. THESE ARE FAVORED BY DRILLERS TO GET FAST DRILLING. SUCH BITS MAY PUT EXCESS PRESSURE ON ROCK AND BREAK UP GOLD THAT COULD BE WASHED AWAY. FRANCIS PREFERS BITS THAT ARE WEDGE-SHAPED.

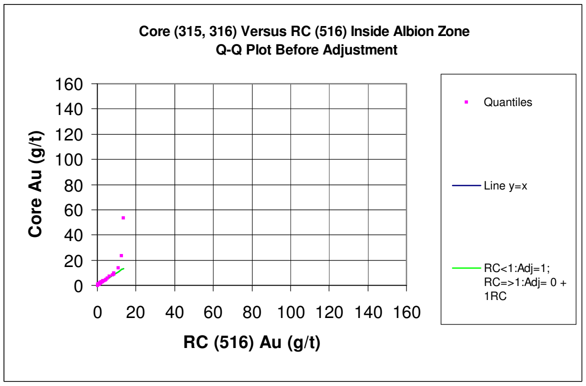
ALSO SAYS BULK SAMPLE IS ONLY WAY TO SETTLE THE ISSUE SHORT OF MINING. I EXPLAINED THAT AMOUNT OF SAMPLE REQUIRED WOULD BE EXPENSIVE. I WOULD CONCUR. IT IS FOR NOVAGOLD TO DECIDE WHETHER SUCH A PROGRAM WOULD BE WORTHWHILE.

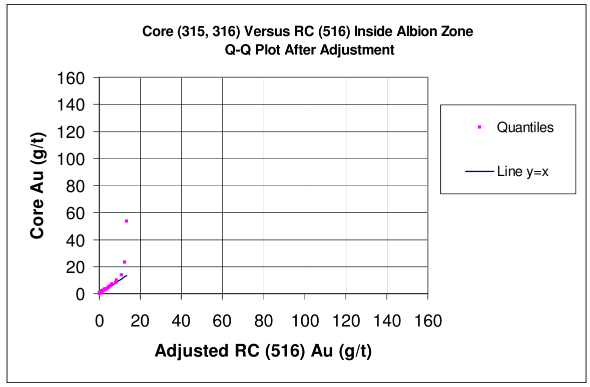
MY POSITION REMAINS THAT MAXIMUM LIKLIHOOD IS CORE SAMPLES ARE BETTER BECUASE RECOVERY IS CLOSE TO 100%. RC RECOVERY IS LOWER AND WE DO NOT KNOW HOW LOSING 20-30% OF SAMPLE AFFECTS GOLD CONTENT. PLEASE NOTE, THE RC RECOVERIES ARE IN NORMAL RANGE. THE INDUSTRY IS LITTERED WITH EXAMPLES WEHER RC WAS PROVED TO BE EITHER HIGH OR LOW.

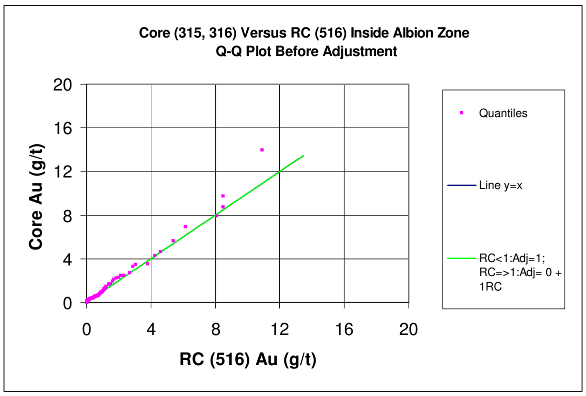
SLUDGE SAMPLES HAVE GOLD. I WOULD EXPECT GROUND UP ROCK TO CERTAINLY CONTAIN GOLD. THIS GOLD WOULD BE CONCENTRATED IN THE SLUICEBOX LIKE COLLECTION DEVICE. AT FORT KNOX, SLUDGE RAN 0.08 OPT WHEN 50 MT OF MINING HAVE VERIFIED ORE GRADE IS 0.025 TO 0.03 OPT. I DONT THINK THE SLUDGE PROVES ANYTHING, AS INDICATED IN KEVIN FRANCIS' PREVIOUS EMAIL TO YOU.

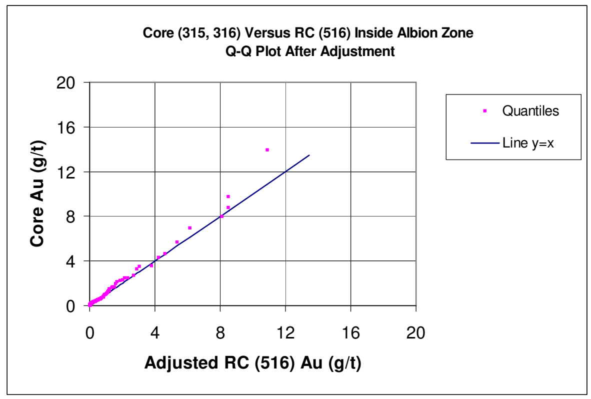
REGARDS
Salut,
Robert

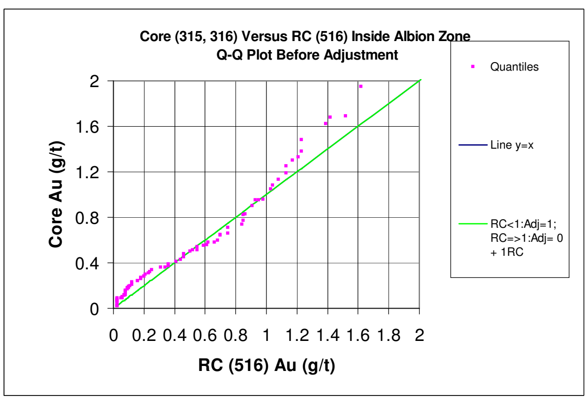
DDH Campaign 315 and 316 Versus RC Campaign 516 Inside Albion Shear Zone - RUN RP1

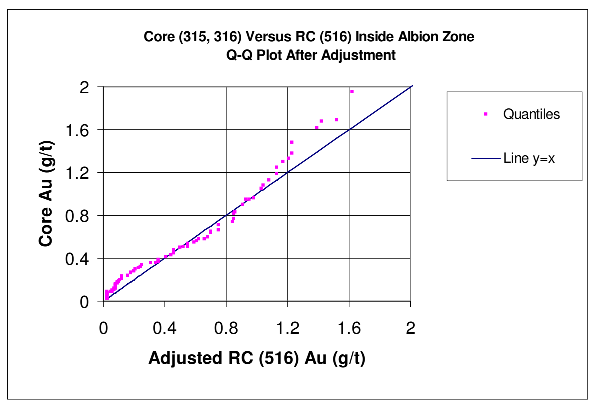




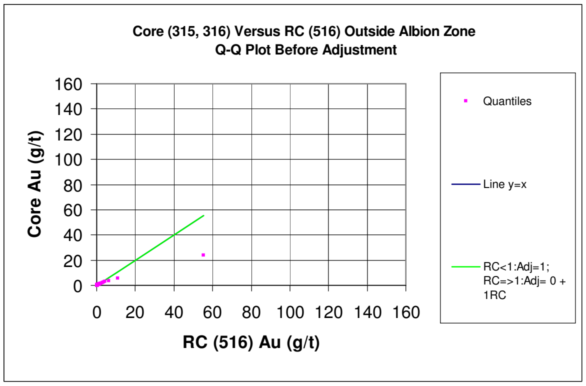


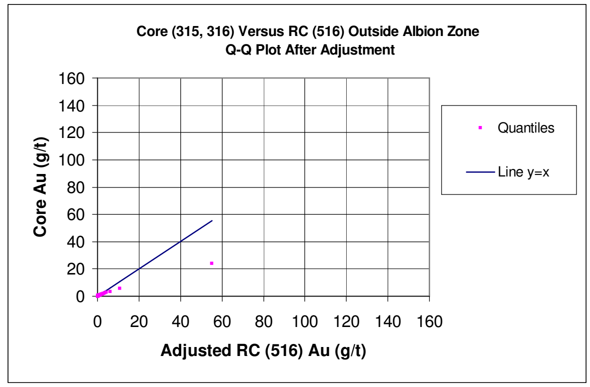


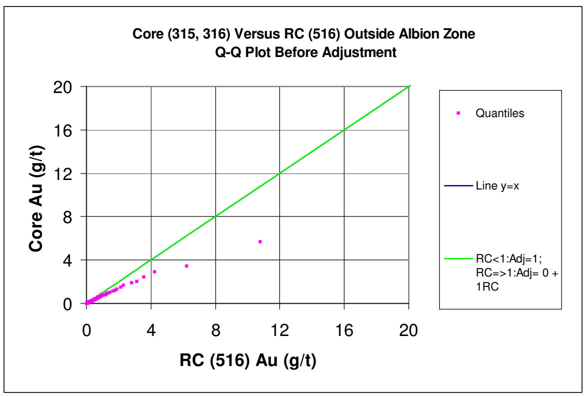


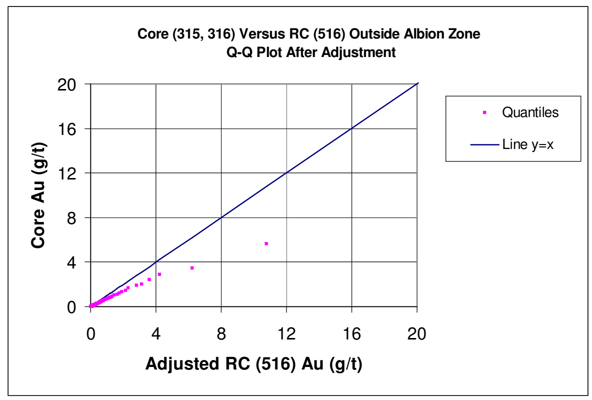


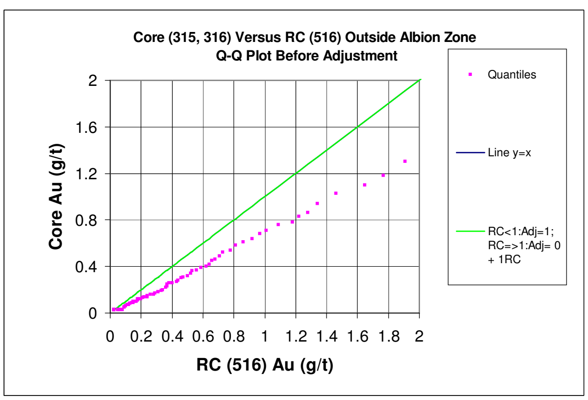
DDH Campaign 315 and 316 Versus RC Campaign 516 Outside Albion Shear Zone - RUN RP2

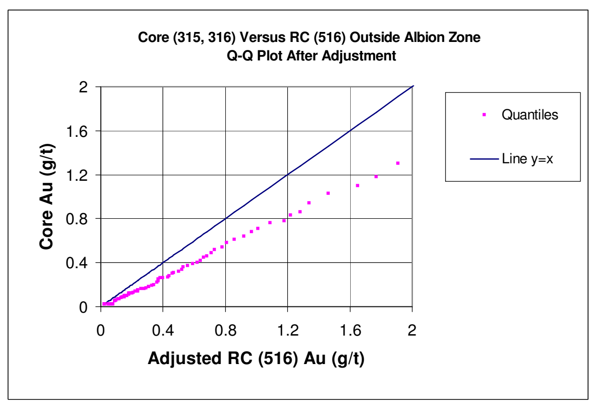




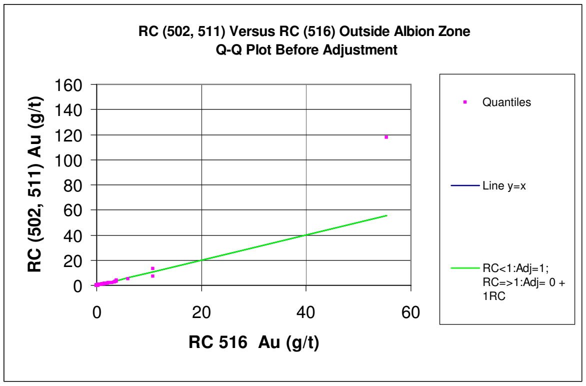


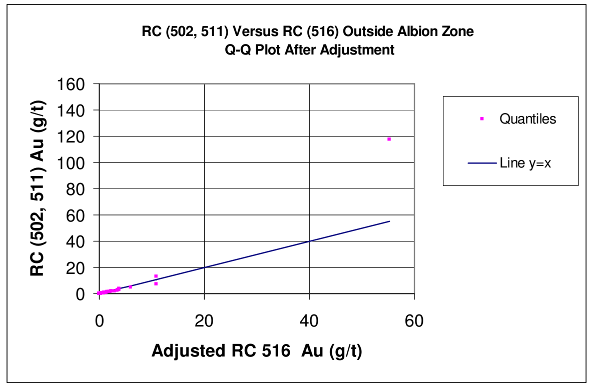


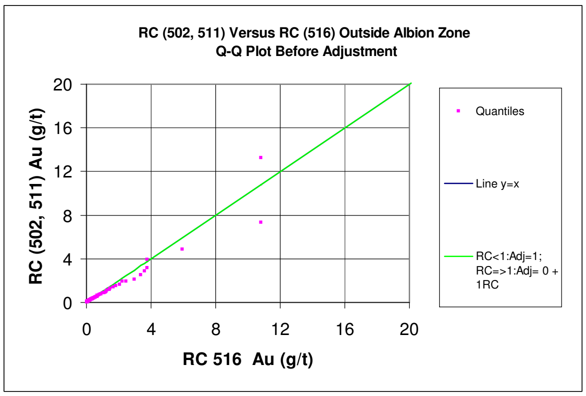


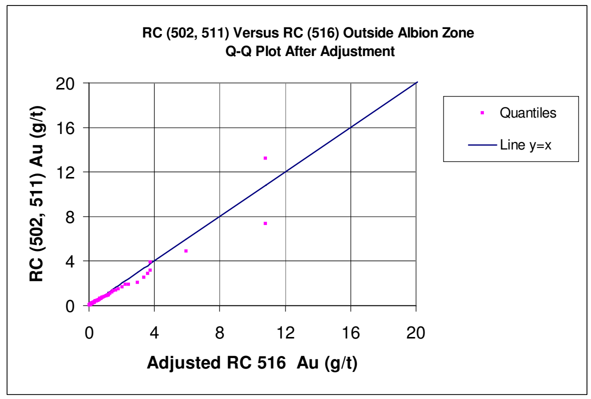


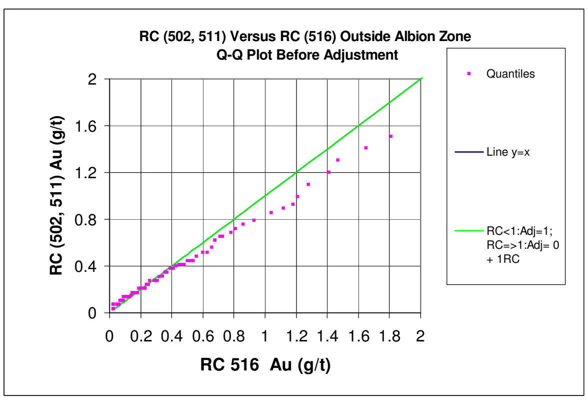
RC Campaigns 502 and 511 Versus RC Campaign 516 Outside Albion Shear Zone - RUN RP3

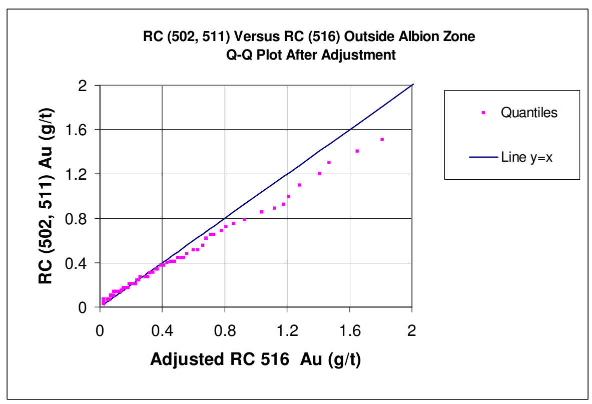




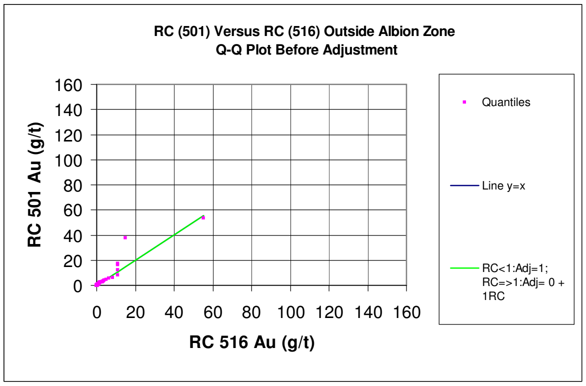


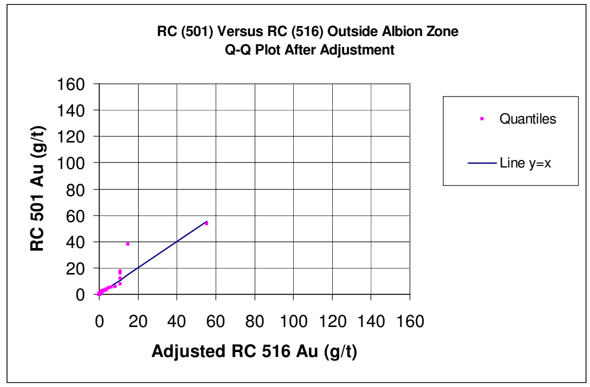


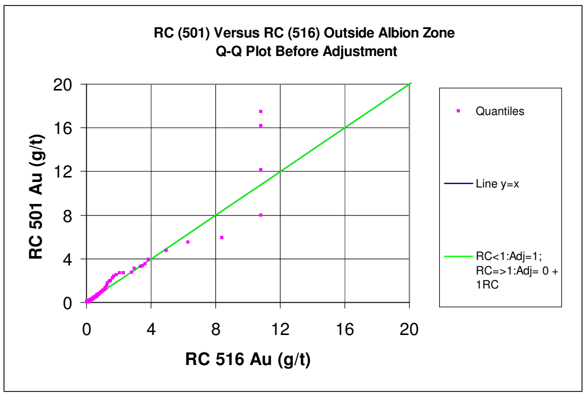


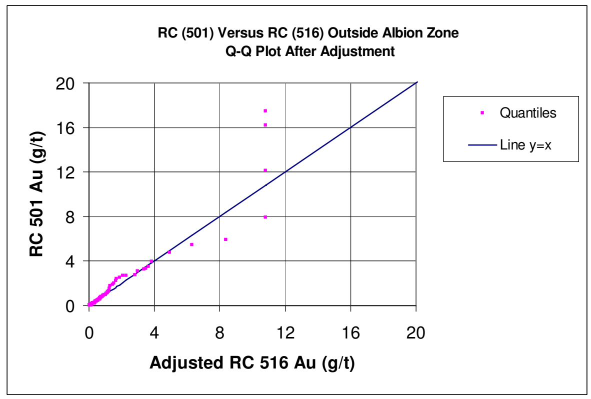


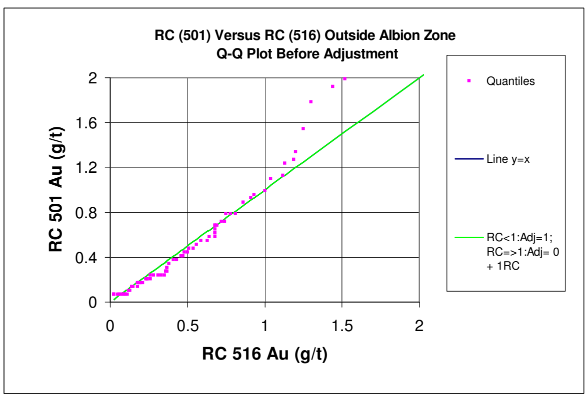
RC Campaign 501 Versus RC Campaign 516 Outside Albion Shear Zone - RUN RP4

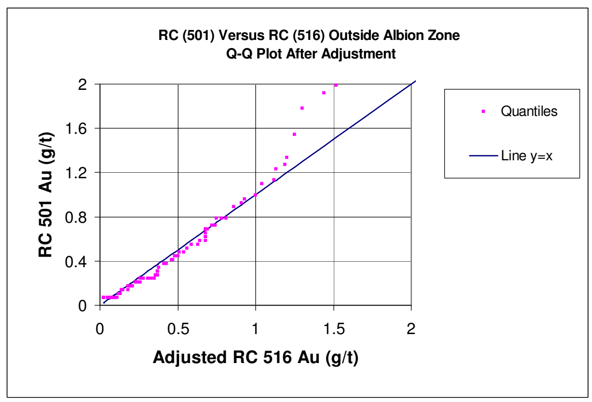




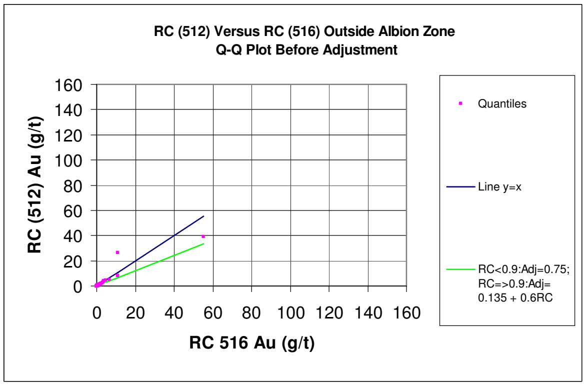


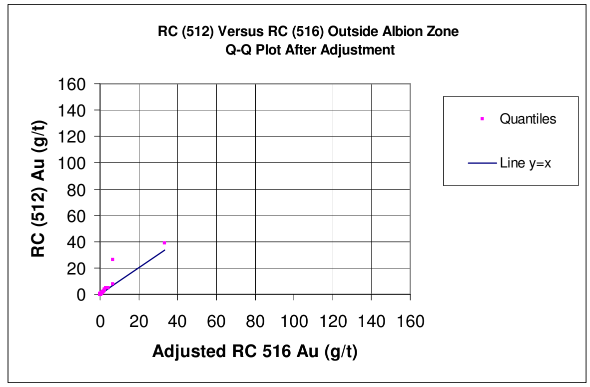


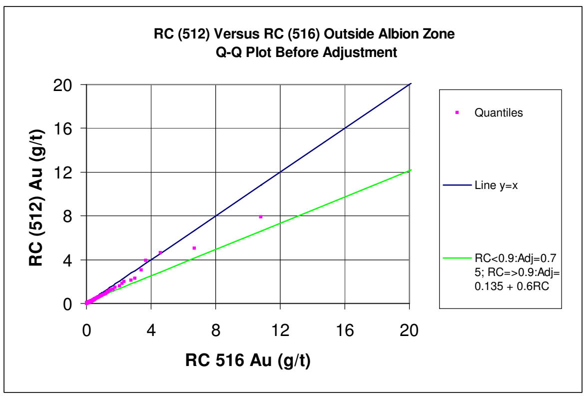


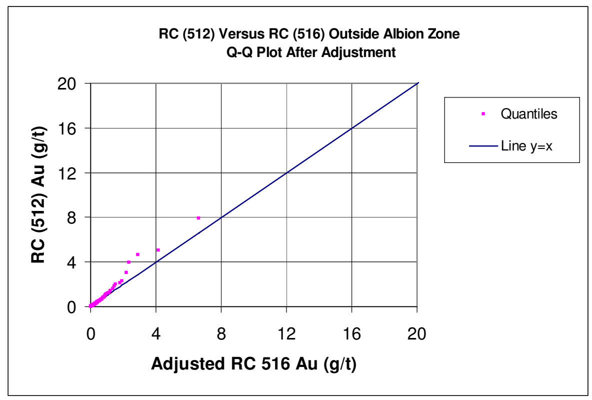


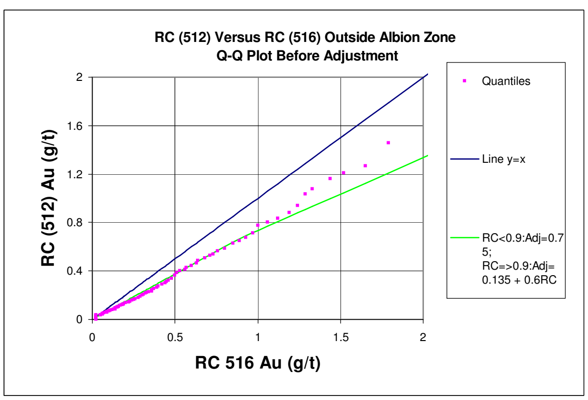
RC Campaign 512 Versus RC Campaign 516 Outside Albion Shear Zone - RUN RP5

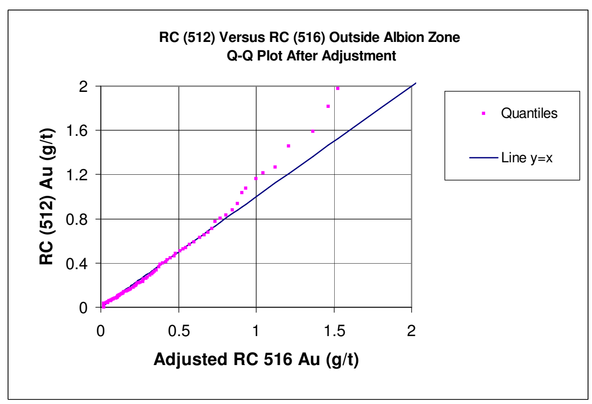




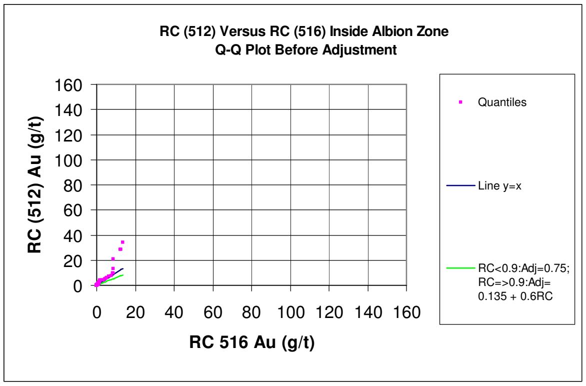


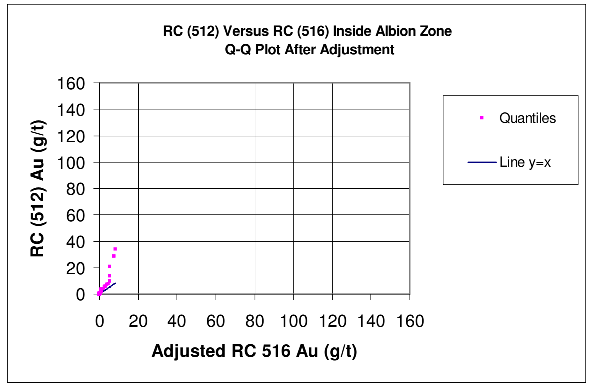


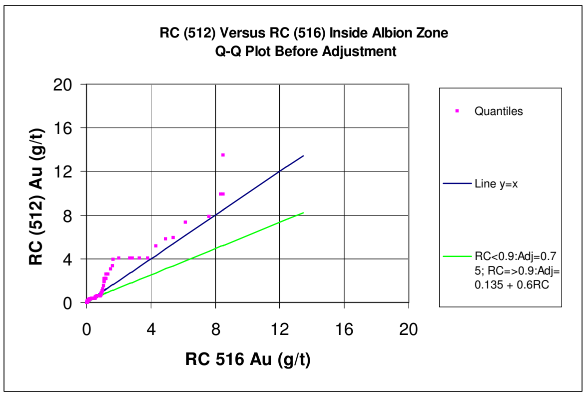


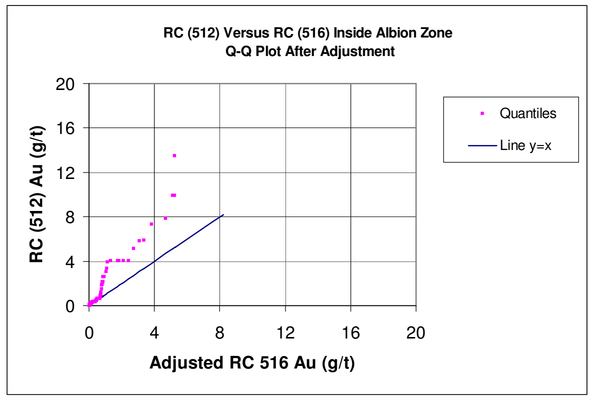


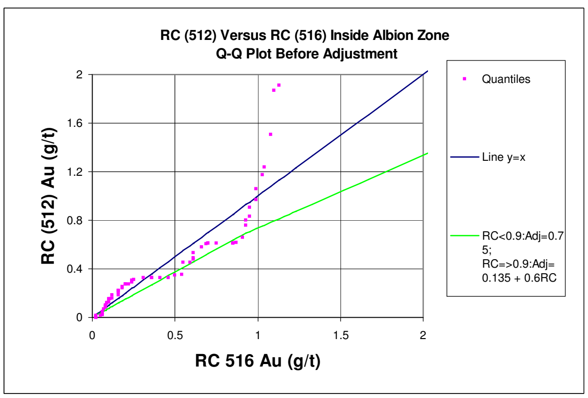
RC Campaign 512 Versus RC Campaign 516 Inside Albion Shear Zone - RUN RP6

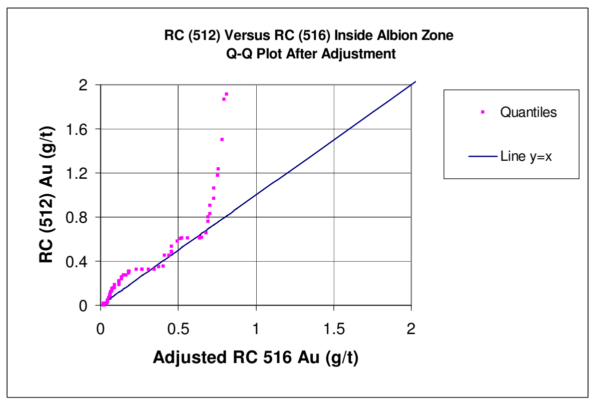




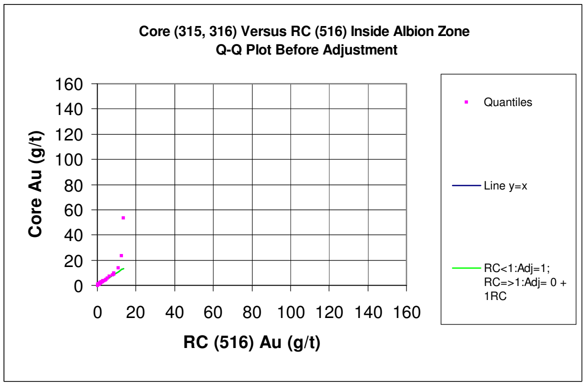


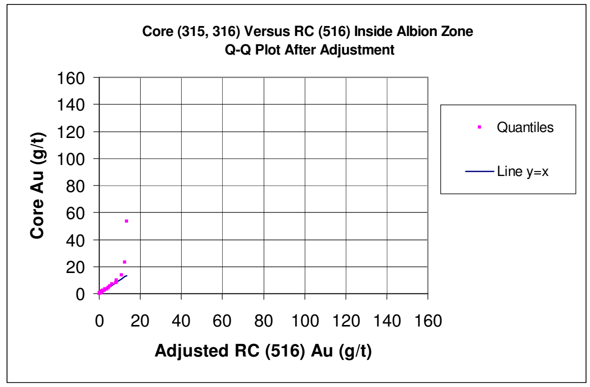


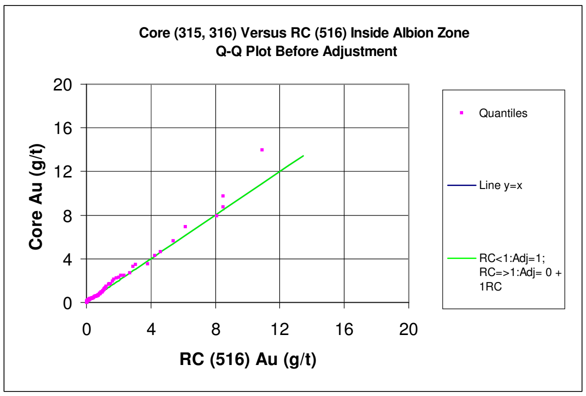


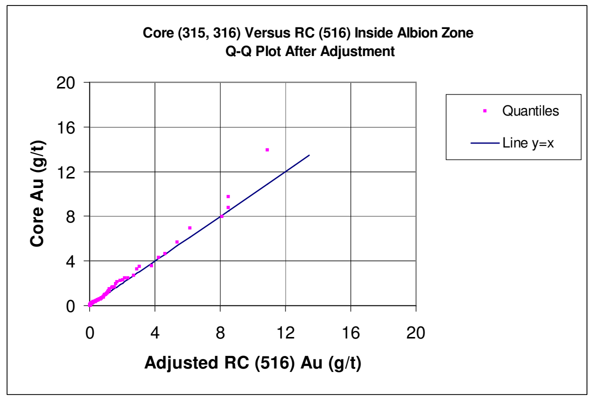


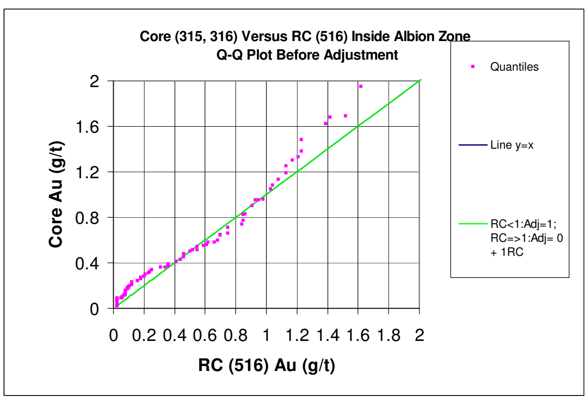
DDH Campaign 315 and 316 Versus RC Campaign 516 Inside Albion Shear Zone - RUN RP1

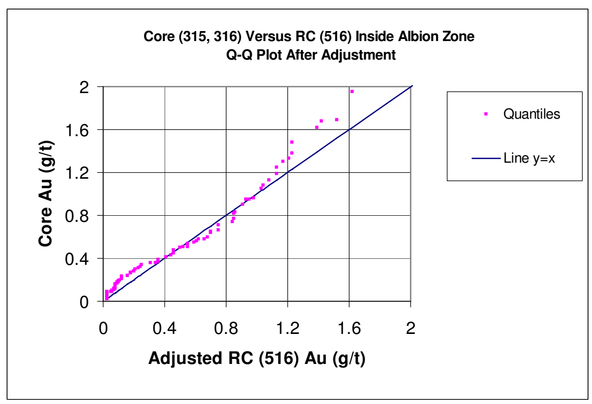




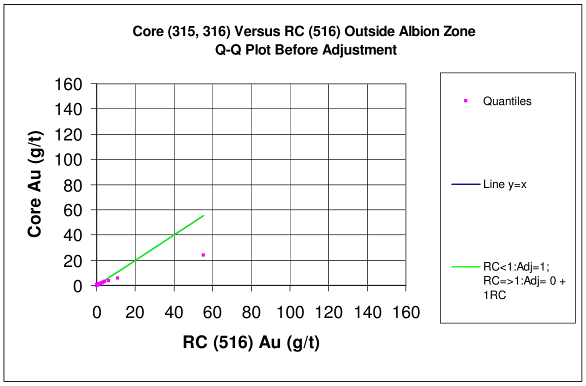


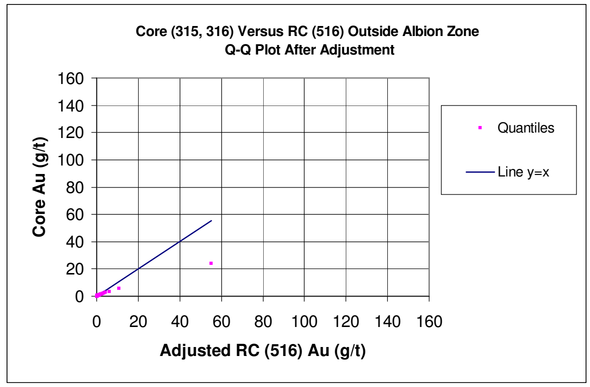


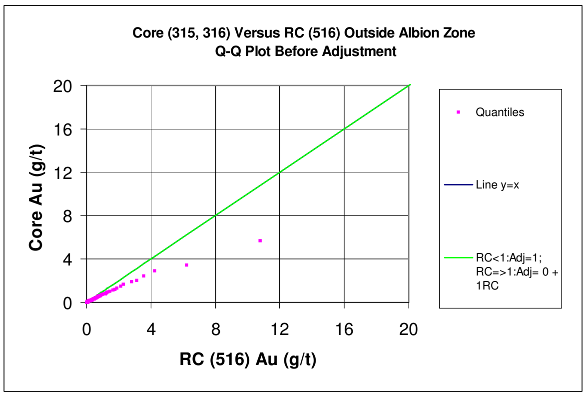


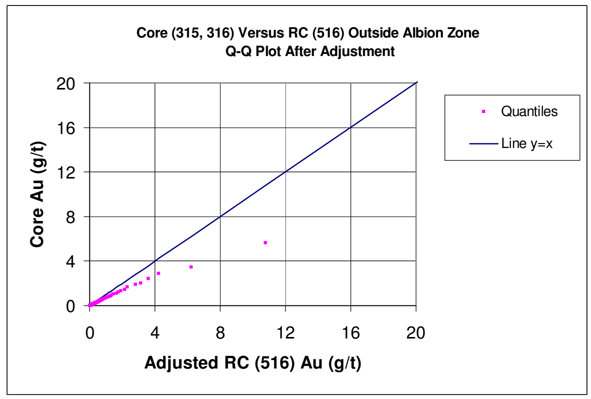


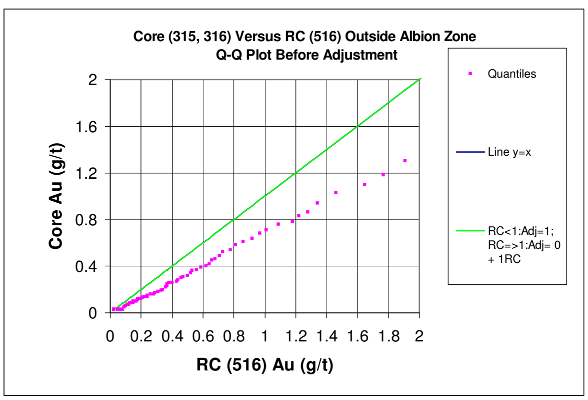
DDH Campaign 315 and 316 Versus RC Campaign 516 Outside Albion Shear Zone - RUN RP2

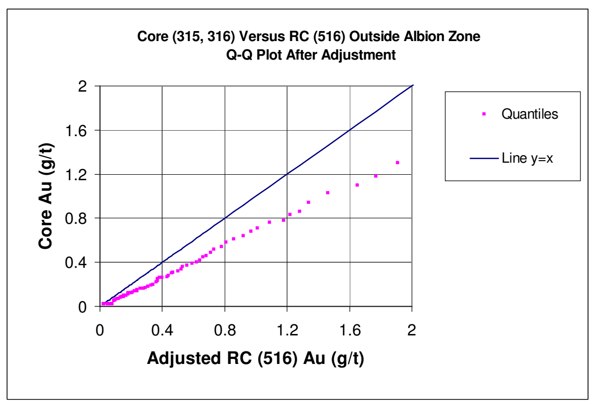




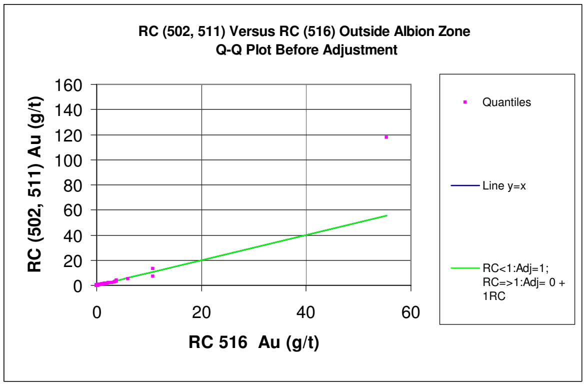


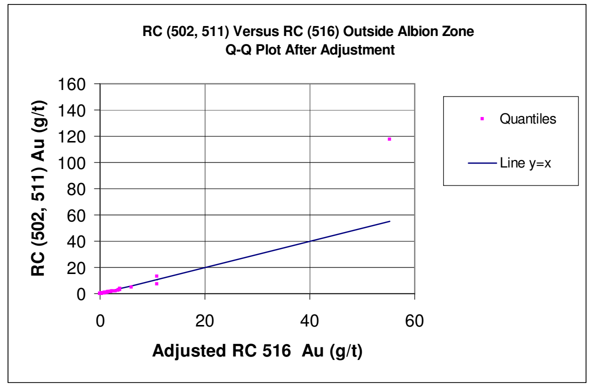


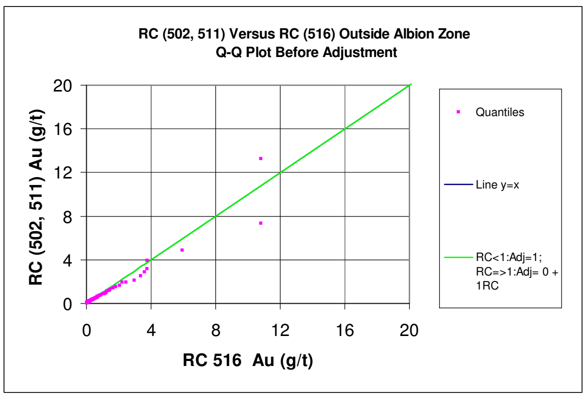


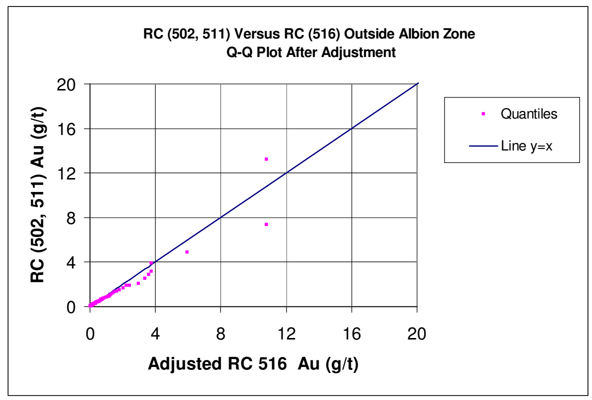


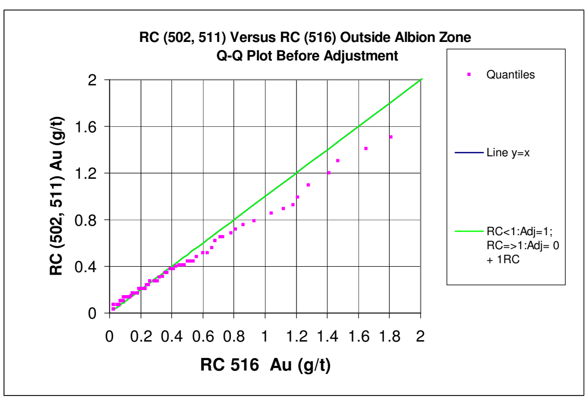
RC Campaigns 502 and 511 Versus RC Campaign 516 Outside Albion Shear Zone - RUN RP3

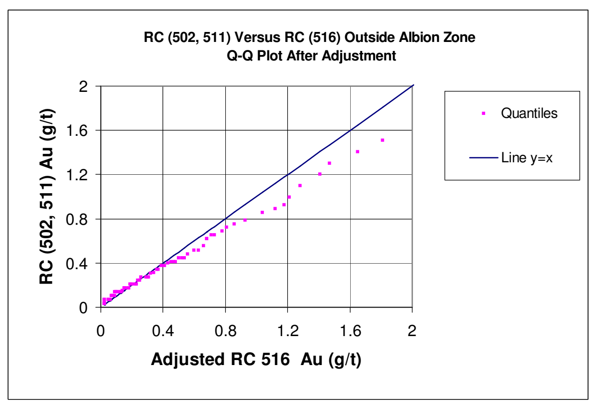




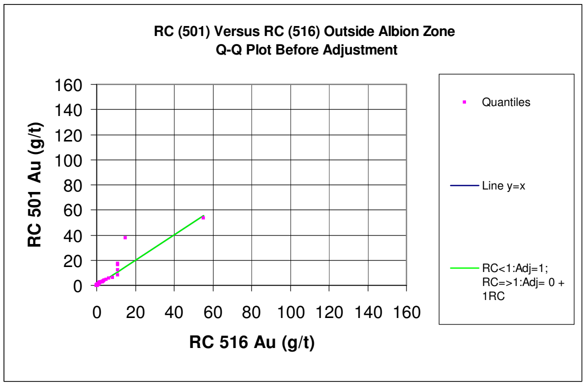


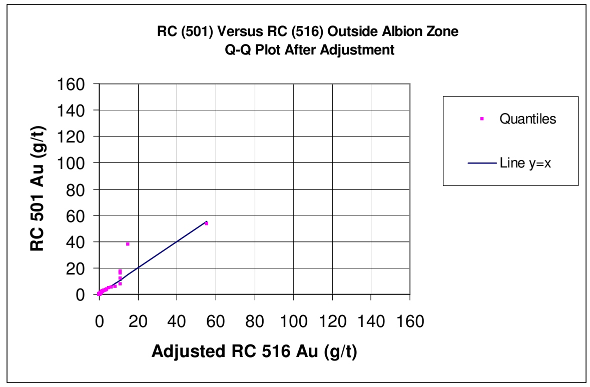


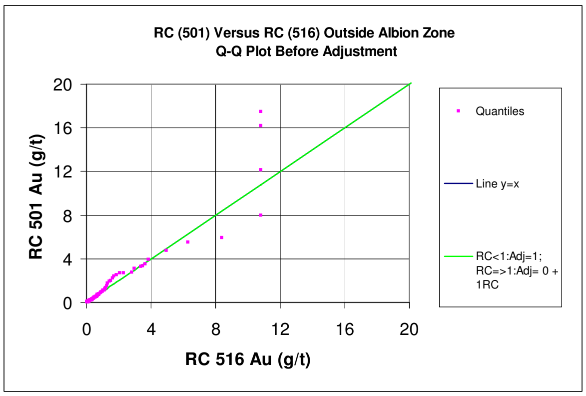


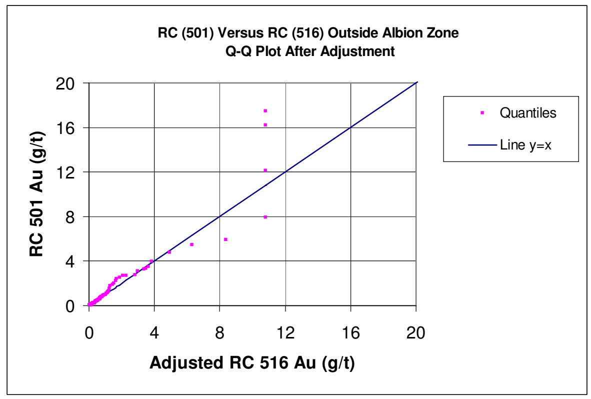


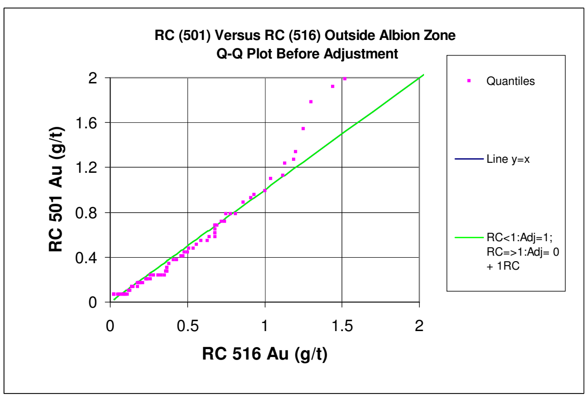
RC Campaign 501 Versus RC Campaign 516 Outside Albion Shear Zone - RUN RP4

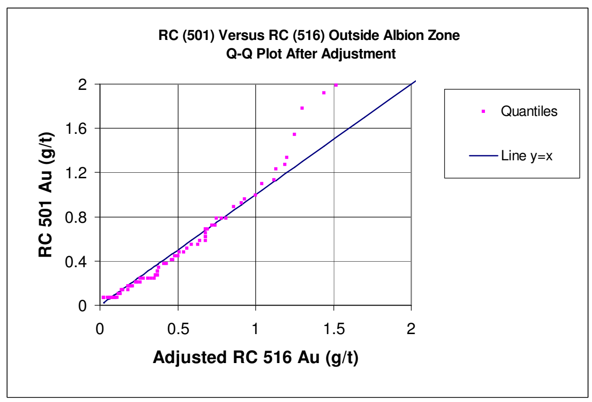




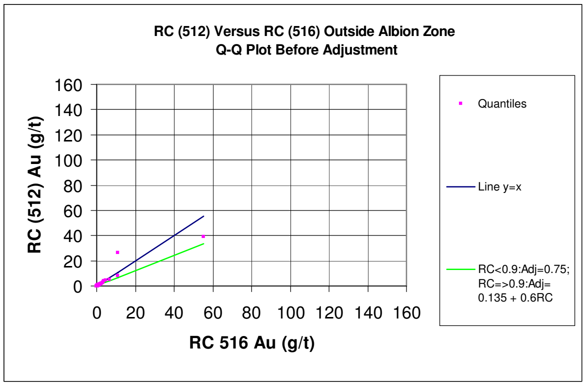


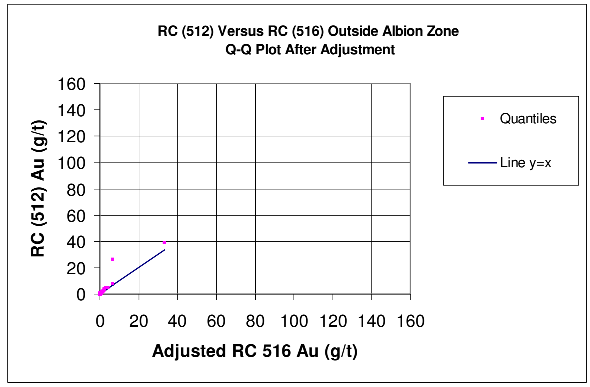


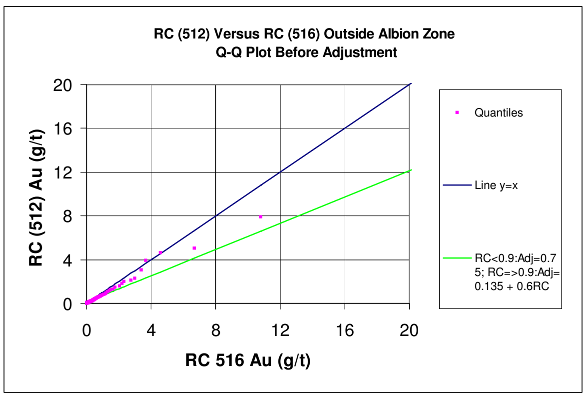


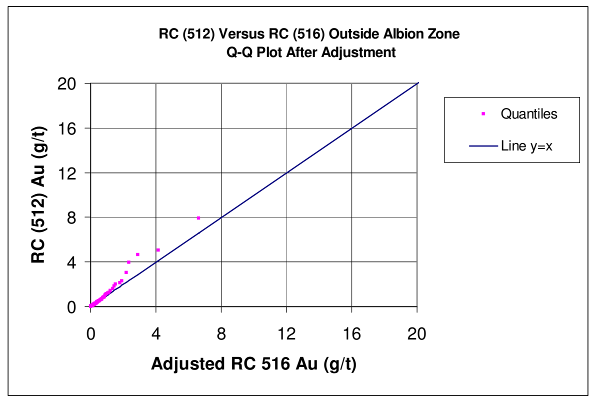


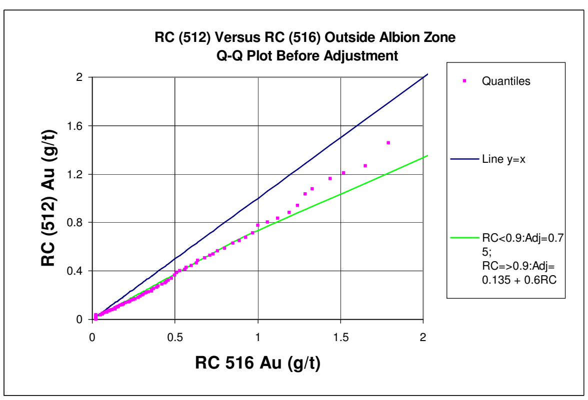
RC Campaign 512 Versus RC Campaign 516 Outside Albion Shear Zone - RUN RP5

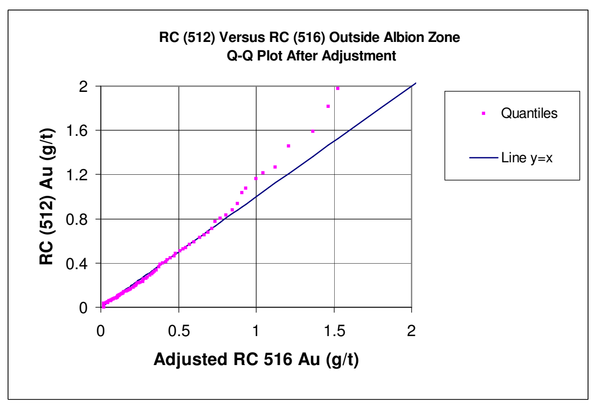




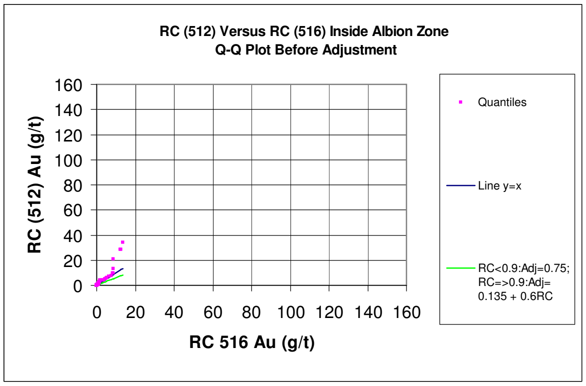


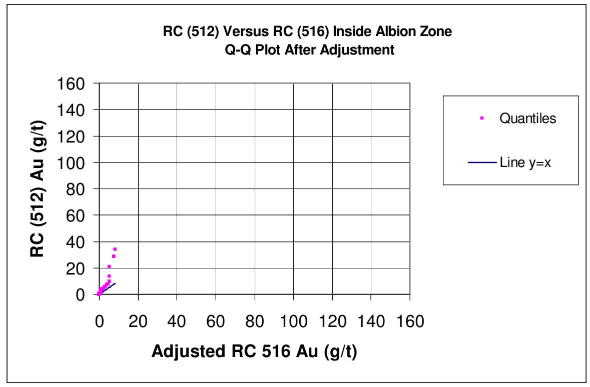


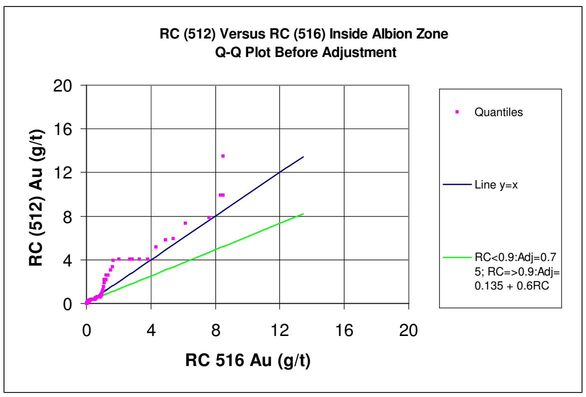


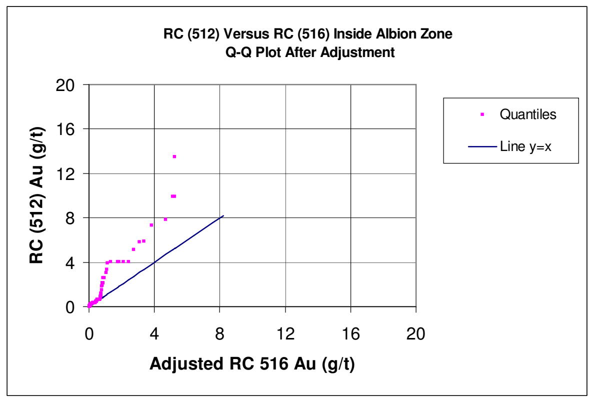


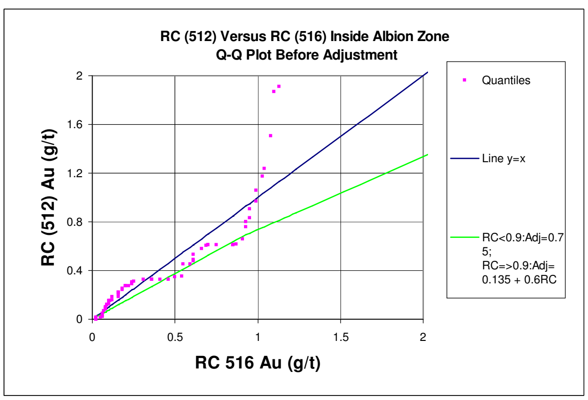
RC Campaign 512 Versus RC Campaign 516 Inside Albion Shear Zone - RUN RP6

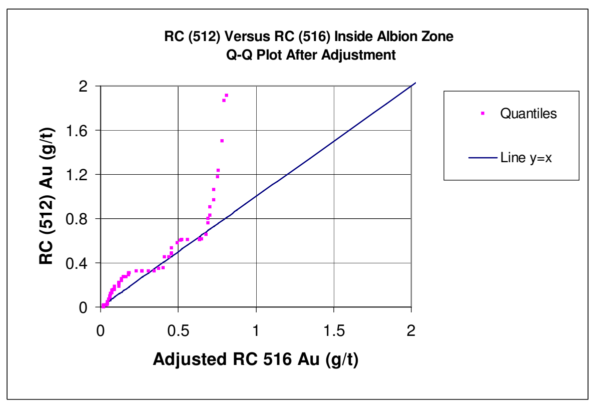








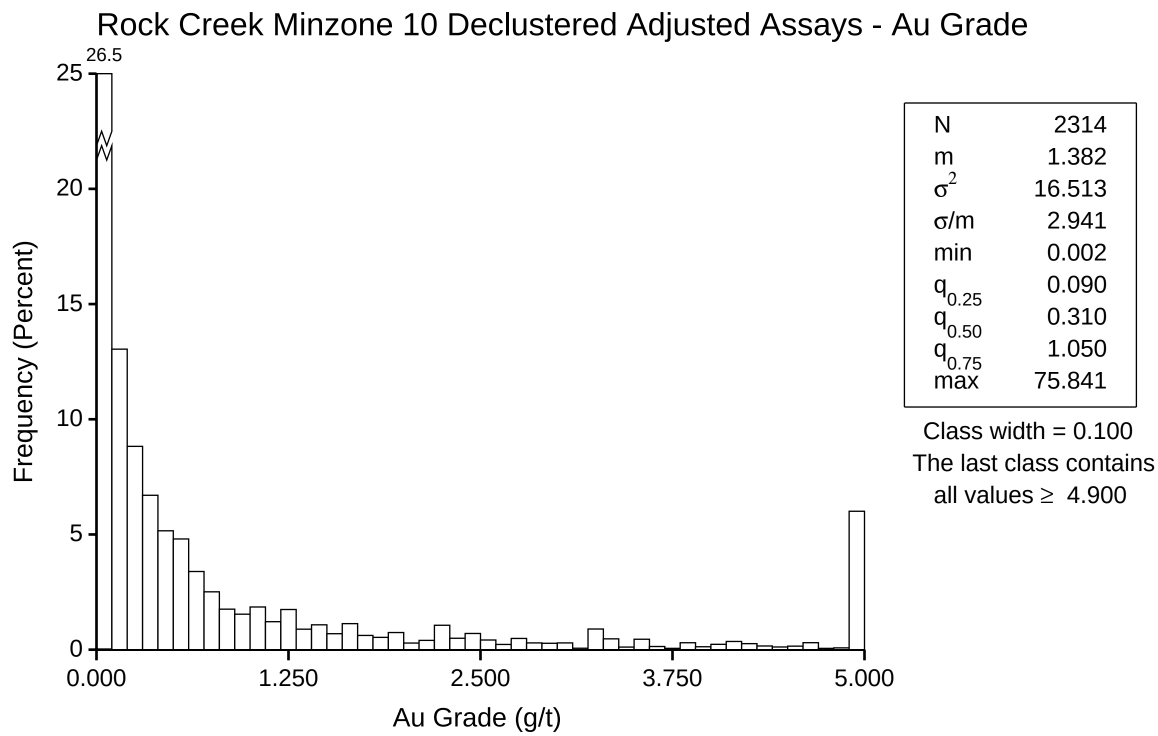




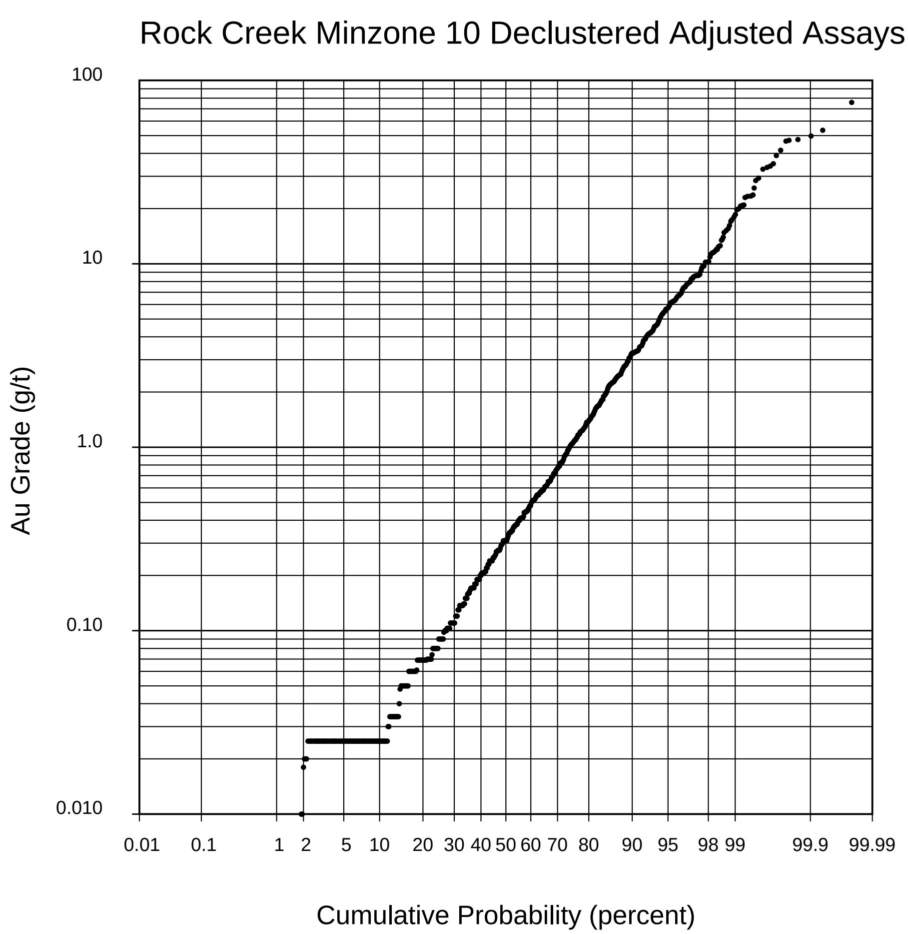
APPENDIX C

HISTOGRAMS & STATISTICS

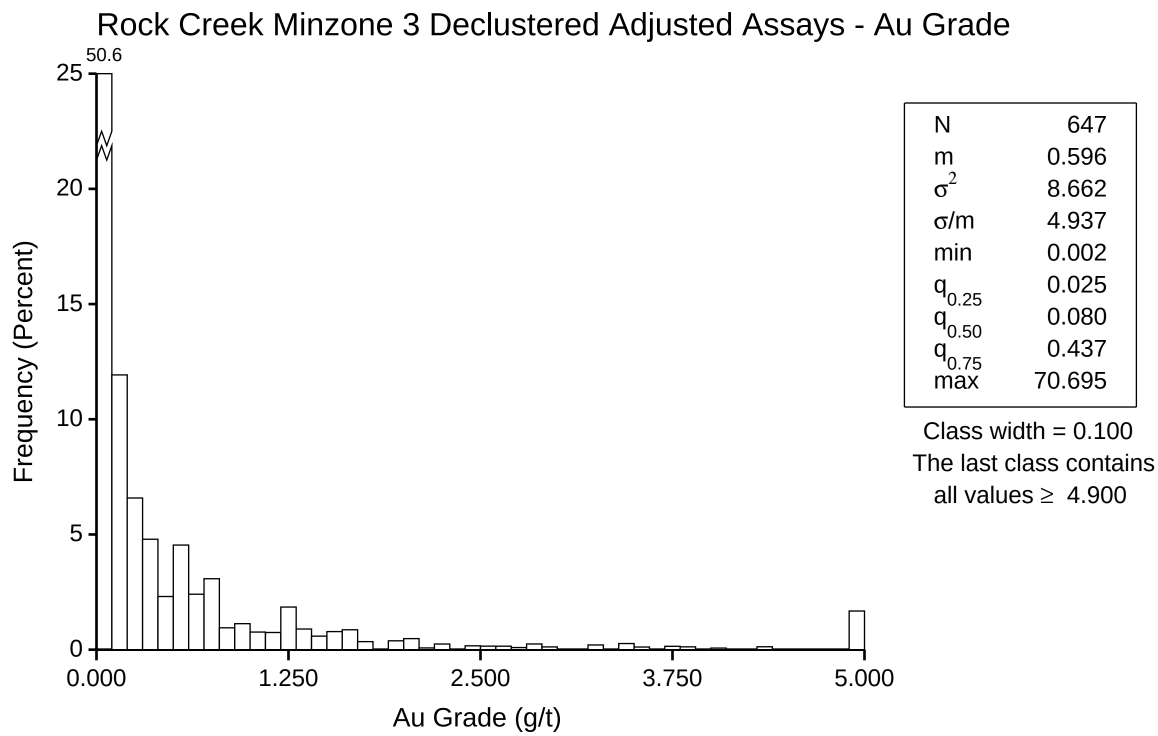
C-1 Assay Histograms & Probability Plots



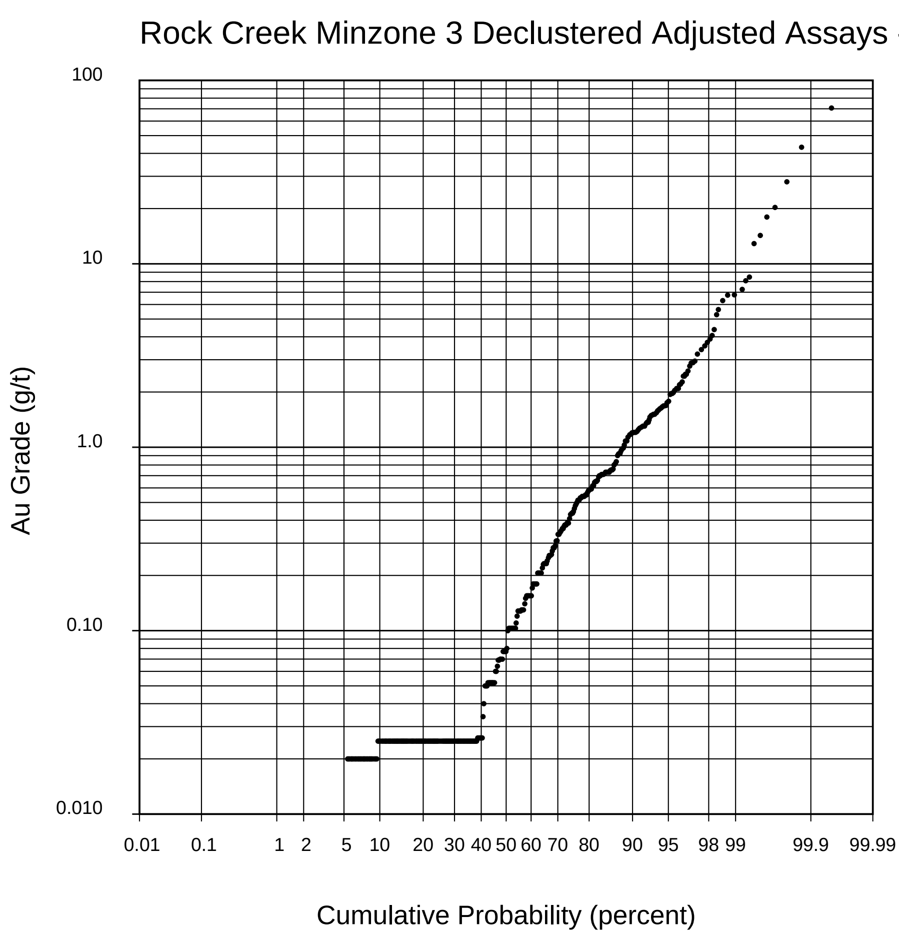
Rock Creek Minzone 10 Declustered Adjusted Assays - Au Grade
26.5
25
20
15
10
5
0
Frequency (Percent)
0.000
1.250
2.500
3.750
5.000
Au Grade (g/t)
N 2314
m 1.382
σ2 16.513
σ/m 2.941
min 0.002
q0.25 0.090
q0.50 0.310
q0.75 1.050
max 75.841
Class width = 0.100
The last class contains
all values ≥ 4.900



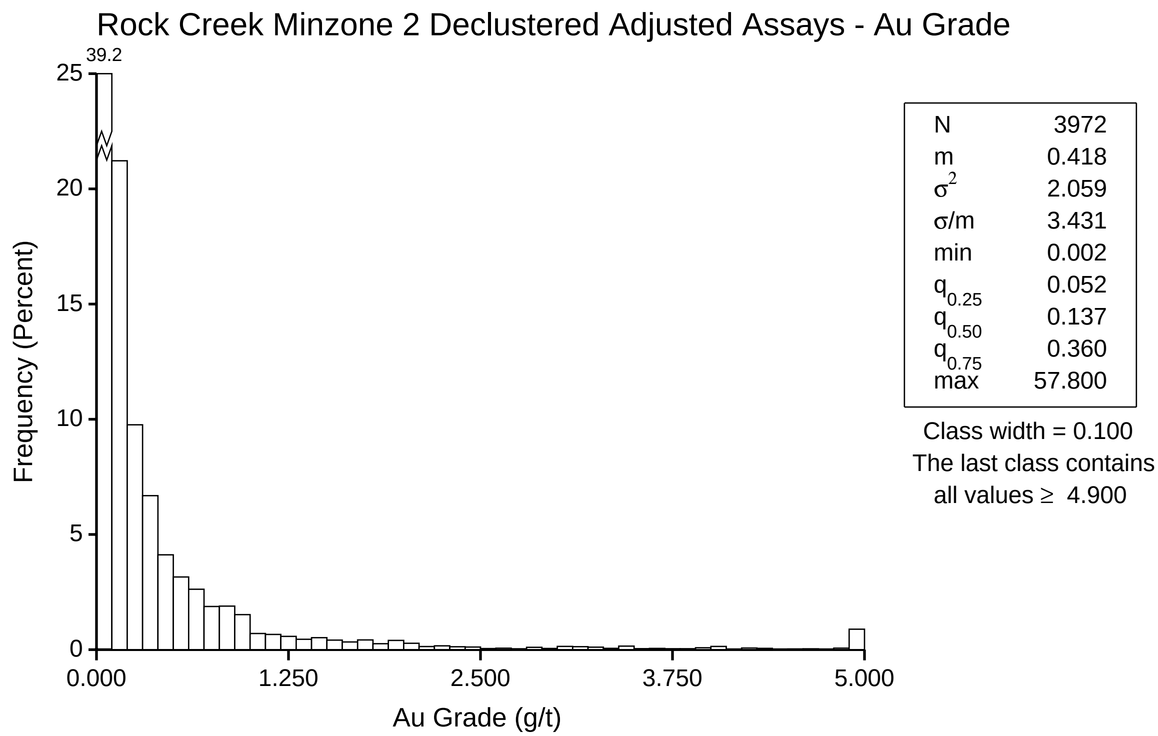
Rock Creek Minzone 10 Declustered Adjusted Assays - Au Grade
100
10
1.0
0.10
0.010
Au Grade (g/t)
0.01
0.1
1
2
5
10
20
30
40
50
60
70
80
90
95
98
99
99.9
99.99
Cumulative Probability (percent)

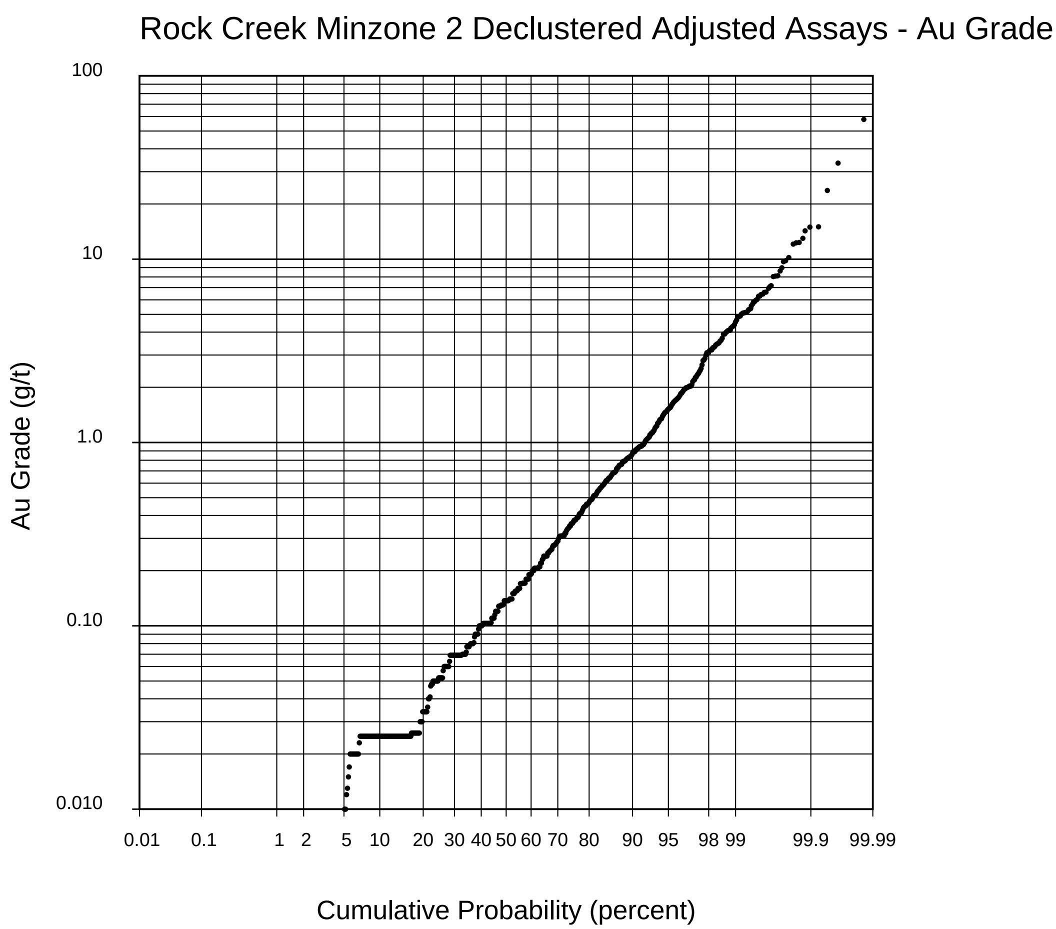


Rock Creek Minzone 3 Declustered Adjusted Assays - Au Grade
50.6
Frequency (Percent)
Au Grade (g/t)
0.000
1.250
2.500
3.750
5.000
N 647
m 0.596
σ2 8.662
σ/m 4.937
min 0.002
q0.25 0.025
q0.50 0.080
q0.75 0.437
max 70.695
Class width = 0.100
The last class contains
all values ≥ 4.900

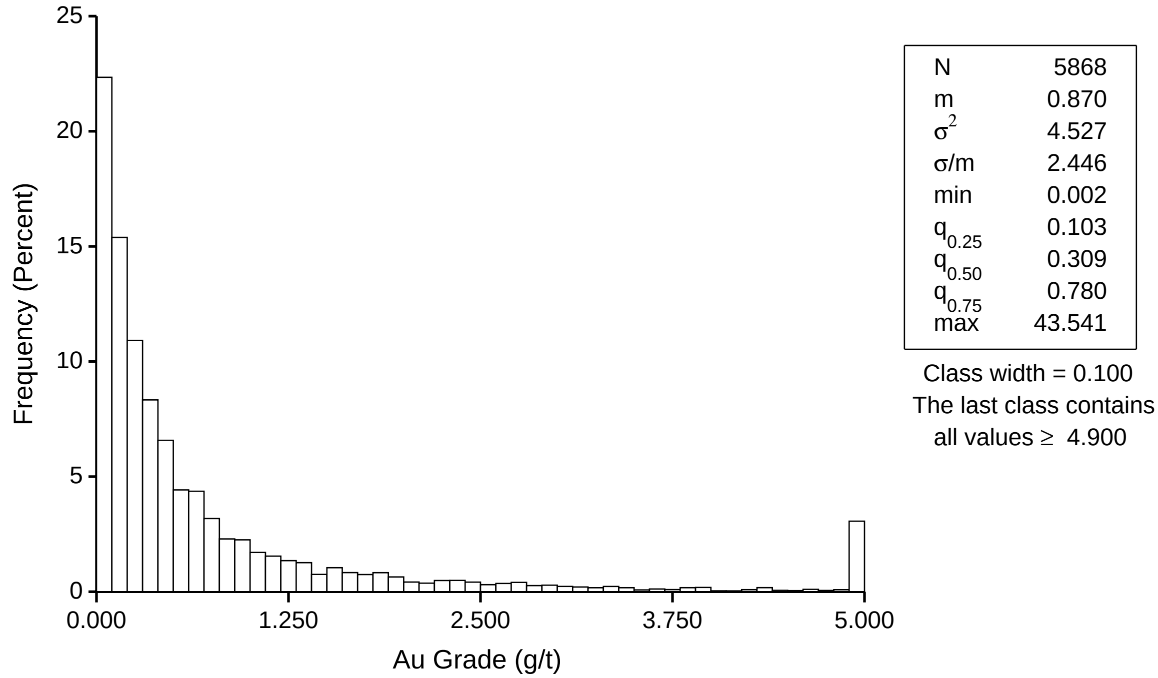


Rock Creek Minzone 3 Declustered Adjusted Assays - Au Grade
Au Grade (g/t)
100
10
1.0
0.10
0.010
0.01 0.1 1 2 5 10 20 30 40 50 60 70 80 90 95 98 99 99.9 99.99
Cumulative Probability (percent)

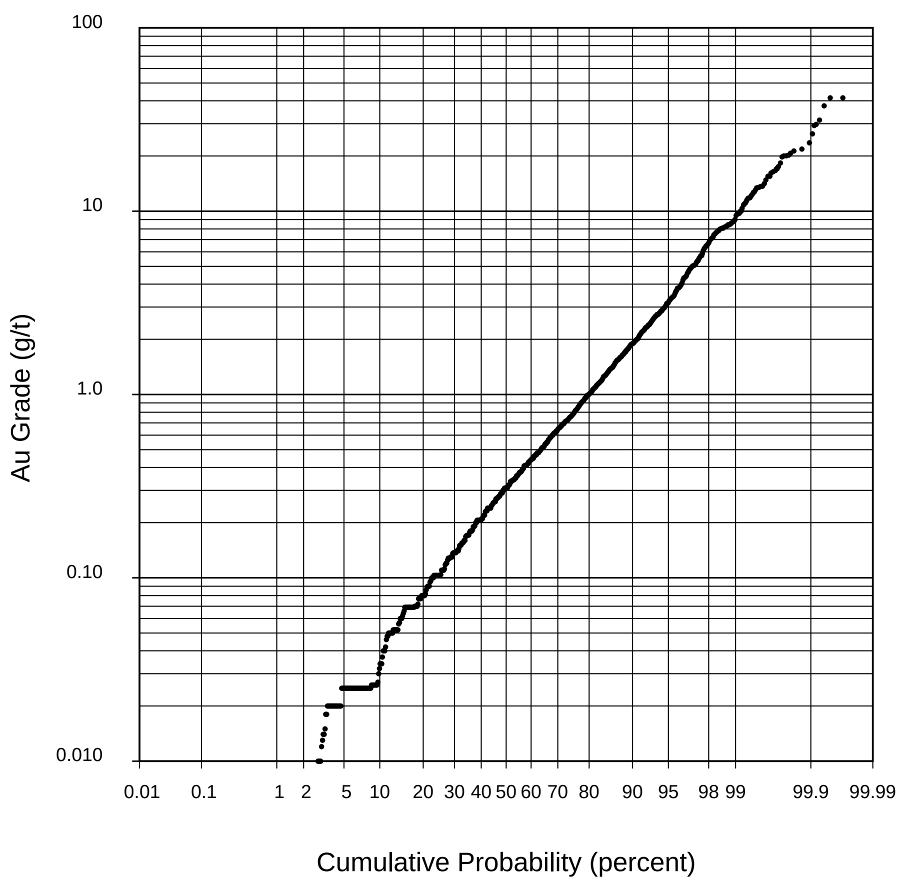

Rock Creek Minzone 2 Declustered Adjusted Assays - Au Grade
39.2
Frequency (Percent)
Au Grade (g/t)
0.000
1.250
2.500
3.750
5.000
N 3972
m 0.418
σ2 2.059
σ/m 3.431
min 0.002
q0.25 0.052
q0.50 0.137
q0.75 0.360
max 57.800
Class width = 0.100
The last class contains
all values ≥ 4.900

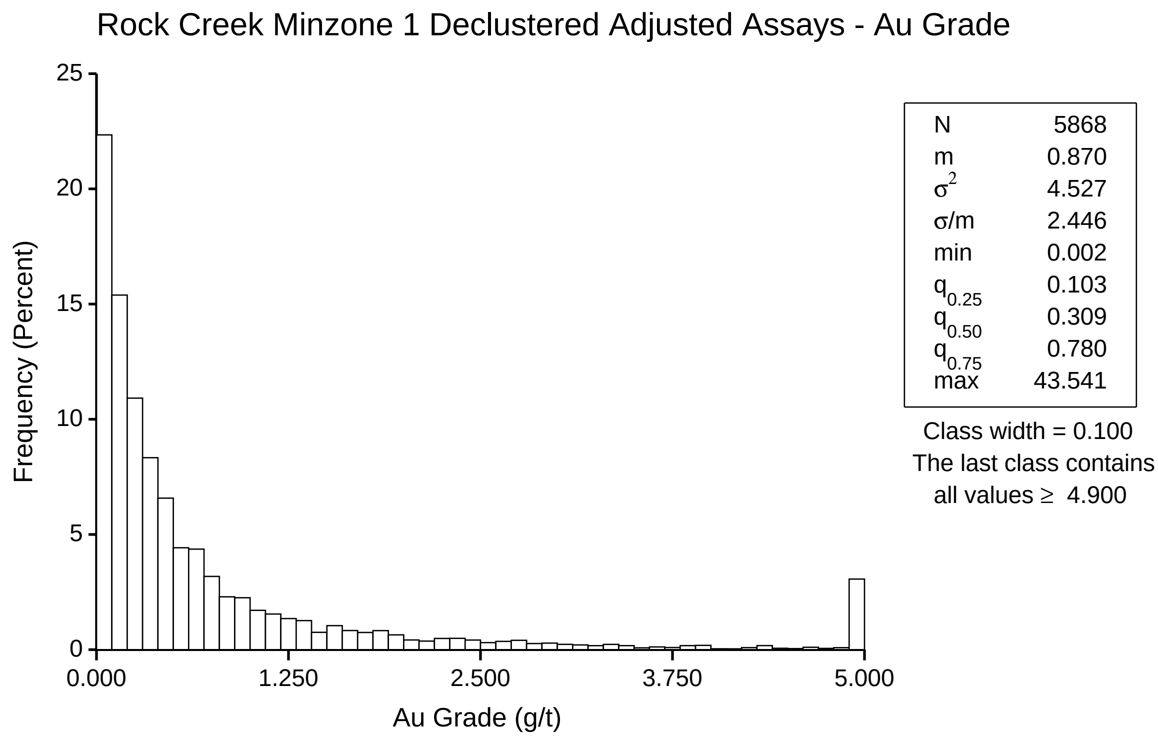

Rock Creek Minzone 2 Declustered Adjusted Assays - Au Grade
Au Grade (g/t)
100
10
1.0
0.10
0.010
0.01 0.1 1 2 5 10 20 30 40 50 60 70 80 90 95 98 99 99.9 99.99
Cumulative Probability (percent)

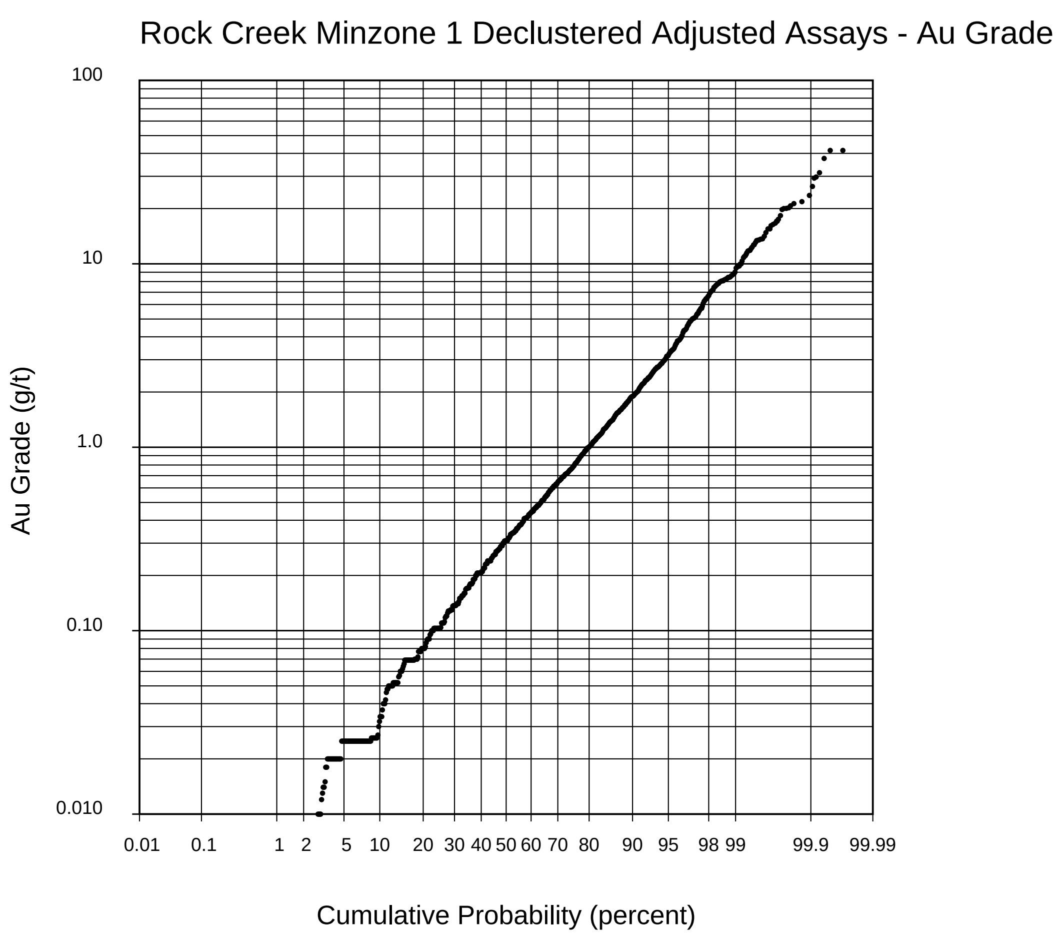
Rock Creek Minzone 1 Declustered Adjusted Assays - Au Grade



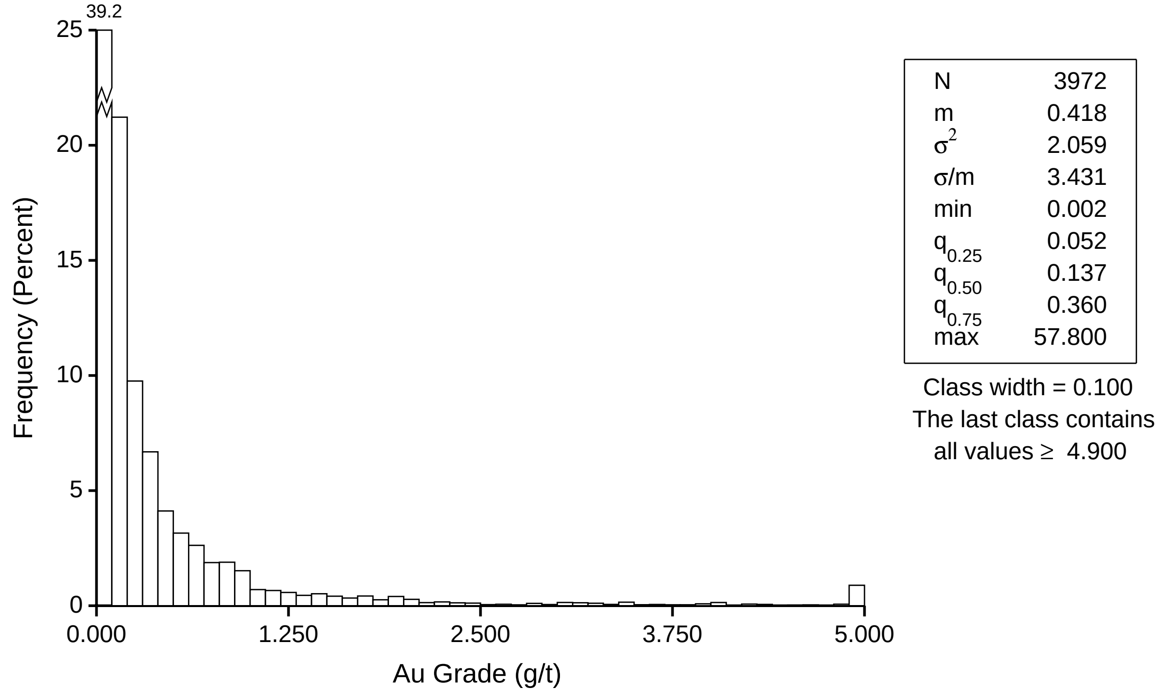
Rock Creek Minzone 1 Declustered Adjusted Assays - Au Grade



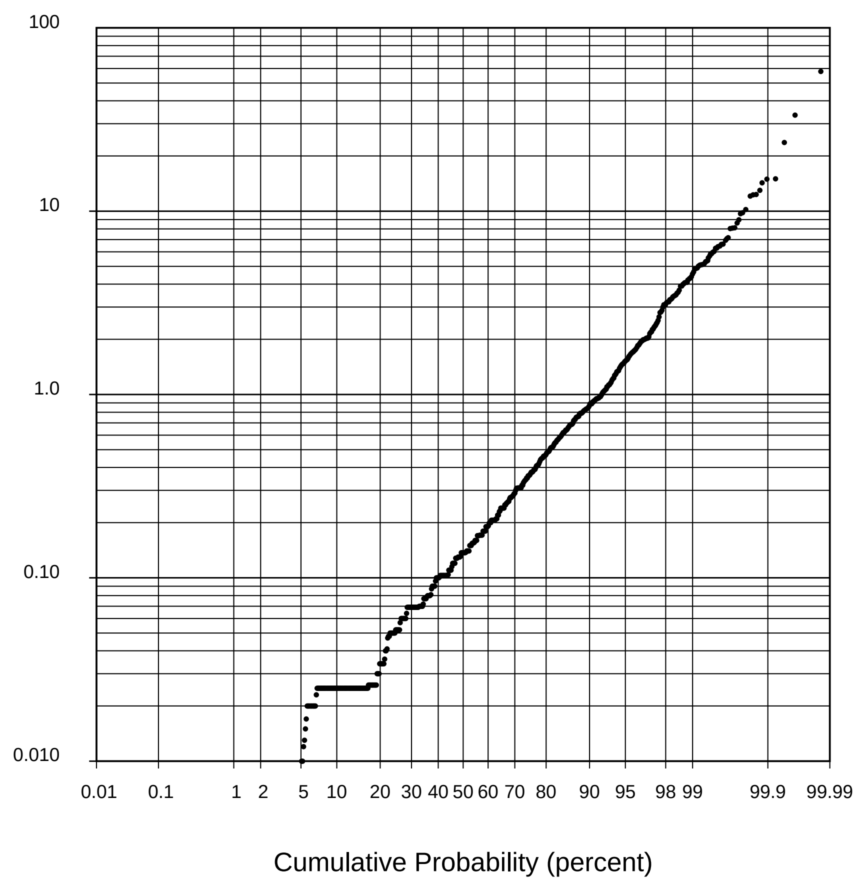

Rock Creek Minzone 1 Declustered Adjusted Assays - Au Grade
Frequency (Percent)
25
20
15
10
5
0
0.000
1.250
2.500
3.750
5.000
Au Grade (g/t)
N 5868
m 0.870
σ² 4.527
σ/m 2.446
min 0.002
q0.25 0.103
q0.50 0.309
q0.75 0.780
max 43.541
Class width = 0.100
The last class contains
all values ≥ 4.900


Rock Creek Minzone 1 Declustered Adjusted Assays - Au Grade
Au Grade (g/t)
100
10
1.0
0.10
0.010
0.01
0.1
1
2
5
10
20
30
40
50
60
70
80
90
95
98
99
99.9
99.99
Cumulative Probability (percent)

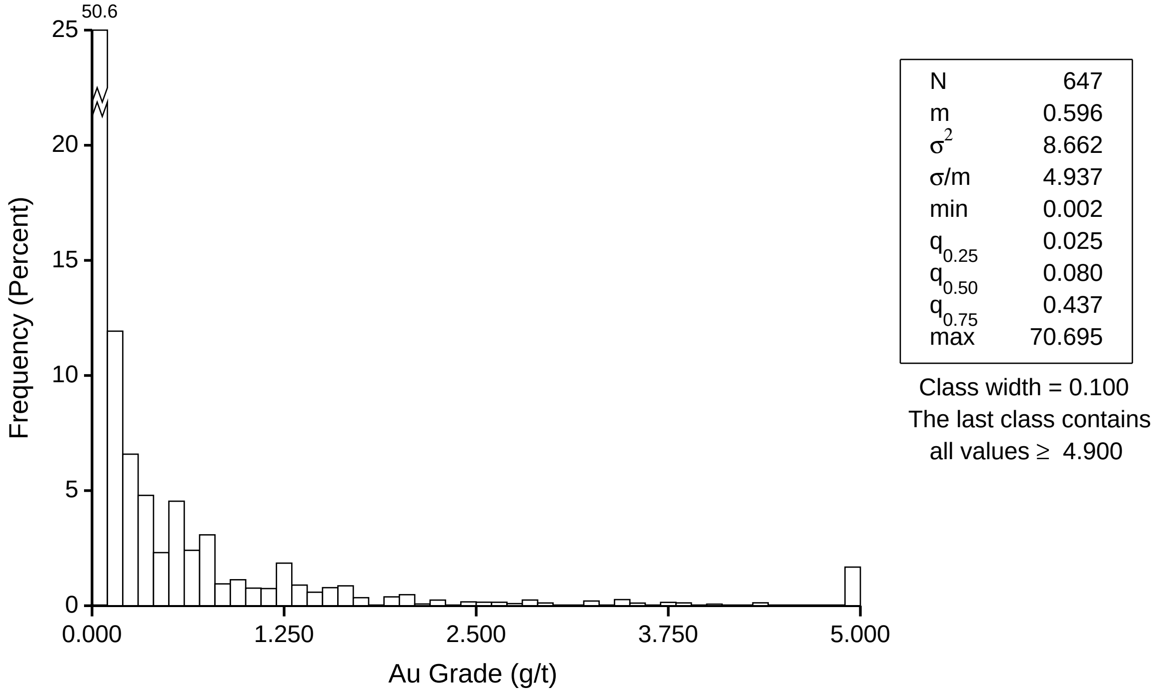
Rock Creek Minzone 2 Declustered Adjusted Assays - Au Grade



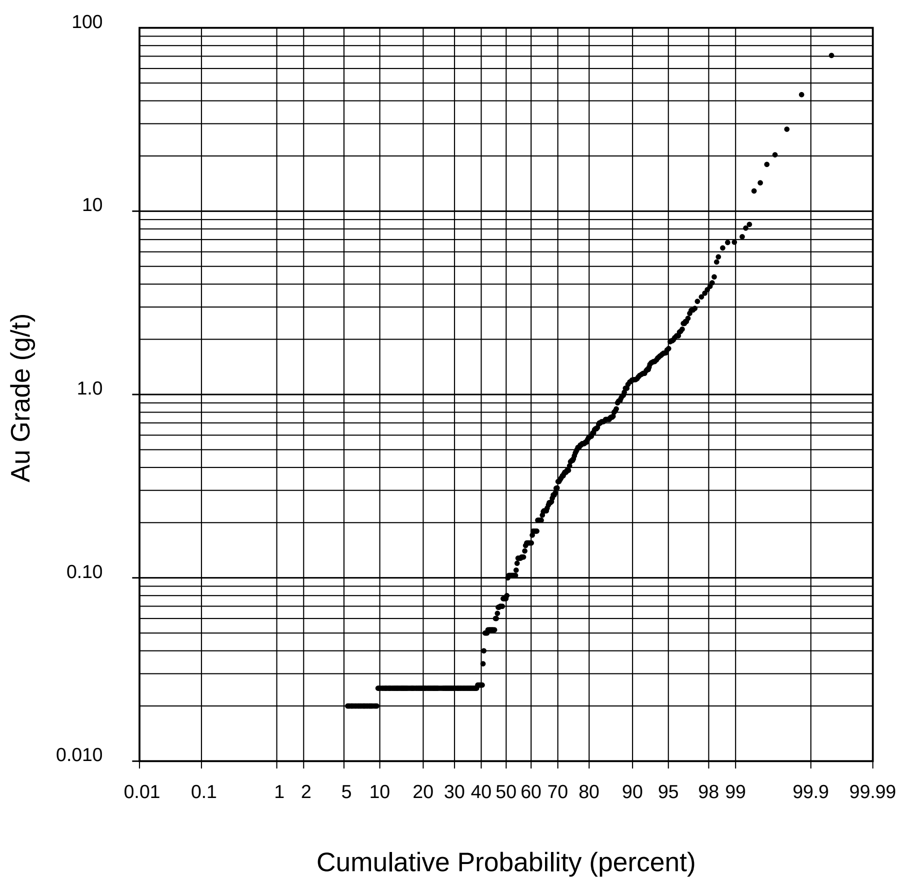
Rock Creek Minzone 2 Declustered Adjusted Assays - Au Grade

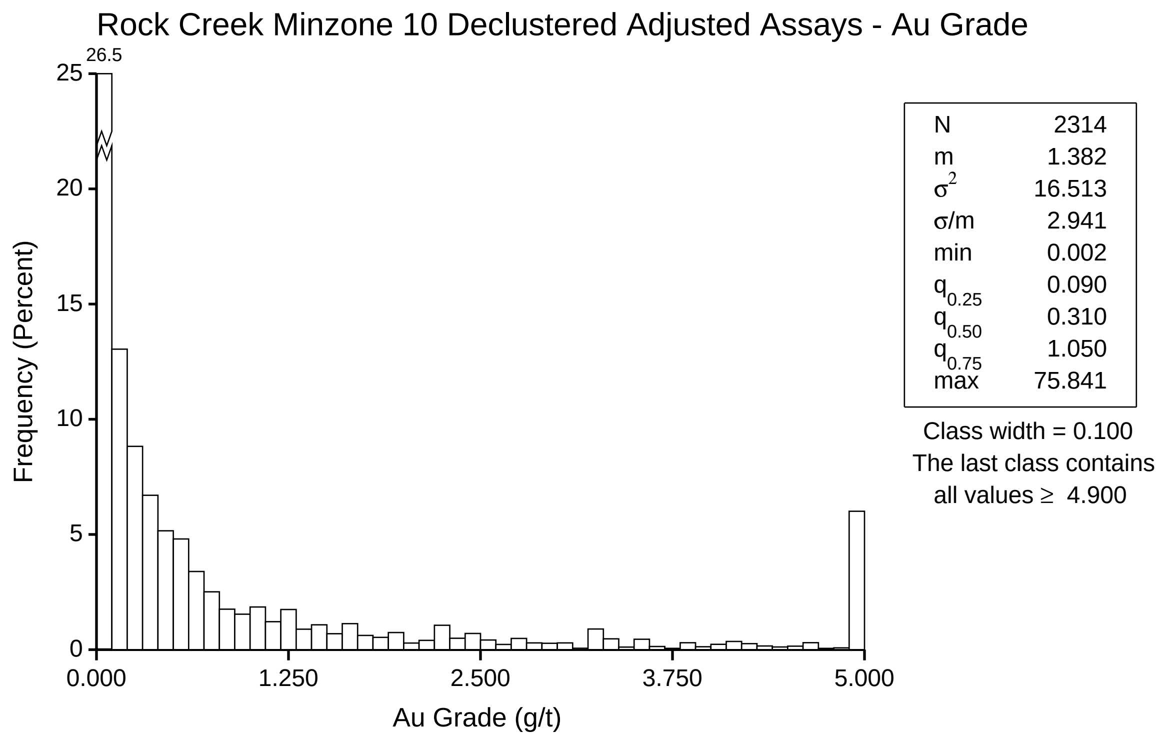


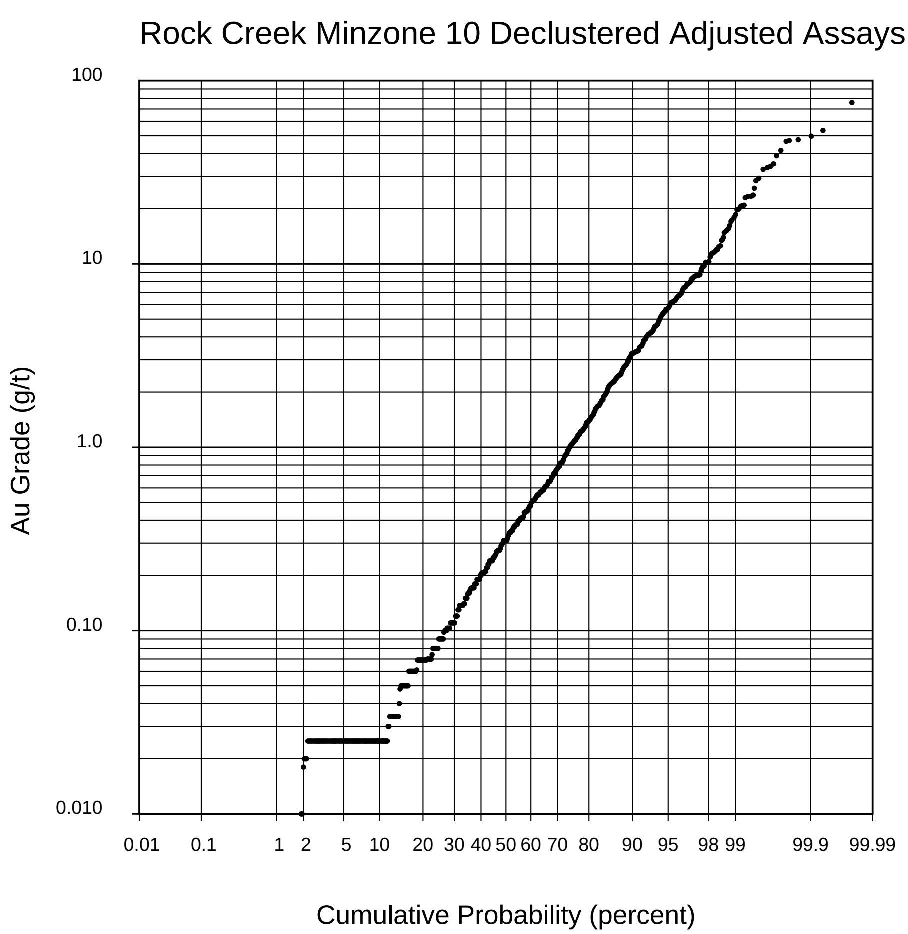
Rock Creek Minzone 3 Declustered Adjusted Assays - Au Grade

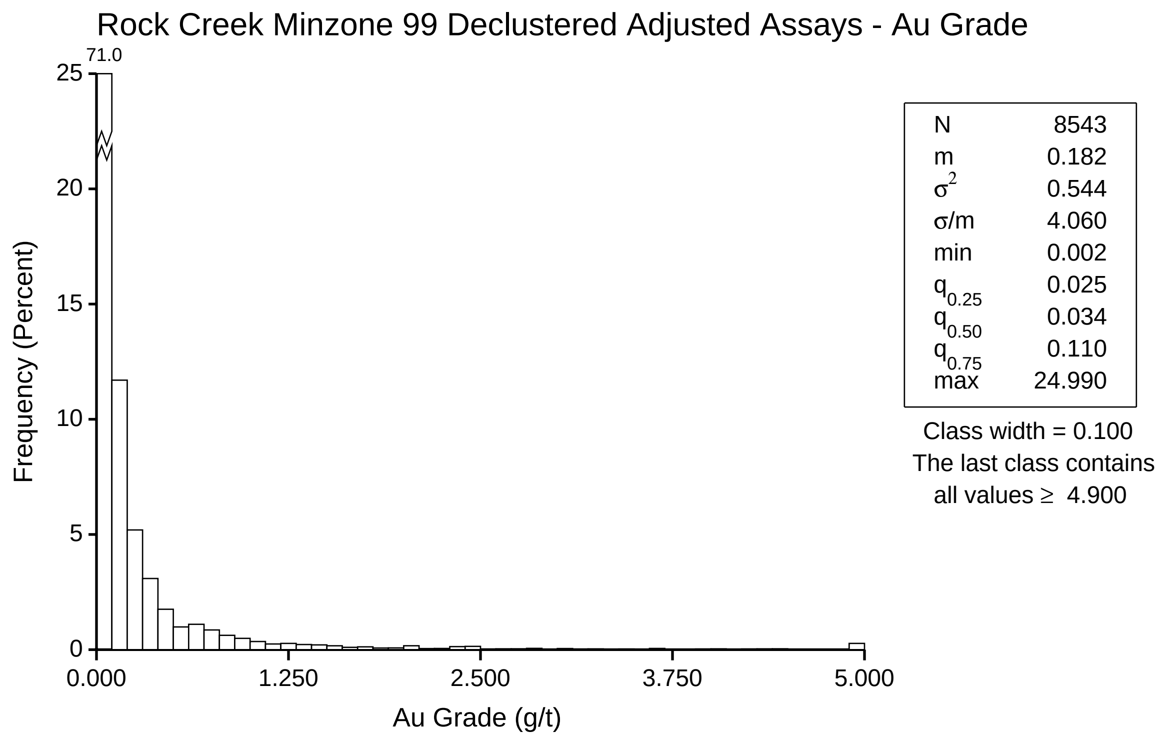


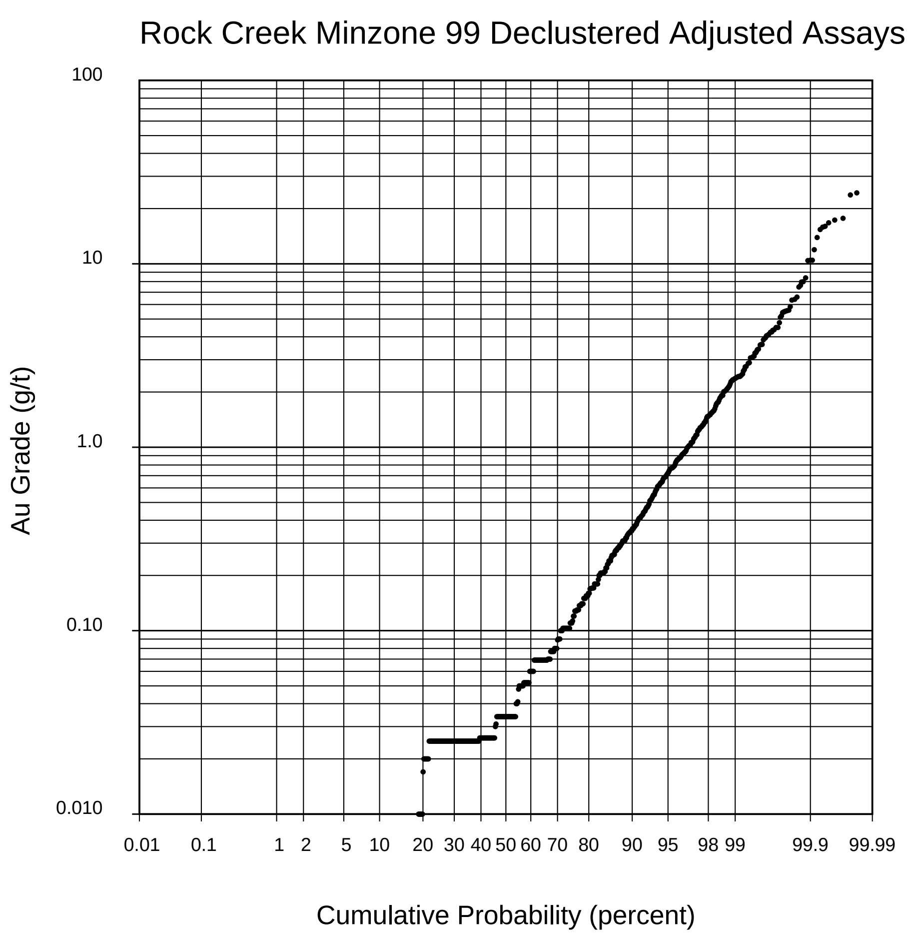
Rock Creek Minzone 3 Declustered Adjusted Assays - Au Grade

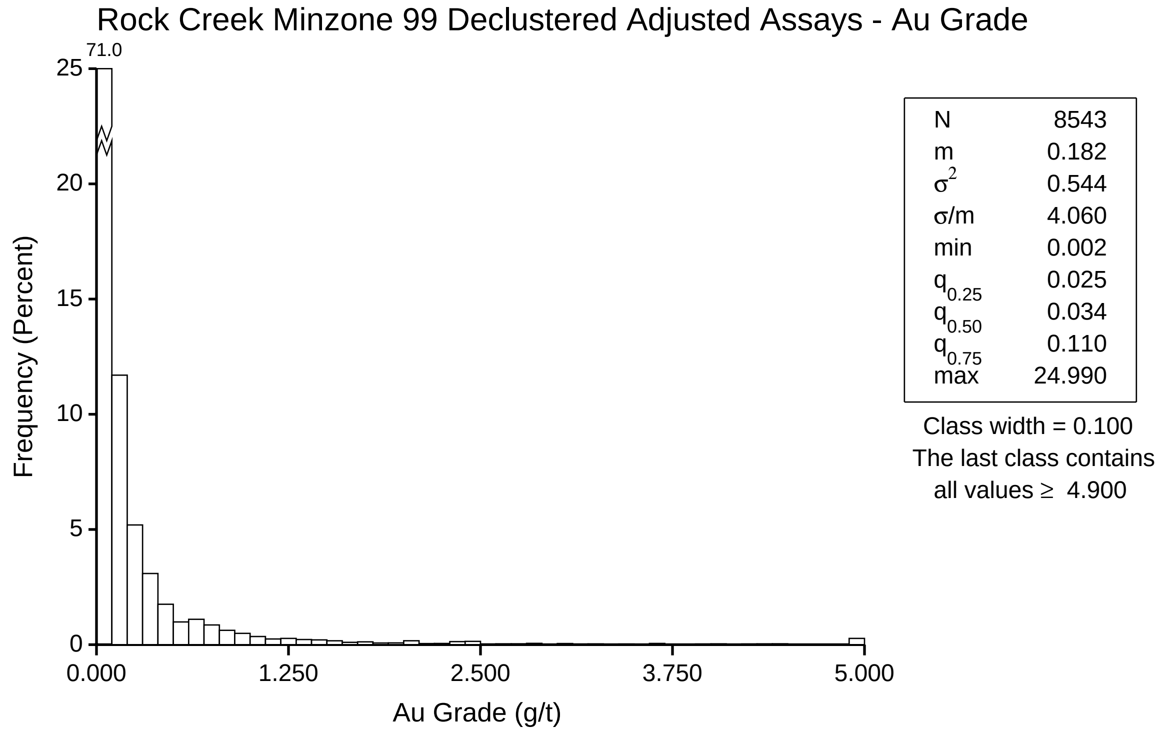


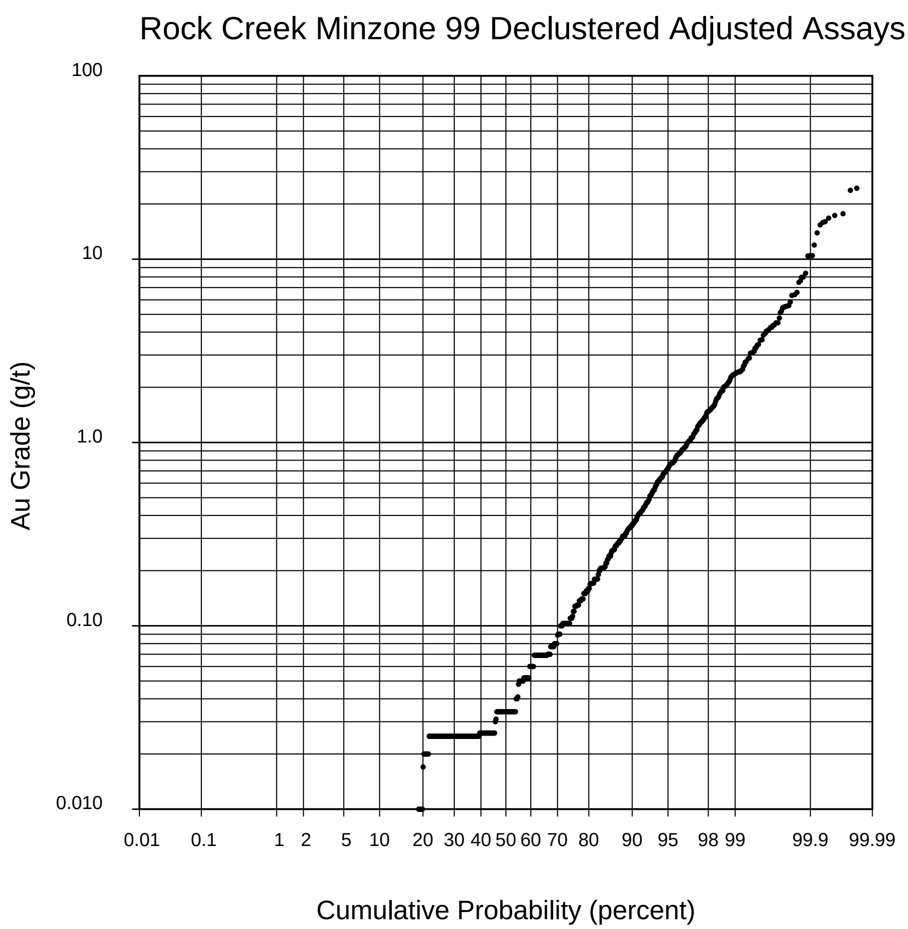

Rock Creek Minzone 10 Declustered Adjusted Assays - Au Grade
Frequency (Percent)
Au Grade (g/t)
N 2314
m 1.382
σ2 16.513
σ/m 2.941
min 0.002
q0.25 0.090
q0.50 0.310
q0.75 1.050
max 75.841
Class width = 0.100
The last class contains
all values ≥ 4.900


Rock Creek Minzone 10 Declustered Adjusted Assays - Au Grade
Au Grade (g/t)
Cumulative Probability (percent)


Rock Creek Minzone 99 Declustered Adjusted Assays - Au Grade
71.0
Frequency (Percent)
Au Grade (g/t)
0.000
1.250
2.500
3.750
5.000
N 8543
m 0.182
σ2 0.544
σ/m 4.060
min 0.002
q0.25 0.025
q0.50 0.034
q0.75 0.110
max 24.990
Class width = 0.100
The last class contains
all values ≥ 4.900

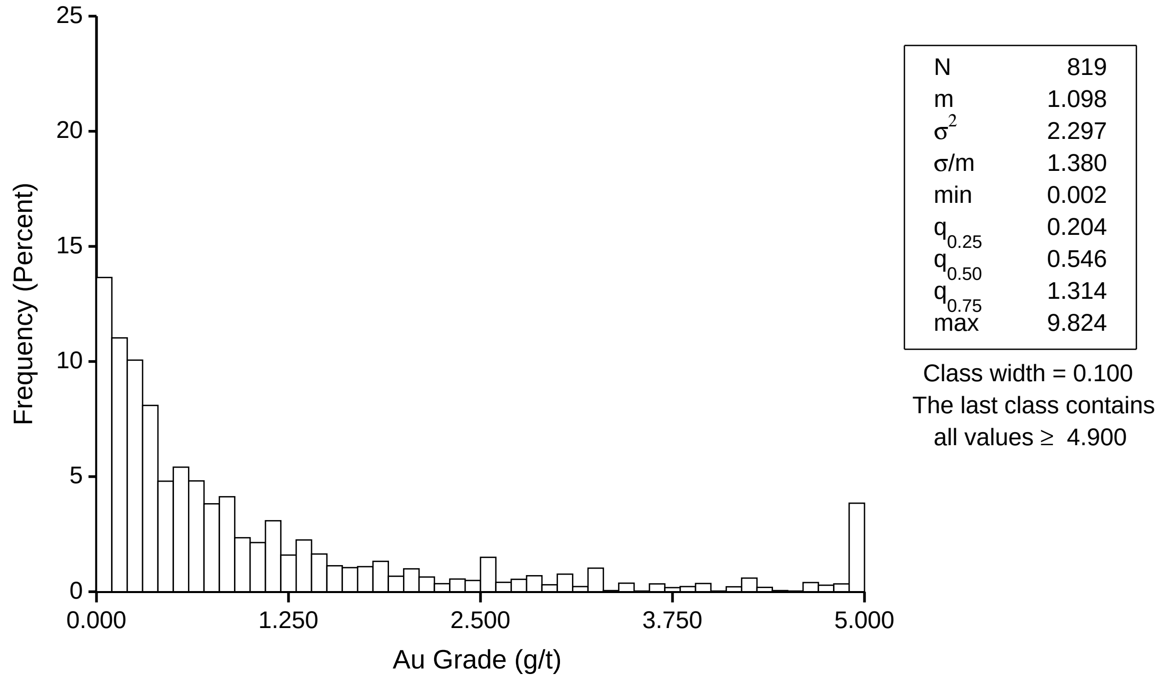

Rock Creek Minzone 99 Declustered Adjusted Assays - Au Grade
Au Grade (g/t)
100
10
1.0
0.10
0.010
0.01 0.1 1 2 5 10 20 30 40 50 60 70 80 90 95 98 99 99.9 99.99
Cumulative Probability (percent)


Rock Creek Minzone 99 Declustered Adjusted Assays - Au Grade
71.0
25
20
15
10
5
0
Frequency (Percent)
0.000
1.250
2.500
3.750
5.000
Au Grade (g/t)
N 8543
m 0.182
σ2 0.544
σ/m 4.060
min 0.002
q0.25 0.025
q0.50 0.034
q0.75 0.110
max 24.990
Class width = 0.100
The last class contains
all values ≥ 4.900

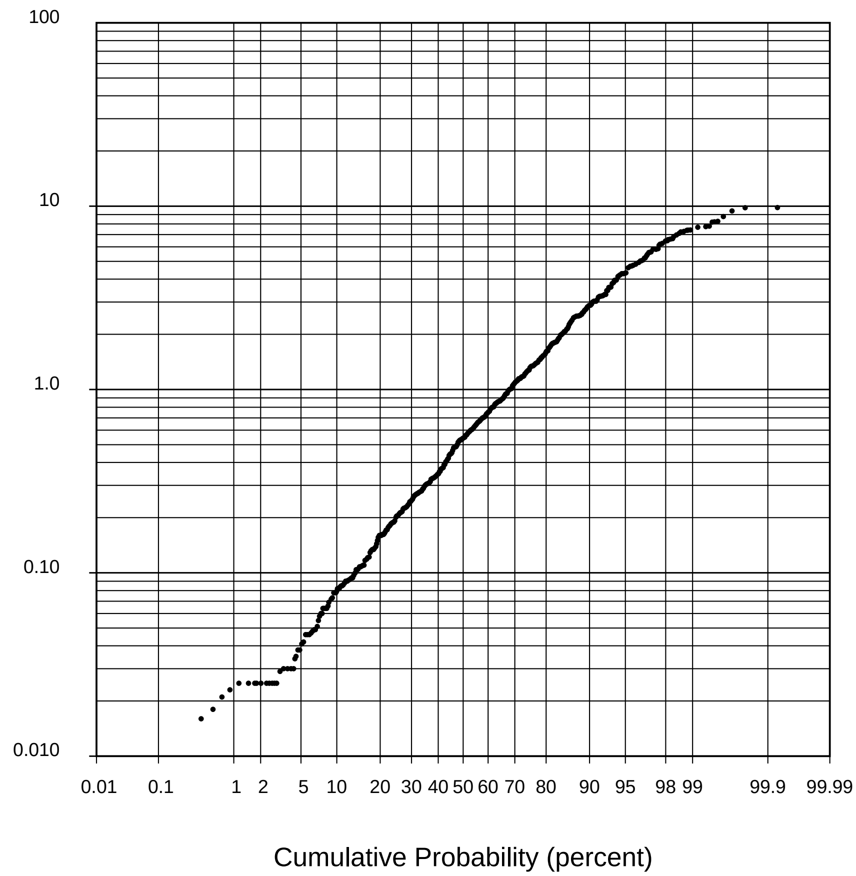

Rock Creek Minzone 99 Declustered Adjusted Assays - Au Grade
100
10
1.0
0.10
0.010
Au Grade (g/t)
0.01 0.1 1 2 5 10 20 30 40 50 60 70 80 90 95 98 99 99.9 99.99
Cumulative Probability (percent)

C-2 Composite Histograms & Probability Plots

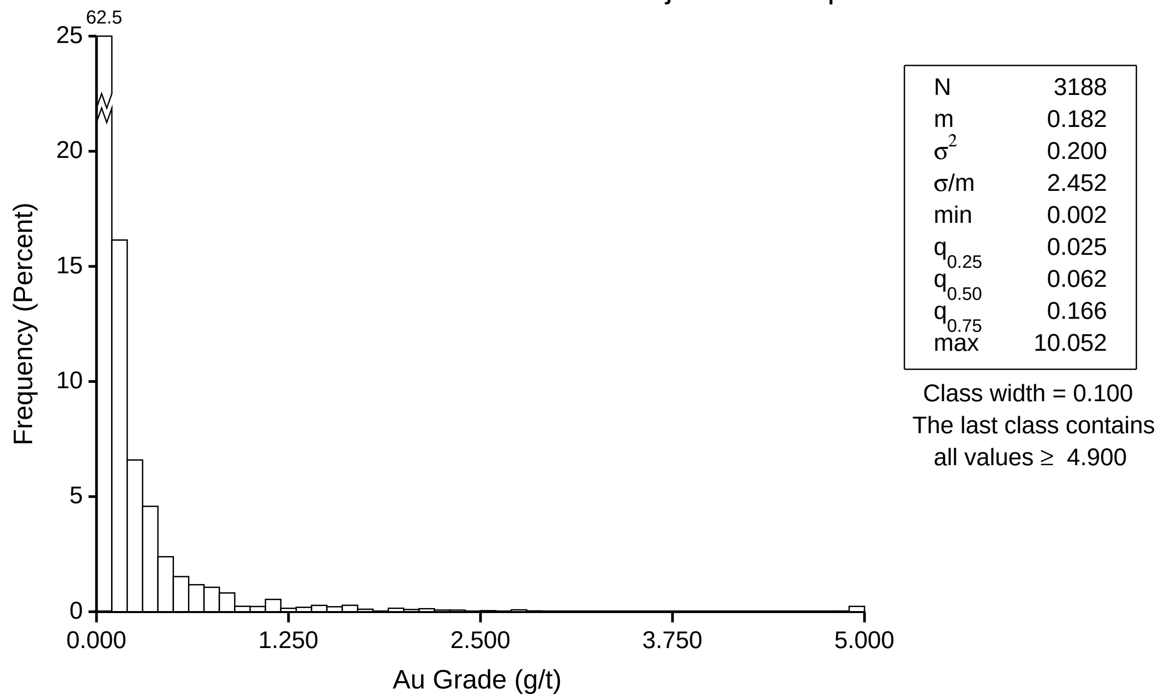
Rock Creek Minzone 10 Declustered Adjusted Composites - Au Grade (<=10 g/t)



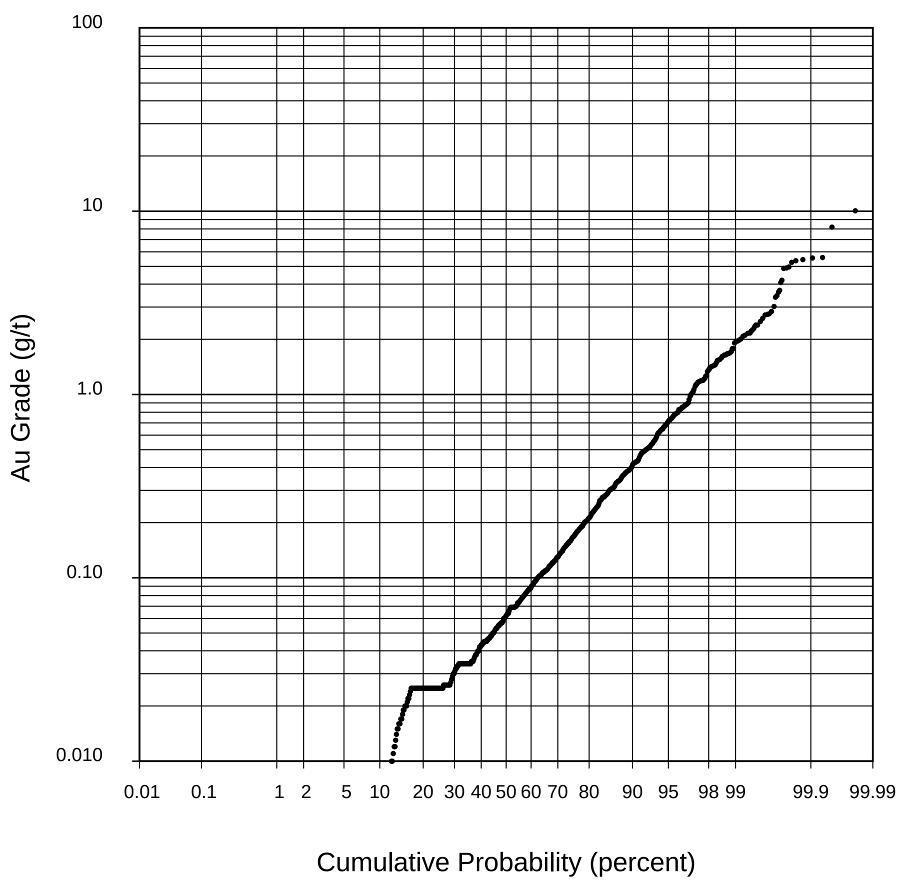
Rock Creek Minzone 10 Declustered Adjusted Composites - Au Grade (<=10 g/t)

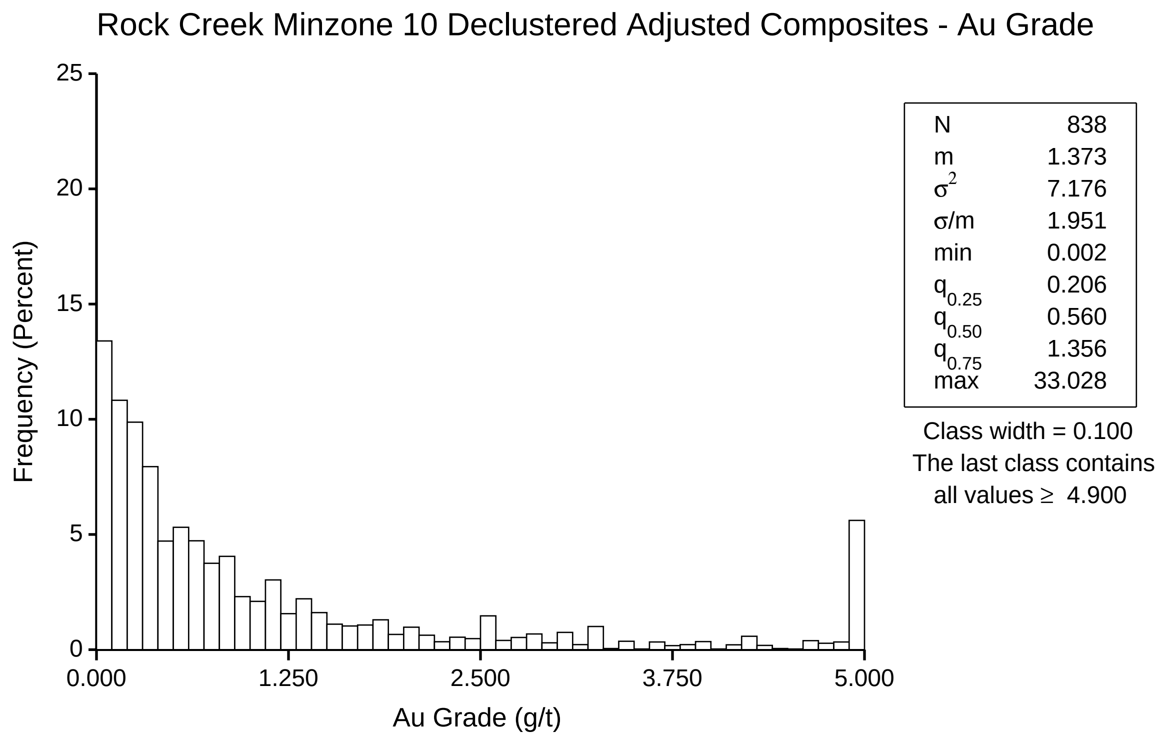


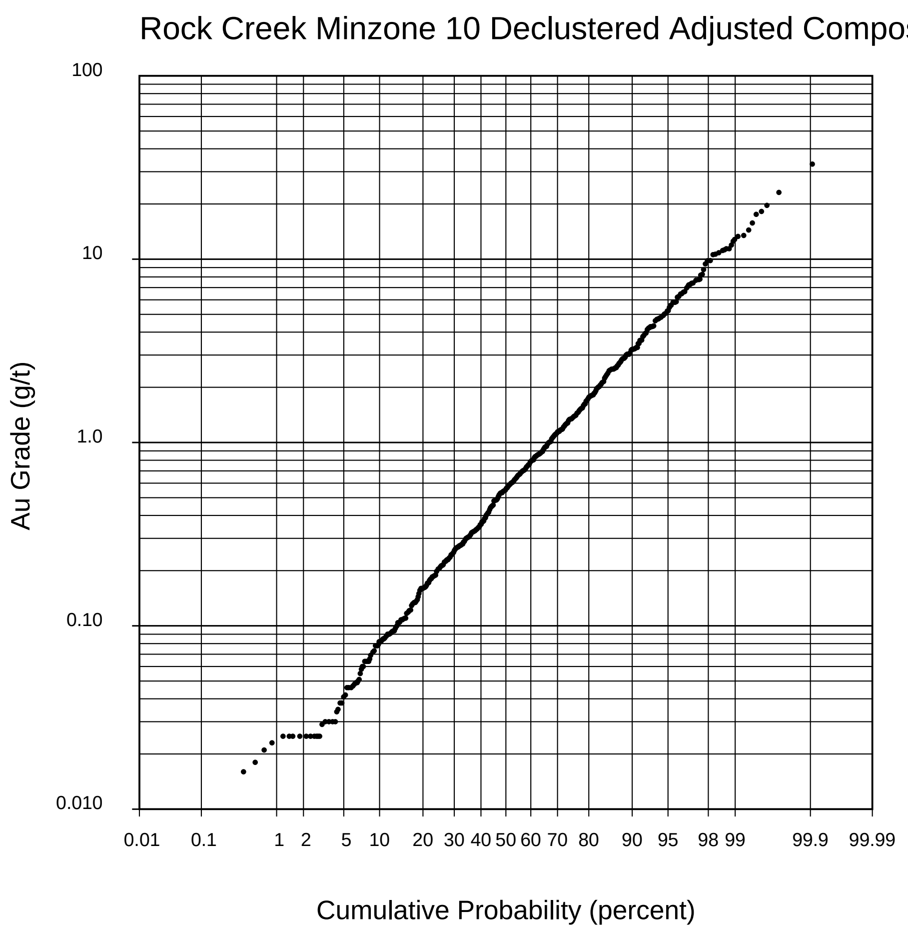
Rock Creek Minzone 99 Declustered Adjusted Composites - Au Grade



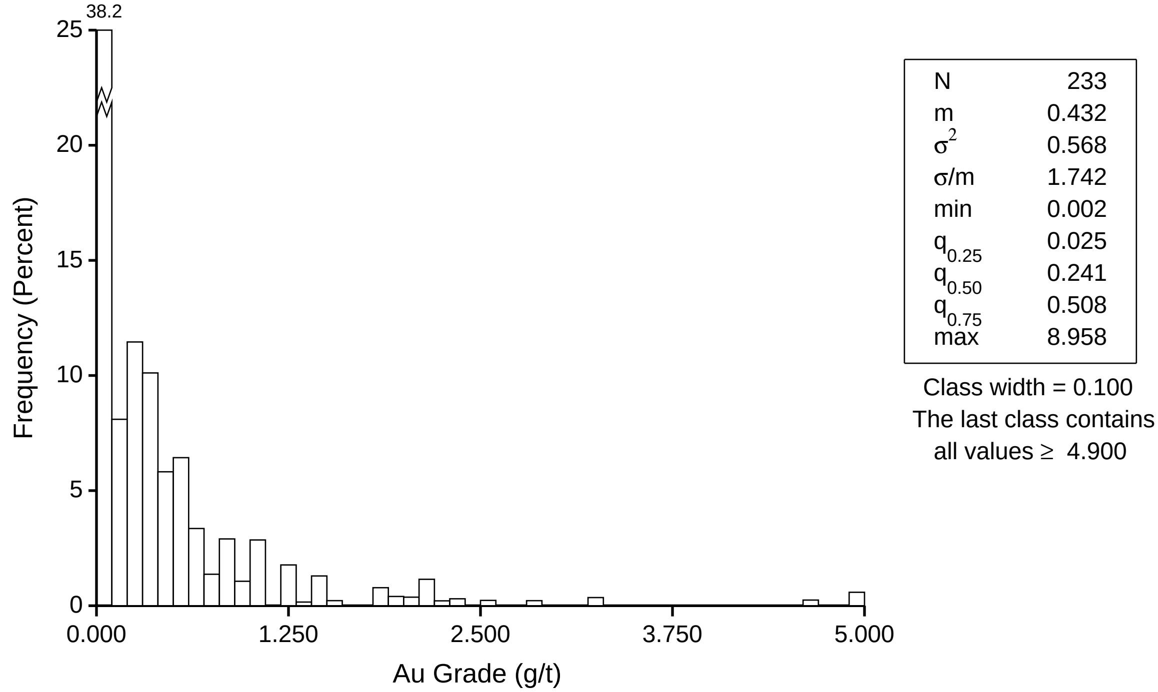
Rock Creek Minzone 99 Declustered Adjusted Composites - Au Grade



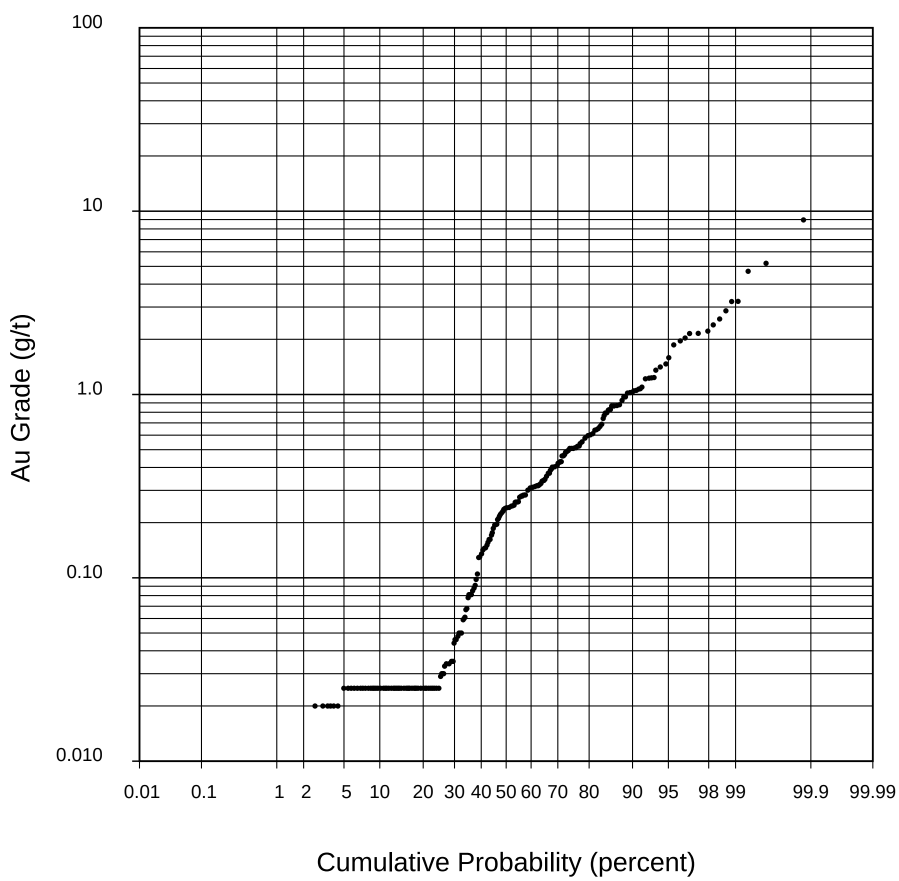

Rock Creek Minzone 10 Declustered Adjusted Composites - Au Grade
Frequency (Percent)
25
20
15
10
5
0
0.000
1.250
2.500
3.750
5.000
Au Grade (g/t)
N 838
m 1.373
σ2 7.176
σ/m 1.951
min 0.002
q0.25 0.206
q0.50 0.560
q0.75 1.356
max 33.028
Class width = 0.100
The last class contains
all values ≥ 4.900

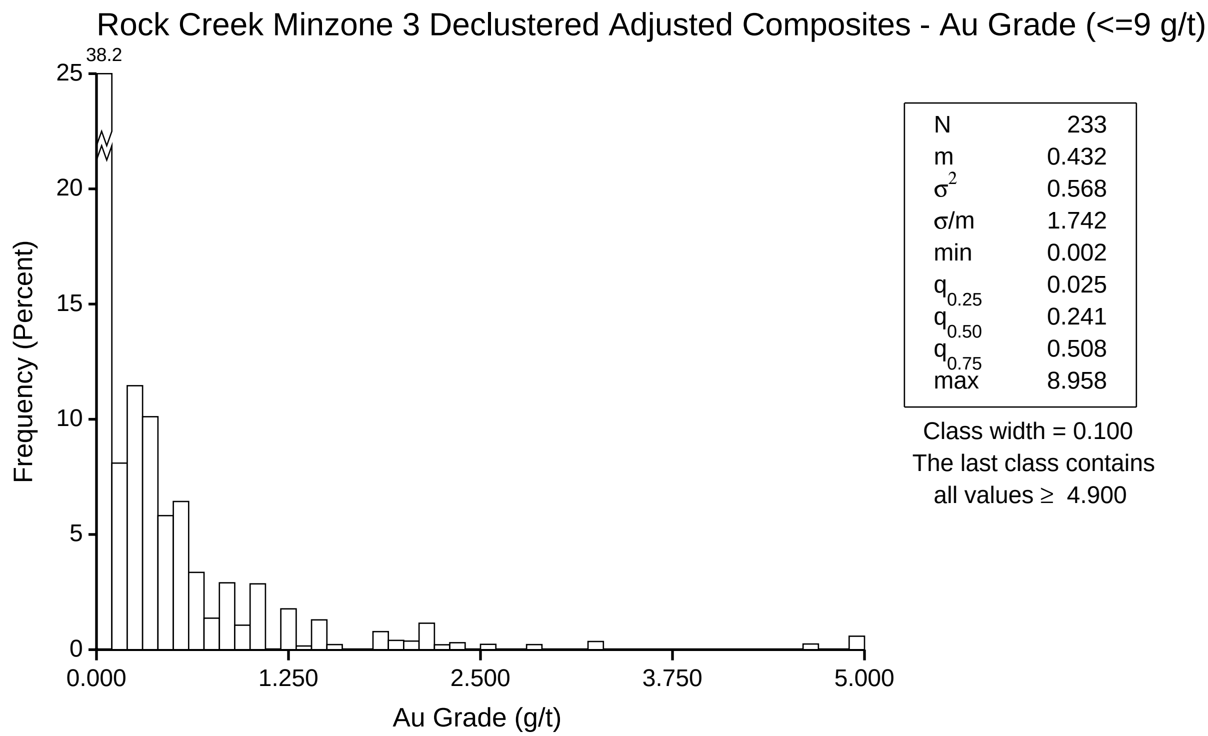

Rock Creek Minzone 10 Declustered Adjusted Composites - Au Grade
Au Grade (g/t)
100
10
1.0
0.10
0.010
0.01
0.1
1
2
5
10
20
30
40
50
60
70
80
90
95
98
99
99.9
99.99
Cumulative Probability (percent)

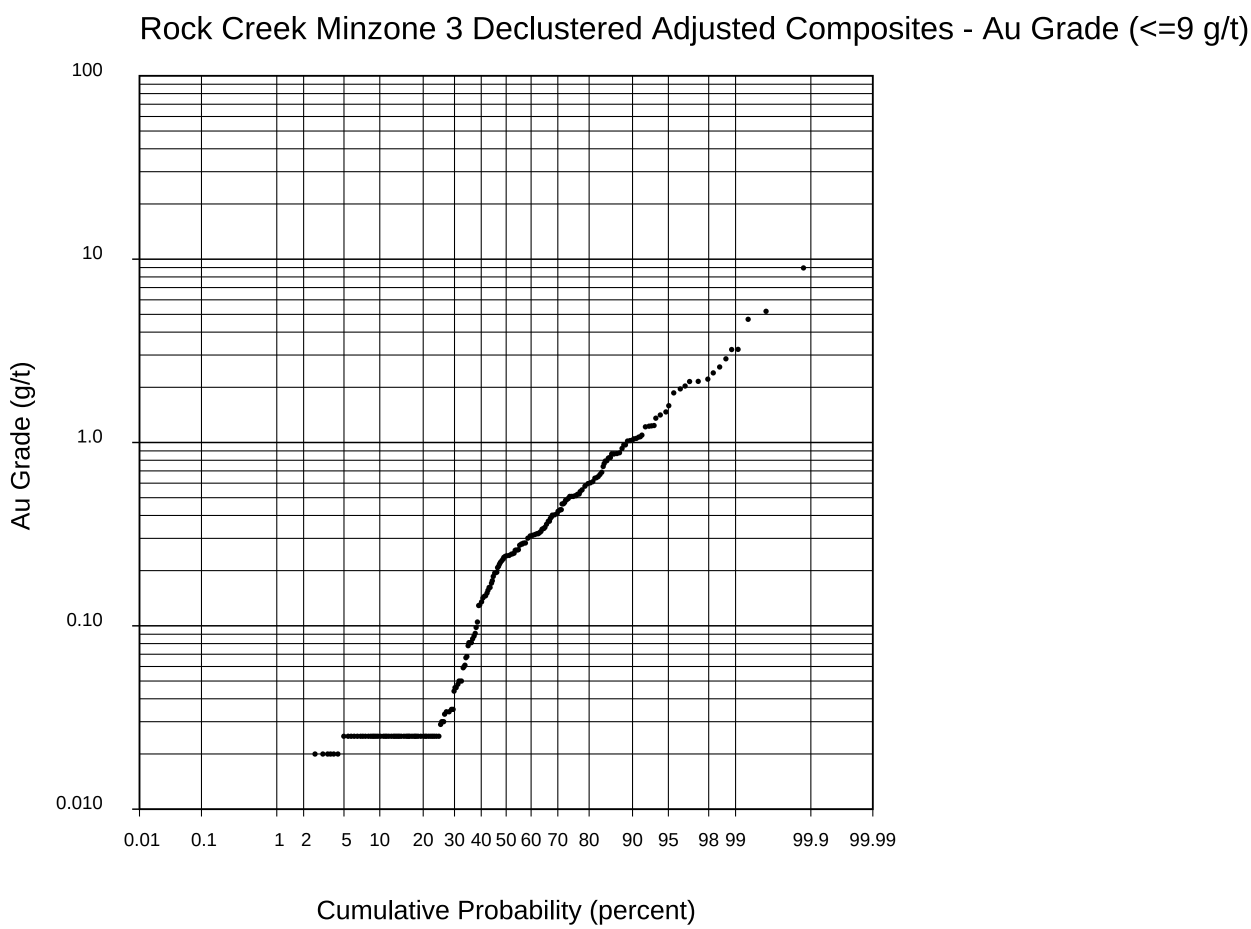
Rock Creek Minzone 3 Declustered Adjusted Composites - Au Grade (<=10 g/t)



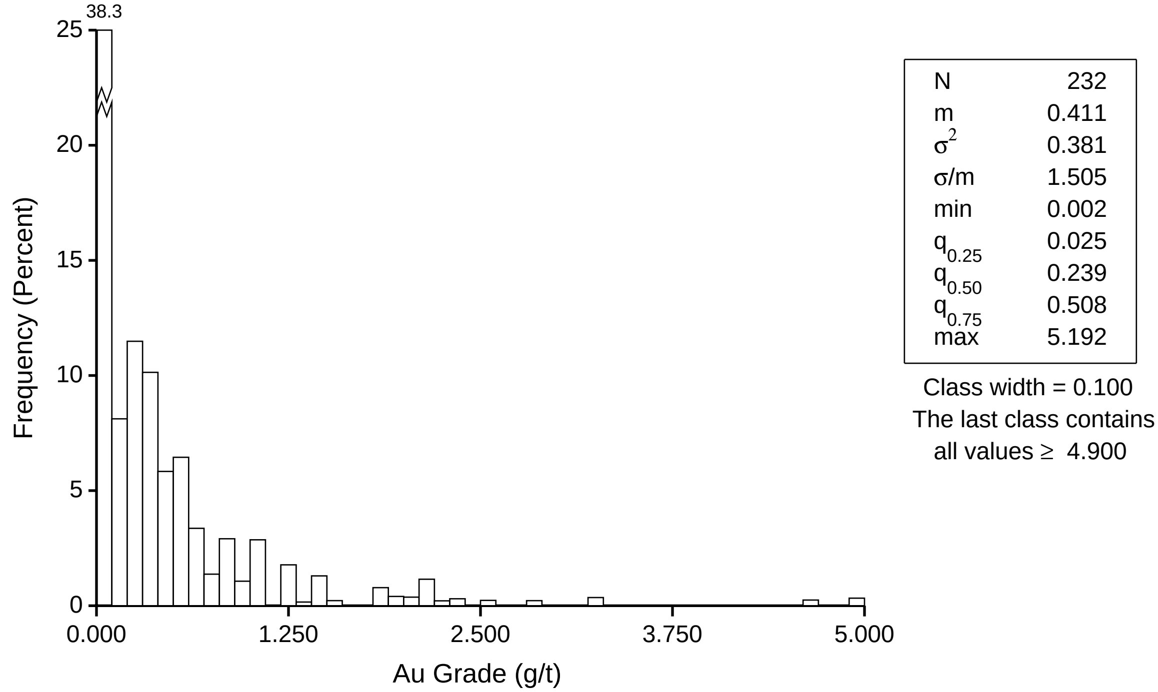
Rock Creek Minzone 3 Declustered Adjusted Composites - Au Grade (<=10 g/t)



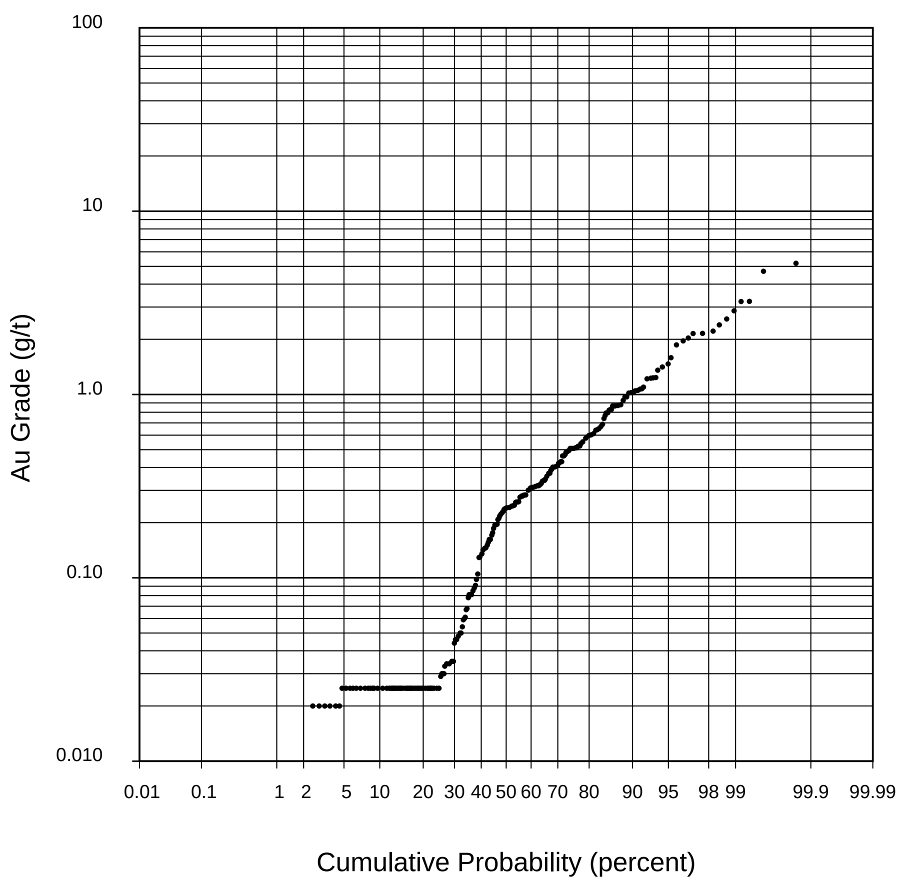

Rock Creek Minzone 3 Declustered Adjusted Composites - Au Grade (<=9 g/t)
38.2
25
20
15
10
5
0
Frequency (Percent)
0.000
1.250
2.500
3.750
5.000
Au Grade (g/t)
N 233
m 0.432
σ2 0.568
σ/m 1.742
min 0.002
q0.25 0.025
q0.50 0.241
q0.75 0.508
max 8.958
Class width = 0.100
The last class contains
all values ≥ 4.900

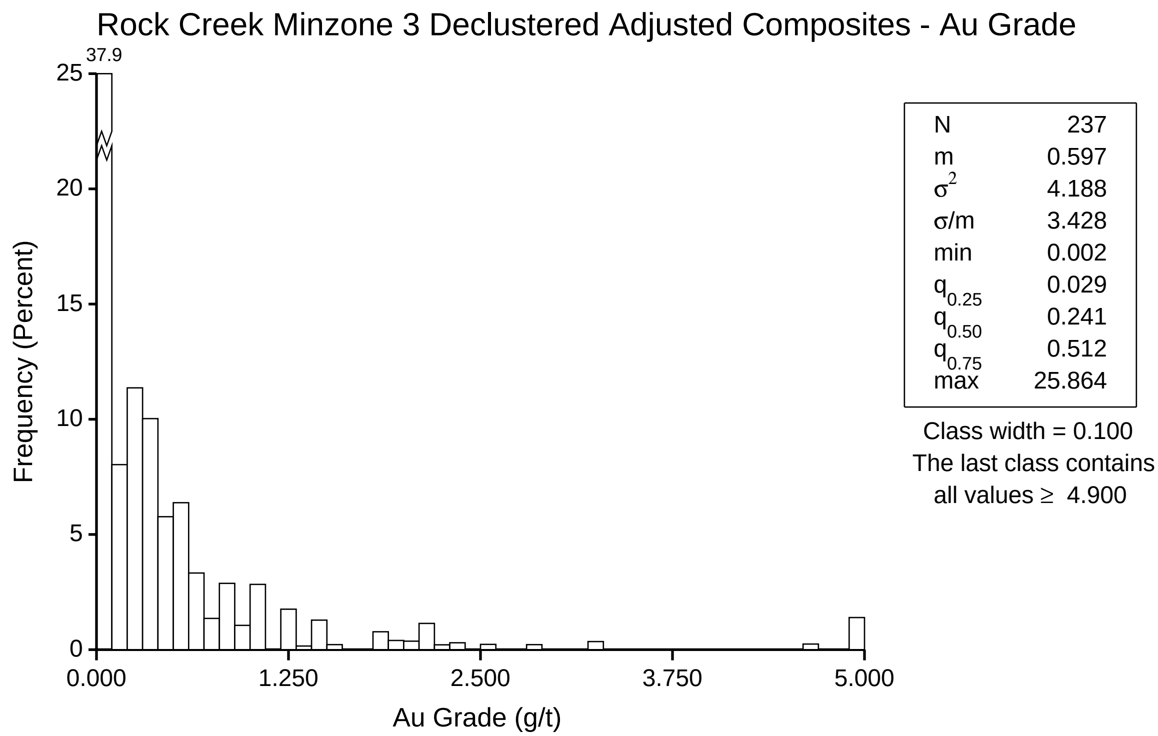

Rock Creek Minzone 3 Declustered Adjusted Composites - Au Grade (<=9 g/t)
100
10
1.0
0.10
0.010
Au Grade (g/t)
0.01
0.1
1
2
5
10
20
30
40
50
60
70
80
90
95
98
99
99.9
99.99
Cumulative Probability (percent)

Rock Creek Minzone 3 Declustered Adjusted Composites - Au Grade (<=8 g/t)

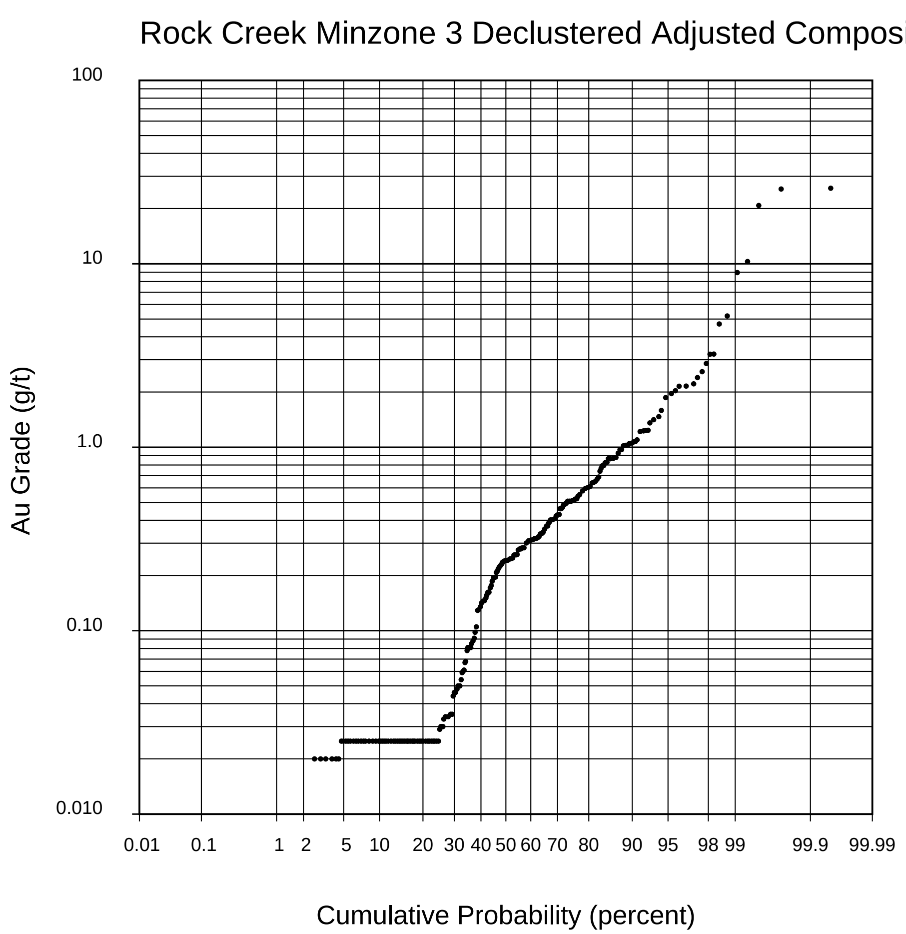


Rock Creek Minzone 3 Declustered Adjusted Composites - Au Grade (<=8 g/t)

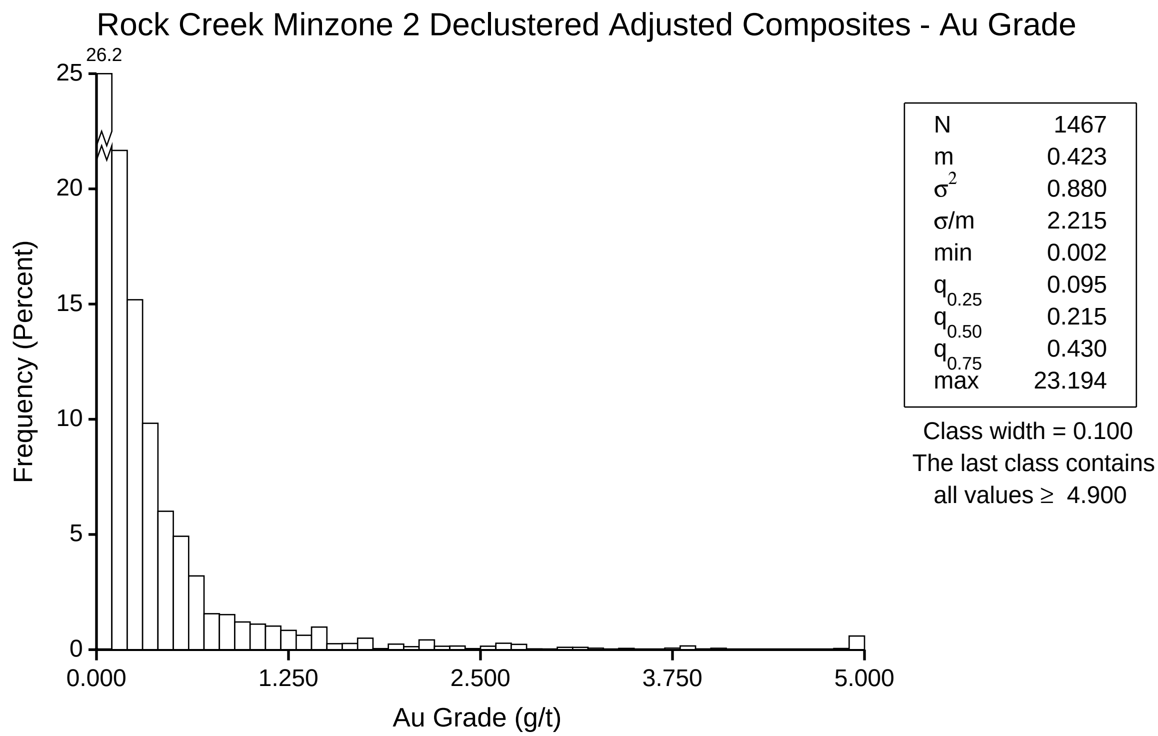


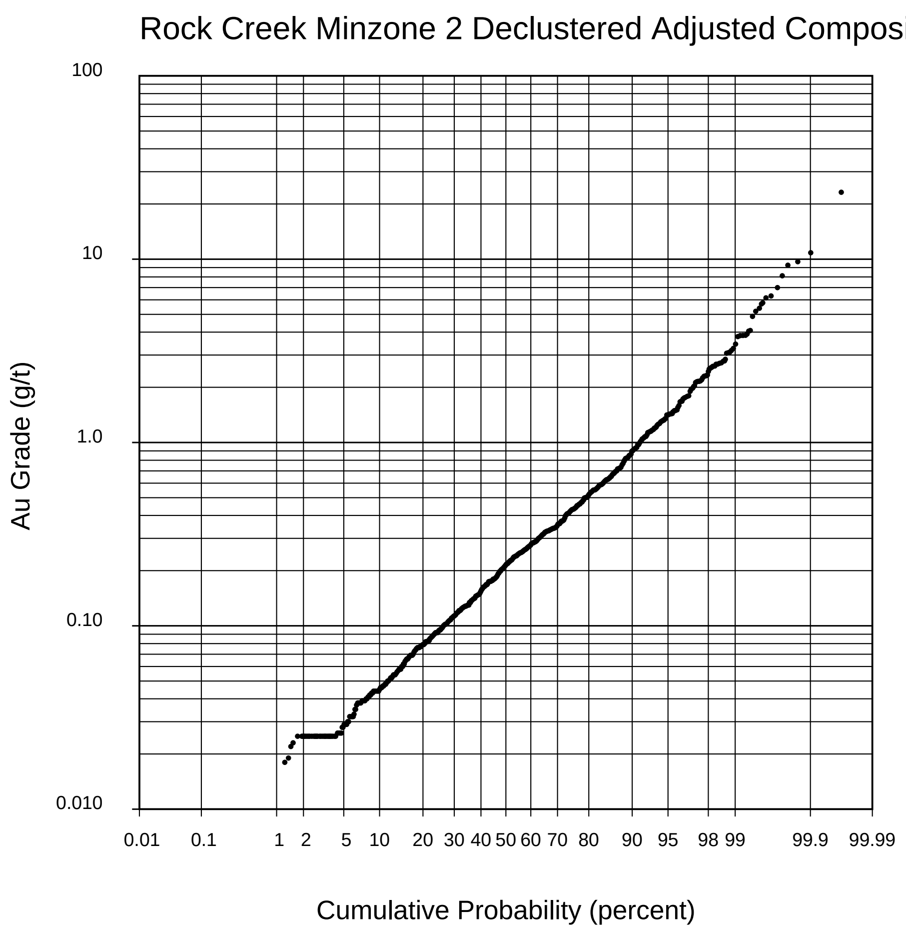


Rock Creek Minzone 3 Declustered Adjusted Composites - Au Grade
37.9
25
20
15
10
5
0
Frequency (Percent)
0.000
1.250
2.500
3.750
5.000
Au Grade (g/t)
N 237
m 0.597
σ2 4.188
σ/m 3.428
min 0.002
q0.25 0.029
q0.50 0.241
q0.75 0.512
max 25.864
Class width = 0.100
The last class contains
all values ≥ 4.900

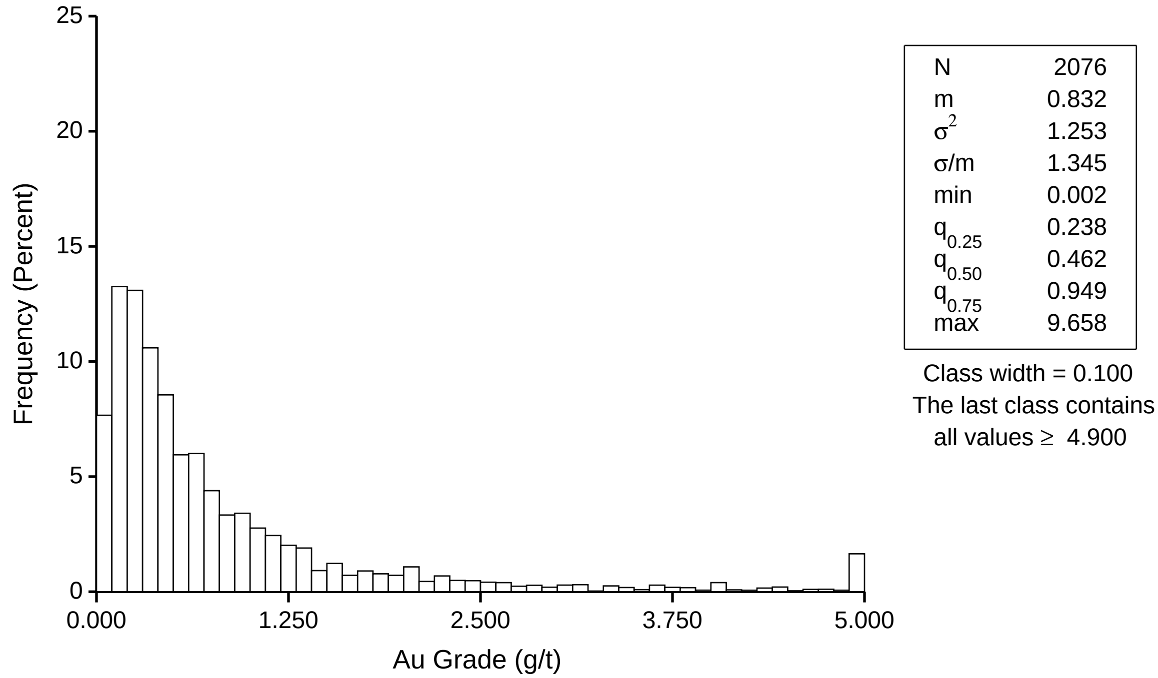


Rock Creek Minzone 3 Declustered Adjusted Composites - Au Grade
100
10
1.0
0.10
0.010
Au Grade (g/t)
0.01
0.1
1
2
5
10
20
30
40
50
60
70
80
90
95
98
99
99.9
99.99
Cumulative Probability (percent)

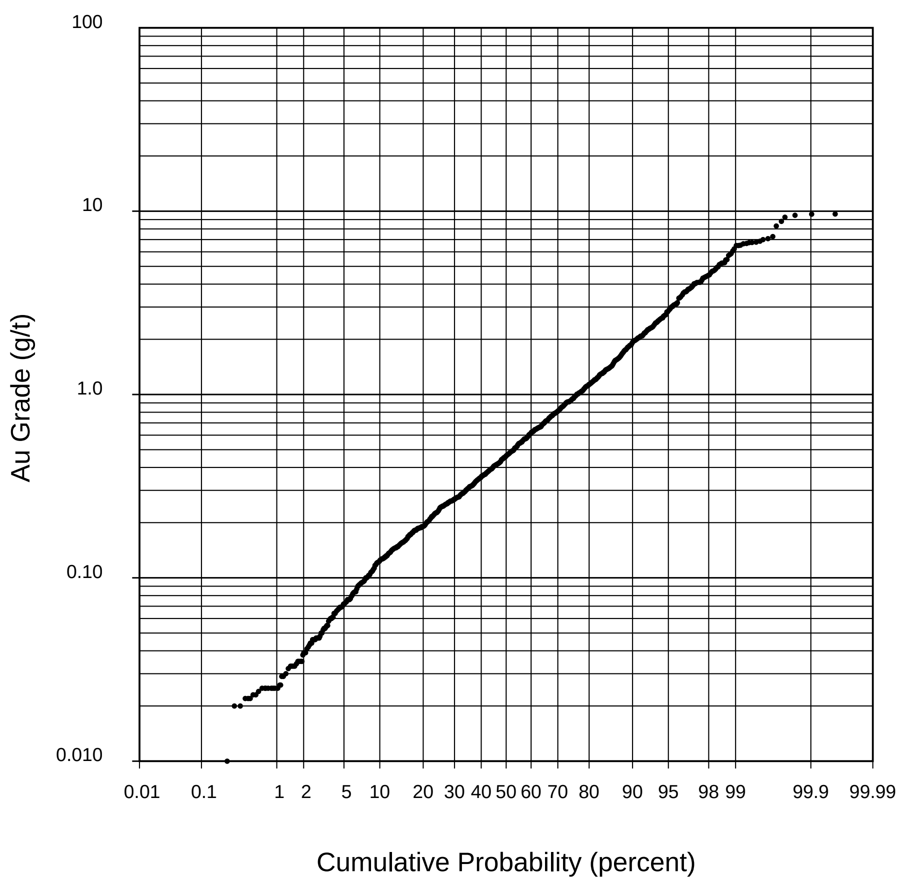

Rock Creek Minzone 2 Declustered Adjusted Composites - Au Grade
26.2
25
20
15
10
5
0
Frequency (Percent)
0.000
1.250
2.500
3.750
5.000
Au Grade (g/t)
N 1467
m 0.423
σ2 0.880
σ/m 2.215
min 0.002
q0.25 0.095
q0.50 0.215
q0.75 0.430
max 23.194
Class width = 0.100
The last class contains
all values ≥ 4.900

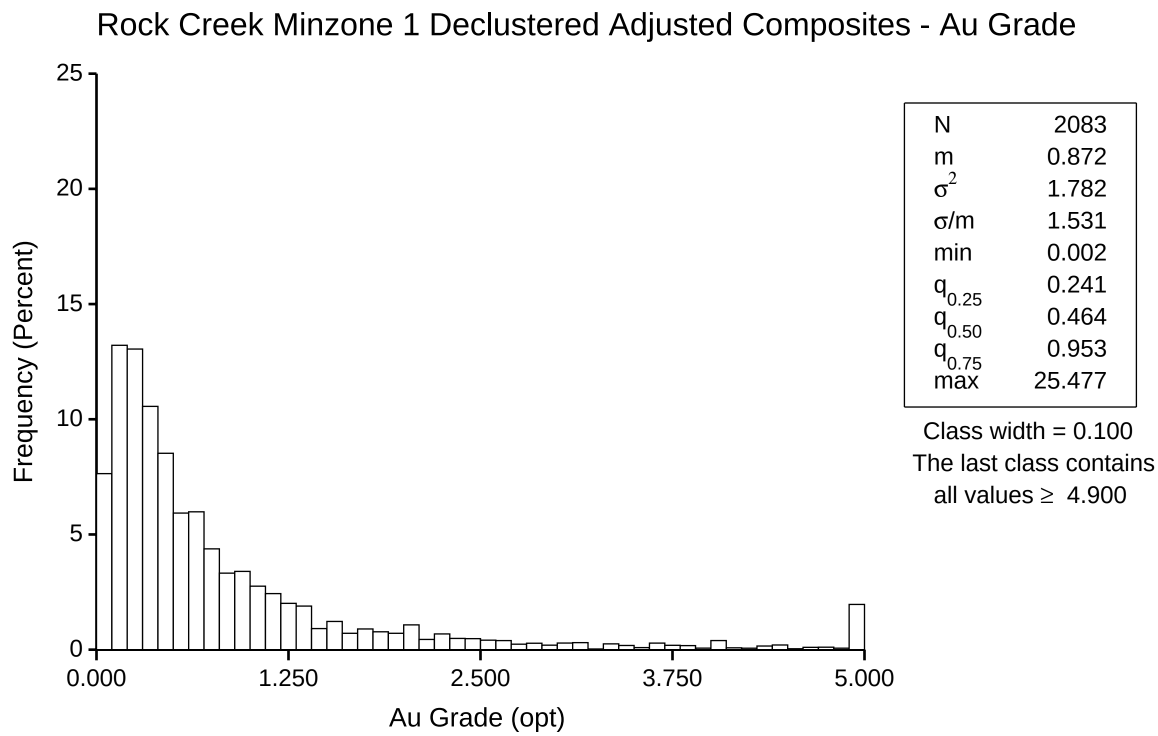

Rock Creek Minzone 2 Declustered Adjusted Composites - Au Grade
100
10
1.0
0.10
0.010
Au Grade (g/t)
0.01
0.1
1
2
5
10
20
30
40
50
60
70
80
90
95
98
99
99.9
99.99
Cumulative Probability (percent)

Rock Creek Minzone 1 Declustered Adjusted Composites - Au Grade (<=10 g/t)

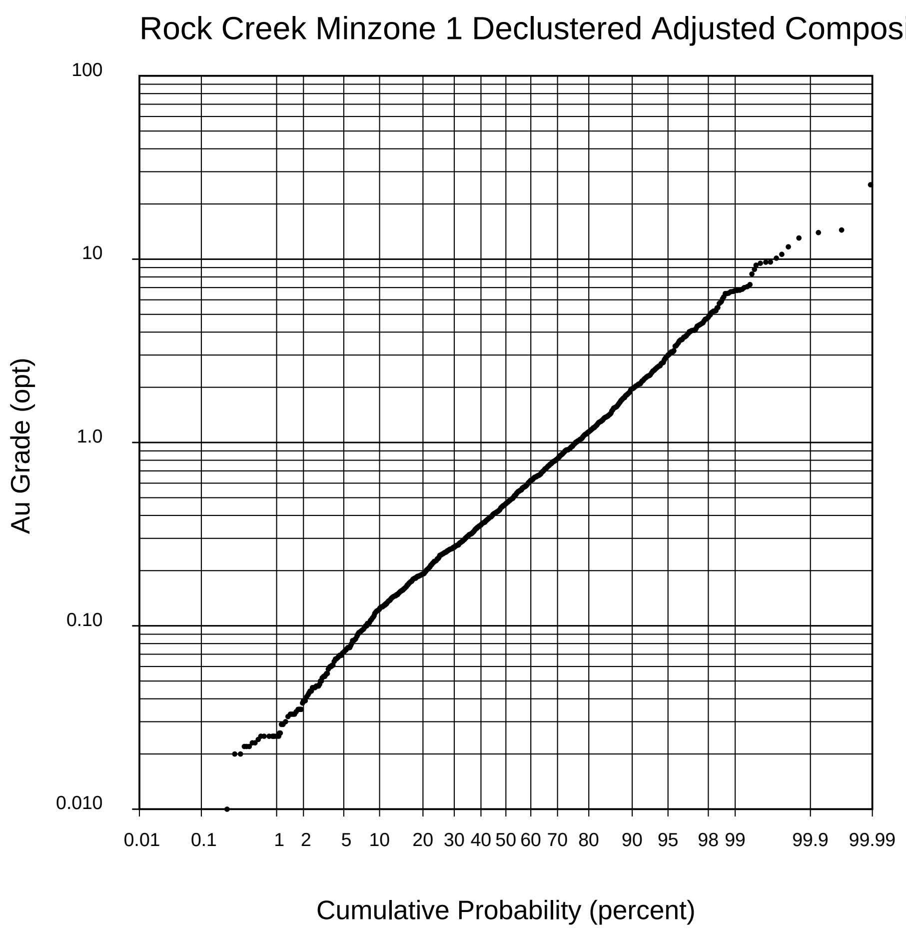


Rock Creek Minzone 1 Declustered Adjusted Composites - Au Grade (<=10 g/t)

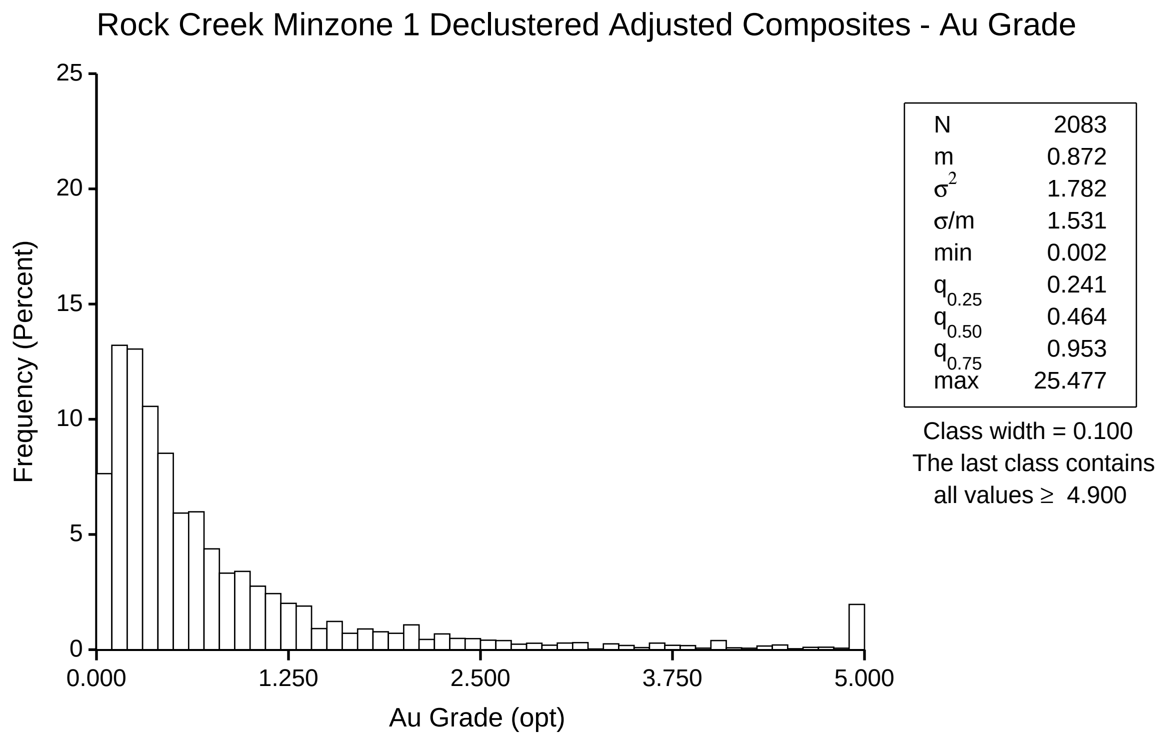


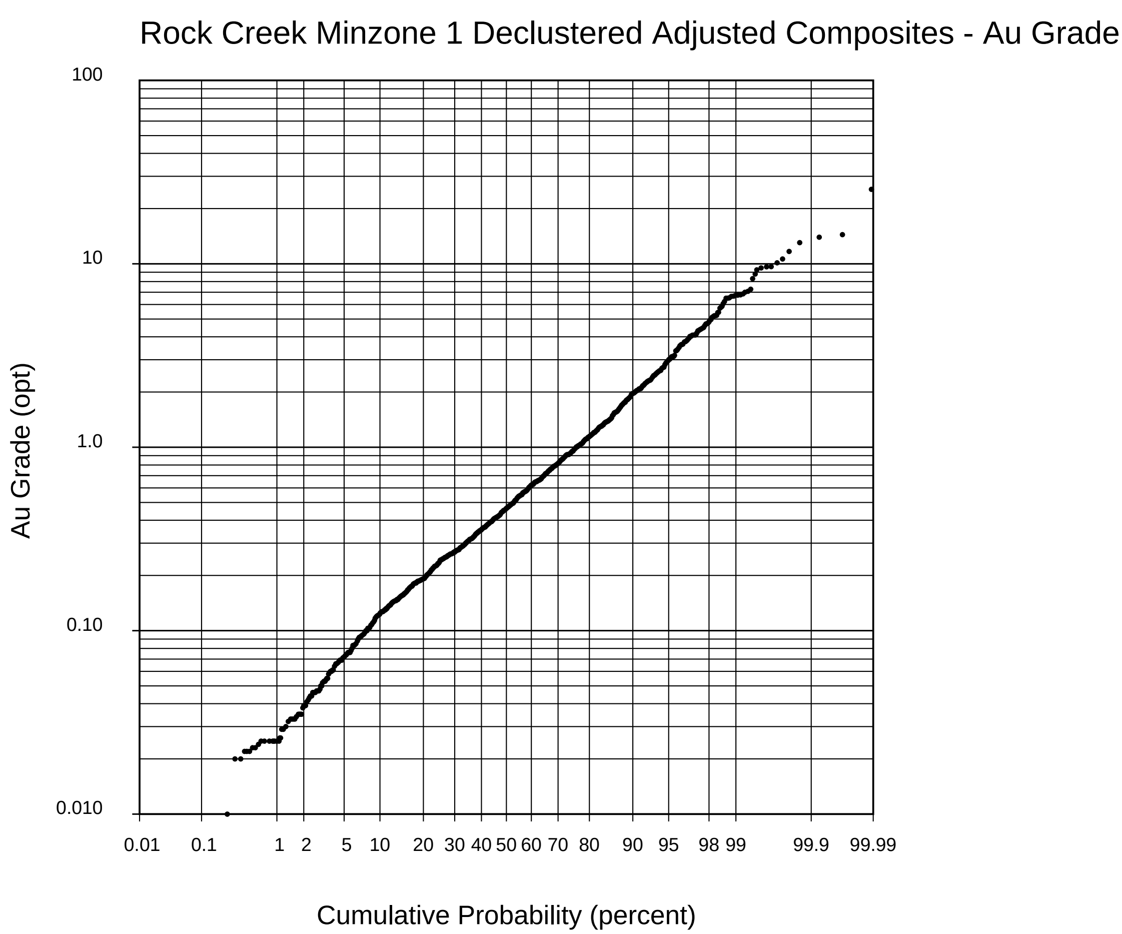


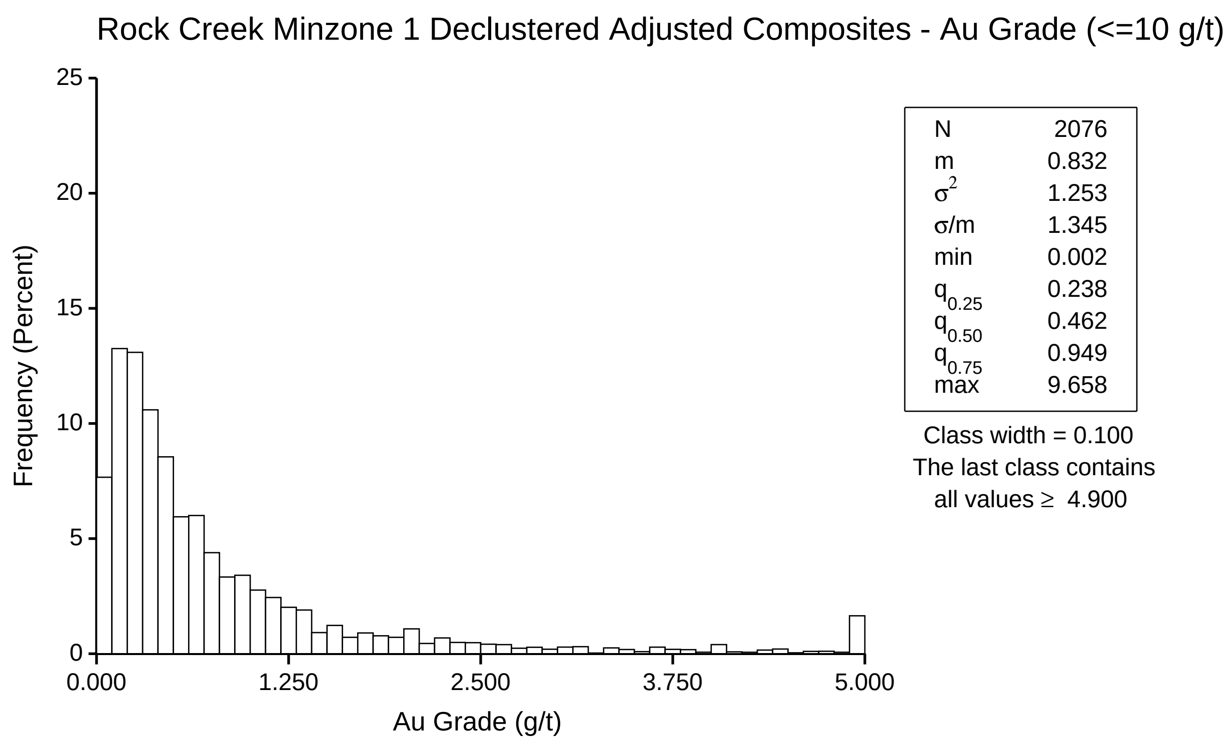
Rock Creek Minzone 1 Declustered Adjusted Composites - Au Grade
Frequency (Percent)
Au Grade (opt)
0.000
1.250
2.500
3.750
5.000
N 2083
m 0.872
σ² 1.782
σ/m 1.531
min 0.002
q0.25 0.241
q0.50 0.464
q0.75 0.953
max 25.477
Class width = 0.100
The last class contains
all values ≥ 4.900

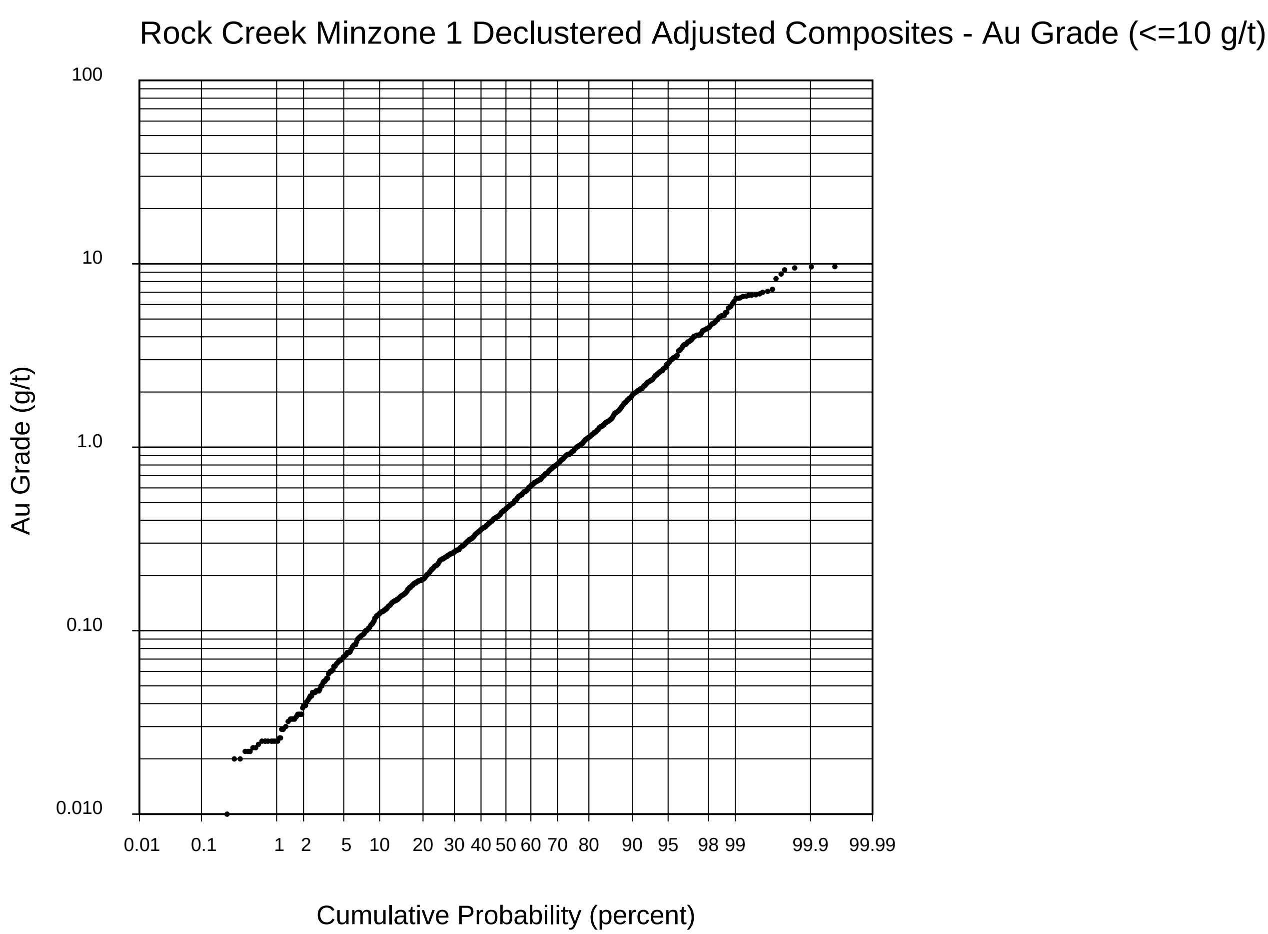


Rock Creek Minzone 1 Declustered Adjusted Composites - Au Grade
Au Grade (opt)
100
10
1.0
0.10
0.010
0.01 0.1 1 2 5 10 20 30 40 50 60 70 80 90 95 98 99 99.9 99.99
Cumulative Probability (percent)

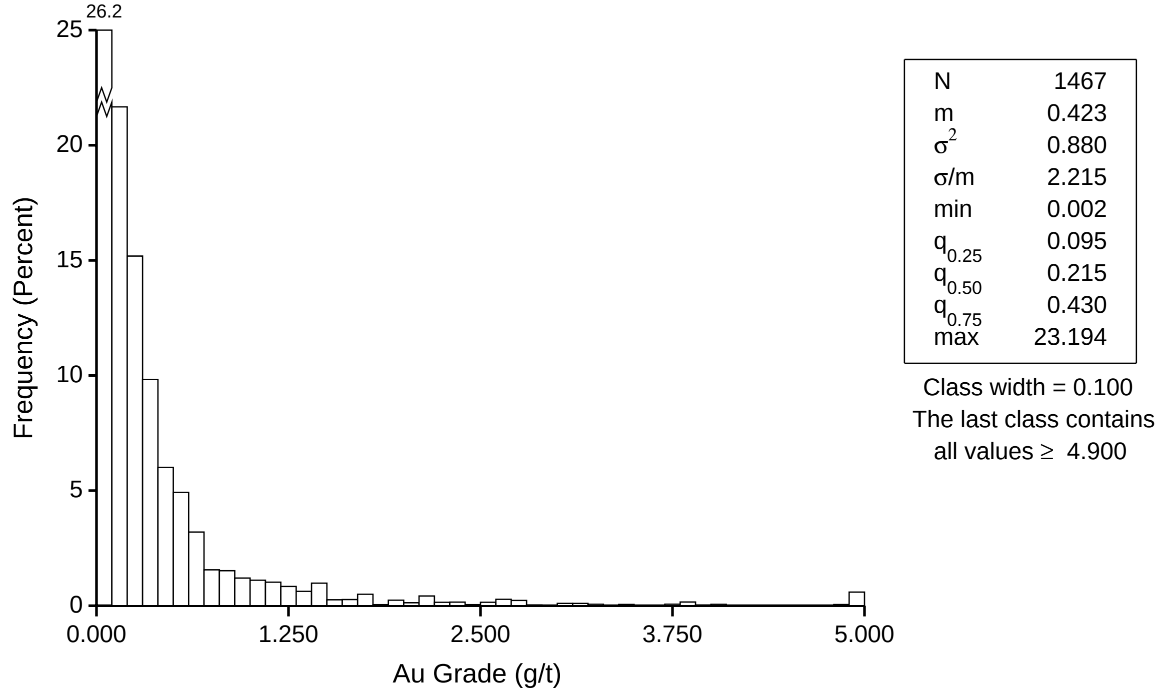

Rock Creek Minzone 1 Declustered Adjusted Composites - Au Grade
Frequency (Percent)
25
20
15
10
5
0
0.000
1.250
2.500
3.750
5.000
Au Grade (opt)
N 2083
m 0.872
σ2 1.782
σ/m 1.531
min 0.002
q0.25 0.241
q0.50 0.464
q0.75 0.953
max 25.477
Class width = 0.100
The last class contains
all values ≥ 4.900


Rock Creek Minzone 1 Declustered Adjusted Composites - Au Grade
Au Grade (opt)
100
10
1.0
0.10
0.010
0.01
0.1
1
2
5
10
20
30
40
50
60
70
80
90
95
98
99
99.9
99.99
Cumulative Probability (percent)

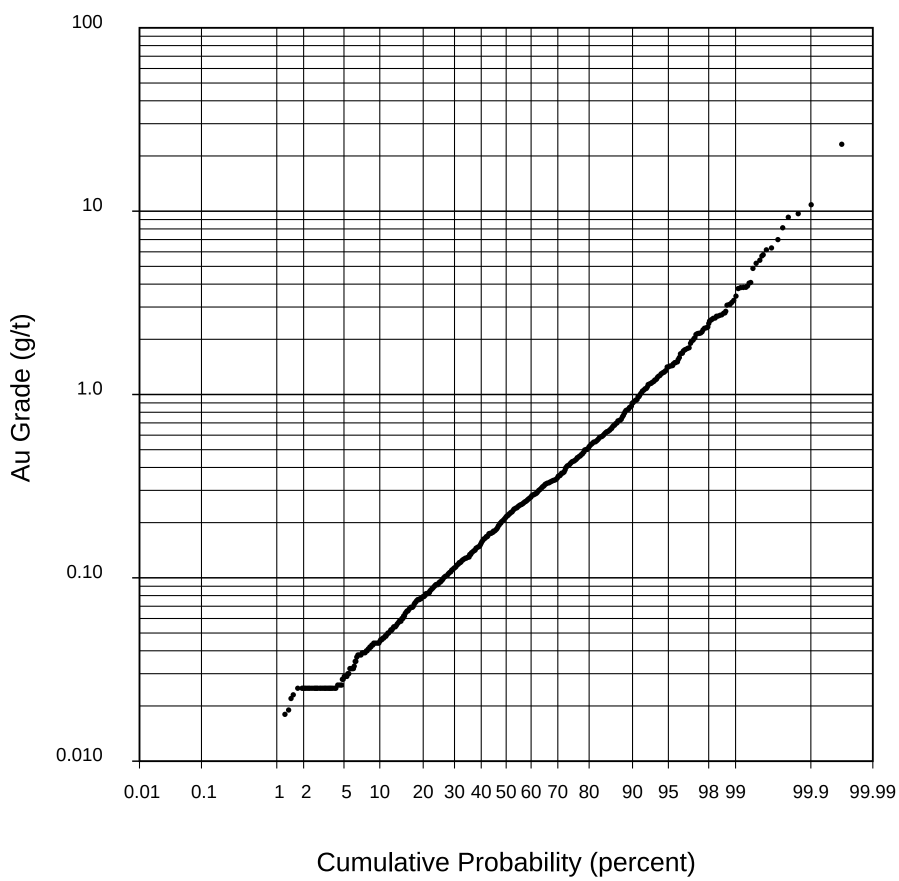

Rock Creek Minzone 1 Declustered Adjusted Composites - Au Grade (<=10 g/t)
Frequency (Percent)
Au Grade (g/t)
0.000
1.250
2.500
3.750
5.000
N 2076
m 0.832
σ2 1.253
σ/m 1.345
min 0.002
q0.25 0.238
q0.50 0.462
q0.75 0.949
max 9.658
Class width = 0.100
The last class contains
all values ≥ 4.900

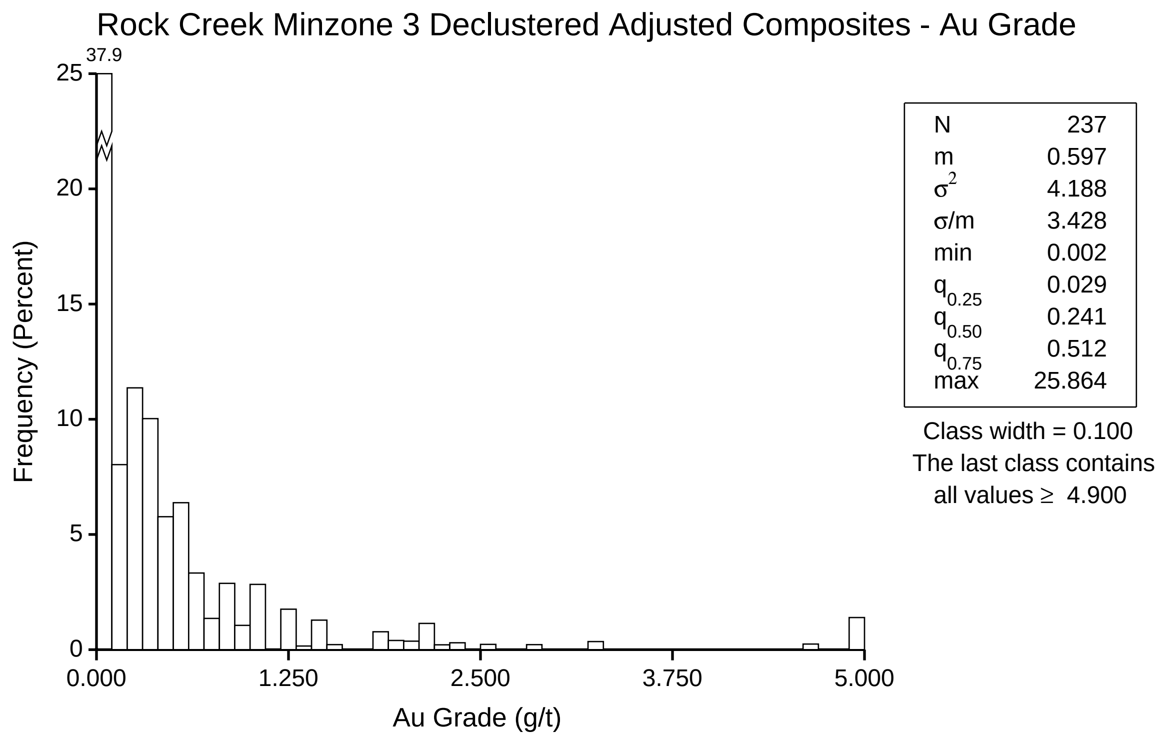

Rock Creek Minzone 1 Declustered Adjusted Composites - Au Grade (<=10 g/t)
Au Grade (g/t)
100
10
1.0
0.10
0.010
0.01 0.1 1 2 5 10 20 30 40 50 60 70 80 90 95 98 99 99.9 99.99
Cumulative Probability (percent)

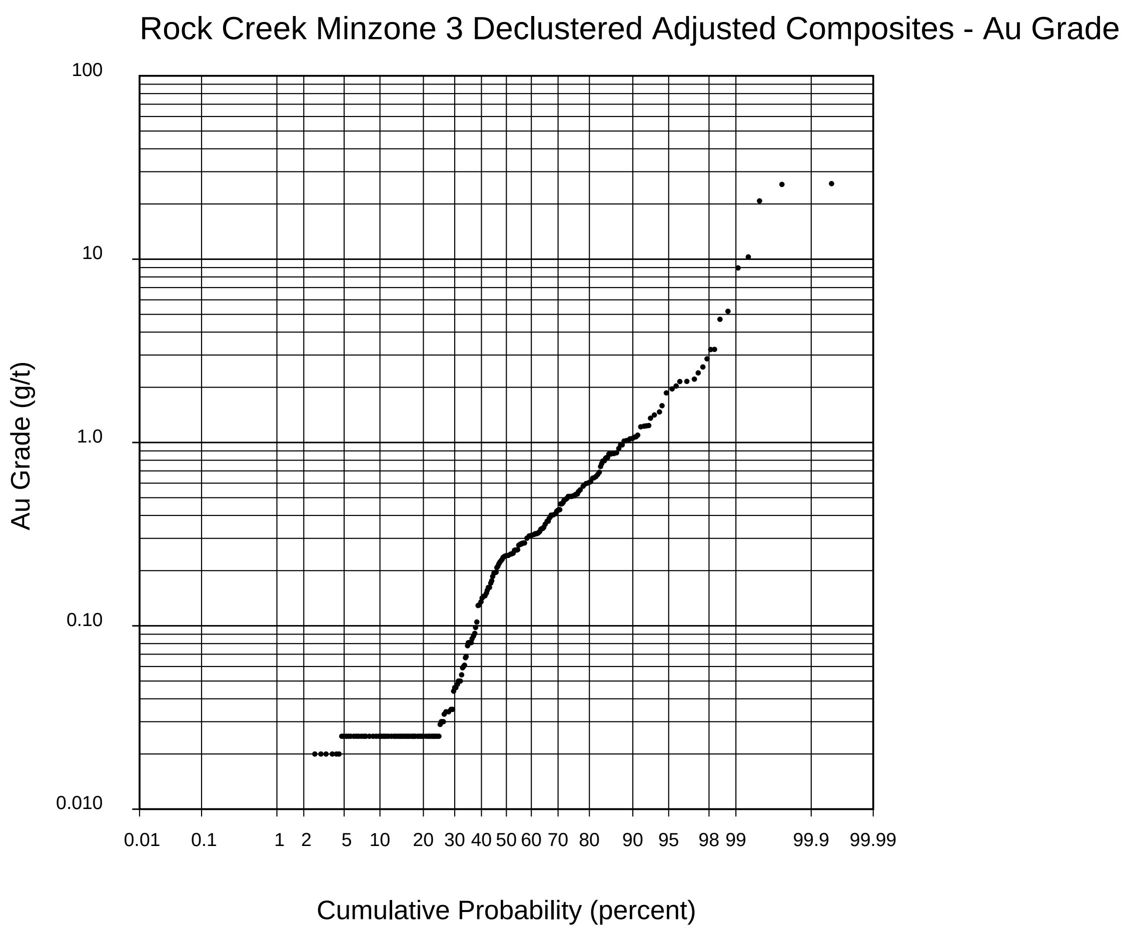
Rock Creek Minzone 2 Declustered Adjusted Composites - Au Grade



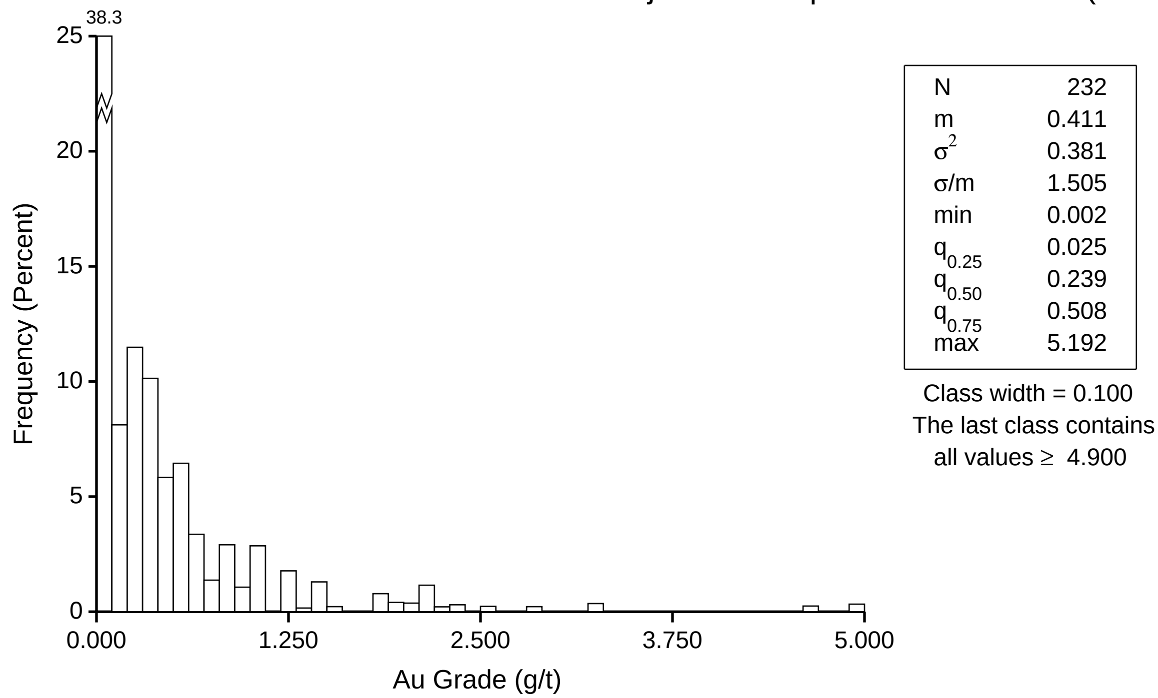
Rock Creek Minzone 2 Declustered Adjusted Composites - Au Grade



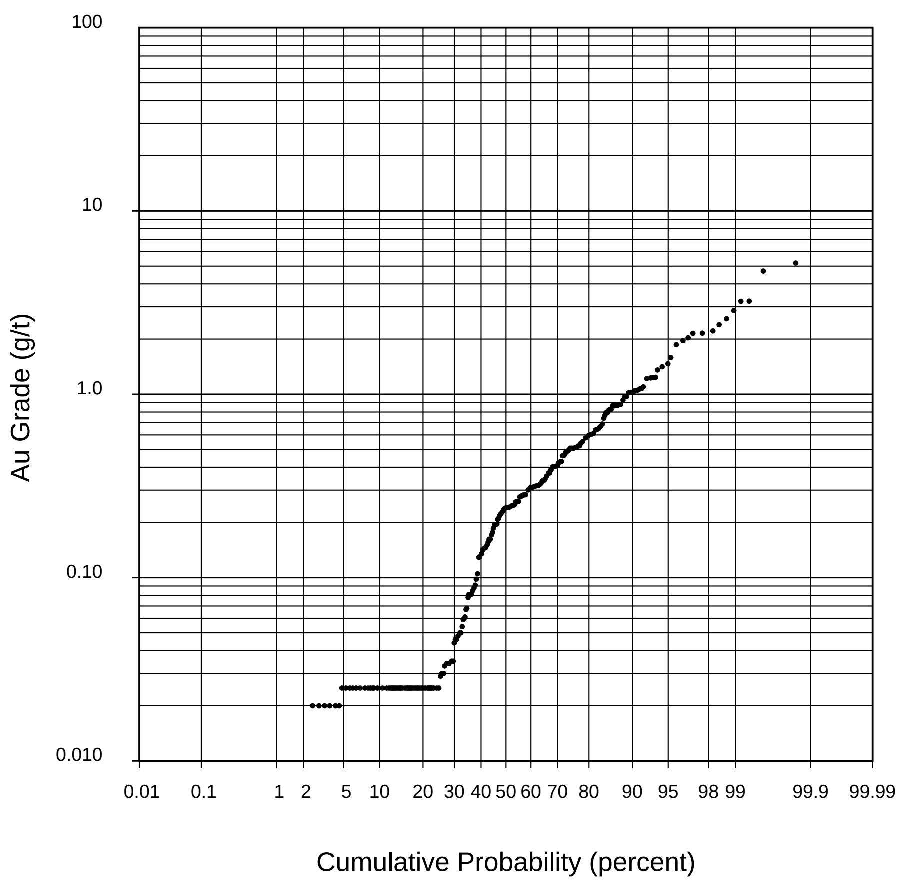

Rock Creek Minzone 3 Declustered Adjusted Composites - Au Grade
37.9
25
20
15
10
5
0
Frequency (Percent)
0.000
1.250
2.500
3.750
5.000
Au Grade (g/t)
N 237
m 0.597
σ2 4.188
σ/m 3.428
min 0.002
q0.25 0.029
q0.50 0.241
q0.75 0.512
max 25.864
Class width = 0.100
The last class contains
all values ≥ 4.900

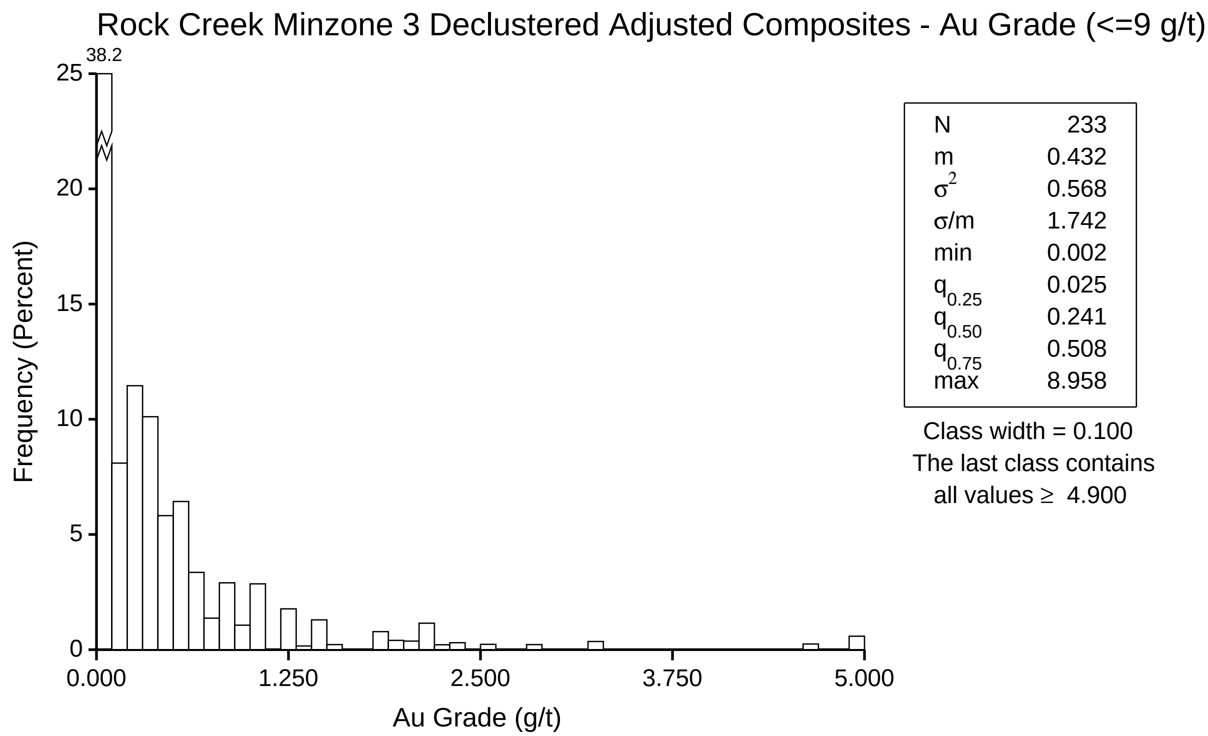

Rock Creek Minzone 3 Declustered Adjusted Composites - Au Grade
100
10
1.0
0.10
0.010
Au Grade (g/t)
0.01 0.1 1 2 5 10 20 30 40 50 60 70 80 90 95 98 99 99.9 99.99
Cumulative Probability (percent)

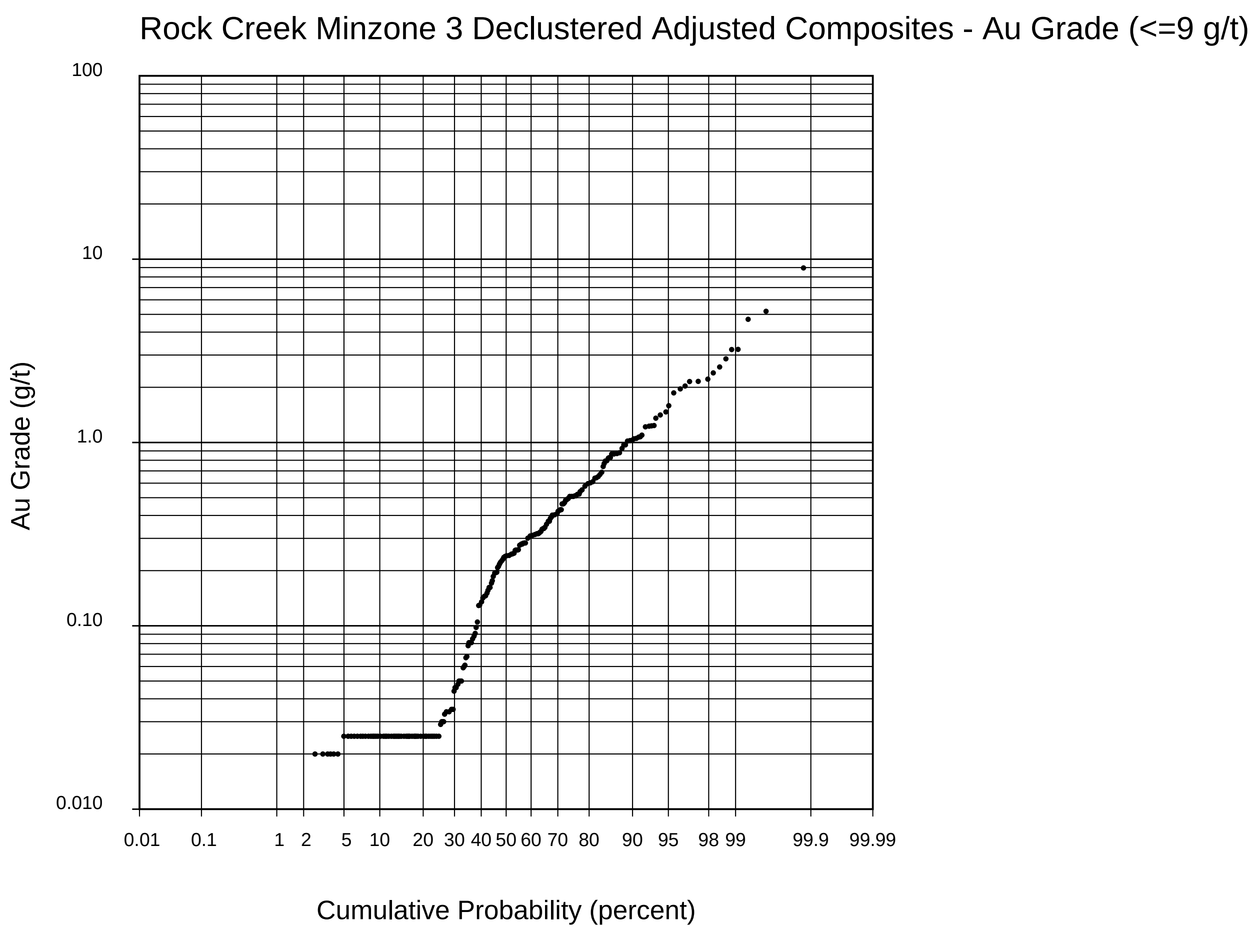
Rock Creek Minzone 3 Declustered Adjusted Composites - Au Grade (<=8 g/t)



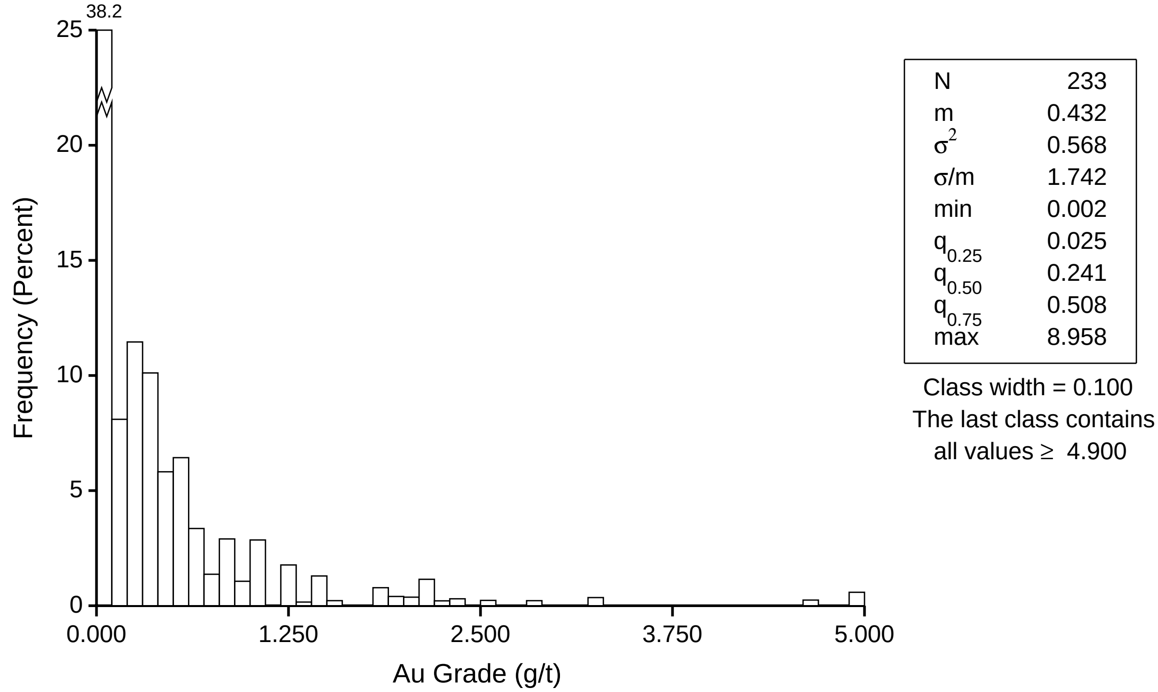
Rock Creek Minzone 3 Declustered Adjusted Composites - Au Grade (<=8 g/t)



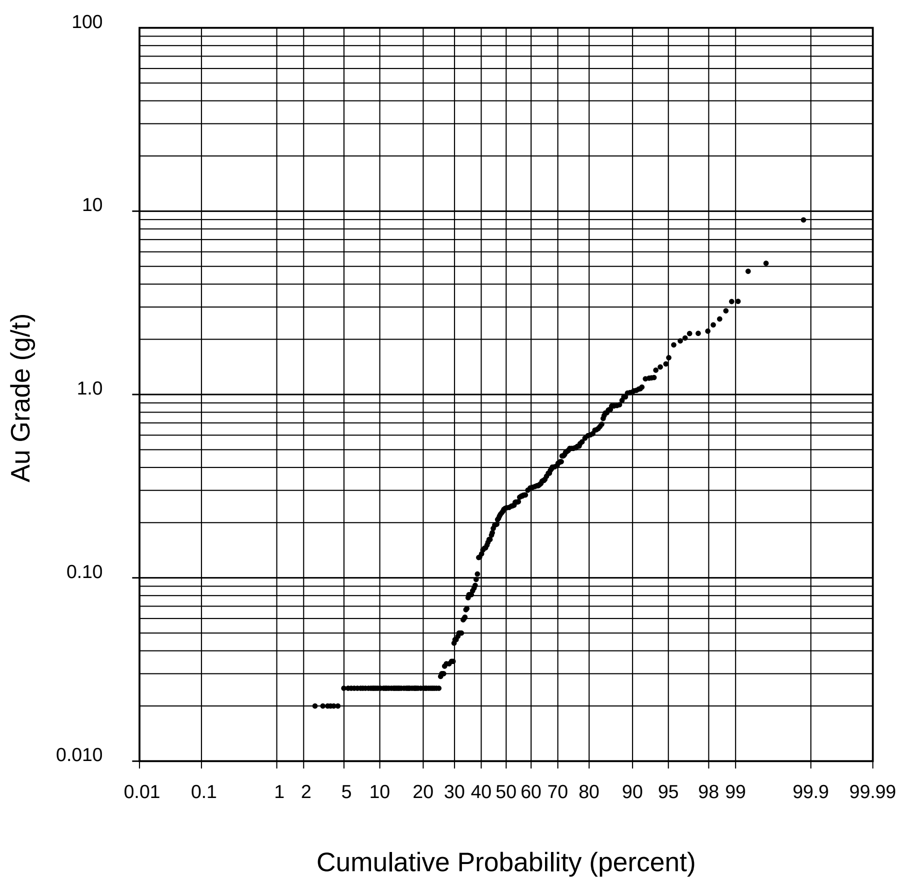

Rock Creek Minzone 3 Declustered Adjusted Composites - Au Grade (<=9 g/t)
38.2
25
20
15
10
5
0
Frequency (Percent)
0.000
1.250
2.500
3.750
5.000
Au Grade (g/t)
N 233
m 0.432
σ2 0.568
σ/m 1.742
min 0.002
q0.25 0.025
q0.50 0.241
q0.75 0.508
max 8.958
Class width = 0.100
The last class contains
all values ≥ 4.900

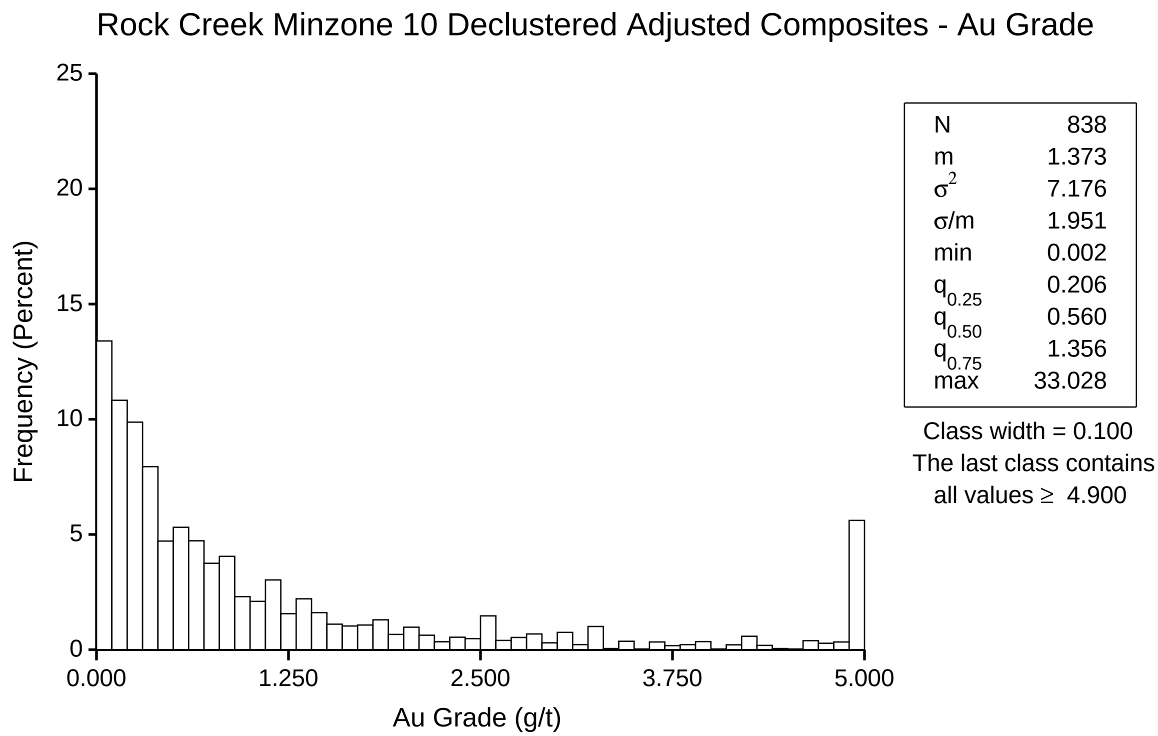

Rock Creek Minzone 3 Declustered Adjusted Composites - Au Grade (<=9 g/t)
100
10
1.0
0.10
0.010
Au Grade (g/t)
0.01 0.1 1 2 5 10 20 30 40 50 60 70 80 90 95 98 99 99.9 99.99
Cumulative Probability (percent)

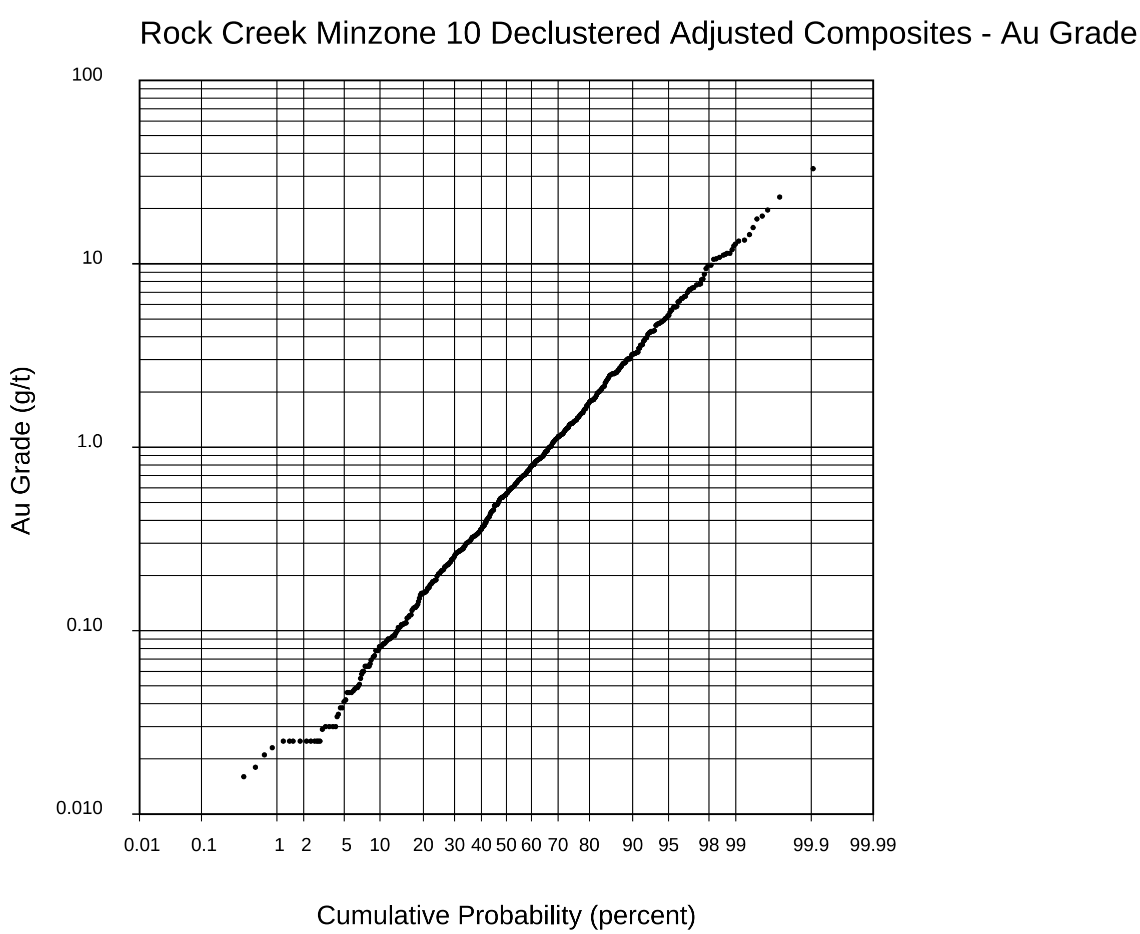
Rock Creek Minzone 3 Declustered Adjusted Composites - Au Grade (<=10 g/t)



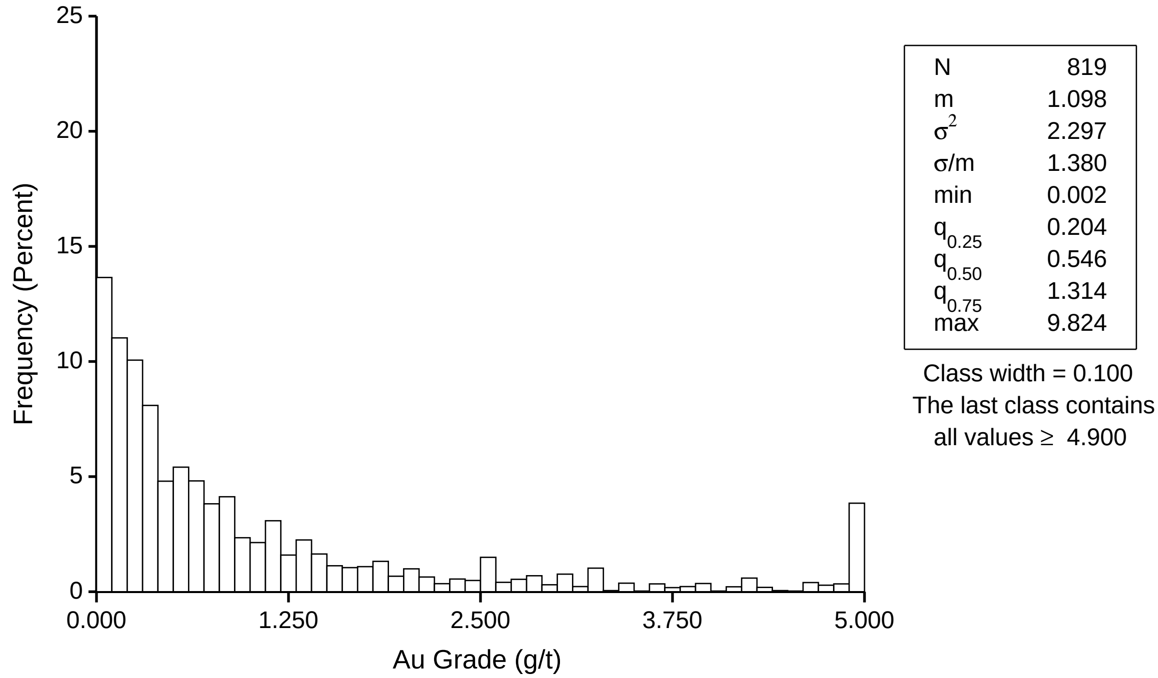
Rock Creek Minzone 3 Declustered Adjusted Composites - Au Grade (<=10 g/t)



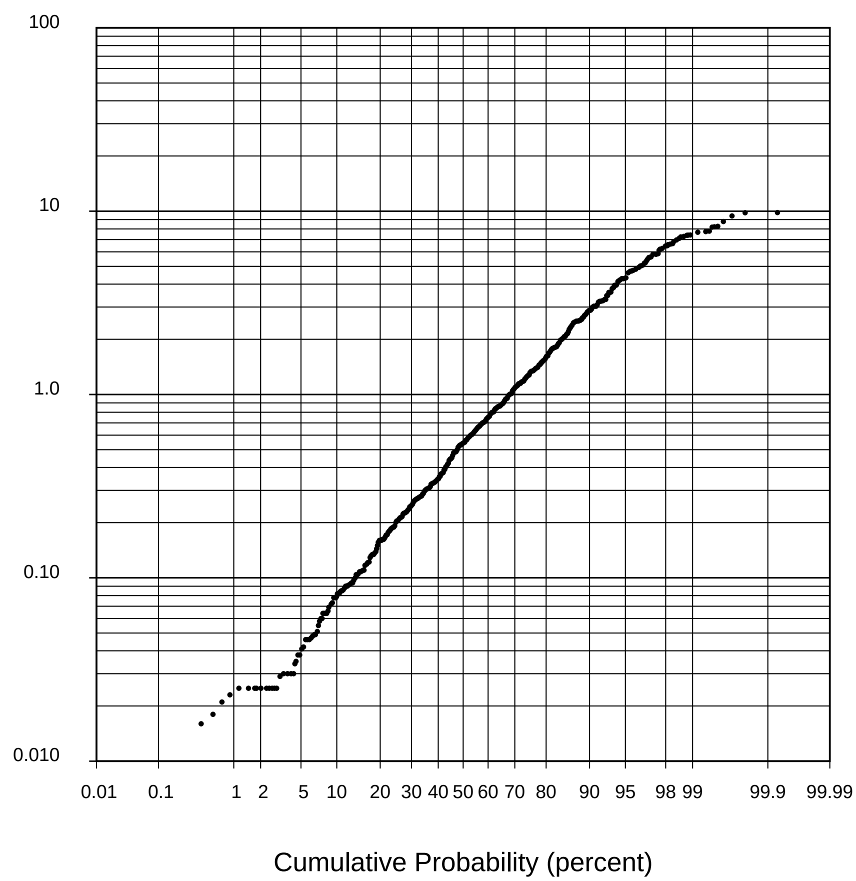

Rock Creek Minzone 10 Declustered Adjusted Composites - Au Grade
Frequency (Percent)
25
20
15
10
5
0
0.000
1.250
2.500
3.750
5.000
Au Grade (g/t)
N 838
m 1.373
σ2 7.176
σ/m 1.951
min 0.002
q0.25 0.206
q0.50 0.560
q0.75 1.356
max 33.028
Class width = 0.100
The last class contains
all values ≥ 4.900


Rock Creek Minzone 10 Declustered Adjusted Composites - Au Grade
Au Grade (g/t)
100
10
1.0
0.10
0.010
0.01
0.1
1
2
5
10
20
30
40
50
60
70
80
90
95
98
99
99.9
99.99
Cumulative Probability (percent)

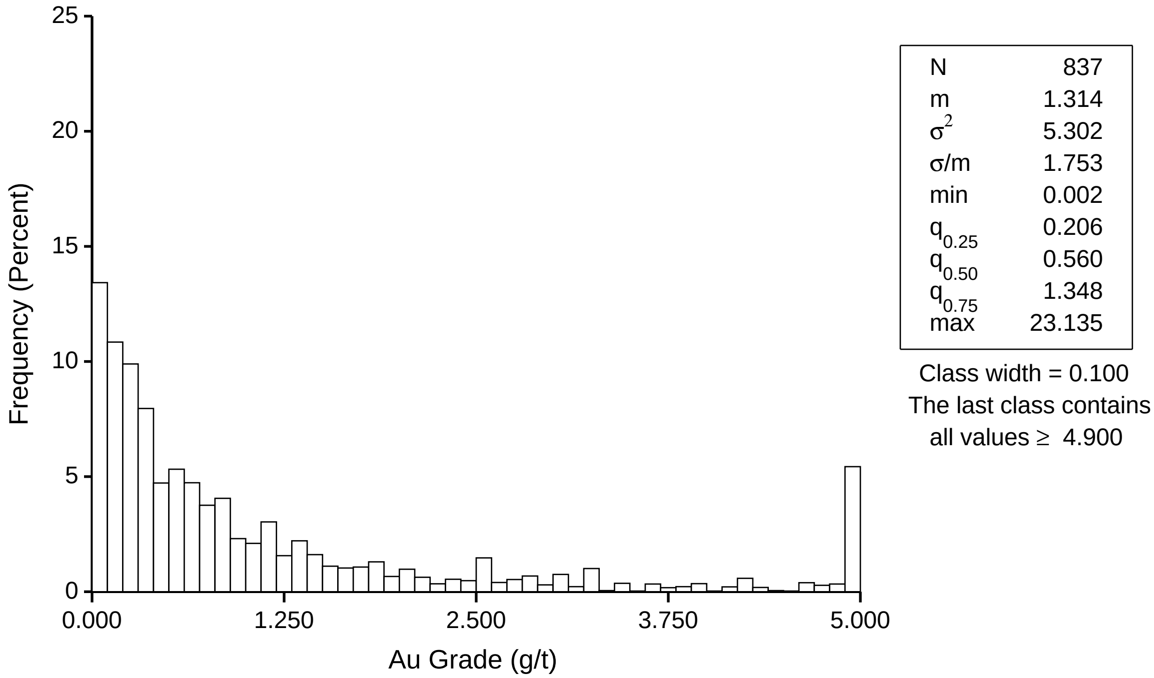
Rock Creek Minzone 10 Declustered Adjusted Composites - Au Grade (<=10 g/t)



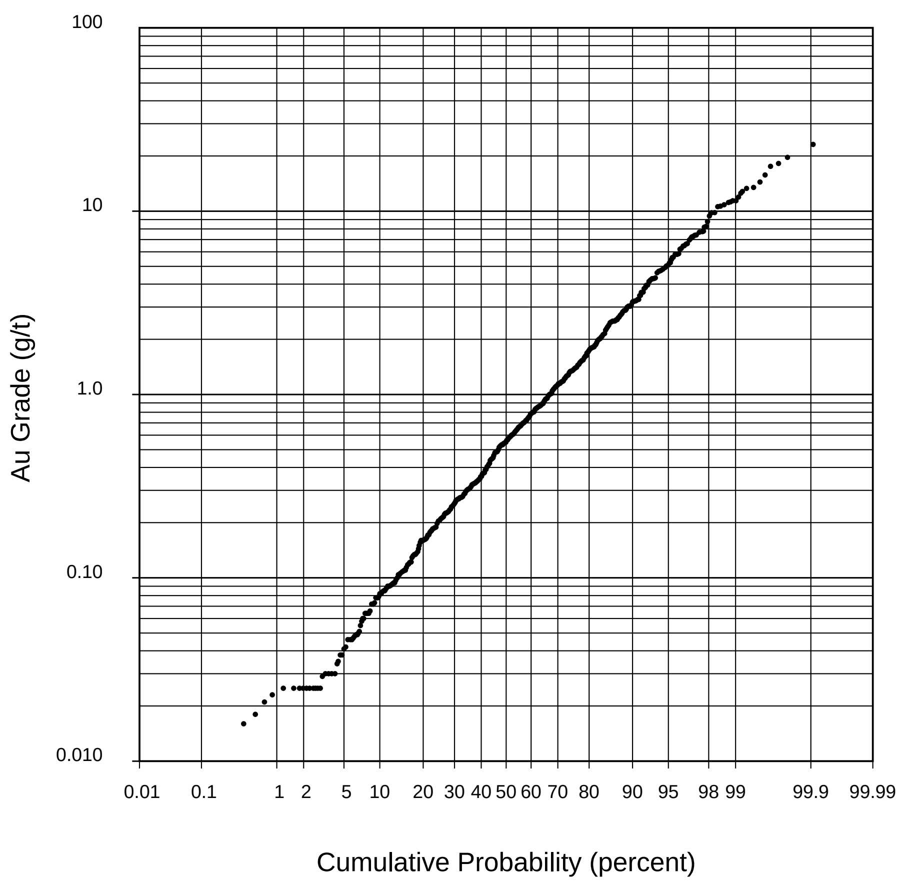
Rock Creek Minzone 10 Declustered Adjusted Composites - Au Grade (<=10 g/t)

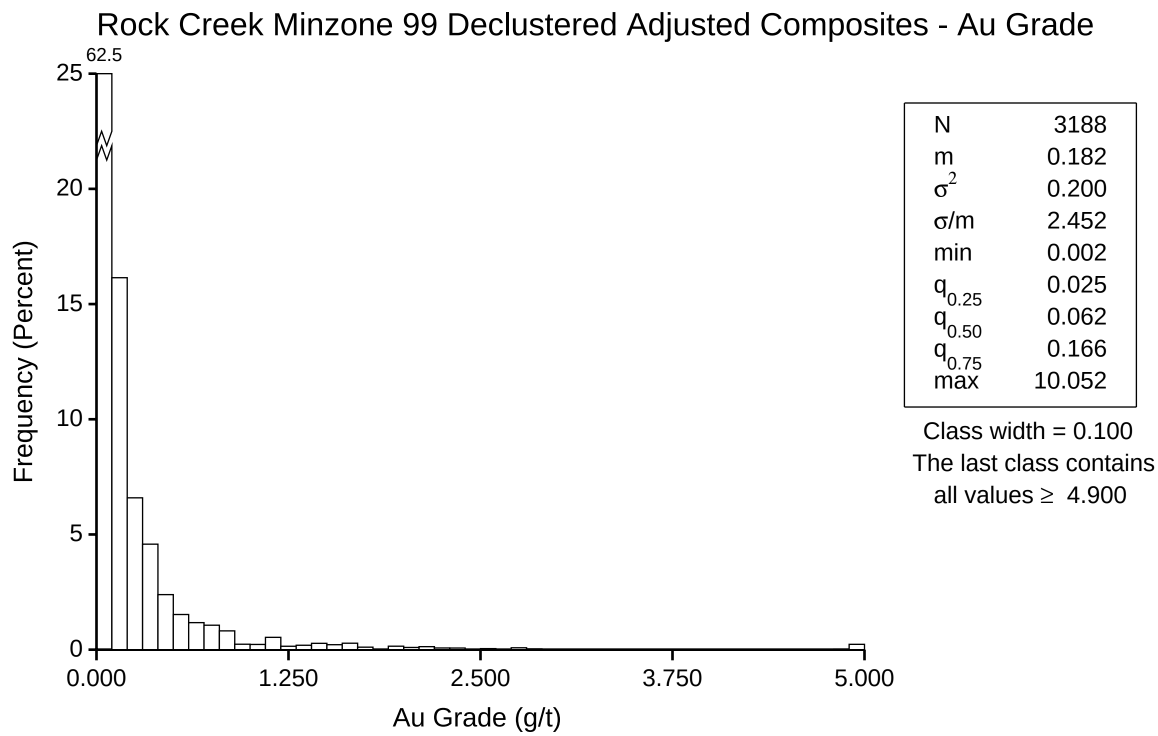


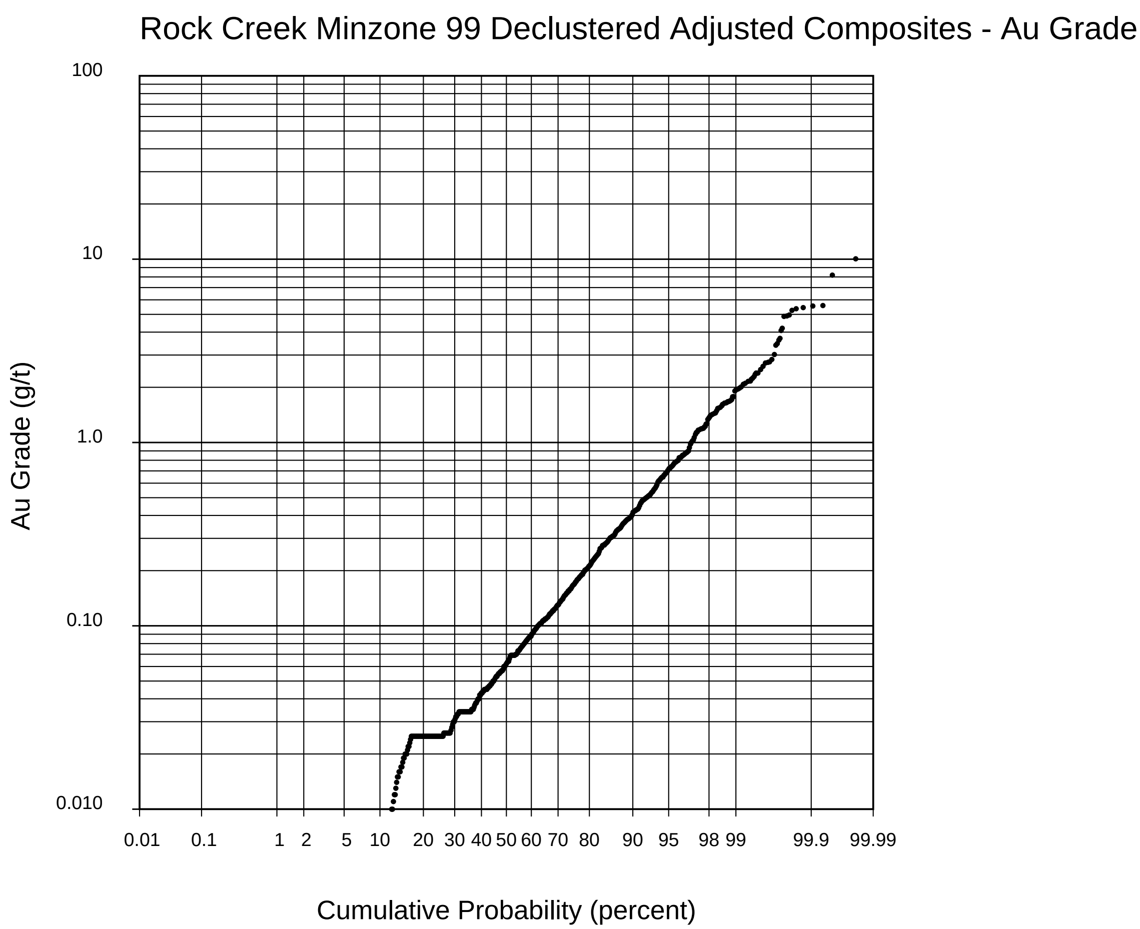
Rock Creek Minzone 10 Declustered Adjusted Composites - Au Grade (<=30 g/t)

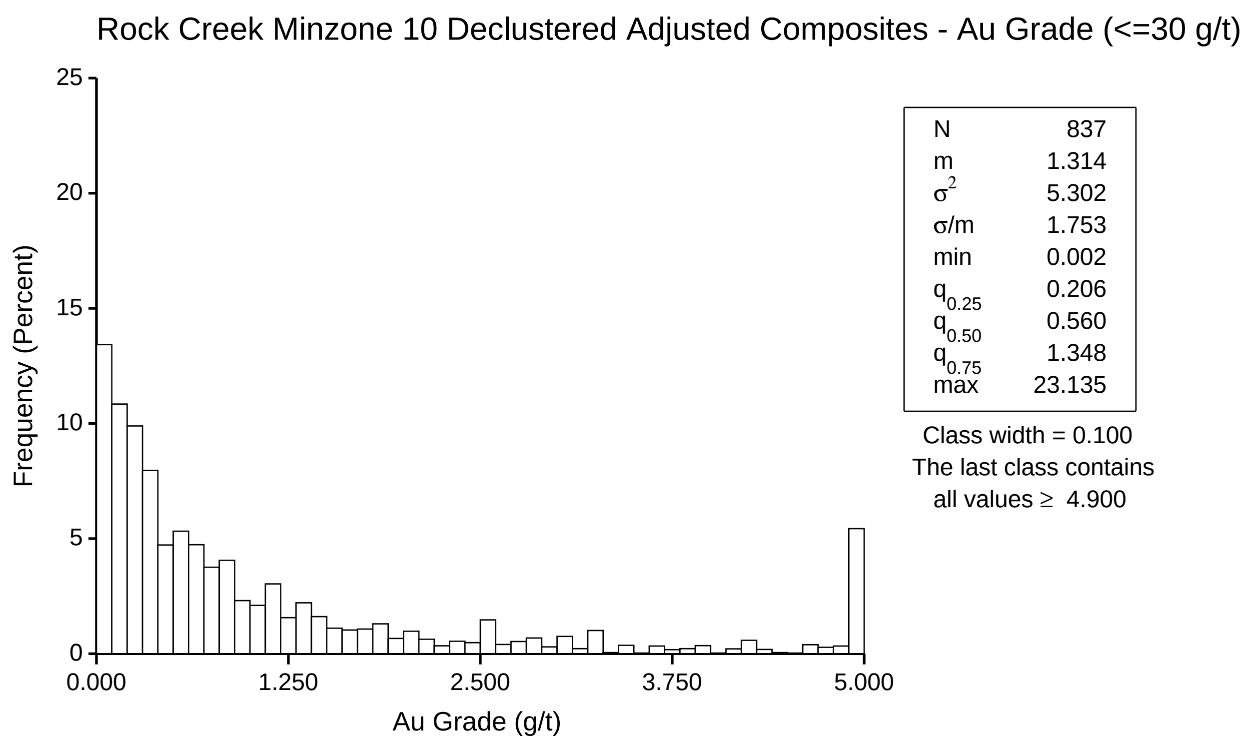


Rock Creek Minzone 10 Declustered Adjusted Composites - Au Grade (<=30 g/t)

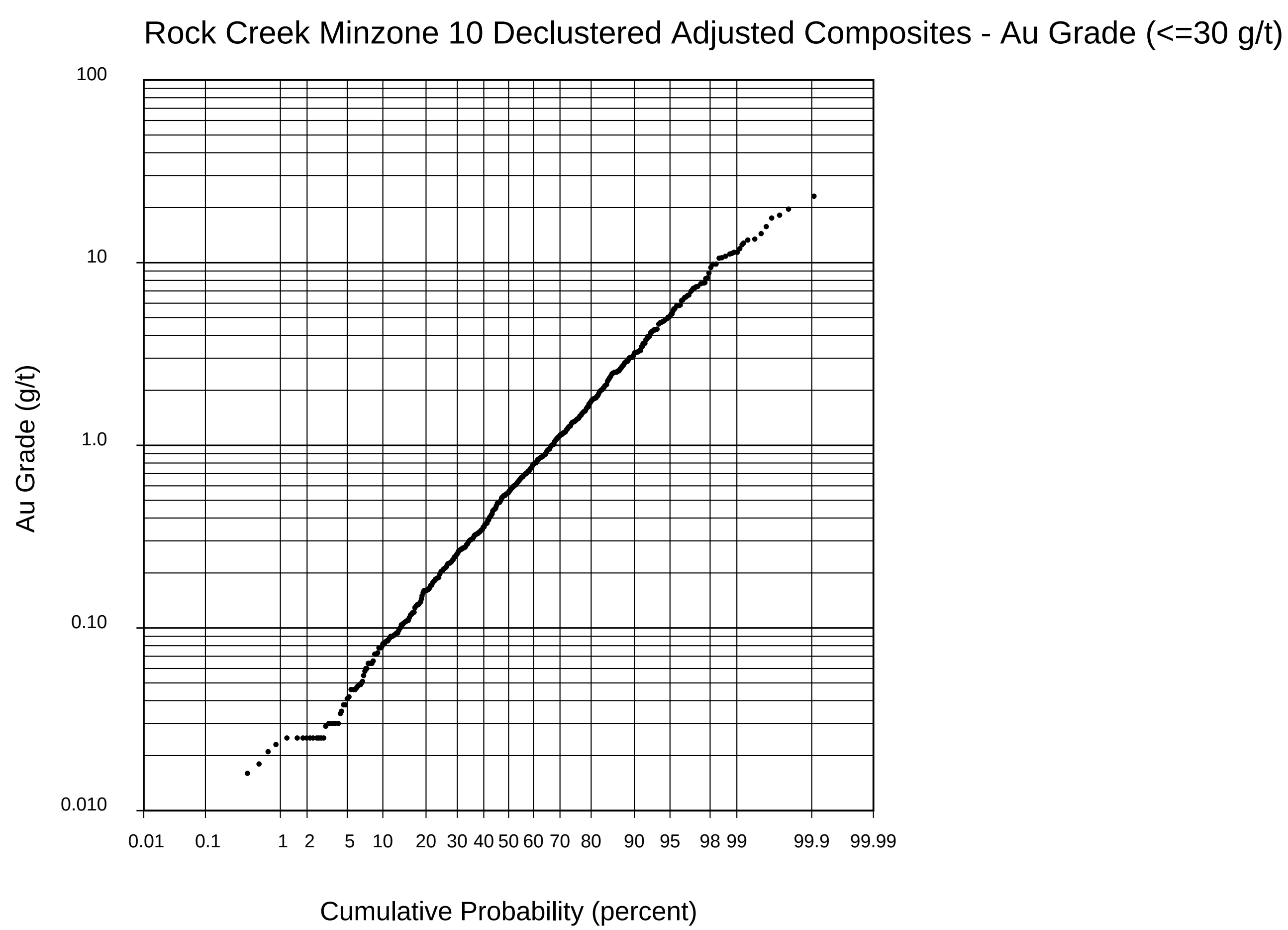



Rock Creek Minzone 99 Declustered Adjusted Composites - Au Grade
62.5
25
20
15
10
5
0
Frequency (Percent)
0.000
1.250
2.500
3.750
5.000
Au Grade (g/t)
N 3188
m 0.182
σ2 0.200
σ/m 2.452
min 0.002
q0.25 0.025
q0.50 0.062
q0.75 0.166
max 10.052
Class width = 0.100
The last class contains
all values ≥ 4.900


Rock Creek Minzone 99 Declustered Adjusted Composites - Au Grade
100
10
1.0
0.10
0.010
Au Grade (g/t)
0.01
0.1
1
2
5
10
20
30
40
50
60
70
80
90
95
98
99
99.9
99.99
Cumulative Probability (percent)

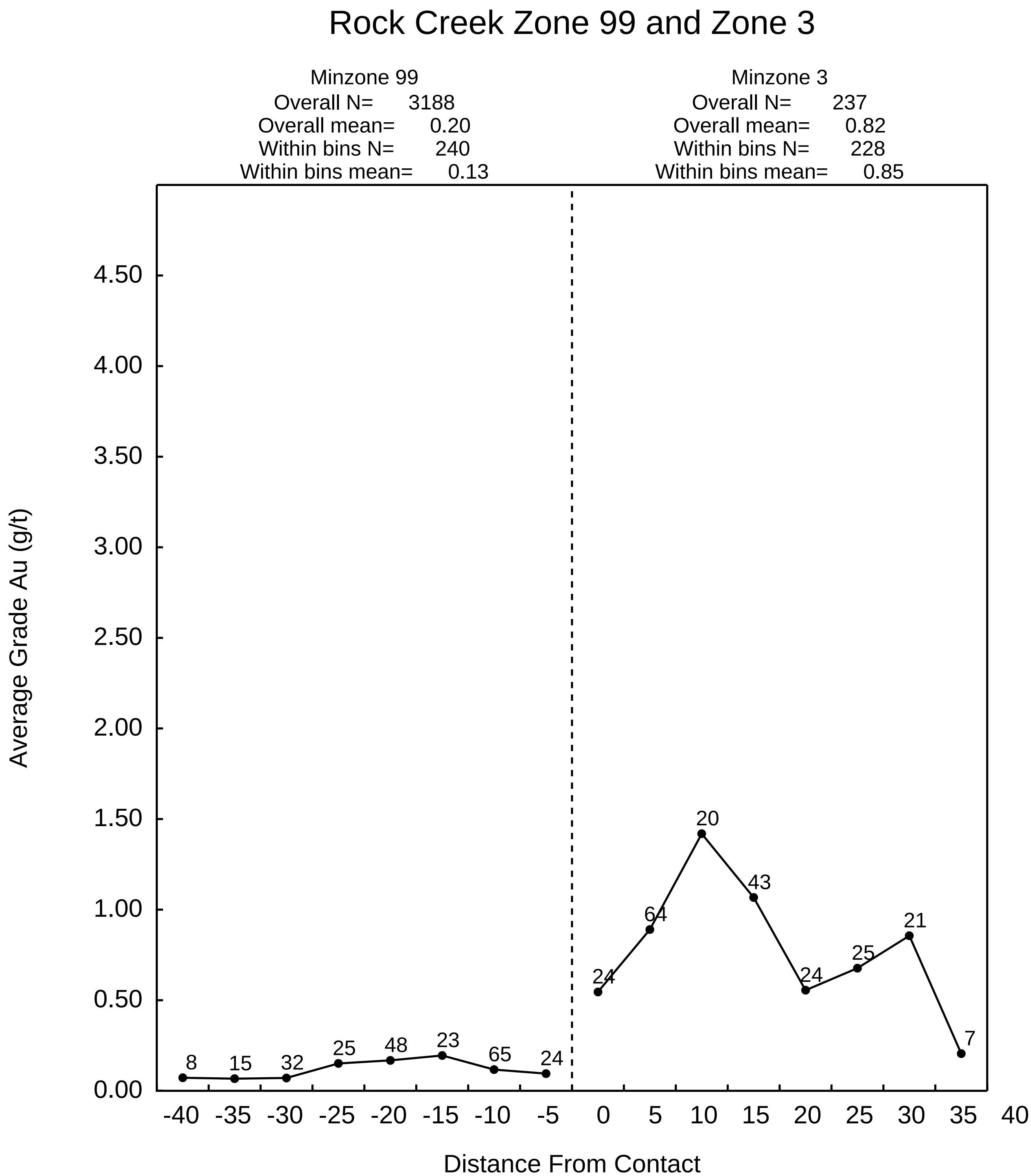


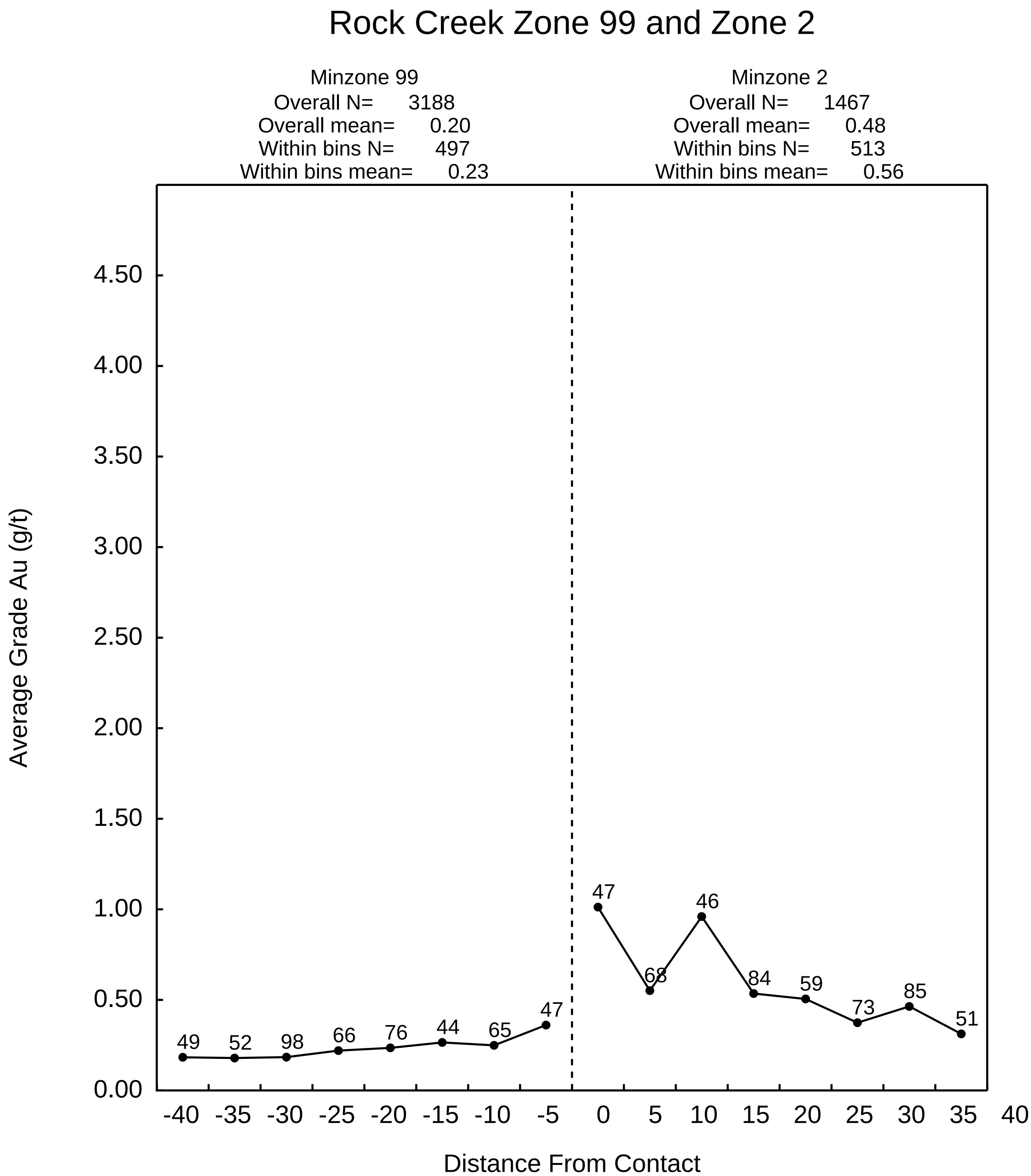
Rock Creek Minzone 10 Declustered Adjusted Composites - Au Grade (<=30 g/t)
Frequency (Percent)
Au Grade (g/t)
0
5
10
15
20
25
0.000
1.250
2.500
3.750
5.000
N 837
m 1.314
σ2 5.302
σ/m 1.753
min 0.002
q0.25 0.206
q0.50 0.560
q0.75 1.348
max 23.135
Class width = 0.100
The last class contains
all values ≥ 4.900

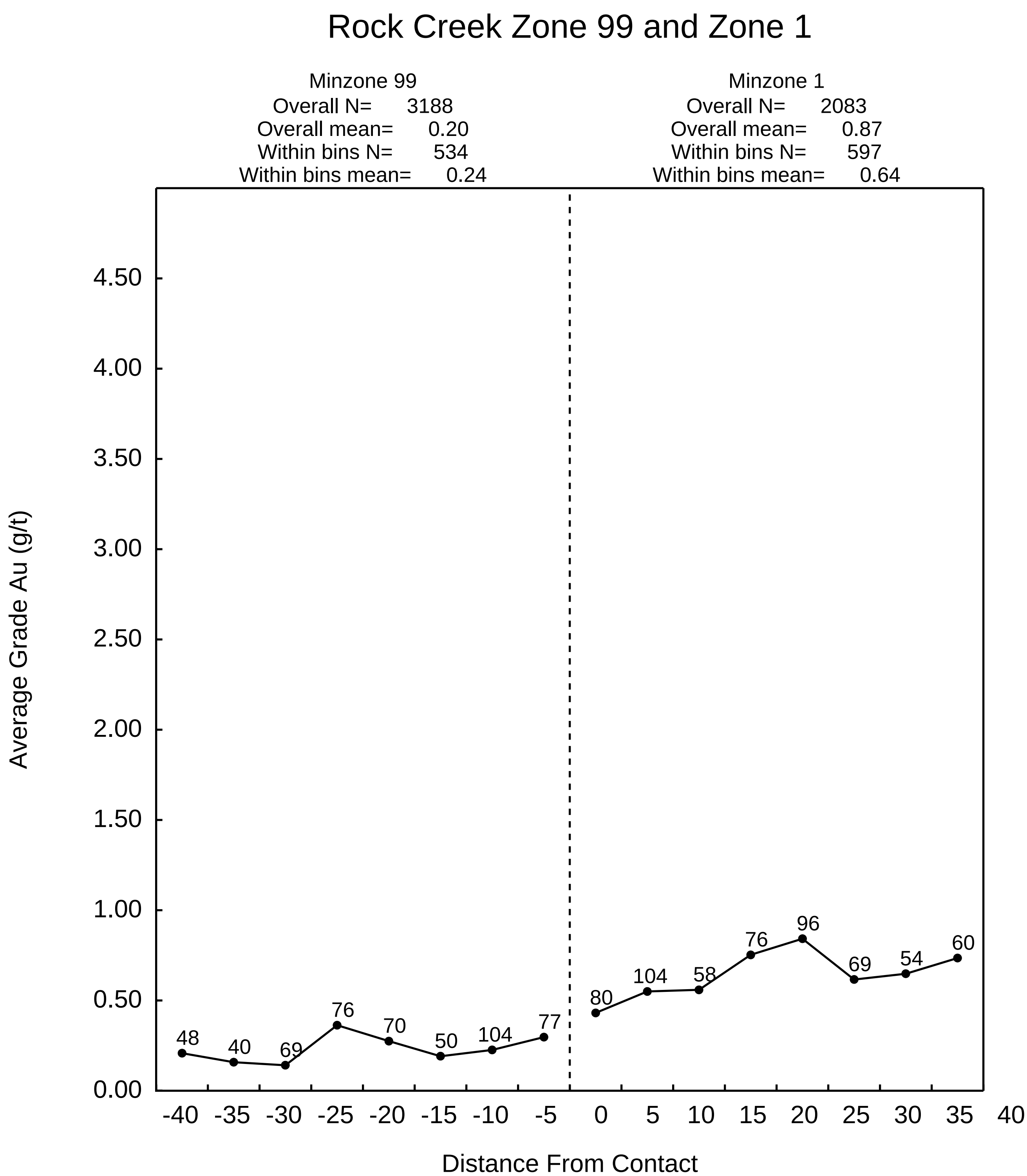


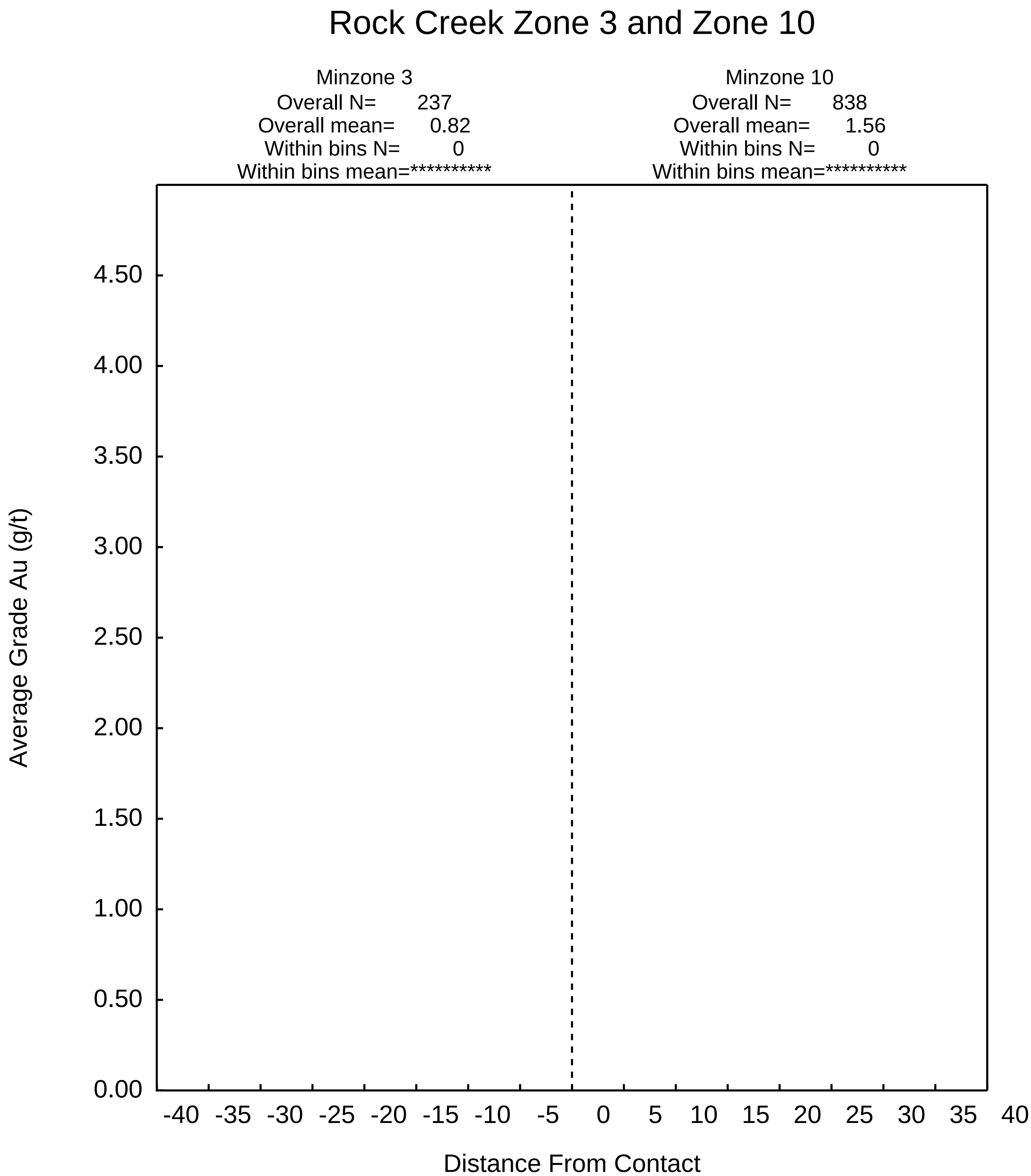
Rock Creek Minzone 10 Declustered Adjusted Composites - Au Grade (<=30 g/t)
Au Grade (g/t)
100
10
1.0
0.10
0.010
0.01 0.1 1 2 5 10 20 30 40 50 60 70 80 90 95 98 99 99.9 99.99
Cumulative Probability (percent)

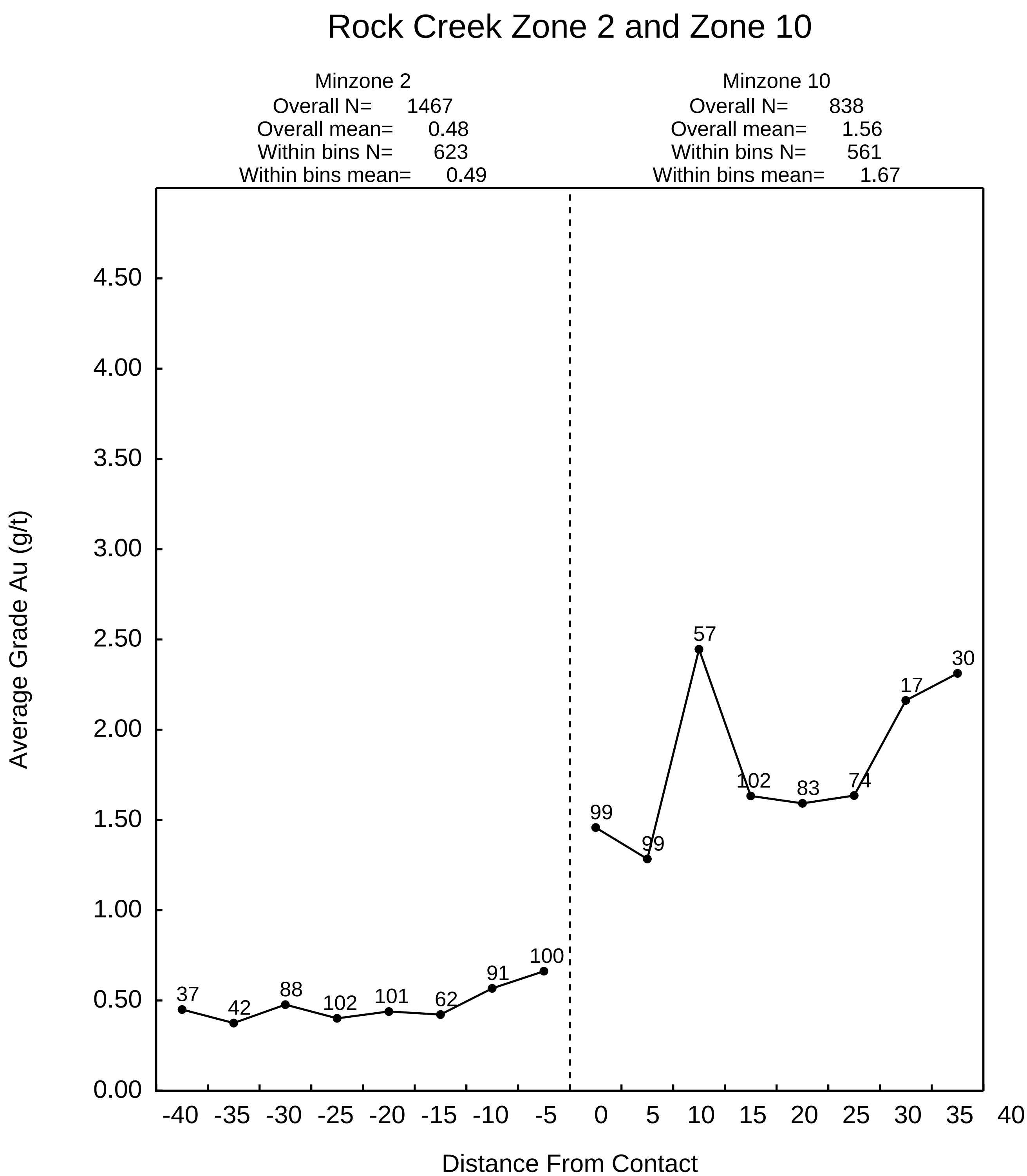
C-3 Contact Plots

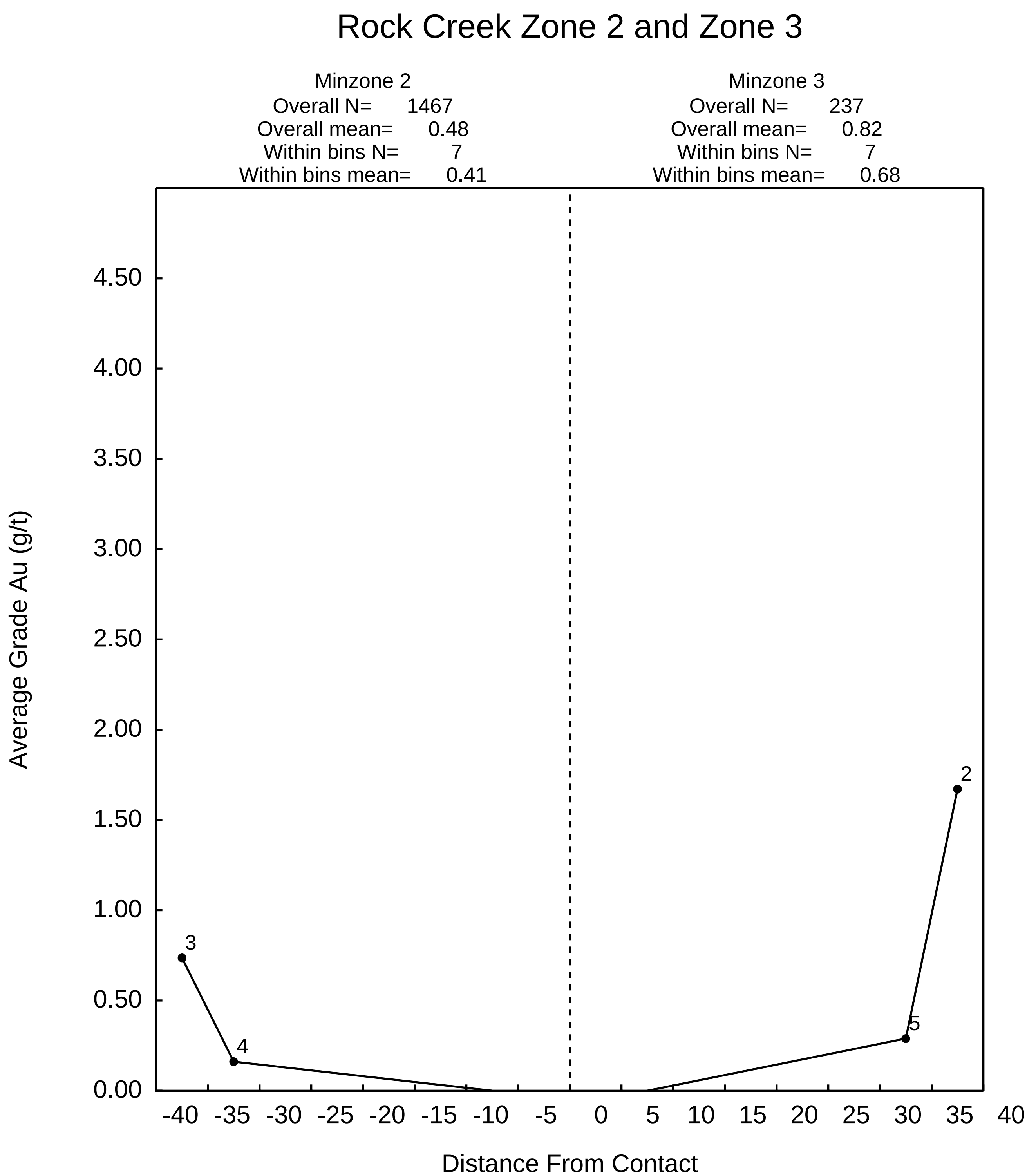

Rock Creek Zone 99 and Zone 3
Minzone 99
Overall N= 3188
Overall mean= 0.20
Within bins N= 240
Within bins mean= 0.13
Minzone 3
Overall N= 237
Overall mean= 0.82
Within bins N= 228
Within bins mean= 0.85
Average Grade Au (g/t)
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
8
15
32
25
48
23
65
24
24
64
20
43
24
25
21
7
-40 -35 -30 -25 -20 -15 -10 -5 0 5 10 15 20 25 30 35 40
Distance From Contact

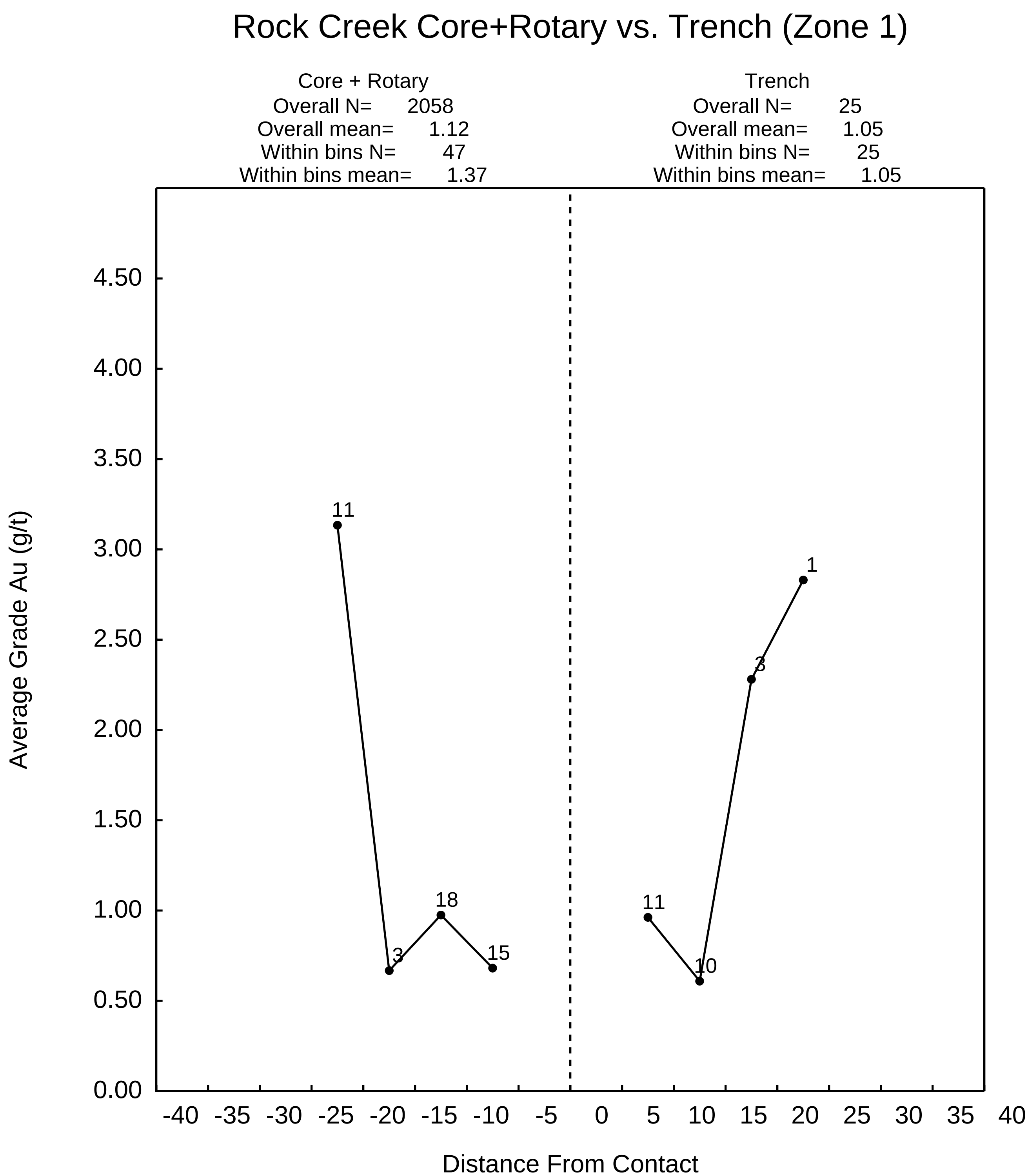

Rock Creek Zone 99 and Zone 2
Minzone 99
Overall N= 3188
Overall mean= 0.20
Within bins N= 497
Within bins mean= 0.23
Minzone 2
Overall N= 1467
Overall mean= 0.48
Within bins N= 513
Within bins mean= 0.56
Average Grade Au (g/t)
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
49
52
98
66
76
44
65
47
47
68
46
84
59
73
85
51
-40 -35 -30 -25 -20 -15 -10 -5 0 5 10 15 20 25 30 35 40
Distance From Contact


Rock Creek Zone 99 and Zone 1
Minzone 99
Overall N= 3188
Overall mean= 0.20
Within bins N= 534
Within bins mean= 0.24
Minzone 1
Overall N= 2083
Overall mean= 0.87
Within bins N= 597
Within bins mean= 0.64
Average Grade Au (g/t)
Distance From Contact
0.00
0.50
1.00
1.50
2.00
2.50
3.00
3.50
4.00
4.50
-40
-35
-30
-25
-20
-15
-10
-5
0
5
10
15
20
25
30
35
40
48
40
69
76
70
50
104
77
80
104
58
76
96
69
54
60

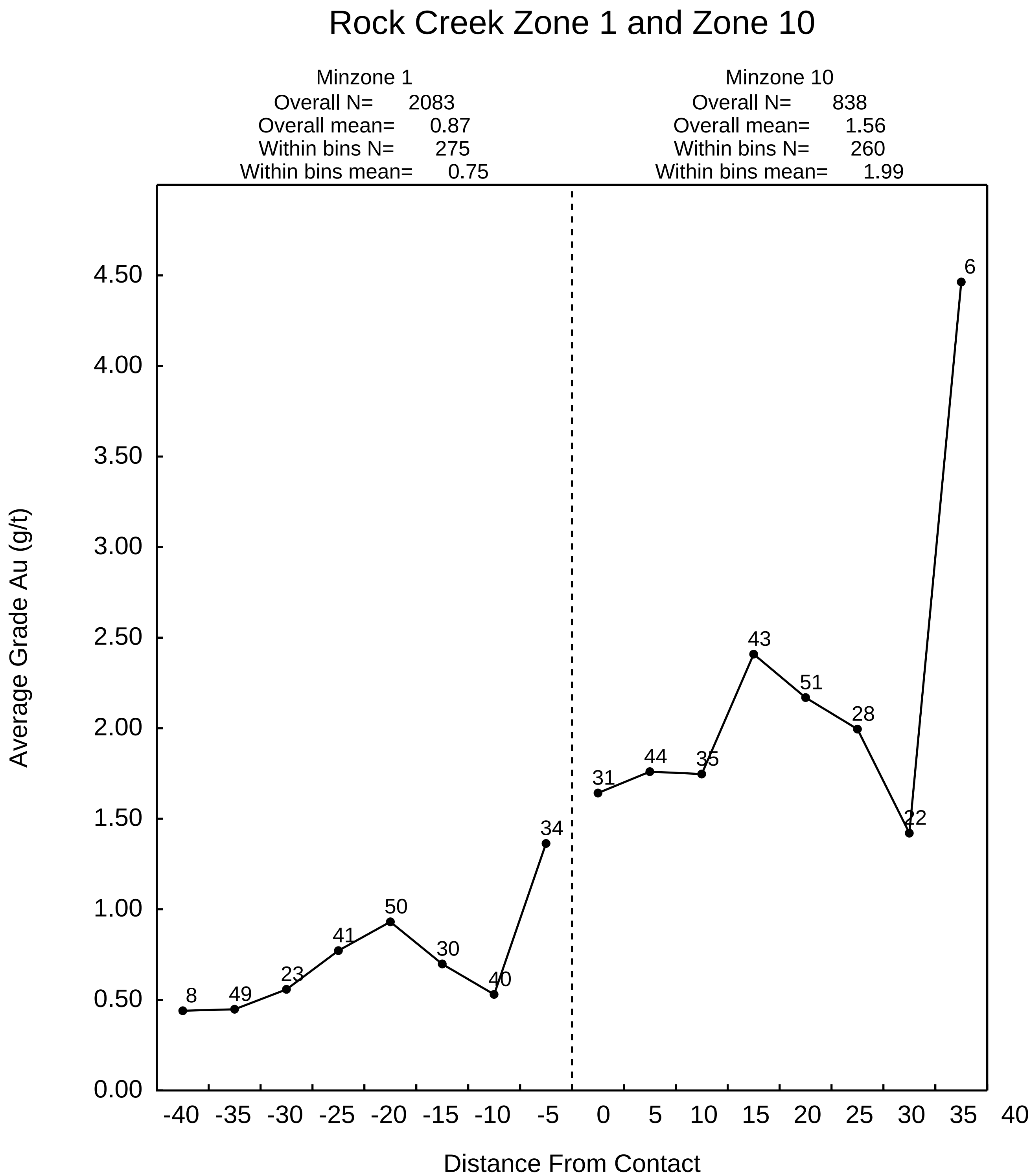

Rock Creek Zone 3 and Zone 10
Minzone 3
Overall N= 237
Overall mean= 0.82
Within bins N= 0
Within bins mean=**********
Minzone 10
Overall N= 838
Overall mean= 1.56
Within bins N= 0
Within bins mean=**********
Average Grade Au (g/t)
0.00
0.50
1.00
1.50
2.00
2.50
3.00
3.50
4.00
4.50
-40 -35 -30 -25 -20 -15 -10 -5 0 5 10 15 20 25 30 35 40
Distance From Contact

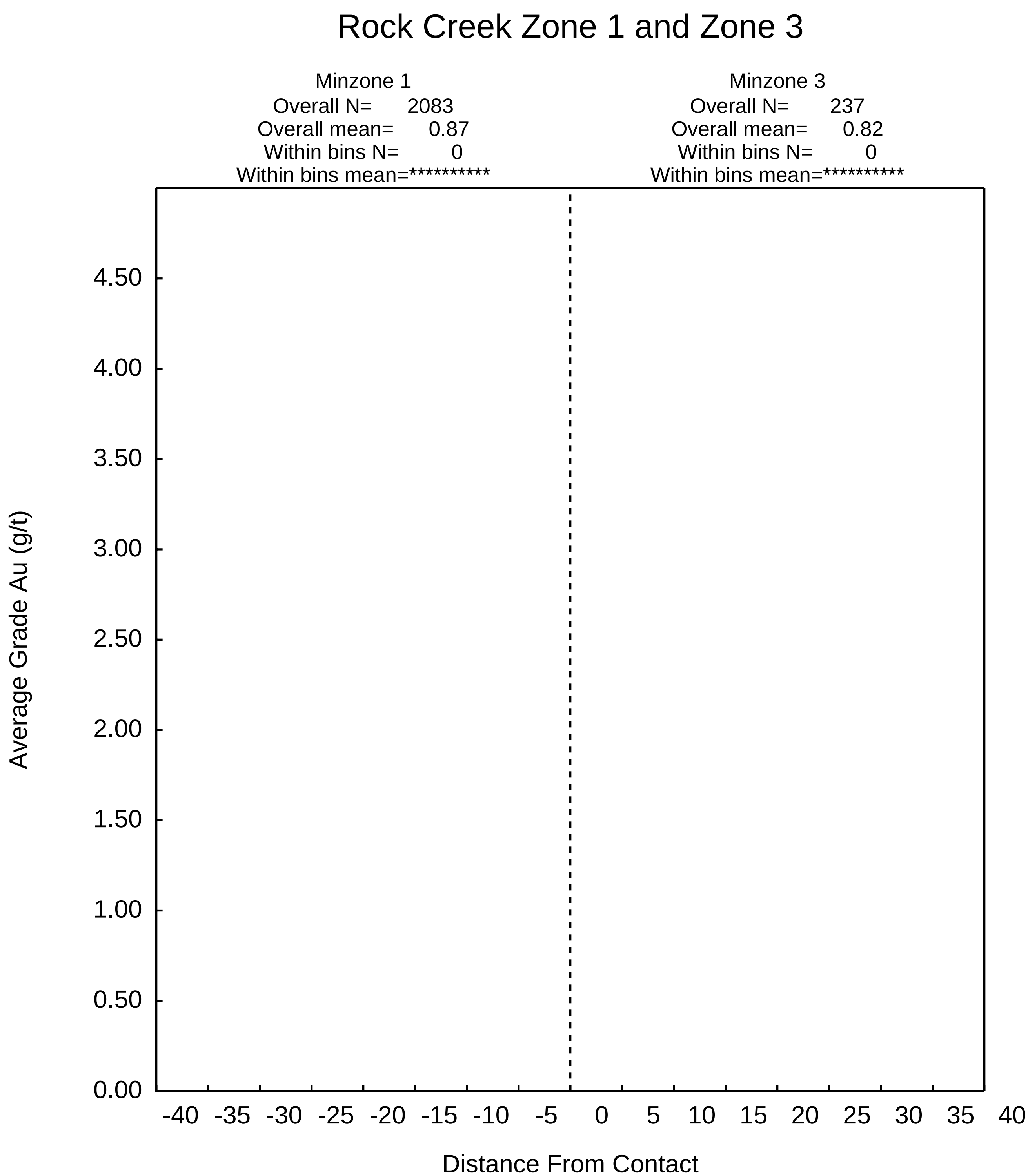

Rock Creek Zone 2 and Zone 10
Minzone 2
Overall N= 1467
Overall mean= 0.48
Within bins N= 623
Within bins mean= 0.49
Minzone 10
Overall N= 838
Overall mean= 1.56
Within bins N= 561
Within bins mean= 1.67
Average Grade Au (g/t)
0.00
0.50
1.00
1.50
2.00
2.50
3.00
3.50
4.00
4.50
37
42
88
102
101
62
91
100
99
99
57
102
83
74
17
30
-40
-35
-30
-25
-20
-15
-10
-5
0
5
10
15
20
25
30
35
40
Distance From Contact

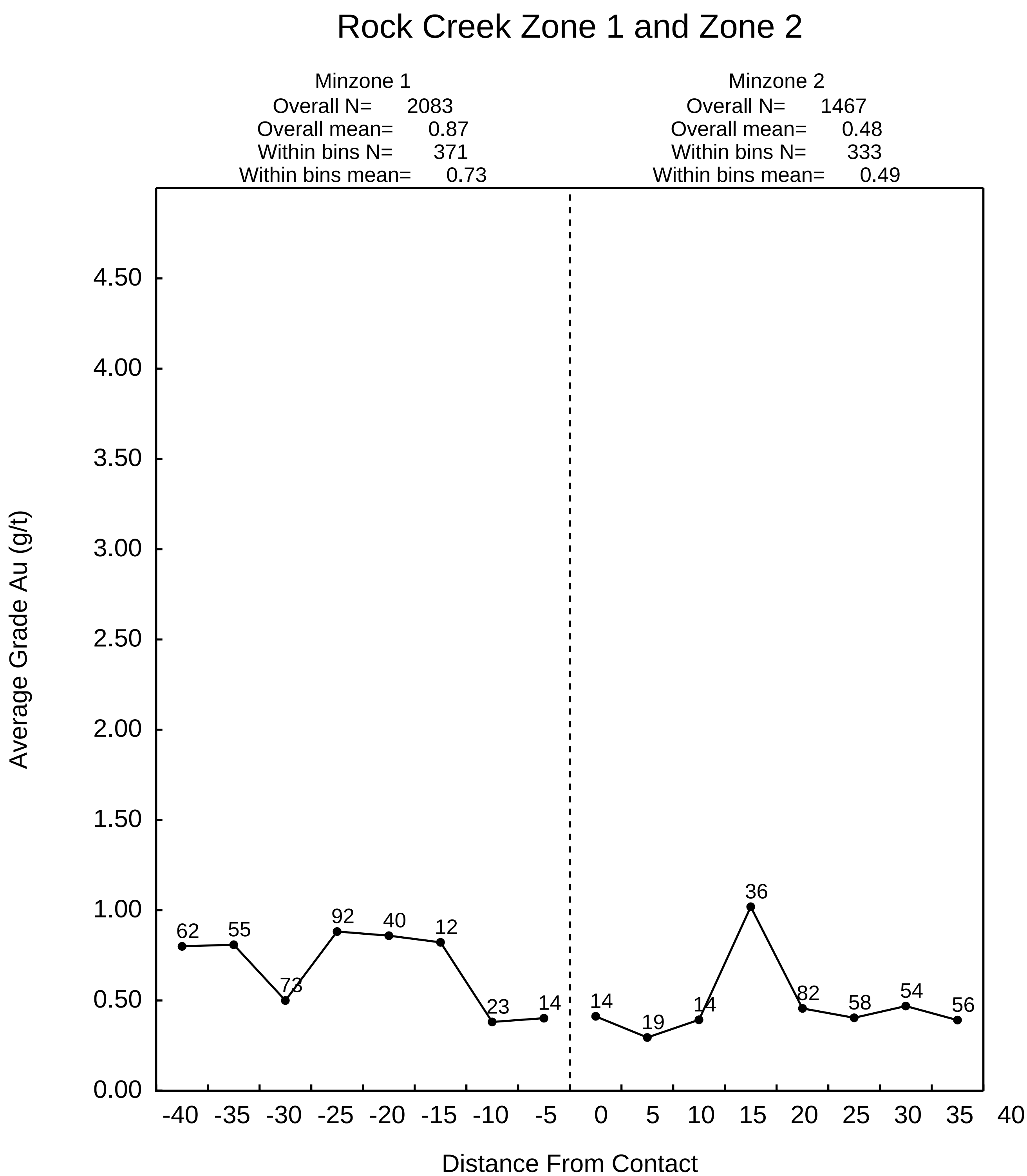

Rock Creek Zone 2 and Zone 3
Minzone 2
Overall N= 1467
Overall mean= 0.48
Within bins N= 7
Within bins mean= 0.41
Minzone 3
Overall N= 237
Overall mean= 0.82
Within bins N= 7
Within bins mean= 0.68
Average Grade Au (g/t)
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
3
4
5
2
-40 -35 -30 -25 -20 -15 -10 -5 0 5 10 15 20 25 30 35 40
Distance From Contact

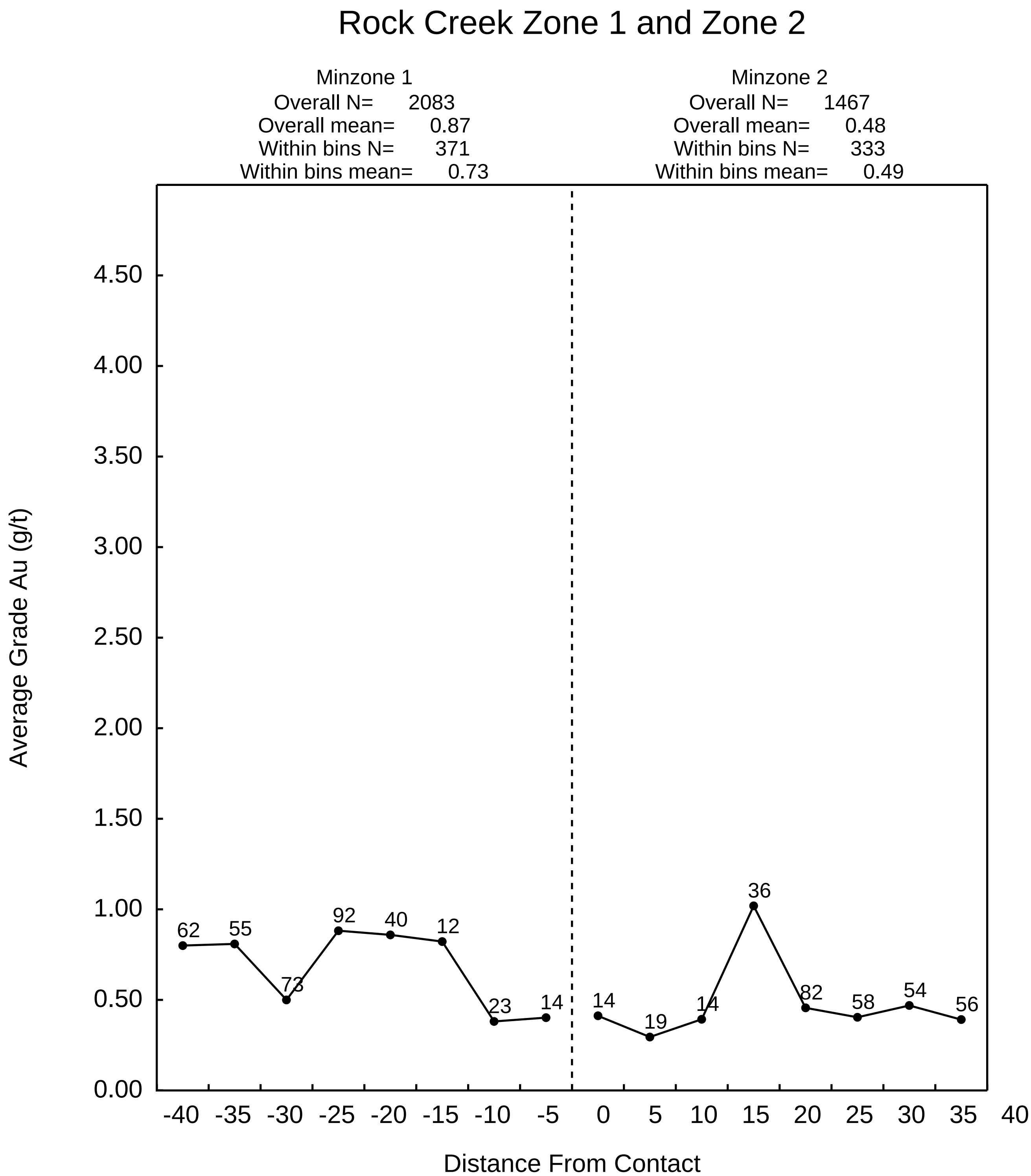


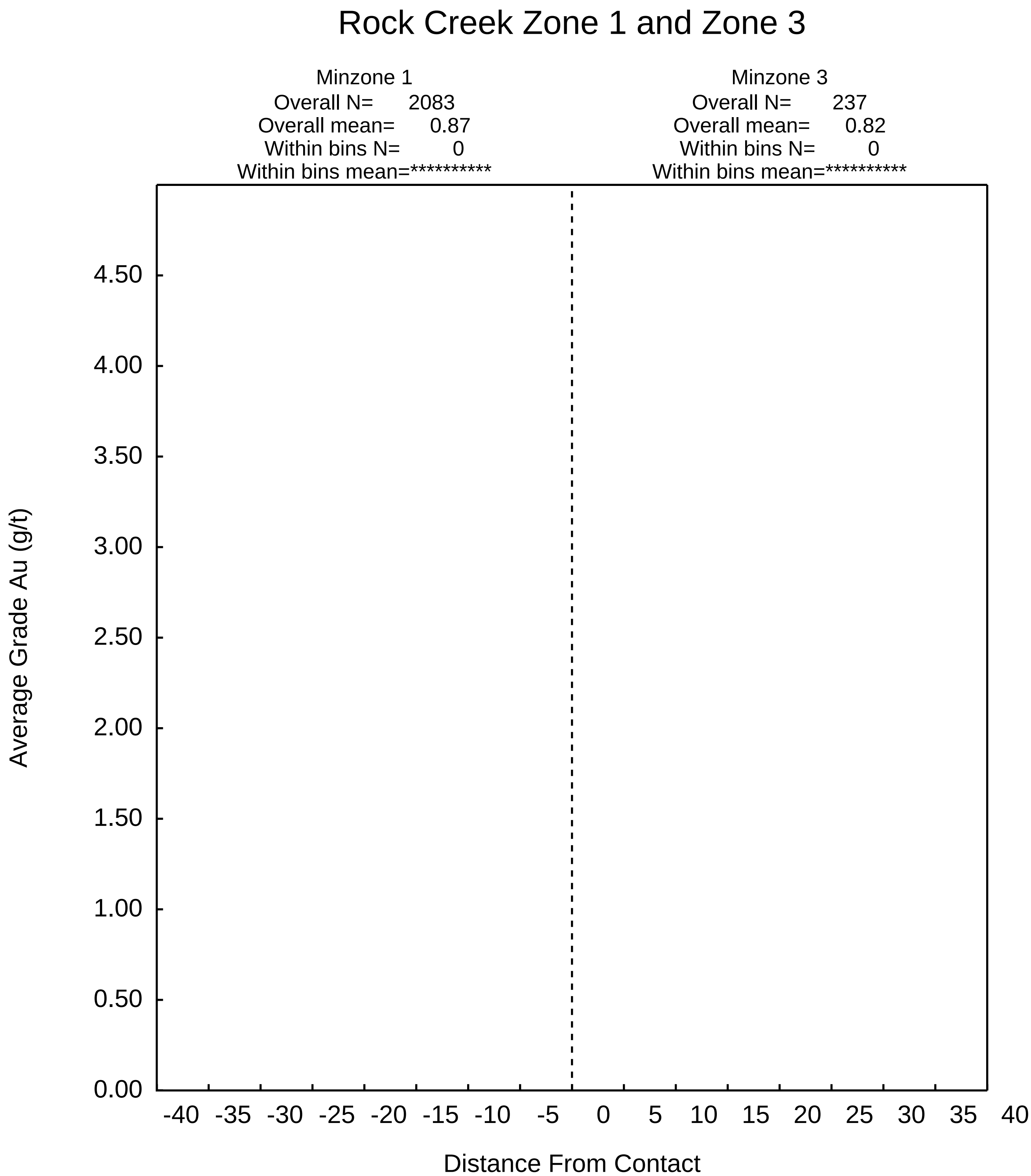
Rock Creek Core+Rotary vs. Trench (Zone 1)
Core + Rotary
Overall N= 2058
Overall mean= 1.12
Within bins N= 47
Within bins mean= 1.37
Trench
Overall N= 25
Overall mean= 1.05
Within bins N= 25
Within bins mean= 1.05
Average Grade Au (g/t)
0.00
0.50
1.00
1.50
2.00
2.50
3.00
3.50
4.00
4.50
-40 -35 -30 -25 -20 -15 -10 -5 0 5 10 15 20 25 30 35 40
Distance From Contact
11
3
18
15
11
10
3
1

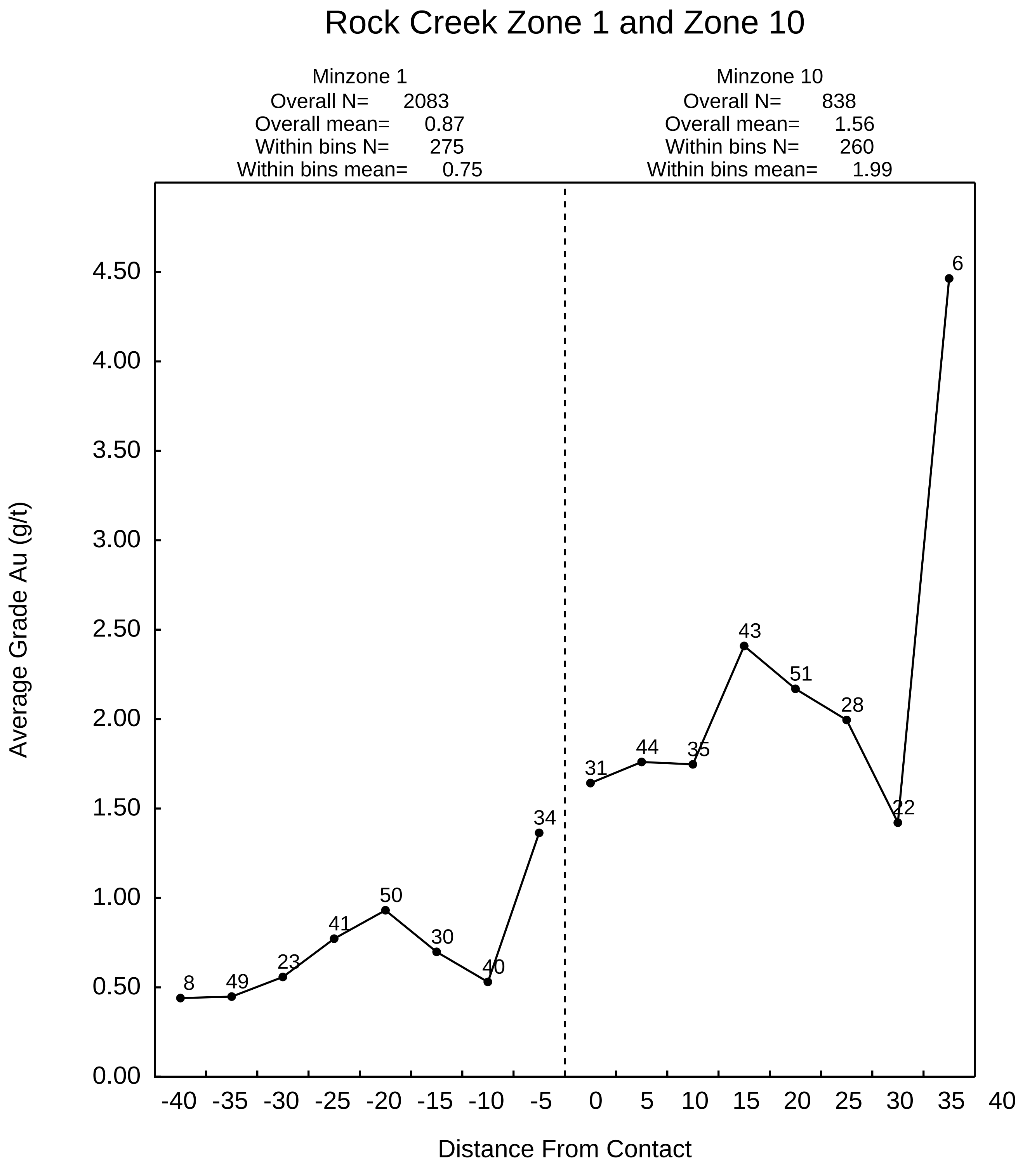

Rock Creek Zone 1 and Zone 10
Minzone 1
Overall N= 2083
Overall mean= 0.87
Within bins N= 275
Within bins mean= 0.75
Minzone 10
Overall N= 838
Overall mean= 1.56
Within bins N= 260
Within bins mean= 1.99
Average Grade Au (g/t)
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
8
49
23
41
50
30
40
34
31
44
35
43
51
28
22
6
-40 -35 -30 -25 -20 -15 -10 -5 0 5 10 15 20 25 30 35 40
Distance From Contact

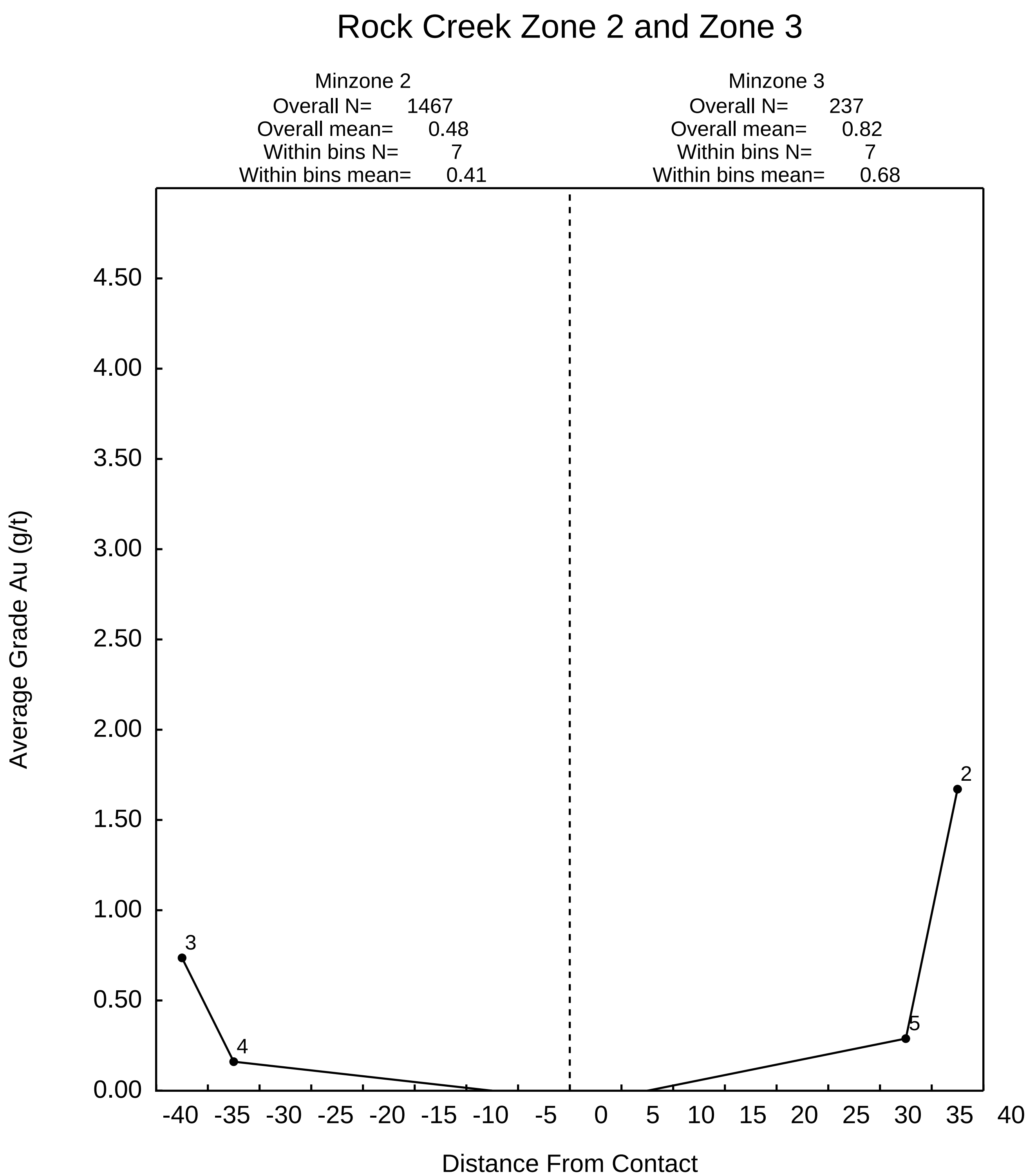

Rock Creek Zone 1 and Zone 3
Minzone 1
Overall N= 2083
Overall mean= 0.87
Within bins N= 0
Within bins mean=**********
Minzone 3
Overall N= 237
Overall mean= 0.82
Within bins N= 0
Within bins mean=**********
Average Grade Au (g/t)
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
-40 -35 -30 -25 -20 -15 -10 -5 0 5 10 15 20 25 30 35 40
Distance From Contact

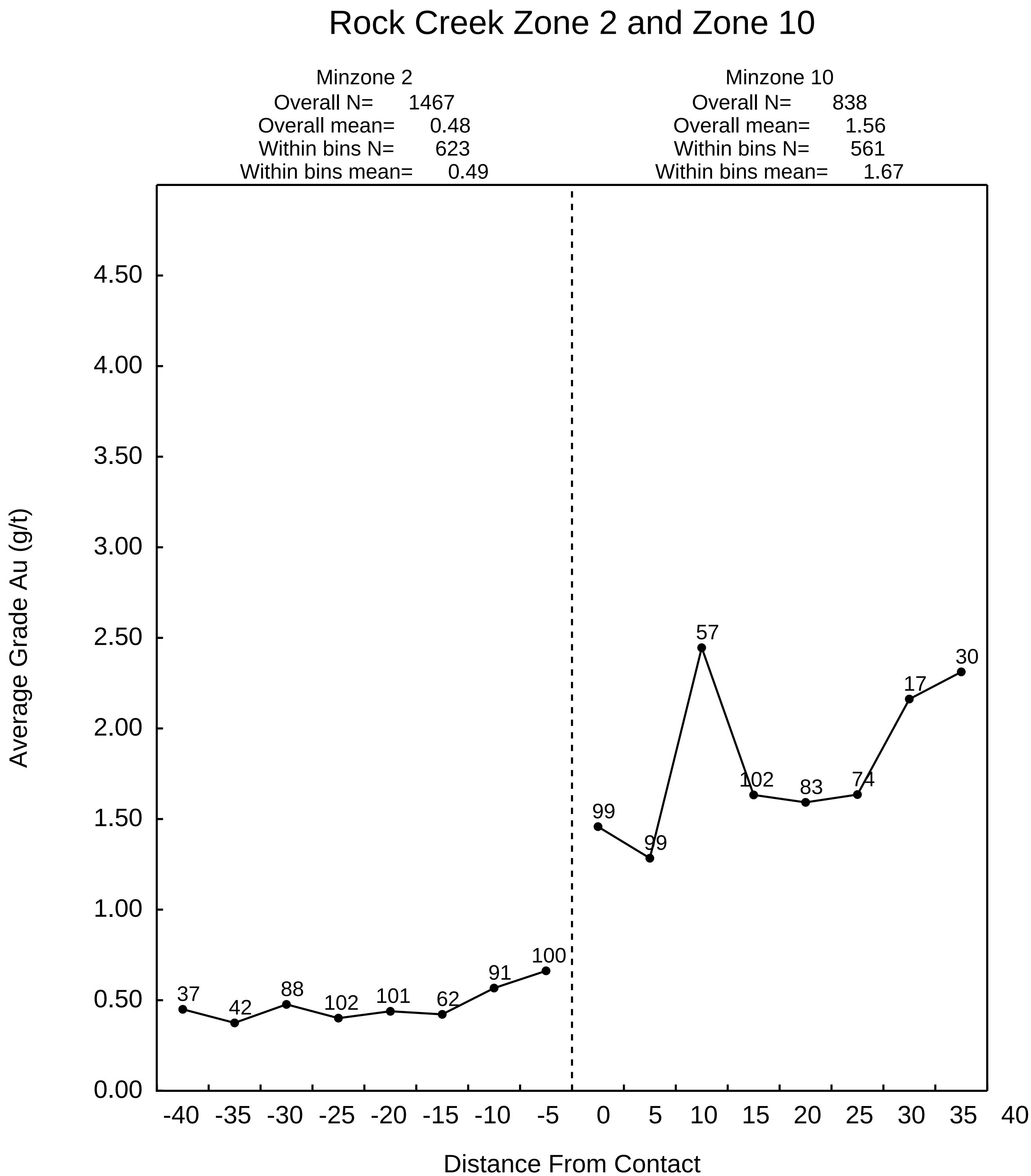

Rock Creek Zone 1 and Zone 2
Minzone 1
Overall N= 2083
Overall mean= 0.87
Within bins N= 371
Within bins mean= 0.73
Minzone 2
Overall N= 1467
Overall mean= 0.48
Within bins N= 333
Within bins mean= 0.49
Average Grade Au (g/t)
0.00
0.50
1.00
1.50
2.00
2.50
3.00
3.50
4.00
4.50
62
55
73
92
40
12
23
14
14
19
14
36
82
58
54
56
-40 -35 -30 -25 -20 -15 -10 -5 0 5 10 15 20 25 30 35 40
Distance From Contact

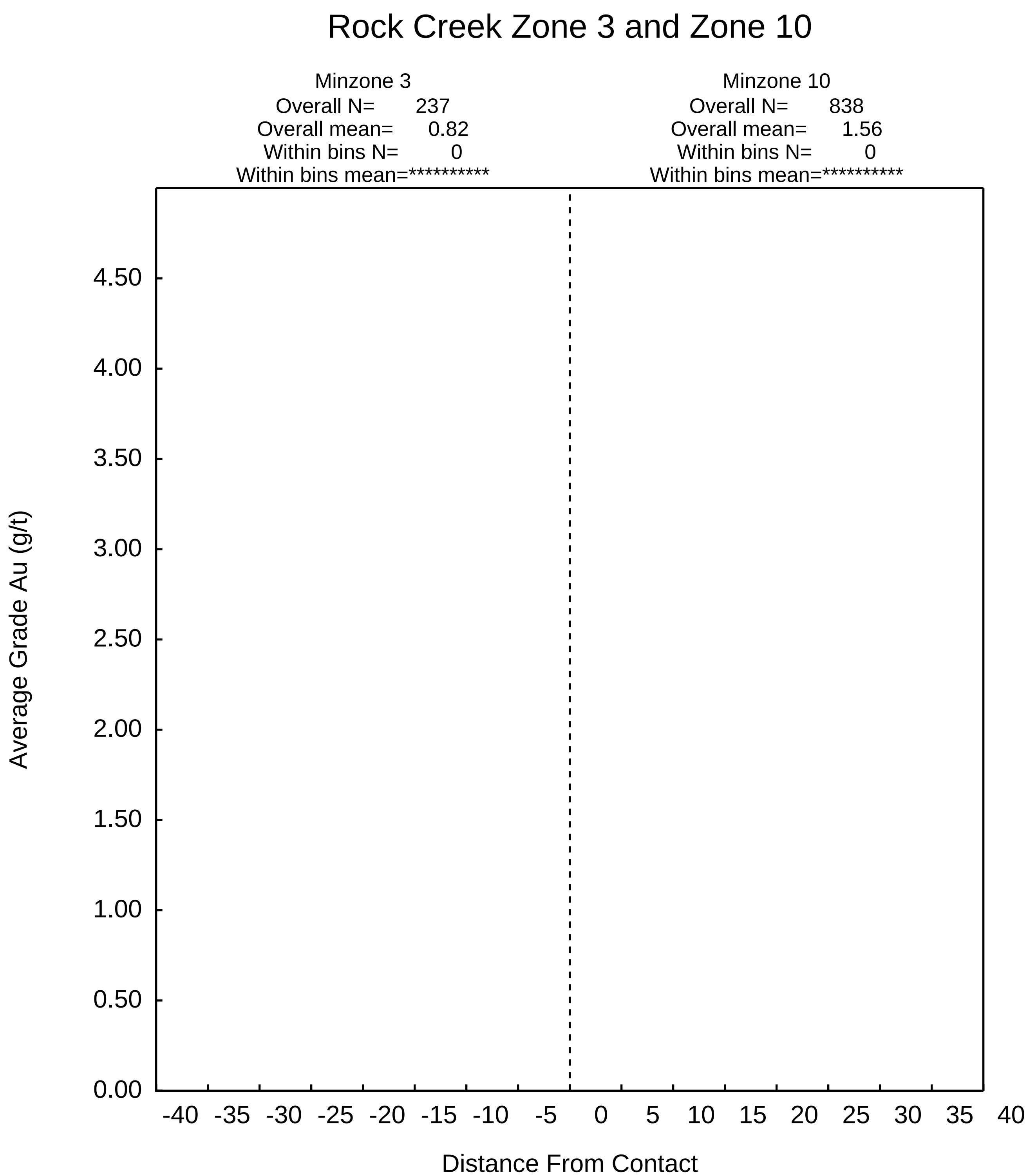

Rock Creek Zone 1 and Zone 2
Minzone 1
Overall N= 2083
Overall mean= 0.87
Within bins N= 371
Within bins mean= 0.73
Minzone 2
Overall N= 1467
Overall mean= 0.48
Within bins N= 333
Within bins mean= 0.49
Average Grade Au (g/t)
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
62
55
73
92
40
12
23
14
14
19
14
36
82
58
54
56
-40
-35
-30
-25
-20
-15
-10
-5
0
5
10
15
20
25
30
35
40
Distance From Contact

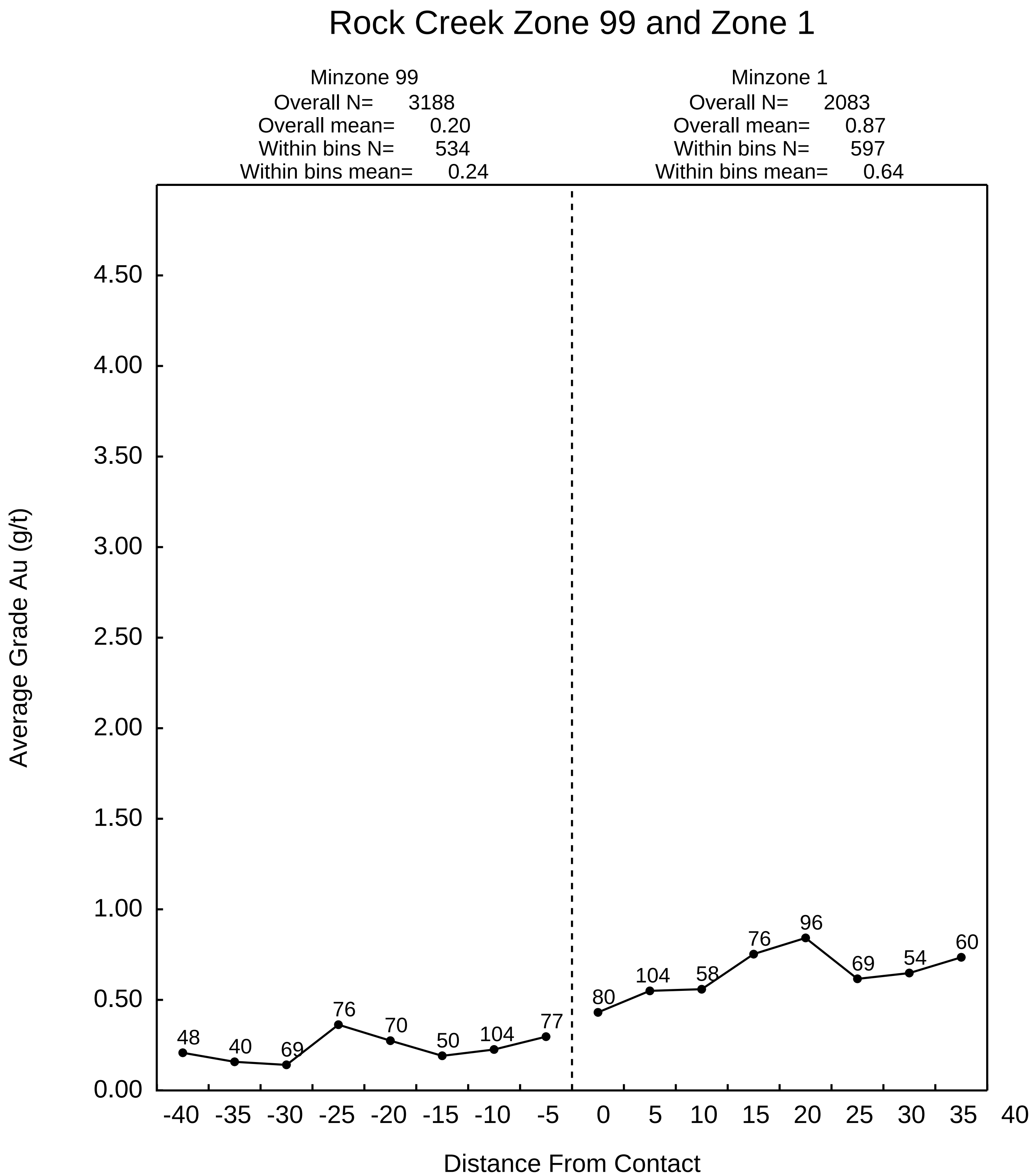

Rock Creek Zone 1 and Zone 3
Minzone 1
Overall N= 2083
Overall mean= 0.87
Within bins N= 0
Within bins mean=**********
Minzone 3
Overall N= 237
Overall mean= 0.82
Within bins N= 0
Within bins mean=**********
Average Grade Au (g/t)
0.00
0.50
1.00
1.50
2.00
2.50
3.00
3.50
4.00
4.50
-40 -35 -30 -25 -20 -15 -10 -5 0 5 10 15 20 25 30 35 40
Distance From Contact


Rock Creek Zone 1 and Zone 10
Minzone 1
Overall N= 2083
Overall mean= 0.87
Within bins N= 275
Within bins mean= 0.75
Minzone 10
Overall N= 838
Overall mean= 1.56
Within bins N= 260
Within bins mean= 1.99
Average Grade Au (g/t)
0.00
0.50
1.00
1.50
2.00
2.50
3.00
3.50
4.00
4.50
-40
-35
-30
-25
-20
-15
-10
-5
0
5
10
15
20
25
30
35
40
Distance From Contact
8
49
23
41
50
30
40
34
31
44
35
43
51
28
22
6

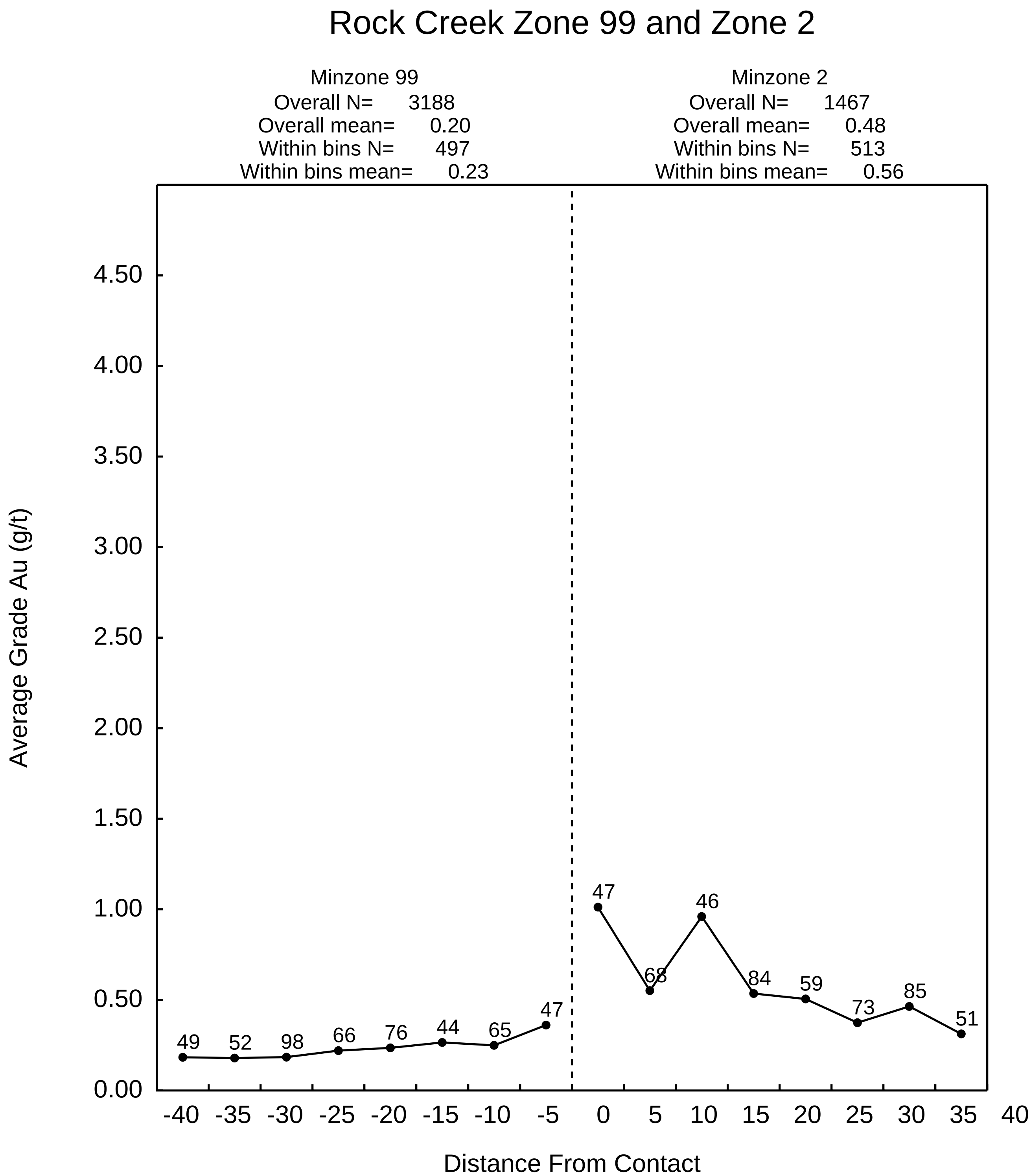

Rock Creek Zone 2 and Zone 3
Minzone 2
Overall N= 1467
Overall mean= 0.48
Within bins N= 7
Within bins mean= 0.41
Minzone 3
Overall N= 237
Overall mean= 0.82
Within bins N= 7
Within bins mean= 0.68
Average Grade Au (g/t)
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
3
4
5
2
-40 -35 -30 -25 -20 -15 -10 -5 0 5 10 15 20 25 30 35 40
Distance From Contact

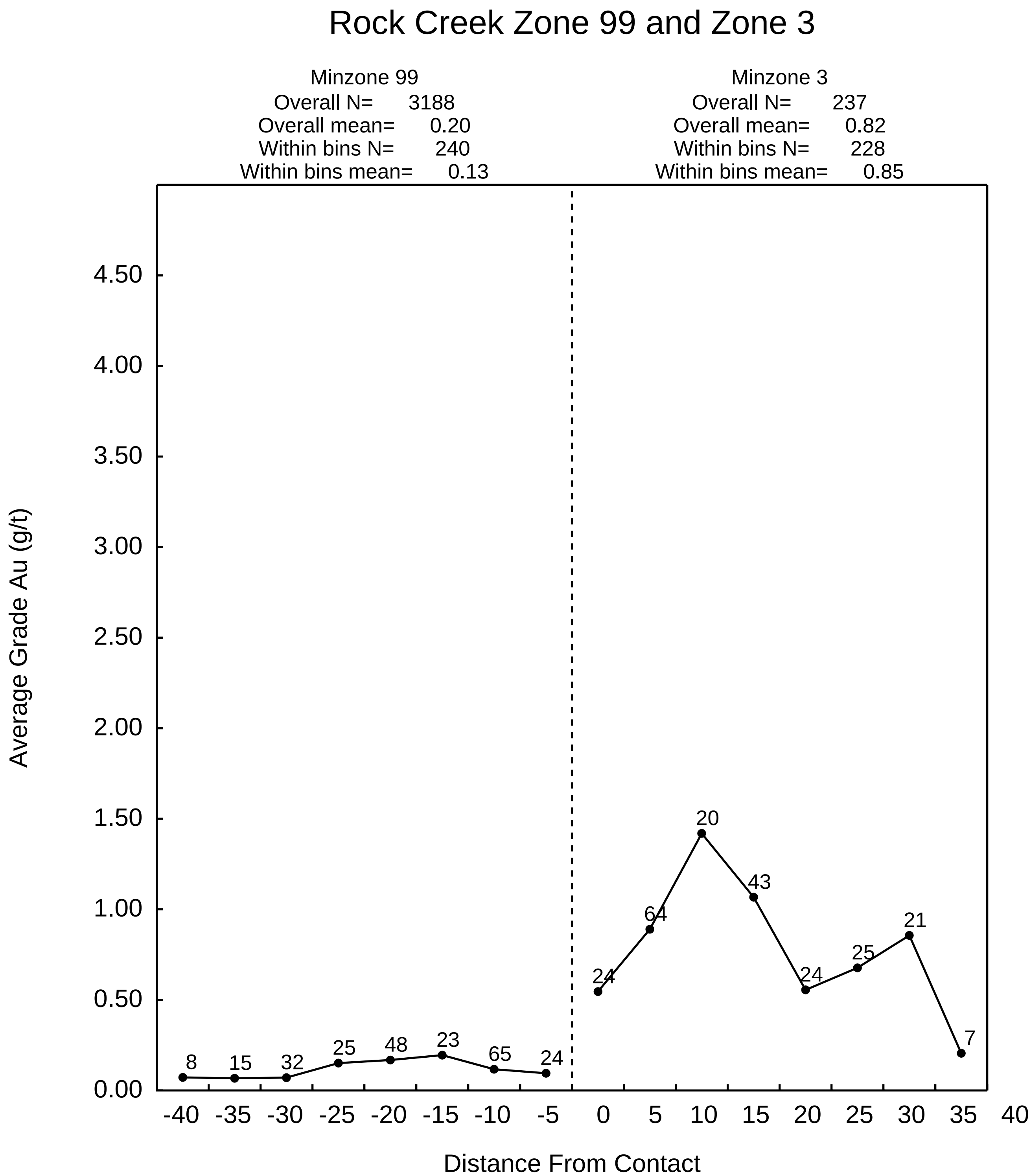

Rock Creek Zone 2 and Zone 10
Minzone 2
Overall N= 1467
Overall mean= 0.48
Within bins N= 623
Within bins mean= 0.49
Minzone 10
Overall N= 838
Overall mean= 1.56
Within bins N= 561
Within bins mean= 1.67
Average Grade Au (g/t)
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
37
42
88
102
101
62
91
100
99
99
57
102
83
74
17
30
-40 -35 -30 -25 -20 -15 -10 -5 0 5 10 15 20 25 30 35 40
Distance From Contact

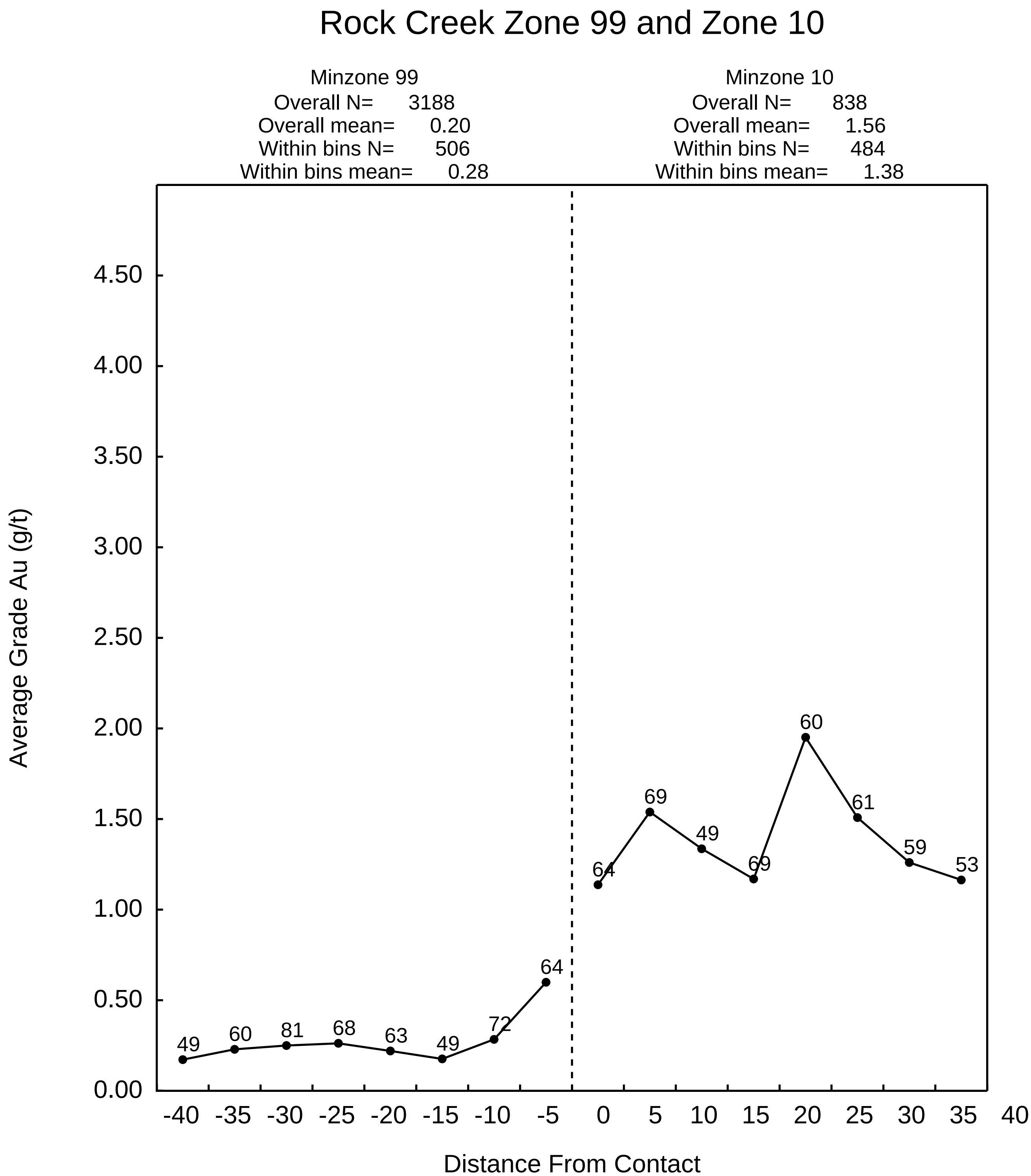

Rock Creek Zone 3 and Zone 10
Minzone 3
Overall N= 237
Overall mean= 0.82
Within bins N= 0
Within bins mean=**********
Minzone 10
Overall N= 838
Overall mean= 1.56
Within bins N= 0
Within bins mean=**********
Average Grade Au (g/t)
0.00
0.50
1.00
1.50
2.00
2.50
3.00
3.50
4.00
4.50
-40 -35 -30 -25 -20 -15 -10 -5 0 5 10 15 20 25 30 35 40
Distance From Contact

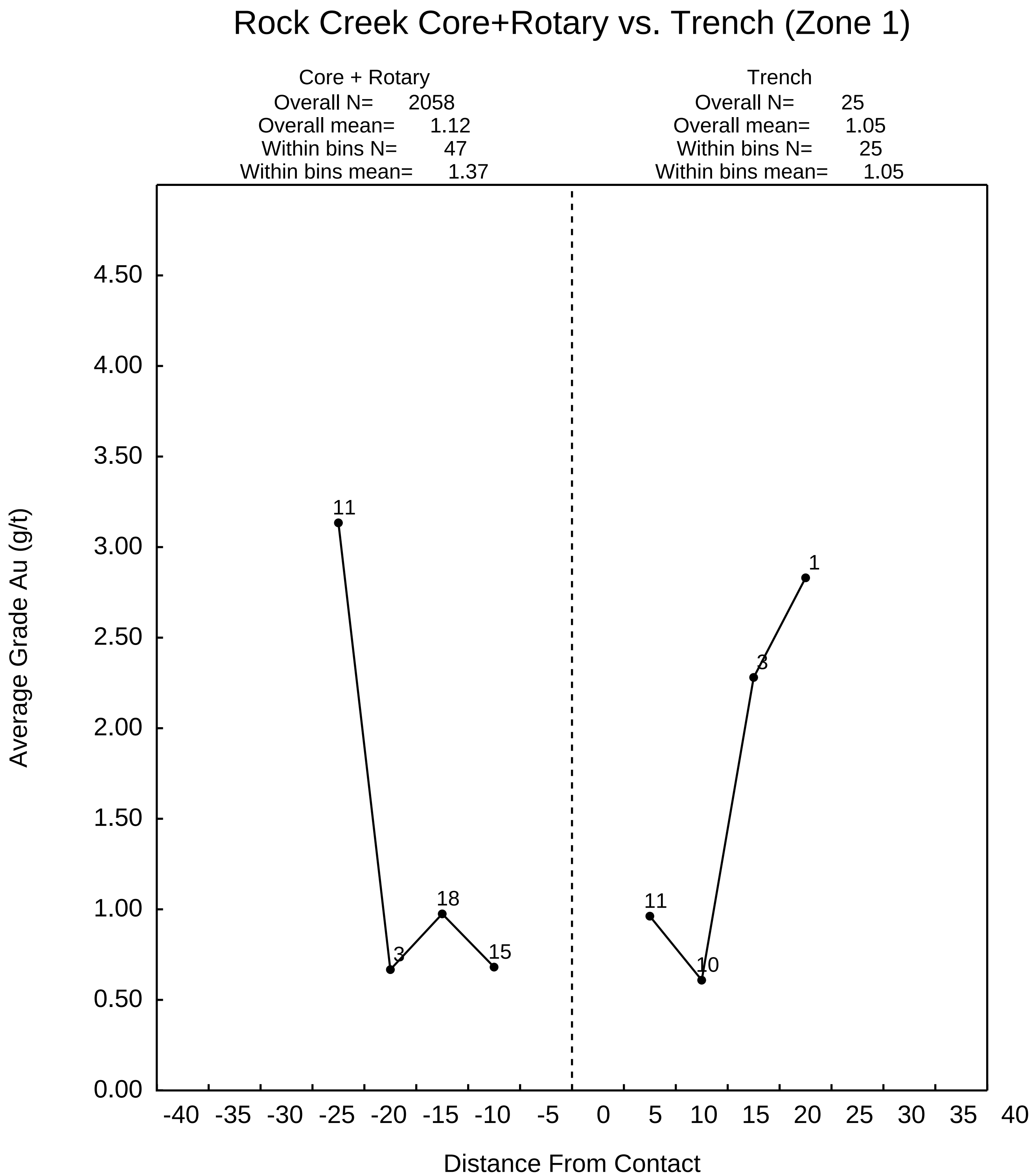


Rock Creek Zone 99 and Zone 1
Minzone 99
Overall N= 3188
Overall mean= 0.20
Within bins N= 534
Within bins mean= 0.24
Minzone 1
Overall N= 2083
Overall mean= 0.87
Within bins N= 597
Within bins mean= 0.64
Average Grade Au (g/t)
0.00
0.50
1.00
1.50
2.00
2.50
3.00
3.50
4.00
4.50
48
40
69
76
70
50
104
77
80
104
58
76
96
69
54
60
-40
-35
-30
-25
-20
-15
-10
-5
0
5
10
15
20
25
30
35
40
Distance From Contact

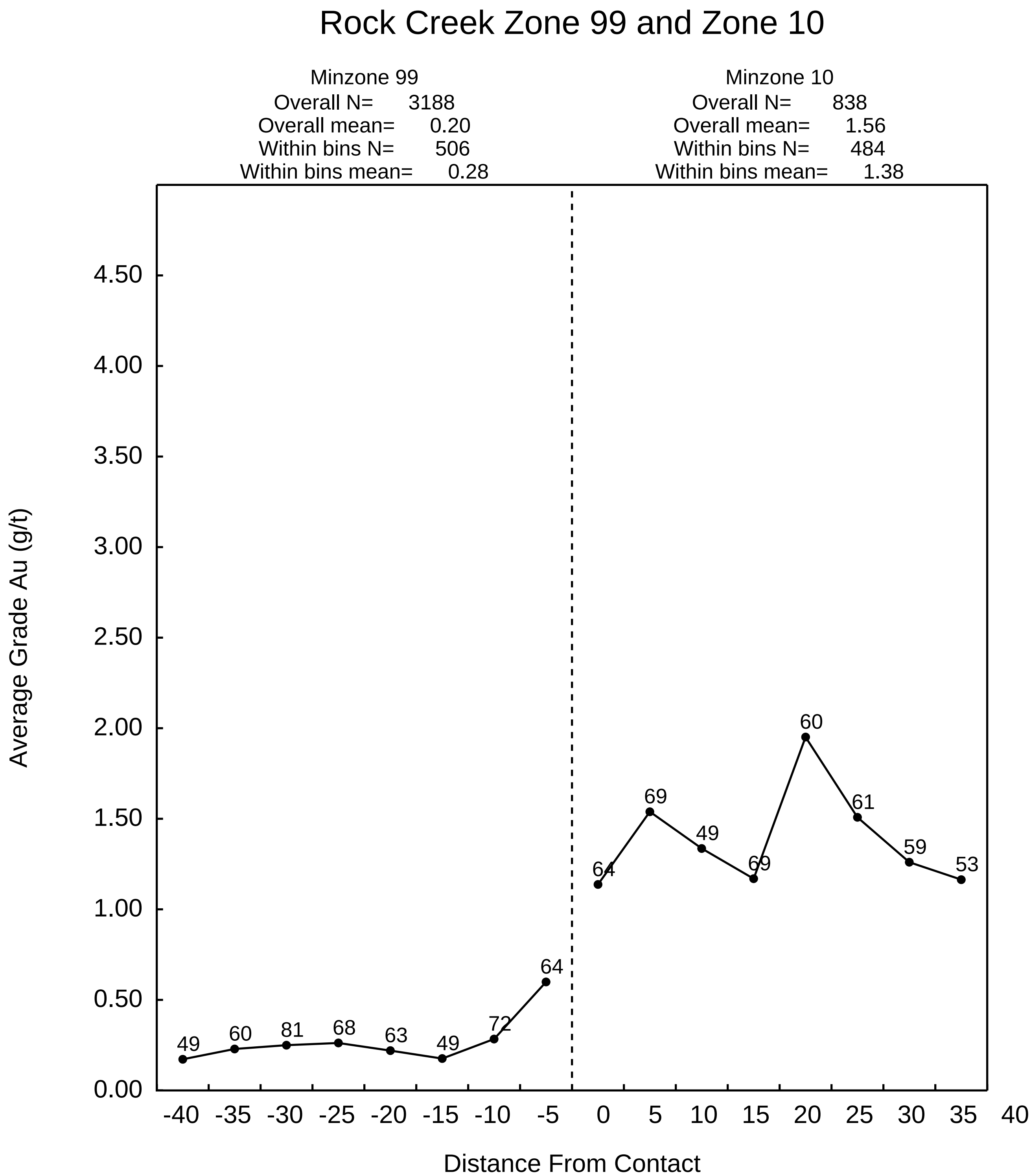

Rock Creek Zone 99 and Zone 2
Minzone 99
Overall N= 3188
Overall mean= 0.20
Within bins N= 497
Within bins mean= 0.23
Minzone 2
Overall N= 1467
Overall mean= 0.48
Within bins N= 513
Within bins mean= 0.56
Average Grade Au (g/t)
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
49
52
98
66
76
44
65
47
47
68
46
84
59
73
85
51
-40
-35
-30
-25
-20
-15
-10
-5
0
5
10
15
20
25
30
35
40
Distance From Contact


Rock Creek Zone 99 and Zone 3
Minzone 99
Overall N= 3188
Overall mean= 0.20
Within bins N= 240
Within bins mean= 0.13
Minzone 3
Overall N= 237
Overall mean= 0.82
Within bins N= 228
Within bins mean= 0.85
Average Grade Au (g/t)
0.00
0.50
1.00
1.50
2.00
2.50
3.00
3.50
4.00
4.50
-40
-35
-30
-25
-20
-15
-10
-5
0
5
10
15
20
25
30
35
40
Distance From Contact
8
15
32
25
48
23
65
24
24
64
20
43
24
25
21
7


Rock Creek Zone 99 and Zone 10
Minzone 99
Overall N= 3188
Overall mean= 0.20
Within bins N= 506
Within bins mean= 0.28
Minzone 10
Overall N= 838
Overall mean= 1.56
Within bins N= 484
Within bins mean= 1.38
Average Grade Au (g/t)
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
49
60
81
68
63
49
72
64
64
69
49
69
60
61
59
53
-40
-35
-30
-25
-20
-15
-10
-5
0
5
10
15
20
25
30
35
40
Distance From Contact



Rock Creek Core+Rotary vs. Trench (Zone 1)
Core + Rotary
Overall N= 2058
Overall mean= 1.12
Within bins N= 47
Within bins mean= 1.37
Trench
Overall N= 25
Overall mean= 1.05
Within bins N= 25
Within bins mean= 1.05
Average Grade Au (g/t)
0.00
0.50
1.00
1.50
2.00
2.50
3.00
3.50
4.00
4.50
11
3
18
15
11
10
3
1
-40 -35 -30 -25 -20 -15 -10 -5 0 5 10 15 20 25 30 35 40
Distance From Contact



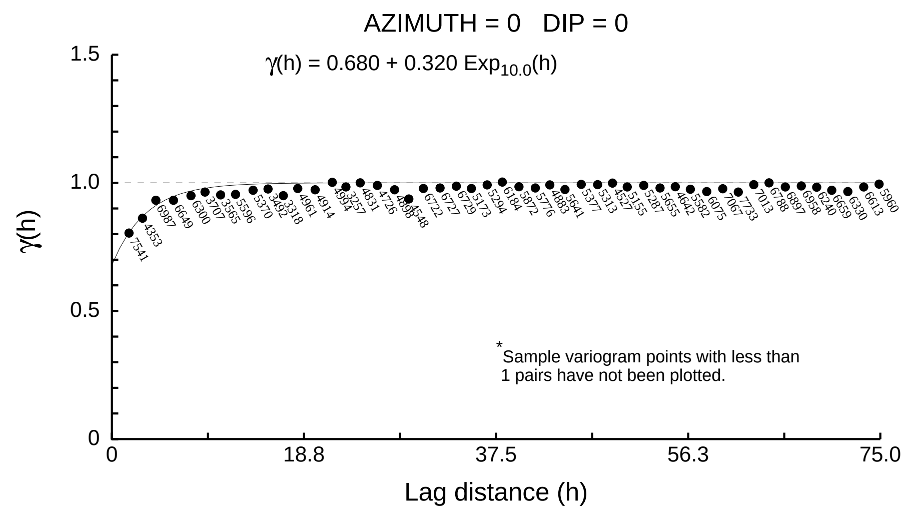
Rock Creek Zone 99 and Zone 10
Minzone 99
Overall N= 3188
Overall mean= 0.20
Within bins N= 506
Within bins mean= 0.28
Minzone 10
Overall N= 838
Overall mean= 1.56
Within bins N= 484
Within bins mean= 1.38
Average Grade Au (g/t)
4.50
4.00
3.50
3.00
2.50
2.00
1.50
1.00
0.50
0.00
49
60
81
68
63
49
72
64
64
69
49
69
60
61
59
53
-40
-35
-30
-25
-20
-15
-10
-5
0
5
10
15
20
25
30
35
40
Distance From Contact

APPENDIX D

VARIOGRAPHY

D-1 Assay Variograms

Zone 99 0.4 gram downhole Ind Correlogram



Zone 99 Downhole Correlograms - Assays

Medsystem and Vulcan Rotation Conventions

Nugget ==> 0.840
C1 ==> 0.160

First Structure -- Exponential with Practical Range

LH Rotation about the Z axis ==> 0
RH Rotation about the X' axis ==> 0
LH Rotation about the Y' axis ==> 0

Range along the Z' axis ==> 7.0	Azimuth ==> 90 Dip ==> 90
Range along the Y' axis ==> 7.0	Azimuth ==> 360 Dip ==> 0
Range along the X' axis ==> 7.0	Azimuth ==> 90 Dip ==> 0

Modeling Criteria

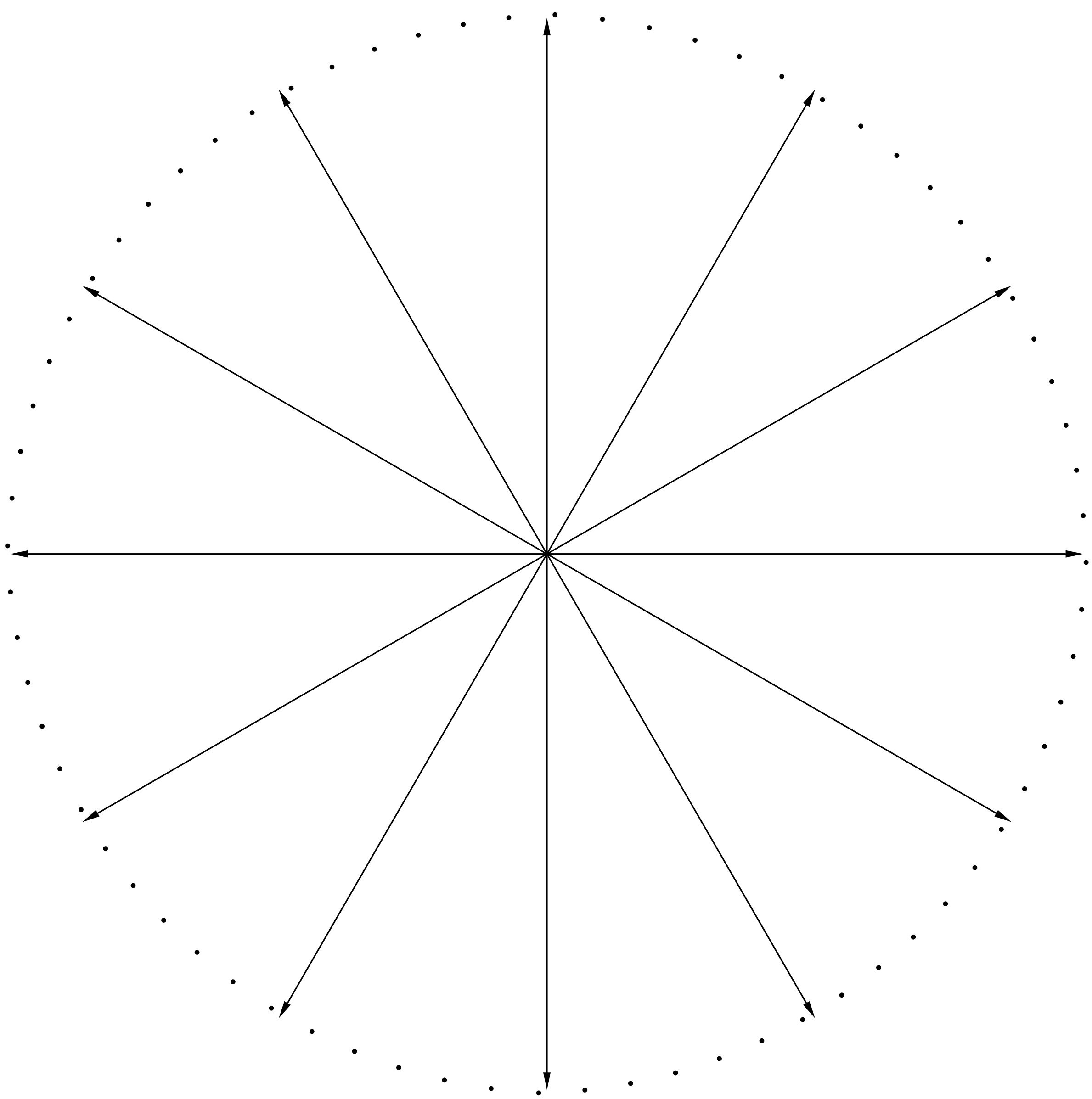
Minimum number pairs req'd ==> 1
Sample variogram points weighted by # pairs

Zone 99 Downhole Correlograms - Assays

Structure Number 1

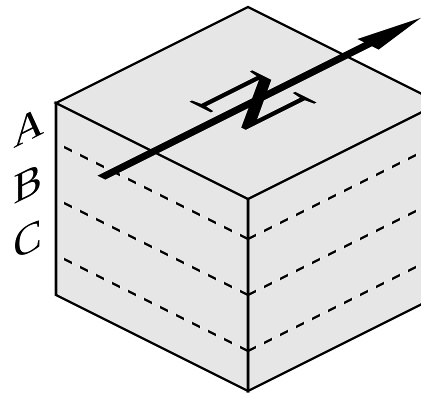
Rose Diagram of Ranges Dipping 0 Degrees
Scale:

7 Units

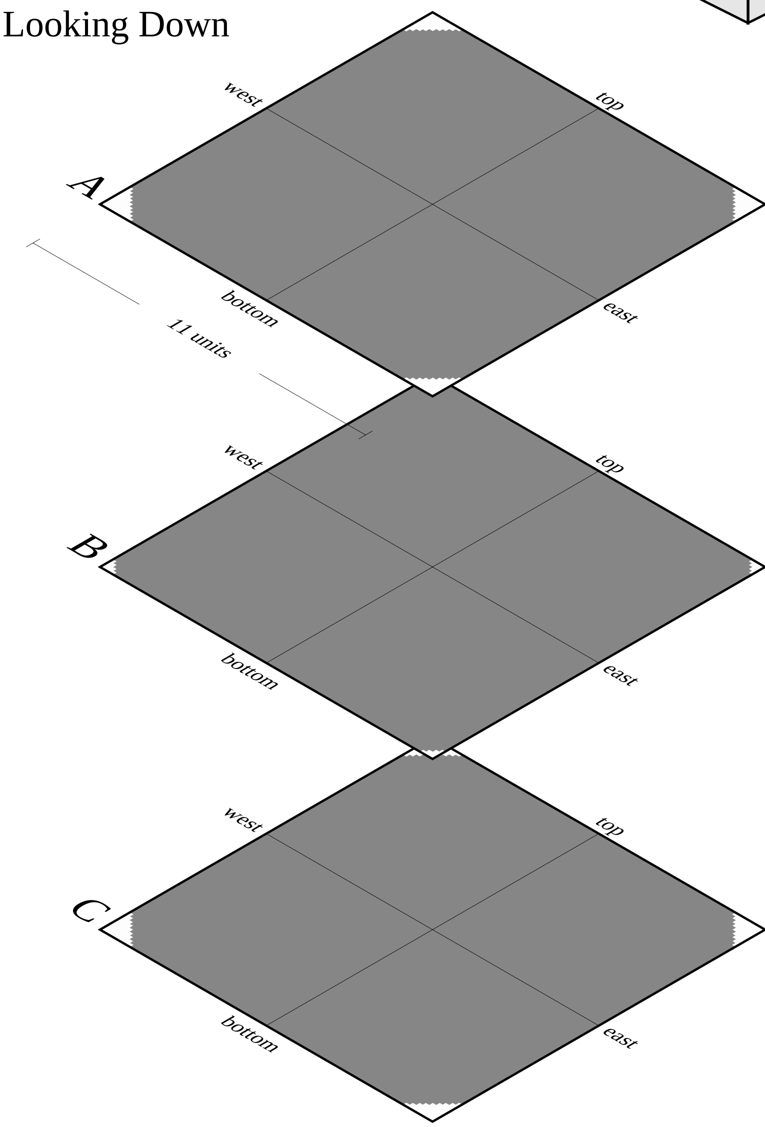


Horizontal Slices Through the Ellipsoids

Reference Cube



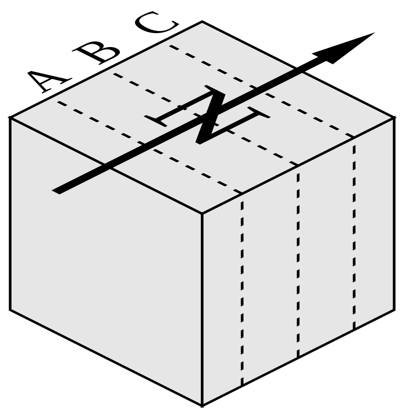
X-Y Planes Looking Down



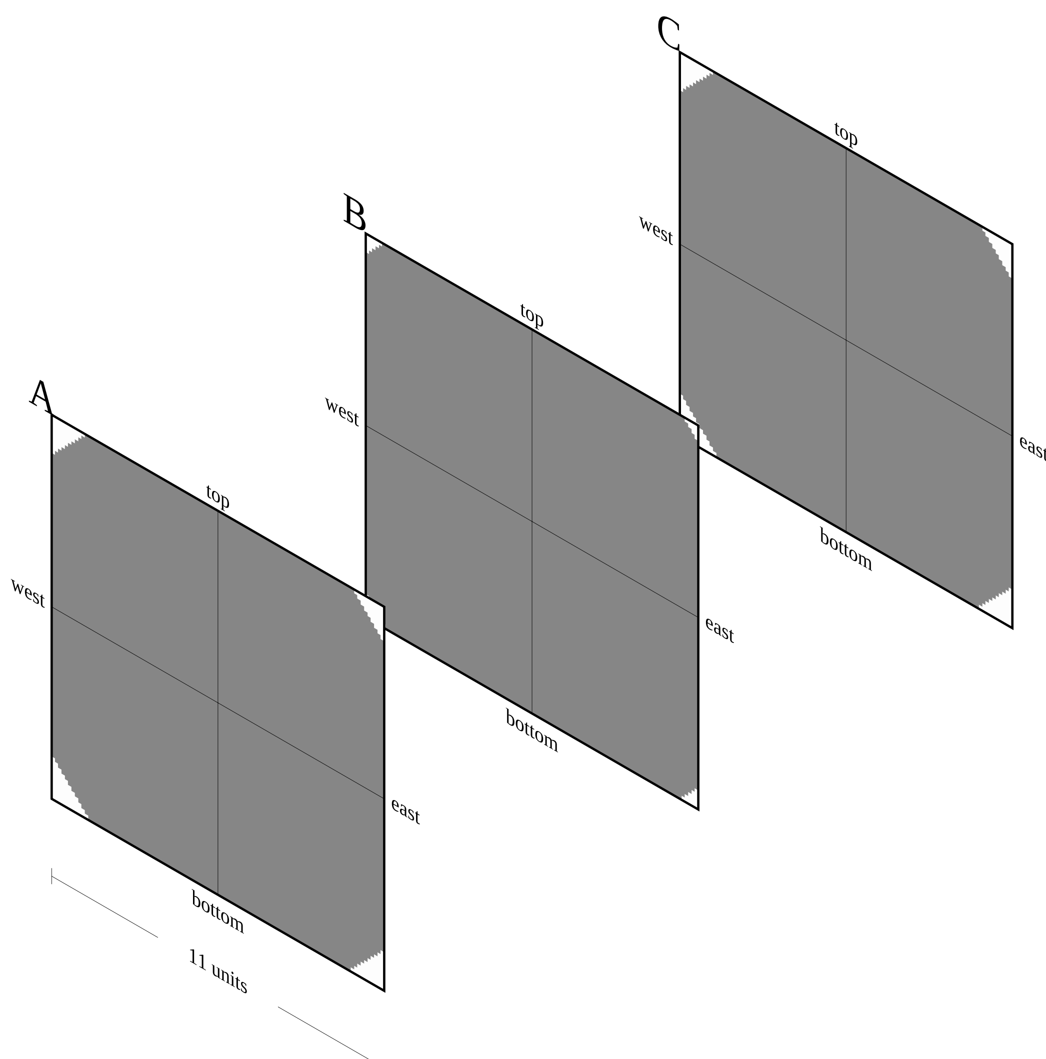
Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Cross Section Views Through the Ellipsoids

Reference Cube



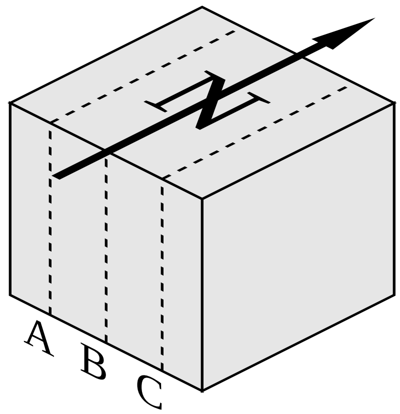
X-Z Planes Looking North



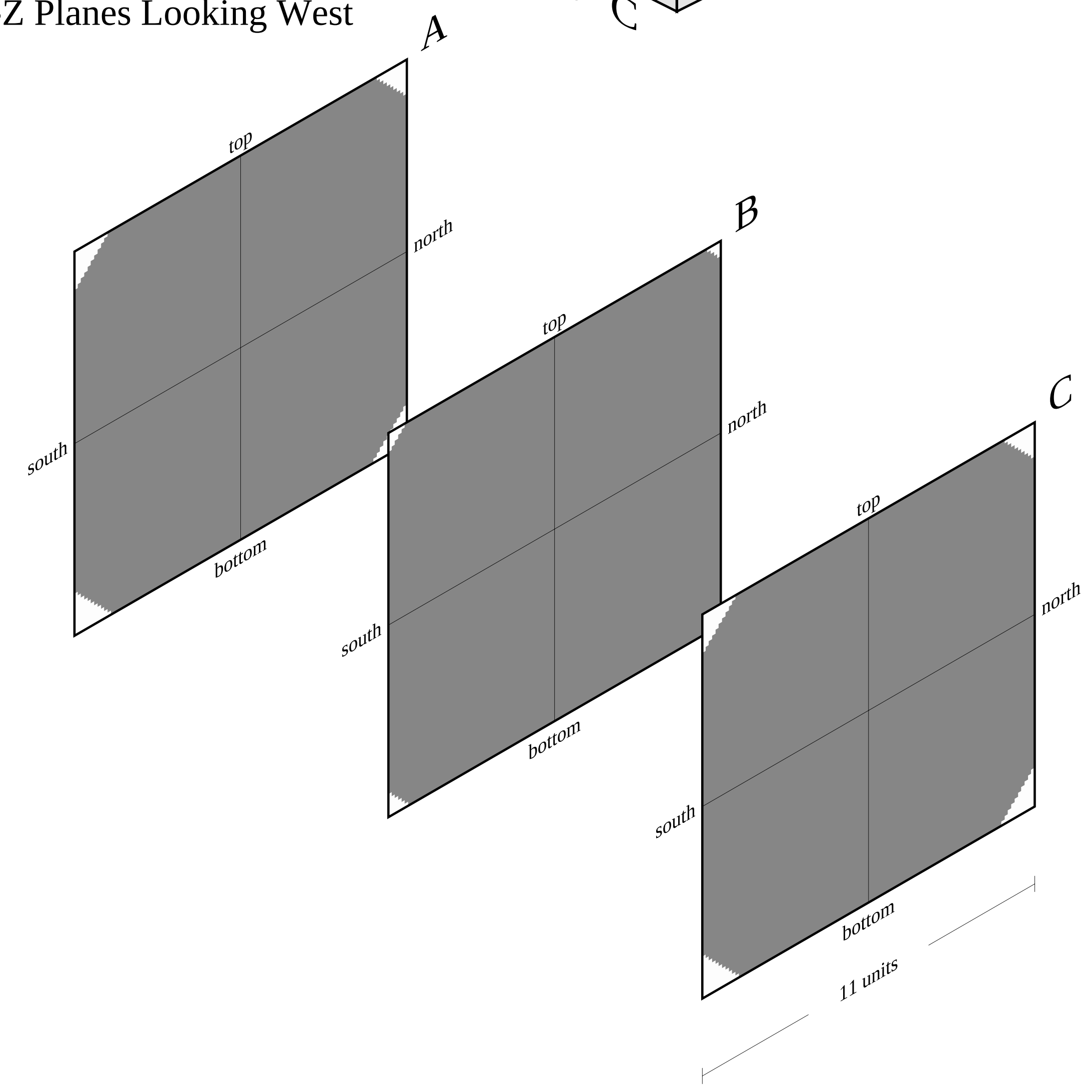
Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Long Section Views Through the Ellipsoids

Reference Cube

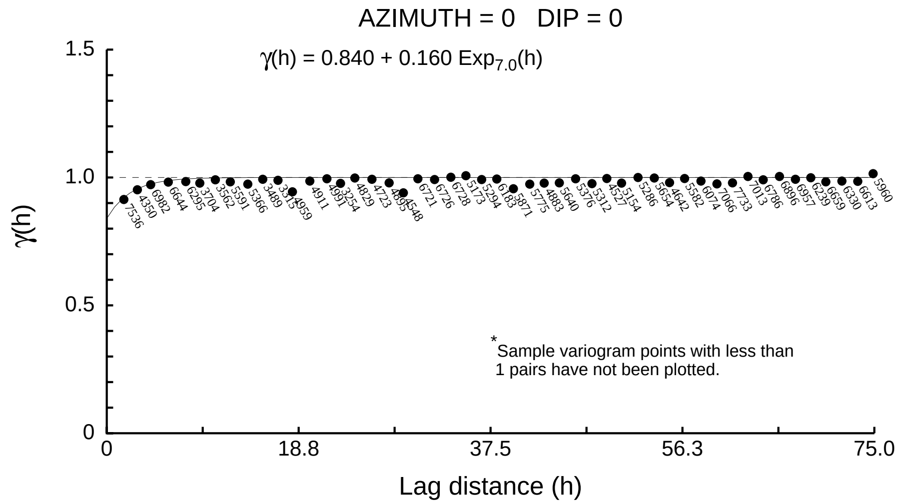


Y-Z Planes Looking West



Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Zone 99 Downhole Correlograms - Assays



Zone 99 Directional Correlograms - Assays

Medsystem and Vulcan Rotation Conventions

Nugget ==> 0.840
C1 ==> 0.160

First Structure -- Exponential with Practical Range

LH Rotation about the Z axis ==> 0
RH Rotation about the X' axis ==> 0
LH Rotation about the Y' axis ==> 75

Range along the Z' axis ==> 14.2	Azimuth ==> 270	Dip ==> 15
Range along the Y' axis ==> 43.8	Azimuth ==> 360	Dip ==> 0
Range along the X' axis ==> 7.3	Azimuth ==> 90	Dip ==> 75

Modeling Criteria

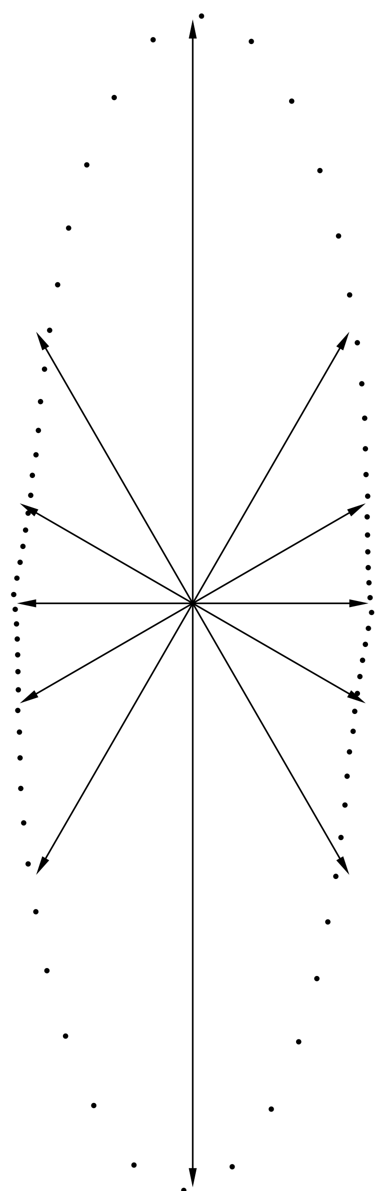
Minimum number pairs req'd ==> 1
Sample variogram points weighted by # pairs

Zone 99 Directional Correlograms - Assays

Structure Number 1

Rose Diagram of Ranges Dipping 0 Degrees
Scale:

40 Units

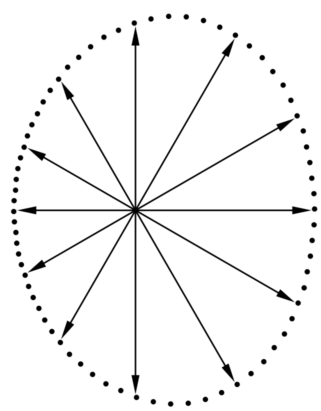


Zone 99 Directional Correlograms - Assays

Structure Number 1

Rose Diagram of Ranges Dipping 30 Degrees
Scale:

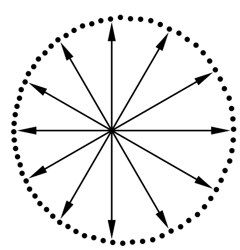
40 Units



Zone 99 Directional Correlograms - Assays

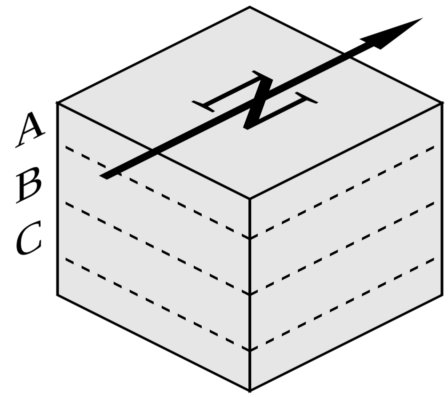
Structure Number 1

Rose Diagram of Ranges Dipping 60 Degrees
Scale:

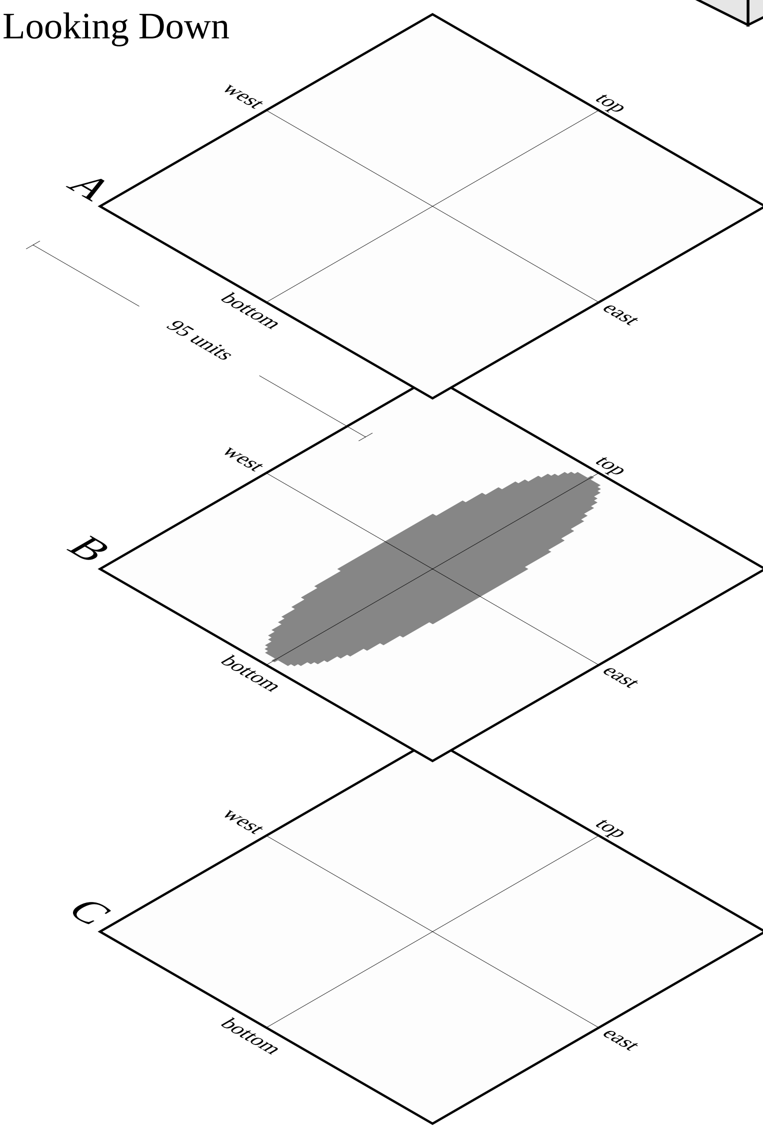


Horizontal Slices Through the Ellipsoids

Reference Cube



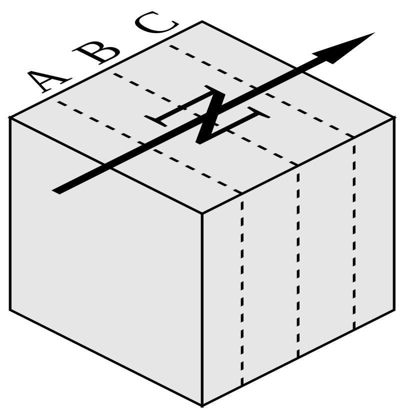
X-Y Planes Looking Down



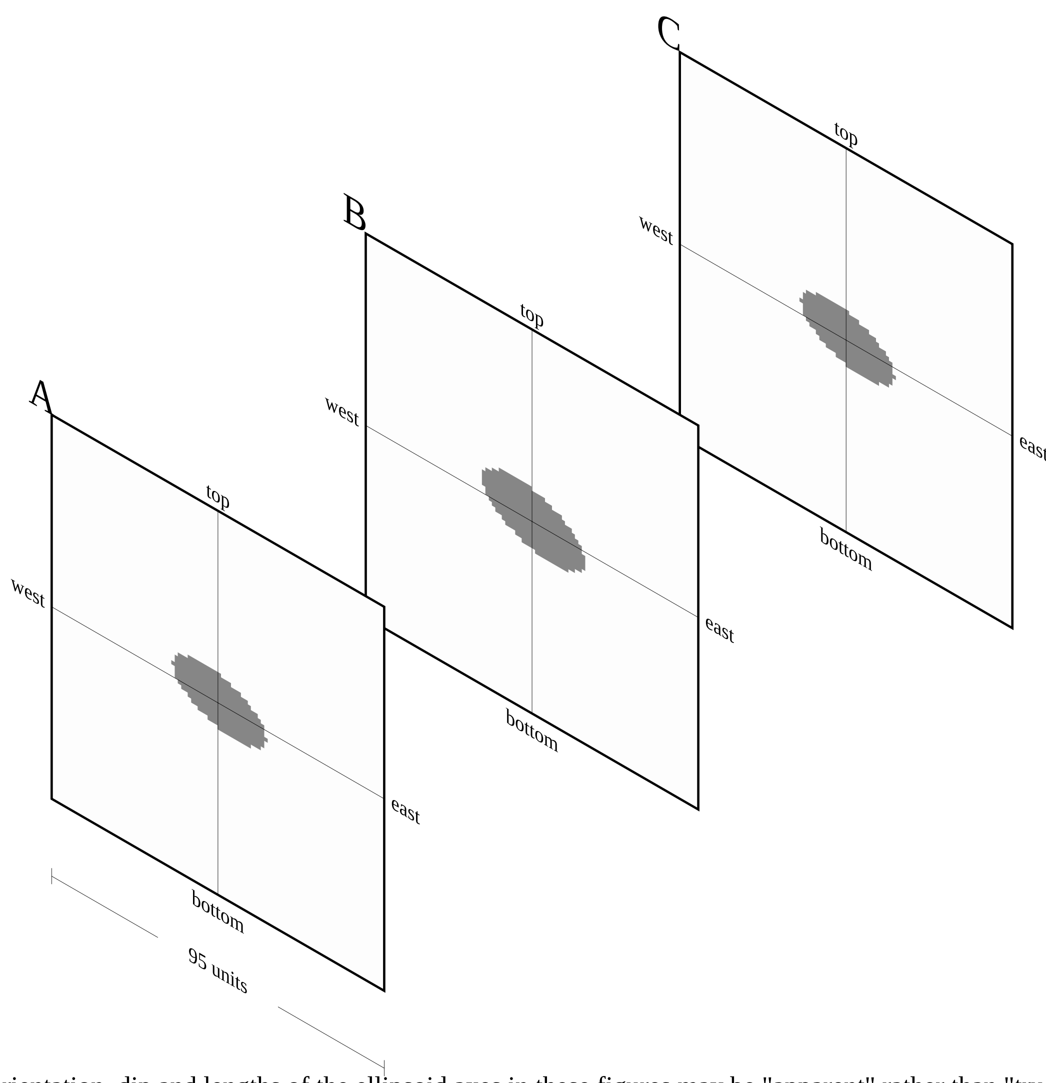
Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Cross Section Views Through the Ellipsoids

Reference Cube



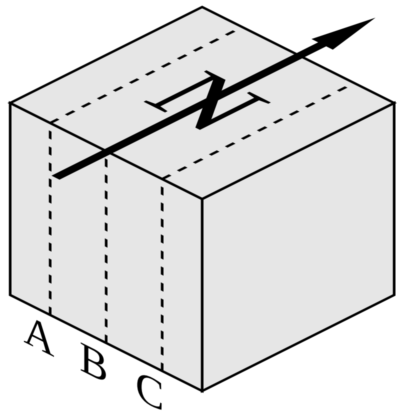
X-Z Planes Looking North



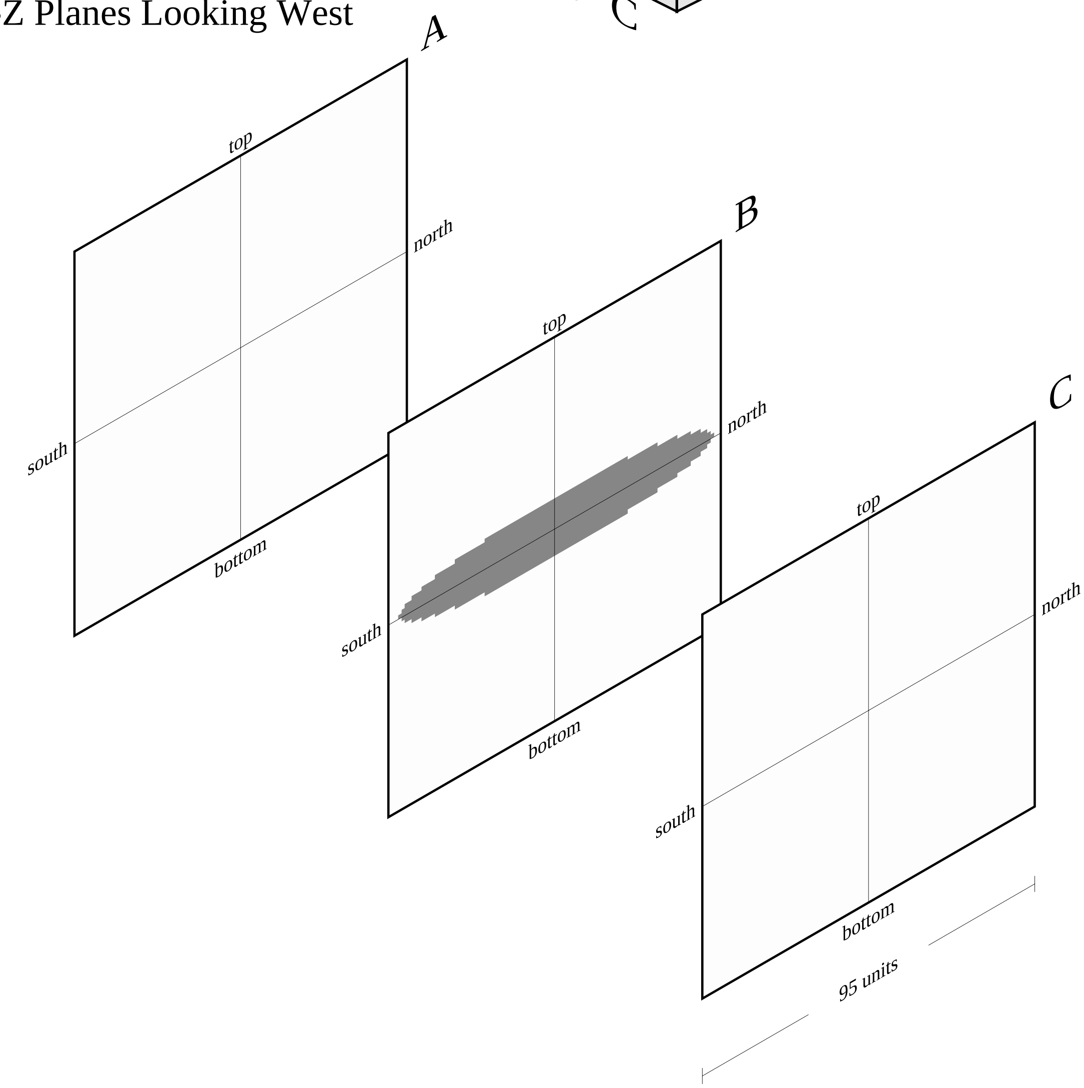
Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Long Section Views Through the Ellipsoids

Reference Cube

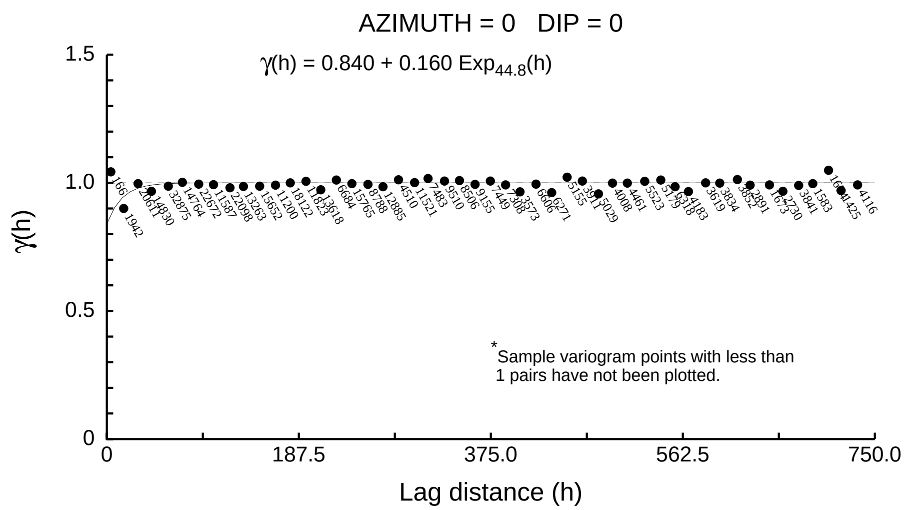


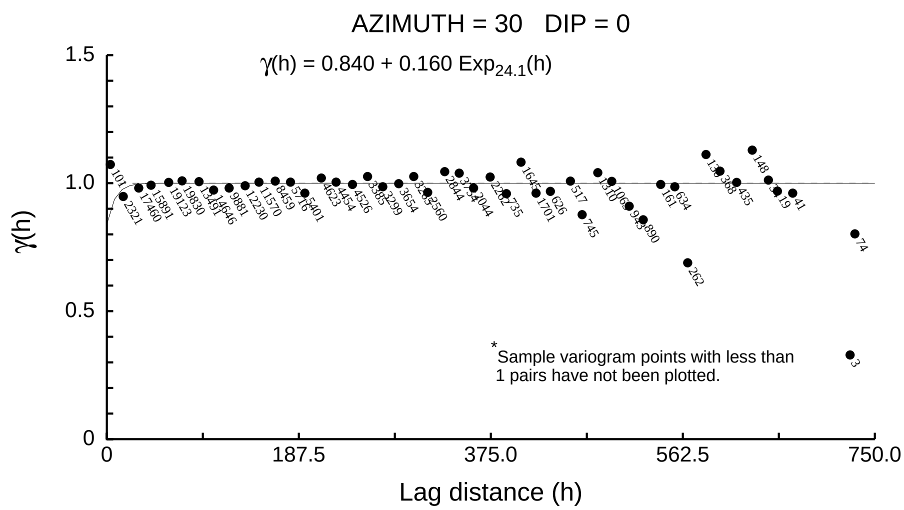
Y-Z Planes Looking West

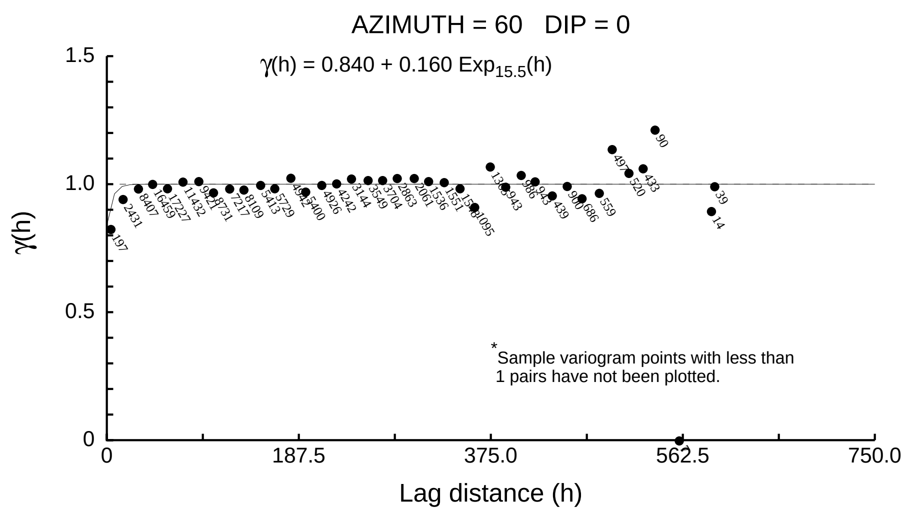


Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Zone 99 Directional Correlograms - Assays







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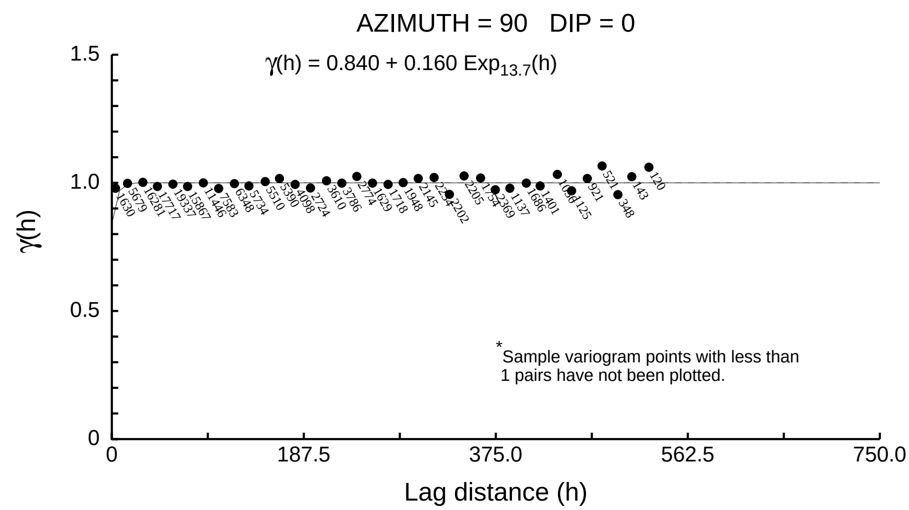
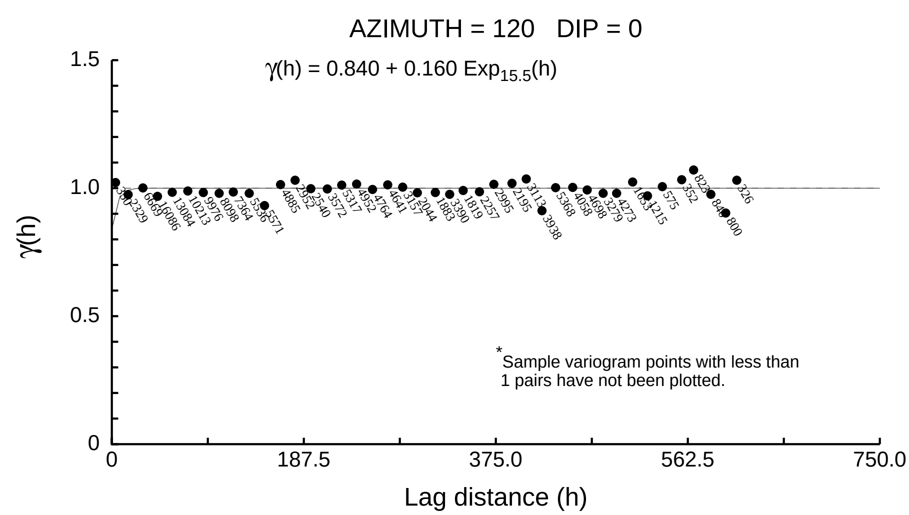
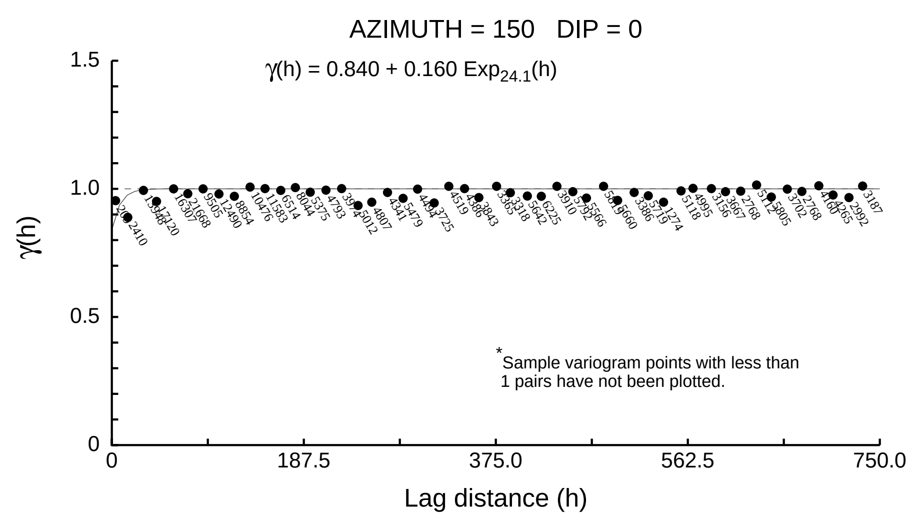
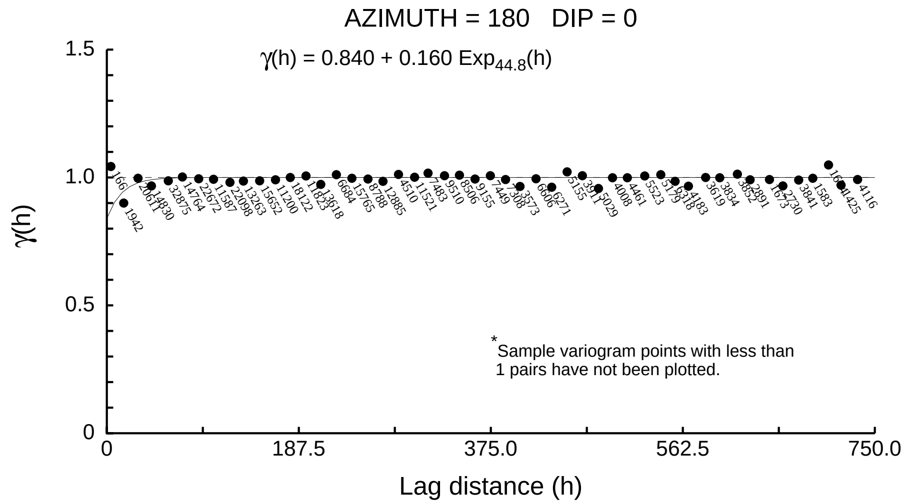
Zone 99 Directional Correlograms - Assays

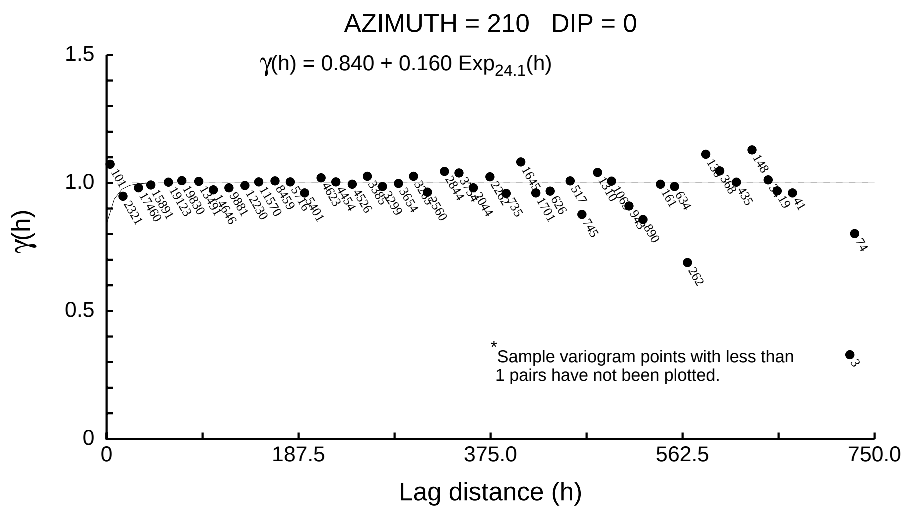


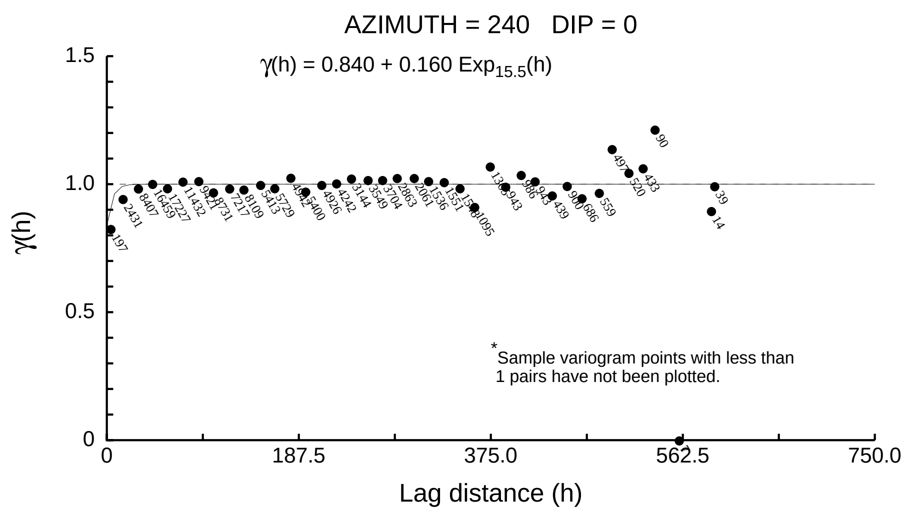




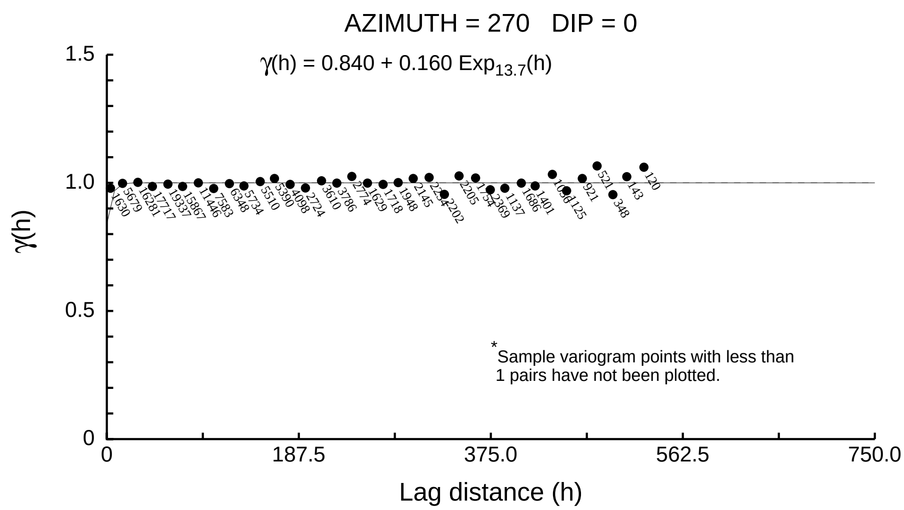
Zone 99 Directional Correlograms - Assays

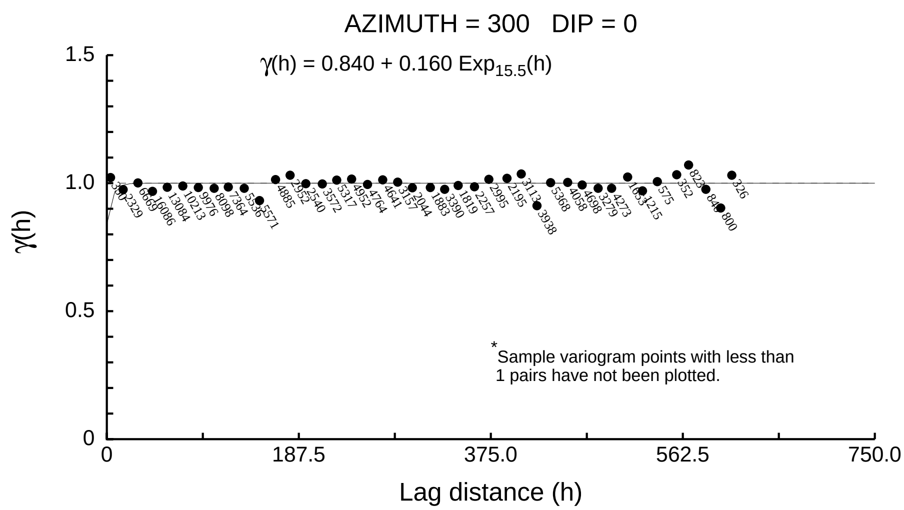


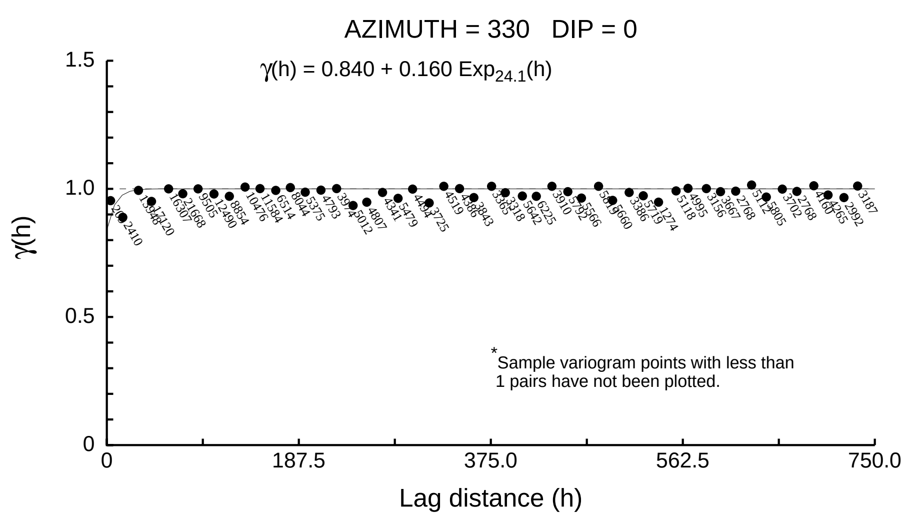




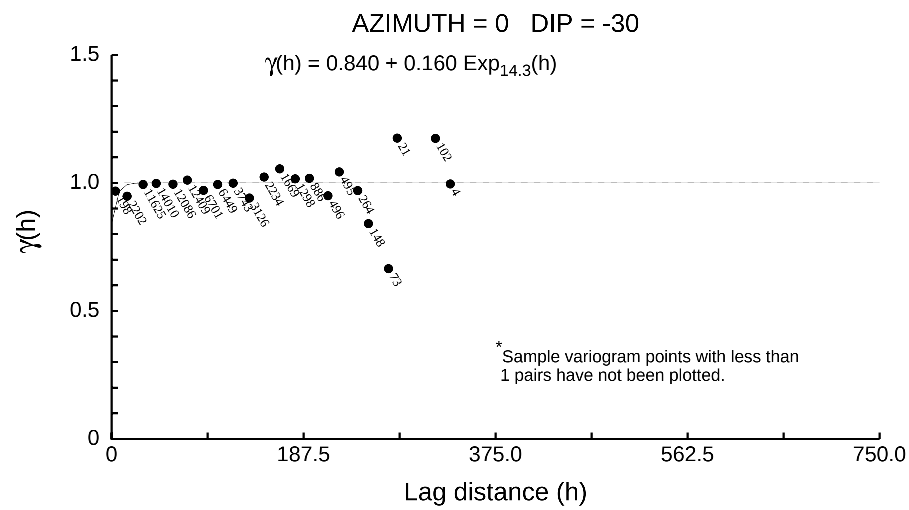
Zone 99 Directional Correlograms - Assays

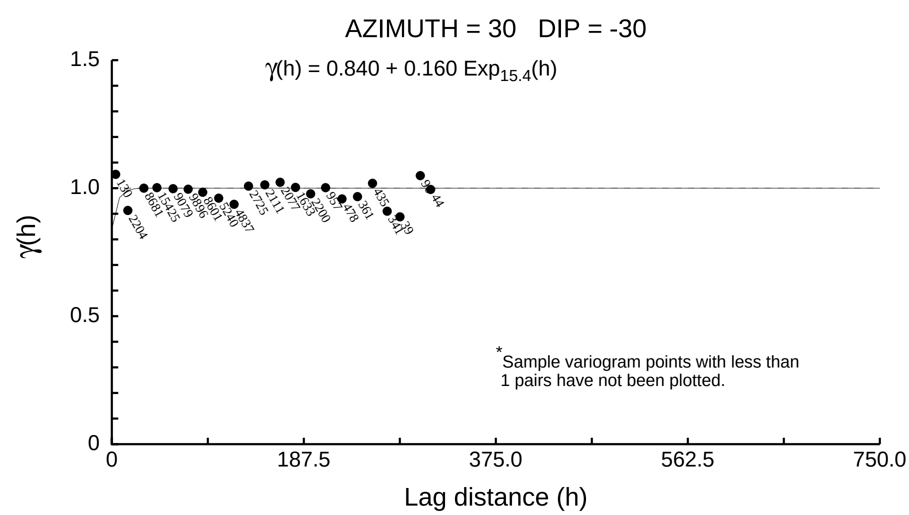


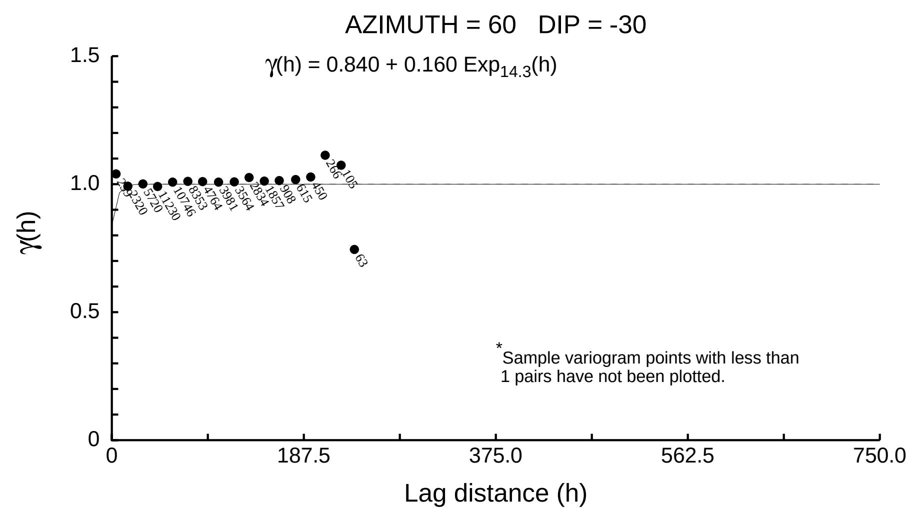




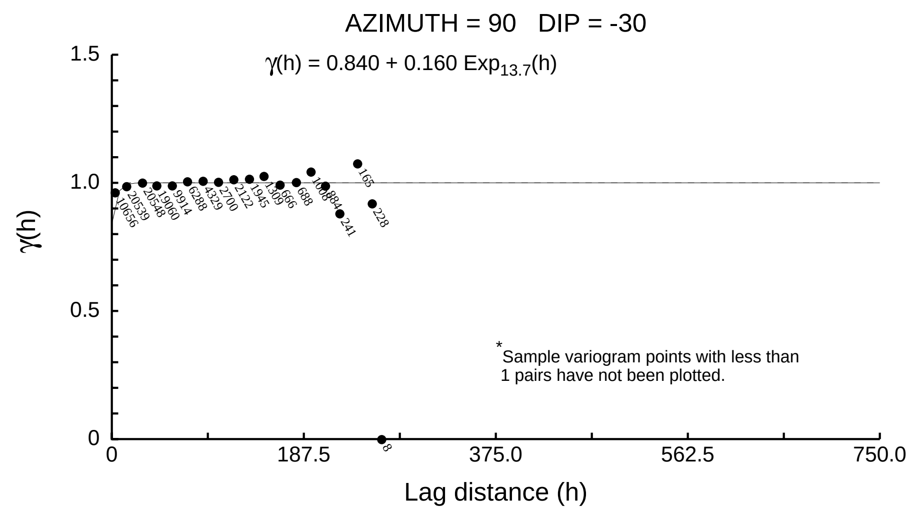
Zone 99 Directional Correlograms - Assays

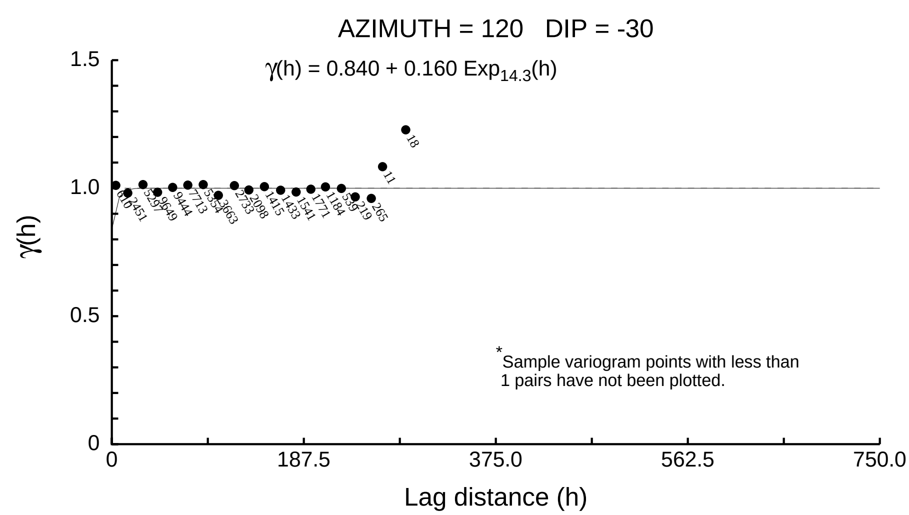


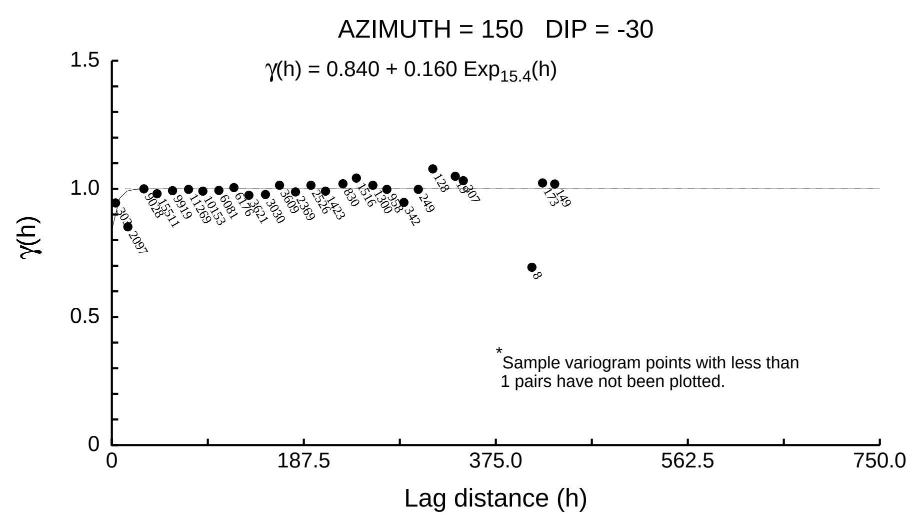




Zone 99 Directional Correlograms - Assays







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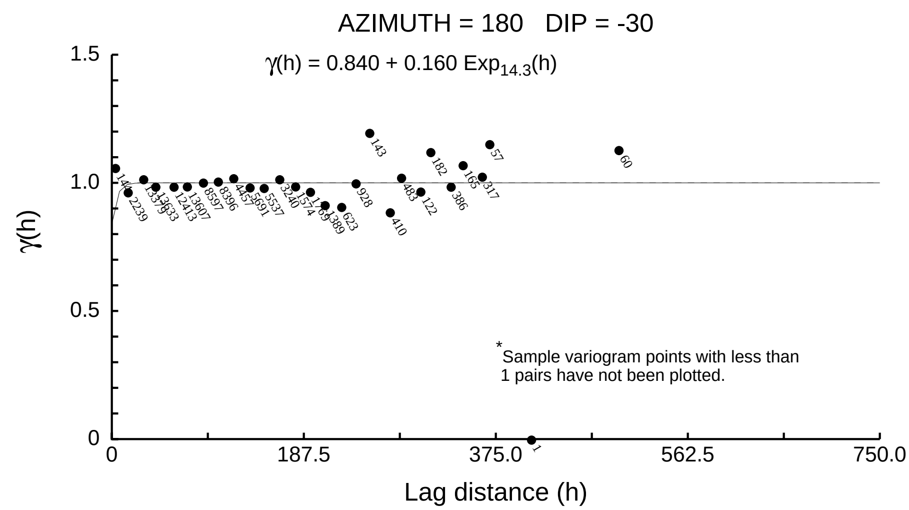
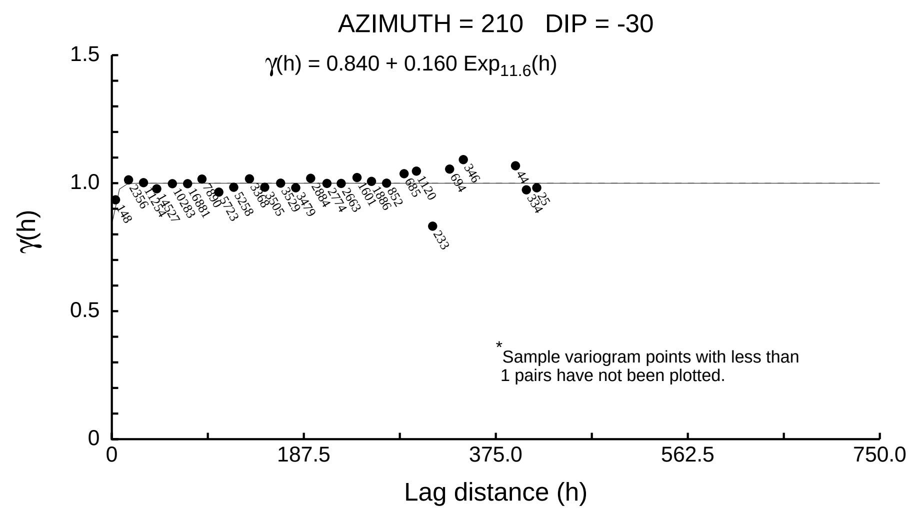
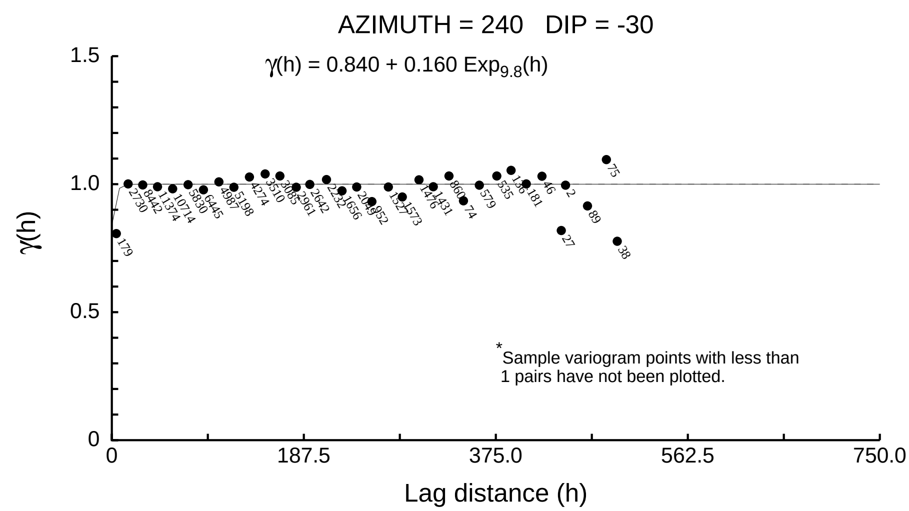
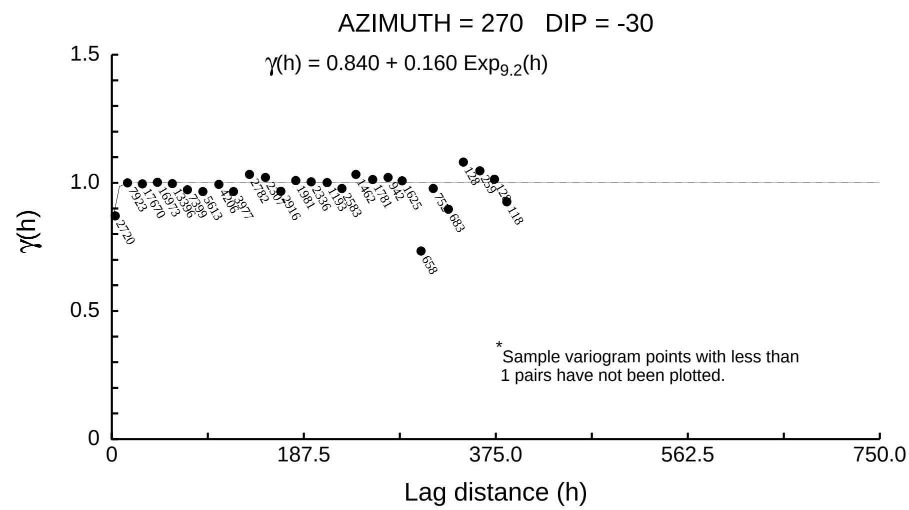
Zone 99 Directional Correlograms - Assays

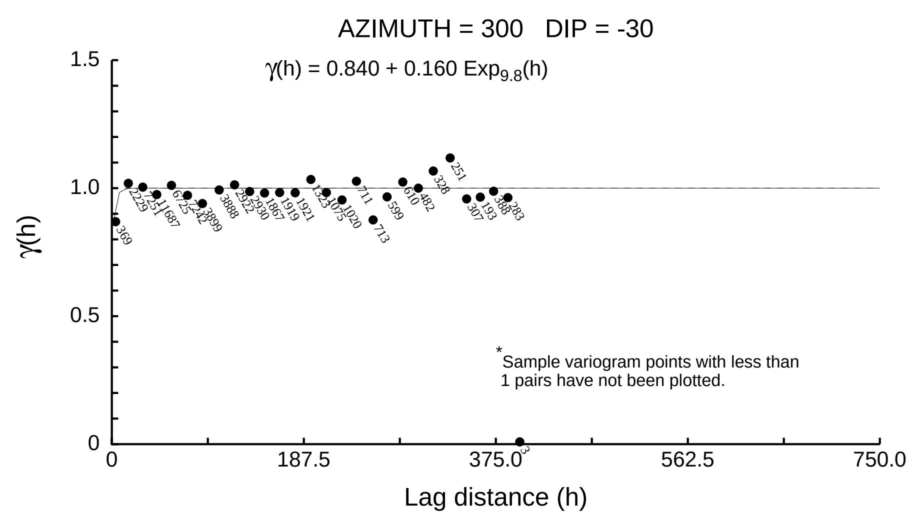


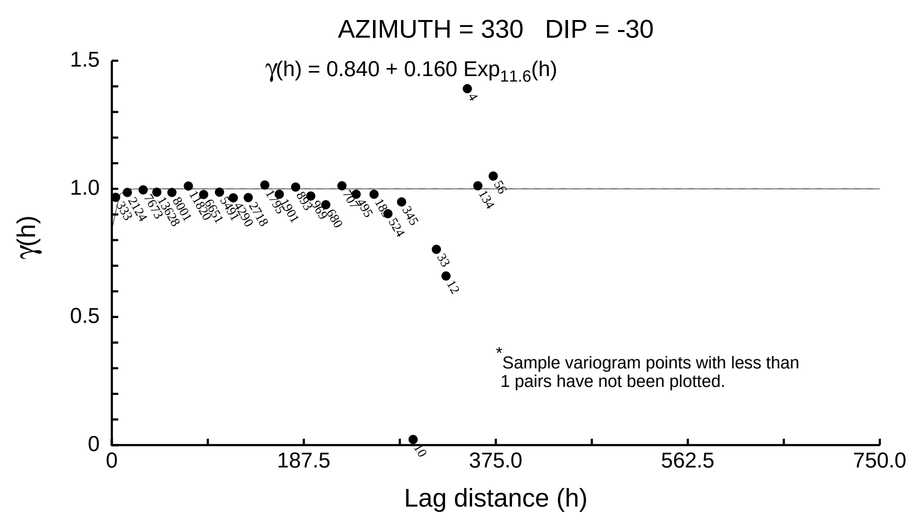




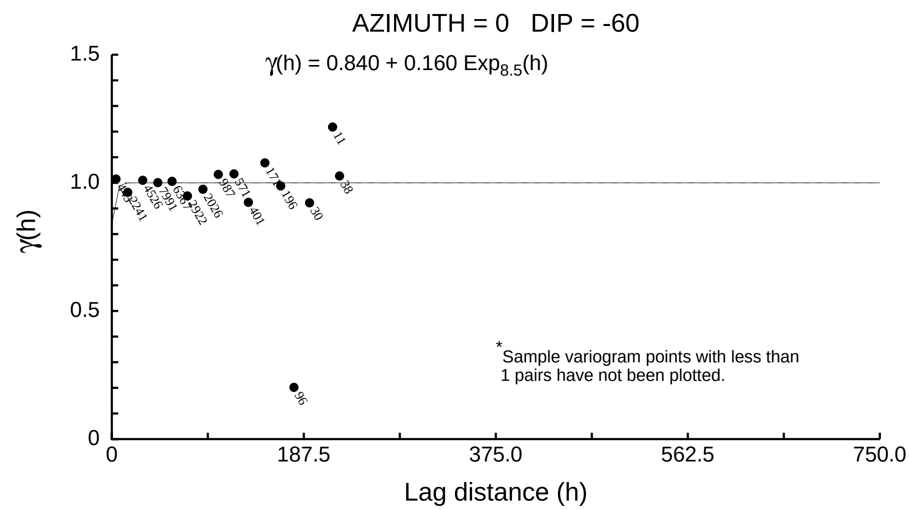
Zone 99 Directional Correlograms - Assays

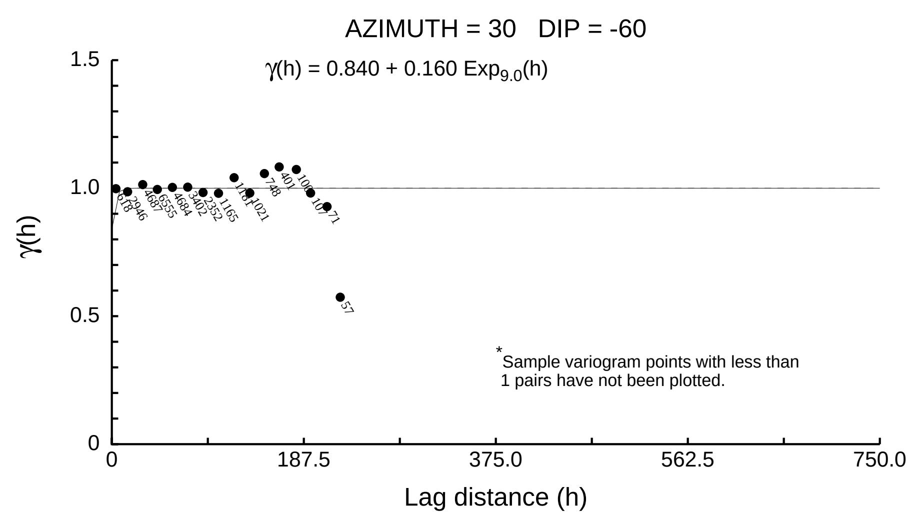


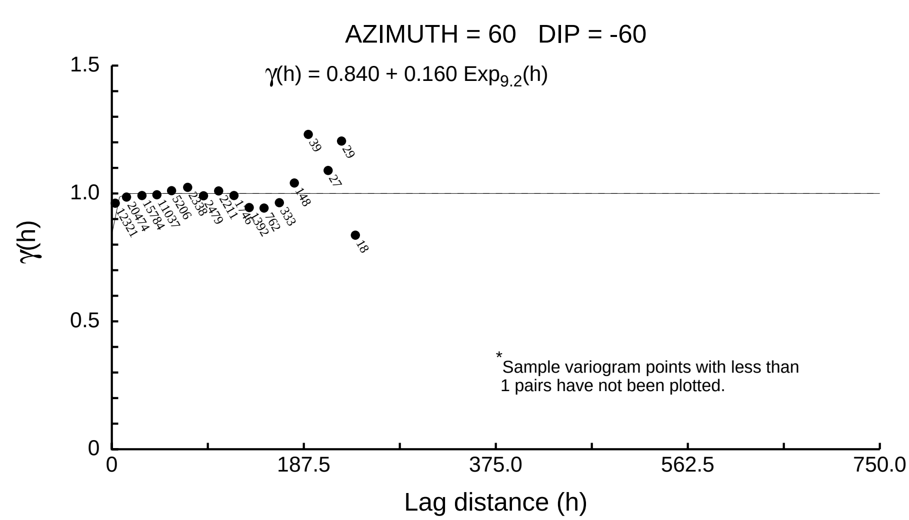




Zone 99 Directional Correlograms - Assays







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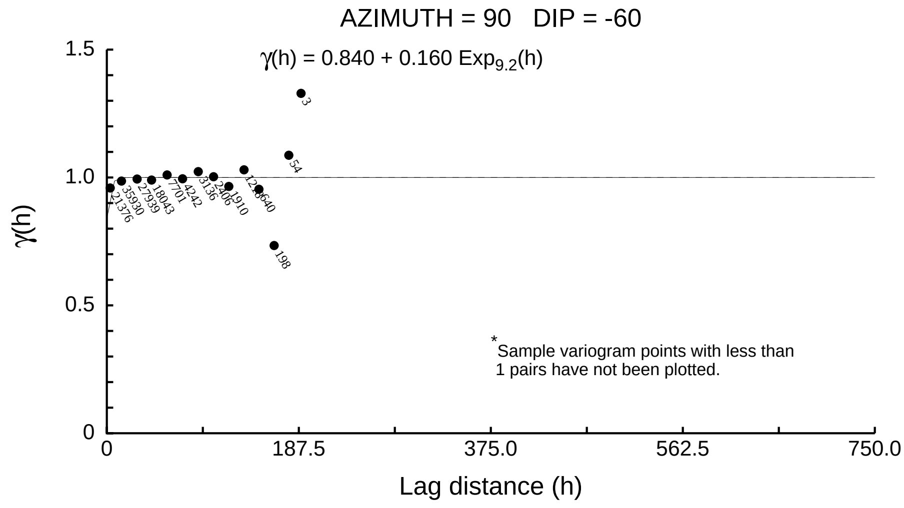
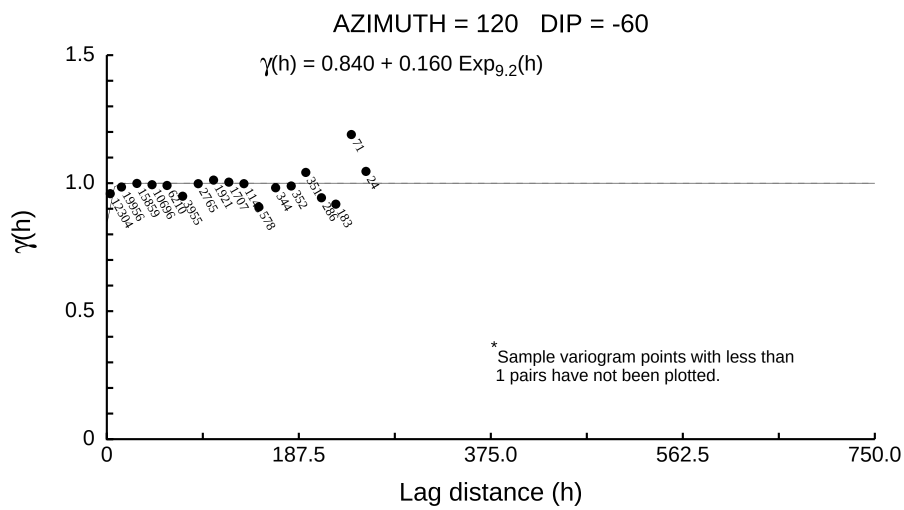
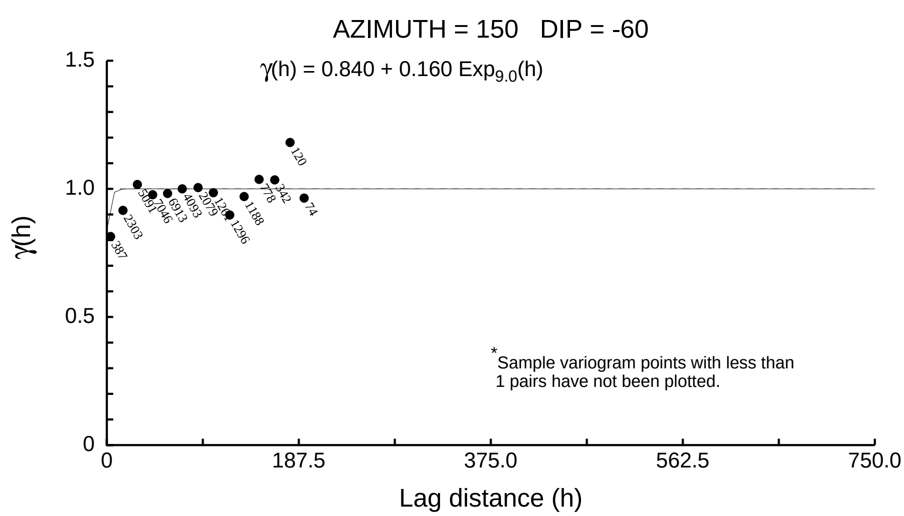
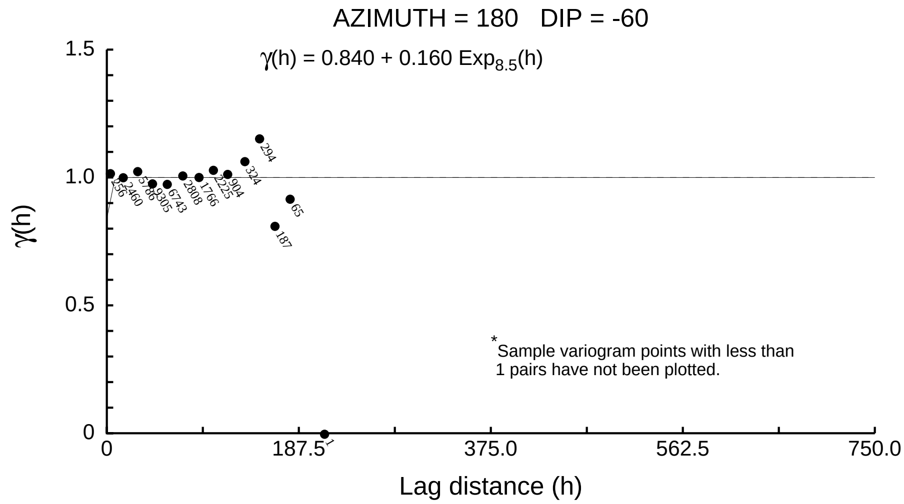
Zone 99 Directional Correlograms - Assays

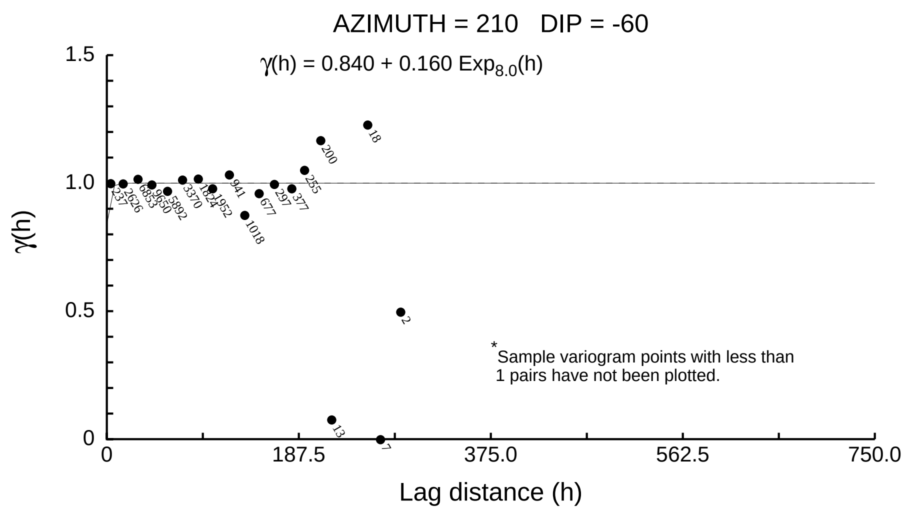


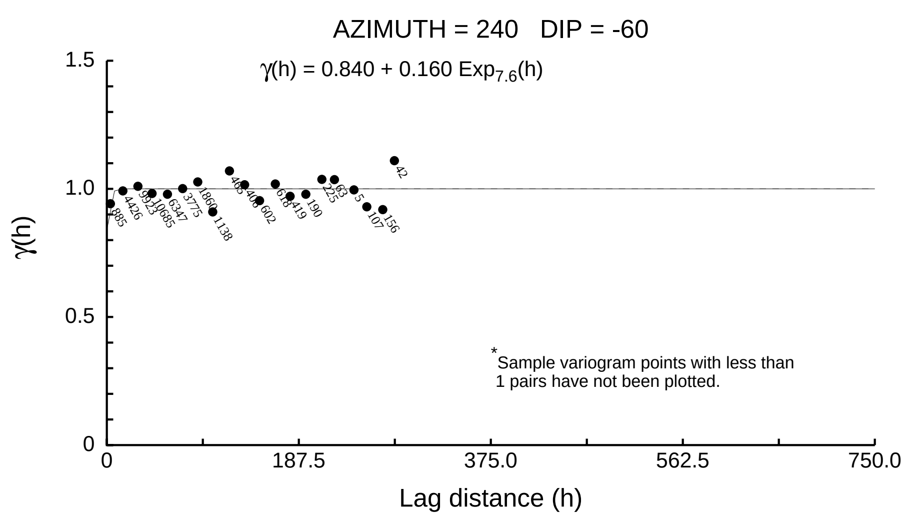




Zone 99 Directional Correlograms - Assays







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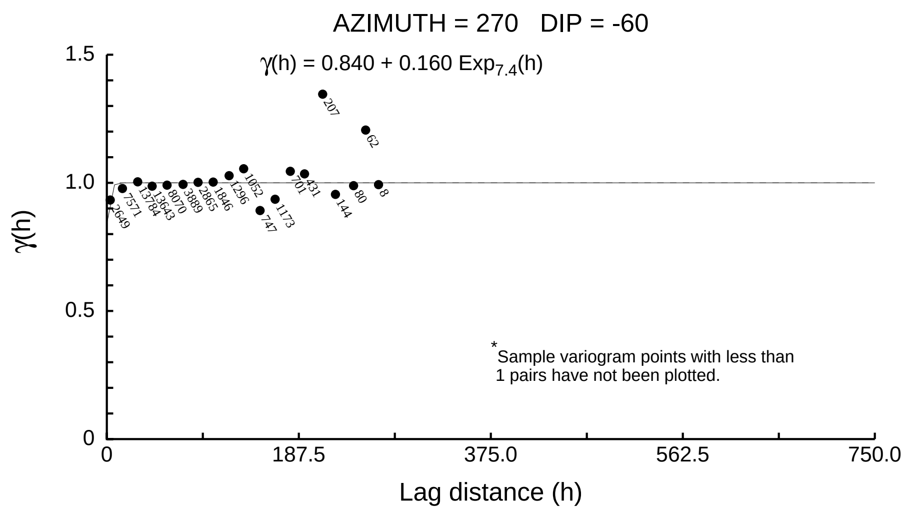
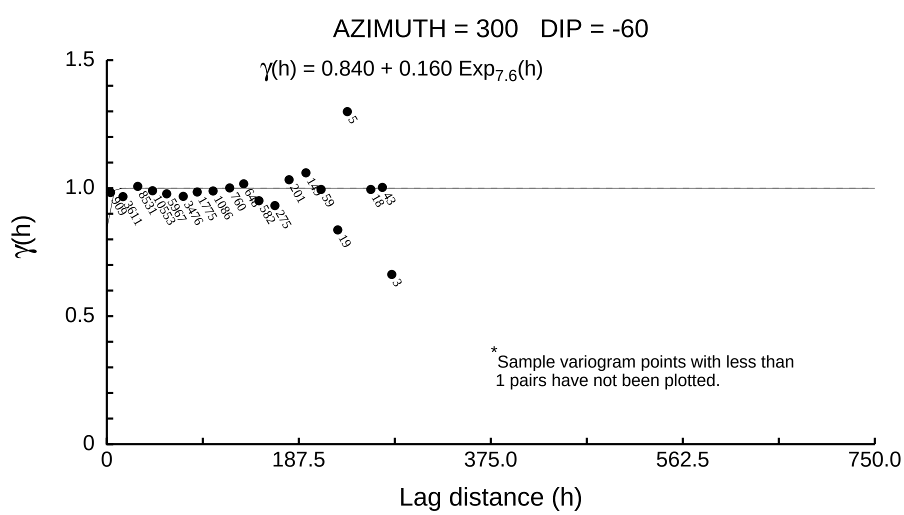
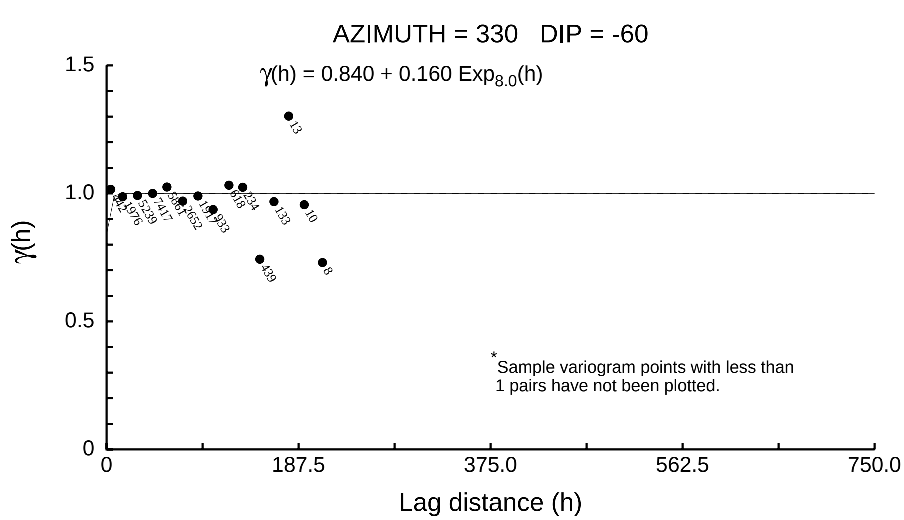
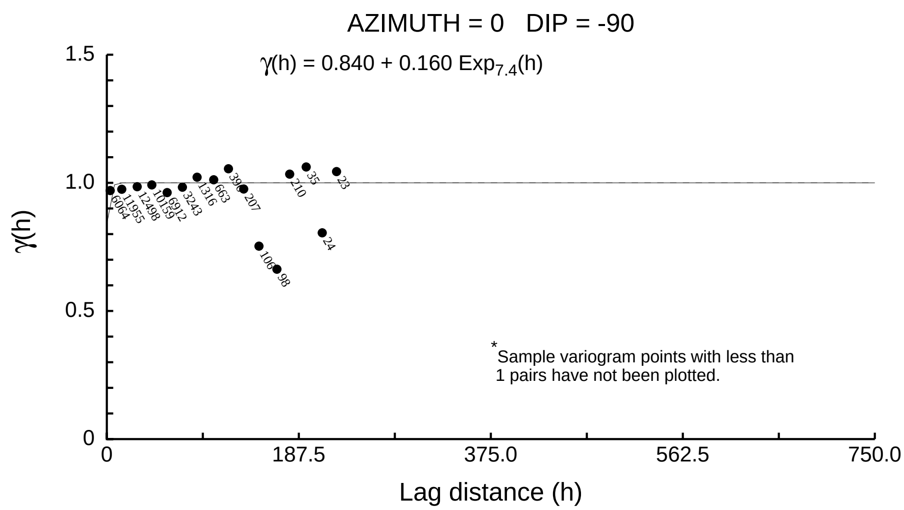
Zone 99 Directional Correlograms - Assays







Zone 99 Directional Correlograms - Assays



Zone 10 Downhole Correlograms - Assays

Medsystem and Vulcan Rotation Conventions

Nugget ==> 0.450
C1 ==> 0.550

First Structure -- Exponential with Practical Range

LH Rotation about the Z axis ==> 0
RH Rotation about the X' axis ==> 0
LH Rotation about the Y' axis ==> 0
Range along the Z' axis ==> 6.5 Azimuth ==> 90 Dip ==> 90
Range along the Y' axis ==> 6.5 Azimuth ==> 360 Dip ==> 0
Range along the X' axis ==> 6.5 Azimuth ==> 90 Dip ==> 0

Modeling Criteria

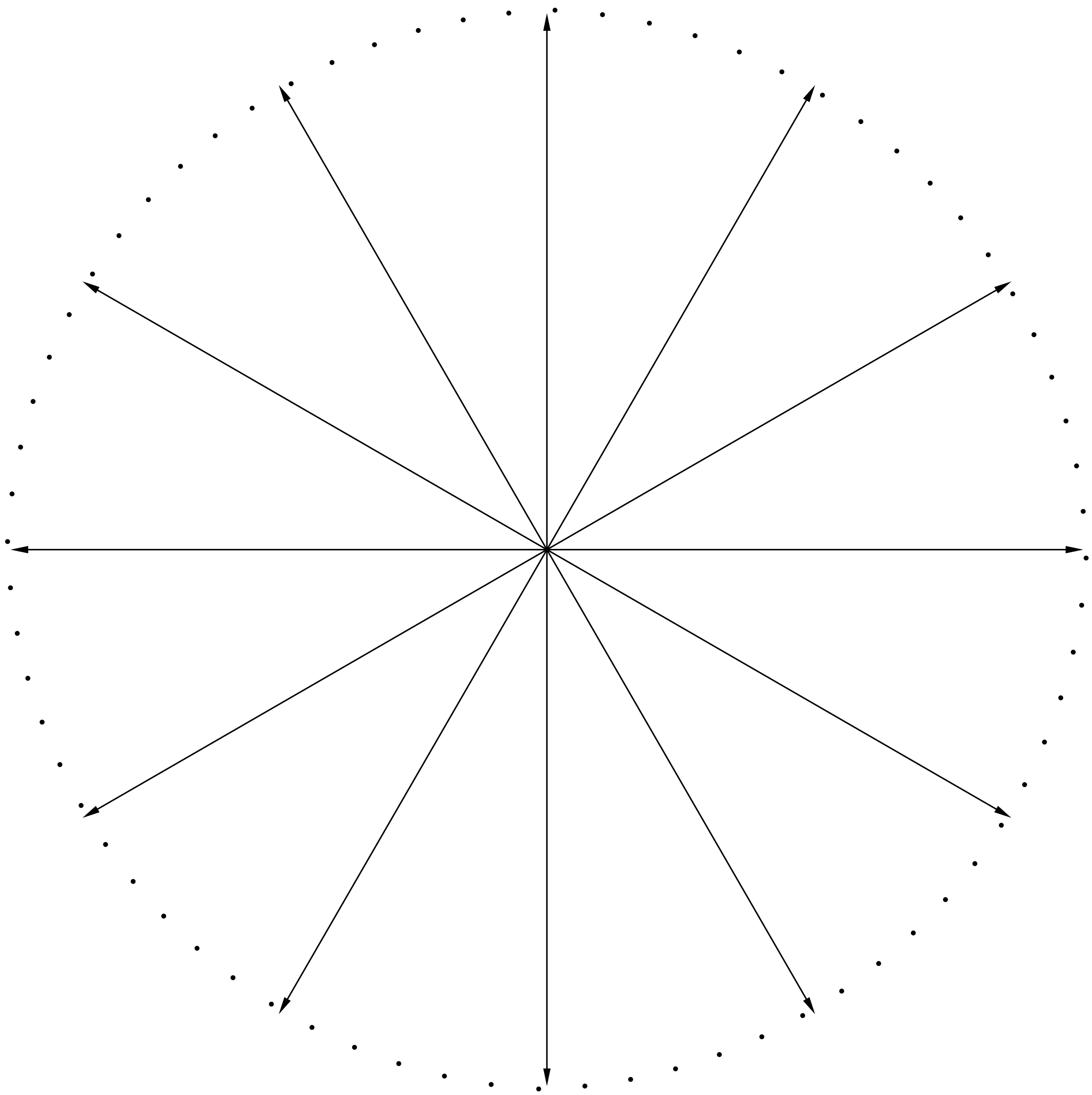
Minimum number pairs req'd ==> 1
Sample variogram points weighted by # pairs

Zone 10 Downhole Correlograms - Assays

Structure Number 1

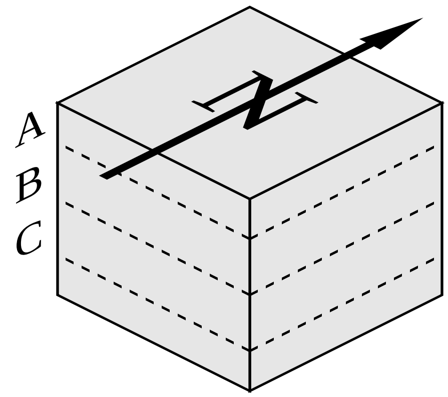
Rose Diagram of Ranges Dipping 0 Degrees
Scale:

6 Units

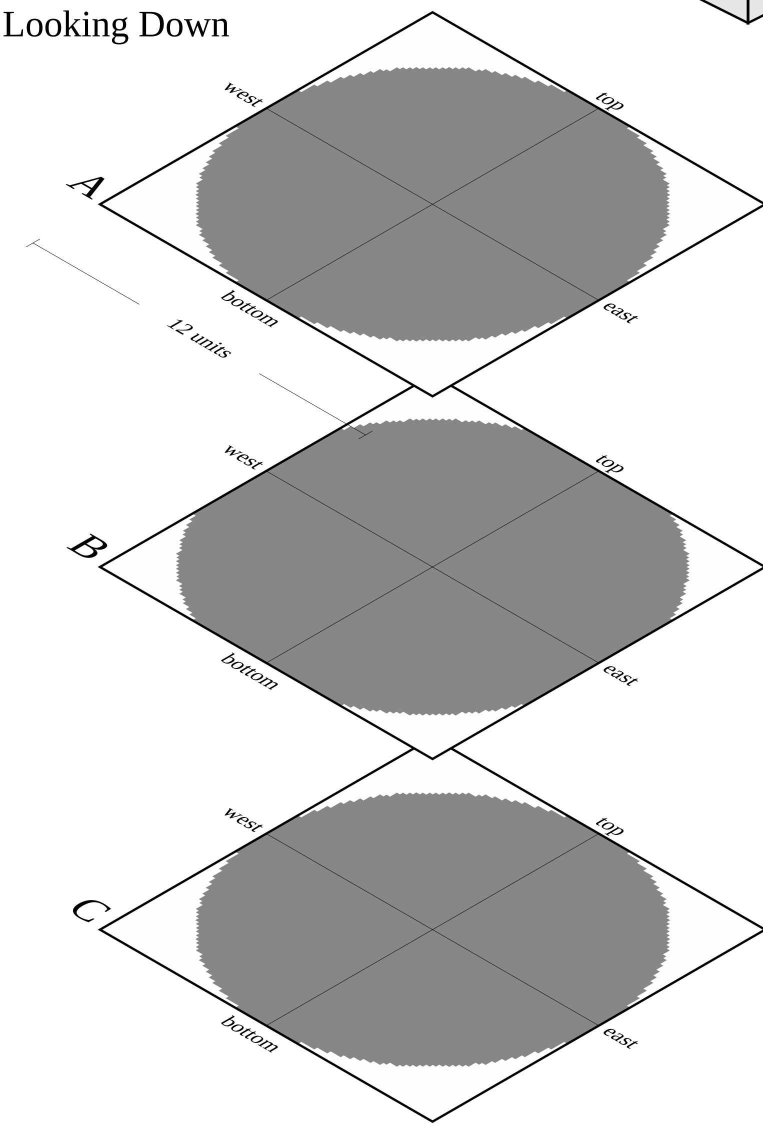


Horizontal Slices Through the Ellipsoids

Reference Cube



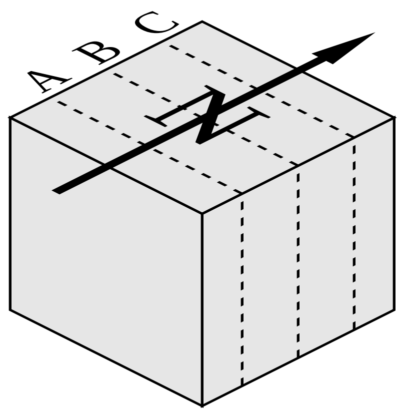
X-Y Planes Looking Down



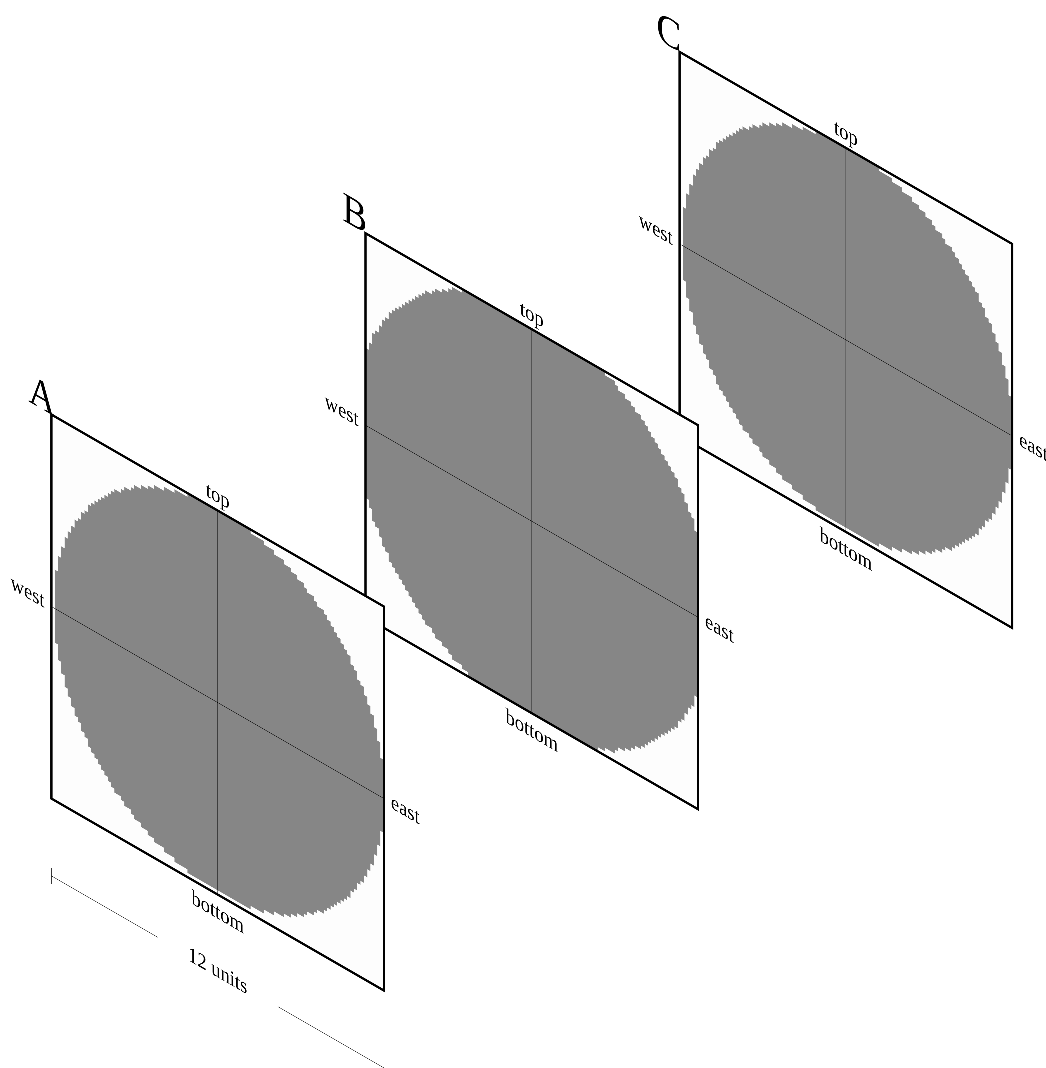
Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Cross Section Views Through the Ellipsoids

Reference Cube



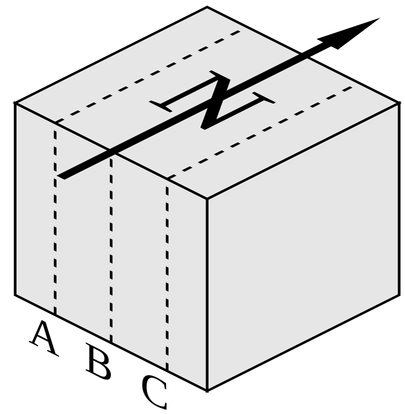
X-Z Planes Looking North



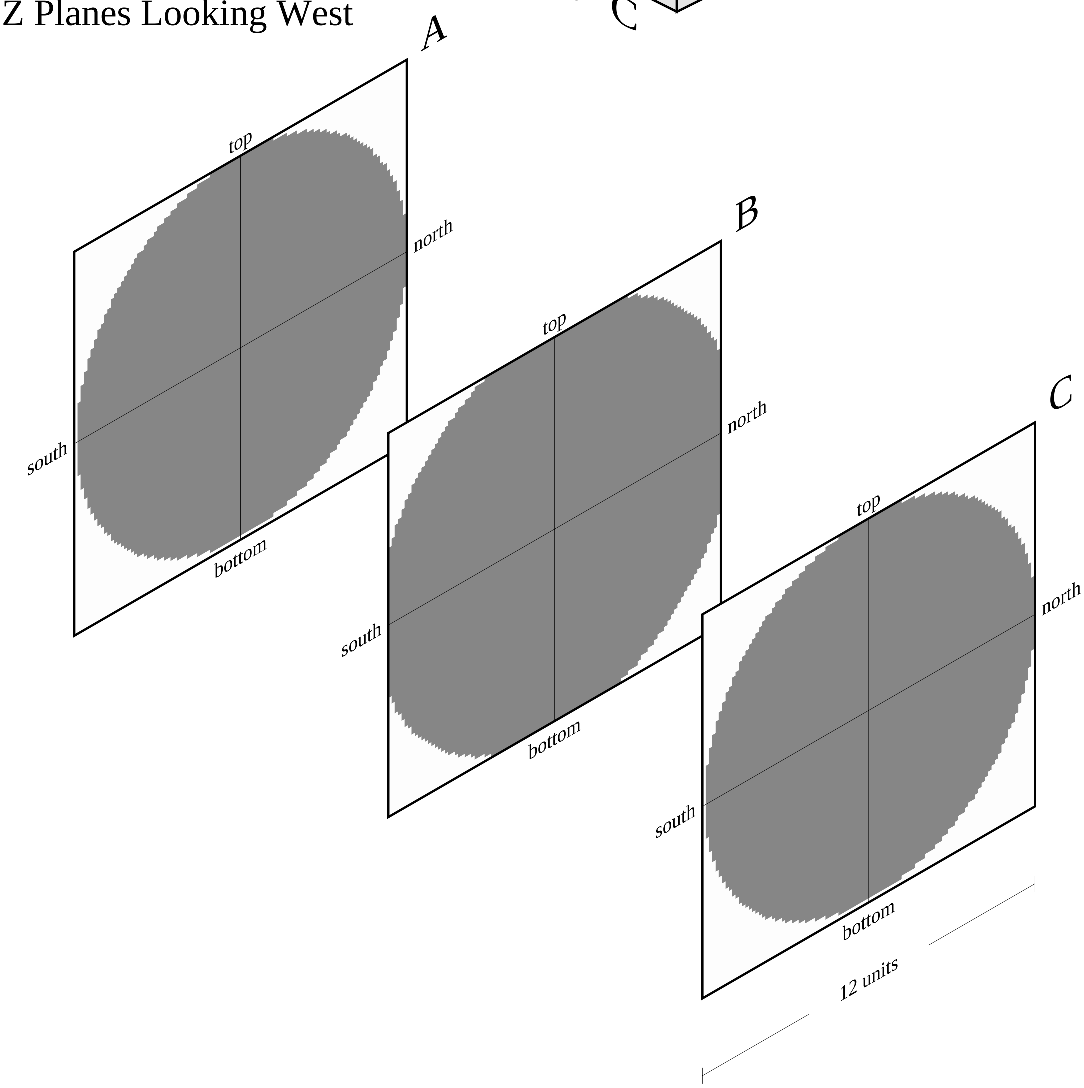
Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Long Section Views Through the Ellipsoids

Reference Cube

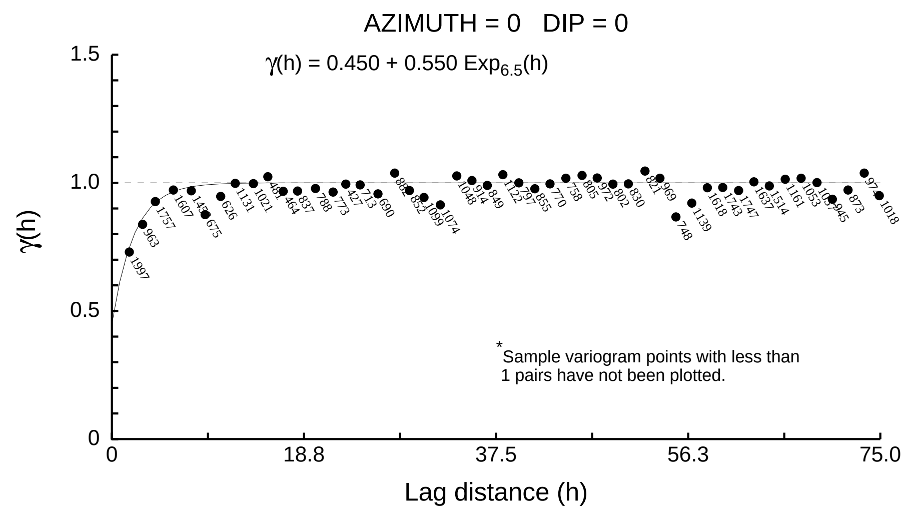


Y-Z Planes Looking West



Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Zone 10 Downhole Correlograms - Assays



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Zone 10 Directional Correlograms - Assays

Medsystem and Vulcan Rotation Conventions

Nugget ==> 0.450
C1 ==> 0.550

First Structure -- Exponential with Practical Range

LH Rotation about the Z axis ==> 0
RH Rotation about the X' axis ==> 0
LH Rotation about the Y' axis ==> 75
Range along the Z' axis ==> 5.1 Azimuth ==> 270 Dip ==> 15
Range along the Y' axis ==> 32.7 Azimuth ==> 360 Dip ==> 0
Range along the X' axis ==> 15.4 Azimuth ==> 90 Dip ==> 75

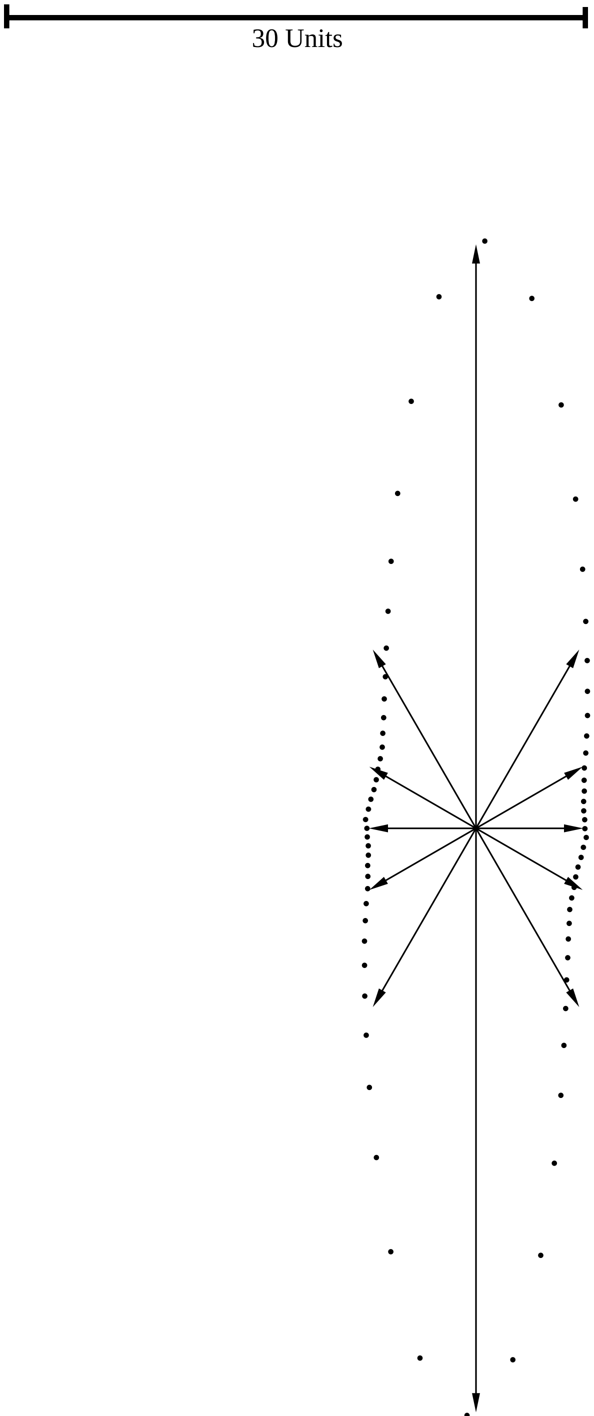
Modeling Criteria

Minimum number pairs req'd ==> 1
Sample variogram points weighted by # pairs

Zone 10 Directional Correlograms - Assays

Structure Number 1

Rose Diagram of Ranges Dipping 0 Degrees
Scale:

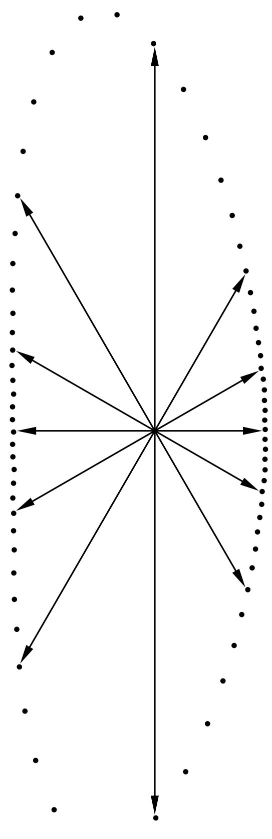


Zone 10 Directional Correlograms - Assays

Structure Number 1

Rose Diagram of Ranges Dipping 30 Degrees
Scale:

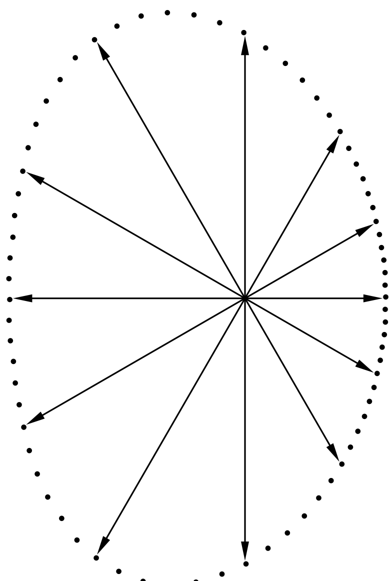
30 Units



Zone 10 Directional Correlograms - Assays

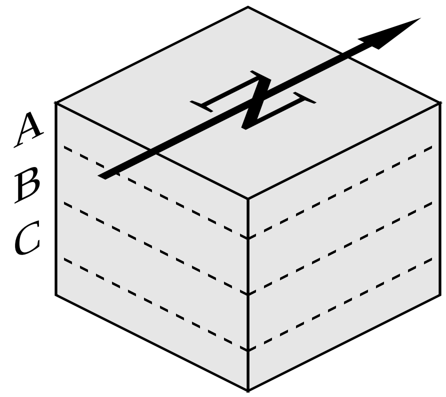
Structure Number 1

Rose Diagram of Ranges Dipping 60 Degrees
Scale:

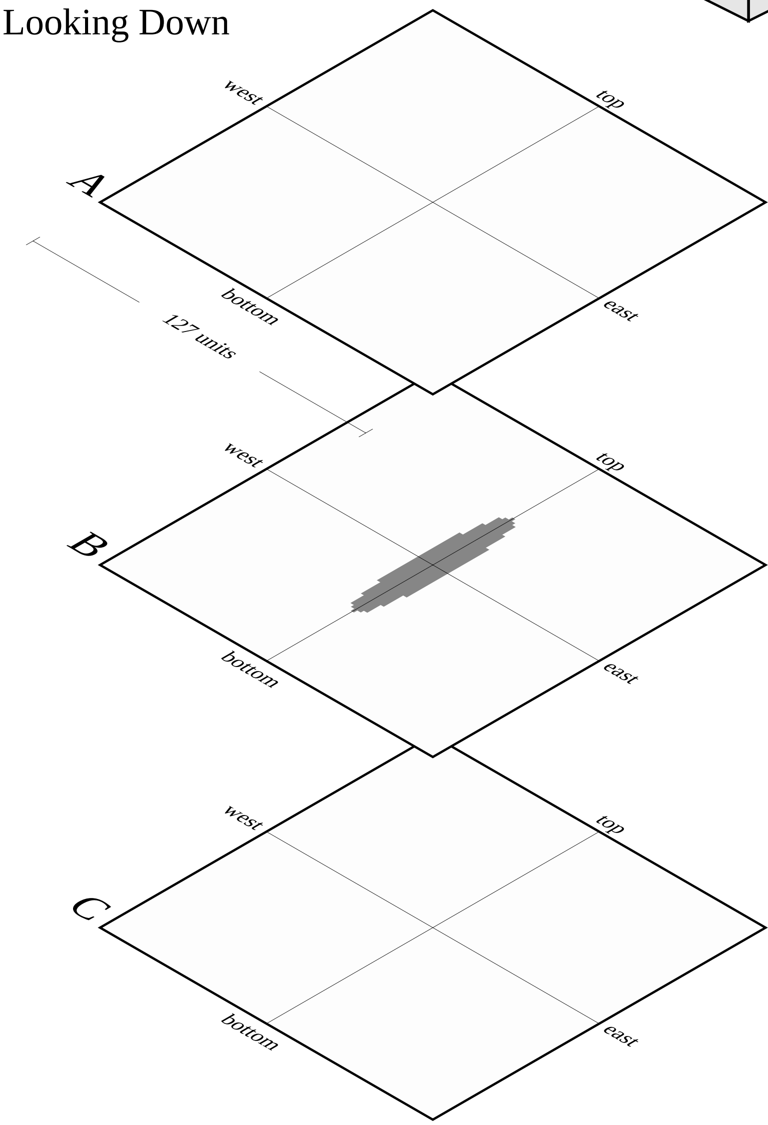


Horizontal Slices Through the Ellipsoids

Reference Cube



X-Y Planes Looking Down



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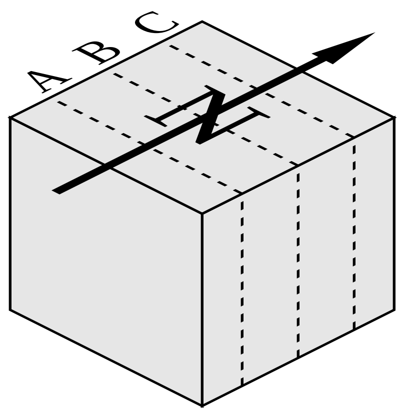
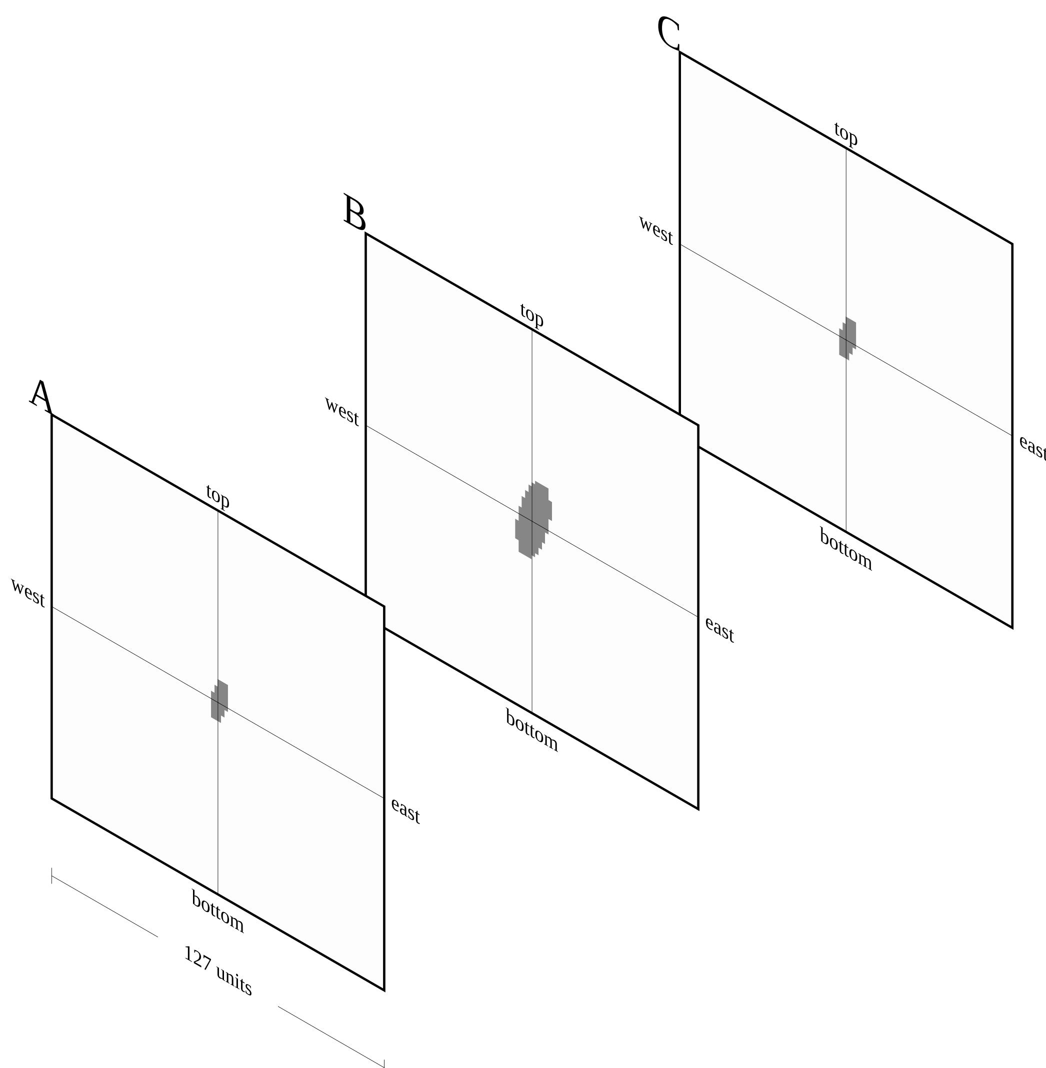
Cross Section Views Through the Ellipsoids

Reference Cube



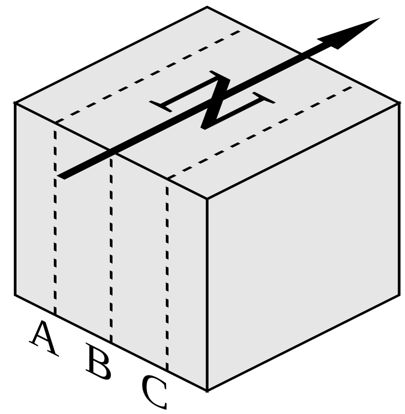
X-Z Planes Looking North



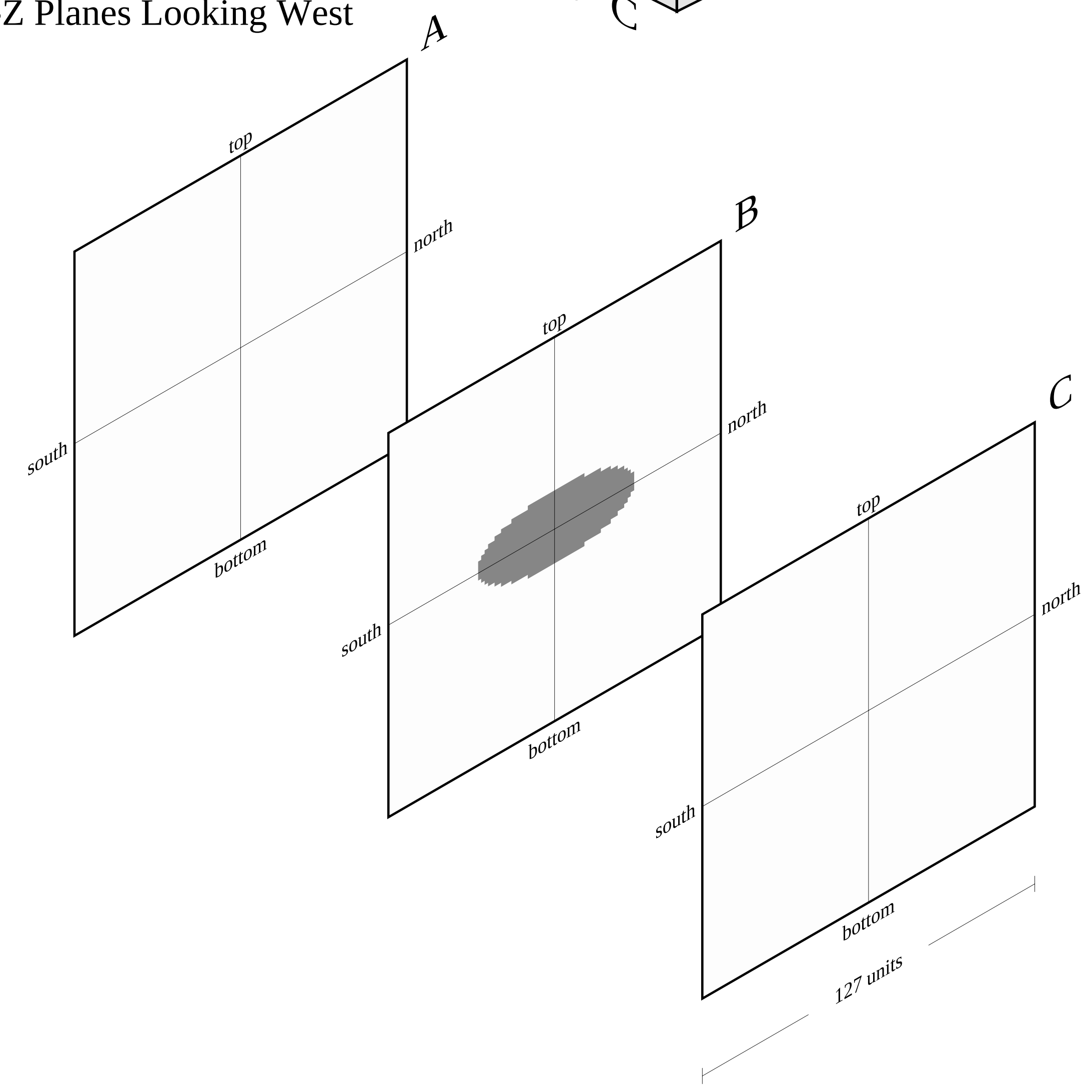
Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Long Section Views Through the Ellipsoids

Reference Cube

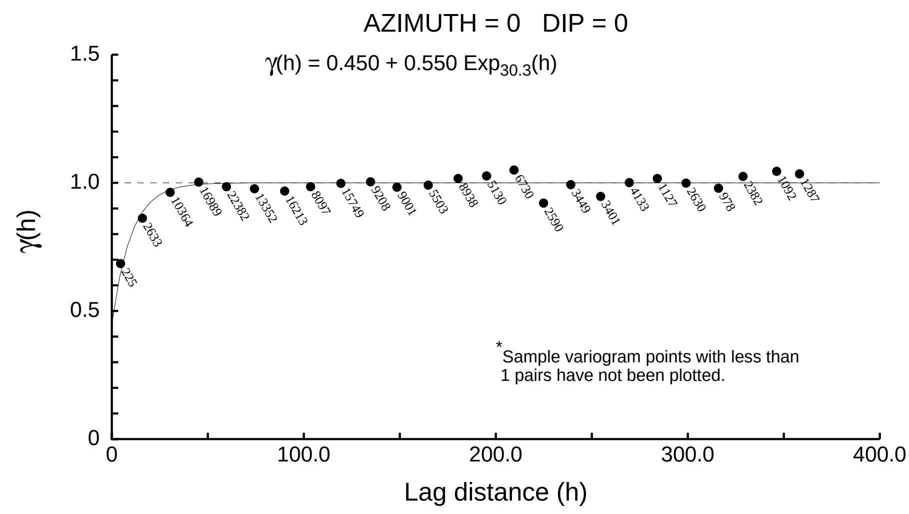


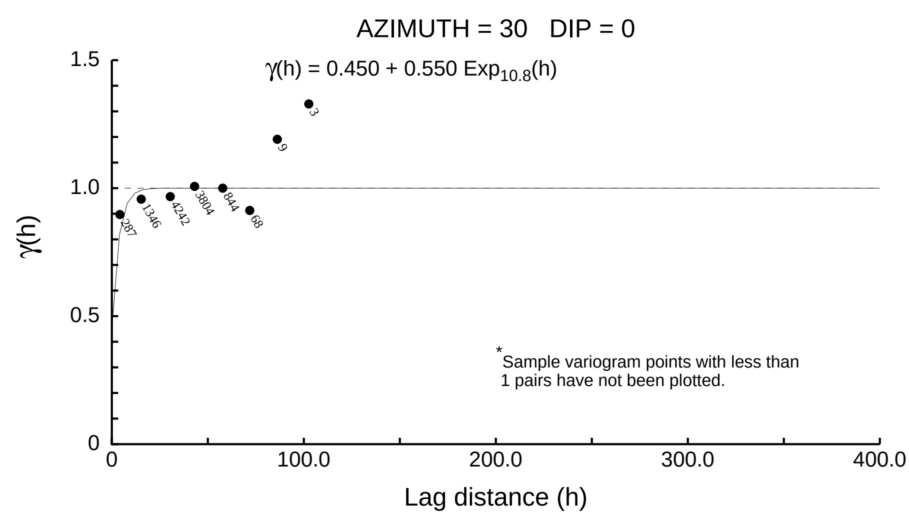
Y-Z Planes Looking West

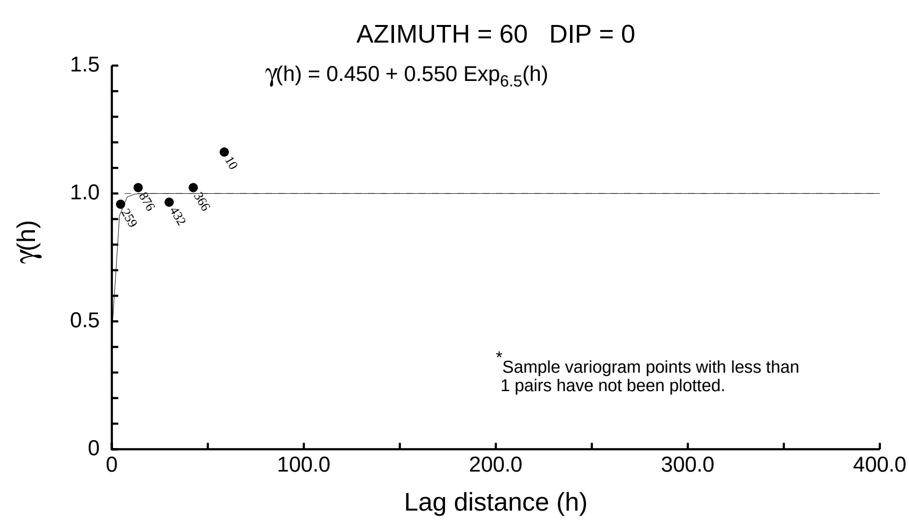


Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

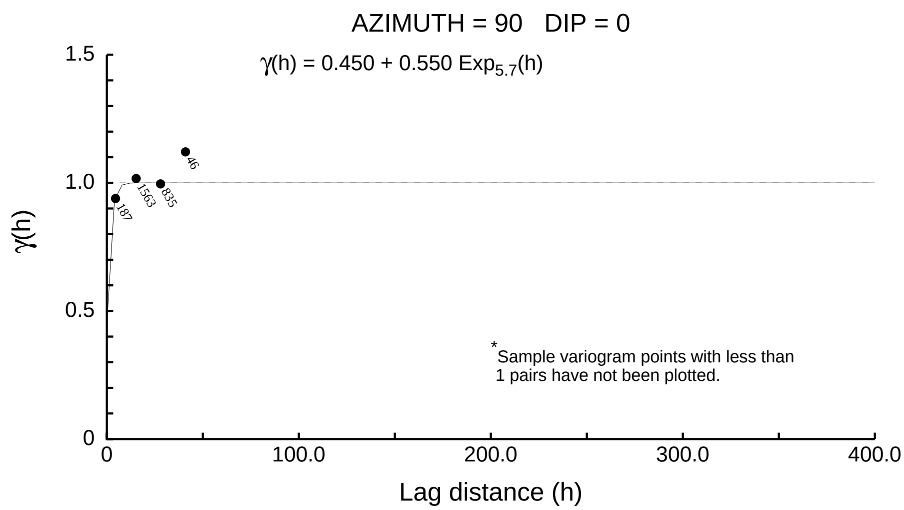
Zone 10 Directional Correlograms - Assays

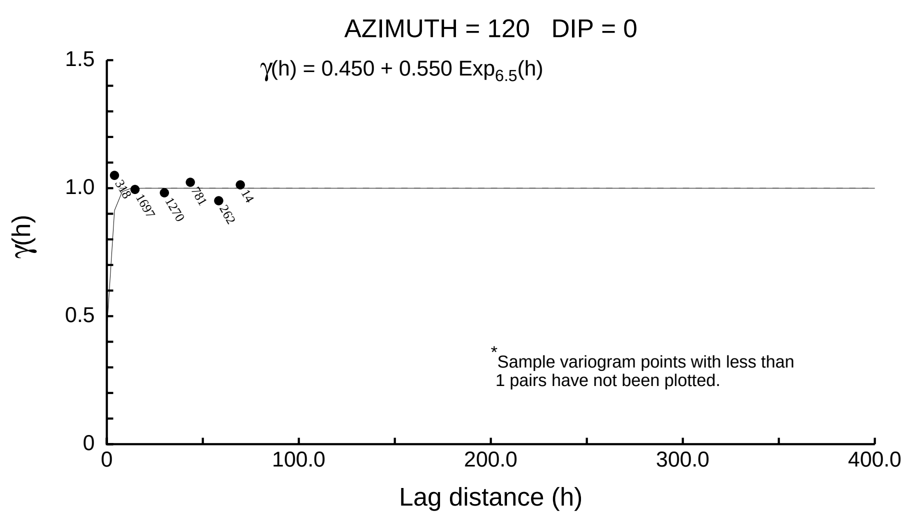


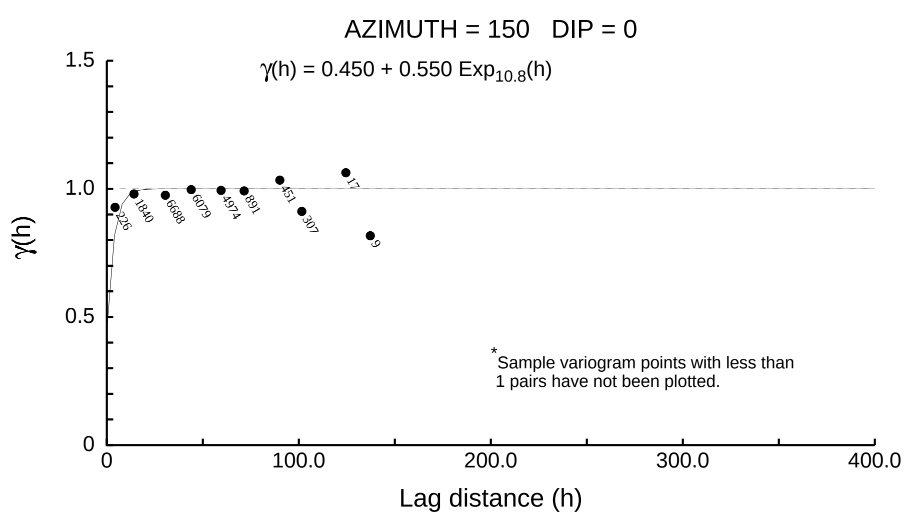




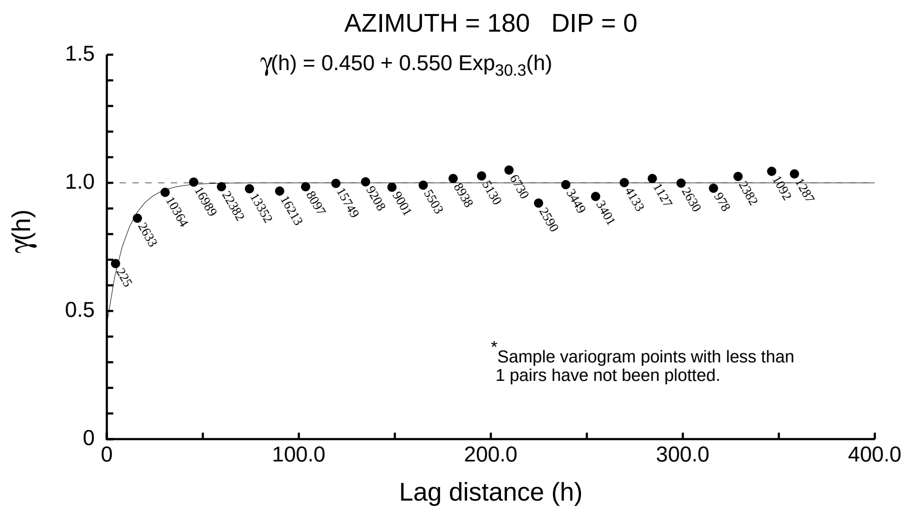
Zone 10 Directional Correlograms - Assays

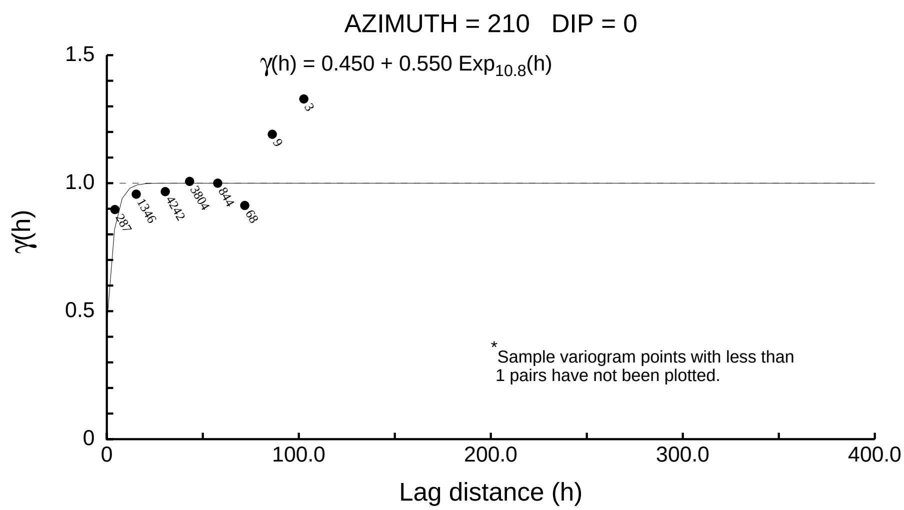


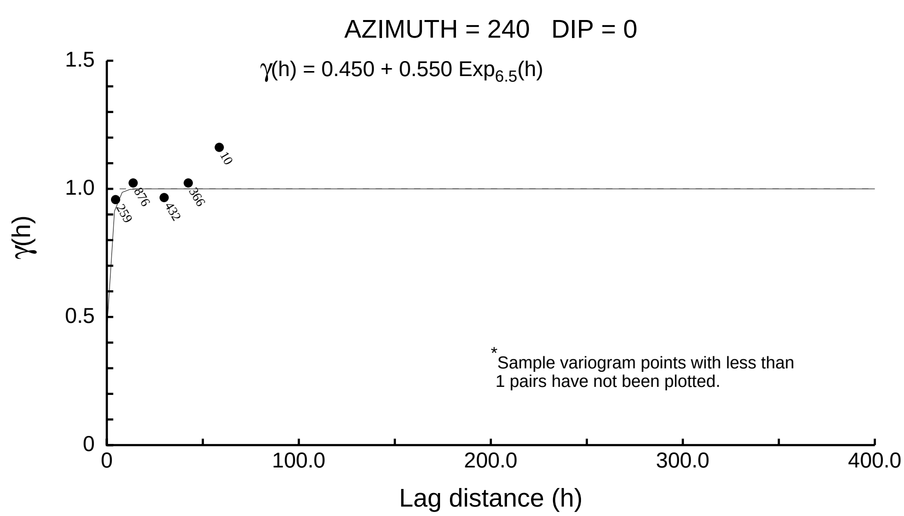




Zone 10 Directional Correlograms - Assays







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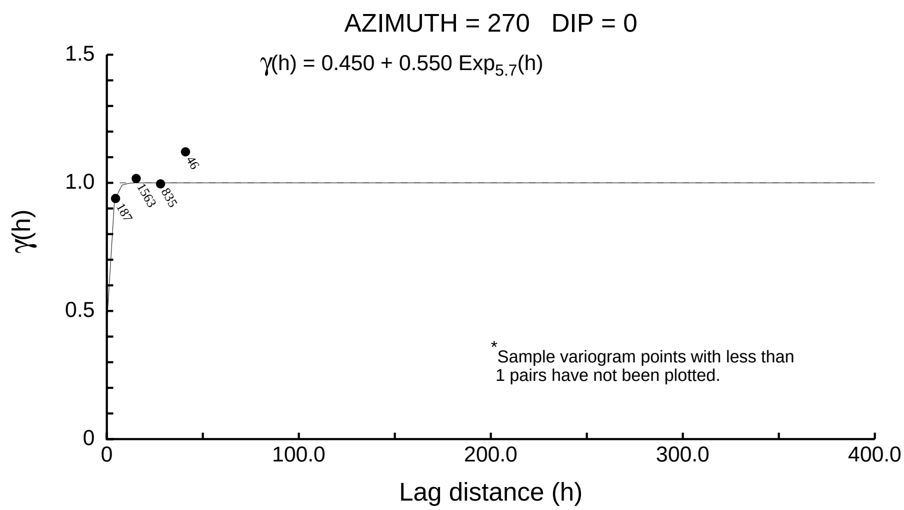
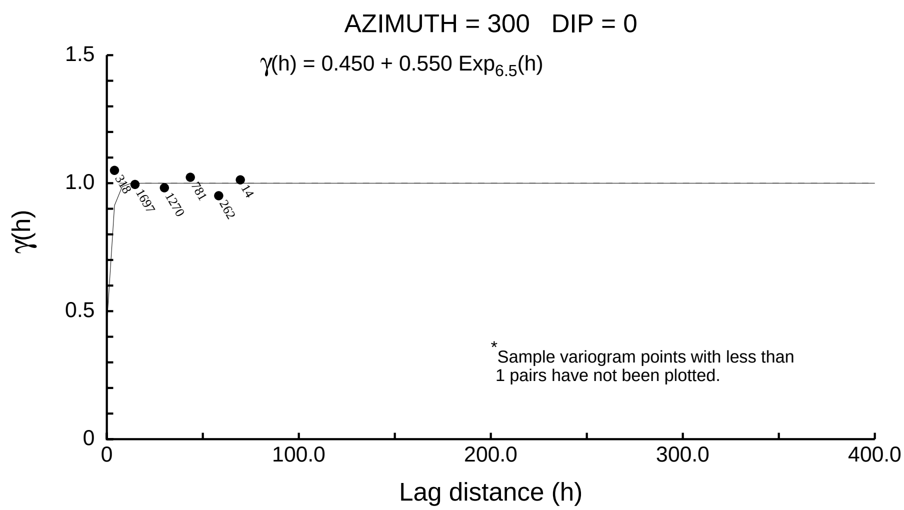
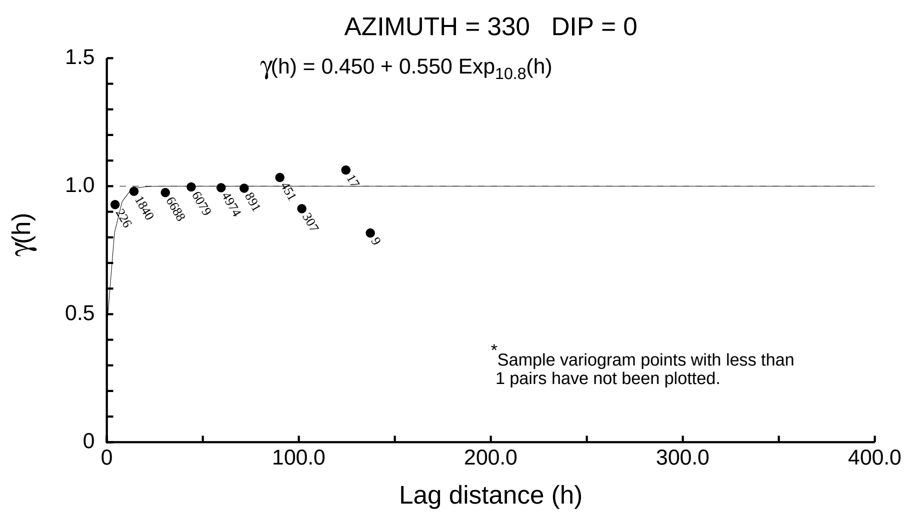
Zone 10 Directional Correlograms - Assays







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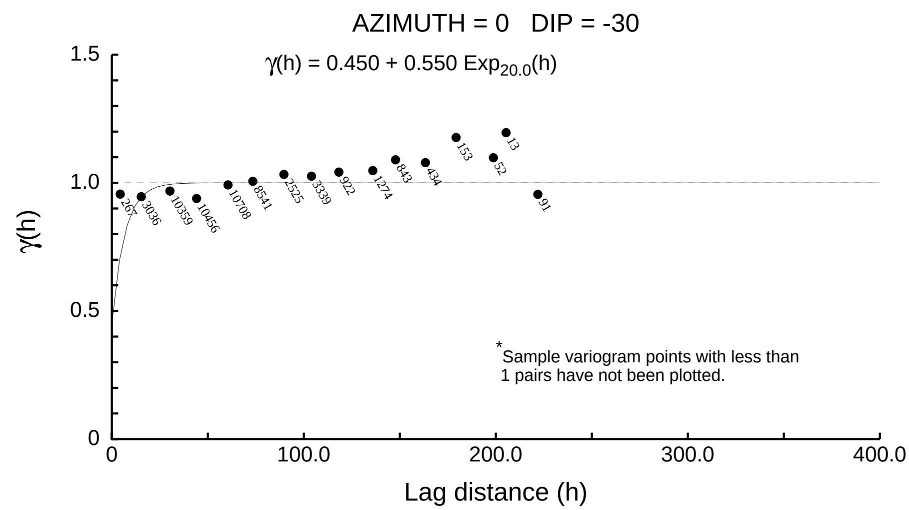
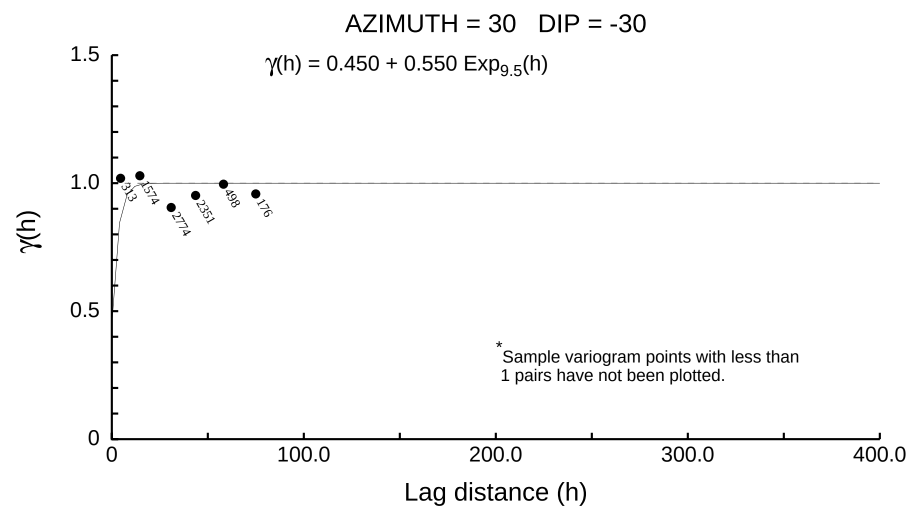
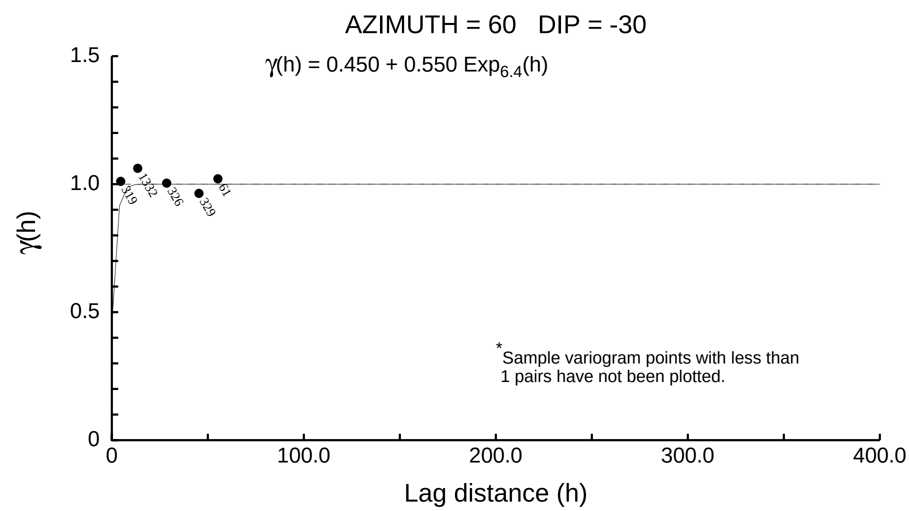
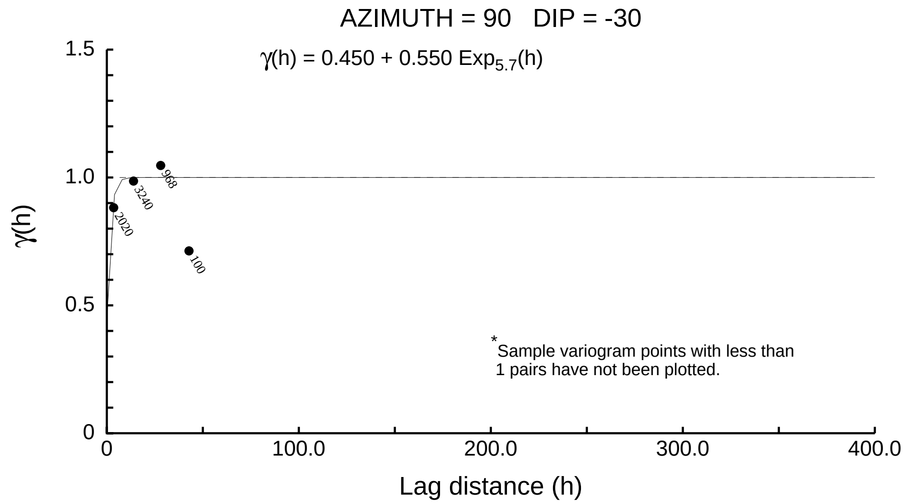
Zone 10 Directional Correlograms - Assays

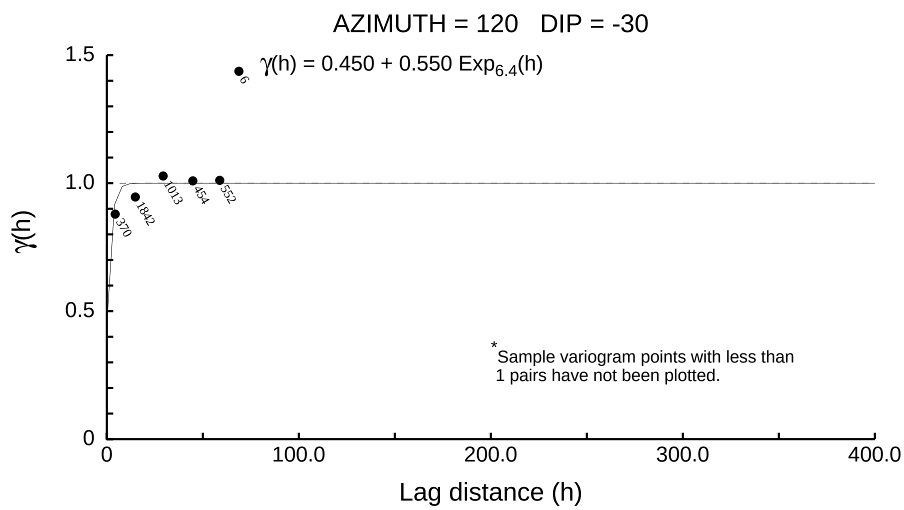


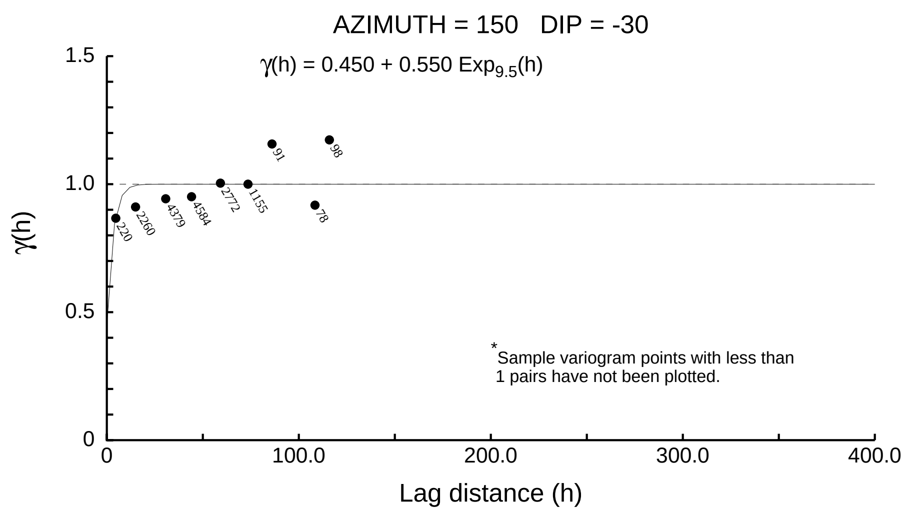




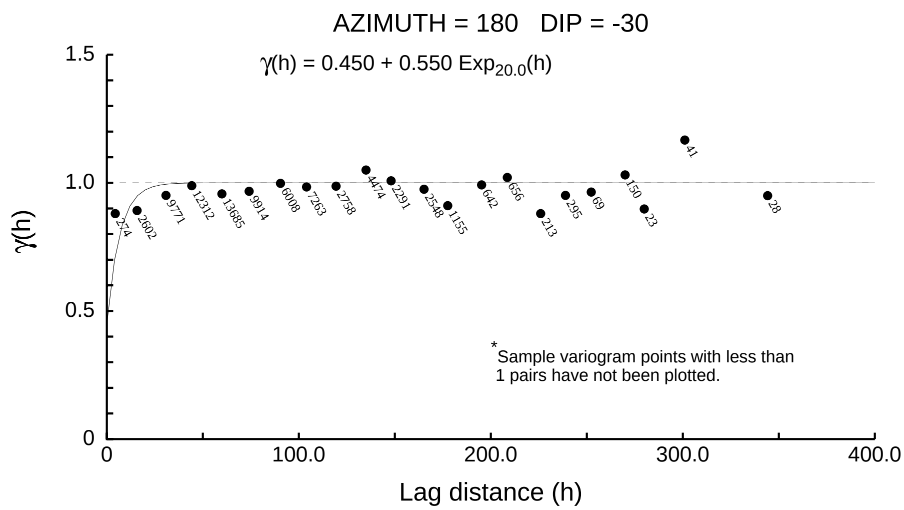
Zone 10 Directional Correlograms - Assays

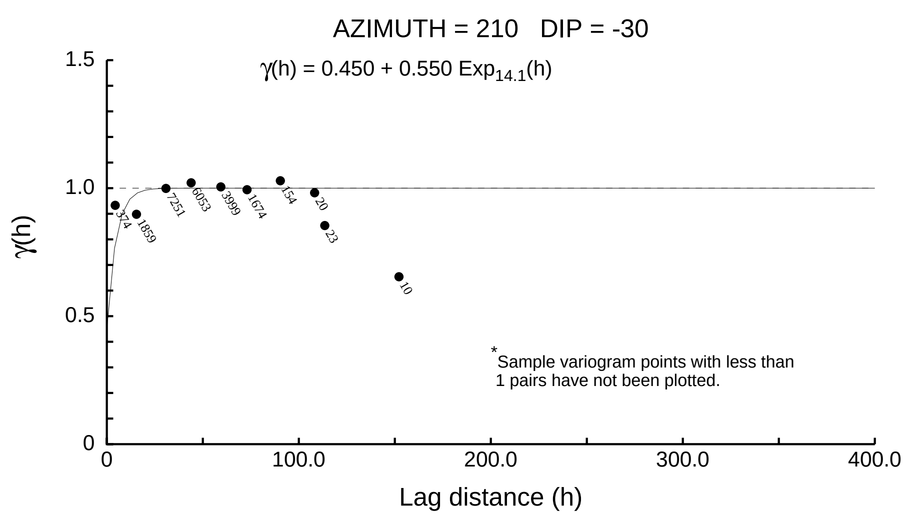


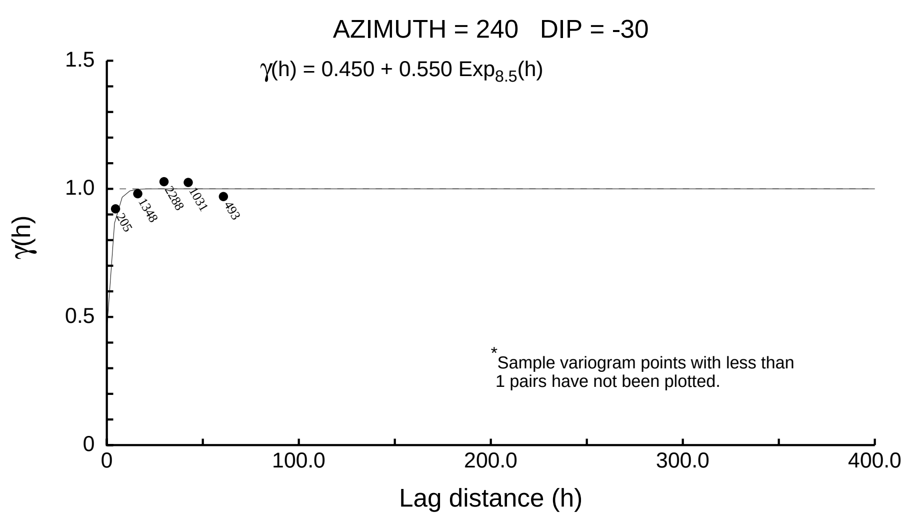




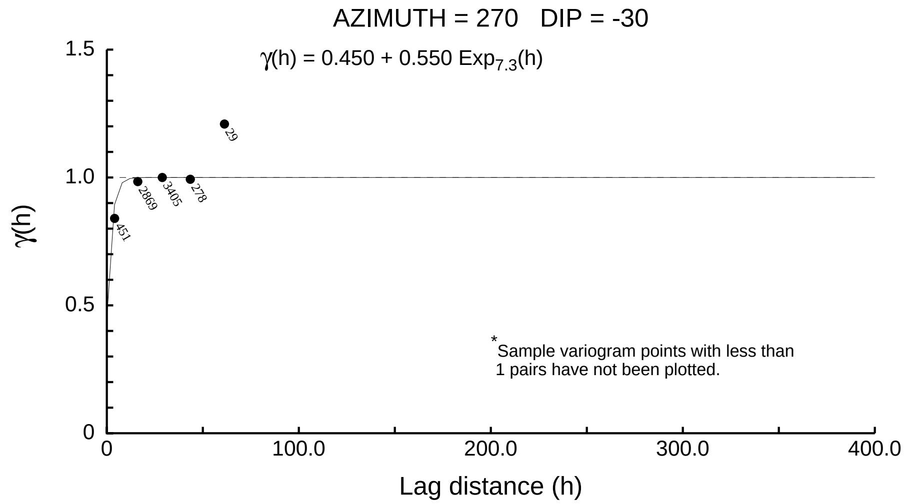
Zone 10 Directional Correlograms - Assays

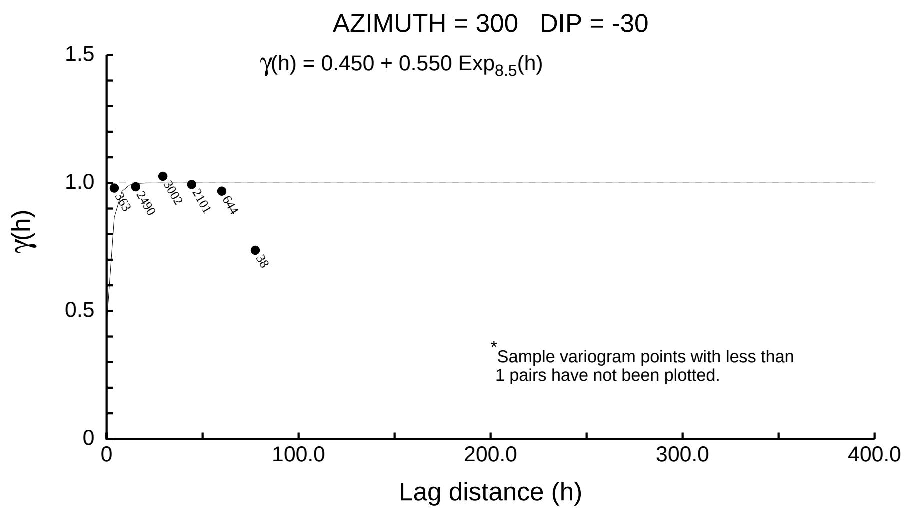


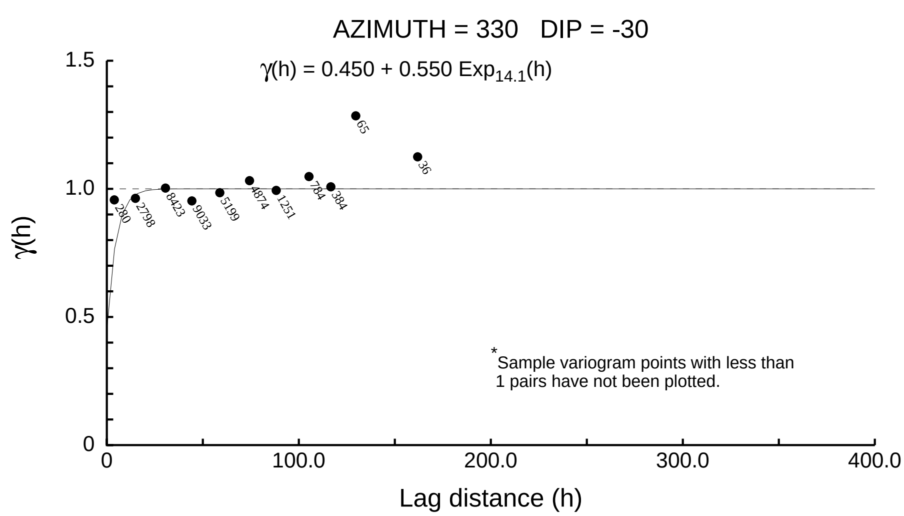




Zone 10 Directional Correlograms - Assays

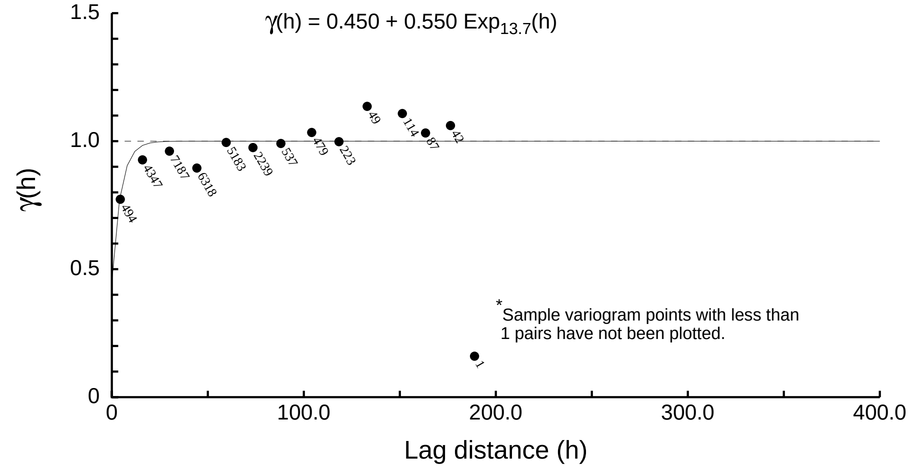




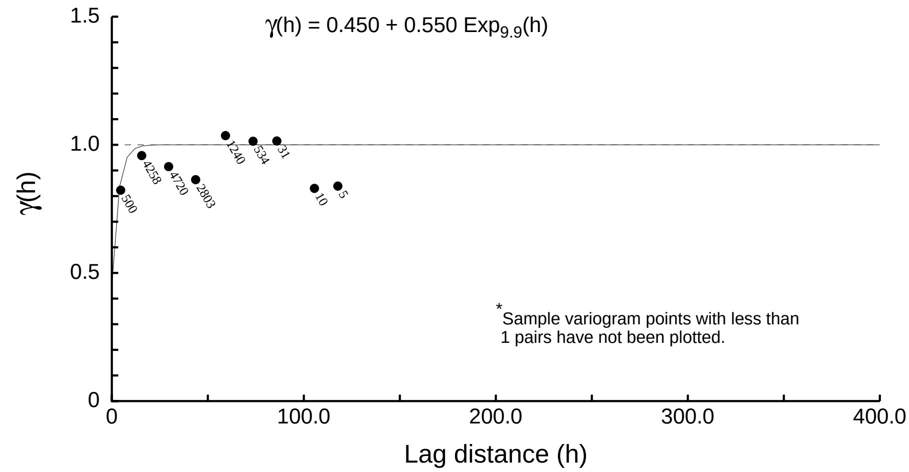


Zone 10 Directional Correlograms - Assays

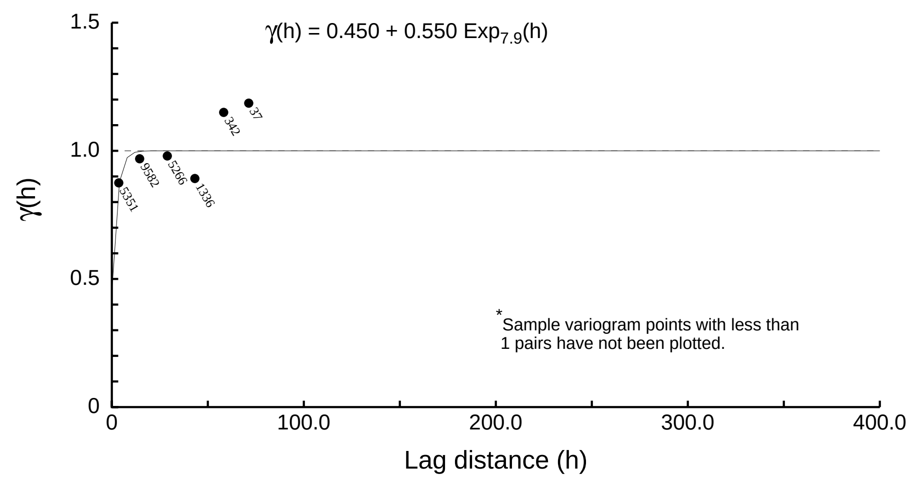
AZIMUTH = 0 DIP = -60



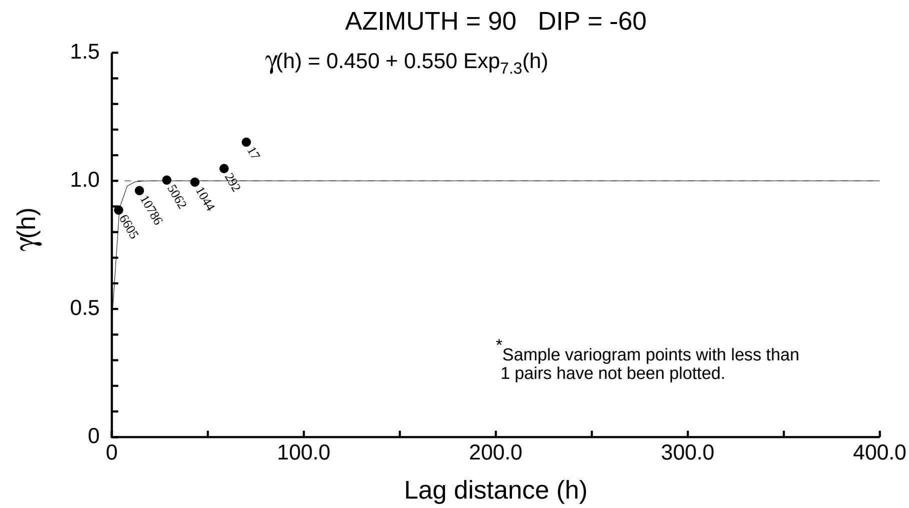
AZIMUTH = 30 DIP = -60

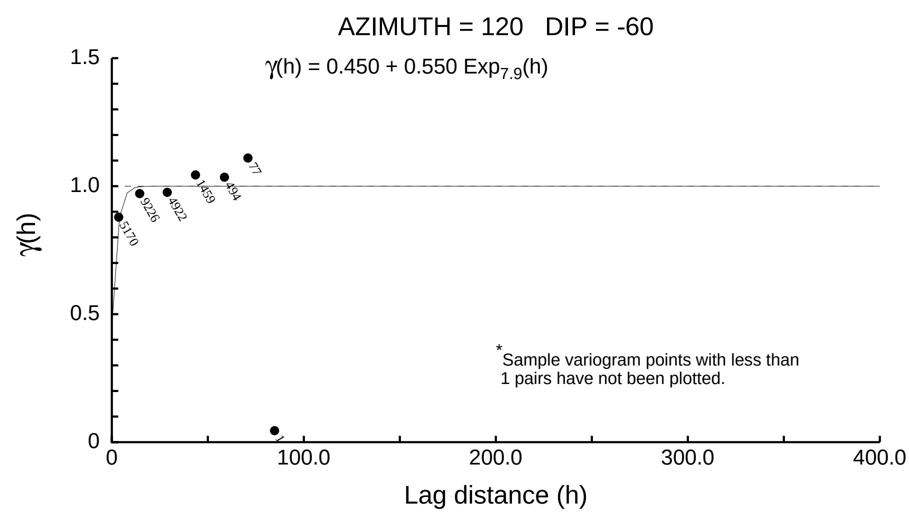


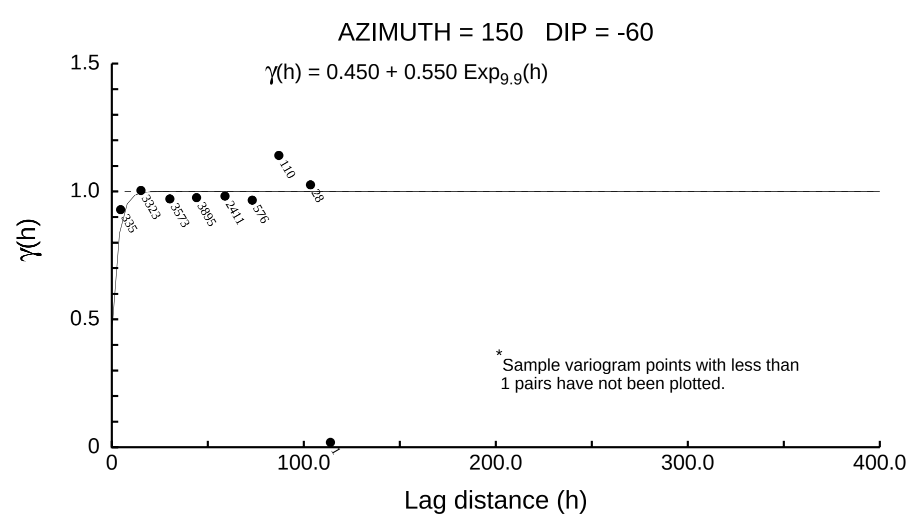
AZIMUTH = 60 DIP = -60



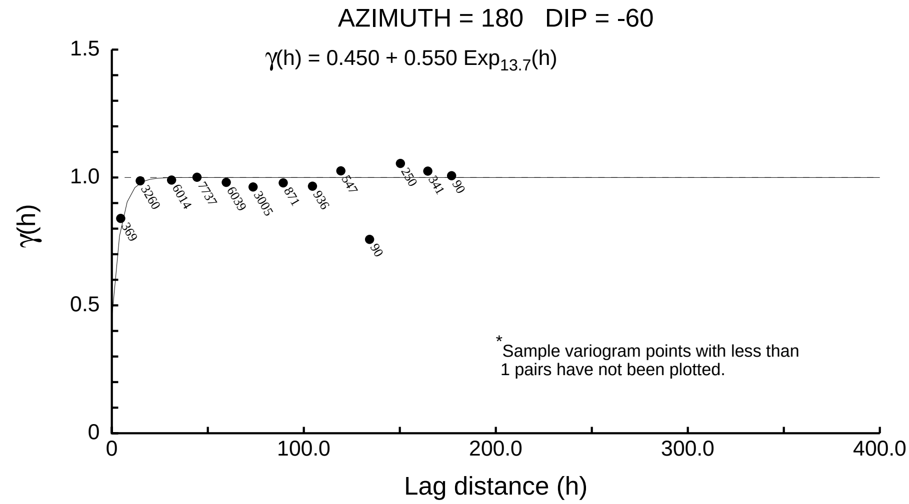
Zone 10 Directional Correlograms - Assays

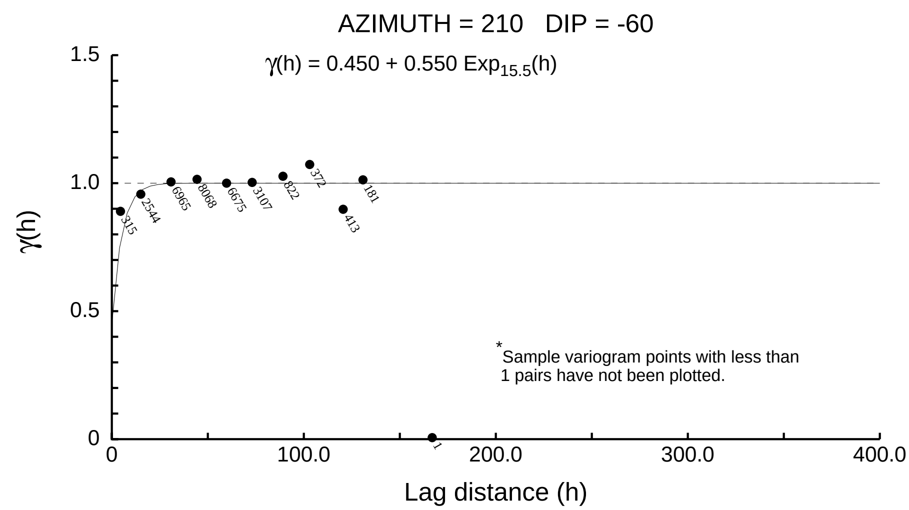


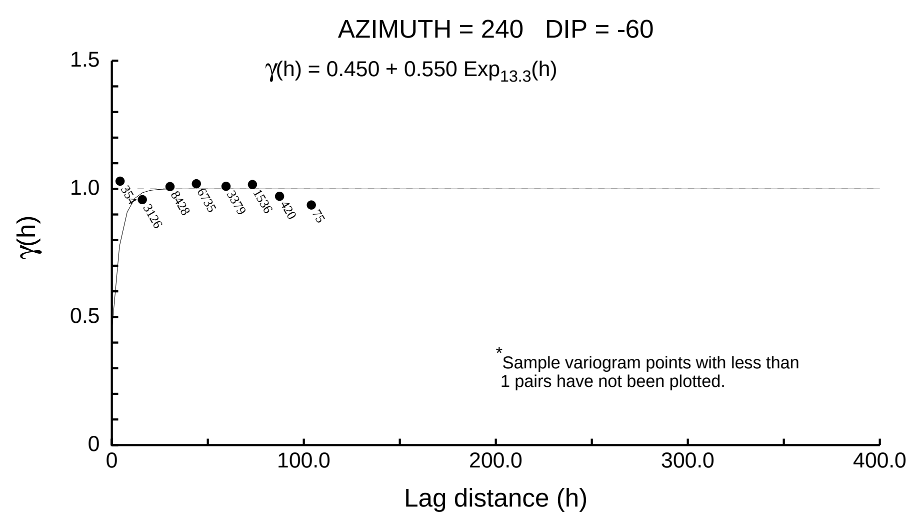




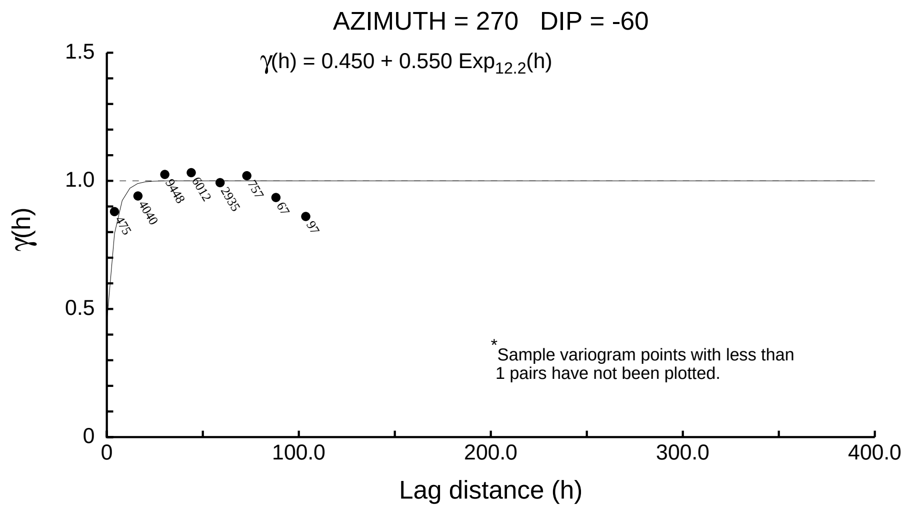
Zone 10 Directional Correlograms - Assays

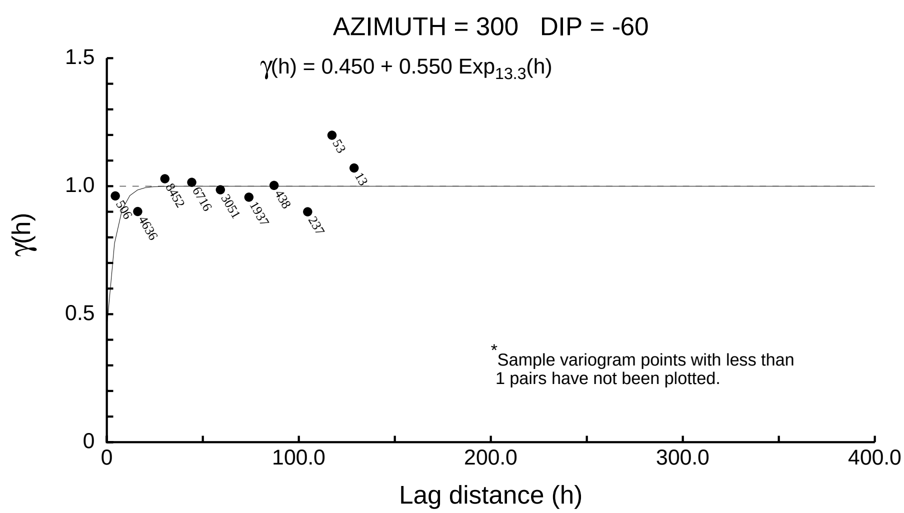


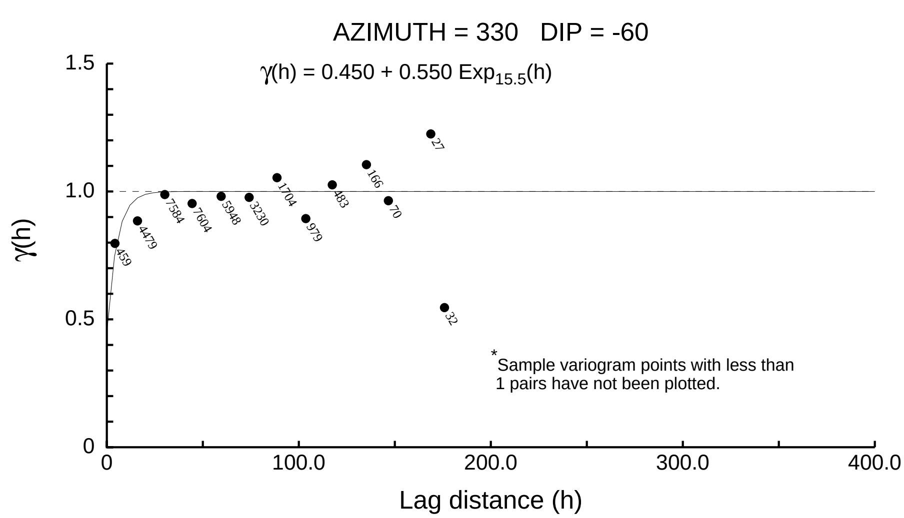




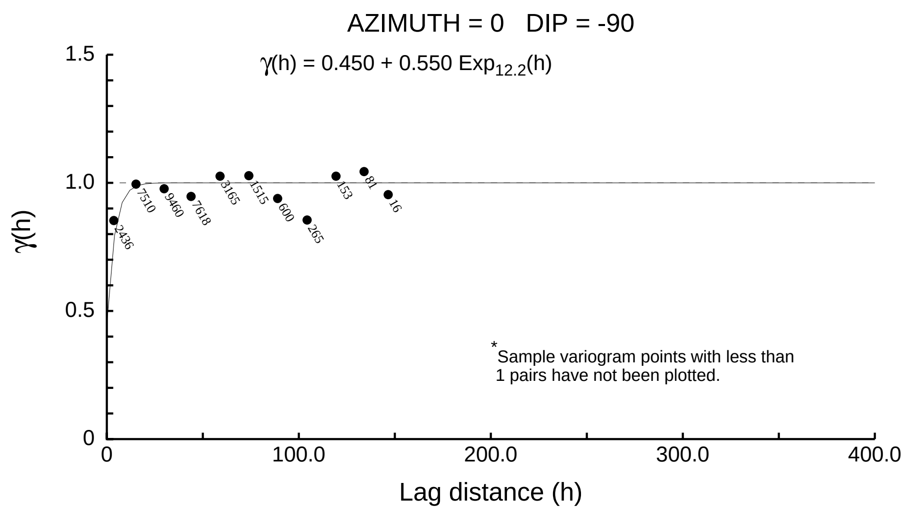
Zone 10 Directional Correlograms - Assays







Zone 10 Directional Correlograms - Assays



Zone 3 Downhole Correlogram - Assays

Medsystem and Vulcan Rotation Conventions

Nugget ==> 0.640
C1 ==> 0.360

First Structure -- Exponential with Practical Range

LH Rotation about the Z axis ==> 0
RH Rotation about the X’ axis ==> 0
LH Rotation about the Y’ axis ==> 0
Range along the Z’ axis ==> 15.0 Azimuth ==> 90 Dip ==> 90
Range along the Y’ axis ==> 15.0 Azimuth ==> 360 Dip ==> 0
Range along the X’ axis ==> 15.0 Azimuth ==> 90 Dip ==> 0

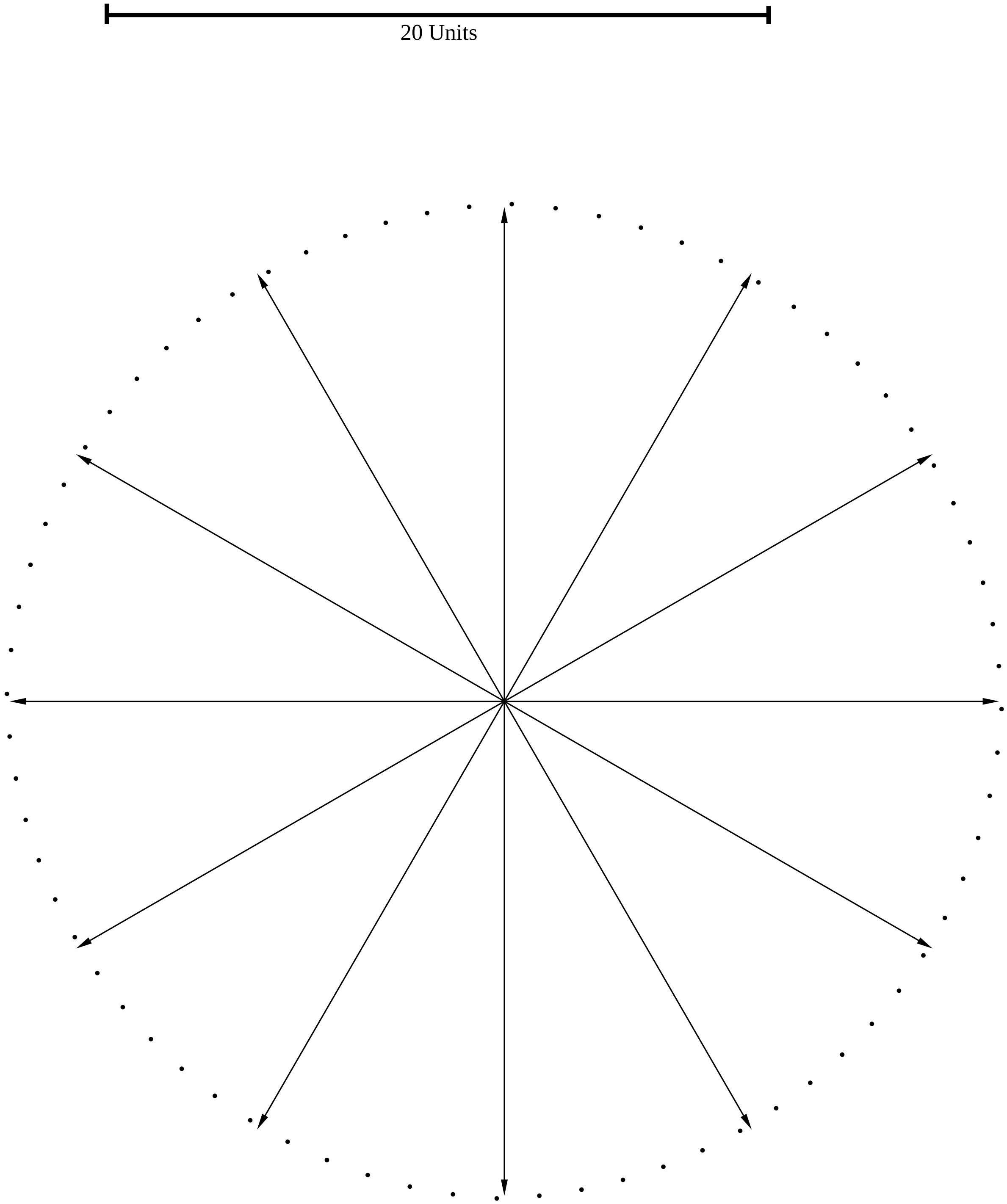
Modeling Criteria

Minimum number pairs req’d ==> 1
Sample variogram points weighted by # pairs

Zone 3 Downhole Correlogram - Assays

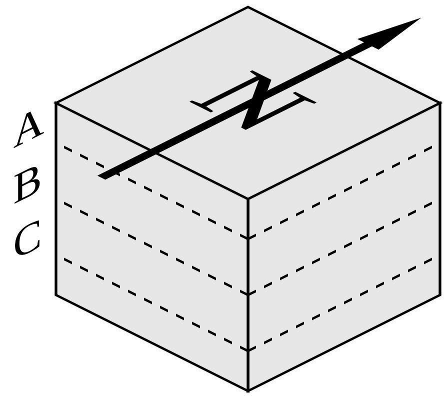
Structure Number 1

Rose Diagram of Ranges Dipping 0 Degrees
Scale:

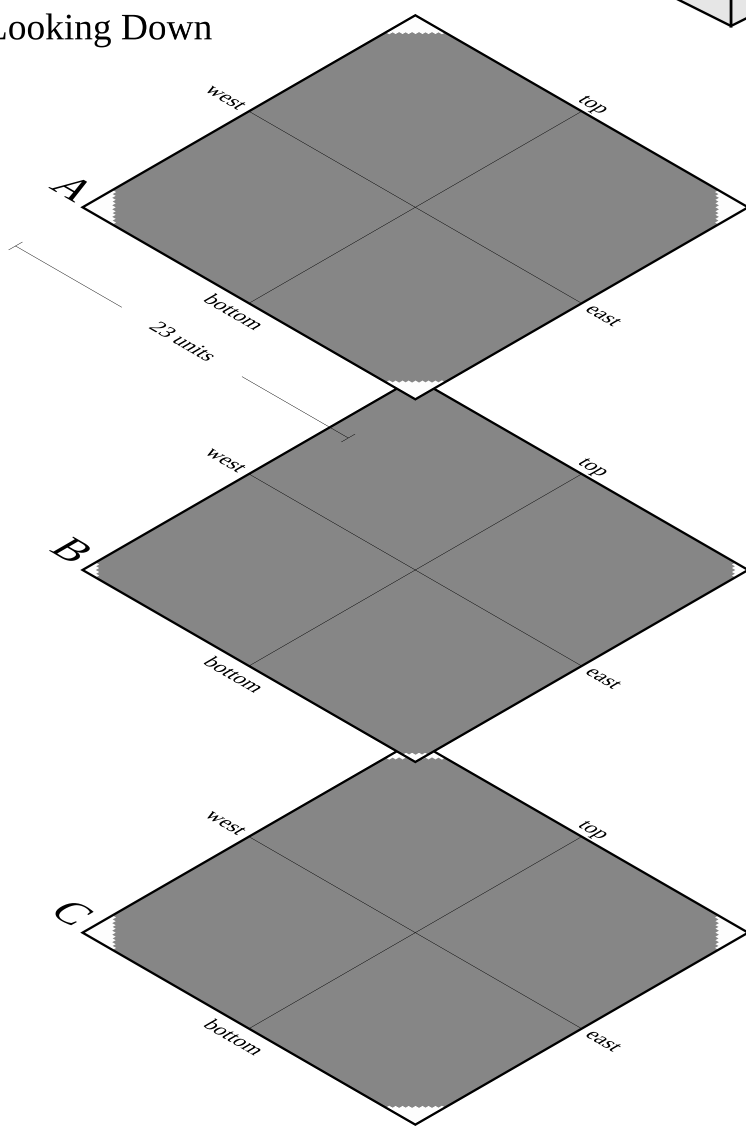


Horizontal Slices Through the Ellipsoids

Reference Cube



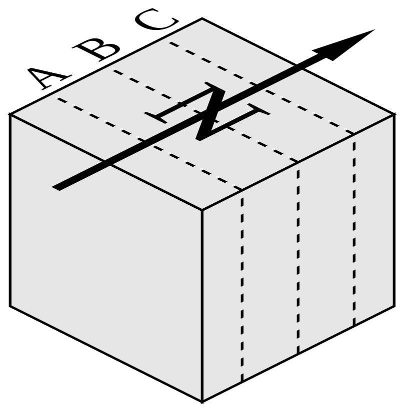
X-Y Planes Looking Down



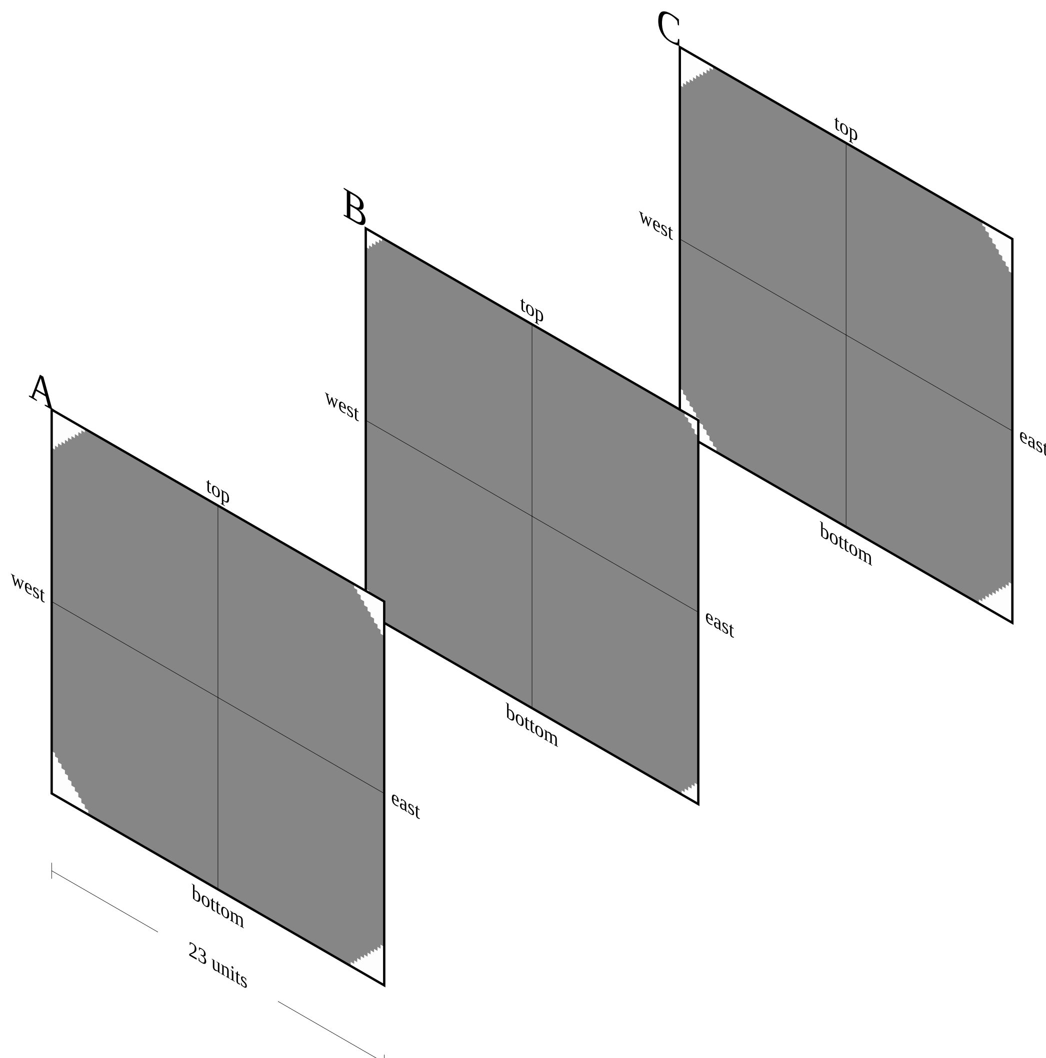
Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Cross Section Views Through the Ellipsoids

Reference Cube



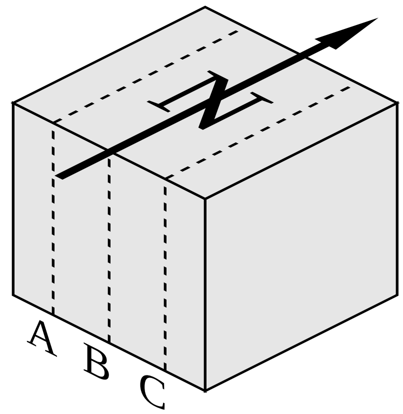
X-Z Planes Looking North



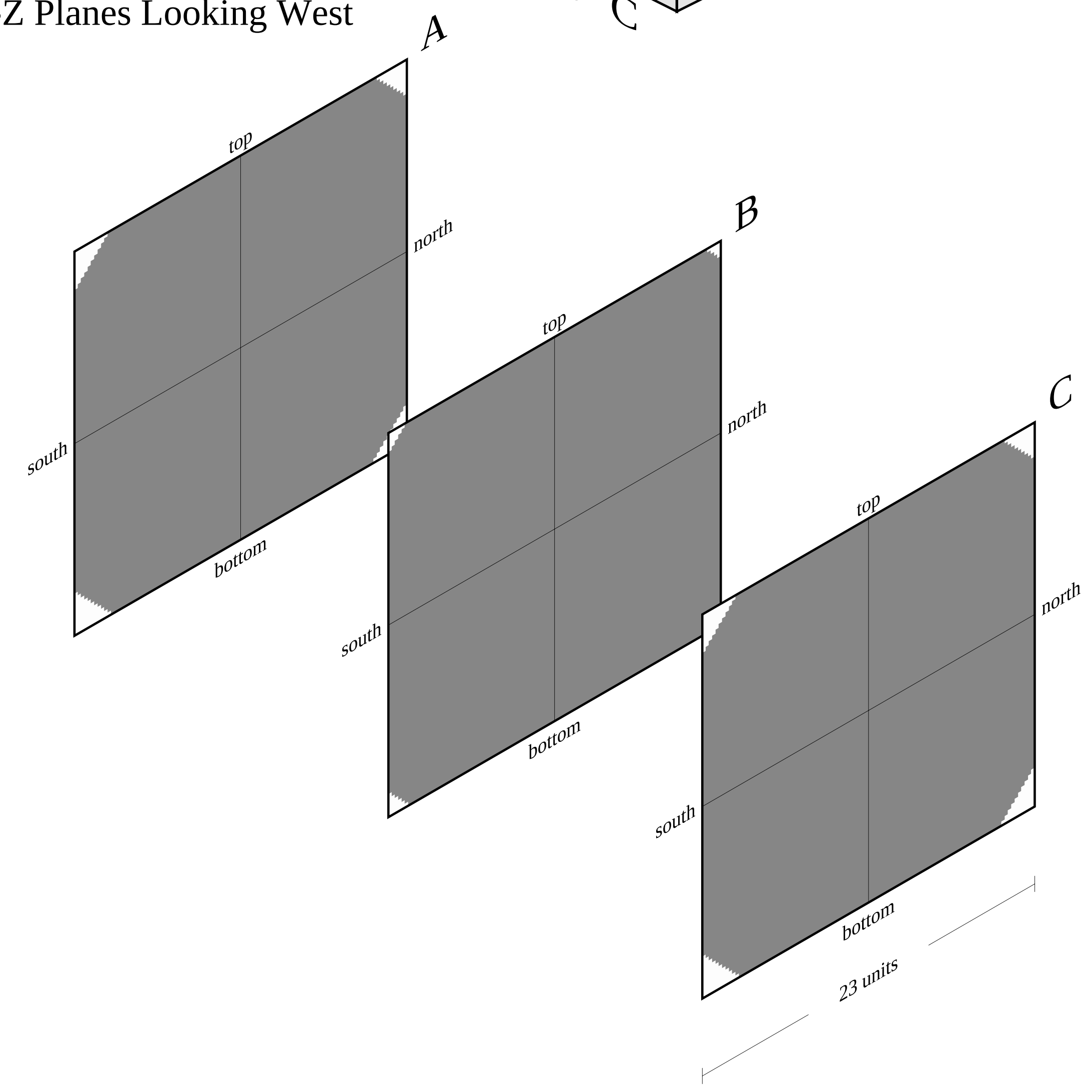
Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Long Section Views Through the Ellipsoids

Reference Cube

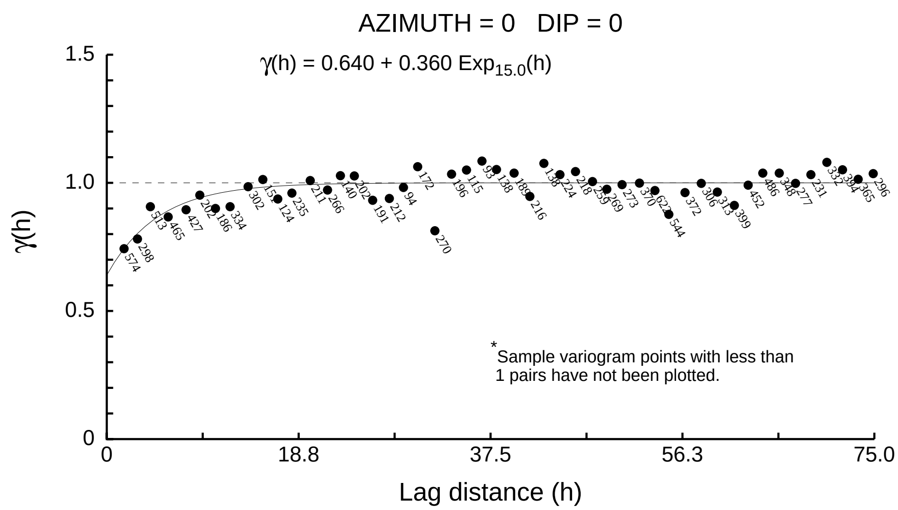


Y-Z Planes Looking West



Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Zone 3 Downhole Correlogram - Assays



Zone 3 Directional Correlograms - Assays

Medsystem and Vulcan Rotation Conventions

Nugget ==> 0.640
C1 ==> 0.360

First Structure -- Exponential with Practical Range

LH Rotation about the Z axis ==> 0
RH Rotation about the X' axis ==> 0
LH Rotation about the Y' axis ==> 75

Range along the Z' axis ==> 37.0	Azimuth ==> 270	Dip ==> 15
Range along the Y' axis ==> 112.6	Azimuth ==> 360	Dip ==> 0
Range along the X' axis ==> 19.8	Azimuth ==> 90	Dip ==> 75

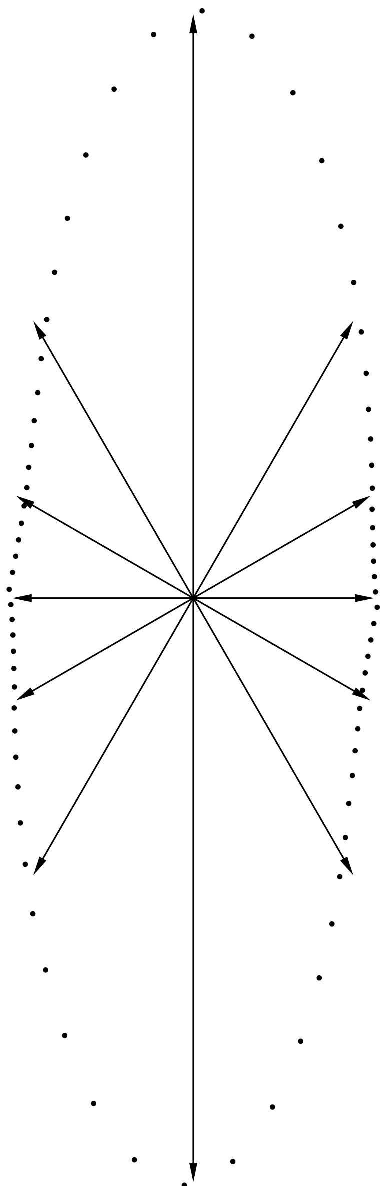
Modeling Criteria

Minimum number pairs req'd ==> 1
Sample variogram points weighted by # pairs

Zone 3 Directional Correlograms - Assays

Structure Number 1

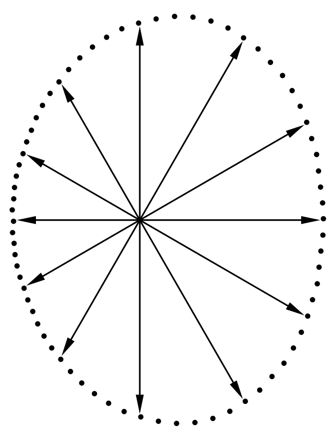
Rose Diagram of Ranges Dipping 0 Degrees
Scale:



Zone 3 Directional Correlograms - Assays

Structure Number 1

Rose Diagram of Ranges Dipping 30 Degrees
Scale:



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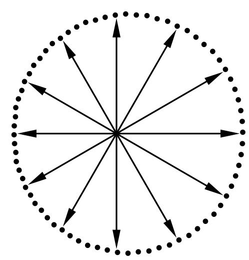
Zone 3 Directional Correlograms - Assays

Structure Number 1

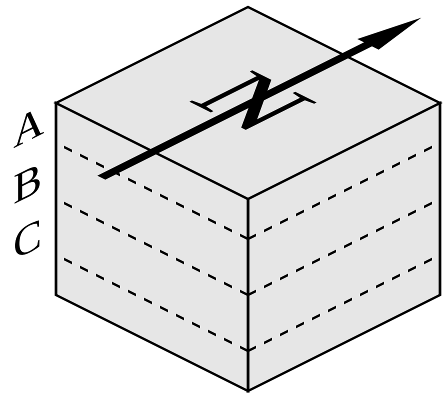
Rose Diagram of Ranges Dipping 60 Degrees
Scale:

100 Units

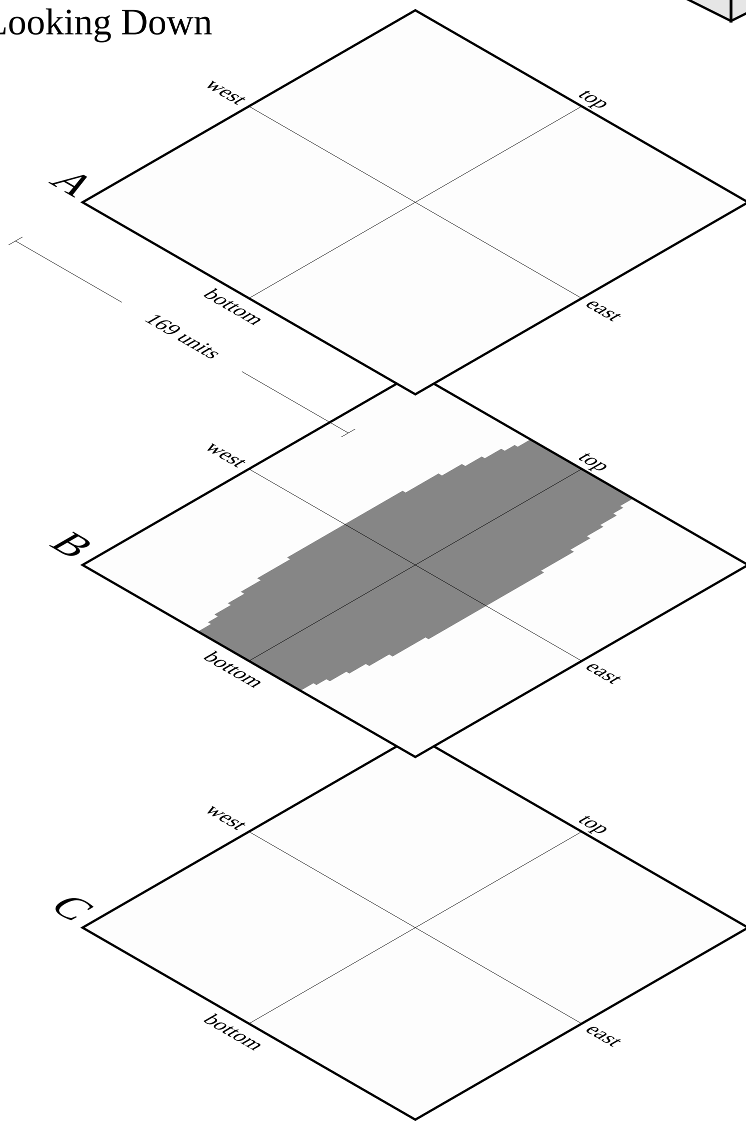


Horizontal Slices Through the Ellipsoids

Reference Cube



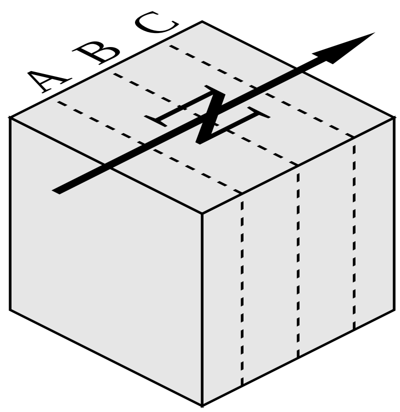
X-Y Planes Looking Down



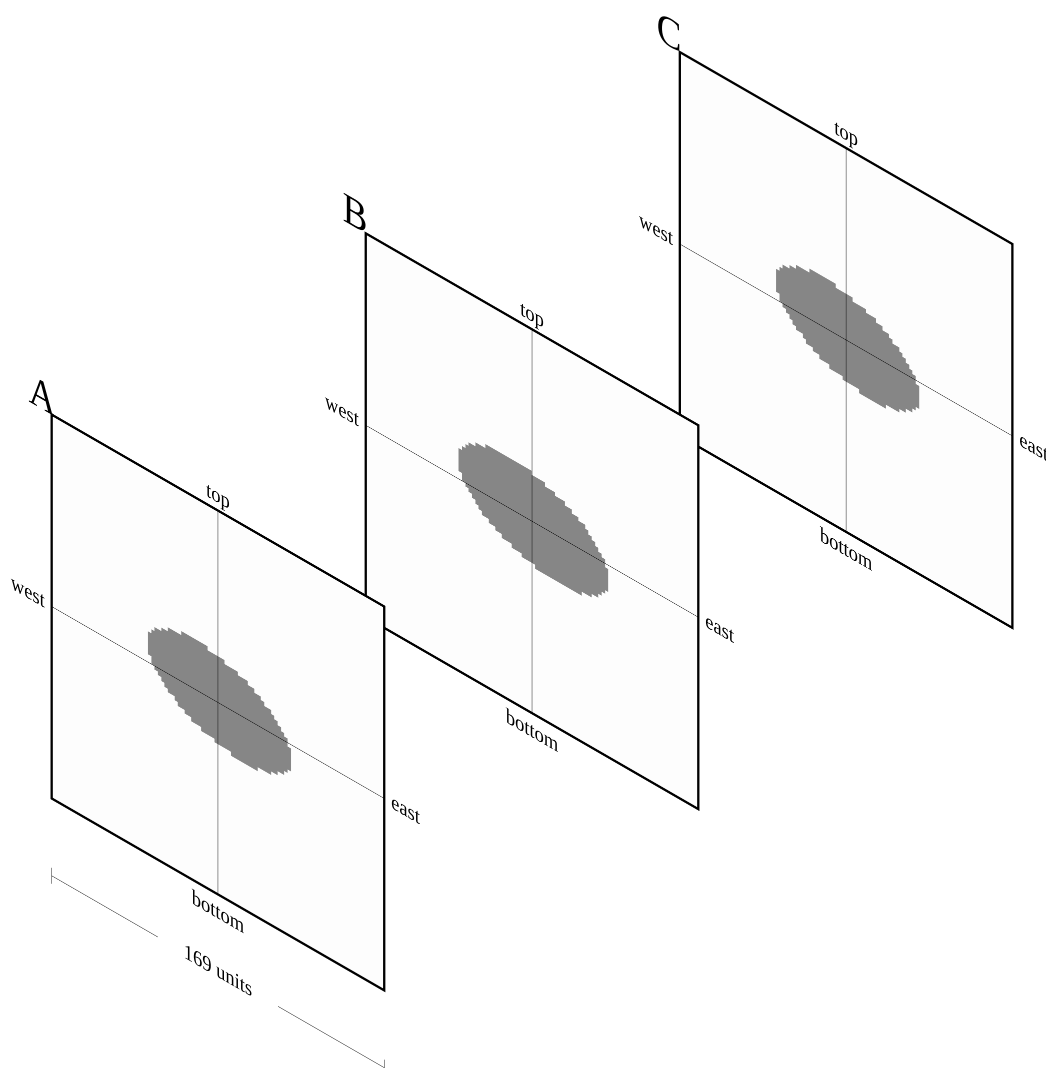
Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Cross Section Views Through the Ellipsoids

Reference Cube



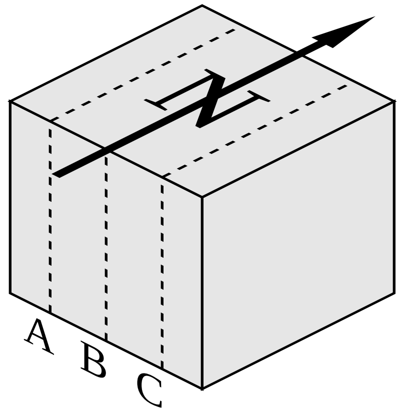
X-Z Planes Looking North



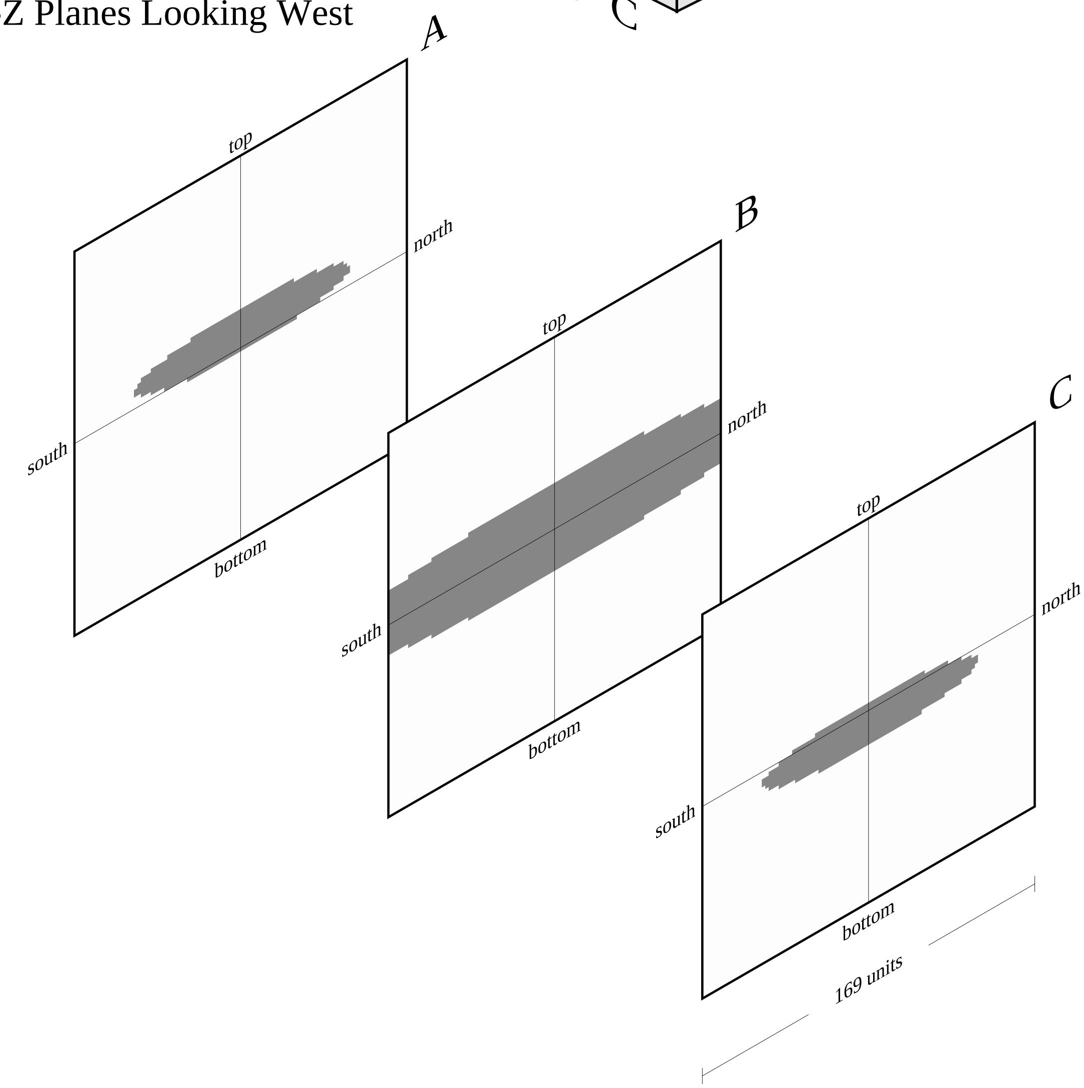
Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Long Section Views Through the Ellipsoids

Reference Cube

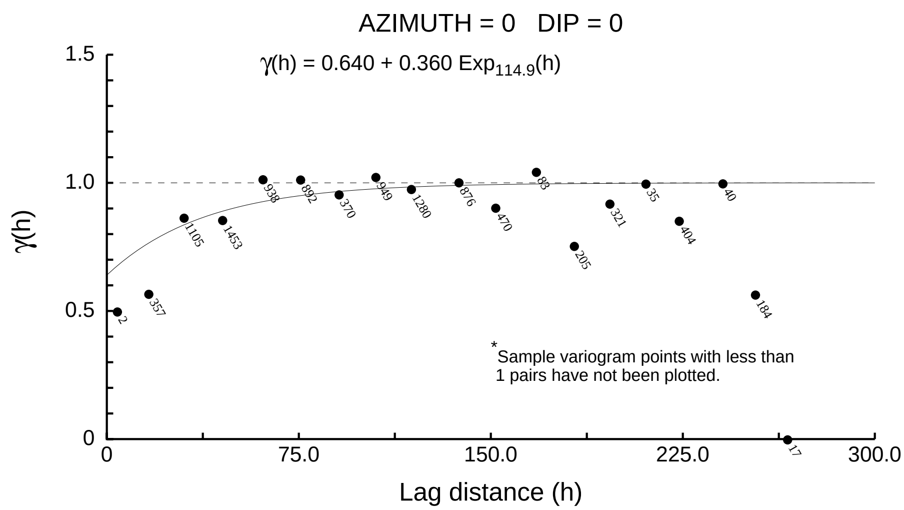


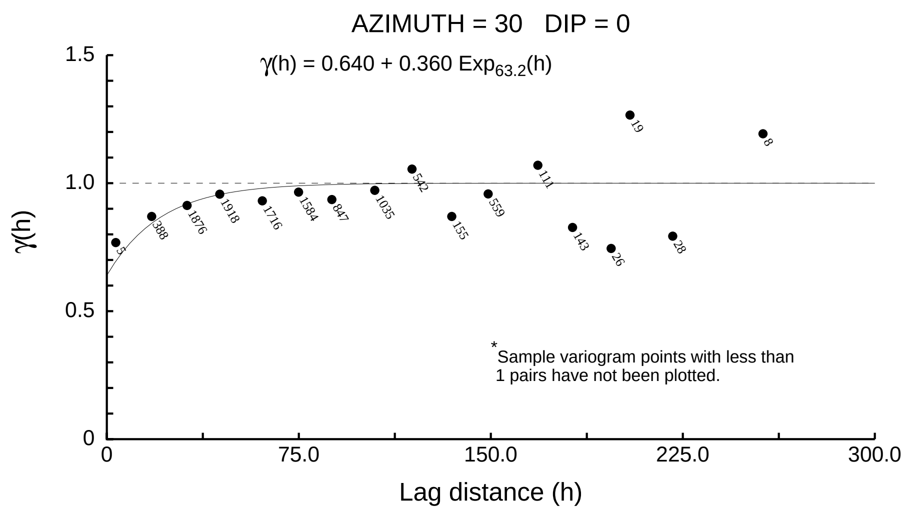
Y-Z Planes Looking West

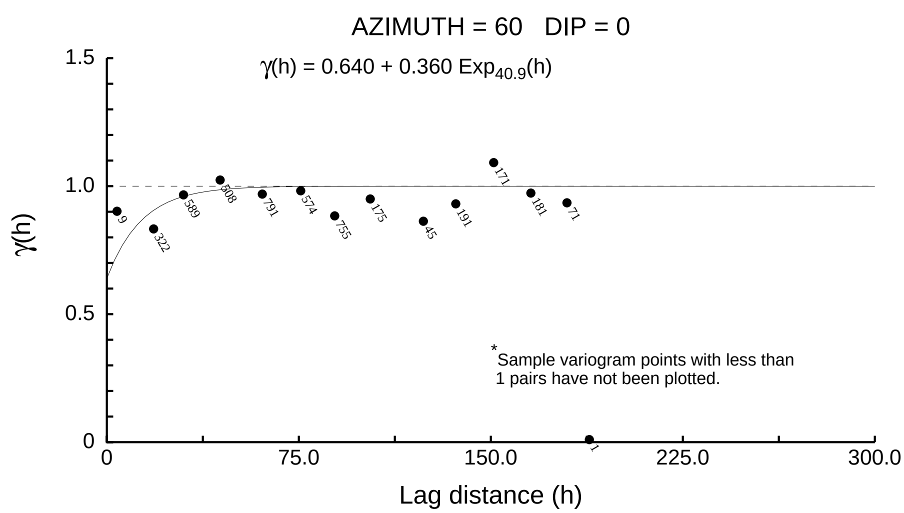


Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

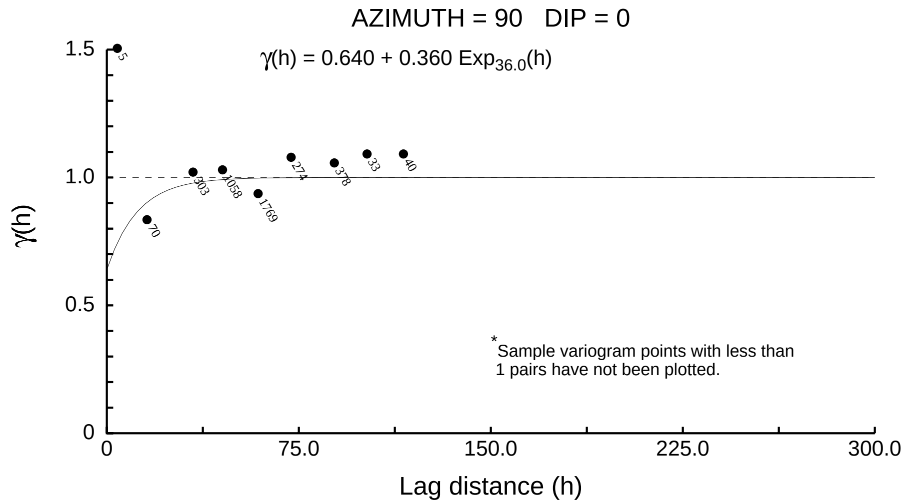
Zone 3 Directional Correlograms - Assays

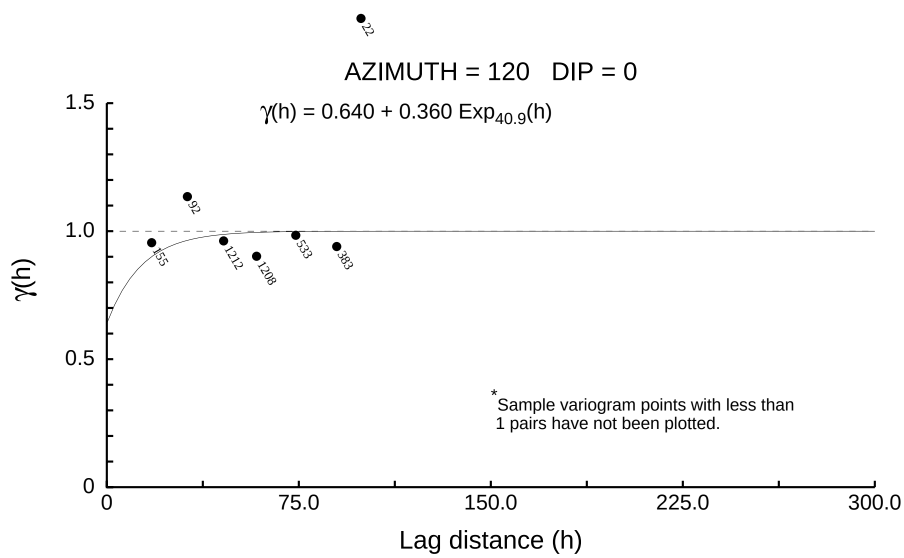


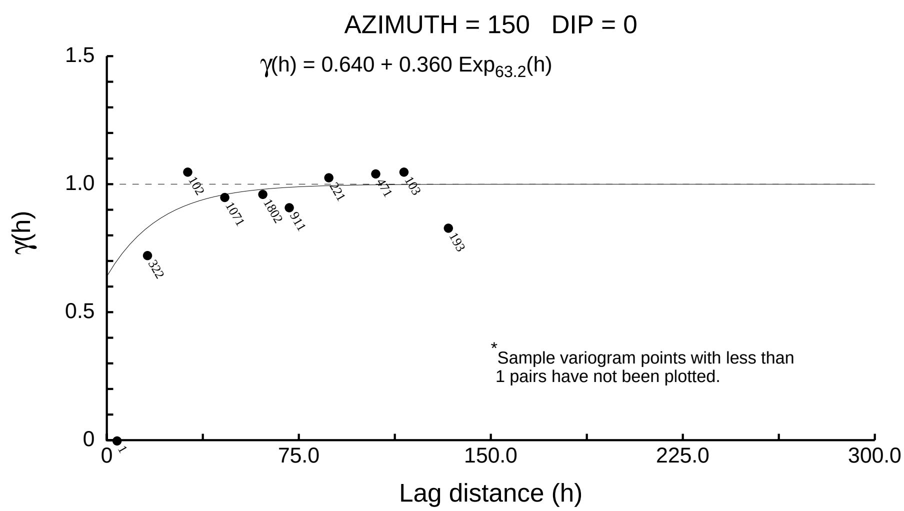




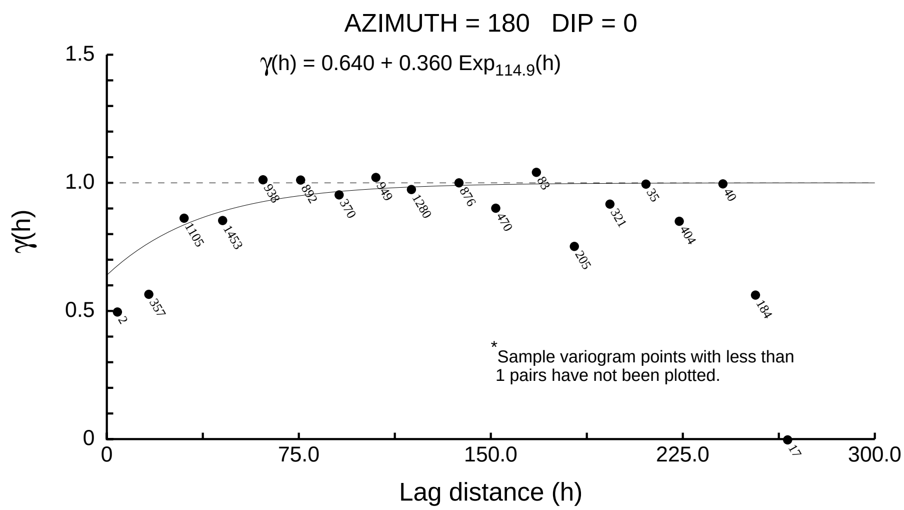
Zone 3 Directional Correlograms - Assays

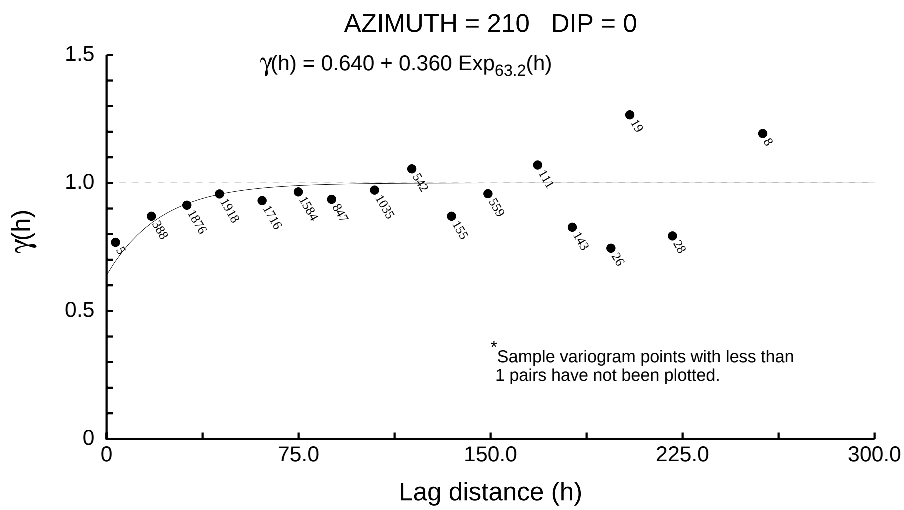


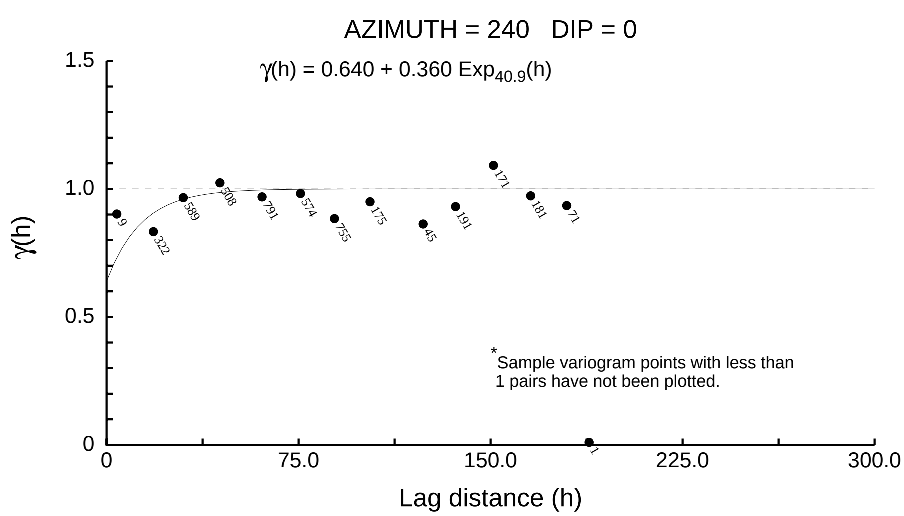




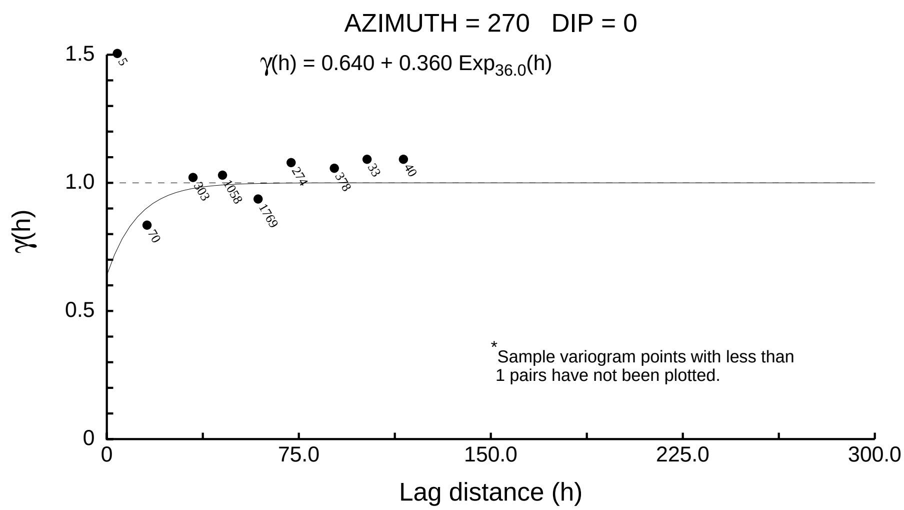
Zone 3 Directional Correlograms - Assays

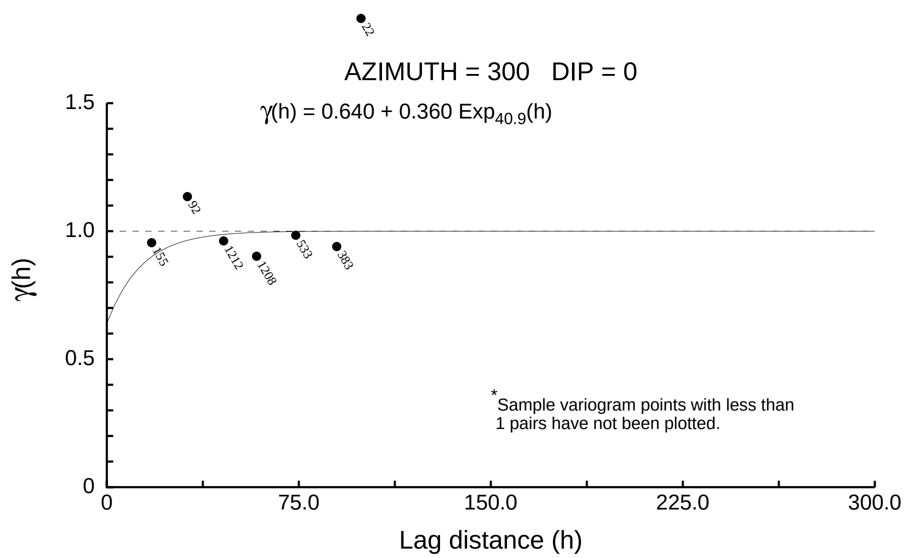


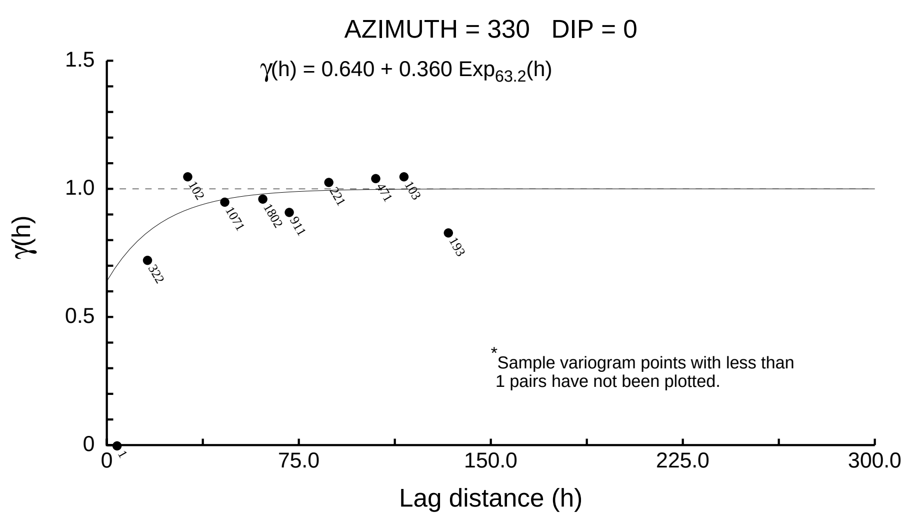




Zone 3 Directional Correlograms - Assays







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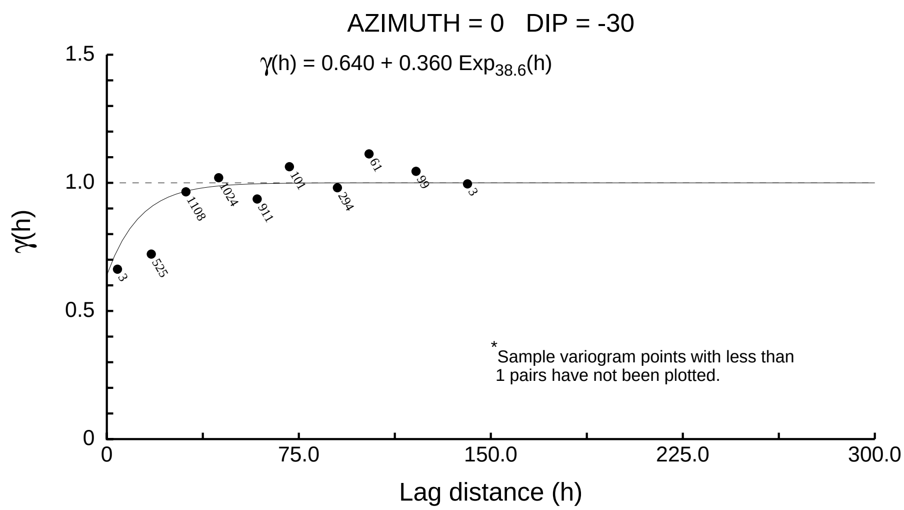
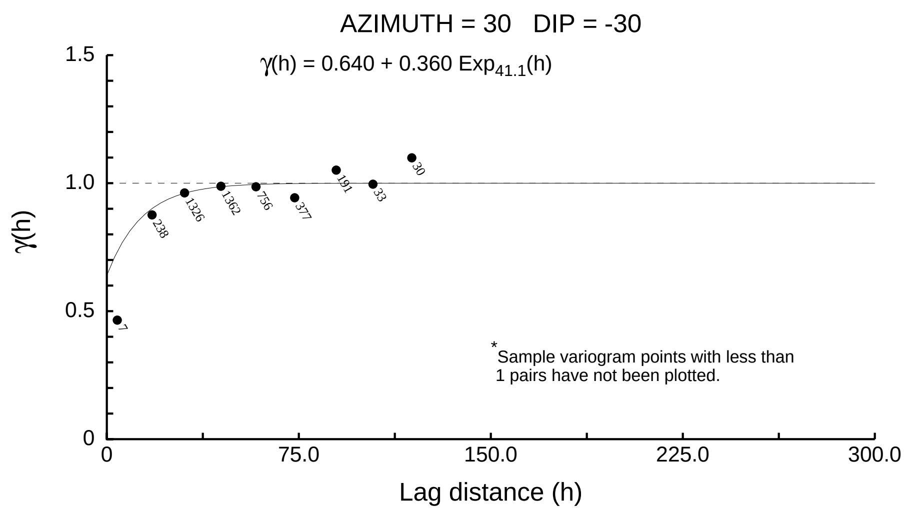
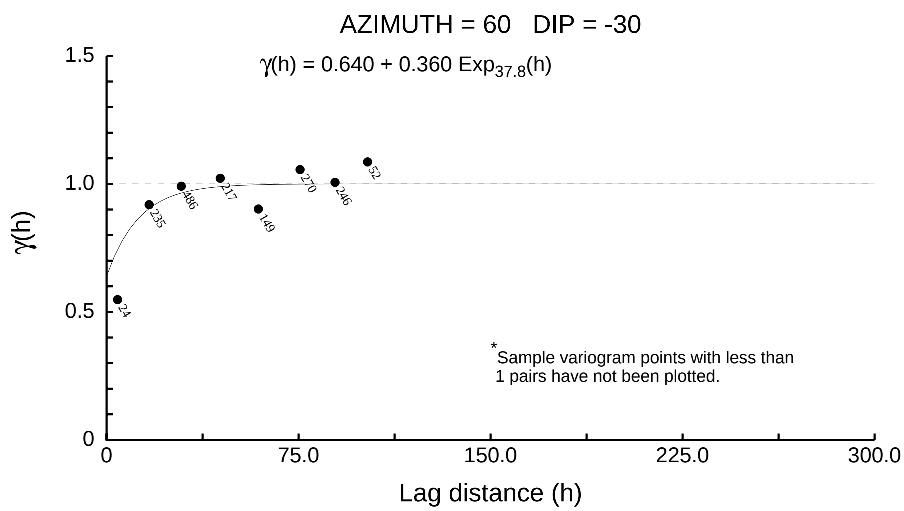
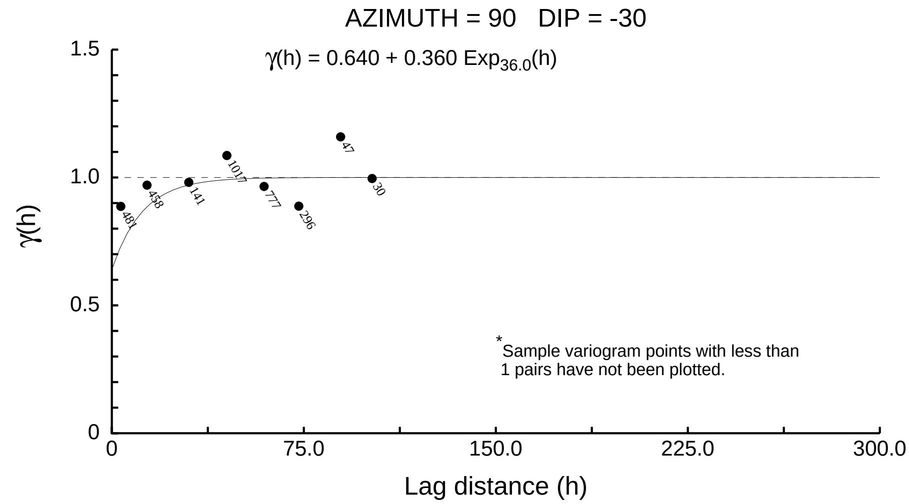
Zone 3 Directional Correlograms - Assays

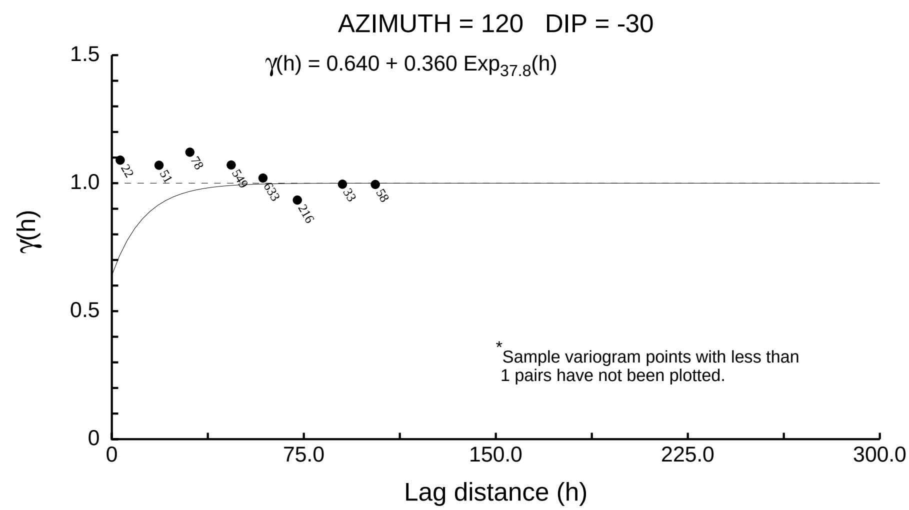


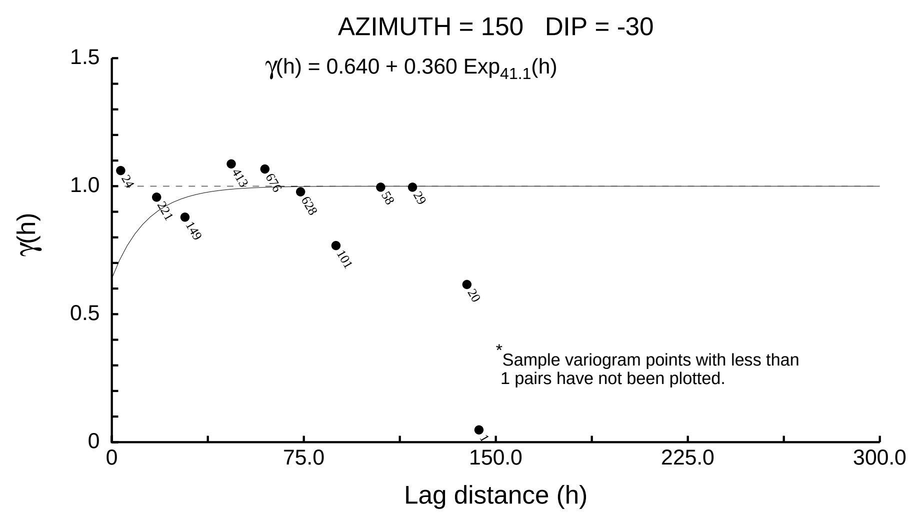




Zone 3 Directional Correlograms - Assays







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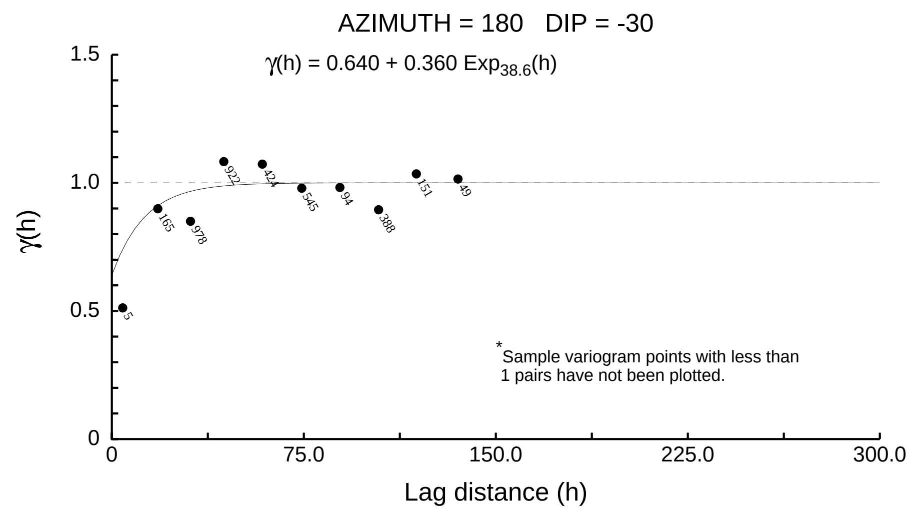
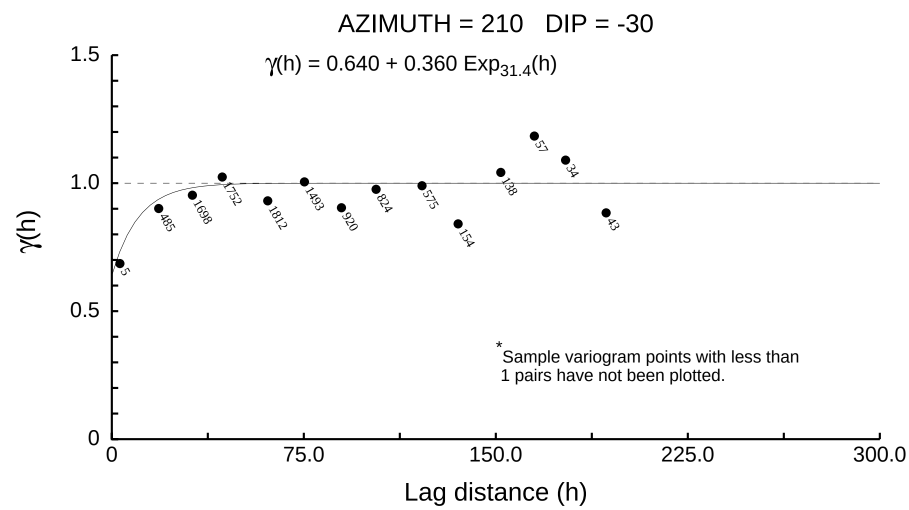
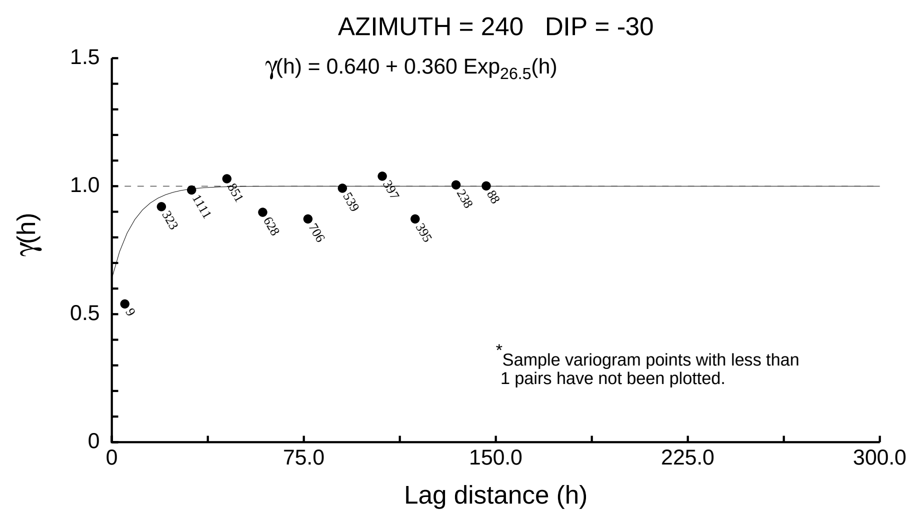
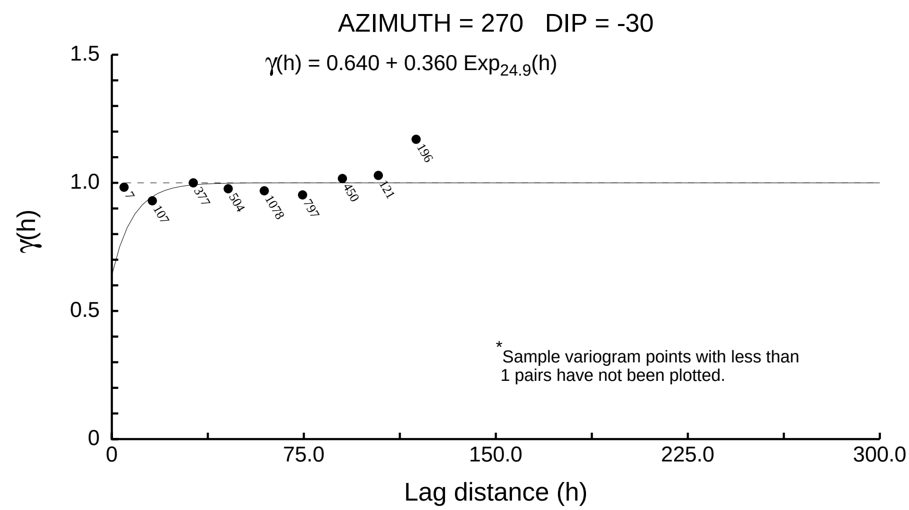
Zone 3 Directional Correlograms - Assays

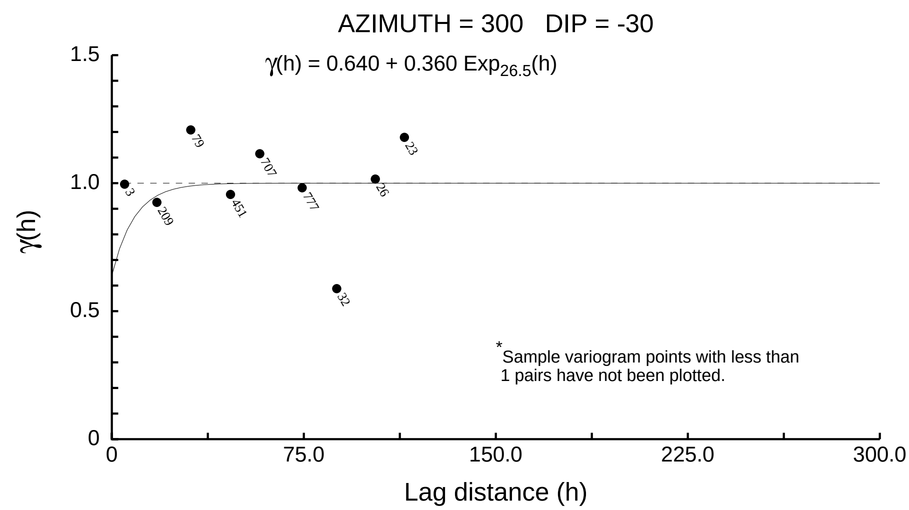


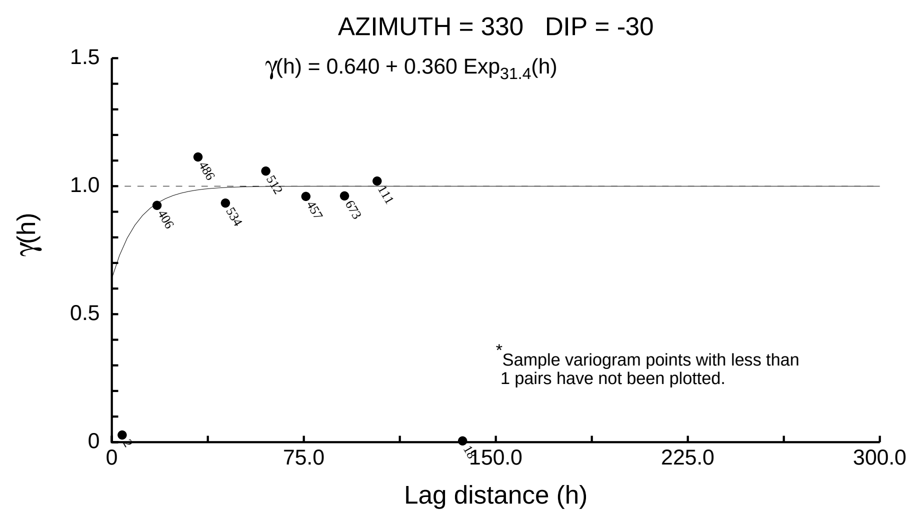




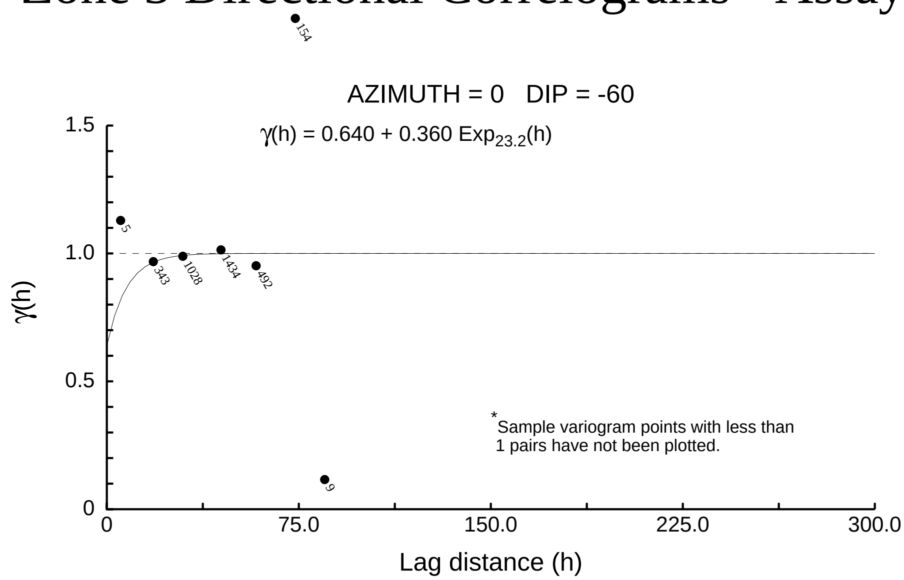
Zone 3 Directional Correlograms - Assays

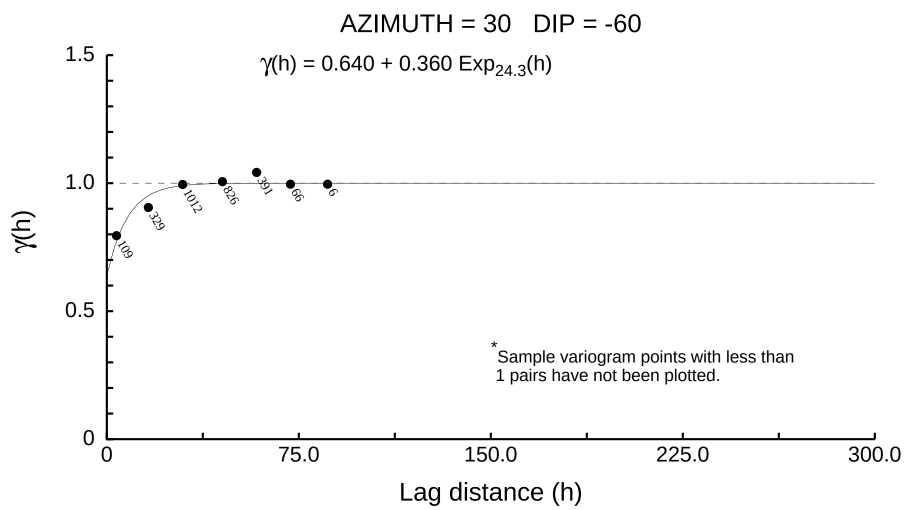


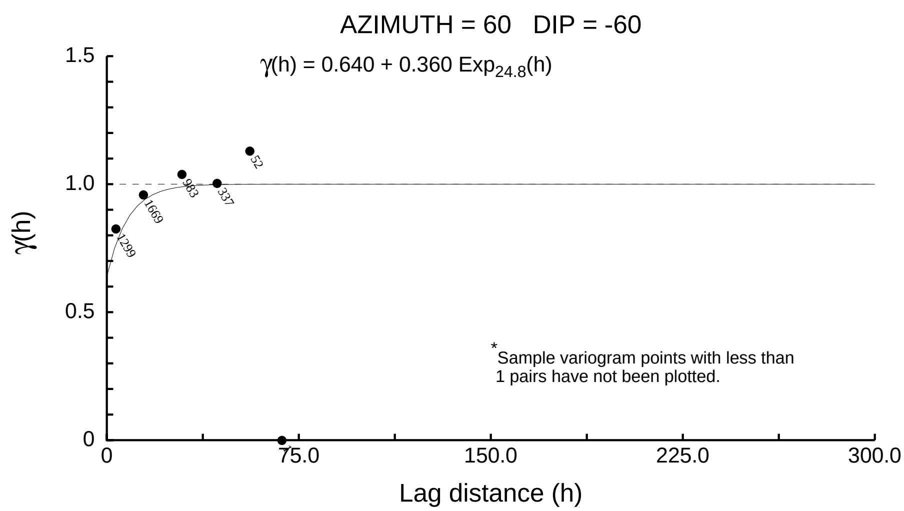




Zone 3 Directional Correlograms - Assays







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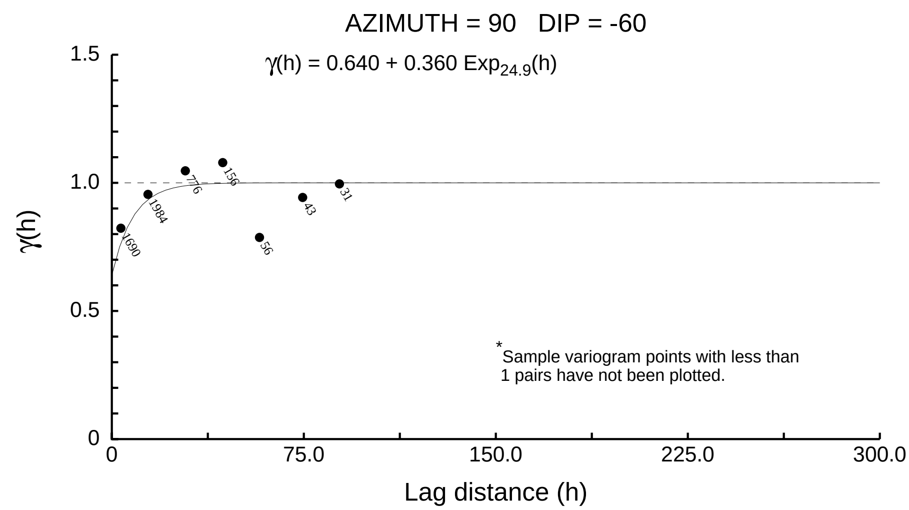
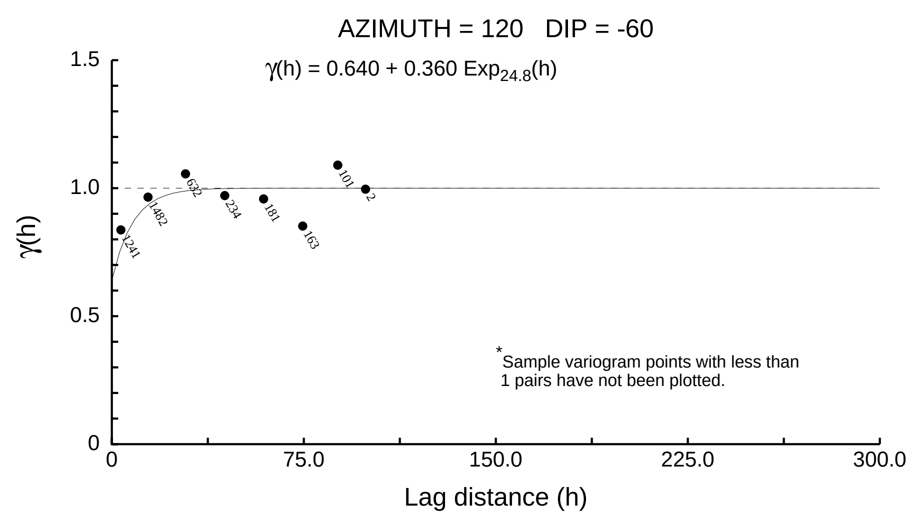
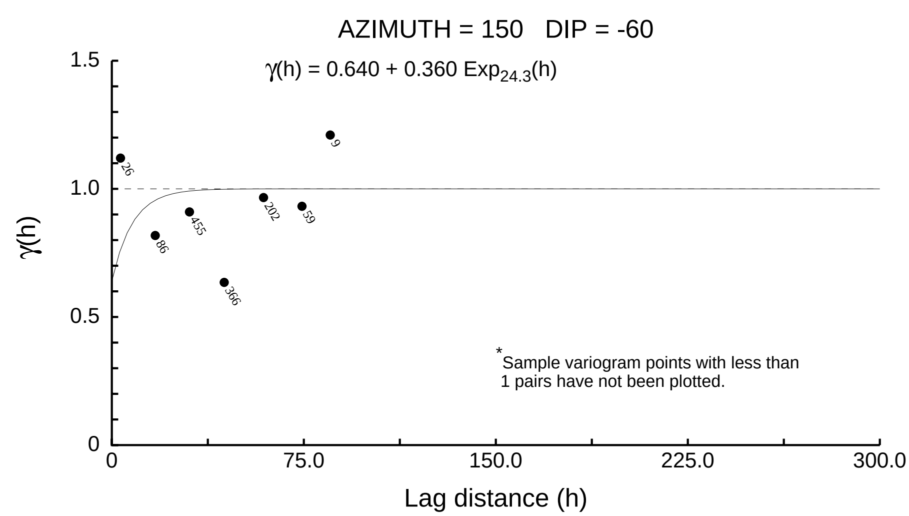
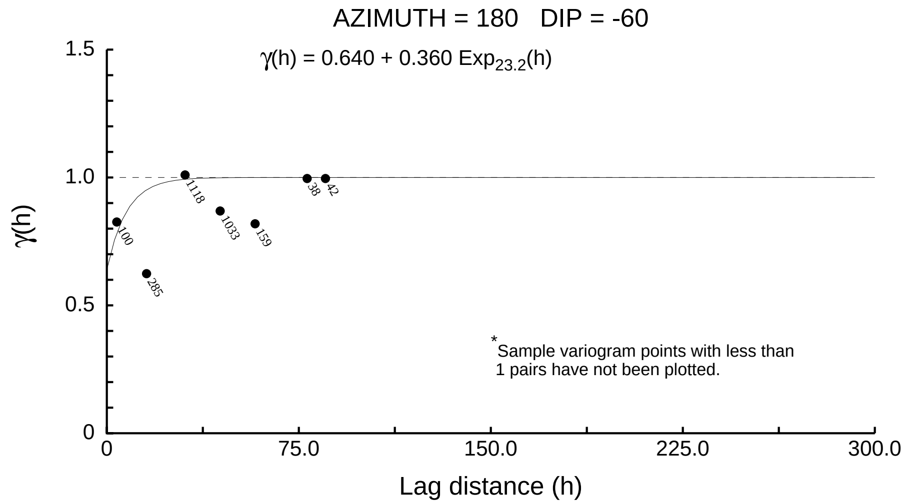
Zone 3 Directional Correlograms - Assays

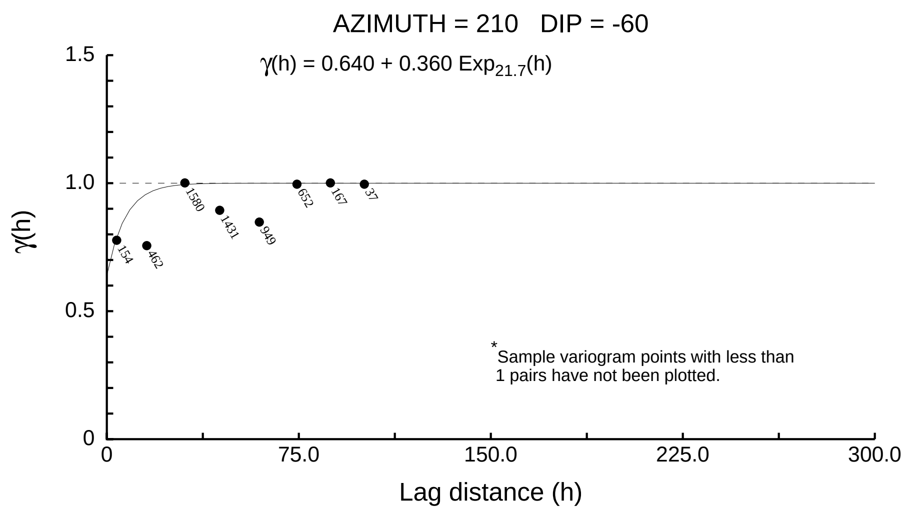


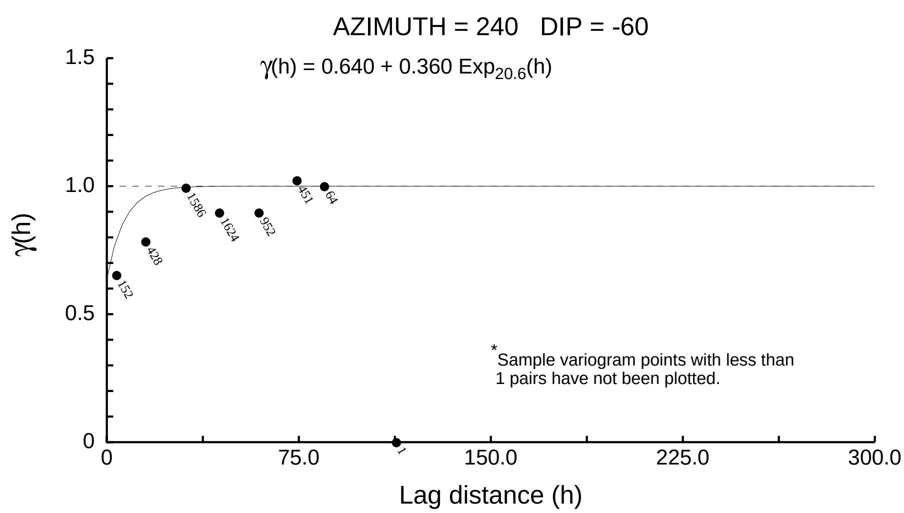




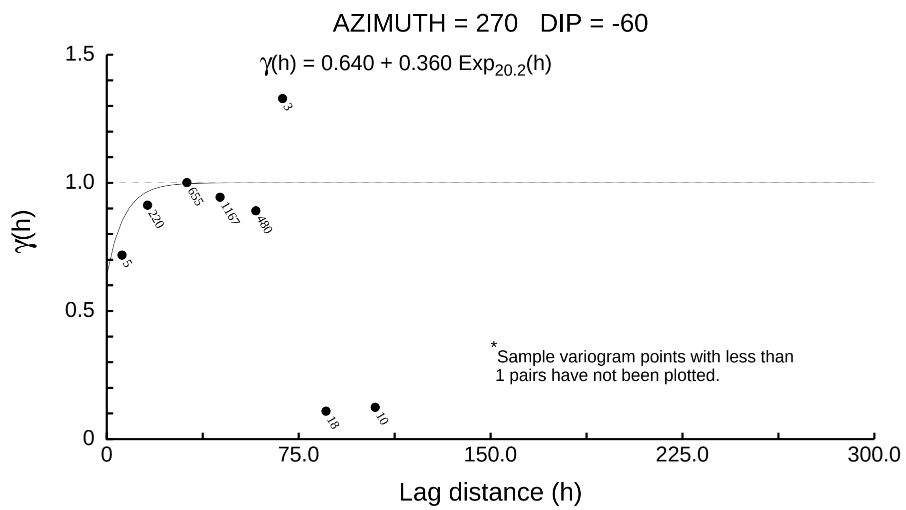
Zone 3 Directional Correlograms - Assays

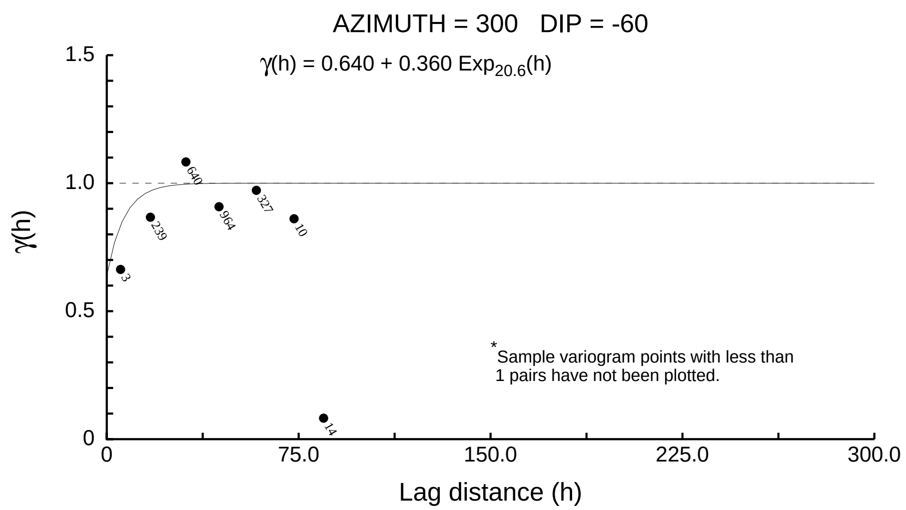


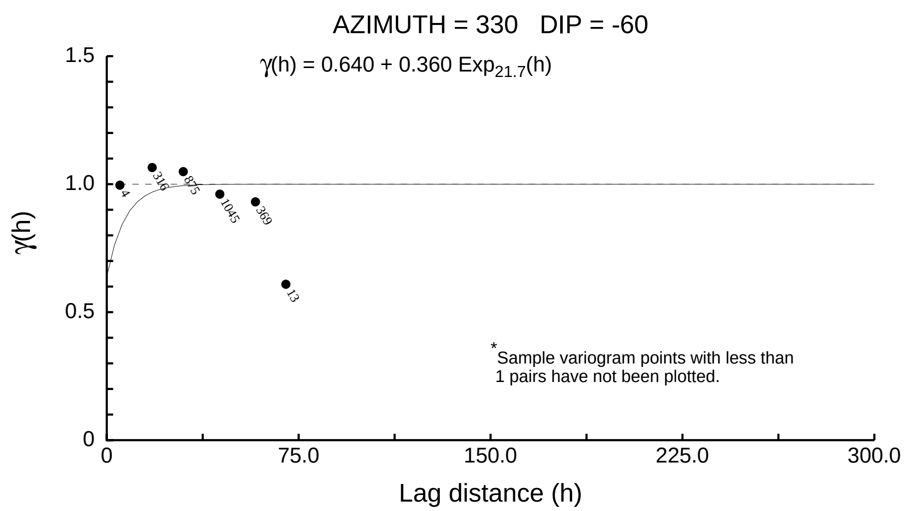




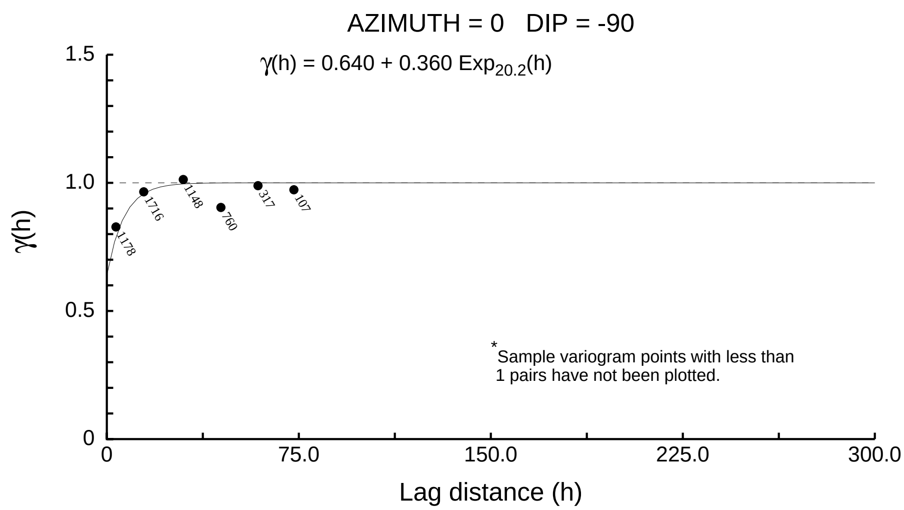
Zone 3 Directional Correlograms - Assays







Zone 3 Directional Correlograms - Assays



Zone 2 Downhole Correlogram - Assays

Medsystem and Vulcan Rotation Conventions

Nugget ==> 0.730
C1 ==> 0.270

First Structure -- Exponential with Practical Range

LH Rotation about the Z axis ==> 0
RH Rotation about the X' axis ==> 0
LH Rotation about the Y' axis ==> 0
Range along the Z' axis ==> 14.0 Azimuth ==> 90 Dip ==> 90
Range along the Y' axis ==> 14.0 Azimuth ==> 360 Dip ==> 0
Range along the X' axis ==> 14.0 Azimuth ==> 90 Dip ==> 0

Modeling Criteria

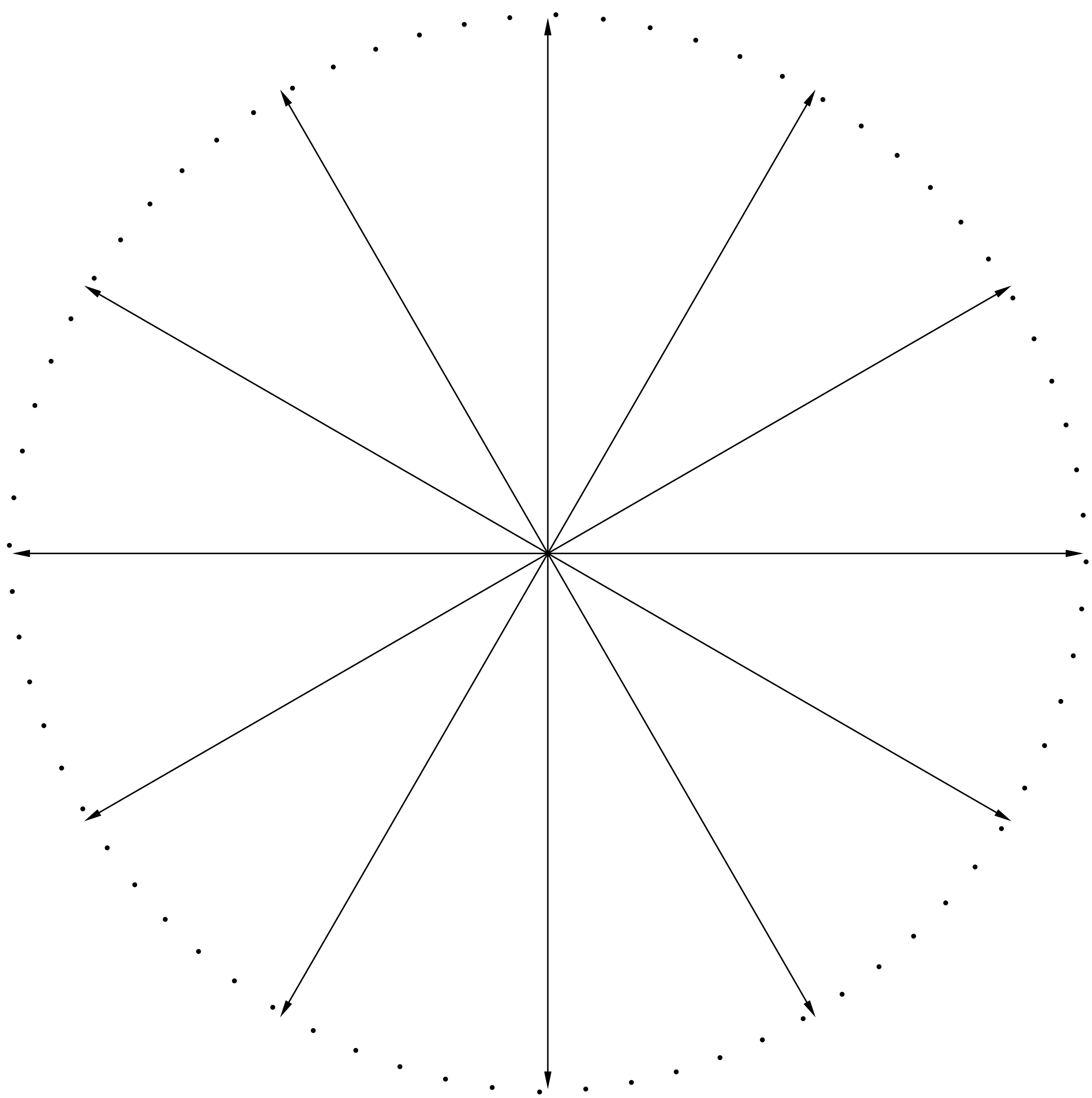
Minimum number pairs req'd ==> 1
Sample variogram points weighted by # pairs

Zone 2 Downhole Correlogram - Assays

Structure Number 1

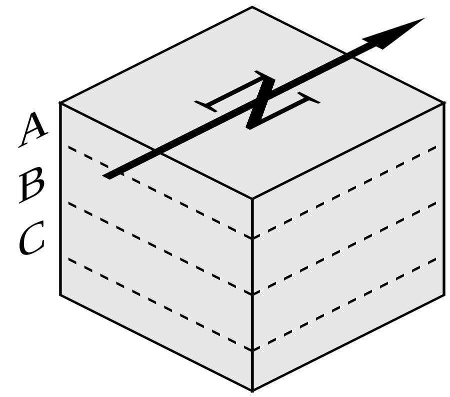
Rose Diagram of Ranges Dipping 0 Degrees
Scale:

10 Units

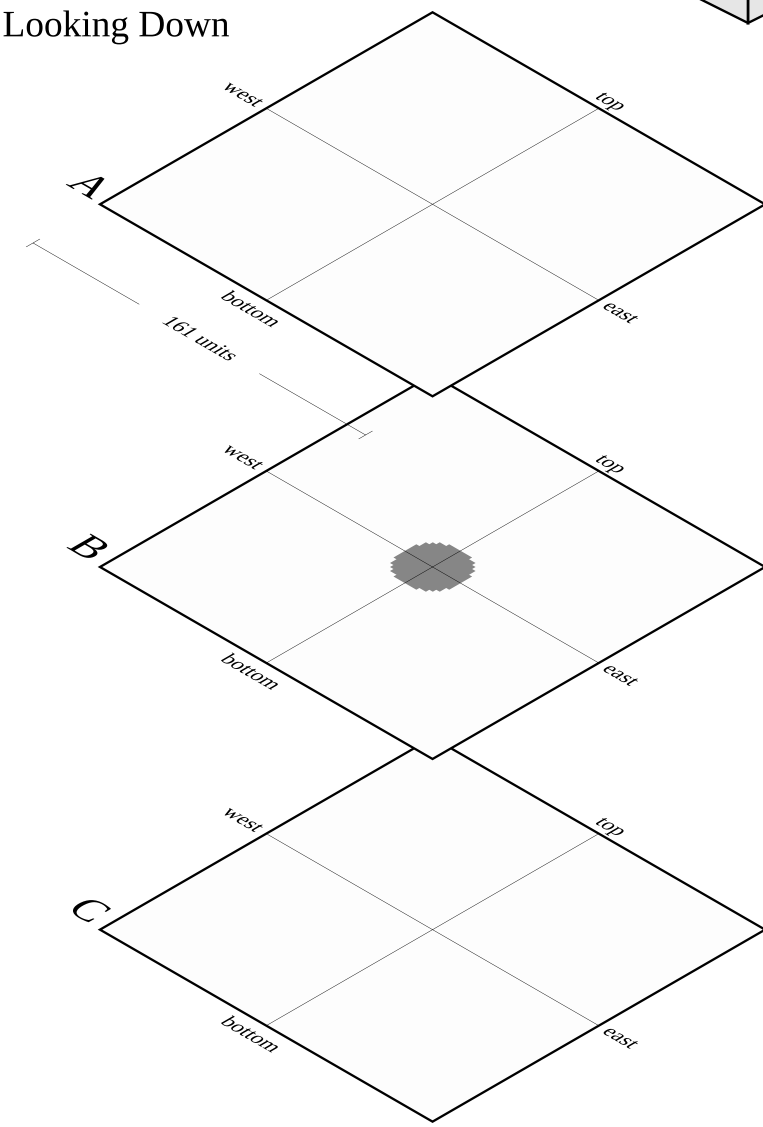


Horizontal Slices Through the Ellipsoids

Reference Cube



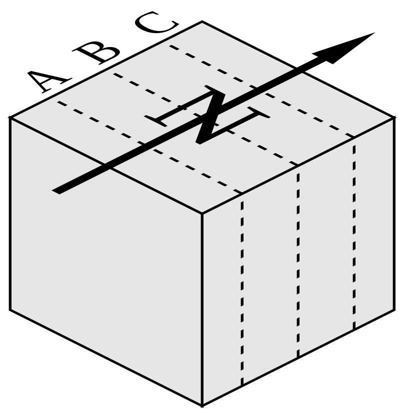
X-Y Planes Looking Down



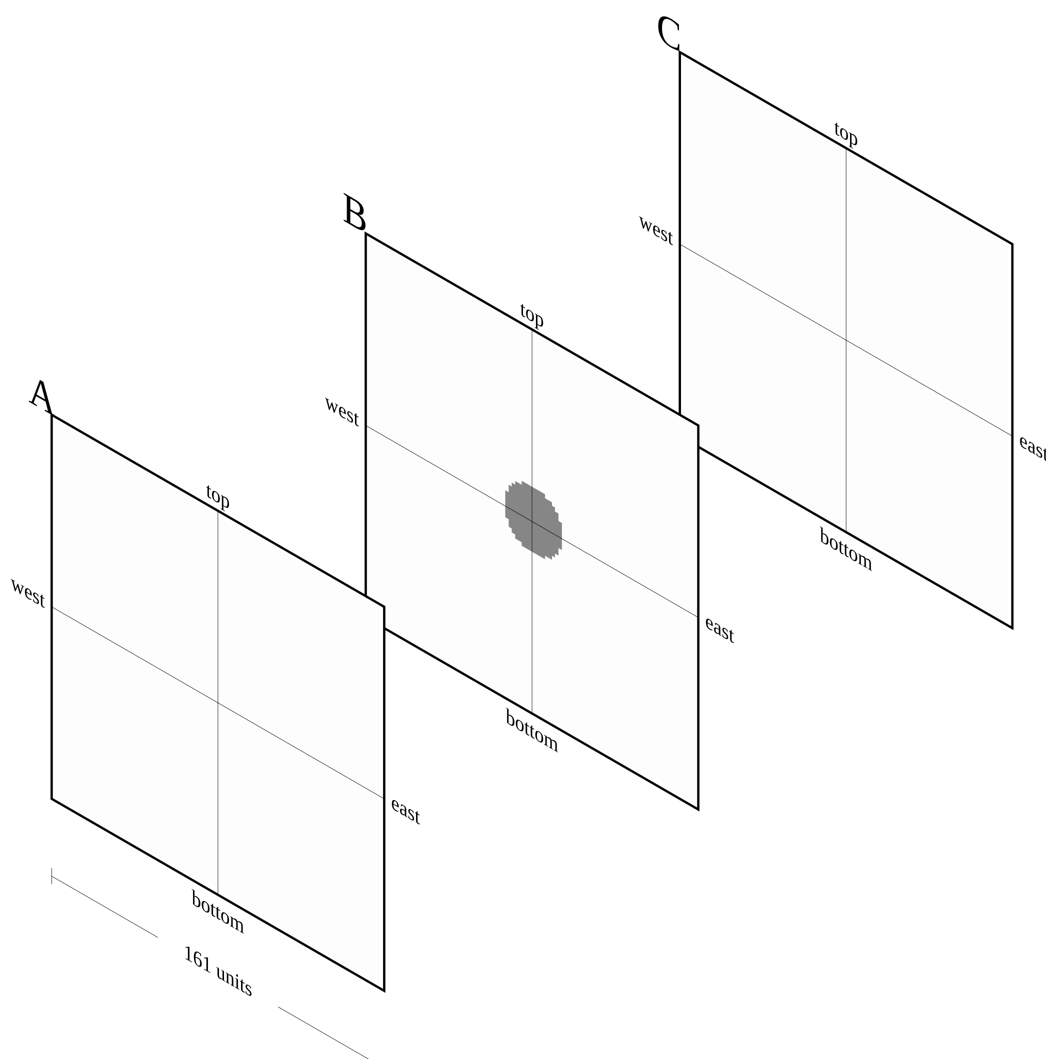
Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Cross Section Views Through the Ellipsoids

Reference Cube



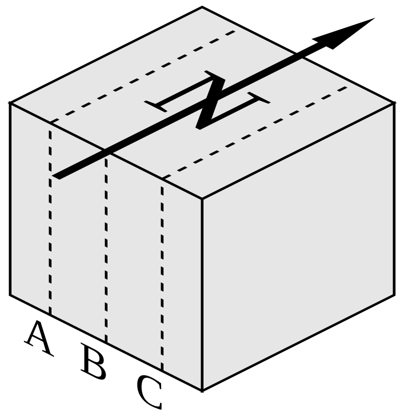
X-Z Planes Looking North



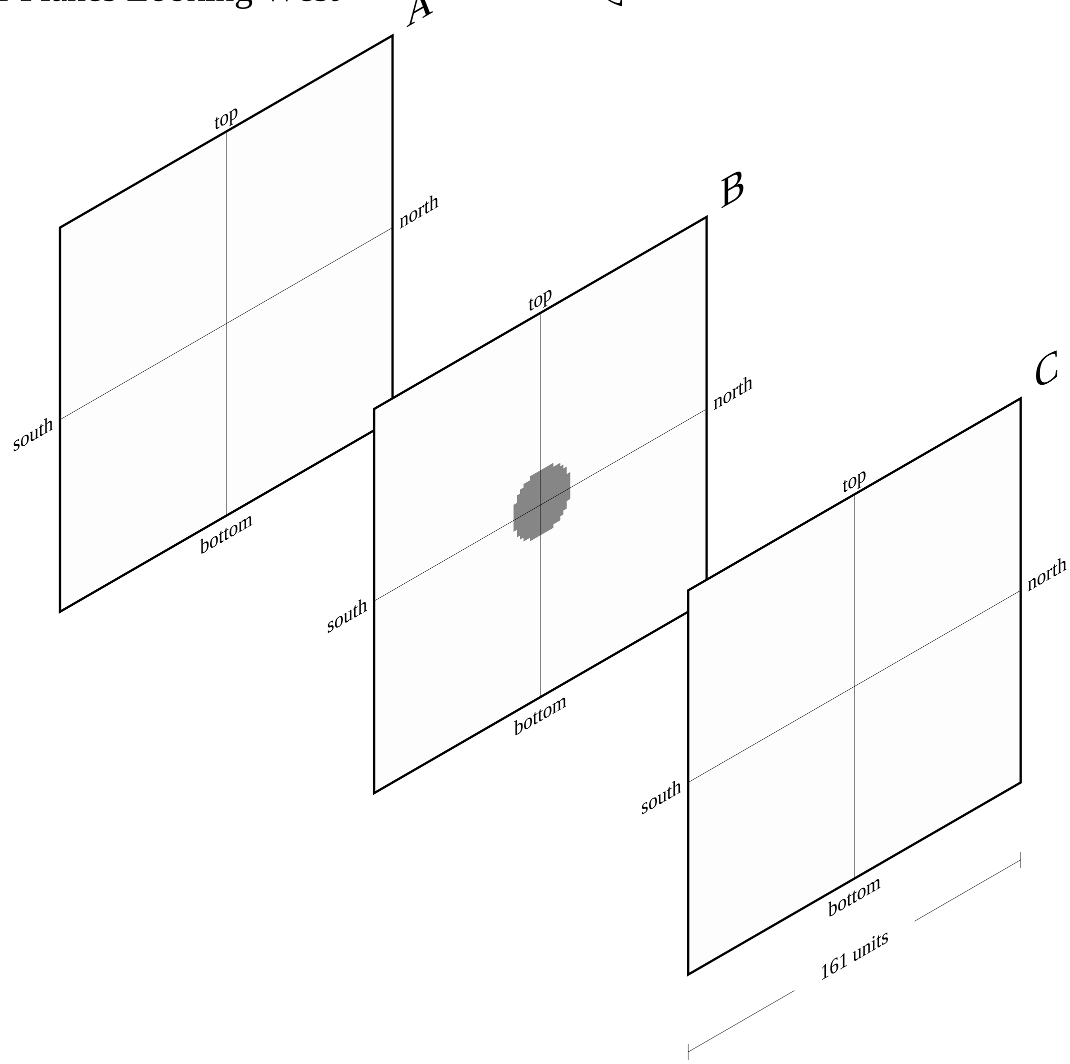
Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Long Section Views Through the Ellipsoids

Reference Cube

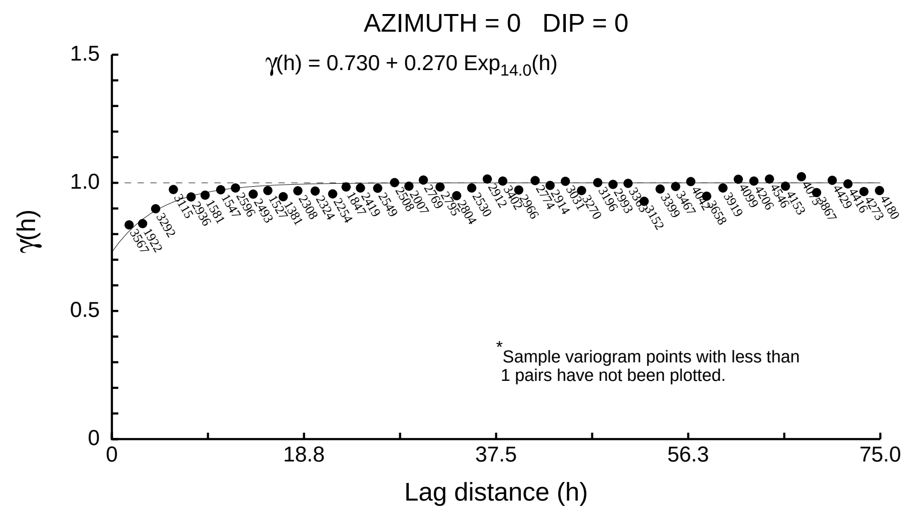


Y-Z Planes Looking West



Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Zone 2 Downhole Correlogram - Assays



Zone 2 Directional Correlograms - Assays

Medsystem and Vulcan Rotation Conventions

Nugget ==> 0.730
C1 ==> 0.270

First Structure -- Exponential with Practical Range

LH Rotation about the Z axis ==> 0
RH Rotation about the X' axis ==> 0
LH Rotation about the Y' axis ==> 75

Range along the Z' axis ==> 13.4	Azimuth ==> 270	Dip ==> 15
Range along the Y' axis ==> 31.0	Azimuth ==> 360	Dip ==> 0
Range along the X' axis ==> 24.0	Azimuth ==> 90	Dip ==> 75

Modeling Criteria

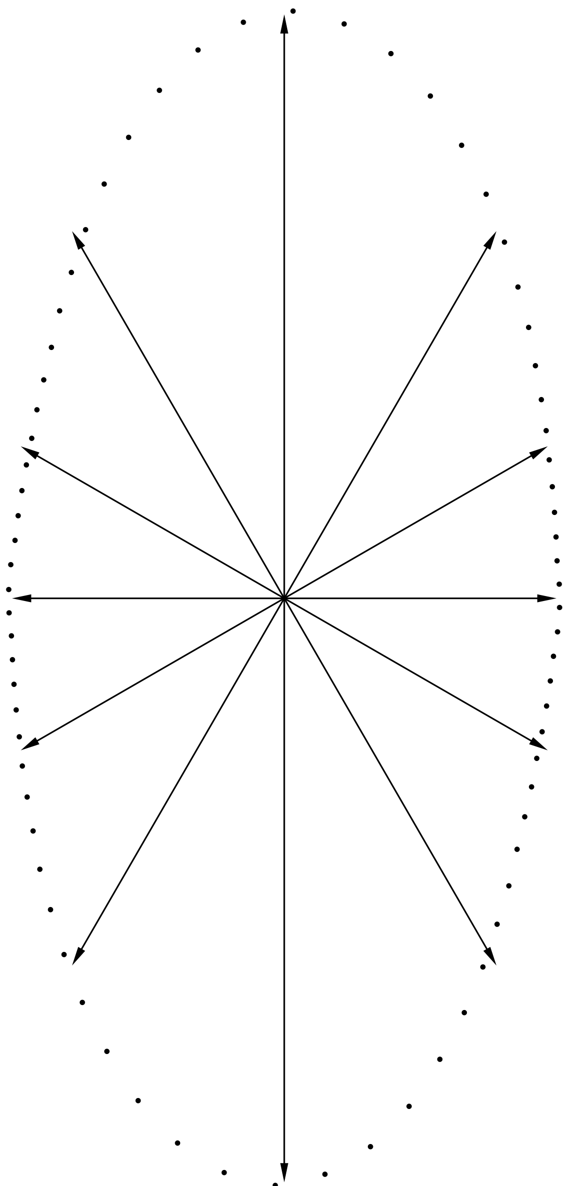
Minimum number pairs req'd ==> 1
Sample variogram points weighted by # pairs

Zone 2 Directional Correlograms - Assays

Structure Number 1

Rose Diagram of Ranges Dipping 0 Degrees
Scale:

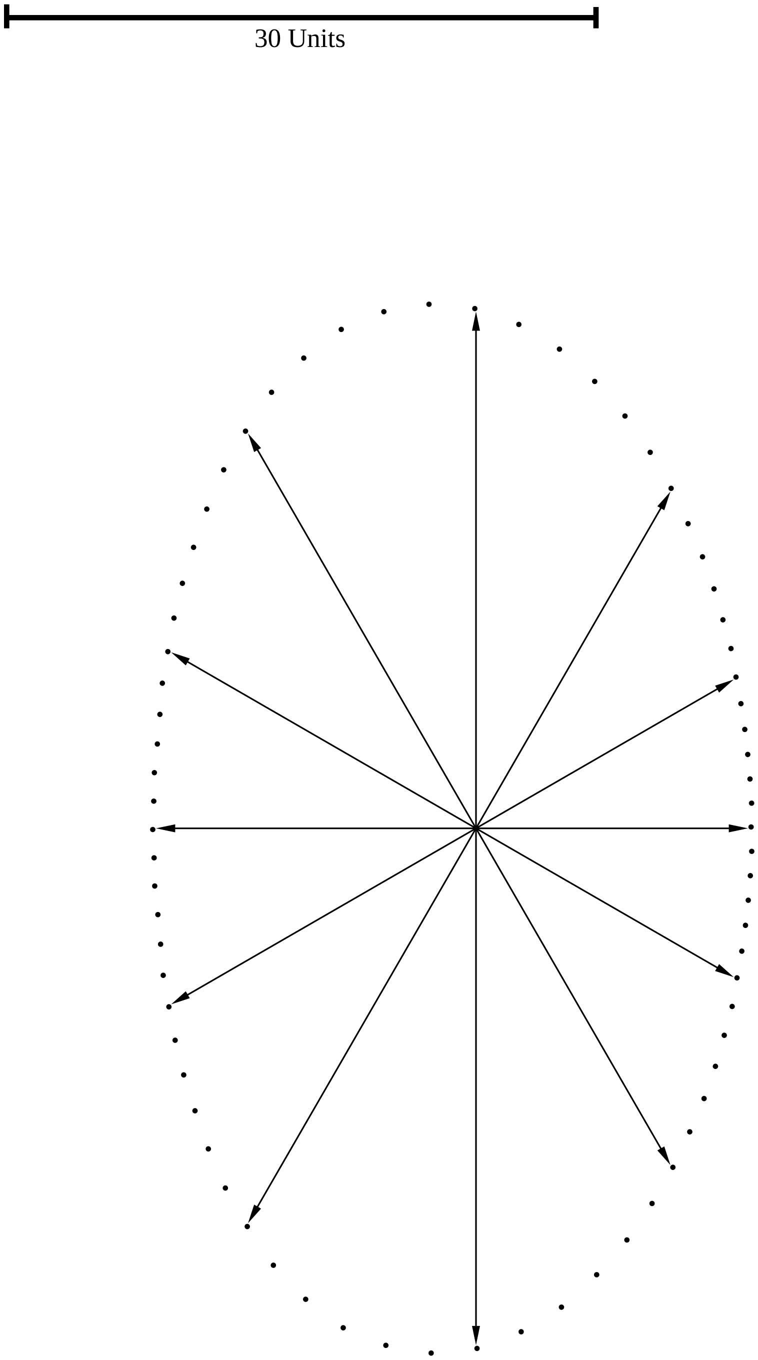
30 Units



Zone 2 Directional Correlograms - Assays

Structure Number 1

Rose Diagram of Ranges Dipping 30 Degrees
Scale:



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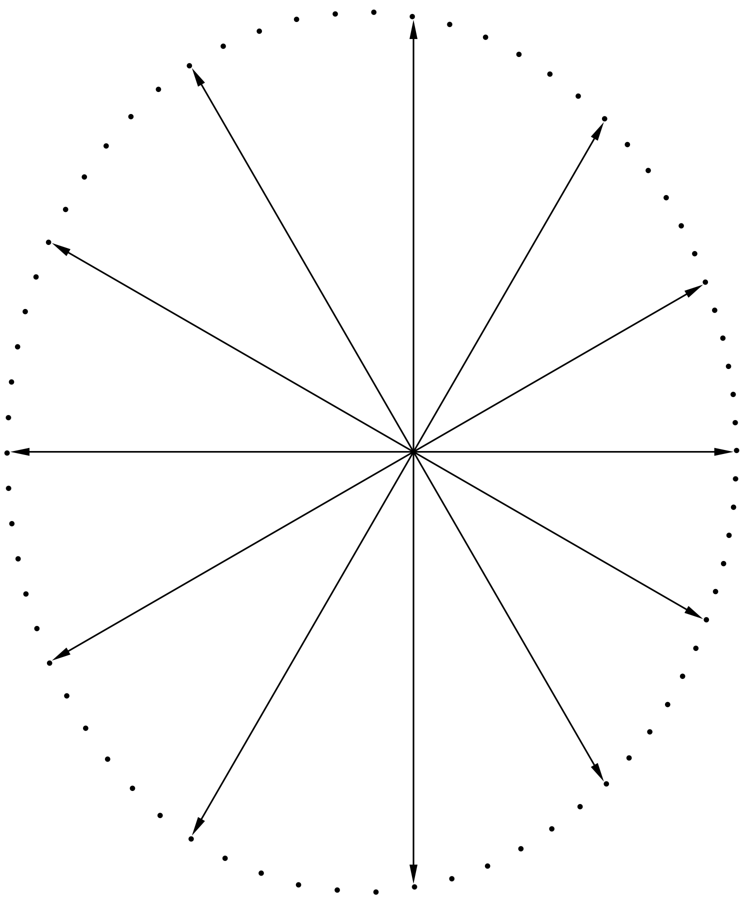
Zone 2 Directional Correlograms - Assays

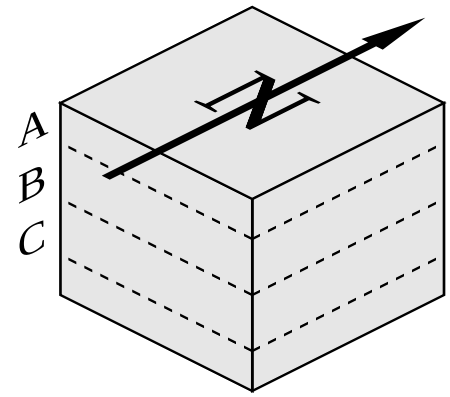
Structure Number 1

Rose Diagram of Ranges Dipping 60 Degrees
Scale:

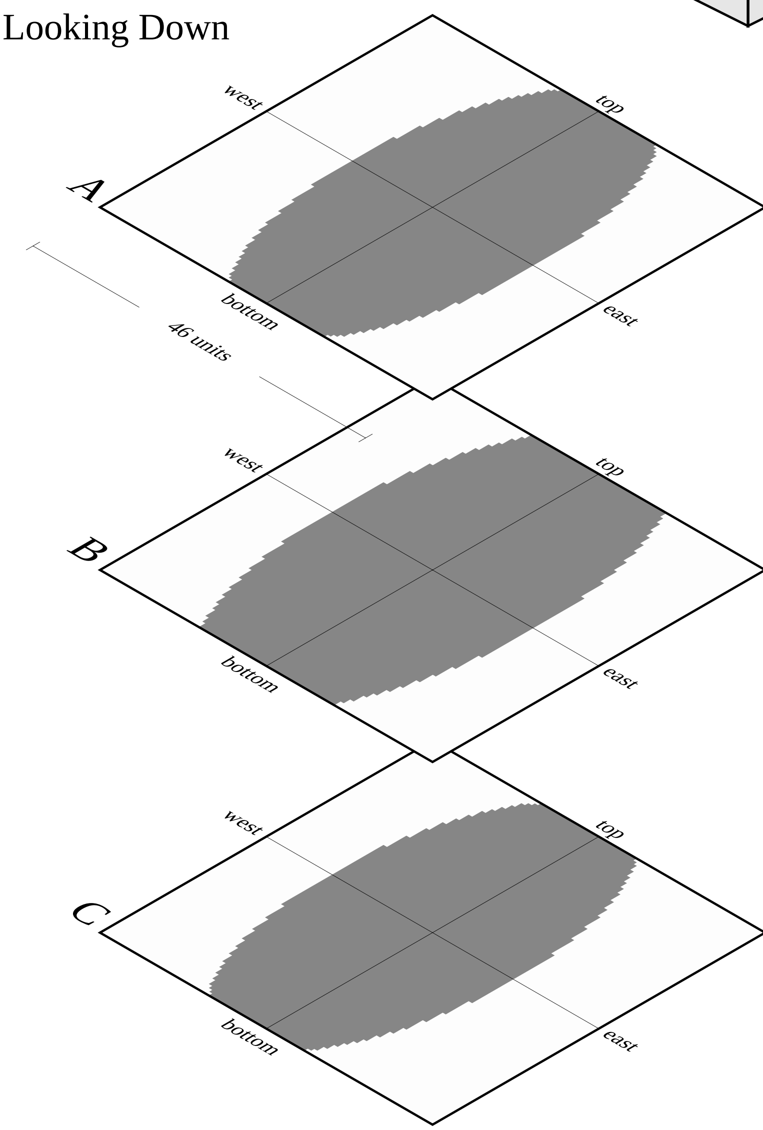


Horizontal Slices Through the Ellipsoids

Reference Cube



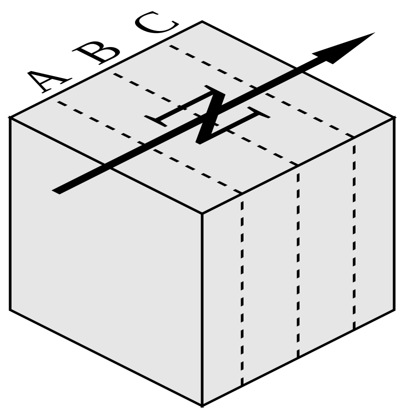
X-Y Planes Looking Down



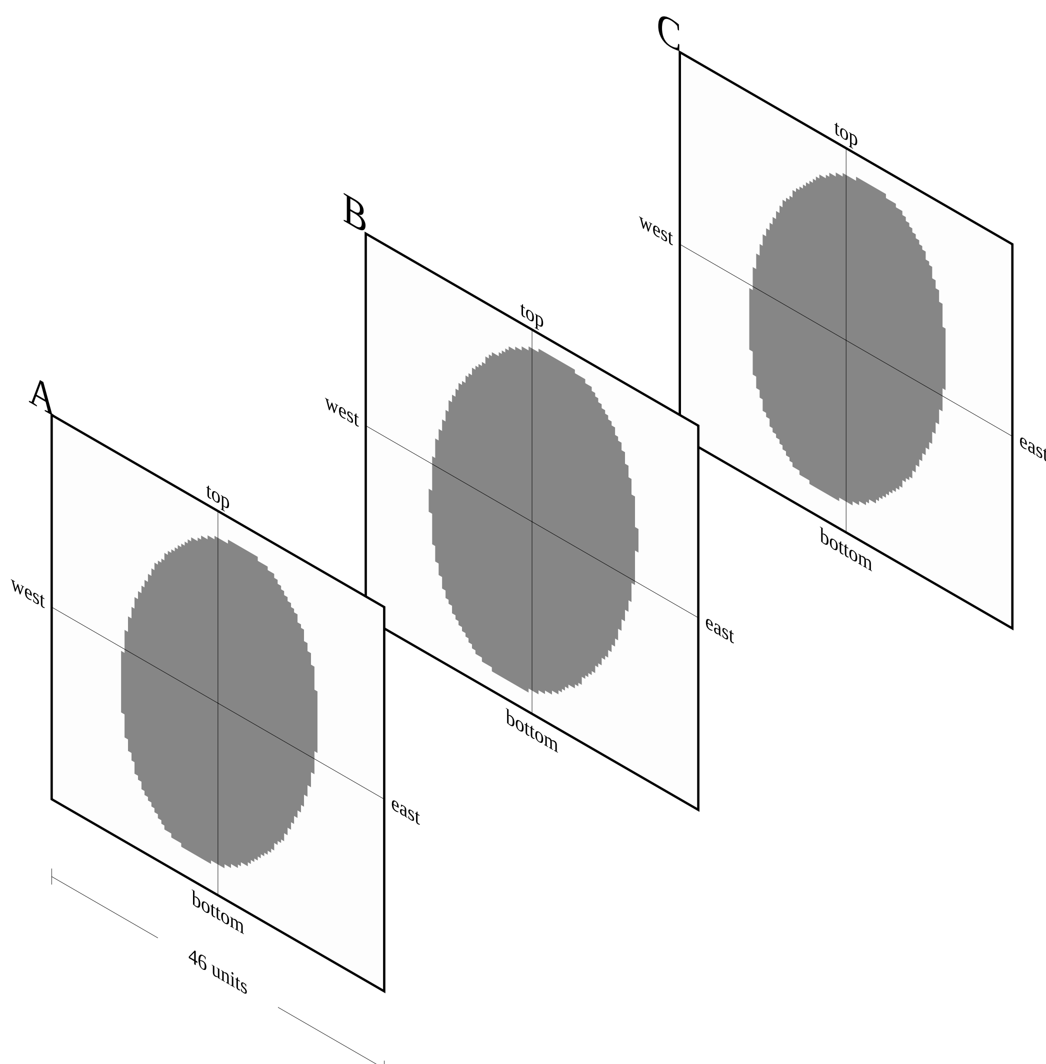
Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Cross Section Views Through the Ellipsoids

Reference Cube



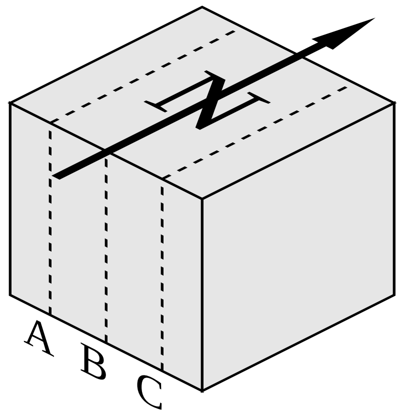
X-Z Planes Looking North



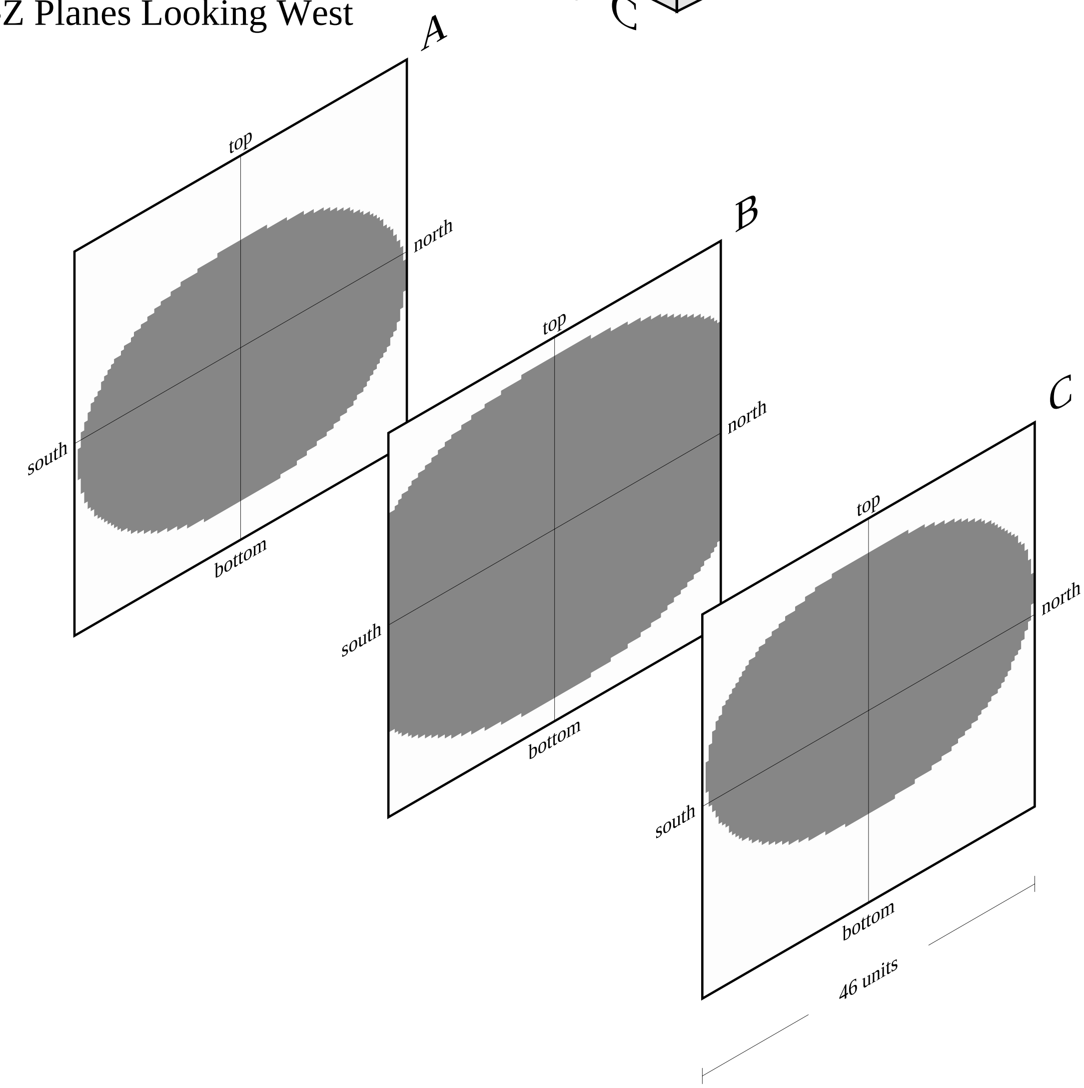
Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Long Section Views Through the Ellipsoids

Reference Cube

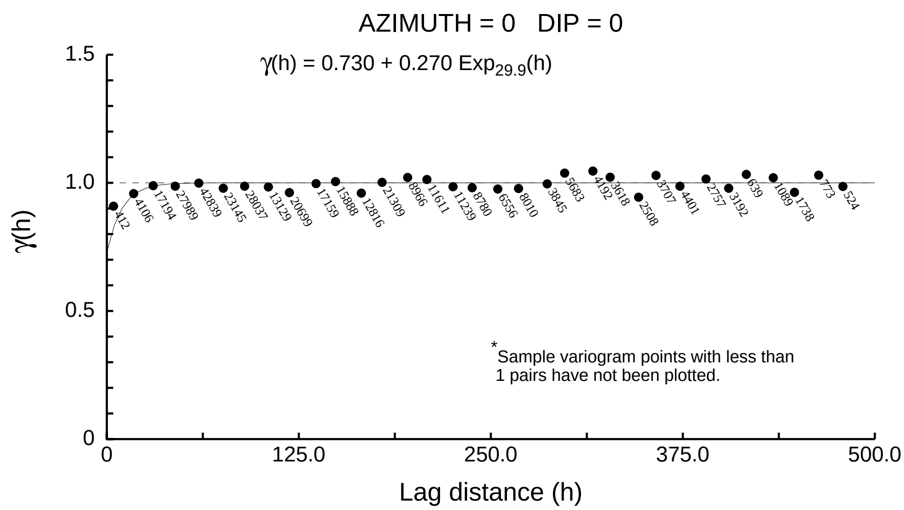


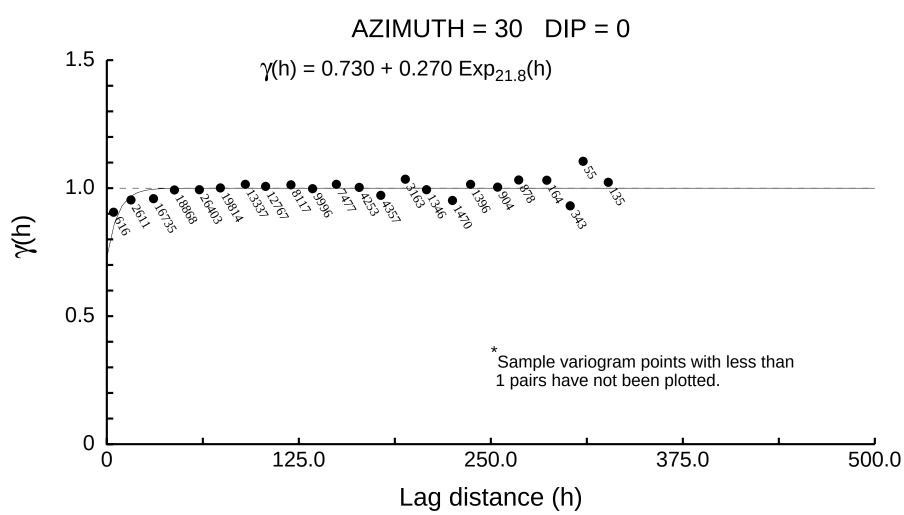
Y-Z Planes Looking West

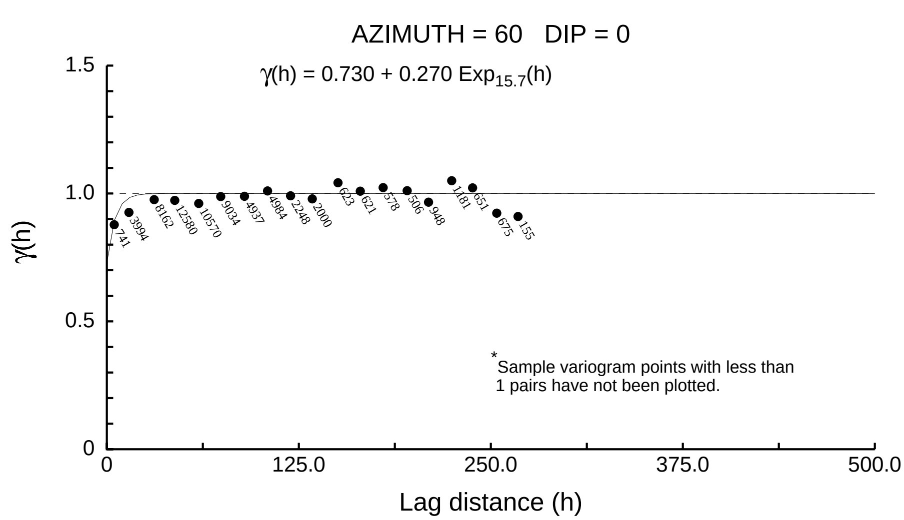


Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

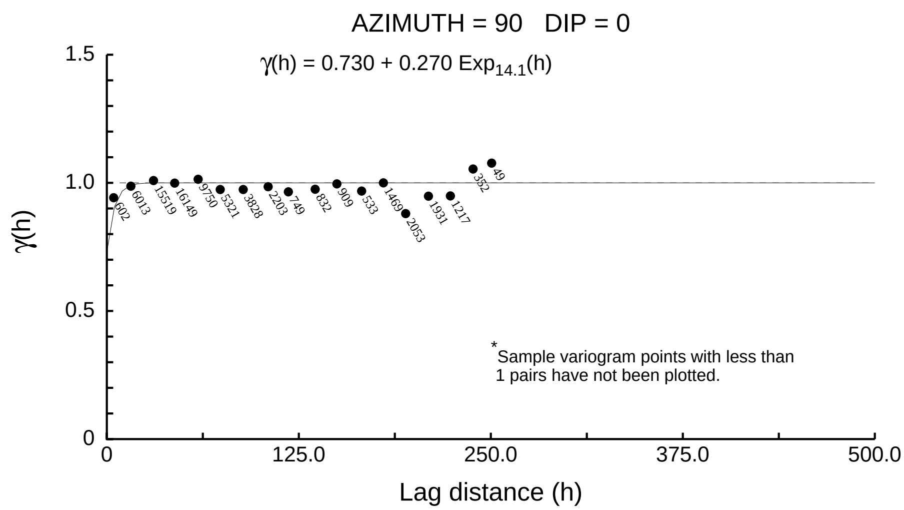
Zone 2 Directional Correlograms - Assays

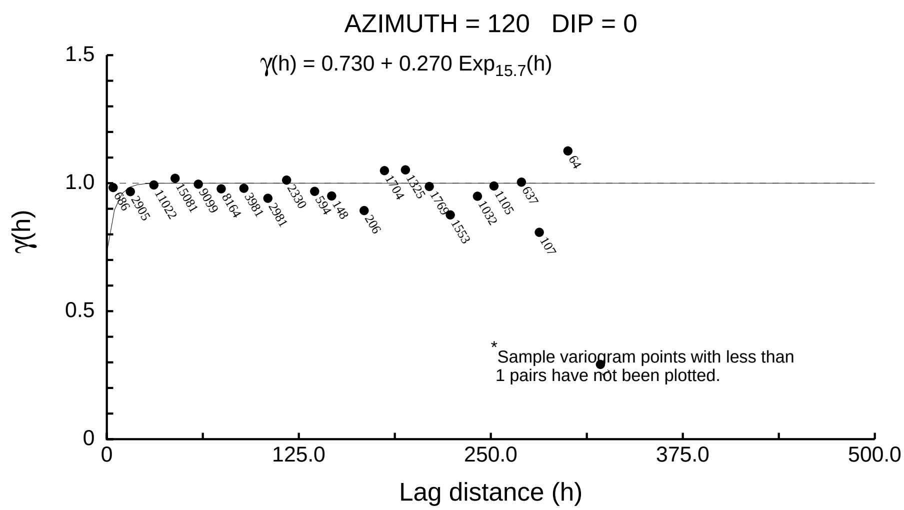


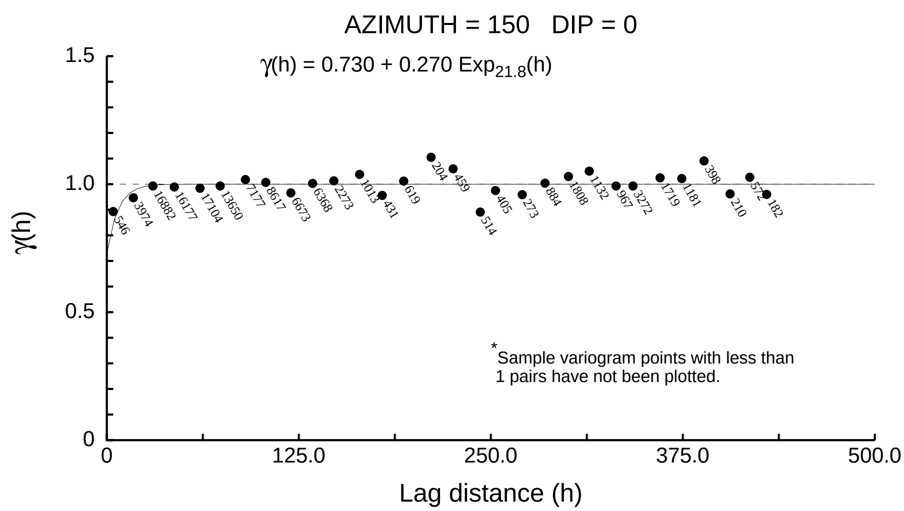




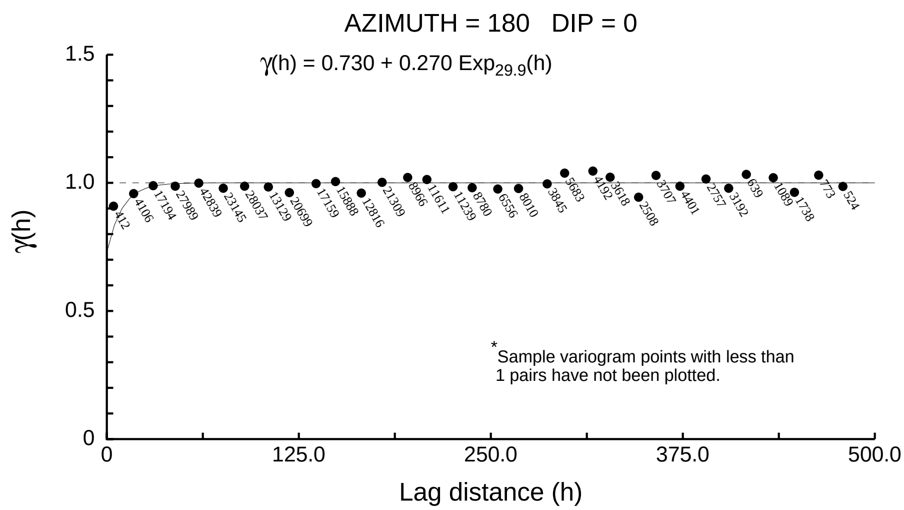
Zone 2 Directional Correlograms - Assays

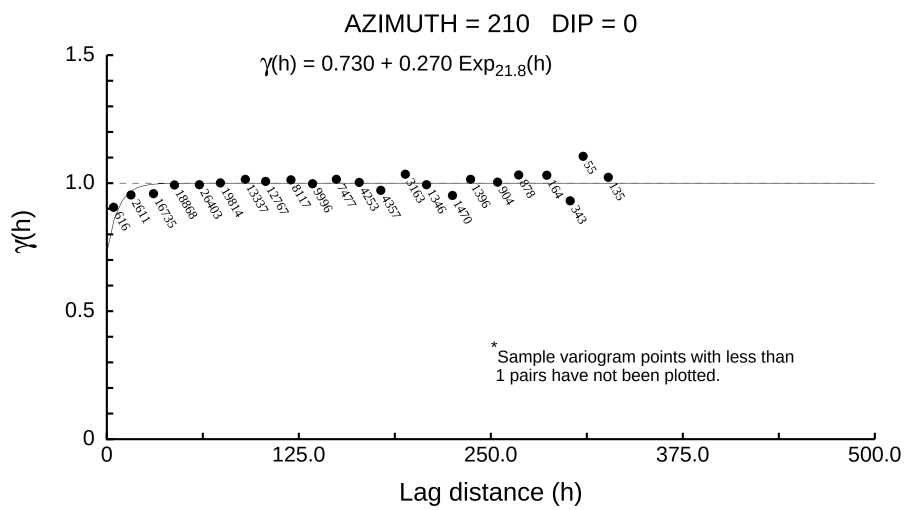


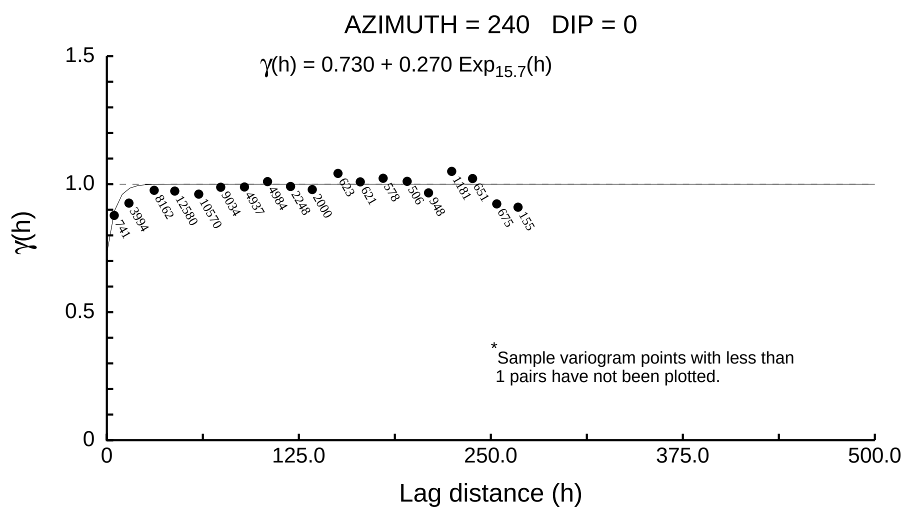




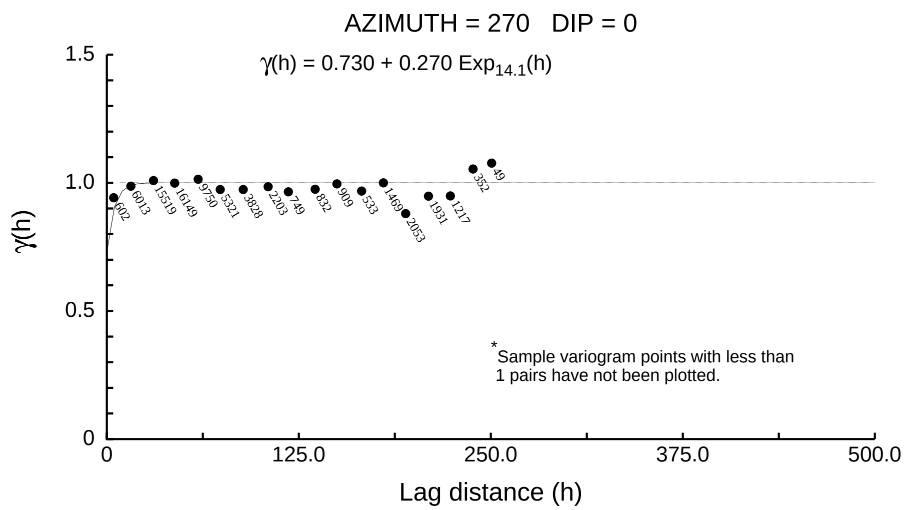
Zone 2 Directional Correlograms - Assays

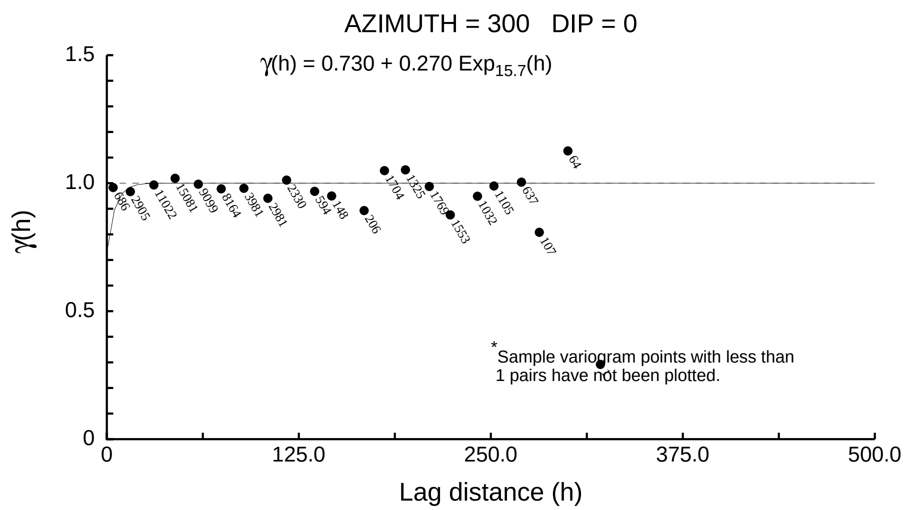


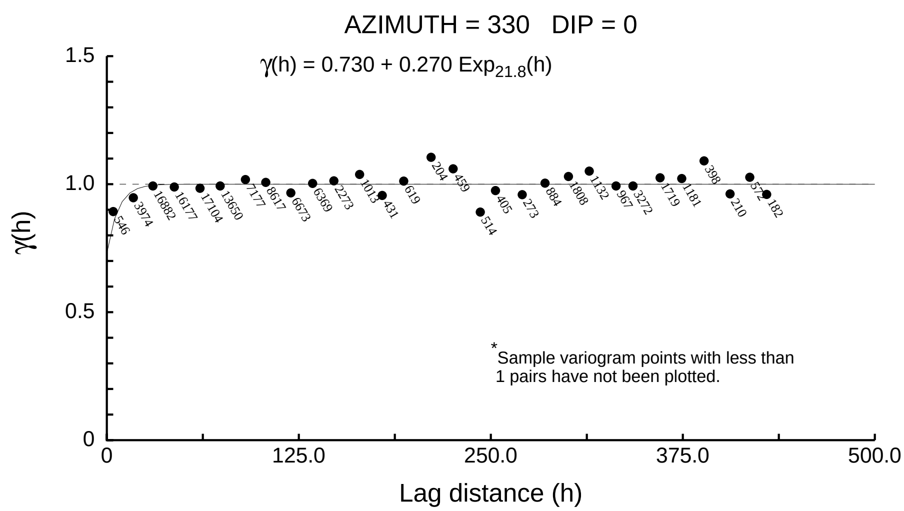




Zone 2 Directional Correlograms - Assays







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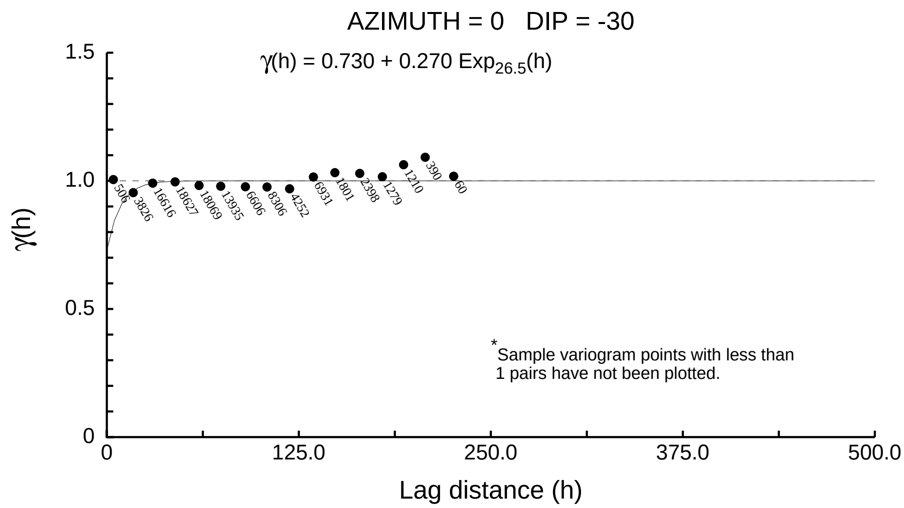
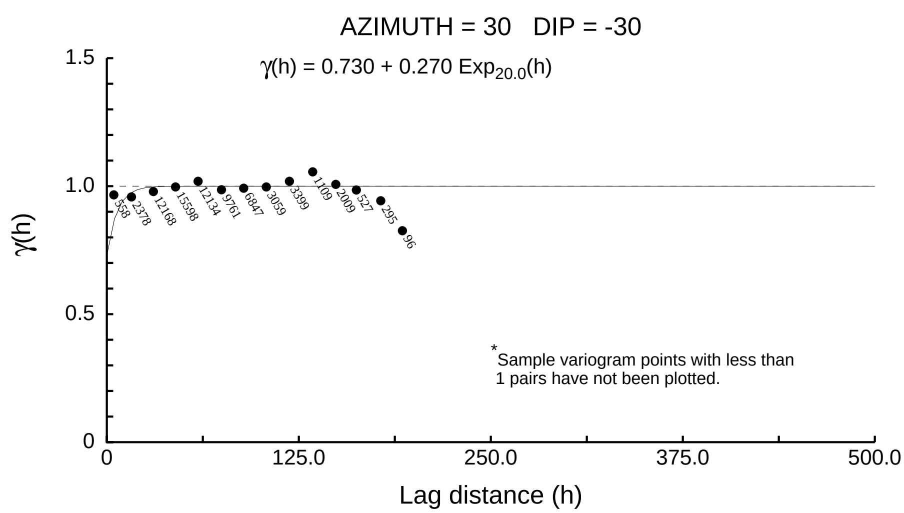
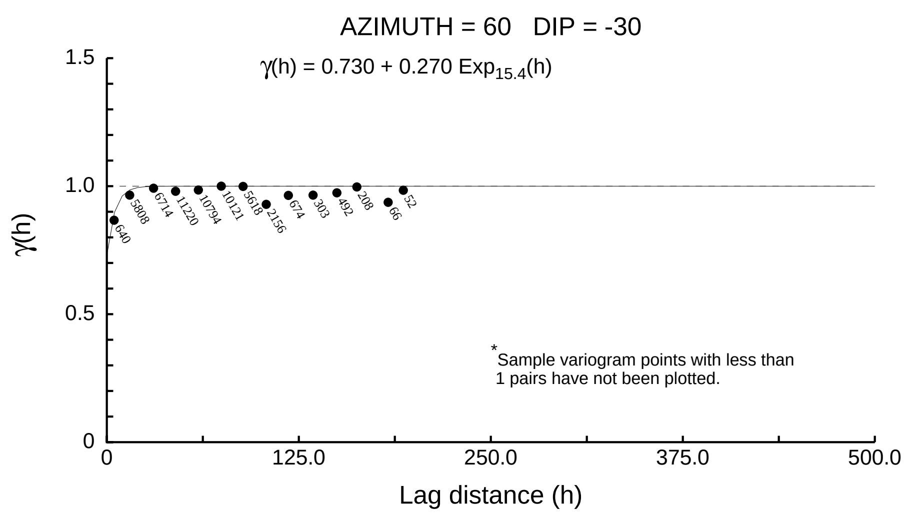
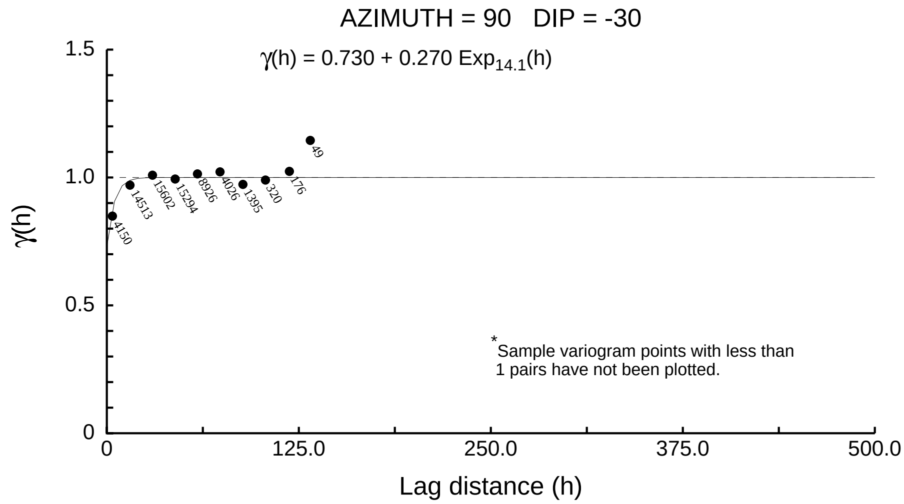
Zone 2 Directional Correlograms - Assays

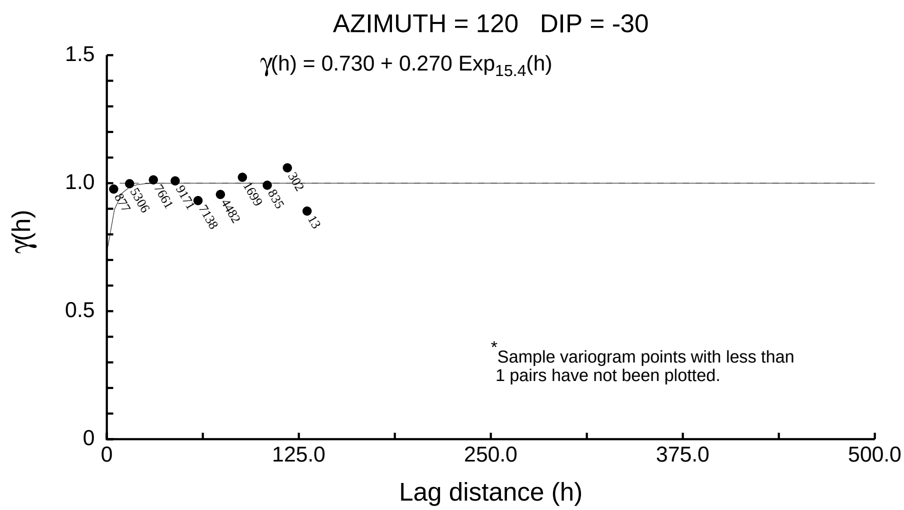


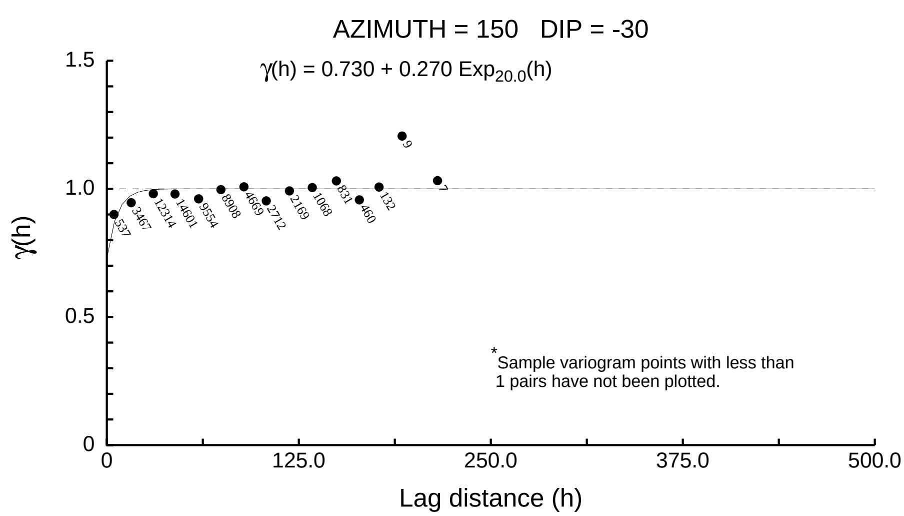




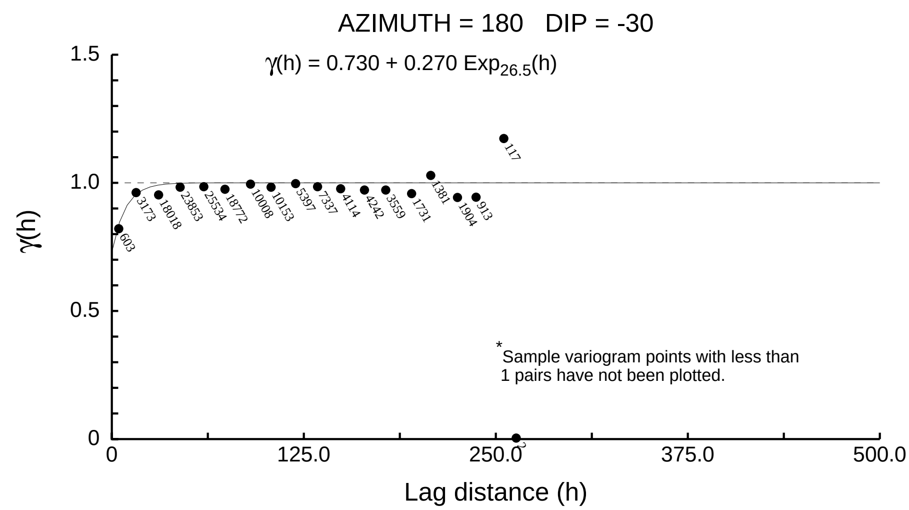
Zone 2 Directional Correlograms - Assays

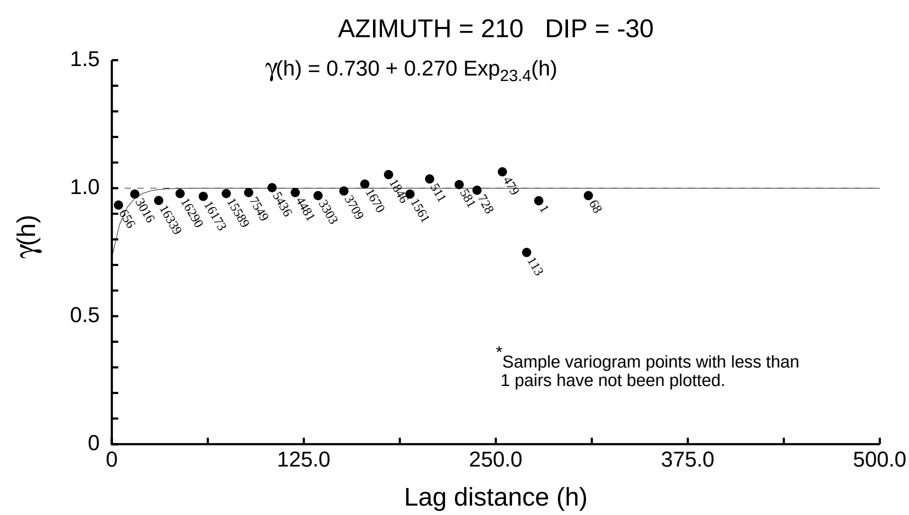


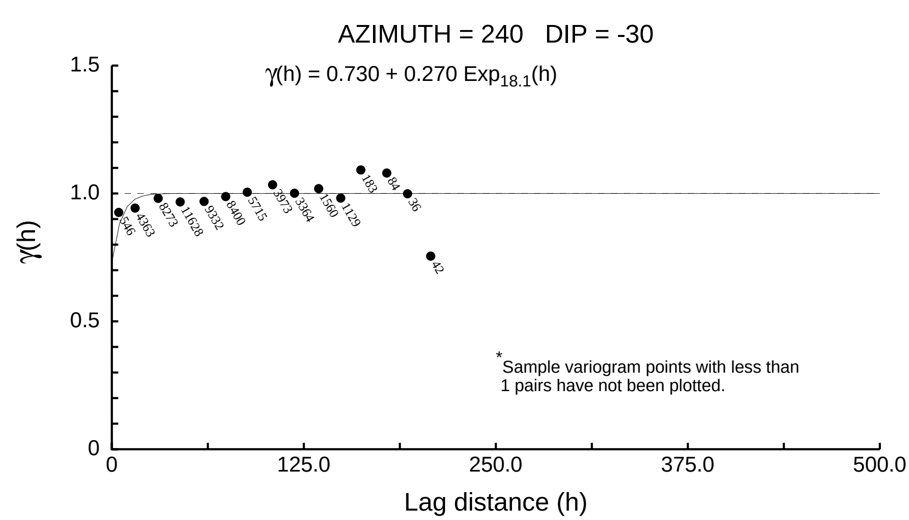




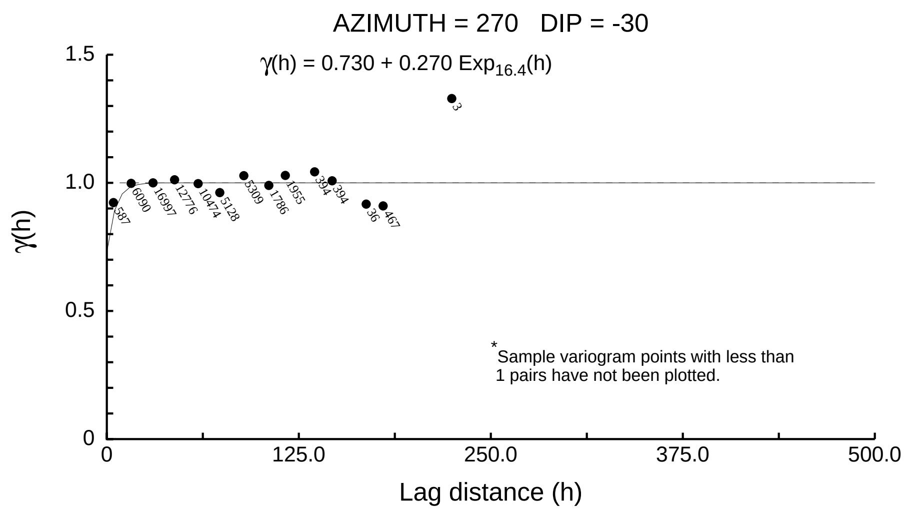
Zone 2 Directional Correlograms - Assays

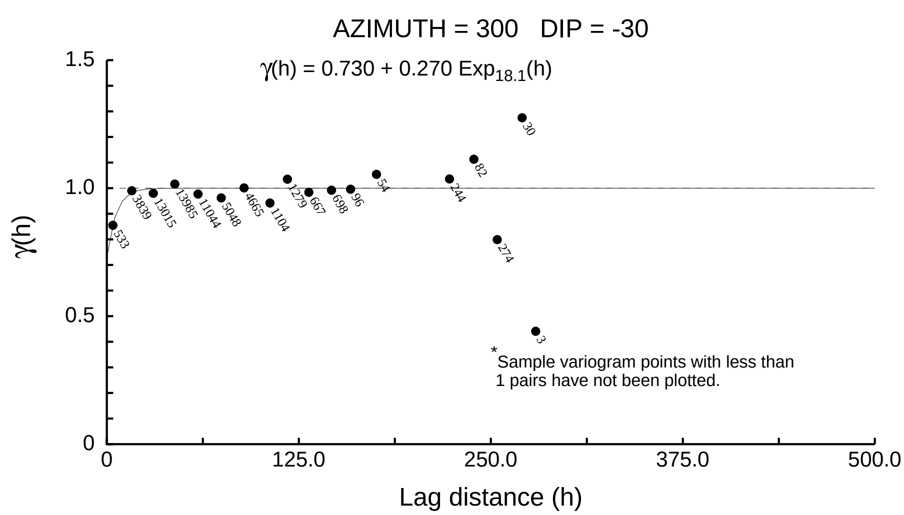


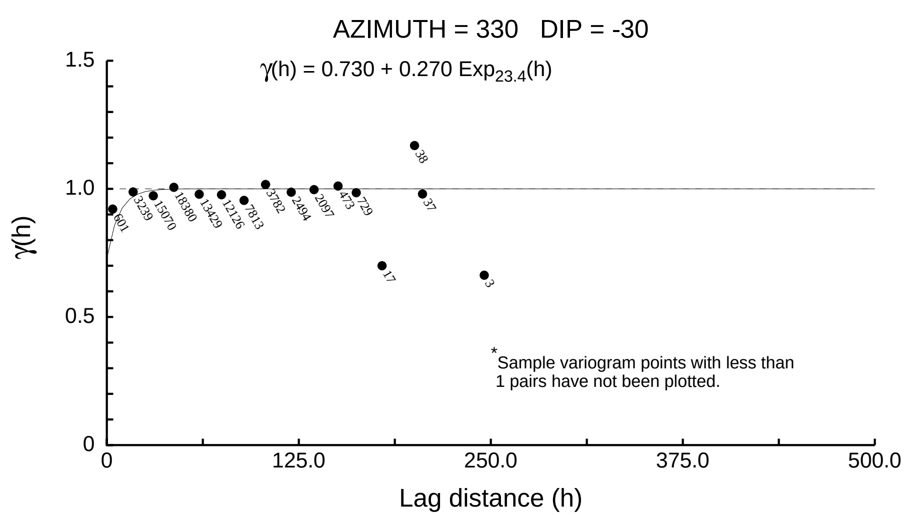




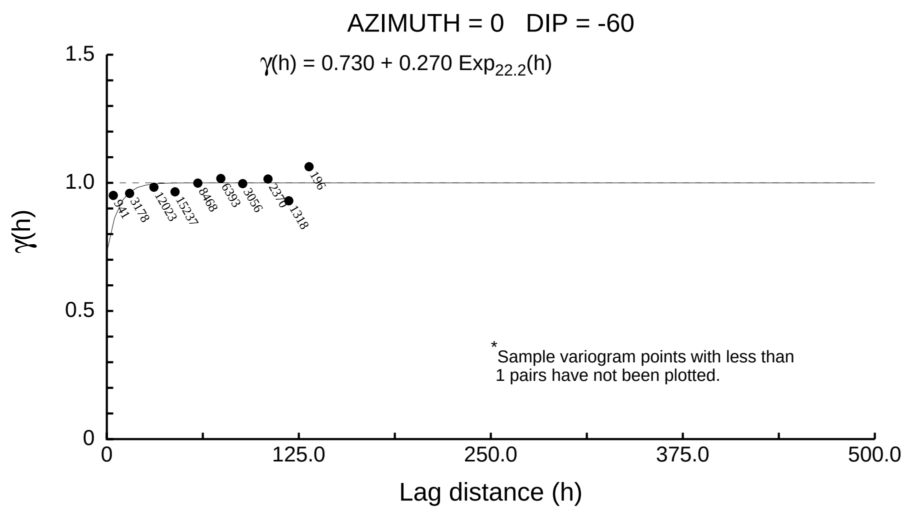
Zone 2 Directional Correlograms - Assays

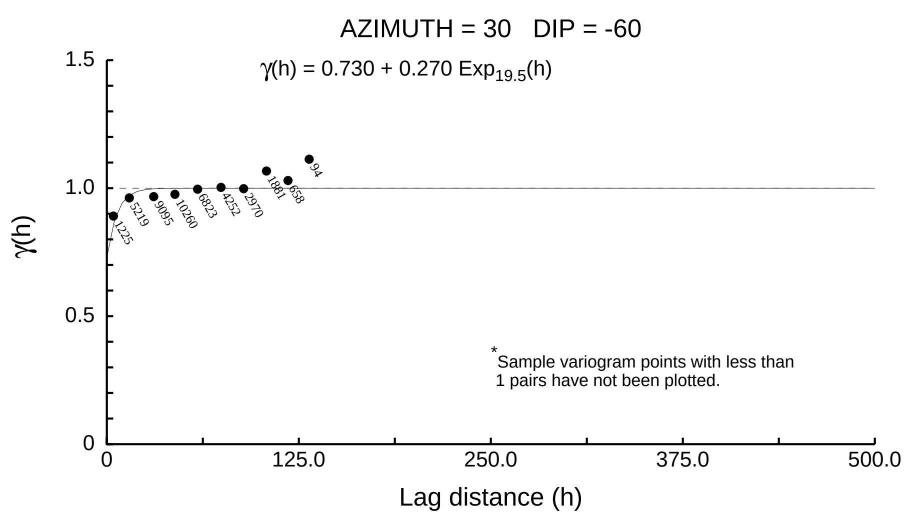


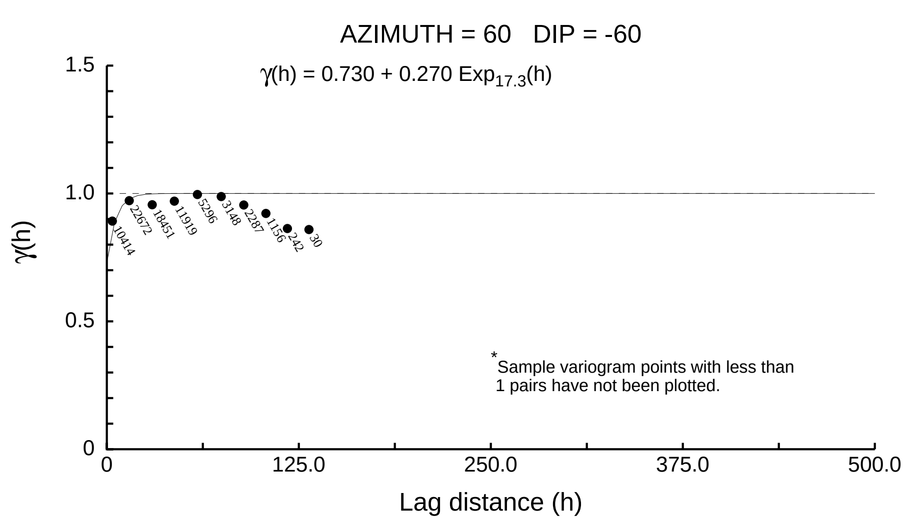




Zone 2 Directional Correlograms - Assays







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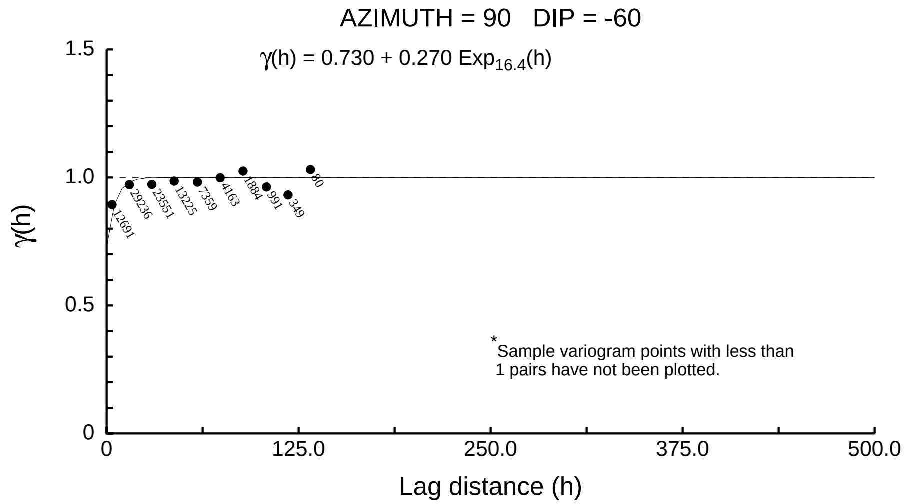
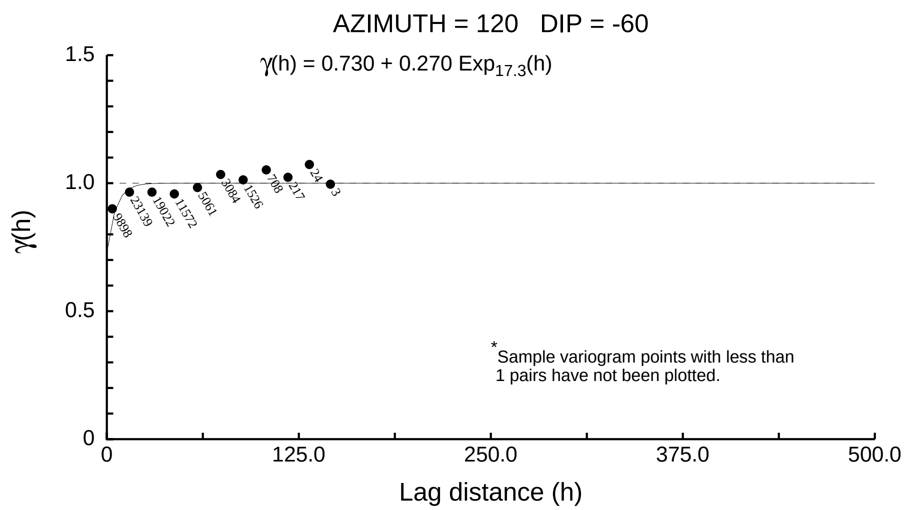
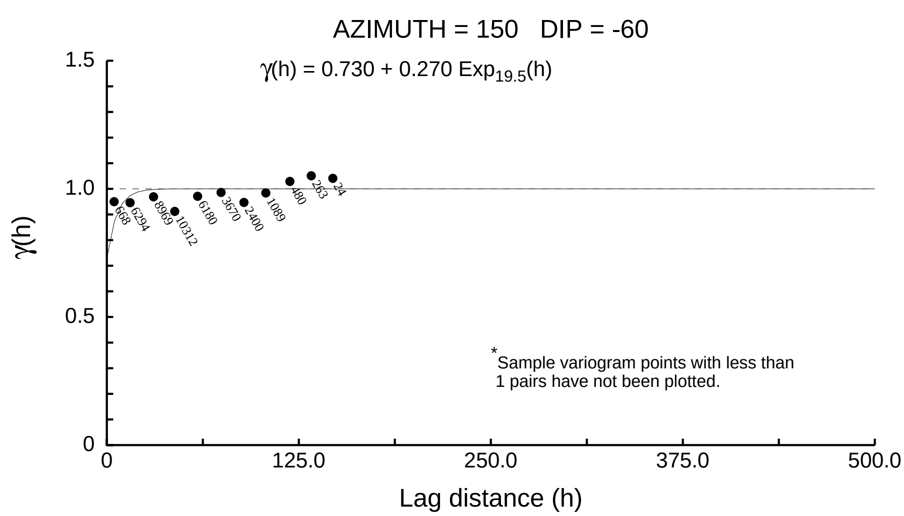
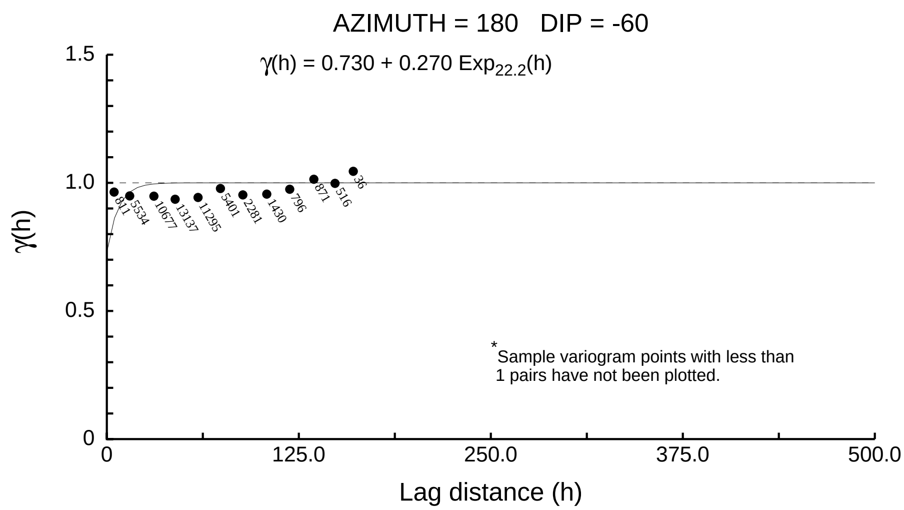
Zone 2 Directional Correlograms - Assays

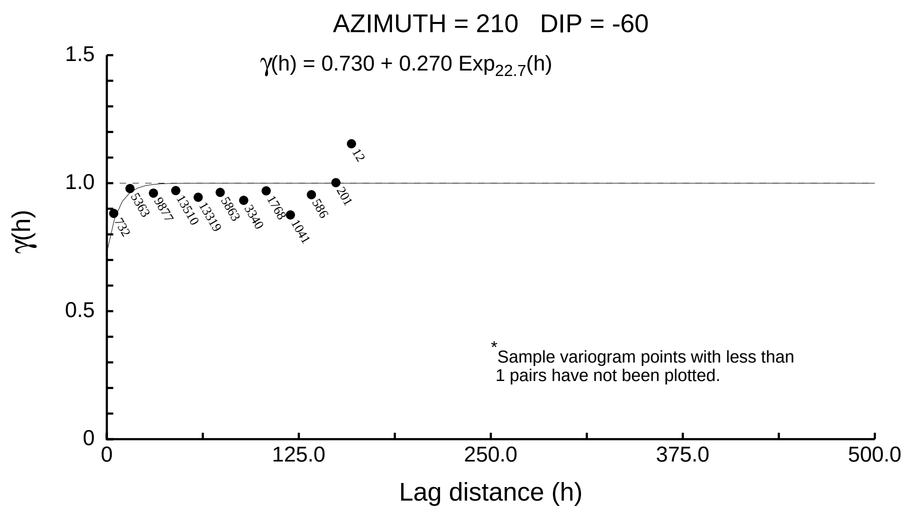


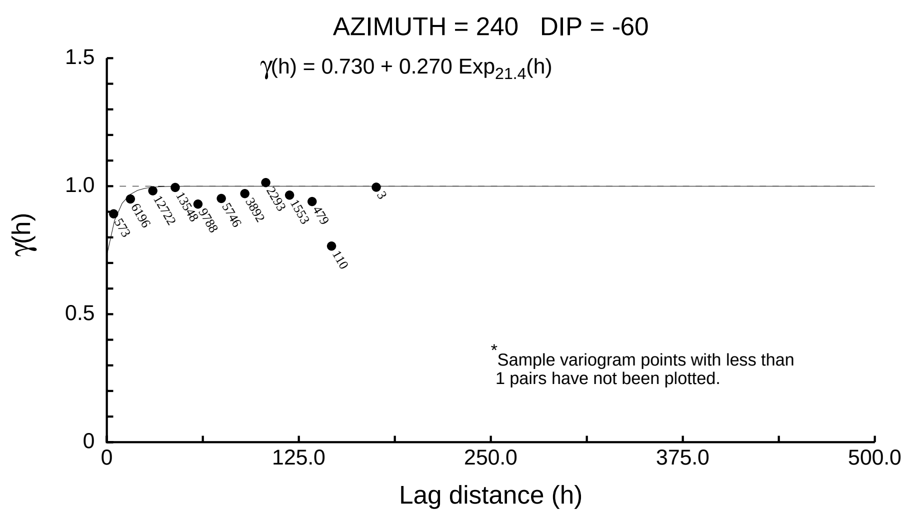




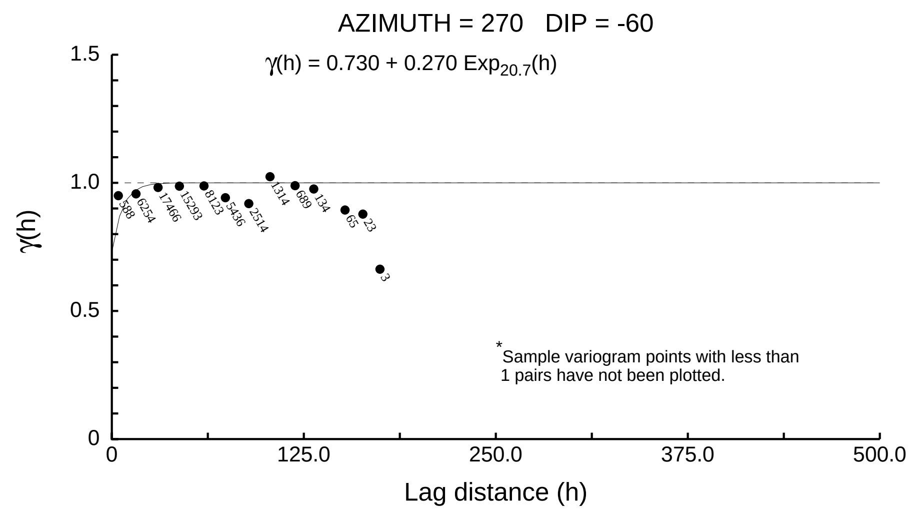
Zone 2 Directional Correlograms - Assays

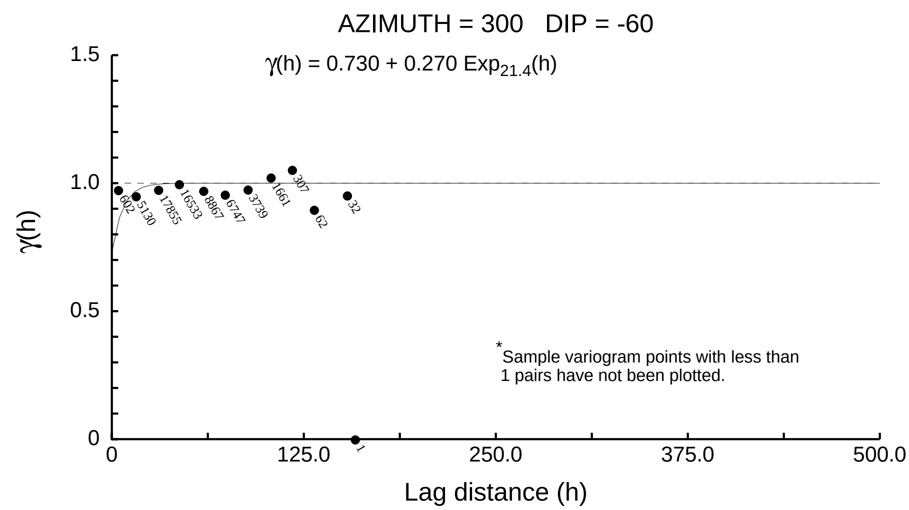


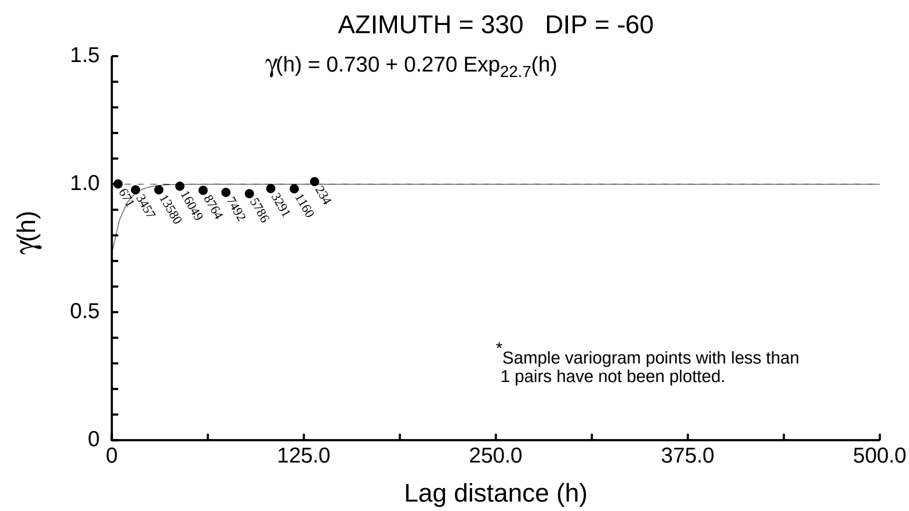




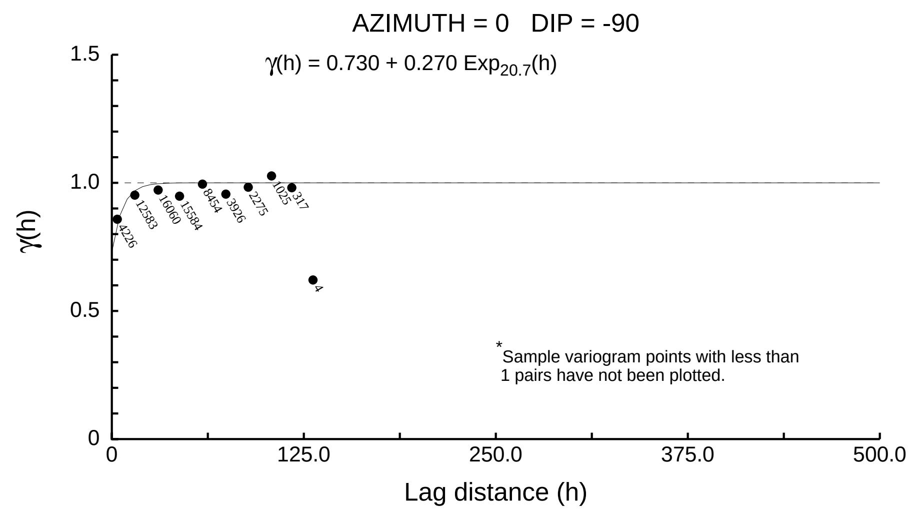
Zone 2 Directional Correlograms - Assays







Zone 2 Directional Correlograms - Assays



Zone 1 Downhole Correlogram - Assays

Medsystem and Vulcan Rotation Conventions

Nugget ==> 0.730
C1 ==> 0.270

First Structure -- Exponential with Practical Range

LH Rotation about the Z axis ==> 0
RH Rotation about the X' axis ==> 0
LH Rotation about the Y' axis ==> 0

Range along the Z' axis	==> 12.0	Azimuth ==> 90	Dip ==> 90
Range along the Y' axis	==> 12.0	Azimuth ==> 360	Dip ==> 0
Range along the X' axis	==> 12.0	Azimuth ==> 90	Dip ==> 0

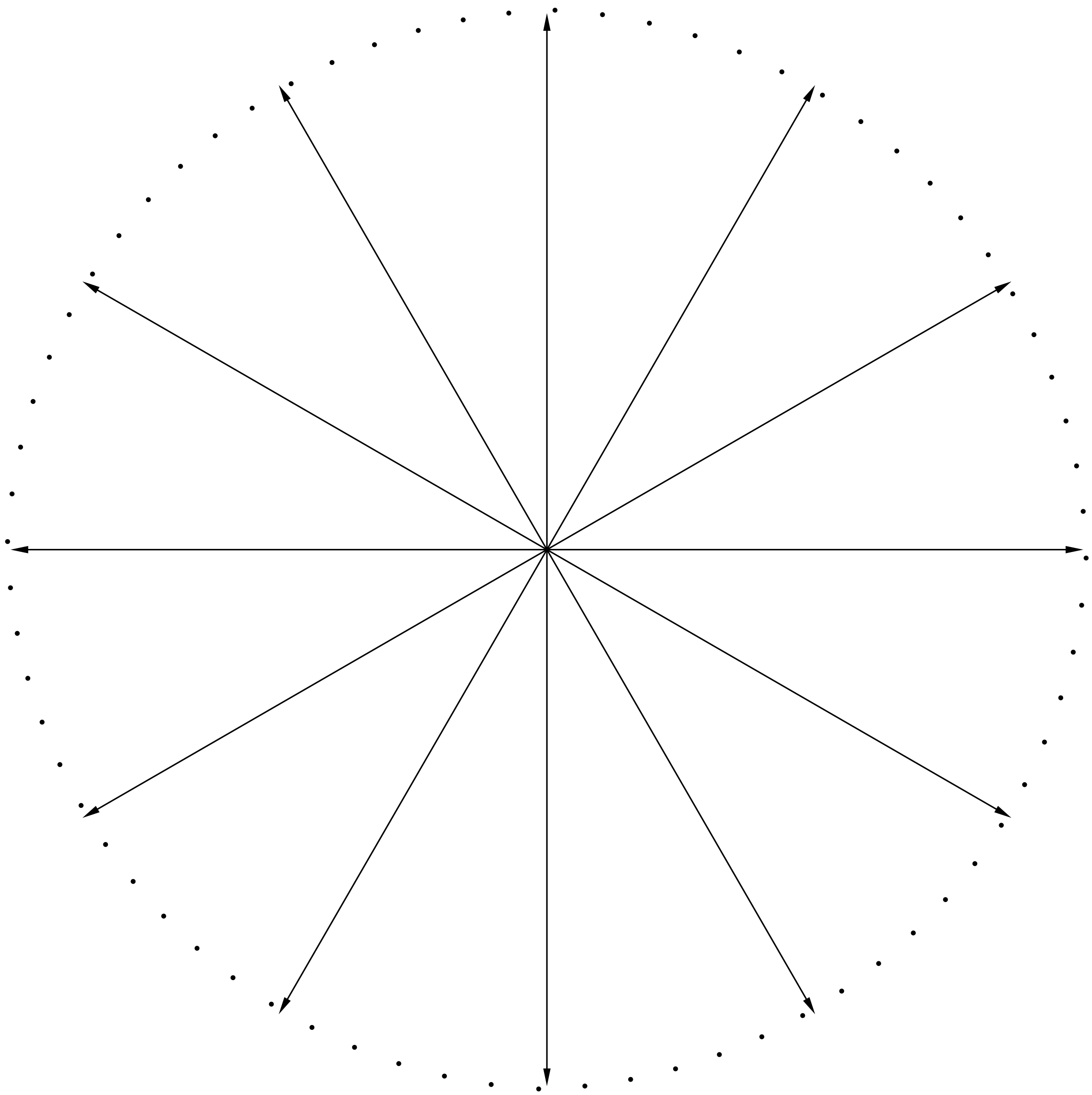
Modeling Criteria

Minimum number pairs req'd ==> 1
Sample variogram points weighted by # pairs

Zone 1 Downhole Correlogram - Assays

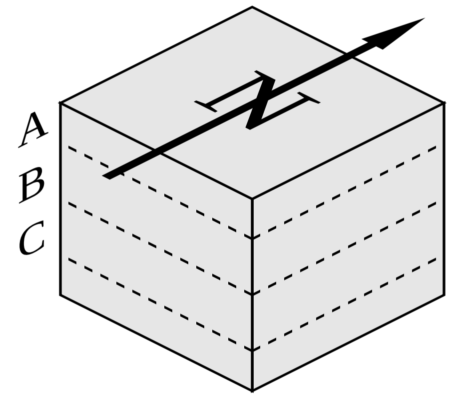
Structure Number 1

Rose Diagram of Ranges Dipping 0 Degrees
Scale:

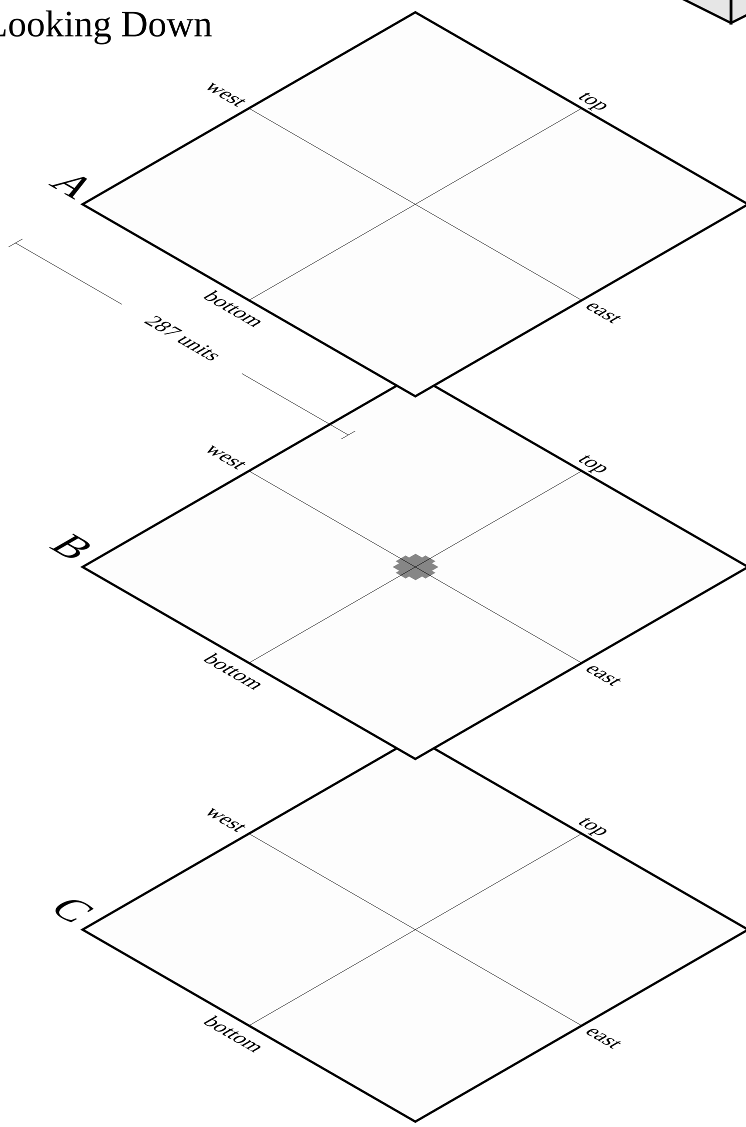


Horizontal Slices Through the Ellipsoids

Reference Cube



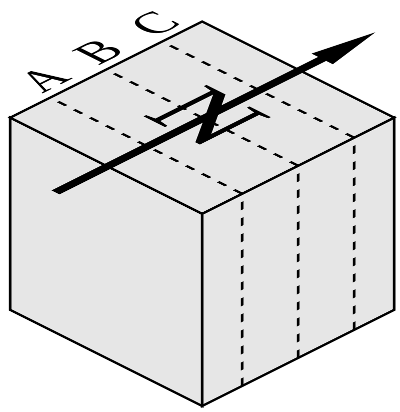
X-Y Planes Looking Down



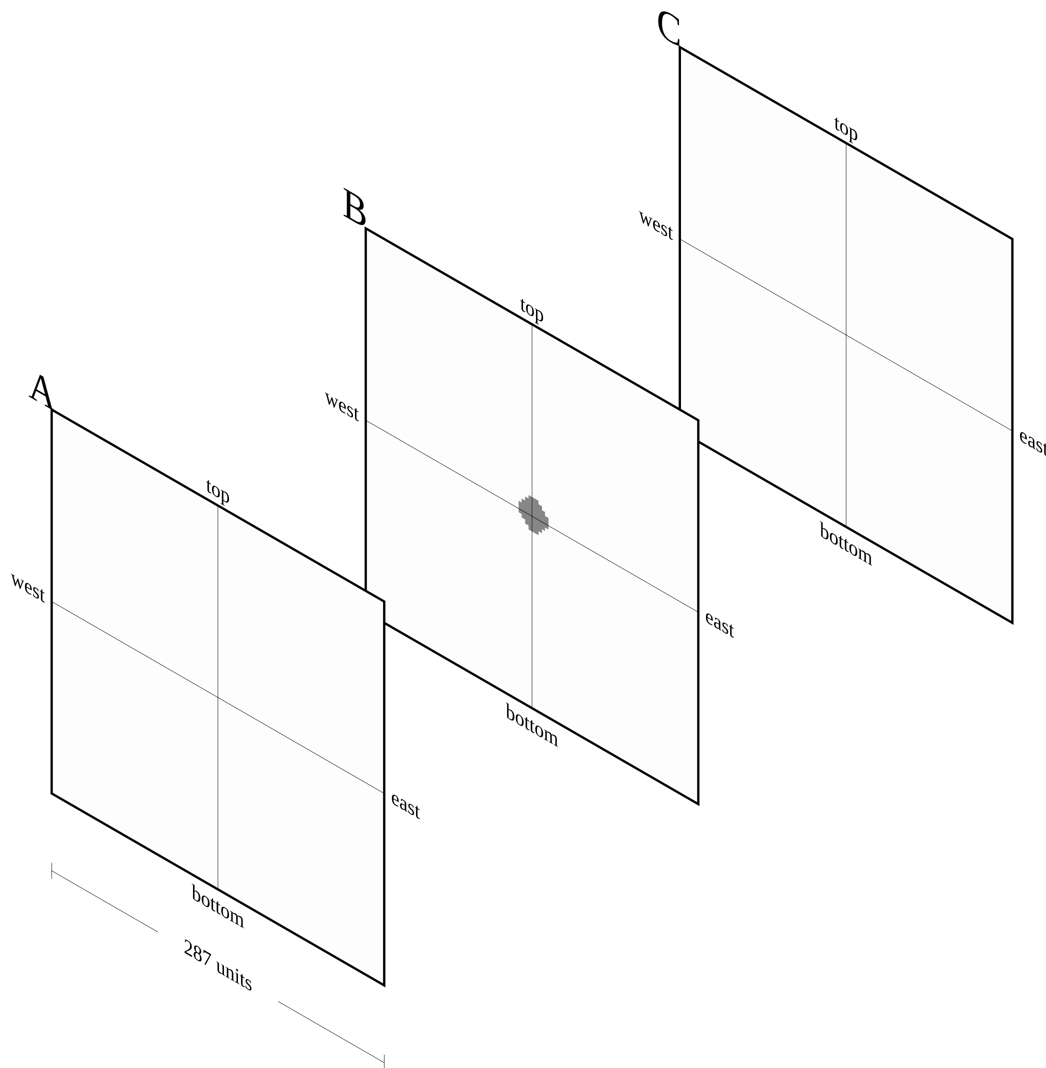
Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Cross Section Views Through the Ellipsoids

Reference Cube



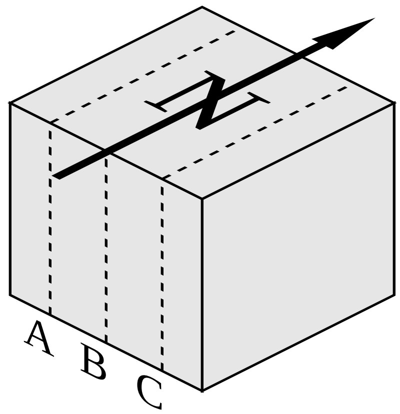
X-Z Planes Looking North



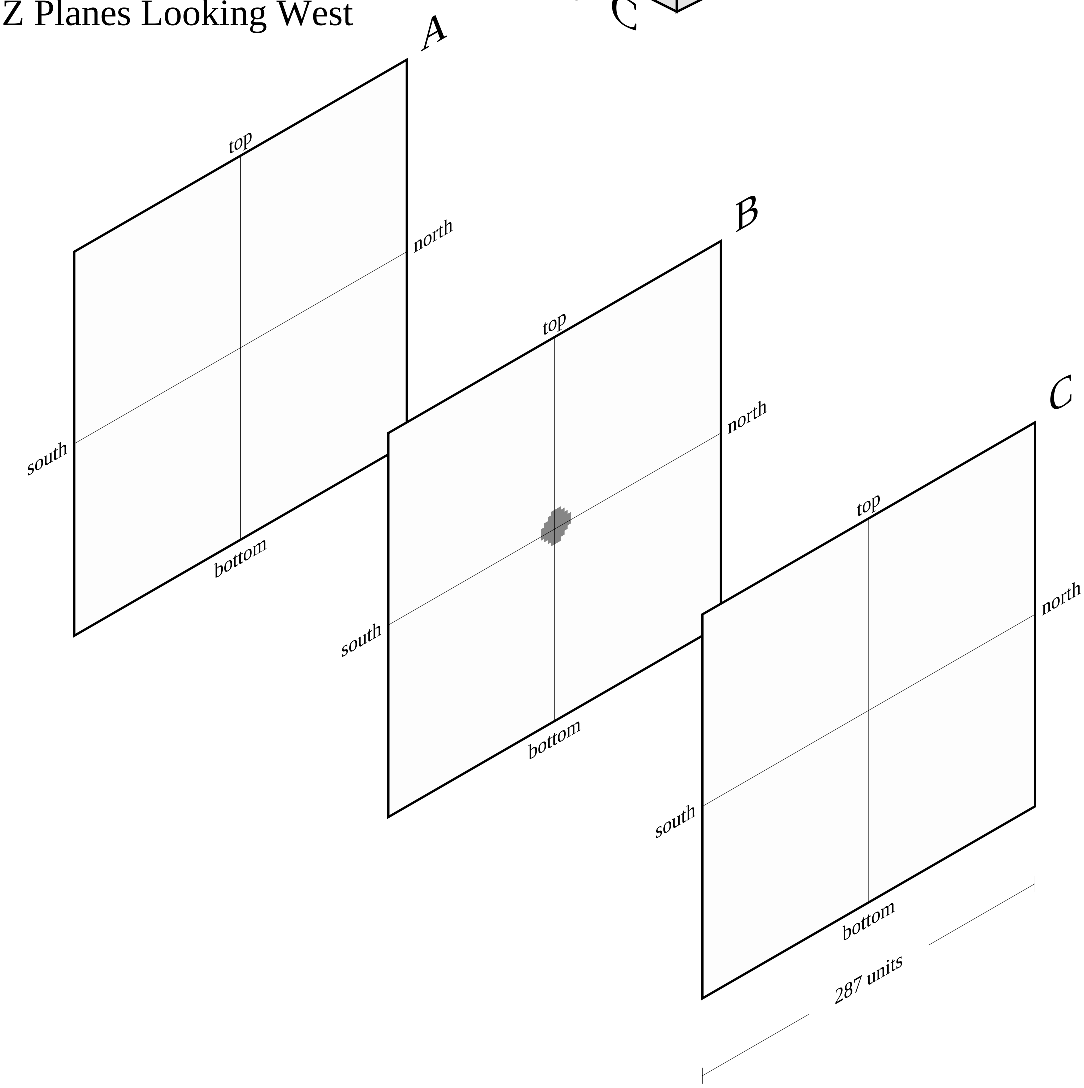
Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Long Section Views Through the Ellipsoids

Reference Cube

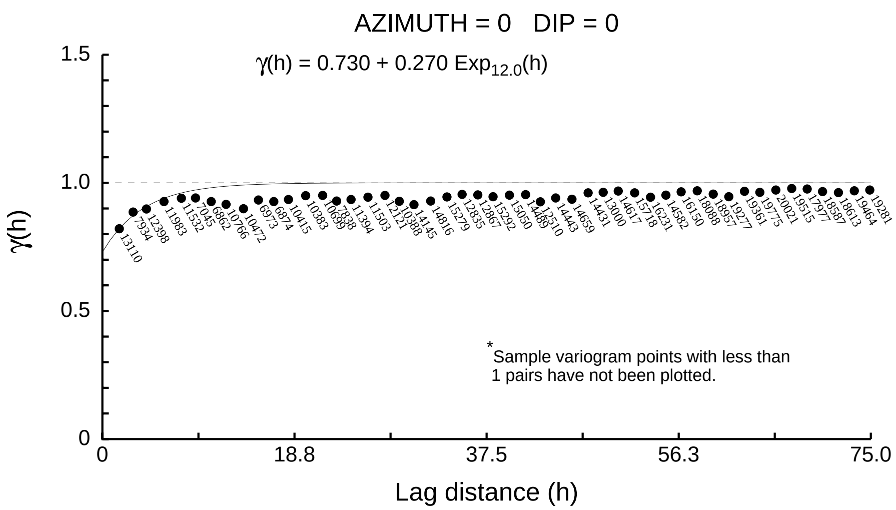


Y-Z Planes Looking West



Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Zone 1 Downhole Correlogram - Assays



Zone 1 Directional Correlograms - Assays

Medsystem and Vulcan Rotation Conventions

Nugget ==> 0.730
C1 ==> 0.270

First Structure -- Exponential with Practical Range

LH Rotation about the Z axis ==> 0
RH Rotation about the X' axis ==> 0
LH Rotation about the Y' axis ==> 75

Range along the Z' axis ==> 9.3	Azimuth ==> 270 Dip ==> 15
Range along the Y' axis ==> 22.1	Azimuth ==> 360 Dip ==> 0
Range along the X' axis ==> 13.2	Azimuth ==> 90 Dip ==> 75

Modeling Criteria

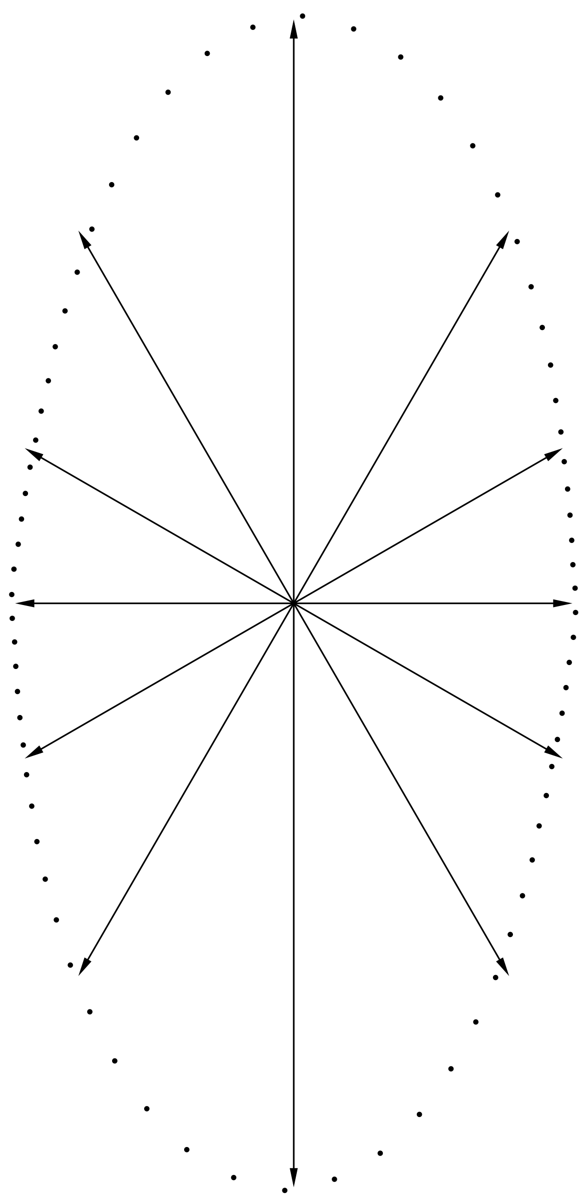
Minimum number pairs req'd ==> 1
Sample variogram points weighted by # pairs

Zone 1 Directional Correlograms - Assays

Structure Number 1

Rose Diagram of Ranges Dipping 0 Degrees
Scale:

20 Units

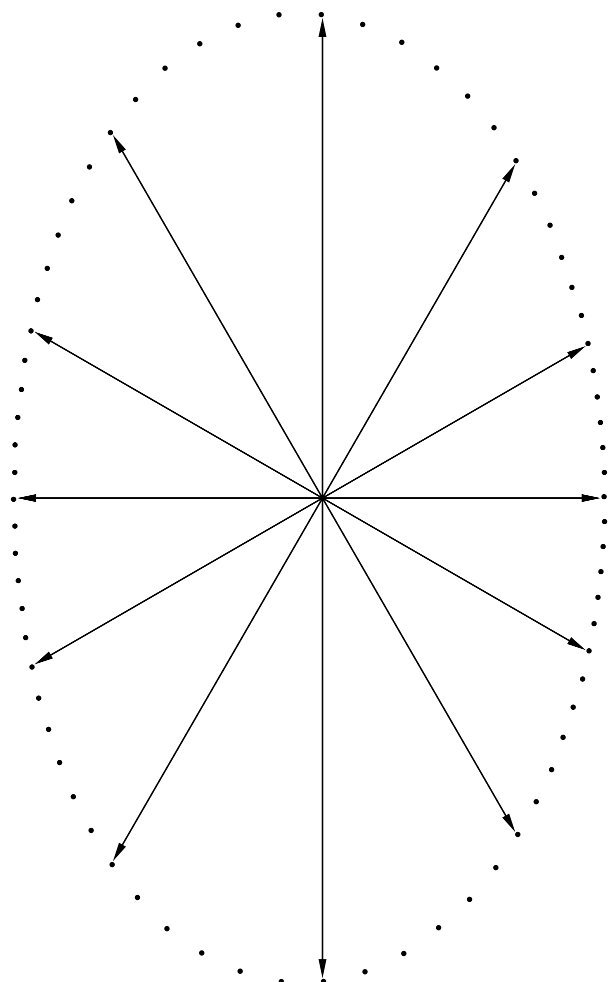


Zone 1 Directional Correlograms - Assays

Structure Number 1

Rose Diagram of Ranges Dipping 30 Degrees
Scale:

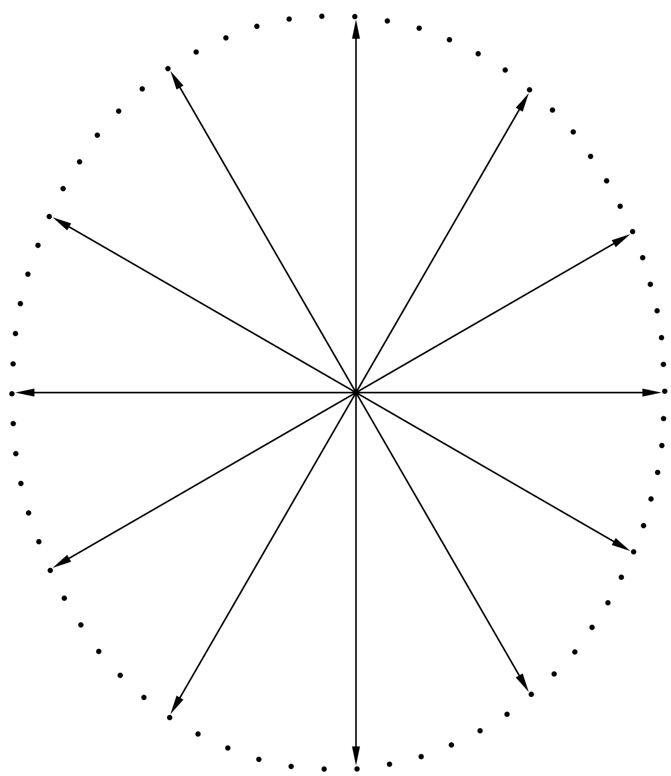
20 Units



Zone 1 Directional Correlograms - Assays

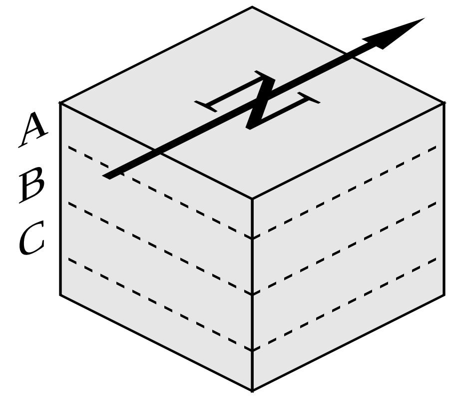
Structure Number 1

Rose Diagram of Ranges Dipping 60 Degrees
Scale:

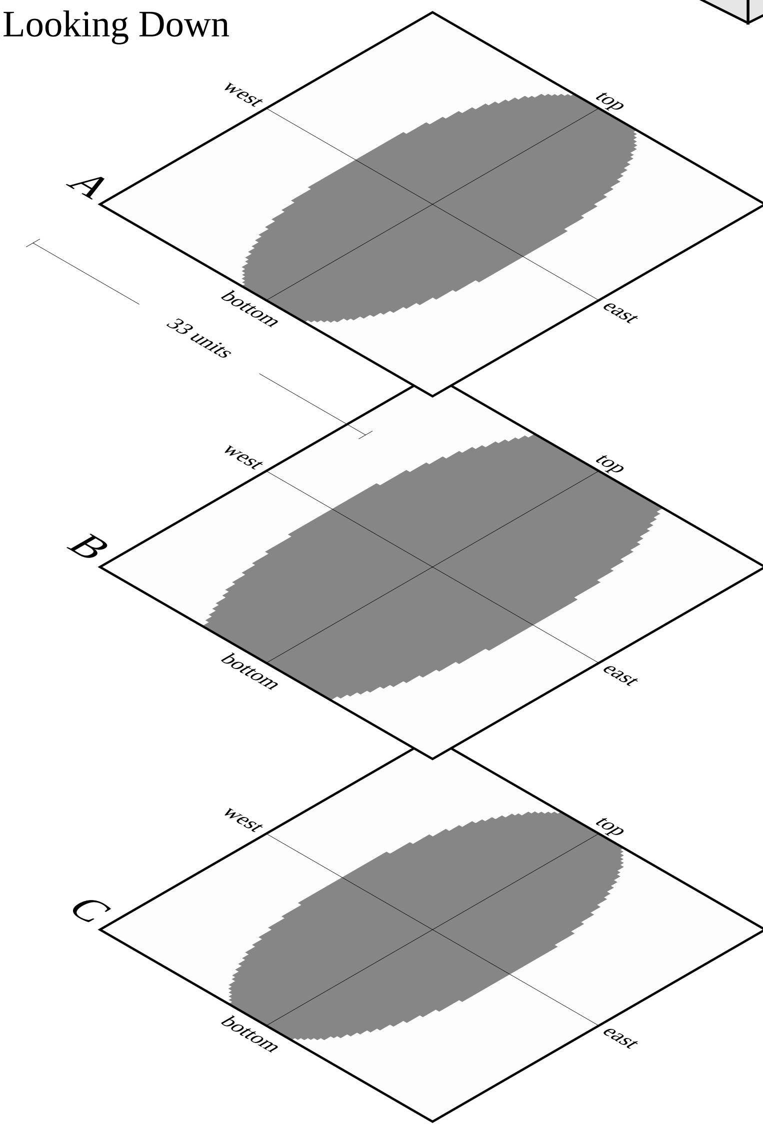


Horizontal Slices Through the Ellipsoids

Reference Cube



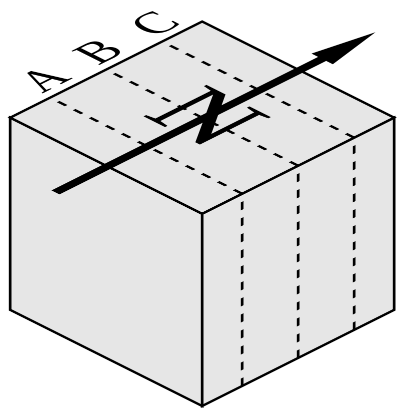
X-Y Planes Looking Down



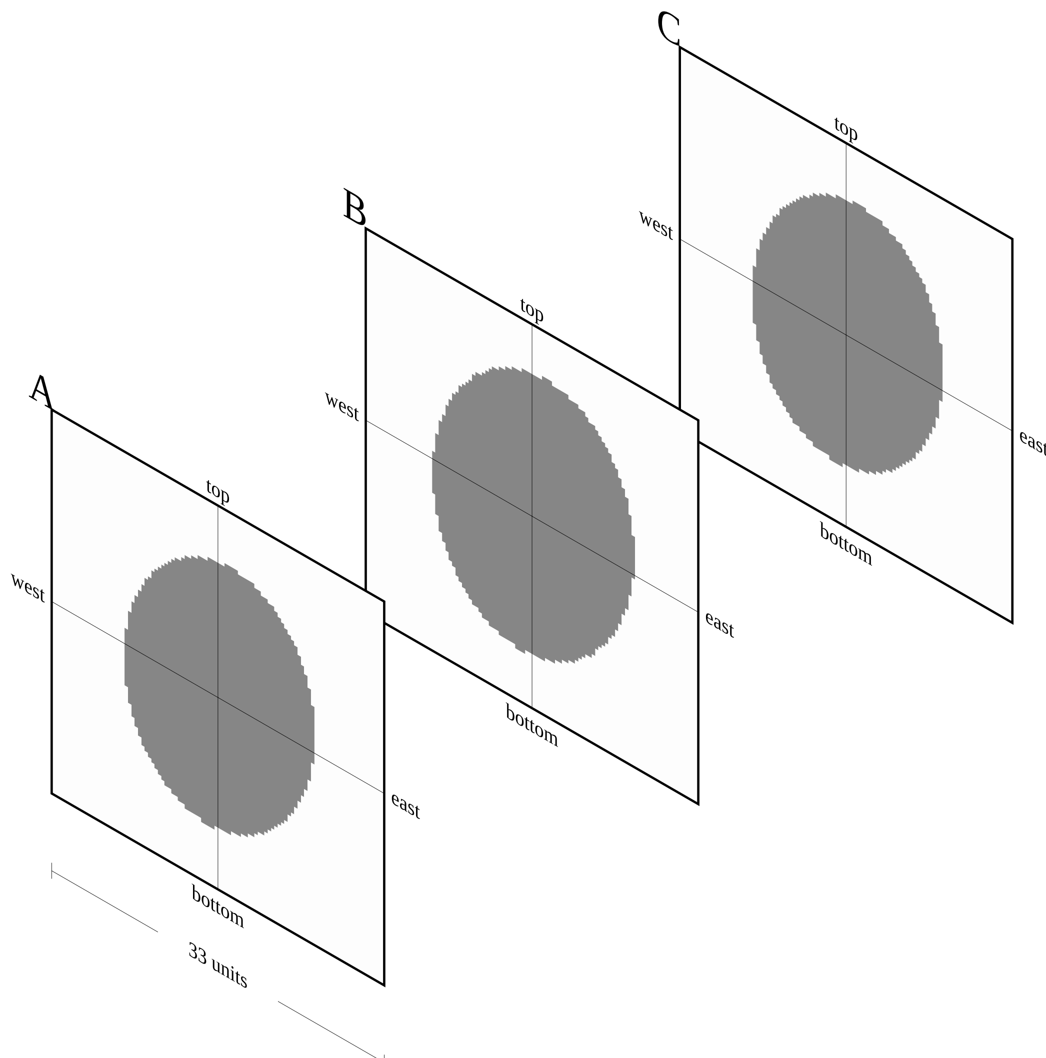
Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Cross Section Views Through the Ellipsoids

Reference Cube



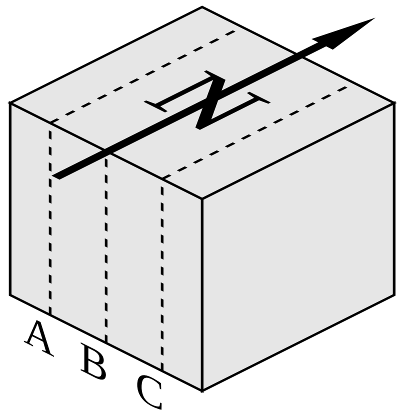
X-Z Planes Looking North



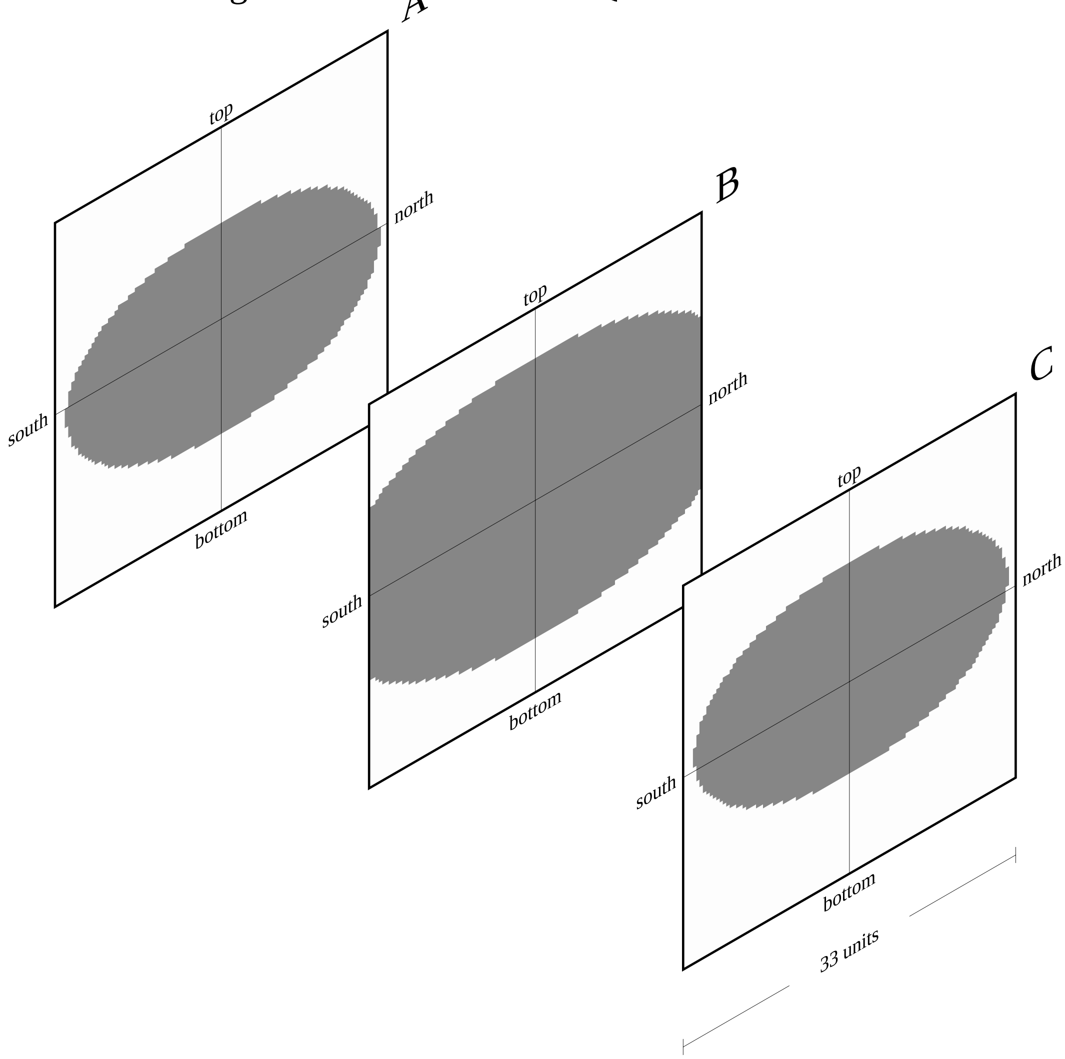
Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Long Section Views Through the Ellipsoids

Reference Cube

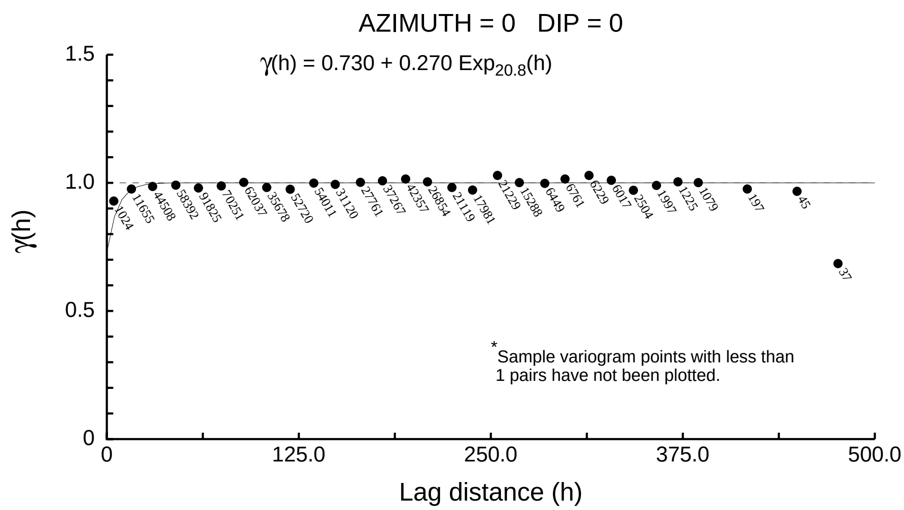


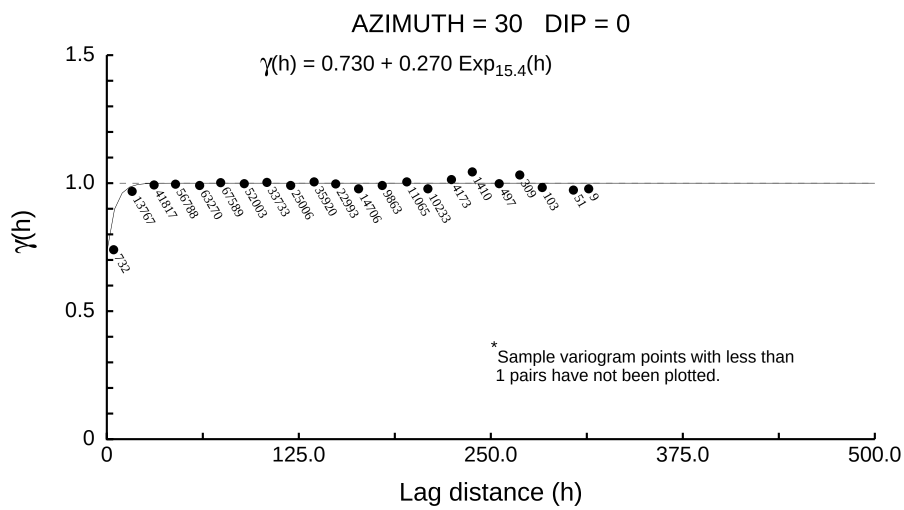
Y-Z Planes Looking West

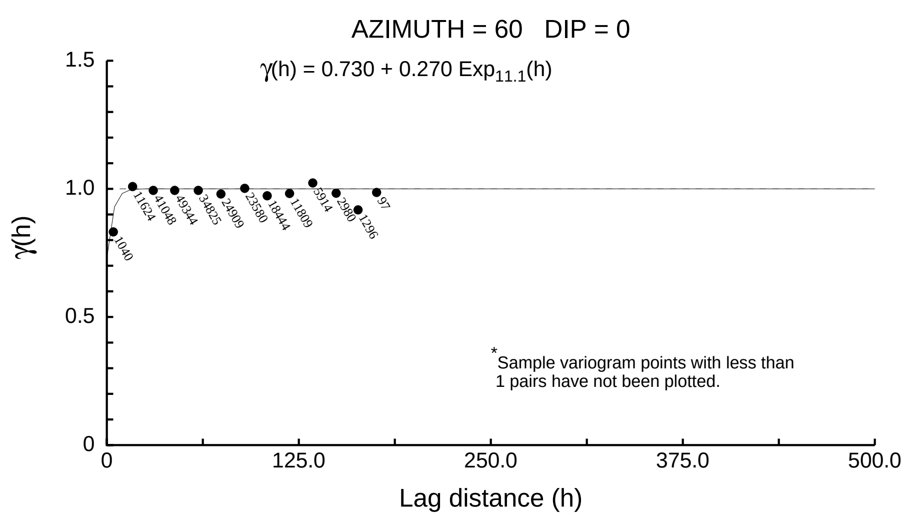


Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Zone 1 Directional Correlograms - Assays







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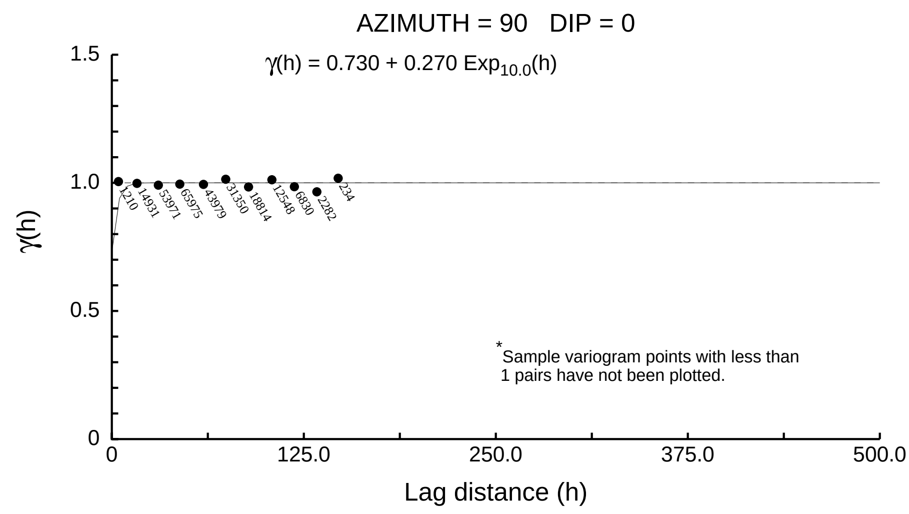
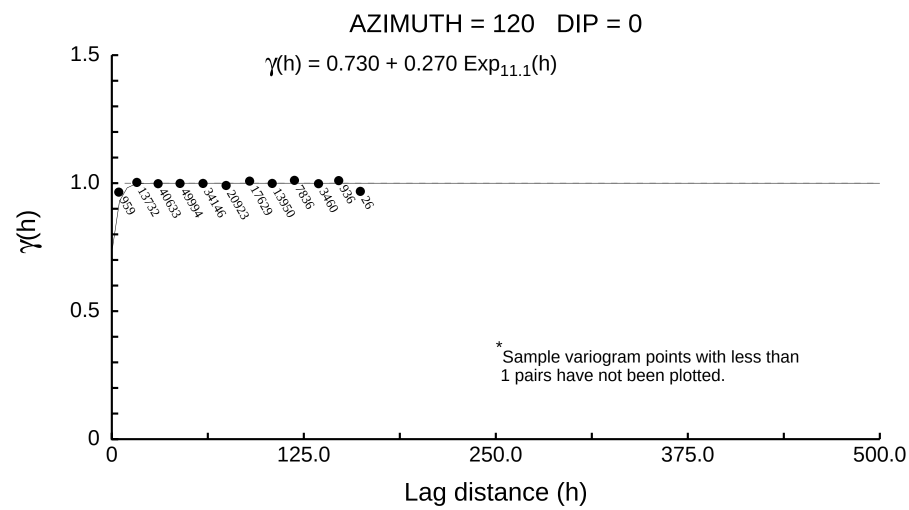
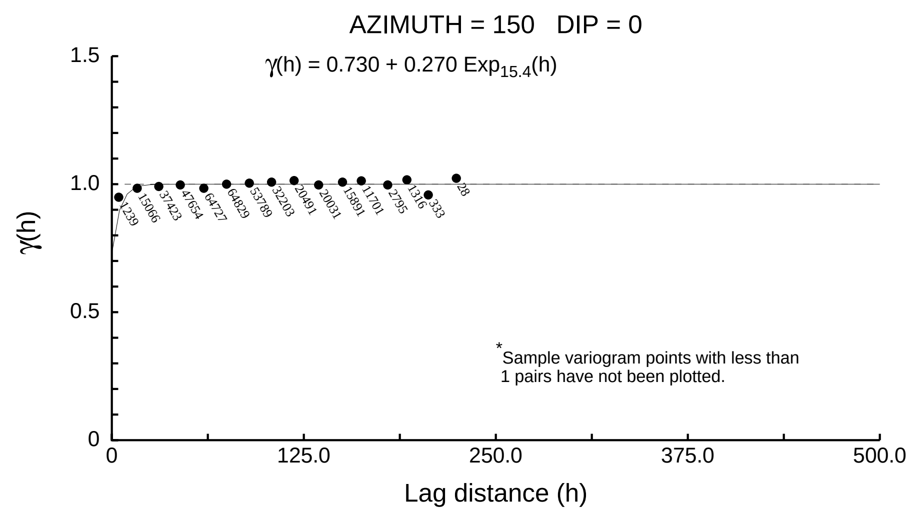
Zone 1 Directional Correlograms - Assays







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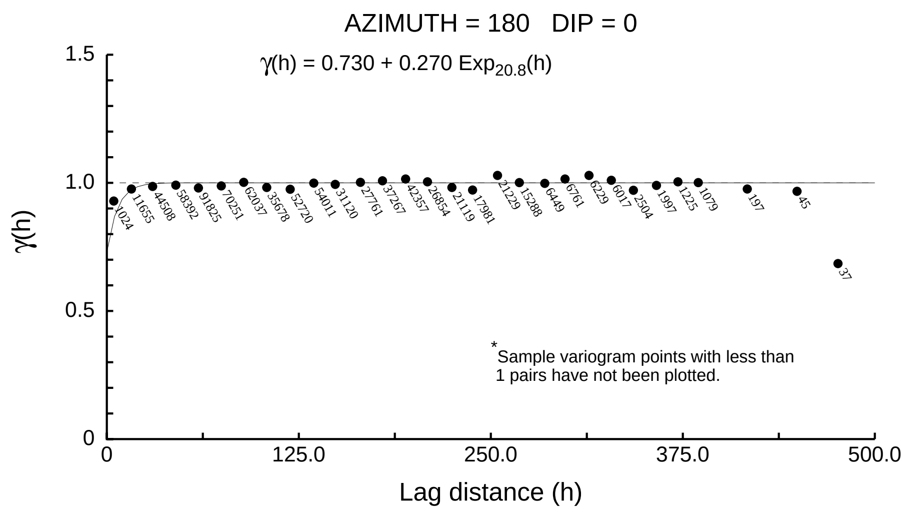
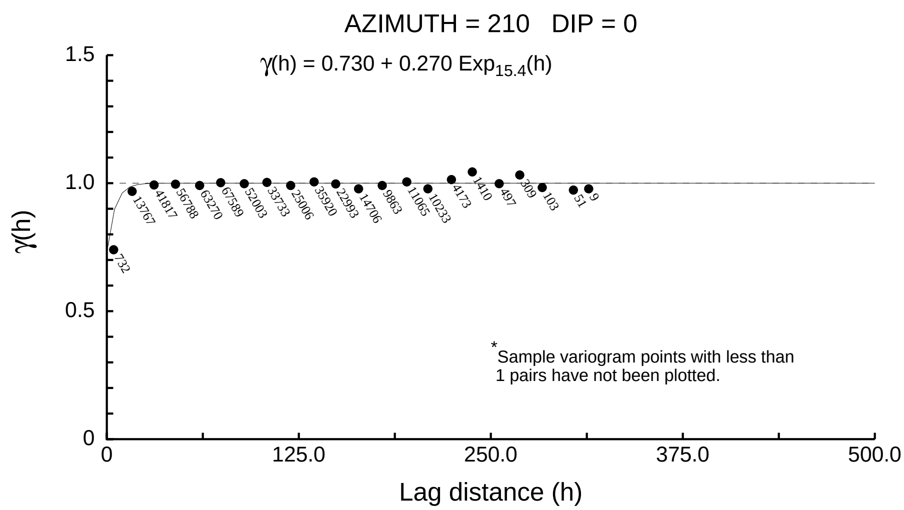
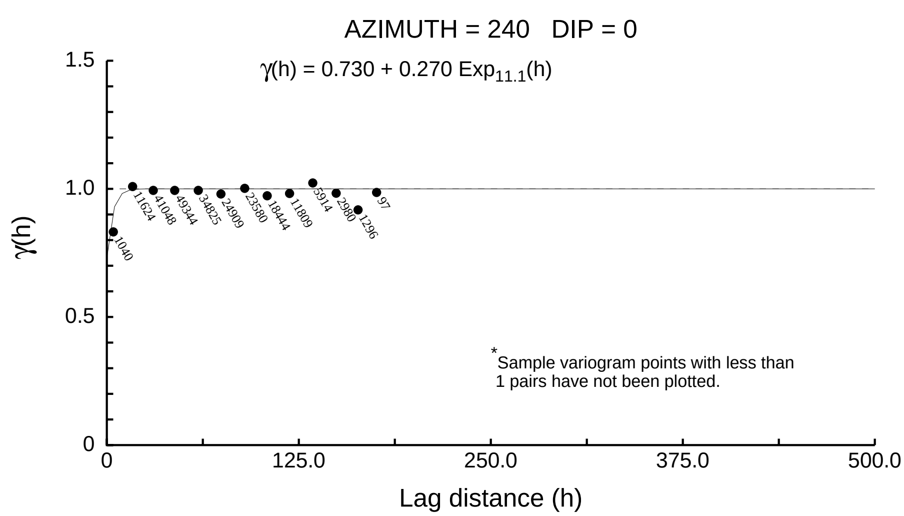
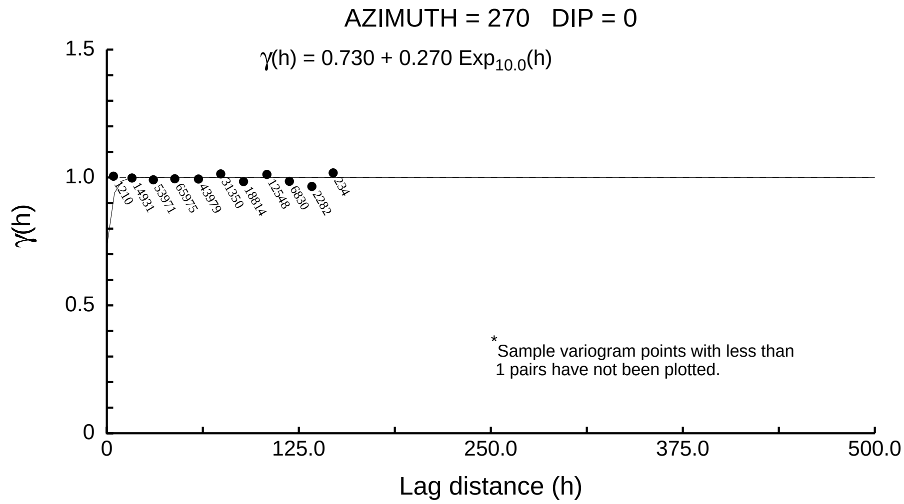
Zone 1 Directional Correlograms - Assays

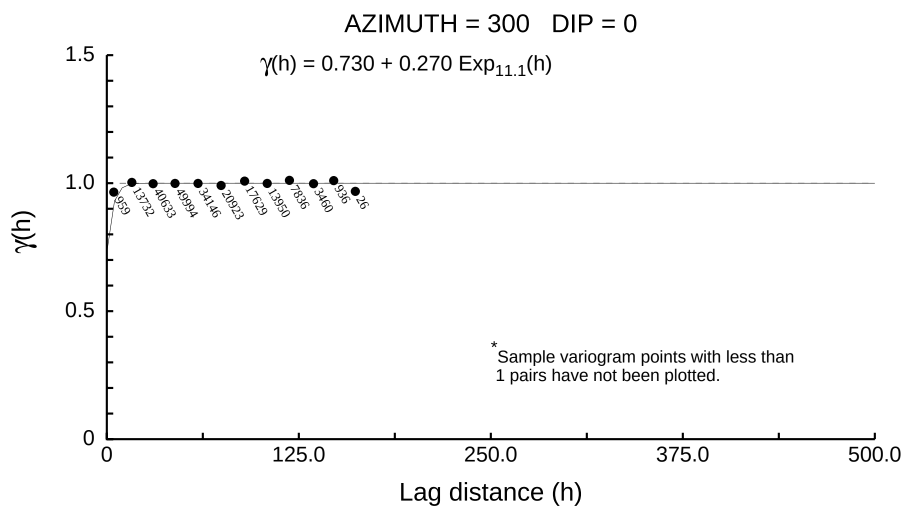


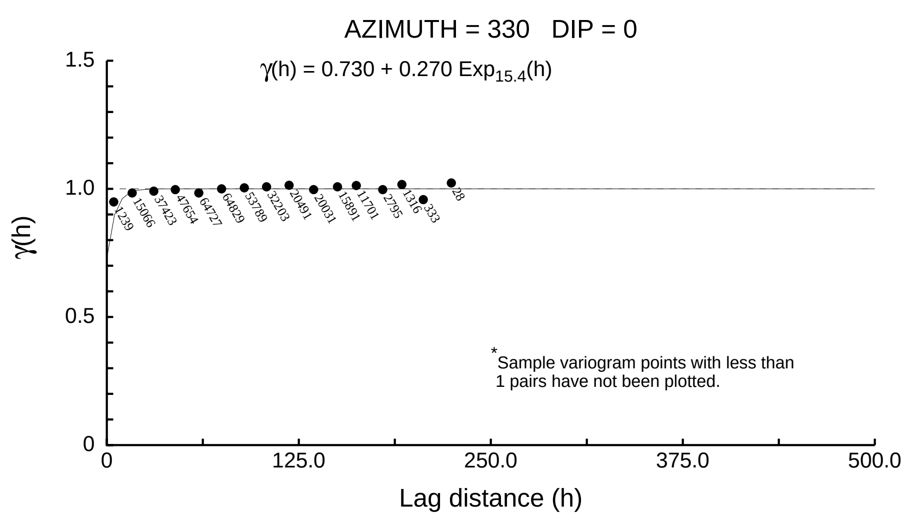




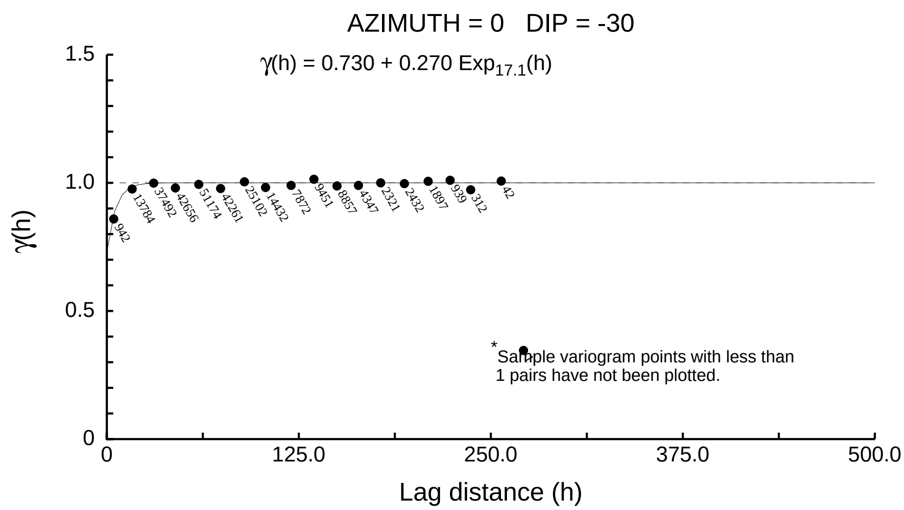
Zone 1 Directional Correlograms - Assays

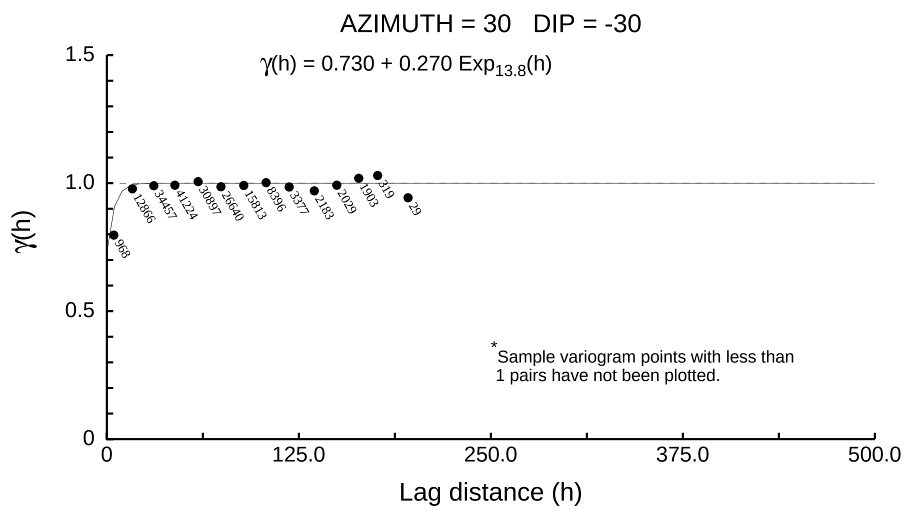


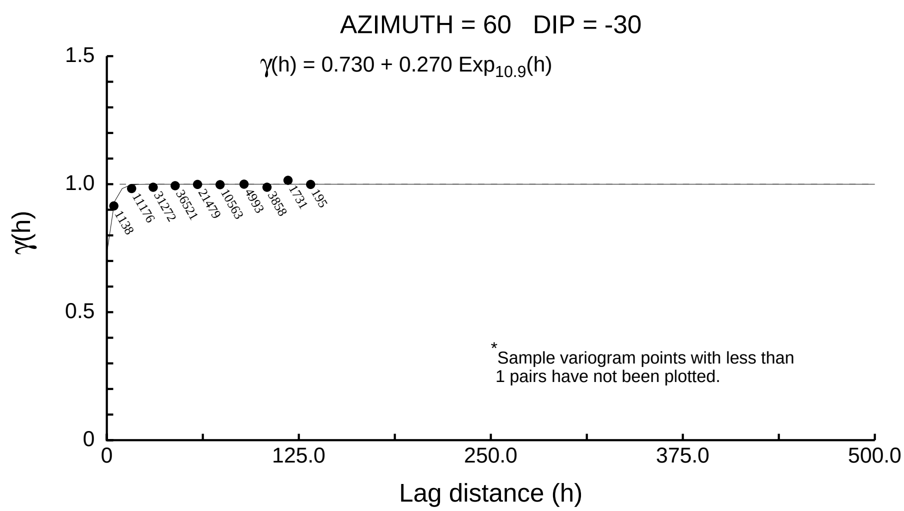




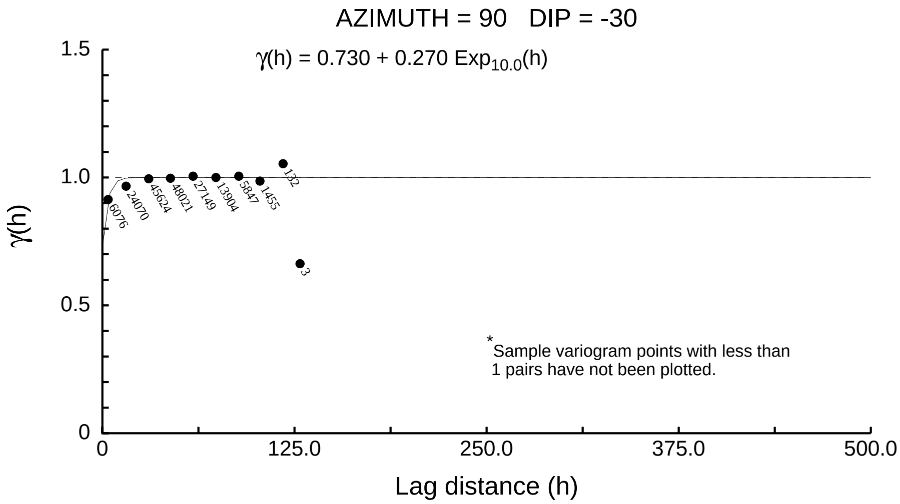
Zone 1 Directional Correlograms - Assays

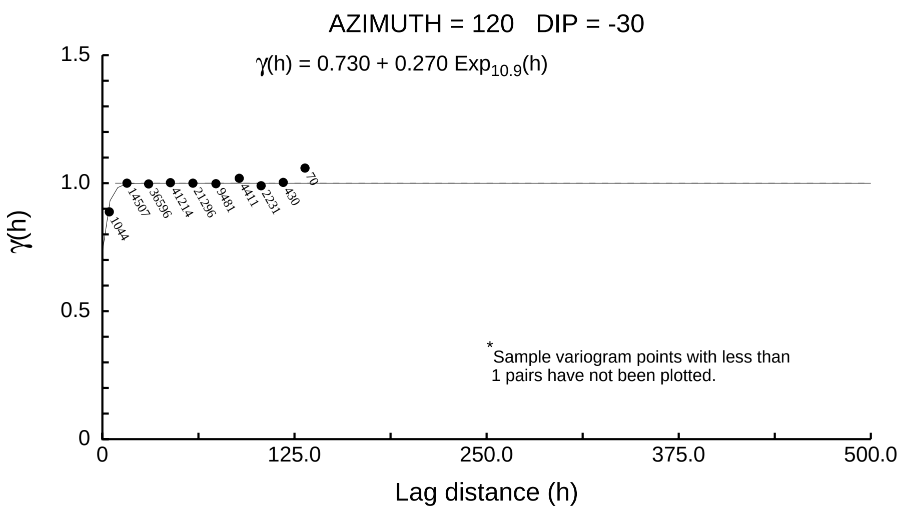


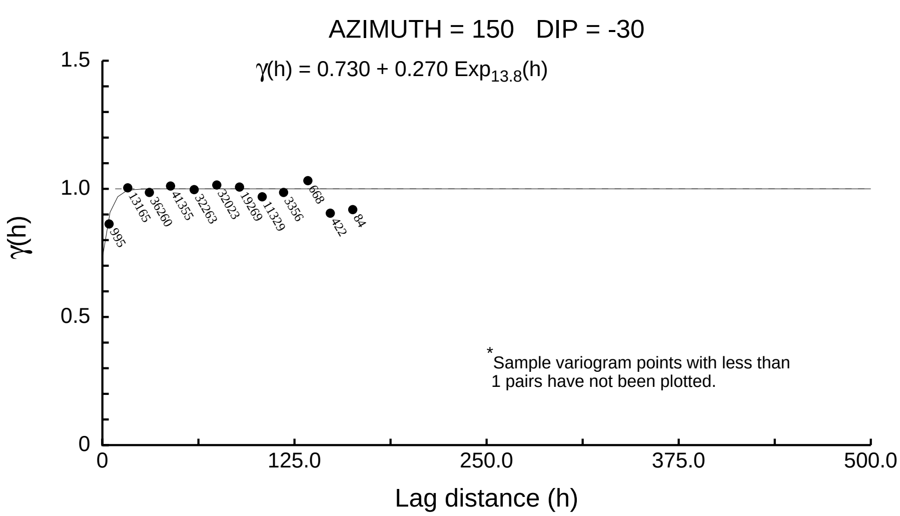




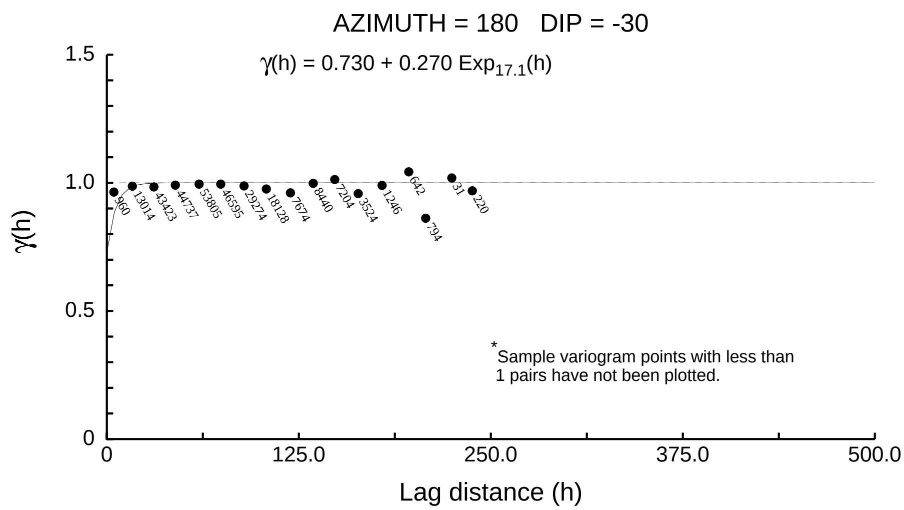
Zone 1 Directional Correlograms - Assays

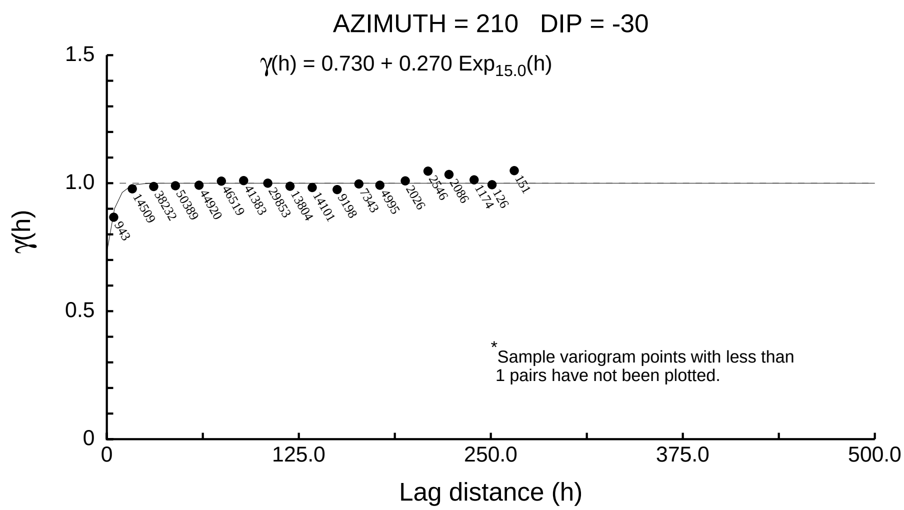


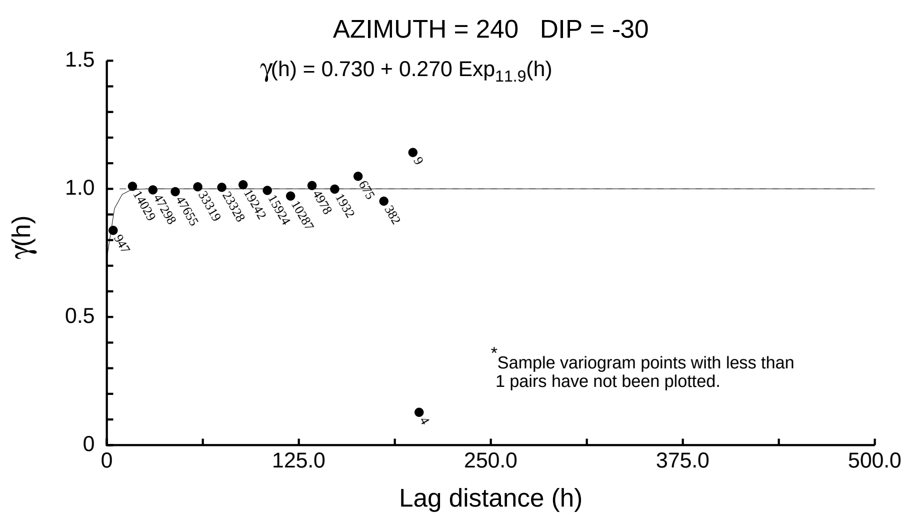




Zone 1 Directional Correlograms - Assays







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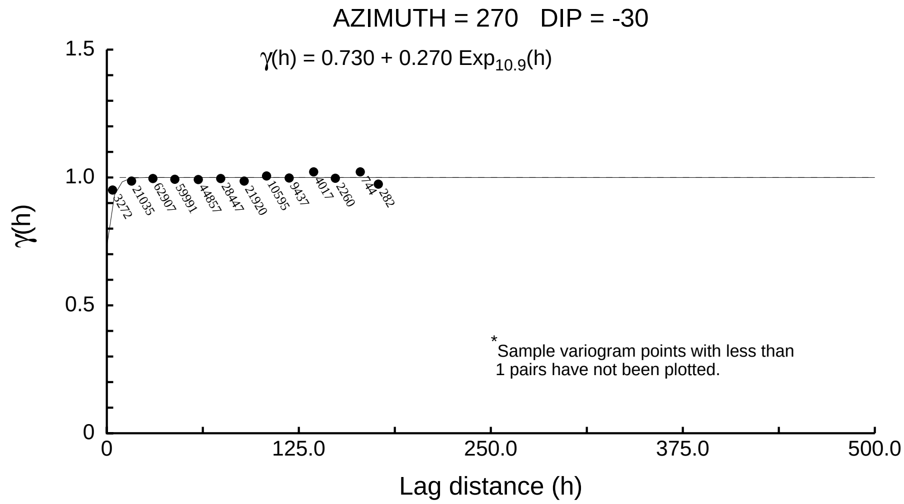
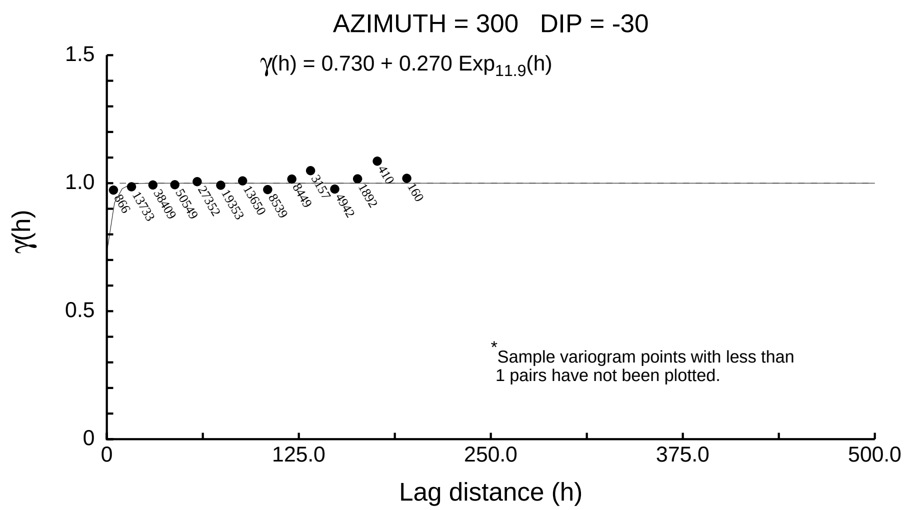
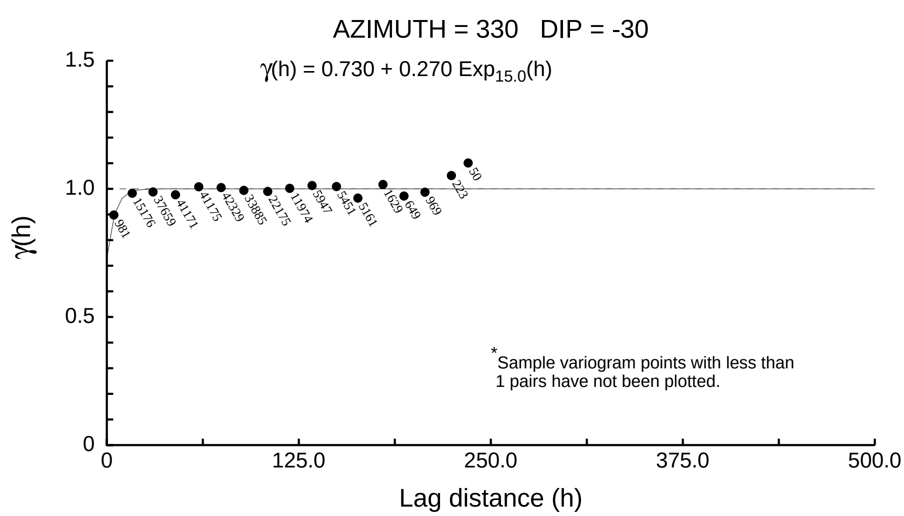
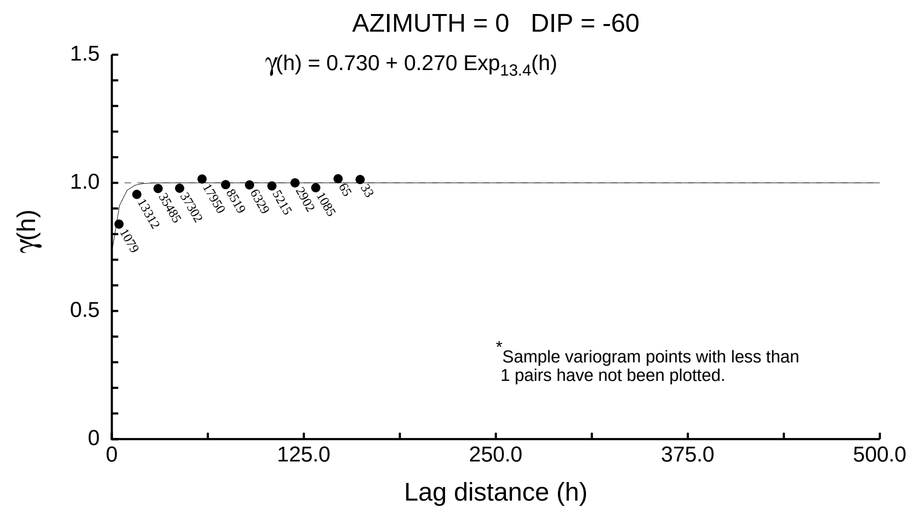
Zone 1 Directional Correlograms - Assays

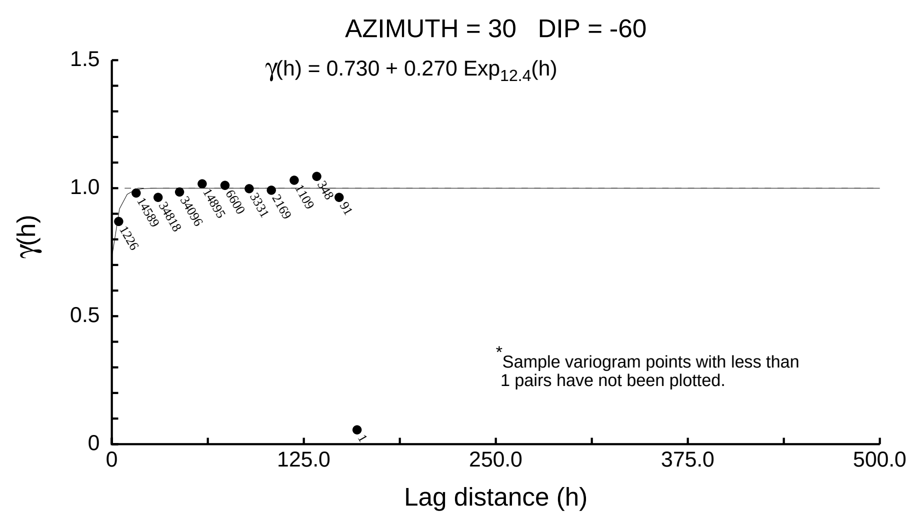


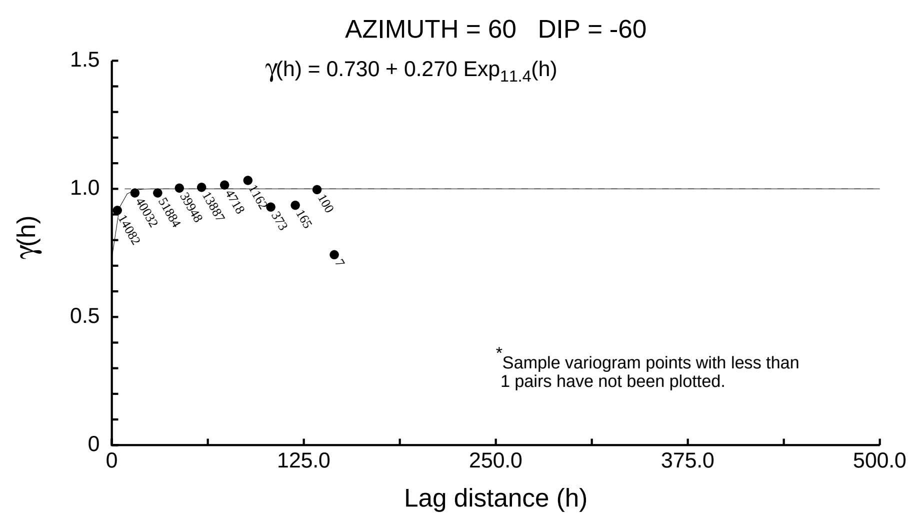




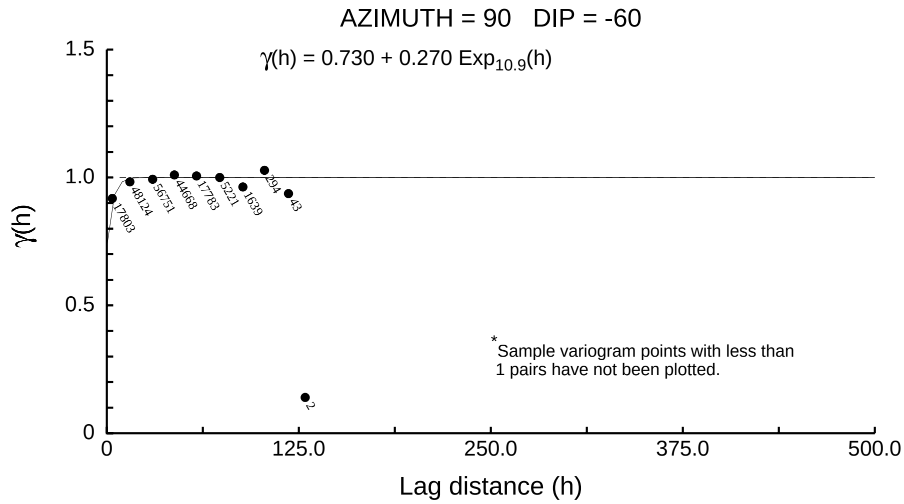
Zone 1 Directional Correlograms - Assays

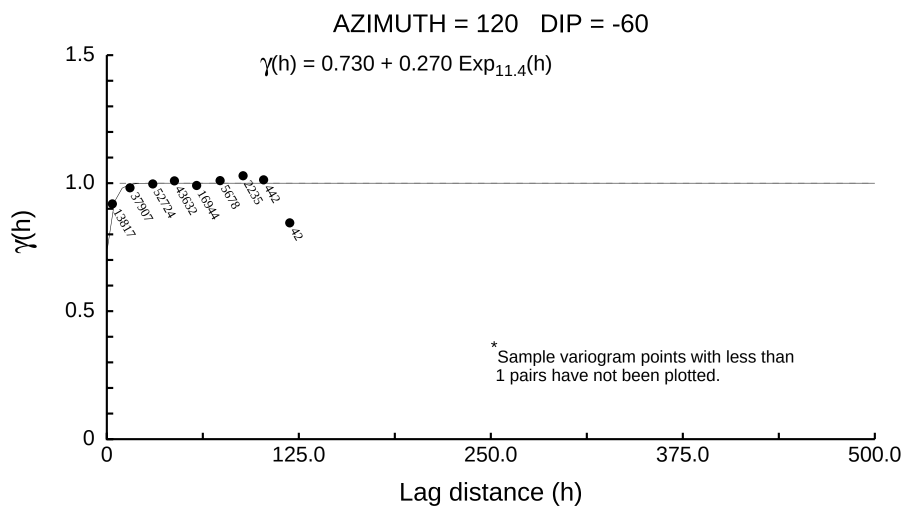


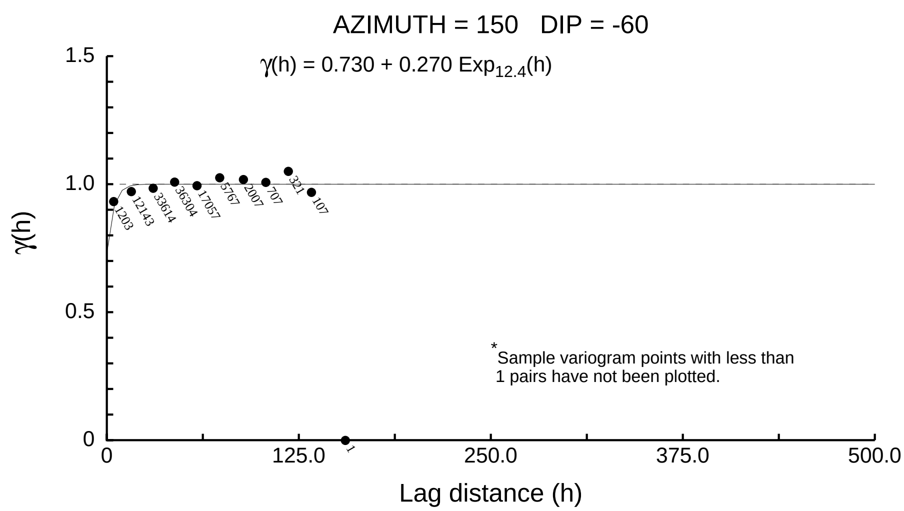




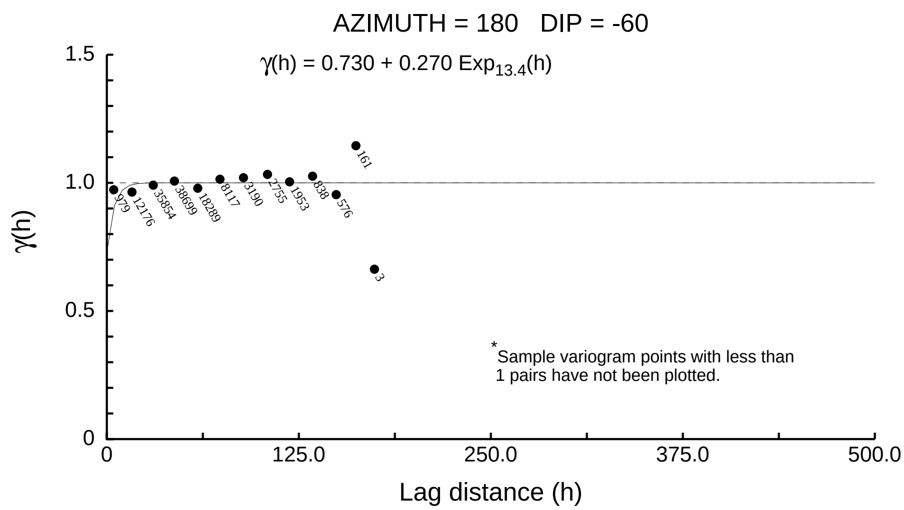
Zone 1 Directional Correlograms - Assays

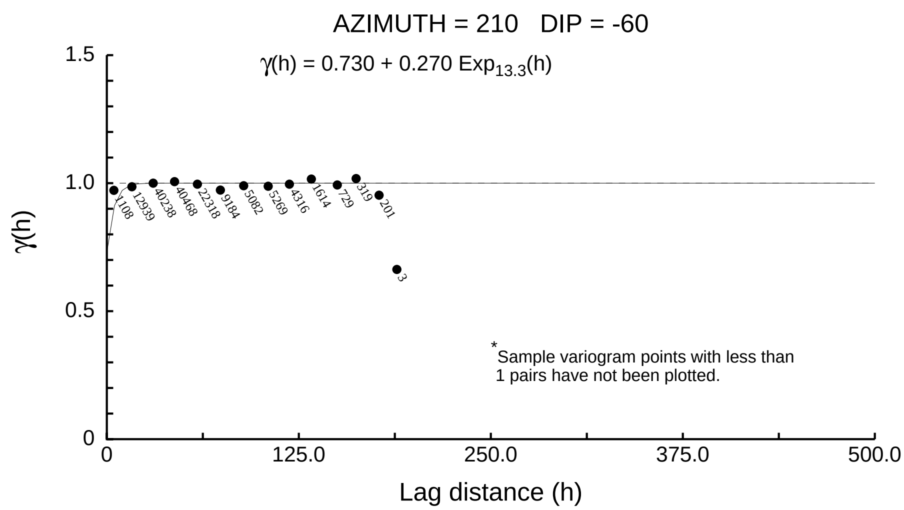


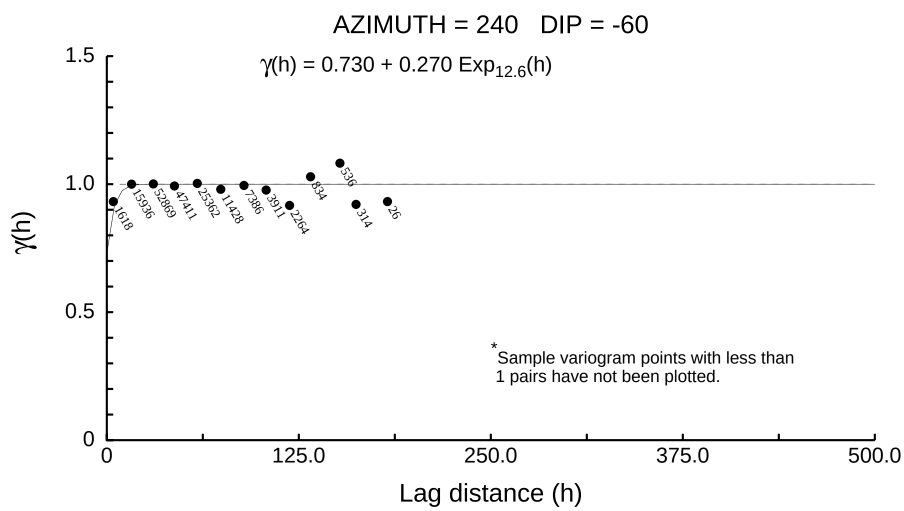




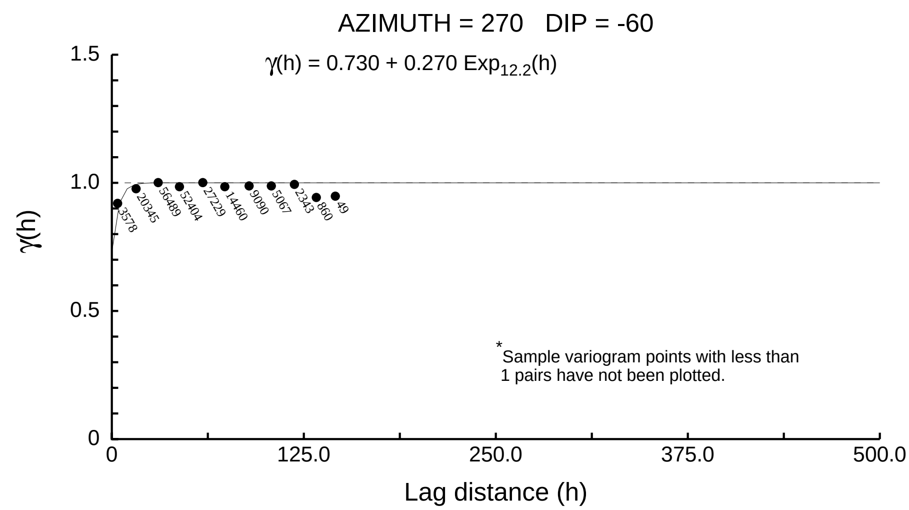
Zone 1 Directional Correlograms - Assays

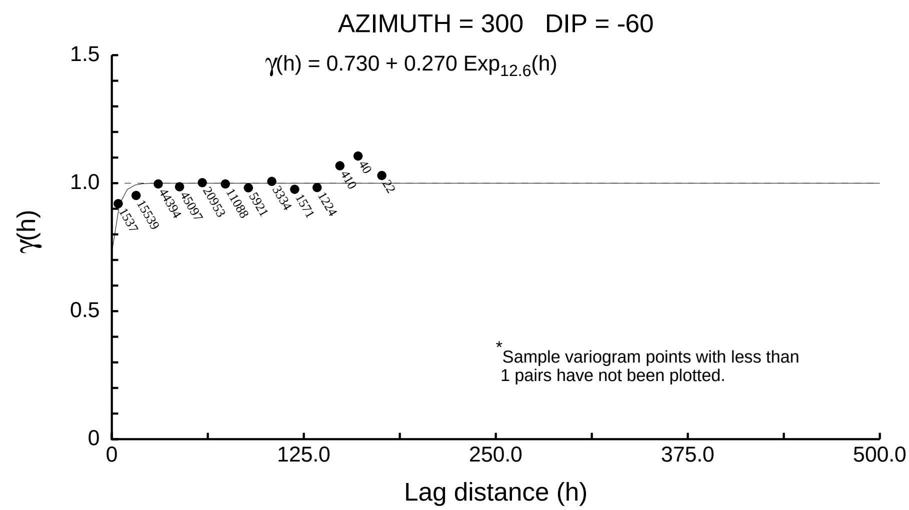


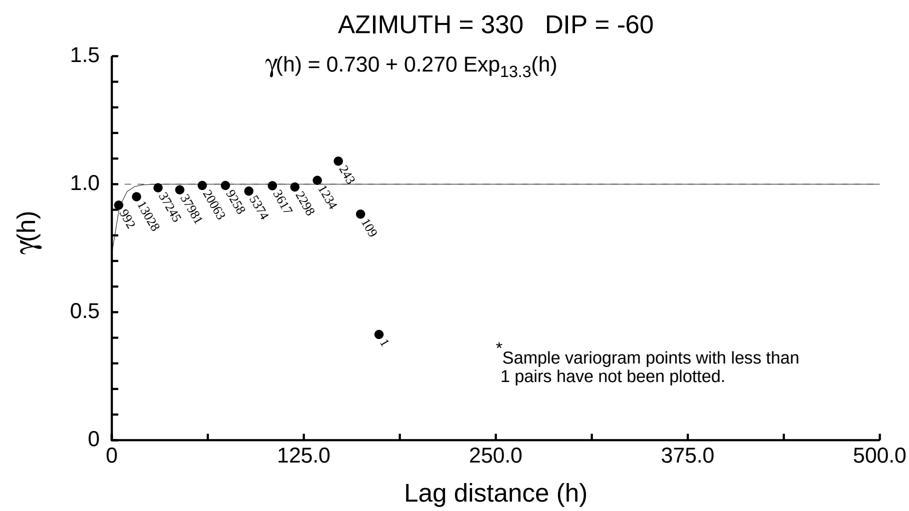




Zone 1 Directional Correlograms - Assays







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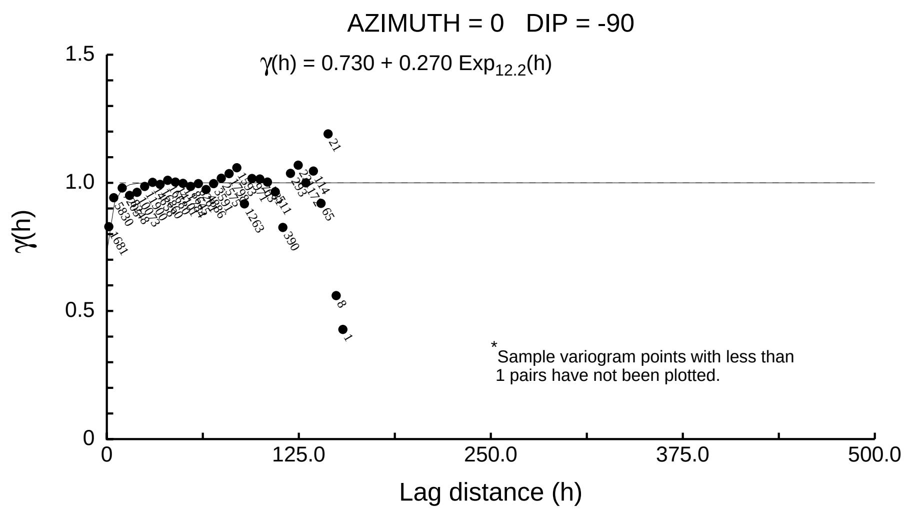
Zone 1 Directional Correlograms - Assays



Zone 1 Downhole Correlogram - Assays

Medsystem and Vulcan Rotation Conventions

Nugget ==> 0.730
C1 ==> 0.270

First Structure -- Exponential with Practical Range

LH Rotation about the Z axis ==> 0
RH Rotation about the X' axis ==> 0
LH Rotation about the Y' axis ==> 0

Range along the Z' axis ==> 12.0	Azimuth ==> 90	Dip ==> 90
Range along the Y' axis ==> 12.0	Azimuth ==> 360	Dip ==> 0
Range along the X' axis ==> 12.0	Azimuth ==> 90	Dip ==> 0

Modeling Criteria

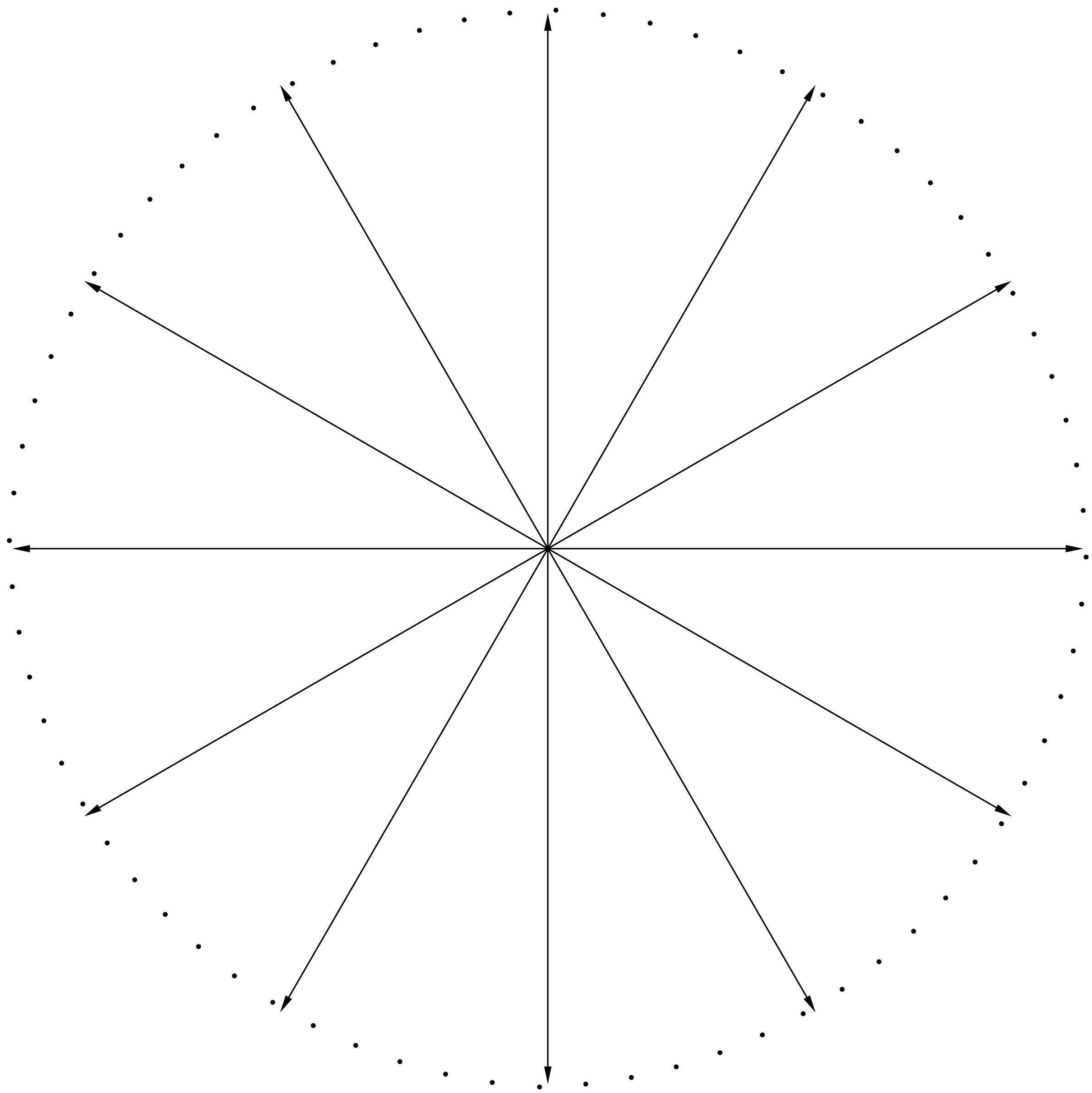
Minimum number pairs req'd ==> 1
Sample variogram points weighted by # pairs

Zone 1 Downhole Correlogram - Assays

Structure Number 1

Rose Diagram of Ranges Dipping 0 Degrees
Scale:

10 Units



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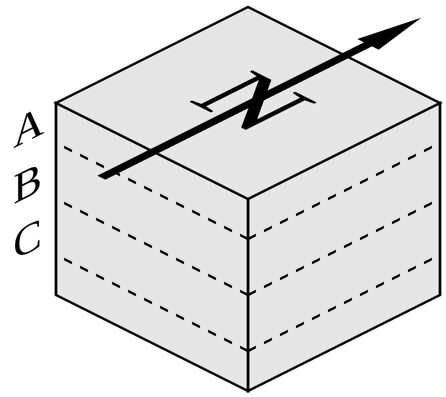
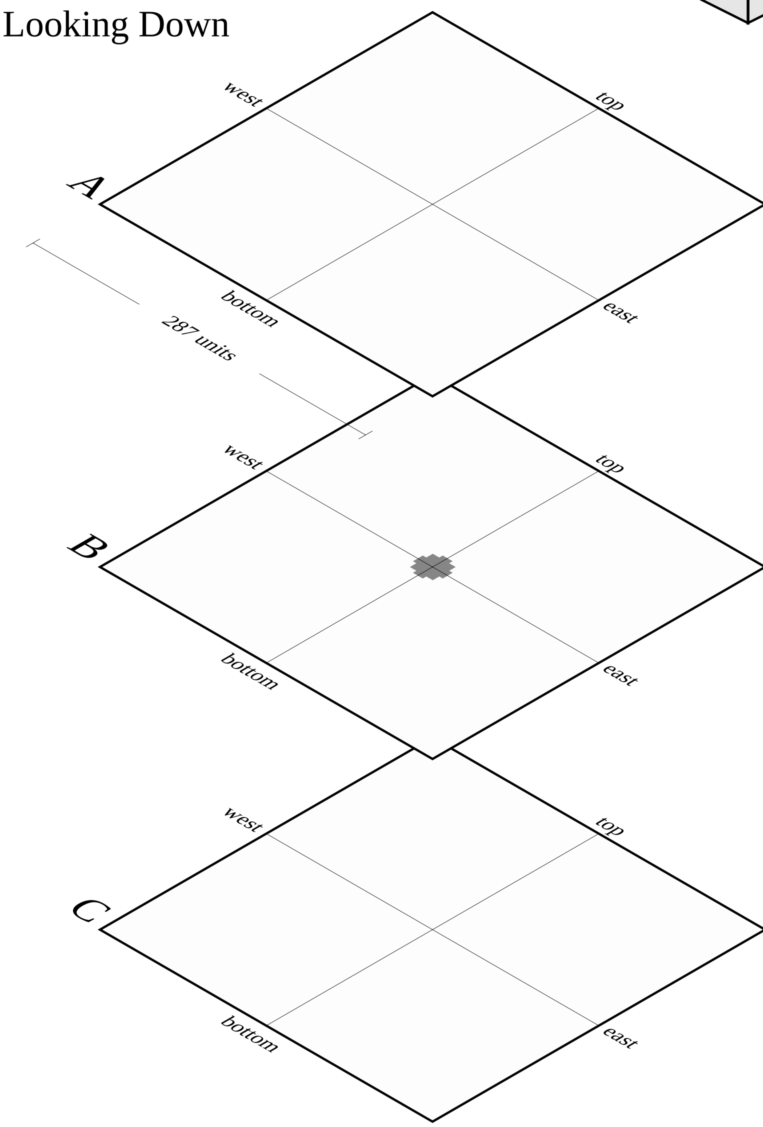
Horizontal Slices Through the Ellipsoids

Reference Cube



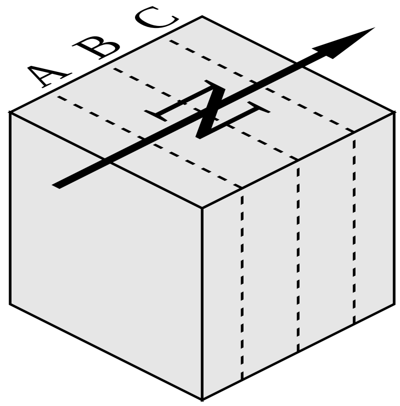
X-Y Planes Looking Down



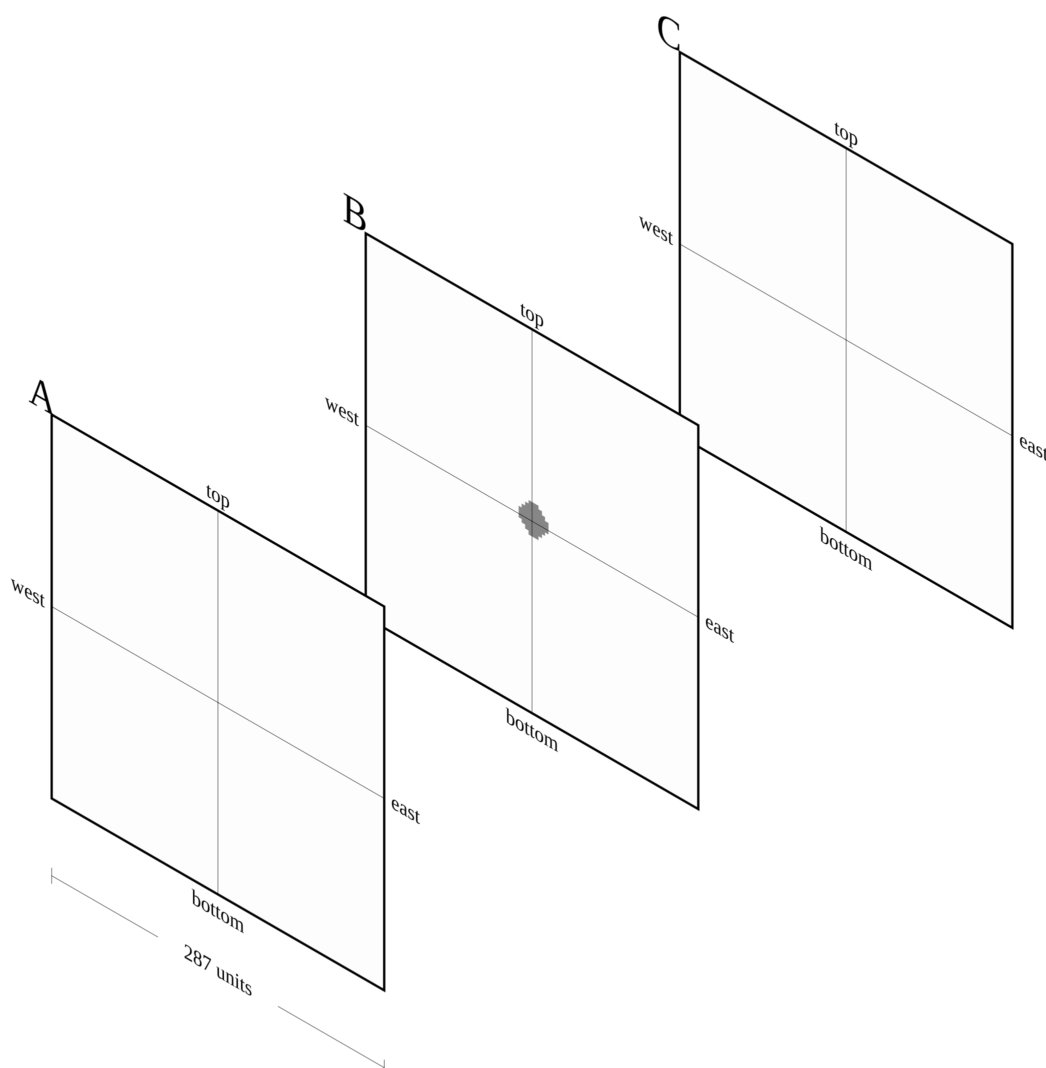
Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Cross Section Views Through the Ellipsoids

Reference Cube



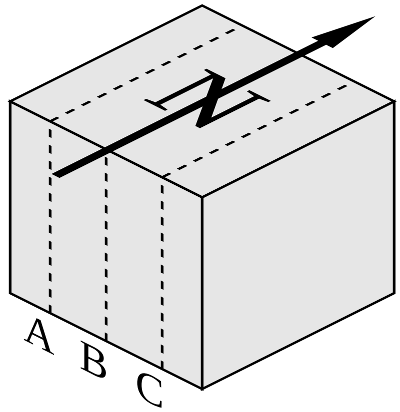
X-Z Planes Looking North



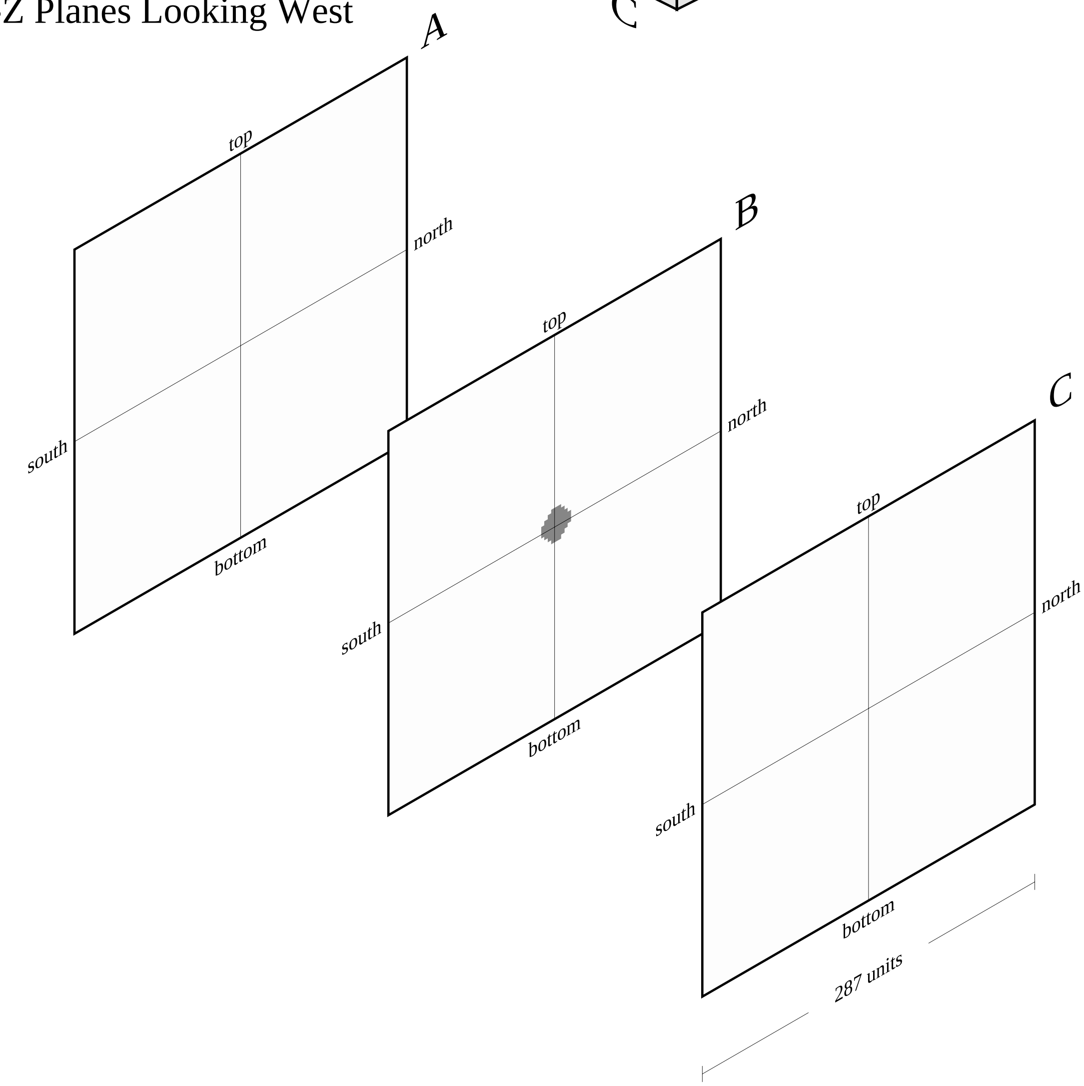
Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Long Section Views Through the Ellipsoids

Reference Cube

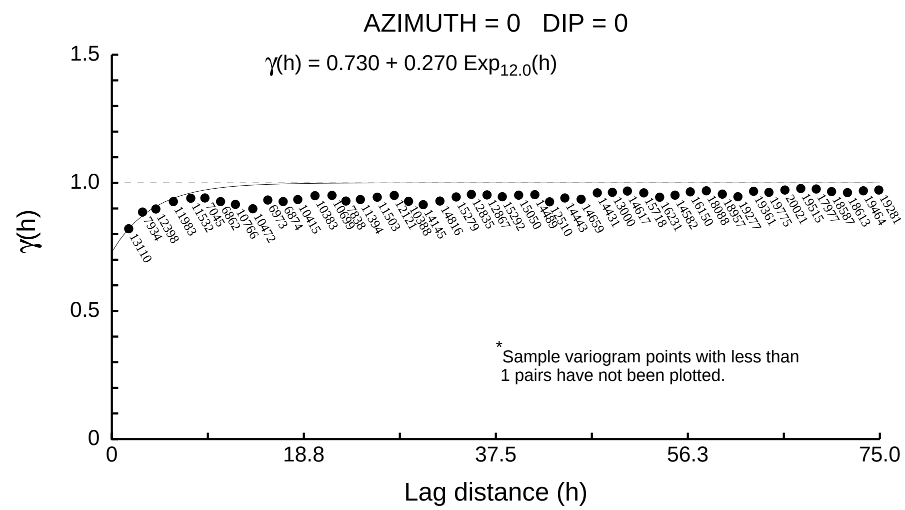


Y-Z Planes Looking West



Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Zone 1 Downhole Correlogram - Assays



Zone 1 Directional Correlograms - Assays

Medsystem and Vulcan Rotation Conventions

Nugget ==> 0.730
C1 ==> 0.270

First Structure -- Exponential with Practical Range

LH Rotation about the Z axis ==> 0
RH Rotation about the X' axis ==> 0
LH Rotation about the Y' axis ==> 75

Range along the Z' axis ==> 9.3	Azimuth ==> 270	Dip ==> 15
Range along the Y' axis ==> 22.1	Azimuth ==> 360	Dip ==> 0
Range along the X' axis ==> 13.2	Azimuth ==> 90	Dip ==> 75

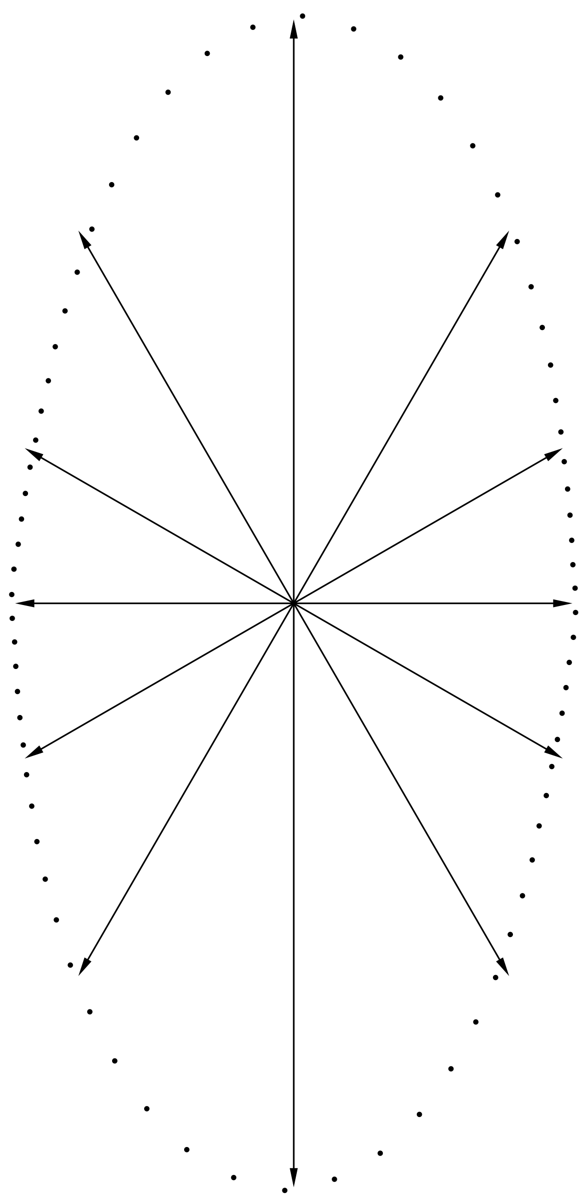
Modeling Criteria

Minimum number pairs req'd ==> 1
Sample variogram points weighted by # pairs

Zone 1 Directional Correlograms - Assays

Structure Number 1

Rose Diagram of Ranges Dipping 0 Degrees
Scale:

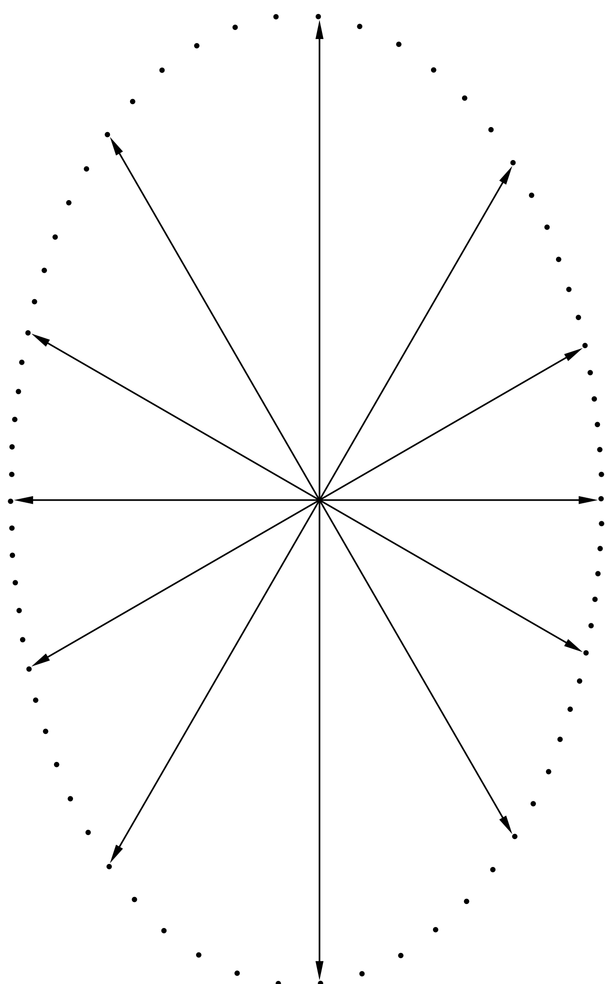


Zone 1 Directional Correlograms - Assays

Structure Number 1

Rose Diagram of Ranges Dipping 30 Degrees
Scale:

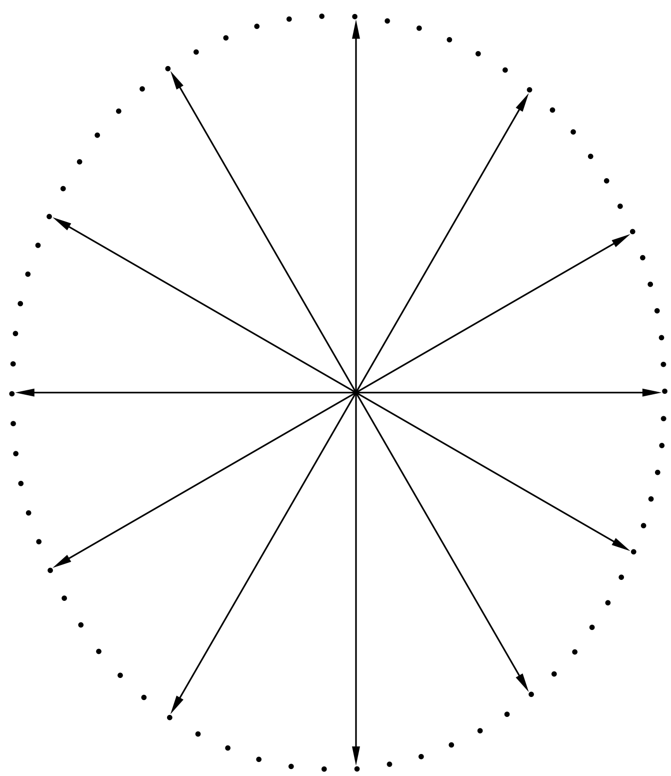
20 Units



Zone 1 Directional Correlograms - Assays

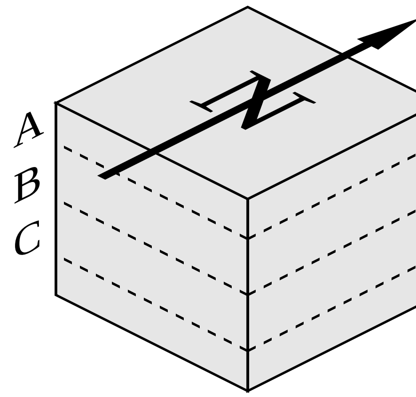
Structure Number 1

Rose Diagram of Ranges Dipping 60 Degrees
Scale:

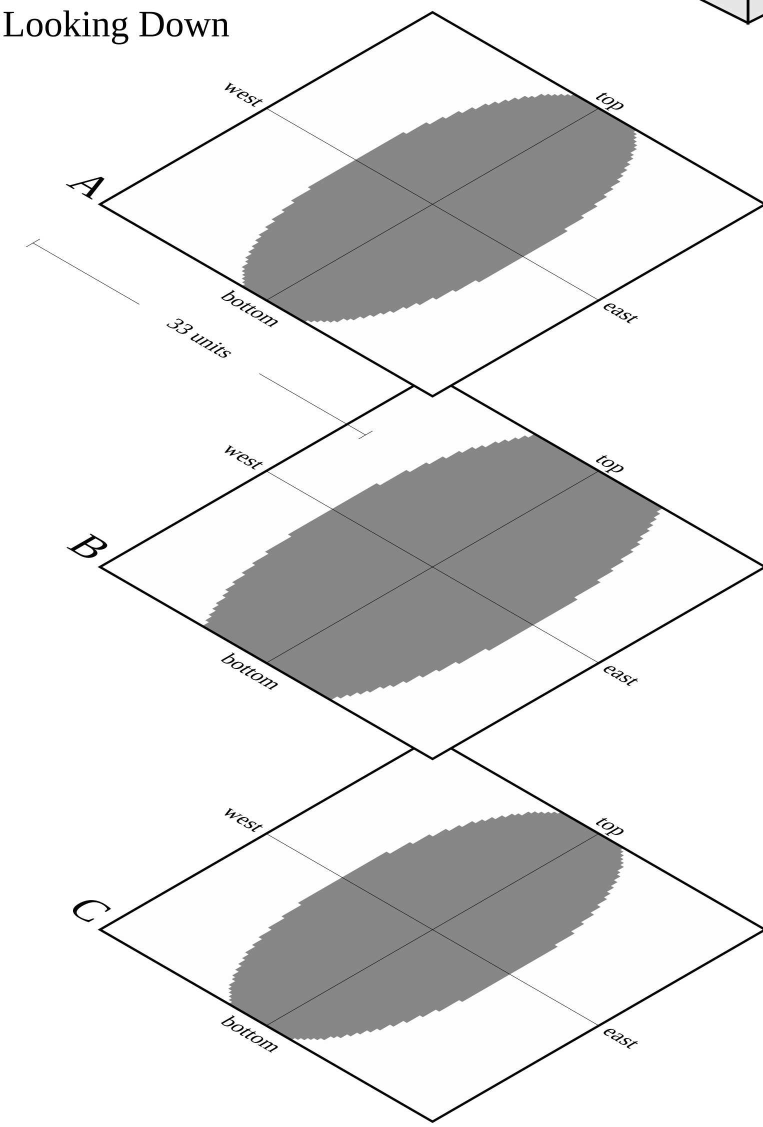


Horizontal Slices Through the Ellipsoids

Reference Cube



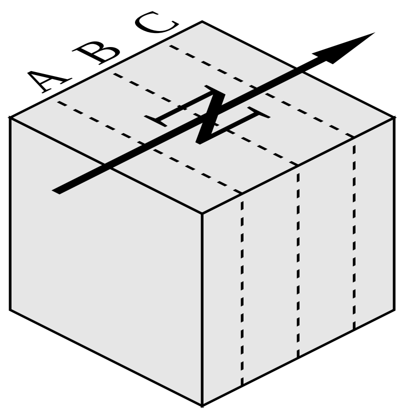
X-Y Planes Looking Down



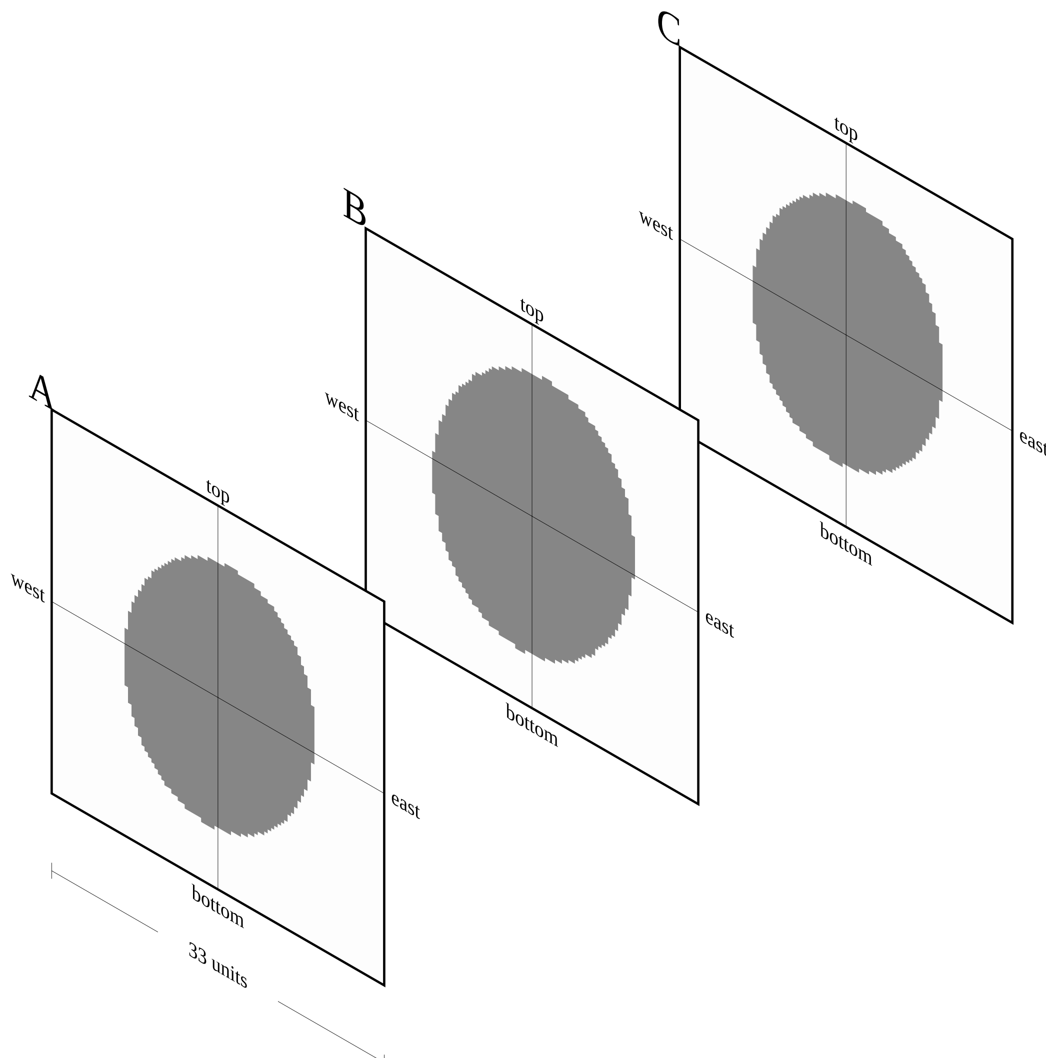
Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Cross Section Views Through the Ellipsoids

Reference Cube



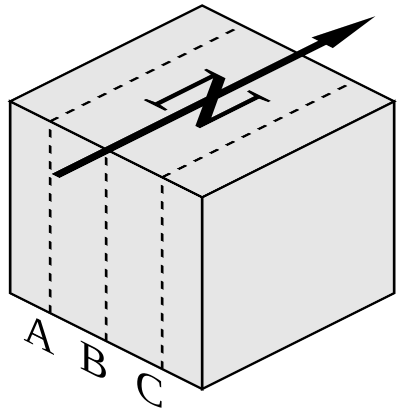
X-Z Planes Looking North



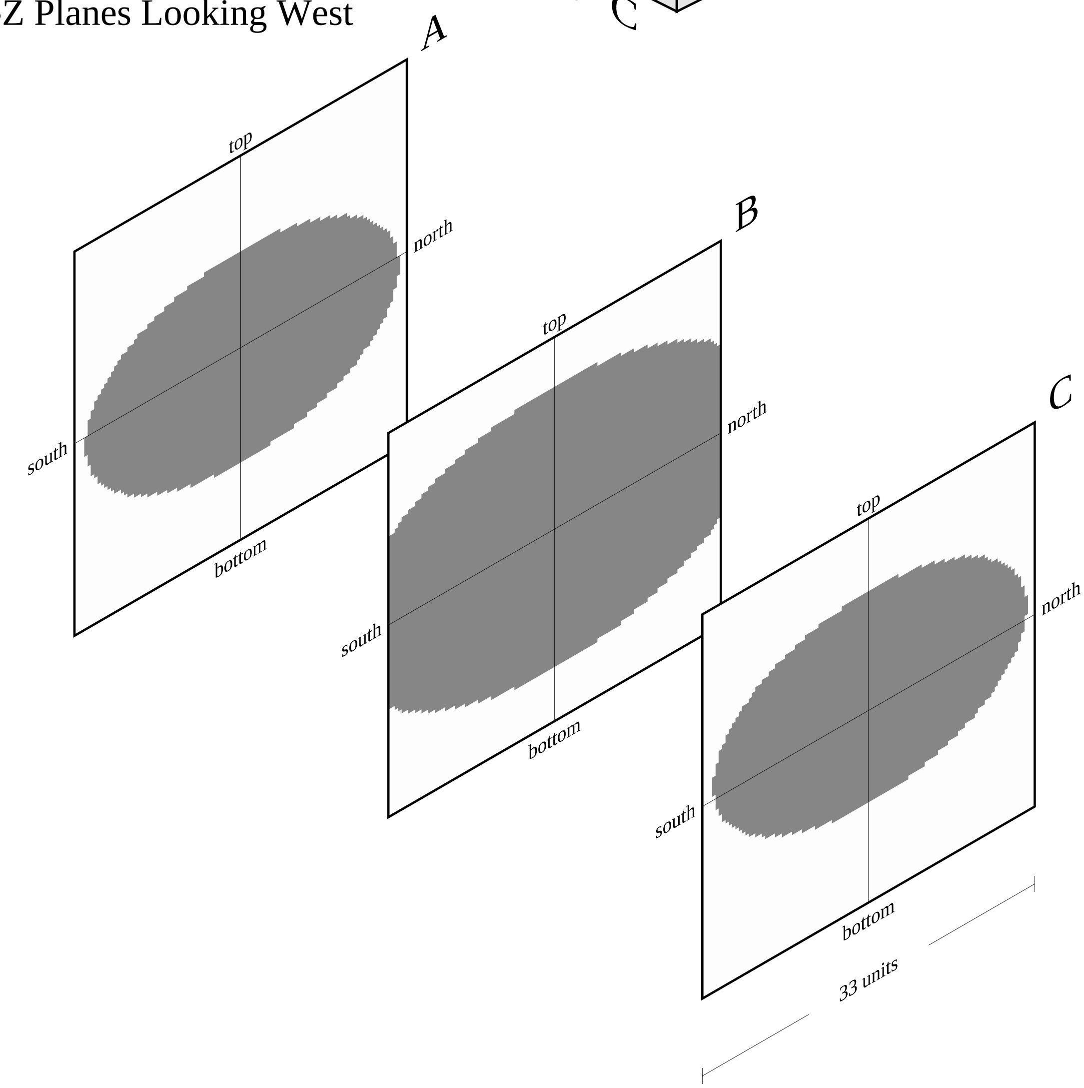
Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Long Section Views Through the Ellipsoids

Reference Cube

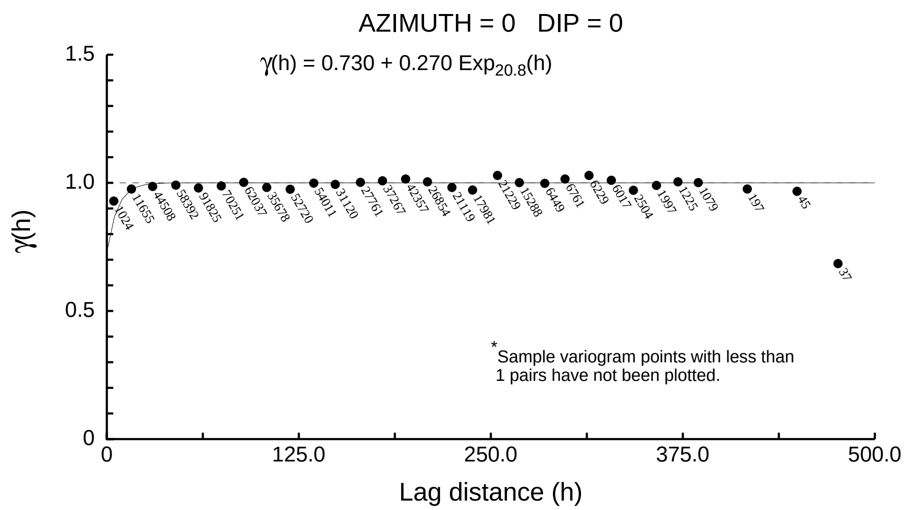


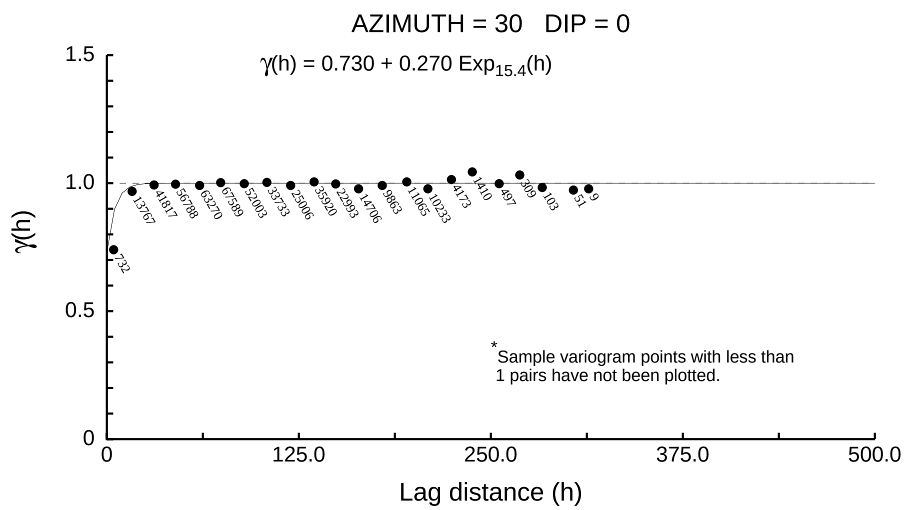
Y-Z Planes Looking West

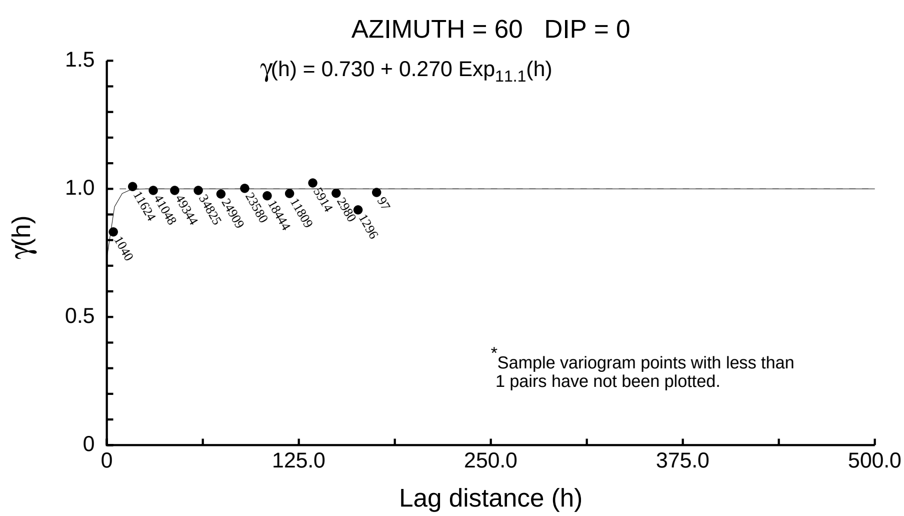


Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

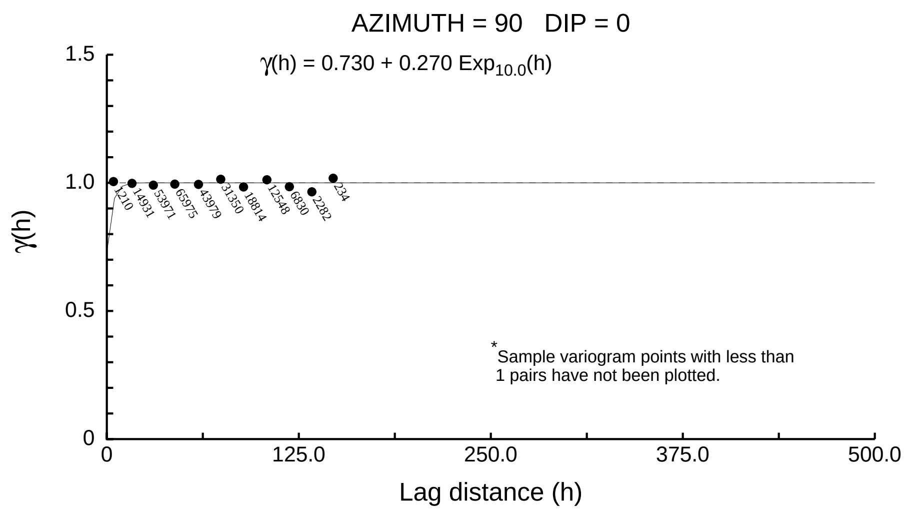
Zone 1 Directional Correlograms - Assays

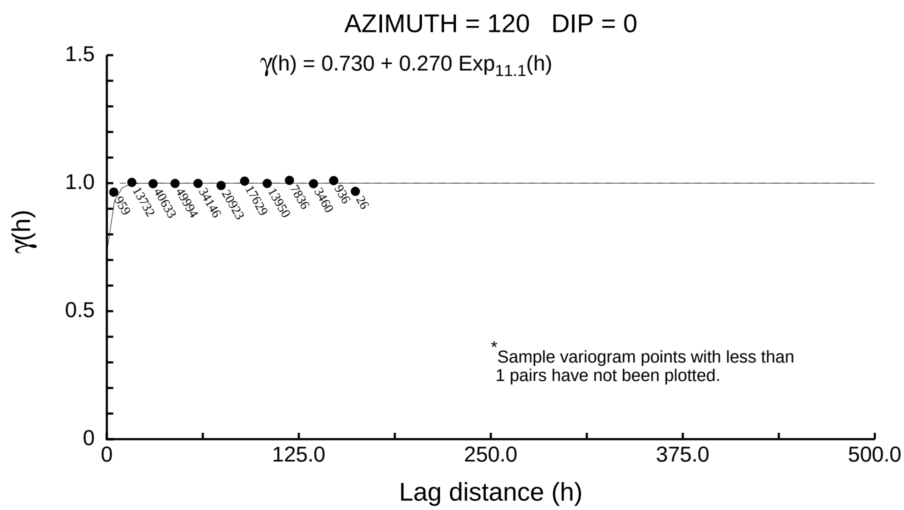


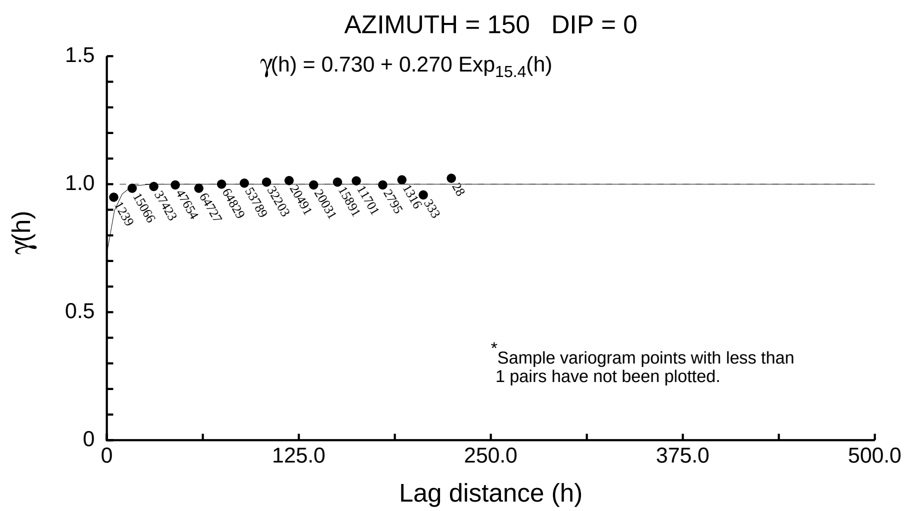




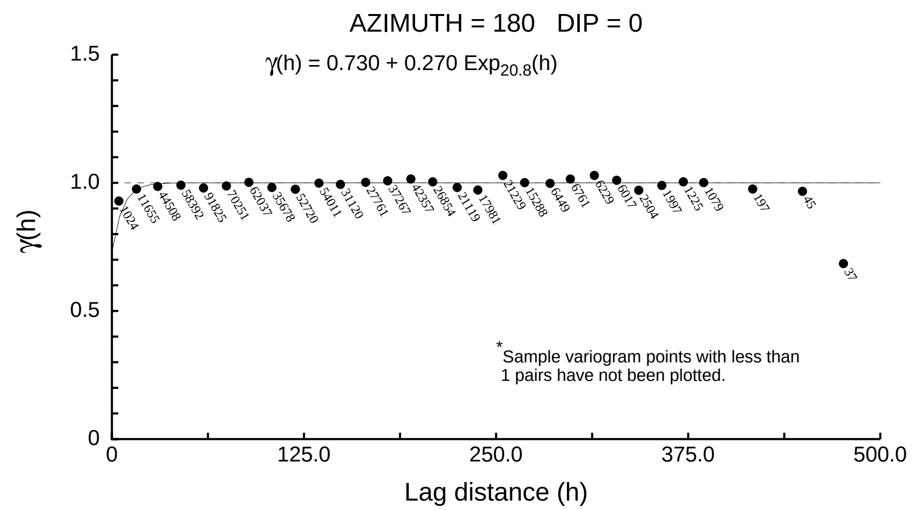
Zone 1 Directional Correlograms - Assays

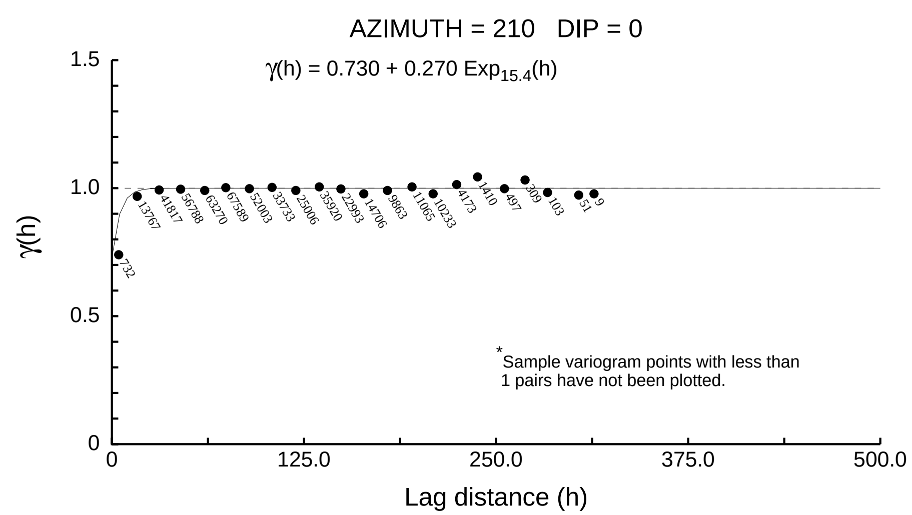


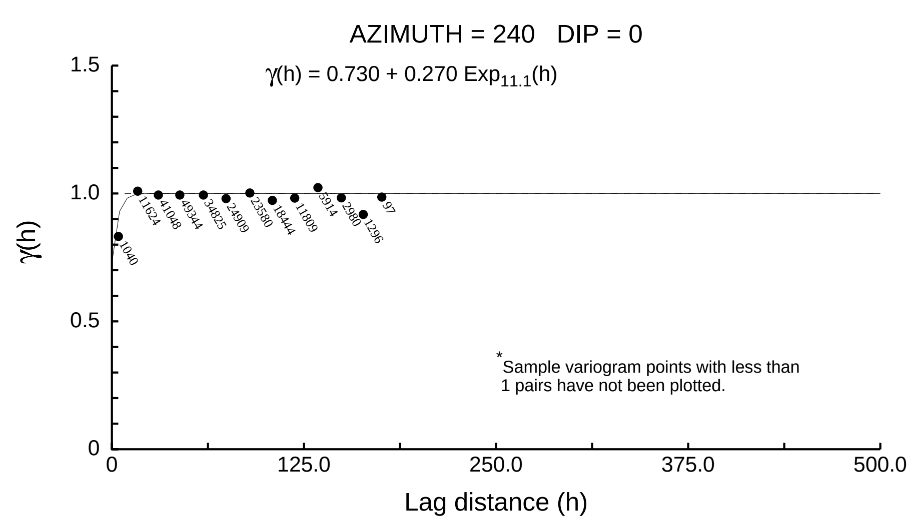




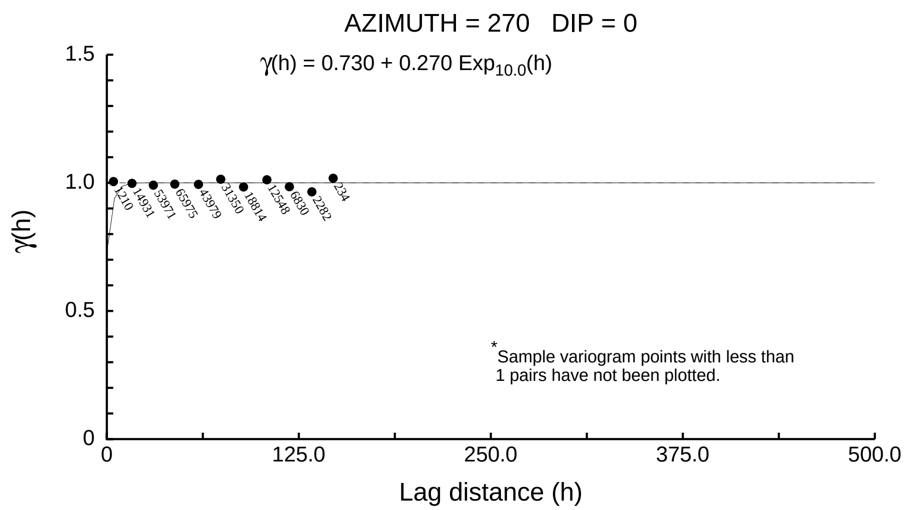
Zone 1 Directional Correlograms - Assays

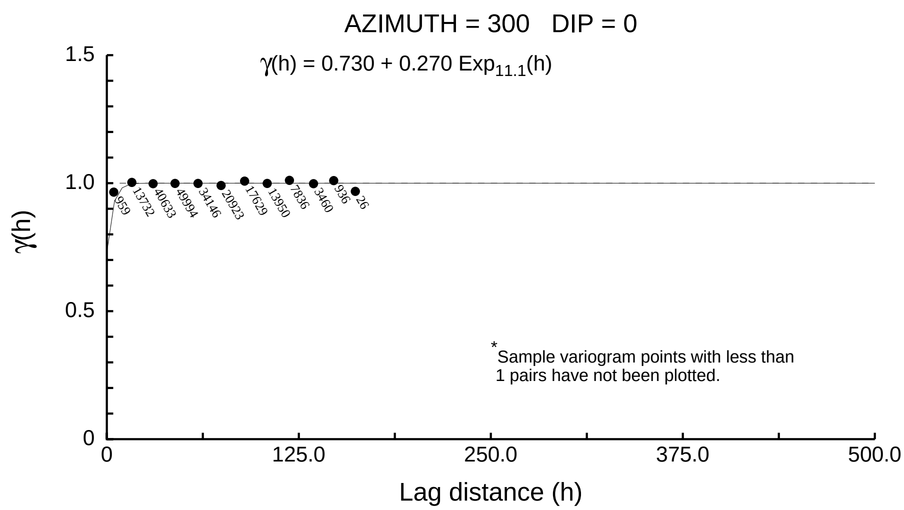


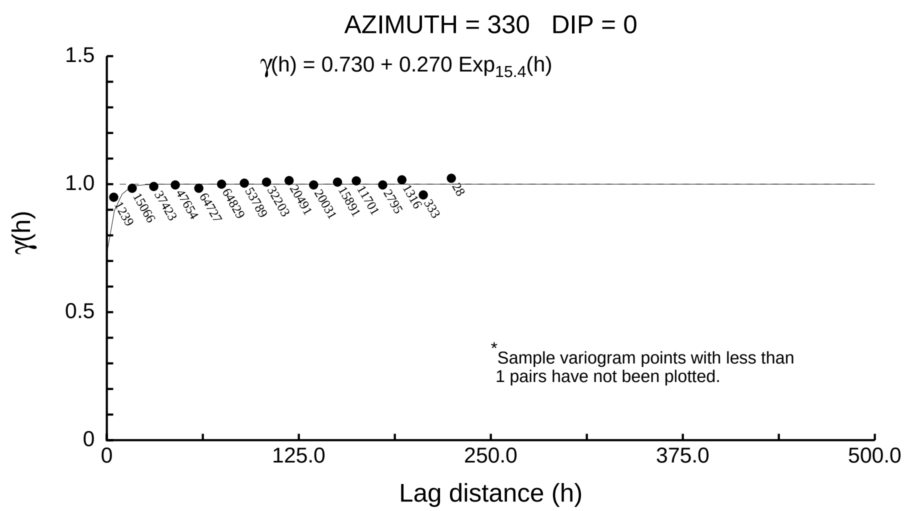




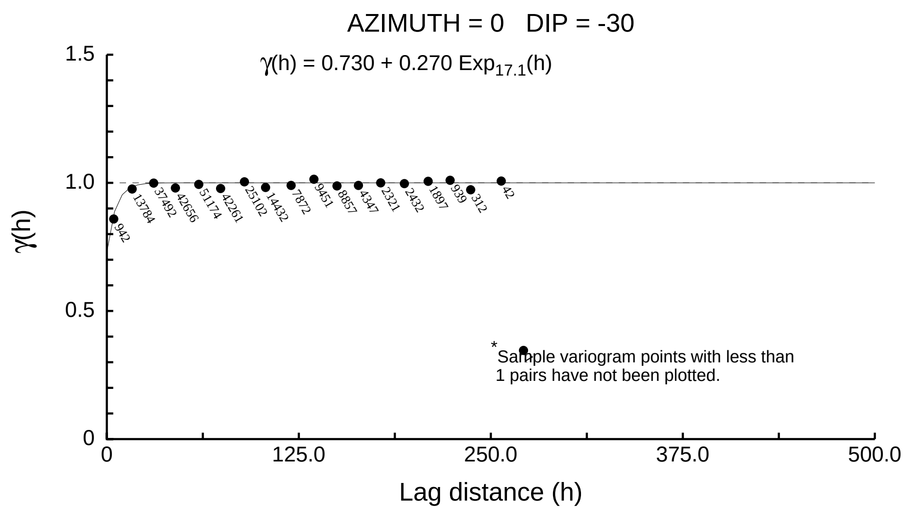
Zone 1 Directional Correlograms - Assays

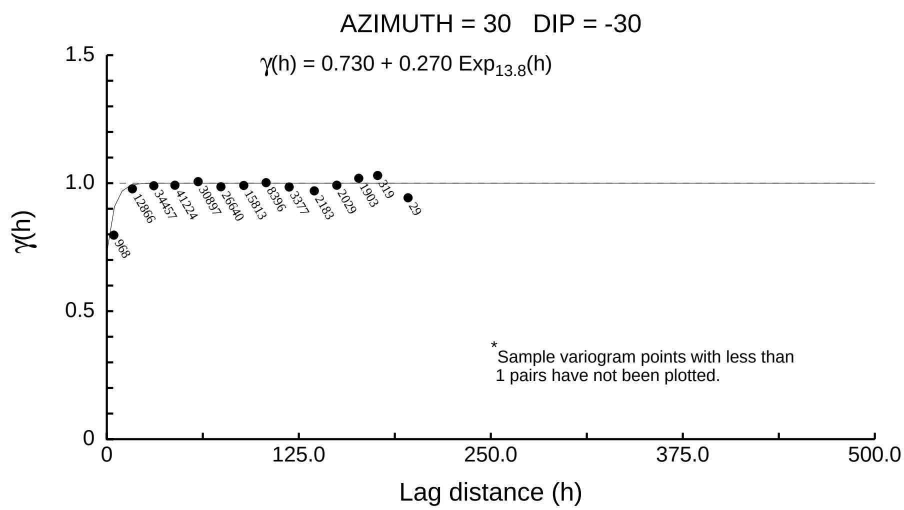


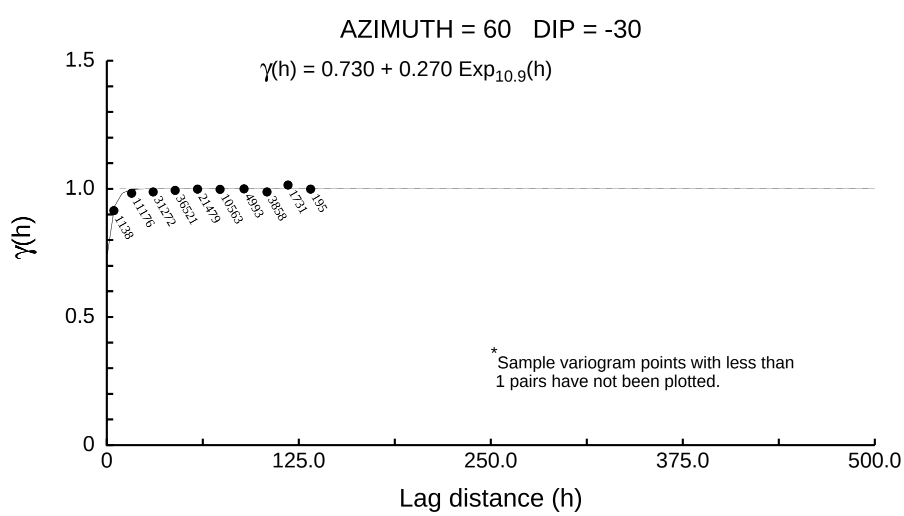




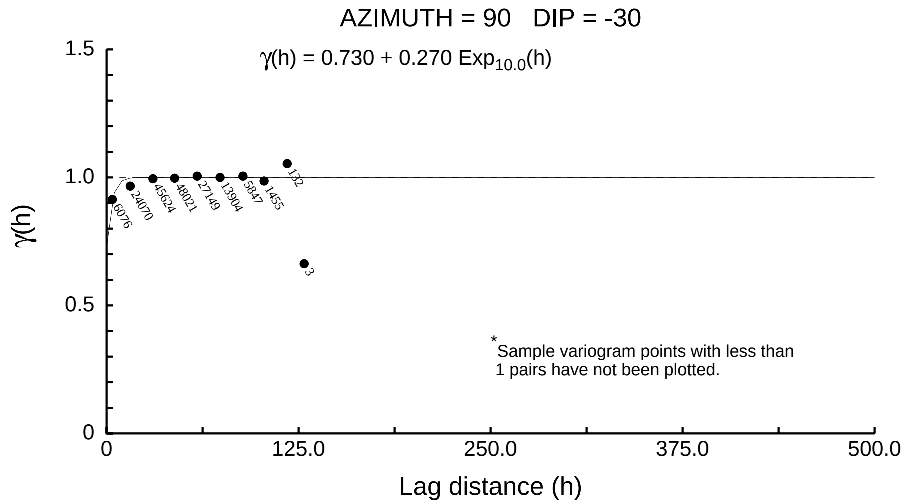
Zone 1 Directional Correlograms - Assays

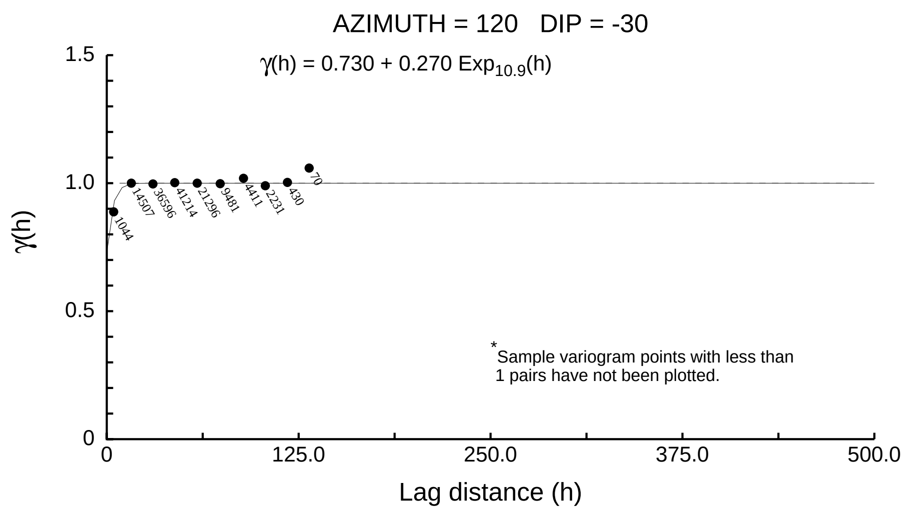


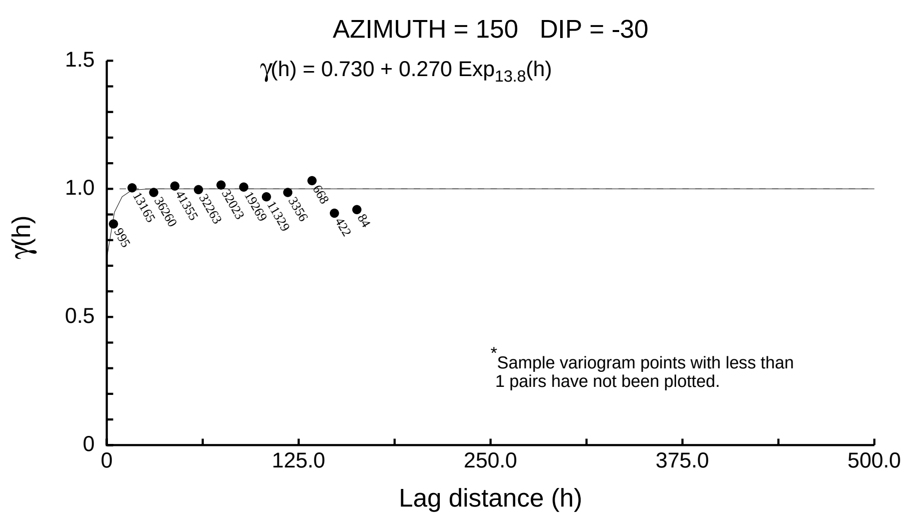




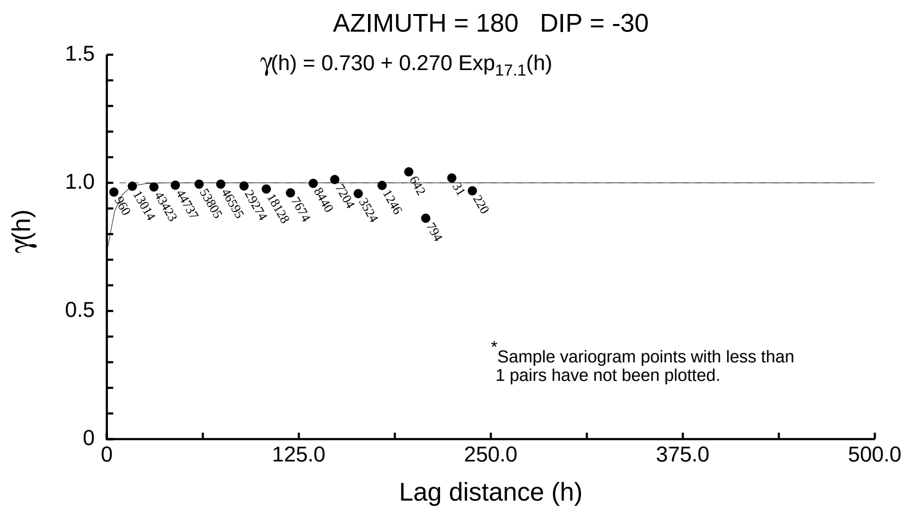
Zone 1 Directional Correlograms - Assays

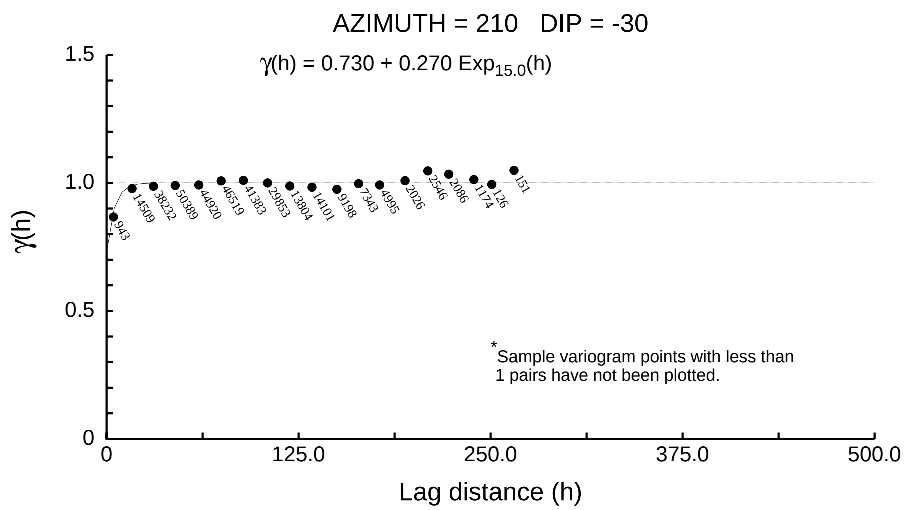


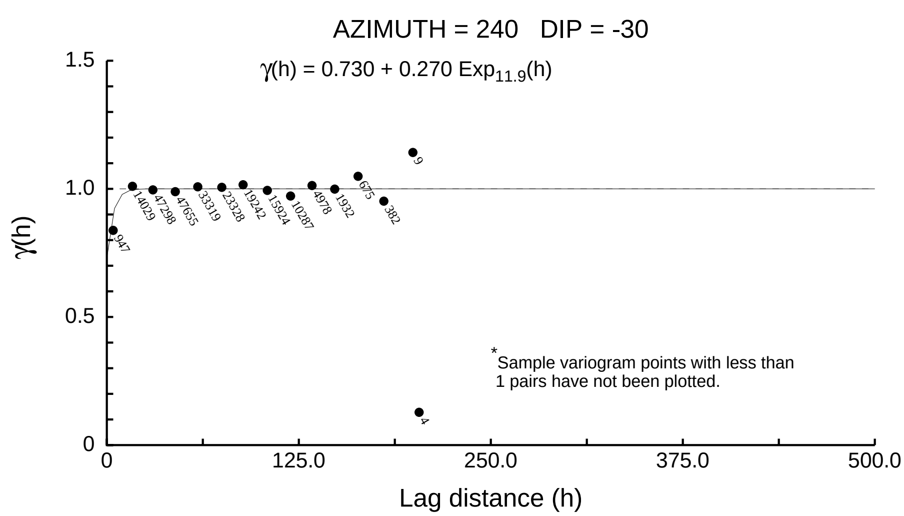




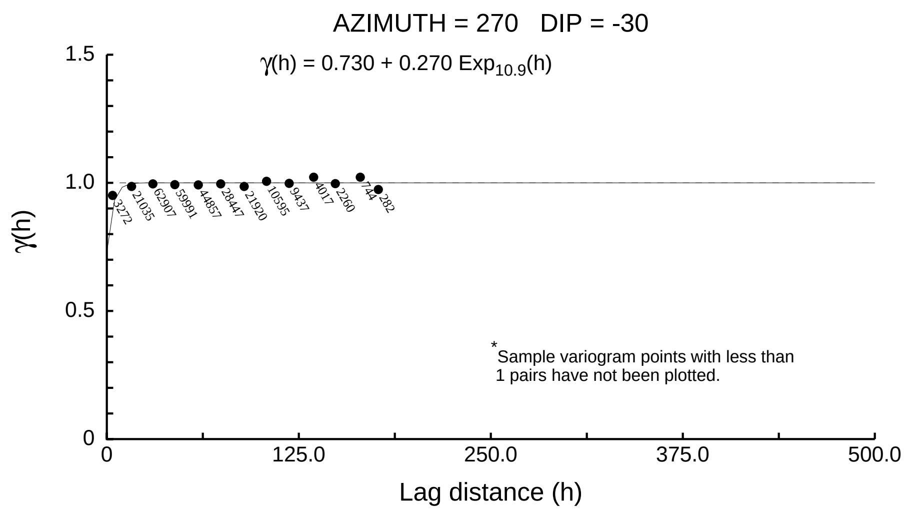
Zone 1 Directional Correlograms - Assays

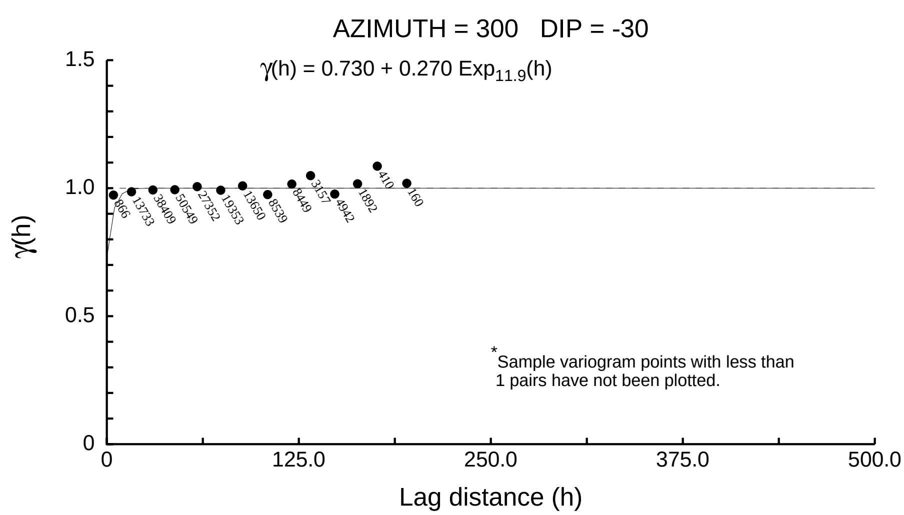


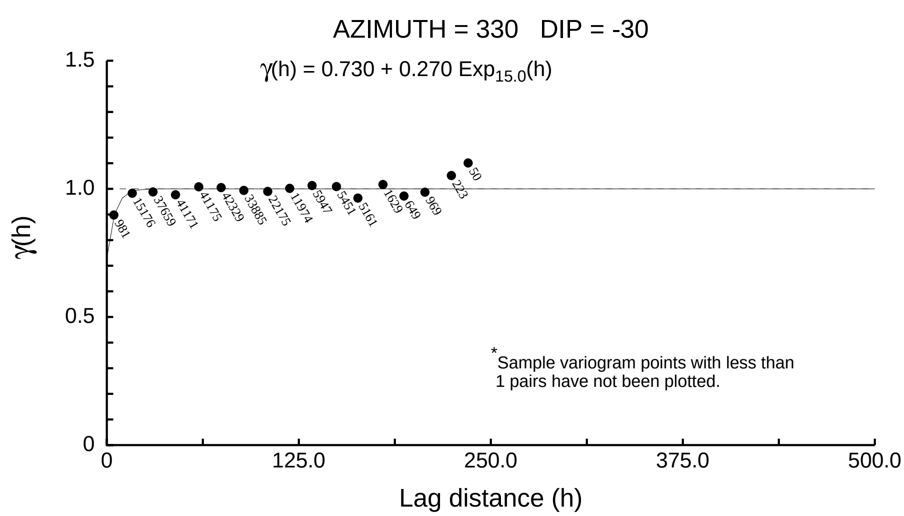




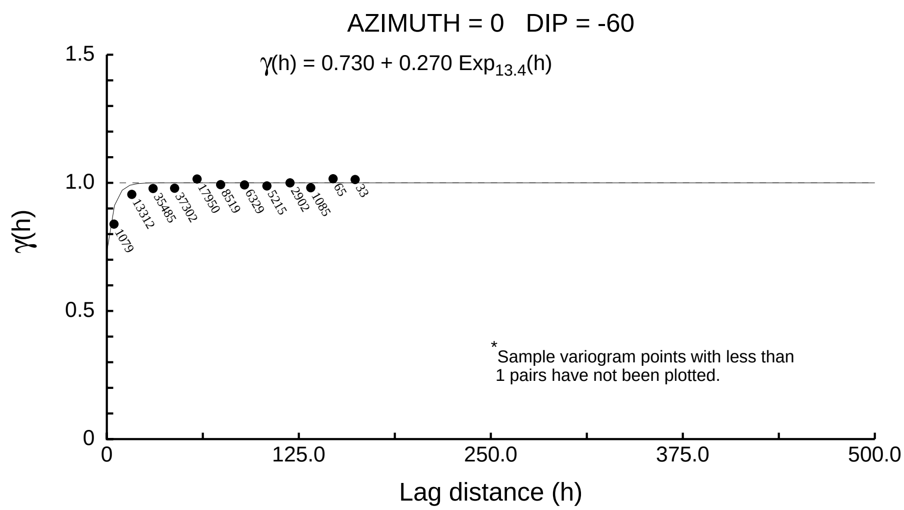
Zone 1 Directional Correlograms - Assays

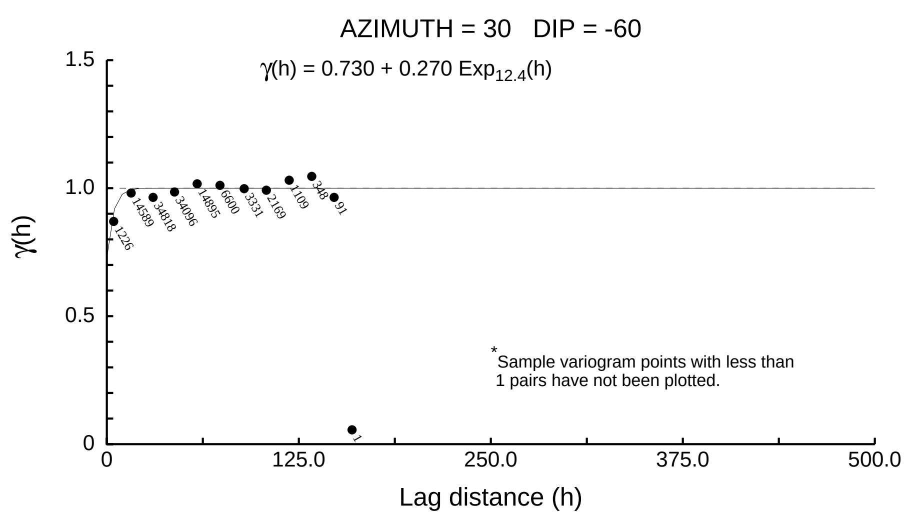


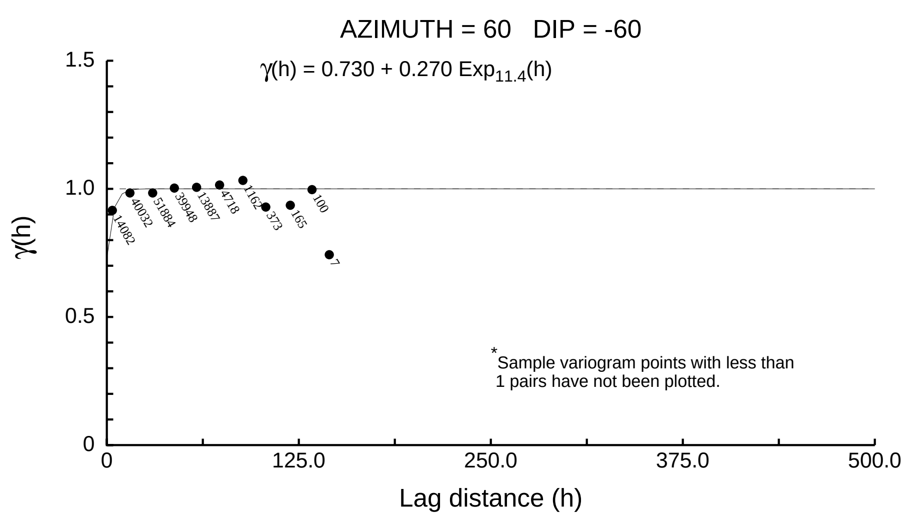




Zone 1 Directional Correlograms - Assays







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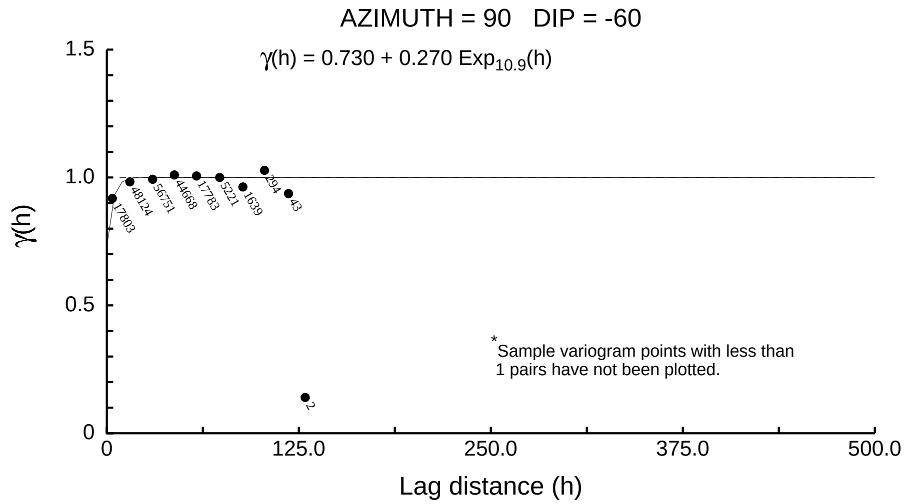
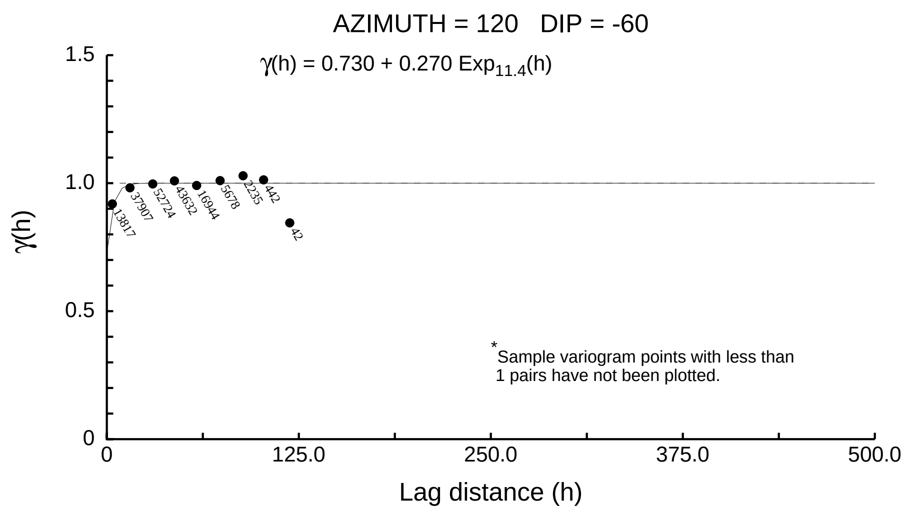
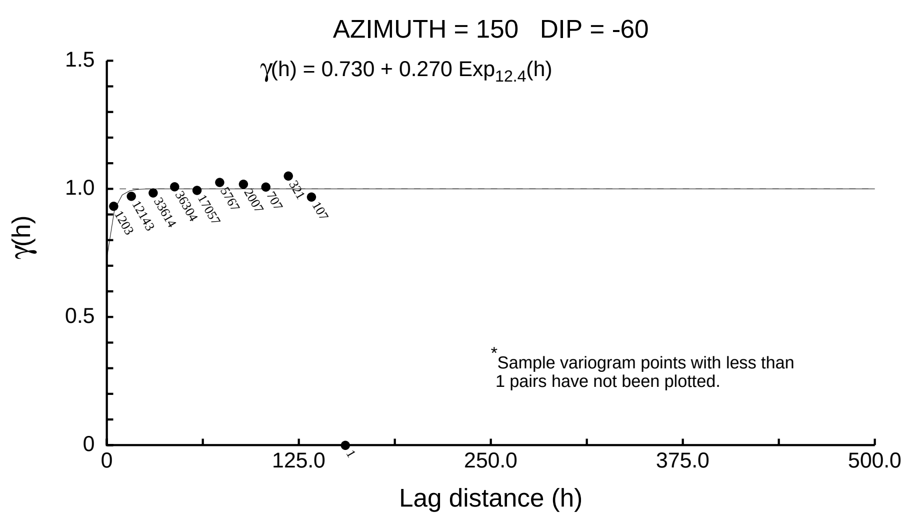
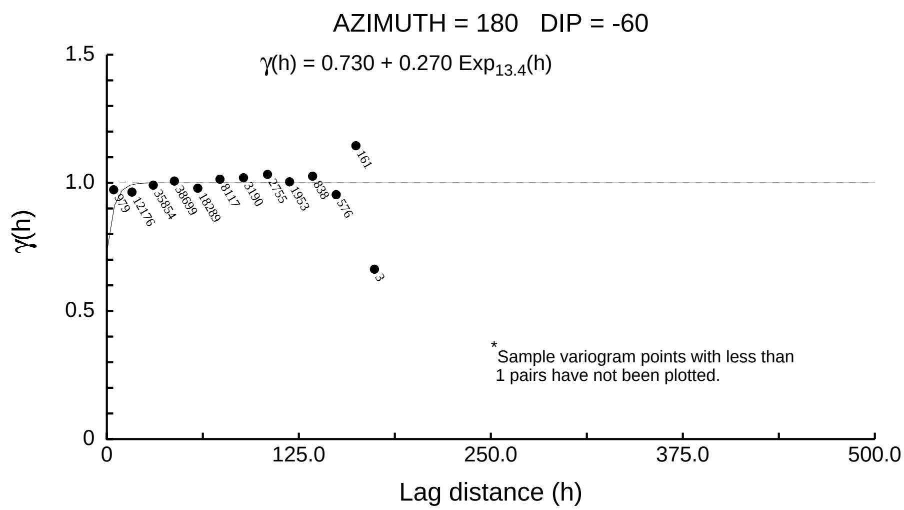
Zone 1 Directional Correlograms - Assays

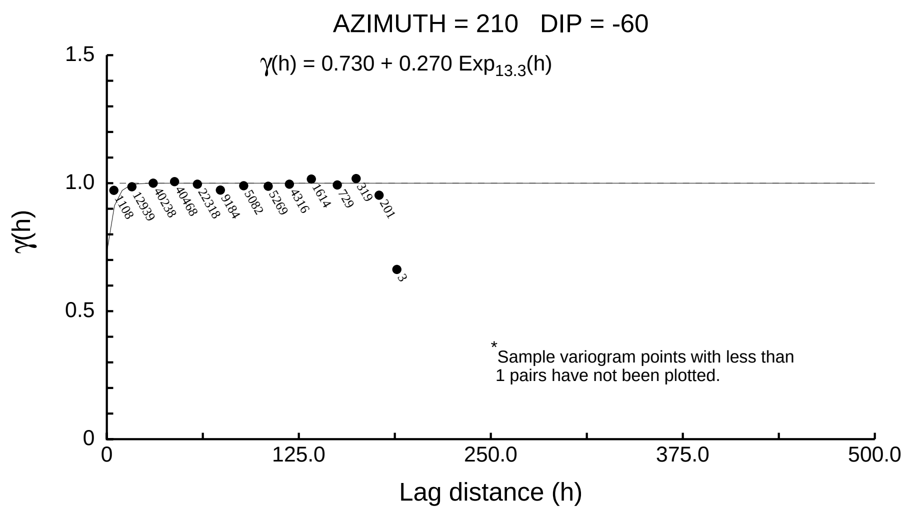


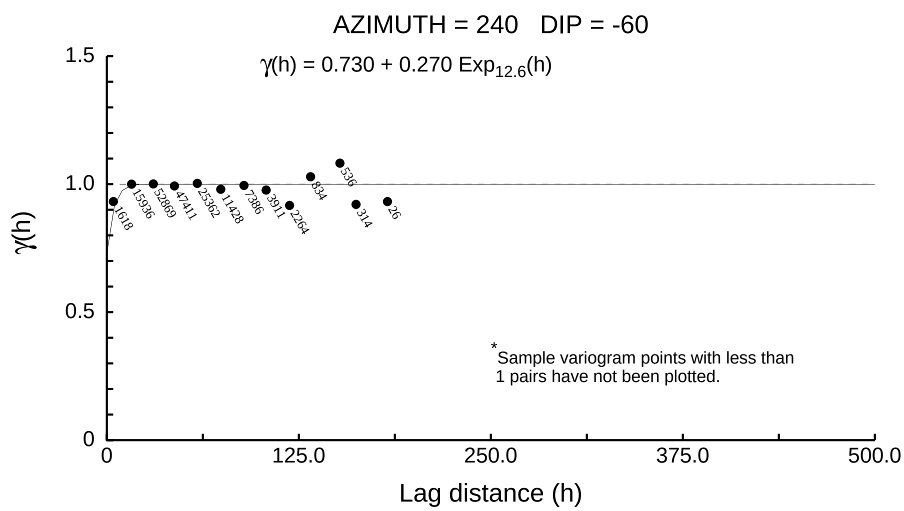




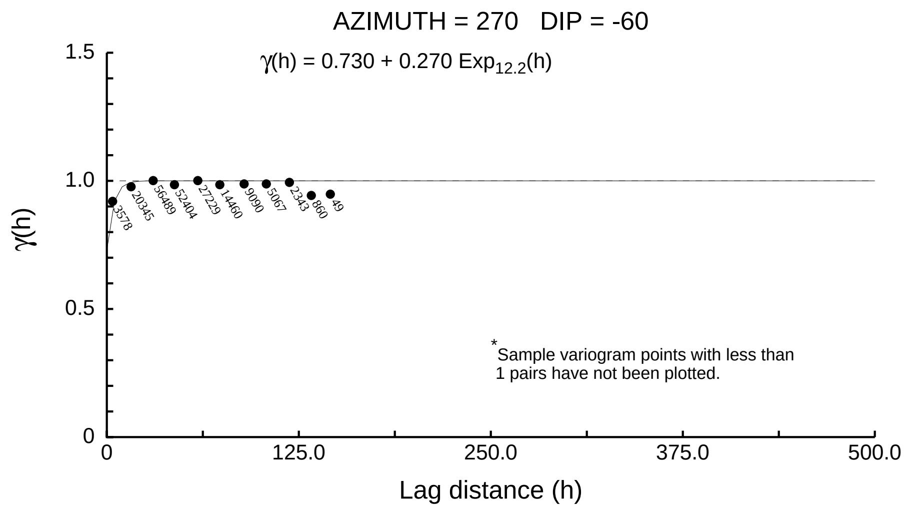
Zone 1 Directional Correlograms - Assays

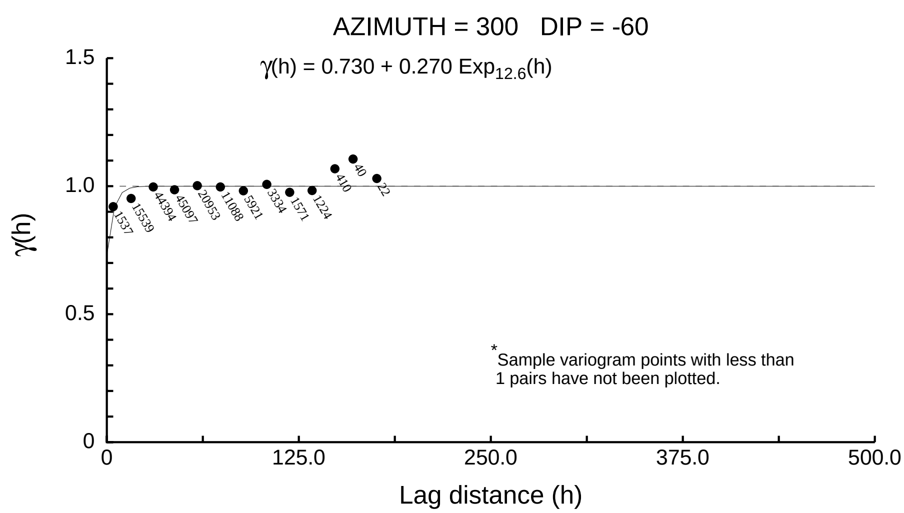


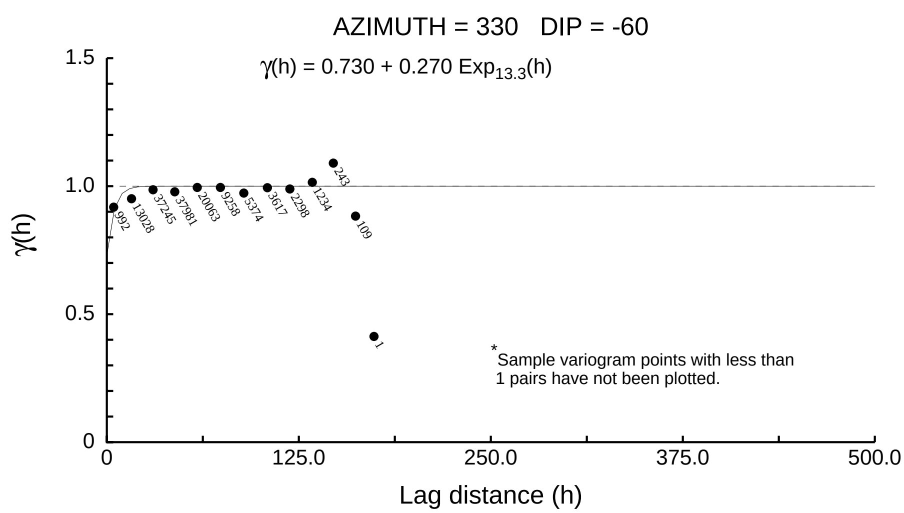




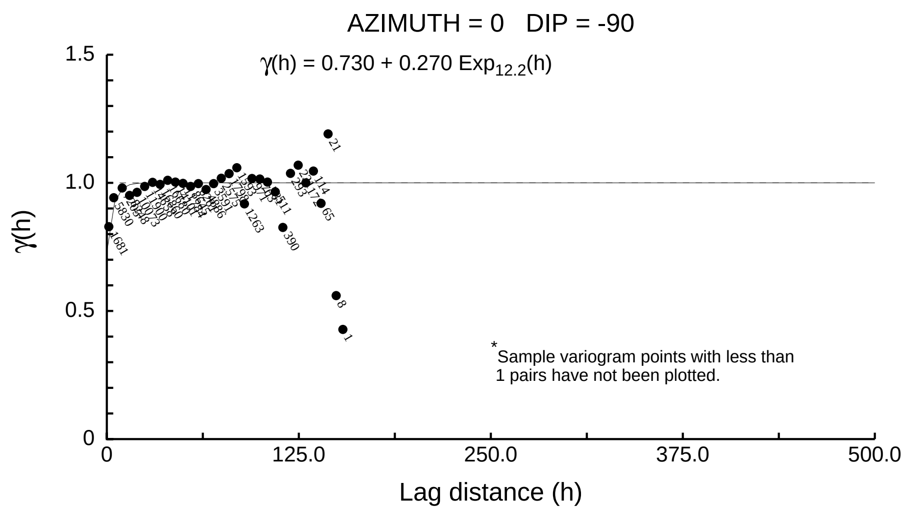
Zone 1 Directional Correlograms - Assays







Zone 1 Directional Correlograms - Assays



Zone 2 Downhole Correlogram - Assays

Medsystem and Vulcan Rotation Conventions

Nugget ==> 0.730
C1 ==> 0.270

First Structure -- Exponential with Practical Range

LH Rotation about the Z axis ==> 0
RH Rotation about the X' axis ==> 0
LH Rotation about the Y' axis ==> 0
Range along the Z' axis ==> 14.0 Azimuth ==> 90 Dip ==> 90
Range along the Y' axis ==> 14.0 Azimuth ==> 360 Dip ==> 0
Range along the X' axis ==> 14.0 Azimuth ==> 90 Dip ==> 0

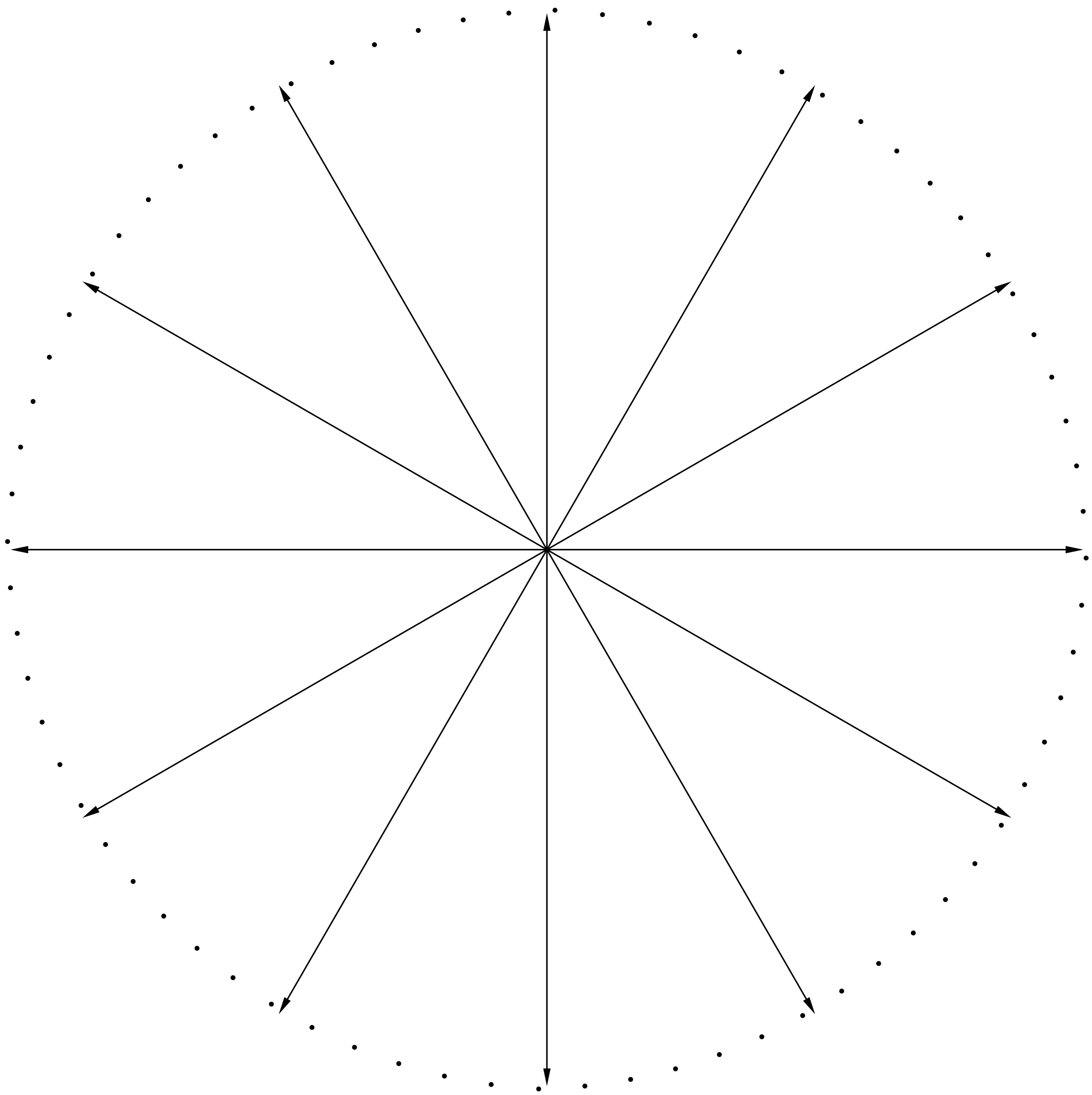
Modeling Criteria

Minimum number pairs req'd ==> 1
Sample variogram points weighted by # pairs

Zone 2 Downhole Correlogram - Assays

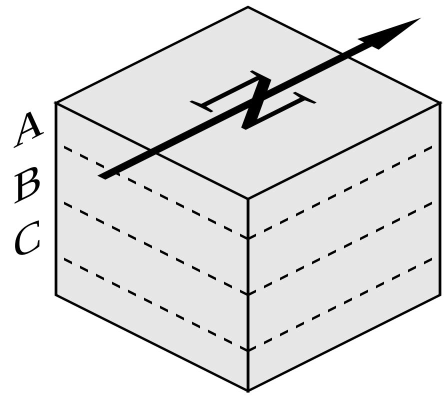
Structure Number 1

Rose Diagram of Ranges Dipping 0 Degrees
Scale:

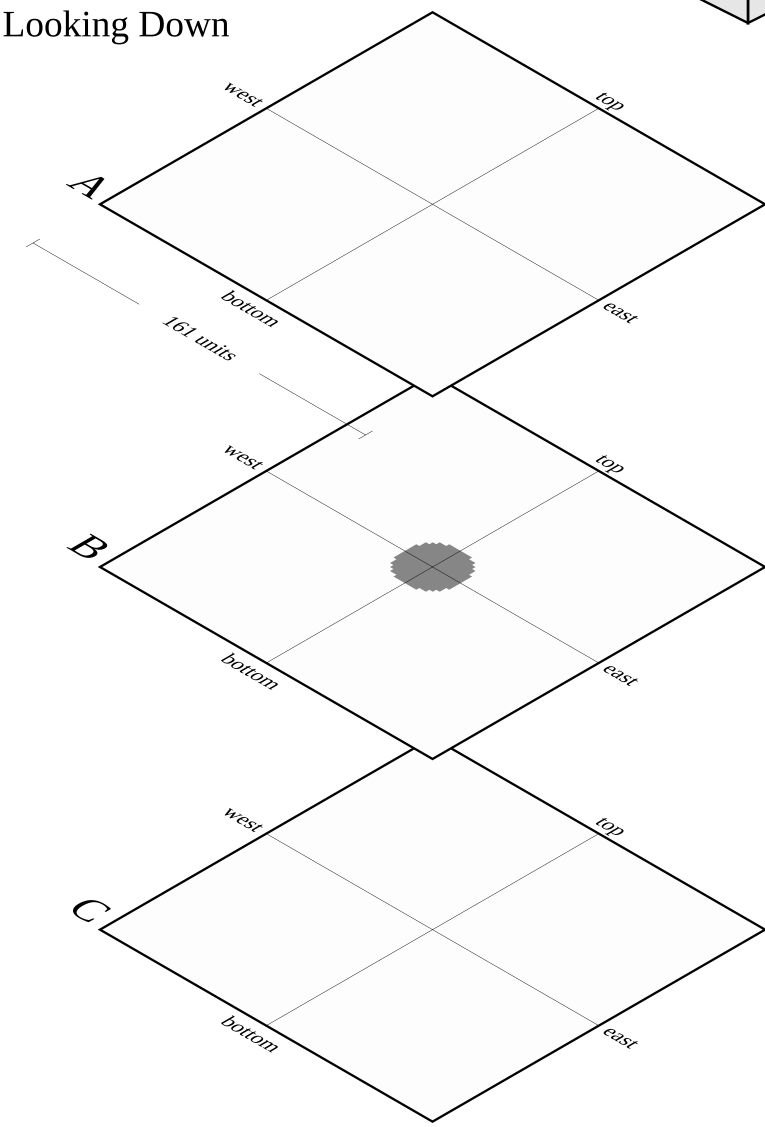


Horizontal Slices Through the Ellipsoids

Reference Cube



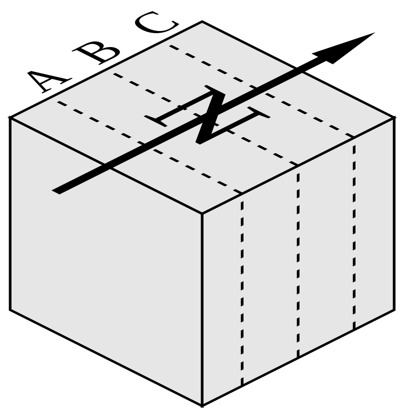
X-Y Planes Looking Down



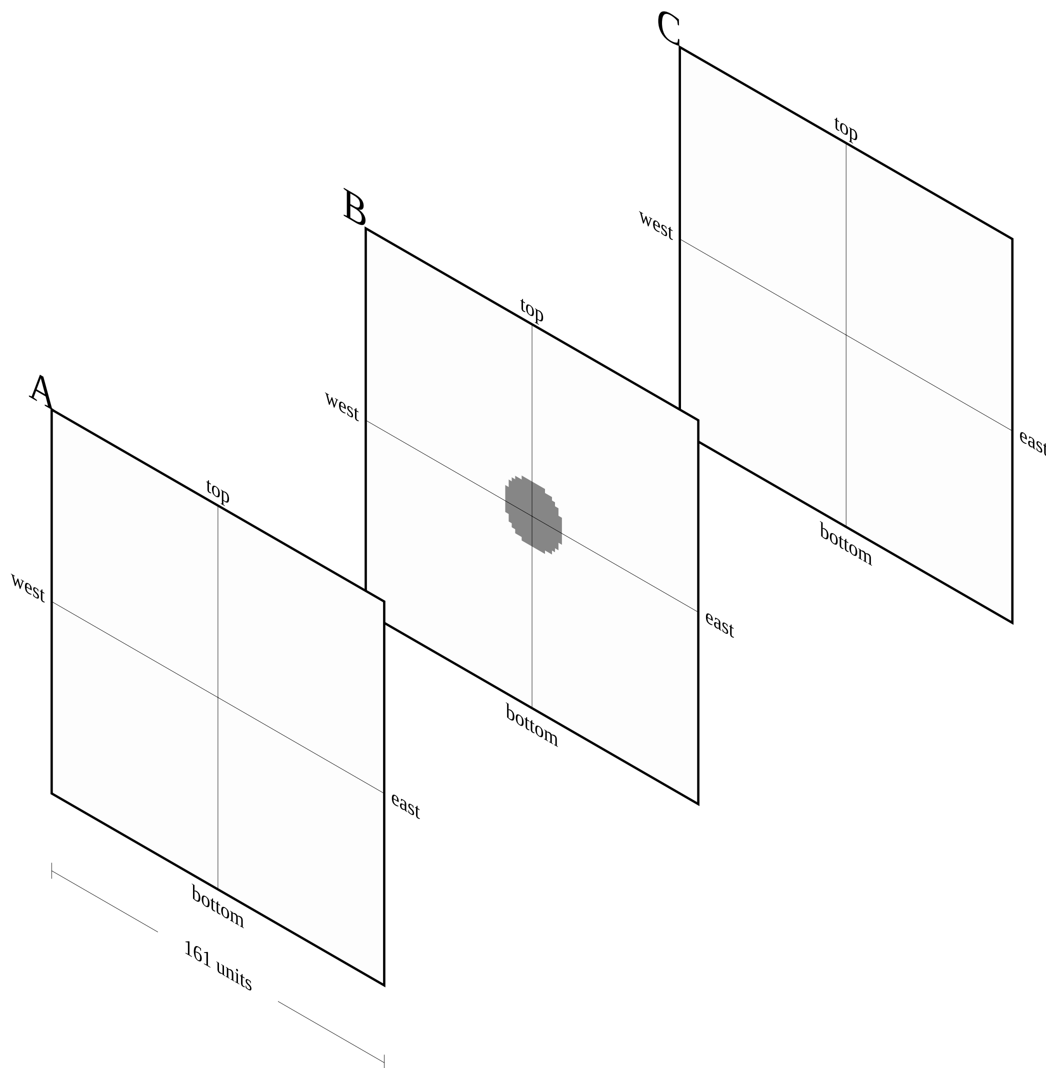
Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Cross Section Views Through the Ellipsoids

Reference Cube



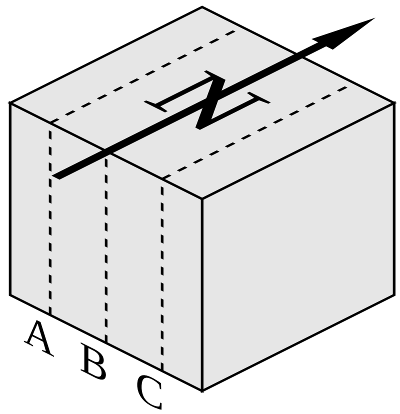
X-Z Planes Looking North



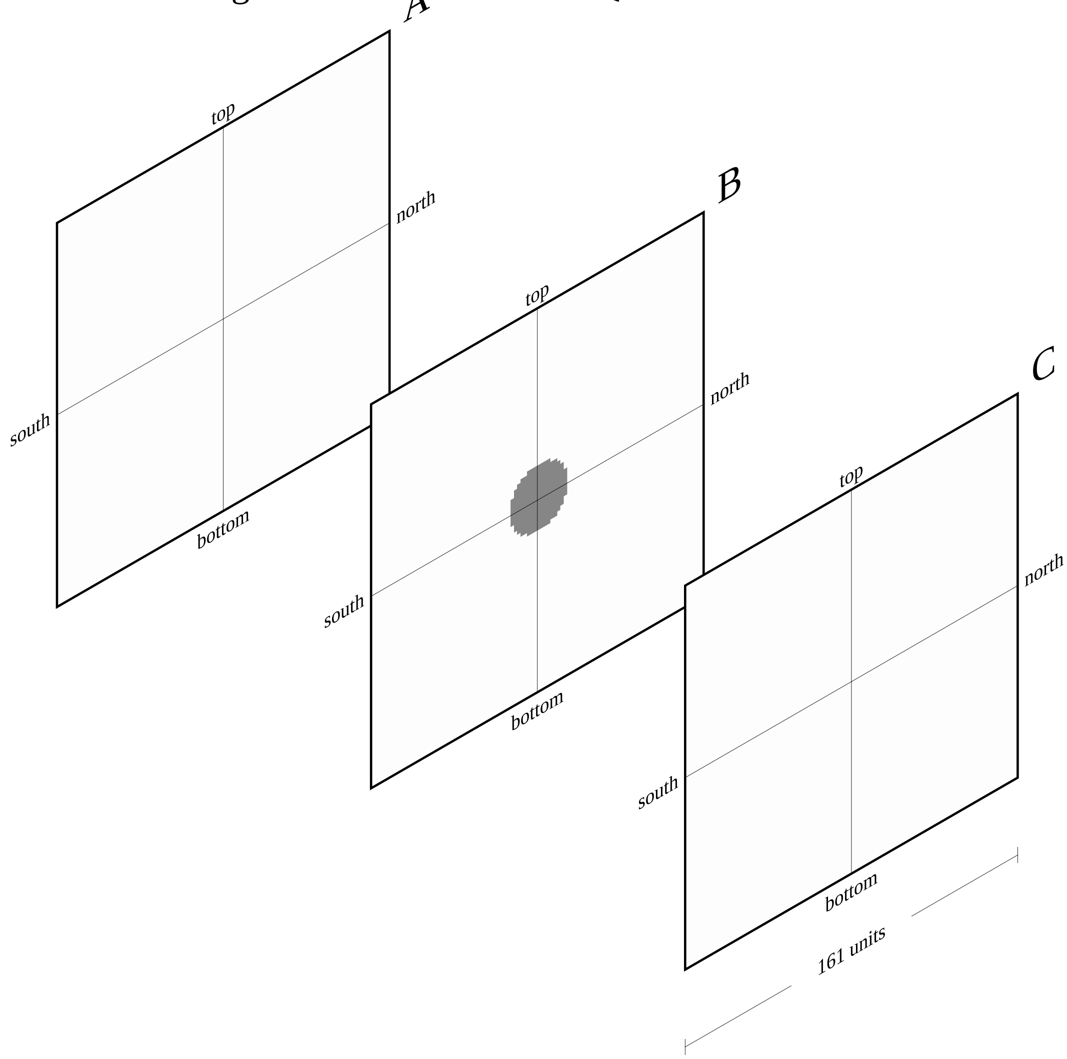
Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Long Section Views Through the Ellipsoids

Reference Cube

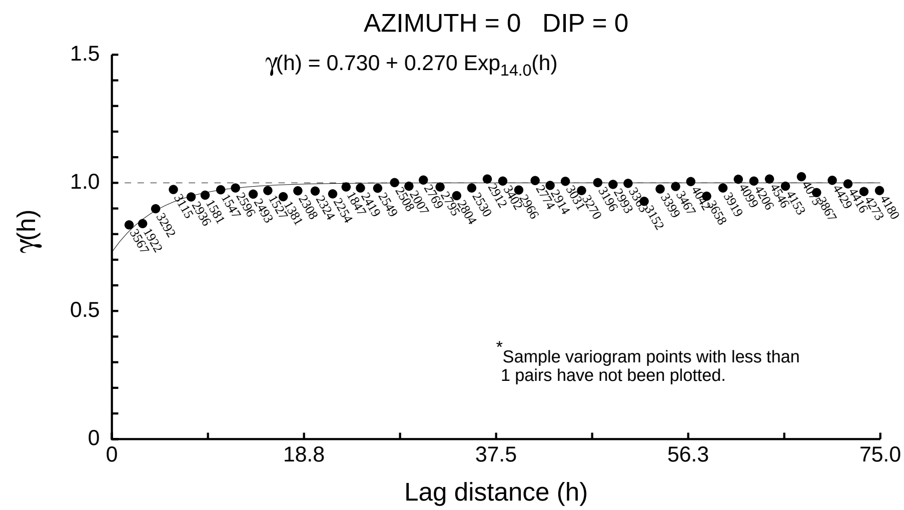


Y-Z Planes Looking West



Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Zone 2 Downhole Correlogram - Assays



Zone 2 Directional Correlograms - Assays

Medsystem and Vulcan Rotation Conventions

Nugget ==> 0.730
C1 ==> 0.270

First Structure -- Exponential with Practical Range

LH Rotation about the Z axis ==> 0
RH Rotation about the X' axis ==> 0
LH Rotation about the Y' axis ==> 75
Range along the Z' axis ==> 13.4 Azimuth ==> 270 Dip ==> 15
Range along the Y' axis ==> 31.0 Azimuth ==> 360 Dip ==> 0
Range along the X' axis ==> 24.0 Azimuth ==> 90 Dip ==> 75

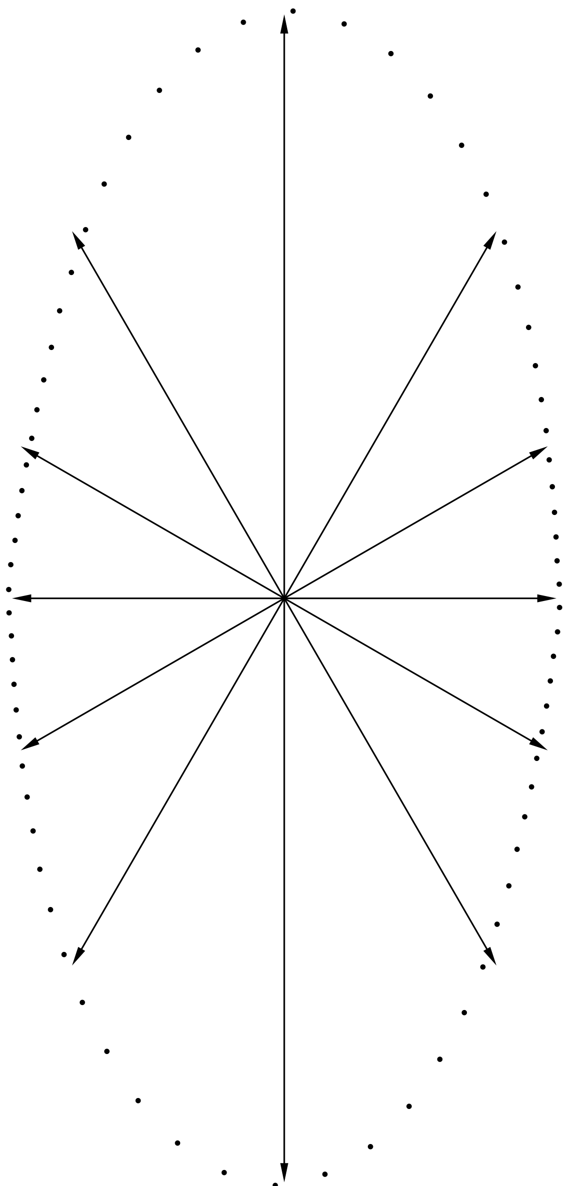
Modeling Criteria

Minimum number pairs req'd ==> 1
Sample variogram points weighted by # pairs

Zone 2 Directional Correlograms - Assays

Structure Number 1

Rose Diagram of Ranges Dipping 0 Degrees
Scale:

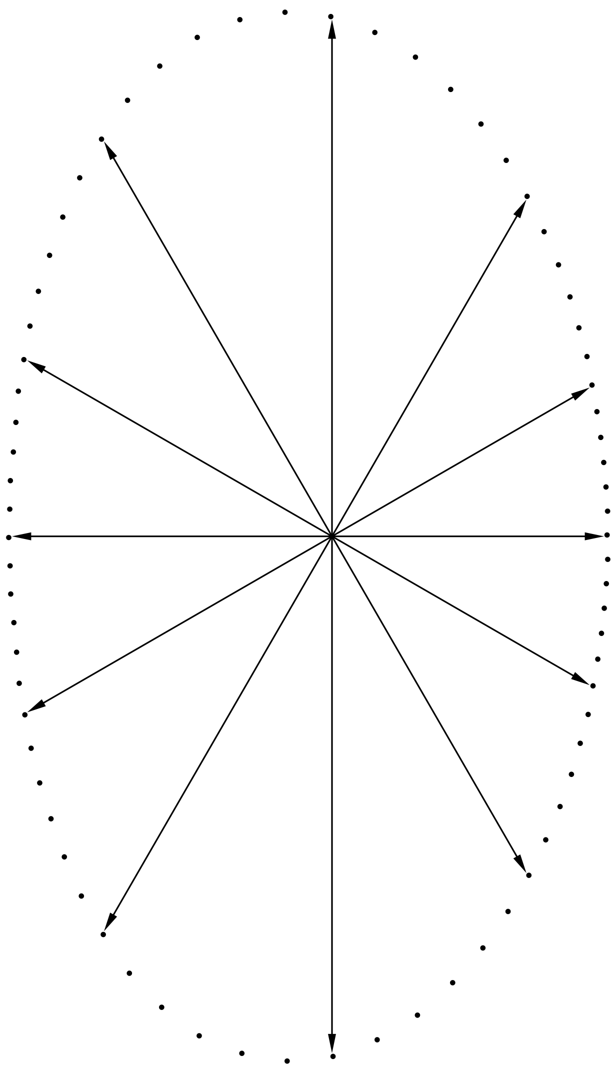


Zone 2 Directional Correlograms - Assays

Structure Number 1

Rose Diagram of Ranges Dipping 30 Degrees
Scale:

30 Units

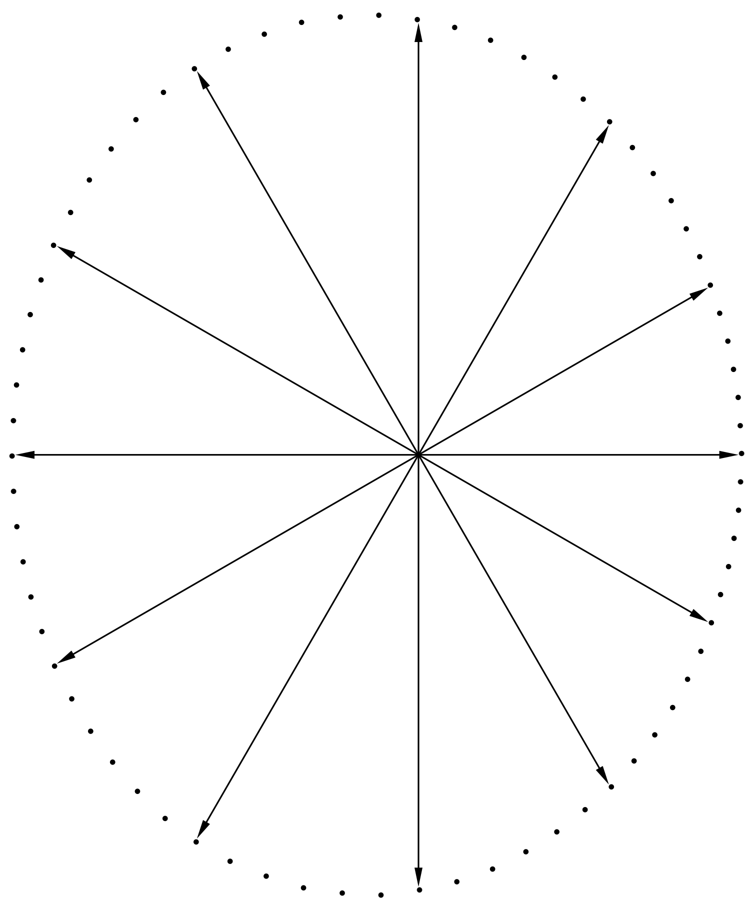


Zone 2 Directional Correlograms - Assays

Structure Number 1

Rose Diagram of Ranges Dipping 60 Degrees
Scale:

30 Units



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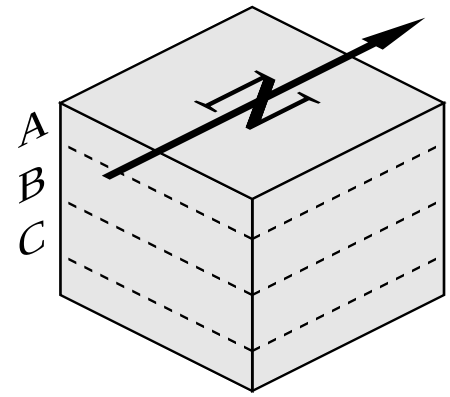
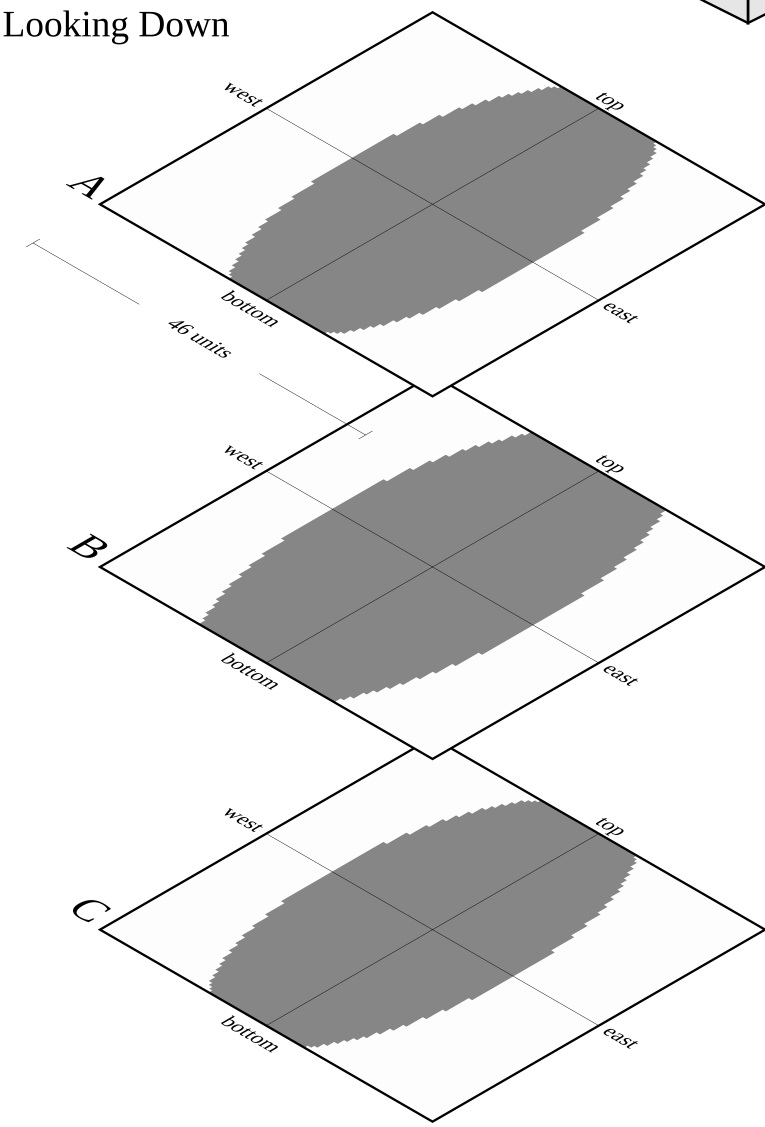
Horizontal Slices Through the Ellipsoids

Reference Cube



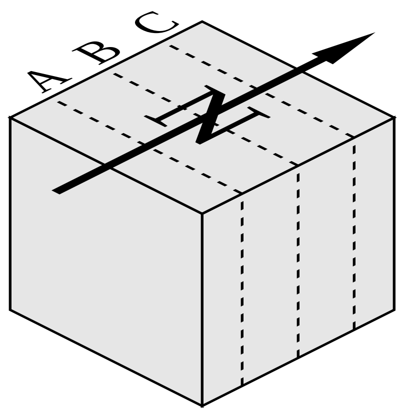
X-Y Planes Looking Down



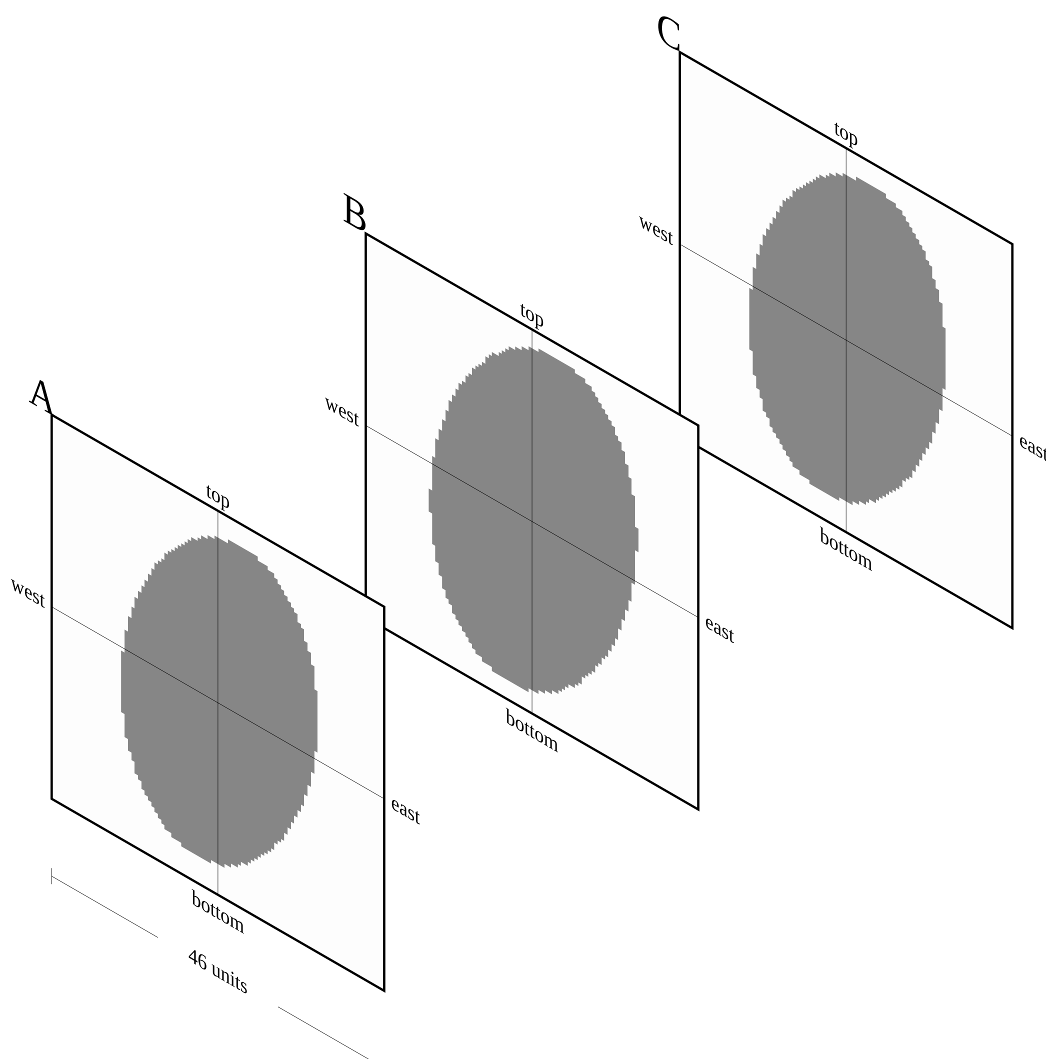
Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Cross Section Views Through the Ellipsoids

Reference Cube



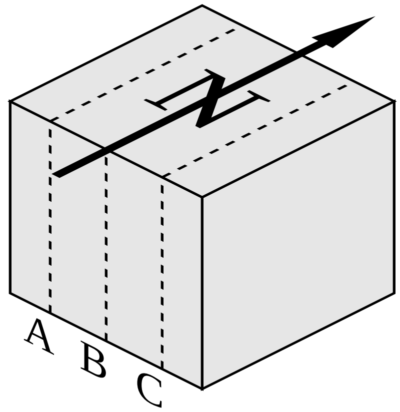
X-Z Planes Looking North



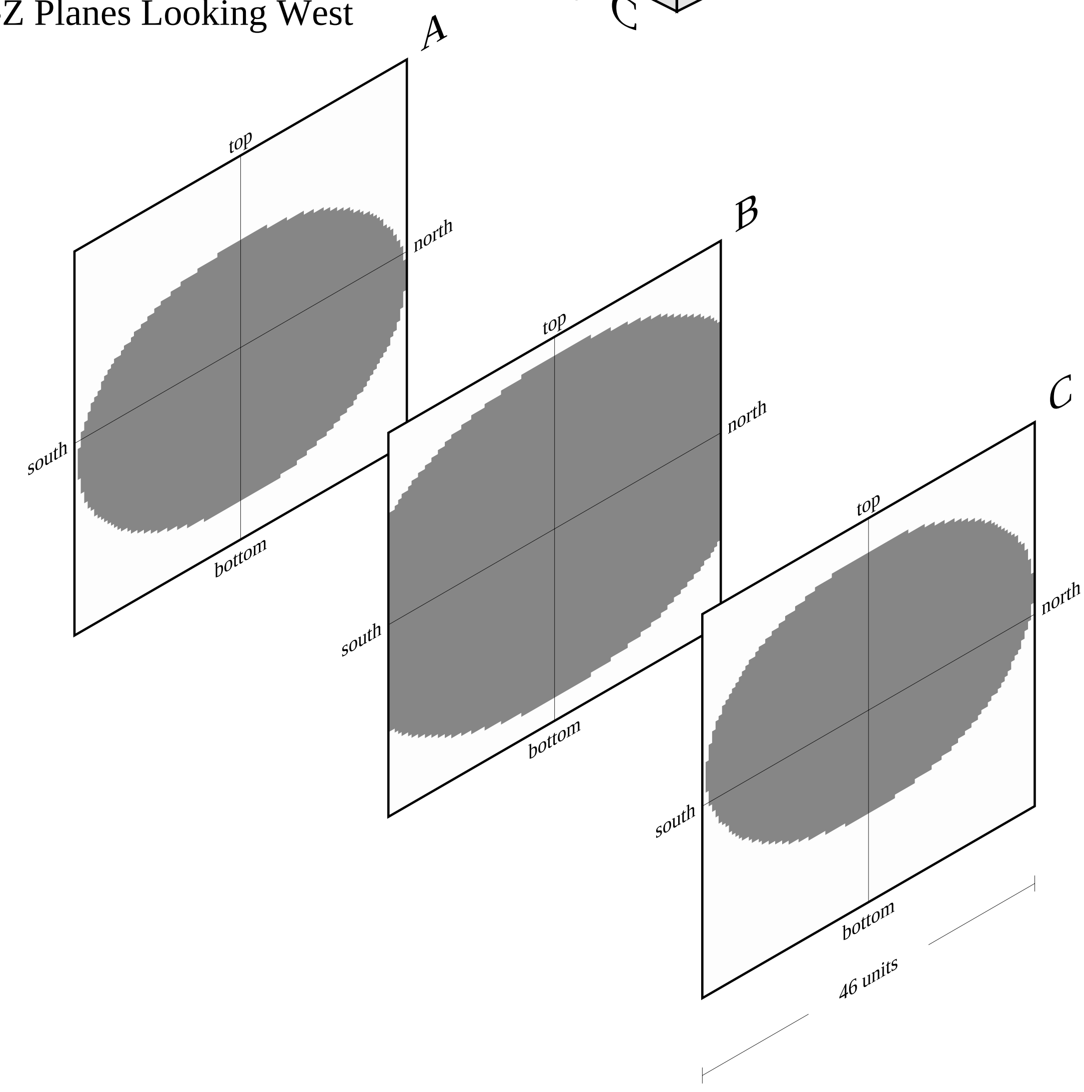
Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Long Section Views Through the Ellipsoids

Reference Cube

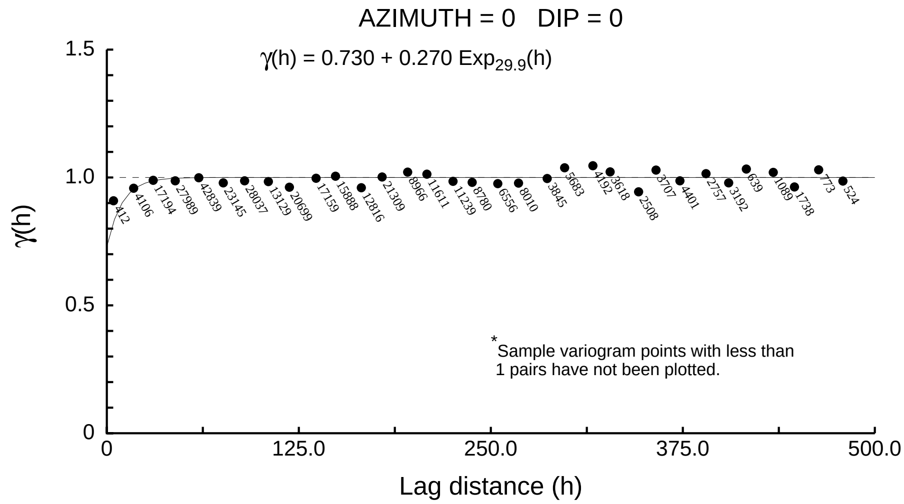


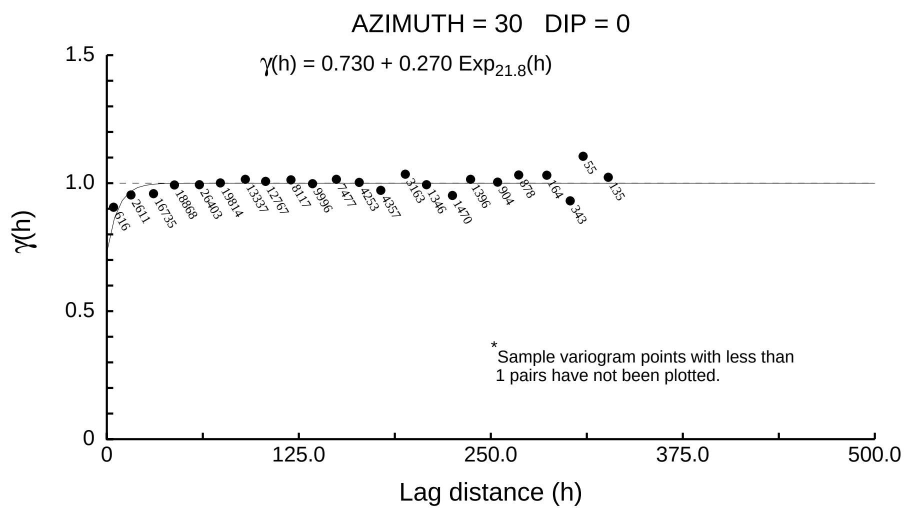
Y-Z Planes Looking West

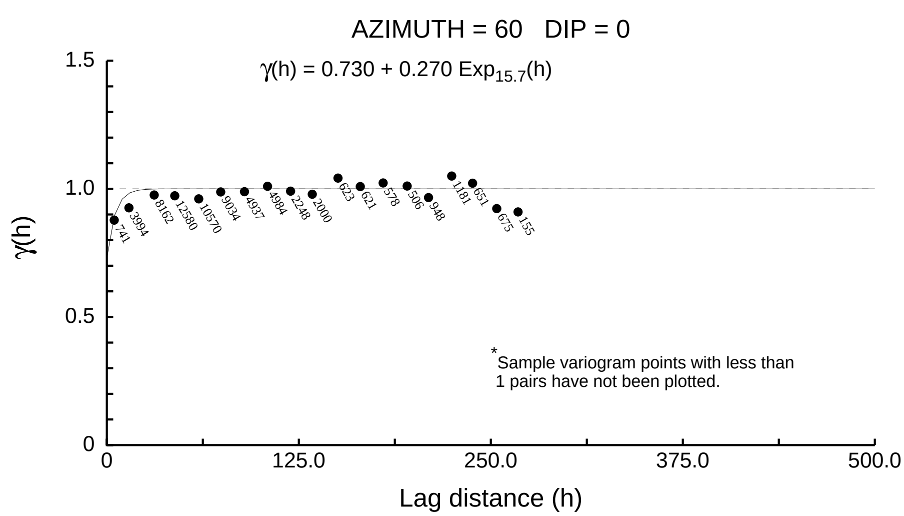


Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

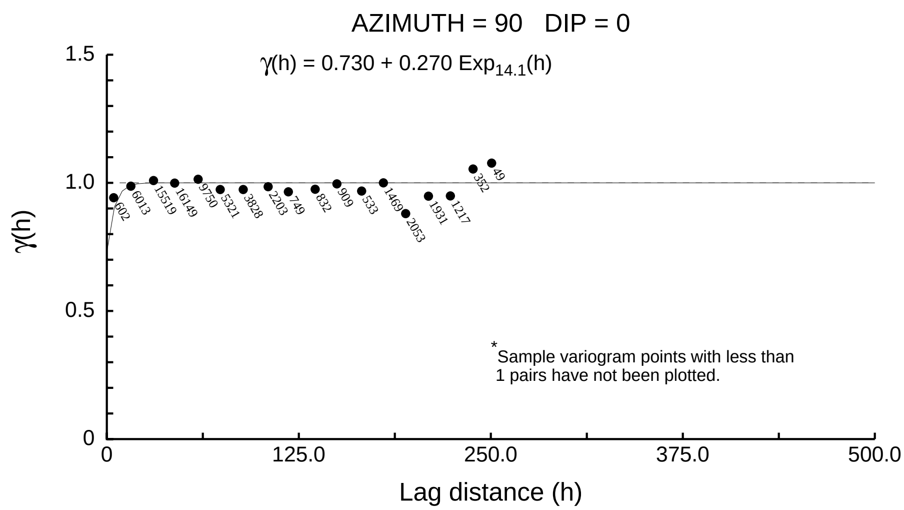
Zone 2 Directional Correlograms - Assays

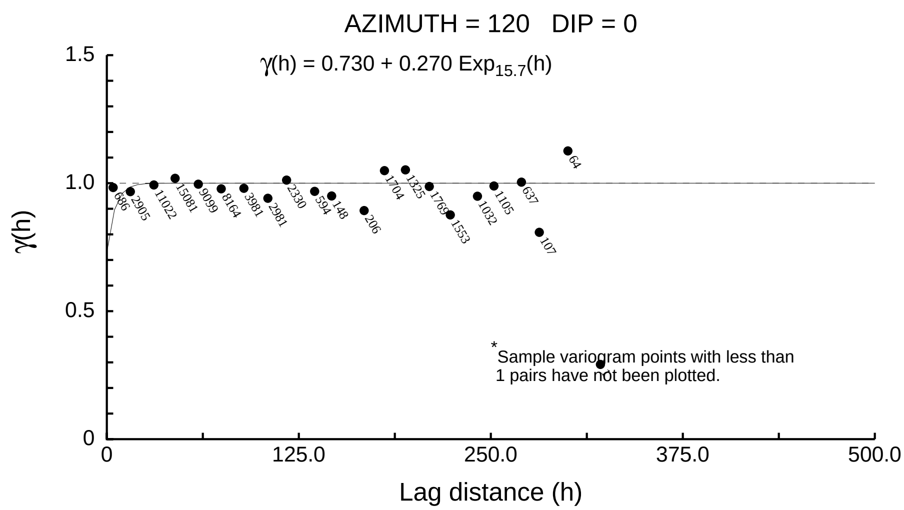


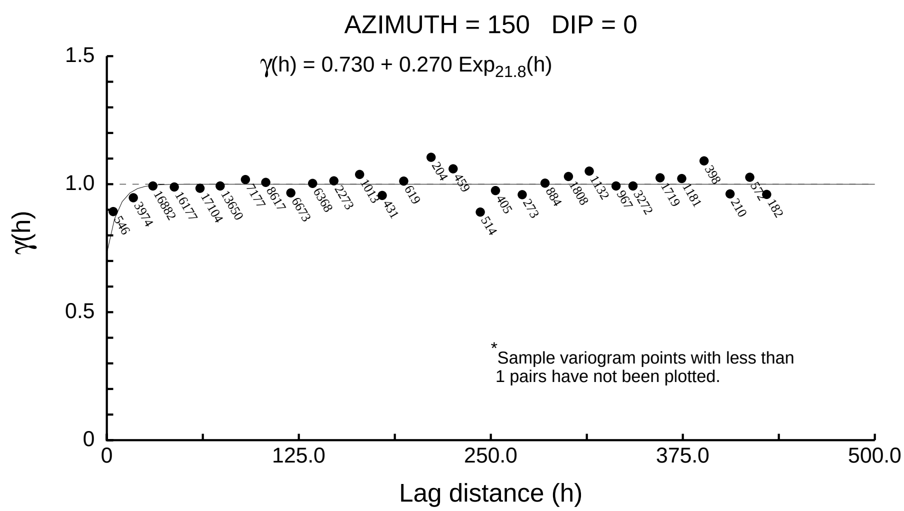




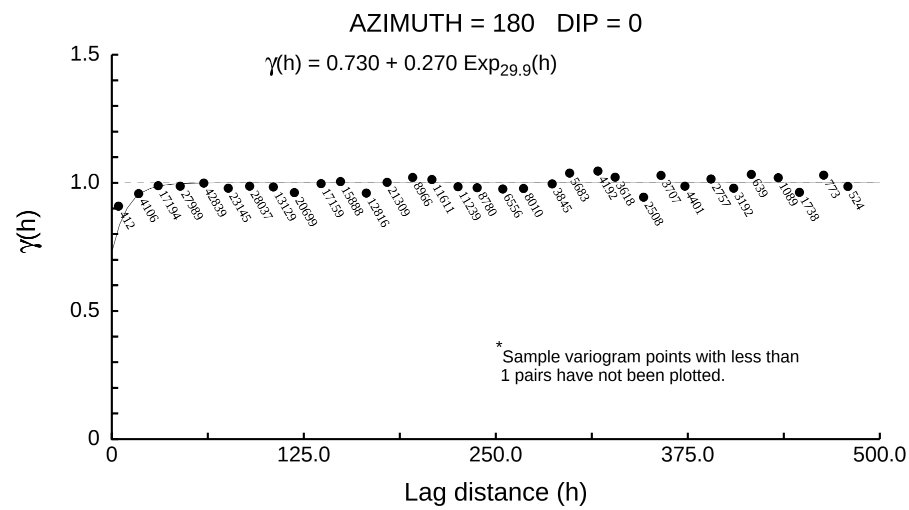
Zone 2 Directional Correlograms - Assays

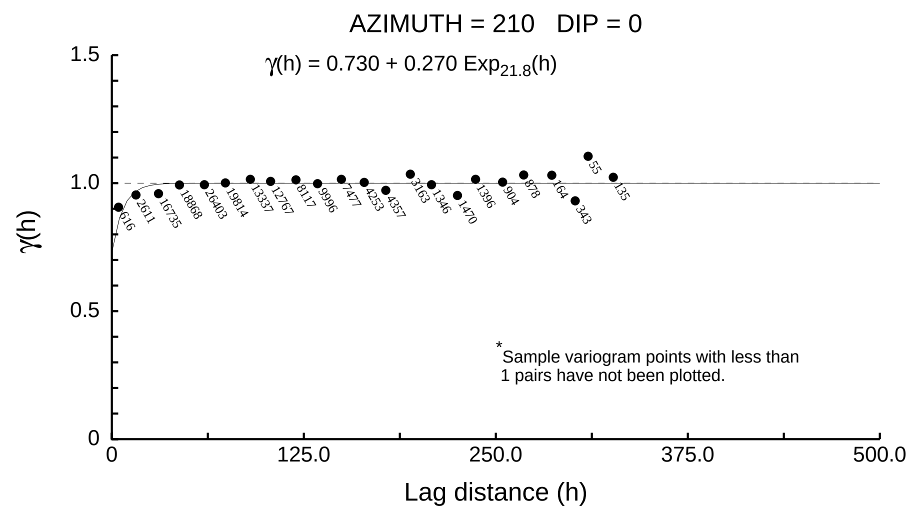


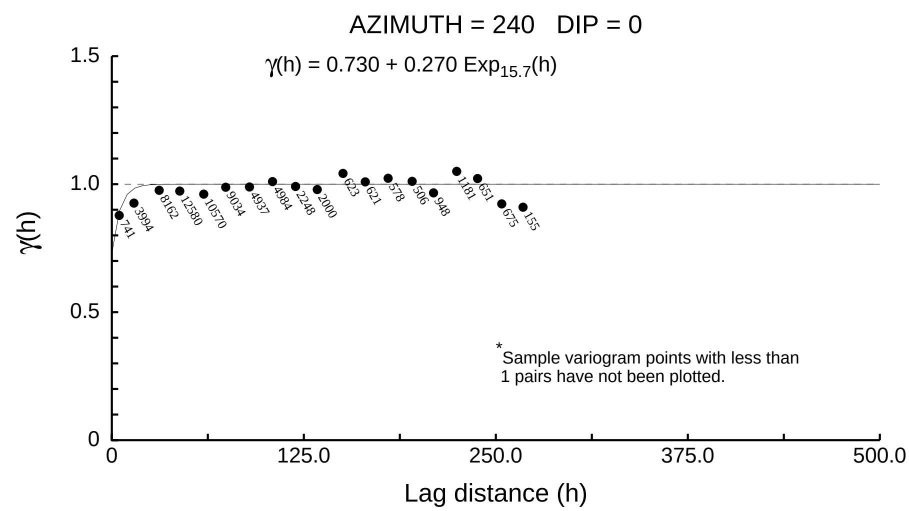




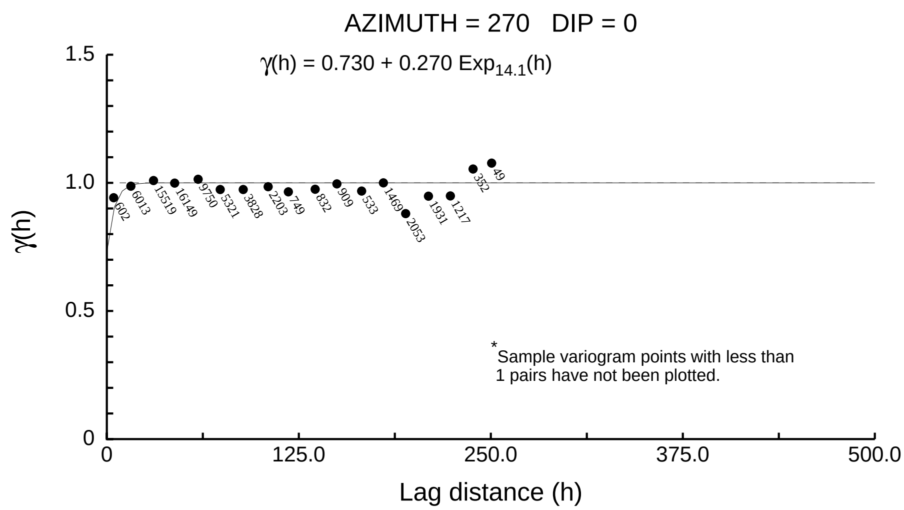
Zone 2 Directional Correlograms - Assays

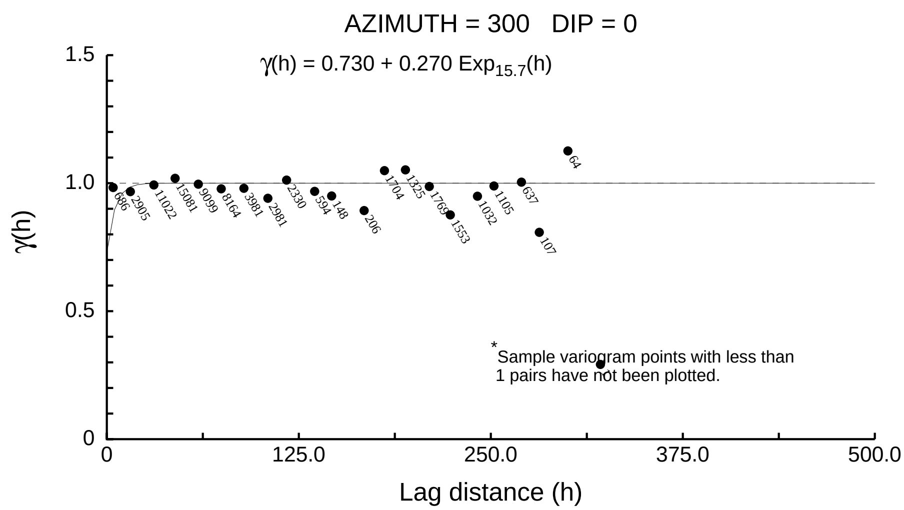


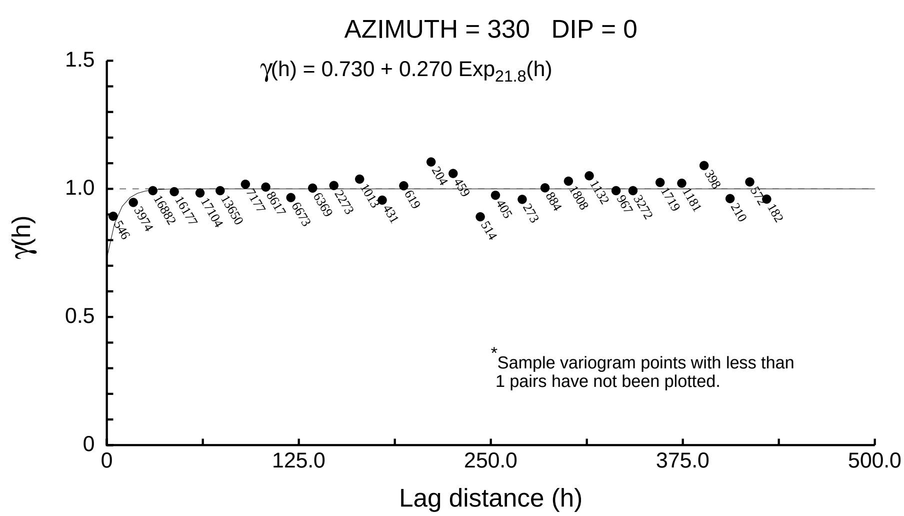




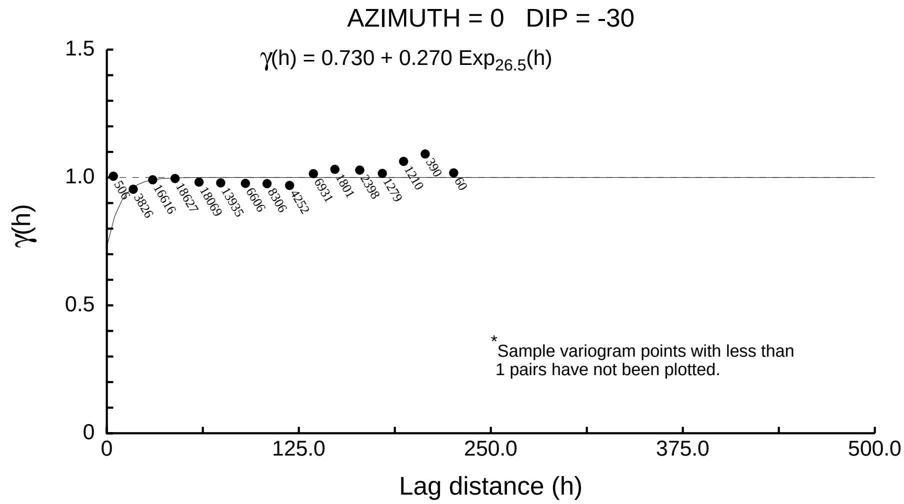
Zone 2 Directional Correlograms - Assays

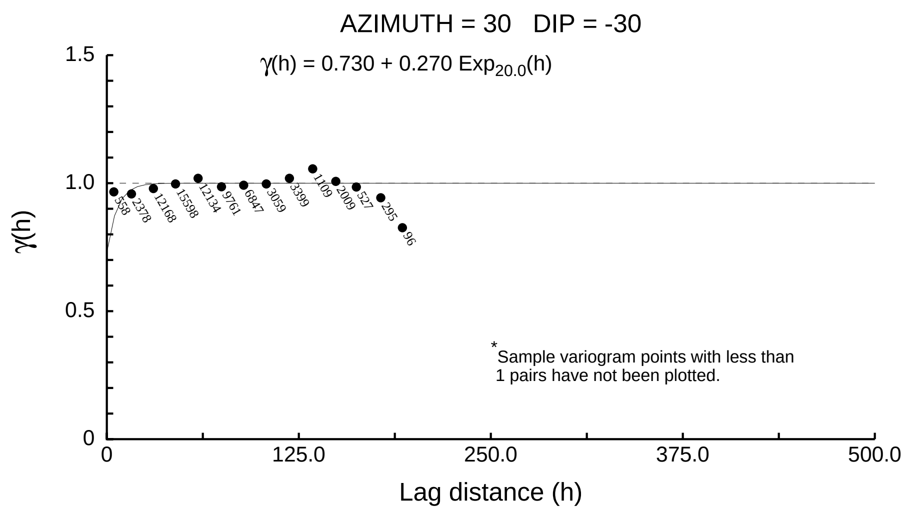


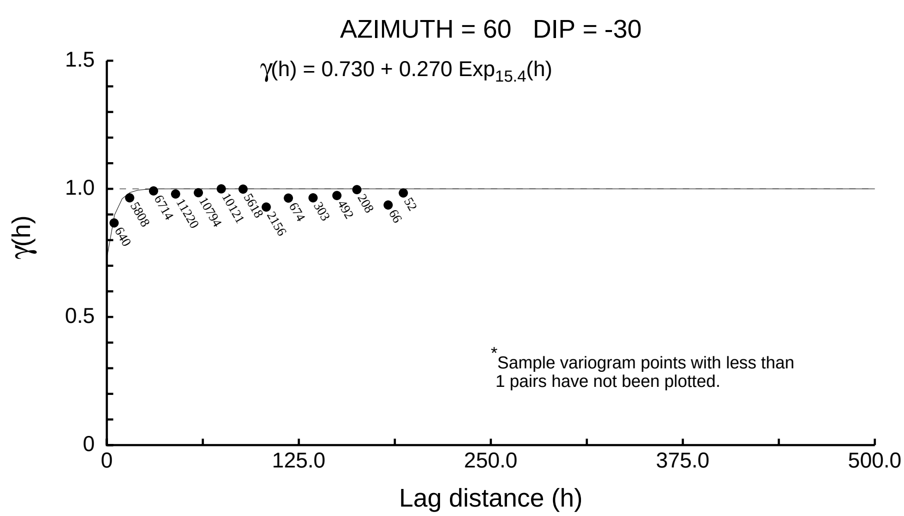




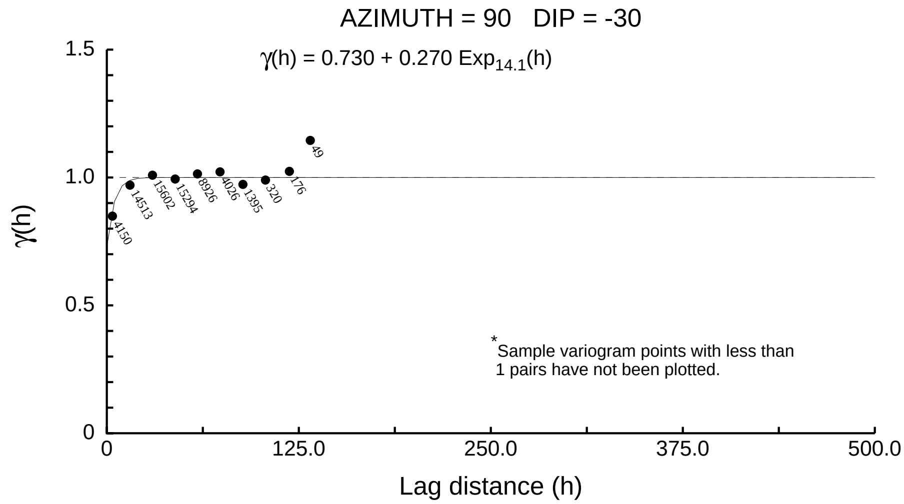
Zone 2 Directional Correlograms - Assays

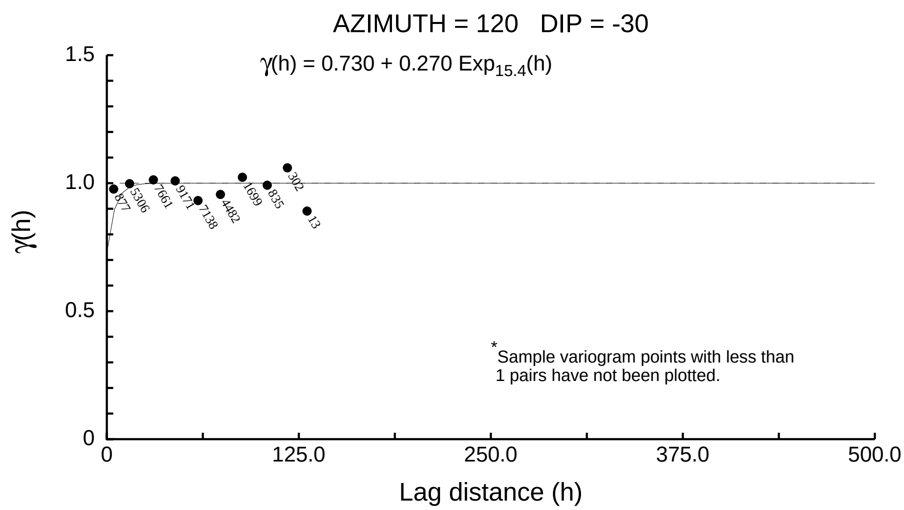


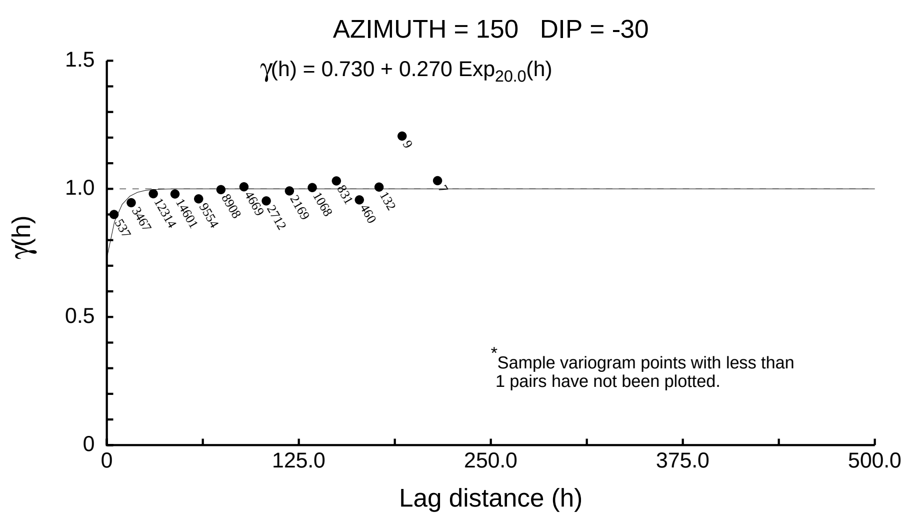




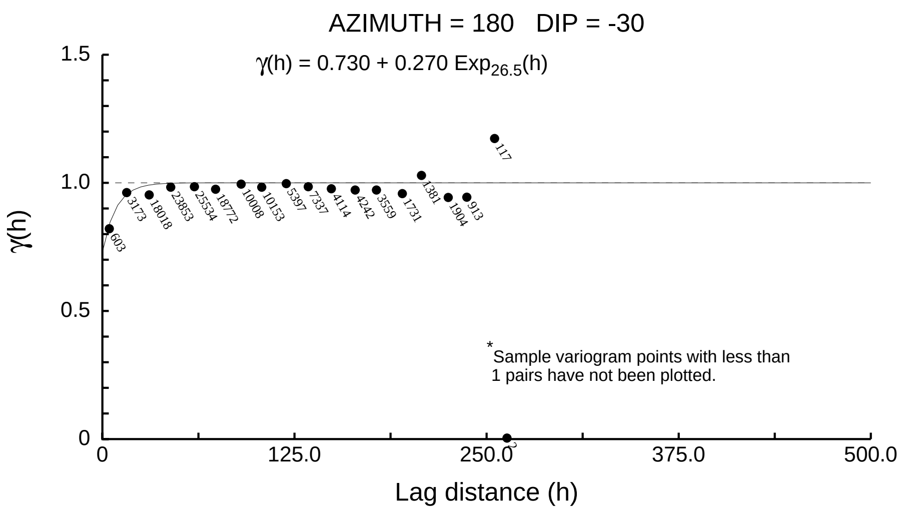
Zone 2 Directional Correlograms - Assays

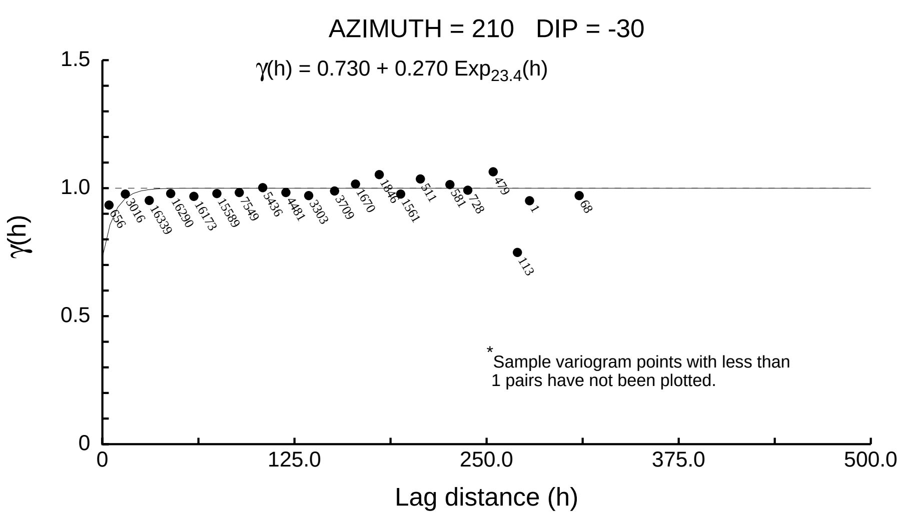


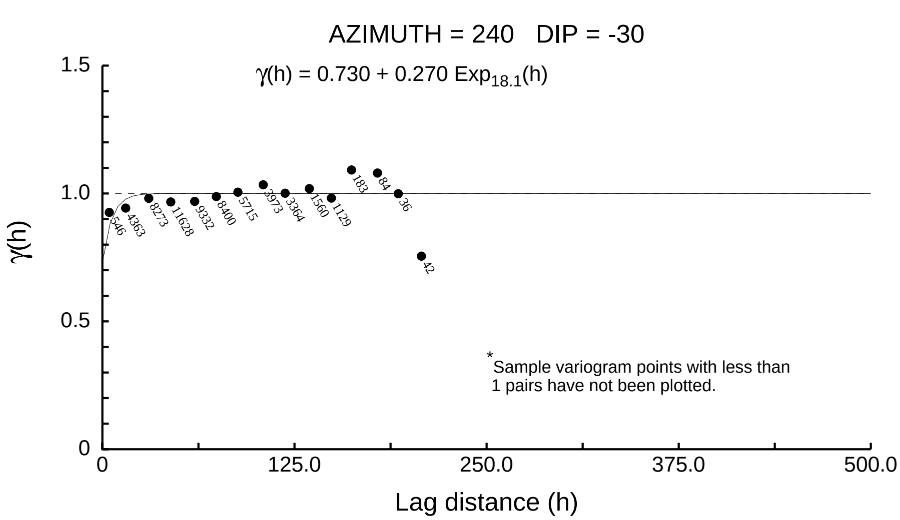




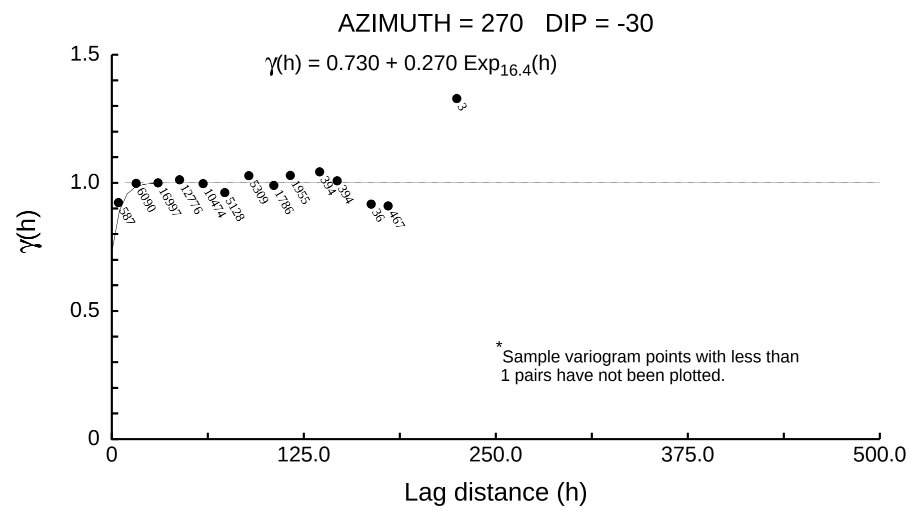
Zone 2 Directional Correlograms - Assays

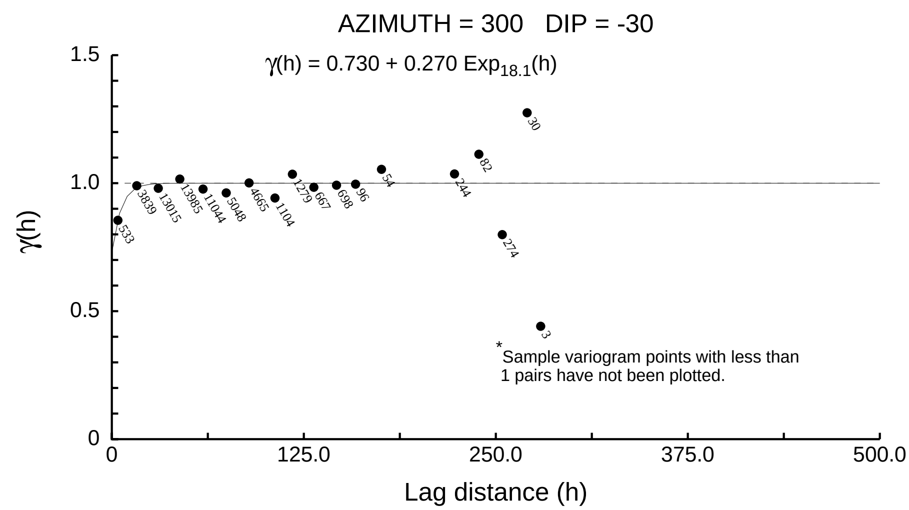


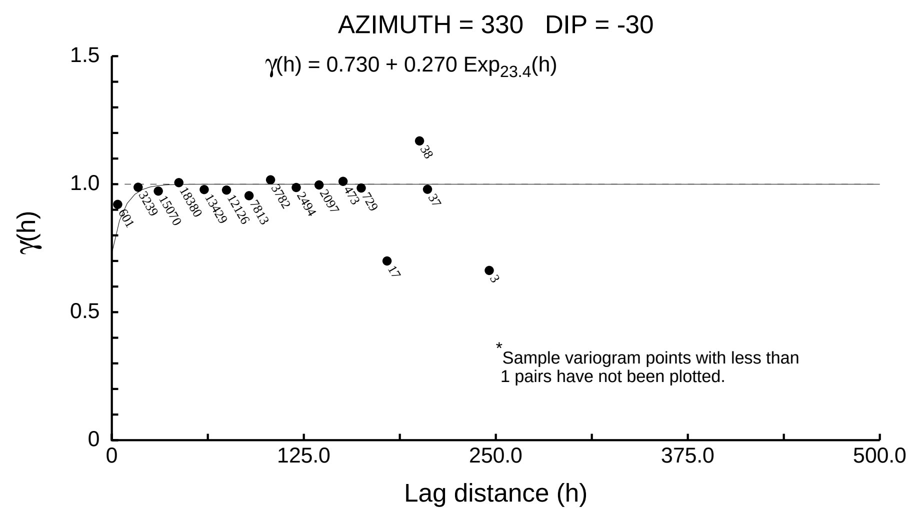




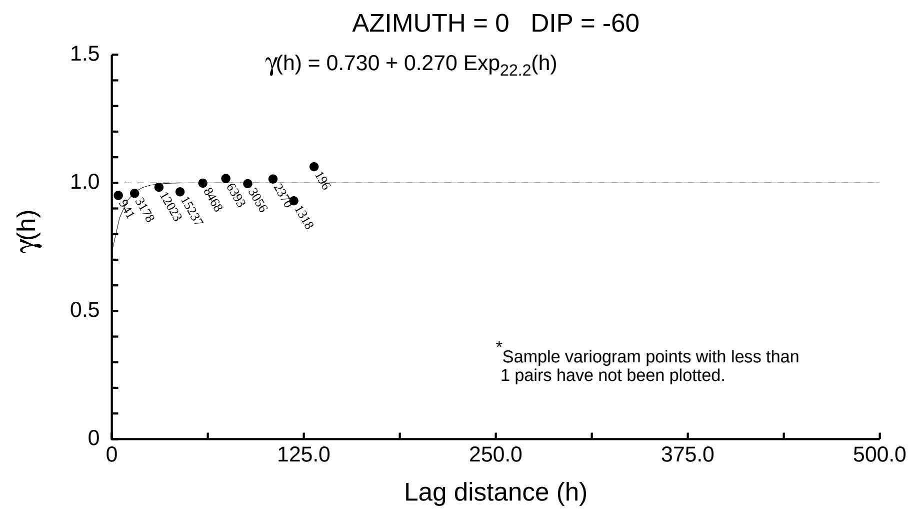
Zone 2 Directional Correlograms - Assays

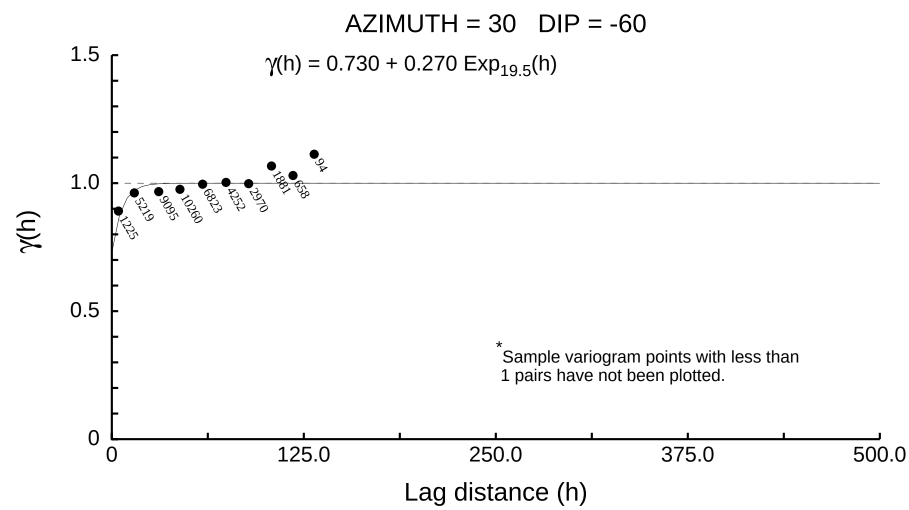


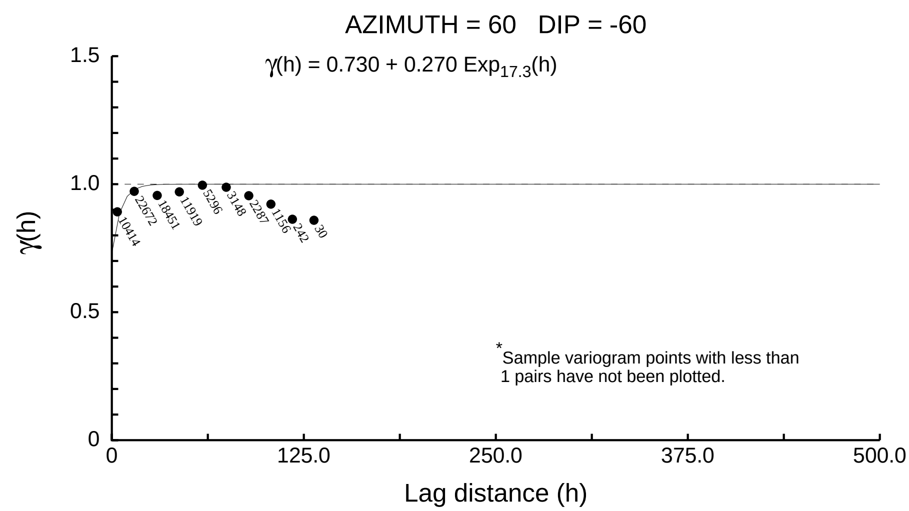




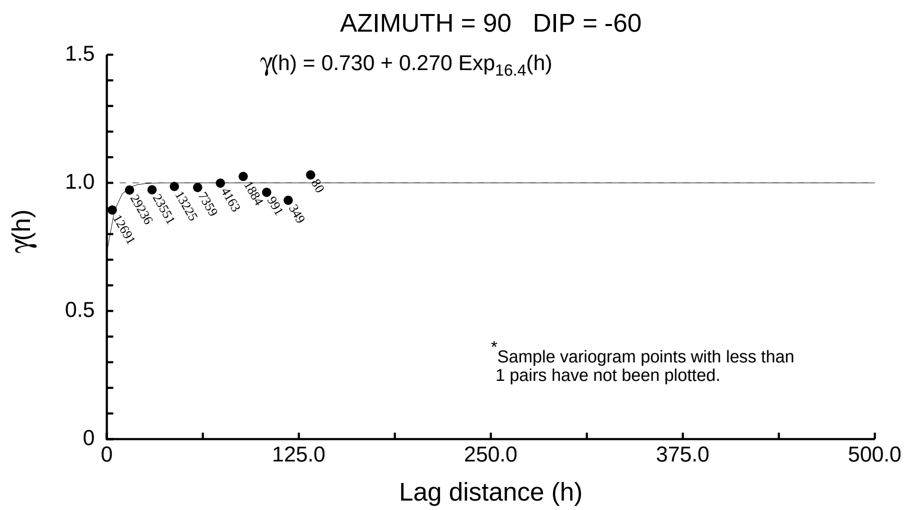
Zone 2 Directional Correlograms - Assays

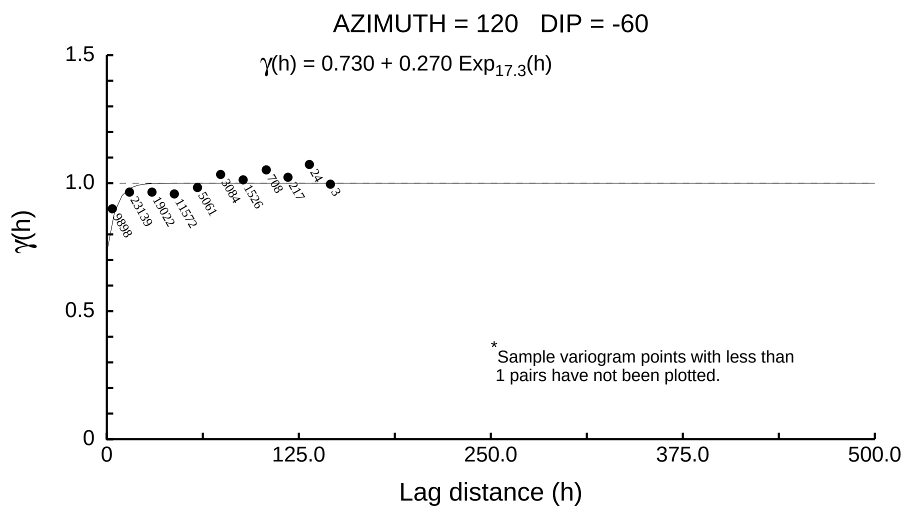


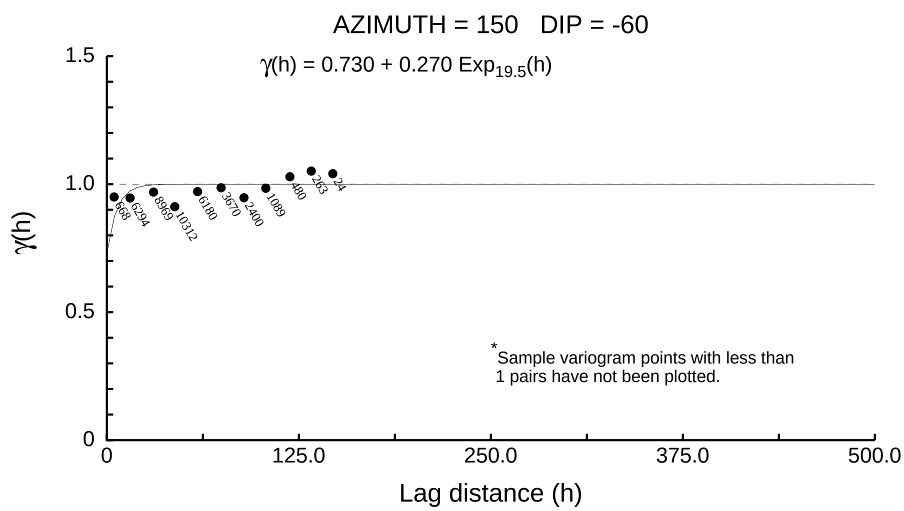




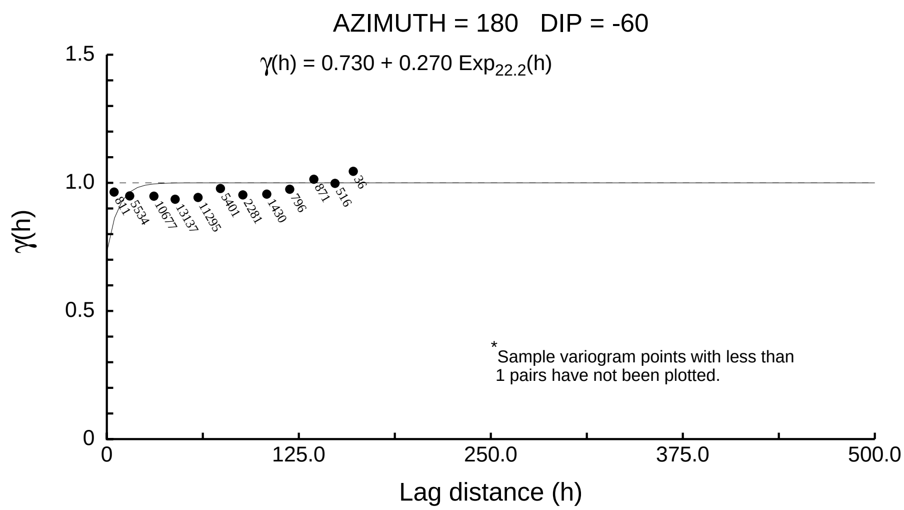
Zone 2 Directional Correlograms - Assays

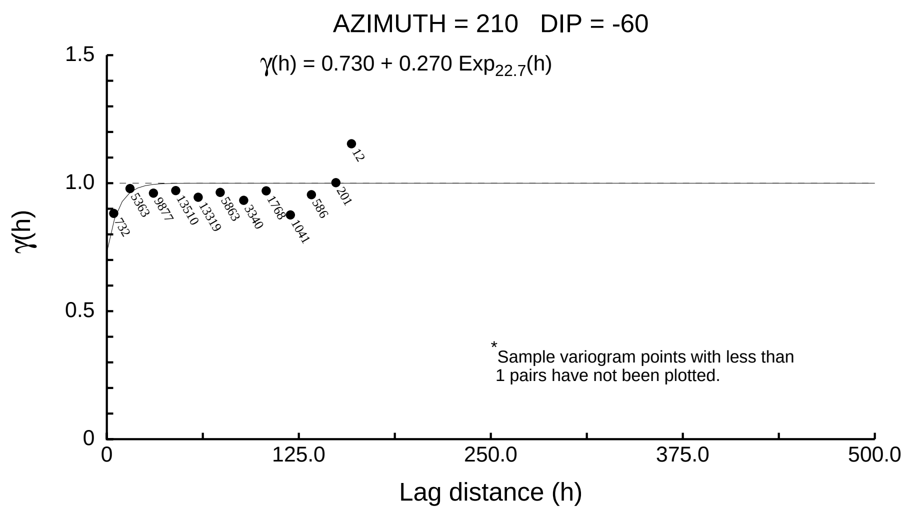


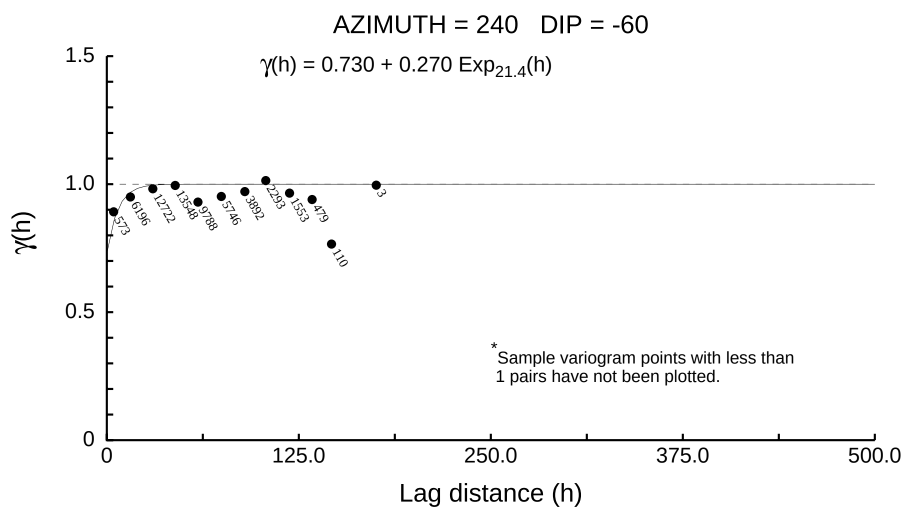




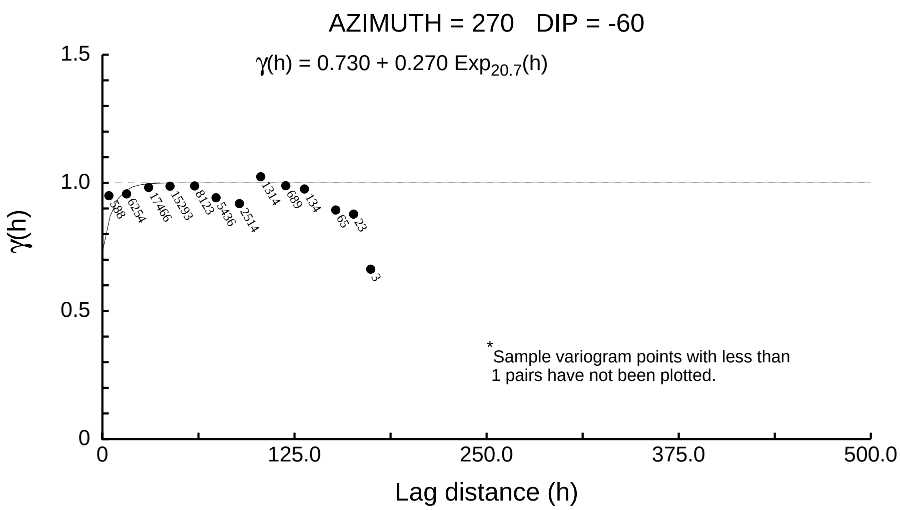
Zone 2 Directional Correlograms - Assays

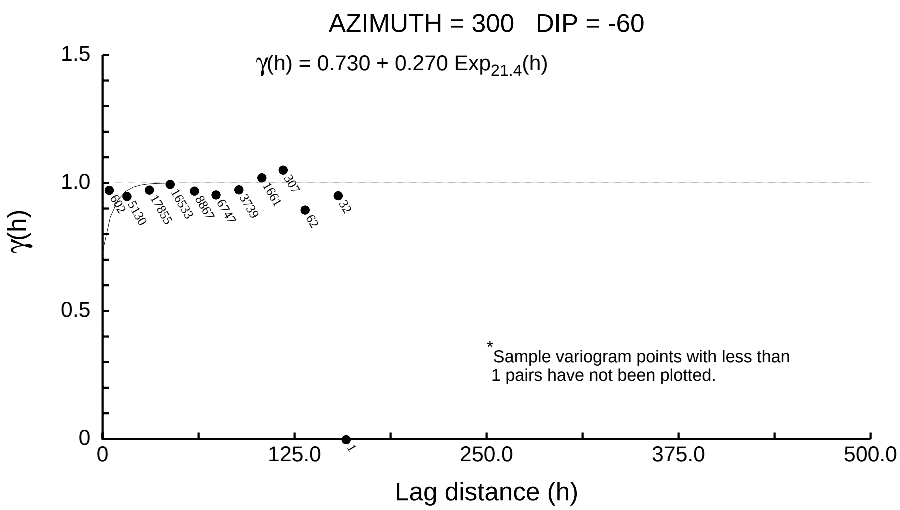


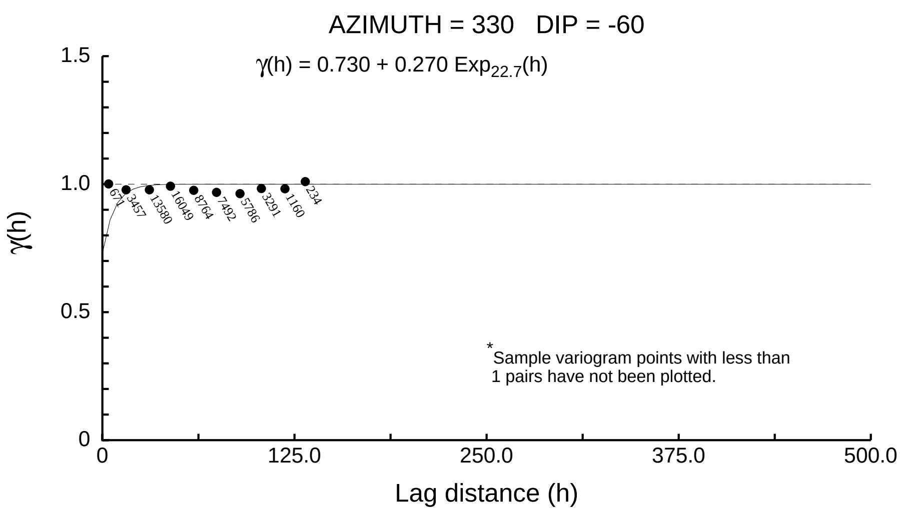




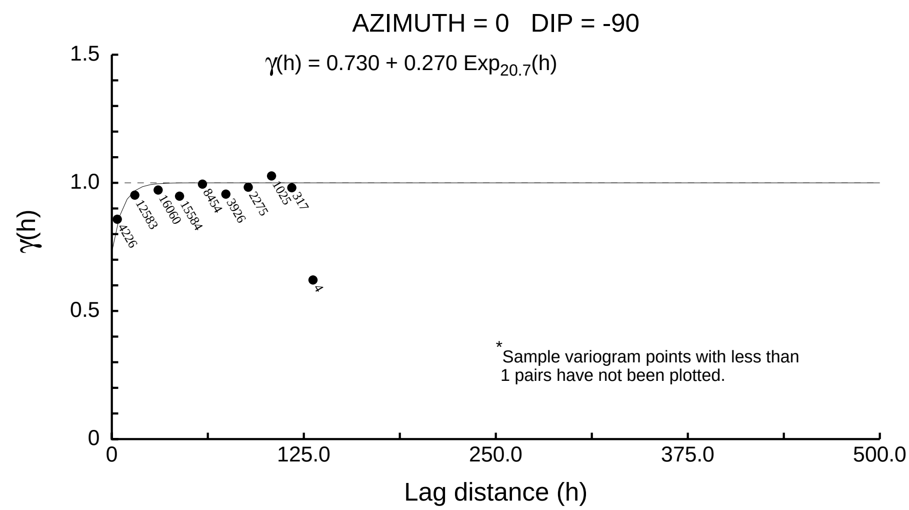
Zone 2 Directional Correlograms - Assays







Zone 2 Directional Correlograms - Assays



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Zone 3 Downhole Correlogram - Assays

Medsystem and Vulcan Rotation Conventions

Nugget ==> 0.640
C1 ==> 0.360

First Structure -- Exponential with Practical Range

LH Rotation about the Z axis ==> 0
RH Rotation about the X’ axis ==> 0
LH Rotation about the Y’ axis ==> 0
Range along the Z’ axis ==> 15.0 Azimuth ==> 90 Dip ==> 90
Range along the Y’ axis ==> 15.0 Azimuth ==> 360 Dip ==> 0
Range along the X’ axis ==> 15.0 Azimuth ==> 90 Dip ==> 0

Modeling Criteria

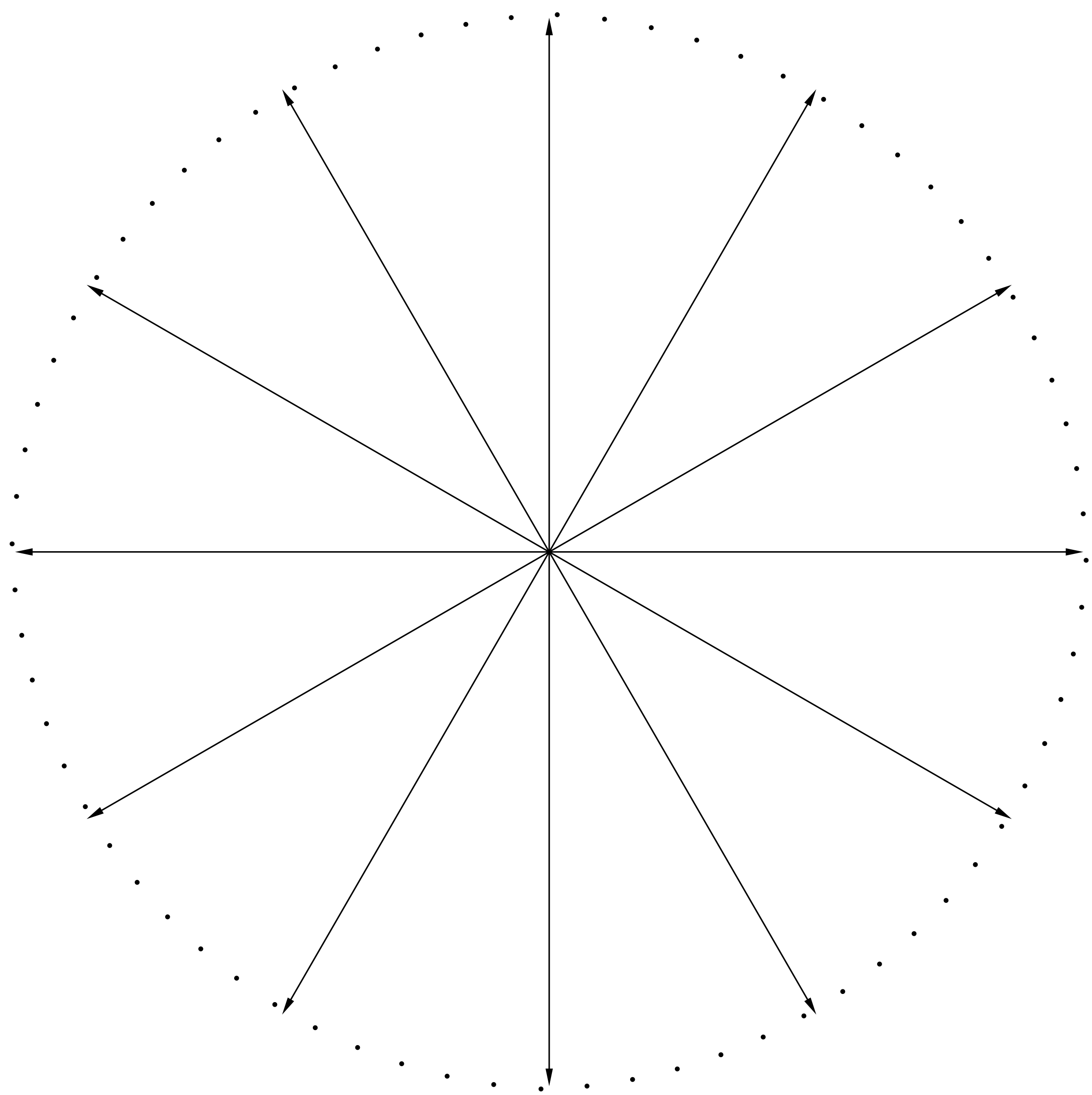
Minimum number pairs req’d ==> 1
Sample variogram points weighted by # pairs

Zone 3 Downhole Correlogram - Assays

Structure Number 1

Rose Diagram of Ranges Dipping 0 Degrees
Scale:

20 Units



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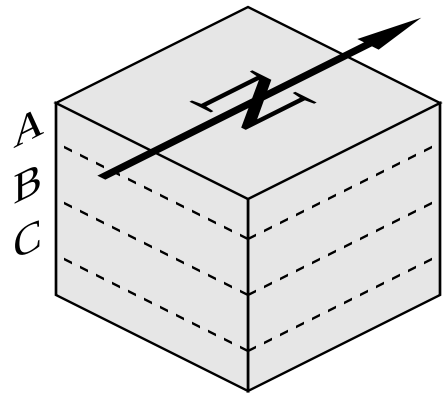
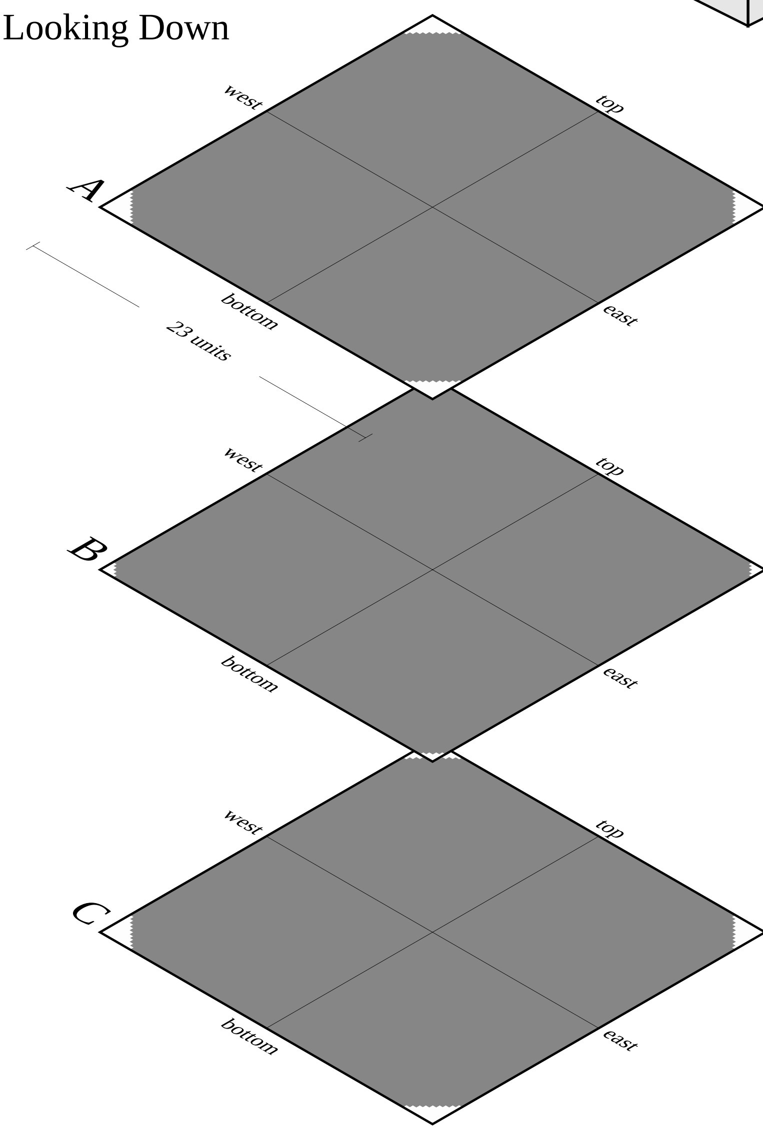
Horizontal Slices Through the Ellipsoids

Reference Cube



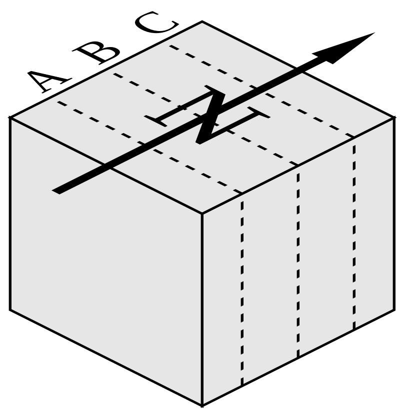
X-Y Planes Looking Down



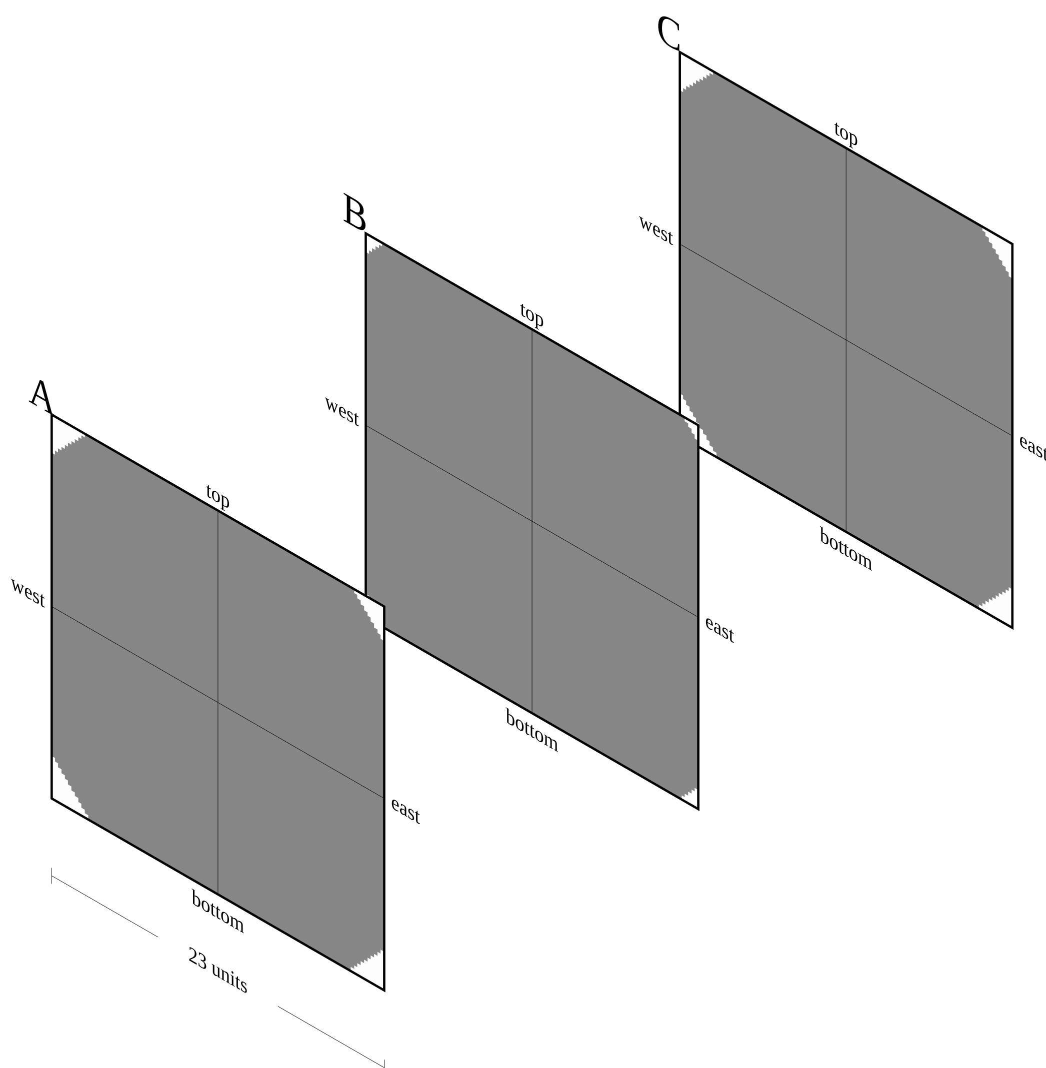
Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Cross Section Views Through the Ellipsoids

Reference Cube



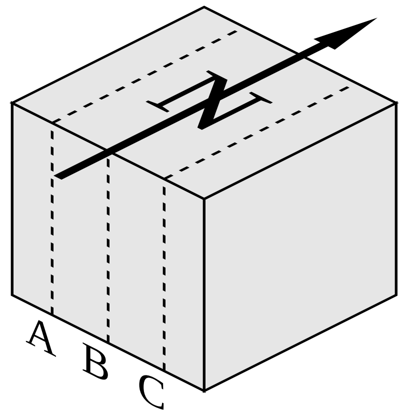
X-Z Planes Looking North



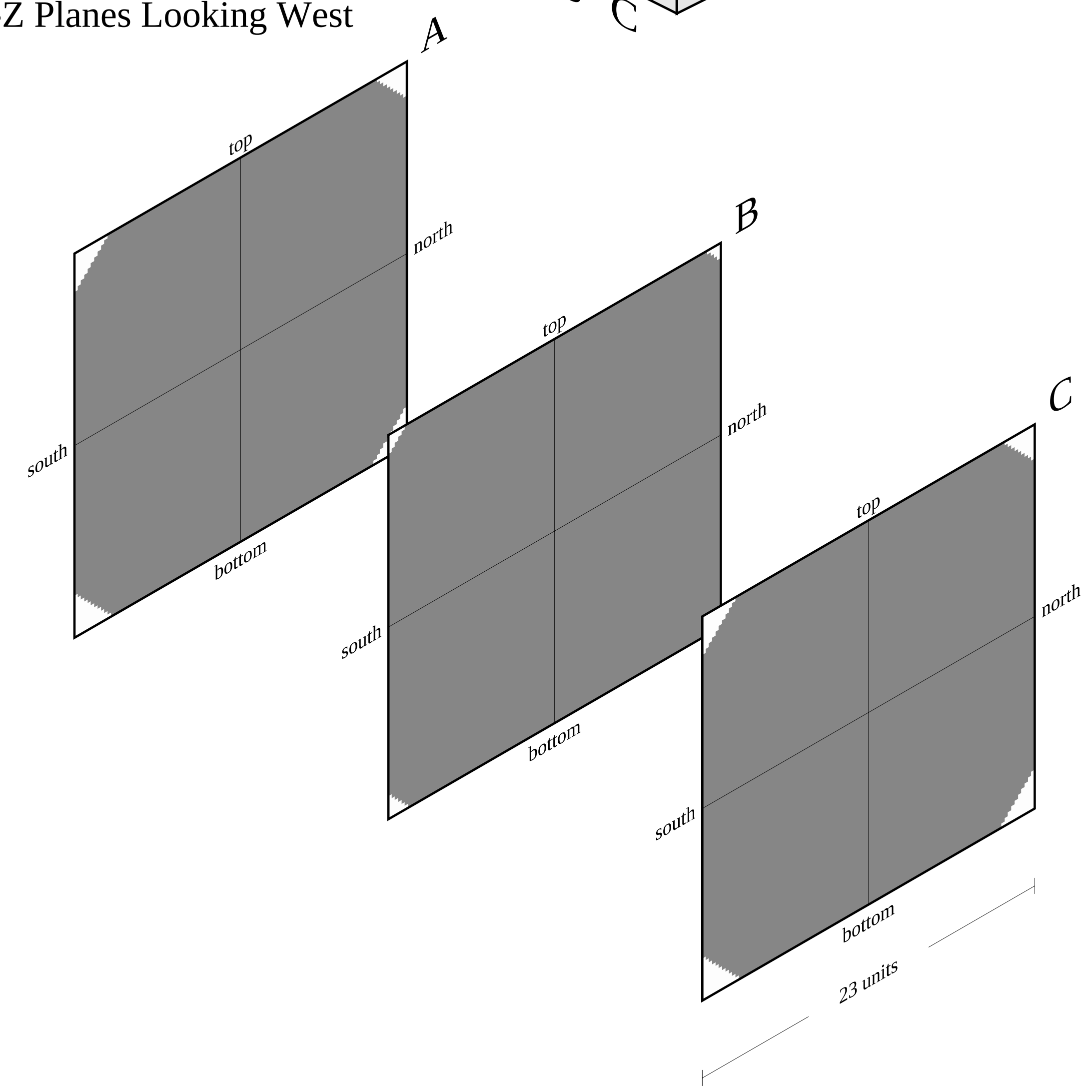
Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Long Section Views Through the Ellipsoids

Reference Cube

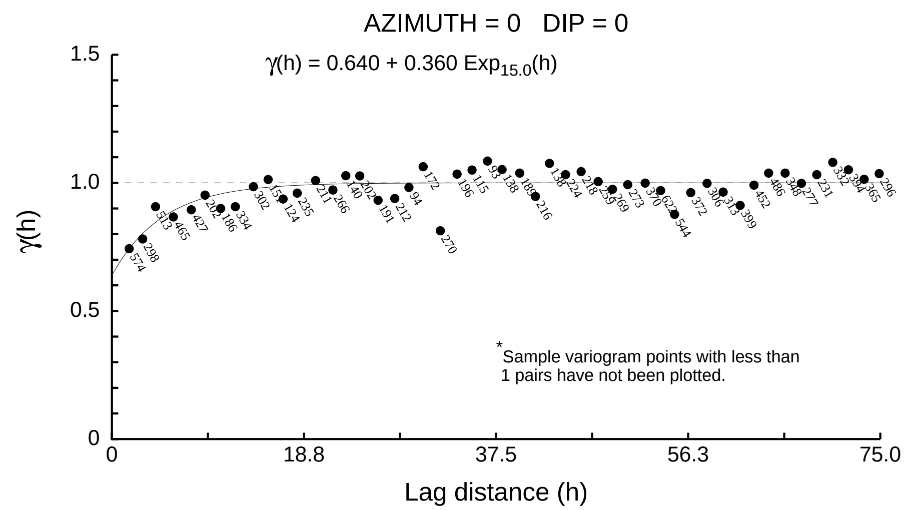


Y-Z Planes Looking West



Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Zone 3 Downhole Correlogram - Assays



Zone 3 Directional Correlograms - Assays

Medsystem and Vulcan Rotation Conventions

Nugget ==> 0.640
C1 ==> 0.360

First Structure -- Exponential with Practical Range

LH Rotation about the Z axis ==> 0
RH Rotation about the X' axis ==> 0
LH Rotation about the Y' axis ==> 75

Range along the Z' axis	==> 37.0	Azimuth ==> 270	Dip ==> 15
Range along the Y' axis	==> 112.6	Azimuth ==> 360	Dip ==> 0
Range along the X' axis	==> 19.8	Azimuth ==> 90	Dip ==> 75

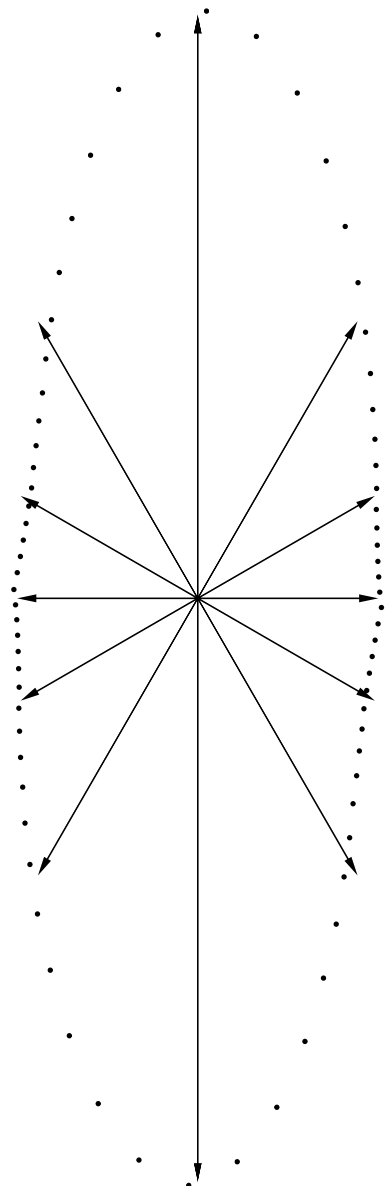
Modeling Criteria

Minimum number pairs req'd ==> 1
Sample variogram points weighted by # pairs

Zone 3 Directional Correlograms - Assays

Structure Number 1

Rose Diagram of Ranges Dipping 0 Degrees
Scale:

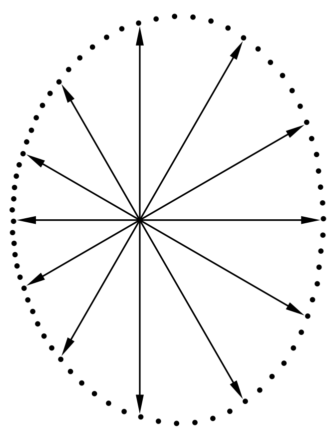


Zone 3 Directional Correlograms - Assays

Structure Number 1

Rose Diagram of Ranges Dipping 30 Degrees
Scale:

100 Units

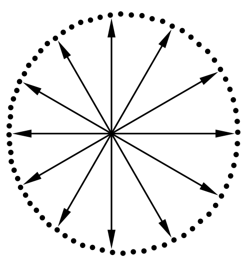


Zone 3 Directional Correlograms - Assays

Structure Number 1

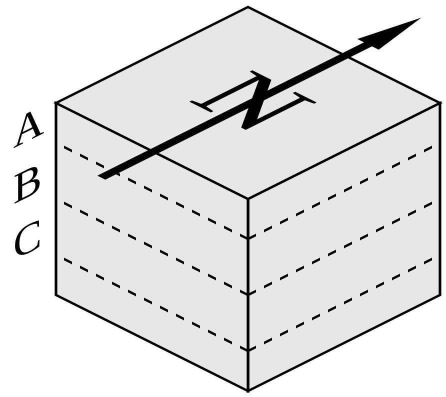
Rose Diagram of Ranges Dipping 60 Degrees
Scale:

100 Units

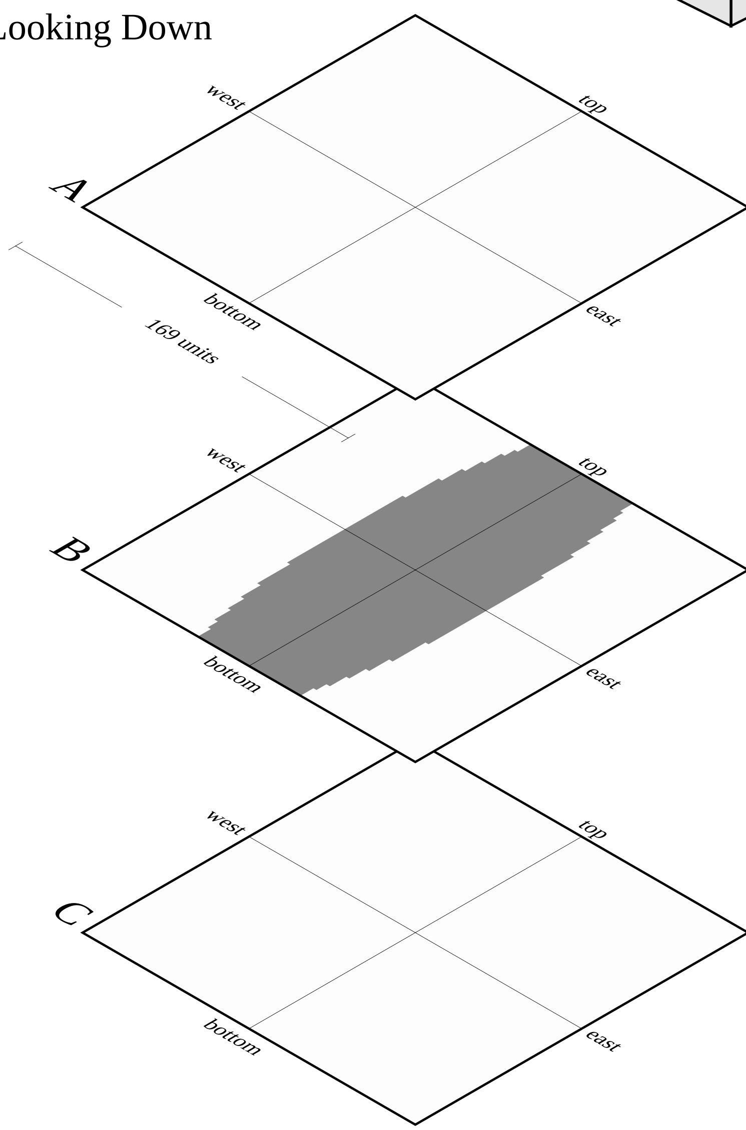


Horizontal Slices Through the Ellipsoids

Reference Cube



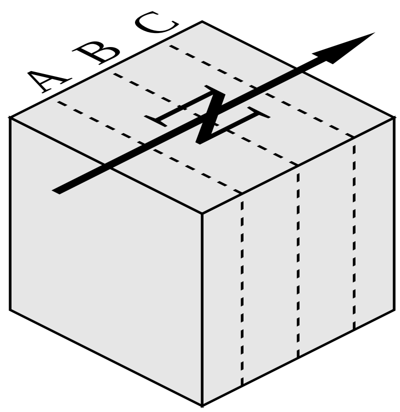
X-Y Planes Looking Down



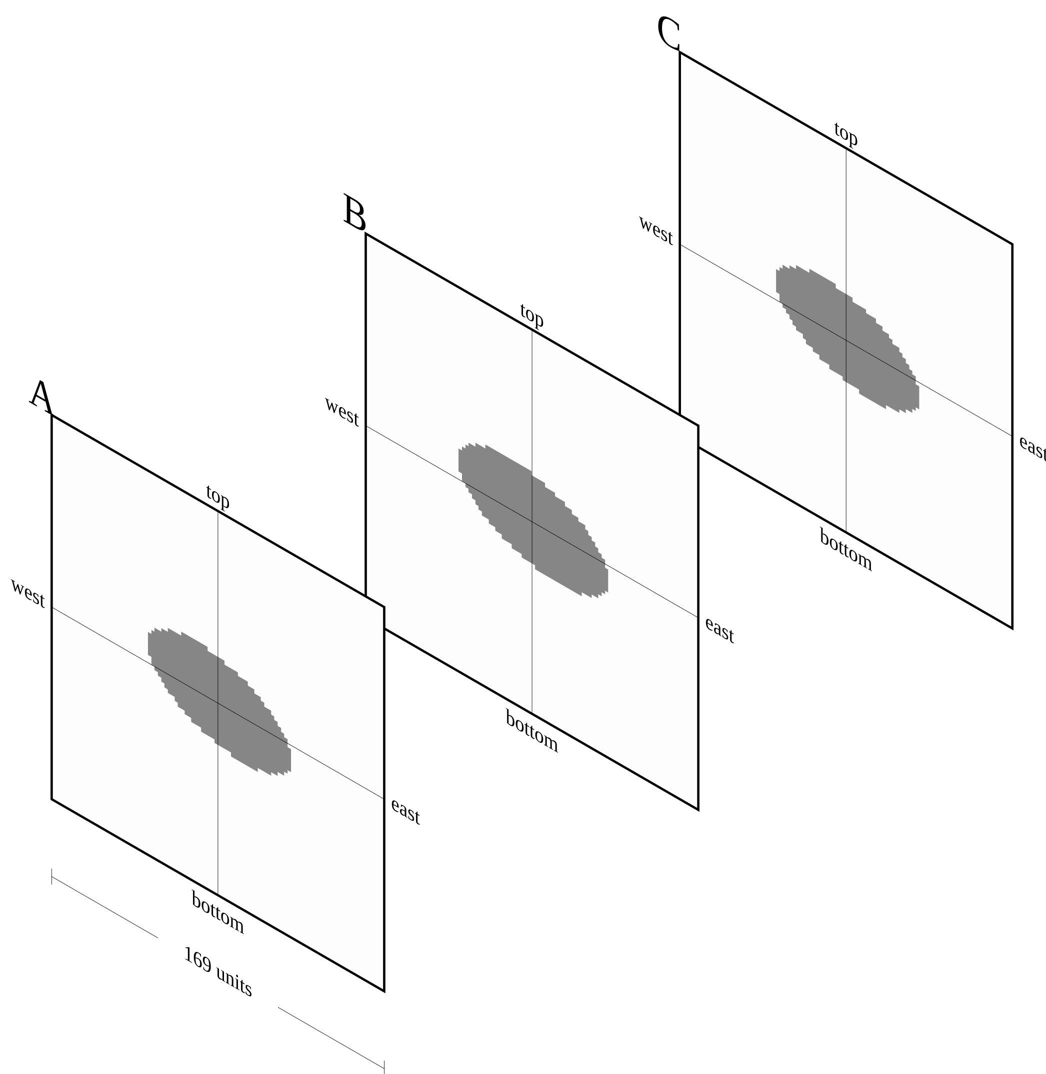
Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Cross Section Views Through the Ellipsoids

Reference Cube



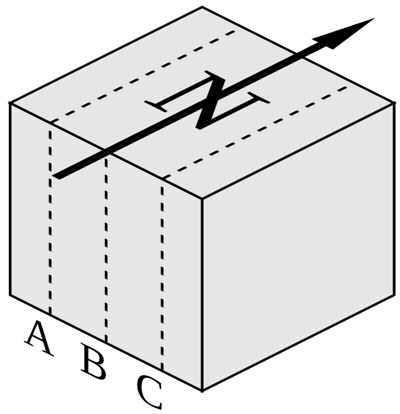
X-Z Planes Looking North



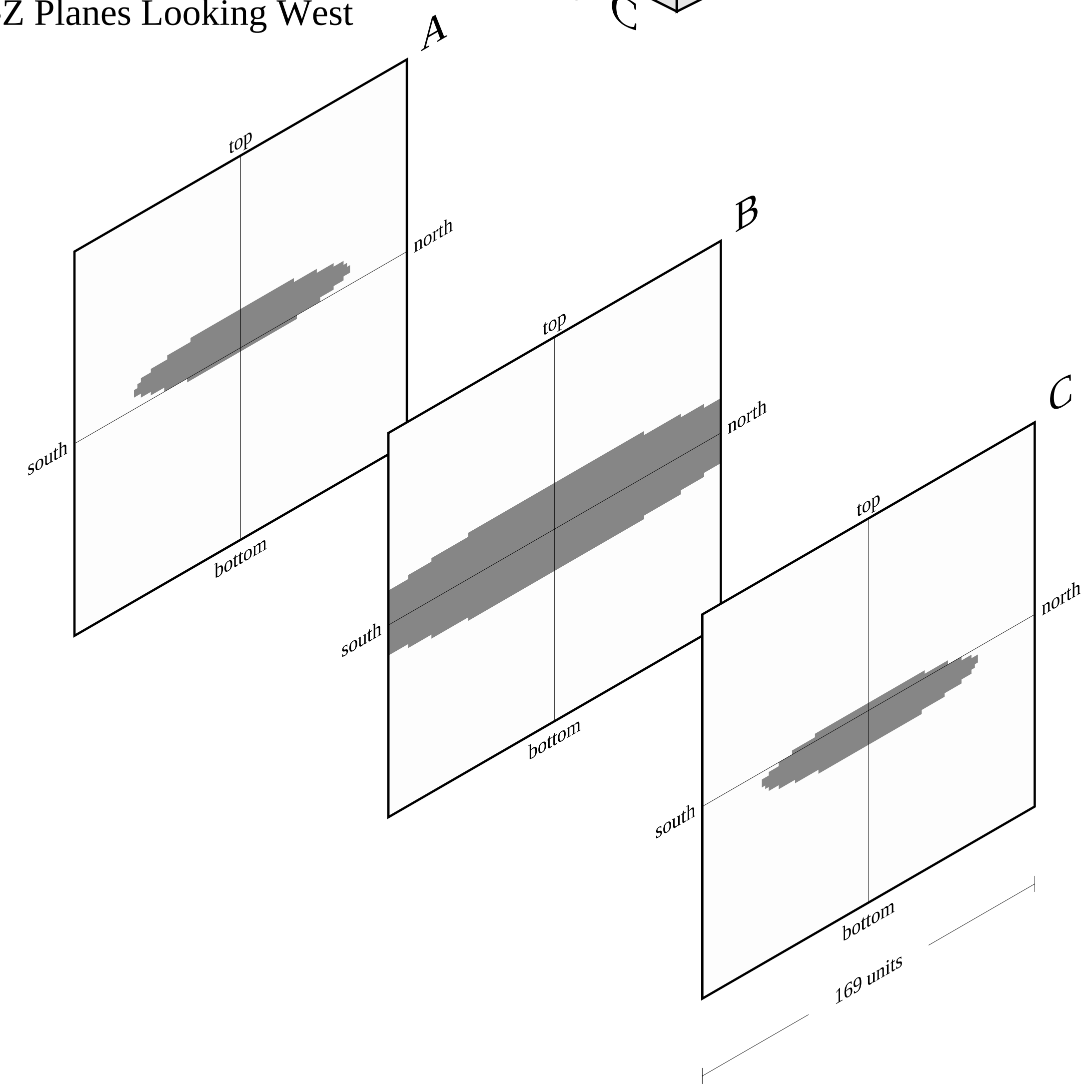
Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Long Section Views Through the Ellipsoids

Reference Cube

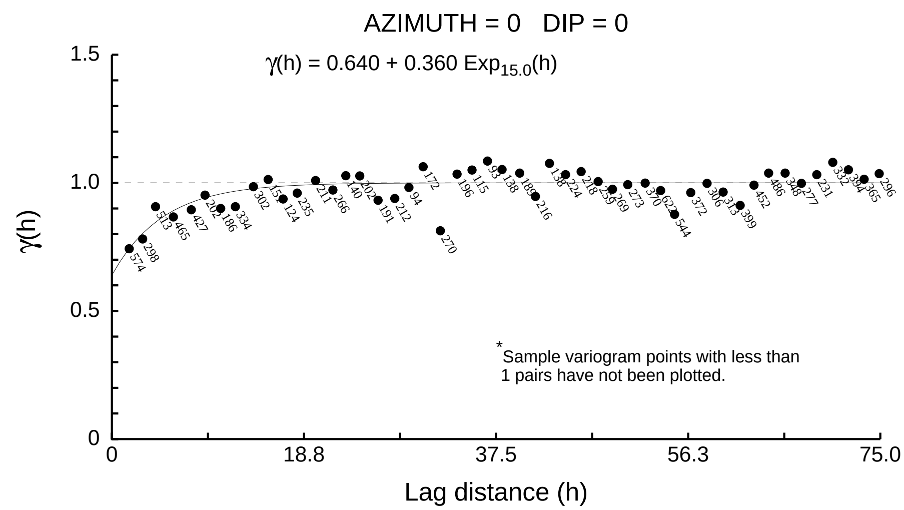


Y-Z Planes Looking West



Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Zone 3 Downhole Correlogram - Assays



Zone 3 Directional Correlograms - Assays

Medsystem and Vulcan Rotation Conventions

Nugget ==> 0.640
C1 ==> 0.360

First Structure -- Exponential with Practical Range

LH Rotation about the Z axis ==> 0
RH Rotation about the X’ axis ==> 0
LH Rotation about the Y’ axis ==> 75

Range along the Z’ axis ==> 37.0	Azimuth ==> 270 Dip ==> 15
Range along the Y’ axis ==> 112.6	Azimuth ==> 360 Dip ==> 0
Range along the X’ axis ==> 19.8	Azimuth ==> 90 Dip ==> 75

Modeling Criteria

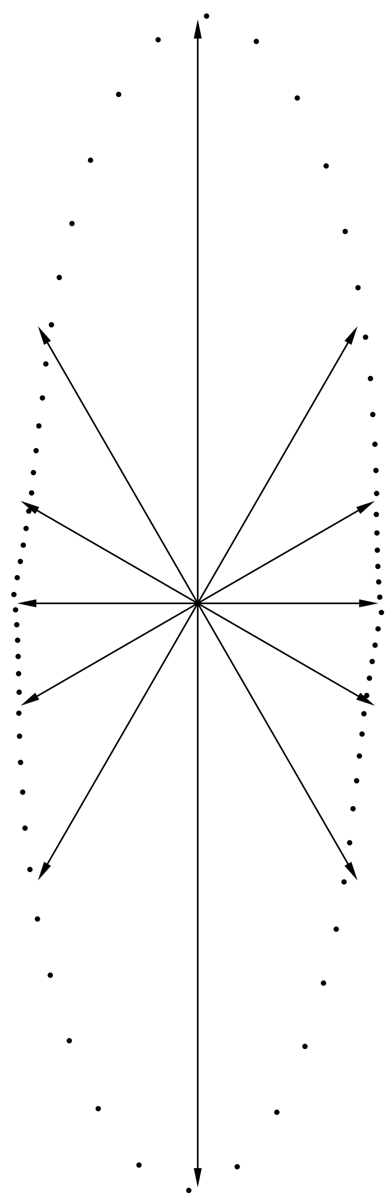
Minimum number pairs req’d ==> 1
Sample variogram points weighted by # pairs

Zone 3 Directional Correlograms - Assays

Structure Number 1

Rose Diagram of Ranges Dipping 0 Degrees
Scale:

100 Units



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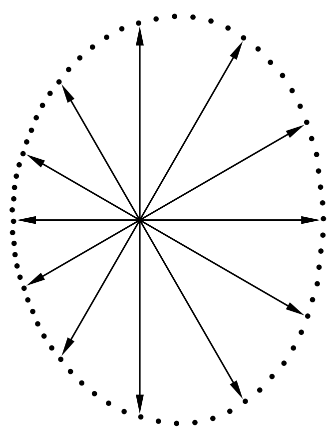
Zone 3 Directional Correlograms - Assays

Structure Number 1

Rose Diagram of Ranges Dipping 30 Degrees
Scale:

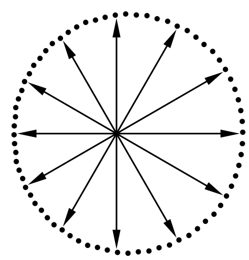


Zone 3 Directional Correlograms - Assays

Structure Number 1

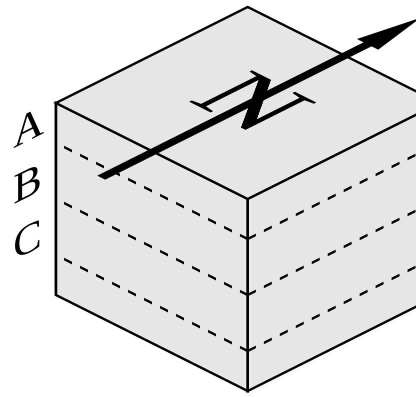
Rose Diagram of Ranges Dipping 60 Degrees
Scale:

100 Units

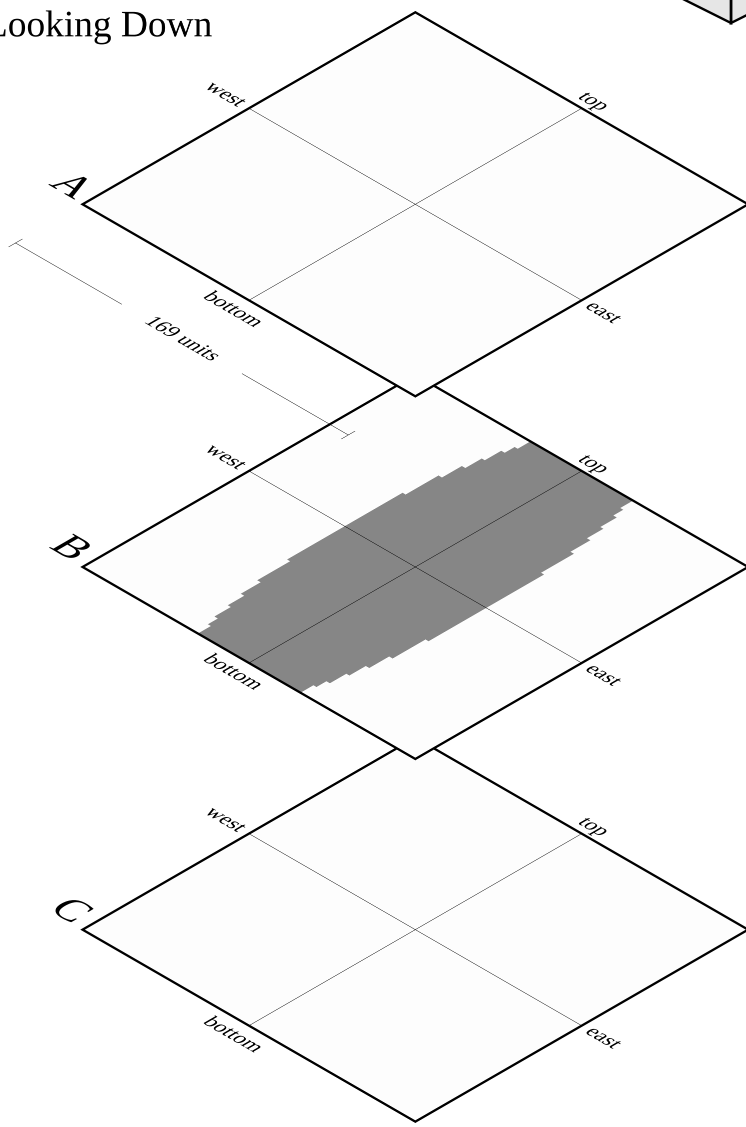


Horizontal Slices Through the Ellipsoids

Reference Cube



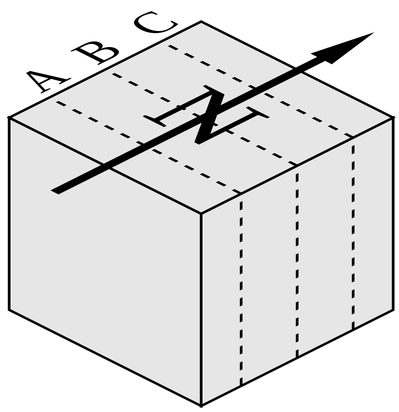
X-Y Planes Looking Down



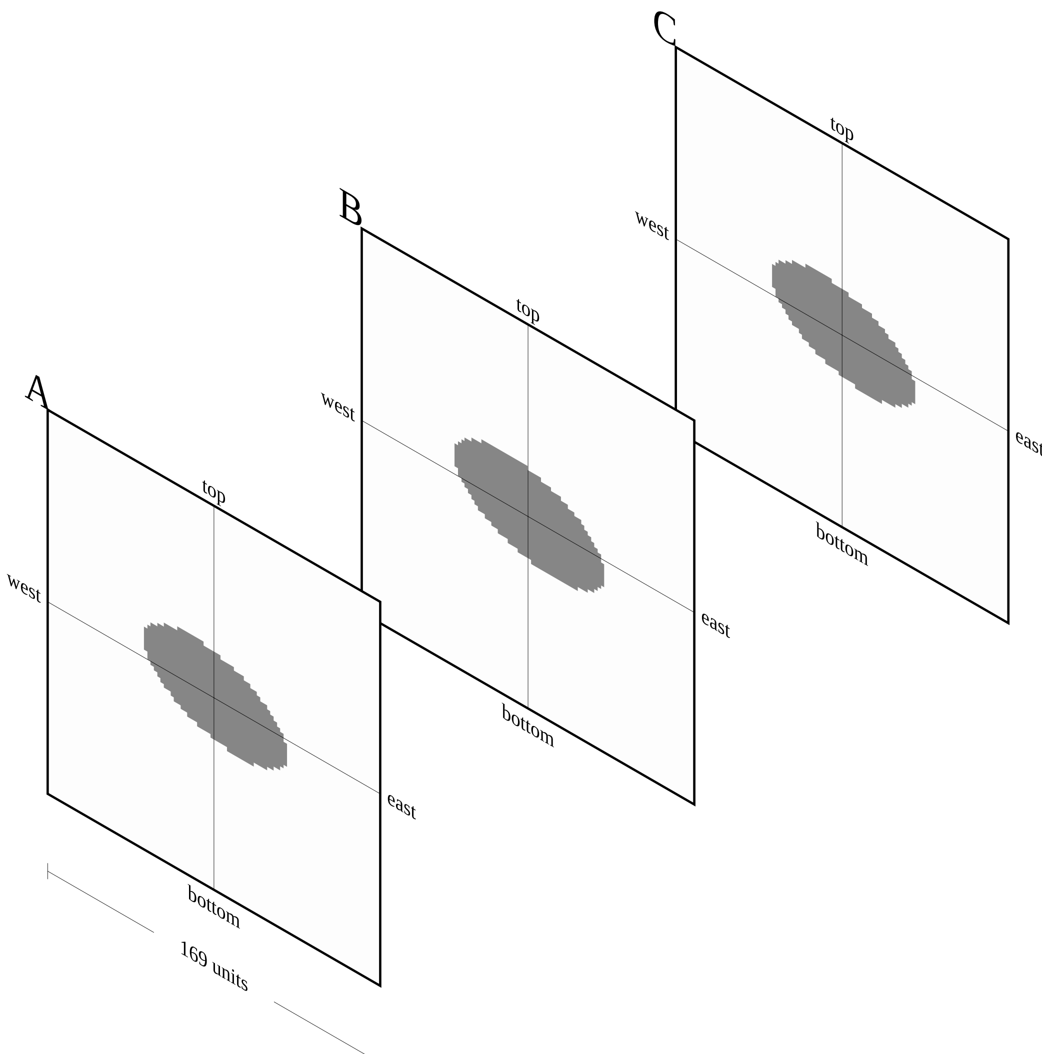
Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Cross Section Views Through the Ellipsoids

Reference Cube



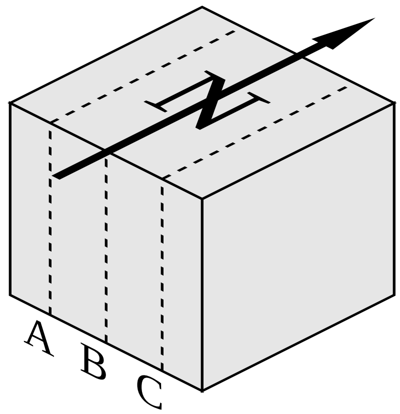
X-Z Planes Looking North



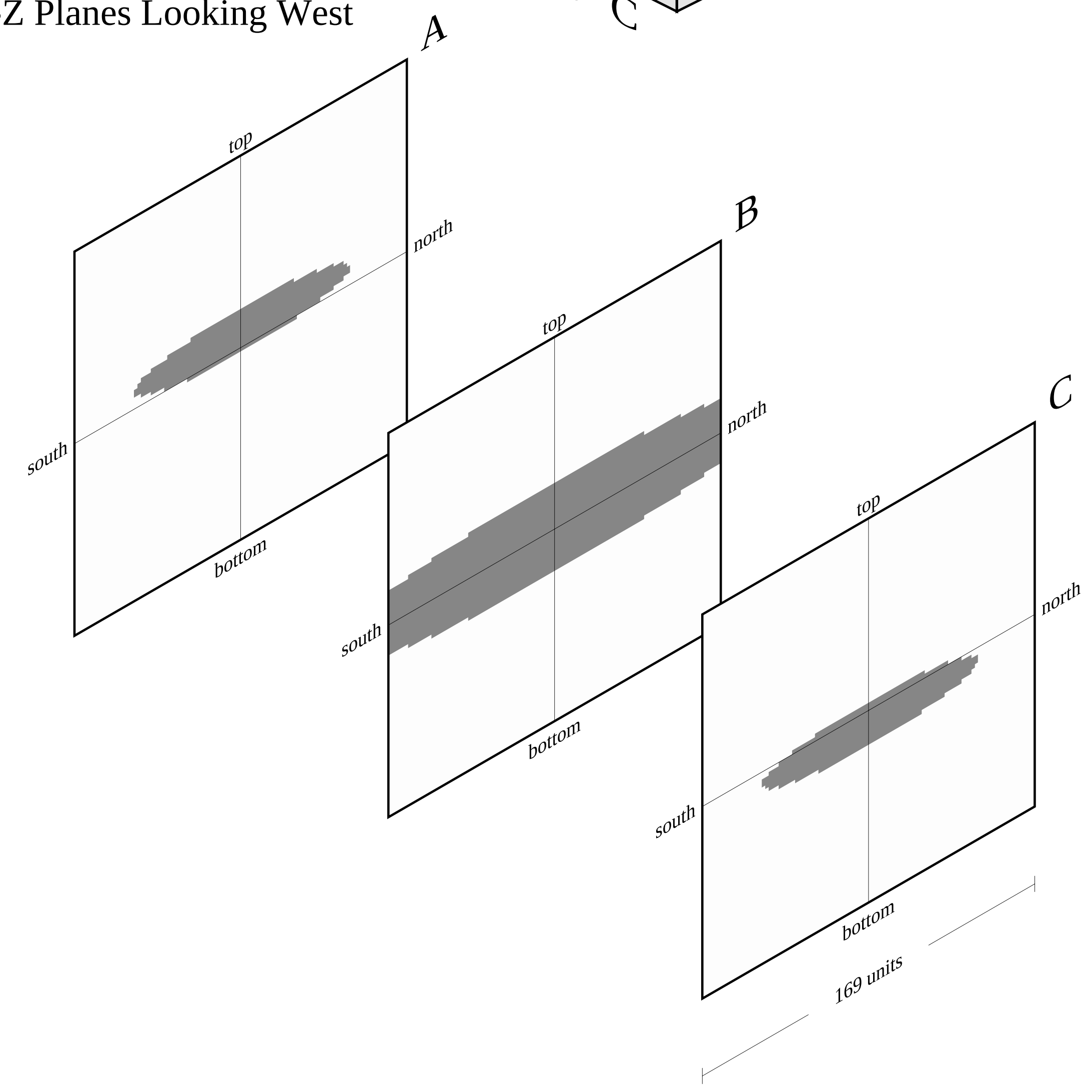
Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Long Section Views Through the Ellipsoids

Reference Cube

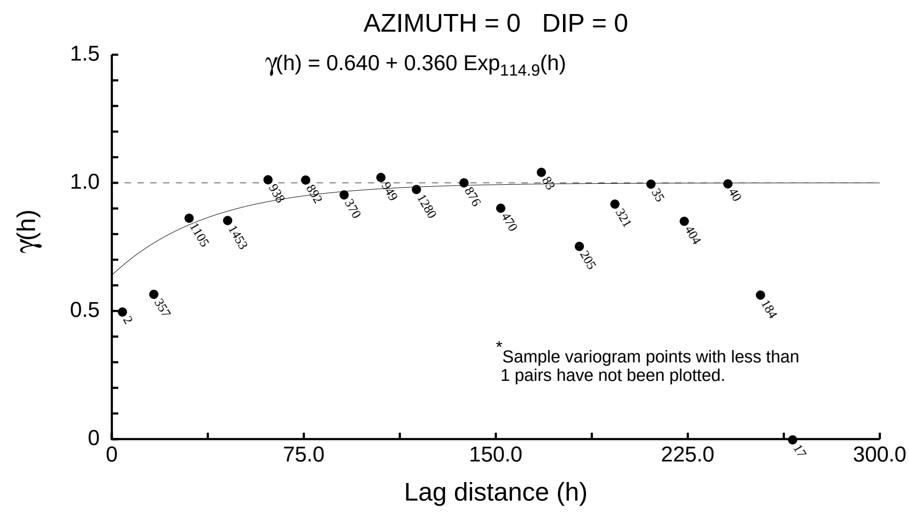


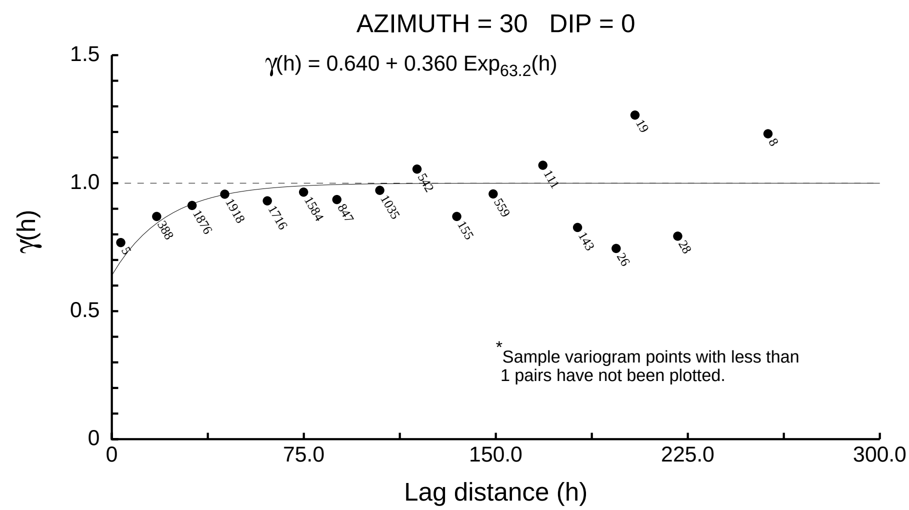
Y-Z Planes Looking West

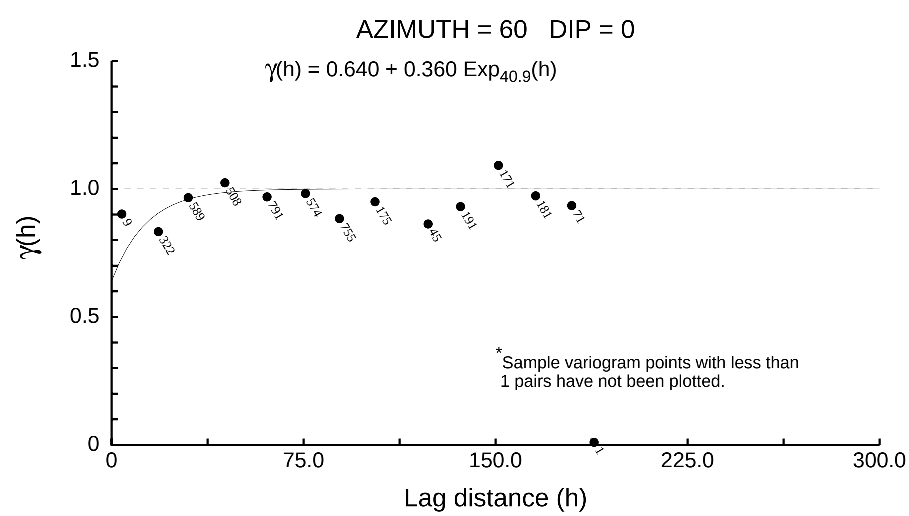


Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

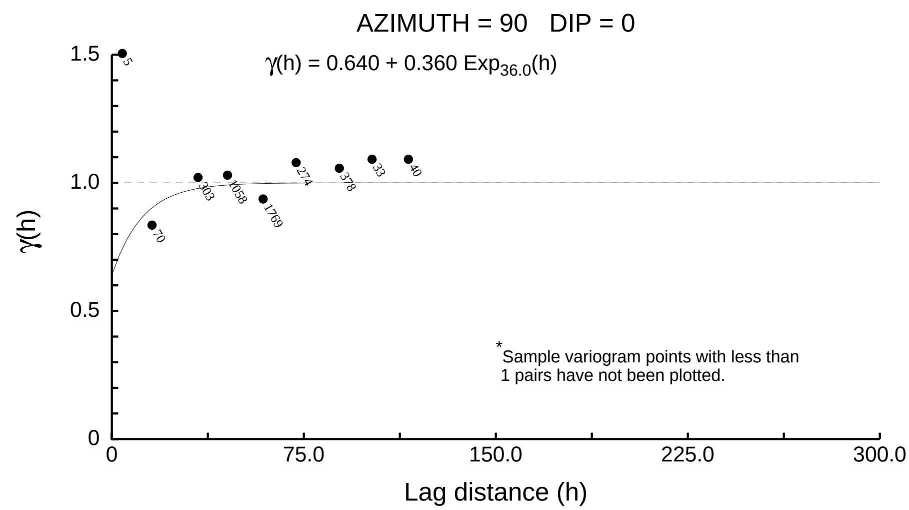
Zone 3 Directional Correlograms - Assays

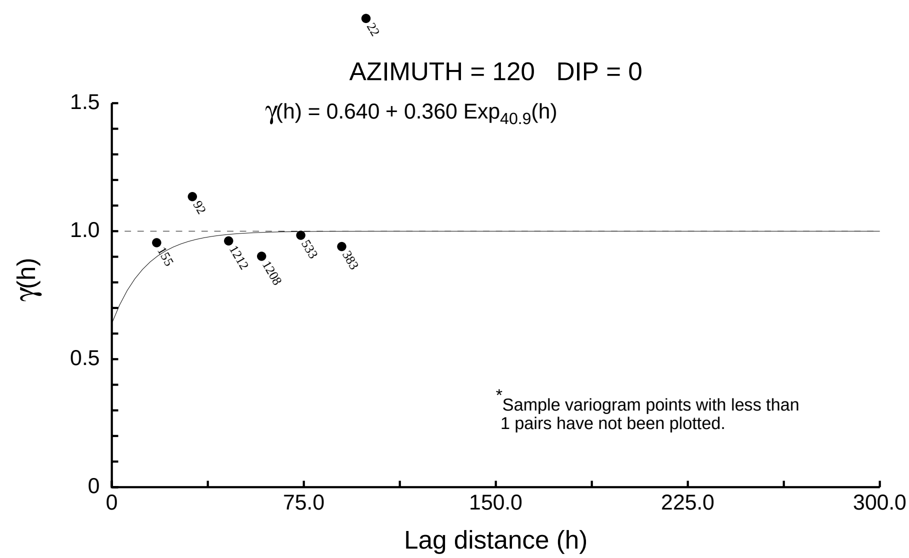


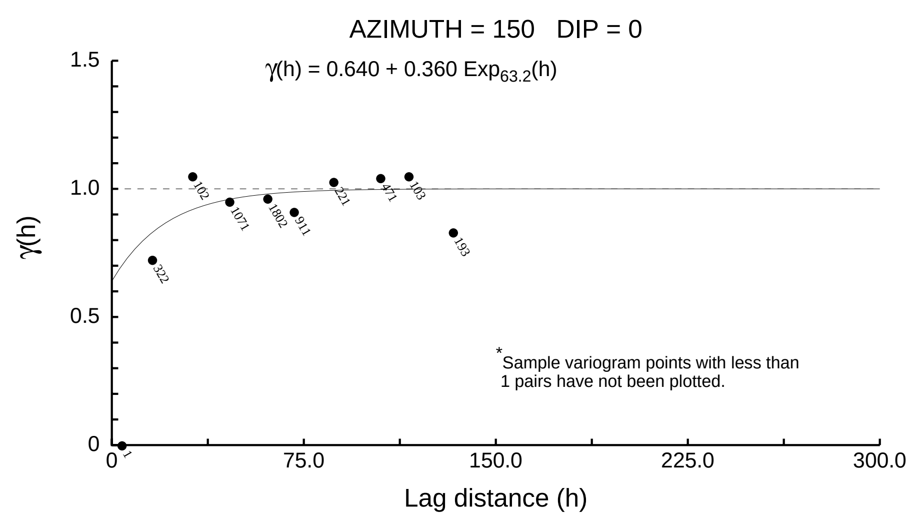




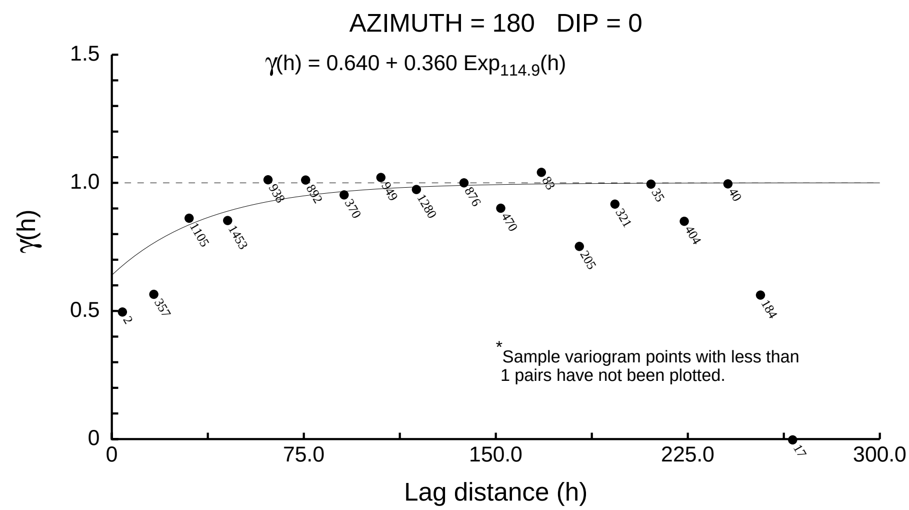
Zone 3 Directional Correlograms - Assays

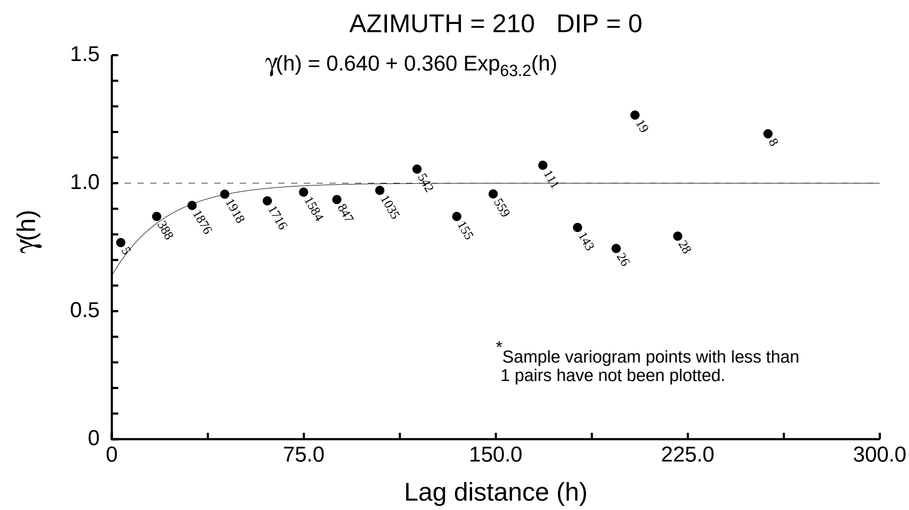


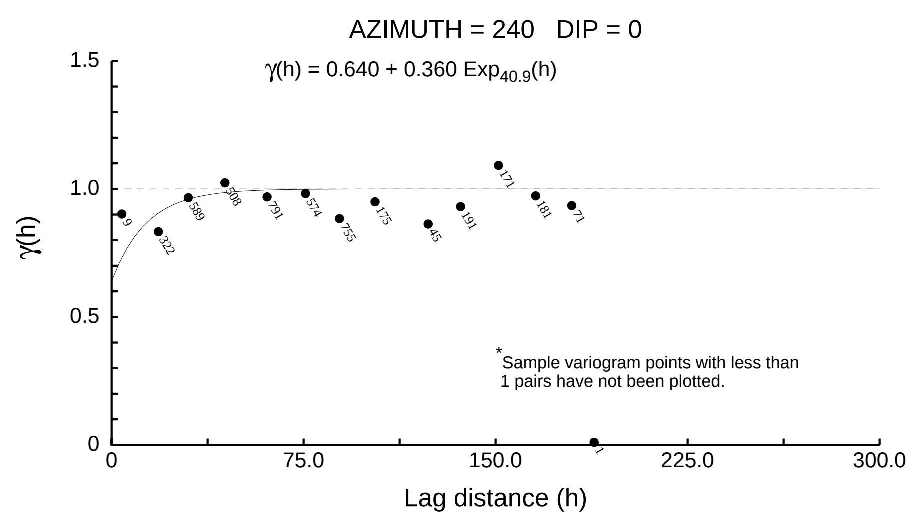




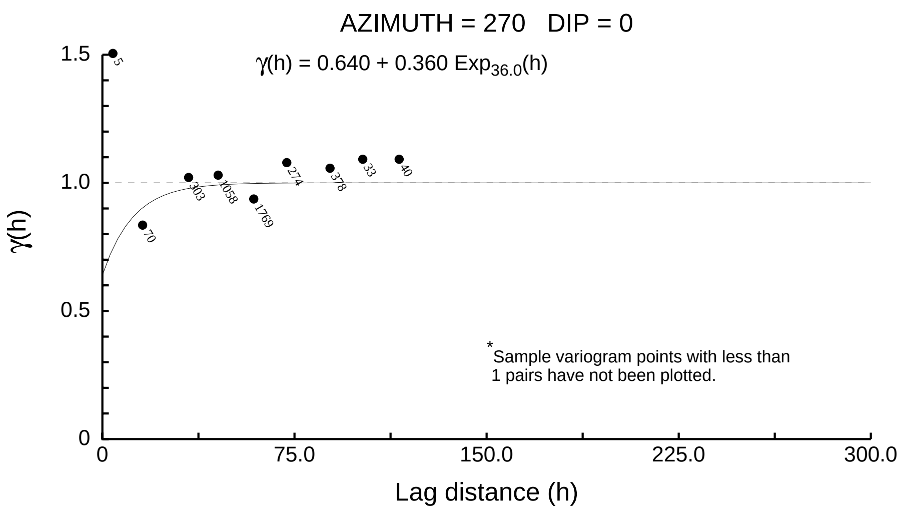
Zone 3 Directional Correlograms - Assays

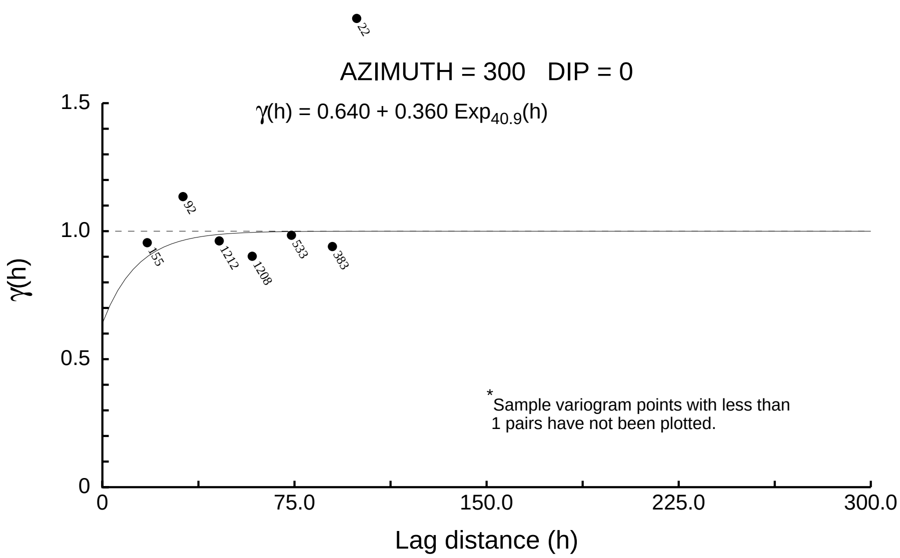


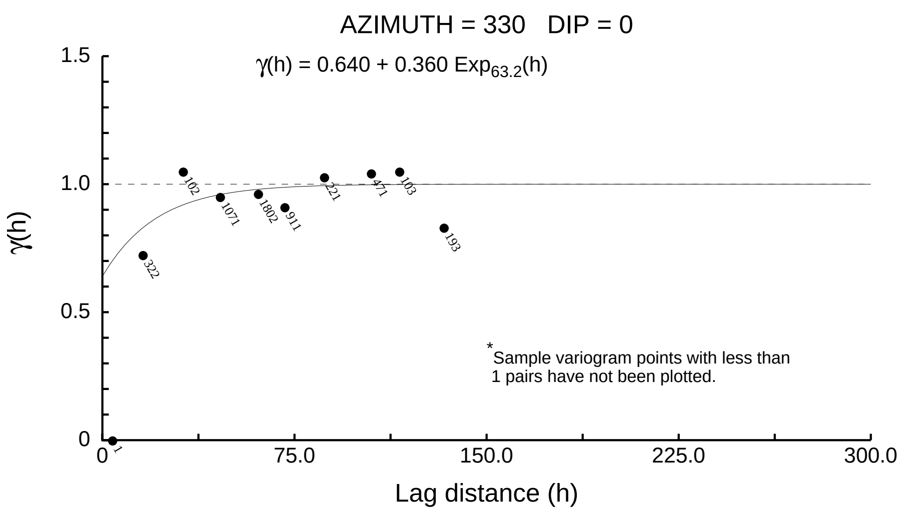




Zone 3 Directional Correlograms - Assays







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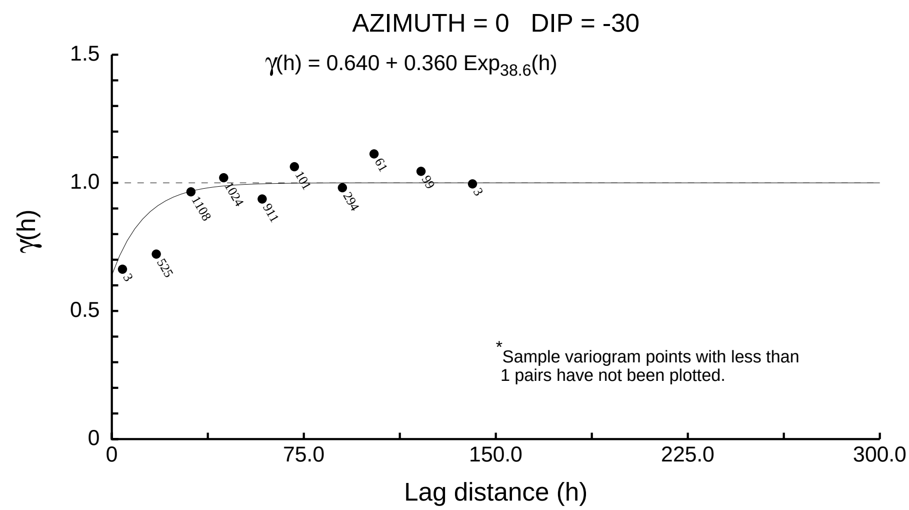
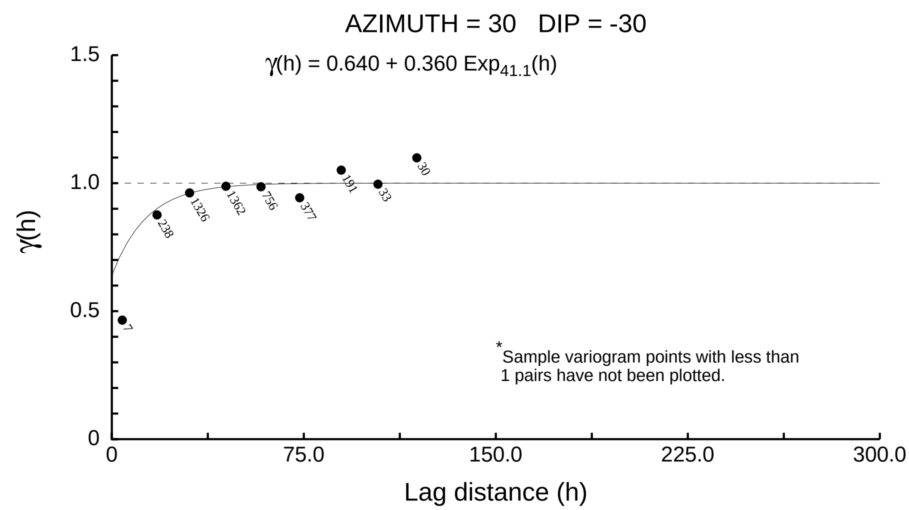
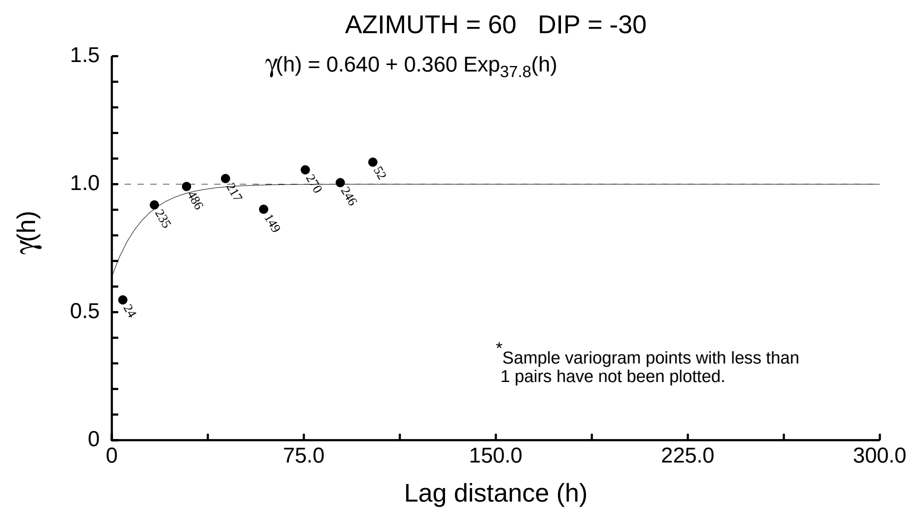
Zone 3 Directional Correlograms - Assays







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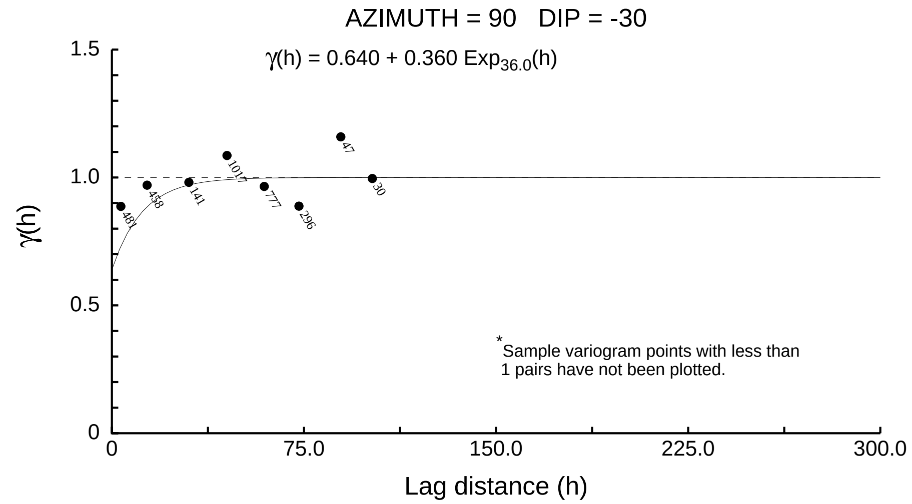
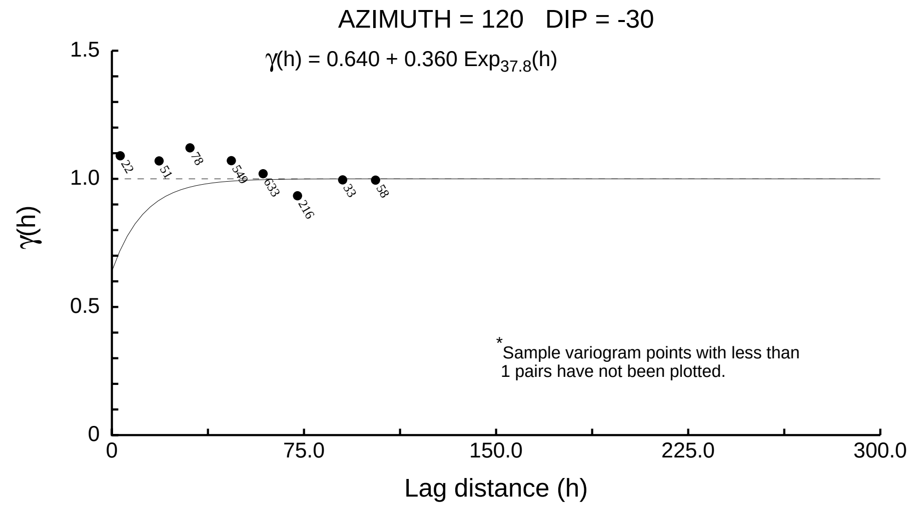
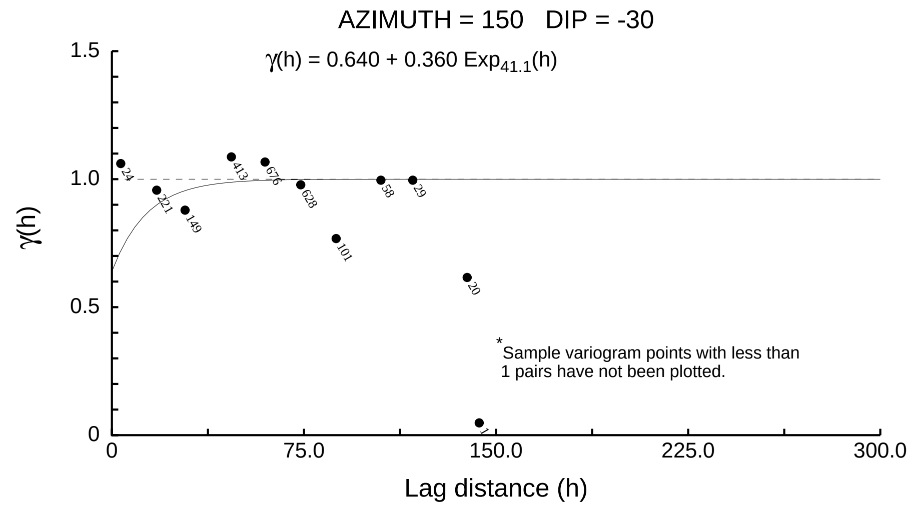
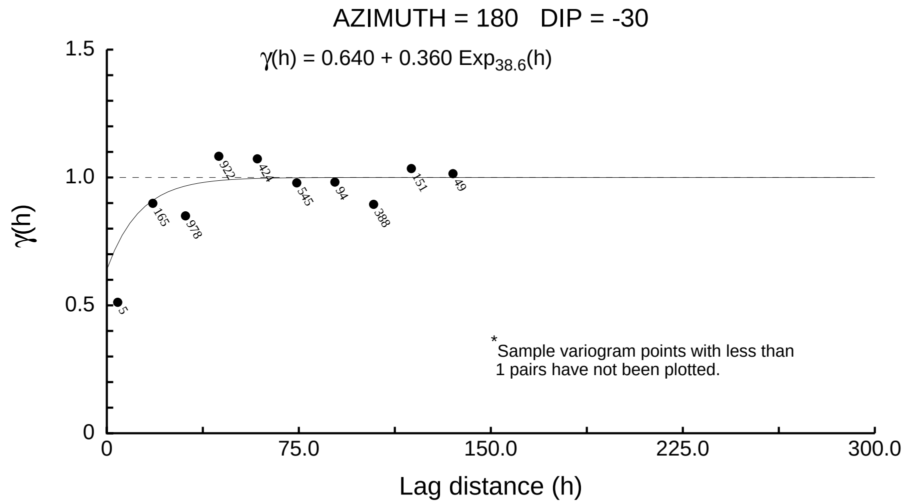
Zone 3 Directional Correlograms - Assays

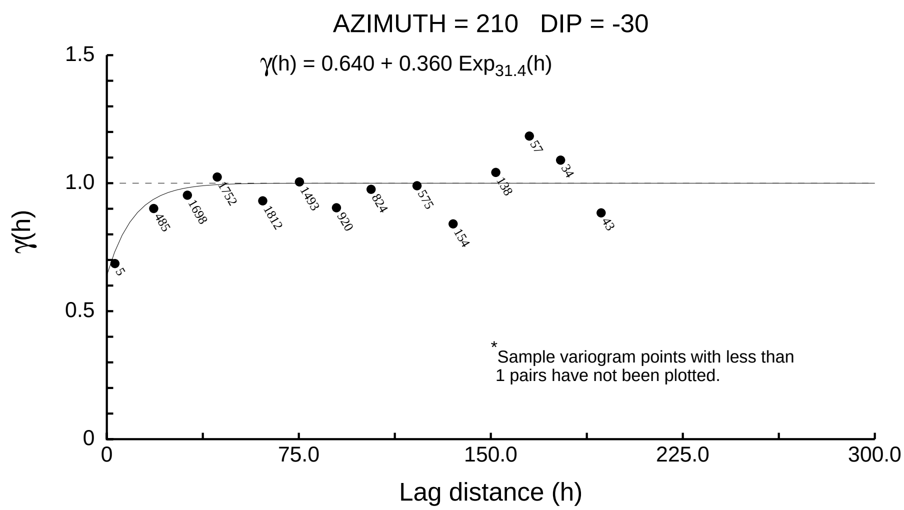


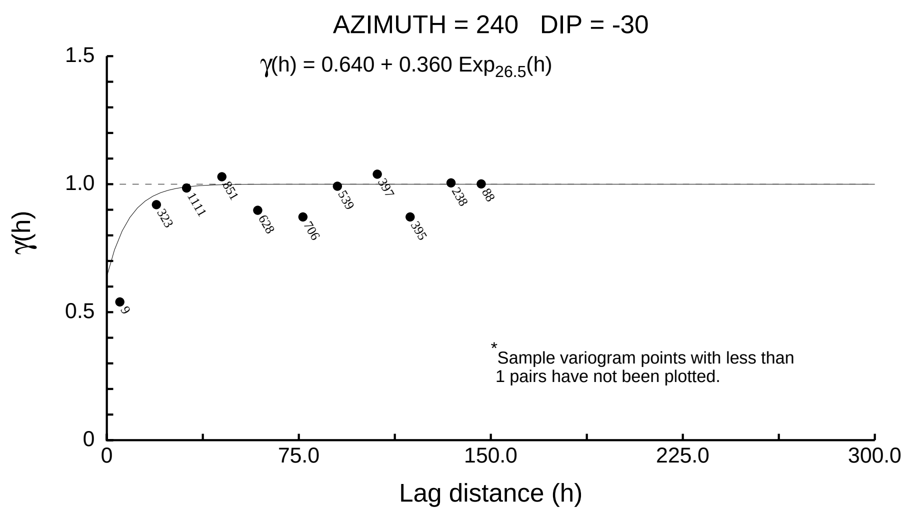




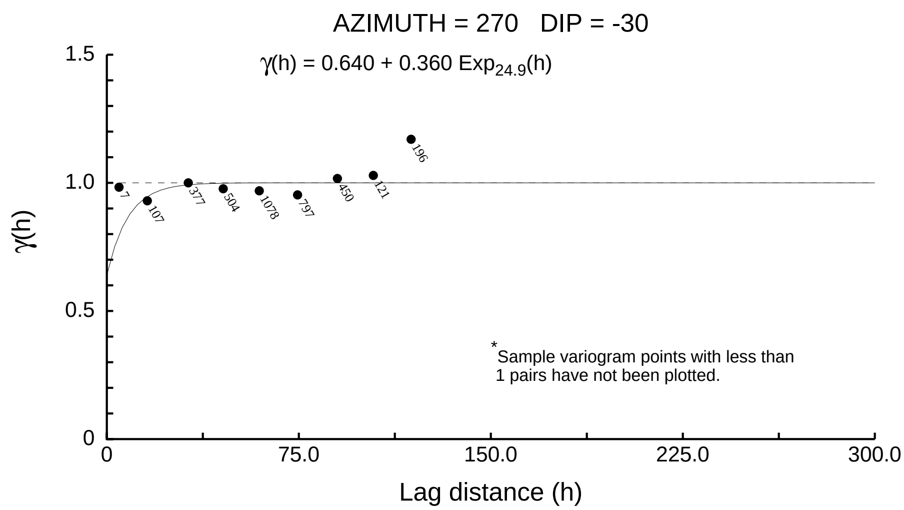
Zone 3 Directional Correlograms - Assays

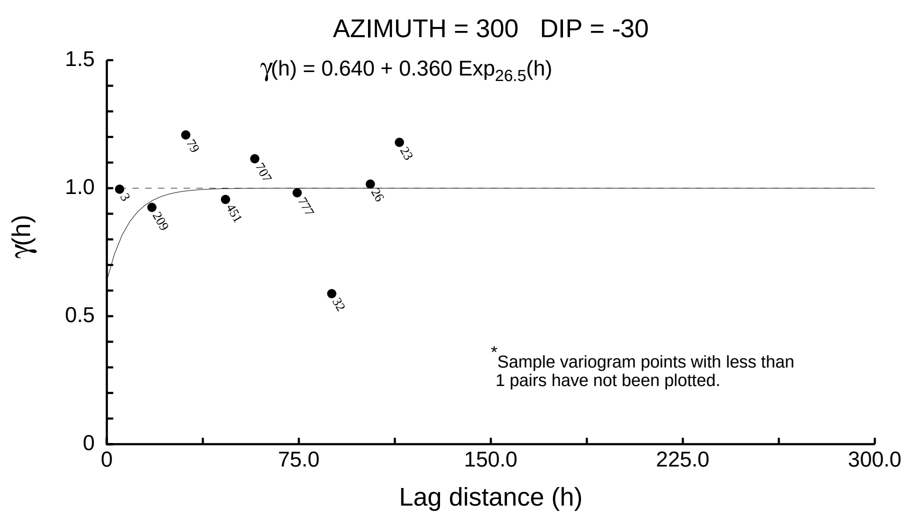


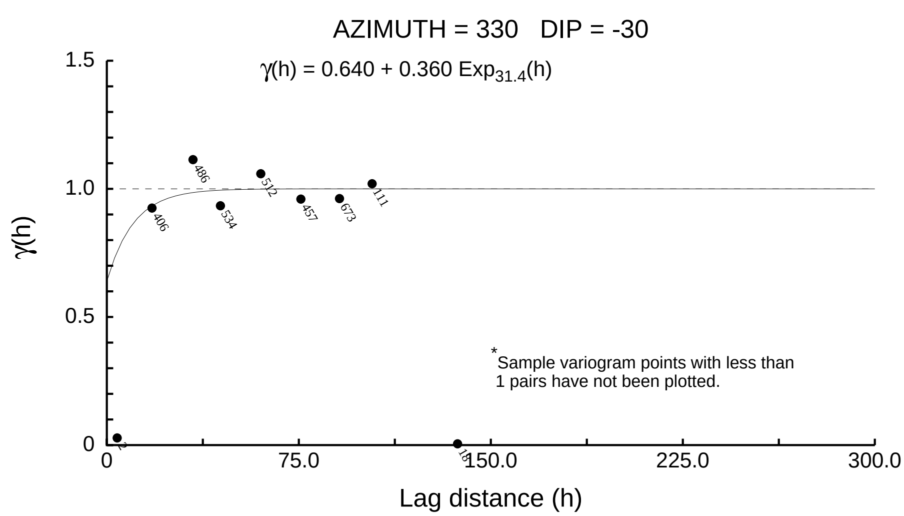




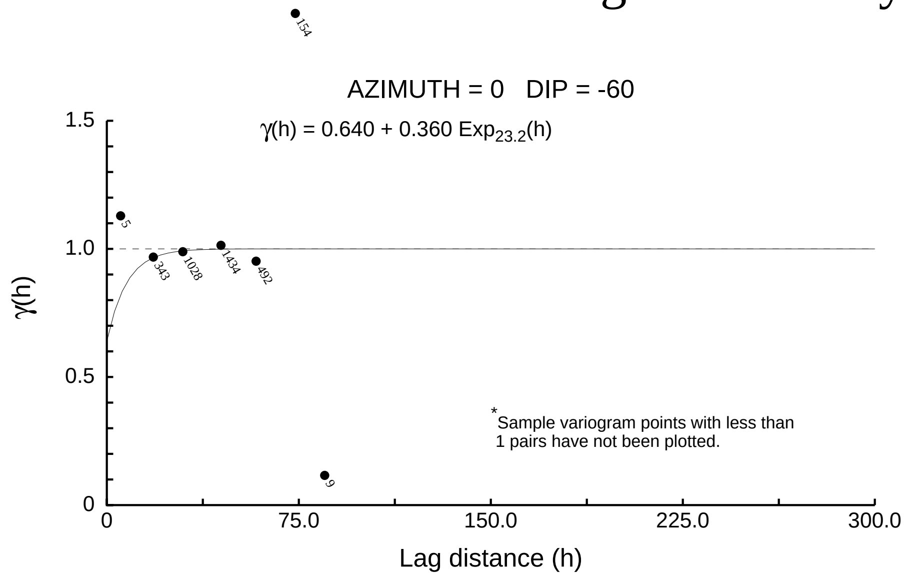
Zone 3 Directional Correlograms - Assays

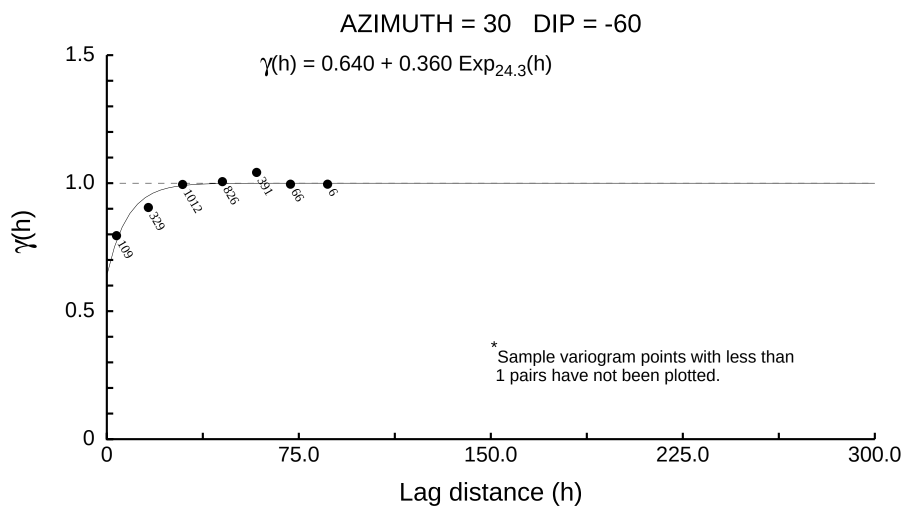


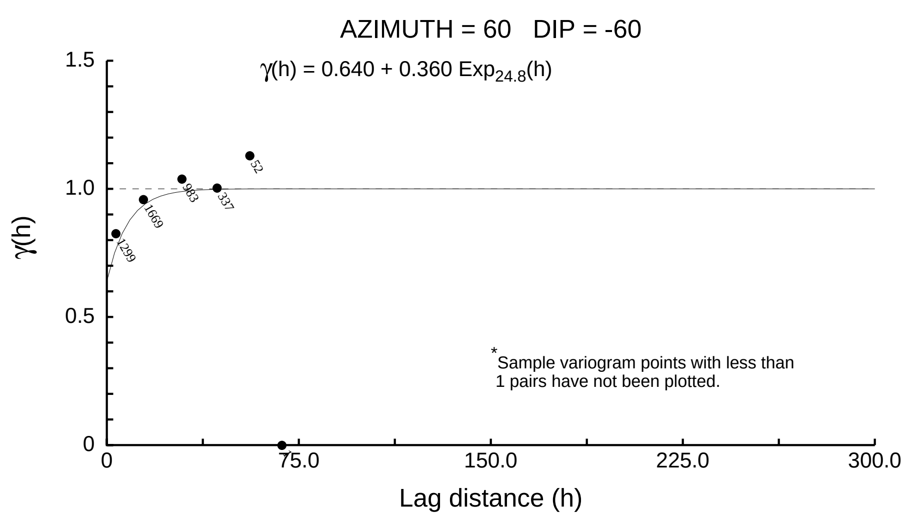




Zone 3 Directional Correlograms - Assays







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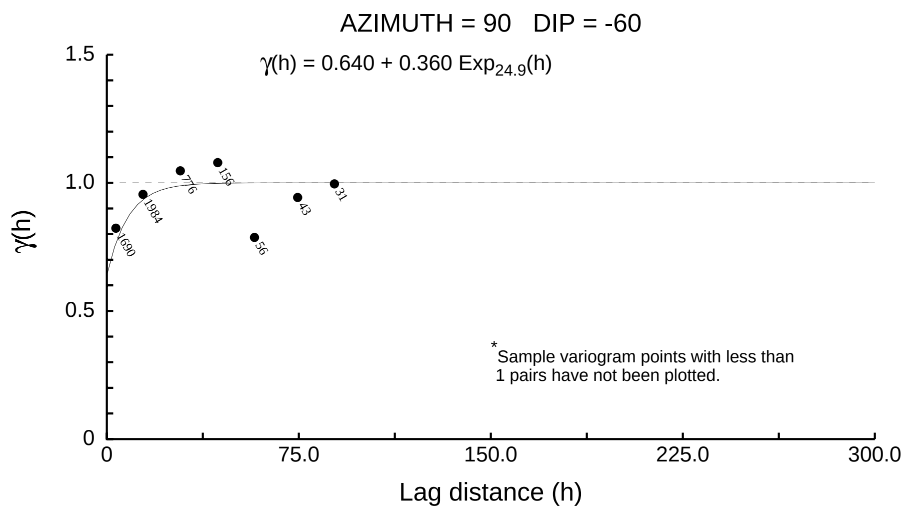
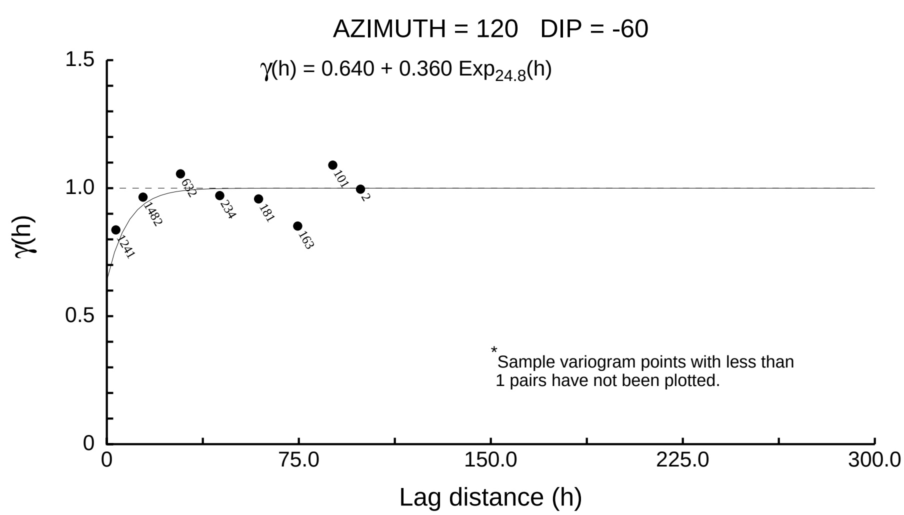
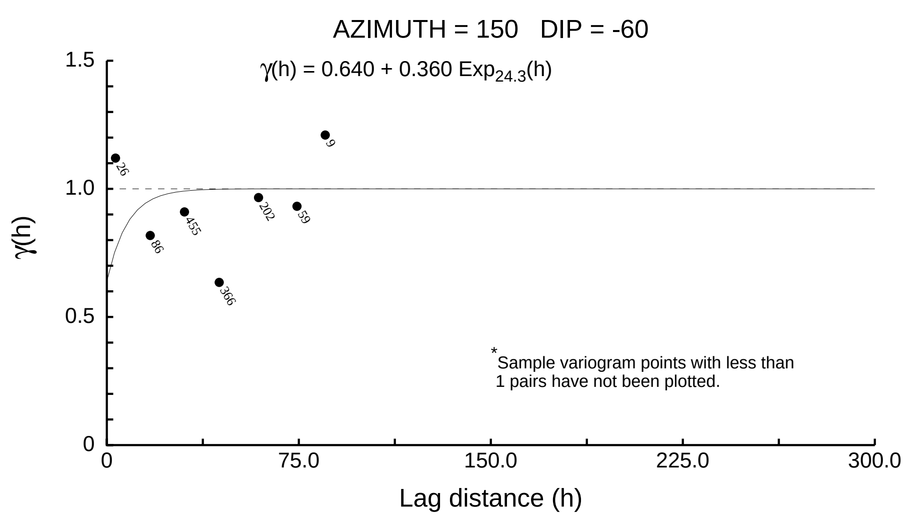
Zone 3 Directional Correlograms - Assays







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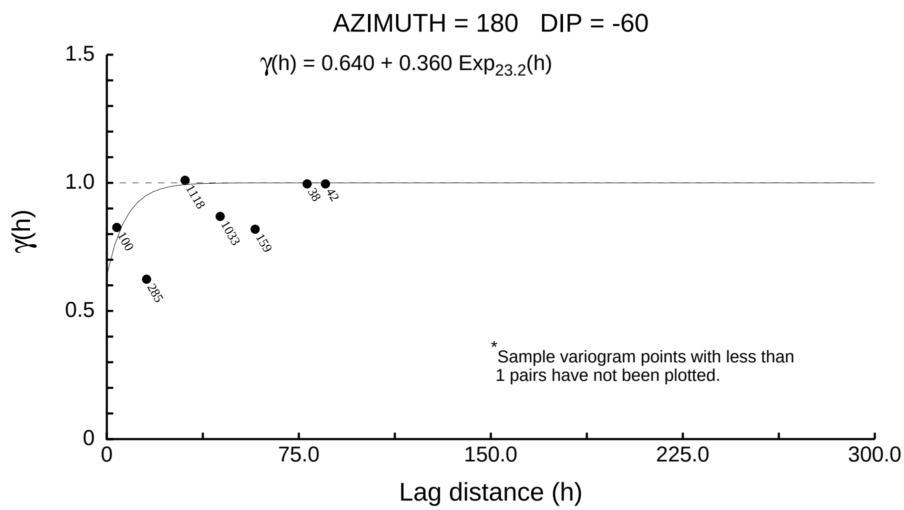
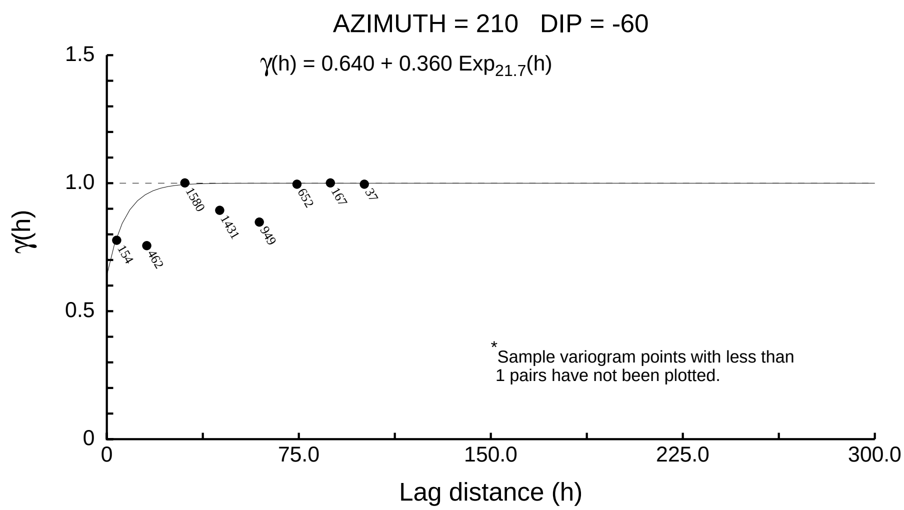
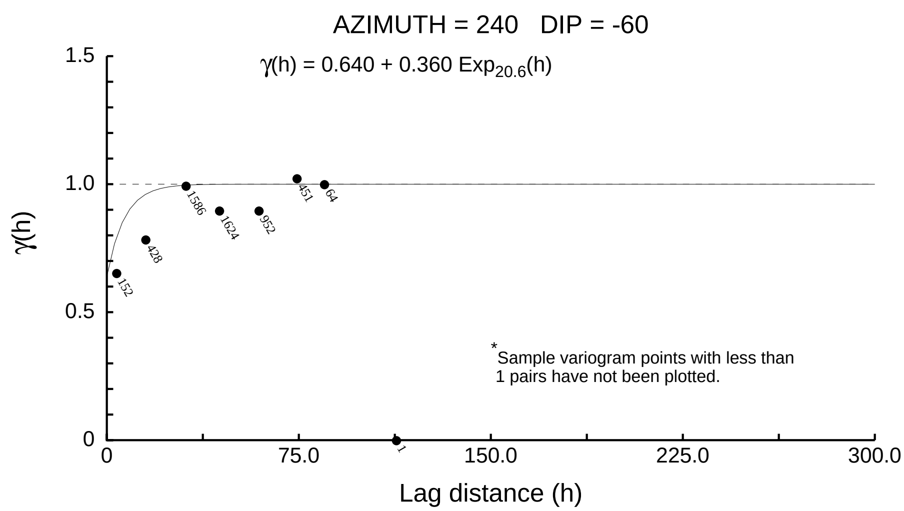
Zone 3 Directional Correlograms - Assays







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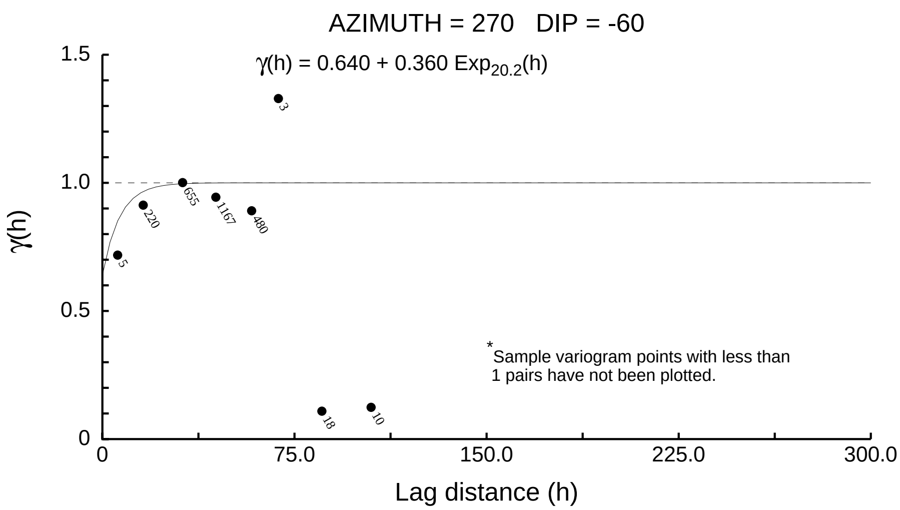
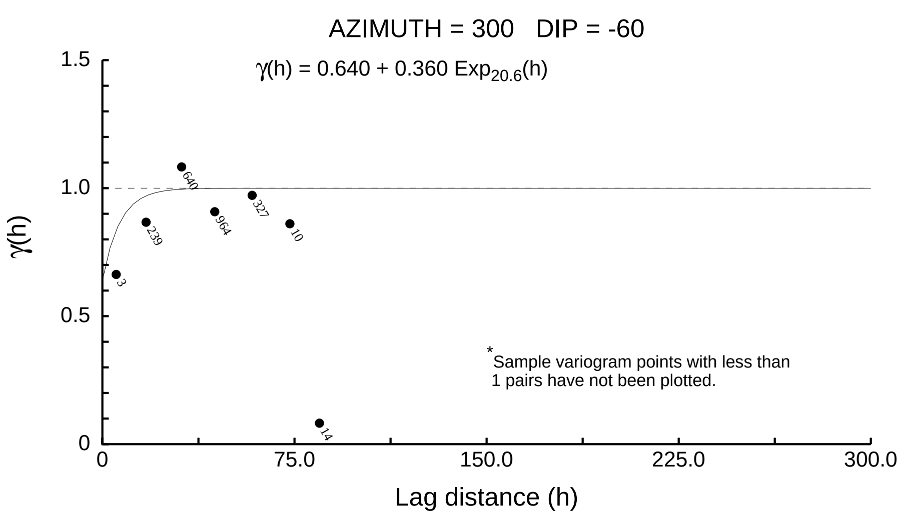
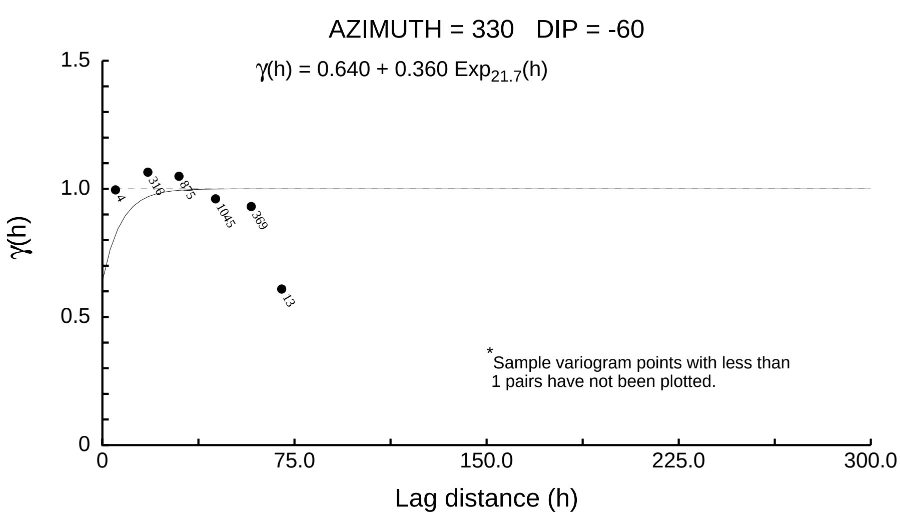
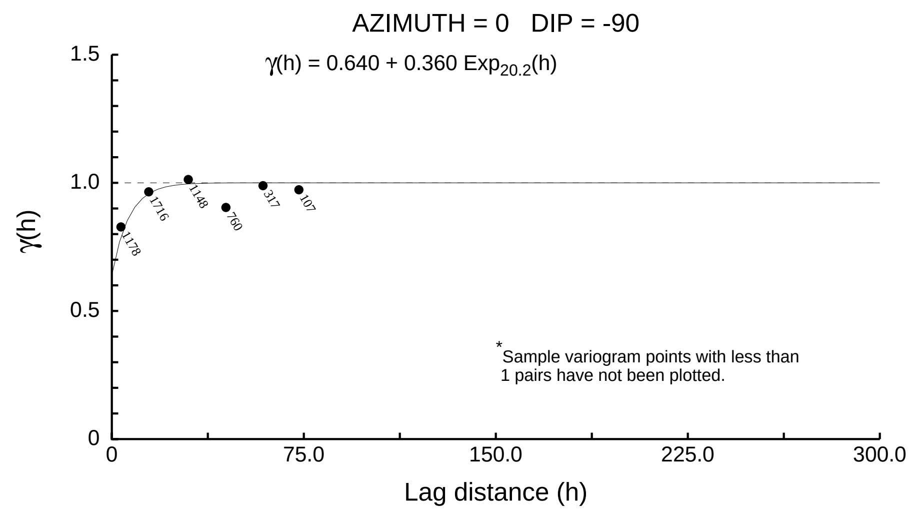
Zone 3 Directional Correlograms - Assays







Zone 3 Directional Correlograms - Assays



Zone 10 Downhole Correlograms - Assays

Medsystem and Vulcan Rotation Conventions

Nugget ==> 0.450
C1 ==> 0.550

First Structure -- Exponential with Practical Range

LH Rotation about the Z axis ==> 0
RH Rotation about the X' axis ==> 0
LH Rotation about the Y' axis ==> 0

Range along the Z' axis ==> 6.5	Azimuth ==> 90 Dip ==> 90
Range along the Y' axis ==> 6.5	Azimuth ==> 360 Dip ==> 0
Range along the X' axis ==> 6.5	Azimuth ==> 90 Dip ==> 0

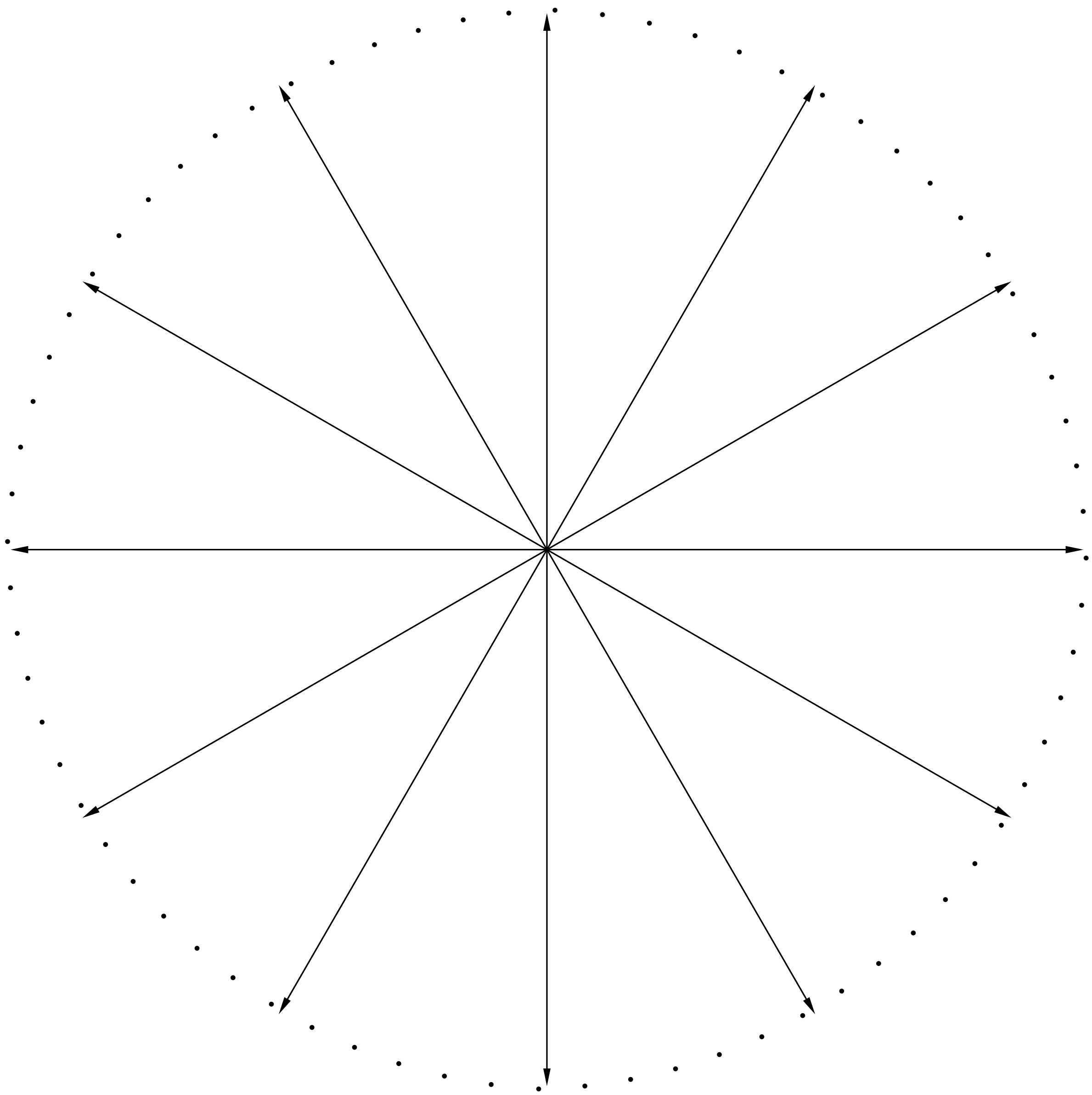
Modeling Criteria

Minimum number pairs req'd ==> 1
Sample variogram points weighted by # pairs

Zone 10 Downhole Correlograms - Assays

Structure Number 1

Rose Diagram of Ranges Dipping 0 Degrees
Scale:



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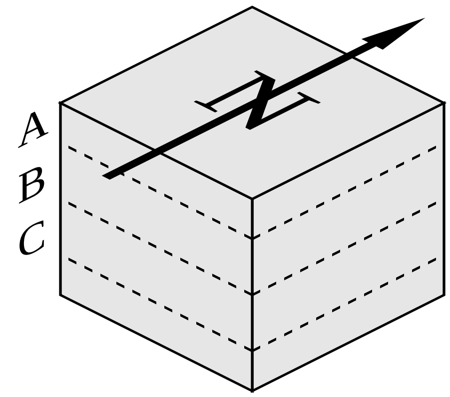
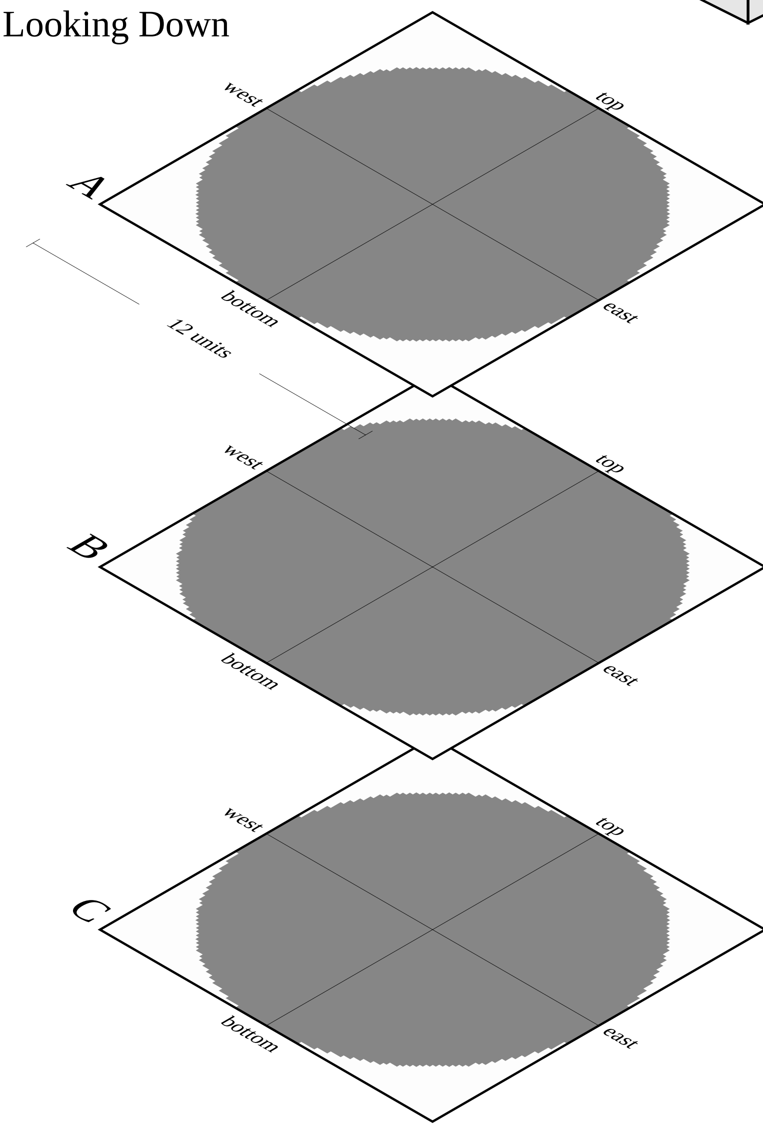
Horizontal Slices Through the Ellipsoids

Reference Cube



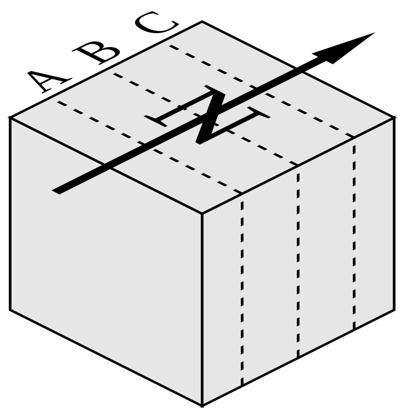
X-Y Planes Looking Down



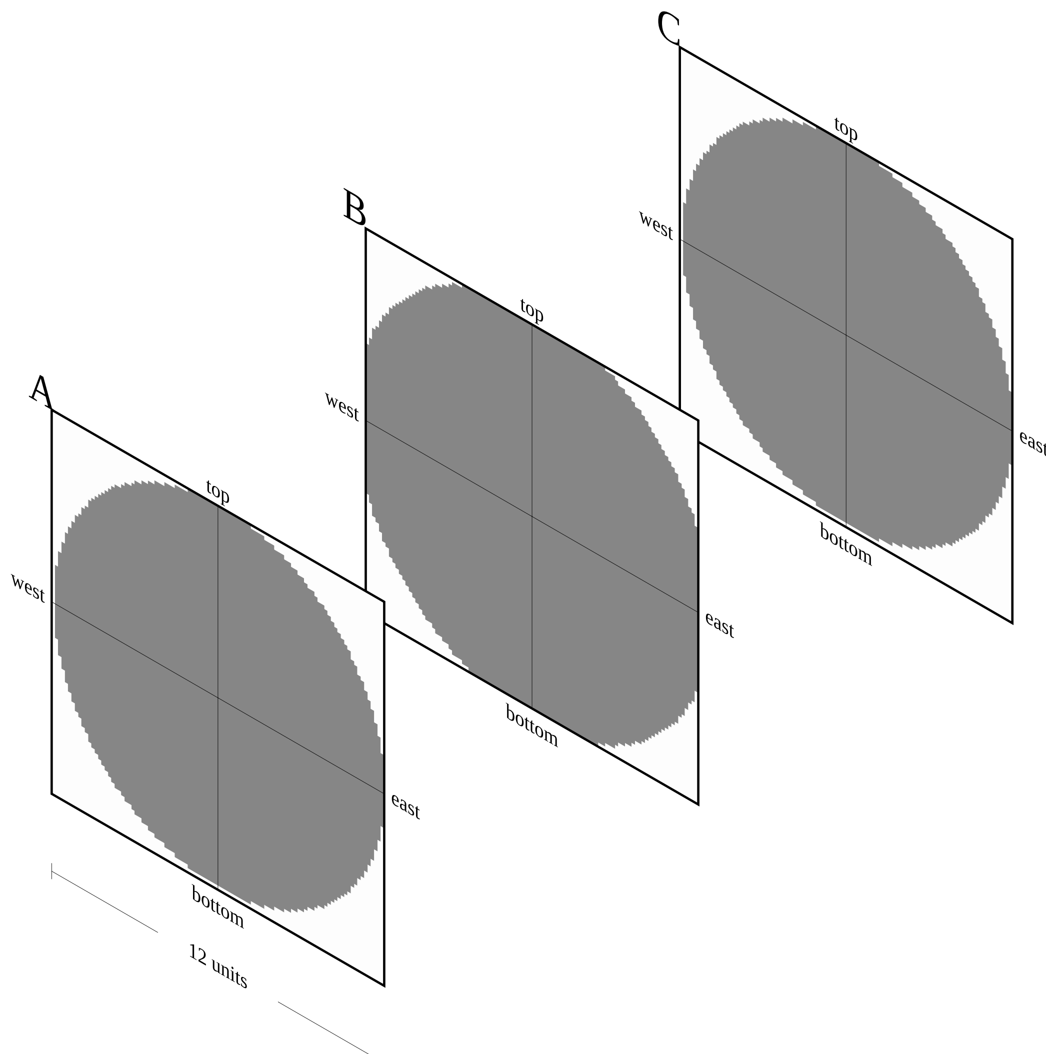
Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Cross Section Views Through the Ellipsoids

Reference Cube



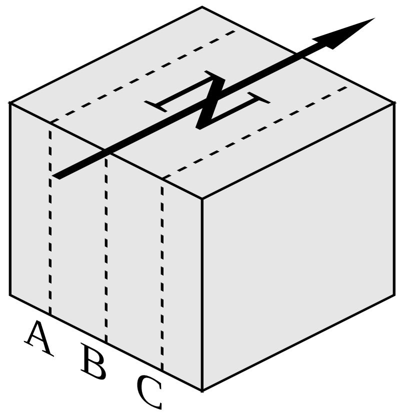
X-Z Planes Looking North



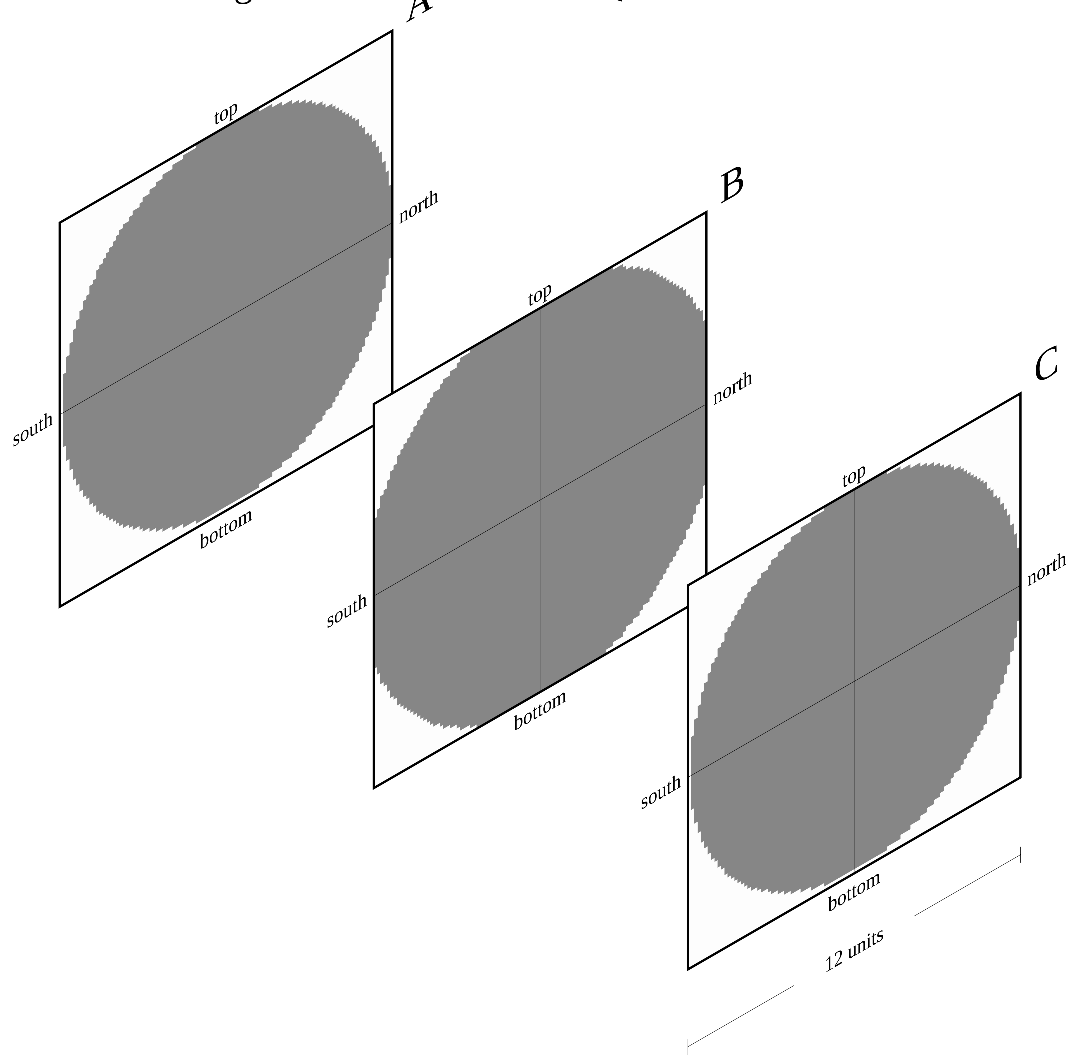
Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Long Section Views Through the Ellipsoids

Reference Cube

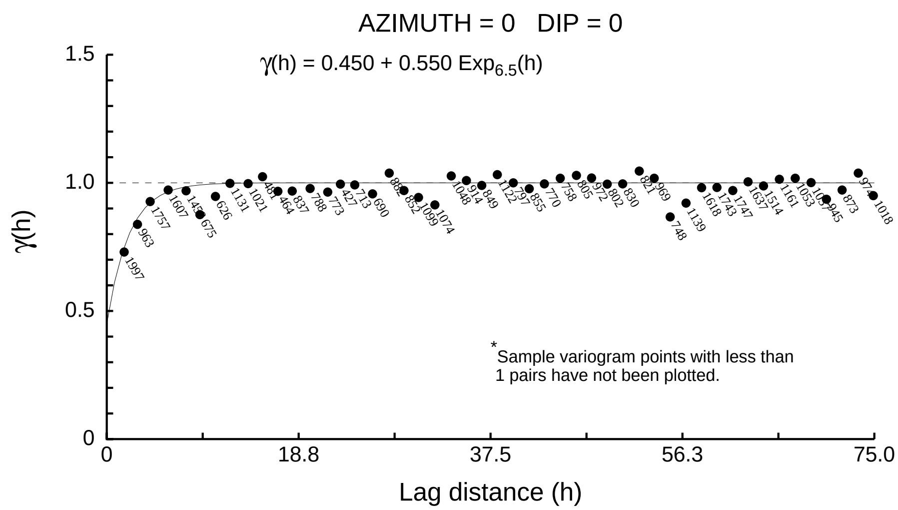


Y-Z Planes Looking West



Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Zone 10 Downhole Correlograms - Assays



Zone 10 Directional Correlograms - Assays

Medsystem and Vulcan Rotation Conventions

Nugget ==> 0.450
C1 ==> 0.550

First Structure -- Exponential with Practical Range

LH Rotation about the Z axis ==> 0
RH Rotation about the X’ axis ==> 0
LH Rotation about the Y’ axis ==> 75
Range along the Z’ axis ==> 5.1 Azimuth ==> 270 Dip ==> 15
Range along the Y’ axis ==> 32.7 Azimuth ==> 360 Dip ==> 0
Range along the X’ axis ==> 15.4 Azimuth ==> 90 Dip ==> 75

Modeling Criteria

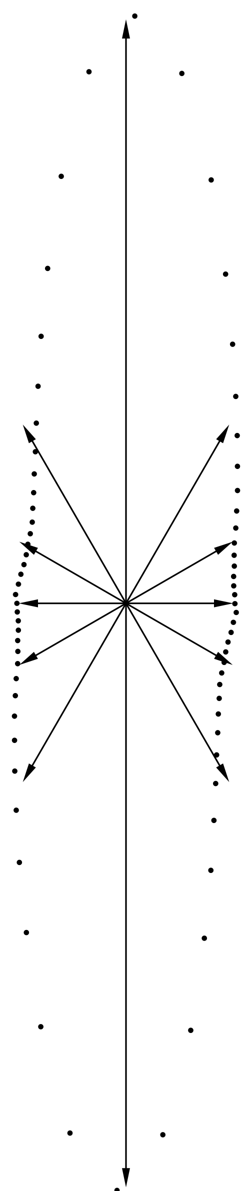
Minimum number pairs req’d ==> 1
Sample variogram points weighted by # pairs

Zone 10 Directional Correlograms - Assays

Structure Number 1

Rose Diagram of Ranges Dipping 0 Degrees
Scale:

30 Units

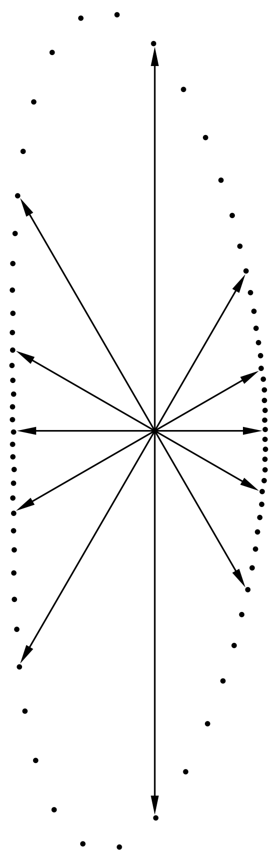


Zone 10 Directional Correlograms - Assays

Structure Number 1

Rose Diagram of Ranges Dipping 30 Degrees
Scale:

30 Units

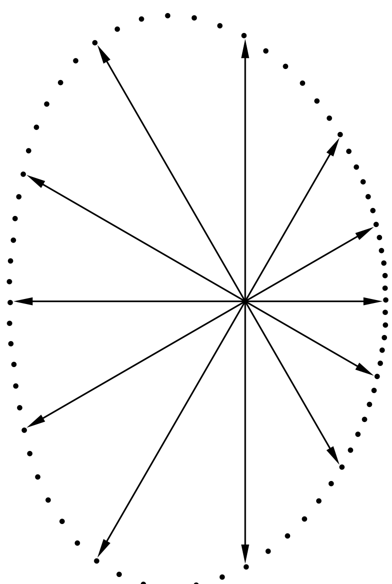


Zone 10 Directional Correlograms - Assays

Structure Number 1

Rose Diagram of Ranges Dipping 60 Degrees
Scale:

30 Units



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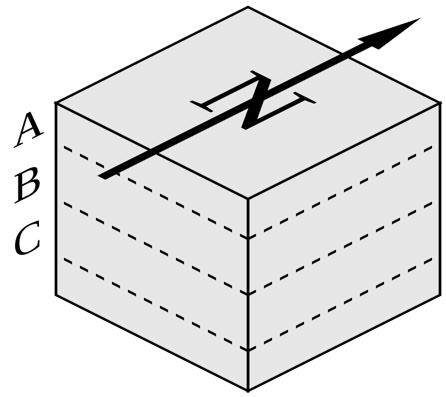
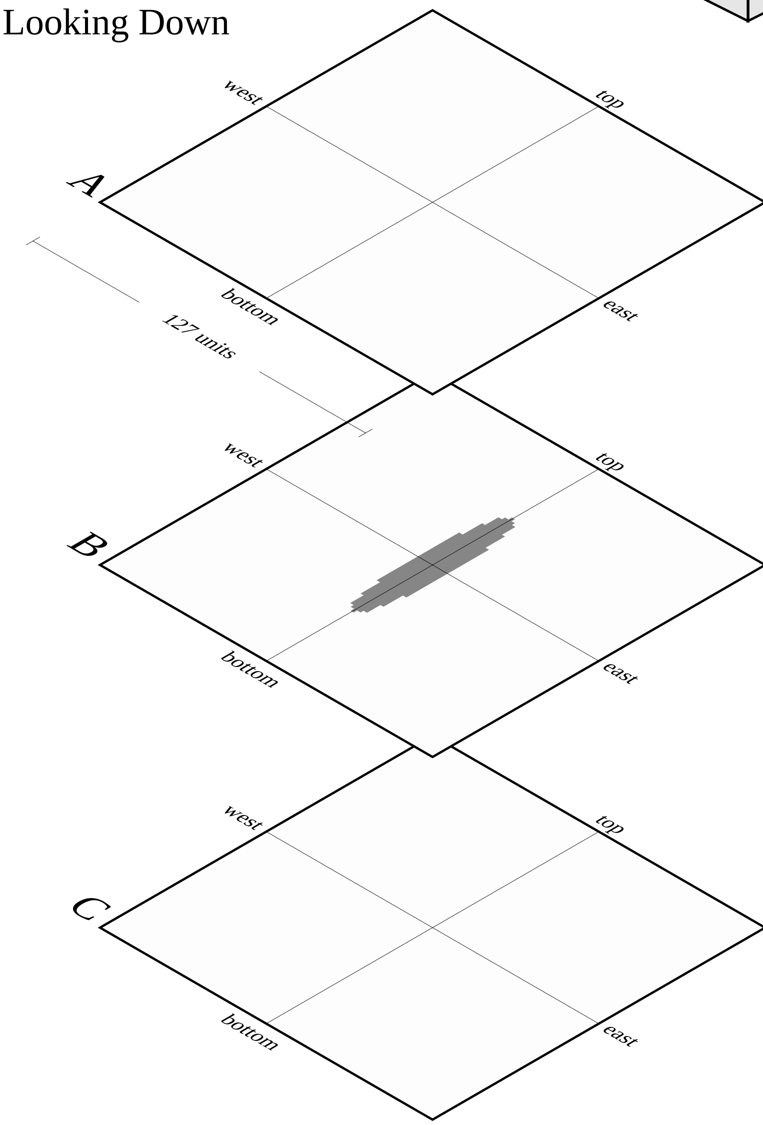
Horizontal Slices Through the Ellipsoids

Reference Cube



X-Y Planes Looking Down



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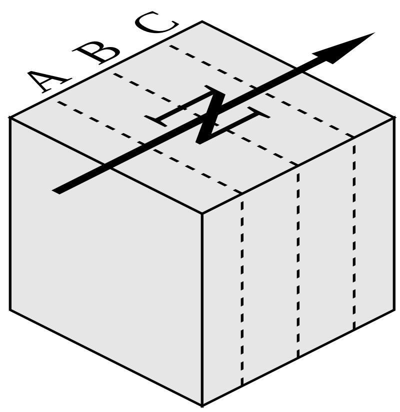
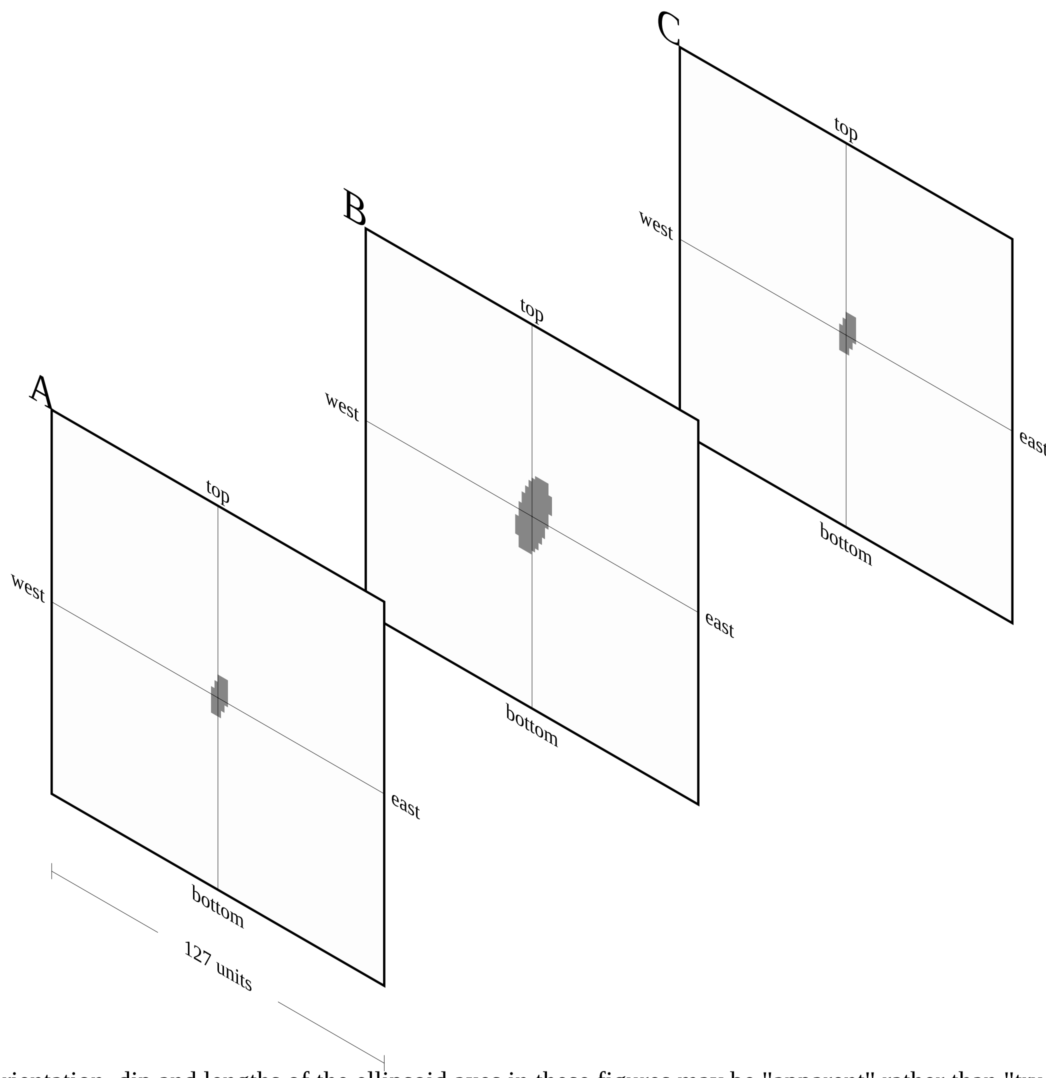
Cross Section Views Through the Ellipsoids

Reference Cube



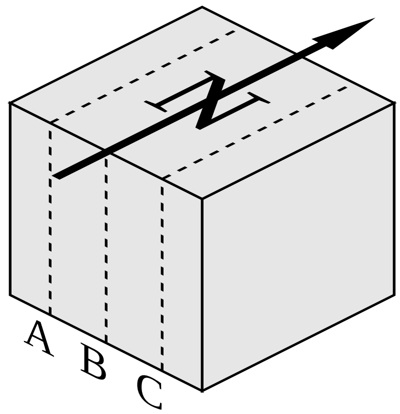
X-Z Planes Looking North



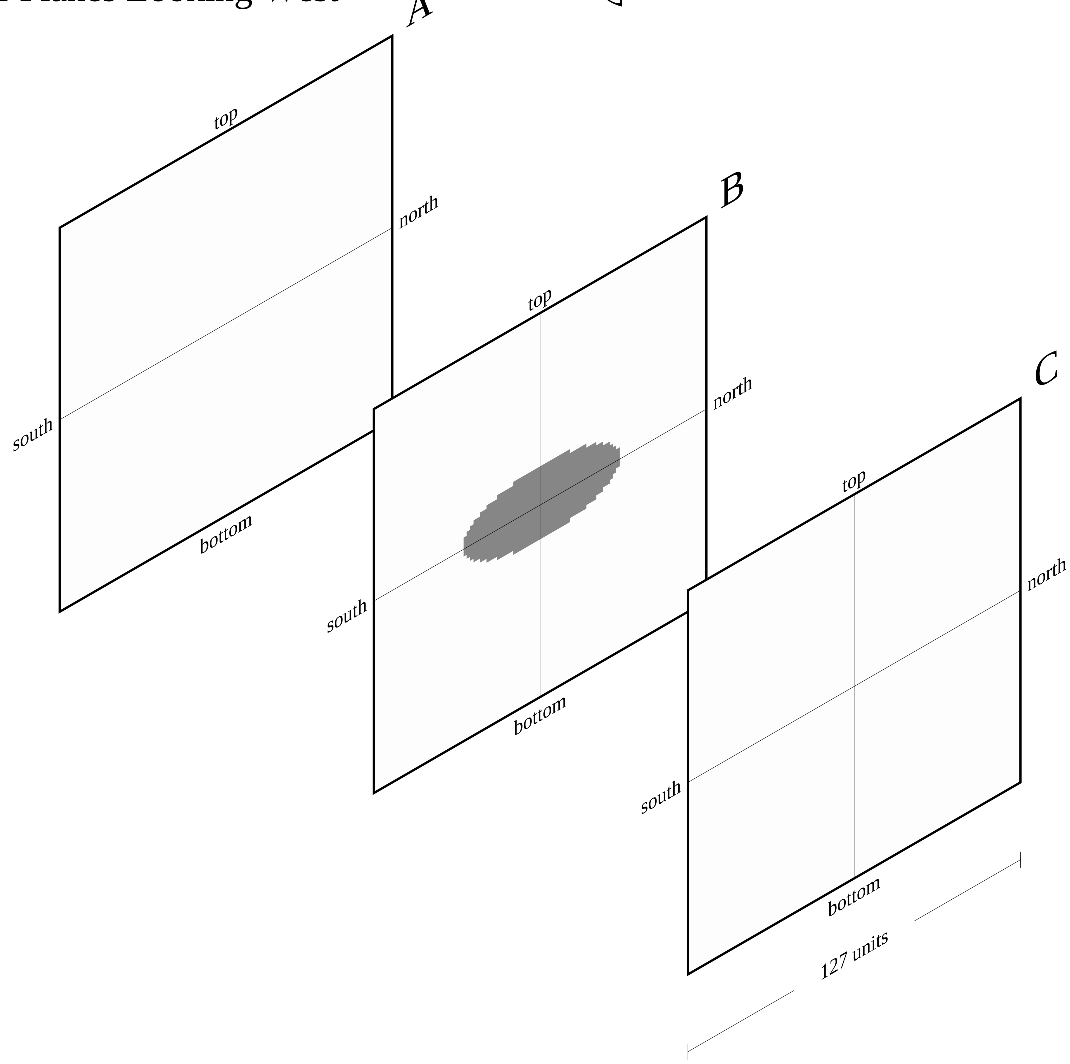
Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Long Section Views Through the Ellipsoids

Reference Cube

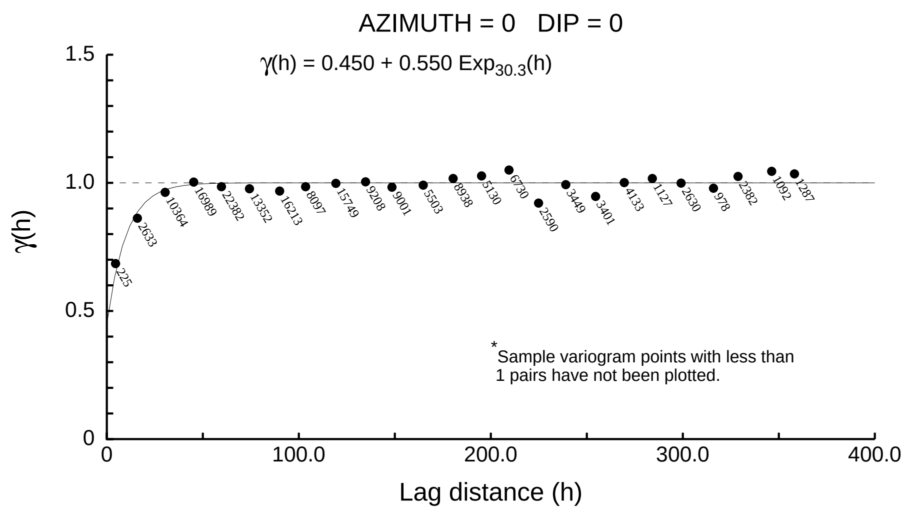


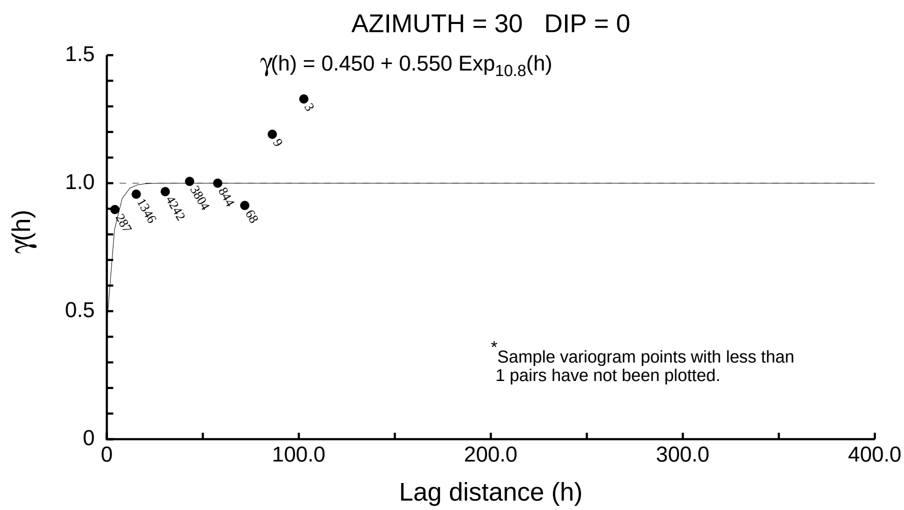
Y-Z Planes Looking West

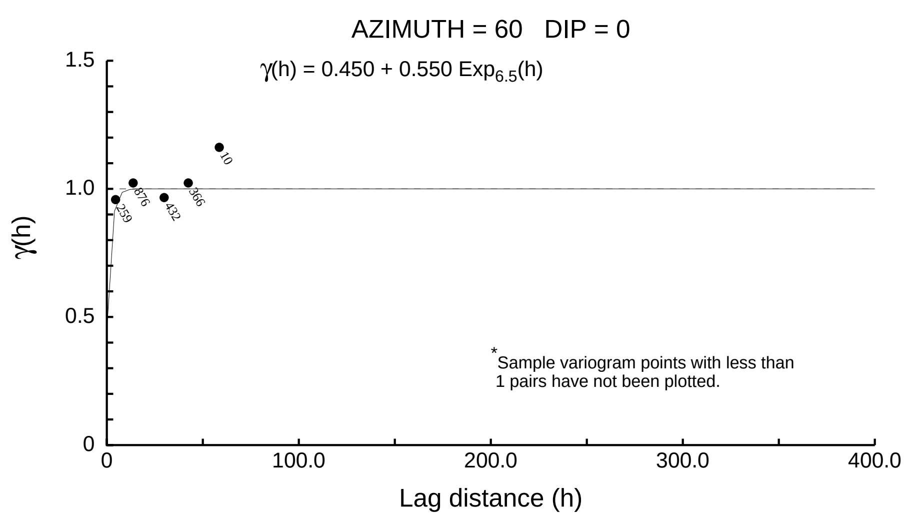


Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

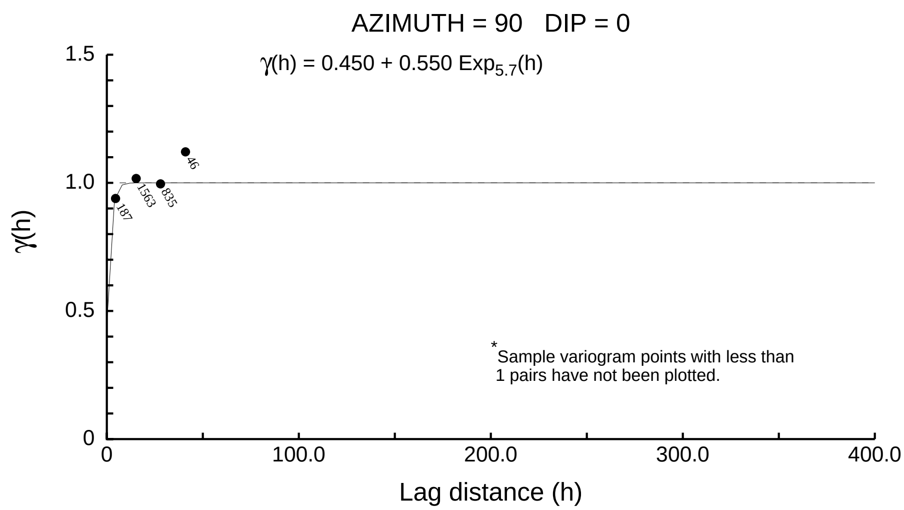
Zone 10 Directional Correlograms - Assays

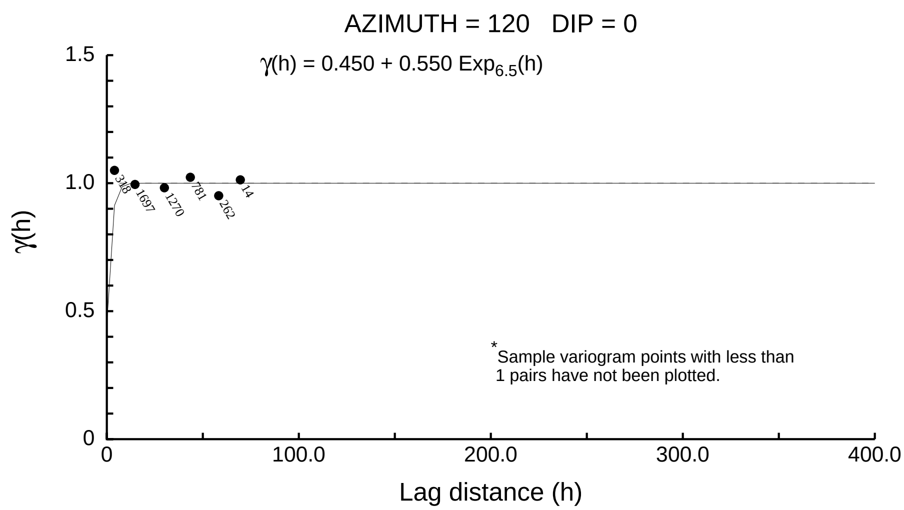


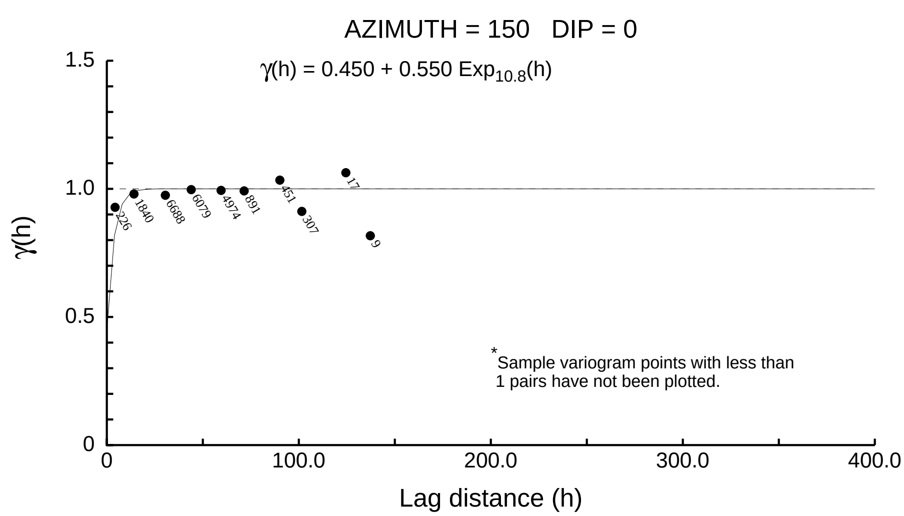




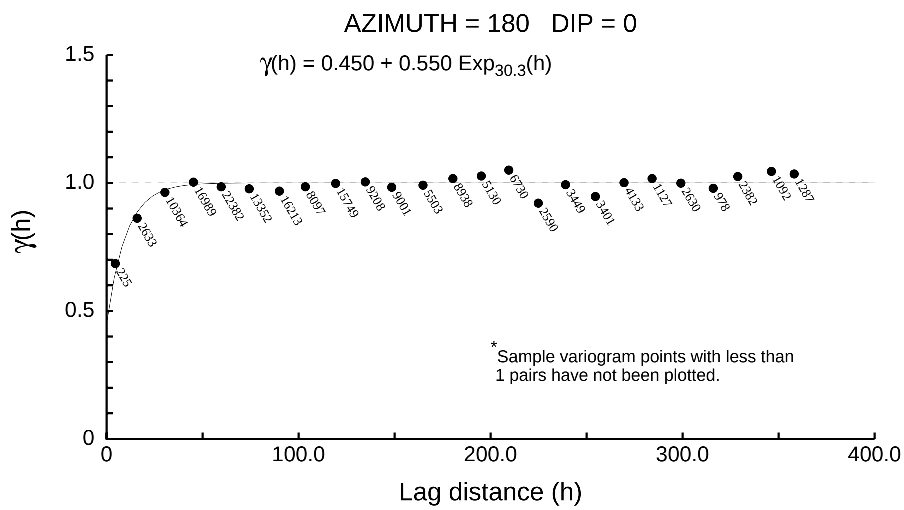
Zone 10 Directional Correlograms - Assays

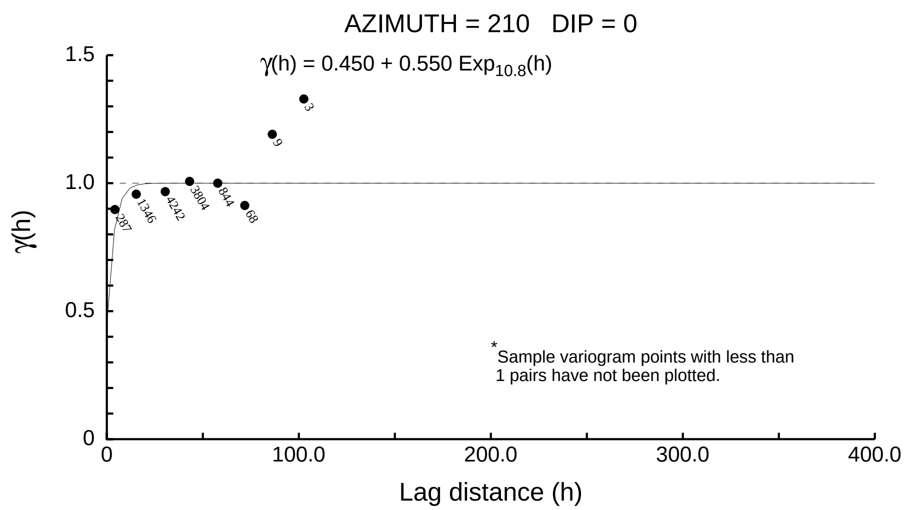


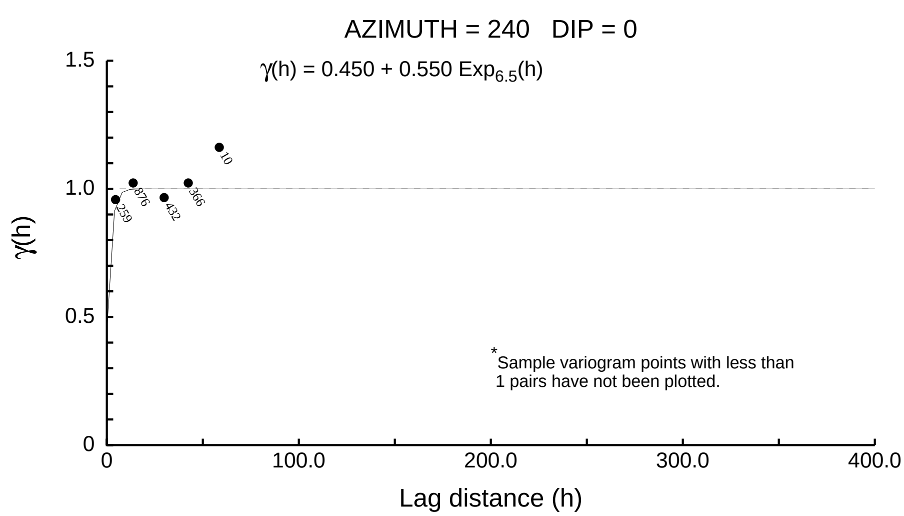




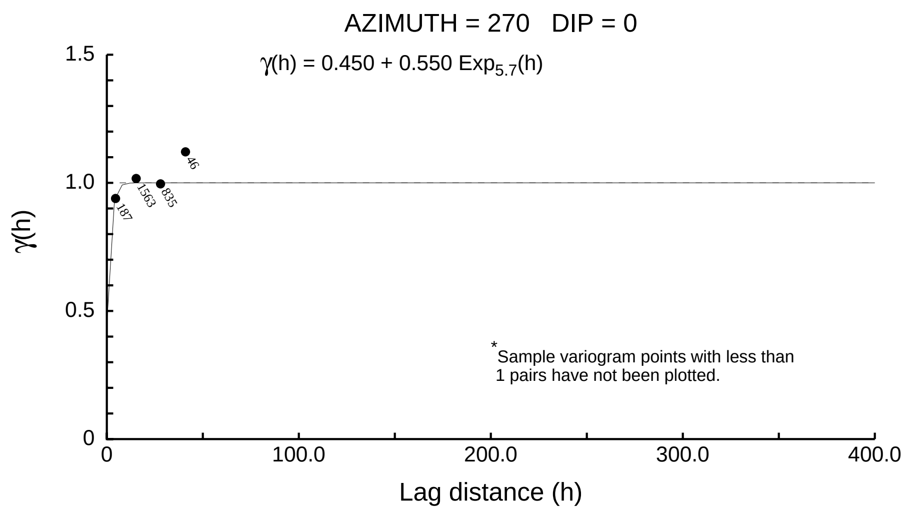
Zone 10 Directional Correlograms - Assays

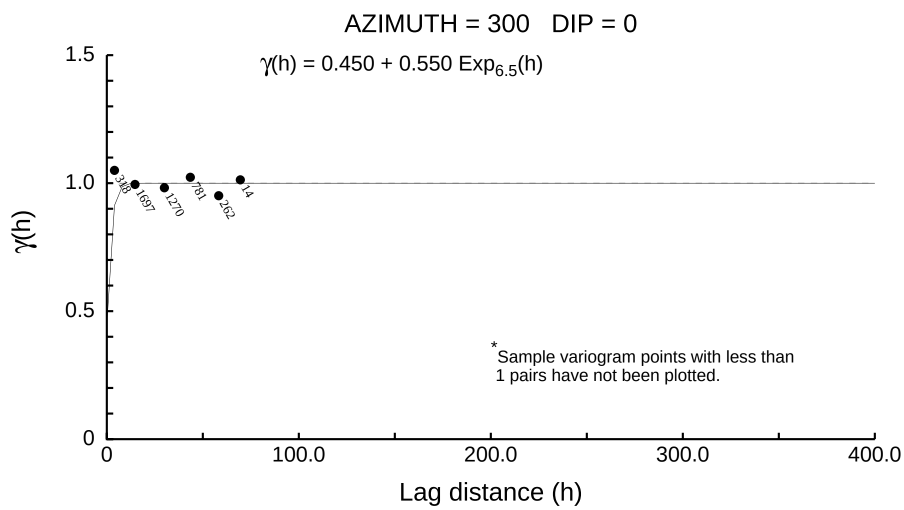


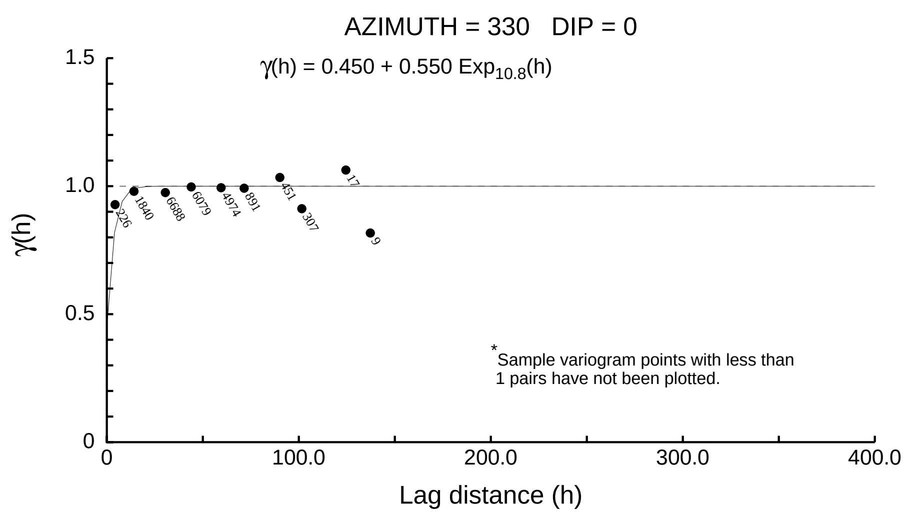




Zone 10 Directional Correlograms - Assays







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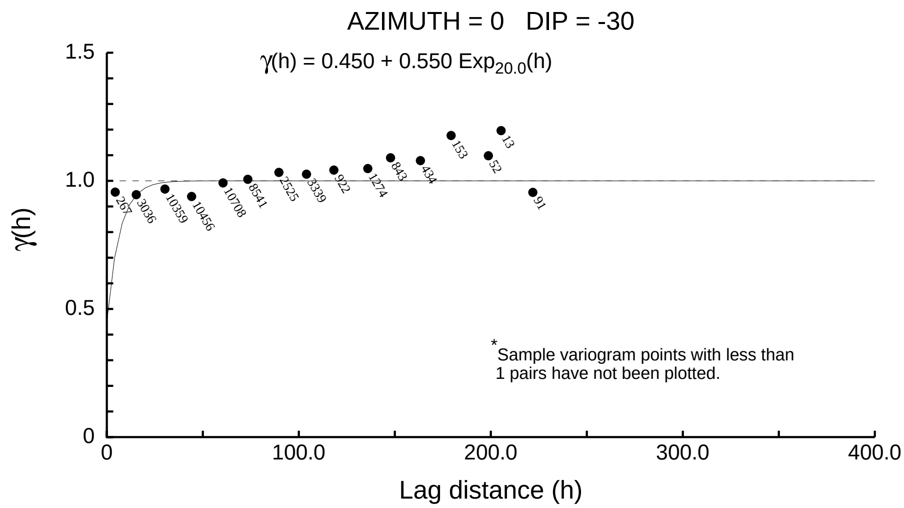
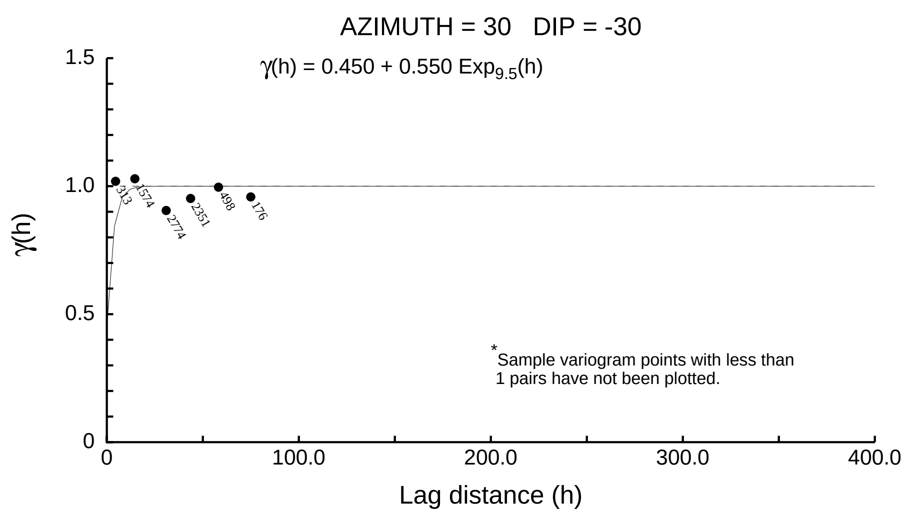
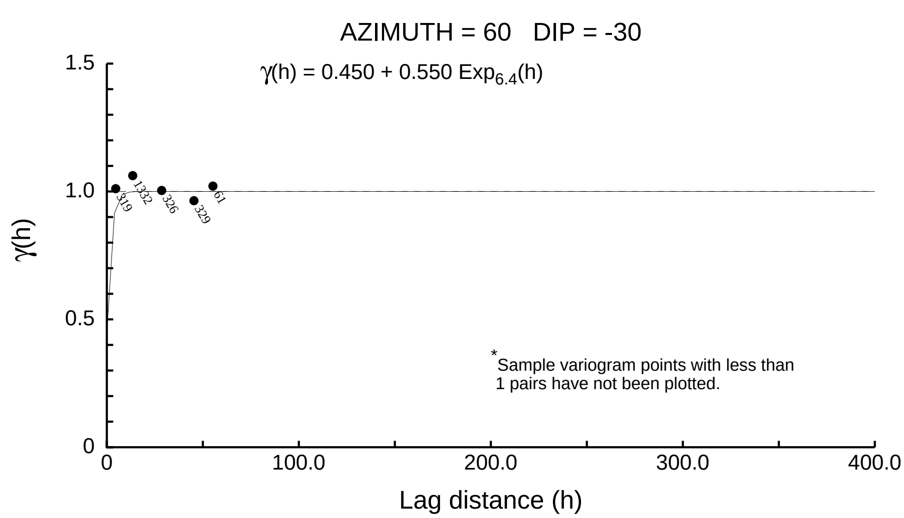
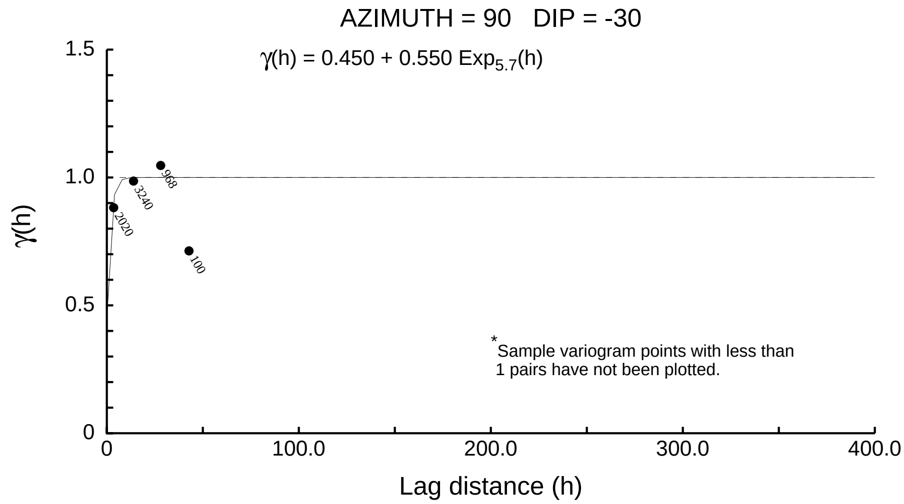
Zone 10 Directional Correlograms - Assays

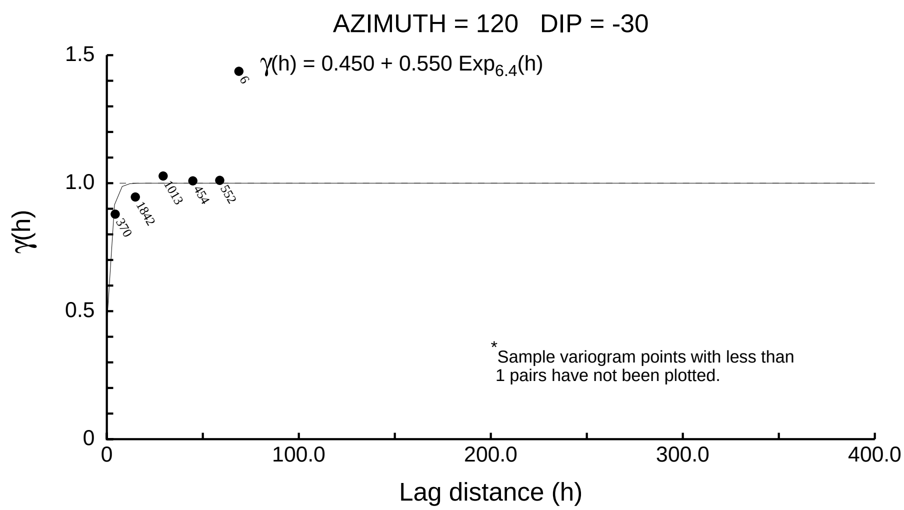


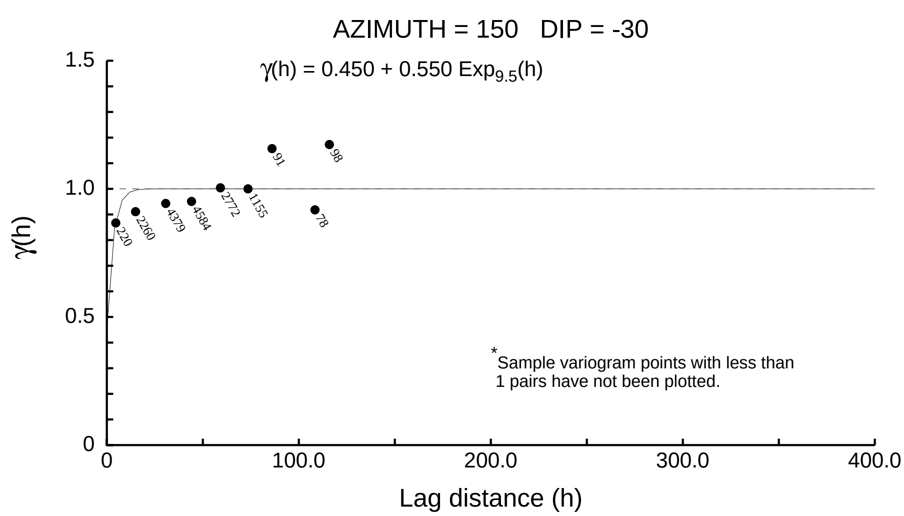




Zone 10 Directional Correlograms - Assays







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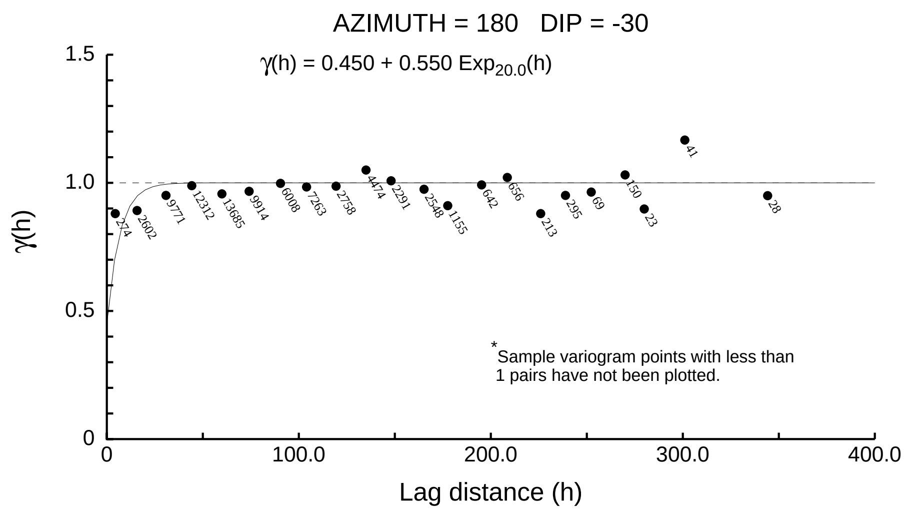
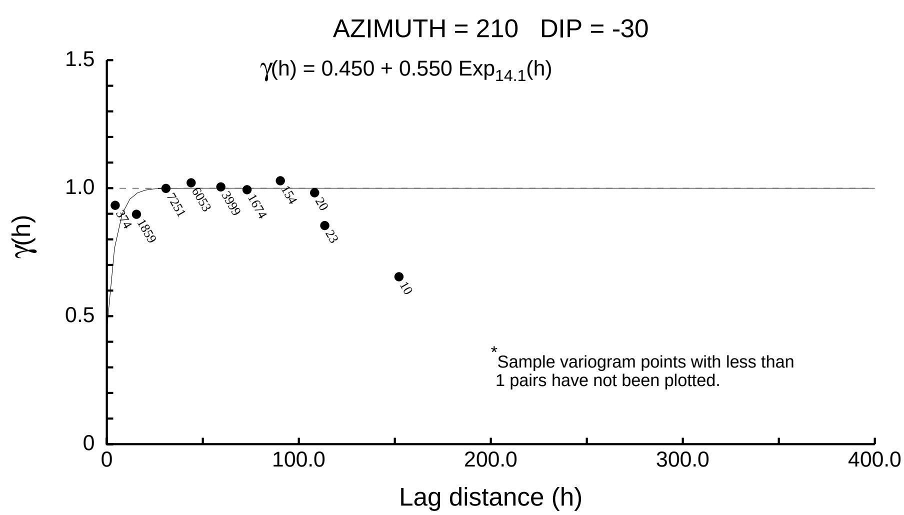
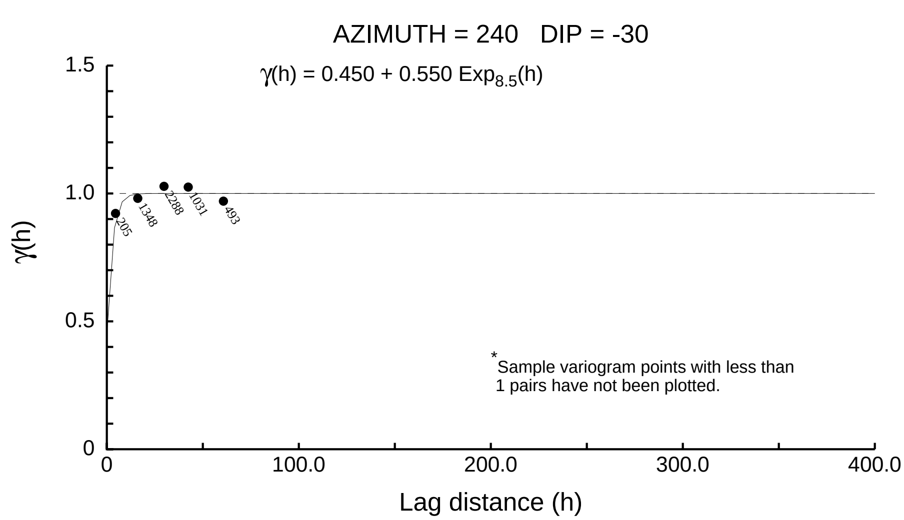
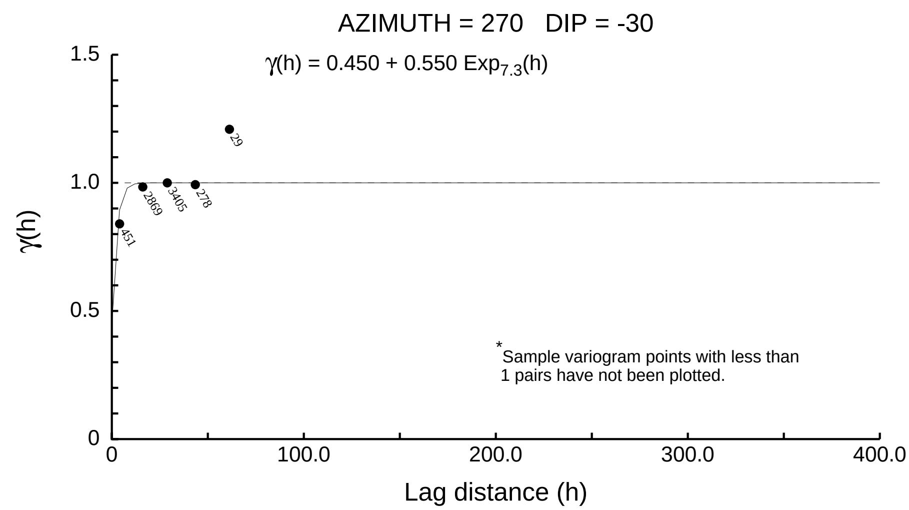
Zone 10 Directional Correlograms - Assays

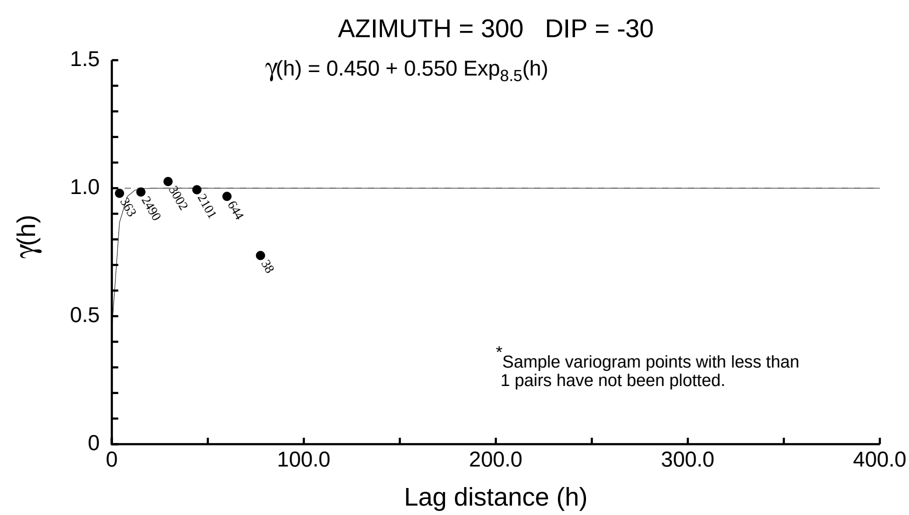


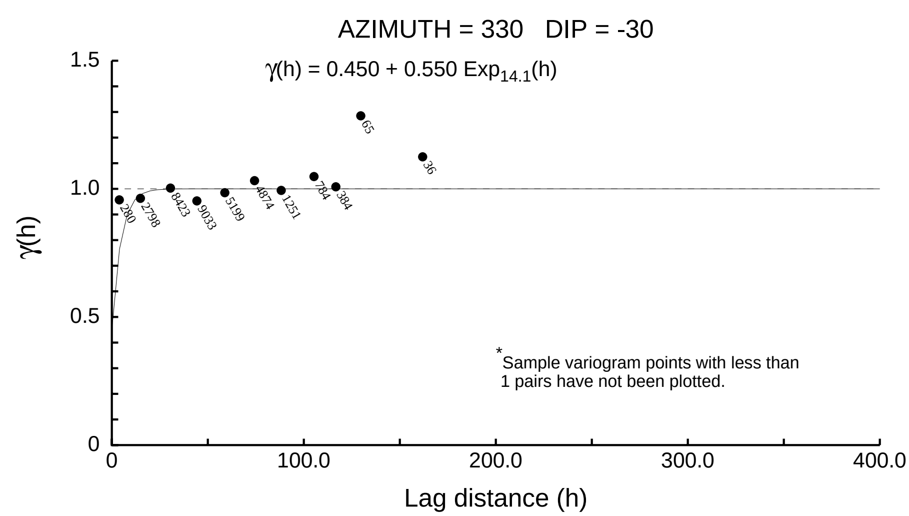




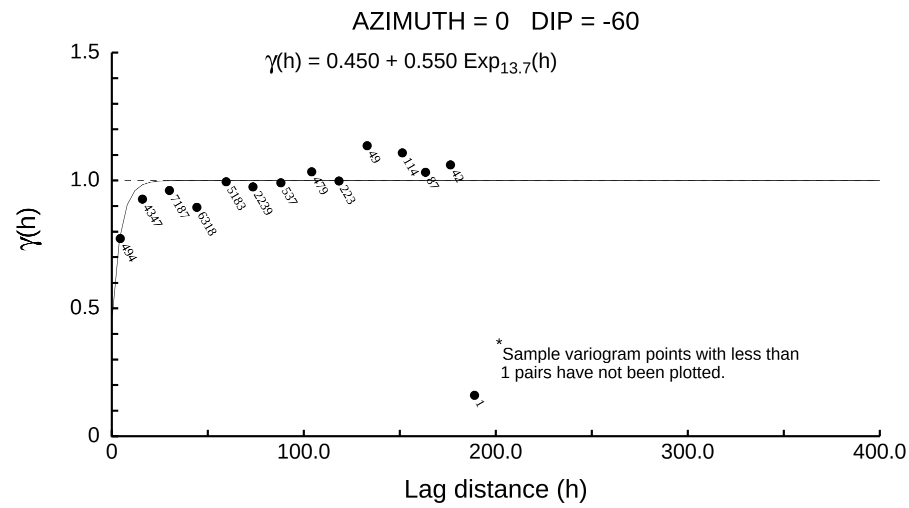
Zone 10 Directional Correlograms - Assays

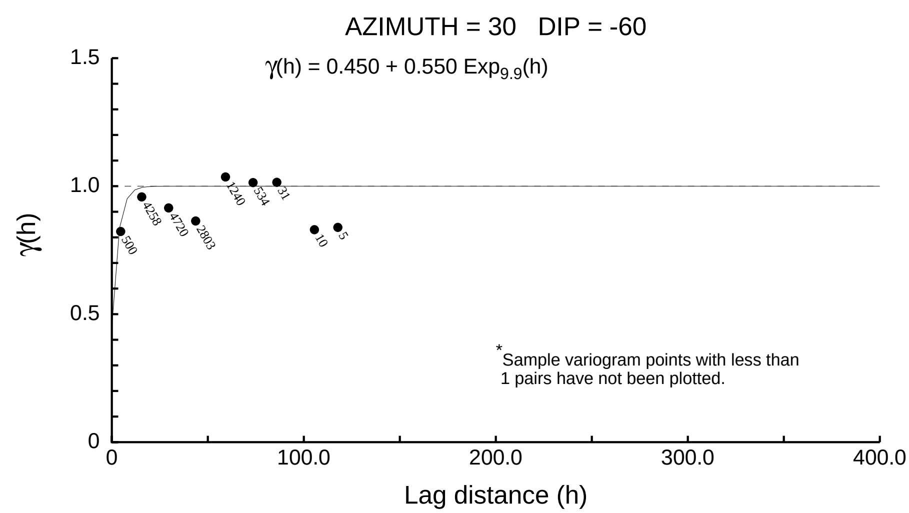


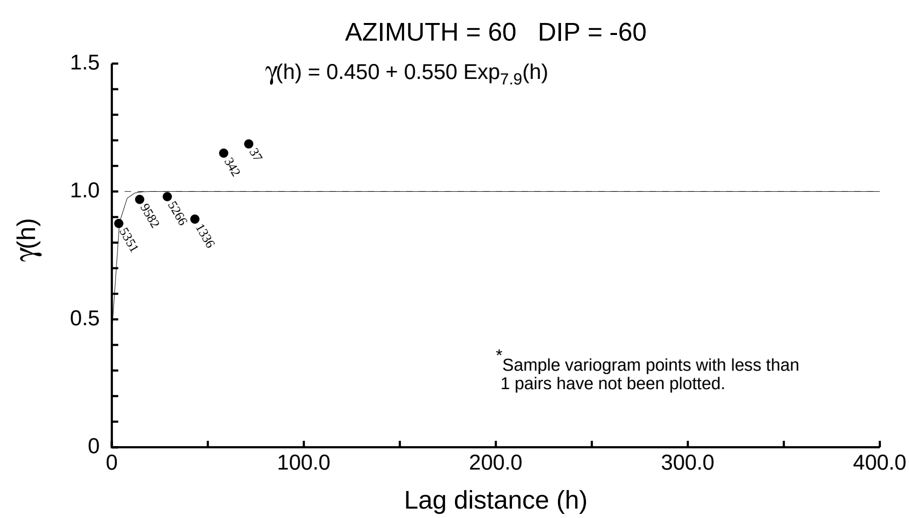




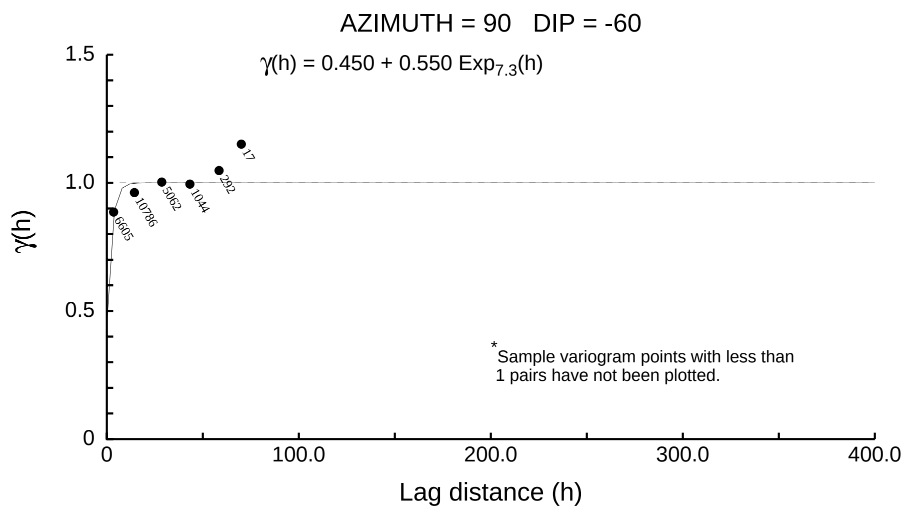
Zone 10 Directional Correlograms - Assays

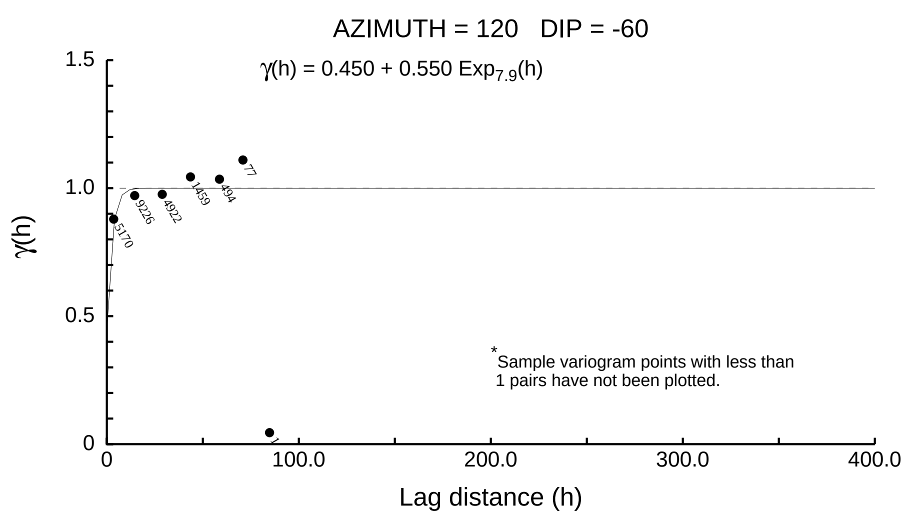


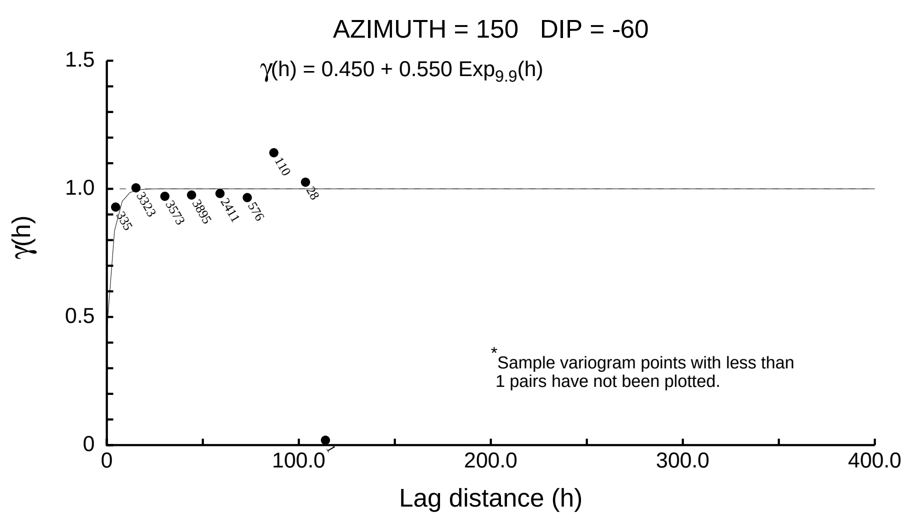




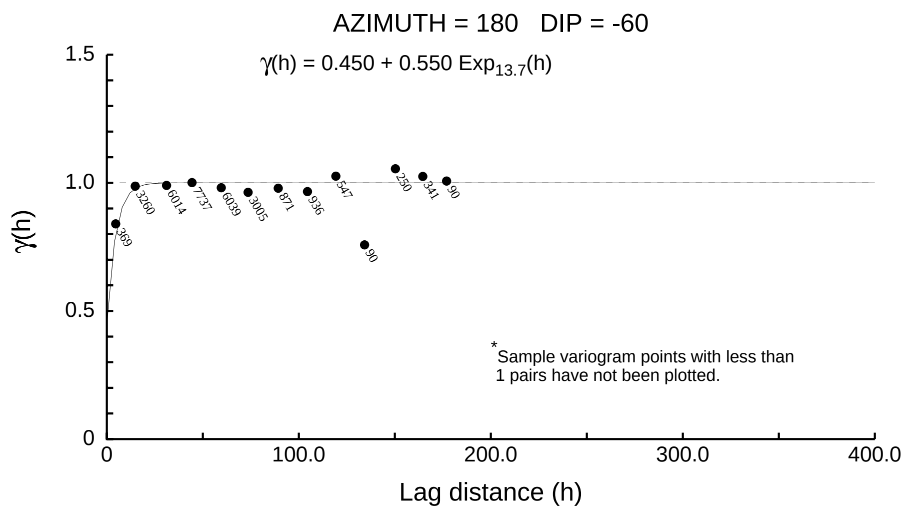
Zone 10 Directional Correlograms - Assays

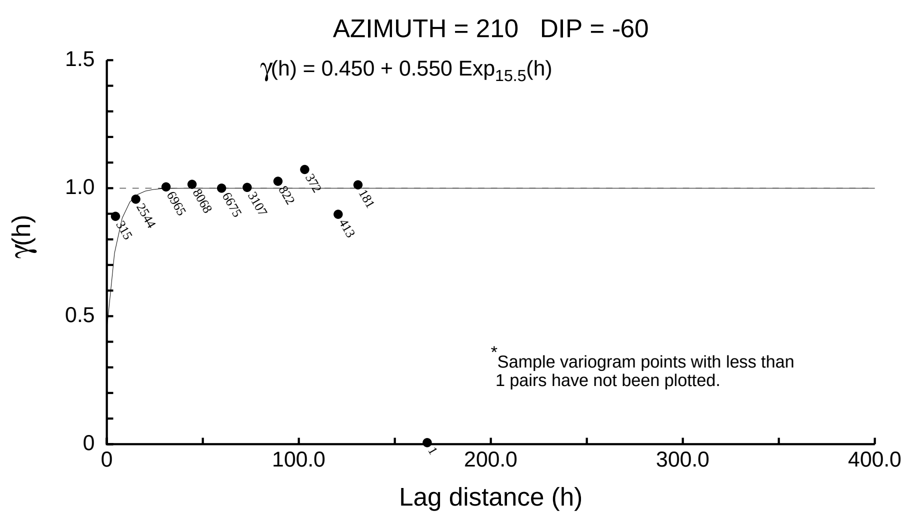


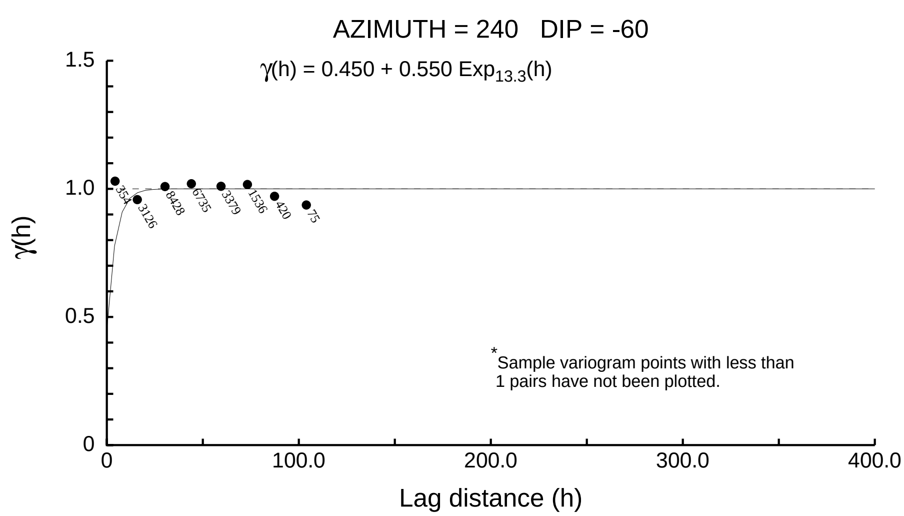




Zone 10 Directional Correlograms - Assays







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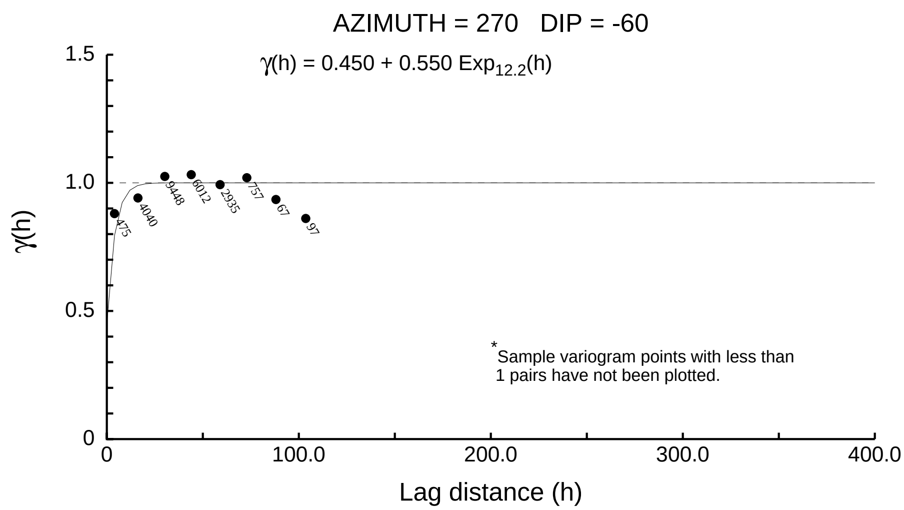
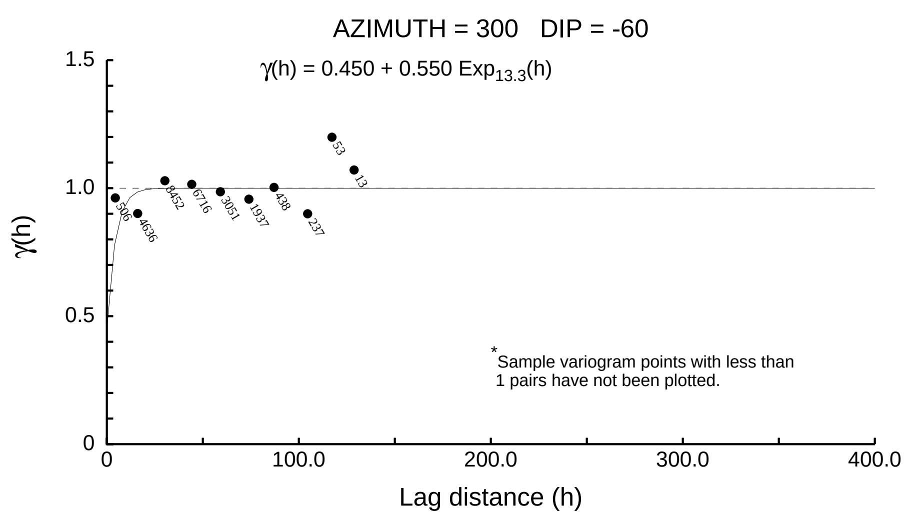
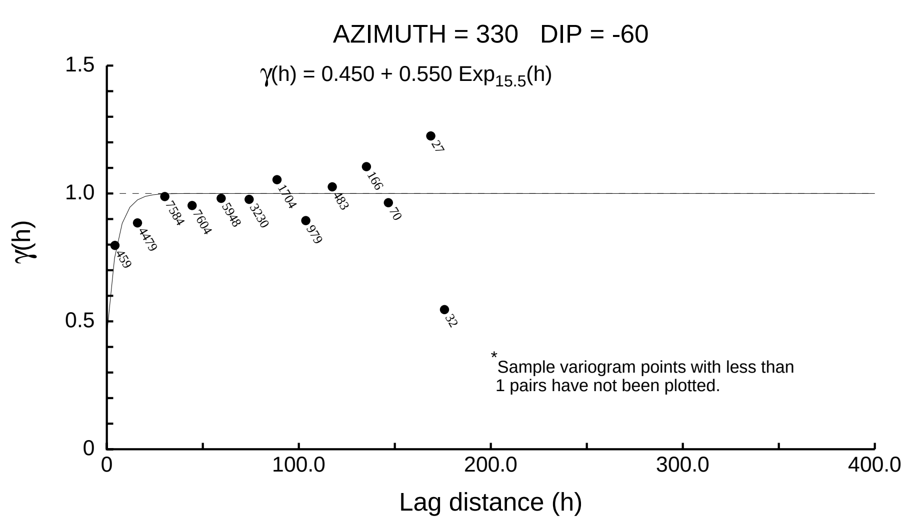
Zone 10 Directional Correlograms - Assays







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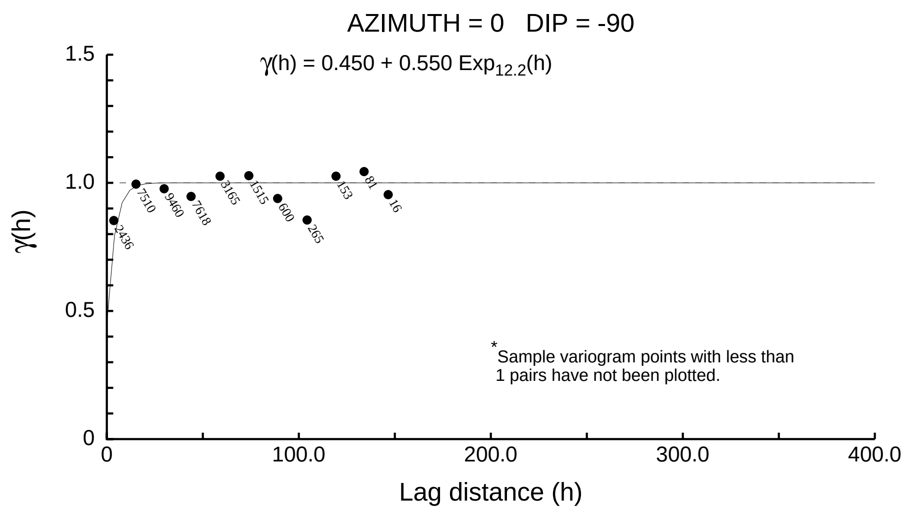
Zone 10 Directional Correlograms - Assays



Zone 99 Downhole Correlograms - Assays

Medsystem and Vulcan Rotation Conventions

Nugget ==> 0.840
C1 ==> 0.160

First Structure -- Exponential with Practical Range

LH Rotation about the Z axis ==> 0
RH Rotation about the X' axis ==> 0
LH Rotation about the Y' axis ==> 0

Range along the Z' axis ==> 7.0	Azimuth ==> 90 Dip ==> 90
Range along the Y' axis ==> 7.0	Azimuth ==> 360 Dip ==> 0
Range along the X' axis ==> 7.0	Azimuth ==> 90 Dip ==> 0

Modeling Criteria

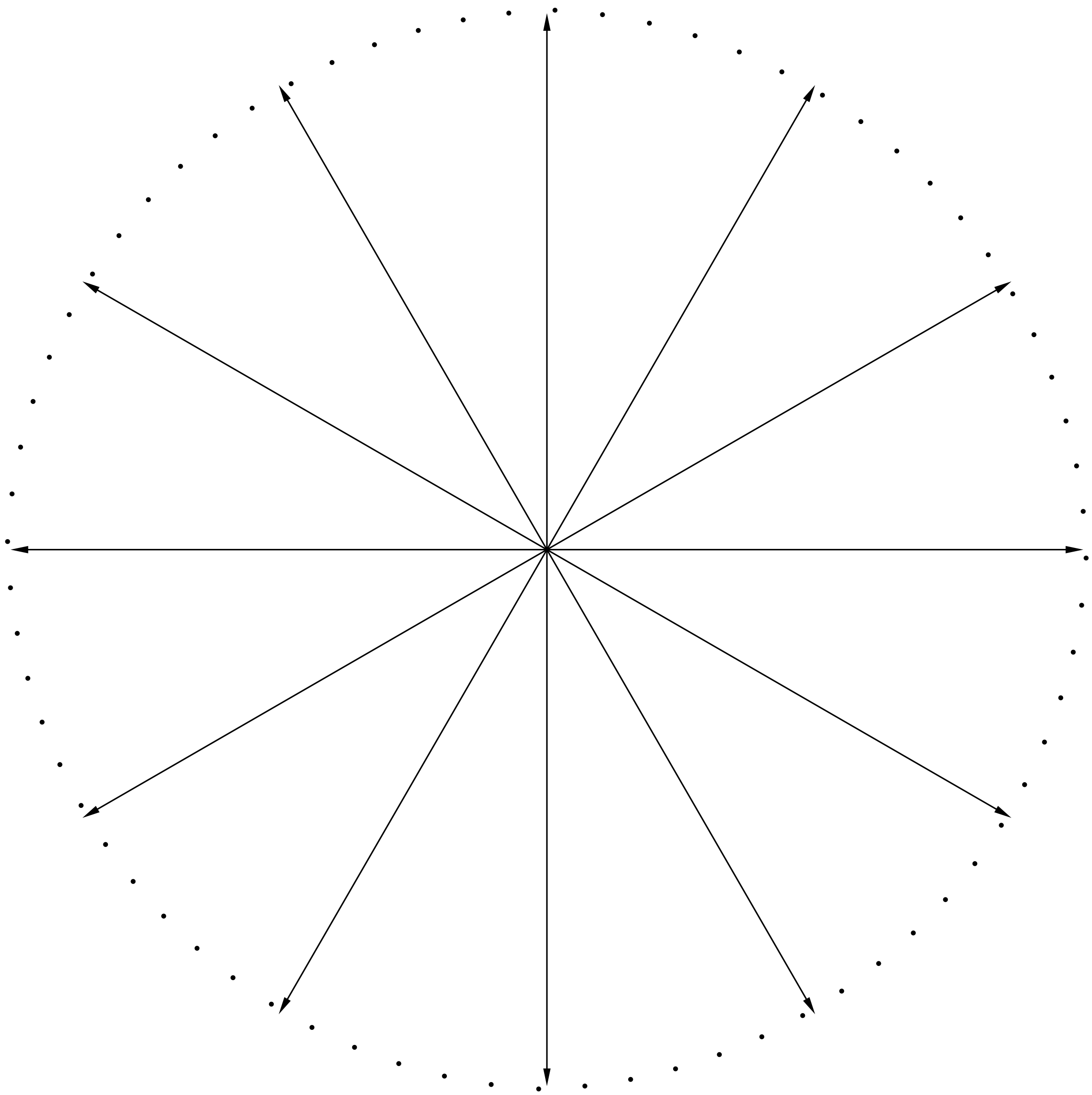
Minimum number pairs req'd ==> 1
Sample variogram points weighted by # pairs

Zone 99 Downhole Correlograms - Assays

Structure Number 1

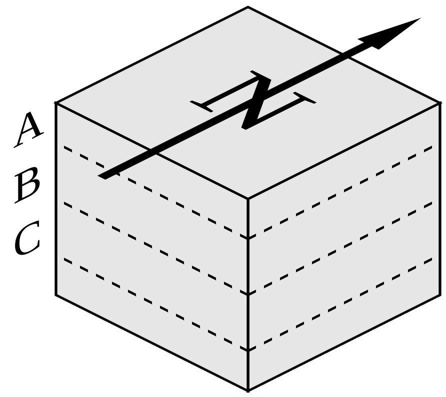
Rose Diagram of Ranges Dipping 0 Degrees
Scale:

7 Units

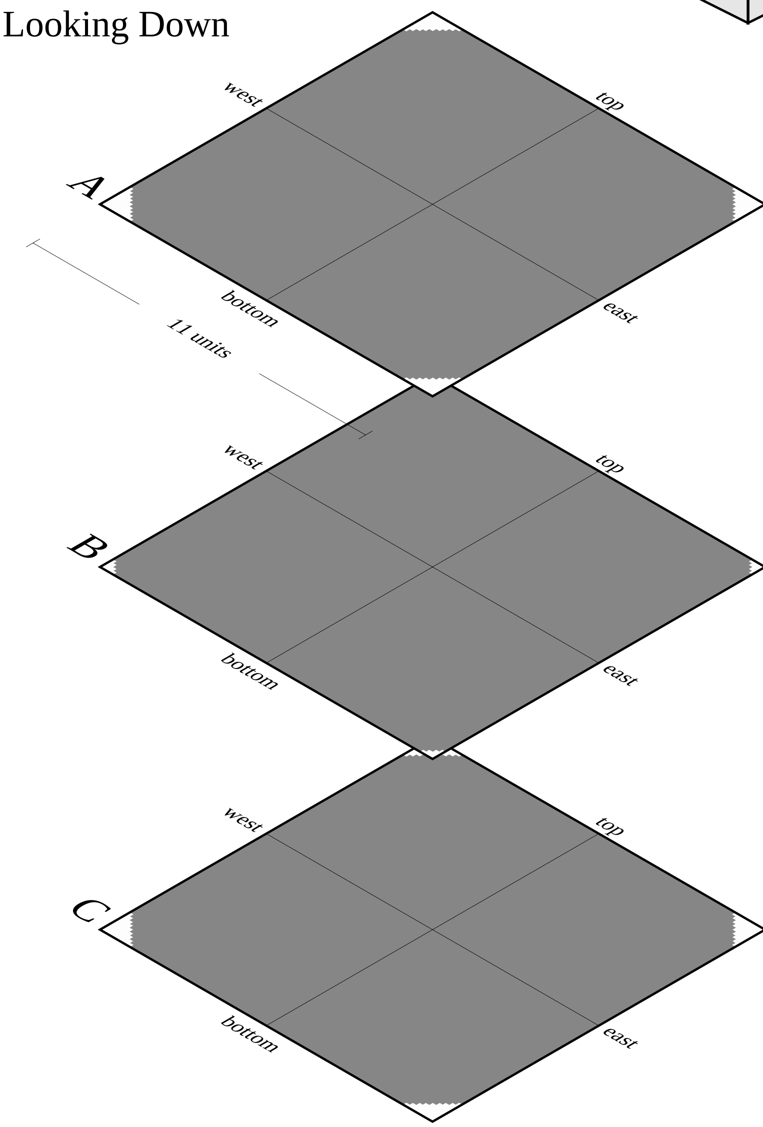


Horizontal Slices Through the Ellipsoids

Reference Cube



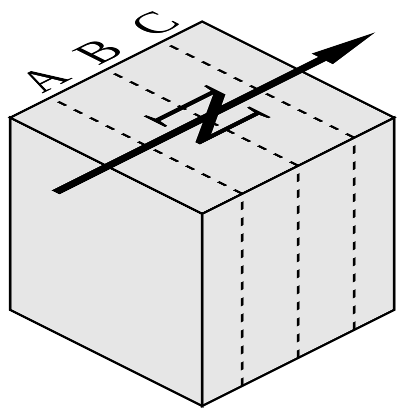
X-Y Planes Looking Down



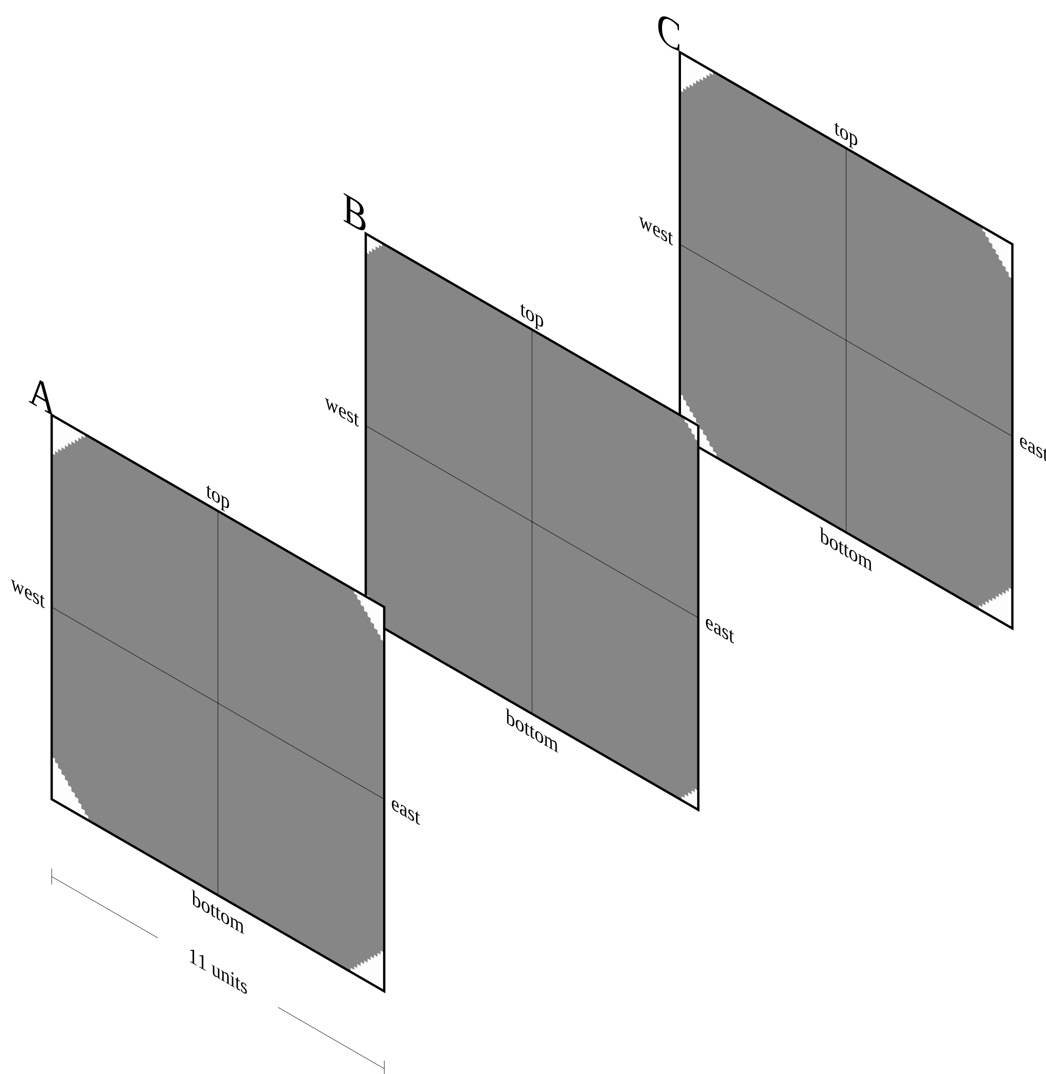
Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Cross Section Views Through the Ellipsoids

Reference Cube



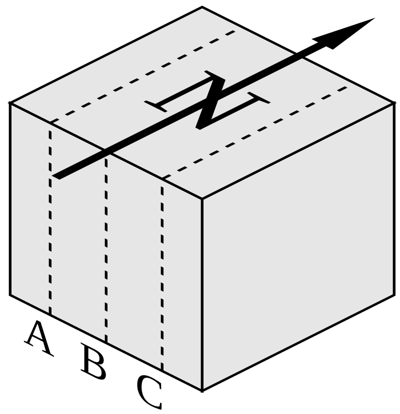
X-Z Planes Looking North



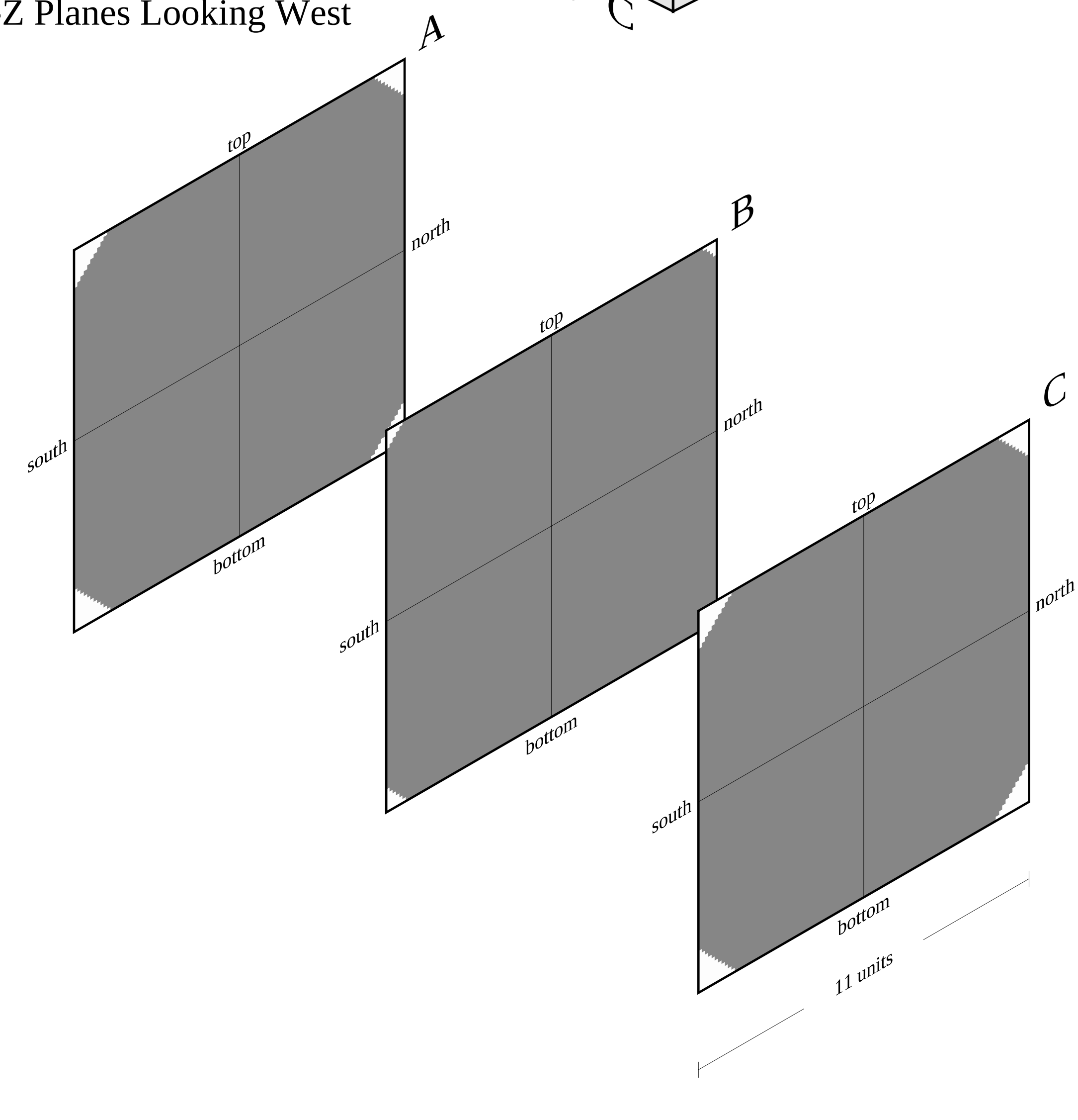
Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Long Section Views Through the Ellipsoids

Reference Cube

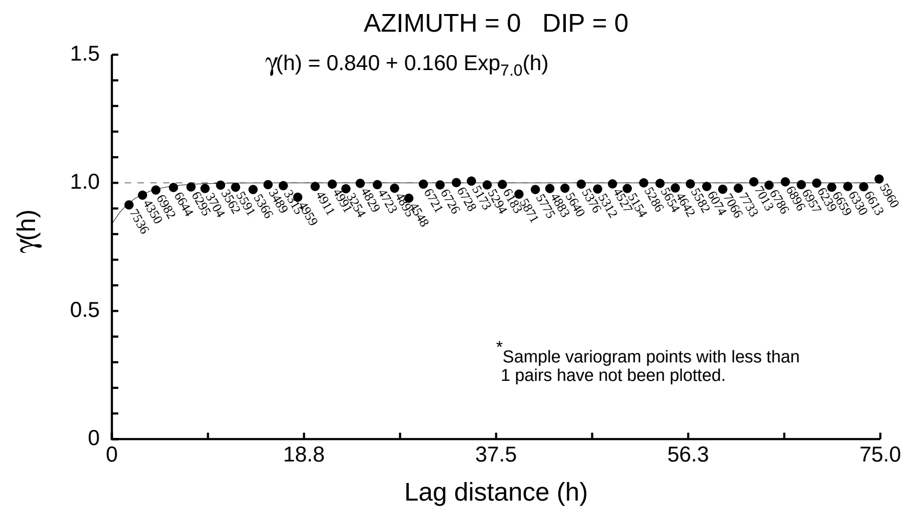


Y-Z Planes Looking West



Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Zone 99 Downhole Correlograms - Assays



Zone 99 Directional Correlograms - Assays

Medsystem and Vulcan Rotation Conventions

Nugget ==> 0.840
C1 ==> 0.160

First Structure -- Exponential with Practical Range

LH Rotation about the Z axis ==> 0
RH Rotation about the X' axis ==> 0
LH Rotation about the Y' axis ==> 75

Range along the Z' axis ==> 14.2	Azimuth ==> 270	Dip ==> 15
Range along the Y' axis ==> 43.8	Azimuth ==> 360	Dip ==> 0
Range along the X' axis ==> 7.3	Azimuth ==> 90	Dip ==> 75

Modeling Criteria

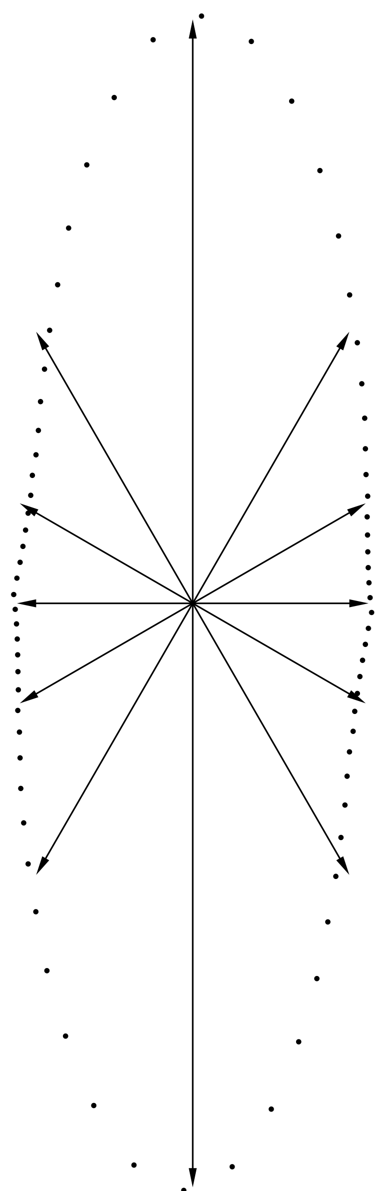
Minimum number pairs req'd ==> 1
Sample variogram points weighted by # pairs

Zone 99 Directional Correlograms - Assays

Structure Number 1

Rose Diagram of Ranges Dipping 0 Degrees
Scale:

40 Units

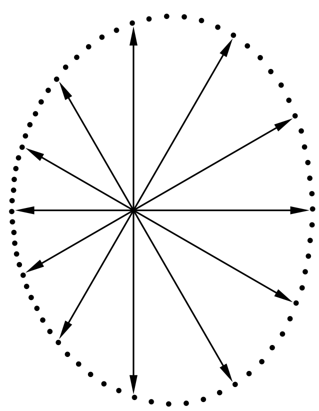


Zone 99 Directional Correlograms - Assays

Structure Number 1

Rose Diagram of Ranges Dipping 30 Degrees
Scale:

40 Units

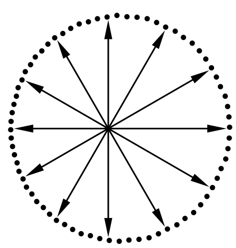


Zone 99 Directional Correlograms - Assays

Structure Number 1

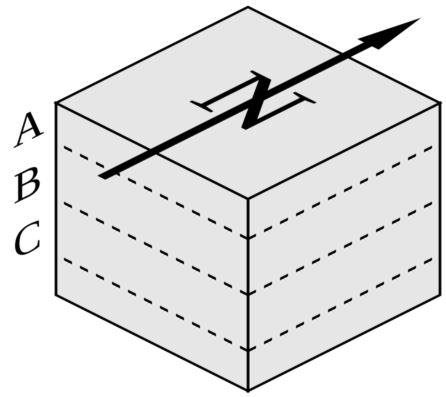
Rose Diagram of Ranges Dipping 60 Degrees
Scale:

40 Units

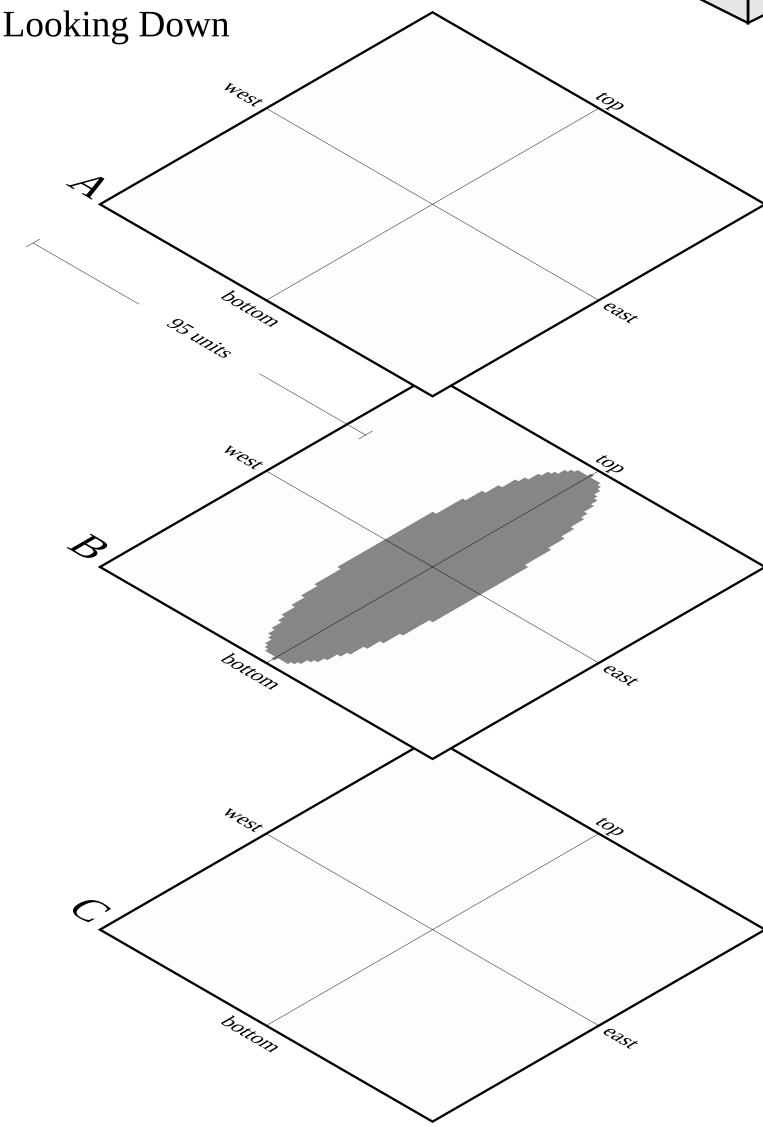


Horizontal Slices Through the Ellipsoids

Reference Cube



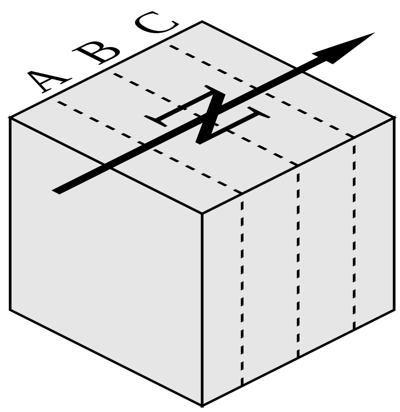
X-Y Planes Looking Down



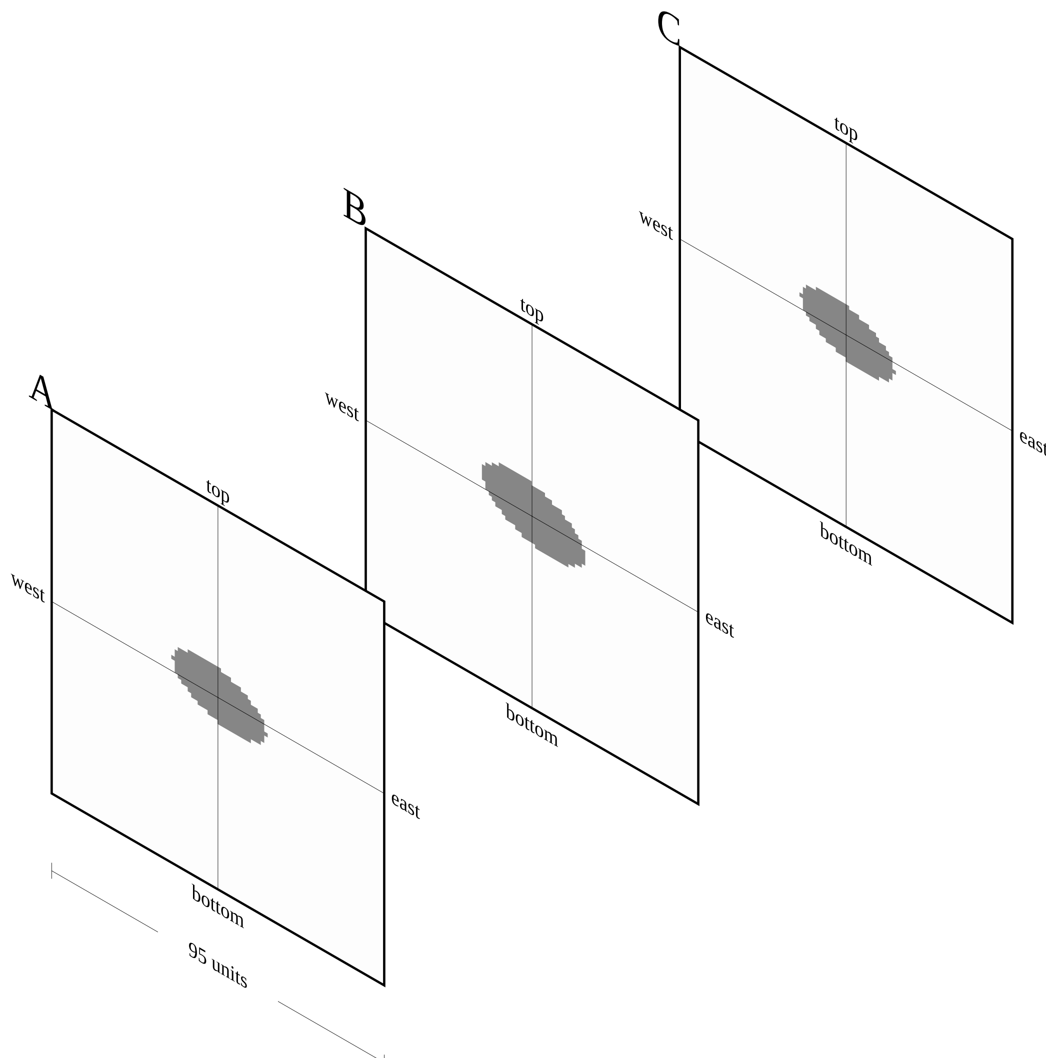
Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Cross Section Views Through the Ellipsoids

Reference Cube



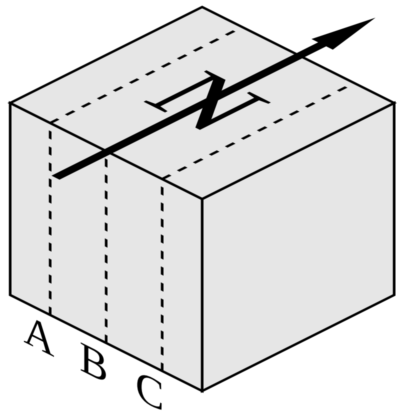
X-Z Planes Looking North



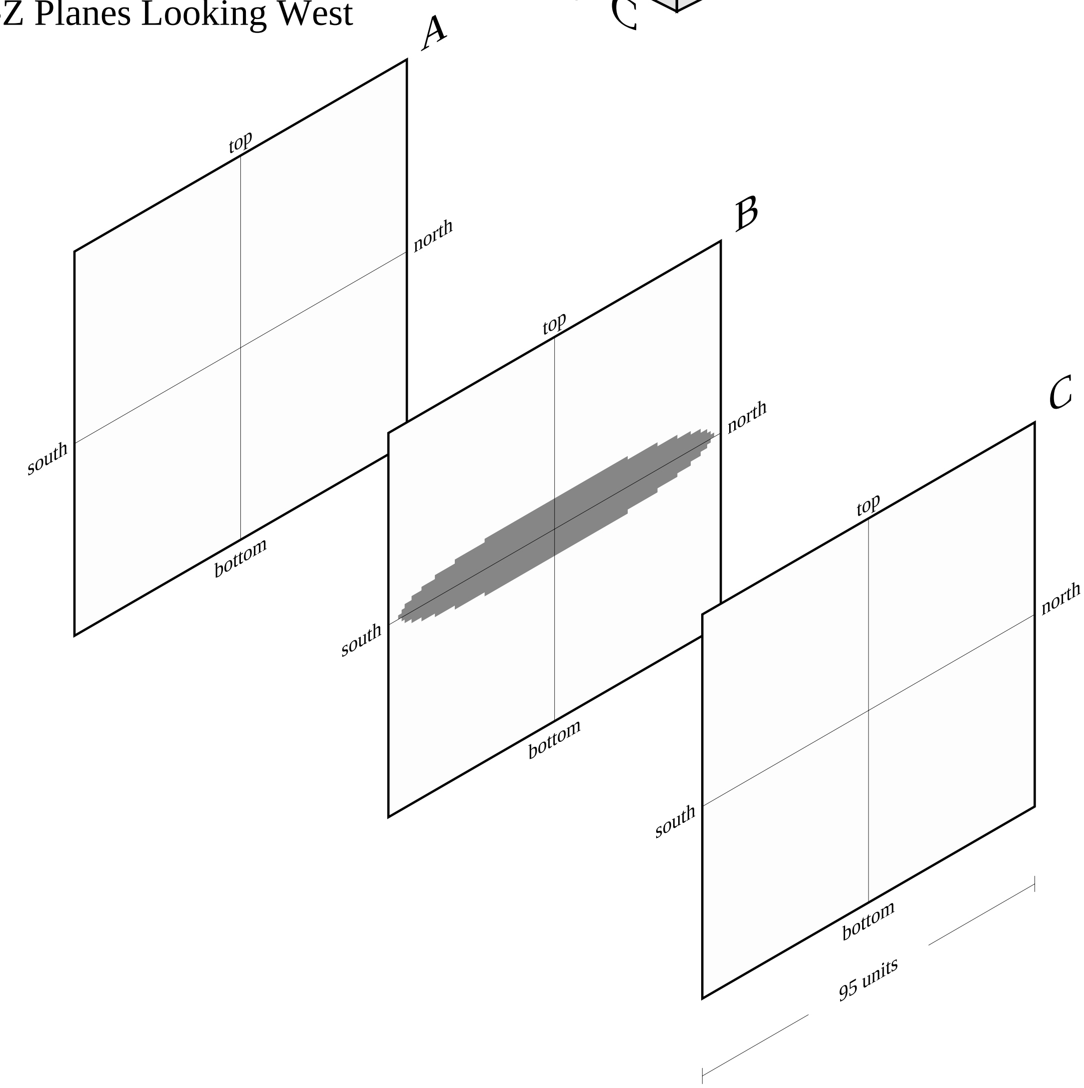
Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Long Section Views Through the Ellipsoids

Reference Cube

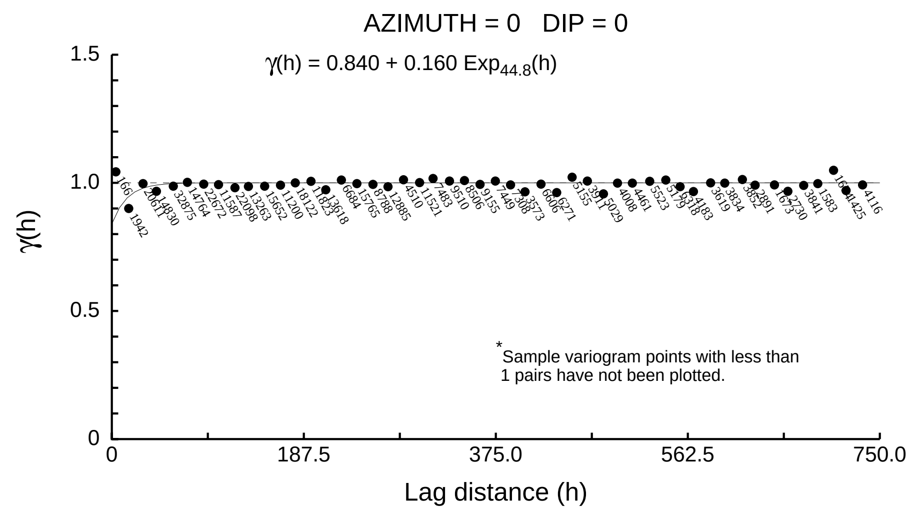


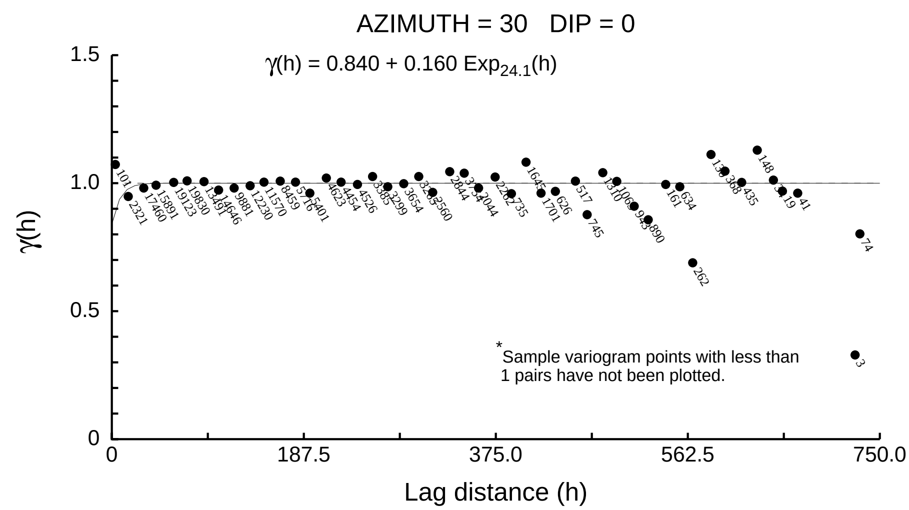
Y-Z Planes Looking West

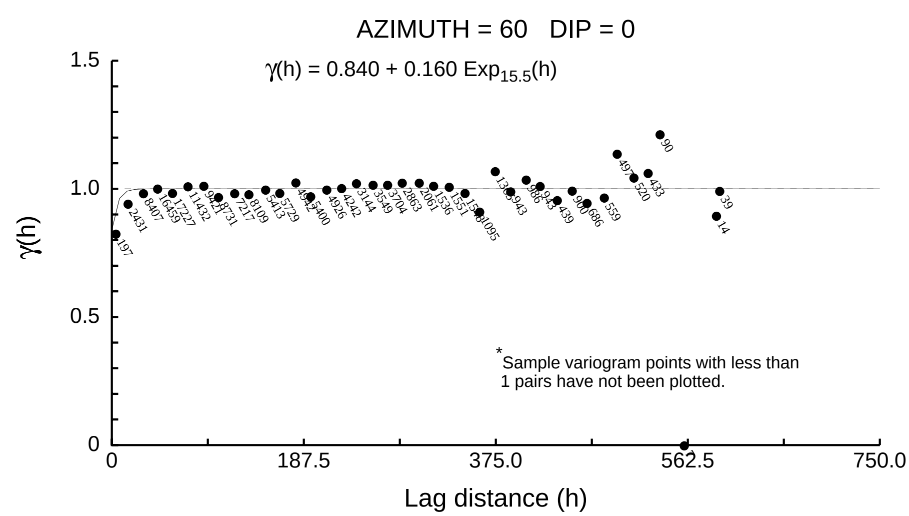


Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

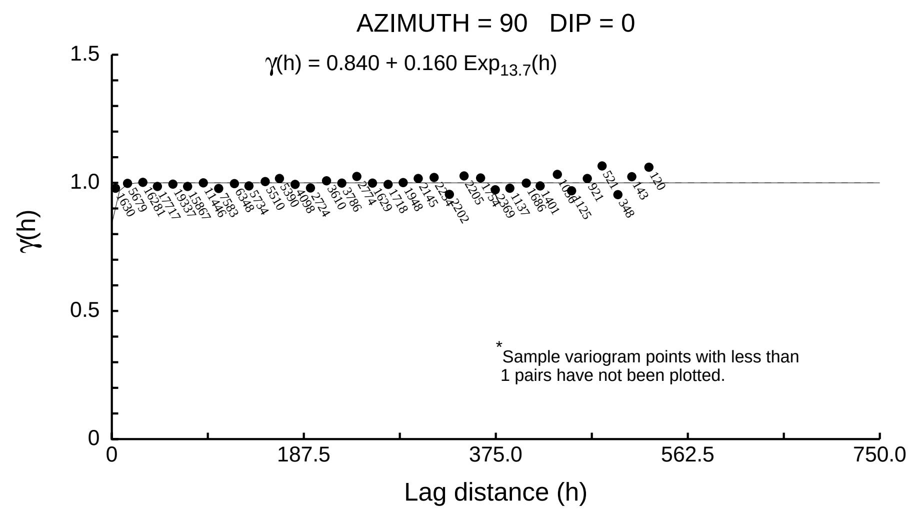
Zone 99 Directional Correlograms - Assays

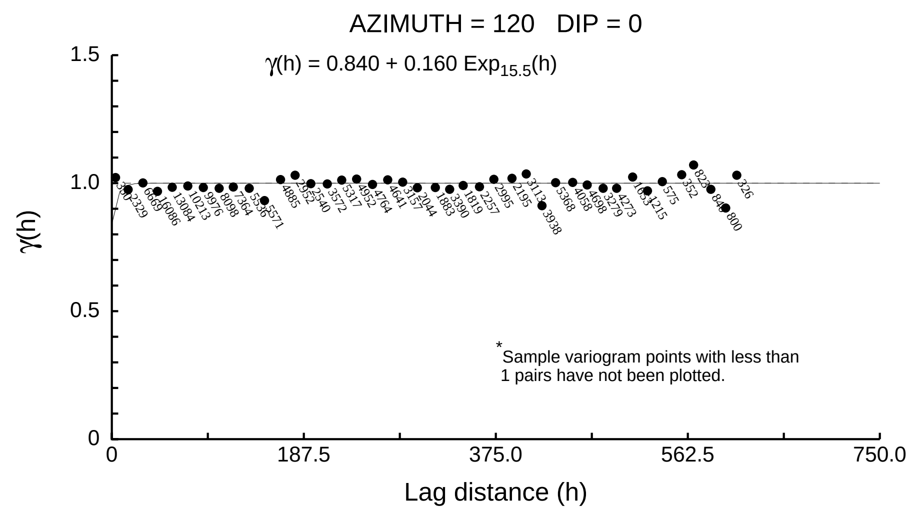


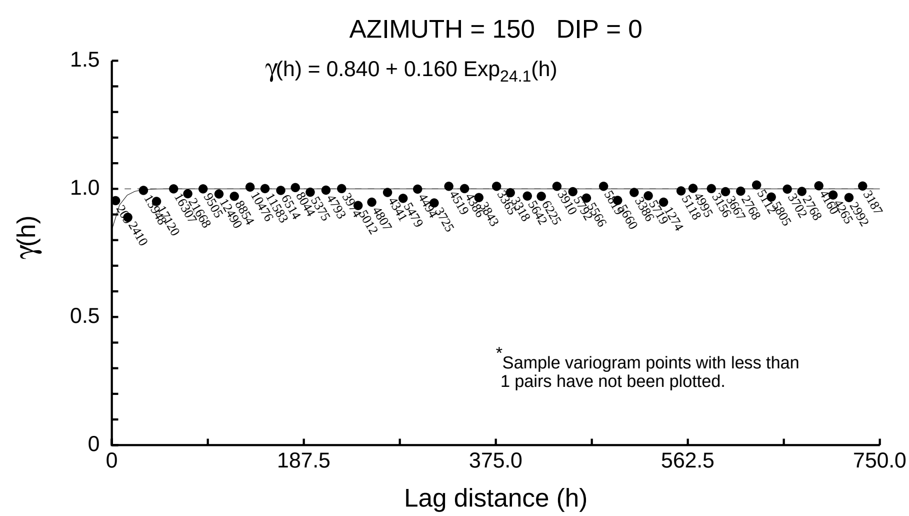




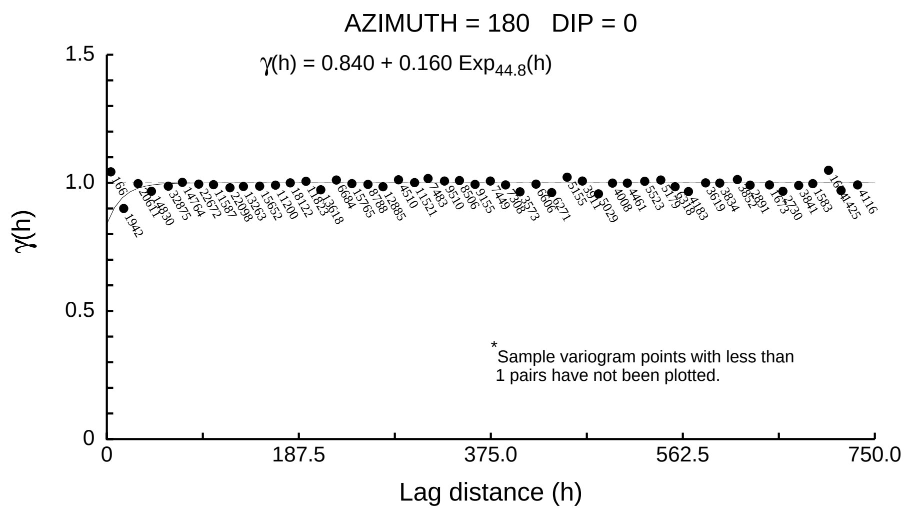
Zone 99 Directional Correlograms - Assays

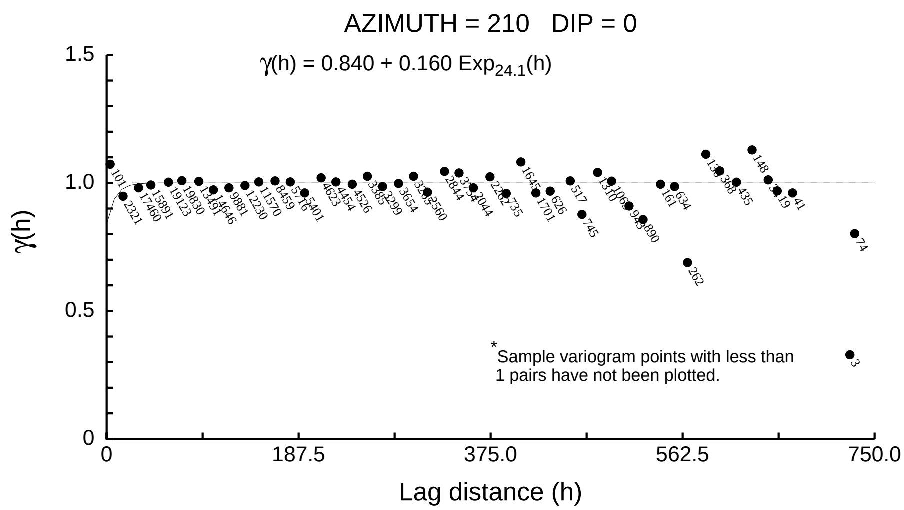


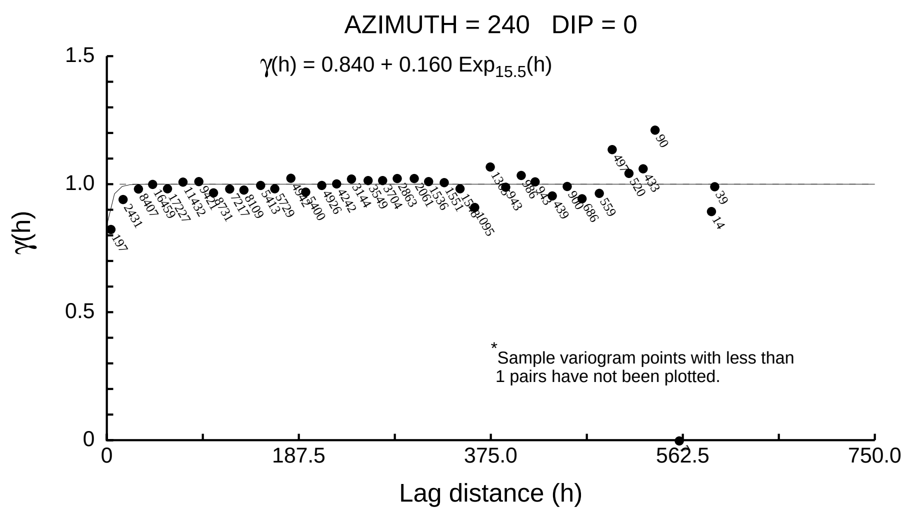




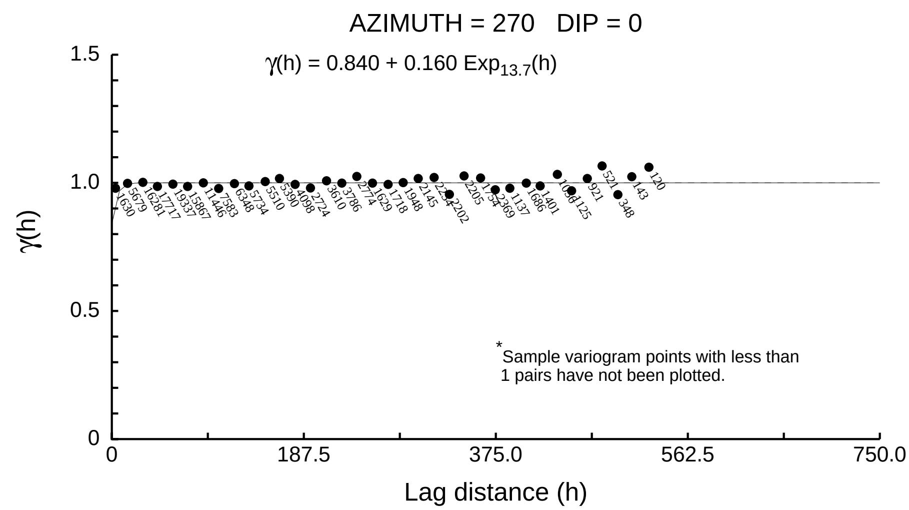
Zone 99 Directional Correlograms - Assays

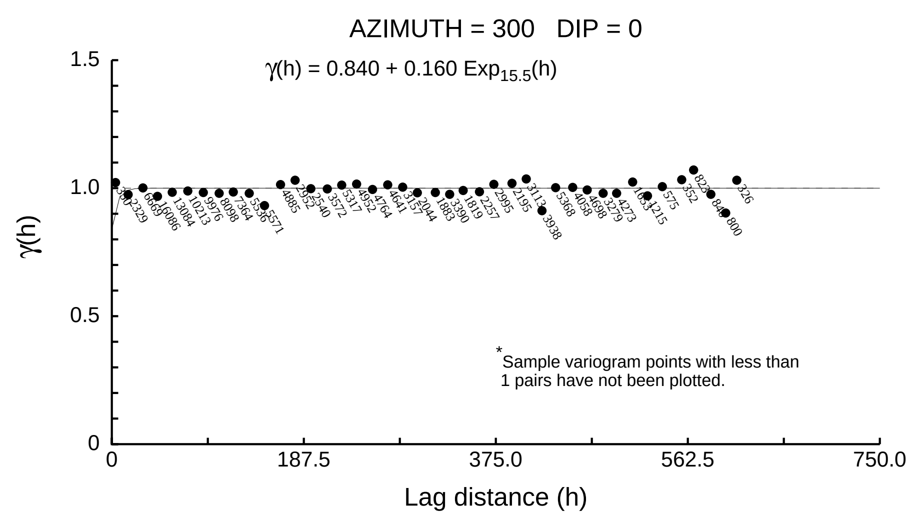


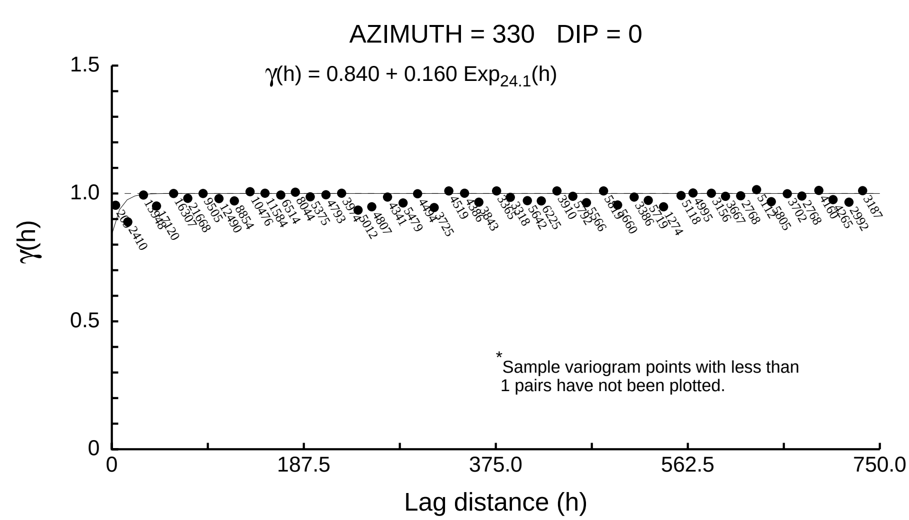




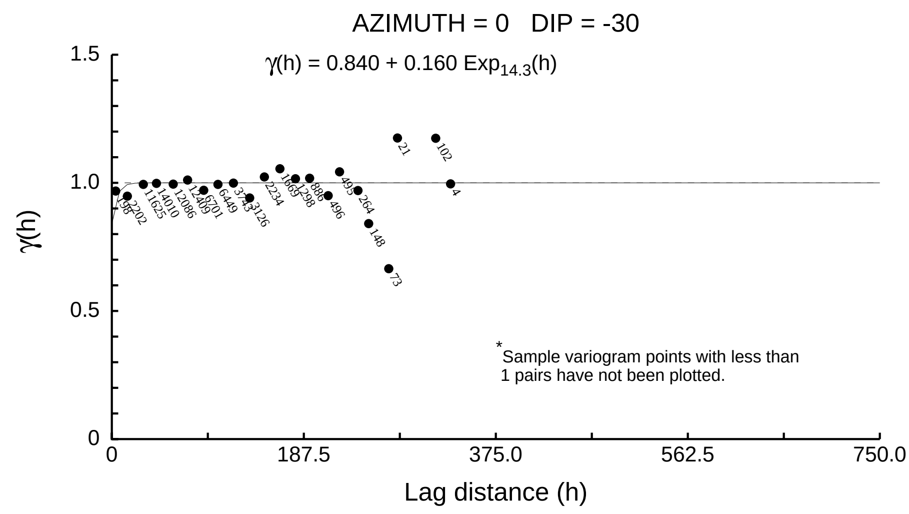
Zone 99 Directional Correlograms - Assays

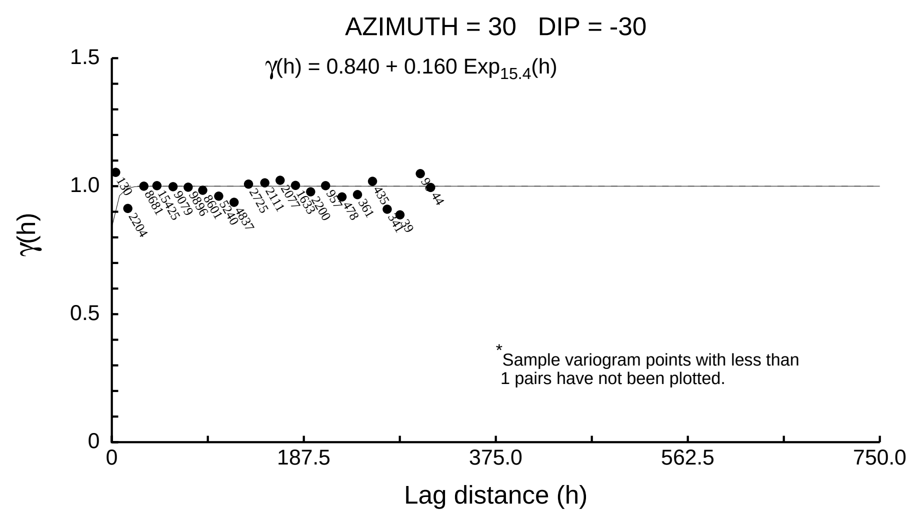


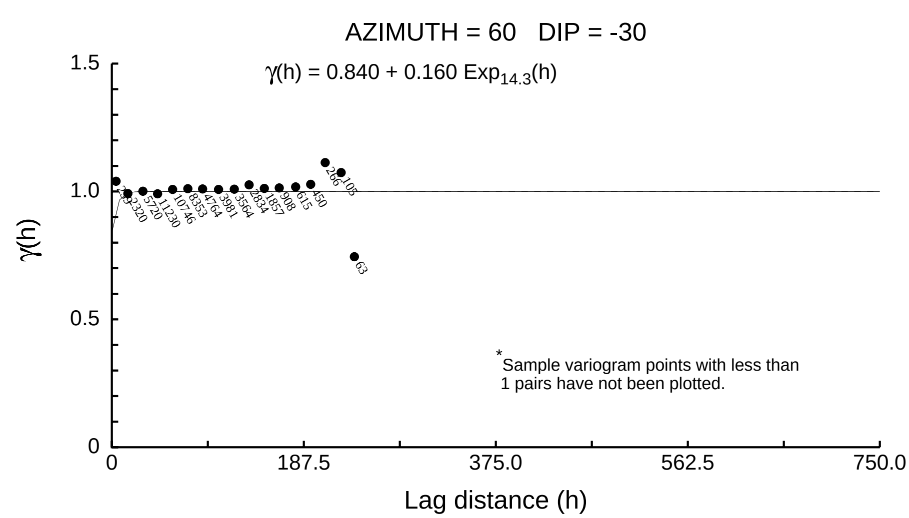




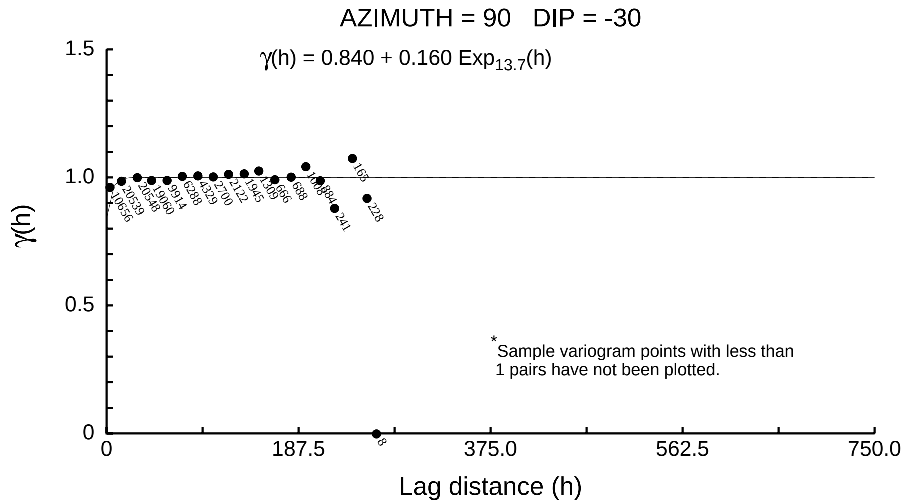
Zone 99 Directional Correlograms - Assays

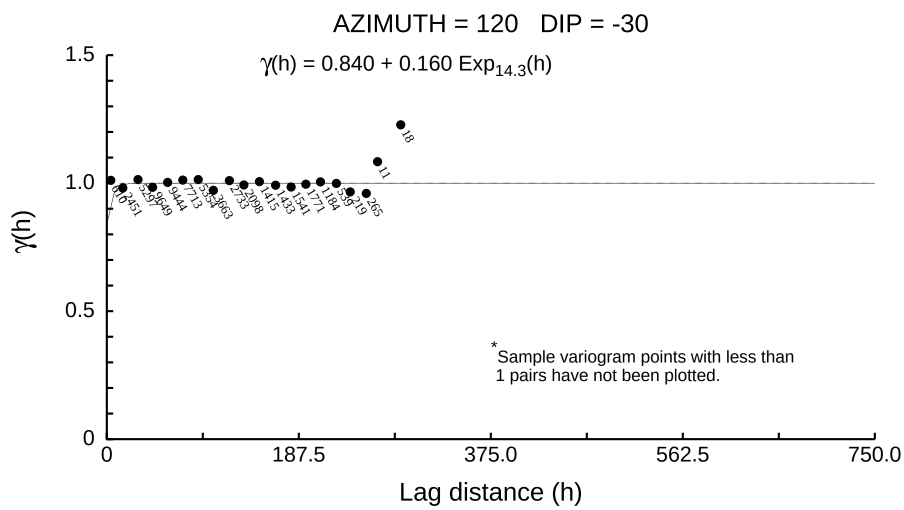


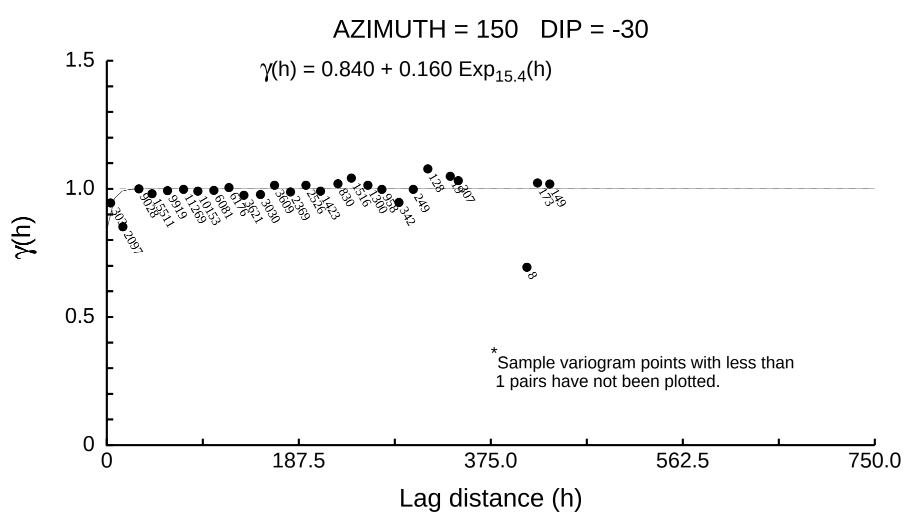




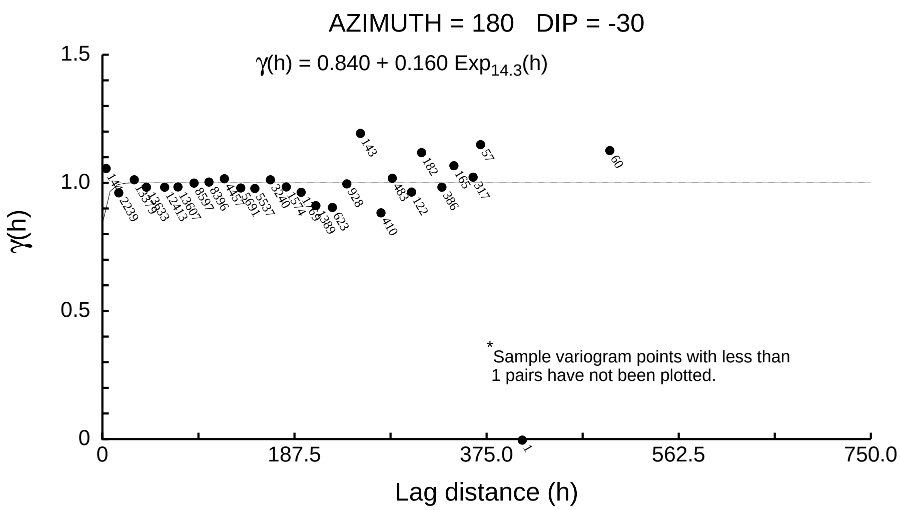
Zone 99 Directional Correlograms - Assays

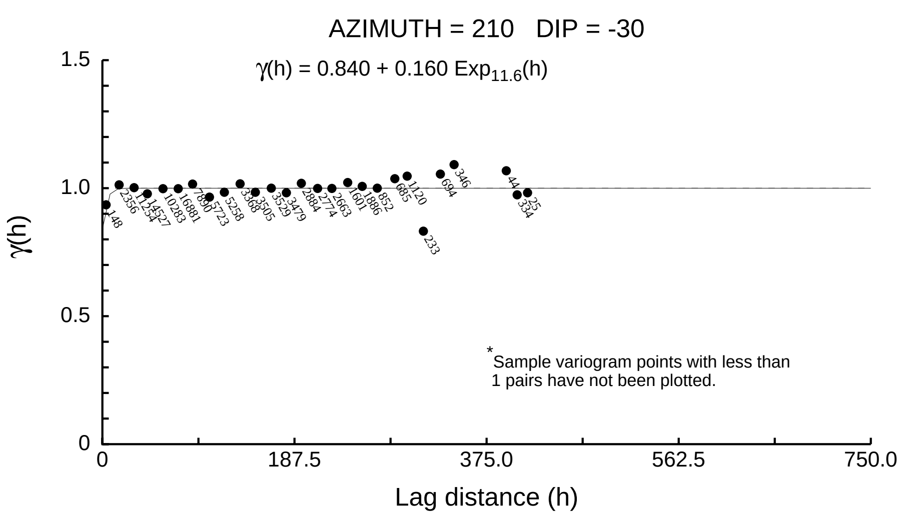


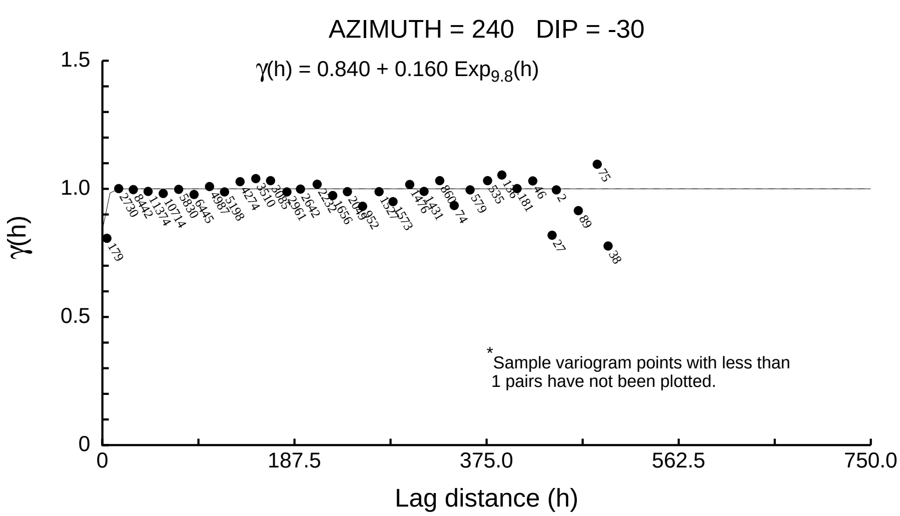




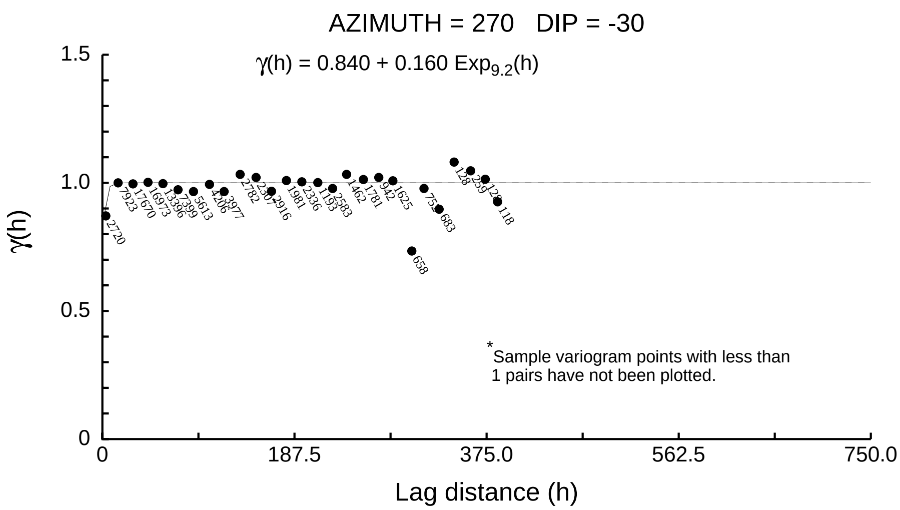
Zone 99 Directional Correlograms - Assays

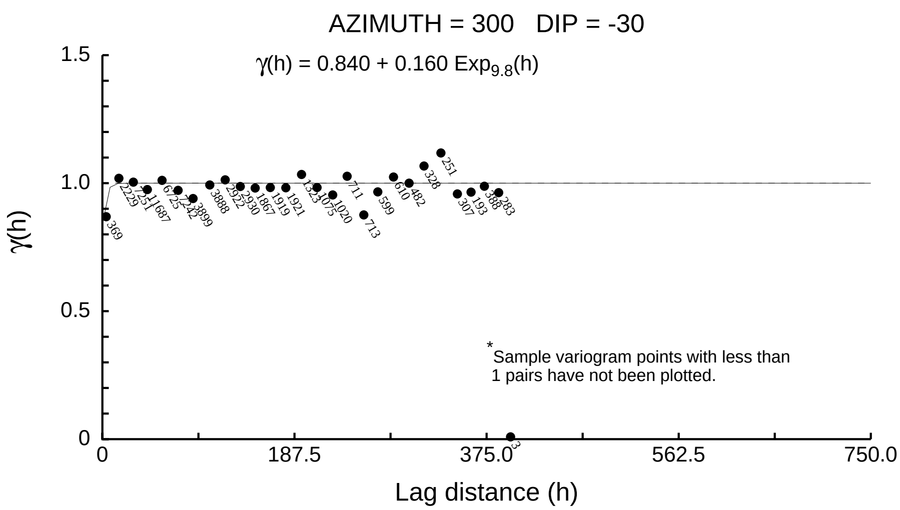


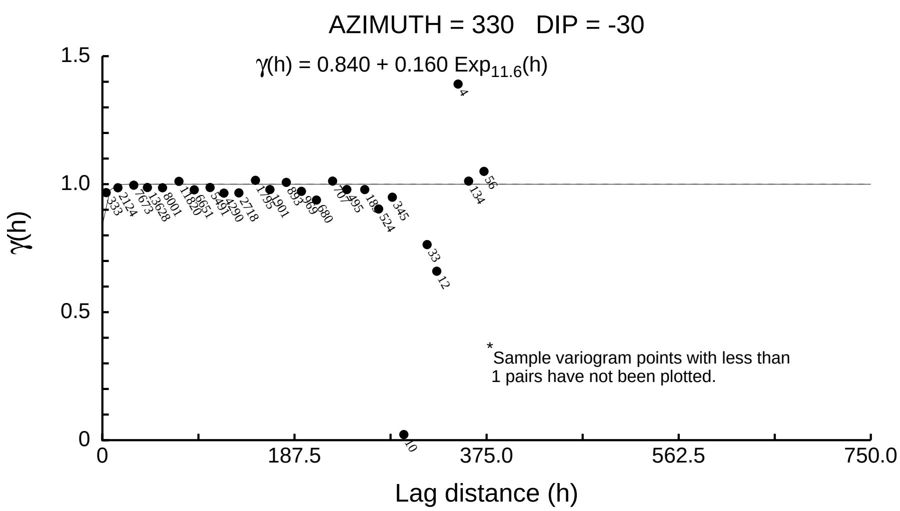




Zone 99 Directional Correlograms - Assays







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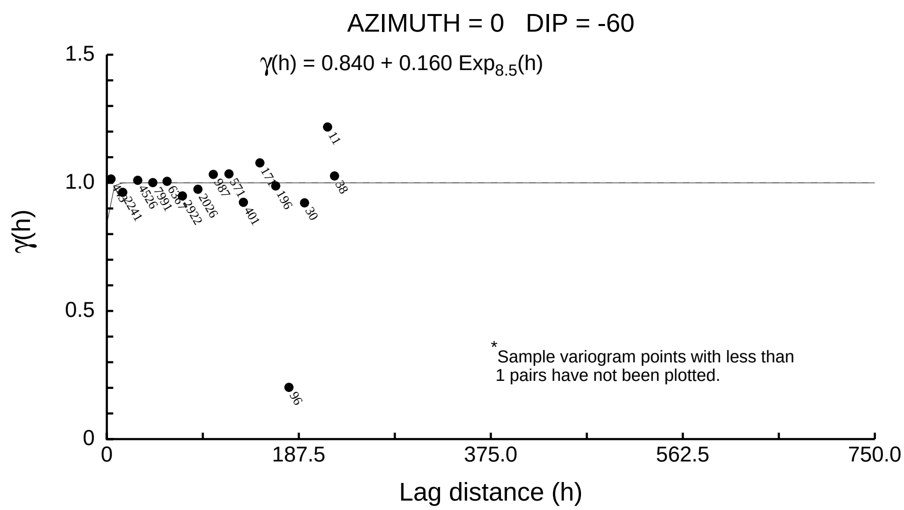
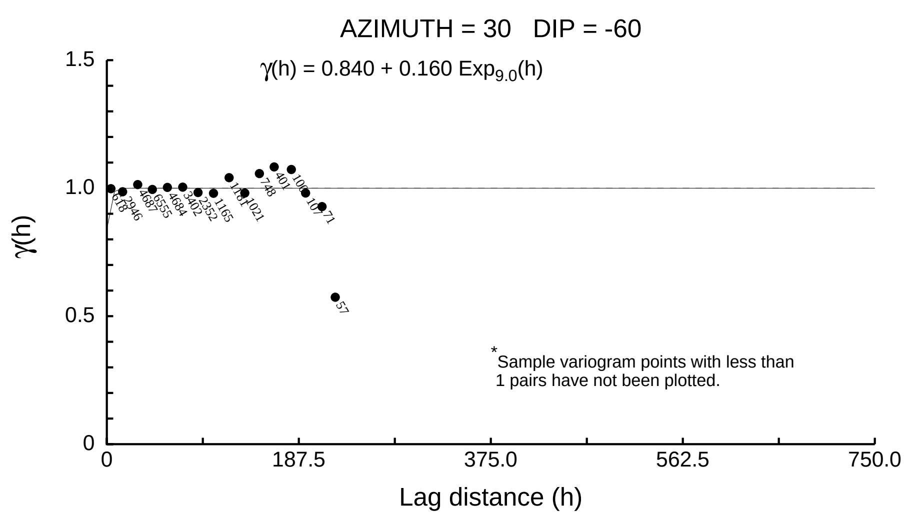
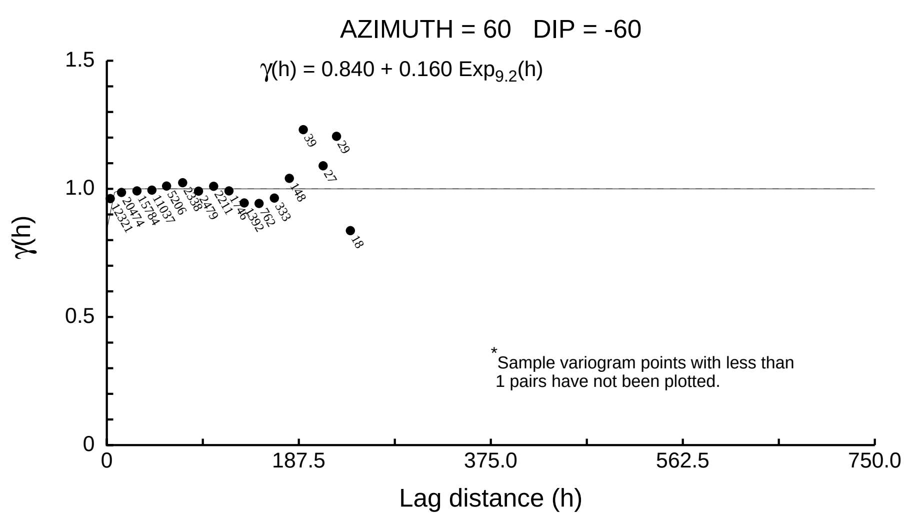
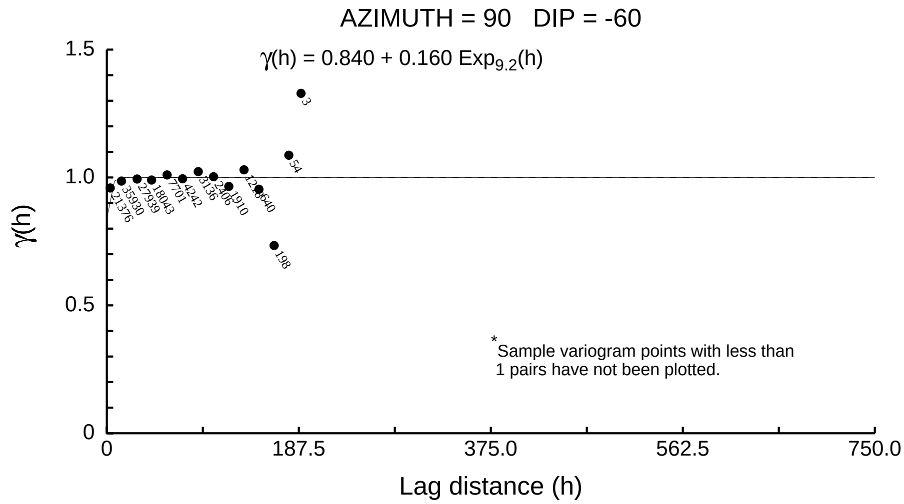
Zone 99 Directional Correlograms - Assays

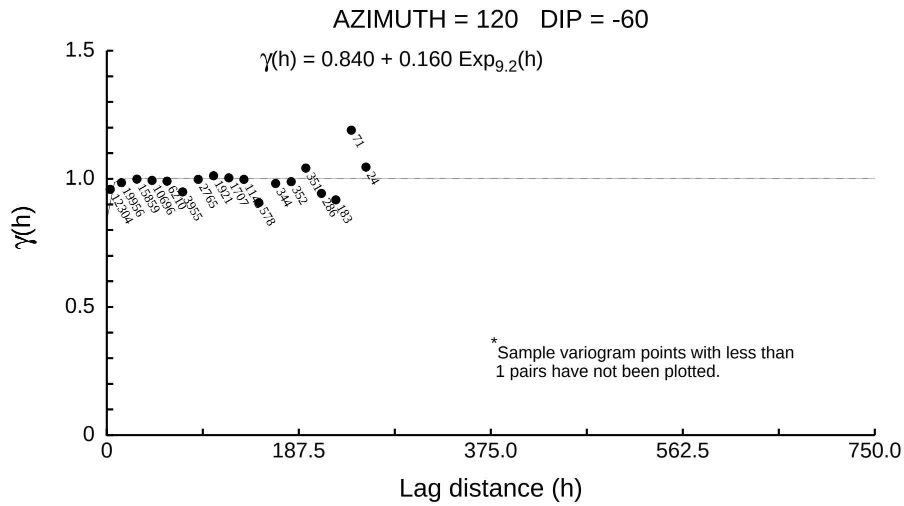


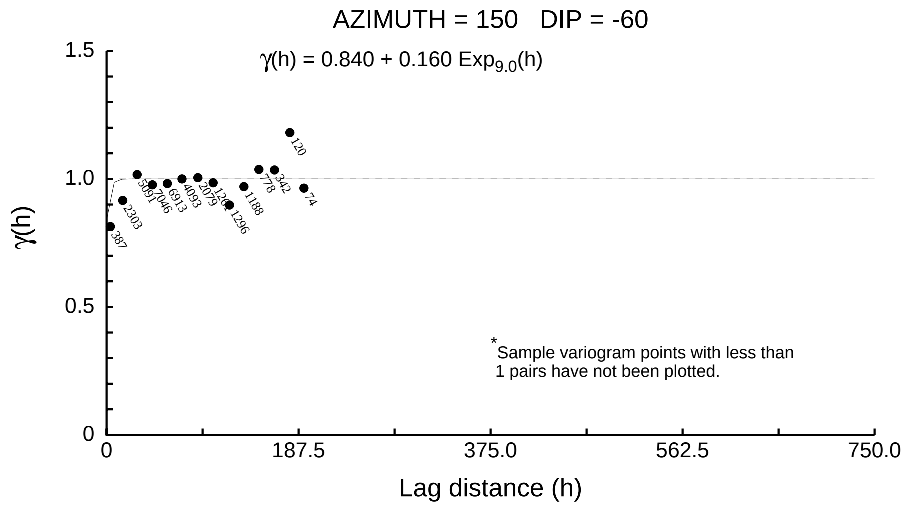




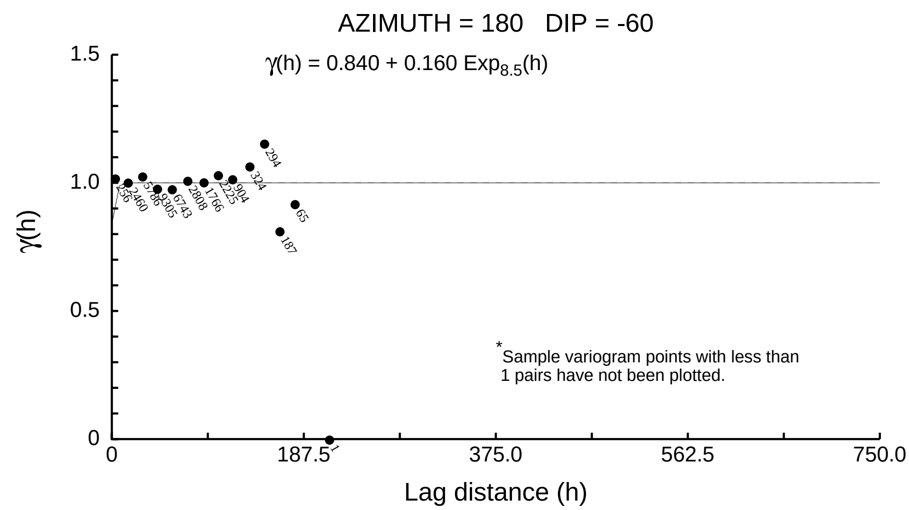
Zone 99 Directional Correlograms - Assays

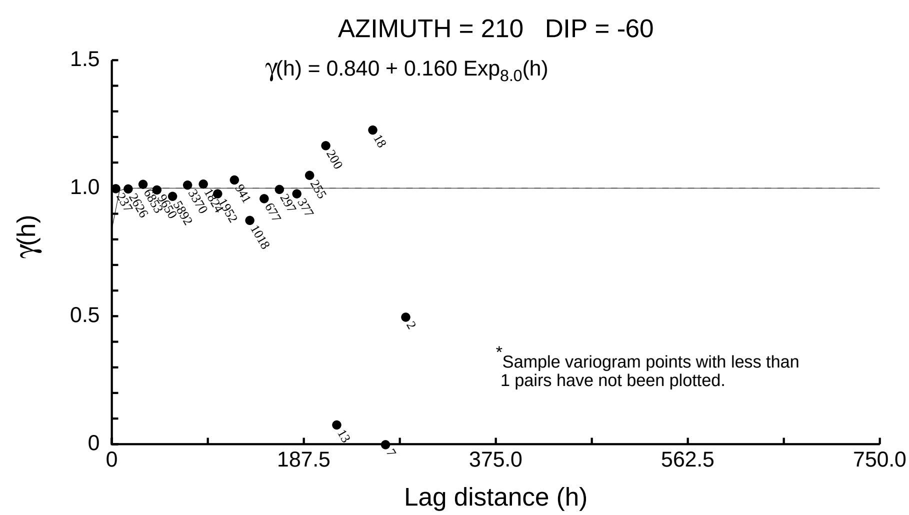


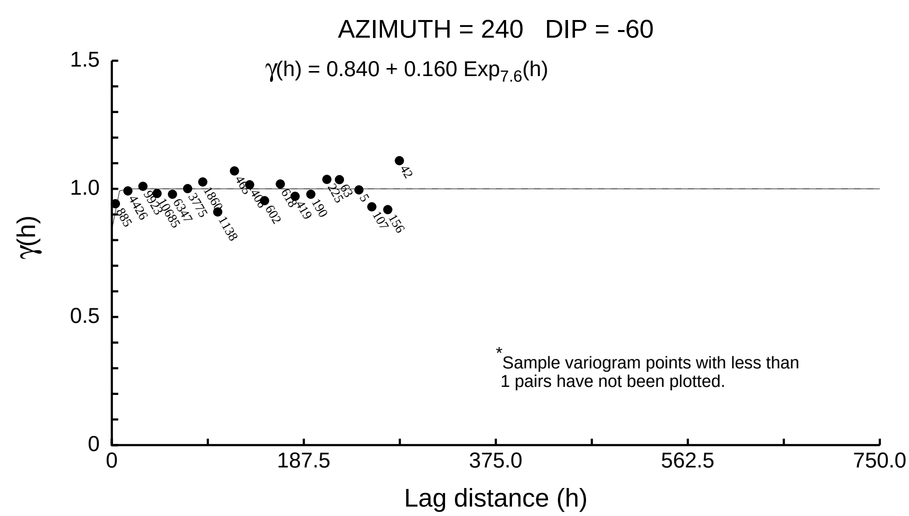




Zone 99 Directional Correlograms - Assays







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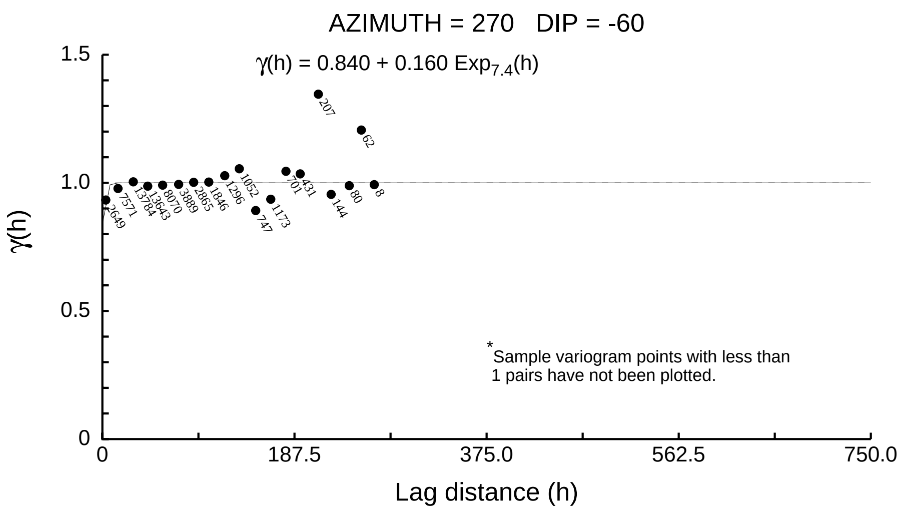
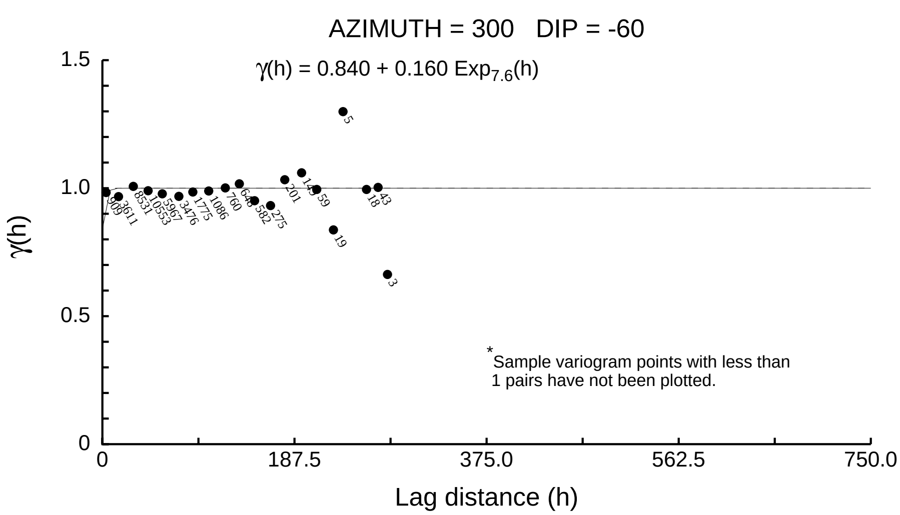
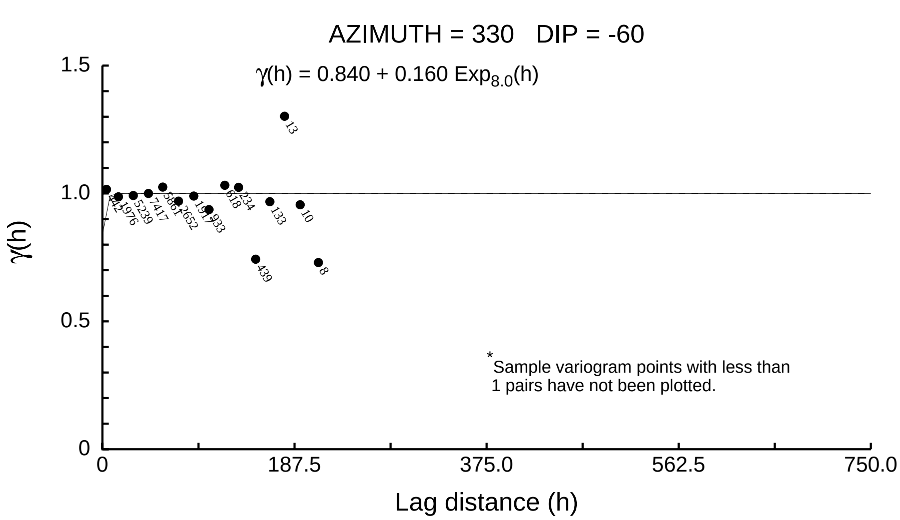
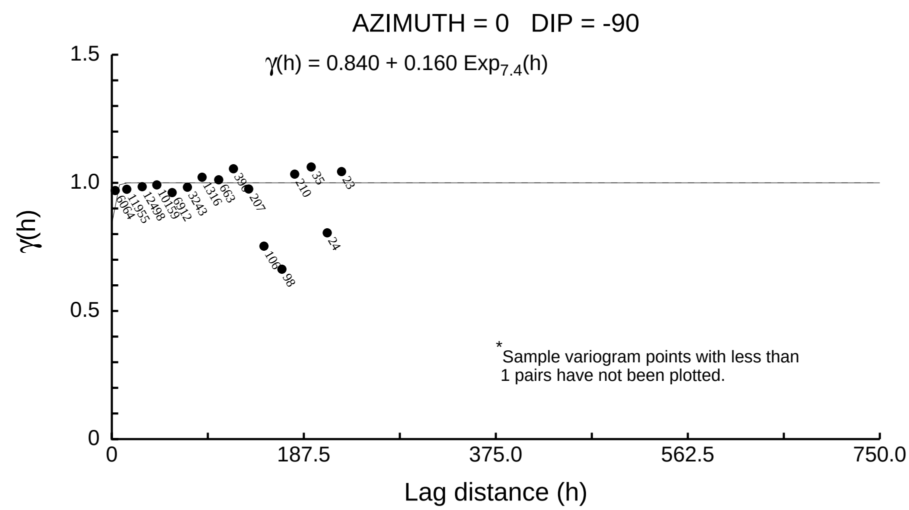
Zone 99 Directional Correlograms - Assays







Zone 99 Directional Correlograms - Assays



Zone 99 0.4 gram downhole Ind Correlogram

Medsystem and Vulcan Rotation Conventions

Nugget ==> 0.680
C1 ==> 0.320

First Structure -- Exponential with Practical Range

LH Rotation about the Z axis ==> 0
RH Rotation about the X' axis ==> 0
LH Rotation about the Y' axis ==> 0

Range along the Z' axis ==> 10.0	Azimuth ==> 90	Dip ==> 90
Range along the Y' axis ==> 10.0	Azimuth ==> 360	Dip ==> 0
Range along the X' axis ==> 10.0	Azimuth ==> 90	Dip ==> 0

Modeling Criteria

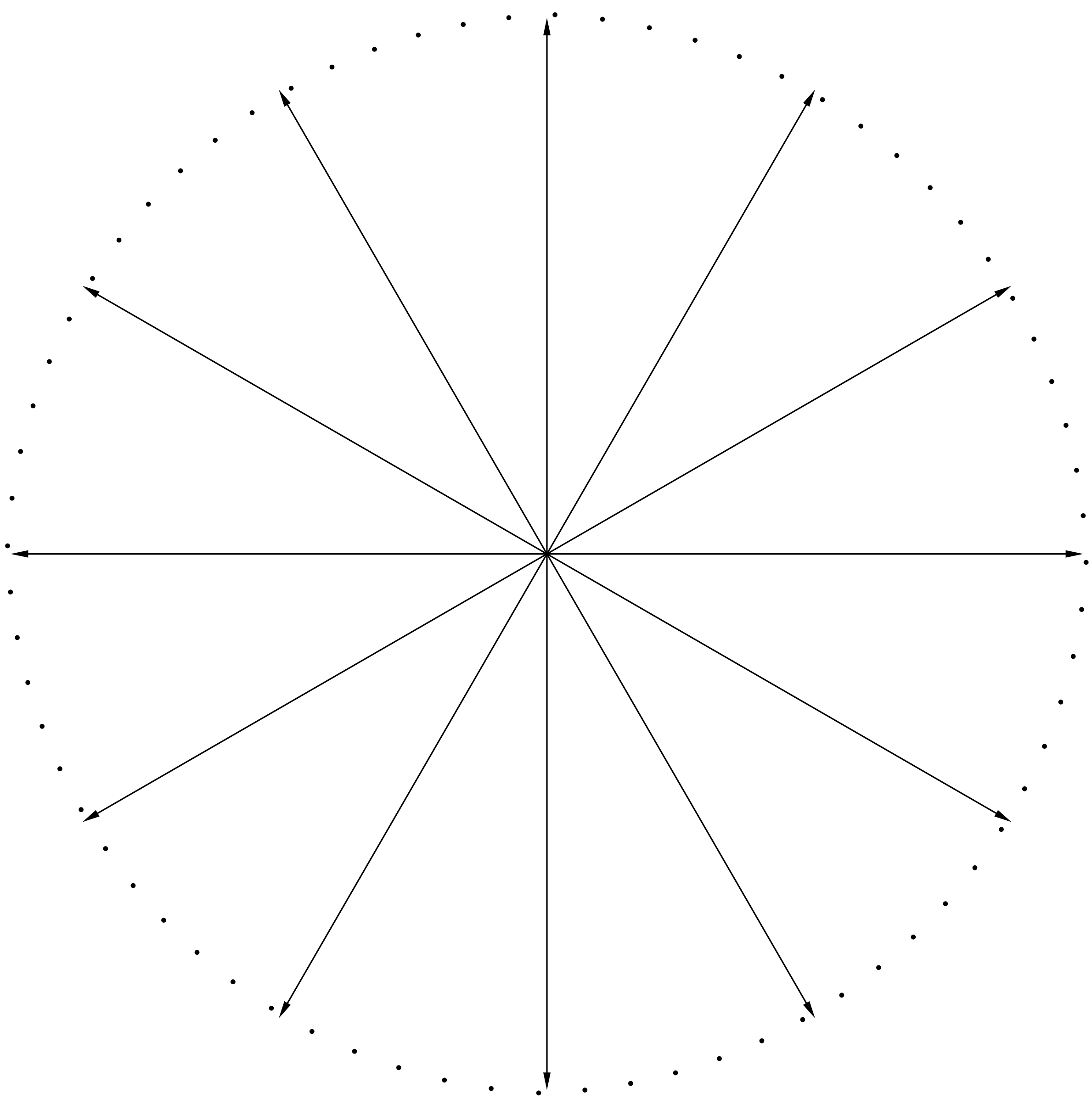
Minimum number pairs req'd ==> 1
Sample variogram points weighted by # pairs

Zone 99 0.4 gram downhole Ind Correlogram

Structure Number 1

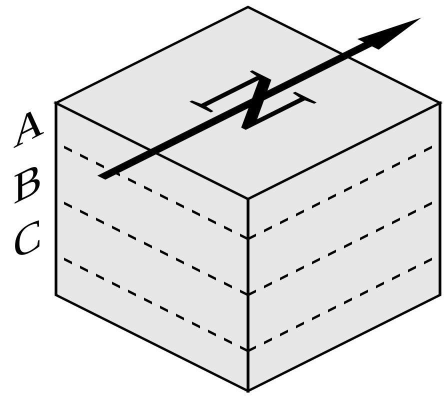
Rose Diagram of Ranges Dipping 0 Degrees
Scale:

10 Units

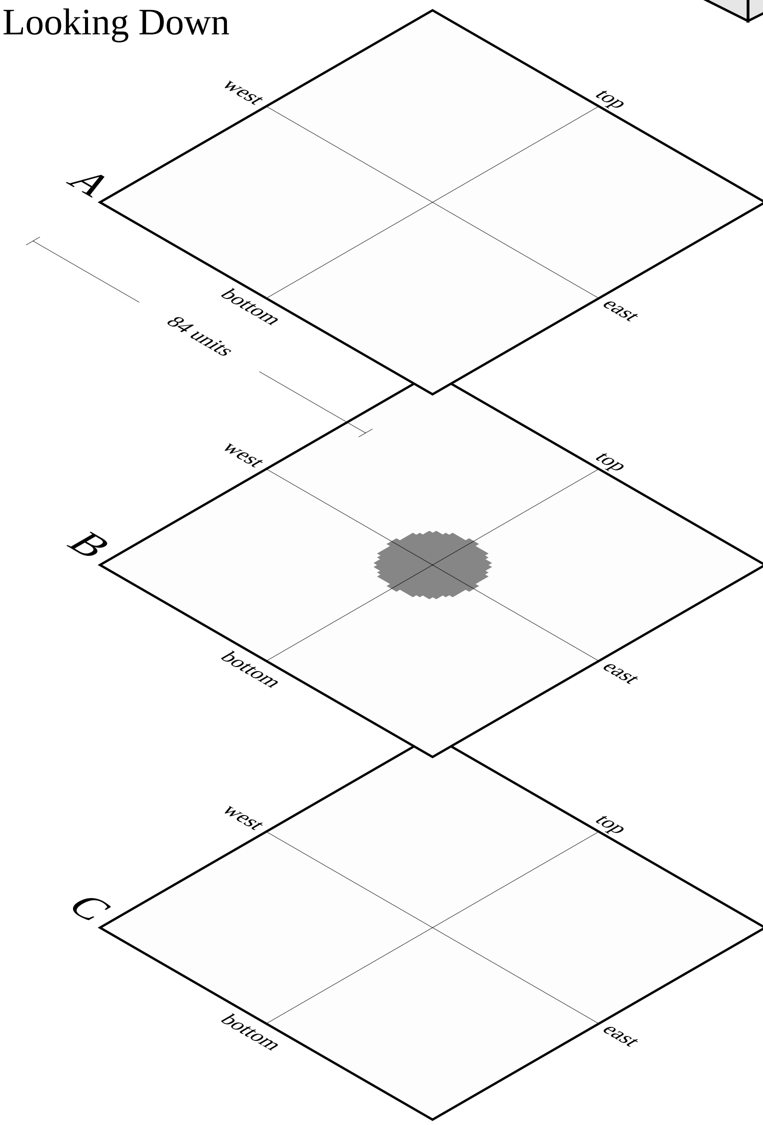


Horizontal Slices Through the Ellipsoids

Reference Cube



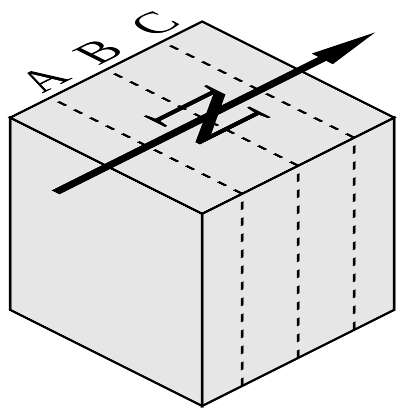
X-Y Planes Looking Down



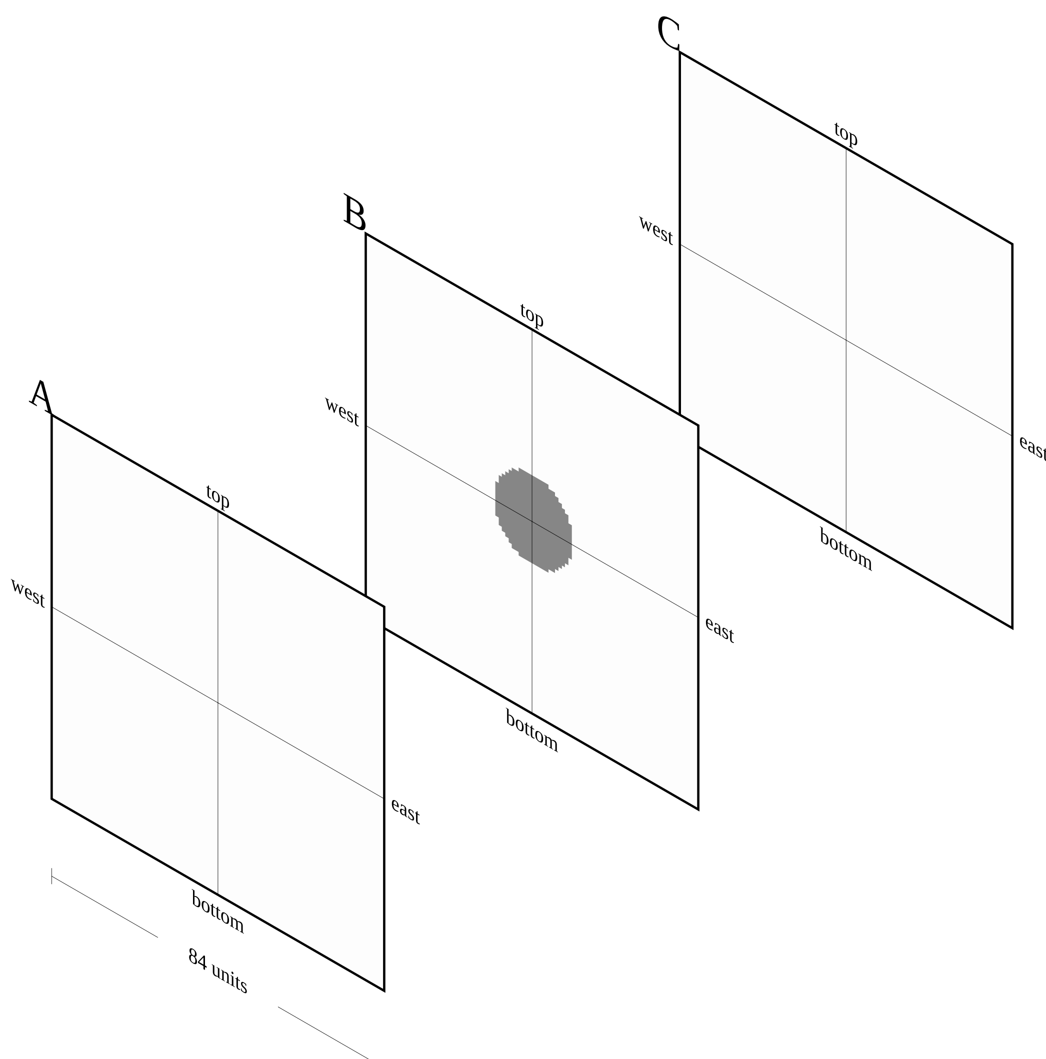
Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Cross Section Views Through the Ellipsoids

Reference Cube



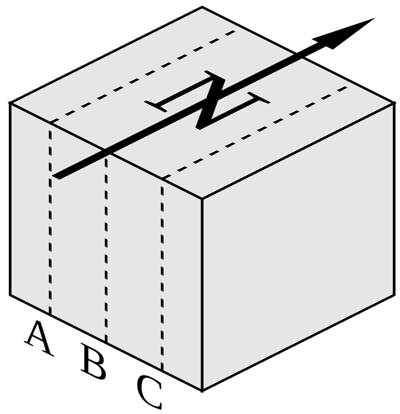
X-Z Planes Looking North



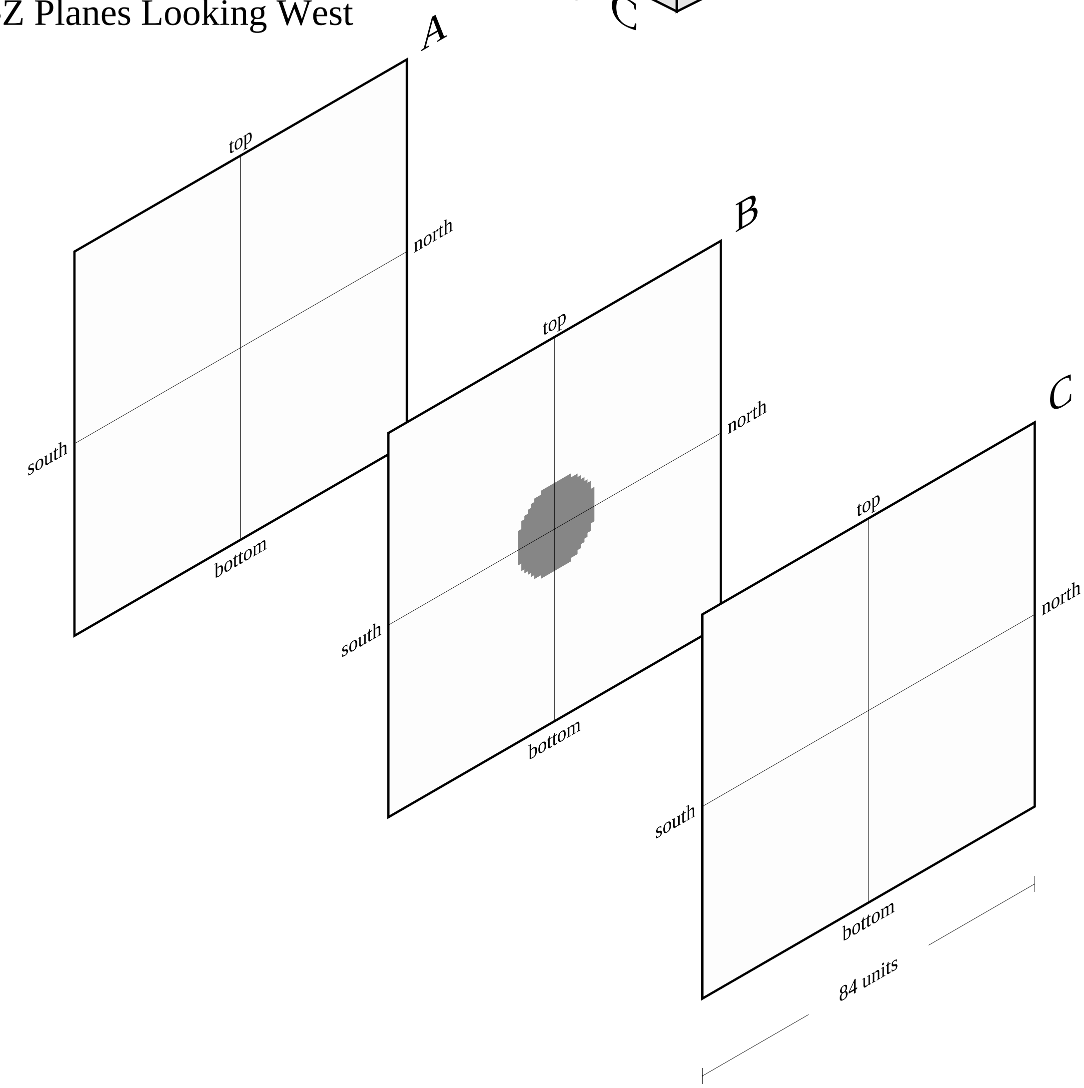
Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Long Section Views Through the Ellipsoids

Reference Cube

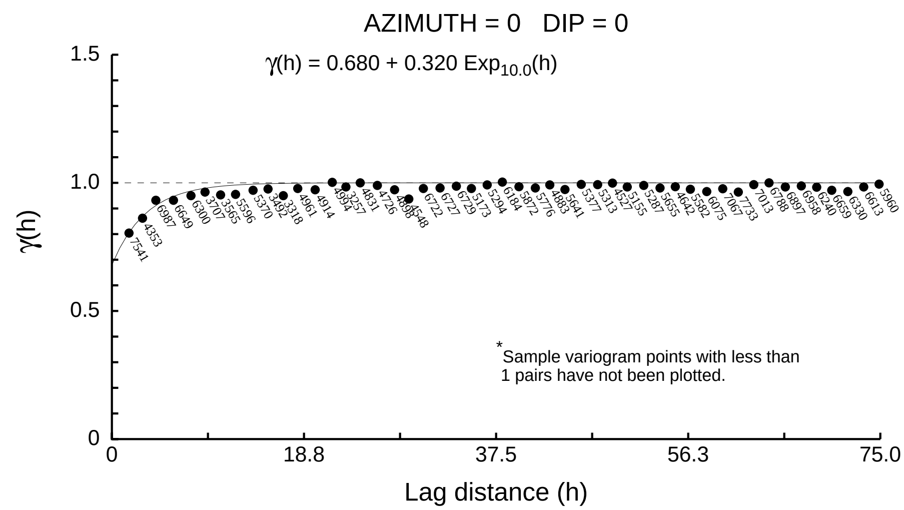


Y-Z Planes Looking West



Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Zone 99 0.4 gram downhole Ind Correlogram



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Zone 99 0.4 gram downhole Ind Correlogram

Medsystem and Vulcan Rotation Conventions

Nugget ==> 0.680
C1 ==> 0.320

First Structure -- Exponential with Practical Range

LH Rotation about the Z axis ==> 0
RH Rotation about the X' axis ==> 0
LH Rotation about the Y' axis ==> 0

Range along the Z' axis ==> 10.0	Azimuth ==> 90	Dip ==> 90
Range along the Y' axis ==> 10.0	Azimuth ==> 360	Dip ==> 0
Range along the X' axis ==> 10.0	Azimuth ==> 90	Dip ==> 0

Modeling Criteria

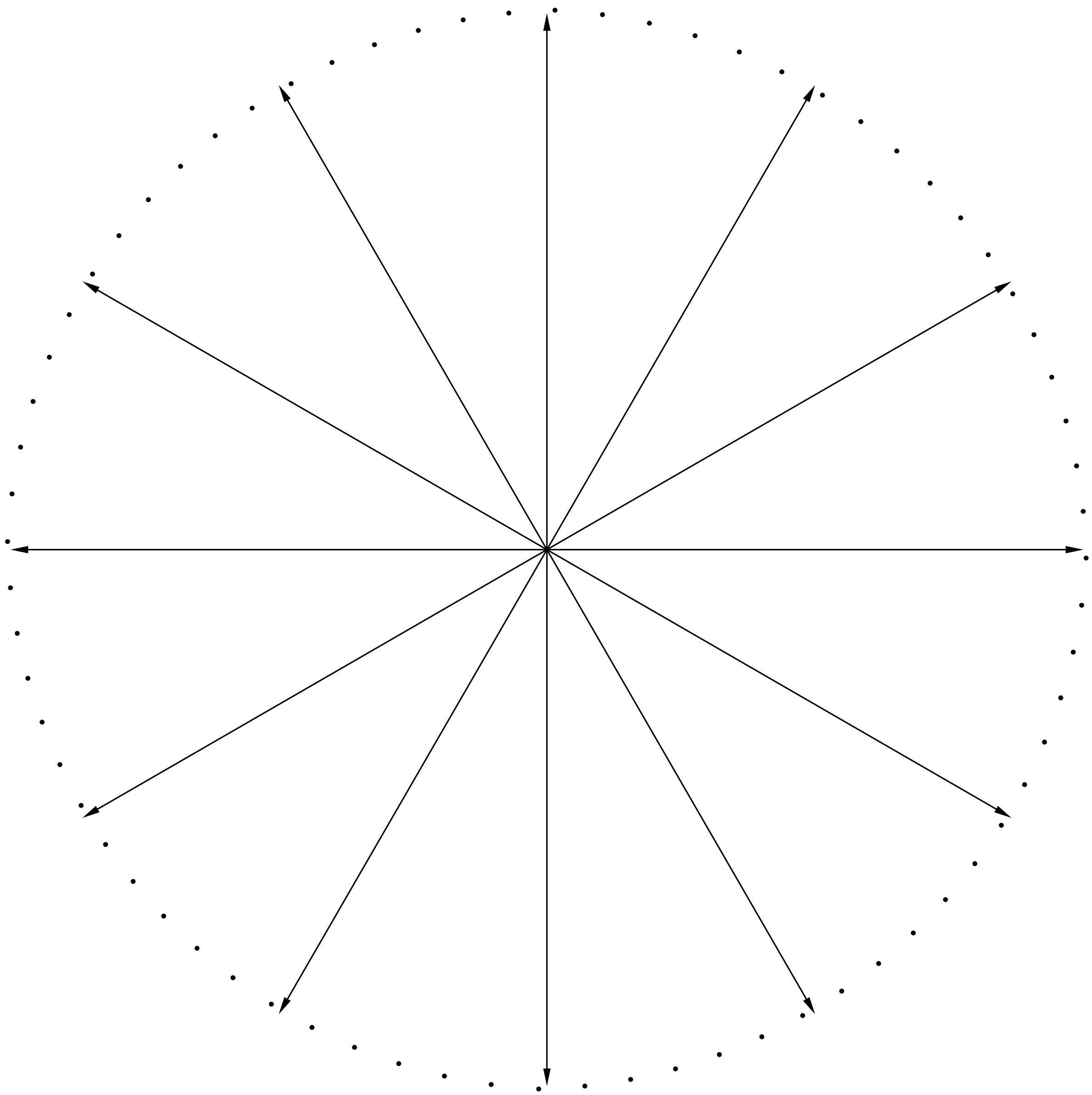
Minimum number pairs req'd ==> 1
Sample variogram points weighted by # pairs

Zone 99 0.4 gram downhole Ind Correlogram

Structure Number 1

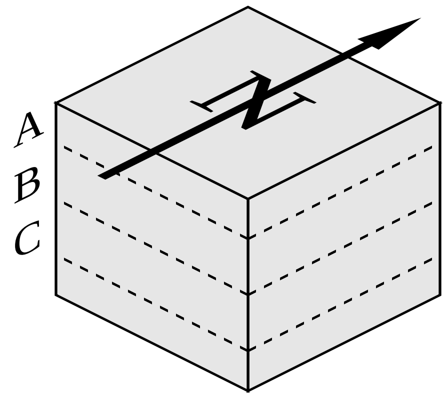
Rose Diagram of Ranges Dipping 0 Degrees
Scale:

10 Units

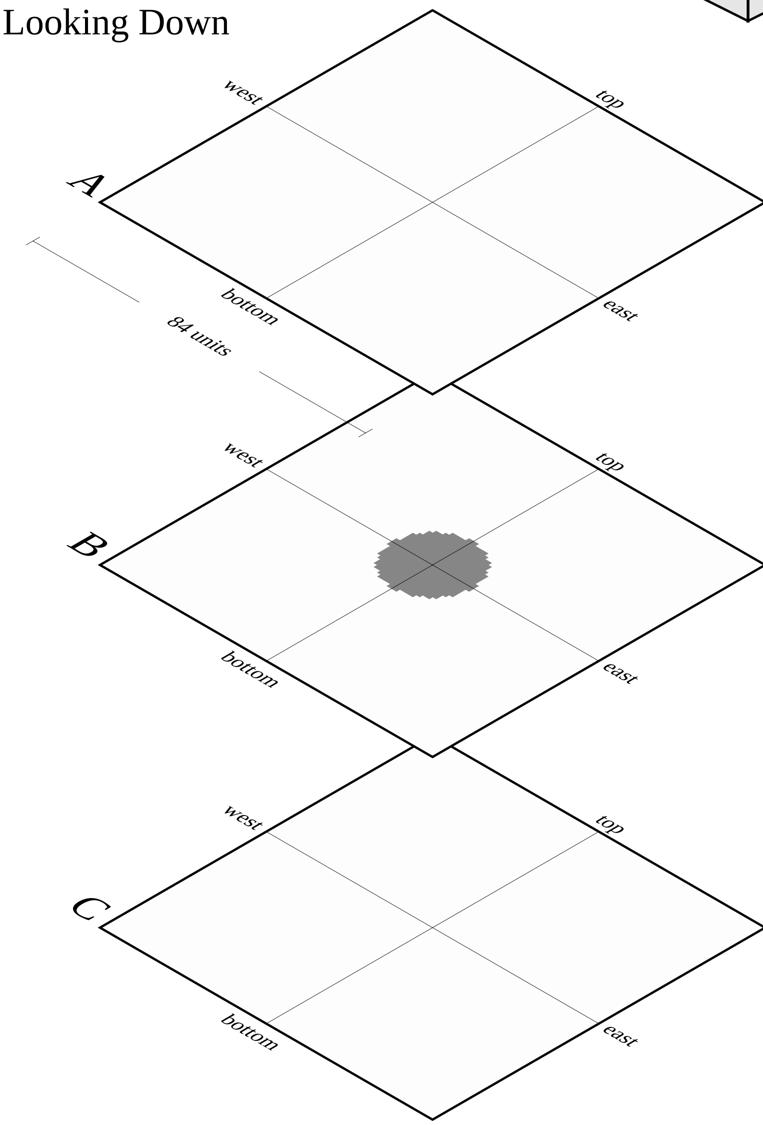


Horizontal Slices Through the Ellipsoids

Reference Cube



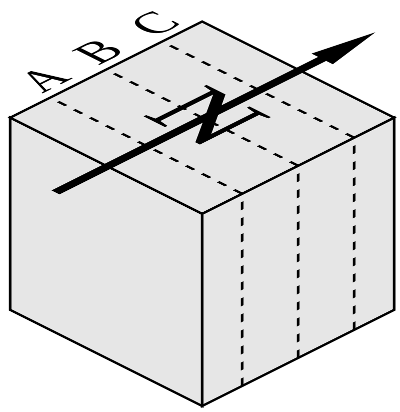
X-Y Planes Looking Down



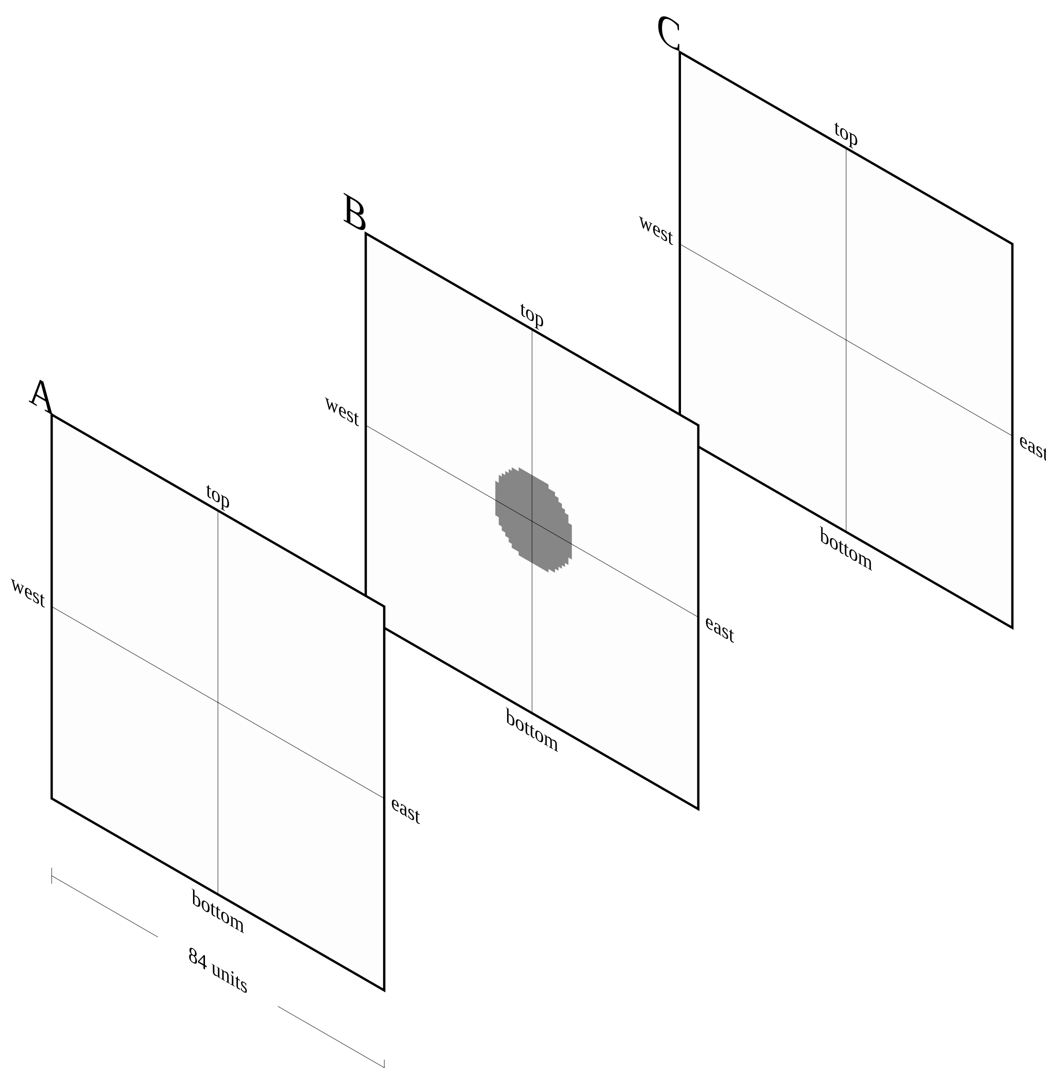
Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Cross Section Views Through the Ellipsoids

Reference Cube



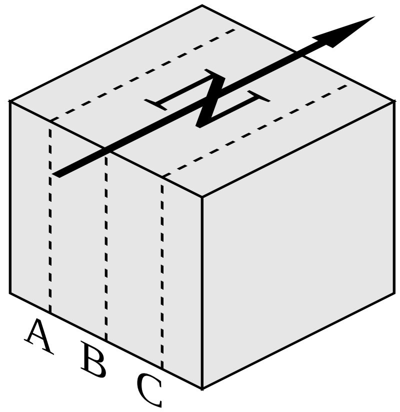
X-Z Planes Looking North



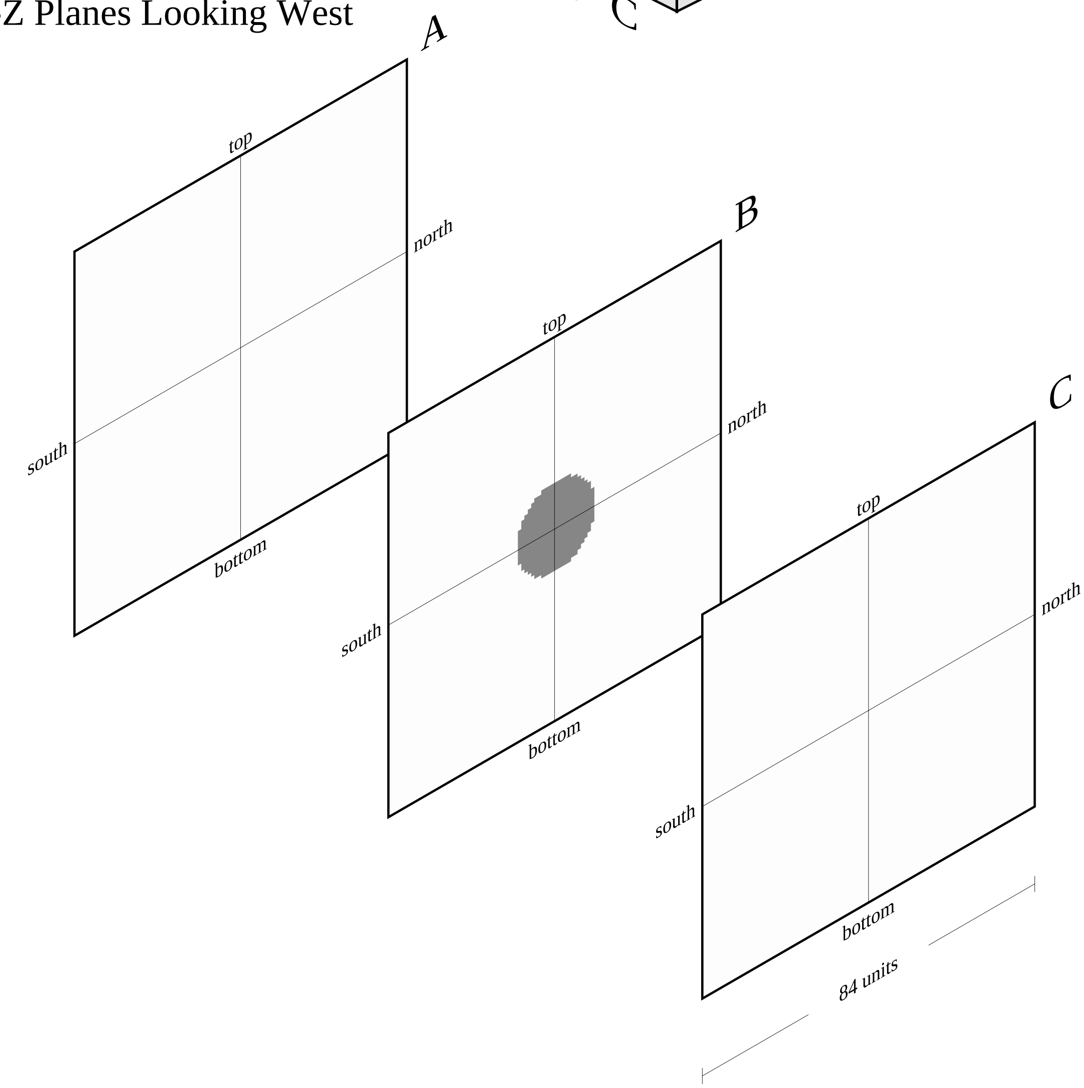
Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Long Section Views Through the Ellipsoids

Reference Cube



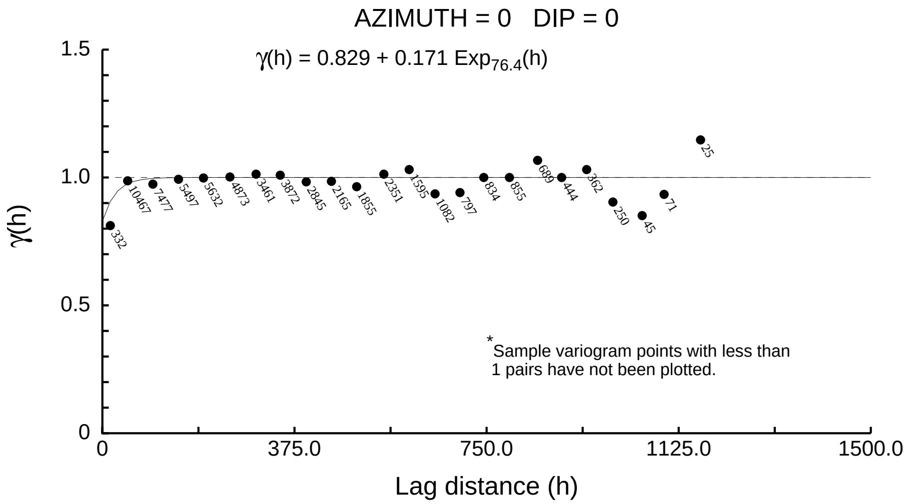
Y-Z Planes Looking West

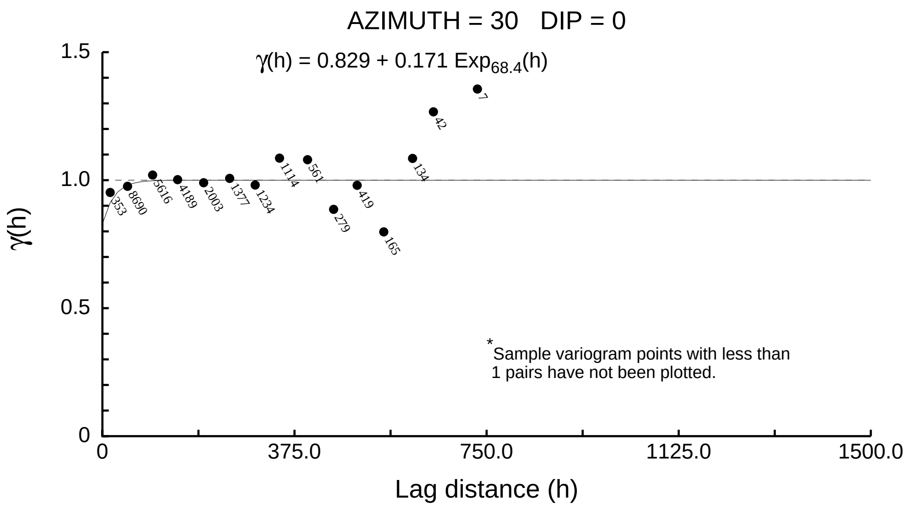


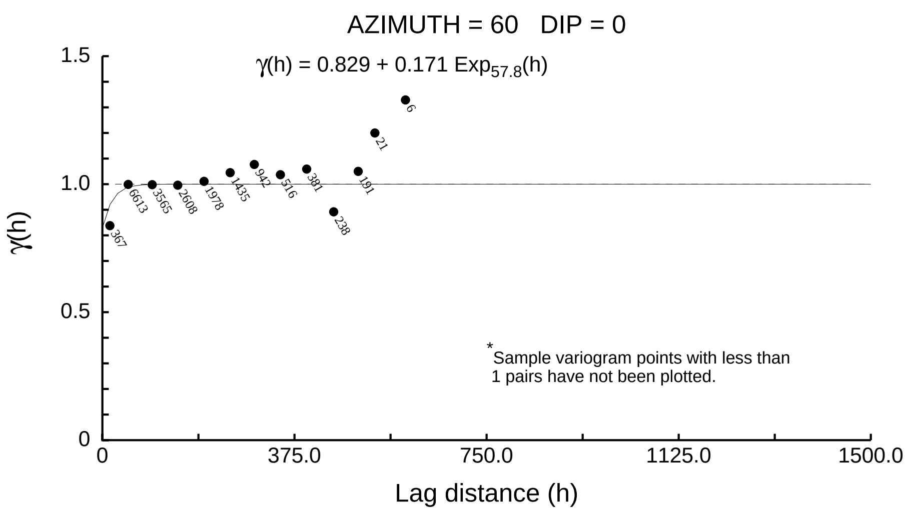
Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

D-2 COMPOSITE VARIOGRAMS

Zone 99 Directional Correlograms - 5m Comps







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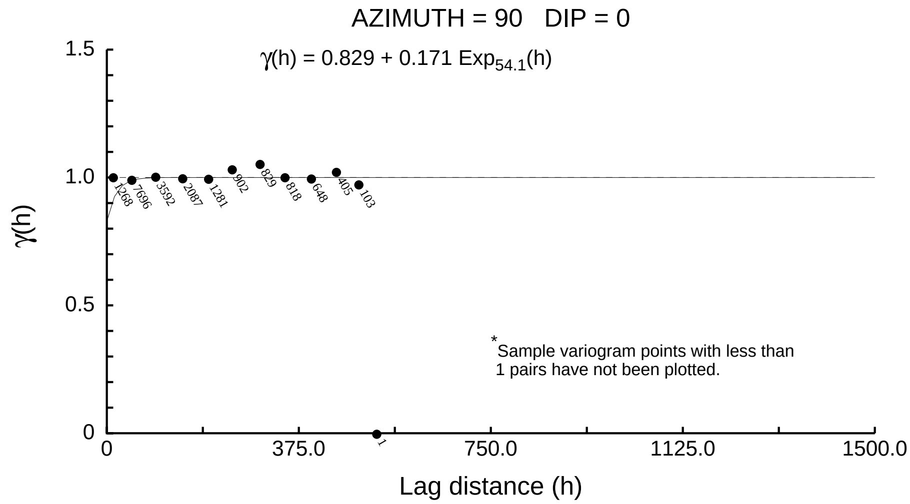
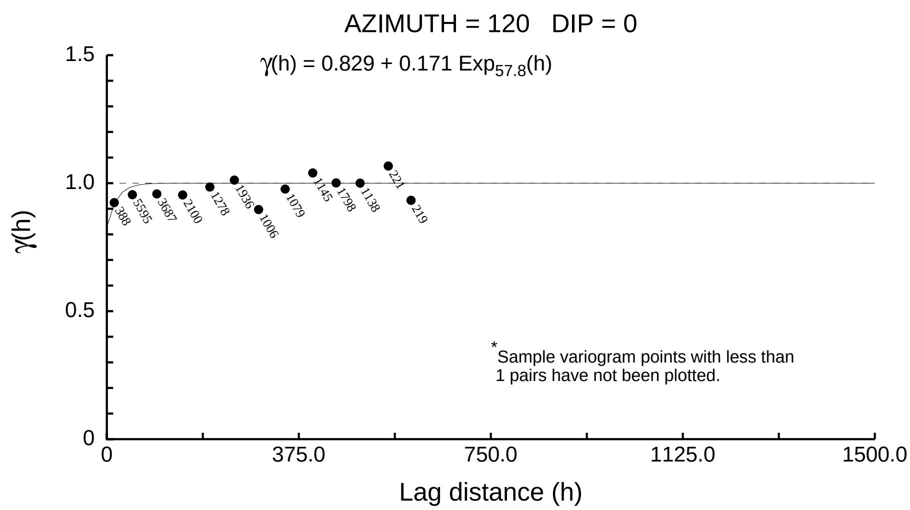
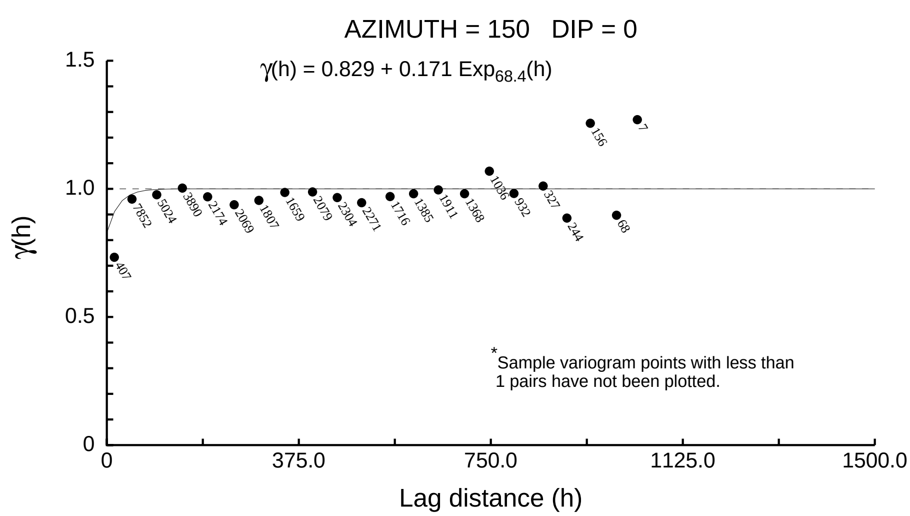
Zone 99 Directional Correlograms - 5m Comps







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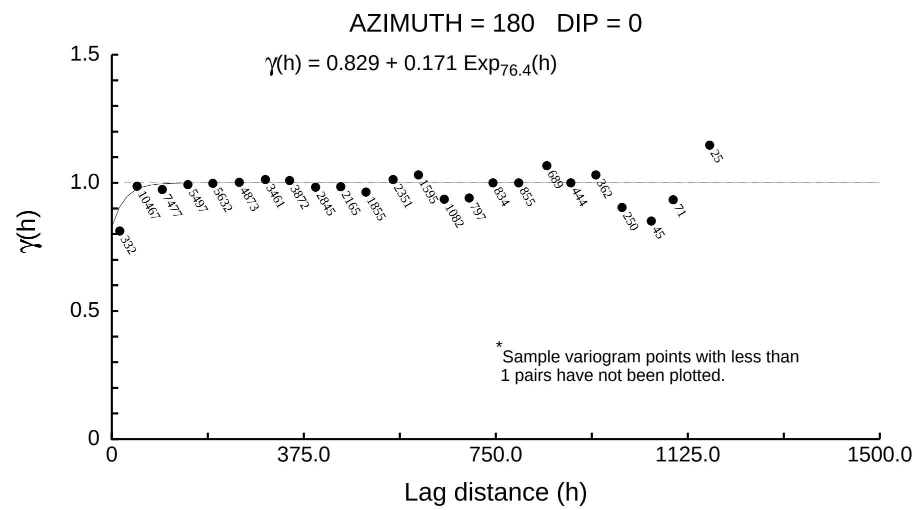
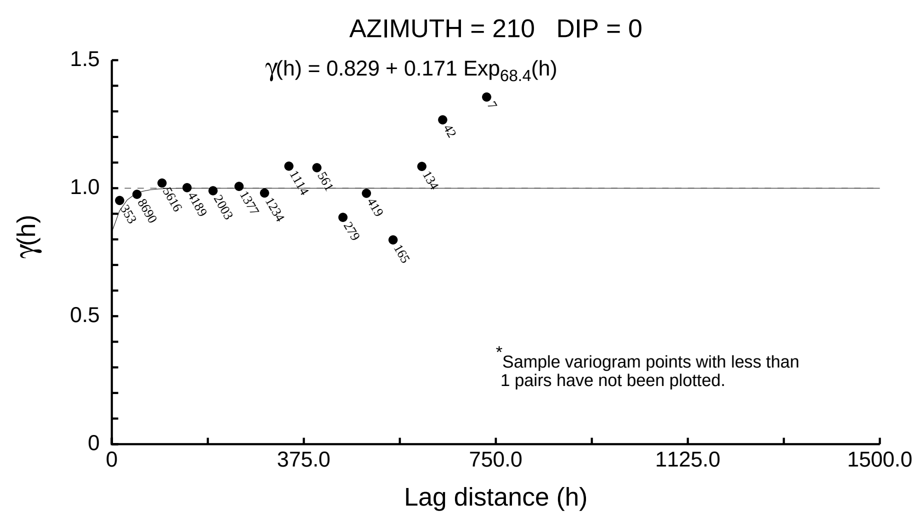
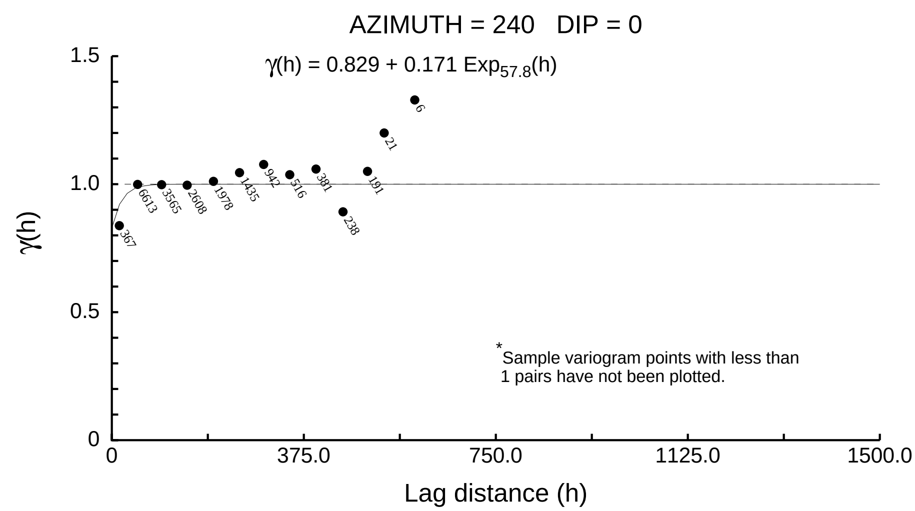
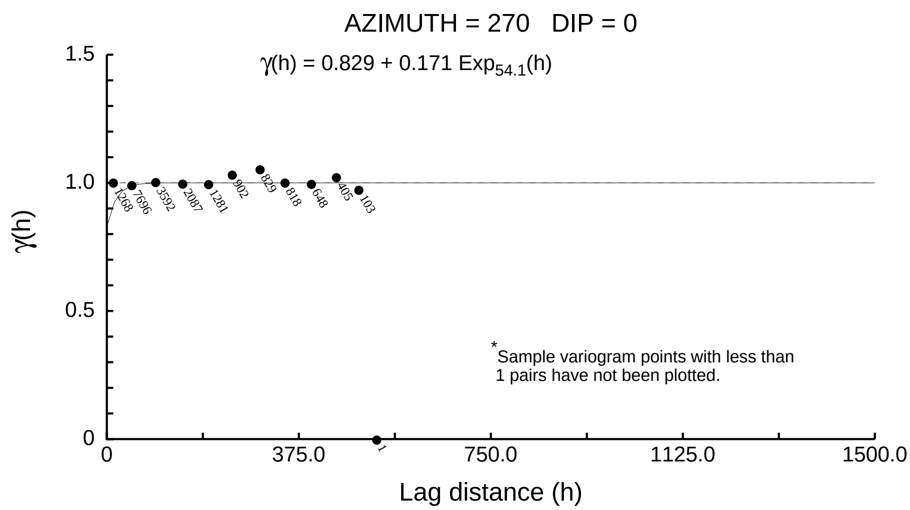
Zone 99 Directional Correlograms - 5m Comps

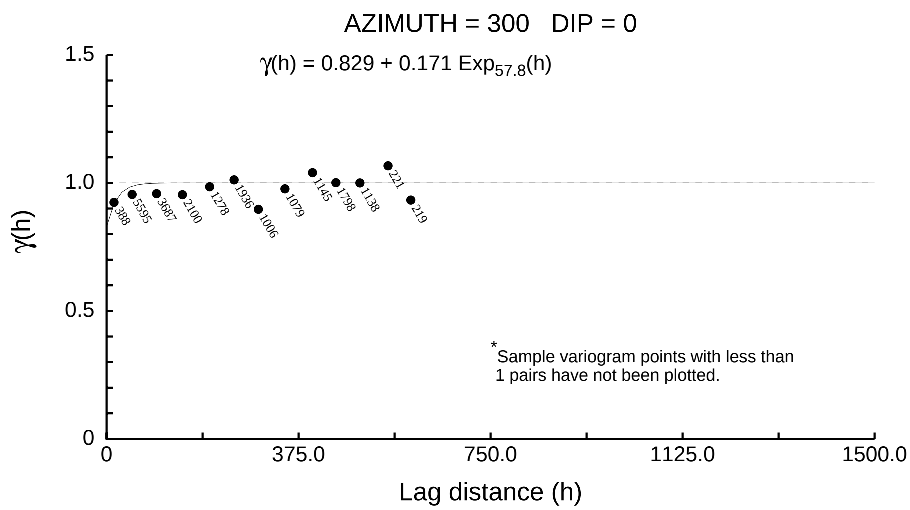


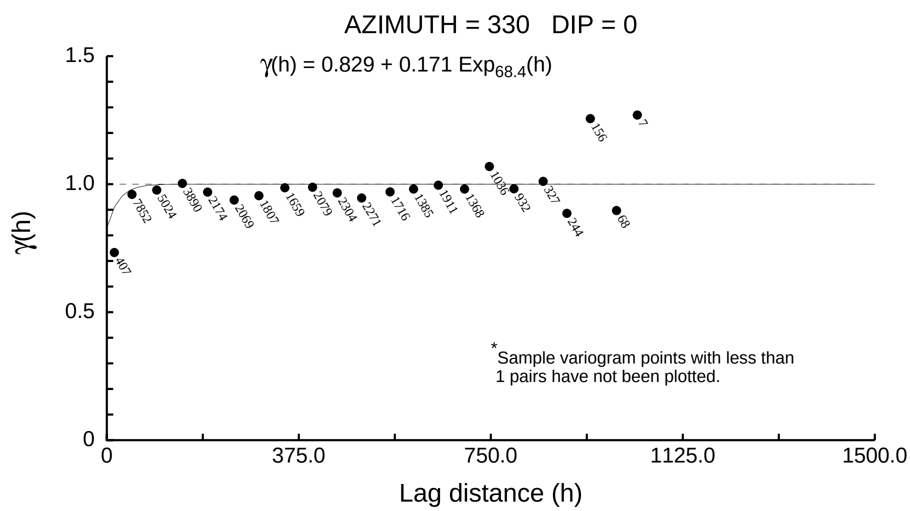




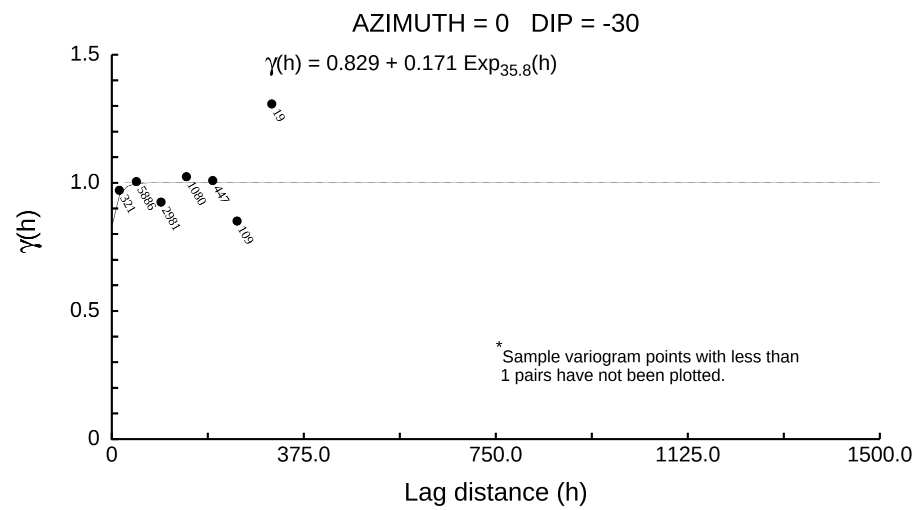
Zone 99 Directional Correlograms - 5m Comps

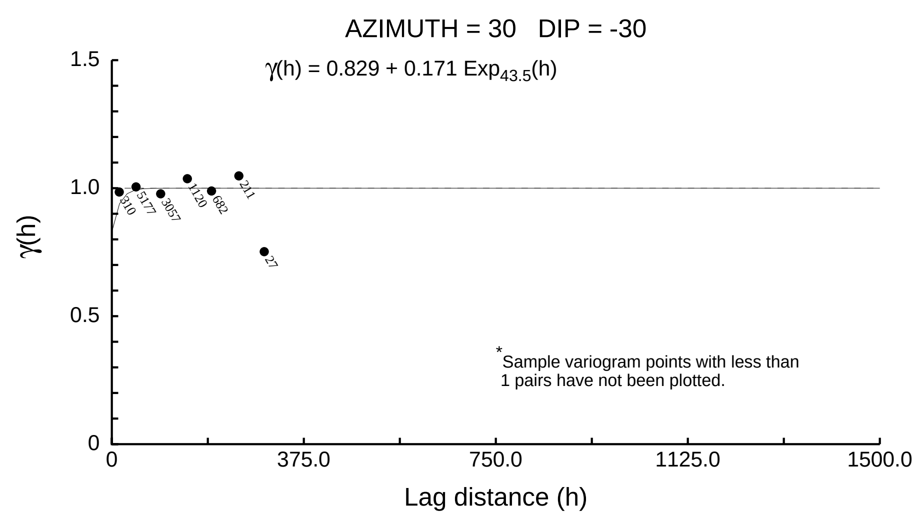


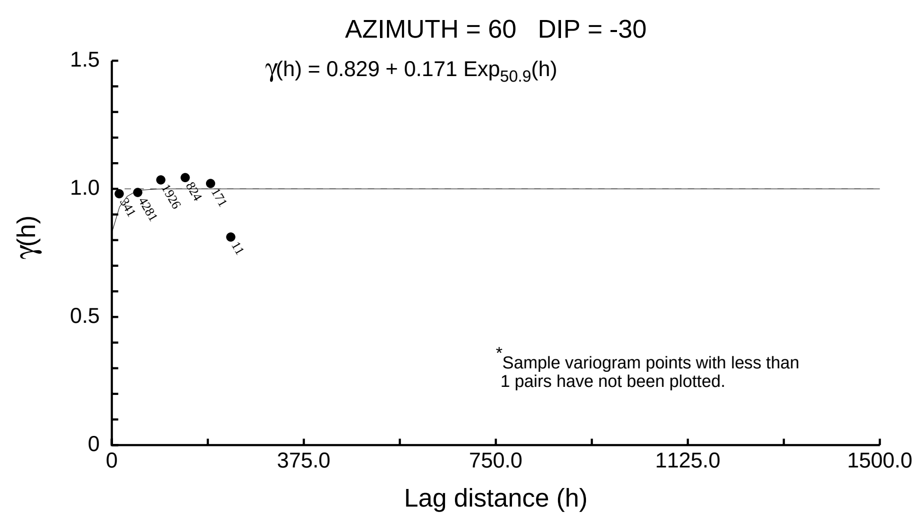




Zone 99 Directional Correlograms - 5m Comps







Zone 99 Directional Correlograms - 5m Comps

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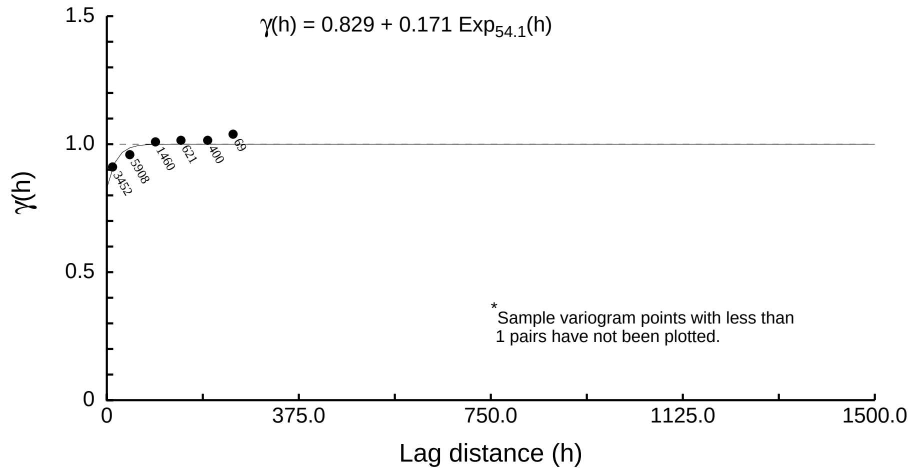

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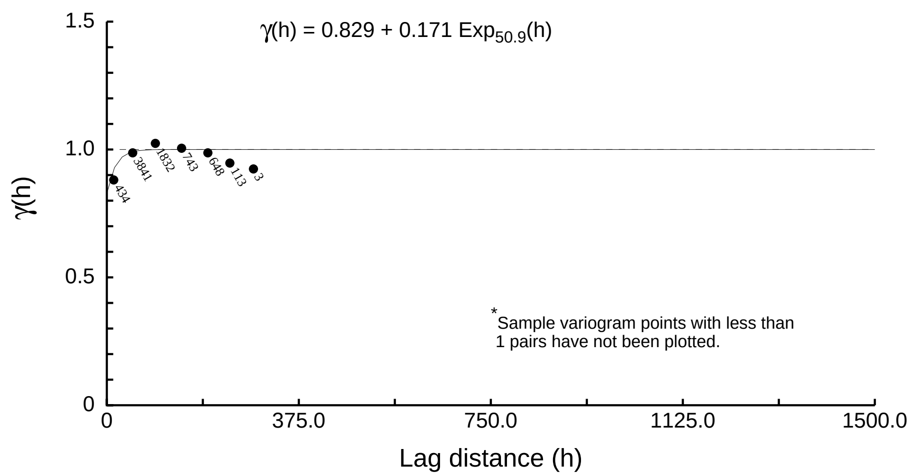

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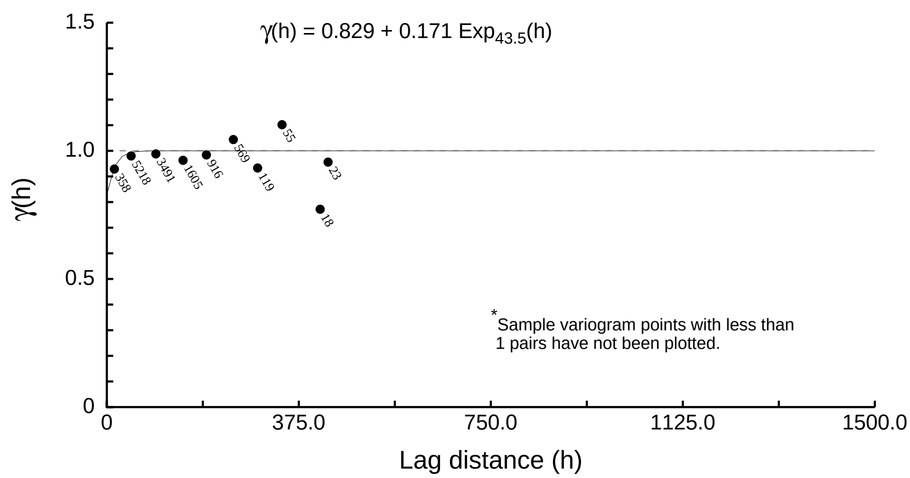
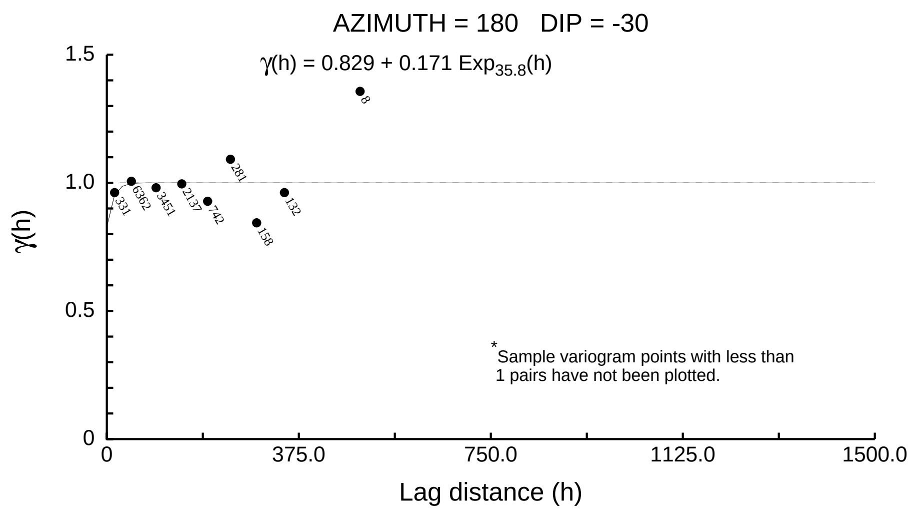
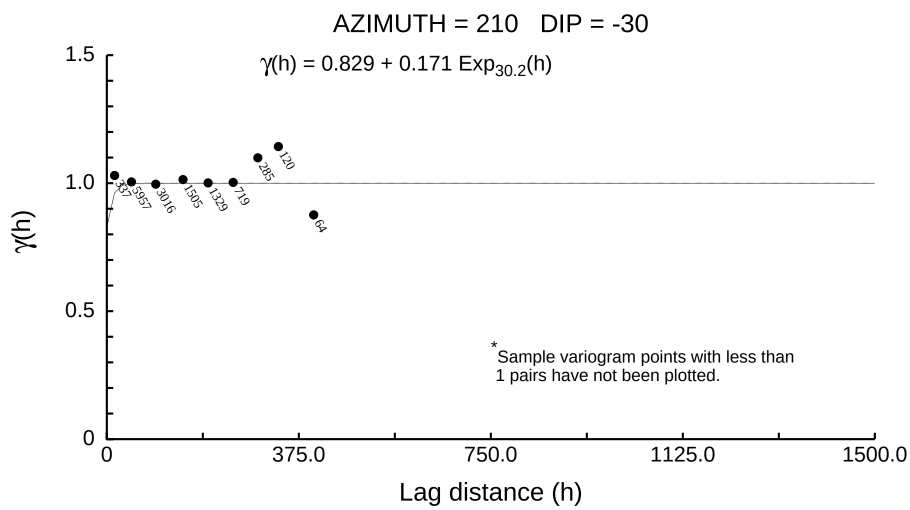
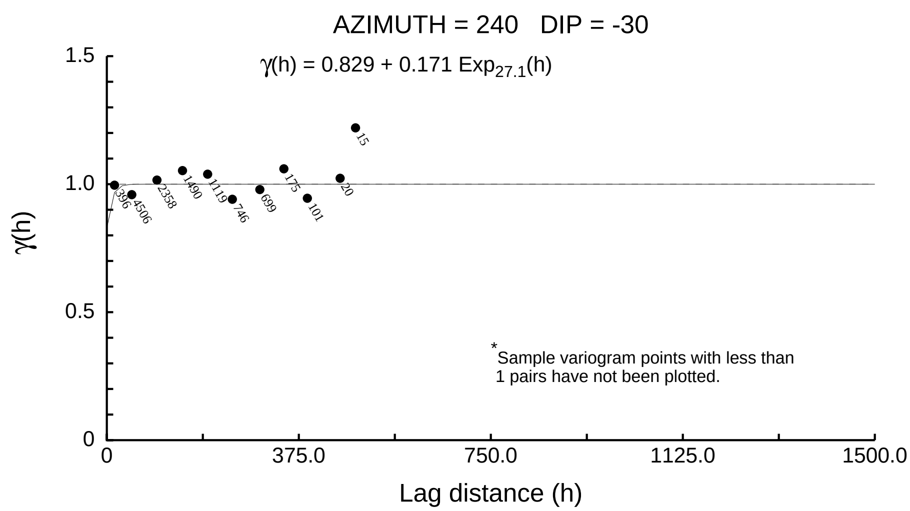


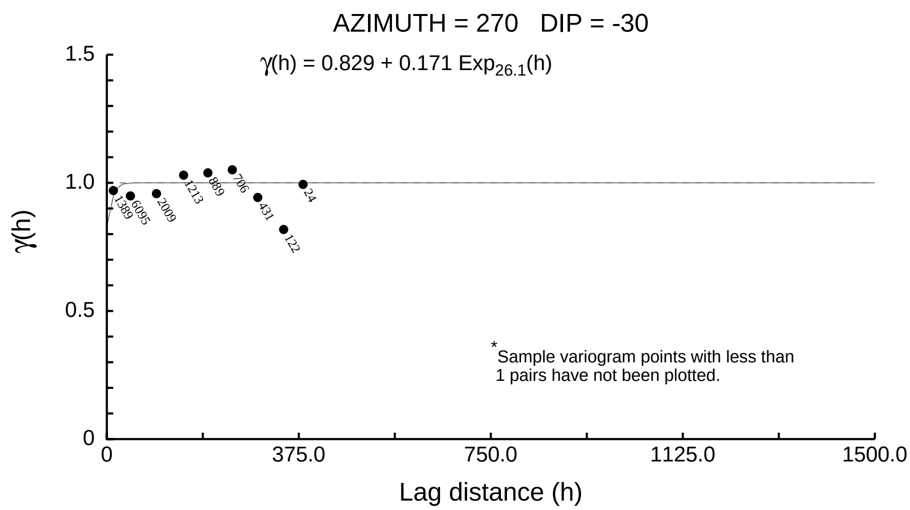
Zone 99 Directional Correlograms - 5m Comps

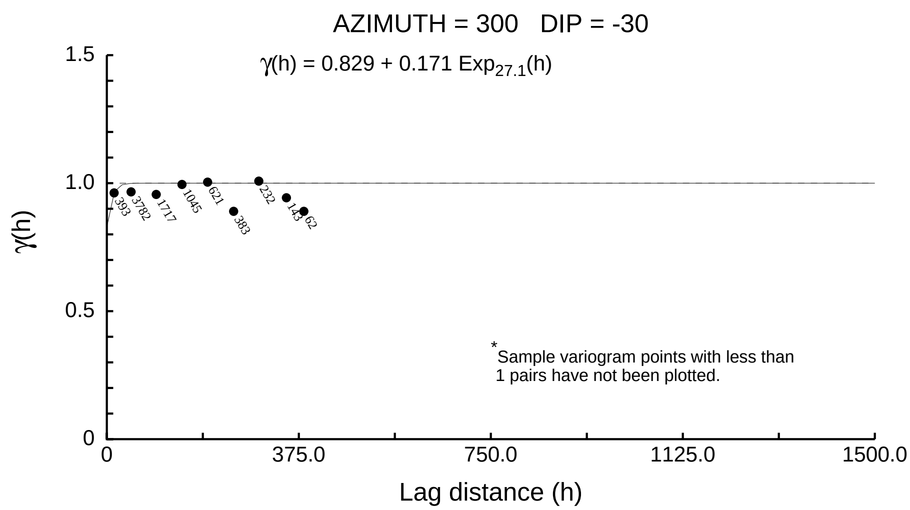


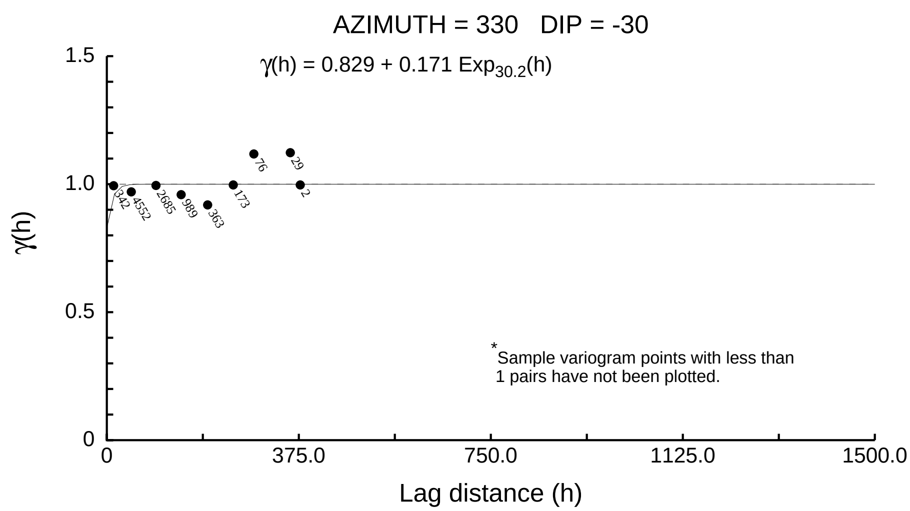




Zone 99 Directional Correlograms - 5m Comps







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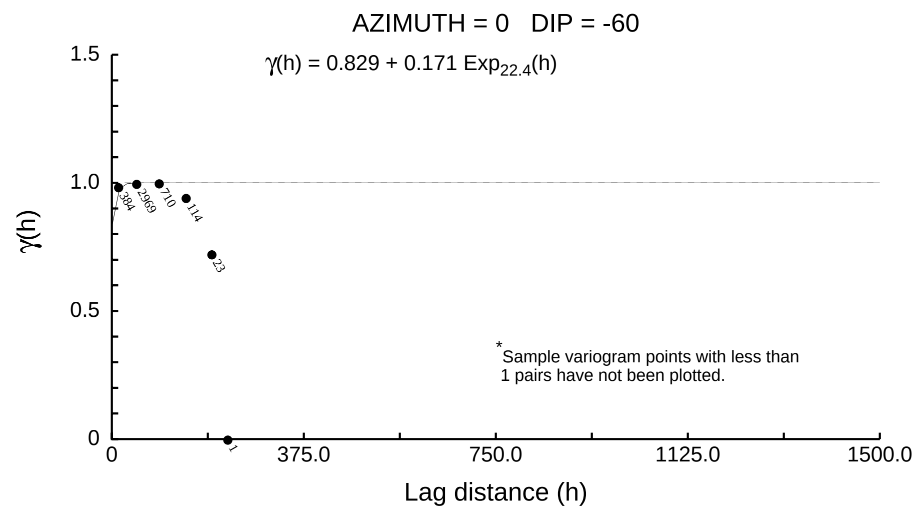
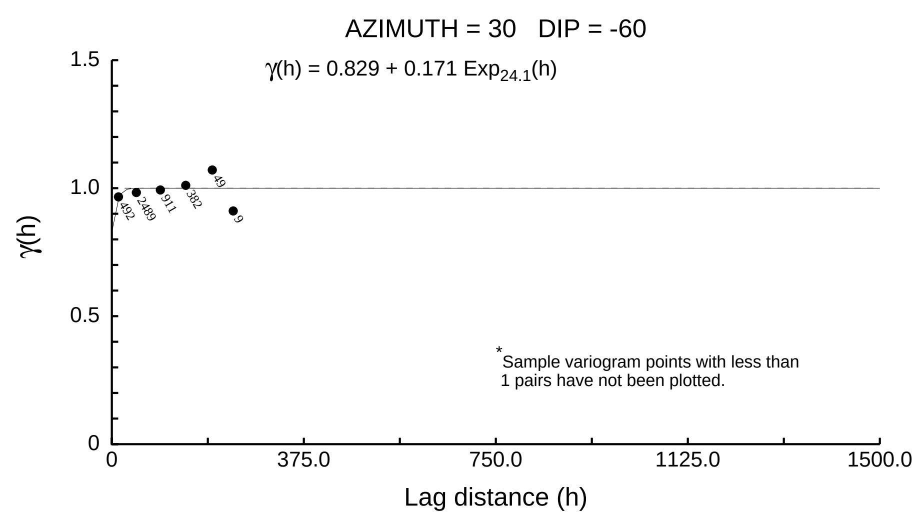
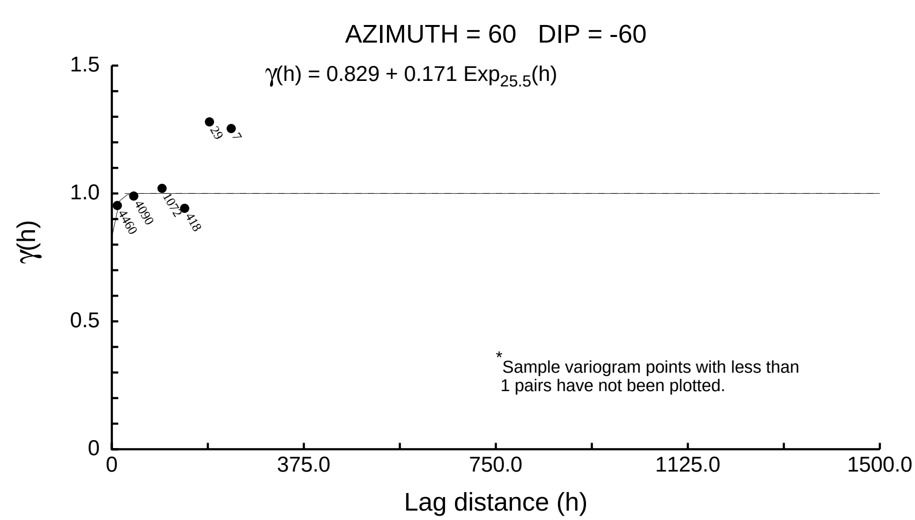
Zone 99 Directional Correlograms - 5m Comps







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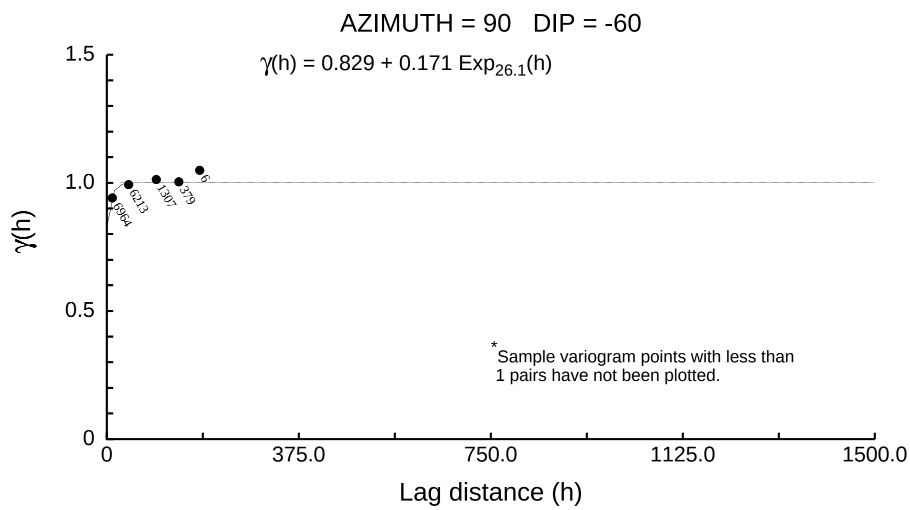
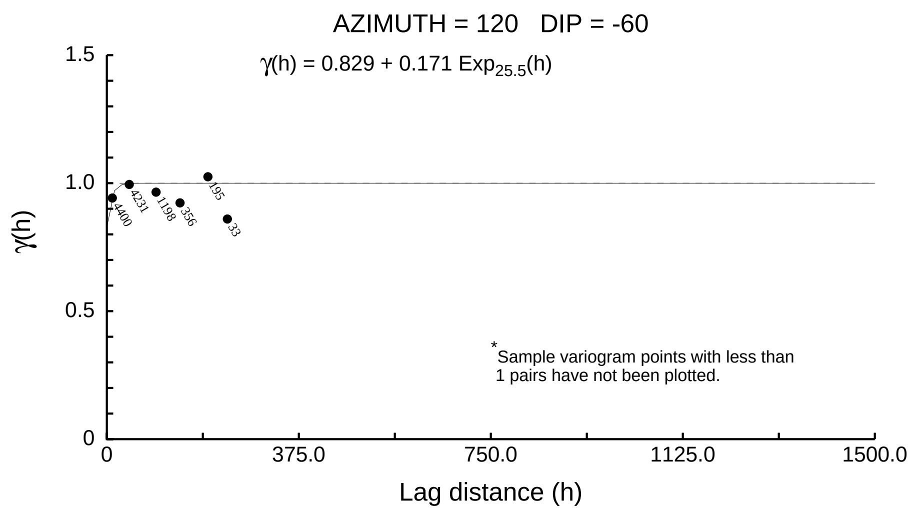
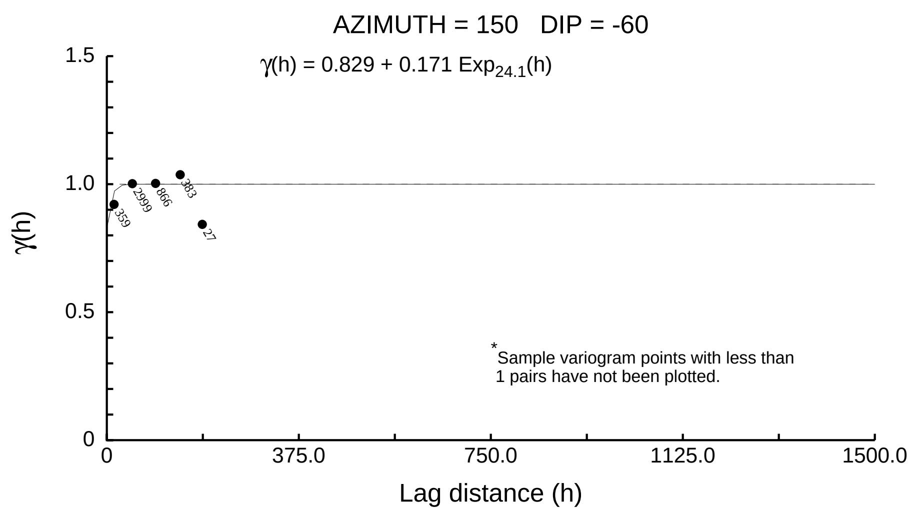
Zone 99 Directional Correlograms - 5m Comps







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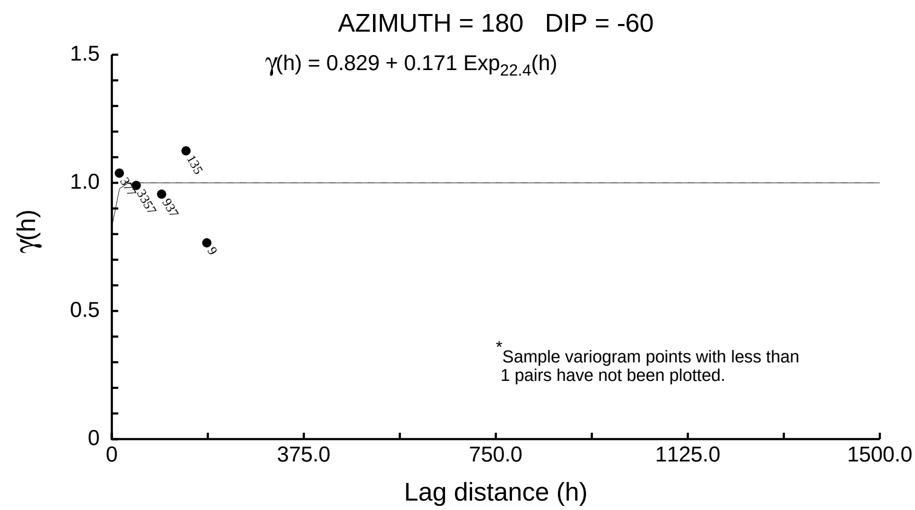
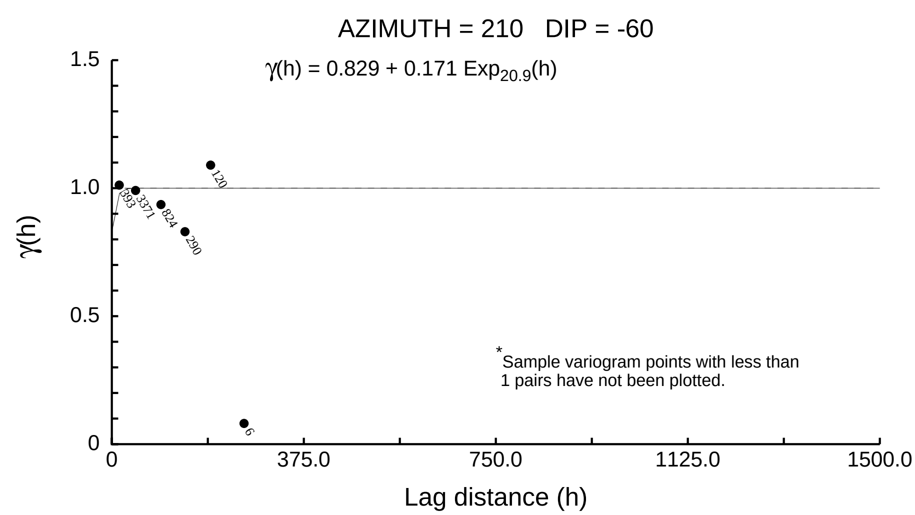
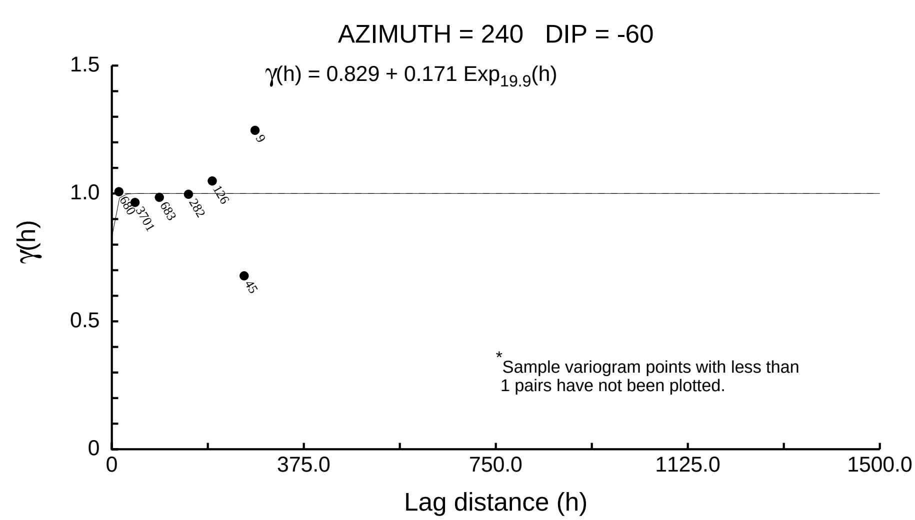
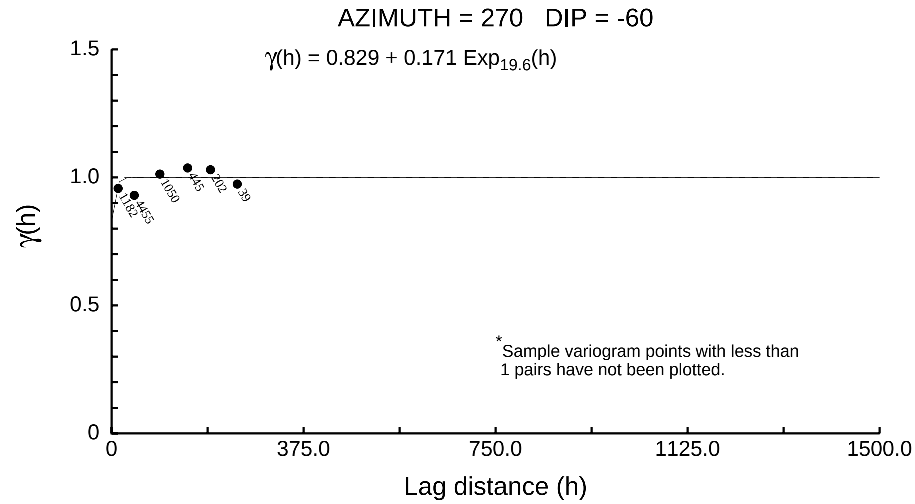
Zone 99 Directional Correlograms - 5m Comps

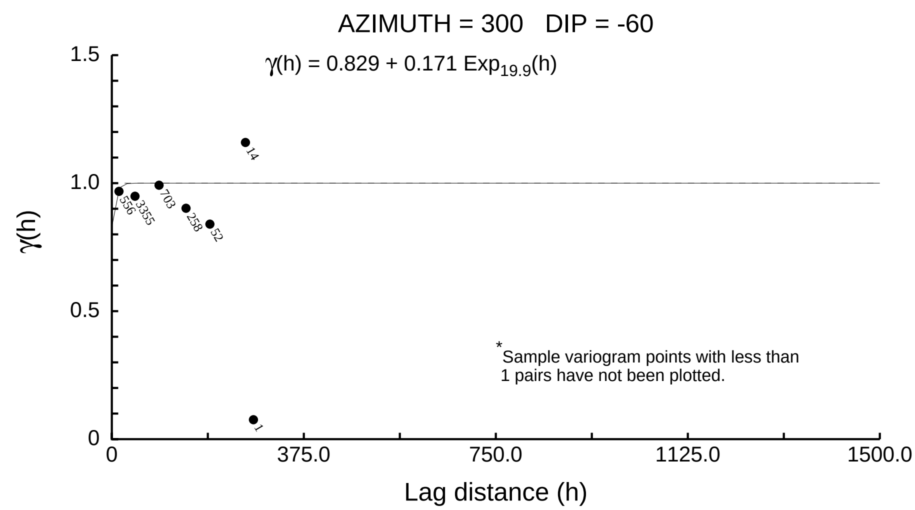


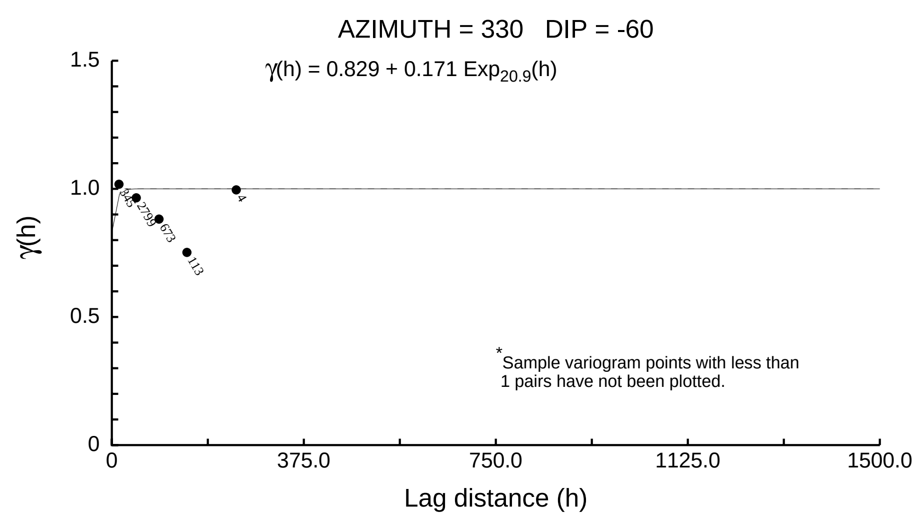




Zone 99 Directional Correlograms - 5m Comps







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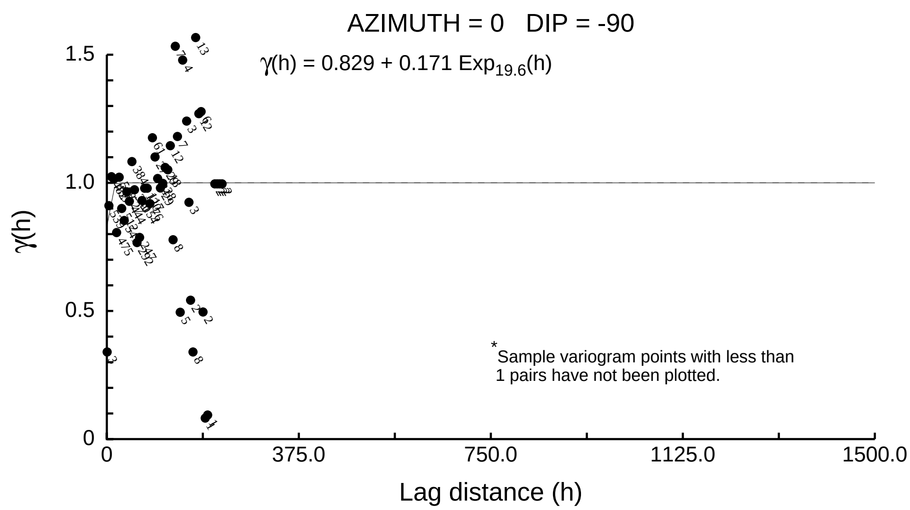
Zone 99 Directional Correlograms - 5m Comps



Zone 99 <= 0.4 g/t Correlogram - 5m Comps

Medsystem and Vulcan Rotation Conventions

Nugget ==> 0.822
C1 ==> 0.178

First Structure -- Exponential with Practical Range

LH Rotation about the Z axis ==> 0
RH Rotation about the X' axis ==> 0
LH Rotation about the Y' axis ==> 75

Range along the Z' axis ==> 115.7	Azimuth ==> 270	Dip ==> 15
Range along the Y' axis ==> 145.9	Azimuth ==> 360	Dip ==> 0
Range along the X' axis ==> 92.9	Azimuth ==> 90	Dip ==> 75

Modeling Criteria

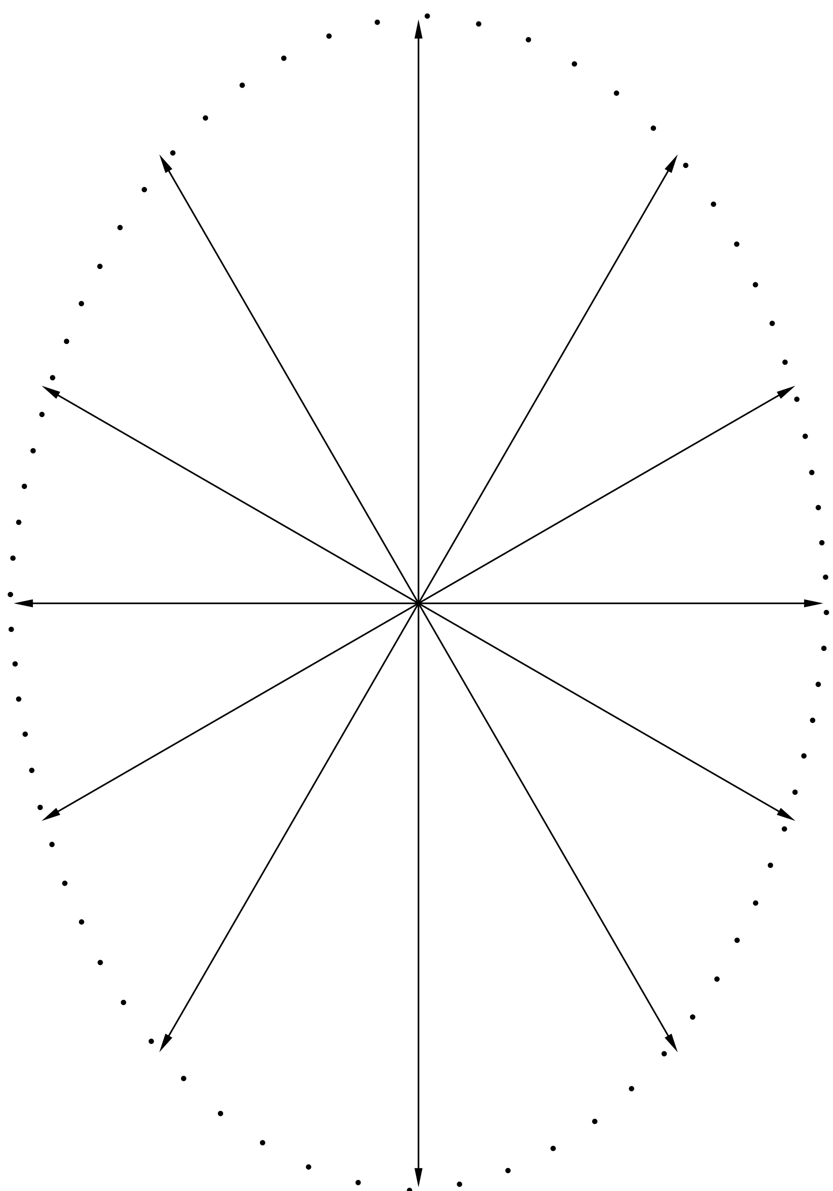
Minimum number pairs req'd ==> 1
Sample variogram points weighted by # pairs

Zone 99 <= 0.4 g/t Correlogram - 5m Comps

Structure Number 1

Rose Diagram of Ranges Dipping 0 Degrees
Scale:

200 Units

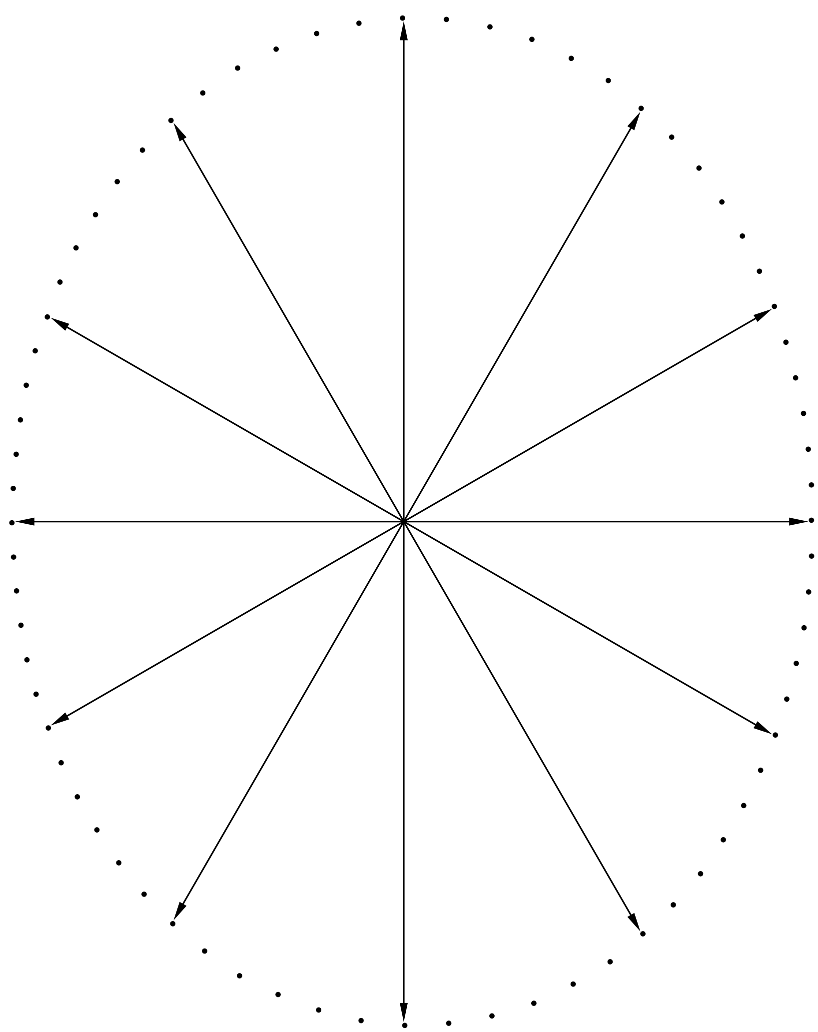


Zone 99 <= 0.4 g/t Correlogram - 5m Comps

Structure Number 1

Rose Diagram of Ranges Dipping 30 Degrees
Scale:

200 Units

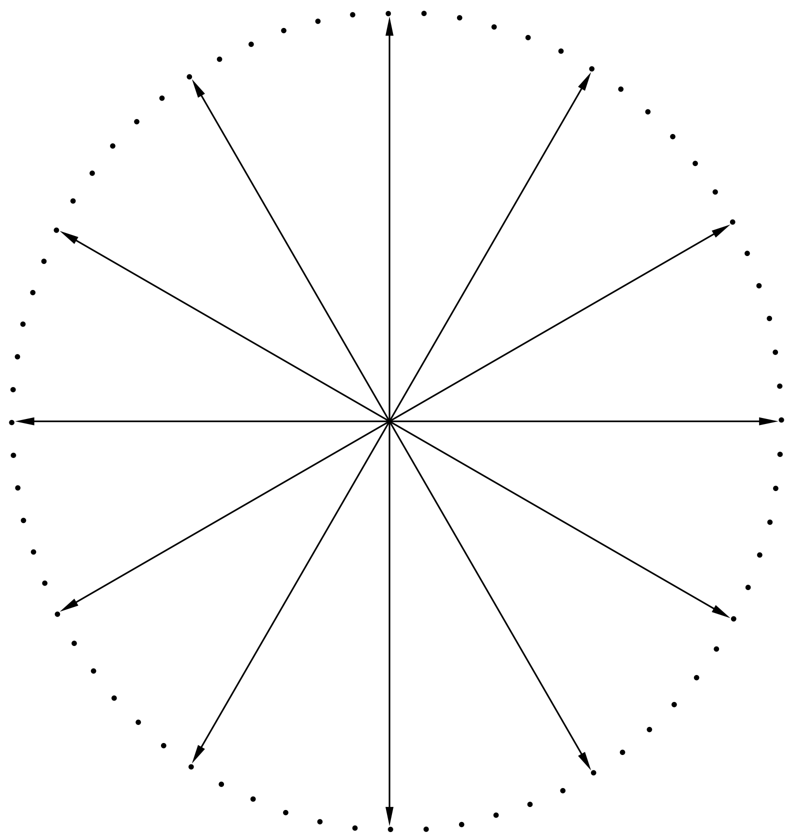


Zone 99 <= 0.4 g/t Correlogram - 5m Comps

Structure Number 1

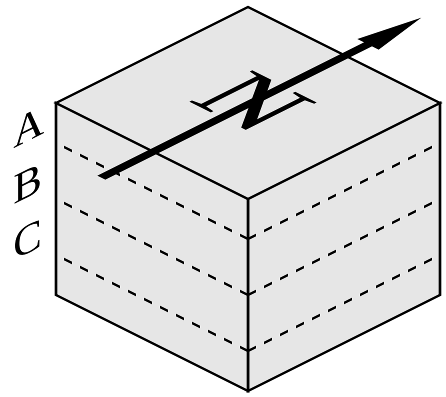
Rose Diagram of Ranges Dipping 60 Degrees
Scale:

200 Units

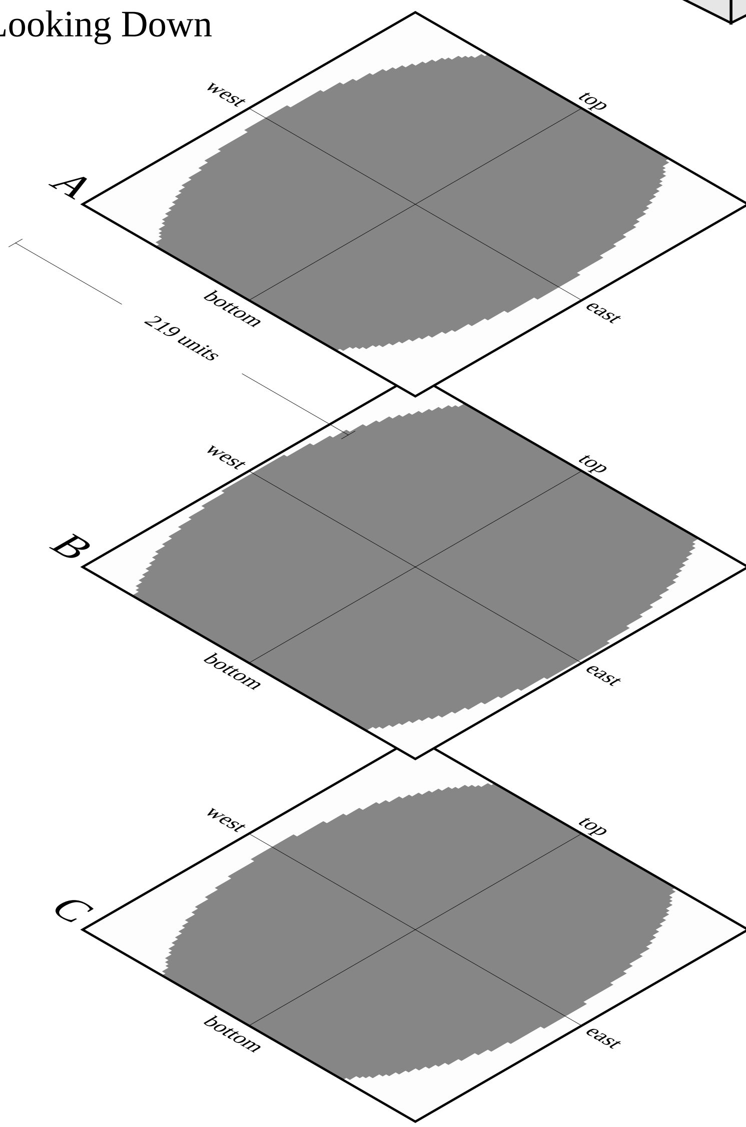


Horizontal Slices Through the Ellipsoids

Reference Cube



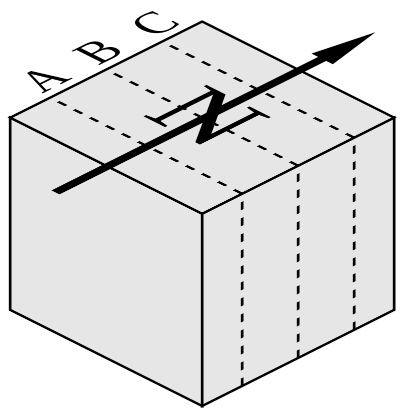
X-Y Planes Looking Down



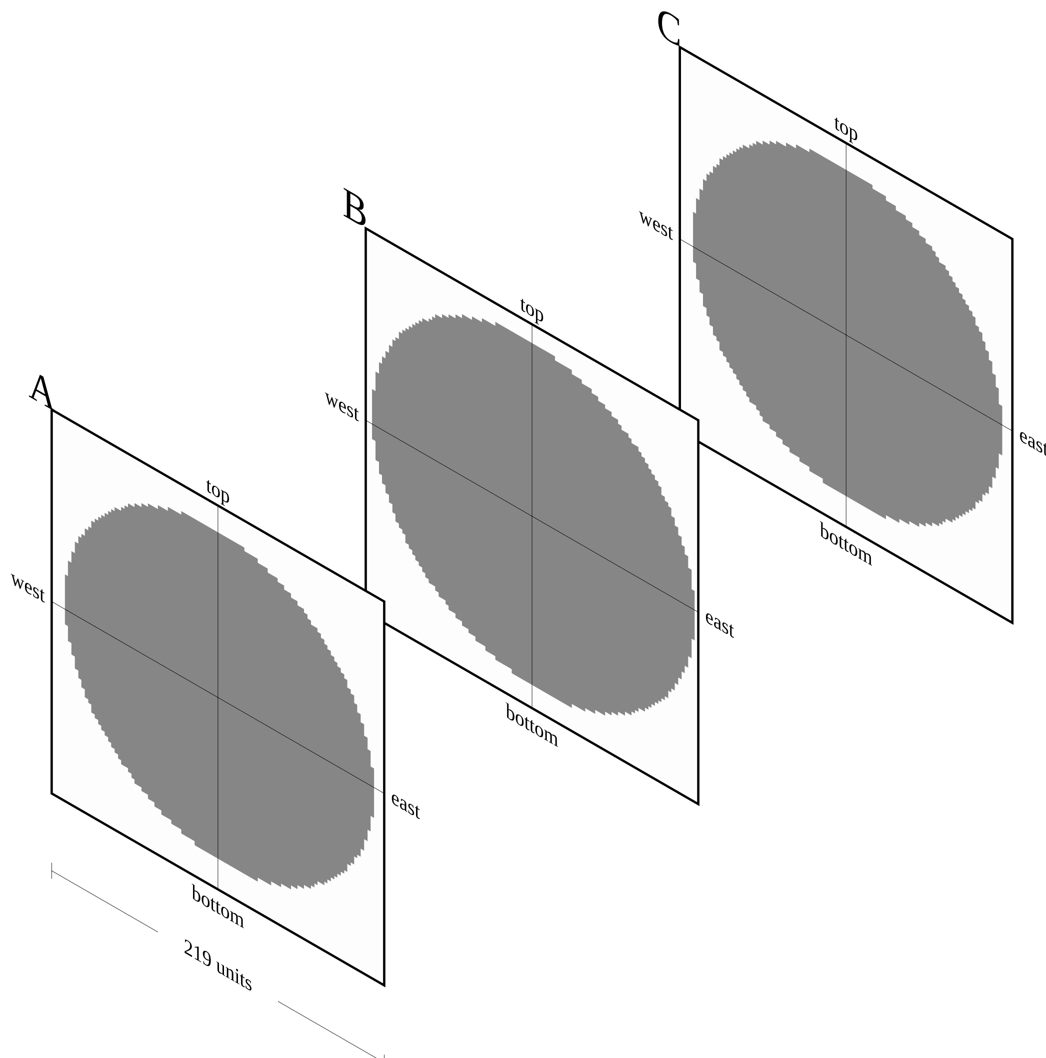
Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Cross Section Views Through the Ellipsoids

Reference Cube



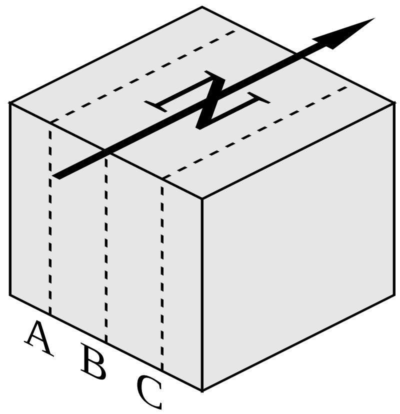
X-Z Planes Looking North



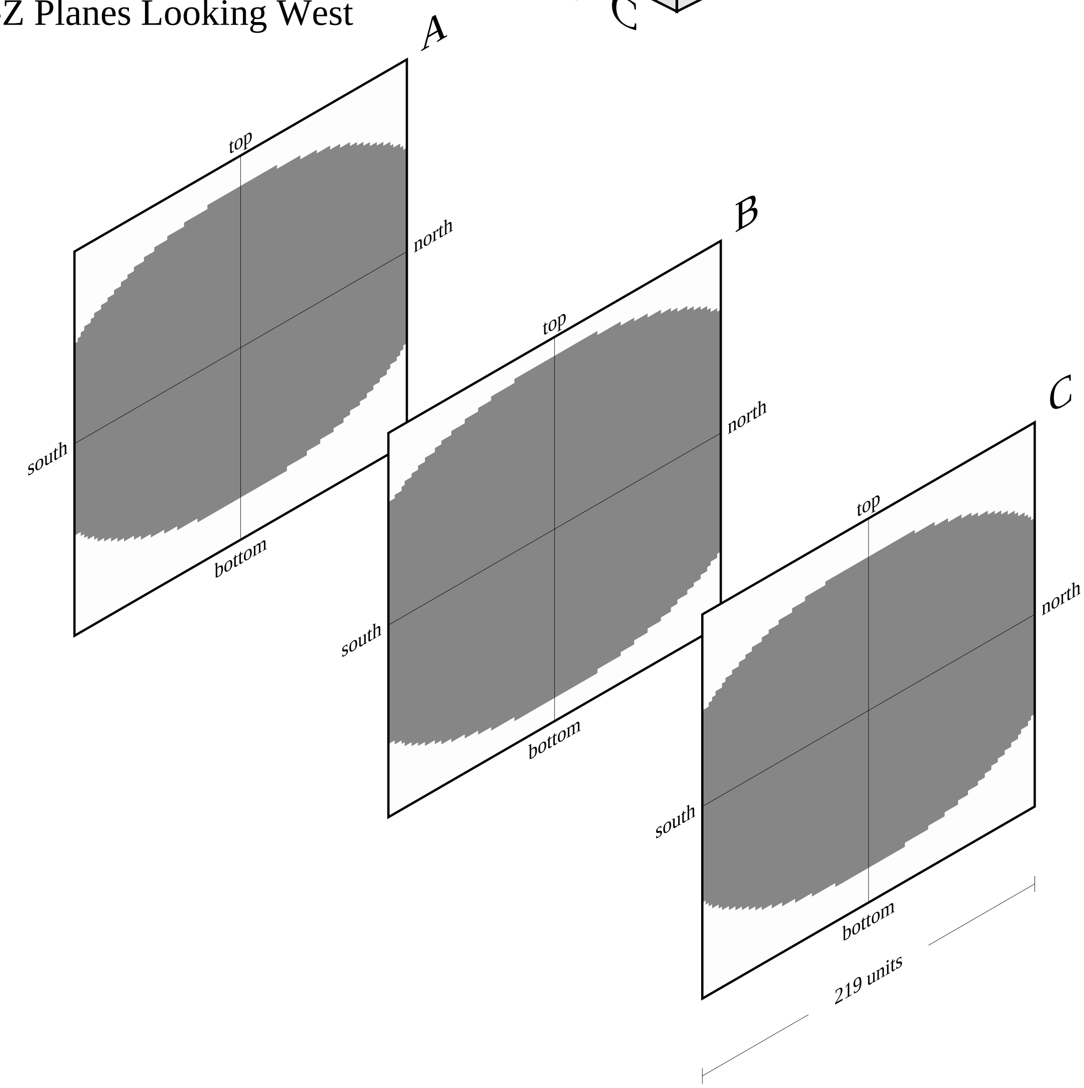
Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Long Section Views Through the Ellipsoids

Reference Cube



Y-Z Planes Looking West



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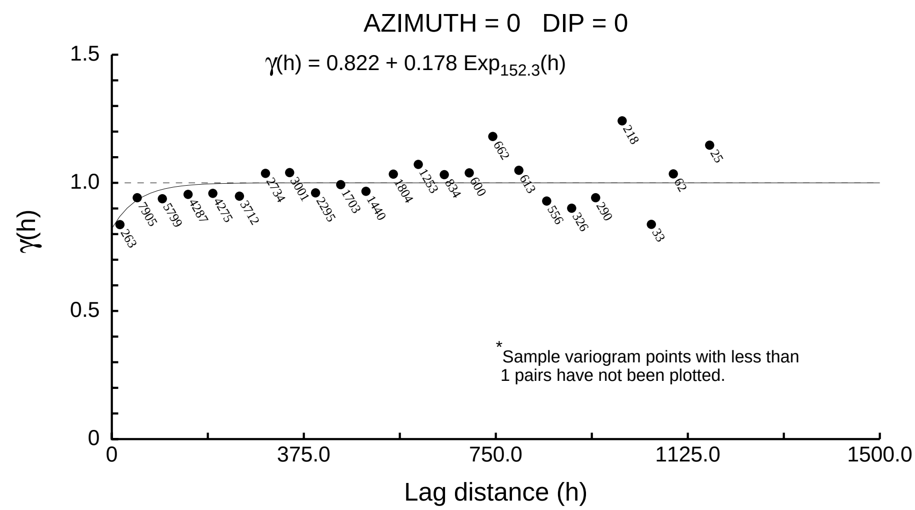
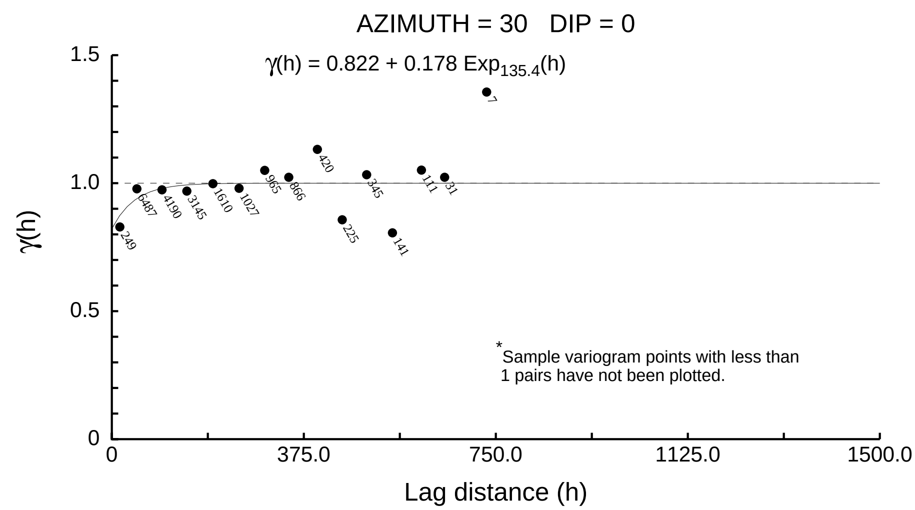
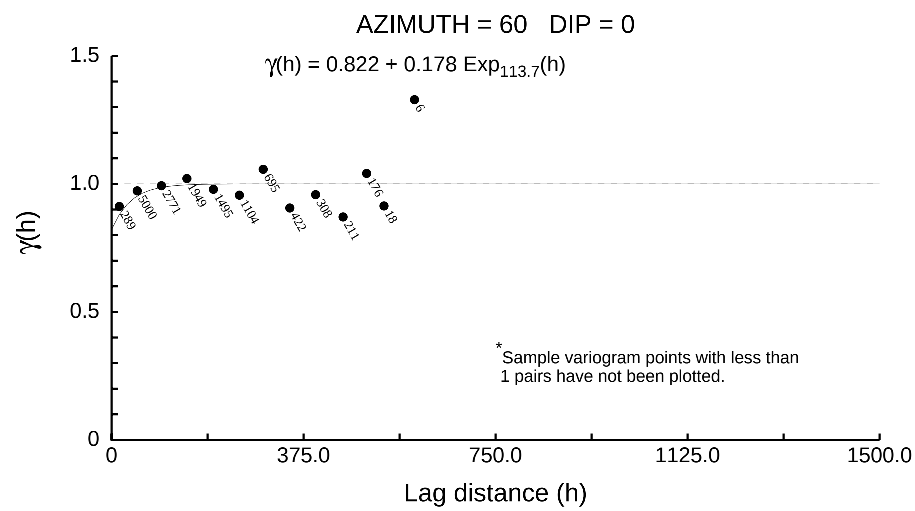
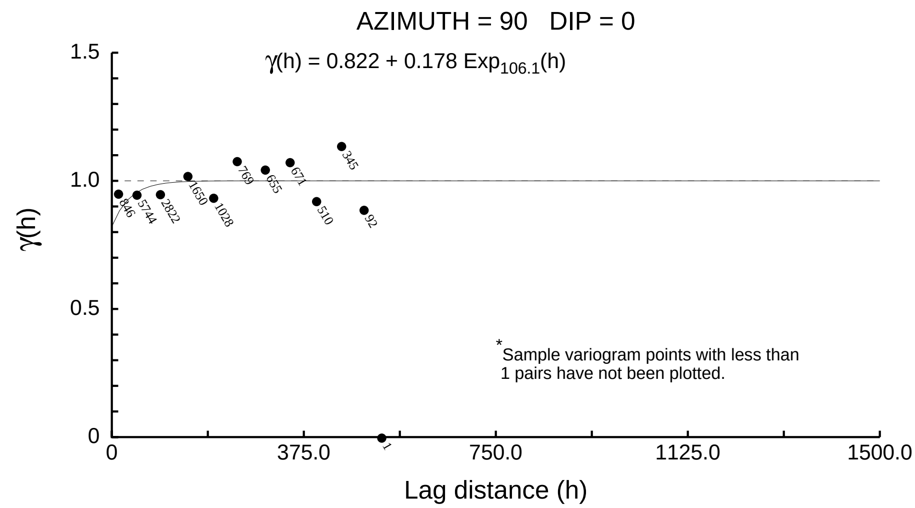
Zone 99 <= 0.4 g/t Correlogram - 5m Comps

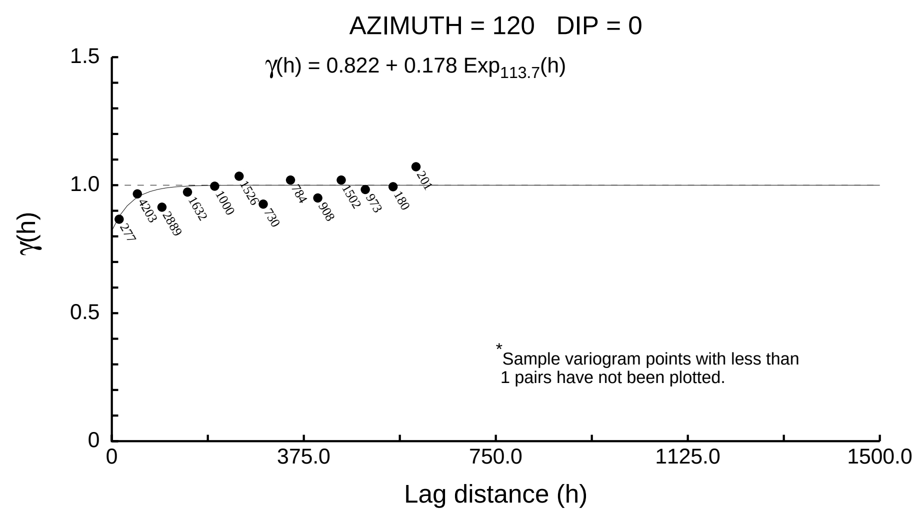


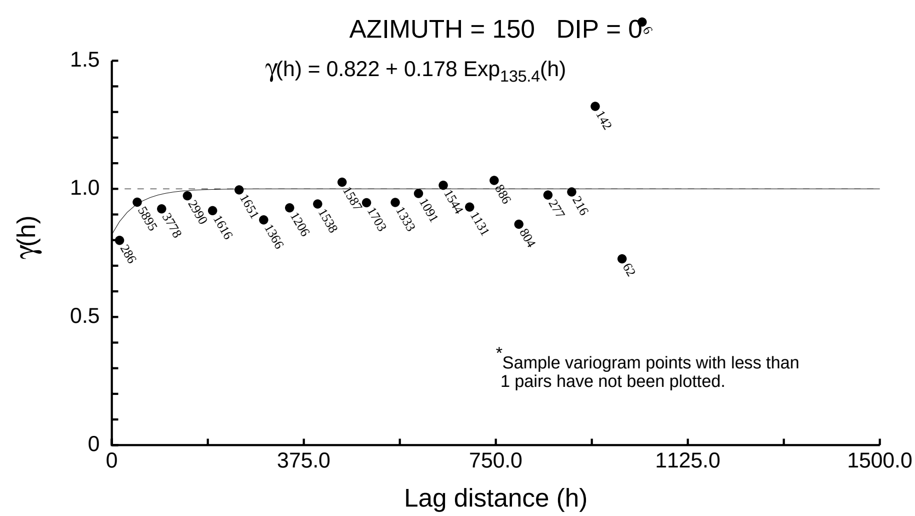




Zone 99 <= 0.4 g/t Correlogram - 5m Comps







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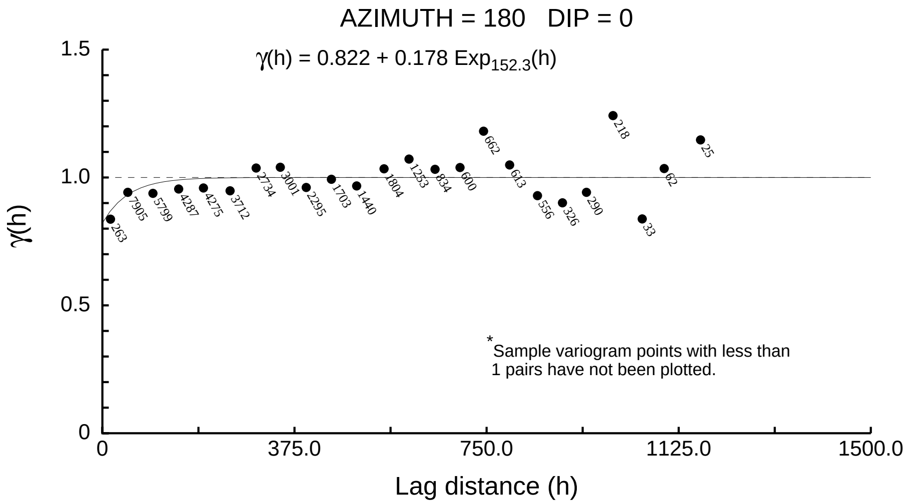

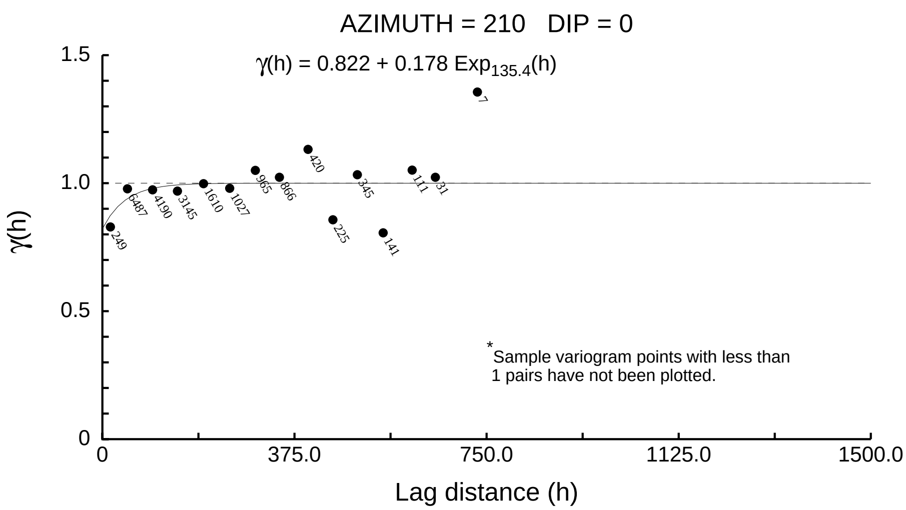

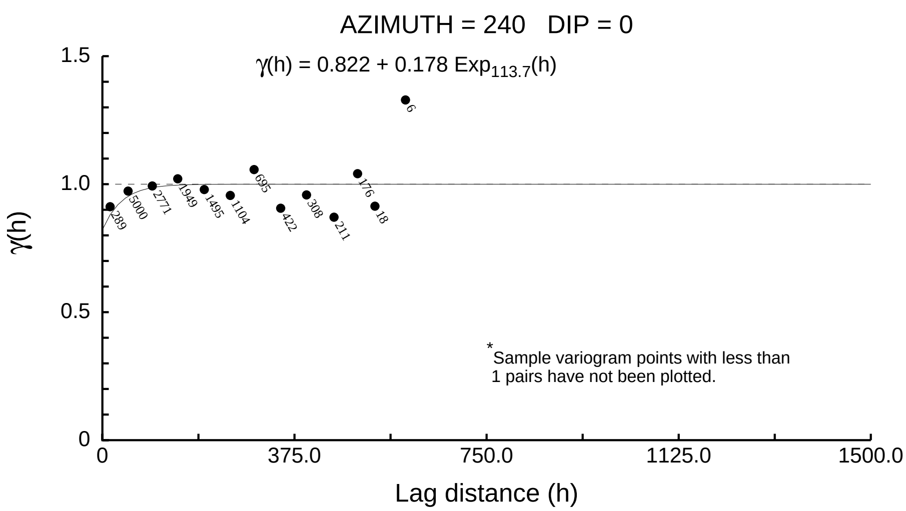

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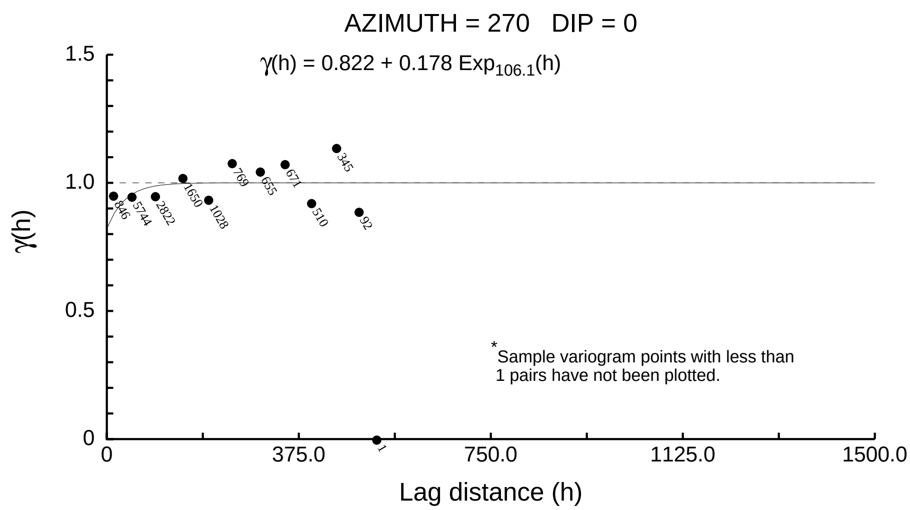

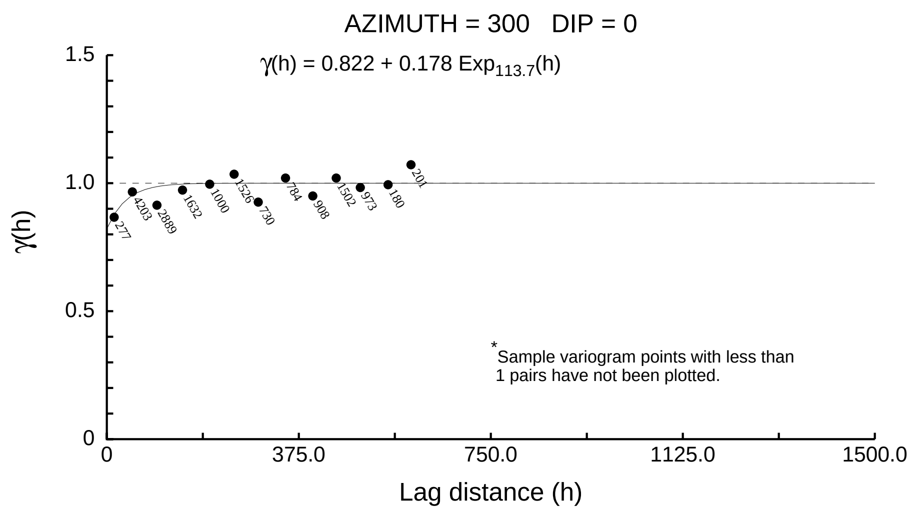

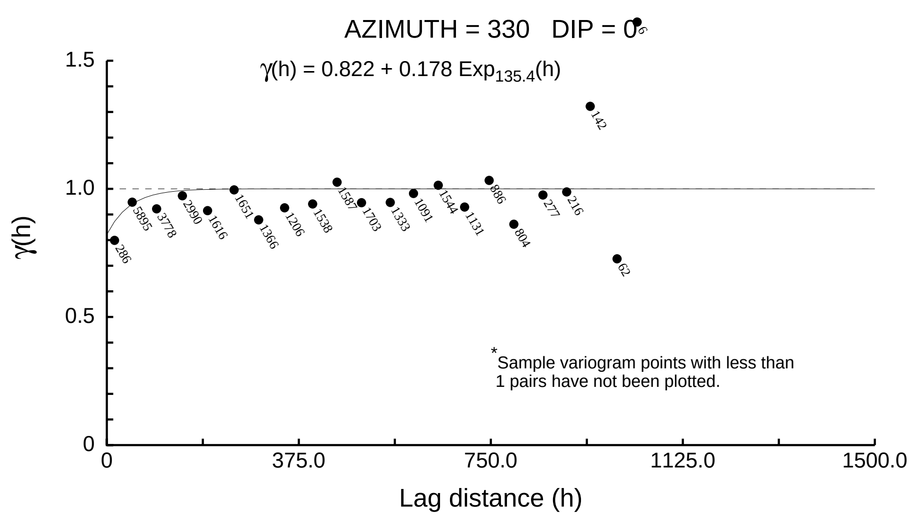

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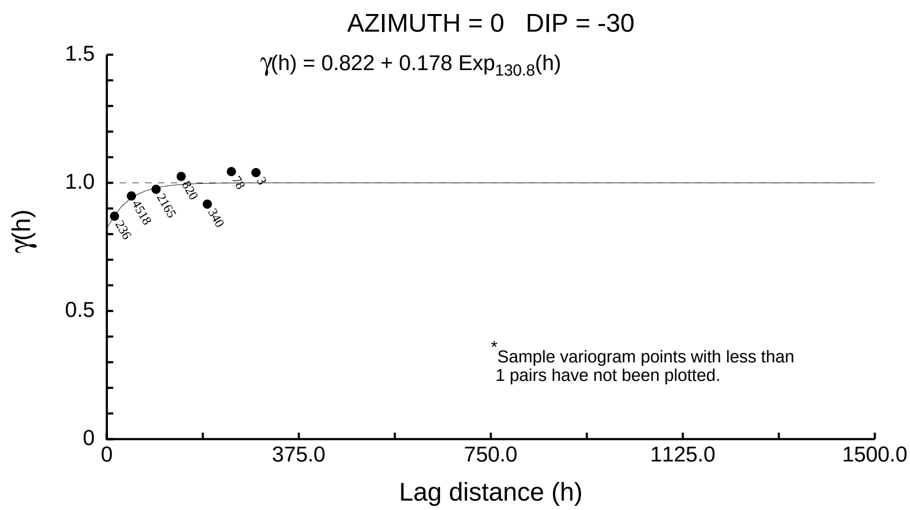
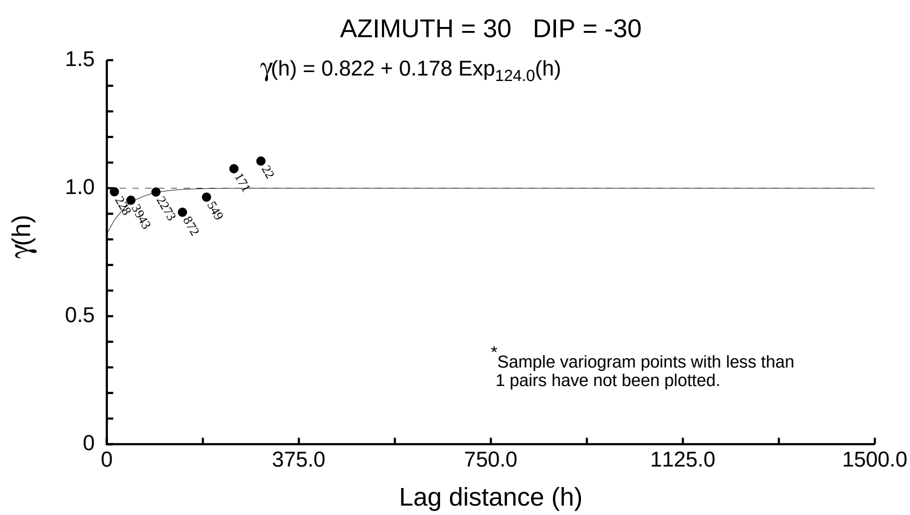
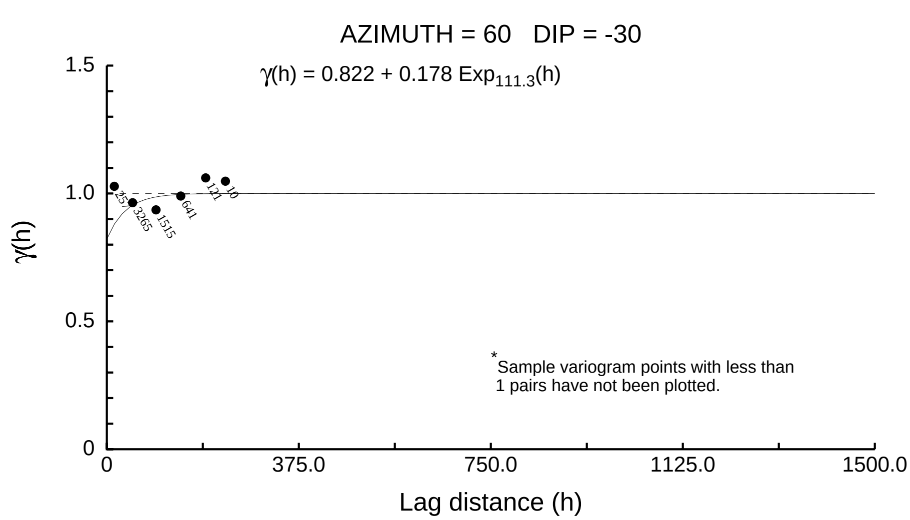
Zone 99 <= 0.4 g/t Correlogram - 5m Comps







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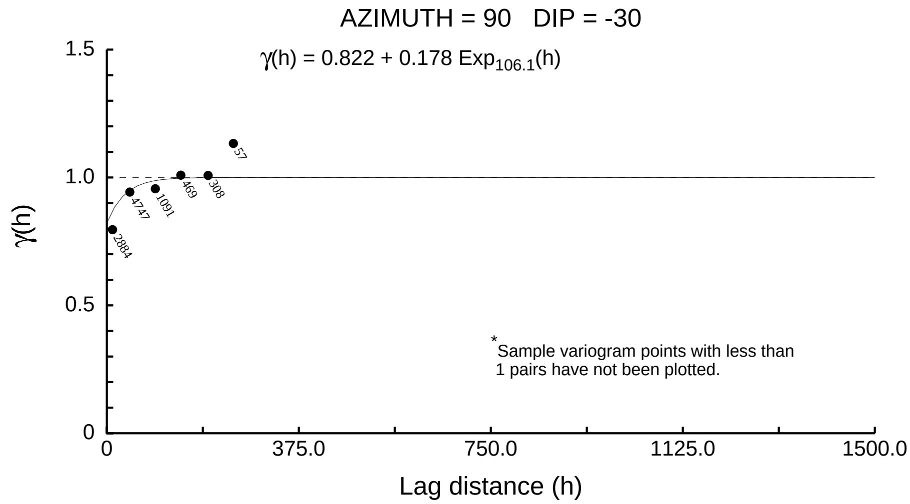
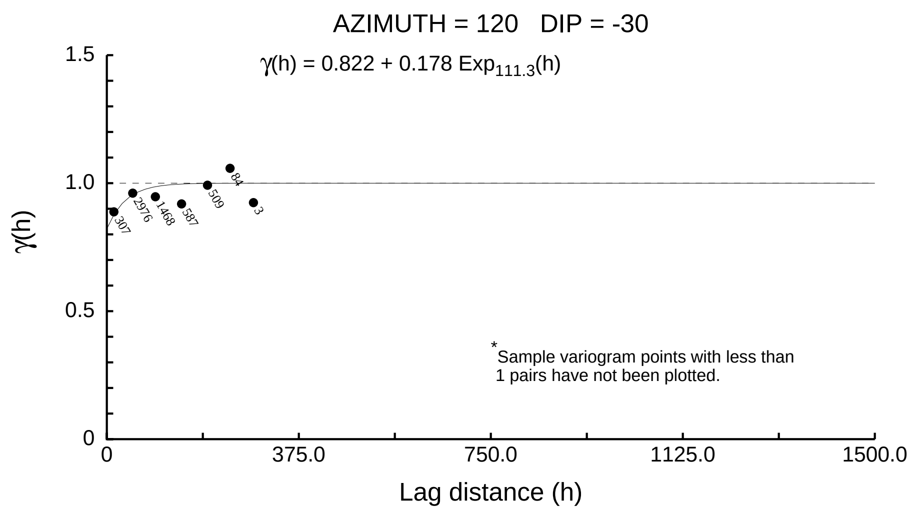
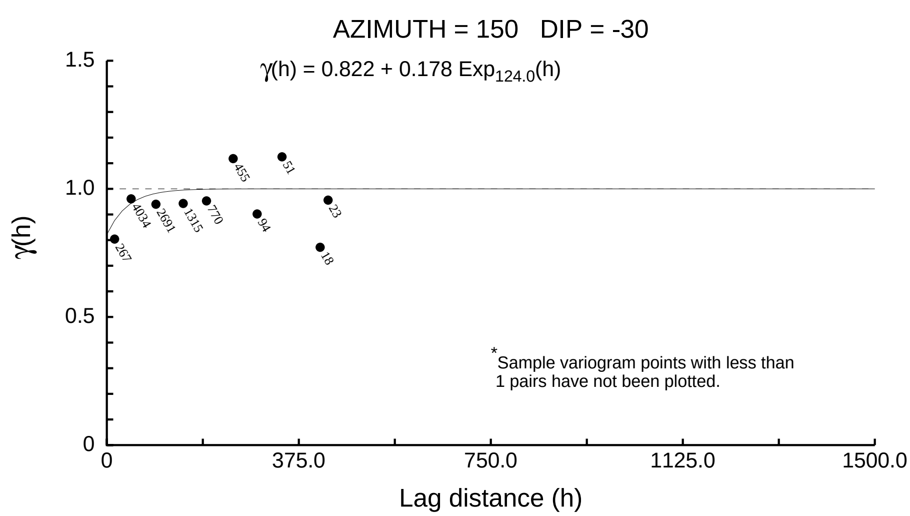
Zone 99 <= 0.4 g/t Correlogram - 5m Comps







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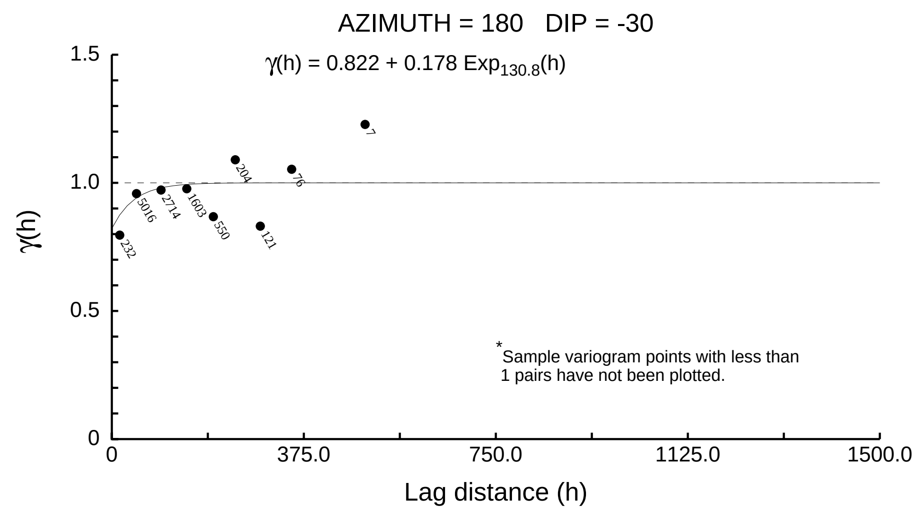

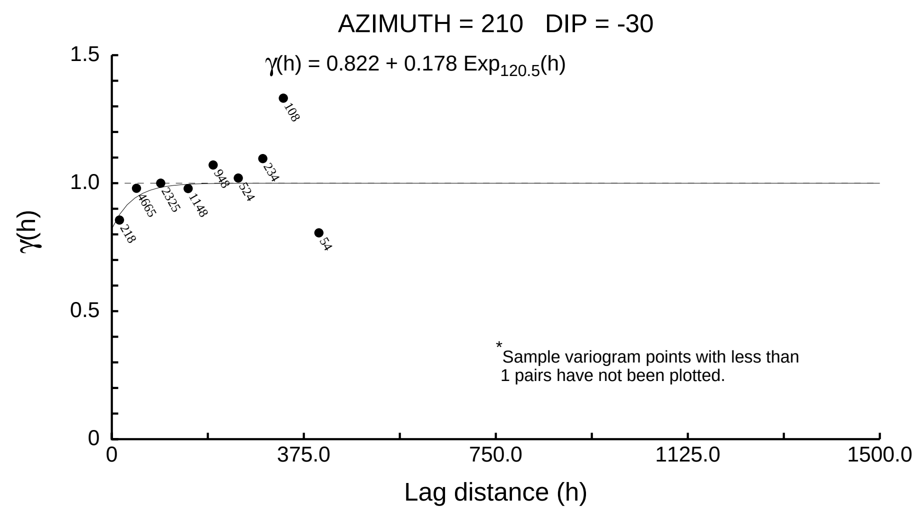

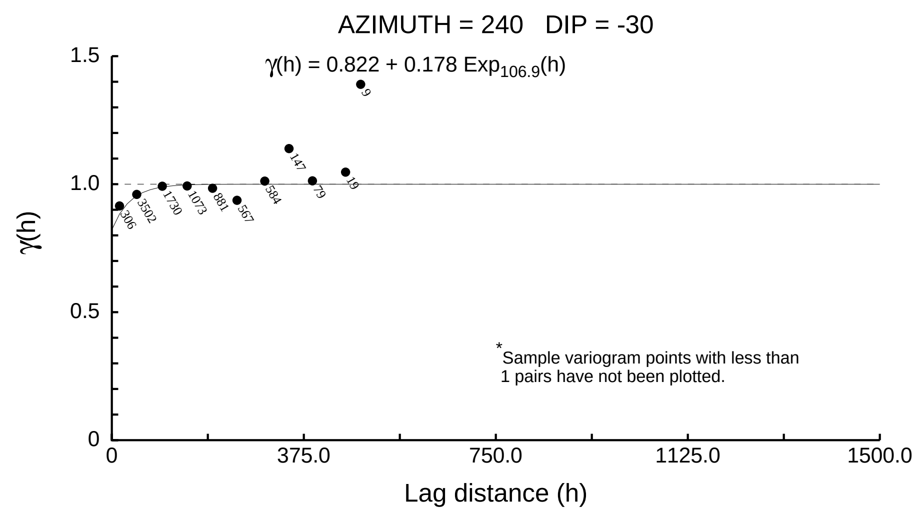

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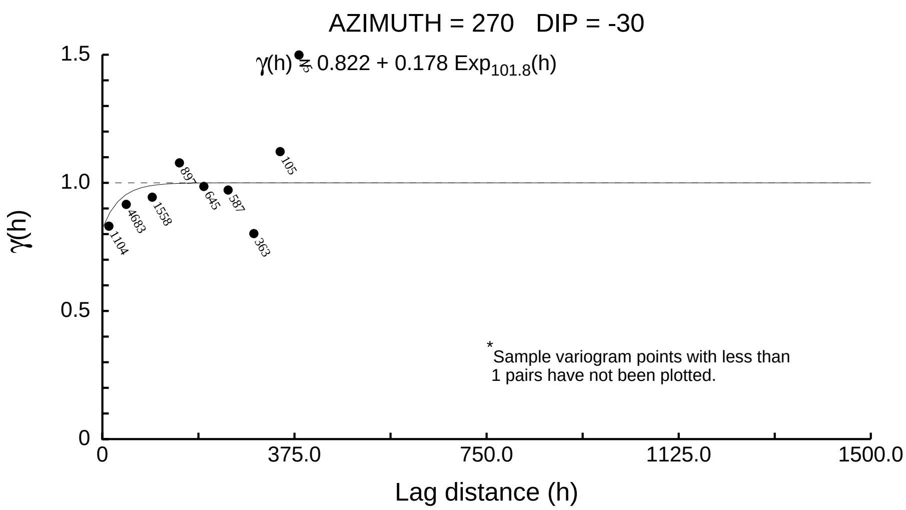
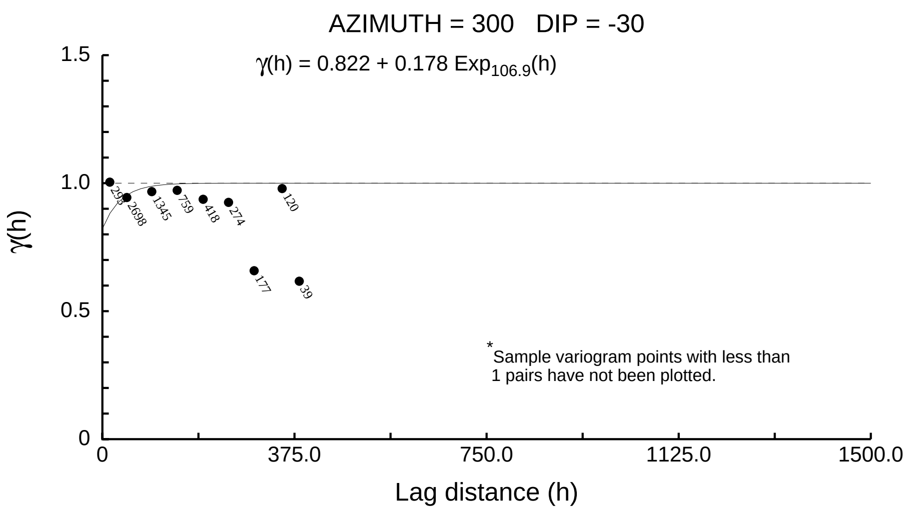
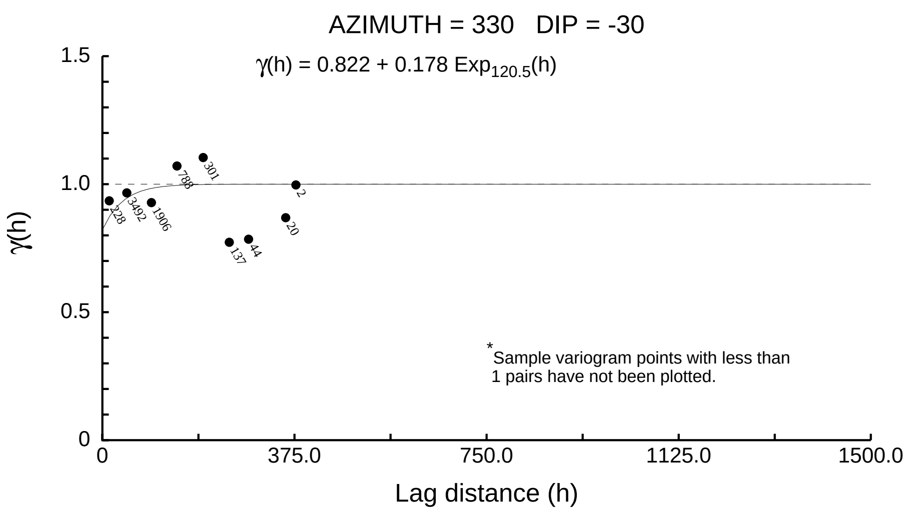
Zone 99 <= 0.4 g/t Correlogram - 5m Comps







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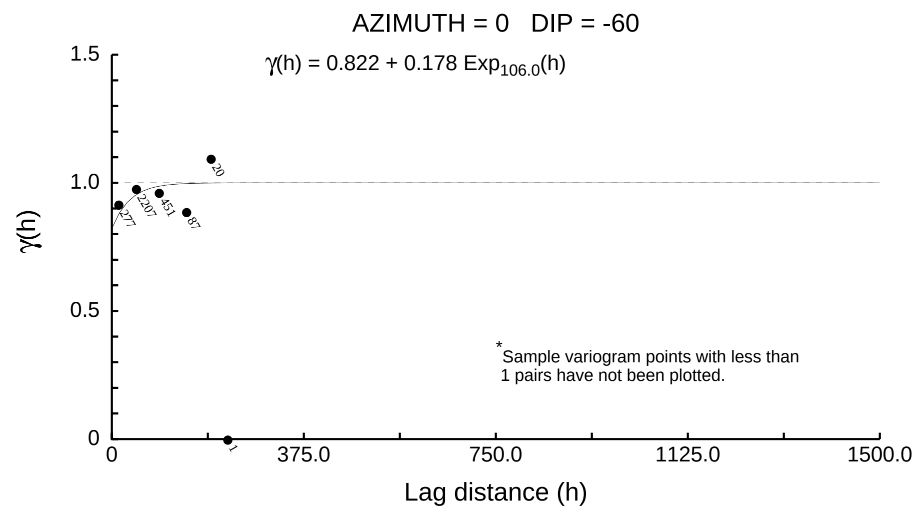

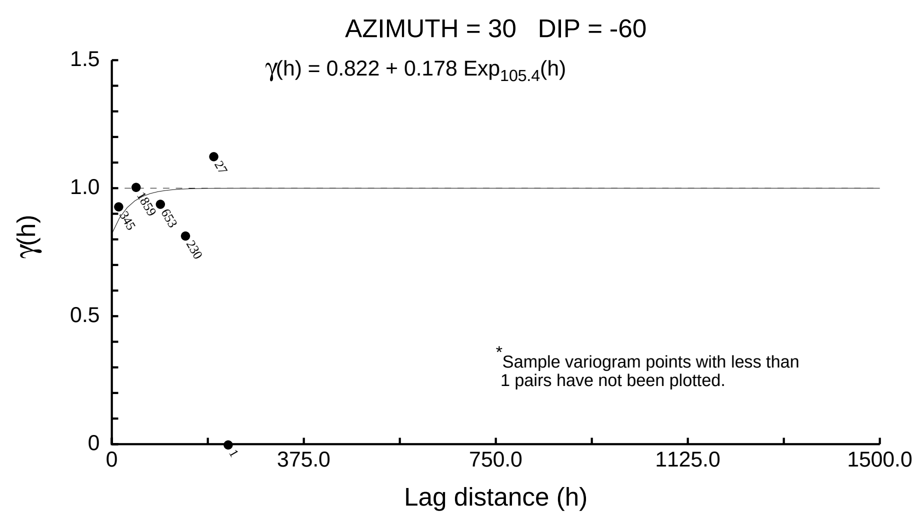

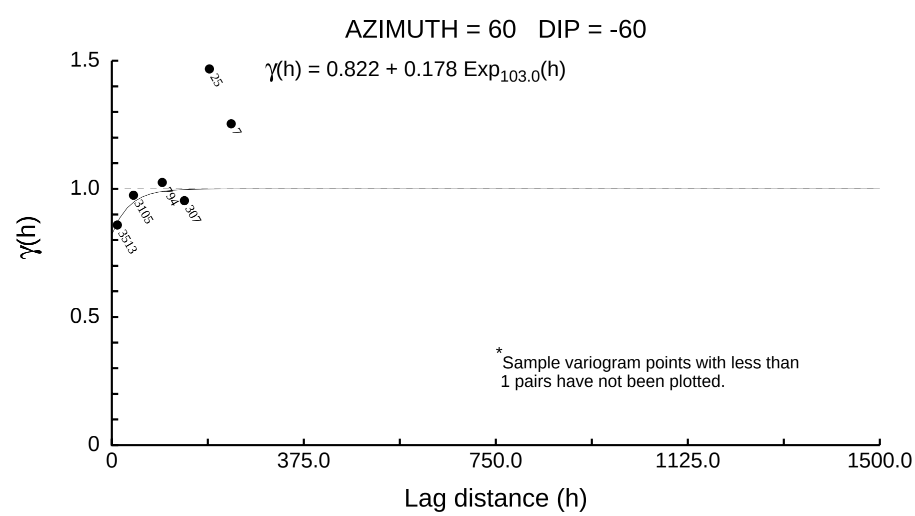

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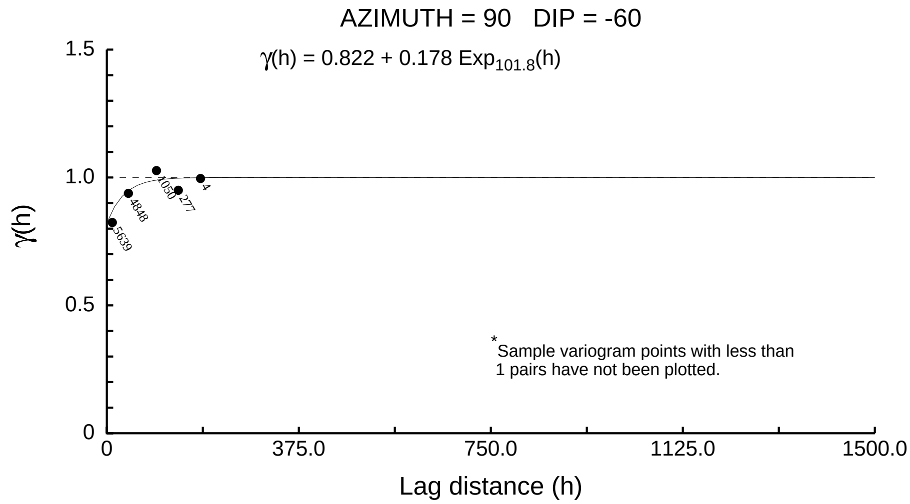

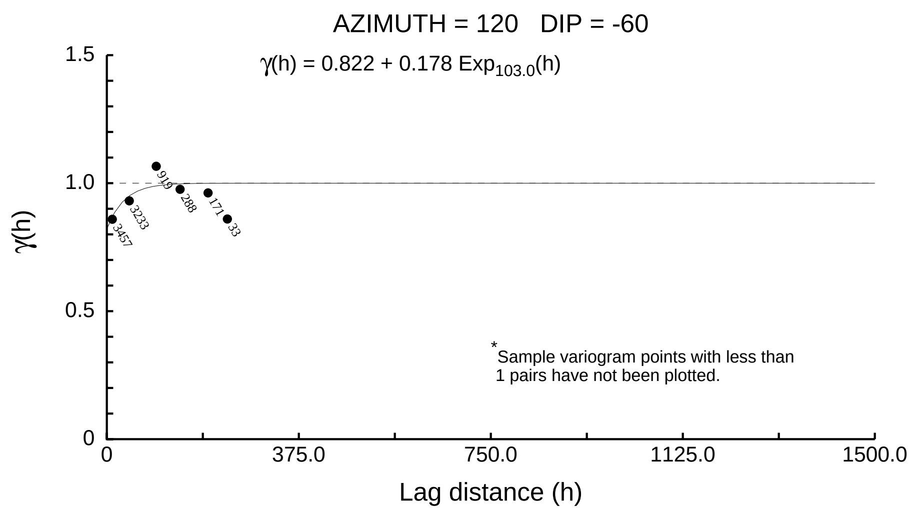

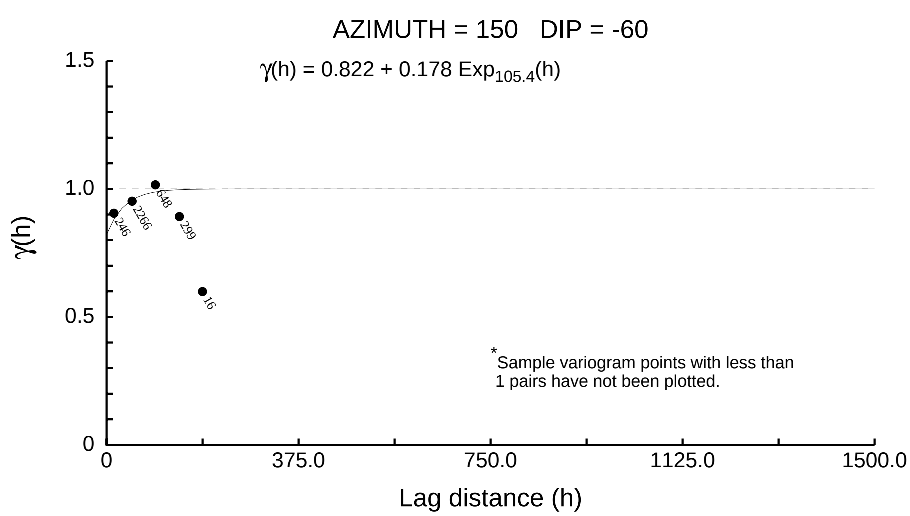

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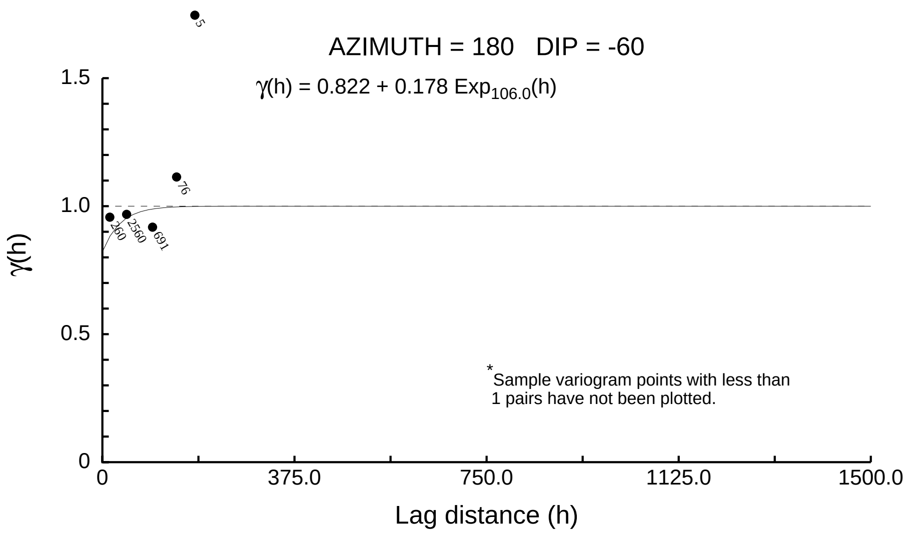

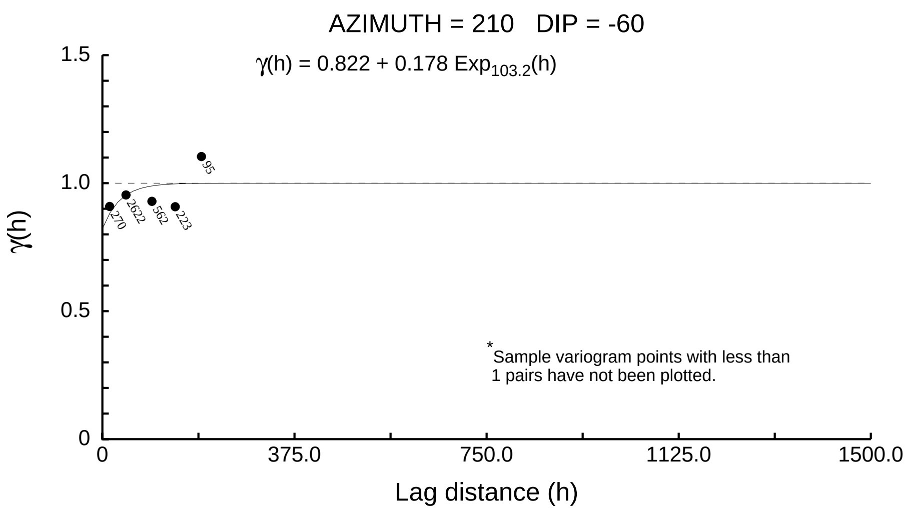

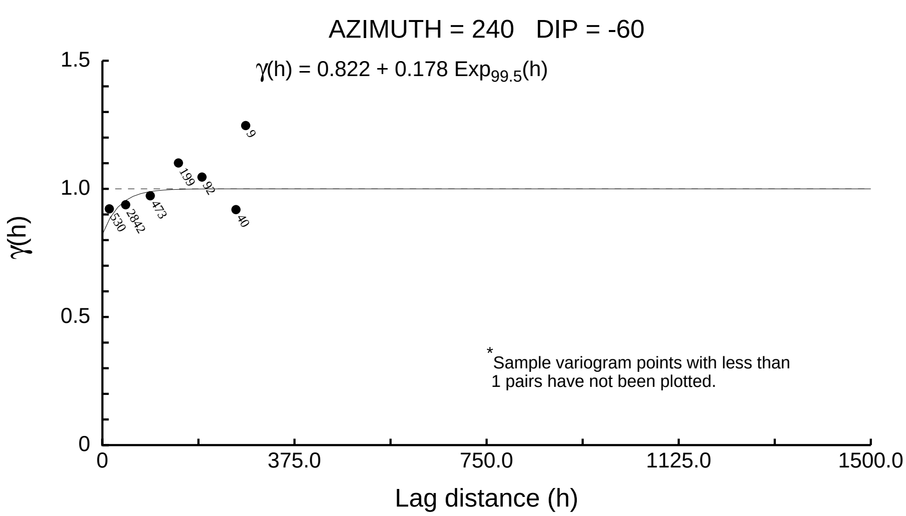

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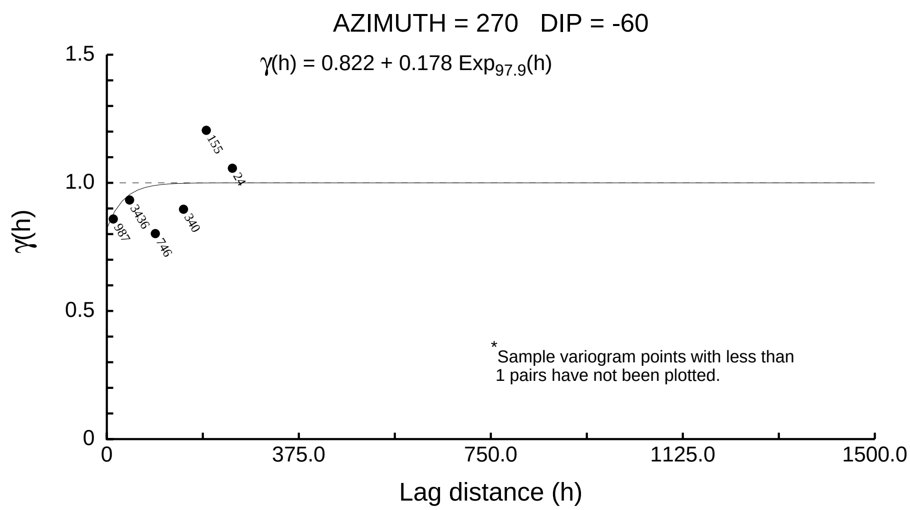
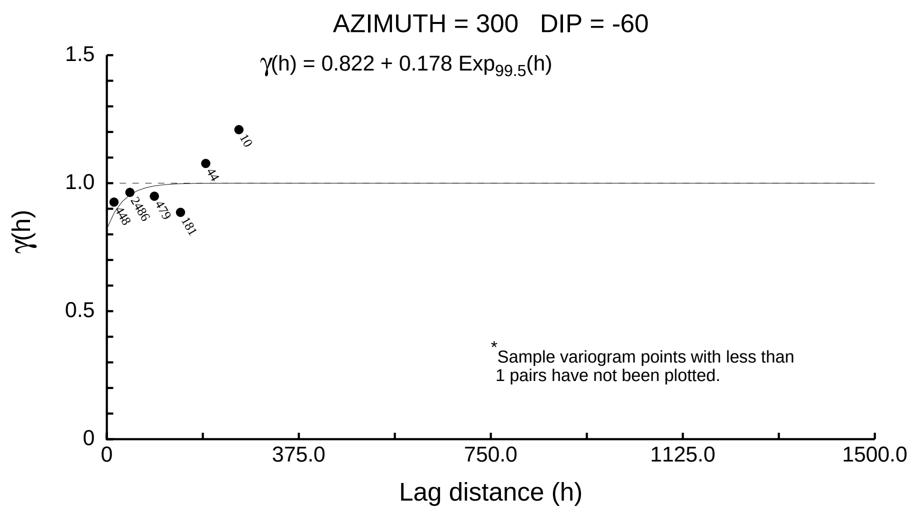
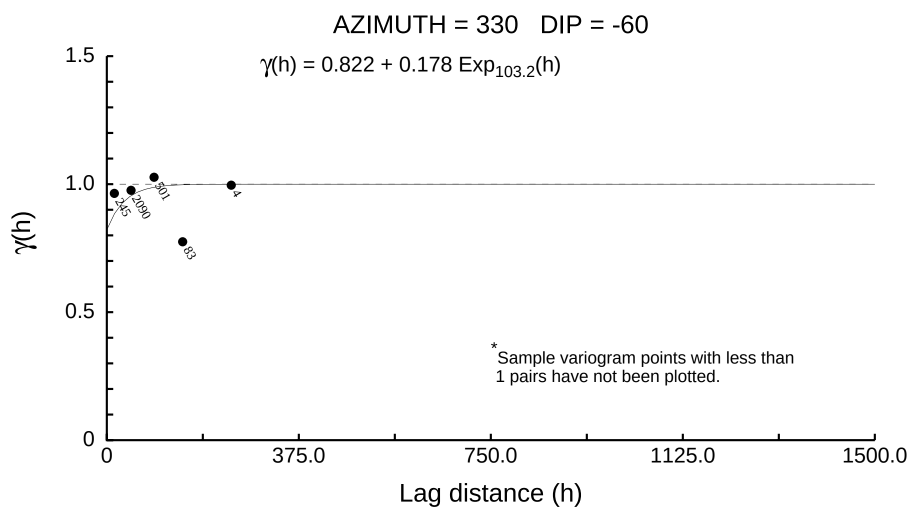
Zone 99 <= 0.4 g/t Correlogram - 5m Comps







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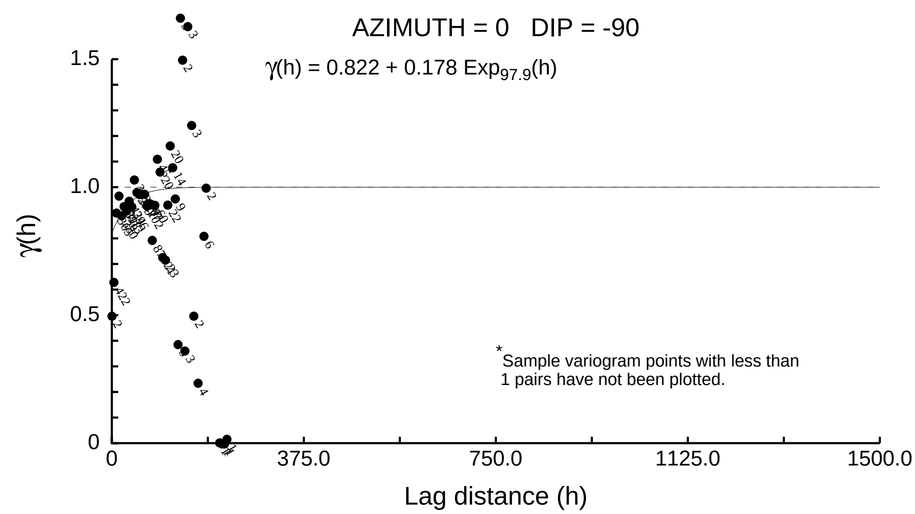
Zone 99 <= 0.4 g/t Correlogram - 5m Comps



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Zone 99 0.4 gram Ind. Correlogram - 5m Comps

Medsystem and Vulcan Rotation Conventions

Nugget ==> 0.680
C1 ==> 0.320

First Structure -- Exponential with Practical Range

LH Rotation about the Z axis ==> 0
RH Rotation about the X' axis ==> 0
LH Rotation about the Y' axis ==> 75

Range along the Z' axis ==> 16.0	Azimuth ==> 270 Dip ==> 15
Range along the Y' axis ==> 23.0	Azimuth ==> 360 Dip ==> 0
Range along the X' axis ==> 15.2	Azimuth ==> 90 Dip ==> 75

Modeling Criteria

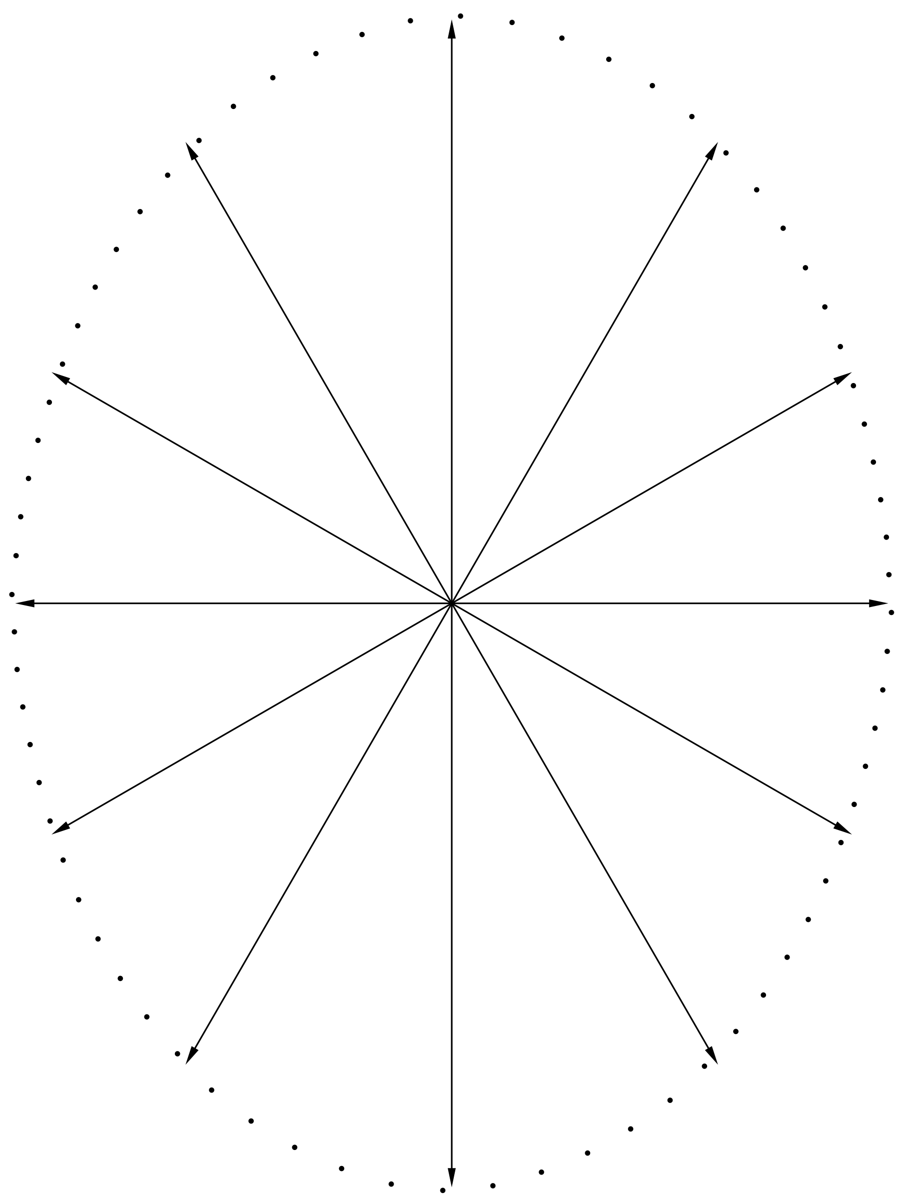
Minimum number pairs req'd ==> 1
Sample variogram points weighted by # pairs

Zone 99 0.4 gram Ind. Correlogram - 5m Comps

Structure Number 1

Rose Diagram of Ranges Dipping 0 Degrees
Scale:

20 Units



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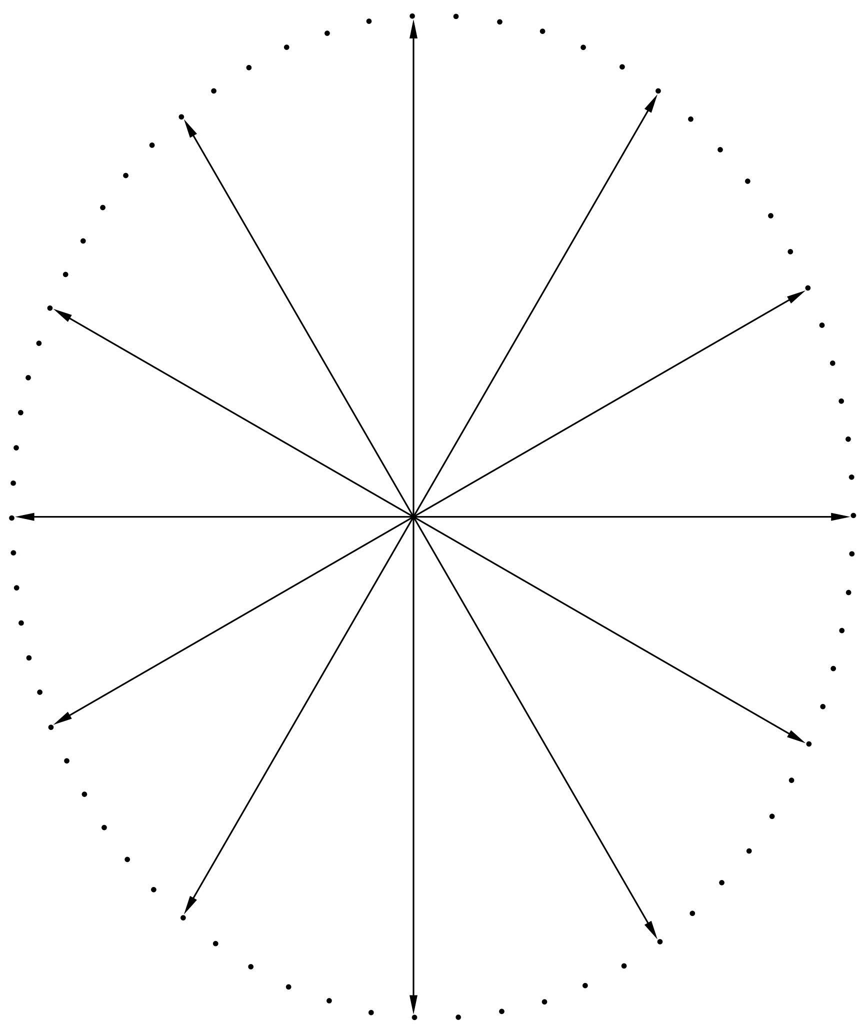
Zone 99 0.4 gram Ind. Correlogram - 5m Comps

Structure Number 1

Rose Diagram of Ranges Dipping 30 Degrees
Scale:

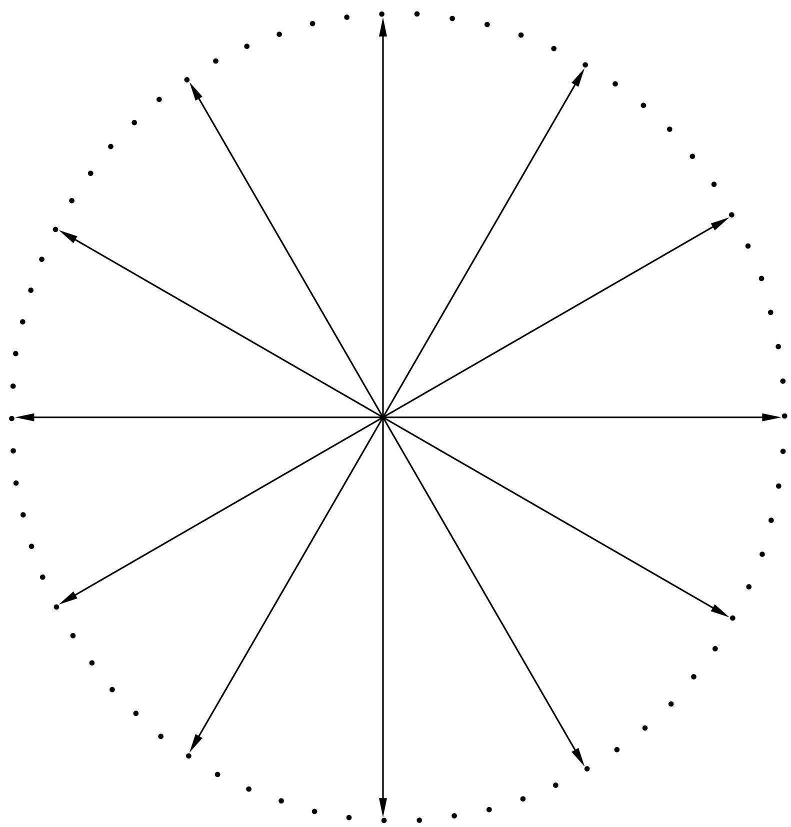
20 Units



Zone 99 0.4 gram Ind. Correlogram - 5m Comps

Structure Number 1

Rose Diagram of Ranges Dipping 60 Degrees
Scale:



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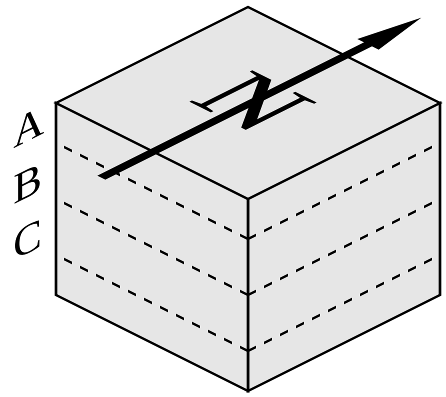
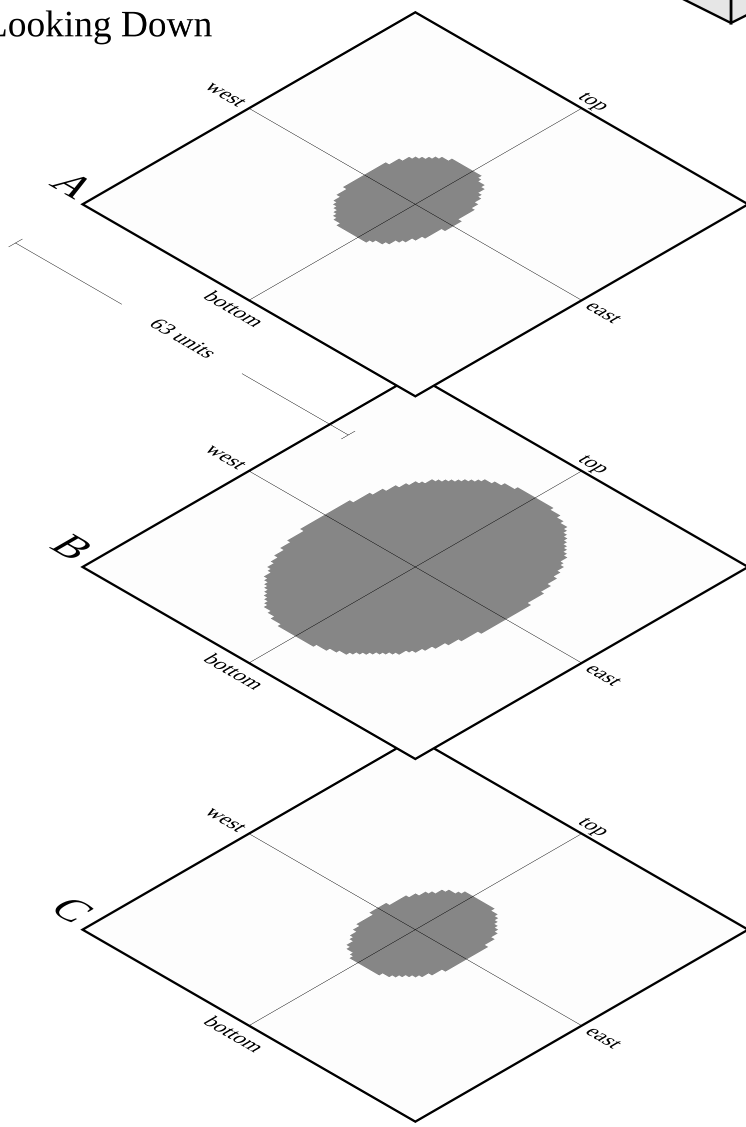
Horizontal Slices Through the Ellipsoids

Reference Cube



X-Y Planes Looking Down



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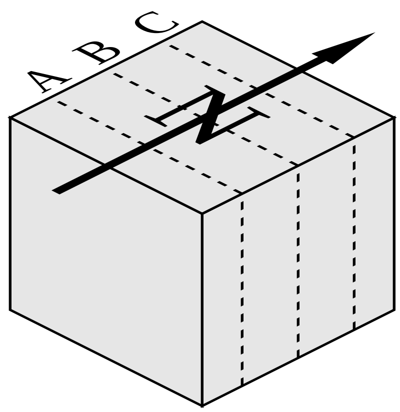
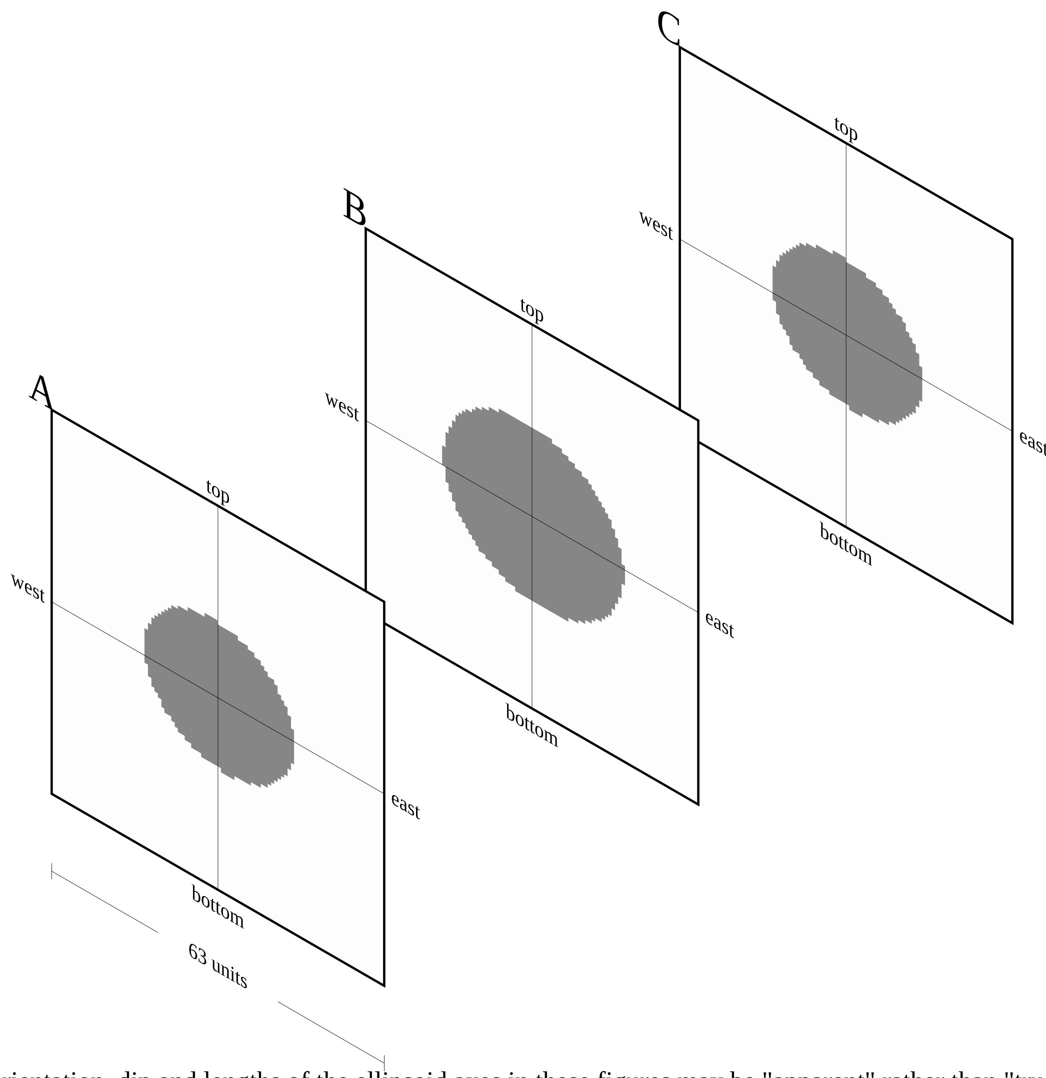
Cross Section Views Through the Ellipsoids

Reference Cube



X-Z Planes Looking North



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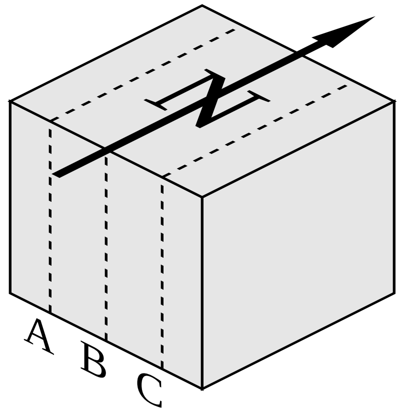
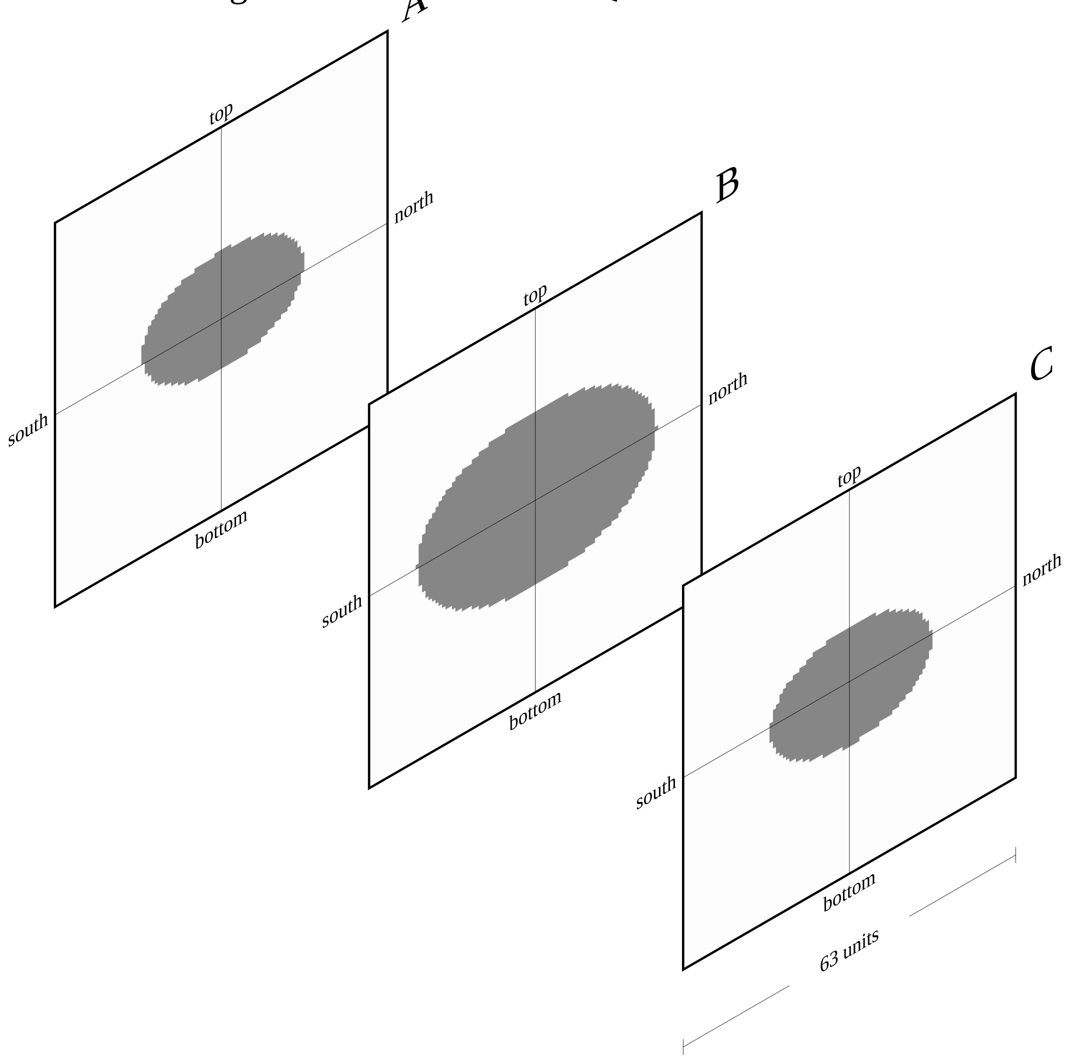
Long Section Views Through the Ellipsoids

Reference Cube

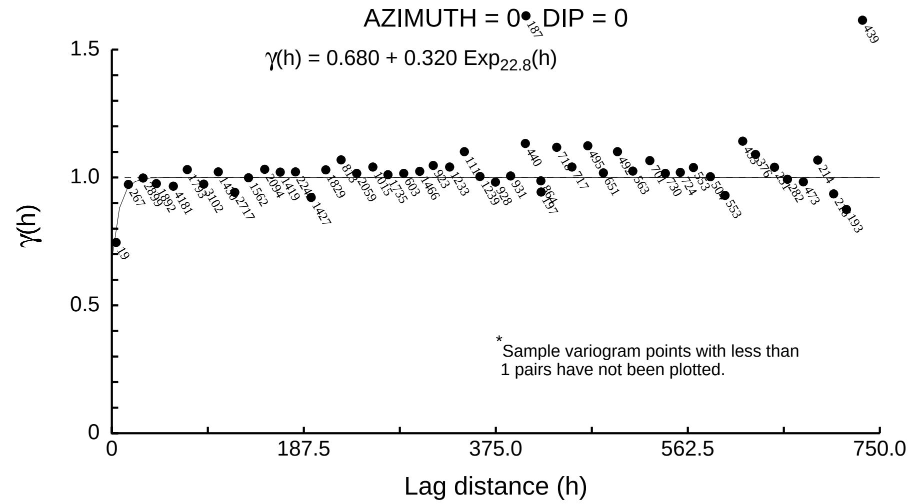


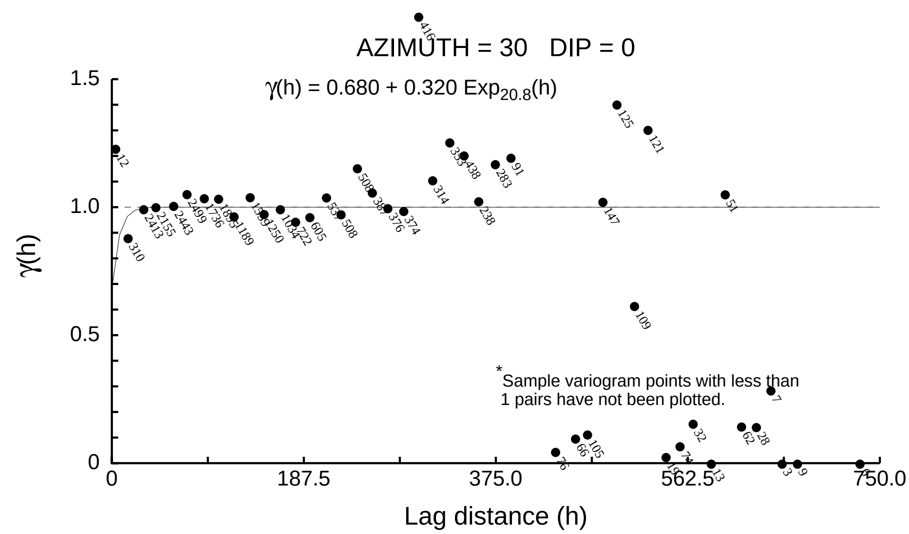
Y-Z Planes Looking West

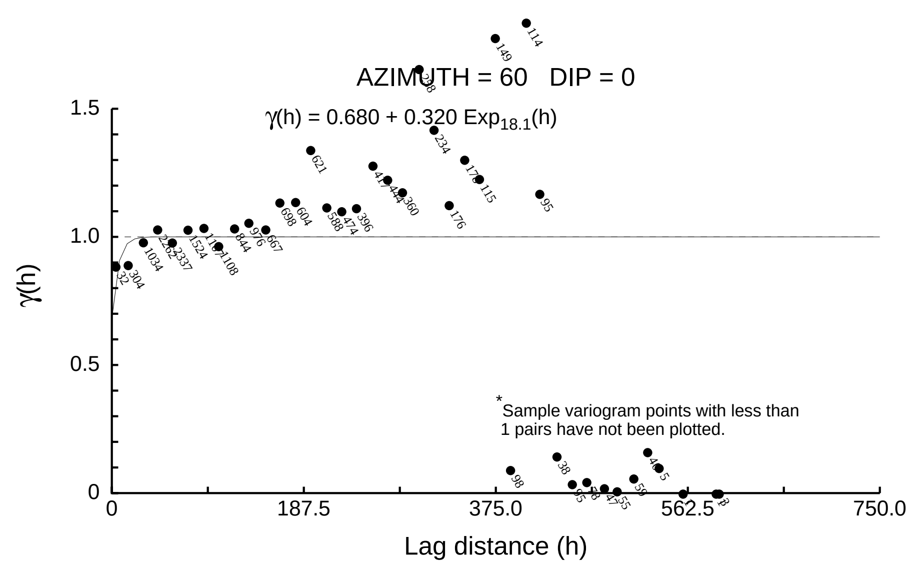


Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

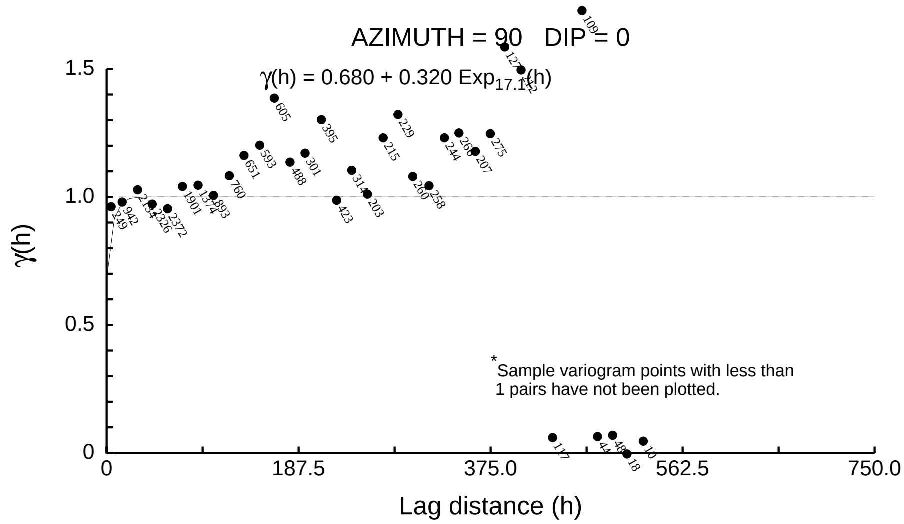
Zone 99 0.4 gram Ind. Correlogram - 5m Comps

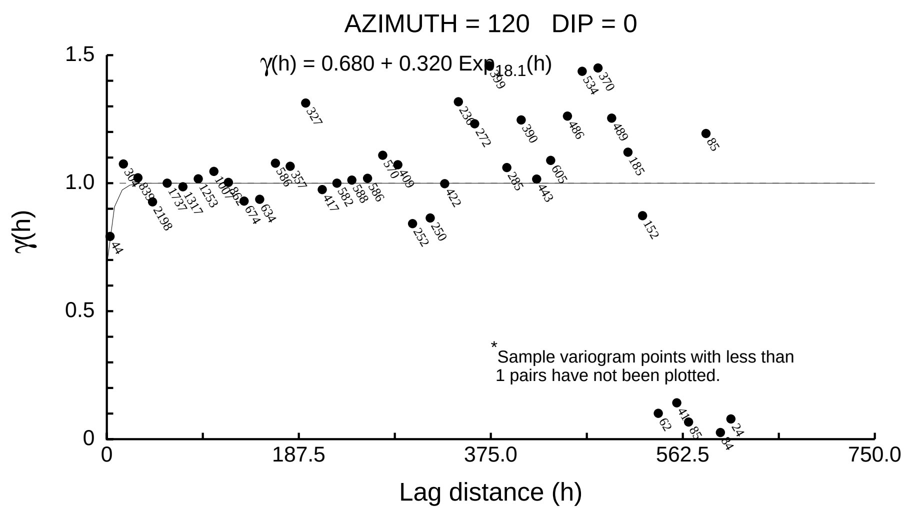


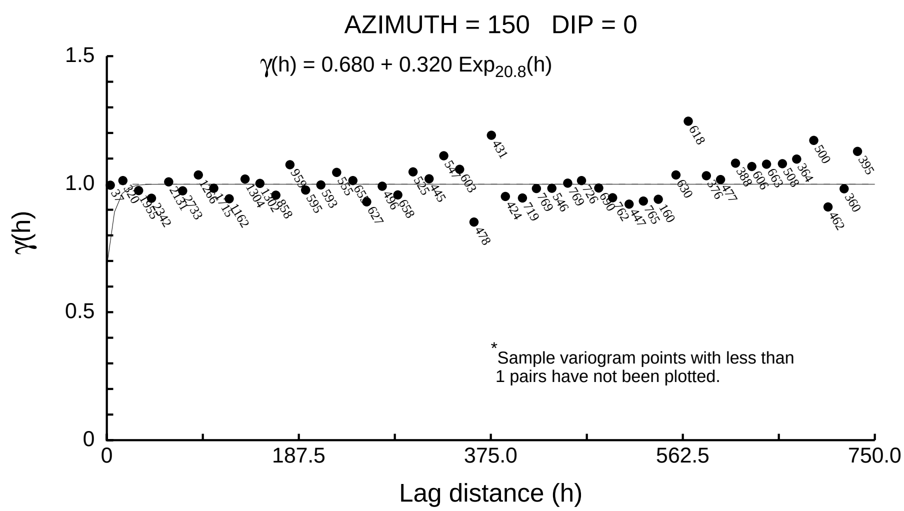




Zone 99 0.4 gram Ind. Correlogram - 5m Comps







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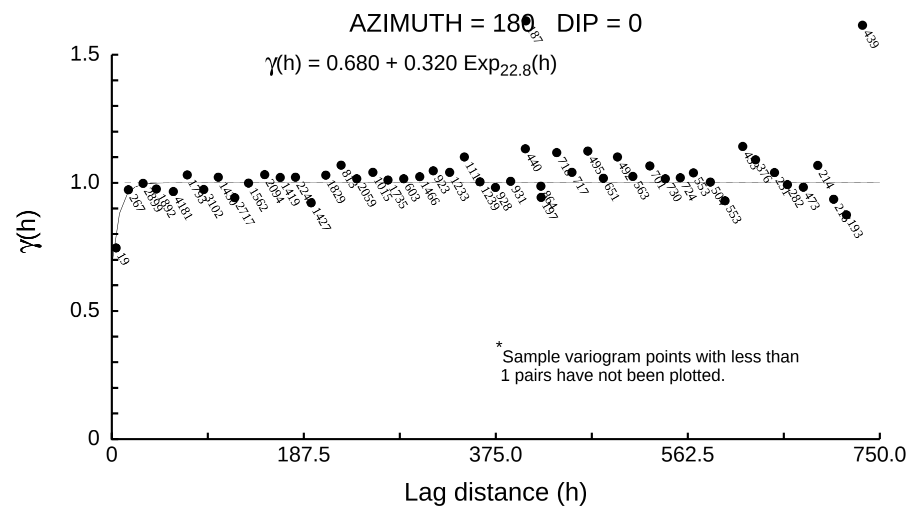
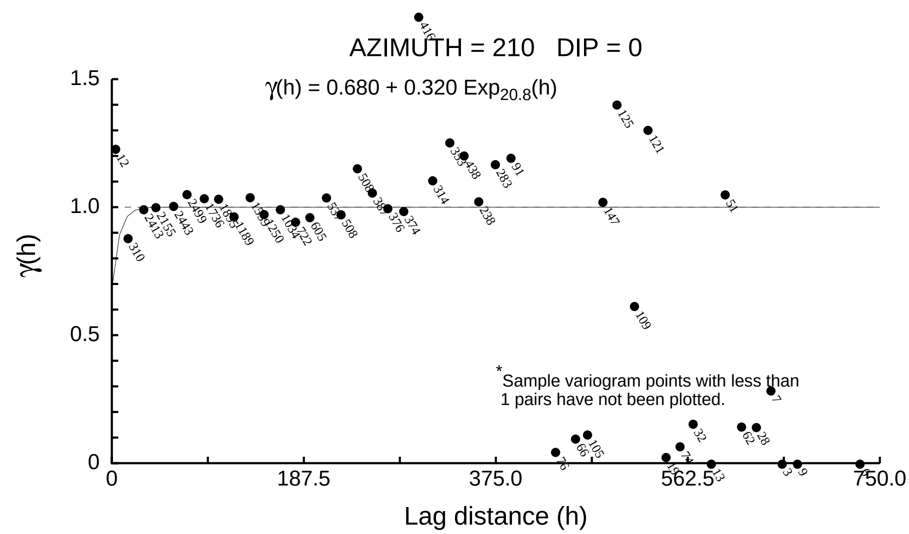
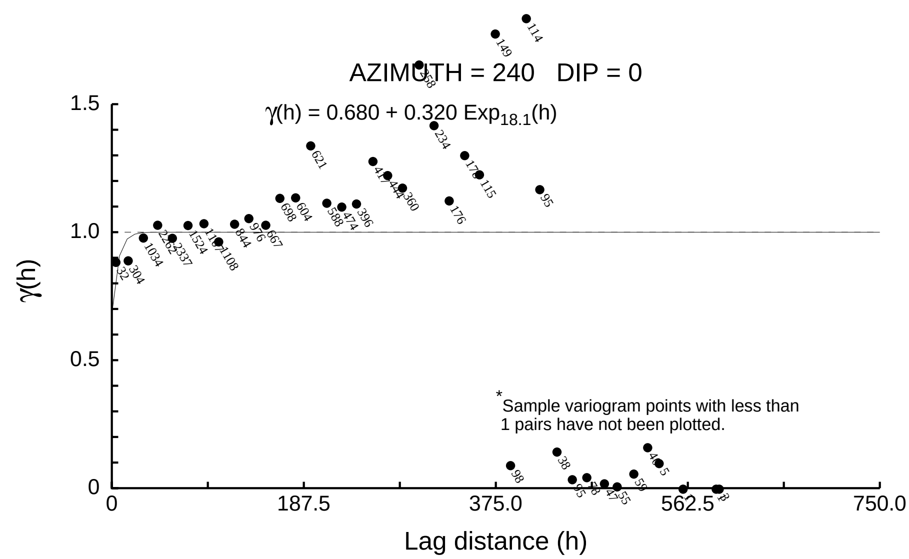
Zone 99 0.4 gram Ind. Correlogram - 5m Comps







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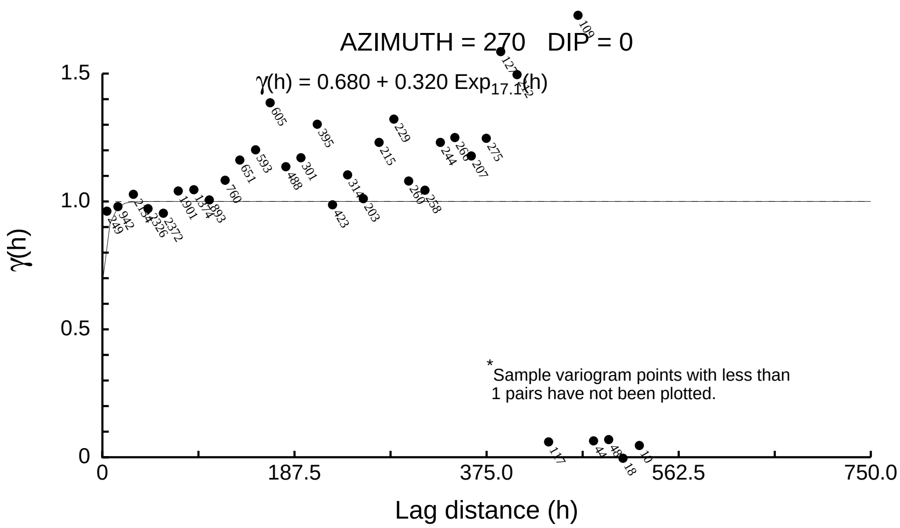
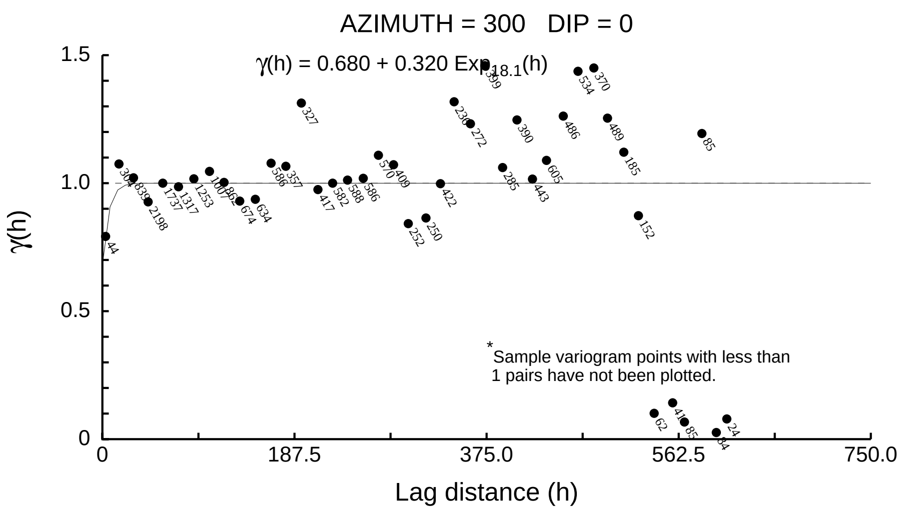
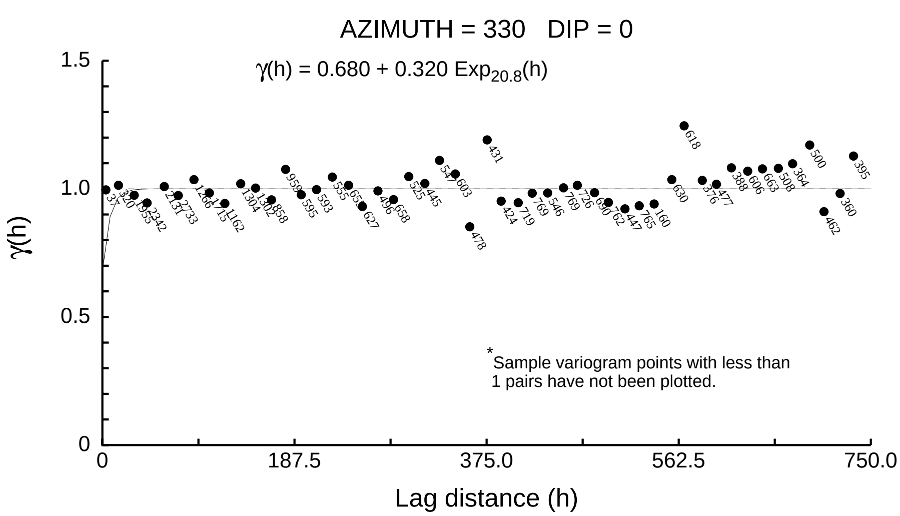
Zone 99 0.4 gram Ind. Correlogram - 5m Comps







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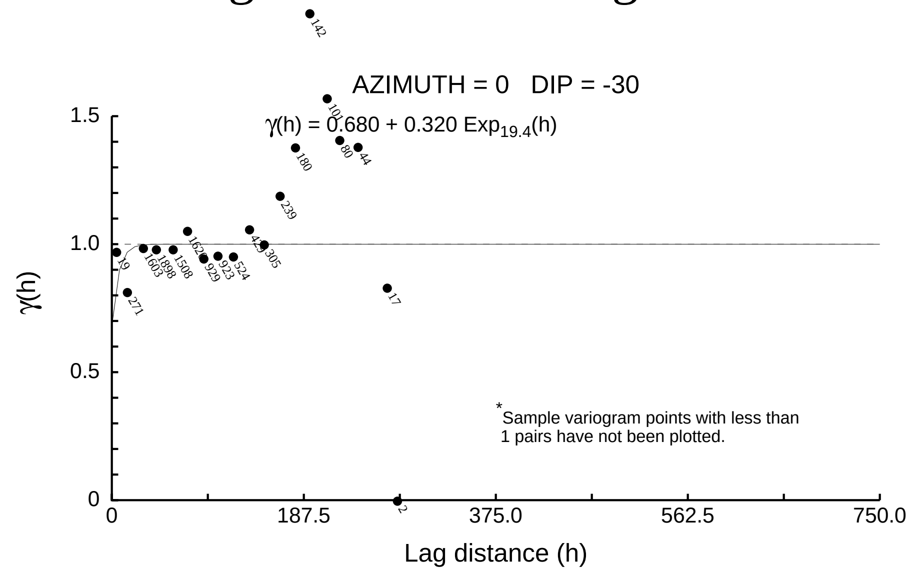
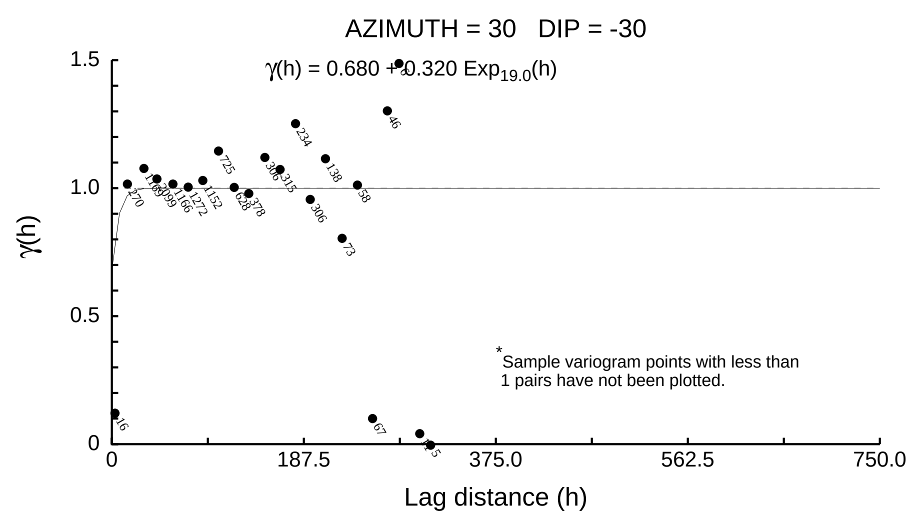
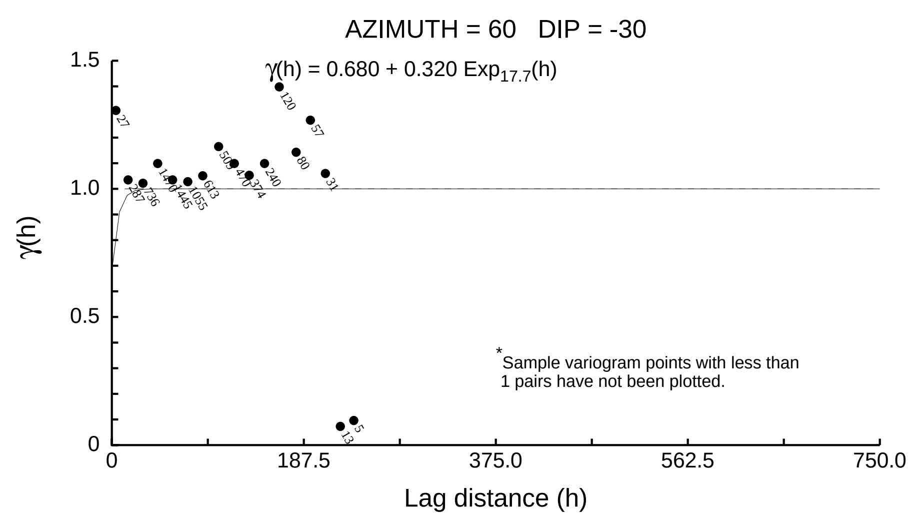
Zone 99 0.4 gram Ind. Correlogram - 5m Comps







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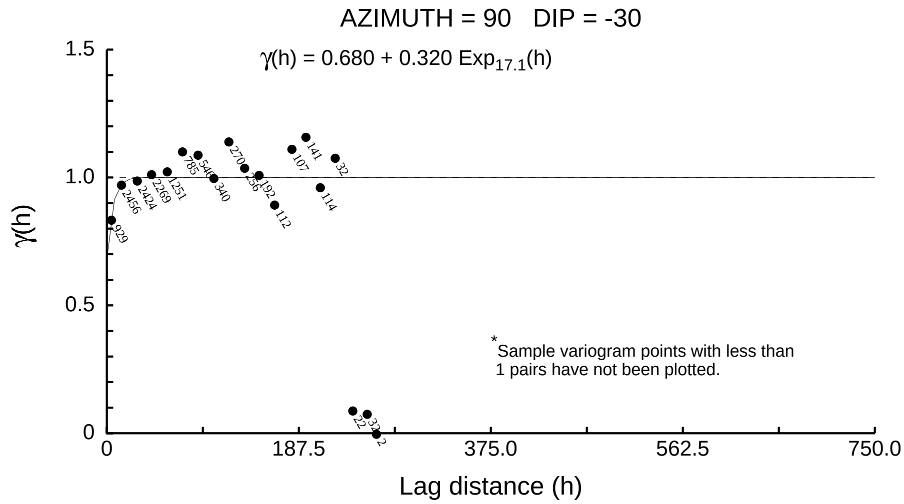
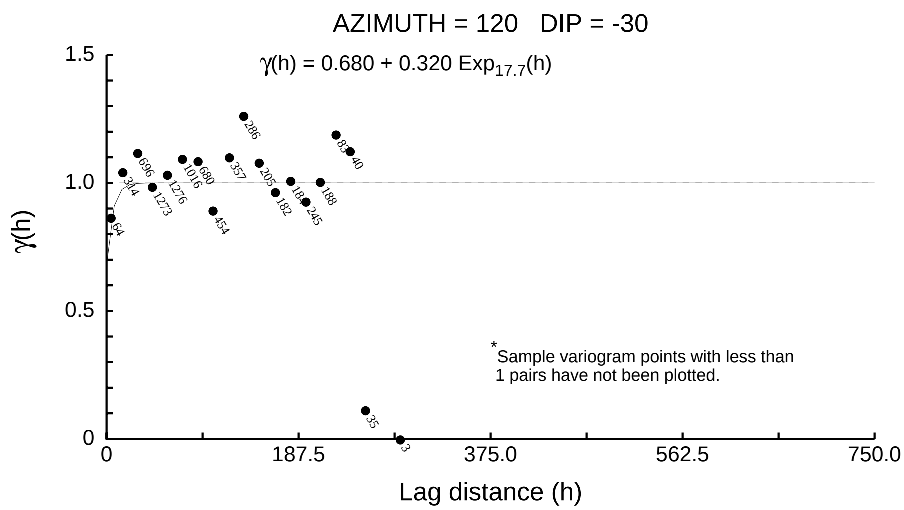
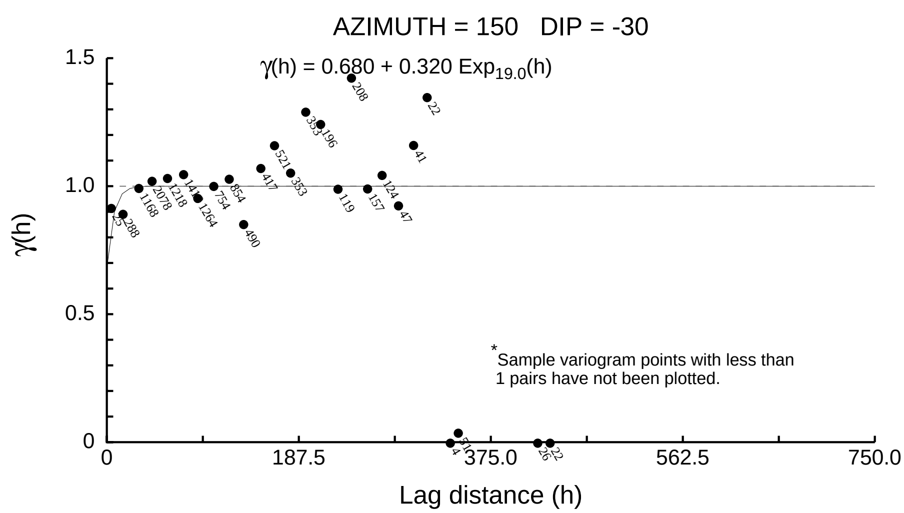
Zone 99 0.4 gram Ind. Correlogram - 5m Comps







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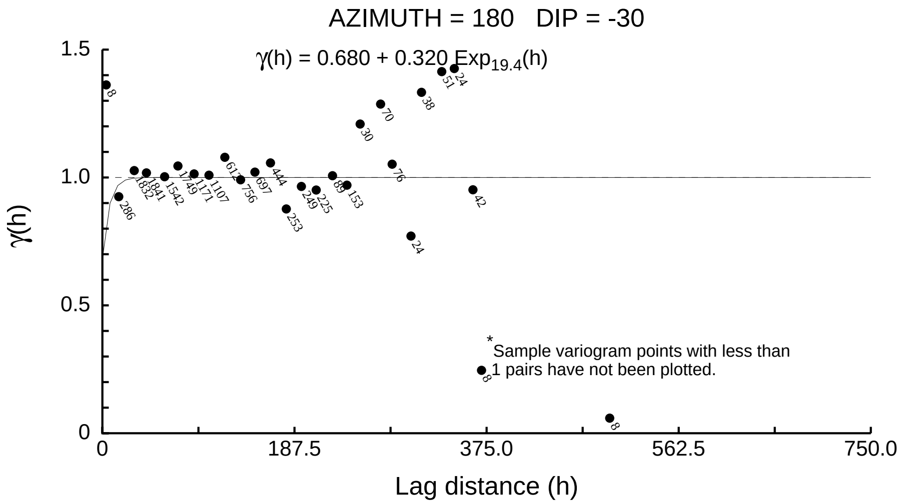
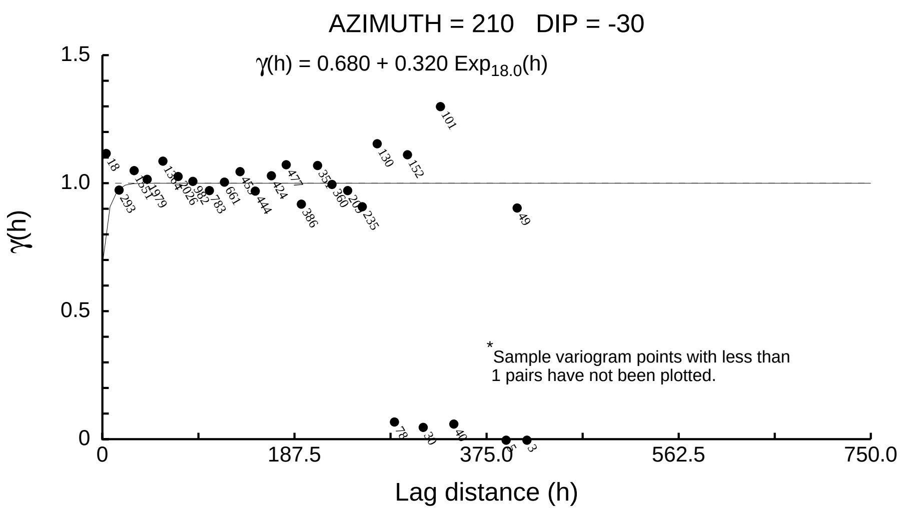
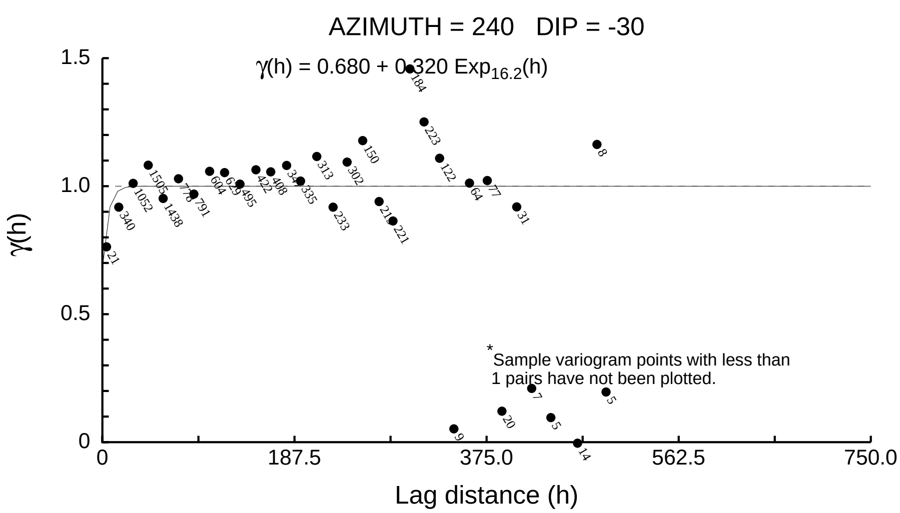
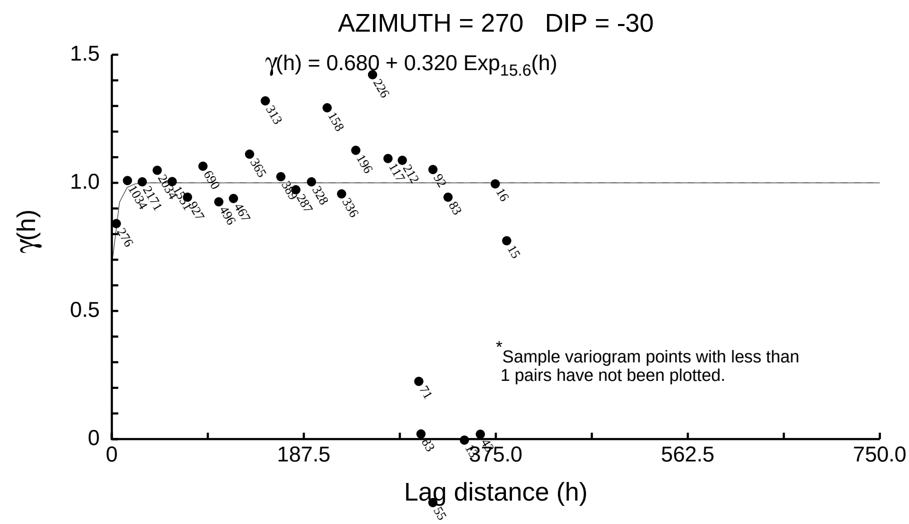
Zone 99 0.4 gram Ind. Correlogram - 5m Comps

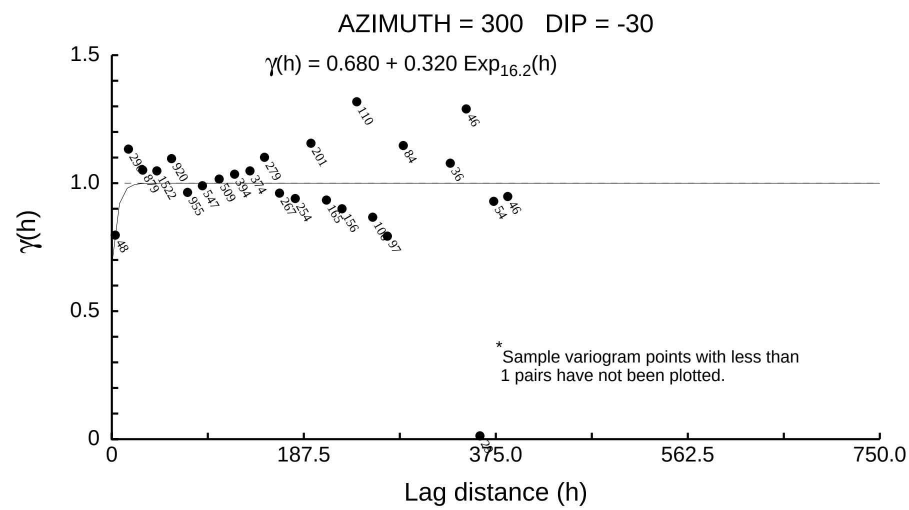


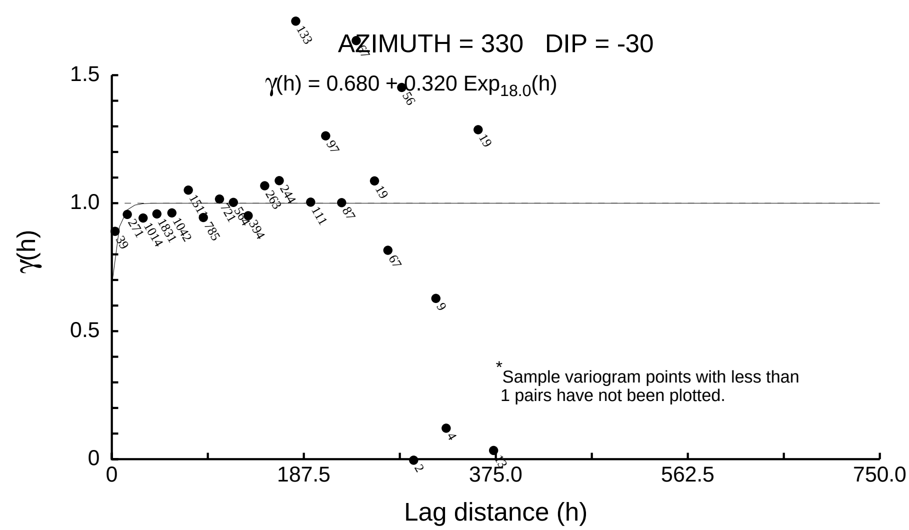




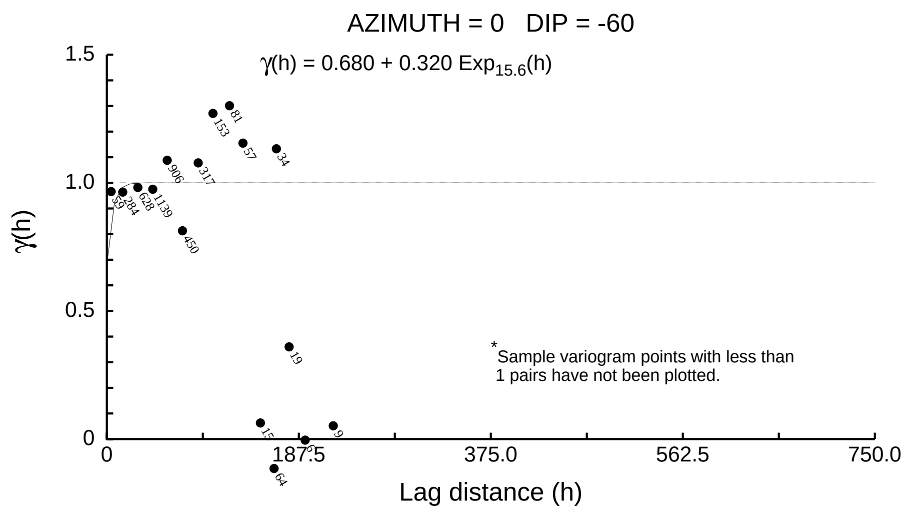
Zone 99 0.4 gram Ind. Correlogram - 5m Comps

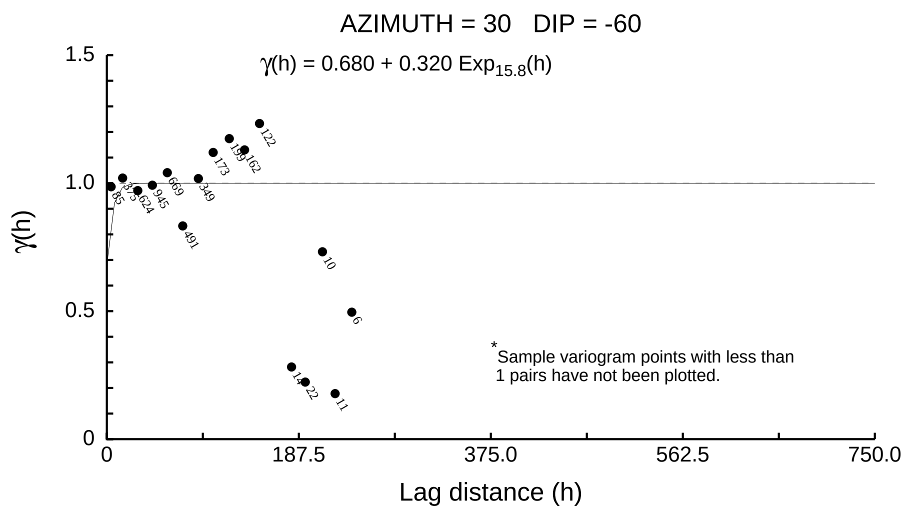


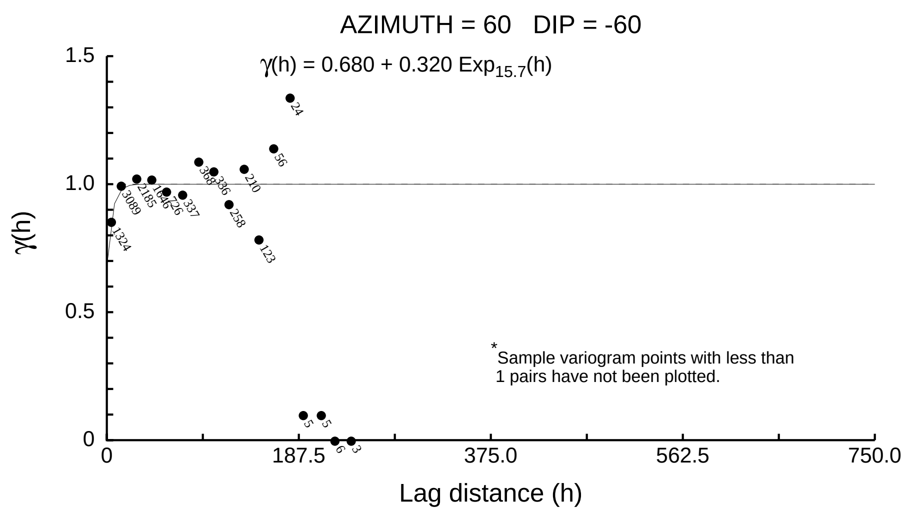




Zone 99 0.4 gram Ind. Correlogram - 5m Comps







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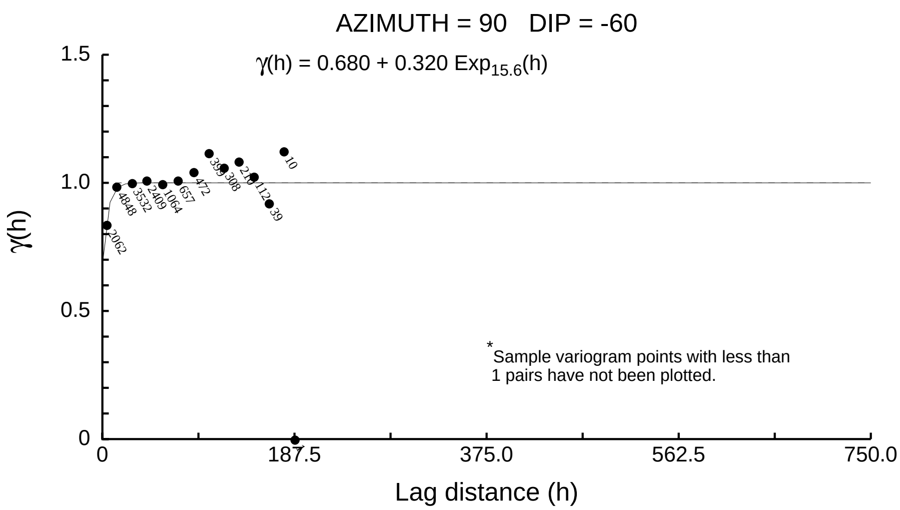
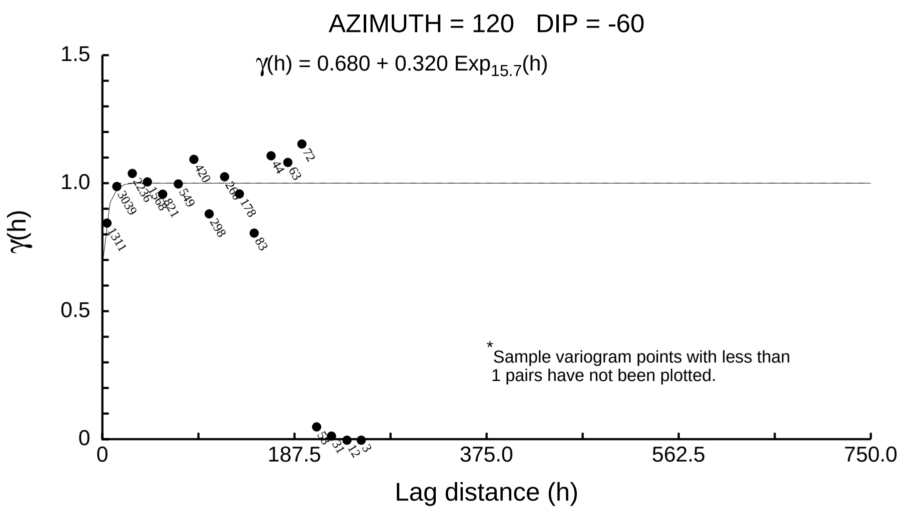
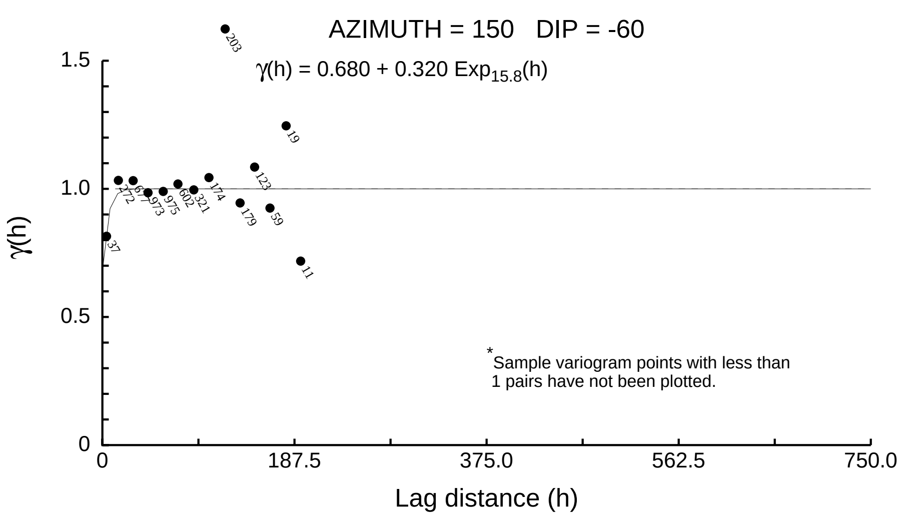
Zone 99 0.4 gram Ind. Correlogram - 5m Comps







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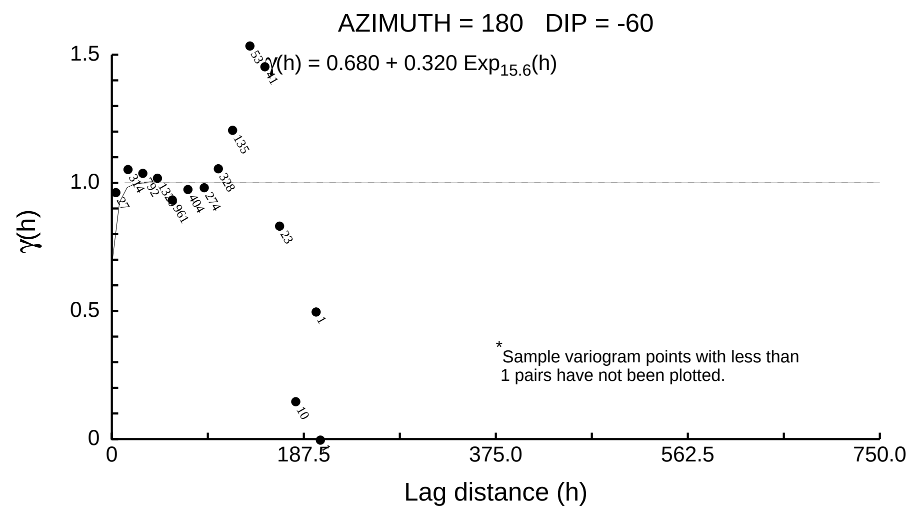
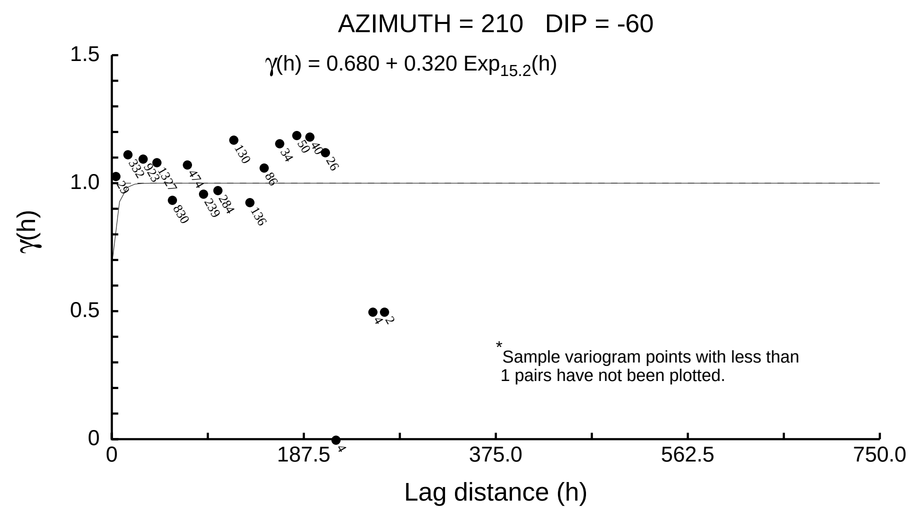
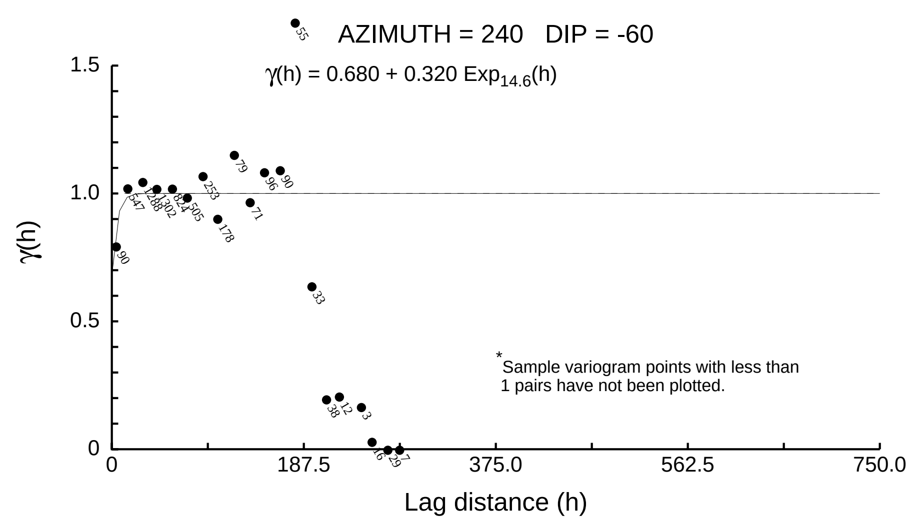
Zone 99 0.4 gram Ind. Correlogram - 5m Comps







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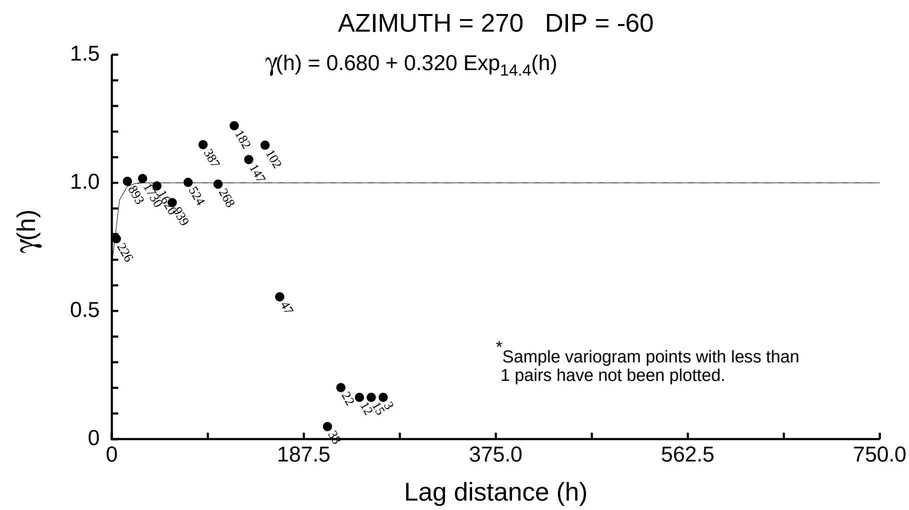
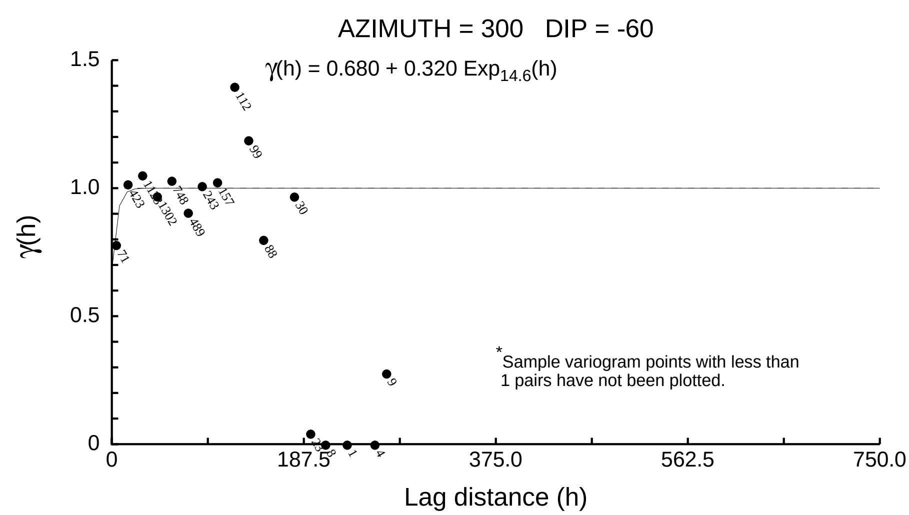
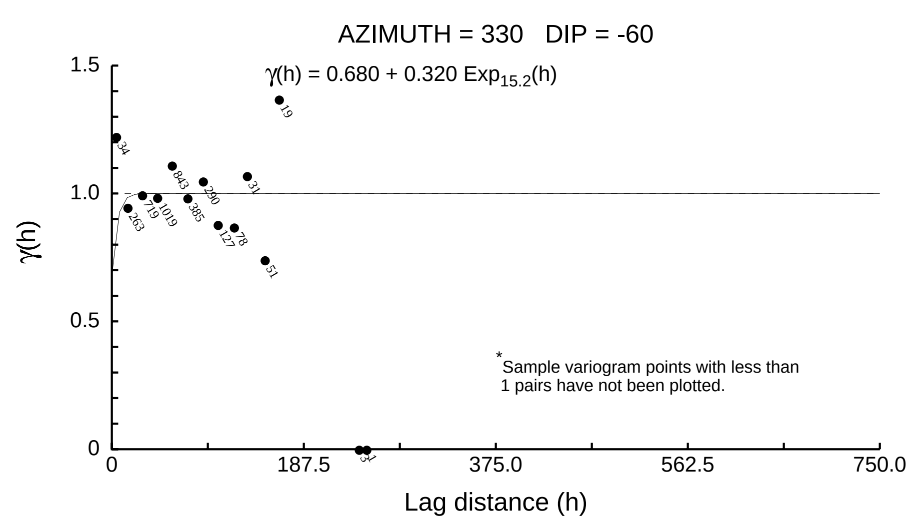
Zone 99 0.4 gram Ind. Correlogram - 5m Comps







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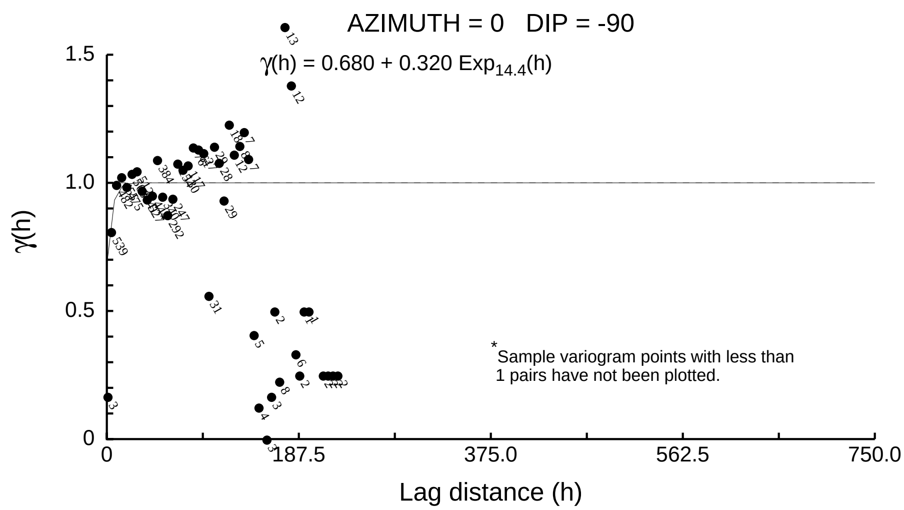
Zone 99 0.4 gram Ind. Correlogram - 5m Comps



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Zone 99 +0.4 gram Correlograms - 5m Comps

Medsystem and Vulcan Rotation Conventions

Nugget ==> 0.005
C1 ==> 0.995

First Structure -- Exponential with Practical Range

LH Rotation about the Z axis ==> 0
RH Rotation about the X’ axis ==> 0
LH Rotation about the Y’ axis ==> 75
Range along the Z’ axis ==> 12.7 Azimuth ==> 270 Dip ==> 15
Range along the Y’ axis ==> 24.7 Azimuth ==> 360 Dip ==> 0
Range along the X’ axis ==> 9.6 Azimuth ==> 90 Dip ==> 75

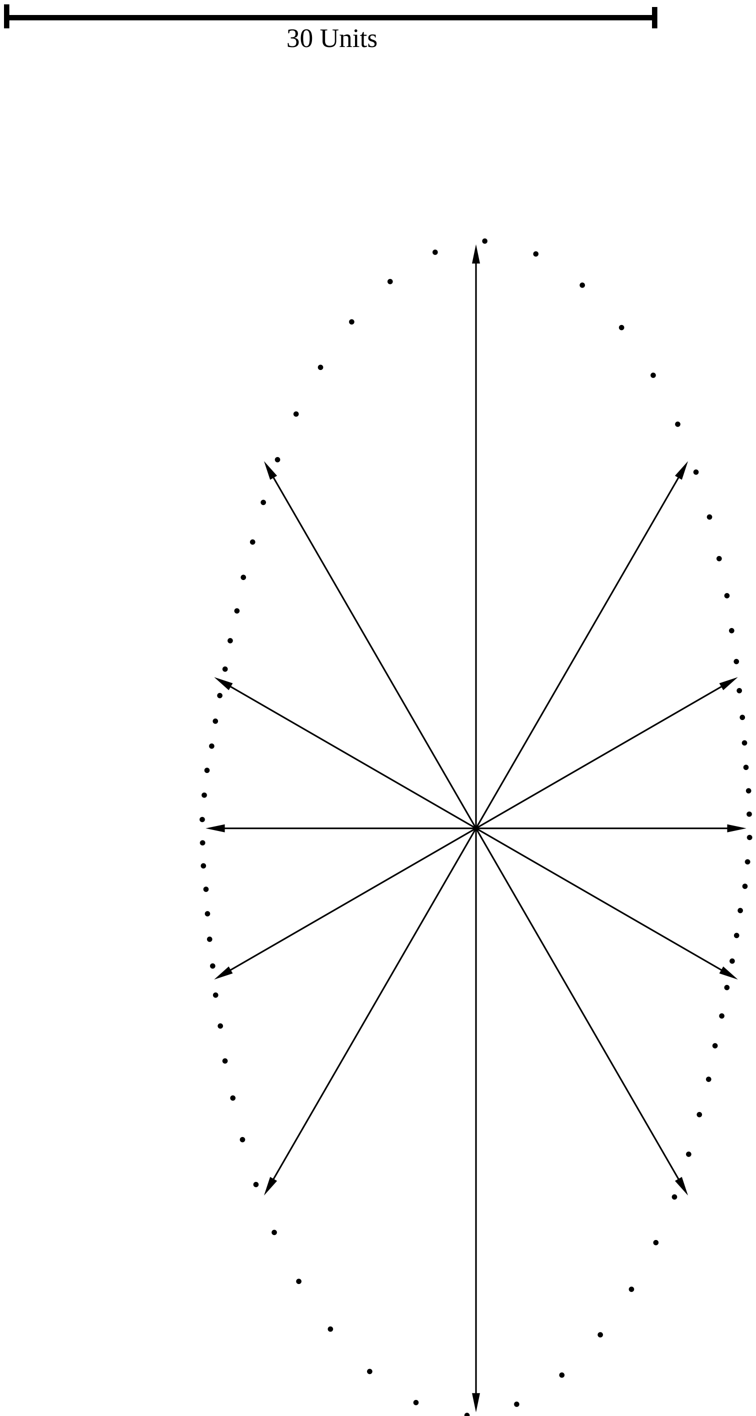
Modeling Criteria

Minimum number pairs req’d ==> 1
Sample variogram points weighted by # pairs

Zone 99 +0.4 gram Correlograms - 5m Comps

Structure Number 1

Rose Diagram of Ranges Dipping 0 Degrees
Scale:



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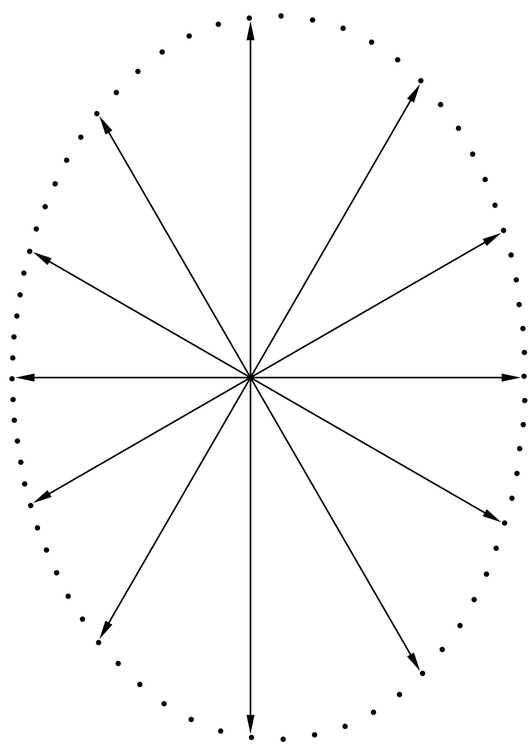
Zone 99 +0.4 gram Correlograms - 5m Comps

Structure Number 1

Rose Diagram of Ranges Dipping 30 Degrees
Scale:

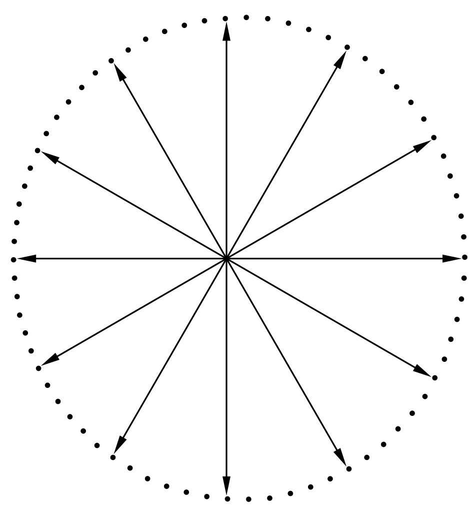
30 Units



Zone 99 +0.4 gram Correlograms - 5m Comps

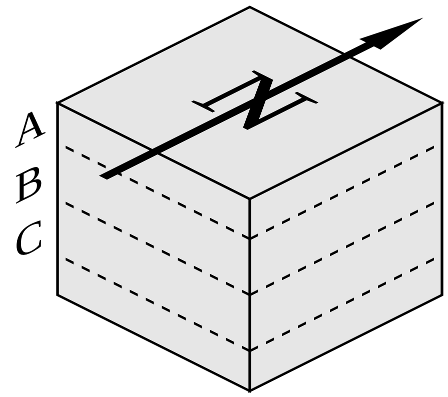
Structure Number 1

Rose Diagram of Ranges Dipping 60 Degrees
Scale:

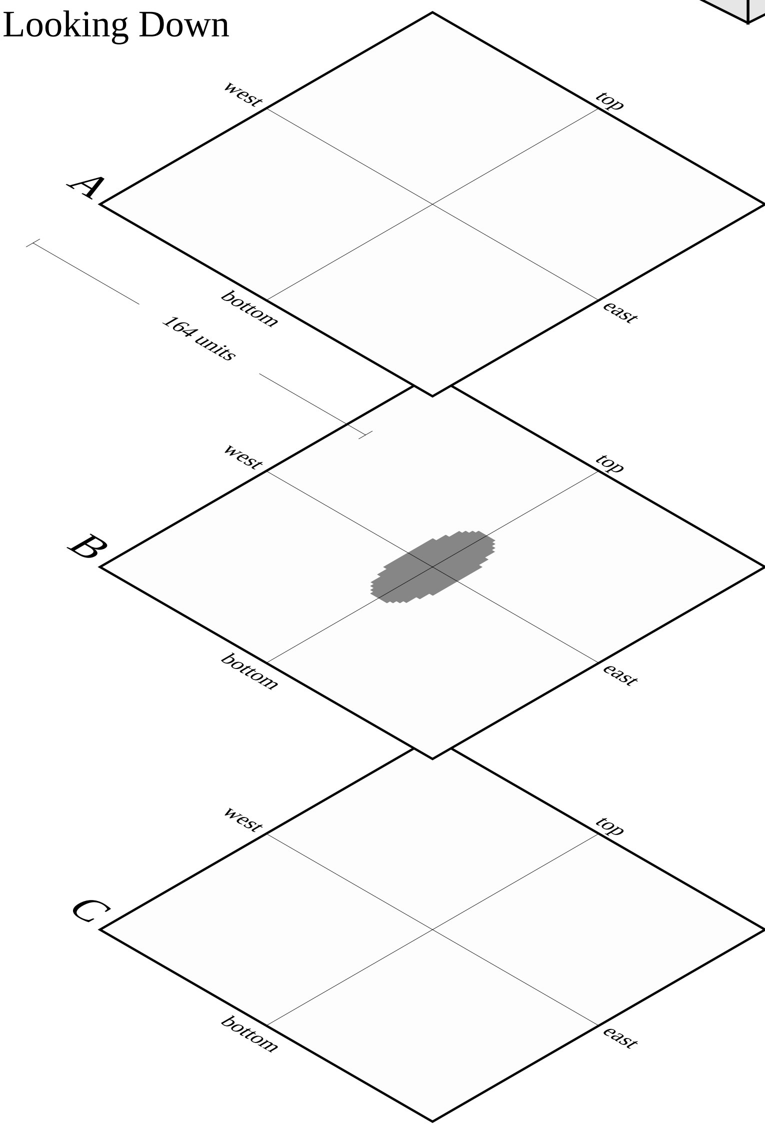


Horizontal Slices Through the Ellipsoids

Reference Cube



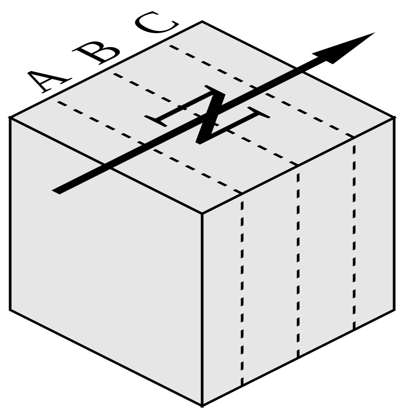
X-Y Planes Looking Down



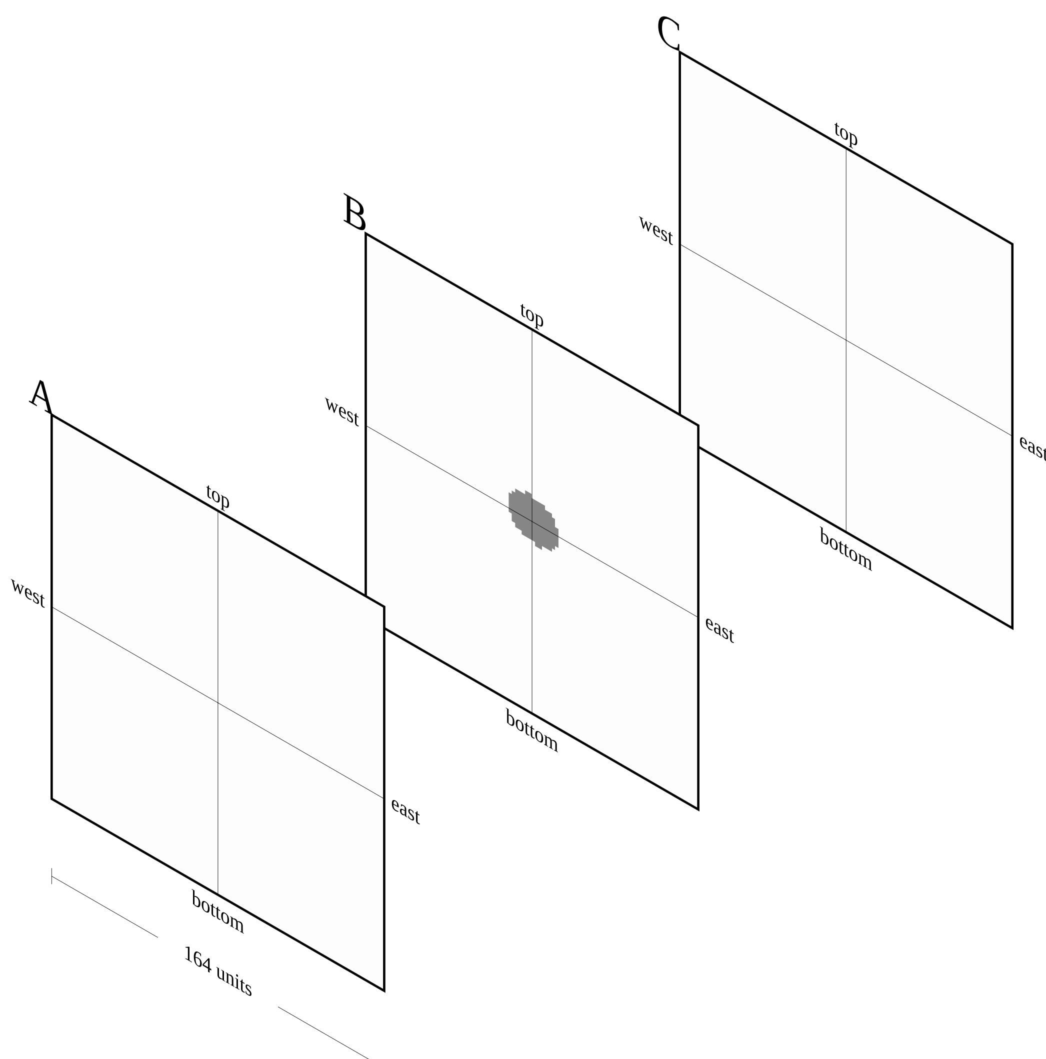
Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Cross Section Views Through the Ellipsoids

Reference Cube



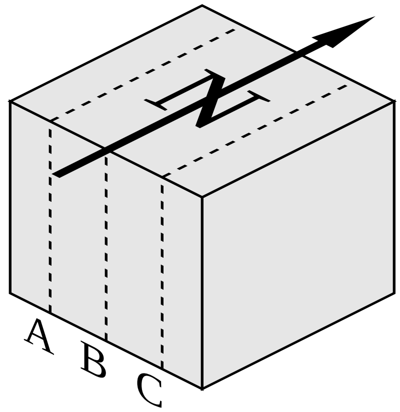
X-Z Planes Looking North



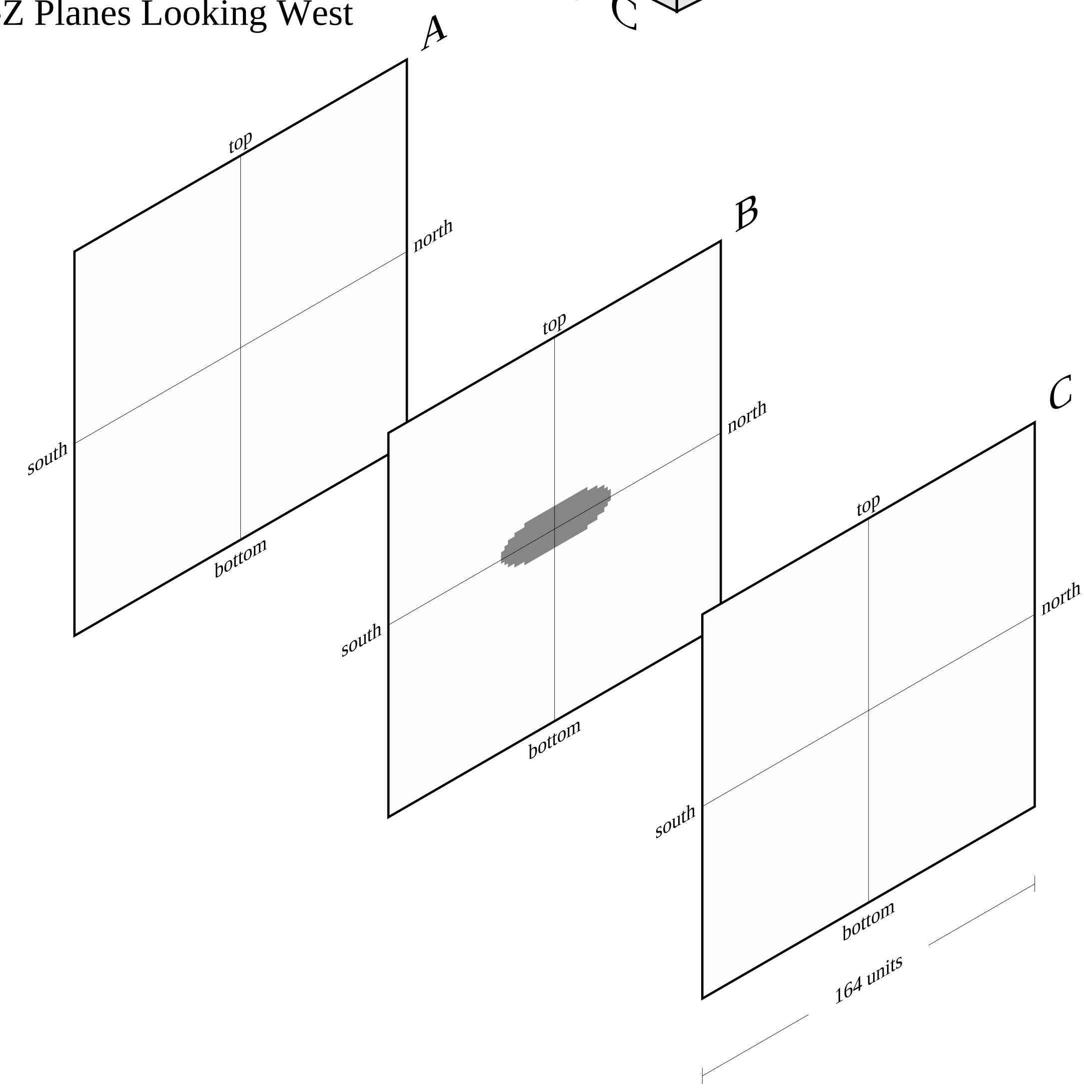
Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Long Section Views Through the Ellipsoids

Reference Cube

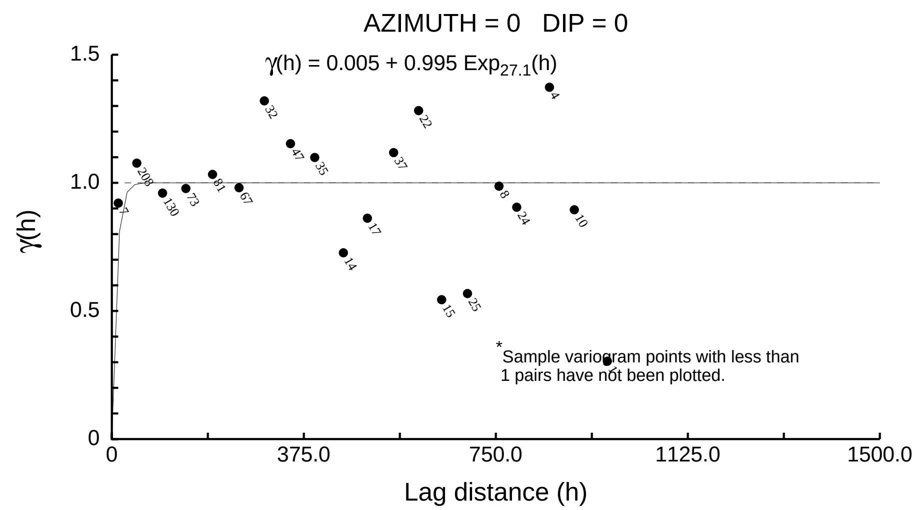


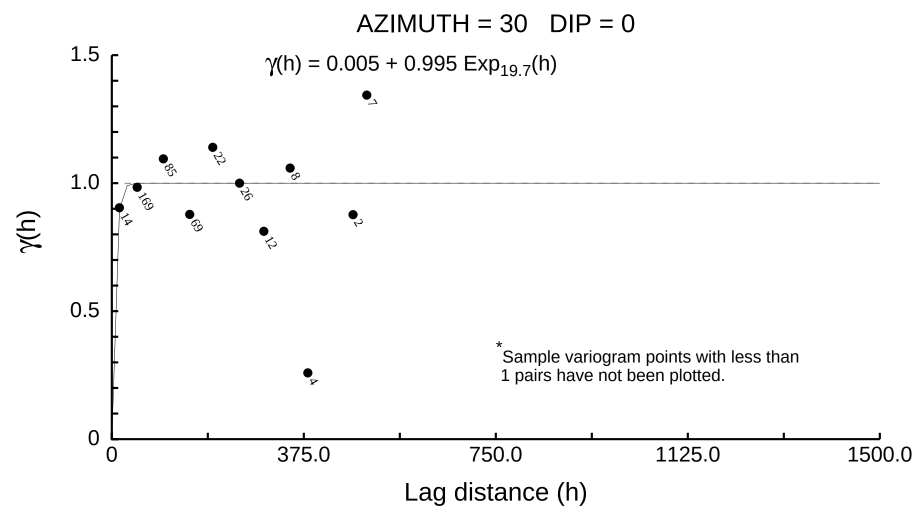
Y-Z Planes Looking West

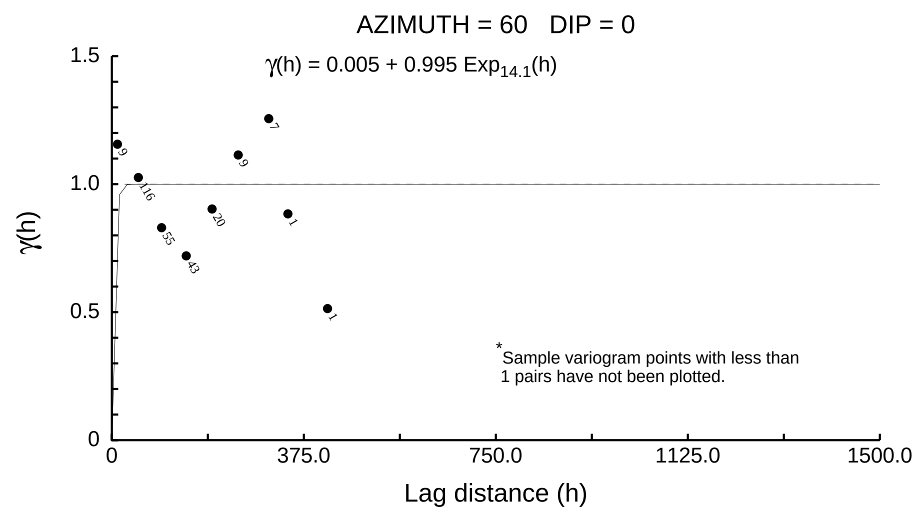


Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

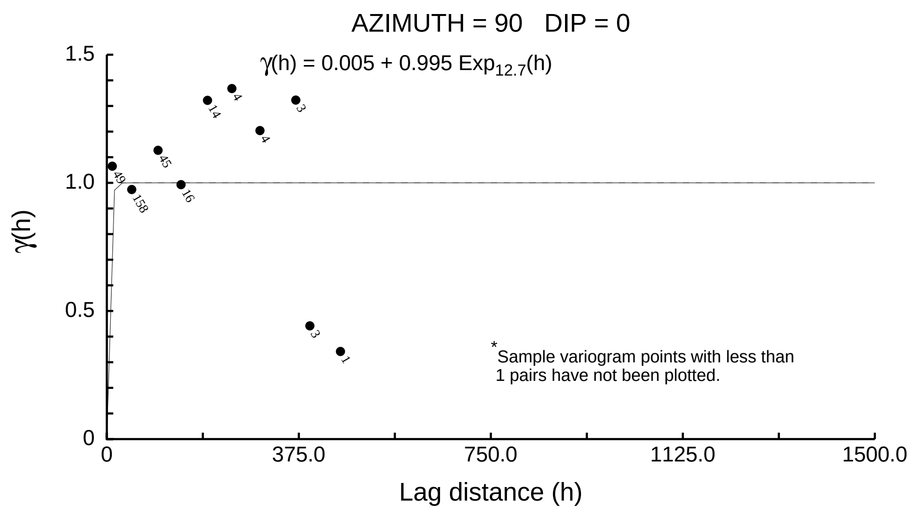
Zone 99 +0.4 gram Correlograms - 5m Comps

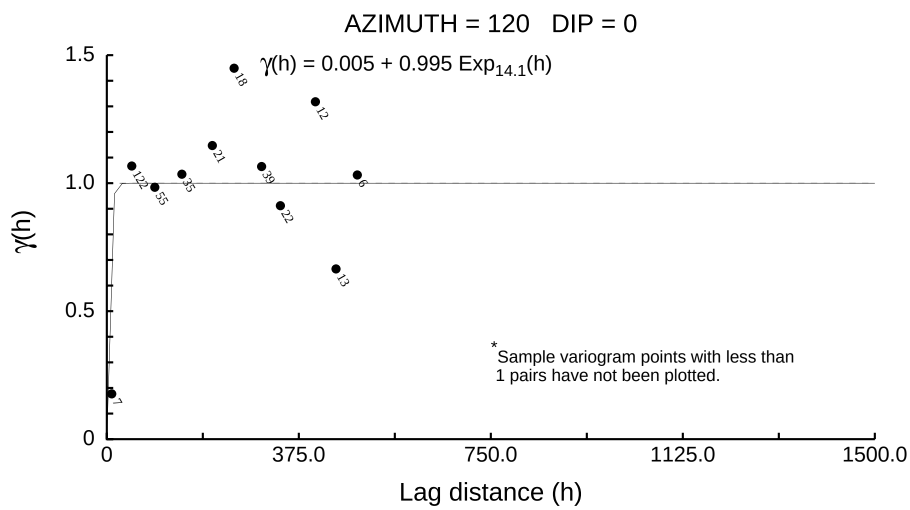


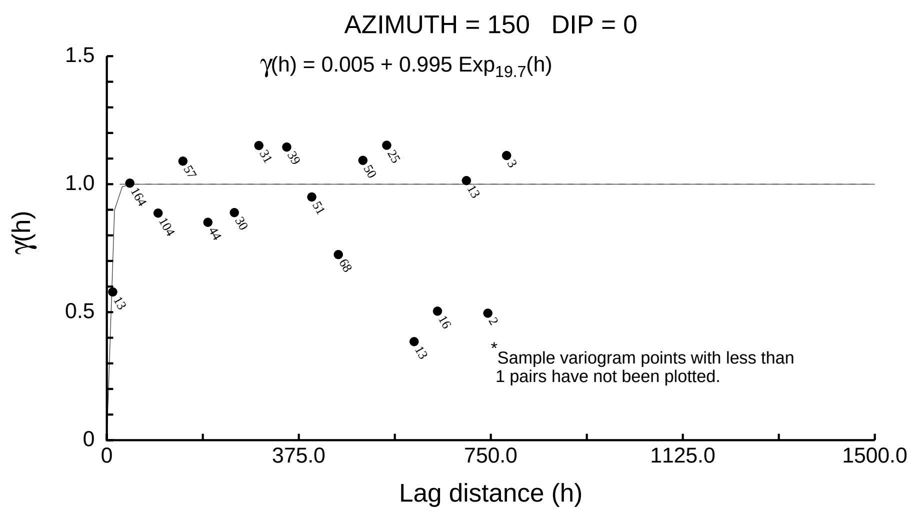




Zone 99 +0.4 gram Correlograms - 5m Comps







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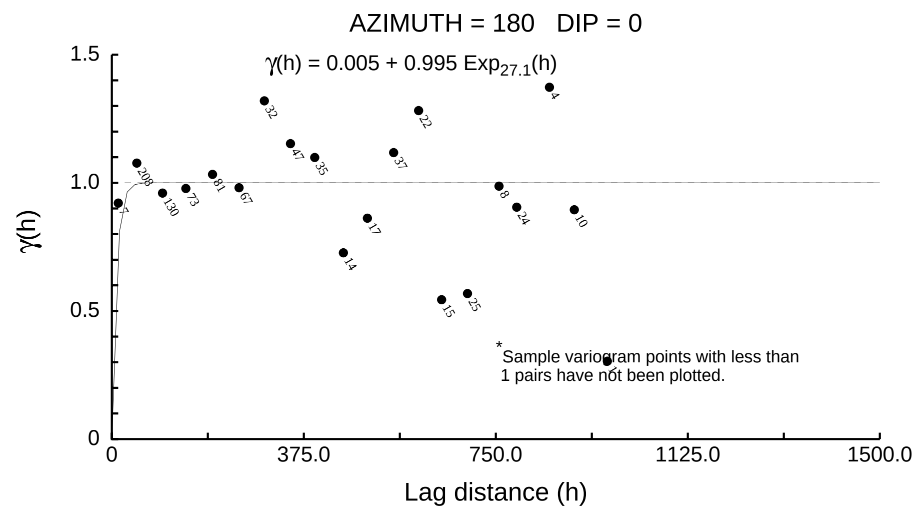
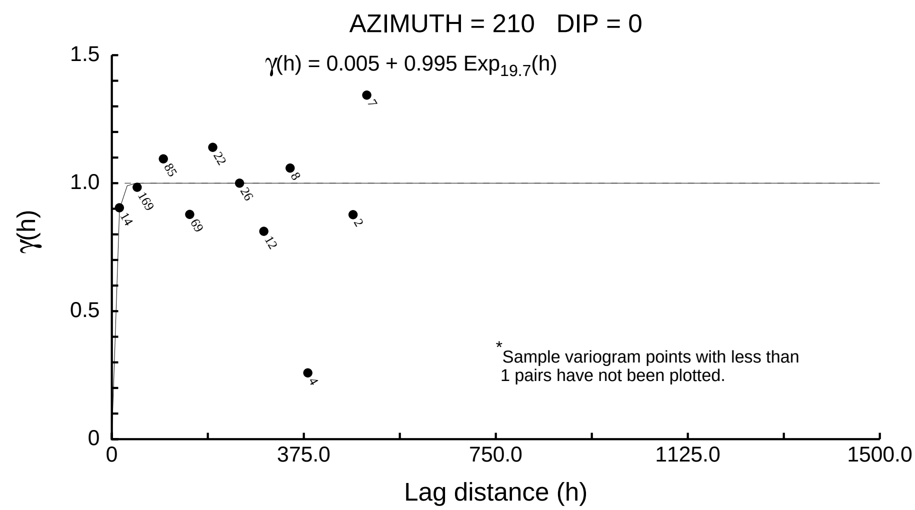
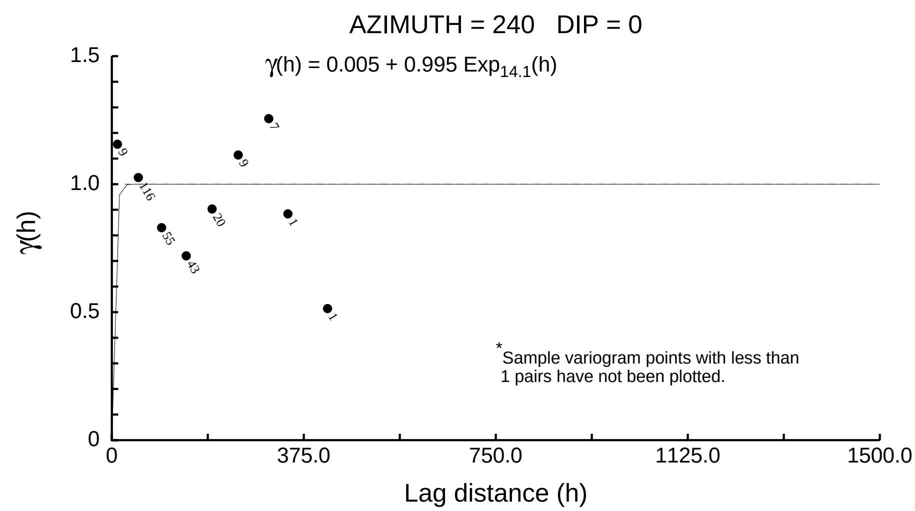
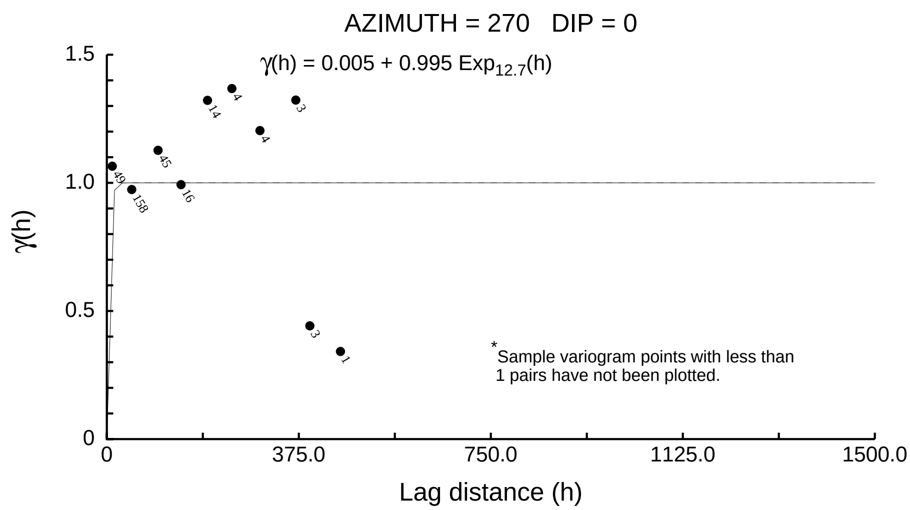
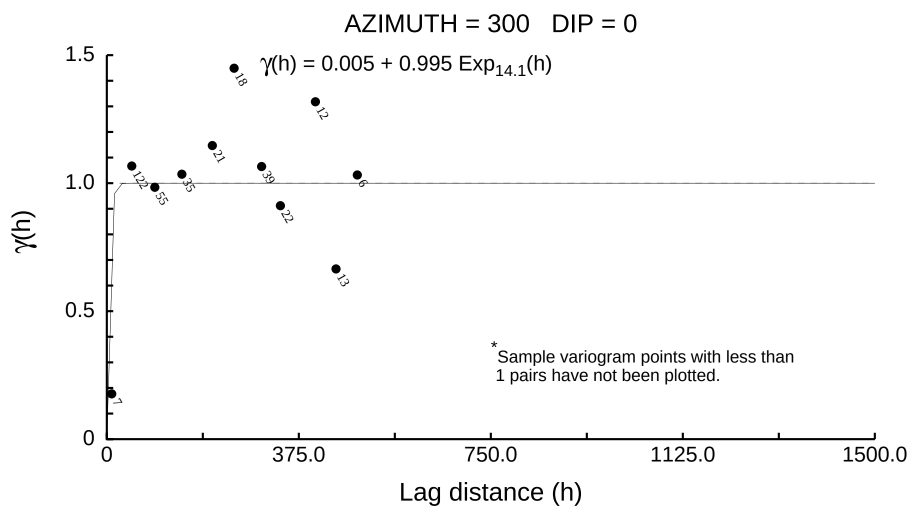


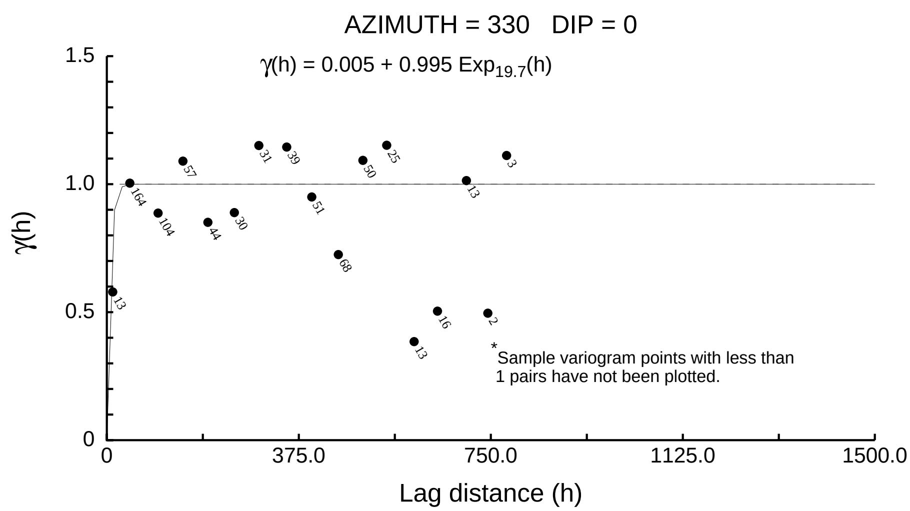




Zone 99 +0.4 gram Correlograms - 5m Comps







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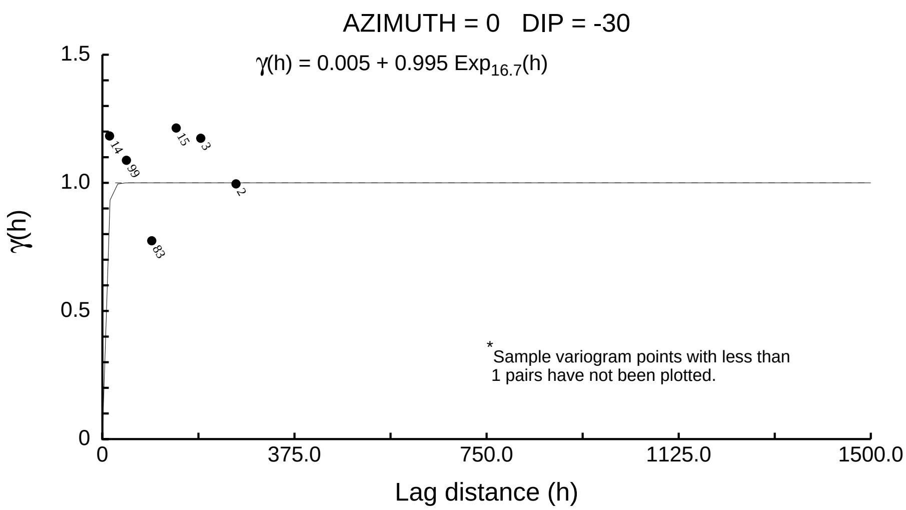
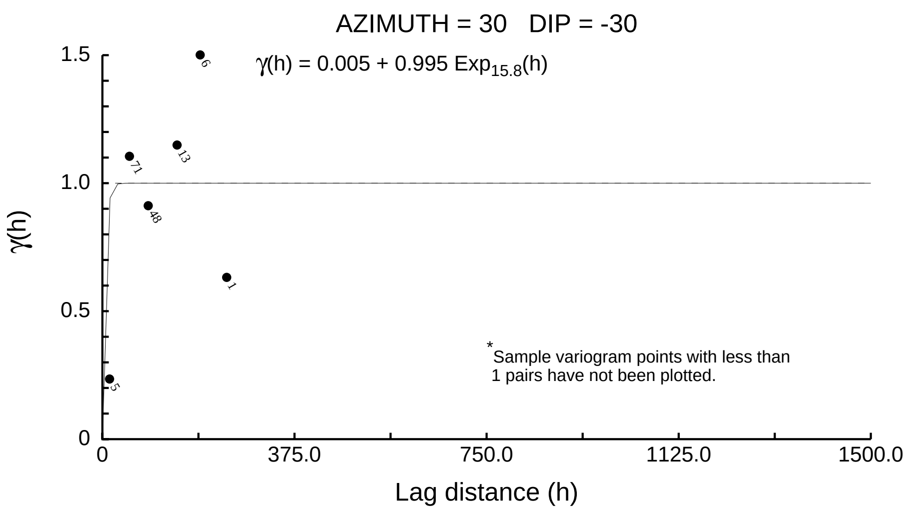
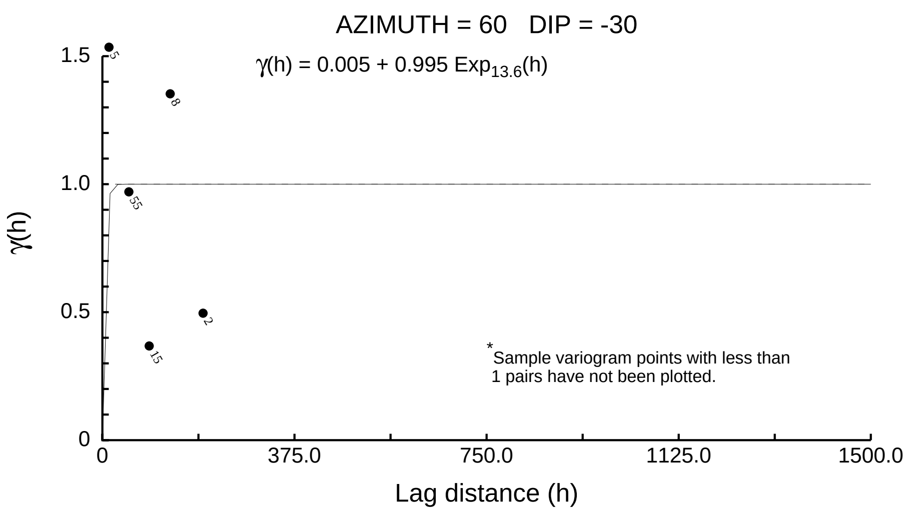
Zone 99 +0.4 gram Correlograms - 5m Comps







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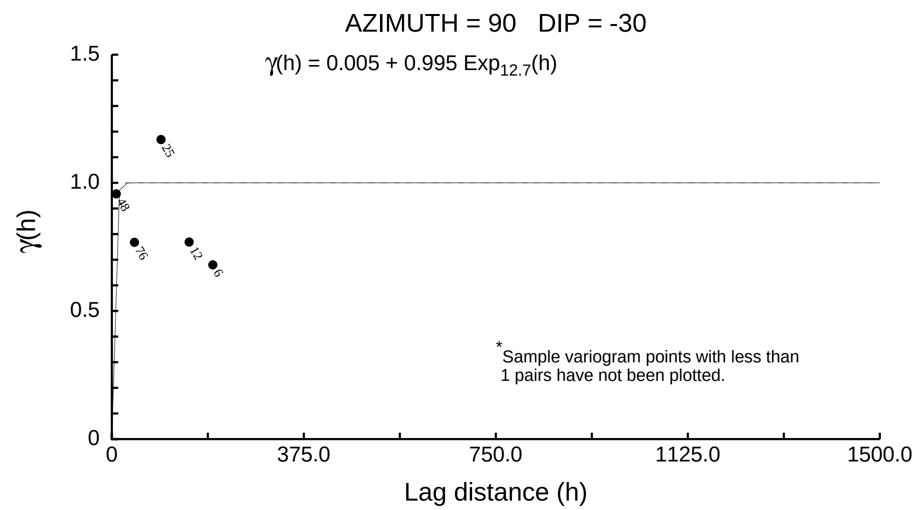

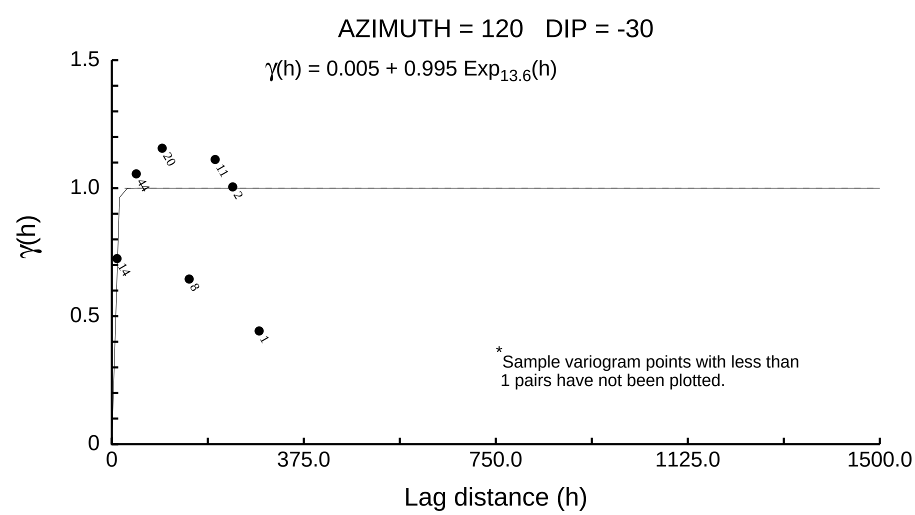

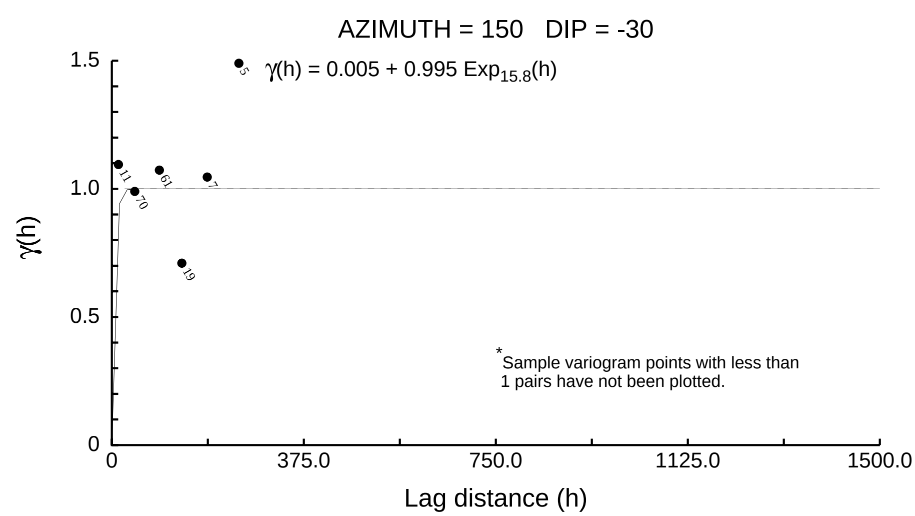

Zone 99 +0.4 gram Correlograms - 5m Comps

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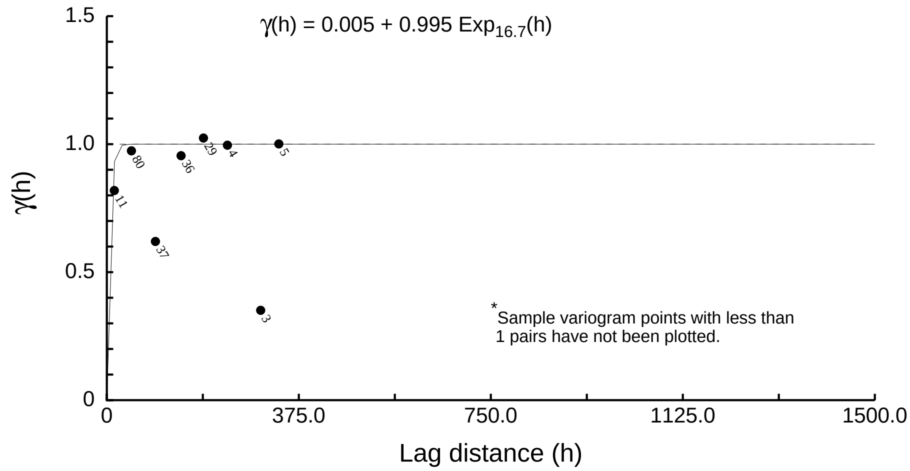
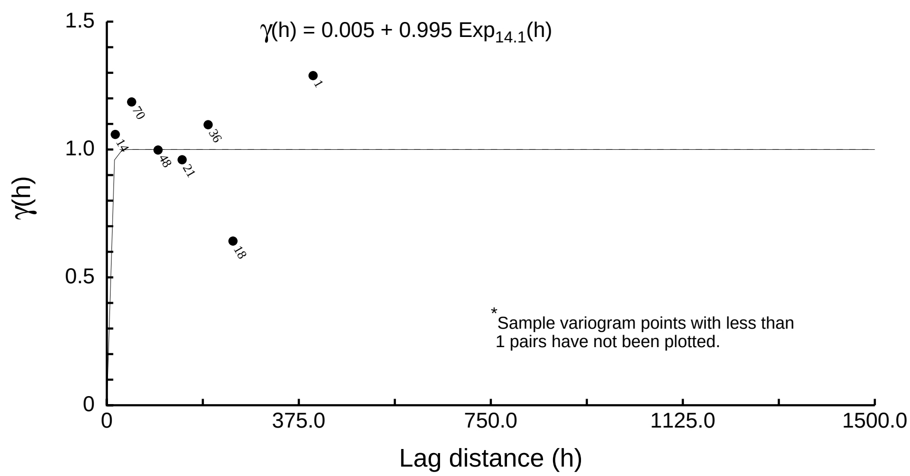
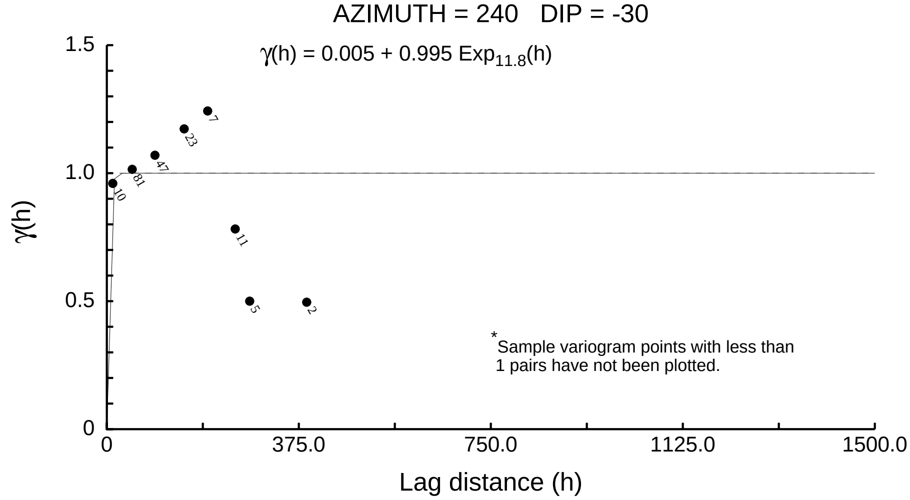


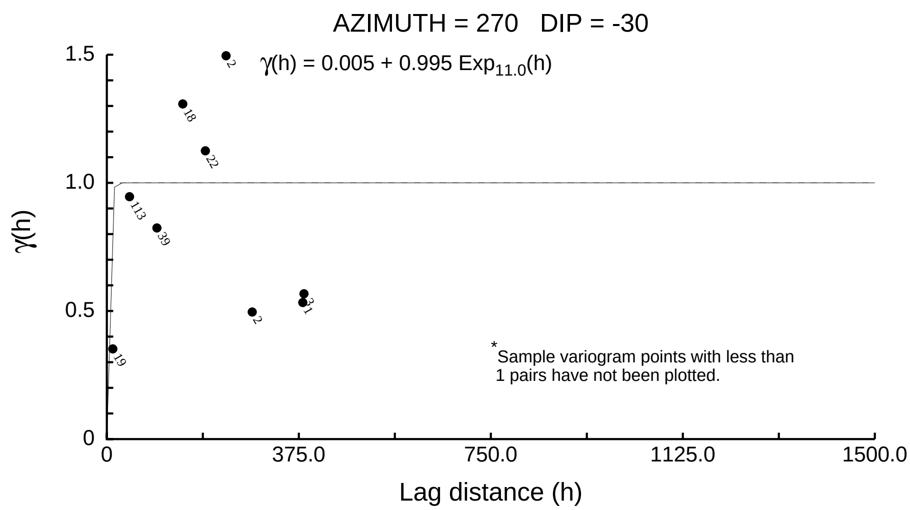
AZIMUTH = 210 DIP = -30

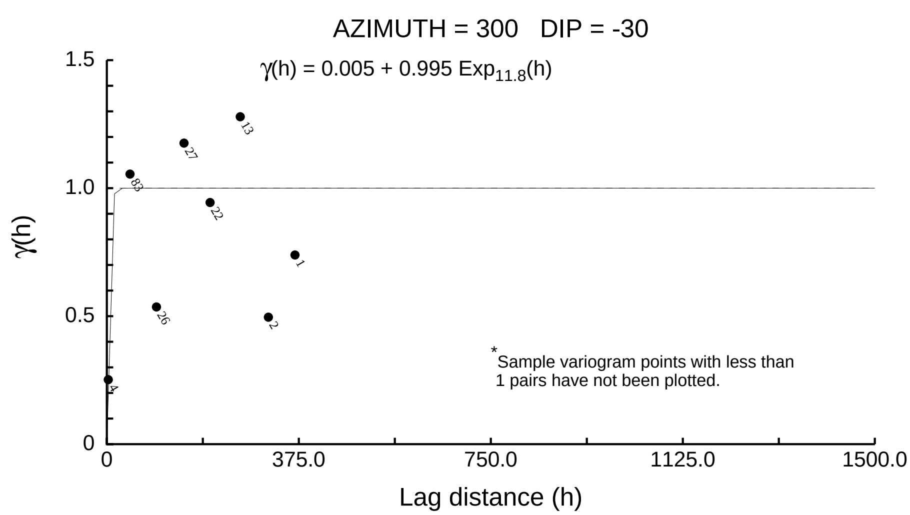


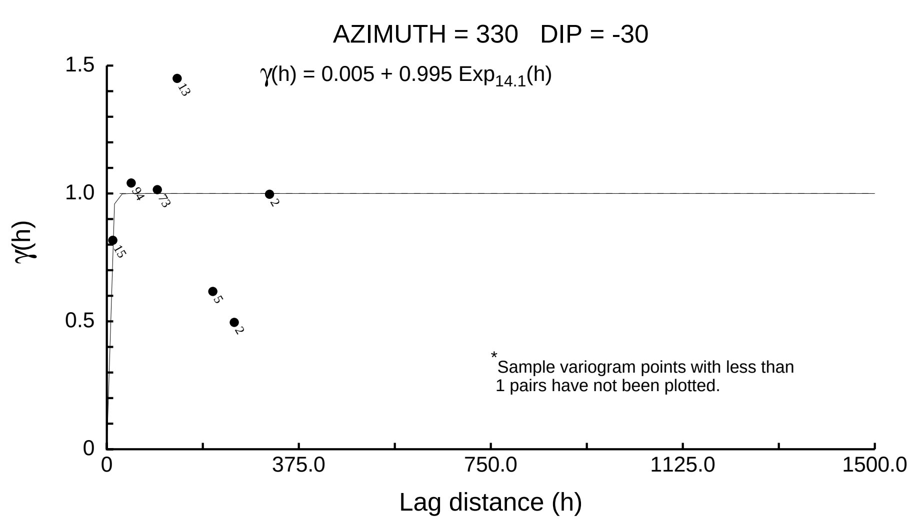
AZIMUTH = 240 DIP = -30



Zone 99 +0.4 gram Correlograms - 5m Comps







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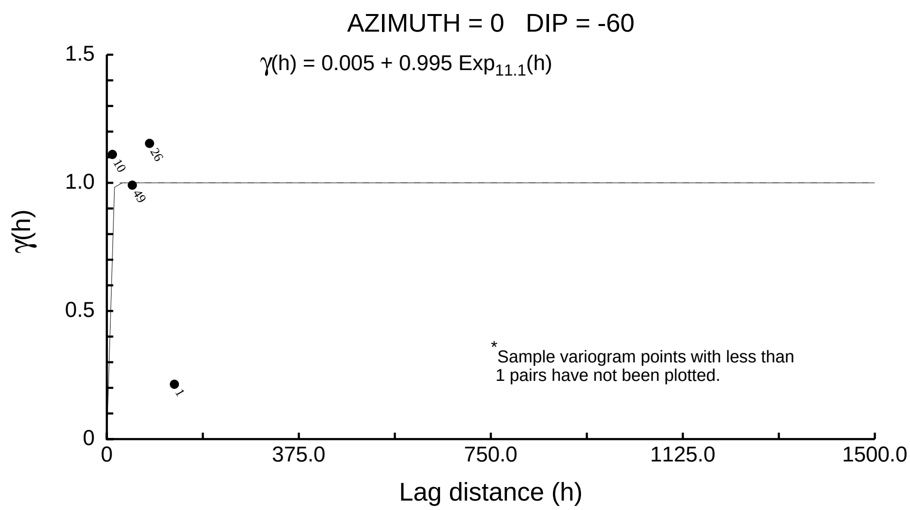
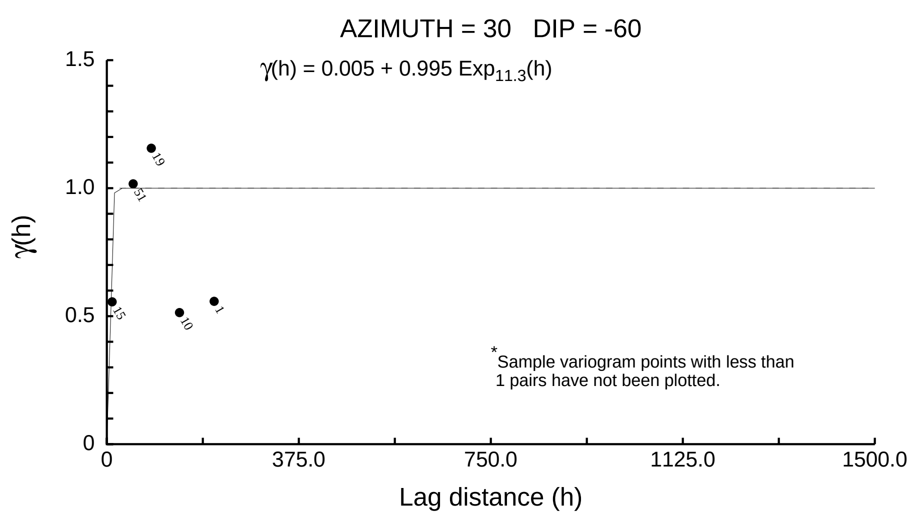
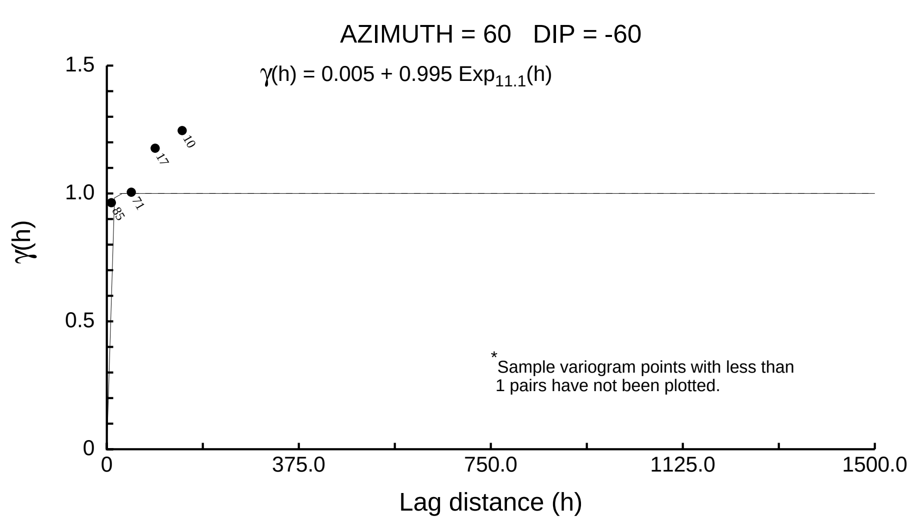
Zone 99 +0.4 gram Correlograms - 5m Comps







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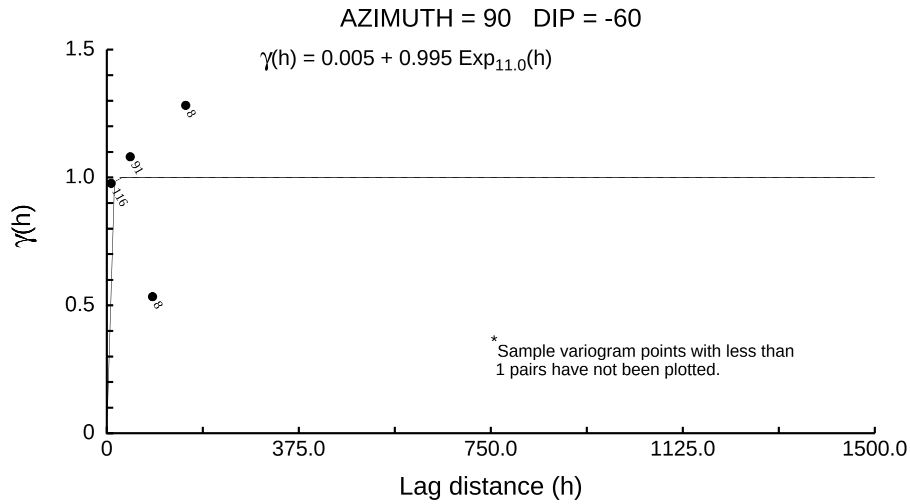

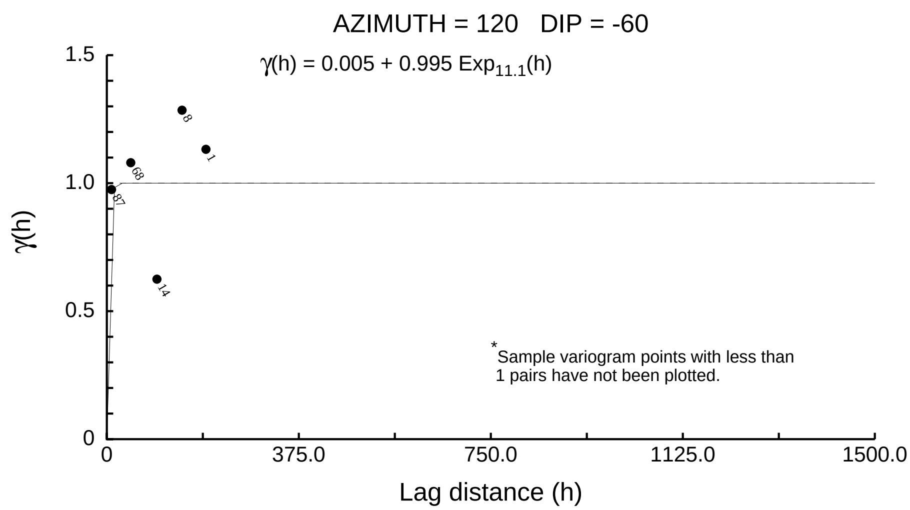

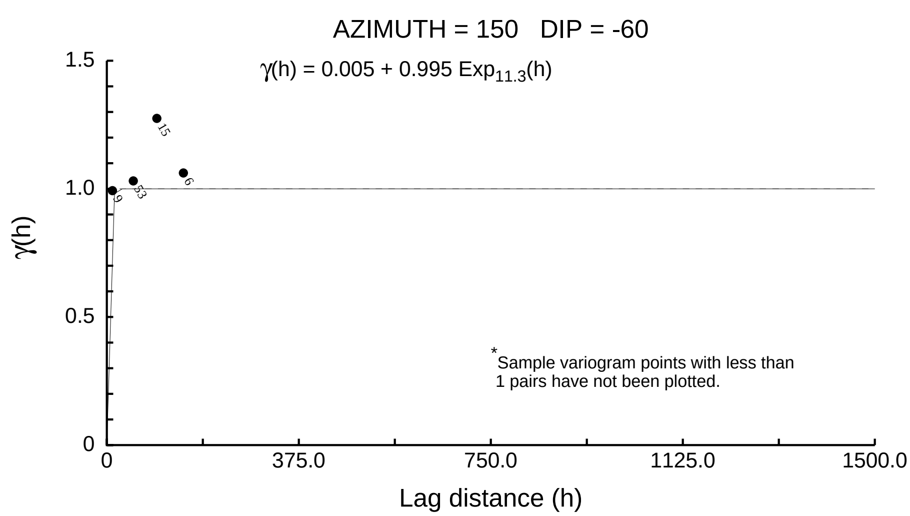

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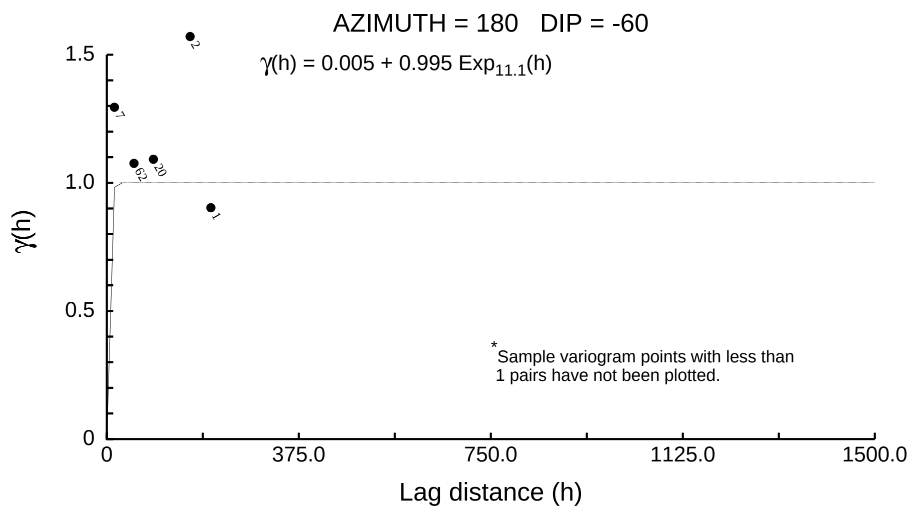
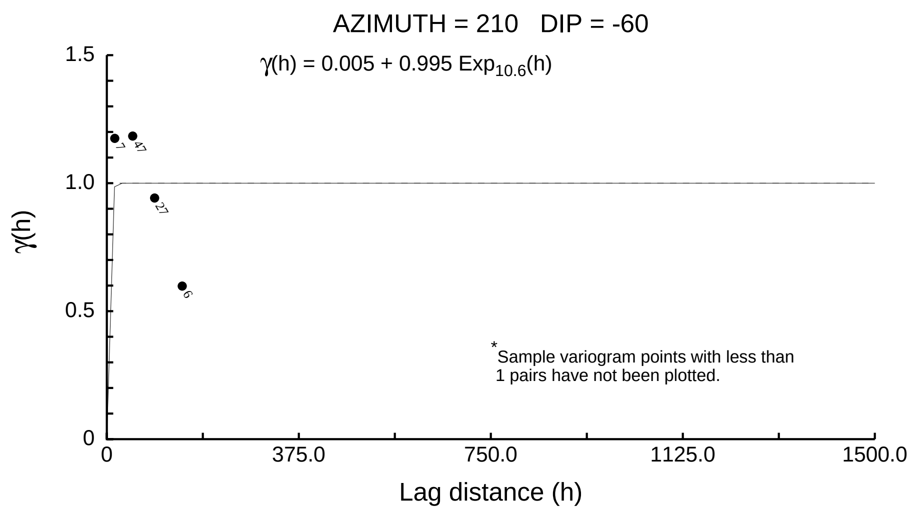
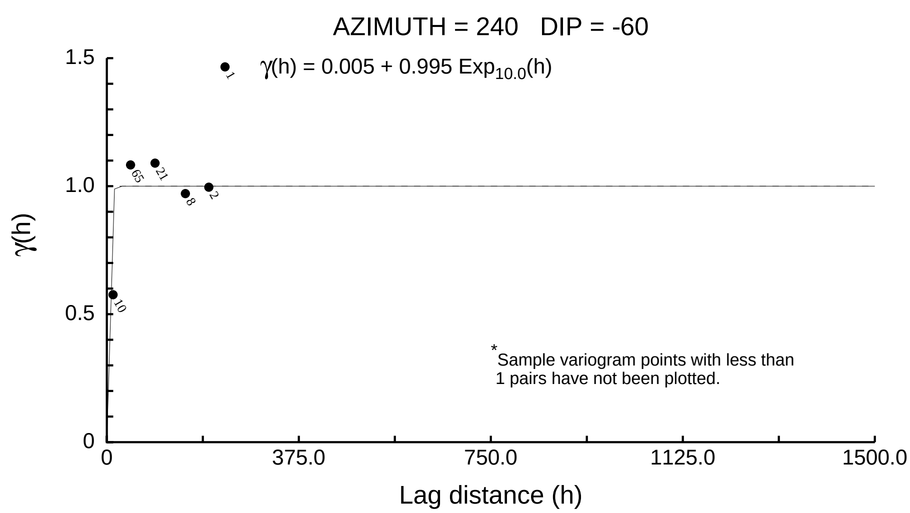
Zone 99 +0.4 gram Correlograms - 5m Comps







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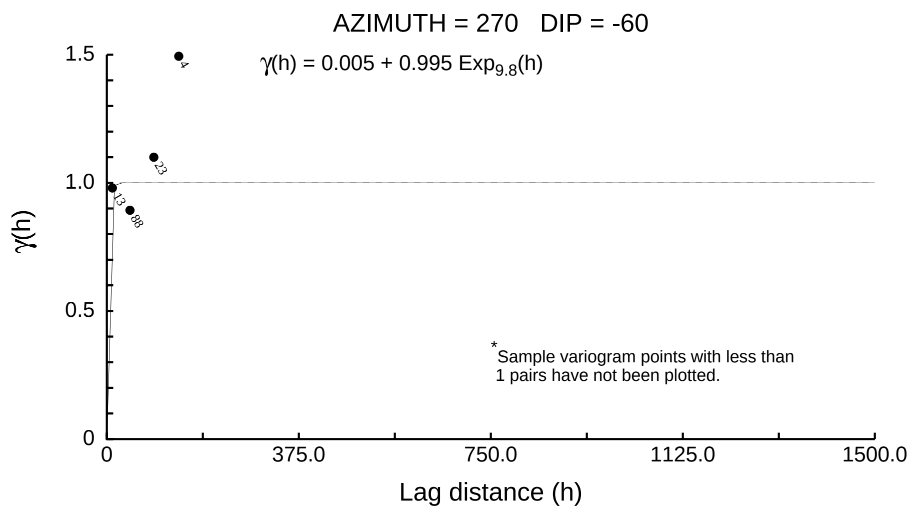
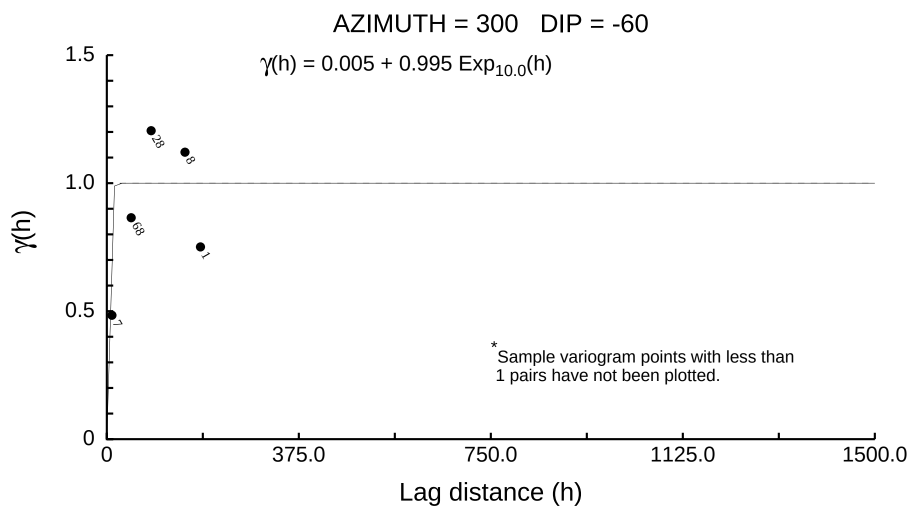
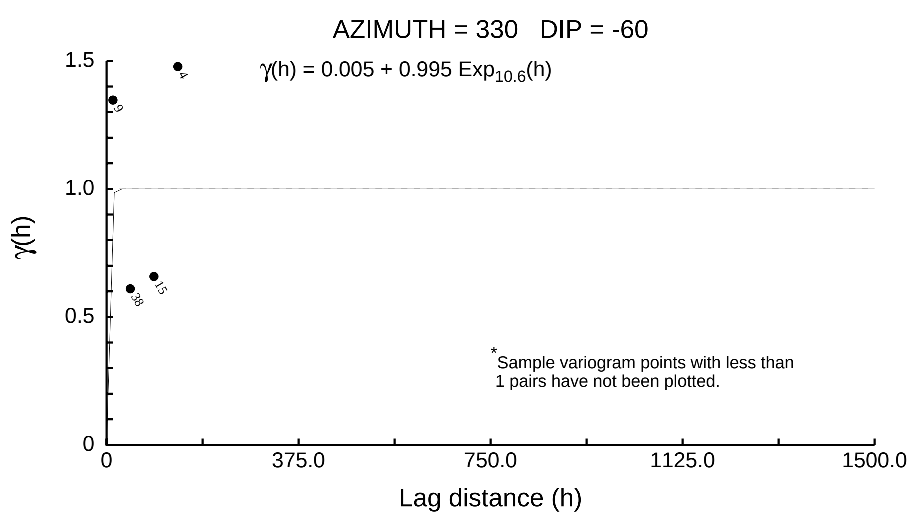
Zone 99 +0.4 gram Correlograms - 5m Comps







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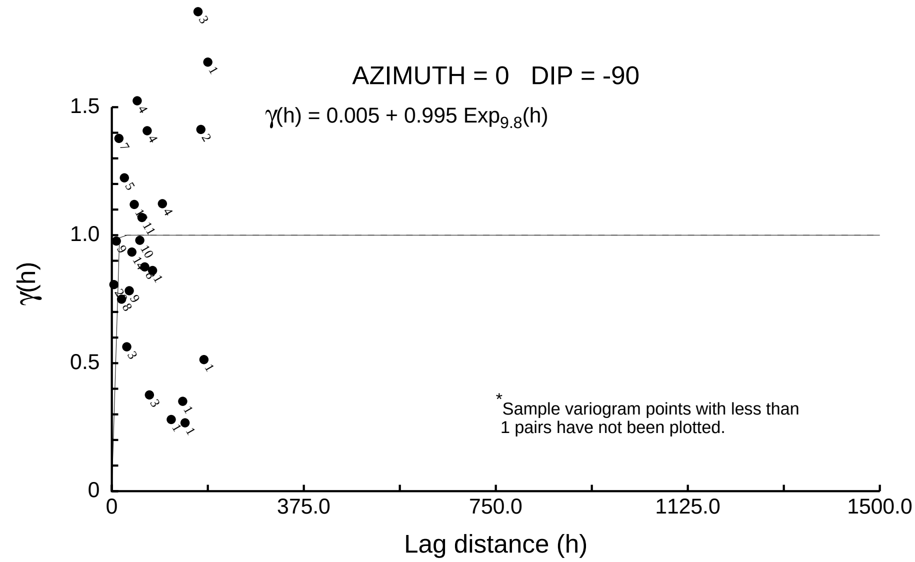
Zone 99 +0.4 gram Correlograms - 5m Comps



Zone 10 Directional Correlograms - 5m Comps

Medsystem and Vulcan Rotation Conventions

Nugget ==> 0.368
C1 ==> 0.632

First Structure -- Exponential with Practical Range

LH Rotation about the Z axis ==> 0
RH Rotation about the X' axis ==> 0
LH Rotation about the Y' axis ==> 75

Range along the Z' axis ==> 15.6	Azimuth ==> 270	Dip ==> 15
Range along the Y' axis ==> 48.4	Azimuth ==> 360	Dip ==> 0
Range along the X' axis ==> 36.8	Azimuth ==> 90	Dip ==> 75

Modeling Criteria

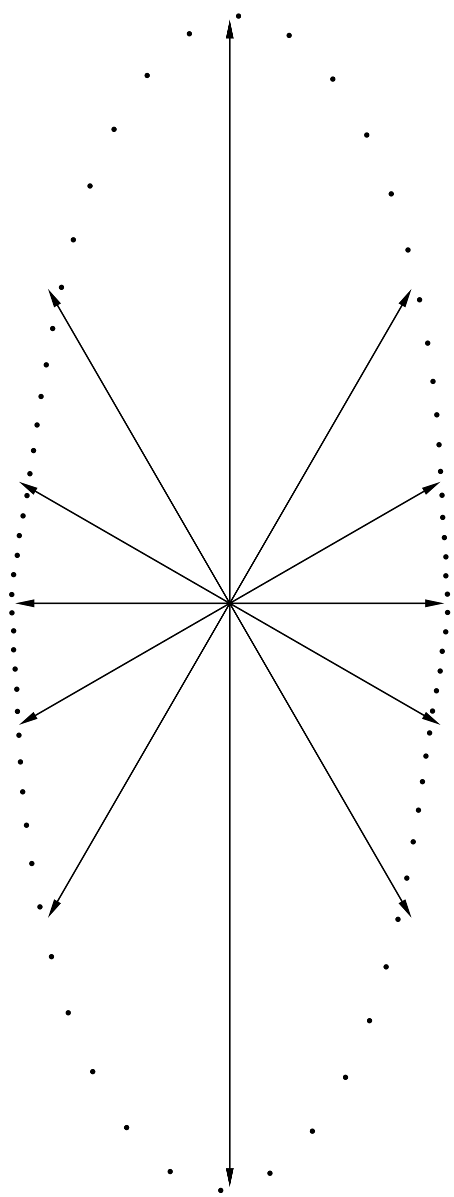
Minimum number pairs req'd ==> 1
Sample variogram points weighted by # pairs

Zone 10 Directional Correlograms - 5m Comps

Structure Number 1

Rose Diagram of Ranges Dipping 0 Degrees
Scale:

50 Units



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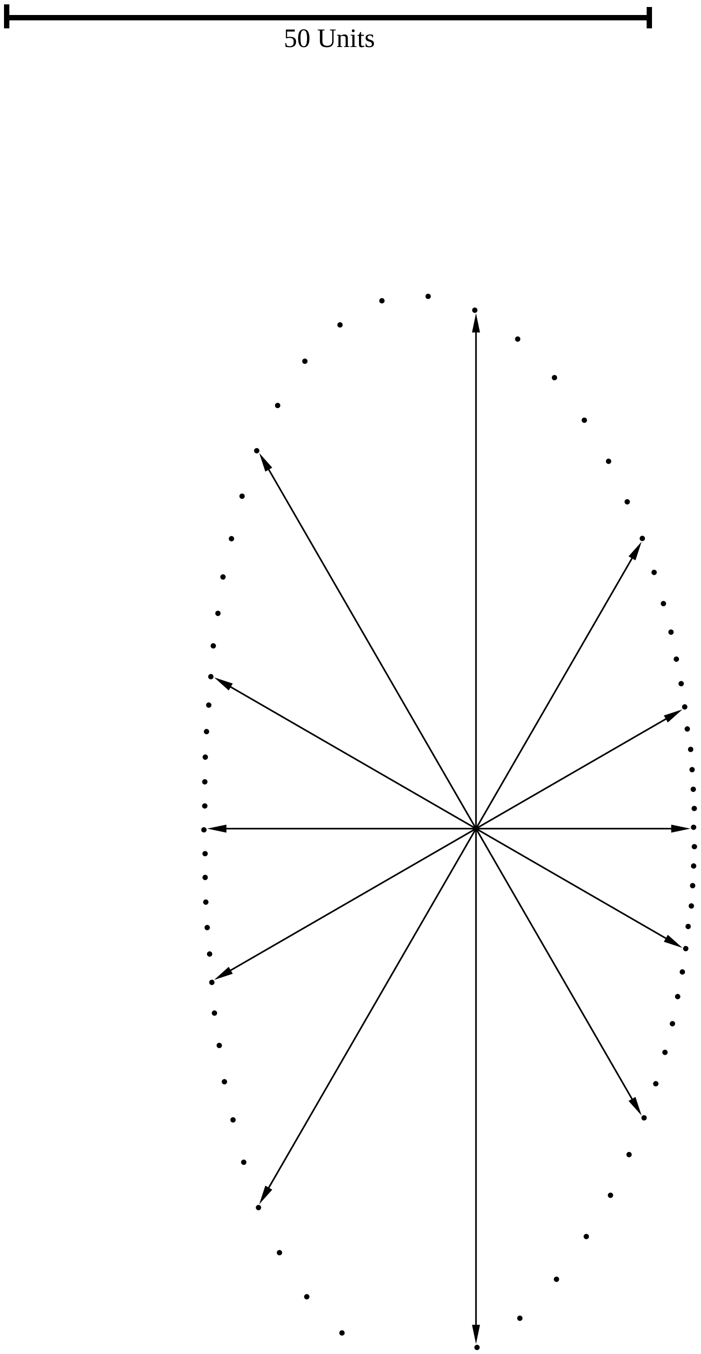
Zone 10 Directional Correlograms - 5m Comps

Structure Number 1

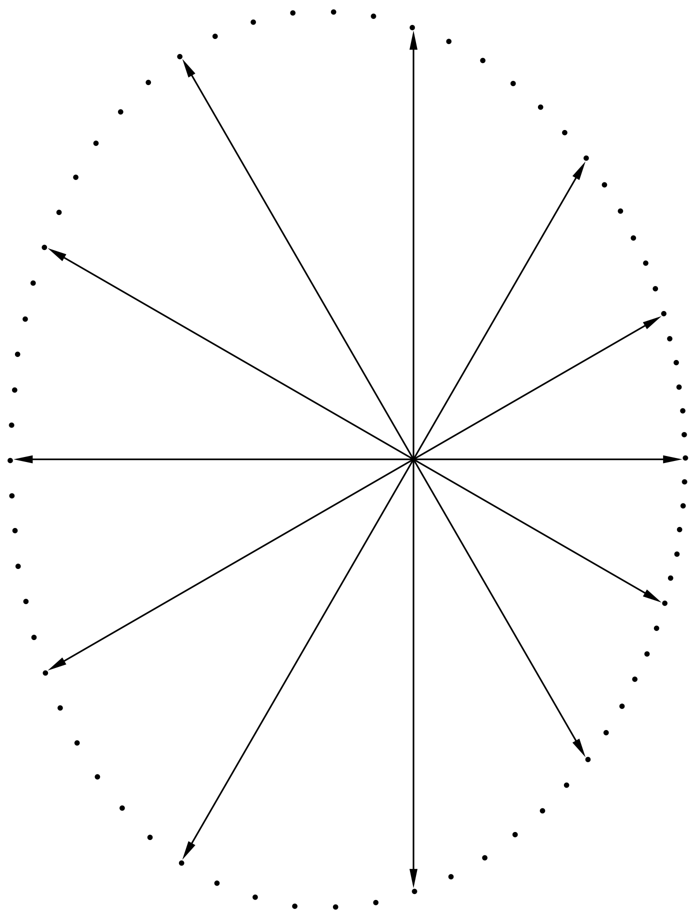
Rose Diagram of Ranges Dipping 30 Degrees
Scale:



Zone 10 Directional Correlograms - 5m Comps

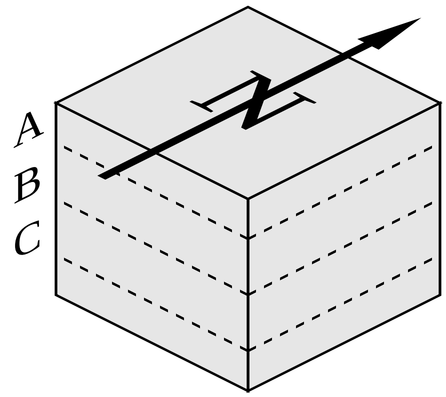
Structure Number 1

Rose Diagram of Ranges Dipping 60 Degrees
Scale:

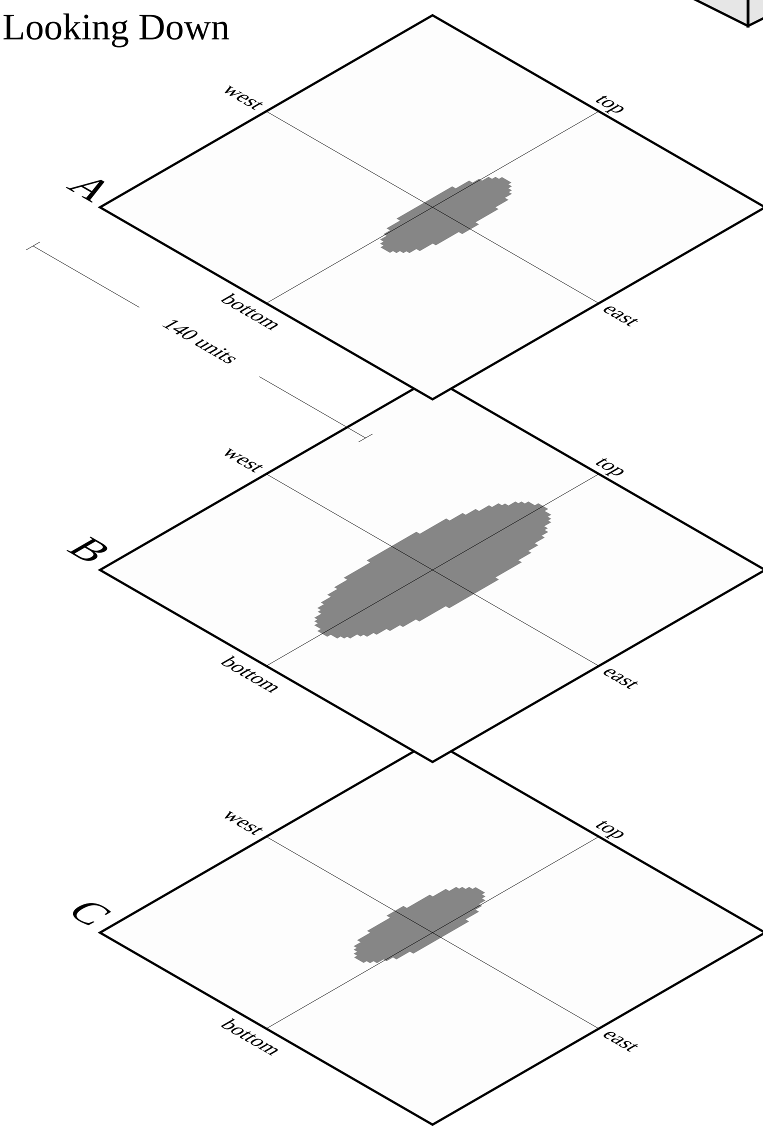


Horizontal Slices Through the Ellipsoids

Reference Cube



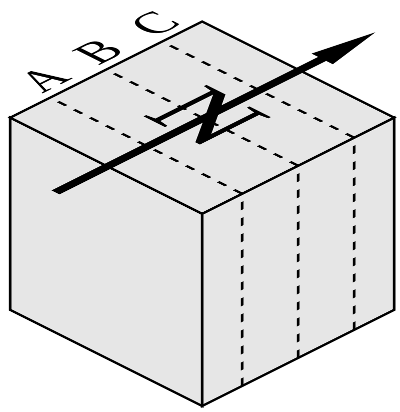
X-Y Planes Looking Down



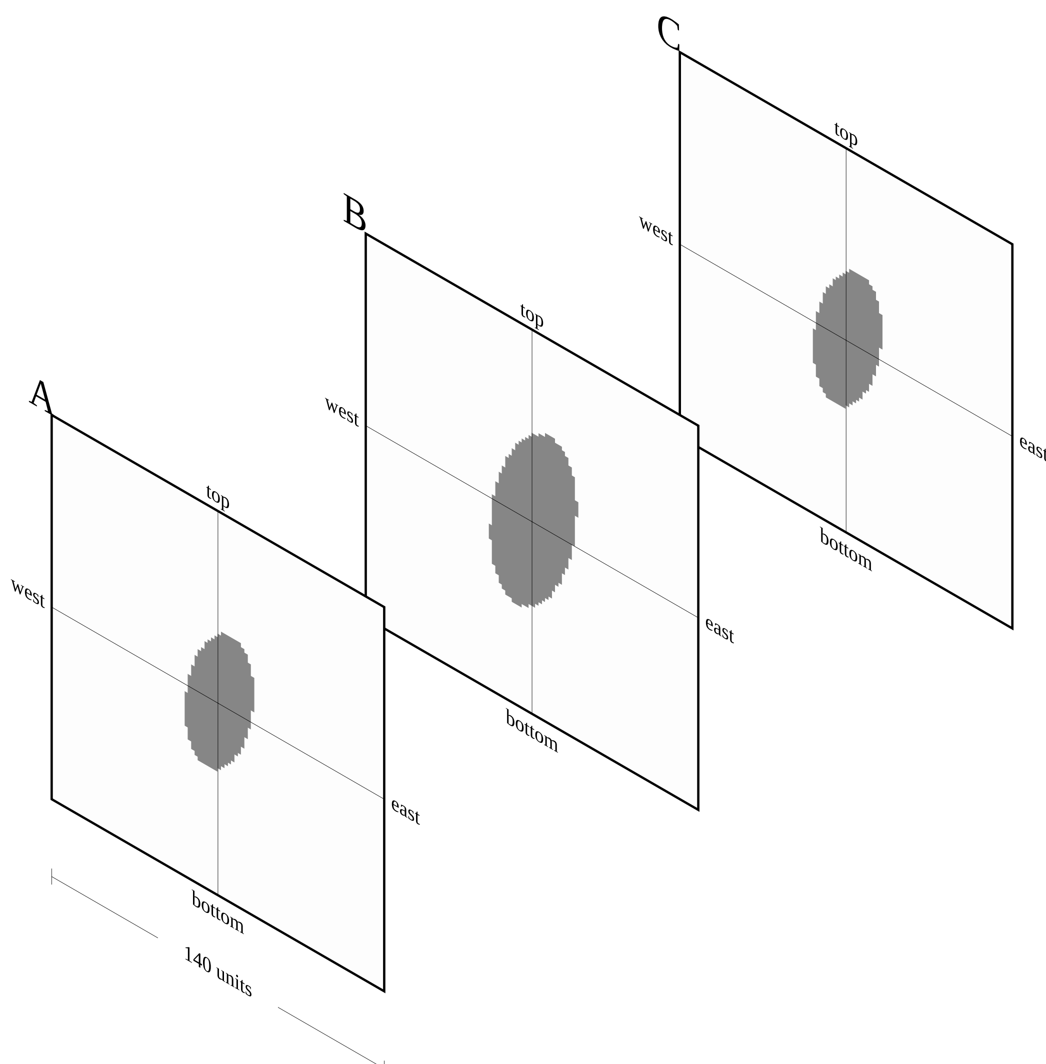
Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Cross Section Views Through the Ellipsoids

Reference Cube



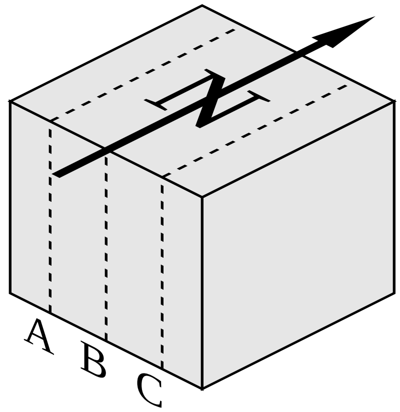
X-Z Planes Looking North



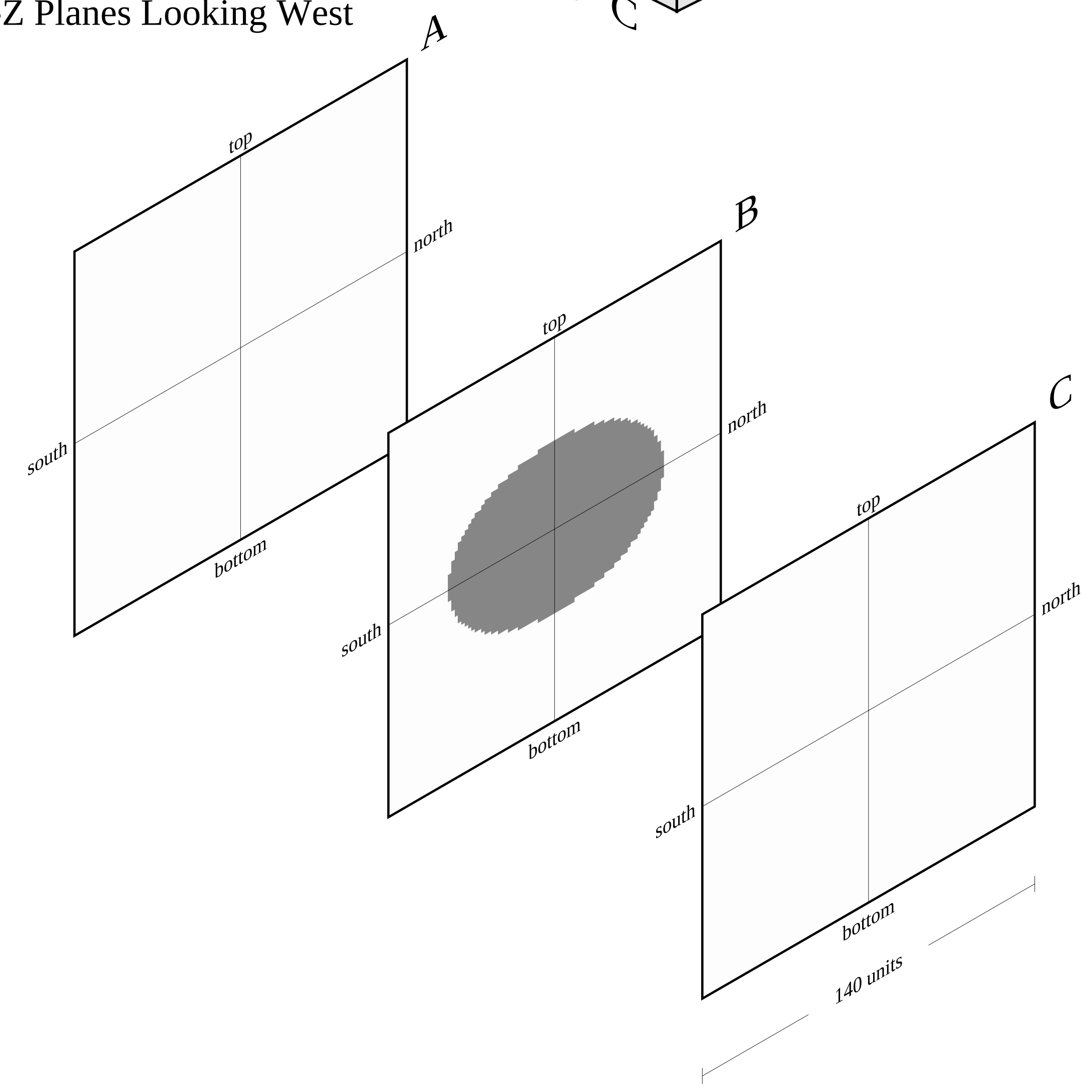
Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Long Section Views Through the Ellipsoids

Reference Cube

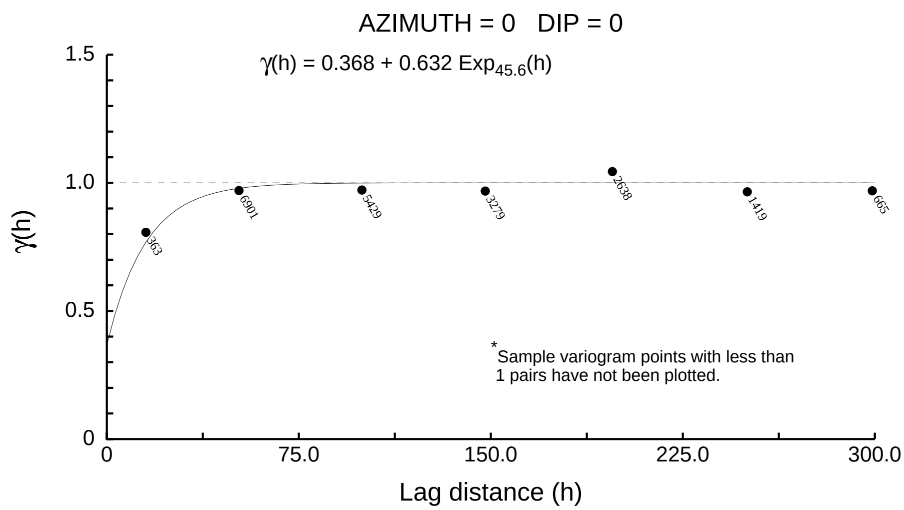


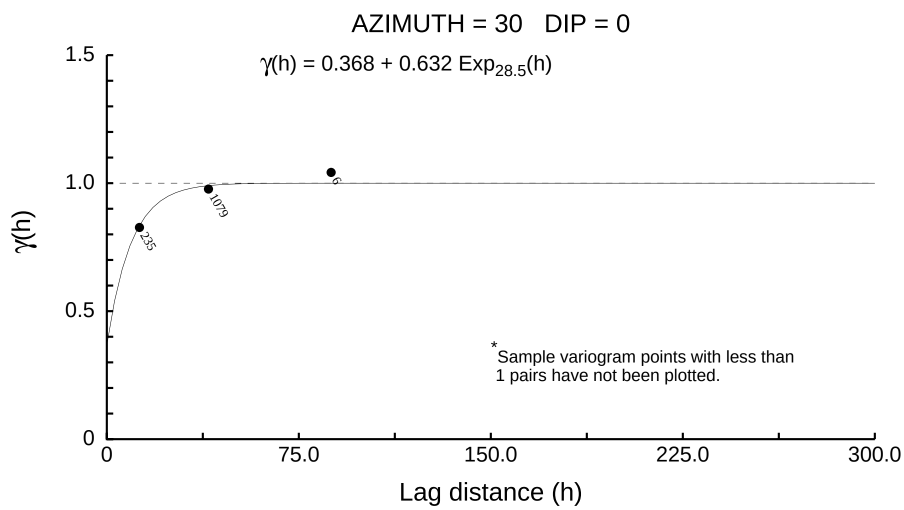
Y-Z Planes Looking West

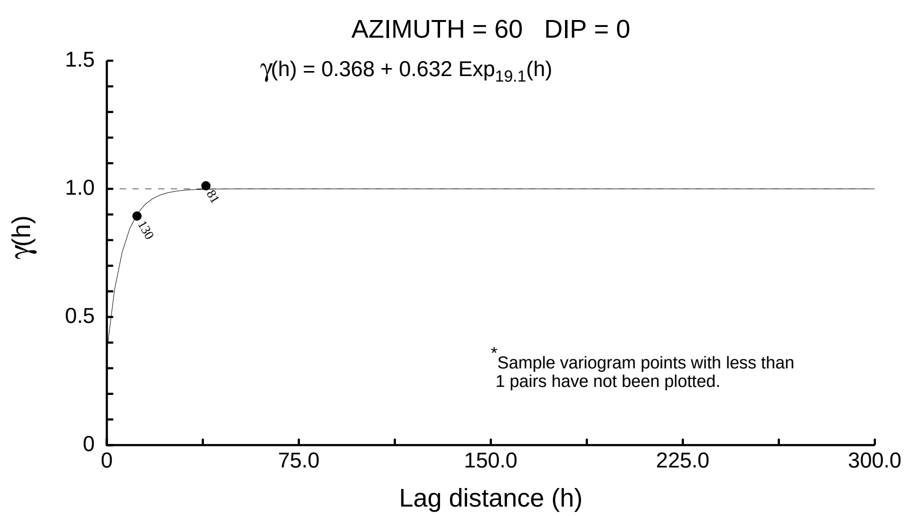


Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

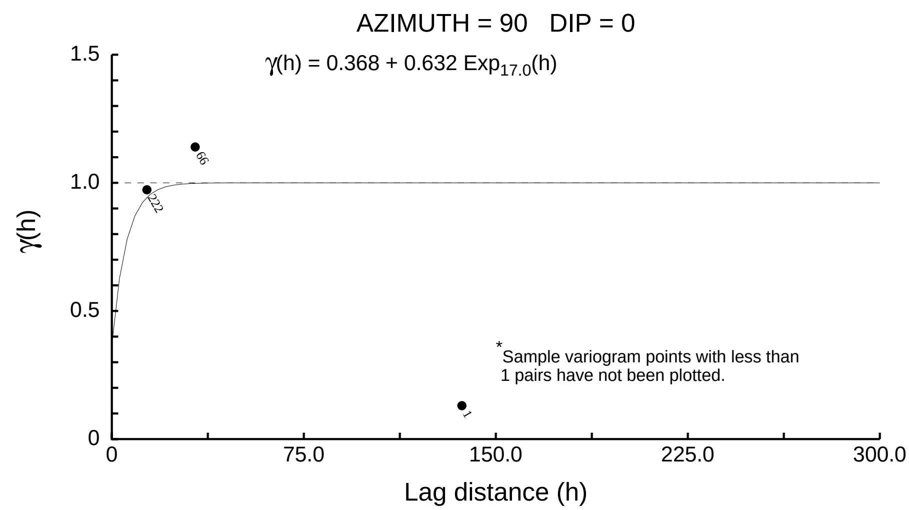
Zone 10 Directional Correlograms - 5m Comps

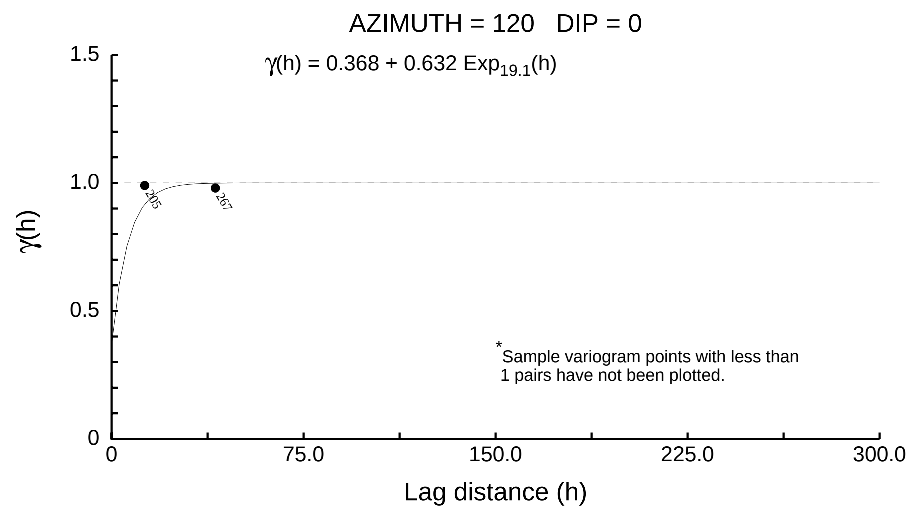


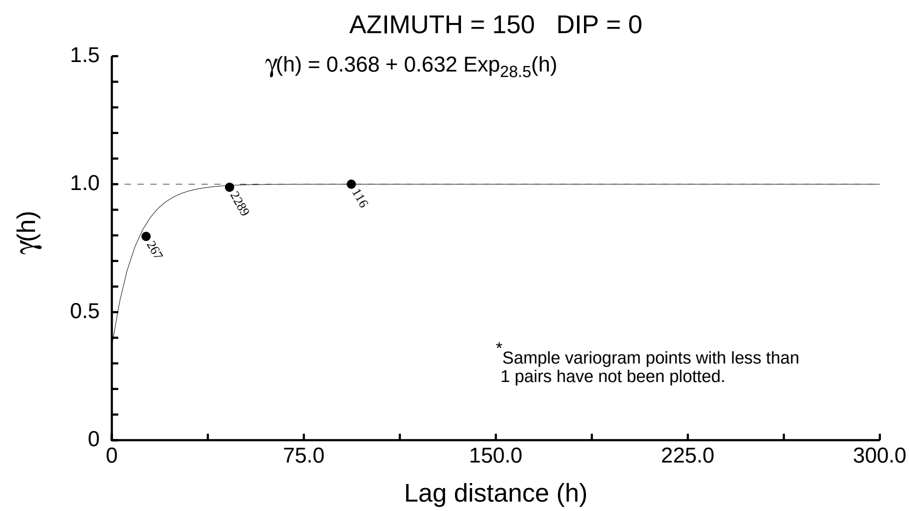




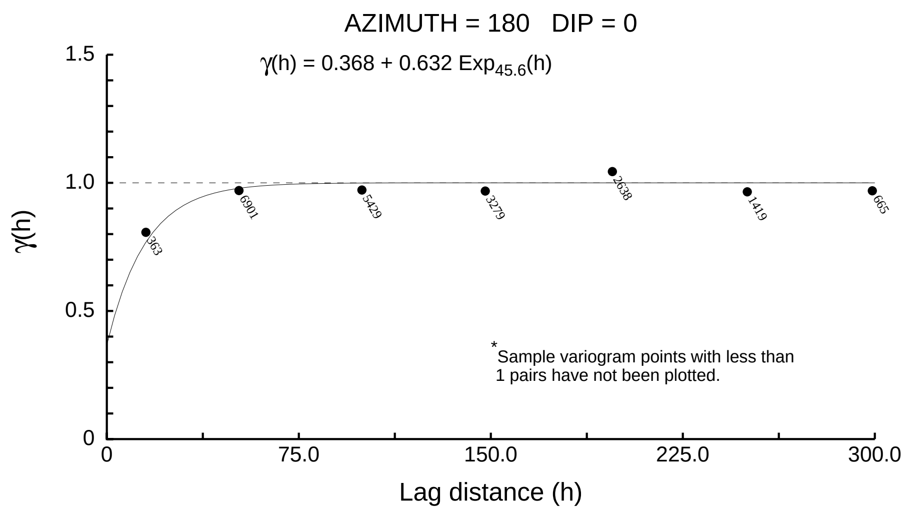
Zone 10 Directional Correlograms - 5m Comps

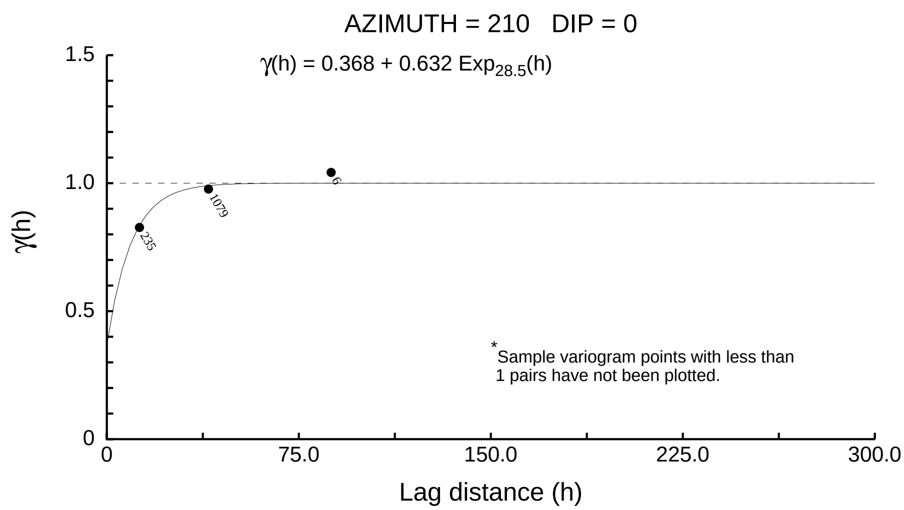


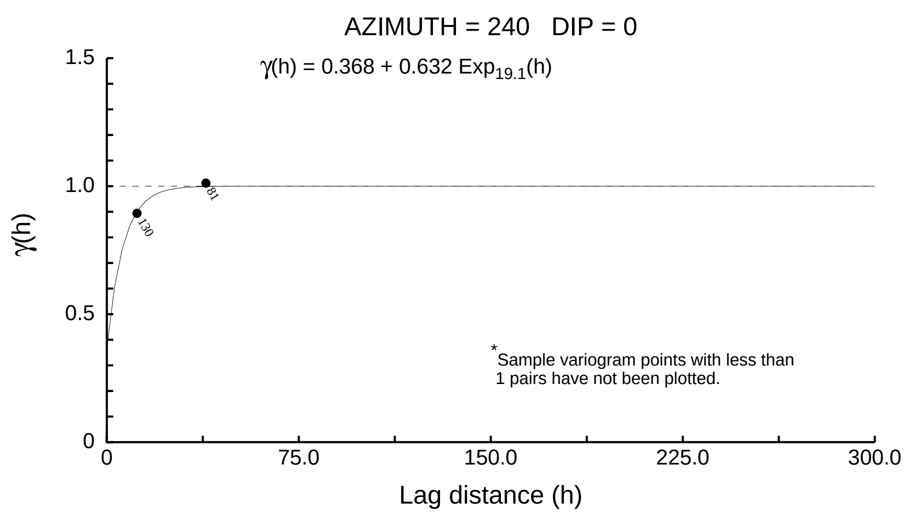




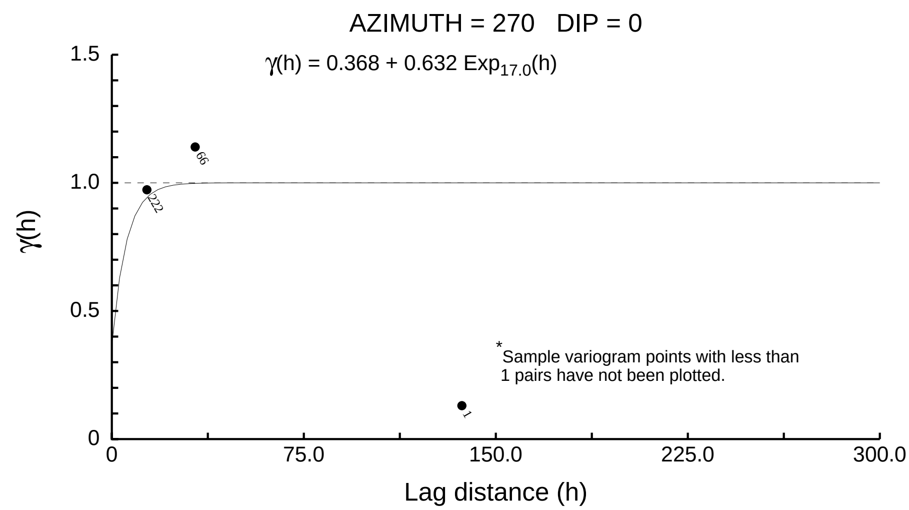
Zone 10 Directional Correlograms - 5m Comps

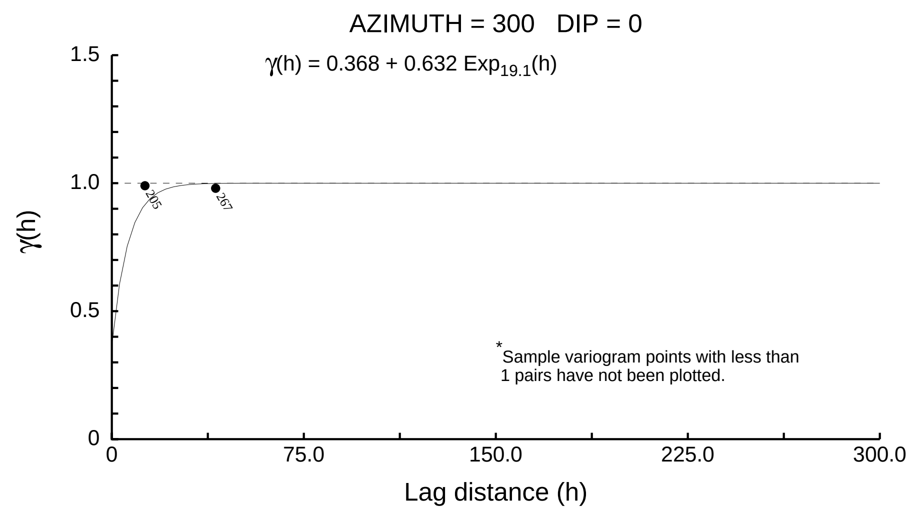


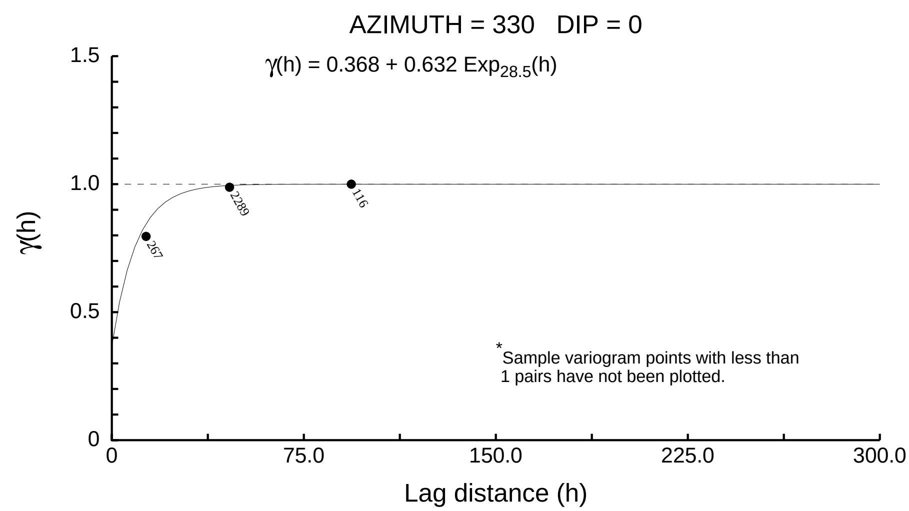




Zone 10 Directional Correlograms - 5m Comps







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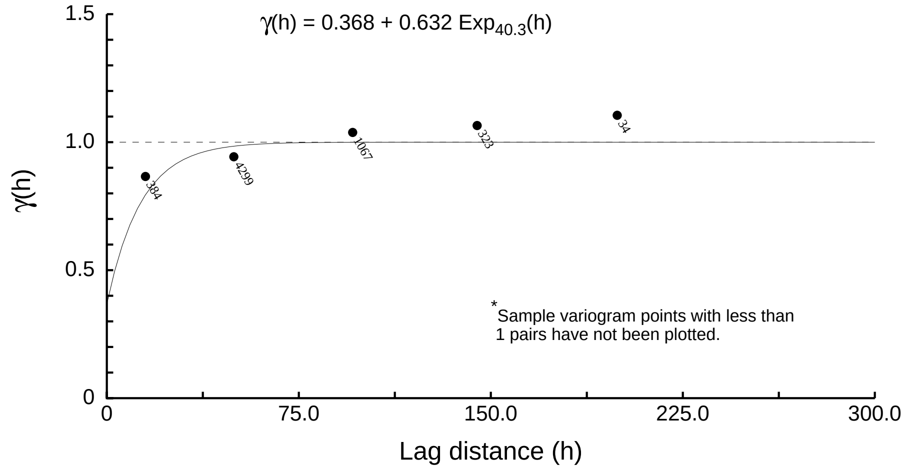
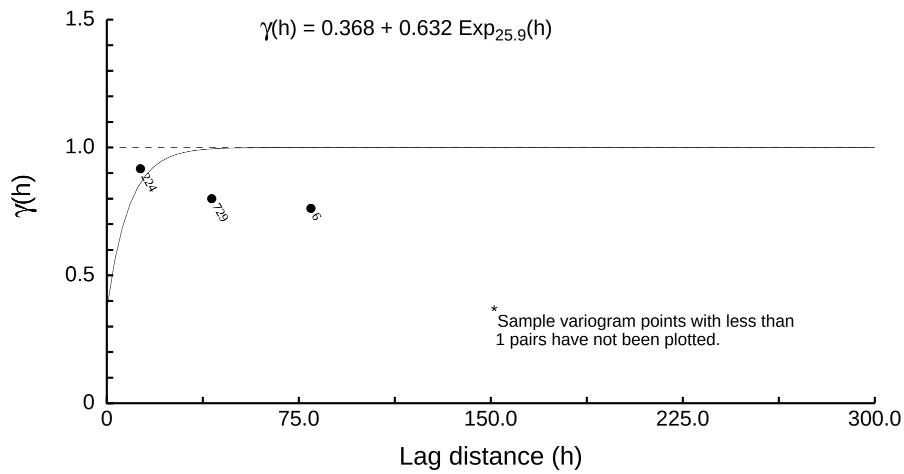
Zone 10 Directional Correlograms - 5m Comps

AZIMUTH = 0   DIP = -30



AZIMUTH = 30   DIP = -30



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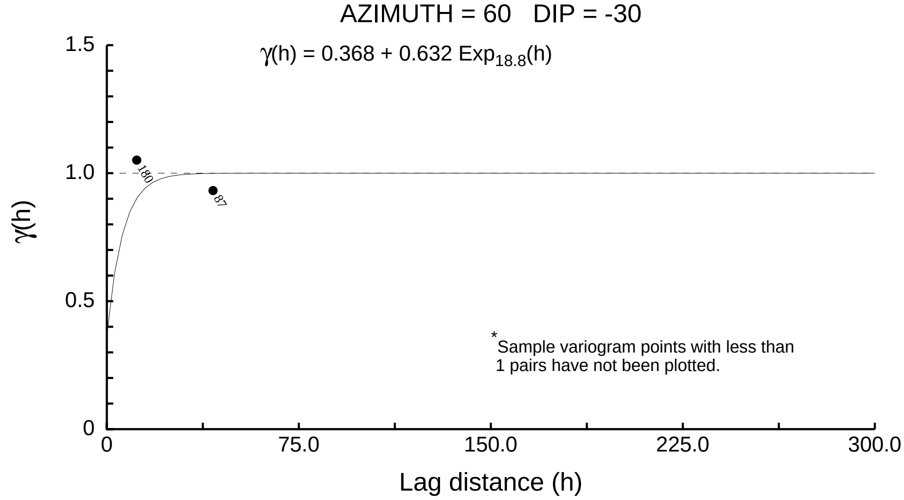
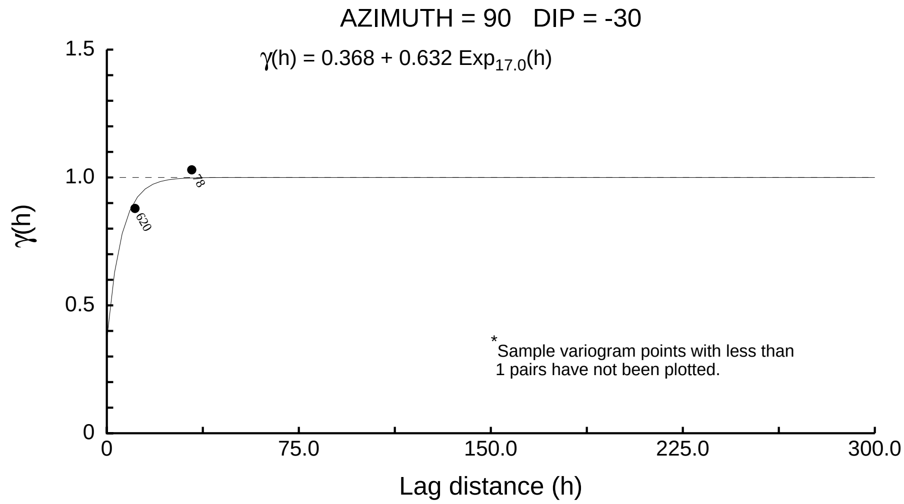
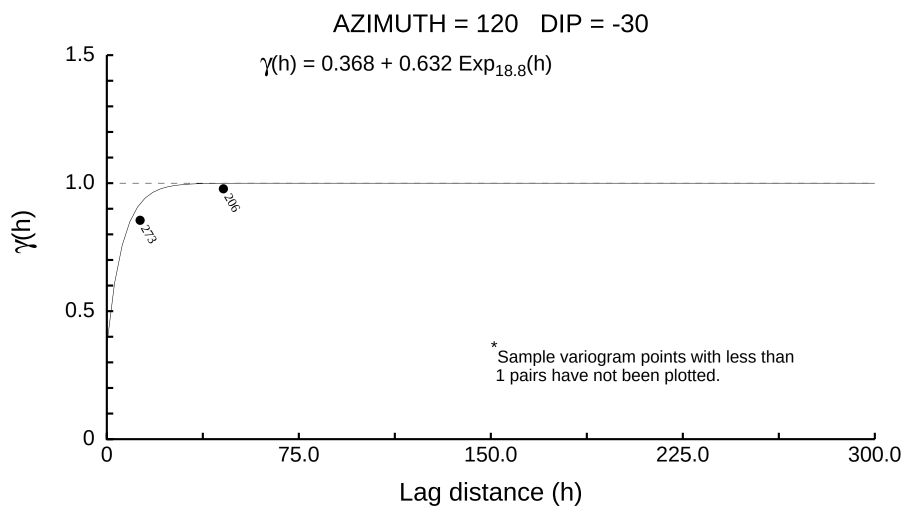
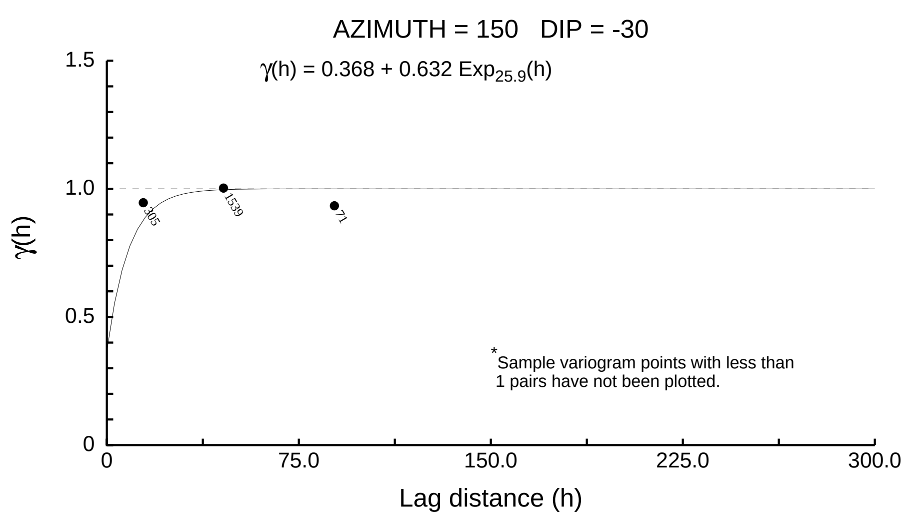


Zone 10 Directional Correlograms - 5m Comps







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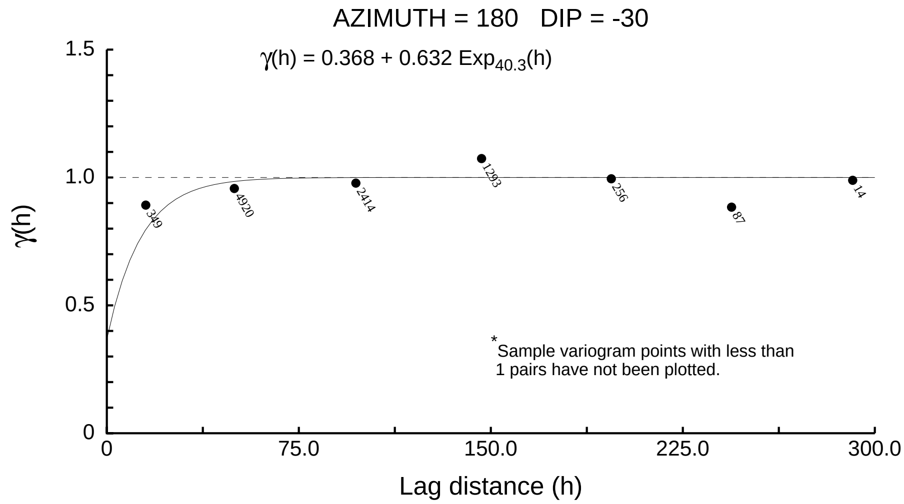
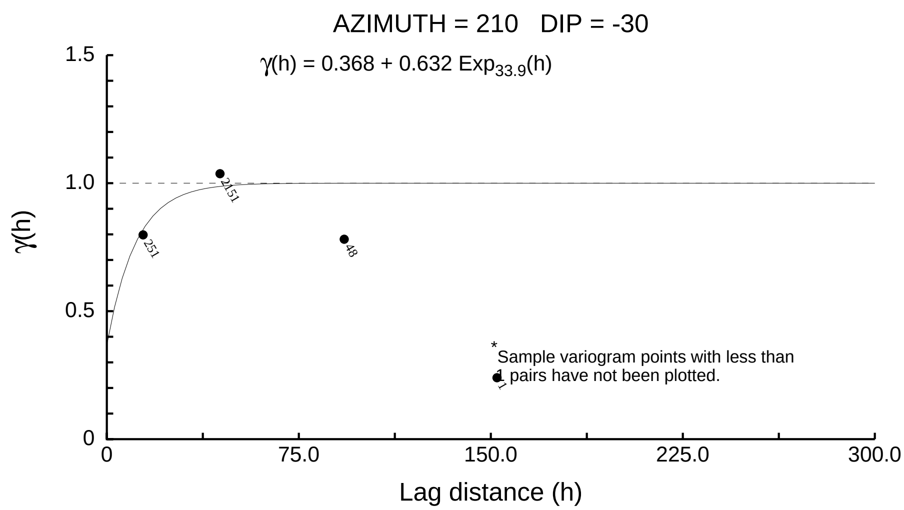
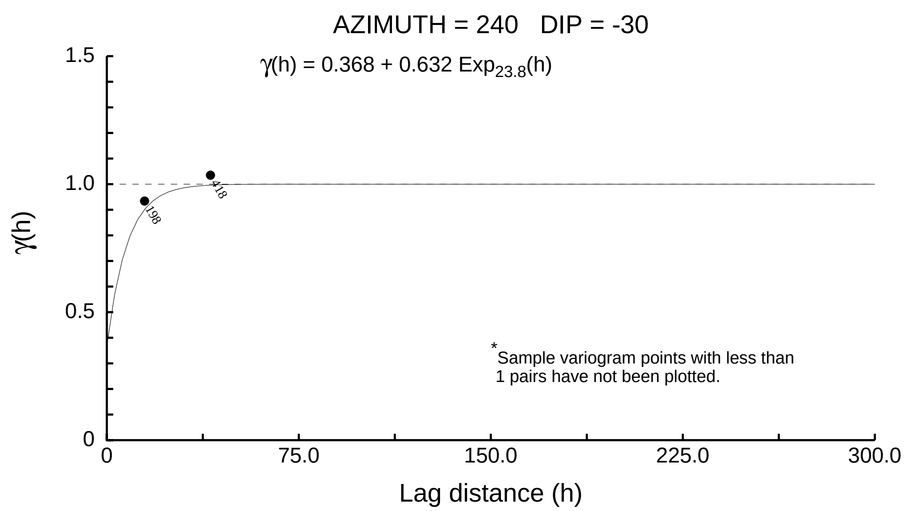
Zone 10 Directional Correlograms - 5m Comps







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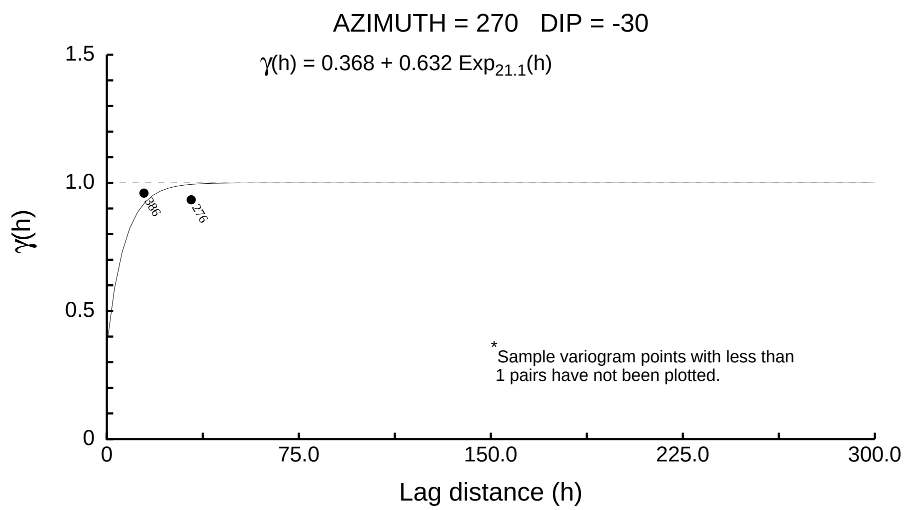
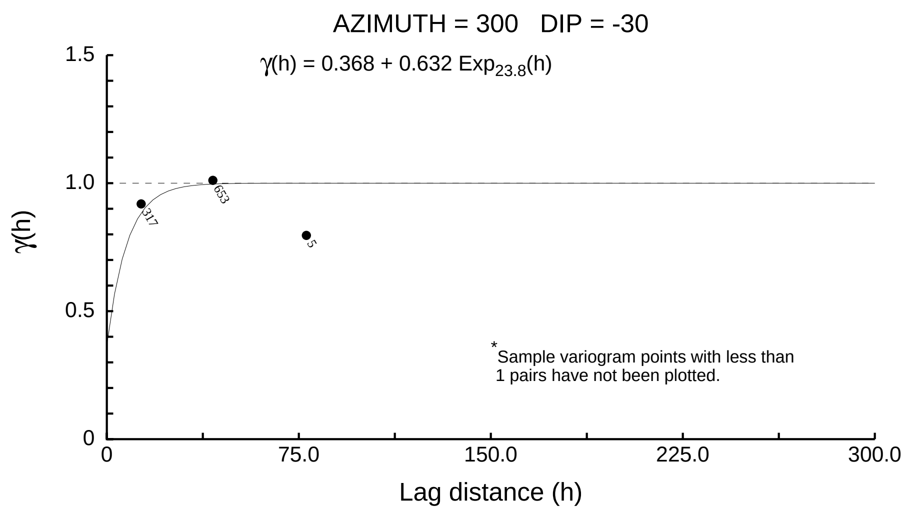
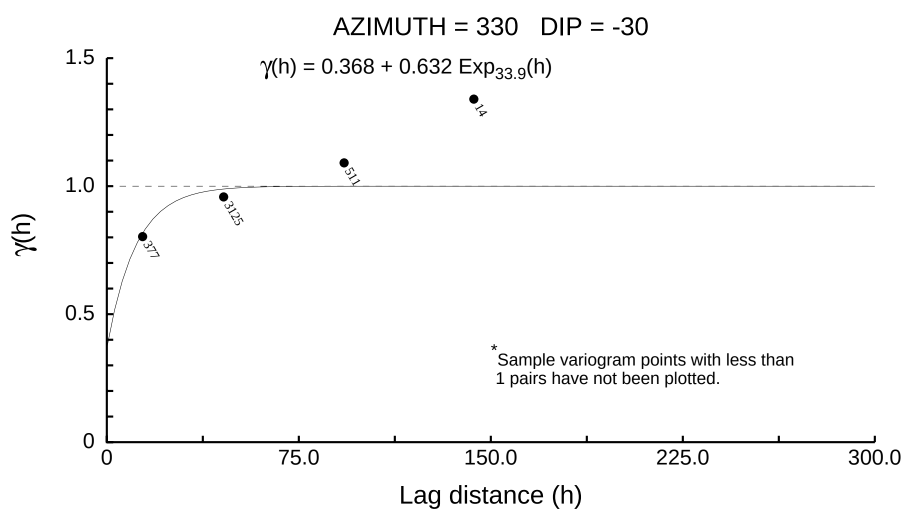
Zone 10 Directional Correlograms - 5m Comps







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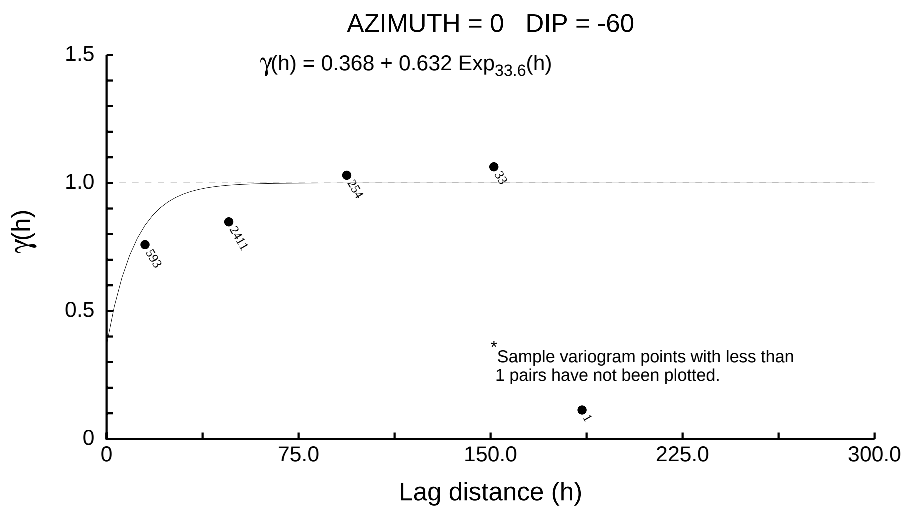
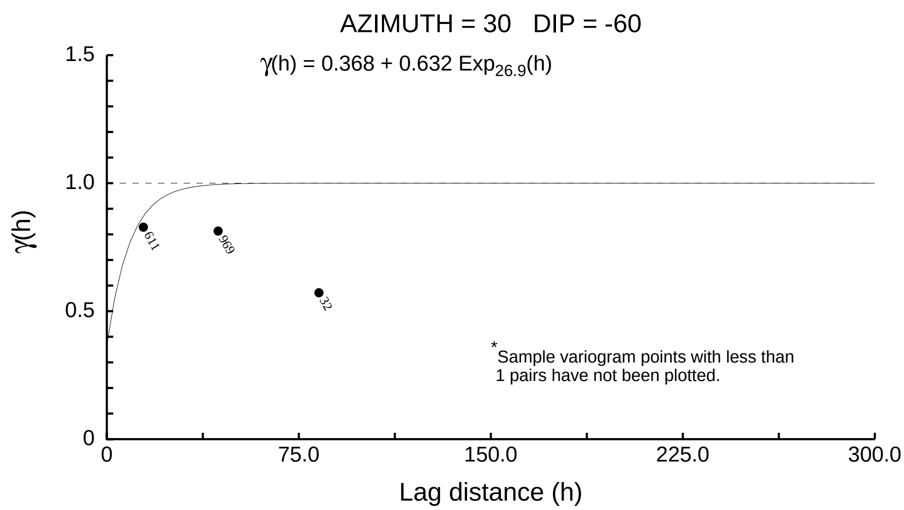
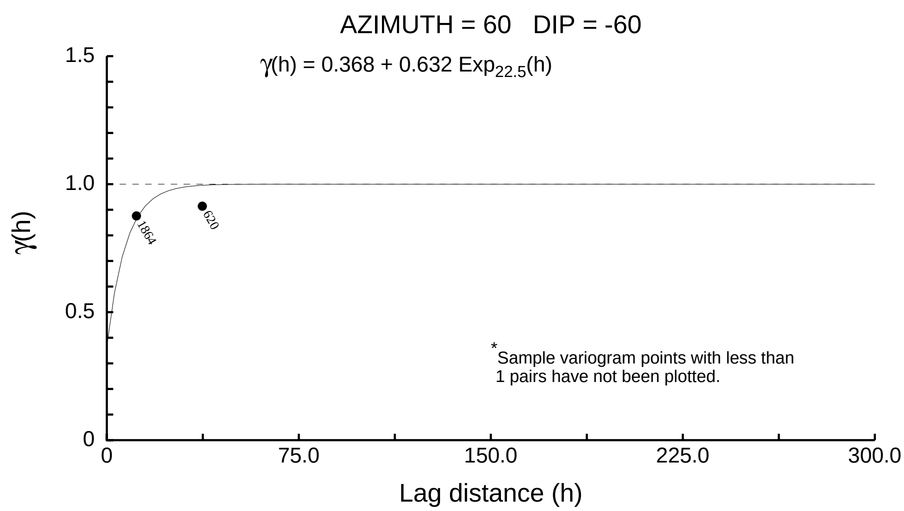
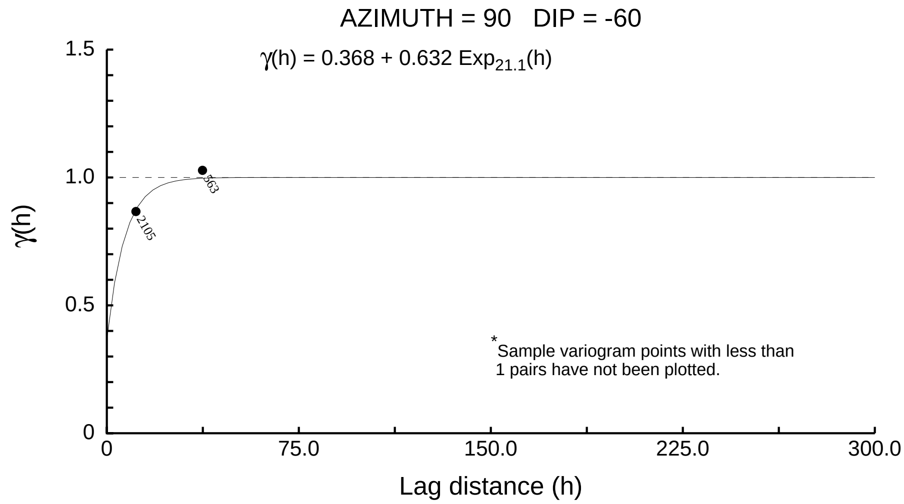
Zone 10 Directional Correlograms - 5m Comps

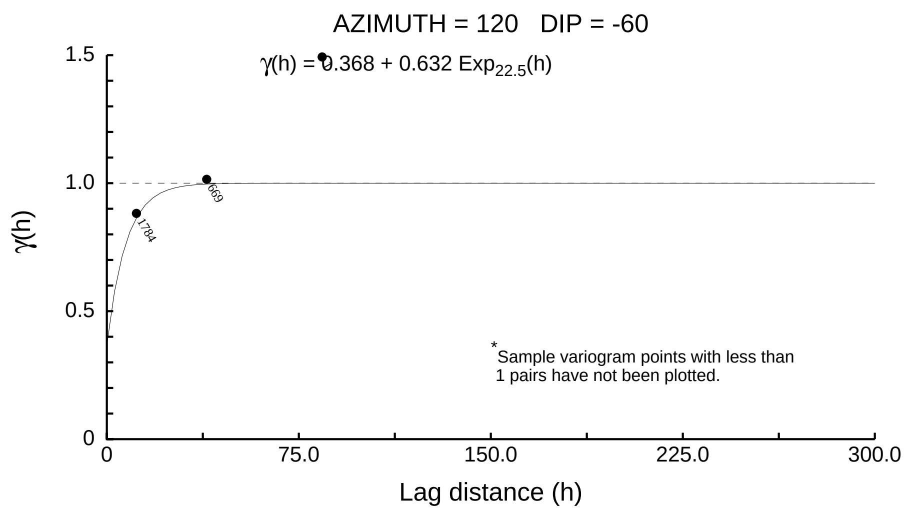


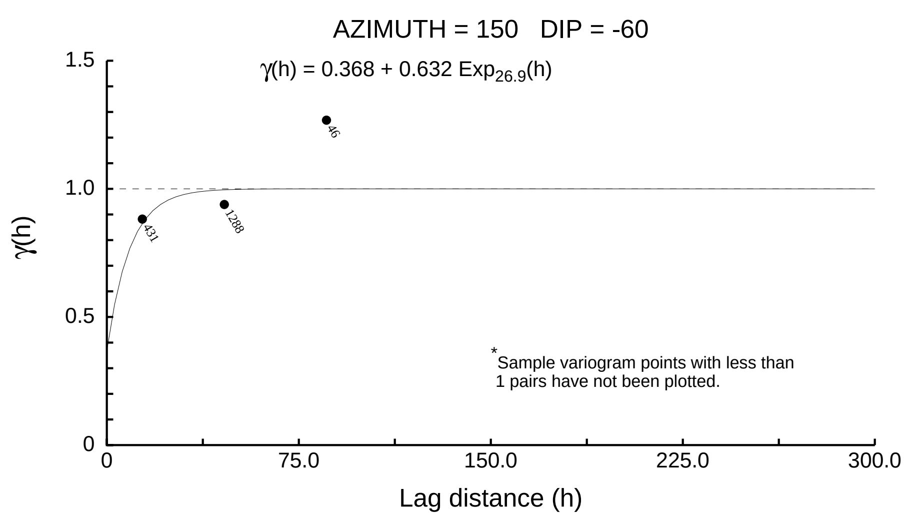




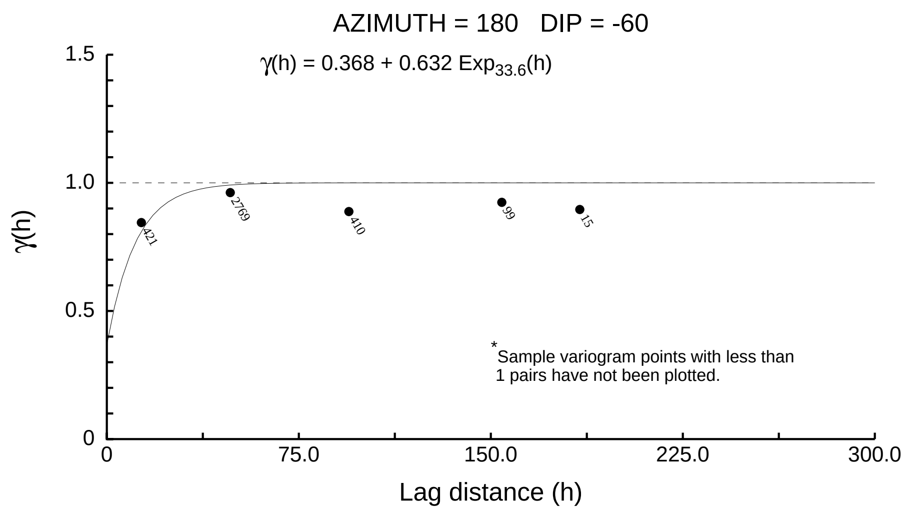
Zone 10 Directional Correlograms - 5m Comps

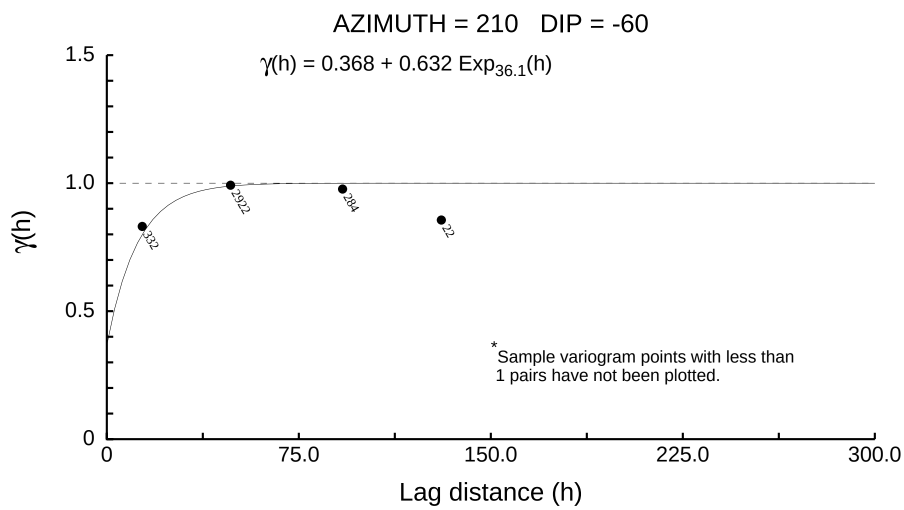


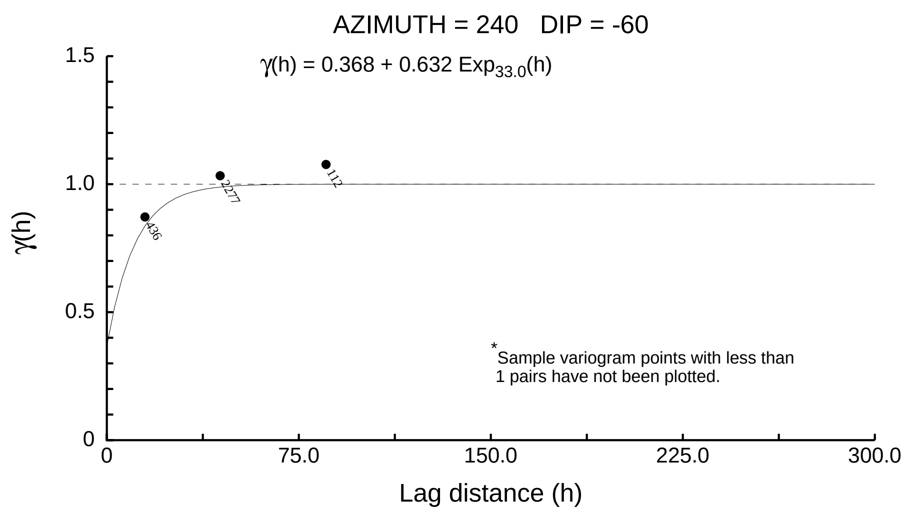




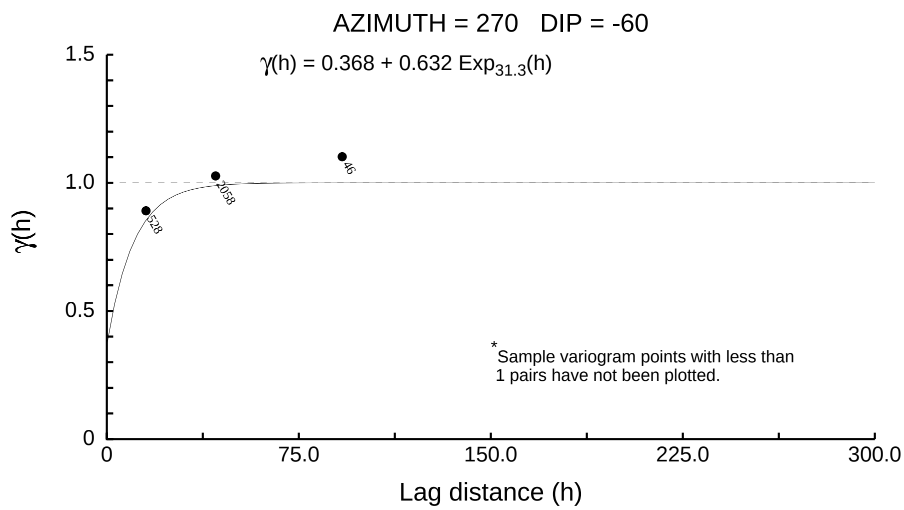
Zone 10 Directional Correlograms - 5m Comps

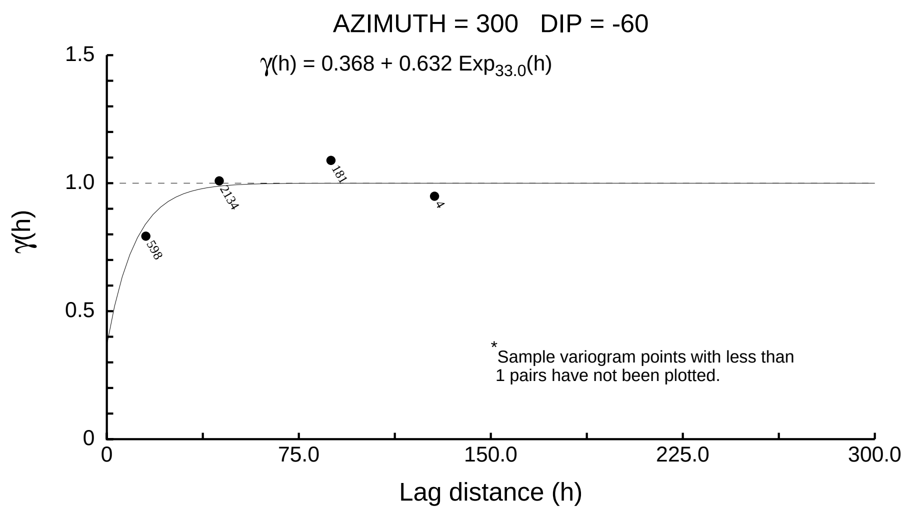


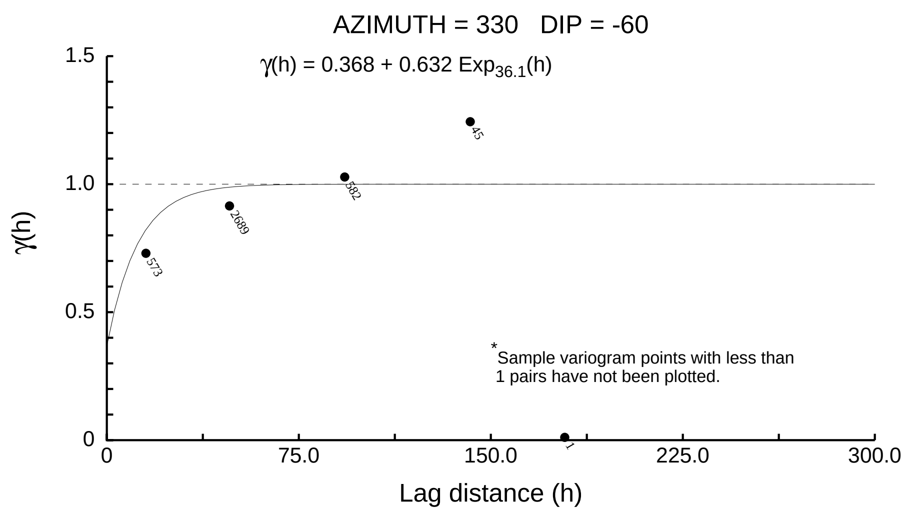




Zone 10 Directional Correlograms - 5m Comps







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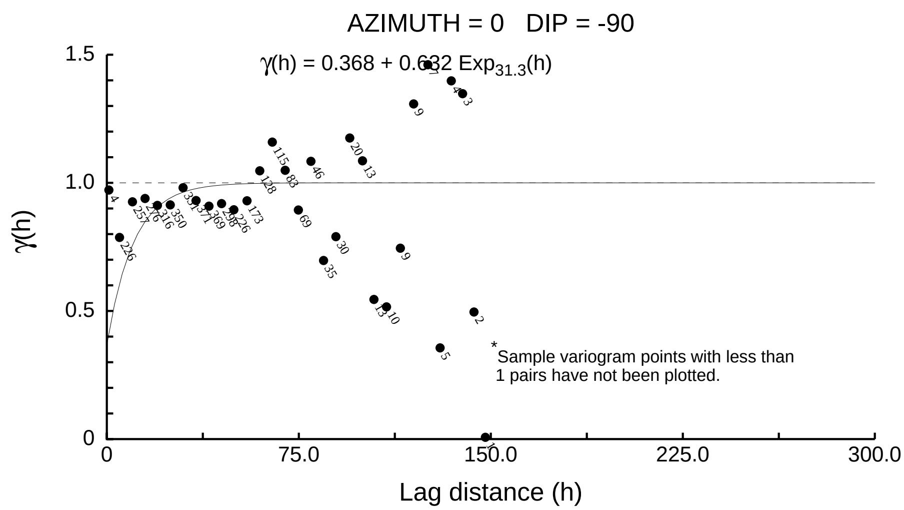
Zone 10 Directional Correlograms - 5m Comps



Zone 3 Directional Correlograms - 5m Comps

Medsystem and Vulcan Rotation Conventions

Nugget ==> 0.478
C1 ==> 0.522

First Structure -- Exponential with Practical Range

LH Rotation about the Z axis ==> 0
RH Rotation about the X' axis ==> 0
LH Rotation about the Y' axis ==> 75

Range along the Z' axis ==> 77.7	Azimuth ==> 270	Dip ==> 15
Range along the Y' axis ==> 124.6	Azimuth ==> 360	Dip ==> 0
Range along the X' axis ==> 41.6	Azimuth ==> 90	Dip ==> 75

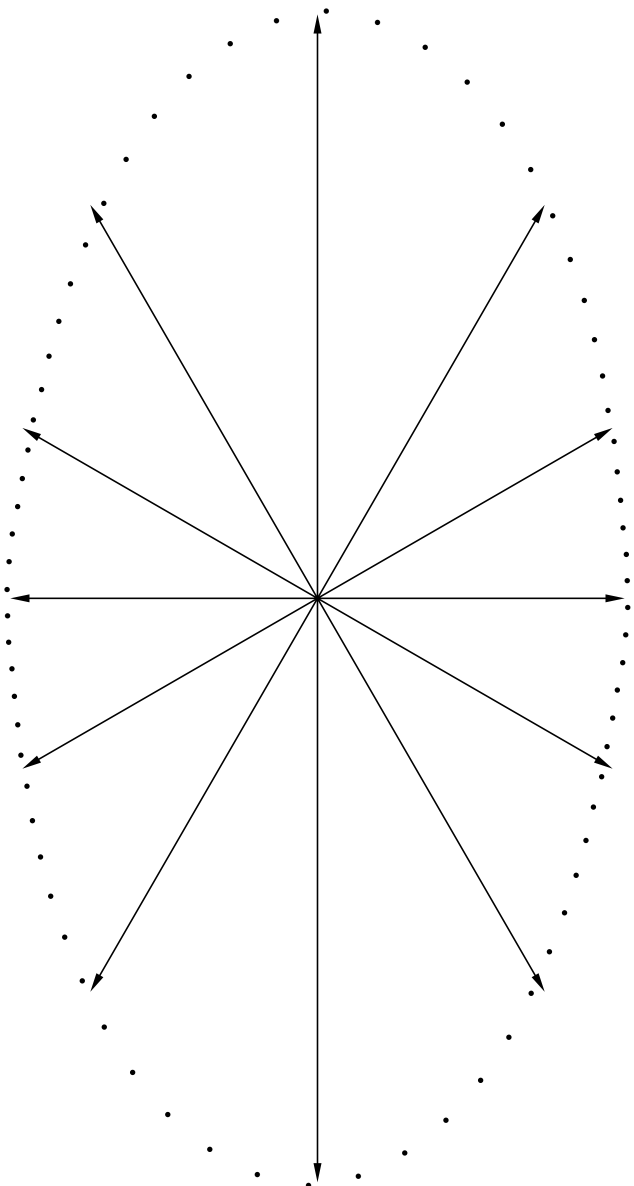
Modeling Criteria

Minimum number pairs req'd ==> 1
Sample variogram points weighted by # pairs

Zone 3 Directional Correlograms - 5m Comps

Structure Number 1

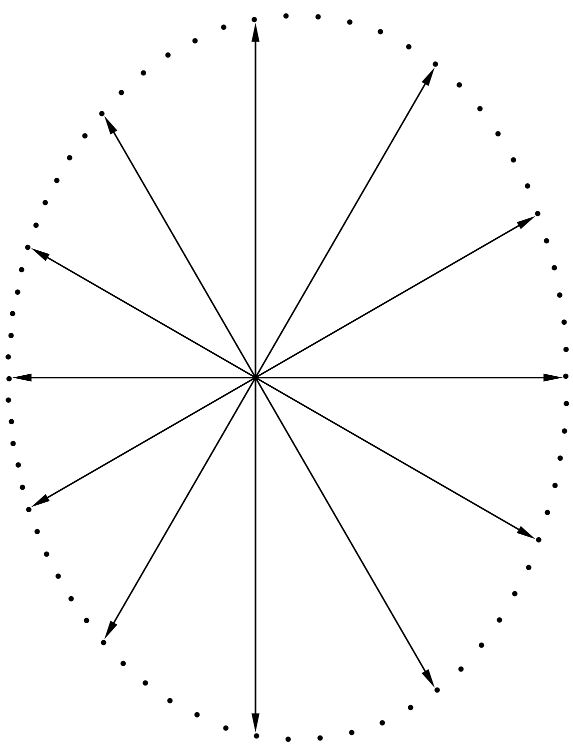
Rose Diagram of Ranges Dipping 0 Degrees
Scale:



Zone 3 Directional Correlograms - 5m Comps

Structure Number 1

Rose Diagram of Ranges Dipping 30 Degrees
Scale:



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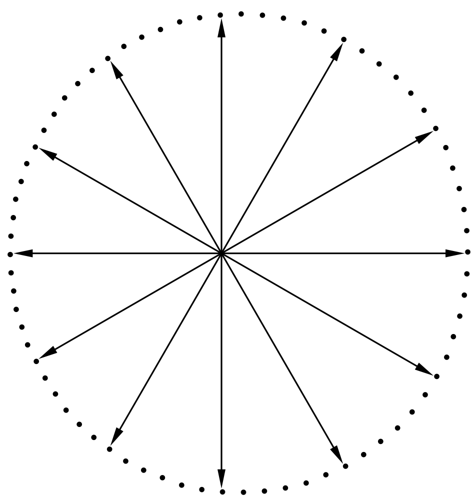
Zone 3 Directional Correlograms - 5m Comps

Structure Number 1

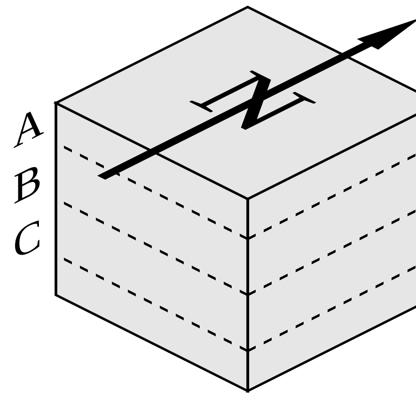
Rose Diagram of Ranges Dipping 60 Degrees

Scale:

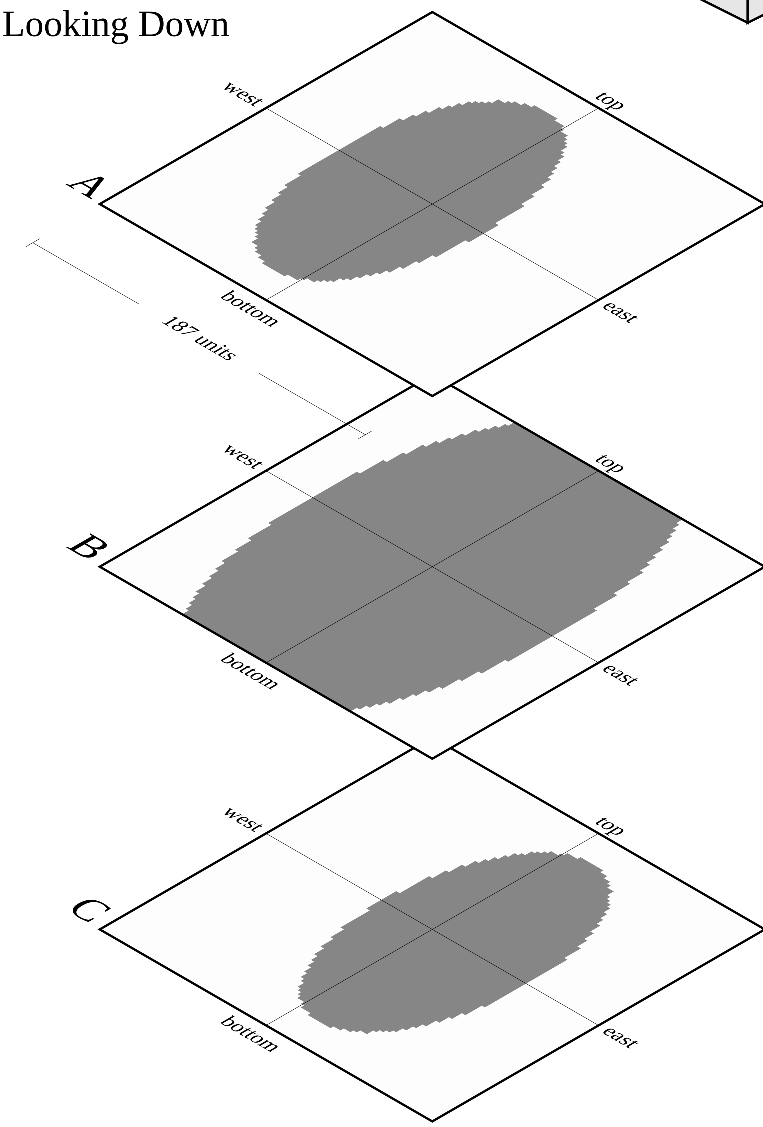


Horizontal Slices Through the Ellipsoids

Reference Cube



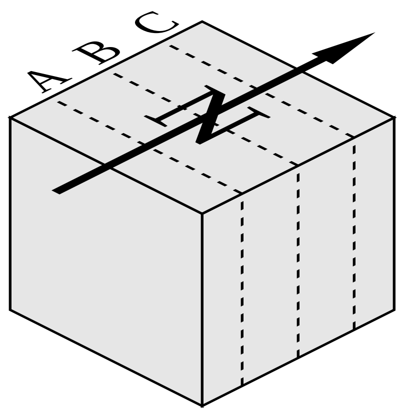
X-Y Planes Looking Down



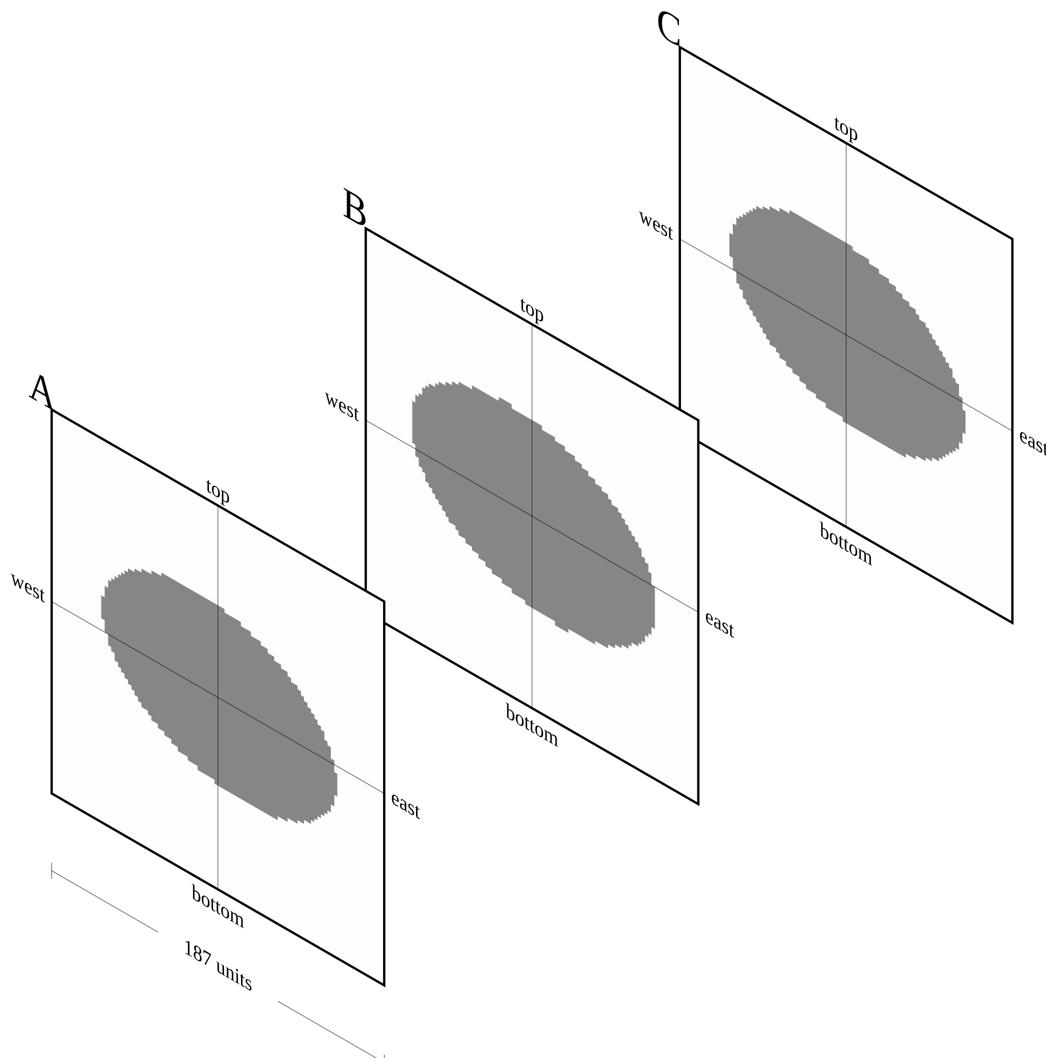
Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Cross Section Views Through the Ellipsoids

Reference Cube



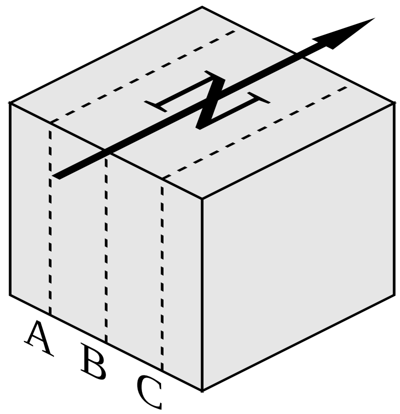
X-Z Planes Looking North



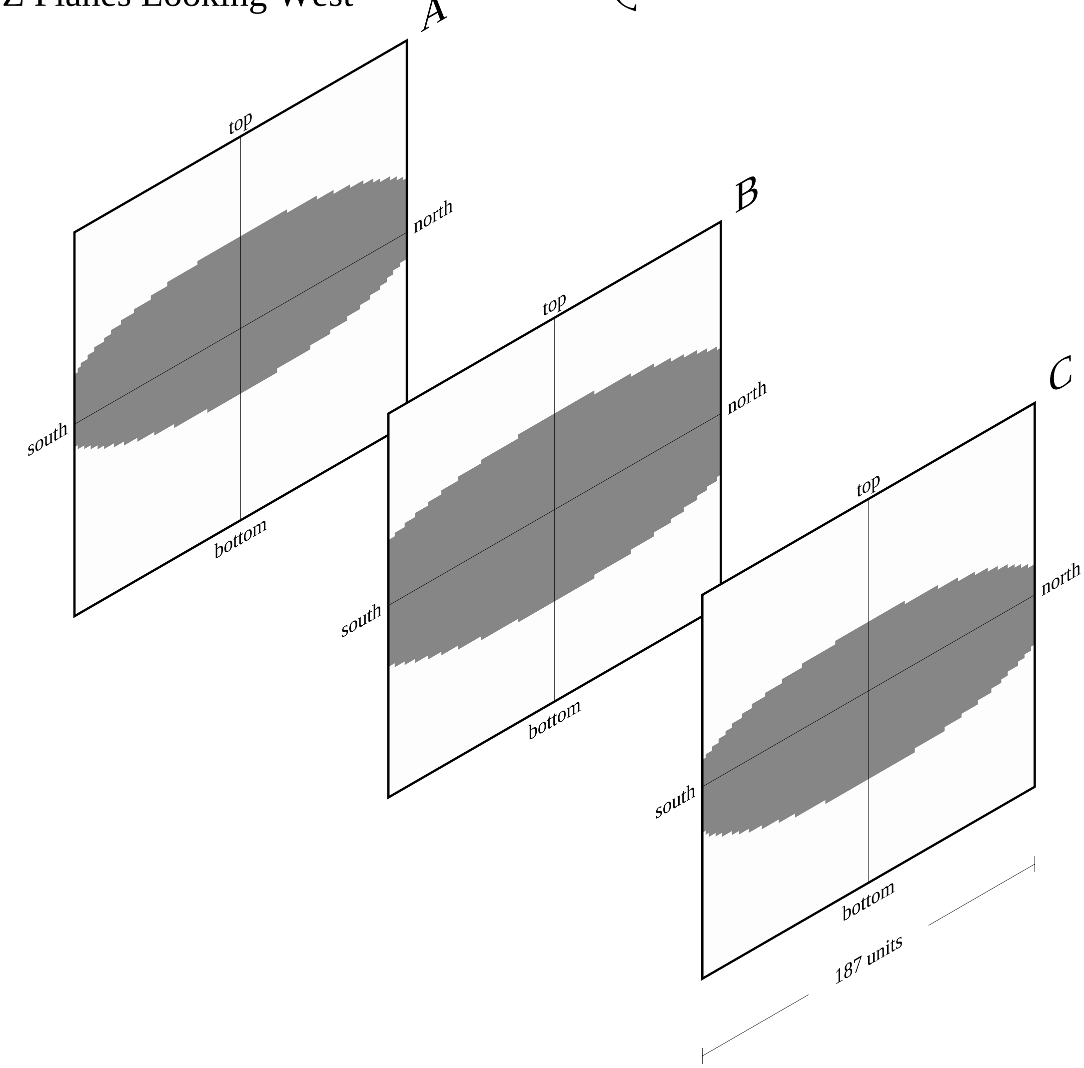
Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Long Section Views Through the Ellipsoids

Reference Cube

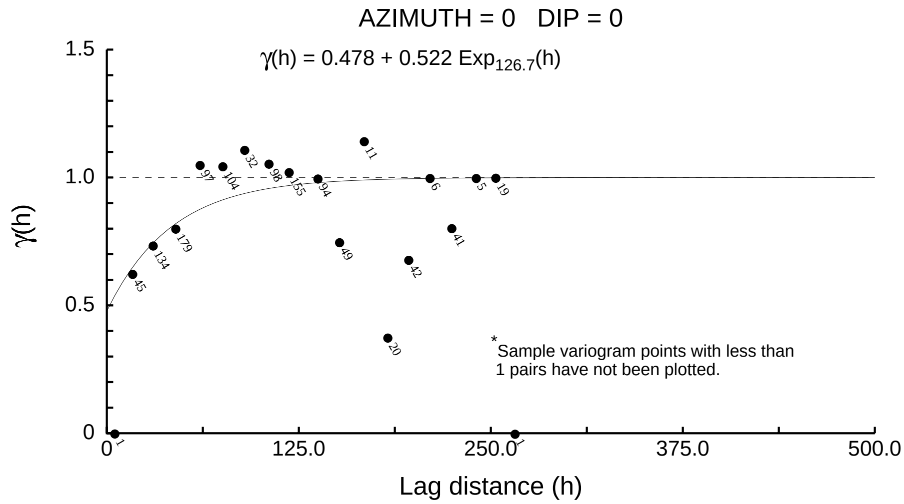


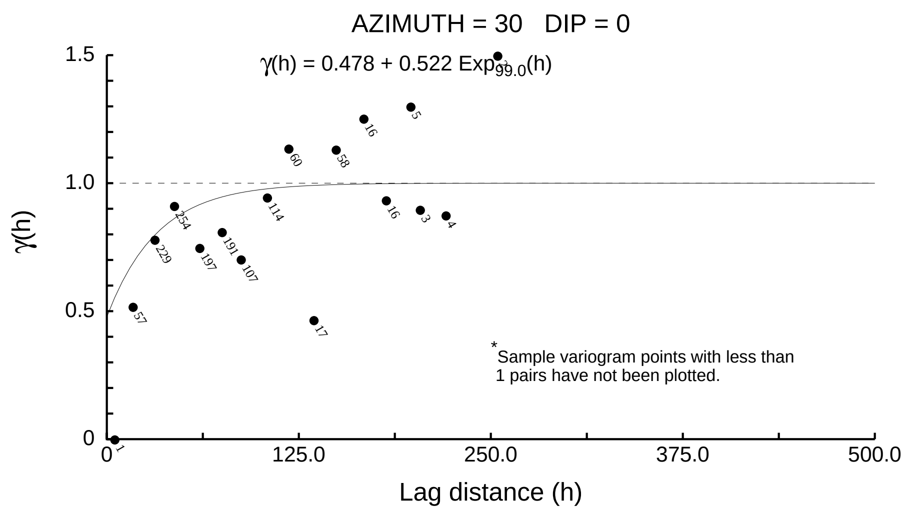
Y-Z Planes Looking West

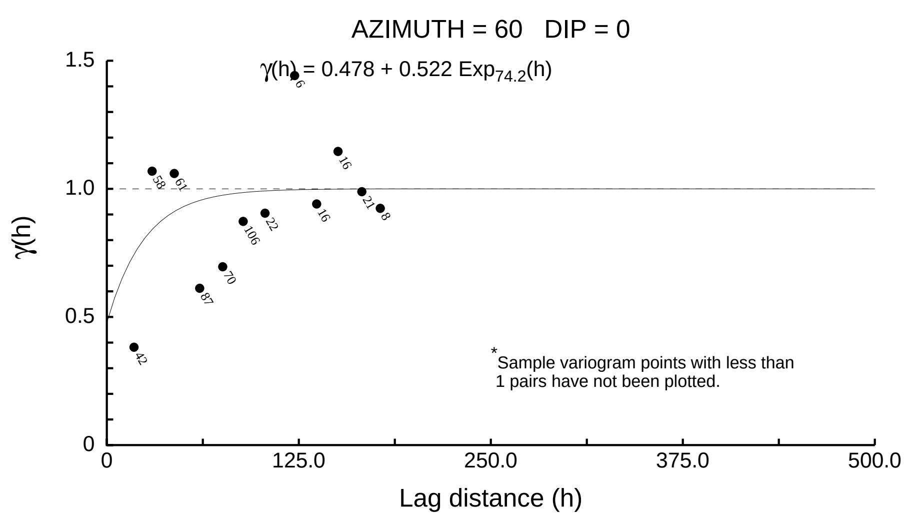


Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

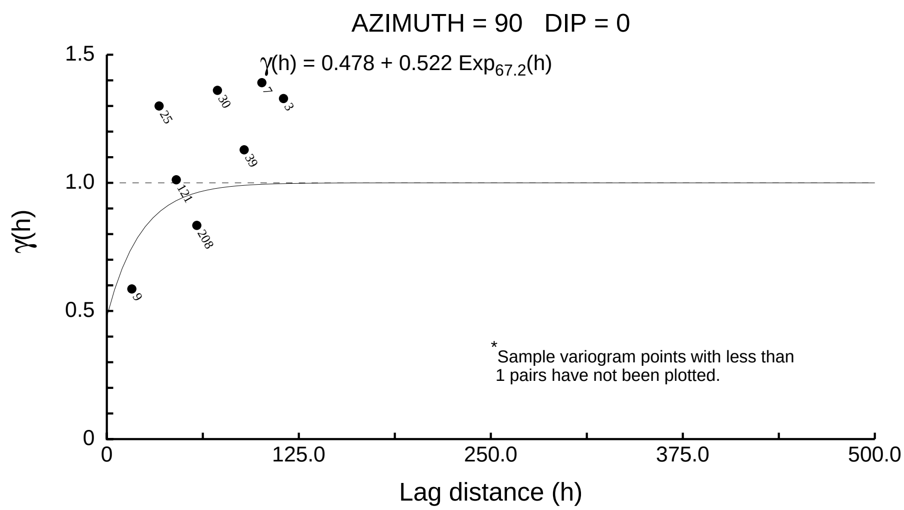
Zone 3 Directional Correlograms - 5m Comps

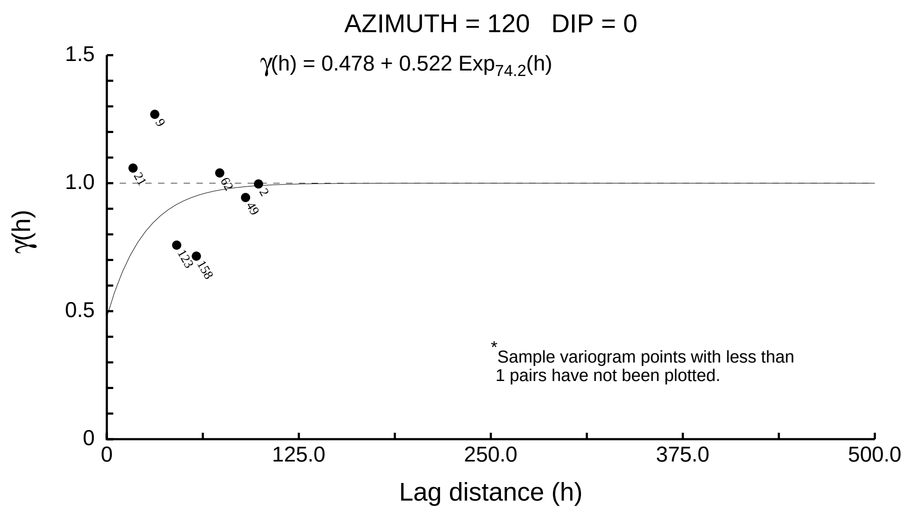


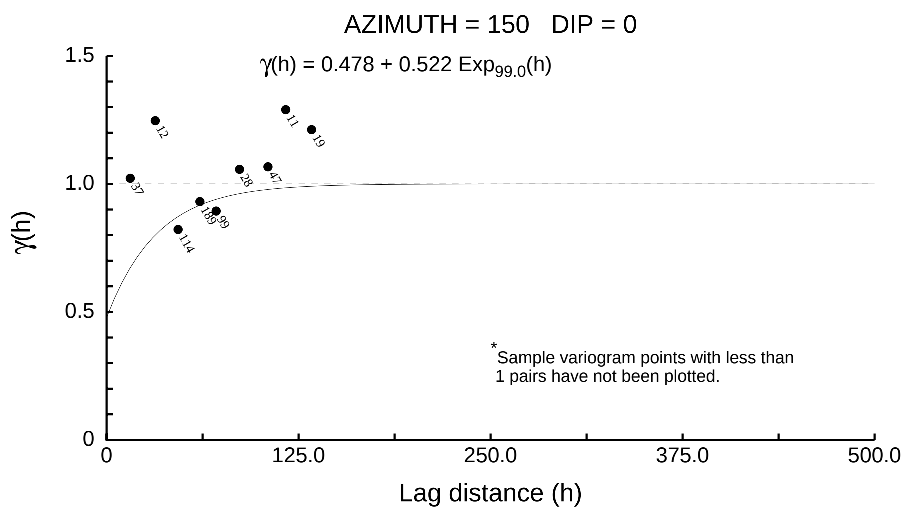




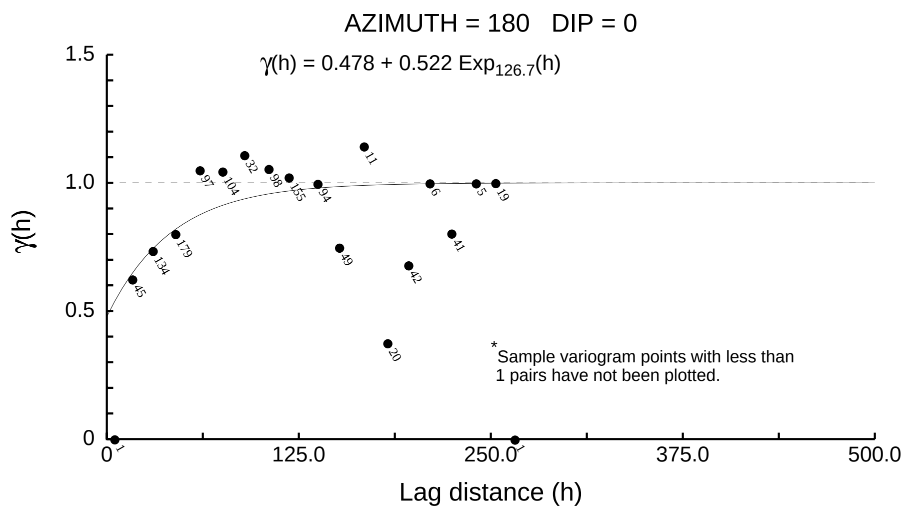
Zone 3 Directional Correlograms - 5m Comps

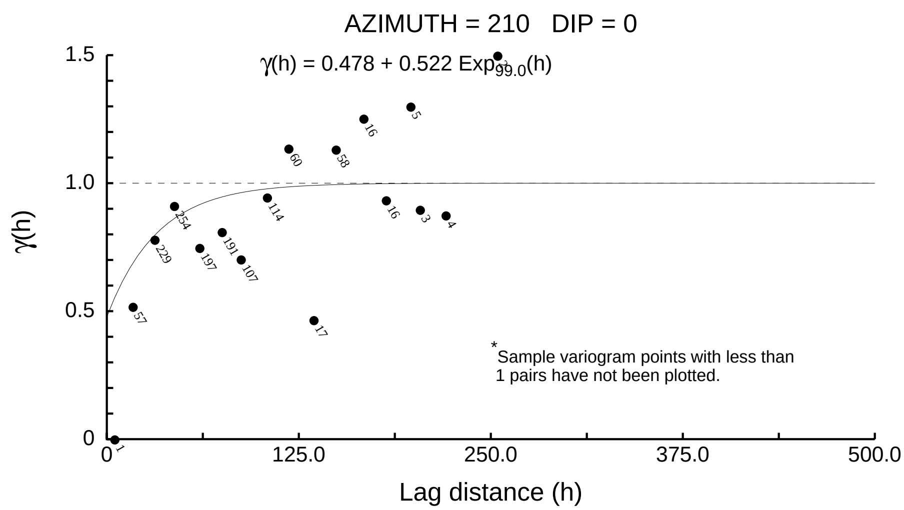


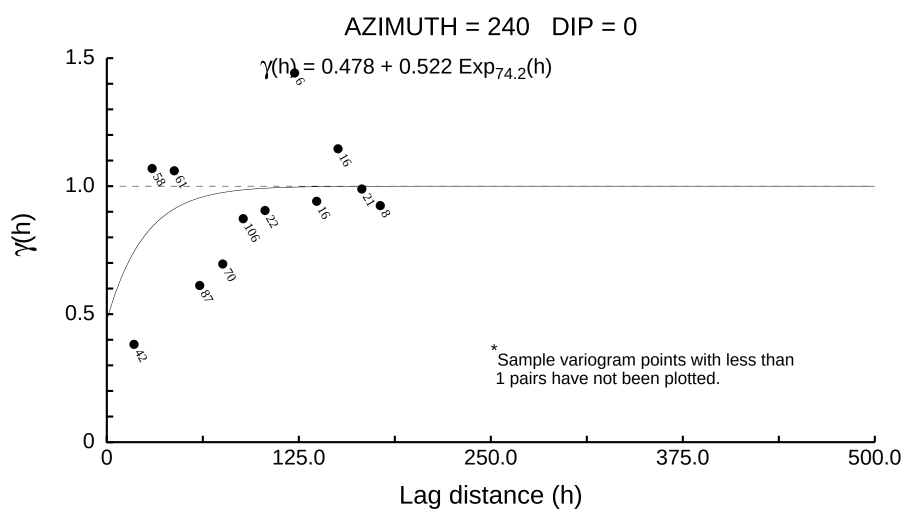




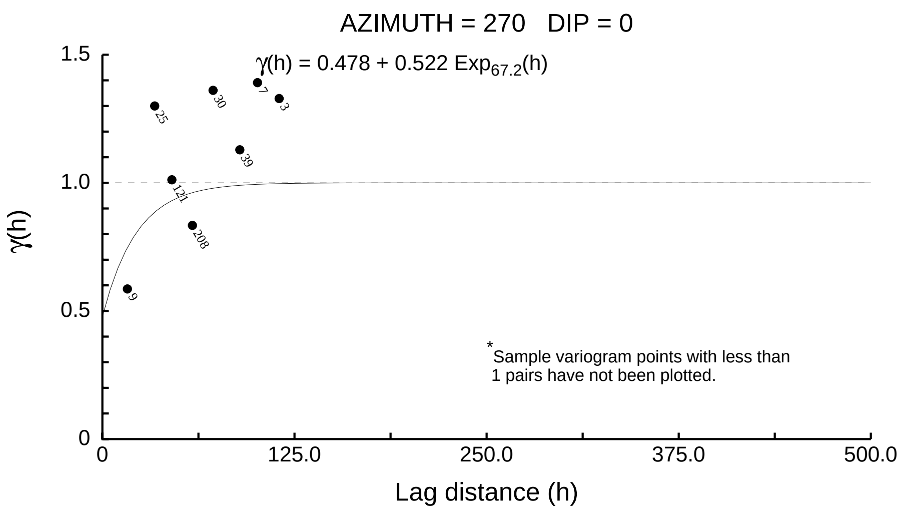
Zone 3 Directional Correlograms - 5m Comps

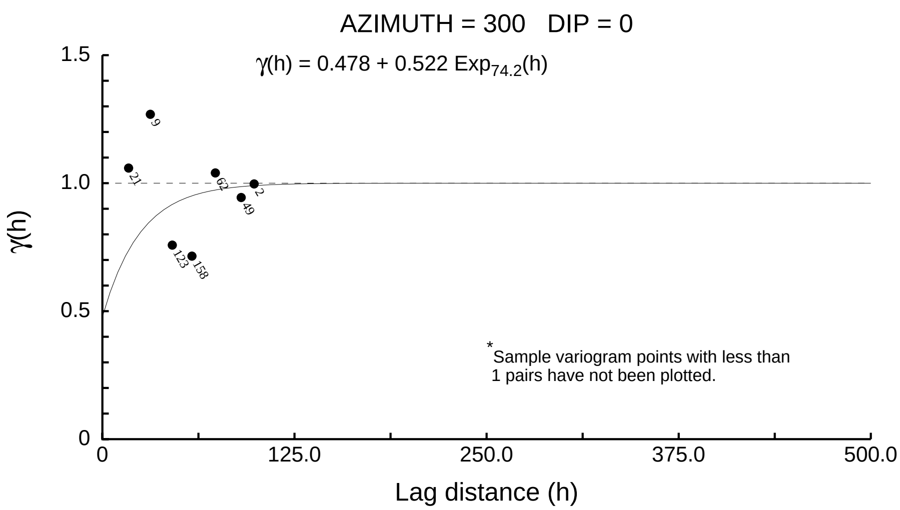


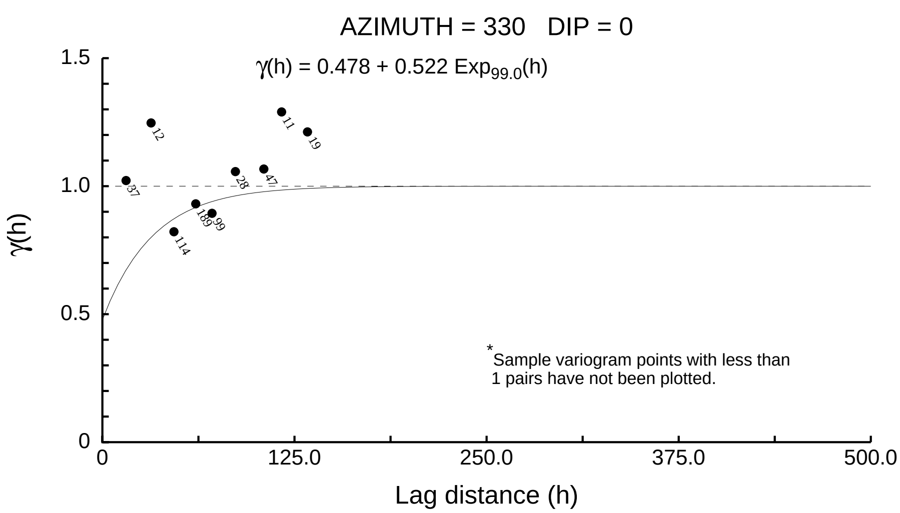




Zone 3 Directional Correlograms - 5m Comps







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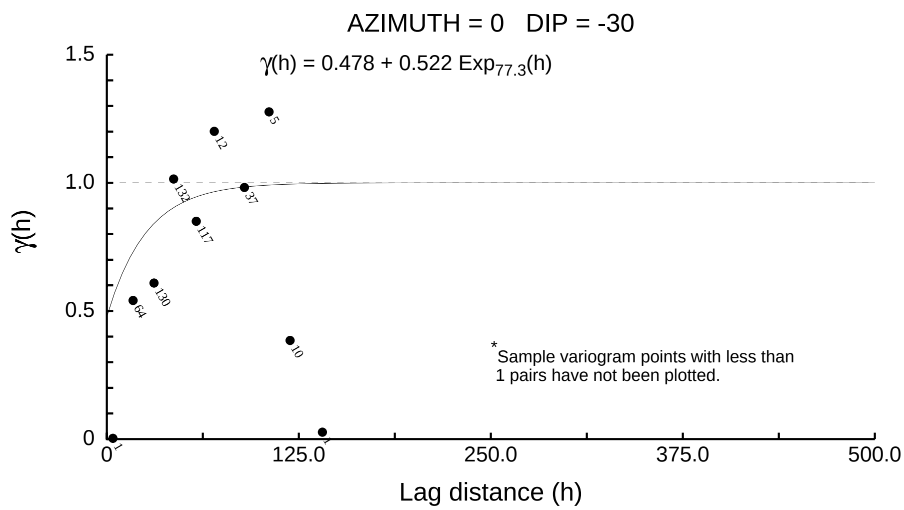
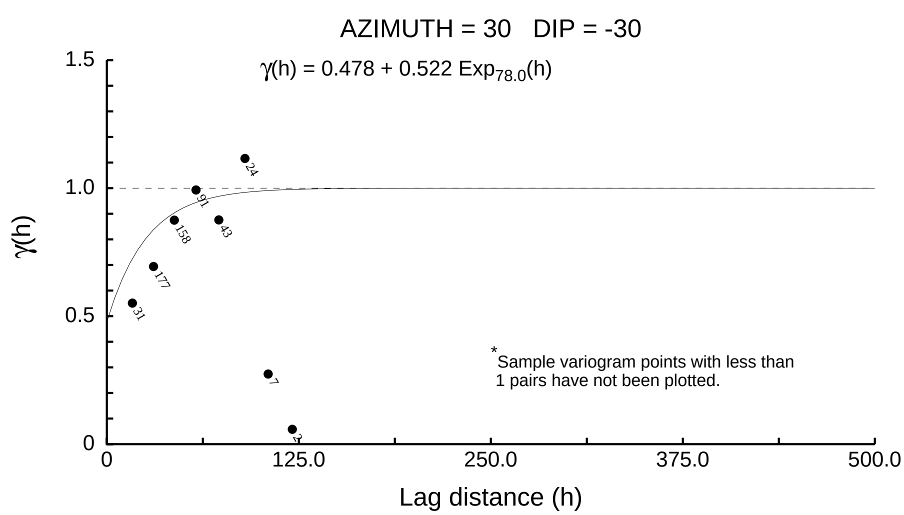
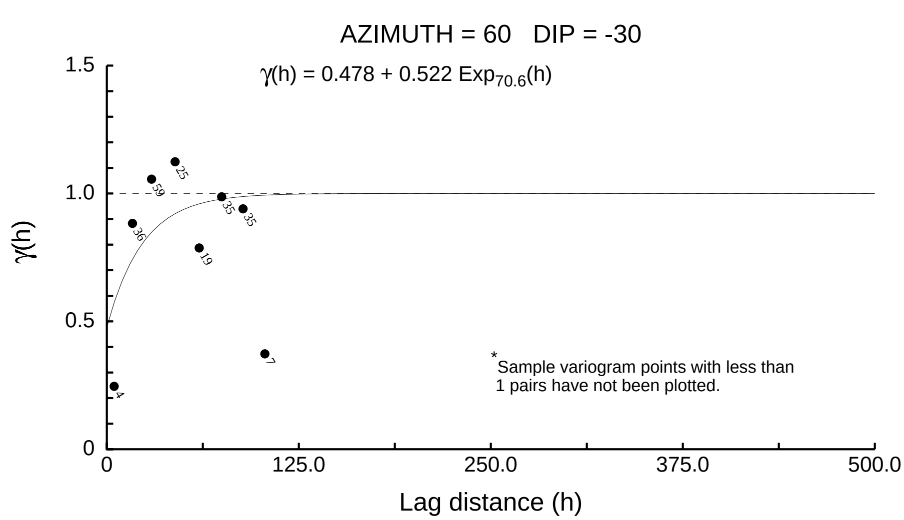
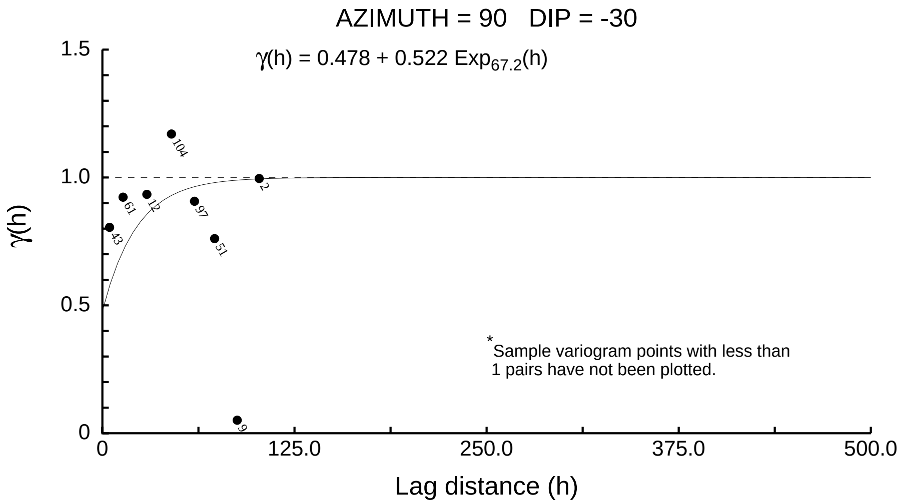
Zone 3 Directional Correlograms - 5m Comps

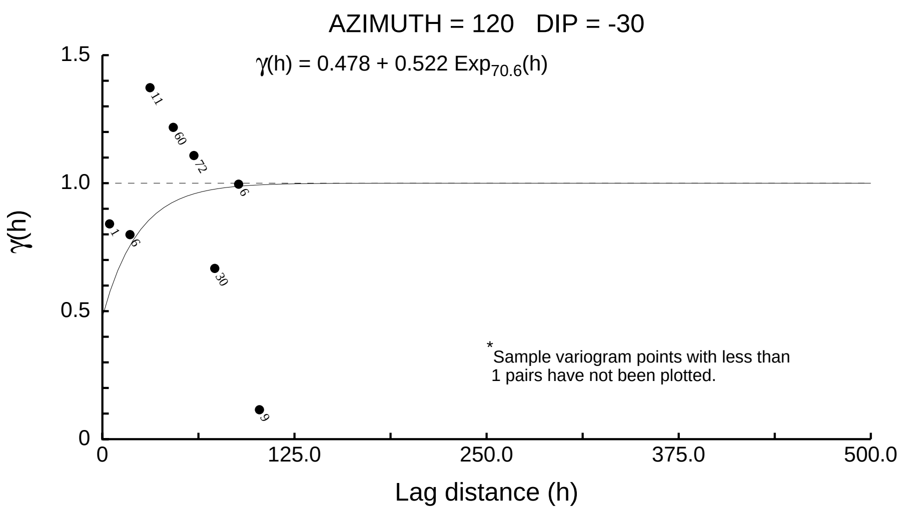


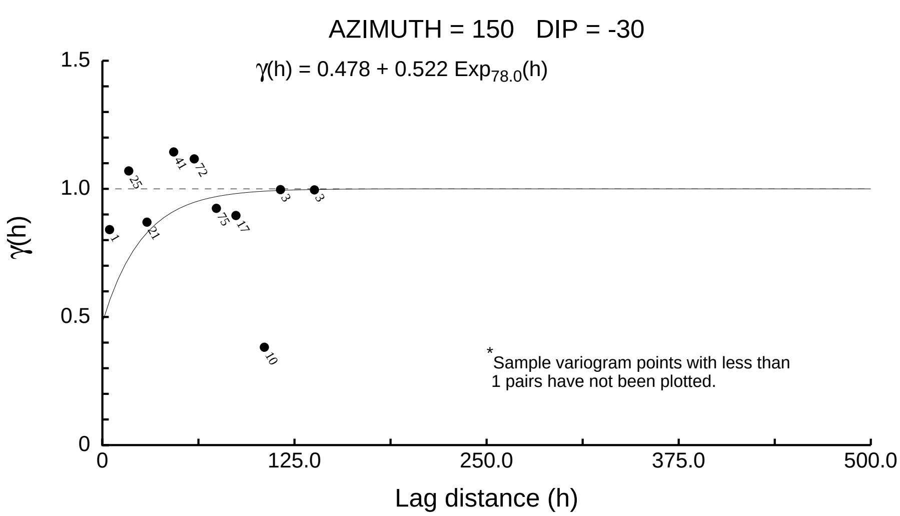




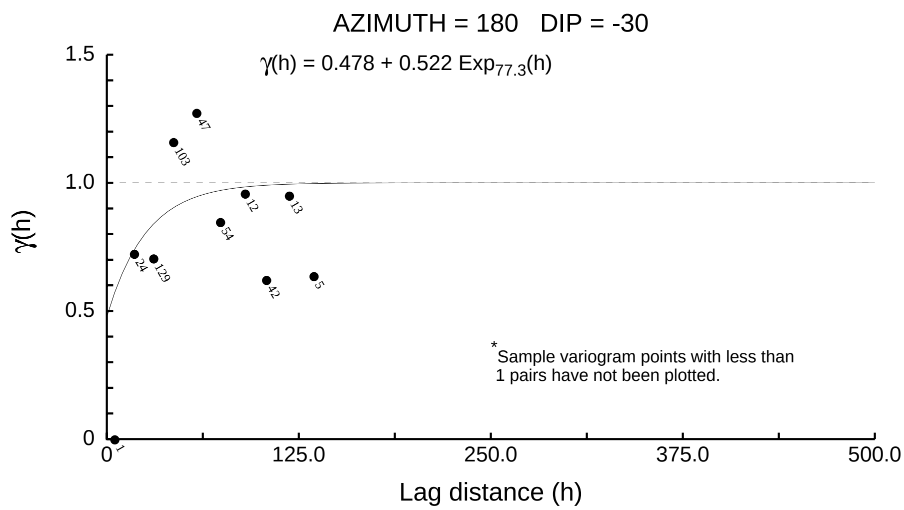
Zone 3 Directional Correlograms - 5m Comps

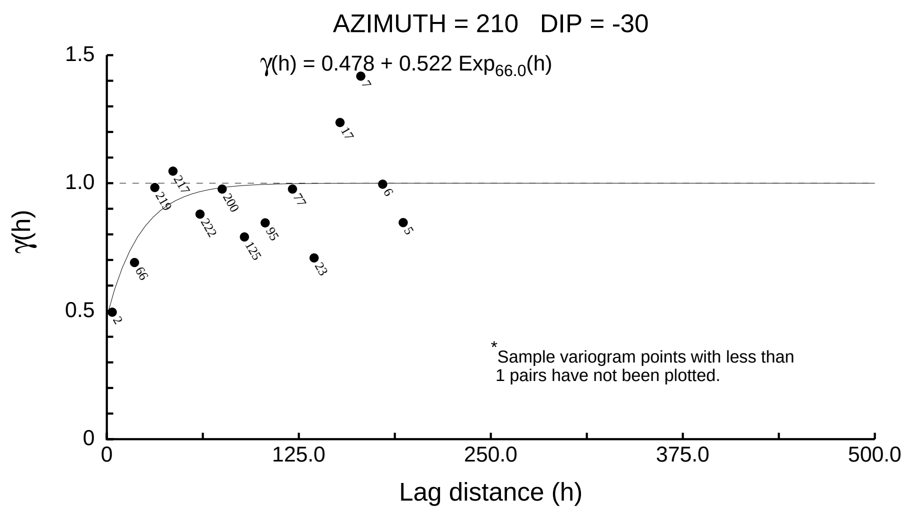


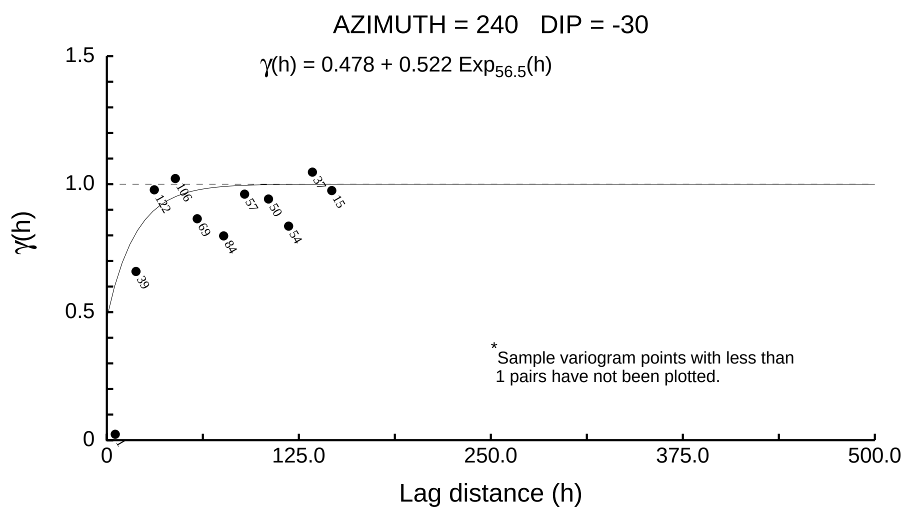




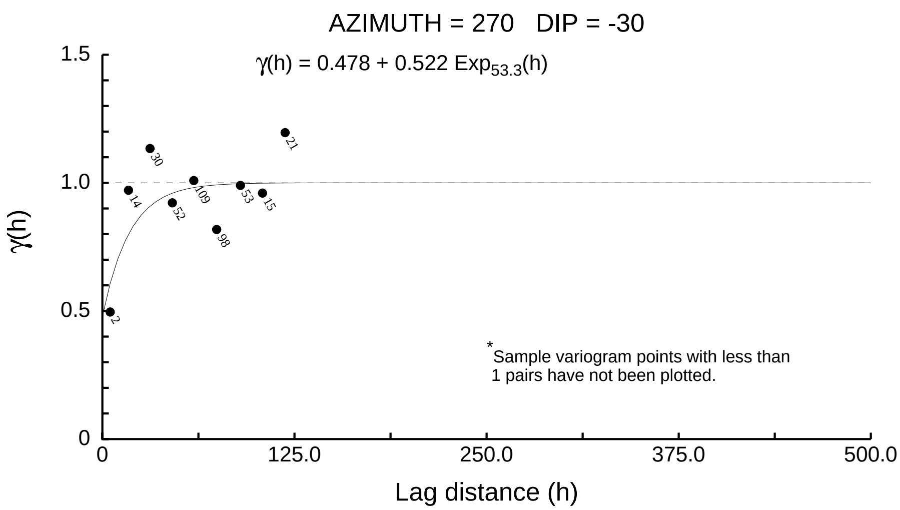
Zone 3 Directional Correlograms - 5m Comps

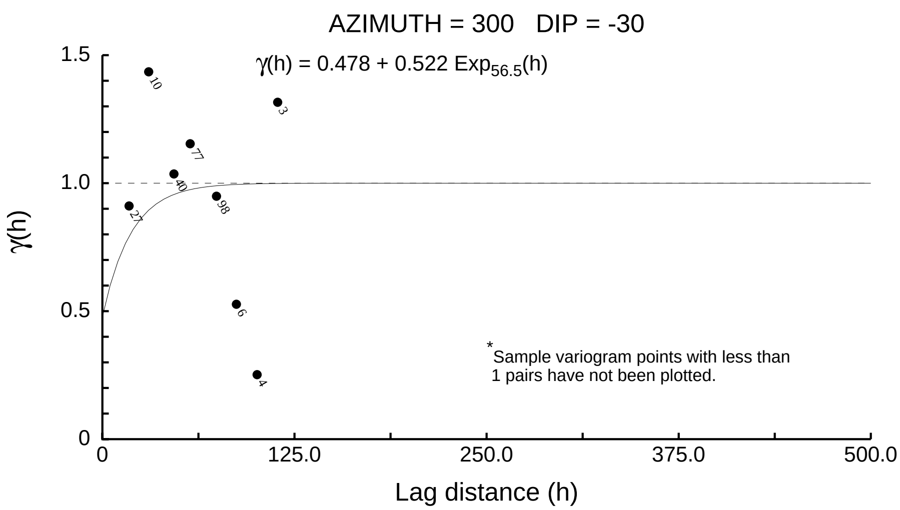


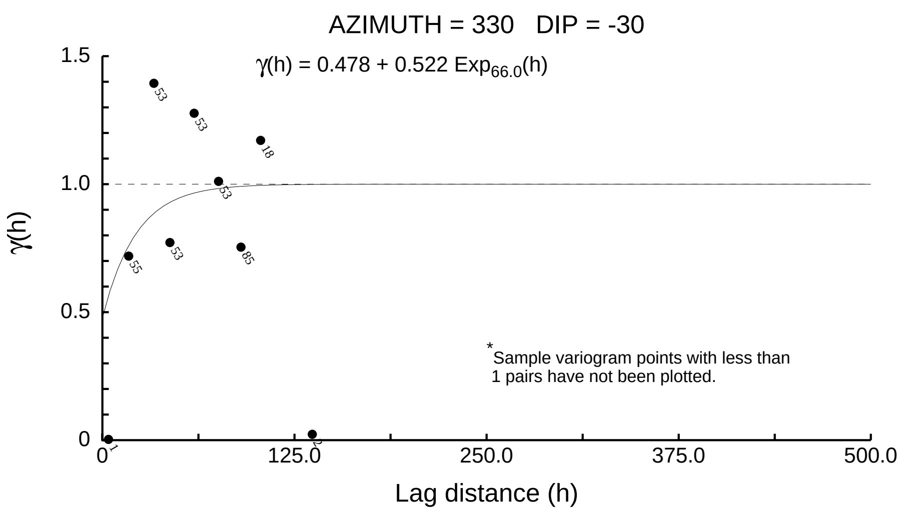




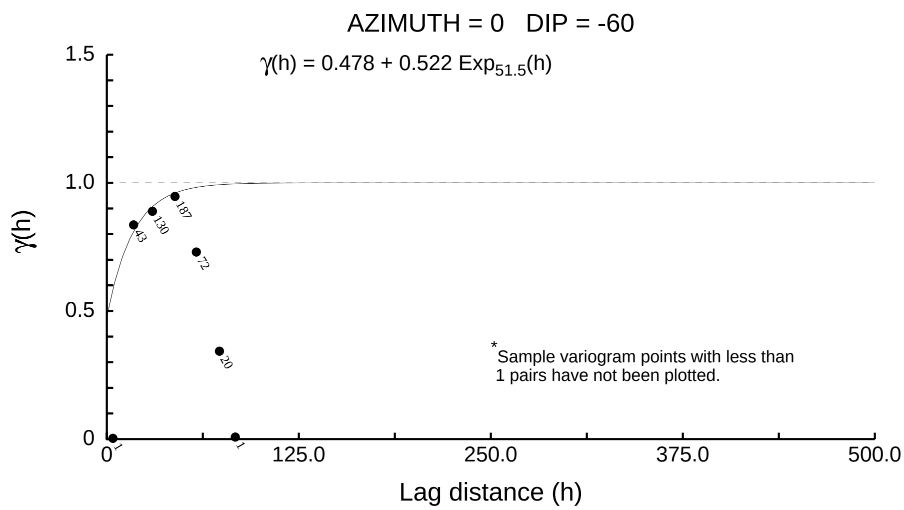
Zone 3 Directional Correlograms - 5m Comps

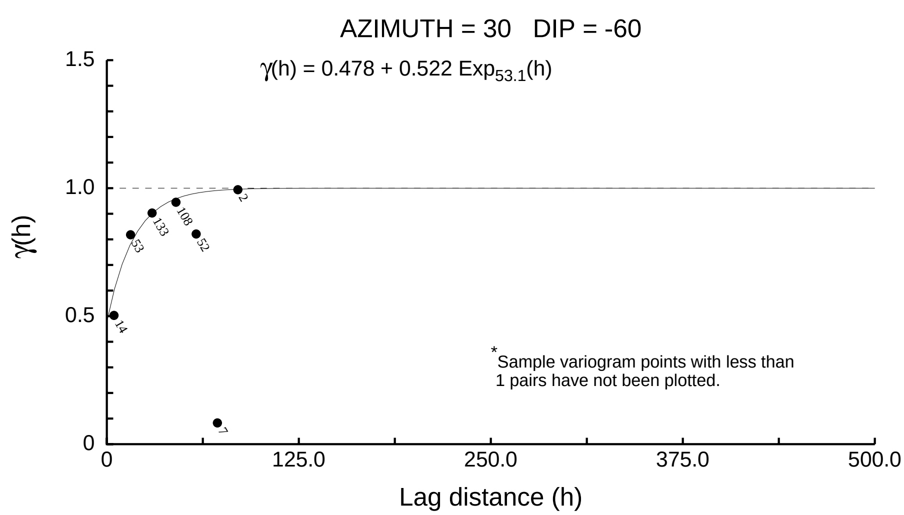


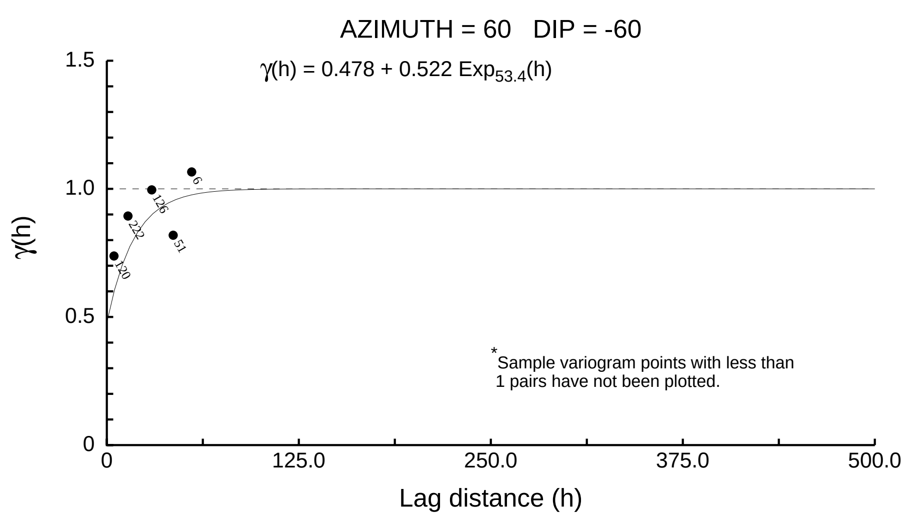




Zone 3 Directional Correlograms - 5m Comps







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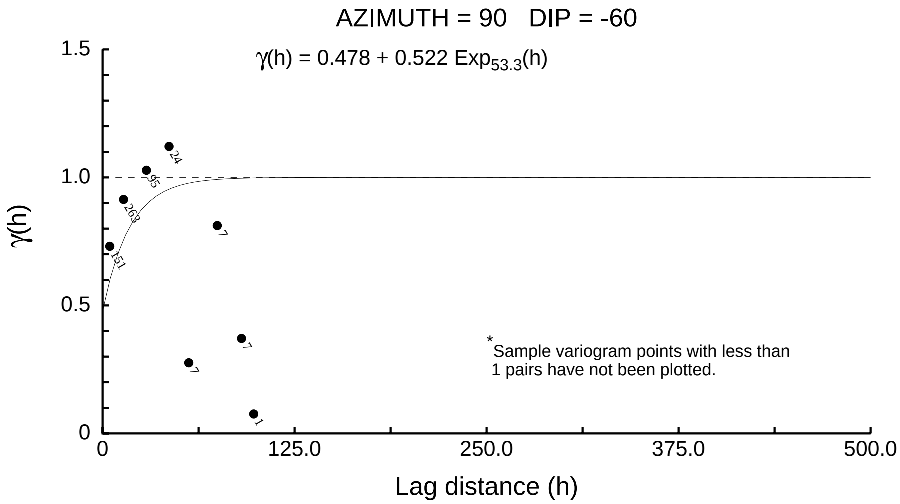
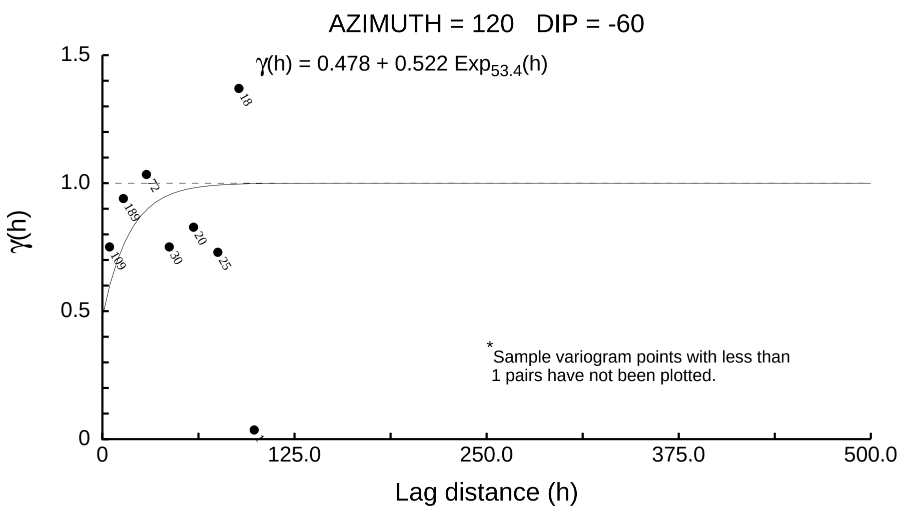
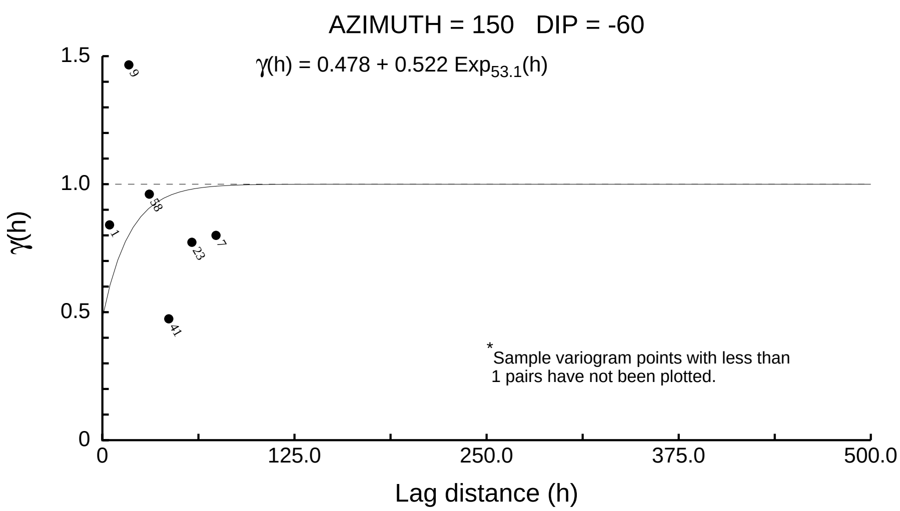
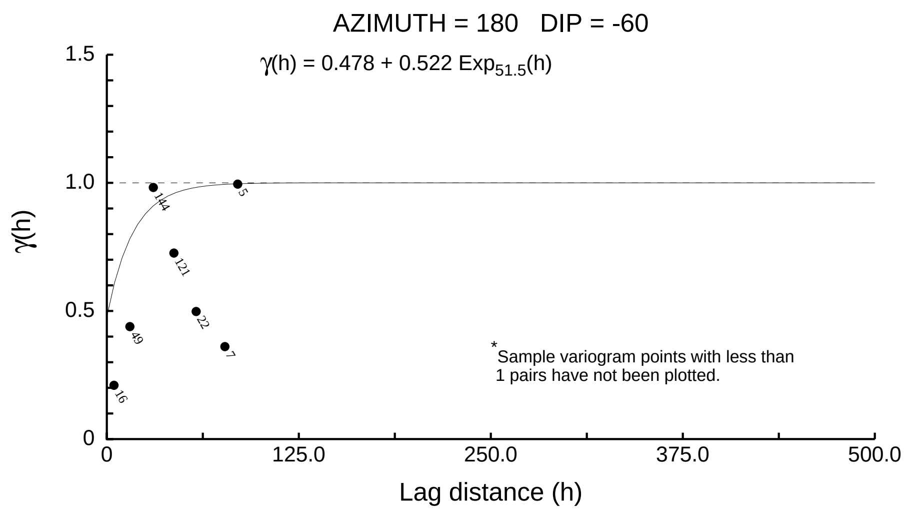
Zone 3 Directional Correlograms - 5m Comps

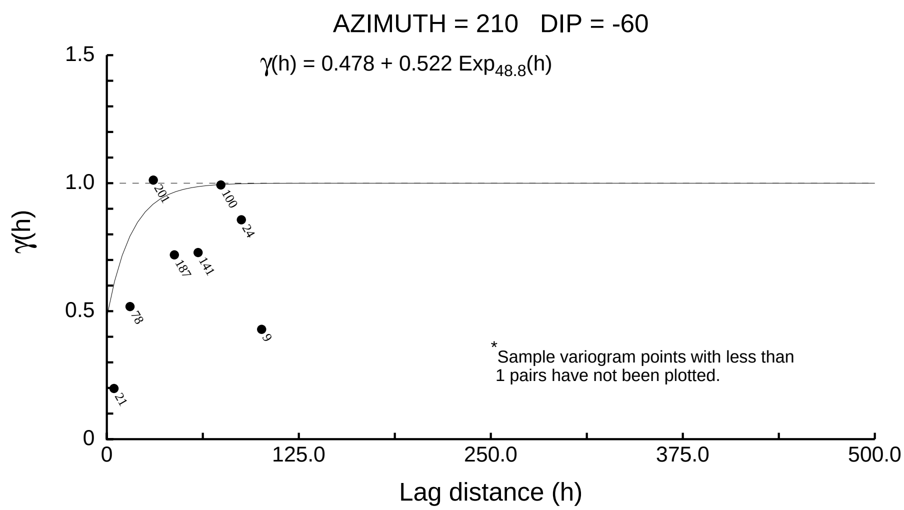


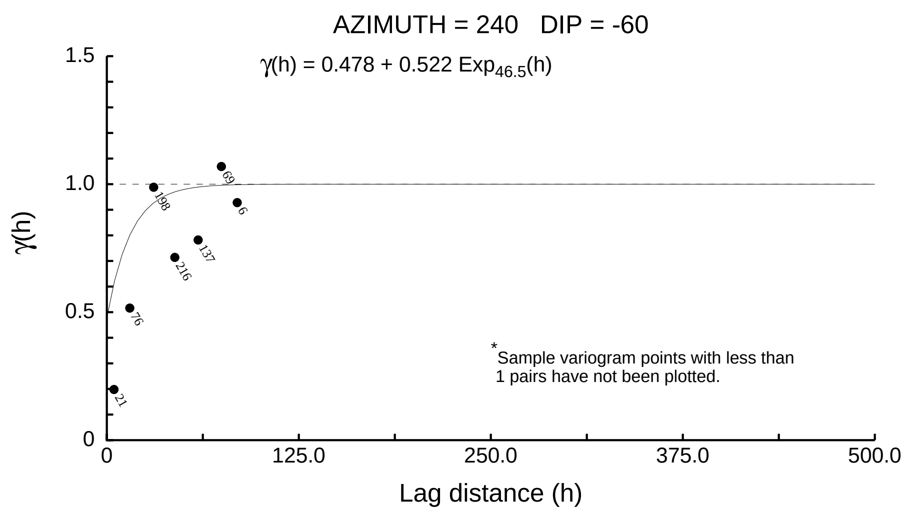




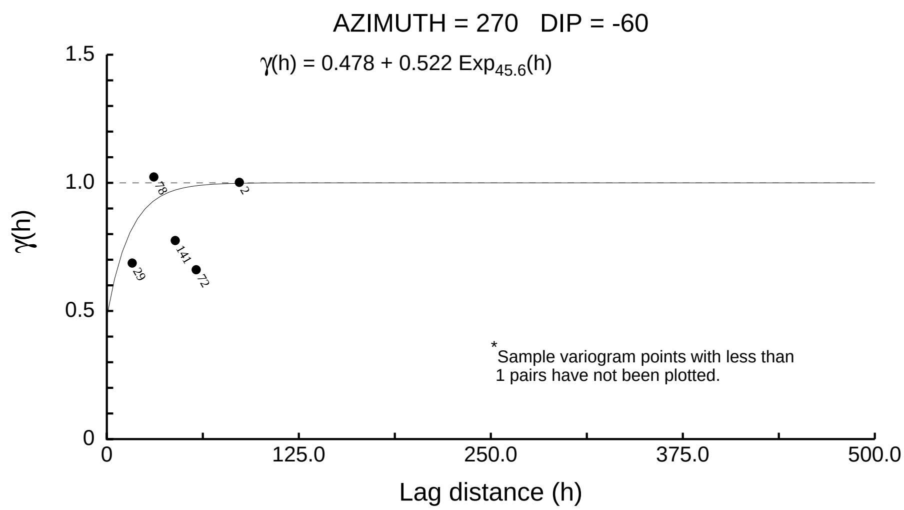
Zone 3 Directional Correlograms - 5m Comps

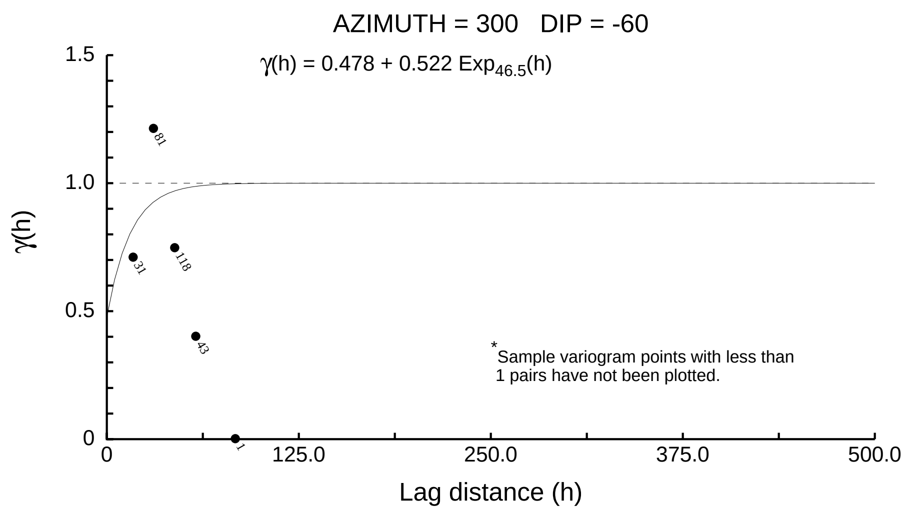


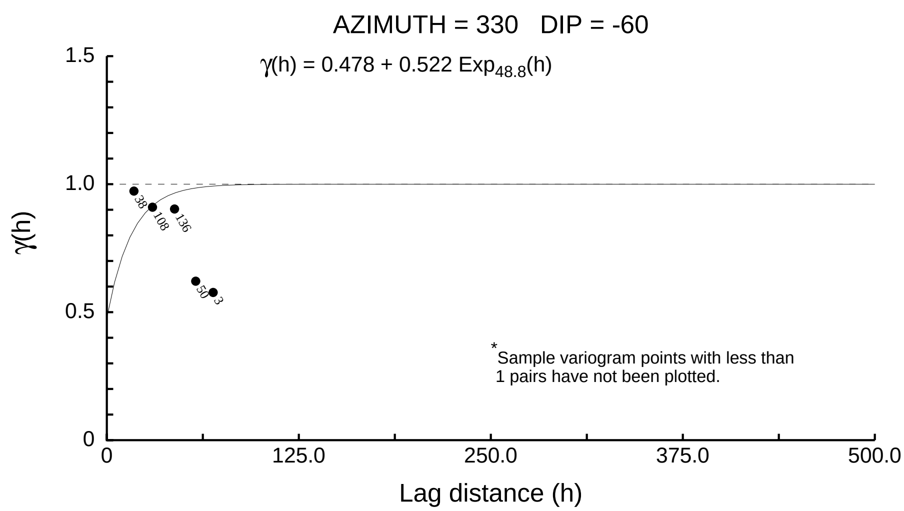




Zone 3 Directional Correlograms - 5m Comps







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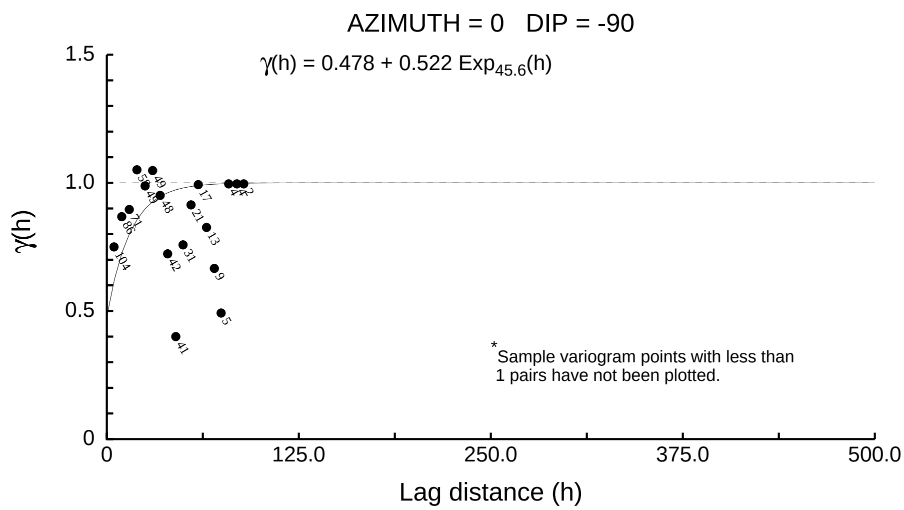
Zone 3 Directional Correlograms - 5m Comps



Zone 2 Directional Correlograms - 5m Comps

Medsystem and Vulcan Rotation Conventions

Nugget ==> 0.631
C1 ==> 0.369

First Structure -- Exponential with Practical Range

LH Rotation about the Z axis ==> 0
RH Rotation about the X' axis ==> 0
LH Rotation about the Y' axis ==> 75

Range along the Z' axis ==> 26.5	Azimuth ==> 270 Dip ==> 15
Range along the Y' axis ==> 66.7	Azimuth ==> 360 Dip ==> 0
Range along the X' axis ==> 54.4	Azimuth ==> 90 Dip ==> 75

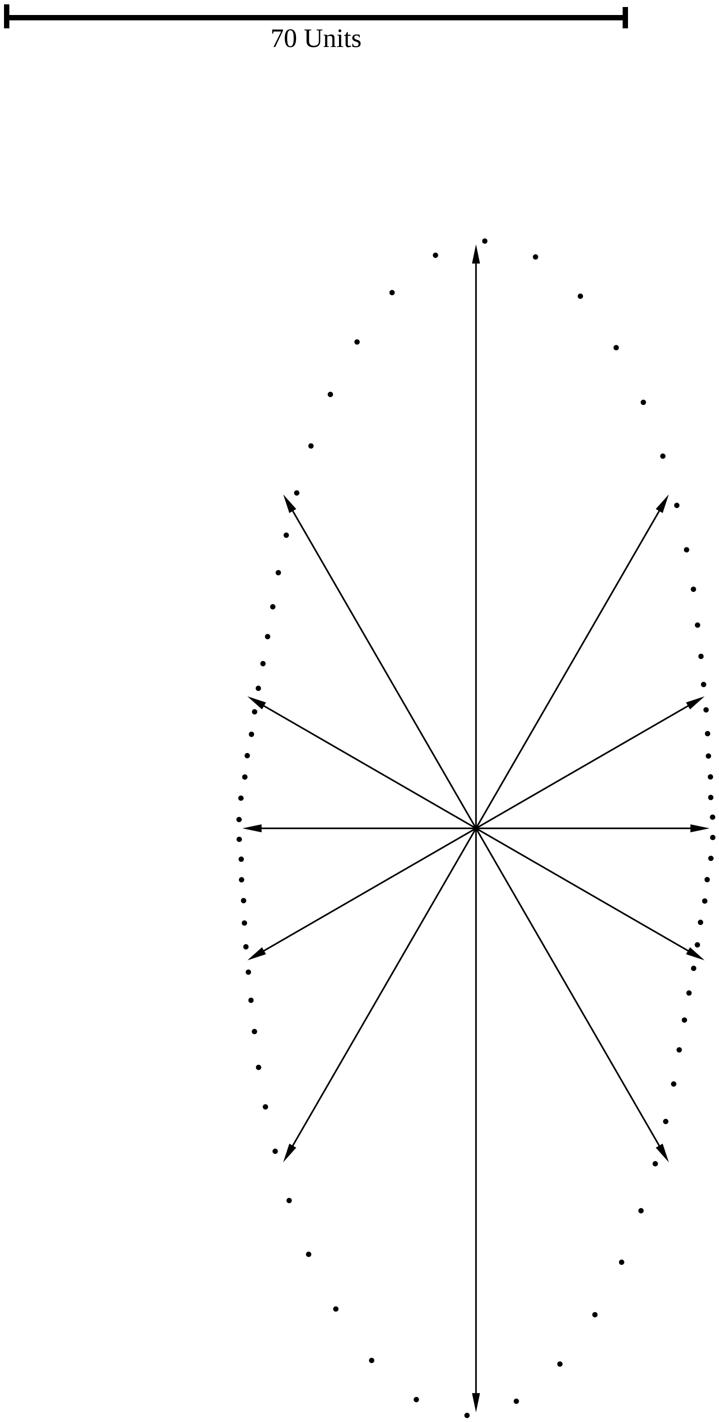
Modeling Criteria

Minimum number pairs req'd ==> 1
Sample variogram points weighted by # pairs

Zone 2 Directional Correlograms - 5m Comps

Structure Number 1

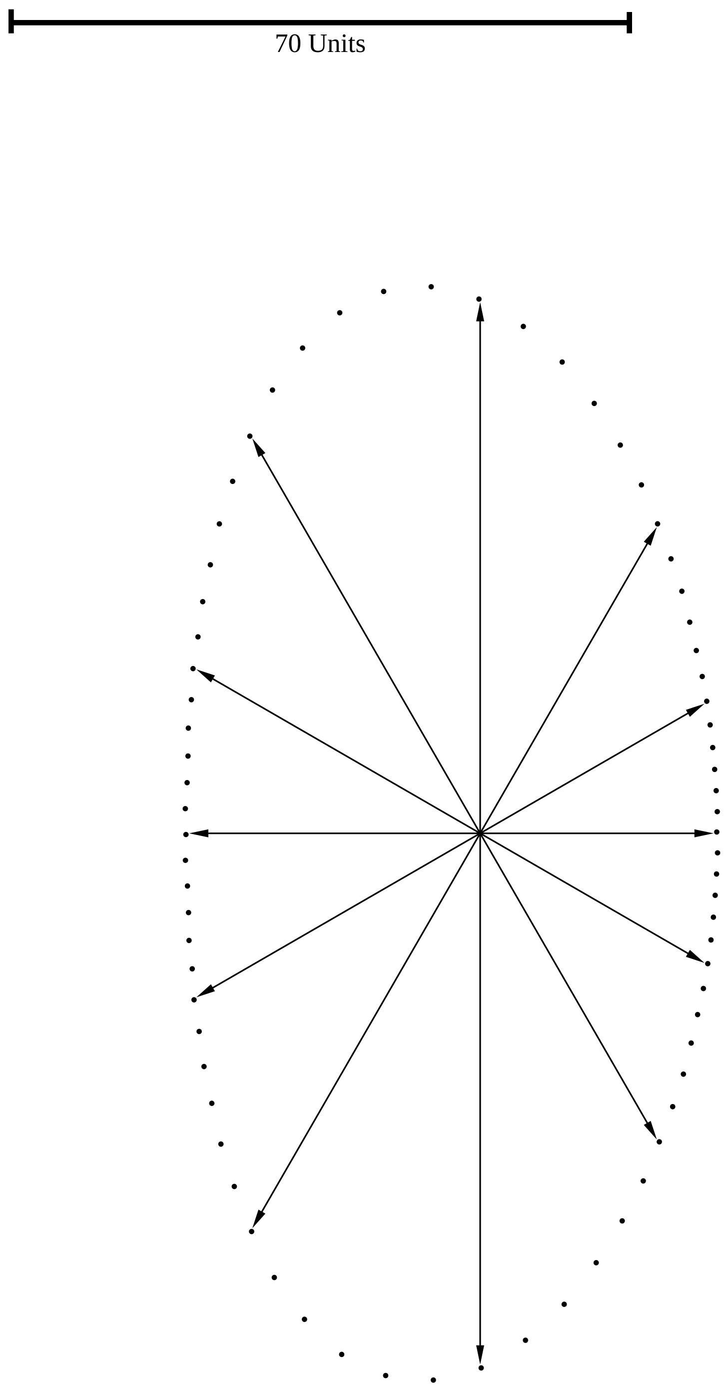
Rose Diagram of Ranges Dipping 0 Degrees
Scale:



Zone 2 Directional Correlograms - 5m Comps

Structure Number 1

Rose Diagram of Ranges Dipping 30 Degrees
Scale:

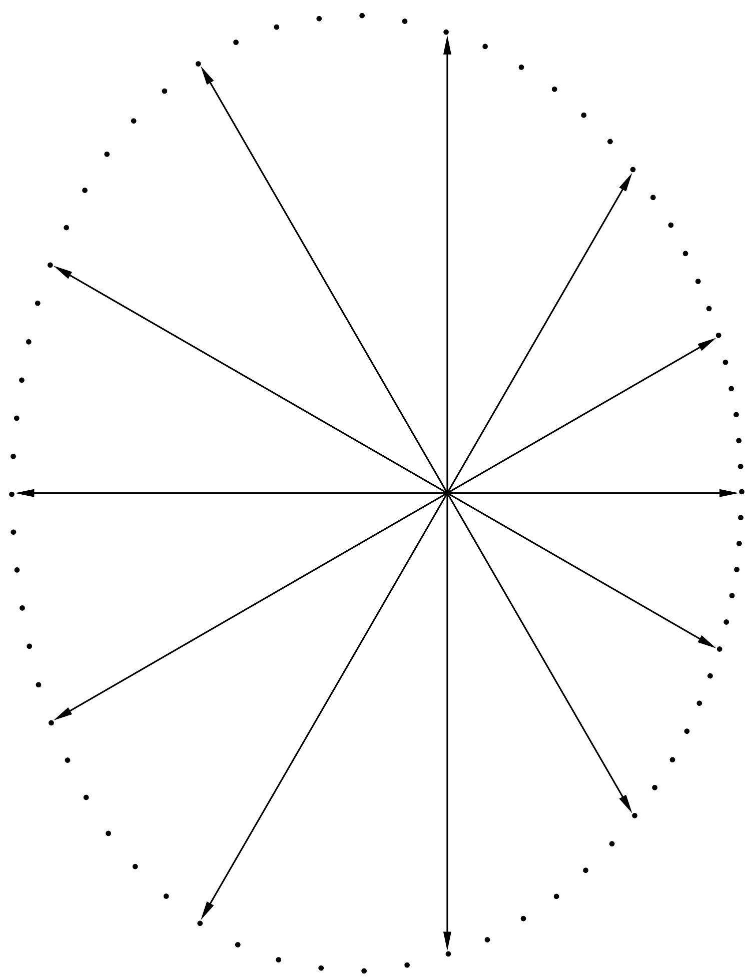


Zone 2 Directional Correlograms - 5m Comps

Structure Number 1

Rose Diagram of Ranges Dipping 60 Degrees
Scale:

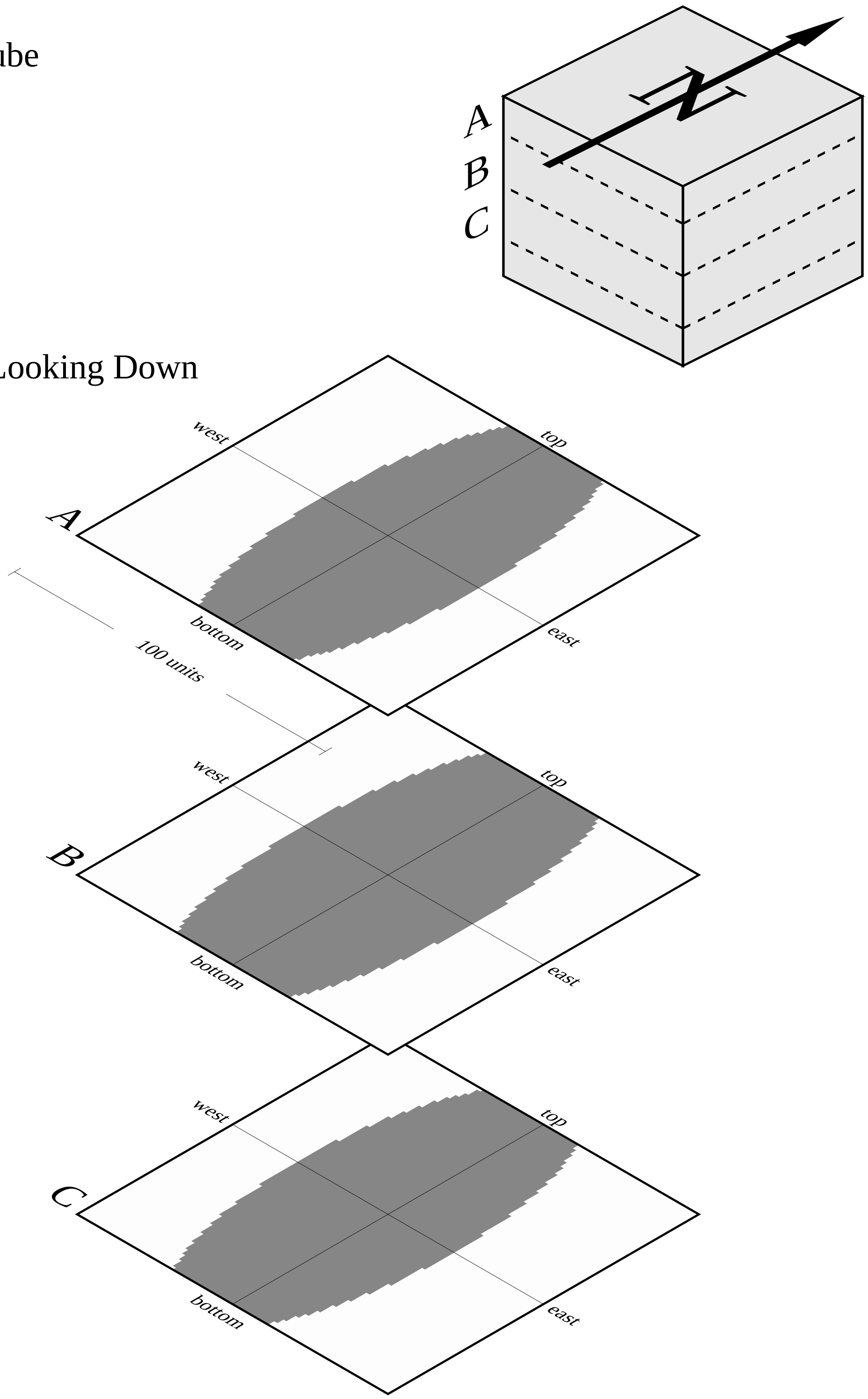
70 Units



Horizontal Slices Through the Ellipsoids

Reference Cube

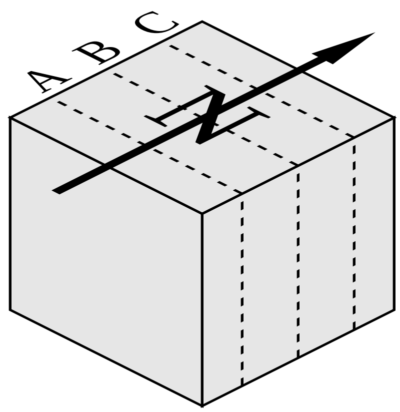
X-Y Planes Looking Down



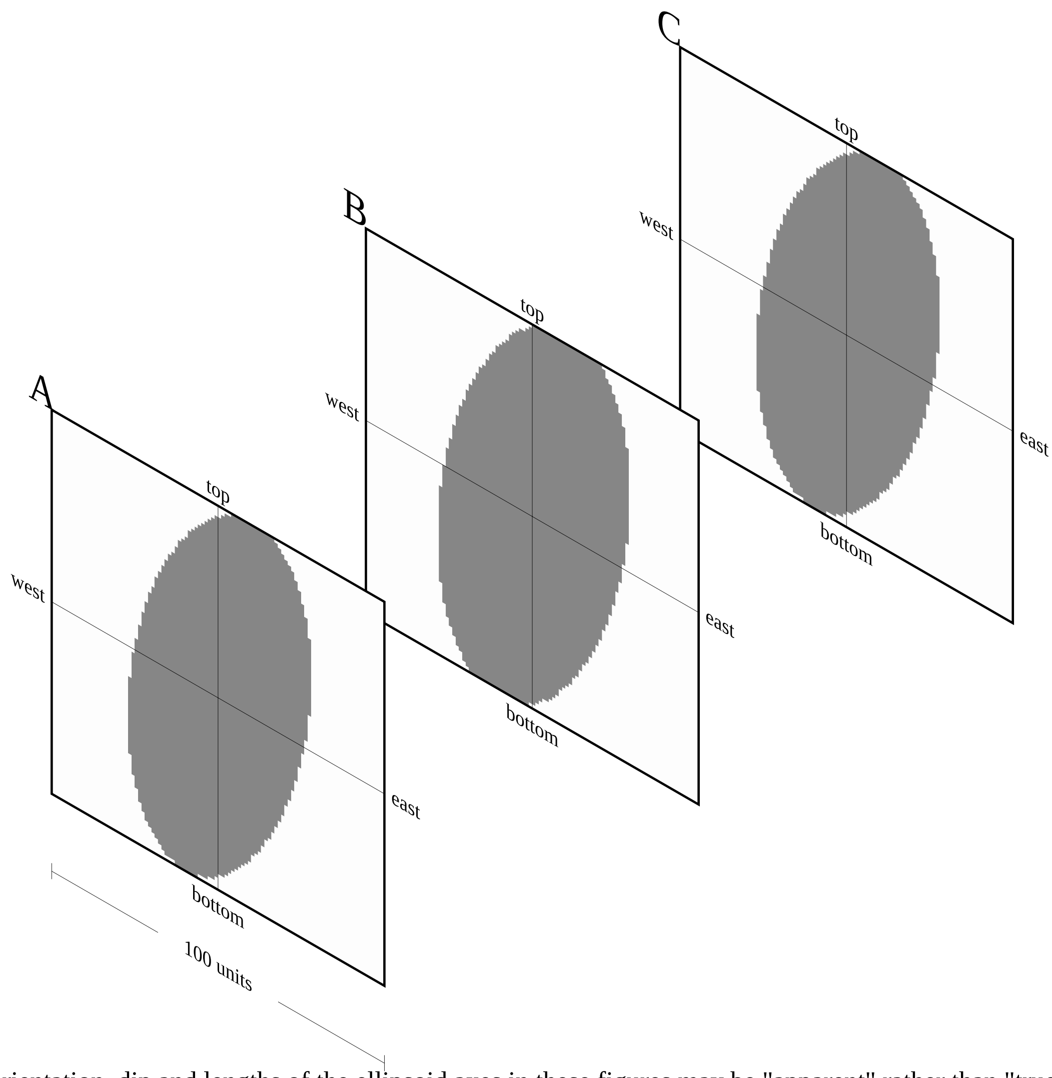
Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Cross Section Views Through the Ellipsoids

Reference Cube



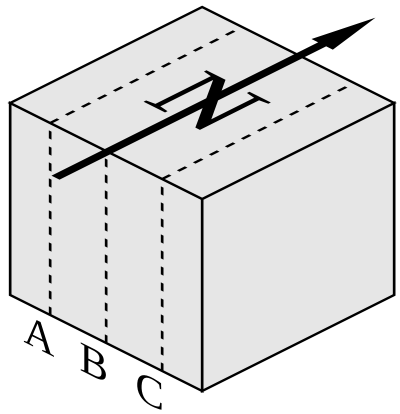
X-Z Planes Looking North



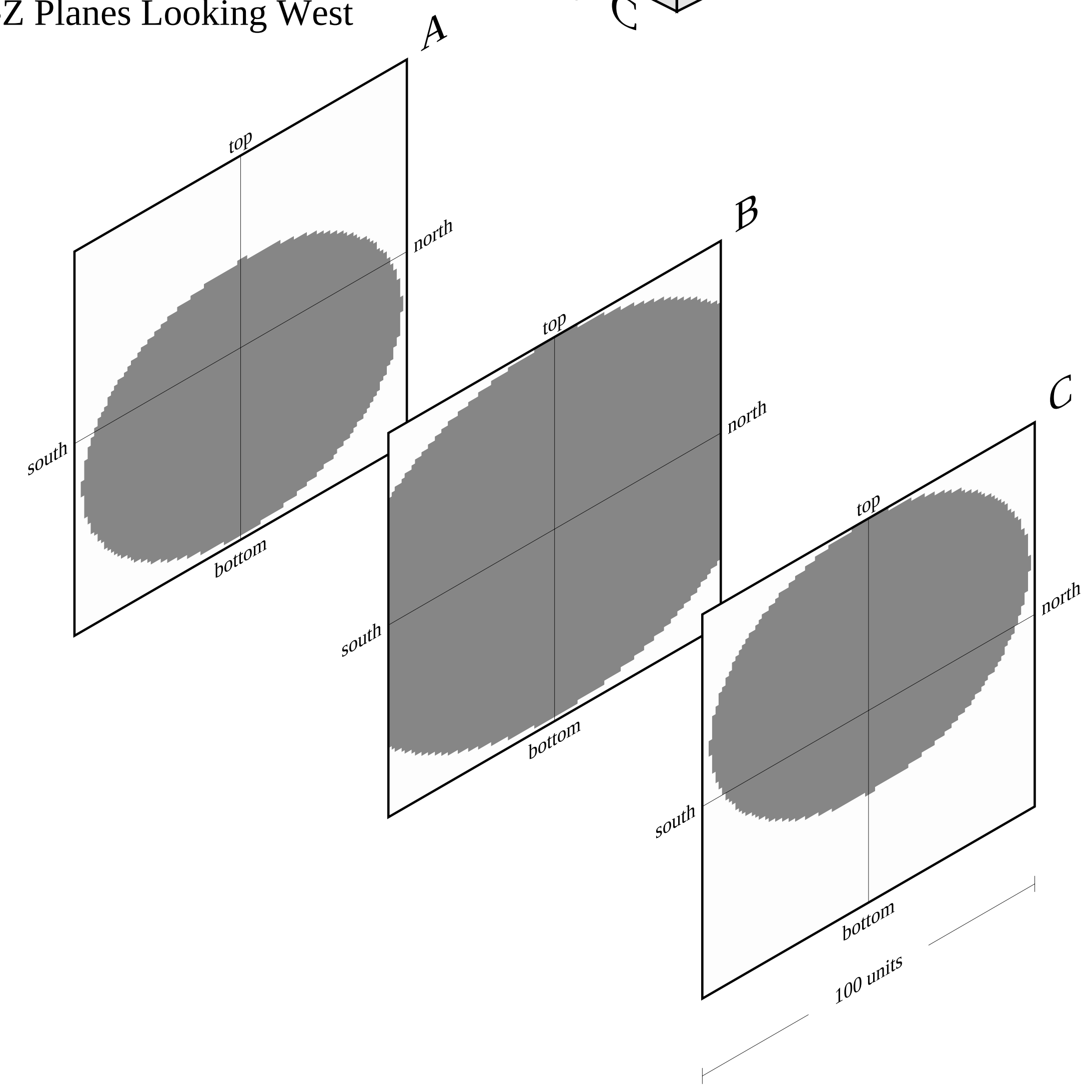
Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Long Section Views Through the Ellipsoids

Reference Cube

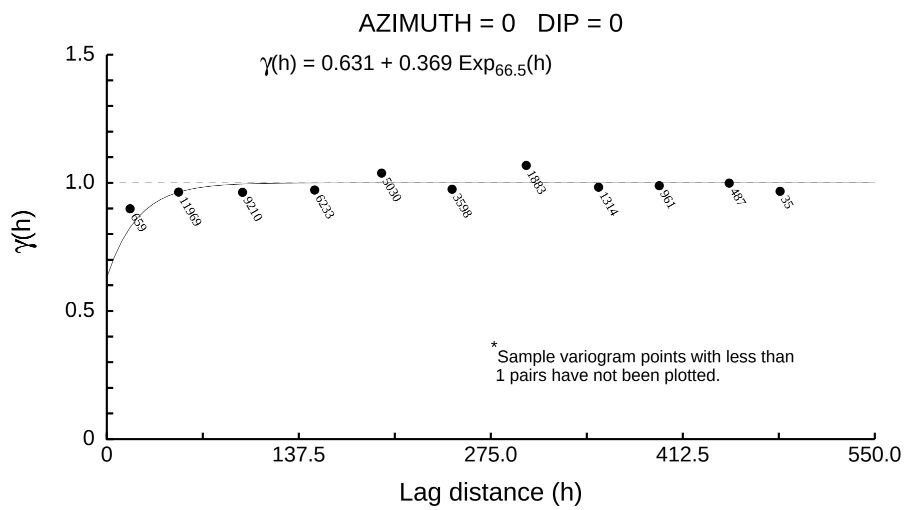


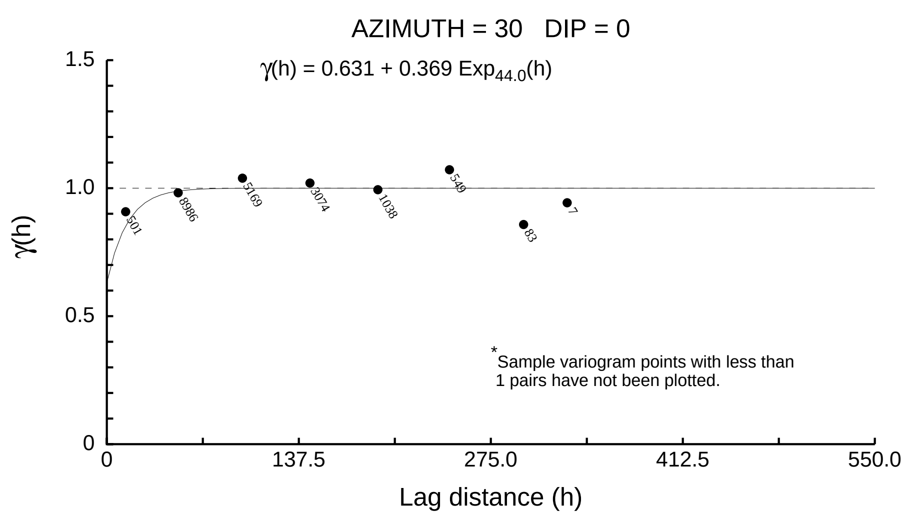
Y-Z Planes Looking West

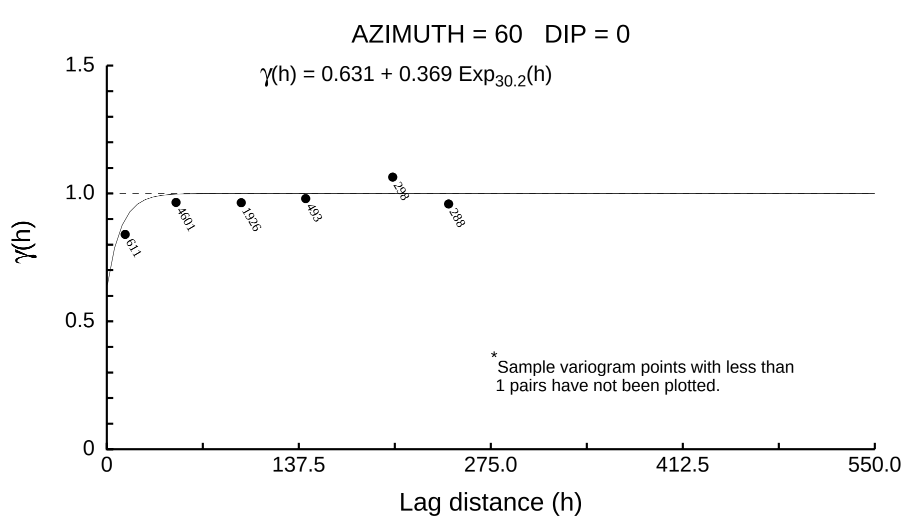


Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

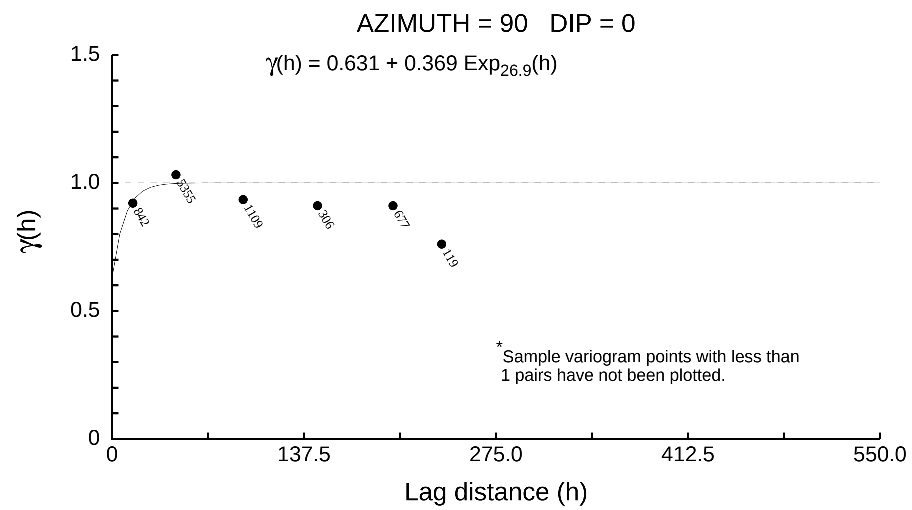
Zone 2 Directional Correlograms - 5m Comps

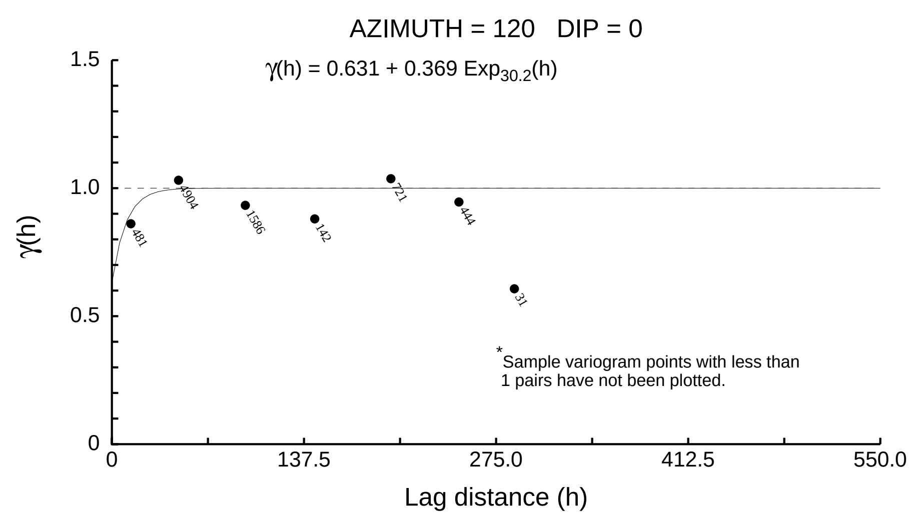


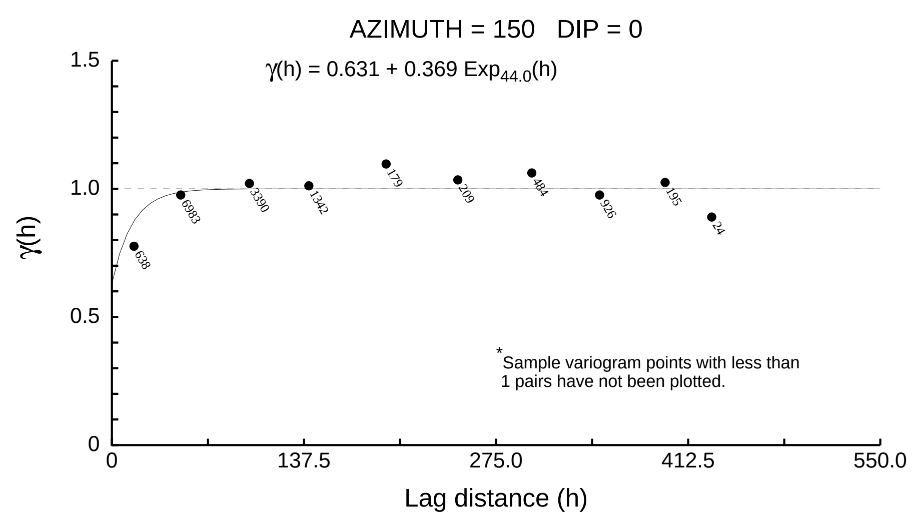




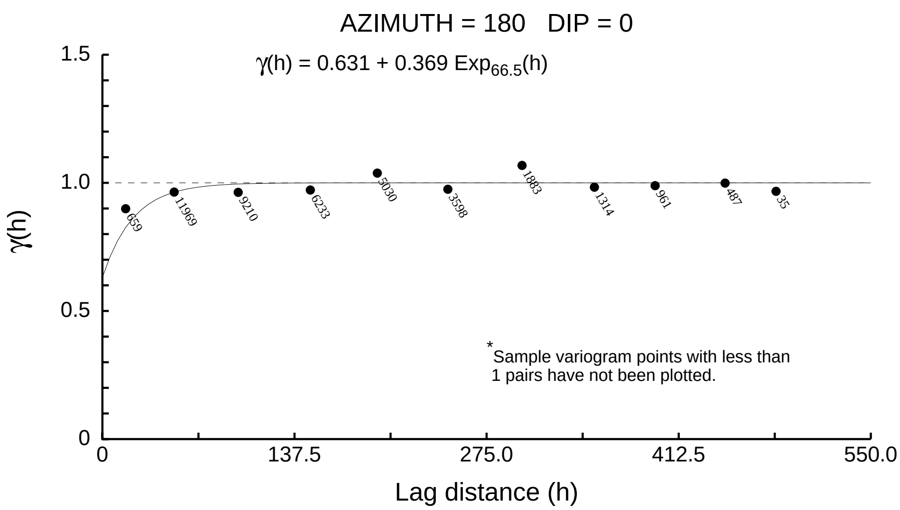
Zone 2 Directional Correlograms - 5m Comps

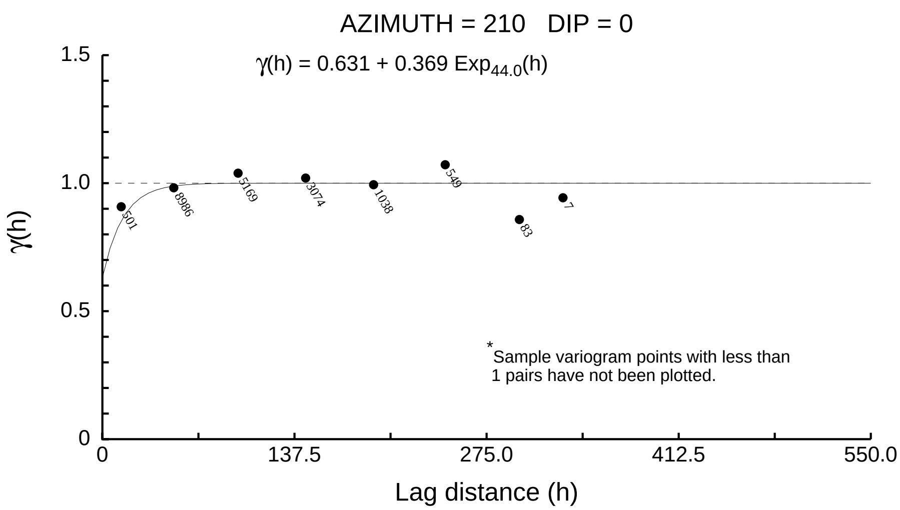


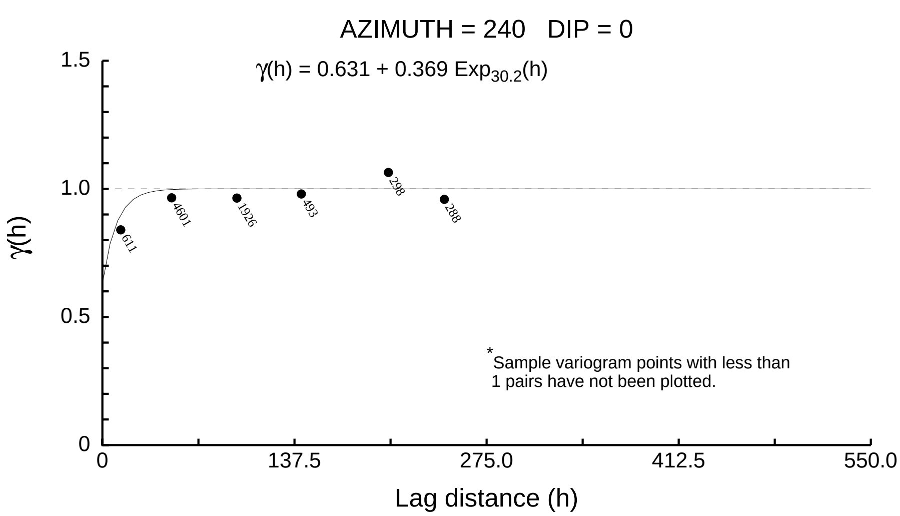




Zone 2 Directional Correlograms - 5m Comps







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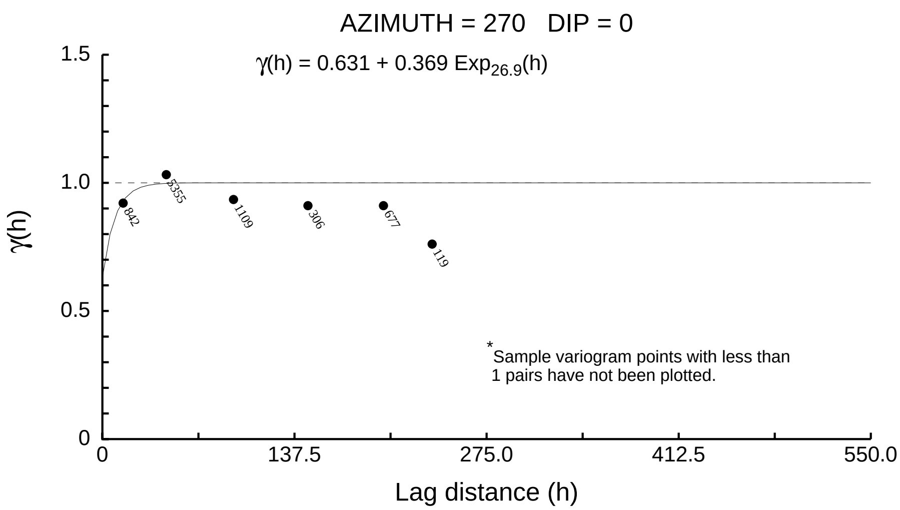
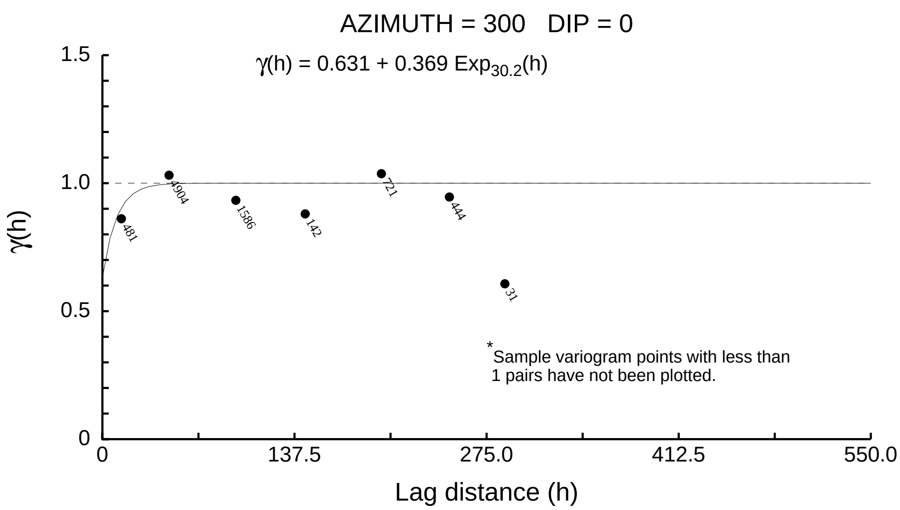
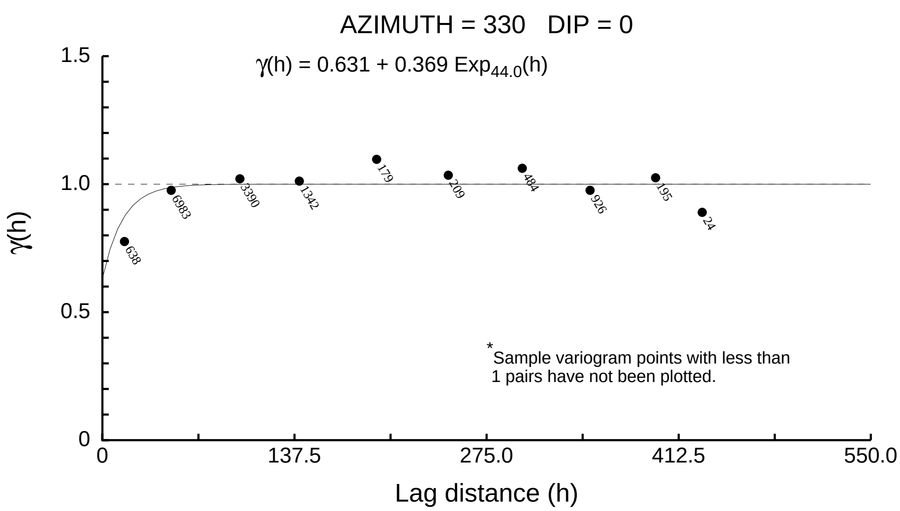
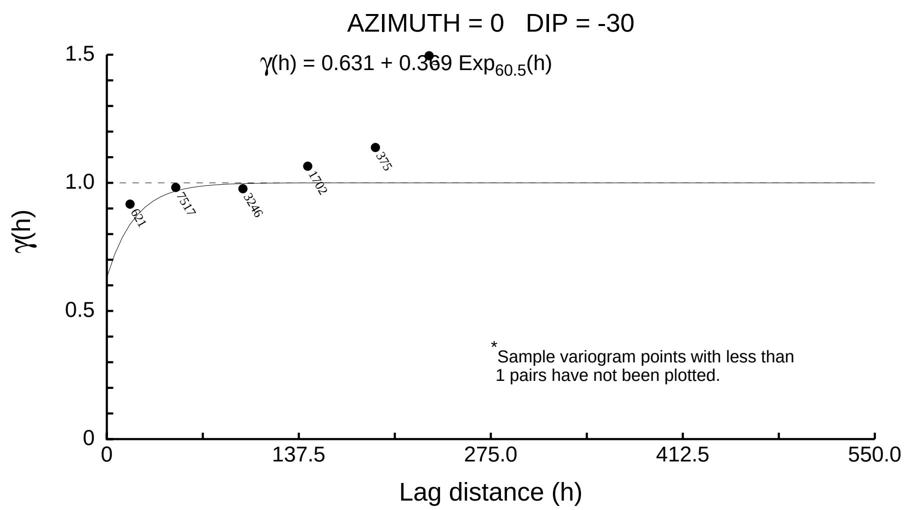
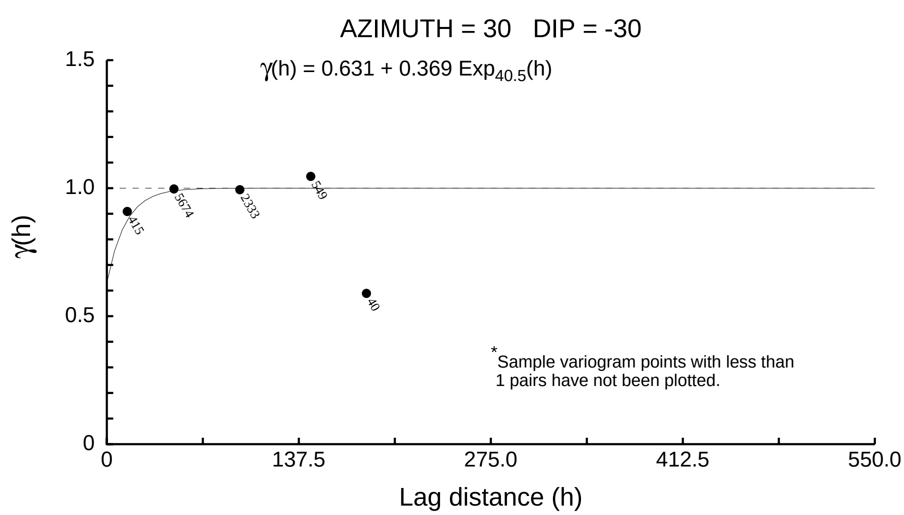


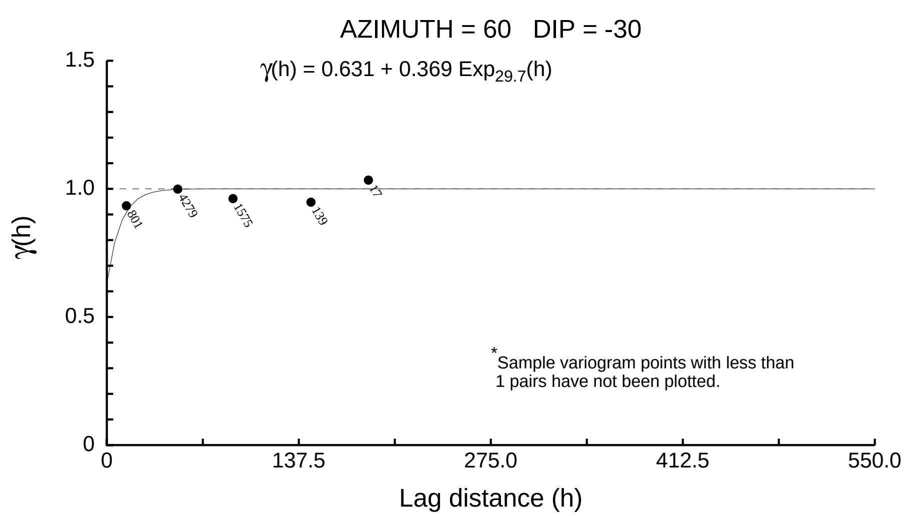




Zone 2 Directional Correlograms - 5m Comps







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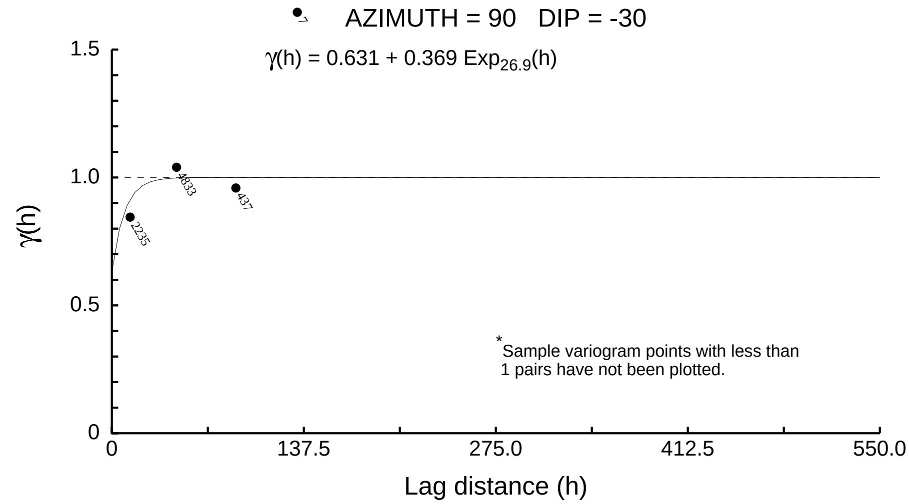

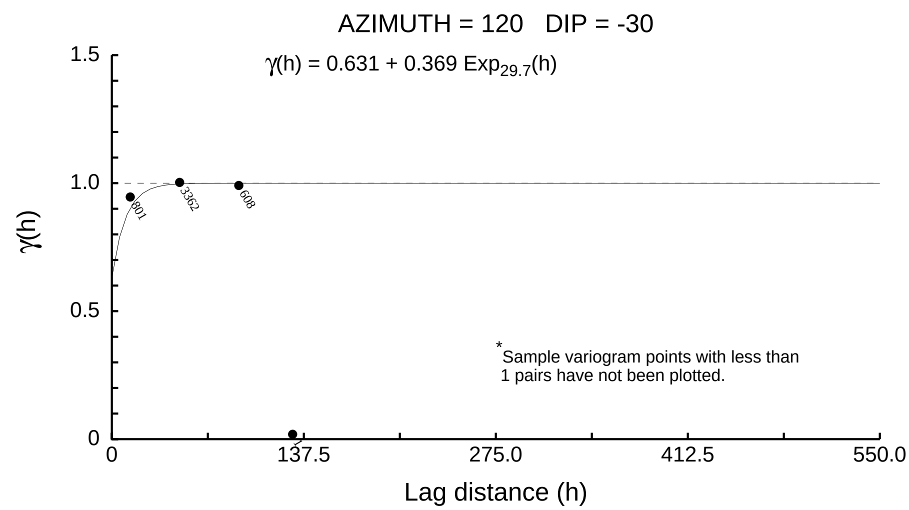

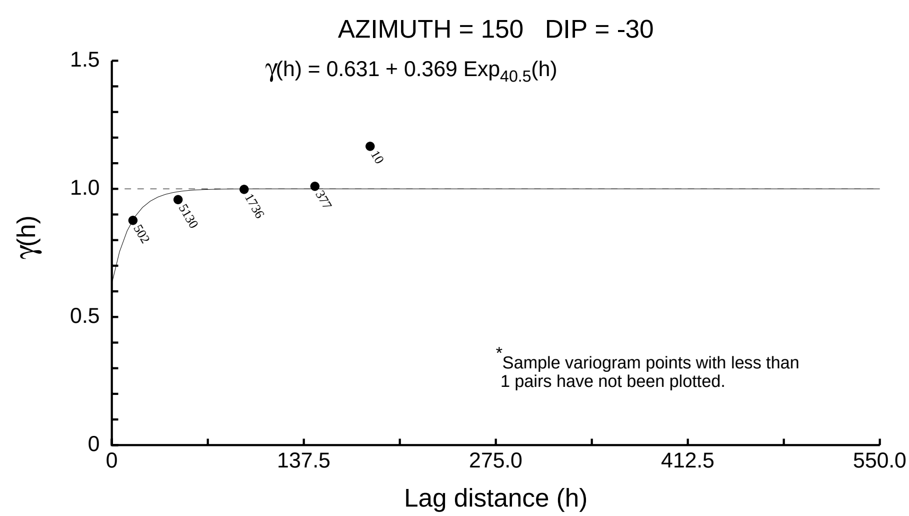

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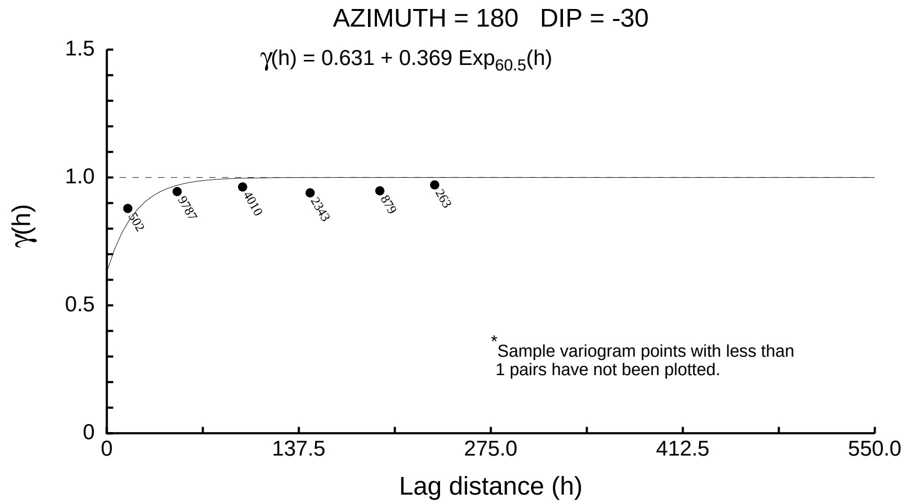

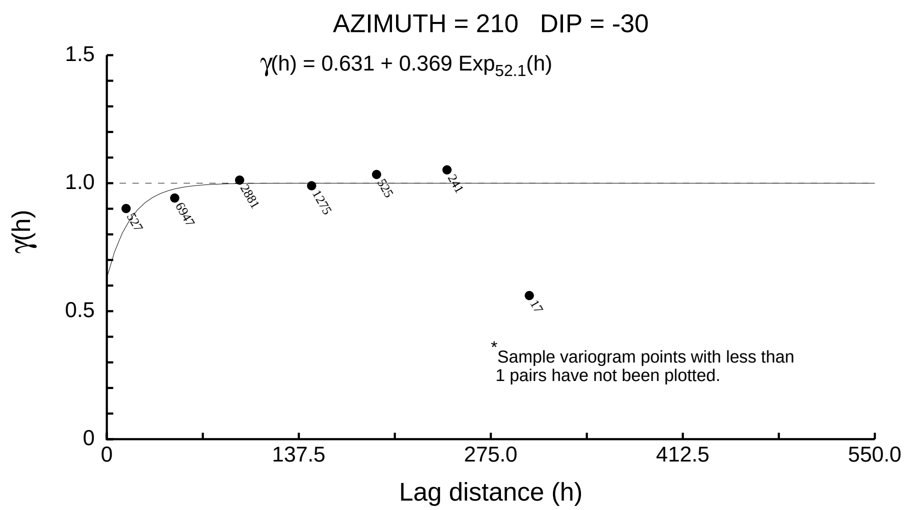

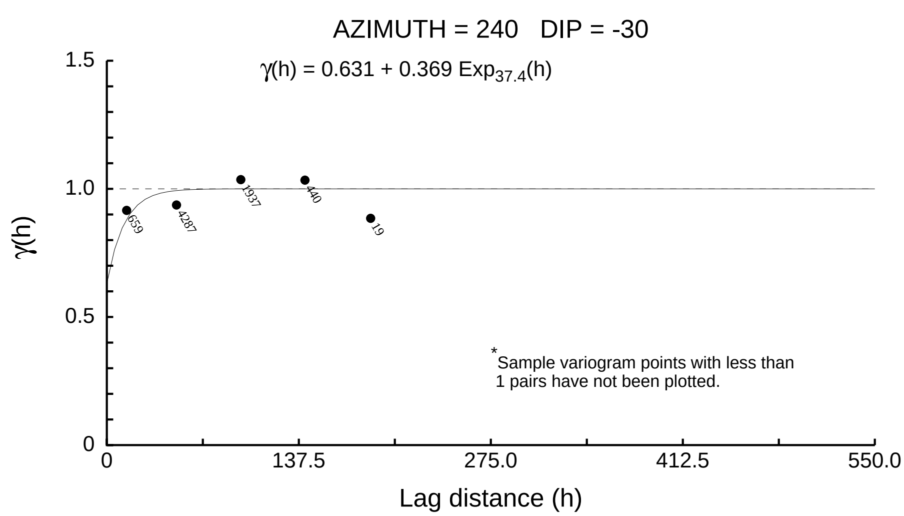

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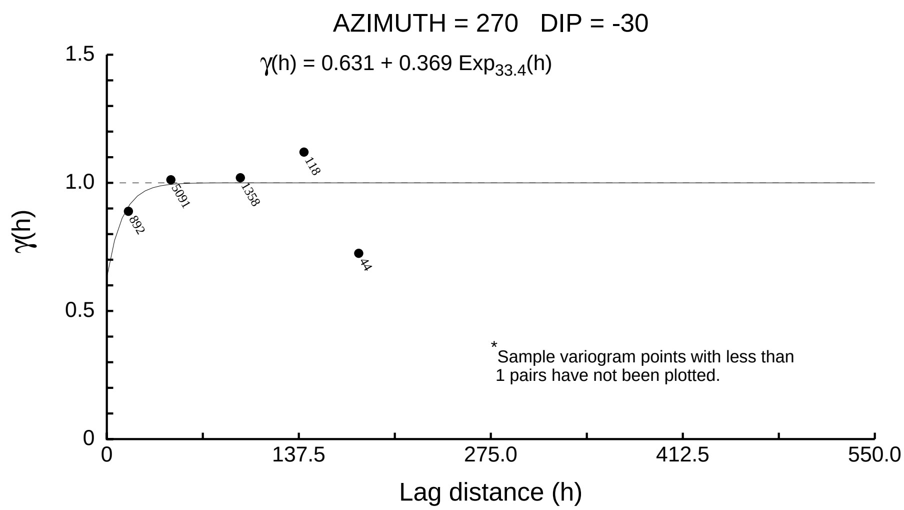
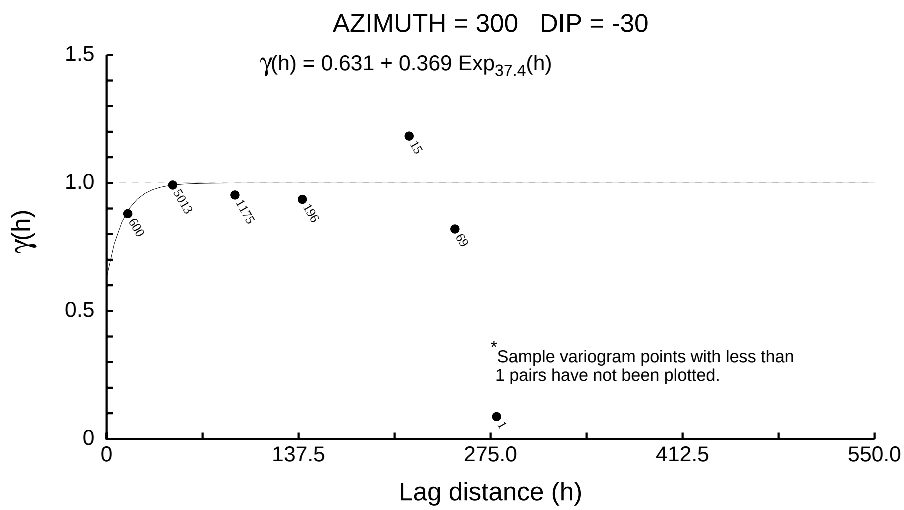
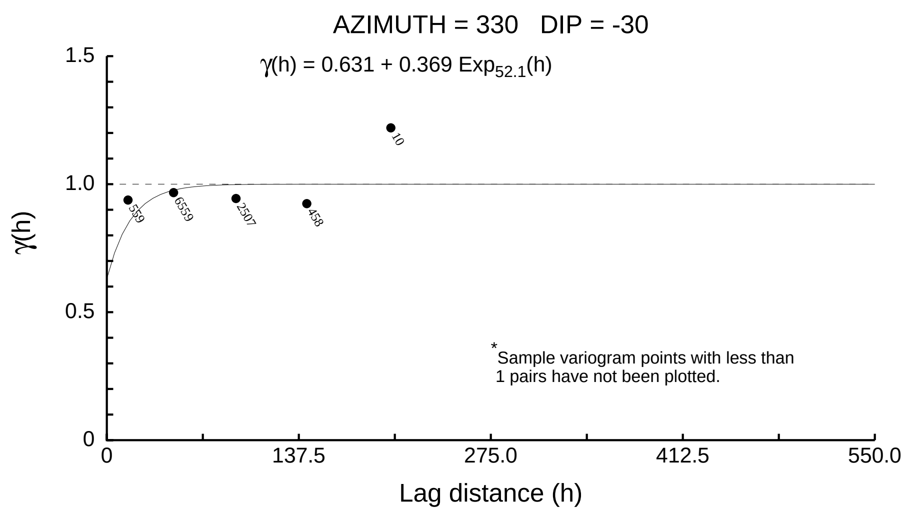
Zone 2 Directional Correlograms - 5m Comps







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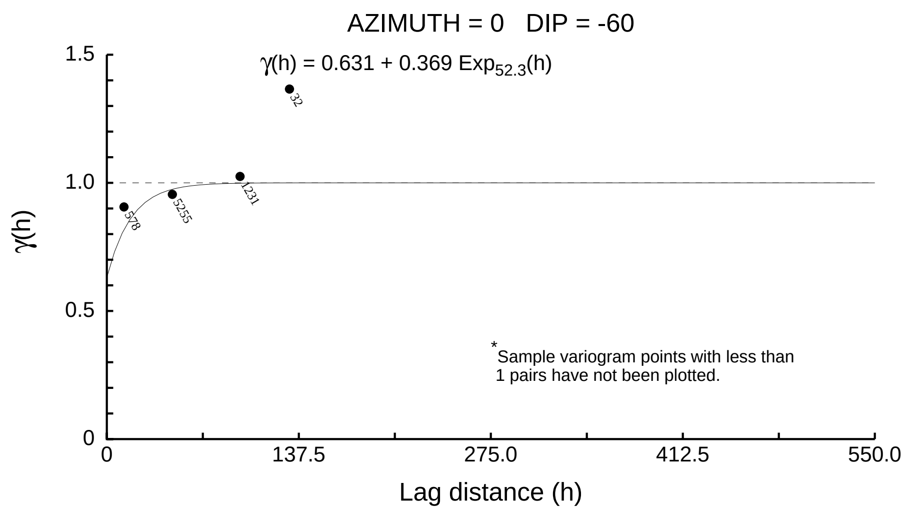

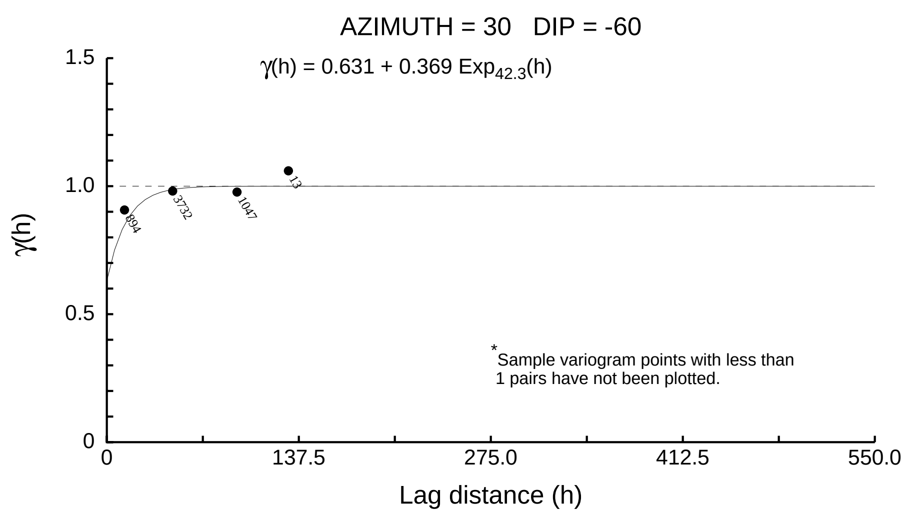

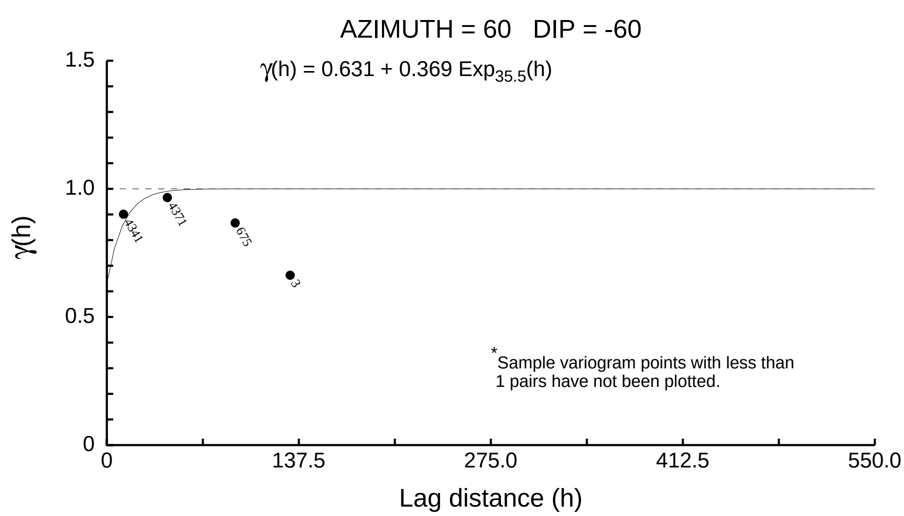

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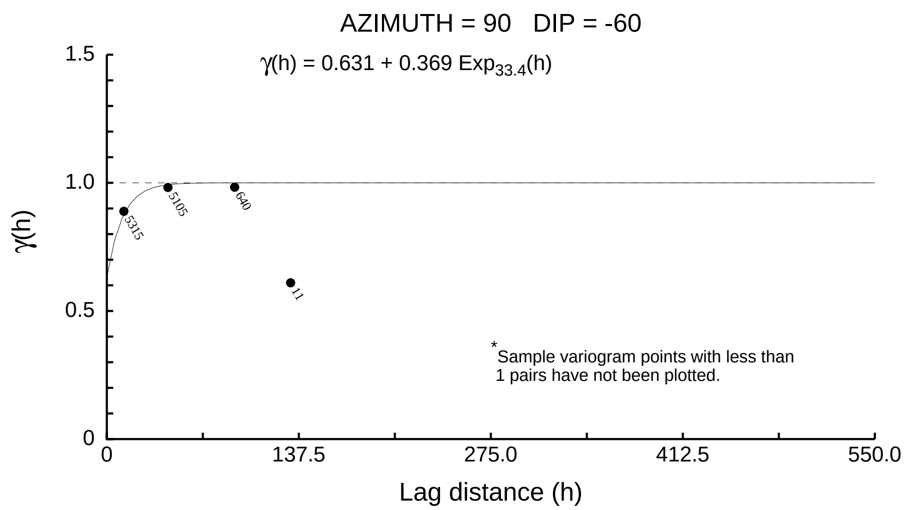
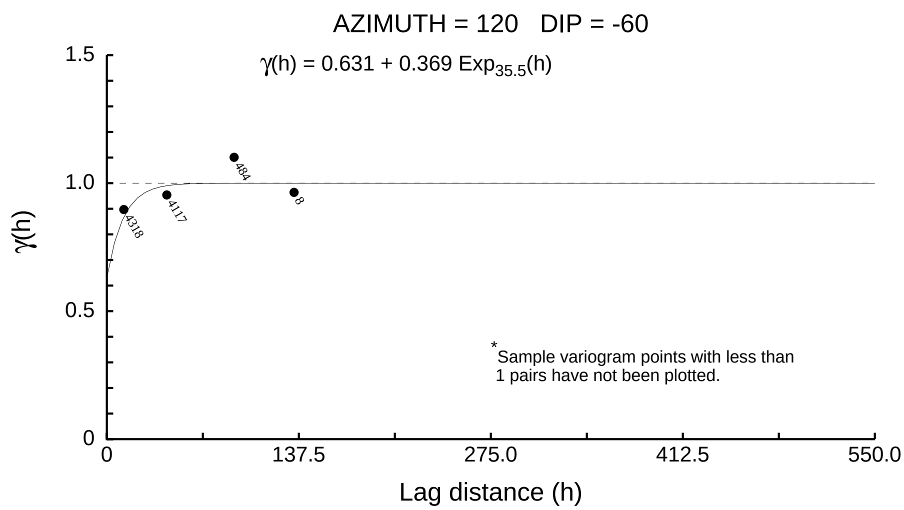
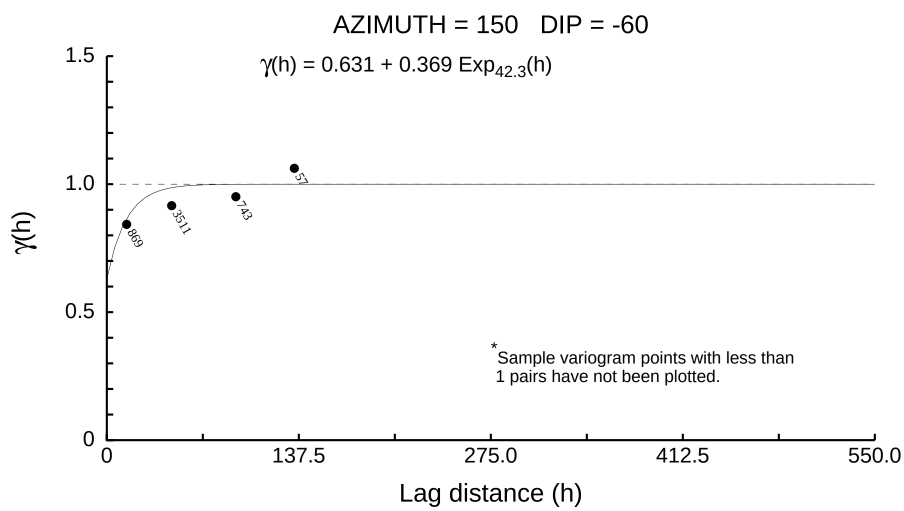
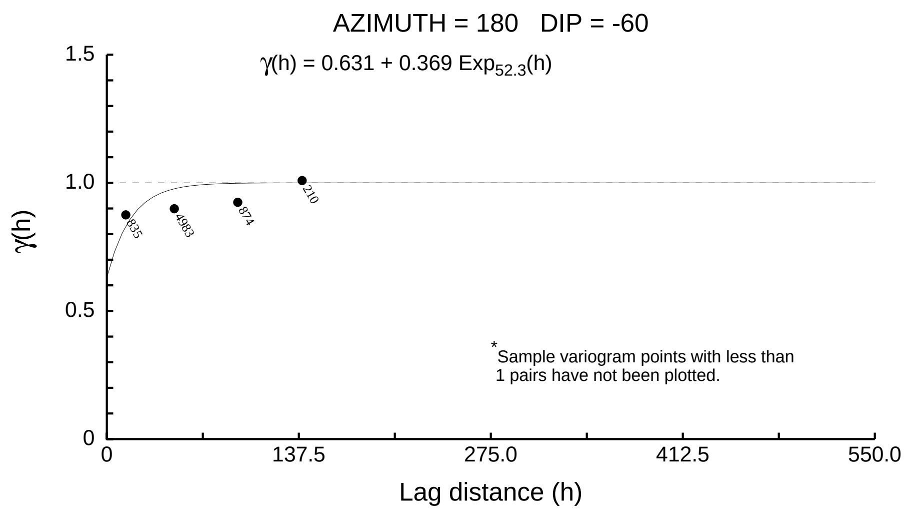
Zone 2 Directional Correlograms - 5m Comps

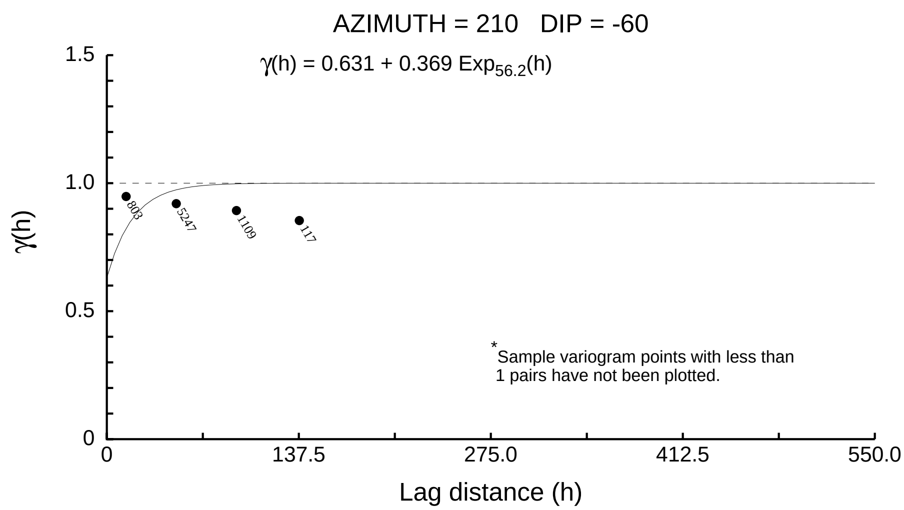


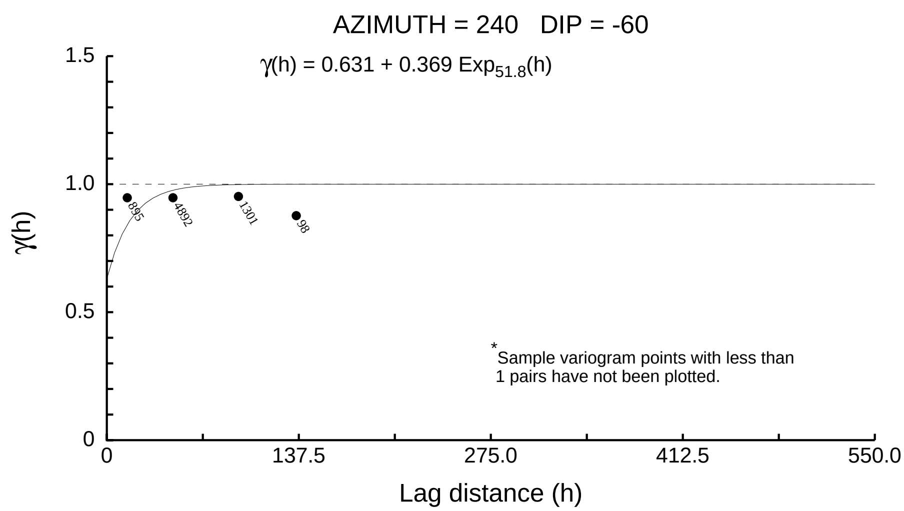




Zone 2 Directional Correlograms - 5m Comps







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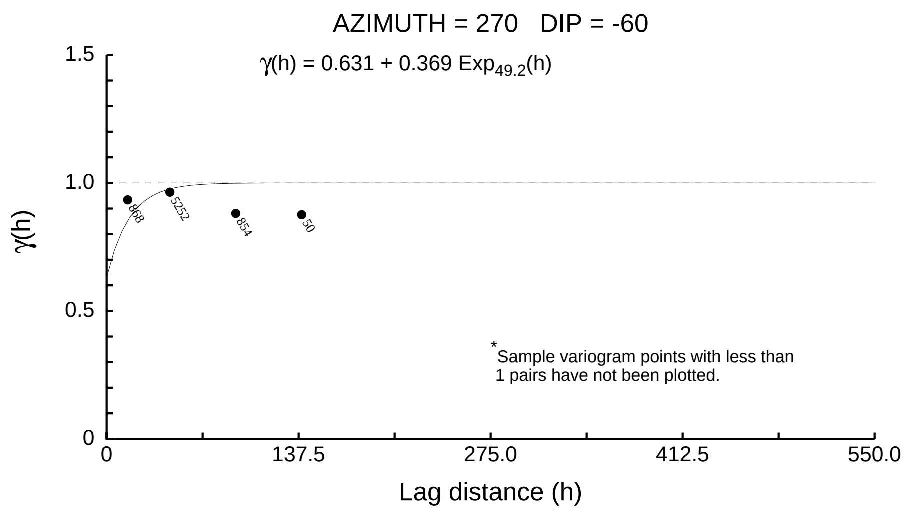
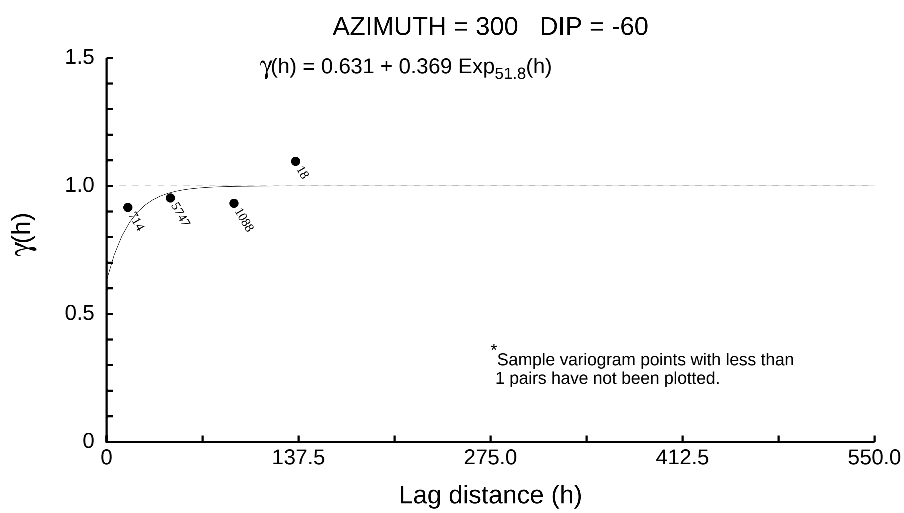
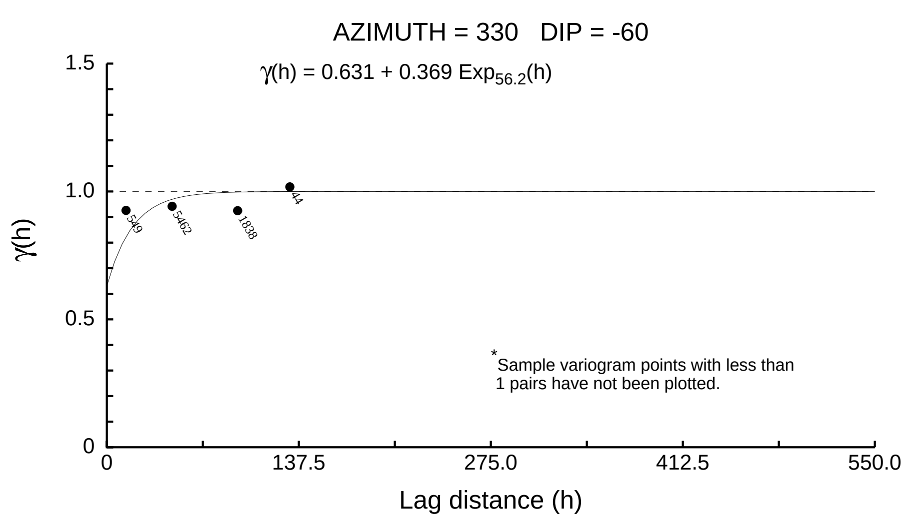
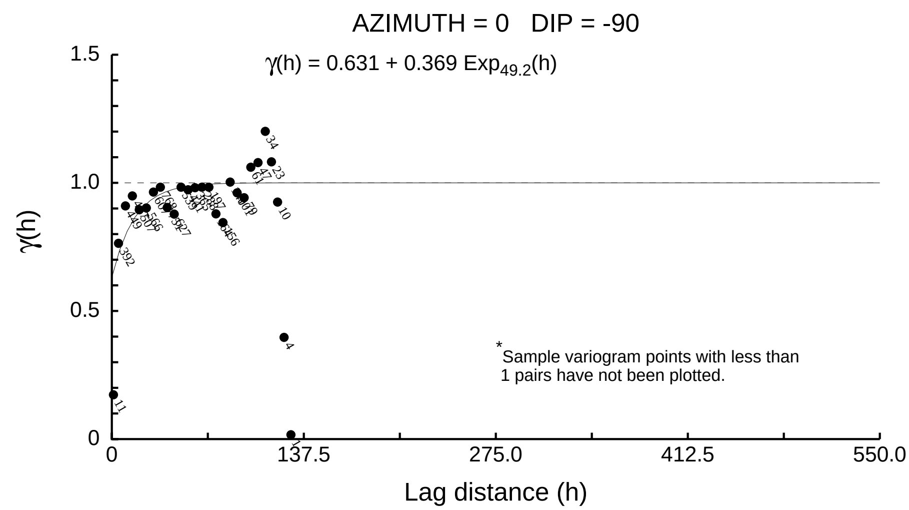
Zone 2 Directional Correlograms - 5m Comps







Zone 2 Directional Correlograms - 5m Comps



Zones 1+2 Directional Correlograms - 5m Comps

Medsystem and Vulcan Rotation Conventions

Nugget ==> 0.651
C1 ==> 0.349

First Structure -- Exponential with Practical Range

LH Rotation about the Z axis ==> 0
RH Rotation about the X' axis ==> 0
LH Rotation about the Y' axis ==> 75

Range along the Z' axis ==> 24.9	Azimuth ==> 270	Dip ==> 15
Range along the Y' axis ==> 84.7	Azimuth ==> 360	Dip ==> 0
Range along the X' axis ==> 51.7	Azimuth ==> 90	Dip ==> 75

Modeling Criteria

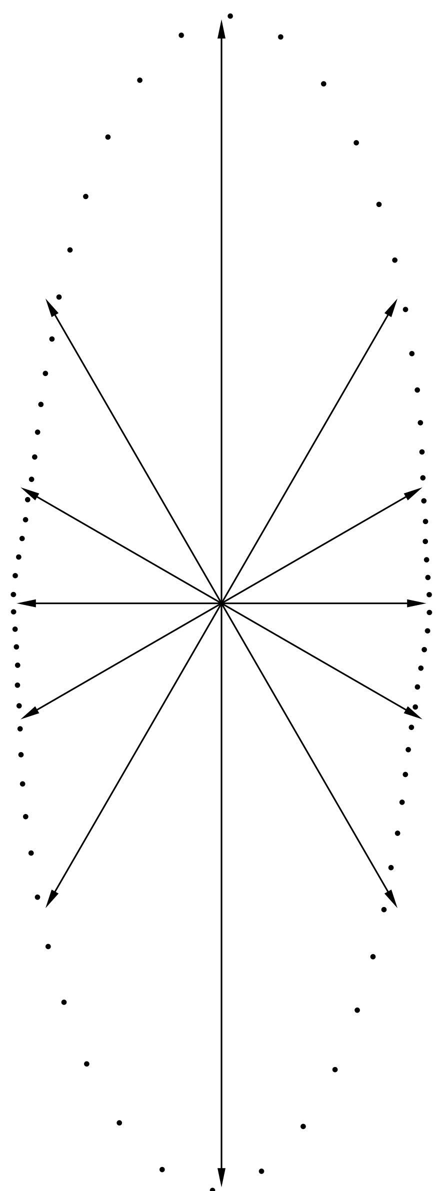
Minimum number pairs req'd ==> 1
Sample variogram points weighted by # pairs

Zones 1+2 Directional Correlograms - 5m Comps

Structure Number 1

Rose Diagram of Ranges Dipping 0 Degrees
Scale:

80 Units



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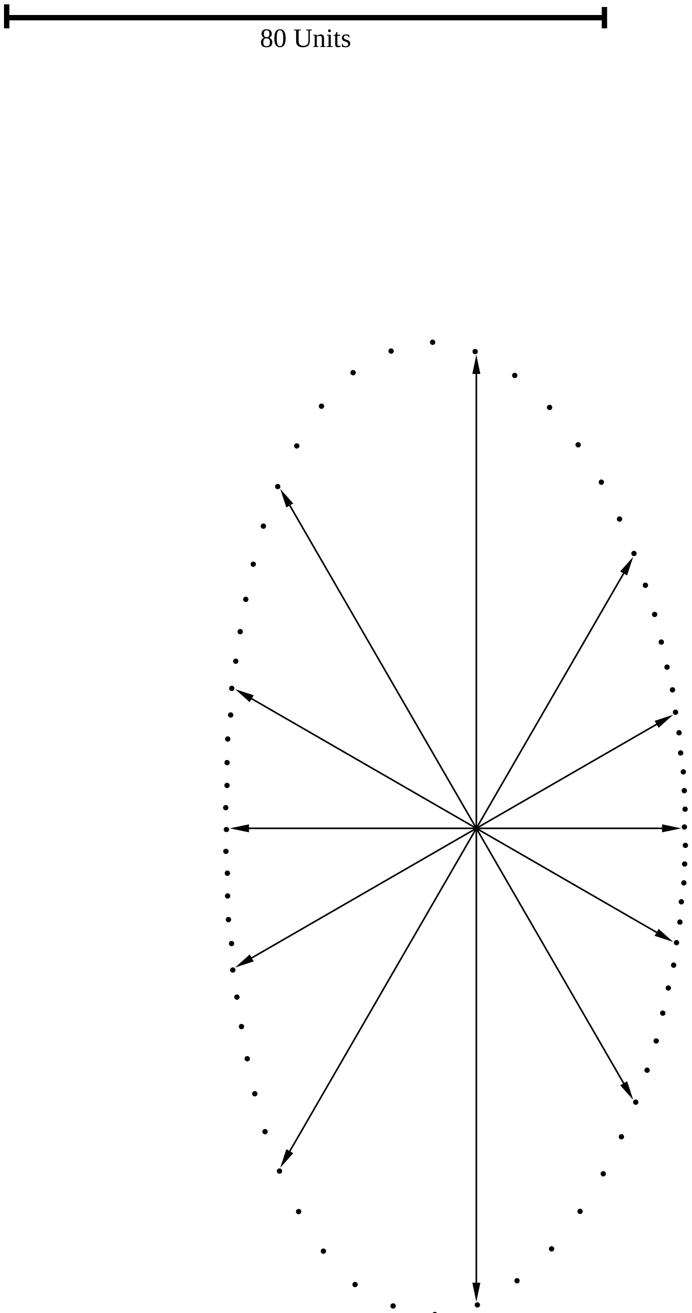
Zones 1+2 Directional Correlograms - 5m Comps

Structure Number 1

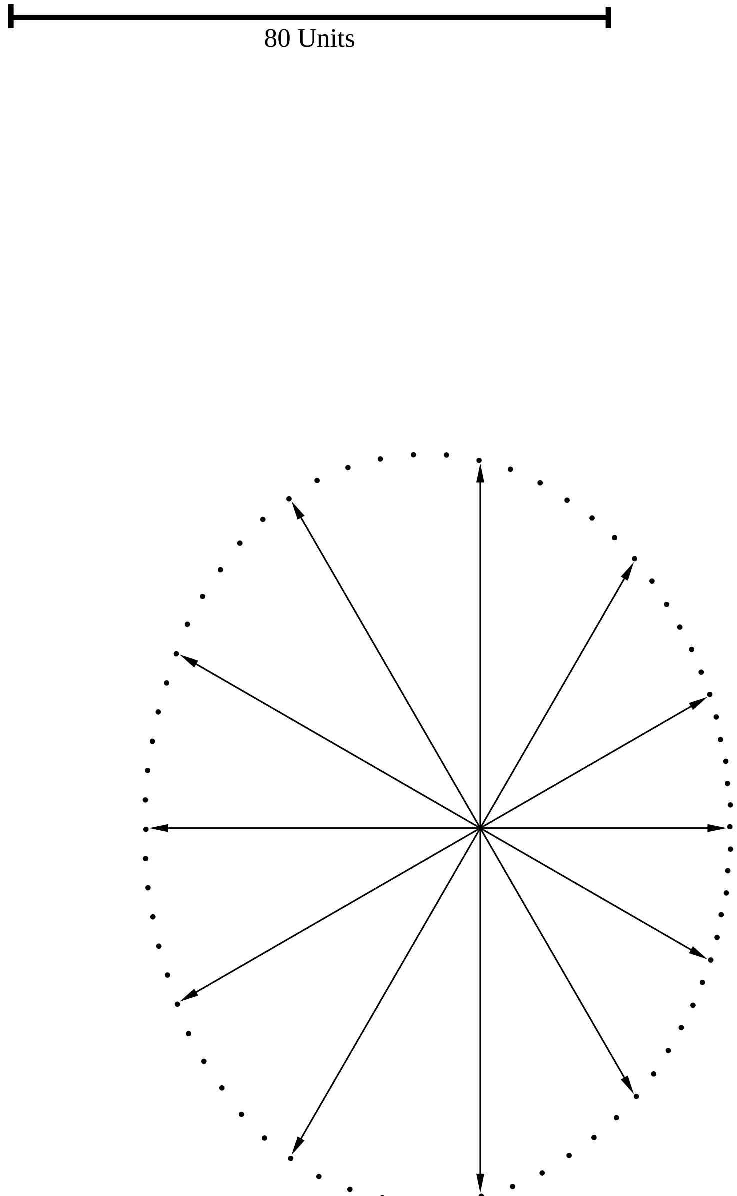
Rose Diagram of Ranges Dipping 30 Degrees
Scale:



Zones 1+2 Directional Correlograms - 5m Comps

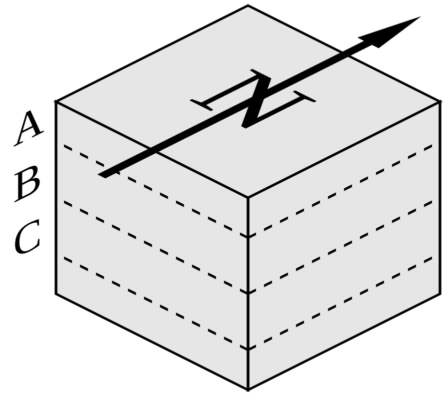
Structure Number 1

Rose Diagram of Ranges Dipping 60 Degrees
Scale:

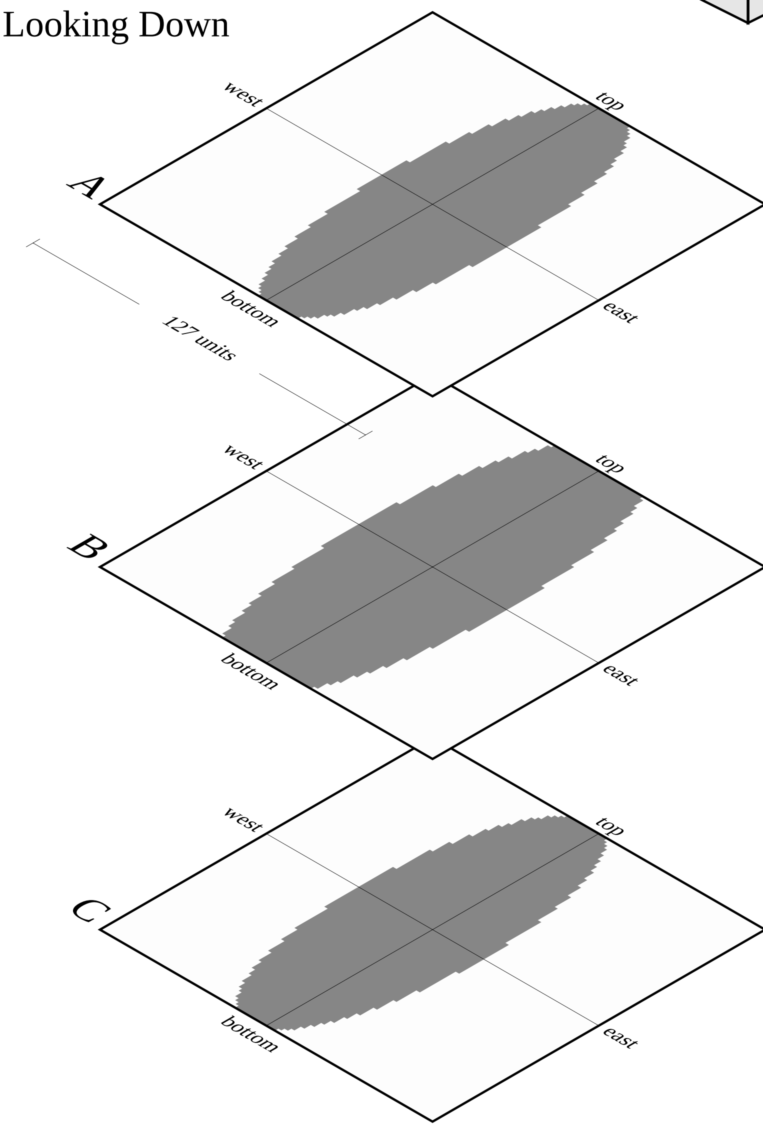


Horizontal Slices Through the Ellipsoids

Reference Cube



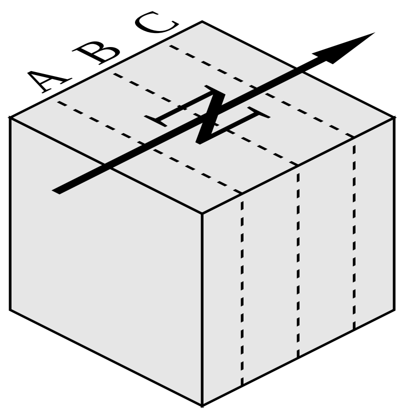
X-Y Planes Looking Down



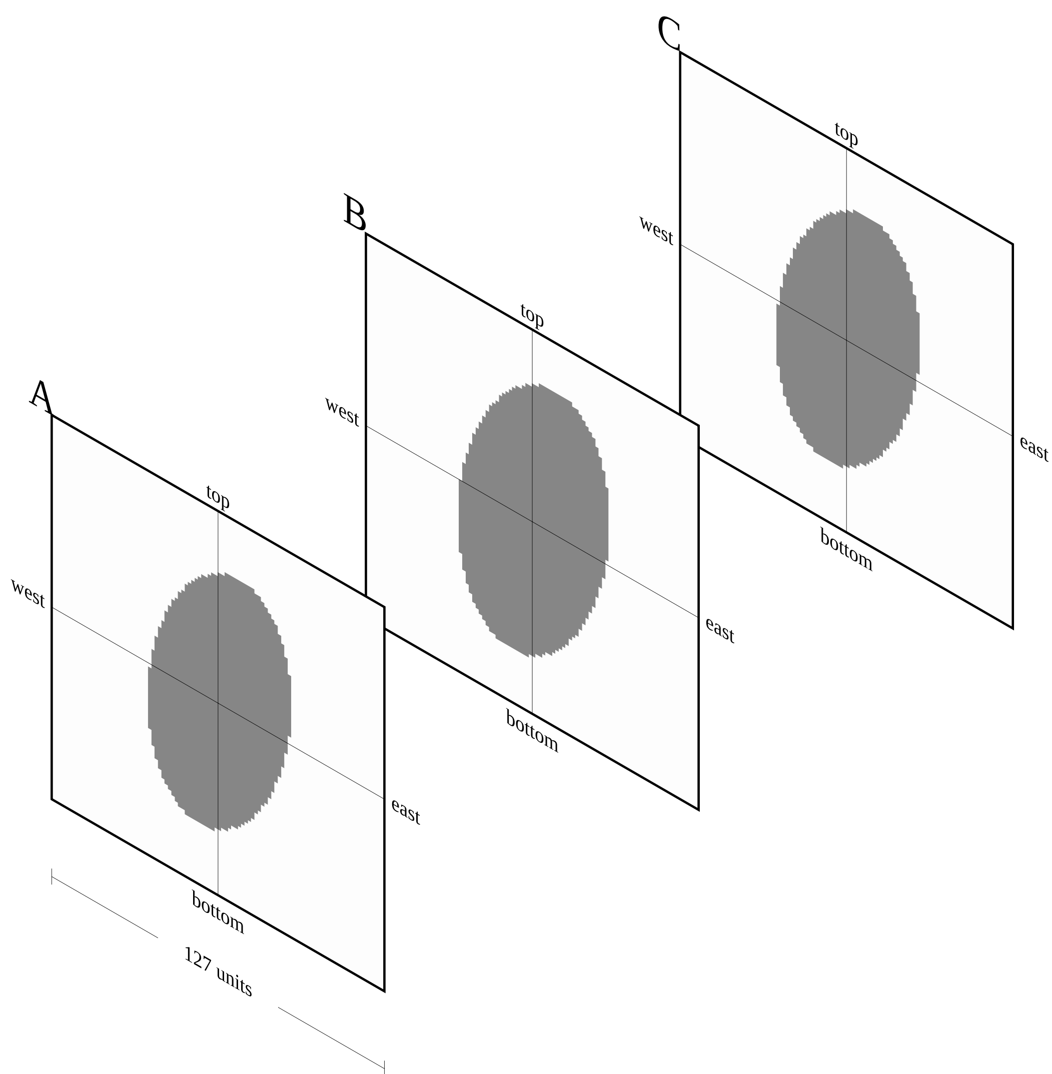
Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Cross Section Views Through the Ellipsoids

Reference Cube



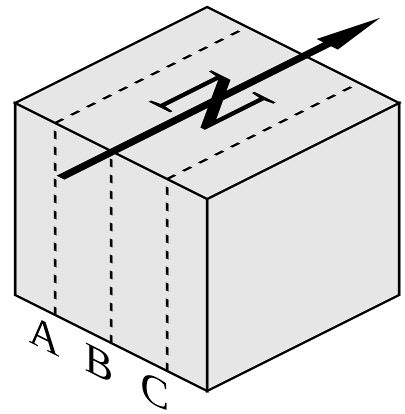
X-Z Planes Looking North



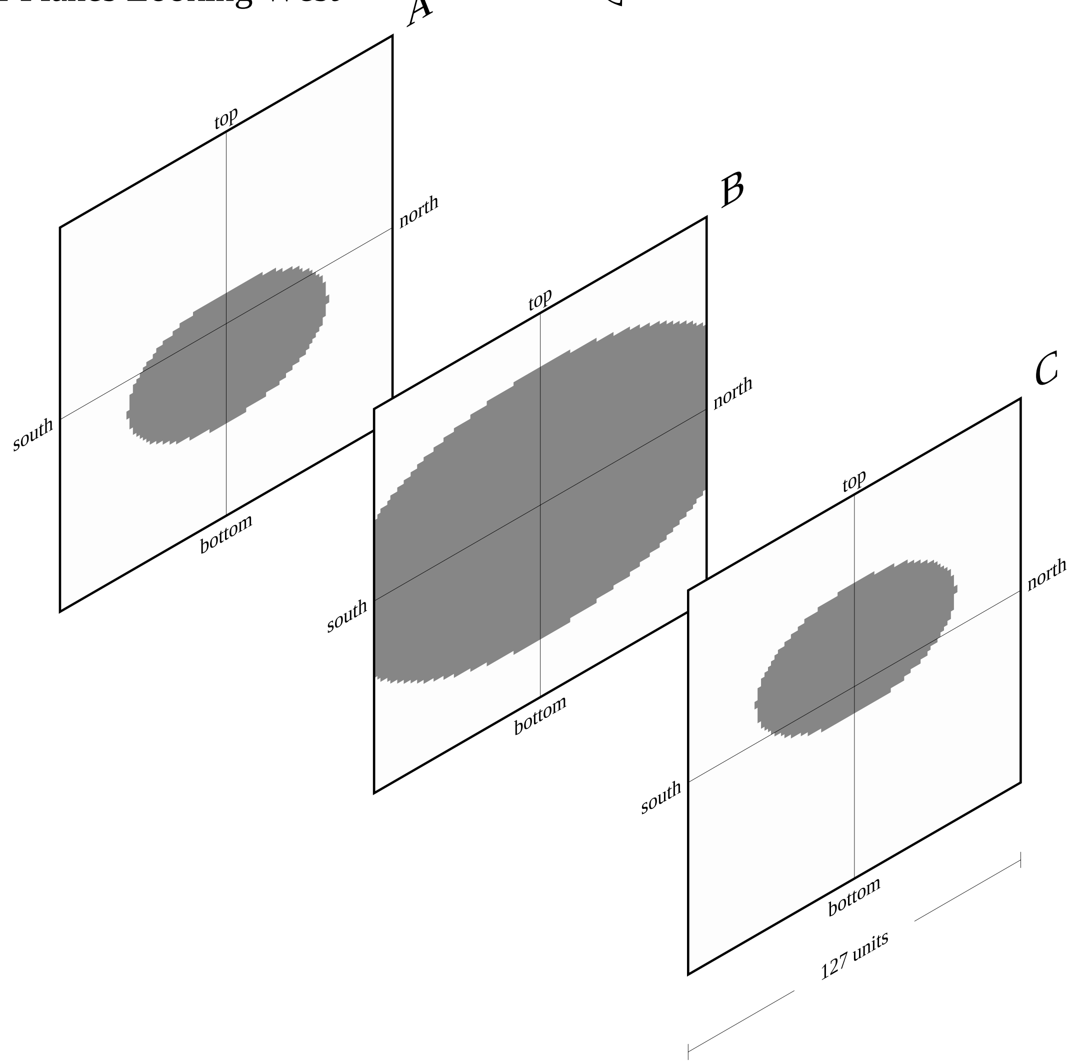
Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Long Section Views Through the Ellipsoids

Reference Cube

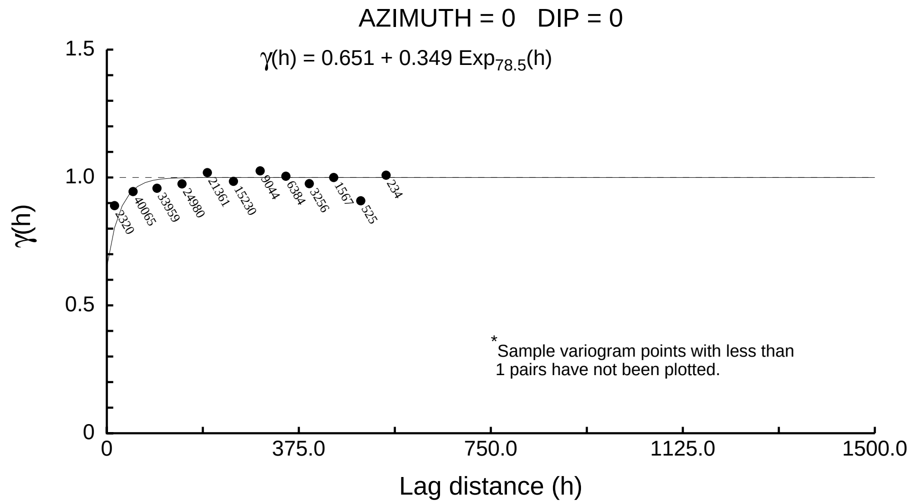


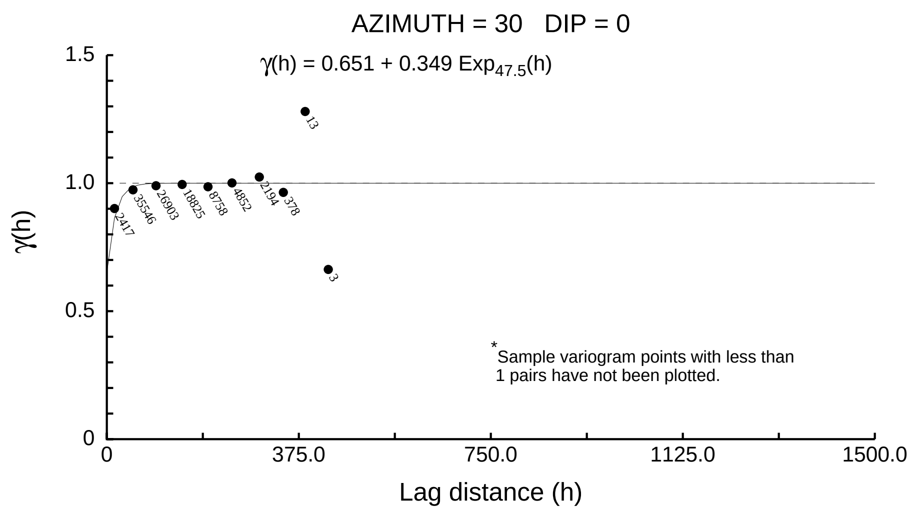
Y-Z Planes Looking West

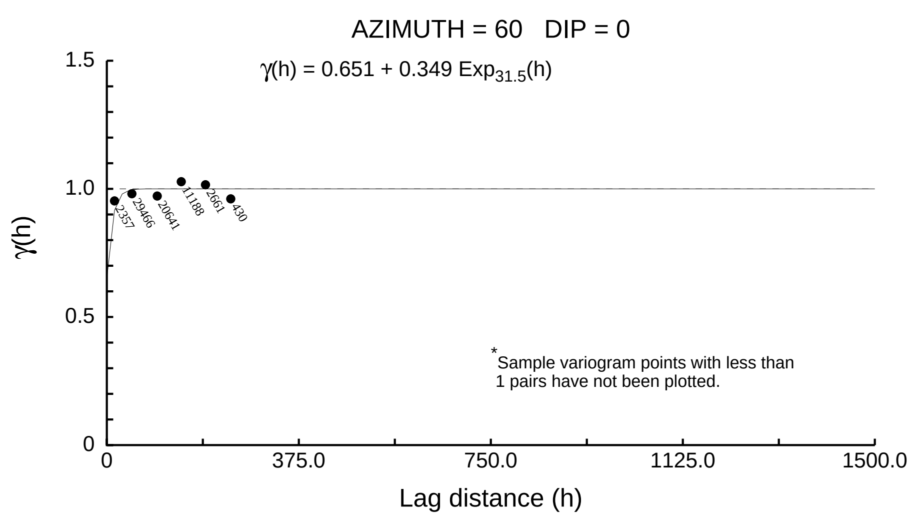


Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Zones 1+2 Directional Correlograms - 5m Comps







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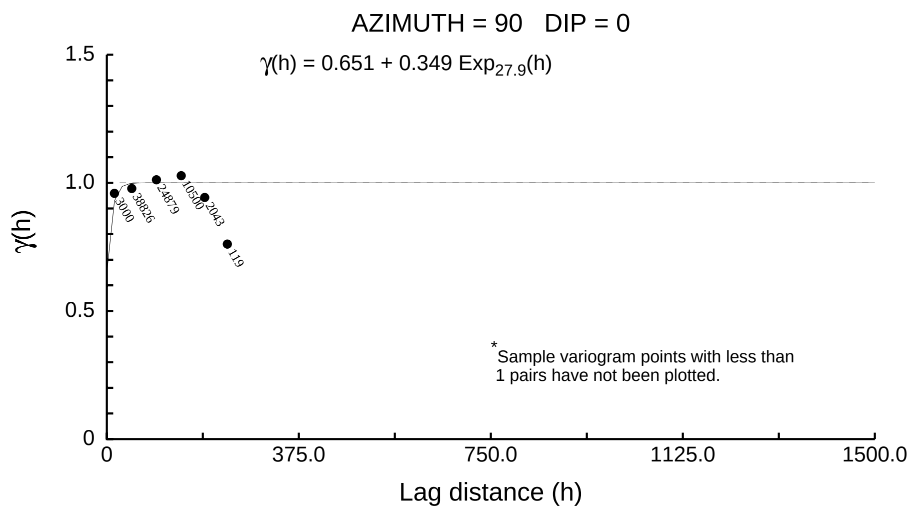
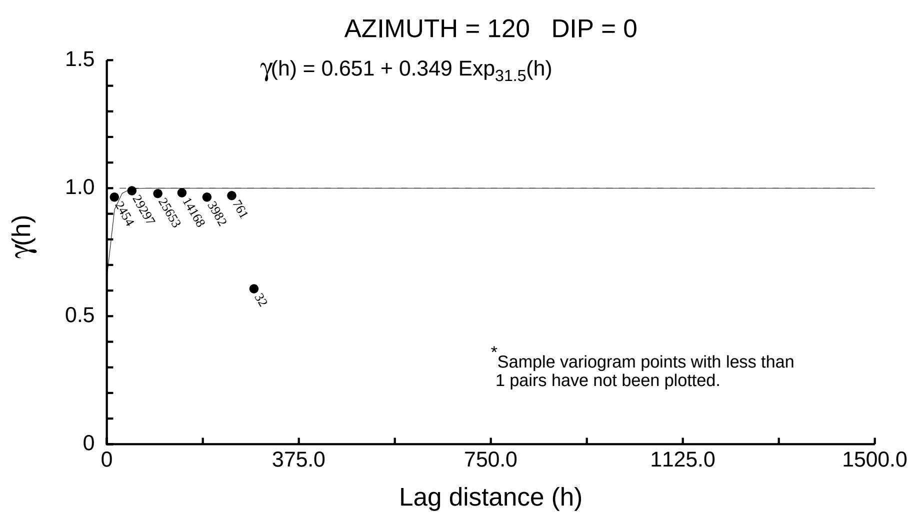
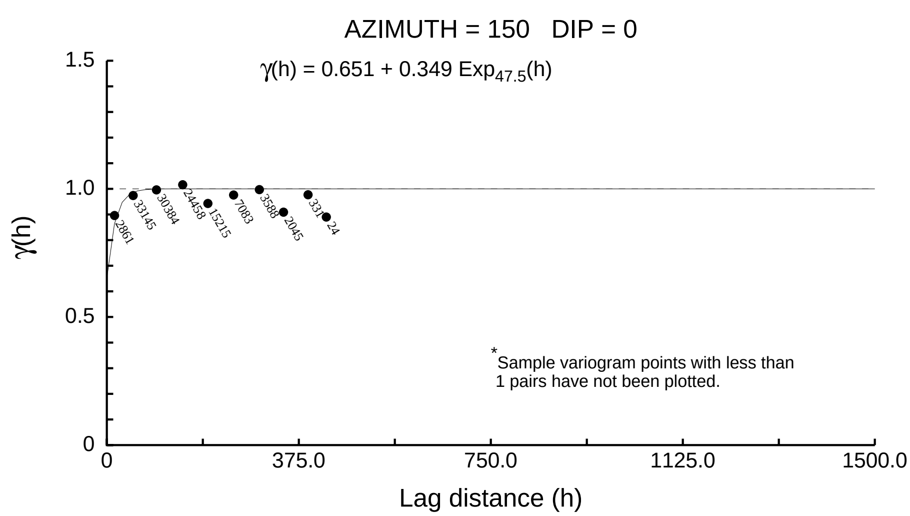
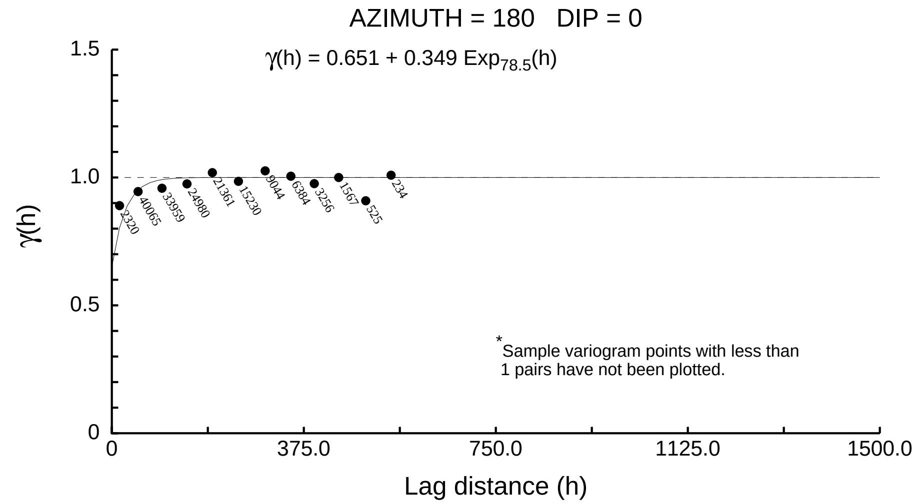
Zones 1+2 Directional Correlograms - 5m Comps

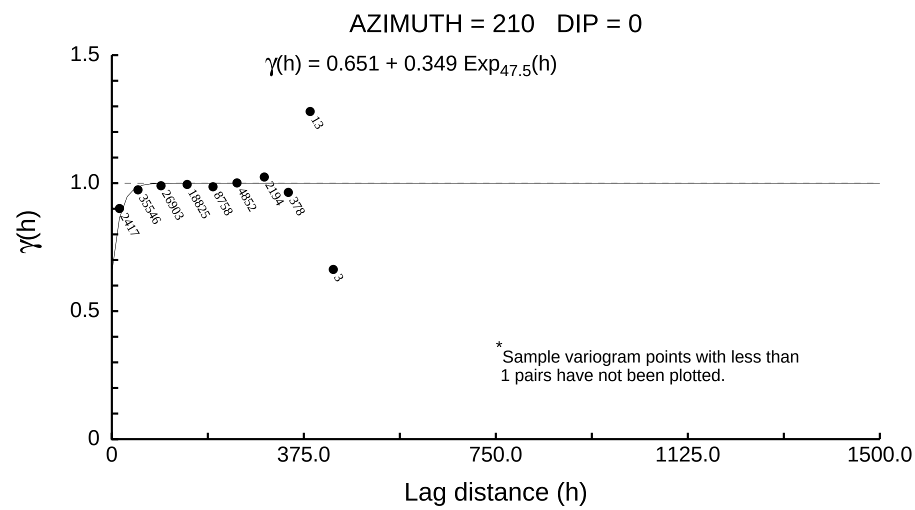


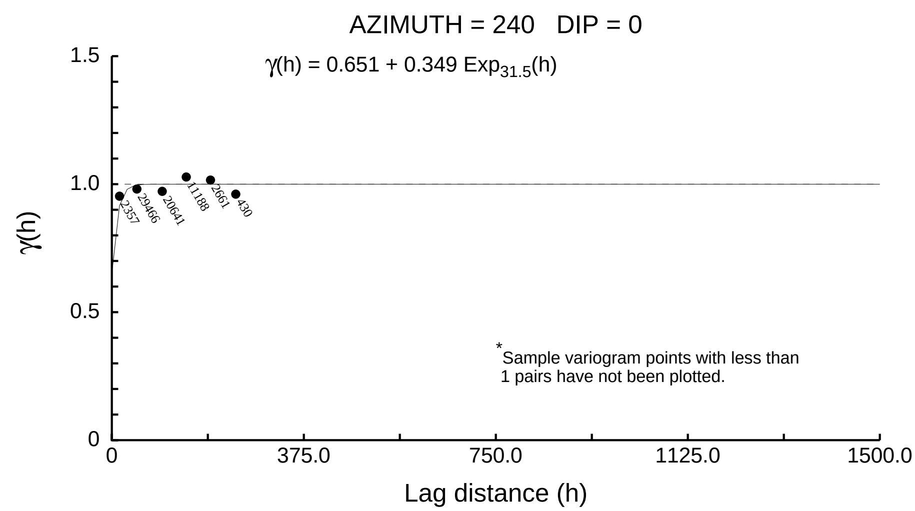




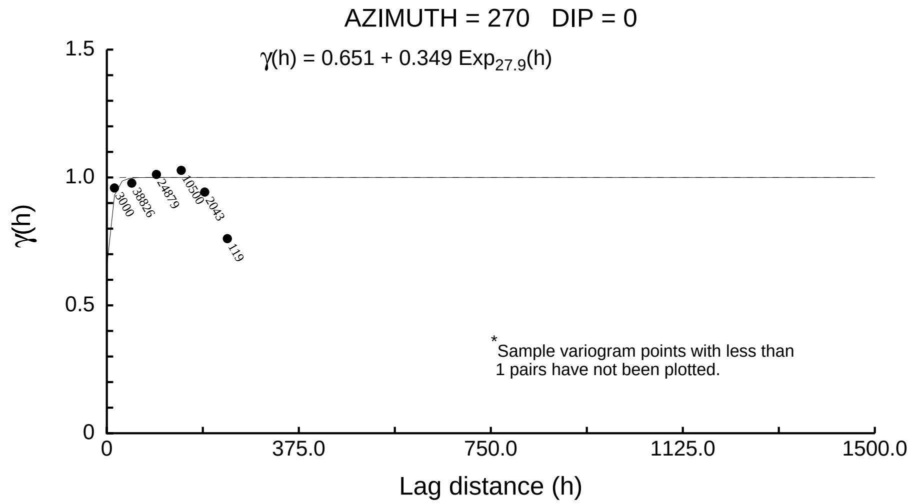
Zones 1+2 Directional Correlograms - 5m Comps

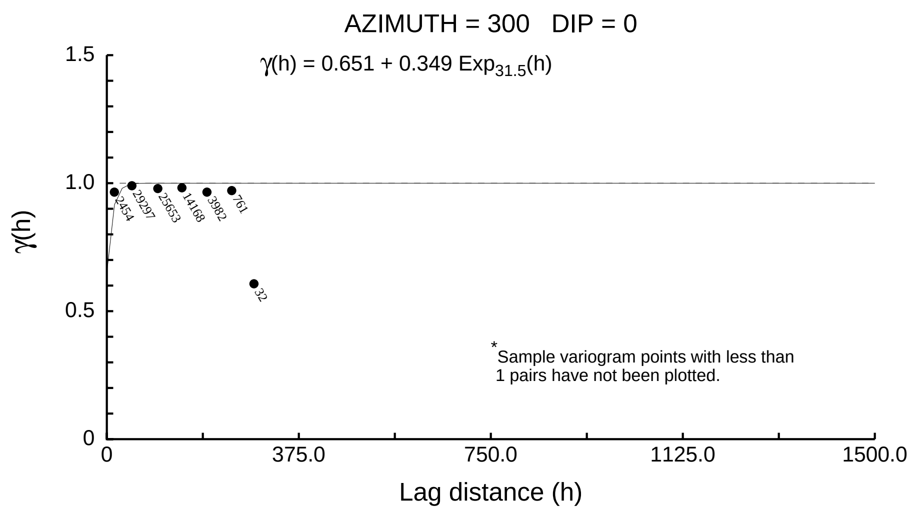


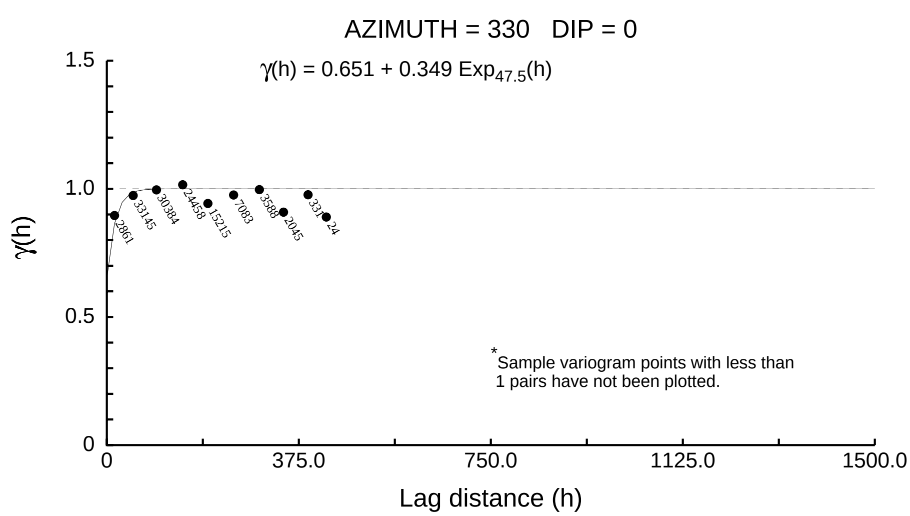




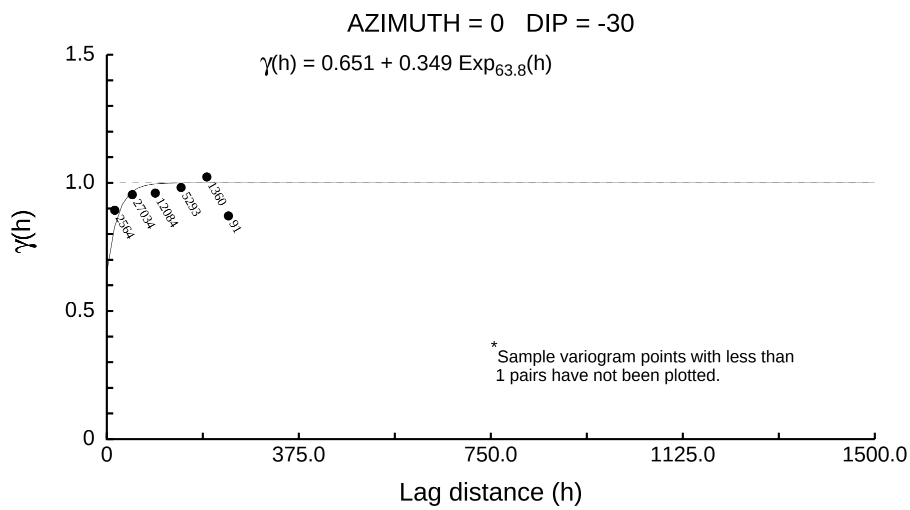
Zones 1+2 Directional Correlograms - 5m Comps

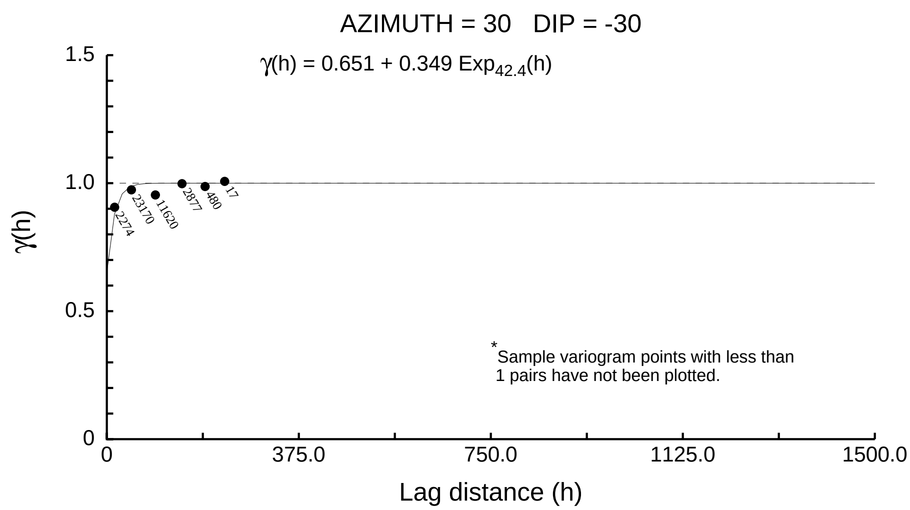


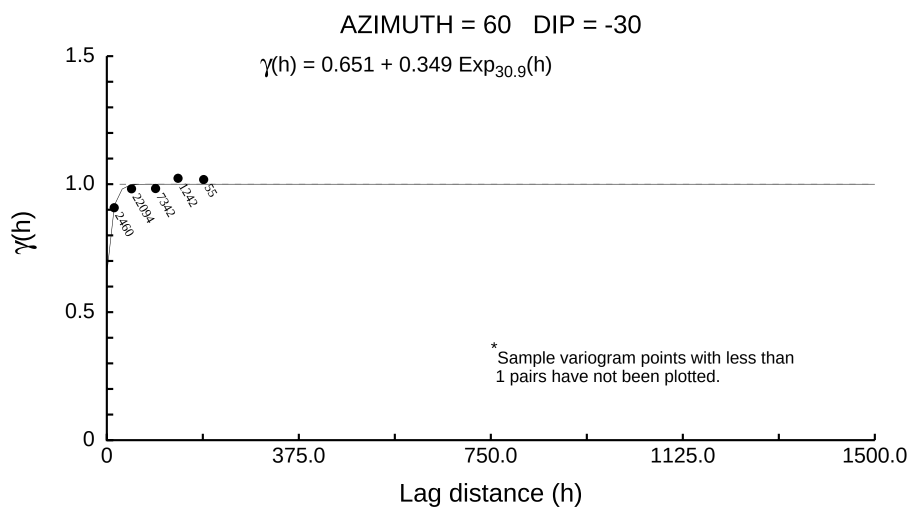




Zones 1+2 Directional Correlograms - 5m Comps







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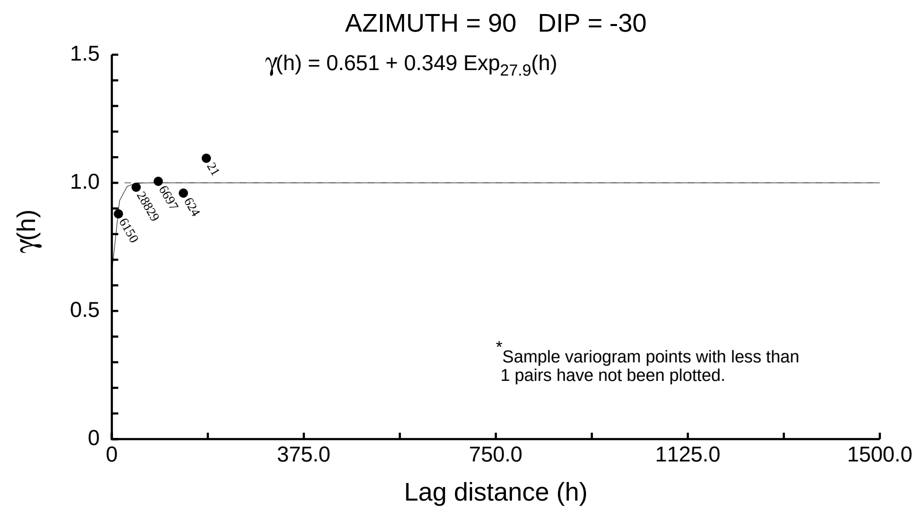
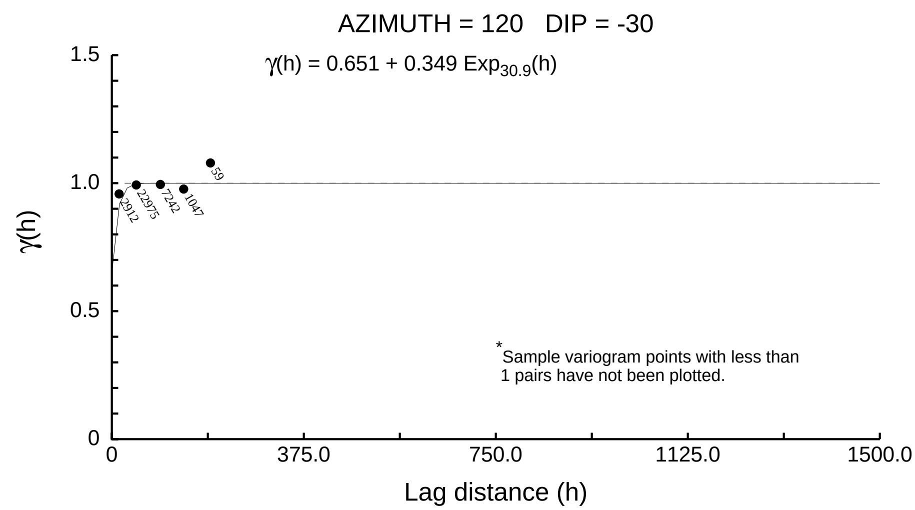
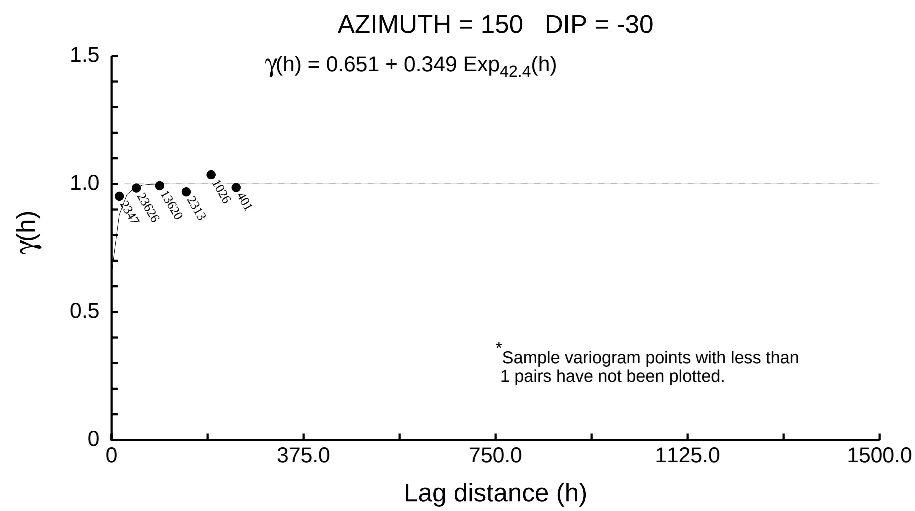
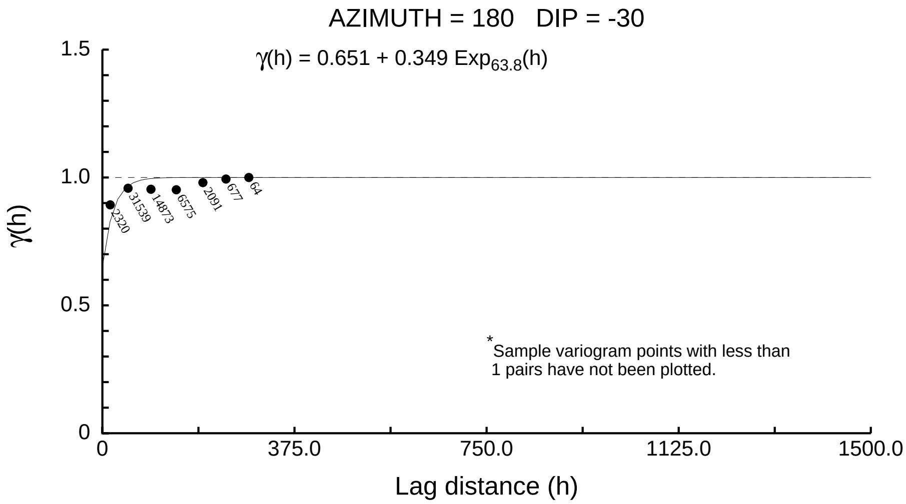
Zones 1+2 Directional Correlograms - 5m Comps

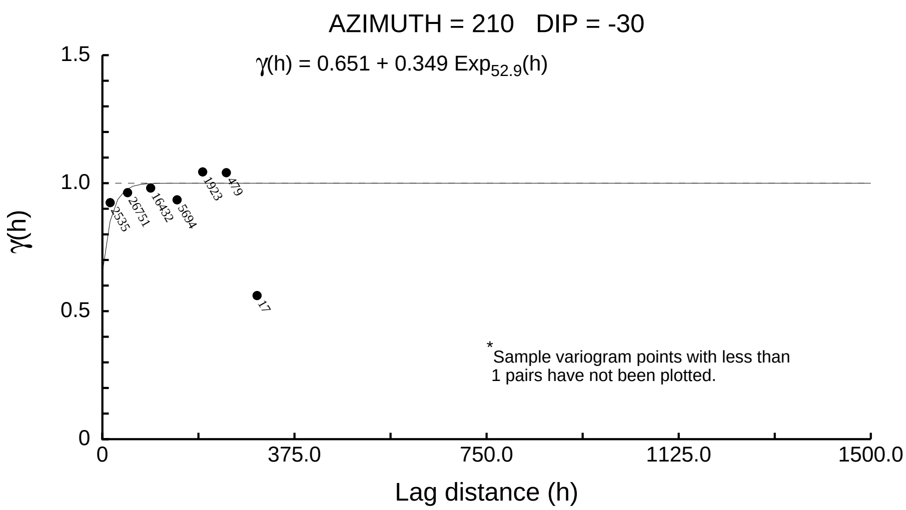


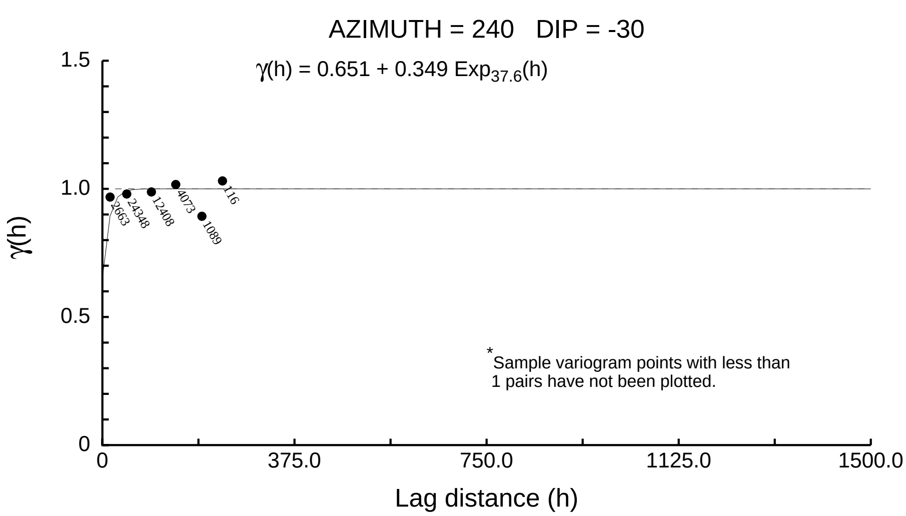




Zones 1+2 Directional Correlograms - 5m Comps







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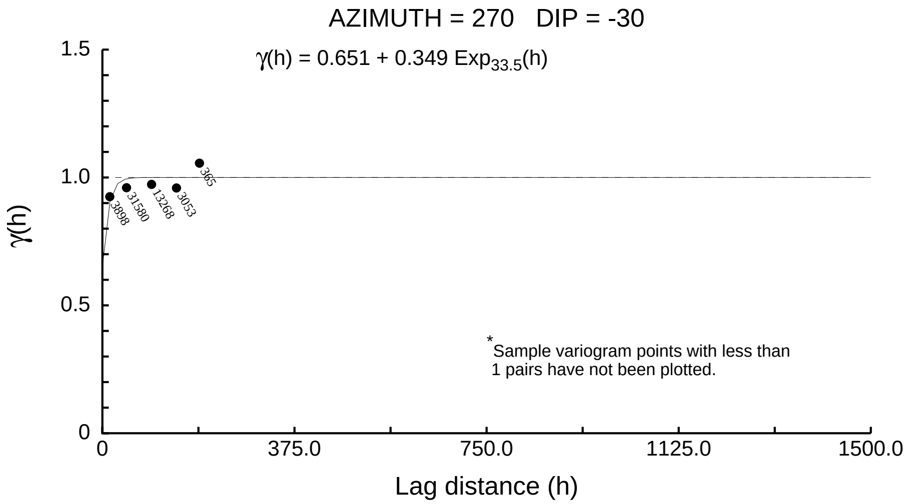
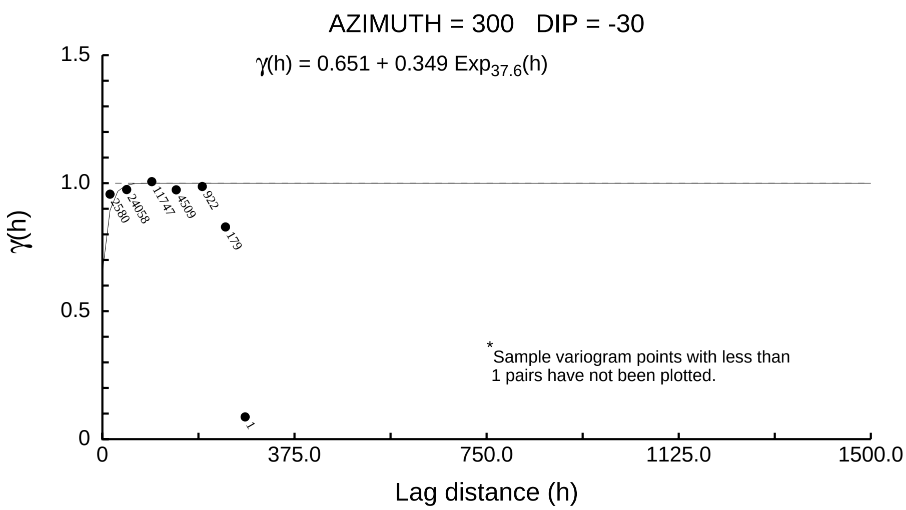
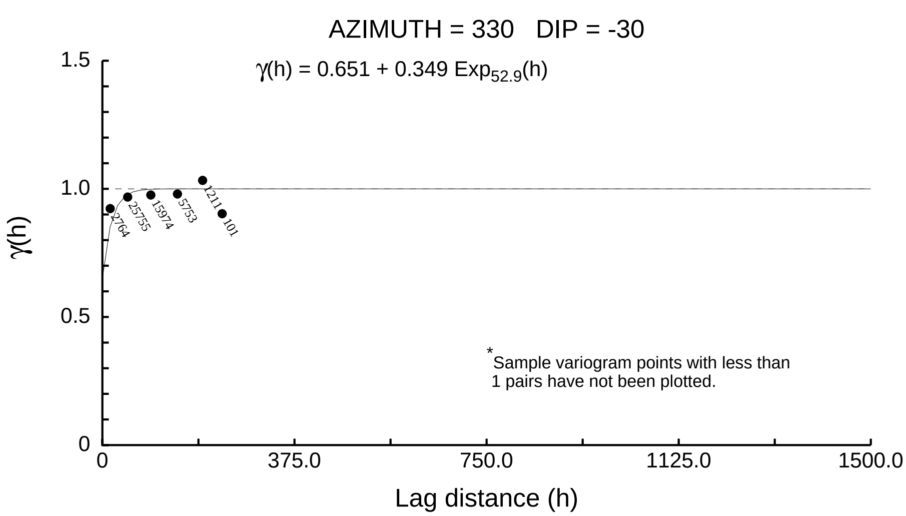
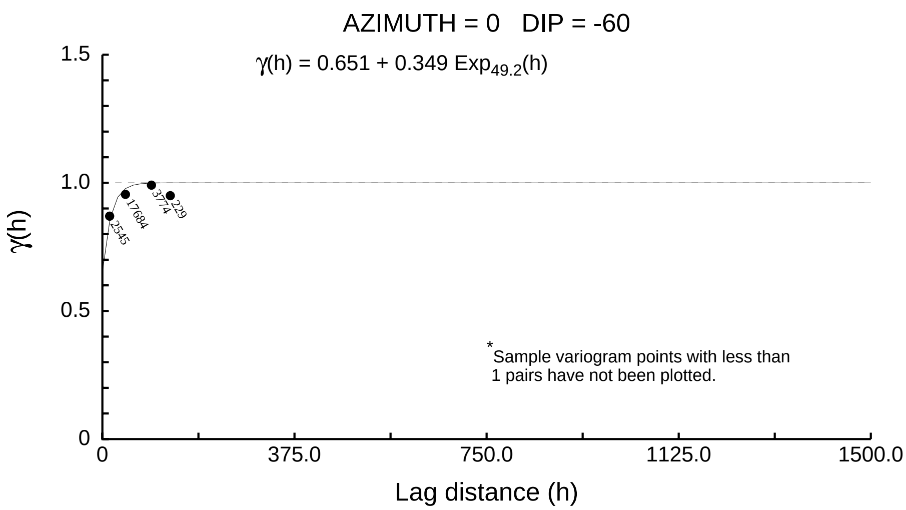
Zones 1+2 Directional Correlograms - 5m Comps

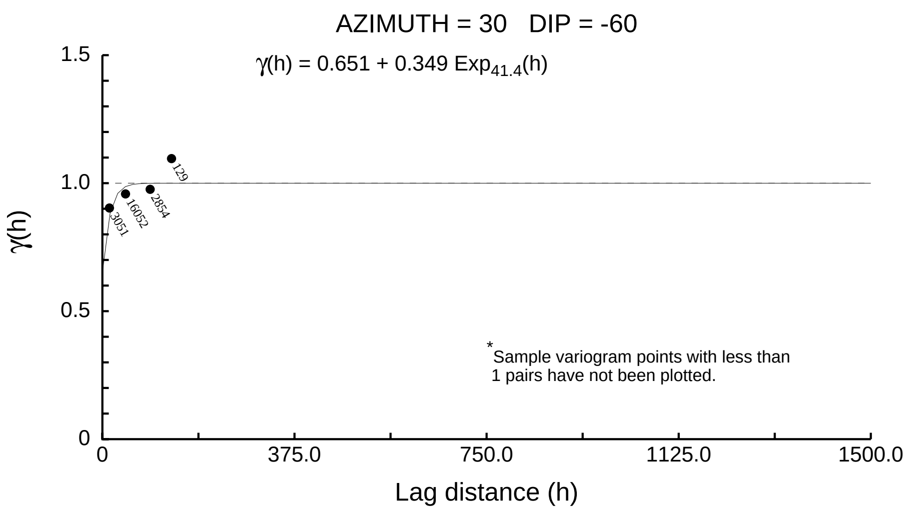


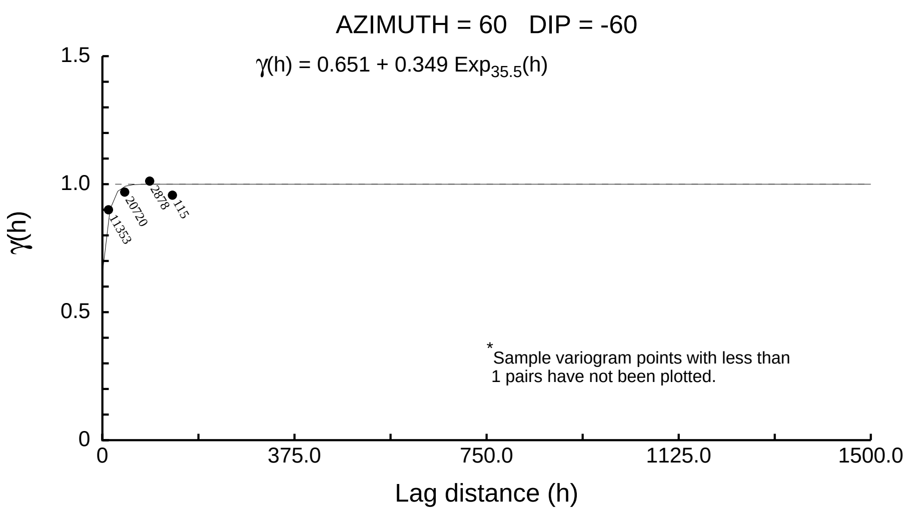




Zones 1+2 Directional Correlograms - 5m Comps







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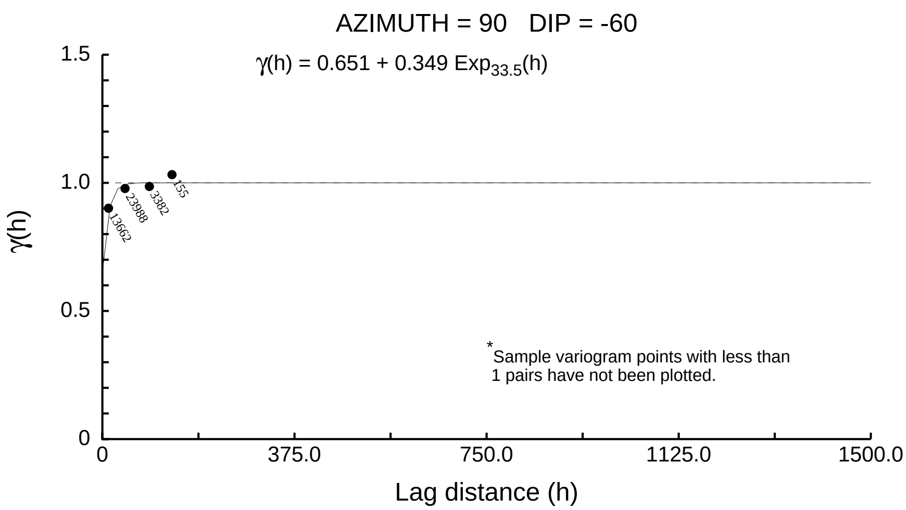
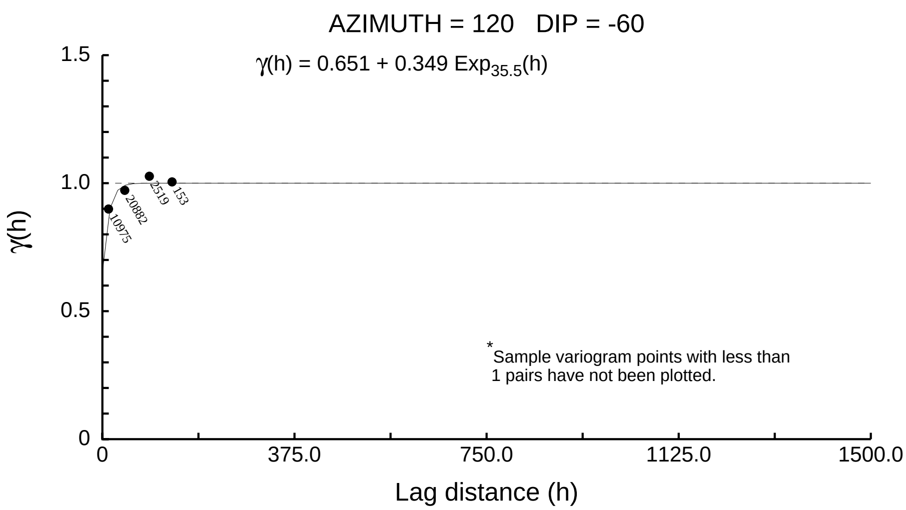
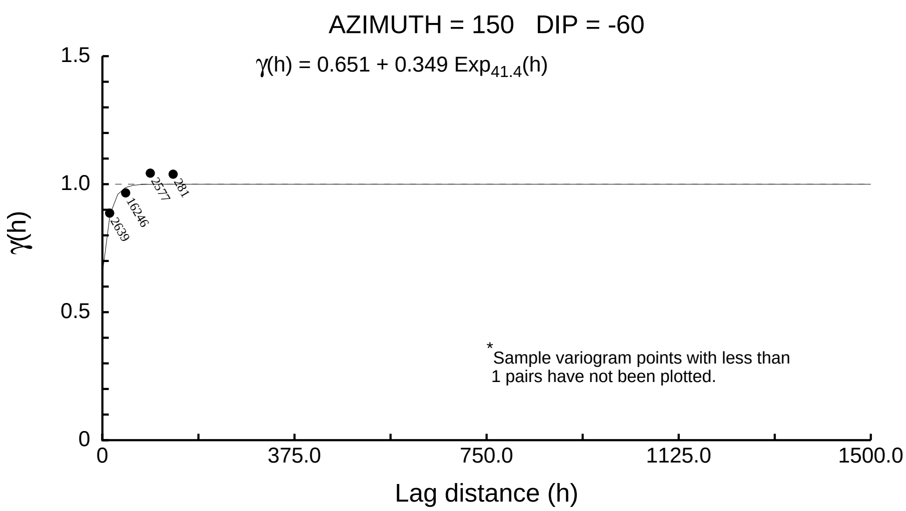
Zones 1+2 Directional Correlograms - 5m Comps







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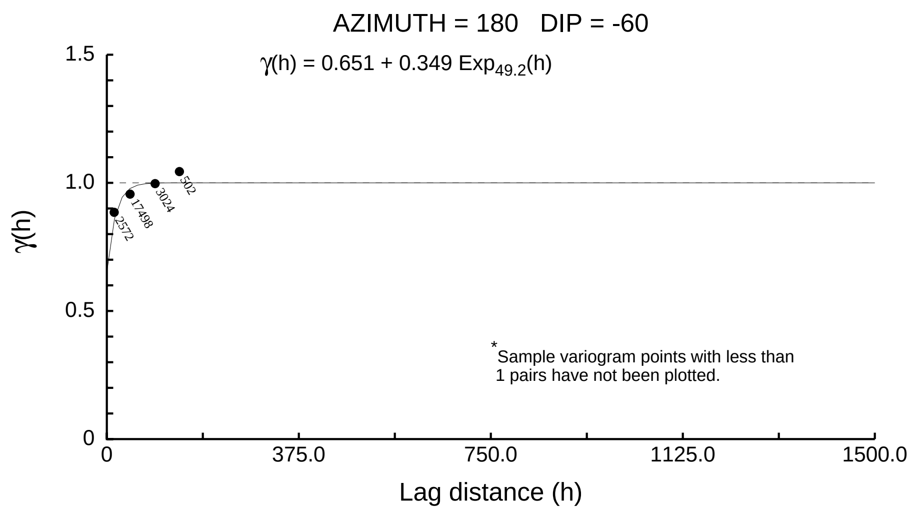
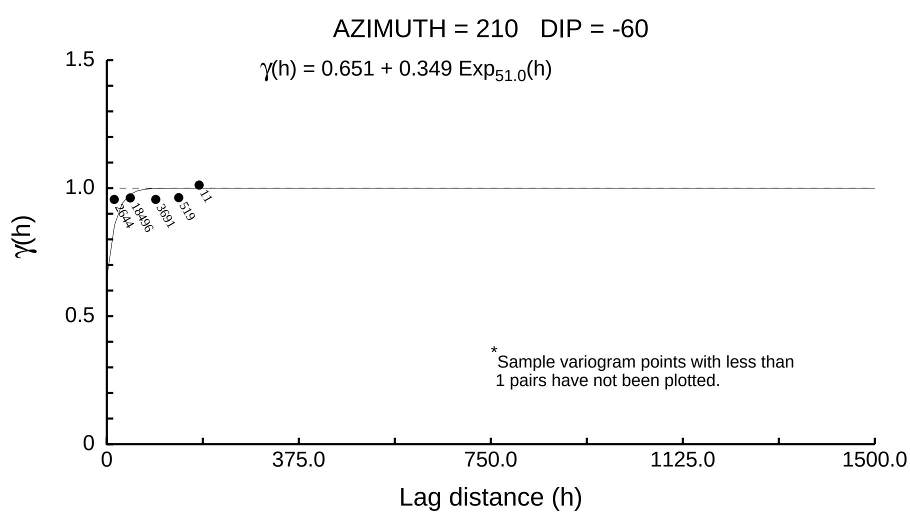
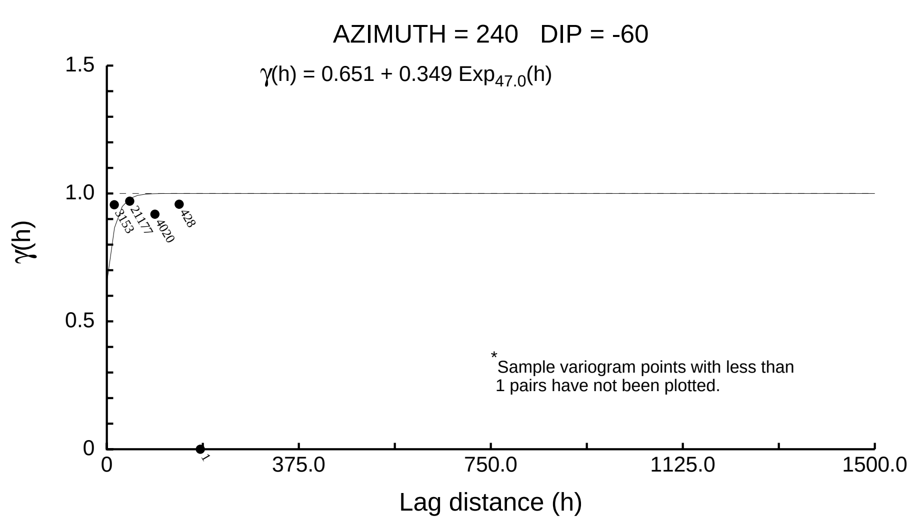
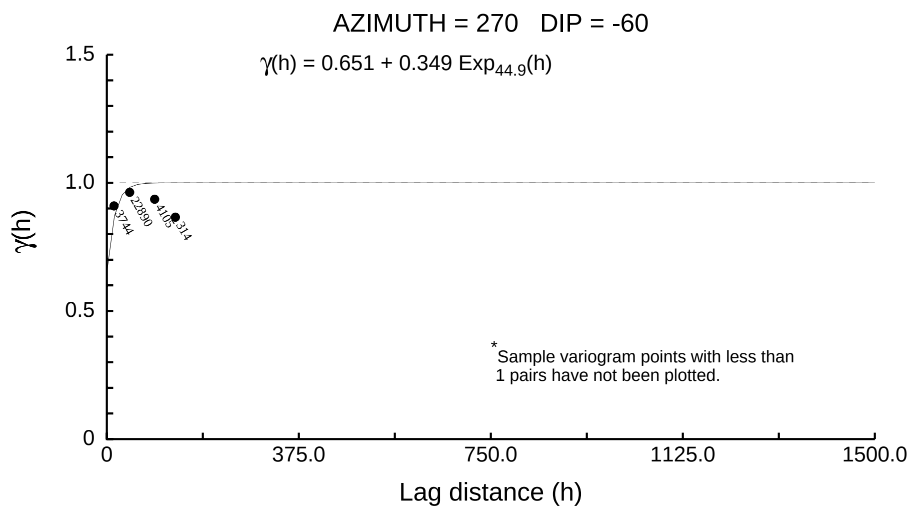
Zones 1+2 Directional Correlograms - 5m Comps

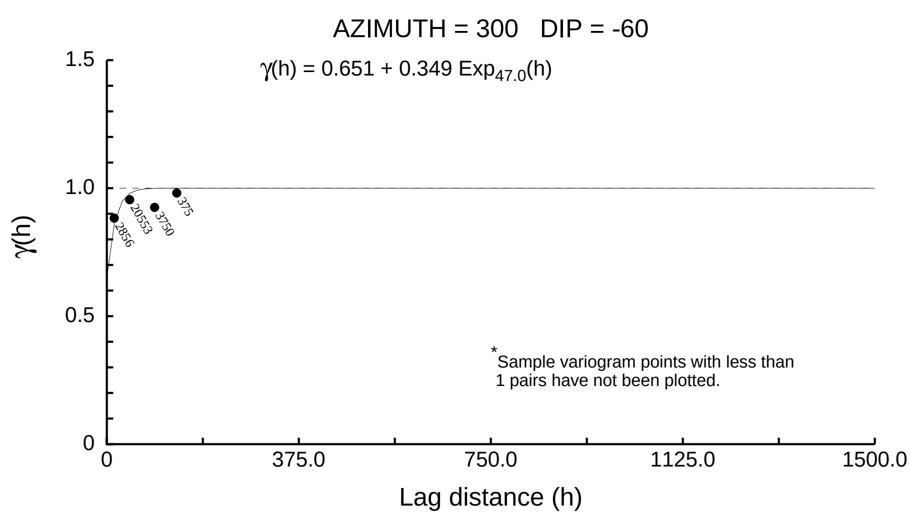


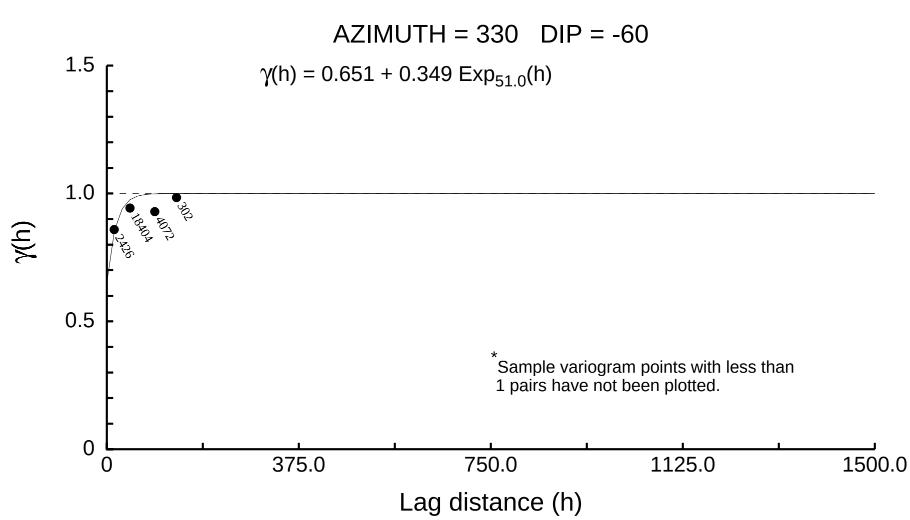




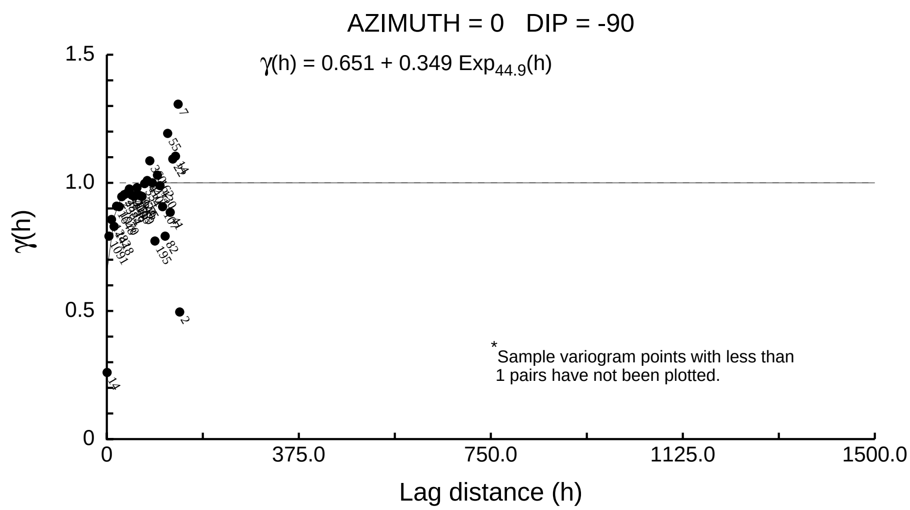
Zones 1+2 Directional Correlograms - 5m Comps







Zones 1+2 Directional Correlograms - 5m Comps



Zone 1 Directional Correlograms - 5m Comps

Medsystem and Vulcan Rotation Conventions

Nugget ==> 0.671
C1 ==> 0.329

First Structure -- Exponential with Practical Range

LH Rotation about the Z axis ==> 0
RH Rotation about the X' axis ==> 0
LH Rotation about the Y' axis ==> 75

Range along the Z' axis ==> 13.8	Azimuth ==> 270	Dip ==> 15
Range along the Y' axis ==> 37.8	Azimuth ==> 360	Dip ==> 0
Range along the X' axis ==> 28.6	Azimuth ==> 90	Dip ==> 75

Modeling Criteria

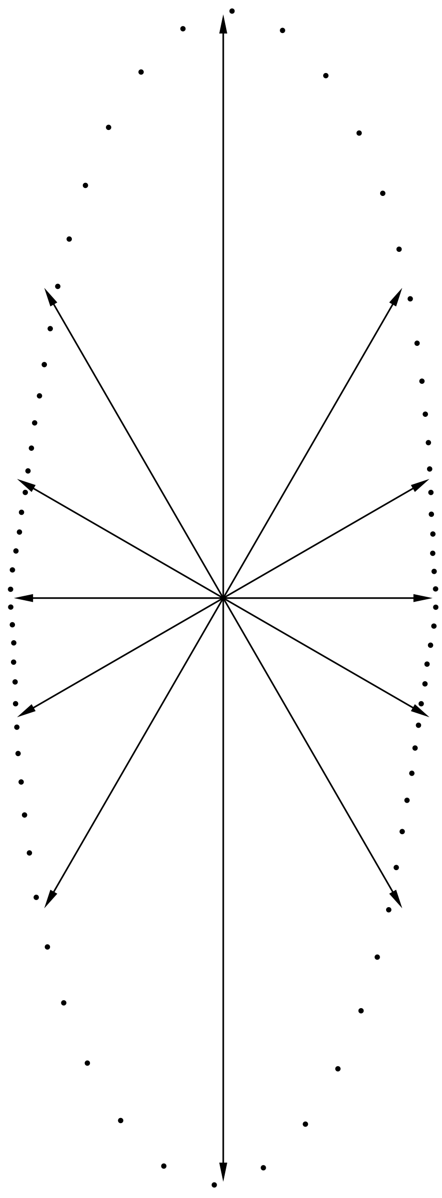
Minimum number pairs req'd ==> 1
Sample variogram points weighted by # pairs

Zone 1 Directional Correlograms - 5m Comps

Structure Number 1

Rose Diagram of Ranges Dipping 0 Degrees

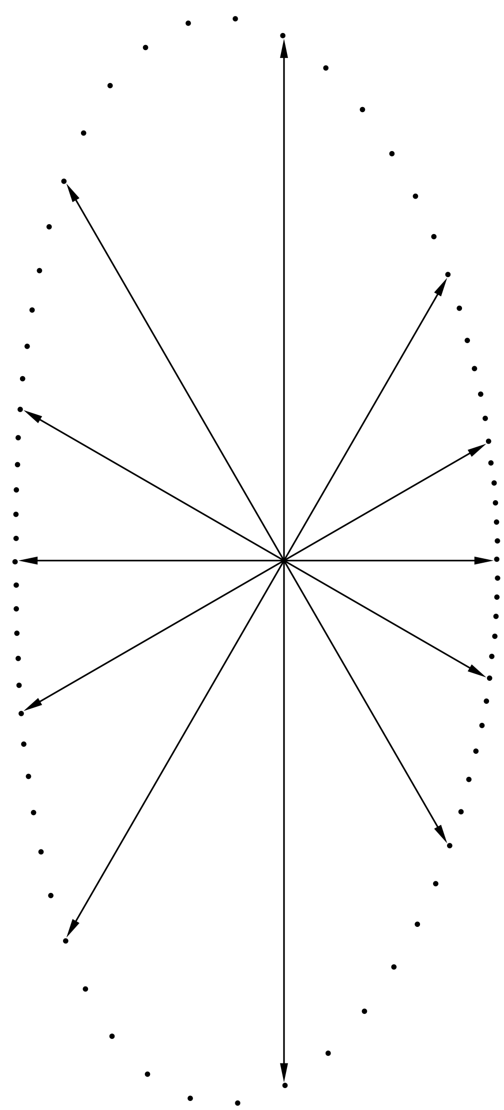
Scale:



Zone 1 Directional Correlograms - 5m Comps

Structure Number 1

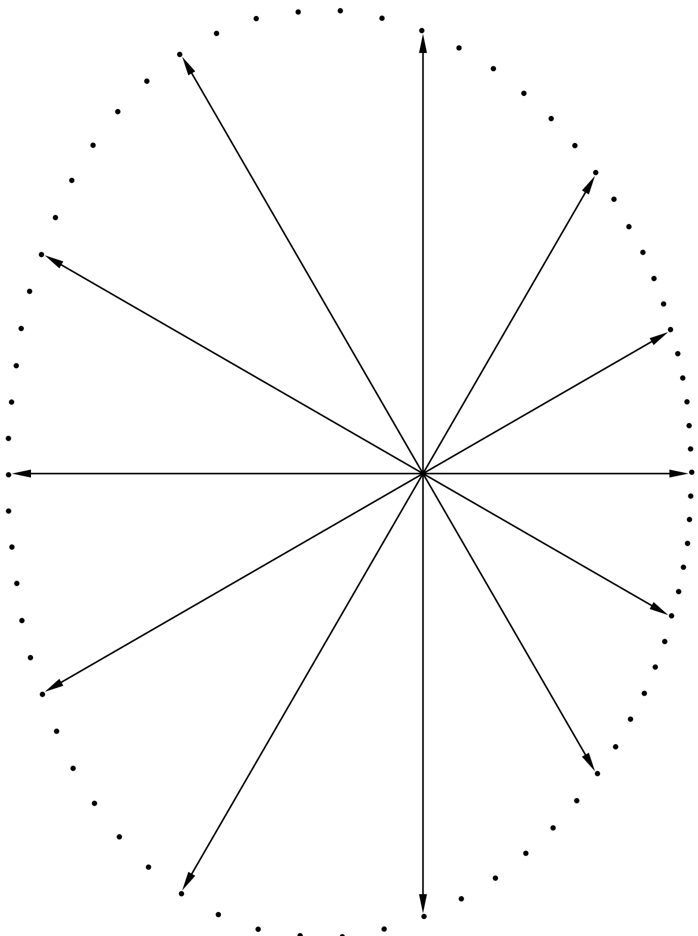
Rose Diagram of Ranges Dipping 30 Degrees
Scale:



Zone 1 Directional Correlograms - 5m Comps

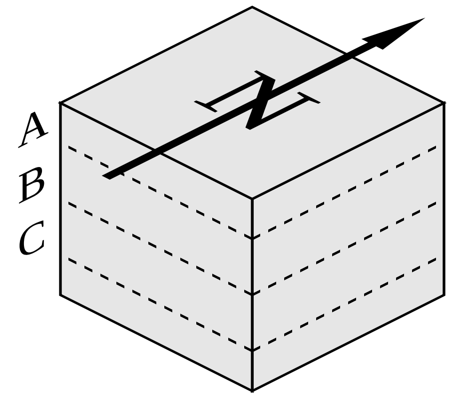
Structure Number 1

Rose Diagram of Ranges Dipping 60 Degrees
Scale:

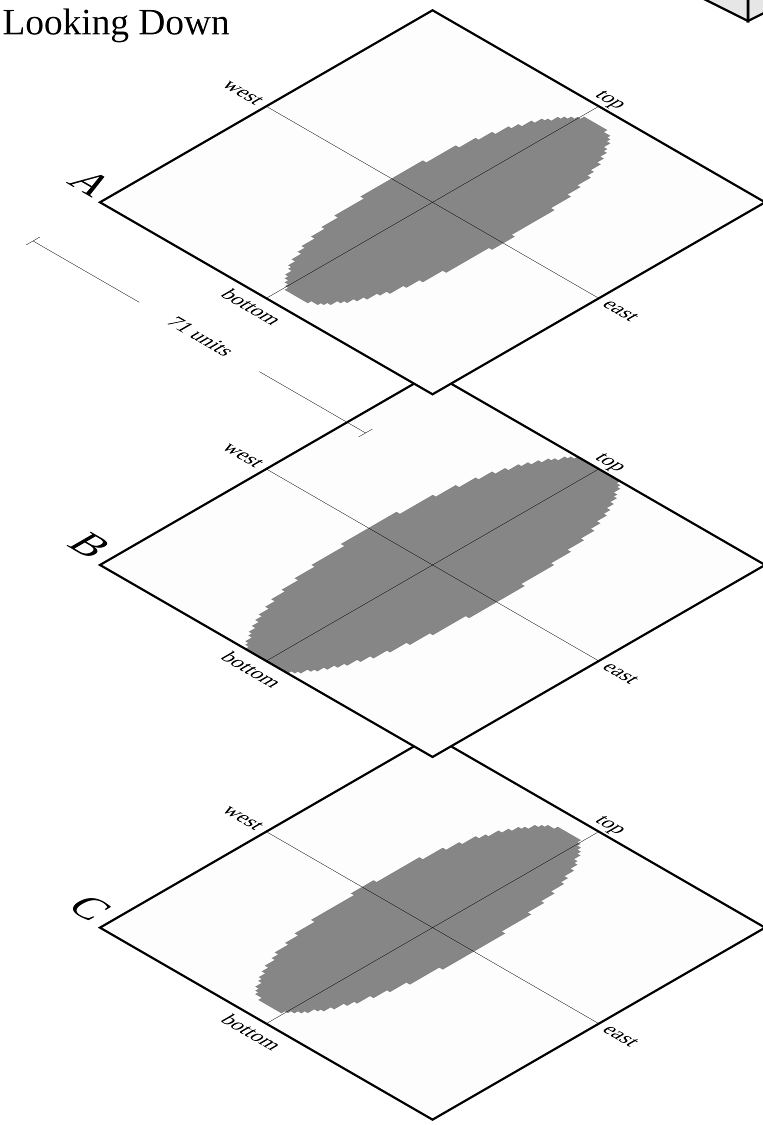


Horizontal Slices Through the Ellipsoids

Reference Cube



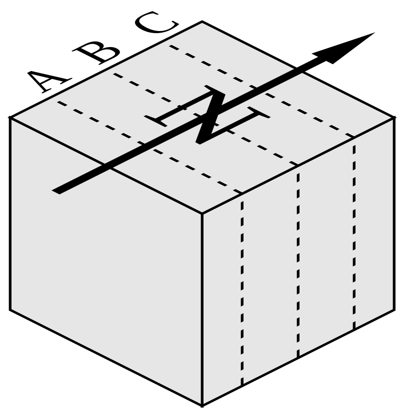
X-Y Planes Looking Down



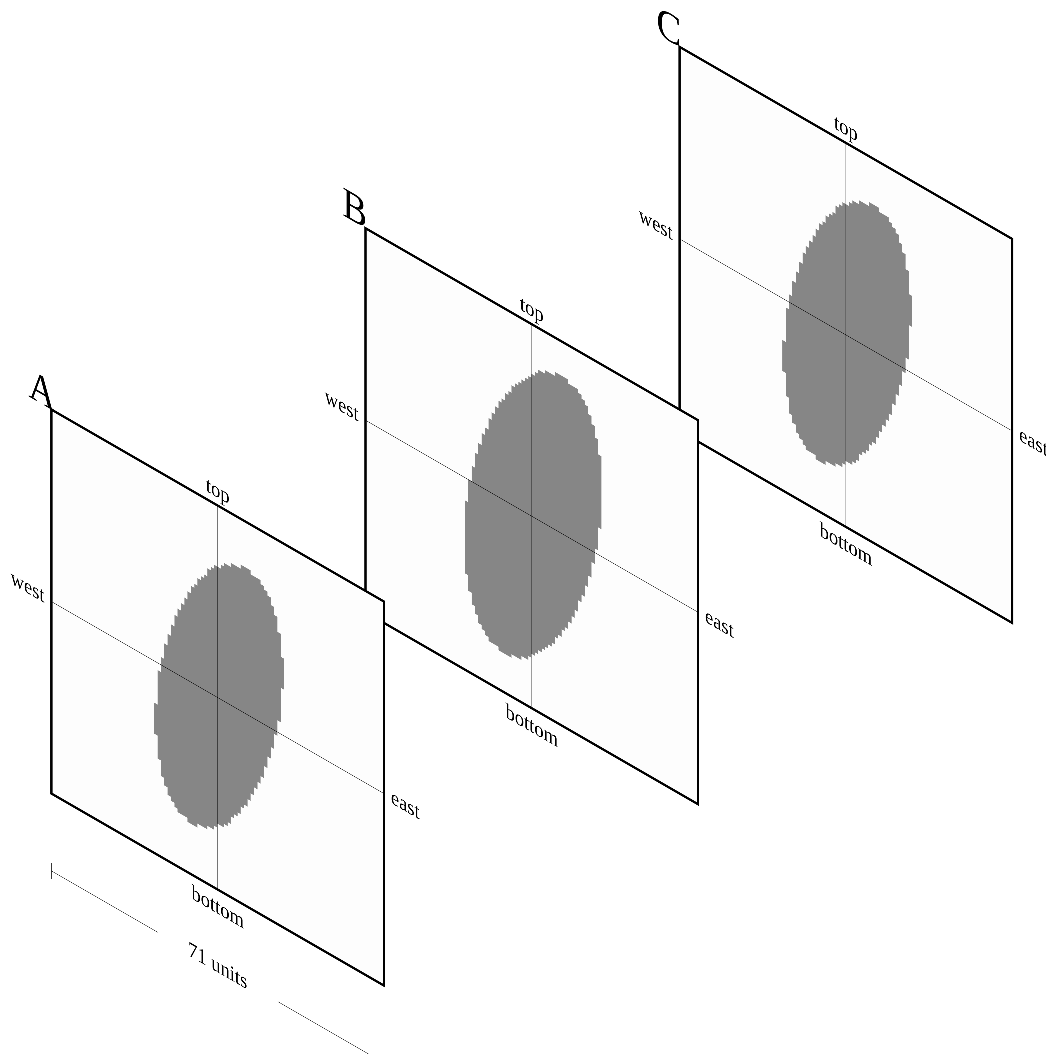
Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Cross Section Views Through the Ellipsoids

Reference Cube



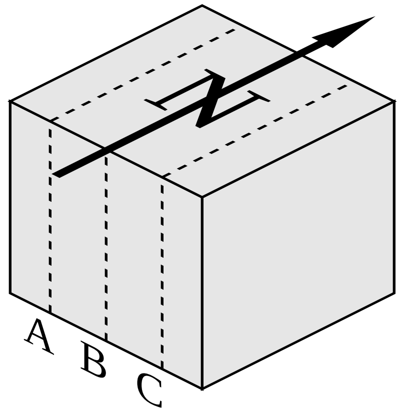
X-Z Planes Looking North



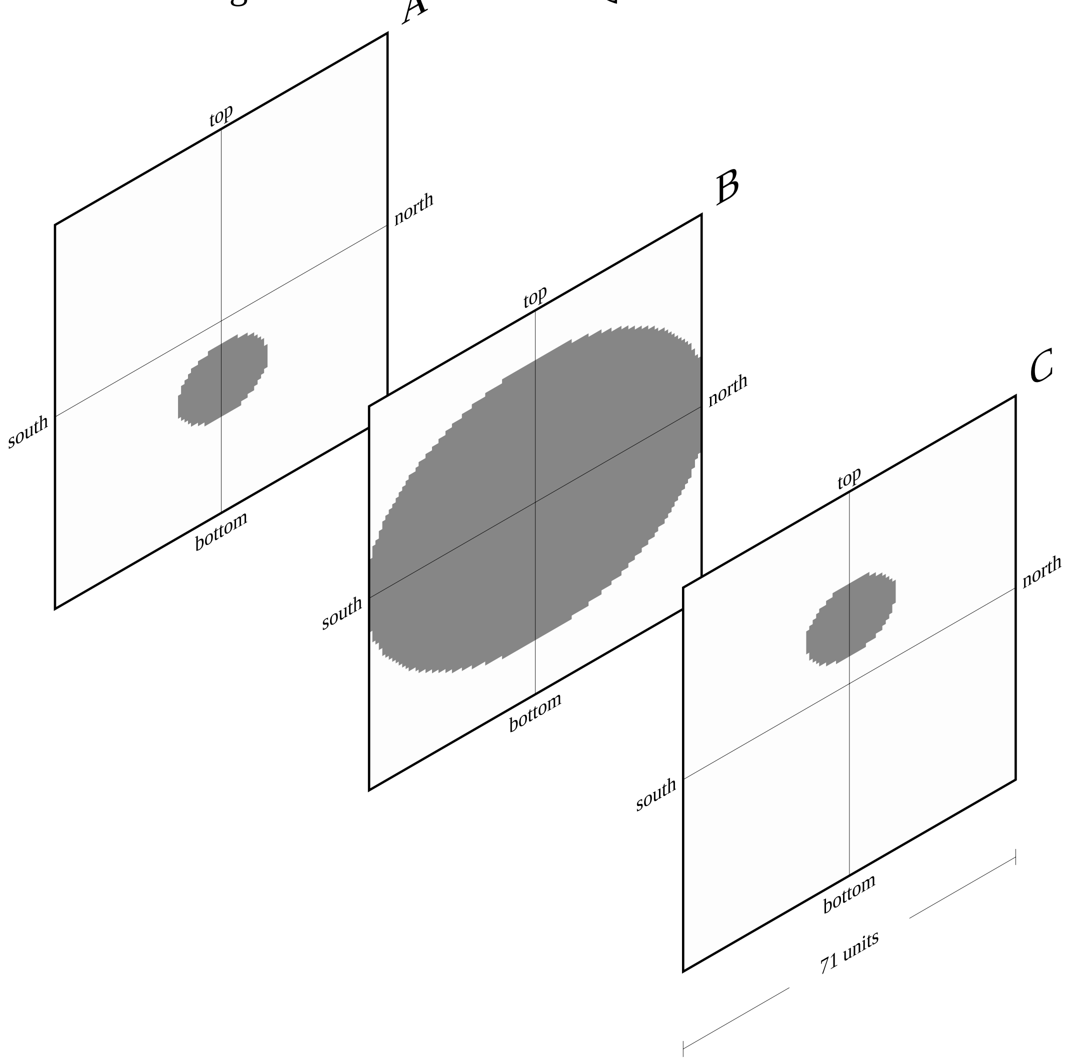
Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Long Section Views Through the Ellipsoids

Reference Cube

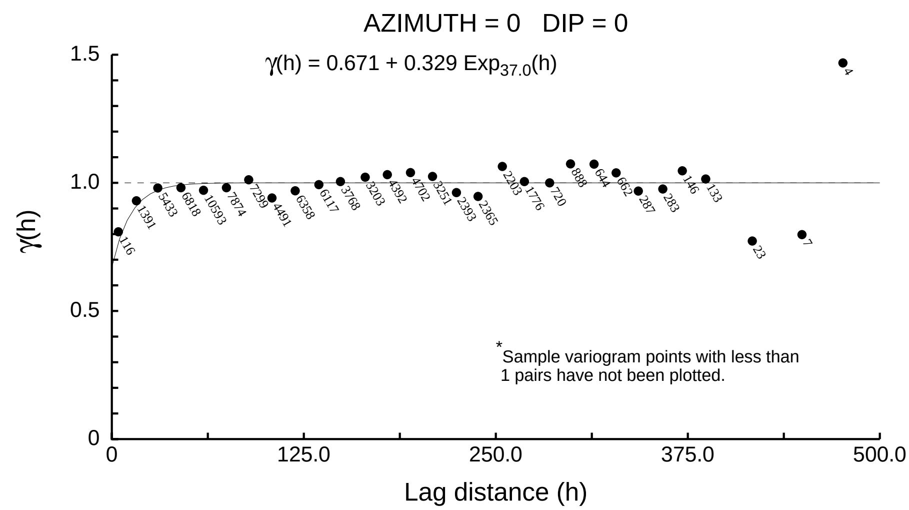


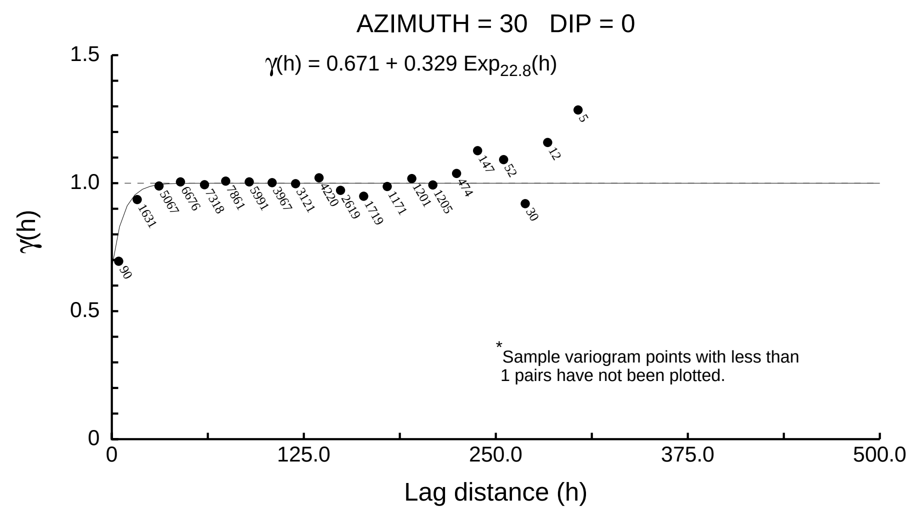
Y-Z Planes Looking West

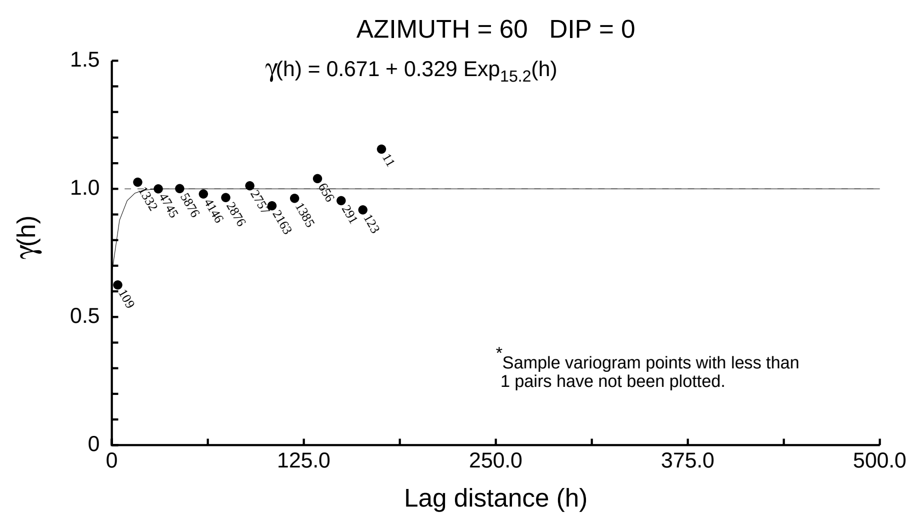


Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Zone 1 Directional Correlograms - 5m Comps

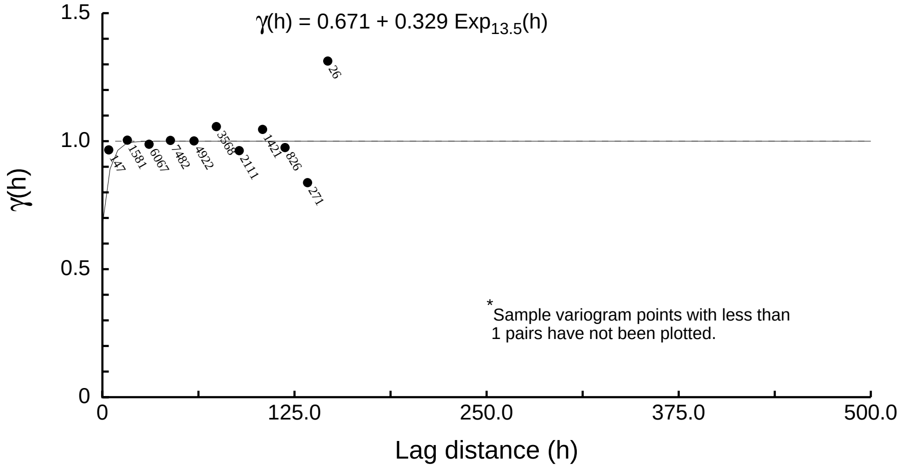




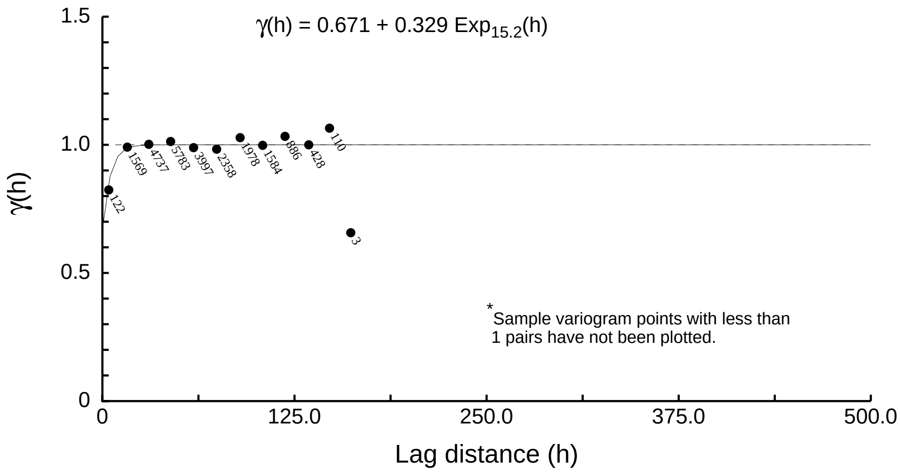


Zone 1 Directional Correlograms - 5m Comps

AZIMUTH = 90   DIP = 0



AZIMUTH = 120   DIP = 0



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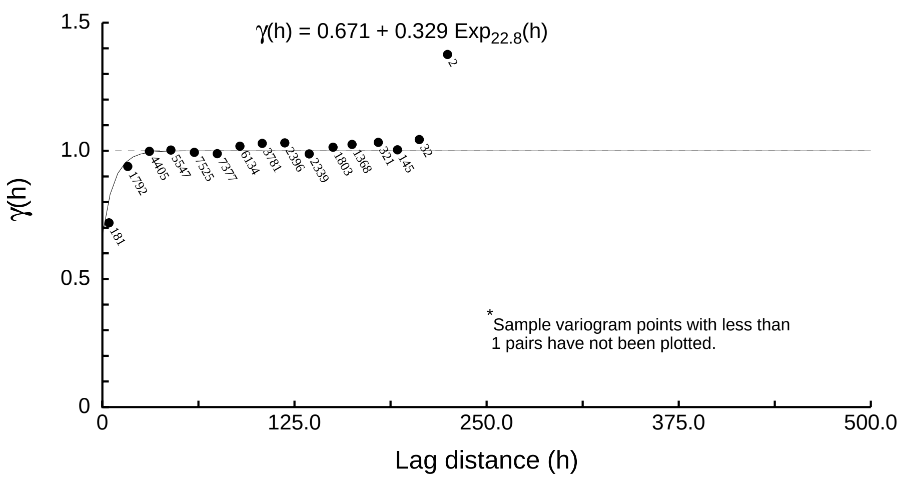

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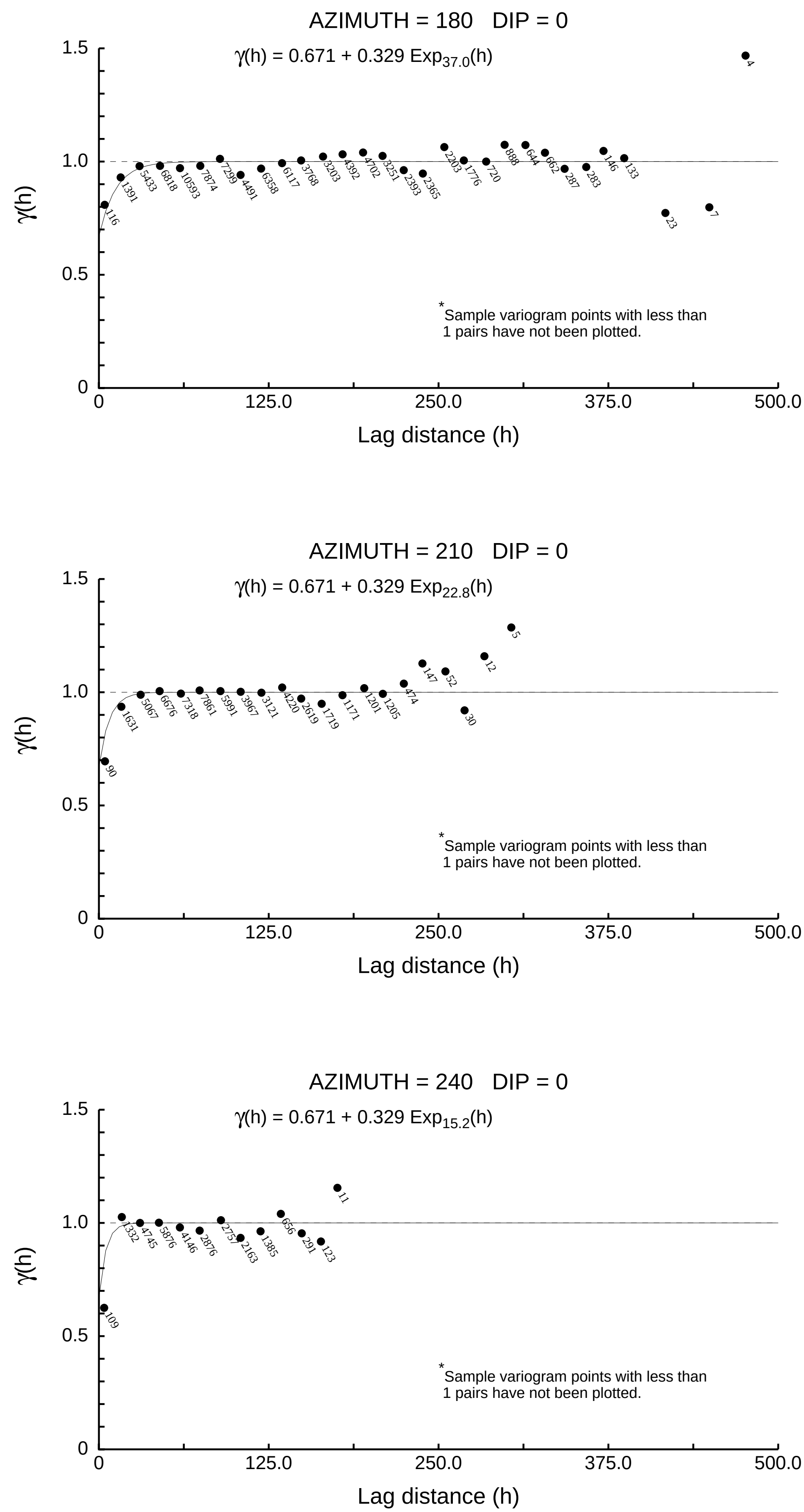
Zone 1 Directional Correlograms - 5m Comps



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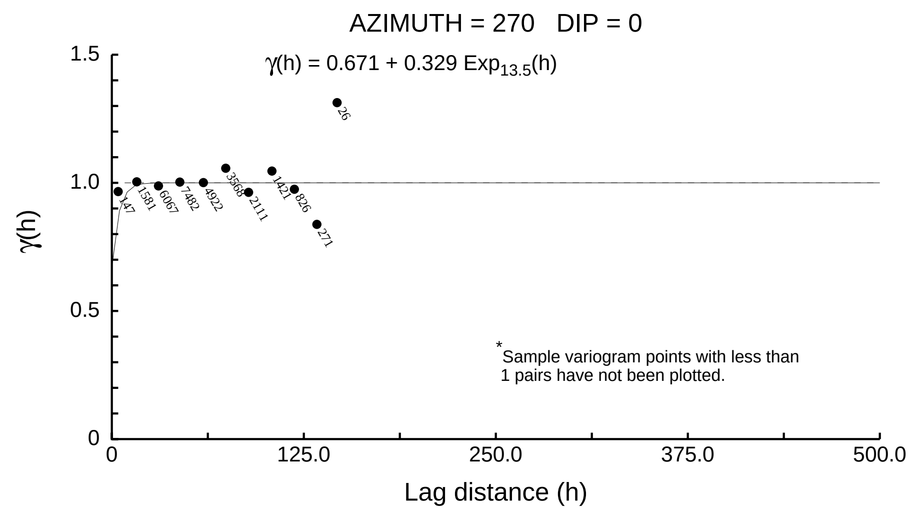
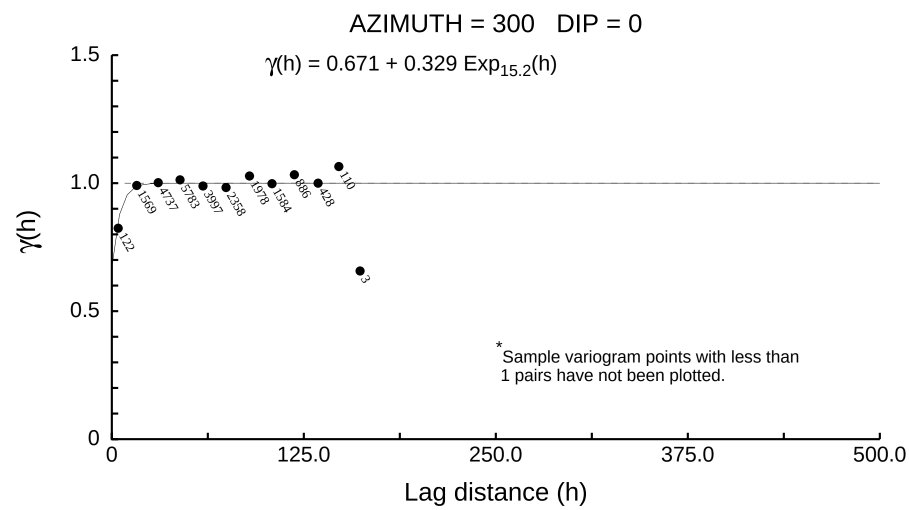
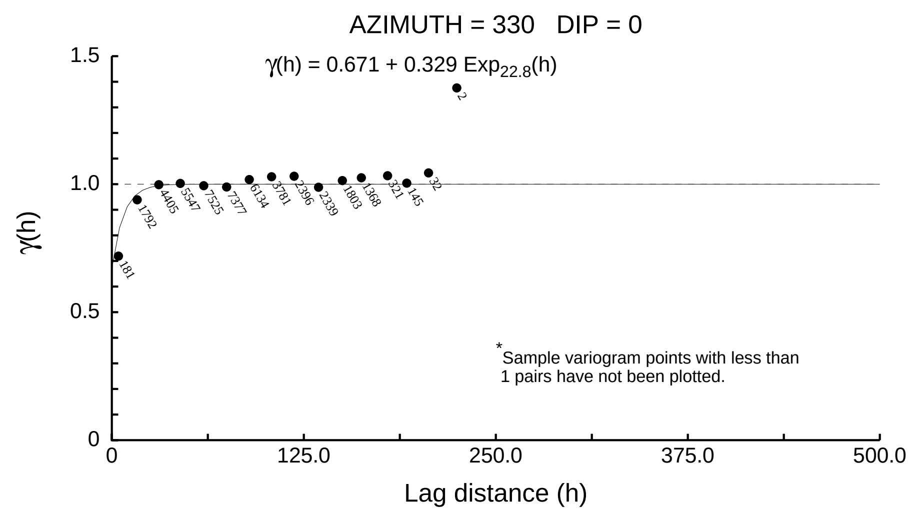
Zone 1 Directional Correlograms - 5m Comps







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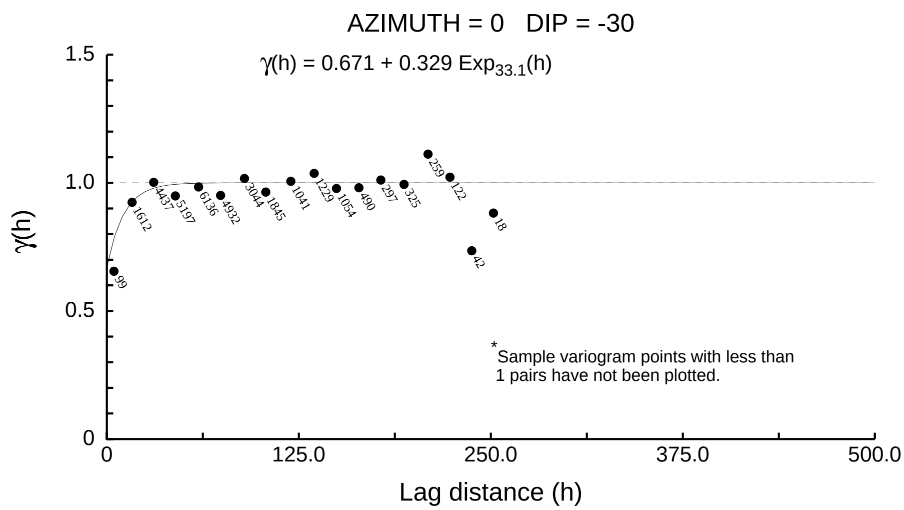
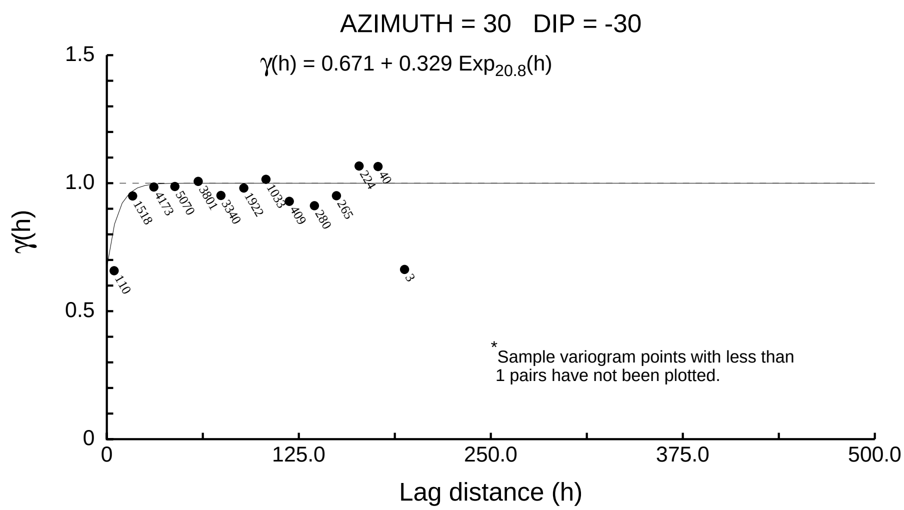
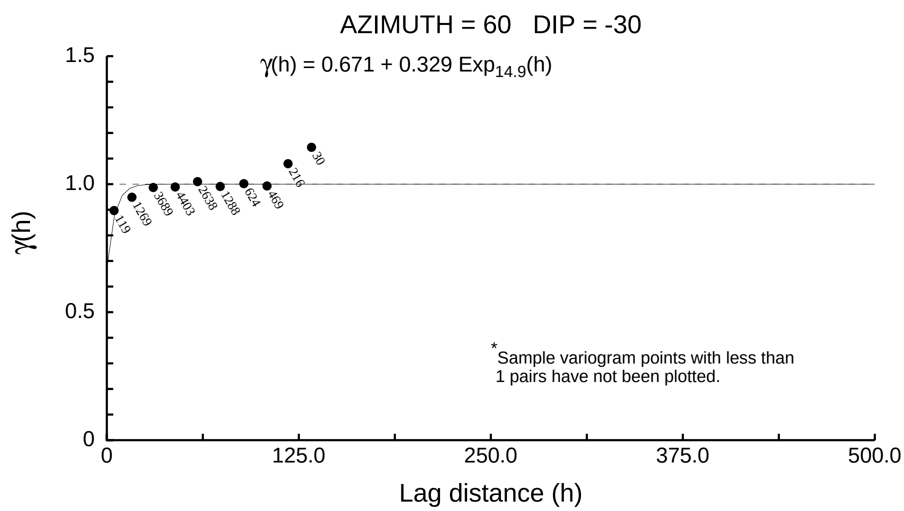
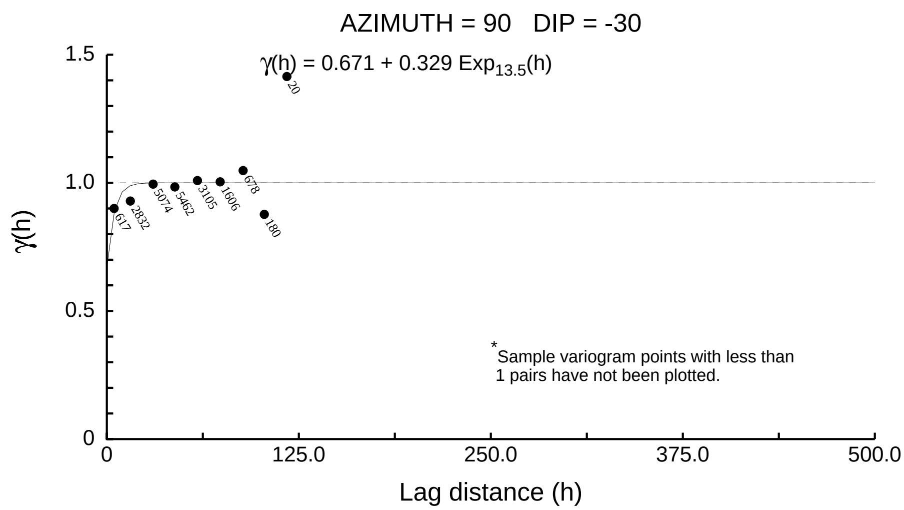
Zone 1 Directional Correlograms - 5m Comps

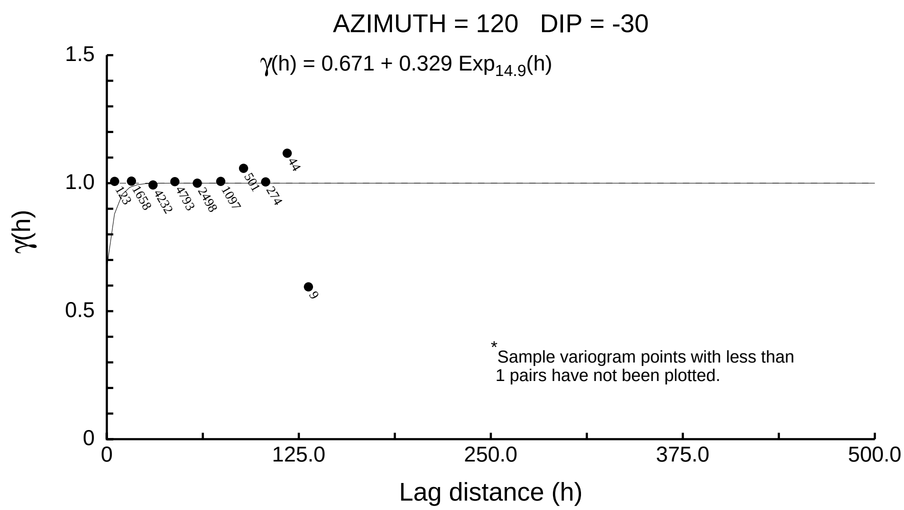


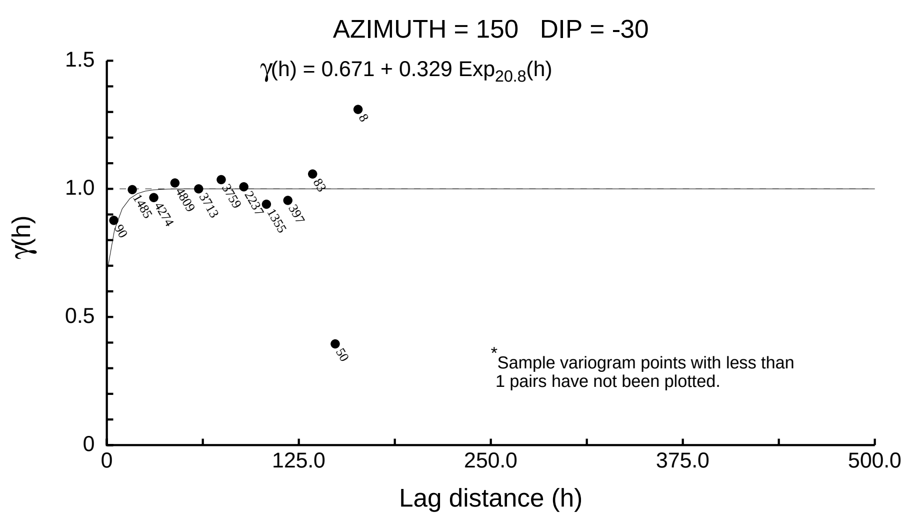




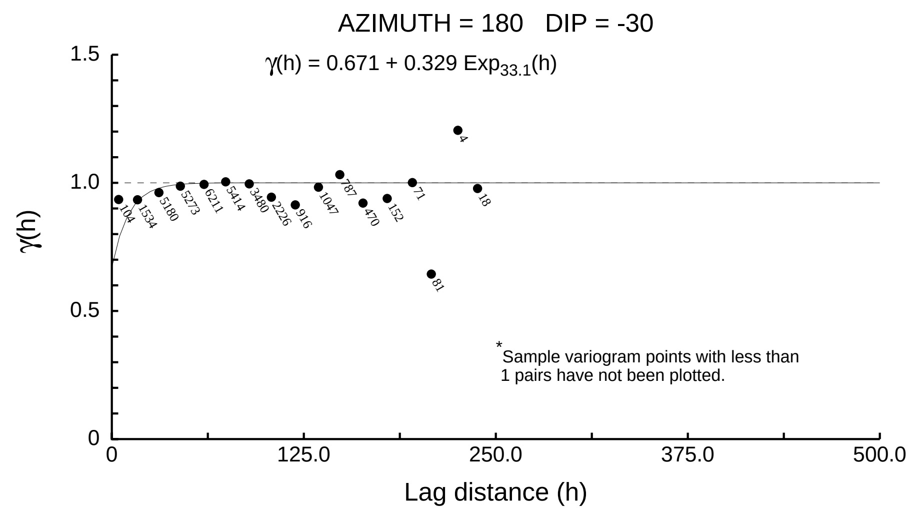
Zone 1 Directional Correlograms - 5m Comps

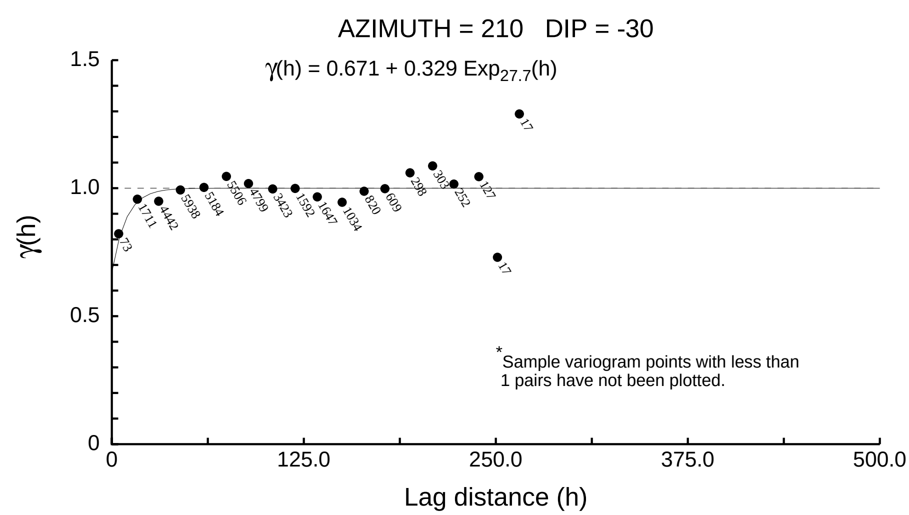


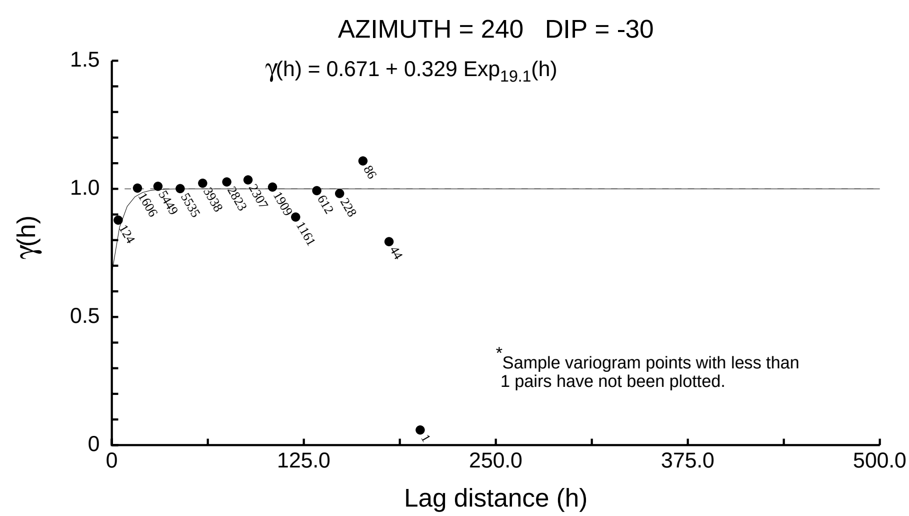




Zone 1 Directional Correlograms - 5m Comps







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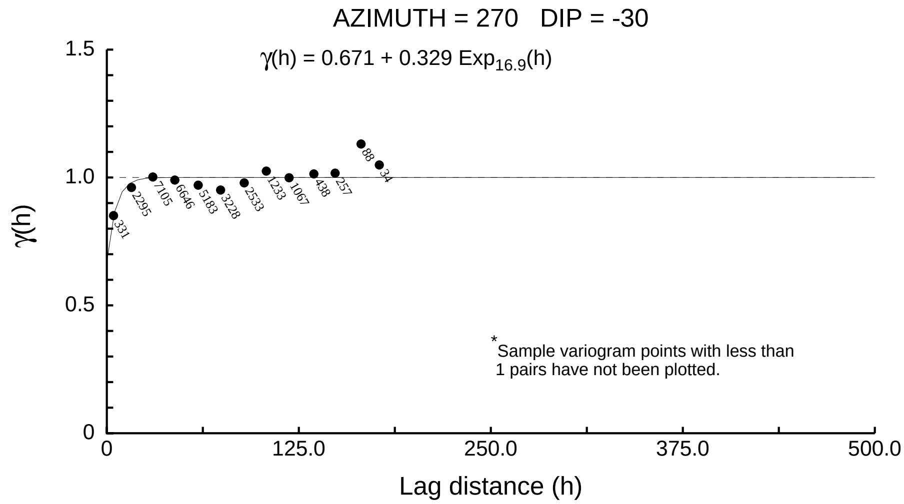
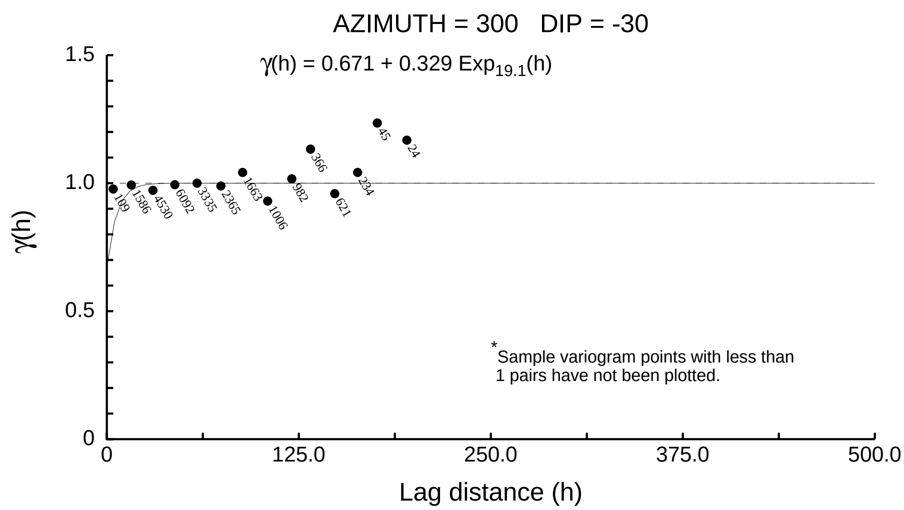
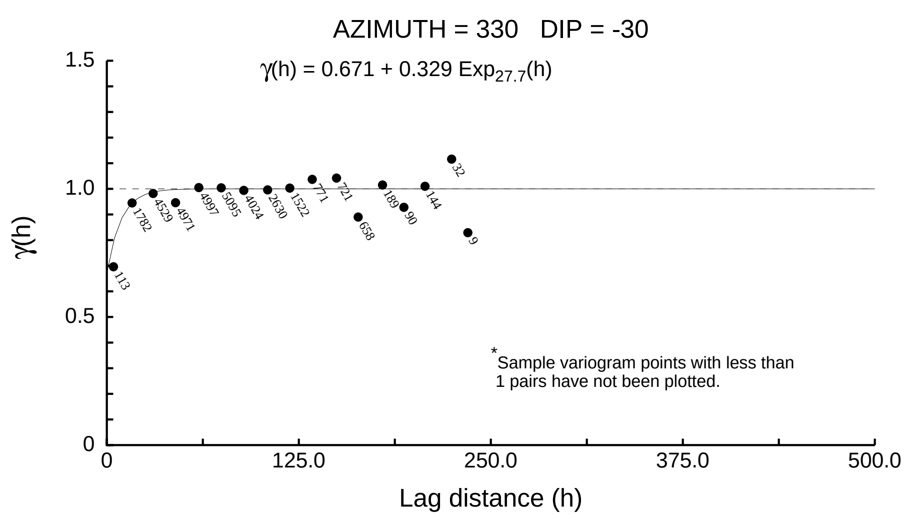
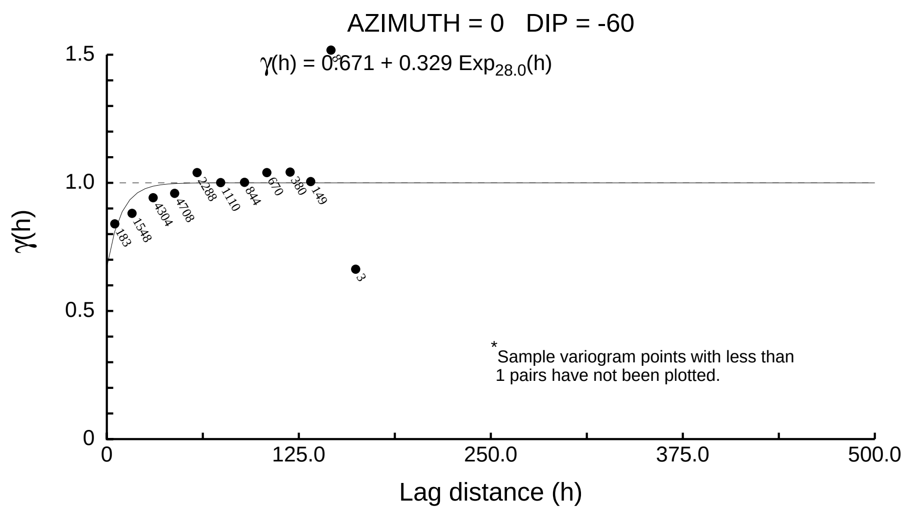
Zone 1 Directional Correlograms - 5m Comps

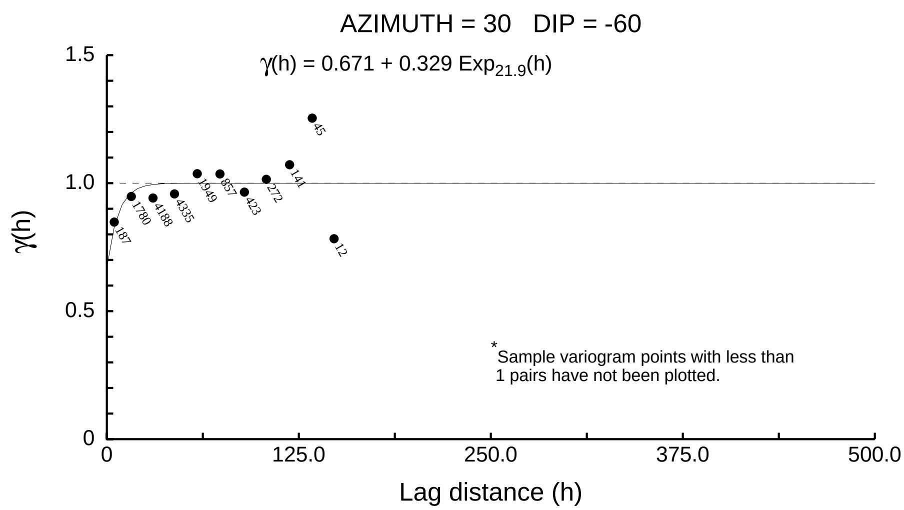


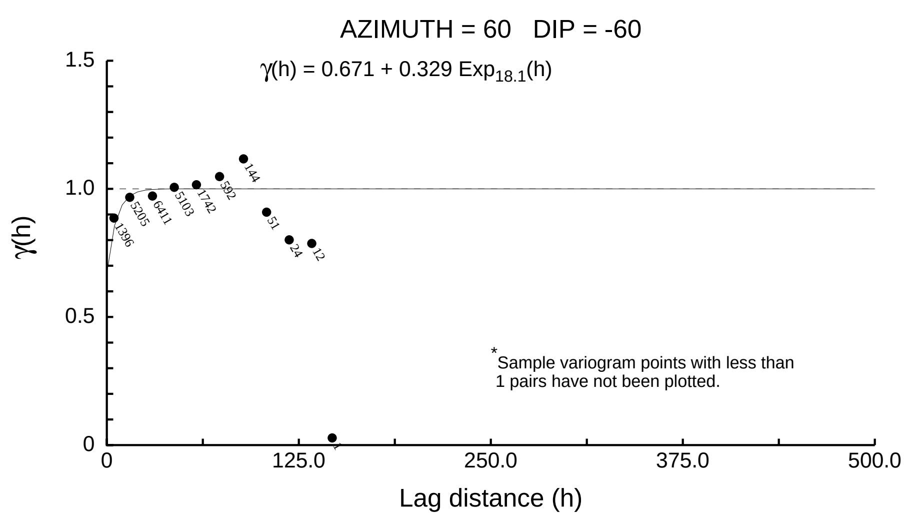




Zone 1 Directional Correlograms - 5m Comps







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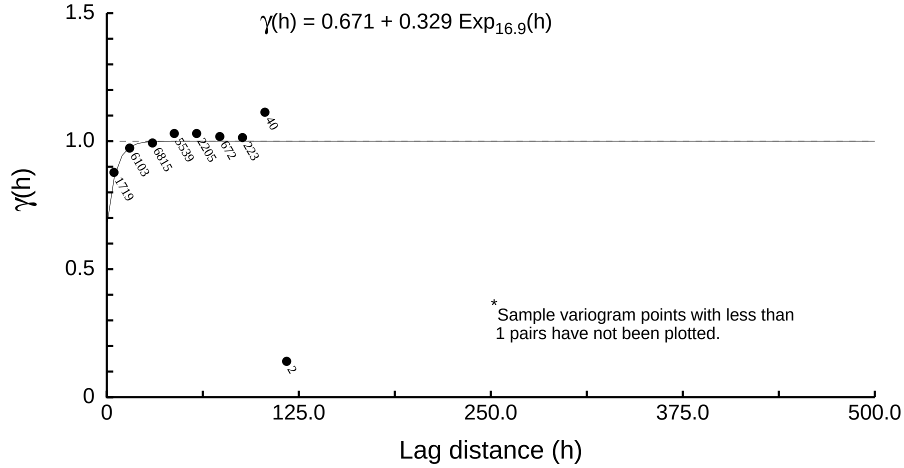
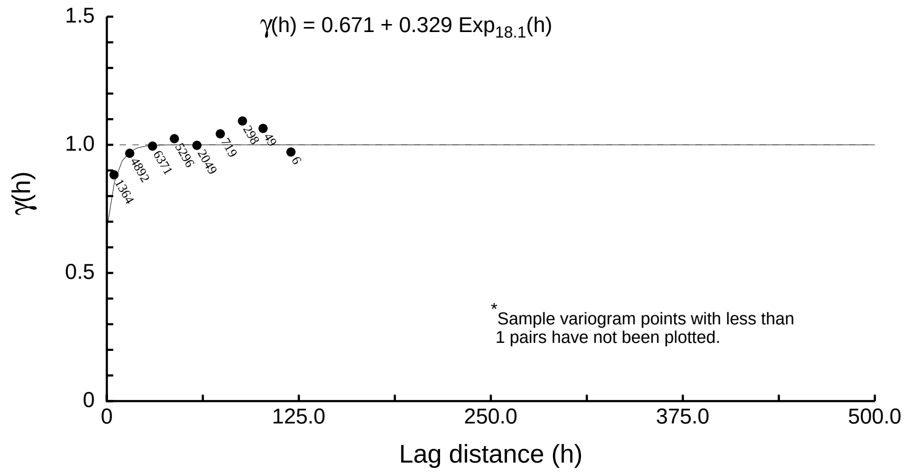
Zone 1 Directional Correlograms - 5m Comps

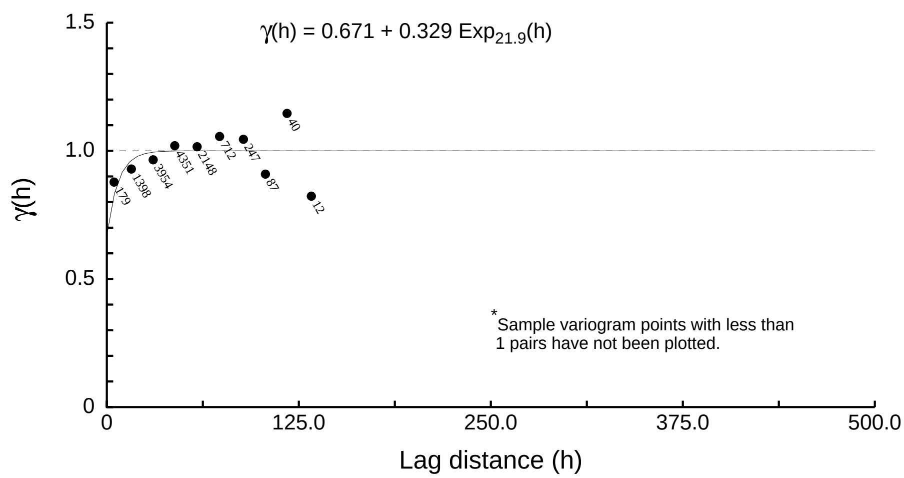
AZIMUTH = 90   DIP = -60



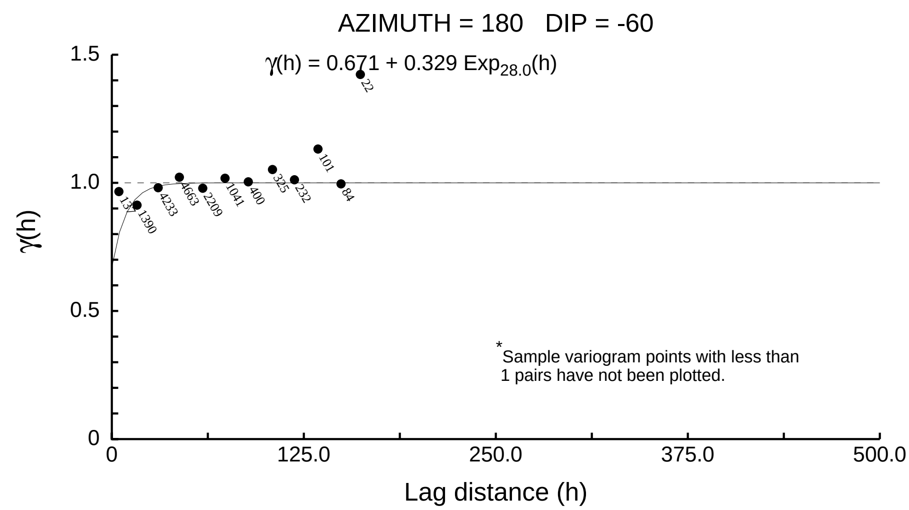
AZIMUTH = 120   DIP = -60

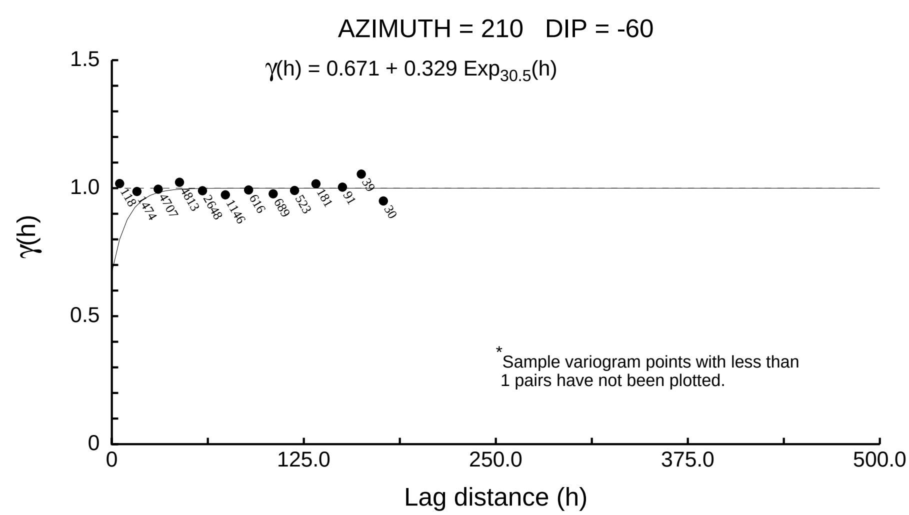


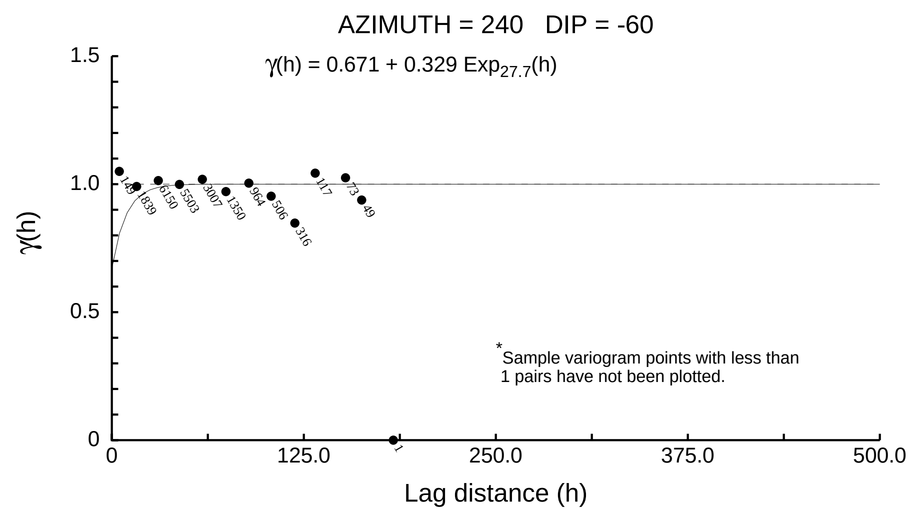
AZIMUTH = 150   DIP = -60



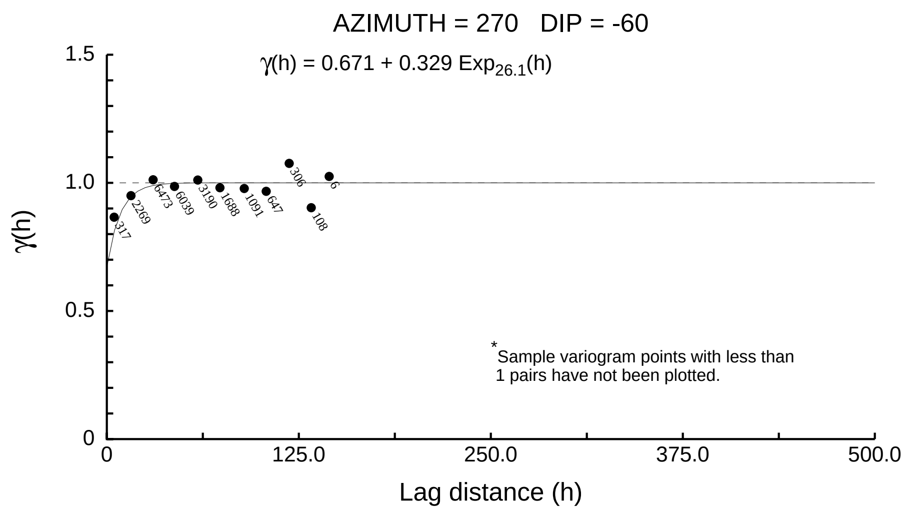
Zone 1 Directional Correlograms - 5m Comps

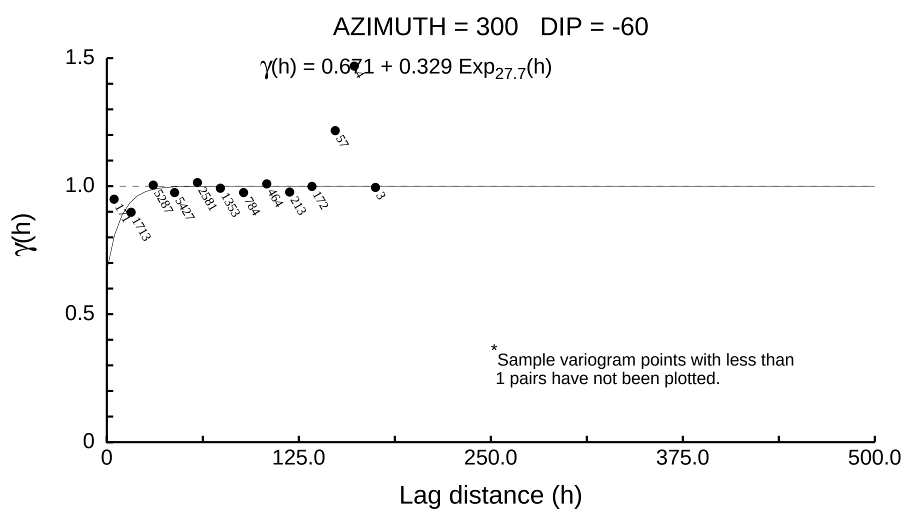


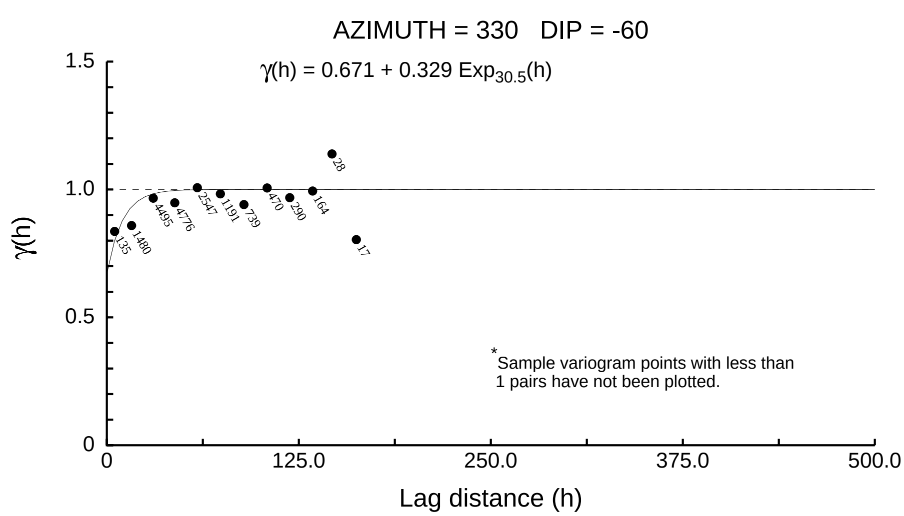




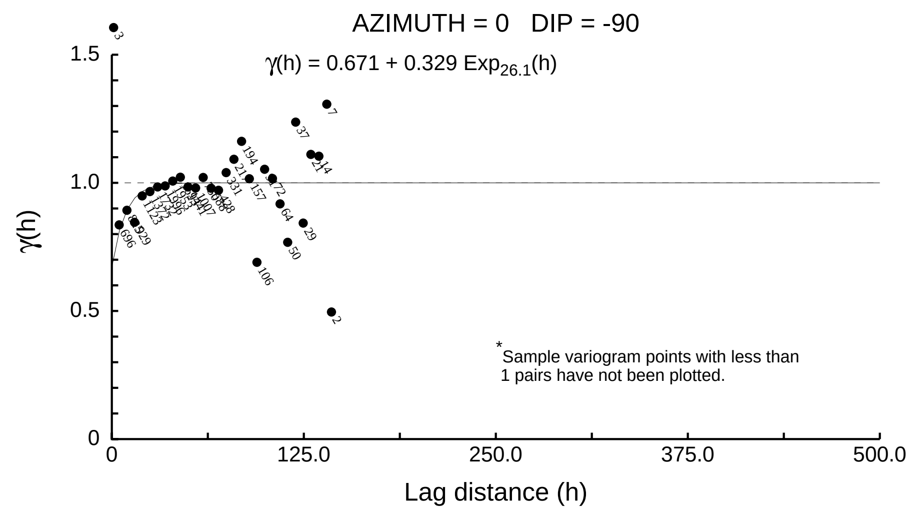
Zone 1 Directional Correlograms - 5m Comps







Zone 1 Directional Correlograms - 5m Comps



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Zone 1 Directional Correlograms - 5m Comps

Medsystem and Vulcan Rotation Conventions

Nugget ==> 0.671
C1 ==> 0.329

First Structure -- Exponential with Practical Range

LH Rotation about the Z axis ==> 0
RH Rotation about the X' axis ==> 0
LH Rotation about the Y' axis ==> 75

Range along the Z' axis ==> 13.8	Azimuth ==> 270 Dip ==> 15
Range along the Y' axis ==> 37.8	Azimuth ==> 360 Dip ==> 0
Range along the X' axis ==> 28.6	Azimuth ==> 90 Dip ==> 75

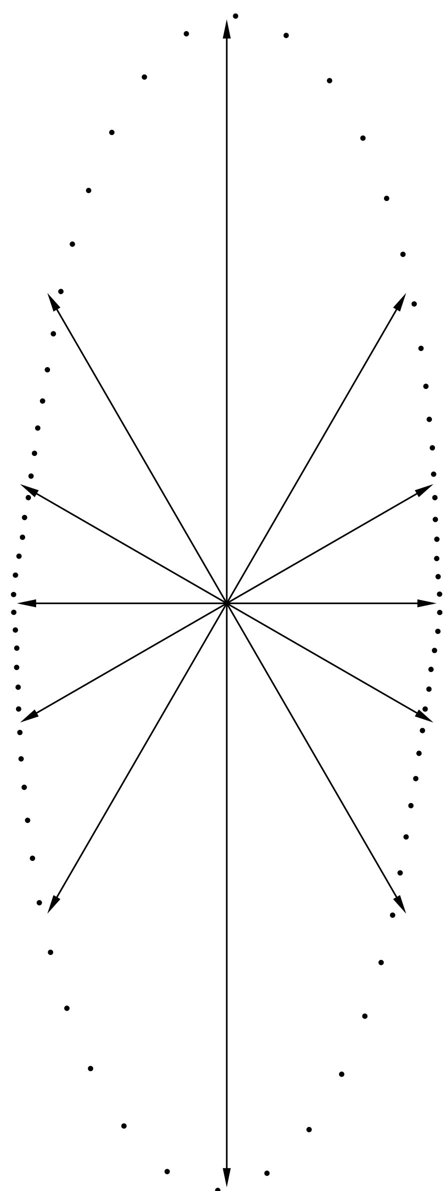
Modeling Criteria

Minimum number pairs req'd ==> 1
Sample variogram points weighted by # pairs

Zone 1 Directional Correlograms - 5m Comps

Structure Number 1

Rose Diagram of Ranges Dipping 0 Degrees
Scale:



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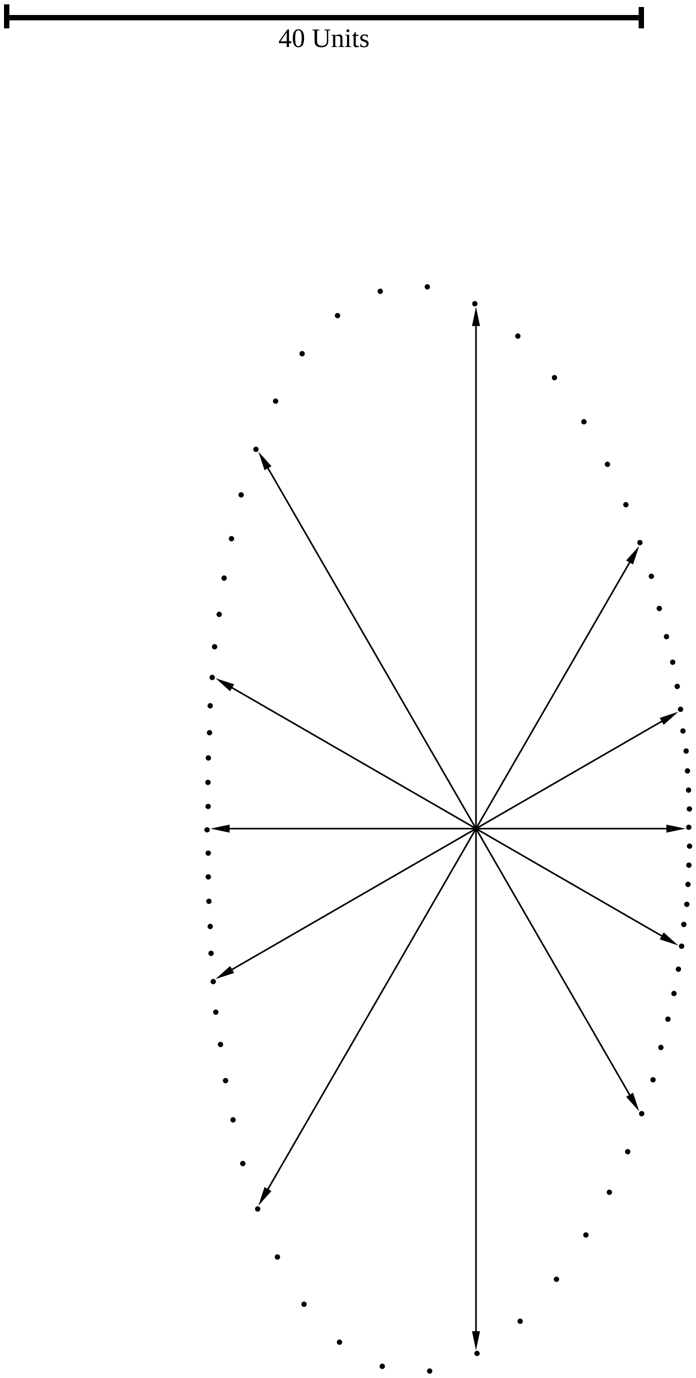
Zone 1 Directional Correlograms - 5m Comps

Structure Number 1

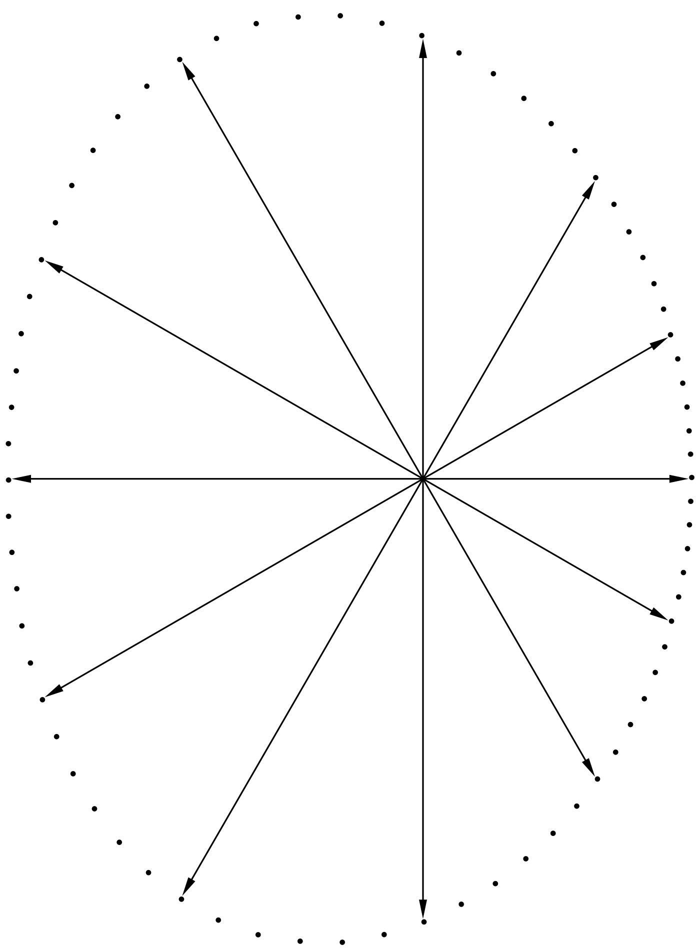
Rose Diagram of Ranges Dipping 30 Degrees
Scale:



Zone 1 Directional Correlograms - 5m Comps

Structure Number 1

Rose Diagram of Ranges Dipping 60 Degrees
Scale:



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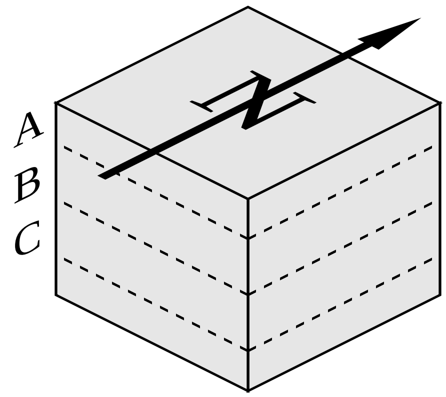
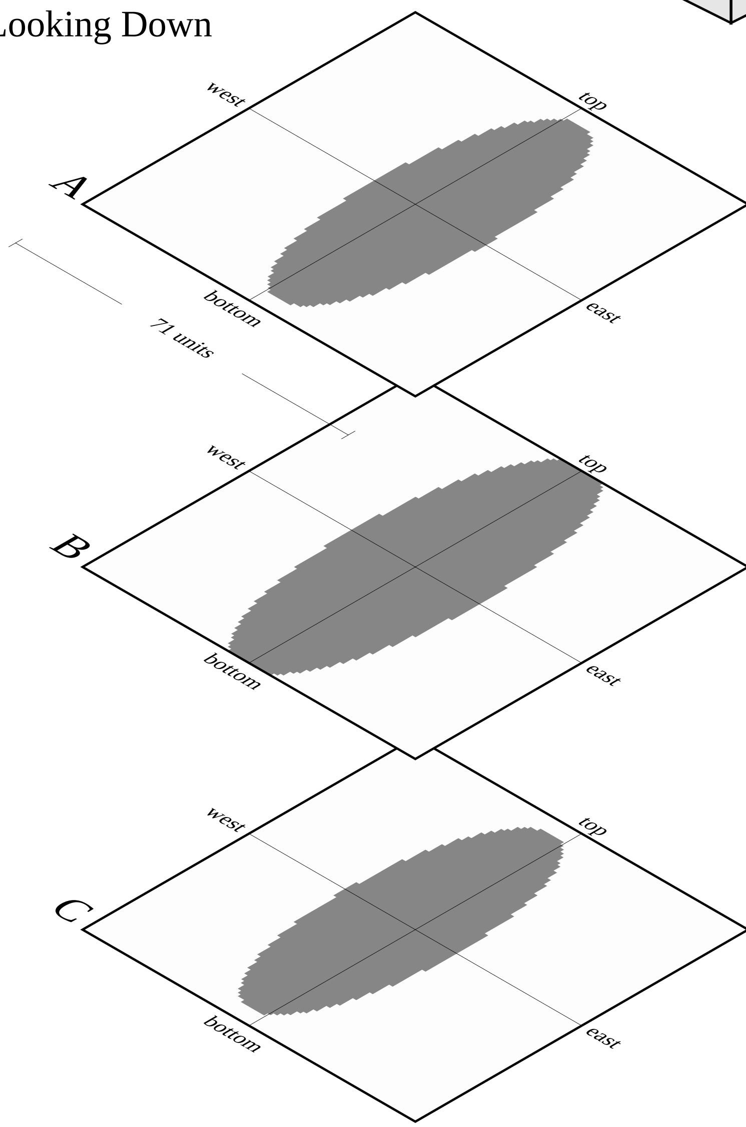
Horizontal Slices Through the Ellipsoids

Reference Cube



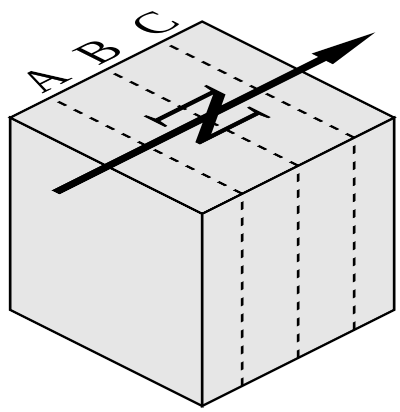
X-Y Planes Looking Down



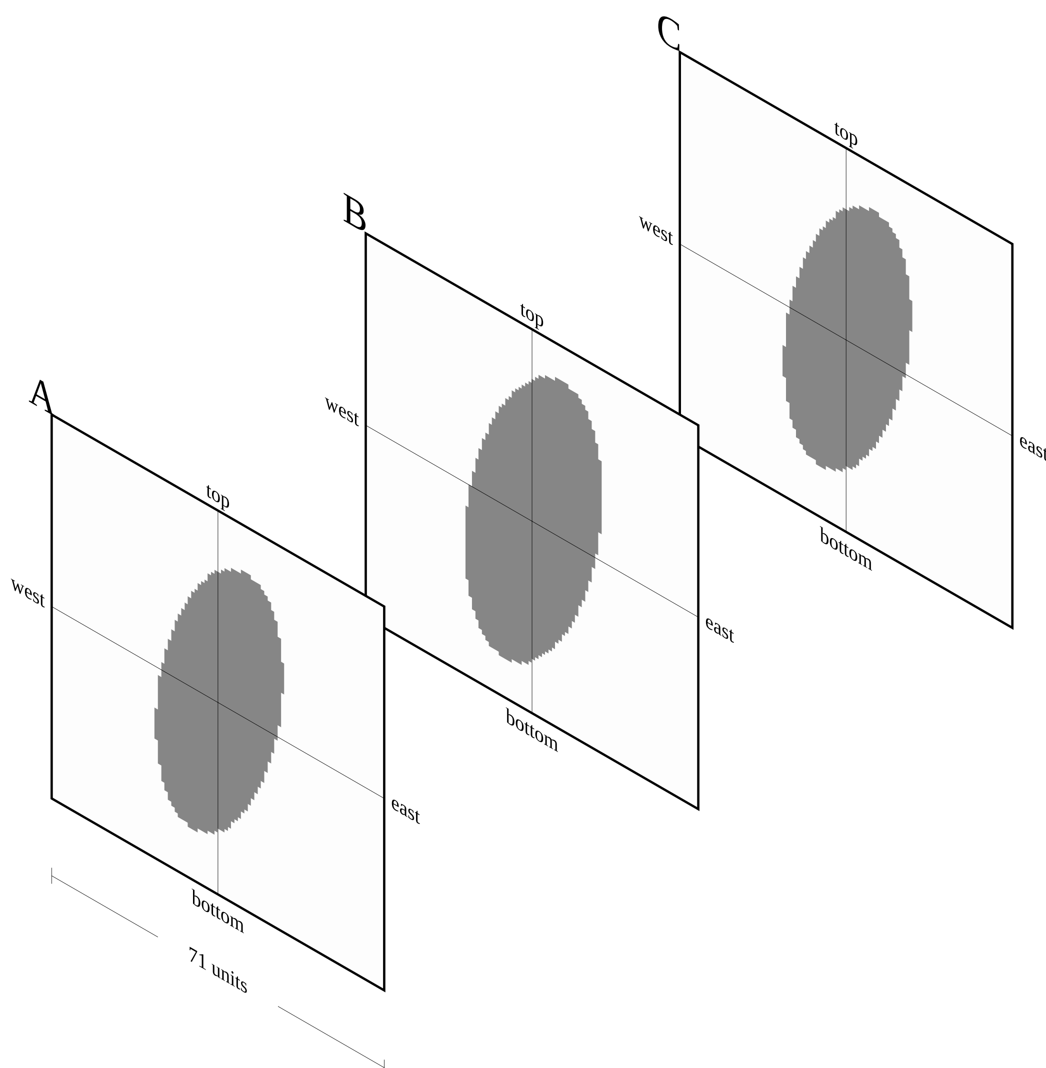
Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Cross Section Views Through the Ellipsoids

Reference Cube



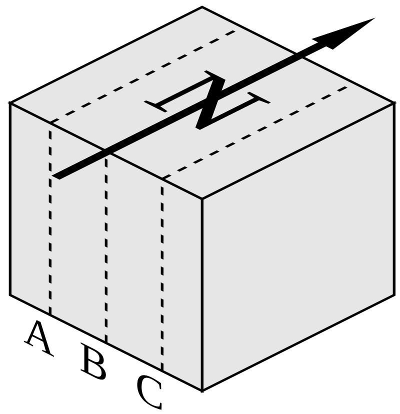
X-Z Planes Looking North



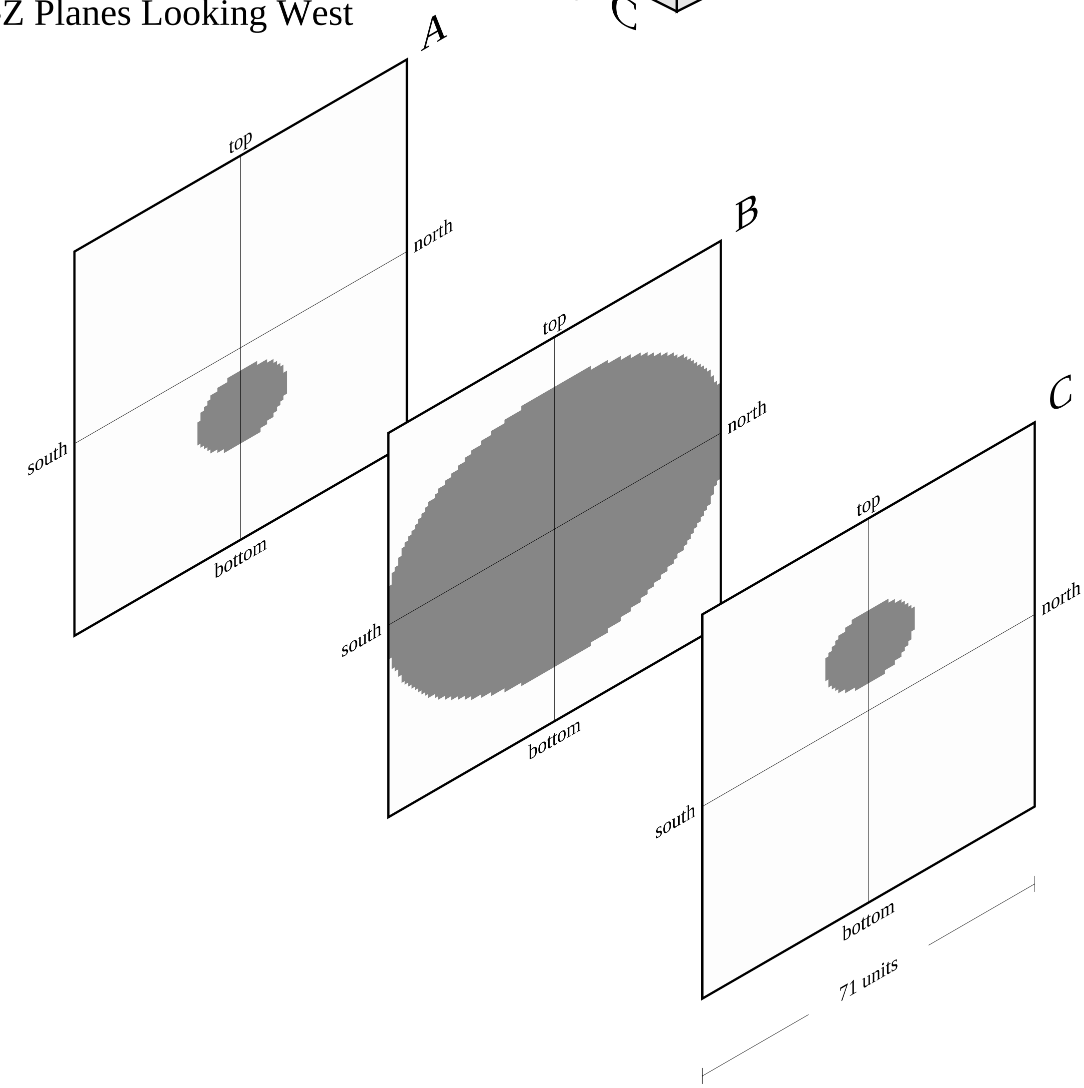
Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Long Section Views Through the Ellipsoids

Reference Cube

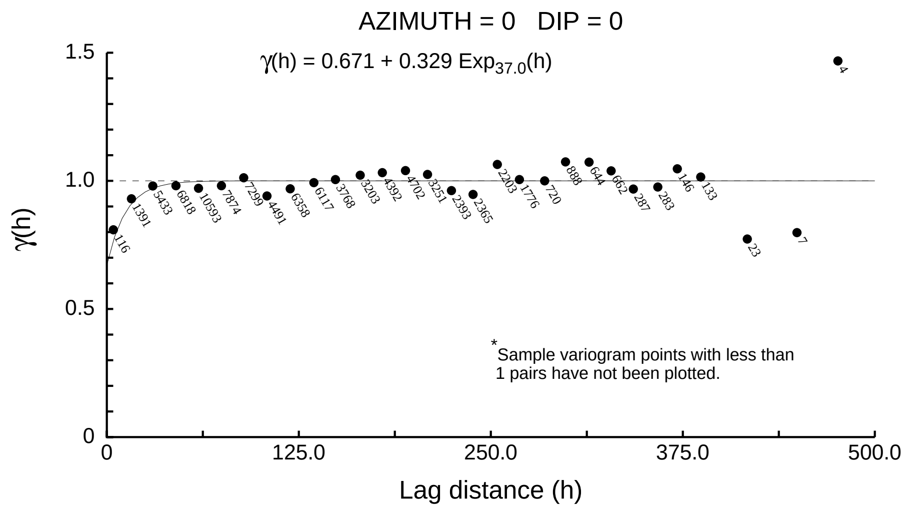


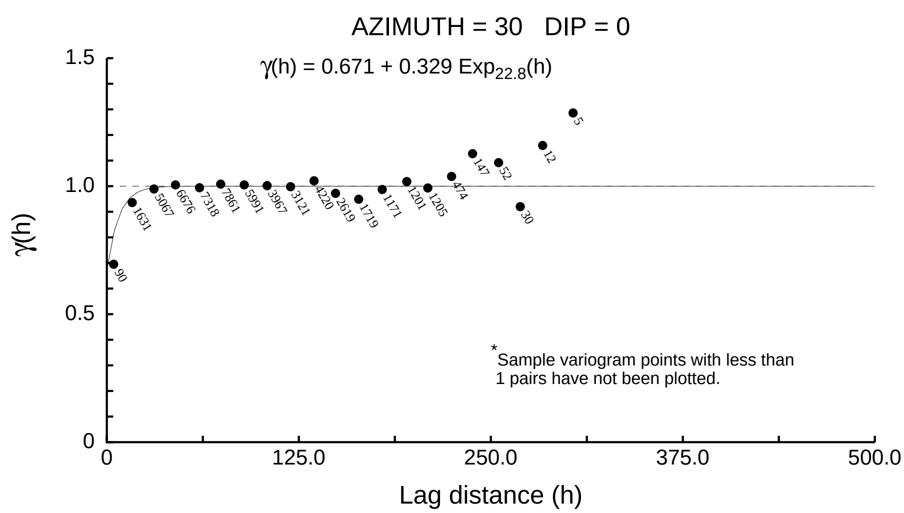
Y-Z Planes Looking West

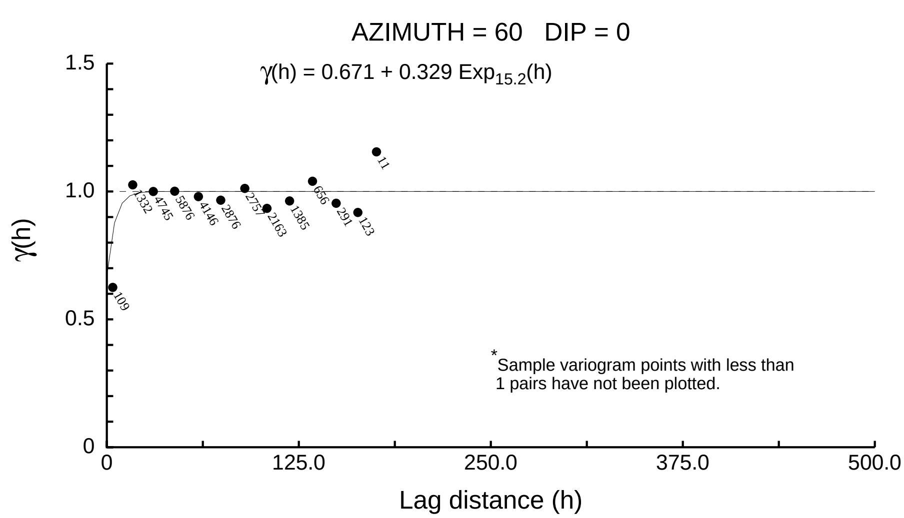


Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

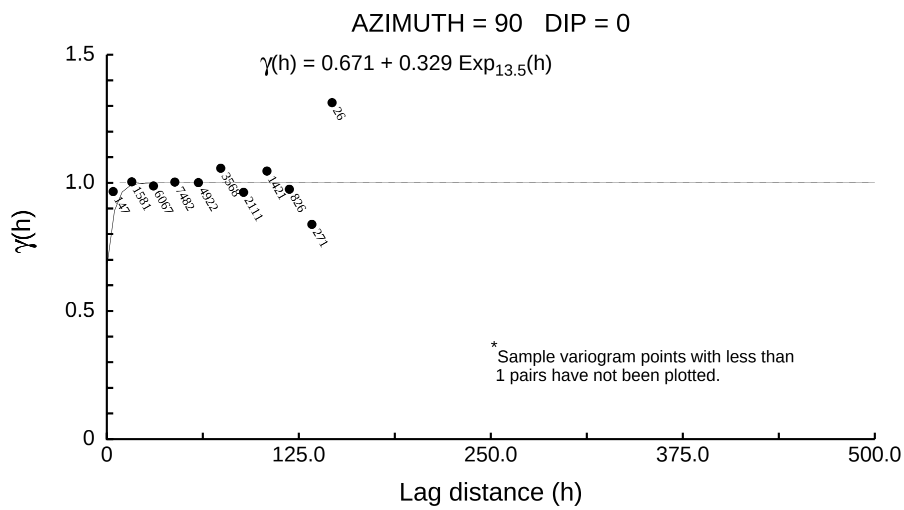
Zone 1 Directional Correlograms - 5m Comps

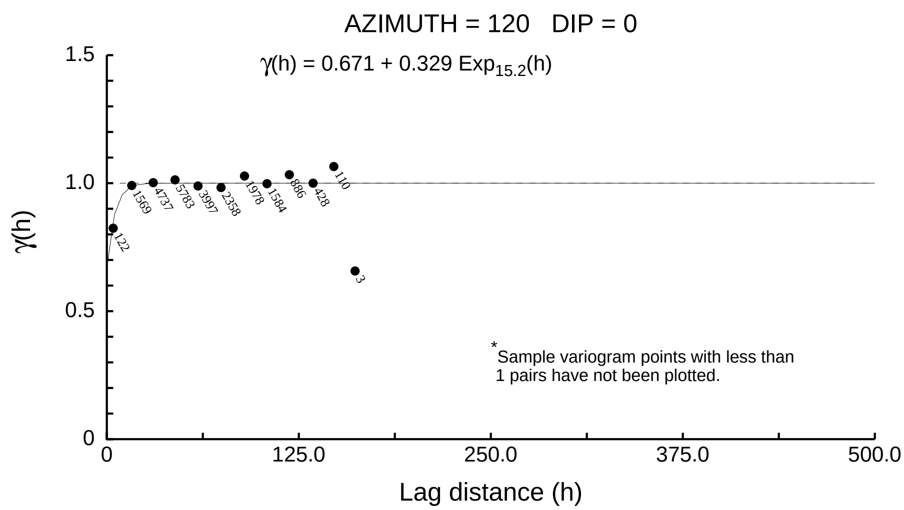


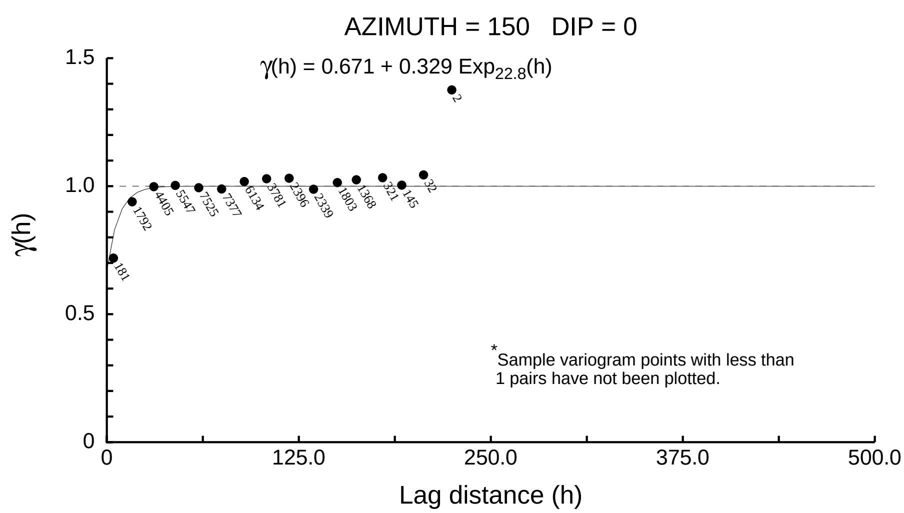




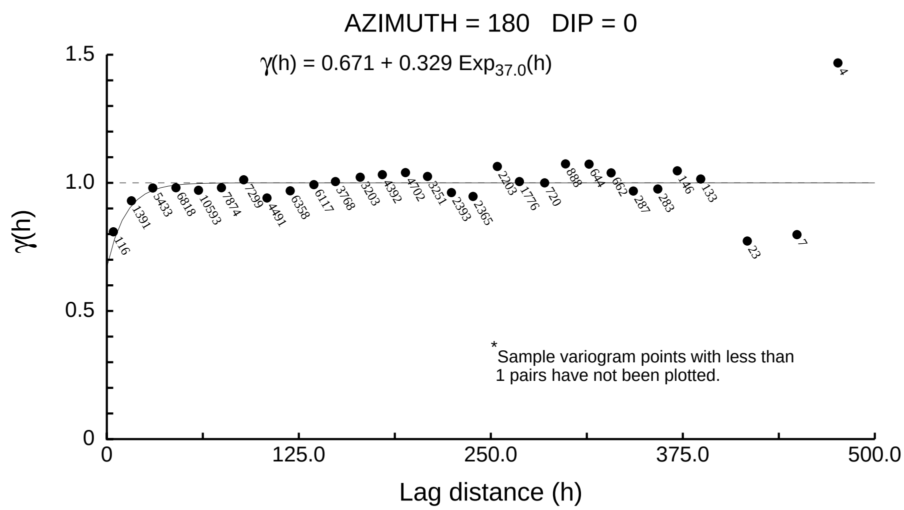
Zone 1 Directional Correlograms - 5m Comps

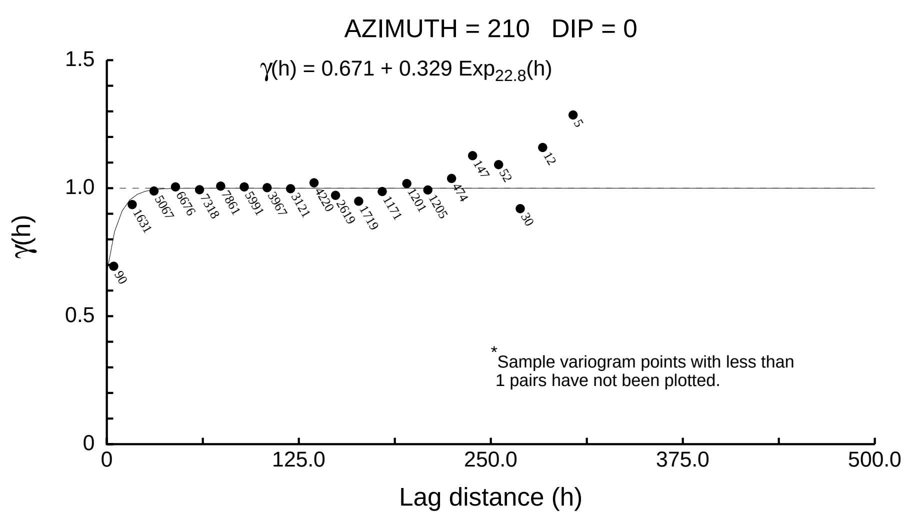


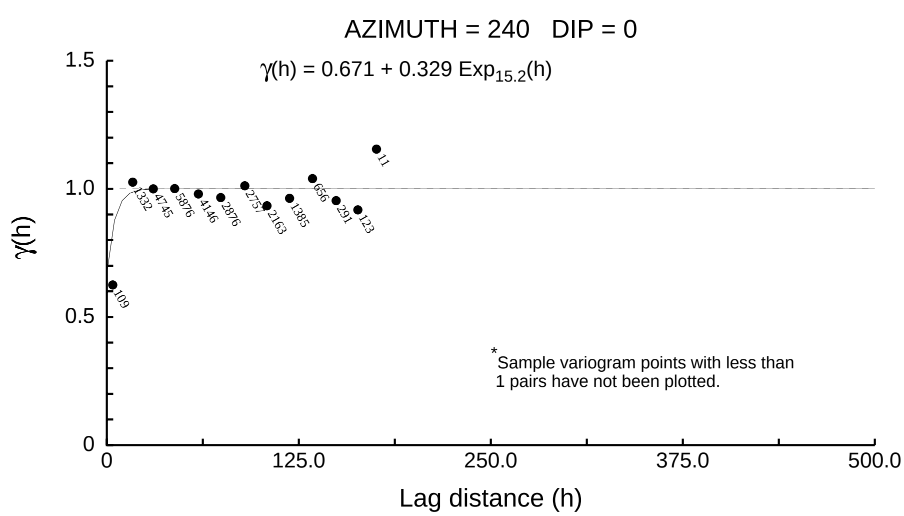




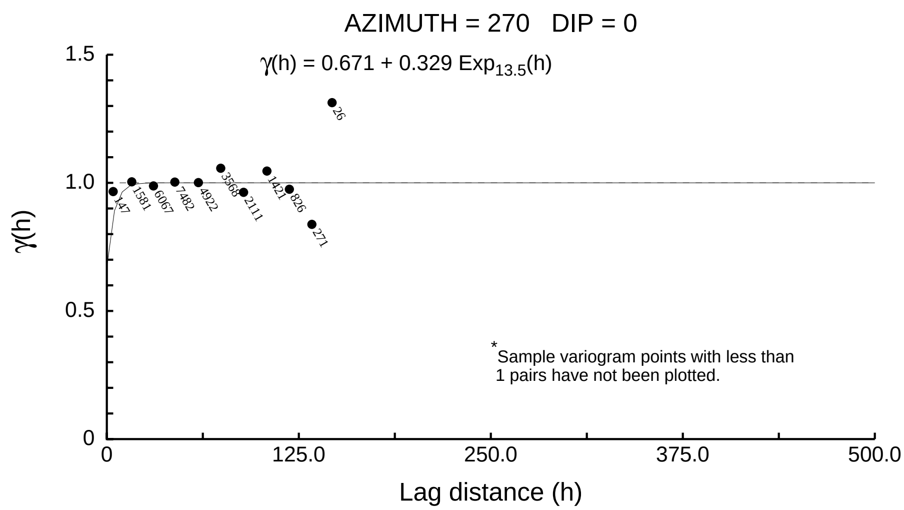
Zone 1 Directional Correlograms - 5m Comps

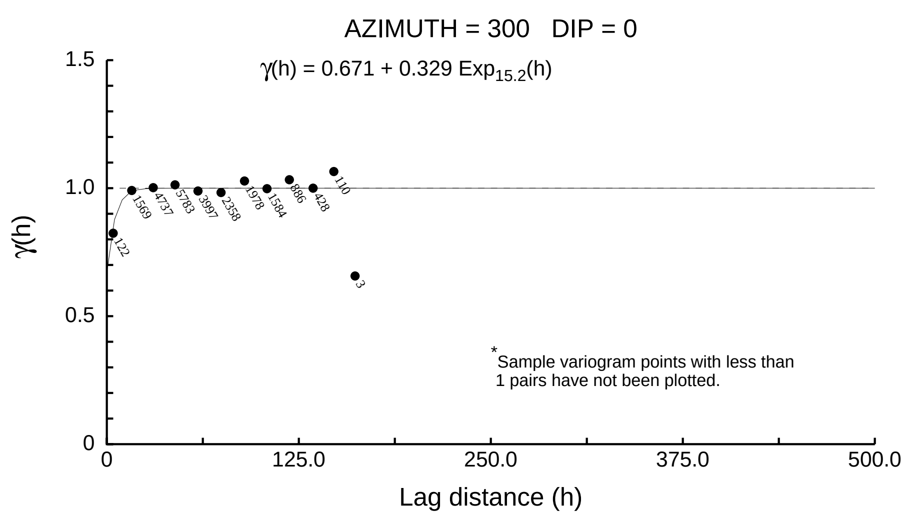


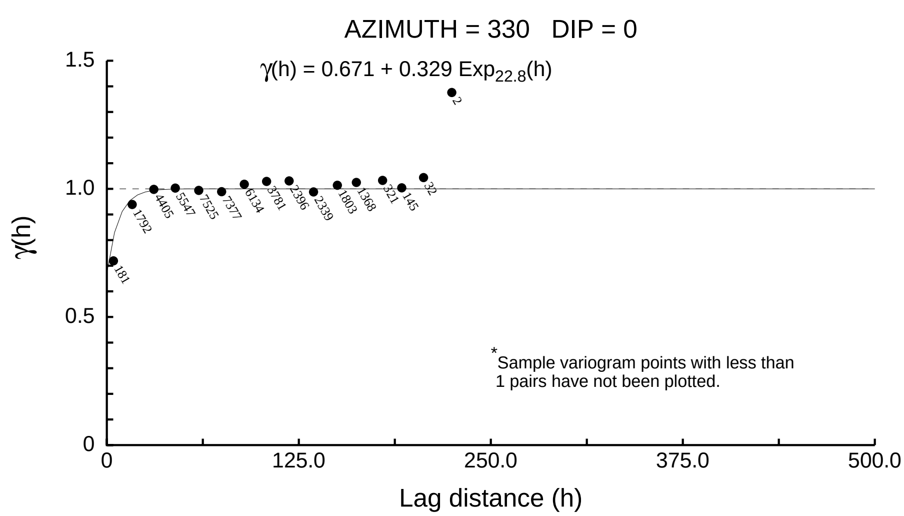




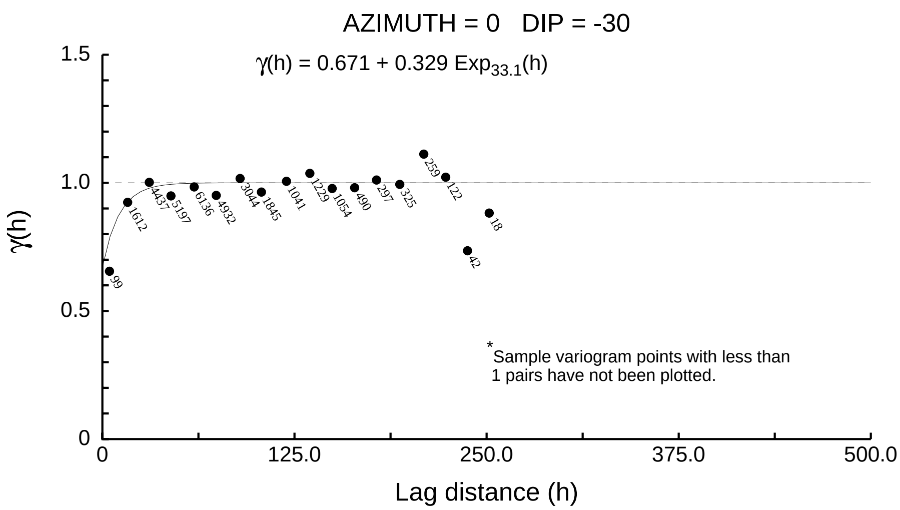
Zone 1 Directional Correlograms - 5m Comps

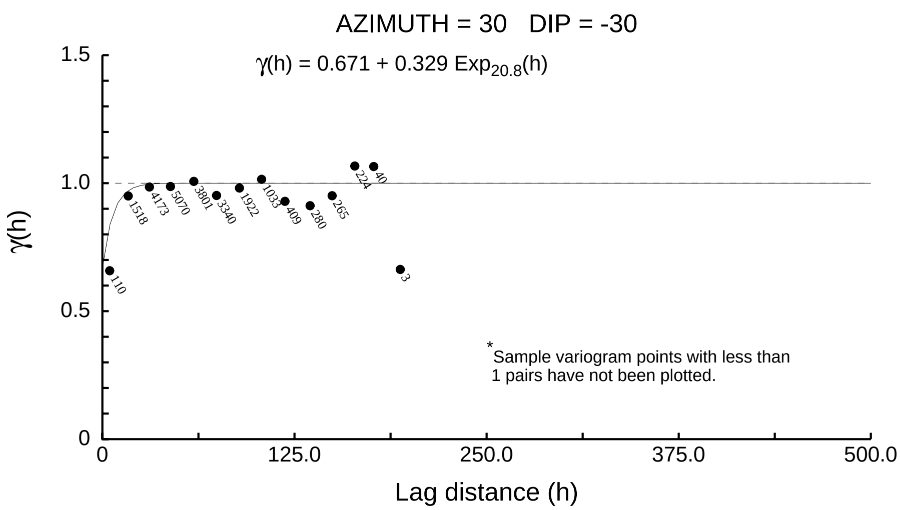


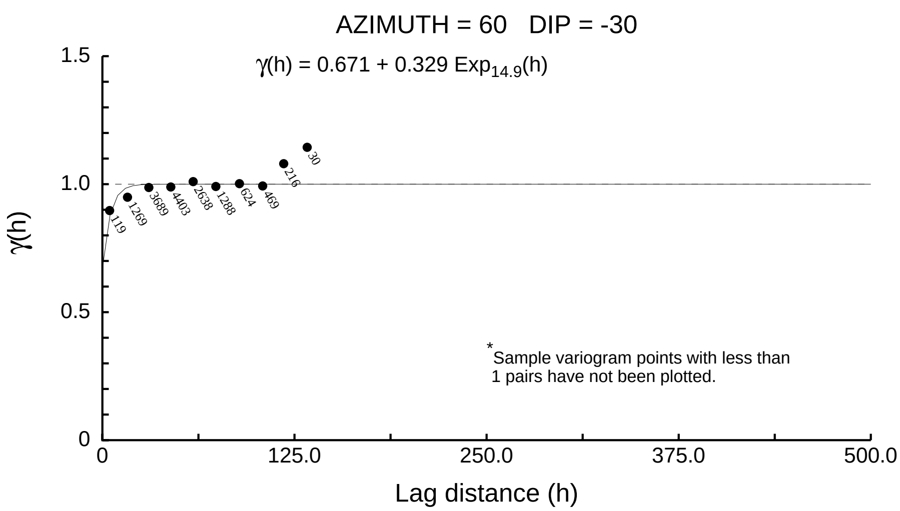




Zone 1 Directional Correlograms - 5m Comps







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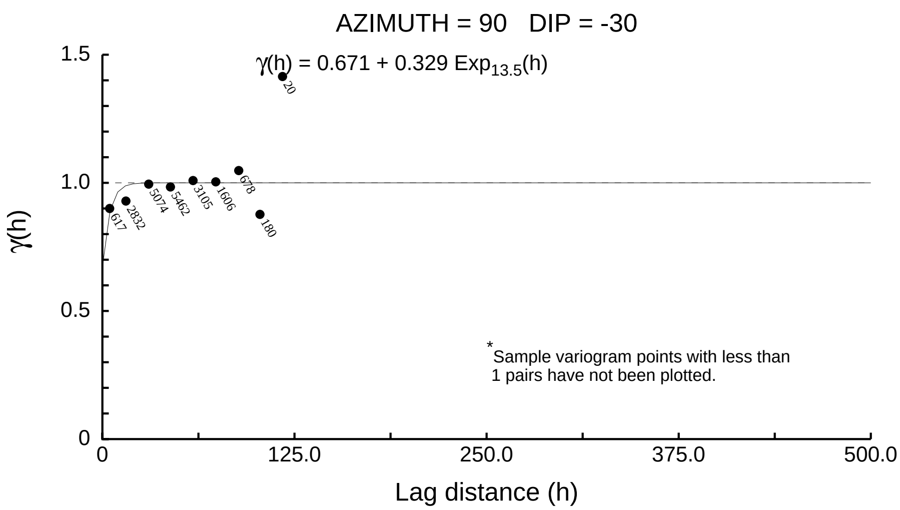
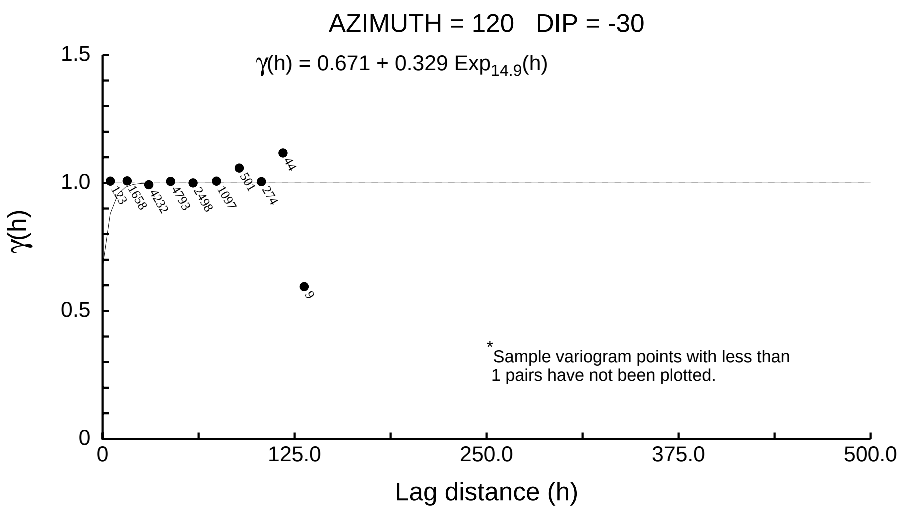
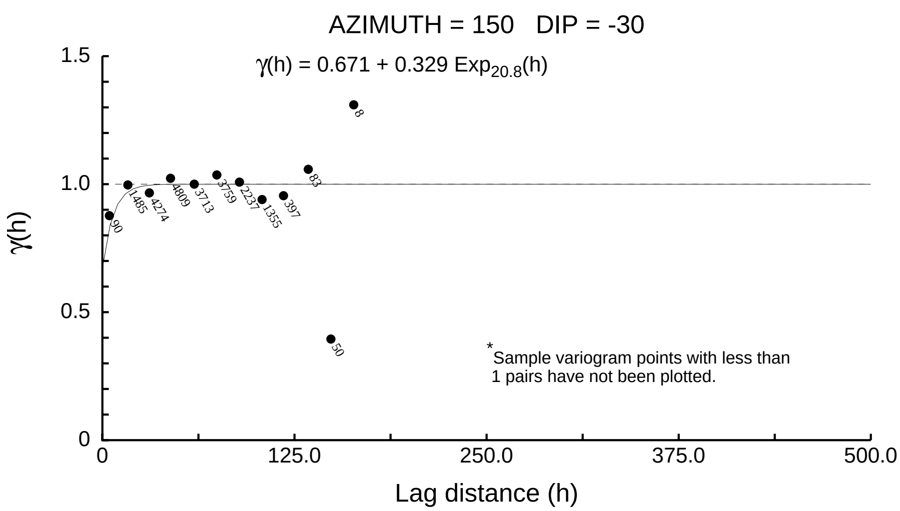
Zone 1 Directional Correlograms - 5m Comps







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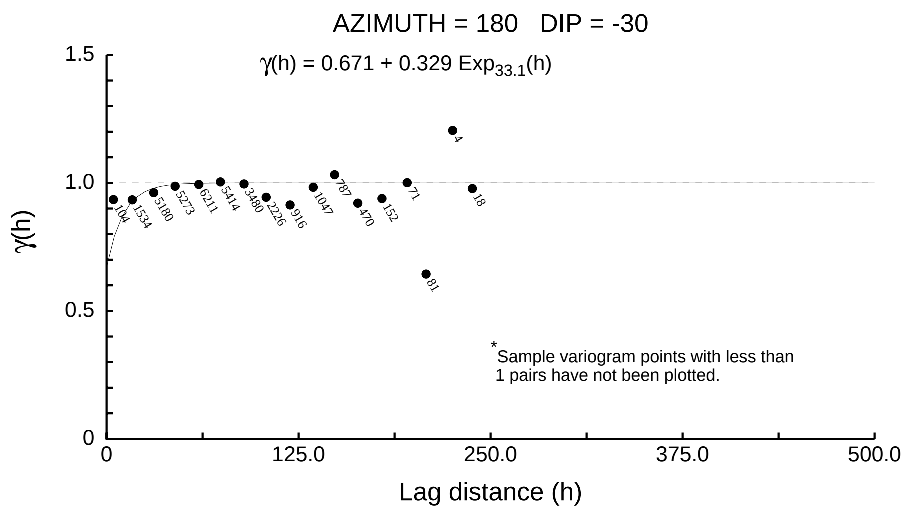
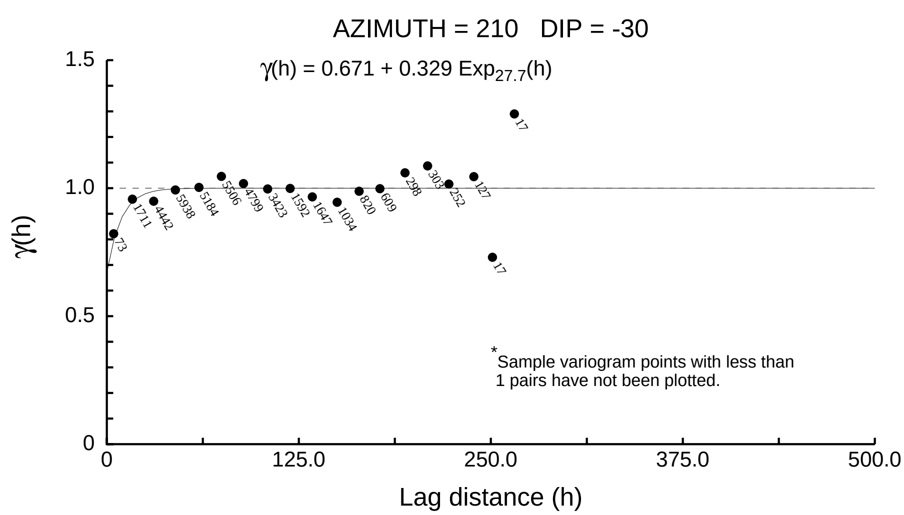
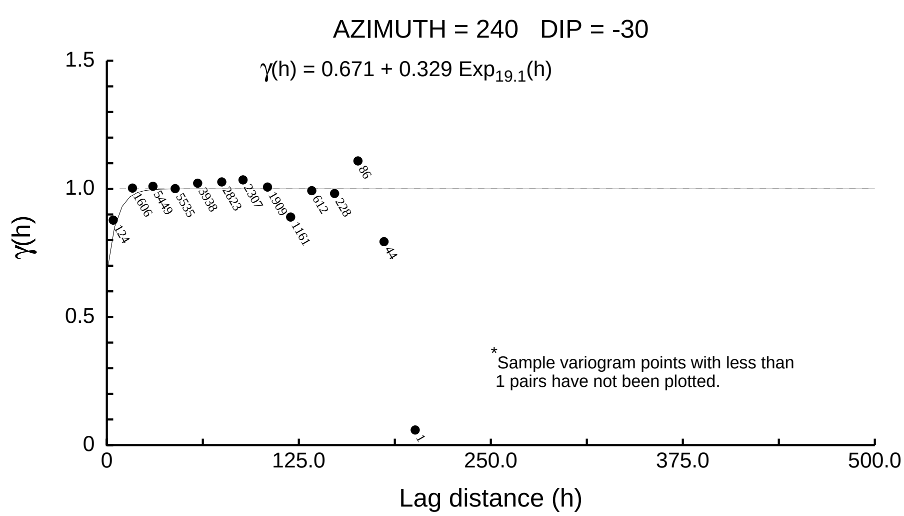
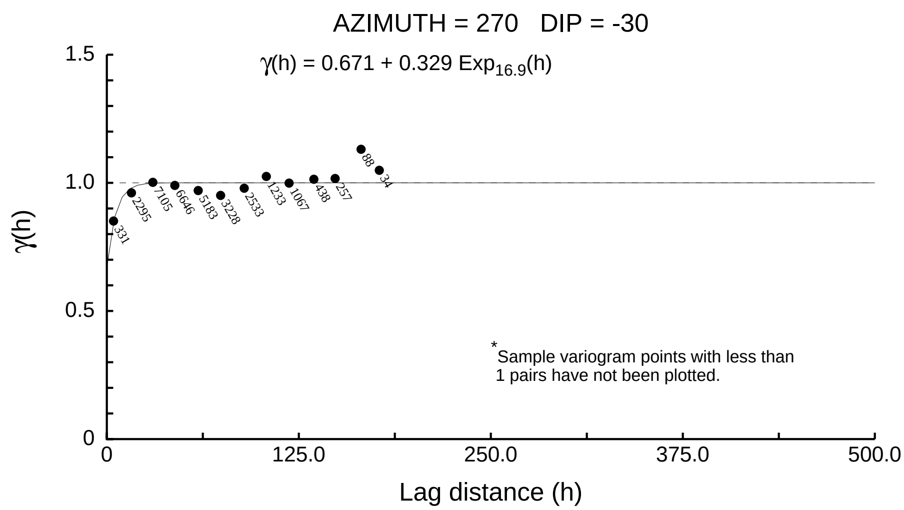
Zone 1 Directional Correlograms - 5m Comps

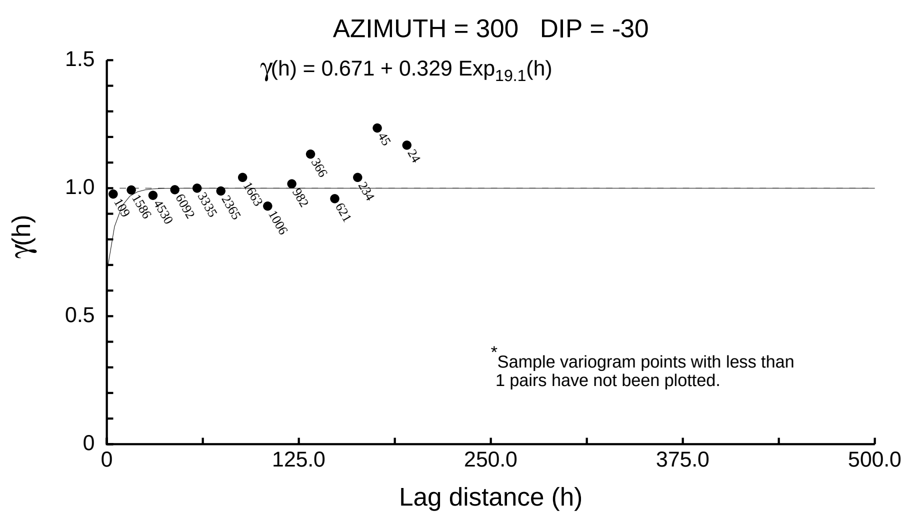


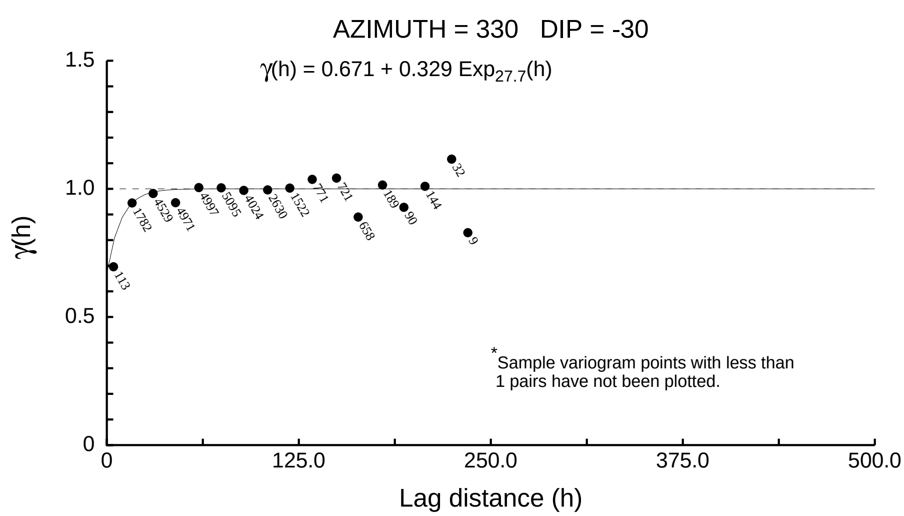




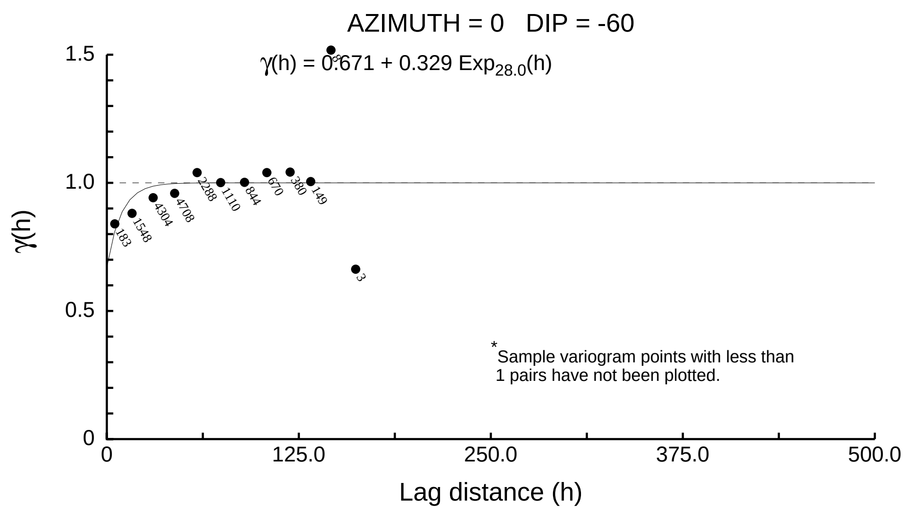
Zone 1 Directional Correlograms - 5m Comps

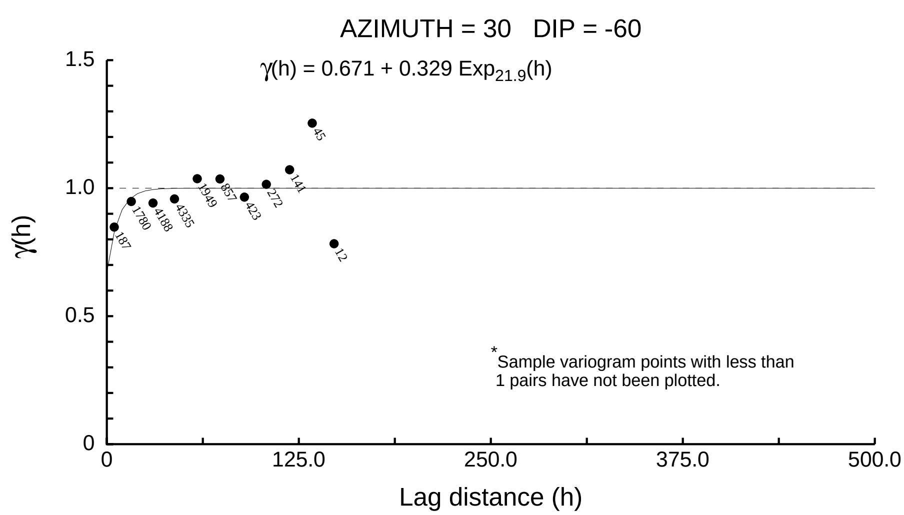


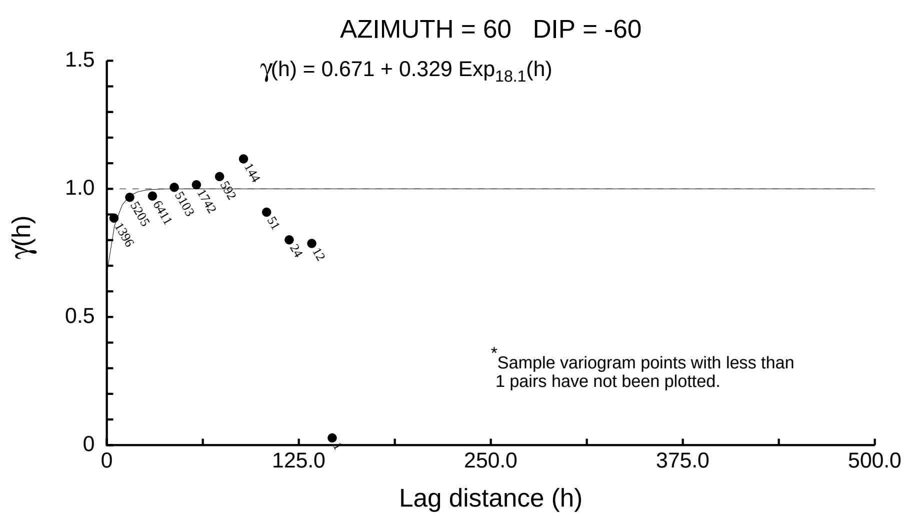




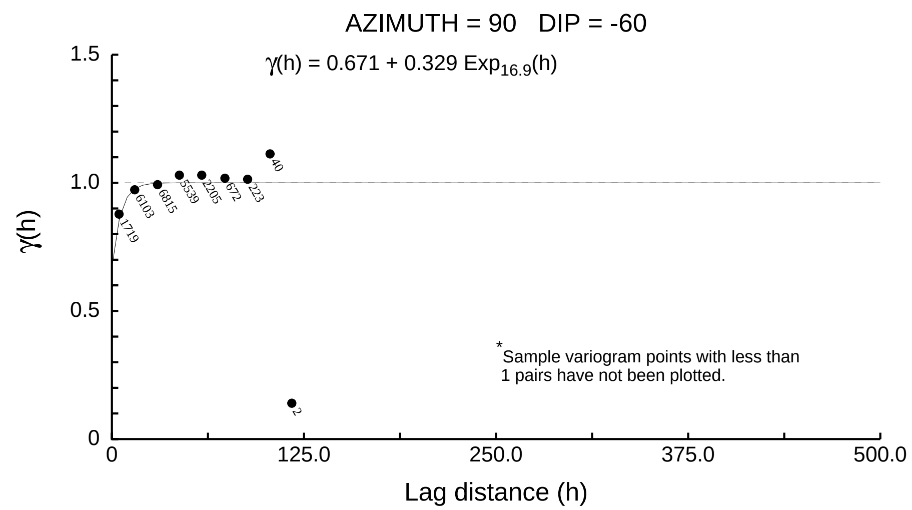
Zone 1 Directional Correlograms - 5m Comps

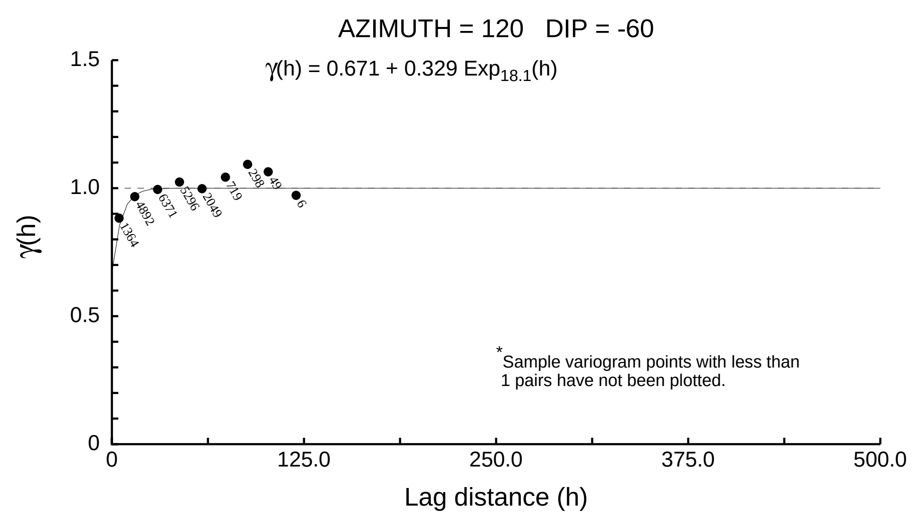


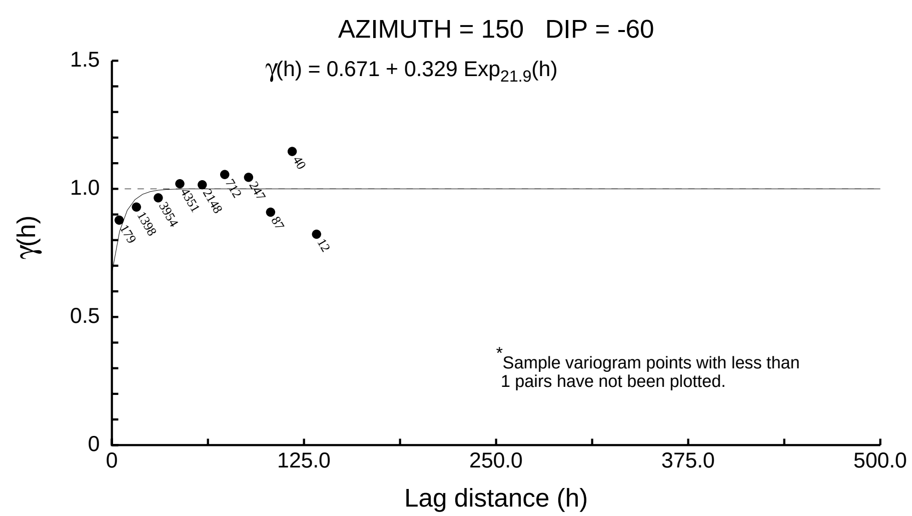




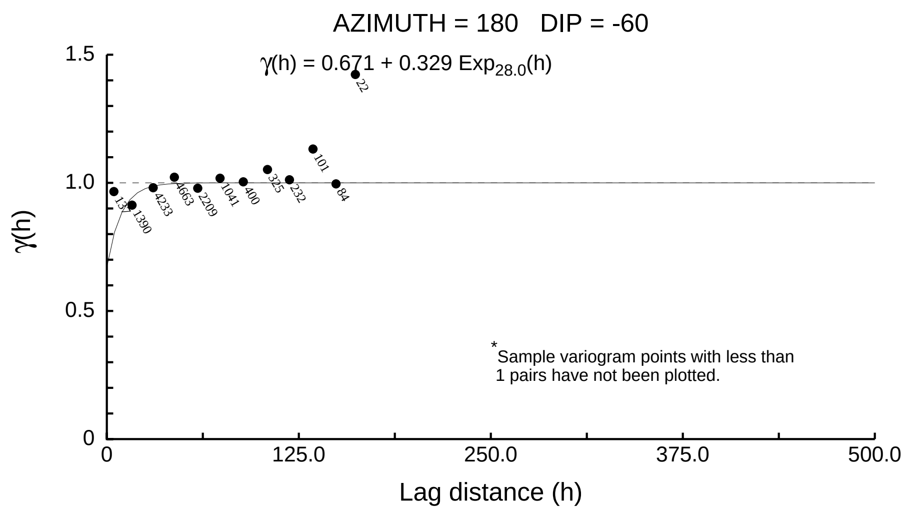
Zone 1 Directional Correlograms - 5m Comps

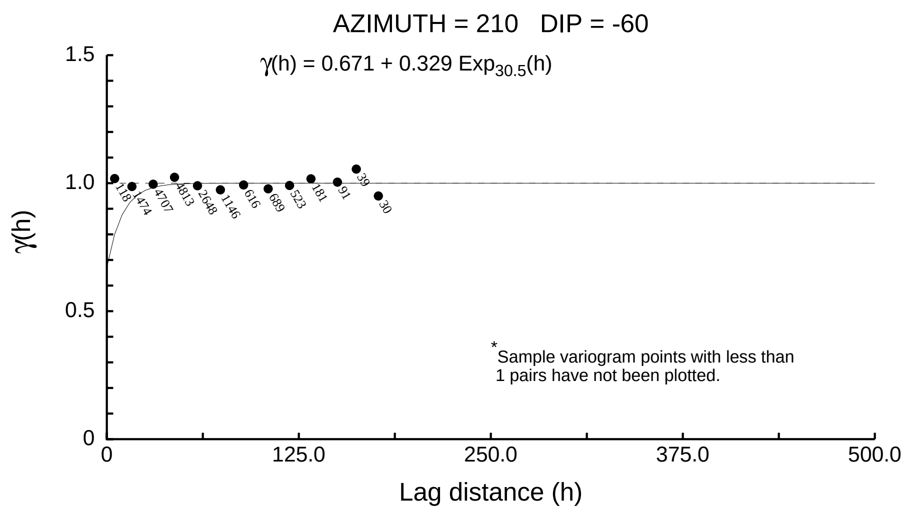


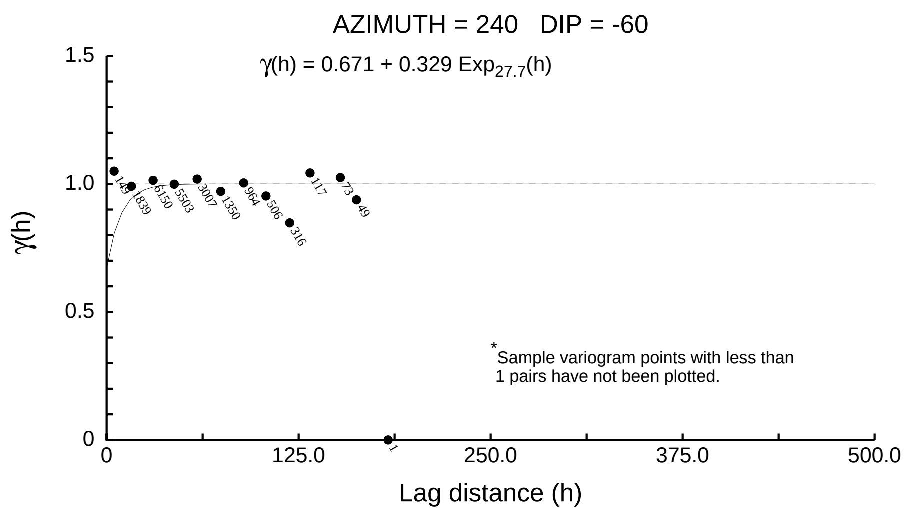




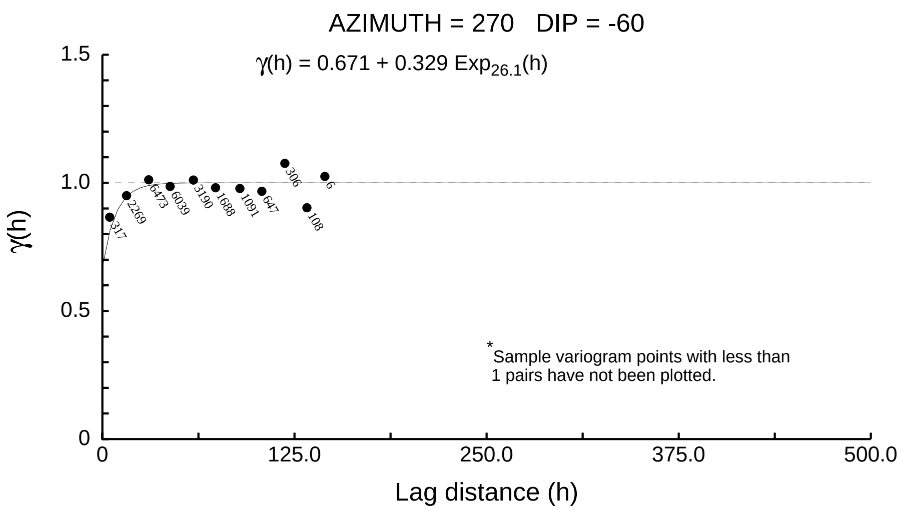
Zone 1 Directional Correlograms - 5m Comps

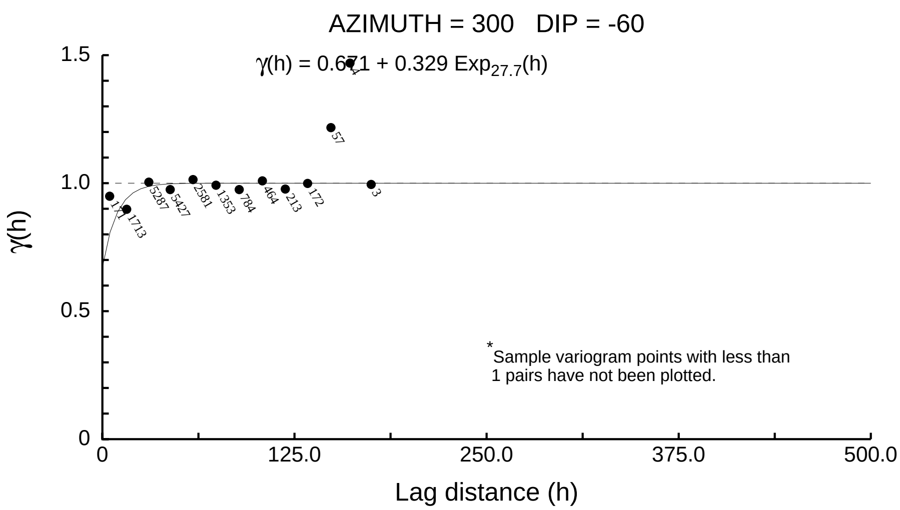


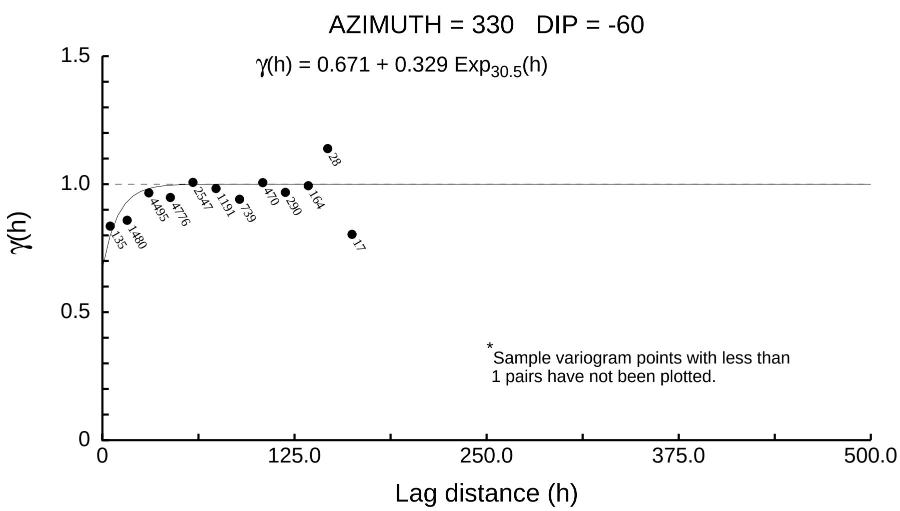




Zone 1 Directional Correlograms - 5m Comps







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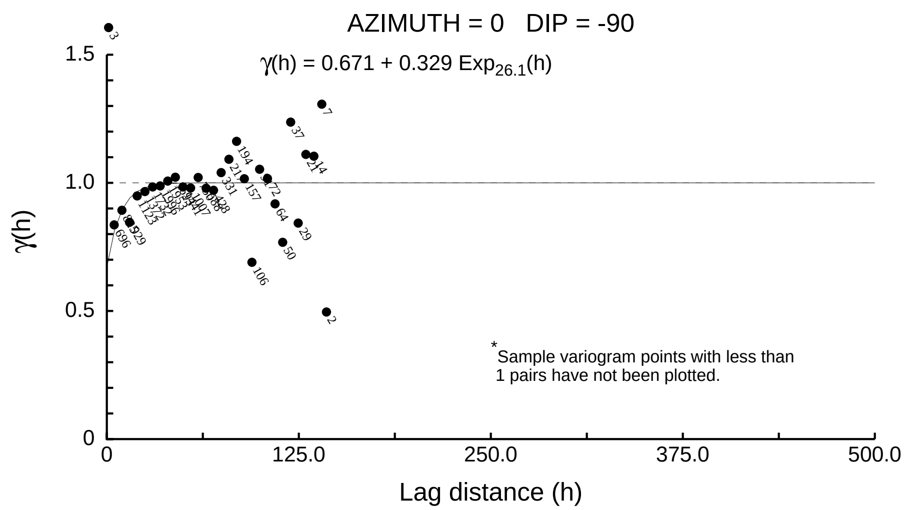
Zone 1 Directional Correlograms - 5m Comps



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Zones 1+2 Directional Correlograms - 5m Comps

Medsystem and Vulcan Rotation Conventions

Nugget ==> 0.651
C1 ==> 0.349

First Structure -- Exponential with Practical Range

LH Rotation about the Z axis ==> 0
RH Rotation about the X’ axis ==> 0
LH Rotation about the Y’ axis ==> 75
Range along the Z’ axis ==> 24.9 Azimuth ==> 270 Dip ==> 15
Range along the Y’ axis ==> 84.7 Azimuth ==> 360 Dip ==> 0
Range along the X’ axis ==> 51.7 Azimuth ==> 90 Dip ==> 75

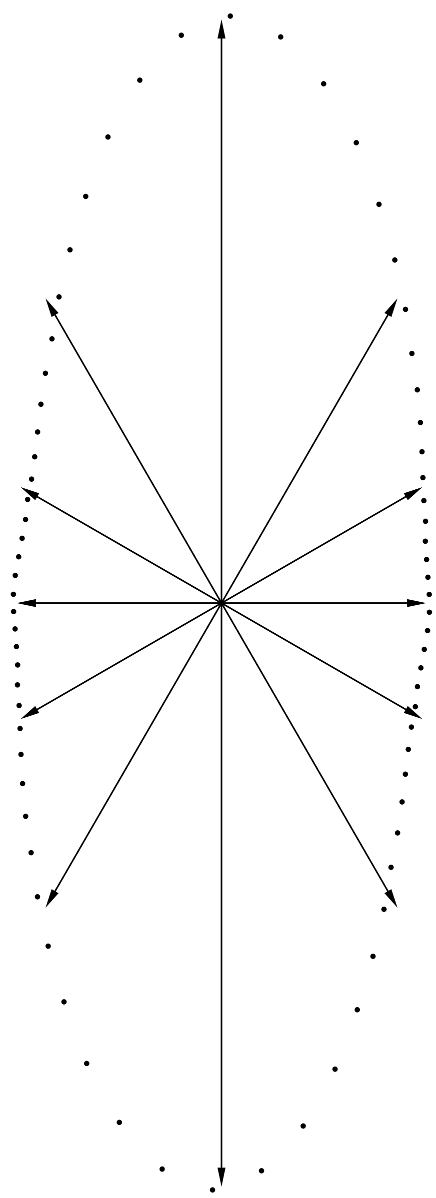
Modeling Criteria

Minimum number pairs req’d ==> 1
Sample variogram points weighted by # pairs

Zones 1+2 Directional Correlograms - 5m Comps

Structure Number 1

Rose Diagram of Ranges Dipping 0 Degrees
Scale:

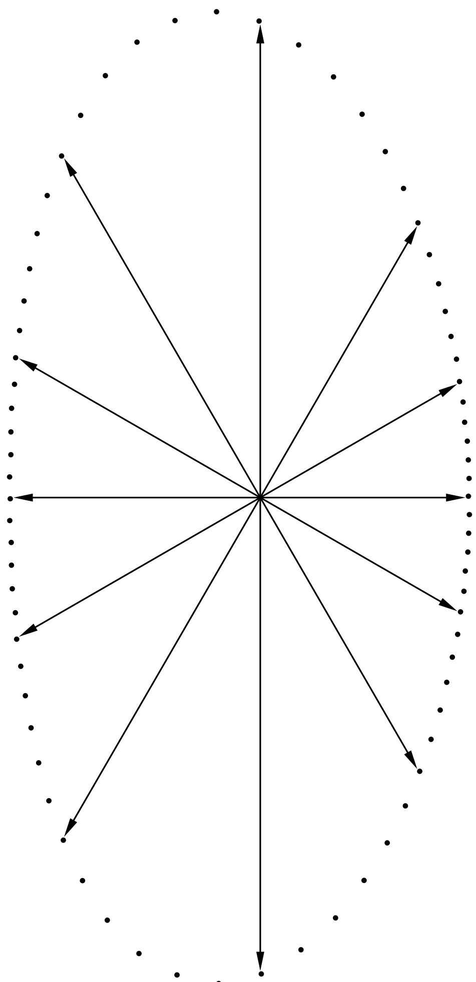


Zones 1+2 Directional Correlograms - 5m Comps

Structure Number 1

Rose Diagram of Ranges Dipping 30 Degrees
Scale:

80 Units

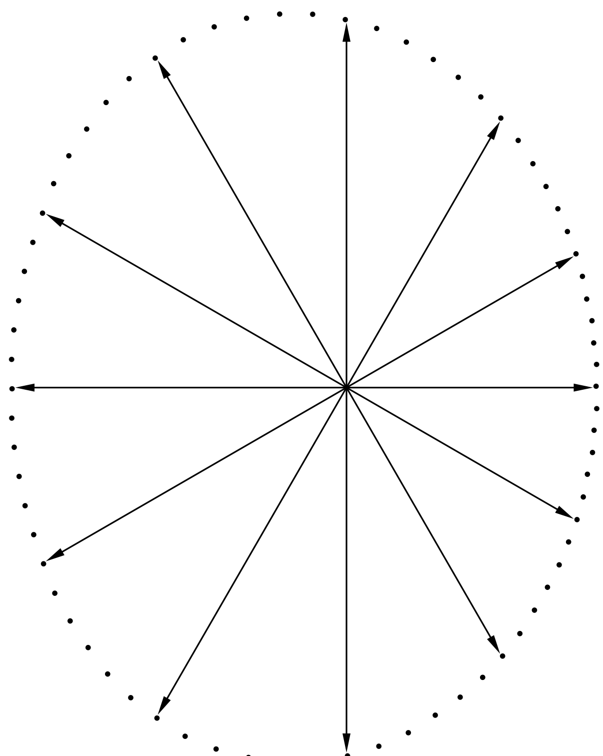


Zones 1+2 Directional Correlograms - 5m Comps

Structure Number 1

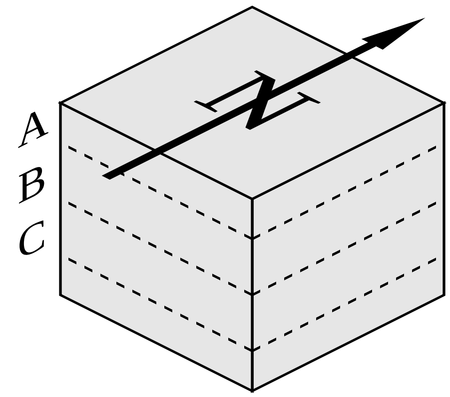
Rose Diagram of Ranges Dipping 60 Degrees
Scale:

80 Units

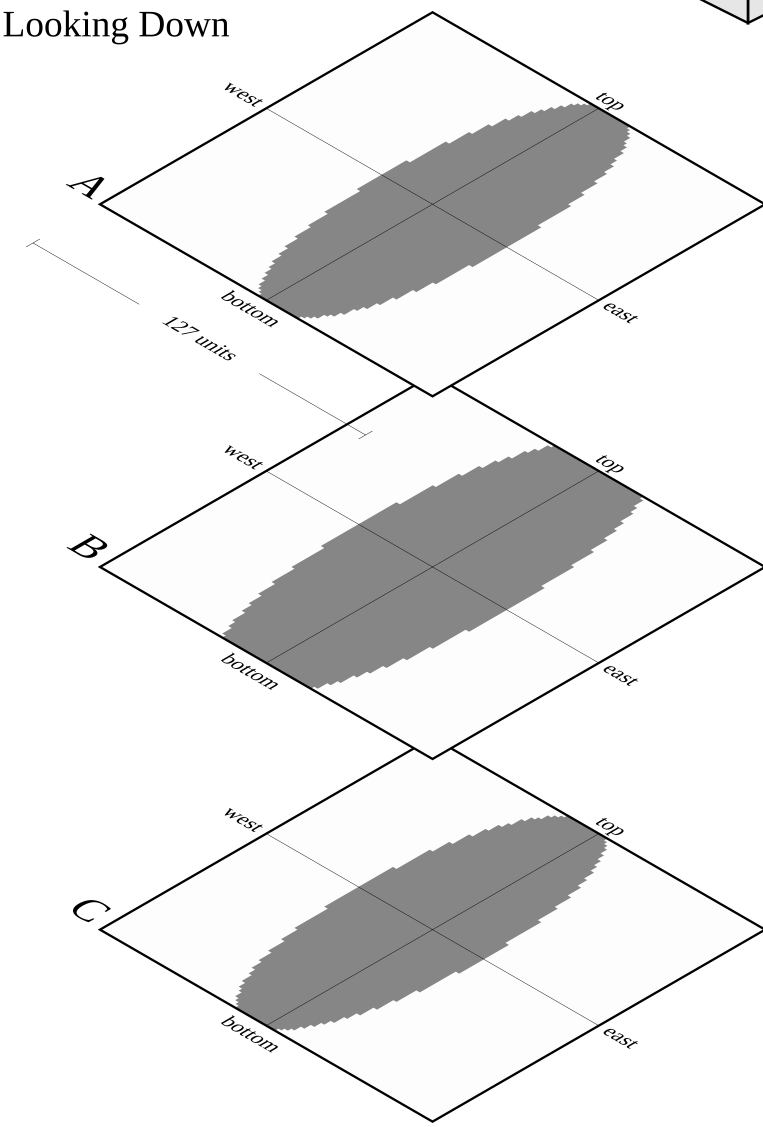


Horizontal Slices Through the Ellipsoids

Reference Cube



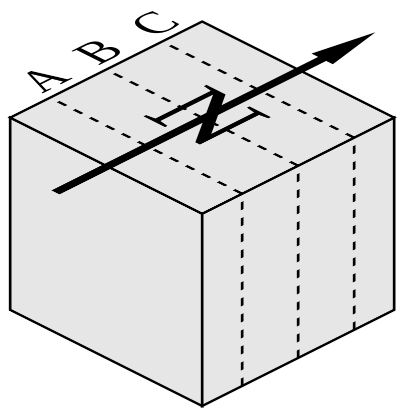
X-Y Planes Looking Down



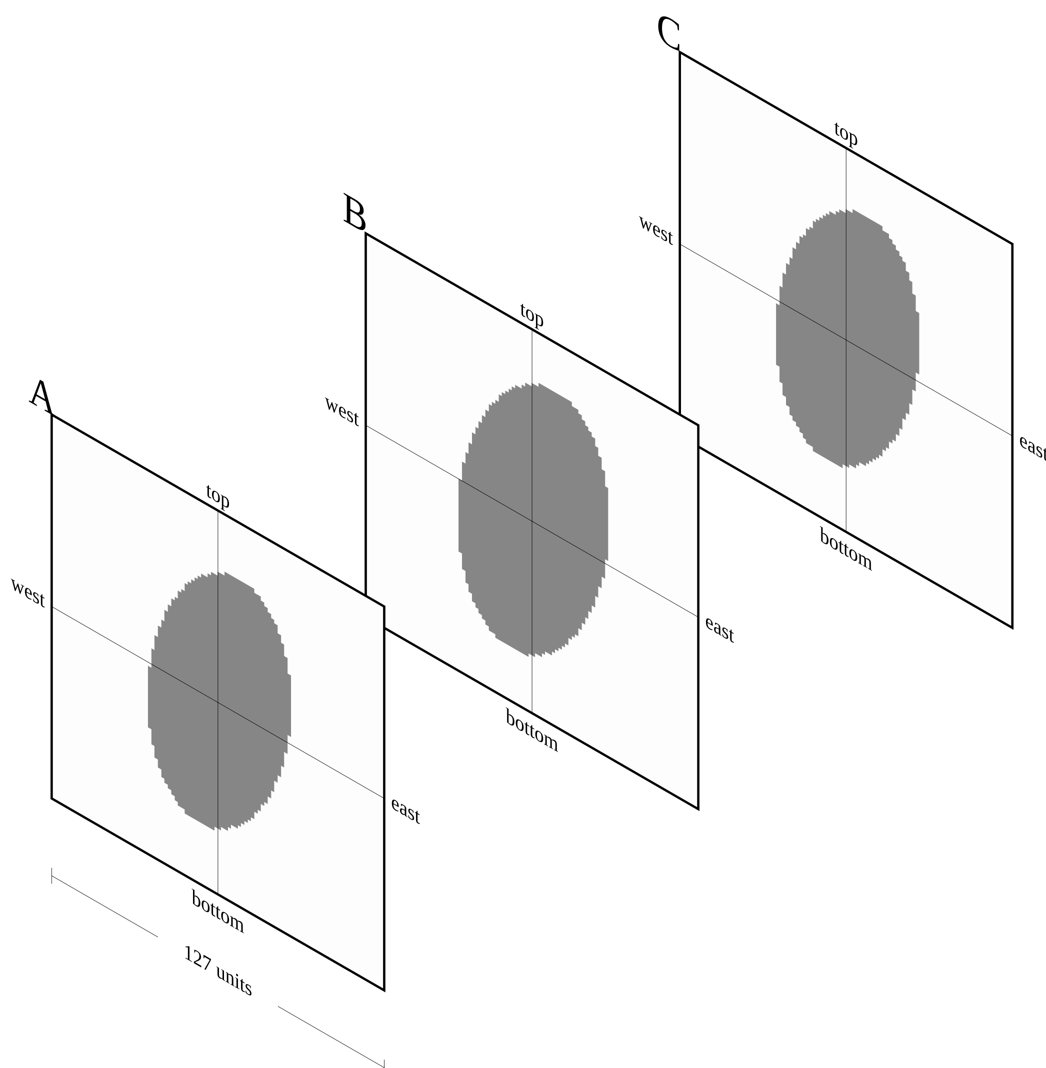
Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Cross Section Views Through the Ellipsoids

Reference Cube



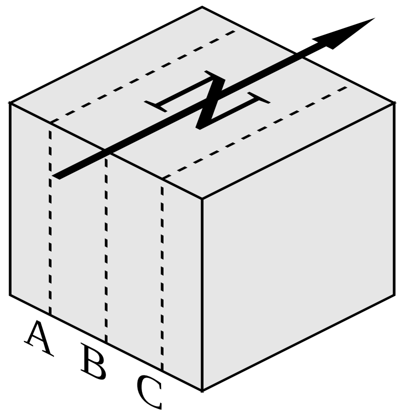
X-Z Planes Looking North



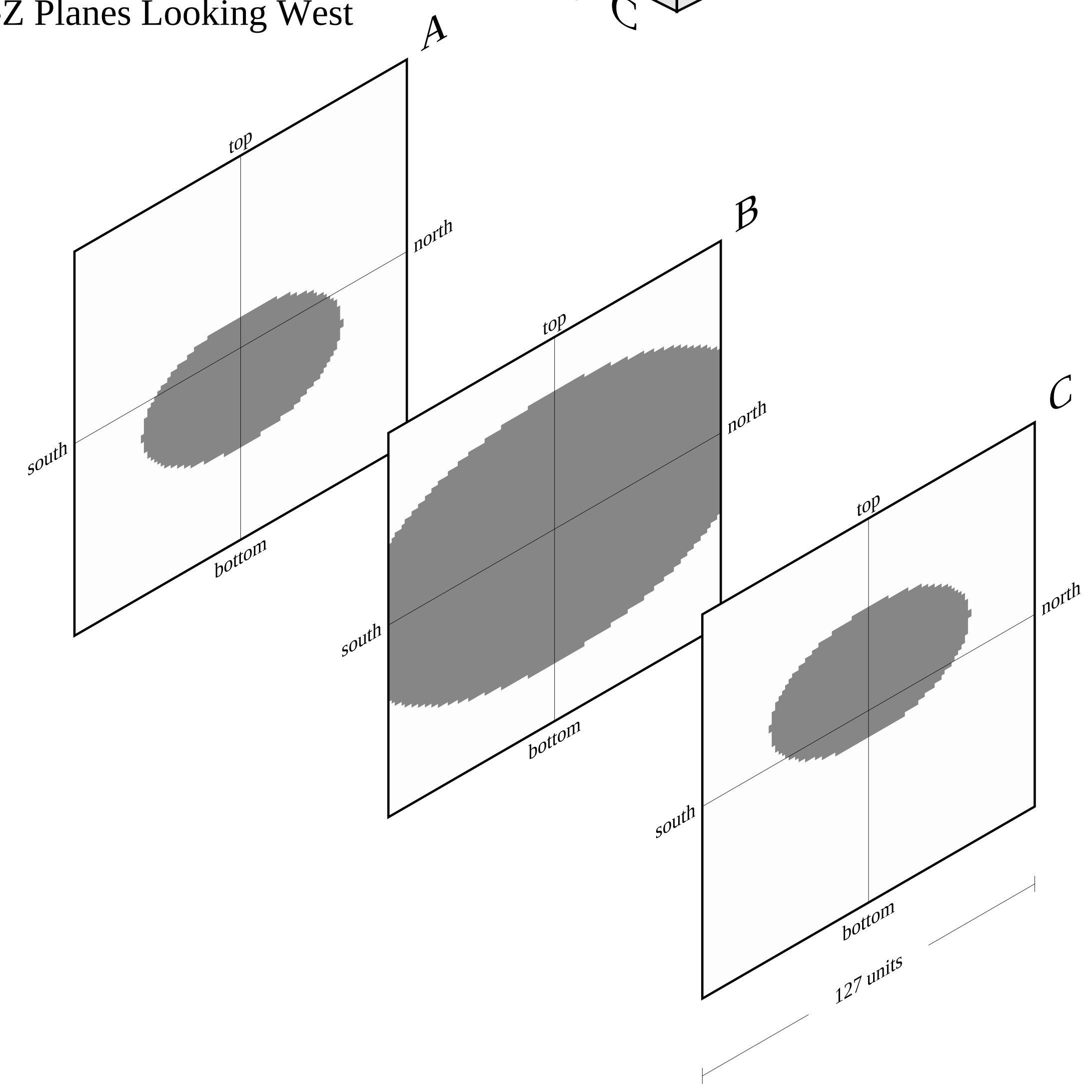
Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Long Section Views Through the Ellipsoids

Reference Cube

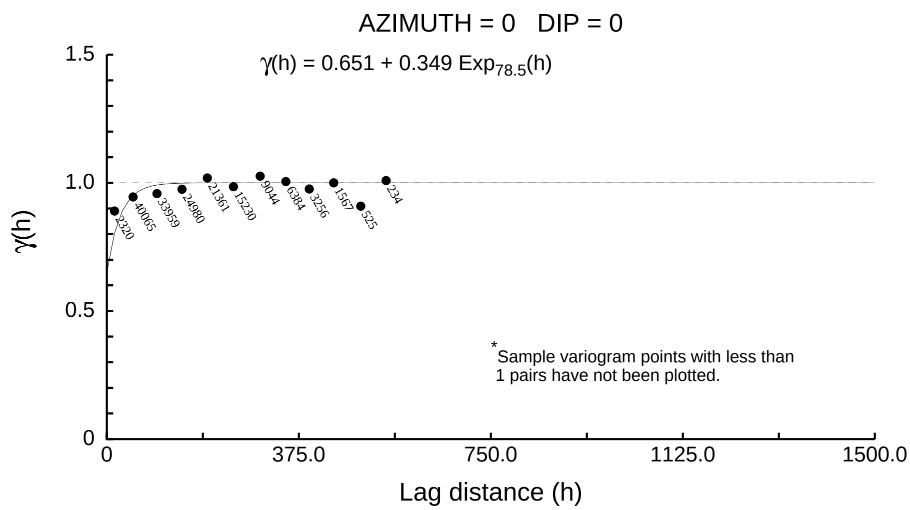


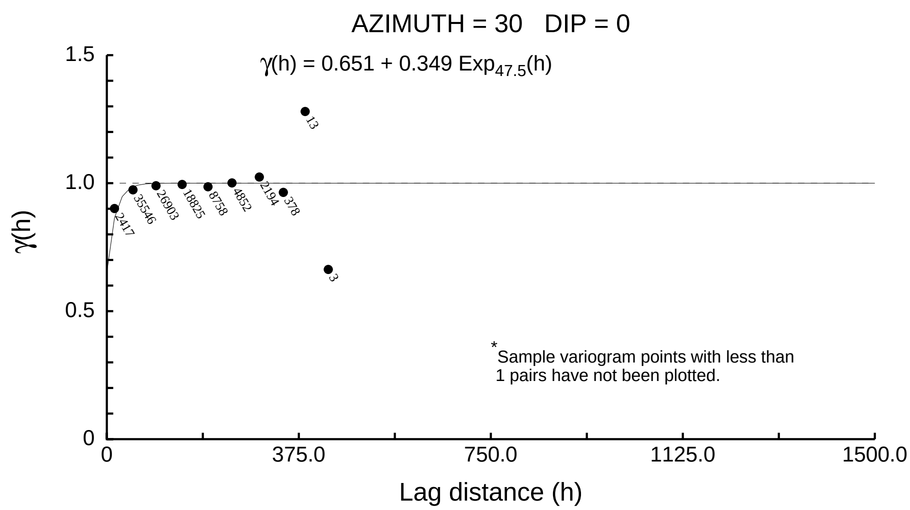
Y-Z Planes Looking West

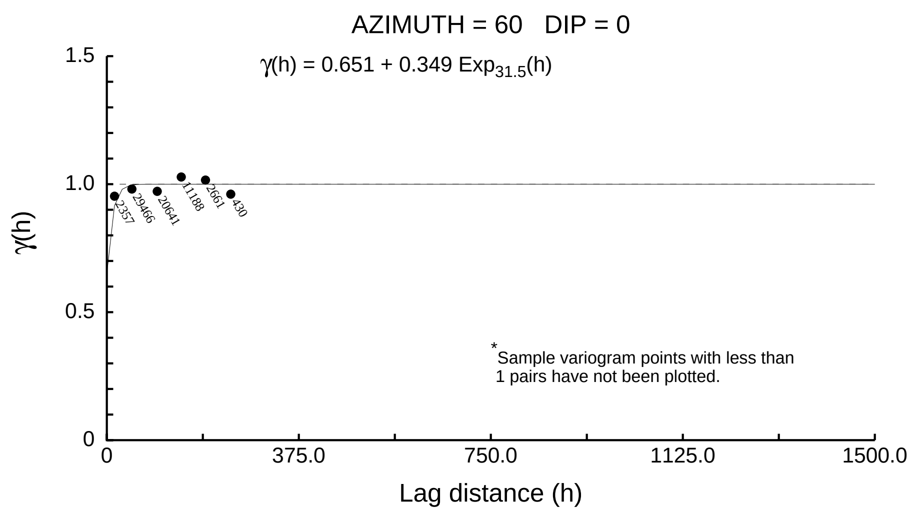


Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Zones 1+2 Directional Correlograms - 5m Comps







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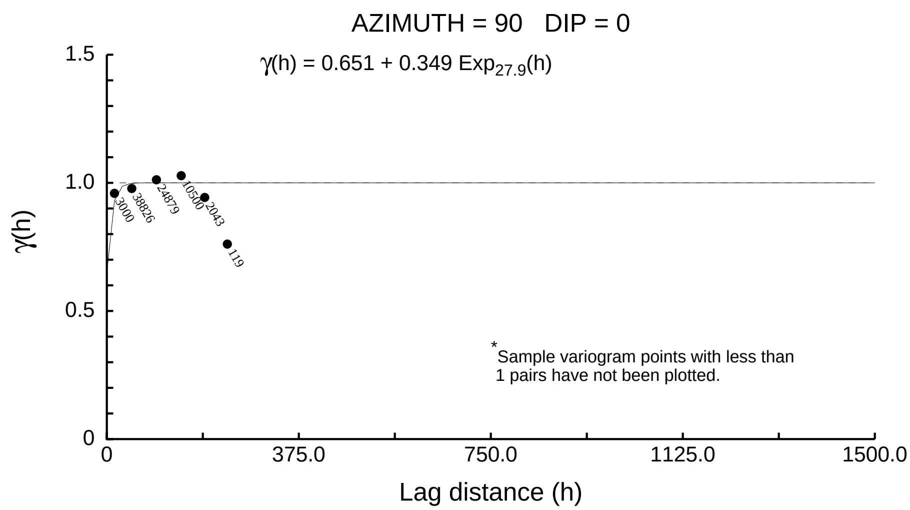
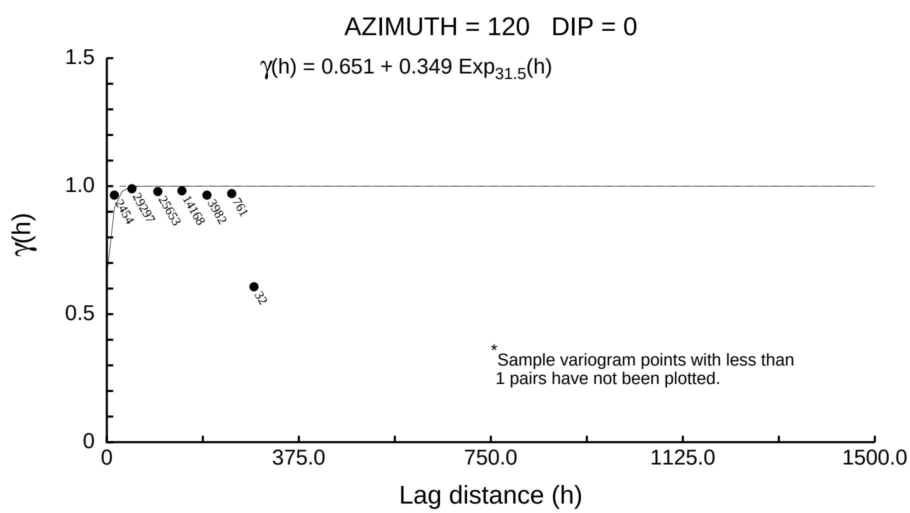
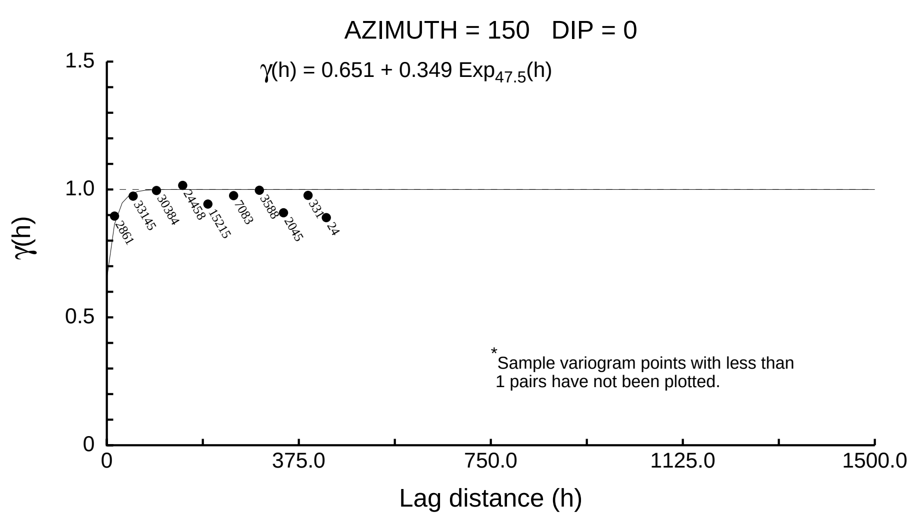
Zones 1+2 Directional Correlograms - 5m Comps







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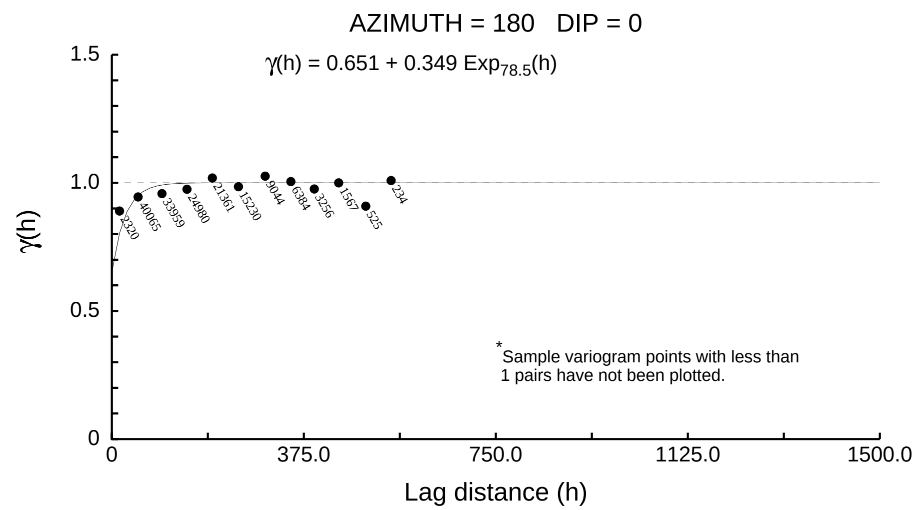
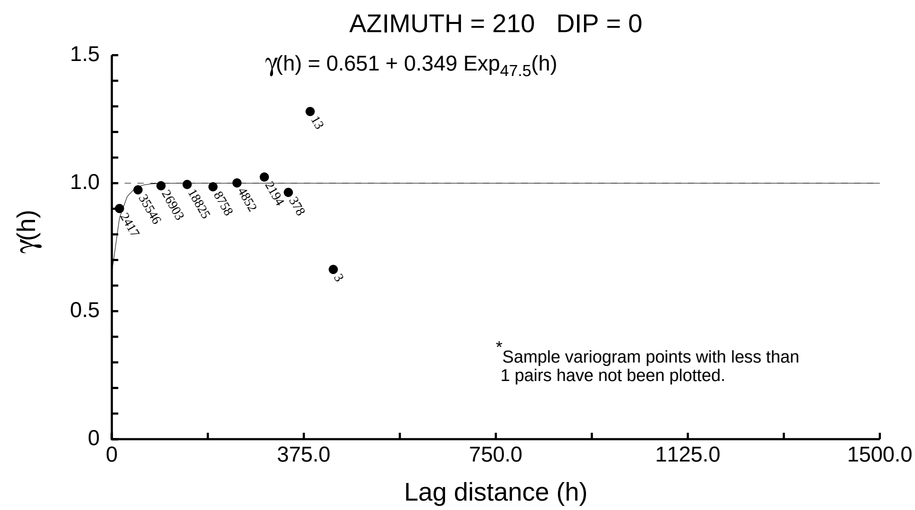
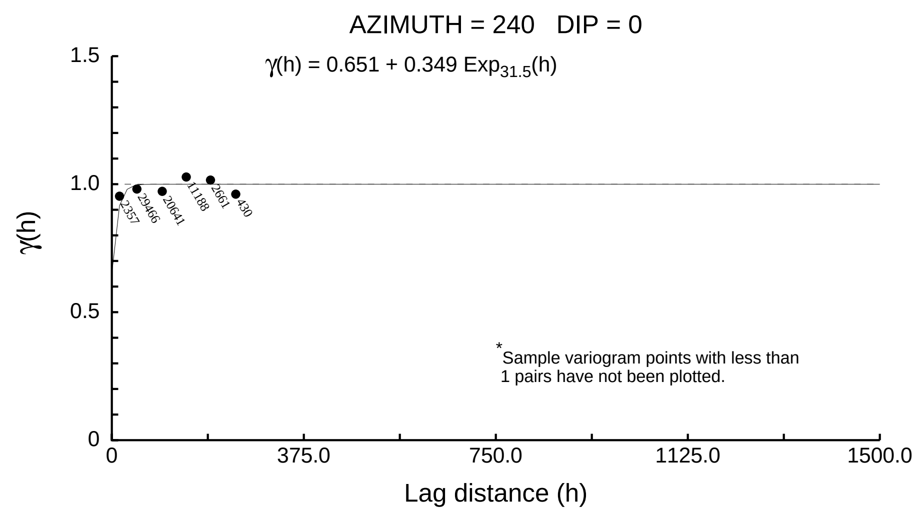
Zones 1+2 Directional Correlograms - 5m Comps







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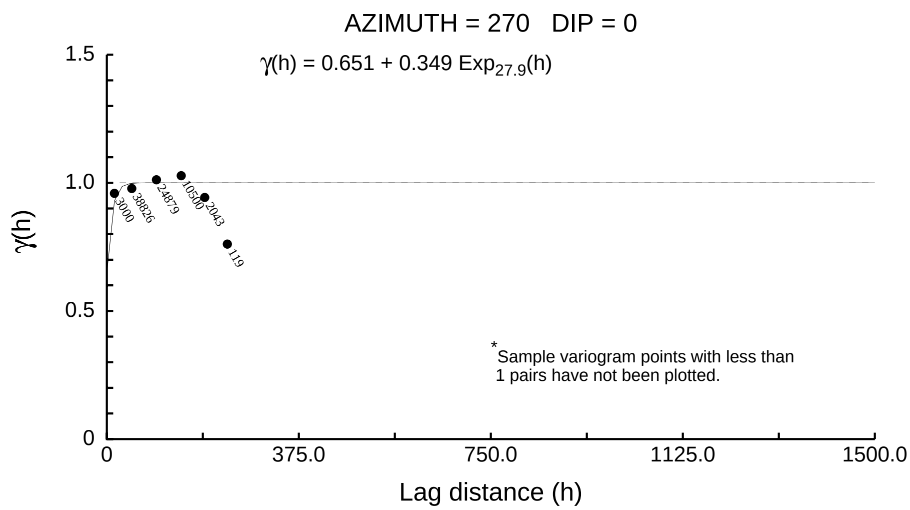
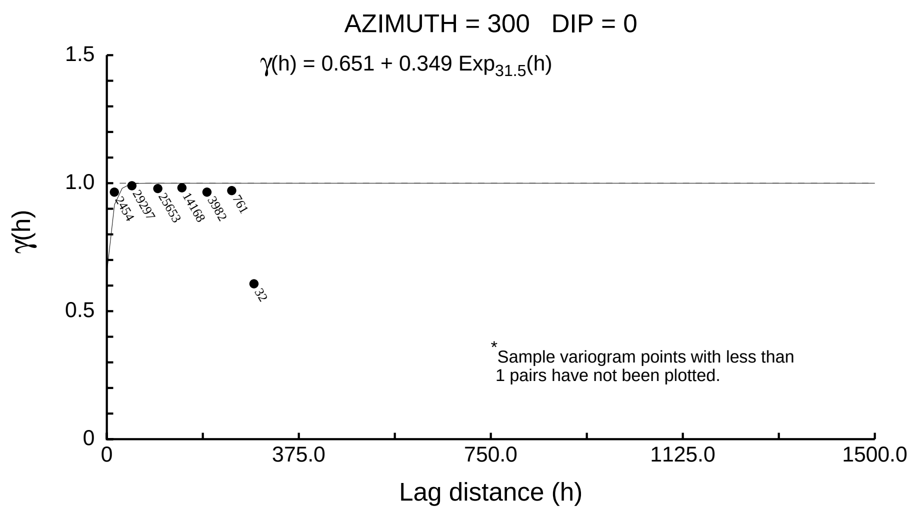
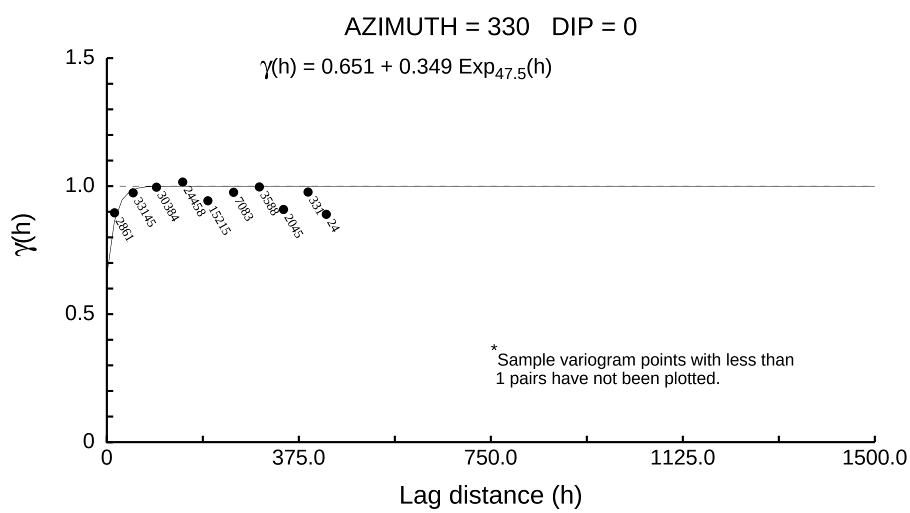
Zones 1+2 Directional Correlograms - 5m Comps







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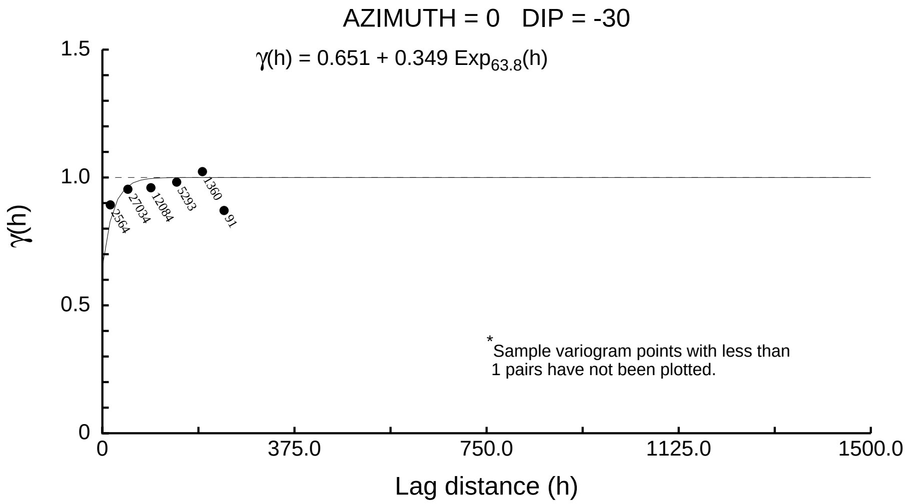
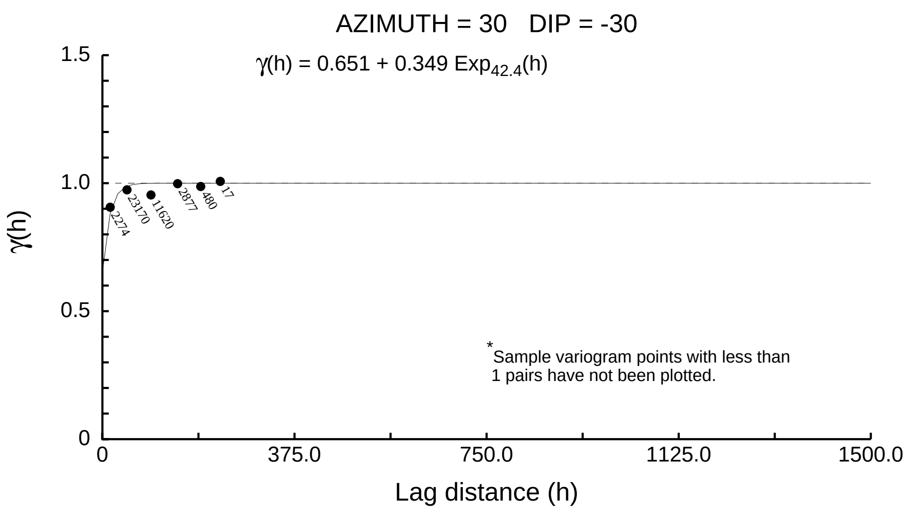
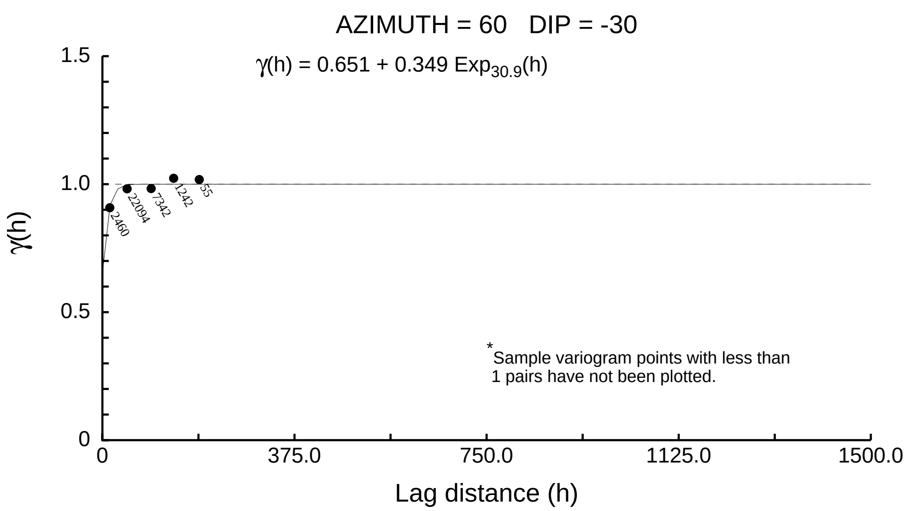
Zones 1+2 Directional Correlograms - 5m Comps







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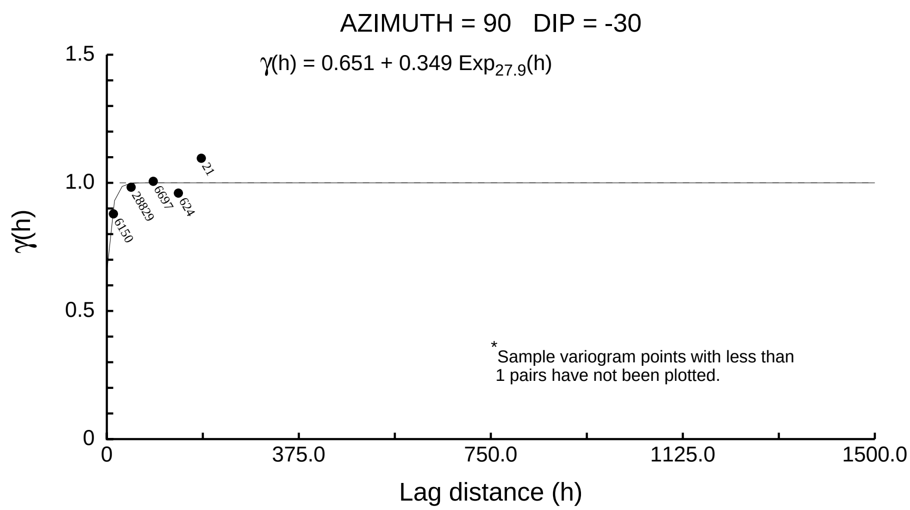
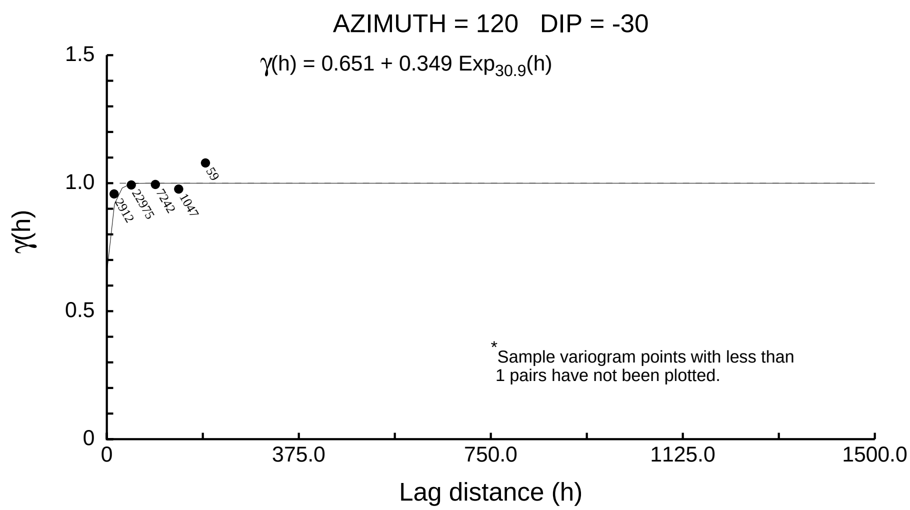
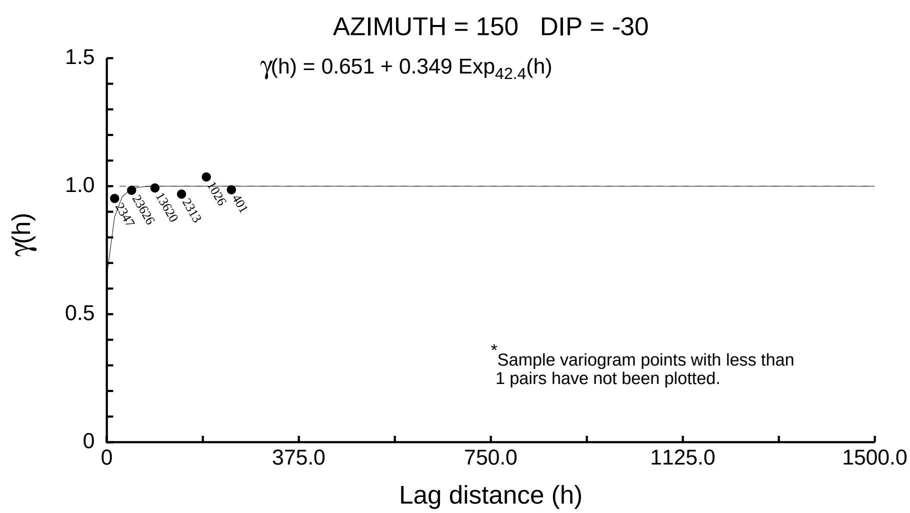
Zones 1+2 Directional Correlograms - 5m Comps







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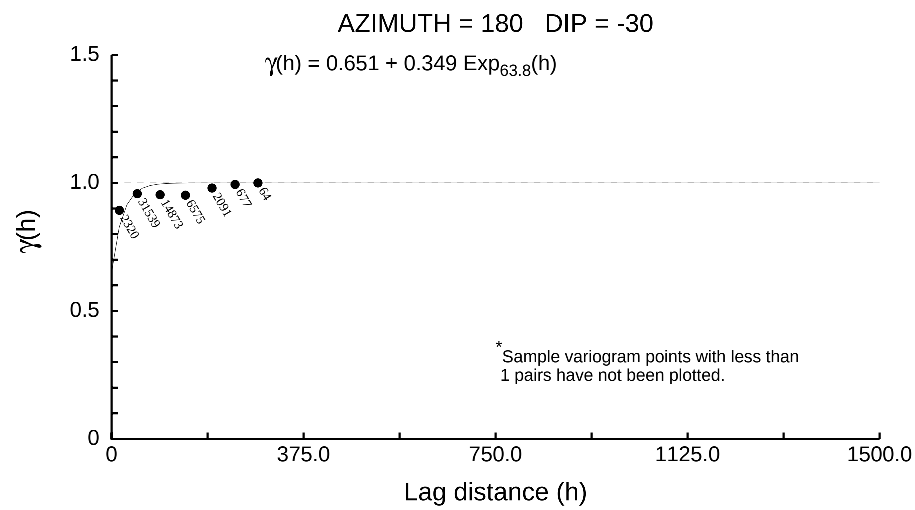
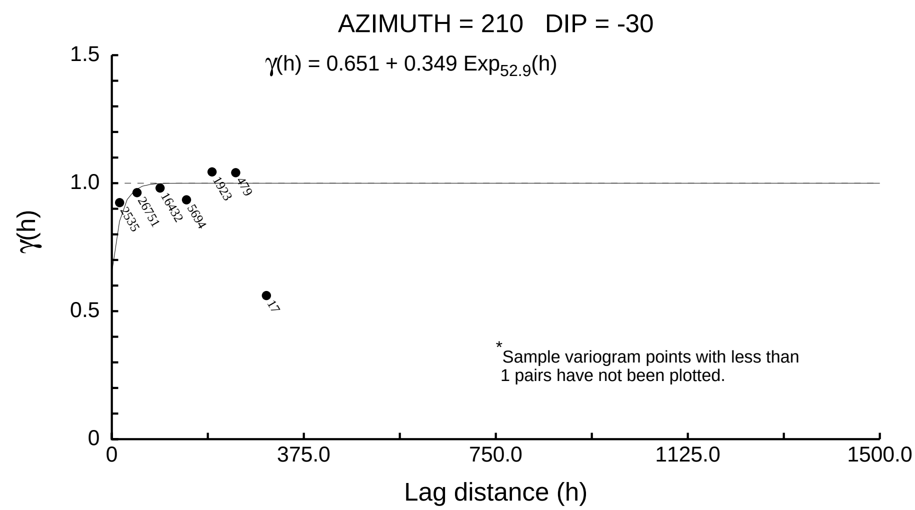
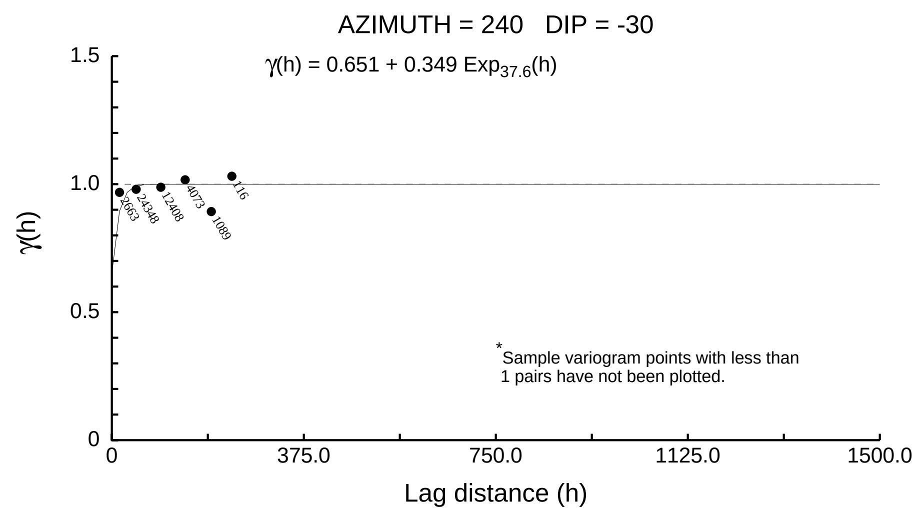
Zones 1+2 Directional Correlograms - 5m Comps







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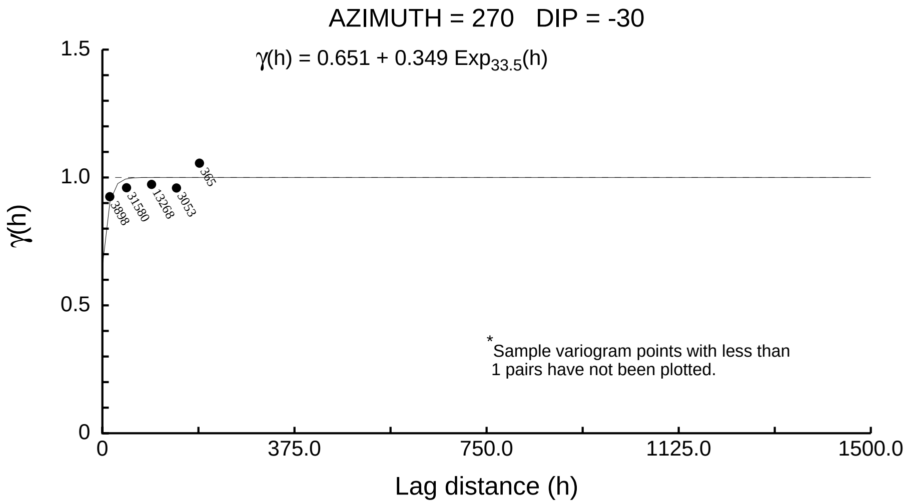
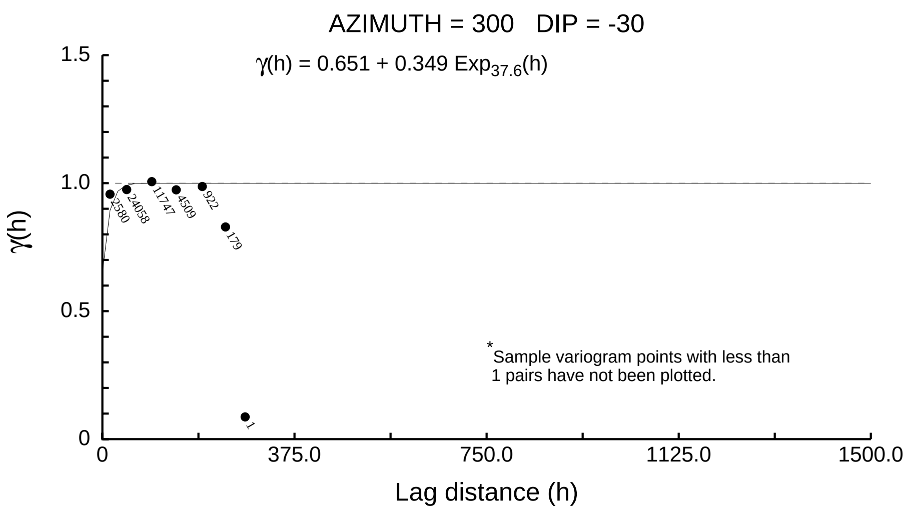
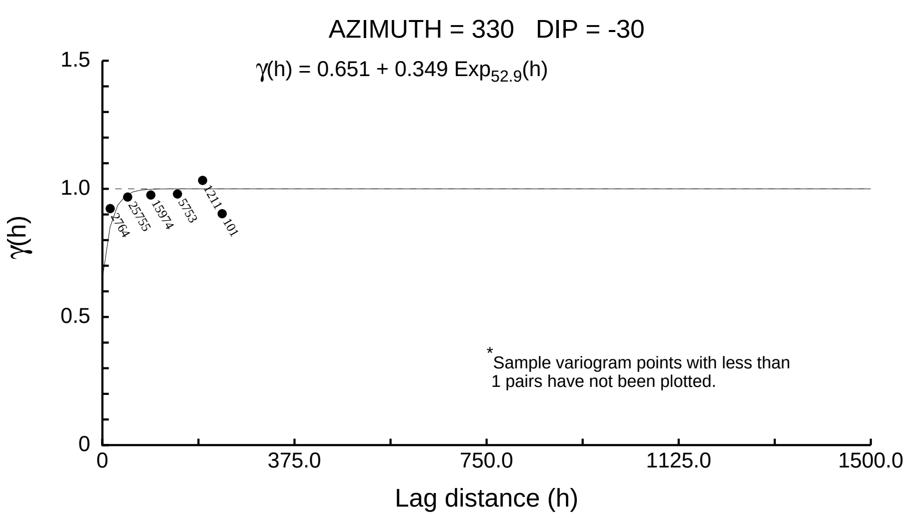
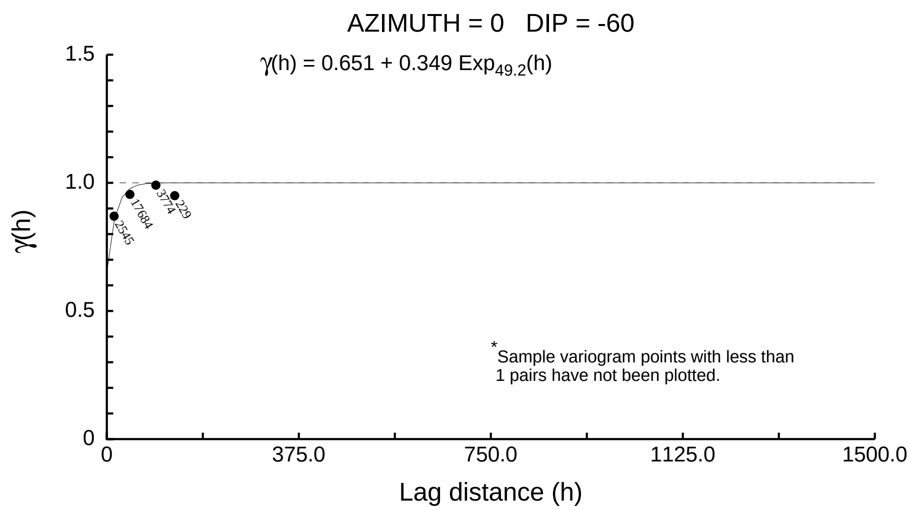
Zones 1+2 Directional Correlograms - 5m Comps

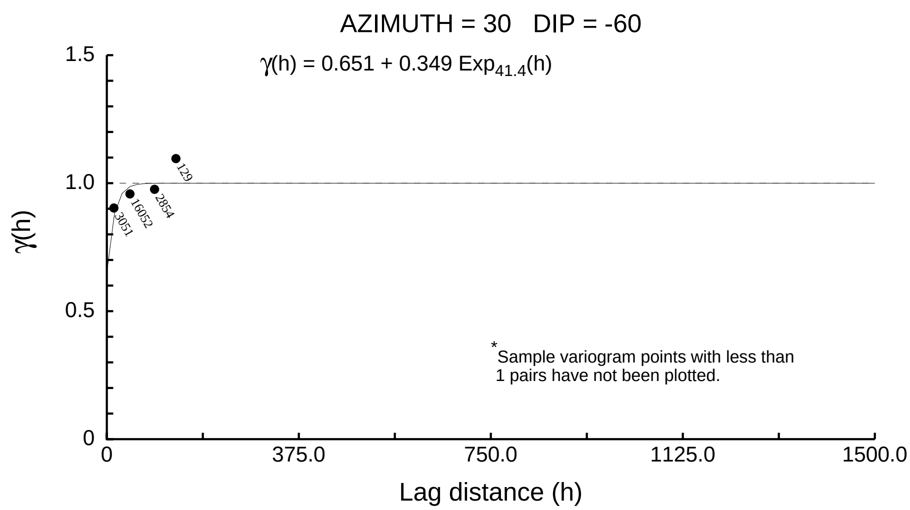


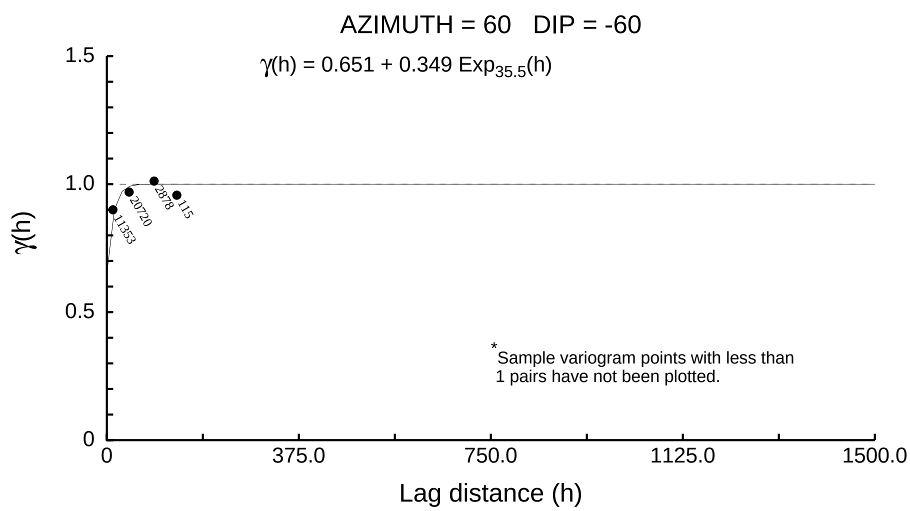




Zones 1+2 Directional Correlograms - 5m Comps







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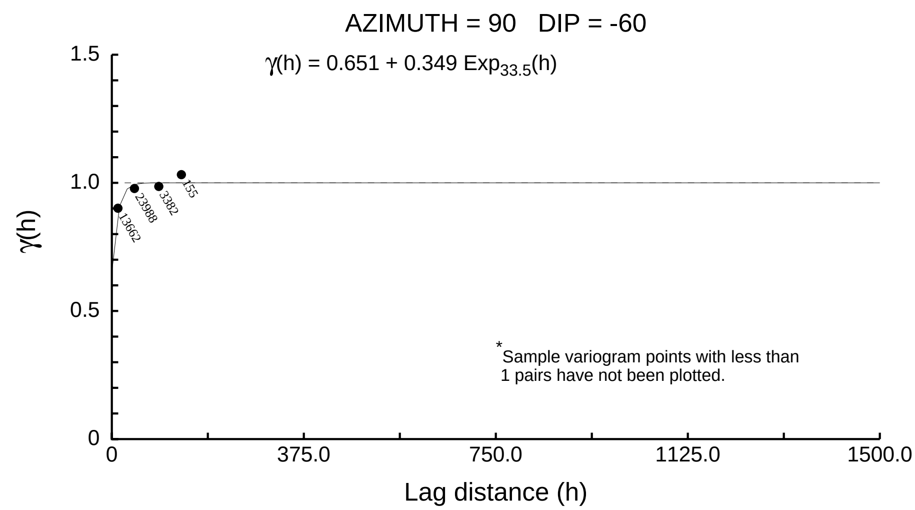
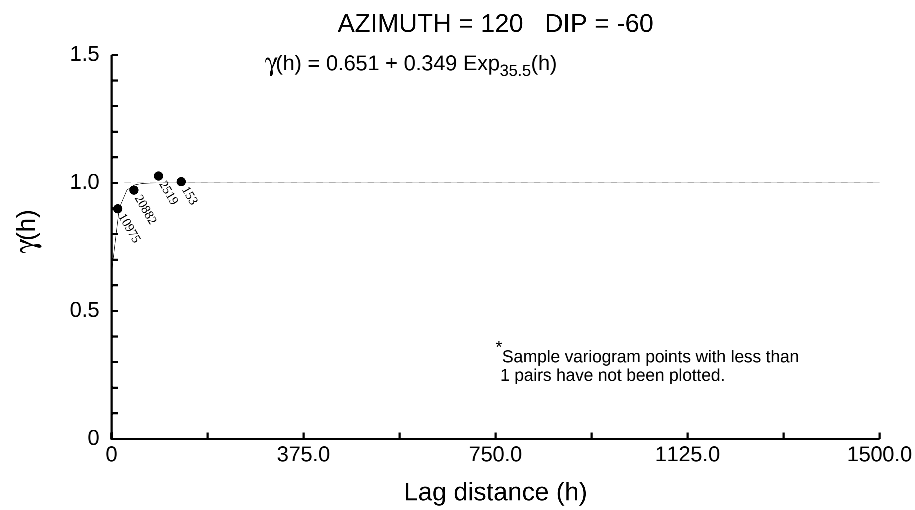
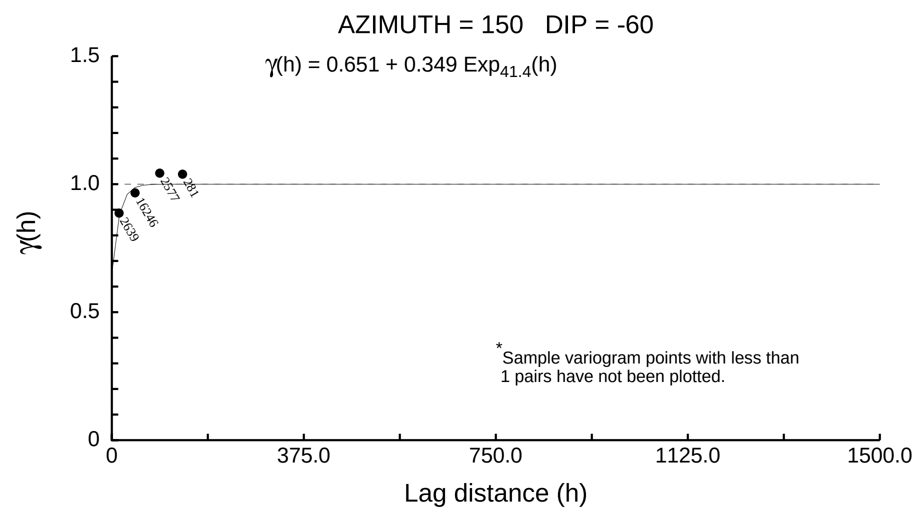
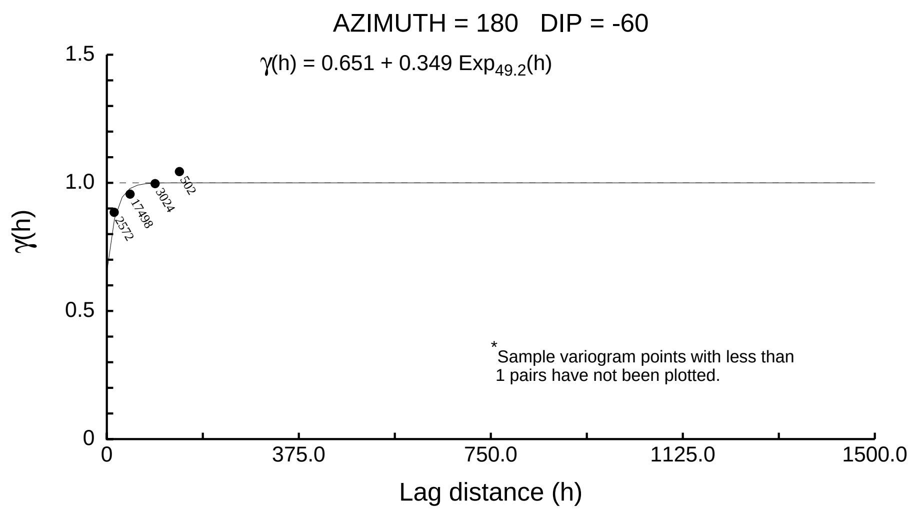
Zones 1+2 Directional Correlograms - 5m Comps

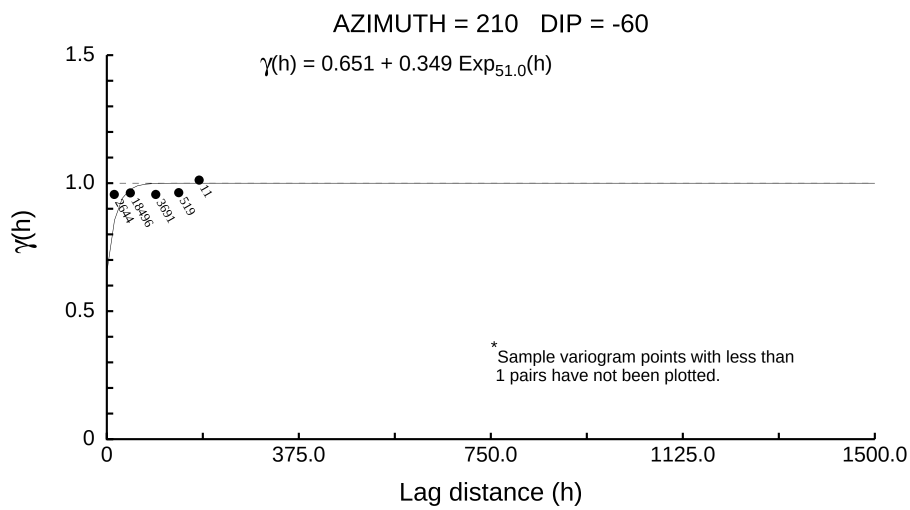


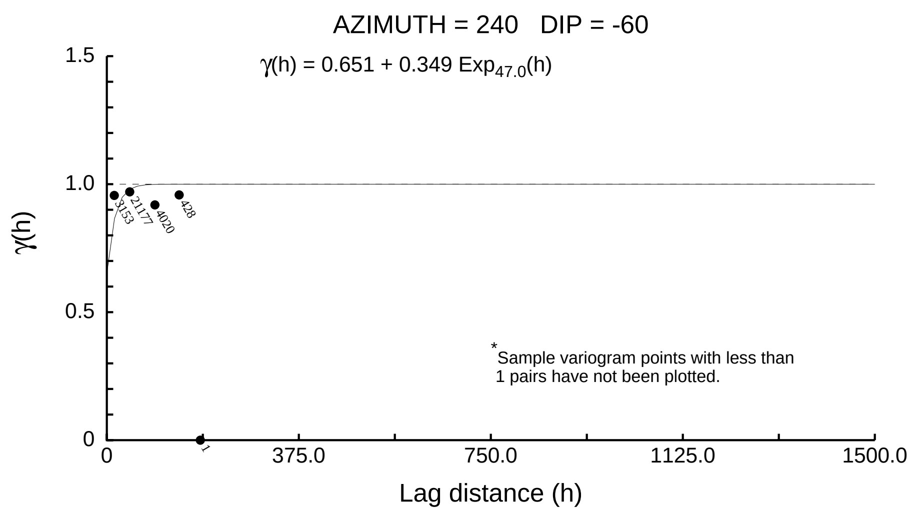




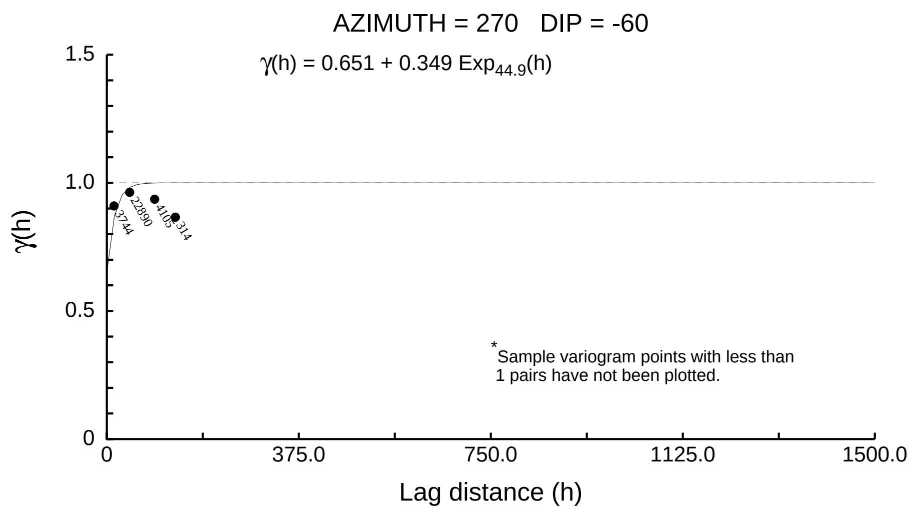
Zones 1+2 Directional Correlograms - 5m Comps

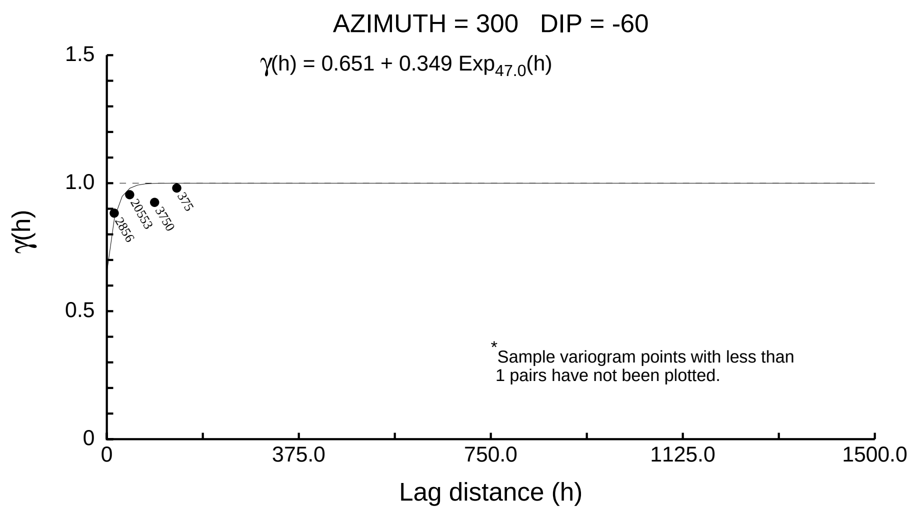


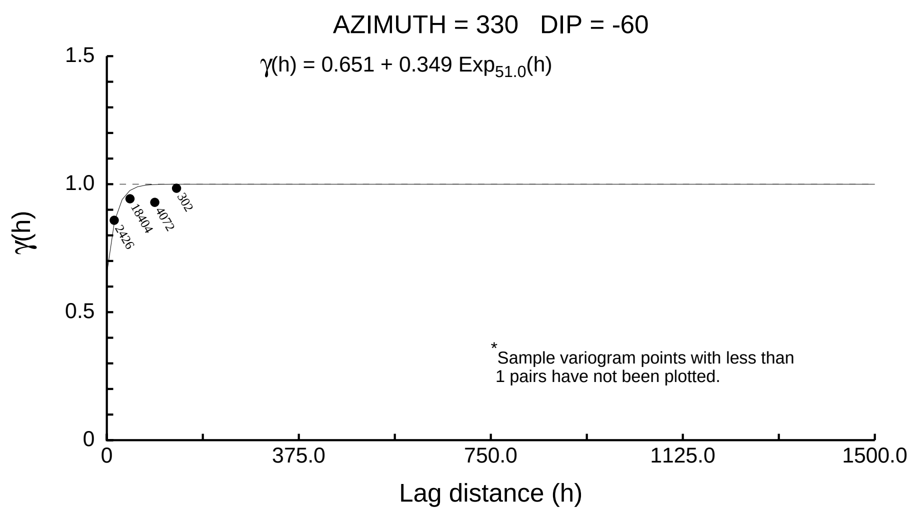




Zones 1+2 Directional Correlograms - 5m Comps







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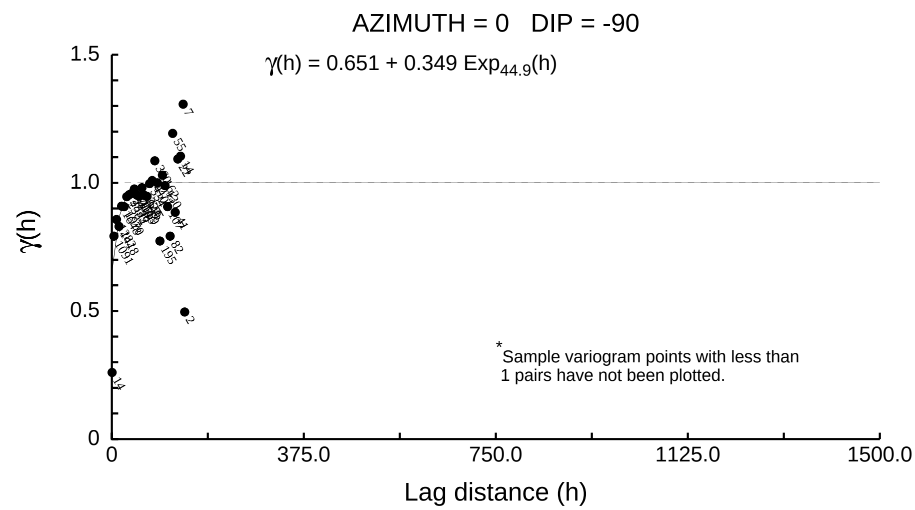
Zones 1+2 Directional Correlograms - 5m Comps



Zone 2 Directional Correlograms - 5m Comps

Medsystem and Vulcan Rotation Conventions

Nugget ==> 0.631
C1 ==> 0.369

First Structure -- Exponential with Practical Range

LH Rotation about the Z axis ==> 0
RH Rotation about the X' axis ==> 0
LH Rotation about the Y' axis ==> 75

Range along the Z' axis ==> 26.5	Azimuth ==> 270	Dip ==> 15
Range along the Y' axis ==> 66.7	Azimuth ==> 360	Dip ==> 0
Range along the X' axis ==> 54.4	Azimuth ==> 90	Dip ==> 75

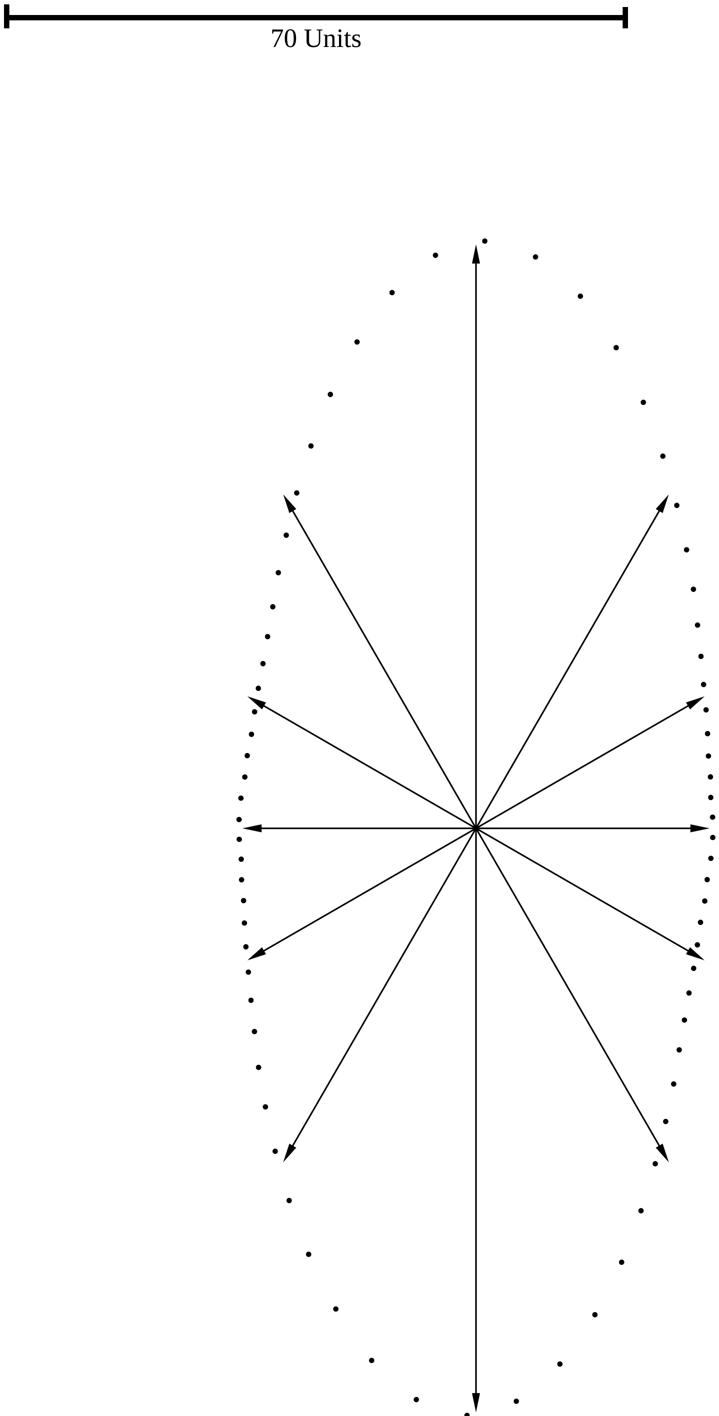
Modeling Criteria

Minimum number pairs req'd ==> 1
Sample variogram points weighted by # pairs

Zone 2 Directional Correlograms - 5m Comps

Structure Number 1

Rose Diagram of Ranges Dipping 0 Degrees
Scale:



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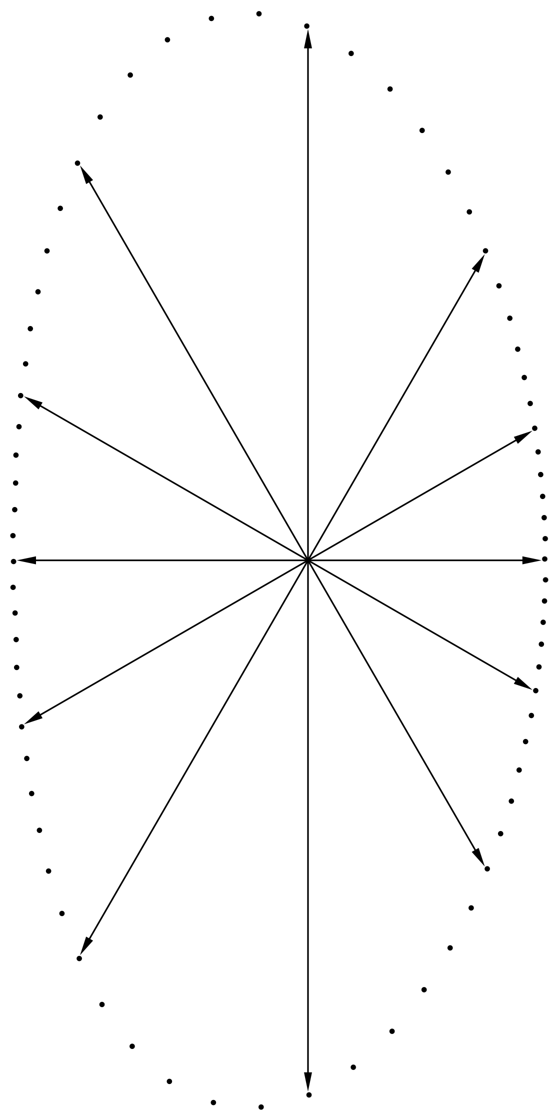
Zone 2 Directional Correlograms - 5m Comps

Structure Number 1

Rose Diagram of Ranges Dipping 30 Degrees
Scale:

70 Units



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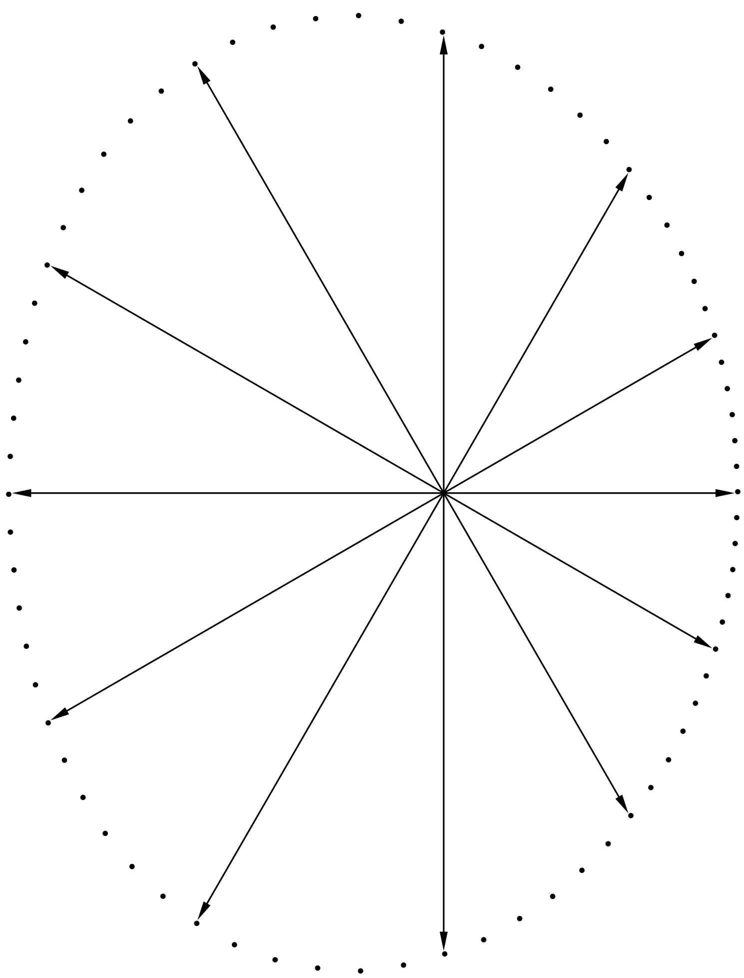
Zone 2 Directional Correlograms - 5m Comps

Structure Number 1

Rose Diagram of Ranges Dipping 60 Degrees
Scale:



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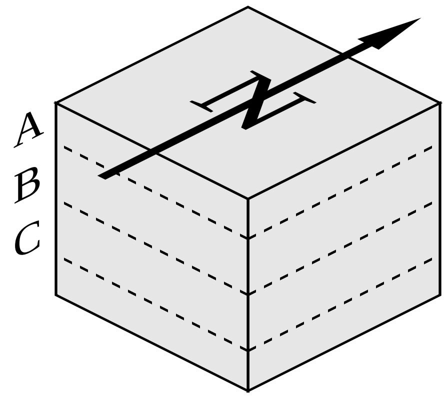
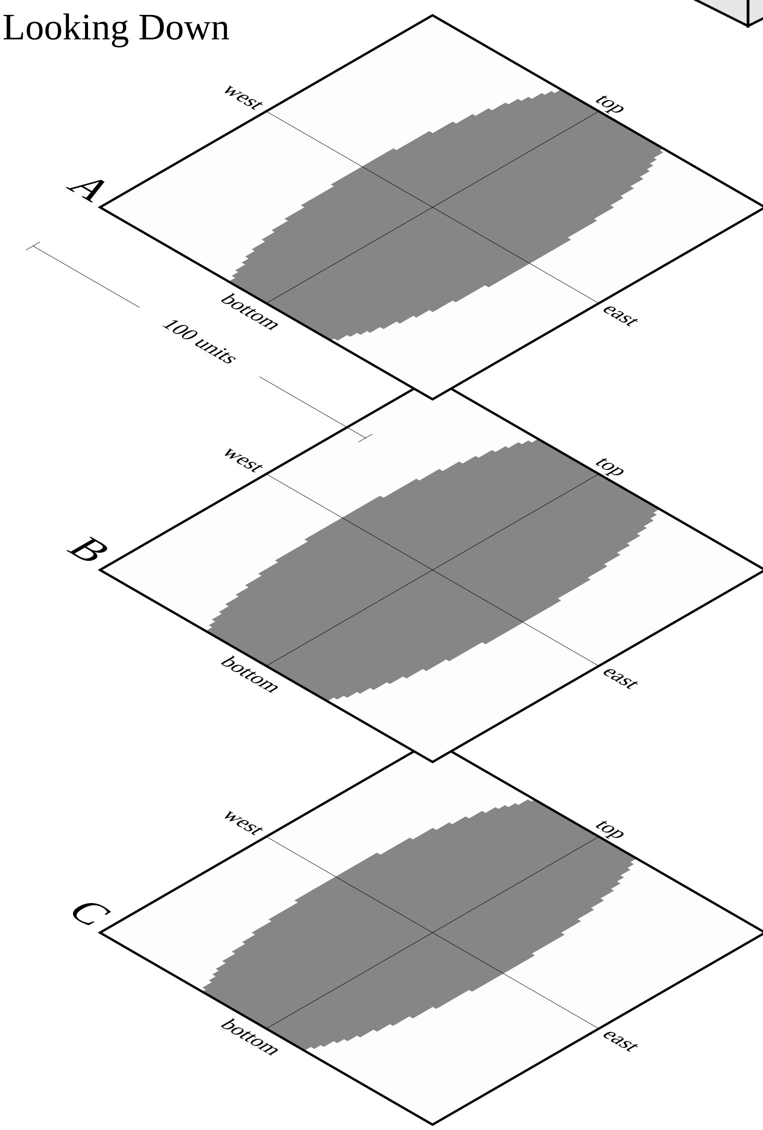
Horizontal Slices Through the Ellipsoids

Reference Cube



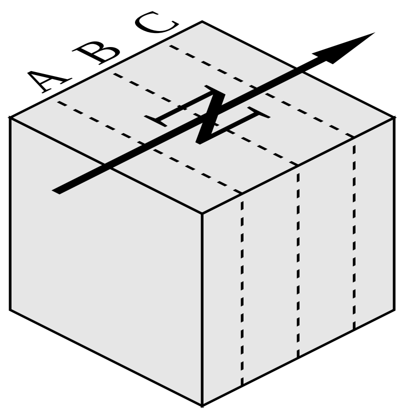
X-Y Planes Looking Down



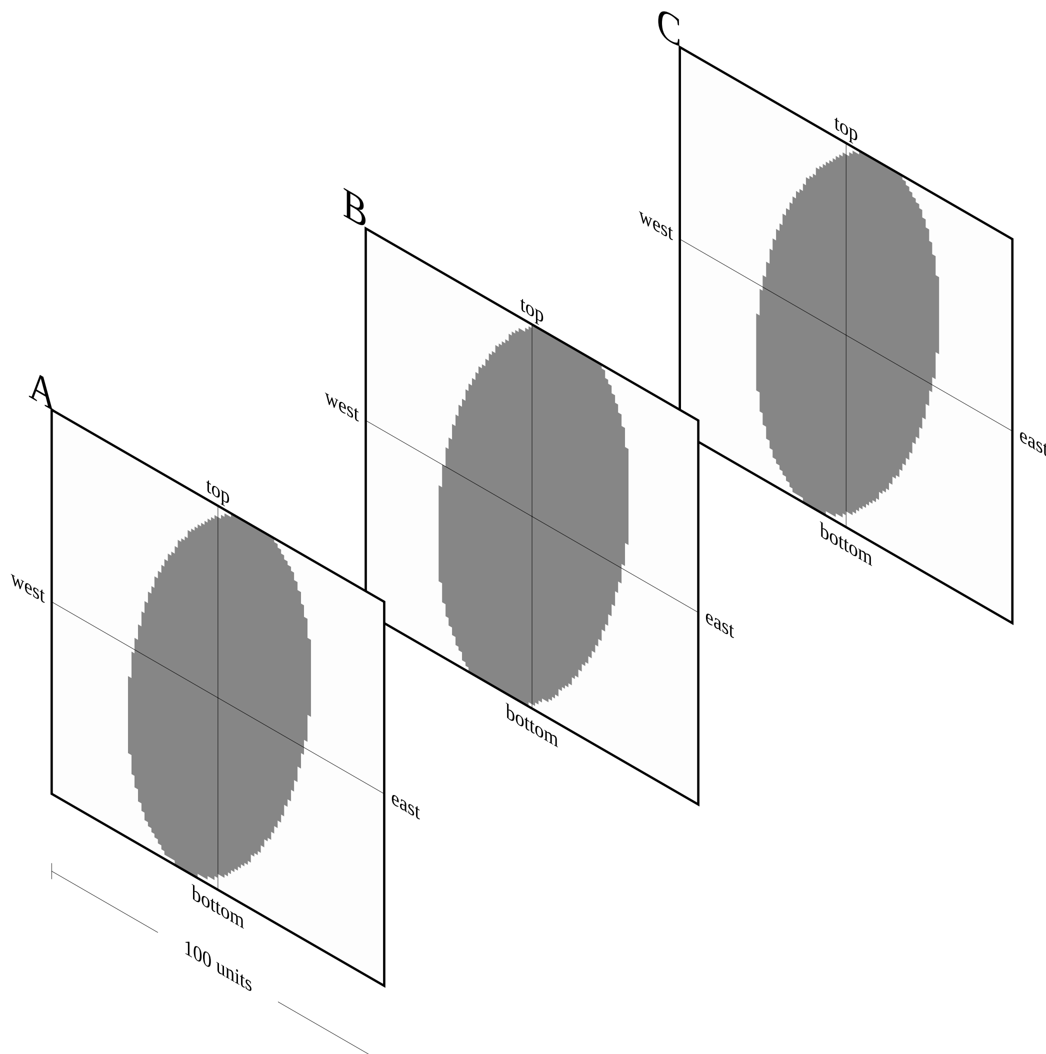
Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Cross Section Views Through the Ellipsoids

Reference Cube



X-Z Planes Looking North

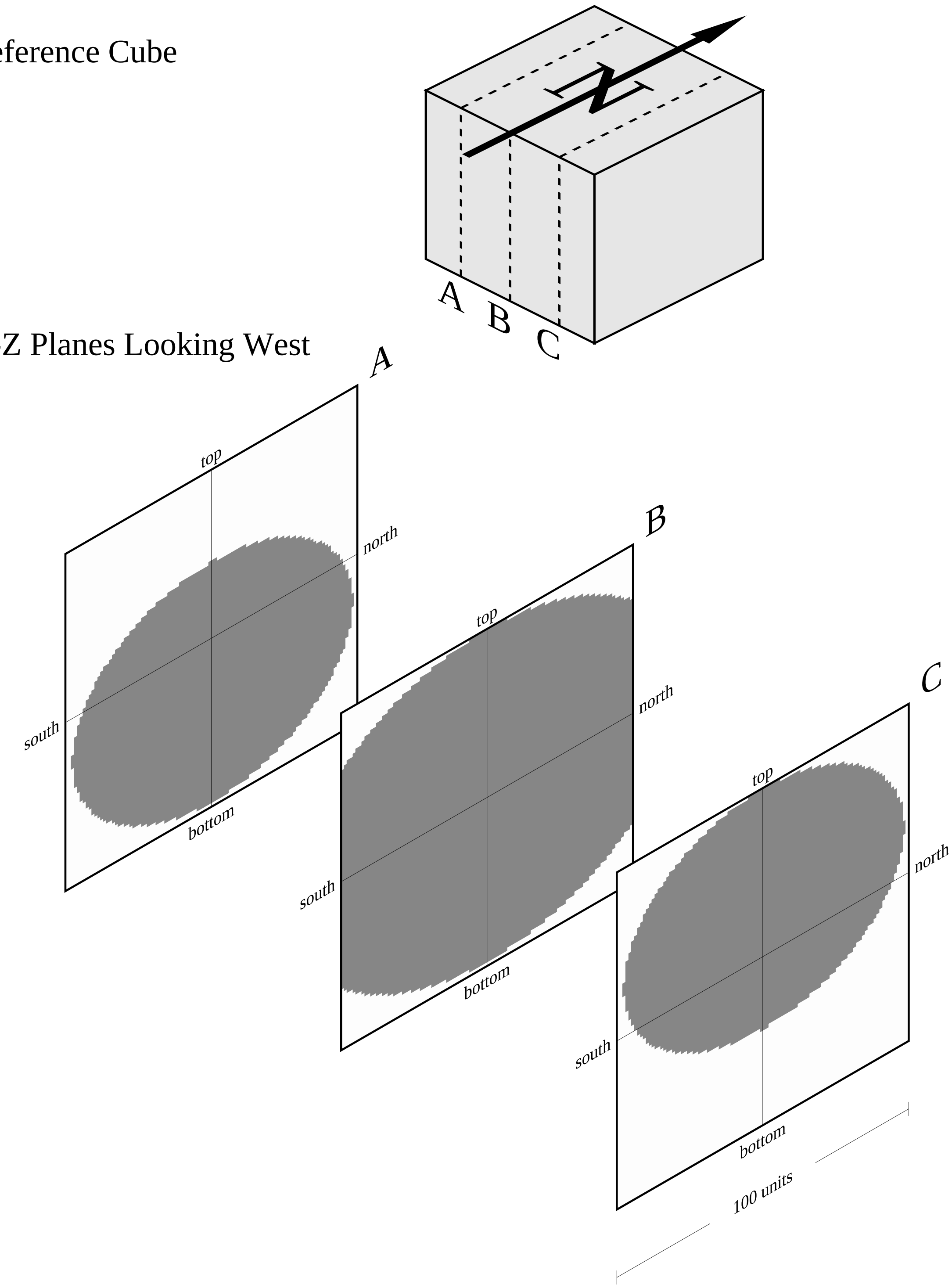


Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Long Section Views Through the Ellipsoids

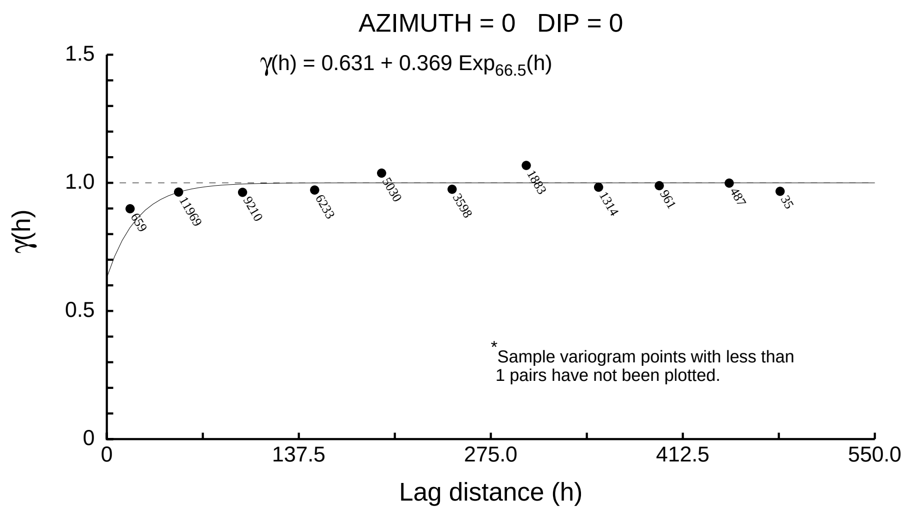
Reference Cube

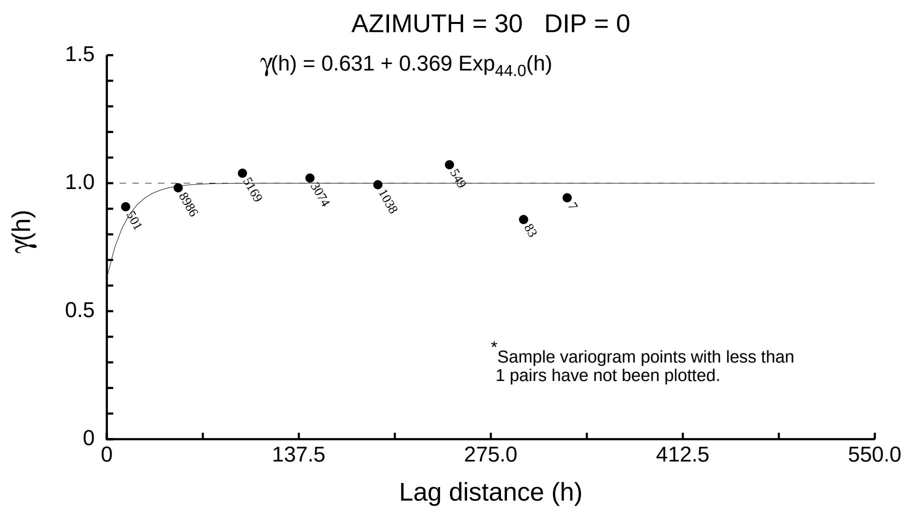
Y-Z Planes Looking West

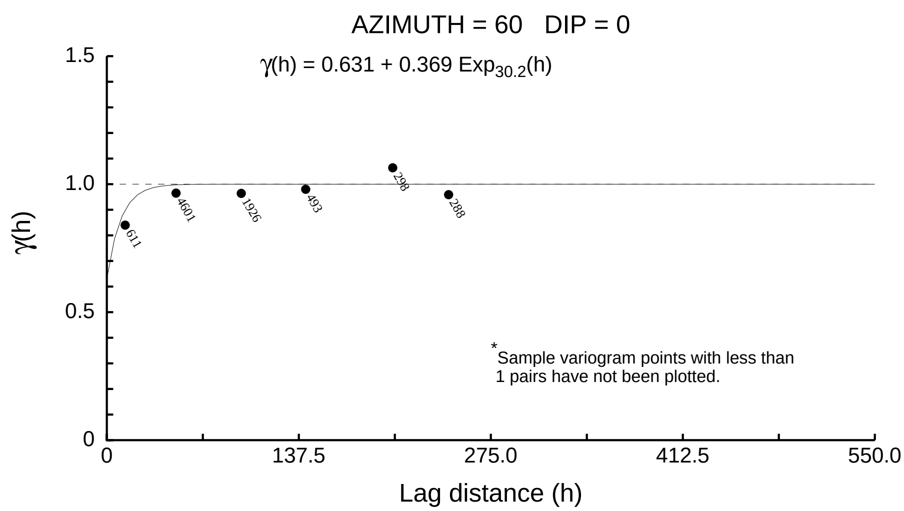


Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

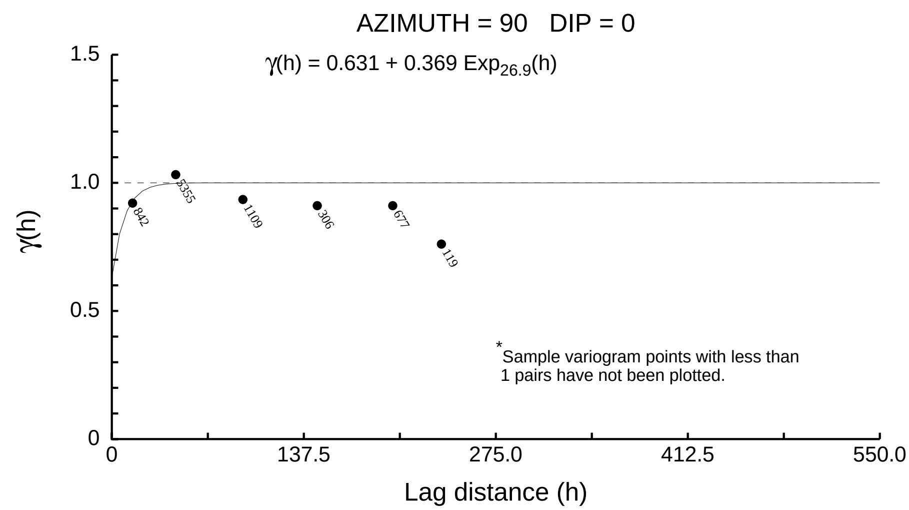
Zone 2 Directional Correlograms - 5m Comps

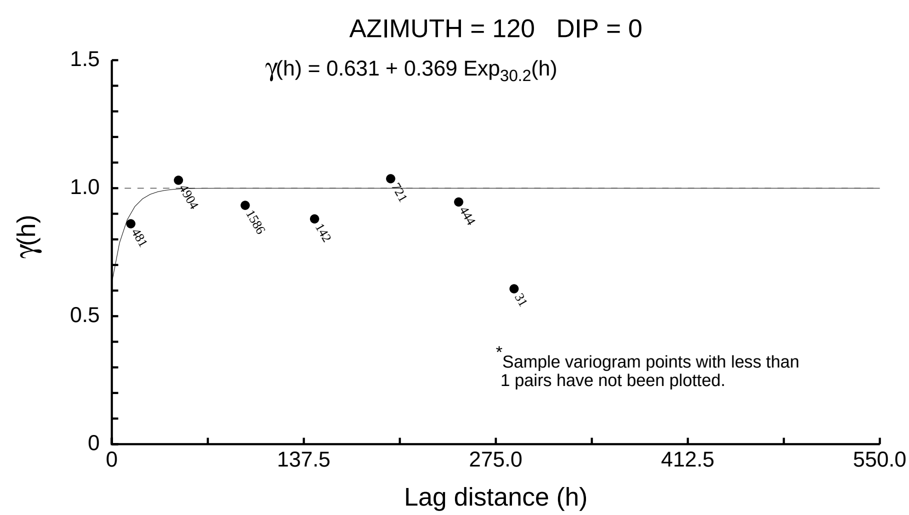


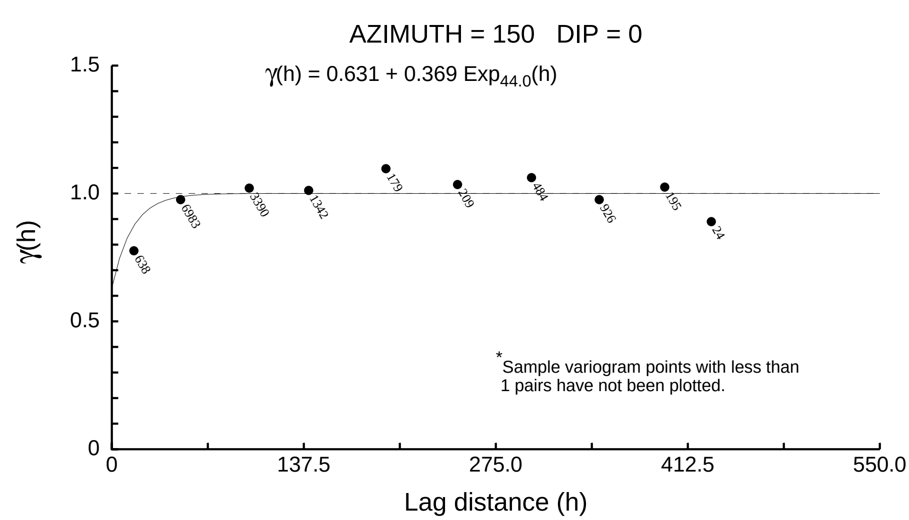




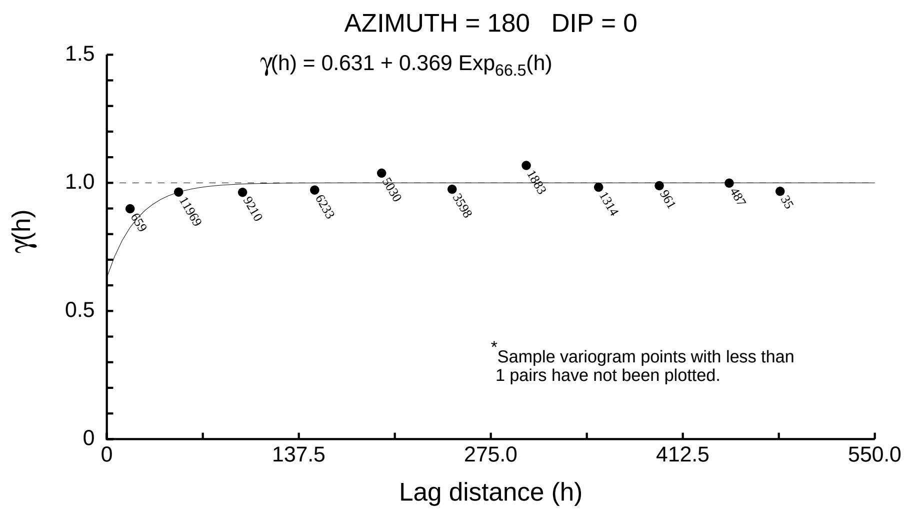
Zone 2 Directional Correlograms - 5m Comps

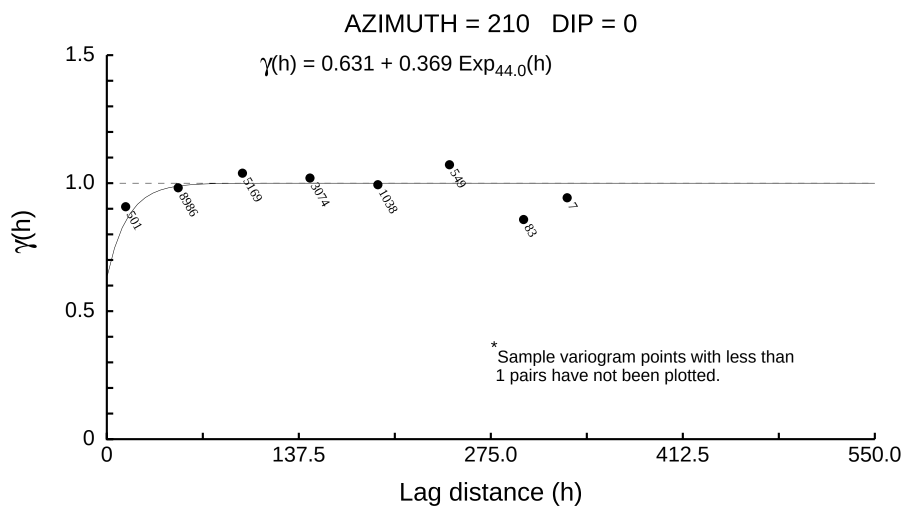


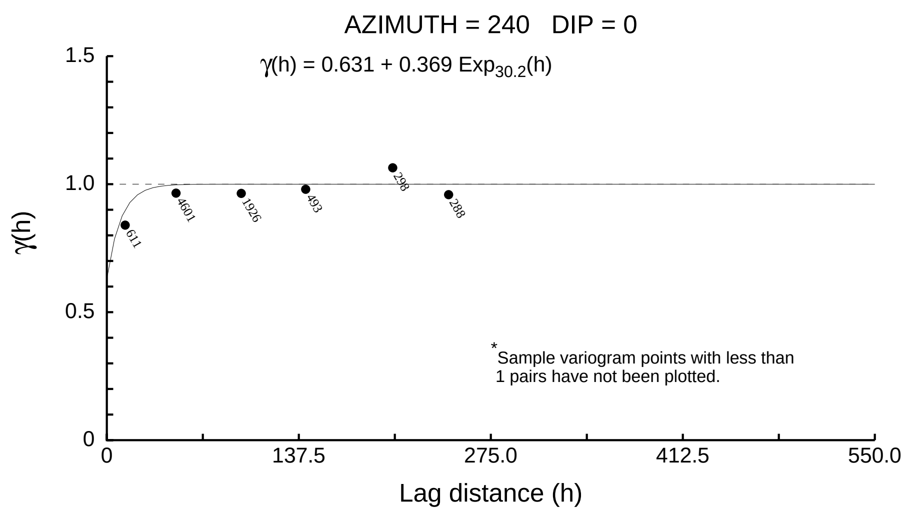




Zone 2 Directional Correlograms - 5m Comps







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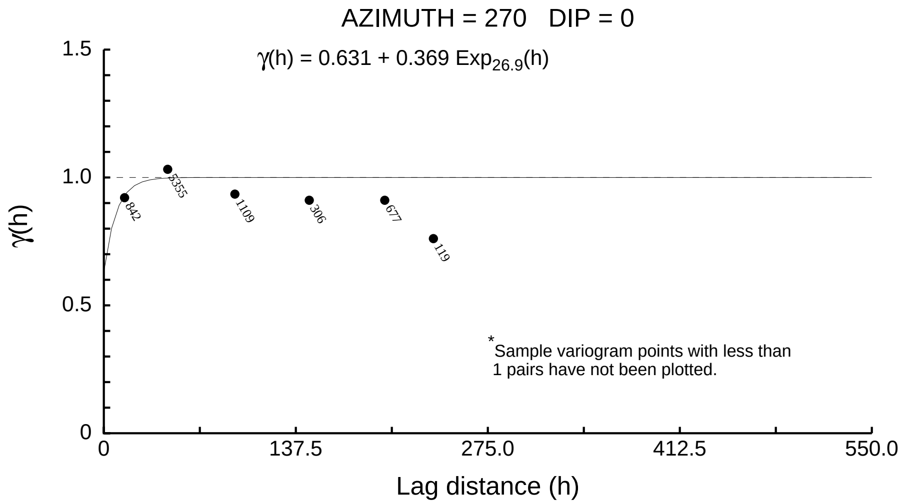
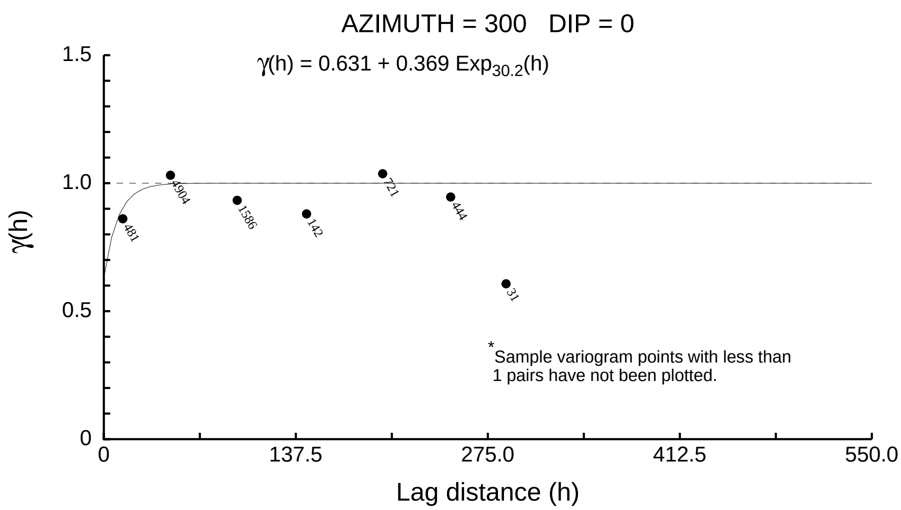
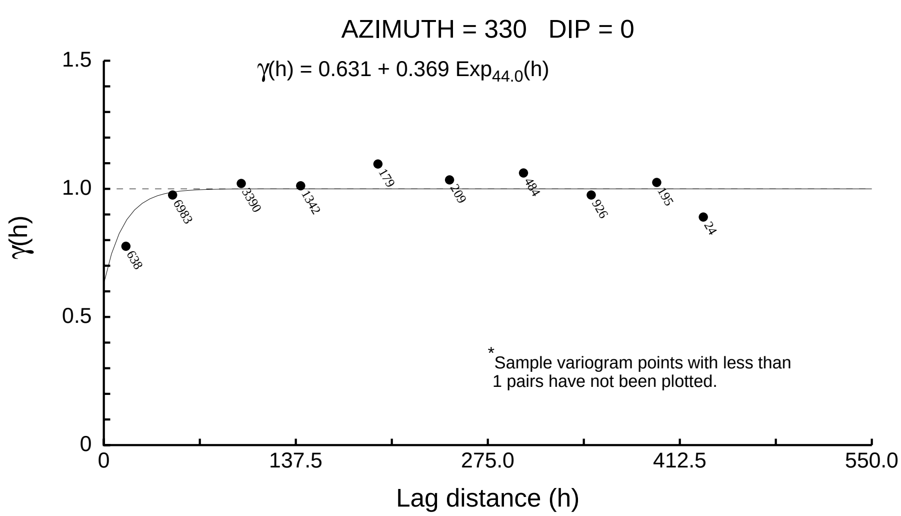
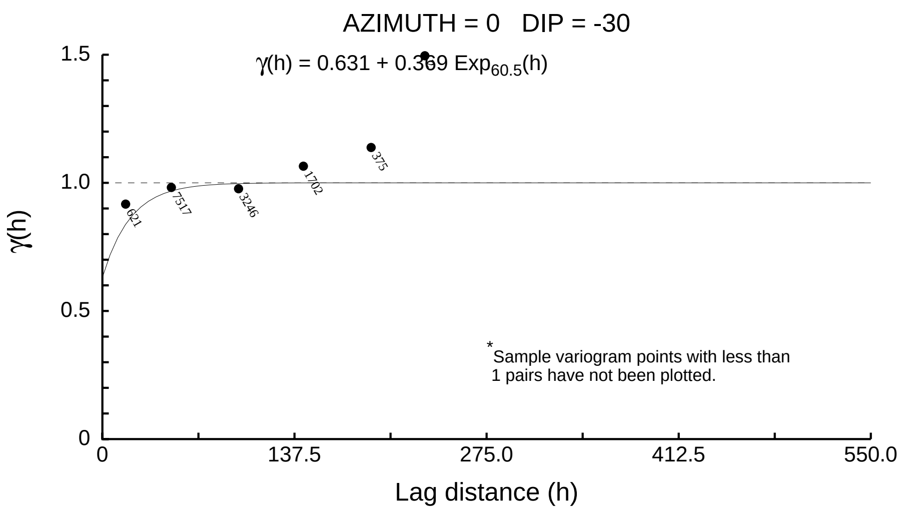
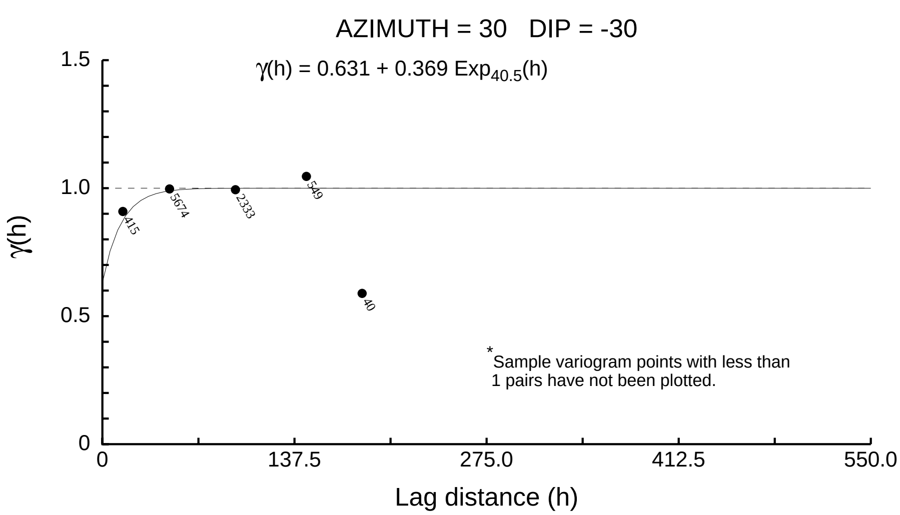


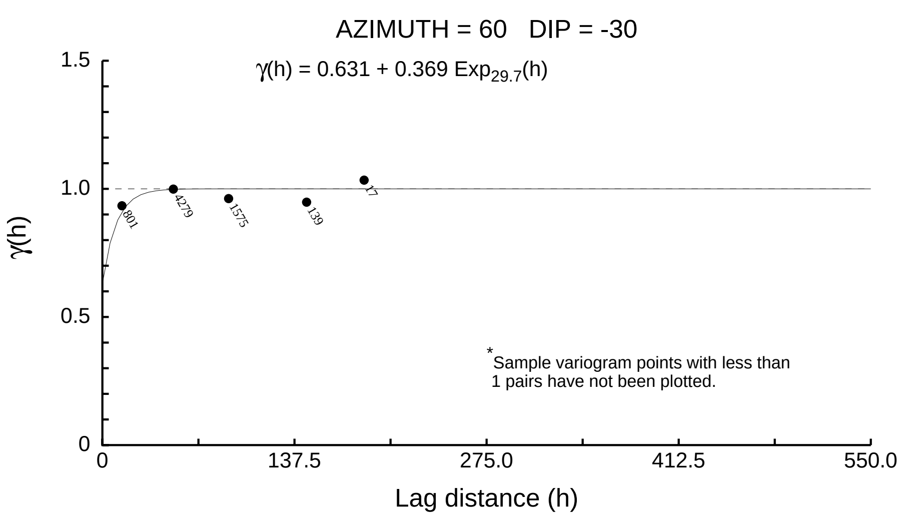




Zone 2 Directional Correlograms - 5m Comps







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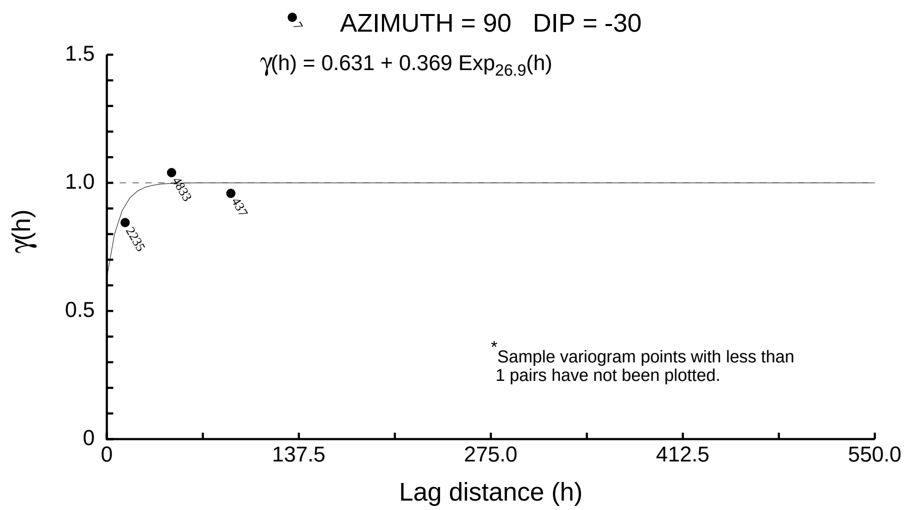

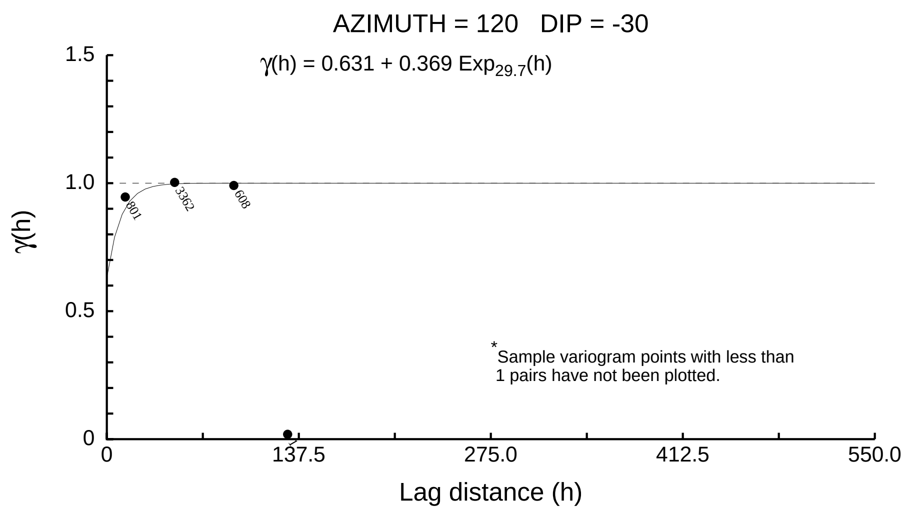

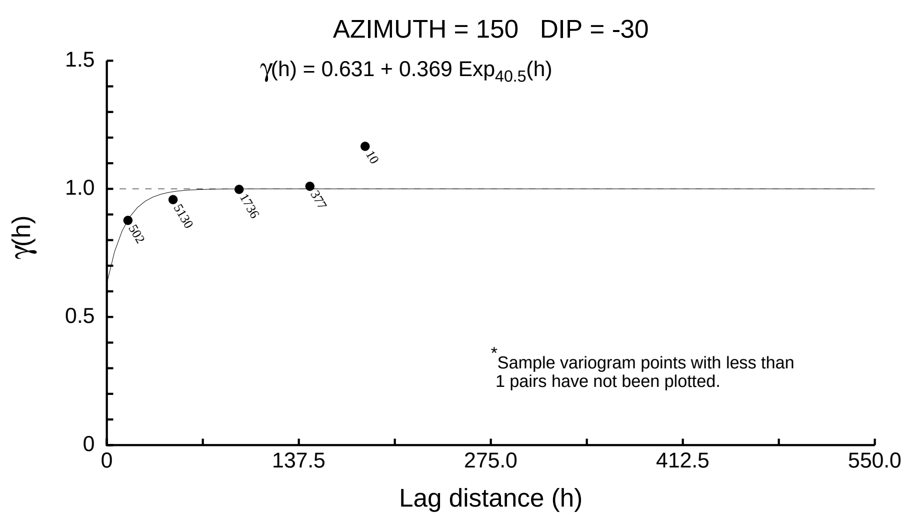

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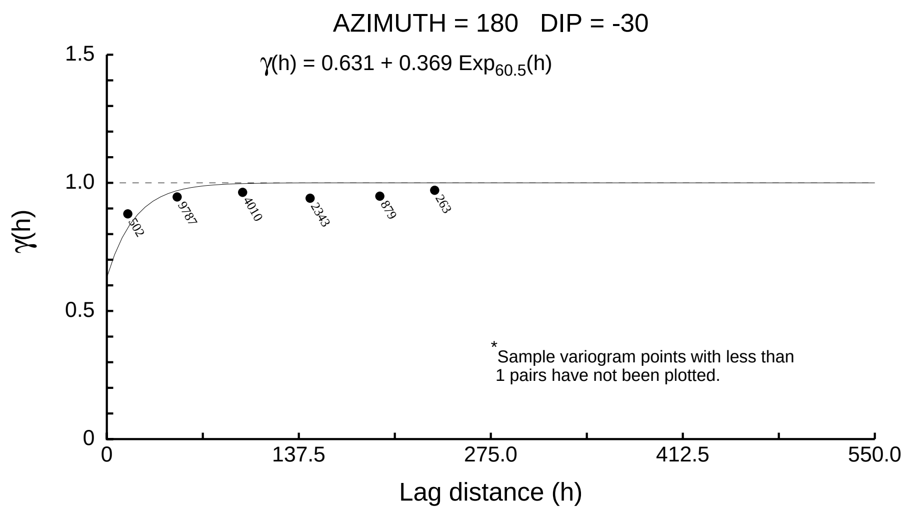
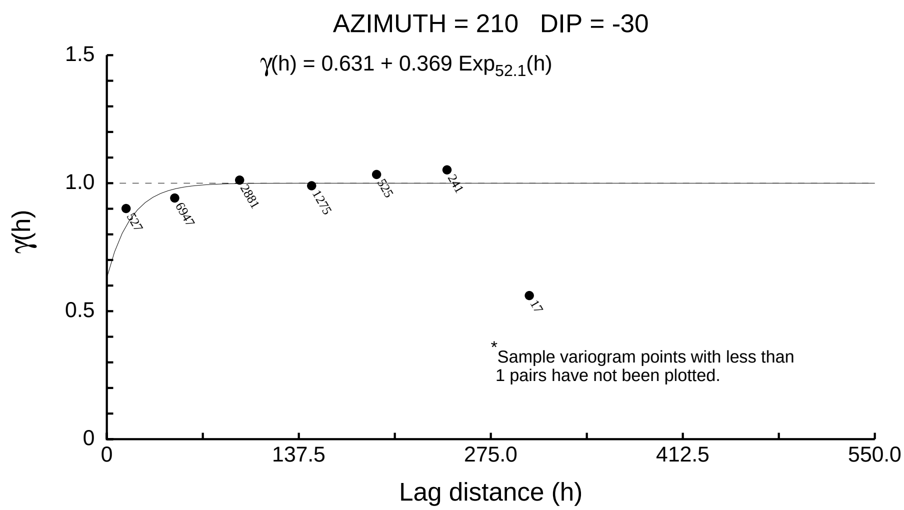
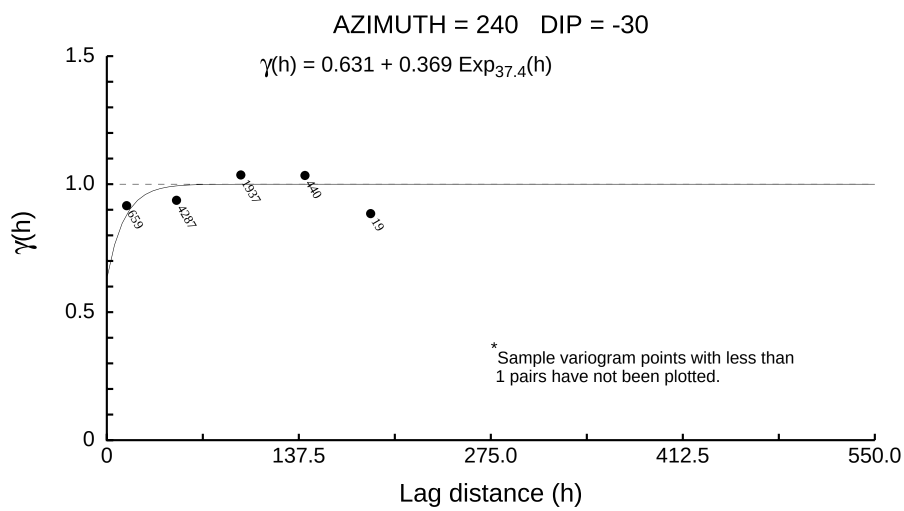
Zone 2 Directional Correlograms - 5m Comps







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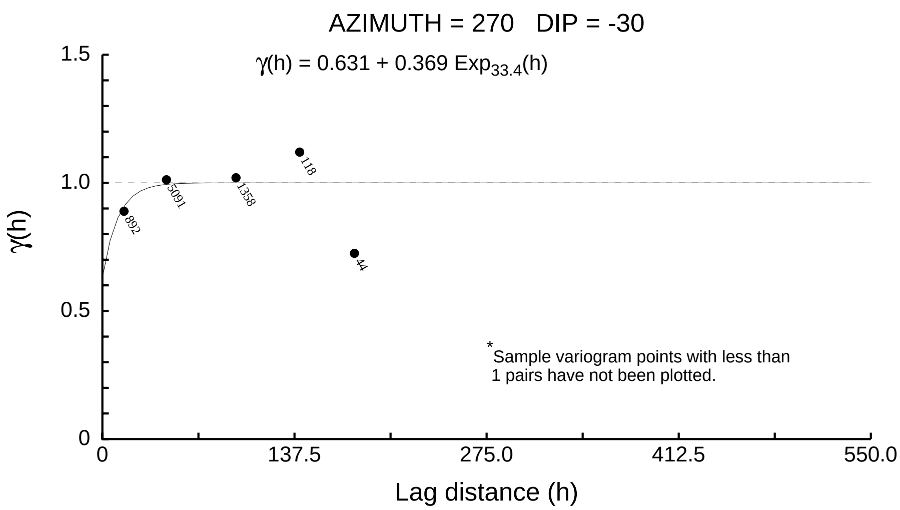
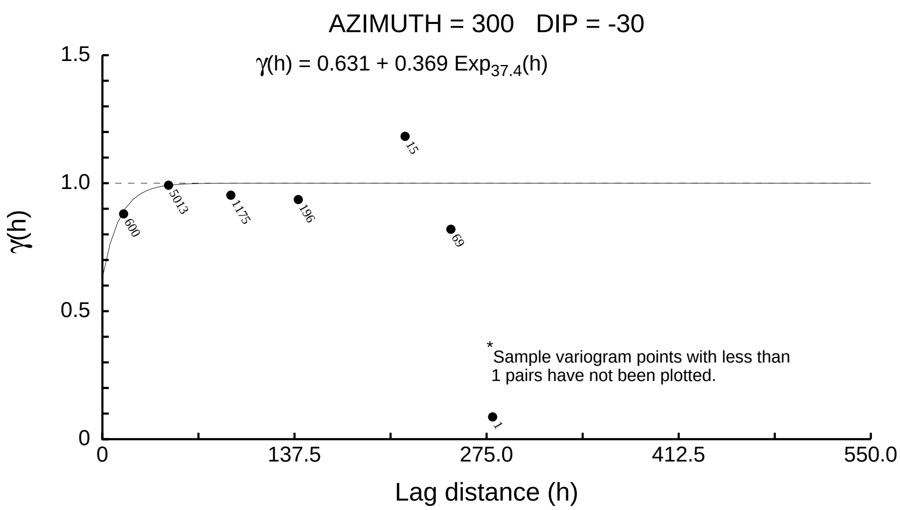
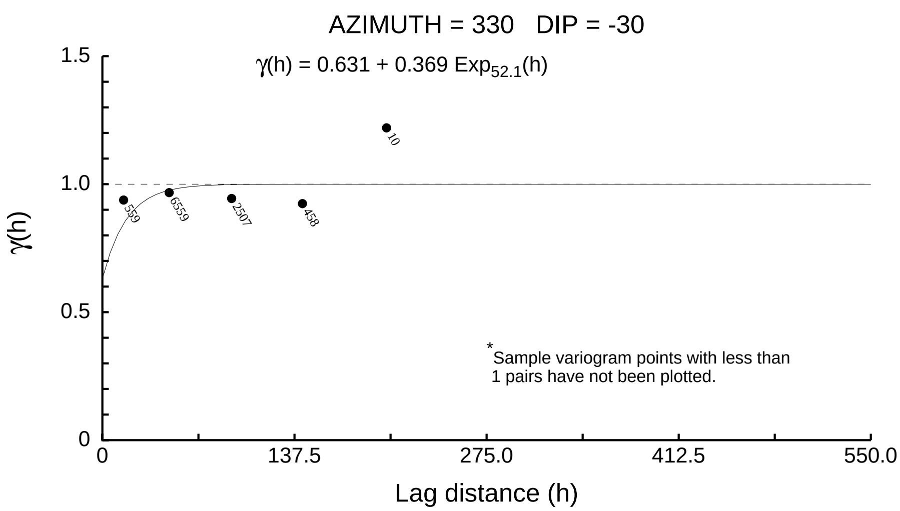
Zone 2 Directional Correlograms - 5m Comps







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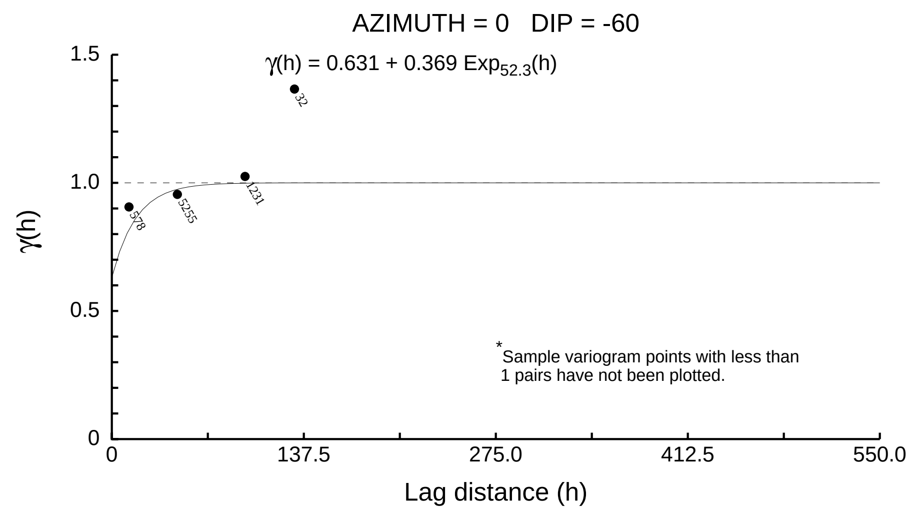
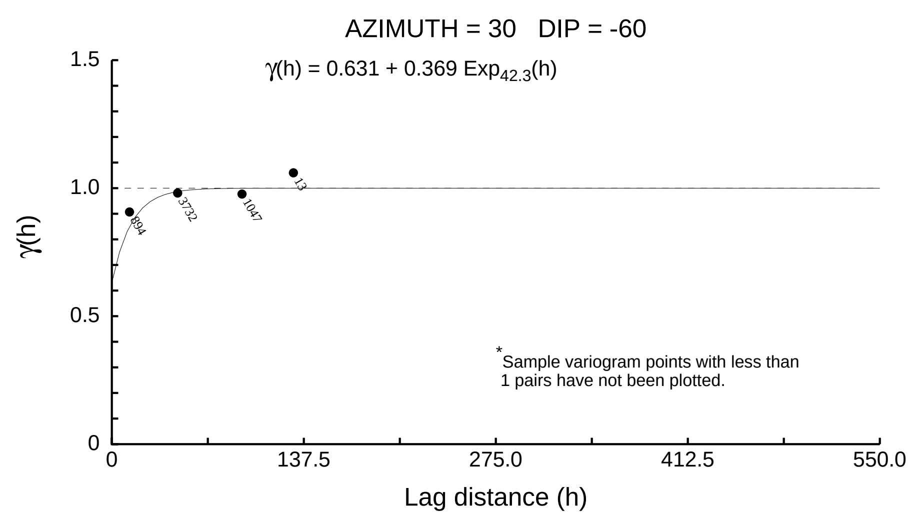
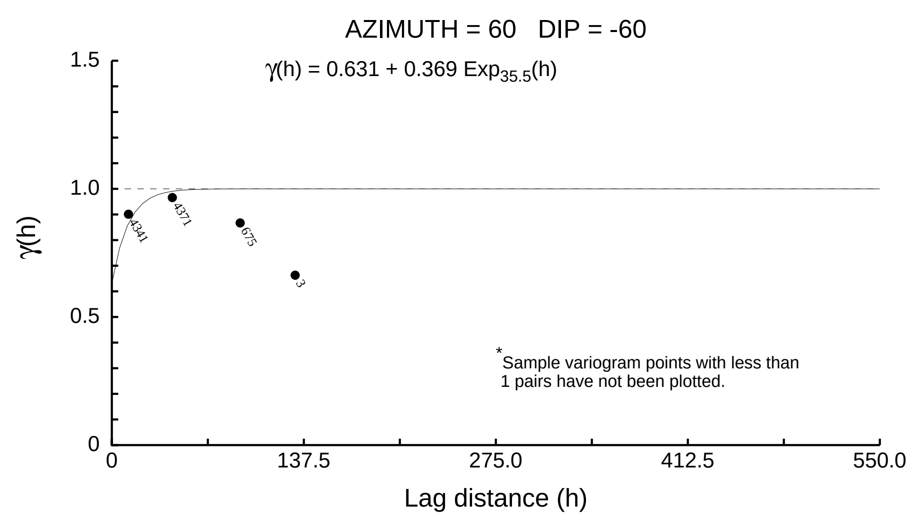
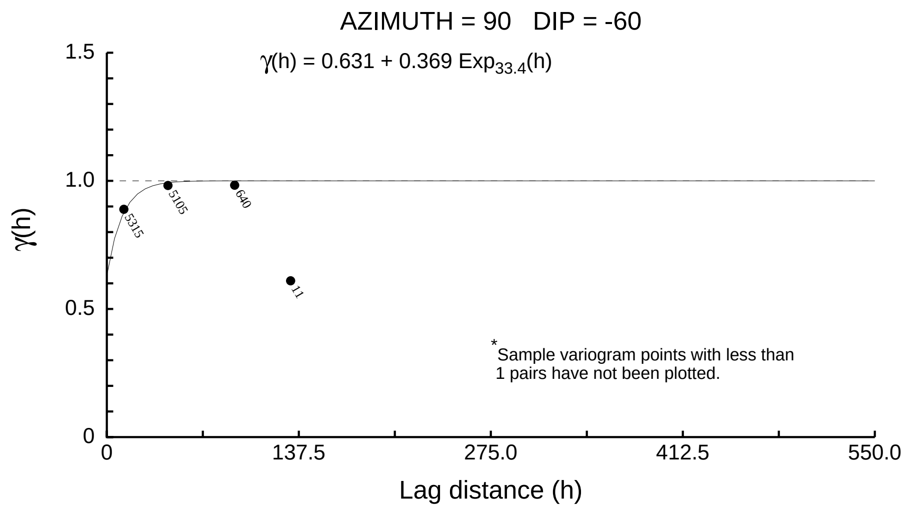
Zone 2 Directional Correlograms - 5m Comps

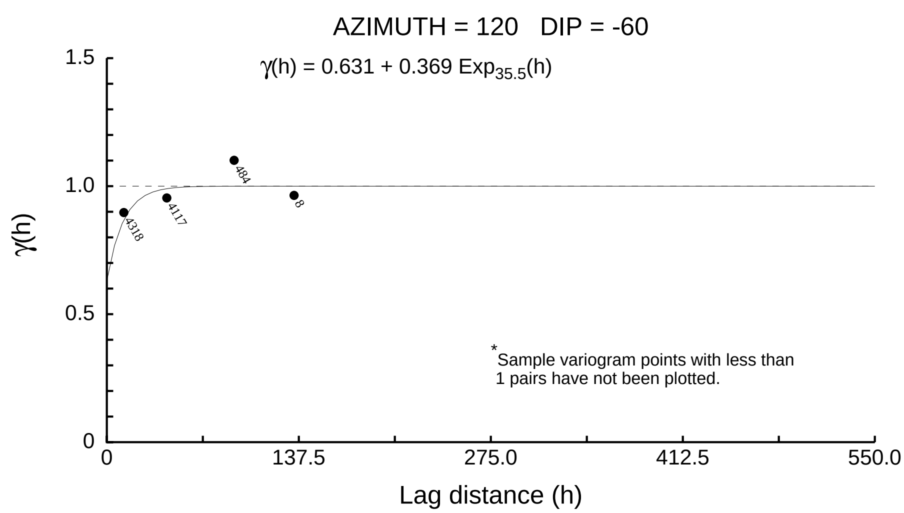


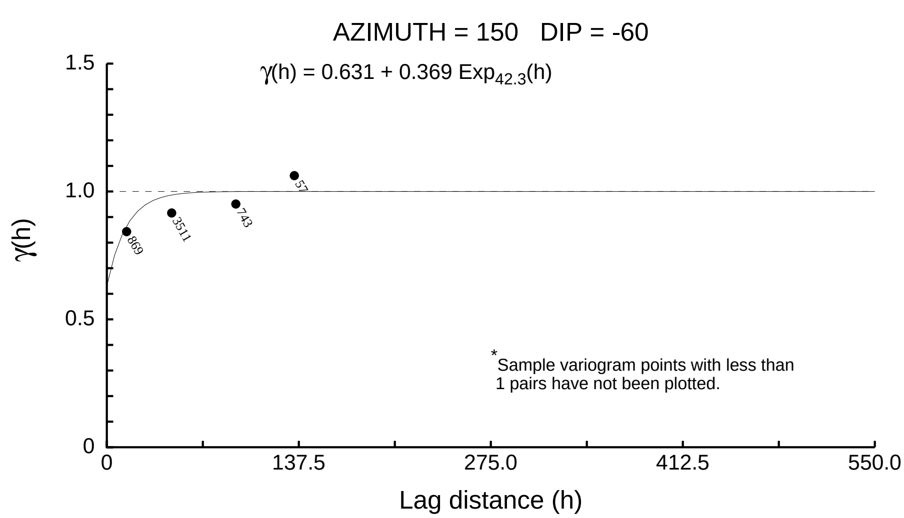




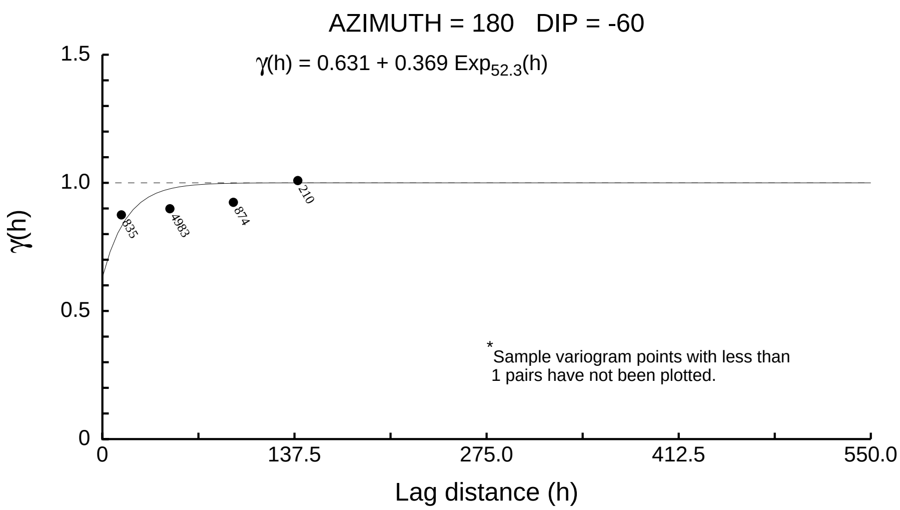
Zone 2 Directional Correlograms - 5m Comps

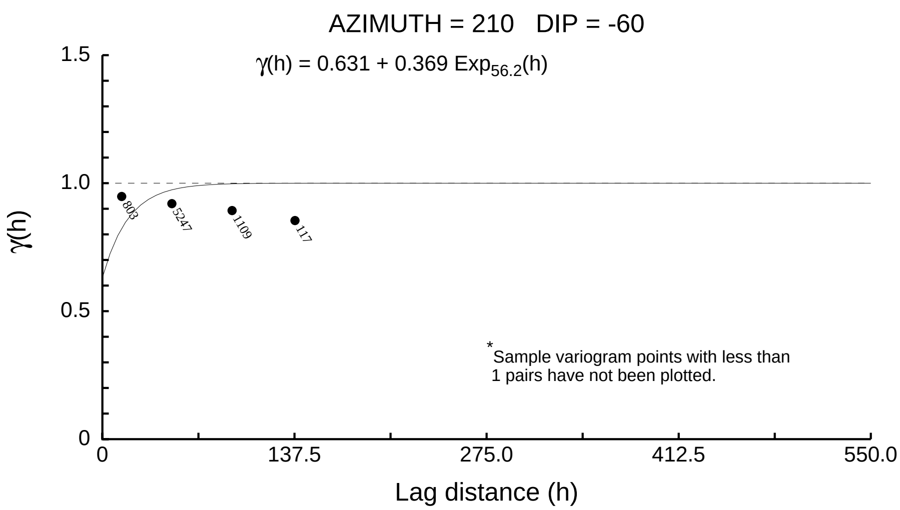


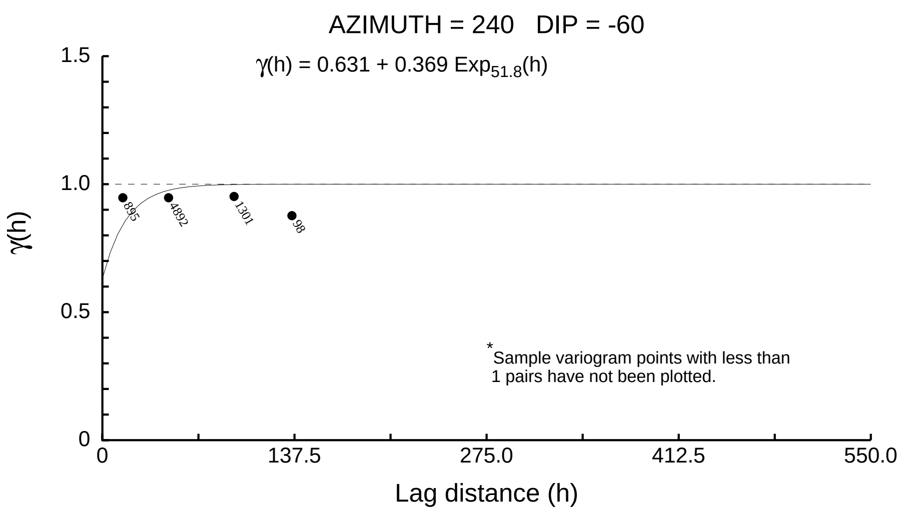




Zone 2 Directional Correlograms - 5m Comps







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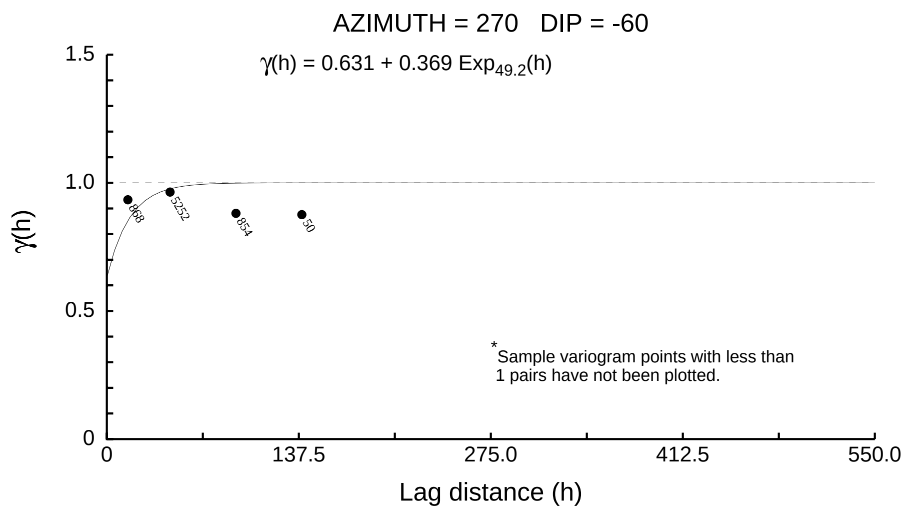
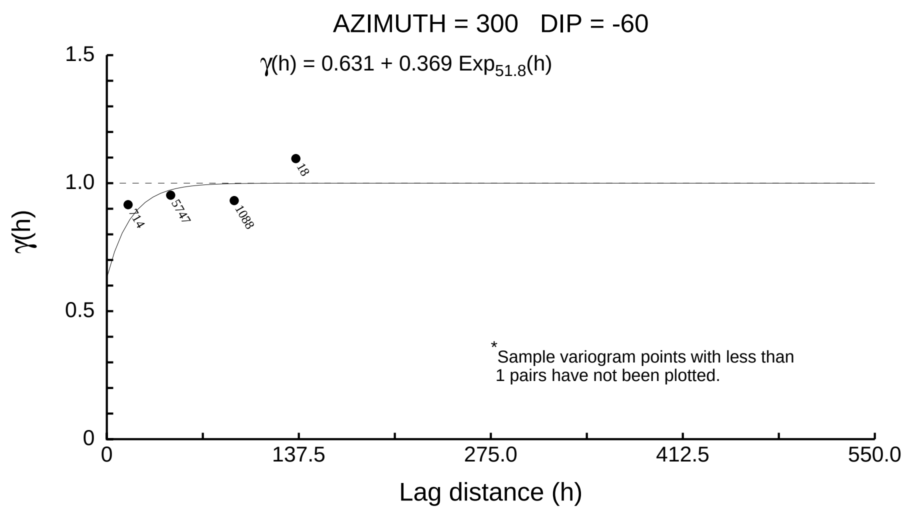
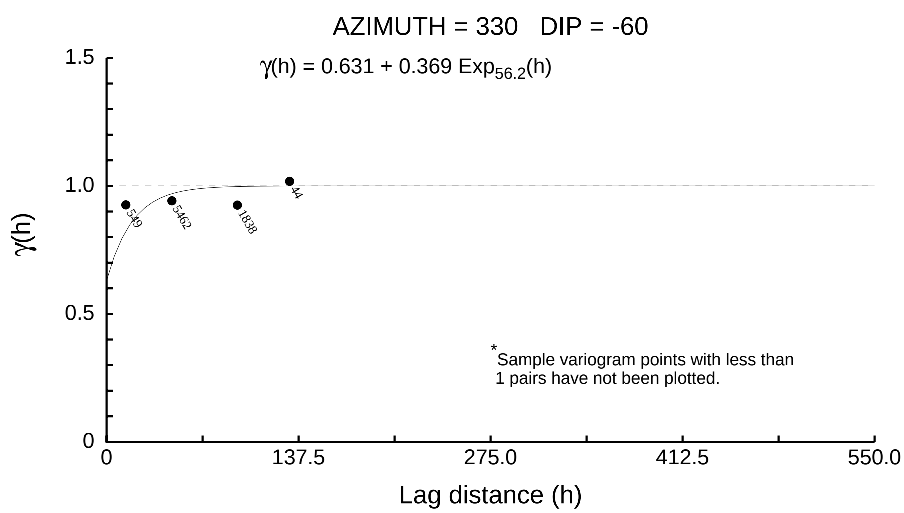
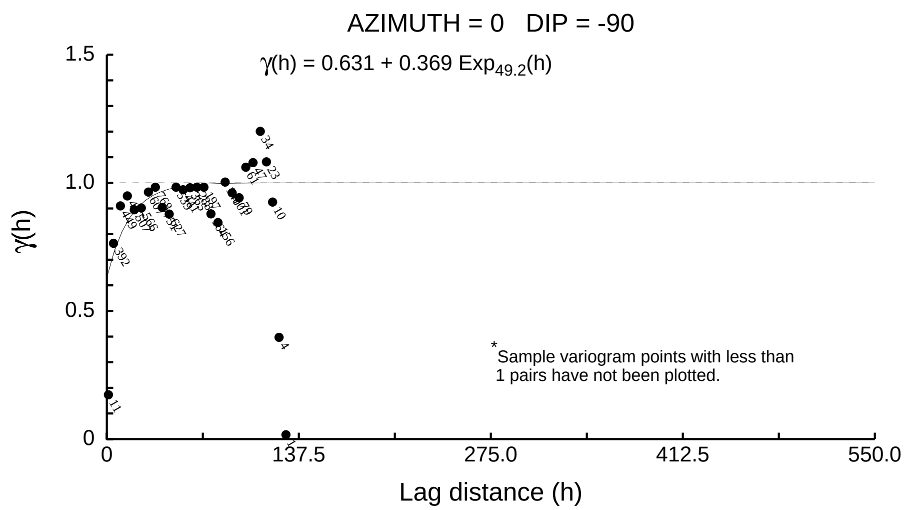
Zone 2 Directional Correlograms - 5m Comps







Zone 2 Directional Correlograms - 5m Comps



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Zone 3 Directional Correlograms - 5m Comps

Medsystem and Vulcan Rotation Conventions

Nugget ==> 0.478
C1 ==> 0.522

First Structure -- Exponential with Practical Range

LH Rotation about the Z axis ==> 0
RH Rotation about the X’ axis ==> 0
LH Rotation about the Y’ axis ==> 75
Range along the Z’ axis ==> 77.7 Azimuth ==> 270 Dip ==> 15
Range along the Y’ axis ==> 124.6 Azimuth ==> 360 Dip ==> 0
Range along the X’ axis ==> 41.6 Azimuth ==> 90 Dip ==> 75

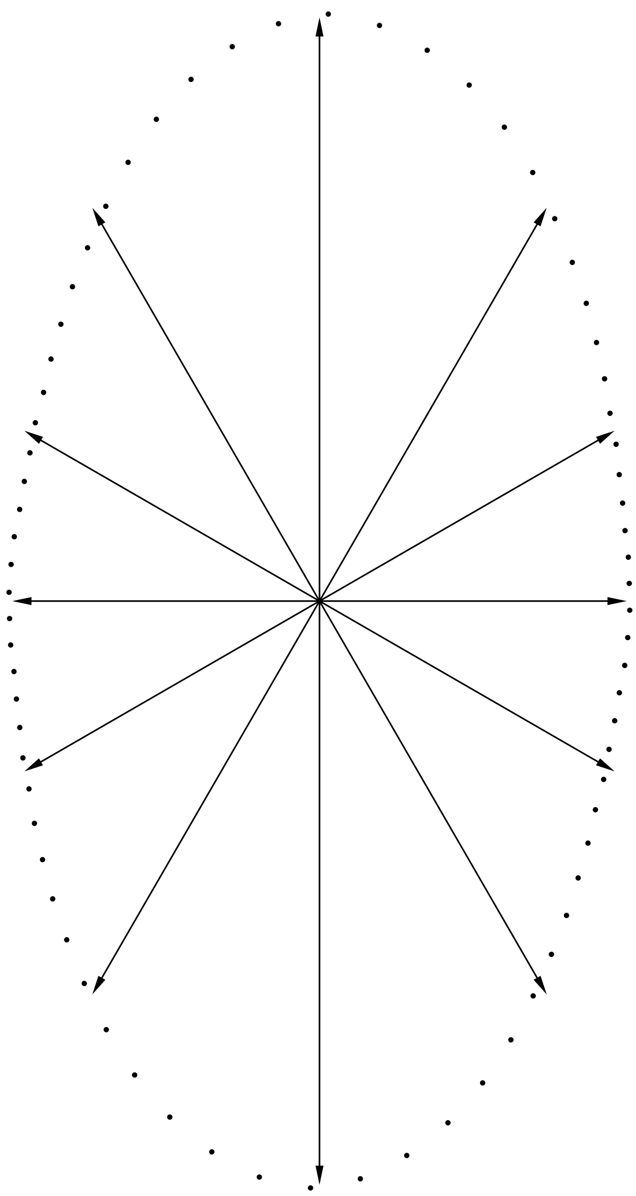
Modeling Criteria

Minimum number pairs req’d ==> 1
Sample variogram points weighted by # pairs

Zone 3 Directional Correlograms - 5m Comps

Structure Number 1

Rose Diagram of Ranges Dipping 0 Degrees
Scale:



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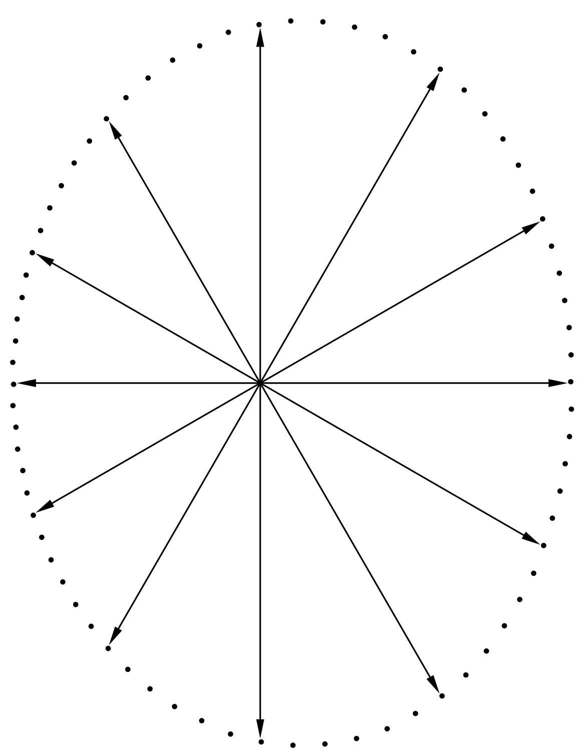
Zone 3 Directional Correlograms - 5m Comps

Structure Number 1

Rose Diagram of Ranges Dipping 30 Degrees
Scale:

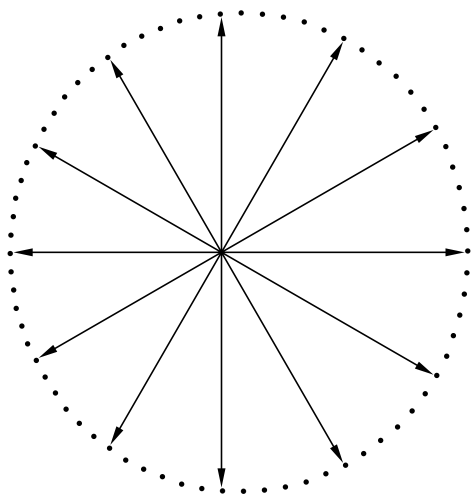
100 Units



Zone 3 Directional Correlograms - 5m Comps

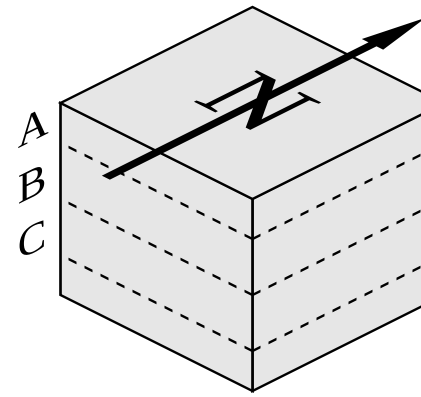
Structure Number 1

Rose Diagram of Ranges Dipping 60 Degrees
Scale:

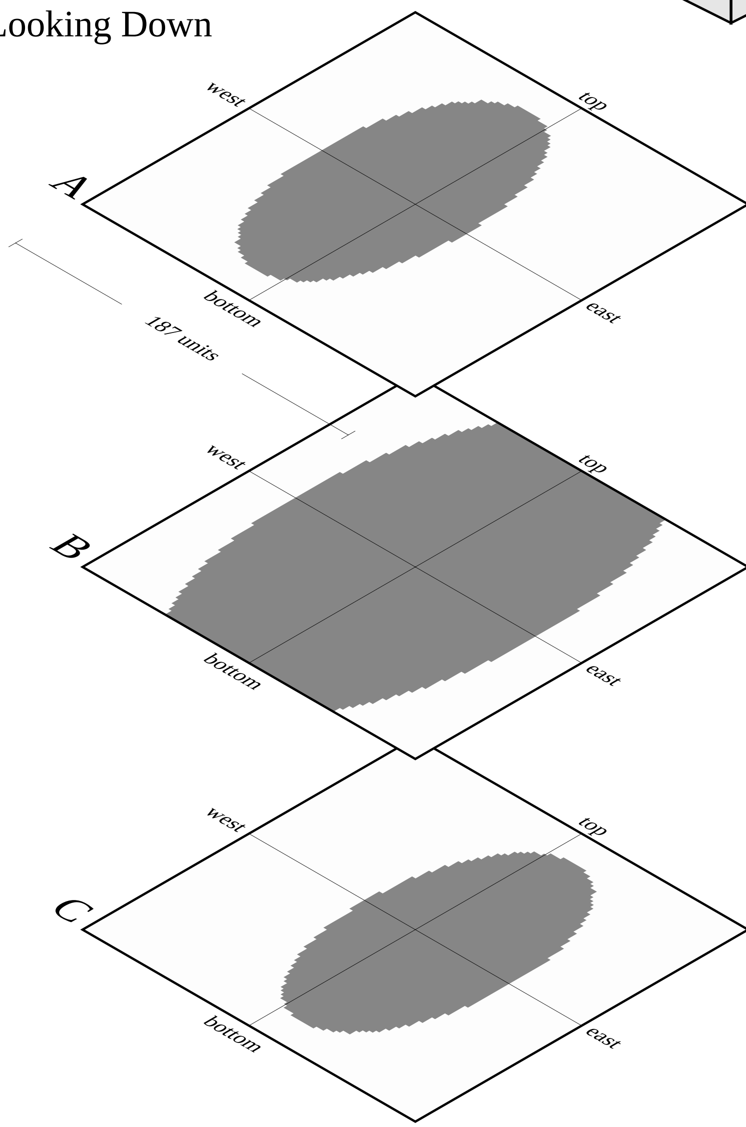


Horizontal Slices Through the Ellipsoids

Reference Cube



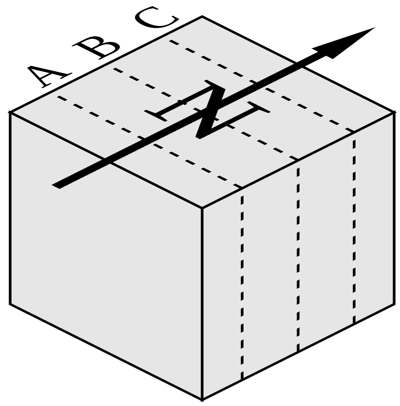
X-Y Planes Looking Down



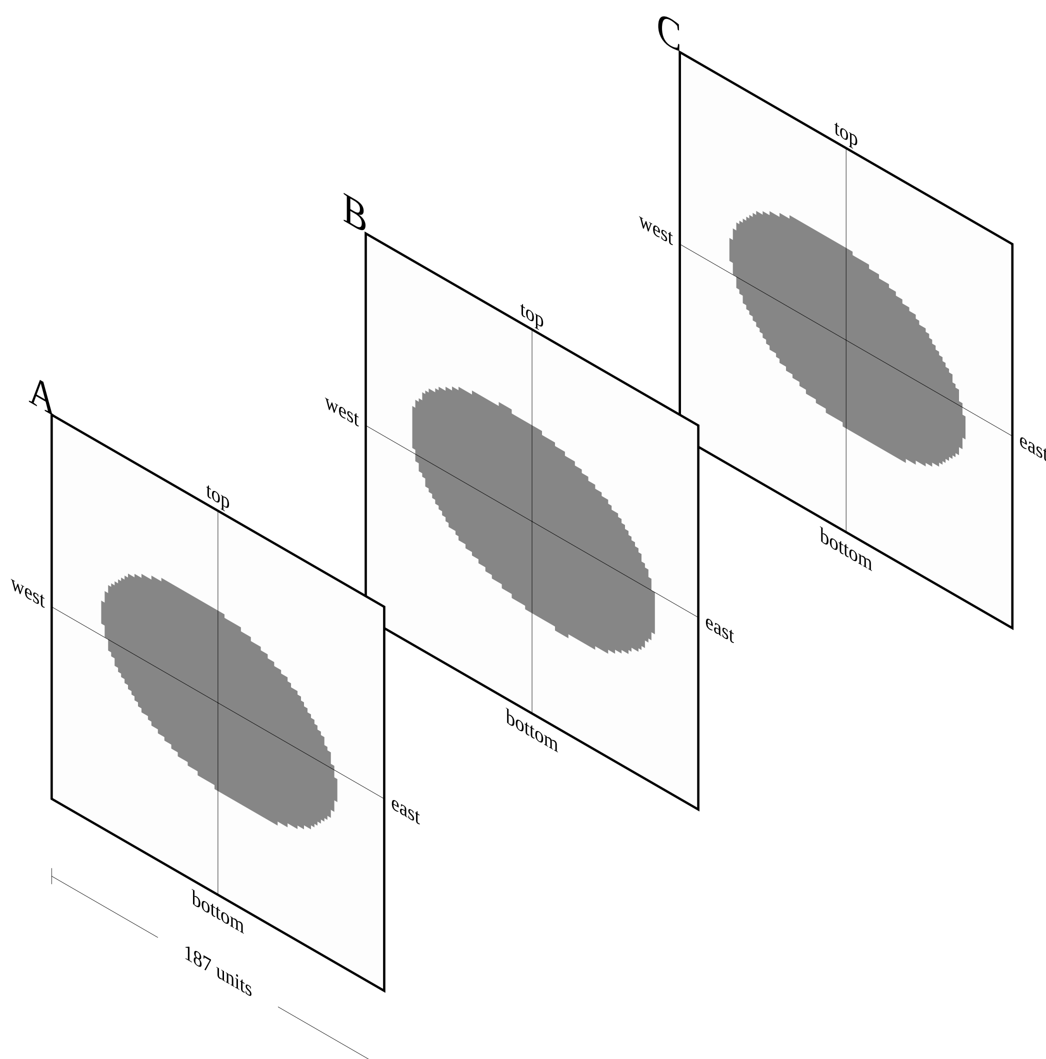
Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Cross Section Views Through the Ellipsoids

Reference Cube



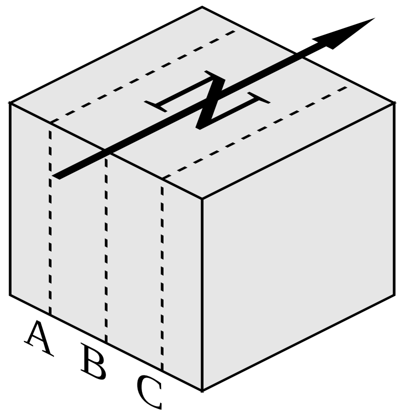
X-Z Planes Looking North



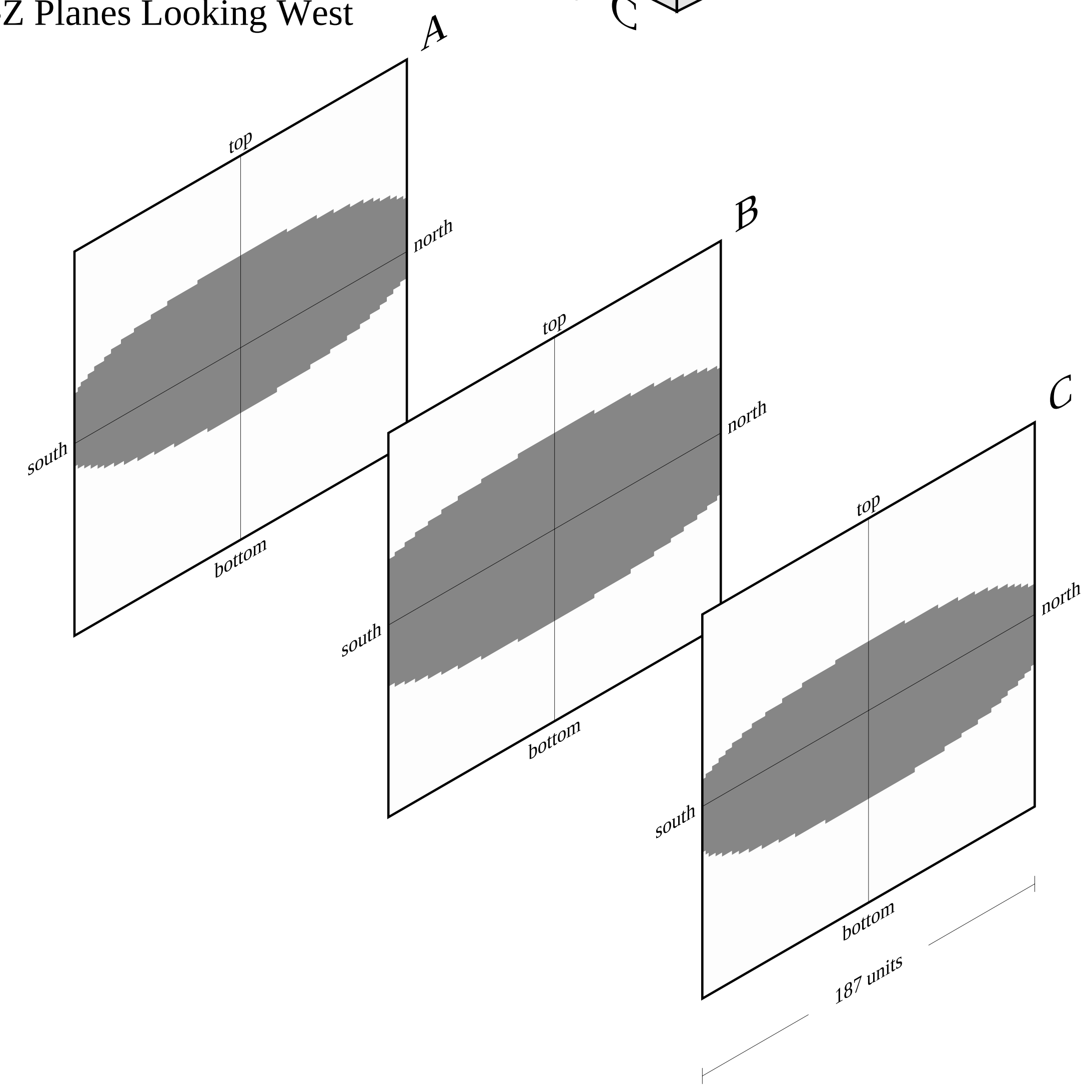
Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Long Section Views Through the Ellipsoids

Reference Cube

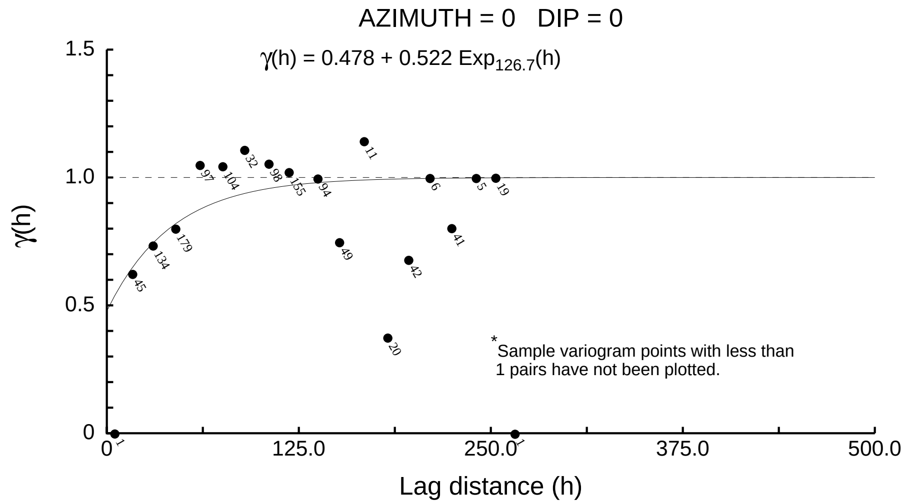


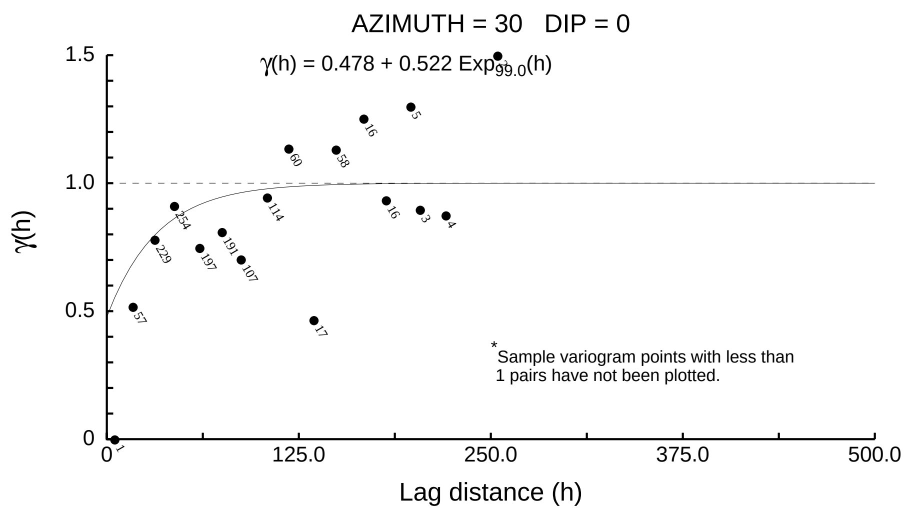
Y-Z Planes Looking West

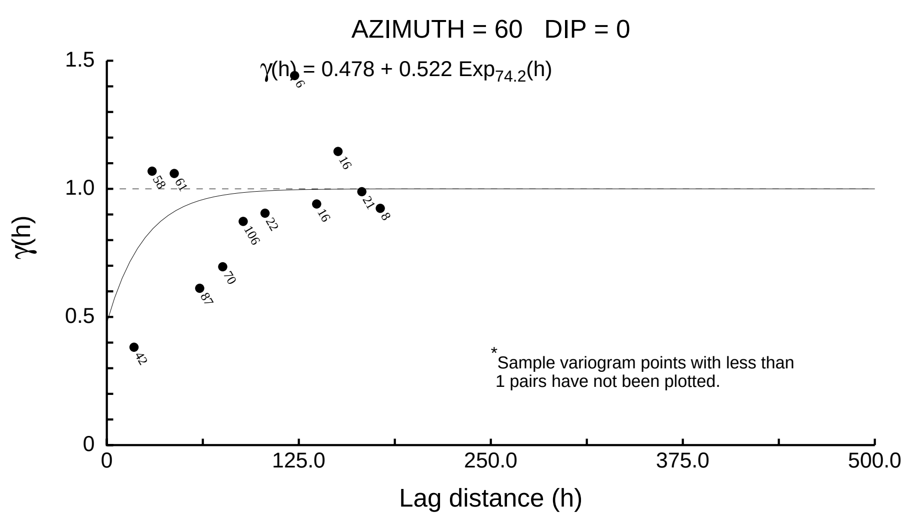


Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

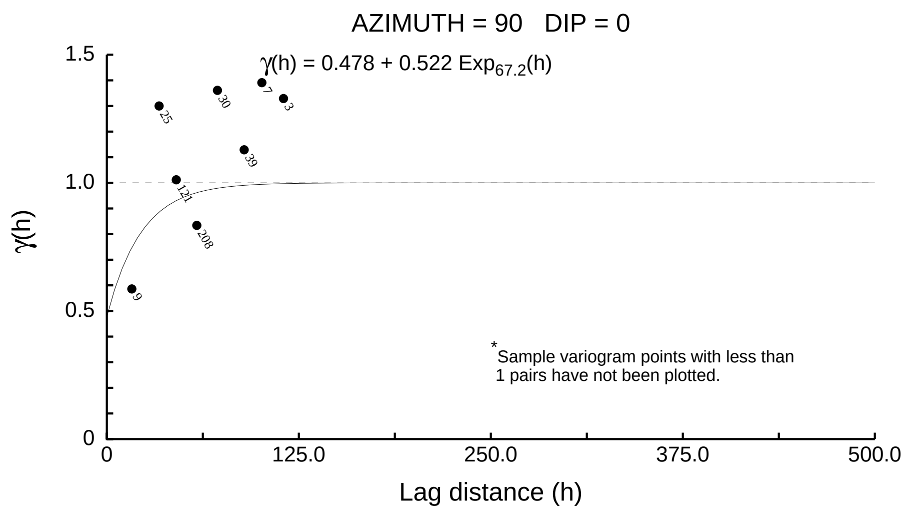
Zone 3 Directional Correlograms - 5m Comps

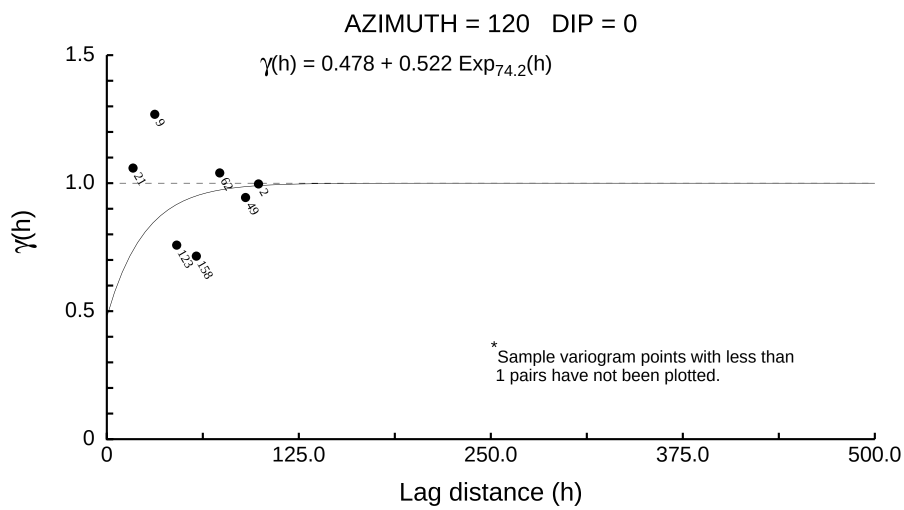


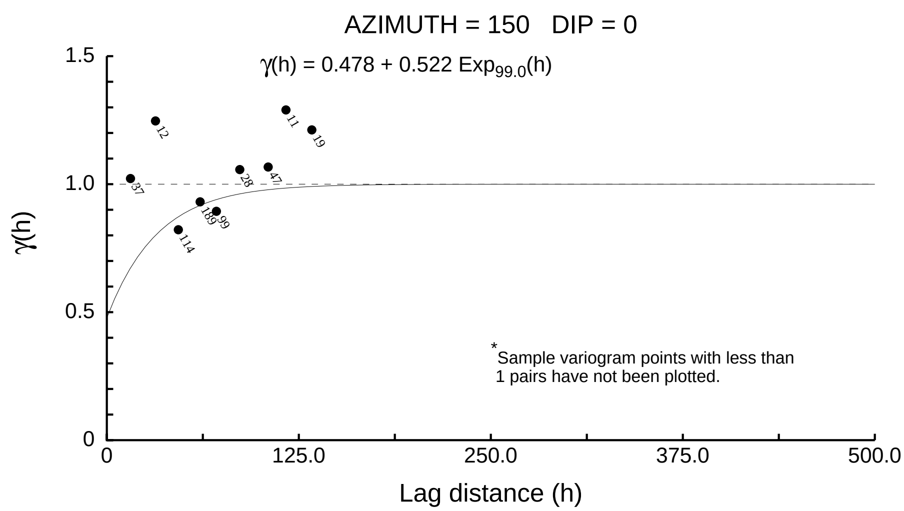




Zone 3 Directional Correlograms - 5m Comps







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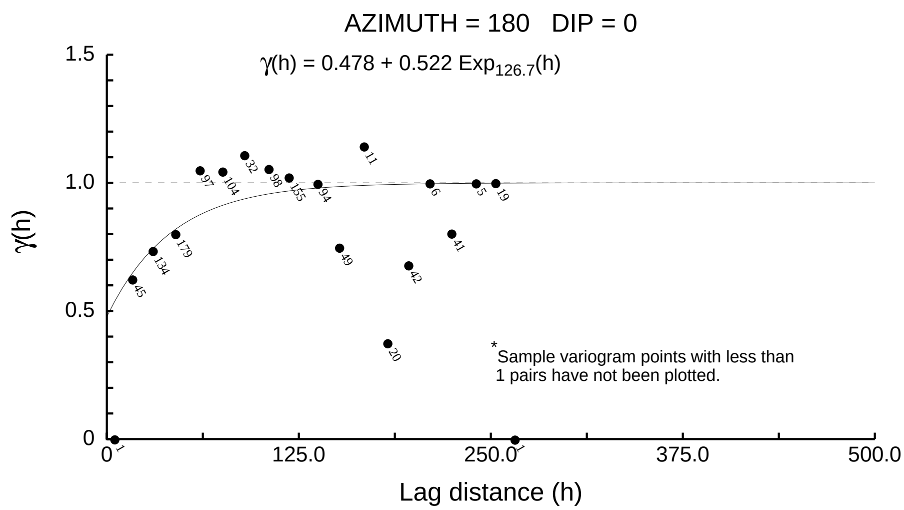
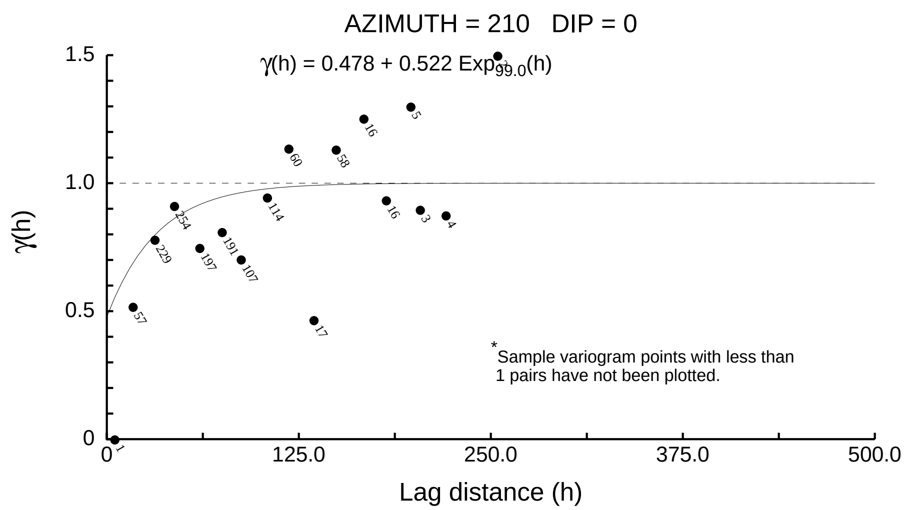
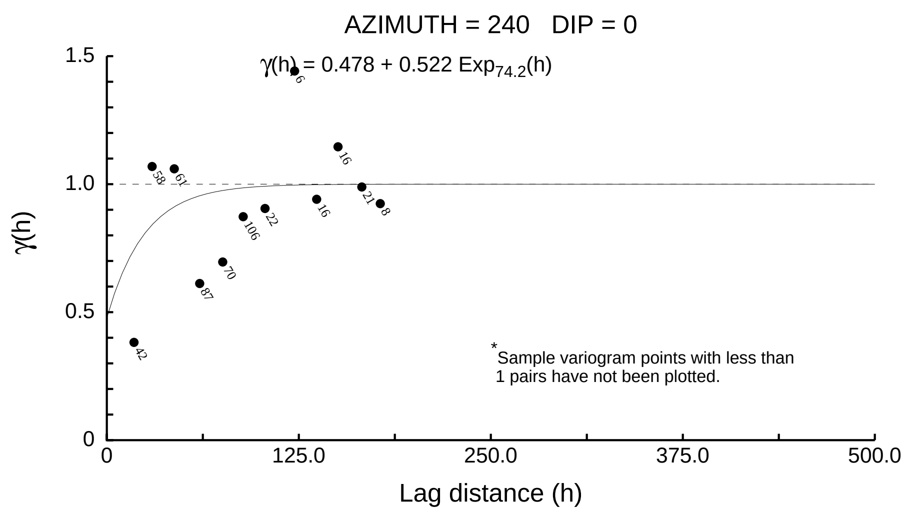
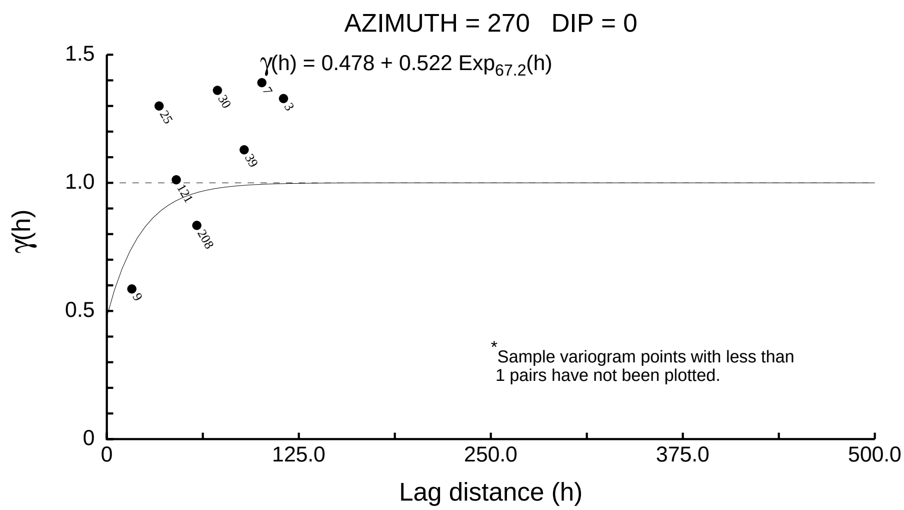
Zone 3 Directional Correlograms - 5m Comps

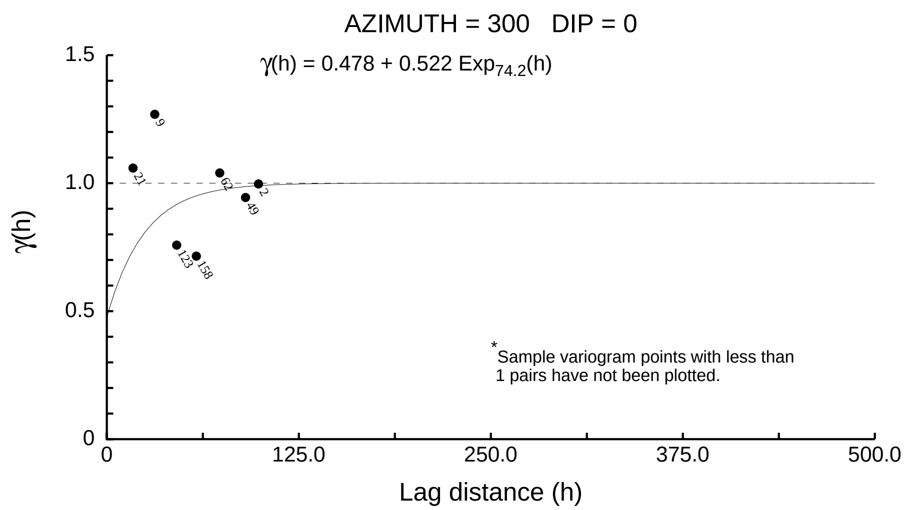


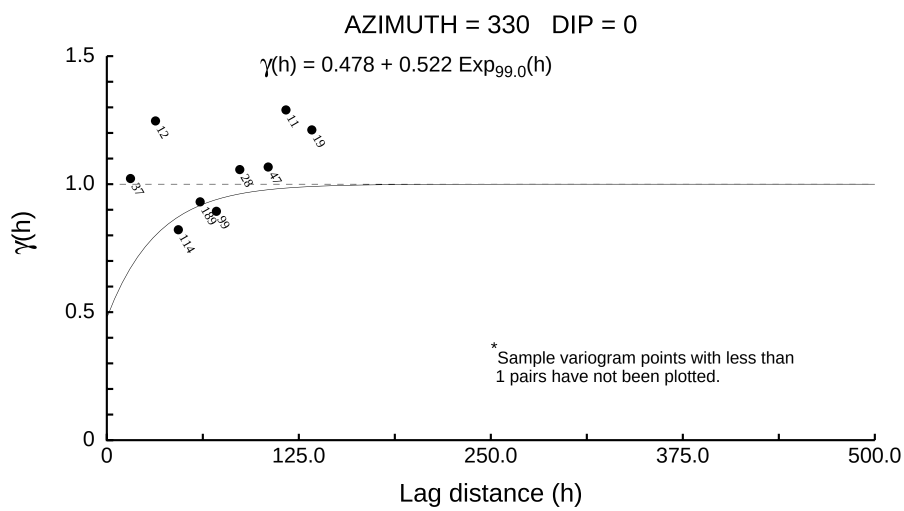




Zone 3 Directional Correlograms - 5m Comps







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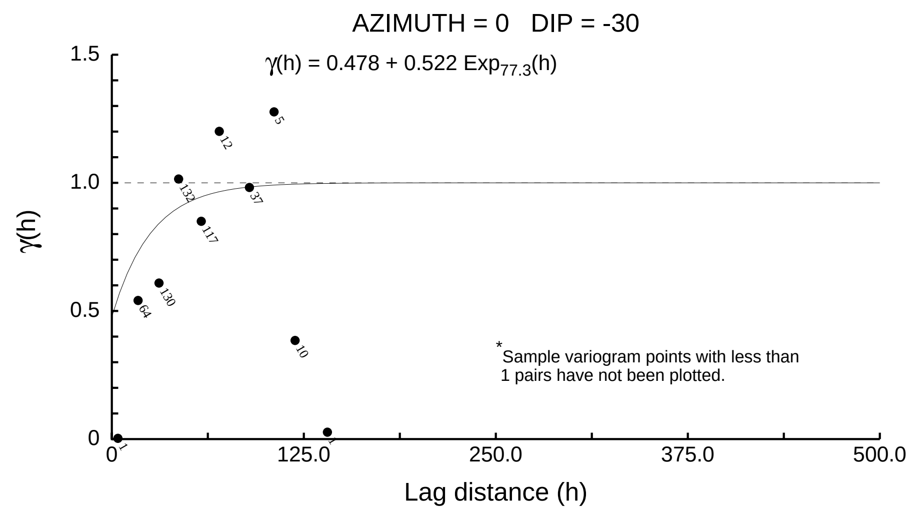
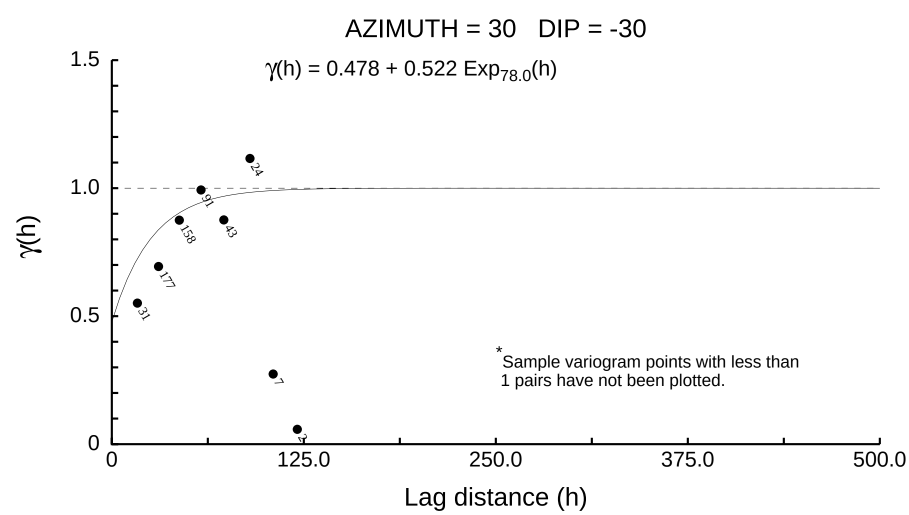
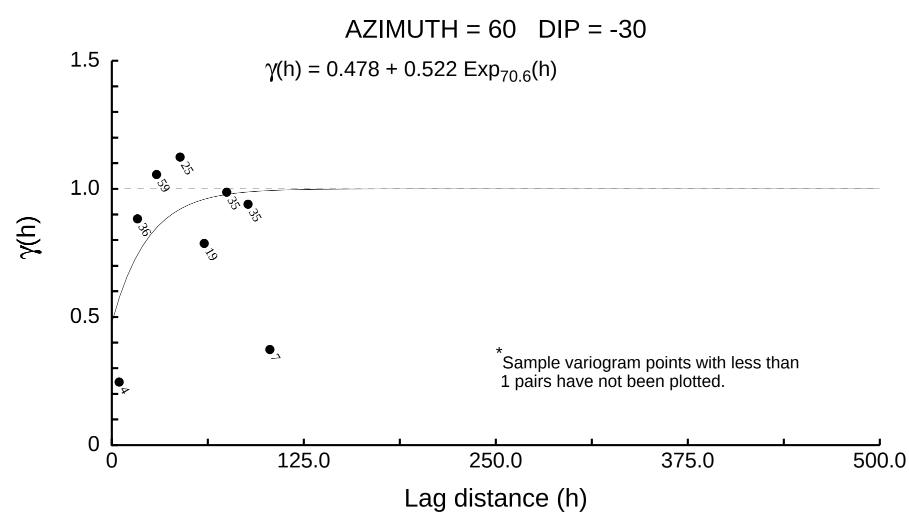
Zone 3 Directional Correlograms - 5m Comps







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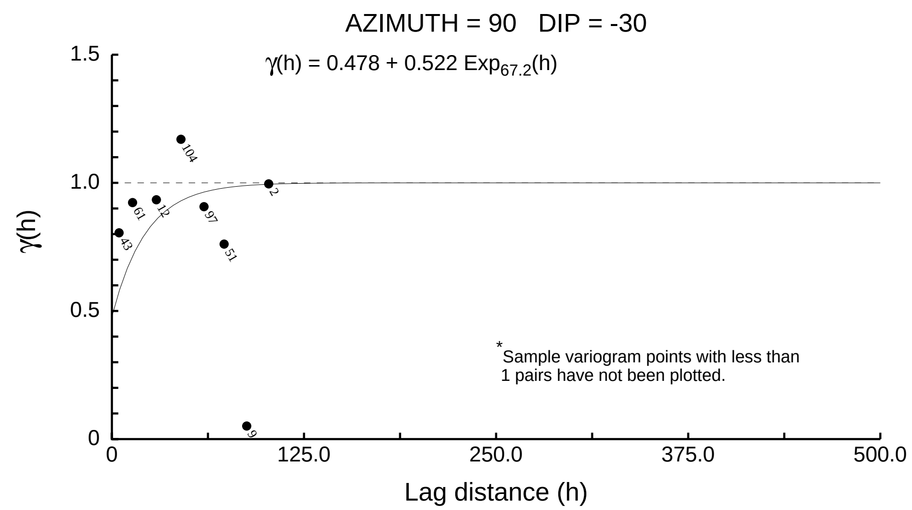

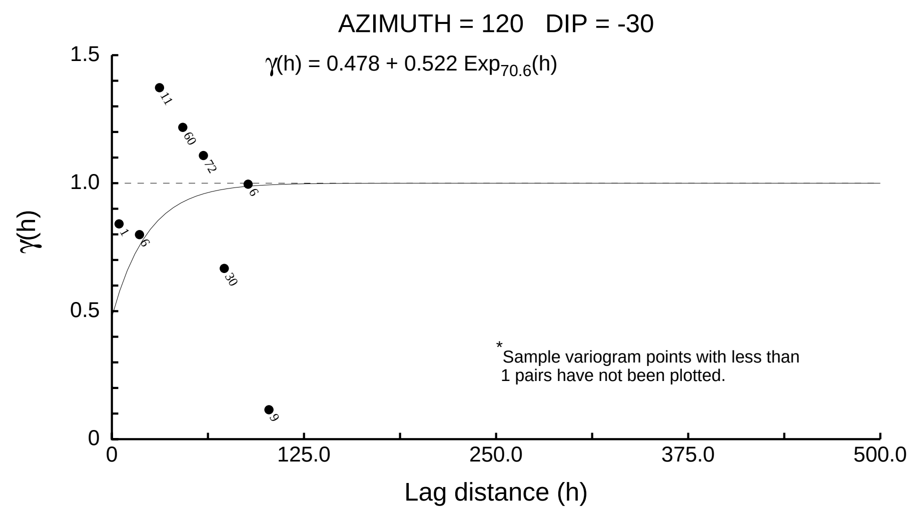

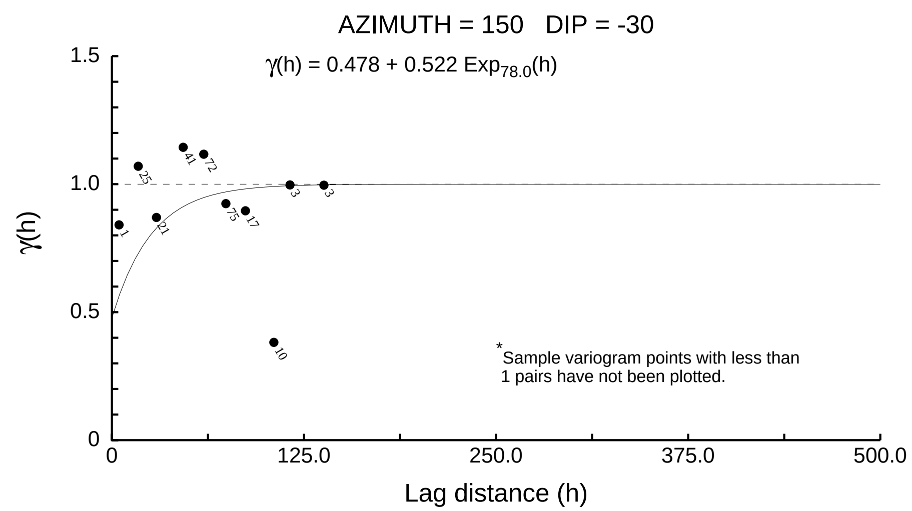

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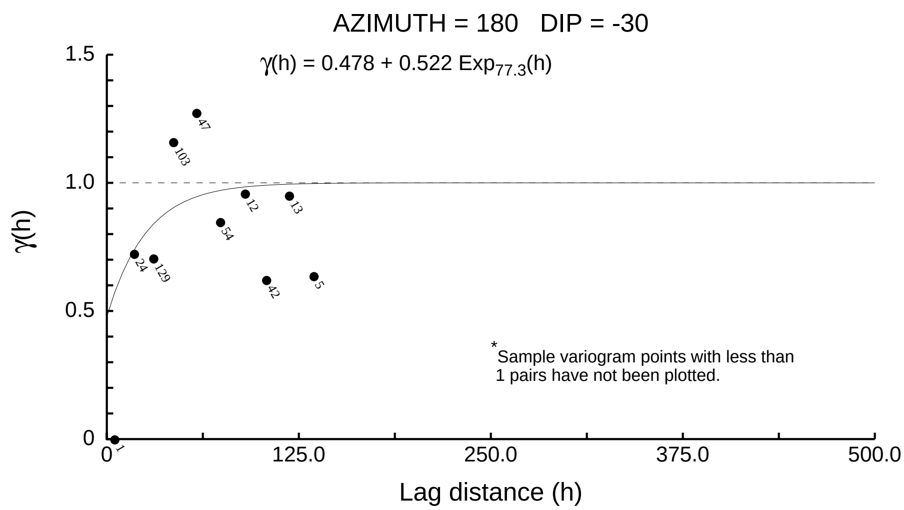
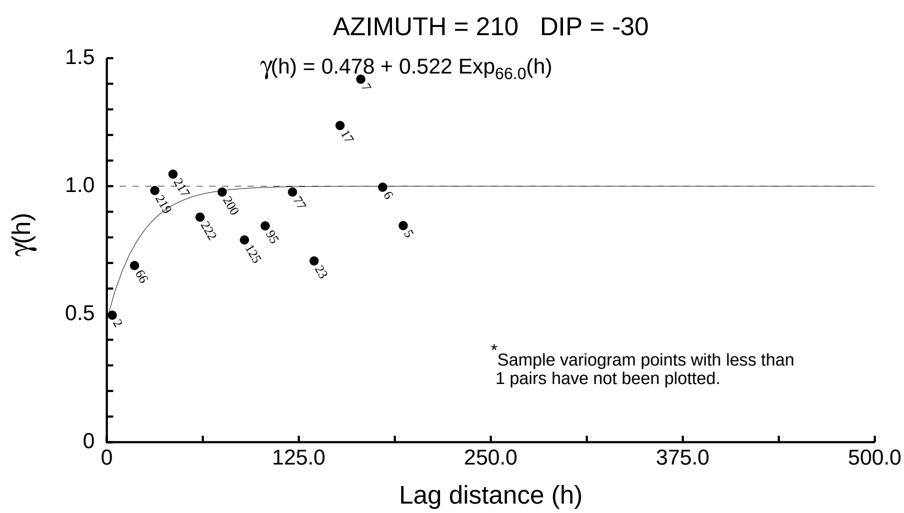
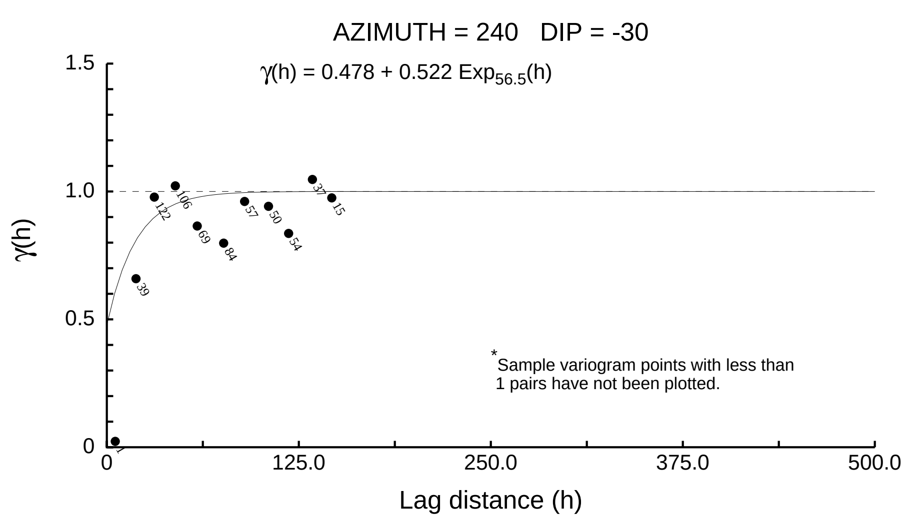
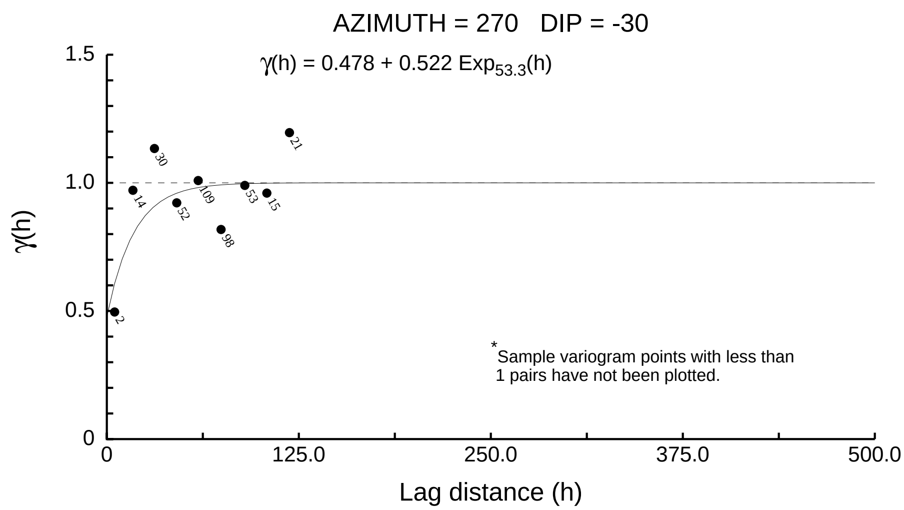
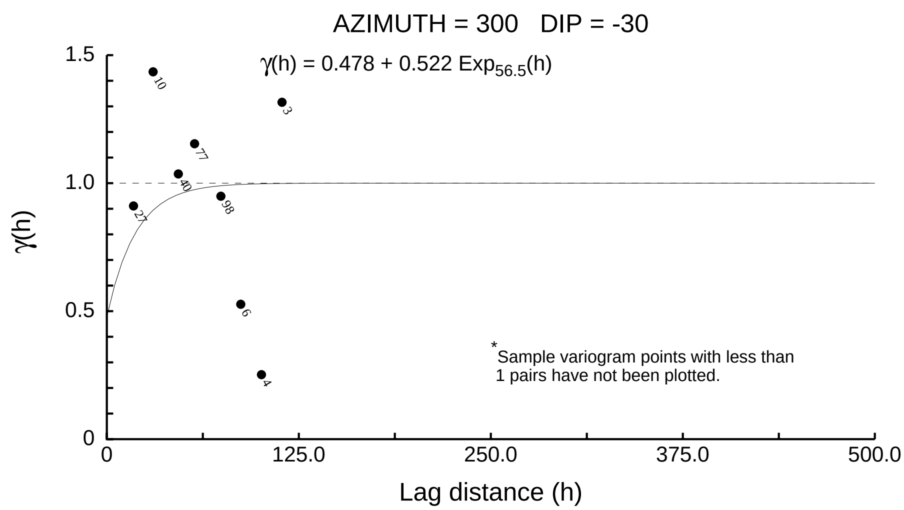


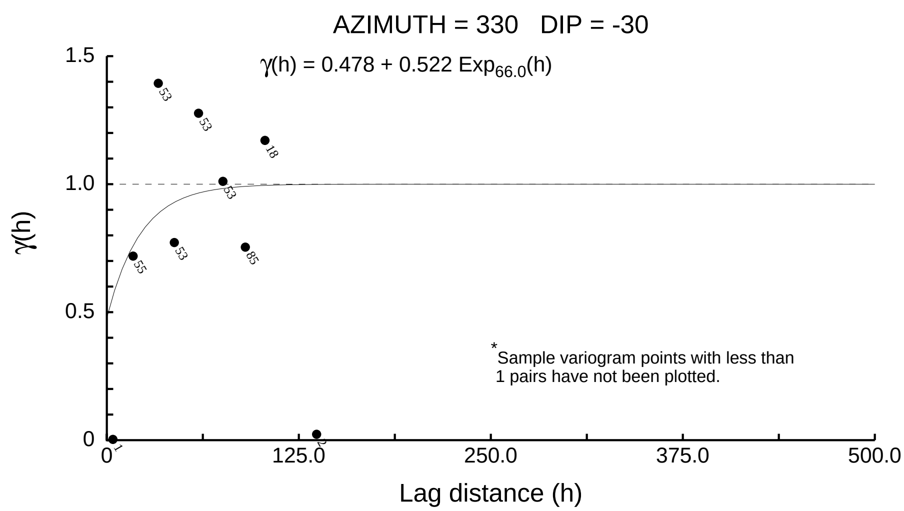




Zone 3 Directional Correlograms - 5m Comps







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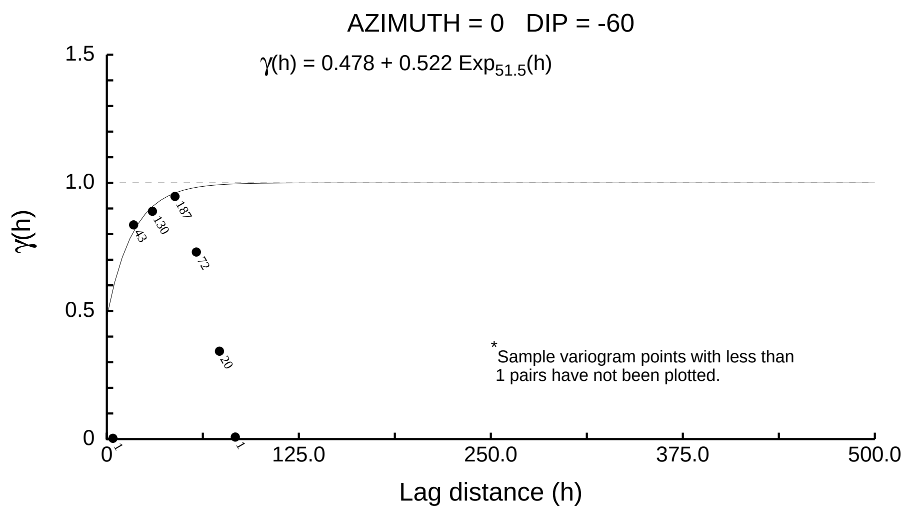
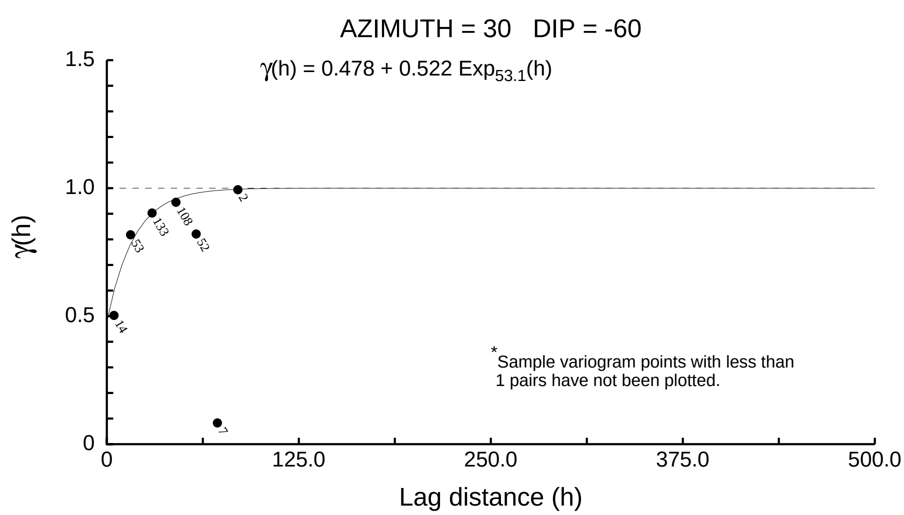
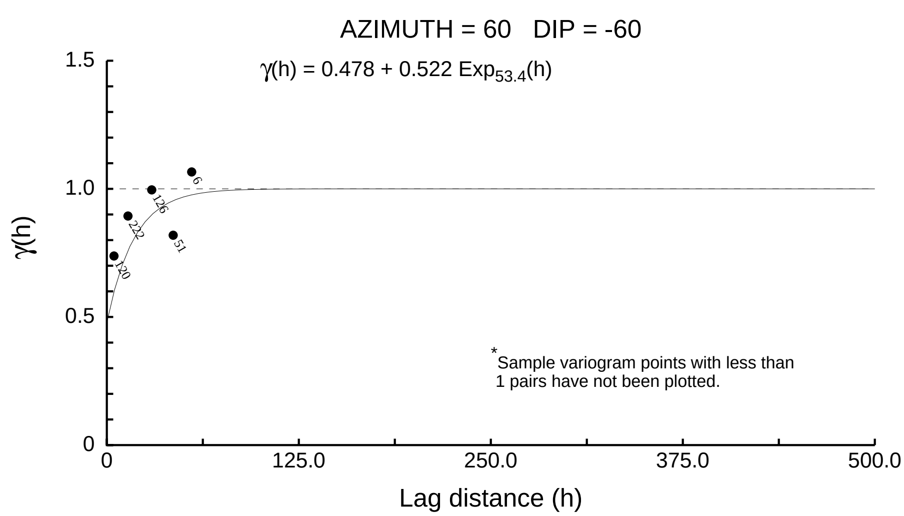
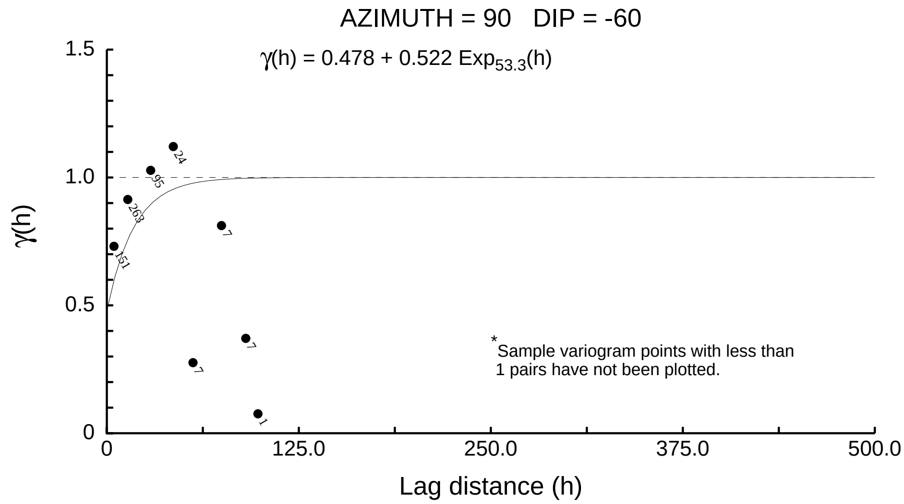
Zone 3 Directional Correlograms - 5m Comps

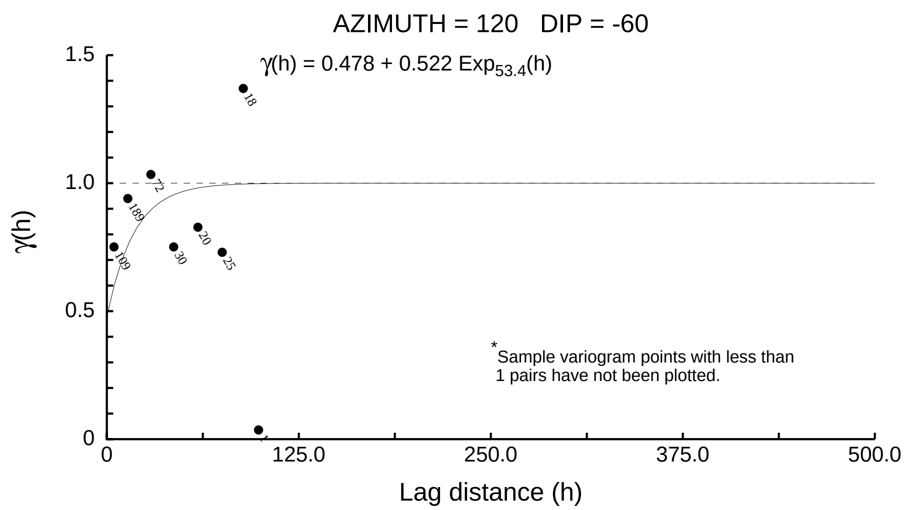


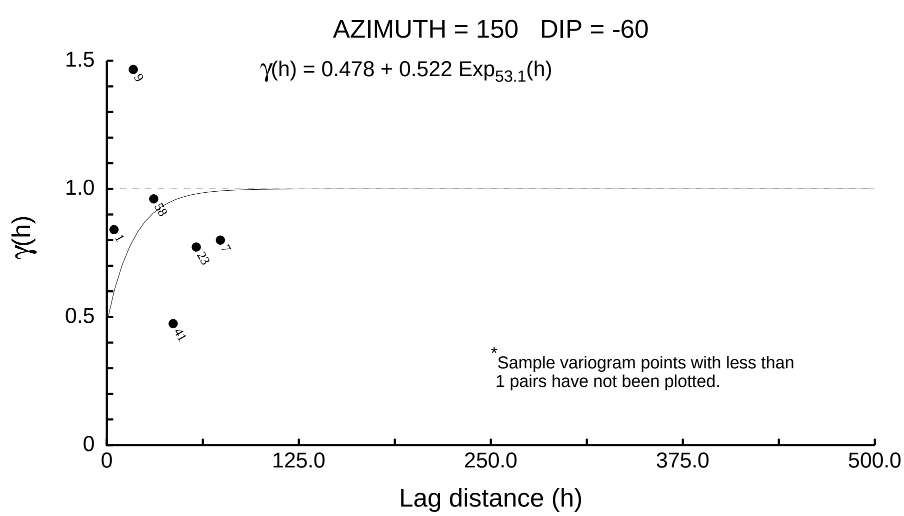




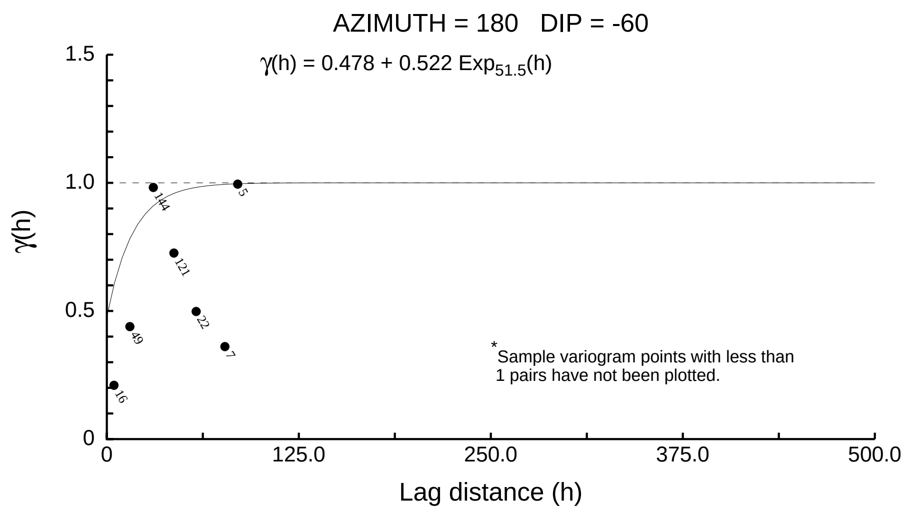
Zone 3 Directional Correlograms - 5m Comps

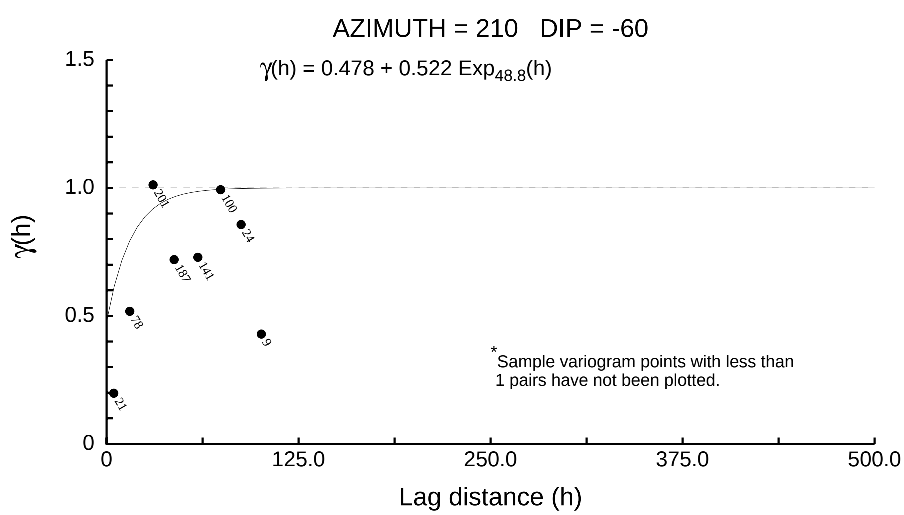


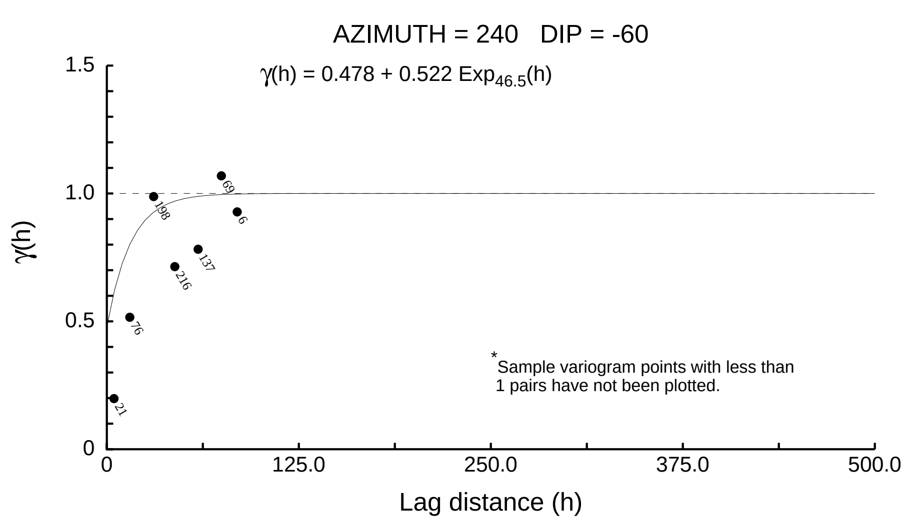




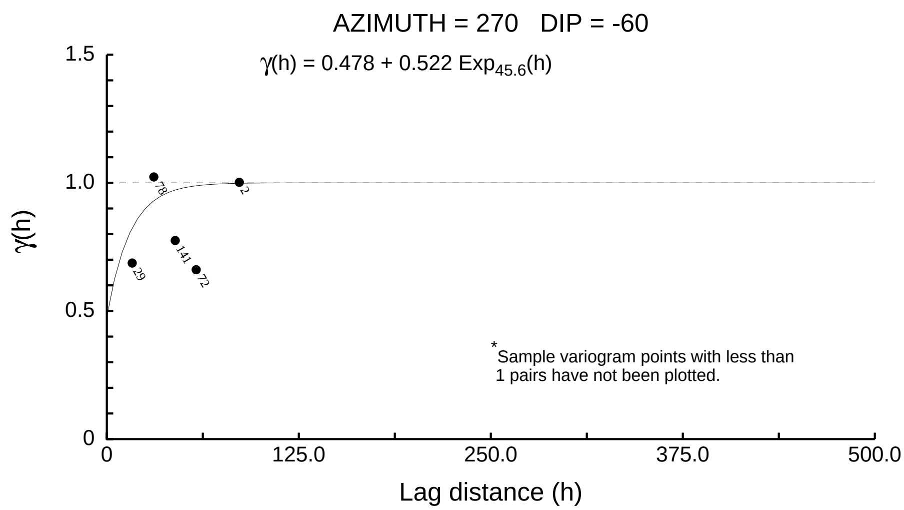
Zone 3 Directional Correlograms - 5m Comps

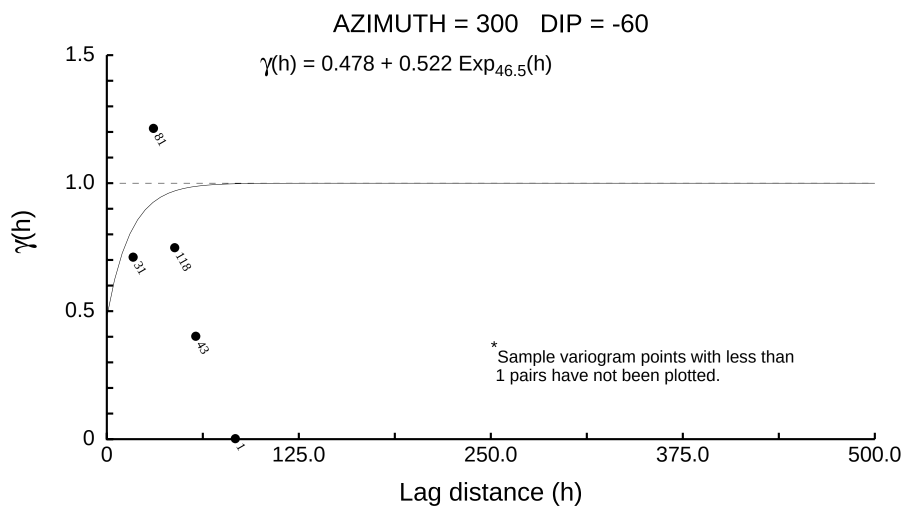


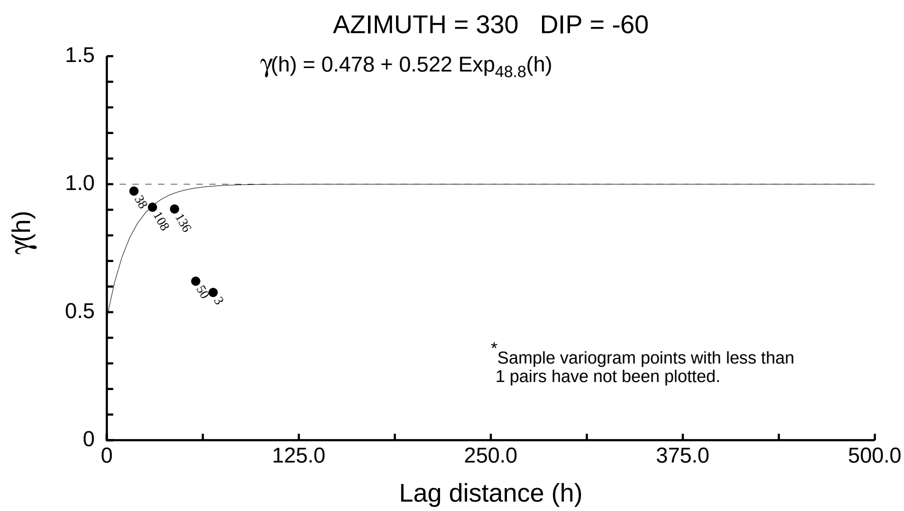




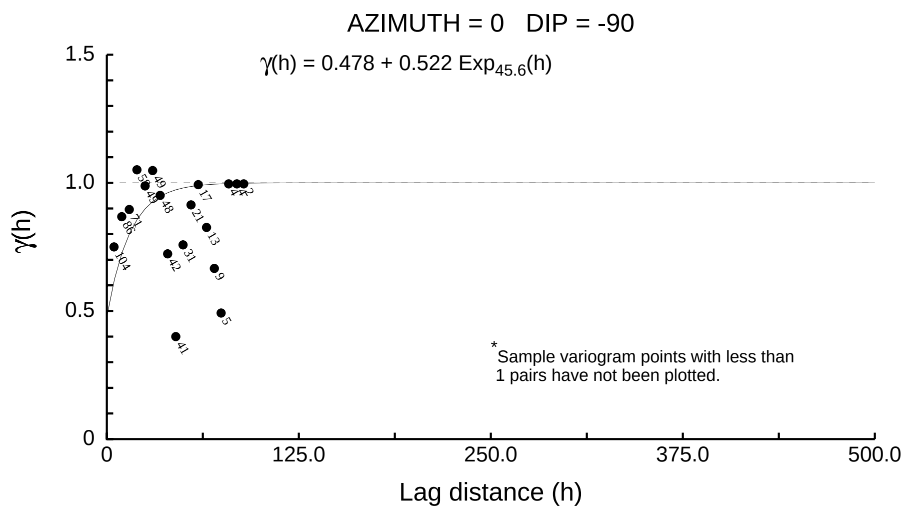
Zone 3 Directional Correlograms - 5m Comps







Zone 3 Directional Correlograms - 5m Comps



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Zone 10 Directional Correlograms - 5m Comps

Medsystem and Vulcan Rotation Conventions

Nugget ==> 0.368
C1 ==> 0.632

First Structure -- Exponential with Practical Range

LH Rotation about the Z axis ==> 0
RH Rotation about the X' axis ==> 0
LH Rotation about the Y' axis ==> 75

Range along the Z' axis ==> 15.6	Azimuth ==> 270	Dip ==> 15
Range along the Y' axis ==> 48.4	Azimuth ==> 360	Dip ==> 0
Range along the X' axis ==> 36.8	Azimuth ==> 90	Dip ==> 75

Modeling Criteria

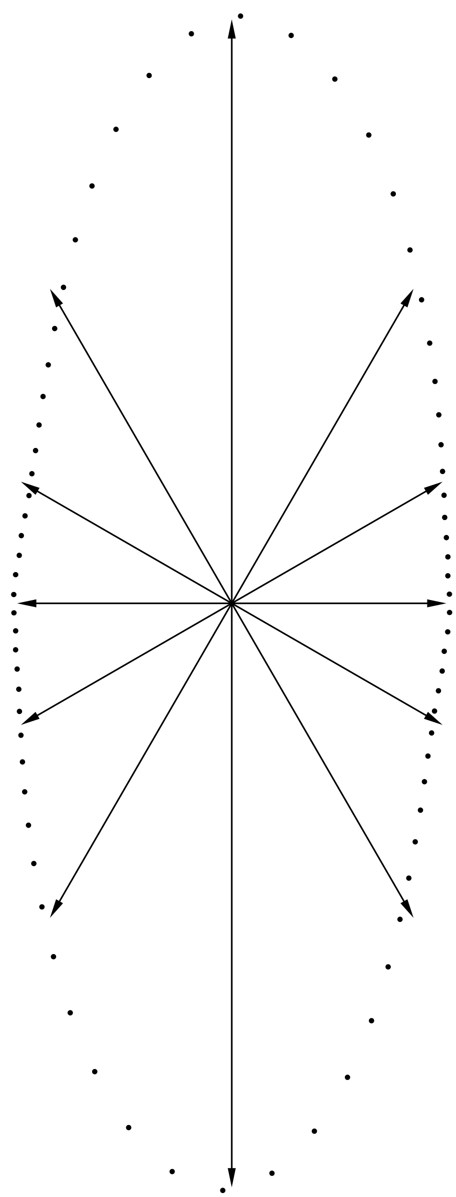
Minimum number pairs req'd ==> 1
Sample variogram points weighted by # pairs

Zone 10 Directional Correlograms - 5m Comps

Structure Number 1

Rose Diagram of Ranges Dipping 0 Degrees
Scale:

50 Units



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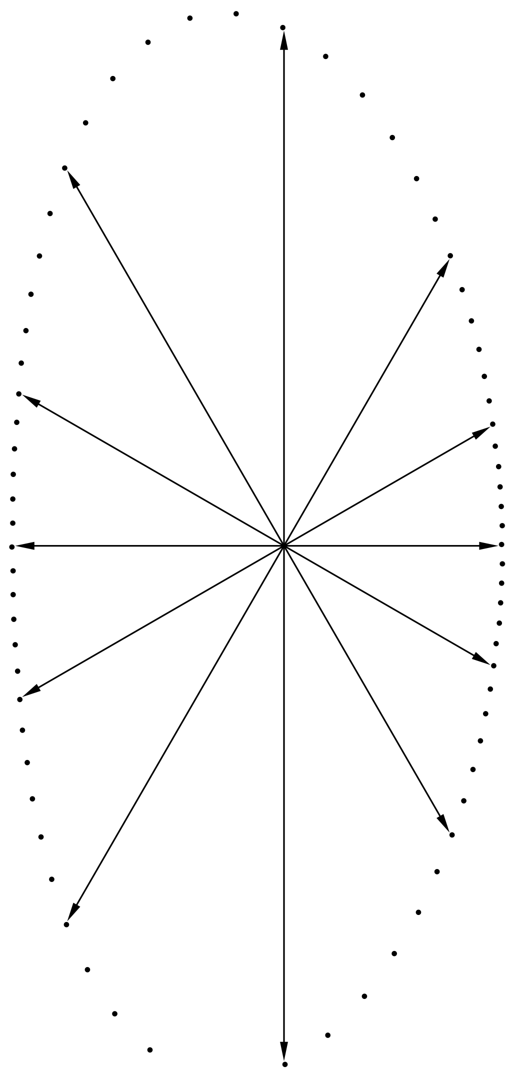
Zone 10 Directional Correlograms - 5m Comps

Structure Number 1

Rose Diagram of Ranges Dipping 30 Degrees
Scale:



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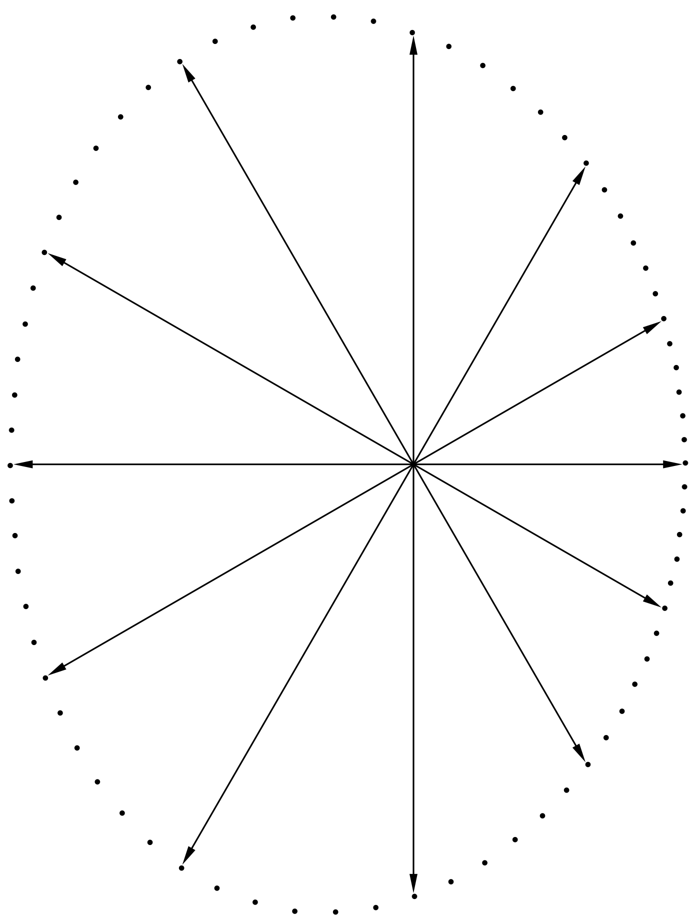
Zone 10 Directional Correlograms - 5m Comps

Structure Number 1

Rose Diagram of Ranges Dipping 60 Degrees
Scale:



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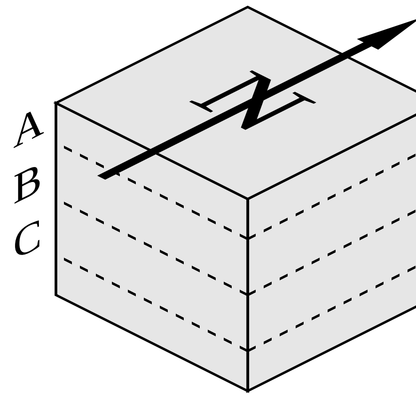
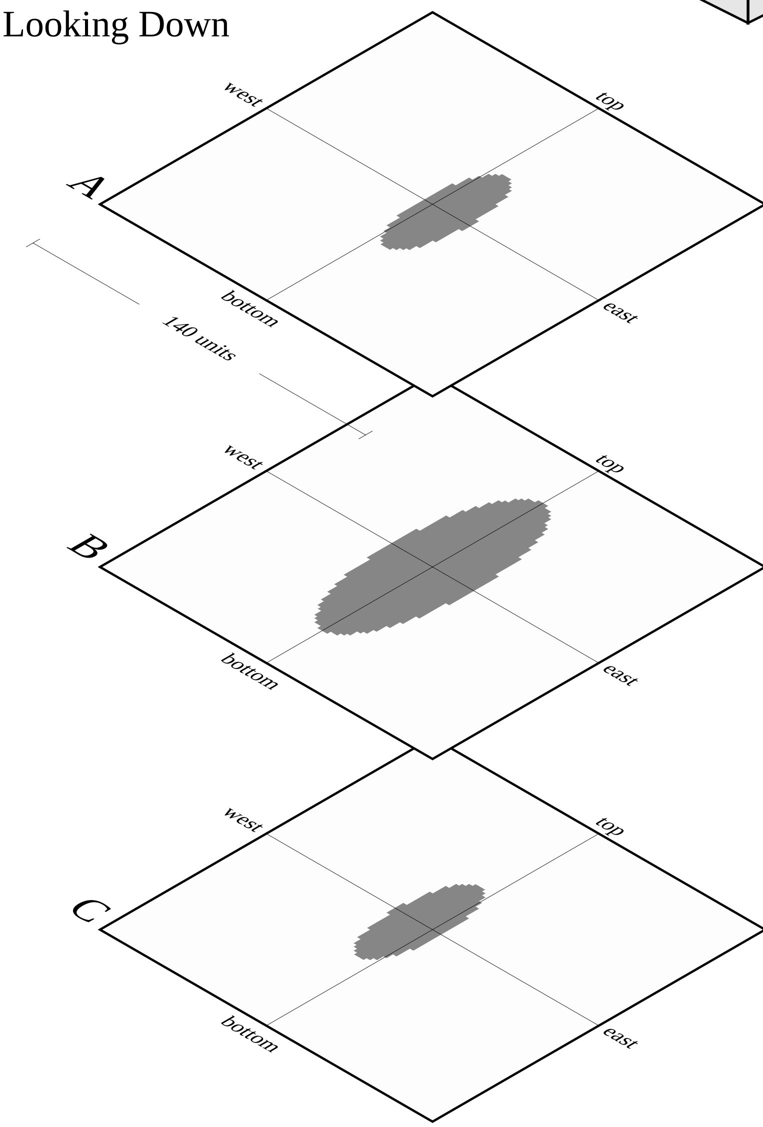
Horizontal Slices Through the Ellipsoids

Reference Cube



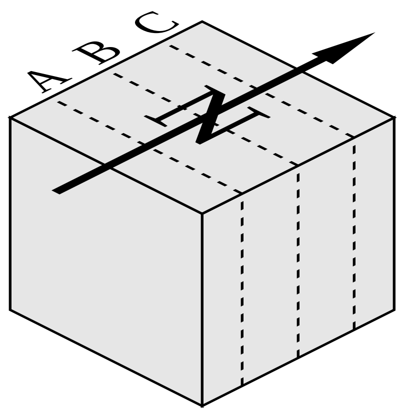
X-Y Planes Looking Down



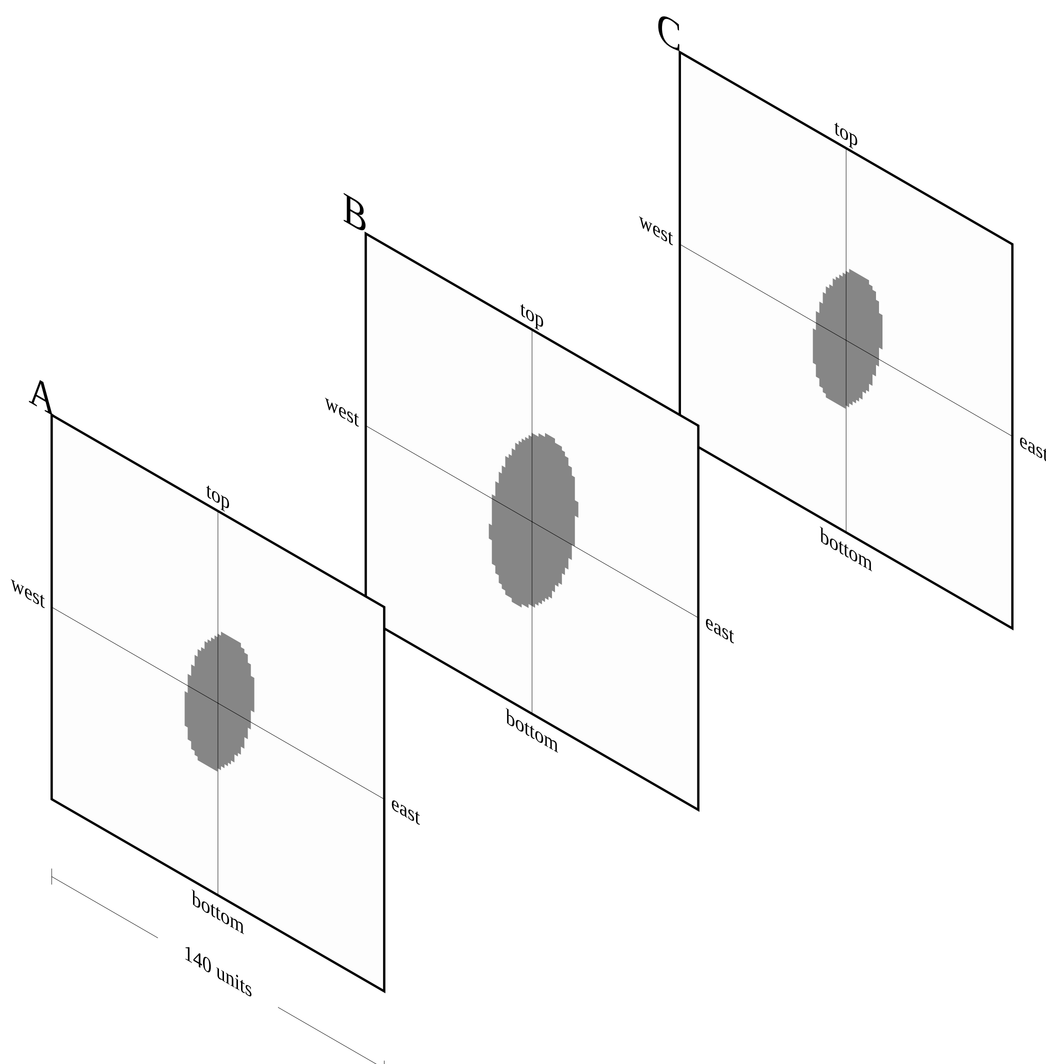
Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Cross Section Views Through the Ellipsoids

Reference Cube



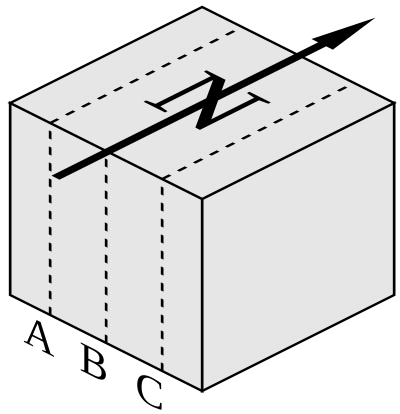
X-Z Planes Looking North



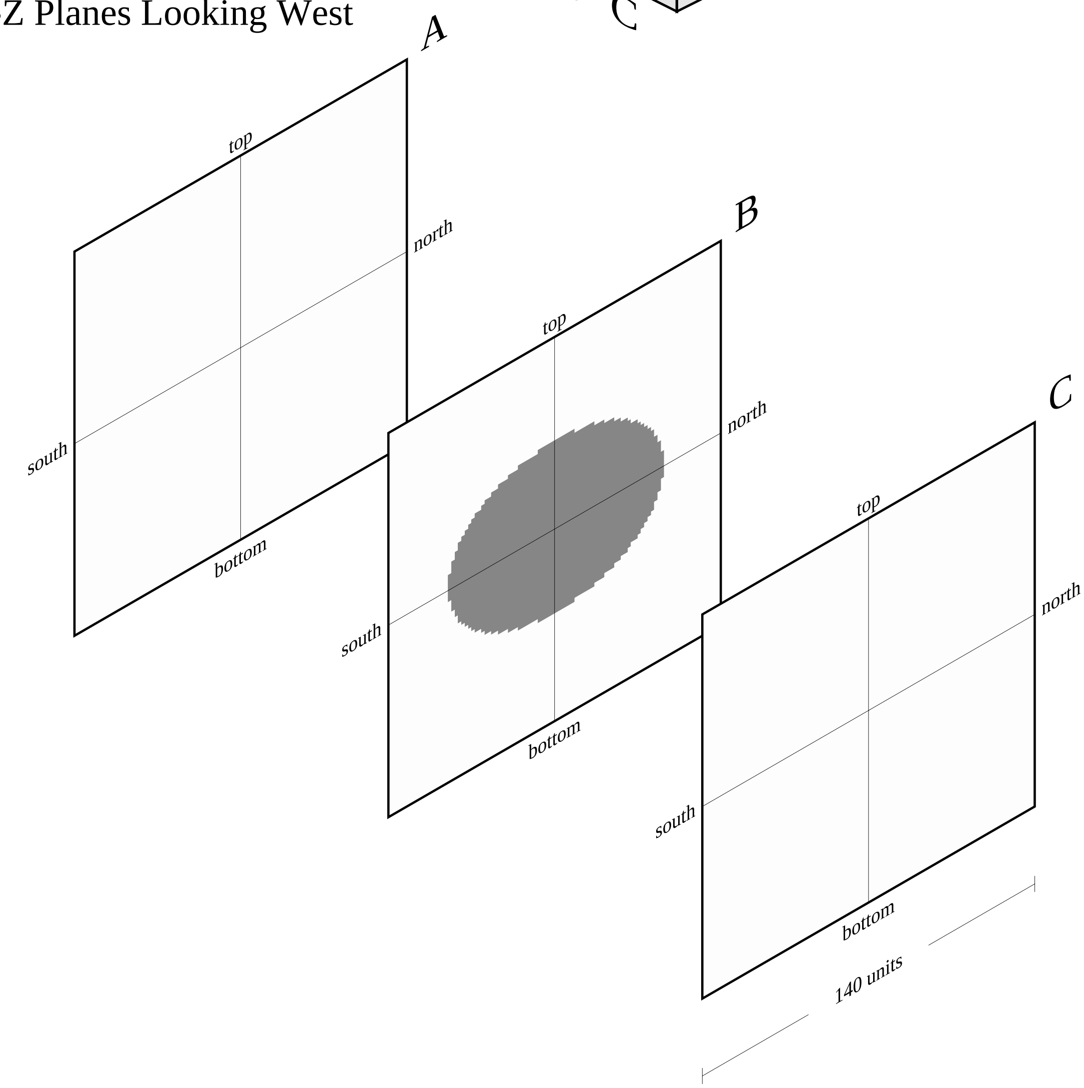
Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Long Section Views Through the Ellipsoids

Reference Cube

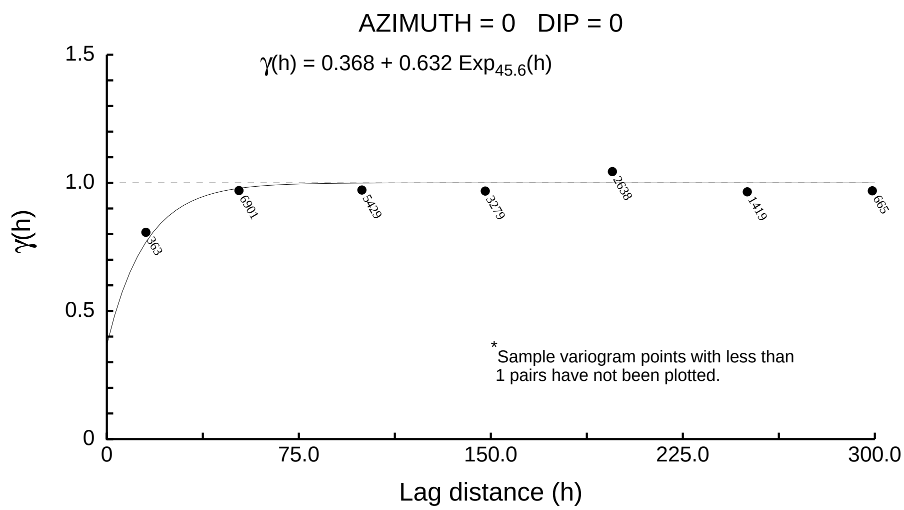


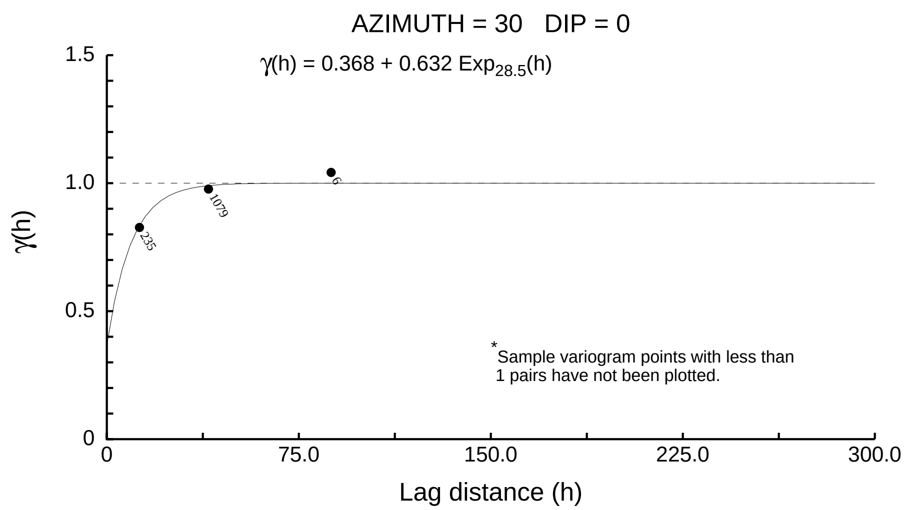
Y-Z Planes Looking West

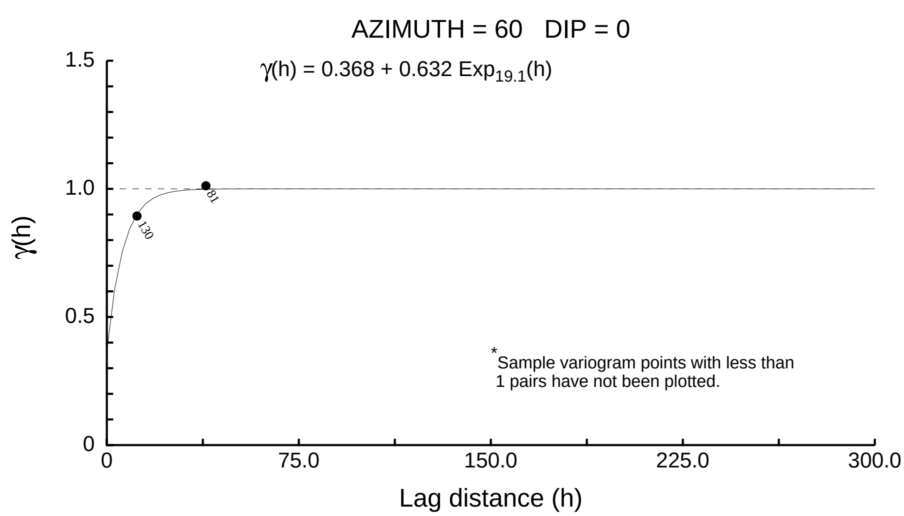


Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Zone 10 Directional Correlograms - 5m Comps







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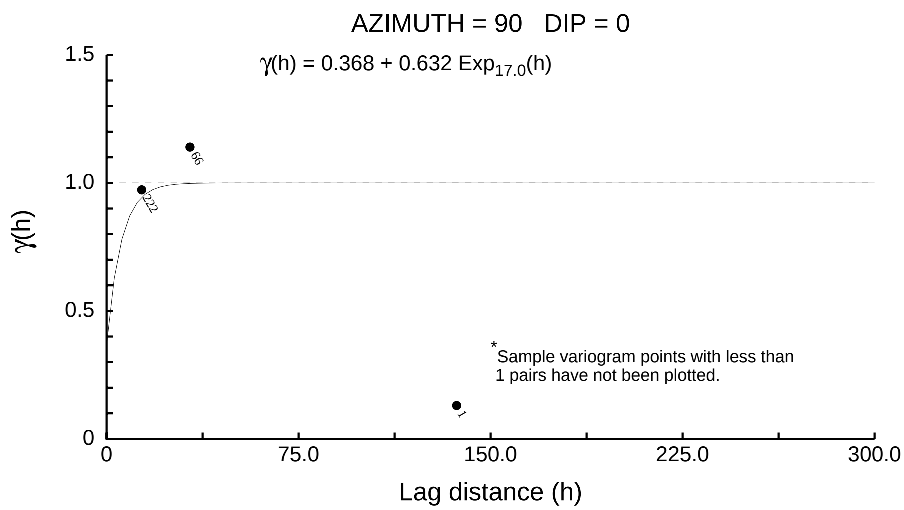
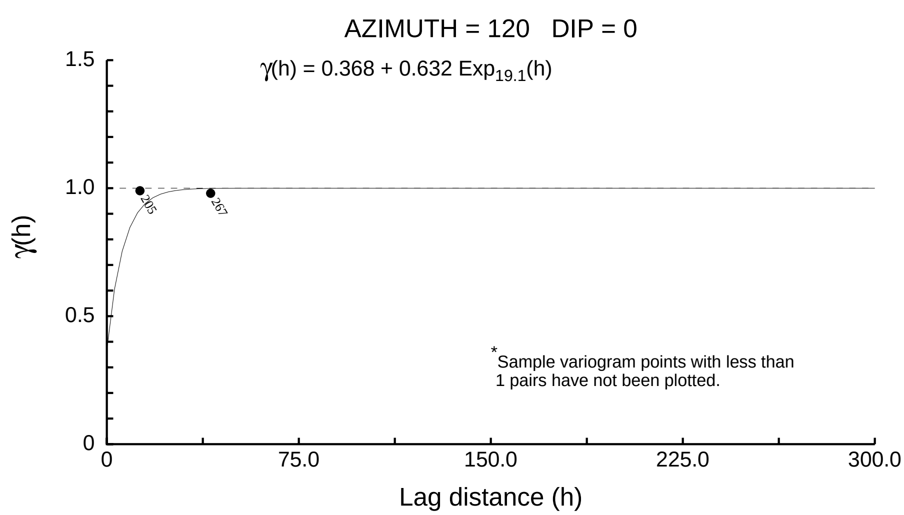
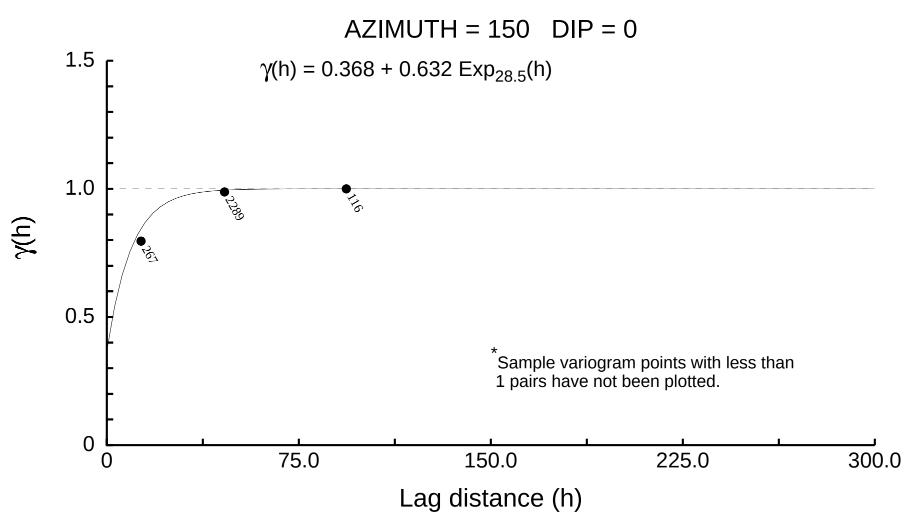
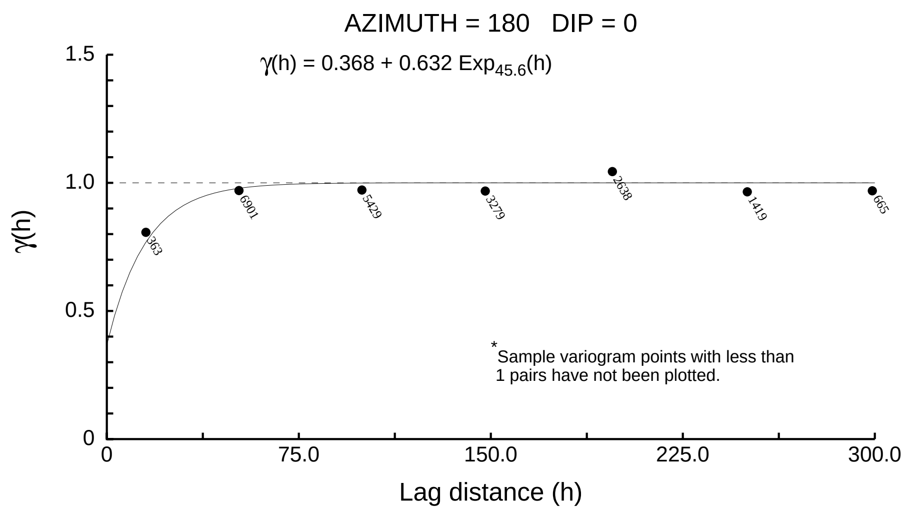
Zone 10 Directional Correlograms - 5m Comps

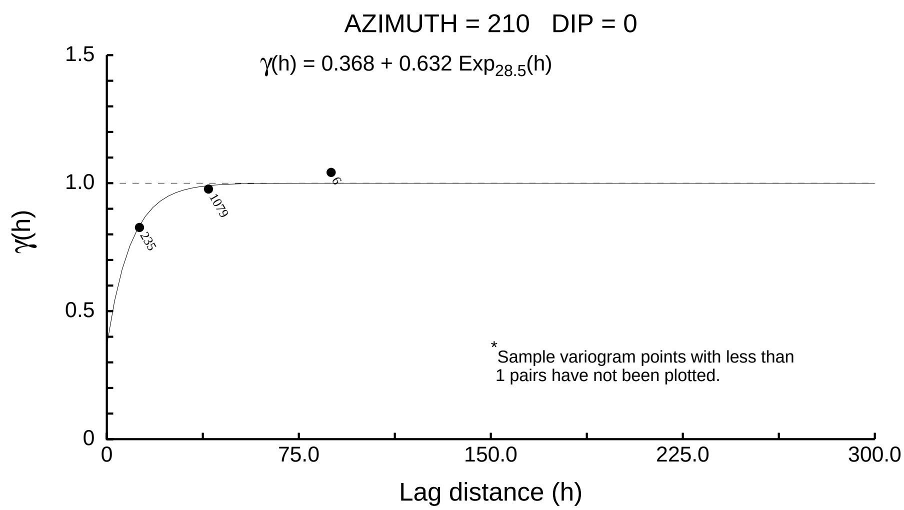


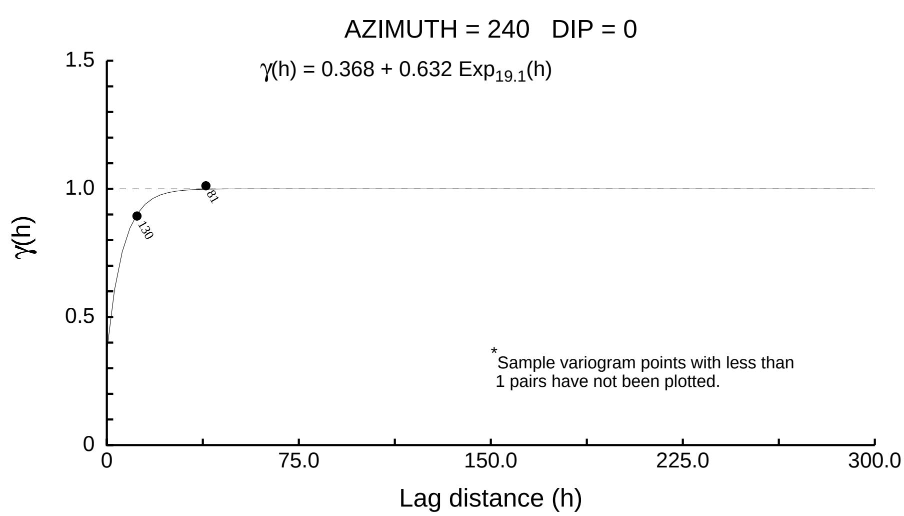




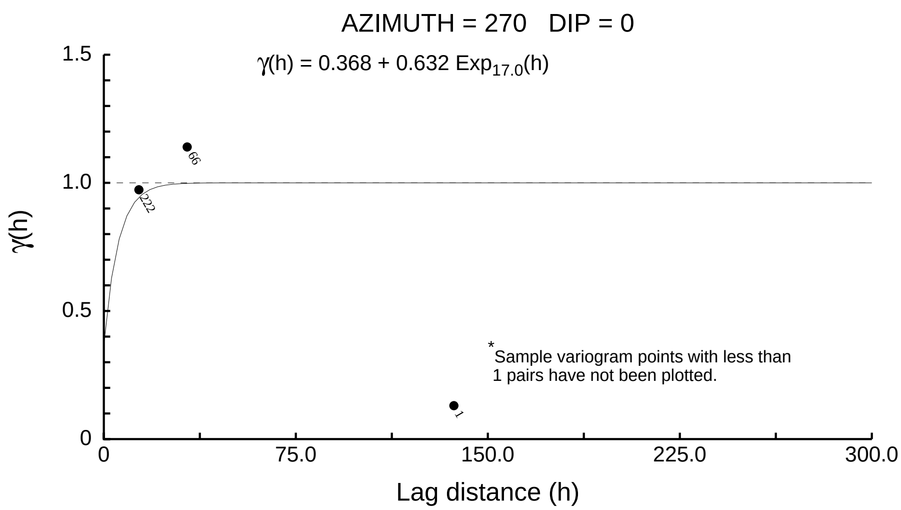
Zone 10 Directional Correlograms - 5m Comps

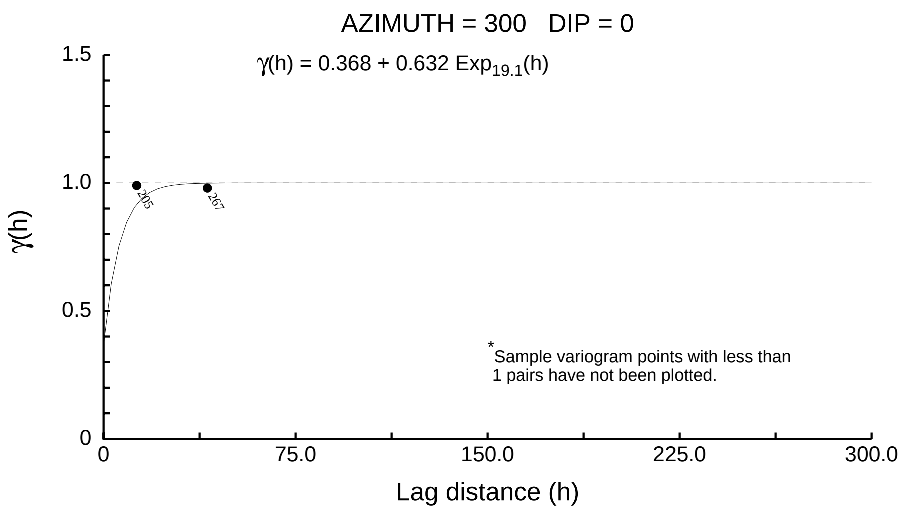


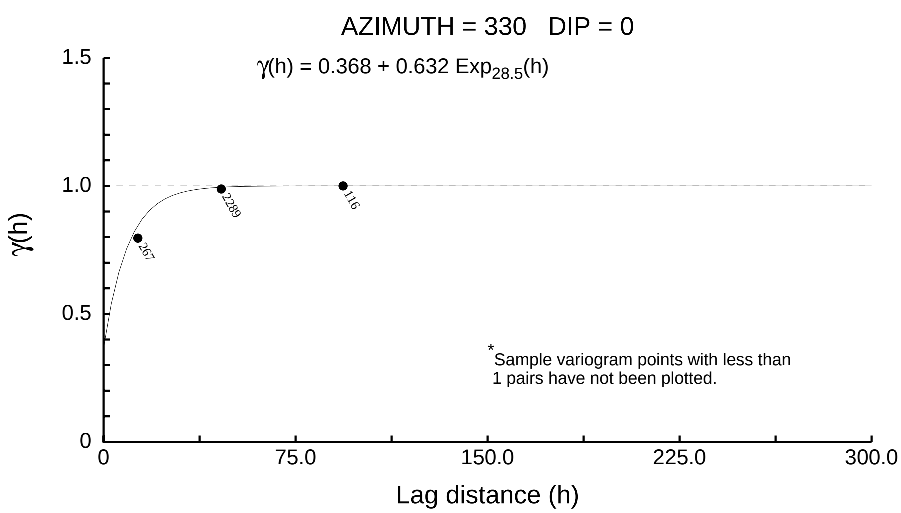




Zone 10 Directional Correlograms - 5m Comps







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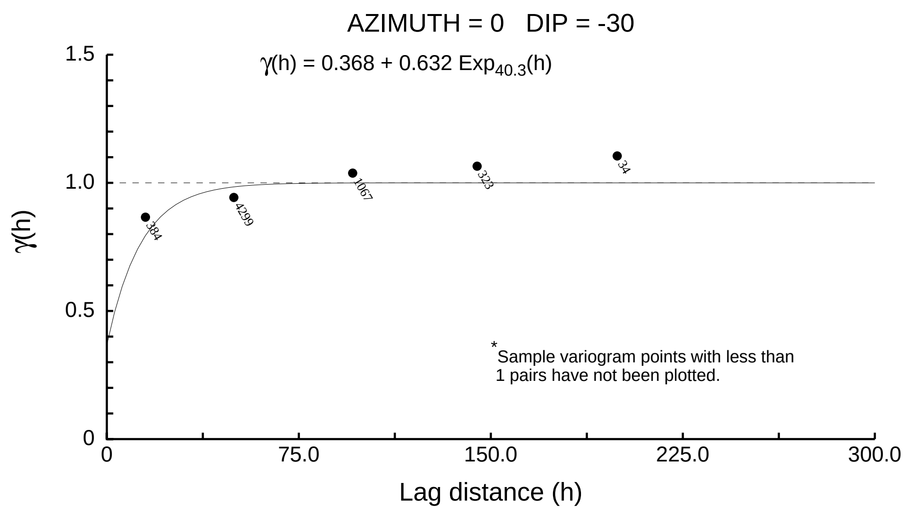
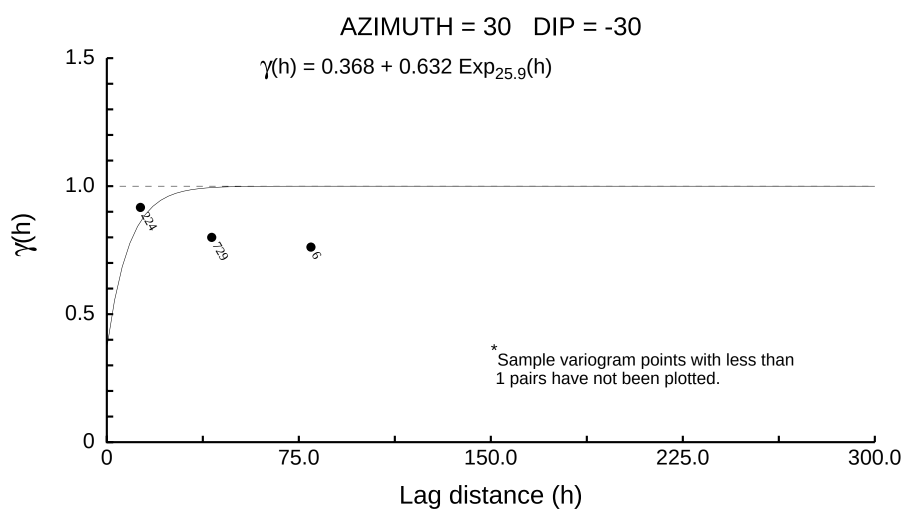
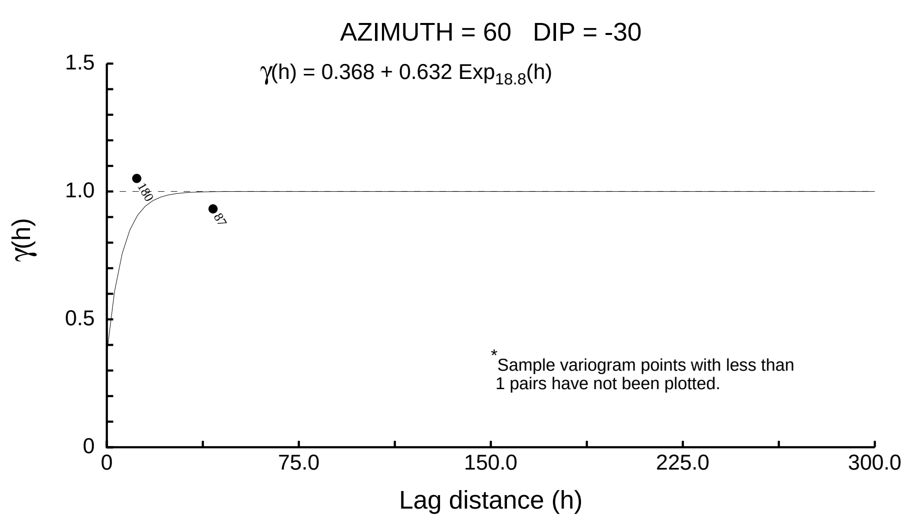
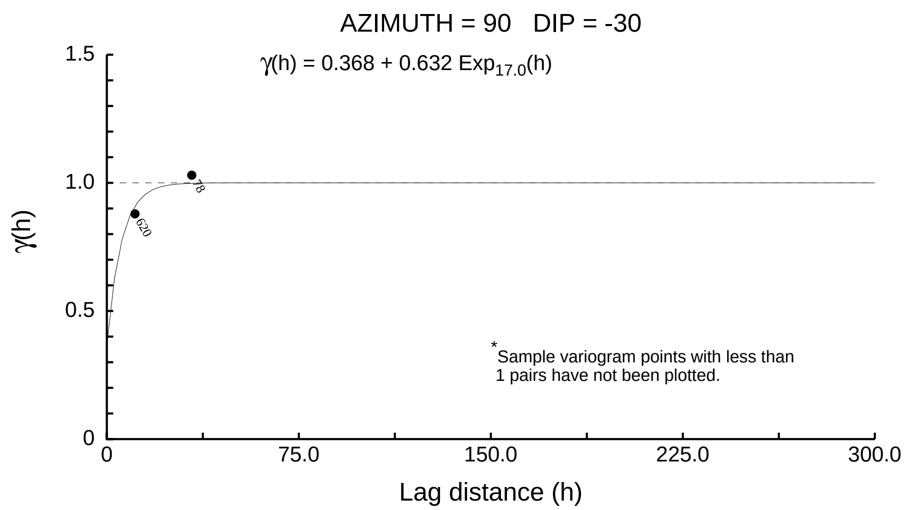
Zone 10 Directional Correlograms - 5m Comps

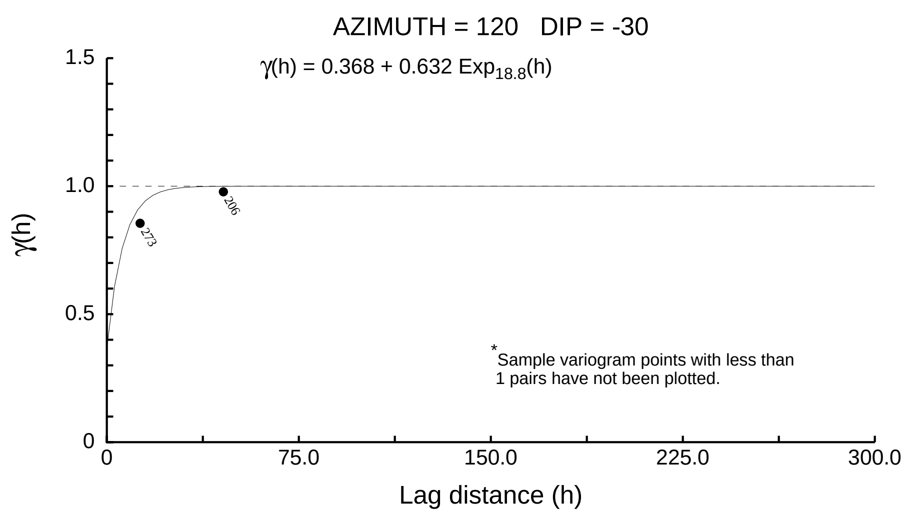


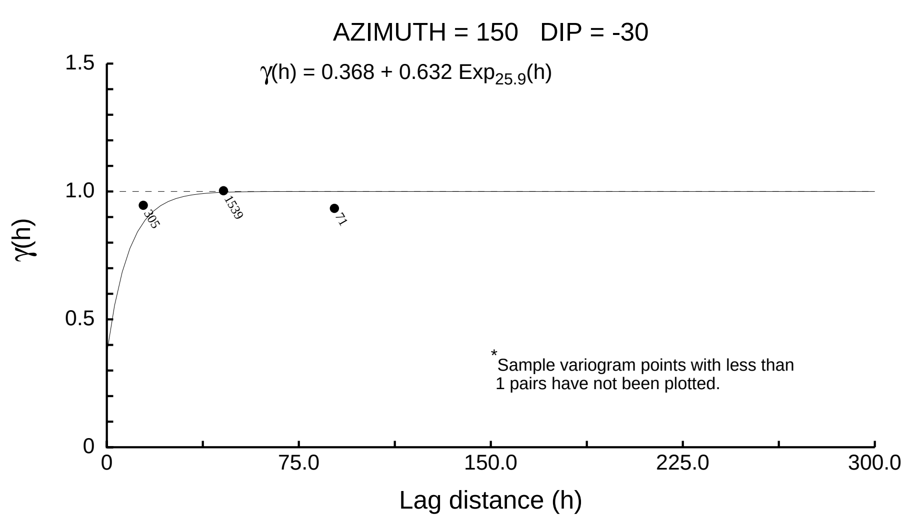




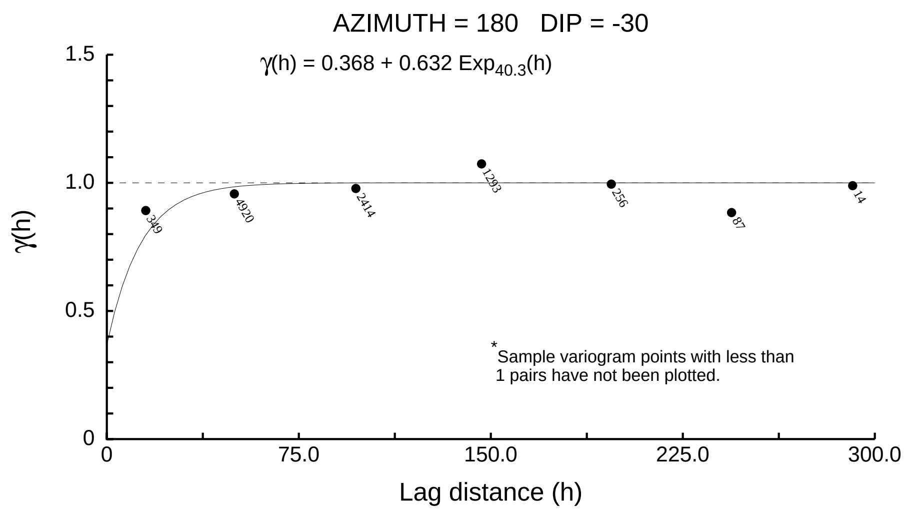
Zone 10 Directional Correlograms - 5m Comps

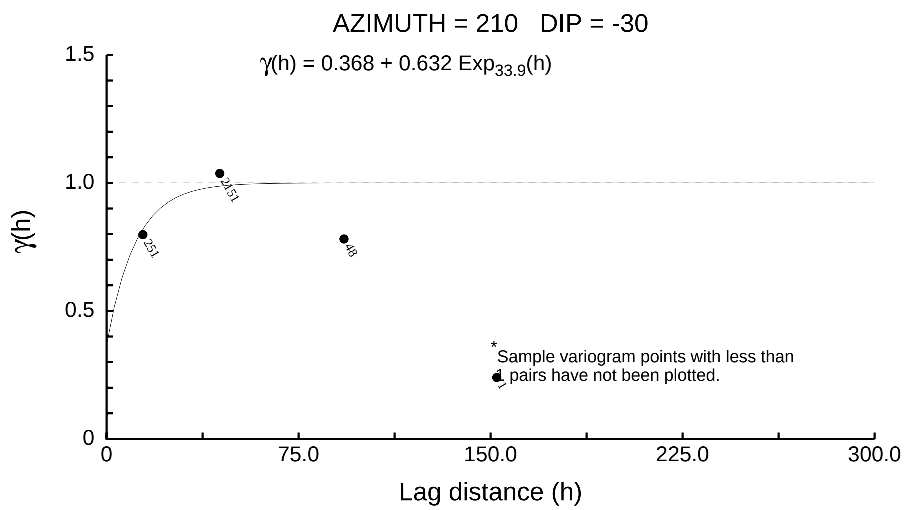


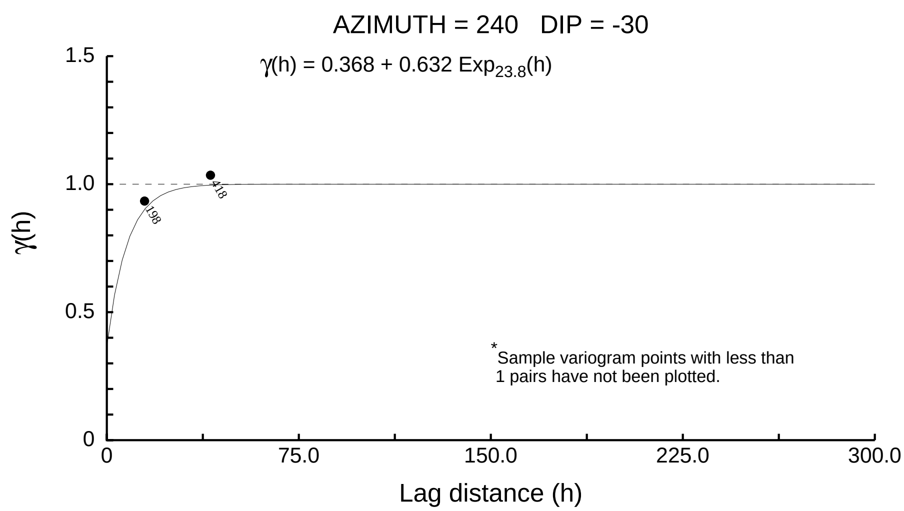




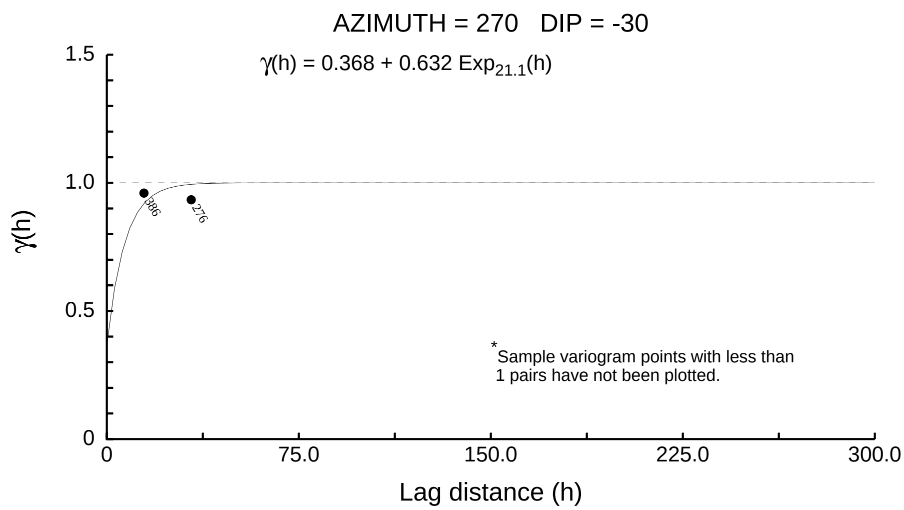
Zone 10 Directional Correlograms - 5m Comps

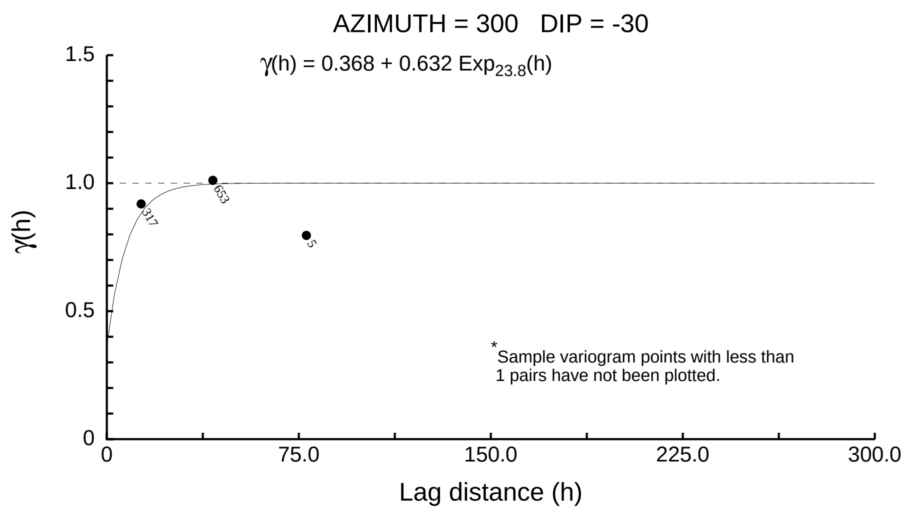


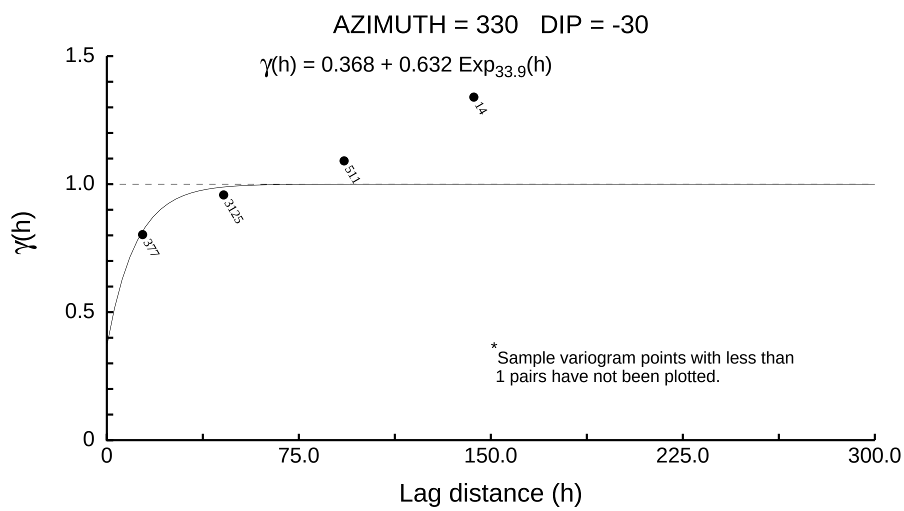




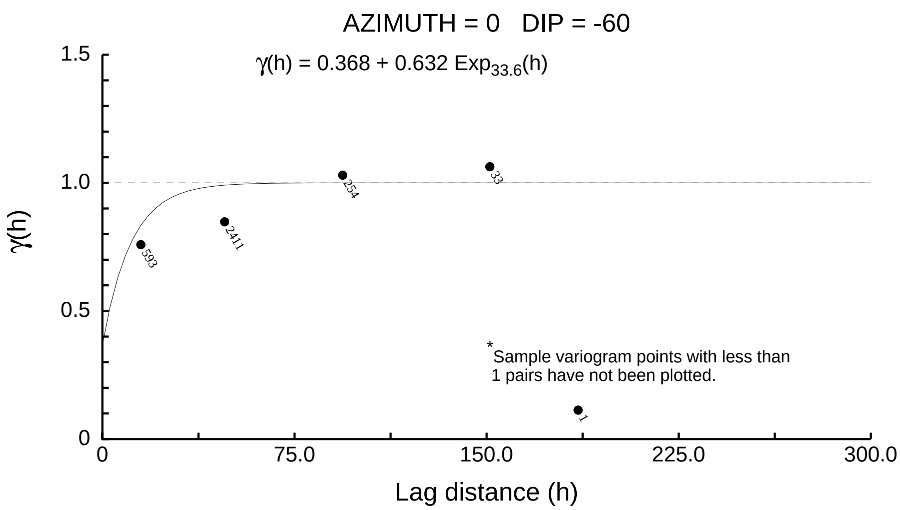
Zone 10 Directional Correlograms - 5m Comps

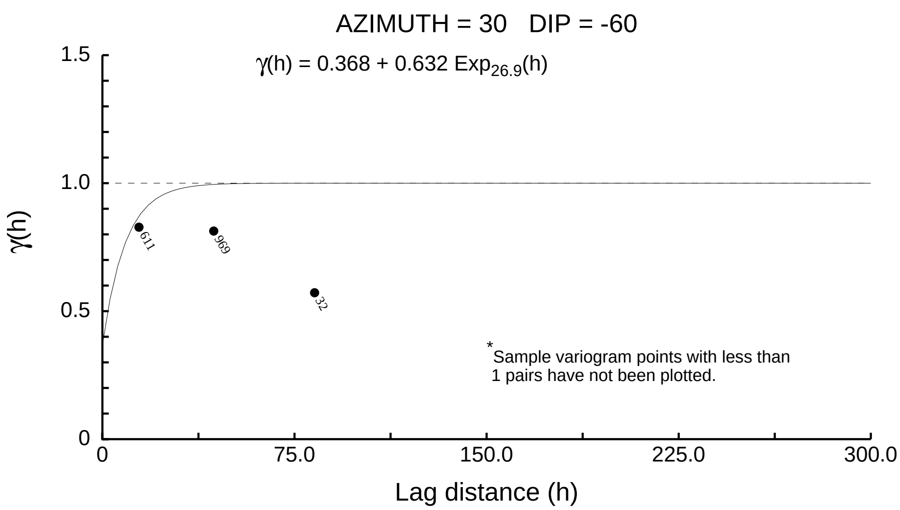


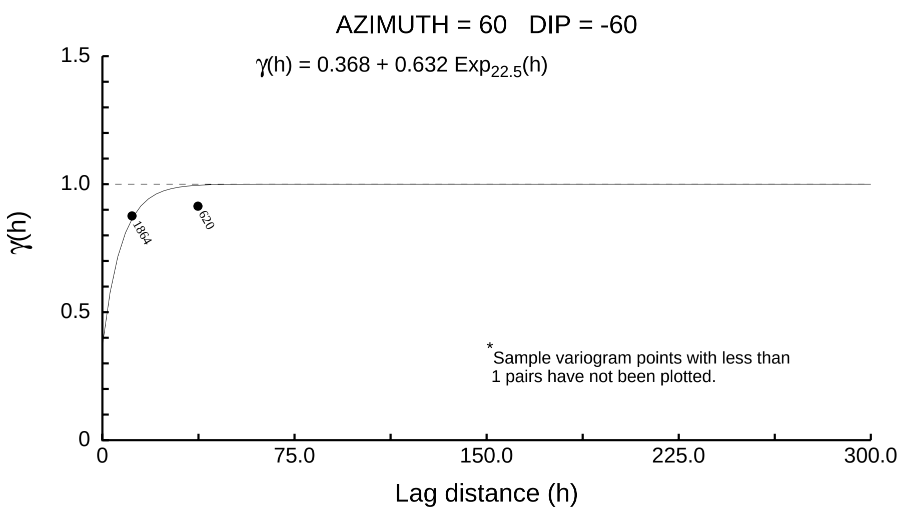




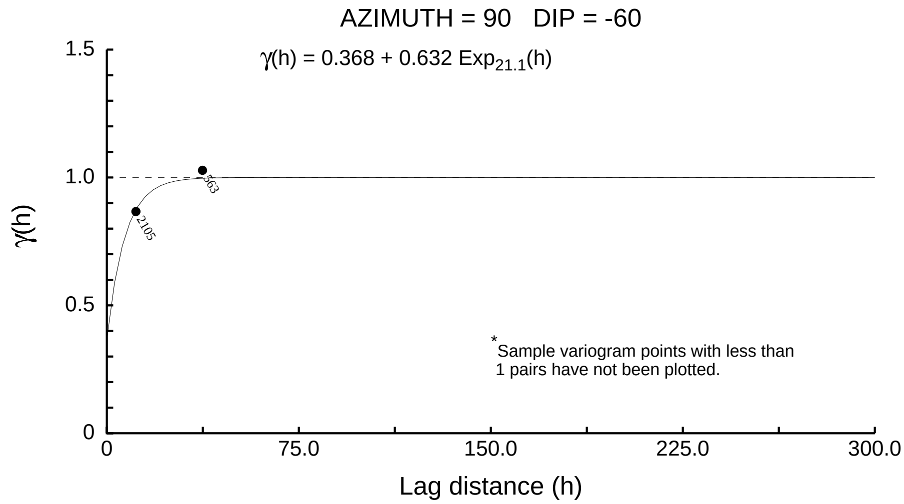
Zone 10 Directional Correlograms - 5m Comps

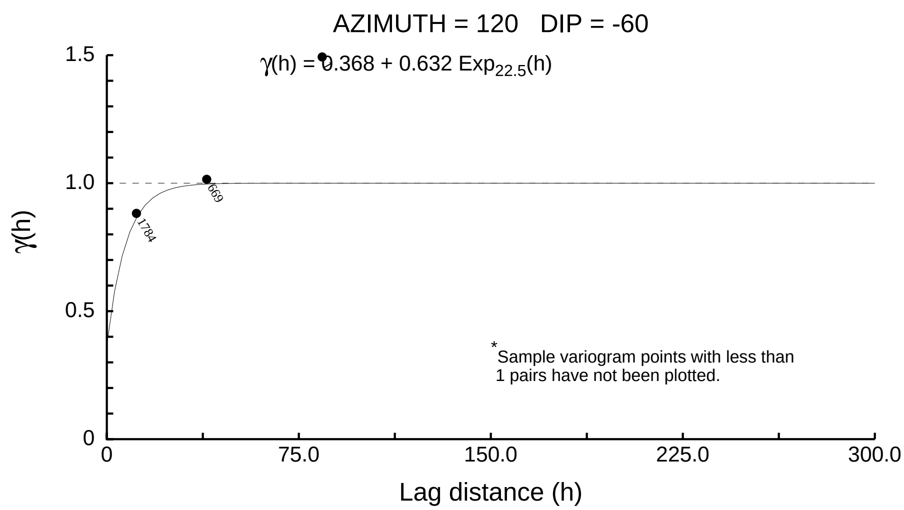


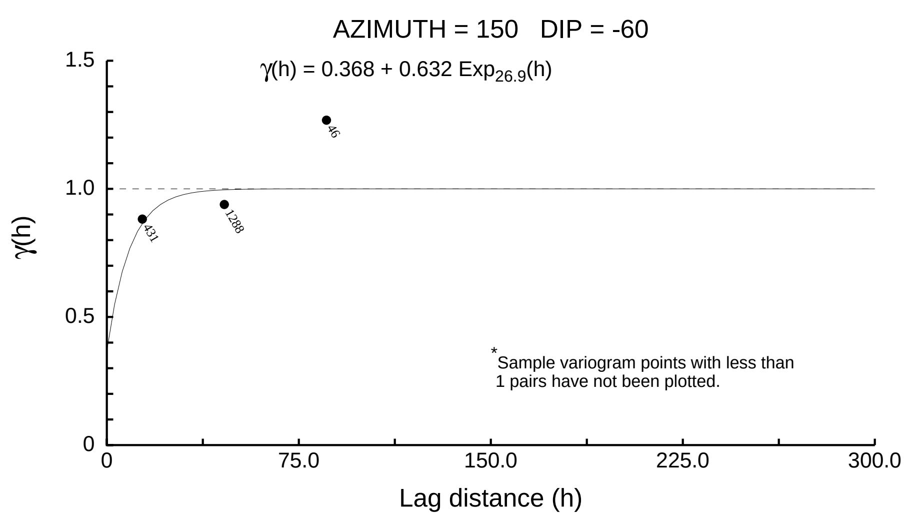




Zone 10 Directional Correlograms - 5m Comps







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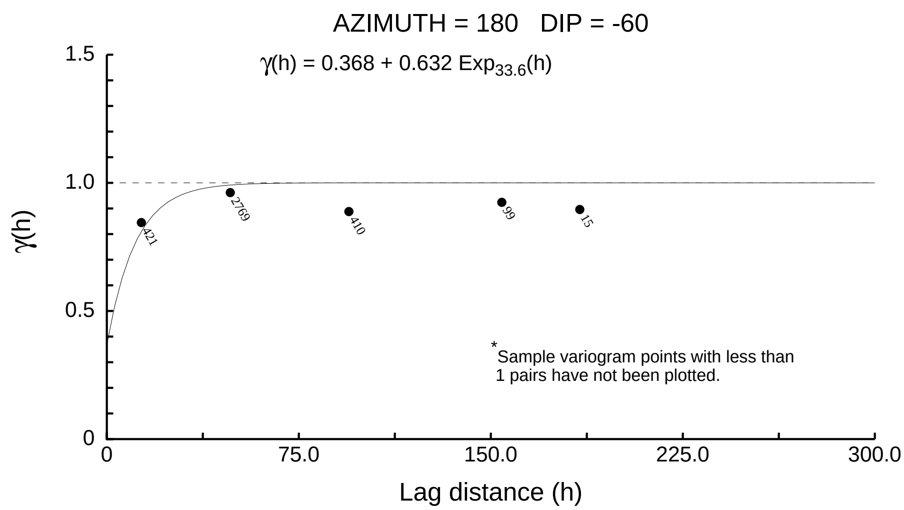
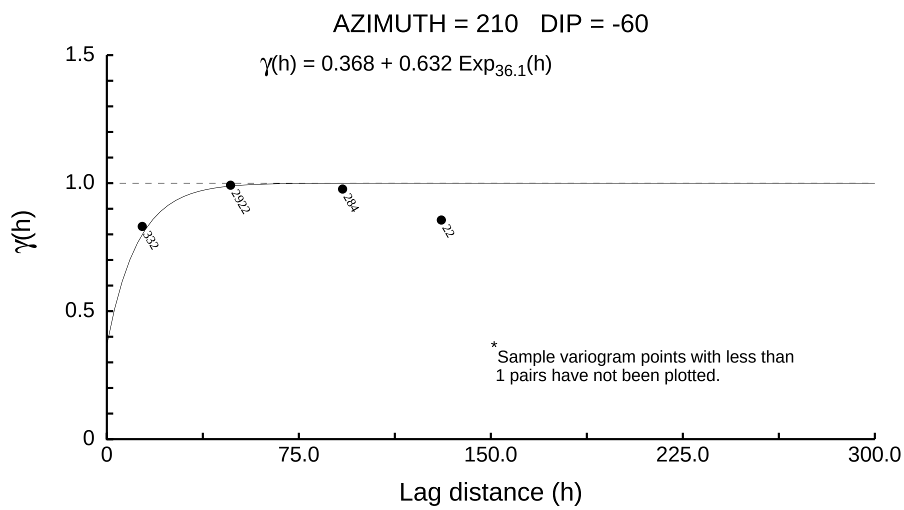
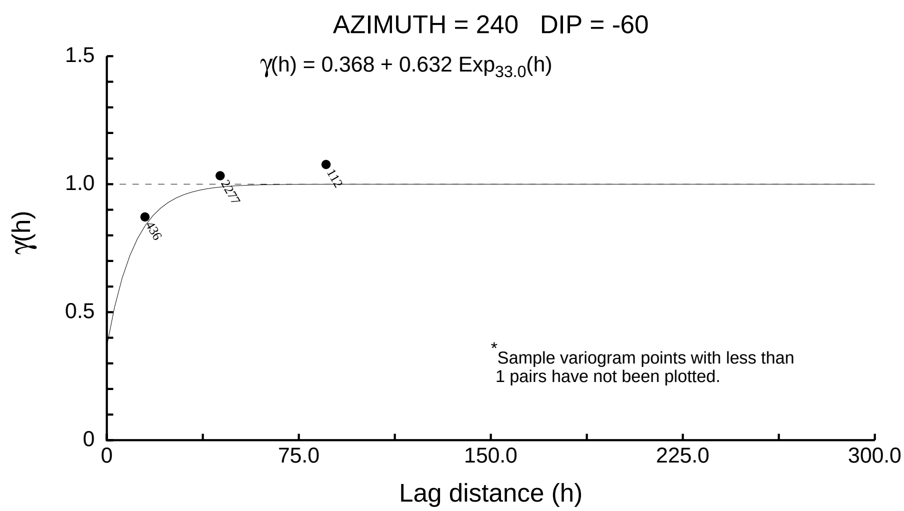
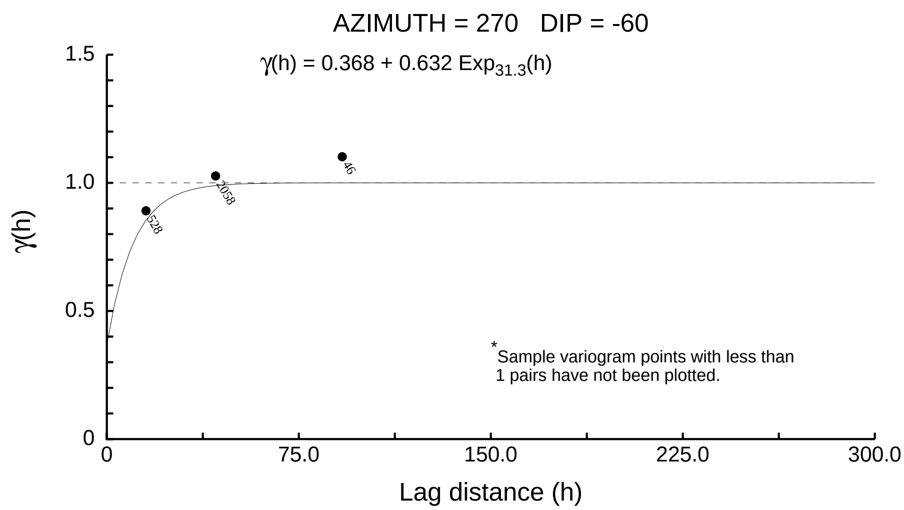
Zone 10 Directional Correlograms - 5m Comps

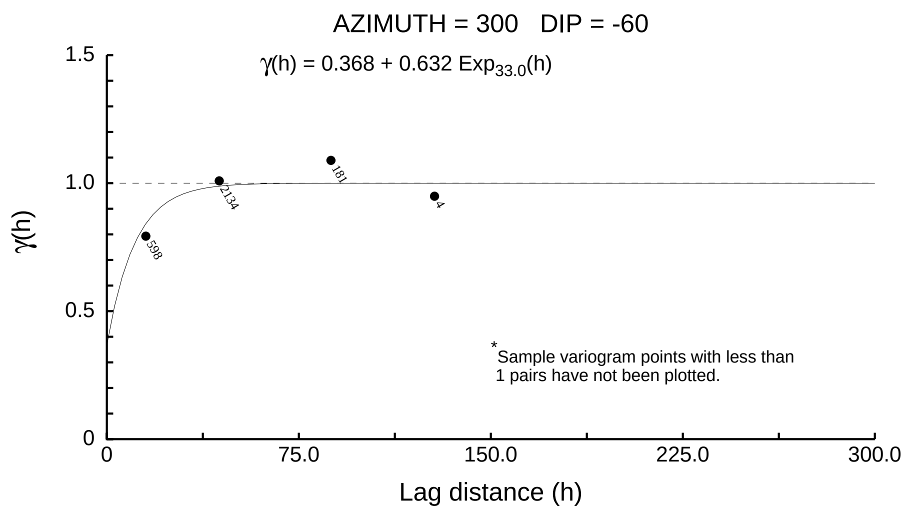


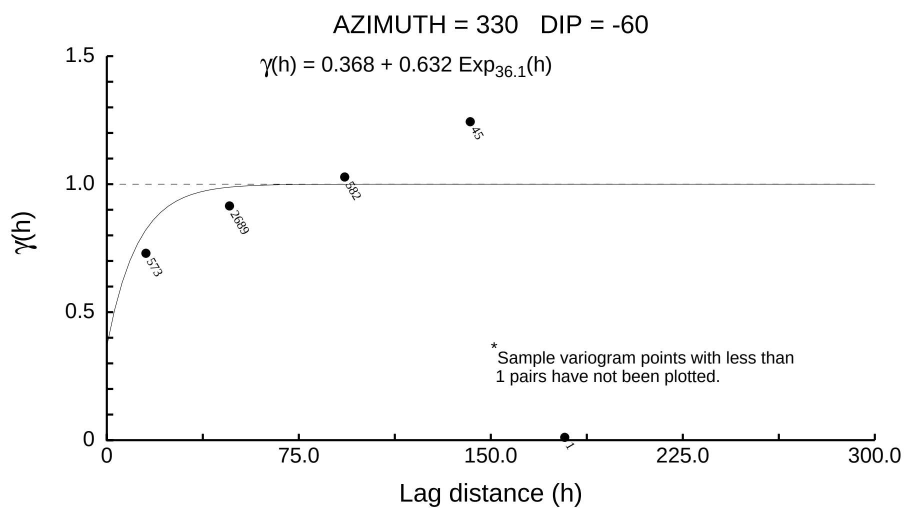




Zone 10 Directional Correlograms - 5m Comps







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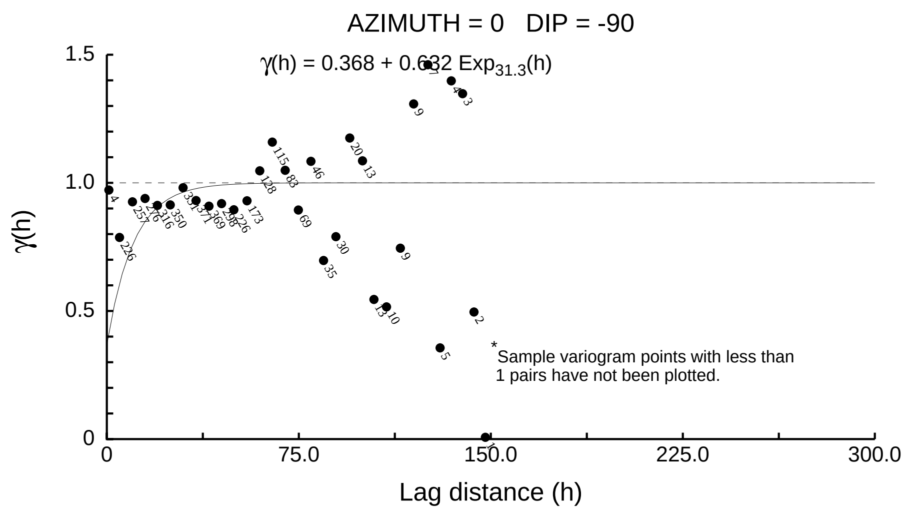
Zone 10 Directional Correlograms - 5m Comps



Zone 99 Directional Correlograms - 5m Comps

Medsystem and Vulcan Rotation Conventions

Nugget ==> 0.829
C1 ==> 0.171

First Structure -- Exponential with Practical Range

LH Rotation about the Z axis ==> 0
RH Rotation about the X’ axis ==> 0
LH Rotation about the Y’ axis ==> 75

Range along the Z’ axis ==> 82.1	Azimuth ==> 270	Dip ==> 15
Range along the Y’ axis ==> 79.2	Azimuth ==> 360	Dip ==> 0
Range along the X’ axis ==> 20.0	Azimuth ==> 90	Dip ==> 75

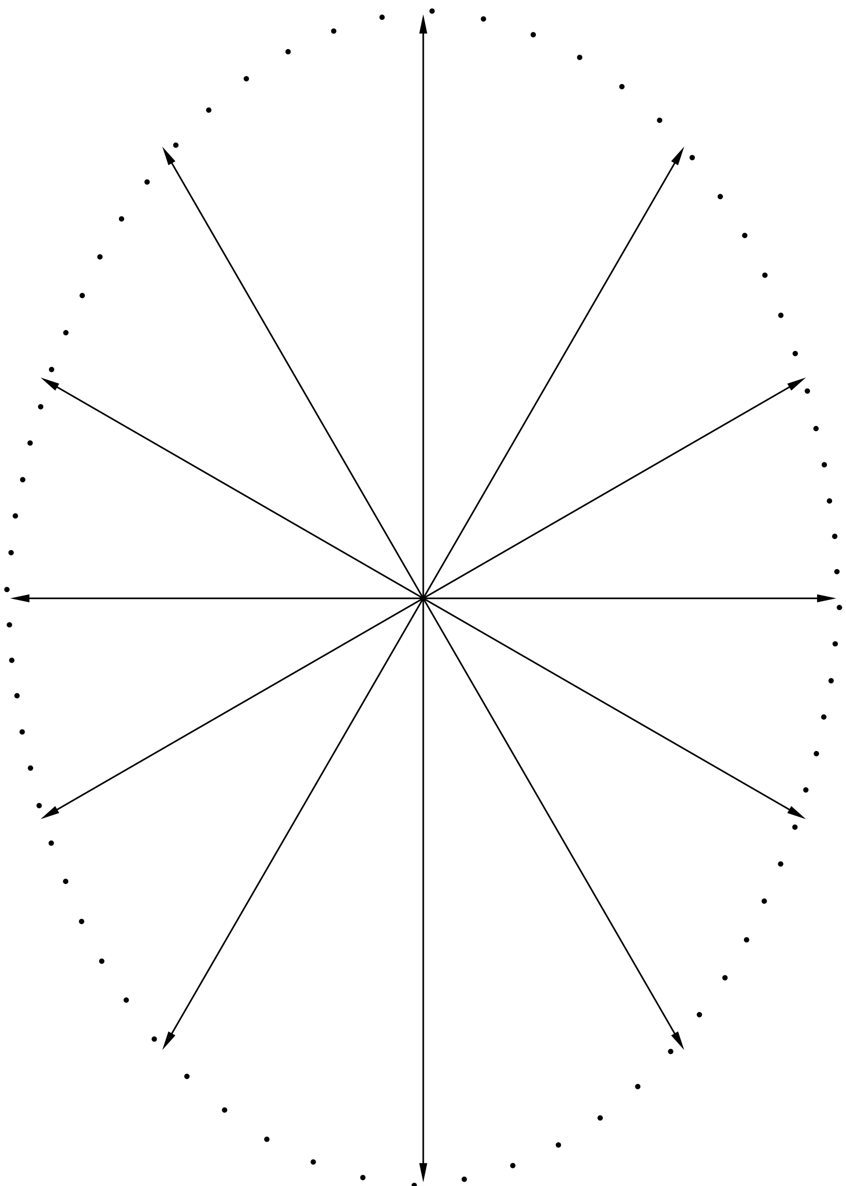
Modeling Criteria

Minimum number pairs req’d ==> 1
Sample variogram points weighted by # pairs

Zone 99 Directional Correlograms - 5m Comps

Structure Number 1

Rose Diagram of Ranges Dipping 0 Degrees
Scale:



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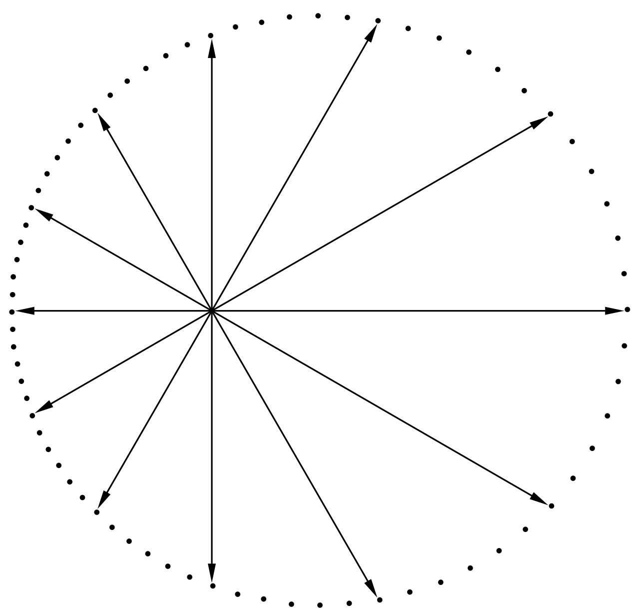
Zone 99 Directional Correlograms - 5m Comps

Structure Number 1

Rose Diagram of Ranges Dipping 30 Degrees
Scale:

80 Units

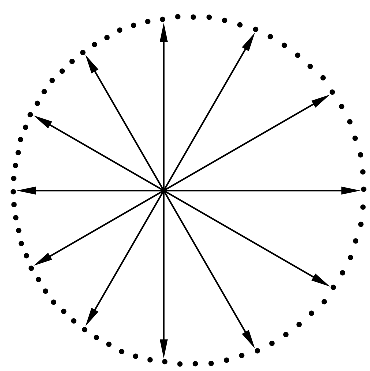


Zone 99 Directional Correlograms - 5m Comps

Structure Number 1

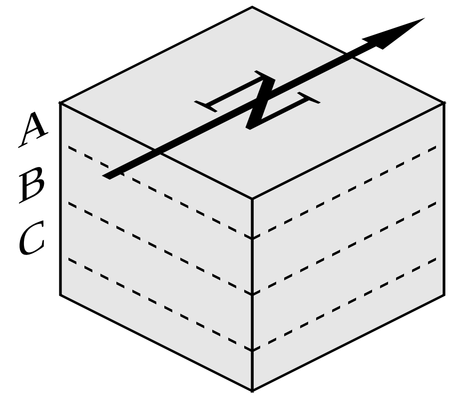
Rose Diagram of Ranges Dipping 60 Degrees
Scale:

80 Units

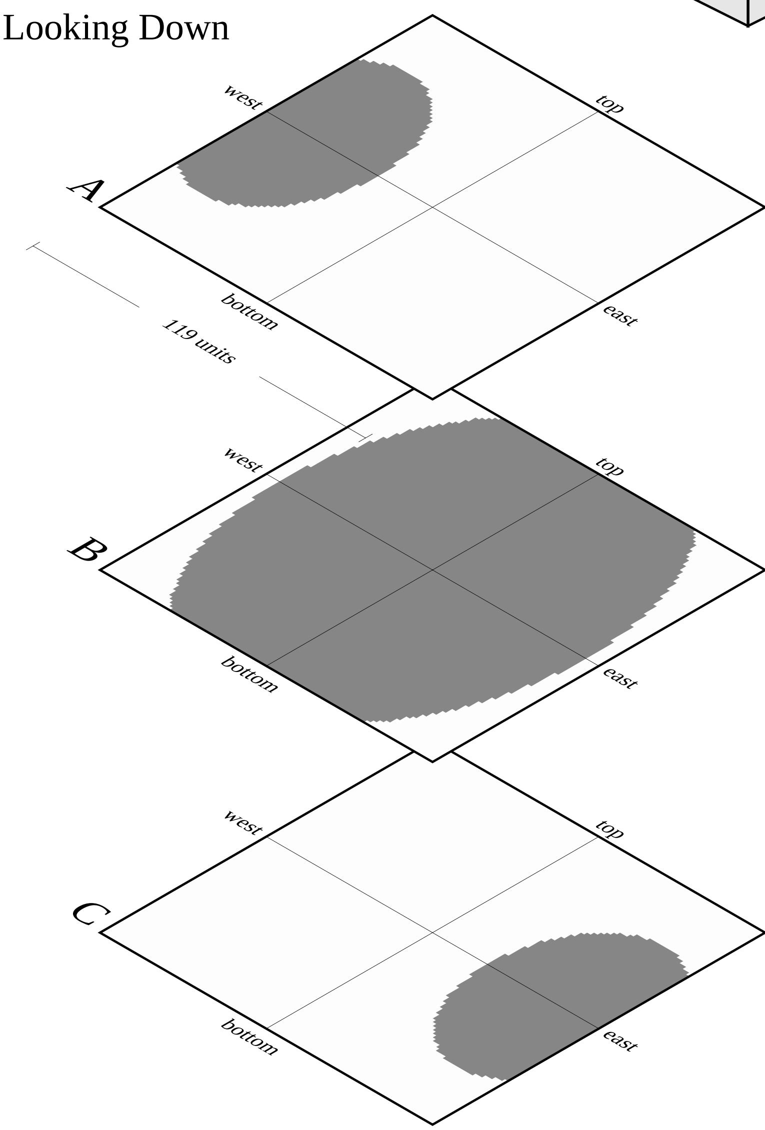


Horizontal Slices Through the Ellipsoids

Reference Cube



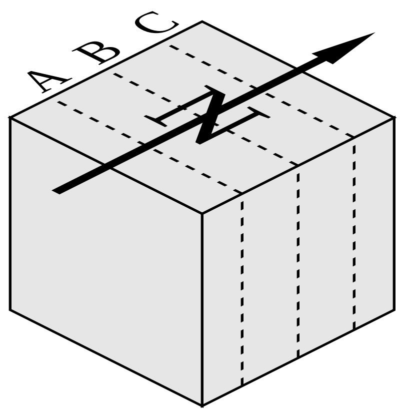
X-Y Planes Looking Down



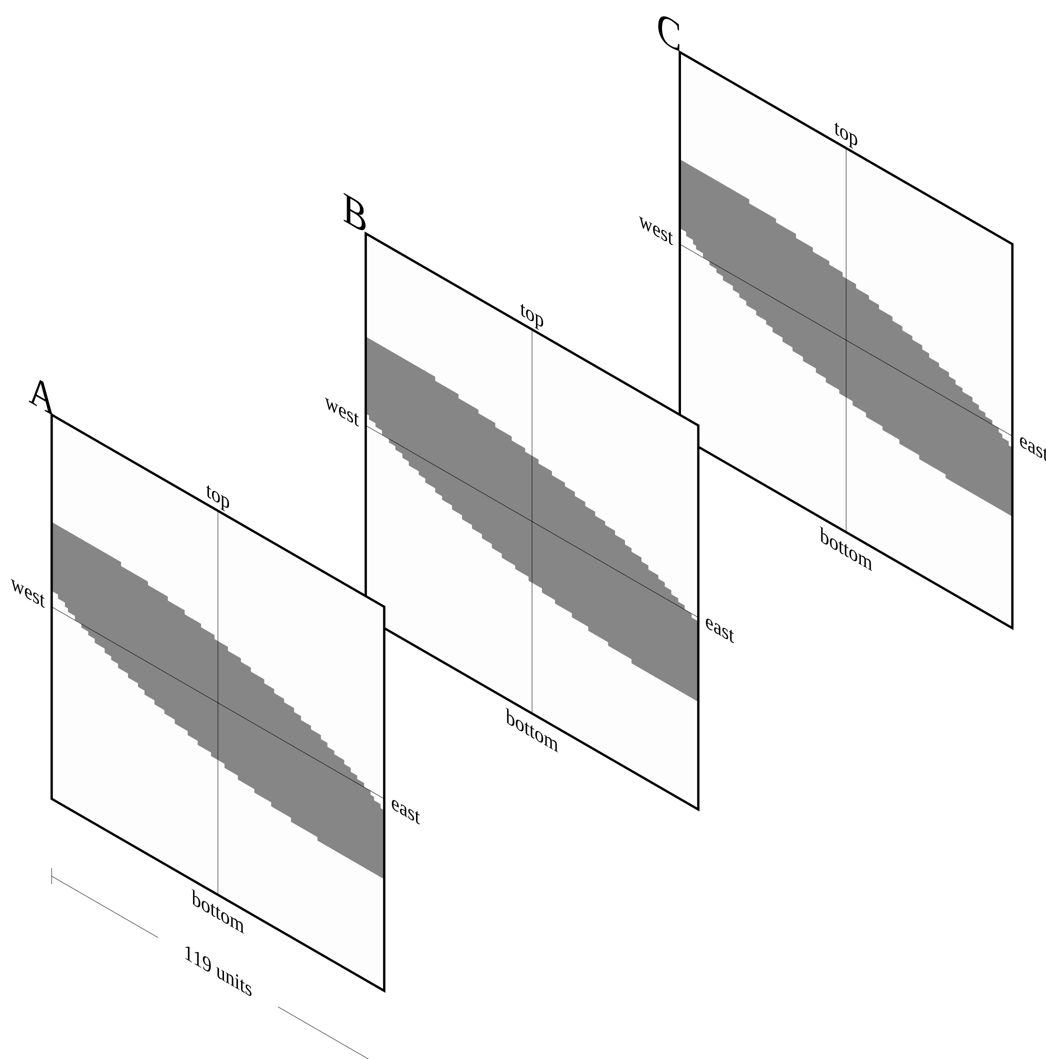
Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Cross Section Views Through the Ellipsoids

Reference Cube



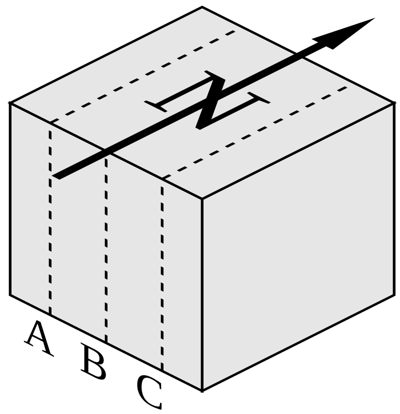
X-Z Planes Looking North



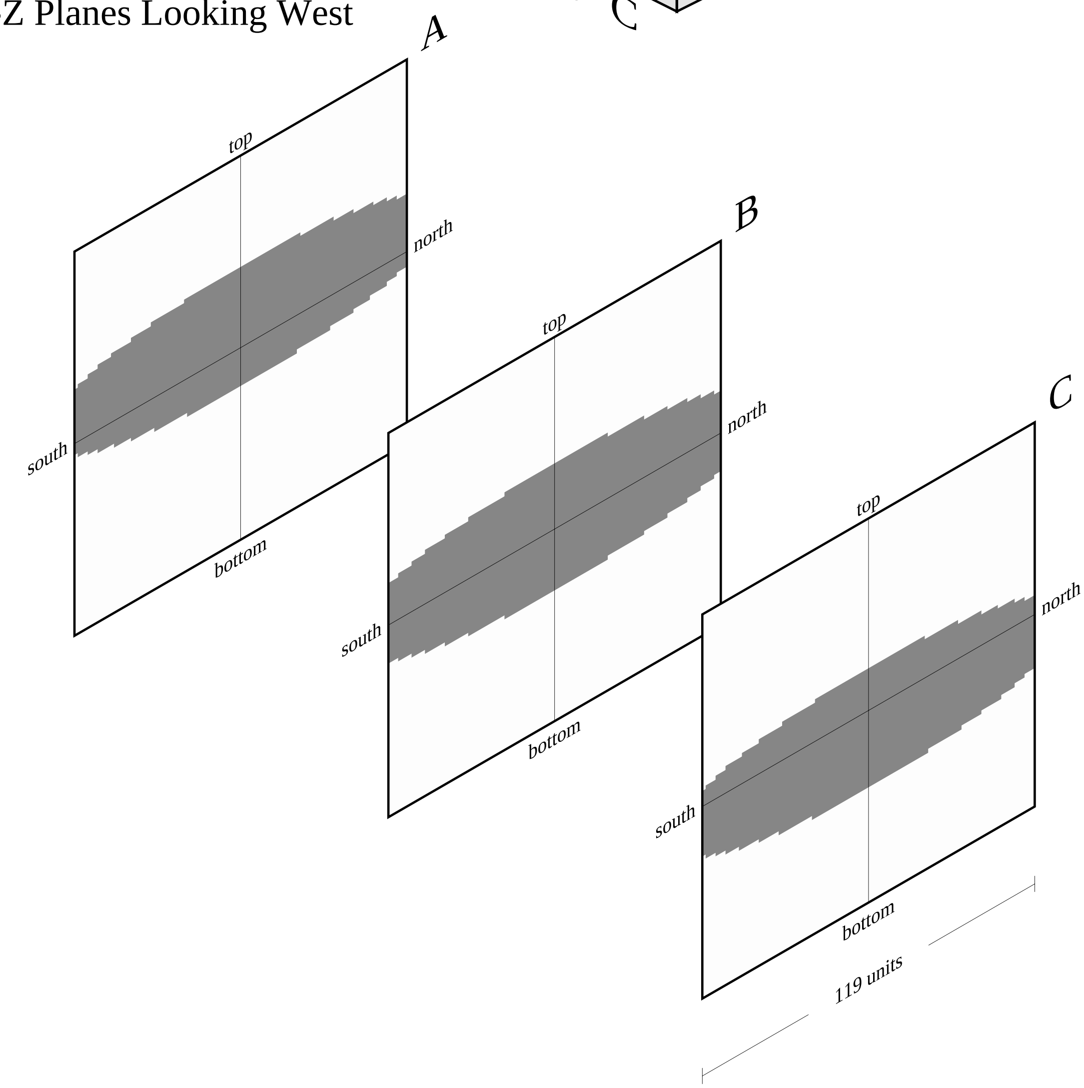
Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Long Section Views Through the Ellipsoids

Reference Cube

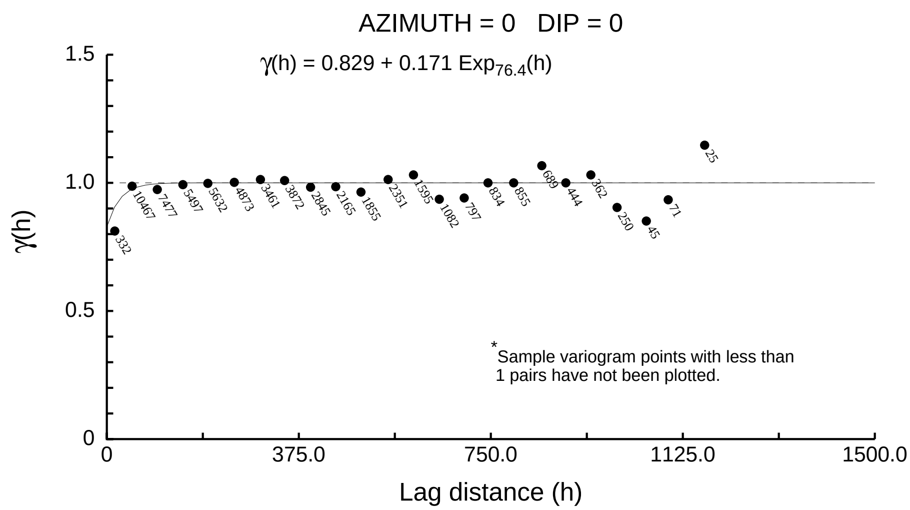


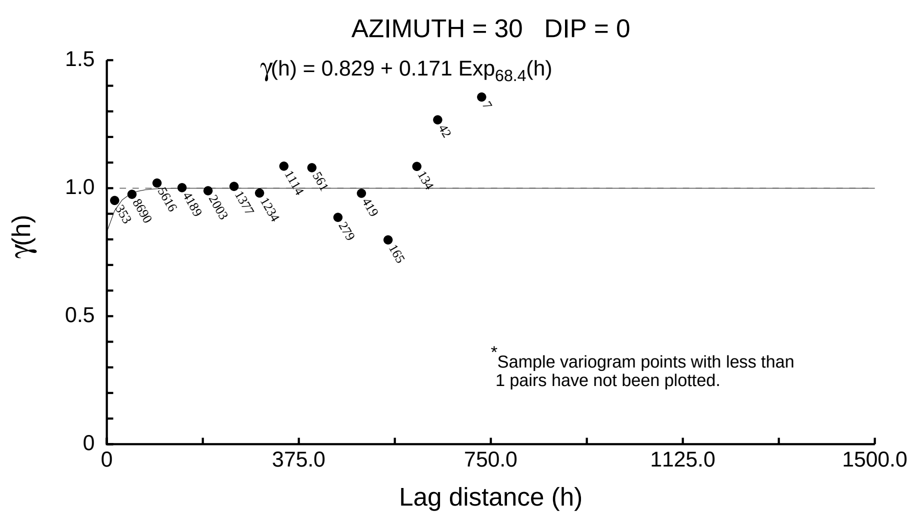
Y-Z Planes Looking West

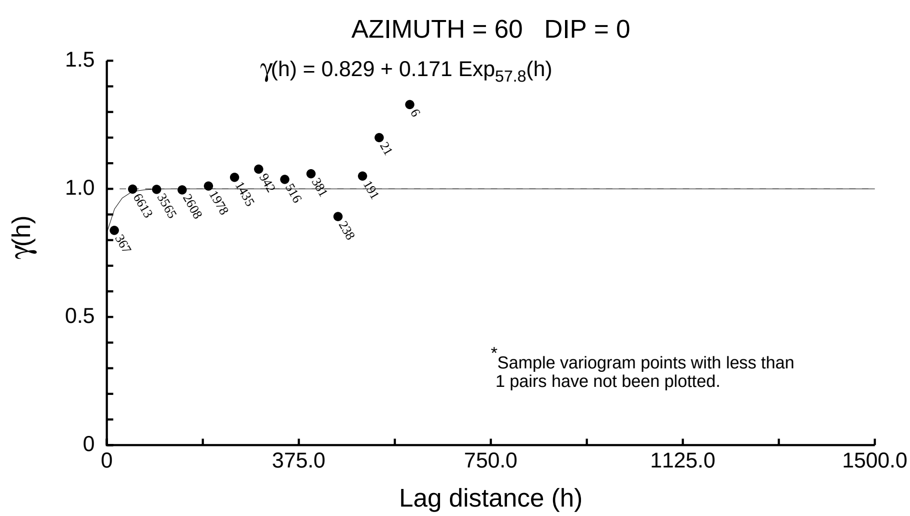


Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

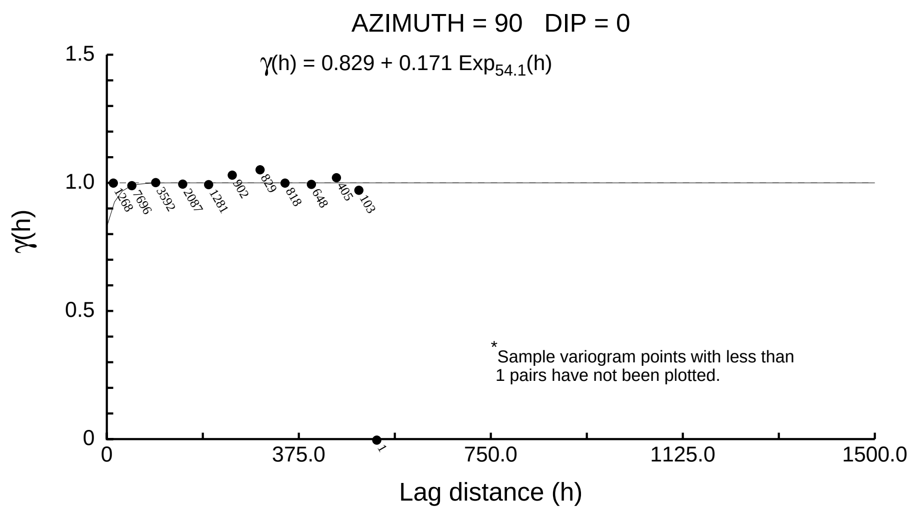
Zone 99 Directional Correlograms - 5m Comps

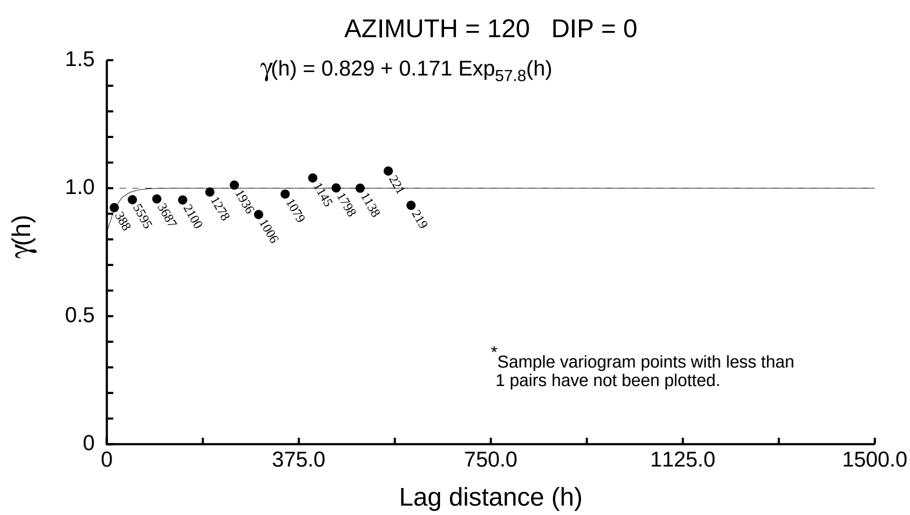


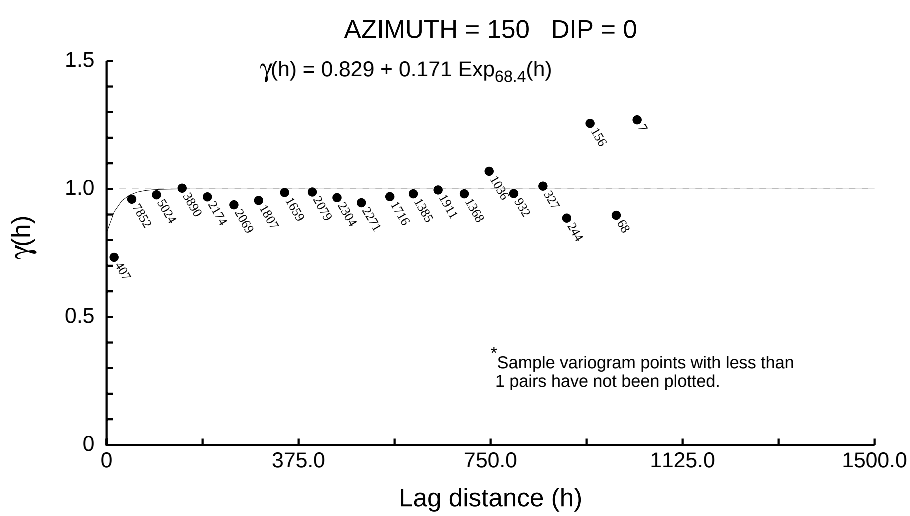




Zone 99 Directional Correlograms - 5m Comps







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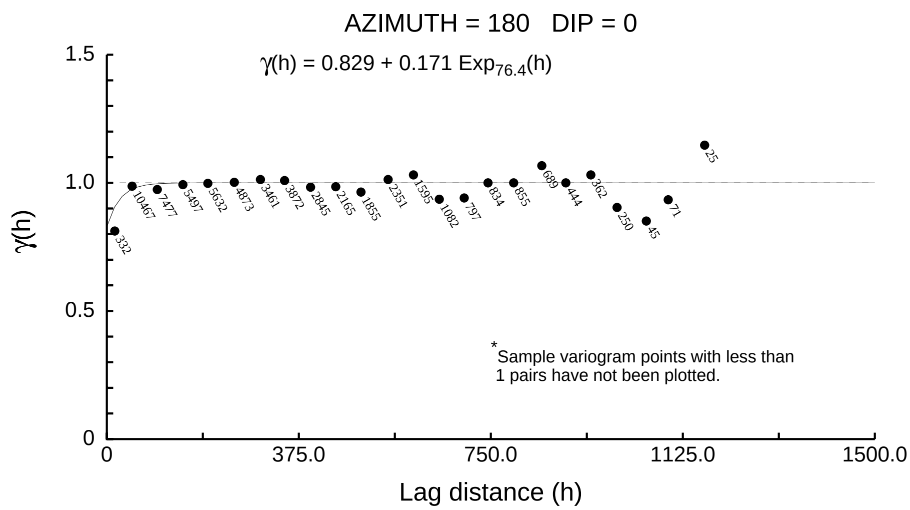
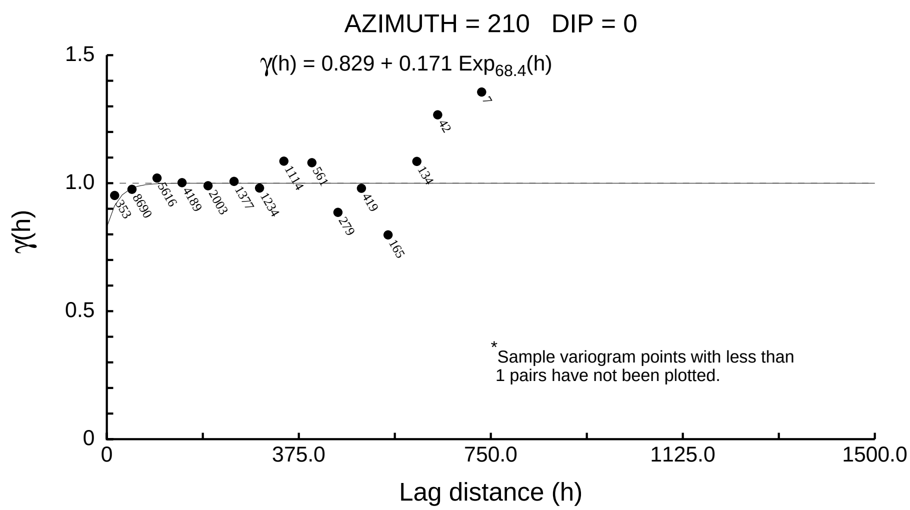
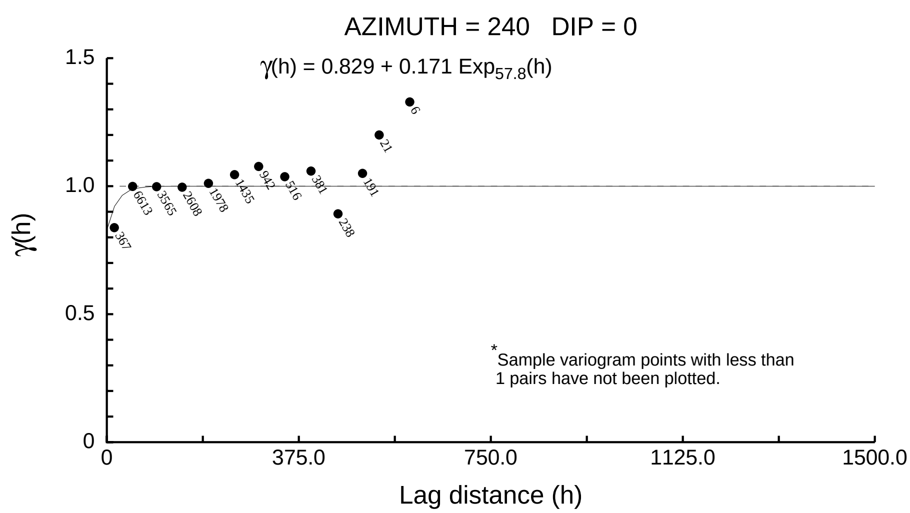
Zone 99 Directional Correlograms - 5m Comps







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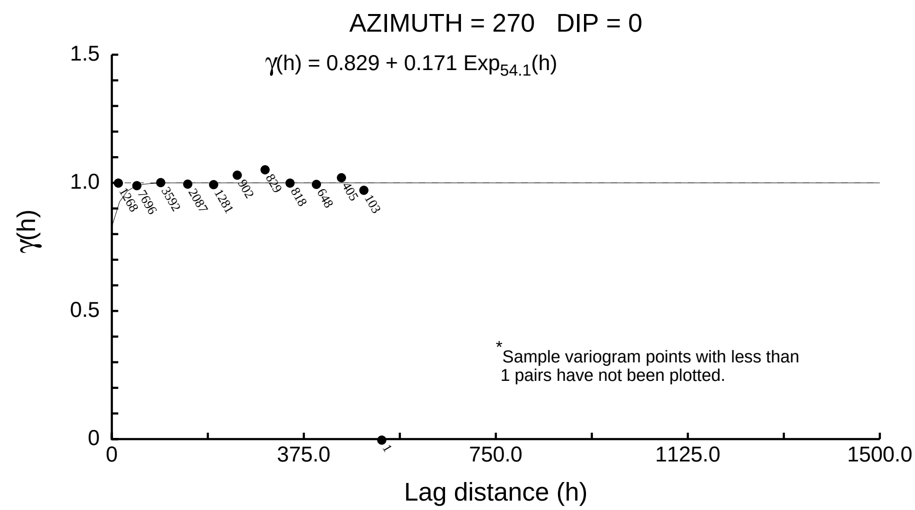
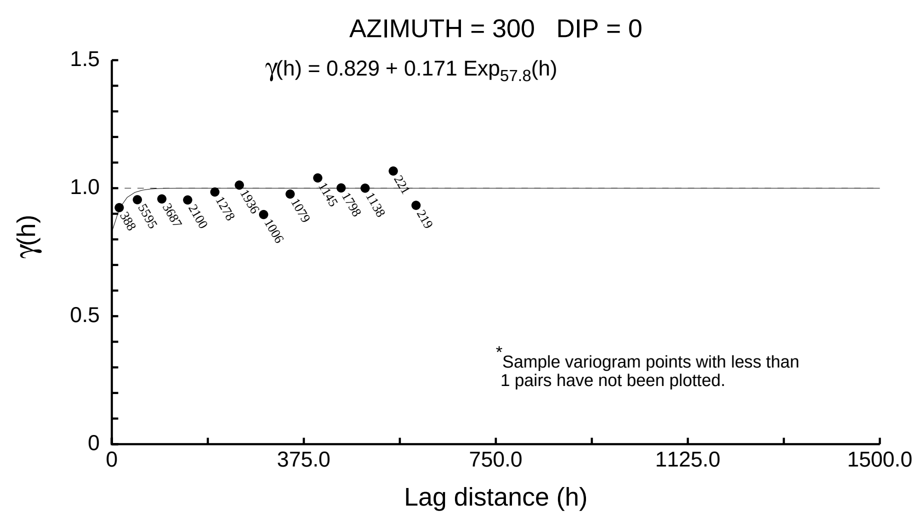
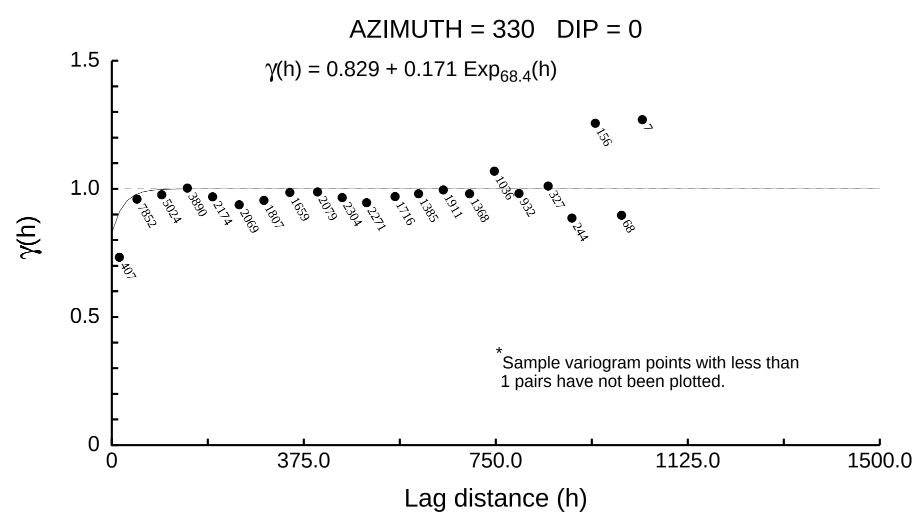
Zone 99 Directional Correlograms - 5m Comps







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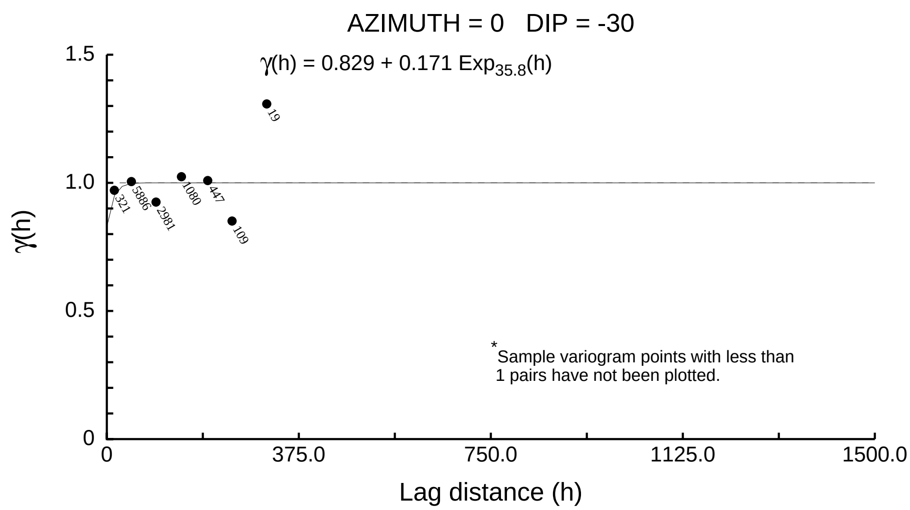
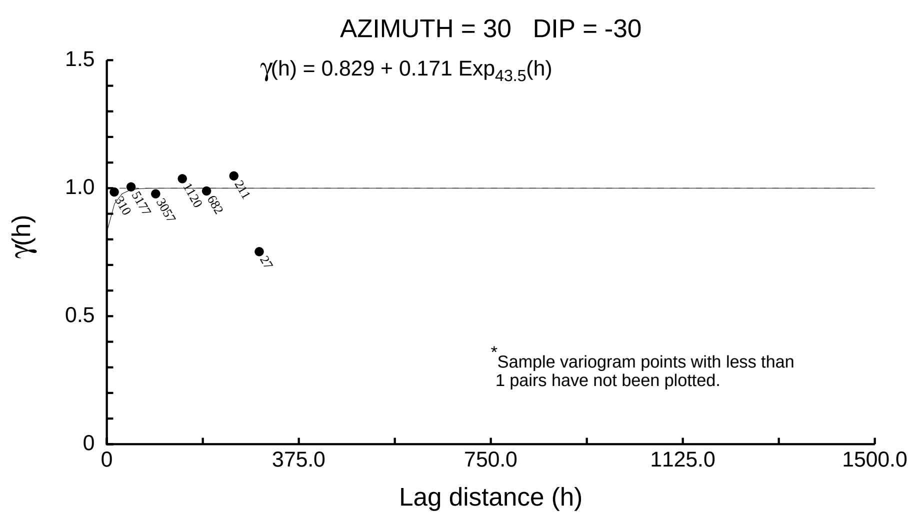
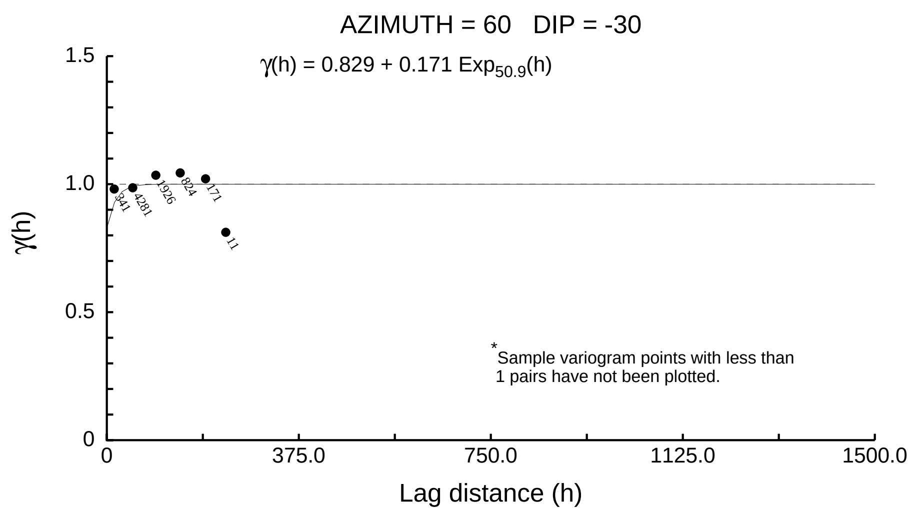
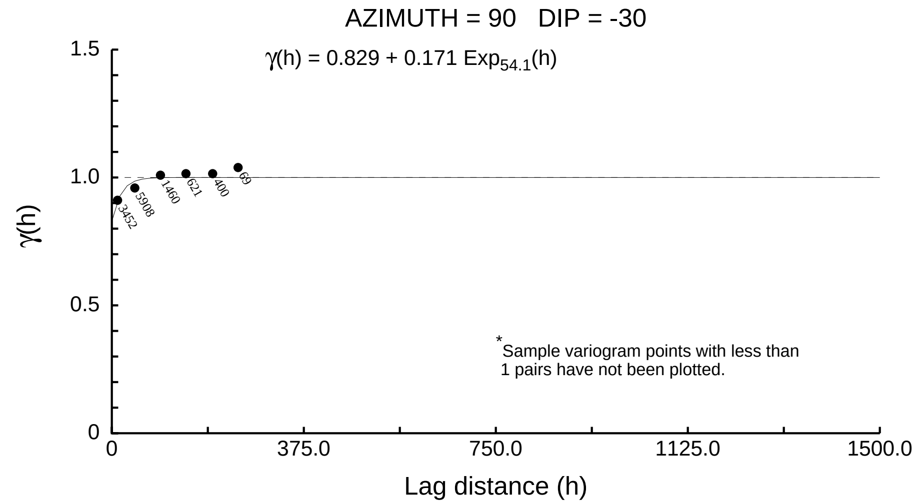
Zone 99 Directional Correlograms - 5m Comps

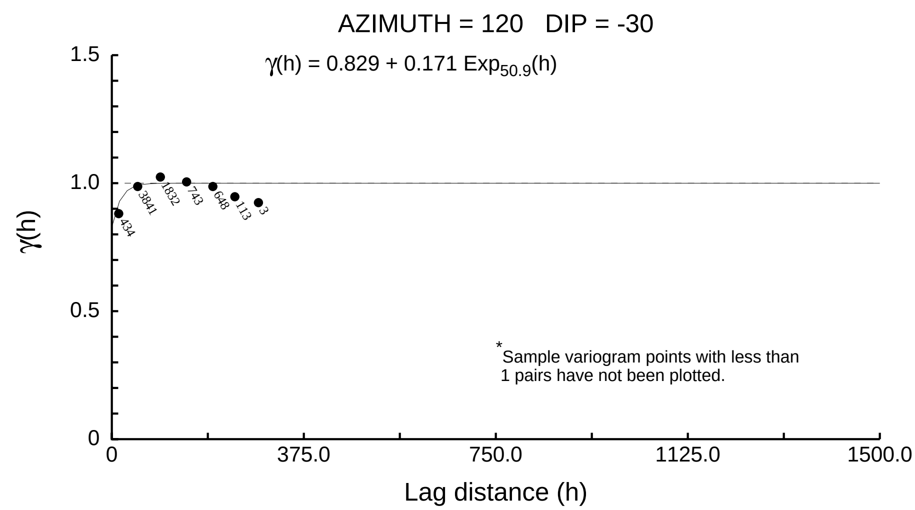


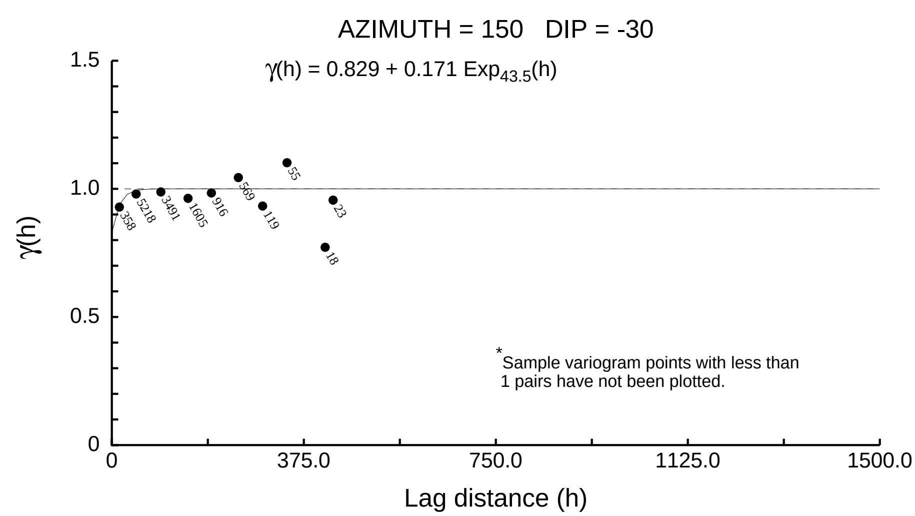




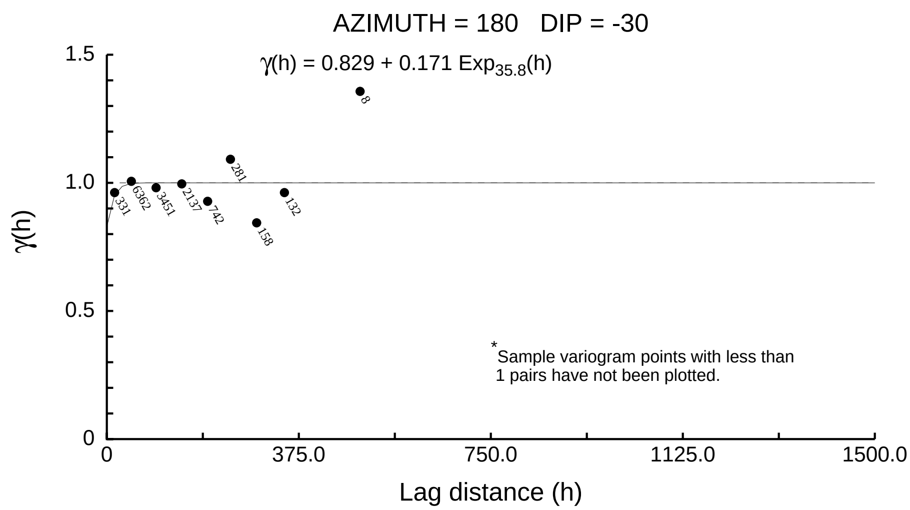
Zone 99 Directional Correlograms - 5m Comps

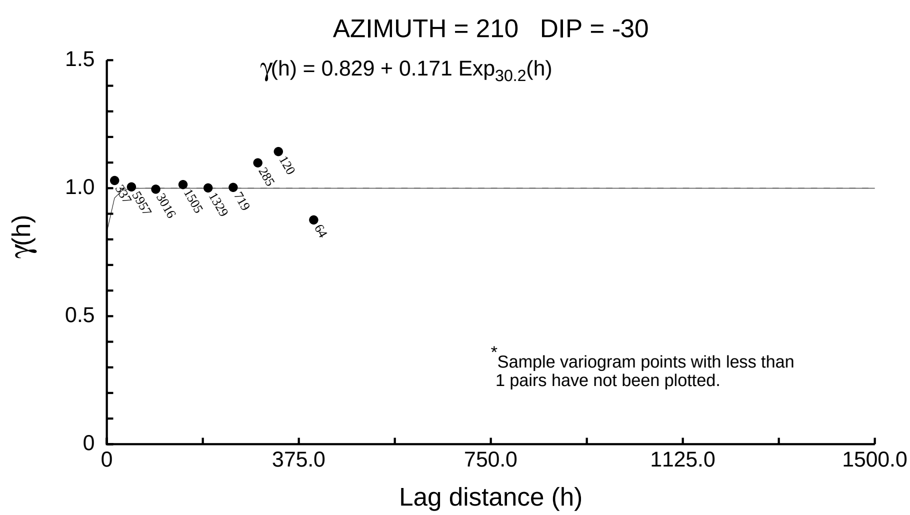


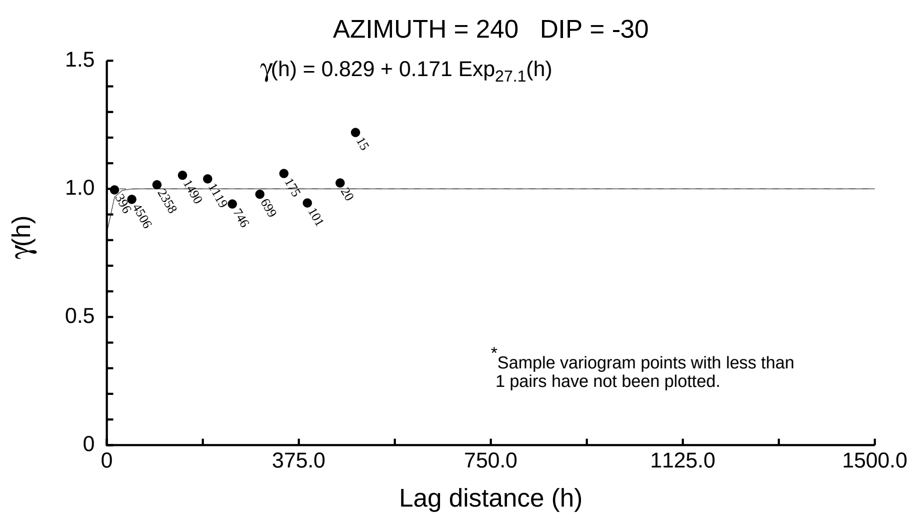




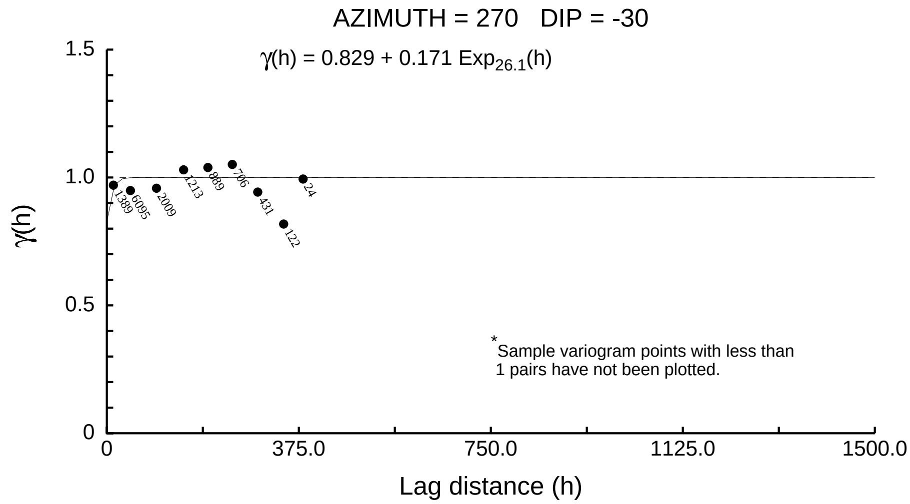
Zone 99 Directional Correlograms - 5m Comps

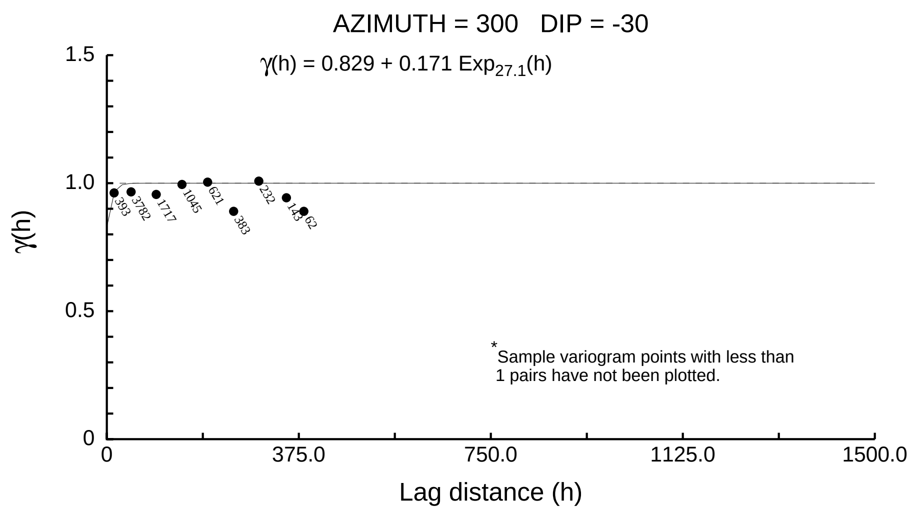


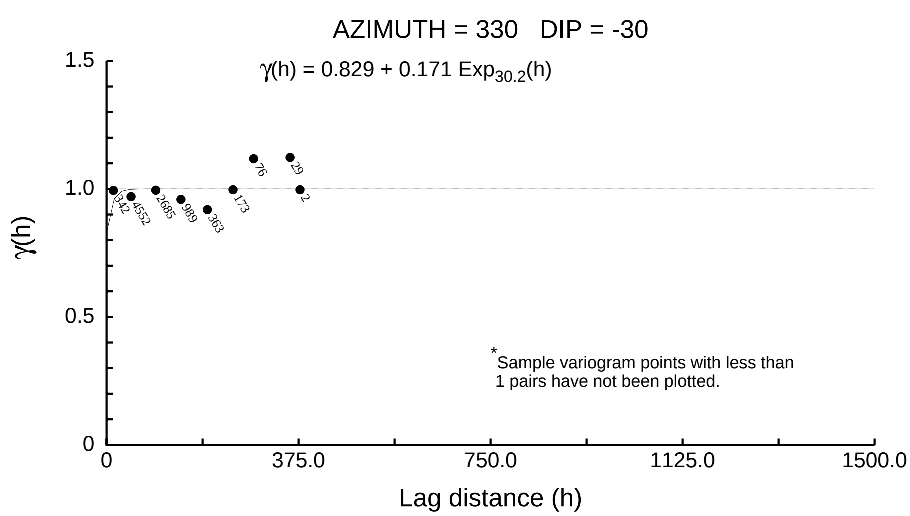




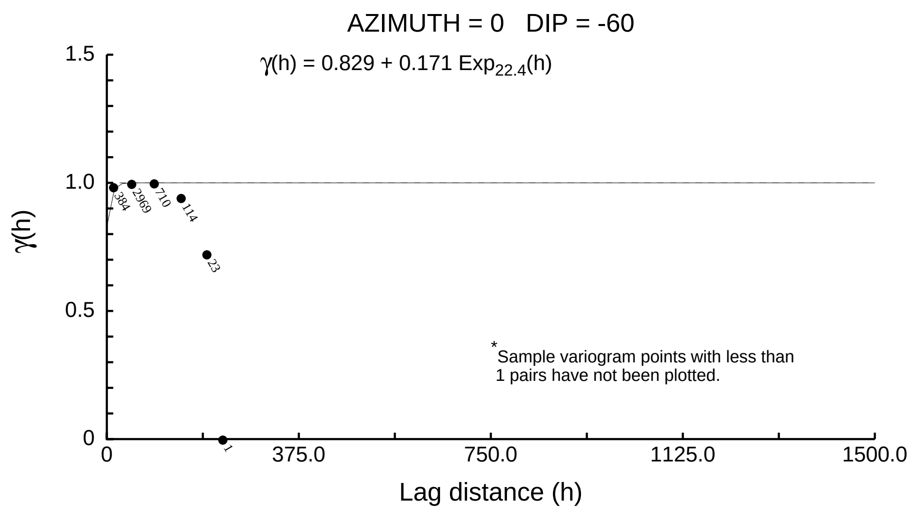
Zone 99 Directional Correlograms - 5m Comps

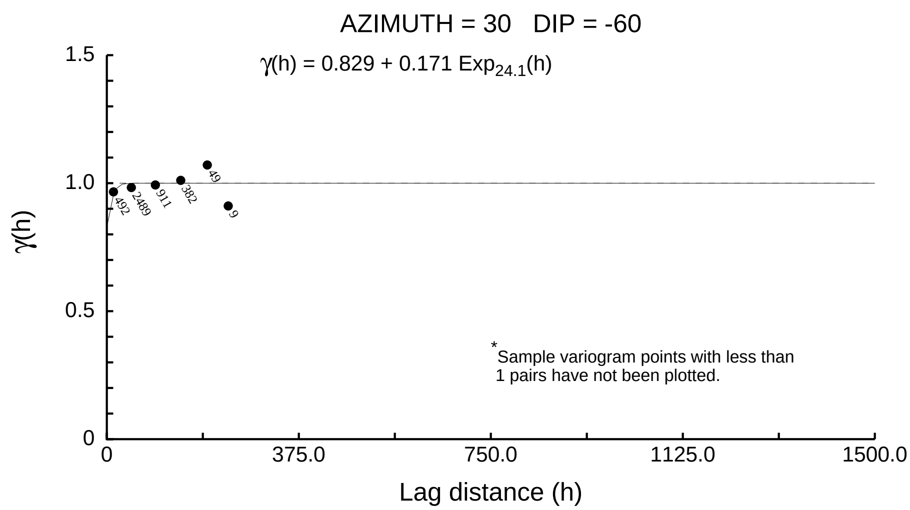


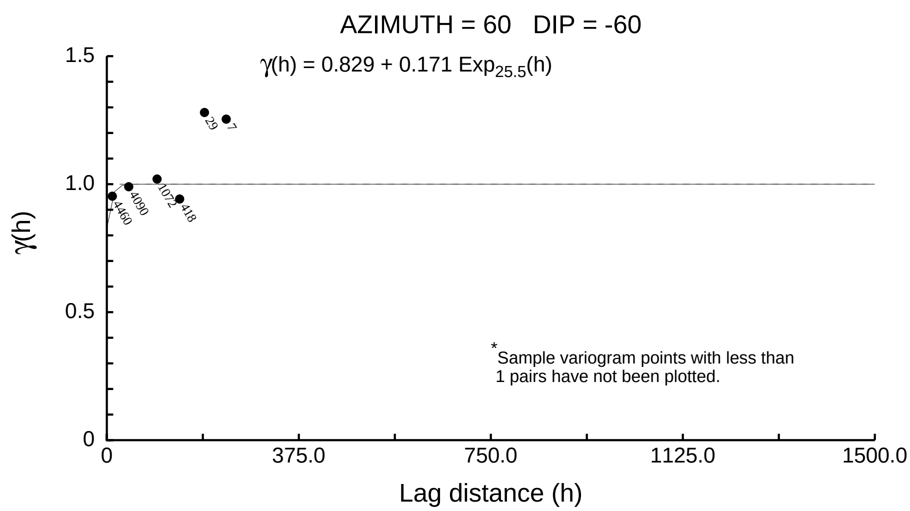




Zone 99 Directional Correlograms - 5m Comps







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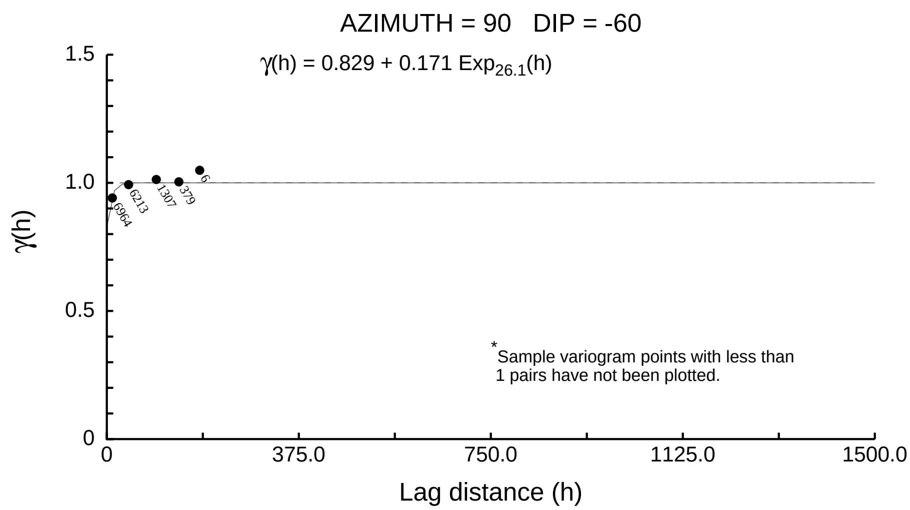
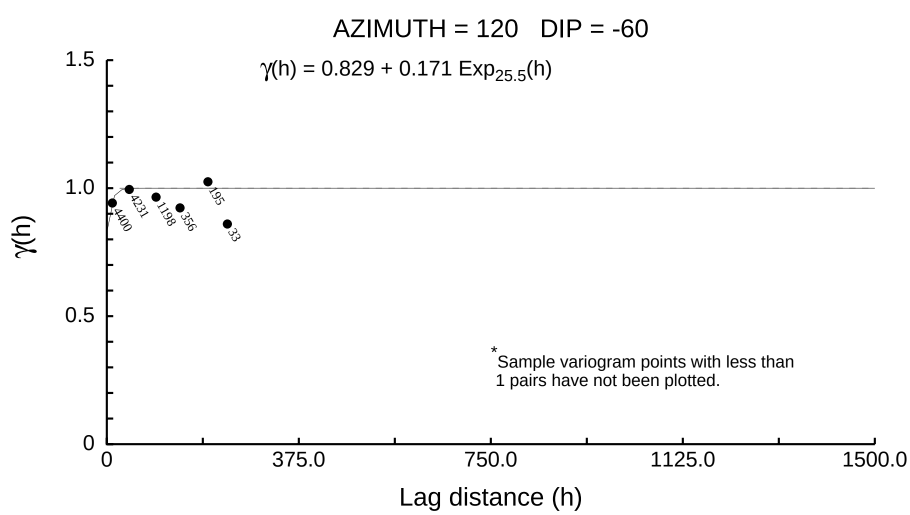
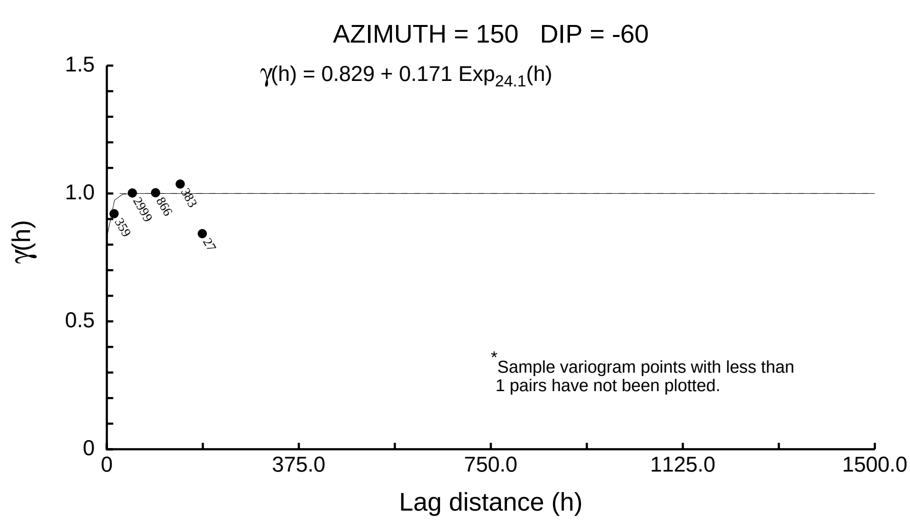
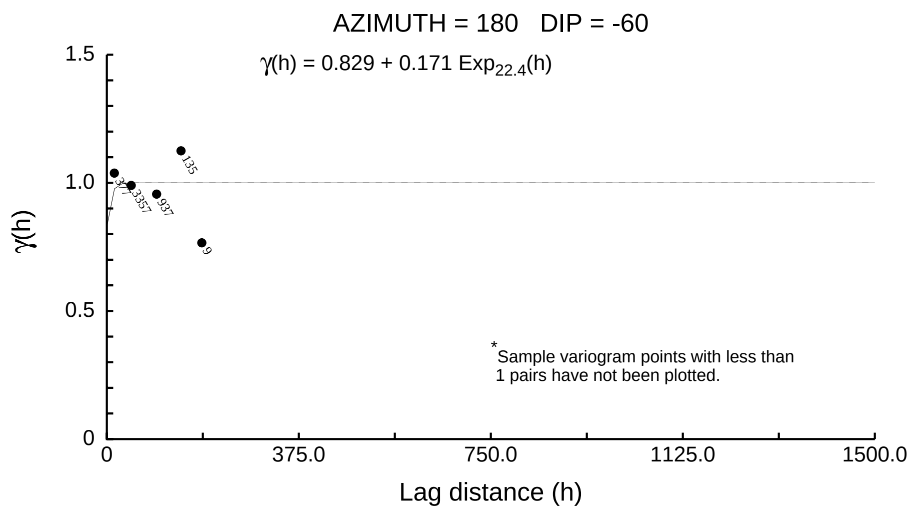
Zone 99 Directional Correlograms - 5m Comps

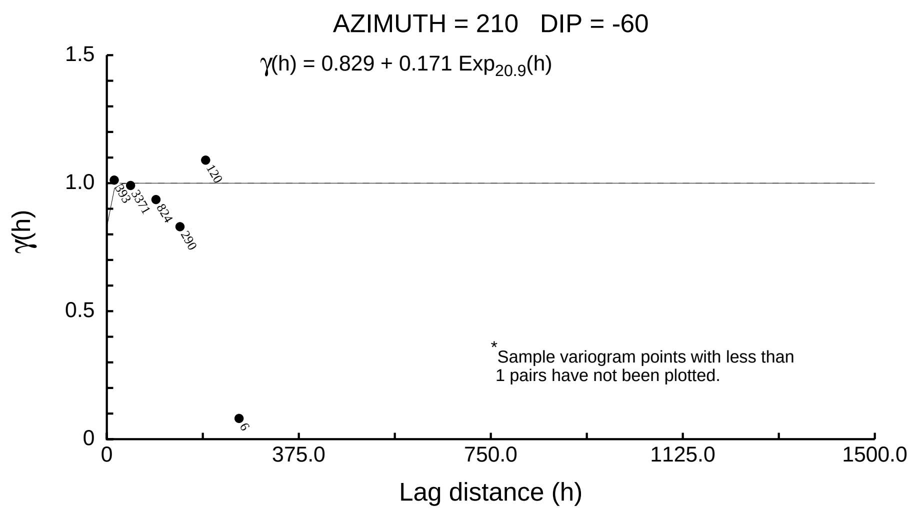


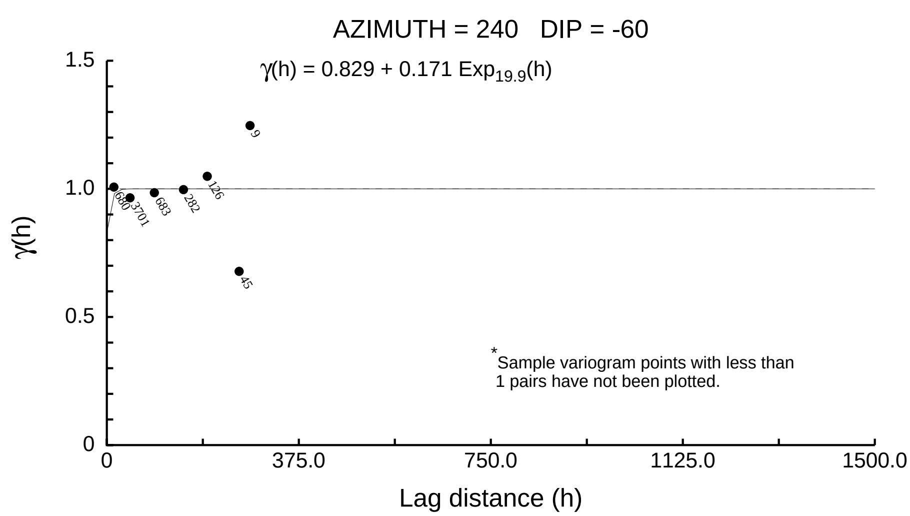




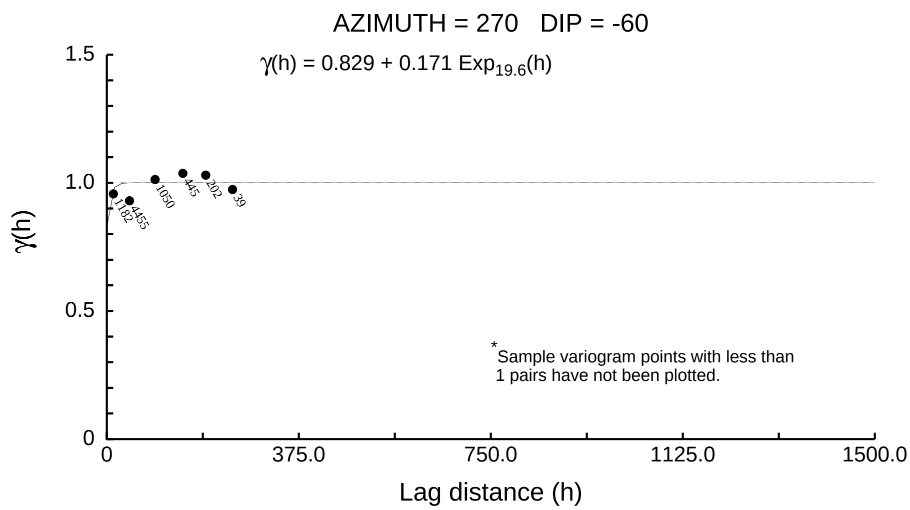
Zone 99 Directional Correlograms - 5m Comps

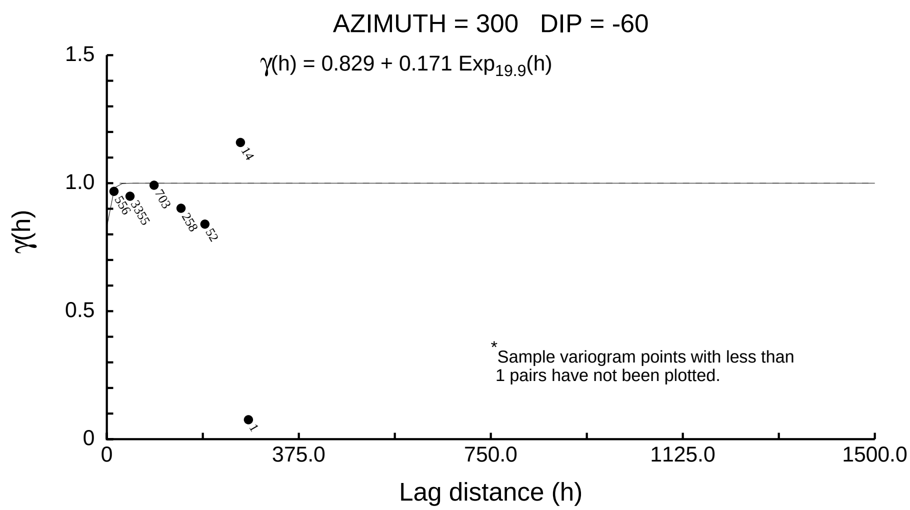


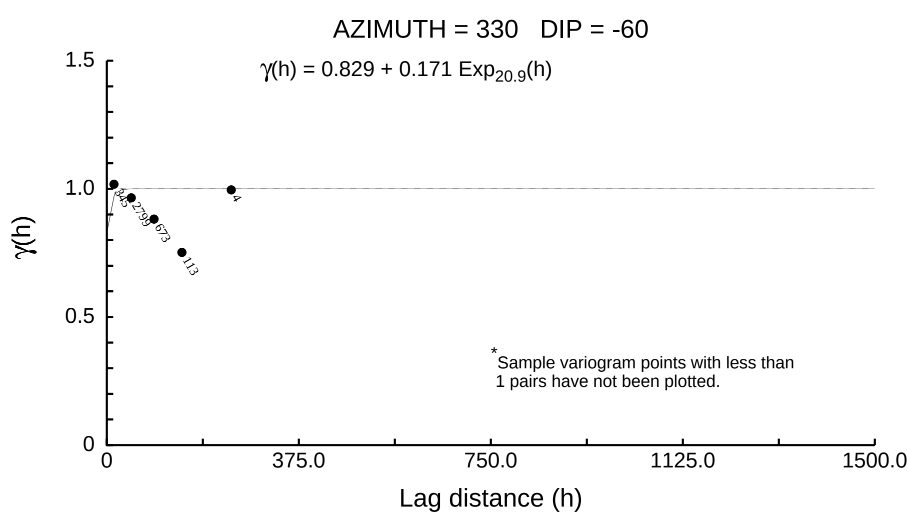




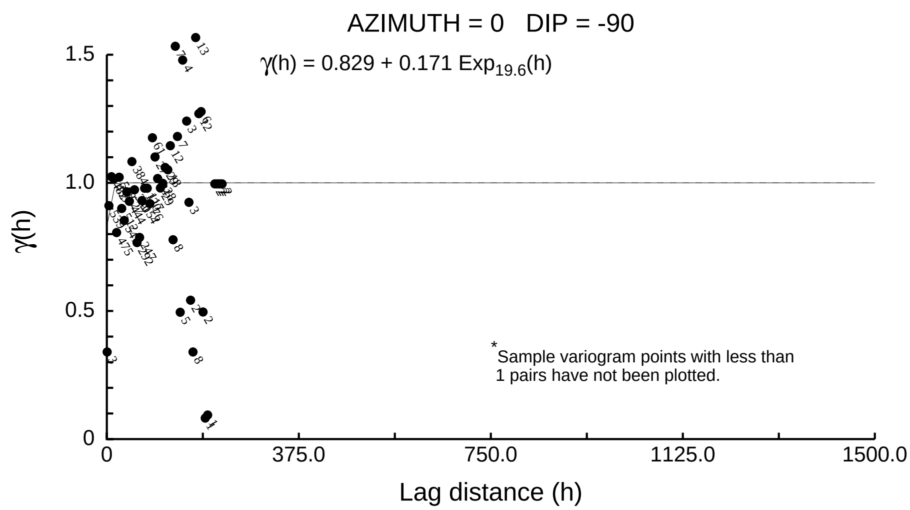
Zone 99 Directional Correlograms - 5m Comps







Zone 99 Directional Correlograms - 5m Comps



Zone 99 <= 0.4 g/t Correlogram - 5m Comps

Medsystem and Vulcan Rotation Conventions

Nugget ==> 0.822
C1 ==> 0.178

First Structure -- Exponential with Practical Range

LH Rotation about the Z axis ==> 0
RH Rotation about the X' axis ==> 0
LH Rotation about the Y' axis ==> 75

Range along the Z' axis	==> 115.7	Azimuth ==> 270	Dip ==> 15
Range along the Y' axis	==> 145.9	Azimuth ==> 360	Dip ==> 0
Range along the X' axis	==> 92.9	Azimuth ==> 90	Dip ==> 75

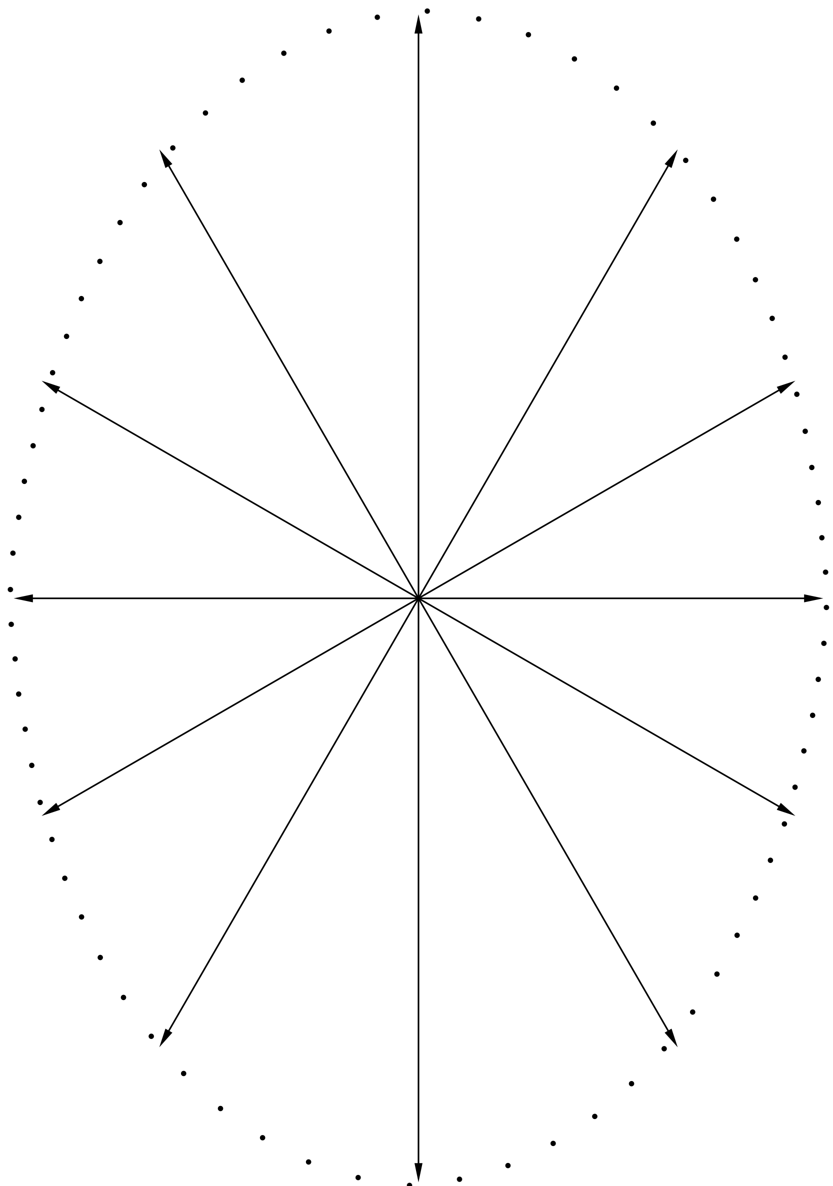
Modeling Criteria

Minimum number pairs req'd ==> 1
Sample variogram points weighted by # pairs

Zone 99 <= 0.4 g/t Correlogram - 5m Comps

Structure Number 1

Rose Diagram of Ranges Dipping 0 Degrees
Scale:



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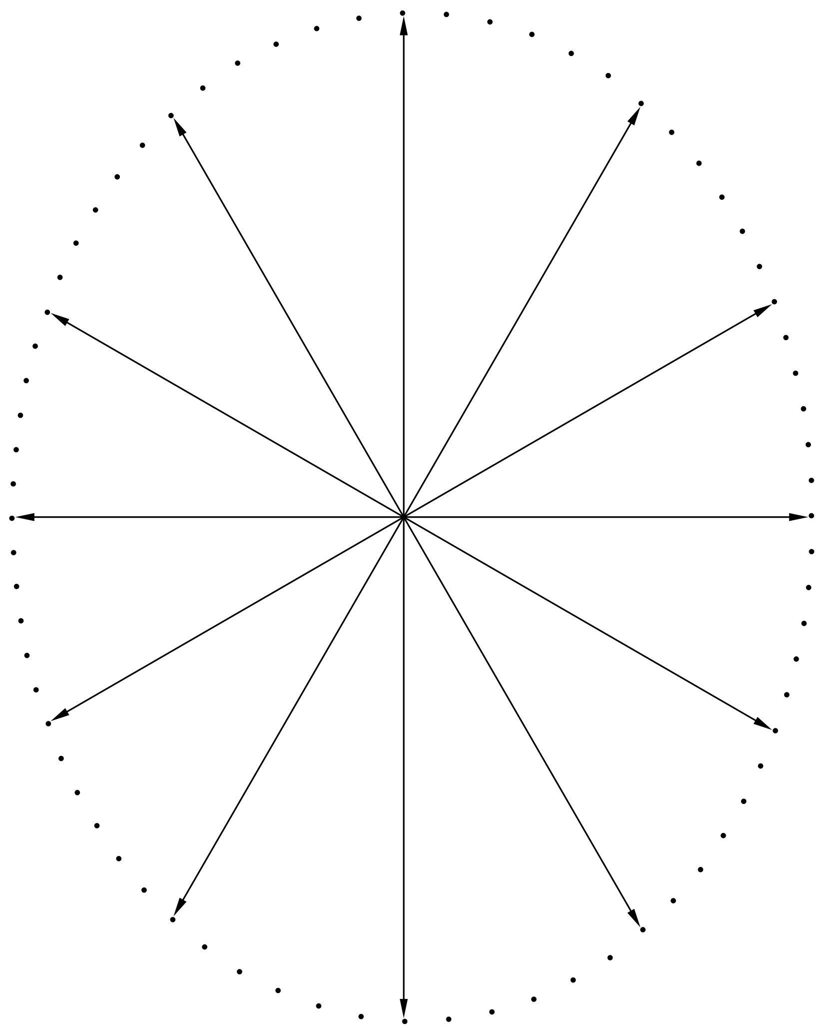
Zone 99 <= 0.4 g/t Correlogram - 5m Comps

Structure Number 1

Rose Diagram of Ranges Dipping 30 Degrees
Scale:

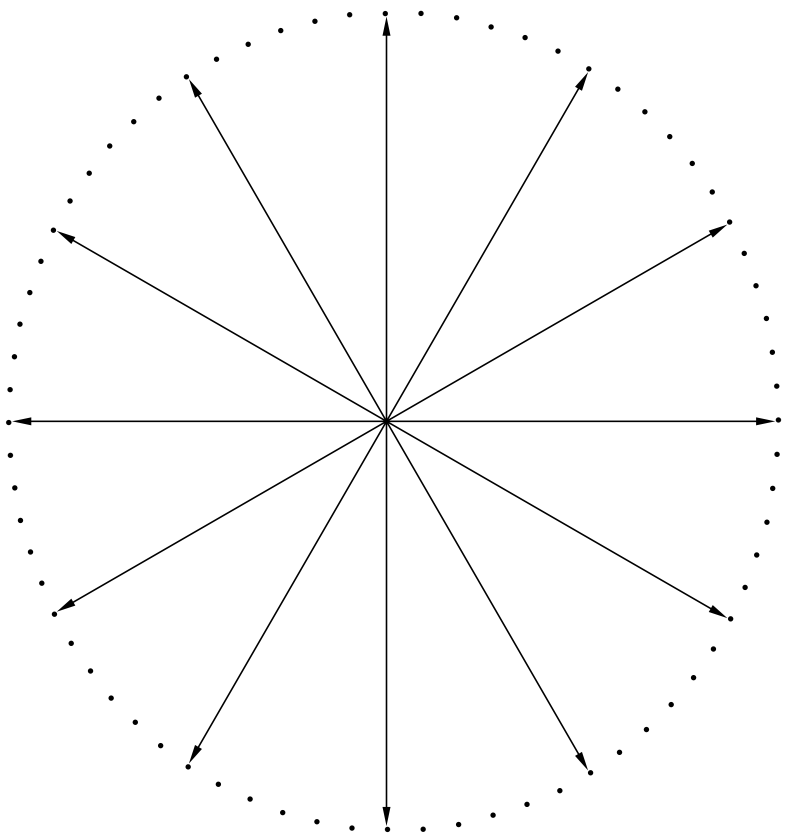
200 Units



Zone 99 <= 0.4 g/t Correlogram - 5m Comps

Structure Number 1

Rose Diagram of Ranges Dipping 60 Degrees
Scale:



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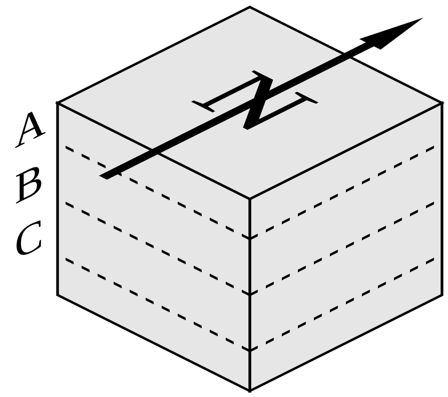
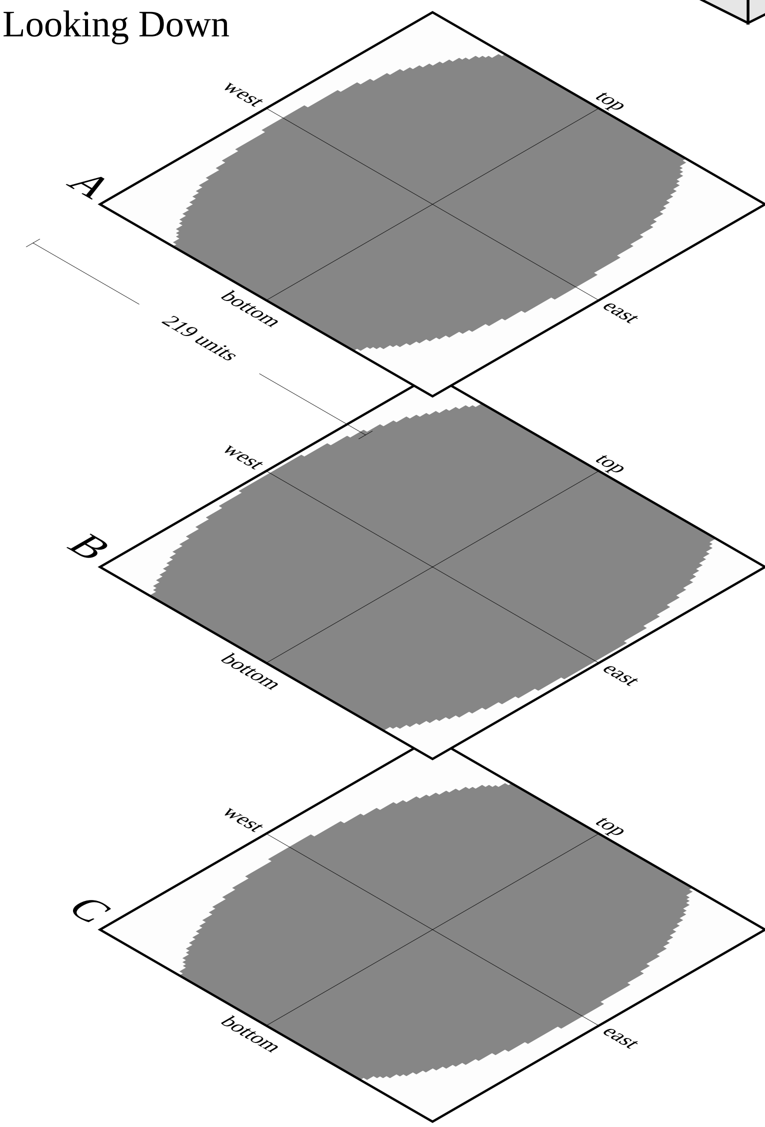
Horizontal Slices Through the Ellipsoids

Reference Cube



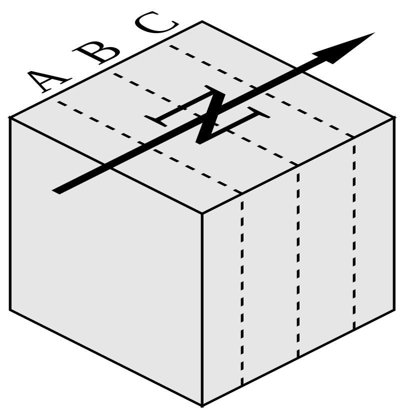
X-Y Planes Looking Down



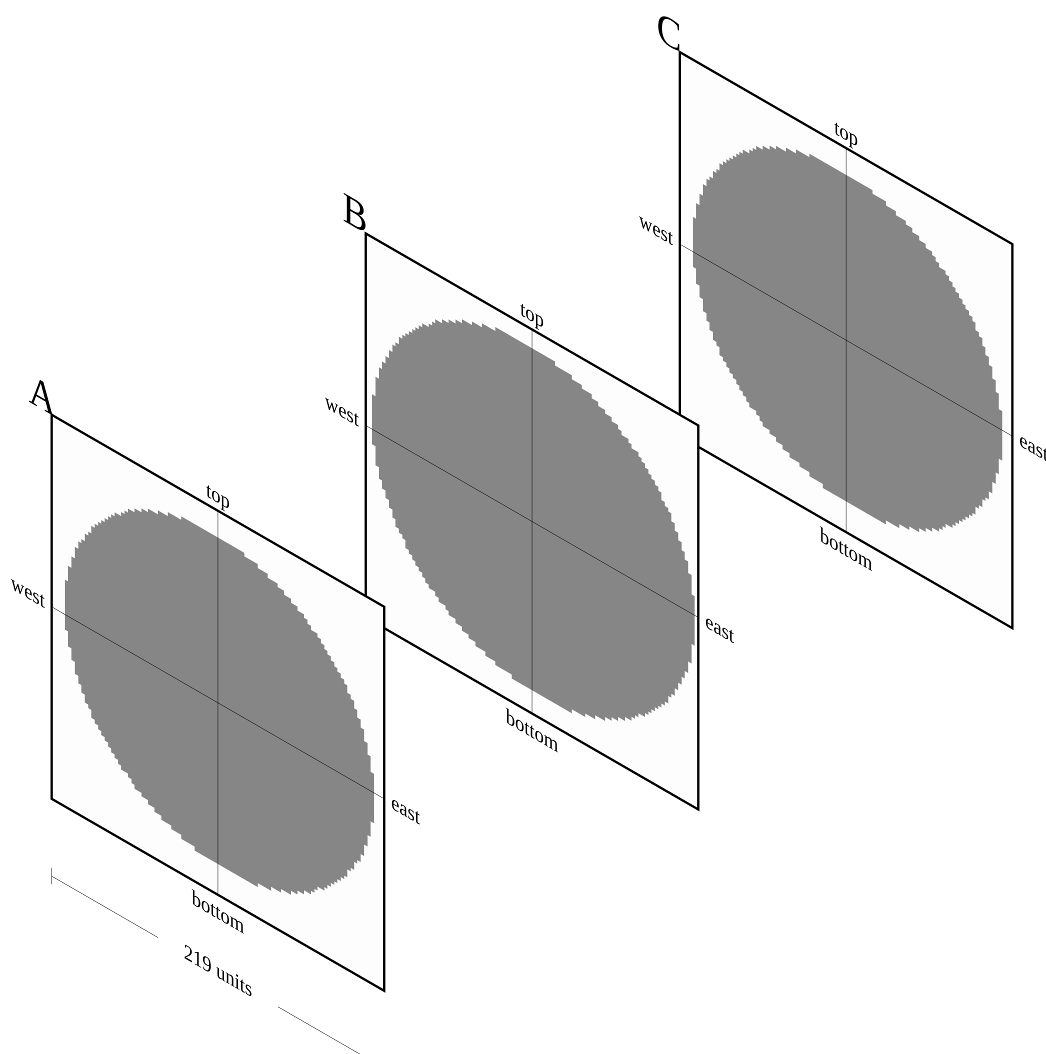
Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Cross Section Views Through the Ellipsoids

Reference Cube



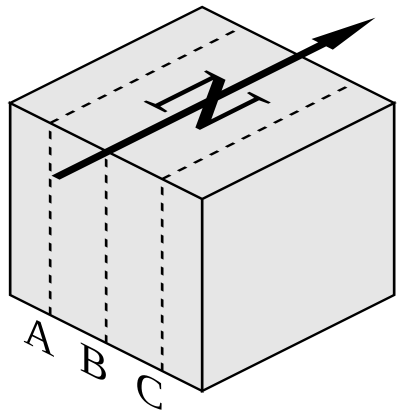
X-Z Planes Looking North



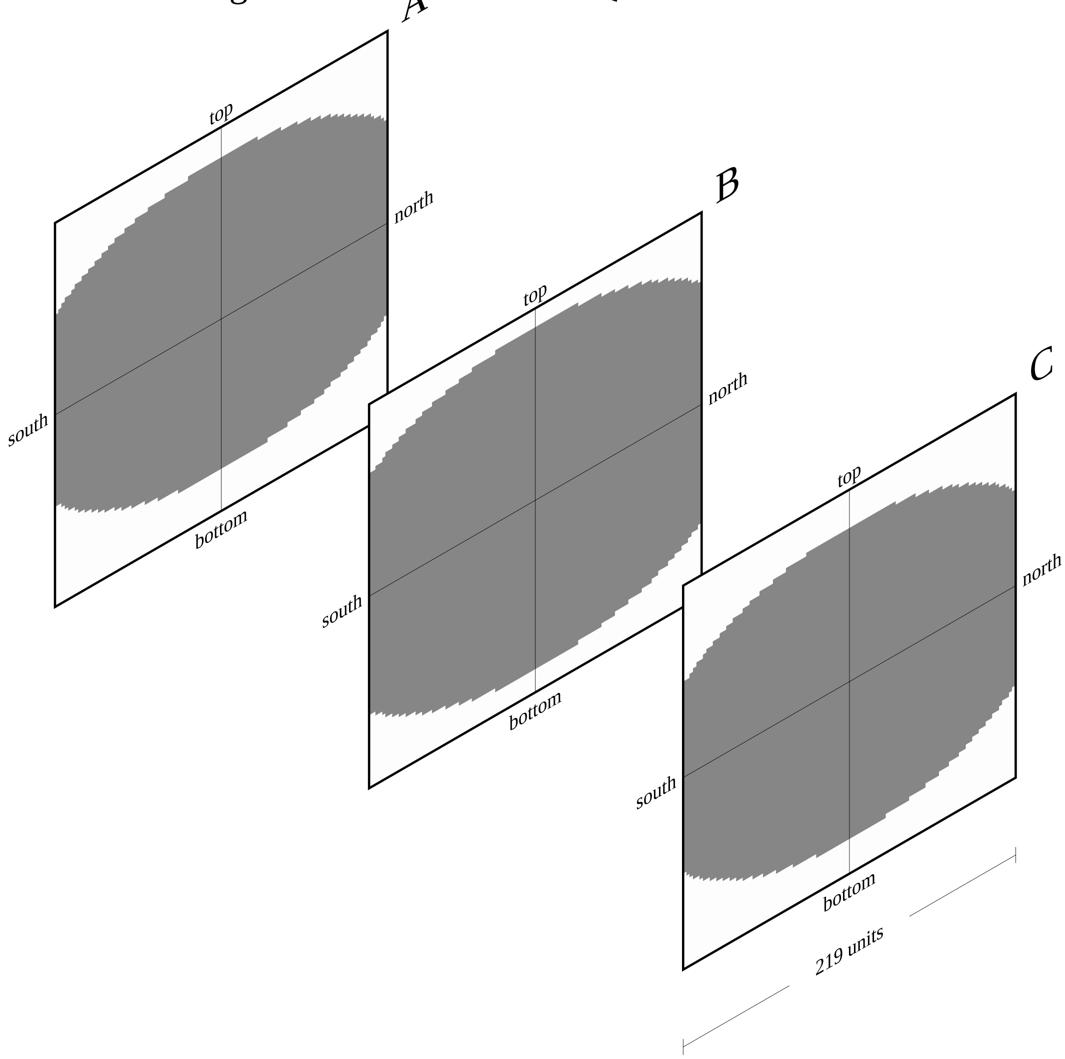
Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Long Section Views Through the Ellipsoids

Reference Cube

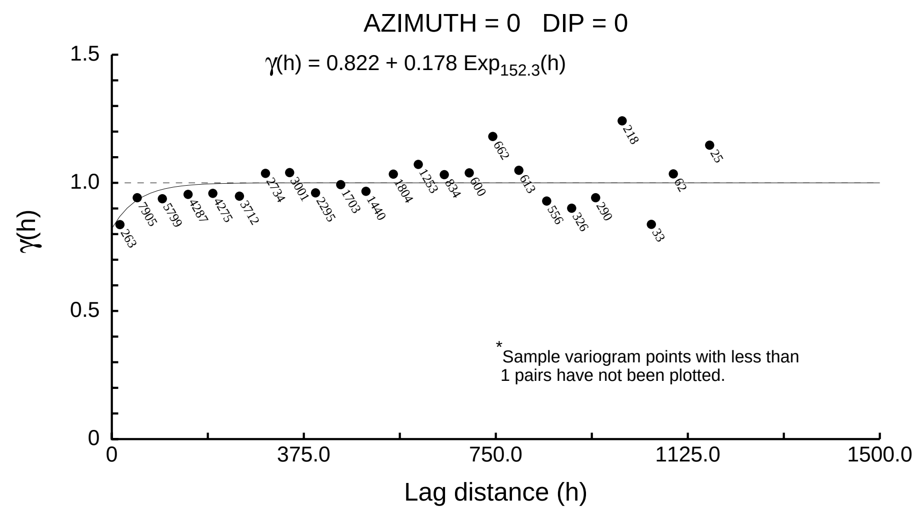


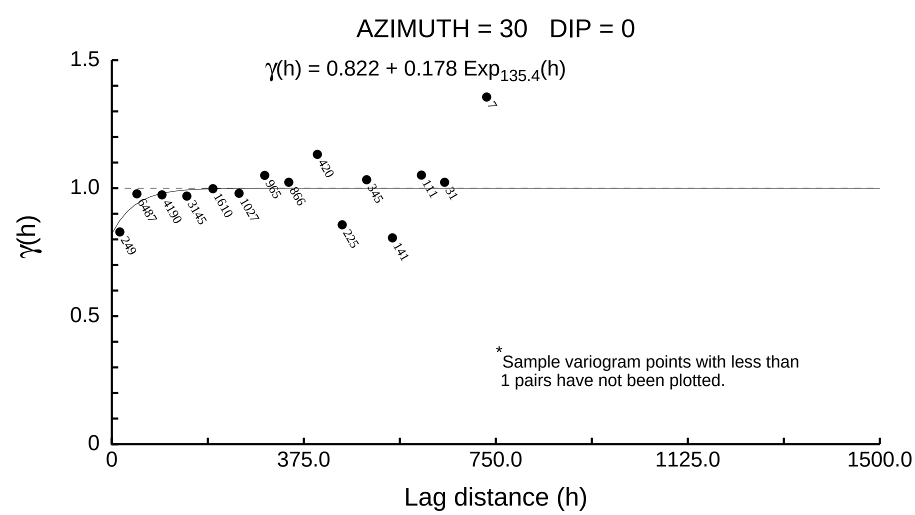
Y-Z Planes Looking West

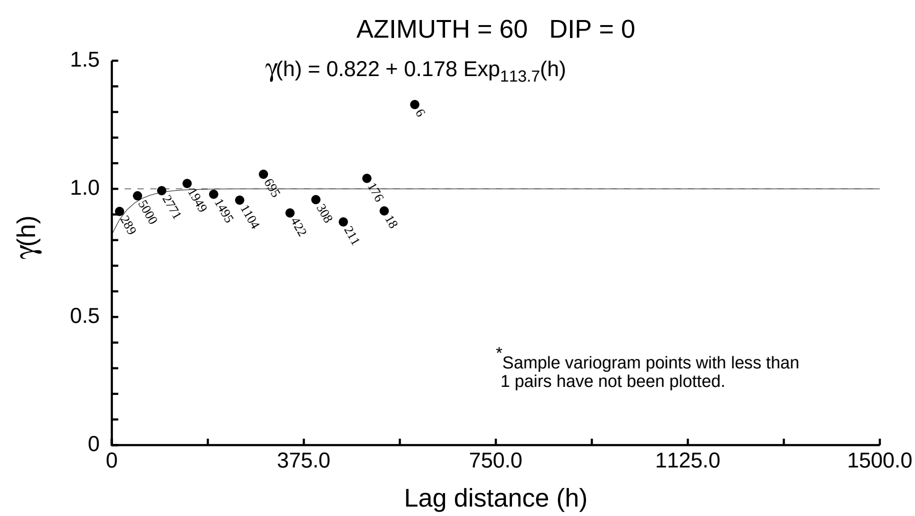


Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

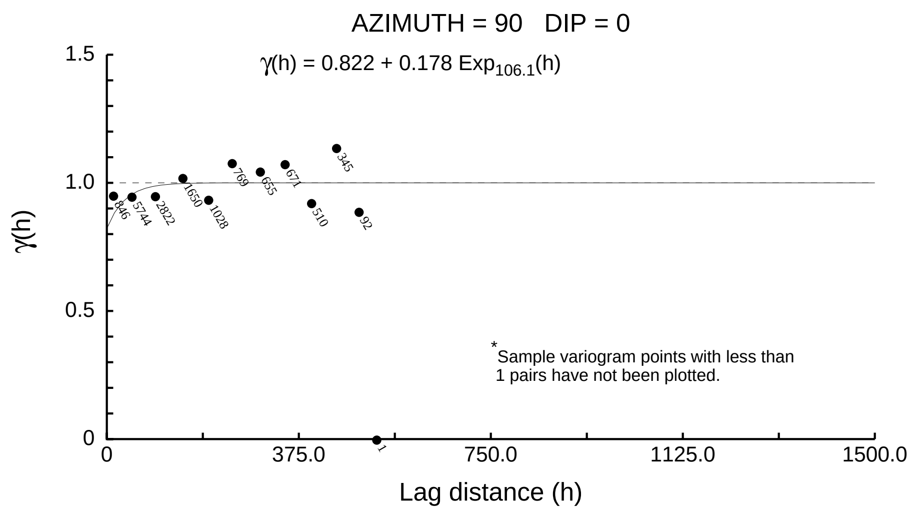
Zone 99 <= 0.4 g/t Correlogram - 5m Comps

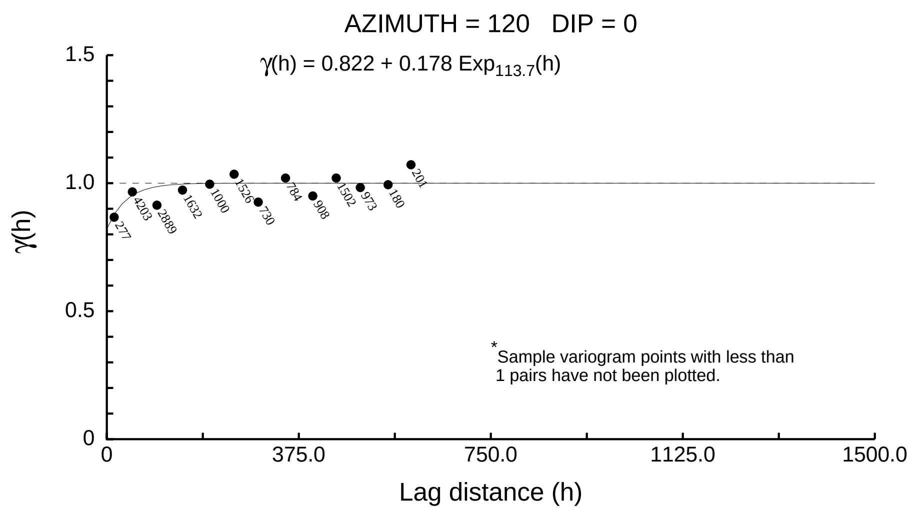


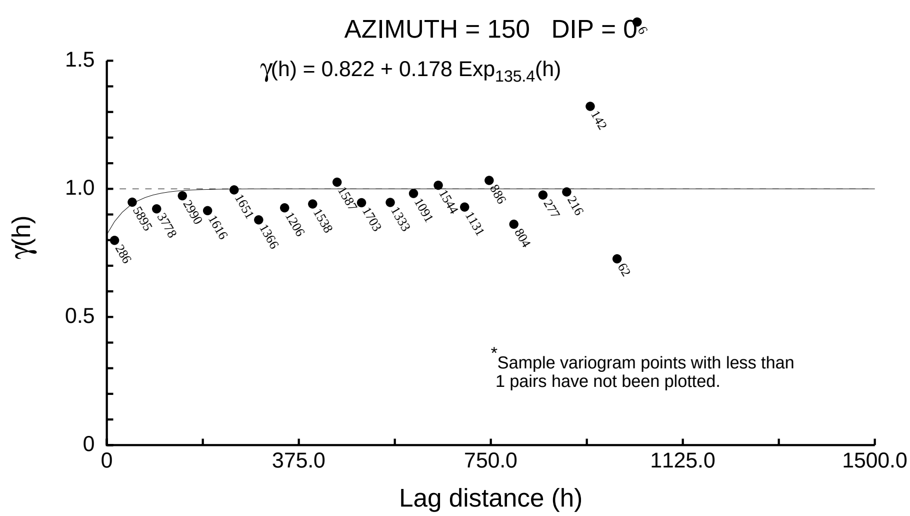




Zone 99 <= 0.4 g/t Correlogram - 5m Comps







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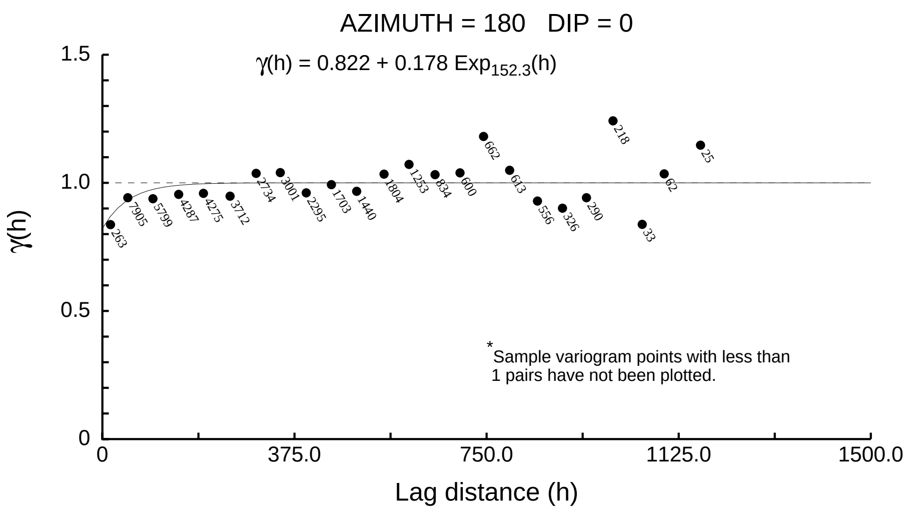
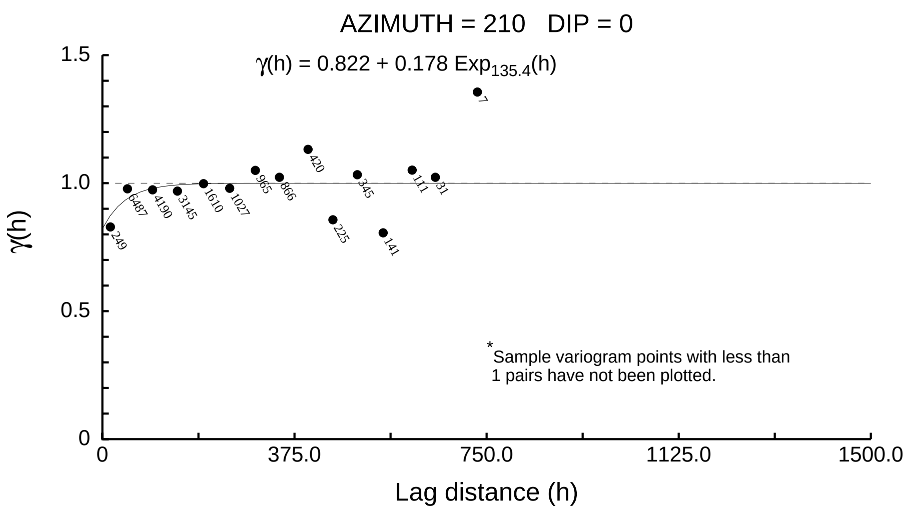
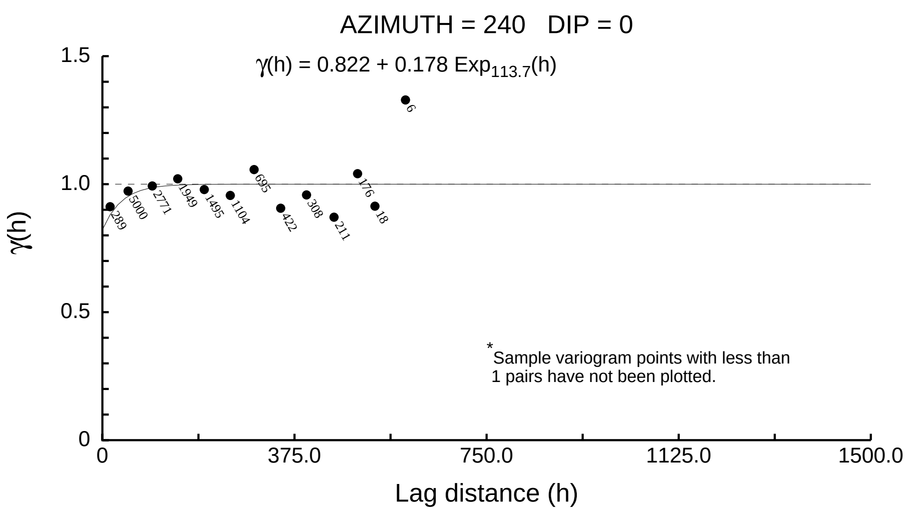
Zone 99 <= 0.4 g/t Correlogram - 5m Comps







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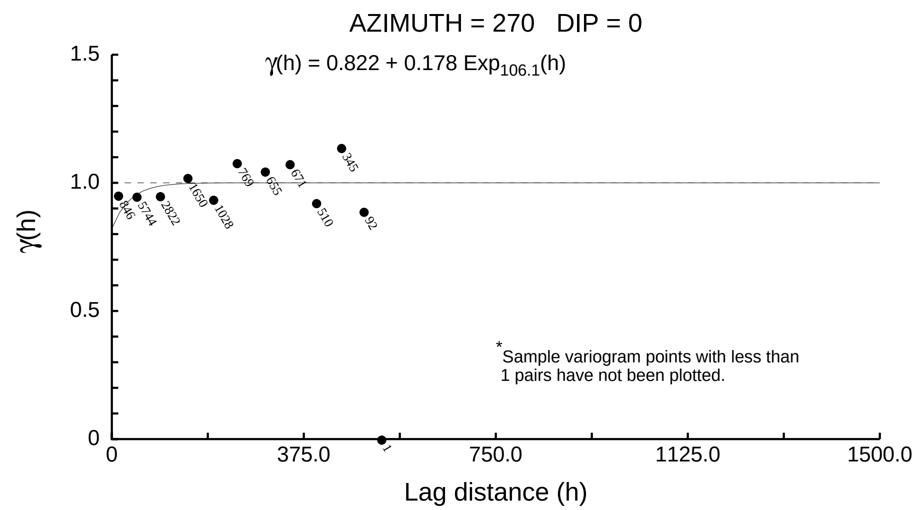
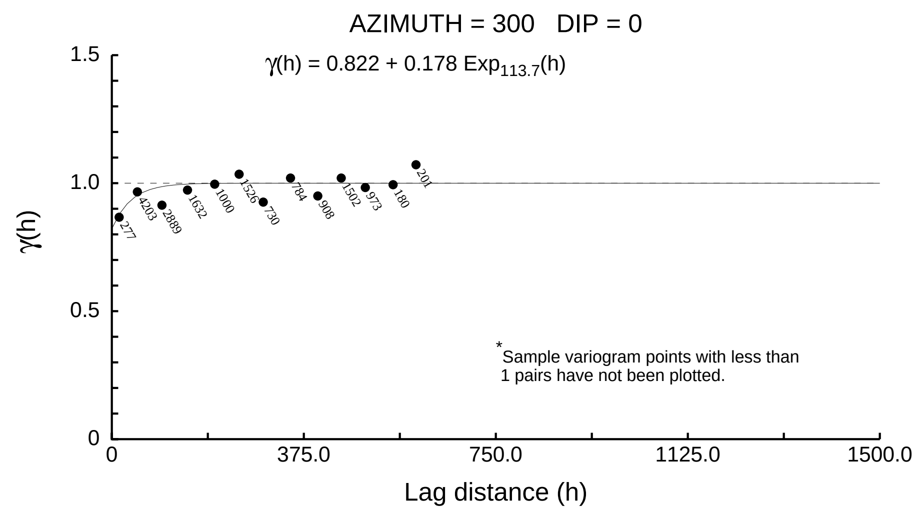
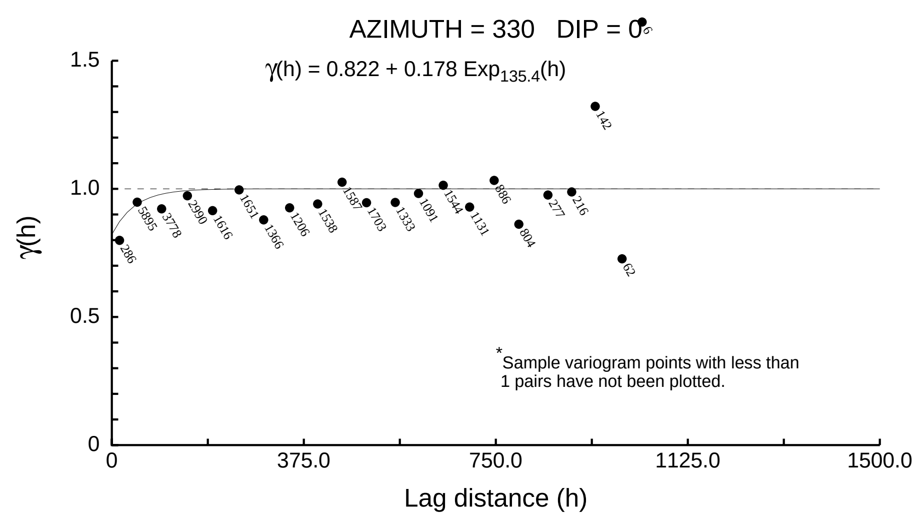
Zone 99 <= 0.4 g/t Correlogram - 5m Comps







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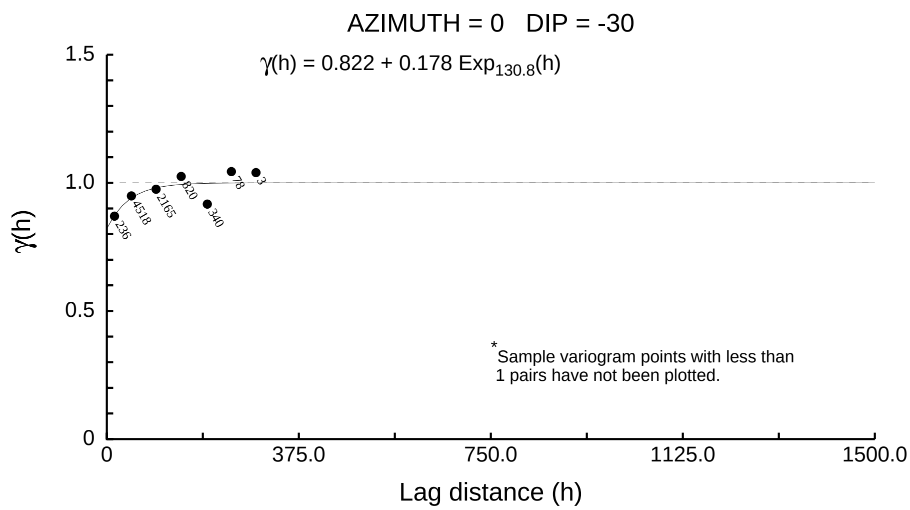
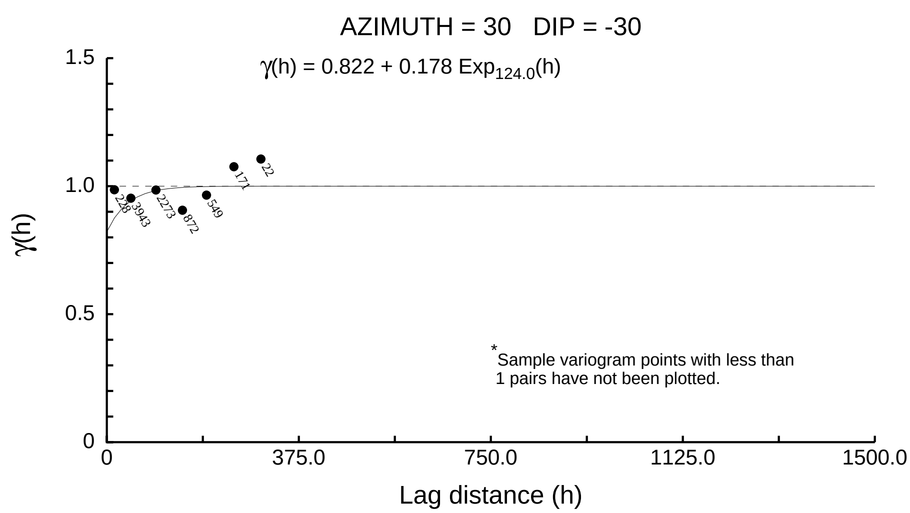
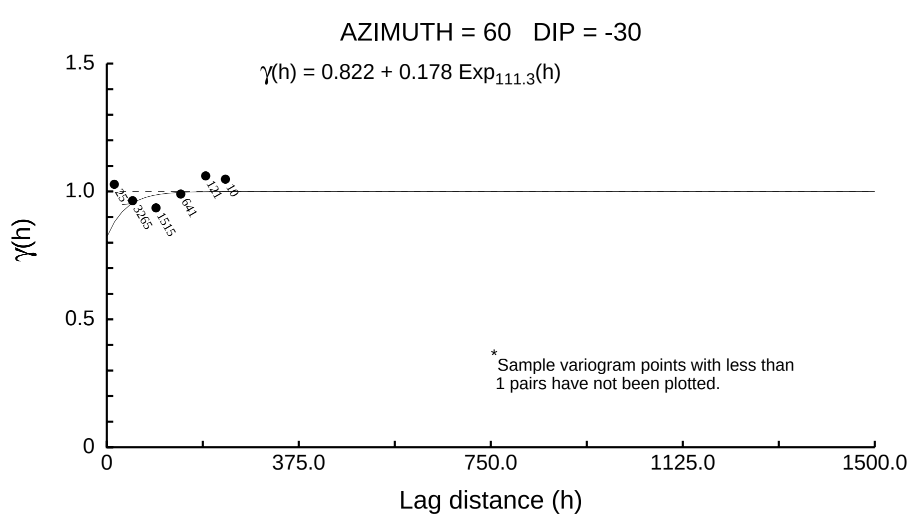
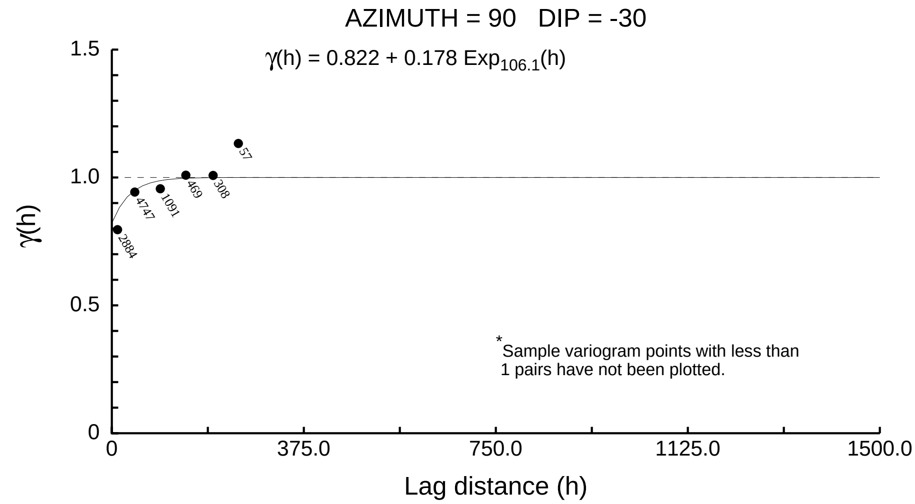
Zone 99 <= 0.4 g/t Correlogram - 5m Comps

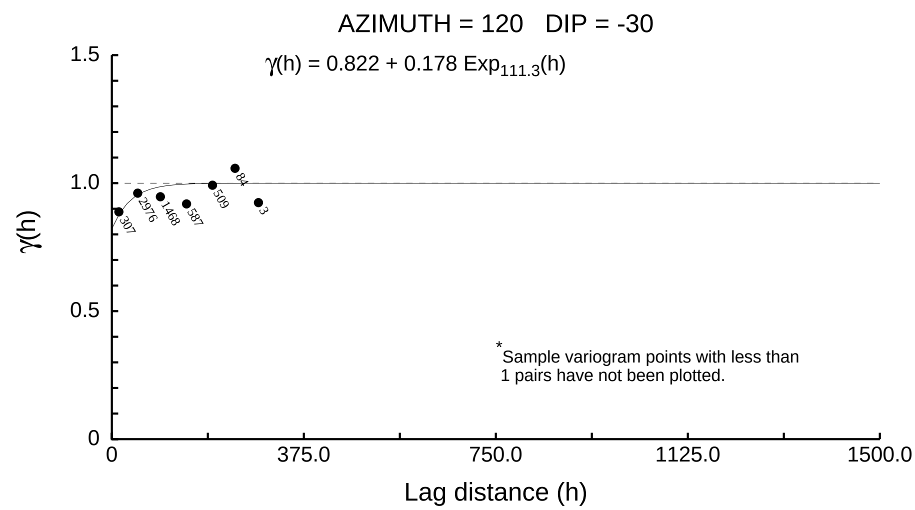


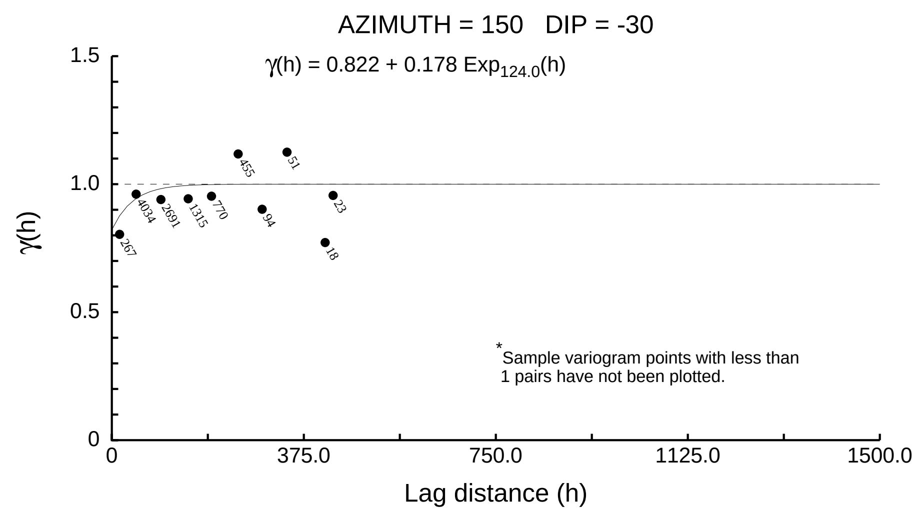




Zone 99 <= 0.4 g/t Correlogram - 5m Comps







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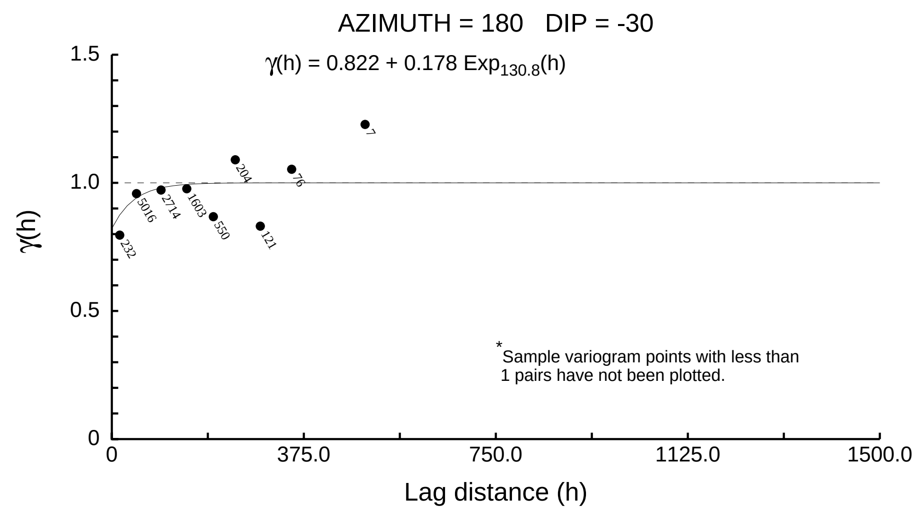

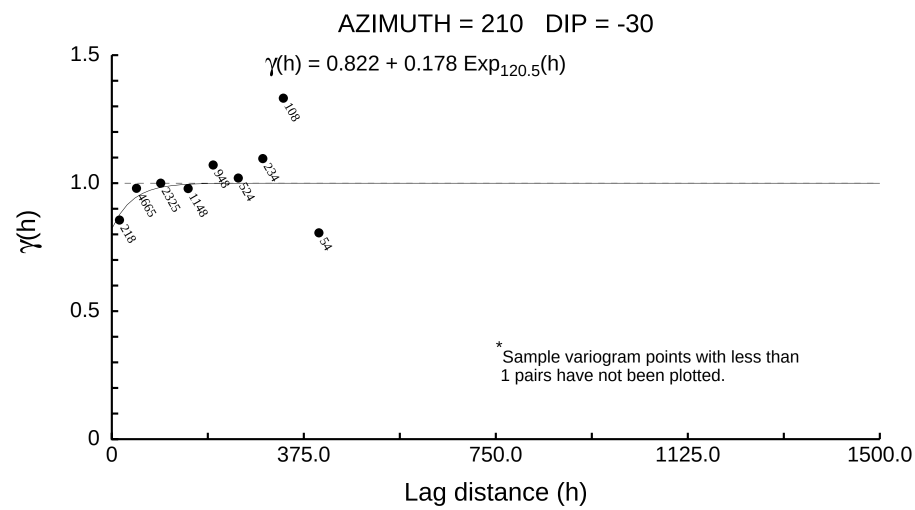

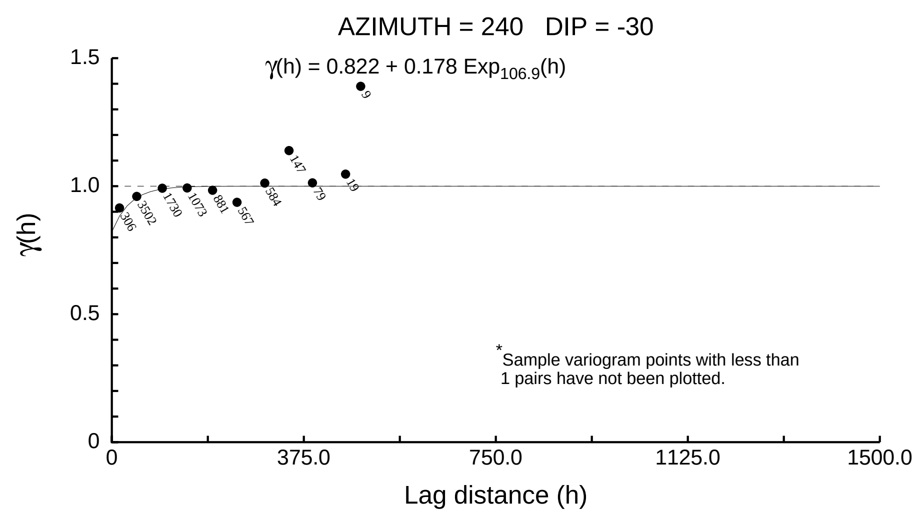

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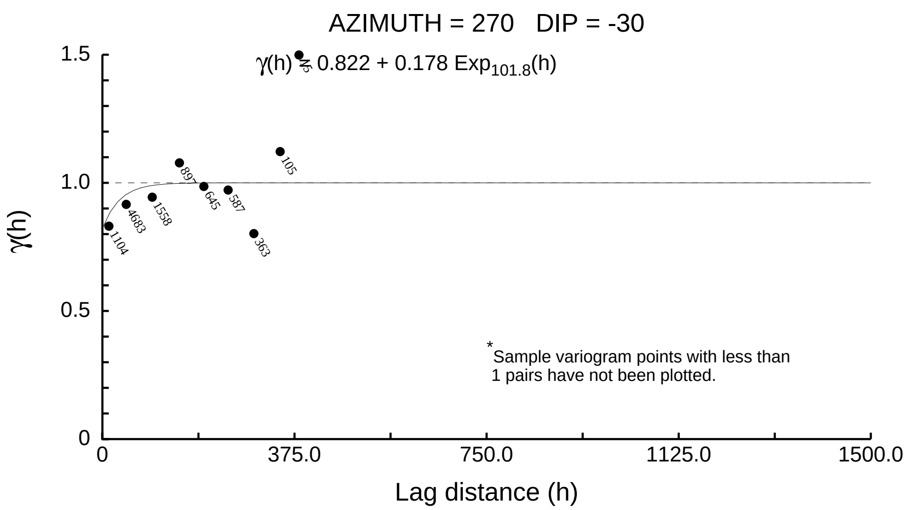
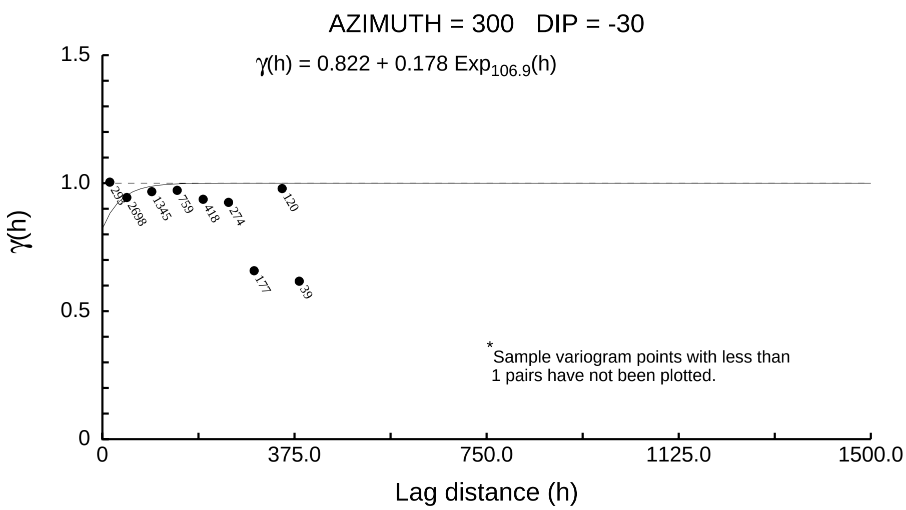
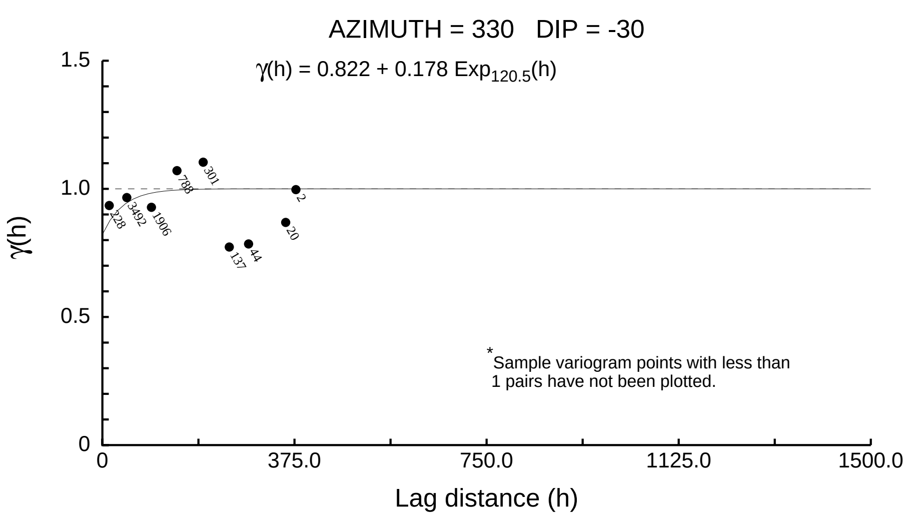
Zone 99 <= 0.4 g/t Correlogram - 5m Comps







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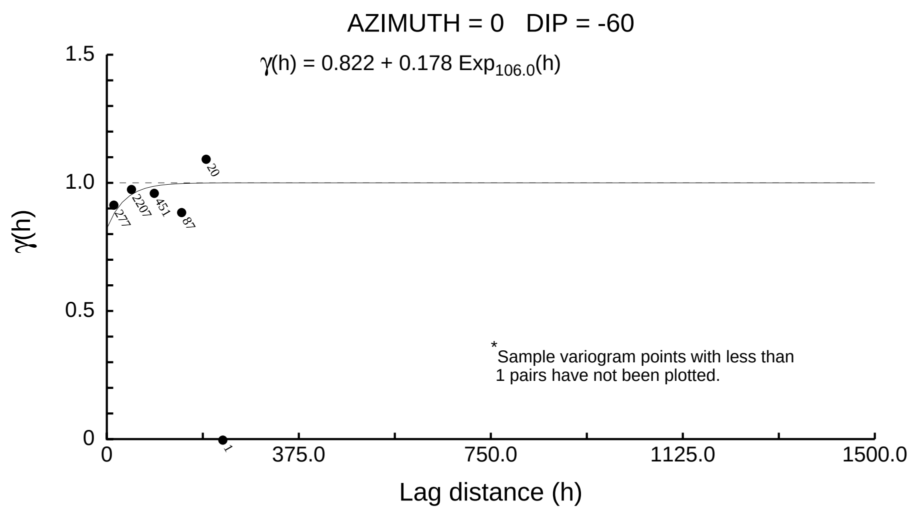

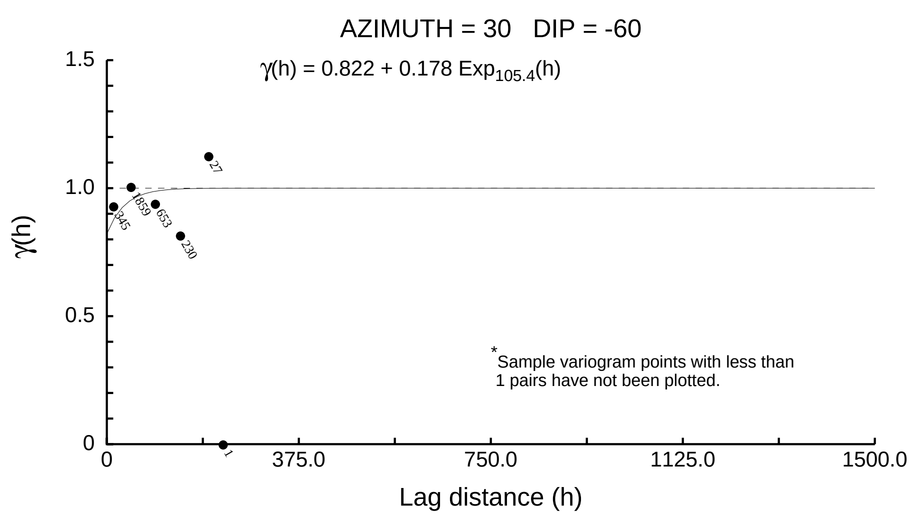

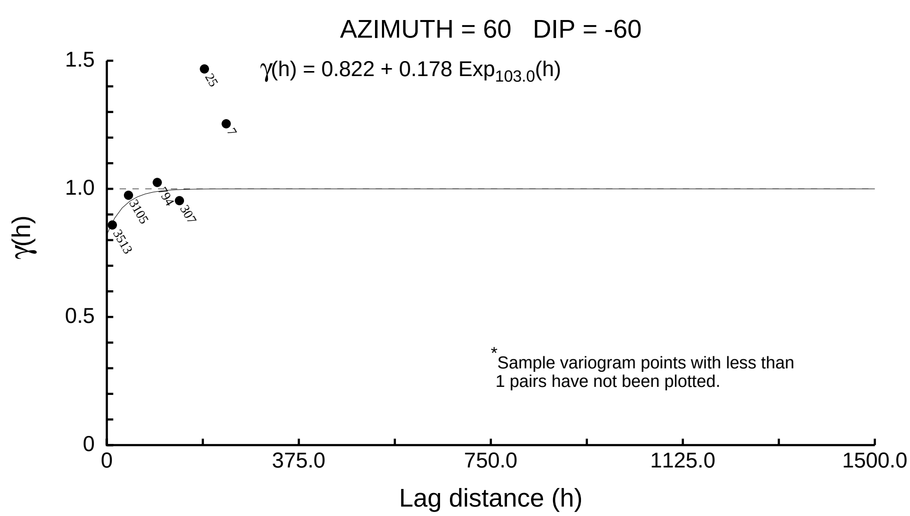

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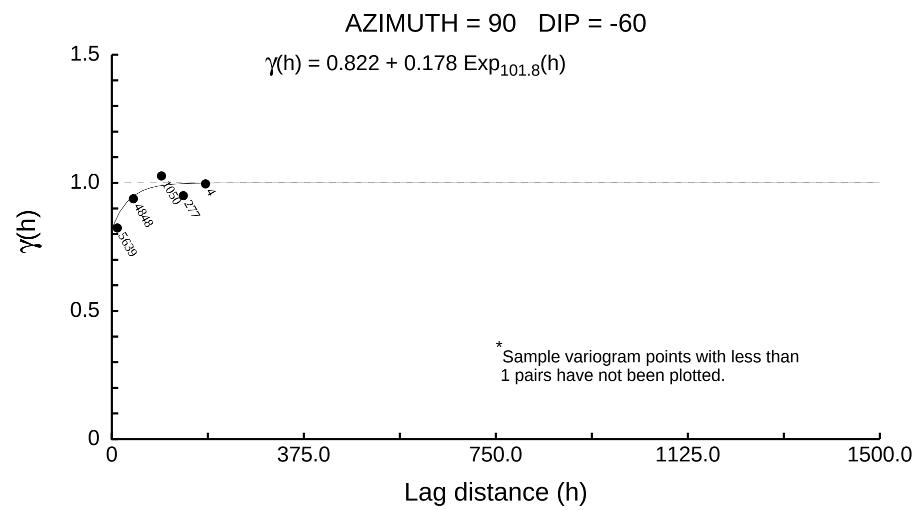

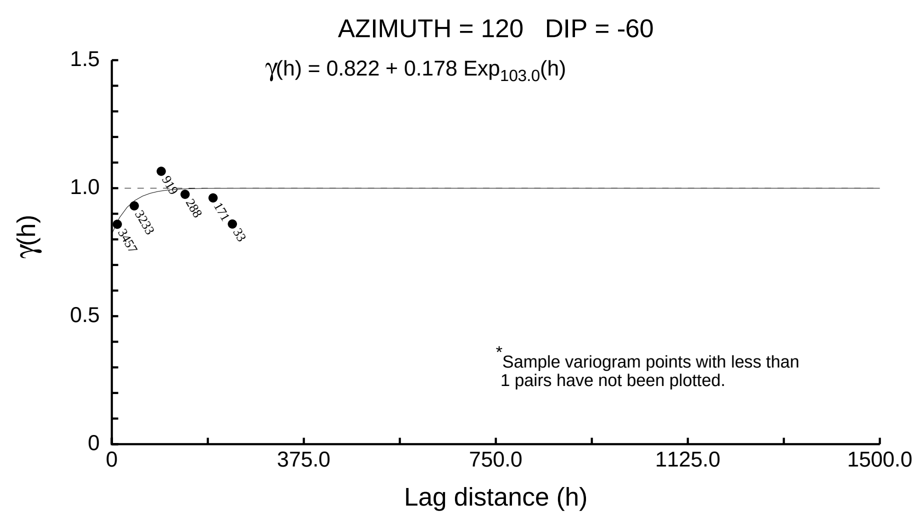

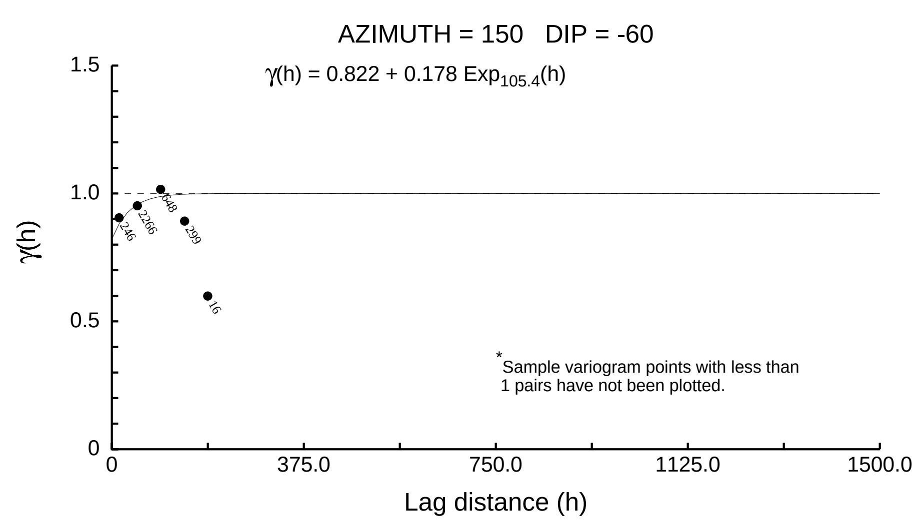

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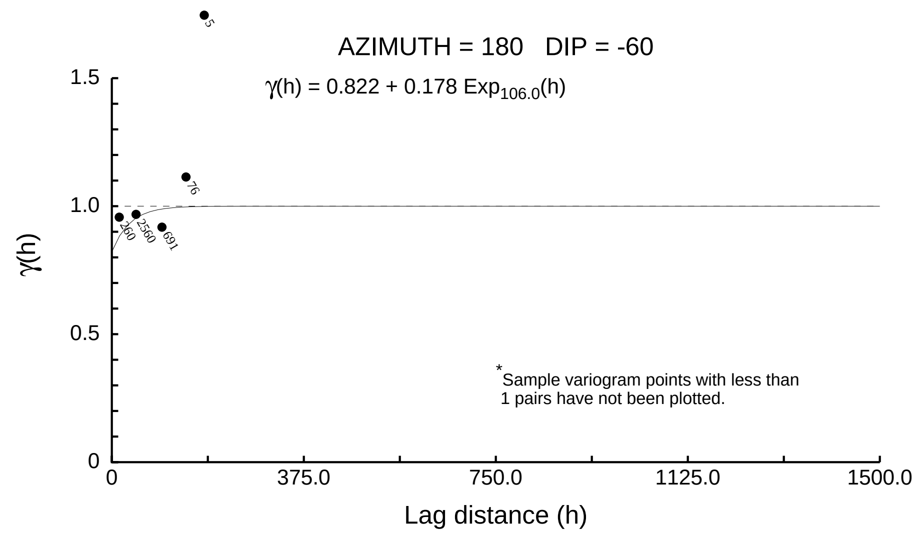

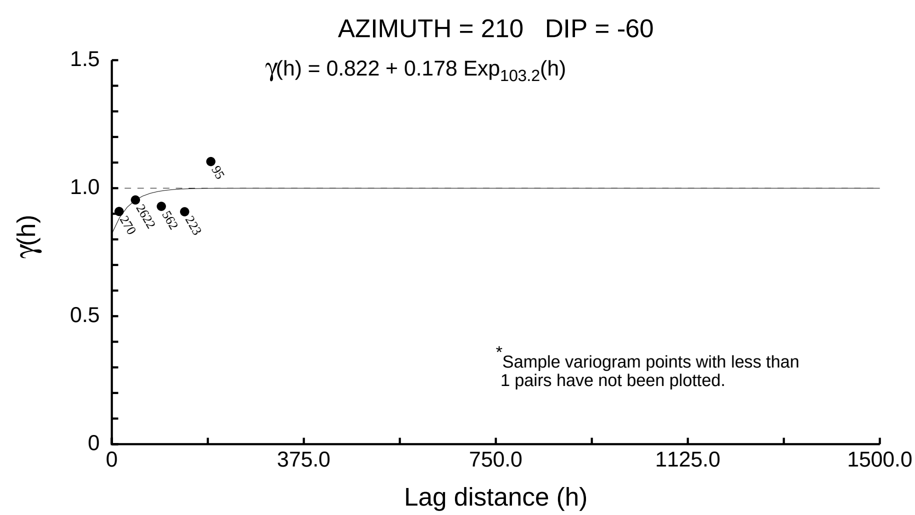

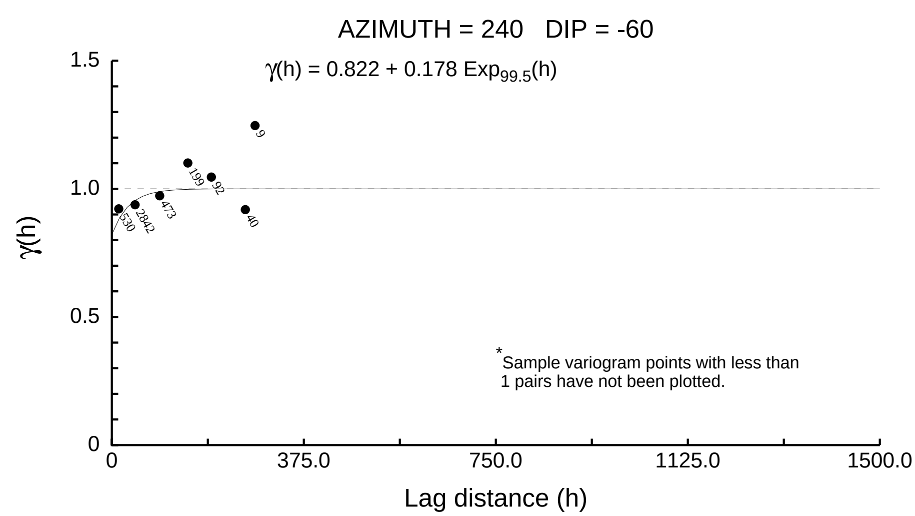

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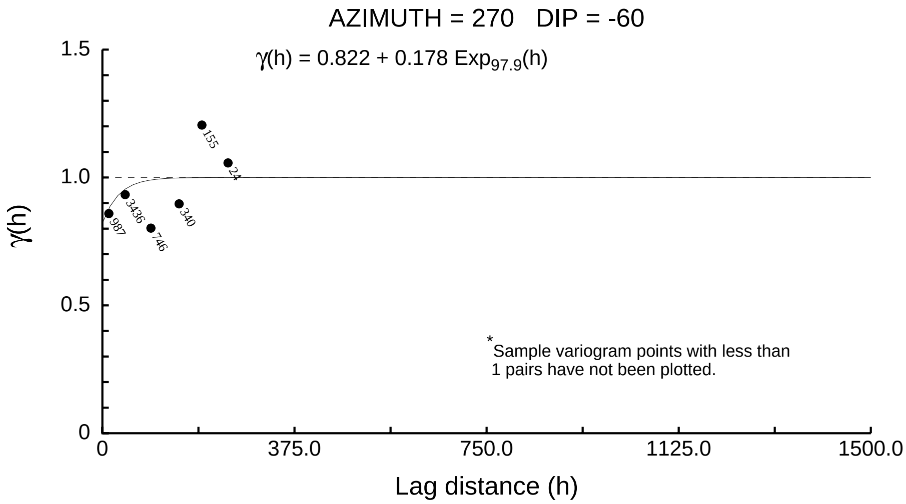

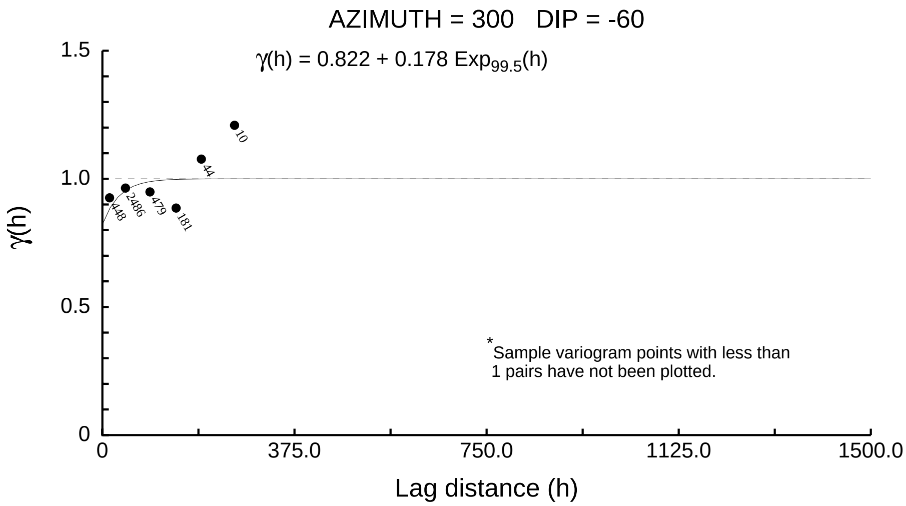

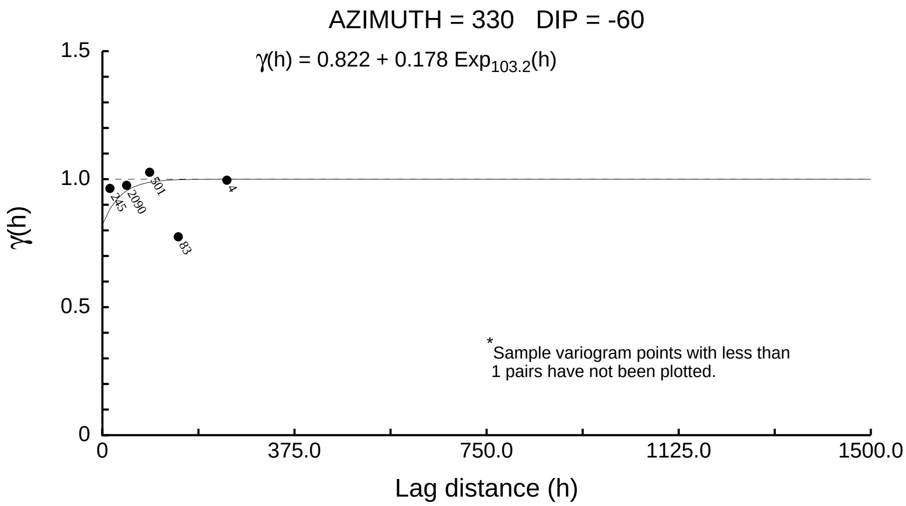

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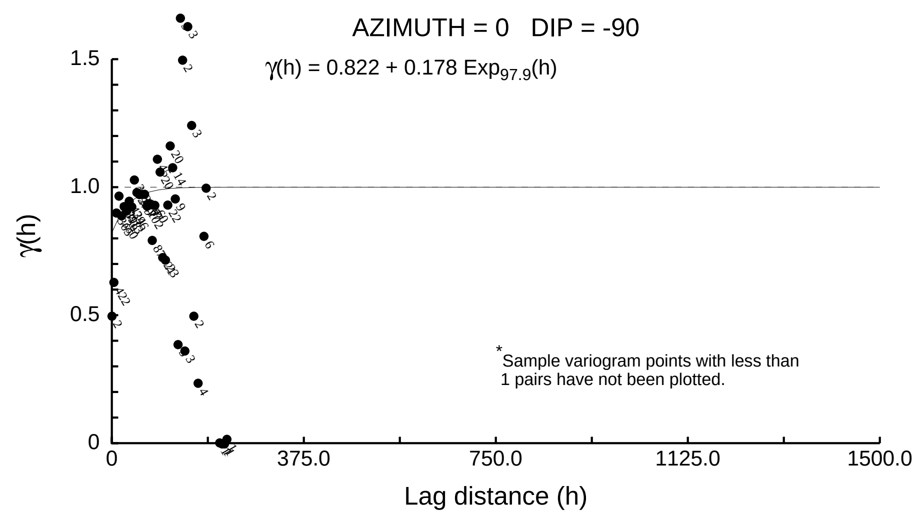


Zone 99 +0.4 gram Correlograms - 5m Comps

Medsystem and Vulcan Rotation Conventions

Nugget ==> 0.005
C1 ==> 0.995

First Structure -- Exponential with Practical Range

LH Rotation about the Z axis ==> 0
RH Rotation about the X’ axis ==> 0
LH Rotation about the Y’ axis ==> 75

Range along the Z’ axis ==> 12.7	Azimuth ==> 270	Dip ==> 15
Range along the Y’ axis ==> 24.7	Azimuth ==> 360	Dip ==> 0
Range along the X’ axis ==> 9.6	Azimuth ==> 90	Dip ==> 75

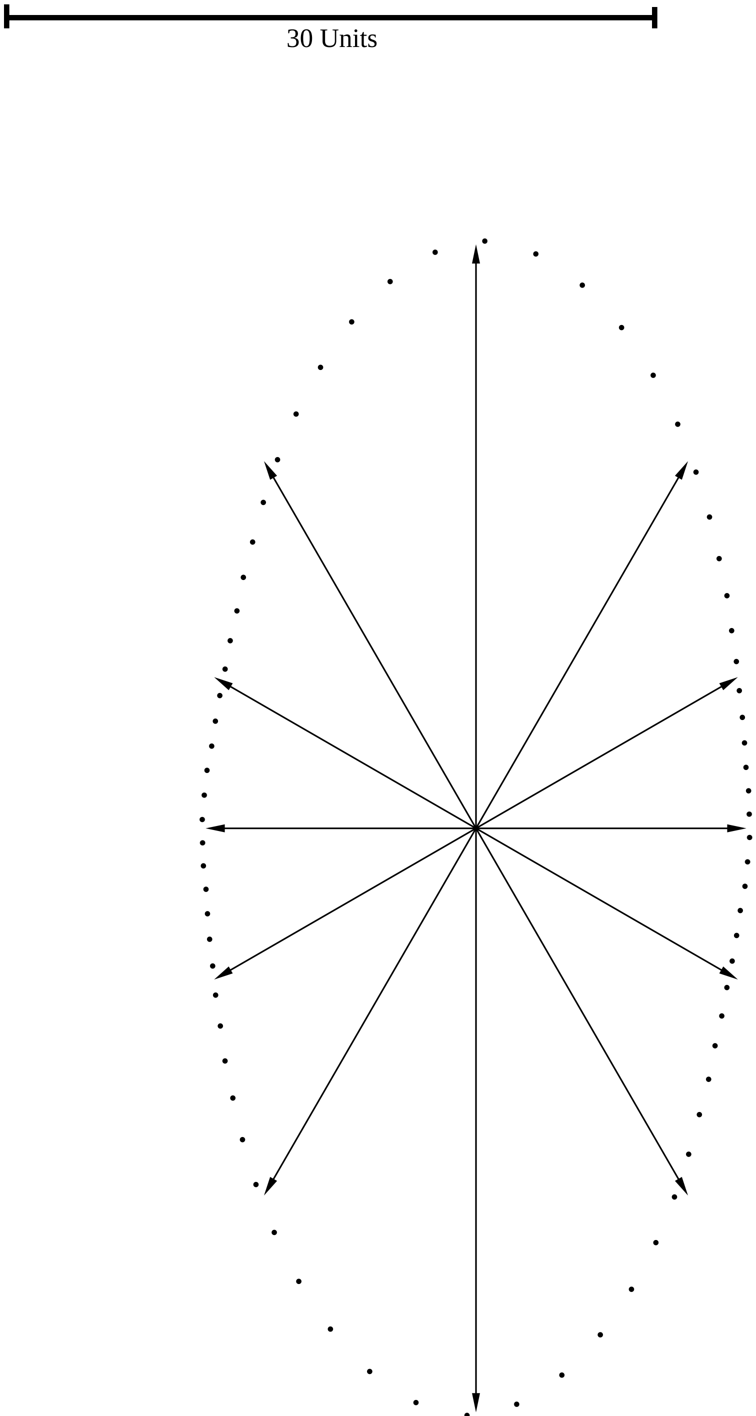
Modeling Criteria

Minimum number pairs req’d ==> 1
Sample variogram points weighted by # pairs

Zone 99 +0.4 gram Correlograms - 5m Comps

Structure Number 1

Rose Diagram of Ranges Dipping 0 Degrees
Scale:



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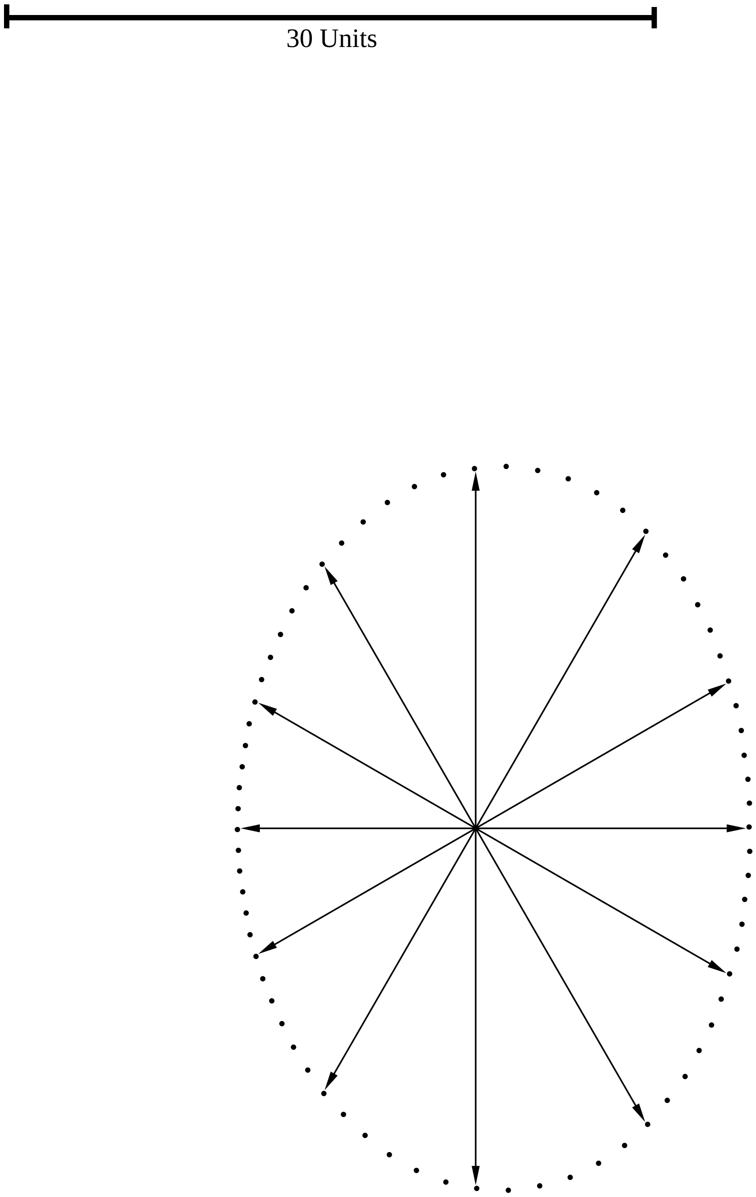
Zone 99 +0.4 gram Correlograms - 5m Comps

Structure Number 1

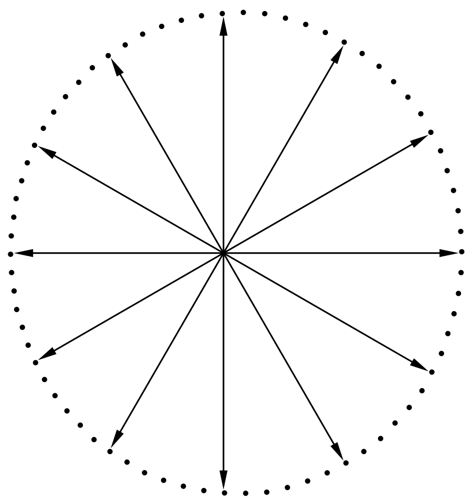
Rose Diagram of Ranges Dipping 30 Degrees
Scale:



Zone 99 +0.4 gram Correlograms - 5m Comps

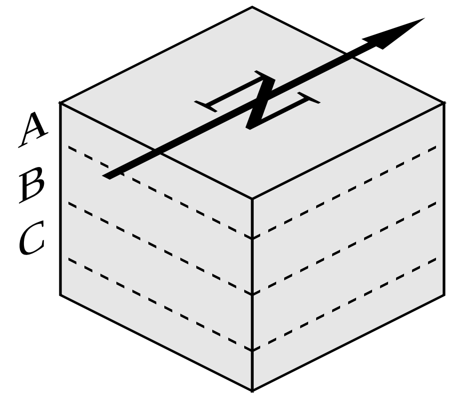
Structure Number 1

Rose Diagram of Ranges Dipping 60 Degrees
Scale:

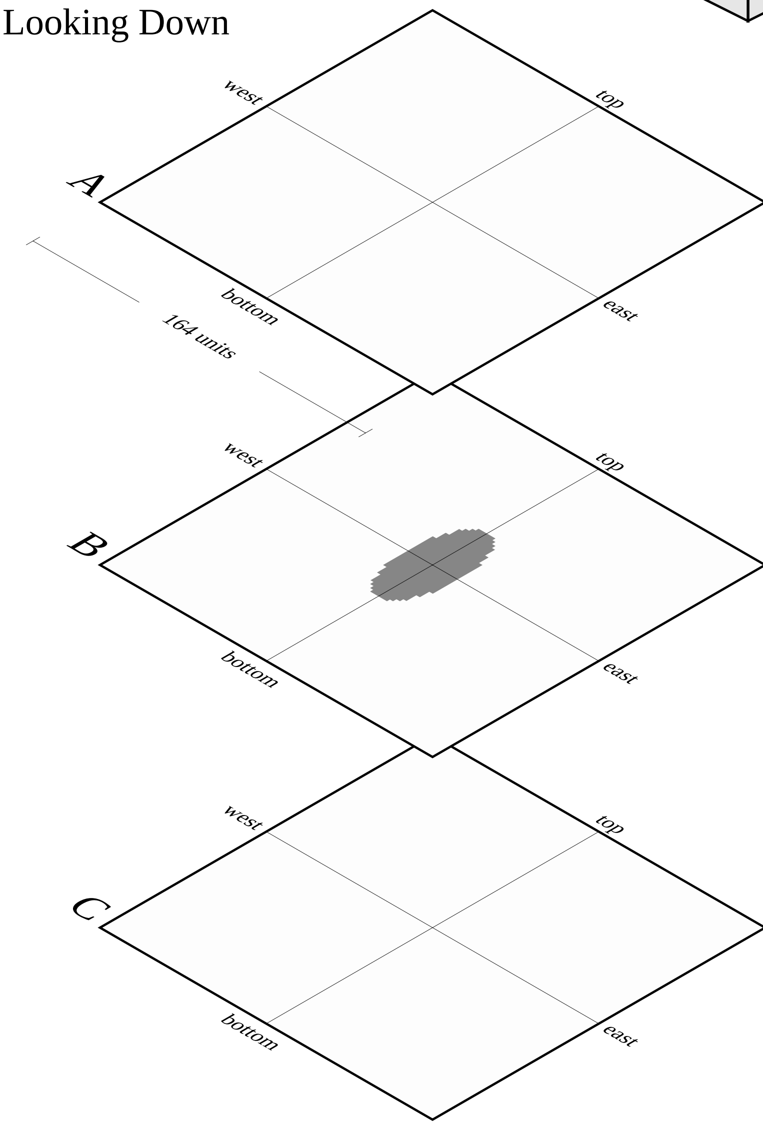


Horizontal Slices Through the Ellipsoids

Reference Cube



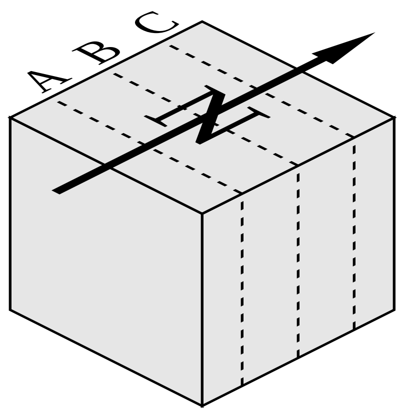
X-Y Planes Looking Down



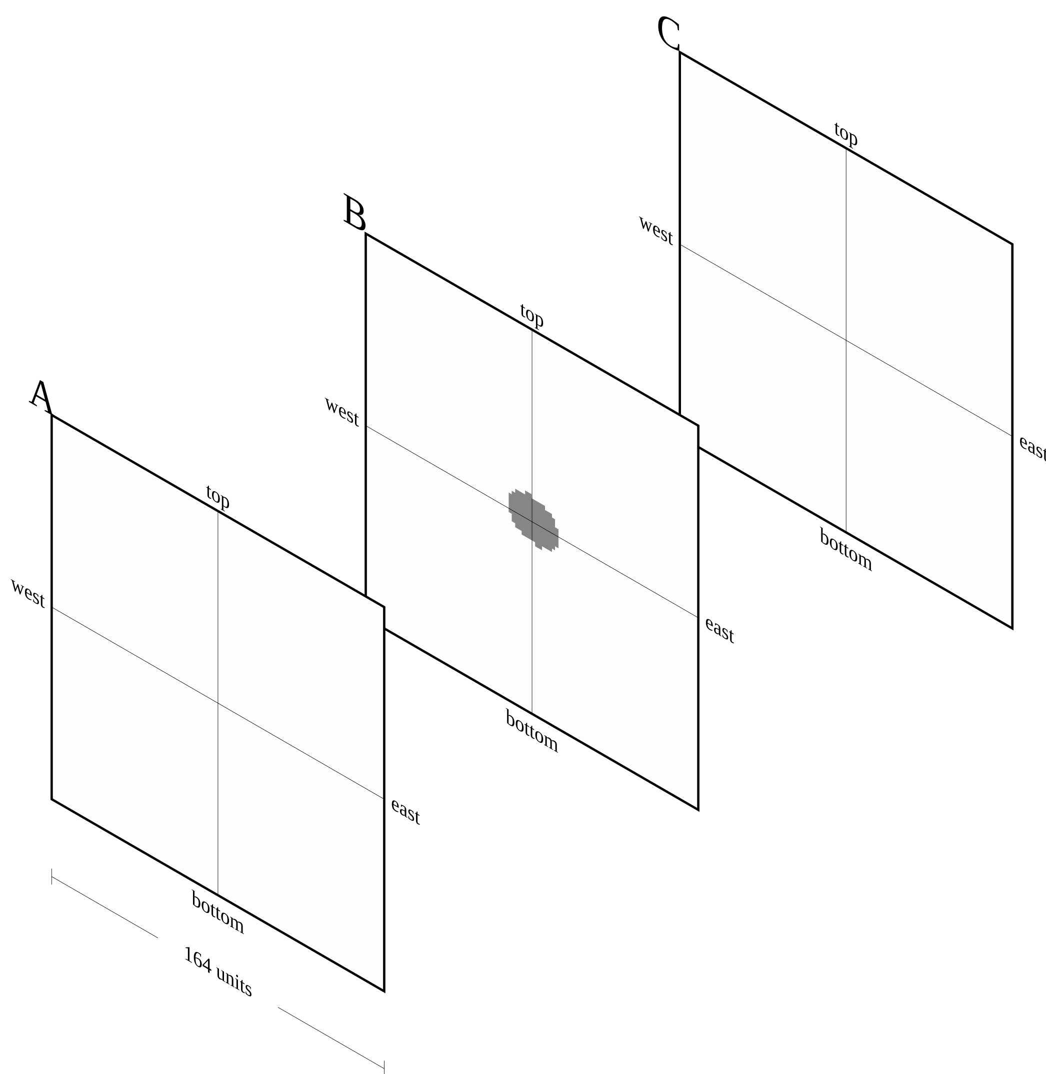
Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Cross Section Views Through the Ellipsoids

Reference Cube



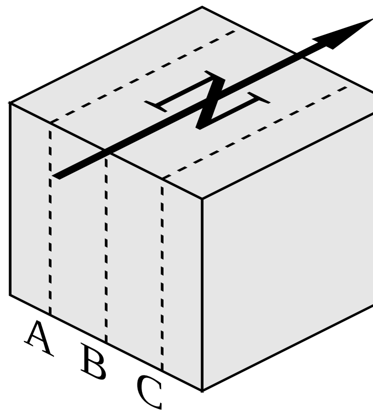
X-Z Planes Looking North



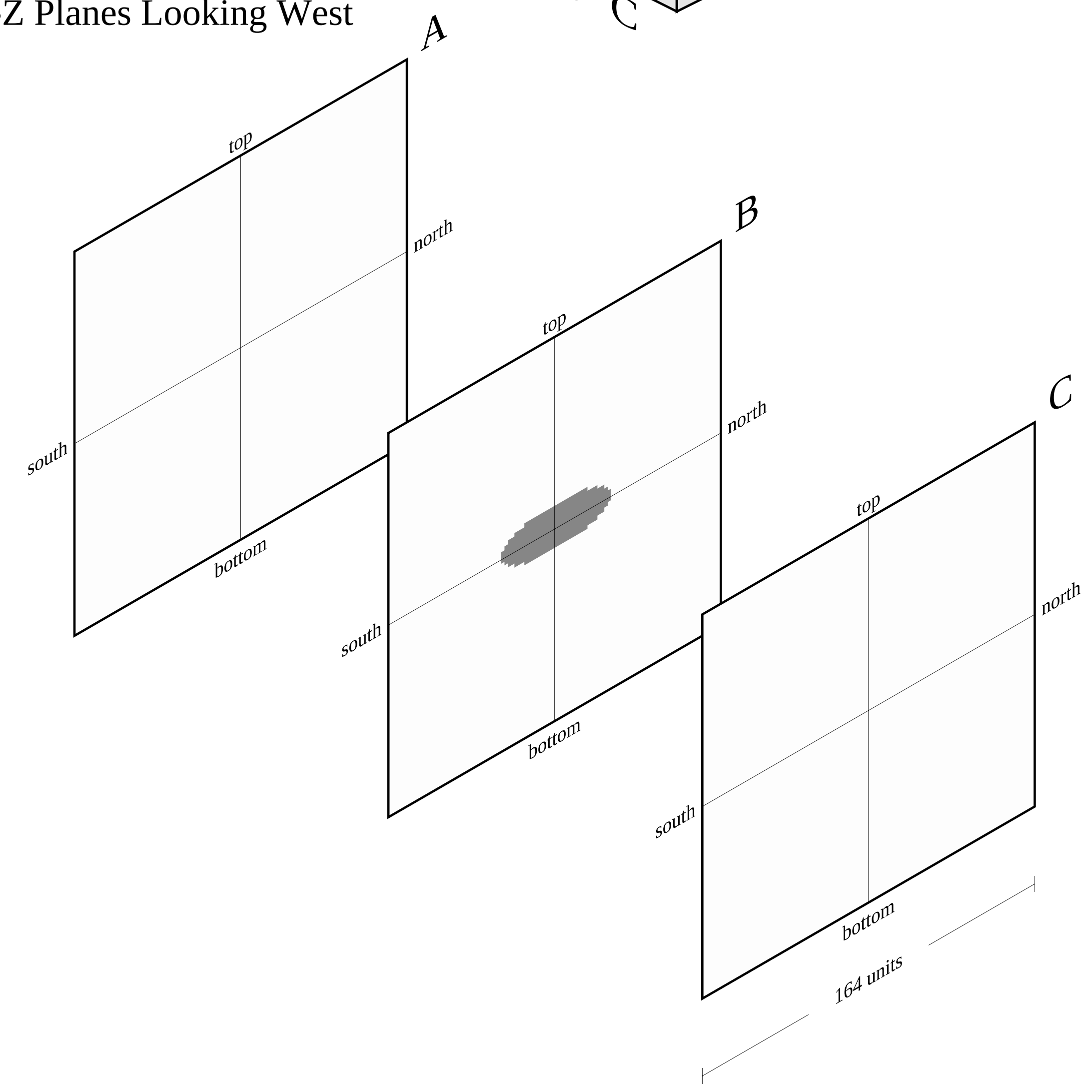
Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Long Section Views Through the Ellipsoids

Reference Cube

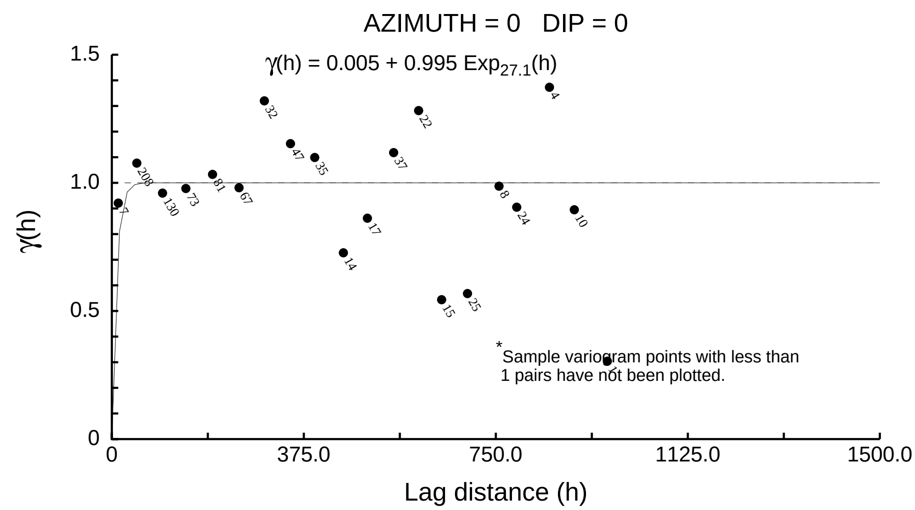


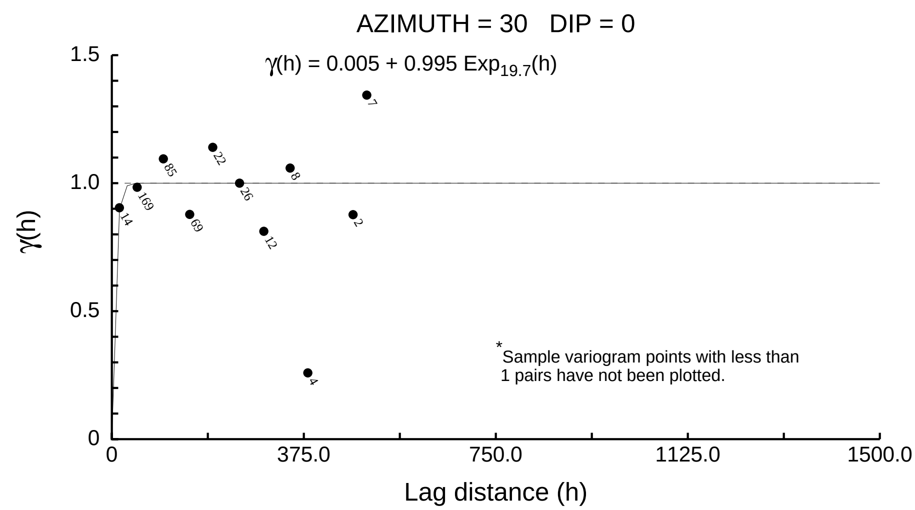
Y-Z Planes Looking West

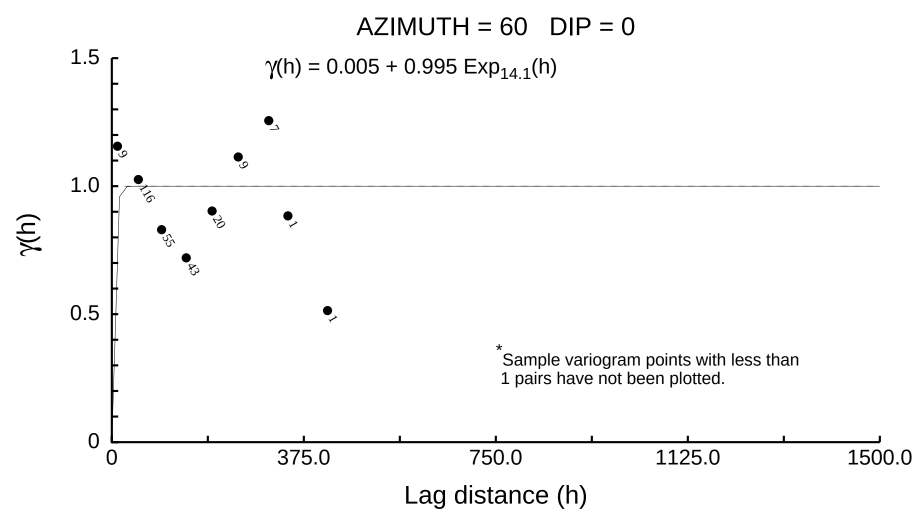


Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

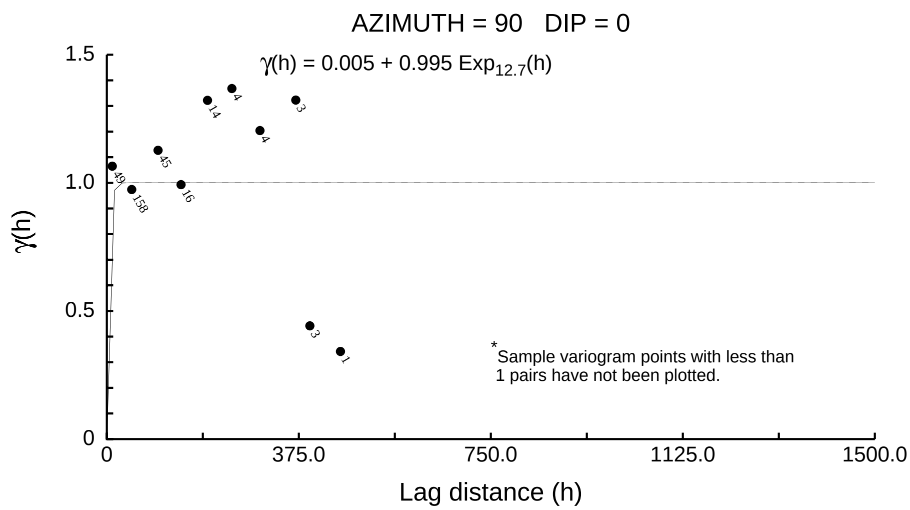
Zone 99 +0.4 gram Correlograms - 5m Comps

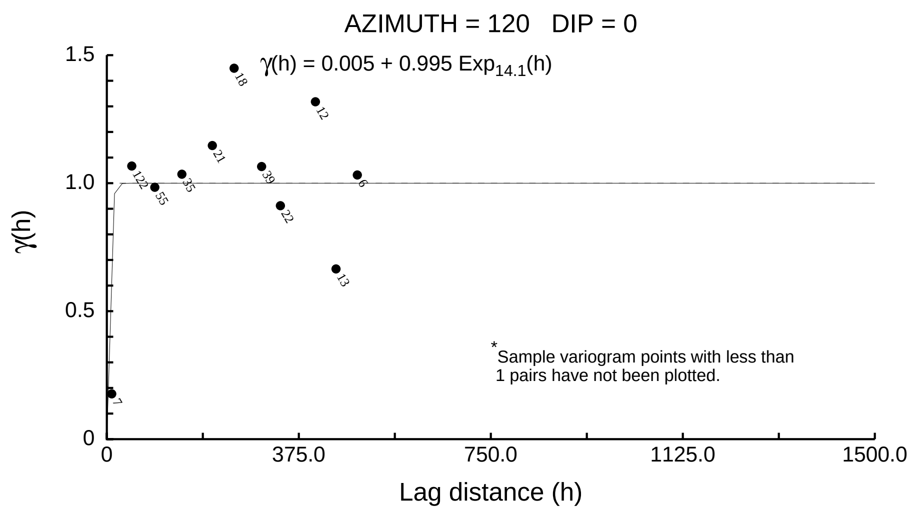


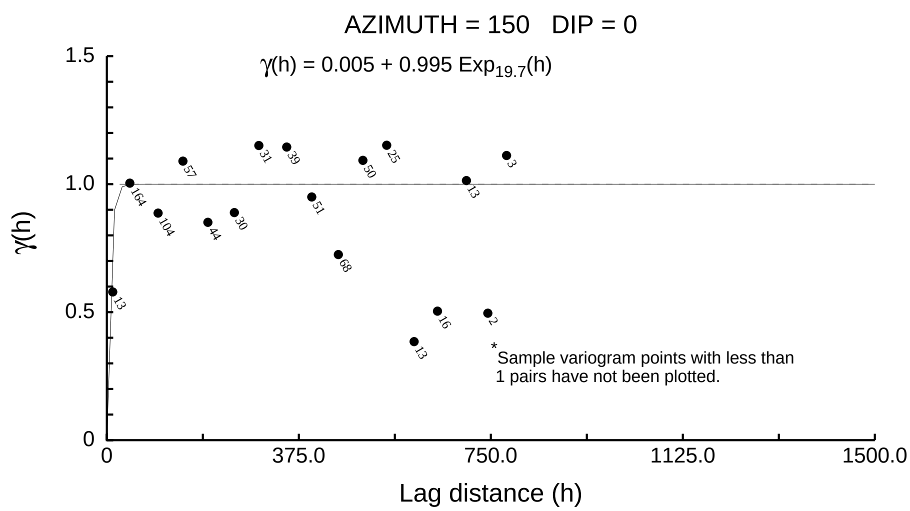




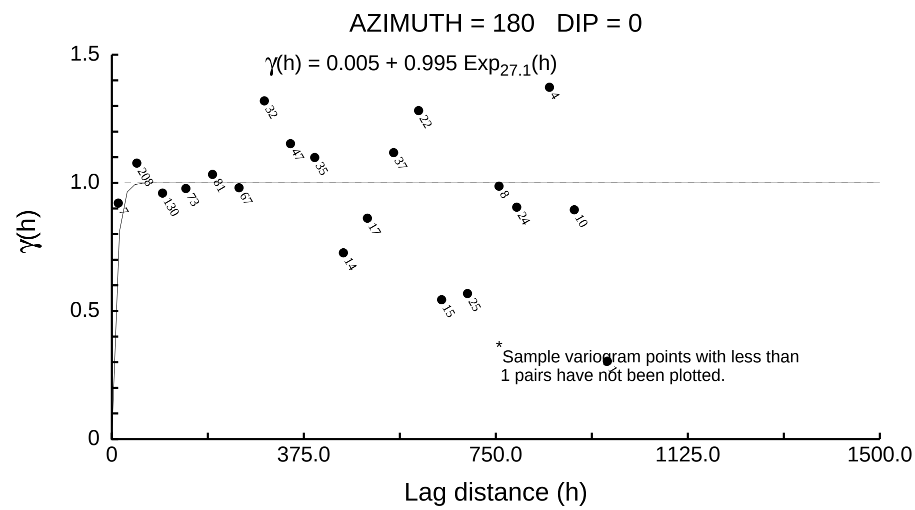
Zone 99 +0.4 gram Correlograms - 5m Comps

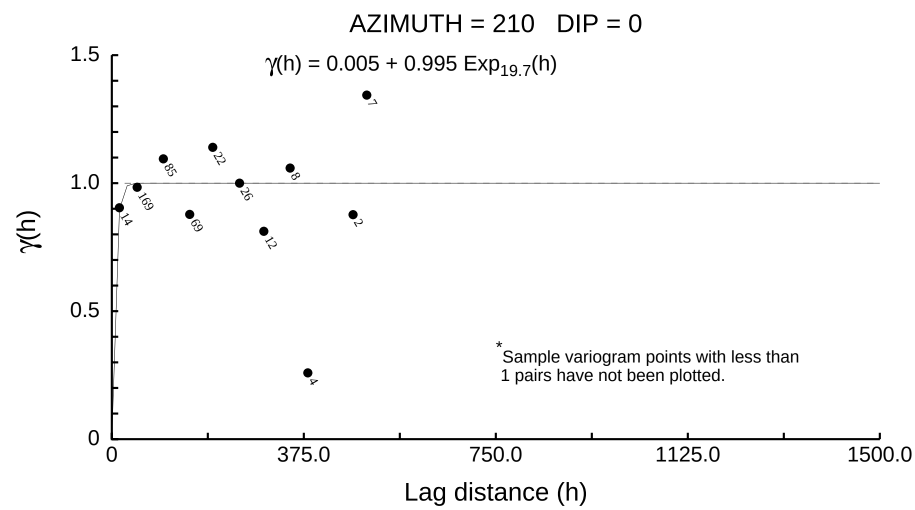


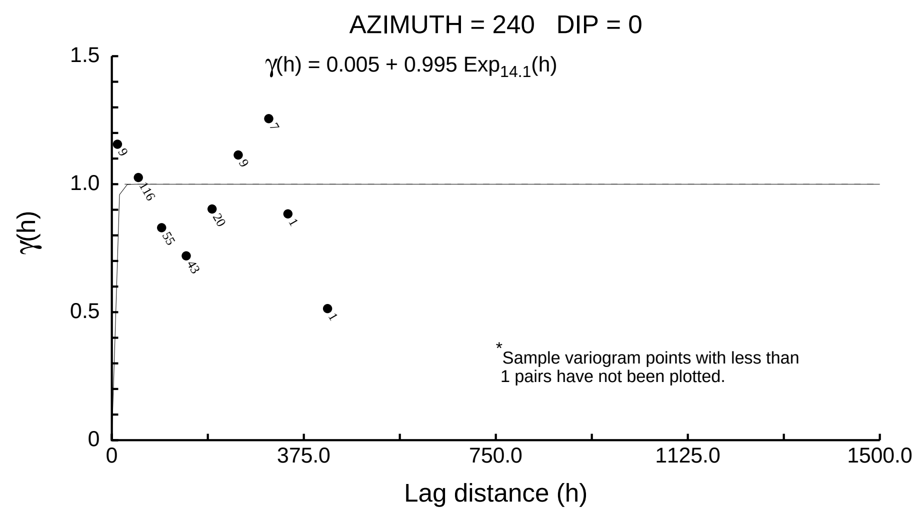




Zone 99 +0.4 gram Correlograms - 5m Comps







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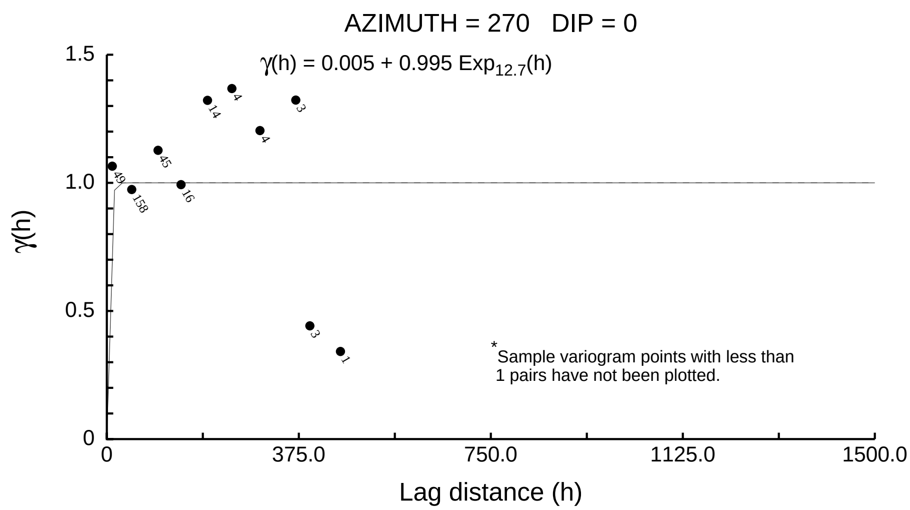

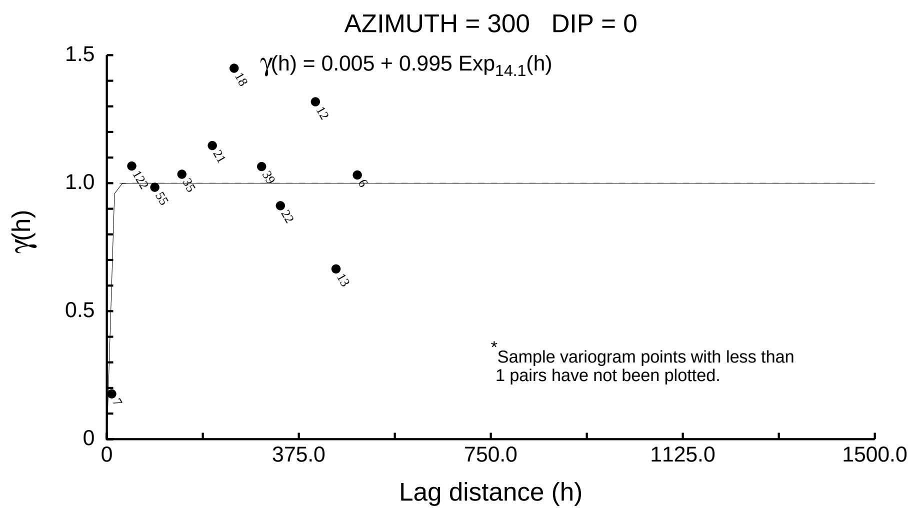

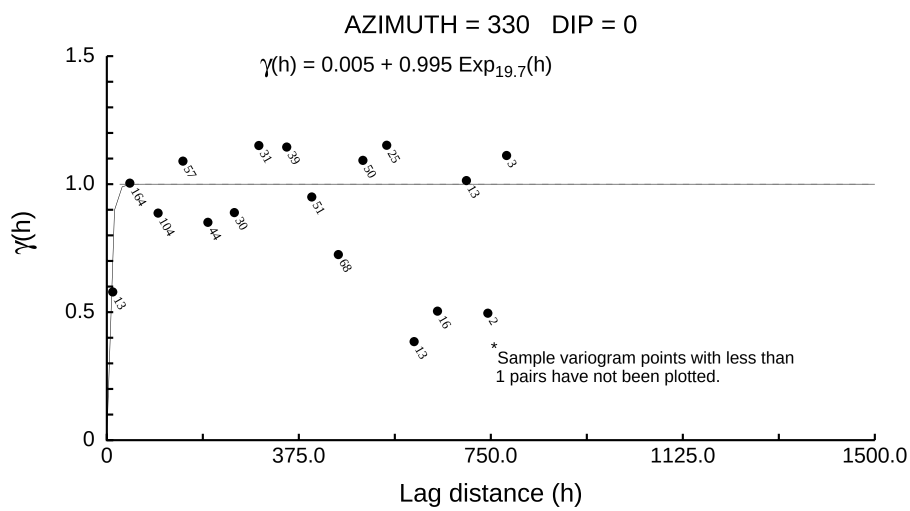

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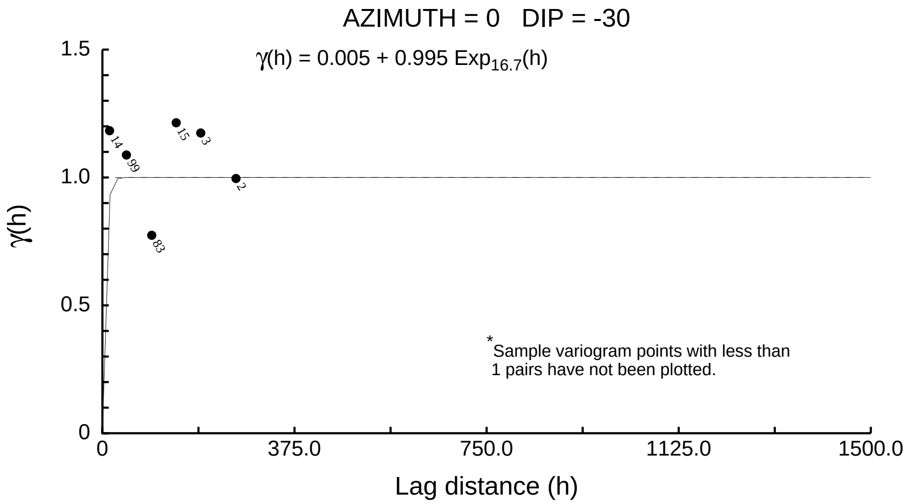

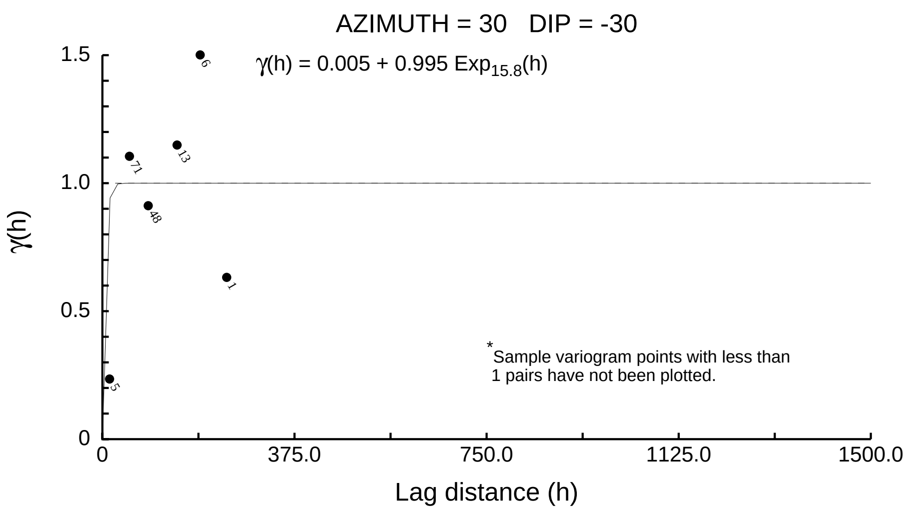

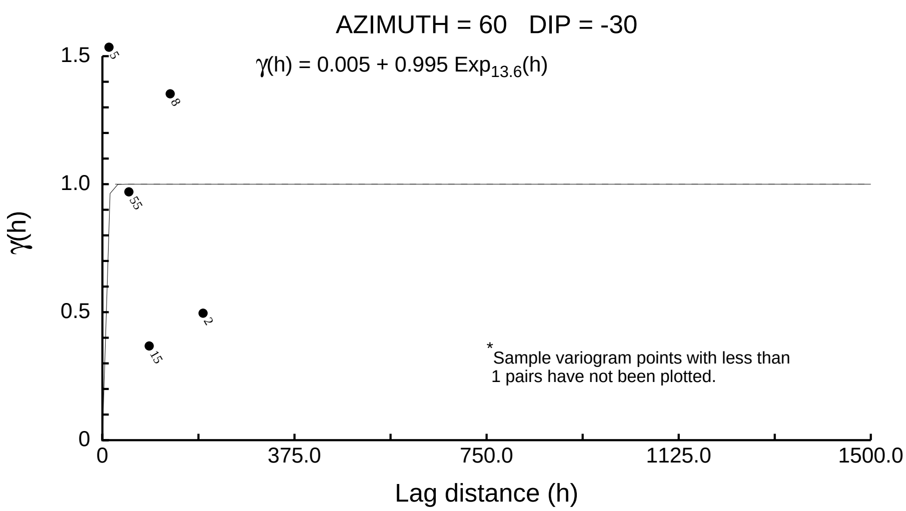

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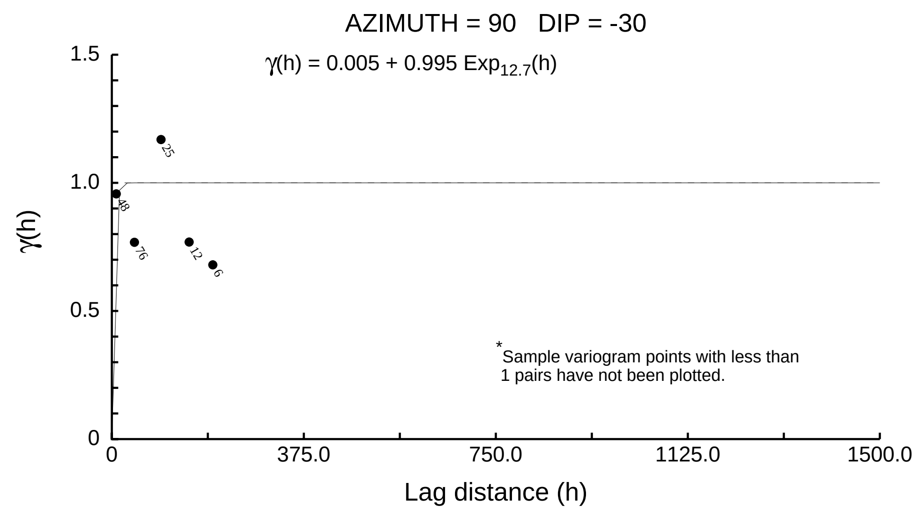

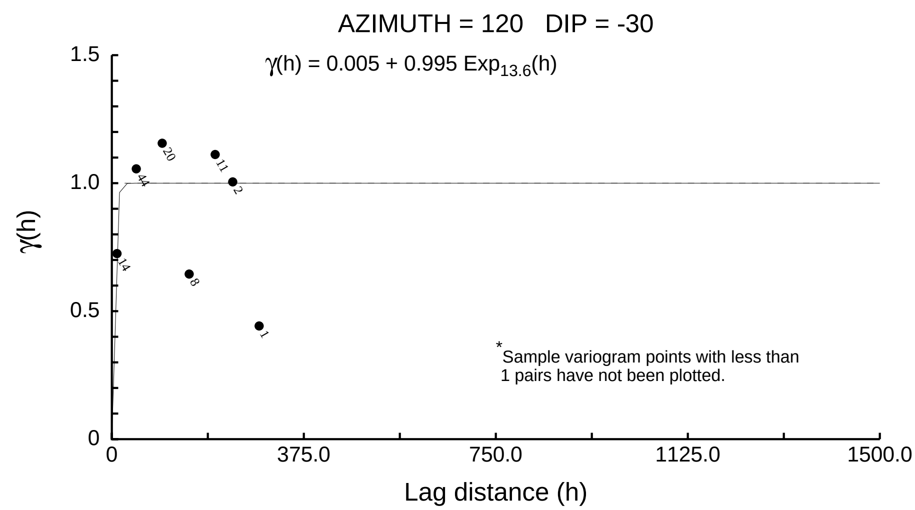

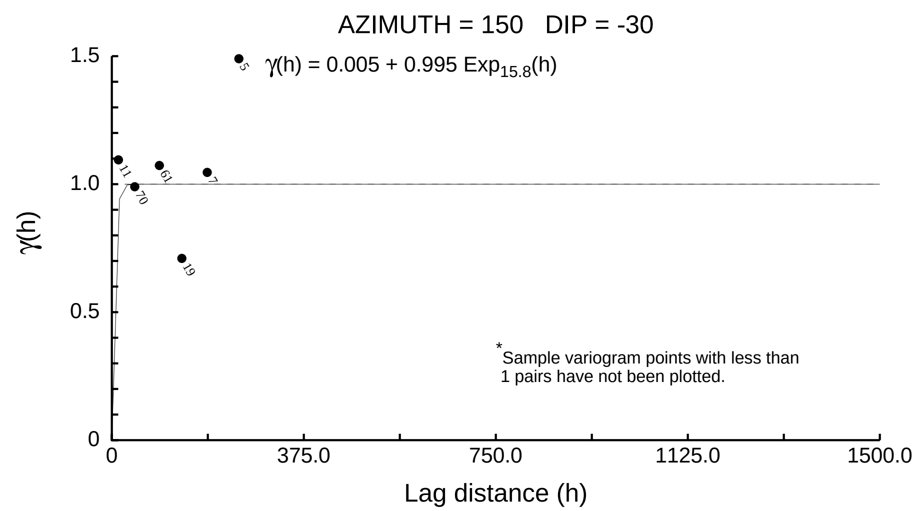

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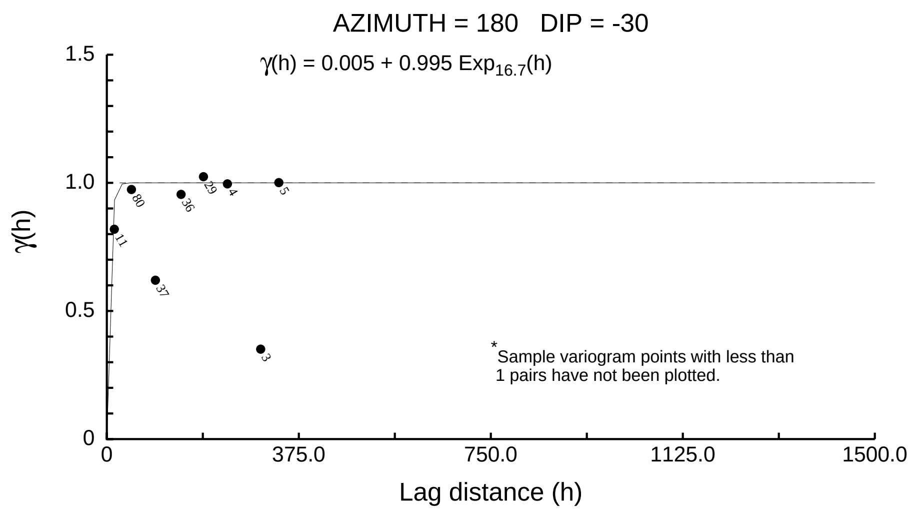

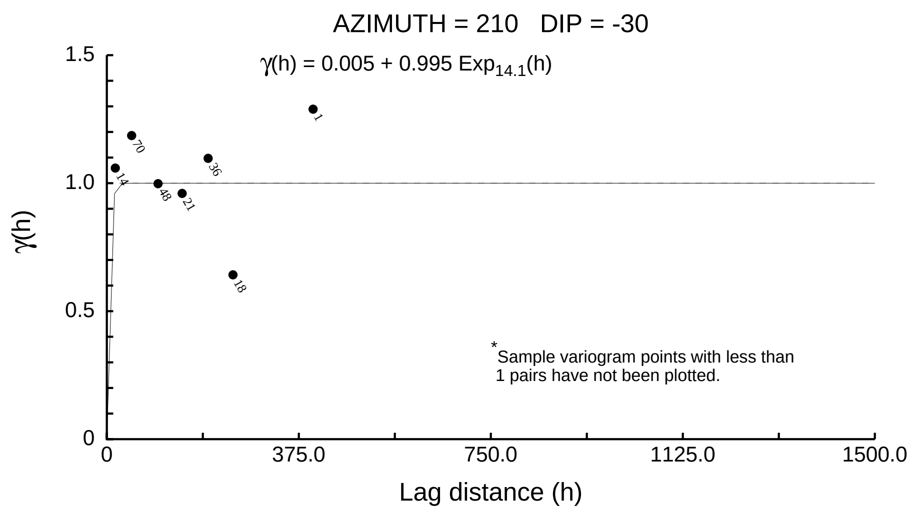

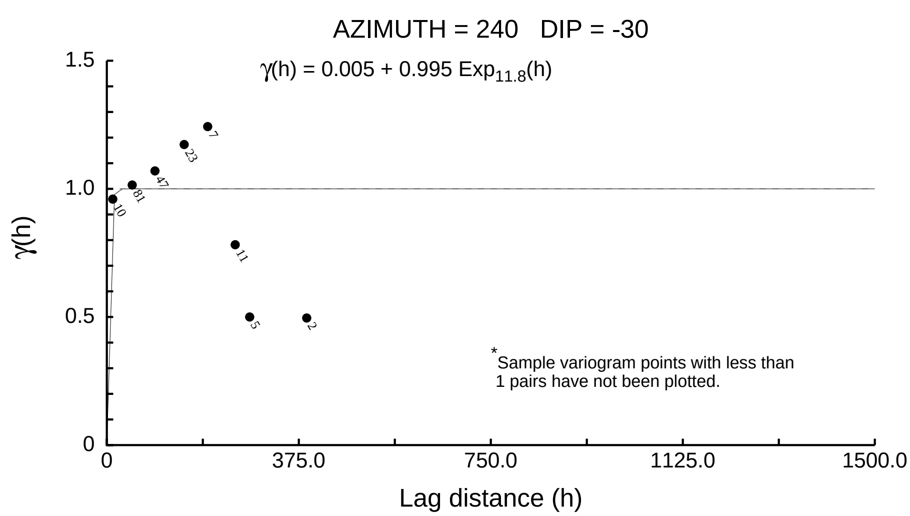

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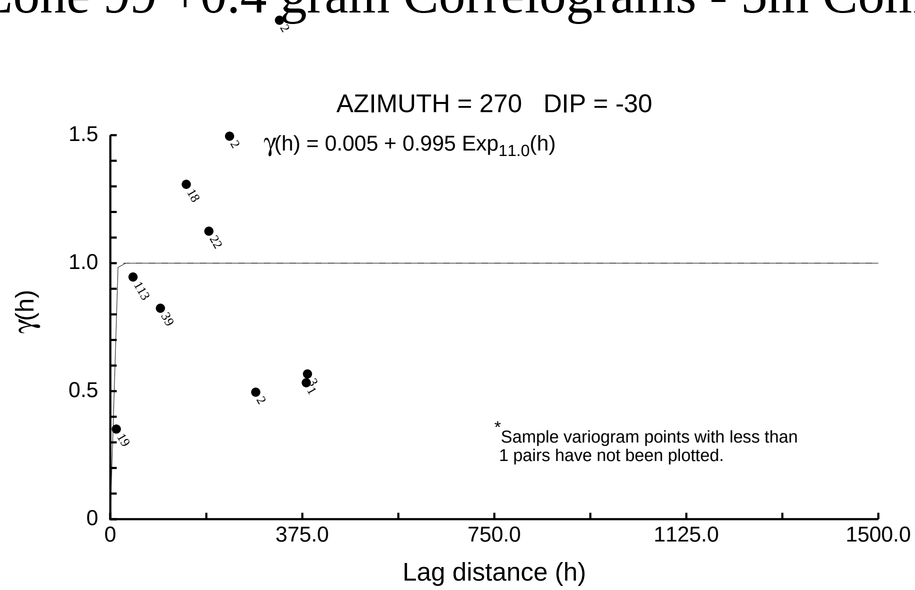

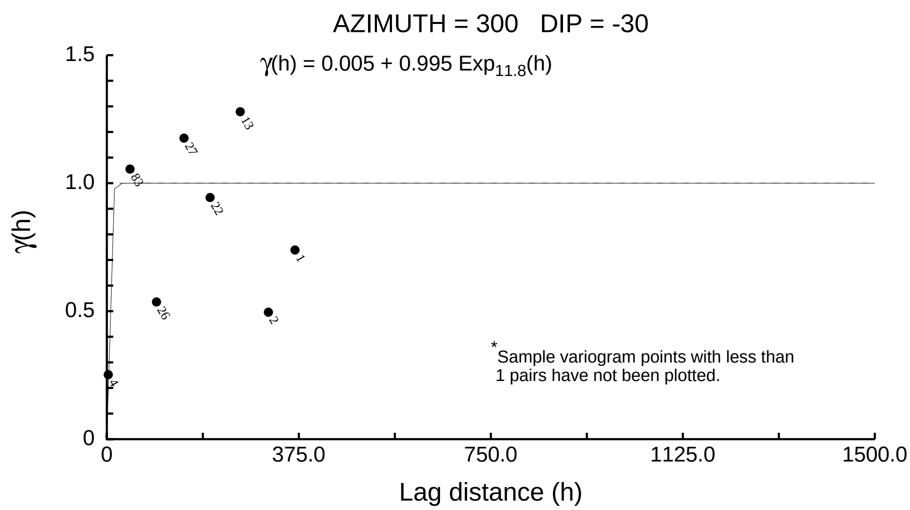

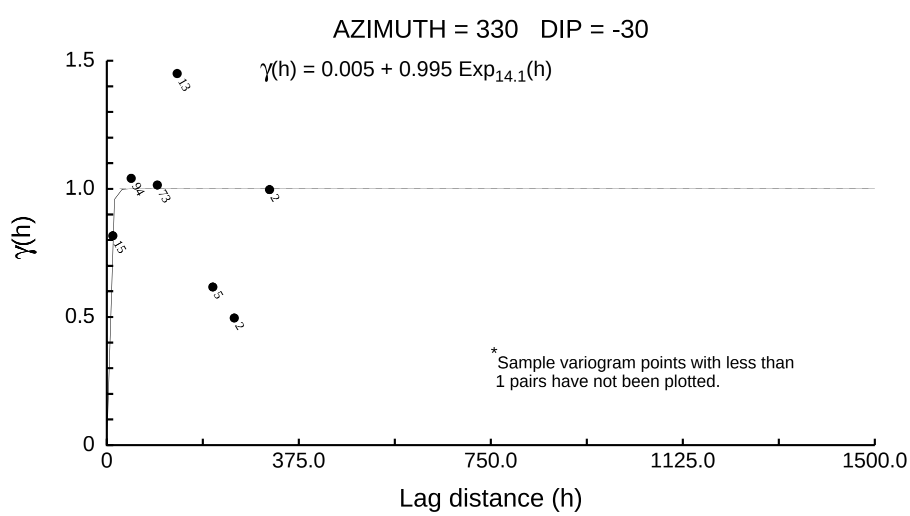

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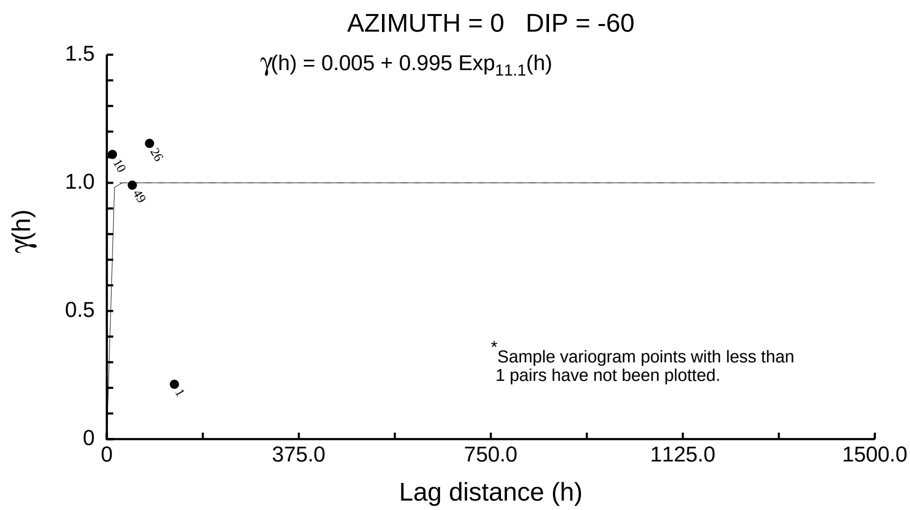

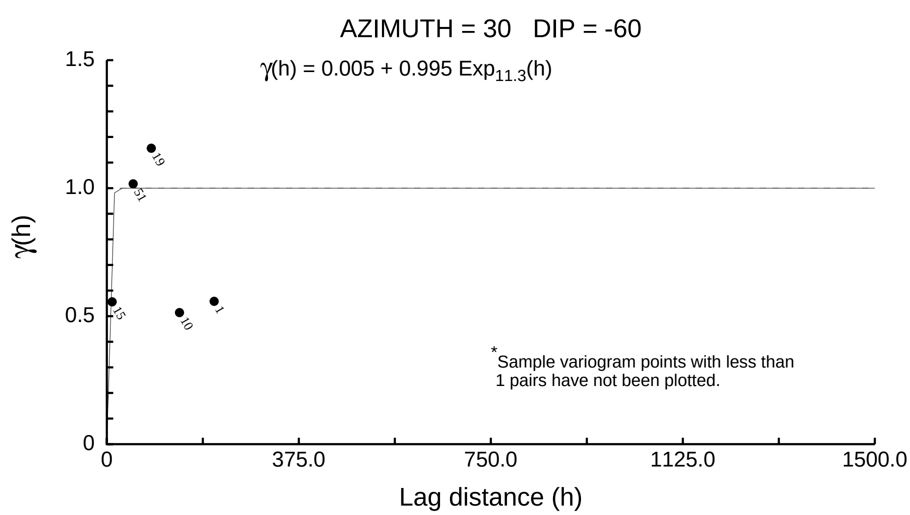

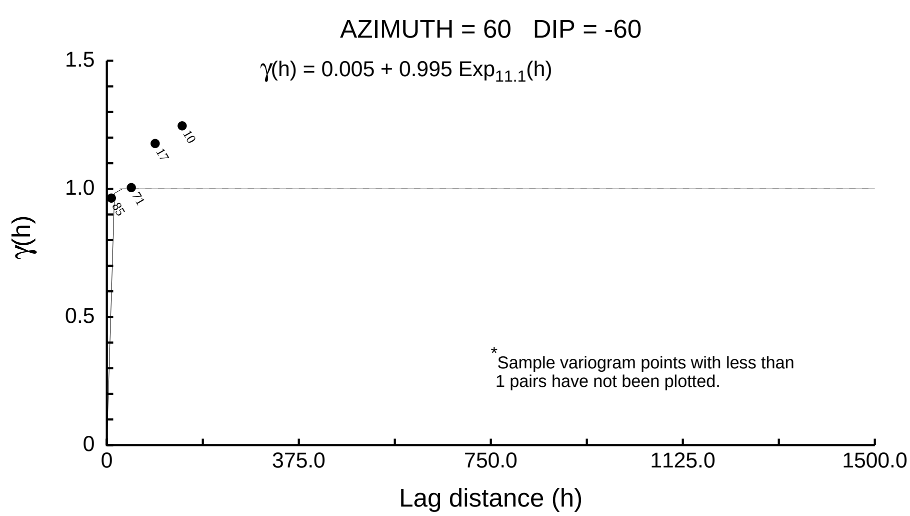

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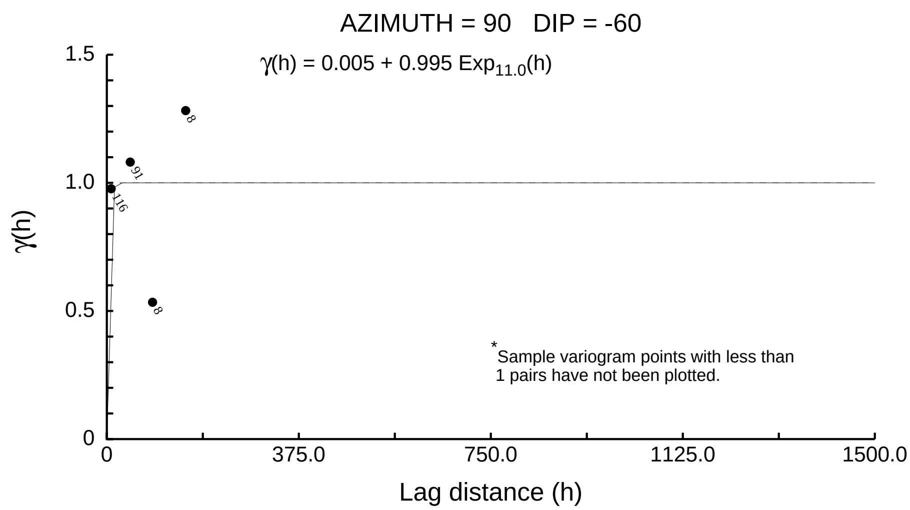

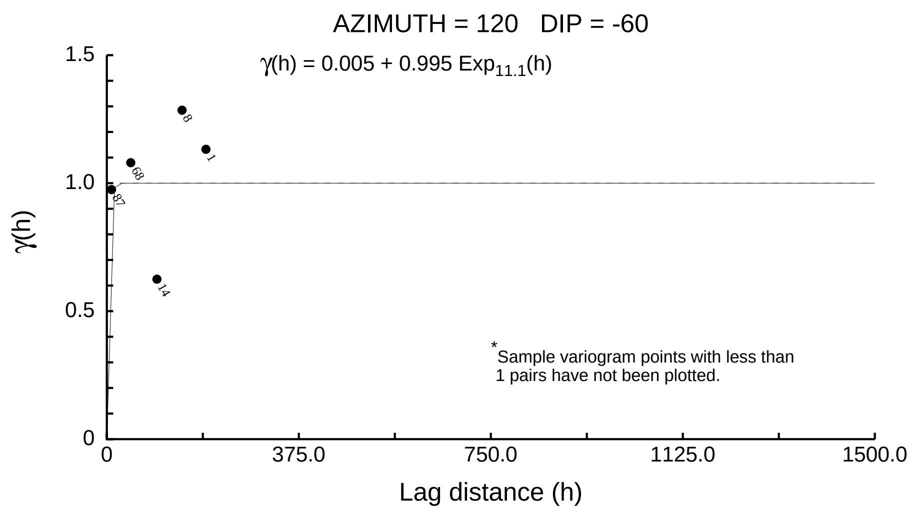

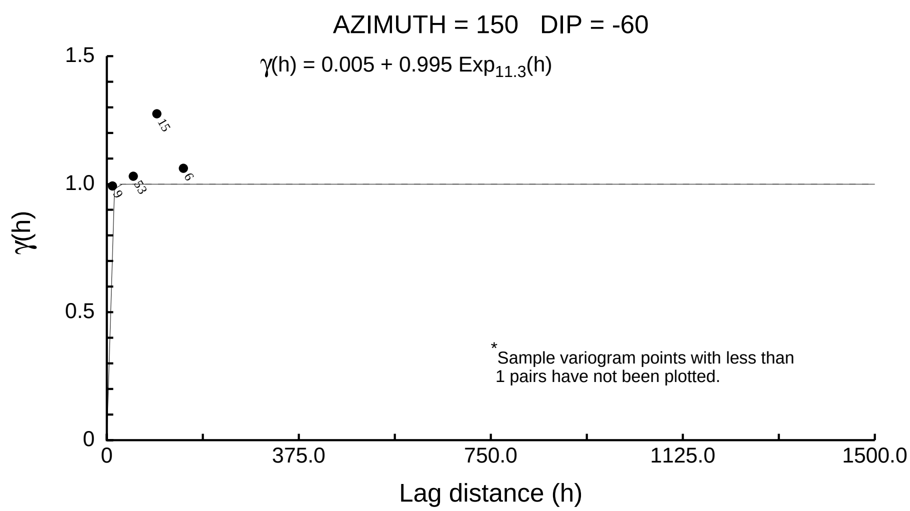

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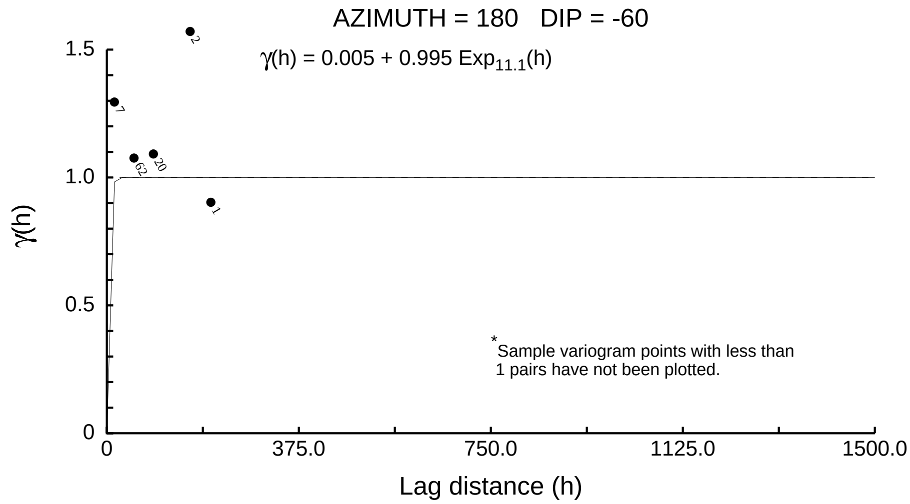

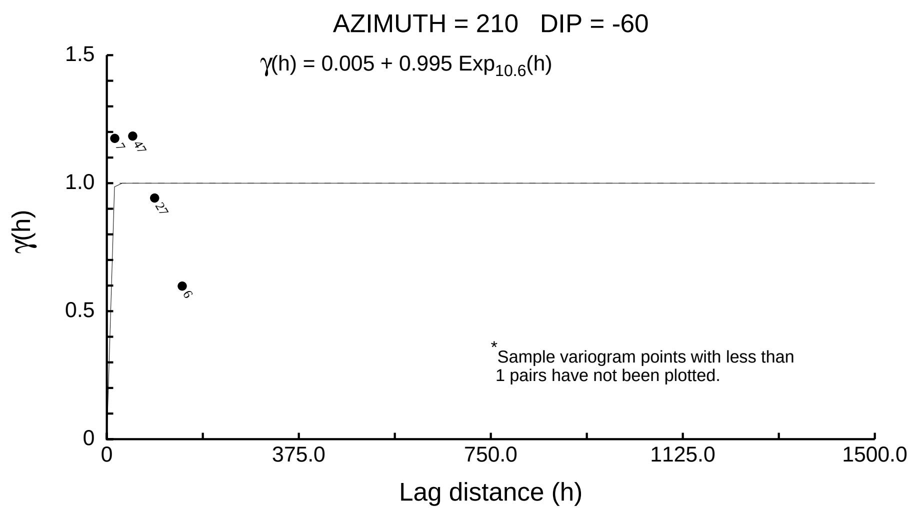

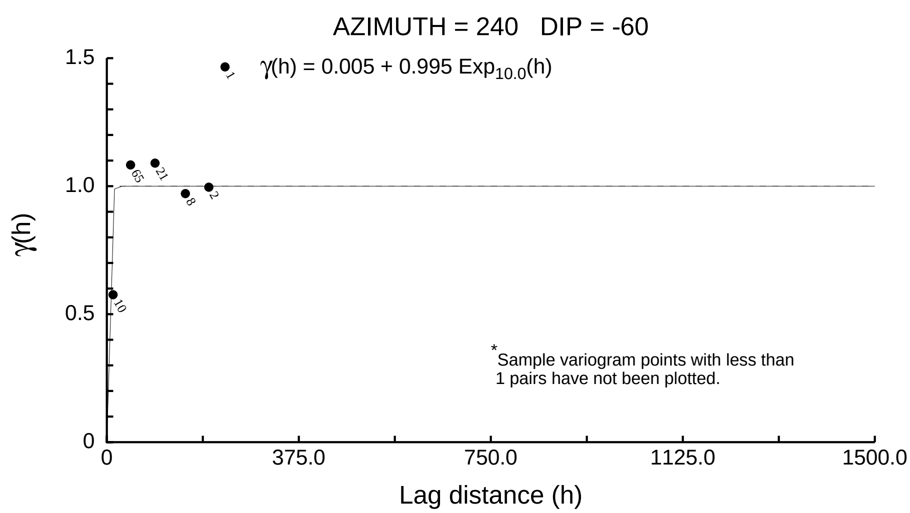

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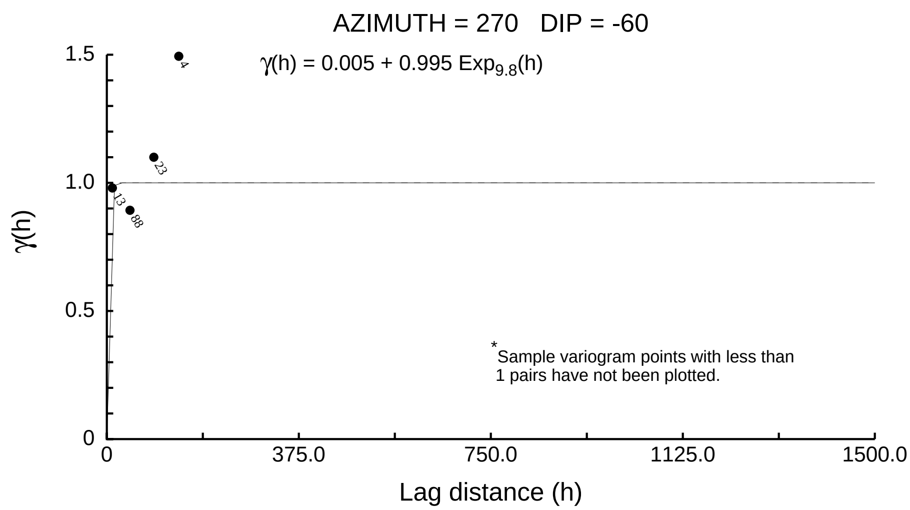
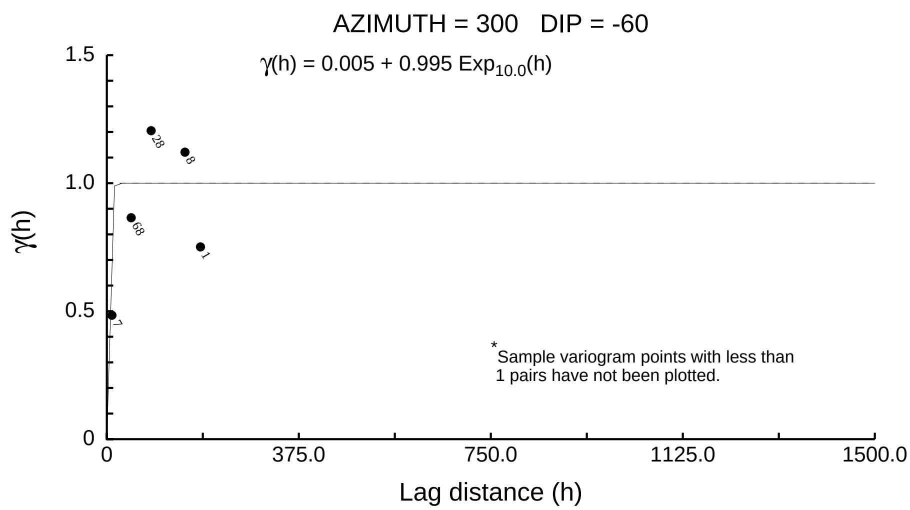
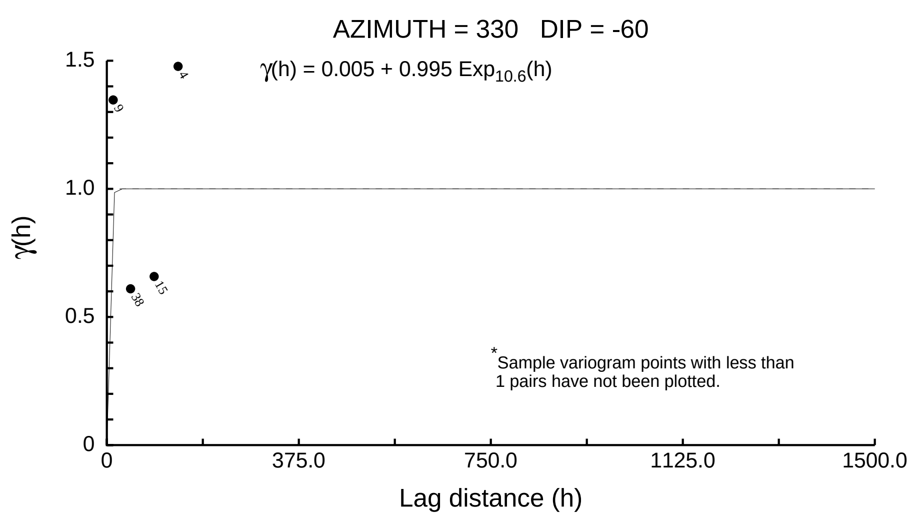
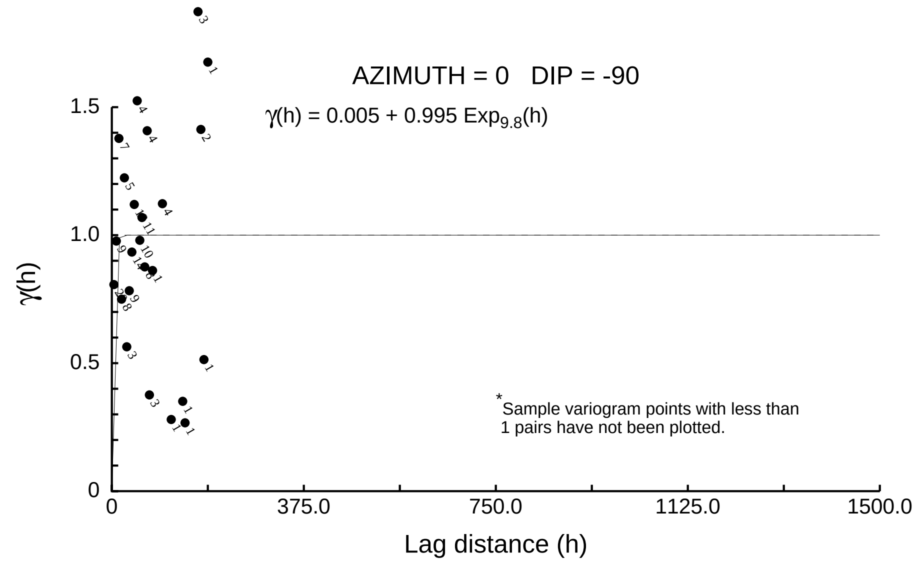






Zone 99 +0.4 gram Correlograms - 5m Comps



Zone 99 0.4 gram Ind. Correlogram - 5m Comps

Medsystem and Vulcan Rotation Conventions

Nugget ==> 0.680
C1 ==> 0.320

First Structure -- Exponential with Practical Range

LH Rotation about the Z axis ==> 0
RH Rotation about the X' axis ==> 0
LH Rotation about the Y' axis ==> 75
Range along the Z' axis ==> 16.0 Azimuth ==> 270 Dip ==> 15
Range along the Y' axis ==> 23.0 Azimuth ==> 360 Dip ==> 0
Range along the X' axis ==> 15.2 Azimuth ==> 90 Dip ==> 75

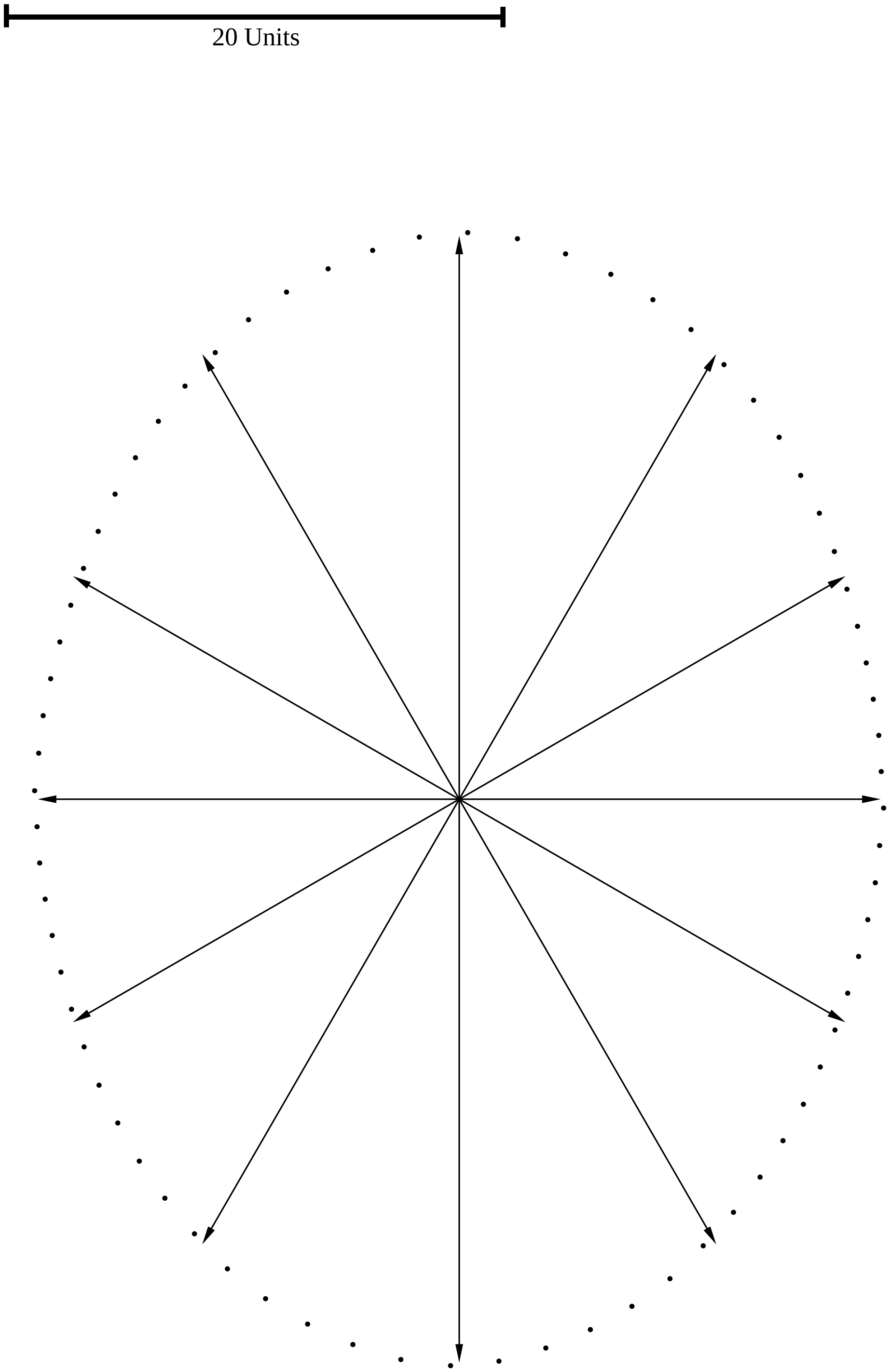
Modeling Criteria

Minimum number pairs req'd ==> 1
Sample variogram points weighted by # pairs

Zone 99 0.4 gram Ind. Correlogram - 5m Comps

Structure Number 1

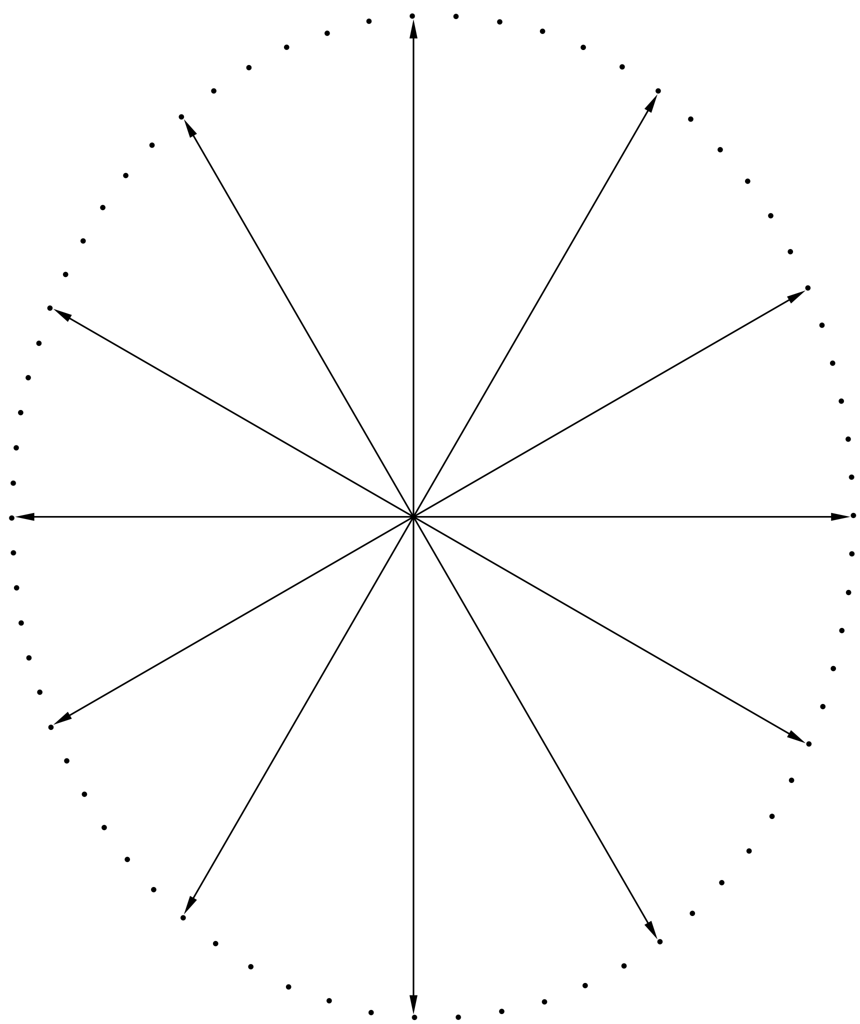
Rose Diagram of Ranges Dipping 0 Degrees
Scale:



Zone 99 0.4 gram Ind. Correlogram - 5m Comps

Structure Number 1

Rose Diagram of Ranges Dipping 30 Degrees
Scale:



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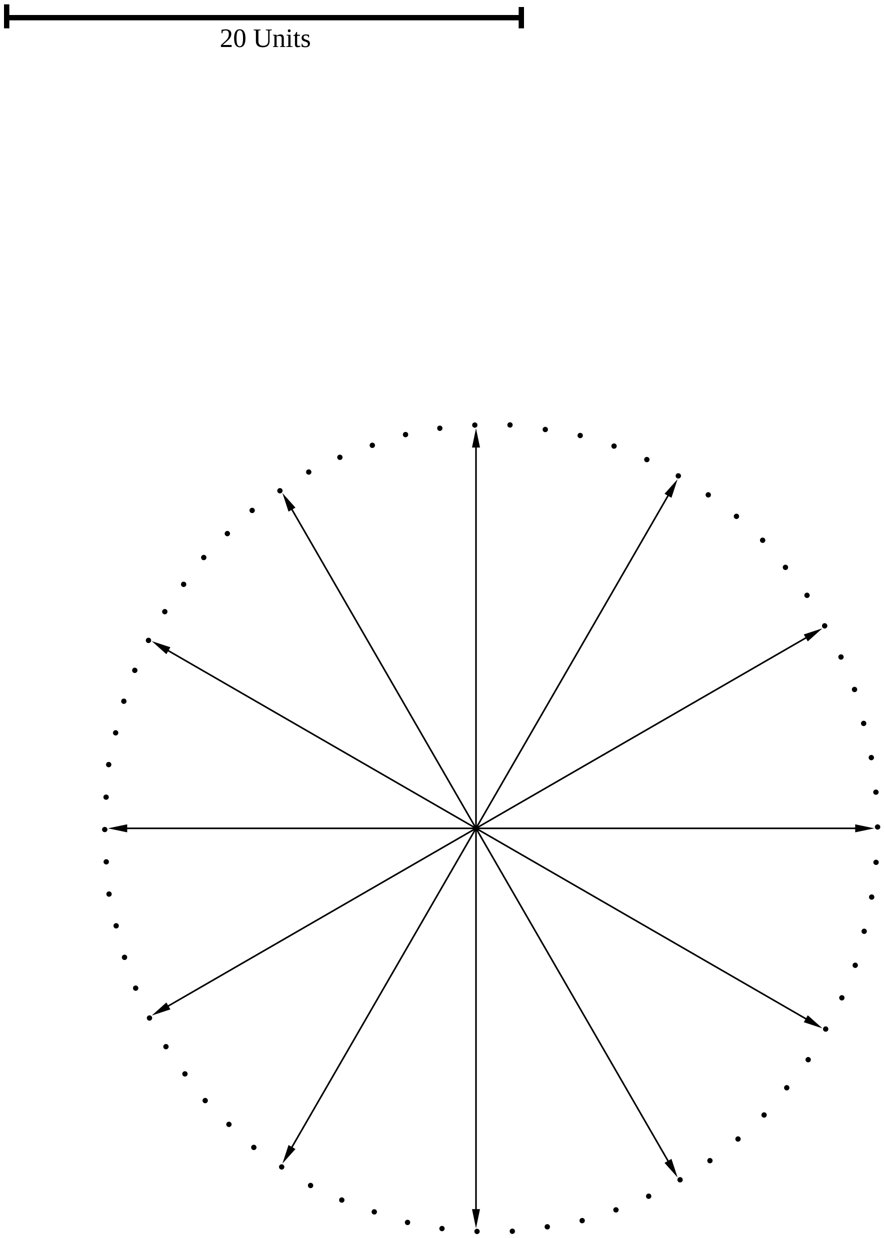
Zone 99 0.4 gram Ind. Correlogram - 5m Comps

Structure Number 1

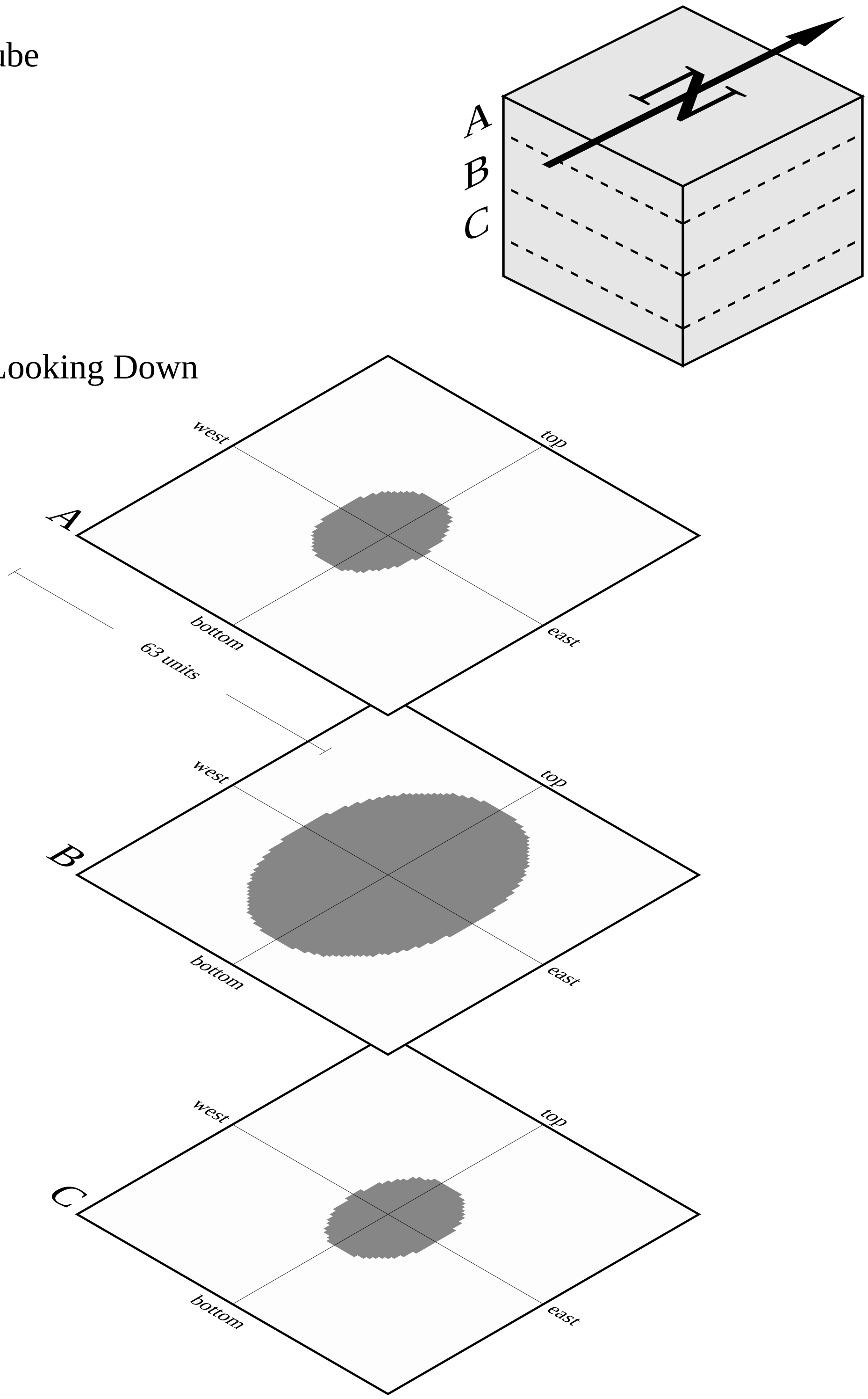
Rose Diagram of Ranges Dipping 60 Degrees
Scale:



Horizontal Slices Through the Ellipsoids

Reference Cube

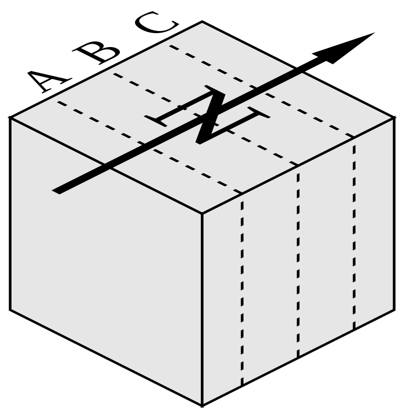
X-Y Planes Looking Down



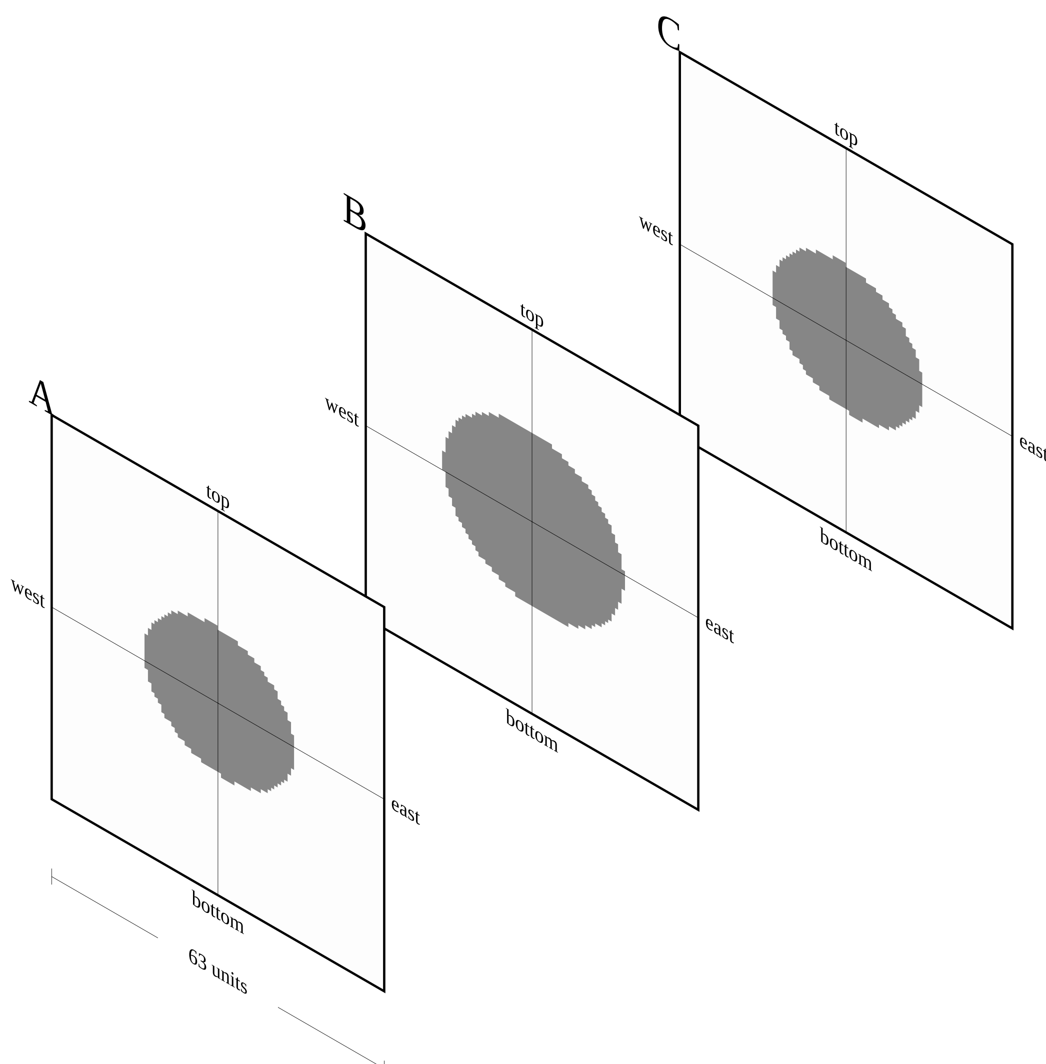
Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Cross Section Views Through the Ellipsoids

Reference Cube



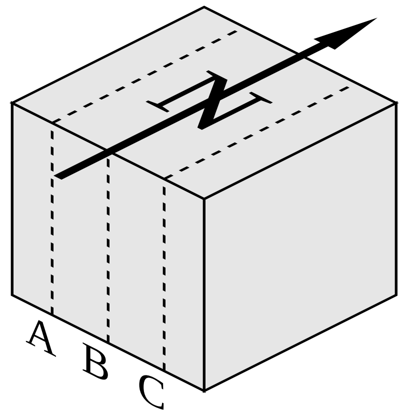
X-Z Planes Looking North



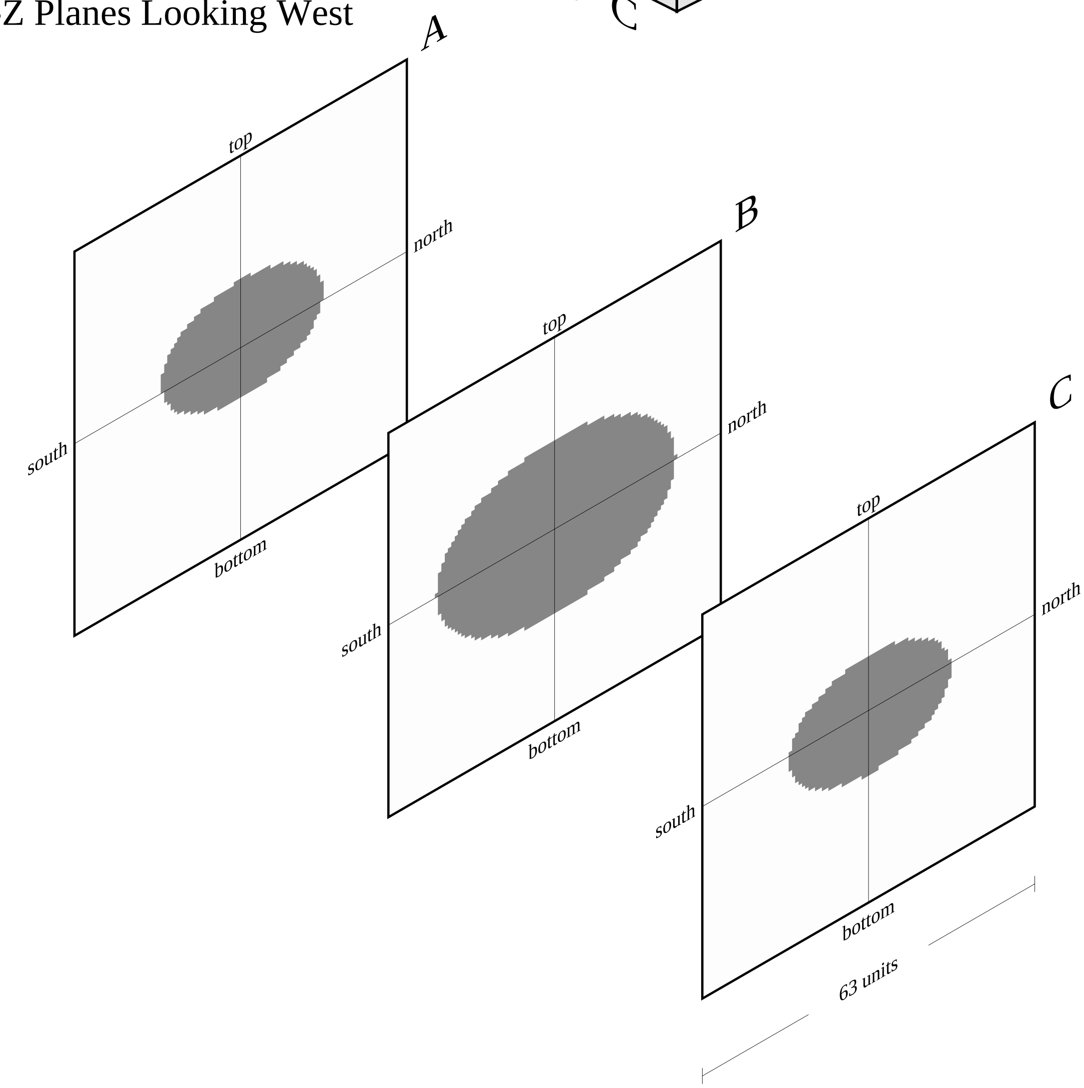
Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Long Section Views Through the Ellipsoids

Reference Cube

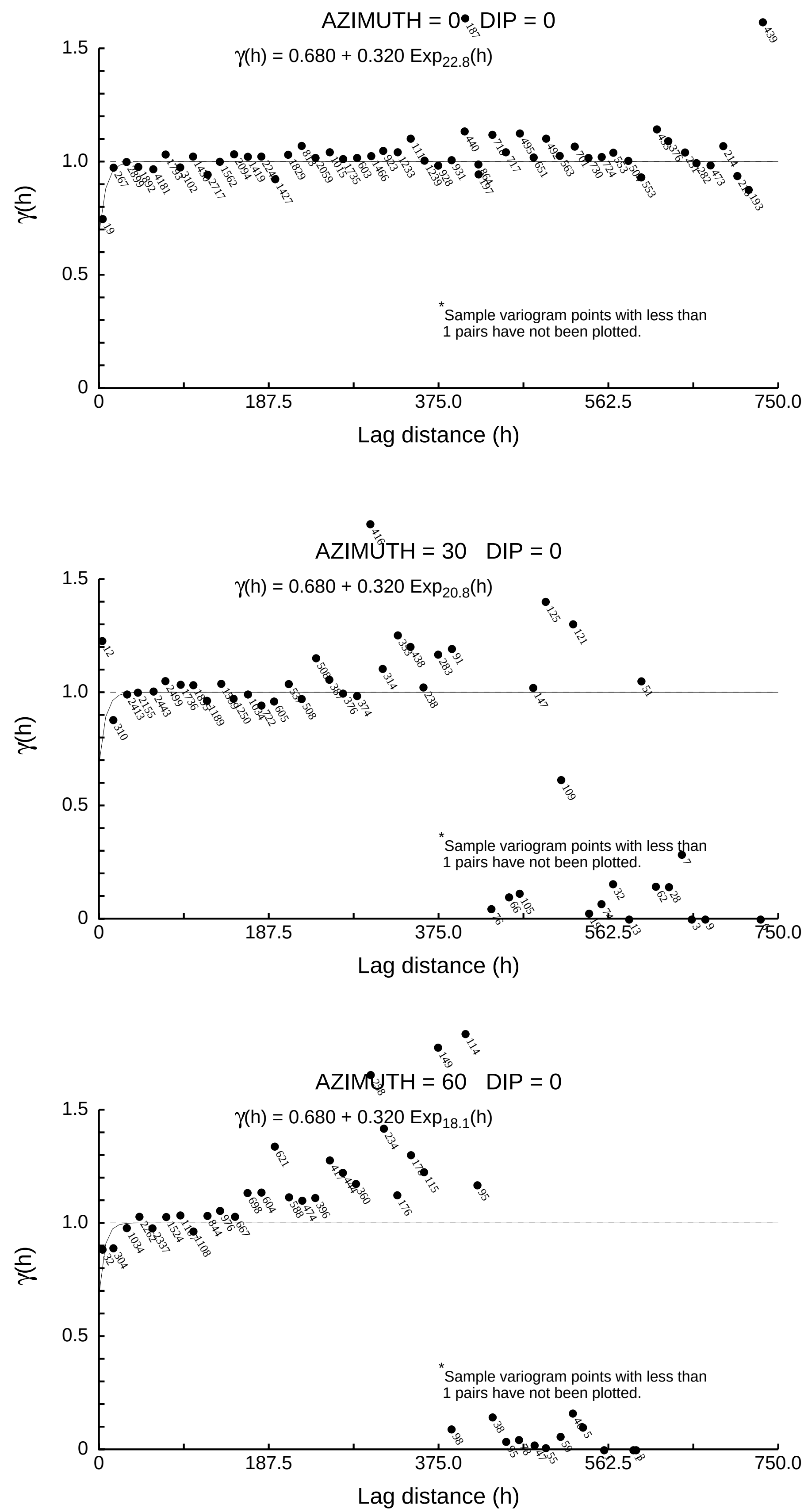


Y-Z Planes Looking West



Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Zone 99 0.4 gram Ind. Correlogram - 5m Comps



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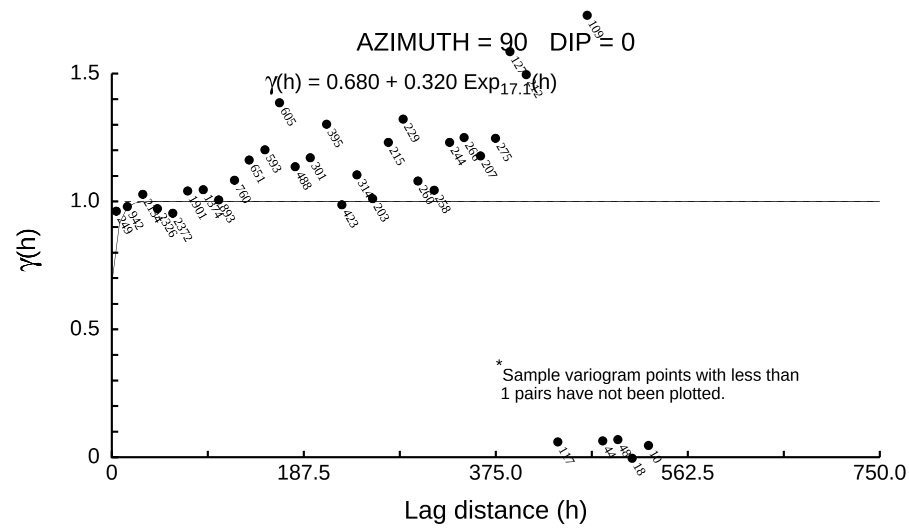
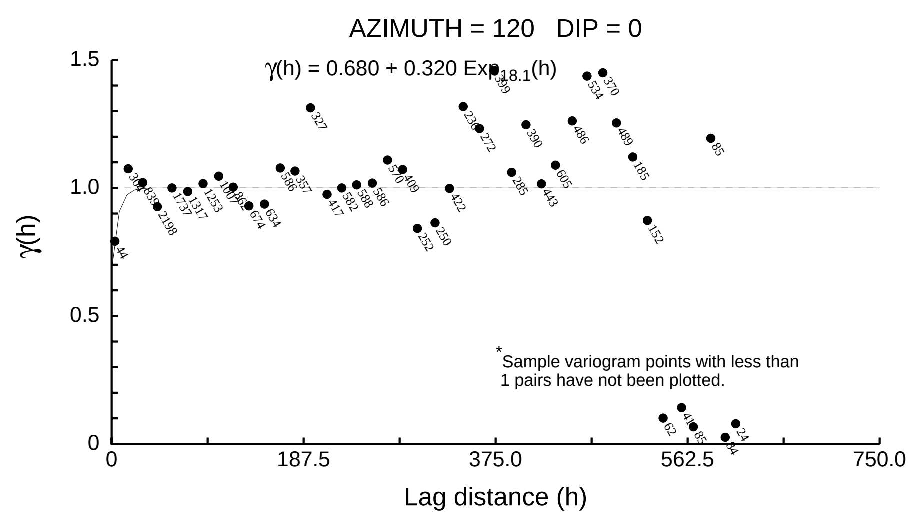
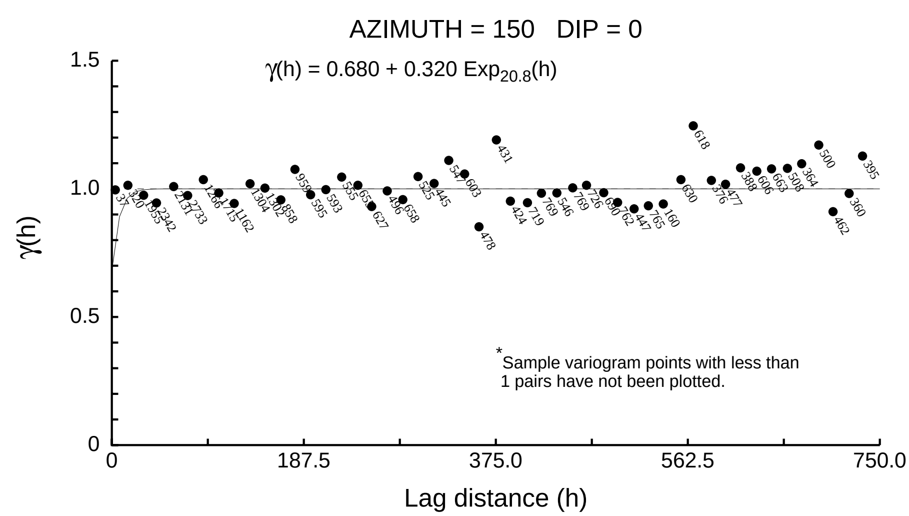
Zone 99 0.4 gram Ind. Correlogram - 5m Comps







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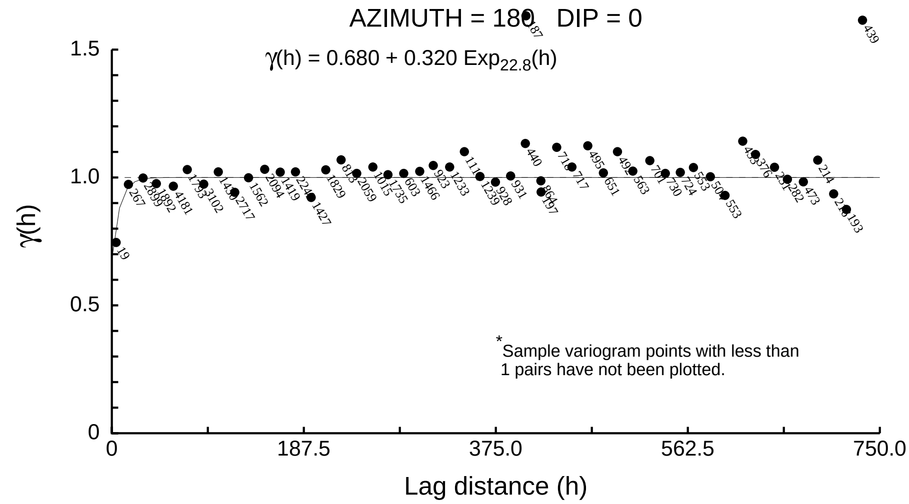
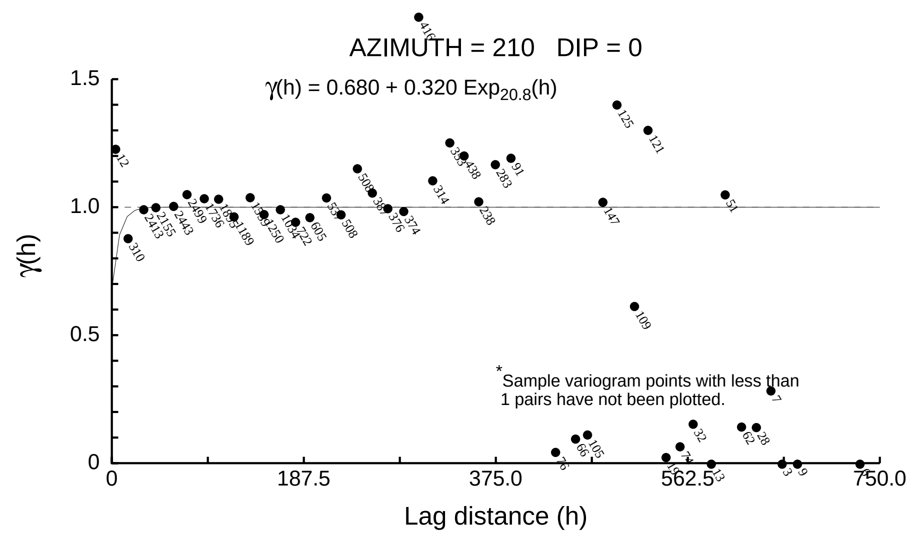
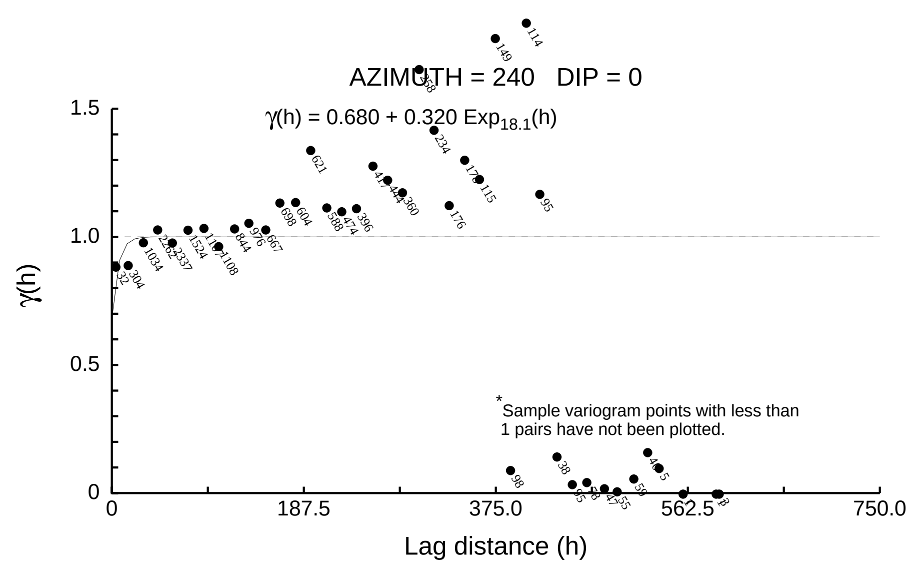
Zone 99 0.4 gram Ind. Correlogram - 5m Comps







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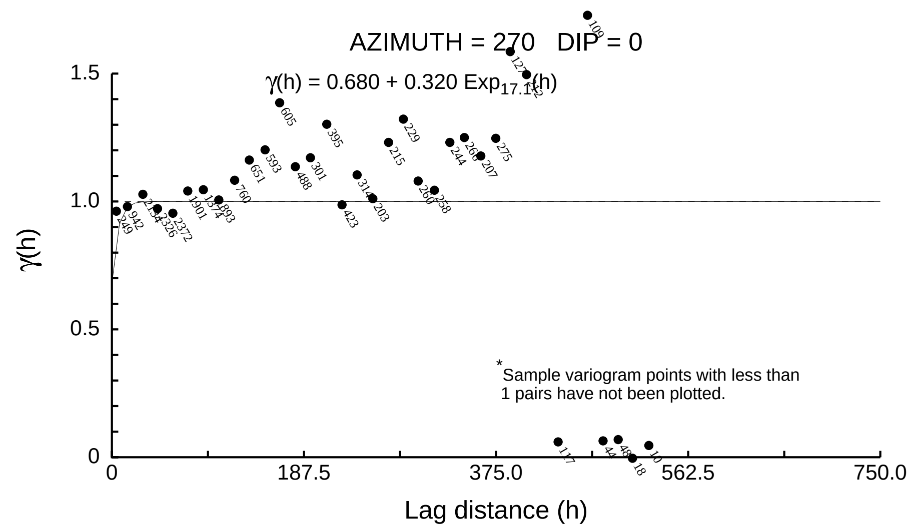
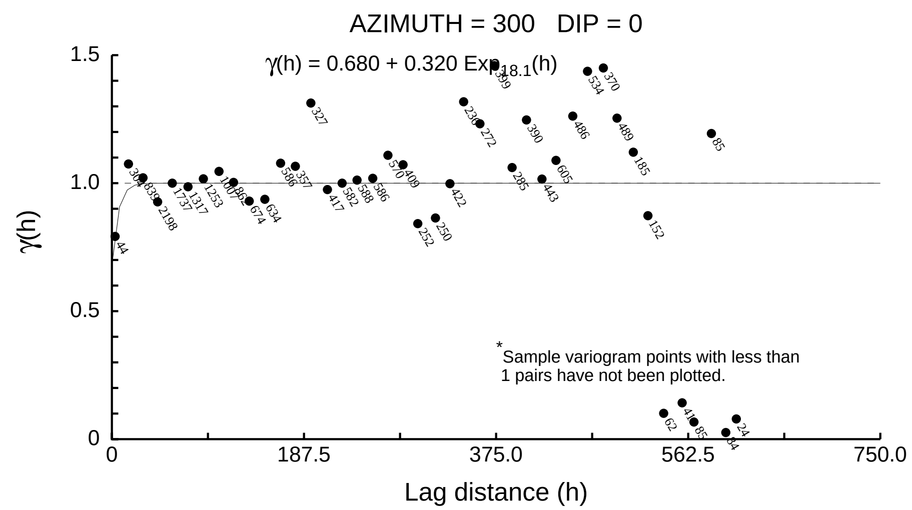
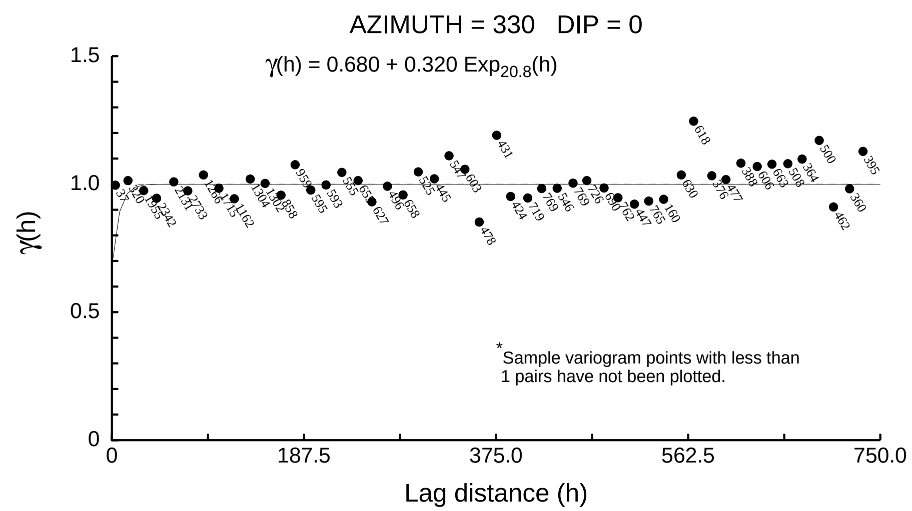
Zone 99 0.4 gram Ind. Correlogram - 5m Comps







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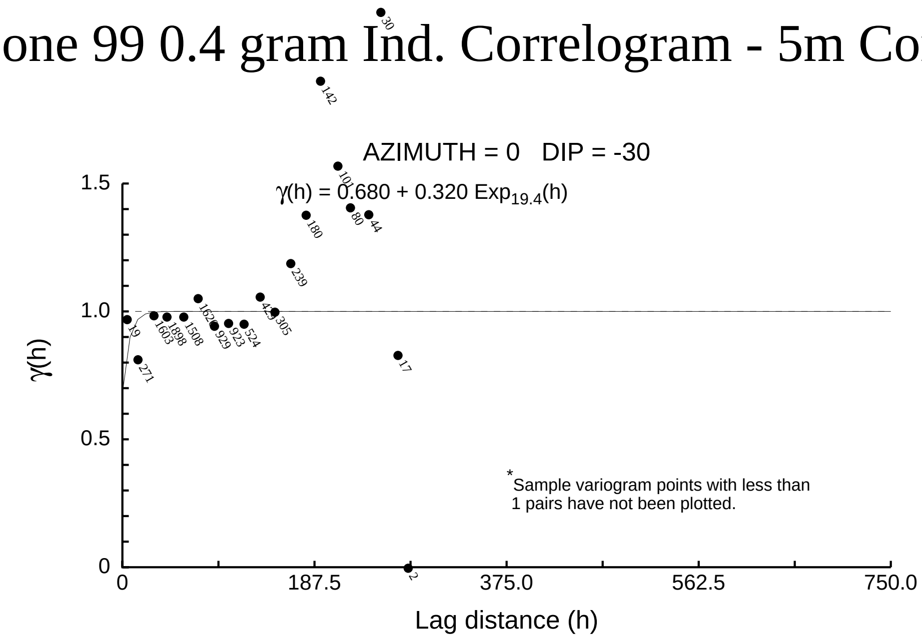
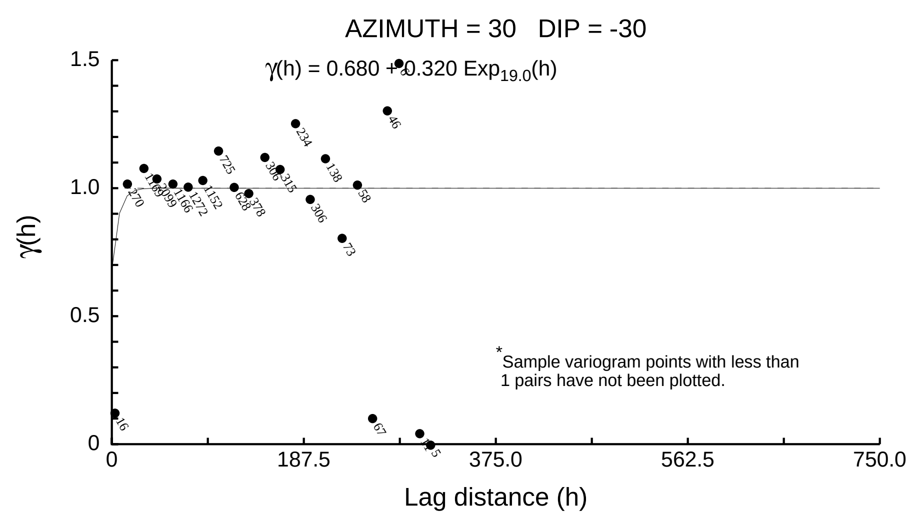
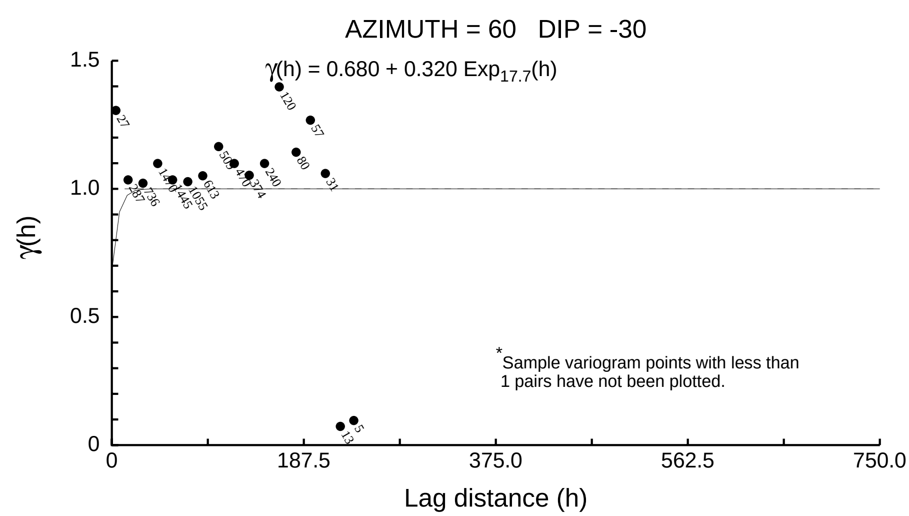
Zone 99 0.4 gram Ind. Correlogram - 5m Comps







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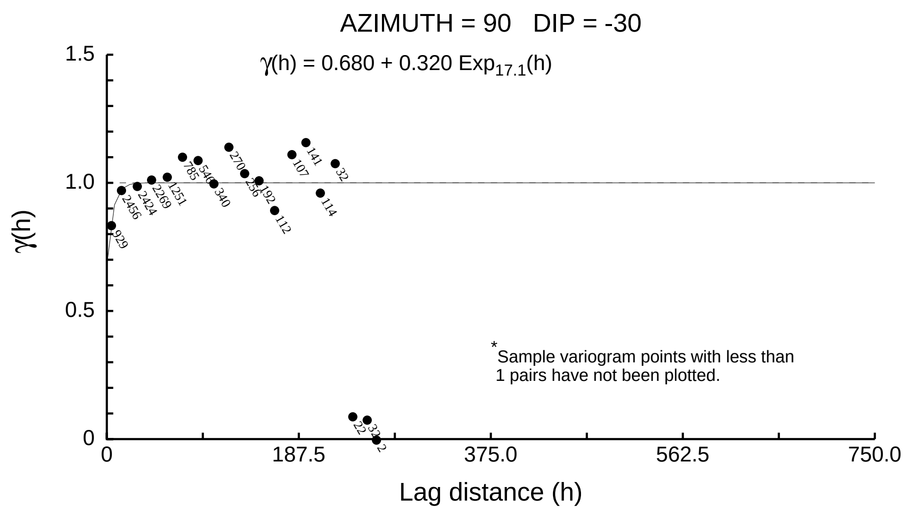
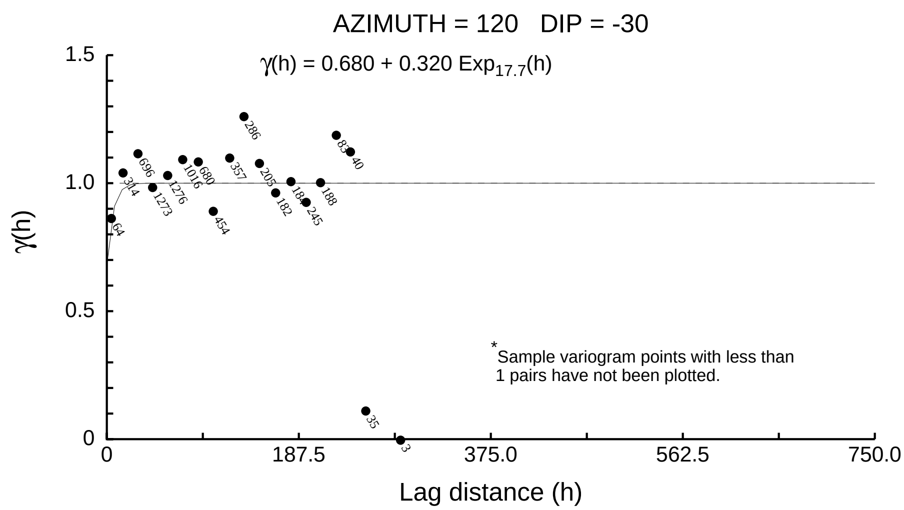
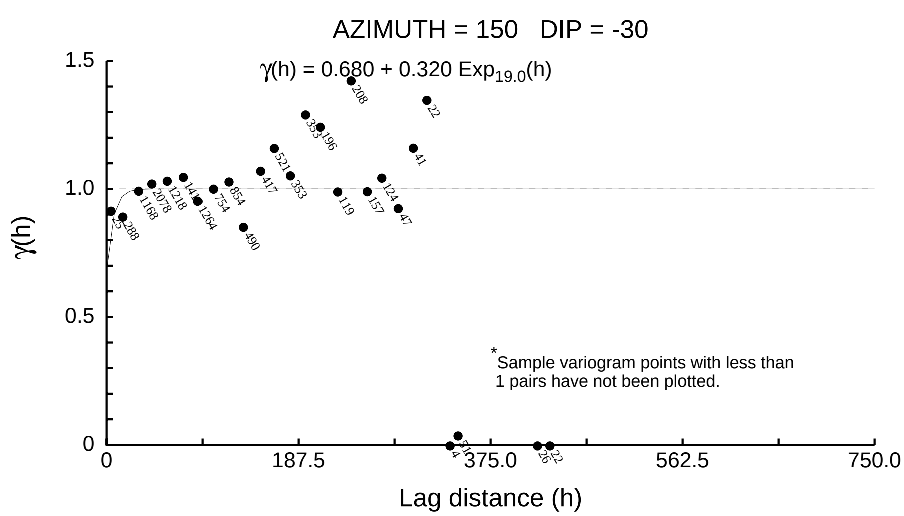
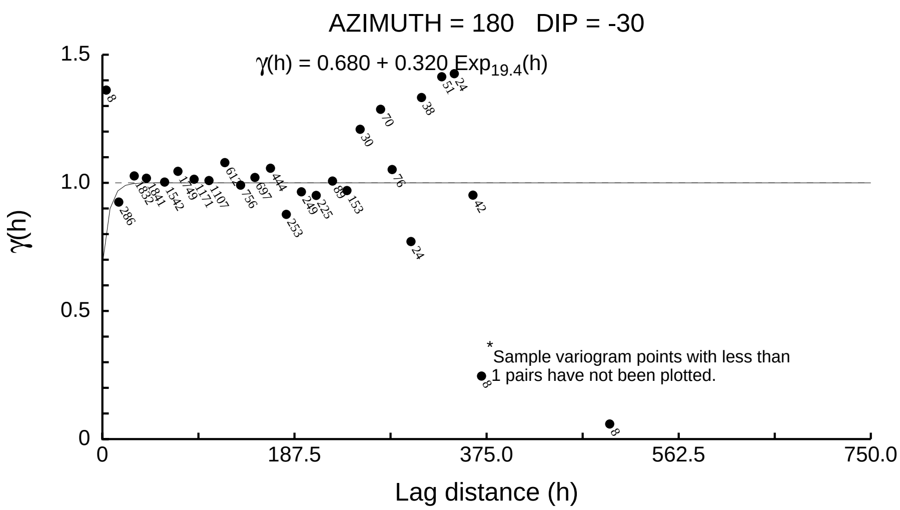
Zone 99 0.4 gram Ind. Correlogram - 5m Comps

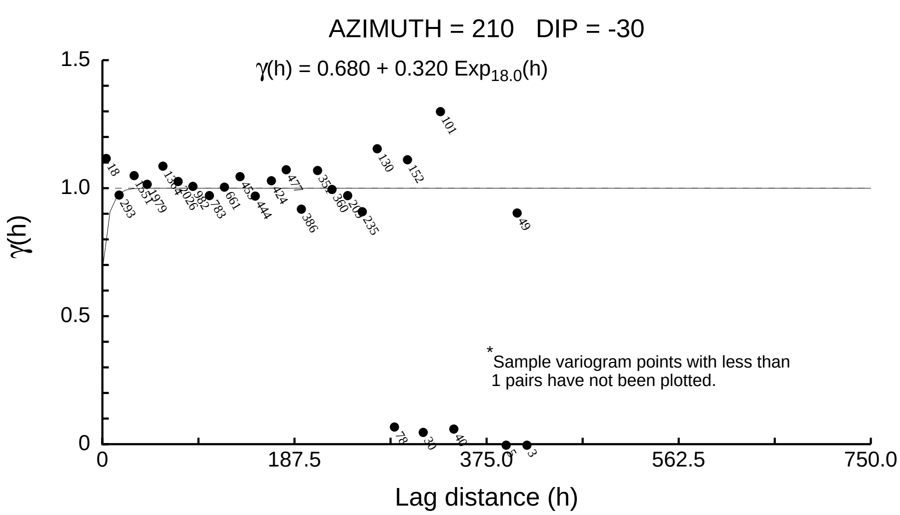


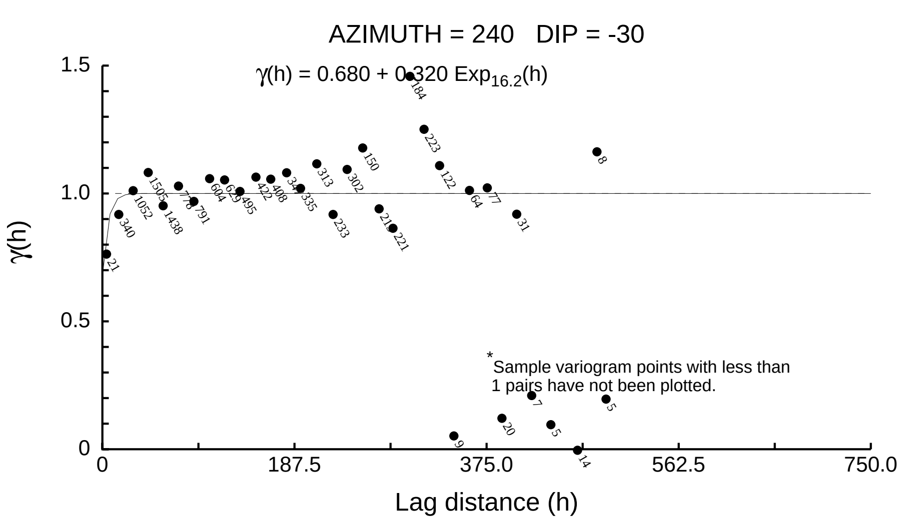




Zone 99 0.4 gram Ind. Correlogram - 5m Comps







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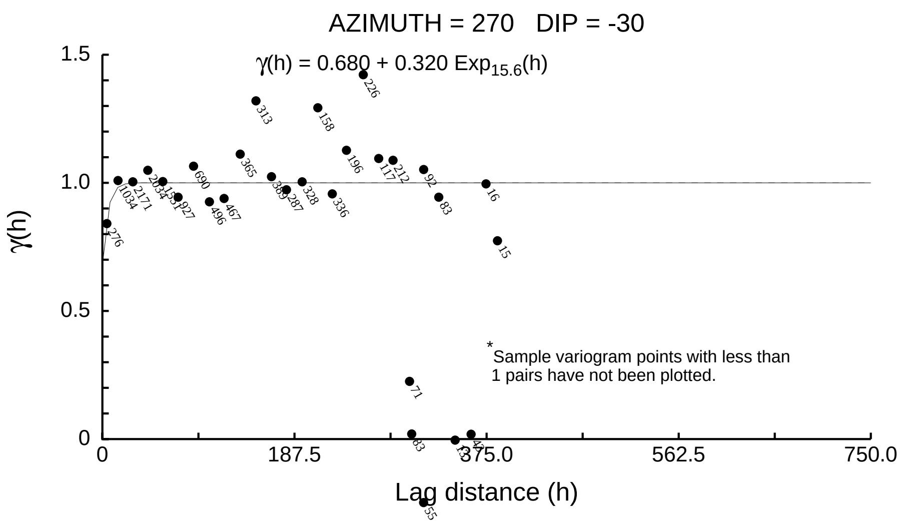
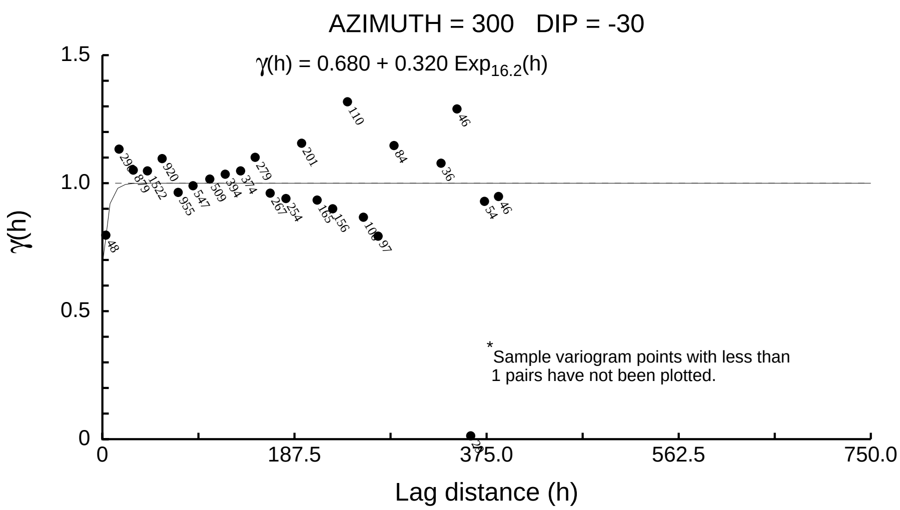
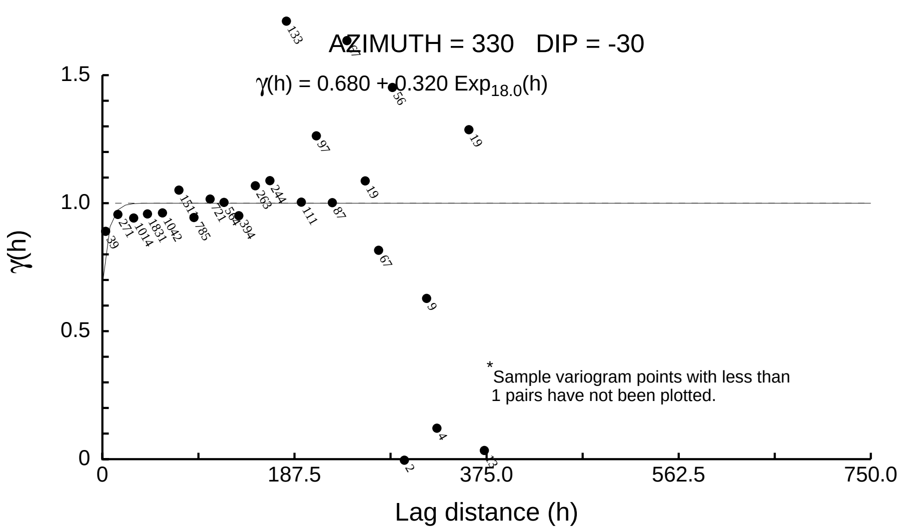
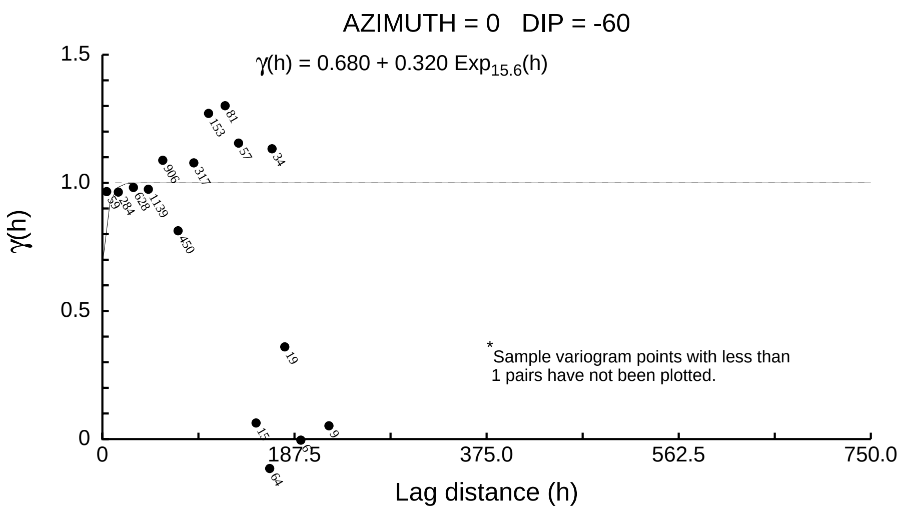
Zone 99 0.4 gram Ind. Correlogram - 5m Comps

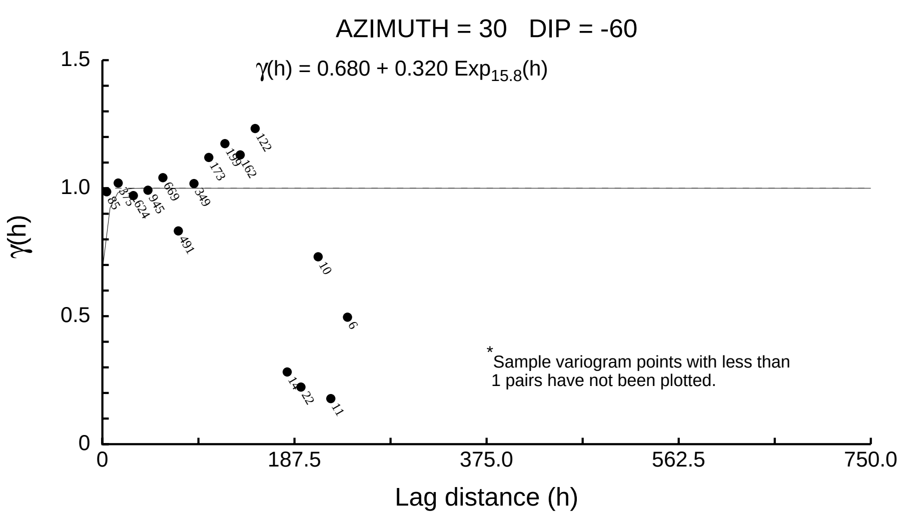


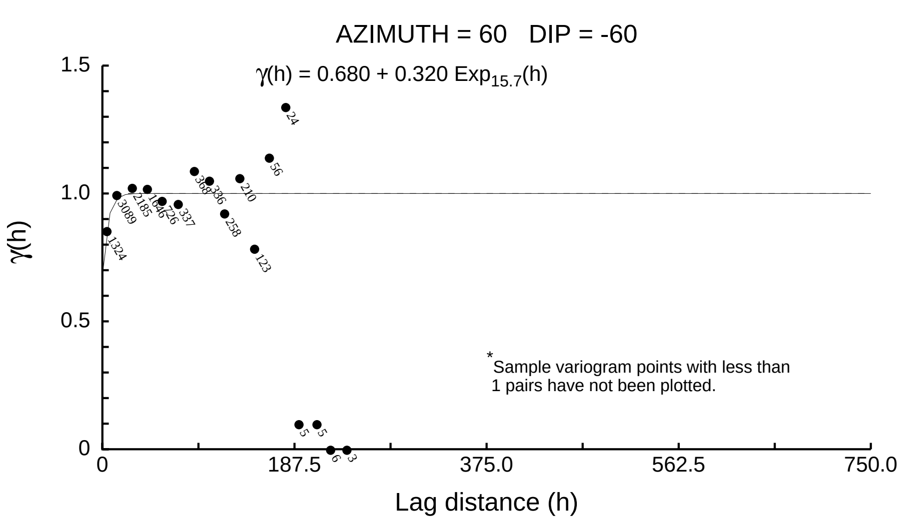




Zone 99 0.4 gram Ind. Correlogram - 5m Comps







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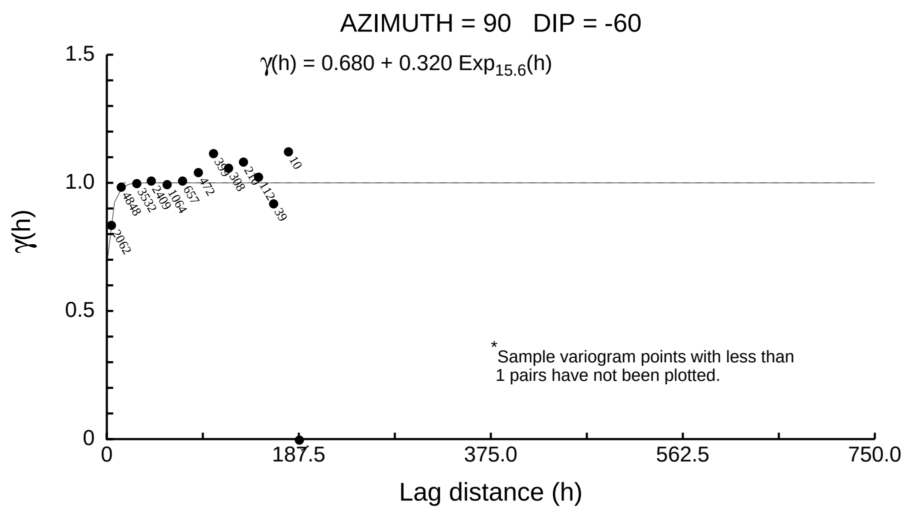
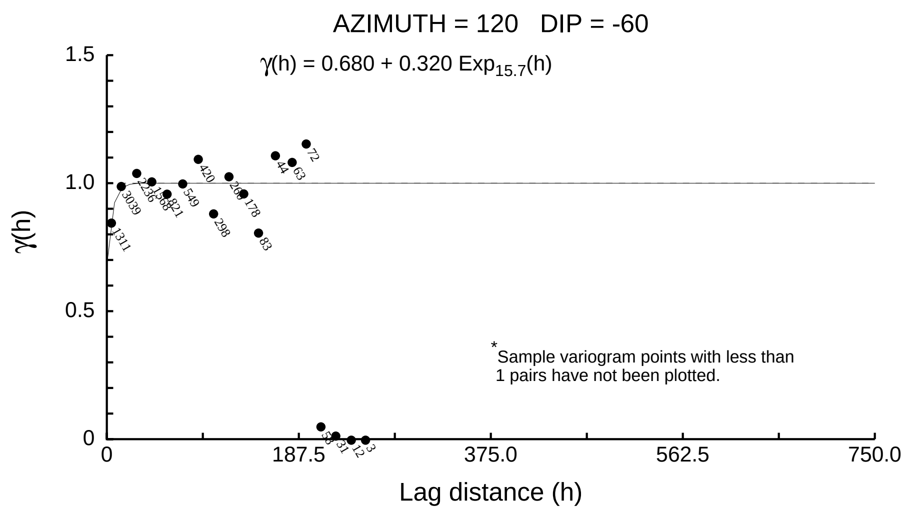
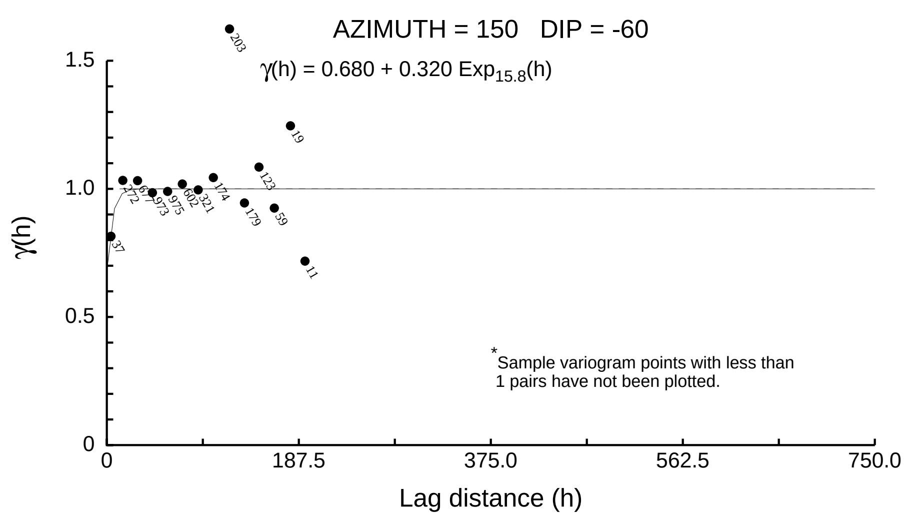
Zone 99 0.4 gram Ind. Correlogram - 5m Comps







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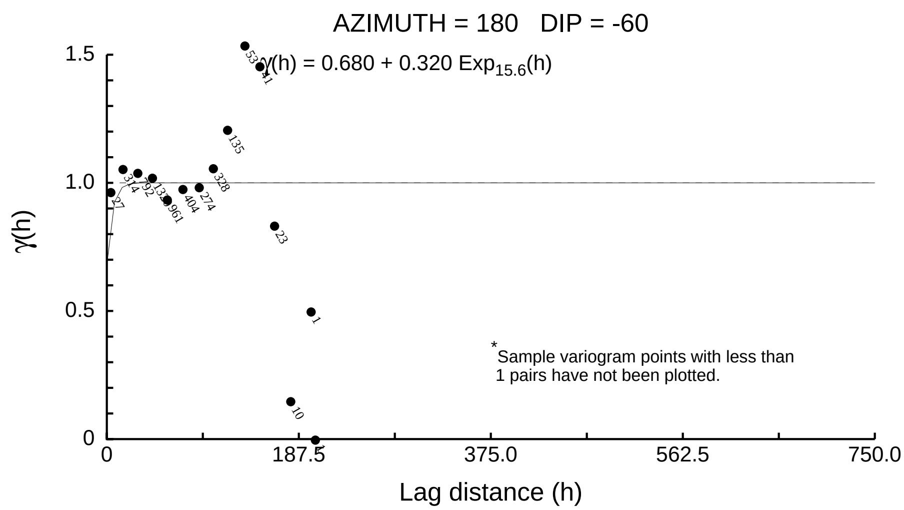
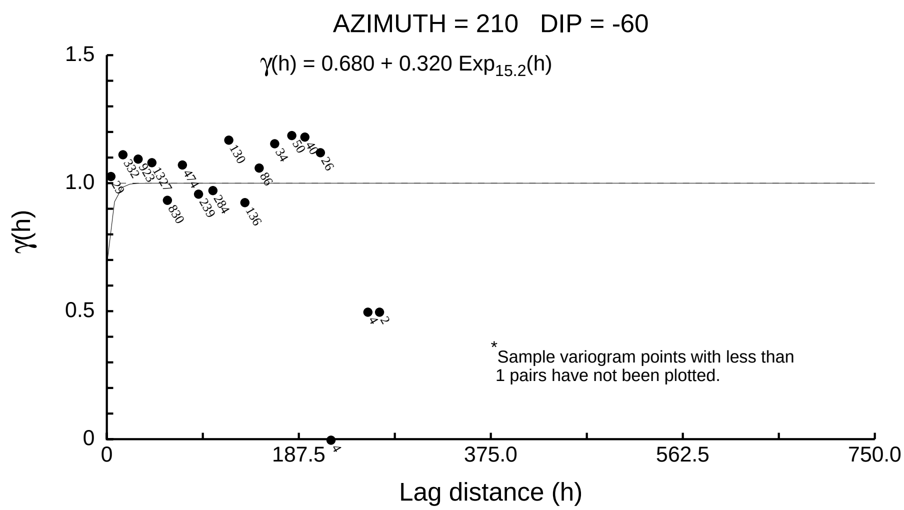
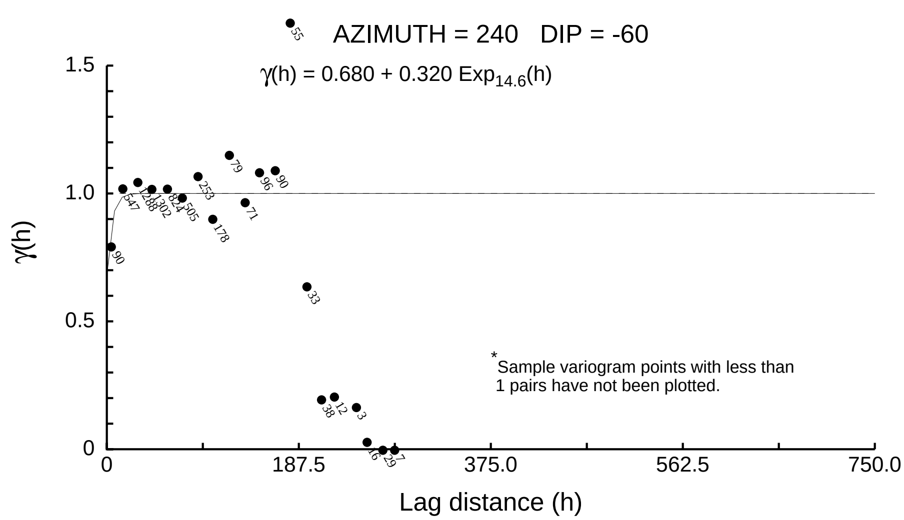
Zone 99 0.4 gram Ind. Correlogram - 5m Comps







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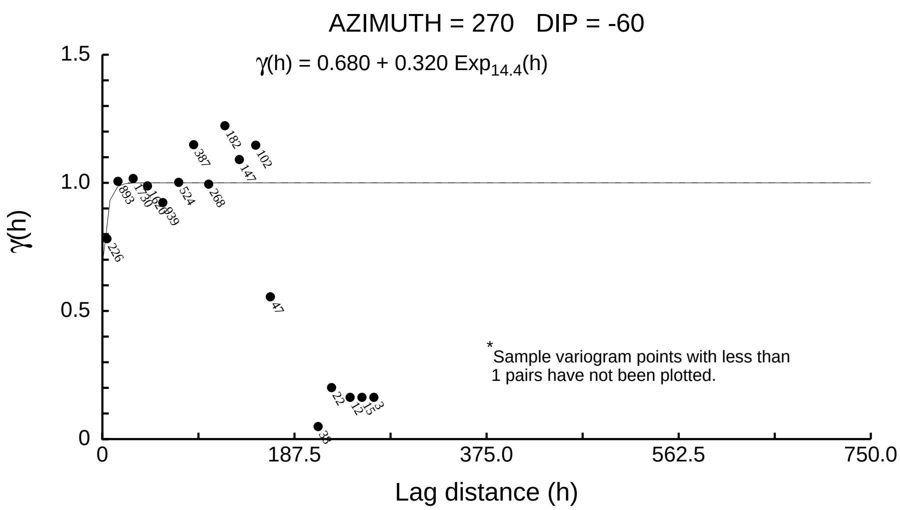
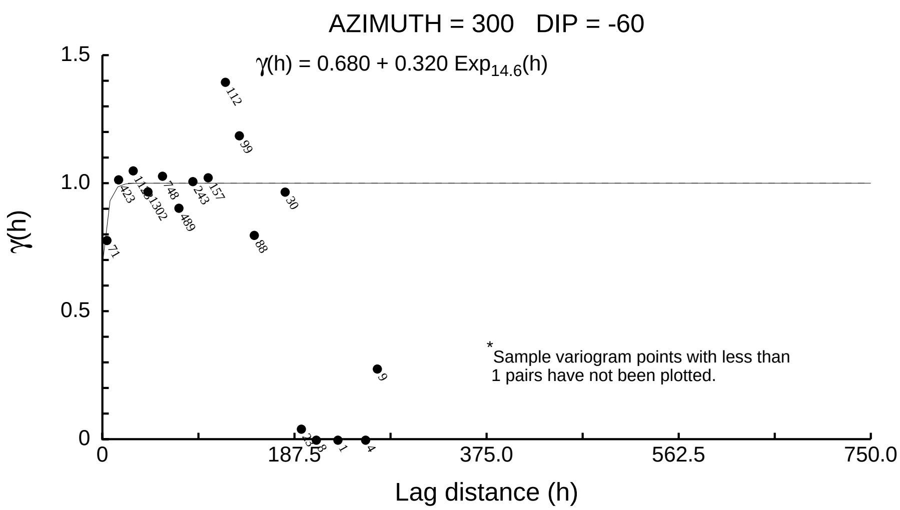
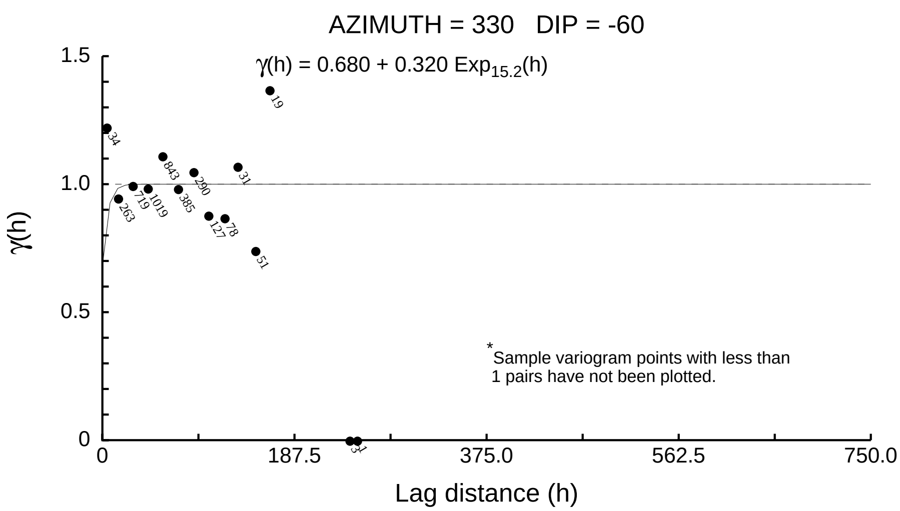
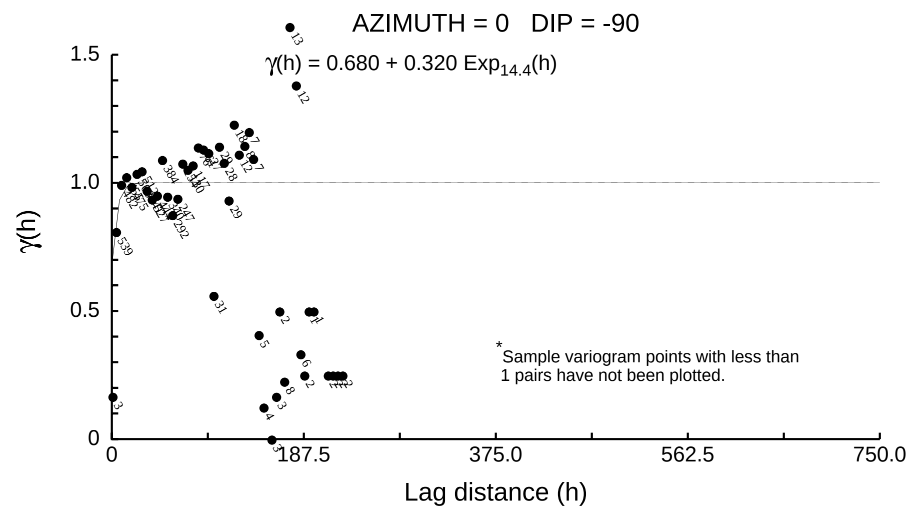
Zone 99 0.4 gram Ind. Correlogram - 5m Comps







Zone 99 0.4 gram Ind. Correlogram - 5m Comps



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Zone 99 Directional Correlograms - 5m Comps

Medsystem and Vulcan Rotation Conventions

Nugget ==> 0.829
C1 ==> 0.171

First Structure -- Exponential with Practical Range

LH Rotation about the Z axis ==> 0
RH Rotation about the X' axis ==> 0
LH Rotation about the Y' axis ==> 75
Range along the Z' axis ==> 82.1 Azimuth ==> 270 Dip ==> 15
Range along the Y' axis ==> 79.2 Azimuth ==> 360 Dip ==> 0
Range along the X' axis ==> 20.0 Azimuth ==> 90 Dip ==> 75

Modeling Criteria

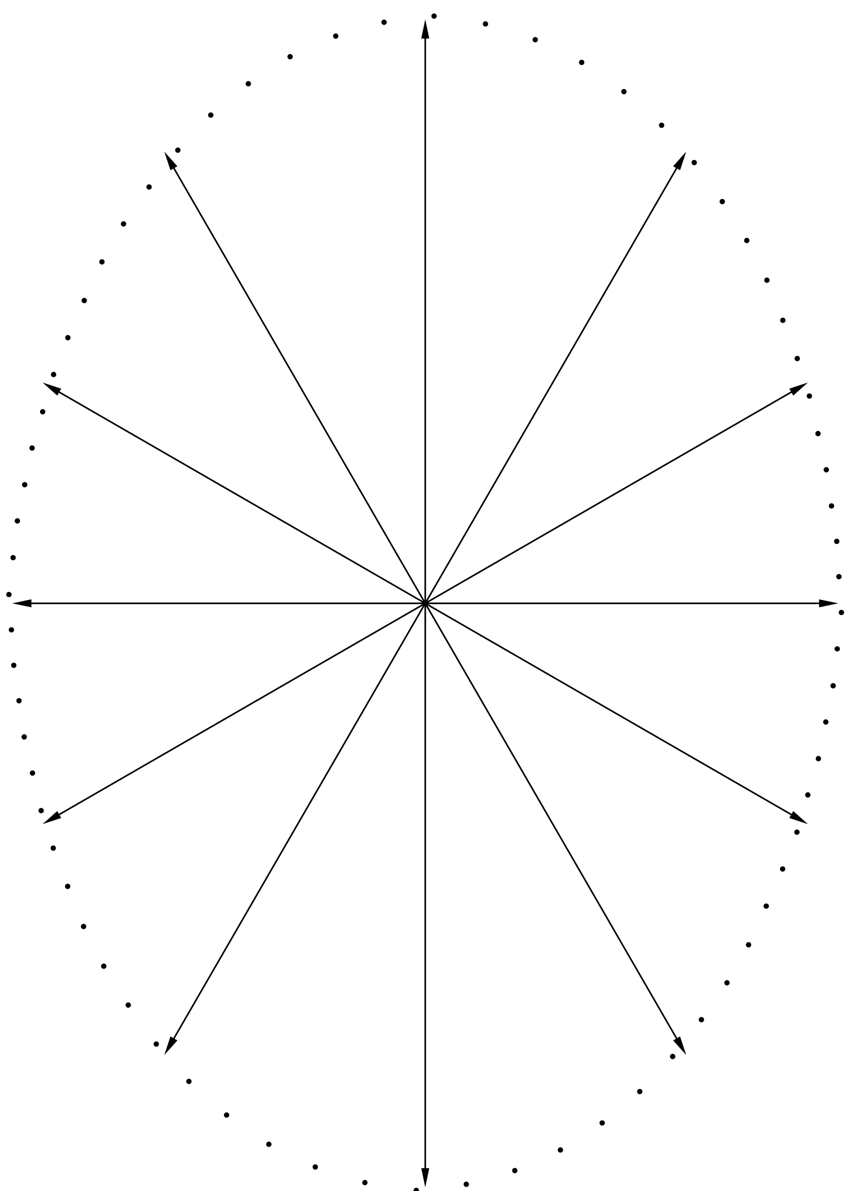
Minimum number pairs req'd ==> 1
Sample variogram points weighted by # pairs

Zone 99 Directional Correlograms - 5m Comps

Structure Number 1

Rose Diagram of Ranges Dipping 0 Degrees
Scale:

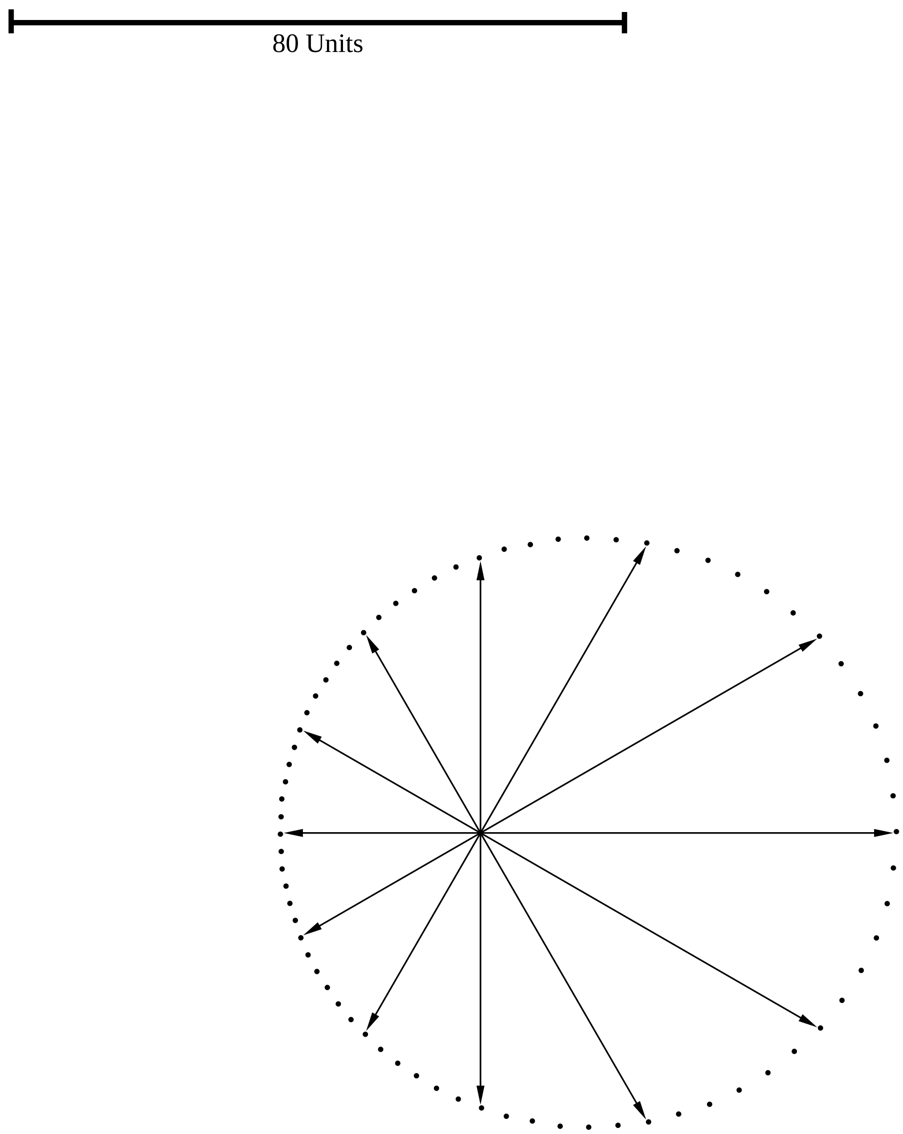
80 Units



Zone 99 Directional Correlograms - 5m Comps

Structure Number 1

Rose Diagram of Ranges Dipping 30 Degrees
Scale:

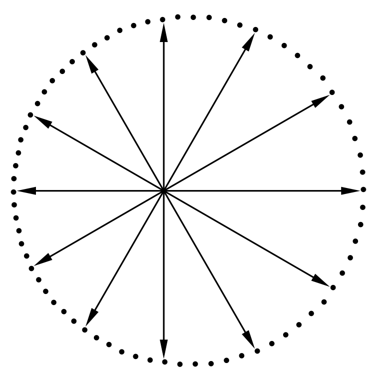


Zone 99 Directional Correlograms - 5m Comps

Structure Number 1

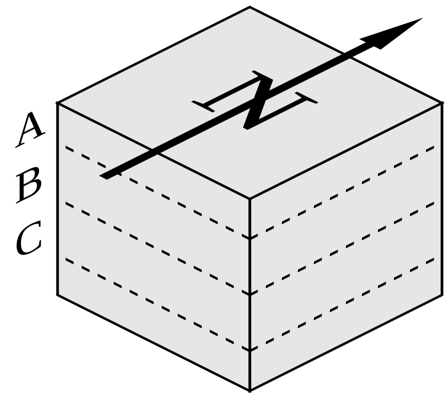
Rose Diagram of Ranges Dipping 60 Degrees
Scale:

80 Units

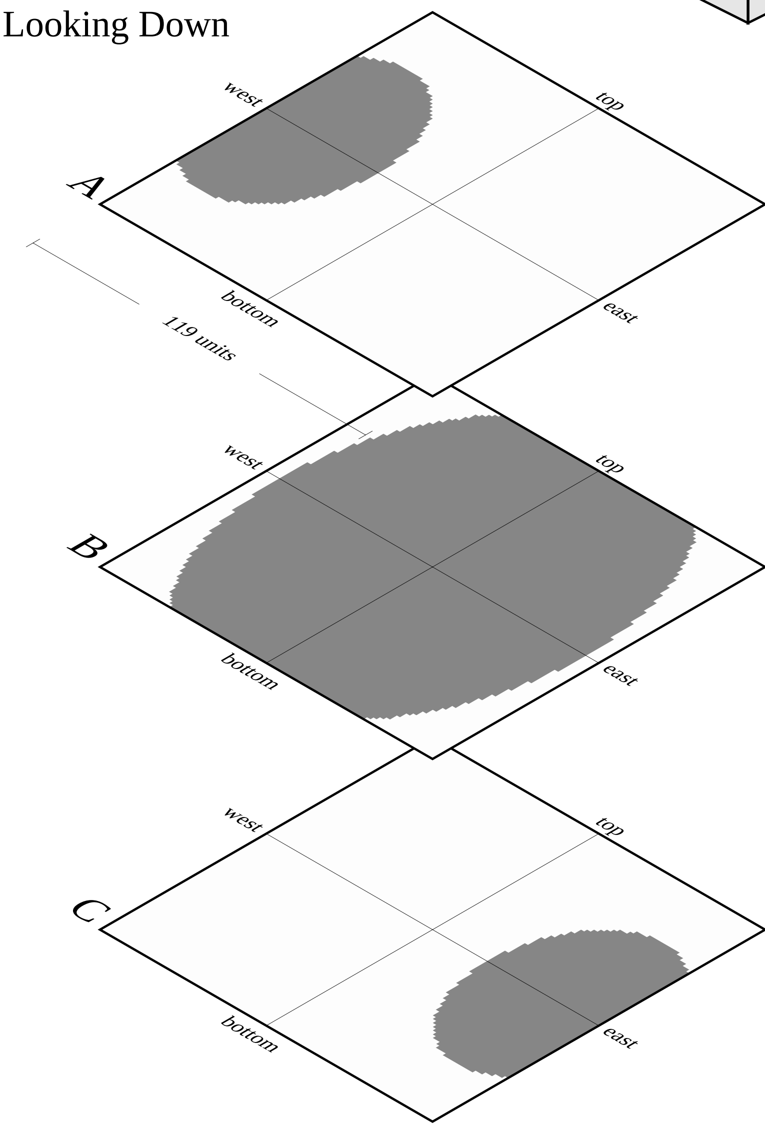


Horizontal Slices Through the Ellipsoids

Reference Cube



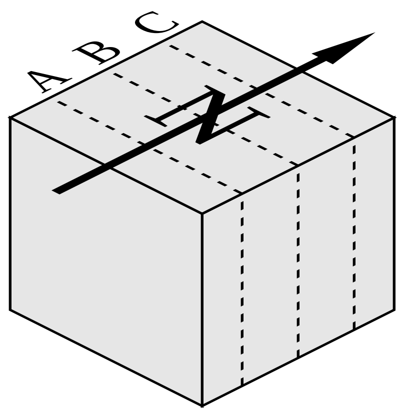
X-Y Planes Looking Down



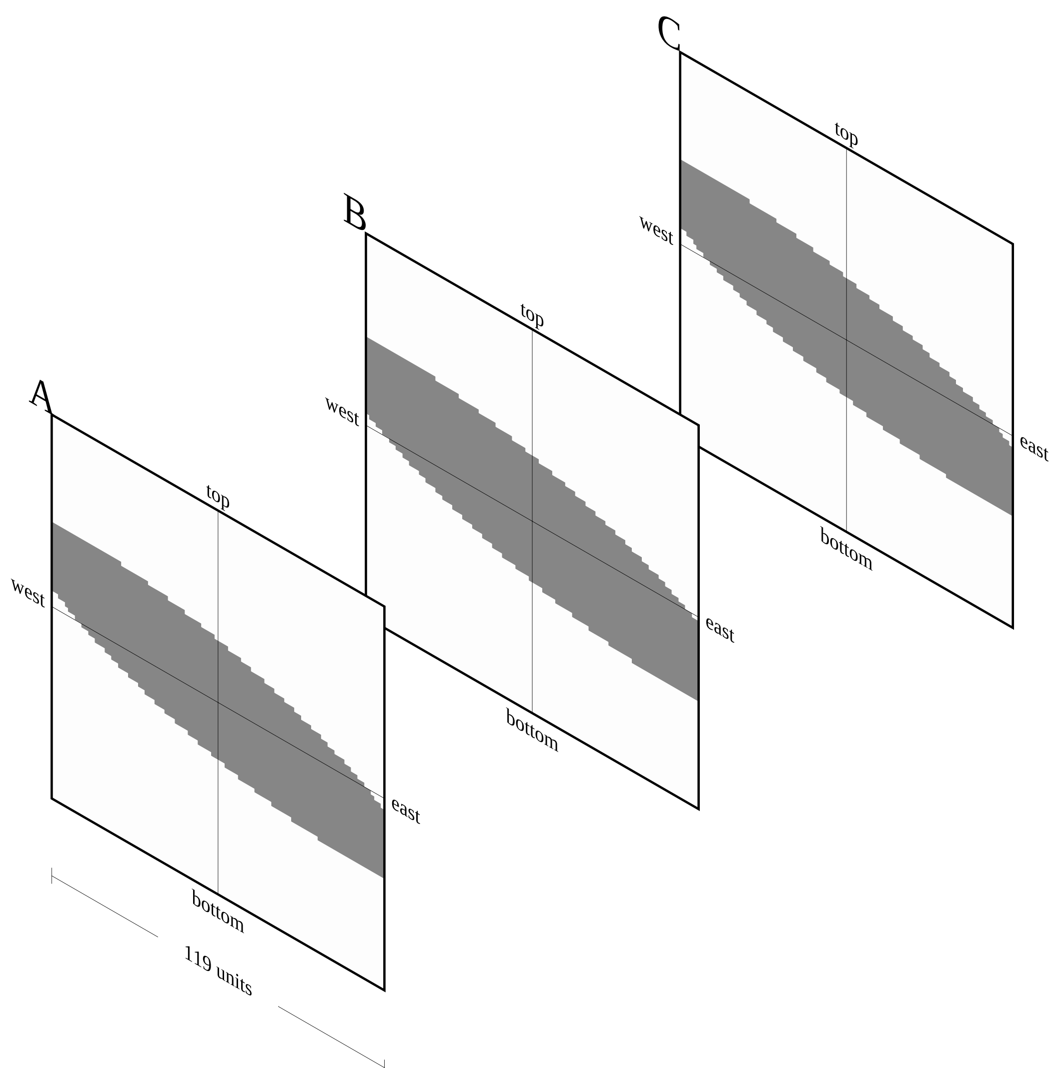
Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Cross Section Views Through the Ellipsoids

Reference Cube



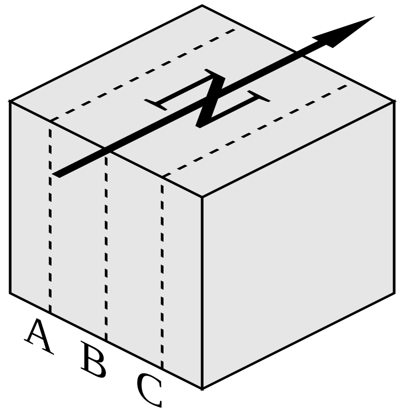
X-Z Planes Looking North



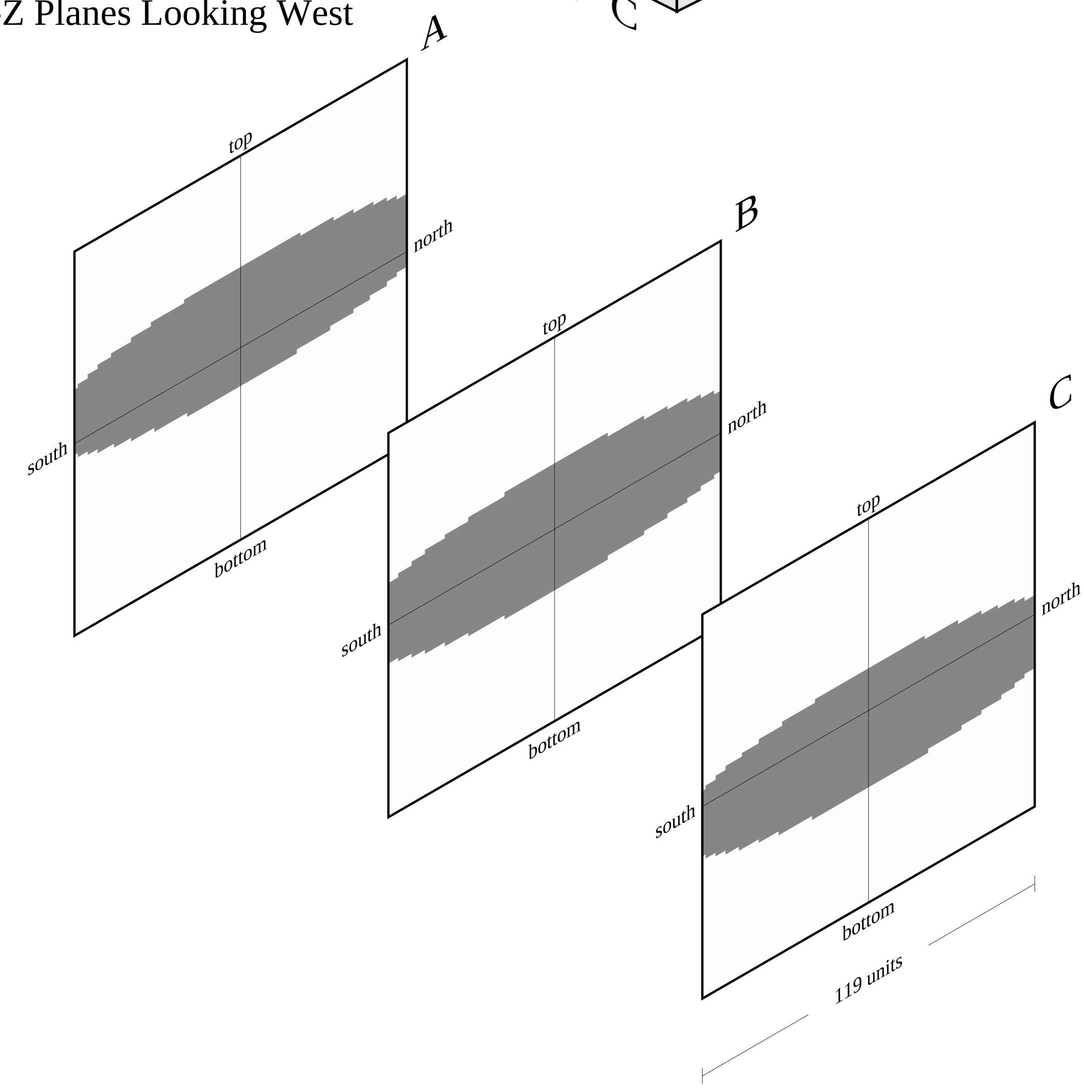
Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Long Section Views Through the Ellipsoids

Reference Cube



Y-Z Planes Looking West



Note -- the orientation, dip and lengths of the ellipsoid axes in these figures may be "apparent" rather than "true".

Appendix E

Q-Q Plot Adjustments, Kriging and Classification Scripts

E-1 Assay Adjustment Batchfiles

```
MEDS-208RP 10=rkck10.dat 11=rkck11.dat 12=rkck12.dat 3=rpt208.la
  ** Special project calcs on data in rkck11.dat & rkck12.dat  **

USR = MJL  /  Wed Dec 1, 2004 6:58:03 PM US Mountain Standard Time

COM  RUNFILE -->  RUN208.J08

IOP1  = 0  0 / Record #s for file 12 surveys to be used
IOP3  = -1 / -1=All DHs; 0=Within PCF limits; 1=Within specified boundary
IOP6  = 1. /  0=Omit storing into file 11;  1=Store into file 11
IOP9  = 0 / 0=Don't read DH-IDENT from the runfile;1=Read from runfile

COM  ASSAY ITEMS ORDER WITHIN INPUT DATA.

GET11= AUREJ AUAJ2 DCODE MINZN
PUT11= AUAJ2

ITM1= DCODE RANGE 301 316
ITM2= AUREJ RANGE  0.000 999

ITM3= MINZN TABLE 20 23
IOP20 = 1 2 3 99

CMD = -AI- ALIAS IS AI
CMD = -TO- ALIAS IS TO
END
AUAJ2 = 1.25 * AUREJ
ENDEXP
```

```
MEDS-208RP 10=rkck10.dat 11=rkck11.dat 12=rkck12.dat 3=rpt208.la
  ** Special project calcs on data in rkck11.dat & rkck12.dat  **

USR = MJL  /  Wed Dec 1, 2004 6:58:03 PM US Mountain Standard Time

COM  RUNFILE -->  RUN208.J07

IOP1  = 0  0 / Record #s for file 12 surveys to be used
IOP3  = -1 / -1=All DHs; 0=Within PCF limits; 1=Within specified boundary
IOP6  = 1. /  0=Omit storing into file 11;  1=Store into file 11
IOP9  = 0 / 0=Don't read DH-IDENT from the runfile;1=Read from runfile

COM  ASSAY ITEMS ORDER WITHIN INPUT DATA.
GET11= AUREJ AUAJ2
PUT11= AUAJ2

CMD = -AI- ALIAS IS AI
CMD = -TO- ALIAS IS TO
END
AUAJ2 = AUREJ
ENDEXP
```

```
MEDS-208RP 10=rkck10.dat 11=rkck11.dat 12=rkck12.dat 3=rpt208.la
  ** Special project calcs on data in rkck11.dat & rkck12.dat  **

USR = MJL  /  Wed Dec 1, 2004 6:58:03 PM US Mountain Standard Time

COM  RUNFILE -->  RUN208.J06

IOP1  = 0  0 / Record #s for file 12 surveys to be used
IOP3  = -1 / -1=All DHs; 0=Within PCF limits; 1=Within specified boundary
IOP6  = 1. /  0=Omit storing into file 11;  1=Store into file 11
IOP9  = 0 / 0=Don't read DH-IDENT from the runfile;1=Read from runfile

COM  ASSAY ITEMS ORDER WITHIN INPUT DATA.

GET11= AUREJ AUAJ1 DCODE MINZN
PUT11= AUAJ1

ITM1= DCODE RANGE 512 516
ITM2= AUREJ RANGE  0.800 999

ITM3= MINZN TABLE 20 23
IOP20 = 1 2 3 99

CMD = -AI- ALIAS IS AI
CMD = -TO- ALIAS IS TO
END
AUAJ1 = 0.04 + 0.75 * AUREJ
ENDEXP
```

```
MEDS-208RP 10=rkck10.dat 11=rkck11.dat 12=rkck12.dat 3=rpt208.la
  ** Special project calcs on data in rkck11.dat & rkck12.dat  **

USR = MJL  /  Wed Dec 1, 2004 6:58:03 PM US Mountain Standard Time

COM  RUNFILE -->  RUN208.J05

IOP1  = 0  0 / Record #s for file 12 surveys to be used
IOP3  = -1 / -1=All DHs; 0=Within PCF limits; 1=Within specified boundary
IOP6  = 1. /  0=Omit storing into file 11;  1=Store into file 11
IOP9  = 0 / 0=Don't read DH-IDENT from the runfile;1=Read from runfile

COM  ASSAY ITEMS ORDER WITHIN INPUT DATA.

GET11= AUREJ AUAJ1 DCODE MINZN
PUT11= AUAJ1

ITM1= DCODE RANGE 512 516
ITM2= AUREJ RANGE  0.00 0.799

ITM3= MINZN TABLE 20 23
IOP20 = 1 2 3 99

CMD = -AI- ALIAS IS AI
CMD = -TO- ALIAS IS TO
END
AUAJ1 = 0.8 * AUREJ
ENDEXP
```

```
MEDS-208RP 10=rkck10.dat 11=rkck11.dat 12=rkck12.dat 3=rpt208.la
  ** Special project calcs on data in rkck11.dat & rkck12.dat  **

USR = MJL  /  Wed Dec 1, 2004 6:58:03 PM US Mountain Standard Time

COM  RUNFILE -->  RUN208.J04

IOP1  = 0  0 / Record #s for file 12 surveys to be used
IOP3  = -1 / -1=All DHs; 0=Within PCF limits; 1=Within specified boundary
IOP6  = 1. /  0=Omit storing into file 11;  1=Store into file 11
IOP9  = 0 / 0=Don't read DH-IDENT from the runfile;1=Read from runfile

COM  ASSAY ITEMS ORDER WITHIN INPUT DATA.

GET11= AUREJ AUAJ1 DCODE MINZN
PUT11= AUAJ1

ITM1= DCODE RANGE 502 511
ITM2= AUREJ RANGE  0.900 999

ITM3= MINZN TABLE 20 23.
IOP20 = 1 2 3 99

CMD = -AI- ALIAS IS AI
CMD = -TO- ALIAS IS TO
END
AUAJ1 = 0.135 + 0.60 * AUREJ
ENDEXP
```

```
MEDS-208RP 10=rkck10.dat 11=rkck11.dat 12=rkck12.dat 3=rpt208.la
  ** Special project calcs on data in rkck11.dat & rkck12.dat  **

USR = MJL  /  Wed Dec 1, 2004 6:58:03 PM US Mountain Standard Time

COM  RUNFILE -->  RUN208.J03

IOP1  = 0  0 / Record #s for file 12 surveys to be used
IOP3  = -1 / -1=All DHs; 0=Within PCF limits; 1=Within specified boundary
IOP6  = 1. /  0=Omit storing into file 11;  1=Store into file 11
IOP9  = 0 / 0=Don't read DH-IDENT from the runfile;1=Read from runfile

COM  ASSAY ITEMS ORDER WITHIN INPUT DATA.

GET11= AUREJ AUAJ1 DCODE MINZN
PUT11= AUAJ1

ITM1= DCODE RANGE 502 511
ITM2= AUREJ RANGE 0.0  0.899

ITM3= MINZN TABLE 20 23
IOP20 = 1 2 3 99

CMD = -AI- ALIAS IS AI
CMD = -TO- ALIAS IS TO
END
AUAJ1 = 0.75 * AUREJ
ENDEXP
```

```
MEDS-208RP 10=rkck10.dat 11=rkck11.dat 12=rkck12.dat 3=rpt208.la
  ** Special project calcs on data in rkck11.dat & rkck12.dat  **

USR = MJL  /  Wed Dec 1, 2004 6:58:03 PM US Mountain Standard Time

COM  RUNFILE -->  RUN208.J02

IOP1  = 0  0 / Record #s for file 12 surveys to be used
IOP3  = -1 / -1=All DHs; 0=Within PCF limits; 1=Within specified boundary
IOP6  = 1. /  0=Omit storing into file 11;  1=Store into file 11
IOP9  = 0 / 0=Don't read DH-IDENT from the runfile;1=Read from runfile

COM  ASSAY ITEMS ORDER WITHIN INPUT DATA.

GET11= AUREJ AUAJ1 DCODE MINZN
PUT11= AUAJ1

ITM1= DCODE RANGE 501 501
ITM2= AUREJ RANGE 0.0  999

ITM3= MINZN TABLE 20 23
IOP20 = 1 2 3 99

CMD = -AI- ALIAS IS AI
CMD = -TO- ALIAS IS TO
END
AUAJ1 = 0.7 * AUREJ
ENDEXP
```

```
MEDS-208RP 10=rkck10.dat 11=rkck11.dat 12=rkck12.dat 3=rpt208.la
  ** Special project calcs on data in rkck11.dat & rkck12.dat  **

USR = MJL  /  Wed Dec 1, 2004 6:58:03 PM US Mountain Standard Time

COM  RUNFILE -->  RUN208.J01

IOP1  = 0  0 / Record #s for file 12 surveys to be used
IOP3  = -1 / -1=All DHs; 0=Within PCF limits; 1=Within specified boundary
IOP6  = 1. /  0=Omit storing into file 11;  1=Store into file 11
IOP9  = 0 / 0=Don't read DH-IDENT from the runfile;1=Read from runfile

COM  ASSAY ITEMS ORDER WITHIN INPUT DATA.
GET11= AUREJ AUAJ1
PUT11= AUAJ1

CMD = -AI- ALIAS IS AI
CMD = -TO- ALIAS IS TO
END
AUAJ1 = AUREJ
ENDEXP
```

```
:  B A T C H   F I L E  -->  ADJUST.BAT

:  November 2004 Rock Creek Base Case RC assay Adjustment

m208rp -f run208.j01  :  Copy AUREJ to AUAJ1
m208rp -f run208.j02  :  Adjust AUAJ1 for 501 (AUAJ1 = AUREJ * 0.7)
m208rp -f run208.j03  :  Adjust AUAJ1 for 502-511 .LT. 0.90 g/t
m208rp -f run208.j04  :  Adjust AUAJ1 for 502-511 .GE. 0.90 g/t
m208rp -f run208.j05  :  Adjust AUAJ1 for 512-516 .LT. 0.80 g/t
m208rp -f run208.j06  :  Adjust AUAJ1 for 512-516 .GE. 0.80 g/t


:  November 2004 Rock Creek Upside Case assay Adjustment

m208rp -f run208.j07  :  Copy AUREJ to AUAJ2
m208rp -f run208.j08  :  Factor AUAJ2 by 1.25 for 301 and 316
m208rp -f run208.j09  :  Adjust AUAJ2 for 501 (AUAJ2 = AUREJ * 0.7)
```

```
MEDS-208RP 10=rkck10.dat 11=rkck11.dat 12=rkck12.dat 3=rpt208.la
  ** Special project calcs on data in rkck11.dat & rkck12.dat  **

USR = MJL  /  Wed Dec 1, 2004 6:58:03 PM US Mountain Standard Time

COM  RUNFILE -->  RUN208.J09

IOP1  = 0  0 / Record #s for file 12 surveys to be used
IOP3  = -1 / -1=All DHs; 0=Within PCF limits; 1=Within specified boundary
IOP6  = 1. /  0=Omit storing into file 11;  1=Store into file 11
IOP9  = 0 / 0=Don't read DH-IDENT from the runfile;1=Read from runfile

COM  ASSAY ITEMS ORDER WITHIN INPUT DATA.

GET11= AUREJ AUAJ2 DCODE MINZN
PUT11= AUAJ2

ITM1= DCODE RANGE 501 501
ITM2= AUREJ RANGE 0.0  999

ITM3= MINZN TABLE 20 23
IOP20 = 1 2 3 99

CMD = -AI- ALIAS IS AI
CMD = -TO- ALIAS IS TO
END
AUAJ2 = 0.7 * AUREJ
ENDEXP
```

```
:  B A T C H   F I L E  -->  ADJUST.BAT

:  November 2004 Rock Creek Base Case RC assay Adjustment

m208rp -f run208.j01  :  Copy AUREJ to AUAJ1
m208rp -f run208.j02  :  Adjust AUAJ1 for 501 (AUAJ1 = AUREJ * 0.7)
m208rp -f run208.j03  :  Adjust AUAJ1 for 502-511 .LT. 0.90 g/t
m208rp -f run208.j04  :  Adjust AUAJ1 for 502-511 .GE. 0.90 g/t
m208rp -f run208.j05  :  Adjust AUAJ1 for 512-516 .LT. 0.80 g/t
m208rp -f run208.j06  :  Adjust AUAJ1 for 512-516 .GE. 0.80 g/t


:  November 2004 Rock Creek Upside Case assay Adjustment

m208rp -f run208.j07  :  Copy AUREJ to AUAJ2
m208rp -f run208.j08  :  Factor AUAJ2 by 1.25 for 301 and 316
m208rp -f run208.j09  :  Adjust AUAJ2 for 501 (AUAJ2 = AUREJ * 0.7)
```

```
MEDS-208RP 10=rkck10.dat 11=rkck11.dat 12=rkck12.dat 3=rpt208.la
  ** Special project calcs on data in rkck11.dat & rkck12.dat  **

USR = MJL  /  Wed Dec 1, 2004 6:58:03 PM US Mountain Standard Time

COM  RUNFILE -->  RUN208.J01

IOP1  = 0  0 / Record #s for file 12 surveys to be used
IOP3  = -1 / -1=All DHs; 0=Within PCF limits; 1=Within specified boundary
IOP6  = 1. /  0=Omit storing into file 11;  1=Store into file 11
IOP9  = 0 / 0=Don't read DH-IDENT from the runfile;1=Read from runfile

COM  ASSAY ITEMS ORDER WITHIN INPUT DATA.
GET11= AUREJ AUAJ1
PUT11= AUAJ1

CMD = -AI- ALIAS IS AI
CMD = -TO- ALIAS IS TO
END
AUAJ1 = AUREJ
ENDEXP
```

```
MEDS-208RP 10=rkck10.dat 11=rkck11.dat 12=rkck12.dat 3=rpt208.la
  ** Special project calcs on data in rkck11.dat & rkck12.dat  **

USR = MJL  /  Wed Dec 1, 2004 6:58:03 PM US Mountain Standard Time

COM  RUNFILE -->  RUN208.J02

IOP1  = 0  0 / Record #s for file 12 surveys to be used
IOP3  = -1 / -1=All DHs; 0=Within PCF limits; 1=Within specified boundary
IOP6  = 1. /  0=Omit storing into file 11;  1=Store into file 11
IOP9  = 0 / 0=Don't read DH-IDENT from the runfile;1=Read from runfile

COM  ASSAY ITEMS ORDER WITHIN INPUT DATA.

GET11= AUREJ AUAJ1 DCODE MINZN
PUT11= AUAJ1

ITM1= DCODE RANGE 501 501
ITM2= AUREJ RANGE 0.0  999

ITM3= MINZN TABLE 20 23
IOP20 = 1 2 3 99

CMD = -AI- ALIAS IS AI
CMD = -TO- ALIAS IS TO
END
AUAJ1 = 0.7 * AUREJ
ENDEXP
```

```
MEDS-208RP 10=rkck10.dat 11=rkck11.dat 12=rkck12.dat 3=rpt208.la
  ** Special project calcs on data in rkck11.dat & rkck12.dat  **

USR = MJL  /  Wed Dec 1, 2004 6:58:03 PM US Mountain Standard Time

COM  RUNFILE -->  RUN208.J03

IOP1  = 0  0 / Record #s for file 12 surveys to be used
IOP3  = -1 / -1=All DHs; 0=Within PCF limits; 1=Within specified boundary
IOP6  = 1. /  0=Omit storing into file 11;  1=Store into file 11
IOP9  = 0 / 0=Don't read DH-IDENT from the runfile;1=Read from runfile

COM  ASSAY ITEMS ORDER WITHIN INPUT DATA.

GET11= AUREJ AUAJ1 DCODE MINZN
PUT11= AUAJ1

ITM1= DCODE RANGE 502 511
ITM2= AUREJ RANGE 0.0  0.899

ITM3= MINZN TABLE 20 23
IOP20 = 1 2 3 99

CMD = -AI- ALIAS IS AI
CMD = -TO- ALIAS IS TO
END
AUAJ1 = 0.75 * AUREJ
ENDEXP
```

```
MEDS-208RP 10=rkck10.dat 11=rkck11.dat 12=rkck12.dat 3=rpt208.la
  ** Special project calcs on data in rkck11.dat & rkck12.dat  **

USR = MJL  /  Wed Dec 1, 2004 6:58:03 PM US Mountain Standard Time

COM  RUNFILE -->  RUN208.J04

IOP1  = 0  0 / Record #s for file 12 surveys to be used
IOP3  = -1 / -1=All DHs; 0=Within PCF limits; 1=Within specified boundary
IOP6  = 1. /  0=Omit storing into file 11;  1=Store into file 11
IOP9  = 0 / 0=Don't read DH-IDENT from the runfile;1=Read from runfile

COM  ASSAY ITEMS ORDER WITHIN INPUT DATA.

GET11= AUREJ AUAJ1 DCODE MINZN
PUT11= AUAJ1

ITM1= DCODE RANGE 502 511
ITM2= AUREJ RANGE  0.900 999

ITM3= MINZN TABLE 20 23.
IOP20 = 1 2 3 99

CMD = -AI- ALIAS IS AI
CMD = -TO- ALIAS IS TO
END
AUAJ1 = 0.135 + 0.60 * AUREJ
ENDEXP
```

```
MEDS-208RP 10=rkck10.dat 11=rkck11.dat 12=rkck12.dat 3=rpt208.la
  ** Special project calcs on data in rkck11.dat & rkck12.dat  **

USR = MJL  /  Wed Dec 1, 2004 6:58:03 PM US Mountain Standard Time

COM  RUNFILE -->  RUN208.J05

IOP1  = 0  0 / Record #s for file 12 surveys to be used
IOP3  = -1 / -1=All DHs; 0=Within PCF limits; 1=Within specified boundary
IOP6  = 1. /  0=Omit storing into file 11;  1=Store into file 11
IOP9  = 0 / 0=Don't read DH-IDENT from the runfile;1=Read from runfile

COM  ASSAY ITEMS ORDER WITHIN INPUT DATA.

GET11= AUREJ AUAJ1 DCODE MINZN
PUT11= AUAJ1

ITM1= DCODE RANGE 512 516
ITM2= AUREJ RANGE  0.00 0.799

ITM3= MINZN TABLE 20 23
IOP20 = 1 2 3 99

CMD = -AI- ALIAS IS AI
CMD = -TO- ALIAS IS TO
END
AUAJ1 = 0.8 * AUREJ
ENDEXP
```

```
MEDS-208RP 10=rkck10.dat 11=rkck11.dat 12=rkck12.dat 3=rpt208.la
  ** Special project calcs on data in rkck11.dat & rkck12.dat  **

USR = MJL  /  Wed Dec 1, 2004 6:58:03 PM US Mountain Standard Time

COM  RUNFILE -->  RUN208.J06

IOP1  = 0  0 / Record #s for file 12 surveys to be used
IOP3  = -1 / -1=All DHs; 0=Within PCF limits; 1=Within specified boundary
IOP6  = 1. /  0=Omit storing into file 11;  1=Store into file 11
IOP9  = 0 / 0=Don't read DH-IDENT from the runfile;1=Read from runfile

COM  ASSAY ITEMS ORDER WITHIN INPUT DATA.

GET11= AUREJ AUAJ1 DCODE MINZN
PUT11= AUAJ1

ITM1= DCODE RANGE 512 516
ITM2= AUREJ RANGE  0.800 999

ITM3= MINZN TABLE 20 23
IOP20 = 1 2 3 99

CMD = -AI- ALIAS IS AI
CMD = -TO- ALIAS IS TO
END
AUAJ1 = 0.04 + 0.75 * AUREJ
ENDEXP
```

```
MEDS-208RP 10=rkck10.dat 11=rkck11.dat 12=rkck12.dat 3=rpt208.la
  ** Special project calcs on data in rkck11.dat & rkck12.dat  **

USR = MJL  /  Wed Dec 1, 2004 6:58:03 PM US Mountain Standard Time

COM  RUNFILE -->  RUN208.J07

IOP1  = 0  0 / Record #s for file 12 surveys to be used
IOP3  = -1 / -1=All DHs; 0=Within PCF limits; 1=Within specified boundary
IOP6  = 1. /  0=Omit storing into file 11;  1=Store into file 11
IOP9  = 0 / 0=Don't read DH-IDENT from the runfile;1=Read from runfile

COM  ASSAY ITEMS ORDER WITHIN INPUT DATA.
GET11= AUREJ AUAJ2
PUT11= AUAJ2

CMD = -AI- ALIAS IS AI
CMD = -TO- ALIAS IS TO
END
AUAJ2 = AUREJ
ENDEXP
```

```
MEDS-208RP 10=rkck10.dat 11=rkck11.dat 12=rkck12.dat 3=rpt208.la
  ** Special project calcs on data in rkck11.dat & rkck12.dat  **

USR = MJL  /  Wed Dec 1, 2004 6:58:03 PM US Mountain Standard Time

COM  RUNFILE -->  RUN208.J08

IOP1  = 0  0 / Record #s for file 12 surveys to be used
IOP3  = -1 / -1=All DHs; 0=Within PCF limits; 1=Within specified boundary
IOP6  = 1. /  0=Omit storing into file 11;  1=Store into file 11
IOP9  = 0 / 0=Don't read DH-IDENT from the runfile;1=Read from runfile

COM  ASSAY ITEMS ORDER WITHIN INPUT DATA.

GET11= AUREJ AUAJ2 DCODE MINZN
PUT11= AUAJ2

ITM1= DCODE RANGE 301 316
ITM2= AUREJ RANGE  0.000 999

ITM3= MINZN TABLE 20 23
IOP20 = 1 2 3 99

CMD = -AI- ALIAS IS AI
CMD = -TO- ALIAS IS TO
END
AUAJ2 = 1.25 * AUREJ
ENDEXP
```

```
MEDS-208RP 10=rkck10.dat 11=rkck11.dat 12=rkck12.dat 3=rpt208.la
  ** Special project calcs on data in rkck11.dat & rkck12.dat  **

USR = MJL  /  Wed Dec 1, 2004 6:58:03 PM US Mountain Standard Time

COM  RUNFILE -->  RUN208.J09

IOP1  = 0  0 / Record #s for file 12 surveys to be used
IOP3  = -1 / -1=All DHs; 0=Within PCF limits; 1=Within specified boundary
IOP6  = 1. /  0=Omit storing into file 11;  1=Store into file 11
IOP9  = 0 / 0=Don't read DH-IDENT from the runfile;1=Read from runfile

COM  ASSAY ITEMS ORDER WITHIN INPUT DATA.

GET11= AUREJ AUAJ2 DCODE MINZN
PUT11= AUAJ2

ITM1= DCODE RANGE 501 501
ITM2= AUREJ RANGE 0.0  999

ITM3= MINZN TABLE 20 23
IOP20 = 1 2 3 99

CMD = -AI- ALIAS IS AI
CMD = -TO- ALIAS IS TO
END
AUAJ2 = 0.7 * AUREJ
ENDEXP
```

E-2 Kriging Batch and Runfiles

```
MEDS-624V1  10=RKCK10.DAT  9=RKCK09.DAT  15=RKCK15.DAT;
MEDS-624V1   3=RPT624.F08  30=
** KRIGING OF 3-D BLOCK VALUES FOR AUKR6 **

RUN = OMIT

USR = MJL  /  MON DEC 6, 2004 9:30:34 AM US MOUNTAIN STANDARD TIME

IOP3 = 1. / 1=3-D SPHERICAL SEARCH; 0=2-D SEARCH
IOP4 = 0 / 0=NO GEOLOGIC MATCHING; 1=MATCH ONE ITEM
IOP6 = 0 / 0=USE TRUE DIST.; 1=USE ANISOTROPIC DIST.
IOP7 = 3 / MIN # OF COMPS FOR INTERP
IOP11= 00 / ROW # FOR EXTENDED OUTPUT
IOP12= 0 / 0=ALL; 1=OCTANT; 2=QUADRANT SEARCH; 3=SPLIT OCTANT;
COM         4=SPLIT QUADRANT.
COM         NOTE: NEGATIVE#=USE ROTATED SEARCH.  BY DEFAULT,
COM         OCTANTS & QUADRANTS ARE DEFINED USING THE PROJECT'S AXES.
IOP16= 6 / MAX.# OF COMPOSITES FOR INTERPOLATING A BLOCK
IOP19= 2 / MAX.# OF COMPOSITES PER HOLE (DEFAULT=NO LIMIT)
IOP20= 0 / 0=STORE VARIANCE; 1=STD DEV; 2=REL. VARIANCE

PAR1 = 50. / PRIMARY X-SEARCH DISTANCE
PAR2 = 50. / PRIMARY Y-SEARCH DISTANCE
PAR3 = 50. / PRIMARY Z-SEARCH DISTANCE
PAR4 = 50. / LIMITING SEARCH DISTANCE
PAR7 = 50. / MAX DISTANCE TO CLOSEST POINT
PAR8 = 50. / MAX DISTANCE TO PROJECT SINGLE COMPOSITE
PAR27= 2 4 1 / BLOCK DISCRETIZATION IN X,Y,Z
PAR31= 10   / OUTLIER CUTOFF TO CHANGE THE SEARCH
PAR32= 16.5 / MAX. 3D SEARCH DISTANCE AT PAR31

IOP17 = 0   /0=ORDINARY KRIGING, 5=SIMPLE
PAR30 = 0.   /MEAN GRADE OF THE AREA TO BE SIMPLE KRIGED

CMD = SEARCH 50. 50. 10. 30. 0. 75.
CMD = NUG 0.478
CMD = EXP 0.522 41.5 13.9 25.9 30. 0. 75.

ITM1 = AUKR6 AUAJ2 CALC KRIGE
ITM2 = AUNN6 AUAJ2 CALC POLYG
ITM3 = MINZN BLOCK LIMIT
ITM4 = TRNCH BLOCK LIMIT
ITM5 = LNGTH RANGE 2.5 5.
ITM6 = DCODE RANGE 301. 516.
ITM7 = DIST6 BLOCK CALC RINGS
ITM8 = NCMP6 BLOCK CALC #COMP
ITM9 = NHOL6 BLOCK CALC #COMP
ITM10 = MINZN RANGE 3. 3.
ITM11 = LNGTH FACTR
CMD = BLOCK LIMIT MINZN 3
CMD = BLOCK LIMIT TRNCH 1 2
CMD = ELEV ZMID

I-O = 0 / DEBUG LEVEL
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=RKCK10.DAT  9=RKCK09.DAT  15=RKCK15.DAT;
MEDS-624V1   3=RPT624.F07  30=
** KRIGING OF 3-D BLOCK VALUES FOR AUKR6 **

RUN = OMIT

USR = MJL  /  MON DEC 6, 2004 9:30:28 AM US MOUNTAIN STANDARD TIME

IOP3 = 1. / 1=3-D SPHERICAL SEARCH; 0=2-D SEARCH
IOP4 = 0 / 0=NO GEOLOGIC MATCHING; 1=MATCH ONE ITEM
IOP6 = 0 / 0=USE TRUE DIST.; 1=USE ANISOTROPIC DIST.
IOP7 = 2 / MIN # OF COMPS FOR INTERP
IOP11= 00 / ROW # FOR EXTENDED OUTPUT
IOP12= 0 / 0=ALL; 1=OCTANT; 2=QUADRANT SEARCH; 3=SPLIT OCTANT;
COM          4=SPLIT QUADRANT.
COM          NOTE: NEGATIVE#=USE ROTATED SEARCH.  BY DEFAULT,
COM          OCTANTS & QUADRANTS ARE DEFINED USING THE PROJECT'S AXES.
IOP16= 12 / MAX.# OF COMPOSITES FOR INTERPOLATING A BLOCK
IOP19= 2 / MAX.# OF COMPOSITES PER HOLE (DEFAULT=NO LIMIT)
IOP20= 0 / 0=STORE VARIANCE; 1=STD DEV; 2=REL. VARIANCE

PAR1 = 50. / PRIMARY X-SEARCH DISTANCE
PAR2 = 50. / PRIMARY Y-SEARCH DISTANCE
PAR3 = 50. / PRIMARY Z-SEARCH DISTANCE
PAR4 = 50. / LIMITING SEARCH DISTANCE
PAR7 = 50. / MAX DISTANCE TO CLOSEST POINT
PAR8 = 50. / MAX DISTANCE TO PROJECT SINGLE COMPOSITE
PAR27= 2 4 1 / BLOCK DISCRETIZATION IN X,Y,Z
PAR31= 10   / OUTLIER CUTOFF TO CHANGE THE SEARCH
PAR32= 16.5 / MAX. 3D SEARCH DISTANCE AT PAR31

IOP17 = 0   /0=ORDINARY KRIGING, 5=SIMPLE
PAR30 = 0.   /MEAN GRADE OF THE AREA TO BE SIMPLE KRIGED

CMD = SEARCH 50. 50. 10. 30. 0. 75.
CMD = NUG 0.478
CMD = EXP 0.522 41.5 13.9 25.9 30. 0. 75.

ITM1 = AUKR6 AUAJ2 CALC KRIGE
ITM2 = AUNN6 AUAJ2 CALC POLYG
ITM3 = MINZN BLOCK LIMIT
ITM4 = TRNCH BLOCK LIMIT
ITM5 = LNGTH RANGE 2.5 5.
ITM6 = DCODE RANGE 301. 516.
ITM7 = DIST6 BLOCK CALC RINGS
ITM8 = NCMP6 BLOCK CALC #COMP
ITM9 = NHOL6 BLOCK CALC #COMP
ITM10 = MINZN RANGE 3. 3.
ITM11 = LNGTH FACTR
CMD = BLOCK LIMIT MINZN 3
CMD = BLOCK LIMIT TRNCH 1 2
CMD = ELEV ZMID

I-O = 0 / DEBUG LEVEL
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=RKCK10.DAT  9=RKCK09.DAT  15=RKCK15.DAT;
MEDS-624V1   3=RPT624.F06  30=
** KRIGING OF 3-D BLOCK VALUES FOR AUKR6 **

RUN = OMIT

USR = MJL  /  MON DEC 6, 2004 9:31:03 AM US MOUNTAIN STANDARD TIME

IOP3 = 1. / 1=3-D SPHERICAL SEARCH; 0=2-D SEARCH
IOP4 = 0 / 0=NO GEOLOGIC MATCHING; 1=MATCH ONE ITEM
IOP6 = 0 / 0=USE TRUE DIST.; 1=USE ANISOTROPIC DIST.
IOP7 = 2 / MIN # OF COMPS FOR INTERP
IOP11= 00 / ROW # FOR EXTENDED OUTPUT
IOP12= 0 / 0=ALL; 1=OCTANT; 2=QUADRANT SEARCH; 3=SPLIT OCTANT;
COM         4=SPLIT QUADRANT.
COM         NOTE: NEGATIVE#=USE ROTATED SEARCH.  BY DEFAULT,
COM         OCTANTS & QUADRANTS ARE DEFINED USING THE PROJECT'S AXES.
IOP16= 8 / MAX.# OF COMPOSITES FOR INTERPOLATING A BLOCK
IOP19= 2 / MAX.# OF COMPOSITES PER HOLE (DEFAULT=NO LIMIT)
IOP20= 0 / 0=STORE VARIANCE; 1=STD DEV; 2=REL. VARIANCE

PAR1 = 15. / PRIMARY X-SEARCH DISTANCE
PAR2 = 15. / PRIMARY Y-SEARCH DISTANCE
PAR3 = 2.5 / PRIMARY Z-SEARCH DISTANCE
PAR4 = 15. / LIMITING SEARCH DISTANCE
PAR7 = 15. / MAX DISTANCE TO CLOSEST POINT
PAR8 = 15. / MAX DISTANCE TO PROJECT SINGLE COMPOSITE
PAR27= 2 4 1 / BLOCK DISCRETIZATION IN X,Y,Z
PAR31= 7.0  / OUTLIER CUTOFF TO CHANGE THE SEARCH
PAR32= 12.5 / MAX. 3D SEARCH DISTANCE AT PAR31

IOP17 = 0   /0=ORDINARY KRIGING, 5=SIMPLE
PAR30 = 0.   /MEAN GRADE OF THE AREA TO BE SIMPLE KRIGED

CMD = SEARCH 15. 15. 2.5 0. 0. 0.
CMD = NUG 0.631
CMD = EXP 0.369 22.2 18.1 8.8 0. 0. 0.

ITM1 = AUKR6 AUAJ2 CALC KRIGE
ITM2 = AUNN6 AUAJ2 CALC POLYG
ITM3 = MINZN BLOCK LIMIT
ITM4 = TRNCH BLOCK LIMIT
ITM5 = LNGTH RANGE 2.5 5.
ITM6 = DCODE RANGE 301. 716.
ITM7 = DIST6 BLOCK CALC RINGS
ITM8 = NCMP6 BLOCK CALC #COMP
ITM9 = NHOL6 BLOCK CALC #COMP
ITM10 = MINZN RANGE 2. 2.
ITM11 = LNGTH FACTR
CMD = BLOCK LIMIT MINZN 2
CMD = BLOCK LIMIT TRNCH 1 1
CMD = ELEV ZMID

I-O = 0 / DEBUG LEVEL
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=RKCK10.DAT  9=RKCK09.DAT  15=RKCK15.DAT;
MEDS-624V1   3=RPT624.F05  30=
** KRIGING OF 3-D BLOCK VALUES FOR AUKR6 **

RUN = OMIT

USR = MJL  /  MON DEC 6, 2004 9:30:21 AM US MOUNTAIN STANDARD TIME

IOP3 = 1. / 1=3-D SPHERICAL SEARCH; 0=2-D SEARCH
IOP4 = 0 / 0=NO GEOLOGIC MATCHING; 1=MATCH ONE ITEM
IOP6 = 0 / 0=USE TRUE DIST.; 1=USE ANISOTROPIC DIST.
IOP7 = 3 / MIN # OF COMPS FOR INTERP
IOP11= 00 / ROW # FOR EXTENDED OUTPUT
IOP12= 0 / 0=ALL; 1=OCTANT; 2=QUADRANT SEARCH; 3=SPLIT OCTANT;
COM          4=SPLIT QUADRANT.
COM          NOTE: NEGATIVE#=USE ROTATED SEARCH.  BY DEFAULT,
COM          OCTANTS & QUADRANTS ARE DEFINED USING THE PROJECT'S AXES.
IOP16= 8 / MAX.# OF COMPOSITES FOR INTERPOLATING A BLOCK
IOP19= 2 / MAX.# OF COMPOSITES PER HOLE (DEFAULT=NO LIMIT)
IOP20= 0 / 0=STORE VARIANCE; 1=STD DEV; 2=REL. VARIANCE

PAR1 = 50. / PRIMARY X-SEARCH DISTANCE
PAR2 = 50. / PRIMARY Y-SEARCH DISTANCE
PAR3 = 50. / PRIMARY Z-SEARCH DISTANCE
PAR4 = 50. / LIMITING SEARCH DISTANCE
PAR7 = 50. / MAX DISTANCE TO CLOSEST POINT
PAR8 = 50. / MAX DISTANCE TO PROJECT SINGLE COMPOSITE
PAR27= 2 4 1 / BLOCK DISCRETIZATION IN X,Y,Z
PAR31= 7.0  / OUTLIER CUTOFF TO CHANGE THE SEARCH
PAR32= 12.5/ MAX. 3D SEARCH DISTANCE AT PAR31

IOP17 = 0   /0=ORDINARY KRIGING, 5=SIMPLE
PAR30 = 0.   /MEAN GRADE OF THE AREA TO BE SIMPLE KRIGED

CMD = SEARCH 50. 50. 10. 0. 0. 75.
CMD = NUG 0.631
CMD = EXP 0.396 22.2 18.1 8.8 0. 0. 75.

ITM1 = AUKR6 AUAJ2 CALC KRIGE
ITM2 = AUNN6 AUAJ2 CALC POLYG
ITM3 = MINZN BLOCK LIMIT
ITM4 = TRNCH BLOCK LIMIT
ITM5 = LNGTH RANGE 2.5 5.
ITM6 = DCODE RANGE 301. 516.
ITM7 = DIST6 BLOCK CALC RINGS
ITM8 = NCMP6 BLOCK CALC #COMP
ITM9 = NHOL6 BLOCK CALC #COMP
ITM10 = MINZN RANGE 2. 2.
ITM11 = LNGTH FACTR
CMD = BLOCK LIMIT MINZN 2
CMD = BLOCK LIMIT TRNCH 1 2
CMD = ELEV ZMID

I-O = 0 / DEBUG LEVEL
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=RKCK10.DAT  9=RKCK09.DAT  15=RKCK15.DAT;
MEDS-624V1   3=RPT624.F04  30=
** KRIGING OF 3-D BLOCK VALUES FOR AUKR6 **

RUN = OMIT

USR = MJL  /  MON DEC 6, 2004 9:30:13 AM US MOUNTAIN STANDARD TIME

IOP3 = 1. / 1=3-D SPHERICAL SEARCH; 0=2-D SEARCH
IOP4 = 0 / 0=NO GEOLOGIC MATCHING; 1=MATCH ONE ITEM
IOP6 = 0 / 0=USE TRUE DIST.; 1=USE ANISOTROPIC DIST.
IOP7 = 2 / MIN # OF COMPS FOR INTERP
IOP11= 00 / ROW # FOR EXTENDED OUTPUT
IOP12= 0 / 0=ALL; 1=OCTANT; 2=QUADRANT SEARCH; 3=SPLIT OCTANT;
COM         4=SPLIT QUADRANT.
COM         NOTE: NEGATIVE#=USE ROTATED SEARCH.  BY DEFAULT,
COM         OCTANTS & QUADRANTS ARE DEFINED USING THE PROJECT'S AXES.
IOP16= 12 / MAX.# OF COMPOSITES FOR INTERPOLATING A BLOCK
IOP19= 2 / MAX.# OF COMPOSITES PER HOLE (DEFAULT=NO LIMIT)
IOP20= 0 / 0=STORE VARIANCE; 1=STD DEV; 2=REL. VARIANCE

PAR1 = 50. / PRIMARY X-SEARCH DISTANCE
PAR2 = 50. / PRIMARY Y-SEARCH DISTANCE
PAR3 = 50. / PRIMARY Z-SEARCH DISTANCE
PAR4 = 50. / LIMITING SEARCH DISTANCE
PAR7 = 50. / MAX DISTANCE TO CLOSEST POINT
PAR8 = 50. / MAX DISTANCE TO PROJECT SINGLE COMPOSITE
PAR27= 2 4 1 / BLOCK DISCRETIZATION IN X,Y,Z
PAR31= 7.0  / OUTLIER CUTOFF TO CHANGE THE SEARCH
PAR32= 12.5 / MAX. 3D SEARCH DISTANCE AT PAR31

IOP17 = 0   /0=ORDINARY KRIGING, 5=SIMPLE
PAR30 = 0.   /MEAN GRADE OF THE AREA TO BE SIMPLE KRIGED

CMD = SEARCH 50. 50. 10. 0. 0. 75.
CMD = NUG 0.631
CMD = EXP 0.396 22.2 18.1 8.8 0. 0. 75.

ITM1 = AUKR6 AUAJ2 CALC KRIGE
ITM2 = AUNN6 AUAJ2 CALC POLYG
ITM3 = MINZN BLOCK LIMIT
ITM4 = TRNCH BLOCK LIMIT
ITM5 = LNGTH RANGE 2.5 5.
ITM6 = DCODE RANGE 301. 516.
ITM7 = DIST6 BLOCK CALC RINGS
ITM8 = NCMP6 BLOCK CALC #COMP
ITM9 = NHOL6 BLOCK CALC #COMP
ITM10 = MINZN RANGE 2. 2.
ITM11 = LNGTH FACTR
CMD = BLOCK LIMIT MINZN 2
CMD = BLOCK LIMIT TRNCH 1 2
CMD = ELEV ZMID

I-O = 0 / DEBUG LEVEL
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=RKCK10.DAT  9=RKCK09.DAT  15=RKCK15.DAT;
MEDS-624V1   3=RPT624.F03  30=
** KRIGING OF 3-D BLOCK VALUES FOR AUKR6 **

RUN = OMIT

USR = MJL  /  MON DEC 6, 2004 9:30:56 AM US MOUNTAIN STANDARD TIME

IOP3 = 1. / 1=3-D SPHERICAL SEARCH; 0=2-D SEARCH
IOP4 = 0 / 0=NO GEOLOGIC MATCHING; 1=MATCH ONE ITEM
IOP6 = 0 / 0=USE TRUE DIST.; 1=USE ANISOTROPIC DIST.
IOP7 = 2 / MIN # OF COMPS FOR INTERP
IOP11= 00 / ROW # FOR EXTENDED OUTPUT
IOP12= 0 / 0=ALL; 1=OCTANT; 2=QUADRANT SEARCH; 3=SPLIT OCTANT;
COM          4=SPLIT QUADRANT.
COM          NOTE: NEGATIVE#=USE ROTATED SEARCH.  BY DEFAULT,
COM          OCTANTS & QUADRANTS ARE DEFINED USING THE PROJECT'S AXES.
IOP16= 8 / MAX.# OF COMPOSITES FOR INTERPOLATING A BLOCK
IOP19= 2 / MAX.# OF COMPOSITES PER HOLE (DEFAULT=NO LIMIT)
IOP20= 0 / 0=STORE VARIANCE; 1=STD DEV; 2=REL. VARIANCE

PAR1 = 15. / PRIMARY X-SEARCH DISTANCE
PAR2 = 15. / PRIMARY Y-SEARCH DISTANCE
PAR3 = 2.5 / PRIMARY Z-SEARCH DISTANCE
PAR4 = 15. / LIMITING SEARCH DISTANCE
PAR7 = 15. / MAX DISTANCE TO CLOSEST POINT
PAR8 = 15. / MAX DISTANCE TO PROJECT SINGLE COMPOSITE
PAR27= 2 4 1 / BLOCK DISCRETIZATION IN X,Y,Z
PAR31= 9    / OUTLIER CUTOFF TO CHANGE THE SEARCH
PAR32= 12.5 / MAX. 3D SEARCH DISTANCE AT PAR31

IOP17 = 0   /0=ORDINARY KRIGING, 5=SIMPLE
PAR30 = 0.   /MEAN GRADE OF THE AREA TO BE SIMPLE KRIGED

CMD = SEARCH 15. 15. 2.5 0. 0. 0.
CMD = NUG 0.671
CMD = EXP 0.329 12.6 9.5 4.6 0. 0. 0.

ITM1 = AUKR6 AUAJ2 CALC KRIGE
ITM2 = AUNN6 AUAJ2 CALC POLYG
ITM3 = MINZN BLOCK LIMIT
ITM4 = TRNCH BLOCK LIMIT
ITM5 = LNGTH RANGE 2.5 5.
ITM6 = DCODE RANGE 301. 716.
ITM7 = DIST6 BLOCK CALC RINGS
ITM8 = NCMP6 BLOCK CALC #COMP
ITM9 = NHOL6 BLOCK CALC #COMP
ITM10 = MINZN RANGE 1. 1.
ITM11 = LNGTH FACTR
CMD = BLOCK LIMIT MINZN 1
CMD = BLOCK LIMIT TRNCH 1 1
CMD = ELEV ZMID

I-O = 0 / DEBUG LEVEL
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=RKCK10.DAT  9=RKCK09.DAT  15=RKCK15.DAT;
MEDS-624V1   3=RPT624.F02  30=
** KRIGING OF 3-D BLOCK VALUES FOR AUKR6 **

RUN = OMIT

USR = MJL  /  MON DEC 6, 2004 9:30:06 AM US MOUNTAIN STANDARD TIME

IOP3 = 1. / 1=3-D SPHERICAL SEARCH; 0=2-D SEARCH
IOP4 = 0 / 0=NO GEOLOGIC MATCHING; 1=MATCH ONE ITEM
IOP6 = 0 / 0=USE TRUE DIST.; 1=USE ANISOTROPIC DIST.
IOP7 = 3 / MIN # OF COMPS FOR INTERP
IOP11= 00 / ROW # FOR EXTENDED OUTPUT
IOP12= 0 / 0=ALL; 1=OCTANT; 2=QUADRANT SEARCH; 3=SPLIT OCTANT;
COM          4=SPLIT QUADRANT.
COM          NOTE: NEGATIVE#=USE ROTATED SEARCH.  BY DEFAULT,
COM          OCTANTS & QUADRANTS ARE DEFINED USING THE PROJECT'S AXES.
IOP16= 6 / MAX.# OF COMPOSITES FOR INTERPOLATING A BLOCK
IOP19= 2 / MAX.# OF COMPOSITES PER HOLE (DEFAULT=NO LIMIT)
IOP20= 0 / 0=STORE VARIANCE; 1=STD DEV; 2=REL. VARIANCE

PAR1 = 50. / PRIMARY X-SEARCH DISTANCE
PAR2 = 50. / PRIMARY Y-SEARCH DISTANCE
PAR3 = 50. / PRIMARY Z-SEARCH DISTANCE
PAR4 = 50. / LIMITING SEARCH DISTANCE
PAR7 = 50. / MAX DISTANCE TO CLOSEST POINT
PAR8 = 50. / MAX DISTANCE TO PROJECT SINGLE COMPOSITE
PAR27= 2 4 1 / BLOCK DISCRETIZATION IN X,Y,Z
PAR31= 9    / OUTLIER CUTOFF TO CHANGE THE SEARCH
PAR32= 12.5 / MAX. 3D SEARCH DISTANCE AT PAR31

IOP17 = 0   /0=ORDINARY KRIGING, 5=SIMPLE
PAR30 = 0.   /MEAN GRADE OF THE AREA TO BE SIMPLE KRIGED

CMD = SEARCH 50. 50. 10. 0. 0. 75.
CMD = NUG 0.671
CMD = EXP 0.329 12.6 9.5 4.6 0. 0. 75.

ITM1 = AUKR6 AUAJ2 CALC KRIGE
ITM2 = AUNN6 AUAJ2 CALC POLYG
ITM3 = MINZN BLOCK LIMIT
ITM4 = TRNCH BLOCK LIMIT
ITM5 = LNGTH RANGE 2.5 5.
ITM6 = DCODE RANGE 301. 516.
ITM7 = DIST6 BLOCK CALC RINGS
ITM8 = NCMP6 BLOCK CALC #COMP
ITM9 = NHOL6 BLOCK CALC #COMP
ITM10 = MINZN RANGE 1. 1.
ITM11 = LNGTH FACTR
CMD = BLOCK LIMIT MINZN 1
CMD = BLOCK LIMIT TRNCH 1 2
CMD = ELEV ZMID

I-O = 0 / DEBUG LEVEL
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=RKCK10.DAT  9=RKCK09.DAT  15=RKCK15.DAT;
MEDS-624V1   3=RPT624.F01  30=
** KRIGING OF 3-D BLOCK VALUES FOR AUKR6 **

RUN = RESET

USR = MJL  /  MON DEC 6, 2004 9:30:00 AM US MOUNTAIN STANDARD TIME

IOP3 = 1. / 1=3-D SPHERICAL SEARCH; 0=2-D SEARCH
IOP4 = 0 / 0=NO GEOLOGIC MATCHING; 1=MATCH ONE ITEM
IOP6 = 0 / 0=USE TRUE DIST.; 1=USE ANISOTROPIC DIST.
IOP7 = 2 / MIN # OF COMPS FOR INTERP
IOP11= 00 / ROW # FOR EXTENDED OUTPUT
IOP12= 0 / 0=ALL; 1=OCTANT; 2=QUADRANT SEARCH; 3=SPLIT OCTANT;
COM         4=SPLIT QUADRANT.
COM         NOTE: NEGATIVE#=USE ROTATED SEARCH.  BY DEFAULT,
COM         OCTANTS & QUADRANTS ARE DEFINED USING THE PROJECT'S AXES.
IOP16= 6 / MAX.# OF COMPOSITES FOR INTERPOLATING A BLOCK
IOP19= 2 / MAX.# OF COMPOSITES PER HOLE (DEFAULT=NO LIMIT)
IOP20= 0 / 0=STORE VARIANCE; 1=STD DEV; 2=REL. VARIANCE

PAR1 = 50. / PRIMARY X-SEARCH DISTANCE
PAR2 = 50. / PRIMARY Y-SEARCH DISTANCE
PAR3 = 50. / PRIMARY Z-SEARCH DISTANCE
PAR4 = 50. / LIMITING SEARCH DISTANCE
PAR7 = 50. / MAX DISTANCE TO CLOSEST POINT
PAR8 = 50. / MAX DISTANCE TO PROJECT SINGLE COMPOSITE
PAR27= 2 4 1 / BLOCK DISCRETIZATION IN X,Y,Z
PAR31= 9     / OUTLIER CUTOFF TO CHANGE THE SEARCH
PAR32= 12.5  / MAX. 3D SEARCH DISTANCE AT PAR31

IOP17 = 0   /0=ORDINARY KRIGING, 5=SIMPLE
PAR30 = 0.   /MEAN GRADE OF THE AREA TO BE SIMPLE KRIGED

CMD = SEARCH 50. 50. 10. 0. 0. 75.
CMD = NUG 0.671
CMD = EXP 0.329 12.6 9.5 4.6 0. 0. 75.

ITM1 = AUKR6 AUAJ2 CALC KRIGE
ITM2 = AUNN6 AUAJ2 CALC POLYG
ITM3 = MINZN BLOCK LIMIT
ITM4 = TRNCH BLOCK LIMIT
ITM5 = LNGTH RANGE 2.5 5.
ITM6 = DCODE RANGE 301. 516.
ITM7 = DIST6 BLOCK CALC RINGS
ITM8 = NCMP6 BLOCK CALC #COMP
ITM9 = NHOL6 BLOCK CALC #COMP
ITM10 = MINZN RANGE 1. 1.
ITM11 = LNGTH FACTR
CMD = BLOCK LIMIT MINZN 1
CMD = BLOCK LIMIT TRNCH 1 2
CMD = ELEV ZMID

I-O = 0 / DEBUG LEVEL
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=RKCK10.DAT  9=RKCK09.DAT  15=RKCK15.DAT;
MEDS-624V1   3=RPT624.E09  30=
** KRIGING OF 3-D BLOCK VALUES FOR AUKR5 **

RUN = OMIT

USR = MJL  /  MON DEC 6, 2004 9:31:11 AM US MOUNTAIN STANDARD TIME

IOP3 = 1. / 1=3-D SPHERICAL SEARCH; 0=2-D SEARCH
IOP4 = 0 / 0=NO GEOLOGIC MATCHING; 1=MATCH ONE ITEM
IOP6 = 0 / 0=USE TRUE DIST.; 1=USE ANISOTROPIC DIST.
IOP7 = 2 / MIN # OF COMPS FOR INTERP
IOP11= 00 / ROW # FOR EXTENDED OUTPUT
IOP12= 0 / 0=ALL; 1=OCTANT; 2=QUADRANT SEARCH; 3=SPLIT OCTANT;
COM         4=SPLIT QUADRANT.
COM         NOTE: NEGATIVE#=USE ROTATED SEARCH.  BY DEFAULT,
COM         OCTANTS & QUADRANTS ARE DEFINED USING THE PROJECT'S AXES.
IOP16= 8 / MAX.# OF COMPOSITES FOR INTERPOLATING A BLOCK
IOP19= 2 / MAX.# OF COMPOSITES PER HOLE (DEFAULT=NO LIMIT)
IOP20= 0 / 0=STORE VARIANCE; 1=STD DEV; 2=REL. VARIANCE

PAR1 = 15. / PRIMARY X-SEARCH DISTANCE
PAR2 = 15. / PRIMARY Y-SEARCH DISTANCE
PAR3 = 2.5 / PRIMARY Z-SEARCH DISTANCE
PAR4 = 15. / LIMITING SEARCH DISTANCE
PAR7 = 15. / MAX DISTANCE TO CLOSEST POINT
PAR8 = 15. / MAX DISTANCE TO PROJECT SINGLE COMPOSITE
PAR27= 2 4 1 / BLOCK DISCRETIZATION IN X,Y,Z
PAR31= 100. / OUTLIER CUTOFF TO CHANGE THE SEARCH
PAR32= 50. / MAX. 3D SEARCH DISTANCE AT PAR31

IOP17 = 0   /0=ORDINARY KRIGING, 5=SIMPLE
PAR30 = 0.   /MEAN GRADE OF THE AREA TO BE SIMPLE KRIGED

CMD = SEARCH 15. 15. 2.5 0. 0. 0.
CMD = NUG 0.478
CMD = EXP 0.522 41.5 13.9 25.9 0. 0. 0.

ITM1 = AUKR5 AUAJ2 CALC KRIGE
ITM2 = AUNN5 AUAJ2 CALC POLYG
ITM3 = MINZN BLOCK LIMIT
ITM4 = TRNCH BLOCK LIMIT
ITM5 = LNGTH RANGE 2.5 5.
ITM6 = DCODE RANGE 301. 716.
ITM7 = DIST5 BLOCK CALC RINGS
ITM8 = NCMP5 BLOCK CALC #COMP
ITM9 = NHOL5 BLOCK CALC #COMP
ITM10 = MINZN RANGE 3. 3.
ITM11 = LNGTH FACTR
CMD = BLOCK LIMIT MINZN 3
CMD = BLOCK LIMIT TRNCH 1 1
CMD = ELEV ZMID

I-O = 0 / DEBUG LEVEL
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=RKCK10.DAT  9=RKCK09.DAT  15=RKCK15.DAT;
MEDS-624V1   3=RPT624.E08  30=
** KRIGING OF 3-D BLOCK VALUES FOR AUKR5 **

RUN = OMIT

USR = MJL  /  MON DEC 6, 2004 9:30:34 AM US MOUNTAIN STANDARD TIME

IOP3 = 1. / 1=3-D SPHERICAL SEARCH; 0=2-D SEARCH
IOP4 = 0 / 0=NO GEOLOGIC MATCHING; 1=MATCH ONE ITEM
IOP6 = 0 / 0=USE TRUE DIST.; 1=USE ANISOTROPIC DIST.
IOP7 = 3 / MIN # OF COMPS FOR INTERP
IOP11= 00 / ROW # FOR EXTENDED OUTPUT
IOP12= 0 / 0=ALL; 1=OCTANT; 2=QUADRANT SEARCH; 3=SPLIT OCTANT;
COM          4=SPLIT QUADRANT.
COM          NOTE: NEGATIVE#=USE ROTATED SEARCH.  BY DEFAULT,
COM          OCTANTS & QUADRANTS ARE DEFINED USING THE PROJECT'S AXES.
IOP16= 6 / MAX.# OF COMPOSITES FOR INTERPOLATING A BLOCK
IOP19= 2 / MAX.# OF COMPOSITES PER HOLE (DEFAULT=NO LIMIT)
IOP20= 0 / 0=STORE VARIANCE; 1=STD DEV; 2=REL. VARIANCE

PAR1 = 50. / PRIMARY X-SEARCH DISTANCE
PAR2 = 50. / PRIMARY Y-SEARCH DISTANCE
PAR3 = 50. / PRIMARY Z-SEARCH DISTANCE
PAR4 = 50. / LIMITING SEARCH DISTANCE
PAR7 = 50. / MAX DISTANCE TO CLOSEST POINT
PAR8 = 50. / MAX DISTANCE TO PROJECT SINGLE COMPOSITE
PAR27= 2 4 1 / BLOCK DISCRETIZATION IN X,Y,Z
PAR31= 100. / OUTLIER CUTOFF TO CHANGE THE SEARCH
PAR32= 50. / MAX. 3D SEARCH DISTANCE AT PAR31

IOP17 = 0   /0=ORDINARY KRIGING, 5=SIMPLE
PAR30 = 0.   /MEAN GRADE OF THE AREA TO BE SIMPLE KRIGED

CMD = SEARCH 50. 50. 10. 30. 0. 75.
CMD = NUG 0.478
CMD = EXP 0.522 41.5 13.9 25.9 30. 0. 75.

ITM1 = AUKR5 AUAJ2 CALC KRIGE
ITM2 = AUNN5 AUAJ2 CALC POLYG
ITM3 = MINZN BLOCK LIMIT
ITM4 = TRNCH BLOCK LIMIT
ITM5 = LNGTH RANGE 2.5 5.
ITM6 = DCODE RANGE 301. 516.
ITM7 = DIST5 BLOCK CALC RINGS
ITM8 = NCMP5 BLOCK CALC #COMP
ITM9 = NHOL5 BLOCK CALC #COMP
ITM10 = MINZN RANGE 3. 3.
ITM11 = LNGTH FACTR
CMD = BLOCK LIMIT MINZN 3
CMD = BLOCK LIMIT TRNCH 1 2
CMD = ELEV ZMID

I-O = 0 / DEBUG LEVEL
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=RKCK10.DAT  9=RKCK09.DAT  15=RKCK15.DAT;
MEDS-624V1   3=RPT624.E07  30=
** KRIGING OF 3-D BLOCK VALUES FOR AUKR5 **

RUN = OMIT

USR = MJL  /  MON DEC 6, 2004 9:30:28 AM US MOUNTAIN STANDARD TIME

IOP3 = 1. / 1=3-D SPHERICAL SEARCH; 0=2-D SEARCH
IOP4 = 0 / 0=NO GEOLOGIC MATCHING; 1=MATCH ONE ITEM
IOP6 = 0 / 0=USE TRUE DIST.; 1=USE ANISOTROPIC DIST.
IOP7 = 2 / MIN # OF COMPS FOR INTERP
IOP11= 00 / ROW # FOR EXTENDED OUTPUT
IOP12= 0 / 0=ALL; 1=OCTANT; 2=QUADRANT SEARCH; 3=SPLIT OCTANT;
COM         4=SPLIT QUADRANT.
COM         NOTE: NEGATIVE#=USE ROTATED SEARCH.  BY DEFAULT,
COM         OCTANTS & QUADRANTS ARE DEFINED USING THE PROJECT'S AXES.
IOP16= 12 / MAX.# OF COMPOSITES FOR INTERPOLATING A BLOCK
IOP19= 2 / MAX.# OF COMPOSITES PER HOLE (DEFAULT=NO LIMIT)
IOP20= 0 / 0=STORE VARIANCE; 1=STD DEV; 2=REL. VARIANCE

PAR1 = 50. / PRIMARY X-SEARCH DISTANCE
PAR2 = 50. / PRIMARY Y-SEARCH DISTANCE
PAR3 = 50. / PRIMARY Z-SEARCH DISTANCE
PAR4 = 50. / LIMITING SEARCH DISTANCE
PAR7 = 50. / MAX DISTANCE TO CLOSEST POINT
PAR8 = 50. / MAX DISTANCE TO PROJECT SINGLE COMPOSITE
PAR27= 2 4 1 / BLOCK DISCRETIZATION IN X,Y,Z
PAR31= 100. / OUTLIER CUTOFF TO CHANGE THE SEARCH
PAR32= 50. / MAX. 3D SEARCH DISTANCE AT PAR31

IOP17 = 0   /0=ORDINARY KRIGING, 5=SIMPLE
PAR30 = 0.   /MEAN GRADE OF THE AREA TO BE SIMPLE KRIGED

CMD = SEARCH 50. 50. 10. 30. 0. 75.
CMD = NUG 0.478
CMD = EXP 0.522 41.5 13.9 25.9 30. 0. 75.

ITM1 = AUKR5 AUAJ2 CALC KRIGE
ITM2 = AUNN5 AUAJ2 CALC POLYG
ITM3 = MINZN BLOCK LIMIT
ITM4 = TRNCH BLOCK LIMIT
ITM5 = LNGTH RANGE 2.5 5.
ITM6 = DCODE RANGE 301. 516.
ITM7 = DIST5 BLOCK CALC RINGS
ITM8 = NCMP5 BLOCK CALC #COMP
ITM9 = NHOL5 BLOCK CALC #COMP
ITM10 = MINZN RANGE 3. 3.
ITM11 = LNGTH FACTR
CMD = BLOCK LIMIT MINZN 3
CMD = BLOCK LIMIT TRNCH 1 2
CMD = ELEV ZMID

I-O = 0 / DEBUG LEVEL
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=RKCK10.DAT  9=RKCK09.DAT  15=RKCK15.DAT;
MEDS-624V1   3=RPT624.E06  30=
** KRIGING OF 3-D BLOCK VALUES FOR AUKR5 **

RUN = OMIT

USR = MJL  /  MON DEC 6, 2004 9:31:03 AM US MOUNTAIN STANDARD TIME

IOP3 = 1. / 1=3-D SPHERICAL SEARCH; 0=2-D SEARCH
IOP4 = 0 / 0=NO GEOLOGIC MATCHING; 1=MATCH ONE ITEM
IOP6 = 0 / 0=USE TRUE DIST.; 1=USE ANISOTROPIC DIST.
IOP7 = 2 / MIN # OF COMPS FOR INTERP
IOP11= 00 / ROW # FOR EXTENDED OUTPUT
IOP12= 0 / 0=ALL; 1=OCTANT; 2=QUADRANT SEARCH; 3=SPLIT OCTANT;
COM         4=SPLIT QUADRANT.
COM         NOTE: NEGATIVE#=USE ROTATED SEARCH.  BY DEFAULT,
COM         OCTANTS & QUADRANTS ARE DEFINED USING THE PROJECT'S AXES.
IOP16= 8 / MAX.# OF COMPOSITES FOR INTERPOLATING A BLOCK
IOP19= 2 / MAX.# OF COMPOSITES PER HOLE (DEFAULT=NO LIMIT)
IOP20= 0 / 0=STORE VARIANCE; 1=STD DEV; 2=REL. VARIANCE

PAR1 = 15. / PRIMARY X-SEARCH DISTANCE
PAR2 = 15. / PRIMARY Y-SEARCH DISTANCE
PAR3 = 2.5 / PRIMARY Z-SEARCH DISTANCE
PAR4 = 15. / LIMITING SEARCH DISTANCE
PAR7 = 15. / MAX DISTANCE TO CLOSEST POINT
PAR8 = 15. / MAX DISTANCE TO PROJECT SINGLE COMPOSITE
PAR27= 2 4 1 / BLOCK DISCRETIZATION IN X,Y,Z
PAR31= 100. / OUTLIER CUTOFF TO CHANGE THE SEARCH
PAR32= 50. / MAX. 3D SEARCH DISTANCE AT PAR31

IOP17 = 0   /0=ORDINARY KRIGING, 5=SIMPLE
PAR30 = 0.   /MEAN GRADE OF THE AREA TO BE SIMPLE KRIGED

CMD = SEARCH 15. 15. 2.5 0. 0. 0.
CMD = NUG 0.631
CMD = EXP 0.369 22.2 18.1 8.8 0. 0. 0.

ITM1 = AUKR5 AUAJ2 CALC KRIGE
ITM2 = AUNN5 AUAJ2 CALC POLYG
ITM3 = MINZN BLOCK LIMIT
ITM4 = TRNCH BLOCK LIMIT
ITM5 = LNGTH RANGE 2.5 5.
ITM6 = DCODE RANGE 301. 716.
ITM7 = DIST5 BLOCK CALC RINGS
ITM8 = NCMP5 BLOCK CALC #COMP
ITM9 = NHOL5 BLOCK CALC #COMP
ITM10 = MINZN RANGE 2. 2.
ITM11 = LNGTH FACTR
CMD = BLOCK LIMIT MINZN 2
CMD = BLOCK LIMIT TRNCH 1 1
CMD = ELEV ZMID

I-O = 0 / DEBUG LEVEL
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=RKCK10.DAT  9=RKCK09.DAT  15=RKCK15.DAT;
MEDS-624V1   3=RPT624.E05  30=
** KRIGING OF 3-D BLOCK VALUES FOR AUKR5 **

RUN = OMIT

USR = MJL  /  MON DEC 6, 2004 9:30:21 AM US MOUNTAIN STANDARD TIME

IOP3 = 1. / 1=3-D SPHERICAL SEARCH; 0=2-D SEARCH
IOP4 = 0 / 0=NO GEOLOGIC MATCHING; 1=MATCH ONE ITEM
IOP6 = 0 / 0=USE TRUE DIST.; 1=USE ANISOTROPIC DIST.
IOP7 = 3 / MIN # OF COMPS FOR INTERP
IOP11= 00 / ROW # FOR EXTENDED OUTPUT
IOP12= 0 / 0=ALL; 1=OCTANT; 2=QUADRANT SEARCH; 3=SPLIT OCTANT;
COM          4=SPLIT QUADRANT.
COM          NOTE: NEGATIVE#=USE ROTATED SEARCH.  BY DEFAULT,
COM          OCTANTS & QUADRANTS ARE DEFINED USING THE PROJECT'S AXES.
IOP16= 8 / MAX.# OF COMPOSITES FOR INTERPOLATING A BLOCK
IOP19= 2 / MAX.# OF COMPOSITES PER HOLE (DEFAULT=NO LIMIT)
IOP20= 0 / 0=STORE VARIANCE; 1=STD DEV; 2=REL. VARIANCE

PAR1 = 50. / PRIMARY X-SEARCH DISTANCE
PAR2 = 50. / PRIMARY Y-SEARCH DISTANCE
PAR3 = 50. / PRIMARY Z-SEARCH DISTANCE
PAR4 = 50. / LIMITING SEARCH DISTANCE
PAR7 = 50. / MAX DISTANCE TO CLOSEST POINT
PAR8 = 50. / MAX DISTANCE TO PROJECT SINGLE COMPOSITE
PAR27= 2 4 1 / BLOCK DISCRETIZATION IN X,Y,Z
PAR31= 100. / OUTLIER CUTOFF TO CHANGE THE SEARCH
PAR32= 50. / MAX. 3D SEARCH DISTANCE AT PAR31

IOP17 = 0   /0=ORDINARY KRIGING, 5=SIMPLE
PAR30 = 0.   /MEAN GRADE OF THE AREA TO BE SIMPLE KRIGED

CMD = SEARCH 50. 50. 10. 0. 0. 75.
CMD = NUG 0.631
CMD = EXP 0.396 22.2 18.1 8.8 0. 0. 75.

ITM1 = AUKR5 AUAJ2 CALC KRIGE
ITM2 = AUNN5 AUAJ2 CALC POLYG
ITM3 = MINZN BLOCK LIMIT
ITM4 = TRNCH BLOCK LIMIT
ITM5 = LNGTH RANGE 2.5 5.
ITM6 = DCODE RANGE 301. 516.
ITM7 = DIST5 BLOCK CALC RINGS
ITM8 = NCMP5 BLOCK CALC #COMP
ITM9 = NHOL5 BLOCK CALC #COMP
ITM10 = MINZN RANGE 2. 2.
ITM11 = LNGTH FACTR
CMD = BLOCK LIMIT MINZN 2
CMD = BLOCK LIMIT TRNCH 1 2
CMD = ELEV ZMID

I-O = 0 / DEBUG LEVEL
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=RKCK10.DAT  9=RKCK09.DAT  15=RKCK15.DAT;
MEDS-624V1   3=RPT624.E04  30=
** KRIGING OF 3-D BLOCK VALUES FOR AUKR5 **

RUN = OMIT

USR = MJL  /  MON DEC 6, 2004 9:30:13 AM US MOUNTAIN STANDARD TIME

IOP3 = 1. / 1=3-D SPHERICAL SEARCH; 0=2-D SEARCH
IOP4 = 0 / 0=NO GEOLOGIC MATCHING; 1=MATCH ONE ITEM
IOP6 = 0 / 0=USE TRUE DIST.; 1=USE ANISOTROPIC DIST.
IOP7 = 2 / MIN # OF COMPS FOR INTERP
IOP11= 00 / ROW # FOR EXTENDED OUTPUT
IOP12= 0 / 0=ALL; 1=OCTANT; 2=QUADRANT SEARCH; 3=SPLIT OCTANT;
COM          4=SPLIT QUADRANT.
COM          NOTE: NEGATIVE#=USE ROTATED SEARCH.  BY DEFAULT,
COM          OCTANTS & QUADRANTS ARE DEFINED USING THE PROJECT'S AXES.
IOP16= 12 / MAX.# OF COMPOSITES FOR INTERPOLATING A BLOCK
IOP19= 2 / MAX.# OF COMPOSITES PER HOLE (DEFAULT=NO LIMIT)
IOP20= 0 / 0=STORE VARIANCE; 1=STD DEV; 2=REL. VARIANCE

PAR1 = 50. / PRIMARY X-SEARCH DISTANCE
PAR2 = 50. / PRIMARY Y-SEARCH DISTANCE
PAR3 = 50. / PRIMARY Z-SEARCH DISTANCE
PAR4 = 50. / LIMITING SEARCH DISTANCE
PAR7 = 50. / MAX DISTANCE TO CLOSEST POINT
PAR8 = 50. / MAX DISTANCE TO PROJECT SINGLE COMPOSITE
PAR27= 2 4 1 / BLOCK DISCRETIZATION IN X,Y,Z
PAR31= 100. / OUTLIER CUTOFF TO CHANGE THE SEARCH
PAR32= 50. / MAX. 3D SEARCH DISTANCE AT PAR31

IOP17 = 0   /0=ORDINARY KRIGING, 5=SIMPLE
PAR30 = 0.   /MEAN GRADE OF THE AREA TO BE SIMPLE KRIGED

CMD = SEARCH 50. 50. 10. 0. 0. 75.
CMD = NUG 0.631
CMD = EXP 0.396 22.2 18.1 8.8 0. 0. 75.

ITM1 = AUKR5 AUAJ2 CALC KRIGE
ITM2 = AUNN5 AUAJ2 CALC POLYG
ITM3 = MINZN BLOCK LIMIT
ITM4 = TRNCH BLOCK LIMIT
ITM5 = LNGTH RANGE 2.5 5.
ITM6 = DCODE RANGE 301. 516.
ITM7 = DIST5 BLOCK CALC RINGS
ITM8 = NCMP5 BLOCK CALC #COMP
ITM9 = NHOL5 BLOCK CALC #COMP
ITM10 = MINZN RANGE 2. 2.
ITM11 = LNGTH FACTR
CMD = BLOCK LIMIT MINZN 2
CMD = BLOCK LIMIT TRNCH 1 2
CMD = ELEV ZMID

I-O = 0 / DEBUG LEVEL
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=RKCK10.DAT  9=RKCK09.DAT  15=RKCK15.DAT;
MEDS-624V1   3=RPT624.E03  30=
** KRIGING OF 3-D BLOCK VALUES FOR AUKR5 **

RUN = OMIT

USR = MJL  /  MON DEC 6, 2004 9:30:56 AM US MOUNTAIN STANDARD TIME

IOP3 = 1. / 1=3-D SPHERICAL SEARCH; 0=2-D SEARCH
IOP4 = 0 / 0=NO GEOLOGIC MATCHING; 1=MATCH ONE ITEM
IOP6 = 0 / 0=USE TRUE DIST.; 1=USE ANISOTROPIC DIST.
IOP7 = 2 / MIN # OF COMPS FOR INTERP
IOP11= 00 / ROW # FOR EXTENDED OUTPUT
IOP12= 0 / 0=ALL; 1=OCTANT; 2=QUADRANT SEARCH; 3=SPLIT OCTANT;
COM          4=SPLIT QUADRANT.
COM          NOTE: NEGATIVE#=USE ROTATED SEARCH.  BY DEFAULT,
COM          OCTANTS & QUADRANTS ARE DEFINED USING THE PROJECT'S AXES.
IOP16= 8 / MAX.# OF COMPOSITES FOR INTERPOLATING A BLOCK
IOP19= 2 / MAX.# OF COMPOSITES PER HOLE (DEFAULT=NO LIMIT)
IOP20= 0 / 0=STORE VARIANCE; 1=STD DEV; 2=REL. VARIANCE

PAR1 = 15. / PRIMARY X-SEARCH DISTANCE
PAR2 = 15. / PRIMARY Y-SEARCH DISTANCE
PAR3 = 2.5 / PRIMARY Z-SEARCH DISTANCE
PAR4 = 15. / LIMITING SEARCH DISTANCE
PAR7 = 15. / MAX DISTANCE TO CLOSEST POINT
PAR8 = 15. / MAX DISTANCE TO PROJECT SINGLE COMPOSITE
PAR27= 2 4 1 / BLOCK DISCRETIZATION IN X,Y,Z
PAR31= 100. / OUTLIER CUTOFF TO CHANGE THE SEARCH
PAR32= 50. / MAX. 3D SEARCH DISTANCE AT PAR31

IOP17 = 0   /0=ORDINARY KRIGING, 5=SIMPLE
PAR30 = 0.   /MEAN GRADE OF THE AREA TO BE SIMPLE KRIGED

CMD = SEARCH 15. 15. 2.5 0. 0. 0.
CMD = NUG 0.671
CMD = EXP 0.329 12.6 9.5 4.6 0. 0. 0.

ITM1 = AUKR5 AUAJ2 CALC KRIGE
ITM2 = AUNN5 AUAJ2 CALC POLYG
ITM3 = MINZN BLOCK LIMIT
ITM4 = TRNCH BLOCK LIMIT
ITM5 = LNGTH RANGE 2.5 5.
ITM6 = DCODE RANGE 301. 716.
ITM7 = DIST5 BLOCK CALC RINGS
ITM8 = NCMP5 BLOCK CALC #COMP
ITM9 = NHOL5 BLOCK CALC #COMP
ITM10 = MINZN RANGE 1. 1.
ITM11 = LNGTH FACTR
CMD = BLOCK LIMIT MINZN 1
CMD = BLOCK LIMIT TRNCH 1 1
CMD = ELEV ZMID

I-O = 0 / DEBUG LEVEL
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=RKCK10.DAT  9=RKCK09.DAT  15=RKCK15.DAT;
MEDS-624V1   3=RPT624.E02  30=
** KRIGING OF 3-D BLOCK VALUES FOR AUKR5 **

RUN = OMIT

USR = MJL  /  MON DEC 6, 2004 9:30:06 AM US MOUNTAIN STANDARD TIME

IOP3 = 1. / 1=3-D SPHERICAL SEARCH; 0=2-D SEARCH
IOP4 = 0 / 0=NO GEOLOGIC MATCHING; 1=MATCH ONE ITEM
IOP6 = 0 / 0=USE TRUE DIST.; 1=USE ANISOTROPIC DIST.
IOP7 = 3 / MIN # OF COMPS FOR INTERP
IOP11= 00 / ROW # FOR EXTENDED OUTPUT
IOP12= 0 / 0=ALL; 1=OCTANT; 2=QUADRANT SEARCH; 3=SPLIT OCTANT;
COM          4=SPLIT QUADRANT.
COM          NOTE: NEGATIVE#=USE ROTATED SEARCH.  BY DEFAULT,
COM          OCTANTS & QUADRANTS ARE DEFINED USING THE PROJECT'S AXES.
IOP16= 6 / MAX.# OF COMPOSITES FOR INTERPOLATING A BLOCK
IOP19= 2 / MAX.# OF COMPOSITES PER HOLE (DEFAULT=NO LIMIT)
IOP20= 0 / 0=STORE VARIANCE; 1=STD DEV; 2=REL. VARIANCE

PAR1 = 50. / PRIMARY X-SEARCH DISTANCE
PAR2 = 50. / PRIMARY Y-SEARCH DISTANCE
PAR3 = 50. / PRIMARY Z-SEARCH DISTANCE
PAR4 = 50. / LIMITING SEARCH DISTANCE
PAR7 = 50. / MAX DISTANCE TO CLOSEST POINT
PAR8 = 50. / MAX DISTANCE TO PROJECT SINGLE COMPOSITE
PAR27= 2 4 1 / BLOCK DISCRETIZATION IN X,Y,Z
PAR31= 100. / OUTLIER CUTOFF TO CHANGE THE SEARCH
PAR32= 50. / MAX. 3D SEARCH DISTANCE AT PAR31

IOP17 = 0   /0=ORDINARY KRIGING, 5=SIMPLE
PAR30 = 0.   /MEAN GRADE OF THE AREA TO BE SIMPLE KRIGED

CMD = SEARCH 50. 50. 10. 0. 0. 75.
CMD = NUG 0.671
CMD = EXP 0.329 12.6 9.5 4.6 0. 0. 75.

ITM1 = AUKR5 AUAJ2 CALC KRIGE
ITM2 = AUNN5 AUAJ2 CALC POLYG
ITM3 = MINZN BLOCK LIMIT
ITM4 = TRNCH BLOCK LIMIT
ITM5 = LNGTH RANGE 2.5 5.
ITM6 = DCODE RANGE 301. 516.
ITM7 = DIST5 BLOCK CALC RINGS
ITM8 = NCMP5 BLOCK CALC #COMP
ITM9 = NHOL5 BLOCK CALC #COMP
ITM10 = MINZN RANGE 1. 1.
ITM11 = LNGTH FACTR
CMD = BLOCK LIMIT MINZN 1
CMD = BLOCK LIMIT TRNCH 1 2
CMD = ELEV ZMID

I-O = 0 / DEBUG LEVEL
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=RKCK10.DAT  9=RKCK09.DAT  15=RKCK15.DAT;
MEDS-624V1   3=RPT624.E01  30=
** KRIGING OF 3-D BLOCK VALUES FOR AUKR5 **

RUN = RESET

USR = MJL  /  MON DEC 6, 2004 9:30:00 AM US MOUNTAIN STANDARD TIME

IOP3 = 1. / 1=3-D SPHERICAL SEARCH; 0=2-D SEARCH
IOP4 = 0 / 0=NO GEOLOGIC MATCHING; 1=MATCH ONE ITEM
IOP6 = 0 / 0=USE TRUE DIST.; 1=USE ANISOTROPIC DIST.
IOP7 = 2 / MIN # OF COMPS FOR INTERP
IOP11= 00 / ROW # FOR EXTENDED OUTPUT
IOP12= 0 / 0=ALL; 1=OCTANT; 2=QUADRANT SEARCH; 3=SPLIT OCTANT;
COM         4=SPLIT QUADRANT.
COM         NOTE: NEGATIVE#=USE ROTATED SEARCH.  BY DEFAULT,
COM         OCTANTS & QUADRANTS ARE DEFINED USING THE PROJECT'S AXES.
IOP16= 6 / MAX.# OF COMPOSITES FOR INTERPOLATING A BLOCK
IOP19= 2 / MAX.# OF COMPOSITES PER HOLE (DEFAULT=NO LIMIT)
IOP20= 0 / 0=STORE VARIANCE; 1=STD DEV; 2=REL. VARIANCE

PAR1 = 50. / PRIMARY X-SEARCH DISTANCE
PAR2 = 50. / PRIMARY Y-SEARCH DISTANCE
PAR3 = 50. / PRIMARY Z-SEARCH DISTANCE
PAR4 = 50. / LIMITING SEARCH DISTANCE
PAR7 = 50. / MAX DISTANCE TO CLOSEST POINT
PAR8 = 50. / MAX DISTANCE TO PROJECT SINGLE COMPOSITE
PAR27= 2 4 1 / BLOCK DISCRETIZATION IN X,Y,Z
PAR31= 100. / OUTLIER CUTOFF TO CHANGE THE SEARCH
PAR32= 50. / MAX. 3D SEARCH DISTANCE AT PAR31

IOP17 = 0   /0=ORDINARY KRIGING, 5=SIMPLE
PAR30 = 0.   /MEAN GRADE OF THE AREA TO BE SIMPLE KRIGED

CMD = SEARCH 50. 50. 10. 0. 0. 75.
CMD = NUG 0.671
CMD = EXP 0.329 12.6 9.5 4.6 0. 0. 75.

ITM1 = AUKR5 AUAJ2 CALC KRIGE
ITM2 = AUNN5 AUAJ2 CALC POLYG
ITM3 = MINZN BLOCK LIMIT
ITM4 = TRNCH BLOCK LIMIT
ITM5 = LNGTH RANGE 2.5 5.
ITM6 = DCODE RANGE 301. 516.
ITM7 = DIST5 BLOCK CALC RINGS
ITM8 = NCMP5 BLOCK CALC #COMP
ITM9 = NHOL5 BLOCK CALC #COMP
ITM10 = MINZN RANGE 1. 1.
ITM11 = LNGTH FACTR
CMD = BLOCK LIMIT MINZN 1
CMD = BLOCK LIMIT TRNCH 1 2
CMD = ELEV ZMID

I-O = 0 / DEBUG LEVEL
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=rkck10.dat  9=rkck09.dat  15=rkck15.dat;
MEDS-624V1   3=rpt624.dbg  31=comps.xyz 30=
** KRIGING of 3-D block values for AUKR1 - debug run

RUN = RESET

USR = MJL  /  Sun Dec 5, 2004 10:26:21 AM US Mountain Standard Time

IOP3 = 1. / 1=3-D spherical search; 0=2-D search
IOP4 = 0 / 0=No geologic matching; 1=Match one item
IOP6 = 0 / 0=Use true dist.; 1=Use anisotropic dist.
IOP7 = 3 / Min # of comps for interp
IOP11= 84 / Row # for extended output
IOP12= 0 / 0=All; 1=Octant; 2=Quadrant search; 3=Split Octants;
COM         4=Split Quadrants
COM        Note: Negative #=use rotated search. By Default,
COM         octants & quadrants are defined using the
COM         project's orthogonal axes).
IOP16= 8 / Max.# of composites for interpolating a block
IOP19= 2 / Max.# of composites per hole (DEFAULT=No limit)
IOP20= 0 / 0=Store variance; 1=STD DEV; 2=Rel. variance

PAR1 = 50. / Primary X-search distance
PAR2 = 50. / Primary Y-search distance
PAR3 = 50. / Primary Z-search distance
PAR4 = 50. / Limiting search distance
PAR7 = 50. / Max distance to closest point
PAR8 = 50. / Max distance to project single composite
PAR27= 2 4 1 / Block discretization in X,Y,Z
PAR31= 100. / Outlier cutoff to change the search
PAR32= 50. / Max. 3D search distance at PAR31

CMD = SEARCH 50. 50. 10. 0. 0. 75.
CMD = NUG 0.368
CMD = EXP 0.632 16.2 12.3 5.2 0. 0. 75.

ITM1 = AUKR1 AUAJ1 CALC KRIGE
ITM2 = MINZN Block limit
ITM3 = dcode range 301. 516.
ITM4 = minzn range 10. 10.
ITM5 = lngth range 2.5 5.
ITM6 = LNGTH FACTR
CMD = Block limit codes 10
CMD = ELEV ZMID

I-O = 0 / Debug level
END
81 81 84 84 24 24
```

```
MEDS-624V1  10=RKCK10.DAT  9=RKCK09.DAT  15=RKCK15.DAT;
MEDS-624V1   3=RPT624.D09  30=
** KRIGING OF 3-D BLOCK VALUES FOR AUKR4 **

RUN = OMIT

USR = MJL  /  MON DEC 6, 2004 9:31:11 AM US MOUNTAIN STANDARD TIME

IOP3 = 1. / 1=3-D SPHERICAL SEARCH; 0=2-D SEARCH
IOP4 = 0 / 0=NO GEOLOGIC MATCHING; 1=MATCH ONE ITEM
IOP6 = 0 / 0=USE TRUE DIST.; 1=USE ANISOTROPIC DIST.
IOP7 = 2 / MIN # OF COMPS FOR INTERP
IOP11= 00 / ROW # FOR EXTENDED OUTPUT
IOP12= 0 / 0=ALL; 1=OCTANT; 2=QUADRANT SEARCH; 3=SPLIT OCTANT;
COM         4=SPLIT QUADRANT.
COM         NOTE: NEGATIVE#=USE ROTATED SEARCH.  BY DEFAULT,
COM         OCTANTS & QUADRANTS ARE DEFINED USING THE PROJECT'S AXES.
IOP16= 8 / MAX.# OF COMPOSITES FOR INTERPOLATING A BLOCK
IOP19= 2 / MAX.# OF COMPOSITES PER HOLE (DEFAULT=NO LIMIT)
IOP20= 0 / 0=STORE VARIANCE; 1=STD DEV; 2=REL. VARIANCE

PAR1 = 15. / PRIMARY X-SEARCH DISTANCE
PAR2 = 15. / PRIMARY Y-SEARCH DISTANCE
PAR3 = 2.5 / PRIMARY Z-SEARCH DISTANCE
PAR4 = 15. / LIMITING SEARCH DISTANCE
PAR7 = 15. / MAX DISTANCE TO CLOSEST POINT
PAR8 = 15. / MAX DISTANCE TO PROJECT SINGLE COMPOSITE
PAR27= 2 4 1 / BLOCK DISCRETIZATION IN X,Y,Z
PAR31= 7.0  / OUTLIER CUTOFF TO CHANGE THE SEARCH
PAR32= 15.0 / MAX. 3D SEARCH DISTANCE AT PAR31

IOP17 = 0   /0=ORDINARY KRIGING, 5=SIMPLE
PAR30 = 0.   /MEAN GRADE OF THE AREA TO BE SIMPLE KRIGED

CMD = SEARCH 15. 15. 2.5 0. 0. 0.
CMD = NUG 0.478
CMD = EXP 0.522 41.5 13.9 25.9 0. 0. 0.

ITM1 = AUKR4 AUAJ1 CALC KRIGE
ITM2 = AUNN4 AUAJ1 CALC POLYG
ITM3 = MINZN BLOCK LIMIT
ITM4 = TRNCH BLOCK LIMIT
ITM5 = LNGTH RANGE 2.5 5.
ITM6 = DCODE RANGE 301. 716.
ITM7 = DIST4 BLOCK CALC RINGS
ITM8 = NCMP4 BLOCK CALC #COMP
ITM9 = NHOL4 BLOCK CALC #COMP
ITM10 = MINZN RANGE 3. 3.
ITM11 = LNGTH FACTR
CMD = BLOCK LIMIT MINZN 3
CMD = BLOCK LIMIT TRNCH 1 1
CMD = ELEV ZMID

I-O = 0 / DEBUG LEVEL
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=RKCK10.DAT  9=RKCK09.DAT  15=RKCK15.DAT;
MEDS-624V1   3=RPT624.D08  30=
** KRIGING OF 3-D BLOCK VALUES FOR AUKR4 **

RUN = OMIT

USR = MJL  /  MON DEC 6, 2004 9:30:34 AM US MOUNTAIN STANDARD TIME

IOP3 = 1. / 1=3-D SPHERICAL SEARCH; 0=2-D SEARCH
IOP4 = 0 / 0=NO GEOLOGIC MATCHING; 1=MATCH ONE ITEM
IOP6 = 0 / 0=USE TRUE DIST.; 1=USE ANISOTROPIC DIST.
IOP7 = 3 / MIN # OF COMPS FOR INTERP
IOP11= 00 / ROW # FOR EXTENDED OUTPUT
IOP12= 0 / 0=ALL; 1=OCTANT; 2=QUADRANT SEARCH; 3=SPLIT OCTANT;
COM          4=SPLIT QUADRANT.
COM          NOTE: NEGATIVE#=USE ROTATED SEARCH.  BY DEFAULT,
COM          OCTANTS & QUADRANTS ARE DEFINED USING THE PROJECT'S AXES.
IOP16= 6 / MAX.# OF COMPOSITES FOR INTERPOLATING A BLOCK
IOP19= 2 / MAX.# OF COMPOSITES PER HOLE (DEFAULT=NO LIMIT)
IOP20= 0 / 0=STORE VARIANCE; 1=STD DEV; 2=REL. VARIANCE

PAR1 = 50. / PRIMARY X-SEARCH DISTANCE
PAR2 = 50. / PRIMARY Y-SEARCH DISTANCE
PAR3 = 50. / PRIMARY Z-SEARCH DISTANCE
PAR4 = 50. / LIMITING SEARCH DISTANCE
PAR7 = 50. / MAX DISTANCE TO CLOSEST POINT
PAR8 = 50. / MAX DISTANCE TO PROJECT SINGLE COMPOSITE
PAR27= 2 4 1 / BLOCK DISCRETIZATION IN X,Y,Z
PAR31= 7.0  / OUTLIER CUTOFF TO CHANGE THE SEARCH
PAR32= 15.0 / MAX. 3D SEARCH DISTANCE AT PAR31

IOP17 = 0   /0=ORDINARY KRIGING, 5=SIMPLE
PAR30 = 0.   /MEAN GRADE OF THE AREA TO BE SIMPLE KRIGED

CMD = SEARCH 50. 50. 10. 30. 0. 75.
CMD = NUG 0.478
CMD = EXP 0.522 41.5 13.9 25.9 30. 0. 75.

ITM1 = AUKR4 AUAJ1 CALC KRIGE
ITM2 = AUNN4 AUAJ1 CALC POLYG
ITM3 = MINZN BLOCK LIMIT
ITM4 = TRNCH BLOCK LIMIT
ITM5 = LNGTH RANGE 2.5 5.
ITM6 = DCODE RANGE 301. 516.
ITM7 = DIST4 BLOCK CALC RINGS
ITM8 = NCMP4 BLOCK CALC #COMP
ITM9 = NHOL4 BLOCK CALC #COMP
ITM10 = MINZN RANGE 3. 3.
ITM11 = LNGTH FACTR
CMD = BLOCK LIMIT MINZN 3
CMD = BLOCK LIMIT TRNCH 1 2
CMD = ELEV ZMID

I-O = 0 / DEBUG LEVEL
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=RKCK10.DAT  9=RKCK09.DAT  15=RKCK15.DAT;
MEDS-624V1   3=RPT624.D07  30=
** KRIGING OF 3-D BLOCK VALUES FOR AUKR4 **

RUN = OMIT

USR = MJL  /  MON DEC 6, 2004 9:30:28 AM US MOUNTAIN STANDARD TIME

IOP3 = 1. / 1=3-D SPHERICAL SEARCH; 0=2-D SEARCH
IOP4 = 0 / 0=NO GEOLOGIC MATCHING; 1=MATCH ONE ITEM
IOP6 = 0 / 0=USE TRUE DIST.; 1=USE ANISOTROPIC DIST.
IOP7 = 2 / MIN # OF COMPS FOR INTERP
IOP11= 00 / ROW # FOR EXTENDED OUTPUT
IOP12= 0 / 0=ALL; 1=OCTANT; 2=QUADRANT SEARCH; 3=SPLIT OCTANT;
COM          4=SPLIT QUADRANT.
COM          NOTE: NEGATIVE#=USE ROTATED SEARCH.  BY DEFAULT,
COM          OCTANTS & QUADRANTS ARE DEFINED USING THE PROJECT'S AXES.
IOP16= 12 / MAX.# OF COMPOSITES FOR INTERPOLATING A BLOCK
IOP19= 2 / MAX.# OF COMPOSITES PER HOLE (DEFAULT=NO LIMIT)
IOP20= 0 / 0=STORE VARIANCE; 1=STD DEV; 2=REL. VARIANCE

PAR1 = 50. / PRIMARY X-SEARCH DISTANCE
PAR2 = 50. / PRIMARY Y-SEARCH DISTANCE
PAR3 = 50. / PRIMARY Z-SEARCH DISTANCE
PAR4 = 50. / LIMITING SEARCH DISTANCE
PAR7 = 50. / MAX DISTANCE TO CLOSEST POINT
PAR8 = 50. / MAX DISTANCE TO PROJECT SINGLE COMPOSITE
PAR27= 2 4 1 / BLOCK DISCRETIZATION IN X,Y,Z
PAR31= 7.0  / OUTLIER CUTOFF TO CHANGE THE SEARCH
PAR32= 15.0 / MAX. 3D SEARCH DISTANCE AT PAR31

IOP17 = 0   /0=ORDINARY KRIGING, 5=SIMPLE
PAR30 = 0.   /MEAN GRADE OF THE AREA TO BE SIMPLE KRIGED

CMD = SEARCH 50. 50. 10. 30. 0. 75.
CMD = NUG 0.478
CMD = EXP 0.522 41.5 13.9 25.9 30. 0. 75.

ITM1 = AUKR4 AUAJ1 CALC KRIGE
ITM2 = AUNN4 AUAJ1 CALC POLYG
ITM3 = MINZN BLOCK LIMIT
ITM4 = TRNCH BLOCK LIMIT
ITM5 = LNGTH RANGE 2.5 5.
ITM6 = DCODE RANGE 301. 516.
ITM7 = DIST4 BLOCK CALC RINGS
ITM8 = NCMP4 BLOCK CALC #COMP
ITM9 = NHOL4 BLOCK CALC #COMP
ITM10 = MINZN RANGE 3. 3.
ITM11 = LNGTH FACTR
CMD = BLOCK LIMIT MINZN 3
CMD = BLOCK LIMIT TRNCH 1 2
CMD = ELEV ZMID

I-O = 0 / DEBUG LEVEL
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=RKCK10.DAT  9=RKCK09.DAT  15=RKCK15.DAT;
MEDS-624V1   3=RPT624.D06  30=
** KRIGING OF 3-D BLOCK VALUES FOR AUKR4 **

RUN = OMIT

USR = MJL  /  MON DEC 6, 2004 9:31:03 AM US MOUNTAIN STANDARD TIME

IOP3 = 1. / 1=3-D SPHERICAL SEARCH; 0=2-D SEARCH
IOP4 = 0 / 0=NO GEOLOGIC MATCHING; 1=MATCH ONE ITEM
IOP6 = 0 / 0=USE TRUE DIST.; 1=USE ANISOTROPIC DIST.
IOP7 = 2 / MIN # OF COMPS FOR INTERP
IOP11= 00 / ROW # FOR EXTENDED OUTPUT
IOP12= 0 / 0=ALL; 1=OCTANT; 2=QUADRANT SEARCH; 3=SPLIT OCTANT;
COM         4=SPLIT QUADRANT.
COM         NOTE: NEGATIVE#=USE ROTATED SEARCH.  BY DEFAULT,
COM         OCTANTS & QUADRANTS ARE DEFINED USING THE PROJECT'S AXES.
IOP16= 8 / MAX.# OF COMPOSITES FOR INTERPOLATING A BLOCK
IOP19= 2 / MAX.# OF COMPOSITES PER HOLE (DEFAULT=NO LIMIT)
IOP20= 0 / 0=STORE VARIANCE; 1=STD DEV; 2=REL. VARIANCE

PAR1 = 15. / PRIMARY X-SEARCH DISTANCE
PAR2 = 15. / PRIMARY Y-SEARCH DISTANCE
PAR3 = 2.5 / PRIMARY Z-SEARCH DISTANCE
PAR4 = 15. / LIMITING SEARCH DISTANCE
PAR7 = 15. / MAX DISTANCE TO CLOSEST POINT
PAR8 = 15. / MAX DISTANCE TO PROJECT SINGLE COMPOSITE
PAR27= 2 4 1 / BLOCK DISCRETIZATION IN X,Y,Z
PAR31= 6.0  / OUTLIER CUTOFF TO CHANGE THE SEARCH
PAR32= 12.5 / MAX. 3D SEARCH DISTANCE AT PAR31

IOP17 = 0   /0=ORDINARY KRIGING, 5=SIMPLE
PAR30 = 0.   /MEAN GRADE OF THE AREA TO BE SIMPLE KRIGED

CMD = SEARCH 15. 15. 2.5 0. 0. 0.
CMD = NUG 0.631
CMD = EXP 0.369 22.2 18.1 8.8 0. 0. 0.

ITM1 = AUKR4 AUAJ1 CALC KRIGE
ITM2 = AUNN4 AUAJ1 CALC POLYG
ITM3 = MINZN BLOCK LIMIT
ITM4 = TRNCH BLOCK LIMIT
ITM5 = LNGTH RANGE 2.5 5.
ITM6 = DCODE RANGE 301. 716.
ITM7 = DIST4 BLOCK CALC RINGS
ITM8 = NCMP4 BLOCK CALC #COMP
ITM9 = NHOL4 BLOCK CALC #COMP
ITM10 = MINZN RANGE 2. 2.
ITM11 = LNGTH FACTR
CMD = BLOCK LIMIT MINZN 2
CMD = BLOCK LIMIT TRNCH 1 1
CMD = ELEV ZMID

I-O = 0 / DEBUG LEVEL
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=RKCK10.DAT  9=RKCK09.DAT  15=RKCK15.DAT;
MEDS-624V1   3=RPT624.D05  30=
** KRIGING OF 3-D BLOCK VALUES FOR AUKR4 **

RUN = OMIT

USR = MJL  /  MON DEC 6, 2004 9:30:21 AM US MOUNTAIN STANDARD TIME

IOP3 = 1. / 1=3-D SPHERICAL SEARCH; 0=2-D SEARCH
IOP4 = 0 / 0=NO GEOLOGIC MATCHING; 1=MATCH ONE ITEM
IOP6 = 0 / 0=USE TRUE DIST.; 1=USE ANISOTROPIC DIST.
IOP7 = 3 / MIN # OF COMPS FOR INTERP
IOP11= 00 / ROW # FOR EXTENDED OUTPUT
IOP12= 0 / 0=ALL; 1=OCTANT; 2=QUADRANT SEARCH; 3=SPLIT OCTANT;
COM          4=SPLIT QUADRANT.
COM          NOTE: NEGATIVE#=USE ROTATED SEARCH.  BY DEFAULT,
COM          OCTANTS & QUADRANTS ARE DEFINED USING THE PROJECT'S AXES.
IOP16= 8 / MAX.# OF COMPOSITES FOR INTERPOLATING A BLOCK
IOP19= 2 / MAX.# OF COMPOSITES PER HOLE (DEFAULT=NO LIMIT)
IOP20= 0 / 0=STORE VARIANCE; 1=STD DEV; 2=REL. VARIANCE

PAR1 = 50. / PRIMARY X-SEARCH DISTANCE
PAR2 = 50. / PRIMARY Y-SEARCH DISTANCE
PAR3 = 50. / PRIMARY Z-SEARCH DISTANCE
PAR4 = 50. / LIMITING SEARCH DISTANCE
PAR7 = 50. / MAX DISTANCE TO CLOSEST POINT
PAR8 = 50. / MAX DISTANCE TO PROJECT SINGLE COMPOSITE
PAR27= 2 4 1 / BLOCK DISCRETIZATION IN X,Y,Z
PAR31= 6.0  / OUTLIER CUTOFF TO CHANGE THE SEARCH
PAR32= 12.5/ MAX. 3D SEARCH DISTANCE AT PAR31

IOP17 = 0   /0=ORDINARY KRIGING, 5=SIMPLE
PAR30 = 0.   /MEAN GRADE OF THE AREA TO BE SIMPLE KRIGED

CMD = SEARCH 50. 50. 10. 0. 0. 75.
CMD = NUG 0.631
CMD = EXP 0.396 22.2 18.1 8.8 0. 0. 75.

ITM1 = AUKR4 AUAJ1 CALC KRIGE
ITM2 = AUNN4 AUAJ1 CALC POLYG
ITM3 = MINZN BLOCK LIMIT
ITM4 = TRNCH BLOCK LIMIT
ITM5 = LNGTH RANGE 2.5 5.
ITM6 = DCODE RANGE 301. 516.
ITM7 = DIST4 BLOCK CALC RINGS
ITM8 = NCMP4 BLOCK CALC #COMP
ITM9 = NHOL4 BLOCK CALC #COMP
ITM10 = MINZN RANGE 2. 2.
ITM11 = LNGTH FACTR
CMD = BLOCK LIMIT MINZN 2
CMD = BLOCK LIMIT TRNCH 1 2
CMD = ELEV ZMID

I-O = 0 / DEBUG LEVEL
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=RKCK10.DAT  9=RKCK09.DAT  15=RKCK15.DAT;
MEDS-624V1   3=RPT624.D04  30=
** KRIGING OF 3-D BLOCK VALUES FOR AUKR4 **

RUN = OMIT

USR = MJL  /  MON DEC 6, 2004 9:30:13 AM US MOUNTAIN STANDARD TIME

IOP3 = 1. / 1=3-D SPHERICAL SEARCH; 0=2-D SEARCH
IOP4 = 0 / 0=NO GEOLOGIC MATCHING; 1=MATCH ONE ITEM
IOP6 = 0 / 0=USE TRUE DIST.; 1=USE ANISOTROPIC DIST.
IOP7 = 2 / MIN # OF COMPS FOR INTERP
IOP11= 00 / ROW # FOR EXTENDED OUTPUT
IOP12= 0 / 0=ALL; 1=OCTANT; 2=QUADRANT SEARCH; 3=SPLIT OCTANT;
COM         4=SPLIT QUADRANT.
COM         NOTE: NEGATIVE#=USE ROTATED SEARCH.  BY DEFAULT,
COM         OCTANTS & QUADRANTS ARE DEFINED USING THE PROJECT'S AXES.
IOP16= 12 / MAX.# OF COMPOSITES FOR INTERPOLATING A BLOCK
IOP19= 2 / MAX.# OF COMPOSITES PER HOLE (DEFAULT=NO LIMIT)
IOP20= 0 / 0=STORE VARIANCE; 1=STD DEV; 2=REL. VARIANCE

PAR1 = 50. / PRIMARY X-SEARCH DISTANCE
PAR2 = 50. / PRIMARY Y-SEARCH DISTANCE
PAR3 = 50. / PRIMARY Z-SEARCH DISTANCE
PAR4 = 50. / LIMITING SEARCH DISTANCE
PAR7 = 50. / MAX DISTANCE TO CLOSEST POINT
PAR8 = 50. / MAX DISTANCE TO PROJECT SINGLE COMPOSITE
PAR27= 2 4 1 / BLOCK DISCRETIZATION IN X,Y,Z
PAR31= 6.0  / OUTLIER CUTOFF TO CHANGE THE SEARCH
PAR32= 12.5 / MAX. 3D SEARCH DISTANCE AT PAR31

IOP17 = 0   /0=ORDINARY KRIGING, 5=SIMPLE
PAR30 = 0.   /MEAN GRADE OF THE AREA TO BE SIMPLE KRIGED

CMD = SEARCH 50. 50. 10. 0. 0. 75.
CMD = NUG 0.631
CMD = EXP 0.396 22.2 18.1 8.8 0. 0. 75.

ITM1 = AUKR4 AUAJ1 CALC KRIGE
ITM2 = AUNN4 AUAJ1 CALC POLYG
ITM3 = MINZN BLOCK LIMIT
ITM4 = TRNCH BLOCK LIMIT
ITM5 = LNGTH RANGE 2.5 5.
ITM6 = DCODE RANGE 301. 516.
ITM7 = DIST4 BLOCK CALC RINGS
ITM8 = NCMP4 BLOCK CALC #COMP
ITM9 = NHOL4 BLOCK CALC #COMP
ITM10 = MINZN RANGE 2. 2.
ITM11 = LNGTH FACTR
CMD = BLOCK LIMIT MINZN 2
CMD = BLOCK LIMIT TRNCH 1 2
CMD = ELEV ZMID

I-O = 0 / DEBUG LEVEL
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=RKCK10.DAT  9=RKCK09.DAT  15=RKCK15.DAT;
MEDS-624V1   3=RPT624.D03  30=
** KRIGING OF 3-D BLOCK VALUES FOR AUKR4 **

RUN = OMIT

USR = MJL  /  MON DEC 6, 2004 9:30:56 AM US MOUNTAIN STANDARD TIME

IOP3 = 1. / 1=3-D SPHERICAL SEARCH; 0=2-D SEARCH
IOP4 = 0 / 0=NO GEOLOGIC MATCHING; 1=MATCH ONE ITEM
IOP6 = 0 / 0=USE TRUE DIST.; 1=USE ANISOTROPIC DIST.
IOP7 = 2 / MIN # OF COMPS FOR INTERP
IOP11= 00 / ROW # FOR EXTENDED OUTPUT
IOP12= 0 / 0=ALL; 1=OCTANT; 2=QUADRANT SEARCH; 3=SPLIT OCTANT;
COM         4=SPLIT QUADRANT.
COM         NOTE: NEGATIVE#=USE ROTATED SEARCH.  BY DEFAULT,
COM         OCTANTS & QUADRANTS ARE DEFINED USING THE PROJECT'S AXES.
IOP16= 8 / MAX.# OF COMPOSITES FOR INTERPOLATING A BLOCK
IOP19= 2 / MAX.# OF COMPOSITES PER HOLE (DEFAULT=NO LIMIT)
IOP20= 0 / 0=STORE VARIANCE; 1=STD DEV; 2=REL. VARIANCE

PAR1 = 15. / PRIMARY X-SEARCH DISTANCE
PAR2 = 15. / PRIMARY Y-SEARCH DISTANCE
PAR3 = 2.5 / PRIMARY Z-SEARCH DISTANCE
PAR4 = 15. / LIMITING SEARCH DISTANCE
PAR7 = 15. / MAX DISTANCE TO CLOSEST POINT
PAR8 = 15. / MAX DISTANCE TO PROJECT SINGLE COMPOSITE
PAR27= 2 4 1 / BLOCK DISCRETIZATION IN X,Y,Z
PAR31= 7    / OUTLIER CUTOFF TO CHANGE THE SEARCH
PAR32= 12.5 / MAX. 3D SEARCH DISTANCE AT PAR31

IOP17 = 0   /0=ORDINARY KRIGING, 5=SIMPLE
PAR30 = 0.   /MEAN GRADE OF THE AREA TO BE SIMPLE KRIGED

CMD = SEARCH 15. 15. 2.5 0. 0. 0.
CMD = NUG 0.671
CMD = EXP 0.329 12.6 9.5 4.6 0. 0. 0.

ITM1 = AUKR4 AUAJ1 CALC KRIGE
ITM2 = AUNN4 AUAJ1 CALC POLYG
ITM3 = MINZN BLOCK LIMIT
ITM4 = TRNCH BLOCK LIMIT
ITM5 = LNGTH RANGE 2.5 5.
ITM6 = DCODE RANGE 301. 716.
ITM7 = DIST4 BLOCK CALC RINGS
ITM8 = NCMP4 BLOCK CALC #COMP
ITM9 = NHOL4 BLOCK CALC #COMP
ITM10 = MINZN RANGE 1. 1.
ITM11 = LNGTH FACTR
CMD = BLOCK LIMIT MINZN 1
CMD = BLOCK LIMIT TRNCH 1 1
CMD = ELEV ZMID

I-O = 0 / DEBUG LEVEL
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=RKCK10.DAT  9=RKCK09.DAT  15=RKCK15.DAT;
MEDS-624V1   3=RPT624.D02  30=
** KRIGING OF 3-D BLOCK VALUES FOR AUKR4 **

RUN = OMIT

USR = MJL  /  MON DEC 6, 2004 9:30:06 AM US MOUNTAIN STANDARD TIME

IOP3 = 1. / 1=3-D SPHERICAL SEARCH; 0=2-D SEARCH
IOP4 = 0 / 0=NO GEOLOGIC MATCHING; 1=MATCH ONE ITEM
IOP6 = 0 / 0=USE TRUE DIST.; 1=USE ANISOTROPIC DIST.
IOP7 = 3 / MIN # OF COMPS FOR INTERP
IOP11= 00 / ROW # FOR EXTENDED OUTPUT
IOP12= 0 / 0=ALL; 1=OCTANT; 2=QUADRANT SEARCH; 3=SPLIT OCTANT;
COM          4=SPLIT QUADRANT.
COM          NOTE: NEGATIVE#=USE ROTATED SEARCH.  BY DEFAULT,
COM          OCTANTS & QUADRANTS ARE DEFINED USING THE PROJECT'S AXES.
IOP16= 6 / MAX.# OF COMPOSITES FOR INTERPOLATING A BLOCK
IOP19= 2 / MAX.# OF COMPOSITES PER HOLE (DEFAULT=NO LIMIT)
IOP20= 0 / 0=STORE VARIANCE; 1=STD DEV; 2=REL. VARIANCE

PAR1 = 50. / PRIMARY X-SEARCH DISTANCE
PAR2 = 50. / PRIMARY Y-SEARCH DISTANCE
PAR3 = 50. / PRIMARY Z-SEARCH DISTANCE
PAR4 = 50. / LIMITING SEARCH DISTANCE
PAR7 = 50. / MAX DISTANCE TO CLOSEST POINT
PAR8 = 50. / MAX DISTANCE TO PROJECT SINGLE COMPOSITE
PAR27= 2 4 1 / BLOCK DISCRETIZATION IN X,Y,Z
PAR31= 7    / OUTLIER CUTOFF TO CHANGE THE SEARCH
PAR32= 12.5 / MAX. 3D SEARCH DISTANCE AT PAR31

IOP17 = 0   /0=ORDINARY KRIGING, 5=SIMPLE
PAR30 = 0.   /MEAN GRADE OF THE AREA TO BE SIMPLE KRIGED

CMD = SEARCH 50. 50. 10. 0. 0. 75.
CMD = NUG 0.671
CMD = EXP 0.329 12.6 9.5 4.6 0. 0. 75.

ITM1 = AUKR4 AUAJ1 CALC KRIGE
ITM2 = AUNN4 AUAJ1 CALC POLYG
ITM3 = MINZN BLOCK LIMIT
ITM4 = TRNCH BLOCK LIMIT
ITM5 = LNGTH RANGE 2.5 5.
ITM6 = DCODE RANGE 301. 516.
ITM7 = DIST4 BLOCK CALC RINGS
ITM8 = NCMP4 BLOCK CALC #COMP
ITM9 = NHOL4 BLOCK CALC #COMP
ITM10 = MINZN RANGE 1. 1.
ITM11 = LNGTH FACTR
CMD = BLOCK LIMIT MINZN 1
CMD = BLOCK LIMIT TRNCH 1 2
CMD = ELEV ZMID

I-O = 0 / DEBUG LEVEL
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=RKCK10.DAT  9=RKCK09.DAT  15=RKCK15.DAT;
MEDS-624V1   3=RPT624.D01  30=
** KRIGING OF 3-D BLOCK VALUES FOR AUKR4 **

RUN = RESET

USR = MJL  /  MON DEC 6, 2004 9:30:00 AM US MOUNTAIN STANDARD TIME

IOP3 = 1. / 1=3-D SPHERICAL SEARCH; 0=2-D SEARCH
IOP4 = 0 / 0=NO GEOLOGIC MATCHING; 1=MATCH ONE ITEM
IOP6 = 0 / 0=USE TRUE DIST.; 1=USE ANISOTROPIC DIST.
IOP7 = 2 / MIN # OF COMPS FOR INTERP
IOP11= 00 / ROW # FOR EXTENDED OUTPUT
IOP12= 0 / 0=ALL; 1=OCTANT; 2=QUADRANT SEARCH; 3=SPLIT OCTANT;
COM         4=SPLIT QUADRANT.
COM         NOTE: NEGATIVE#=USE ROTATED SEARCH.  BY DEFAULT,
COM         OCTANTS & QUADRANTS ARE DEFINED USING THE PROJECT'S AXES.
IOP16= 6 / MAX.# OF COMPOSITES FOR INTERPOLATING A BLOCK
IOP19= 2 / MAX.# OF COMPOSITES PER HOLE (DEFAULT=NO LIMIT)
IOP20= 0 / 0=STORE VARIANCE; 1=STD DEV; 2=REL. VARIANCE

PAR1 = 50. / PRIMARY X-SEARCH DISTANCE
PAR2 = 50. / PRIMARY Y-SEARCH DISTANCE
PAR3 = 50. / PRIMARY Z-SEARCH DISTANCE
PAR4 = 50. / LIMITING SEARCH DISTANCE
PAR7 = 50. / MAX DISTANCE TO CLOSEST POINT
PAR8 = 50. / MAX DISTANCE TO PROJECT SINGLE COMPOSITE
PAR27= 2 4 1 / BLOCK DISCRETIZATION IN X,Y,Z
PAR31= 7     / OUTLIER CUTOFF TO CHANGE THE SEARCH
PAR32= 12.5  / MAX. 3D SEARCH DISTANCE AT PAR31

IOP17 = 0   /0=ORDINARY KRIGING, 5=SIMPLE
PAR30 = 0.   /MEAN GRADE OF THE AREA TO BE SIMPLE KRIGED

CMD = SEARCH 50. 50. 10. 0. 0. 75.
CMD = NUG 0.671
CMD = EXP 0.329 12.6 9.5 4.6 0. 0. 75.

ITM1 = AUKR4 AUAJ1 CALC KRIGE
ITM2 = AUNN4 AUAJ1 CALC POLYG
ITM3 = MINZN BLOCK LIMIT
ITM4 = TRNCH BLOCK LIMIT
ITM5 = LNGTH RANGE 2.5 5.
ITM6 = DCODE RANGE 301. 516.
ITM7 = DIST4 BLOCK CALC RINGS
ITM8 = NCMP4 BLOCK CALC #COMP
ITM9 = NHOL4 BLOCK CALC #COMP
ITM10 = MINZN RANGE 1. 1.
ITM11 = LNGTH FACTR
CMD = BLOCK LIMIT MINZN 1
CMD = BLOCK LIMIT TRNCH 1 2
CMD = ELEV ZMID

I-O = 0 / DEBUG LEVEL
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=RKCK10.DAT  9=RKCK09.DAT  15=RKCK15.DAT;
MEDS-624V1   3=RPT624.C09  30=
** KRIGING OF 3-D BLOCK VALUES FOR AUKR3 **

RUN = OMIT

USR = MJL  /  MON DEC 6, 2004 9:31:11 AM US MOUNTAIN STANDARD TIME

IOP3 = 1. / 1=3-D SPHERICAL SEARCH; 0=2-D SEARCH
IOP4 = 0 / 0=NO GEOLOGIC MATCHING; 1=MATCH ONE ITEM
IOP6 = 0 / 0=USE TRUE DIST.; 1=USE ANISOTROPIC DIST.
IOP7 = 2 / MIN # OF COMPS FOR INTERP
IOP11= 00 / ROW # FOR EXTENDED OUTPUT
IOP12= 0 / 0=ALL; 1=OCTANT; 2=QUADRANT SEARCH; 3=SPLIT OCTANT;
COM         4=SPLIT QUADRANT.
COM         NOTE: NEGATIVE#=USE ROTATED SEARCH.  BY DEFAULT,
COM         OCTANTS & QUADRANTS ARE DEFINED USING THE PROJECT'S AXES.
IOP16= 8 / MAX.# OF COMPOSITES FOR INTERPOLATING A BLOCK
IOP19= 2 / MAX.# OF COMPOSITES PER HOLE (DEFAULT=NO LIMIT)
IOP20= 0 / 0=STORE VARIANCE; 1=STD DEV; 2=REL. VARIANCE

PAR1 = 15. / PRIMARY X-SEARCH DISTANCE
PAR2 = 15. / PRIMARY Y-SEARCH DISTANCE
PAR3 = 2.5 / PRIMARY Z-SEARCH DISTANCE
PAR4 = 15. / LIMITING SEARCH DISTANCE
PAR7 = 15. / MAX DISTANCE TO CLOSEST POINT
PAR8 = 15. / MAX DISTANCE TO PROJECT SINGLE COMPOSITE
PAR27= 2 4 1 / BLOCK DISCRETIZATION IN X,Y,Z
PAR31= 100. / OUTLIER CUTOFF TO CHANGE THE SEARCH
PAR32= 50. / MAX. 3D SEARCH DISTANCE AT PAR31

IOP17 = 0   /0=ORDINARY KRIGING, 5=SIMPLE
PAR30 = 0.   /MEAN GRADE OF THE AREA TO BE SIMPLE KRIGED

CMD = SEARCH 15. 15. 2.5 0. 0. 0.
CMD = NUG 0.478
CMD = EXP 0.522 41.5 13.9 25.9 0. 0. 0.

ITM1 = AUKR3 AUAJ1 CALC KRIGE
ITM2 = AUNN3 AUAJ1 CALC POLYG
ITM3 = MINZN BLOCK LIMIT
ITM4 = TRNCH BLOCK LIMIT
ITM5 = LNGTH RANGE 2.5 5.
ITM6 = DCODE RANGE 301. 716.
ITM7 = DIST3 BLOCK CALC RINGS
ITM8 = NCMP3 BLOCK CALC #COMP
ITM9 = NHOL3 BLOCK CALC #COMP
ITM10 = MINZN RANGE 3. 3.
ITM11 = LNGTH FACTR
CMD = BLOCK LIMIT MINZN 3
CMD = BLOCK LIMIT TRNCH 1 1
CMD = ELEV ZMID

I-O = 0 / DEBUG LEVEL
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=RKCK10.DAT  9=RKCK09.DAT  15=RKCK15.DAT;
MEDS-624V1   3=RPT624.C08  30=
** KRIGING OF 3-D BLOCK VALUES FOR AUKR3 **

RUN = OMIT

USR = MJL  /  MON DEC 6, 2004 9:30:34 AM US MOUNTAIN STANDARD TIME

IOP3 = 1. / 1=3-D SPHERICAL SEARCH; 0=2-D SEARCH
IOP4 = 0 / 0=NO GEOLOGIC MATCHING; 1=MATCH ONE ITEM
IOP6 = 0 / 0=USE TRUE DIST.; 1=USE ANISOTROPIC DIST.
IOP7 = 3 / MIN # OF COMPS FOR INTERP
IOP11= 00 / ROW # FOR EXTENDED OUTPUT
IOP12= 0 / 0=ALL; 1=OCTANT; 2=QUADRANT SEARCH; 3=SPLIT OCTANT;
COM          4=SPLIT QUADRANT.
COM          NOTE: NEGATIVE#=USE ROTATED SEARCH.  BY DEFAULT,
COM          OCTANTS & QUADRANTS ARE DEFINED USING THE PROJECT'S AXES.
IOP16= 6 / MAX.# OF COMPOSITES FOR INTERPOLATING A BLOCK
IOP19= 2 / MAX.# OF COMPOSITES PER HOLE (DEFAULT=NO LIMIT)
IOP20= 0 / 0=STORE VARIANCE; 1=STD DEV; 2=REL. VARIANCE

PAR1 = 50. / PRIMARY X-SEARCH DISTANCE
PAR2 = 50. / PRIMARY Y-SEARCH DISTANCE
PAR3 = 50. / PRIMARY Z-SEARCH DISTANCE
PAR4 = 50. / LIMITING SEARCH DISTANCE
PAR7 = 50. / MAX DISTANCE TO CLOSEST POINT
PAR8 = 50. / MAX DISTANCE TO PROJECT SINGLE COMPOSITE
PAR27= 2 4 1 / BLOCK DISCRETIZATION IN X,Y,Z
PAR31= 100. / OUTLIER CUTOFF TO CHANGE THE SEARCH
PAR32= 50. / MAX. 3D SEARCH DISTANCE AT PAR31

IOP17 = 0   /0=ORDINARY KRIGING, 5=SIMPLE
PAR30 = 0.   /MEAN GRADE OF THE AREA TO BE SIMPLE KRIGED

CMD = SEARCH 50. 50. 10. 30. 0. 75.
CMD = NUG 0.478
CMD = EXP 0.522 41.5 13.9 25.9 30. 0. 75.

ITM1 = AUKR3 AUAJ1 CALC KRIGE
ITM2 = AUNN3 AUAJ1 CALC POLYG
ITM3 = MINZN BLOCK LIMIT
ITM4 = TRNCH BLOCK LIMIT
ITM5 = LNGTH RANGE 2.5 5.
ITM6 = DCODE RANGE 301. 516.
ITM7 = DIST3 BLOCK CALC RINGS
ITM8 = NCMP3 BLOCK CALC #COMP
ITM9 = NHOL3 BLOCK CALC #COMP
ITM10 = MINZN RANGE 3. 3.
ITM11 = LNGTH FACTR
CMD = BLOCK LIMIT MINZN 3
CMD = BLOCK LIMIT TRNCH 1 2
CMD = ELEV ZMID

I-O = 0 / DEBUG LEVEL
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=RKCK10.DAT  9=RKCK09.DAT  15=RKCK15.DAT;
MEDS-624V1   3=RPT624.C07  30=
** KRIGING OF 3-D BLOCK VALUES FOR AUKR3 **

RUN = OMIT

USR = MJL  /  MON DEC 6, 2004 9:30:28 AM US MOUNTAIN STANDARD TIME

IOP3 = 1. / 1=3-D SPHERICAL SEARCH; 0=2-D SEARCH
IOP4 = 0 / 0=NO GEOLOGIC MATCHING; 1=MATCH ONE ITEM
IOP6 = 0 / 0=USE TRUE DIST.; 1=USE ANISOTROPIC DIST.
IOP7 = 2 / MIN # OF COMPS FOR INTERP
IOP11= 00 / ROW # FOR EXTENDED OUTPUT
IOP12= 0 / 0=ALL; 1=OCTANT; 2=QUADRANT SEARCH; 3=SPLIT OCTANT;
COM          4=SPLIT QUADRANT.
COM          NOTE: NEGATIVE#=USE ROTATED SEARCH.  BY DEFAULT,
COM          OCTANTS & QUADRANTS ARE DEFINED USING THE PROJECT'S AXES.
IOP16= 12 / MAX.# OF COMPOSITES FOR INTERPOLATING A BLOCK
IOP19= 2 / MAX.# OF COMPOSITES PER HOLE (DEFAULT=NO LIMIT)
IOP20= 0 / 0=STORE VARIANCE; 1=STD DEV; 2=REL. VARIANCE

PAR1 = 50. / PRIMARY X-SEARCH DISTANCE
PAR2 = 50. / PRIMARY Y-SEARCH DISTANCE
PAR3 = 50. / PRIMARY Z-SEARCH DISTANCE
PAR4 = 50. / LIMITING SEARCH DISTANCE
PAR7 = 50. / MAX DISTANCE TO CLOSEST POINT
PAR8 = 50. / MAX DISTANCE TO PROJECT SINGLE COMPOSITE
PAR27= 2 4 1 / BLOCK DISCRETIZATION IN X,Y,Z
PAR31= 100. / OUTLIER CUTOFF TO CHANGE THE SEARCH
PAR32= 50. / MAX. 3D SEARCH DISTANCE AT PAR31

IOP17 = 0   /0=ORDINARY KRIGING, 5=SIMPLE
PAR30 = 0.   /MEAN GRADE OF THE AREA TO BE SIMPLE KRIGED

CMD = SEARCH 50. 50. 10. 30. 0. 75.
CMD = NUG 0.478
CMD = EXP 0.522 41.5 13.9 25.9 30. 0. 75.

ITM1 = AUKR3 AUAJ1 CALC KRIGE
ITM2 = AUNN3 AUAJ1 CALC POLYG
ITM3 = MINZN BLOCK LIMIT
ITM4 = TRNCH BLOCK LIMIT
ITM5 = LNGTH RANGE 2.5 5.
ITM6 = DCODE RANGE 301. 516.
ITM7 = DIST3 BLOCK CALC RINGS
ITM8 = NCMP3 BLOCK CALC #COMP
ITM9 = NHOL3 BLOCK CALC #COMP
ITM10 = MINZN RANGE 3. 3.
ITM11 = LNGTH FACTR
CMD = BLOCK LIMIT MINZN 3
CMD = BLOCK LIMIT TRNCH 1 2
CMD = ELEV ZMID

I-O = 0 / DEBUG LEVEL
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=RKCK10.DAT  9=RKCK09.DAT  15=RKCK15.DAT;
MEDS-624V1   3=RPT624.C06  30=
** KRIGING OF 3-D BLOCK VALUES FOR AUKR3 **

RUN = OMIT

USR = MJL  /  MON DEC 6, 2004 9:31:03 AM US MOUNTAIN STANDARD TIME

IOP3 = 1. / 1=3-D SPHERICAL SEARCH; 0=2-D SEARCH
IOP4 = 0 / 0=NO GEOLOGIC MATCHING; 1=MATCH ONE ITEM
IOP6 = 0 / 0=USE TRUE DIST.; 1=USE ANISOTROPIC DIST.
IOP7 = 2 / MIN # OF COMPS FOR INTERP
IOP11= 00 / ROW # FOR EXTENDED OUTPUT
IOP12= 0 / 0=ALL; 1=OCTANT; 2=QUADRANT SEARCH; 3=SPLIT OCTANT;
COM          4=SPLIT QUADRANT.
COM          NOTE: NEGATIVE#=USE ROTATED SEARCH.  BY DEFAULT,
COM          OCTANTS & QUADRANTS ARE DEFINED USING THE PROJECT'S AXES.
IOP16= 8 / MAX.# OF COMPOSITES FOR INTERPOLATING A BLOCK
IOP19= 2 / MAX.# OF COMPOSITES PER HOLE (DEFAULT=NO LIMIT)
IOP20= 0 / 0=STORE VARIANCE; 1=STD DEV; 2=REL. VARIANCE

PAR1 = 15. / PRIMARY X-SEARCH DISTANCE
PAR2 = 15. / PRIMARY Y-SEARCH DISTANCE
PAR3 = 2.5 / PRIMARY Z-SEARCH DISTANCE
PAR4 = 15. / LIMITING SEARCH DISTANCE
PAR7 = 15. / MAX DISTANCE TO CLOSEST POINT
PAR8 = 15. / MAX DISTANCE TO PROJECT SINGLE COMPOSITE
PAR27= 2 4 1 / BLOCK DISCRETIZATION IN X,Y,Z
PAR31= 100. / OUTLIER CUTOFF TO CHANGE THE SEARCH
PAR32= 50. / MAX. 3D SEARCH DISTANCE AT PAR31

IOP17 = 0   /0=ORDINARY KRIGING, 5=SIMPLE
PAR30 = 0.   /MEAN GRADE OF THE AREA TO BE SIMPLE KRIGED

CMD = SEARCH 15. 15. 2.5 0. 0. 0.
CMD = NUG 0.631
CMD = EXP 0.369 22.2 18.1 8.8 0. 0. 0.

ITM1 = AUKR3 AUAJ1 CALC KRIGE
ITM2 = AUNN3 AUAJ1 CALC POLYG
ITM3 = MINZN BLOCK LIMIT
ITM4 = TRNCH BLOCK LIMIT
ITM5 = LNGTH RANGE 2.5 5.
ITM6 = DCODE RANGE 301. 716.
ITM7 = DIST3 BLOCK CALC RINGS
ITM8 = NCMP3 BLOCK CALC #COMP
ITM9 = NHOL3 BLOCK CALC #COMP
ITM10 = MINZN RANGE 2. 2.
ITM11 = LNGTH FACTR
CMD = BLOCK LIMIT MINZN 2
CMD = BLOCK LIMIT TRNCH 1 1
CMD = ELEV ZMID

I-O = 0 / DEBUG LEVEL
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=RKCK10.DAT  9=RKCK09.DAT  15=RKCK15.DAT;
MEDS-624V1   3=RPT624.C05  30=
** KRIGING OF 3-D BLOCK VALUES FOR AUKR3 **

RUN = OMIT

USR = MJL  /  MON DEC 6, 2004 9:30:21 AM US MOUNTAIN STANDARD TIME

IOP3 = 1. / 1=3-D SPHERICAL SEARCH; 0=2-D SEARCH
IOP4 = 0 / 0=NO GEOLOGIC MATCHING; 1=MATCH ONE ITEM
IOP6 = 0 / 0=USE TRUE DIST.; 1=USE ANISOTROPIC DIST.
IOP7 = 3 / MIN # OF COMPS FOR INTERP
IOP11= 00 / ROW # FOR EXTENDED OUTPUT
IOP12= 0 / 0=ALL; 1=OCTANT; 2=QUADRANT SEARCH; 3=SPLIT OCTANT;
COM         4=SPLIT QUADRANT.
COM         NOTE: NEGATIVE#=USE ROTATED SEARCH.  BY DEFAULT,
COM         OCTANTS & QUADRANTS ARE DEFINED USING THE PROJECT'S AXES.
IOP16= 8 / MAX.# OF COMPOSITES FOR INTERPOLATING A BLOCK
IOP19= 2 / MAX.# OF COMPOSITES PER HOLE (DEFAULT=NO LIMIT)
IOP20= 0 / 0=STORE VARIANCE; 1=STD DEV; 2=REL. VARIANCE

PAR1 = 50. / PRIMARY X-SEARCH DISTANCE
PAR2 = 50. / PRIMARY Y-SEARCH DISTANCE
PAR3 = 50. / PRIMARY Z-SEARCH DISTANCE
PAR4 = 50. / LIMITING SEARCH DISTANCE
PAR7 = 50. / MAX DISTANCE TO CLOSEST POINT
PAR8 = 50. / MAX DISTANCE TO PROJECT SINGLE COMPOSITE
PAR27= 2 4 1 / BLOCK DISCRETIZATION IN X,Y,Z
PAR31= 100. / OUTLIER CUTOFF TO CHANGE THE SEARCH
PAR32= 50. / MAX. 3D SEARCH DISTANCE AT PAR31

IOP17 = 0   /0=ORDINARY KRIGING, 5=SIMPLE
PAR30 = 0.   /MEAN GRADE OF THE AREA TO BE SIMPLE KRIGED

CMD = SEARCH 50. 50. 10. 0. 0. 75.
CMD = NUG 0.631
CMD = EXP 0.396 22.2 18.1 8.8 0. 0. 75.

ITM1 = AUKR3 AUAJ1 CALC KRIGE
ITM2 = AUNN3 AUAJ1 CALC POLYG
ITM3 = MINZN BLOCK LIMIT
ITM4 = TRNCH BLOCK LIMIT
ITM5 = LNGTH RANGE 2.5 5.
ITM6 = DCODE RANGE 301. 516.
ITM7 = DIST3 BLOCK CALC RINGS
ITM8 = NCMP3 BLOCK CALC #COMP
ITM9 = NHOL3 BLOCK CALC #COMP
ITM10 = MINZN RANGE 2. 2.
ITM11 = LNGTH FACTR
CMD = BLOCK LIMIT MINZN 2
CMD = BLOCK LIMIT TRNCH 1 2
CMD = ELEV ZMID

I-O = 0 / DEBUG LEVEL
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=RKCK10.DAT  9=RKCK09.DAT  15=RKCK15.DAT;
MEDS-624V1   3=RPT624.C04  30=
** KRIGING OF 3-D BLOCK VALUES FOR AUKR3 **

RUN = OMIT

USR = MJL  /  MON DEC 6, 2004 9:30:13 AM US MOUNTAIN STANDARD TIME

IOP3 = 1. / 1=3-D SPHERICAL SEARCH; 0=2-D SEARCH
IOP4 = 0 / 0=NO GEOLOGIC MATCHING; 1=MATCH ONE ITEM
IOP6 = 0 / 0=USE TRUE DIST.; 1=USE ANISOTROPIC DIST.
IOP7 = 2 / MIN # OF COMPS FOR INTERP
IOP11= 00 / ROW # FOR EXTENDED OUTPUT
IOP12= 0 / 0=ALL; 1=OCTANT; 2=QUADRANT SEARCH; 3=SPLIT OCTANT;
COM          4=SPLIT QUADRANT.
COM          NOTE: NEGATIVE#=USE ROTATED SEARCH.  BY DEFAULT,
COM          OCTANTS & QUADRANTS ARE DEFINED USING THE PROJECT'S AXES.
IOP16= 12 / MAX.# OF COMPOSITES FOR INTERPOLATING A BLOCK
IOP19= 2 / MAX.# OF COMPOSITES PER HOLE (DEFAULT=NO LIMIT)
IOP20= 0 / 0=STORE VARIANCE; 1=STD DEV; 2=REL. VARIANCE

PAR1 = 50. / PRIMARY X-SEARCH DISTANCE
PAR2 = 50. / PRIMARY Y-SEARCH DISTANCE
PAR3 = 50. / PRIMARY Z-SEARCH DISTANCE
PAR4 = 50. / LIMITING SEARCH DISTANCE
PAR7 = 50. / MAX DISTANCE TO CLOSEST POINT
PAR8 = 50. / MAX DISTANCE TO PROJECT SINGLE COMPOSITE
PAR27= 2 4 1 / BLOCK DISCRETIZATION IN X,Y,Z
PAR31= 100. / OUTLIER CUTOFF TO CHANGE THE SEARCH
PAR32= 50. / MAX. 3D SEARCH DISTANCE AT PAR31

IOP17 = 0   /0=ORDINARY KRIGING, 5=SIMPLE
PAR30 = 0.   /MEAN GRADE OF THE AREA TO BE SIMPLE KRIGED

CMD = SEARCH 50. 50. 10. 0. 0. 75.
CMD = NUG 0.631
CMD = EXP 0.396 22.2 18.1 8.8 0. 0. 75.

ITM1 = AUKR3 AUAJ1 CALC KRIGE
ITM2 = AUNN3 AUAJ1 CALC POLYG
ITM3 = MINZN BLOCK LIMIT
ITM4 = TRNCH BLOCK LIMIT
ITM5 = LNGTH RANGE 2.5 5.
ITM6 = DCODE RANGE 301. 516.
ITM7 = DIST3 BLOCK CALC RINGS
ITM8 = NCMP3 BLOCK CALC #COMP
ITM9 = NHOL3 BLOCK CALC #COMP
ITM10 = MINZN RANGE 2. 2.
ITM11 = LNGTH FACTR
CMD = BLOCK LIMIT MINZN 2
CMD = BLOCK LIMIT TRNCH 1 2
CMD = ELEV ZMID

I-O = 0 / DEBUG LEVEL
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=RKCK10.DAT  9=RKCK09.DAT  15=RKCK15.DAT;
MEDS-624V1   3=RPT624.C03  30=
** KRIGING OF 3-D BLOCK VALUES FOR AUKR3 **

RUN = OMIT

USR = MJL  /  MON DEC 6, 2004 9:30:56 AM US MOUNTAIN STANDARD TIME

IOP3 = 1. / 1=3-D SPHERICAL SEARCH; 0=2-D SEARCH
IOP4 = 0 / 0=NO GEOLOGIC MATCHING; 1=MATCH ONE ITEM
IOP6 = 0 / 0=USE TRUE DIST.; 1=USE ANISOTROPIC DIST.
IOP7 = 2 / MIN # OF COMPS FOR INTERP
IOP11= 00 / ROW # FOR EXTENDED OUTPUT
IOP12= 0 / 0=ALL; 1=OCTANT; 2=QUADRANT SEARCH; 3=SPLIT OCTANT;
COM         4=SPLIT QUADRANT.
COM         NOTE: NEGATIVE#=USE ROTATED SEARCH.  BY DEFAULT,
COM         OCTANTS & QUADRANTS ARE DEFINED USING THE PROJECT'S AXES.
IOP16= 8 / MAX.# OF COMPOSITES FOR INTERPOLATING A BLOCK
IOP19= 2 / MAX.# OF COMPOSITES PER HOLE (DEFAULT=NO LIMIT)
IOP20= 0 / 0=STORE VARIANCE; 1=STD DEV; 2=REL. VARIANCE

PAR1 = 15. / PRIMARY X-SEARCH DISTANCE
PAR2 = 15. / PRIMARY Y-SEARCH DISTANCE
PAR3 = 2.5 / PRIMARY Z-SEARCH DISTANCE
PAR4 = 15. / LIMITING SEARCH DISTANCE
PAR7 = 15. / MAX DISTANCE TO CLOSEST POINT
PAR8 = 15. / MAX DISTANCE TO PROJECT SINGLE COMPOSITE
PAR27= 2 4 1 / BLOCK DISCRETIZATION IN X,Y,Z
PAR31= 100. / OUTLIER CUTOFF TO CHANGE THE SEARCH
PAR32= 50. / MAX. 3D SEARCH DISTANCE AT PAR31

IOP17 = 0   /0=ORDINARY KRIGING, 5=SIMPLE
PAR30 = 0.   /MEAN GRADE OF THE AREA TO BE SIMPLE KRIGED

CMD = SEARCH 15. 15. 2.5 0. 0. 0.
CMD = NUG 0.671
CMD = EXP 0.329 12.6 9.5 4.6 0. 0. 0.

ITM1 = AUKR3 AUAJ1 CALC KRIGE
ITM2 = AUNN3 AUAJ1 CALC POLYG
ITM3 = MINZN BLOCK LIMIT
ITM4 = TRNCH BLOCK LIMIT
ITM5 = LNGTH RANGE 2.5 5.
ITM6 = DCODE RANGE 301. 716.
ITM7 = DIST3 BLOCK CALC RINGS
ITM8 = NCMP3 BLOCK CALC #COMP
ITM9 = NHOL3 BLOCK CALC #COMP
ITM10 = MINZN RANGE 1. 1.
ITM11 = LNGTH FACTR
CMD = BLOCK LIMIT MINZN 1
CMD = BLOCK LIMIT TRNCH 1 1
CMD = ELEV ZMID

I-O = 0 / DEBUG LEVEL
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=RKCK10.DAT  9=RKCK09.DAT  15=RKCK15.DAT;
MEDS-624V1   3=RPT624.C02  30=
** KRIGING OF 3-D BLOCK VALUES FOR AUKR3 **

RUN = OMIT

USR = MJL  /  MON DEC 6, 2004 9:30:06 AM US MOUNTAIN STANDARD TIME

IOP3 = 1. / 1=3-D SPHERICAL SEARCH; 0=2-D SEARCH
IOP4 = 0 / 0=NO GEOLOGIC MATCHING; 1=MATCH ONE ITEM
IOP6 = 0 / 0=USE TRUE DIST.; 1=USE ANISOTROPIC DIST.
IOP7 = 3 / MIN # OF COMPS FOR INTERP
IOP11= 00 / ROW # FOR EXTENDED OUTPUT
IOP12= 0 / 0=ALL; 1=OCTANT; 2=QUADRANT SEARCH; 3=SPLIT OCTANT;
COM          4=SPLIT QUADRANT.
COM          NOTE: NEGATIVE#=USE ROTATED SEARCH.  BY DEFAULT,
COM          OCTANTS & QUADRANTS ARE DEFINED USING THE PROJECT'S AXES.
IOP16= 6 / MAX.# OF COMPOSITES FOR INTERPOLATING A BLOCK
IOP19= 2 / MAX.# OF COMPOSITES PER HOLE (DEFAULT=NO LIMIT)
IOP20= 0 / 0=STORE VARIANCE; 1=STD DEV; 2=REL. VARIANCE

PAR1 = 50. / PRIMARY X-SEARCH DISTANCE
PAR2 = 50. / PRIMARY Y-SEARCH DISTANCE
PAR3 = 50. / PRIMARY Z-SEARCH DISTANCE
PAR4 = 50. / LIMITING SEARCH DISTANCE
PAR7 = 50. / MAX DISTANCE TO CLOSEST POINT
PAR8 = 50. / MAX DISTANCE TO PROJECT SINGLE COMPOSITE
PAR27= 2 4 1 / BLOCK DISCRETIZATION IN X,Y,Z
PAR31= 100. / OUTLIER CUTOFF TO CHANGE THE SEARCH
PAR32= 50. / MAX. 3D SEARCH DISTANCE AT PAR31

IOP17 = 0   /0=ORDINARY KRIGING, 5=SIMPLE
PAR30 = 0.   /MEAN GRADE OF THE AREA TO BE SIMPLE KRIGED

CMD = SEARCH 50. 50. 10. 0. 0. 75.
CMD = NUG 0.671
CMD = EXP 0.329 12.6 9.5 4.6 0. 0. 75.

ITM1 = AUKR3 AUAJ1 CALC KRIGE
ITM2 = AUNN3 AUAJ1 CALC POLYG
ITM3 = MINZN BLOCK LIMIT
ITM4 = TRNCH BLOCK LIMIT
ITM5 = LNGTH RANGE 2.5 5.
ITM6 = DCODE RANGE 301. 516.
ITM7 = DIST3 BLOCK CALC RINGS
ITM8 = NCMP3 BLOCK CALC #COMP
ITM9 = NHOL3 BLOCK CALC #COMP
ITM10 = MINZN RANGE 1. 1.
ITM11 = LNGTH FACTR
CMD = BLOCK LIMIT MINZN 1
CMD = BLOCK LIMIT TRNCH 1 2
CMD = ELEV ZMID

I-O = 0 / DEBUG LEVEL
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=RKCK10.DAT  9=RKCK09.DAT  15=RKCK15.DAT;
MEDS-624V1   3=RPT624.C01  30=
** KRIGING OF 3-D BLOCK VALUES FOR AUKR3 **

RUN = RESET

USR = MJL  /  MON DEC 6, 2004 9:30:00 AM US MOUNTAIN STANDARD TIME

IOP3 = 1. / 1=3-D SPHERICAL SEARCH; 0=2-D SEARCH
IOP4 = 0 / 0=NO GEOLOGIC MATCHING; 1=MATCH ONE ITEM
IOP6 = 0 / 0=USE TRUE DIST.; 1=USE ANISOTROPIC DIST.
IOP7 = 2 / MIN # OF COMPS FOR INTERP
IOP11= 00 / ROW # FOR EXTENDED OUTPUT
IOP12= 0 / 0=ALL; 1=OCTANT; 2=QUADRANT SEARCH; 3=SPLIT OCTANT;
COM          4=SPLIT QUADRANT.
COM          NOTE: NEGATIVE#=USE ROTATED SEARCH.  BY DEFAULT,
COM          OCTANTS & QUADRANTS ARE DEFINED USING THE PROJECT'S AXES.
IOP16= 6 / MAX.# OF COMPOSITES FOR INTERPOLATING A BLOCK
IOP19= 2 / MAX.# OF COMPOSITES PER HOLE (DEFAULT=NO LIMIT)
IOP20= 0 / 0=STORE VARIANCE; 1=STD DEV; 2=REL. VARIANCE

PAR1 = 50. / PRIMARY X-SEARCH DISTANCE
PAR2 = 50. / PRIMARY Y-SEARCH DISTANCE
PAR3 = 50. / PRIMARY Z-SEARCH DISTANCE
PAR4 = 50. / LIMITING SEARCH DISTANCE
PAR7 = 50. / MAX DISTANCE TO CLOSEST POINT
PAR8 = 50. / MAX DISTANCE TO PROJECT SINGLE COMPOSITE
PAR27= 2 4 1 / BLOCK DISCRETIZATION IN X,Y,Z
PAR31= 100. / OUTLIER CUTOFF TO CHANGE THE SEARCH
PAR32= 50. / MAX. 3D SEARCH DISTANCE AT PAR31

IOP17 = 0   /0=ORDINARY KRIGING, 5=SIMPLE
PAR30 = 0.   /MEAN GRADE OF THE AREA TO BE SIMPLE KRIGED

CMD = SEARCH 50. 50. 10. 0. 0. 75.
CMD = NUG 0.671
CMD = EXP 0.329 12.6 9.5 4.6 0. 0. 75.

ITM1 = AUKR3 AUAJ1 CALC KRIGE
ITM2 = AUNN3 AUAJ1 CALC POLYG
ITM3 = MINZN BLOCK LIMIT
ITM4 = TRNCH BLOCK LIMIT
ITM5 = LNGTH RANGE 2.5 5.
ITM6 = DCODE RANGE 301. 516.
ITM7 = DIST3 BLOCK CALC RINGS
ITM8 = NCMP3 BLOCK CALC #COMP
ITM9 = NHOL3 BLOCK CALC #COMP
ITM10 = MINZN RANGE 1. 1.
ITM11 = LNGTH FACTR
CMD = BLOCK LIMIT MINZN 1
CMD = BLOCK LIMIT TRNCH 1 2
CMD = ELEV ZMID

I-O = 0 / DEBUG LEVEL
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=rkck10.dat  9=rkck09.dat  15=rkck15.dat;
MEDS-624V1   3=rpt624.b09  30=
** KRIGING of 3-D block values for aukr2 **

RUN = omit

USR = MJL  /  Mon Dec 6, 2004 9:31:11 AM US Mountain Standard Time

IOP3 = 1. / 1=3-D spherical search; 0=2-D search
IOP4 = 0 / 0=No geologic matching; 1=Match one item
IOP6 = 0 / 0=Use true dist.; 1=Use anisotropic dist.
IOP7 = 2 / Min # of comps for interp
IOP11= 00 / Row # for extended output
IOP12= 0 / 0=All; 1=Octant; 2=Quadrant search; 3=Split Octant;
COM         4=Split Quadrant.
COM         Note: Negative#=use rotated search.  By Default,
COM         octants & quadrants are defined using the project's axes.
IOP16= 8 / Max.# of composites for interpolating a block
IOP19= 2 / Max.# of composites per hole (DEFAULT=No limit)
IOP20= 0 / 0=Store variance; 1=STD DEV; 2=Rel. variance

PAR1 = 15. / Primary X-search distance
PAR2 = 15. / Primary Y-search distance
PAR3 = 2.5 / Primary Z-search distance
PAR4 = 15. / Limiting search distance
PAR7 = 15. / Max distance to closest point
PAR8 = 15. / Max distance to project single composite
PAR27= 2 4 1 / Block discretization in X,Y,Z
PAR31= 10   / Outlier cutoff to change the search
PAR32= 17.5 / Max. 3D search distance at PAR31

IOP17 = 0   /0=Ordinary kriging, 5=Simple
PAR30 = 0.   /Mean grade of the area to be simple kriged

CMD = SEARCH 15. 15. 2.5 0. 0. 0.
CMD = NUG 0.478
CMD = EXP 0.522 41.5 13.9 25.9 0. 0. 0.

ITM1 = aukr2 aurej CALC KRIGE
ITM2 = aunn2 aurej CALC POLYG
ITM3 = minzn Block limit
ITM4 = trnch Block limit
ITM5 = lngth RANGE 2.5 5.
ITM6 = dcode RANGE 301. 716.
ITM7 = dist2 Block calc rings
ITM8 = ncmp2 Block calc #comp
ITM9 = nhol2 Block calc #comp
ITM10 = minzn RANGE 3. 3.
ITM11 = lngth FACTR
CMD = Block limit minzn 3
CMD = Block limit trnch 1 1
CMD = ELEV ZMID

I-O = 0 / Debug level
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=rkck10.dat  9=rkck09.dat  15=rkck15.dat;
MEDS-624V1   3=rpt624.b08  30=
** KRIGING of 3-D block values for aukr2 **

RUN = omit

USR = MJL  /  Mon Dec 6, 2004 9:30:34 AM US Mountain Standard Time

IOP3 = 1. / 1=3-D spherical search; 0=2-D search
IOP4 = 0 / 0=No geologic matching; 1=Match one item
IOP6 = 0 / 0=Use true dist.; 1=Use anisotropic dist.
IOP7 = 3 / Min # of comps for interp
IOP11= 00 / Row # for extended output
IOP12= 0 / 0=All; 1=Octant; 2=Quadrant search; 3=Split Octant;
COM         4=Split Quadrant.
COM         Note: Negative#=use rotated search.  By Default,
COM         octants & quadrants are defined using the project's axes.
IOP16= 6 / Max.# of composites for interpolating a block
IOP19= 2 / Max.# of composites per hole (DEFAULT=No limit)
IOP20= 0 / 0=Store variance; 1=STD DEV; 2=Rel. variance

PAR1 = 50. / Primary X-search distance
PAR2 = 50. / Primary Y-search distance
PAR3 = 50. / Primary Z-search distance
PAR4 = 50. / Limiting search distance
PAR7 = 50. / Max distance to closest point
PAR8 = 50. / Max distance to project single composite
PAR27= 2 4 1 / Block discretization in X,Y,Z
PAR31= 10   / Outlier cutoff to change the search
PAR32= 17.5 / Max. 3D search distance at PAR31

IOP17 = 0   /0=Ordinary kriging, 5=Simple
PAR30 = 0.   /Mean grade of the area to be simple kriged

CMD = SEARCH 50. 50. 10. 30. 0. 75.
CMD = NUG 0.478
CMD = EXP 0.522 41.5 13.9 25.9 30. 0. 75.

ITM1 = aukr2 aurej CALC KRIGE
ITM2 = aunn2 aurej CALC POLYG
ITM3 = minzn Block limit
ITM4 = trnch Block limit
ITM5 = lngth RANGE 2.5 5.
ITM6 = dcode RANGE 301. 516.
ITM7 = dist2 Block calc rings
ITM8 = ncmp2 Block calc #comp
ITM9 = nhol2 Block calc #comp
ITM10 = minzn RANGE 3. 3.
ITM11 = lngth FACTR
CMD = Block limit minzn 3
CMD = Block limit trnch 1 2
CMD = ELEV ZMID

I-O = 0 / Debug level
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=rkck10.dat  9=rkck09.dat  15=rkck15.dat;
MEDS-624V1   3=rpt624.b07  30=
** KRIGING of 3-D block values for aukr2 **

RUN = omit

USR = MJL  /  Mon Dec 6, 2004 9:30:28 AM US Mountain Standard Time

IOP3 = 1. / 1=3-D spherical search; 0=2-D search
IOP4 = 0 / 0=No geologic matching; 1=Match one item
IOP6 = 0 / 0=Use true dist.; 1=Use anisotropic dist.
IOP7 = 2 / Min # of comps for interp
IOP11= 00 / Row # for extended output
IOP12= 0 / 0=All; 1=Octant; 2=Quadrant search; 3=Split Octant;
COM         4=Split Quadrant.
COM         Note: Negative#=use rotated search.  By Default,
COM         octants & quadrants are defined using the project's axes.
IOP16= 12 / Max.# of composites for interpolating a block
IOP19= 2 / Max.# of composites per hole (DEFAULT=No limit)
IOP20= 0 / 0=Store variance; 1=STD DEV; 2=Rel. variance

PAR1 = 50. / Primary X-search distance
PAR2 = 50. / Primary Y-search distance
PAR3 = 50. / Primary Z-search distance
PAR4 = 50. / Limiting search distance
PAR7 = 50. / Max distance to closest point
PAR8 = 50. / Max distance to project single composite
PAR27= 2 4 1 / Block discretization in X,Y,Z
PAR31= 10   / Outlier cutoff to change the search
PAR32= 17.5 / Max. 3D search distance at PAR31

IOP17 = 0   /0=Ordinary kriging, 5=Simple
PAR30 = 0.   /Mean grade of the area to be simple kriged

CMD = SEARCH 50. 50. 10. 30. 0. 75.
CMD = NUG 0.478
CMD = EXP 0.522 41.5 13.9 25.9 30. 0. 75.

ITM1 = aukr2 aurej CALC KRIGE
ITM2 = aunn2 aurej CALC POLYG
ITM3 = minzn Block limit
ITM4 = trnch Block limit
ITM5 = lngth RANGE 2.5 5.
ITM6 = dcode RANGE 301. 516.
ITM7 = dist2 Block calc rings
ITM8 = ncmp2 Block calc #comp
ITM9 = nhol2 Block calc #comp
ITM10 = minzn RANGE 3. 3.
ITM11 = lngth FACTR
CMD = Block limit minzn 3
CMD = Block limit trnch 1 2
CMD = ELEV ZMID

I-O = 0 / Debug level
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=rkck10.dat  9=rkck09.dat  15=rkck15.dat;
MEDS-624V1   3=rpt624.b06  30=
** KRIGING of 3-D block values for aukr2 **

RUN = omit

USR = MJL  /  Mon Dec 6, 2004 9:31:03 AM US Mountain Standard Time

IOP3 = 1. / 1=3-D spherical search; 0=2-D search
IOP4 = 0 / 0=No geologic matching; 1=Match one item
IOP6 = 0 / 0=Use true dist.; 1=Use anisotropic dist.
IOP7 = 2 / Min # of comps for interp
IOP11= 00 / Row # for extended output
IOP12= 0 / 0=All; 1=Octant; 2=Quadrant search; 3=Split Octant;
COM         4=Split Quadrant.
COM         Note: Negative#=use rotated search.  By Default,
COM         octants & quadrants are defined using the project's axes.
IOP16= 8 / Max.# of composites for interpolating a block
IOP19= 2 / Max.# of composites per hole (DEFAULT=No limit)
IOP20= 0 / 0=Store variance; 1=STD DEV; 2=Rel. variance

PAR1 = 15. / Primary X-search distance
PAR2 = 15. / Primary Y-search distance
PAR3 = 2.5 / Primary Z-search distance
PAR4 = 15. / Limiting search distance
PAR7 = 15. / Max distance to closest point
PAR8 = 15. / Max distance to project single composite
PAR27= 2 4 1 / Block discretization in X,Y,Z
PAR31= 6.0  / Outlier cutoff to change the search
PAR32= 12.5 / Max. 3D search distance at PAR31

IOP17 = 0   /0=Ordinary kriging, 5=Simple
PAR30 = 0.   /Mean grade of the area to be simple kriged

CMD = SEARCH 15. 15. 2.5 0. 0. 0.
CMD = NUG 0.631
CMD = EXP 0.369 22.2 18.1 8.8 0. 0. 0.

ITM1 = aukr2 aurej CALC KRIGE
ITM2 = aunn2 aurej CALC POLYG
ITM3 = minzn Block limit
ITM4 = trnch Block limit
ITM5 = lngth RANGE 2.5 5.
ITM6 = dcode RANGE 301. 716.
ITM7 = dist2 Block calc rings
ITM8 = ncmp2 Block calc #comp
ITM9 = nhol2 Block calc #comp
ITM10 = minzn RANGE 2. 2.
ITM11 = lngth FACTR
CMD = Block limit minzn 2
CMD = Block limit trnch 1 1
CMD = ELEV ZMID

I-O = 0 / Debug level
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=rkck10.dat  9=rkck09.dat  15=rkck15.dat;
MEDS-624V1   3=rpt624.b05  30=
** KRIGING of 3-D block values for aukr2 **

RUN = omit

USR = MJL  /  Mon Dec 6, 2004 9:30:21 AM US Mountain Standard Time

IOP3 = 1. / 1=3-D spherical search; 0=2-D search
IOP4 = 0 / 0=No geologic matching; 1=Match one item
IOP6 = 0 / 0=Use true dist.; 1=Use anisotropic dist.
IOP7 = 3 / Min # of comps for interp
IOP11= 00 / Row # for extended output
IOP12= 0 / 0=All; 1=Octant; 2=Quadrant search; 3=Split Octant;
COM         4=Split Quadrant.
COM         Note: Negative#=use rotated search.  By Default,
COM         octants & quadrants are defined using the project's axes.
IOP16= 8 / Max.# of composites for interpolating a block
IOP19= 2 / Max.# of composites per hole (DEFAULT=No limit)
IOP20= 0 / 0=Store variance; 1=STD DEV; 2=Rel. variance

PAR1 = 50. / Primary X-search distance
PAR2 = 50. / Primary Y-search distance
PAR3 = 50. / Primary Z-search distance
PAR4 = 50. / Limiting search distance
PAR7 = 50. / Max distance to closest point
PAR8 = 50. / Max distance to project single composite
PAR27= 2 4 1 / Block discretization in X,Y,Z
PAR31= 6.0  / Outlier cutoff to change the search
PAR32= 12.5/ Max. 3D search distance at PAR31

IOP17 = 0   /0=Ordinary kriging, 5=Simple
PAR30 = 0.   /Mean grade of the area to be simple kriged

CMD = SEARCH 50. 50. 10. 0. 0. 75.
CMD = NUG 0.631
CMD = EXP 0.396 22.2 18.1 8.8 0. 0. 75.

ITM1 = aukr2 aurej CALC KRIGE
ITM2 = aunn2 aurej CALC POLYG
ITM3 = minzn Block limit
ITM4 = trnch Block limit
ITM5 = lngth RANGE 2.5 5.
ITM6 = dcode RANGE 301. 516.
ITM7 = dist2 Block calc rings
ITM8 = ncmp2 Block calc #comp
ITM9 = nhol2 Block calc #comp
ITM10 = minzn RANGE 2. 2.
ITM11 = lngth FACTR
CMD = Block limit minzn 2
CMD = Block limit trnch 1 2
CMD = ELEV ZMID

I-O = 0 / Debug level
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=rkck10.dat  9=rkck09.dat  15=rkck15.dat;
MEDS-624V1   3=rpt624.b04  30=
** KRIGING of 3-D block values for aukr2 **

RUN = omit

USR = MJL  /  Mon Dec 6, 2004 9:30:13 AM US Mountain Standard Time

IOP3 = 1. / 1=3-D spherical search; 0=2-D search
IOP4 = 0 / 0=No geologic matching; 1=Match one item
IOP6 = 0 / 0=Use true dist.; 1=Use anisotropic dist.
IOP7 = 2 / Min # of comps for interp
IOP11= 00 / Row # for extended output
IOP12= 0 / 0=All; 1=Octant; 2=Quadrant search; 3=Split Octant;
COM         4=Split Quadrant.
COM         Note: Negative#=use rotated search.  By Default,
COM         octants & quadrants are defined using the project's axes.
IOP16= 12 / Max.# of composites for interpolating a block
IOP19= 2 / Max.# of composites per hole (DEFAULT=No limit)
IOP20= 0 / 0=Store variance; 1=STD DEV; 2=Rel. variance

PAR1 = 50. / Primary X-search distance
PAR2 = 50. / Primary Y-search distance
PAR3 = 50. / Primary Z-search distance
PAR4 = 50. / Limiting search distance
PAR7 = 50. / Max distance to closest point
PAR8 = 50. / Max distance to project single composite
PAR27= 2 4 1 / Block discretization in X,Y,Z
PAR31= 6.0  / Outlier cutoff to change the search
PAR32= 12.5 / Max. 3D search distance at PAR31

IOP17 = 0   /0=Ordinary kriging, 5=Simple
PAR30 = 0.   /Mean grade of the area to be simple kriged

CMD = SEARCH 50. 50. 10. 0. 0. 75.
CMD = NUG 0.631
CMD = EXP 0.396 22.2 18.1 8.8 0. 0. 75.

ITM1 = aukr2 aurej CALC KRIGE
ITM2 = aunn2 aurej CALC POLYG
ITM3 = minzn Block limit
ITM4 = trnch Block limit
ITM5 = lngth RANGE 2.5 5.
ITM6 = dcode RANGE 301. 516.
ITM7 = dist2 Block calc rings
ITM8 = ncmp2 Block calc #comp
ITM9 = nhol2 Block calc #comp
ITM10 = minzn RANGE 2. 2.
ITM11 = lngth FACTR
CMD = Block limit minzn 2
CMD = Block limit trnch 1 2
CMD = ELEV ZMID

I-O = 0 / Debug level
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=rkck10.dat  9=rkck09.dat  15=rkck15.dat;
MEDS-624V1   3=rpt624.b03  30=
** KRIGING of 3-D block values for aukr2 **

RUN = omit

USR = MJL  /  Mon Dec 6, 2004 9:30:56 AM US Mountain Standard Time

IOP3 = 1. / 1=3-D spherical search; 0=2-D search
IOP4 = 0 / 0=No geologic matching; 1=Match one item
IOP6 = 0 / 0=Use true dist.; 1=Use anisotropic dist.
IOP7 = 2 / Min # of comps for interp
IOP11= 00 / Row # for extended output
IOP12= 0 / 0=All; 1=Octant; 2=Quadrant search; 3=Split Octant;
COM         4=Split Quadrant.
COM         Note: Negative#=use rotated search.  By Default,
COM         octants & quadrants are defined using the project's axes.
IOP16= 8 / Max.# of composites for interpolating a block
IOP19= 2 / Max.# of composites per hole (DEFAULT=No limit)
IOP20= 0 / 0=Store variance; 1=STD DEV; 2=Rel. variance

PAR1 = 15. / Primary X-search distance
PAR2 = 15. / Primary Y-search distance
PAR3 = 2.5 / Primary Z-search distance
PAR4 = 15. / Limiting search distance
PAR7 = 15. / Max distance to closest point
PAR8 = 15. / Max distance to project single composite
PAR27= 2 4 1 / Block discretization in X,Y,Z
PAR31= 9    / Outlier cutoff to change the search
PAR32= 12.5 / Max. 3D search distance at PAR31

IOP17 = 0   /0=Ordinary kriging, 5=Simple
PAR30 = 0.   /Mean grade of the area to be simple kriged

CMD = SEARCH 15. 15. 2.5 0. 0. 0.
CMD = NUG 0.671
CMD = EXP 0.329 12.6 9.5 4.6 0. 0. 0.

ITM1 = aukr2 aurej CALC KRIGE
ITM2 = aunn2 aurej CALC POLYG
ITM3 = minzn Block limit
ITM4 = trnch Block limit
ITM5 = lngth RANGE 2.5 5.
ITM6 = dcode RANGE 301. 716.
ITM7 = dist2 Block calc rings
ITM8 = ncmp2 Block calc #comp
ITM9 = nhol2 Block calc #comp
ITM10 = minzn RANGE 1. 1.
ITM11 = lngth FACTR
CMD = Block limit minzn 1
CMD = Block limit trnch 1 1
CMD = ELEV ZMID

I-O = 0 / Debug level
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=rkck10.dat  9=rkck09.dat  15=rkck15.dat;
MEDS-624V1   3=rpt624.b02  30=
** KRIGING of 3-D block values for aukr2 **

RUN = omit

USR = MJL  /  Mon Dec 6, 2004 9:30:06 AM US Mountain Standard Time

IOP3 = 1. / 1=3-D spherical search; 0=2-D search
IOP4 = 0 / 0=No geologic matching; 1=Match one item
IOP6 = 0 / 0=Use true dist.; 1=Use anisotropic dist.
IOP7 = 3 / Min # of comps for interp
IOP11= 00 / Row # for extended output
IOP12= 0 / 0=All; 1=Octant; 2=Quadrant search; 3=Split Octant;
COM         4=Split Quadrant.
COM         Note: Negative#=use rotated search.  By Default,
COM         octants & quadrants are defined using the project's axes.
IOP16= 6 / Max.# of composites for interpolating a block
IOP19= 2 / Max.# of composites per hole (DEFAULT=No limit)
IOP20= 0 / 0=Store variance; 1=STD DEV; 2=Rel. variance

PAR1 = 50. / Primary X-search distance
PAR2 = 50. / Primary Y-search distance
PAR3 = 50. / Primary Z-search distance
PAR4 = 50. / Limiting search distance
PAR7 = 50. / Max distance to closest point
PAR8 = 50. / Max distance to project single composite
PAR27= 2 4 1 / Block discretization in X,Y,Z
PAR31= 9    / Outlier cutoff to change the search
PAR32= 12.5 / Max. 3D search distance at PAR31

IOP17 = 0   /0=Ordinary kriging, 5=Simple
PAR30 = 0.   /Mean grade of the area to be simple kriged

CMD = SEARCH 50. 50. 10. 0. 0. 75.
CMD = NUG 0.671
CMD = EXP 0.329 12.6 9.5 4.6 0. 0. 75.

ITM1 = aukr2 aurej CALC KRIGE
ITM2 = aunn2 aurej CALC POLYG
ITM3 = minzn Block limit
ITM4 = trnch Block limit
ITM5 = lngth RANGE 2.5 5.
ITM6 = dcode RANGE 301. 516.
ITM7 = dist2 Block calc rings
ITM8 = ncmp2 Block calc #comp
ITM9 = nhol2 Block calc #comp
ITM10 = minzn RANGE 1. 1.
ITM11 = lngth FACTR
CMD = Block limit minzn 1
CMD = Block limit trnch 1 2
CMD = ELEV ZMID

I-O = 0 / Debug level
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=rkck10.dat  9=rkck09.dat  15=rkck15.dat;
MEDS-624V1   3=rpt624.b01  30=
** KRIGING of 3-D block values for aukr2 **

RUN = reset

USR = MJL  /  Mon Dec 6, 2004 9:30:00 AM US Mountain Standard Time

IOP3 = 1. / 1=3-D spherical search; 0=2-D search
IOP4 = 0 / 0=No geologic matching; 1=Match one item
IOP6 = 0 / 0=Use true dist.; 1=Use anisotropic dist.
IOP7 = 2 / Min # of comps for interp
IOP11= 00 / Row # for extended output
IOP12= 0 / 0=All; 1=Octant; 2=Quadrant search; 3=Split Octant;
COM         4=Split Quadrant.
COM         Note: Negative#=use rotated search.  By Default,
COM         octants & quadrants are defined using the project's axes.
IOP16= 6 / Max.# of composites for interpolating a block
IOP19= 2 / Max.# of composites per hole (DEFAULT=No limit)
IOP20= 0 / 0=Store variance; 1=STD DEV; 2=Rel. variance

PAR1 = 50. / Primary X-search distance
PAR2 = 50. / Primary Y-search distance
PAR3 = 50. / Primary Z-search distance
PAR4 = 50. / Limiting search distance
PAR7 = 50. / Max distance to closest point
PAR8 = 50. / Max distance to project single composite
PAR27= 2 4 1 / Block discretization in X,Y,Z
PAR31= 9     / Outlier cutoff to change the search
PAR32= 12.5  / Max. 3D search distance at PAR31

IOP17 = 0   /0=Ordinary kriging, 5=Simple
PAR30 = 0.   /Mean grade of the area to be simple kriged

CMD = SEARCH 50. 50. 10. 0. 0. 75.
CMD = NUG 0.671
CMD = EXP 0.329 12.6 9.5 4.6 0. 0. 75.

ITM1 = aukr2 aurej CALC KRIGE
ITM2 = aunn2 aurej CALC POLYG
ITM3 = minzn Block limit
ITM4 = trnch Block limit
ITM5 = lngth RANGE 2.5 5.
ITM6 = dcode RANGE 301. 516.
ITM7 = dist2 Block calc rings
ITM8 = ncmp2 Block calc #comp
ITM9 = nhol2 Block calc #comp
ITM10 = minzn RANGE 1. 1.
ITM11 = lngth FACTR
CMD = Block limit minzn 1
CMD = Block limit trnch 1 2
CMD = ELEV ZMID

I-O = 0 / Debug level
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=rkck10.dat  9=rkck09.dat  15=rkck15.dat;
MEDS-624V1   3=rpt624.a09  30=
** KRIGING of 3-D block values for aukr1 **

RUN = omit

USR = MJL  /  Mon Dec 6, 2004 9:31:11 AM US Mountain Standard Time

IOP3 = 1. / 1=3-D spherical search; 0=2-D search
IOP4 = 0 / 0=No geologic matching; 1=Match one item
IOP6 = 0 / 0=Use true dist.; 1=Use anisotropic dist.
IOP7 = 2 / Min # of comps for interp
IOP11= 00 / Row # for extended output
IOP12= 0 / 0=All; 1=Octant; 2=Quadrant search; 3=Split Octant;
COM         4=Split Quadrant.
COM         Note: Negative#=use rotated search.  By Default,
COM         octants & quadrants are defined using the project's axes.
IOP16= 8 / Max.# of composites for interpolating a block
IOP19= 2 / Max.# of composites per hole (DEFAULT=No limit)
IOP20= 0 / 0=Store variance; 1=STD DEV; 2=Rel. variance

PAR1 = 15. / Primary X-search distance
PAR2 = 15. / Primary Y-search distance
PAR3 = 2.5 / Primary Z-search distance
PAR4 = 15. / Limiting search distance
PAR7 = 15. / Max distance to closest point
PAR8 = 15. / Max distance to project single composite
PAR27= 2 4 1 / Block discretization in X,Y,Z
PAR31= 100. / Outlier cutoff to change the search
PAR32= 50. / Max. 3D search distance at PAR31

IOP17 = 0   /0=Ordinary kriging, 5=Simple
PAR30 = 0.   /Mean grade of the area to be simple kriged

CMD = SEARCH 15. 15. 2.5 0. 0. 0.
CMD = NUG 0.478
CMD = EXP 0.522 41.5 13.9 25.9 0. 0. 0.

ITM1 = aukr1 aurej CALC KRIGE
ITM2 = aunn1 aurej CALC POLYG
ITM3 = minzn Block limit
ITM4 = trnch Block limit
ITM5 = lngth RANGE 2.5 5.
ITM6 = dcode RANGE 301. 716.
ITM7 = dist1 Block calc rings
ITM8 = ncmp1 Block calc #comp
ITM9 = nhol1 Block calc #comp
ITM10 = minzn RANGE 3. 3.
ITM11 = lngth FACTR
CMD = Block limit minzn 3
CMD = Block limit trnch 1 1
CMD = ELEV ZMID

I-O = 0 / Debug level
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=rkck10.dat  9=rkck09.dat  15=rkck15.dat;
MEDS-624V1   3=rpt624.a08  30=
** KRIGING of 3-D block values for aukr1 **

RUN = omit

USR = MJL  /  Mon Dec 6, 2004 9:30:34 AM US Mountain Standard Time

IOP3 = 1. / 1=3-D spherical search; 0=2-D search
IOP4 = 0 / 0=No geologic matching; 1=Match one item
IOP6 = 0 / 0=Use true dist.; 1=Use anisotropic dist.
IOP7 = 3 / Min # of comps for interp
IOP11= 00 / Row # for extended output
IOP12= 0 / 0=All; 1=Octant; 2=Quadrant search; 3=Split Octant;
COM         4=Split Quadrant.
COM         Note: Negative#=use rotated search.  By Default,
COM         octants & quadrants are defined using the project's axes.
IOP16= 6 / Max.# of composites for interpolating a block
IOP19= 2 / Max.# of composites per hole (DEFAULT=No limit)
IOP20= 0 / 0=Store variance; 1=STD DEV; 2=Rel. variance

PAR1 = 50. / Primary X-search distance
PAR2 = 50. / Primary Y-search distance
PAR3 = 50. / Primary Z-search distance
PAR4 = 50. / Limiting search distance
PAR7 = 50. / Max distance to closest point
PAR8 = 50. / Max distance to project single composite
PAR27= 2 4 1 / Block discretization in X,Y,Z
PAR31= 100. / Outlier cutoff to change the search
PAR32= 50. / Max. 3D search distance at PAR31

IOP17 = 0   /0=Ordinary kriging, 5=Simple
PAR30 = 0.   /Mean grade of the area to be simple kriged

CMD = SEARCH 50. 50. 10. 30. 0. 75.
CMD = NUG 0.478
CMD = EXP 0.522 41.5 13.9 25.9 30. 0. 75.

ITM1 = aukr1 aurej CALC KRIGE
ITM2 = aunn1 aurej CALC POLYG
ITM3 = minzn Block limit
ITM4 = trnch Block limit
ITM5 = lngth RANGE 2.5 5.
ITM6 = dcode RANGE 301. 516.
ITM7 = dist1 Block calc rings
ITM8 = ncmp1 Block calc #comp
ITM9 = nhol1 Block calc #comp
ITM10 = minzn RANGE 3. 3.
ITM11 = lngth FACTR
CMD = Block limit minzn 3
CMD = Block limit trnch 1 2
CMD = ELEV ZMID

I-O = 0 / Debug level
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=rkck10.dat  9=rkck09.dat  15=rkck15.dat;
MEDS-624V1   3=rpt624.a07  30=
** KRIGING of 3-D block values for aukr1 **

RUN = omit

USR = MJL  /  Mon Dec 6, 2004 9:30:28 AM US Mountain Standard Time

IOP3 = 1. / 1=3-D spherical search; 0=2-D search
IOP4 = 0 / 0=No geologic matching; 1=Match one item
IOP6 = 0 / 0=Use true dist.; 1=Use anisotropic dist.
IOP7 = 2 / Min # of comps for interp
IOP11= 00 / Row # for extended output
IOP12= 0 / 0=All; 1=Octant; 2=Quadrant search; 3=Split Octant;
COM         4=Split Quadrant.
COM         Note: Negative#=use rotated search.  By Default,
COM         octants & quadrants are defined using the project's axes.
IOP16= 12 / Max.# of composites for interpolating a block
IOP19= 2 / Max.# of composites per hole (DEFAULT=No limit)
IOP20= 0 / 0=Store variance; 1=STD DEV; 2=Rel. variance

PAR1 = 50. / Primary X-search distance
PAR2 = 50. / Primary Y-search distance
PAR3 = 50. / Primary Z-search distance
PAR4 = 50. / Limiting search distance
PAR7 = 50. / Max distance to closest point
PAR8 = 50. / Max distance to project single composite
PAR27= 2 4 1 / Block discretization in X,Y,Z
PAR31= 100. / Outlier cutoff to change the search
PAR32= 50. / Max. 3D search distance at PAR31

IOP17 = 0   /0=Ordinary kriging, 5=Simple
PAR30 = 0.   /Mean grade of the area to be simple kriged

CMD = SEARCH 50. 50. 10. 30. 0. 75.
CMD = NUG 0.478
CMD = EXP 0.522 41.5 13.9 25.9 30. 0. 75.

ITM1 = aukr1 aurej CALC KRIGE
ITM2 = aunn1 aurej CALC POLYG
ITM3 = minzn Block limit
ITM4 = trnch Block limit
ITM5 = lngth RANGE 2.5 5.
ITM6 = dcode RANGE 301. 516.
ITM7 = dist1 Block calc rings
ITM8 = ncmp1 Block calc #comp
ITM9 = nhol1 Block calc #comp
ITM10 = minzn RANGE 3. 3.
ITM11 = lngth FACTR
CMD = Block limit minzn 3
CMD = Block limit trnch 1 2
CMD = ELEV ZMID

I-O = 0 / Debug level
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=rkck10.dat  9=rkck09.dat  15=rkck15.dat;
MEDS-624V1   3=rpt624.a06  30=
** KRIGING of 3-D block values for aukr1 **

RUN = omit

USR = MJL  /  Mon Dec 6, 2004 9:31:03 AM US Mountain Standard Time

IOP3 = 1. / 1=3-D spherical search; 0=2-D search
IOP4 = 0 / 0=No geologic matching; 1=Match one item
IOP6 = 0 / 0=Use true dist.; 1=Use anisotropic dist.
IOP7 = 2 / Min # of comps for interp
IOP11= 00 / Row # for extended output
IOP12= 0 / 0=All; 1=Octant; 2=Quadrant search; 3=Split Octant;
COM         4=Split Quadrant.
COM         Note: Negative#=use rotated search.  By Default,
COM         octants & quadrants are defined using the project's axes.
IOP16= 8 / Max.# of composites for interpolating a block
IOP19= 2 / Max.# of composites per hole (DEFAULT=No limit)
IOP20= 0 / 0=Store variance; 1=STD DEV; 2=Rel. variance

PAR1 = 15. / Primary X-search distance
PAR2 = 15. / Primary Y-search distance
PAR3 = 2.5 / Primary Z-search distance
PAR4 = 15. / Limiting search distance
PAR7 = 15. / Max distance to closest point
PAR8 = 15. / Max distance to project single composite
PAR27= 2 4 1 / Block discretization in X,Y,Z
PAR31= 100. / Outlier cutoff to change the search
PAR32= 50. / Max. 3D search distance at PAR31

IOP17 = 0   /0=Ordinary kriging, 5=Simple
PAR30 = 0.   /Mean grade of the area to be simple kriged

CMD = SEARCH 15. 15. 2.5 0. 0. 0.
CMD = NUG 0.631
CMD = EXP 0.369 22.2 18.1 8.8 0. 0. 0.

ITM1 = aukr1 aurej CALC KRIGE
ITM2 = aunn1 aurej CALC POLYG
ITM3 = minzn Block limit
ITM4 = trnch Block limit
ITM5 = lngth RANGE 2.5 5.
ITM6 = dcode RANGE 301. 716.
ITM7 = dist1 Block calc rings
ITM8 = ncmp1 Block calc #comp
ITM9 = nhol1 Block calc #comp
ITM10 = minzn RANGE 2. 2.
ITM11 = lngth FACTR
CMD = Block limit minzn 2
CMD = Block limit trnch 1 1
CMD = ELEV ZMID

I-O = 0 / Debug level
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=rkck10.dat  9=rkck09.dat  15=rkck15.dat;
MEDS-624V1   3=rpt624.a05  30=
** KRIGING of 3-D block values for aukr1 **

RUN = omit

USR = MJL  /  Mon Dec 6, 2004 9:30:21 AM US Mountain Standard Time

IOP3 = 1. / 1=3-D spherical search; 0=2-D search
IOP4 = 0 / 0=No geologic matching; 1=Match one item
IOP6 = 0 / 0=Use true dist.; 1=Use anisotropic dist.
IOP7 = 3 / Min # of comps for interp
IOP11= 00 / Row # for extended output
IOP12= 0 / 0=All; 1=Octant; 2=Quadrant search; 3=Split Octant;
COM         4=Split Quadrant.
COM         Note: Negative#=use rotated search.  By Default,
COM         octants & quadrants are defined using the project's axes.
IOP16= 8 / Max.# of composites for interpolating a block
IOP19= 2 / Max.# of composites per hole (DEFAULT=No limit)
IOP20= 0 / 0=Store variance; 1=STD DEV; 2=Rel. variance

PAR1 = 50. / Primary X-search distance
PAR2 = 50. / Primary Y-search distance
PAR3 = 50. / Primary Z-search distance
PAR4 = 50. / Limiting search distance
PAR7 = 50. / Max distance to closest point
PAR8 = 50. / Max distance to project single composite
PAR27= 2 4 1 / Block discretization in X,Y,Z
PAR31= 100. / Outlier cutoff to change the search
PAR32= 50. / Max. 3D search distance at PAR31

IOP17 = 0   /0=Ordinary kriging, 5=Simple
PAR30 = 0.   /Mean grade of the area to be simple kriged

CMD = SEARCH 50. 50. 10. 0. 0. 75.
CMD = NUG 0.631
CMD = EXP 0.396 22.2 18.1 8.8 0. 0. 75.

ITM1 = aukr1 aurej CALC KRIGE
ITM2 = aunn1 aurej CALC POLYG
ITM3 = minzn Block limit
ITM4 = trnch Block limit
ITM5 = lngth RANGE 2.5 5.
ITM6 = dcode RANGE 301. 516.
ITM7 = dist1 Block calc rings
ITM8 = ncmp1 Block calc #comp
ITM9 = nhol1 Block calc #comp
ITM10 = minzn RANGE 2. 2.
ITM11 = lngth FACTR
CMD = Block limit minzn 2
CMD = Block limit trnch 1 2
CMD = ELEV ZMID

I-O = 0 / Debug level
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=rkck10.dat  9=rkck09.dat  15=rkck15.dat;
MEDS-624V1   3=rpt624.a04  30=
** KRIGING of 3-D block values for aukr1 **

RUN = omit

USR = MJL  /  Mon Dec 6, 2004 9:30:13 AM US Mountain Standard Time

IOP3 = 1. / 1=3-D spherical search; 0=2-D search
IOP4 = 0 / 0=No geologic matching; 1=Match one item
IOP6 = 0 / 0=Use true dist.; 1=Use anisotropic dist.
IOP7 = 2 / Min # of comps for interp
IOP11= 00 / Row # for extended output
IOP12= 0 / 0=All; 1=Octant; 2=Quadrant search; 3=Split Octant;
COM         4=Split Quadrant.
COM         Note: Negative#=use rotated search.  By Default,
COM         octants & quadrants are defined using the project's axes.
IOP16= 12 / Max.# of composites for interpolating a block
IOP19= 2 / Max.# of composites per hole (DEFAULT=No limit)
IOP20= 0 / 0=Store variance; 1=STD DEV; 2=Rel. variance

PAR1 = 50. / Primary X-search distance
PAR2 = 50. / Primary Y-search distance
PAR3 = 50. / Primary Z-search distance
PAR4 = 50. / Limiting search distance
PAR7 = 50. / Max distance to closest point
PAR8 = 50. / Max distance to project single composite
PAR27= 2 4 1 / Block discretization in X,Y,Z
PAR31= 100. / Outlier cutoff to change the search
PAR32= 50. / Max. 3D search distance at PAR31

IOP17 = 0   /0=Ordinary kriging, 5=Simple
PAR30 = 0.   /Mean grade of the area to be simple kriged

CMD = SEARCH 50. 50. 10. 0. 0. 75.
CMD = NUG 0.631
CMD = EXP 0.396 22.2 18.1 8.8 0. 0. 75.

ITM1 = aukr1 aurej CALC KRIGE
ITM2 = aunn1 aurej CALC POLYG
ITM3 = minzn Block limit
ITM4 = trnch Block limit
ITM5 = lngth RANGE 2.5 5.
ITM6 = dcode RANGE 301. 516.
ITM7 = dist1 Block calc rings
ITM8 = ncmp1 Block calc #comp
ITM9 = nhol1 Block calc #comp
ITM10 = minzn RANGE 2. 2.
ITM11 = lngth FACTR
CMD = Block limit minzn 2
CMD = Block limit trnch 1 2
CMD = ELEV ZMID

I-O = 0 / Debug level
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=rkck10.dat  9=rkck09.dat  15=rkck15.dat;
MEDS-624V1   3=rpt624.a03  30=
** KRIGING of 3-D block values for aukr1 **

RUN = omit

USR = MJL  /  Mon Dec 6, 2004 9:30:56 AM US Mountain Standard Time

IOP3 = 1. / 1=3-D spherical search; 0=2-D search
IOP4 = 0 / 0=No geologic matching; 1=Match one item
IOP6 = 0 / 0=Use true dist.; 1=Use anisotropic dist.
IOP7 = 2 / Min # of comps for interp
IOP11= 00 / Row # for extended output
IOP12= 0 / 0=All; 1=Octant; 2=Quadrant search; 3=Split Octant;
COM         4=Split Quadrant.
COM         Note: Negative#=use rotated search.  By Default,
COM         octants & quadrants are defined using the project's axes.
IOP16= 8 / Max.# of composites for interpolating a block
IOP19= 2 / Max.# of composites per hole (DEFAULT=No limit)
IOP20= 0 / 0=Store variance; 1=STD DEV; 2=Rel. variance

PAR1 = 15. / Primary X-search distance
PAR2 = 15. / Primary Y-search distance
PAR3 = 2.5 / Primary Z-search distance
PAR4 = 15. / Limiting search distance
PAR7 = 15. / Max distance to closest point
PAR8 = 15. / Max distance to project single composite
PAR27= 2 4 1 / Block discretization in X,Y,Z
PAR31= 100. / Outlier cutoff to change the search
PAR32= 50. / Max. 3D search distance at PAR31

IOP17 = 0   /0=Ordinary kriging, 5=Simple
PAR30 = 0.   /Mean grade of the area to be simple kriged

CMD = SEARCH 15. 15. 2.5 0. 0. 0.
CMD = NUG 0.671
CMD = EXP 0.329 12.6 9.5 4.6 0. 0. 0.

ITM1 = aukr1 aurej CALC KRIGE
ITM2 = aunn1 aurej CALC POLYG
ITM3 = minzn Block limit
ITM4 = trnch Block limit
ITM5 = lngth RANGE 2.5 5.
ITM6 = dcode RANGE 301. 716.
ITM7 = dist1 Block calc rings
ITM8 = ncmp1 Block calc #comp
ITM9 = nhol1 Block calc #comp
ITM10 = minzn RANGE 1. 1.
ITM11 = lngth FACTR
CMD = Block limit minzn 1
CMD = Block limit trnch 1 1
CMD = ELEV ZMID

I-O = 0 / Debug level
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=rkck10.dat  9=rkck09.dat  15=rkck15.dat;
MEDS-624V1   3=rpt624.a02  30=
** KRIGING of 3-D block values for aukr1 **

RUN = omit

USR = MJL  /  Mon Dec 6, 2004 9:30:06 AM US Mountain Standard Time

IOP3 = 1. / 1=3-D spherical search; 0=2-D search
IOP4 = 0 / 0=No geologic matching; 1=Match one item
IOP6 = 0 / 0=Use true dist.; 1=Use anisotropic dist.
IOP7 = 3 / Min # of comps for interp
IOP11= 00 / Row # for extended output
IOP12= 0 / 0=All; 1=Octant; 2=Quadrant search; 3=Split Octant;
COM         4=Split Quadrant.
COM         Note: Negative#=use rotated search.  By Default,
COM         octants & quadrants are defined using the project's axes.
IOP16= 6 / Max.# of composites for interpolating a block
IOP19= 2 / Max.# of composites per hole (DEFAULT=No limit)
IOP20= 0 / 0=Store variance; 1=STD DEV; 2=Rel. variance

PAR1 = 50. / Primary X-search distance
PAR2 = 50. / Primary Y-search distance
PAR3 = 50. / Primary Z-search distance
PAR4 = 50. / Limiting search distance
PAR7 = 50. / Max distance to closest point
PAR8 = 50. / Max distance to project single composite
PAR27= 2 4 1 / Block discretization in X,Y,Z
PAR31= 100. / Outlier cutoff to change the search
PAR32= 50. / Max. 3D search distance at PAR31

IOP17 = 0   /0=Ordinary kriging, 5=Simple
PAR30 = 0.   /Mean grade of the area to be simple kriged

CMD = SEARCH 50. 50. 10. 0. 0. 75.
CMD = NUG 0.671
CMD = EXP 0.329 12.6 9.5 4.6 0. 0. 75.

ITM1 = aukr1 aurej CALC KRIGE
ITM2 = aunn1 aurej CALC POLYG
ITM3 = minzn Block limit
ITM4 = trnch Block limit
ITM5 = lngth RANGE 2.5 5.
ITM6 = dcode RANGE 301. 516.
ITM7 = dist1 Block calc rings
ITM8 = ncmp1 Block calc #comp
ITM9 = nhol1 Block calc #comp
ITM10 = minzn RANGE 1. 1.
ITM11 = lngth FACTR
CMD = Block limit minzn 1
CMD = Block limit trnch 1 2
CMD = ELEV ZMID

I-O = 0 / Debug level
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=rkck10.dat  9=rkck09.dat  15=rkck15.dat;
MEDS-624V1   3=rpt624.a01  30=
** KRIGING of 3-D block values for aukr1 **

RUN = reset

USR = MJL  /  Mon Dec 6, 2004 9:30:00 AM US Mountain Standard Time

IOP3 = 1. / 1=3-D spherical search; 0=2-D search
IOP4 = 0 / 0=No geologic matching; 1=Match one item
IOP6 = 0 / 0=Use true dist.; 1=Use anisotropic dist.
IOP7 = 2 / Min # of comps for interp
IOP11= 00 / Row # for extended output
IOP12= 0 / 0=All; 1=Octant; 2=Quadrant search; 3=Split Octant;
COM         4=Split Quadrant.
COM         Note: Negative#=use rotated search.  By Default,
COM         octants & quadrants are defined using the project's axes.
IOP16= 6 / Max.# of composites for interpolating a block
IOP19= 2 / Max.# of composites per hole (DEFAULT=No limit)
IOP20= 0 / 0=Store variance; 1=STD DEV; 2=Rel. variance

PAR1 = 50. / Primary X-search distance
PAR2 = 50. / Primary Y-search distance
PAR3 = 50. / Primary Z-search distance
PAR4 = 50. / Limiting search distance
PAR7 = 50. / Max distance to closest point
PAR8 = 50. / Max distance to project single composite
PAR27= 2 4 1 / Block discretization in X,Y,Z
PAR31= 100. / Outlier cutoff to change the search
PAR32= 50. / Max. 3D search distance at PAR31

IOP17 = 0   /0=Ordinary kriging, 5=Simple
PAR30 = 0.   /Mean grade of the area to be simple kriged

CMD = SEARCH 50. 50. 10. 0. 0. 75.
CMD = NUG 0.671
CMD = EXP 0.329 12.6 9.5 4.6 0. 0. 75.

ITM1 = aukr1 aurej CALC KRIGE
ITM2 = aunn1 aurej CALC POLYG
ITM3 = minzn Block limit
ITM4 = trnch Block limit
ITM5 = lngth RANGE 2.5 5.
ITM6 = dcode RANGE 301. 516.
ITM7 = dist1 Block calc rings
ITM8 = ncmp1 Block calc #comp
ITM9 = nhol1 Block calc #comp
ITM10 = minzn RANGE 1. 1.
ITM11 = lngth FACTR
CMD = Block limit minzn 1
CMD = Block limit trnch 1 2
CMD = ELEV ZMID

I-O = 0 / Debug level
END
0 0 0 0 0 0
```

```
MEDS-620V1  10=RKCK10.DAT  9=RKCK09.DAT  15=RKCK15.DAT;
MEDS-620V1   3=RPT620.C03
** I D W INTERPOLATION OF 3-D BLOCK VALUES FOR AUKR3 **

RUN = OMIT

USR = MJL  /  MON DEC 6, 2004 1:54:45 PM US MOUNTAIN STANDARD TIME

IOP3 = 1. / 1=3-D SPHERICAL SEARCH; 0=2-D SEARCH
IOP4 = 0  / 0=NO GEOLOGIC MATCHING; 1=MATCH ONE ITEM
IOP6 = 0  / 0=USE TRUE DIST; 1=USE ANISOTROPIC DIST
IOP7 = 2  / MIN # OF COMPS FOR INTERP
IOP11= 00 / ROW # FOR EXTENDED OUTPUT
IOP12= 0  / 0=ALL, 1=OCTANT; 2=QUADRANT SEARCH; 3=SPLIT OCTANT
COM         4=SPLIT QUADRANT.
COM        NOTE: NEGATIVE #=USE ROTATED SEARCH
COM        (BY DEFAULT, OCTANTS & QUADRANTS ARE DEFINED USING
COM         THE PROJECT'S ORTHOGONAL AXES).
IOP16= 8  / MAX.# OF COMPOSITES FOR INTERPOLATING A BLOCK
IOP18= 0  / 0=STORE LOCAL ERROR AS VARIANCE; 1=STD DEV.
IOP19= 2  / MAX.# OF COMPOSITES PER HOLE (DEFAULT=NO LIMIT)
IOP25= 0  / 1=APPLY WEIGHT FACTOR AFTER IDW, 0=BEFORE

PAR1 = 15. / PRIMARY X-SEARCH DISTANCE
PAR2 = 15. / PRIMARY Y-SEARCH DISTANCE
PAR3 = 2.5 / PRIMARY Z-SEARCH DISTANCE
PAR4 = 15. / LIMITING SEARCH DISTANCE
PAR5 = 3   / INVERSE DISTANCE POWER (DEFAULT=2)
PAR7 = 15. / MAX DISTANCE TO CLOSEST POINT
PAR8 = 15. / MAX DISTANCE TO PROJECT SINGLE COMPOSITE
PAR31= 100. / OUTLIER CUTOFF TO CHANGE THE SEARCH
PAR32= 50. / MAX. 3D SEARCH DISTANCE AT PAR31

CMD = SEARCH 15. 15. 2.5. 0. 0. 0.

ITM1 = AUKR3 AUAJ1 CALC INVWT
ITM2 = AUNN3 AUAJ1 CALC POLYG
ITM3 = MINZN BLOCK LIMIT
ITM4 = TRNCH BLOCK LIMIT
ITM5 = MINZN RANGE 10 10
ITM6 = LNGTH RANGE 2.5 5.
ITM7 = DCODE RANGE 301. 716.
ITM8 = DIST3 BLOCK CALC RINGS
ITM9 = NCMP3 BLOCK CALC #COMP
ITM10 = NHOL3 BLOCK CALC #COMP
ITM11 = LNGTH FACTR
CMD = BLOCK LIMIT MINZN 10
CMD = BLOCK LIMIT TRNCH 1 1
CMD = ELEV ZMID
END
0 0 0 0 0 0
```

```
MEDS-620V1  10=RKCK10.DAT  9=RKCK09.DAT  15=RKCK15.DAT;
MEDS-620V1   3=RPT620.C02
** I D W INTERPOLATION OF 3-D BLOCK VALUES FOR AUKR3 **

RUN = OMIT

USR = MJL  /  MON DEC 6, 2004 1:54:45 PM US MOUNTAIN STANDARD TIME

IOP3 = 1. / 1=3-D SPHERICAL SEARCH; 0=2-D SEARCH
IOP4 = 1  / 0=NO GEOLOGIC MATCHING; 1=MATCH ONE ITEM
IOP6 = 0  / 0=USE TRUE DIST; 1=USE ANISOTROPIC DIST
IOP7 = 3  / MIN # OF COMPS FOR INTERP
IOP11= 00 / ROW # FOR EXTENDED OUTPUT
IOP12= 0  / 0=ALL, 1=OCTANT; 2=QUADRANT SEARCH; 3=SPLIT OCTANT
COM         4=SPLIT QUADRANT.
COM        NOTE: NEGATIVE #=USE ROTATED SEARCH
COM        (BY DEFAULT, OCTANTS & QUADRANTS ARE DEFINED USING
COM         THE PROJECT'S ORTHOGONAL AXES).
IOP16= 8  / MAX.# OF COMPOSITES FOR INTERPOLATING A BLOCK
IOP18= 0  / 0=STORE LOCAL ERROR AS VARIANCE; 1=STD DEV.
IOP19= 2  / MAX.# OF COMPOSITES PER HOLE (DEFAULT=NO LIMIT)
IOP25= 0  / 1=APPLY WEIGHT FACTOR AFTER IDW, 0=BEFORE

PAR1 = 75. / PRIMARY X-SEARCH DISTANCE
PAR2 = 75. / PRIMARY Y-SEARCH DISTANCE
PAR3 = 75. / PRIMARY Z-SEARCH DISTANCE
PAR4 = 50. / LIMITING SEARCH DISTANCE
PAR5 = 4.5 / INVERSE DISTANCE POWER (DEFAULT=2)
PAR7 = 50. / MAX DISTANCE TO CLOSEST POINT
PAR8 = 50. / MAX DISTANCE TO PROJECT SINGLE COMPOSITE
PAR31= 100. / OUTLIER CUTOFF TO CHANGE THE SEARCH
PAR32= 50. / MAX. 3D SEARCH DISTANCE AT PAR31

CMD = SEARCH 50. 50. 10. 0. 0. 75.

ITM1 = AUKR3 AUAJ1 CALC INVWT
ITM2 = AUNN3 AUAJ1 CALC POLYG
ITM3 = MINZN BLOCK LIMIT
ITM4 = TRNCH BLOCK LIMIT
ITM5 = MINZN MINZN MATCH MODEL
ITM6 = LNGTH RANGE 2.5 5.
ITM7 = DCODE RANGE 301. 516.
ITM8 = DIST3 BLOCK CALC RINGS
ITM9 = NCMP3 BLOCK CALC #COMP
ITM10 = NHOL3 BLOCK CALC #COMP
ITM11 = LNGTH FACTR
CMD = BLOCK LIMIT MINZN 10
CMD = BLOCK LIMIT TRNCH 1 2
CMD = ELEV ZMID
END
0 0 0 0 0 0
```

```
MEDS-620V1  10=RKCK10.DAT  9=RKCK09.DAT  15=RKCK15.DAT;
MEDS-620V1   3=RPT620.C01
** I D W INTERPOLATION OF 3-D BLOCK VALUES FOR AUKR3 **

RUN = OMIT

USR = MJL  /  MON DEC 6, 2004 1:54:45 PM US MOUNTAIN STANDARD TIME

IOP3 = 1. / 1=3-D SPHERICAL SEARCH; 0=2-D SEARCH
IOP4 = 0  / 0=NO GEOLOGIC MATCHING; 1=MATCH ONE ITEM
IOP6 = 0  / 0=USE TRUE DIST; 1=USE ANISOTROPIC DIST
IOP7 = 2  / MIN # OF COMPS FOR INTERP
IOP11= 00 / ROW # FOR EXTENDED OUTPUT
IOP12= 0  / 0=ALL, 1=OCTANT; 2=QUADRANT SEARCH; 3=SPLIT OCTANT
COM         4=SPLIT QUADRANT.
COM        NOTE: NEGATIVE #=USE ROTATED SEARCH
COM        (BY DEFAULT, OCTANTS & QUADRANTS ARE DEFINED USING
COM         THE PROJECT'S ORTHOGONAL AXES).
IOP16= 12 / MAX.# OF COMPOSITES FOR INTERPOLATING A BLOCK
IOP18= 0  / 0=STORE LOCAL ERROR AS VARIANCE; 1=STD DEV.
IOP19= 2  / MAX.# OF COMPOSITES PER HOLE (DEFAULT=NO LIMIT)
IOP25= 0  / 1=APPLY WEIGHT FACTOR AFTER IDW, 0=BEFORE

PAR1 = 75. / PRIMARY X-SEARCH DISTANCE
PAR2 = 75. / PRIMARY Y-SEARCH DISTANCE
PAR3 = 75. / PRIMARY Z-SEARCH DISTANCE
PAR4 = 50. / LIMITING SEARCH DISTANCE
PAR5 = 3 / INVERSE DISTANCE POWER (DEFAULT=2)
PAR7 = 50. / MAX DISTANCE TO CLOSEST POINT
PAR8 = 50. / MAX DISTANCE TO PROJECT SINGLE COMPOSITE
PAR31= 100. / OUTLIER CUTOFF TO CHANGE THE SEARCH
PAR32= 50. / MAX. 3D SEARCH DISTANCE AT PAR31

CMD = SEARCH 50. 50. 10. 0. 0. 75.

ITM1 = AUKR3 AUAJ1 CALC INVWT
ITM2 = AUNN3 AUAJ1 CALC POLYG
ITM3 = MINZN BLOCK LIMIT
ITM4 = TRNCH BLOCK LIMIT
ITM5 = MINZN RANGE 10 10
ITM6 = LNGTH RANGE 2.5 5.
ITM7 = DCODE RANGE 301. 516.
ITM8 = DIST3 BLOCK CALC RINGS
ITM9 = NCMP3 BLOCK CALC #COMP
ITM10 = NHOL3 BLOCK CALC #COMP
ITM11 = LNGTH FACTR
CMD = BLOCK LIMIT MINZN 10
CMD = BLOCK LIMIT TRNCH 1 2
CMD = ELEV ZMID
END
0 0 0 0 0 0
```

```
MEDS-620V1  10=RKCK10.DAT  9=RKCK09.DAT  15=RKCK15.DAT;
MEDS-620V1   3=RPT620.B03
** I D W INTERPOLATION OF 3-D BLOCK VALUES FOR AUKR2 **

RUN = OMIT

USR = MJL  /  MON DEC 6, 2004 1:54:45 PM US MOUNTAIN STANDARD TIME

IOP3 = 1. / 1=3-D SPHERICAL SEARCH; 0=2-D SEARCH
IOP4 = 0  / 0=NO GEOLOGIC MATCHING; 1=MATCH ONE ITEM
IOP6 = 0  / 0=USE TRUE DIST; 1=USE ANISOTROPIC DIST
IOP7 = 2  / MIN # OF COMPS FOR INTERP
IOP11= 00 / ROW # FOR EXTENDED OUTPUT
IOP12= 0  / 0=ALL, 1=OCTANT; 2=QUADRANT SEARCH; 3=SPLIT OCTANT
COM         4=SPLIT QUADRANT.
COM        NOTE: NEGATIVE #=USE ROTATED SEARCH
COM        (BY DEFAULT, OCTANTS & QUADRANTS ARE DEFINED USING
COM         THE PROJECT'S ORTHOGONAL AXES).
IOP16= 8  / MAX.# OF COMPOSITES FOR INTERPOLATING A BLOCK
IOP18= 0  / 0=STORE LOCAL ERROR AS VARIANCE; 1=STD DEV.
IOP19= 2  / MAX.# OF COMPOSITES PER HOLE (DEFAULT=NO LIMIT)
IOP25= 0  / 1=APPLY WEIGHT FACTOR AFTER IDW, 0=BEFORE

PAR1 = 15. / PRIMARY X-SEARCH DISTANCE
PAR2 = 15. / PRIMARY Y-SEARCH DISTANCE
PAR3 = 2.5 / PRIMARY Z-SEARCH DISTANCE
PAR4 = 15. / LIMITING SEARCH DISTANCE
PAR5 = 3   / INVERSE DISTANCE POWER (DEFAULT=2)
PAR7 = 15. / MAX DISTANCE TO CLOSEST POINT
PAR8 = 15. / MAX DISTANCE TO PROJECT SINGLE COMPOSITE
PAR31= 10.75 / OUTLIER CUTOFF TO CHANGE THE SEARCH
PAR32= 12.75 / MAX. 3D SEARCH DISTANCE AT PAR31

CMD = SEARCH 15. 15. 2.5. 0. 0. 0.

ITM1 = AUKR2 AUREJ CALC INVWT
ITM2 = AUNN2 AUREJ CALC POLYG
ITM3 = MINZN BLOCK LIMIT
ITM4 = TRNCH BLOCK LIMIT
ITM5 = MINZN RANGE 10 10
ITM6 = LNGTH RANGE 2.5 5.
ITM7 = DCODE RANGE 301. 716.
ITM8 = DIST2 BLOCK CALC RINGS
ITM9 = NCMP2 BLOCK CALC #COMP
ITM10 = NHOL2 BLOCK CALC #COMP
ITM11 = LNGTH FACTR
CMD = BLOCK LIMIT MINZN 10
CMD = BLOCK LIMIT TRNCH 1 1
CMD = ELEV ZMID
END
0 0 0 0 0 0
```

```
MEDS-620V1  10=rkck10.dat  9=rkck09.dat  15=rkck15.dat;
MEDS-620V1   3=rpt620.b02
** I D W interpolation of 3-D block values for AUKR2 **

RUN = OMIT

USR = MJL  /  Mon Dec 6, 2004 1:54:45 PM US Mountain Standard Time

IOP3 = 1. / 1=3-D spherical search; 0=2-D search
IOP4 = 1  / 0=No geologic matching; 1=Match one item
IOP6 = 0  / 0=Use true dist; 1=Use anisotropic dist
IOP7 = 3  / Min # of comps for interp
IOP11= 00 / Row # for extended output
IOP12= 0  / 0=All, 1=Octant; 2=Quadrant search; 3=Split Octant
COM         4=Split Quadrant.
COM        Note: Negative #=use rotated search
COM        (by DEFAULT, octants & quadrants are defined using
COM         the project's orthogonal axes).
IOP16= 8  / Max.# of composites for interpolating a block
IOP18= 0  / 0=Store local error as variance; 1=Std dev.
IOP19= 2  / Max.# of composites per hole (DEFAULT=NO LIMIT)
IOP25= 0  / 1=Apply weight factor AFTER IDW, 0=Before

PAR1 = 75. / Primary X-search distance
PAR2 = 75. / Primary Y-search distance
PAR3 = 75. / Primary Z-search distance
PAR4 = 50. / Limiting search distance
PAR5 = 4.5 / Inverse distance power (DEFAULT=2)
PAR7 = 50. / Max distance to closest point
PAR8 = 50. / Max distance to project single composite
PAR31= 10.75 / Outlier cutoff to change the search
PAR32= 12.75 / Max. 3D search distance at PAR31

CMD = SEARCH 50. 50. 10. 0. 0. 75.

ITM1 = AUKR2 AUREJ CALC INVWT
ITM2 = AUNN2 AUREJ CALC POLYG
ITM3 = MINZN Block limit
ITM4 = TRNCH Block limit
ITM5 = MINZN MINZN Match model
ITM6 = LNGTH RANGE 2.5 5.
ITM7 = DCODE RANGE 301. 516.
ITM8 = DIST2 Block calc rings
ITM9 = NCMP2 Block calc #comp
ITM10 = NHOL2 Block calc #comp
ITM11 = LNGTH FACTR
CMD = Block limit MINZN 10
CMD = Block limit TRNCH 1 2
CMD = ELEV ZMID
END
0 0 0 0 0 0
```

```
MEDS-620V1  10=RKCK10.DAT  9=RKCK09.DAT  15=RKCK15.DAT;
MEDS-620V1   3=RPT620.B01
** I D W INTERPOLATION OF 3-D BLOCK VALUES FOR AUKR2 **

RUN = OMIT

USR = MJL  /  MON DEC 6, 2004 1:54:45 PM US MOUNTAIN STANDARD TIME

IOP3 = 1. / 1=3-D SPHERICAL SEARCH; 0=2-D SEARCH
IOP4 = 0  / 0=NO GEOLOGIC MATCHING; 1=MATCH ONE ITEM
IOP6 = 0  / 0=USE TRUE DIST; 1=USE ANISOTROPIC DIST
IOP7 = 2  / MIN # OF COMPS FOR INTERP
IOP11= 00 / ROW # FOR EXTENDED OUTPUT
IOP12= 0  / 0=ALL, 1=OCTANT; 2=QUADRANT SEARCH; 3=SPLIT OCTANT
COM         4=SPLIT QUADRANT.
COM        NOTE: NEGATIVE #=USE ROTATED SEARCH
COM        (BY DEFAULT, OCTANTS & QUADRANTS ARE DEFINED USING
COM         THE PROJECT'S ORTHOGONAL AXES).
IOP16= 12 / MAX.# OF COMPOSITES FOR INTERPOLATING A BLOCK
IOP18= 0  / 0=STORE LOCAL ERROR AS VARIANCE; 1=STD DEV.
IOP19= 2  / MAX.# OF COMPOSITES PER HOLE (DEFAULT=NO LIMIT)
IOP25= 0  / 1=APPLY WEIGHT FACTOR AFTER IDW, 0=BEFORE

PAR1 = 75. / PRIMARY X-SEARCH DISTANCE
PAR2 = 75. / PRIMARY Y-SEARCH DISTANCE
PAR3 = 75. / PRIMARY Z-SEARCH DISTANCE
PAR4 = 50. / LIMITING SEARCH DISTANCE
PAR5 = 3 / INVERSE DISTANCE POWER (DEFAULT=2)
PAR7 = 50. / MAX DISTANCE TO CLOSEST POINT
PAR8 = 50. / MAX DISTANCE TO PROJECT SINGLE COMPOSITE
PAR31= 10.75 / OUTLIER CUTOFF TO CHANGE THE SEARCH
PAR32= 12.75 / MAX. 3D SEARCH DISTANCE AT PAR31

CMD = SEARCH 50. 50. 10. 0. 0. 75.

ITM1 = AUKR2 AUREJ CALC INVWT
ITM2 = AUNN2 AUREJ CALC POLYG
ITM3 = MINZN BLOCK LIMIT
ITM4 = TRNCH BLOCK LIMIT
ITM5 = MINZN RANGE 10 10
ITM6 = LNGTH RANGE 2.5 5.
ITM7 = DCODE RANGE 301. 516.
ITM8 = DIST2 BLOCK CALC RINGS
ITM9 = NCMP2 BLOCK CALC #COMP
ITM10 = NHOL2 BLOCK CALC #COMP
ITM11 = LNGTH FACTR
CMD = BLOCK LIMIT MINZN 10
CMD = BLOCK LIMIT TRNCH 1 2
CMD = ELEV ZMID
END
0 0 0 0 0 0
```

```
MEDS-620V1  10=RKCK10.DAT  9=RKCK09.DAT  15=RKCK15.DAT;
MEDS-620V1   3=RPT620.A03
** I D W INTERPOLATION OF 3-D BLOCK VALUES FOR AUKR1 **

RUN = OMIT

USR = MJL  /  MON DEC 6, 2004 1:54:45 PM US MOUNTAIN STANDARD TIME

IOP3 = 1. / 1=3-D SPHERICAL SEARCH; 0=2-D SEARCH
IOP4 = 0  / 0=NO GEOLOGIC MATCHING; 1=MATCH ONE ITEM
IOP6 = 0  / 0=USE TRUE DIST; 1=USE ANISOTROPIC DIST
IOP7 = 2  / MIN # OF COMPS FOR INTERP
IOP11= 00 / ROW # FOR EXTENDED OUTPUT
IOP12= 0  / 0=ALL, 1=OCTANT; 2=QUADRANT SEARCH; 3=SPLIT OCTANT
COM         4=SPLIT QUADRANT.
COM        NOTE: NEGATIVE #=USE ROTATED SEARCH
COM        (BY DEFAULT, OCTANTS & QUADRANTS ARE DEFINED USING
COM         THE PROJECT'S ORTHOGONAL AXES).
IOP16= 8  / MAX.# OF COMPOSITES FOR INTERPOLATING A BLOCK
IOP18= 0  / 0=STORE LOCAL ERROR AS VARIANCE; 1=STD DEV.
IOP19= 2  / MAX.# OF COMPOSITES PER HOLE (DEFAULT=NO LIMIT)
IOP25= 0  / 1=APPLY WEIGHT FACTOR AFTER IDW, 0=BEFORE

PAR1 = 15. / PRIMARY X-SEARCH DISTANCE
PAR2 = 15. / PRIMARY Y-SEARCH DISTANCE
PAR3 = 2.5 / PRIMARY Z-SEARCH DISTANCE
PAR4 = 15. / LIMITING SEARCH DISTANCE
PAR5 = 3   / INVERSE DISTANCE POWER (DEFAULT=2)
PAR7 = 15. / MAX DISTANCE TO CLOSEST POINT
PAR8 = 15. / MAX DISTANCE TO PROJECT SINGLE COMPOSITE
PAR31= 100. / OUTLIER CUTOFF TO CHANGE THE SEARCH
PAR32= 50. / MAX. 3D SEARCH DISTANCE AT PAR31

CMD = SEARCH 15. 15. 2.5. 0. 0. 0.

ITM1 = AUKR1 AUREJ CALC INVWT
ITM2 = AUNN1 AUREJ CALC POLYG
ITM3 = MINZN BLOCK LIMIT
ITM4 = TRNCH BLOCK LIMIT
ITM5 = MINZN RANGE 10 10
ITM6 = LNGTH RANGE 2.5 5.
ITM7 = DCODE RANGE 301. 716.
ITM8 = DIST1 BLOCK CALC RINGS
ITM9 = NCMP1 BLOCK CALC #COMP
ITM10 = NHOL1 BLOCK CALC #COMP
ITM11 = LNGTH FACTR
CMD = BLOCK LIMIT MINZN 10
CMD = BLOCK LIMIT TRNCH 1 1
CMD = ELEV ZMID
END
0 0 0 0 0 0
```

```
MEDS-620V1  10=RKCK10.DAT  9=RKCK09.DAT  15=RKCK15.DAT;
MEDS-620V1   3=RPT620.A02
** I D W INTERPOLATION OF 3-D BLOCK VALUES FOR AUKR1 **

RUN = OMIT

USR = MJL  /  MON DEC 6, 2004 1:54:45 PM US MOUNTAIN STANDARD TIME

IOP3 = 1. / 1=3-D SPHERICAL SEARCH; 0=2-D SEARCH
IOP4 = 1  / 0=NO GEOLOGIC MATCHING; 1=MATCH ONE ITEM
IOP6 = 0  / 0=USE TRUE DIST; 1=USE ANISOTROPIC DIST
IOP7 = 3  / MIN # OF COMPS FOR INTERP
IOP11= 00 / ROW # FOR EXTENDED OUTPUT
IOP12= 0  / 0=ALL, 1=OCTANT; 2=QUADRANT SEARCH; 3=SPLIT OCTANT
COM         4=SPLIT QUADRANT.
COM        NOTE: NEGATIVE #=USE ROTATED SEARCH
COM        (BY DEFAULT, OCTANTS & QUADRANTS ARE DEFINED USING
COM         THE PROJECT'S ORTHOGONAL AXES).
IOP16= 8  / MAX.# OF COMPOSITES FOR INTERPOLATING A BLOCK
IOP18= 0  / 0=STORE LOCAL ERROR AS VARIANCE; 1=STD DEV.
IOP19= 2  / MAX.# OF COMPOSITES PER HOLE (DEFAULT=NO LIMIT)
IOP25= 0  / 1=APPLY WEIGHT FACTOR AFTER IDW, 0=BEFORE

PAR1 = 75. / PRIMARY X-SEARCH DISTANCE
PAR2 = 75. / PRIMARY Y-SEARCH DISTANCE
PAR3 = 75. / PRIMARY Z-SEARCH DISTANCE
PAR4 = 50. / LIMITING SEARCH DISTANCE
PAR5 = 4.5 / INVERSE DISTANCE POWER (DEFAULT=2)
PAR7 = 50. / MAX DISTANCE TO CLOSEST POINT
PAR8 = 50. / MAX DISTANCE TO PROJECT SINGLE COMPOSITE
PAR31= 100. / OUTLIER CUTOFF TO CHANGE THE SEARCH
PAR32= 50. / MAX. 3D SEARCH DISTANCE AT PAR31

CMD = SEARCH 50. 50. 10. 0. 0. 75.

ITM1 = AUKR1 AUREJ CALC INVWT
ITM2 = AUNN1 AUREJ CALC POLYG
ITM3 = MINZN BLOCK LIMIT
ITM4 = TRNCH BLOCK LIMIT
ITM5 = MINZN MINZN MATCH MODEL
ITM6 = LNGTH RANGE 2.5 5.
ITM7 = DCODE RANGE 301. 516.
ITM8 = DIST1 BLOCK CALC RINGS
ITM9 = NCMP1 BLOCK CALC #COMP
ITM10 = NHOL1 BLOCK CALC #COMP
ITM11 = LNGTH FACTR
CMD = BLOCK LIMIT MINZN 10
CMD = BLOCK LIMIT TRNCH 1 2
CMD = ELEV ZMID
END
0 0 0 0 0 0
```

```
MEDS-620V1  10=RKCK10.DAT  9=RKCK09.DAT  15=RKCK15.DAT;
MEDS-620V1   3=RPT620.A01
** I D W INTERPOLATION OF 3-D BLOCK VALUES FOR AUKR1 **

RUN = OMIT

USR = MJL  /  MON DEC 6, 2004 1:54:45 PM US MOUNTAIN STANDARD TIME

IOP3 = 1. / 1=3-D SPHERICAL SEARCH; 0=2-D SEARCH
IOP4 = 0  / 0=NO GEOLOGIC MATCHING; 1=MATCH ONE ITEM
IOP6 = 0  / 0=USE TRUE DIST; 1=USE ANISOTROPIC DIST
IOP7 = 2  / MIN # OF COMPS FOR INTERP
IOP11= 00 / ROW # FOR EXTENDED OUTPUT
IOP12= 0  / 0=ALL, 1=OCTANT; 2=QUADRANT SEARCH; 3=SPLIT OCTANT
COM         4=SPLIT QUADRANT.
COM        NOTE: NEGATIVE #=USE ROTATED SEARCH
COM        (BY DEFAULT, OCTANTS & QUADRANTS ARE DEFINED USING
COM         THE PROJECT'S ORTHOGONAL AXES).
IOP16= 12 / MAX.# OF COMPOSITES FOR INTERPOLATING A BLOCK
IOP18= 0  / 0=STORE LOCAL ERROR AS VARIANCE; 1=STD DEV.
IOP19= 2  / MAX.# OF COMPOSITES PER HOLE (DEFAULT=NO LIMIT)
IOP25= 0  / 1=APPLY WEIGHT FACTOR AFTER IDW, 0=BEFORE

PAR1 = 75. / PRIMARY X-SEARCH DISTANCE
PAR2 = 75. / PRIMARY Y-SEARCH DISTANCE
PAR3 = 75. / PRIMARY Z-SEARCH DISTANCE
PAR4 = 50. / LIMITING SEARCH DISTANCE
PAR5 = 3 / INVERSE DISTANCE POWER (DEFAULT=2)
PAR7 = 50. / MAX DISTANCE TO CLOSEST POINT
PAR8 = 50. / MAX DISTANCE TO PROJECT SINGLE COMPOSITE
PAR31= 100. / OUTLIER CUTOFF TO CHANGE THE SEARCH
PAR32= 50. / MAX. 3D SEARCH DISTANCE AT PAR31

CMD = SEARCH 50. 50. 10. 0. 0. 75.

ITM1 = AUKR1 AUREJ CALC INVWT
ITM2 = AUNN1 AUREJ CALC POLYG
ITM3 = MINZN BLOCK LIMIT
ITM4 = TRNCH BLOCK LIMIT
ITM5 = MINZN RANGE 10 10
ITM6 = LNGTH RANGE 2.5 5.
ITM7 = DCODE RANGE 301. 516.
ITM8 = DIST1 BLOCK CALC RINGS
ITM9 = NCMP1 BLOCK CALC #COMP
ITM10 = NHOL1 BLOCK CALC #COMP
ITM11 = LNGTH FACTR
CMD = BLOCK LIMIT MINZN 10
CMD = BLOCK LIMIT TRNCH 1 2
CMD = ELEV ZMID
END
0 0 0 0 0 0
```

```
: B A T C H   F I L E   -->   EST_01.BAT   (UNADJUSTED GRADES - NO METAL REMOVED)

m624v1 -f run624.a01  : Krige MINZN 1 using at least 1 hole from 301-516 data with steep ellipse
m624v1 -f run624.a02  : Krige MINZN 1 using at least 2 holes from 301-516 data with steep ellipse
m624v1 -f run624.a03  : Krige MINZN 1 near trenches using 301-716 data with flat ellipse

m624v1 -f run624.a04  : Krige MINZN 2 using at least 1 hole from 301-516 data with steep ellipse
m624v1 -f run624.a05  : Krige MINZN 2 using at least 2 holes from 301-516 data with steep ellipse
m624v1 -f run624.a06  : Krige MINZN 2 near trenches using 301-716 data with flat ellipse

m624v1 -f run624.a07  : Krige MINZN 3 using at least 1 hole from 301-516 data with steep ellipse
m624v1 -f run624.a08  : Krige MINZN 3 using at least 2 holes from 301-516 data with steep ellipse
m624v1 -f run624.a09  : Krige MINZN 3 near trenches using 301-716 data with flat ellipse

m620v1 -f run620.a01  : ID3 MINZN 10 using at least 1 hole from 301-516 data with steep ellipse
m620v1 -f run620.a02  : ID3 MINZN 10 using at least 2 holes from 301-516 data with steep ellipse
m620v1 -f run620.a03  : ID3 MINZN 10 using at least 1 holes from 301-516 data with flat ellipse

: B A T C H   F I L E   -->   IND99.BAT


m601v1 -f run601.ind  : Set INAU1, AULO, AUHI = -1
m508rp -f run508.in0  : Set INAU1 = 0 for all MINZN 99 composites
m508rp -f run508.in1  : Set INAU1 = 1 if AUAJ1 .GE. 0.40 for all MINZN 99 composites
m624v1 -f run624.in1  : Krige INAU1 for MINZN 99 using DCODE 301 - 516
m624v1 -f run624.in2  : Krige INAU1 for MINZN 99 using DCODE 301 - 716 for "trench blocks"
m612rp -f run612.fl1  : Set IFLAG = 1 if INAU1 >= 0.00
m612rp -f run612.fl2  : Set IFLAG = 2 if INAU1 >= 0.50
m617v1 -f run617.ifl  : Backtag composites with IFLAG
m624v1 -f run624.lg1  : Krige AULO for MINZN 99 using DCODE 301 - 516 (IFLAG 1 to 2)
m624v1 -f run624.lg2  : Krige AULO for MINZN 99 using DCODE 301 - 716 for "trench blocks" (IFLAG 1 to 2)
m624v1 -f run624.hg1  : Krige AUHI for MINZN 99 using DCODE 301 - 516 (IFLAG 1 to 2)
m624v1 -f run624.hg2  : Krige AUHI for MINZN 99 using DCODE 301 - 716 for "trench blocks" (IFLAG 1 to 2)
m620v1 -f run620.n01  : NN grade for Zone 99 using DCODE 301 - 516
m620v1 -f run620.n02  : NN grade for Zone 99 using DCODE 301 - 716 for "trench blocks"
                      :
m603v1 -f run603.ind
```

```
awk -f ind01.awk blkind.txt > dat610.i01
m610v2 -f run610.i01

:  B A T C H   F I L E   -->   EST_02.BAT   (UNADJUSTED GRADES - METAL REMOVED)

m624v1 -f run624.b01  : Krige MINZN 1 using at least 1 hole from 301-516 data
with steep ellipse
m624v1 -f run624.b02  : Krige MINZN 1 using at least 2 holes from 301-516 data
with steep ellipse
m624v1 -f run624.b03  : Krige MINZN 1 near trenches using 301-716 data with
flat ellipse

m624v1 -f run624.b04  : Krige MINZN 2 using at least 1 hole from 301-516 data
with steep ellipse
m624v1 -f run624.b05  : Krige MINZN 2 using at least 2 holes from 301-516 data
with steep ellipse
m624v1 -f run624.b06  : Krige MINZN 2 near trenches using 301-716 data with
flat ellipse

m624v1 -f run624.b07  : Krige MINZN 3 using at least 1 hole from 301-516 data
with steep ellipse
m624v1 -f run624.b08  : Krige MINZN 3 using at least 2 holes from 301-516 data
with steep ellipse
m624v1 -f run624.b09  : Krige MINZN 3 near trenches using 301-716 data with
flat ellipse

m620v1 -f run620.b01  : ID3 MINZN 10 using at least 1 hole from 301-516 data
with steep ellipse
m620v1 -f run620.b02  : ID3 MINZN 10 using at least 2 holes from 301-516 data
with steep ellipse
m620v1 -f run620.b03  : ID3 MINZN 10 using at least 1 holes from 301-516 data
with flat ellipse

:  B A T C H   F I L E   -->   IND99.BAT


m601v1 -f run601.ind  : Set INAU1, AULO, AUHI = -1
m508rp -f run508.in0  : Set INAU1 = 0 for all MINZN 99 composites
m508rp -f run508.in1  : Set INAU1 = 1 if AUAJ1 .GE. 0.40 for all MINZN 99
composites
m624v1 -f run624.in1  : Krige INAU1 for MINZN 99 using DCODE 301 - 516
m624v1 -f run624.in2  : Krige INAU1 for MINZN 99 using DCODE 301 - 716 for
"trench blocks"
m612rp -f run612.fl1  : Set IFLAG = 1 if INAU1 >= 0.00
m612rp -f run612.fl2  : Set IFLAG = 2 if INAU1 >= 0.50
m617v1 -f run617.ifl  : Backtag composites with IFLAG
m624v1 -f run624.lg1  : Krige AULO for MINZN 99 using DCODE 301 - 516 (IFLAG 1
to 2)
m624v1 -f run624.lg2  : Krige AULO for MINZN 99 using DCODE 301 - 716 for
"trench blocks" (IFLAG 1 to 2)
m624v1 -f run624.hg1  : Krige AUHI for MINZN 99 using DCODE 301 - 516 (IFLAG 1
to 2)
m624v1 -f run624.hg2  : Krige AUHI for MINZN 99 using DCODE 301 - 716 for
"trench blocks" (IFLAG 1 to 2)
m620v1 -f run620.n01  : NN grade for Zone 99 using DCODE 301 - 516
m620v1 -f run620.n02  : NN grade for Zone 99 using DCODE 301 - 716 for "trench
blocks"
```

```
                      :

m603v1 -f run603.ind
awk -f ind02.awk blkind.txt > dat610.i02
m610v2 -f run610.i02


:  B A T C H   F I L E   -->   EST_03.BAT   (ADJUSTED GRADES - NO METAL
REMOVED)

m624v1 -f run624.c01  : Krige MINZN 1 using at least 1 hole from 301-516 data
with steep ellipse
m624v1 -f run624.c02  : Krige MINZN 1 using at least 2 holes from 301-516 data
with steep ellipse
m624v1 -f run624.c03  : Krige MINZN 1 near trenches using 301-716 data with
flat ellipse

m624v1 -f run624.c04  : Krige MINZN 2 using at least 1 hole from 301-516 data
with steep ellipse
m624v1 -f run624.c05  : Krige MINZN 2 using at least 2 holes from 301-516 data
with steep ellipse
m624v1 -f run624.c06  : Krige MINZN 2 near trenches using 301-716 data with
flat ellipse

m624v1 -f run624.c07  : Krige MINZN 3 using at least 1 hole from 301-516 data
with steep ellipse
m624v1 -f run624.c08  : Krige MINZN 3 using at least 2 holes from 301-516 data
with steep ellipse
m624v1 -f run624.c09  : Krige MINZN 3 near trenches using 301-716 data with
flat ellipse

m620v1 -f run620.c01  : ID3 MINZN 10 using at least 1 hole from 301-516 data
with steep ellipse
m620v1 -f run620.c02  : ID3 MINZN 10 using at least 2 holes from 301-516 data
with steep ellipse
m620v1 -f run620.c03  : ID3 MINZN 10 using at least 1 holes from 301-516 data
with flat ellipse

:  B A T C H   F I L E   -->   IND99.BAT


m601v1 -f run601.ind  : Set INAU1, AULO, AUHI = -1
m508rp -f run508.in0  : Set INAU1 = 0 for all MINZN 99 composites
m508rp -f run508.in1  : Set INAU1 = 1 if AUAJ1 .GE. 0.40 for all MINZN 99
composites
m624v1 -f run624.in1  : Krige INAU1 for MINZN 99 using DCODE 301 - 516
m624v1 -f run624.in2  : Krige INAU1 for MINZN 99 using DCODE 301 - 716 for
"trench blocks"
m612rp -f run612.fl1  : Set IFLAG = 1 if INAU1 >= 0.00
m612rp -f run612.fl2  : Set IFLAG = 2 if INAU1 >= 0.50
m617v1 -f run617.ifl  : Backtag composites with IFLAG
m624v1 -f run624.lg1  : Krige AULO for MINZN 99 using DCODE 301 - 516 (IFLAG 1
to 2)
m624v1 -f run624.lg2  : Krige AULO for MINZN 99 using DCODE 301 - 716 for
"trench blocks" (IFLAG 1 to 2)
m624v1 -f run624.hg1  : Krige AUHI for MINZN 99 using DCODE 301 - 516 (IFLAG 1
to 2)
```

```
m624v1 -f run624.hg2  : Krige AUHI for MINZN 99 using DCODE 301 - 716 for
"trench blocks" (IFLAG 1 to 2)
m620v1 -f run620.n01  : NN grade for Zone 99 using DCODE 301 - 516
m620v1 -f run620.n02  : NN grade for Zone 99 using DCODE 301 - 716 for "trench
blocks"
                      :

m603v1 -f run603.ind
awk -f ind03.awk blkind.txt > dat610.i03
m610v2 -f run610.i03


:  B A T C H   F I L E   -->   EST_04.BAT   (ADJUSTED GRADES - METAL REMOVED)

m624v1 -f run624.d01  : Krige MINZN 1 using at least 1 hole from 301-516 data
with steep ellipse
m624v1 -f run624.d02  : Krige MINZN 1 using at least 2 holes from 301-516 data
with steep ellipse
m624v1 -f run624.d03  : Krige MINZN 1 near trenches using 301-716 data with
flat ellipse

m624v1 -f run624.d04  : Krige MINZN 2 using at least 1 hole from 301-516 data
with steep ellipse
m624v1 -f run624.d05  : Krige MINZN 2 using at least 2 holes from 301-516 data
with steep ellipse
m624v1 -f run624.d06  : Krige MINZN 2 near trenches using 301-716 data with
flat ellipse

m624v1 -f run624.d07  : Krige MINZN 3 using at least 1 hole from 301-516 data
with steep ellipse
m624v1 -f run624.d08  : Krige MINZN 3 using at least 2 holes from 301-516 data
with steep ellipse
m624v1 -f run624.d09  : Krige MINZN 3 near trenches using 301-716 data with
flat ellipse

m620v1 -f run620.d01  : ID3 MINZN 10 using at least 1 hole from 301-516 data
with steep ellipse
m620v1 -f run620.d02  : ID3 MINZN 10 using at least 2 holes from 301-516 data
with steep ellipse
m620v1 -f run620.d03  : ID3 MINZN 10 using at least 1 holes from 301-516 data
with flat ellipse

:  B A T C H   F I L E   -->   IND99.BAT


m601v1 -f run601.ind  : Set INAU1, AULO, AUHI = -1
m508rp -f run508.in0  : Set INAU1 = 0 for all MINZN 99 composites
m508rp -f run508.in1  : Set INAU1 = 1 if AUAJ1 .GE. 0.40 for all MINZN 99
composites
m624v1 -f run624.in1  : Krige INAU1 for MINZN 99 using DCODE 301 - 516
m624v1 -f run624.in2  : Krige INAU1 for MINZN 99 using DCODE 301 - 716 for
"trench blocks"
m612rp -f run612.fl1  : Set IFLAG = 1 if INAU1 >= 0.00
m612rp -f run612.fl2  : Set IFLAG = 2 if INAU1 >= 0.50
m617v1 -f run617.ifl  : Backtag composites with IFLAG
m624v1 -f run624.lg1  : Krige AULO for MINZN 99 using DCODE 301 - 516 (IFLAG 1
to 2)
```

```
m624v1 -f run624.lg2  : Krige AULO for MINZN 99 using DCODE 301 - 716 for
"trench blocks" (IFLAG 1 to 2)
m624v1 -f run624.hg1  : Krige AUHI for MINZN 99 using DCODE 301 - 516 (IFLAG 1
to 2)
m624v1 -f run624.hg2  : Krige AUHI for MINZN 99 using DCODE 301 - 716 for
"trench blocks" (IFLAG 1 to 2)
m620v1 -f run620.n01  : NN grade for Zone 99 using DCODE 301 - 516
m620v1 -f run620.n02  : NN grade for Zone 99 using DCODE 301 - 716 for "trench
blocks"
                      :

m603v1 -f run603.ind
awk -f ind04.awk blkind.txt > dat610.i04
m610v2 -f run610.i04


:  B A T C H   F I L E   -->   EST_05.BAT   (UPSIDE GRADES - NO METAL REMOVED)

m624v1 -f run624.e01  : Krige MINZN 1 using at least 1 hole from 301-516 data
with steep ellipse
m624v1 -f run624.e02  : Krige MINZN 1 using at least 2 holes from 301-516 data
with steep ellipse
m624v1 -f run624.e03  : Krige MINZN 1 near trenches using 301-716 data with
flat ellipse

m624v1 -f run624.e04  : Krige MINZN 2 using at least 1 hole from 301-516 data
with steep ellipse
m624v1 -f run624.e05  : Krige MINZN 2 using at least 2 holes from 301-516 data
with steep ellipse
m624v1 -f run624.e06  : Krige MINZN 2 near trenches using 301-716 data with
flat ellipse

m624v1 -f run624.e07  : Krige MINZN 3 using at least 1 hole from 301-516 data
with steep ellipse
m624v1 -f run624.e08  : Krige MINZN 3 using at least 2 holes from 301-516 data
with steep ellipse
m624v1 -f run624.e09  : Krige MINZN 3 near trenches using 301-716 data with
flat ellipse

m620v1 -f run620.e01  : ID3 MINZN 10 using at least 1 hole from 301-516 data
with steep ellipse
m620v1 -f run620.e02  : ID3 MINZN 10 using at least 2 holes from 301-516 data
with steep ellipse
m620v1 -f run620.e03  : ID3 MINZN 10 using at least 1 holes from 301-516 data
with flat ellipse

:  B A T C H   F I L E   -->   IND99.BAT


m601v1 -f run601.ind  : Set INAU1, AULO, AUHI = -1
m508rp -f run508.in0  : Set INAU1 = 0 for all MINZN 99 composites
m508rp -f run508.in1  : Set INAU1 = 1 if AUAJ1 .GE. 0.40 for all MINZN 99
composites
m624v1 -f run624.in1  : Krige INAU1 for MINZN 99 using DCODE 301 - 516
m624v1 -f run624.in2  : Krige INAU1 for MINZN 99 using DCODE 301 - 716 for
"trench blocks"
m612rp -f run612.fl1  : Set IFLAG = 1 if INAU1 >= 0.00
```

```
m612rp -f run612.fl2  : Set IFLAG = 2 if INAU1 >= 0.50
m617v1 -f run617.ifl  : Backtag composites with IFLAG
m624v1 -f run624.lg1  : Krige AULO for MINZN 99 using DCODE 301 - 516 (IFLAG 1
to 2)
m624v1 -f run624.lg2  : Krige AULO for MINZN 99 using DCODE 301 - 716 for
"trench blocks" (IFLAG 1 to 2)
m624v1 -f run624.hg1  : Krige AUHI for MINZN 99 using DCODE 301 - 516 (IFLAG 1
to 2)
m624v1 -f run624.hg2  : Krige AUHI for MINZN 99 using DCODE 301 - 716 for
"trench blocks" (IFLAG 1 to 2)
m620v1 -f run620.n01  : NN grade for Zone 99 using DCODE 301 - 516
m620v1 -f run620.n02  : NN grade for Zone 99 using DCODE 301 - 716 for "trench
blocks"
                      :

m603v1 -f run603.ind
awk -f ind05.awk blkind.txt > dat610.i05
m610v2 -f run610.i05


:  B A T C H   F I L E   -->   EST_06.BAT   (UPSIDE GRADES - METAL REMOVED)

m624v1 -f run624.f01  : Krige MINZN 1 using at least 1 hole from 301-516 data
with steep ellipse
m624v1 -f run624.f02  : Krige MINZN 1 using at least 2 holes from 301-516 data
with steep ellipse
m624v1 -f run624.f03  : Krige MINZN 1 near trenches using 301-716 data with
flat ellipse

m624v1 -f run624.f04  : Krige MINZN 2 using at least 1 hole from 301-516 data
with steep ellipse
m624v1 -f run624.f05  : Krige MINZN 2 using at least 2 holes from 301-516 data
with steep ellipse
m624v1 -f run624.f06  : Krige MINZN 2 near trenches using 301-716 data with
flat ellipse

m624v1 -f run624.f07  : Krige MINZN 3 using at least 1 hole from 301-516 data
with steep ellipse
m624v1 -f run624.f08  : Krige MINZN 3 using at least 2 holes from 301-516 data
with steep ellipse
m624v1 -f run624.f09  : Krige MINZN 3 near trenches using 301-716 data with
flat ellipse

m620v1 -f run620.f01  : ID3 MINZN 10 using at least 1 hole from 301-516 data
with steep ellipse
m620v1 -f run620.f02  : ID3 MINZN 10 using at least 2 holes from 301-516 data
with steep ellipse
m620v1 -f run620.f03  : ID3 MINZN 10 using at least 1 holes from 301-516 data
with flat ellipse

:  B A T C H   F I L E   -->   IND99.BAT


m601v1 -f run601.ind  : Set INAU1, AULO, AUHI = -1
m508rp -f run508.in0  : Set INAU1 = 0 for all MINZN 99 composites
m508rp -f run508.in1  : Set INAU1 = 1 if AUAJ1 .GE. 0.40 for all MINZN 99
composites
```

```
m624v1 -f run624.in1  : Krige INAU1 for MINZN 99 using DCODE 301 - 516
m624v1 -f run624.in2  : Krige INAU1 for MINZN 99 using DCODE 301 - 716 for
"trench blocks"
m612rp -f run612.fl1  : Set IFLAG = 1 if INAU1 >= 0.00
m612rp -f run612.fl2  : Set IFLAG = 2 if INAU1 >= 0.50
m617v1 -f run617.ifl  : Backtag composites with IFLAG
m624v1 -f run624.lg1  : Krige AULO for MINZN 99 using DCODE 301 - 516 (IFLAG 1
to 2)
m624v1 -f run624.lg2  : Krige AULO for MINZN 99 using DCODE 301 - 716 for
"trench blocks" (IFLAG 1 to 2)
m624v1 -f run624.hg1  : Krige AUHI for MINZN 99 using DCODE 301 - 516 (IFLAG 1
to 2)
m624v1 -f run624.hg2  : Krige AUHI for MINZN 99 using DCODE 301 - 716 for
"trench blocks" (IFLAG 1 to 2)
m620v1 -f run620.n01  : NN grade for Zone 99 using DCODE 301 - 516
m620v1 -f run620.n02  : NN grade for Zone 99 using DCODE 301 - 716 for "trench
blocks"
                      :

m603v1 -f run603.ind
awk -f ind06.awk blkind.txt > dat610.i06
m610v2 -f run610.i06

mtres -f run708.m01
mtres -f run708.m02
mtres -f run708.m03
mtres -f run708.m04
mtres -f run708.m05
mtres -f run708.m06
```

```
MEDS-624V1  10=RKCK10.DAT  9=RKCK09.DAT  15=RKCK15.DAT;
MEDS-624V1   3=RPT624.F09  30=
** KRIGING OF 3-D BLOCK VALUES FOR AUKR6 **

RUN = OMIT

USR = MJL  /  MON DEC 6, 2004 9:31:11 AM US MOUNTAIN STANDARD TIME

IOP3 = 1. / 1=3-D SPHERICAL SEARCH; 0=2-D SEARCH
IOP4 = 0 / 0=NO GEOLOGIC MATCHING; 1=MATCH ONE ITEM
IOP6 = 0 / 0=USE TRUE DIST.; 1=USE ANISOTROPIC DIST.
IOP7 = 2 / MIN # OF COMPS FOR INTERP
IOP11= 00 / ROW # FOR EXTENDED OUTPUT
IOP12= 0 / 0=ALL; 1=OCTANT; 2=QUADRANT SEARCH; 3=SPLIT OCTANT;
COM          4=SPLIT QUADRANT.
COM          NOTE: NEGATIVE#=USE ROTATED SEARCH.  BY DEFAULT,
COM          OCTANTS & QUADRANTS ARE DEFINED USING THE PROJECT'S AXES.
IOP16= 8 / MAX.# OF COMPOSITES FOR INTERPOLATING A BLOCK
IOP19= 2 / MAX.# OF COMPOSITES PER HOLE (DEFAULT=NO LIMIT)
IOP20= 0 / 0=STORE VARIANCE; 1=STD DEV; 2=REL. VARIANCE

PAR1 = 15. / PRIMARY X-SEARCH DISTANCE
PAR2 = 15. / PRIMARY Y-SEARCH DISTANCE
PAR3 = 2.5 / PRIMARY Z-SEARCH DISTANCE
PAR4 = 15. / LIMITING SEARCH DISTANCE
PAR7 = 15. / MAX DISTANCE TO CLOSEST POINT
PAR8 = 15. / MAX DISTANCE TO PROJECT SINGLE COMPOSITE
PAR27= 2 4 1 / BLOCK DISCRETIZATION IN X,Y,Z
PAR31= 10   / OUTLIER CUTOFF TO CHANGE THE SEARCH
PAR32= 16.5 / MAX. 3D SEARCH DISTANCE AT PAR31

IOP17 = 0   /0=ORDINARY KRIGING, 5=SIMPLE
PAR30 = 0.   /MEAN GRADE OF THE AREA TO BE SIMPLE KRIGED

CMD = SEARCH 15. 15. 2.5 0. 0. 0.
CMD = NUG 0.478
CMD = EXP 0.522 41.5 13.9 25.9 0. 0. 0.

ITM1 = AUKR6 AUAJ2 CALC KRIGE
ITM2 = AUNN6 AUAJ2 CALC POLYG
ITM3 = MINZN BLOCK LIMIT
ITM4 = TRNCH BLOCK LIMIT
ITM5 = LNGTH RANGE 2.5 5.
ITM6 = DCODE RANGE 301. 716.
ITM7 = DIST6 BLOCK CALC RINGS
ITM8 = NCMP6 BLOCK CALC #COMP
ITM9 = NHOL6 BLOCK CALC #COMP
ITM10 = MINZN RANGE 3. 3.
ITM11 = LNGTH FACTR
CMD = BLOCK LIMIT MINZN 3
CMD = BLOCK LIMIT TRNCH 1 1
CMD = ELEV ZMID

I-O = 0 / DEBUG LEVEL
END
0 0 0 0 0 0
```

```
:  B A T C H   F I L E   -->   EST_01.BAT   (UNADJUSTED GRADES - NO METAL REMOVED)

m624v1 -f run624.a01  : Krige MINZN 1 using at least 1 hole from 301-516 data with steep ellipse
m624v1 -f run624.a02  : Krige MINZN 1 using at least 2 holes from 301-516 data with steep ellipse
m624v1 -f run624.a03  : Krige MINZN 1 near trenches using 301-716 data with flat ellipse

m624v1 -f run624.a04  : Krige MINZN 2 using at least 1 hole from 301-516 data with steep ellipse
m624v1 -f run624.a05  : Krige MINZN 2 using at least 2 holes from 301-516 data with steep ellipse
m624v1 -f run624.a06  : Krige MINZN 2 near trenches using 301-716 data with flat ellipse

m624v1 -f run624.a07  : Krige MINZN 3 using at least 1 hole from 301-516 data with steep ellipse
m624v1 -f run624.a08  : Krige MINZN 3 using at least 2 holes from 301-516 data with steep ellipse
m624v1 -f run624.a09  : Krige MINZN 3 near trenches using 301-716 data with flat ellipse

m620v1 -f run620.a01  : ID3 MINZN 10 using at least 1 hole from 301-516 data with steep ellipse
m620v1 -f run620.a02  : ID3 MINZN 10 using at least 2 holes from 301-516 data with steep ellipse
m620v1 -f run620.a03  : ID3 MINZN 10 using at least 1 holes from 301-516 data with flat ellipse

:  B A T C H   F I L E   -->   IND99.BAT


m601v1 -f run601.ind  : Set INAU1, AULO, AUHI = -1
m508rp -f run508.in0  : Set INAU1 = 0 for all MINZN 99 composites
m508rp -f run508.in1  : Set INAU1 = 1 if AUAJ1 .GE. 0.40 for all MINZN 99 composites
m624v1 -f run624.in1  : Krige INAU1 for MINZN 99 using DCODE 301 - 516
m624v1 -f run624.in2  : Krige INAU1 for MINZN 99 using DCODE 301 - 716 for "trench blocks"
m612rp -f run612.fl1  : Set IFLAG = 1 if INAU1 >= 0.00
m612rp -f run612.fl2  : Set IFLAG = 2 if INAU1 >= 0.50
m617v1 -f run617.ifl  : Backtag composites with IFLAG
m624v1 -f run624.lg1  : Krige AULO for MINZN 99 using DCODE 301 - 516 (IFLAG 1 to 2)
m624v1 -f run624.lg2  : Krige AULO for MINZN 99 using DCODE 301 - 716 for "trench blocks" (IFLAG 1 to 2)
m624v1 -f run624.hg1  : Krige AUHI for MINZN 99 using DCODE 301 - 516 (IFLAG 1 to 2)
m624v1 -f run624.hg2  : Krige AUHI for MINZN 99 using DCODE 301 - 716 for "trench blocks" (IFLAG 1 to 2)
m620v1 -f run620.n01  : NN grade for Zone 99 using DCODE 301 - 516
m620v1 -f run620.n02  : NN grade for Zone 99 using DCODE 301 - 716 for "trench blocks"
                      :
m603v1 -f run603.ind
```

```
awk -f ind01.awk blkind.txt > dat610.i01
m610v2 -f run610.i01

:  B A T C H   F I L E   -->   EST_02.BAT   (UNADJUSTED GRADES - METAL REMOVED)

m624v1 -f run624.b01  : Krige MINZN 1 using at least 1 hole from 301-516 data
with steep ellipse
m624v1 -f run624.b02  : Krige MINZN 1 using at least 2 holes from 301-516 data
with steep ellipse
m624v1 -f run624.b03  : Krige MINZN 1 near trenches using 301-716 data with
flat ellipse

m624v1 -f run624.b04  : Krige MINZN 2 using at least 1 hole from 301-516 data
with steep ellipse
m624v1 -f run624.b05  : Krige MINZN 2 using at least 2 holes from 301-516 data
with steep ellipse
m624v1 -f run624.b06  : Krige MINZN 2 near trenches using 301-716 data with
flat ellipse

m624v1 -f run624.b07  : Krige MINZN 3 using at least 1 hole from 301-516 data
with steep ellipse
m624v1 -f run624.b08  : Krige MINZN 3 using at least 2 holes from 301-516 data
with steep ellipse
m624v1 -f run624.b09  : Krige MINZN 3 near trenches using 301-716 data with
flat ellipse

m620v1 -f run620.b01  : ID3 MINZN 10 using at least 1 hole from 301-516 data
with steep ellipse
m620v1 -f run620.b02  : ID3 MINZN 10 using at least 2 holes from 301-516 data
with steep ellipse
m620v1 -f run620.b03  : ID3 MINZN 10 using at least 1 holes from 301-516 data
with flat ellipse

:  B A T C H   F I L E   -->   IND99.BAT


m601v1 -f run601.ind  : Set INAU1, AULO, AUHI = -1
m508rp -f run508.in0  : Set INAU1 = 0 for all MINZN 99 composites
m508rp -f run508.in1  : Set INAU1 = 1 if AUAJ1 .GE. 0.40 for all MINZN 99
composites
m624v1 -f run624.in1  : Krige INAU1 for MINZN 99 using DCODE 301 - 516
m624v1 -f run624.in2  : Krige INAU1 for MINZN 99 using DCODE 301 - 716 for
"trench blocks"
m612rp -f run612.fl1  : Set IFLAG = 1 if INAU1 >= 0.00
m612rp -f run612.fl2  : Set IFLAG = 2 if INAU1 >= 0.50
m617v1 -f run617.ifl  : Backtag composites with IFLAG
m624v1 -f run624.lg1  : Krige AULO for MINZN 99 using DCODE 301 - 516 (IFLAG 1
to 2)
m624v1 -f run624.lg2  : Krige AULO for MINZN 99 using DCODE 301 - 716 for
"trench blocks" (IFLAG 1 to 2)
m624v1 -f run624.hg1  : Krige AUHI for MINZN 99 using DCODE 301 - 516 (IFLAG 1
to 2)
m624v1 -f run624.hg2  : Krige AUHI for MINZN 99 using DCODE 301 - 716 for
"trench blocks" (IFLAG 1 to 2)
m620v1 -f run620.n01  : NN grade for Zone 99 using DCODE 301 - 516
m620v1 -f run620.n02  : NN grade for Zone 99 using DCODE 301 - 716 for "trench
blocks"
```

```
                      :

m603v1 -f run603.ind
awk -f ind02.awk blkind.txt > dat610.i02
m610v2 -f run610.i02


:  B A T C H   F I L E   -->   EST_03.BAT   (ADJUSTED GRADES - NO METAL
REMOVED)

m624v1 -f run624.c01  : Krige MINZN 1 using at least 1 hole from 301-516 data
with steep ellipse
m624v1 -f run624.c02  : Krige MINZN 1 using at least 2 holes from 301-516 data
with steep ellipse
m624v1 -f run624.c03  : Krige MINZN 1 near trenches using 301-716 data with
flat ellipse

m624v1 -f run624.c04  : Krige MINZN 2 using at least 1 hole from 301-516 data
with steep ellipse
m624v1 -f run624.c05  : Krige MINZN 2 using at least 2 holes from 301-516 data
with steep ellipse
m624v1 -f run624.c06  : Krige MINZN 2 near trenches using 301-716 data with
flat ellipse

m624v1 -f run624.c07  : Krige MINZN 3 using at least 1 hole from 301-516 data
with steep ellipse
m624v1 -f run624.c08  : Krige MINZN 3 using at least 2 holes from 301-516 data
with steep ellipse
m624v1 -f run624.c09  : Krige MINZN 3 near trenches using 301-716 data with
flat ellipse

m620v1 -f run620.c01  : ID3 MINZN 10 using at least 1 hole from 301-516 data
with steep ellipse
m620v1 -f run620.c02  : ID3 MINZN 10 using at least 2 holes from 301-516 data
with steep ellipse
m620v1 -f run620.c03  : ID3 MINZN 10 using at least 1 holes from 301-516 data
with flat ellipse

:  B A T C H   F I L E   -->   IND99.BAT


m601v1 -f run601.ind  : Set INAU1, AULO, AUHI = -1
m508rp -f run508.in0  : Set INAU1 = 0 for all MINZN 99 composites
m508rp -f run508.in1  : Set INAU1 = 1 if AUAJ1 .GE. 0.40 for all MINZN 99
composites
m624v1 -f run624.in1  : Krige INAU1 for MINZN 99 using DCODE 301 - 516
m624v1 -f run624.in2  : Krige INAU1 for MINZN 99 using DCODE 301 - 716 for
"trench blocks"
m612rp -f run612.fl1  : Set IFLAG = 1 if INAU1 >= 0.00
m612rp -f run612.fl2  : Set IFLAG = 2 if INAU1 >= 0.50
m617v1 -f run617.ifl  : Backtag composites with IFLAG
m624v1 -f run624.lg1  : Krige AULO for MINZN 99 using DCODE 301 - 516 (IFLAG 1
to 2)
m624v1 -f run624.lg2  : Krige AULO for MINZN 99 using DCODE 301 - 716 for
"trench blocks" (IFLAG 1 to 2)
m624v1 -f run624.hg1  : Krige AUHI for MINZN 99 using DCODE 301 - 516 (IFLAG 1
to 2)
```

```
m624v1 -f run624.hg2  : Krige AUHI for MINZN 99 using DCODE 301 - 716 for
"trench blocks" (IFLAG 1 to 2)
m620v1 -f run620.n01  : NN grade for Zone 99 using DCODE 301 - 516
m620v1 -f run620.n02  : NN grade for Zone 99 using DCODE 301 - 716 for "trench
blocks"
                      :

m603v1 -f run603.ind
awk -f ind03.awk blkind.txt > dat610.i03
m610v2 -f run610.i03


:  B A T C H   F I L E   -->   EST_04.BAT   (ADJUSTED GRADES - METAL REMOVED)

m624v1 -f run624.d01  : Krige MINZN 1 using at least 1 hole from 301-516 data
with steep ellipse
m624v1 -f run624.d02  : Krige MINZN 1 using at least 2 holes from 301-516 data
with steep ellipse
m624v1 -f run624.d03  : Krige MINZN 1 near trenches using 301-716 data with
flat ellipse

m624v1 -f run624.d04  : Krige MINZN 2 using at least 1 hole from 301-516 data
with steep ellipse
m624v1 -f run624.d05  : Krige MINZN 2 using at least 2 holes from 301-516 data
with steep ellipse
m624v1 -f run624.d06  : Krige MINZN 2 near trenches using 301-716 data with
flat ellipse

m624v1 -f run624.d07  : Krige MINZN 3 using at least 1 hole from 301-516 data
with steep ellipse
m624v1 -f run624.d08  : Krige MINZN 3 using at least 2 holes from 301-516 data
with steep ellipse
m624v1 -f run624.d09  : Krige MINZN 3 near trenches using 301-716 data with
flat ellipse

m620v1 -f run620.d01  : ID3 MINZN 10 using at least 1 hole from 301-516 data
with steep ellipse
m620v1 -f run620.d02  : ID3 MINZN 10 using at least 2 holes from 301-516 data
with steep ellipse
m620v1 -f run620.d03  : ID3 MINZN 10 using at least 1 holes from 301-516 data
with flat ellipse

:  B A T C H   F I L E   -->   IND99.BAT


m601v1 -f run601.ind  : Set INAU1, AULO, AUHI = -1
m508rp -f run508.in0  : Set INAU1 = 0 for all MINZN 99 composites
m508rp -f run508.in1  : Set INAU1 = 1 if AUAJ1 .GE. 0.40 for all MINZN 99
composites
m624v1 -f run624.in1  : Krige INAU1 for MINZN 99 using DCODE 301 - 516
m624v1 -f run624.in2  : Krige INAU1 for MINZN 99 using DCODE 301 - 716 for
"trench blocks"
m612rp -f run612.fl1  : Set IFLAG = 1 if INAU1 >= 0.00
m612rp -f run612.fl2  : Set IFLAG = 2 if INAU1 >= 0.50
m617v1 -f run617.ifl  : Backtag composites with IFLAG
m624v1 -f run624.lg1  : Krige AULO for MINZN 99 using DCODE 301 - 516 (IFLAG 1
to 2)
```

```
m624v1 -f run624.lg2  : Krige AULO for MINZN 99 using DCODE 301 - 716 for
"trench blocks" (IFLAG 1 to 2)
m624v1 -f run624.hg1  : Krige AUHI for MINZN 99 using DCODE 301 - 516 (IFLAG 1
to 2)
m624v1 -f run624.hg2  : Krige AUHI for MINZN 99 using DCODE 301 - 716 for
"trench blocks" (IFLAG 1 to 2)
m620v1 -f run620.n01  : NN grade for Zone 99 using DCODE 301 - 516
m620v1 -f run620.n02  : NN grade for Zone 99 using DCODE 301 - 716 for "trench
blocks"
                      :

m603v1 -f run603.ind
awk -f ind04.awk blkind.txt > dat610.i04
m610v2 -f run610.i04


:  B A T C H   F I L E   -->   EST_05.BAT   (UPSIDE GRADES - NO METAL REMOVED)

m624v1 -f run624.e01  : Krige MINZN 1 using at least 1 hole from 301-516 data
with steep ellipse
m624v1 -f run624.e02  : Krige MINZN 1 using at least 2 holes from 301-516 data
with steep ellipse
m624v1 -f run624.e03  : Krige MINZN 1 near trenches using 301-716 data with
flat ellipse

m624v1 -f run624.e04  : Krige MINZN 2 using at least 1 hole from 301-516 data
with steep ellipse
m624v1 -f run624.e05  : Krige MINZN 2 using at least 2 holes from 301-516 data
with steep ellipse
m624v1 -f run624.e06  : Krige MINZN 2 near trenches using 301-716 data with
flat ellipse

m624v1 -f run624.e07  : Krige MINZN 3 using at least 1 hole from 301-516 data
with steep ellipse
m624v1 -f run624.e08  : Krige MINZN 3 using at least 2 holes from 301-516 data
with steep ellipse
m624v1 -f run624.e09  : Krige MINZN 3 near trenches using 301-716 data with
flat ellipse

m620v1 -f run620.e01  : ID3 MINZN 10 using at least 1 hole from 301-516 data
with steep ellipse
m620v1 -f run620.e02  : ID3 MINZN 10 using at least 2 holes from 301-516 data
with steep ellipse
m620v1 -f run620.e03  : ID3 MINZN 10 using at least 1 holes from 301-516 data
with flat ellipse

:  B A T C H   F I L E   -->   IND99.BAT


m601v1 -f run601.ind  : Set INAU1, AULO, AUHI = -1
m508rp -f run508.in0  : Set INAU1 = 0 for all MINZN 99 composites
m508rp -f run508.in1  : Set INAU1 = 1 if AUAJ1 .GE. 0.40 for all MINZN 99
composites
m624v1 -f run624.in1  : Krige INAU1 for MINZN 99 using DCODE 301 - 516
m624v1 -f run624.in2  : Krige INAU1 for MINZN 99 using DCODE 301 - 716 for
"trench blocks"
m612rp -f run612.fl1  : Set IFLAG = 1 if INAU1 >= 0.00
```

```
m612rp -f run612.fl2  : Set IFLAG = 2 if INAU1 >= 0.50
m617v1 -f run617.ifl  : Backtag composites with IFLAG
m624v1 -f run624.lg1  : Krige AULO for MINZN 99 using DCODE 301 - 516 (IFLAG 1
to 2)
m624v1 -f run624.lg2  : Krige AULO for MINZN 99 using DCODE 301 - 716 for
"trench blocks" (IFLAG 1 to 2)
m624v1 -f run624.hg1  : Krige AUHI for MINZN 99 using DCODE 301 - 516 (IFLAG 1
to 2)
m624v1 -f run624.hg2  : Krige AUHI for MINZN 99 using DCODE 301 - 716 for
"trench blocks" (IFLAG 1 to 2)
m620v1 -f run620.n01  : NN grade for Zone 99 using DCODE 301 - 516
m620v1 -f run620.n02  : NN grade for Zone 99 using DCODE 301 - 716 for "trench
blocks"
                      :

m603v1 -f run603.ind
awk -f ind05.awk blkind.txt > dat610.i05
m610v2 -f run610.i05


:  B A T C H   F I L E   -->   EST_06.BAT   (UPSIDE GRADES - METAL REMOVED)

m624v1 -f run624.f01  : Krige MINZN 1 using at least 1 hole from 301-516 data
with steep ellipse
m624v1 -f run624.f02  : Krige MINZN 1 using at least 2 holes from 301-516 data
with steep ellipse
m624v1 -f run624.f03  : Krige MINZN 1 near trenches using 301-716 data with
flat ellipse

m624v1 -f run624.f04  : Krige MINZN 2 using at least 1 hole from 301-516 data
with steep ellipse
m624v1 -f run624.f05  : Krige MINZN 2 using at least 2 holes from 301-516 data
with steep ellipse
m624v1 -f run624.f06  : Krige MINZN 2 near trenches using 301-716 data with
flat ellipse

m624v1 -f run624.f07  : Krige MINZN 3 using at least 1 hole from 301-516 data
with steep ellipse
m624v1 -f run624.f08  : Krige MINZN 3 using at least 2 holes from 301-516 data
with steep ellipse
m624v1 -f run624.f09  : Krige MINZN 3 near trenches using 301-716 data with
flat ellipse

m620v1 -f run620.f01  : ID3 MINZN 10 using at least 1 hole from 301-516 data
with steep ellipse
m620v1 -f run620.f02  : ID3 MINZN 10 using at least 2 holes from 301-516 data
with steep ellipse
m620v1 -f run620.f03  : ID3 MINZN 10 using at least 1 holes from 301-516 data
with flat ellipse

:  B A T C H   F I L E   -->   IND99.BAT


m601v1 -f run601.ind  : Set INAU1, AULO, AUHI = -1
m508rp -f run508.in0  : Set INAU1 = 0 for all MINZN 99 composites
m508rp -f run508.in1  : Set INAU1 = 1 if AUAJ1 .GE. 0.40 for all MINZN 99
composites
```

```
m624v1 -f run624.in1  : Krige INAU1 for MINZN 99 using DCODE 301 - 516
m624v1 -f run624.in2  : Krige INAU1 for MINZN 99 using DCODE 301 - 716 for
"trench blocks"
m612rp -f run612.fl1  : Set IFLAG = 1 if INAU1 >= 0.00
m612rp -f run612.fl2  : Set IFLAG = 2 if INAU1 >= 0.50
m617v1 -f run617.ifl  : Backtag composites with IFLAG
m624v1 -f run624.lg1  : Krige AULO for MINZN 99 using DCODE 301 - 516 (IFLAG 1
to 2)
m624v1 -f run624.lg2  : Krige AULO for MINZN 99 using DCODE 301 - 716 for
"trench blocks" (IFLAG 1 to 2)
m624v1 -f run624.hg1  : Krige AUHI for MINZN 99 using DCODE 301 - 516 (IFLAG 1
to 2)
m624v1 -f run624.hg2  : Krige AUHI for MINZN 99 using DCODE 301 - 716 for
"trench blocks" (IFLAG 1 to 2)
m620v1 -f run620.n01  : NN grade for Zone 99 using DCODE 301 - 516
m620v1 -f run620.n02  : NN grade for Zone 99 using DCODE 301 - 716 for "trench
blocks"
                      :

m603v1 -f run603.ind
awk -f ind06.awk blkind.txt > dat610.i06
m610v2 -f run610.i06

mtres -f run708.m01
mtres -f run708.m02
mtres -f run708.m03
mtres -f run708.m04
mtres -f run708.m05
mtres -f run708.m06
```

```
MEDS-620V1  10=RKCK10.DAT  9=RKCK09.DAT  15=RKCK15.DAT;
MEDS-620V1   3=RPT620.A01
** I D W INTERPOLATION OF 3-D BLOCK VALUES FOR AUKR1 **

RUN = OMIT

USR = MJL  /  MON DEC 6, 2004 1:54:45 PM US MOUNTAIN STANDARD TIME

IOP3 = 1. / 1=3-D SPHERICAL SEARCH; 0=2-D SEARCH
IOP4 = 0  / 0=NO GEOLOGIC MATCHING; 1=MATCH ONE ITEM
IOP6 = 0  / 0=USE TRUE DIST; 1=USE ANISOTROPIC DIST
IOP7 = 2  / MIN # OF COMPS FOR INTERP
IOP11= 00 / ROW # FOR EXTENDED OUTPUT
IOP12= 0  / 0=ALL, 1=OCTANT; 2=QUADRANT SEARCH; 3=SPLIT OCTANT
COM         4=SPLIT QUADRANT.
COM        NOTE: NEGATIVE #=USE ROTATED SEARCH
COM        (BY DEFAULT, OCTANTS & QUADRANTS ARE DEFINED USING
COM         THE PROJECT'S ORTHOGONAL AXES).
IOP16= 12 / MAX.# OF COMPOSITES FOR INTERPOLATING A BLOCK
IOP18= 0  / 0=STORE LOCAL ERROR AS VARIANCE; 1=STD DEV.
IOP19= 2  / MAX.# OF COMPOSITES PER HOLE (DEFAULT=NO LIMIT)
IOP25= 0  / 1=APPLY WEIGHT FACTOR AFTER IDW, 0=BEFORE

PAR1 = 75. / PRIMARY X-SEARCH DISTANCE
PAR2 = 75. / PRIMARY Y-SEARCH DISTANCE
PAR3 = 75. / PRIMARY Z-SEARCH DISTANCE
PAR4 = 50. / LIMITING SEARCH DISTANCE
PAR5 = 3 / INVERSE DISTANCE POWER (DEFAULT=2)
PAR7 = 50. / MAX DISTANCE TO CLOSEST POINT
PAR8 = 50. / MAX DISTANCE TO PROJECT SINGLE COMPOSITE
PAR31= 100. / OUTLIER CUTOFF TO CHANGE THE SEARCH
PAR32= 50. / MAX. 3D SEARCH DISTANCE AT PAR31

CMD = SEARCH 50. 50. 10. 0. 0. 75.

ITM1 = AUKR1 AUREJ CALC INVWT
ITM2 = AUNN1 AUREJ CALC POLYG
ITM3 = MINZN BLOCK LIMIT
ITM4 = TRNCH BLOCK LIMIT
ITM5 = MINZN RANGE 10 10
ITM6 = LNGTH RANGE 2.5 5.
ITM7 = DCODE RANGE 301. 516.
ITM8 = DIST1 BLOCK CALC RINGS
ITM9 = NCMP1 BLOCK CALC #COMP
ITM10 = NHOL1 BLOCK CALC #COMP
ITM11 = LNGTH FACTR
CMD = BLOCK LIMIT MINZN 10
CMD = BLOCK LIMIT TRNCH 1 2
CMD = ELEV ZMID
END
0 0 0 0 0 0
```

```
MEDS-620V1  10=RKCK10.DAT  9=RKCK09.DAT  15=RKCK15.DAT;
MEDS-620V1   3=RPT620.A02
** I D W INTERPOLATION OF 3-D BLOCK VALUES FOR AUKR1 **

RUN = OMIT

USR = MJL  /  MON DEC 6, 2004 1:54:45 PM US MOUNTAIN STANDARD TIME

IOP3 = 1. / 1=3-D SPHERICAL SEARCH; 0=2-D SEARCH
IOP4 = 1  / 0=NO GEOLOGIC MATCHING; 1=MATCH ONE ITEM
IOP6 = 0  / 0=USE TRUE DIST; 1=USE ANISOTROPIC DIST
IOP7 = 3  / MIN # OF COMPS FOR INTERP
IOP11= 00 / ROW # FOR EXTENDED OUTPUT
IOP12= 0  / 0=ALL, 1=OCTANT; 2=QUADRANT SEARCH; 3=SPLIT OCTANT
COM         4=SPLIT QUADRANT.
COM        NOTE: NEGATIVE #=USE ROTATED SEARCH
COM        (BY DEFAULT, OCTANTS & QUADRANTS ARE DEFINED USING
COM         THE PROJECT'S ORTHOGONAL AXES).
IOP16= 8  / MAX.# OF COMPOSITES FOR INTERPOLATING A BLOCK
IOP18= 0  / 0=STORE LOCAL ERROR AS VARIANCE; 1=STD DEV.
IOP19= 2  / MAX.# OF COMPOSITES PER HOLE (DEFAULT=NO LIMIT)
IOP25= 0  / 1=APPLY WEIGHT FACTOR AFTER IDW, 0=BEFORE

PAR1 = 75. / PRIMARY X-SEARCH DISTANCE
PAR2 = 75. / PRIMARY Y-SEARCH DISTANCE
PAR3 = 75. / PRIMARY Z-SEARCH DISTANCE
PAR4 = 50. / LIMITING SEARCH DISTANCE
PAR5 = 4.5 / INVERSE DISTANCE POWER (DEFAULT=2)
PAR7 = 50. / MAX DISTANCE TO CLOSEST POINT
PAR8 = 50. / MAX DISTANCE TO PROJECT SINGLE COMPOSITE
PAR31= 100. / OUTLIER CUTOFF TO CHANGE THE SEARCH
PAR32= 50. / MAX. 3D SEARCH DISTANCE AT PAR31

CMD = SEARCH 50. 50. 10. 0. 0. 75.

ITM1 = AUKR1 AUREJ CALC INVWT
ITM2 = AUNN1 AUREJ CALC POLYG
ITM3 = MINZN BLOCK LIMIT
ITM4 = TRNCH BLOCK LIMIT
ITM5 = MINZN MINZN MATCH MODEL
ITM6 = LNGTH RANGE 2.5 5.
ITM7 = DCODE RANGE 301. 516.
ITM8 = DIST1 BLOCK CALC RINGS
ITM9 = NCMP1 BLOCK CALC #COMP
ITM10 = NHOL1 BLOCK CALC #COMP
ITM11 = LNGTH FACTR
CMD = BLOCK LIMIT MINZN 10
CMD = BLOCK LIMIT TRNCH 1 2
CMD = ELEV ZMID
END
0 0 0 0 0 0
```

```
MEDS-620V1  10=RKCK10.DAT  9=RKCK09.DAT  15=RKCK15.DAT;
MEDS-620V1   3=RPT620.A03
** I D W INTERPOLATION OF 3-D BLOCK VALUES FOR AUKR1 **

RUN = OMIT

USR = MJL  /  MON DEC 6, 2004 1:54:45 PM US MOUNTAIN STANDARD TIME

IOP3 = 1. / 1=3-D SPHERICAL SEARCH; 0=2-D SEARCH
IOP4 = 0  / 0=NO GEOLOGIC MATCHING; 1=MATCH ONE ITEM
IOP6 = 0  / 0=USE TRUE DIST; 1=USE ANISOTROPIC DIST
IOP7 = 2  / MIN # OF COMPS FOR INTERP
IOP11= 00 / ROW # FOR EXTENDED OUTPUT
IOP12= 0  / 0=ALL, 1=OCTANT; 2=QUADRANT SEARCH; 3=SPLIT OCTANT
COM         4=SPLIT QUADRANT.
COM        NOTE: NEGATIVE #=USE ROTATED SEARCH
COM        (BY DEFAULT, OCTANTS & QUADRANTS ARE DEFINED USING
COM         THE PROJECT'S ORTHOGONAL AXES).
IOP16= 8  / MAX.# OF COMPOSITES FOR INTERPOLATING A BLOCK
IOP18= 0  / 0=STORE LOCAL ERROR AS VARIANCE; 1=STD DEV.
IOP19= 2  / MAX.# OF COMPOSITES PER HOLE (DEFAULT=NO LIMIT)
IOP25= 0  / 1=APPLY WEIGHT FACTOR AFTER IDW, 0=BEFORE

PAR1 = 15. / PRIMARY X-SEARCH DISTANCE
PAR2 = 15. / PRIMARY Y-SEARCH DISTANCE
PAR3 = 2.5 / PRIMARY Z-SEARCH DISTANCE
PAR4 = 15. / LIMITING SEARCH DISTANCE
PAR5 = 3   / INVERSE DISTANCE POWER (DEFAULT=2)
PAR7 = 15. / MAX DISTANCE TO CLOSEST POINT
PAR8 = 15. / MAX DISTANCE TO PROJECT SINGLE COMPOSITE
PAR31= 100. / OUTLIER CUTOFF TO CHANGE THE SEARCH
PAR32= 50. / MAX. 3D SEARCH DISTANCE AT PAR31

CMD = SEARCH 15. 15. 2.5. 0. 0. 0.

ITM1 = AUKR1 AUREJ CALC INVWT
ITM2 = AUNN1 AUREJ CALC POLYG
ITM3 = MINZN BLOCK LIMIT
ITM4 = TRNCH BLOCK LIMIT
ITM5 = MINZN RANGE 10 10
ITM6 = LNGTH RANGE 2.5 5.
ITM7 = DCODE RANGE 301. 716.
ITM8 = DIST1 BLOCK CALC RINGS
ITM9 = NCMP1 BLOCK CALC #COMP
ITM10 = NHOL1 BLOCK CALC #COMP
ITM11 = LNGTH FACTR
CMD = BLOCK LIMIT MINZN 10
CMD = BLOCK LIMIT TRNCH 1 1
CMD = ELEV ZMID
END
0 0 0 0 0 0
```

```
MEDS-620V1  10=RKCK10.DAT  9=RKCK09.DAT  15=RKCK15.DAT;
MEDS-620V1   3=RPT620.B01
** I D W INTERPOLATION OF 3-D BLOCK VALUES FOR AUKR2 **

RUN = OMIT

USR = MJL  /  MON DEC 6, 2004 1:54:45 PM US MOUNTAIN STANDARD TIME

IOP3 = 1. / 1=3-D SPHERICAL SEARCH; 0=2-D SEARCH
IOP4 = 0  / 0=NO GEOLOGIC MATCHING; 1=MATCH ONE ITEM
IOP6 = 0  / 0=USE TRUE DIST; 1=USE ANISOTROPIC DIST
IOP7 = 2  / MIN # OF COMPS FOR INTERP
IOP11= 00 / ROW # FOR EXTENDED OUTPUT
IOP12= 0  / 0=ALL, 1=OCTANT; 2=QUADRANT SEARCH; 3=SPLIT OCTANT
COM         4=SPLIT QUADRANT.
COM        NOTE: NEGATIVE #=USE ROTATED SEARCH
COM        (BY DEFAULT, OCTANTS & QUADRANTS ARE DEFINED USING
COM         THE PROJECT'S ORTHOGONAL AXES).
IOP16= 12 / MAX.# OF COMPOSITES FOR INTERPOLATING A BLOCK
IOP18= 0  / 0=STORE LOCAL ERROR AS VARIANCE; 1=STD DEV.
IOP19= 2  / MAX.# OF COMPOSITES PER HOLE (DEFAULT=NO LIMIT)
IOP25= 0  / 1=APPLY WEIGHT FACTOR AFTER IDW, 0=BEFORE

PAR1 = 75. / PRIMARY X-SEARCH DISTANCE
PAR2 = 75. / PRIMARY Y-SEARCH DISTANCE
PAR3 = 75. / PRIMARY Z-SEARCH DISTANCE
PAR4 = 50. / LIMITING SEARCH DISTANCE
PAR5 = 3 / INVERSE DISTANCE POWER (DEFAULT=2)
PAR7 = 50. / MAX DISTANCE TO CLOSEST POINT
PAR8 = 50. / MAX DISTANCE TO PROJECT SINGLE COMPOSITE
PAR31= 10.75 / OUTLIER CUTOFF TO CHANGE THE SEARCH
PAR32= 12.75 / MAX. 3D SEARCH DISTANCE AT PAR31

CMD = SEARCH 50. 50. 10. 0. 0. 75.

ITM1 = AUKR2 AUREJ CALC INVWT
ITM2 = AUNN2 AUREJ CALC POLYG
ITM3 = MINZN BLOCK LIMIT
ITM4 = TRNCH BLOCK LIMIT
ITM5 = MINZN RANGE 10 10
ITM6 = LNGTH RANGE 2.5 5.
ITM7 = DCODE RANGE 301. 516.
ITM8 = DIST2 BLOCK CALC RINGS
ITM9 = NCMP2 BLOCK CALC #COMP
ITM10 = NHOL2 BLOCK CALC #COMP
ITM11 = LNGTH FACTR
CMD = BLOCK LIMIT MINZN 10
CMD = BLOCK LIMIT TRNCH 1 2
CMD = ELEV ZMID
END
0 0 0 0 0 0
```

```
MEDS-620V1  10=rkck10.dat  9=rkck09.dat  15=rkck15.dat;
MEDS-620V1   3=rpt620.b02
** I D W interpolation of 3-D block values for AUKR2 **

RUN = OMIT

USR = MJL  /  Mon Dec 6, 2004 1:54:45 PM US Mountain Standard Time

IOP3 = 1. / 1=3-D spherical search; 0=2-D search
IOP4 = 1  / 0=No geologic matching; 1=Match one item
IOP6 = 0  / 0=Use true dist; 1=Use anisotropic dist
IOP7 = 3  / Min # of comps for interp
IOP11= 00 / Row # for extended output
IOP12= 0  / 0=All, 1=Octant; 2=Quadrant search; 3=Split Octant
COM         4=Split Quadrant.
COM        Note: Negative #=use rotated search
COM        (by DEFAULT, octants & quadrants are defined using
COM         the project's orthogonal axes).
IOP16= 8  / Max.# of composites for interpolating a block
IOP18= 0  / 0=Store local error as variance; 1=Std dev.
IOP19= 2  / Max.# of composites per hole (DEFAULT=NO LIMIT)
IOP25= 0  / 1=Apply weight factor AFTER IDW, 0=Before

PAR1 = 75. / Primary X-search distance
PAR2 = 75. / Primary Y-search distance
PAR3 = 75. / Primary Z-search distance
PAR4 = 50. / Limiting search distance
PAR5 = 4.5 / Inverse distance power (DEFAULT=2)
PAR7 = 50. / Max distance to closest point
PAR8 = 50. / Max distance to project single composite
PAR31= 10.75 / Outlier cutoff to change the search
PAR32= 12.75 / Max. 3D search distance at PAR31

CMD = SEARCH 50. 50. 10. 0. 0. 75.

ITM1 = AUKR2 AUREJ CALC INVWT
ITM2 = AUNN2 AUREJ CALC POLYG
ITM3 = MINZN Block limit
ITM4 = TRNCH Block limit
ITM5 = MINZN MINZN Match model
ITM6 = LNGTH RANGE 2.5 5.
ITM7 = DCODE RANGE 301. 516.
ITM8 = DIST2 Block calc rings
ITM9 = NCMP2 Block calc #comp
ITM10 = NHOL2 Block calc #comp
ITM11 = LNGTH FACTR
CMD = Block limit MINZN 10
CMD = Block limit TRNCH 1 2
CMD = ELEV ZMID
END
0 0 0 0 0 0
```

```
MEDS-620V1  10=RKCK10.DAT  9=RKCK09.DAT  15=RKCK15.DAT;
MEDS-620V1   3=RPT620.B03
** I D W INTERPOLATION OF 3-D BLOCK VALUES FOR AUKR2 **

RUN = OMIT

USR = MJL  /  MON DEC 6, 2004 1:54:45 PM US MOUNTAIN STANDARD TIME

IOP3 = 1. / 1=3-D SPHERICAL SEARCH; 0=2-D SEARCH
IOP4 = 0  / 0=NO GEOLOGIC MATCHING; 1=MATCH ONE ITEM
IOP6 = 0  / 0=USE TRUE DIST; 1=USE ANISOTROPIC DIST
IOP7 = 2  / MIN # OF COMPS FOR INTERP
IOP11= 00 / ROW # FOR EXTENDED OUTPUT
IOP12= 0  / 0=ALL, 1=OCTANT; 2=QUADRANT SEARCH; 3=SPLIT OCTANT
COM         4=SPLIT QUADRANT.
COM        NOTE: NEGATIVE #=USE ROTATED SEARCH
COM        (BY DEFAULT, OCTANTS & QUADRANTS ARE DEFINED USING
COM         THE PROJECT'S ORTHOGONAL AXES).
IOP16= 8  / MAX.# OF COMPOSITES FOR INTERPOLATING A BLOCK
IOP18= 0  / 0=STORE LOCAL ERROR AS VARIANCE; 1=STD DEV.
IOP19= 2  / MAX.# OF COMPOSITES PER HOLE (DEFAULT=NO LIMIT)
IOP25= 0  / 1=APPLY WEIGHT FACTOR AFTER IDW, 0=BEFORE

PAR1 = 15. / PRIMARY X-SEARCH DISTANCE
PAR2 = 15. / PRIMARY Y-SEARCH DISTANCE
PAR3 = 2.5 / PRIMARY Z-SEARCH DISTANCE
PAR4 = 15. / LIMITING SEARCH DISTANCE
PAR5 = 3   / INVERSE DISTANCE POWER (DEFAULT=2)
PAR7 = 15. / MAX DISTANCE TO CLOSEST POINT
PAR8 = 15. / MAX DISTANCE TO PROJECT SINGLE COMPOSITE
PAR31= 10.75 / OUTLIER CUTOFF TO CHANGE THE SEARCH
PAR32= 12.75 / MAX. 3D SEARCH DISTANCE AT PAR31

CMD = SEARCH 15. 15. 2.5. 0. 0. 0.

ITM1 = AUKR2 AUREJ CALC INVWT
ITM2 = AUNN2 AUREJ CALC POLYG
ITM3 = MINZN BLOCK LIMIT
ITM4 = TRNCH BLOCK LIMIT
ITM5 = MINZN RANGE 10 10
ITM6 = LNGTH RANGE 2.5 5.
ITM7 = DCODE RANGE 301. 716.
ITM8 = DIST2 BLOCK CALC RINGS
ITM9 = NCMP2 BLOCK CALC #COMP
ITM10 = NHOL2 BLOCK CALC #COMP
ITM11 = LNGTH FACTR
CMD = BLOCK LIMIT MINZN 10
CMD = BLOCK LIMIT TRNCH 1 1
CMD = ELEV ZMID
END
0 0 0 0 0 0
```

```
MEDS-620V1  10=RKCK10.DAT  9=RKCK09.DAT  15=RKCK15.DAT;
MEDS-620V1   3=RPT620.C01
** I D W INTERPOLATION OF 3-D BLOCK VALUES FOR AUKR3 **

RUN = OMIT

USR = MJL  /  MON DEC 6, 2004 1:54:45 PM US MOUNTAIN STANDARD TIME

IOP3 = 1. / 1=3-D SPHERICAL SEARCH; 0=2-D SEARCH
IOP4 = 0  / 0=NO GEOLOGIC MATCHING; 1=MATCH ONE ITEM
IOP6 = 0  / 0=USE TRUE DIST; 1=USE ANISOTROPIC DIST
IOP7 = 2  / MIN # OF COMPS FOR INTERP
IOP11= 00 / ROW # FOR EXTENDED OUTPUT
IOP12= 0  / 0=ALL, 1=OCTANT; 2=QUADRANT SEARCH; 3=SPLIT OCTANT
COM         4=SPLIT QUADRANT.
COM        NOTE: NEGATIVE #=USE ROTATED SEARCH
COM        (BY DEFAULT, OCTANTS & QUADRANTS ARE DEFINED USING
COM         THE PROJECT'S ORTHOGONAL AXES).
IOP16= 12 / MAX.# OF COMPOSITES FOR INTERPOLATING A BLOCK
IOP18= 0  / 0=STORE LOCAL ERROR AS VARIANCE; 1=STD DEV.
IOP19= 2  / MAX.# OF COMPOSITES PER HOLE (DEFAULT=NO LIMIT)
IOP25= 0  / 1=APPLY WEIGHT FACTOR AFTER IDW, 0=BEFORE

PAR1 = 75. / PRIMARY X-SEARCH DISTANCE
PAR2 = 75. / PRIMARY Y-SEARCH DISTANCE
PAR3 = 75. / PRIMARY Z-SEARCH DISTANCE
PAR4 = 50. / LIMITING SEARCH DISTANCE
PAR5 = 3 / INVERSE DISTANCE POWER (DEFAULT=2)
PAR7 = 50. / MAX DISTANCE TO CLOSEST POINT
PAR8 = 50. / MAX DISTANCE TO PROJECT SINGLE COMPOSITE
PAR31= 100. / OUTLIER CUTOFF TO CHANGE THE SEARCH
PAR32= 50. / MAX. 3D SEARCH DISTANCE AT PAR31

CMD = SEARCH 50. 50. 10. 0. 0. 75.

ITM1 = AUKR3 AUAJ1 CALC INVWT
ITM2 = AUNN3 AUAJ1 CALC POLYG
ITM3 = MINZN BLOCK LIMIT
ITM4 = TRNCH BLOCK LIMIT
ITM5 = MINZN RANGE 10 10
ITM6 = LNGTH RANGE 2.5 5.
ITM7 = DCODE RANGE 301. 516.
ITM8 = DIST3 BLOCK CALC RINGS
ITM9 = NCMP3 BLOCK CALC #COMP
ITM10 = NHOL3 BLOCK CALC #COMP
ITM11 = LNGTH FACTR
CMD = BLOCK LIMIT MINZN 10
CMD = BLOCK LIMIT TRNCH 1 2
CMD = ELEV ZMID
END
0 0 0 0 0 0
```

```
MEDS-620V1  10=RKCK10.DAT  9=RKCK09.DAT  15=RKCK15.DAT;
MEDS-620V1   3=RPT620.C02
** I D W INTERPOLATION OF 3-D BLOCK VALUES FOR AUKR3 **

RUN = OMIT

USR = MJL  /  MON DEC 6, 2004 1:54:45 PM US MOUNTAIN STANDARD TIME

IOP3 = 1. / 1=3-D SPHERICAL SEARCH; 0=2-D SEARCH
IOP4 = 1  / 0=NO GEOLOGIC MATCHING; 1=MATCH ONE ITEM
IOP6 = 0  / 0=USE TRUE DIST; 1=USE ANISOTROPIC DIST
IOP7 = 3  / MIN # OF COMPS FOR INTERP
IOP11= 00 / ROW # FOR EXTENDED OUTPUT
IOP12= 0  / 0=ALL, 1=OCTANT; 2=QUADRANT SEARCH; 3=SPLIT OCTANT
COM         4=SPLIT QUADRANT.
COM        NOTE: NEGATIVE #=USE ROTATED SEARCH
COM        (BY DEFAULT, OCTANTS & QUADRANTS ARE DEFINED USING
COM         THE PROJECT'S ORTHOGONAL AXES).
IOP16= 8  / MAX.# OF COMPOSITES FOR INTERPOLATING A BLOCK
IOP18= 0  / 0=STORE LOCAL ERROR AS VARIANCE; 1=STD DEV.
IOP19= 2  / MAX.# OF COMPOSITES PER HOLE (DEFAULT=NO LIMIT)
IOP25= 0  / 1=APPLY WEIGHT FACTOR AFTER IDW, 0=BEFORE

PAR1 = 75. / PRIMARY X-SEARCH DISTANCE
PAR2 = 75. / PRIMARY Y-SEARCH DISTANCE
PAR3 = 75. / PRIMARY Z-SEARCH DISTANCE
PAR4 = 50. / LIMITING SEARCH DISTANCE
PAR5 = 4.5 / INVERSE DISTANCE POWER (DEFAULT=2)
PAR7 = 50. / MAX DISTANCE TO CLOSEST POINT
PAR8 = 50. / MAX DISTANCE TO PROJECT SINGLE COMPOSITE
PAR31= 100. / OUTLIER CUTOFF TO CHANGE THE SEARCH
PAR32= 50. / MAX. 3D SEARCH DISTANCE AT PAR31

CMD = SEARCH 50. 50. 10. 0. 0. 75.

ITM1 = AUKR3 AUAJ1 CALC INVWT
ITM2 = AUNN3 AUAJ1 CALC POLYG
ITM3 = MINZN BLOCK LIMIT
ITM4 = TRNCH BLOCK LIMIT
ITM5 = MINZN MINZN MATCH MODEL
ITM6 = LNGTH RANGE 2.5 5.
ITM7 = DCODE RANGE 301. 516.
ITM8 = DIST3 BLOCK CALC RINGS
ITM9 = NCMP3 BLOCK CALC #COMP
ITM10 = NHOL3 BLOCK CALC #COMP
ITM11 = LNGTH FACTR
CMD = BLOCK LIMIT MINZN 10
CMD = BLOCK LIMIT TRNCH 1 2
CMD = ELEV ZMID
END
0 0 0 0 0 0
```

```
MEDS-620V1  10=RKCK10.DAT  9=RKCK09.DAT  15=RKCK15.DAT;
MEDS-620V1   3=RPT620.C03
** I D W INTERPOLATION OF 3-D BLOCK VALUES FOR AUKR3 **

RUN = OMIT

USR = MJL  /  MON DEC 6, 2004 1:54:45 PM US MOUNTAIN STANDARD TIME

IOP3 = 1. / 1=3-D SPHERICAL SEARCH; 0=2-D SEARCH
IOP4 = 0  / 0=NO GEOLOGIC MATCHING; 1=MATCH ONE ITEM
IOP6 = 0  / 0=USE TRUE DIST; 1=USE ANISOTROPIC DIST
IOP7 = 2  / MIN # OF COMPS FOR INTERP
IOP11= 00 / ROW # FOR EXTENDED OUTPUT
IOP12= 0  / 0=ALL, 1=OCTANT; 2=QUADRANT SEARCH; 3=SPLIT OCTANT
COM          4=SPLIT QUADRANT.
COM         NOTE: NEGATIVE #=USE ROTATED SEARCH
COM         (BY DEFAULT, OCTANTS & QUADRANTS ARE DEFINED USING
COM          THE PROJECT'S ORTHOGONAL AXES).
IOP16= 8  / MAX.# OF COMPOSITES FOR INTERPOLATING A BLOCK
IOP18= 0  / 0=STORE LOCAL ERROR AS VARIANCE; 1=STD DEV.
IOP19= 2  / MAX.# OF COMPOSITES PER HOLE (DEFAULT=NO LIMIT)
IOP25= 0  / 1=APPLY WEIGHT FACTOR AFTER IDW, 0=BEFORE

PAR1 = 15. / PRIMARY X-SEARCH DISTANCE
PAR2 = 15. / PRIMARY Y-SEARCH DISTANCE
PAR3 = 2.5 / PRIMARY Z-SEARCH DISTANCE
PAR4 = 15. / LIMITING SEARCH DISTANCE
PAR5 = 3   / INVERSE DISTANCE POWER (DEFAULT=2)
PAR7 = 15. / MAX DISTANCE TO CLOSEST POINT
PAR8 = 15. / MAX DISTANCE TO PROJECT SINGLE COMPOSITE
PAR31= 100. / OUTLIER CUTOFF TO CHANGE THE SEARCH
PAR32= 50. / MAX. 3D SEARCH DISTANCE AT PAR31

CMD = SEARCH 15. 15. 2.5. 0. 0. 0.

ITM1 = AUKR3 AUAJ1 CALC INVWT
ITM2 = AUNN3 AUAJ1 CALC POLYG
ITM3 = MINZN BLOCK LIMIT
ITM4 = TRNCH BLOCK LIMIT
ITM5 = MINZN RANGE 10 10
ITM6 = LNGTH RANGE 2.5 5.
ITM7 = DCODE RANGE 301. 716.
ITM8 = DIST3 BLOCK CALC RINGS
ITM9 = NCMP3 BLOCK CALC #COMP
ITM10 = NHOL3 BLOCK CALC #COMP
ITM11 = LNGTH FACTR
CMD = BLOCK LIMIT MINZN 10
CMD = BLOCK LIMIT TRNCH 1 1
CMD = ELEV ZMID
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=rkck10.dat  9=rkck09.dat  15=rkck15.dat;
MEDS-624V1   3=rpt624.a01  30=
** KRIGING of 3-D block values for aukr1 **

RUN = reset

USR = MJL  /  Mon Dec 6, 2004 9:30:00 AM US Mountain Standard Time

IOP3 = 1. / 1=3-D spherical search; 0=2-D search
IOP4 = 0 / 0=No geologic matching; 1=Match one item
IOP6 = 0 / 0=Use true dist.; 1=Use anisotropic dist.
IOP7 = 2 / Min # of comps for interp
IOP11= 00 / Row # for extended output
IOP12= 0 / 0=All; 1=Octant; 2=Quadrant search; 3=Split Octant;
COM         4=Split Quadrant.
COM         Note: Negative#=use rotated search.  By Default,
COM         octants & quadrants are defined using the project's axes.
IOP16= 6 / Max.# of composites for interpolating a block
IOP19= 2 / Max.# of composites per hole (DEFAULT=No limit)
IOP20= 0 / 0=Store variance; 1=STD DEV; 2=Rel. variance

PAR1 = 50. / Primary X-search distance
PAR2 = 50. / Primary Y-search distance
PAR3 = 50. / Primary Z-search distance
PAR4 = 50. / Limiting search distance
PAR7 = 50. / Max distance to closest point
PAR8 = 50. / Max distance to project single composite
PAR27= 2 4 1 / Block discretization in X,Y,Z
PAR31= 100. / Outlier cutoff to change the search
PAR32= 50. / Max. 3D search distance at PAR31

IOP17 = 0   /0=Ordinary kriging, 5=Simple
PAR30 = 0.   /Mean grade of the area to be simple kriged

CMD = SEARCH 50. 50. 10. 0. 0. 75.
CMD = NUG 0.671
CMD = EXP 0.329 12.6 9.5 4.6 0. 0. 75.

ITM1 = aukr1 aurej CALC KRIGE
ITM2 = aunn1 aurej CALC POLYG
ITM3 = minzn Block limit
ITM4 = trnch Block limit
ITM5 = lngth RANGE 2.5 5.
ITM6 = dcode RANGE 301. 516.
ITM7 = dist1 Block calc rings
ITM8 = ncmp1 Block calc #comp
ITM9 = nhol1 Block calc #comp
ITM10 = minzn RANGE 1. 1.
ITM11 = lngth FACTR
CMD = Block limit minzn 1
CMD = Block limit trnch 1 2
CMD = ELEV ZMID

I-O = 0 / Debug level
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=rkck10.dat  9=rkck09.dat  15=rkck15.dat;
MEDS-624V1   3=rpt624.a02  30=
** KRIGING of 3-D block values for aukr1 **

RUN = omit

USR = MJL  /  Mon Dec 6, 2004 9:30:06 AM US Mountain Standard Time

IOP3 = 1. / 1=3-D spherical search; 0=2-D search
IOP4 = 0 / 0=No geologic matching; 1=Match one item
IOP6 = 0 / 0=Use true dist.; 1=Use anisotropic dist.
IOP7 = 3 / Min # of comps for interp
IOP11= 00 / Row # for extended output
IOP12= 0 / 0=All; 1=Octant; 2=Quadrant search; 3=Split Octant;
COM         4=Split Quadrant.
COM         Note: Negative#=use rotated search.  By Default,
COM         octants & quadrants are defined using the project's axes.
IOP16= 6 / Max.# of composites for interpolating a block
IOP19= 2 / Max.# of composites per hole (DEFAULT=No limit)
IOP20= 0 / 0=Store variance; 1=STD DEV; 2=Rel. variance

PAR1 = 50. / Primary X-search distance
PAR2 = 50. / Primary Y-search distance
PAR3 = 50. / Primary Z-search distance
PAR4 = 50. / Limiting search distance
PAR7 = 50. / Max distance to closest point
PAR8 = 50. / Max distance to project single composite
PAR27= 2 4 1 / Block discretization in X,Y,Z
PAR31= 100. / Outlier cutoff to change the search
PAR32= 50. / Max. 3D search distance at PAR31

IOP17 = 0   /0=Ordinary kriging, 5=Simple
PAR30 = 0.   /Mean grade of the area to be simple kriged

CMD = SEARCH 50. 50. 10. 0. 0. 75.
CMD = NUG 0.671
CMD = EXP 0.329 12.6 9.5 4.6 0. 0. 75.

ITM1 = aukr1 aurej CALC KRIGE
ITM2 = aunn1 aurej CALC POLYG
ITM3 = minzn Block limit
ITM4 = trnch Block limit
ITM5 = lngth RANGE 2.5 5.
ITM6 = dcode RANGE 301. 516.
ITM7 = dist1 Block calc rings
ITM8 = ncmp1 Block calc #comp
ITM9 = nhol1 Block calc #comp
ITM10 = minzn RANGE 1. 1.
ITM11 = lngth FACTR
CMD = Block limit minzn 1
CMD = Block limit trnch 1 2
CMD = ELEV ZMID

I-O = 0 / Debug level
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=rkck10.dat  9=rkck09.dat  15=rkck15.dat;
MEDS-624V1   3=rpt624.a03  30=
** KRIGING of 3-D block values for aukr1 **

RUN = omit

USR = MJL  /  Mon Dec 6, 2004 9:30:56 AM US Mountain Standard Time

IOP3 = 1. / 1=3-D spherical search; 0=2-D search
IOP4 = 0 / 0=No geologic matching; 1=Match one item
IOP6 = 0 / 0=Use true dist.; 1=Use anisotropic dist.
IOP7 = 2 / Min # of comps for interp
IOP11= 00 / Row # for extended output
IOP12= 0 / 0=All; 1=Octant; 2=Quadrant search; 3=Split Octant;
COM         4=Split Quadrant.
COM         Note: Negative#=use rotated search.  By Default,
COM         octants & quadrants are defined using the project's axes.
IOP16= 8 / Max.# of composites for interpolating a block
IOP19= 2 / Max.# of composites per hole (DEFAULT=No limit)
IOP20= 0 / 0=Store variance; 1=STD DEV; 2=Rel. variance

PAR1 = 15. / Primary X-search distance
PAR2 = 15. / Primary Y-search distance
PAR3 = 2.5 / Primary Z-search distance
PAR4 = 15. / Limiting search distance
PAR7 = 15. / Max distance to closest point
PAR8 = 15. / Max distance to project single composite
PAR27= 2 4 1 / Block discretization in X,Y,Z
PAR31= 100. / Outlier cutoff to change the search
PAR32= 50. / Max. 3D search distance at PAR31

IOP17 = 0   /0=Ordinary kriging, 5=Simple
PAR30 = 0.   /Mean grade of the area to be simple kriged

CMD = SEARCH 15. 15. 2.5 0. 0. 0.
CMD = NUG 0.671
CMD = EXP 0.329 12.6 9.5 4.6 0. 0. 0.

ITM1 = aukr1 aurej CALC KRIGE
ITM2 = aunn1 aurej CALC POLYG
ITM3 = minzn Block limit
ITM4 = trnch Block limit
ITM5 = lngth RANGE 2.5 5.
ITM6 = dcode RANGE 301. 716.
ITM7 = dist1 Block calc rings
ITM8 = ncmp1 Block calc #comp
ITM9 = nhol1 Block calc #comp
ITM10 = minzn RANGE 1. 1.
ITM11 = lngth FACTR
CMD = Block limit minzn 1
CMD = Block limit trnch 1 1
CMD = ELEV ZMID

I-O = 0 / Debug level
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=rkck10.dat  9=rkck09.dat  15=rkck15.dat;
MEDS-624V1   3=rpt624.a04  30=
** KRIGING of 3-D block values for aukr1 **

RUN = omit

USR = MJL  /  Mon Dec 6, 2004 9:30:13 AM US Mountain Standard Time

IOP3 = 1. / 1=3-D spherical search; 0=2-D search
IOP4 = 0 / 0=No geologic matching; 1=Match one item
IOP6 = 0 / 0=Use true dist.; 1=Use anisotropic dist.
IOP7 = 2 / Min # of comps for interp
IOP11= 00 / Row # for extended output
IOP12= 0 / 0=All; 1=Octant; 2=Quadrant search; 3=Split Octant;
COM         4=Split Quadrant.
COM         Note: Negative#=use rotated search.  By Default,
COM         octants & quadrants are defined using the project's axes.
IOP16= 12 / Max.# of composites for interpolating a block
IOP19= 2 / Max.# of composites per hole (DEFAULT=No limit)
IOP20= 0 / 0=Store variance; 1=STD DEV; 2=Rel. variance

PAR1 = 50. / Primary X-search distance
PAR2 = 50. / Primary Y-search distance
PAR3 = 50. / Primary Z-search distance
PAR4 = 50. / Limiting search distance
PAR7 = 50. / Max distance to closest point
PAR8 = 50. / Max distance to project single composite
PAR27= 2 4 1 / Block discretization in X,Y,Z
PAR31= 100. / Outlier cutoff to change the search
PAR32= 50. / Max. 3D search distance at PAR31

IOP17 = 0   /0=Ordinary kriging, 5=Simple
PAR30 = 0.   /Mean grade of the area to be simple kriged

CMD = SEARCH 50. 50. 10. 0. 0. 75.
CMD = NUG 0.631
CMD = EXP 0.396 22.2 18.1 8.8 0. 0. 75.

ITM1 = aukr1 aurej CALC KRIGE
ITM2 = aunn1 aurej CALC POLYG
ITM3 = minzn Block limit
ITM4 = trnch Block limit
ITM5 = lngth RANGE 2.5 5.
ITM6 = dcode RANGE 301. 516.
ITM7 = dist1 Block calc rings
ITM8 = ncmp1 Block calc #comp
ITM9 = nhol1 Block calc #comp
ITM10 = minzn RANGE 2. 2.
ITM11 = lngth FACTR
CMD = Block limit minzn 2
CMD = Block limit trnch 1 2
CMD = ELEV ZMID

I-O = 0 / Debug level
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=rkck10.dat  9=rkck09.dat  15=rkck15.dat;
MEDS-624V1   3=rpt624.a05  30=
** KRIGING of 3-D block values for aukr1 **

RUN = omit

USR = MJL  /  Mon Dec 6, 2004 9:30:21 AM US Mountain Standard Time

IOP3 = 1. / 1=3-D spherical search; 0=2-D search
IOP4 = 0 / 0=No geologic matching; 1=Match one item
IOP6 = 0 / 0=Use true dist.; 1=Use anisotropic dist.
IOP7 = 3 / Min # of comps for interp
IOP11= 00 / Row # for extended output
IOP12= 0 / 0=All; 1=Octant; 2=Quadrant search; 3=Split Octant;
COM         4=Split Quadrant.
COM         Note: Negative#=use rotated search.  By Default,
COM         octants & quadrants are defined using the project's axes.
IOP16= 8 / Max.# of composites for interpolating a block
IOP19= 2 / Max.# of composites per hole (DEFAULT=No limit)
IOP20= 0 / 0=Store variance; 1=STD DEV; 2=Rel. variance

PAR1 = 50. / Primary X-search distance
PAR2 = 50. / Primary Y-search distance
PAR3 = 50. / Primary Z-search distance
PAR4 = 50. / Limiting search distance
PAR7 = 50. / Max distance to closest point
PAR8 = 50. / Max distance to project single composite
PAR27= 2 4 1 / Block discretization in X,Y,Z
PAR31= 100. / Outlier cutoff to change the search
PAR32= 50. / Max. 3D search distance at PAR31

IOP17 = 0   /0=Ordinary kriging, 5=Simple
PAR30 = 0.   /Mean grade of the area to be simple kriged

CMD = SEARCH 50. 50. 10. 0. 0. 75.
CMD = NUG 0.631
CMD = EXP 0.396 22.2 18.1 8.8 0. 0. 75.

ITM1 = aukr1 aurej CALC KRIGE
ITM2 = aunn1 aurej CALC POLYG
ITM3 = minzn Block limit
ITM4 = trnch Block limit
ITM5 = lngth RANGE 2.5 5.
ITM6 = dcode RANGE 301. 516.
ITM7 = dist1 Block calc rings
ITM8 = ncmp1 Block calc #comp
ITM9 = nhol1 Block calc #comp
ITM10 = minzn RANGE 2. 2.
ITM11 = lngth FACTR
CMD = Block limit minzn 2
CMD = Block limit trnch 1 2
CMD = ELEV ZMID

I-O = 0 / Debug level
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=rkck10.dat  9=rkck09.dat  15=rkck15.dat;
MEDS-624V1   3=rpt624.a06  30=
** KRIGING of 3-D block values for aukr1 **

RUN = omit

USR = MJL  /  Mon Dec 6, 2004 9:31:03 AM US Mountain Standard Time

IOP3 = 1. / 1=3-D spherical search; 0=2-D search
IOP4 = 0 / 0=No geologic matching; 1=Match one item
IOP6 = 0 / 0=Use true dist.; 1=Use anisotropic dist.
IOP7 = 2 / Min # of comps for interp
IOP11= 00 / Row # for extended output
IOP12= 0 / 0=All; 1=Octant; 2=Quadrant search; 3=Split Octant;
COM         4=Split Quadrant.
COM         Note: Negative#=use rotated search.  By Default,
COM         octants & quadrants are defined using the project's axes.
IOP16= 8 / Max.# of composites for interpolating a block
IOP19= 2 / Max.# of composites per hole (DEFAULT=No limit)
IOP20= 0 / 0=Store variance; 1=STD DEV; 2=Rel. variance

PAR1 = 15. / Primary X-search distance
PAR2 = 15. / Primary Y-search distance
PAR3 = 2.5 / Primary Z-search distance
PAR4 = 15. / Limiting search distance
PAR7 = 15. / Max distance to closest point
PAR8 = 15. / Max distance to project single composite
PAR27= 2 4 1 / Block discretization in X,Y,Z
PAR31= 100. / Outlier cutoff to change the search
PAR32= 50. / Max. 3D search distance at PAR31

IOP17 = 0   /0=Ordinary kriging, 5=Simple
PAR30 = 0.   /Mean grade of the area to be simple kriged

CMD = SEARCH 15. 15. 2.5 0. 0. 0.
CMD = NUG 0.631
CMD = EXP 0.369 22.2 18.1 8.8 0. 0. 0.

ITM1 = aukr1 aurej CALC KRIGE
ITM2 = aunn1 aurej CALC POLYG
ITM3 = minzn Block limit
ITM4 = trnch Block limit
ITM5 = lngth RANGE 2.5 5.
ITM6 = dcode RANGE 301. 716.
ITM7 = dist1 Block calc rings
ITM8 = ncmp1 Block calc #comp
ITM9 = nhol1 Block calc #comp
ITM10 = minzn RANGE 2. 2.
ITM11 = lngth FACTR
CMD = Block limit minzn 2
CMD = Block limit trnch 1 1
CMD = ELEV ZMID

I-O = 0 / Debug level
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=rkck10.dat  9=rkck09.dat  15=rkck15.dat;
MEDS-624V1   3=rpt624.a07  30=
** KRIGING of 3-D block values for aukr1 **

RUN = omit

USR = MJL  /  Mon Dec 6, 2004 9:30:28 AM US Mountain Standard Time

IOP3 = 1. / 1=3-D spherical search; 0=2-D search
IOP4 = 0 / 0=No geologic matching; 1=Match one item
IOP6 = 0 / 0=Use true dist.; 1=Use anisotropic dist.
IOP7 = 2 / Min # of comps for interp
IOP11= 00 / Row # for extended output
IOP12= 0 / 0=All; 1=Octant; 2=Quadrant search; 3=Split Octant;
COM         4=Split Quadrant.
COM         Note: Negative#=use rotated search.  By Default,
COM         octants & quadrants are defined using the project's axes.
IOP16= 12 / Max.# of composites for interpolating a block
IOP19= 2 / Max.# of composites per hole (DEFAULT=No limit)
IOP20= 0 / 0=Store variance; 1=STD DEV; 2=Rel. variance

PAR1 = 50. / Primary X-search distance
PAR2 = 50. / Primary Y-search distance
PAR3 = 50. / Primary Z-search distance
PAR4 = 50. / Limiting search distance
PAR7 = 50. / Max distance to closest point
PAR8 = 50. / Max distance to project single composite
PAR27= 2 4 1 / Block discretization in X,Y,Z
PAR31= 100. / Outlier cutoff to change the search
PAR32= 50. / Max. 3D search distance at PAR31

IOP17 = 0   /0=Ordinary kriging, 5=Simple
PAR30 = 0.   /Mean grade of the area to be simple kriged

CMD = SEARCH 50. 50. 10. 30. 0. 75.
CMD = NUG 0.478
CMD = EXP 0.522 41.5 13.9 25.9 30. 0. 75.

ITM1 = aukr1 aurej CALC KRIGE
ITM2 = aunn1 aurej CALC POLYG
ITM3 = minzn Block limit
ITM4 = trnch Block limit
ITM5 = lngth RANGE 2.5 5.
ITM6 = dcode RANGE 301. 516.
ITM7 = dist1 Block calc rings
ITM8 = ncmp1 Block calc #comp
ITM9 = nhol1 Block calc #comp
ITM10 = minzn RANGE 3. 3.
ITM11 = lngth FACTR
CMD = Block limit minzn 3
CMD = Block limit trnch 1 2
CMD = ELEV ZMID

I-O = 0 / Debug level
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=rkck10.dat  9=rkck09.dat  15=rkck15.dat;
MEDS-624V1   3=rpt624.a08  30=
** KRIGING of 3-D block values for aukr1 **

RUN = omit

USR = MJL  /  Mon Dec 6, 2004 9:30:34 AM US Mountain Standard Time

IOP3 = 1. / 1=3-D spherical search; 0=2-D search
IOP4 = 0 / 0=No geologic matching; 1=Match one item
IOP6 = 0 / 0=Use true dist.; 1=Use anisotropic dist.
IOP7 = 3 / Min # of comps for interp
IOP11= 00 / Row # for extended output
IOP12= 0 / 0=All; 1=Octant; 2=Quadrant search; 3=Split Octant;
COM         4=Split Quadrant.
COM         Note: Negative#=use rotated search.  By Default,
COM         octants & quadrants are defined using the project's axes.
IOP16= 6 / Max.# of composites for interpolating a block
IOP19= 2 / Max.# of composites per hole (DEFAULT=No limit)
IOP20= 0 / 0=Store variance; 1=STD DEV; 2=Rel. variance

PAR1 = 50. / Primary X-search distance
PAR2 = 50. / Primary Y-search distance
PAR3 = 50. / Primary Z-search distance
PAR4 = 50. / Limiting search distance
PAR7 = 50. / Max distance to closest point
PAR8 = 50. / Max distance to project single composite
PAR27= 2 4 1 / Block discretization in X,Y,Z
PAR31= 100. / Outlier cutoff to change the search
PAR32= 50. / Max. 3D search distance at PAR31

IOP17 = 0   /0=Ordinary kriging, 5=Simple
PAR30 = 0.   /Mean grade of the area to be simple kriged

CMD = SEARCH 50. 50. 10. 30. 0. 75.
CMD = NUG 0.478
CMD = EXP 0.522 41.5 13.9 25.9 30. 0. 75.

ITM1 = aukr1 aurej CALC KRIGE
ITM2 = aunn1 aurej CALC POLYG
ITM3 = minzn Block limit
ITM4 = trnch Block limit
ITM5 = lngth RANGE 2.5 5.
ITM6 = dcode RANGE 301. 516.
ITM7 = dist1 Block calc rings
ITM8 = ncmp1 Block calc #comp
ITM9 = nhol1 Block calc #comp
ITM10 = minzn RANGE 3. 3.
ITM11 = lngth FACTR
CMD = Block limit minzn 3
CMD = Block limit trnch 1 2
CMD = ELEV ZMID

I-O = 0 / Debug level
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=rkck10.dat  9=rkck09.dat  15=rkck15.dat;
MEDS-624V1   3=rpt624.a09  30=
** KRIGING of 3-D block values for aukr1 **

RUN = omit

USR = MJL  /  Mon Dec 6, 2004 9:31:11 AM US Mountain Standard Time

IOP3 = 1. / 1=3-D spherical search; 0=2-D search
IOP4 = 0 / 0=No geologic matching; 1=Match one item
IOP6 = 0 / 0=Use true dist.; 1=Use anisotropic dist.
IOP7 = 2 / Min # of comps for interp
IOP11= 00 / Row # for extended output
IOP12= 0 / 0=All; 1=Octant; 2=Quadrant search; 3=Split Octant;
COM         4=Split Quadrant.
COM         Note: Negative#=use rotated search.  By Default,
COM         octants & quadrants are defined using the project's axes.
IOP16= 8 / Max.# of composites for interpolating a block
IOP19= 2 / Max.# of composites per hole (DEFAULT=No limit)
IOP20= 0 / 0=Store variance; 1=STD DEV; 2=Rel. variance

PAR1 = 15. / Primary X-search distance
PAR2 = 15. / Primary Y-search distance
PAR3 = 2.5 / Primary Z-search distance
PAR4 = 15. / Limiting search distance
PAR7 = 15. / Max distance to closest point
PAR8 = 15. / Max distance to project single composite
PAR27= 2 4 1 / Block discretization in X,Y,Z
PAR31= 100. / Outlier cutoff to change the search
PAR32= 50. / Max. 3D search distance at PAR31

IOP17 = 0   /0=Ordinary kriging, 5=Simple
PAR30 = 0.   /Mean grade of the area to be simple kriged

CMD = SEARCH 15. 15. 2.5 0. 0. 0.
CMD = NUG 0.478
CMD = EXP 0.522 41.5 13.9 25.9 0. 0. 0.

ITM1 = aukr1 aurej CALC KRIGE
ITM2 = aunn1 aurej CALC POLYG
ITM3 = minzn Block limit
ITM4 = trnch Block limit
ITM5 = lngth RANGE 2.5 5.
ITM6 = dcode RANGE 301. 716.
ITM7 = dist1 Block calc rings
ITM8 = ncmp1 Block calc #comp
ITM9 = nhol1 Block calc #comp
ITM10 = minzn RANGE 3. 3.
ITM11 = lngth FACTR
CMD = Block limit minzn 3
CMD = Block limit trnch 1 1
CMD = ELEV ZMID

I-O = 0 / Debug level
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=rkck10.dat  9=rkck09.dat  15=rkck15.dat;
MEDS-624V1   3=rpt624.b01  30=
** KRIGING of 3-D block values for aukr2 **

RUN = reset

USR = MJL  /  Mon Dec 6, 2004 9:30:00 AM US Mountain Standard Time

IOP3 = 1. / 1=3-D spherical search; 0=2-D search
IOP4 = 0 / 0=No geologic matching; 1=Match one item
IOP6 = 0 / 0=Use true dist.; 1=Use anisotropic dist.
IOP7 = 2 / Min # of comps for interp
IOP11= 00 / Row # for extended output
IOP12= 0 / 0=All; 1=Octant; 2=Quadrant search; 3=Split Octant;
COM         4=Split Quadrant.
COM         Note: Negative#=use rotated search.  By Default,
COM         octants & quadrants are defined using the project's axes.
IOP16= 6 / Max.# of composites for interpolating a block
IOP19= 2 / Max.# of composites per hole (DEFAULT=No limit)
IOP20= 0 / 0=Store variance; 1=STD DEV; 2=Rel. variance

PAR1 = 50. / Primary X-search distance
PAR2 = 50. / Primary Y-search distance
PAR3 = 50. / Primary Z-search distance
PAR4 = 50. / Limiting search distance
PAR7 = 50. / Max distance to closest point
PAR8 = 50. / Max distance to project single composite
PAR27= 2 4 1 / Block discretization in X,Y,Z
PAR31= 9     / Outlier cutoff to change the search
PAR32= 12.5  / Max. 3D search distance at PAR31

IOP17 = 0   /0=Ordinary kriging, 5=Simple
PAR30 = 0.   /Mean grade of the area to be simple kriged

CMD = SEARCH 50. 50. 10. 0. 0. 75.
CMD = NUG 0.671
CMD = EXP 0.329 12.6 9.5 4.6 0. 0. 75.

ITM1 = aukr2 aurej CALC KRIGE
ITM2 = aunn2 aurej CALC POLYG
ITM3 = minzn Block limit
ITM4 = trnch Block limit
ITM5 = lngth RANGE 2.5 5.
ITM6 = dcode RANGE 301. 516.
ITM7 = dist2 Block calc rings
ITM8 = ncmp2 Block calc #comp
ITM9 = nhol2 Block calc #comp
ITM10 = minzn RANGE 1. 1.
ITM11 = lngth FACTR
CMD = Block limit minzn 1
CMD = Block limit trnch 1 2
CMD = ELEV ZMID

I-O = 0 / Debug level
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=rkck10.dat  9=rkck09.dat  15=rkck15.dat;
MEDS-624V1   3=rpt624.b02  30=
** KRIGING of 3-D block values for aukr2 **

RUN = omit

USR = MJL  /  Mon Dec 6, 2004 9:30:06 AM US Mountain Standard Time

IOP3 = 1. / 1=3-D spherical search; 0=2-D search
IOP4 = 0 / 0=No geologic matching; 1=Match one item
IOP6 = 0 / 0=Use true dist.; 1=Use anisotropic dist.
IOP7 = 3 / Min # of comps for interp
IOP11= 00 / Row # for extended output
IOP12= 0 / 0=All; 1=Octant; 2=Quadrant search; 3=Split Octant;
COM         4=Split Quadrant.
COM         Note: Negative#=use rotated search.  By Default,
COM         octants & quadrants are defined using the project's axes.
IOP16= 6 / Max.# of composites for interpolating a block
IOP19= 2 / Max.# of composites per hole (DEFAULT=No limit)
IOP20= 0 / 0=Store variance; 1=STD DEV; 2=Rel. variance

PAR1 = 50. / Primary X-search distance
PAR2 = 50. / Primary Y-search distance
PAR3 = 50. / Primary Z-search distance
PAR4 = 50. / Limiting search distance
PAR7 = 50. / Max distance to closest point
PAR8 = 50. / Max distance to project single composite
PAR27= 2 4 1 / Block discretization in X,Y,Z
PAR31= 9    / Outlier cutoff to change the search
PAR32= 12.5 / Max. 3D search distance at PAR31

IOP17 = 0   /0=Ordinary kriging, 5=Simple
PAR30 = 0.   /Mean grade of the area to be simple kriged

CMD = SEARCH 50. 50. 10. 0. 0. 75.
CMD = NUG 0.671
CMD = EXP 0.329 12.6 9.5 4.6 0. 0. 75.

ITM1 = aukr2 aurej CALC KRIGE
ITM2 = aunn2 aurej CALC POLYG
ITM3 = minzn Block limit
ITM4 = trnch Block limit
ITM5 = lngth RANGE 2.5 5.
ITM6 = dcode RANGE 301. 516.
ITM7 = dist2 Block calc rings
ITM8 = ncmp2 Block calc #comp
ITM9 = nhol2 Block calc #comp
ITM10 = minzn RANGE 1. 1.
ITM11 = lngth FACTR
CMD = Block limit minzn 1
CMD = Block limit trnch 1 2
CMD = ELEV ZMID

I-O = 0 / Debug level
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=rkck10.dat  9=rkck09.dat  15=rkck15.dat;
MEDS-624V1   3=rpt624.b03  30=
** KRIGING of 3-D block values for aukr2 **

RUN = omit

USR = MJL  /  Mon Dec 6, 2004 9:30:56 AM US Mountain Standard Time

IOP3 = 1. / 1=3-D spherical search; 0=2-D search
IOP4 = 0 / 0=No geologic matching; 1=Match one item
IOP6 = 0 / 0=Use true dist.; 1=Use anisotropic dist.
IOP7 = 2 / Min # of comps for interp
IOP11= 00 / Row # for extended output
IOP12= 0 / 0=All; 1=Octant; 2=Quadrant search; 3=Split Octant;
COM         4=Split Quadrant.
COM         Note: Negative#=use rotated search.  By Default,
COM         octants & quadrants are defined using the project's axes.
IOP16= 8 / Max.# of composites for interpolating a block
IOP19= 2 / Max.# of composites per hole (DEFAULT=No limit)
IOP20= 0 / 0=Store variance; 1=STD DEV; 2=Rel. variance

PAR1 = 15. / Primary X-search distance
PAR2 = 15. / Primary Y-search distance
PAR3 = 2.5 / Primary Z-search distance
PAR4 = 15. / Limiting search distance
PAR7 = 15. / Max distance to closest point
PAR8 = 15. / Max distance to project single composite
PAR27= 2 4 1 / Block discretization in X,Y,Z
PAR31= 9    / Outlier cutoff to change the search
PAR32= 12.5 / Max. 3D search distance at PAR31

IOP17 = 0   /0=Ordinary kriging, 5=Simple
PAR30 = 0.   /Mean grade of the area to be simple kriged

CMD = SEARCH 15. 15. 2.5 0. 0. 0.
CMD = NUG 0.671
CMD = EXP 0.329 12.6 9.5 4.6 0. 0. 0.

ITM1 = aukr2 aurej CALC KRIGE
ITM2 = aunn2 aurej CALC POLYG
ITM3 = minzn Block limit
ITM4 = trnch Block limit
ITM5 = lngth RANGE 2.5 5.
ITM6 = dcode RANGE 301. 716.
ITM7 = dist2 Block calc rings
ITM8 = ncmp2 Block calc #comp
ITM9 = nhol2 Block calc #comp
ITM10 = minzn RANGE 1. 1.
ITM11 = lngth FACTR
CMD = Block limit minzn 1
CMD = Block limit trnch 1 1
CMD = ELEV ZMID

I-O = 0 / Debug level
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=rkck10.dat  9=rkck09.dat  15=rkck15.dat;
MEDS-624V1   3=rpt624.b04  30=
** KRIGING of 3-D block values for aukr2 **

RUN = omit

USR = MJL  /  Mon Dec 6, 2004 9:30:13 AM US Mountain Standard Time

IOP3 = 1. / 1=3-D spherical search; 0=2-D search
IOP4 = 0 / 0=No geologic matching; 1=Match one item
IOP6 = 0 / 0=Use true dist.; 1=Use anisotropic dist.
IOP7 = 2 / Min # of comps for interp
IOP11= 00 / Row # for extended output
IOP12= 0 / 0=All; 1=Octant; 2=Quadrant search; 3=Split Octant;
COM         4=Split Quadrant.
COM         Note: Negative#=use rotated search.  By Default,
COM         octants & quadrants are defined using the project's axes.
IOP16= 12 / Max.# of composites for interpolating a block
IOP19= 2 / Max.# of composites per hole (DEFAULT=No limit)
IOP20= 0 / 0=Store variance; 1=STD DEV; 2=Rel. variance

PAR1 = 50. / Primary X-search distance
PAR2 = 50. / Primary Y-search distance
PAR3 = 50. / Primary Z-search distance
PAR4 = 50. / Limiting search distance
PAR7 = 50. / Max distance to closest point
PAR8 = 50. / Max distance to project single composite
PAR27= 2 4 1 / Block discretization in X,Y,Z
PAR31= 6.0  / Outlier cutoff to change the search
PAR32= 12.5 / Max. 3D search distance at PAR31

IOP17 = 0   /0=Ordinary kriging, 5=Simple
PAR30 = 0.   /Mean grade of the area to be simple kriged

CMD = SEARCH 50. 50. 10. 0. 0. 75.
CMD = NUG 0.631
CMD = EXP 0.396 22.2 18.1 8.8 0. 0. 75.

ITM1 = aukr2 aurej CALC KRIGE
ITM2 = aunn2 aurej CALC POLYG
ITM3 = minzn Block limit
ITM4 = trnch Block limit
ITM5 = lngth RANGE 2.5 5.
ITM6 = dcode RANGE 301. 516.
ITM7 = dist2 Block calc rings
ITM8 = ncmp2 Block calc #comp
ITM9 = nhol2 Block calc #comp
ITM10 = minzn RANGE 2. 2.
ITM11 = lngth FACTR
CMD = Block limit minzn 2
CMD = Block limit trnch 1 2
CMD = ELEV ZMID

I-O = 0 / Debug level
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=rkck10.dat  9=rkck09.dat  15=rkck15.dat;
MEDS-624V1   3=rpt624.b05  30=
** KRIGING of 3-D block values for aukr2 **

RUN = omit

USR = MJL  /  Mon Dec 6, 2004 9:30:21 AM US Mountain Standard Time

IOP3 = 1. / 1=3-D spherical search; 0=2-D search
IOP4 = 0 / 0=No geologic matching; 1=Match one item
IOP6 = 0 / 0=Use true dist.; 1=Use anisotropic dist.
IOP7 = 3 / Min # of comps for interp
IOP11= 00 / Row # for extended output
IOP12= 0 / 0=All; 1=Octant; 2=Quadrant search; 3=Split Octant;
COM         4=Split Quadrant.
COM         Note: Negative#=use rotated search.  By Default,
COM         octants & quadrants are defined using the project's axes.
IOP16= 8 / Max.# of composites for interpolating a block
IOP19= 2 / Max.# of composites per hole (DEFAULT=No limit)
IOP20= 0 / 0=Store variance; 1=STD DEV; 2=Rel. variance

PAR1 = 50. / Primary X-search distance
PAR2 = 50. / Primary Y-search distance
PAR3 = 50. / Primary Z-search distance
PAR4 = 50. / Limiting search distance
PAR7 = 50. / Max distance to closest point
PAR8 = 50. / Max distance to project single composite
PAR27= 2 4 1 / Block discretization in X,Y,Z
PAR31= 6.0  / Outlier cutoff to change the search
PAR32= 12.5/ Max. 3D search distance at PAR31

IOP17 = 0   /0=Ordinary kriging, 5=Simple
PAR30 = 0.   /Mean grade of the area to be simple kriged

CMD = SEARCH 50. 50. 10. 0. 0. 75.
CMD = NUG 0.631
CMD = EXP 0.396 22.2 18.1 8.8 0. 0. 75.

ITM1 = aukr2 aurej CALC KRIGE
ITM2 = aunn2 aurej CALC POLYG
ITM3 = minzn Block limit
ITM4 = trnch Block limit
ITM5 = lngth RANGE 2.5 5.
ITM6 = dcode RANGE 301. 516.
ITM7 = dist2 Block calc rings
ITM8 = ncmp2 Block calc #comp
ITM9 = nhol2 Block calc #comp
ITM10 = minzn RANGE 2. 2.
ITM11 = lngth FACTR
CMD = Block limit minzn 2
CMD = Block limit trnch 1 2
CMD = ELEV ZMID

I-O = 0 / Debug level
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=rkck10.dat  9=rkck09.dat  15=rkck15.dat;
MEDS-624V1   3=rpt624.b06  30=
** KRIGING of 3-D block values for aukr2 **

RUN = omit

USR = MJL  /  Mon Dec 6, 2004 9:31:03 AM US Mountain Standard Time

IOP3 = 1. / 1=3-D spherical search; 0=2-D search
IOP4 = 0 / 0=No geologic matching; 1=Match one item
IOP6 = 0 / 0=Use true dist.; 1=Use anisotropic dist.
IOP7 = 2 / Min # of comps for interp
IOP11= 00 / Row # for extended output
IOP12= 0 / 0=All; 1=Octant; 2=Quadrant search; 3=Split Octant;
COM         4=Split Quadrant.
COM         Note: Negative#=use rotated search.  By Default,
COM         octants & quadrants are defined using the project's axes.
IOP16= 8 / Max.# of composites for interpolating a block
IOP19= 2 / Max.# of composites per hole (DEFAULT=No limit)
IOP20= 0 / 0=Store variance; 1=STD DEV; 2=Rel. variance

PAR1 = 15. / Primary X-search distance
PAR2 = 15. / Primary Y-search distance
PAR3 = 2.5 / Primary Z-search distance
PAR4 = 15. / Limiting search distance
PAR7 = 15. / Max distance to closest point
PAR8 = 15. / Max distance to project single composite
PAR27= 2 4 1 / Block discretization in X,Y,Z
PAR31= 6.0  / Outlier cutoff to change the search
PAR32= 12.5 / Max. 3D search distance at PAR31

IOP17 = 0   /0=Ordinary kriging, 5=Simple
PAR30 = 0.   /Mean grade of the area to be simple kriged

CMD = SEARCH 15. 15. 2.5 0. 0. 0.
CMD = NUG 0.631
CMD = EXP 0.369 22.2 18.1 8.8 0. 0. 0.

ITM1 = aukr2 aurej CALC KRIGE
ITM2 = aunn2 aurej CALC POLYG
ITM3 = minzn Block limit
ITM4 = trnch Block limit
ITM5 = lngth RANGE 2.5 5.
ITM6 = dcode RANGE 301. 716.
ITM7 = dist2 Block calc rings
ITM8 = ncmp2 Block calc #comp
ITM9 = nhol2 Block calc #comp
ITM10 = minzn RANGE 2. 2.
ITM11 = lngth FACTR
CMD = Block limit minzn 2
CMD = Block limit trnch 1 1
CMD = ELEV ZMID

I-O = 0 / Debug level
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=rkck10.dat  9=rkck09.dat  15=rkck15.dat;
MEDS-624V1   3=rpt624.b07  30=
** KRIGING of 3-D block values for aukr2 **

RUN = omit

USR = MJL  /  Mon Dec 6, 2004 9:30:28 AM US Mountain Standard Time

IOP3 = 1. / 1=3-D spherical search; 0=2-D search
IOP4 = 0 / 0=No geologic matching; 1=Match one item
IOP6 = 0 / 0=Use true dist.; 1=Use anisotropic dist.
IOP7 = 2 / Min # of comps for interp
IOP11= 00 / Row # for extended output
IOP12= 0 / 0=All; 1=Octant; 2=Quadrant search; 3=Split Octant;
COM         4=Split Quadrant.
COM         Note: Negative#=use rotated search.  By Default,
COM         octants & quadrants are defined using the project's axes.
IOP16= 12 / Max.# of composites for interpolating a block
IOP19= 2 / Max.# of composites per hole (DEFAULT=No limit)
IOP20= 0 / 0=Store variance; 1=STD DEV; 2=Rel. variance

PAR1 = 50. / Primary X-search distance
PAR2 = 50. / Primary Y-search distance
PAR3 = 50. / Primary Z-search distance
PAR4 = 50. / Limiting search distance
PAR7 = 50. / Max distance to closest point
PAR8 = 50. / Max distance to project single composite
PAR27= 2 4 1 / Block discretization in X,Y,Z
PAR31= 10   / Outlier cutoff to change the search
PAR32= 17.5 / Max. 3D search distance at PAR31

IOP17 = 0   /0=Ordinary kriging, 5=Simple
PAR30 = 0.   /Mean grade of the area to be simple kriged

CMD = SEARCH 50. 50. 10. 30. 0. 75.
CMD = NUG 0.478
CMD = EXP 0.522 41.5 13.9 25.9 30. 0. 75.

ITM1 = aukr2 aurej CALC KRIGE
ITM2 = aunn2 aurej CALC POLYG
ITM3 = minzn Block limit
ITM4 = trnch Block limit
ITM5 = lngth RANGE 2.5 5.
ITM6 = dcode RANGE 301. 516.
ITM7 = dist2 Block calc rings
ITM8 = ncmp2 Block calc #comp
ITM9 = nhol2 Block calc #comp
ITM10 = minzn RANGE 3. 3.
ITM11 = lngth FACTR
CMD = Block limit minzn 3
CMD = Block limit trnch 1 2
CMD = ELEV ZMID

I-O = 0 / Debug level
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=rkck10.dat  9=rkck09.dat  15=rkck15.dat;
MEDS-624V1   3=rpt624.b08  30=
** KRIGING of 3-D block values for aukr2 **

RUN = omit

USR = MJL  /  Mon Dec 6, 2004 9:30:34 AM US Mountain Standard Time

IOP3 = 1. / 1=3-D spherical search; 0=2-D search
IOP4 = 0 / 0=No geologic matching; 1=Match one item
IOP6 = 0 / 0=Use true dist.; 1=Use anisotropic dist.
IOP7 = 3 / Min # of comps for interp
IOP11= 00 / Row # for extended output
IOP12= 0 / 0=All; 1=Octant; 2=Quadrant search; 3=Split Octant;
COM         4=Split Quadrant.
COM         Note: Negative#=use rotated search.  By Default,
COM         octants & quadrants are defined using the project's axes.
IOP16= 6 / Max.# of composites for interpolating a block
IOP19= 2 / Max.# of composites per hole (DEFAULT=No limit)
IOP20= 0 / 0=Store variance; 1=STD DEV; 2=Rel. variance

PAR1 = 50. / Primary X-search distance
PAR2 = 50. / Primary Y-search distance
PAR3 = 50. / Primary Z-search distance
PAR4 = 50. / Limiting search distance
PAR7 = 50. / Max distance to closest point
PAR8 = 50. / Max distance to project single composite
PAR27= 2 4 1 / Block discretization in X,Y,Z
PAR31= 10   / Outlier cutoff to change the search
PAR32= 17.5 / Max. 3D search distance at PAR31

IOP17 = 0   /0=Ordinary kriging, 5=Simple
PAR30 = 0.   /Mean grade of the area to be simple kriged

CMD = SEARCH 50. 50. 10. 30. 0. 75.
CMD = NUG 0.478
CMD = EXP 0.522 41.5 13.9 25.9 30. 0. 75.

ITM1 = aukr2 aurej CALC KRIGE
ITM2 = aunn2 aurej CALC POLYG
ITM3 = minzn Block limit
ITM4 = trnch Block limit
ITM5 = lngth RANGE 2.5 5.
ITM6 = dcode RANGE 301. 516.
ITM7 = dist2 Block calc rings
ITM8 = ncmp2 Block calc #comp
ITM9 = nhol2 Block calc #comp
ITM10 = minzn RANGE 3. 3.
ITM11 = lngth FACTR
CMD = Block limit minzn 3
CMD = Block limit trnch 1 2
CMD = ELEV ZMID

I-O = 0 / Debug level
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=rkck10.dat  9=rkck09.dat  15=rkck15.dat;
MEDS-624V1   3=rpt624.b09  30=
** KRIGING of 3-D block values for aukr2 **

RUN = omit

USR = MJL  /  Mon Dec 6, 2004 9:31:11 AM US Mountain Standard Time

IOP3 = 1. / 1=3-D spherical search; 0=2-D search
IOP4 = 0 / 0=No geologic matching; 1=Match one item
IOP6 = 0 / 0=Use true dist.; 1=Use anisotropic dist.
IOP7 = 2 / Min # of comps for interp
IOP11= 00 / Row # for extended output
IOP12= 0 / 0=All; 1=Octant; 2=Quadrant search; 3=Split Octant;
COM         4=Split Quadrant.
COM         Note: Negative#=use rotated search.  By Default,
COM         octants & quadrants are defined using the project's axes.
IOP16= 8 / Max.# of composites for interpolating a block
IOP19= 2 / Max.# of composites per hole (DEFAULT=No limit)
IOP20= 0 / 0=Store variance; 1=STD DEV; 2=Rel. variance

PAR1 = 15. / Primary X-search distance
PAR2 = 15. / Primary Y-search distance
PAR3 = 2.5 / Primary Z-search distance
PAR4 = 15. / Limiting search distance
PAR7 = 15. / Max distance to closest point
PAR8 = 15. / Max distance to project single composite
PAR27= 2 4 1 / Block discretization in X,Y,Z
PAR31= 10   / Outlier cutoff to change the search
PAR32= 17.5 / Max. 3D search distance at PAR31

IOP17 = 0   /0=Ordinary kriging, 5=Simple
PAR30 = 0.   /Mean grade of the area to be simple kriged

CMD = SEARCH 15. 15. 2.5 0. 0. 0.
CMD = NUG 0.478
CMD = EXP 0.522 41.5 13.9 25.9 0. 0. 0.

ITM1 = aukr2 aurej CALC KRIGE
ITM2 = aunn2 aurej CALC POLYG
ITM3 = minzn Block limit
ITM4 = trnch Block limit
ITM5 = lngth RANGE 2.5 5.
ITM6 = dcode RANGE 301. 716.
ITM7 = dist2 Block calc rings
ITM8 = ncmp2 Block calc #comp
ITM9 = nhol2 Block calc #comp
ITM10 = minzn RANGE 3. 3.
ITM11 = lngth FACTR
CMD = Block limit minzn 3
CMD = Block limit trnch 1 1
CMD = ELEV ZMID

I-O = 0 / Debug level
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=RKCK10.DAT  9=RKCK09.DAT  15=RKCK15.DAT;
MEDS-624V1   3=RPT624.C01  30=
** KRIGING OF 3-D BLOCK VALUES FOR AUKR3 **

RUN = RESET

USR = MJL  /  MON DEC 6, 2004 9:30:00 AM US MOUNTAIN STANDARD TIME

IOP3 = 1. / 1=3-D SPHERICAL SEARCH; 0=2-D SEARCH
IOP4 = 0 / 0=NO GEOLOGIC MATCHING; 1=MATCH ONE ITEM
IOP6 = 0 / 0=USE TRUE DIST.; 1=USE ANISOTROPIC DIST.
IOP7 = 2 / MIN # OF COMPS FOR INTERP
IOP11= 00 / ROW # FOR EXTENDED OUTPUT
IOP12= 0 / 0=ALL; 1=OCTANT; 2=QUADRANT SEARCH; 3=SPLIT OCTANT;
COM          4=SPLIT QUADRANT.
COM          NOTE: NEGATIVE#=USE ROTATED SEARCH.  BY DEFAULT,
COM          OCTANTS & QUADRANTS ARE DEFINED USING THE PROJECT'S AXES.
IOP16= 6 / MAX.# OF COMPOSITES FOR INTERPOLATING A BLOCK
IOP19= 2 / MAX.# OF COMPOSITES PER HOLE (DEFAULT=NO LIMIT)
IOP20= 0 / 0=STORE VARIANCE; 1=STD DEV; 2=REL. VARIANCE

PAR1 = 50. / PRIMARY X-SEARCH DISTANCE
PAR2 = 50. / PRIMARY Y-SEARCH DISTANCE
PAR3 = 50. / PRIMARY Z-SEARCH DISTANCE
PAR4 = 50. / LIMITING SEARCH DISTANCE
PAR7 = 50. / MAX DISTANCE TO CLOSEST POINT
PAR8 = 50. / MAX DISTANCE TO PROJECT SINGLE COMPOSITE
PAR27= 2 4 1 / BLOCK DISCRETIZATION IN X,Y,Z
PAR31= 100. / OUTLIER CUTOFF TO CHANGE THE SEARCH
PAR32= 50. / MAX. 3D SEARCH DISTANCE AT PAR31

IOP17 = 0   /0=ORDINARY KRIGING, 5=SIMPLE
PAR30 = 0.   /MEAN GRADE OF THE AREA TO BE SIMPLE KRIGED

CMD = SEARCH 50. 50. 10. 0. 0. 75.
CMD = NUG 0.671
CMD = EXP 0.329 12.6 9.5 4.6 0. 0. 75.

ITM1 = AUKR3 AUAJ1 CALC KRIGE
ITM2 = AUNN3 AUAJ1 CALC POLYG
ITM3 = MINZN BLOCK LIMIT
ITM4 = TRNCH BLOCK LIMIT
ITM5 = LNGTH RANGE 2.5 5.
ITM6 = DCODE RANGE 301. 516.
ITM7 = DIST3 BLOCK CALC RINGS
ITM8 = NCMP3 BLOCK CALC #COMP
ITM9 = NHOL3 BLOCK CALC #COMP
ITM10 = MINZN RANGE 1. 1.
ITM11 = LNGTH FACTR
CMD = BLOCK LIMIT MINZN 1
CMD = BLOCK LIMIT TRNCH 1 2
CMD = ELEV ZMID

I-O = 0 / DEBUG LEVEL
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=RKCK10.DAT  9=RKCK09.DAT  15=RKCK15.DAT;
MEDS-624V1   3=RPT624.C02  30=
** KRIGING OF 3-D BLOCK VALUES FOR AUKR3 **

RUN = OMIT

USR = MJL  /  MON DEC 6, 2004 9:30:06 AM US MOUNTAIN STANDARD TIME

IOP3 = 1. / 1=3-D SPHERICAL SEARCH; 0=2-D SEARCH
IOP4 = 0 / 0=NO GEOLOGIC MATCHING; 1=MATCH ONE ITEM
IOP6 = 0 / 0=USE TRUE DIST.; 1=USE ANISOTROPIC DIST.
IOP7 = 3 / MIN # OF COMPS FOR INTERP
IOP11= 00 / ROW # FOR EXTENDED OUTPUT
IOP12= 0 / 0=ALL; 1=OCTANT; 2=QUADRANT SEARCH; 3=SPLIT OCTANT;
COM          4=SPLIT QUADRANT.
COM          NOTE: NEGATIVE#=USE ROTATED SEARCH.  BY DEFAULT,
COM          OCTANTS & QUADRANTS ARE DEFINED USING THE PROJECT'S AXES.
IOP16= 6 / MAX.# OF COMPOSITES FOR INTERPOLATING A BLOCK
IOP19= 2 / MAX.# OF COMPOSITES PER HOLE (DEFAULT=NO LIMIT)
IOP20= 0 / 0=STORE VARIANCE; 1=STD DEV; 2=REL. VARIANCE

PAR1 = 50. / PRIMARY X-SEARCH DISTANCE
PAR2 = 50. / PRIMARY Y-SEARCH DISTANCE
PAR3 = 50. / PRIMARY Z-SEARCH DISTANCE
PAR4 = 50. / LIMITING SEARCH DISTANCE
PAR7 = 50. / MAX DISTANCE TO CLOSEST POINT
PAR8 = 50. / MAX DISTANCE TO PROJECT SINGLE COMPOSITE
PAR27= 2 4 1 / BLOCK DISCRETIZATION IN X,Y,Z
PAR31= 100. / OUTLIER CUTOFF TO CHANGE THE SEARCH
PAR32= 50. / MAX. 3D SEARCH DISTANCE AT PAR31

IOP17 = 0   /0=ORDINARY KRIGING, 5=SIMPLE
PAR30 = 0.   /MEAN GRADE OF THE AREA TO BE SIMPLE KRIGED

CMD = SEARCH 50. 50. 10. 0. 0. 75.
CMD = NUG 0.671
CMD = EXP 0.329 12.6 9.5 4.6 0. 0. 75.

ITM1 = AUKR3 AUAJ1 CALC KRIGE
ITM2 = AUNN3 AUAJ1 CALC POLYG
ITM3 = MINZN BLOCK LIMIT
ITM4 = TRNCH BLOCK LIMIT
ITM5 = LNGTH RANGE 2.5 5.
ITM6 = DCODE RANGE 301. 516.
ITM7 = DIST3 BLOCK CALC RINGS
ITM8 = NCMP3 BLOCK CALC #COMP
ITM9 = NHOL3 BLOCK CALC #COMP
ITM10 = MINZN RANGE 1. 1.
ITM11 = LNGTH FACTR
CMD = BLOCK LIMIT MINZN 1
CMD = BLOCK LIMIT TRNCH 1 2
CMD = ELEV ZMID

I-O = 0 / DEBUG LEVEL
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=RKCK10.DAT  9=RKCK09.DAT  15=RKCK15.DAT;
MEDS-624V1   3=RPT624.C03  30=
** KRIGING OF 3-D BLOCK VALUES FOR AUKR3 **

RUN = OMIT

USR = MJL  /  MON DEC 6, 2004 9:30:56 AM US MOUNTAIN STANDARD TIME

IOP3 = 1. / 1=3-D SPHERICAL SEARCH; 0=2-D SEARCH
IOP4 = 0 / 0=NO GEOLOGIC MATCHING; 1=MATCH ONE ITEM
IOP6 = 0 / 0=USE TRUE DIST.; 1=USE ANISOTROPIC DIST.
IOP7 = 2 / MIN # OF COMPS FOR INTERP
IOP11= 00 / ROW # FOR EXTENDED OUTPUT
IOP12= 0 / 0=ALL; 1=OCTANT; 2=QUADRANT SEARCH; 3=SPLIT OCTANT;
COM         4=SPLIT QUADRANT.
COM         NOTE: NEGATIVE#=USE ROTATED SEARCH.  BY DEFAULT,
COM         OCTANTS & QUADRANTS ARE DEFINED USING THE PROJECT'S AXES.
IOP16= 8 / MAX.# OF COMPOSITES FOR INTERPOLATING A BLOCK
IOP19= 2 / MAX.# OF COMPOSITES PER HOLE (DEFAULT=NO LIMIT)
IOP20= 0 / 0=STORE VARIANCE; 1=STD DEV; 2=REL. VARIANCE

PAR1 = 15. / PRIMARY X-SEARCH DISTANCE
PAR2 = 15. / PRIMARY Y-SEARCH DISTANCE
PAR3 = 2.5 / PRIMARY Z-SEARCH DISTANCE
PAR4 = 15. / LIMITING SEARCH DISTANCE
PAR7 = 15. / MAX DISTANCE TO CLOSEST POINT
PAR8 = 15. / MAX DISTANCE TO PROJECT SINGLE COMPOSITE
PAR27= 2 4 1 / BLOCK DISCRETIZATION IN X,Y,Z
PAR31= 100. / OUTLIER CUTOFF TO CHANGE THE SEARCH
PAR32= 50. / MAX. 3D SEARCH DISTANCE AT PAR31

IOP17 = 0   /0=ORDINARY KRIGING, 5=SIMPLE
PAR30 = 0.   /MEAN GRADE OF THE AREA TO BE SIMPLE KRIGED

CMD = SEARCH 15. 15. 2.5 0. 0. 0.
CMD = NUG 0.671
CMD = EXP 0.329 12.6 9.5 4.6 0. 0. 0.

ITM1 = AUKR3 AUAJ1 CALC KRIGE
ITM2 = AUNN3 AUAJ1 CALC POLYG
ITM3 = MINZN BLOCK LIMIT
ITM4 = TRNCH BLOCK LIMIT
ITM5 = LNGTH RANGE 2.5 5.
ITM6 = DCODE RANGE 301. 716.
ITM7 = DIST3 BLOCK CALC RINGS
ITM8 = NCMP3 BLOCK CALC #COMP
ITM9 = NHOL3 BLOCK CALC #COMP
ITM10 = MINZN RANGE 1. 1.
ITM11 = LNGTH FACTR
CMD = BLOCK LIMIT MINZN 1
CMD = BLOCK LIMIT TRNCH 1 1
CMD = ELEV ZMID

I-O = 0 / DEBUG LEVEL
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=RKCK10.DAT  9=RKCK09.DAT  15=RKCK15.DAT;
MEDS-624V1   3=RPT624.C04  30=
** KRIGING OF 3-D BLOCK VALUES FOR AUKR3 **

RUN = OMIT

USR = MJL  /  MON DEC 6, 2004 9:30:13 AM US MOUNTAIN STANDARD TIME

IOP3 = 1. / 1=3-D SPHERICAL SEARCH; 0=2-D SEARCH
IOP4 = 0 / 0=NO GEOLOGIC MATCHING; 1=MATCH ONE ITEM
IOP6 = 0 / 0=USE TRUE DIST.; 1=USE ANISOTROPIC DIST.
IOP7 = 2 / MIN # OF COMPS FOR INTERP
IOP11= 00 / ROW # FOR EXTENDED OUTPUT
IOP12= 0 / 0=ALL; 1=OCTANT; 2=QUADRANT SEARCH; 3=SPLIT OCTANT;
COM         4=SPLIT QUADRANT.
COM         NOTE: NEGATIVE#=USE ROTATED SEARCH.  BY DEFAULT,
COM         OCTANTS & QUADRANTS ARE DEFINED USING THE PROJECT'S AXES.
IOP16= 12 / MAX.# OF COMPOSITES FOR INTERPOLATING A BLOCK
IOP19= 2 / MAX.# OF COMPOSITES PER HOLE (DEFAULT=NO LIMIT)
IOP20= 0 / 0=STORE VARIANCE; 1=STD DEV; 2=REL. VARIANCE

PAR1 = 50. / PRIMARY X-SEARCH DISTANCE
PAR2 = 50. / PRIMARY Y-SEARCH DISTANCE
PAR3 = 50. / PRIMARY Z-SEARCH DISTANCE
PAR4 = 50. / LIMITING SEARCH DISTANCE
PAR7 = 50. / MAX DISTANCE TO CLOSEST POINT
PAR8 = 50. / MAX DISTANCE TO PROJECT SINGLE COMPOSITE
PAR27= 2 4 1 / BLOCK DISCRETIZATION IN X,Y,Z
PAR31= 100. / OUTLIER CUTOFF TO CHANGE THE SEARCH
PAR32= 50. / MAX. 3D SEARCH DISTANCE AT PAR31

IOP17 = 0   /0=ORDINARY KRIGING, 5=SIMPLE
PAR30 = 0.   /MEAN GRADE OF THE AREA TO BE SIMPLE KRIGED

CMD = SEARCH 50. 50. 10. 0. 0. 75.
CMD = NUG 0.631
CMD = EXP 0.396 22.2 18.1 8.8 0. 0. 75.

ITM1 = AUKR3 AUAJ1 CALC KRIGE
ITM2 = AUNN3 AUAJ1 CALC POLYG
ITM3 = MINZN BLOCK LIMIT
ITM4 = TRNCH BLOCK LIMIT
ITM5 = LNGTH RANGE 2.5 5.
ITM6 = DCODE RANGE 301. 516.
ITM7 = DIST3 BLOCK CALC RINGS
ITM8 = NCMP3 BLOCK CALC #COMP
ITM9 = NHOL3 BLOCK CALC #COMP
ITM10 = MINZN RANGE 2. 2.
ITM11 = LNGTH FACTR
CMD = BLOCK LIMIT MINZN 2
CMD = BLOCK LIMIT TRNCH 1 2
CMD = ELEV ZMID

I-O = 0 / DEBUG LEVEL
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=RKCK10.DAT  9=RKCK09.DAT  15=RKCK15.DAT;
MEDS-624V1   3=RPT624.C05  30=
** KRIGING OF 3-D BLOCK VALUES FOR AUKR3 **

RUN = OMIT

USR = MJL  /  MON DEC 6, 2004 9:30:21 AM US MOUNTAIN STANDARD TIME

IOP3 = 1. / 1=3-D SPHERICAL SEARCH; 0=2-D SEARCH
IOP4 = 0 / 0=NO GEOLOGIC MATCHING; 1=MATCH ONE ITEM
IOP6 = 0 / 0=USE TRUE DIST.; 1=USE ANISOTROPIC DIST.
IOP7 = 3 / MIN # OF COMPS FOR INTERP
IOP11= 00 / ROW # FOR EXTENDED OUTPUT
IOP12= 0 / 0=ALL; 1=OCTANT; 2=QUADRANT SEARCH; 3=SPLIT OCTANT;
COM         4=SPLIT QUADRANT.
COM         NOTE: NEGATIVE#=USE ROTATED SEARCH.  BY DEFAULT,
COM         OCTANTS & QUADRANTS ARE DEFINED USING THE PROJECT'S AXES.
IOP16= 8 / MAX.# OF COMPOSITES FOR INTERPOLATING A BLOCK
IOP19= 2 / MAX.# OF COMPOSITES PER HOLE (DEFAULT=NO LIMIT)
IOP20= 0 / 0=STORE VARIANCE; 1=STD DEV; 2=REL. VARIANCE

PAR1 = 50. / PRIMARY X-SEARCH DISTANCE
PAR2 = 50. / PRIMARY Y-SEARCH DISTANCE
PAR3 = 50. / PRIMARY Z-SEARCH DISTANCE
PAR4 = 50. / LIMITING SEARCH DISTANCE
PAR7 = 50. / MAX DISTANCE TO CLOSEST POINT
PAR8 = 50. / MAX DISTANCE TO PROJECT SINGLE COMPOSITE
PAR27= 2 4 1 / BLOCK DISCRETIZATION IN X,Y,Z
PAR31= 100. / OUTLIER CUTOFF TO CHANGE THE SEARCH
PAR32= 50. / MAX. 3D SEARCH DISTANCE AT PAR31

IOP17 = 0   /0=ORDINARY KRIGING, 5=SIMPLE
PAR30 = 0.   /MEAN GRADE OF THE AREA TO BE SIMPLE KRIGED

CMD = SEARCH 50. 50. 10. 0. 0. 75.
CMD = NUG 0.631
CMD = EXP 0.396 22.2 18.1 8.8 0. 0. 75.

ITM1 = AUKR3 AUAJ1 CALC KRIGE
ITM2 = AUNN3 AUAJ1 CALC POLYG
ITM3 = MINZN BLOCK LIMIT
ITM4 = TRNCH BLOCK LIMIT
ITM5 = LNGTH RANGE 2.5 5.
ITM6 = DCODE RANGE 301. 516.
ITM7 = DIST3 BLOCK CALC RINGS
ITM8 = NCMP3 BLOCK CALC #COMP
ITM9 = NHOL3 BLOCK CALC #COMP
ITM10 = MINZN RANGE 2. 2.
ITM11 = LNGTH FACTR
CMD = BLOCK LIMIT MINZN 2
CMD = BLOCK LIMIT TRNCH 1 2
CMD = ELEV ZMID

I-O = 0 / DEBUG LEVEL
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=RKCK10.DAT  9=RKCK09.DAT  15=RKCK15.DAT;
MEDS-624V1   3=RPT624.C06  30=
** KRIGING OF 3-D BLOCK VALUES FOR AUKR3 **

RUN = OMIT

USR = MJL  /  MON DEC 6, 2004 9:31:03 AM US MOUNTAIN STANDARD TIME

IOP3 = 1. / 1=3-D SPHERICAL SEARCH; 0=2-D SEARCH
IOP4 = 0 / 0=NO GEOLOGIC MATCHING; 1=MATCH ONE ITEM
IOP6 = 0 / 0=USE TRUE DIST.; 1=USE ANISOTROPIC DIST.
IOP7 = 2 / MIN # OF COMPS FOR INTERP
IOP11= 00 / ROW # FOR EXTENDED OUTPUT
IOP12= 0 / 0=ALL; 1=OCTANT; 2=QUADRANT SEARCH; 3=SPLIT OCTANT;
COM         4=SPLIT QUADRANT.
COM         NOTE: NEGATIVE#=USE ROTATED SEARCH.  BY DEFAULT,
COM         OCTANTS & QUADRANTS ARE DEFINED USING THE PROJECT'S AXES.
IOP16= 8 / MAX.# OF COMPOSITES FOR INTERPOLATING A BLOCK
IOP19= 2 / MAX.# OF COMPOSITES PER HOLE (DEFAULT=NO LIMIT)
IOP20= 0 / 0=STORE VARIANCE; 1=STD DEV; 2=REL. VARIANCE

PAR1 = 15. / PRIMARY X-SEARCH DISTANCE
PAR2 = 15. / PRIMARY Y-SEARCH DISTANCE
PAR3 = 2.5 / PRIMARY Z-SEARCH DISTANCE
PAR4 = 15. / LIMITING SEARCH DISTANCE
PAR7 = 15. / MAX DISTANCE TO CLOSEST POINT
PAR8 = 15. / MAX DISTANCE TO PROJECT SINGLE COMPOSITE
PAR27= 2 4 1 / BLOCK DISCRETIZATION IN X,Y,Z
PAR31= 100. / OUTLIER CUTOFF TO CHANGE THE SEARCH
PAR32= 50. / MAX. 3D SEARCH DISTANCE AT PAR31

IOP17 = 0   /0=ORDINARY KRIGING, 5=SIMPLE
PAR30 = 0.   /MEAN GRADE OF THE AREA TO BE SIMPLE KRIGED

CMD = SEARCH 15. 15. 2.5 0. 0. 0.
CMD = NUG 0.631
CMD = EXP 0.369 22.2 18.1 8.8 0. 0. 0.

ITM1 = AUKR3 AUAJ1 CALC KRIGE
ITM2 = AUNN3 AUAJ1 CALC POLYG
ITM3 = MINZN BLOCK LIMIT
ITM4 = TRNCH BLOCK LIMIT
ITM5 = LNGTH RANGE 2.5 5.
ITM6 = DCODE RANGE 301. 716.
ITM7 = DIST3 BLOCK CALC RINGS
ITM8 = NCMP3 BLOCK CALC #COMP
ITM9 = NHOL3 BLOCK CALC #COMP
ITM10 = MINZN RANGE 2. 2.
ITM11 = LNGTH FACTR
CMD = BLOCK LIMIT MINZN 2
CMD = BLOCK LIMIT TRNCH 1 1
CMD = ELEV ZMID

I-O = 0 / DEBUG LEVEL
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=RKCK10.DAT  9=RKCK09.DAT  15=RKCK15.DAT;
MEDS-624V1   3=RPT624.C07  30=
** KRIGING OF 3-D BLOCK VALUES FOR AUKR3 **

RUN = OMIT

USR = MJL  /  MON DEC 6, 2004 9:30:28 AM US MOUNTAIN STANDARD TIME

IOP3 = 1. / 1=3-D SPHERICAL SEARCH; 0=2-D SEARCH
IOP4 = 0 / 0=NO GEOLOGIC MATCHING; 1=MATCH ONE ITEM
IOP6 = 0 / 0=USE TRUE DIST.; 1=USE ANISOTROPIC DIST.
IOP7 = 2 / MIN # OF COMPS FOR INTERP
IOP11= 00 / ROW # FOR EXTENDED OUTPUT
IOP12= 0 / 0=ALL; 1=OCTANT; 2=QUADRANT SEARCH; 3=SPLIT OCTANT;
COM          4=SPLIT QUADRANT.
COM          NOTE: NEGATIVE#=USE ROTATED SEARCH.  BY DEFAULT,
COM          OCTANTS & QUADRANTS ARE DEFINED USING THE PROJECT'S AXES.
IOP16= 12 / MAX.# OF COMPOSITES FOR INTERPOLATING A BLOCK
IOP19= 2 / MAX.# OF COMPOSITES PER HOLE (DEFAULT=NO LIMIT)
IOP20= 0 / 0=STORE VARIANCE; 1=STD DEV; 2=REL. VARIANCE

PAR1 = 50. / PRIMARY X-SEARCH DISTANCE
PAR2 = 50. / PRIMARY Y-SEARCH DISTANCE
PAR3 = 50. / PRIMARY Z-SEARCH DISTANCE
PAR4 = 50. / LIMITING SEARCH DISTANCE
PAR7 = 50. / MAX DISTANCE TO CLOSEST POINT
PAR8 = 50. / MAX DISTANCE TO PROJECT SINGLE COMPOSITE
PAR27= 2 4 1 / BLOCK DISCRETIZATION IN X,Y,Z
PAR31= 100. / OUTLIER CUTOFF TO CHANGE THE SEARCH
PAR32= 50. / MAX. 3D SEARCH DISTANCE AT PAR31

IOP17 = 0   /0=ORDINARY KRIGING, 5=SIMPLE
PAR30 = 0.   /MEAN GRADE OF THE AREA TO BE SIMPLE KRIGED

CMD = SEARCH 50. 50. 10. 30. 0. 75.
CMD = NUG 0.478
CMD = EXP 0.522 41.5 13.9 25.9 30. 0. 75.

ITM1 = AUKR3 AUAJ1 CALC KRIGE
ITM2 = AUNN3 AUAJ1 CALC POLYG
ITM3 = MINZN BLOCK LIMIT
ITM4 = TRNCH BLOCK LIMIT
ITM5 = LNGTH RANGE 2.5 5.
ITM6 = DCODE RANGE 301. 516.
ITM7 = DIST3 BLOCK CALC RINGS
ITM8 = NCMP3 BLOCK CALC #COMP
ITM9 = NHOL3 BLOCK CALC #COMP
ITM10 = MINZN RANGE 3. 3.
ITM11 = LNGTH FACTR
CMD = BLOCK LIMIT MINZN 3
CMD = BLOCK LIMIT TRNCH 1 2
CMD = ELEV ZMID

I-O = 0 / DEBUG LEVEL
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=RKCK10.DAT  9=RKCK09.DAT  15=RKCK15.DAT;
MEDS-624V1   3=RPT624.C08  30=
** KRIGING OF 3-D BLOCK VALUES FOR AUKR3 **

RUN = OMIT

USR = MJL  /  MON DEC 6, 2004 9:30:34 AM US MOUNTAIN STANDARD TIME

IOP3 = 1. / 1=3-D SPHERICAL SEARCH; 0=2-D SEARCH
IOP4 = 0 / 0=NO GEOLOGIC MATCHING; 1=MATCH ONE ITEM
IOP6 = 0 / 0=USE TRUE DIST.; 1=USE ANISOTROPIC DIST.
IOP7 = 3 / MIN # OF COMPS FOR INTERP
IOP11= 00 / ROW # FOR EXTENDED OUTPUT
IOP12= 0 / 0=ALL; 1=OCTANT; 2=QUADRANT SEARCH; 3=SPLIT OCTANT;
COM          4=SPLIT QUADRANT.
COM          NOTE: NEGATIVE#=USE ROTATED SEARCH.  BY DEFAULT,
COM          OCTANTS & QUADRANTS ARE DEFINED USING THE PROJECT'S AXES.
IOP16= 6 / MAX.# OF COMPOSITES FOR INTERPOLATING A BLOCK
IOP19= 2 / MAX.# OF COMPOSITES PER HOLE (DEFAULT=NO LIMIT)
IOP20= 0 / 0=STORE VARIANCE; 1=STD DEV; 2=REL. VARIANCE

PAR1 = 50. / PRIMARY X-SEARCH DISTANCE
PAR2 = 50. / PRIMARY Y-SEARCH DISTANCE
PAR3 = 50. / PRIMARY Z-SEARCH DISTANCE
PAR4 = 50. / LIMITING SEARCH DISTANCE
PAR7 = 50. / MAX DISTANCE TO CLOSEST POINT
PAR8 = 50. / MAX DISTANCE TO PROJECT SINGLE COMPOSITE
PAR27= 2 4 1 / BLOCK DISCRETIZATION IN X,Y,Z
PAR31= 100. / OUTLIER CUTOFF TO CHANGE THE SEARCH
PAR32= 50. / MAX. 3D SEARCH DISTANCE AT PAR31

IOP17 = 0   /0=ORDINARY KRIGING, 5=SIMPLE
PAR30 = 0.   /MEAN GRADE OF THE AREA TO BE SIMPLE KRIGED

CMD = SEARCH 50. 50. 10. 30. 0. 75.
CMD = NUG 0.478
CMD = EXP 0.522 41.5 13.9 25.9 30. 0. 75.

ITM1 = AUKR3 AUAJ1 CALC KRIGE
ITM2 = AUNN3 AUAJ1 CALC POLYG
ITM3 = MINZN BLOCK LIMIT
ITM4 = TRNCH BLOCK LIMIT
ITM5 = LNGTH RANGE 2.5 5.
ITM6 = DCODE RANGE 301. 516.
ITM7 = DIST3 BLOCK CALC RINGS
ITM8 = NCMP3 BLOCK CALC #COMP
ITM9 = NHOL3 BLOCK CALC #COMP
ITM10 = MINZN RANGE 3. 3.
ITM11 = LNGTH FACTR
CMD = BLOCK LIMIT MINZN 3
CMD = BLOCK LIMIT TRNCH 1 2
CMD = ELEV ZMID

I-O = 0 / DEBUG LEVEL
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=RKCK10.DAT  9=RKCK09.DAT  15=RKCK15.DAT;
MEDS-624V1   3=RPT624.C09  30=
** KRIGING OF 3-D BLOCK VALUES FOR AUKR3 **

RUN = OMIT

USR = MJL  /  MON DEC 6, 2004 9:31:11 AM US MOUNTAIN STANDARD TIME

IOP3 = 1. / 1=3-D SPHERICAL SEARCH; 0=2-D SEARCH
IOP4 = 0 / 0=NO GEOLOGIC MATCHING; 1=MATCH ONE ITEM
IOP6 = 0 / 0=USE TRUE DIST.; 1=USE ANISOTROPIC DIST.
IOP7 = 2 / MIN # OF COMPS FOR INTERP
IOP11= 00 / ROW # FOR EXTENDED OUTPUT
IOP12= 0 / 0=ALL; 1=OCTANT; 2=QUADRANT SEARCH; 3=SPLIT OCTANT;
COM          4=SPLIT QUADRANT.
COM          NOTE: NEGATIVE#=USE ROTATED SEARCH.  BY DEFAULT,
COM          OCTANTS & QUADRANTS ARE DEFINED USING THE PROJECT'S AXES.
IOP16= 8 / MAX.# OF COMPOSITES FOR INTERPOLATING A BLOCK
IOP19= 2 / MAX.# OF COMPOSITES PER HOLE (DEFAULT=NO LIMIT)
IOP20= 0 / 0=STORE VARIANCE; 1=STD DEV; 2=REL. VARIANCE

PAR1 = 15. / PRIMARY X-SEARCH DISTANCE
PAR2 = 15. / PRIMARY Y-SEARCH DISTANCE
PAR3 = 2.5 / PRIMARY Z-SEARCH DISTANCE
PAR4 = 15. / LIMITING SEARCH DISTANCE
PAR7 = 15. / MAX DISTANCE TO CLOSEST POINT
PAR8 = 15. / MAX DISTANCE TO PROJECT SINGLE COMPOSITE
PAR27= 2 4 1 / BLOCK DISCRETIZATION IN X,Y,Z
PAR31= 100. / OUTLIER CUTOFF TO CHANGE THE SEARCH
PAR32= 50. / MAX. 3D SEARCH DISTANCE AT PAR31

IOP17 = 0   /0=ORDINARY KRIGING, 5=SIMPLE
PAR30 = 0.   /MEAN GRADE OF THE AREA TO BE SIMPLE KRIGED

CMD = SEARCH 15. 15. 2.5 0. 0. 0.
CMD = NUG 0.478
CMD = EXP 0.522 41.5 13.9 25.9 0. 0. 0.

ITM1 = AUKR3 AUAJ1 CALC KRIGE
ITM2 = AUNN3 AUAJ1 CALC POLYG
ITM3 = MINZN BLOCK LIMIT
ITM4 = TRNCH BLOCK LIMIT
ITM5 = LNGTH RANGE 2.5 5.
ITM6 = DCODE RANGE 301. 716.
ITM7 = DIST3 BLOCK CALC RINGS
ITM8 = NCMP3 BLOCK CALC #COMP
ITM9 = NHOL3 BLOCK CALC #COMP
ITM10 = MINZN RANGE 3. 3.
ITM11 = LNGTH FACTR
CMD = BLOCK LIMIT MINZN 3
CMD = BLOCK LIMIT TRNCH 1 1
CMD = ELEV ZMID

I-O = 0 / DEBUG LEVEL
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=RKCK10.DAT  9=RKCK09.DAT  15=RKCK15.DAT;
MEDS-624V1   3=RPT624.D01  30=
** KRIGING OF 3-D BLOCK VALUES FOR AUKR4 **

RUN = RESET

USR = MJL  /  MON DEC 6, 2004 9:30:00 AM US MOUNTAIN STANDARD TIME

IOP3 = 1. / 1=3-D SPHERICAL SEARCH; 0=2-D SEARCH
IOP4 = 0 / 0=NO GEOLOGIC MATCHING; 1=MATCH ONE ITEM
IOP6 = 0 / 0=USE TRUE DIST.; 1=USE ANISOTROPIC DIST.
IOP7 = 2 / MIN # OF COMPS FOR INTERP
IOP11= 00 / ROW # FOR EXTENDED OUTPUT
IOP12= 0 / 0=ALL; 1=OCTANT; 2=QUADRANT SEARCH; 3=SPLIT OCTANT;
COM         4=SPLIT QUADRANT.
COM         NOTE: NEGATIVE#=USE ROTATED SEARCH.  BY DEFAULT,
COM         OCTANTS & QUADRANTS ARE DEFINED USING THE PROJECT'S AXES.
IOP16= 6 / MAX.# OF COMPOSITES FOR INTERPOLATING A BLOCK
IOP19= 2 / MAX.# OF COMPOSITES PER HOLE (DEFAULT=NO LIMIT)
IOP20= 0 / 0=STORE VARIANCE; 1=STD DEV; 2=REL. VARIANCE

PAR1 = 50. / PRIMARY X-SEARCH DISTANCE
PAR2 = 50. / PRIMARY Y-SEARCH DISTANCE
PAR3 = 50. / PRIMARY Z-SEARCH DISTANCE
PAR4 = 50. / LIMITING SEARCH DISTANCE
PAR7 = 50. / MAX DISTANCE TO CLOSEST POINT
PAR8 = 50. / MAX DISTANCE TO PROJECT SINGLE COMPOSITE
PAR27= 2 4 1 / BLOCK DISCRETIZATION IN X,Y,Z
PAR31= 7     / OUTLIER CUTOFF TO CHANGE THE SEARCH
PAR32= 12.5  / MAX. 3D SEARCH DISTANCE AT PAR31

IOP17 = 0   /0=ORDINARY KRIGING, 5=SIMPLE
PAR30 = 0.  /MEAN GRADE OF THE AREA TO BE SIMPLE KRIGED

CMD = SEARCH 50. 50. 10. 0. 0. 75.
CMD = NUG 0.671
CMD = EXP 0.329 12.6 9.5 4.6 0. 0. 75.

ITM1 = AUKR4 AUAJ1 CALC KRIGE
ITM2 = AUNN4 AUAJ1 CALC POLYG
ITM3 = MINZN BLOCK LIMIT
ITM4 = TRNCH BLOCK LIMIT
ITM5 = LNGTH RANGE 2.5 5.
ITM6 = DCODE RANGE 301. 516.
ITM7 = DIST4 BLOCK CALC RINGS
ITM8 = NCMP4 BLOCK CALC #COMP
ITM9 = NHOL4 BLOCK CALC #COMP
ITM10 = MINZN RANGE 1. 1.
ITM11 = LNGTH FACTR
CMD = BLOCK LIMIT MINZN 1
CMD = BLOCK LIMIT TRNCH 1 2
CMD = ELEV ZMID

I-O = 0 / DEBUG LEVEL
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=RKCK10.DAT  9=RKCK09.DAT  15=RKCK15.DAT;
MEDS-624V1   3=RPT624.D02  30=
** KRIGING OF 3-D BLOCK VALUES FOR AUKR4 **

RUN = OMIT

USR = MJL  /  MON DEC 6, 2004 9:30:06 AM US MOUNTAIN STANDARD TIME

IOP3 = 1. / 1=3-D SPHERICAL SEARCH; 0=2-D SEARCH
IOP4 = 0 / 0=NO GEOLOGIC MATCHING; 1=MATCH ONE ITEM
IOP6 = 0 / 0=USE TRUE DIST.; 1=USE ANISOTROPIC DIST.
IOP7 = 3 / MIN # OF COMPS FOR INTERP
IOP11= 00 / ROW # FOR EXTENDED OUTPUT
IOP12= 0 / 0=ALL; 1=OCTANT; 2=QUADRANT SEARCH; 3=SPLIT OCTANT;
COM         4=SPLIT QUADRANT.
COM         NOTE: NEGATIVE#=USE ROTATED SEARCH.  BY DEFAULT,
COM         OCTANTS & QUADRANTS ARE DEFINED USING THE PROJECT'S AXES.
IOP16= 6 / MAX.# OF COMPOSITES FOR INTERPOLATING A BLOCK
IOP19= 2 / MAX.# OF COMPOSITES PER HOLE (DEFAULT=NO LIMIT)
IOP20= 0 / 0=STORE VARIANCE; 1=STD DEV; 2=REL. VARIANCE

PAR1 = 50. / PRIMARY X-SEARCH DISTANCE
PAR2 = 50. / PRIMARY Y-SEARCH DISTANCE
PAR3 = 50. / PRIMARY Z-SEARCH DISTANCE
PAR4 = 50. / LIMITING SEARCH DISTANCE
PAR7 = 50. / MAX DISTANCE TO CLOSEST POINT
PAR8 = 50. / MAX DISTANCE TO PROJECT SINGLE COMPOSITE
PAR27= 2 4 1 / BLOCK DISCRETIZATION IN X,Y,Z
PAR31= 7    / OUTLIER CUTOFF TO CHANGE THE SEARCH
PAR32= 12.5 / MAX. 3D SEARCH DISTANCE AT PAR31

IOP17 = 0   /0=ORDINARY KRIGING, 5=SIMPLE
PAR30 = 0.   /MEAN GRADE OF THE AREA TO BE SIMPLE KRIGED

CMD = SEARCH 50. 50. 10. 0. 0. 75.
CMD = NUG 0.671
CMD = EXP 0.329 12.6 9.5 4.6 0. 0. 75.

ITM1 = AUKR4 AUAJ1 CALC KRIGE
ITM2 = AUNN4 AUAJ1 CALC POLYG
ITM3 = MINZN BLOCK LIMIT
ITM4 = TRNCH BLOCK LIMIT
ITM5 = LNGTH RANGE 2.5 5.
ITM6 = DCODE RANGE 301. 516.
ITM7 = DIST4 BLOCK CALC RINGS
ITM8 = NCMP4 BLOCK CALC #COMP
ITM9 = NHOL4 BLOCK CALC #COMP
ITM10 = MINZN RANGE 1. 1.
ITM11 = LNGTH FACTR
CMD = BLOCK LIMIT MINZN 1
CMD = BLOCK LIMIT TRNCH 1 2
CMD = ELEV ZMID

I-O = 0 / DEBUG LEVEL
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=RKCK10.DAT  9=RKCK09.DAT  15=RKCK15.DAT;
MEDS-624V1   3=RPT624.D03  30=
** KRIGING OF 3-D BLOCK VALUES FOR AUKR4 **

RUN = OMIT

USR = MJL  /  MON DEC 6, 2004 9:30:56 AM US MOUNTAIN STANDARD TIME

IOP3 = 1. / 1=3-D SPHERICAL SEARCH; 0=2-D SEARCH
IOP4 = 0 / 0=NO GEOLOGIC MATCHING; 1=MATCH ONE ITEM
IOP6 = 0 / 0=USE TRUE DIST.; 1=USE ANISOTROPIC DIST.
IOP7 = 2 / MIN # OF COMPS FOR INTERP
IOP11= 00 / ROW # FOR EXTENDED OUTPUT
IOP12= 0 / 0=ALL; 1=OCTANT; 2=QUADRANT SEARCH; 3=SPLIT OCTANT;
COM         4=SPLIT QUADRANT.
COM         NOTE: NEGATIVE#=USE ROTATED SEARCH.  BY DEFAULT,
COM         OCTANTS & QUADRANTS ARE DEFINED USING THE PROJECT'S AXES.
IOP16= 8 / MAX.# OF COMPOSITES FOR INTERPOLATING A BLOCK
IOP19= 2 / MAX.# OF COMPOSITES PER HOLE (DEFAULT=NO LIMIT)
IOP20= 0 / 0=STORE VARIANCE; 1=STD DEV; 2=REL. VARIANCE

PAR1 = 15. / PRIMARY X-SEARCH DISTANCE
PAR2 = 15. / PRIMARY Y-SEARCH DISTANCE
PAR3 = 2.5 / PRIMARY Z-SEARCH DISTANCE
PAR4 = 15. / LIMITING SEARCH DISTANCE
PAR7 = 15. / MAX DISTANCE TO CLOSEST POINT
PAR8 = 15. / MAX DISTANCE TO PROJECT SINGLE COMPOSITE
PAR27= 2 4 1 / BLOCK DISCRETIZATION IN X,Y,Z
PAR31= 7    / OUTLIER CUTOFF TO CHANGE THE SEARCH
PAR32= 12.5 / MAX. 3D SEARCH DISTANCE AT PAR31

IOP17 = 0   /0=ORDINARY KRIGING, 5=SIMPLE
PAR30 = 0.   /MEAN GRADE OF THE AREA TO BE SIMPLE KRIGED

CMD = SEARCH 15. 15. 2.5 0. 0. 0.
CMD = NUG 0.671
CMD = EXP 0.329 12.6 9.5 4.6 0. 0. 0.

ITM1 = AUKR4 AUAJ1 CALC KRIGE
ITM2 = AUNN4 AUAJ1 CALC POLYG
ITM3 = MINZN BLOCK LIMIT
ITM4 = TRNCH BLOCK LIMIT
ITM5 = LNGTH RANGE 2.5 5.
ITM6 = DCODE RANGE 301. 716.
ITM7 = DIST4 BLOCK CALC RINGS
ITM8 = NCMP4 BLOCK CALC #COMP
ITM9 = NHOL4 BLOCK CALC #COMP
ITM10 = MINZN RANGE 1. 1.
ITM11 = LNGTH FACTR
CMD = BLOCK LIMIT MINZN 1
CMD = BLOCK LIMIT TRNCH 1 1
CMD = ELEV ZMID

I-O = 0 / DEBUG LEVEL
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=RKCK10.DAT  9=RKCK09.DAT  15=RKCK15.DAT;
MEDS-624V1   3=RPT624.D04  30=
** KRIGING OF 3-D BLOCK VALUES FOR AUKR4 **

RUN = OMIT

USR = MJL  /  MON DEC 6, 2004 9:30:13 AM US MOUNTAIN STANDARD TIME

IOP3 = 1. / 1=3-D SPHERICAL SEARCH; 0=2-D SEARCH
IOP4 = 0 / 0=NO GEOLOGIC MATCHING; 1=MATCH ONE ITEM
IOP6 = 0 / 0=USE TRUE DIST.; 1=USE ANISOTROPIC DIST.
IOP7 = 2 / MIN # OF COMPS FOR INTERP
IOP11= 00 / ROW # FOR EXTENDED OUTPUT
IOP12= 0 / 0=ALL; 1=OCTANT; 2=QUADRANT SEARCH; 3=SPLIT OCTANT;
COM         4=SPLIT QUADRANT.
COM         NOTE: NEGATIVE#=USE ROTATED SEARCH.  BY DEFAULT,
COM         OCTANTS & QUADRANTS ARE DEFINED USING THE PROJECT'S AXES.
IOP16= 12 / MAX.# OF COMPOSITES FOR INTERPOLATING A BLOCK
IOP19= 2 / MAX.# OF COMPOSITES PER HOLE (DEFAULT=NO LIMIT)
IOP20= 0 / 0=STORE VARIANCE; 1=STD DEV; 2=REL. VARIANCE

PAR1 = 50. / PRIMARY X-SEARCH DISTANCE
PAR2 = 50. / PRIMARY Y-SEARCH DISTANCE
PAR3 = 50. / PRIMARY Z-SEARCH DISTANCE
PAR4 = 50. / LIMITING SEARCH DISTANCE
PAR7 = 50. / MAX DISTANCE TO CLOSEST POINT
PAR8 = 50. / MAX DISTANCE TO PROJECT SINGLE COMPOSITE
PAR27= 2 4 1 / BLOCK DISCRETIZATION IN X,Y,Z
PAR31= 6.0  / OUTLIER CUTOFF TO CHANGE THE SEARCH
PAR32= 12.5 / MAX. 3D SEARCH DISTANCE AT PAR31

IOP17 = 0   /0=ORDINARY KRIGING, 5=SIMPLE
PAR30 = 0.   /MEAN GRADE OF THE AREA TO BE SIMPLE KRIGED

CMD = SEARCH 50. 50. 10. 0. 0. 75.
CMD = NUG 0.631
CMD = EXP 0.396 22.2 18.1 8.8 0. 0. 75.

ITM1 = AUKR4 AUAJ1 CALC KRIGE
ITM2 = AUNN4 AUAJ1 CALC POLYG
ITM3 = MINZN BLOCK LIMIT
ITM4 = TRNCH BLOCK LIMIT
ITM5 = LNGTH RANGE 2.5 5.
ITM6 = DCODE RANGE 301. 516.
ITM7 = DIST4 BLOCK CALC RINGS
ITM8 = NCMP4 BLOCK CALC #COMP
ITM9 = NHOL4 BLOCK CALC #COMP
ITM10 = MINZN RANGE 2. 2.
ITM11 = LNGTH FACTR
CMD = BLOCK LIMIT MINZN 2
CMD = BLOCK LIMIT TRNCH 1 2
CMD = ELEV ZMID

I-O = 0 / DEBUG LEVEL
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=RKCK10.DAT  9=RKCK09.DAT  15=RKCK15.DAT;
MEDS-624V1   3=RPT624.D05  30=
** KRIGING OF 3-D BLOCK VALUES FOR AUKR4 **

RUN = OMIT

USR = MJL  /  MON DEC 6, 2004 9:30:21 AM US MOUNTAIN STANDARD TIME

IOP3 = 1. / 1=3-D SPHERICAL SEARCH; 0=2-D SEARCH
IOP4 = 0 / 0=NO GEOLOGIC MATCHING; 1=MATCH ONE ITEM
IOP6 = 0 / 0=USE TRUE DIST.; 1=USE ANISOTROPIC DIST.
IOP7 = 3 / MIN # OF COMPS FOR INTERP
IOP11= 00 / ROW # FOR EXTENDED OUTPUT
IOP12= 0 / 0=ALL; 1=OCTANT; 2=QUADRANT SEARCH; 3=SPLIT OCTANT;
COM         4=SPLIT QUADRANT.
COM         NOTE: NEGATIVE#=USE ROTATED SEARCH.  BY DEFAULT,
COM         OCTANTS & QUADRANTS ARE DEFINED USING THE PROJECT'S AXES.
IOP16= 8 / MAX.# OF COMPOSITES FOR INTERPOLATING A BLOCK
IOP19= 2 / MAX.# OF COMPOSITES PER HOLE (DEFAULT=NO LIMIT)
IOP20= 0 / 0=STORE VARIANCE; 1=STD DEV; 2=REL. VARIANCE

PAR1 = 50. / PRIMARY X-SEARCH DISTANCE
PAR2 = 50. / PRIMARY Y-SEARCH DISTANCE
PAR3 = 50. / PRIMARY Z-SEARCH DISTANCE
PAR4 = 50. / LIMITING SEARCH DISTANCE
PAR7 = 50. / MAX DISTANCE TO CLOSEST POINT
PAR8 = 50. / MAX DISTANCE TO PROJECT SINGLE COMPOSITE
PAR27= 2 4 1 / BLOCK DISCRETIZATION IN X,Y,Z
PAR31= 6.0  / OUTLIER CUTOFF TO CHANGE THE SEARCH
PAR32= 12.5/ MAX. 3D SEARCH DISTANCE AT PAR31

IOP17 = 0   /0=ORDINARY KRIGING, 5=SIMPLE
PAR30 = 0.   /MEAN GRADE OF THE AREA TO BE SIMPLE KRIGED

CMD = SEARCH 50. 50. 10. 0. 0. 75.
CMD = NUG 0.631
CMD = EXP 0.396 22.2 18.1 8.8 0. 0. 75.

ITM1 = AUKR4 AUAJ1 CALC KRIGE
ITM2 = AUNN4 AUAJ1 CALC POLYG
ITM3 = MINZN BLOCK LIMIT
ITM4 = TRNCH BLOCK LIMIT
ITM5 = LNGTH RANGE 2.5 5.
ITM6 = DCODE RANGE 301. 516.
ITM7 = DIST4 BLOCK CALC RINGS
ITM8 = NCMP4 BLOCK CALC #COMP
ITM9 = NHOL4 BLOCK CALC #COMP
ITM10 = MINZN RANGE 2. 2.
ITM11 = LNGTH FACTR
CMD = BLOCK LIMIT MINZN 2
CMD = BLOCK LIMIT TRNCH 1 2
CMD = ELEV ZMID

I-O = 0 / DEBUG LEVEL
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=RKCK10.DAT  9=RKCK09.DAT  15=RKCK15.DAT;
MEDS-624V1   3=RPT624.D06  30=
** KRIGING OF 3-D BLOCK VALUES FOR AUKR4 **

RUN = OMIT

USR = MJL  /  MON DEC 6, 2004 9:31:03 AM US MOUNTAIN STANDARD TIME

IOP3 = 1. / 1=3-D SPHERICAL SEARCH; 0=2-D SEARCH
IOP4 = 0 / 0=NO GEOLOGIC MATCHING; 1=MATCH ONE ITEM
IOP6 = 0 / 0=USE TRUE DIST.; 1=USE ANISOTROPIC DIST.
IOP7 = 2 / MIN # OF COMPS FOR INTERP
IOP11= 00 / ROW # FOR EXTENDED OUTPUT
IOP12= 0 / 0=ALL; 1=OCTANT; 2=QUADRANT SEARCH; 3=SPLIT OCTANT;
COM         4=SPLIT QUADRANT.
COM         NOTE: NEGATIVE#=USE ROTATED SEARCH.  BY DEFAULT,
COM         OCTANTS & QUADRANTS ARE DEFINED USING THE PROJECT'S AXES.
IOP16= 8 / MAX.# OF COMPOSITES FOR INTERPOLATING A BLOCK
IOP19= 2 / MAX.# OF COMPOSITES PER HOLE (DEFAULT=NO LIMIT)
IOP20= 0 / 0=STORE VARIANCE; 1=STD DEV; 2=REL. VARIANCE

PAR1 = 15. / PRIMARY X-SEARCH DISTANCE
PAR2 = 15. / PRIMARY Y-SEARCH DISTANCE
PAR3 = 2.5 / PRIMARY Z-SEARCH DISTANCE
PAR4 = 15. / LIMITING SEARCH DISTANCE
PAR7 = 15. / MAX DISTANCE TO CLOSEST POINT
PAR8 = 15. / MAX DISTANCE TO PROJECT SINGLE COMPOSITE
PAR27= 2 4 1 / BLOCK DISCRETIZATION IN X,Y,Z
PAR31= 6.0  / OUTLIER CUTOFF TO CHANGE THE SEARCH
PAR32= 12.5 / MAX. 3D SEARCH DISTANCE AT PAR31

IOP17 = 0   /0=ORDINARY KRIGING, 5=SIMPLE
PAR30 = 0.   /MEAN GRADE OF THE AREA TO BE SIMPLE KRIGED

CMD = SEARCH 15. 15. 2.5 0. 0. 0.
CMD = NUG 0.631
CMD = EXP 0.369 22.2 18.1 8.8 0. 0. 0.

ITM1 = AUKR4 AUAJ1 CALC KRIGE
ITM2 = AUNN4 AUAJ1 CALC POLYG
ITM3 = MINZN BLOCK LIMIT
ITM4 = TRNCH BLOCK LIMIT
ITM5 = LNGTH RANGE 2.5 5.
ITM6 = DCODE RANGE 301. 716.
ITM7 = DIST4 BLOCK CALC RINGS
ITM8 = NCMP4 BLOCK CALC #COMP
ITM9 = NHOL4 BLOCK CALC #COMP
ITM10 = MINZN RANGE 2. 2.
ITM11 = LNGTH FACTR
CMD = BLOCK LIMIT MINZN 2
CMD = BLOCK LIMIT TRNCH 1 1
CMD = ELEV ZMID

I-O = 0 / DEBUG LEVEL
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=RKCK10.DAT  9=RKCK09.DAT  15=RKCK15.DAT;
MEDS-624V1   3=RPT624.D07  30=
** KRIGING OF 3-D BLOCK VALUES FOR AUKR4 **

RUN = OMIT

USR = MJL  /  MON DEC 6, 2004 9:30:28 AM US MOUNTAIN STANDARD TIME

IOP3 = 1. / 1=3-D SPHERICAL SEARCH; 0=2-D SEARCH
IOP4 = 0 / 0=NO GEOLOGIC MATCHING; 1=MATCH ONE ITEM
IOP6 = 0 / 0=USE TRUE DIST.; 1=USE ANISOTROPIC DIST.
IOP7 = 2 / MIN # OF COMPS FOR INTERP
IOP11= 00 / ROW # FOR EXTENDED OUTPUT
IOP12= 0 / 0=ALL; 1=OCTANT; 2=QUADRANT SEARCH; 3=SPLIT OCTANT;
COM         4=SPLIT QUADRANT.
COM         NOTE: NEGATIVE#=USE ROTATED SEARCH.  BY DEFAULT,
COM         OCTANTS & QUADRANTS ARE DEFINED USING THE PROJECT'S AXES.
IOP16= 12 / MAX.# OF COMPOSITES FOR INTERPOLATING A BLOCK
IOP19= 2 / MAX.# OF COMPOSITES PER HOLE (DEFAULT=NO LIMIT)
IOP20= 0 / 0=STORE VARIANCE; 1=STD DEV; 2=REL. VARIANCE

PAR1 = 50. / PRIMARY X-SEARCH DISTANCE
PAR2 = 50. / PRIMARY Y-SEARCH DISTANCE
PAR3 = 50. / PRIMARY Z-SEARCH DISTANCE
PAR4 = 50. / LIMITING SEARCH DISTANCE
PAR7 = 50. / MAX DISTANCE TO CLOSEST POINT
PAR8 = 50. / MAX DISTANCE TO PROJECT SINGLE COMPOSITE
PAR27= 2 4 1 / BLOCK DISCRETIZATION IN X,Y,Z
PAR31= 7.0  / OUTLIER CUTOFF TO CHANGE THE SEARCH
PAR32= 15.0 / MAX. 3D SEARCH DISTANCE AT PAR31

IOP17 = 0   /0=ORDINARY KRIGING, 5=SIMPLE
PAR30 = 0.   /MEAN GRADE OF THE AREA TO BE SIMPLE KRIGED

CMD = SEARCH 50. 50. 10. 30. 0. 75.
CMD = NUG 0.478
CMD = EXP 0.522 41.5 13.9 25.9 30. 0. 75.

ITM1 = AUKR4 AUAJ1 CALC KRIGE
ITM2 = AUNN4 AUAJ1 CALC POLYG
ITM3 = MINZN BLOCK LIMIT
ITM4 = TRNCH BLOCK LIMIT
ITM5 = LNGTH RANGE 2.5 5.
ITM6 = DCODE RANGE 301. 516.
ITM7 = DIST4 BLOCK CALC RINGS
ITM8 = NCMP4 BLOCK CALC #COMP
ITM9 = NHOL4 BLOCK CALC #COMP
ITM10 = MINZN RANGE 3. 3.
ITM11 = LNGTH FACTR
CMD = BLOCK LIMIT MINZN 3
CMD = BLOCK LIMIT TRNCH 1 2
CMD = ELEV ZMID

I-O = 0 / DEBUG LEVEL
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=RKCK10.DAT  9=RKCK09.DAT  15=RKCK15.DAT;
MEDS-624V1   3=RPT624.D08  30=
** KRIGING OF 3-D BLOCK VALUES FOR AUKR4 **

RUN = OMIT

USR = MJL  /  MON DEC 6, 2004 9:30:34 AM US MOUNTAIN STANDARD TIME

IOP3 = 1. / 1=3-D SPHERICAL SEARCH; 0=2-D SEARCH
IOP4 = 0 / 0=NO GEOLOGIC MATCHING; 1=MATCH ONE ITEM
IOP6 = 0 / 0=USE TRUE DIST.; 1=USE ANISOTROPIC DIST.
IOP7 = 3 / MIN # OF COMPS FOR INTERP
IOP11= 00 / ROW # FOR EXTENDED OUTPUT
IOP12= 0 / 0=ALL; 1=OCTANT; 2=QUADRANT SEARCH; 3=SPLIT OCTANT;
COM         4=SPLIT QUADRANT.
COM         NOTE: NEGATIVE#=USE ROTATED SEARCH.  BY DEFAULT,
COM         OCTANTS & QUADRANTS ARE DEFINED USING THE PROJECT'S AXES.
IOP16= 6 / MAX.# OF COMPOSITES FOR INTERPOLATING A BLOCK
IOP19= 2 / MAX.# OF COMPOSITES PER HOLE (DEFAULT=NO LIMIT)
IOP20= 0 / 0=STORE VARIANCE; 1=STD DEV; 2=REL. VARIANCE

PAR1 = 50. / PRIMARY X-SEARCH DISTANCE
PAR2 = 50. / PRIMARY Y-SEARCH DISTANCE
PAR3 = 50. / PRIMARY Z-SEARCH DISTANCE
PAR4 = 50. / LIMITING SEARCH DISTANCE
PAR7 = 50. / MAX DISTANCE TO CLOSEST POINT
PAR8 = 50. / MAX DISTANCE TO PROJECT SINGLE COMPOSITE
PAR27= 2 4 1 / BLOCK DISCRETIZATION IN X,Y,Z
PAR31= 7.0  / OUTLIER CUTOFF TO CHANGE THE SEARCH
PAR32= 15.0 / MAX. 3D SEARCH DISTANCE AT PAR31

IOP17 = 0   /0=ORDINARY KRIGING, 5=SIMPLE
PAR30 = 0.   /MEAN GRADE OF THE AREA TO BE SIMPLE KRIGED

CMD = SEARCH 50. 50. 10. 30. 0. 75.
CMD = NUG 0.478
CMD = EXP 0.522 41.5 13.9 25.9 30. 0. 75.

ITM1 = AUKR4 AUAJ1 CALC KRIGE
ITM2 = AUNN4 AUAJ1 CALC POLYG
ITM3 = MINZN BLOCK LIMIT
ITM4 = TRNCH BLOCK LIMIT
ITM5 = LNGTH RANGE 2.5 5.
ITM6 = DCODE RANGE 301. 516.
ITM7 = DIST4 BLOCK CALC RINGS
ITM8 = NCMP4 BLOCK CALC #COMP
ITM9 = NHOL4 BLOCK CALC #COMP
ITM10 = MINZN RANGE 3. 3.
ITM11 = LNGTH FACTR
CMD = BLOCK LIMIT MINZN 3
CMD = BLOCK LIMIT TRNCH 1 2
CMD = ELEV ZMID

I-O = 0 / DEBUG LEVEL
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=RKCK10.DAT  9=RKCK09.DAT  15=RKCK15.DAT;
MEDS-624V1   3=RPT624.D09  30=
** KRIGING OF 3-D BLOCK VALUES FOR AUKR4 **

RUN = OMIT

USR = MJL  /  MON DEC 6, 2004 9:31:11 AM US MOUNTAIN STANDARD TIME

IOP3 = 1. / 1=3-D SPHERICAL SEARCH; 0=2-D SEARCH
IOP4 = 0 / 0=NO GEOLOGIC MATCHING; 1=MATCH ONE ITEM
IOP6 = 0 / 0=USE TRUE DIST.; 1=USE ANISOTROPIC DIST.
IOP7 = 2 / MIN # OF COMPS FOR INTERP
IOP11= 00 / ROW # FOR EXTENDED OUTPUT
IOP12= 0 / 0=ALL; 1=OCTANT; 2=QUADRANT SEARCH; 3=SPLIT OCTANT;
COM         4=SPLIT QUADRANT.
COM         NOTE: NEGATIVE#=USE ROTATED SEARCH.  BY DEFAULT,
COM         OCTANTS & QUADRANTS ARE DEFINED USING THE PROJECT'S AXES.
IOP16= 8 / MAX.# OF COMPOSITES FOR INTERPOLATING A BLOCK
IOP19= 2 / MAX.# OF COMPOSITES PER HOLE (DEFAULT=NO LIMIT)
IOP20= 0 / 0=STORE VARIANCE; 1=STD DEV; 2=REL. VARIANCE

PAR1 = 15. / PRIMARY X-SEARCH DISTANCE
PAR2 = 15. / PRIMARY Y-SEARCH DISTANCE
PAR3 = 2.5 / PRIMARY Z-SEARCH DISTANCE
PAR4 = 15. / LIMITING SEARCH DISTANCE
PAR7 = 15. / MAX DISTANCE TO CLOSEST POINT
PAR8 = 15. / MAX DISTANCE TO PROJECT SINGLE COMPOSITE
PAR27= 2 4 1 / BLOCK DISCRETIZATION IN X,Y,Z
PAR31= 7.0  / OUTLIER CUTOFF TO CHANGE THE SEARCH
PAR32= 15.0 / MAX. 3D SEARCH DISTANCE AT PAR31

IOP17 = 0   /0=ORDINARY KRIGING, 5=SIMPLE
PAR30 = 0.   /MEAN GRADE OF THE AREA TO BE SIMPLE KRIGED

CMD = SEARCH 15. 15. 2.5 0. 0. 0.
CMD = NUG 0.478
CMD = EXP 0.522 41.5 13.9 25.9 0. 0. 0.

ITM1 = AUKR4 AUAJ1 CALC KRIGE
ITM2 = AUNN4 AUAJ1 CALC POLYG
ITM3 = MINZN BLOCK LIMIT
ITM4 = TRNCH BLOCK LIMIT
ITM5 = LNGTH RANGE 2.5 5.
ITM6 = DCODE RANGE 301. 716.
ITM7 = DIST4 BLOCK CALC RINGS
ITM8 = NCMP4 BLOCK CALC #COMP
ITM9 = NHOL4 BLOCK CALC #COMP
ITM10 = MINZN RANGE 3. 3.
ITM11 = LNGTH FACTR
CMD = BLOCK LIMIT MINZN 3
CMD = BLOCK LIMIT TRNCH 1 1
CMD = ELEV ZMID

I-O = 0 / DEBUG LEVEL
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=rkck10.dat  9=rkck09.dat  15=rkck15.dat;
MEDS-624V1   3=rpt624.dbg  31=comps.xyz 30=
** KRIGING of 3-D block values for AUKR1 - debug run

RUN = RESET

USR = MJL  /  Sun Dec 5, 2004 10:26:21 AM US Mountain Standard Time

IOP3 = 1. / 1=3-D spherical search; 0=2-D search
IOP4 = 0 / 0=No geologic matching; 1=Match one item
IOP6 = 0 / 0=Use true dist.; 1=Use anisotropic dist.
IOP7 = 3 / Min # of comps for interp
IOP11= 84 / Row # for extended output
IOP12= 0 / 0=All; 1=Octant; 2=Quadrant search; 3=Split Octants;
COM         4=Split Quadrants
COM        Note: Negative #=use rotated search. By Default,
COM         octants & quadrants are defined using the
COM         project's orthogonal axes).
IOP16= 8 / Max.# of composites for interpolating a block
IOP19= 2 / Max.# of composites per hole (DEFAULT=No limit)
IOP20= 0 / 0=Store variance; 1=STD DEV; 2=Rel. variance

PAR1 = 50. / Primary X-search distance
PAR2 = 50. / Primary Y-search distance
PAR3 = 50. / Primary Z-search distance
PAR4 = 50. / Limiting search distance
PAR7 = 50. / Max distance to closest point
PAR8 = 50. / Max distance to project single composite
PAR27= 2 4 1 / Block discretization in X,Y,Z
PAR31= 100. / Outlier cutoff to change the search
PAR32= 50. / Max. 3D search distance at PAR31

CMD = SEARCH 50. 50. 10. 0. 0. 75.
CMD = NUG 0.368
CMD = EXP 0.632 16.2 12.3 5.2 0. 0. 75.

ITM1 = AUKR1 AUAJ1 CALC KRIGE
ITM2 = MINZN Block limit
ITM3 = dcode range 301. 516.
ITM4 = minzn range 10. 10.
ITM5 = lngth range 2.5 5.
ITM6 = LNGTH FACTR
CMD = Block limit codes 10
CMD = ELEV ZMID

I-O = 0 / Debug level
END
81 81 84 84 24 24
```

```
MEDS-624V1  10=RKCK10.DAT  9=RKCK09.DAT  15=RKCK15.DAT;
MEDS-624V1   3=RPT624.E01  30=
** KRIGING OF 3-D BLOCK VALUES FOR AUKR5 **

RUN = RESET

USR = MJL  /  MON DEC 6, 2004 9:30:00 AM US MOUNTAIN STANDARD TIME

IOP3 = 1. / 1=3-D SPHERICAL SEARCH; 0=2-D SEARCH
IOP4 = 0 / 0=NO GEOLOGIC MATCHING; 1=MATCH ONE ITEM
IOP6 = 0 / 0=USE TRUE DIST.; 1=USE ANISOTROPIC DIST.
IOP7 = 2 / MIN # OF COMPS FOR INTERP
IOP11= 00 / ROW # FOR EXTENDED OUTPUT
IOP12= 0 / 0=ALL; 1=OCTANT; 2=QUADRANT SEARCH; 3=SPLIT OCTANT;
COM         4=SPLIT QUADRANT.
COM         NOTE: NEGATIVE#=USE ROTATED SEARCH.  BY DEFAULT,
COM         OCTANTS & QUADRANTS ARE DEFINED USING THE PROJECT'S AXES.
IOP16= 6 / MAX.# OF COMPOSITES FOR INTERPOLATING A BLOCK
IOP19= 2 / MAX.# OF COMPOSITES PER HOLE (DEFAULT=NO LIMIT)
IOP20= 0 / 0=STORE VARIANCE; 1=STD DEV; 2=REL. VARIANCE

PAR1 = 50. / PRIMARY X-SEARCH DISTANCE
PAR2 = 50. / PRIMARY Y-SEARCH DISTANCE
PAR3 = 50. / PRIMARY Z-SEARCH DISTANCE
PAR4 = 50. / LIMITING SEARCH DISTANCE
PAR7 = 50. / MAX DISTANCE TO CLOSEST POINT
PAR8 = 50. / MAX DISTANCE TO PROJECT SINGLE COMPOSITE
PAR27= 2 4 1 / BLOCK DISCRETIZATION IN X,Y,Z
PAR31= 100. / OUTLIER CUTOFF TO CHANGE THE SEARCH
PAR32= 50. / MAX. 3D SEARCH DISTANCE AT PAR31

IOP17 = 0   /0=ORDINARY KRIGING, 5=SIMPLE
PAR30 = 0.   /MEAN GRADE OF THE AREA TO BE SIMPLE KRIGED

CMD = SEARCH 50. 50. 10. 0. 0. 75.
CMD = NUG 0.671
CMD = EXP 0.329 12.6 9.5 4.6 0. 0. 75.

ITM1 = AUKR5 AUAJ2 CALC KRIGE
ITM2 = AUNN5 AUAJ2 CALC POLYG
ITM3 = MINZN BLOCK LIMIT
ITM4 = TRNCH BLOCK LIMIT
ITM5 = LNGTH RANGE 2.5 5.
ITM6 = DCODE RANGE 301. 516.
ITM7 = DIST5 BLOCK CALC RINGS
ITM8 = NCMP5 BLOCK CALC #COMP
ITM9 = NHOL5 BLOCK CALC #COMP
ITM10 = MINZN RANGE 1. 1.
ITM11 = LNGTH FACTR
CMD = BLOCK LIMIT MINZN 1
CMD = BLOCK LIMIT TRNCH 1 2
CMD = ELEV ZMID

I-O = 0 / DEBUG LEVEL
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=RKCK10.DAT  9=RKCK09.DAT  15=RKCK15.DAT;
MEDS-624V1   3=RPT624.E02  30=
** KRIGING OF 3-D BLOCK VALUES FOR AUKR5 **

RUN = OMIT

USR = MJL  /  MON DEC 6, 2004 9:30:06 AM US MOUNTAIN STANDARD TIME

IOP3 = 1. / 1=3-D SPHERICAL SEARCH; 0=2-D SEARCH
IOP4 = 0 / 0=NO GEOLOGIC MATCHING; 1=MATCH ONE ITEM
IOP6 = 0 / 0=USE TRUE DIST.; 1=USE ANISOTROPIC DIST.
IOP7 = 3 / MIN # OF COMPS FOR INTERP
IOP11= 00 / ROW # FOR EXTENDED OUTPUT
IOP12= 0 / 0=ALL; 1=OCTANT; 2=QUADRANT SEARCH; 3=SPLIT OCTANT;
COM         4=SPLIT QUADRANT.
COM         NOTE: NEGATIVE#=USE ROTATED SEARCH.  BY DEFAULT,
COM         OCTANTS & QUADRANTS ARE DEFINED USING THE PROJECT'S AXES.
IOP16= 6 / MAX.# OF COMPOSITES FOR INTERPOLATING A BLOCK
IOP19= 2 / MAX.# OF COMPOSITES PER HOLE (DEFAULT=NO LIMIT)
IOP20= 0 / 0=STORE VARIANCE; 1=STD DEV; 2=REL. VARIANCE

PAR1 = 50. / PRIMARY X-SEARCH DISTANCE
PAR2 = 50. / PRIMARY Y-SEARCH DISTANCE
PAR3 = 50. / PRIMARY Z-SEARCH DISTANCE
PAR4 = 50. / LIMITING SEARCH DISTANCE
PAR7 = 50. / MAX DISTANCE TO CLOSEST POINT
PAR8 = 50. / MAX DISTANCE TO PROJECT SINGLE COMPOSITE
PAR27= 2 4 1 / BLOCK DISCRETIZATION IN X,Y,Z
PAR31= 100. / OUTLIER CUTOFF TO CHANGE THE SEARCH
PAR32= 50. / MAX. 3D SEARCH DISTANCE AT PAR31

IOP17 = 0   /0=ORDINARY KRIGING, 5=SIMPLE
PAR30 = 0.   /MEAN GRADE OF THE AREA TO BE SIMPLE KRIGED

CMD = SEARCH 50. 50. 10. 0. 0. 75.
CMD = NUG 0.671
CMD = EXP 0.329 12.6 9.5 4.6 0. 0. 75.

ITM1 = AUKR5 AUAJ2 CALC KRIGE
ITM2 = AUNN5 AUAJ2 CALC POLYG
ITM3 = MINZN BLOCK LIMIT
ITM4 = TRNCH BLOCK LIMIT
ITM5 = LNGTH RANGE 2.5 5.
ITM6 = DCODE RANGE 301. 516.
ITM7 = DIST5 BLOCK CALC RINGS
ITM8 = NCMP5 BLOCK CALC #COMP
ITM9 = NHOL5 BLOCK CALC #COMP
ITM10 = MINZN RANGE 1. 1.
ITM11 = LNGTH FACTR
CMD = BLOCK LIMIT MINZN 1
CMD = BLOCK LIMIT TRNCH 1 2
CMD = ELEV ZMID

I-O = 0 / DEBUG LEVEL
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=RKCK10.DAT  9=RKCK09.DAT  15=RKCK15.DAT;
MEDS-624V1   3=RPT624.E03  30=
** KRIGING OF 3-D BLOCK VALUES FOR AUKR5 **

RUN = OMIT

USR = MJL  /  MON DEC 6, 2004 9:30:56 AM US MOUNTAIN STANDARD TIME

IOP3 = 1. / 1=3-D SPHERICAL SEARCH; 0=2-D SEARCH
IOP4 = 0 / 0=NO GEOLOGIC MATCHING; 1=MATCH ONE ITEM
IOP6 = 0 / 0=USE TRUE DIST.; 1=USE ANISOTROPIC DIST.
IOP7 = 2 / MIN # OF COMPS FOR INTERP
IOP11= 00 / ROW # FOR EXTENDED OUTPUT
IOP12= 0 / 0=ALL; 1=OCTANT; 2=QUADRANT SEARCH; 3=SPLIT OCTANT;
COM         4=SPLIT QUADRANT.
COM         NOTE: NEGATIVE#=USE ROTATED SEARCH.  BY DEFAULT,
COM         OCTANTS & QUADRANTS ARE DEFINED USING THE PROJECT'S AXES.
IOP16= 8 / MAX.# OF COMPOSITES FOR INTERPOLATING A BLOCK
IOP19= 2 / MAX.# OF COMPOSITES PER HOLE (DEFAULT=NO LIMIT)
IOP20= 0 / 0=STORE VARIANCE; 1=STD DEV; 2=REL. VARIANCE

PAR1 = 15. / PRIMARY X-SEARCH DISTANCE
PAR2 = 15. / PRIMARY Y-SEARCH DISTANCE
PAR3 = 2.5 / PRIMARY Z-SEARCH DISTANCE
PAR4 = 15. / LIMITING SEARCH DISTANCE
PAR7 = 15. / MAX DISTANCE TO CLOSEST POINT
PAR8 = 15. / MAX DISTANCE TO PROJECT SINGLE COMPOSITE
PAR27= 2 4 1 / BLOCK DISCRETIZATION IN X,Y,Z
PAR31= 100. / OUTLIER CUTOFF TO CHANGE THE SEARCH
PAR32= 50. / MAX. 3D SEARCH DISTANCE AT PAR31

IOP17 = 0   /0=ORDINARY KRIGING, 5=SIMPLE
PAR30 = 0.   /MEAN GRADE OF THE AREA TO BE SIMPLE KRIGED

CMD = SEARCH 15. 15. 2.5 0. 0. 0.
CMD = NUG 0.671
CMD = EXP 0.329 12.6 9.5 4.6 0. 0. 0.

ITM1 = AUKR5 AUAJ2 CALC KRIGE
ITM2 = AUNN5 AUAJ2 CALC POLYG
ITM3 = MINZN BLOCK LIMIT
ITM4 = TRNCH BLOCK LIMIT
ITM5 = LNGTH RANGE 2.5 5.
ITM6 = DCODE RANGE 301. 716.
ITM7 = DIST5 BLOCK CALC RINGS
ITM8 = NCMP5 BLOCK CALC #COMP
ITM9 = NHOL5 BLOCK CALC #COMP
ITM10 = MINZN RANGE 1. 1.
ITM11 = LNGTH FACTR
CMD = BLOCK LIMIT MINZN 1
CMD = BLOCK LIMIT TRNCH 1 1
CMD = ELEV ZMID

I-O = 0 / DEBUG LEVEL
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=RKCK10.DAT  9=RKCK09.DAT  15=RKCK15.DAT;
MEDS-624V1   3=RPT624.E04  30=
** KRIGING OF 3-D BLOCK VALUES FOR AUKR5 **

RUN = OMIT

USR = MJL  /  MON DEC 6, 2004 9:30:13 AM US MOUNTAIN STANDARD TIME

IOP3 = 1. / 1=3-D SPHERICAL SEARCH; 0=2-D SEARCH
IOP4 = 0 / 0=NO GEOLOGIC MATCHING; 1=MATCH ONE ITEM
IOP6 = 0 / 0=USE TRUE DIST.; 1=USE ANISOTROPIC DIST.
IOP7 = 2 / MIN # OF COMPS FOR INTERP
IOP11= 00 / ROW # FOR EXTENDED OUTPUT
IOP12= 0 / 0=ALL; 1=OCTANT; 2=QUADRANT SEARCH; 3=SPLIT OCTANT;
COM         4=SPLIT QUADRANT.
COM         NOTE: NEGATIVE#=USE ROTATED SEARCH.  BY DEFAULT,
COM         OCTANTS & QUADRANTS ARE DEFINED USING THE PROJECT'S AXES.
IOP16= 12 / MAX.# OF COMPOSITES FOR INTERPOLATING A BLOCK
IOP19= 2 / MAX.# OF COMPOSITES PER HOLE (DEFAULT=NO LIMIT)
IOP20= 0 / 0=STORE VARIANCE; 1=STD DEV; 2=REL. VARIANCE

PAR1 = 50. / PRIMARY X-SEARCH DISTANCE
PAR2 = 50. / PRIMARY Y-SEARCH DISTANCE
PAR3 = 50. / PRIMARY Z-SEARCH DISTANCE
PAR4 = 50. / LIMITING SEARCH DISTANCE
PAR7 = 50. / MAX DISTANCE TO CLOSEST POINT
PAR8 = 50. / MAX DISTANCE TO PROJECT SINGLE COMPOSITE
PAR27= 2 4 1 / BLOCK DISCRETIZATION IN X,Y,Z
PAR31= 100. / OUTLIER CUTOFF TO CHANGE THE SEARCH
PAR32= 50. / MAX. 3D SEARCH DISTANCE AT PAR31

IOP17 = 0   /0=ORDINARY KRIGING, 5=SIMPLE
PAR30 = 0.   /MEAN GRADE OF THE AREA TO BE SIMPLE KRIGED

CMD = SEARCH 50. 50. 10. 0. 0. 75.
CMD = NUG 0.631
CMD = EXP 0.396 22.2 18.1 8.8 0. 0. 75.

ITM1 = AUKR5 AUAJ2 CALC KRIGE
ITM2 = AUNN5 AUAJ2 CALC POLYG
ITM3 = MINZN BLOCK LIMIT
ITM4 = TRNCH BLOCK LIMIT
ITM5 = LNGTH RANGE 2.5 5.
ITM6 = DCODE RANGE 301. 516.
ITM7 = DIST5 BLOCK CALC RINGS
ITM8 = NCMP5 BLOCK CALC #COMP
ITM9 = NHOL5 BLOCK CALC #COMP
ITM10 = MINZN RANGE 2. 2.
ITM11 = LNGTH FACTR
CMD = BLOCK LIMIT MINZN 2
CMD = BLOCK LIMIT TRNCH 1 2
CMD = ELEV ZMID

I-O = 0 / DEBUG LEVEL
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=RKCK10.DAT  9=RKCK09.DAT  15=RKCK15.DAT;
MEDS-624V1   3=RPT624.E05  30=
** KRIGING OF 3-D BLOCK VALUES FOR AUKR5 **

RUN = OMIT

USR = MJL  /  MON DEC 6, 2004 9:30:21 AM US MOUNTAIN STANDARD TIME

IOP3 = 1. / 1=3-D SPHERICAL SEARCH; 0=2-D SEARCH
IOP4 = 0 / 0=NO GEOLOGIC MATCHING; 1=MATCH ONE ITEM
IOP6 = 0 / 0=USE TRUE DIST.; 1=USE ANISOTROPIC DIST.
IOP7 = 3 / MIN # OF COMPS FOR INTERP
IOP11= 00 / ROW # FOR EXTENDED OUTPUT
IOP12= 0 / 0=ALL; 1=OCTANT; 2=QUADRANT SEARCH; 3=SPLIT OCTANT;
COM          4=SPLIT QUADRANT.
COM          NOTE: NEGATIVE#=USE ROTATED SEARCH.  BY DEFAULT,
COM          OCTANTS & QUADRANTS ARE DEFINED USING THE PROJECT'S AXES.
IOP16= 8 / MAX.# OF COMPOSITES FOR INTERPOLATING A BLOCK
IOP19= 2 / MAX.# OF COMPOSITES PER HOLE (DEFAULT=NO LIMIT)
IOP20= 0 / 0=STORE VARIANCE; 1=STD DEV; 2=REL. VARIANCE

PAR1 = 50. / PRIMARY X-SEARCH DISTANCE
PAR2 = 50. / PRIMARY Y-SEARCH DISTANCE
PAR3 = 50. / PRIMARY Z-SEARCH DISTANCE
PAR4 = 50. / LIMITING SEARCH DISTANCE
PAR7 = 50. / MAX DISTANCE TO CLOSEST POINT
PAR8 = 50. / MAX DISTANCE TO PROJECT SINGLE COMPOSITE
PAR27= 2 4 1 / BLOCK DISCRETIZATION IN X,Y,Z
PAR31= 100. / OUTLIER CUTOFF TO CHANGE THE SEARCH
PAR32= 50. / MAX. 3D SEARCH DISTANCE AT PAR31

IOP17 = 0   /0=ORDINARY KRIGING, 5=SIMPLE
PAR30 = 0.   /MEAN GRADE OF THE AREA TO BE SIMPLE KRIGED

CMD = SEARCH 50. 50. 10. 0. 0. 75.
CMD = NUG 0.631
CMD = EXP 0.396 22.2 18.1 8.8 0. 0. 75.

ITM1 = AUKR5 AUAJ2 CALC KRIGE
ITM2 = AUNN5 AUAJ2 CALC POLYG
ITM3 = MINZN BLOCK LIMIT
ITM4 = TRNCH BLOCK LIMIT
ITM5 = LNGTH RANGE 2.5 5.
ITM6 = DCODE RANGE 301. 516.
ITM7 = DIST5 BLOCK CALC RINGS
ITM8 = NCMP5 BLOCK CALC #COMP
ITM9 = NHOL5 BLOCK CALC #COMP
ITM10 = MINZN RANGE 2. 2.
ITM11 = LNGTH FACTR
CMD = BLOCK LIMIT MINZN 2
CMD = BLOCK LIMIT TRNCH 1 2
CMD = ELEV ZMID

I-O = 0 / DEBUG LEVEL
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=RKCK10.DAT  9=RKCK09.DAT  15=RKCK15.DAT;
MEDS-624V1   3=RPT624.E06  30=
** KRIGING OF 3-D BLOCK VALUES FOR AUKR5 **

RUN = OMIT

USR = MJL  /  MON DEC 6, 2004 9:31:03 AM US MOUNTAIN STANDARD TIME

IOP3 = 1. / 1=3-D SPHERICAL SEARCH; 0=2-D SEARCH
IOP4 = 0 / 0=NO GEOLOGIC MATCHING; 1=MATCH ONE ITEM
IOP6 = 0 / 0=USE TRUE DIST.; 1=USE ANISOTROPIC DIST.
IOP7 = 2 / MIN # OF COMPS FOR INTERP
IOP11= 00 / ROW # FOR EXTENDED OUTPUT
IOP12= 0 / 0=ALL; 1=OCTANT; 2=QUADRANT SEARCH; 3=SPLIT OCTANT;
COM          4=SPLIT QUADRANT.
COM          NOTE: NEGATIVE#=USE ROTATED SEARCH.  BY DEFAULT,
COM          OCTANTS & QUADRANTS ARE DEFINED USING THE PROJECT'S AXES.
IOP16= 8 / MAX.# OF COMPOSITES FOR INTERPOLATING A BLOCK
IOP19= 2 / MAX.# OF COMPOSITES PER HOLE (DEFAULT=NO LIMIT)
IOP20= 0 / 0=STORE VARIANCE; 1=STD DEV; 2=REL. VARIANCE

PAR1 = 15. / PRIMARY X-SEARCH DISTANCE
PAR2 = 15. / PRIMARY Y-SEARCH DISTANCE
PAR3 = 2.5 / PRIMARY Z-SEARCH DISTANCE
PAR4 = 15. / LIMITING SEARCH DISTANCE
PAR7 = 15. / MAX DISTANCE TO CLOSEST POINT
PAR8 = 15. / MAX DISTANCE TO PROJECT SINGLE COMPOSITE
PAR27= 2 4 1 / BLOCK DISCRETIZATION IN X,Y,Z
PAR31= 100. / OUTLIER CUTOFF TO CHANGE THE SEARCH
PAR32= 50. / MAX. 3D SEARCH DISTANCE AT PAR31

IOP17 = 0   /0=ORDINARY KRIGING, 5=SIMPLE
PAR30 = 0.   /MEAN GRADE OF THE AREA TO BE SIMPLE KRIGED

CMD = SEARCH 15. 15. 2.5 0. 0. 0.
CMD = NUG 0.631
CMD = EXP 0.369 22.2 18.1 8.8 0. 0. 0.

ITM1 = AUKR5 AUAJ2 CALC KRIGE
ITM2 = AUNN5 AUAJ2 CALC POLYG
ITM3 = MINZN BLOCK LIMIT
ITM4 = TRNCH BLOCK LIMIT
ITM5 = LNGTH RANGE 2.5 5.
ITM6 = DCODE RANGE 301. 716.
ITM7 = DIST5 BLOCK CALC RINGS
ITM8 = NCMP5 BLOCK CALC #COMP
ITM9 = NHOL5 BLOCK CALC #COMP
ITM10 = MINZN RANGE 2. 2.
ITM11 = LNGTH FACTR
CMD = BLOCK LIMIT MINZN 2
CMD = BLOCK LIMIT TRNCH 1 1
CMD = ELEV ZMID

I-O = 0 / DEBUG LEVEL
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=RKCK10.DAT  9=RKCK09.DAT  15=RKCK15.DAT;
MEDS-624V1   3=RPT624.E07  30=
** KRIGING OF 3-D BLOCK VALUES FOR AUKR5 **

RUN = OMIT

USR = MJL  /  MON DEC 6, 2004 9:30:28 AM US MOUNTAIN STANDARD TIME

IOP3 = 1. / 1=3-D SPHERICAL SEARCH; 0=2-D SEARCH
IOP4 = 0 / 0=NO GEOLOGIC MATCHING; 1=MATCH ONE ITEM
IOP6 = 0 / 0=USE TRUE DIST.; 1=USE ANISOTROPIC DIST.
IOP7 = 2 / MIN # OF COMPS FOR INTERP
IOP11= 00 / ROW # FOR EXTENDED OUTPUT
IOP12= 0 / 0=ALL; 1=OCTANT; 2=QUADRANT SEARCH; 3=SPLIT OCTANT;
COM         4=SPLIT QUADRANT.
COM         NOTE: NEGATIVE#=USE ROTATED SEARCH.  BY DEFAULT,
COM         OCTANTS & QUADRANTS ARE DEFINED USING THE PROJECT'S AXES.
IOP16= 12 / MAX.# OF COMPOSITES FOR INTERPOLATING A BLOCK
IOP19= 2 / MAX.# OF COMPOSITES PER HOLE (DEFAULT=NO LIMIT)
IOP20= 0 / 0=STORE VARIANCE; 1=STD DEV; 2=REL. VARIANCE

PAR1 = 50. / PRIMARY X-SEARCH DISTANCE
PAR2 = 50. / PRIMARY Y-SEARCH DISTANCE
PAR3 = 50. / PRIMARY Z-SEARCH DISTANCE
PAR4 = 50. / LIMITING SEARCH DISTANCE
PAR7 = 50. / MAX DISTANCE TO CLOSEST POINT
PAR8 = 50. / MAX DISTANCE TO PROJECT SINGLE COMPOSITE
PAR27= 2 4 1 / BLOCK DISCRETIZATION IN X,Y,Z
PAR31= 100. / OUTLIER CUTOFF TO CHANGE THE SEARCH
PAR32= 50. / MAX. 3D SEARCH DISTANCE AT PAR31

IOP17 = 0   /0=ORDINARY KRIGING, 5=SIMPLE
PAR30 = 0.   /MEAN GRADE OF THE AREA TO BE SIMPLE KRIGED

CMD = SEARCH 50. 50. 10. 30. 0. 75.
CMD = NUG 0.478
CMD = EXP 0.522 41.5 13.9 25.9 30. 0. 75.

ITM1 = AUKR5 AUAJ2 CALC KRIGE
ITM2 = AUNN5 AUAJ2 CALC POLYG
ITM3 = MINZN BLOCK LIMIT
ITM4 = TRNCH BLOCK LIMIT
ITM5 = LNGTH RANGE 2.5 5.
ITM6 = DCODE RANGE 301. 516.
ITM7 = DIST5 BLOCK CALC RINGS
ITM8 = NCMP5 BLOCK CALC #COMP
ITM9 = NHOL5 BLOCK CALC #COMP
ITM10 = MINZN RANGE 3. 3.
ITM11 = LNGTH FACTR
CMD = BLOCK LIMIT MINZN 3
CMD = BLOCK LIMIT TRNCH 1 2
CMD = ELEV ZMID

I-O = 0 / DEBUG LEVEL
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=RKCK10.DAT  9=RKCK09.DAT  15=RKCK15.DAT;
MEDS-624V1   3=RPT624.E08  30=
** KRIGING OF 3-D BLOCK VALUES FOR AUKR5 **

RUN = OMIT

USR = MJL  /  MON DEC 6, 2004 9:30:34 AM US MOUNTAIN STANDARD TIME

IOP3 = 1. / 1=3-D SPHERICAL SEARCH; 0=2-D SEARCH
IOP4 = 0 / 0=NO GEOLOGIC MATCHING; 1=MATCH ONE ITEM
IOP6 = 0 / 0=USE TRUE DIST.; 1=USE ANISOTROPIC DIST.
IOP7 = 3 / MIN # OF COMPS FOR INTERP
IOP11= 00 / ROW # FOR EXTENDED OUTPUT
IOP12= 0 / 0=ALL; 1=OCTANT; 2=QUADRANT SEARCH; 3=SPLIT OCTANT;
COM         4=SPLIT QUADRANT.
COM         NOTE: NEGATIVE#=USE ROTATED SEARCH.  BY DEFAULT,
COM         OCTANTS & QUADRANTS ARE DEFINED USING THE PROJECT'S AXES.
IOP16= 6 / MAX.# OF COMPOSITES FOR INTERPOLATING A BLOCK
IOP19= 2 / MAX.# OF COMPOSITES PER HOLE (DEFAULT=NO LIMIT)
IOP20= 0 / 0=STORE VARIANCE; 1=STD DEV; 2=REL. VARIANCE

PAR1 = 50. / PRIMARY X-SEARCH DISTANCE
PAR2 = 50. / PRIMARY Y-SEARCH DISTANCE
PAR3 = 50. / PRIMARY Z-SEARCH DISTANCE
PAR4 = 50. / LIMITING SEARCH DISTANCE
PAR7 = 50. / MAX DISTANCE TO CLOSEST POINT
PAR8 = 50. / MAX DISTANCE TO PROJECT SINGLE COMPOSITE
PAR27= 2 4 1 / BLOCK DISCRETIZATION IN X,Y,Z
PAR31= 100. / OUTLIER CUTOFF TO CHANGE THE SEARCH
PAR32= 50. / MAX. 3D SEARCH DISTANCE AT PAR31

IOP17 = 0   /0=ORDINARY KRIGING, 5=SIMPLE
PAR30 = 0.   /MEAN GRADE OF THE AREA TO BE SIMPLE KRIGED

CMD = SEARCH 50. 50. 10. 30. 0. 75.
CMD = NUG 0.478
CMD = EXP 0.522 41.5 13.9 25.9 30. 0. 75.

ITM1 = AUKR5 AUAJ2 CALC KRIGE
ITM2 = AUNN5 AUAJ2 CALC POLYG
ITM3 = MINZN BLOCK LIMIT
ITM4 = TRNCH BLOCK LIMIT
ITM5 = LNGTH RANGE 2.5 5.
ITM6 = DCODE RANGE 301. 516.
ITM7 = DIST5 BLOCK CALC RINGS
ITM8 = NCMP5 BLOCK CALC #COMP
ITM9 = NHOL5 BLOCK CALC #COMP
ITM10 = MINZN RANGE 3. 3.
ITM11 = LNGTH FACTR
CMD = BLOCK LIMIT MINZN 3
CMD = BLOCK LIMIT TRNCH 1 2
CMD = ELEV ZMID

I-O = 0 / DEBUG LEVEL
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=RKCK10.DAT  9=RKCK09.DAT  15=RKCK15.DAT;
MEDS-624V1   3=RPT624.E09  30=
** KRIGING OF 3-D BLOCK VALUES FOR AUKR5 **

RUN = OMIT

USR = MJL  /  MON DEC 6, 2004 9:31:11 AM US MOUNTAIN STANDARD TIME

IOP3 = 1. / 1=3-D SPHERICAL SEARCH; 0=2-D SEARCH
IOP4 = 0 / 0=NO GEOLOGIC MATCHING; 1=MATCH ONE ITEM
IOP6 = 0 / 0=USE TRUE DIST.; 1=USE ANISOTROPIC DIST.
IOP7 = 2 / MIN # OF COMPS FOR INTERP
IOP11= 00 / ROW # FOR EXTENDED OUTPUT
IOP12= 0 / 0=ALL; 1=OCTANT; 2=QUADRANT SEARCH; 3=SPLIT OCTANT;
COM         4=SPLIT QUADRANT.
COM         NOTE: NEGATIVE#=USE ROTATED SEARCH.  BY DEFAULT,
COM         OCTANTS & QUADRANTS ARE DEFINED USING THE PROJECT'S AXES.
IOP16= 8 / MAX.# OF COMPOSITES FOR INTERPOLATING A BLOCK
IOP19= 2 / MAX.# OF COMPOSITES PER HOLE (DEFAULT=NO LIMIT)
IOP20= 0 / 0=STORE VARIANCE; 1=STD DEV; 2=REL. VARIANCE

PAR1 = 15. / PRIMARY X-SEARCH DISTANCE
PAR2 = 15. / PRIMARY Y-SEARCH DISTANCE
PAR3 = 2.5 / PRIMARY Z-SEARCH DISTANCE
PAR4 = 15. / LIMITING SEARCH DISTANCE
PAR7 = 15. / MAX DISTANCE TO CLOSEST POINT
PAR8 = 15. / MAX DISTANCE TO PROJECT SINGLE COMPOSITE
PAR27= 2 4 1 / BLOCK DISCRETIZATION IN X,Y,Z
PAR31= 100. / OUTLIER CUTOFF TO CHANGE THE SEARCH
PAR32= 50. / MAX. 3D SEARCH DISTANCE AT PAR31

IOP17 = 0   /0=ORDINARY KRIGING, 5=SIMPLE
PAR30 = 0.   /MEAN GRADE OF THE AREA TO BE SIMPLE KRIGED

CMD = SEARCH 15. 15. 2.5 0. 0. 0.
CMD = NUG 0.478
CMD = EXP 0.522 41.5 13.9 25.9 0. 0. 0.

ITM1 = AUKR5 AUAJ2 CALC KRIGE
ITM2 = AUNN5 AUAJ2 CALC POLYG
ITM3 = MINZN BLOCK LIMIT
ITM4 = TRNCH BLOCK LIMIT
ITM5 = LNGTH RANGE 2.5 5.
ITM6 = DCODE RANGE 301. 716.
ITM7 = DIST5 BLOCK CALC RINGS
ITM8 = NCMP5 BLOCK CALC #COMP
ITM9 = NHOL5 BLOCK CALC #COMP
ITM10 = MINZN RANGE 3. 3.
ITM11 = LNGTH FACTR
CMD = BLOCK LIMIT MINZN 3
CMD = BLOCK LIMIT TRNCH 1 1
CMD = ELEV ZMID

I-O = 0 / DEBUG LEVEL
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=RKCK10.DAT  9=RKCK09.DAT  15=RKCK15.DAT;
MEDS-624V1   3=RPT624.F01  30=
** KRIGING OF 3-D BLOCK VALUES FOR AUKR6 **

RUN = RESET

USR = MJL  /  MON DEC 6, 2004 9:30:00 AM US MOUNTAIN STANDARD TIME

IOP3 = 1. / 1=3-D SPHERICAL SEARCH; 0=2-D SEARCH
IOP4 = 0 / 0=NO GEOLOGIC MATCHING; 1=MATCH ONE ITEM
IOP6 = 0 / 0=USE TRUE DIST.; 1=USE ANISOTROPIC DIST.
IOP7 = 2 / MIN # OF COMPS FOR INTERP
IOP11= 00 / ROW # FOR EXTENDED OUTPUT
IOP12= 0 / 0=ALL; 1=OCTANT; 2=QUADRANT SEARCH; 3=SPLIT OCTANT;
COM         4=SPLIT QUADRANT.
COM         NOTE: NEGATIVE#=USE ROTATED SEARCH.  BY DEFAULT,
COM         OCTANTS & QUADRANTS ARE DEFINED USING THE PROJECT'S AXES.
IOP16= 6 / MAX.# OF COMPOSITES FOR INTERPOLATING A BLOCK
IOP19= 2 / MAX.# OF COMPOSITES PER HOLE (DEFAULT=NO LIMIT)
IOP20= 0 / 0=STORE VARIANCE; 1=STD DEV; 2=REL. VARIANCE

PAR1 = 50. / PRIMARY X-SEARCH DISTANCE
PAR2 = 50. / PRIMARY Y-SEARCH DISTANCE
PAR3 = 50. / PRIMARY Z-SEARCH DISTANCE
PAR4 = 50. / LIMITING SEARCH DISTANCE
PAR7 = 50. / MAX DISTANCE TO CLOSEST POINT
PAR8 = 50. / MAX DISTANCE TO PROJECT SINGLE COMPOSITE
PAR27= 2 4 1 / BLOCK DISCRETIZATION IN X,Y,Z
PAR31= 9     / OUTLIER CUTOFF TO CHANGE THE SEARCH
PAR32= 12.5  / MAX. 3D SEARCH DISTANCE AT PAR31

IOP17 = 0   /0=ORDINARY KRIGING, 5=SIMPLE
PAR30 = 0.   /MEAN GRADE OF THE AREA TO BE SIMPLE KRIGED

CMD = SEARCH 50. 50. 10. 0. 0. 75.
CMD = NUG 0.671
CMD = EXP 0.329 12.6 9.5 4.6 0. 0. 75.

ITM1 = AUKR6 AUAJ2 CALC KRIGE
ITM2 = AUNN6 AUAJ2 CALC POLYG
ITM3 = MINZN BLOCK LIMIT
ITM4 = TRNCH BLOCK LIMIT
ITM5 = LNGTH RANGE 2.5 5.
ITM6 = DCODE RANGE 301. 516.
ITM7 = DIST6 BLOCK CALC RINGS
ITM8 = NCMP6 BLOCK CALC #COMP
ITM9 = NHOL6 BLOCK CALC #COMP
ITM10 = MINZN RANGE 1. 1.
ITM11 = LNGTH FACTR
CMD = BLOCK LIMIT MINZN 1
CMD = BLOCK LIMIT TRNCH 1 2
CMD = ELEV ZMID

I-O = 0 / DEBUG LEVEL
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=RKCK10.DAT  9=RKCK09.DAT  15=RKCK15.DAT;
MEDS-624V1   3=RPT624.F02  30=
** KRIGING OF 3-D BLOCK VALUES FOR AUKR6 **

RUN = OMIT

USR = MJL  /  MON DEC 6, 2004 9:30:06 AM US MOUNTAIN STANDARD TIME

IOP3 = 1. / 1=3-D SPHERICAL SEARCH; 0=2-D SEARCH
IOP4 = 0 / 0=NO GEOLOGIC MATCHING; 1=MATCH ONE ITEM
IOP6 = 0 / 0=USE TRUE DIST.; 1=USE ANISOTROPIC DIST.
IOP7 = 3 / MIN # OF COMPS FOR INTERP
IOP11= 00 / ROW # FOR EXTENDED OUTPUT
IOP12= 0 / 0=ALL; 1=OCTANT; 2=QUADRANT SEARCH; 3=SPLIT OCTANT;
COM         4=SPLIT QUADRANT.
COM         NOTE: NEGATIVE#=USE ROTATED SEARCH.  BY DEFAULT,
COM         OCTANTS & QUADRANTS ARE DEFINED USING THE PROJECT'S AXES.
IOP16= 6 / MAX.# OF COMPOSITES FOR INTERPOLATING A BLOCK
IOP19= 2 / MAX.# OF COMPOSITES PER HOLE (DEFAULT=NO LIMIT)
IOP20= 0 / 0=STORE VARIANCE; 1=STD DEV; 2=REL. VARIANCE

PAR1 = 50. / PRIMARY X-SEARCH DISTANCE
PAR2 = 50. / PRIMARY Y-SEARCH DISTANCE
PAR3 = 50. / PRIMARY Z-SEARCH DISTANCE
PAR4 = 50. / LIMITING SEARCH DISTANCE
PAR7 = 50. / MAX DISTANCE TO CLOSEST POINT
PAR8 = 50. / MAX DISTANCE TO PROJECT SINGLE COMPOSITE
PAR27= 2 4 1 / BLOCK DISCRETIZATION IN X,Y,Z
PAR31= 9    / OUTLIER CUTOFF TO CHANGE THE SEARCH
PAR32= 12.5 / MAX. 3D SEARCH DISTANCE AT PAR31

IOP17 = 0   /0=ORDINARY KRIGING, 5=SIMPLE
PAR30 = 0.   /MEAN GRADE OF THE AREA TO BE SIMPLE KRIGED

CMD = SEARCH 50. 50. 10. 0. 0. 75.
CMD = NUG 0.671
CMD = EXP 0.329 12.6 9.5 4.6 0. 0. 75.

ITM1 = AUKR6 AUAJ2 CALC KRIGE
ITM2 = AUNN6 AUAJ2 CALC POLYG
ITM3 = MINZN BLOCK LIMIT
ITM4 = TRNCH BLOCK LIMIT
ITM5 = LNGTH RANGE 2.5 5.
ITM6 = DCODE RANGE 301. 516.
ITM7 = DIST6 BLOCK CALC RINGS
ITM8 = NCMP6 BLOCK CALC #COMP
ITM9 = NHOL6 BLOCK CALC #COMP
ITM10 = MINZN RANGE 1. 1.
ITM11 = LNGTH FACTR
CMD = BLOCK LIMIT MINZN 1
CMD = BLOCK LIMIT TRNCH 1 2
CMD = ELEV ZMID

I-O = 0 / DEBUG LEVEL
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=RKCK10.DAT  9=RKCK09.DAT  15=RKCK15.DAT;
MEDS-624V1   3=RPT624.F03  30=
** KRIGING OF 3-D BLOCK VALUES FOR AUKR6 **

RUN = OMIT

USR = MJL  /  MON DEC 6, 2004 9:30:56 AM US MOUNTAIN STANDARD TIME

IOP3 = 1. / 1=3-D SPHERICAL SEARCH; 0=2-D SEARCH
IOP4 = 0 / 0=NO GEOLOGIC MATCHING; 1=MATCH ONE ITEM
IOP6 = 0 / 0=USE TRUE DIST.; 1=USE ANISOTROPIC DIST.
IOP7 = 2 / MIN # OF COMPS FOR INTERP
IOP11= 00 / ROW # FOR EXTENDED OUTPUT
IOP12= 0 / 0=ALL; 1=OCTANT; 2=QUADRANT SEARCH; 3=SPLIT OCTANT;
COM         4=SPLIT QUADRANT.
COM         NOTE: NEGATIVE#=USE ROTATED SEARCH.  BY DEFAULT,
COM         OCTANTS & QUADRANTS ARE DEFINED USING THE PROJECT'S AXES.
IOP16= 8 / MAX.# OF COMPOSITES FOR INTERPOLATING A BLOCK
IOP19= 2 / MAX.# OF COMPOSITES PER HOLE (DEFAULT=NO LIMIT)
IOP20= 0 / 0=STORE VARIANCE; 1=STD DEV; 2=REL. VARIANCE

PAR1 = 15. / PRIMARY X-SEARCH DISTANCE
PAR2 = 15. / PRIMARY Y-SEARCH DISTANCE
PAR3 = 2.5 / PRIMARY Z-SEARCH DISTANCE
PAR4 = 15. / LIMITING SEARCH DISTANCE
PAR7 = 15. / MAX DISTANCE TO CLOSEST POINT
PAR8 = 15. / MAX DISTANCE TO PROJECT SINGLE COMPOSITE
PAR27= 2 4 1 / BLOCK DISCRETIZATION IN X,Y,Z
PAR31= 9    / OUTLIER CUTOFF TO CHANGE THE SEARCH
PAR32= 12.5 / MAX. 3D SEARCH DISTANCE AT PAR31

IOP17 = 0   /0=ORDINARY KRIGING, 5=SIMPLE
PAR30 = 0.   /MEAN GRADE OF THE AREA TO BE SIMPLE KRIGED

CMD = SEARCH 15. 15. 2.5 0. 0. 0.
CMD = NUG 0.671
CMD = EXP 0.329 12.6 9.5 4.6 0. 0. 0.

ITM1 = AUKR6 AUAJ2 CALC KRIGE
ITM2 = AUNN6 AUAJ2 CALC POLYG
ITM3 = MINZN BLOCK LIMIT
ITM4 = TRNCH BLOCK LIMIT
ITM5 = LNGTH RANGE 2.5 5.
ITM6 = DCODE RANGE 301. 716.
ITM7 = DIST6 BLOCK CALC RINGS
ITM8 = NCMP6 BLOCK CALC #COMP
ITM9 = NHOL6 BLOCK CALC #COMP
ITM10 = MINZN RANGE 1. 1.
ITM11 = LNGTH FACTR
CMD = BLOCK LIMIT MINZN 1
CMD = BLOCK LIMIT TRNCH 1 1
CMD = ELEV ZMID

I-O = 0 / DEBUG LEVEL
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=RKCK10.DAT  9=RKCK09.DAT  15=RKCK15.DAT;
MEDS-624V1   3=RPT624.F04  30=
** KRIGING OF 3-D BLOCK VALUES FOR AUKR6 **

RUN = OMIT

USR = MJL  /  MON DEC 6, 2004 9:30:13 AM US MOUNTAIN STANDARD TIME

IOP3 = 1. / 1=3-D SPHERICAL SEARCH; 0=2-D SEARCH
IOP4 = 0 / 0=NO GEOLOGIC MATCHING; 1=MATCH ONE ITEM
IOP6 = 0 / 0=USE TRUE DIST.; 1=USE ANISOTROPIC DIST.
IOP7 = 2 / MIN # OF COMPS FOR INTERP
IOP11= 00 / ROW # FOR EXTENDED OUTPUT
IOP12= 0 / 0=ALL; 1=OCTANT; 2=QUADRANT SEARCH; 3=SPLIT OCTANT;
COM         4=SPLIT QUADRANT.
COM         NOTE: NEGATIVE#=USE ROTATED SEARCH.  BY DEFAULT,
COM         OCTANTS & QUADRANTS ARE DEFINED USING THE PROJECT'S AXES.
IOP16= 12 / MAX.# OF COMPOSITES FOR INTERPOLATING A BLOCK
IOP19= 2 / MAX.# OF COMPOSITES PER HOLE (DEFAULT=NO LIMIT)
IOP20= 0 / 0=STORE VARIANCE; 1=STD DEV; 2=REL. VARIANCE

PAR1 = 50. / PRIMARY X-SEARCH DISTANCE
PAR2 = 50. / PRIMARY Y-SEARCH DISTANCE
PAR3 = 50. / PRIMARY Z-SEARCH DISTANCE
PAR4 = 50. / LIMITING SEARCH DISTANCE
PAR7 = 50. / MAX DISTANCE TO CLOSEST POINT
PAR8 = 50. / MAX DISTANCE TO PROJECT SINGLE COMPOSITE
PAR27= 2 4 1 / BLOCK DISCRETIZATION IN X,Y,Z
PAR31= 7.0  / OUTLIER CUTOFF TO CHANGE THE SEARCH
PAR32= 12.5 / MAX. 3D SEARCH DISTANCE AT PAR31

IOP17 = 0   /0=ORDINARY KRIGING, 5=SIMPLE
PAR30 = 0.   /MEAN GRADE OF THE AREA TO BE SIMPLE KRIGED

CMD = SEARCH 50. 50. 10. 0. 0. 75.
CMD = NUG 0.631
CMD = EXP 0.396 22.2 18.1 8.8 0. 0. 75.

ITM1 = AUKR6 AUAJ2 CALC KRIGE
ITM2 = AUNN6 AUAJ2 CALC POLYG
ITM3 = MINZN BLOCK LIMIT
ITM4 = TRNCH BLOCK LIMIT
ITM5 = LNGTH RANGE 2.5 5.
ITM6 = DCODE RANGE 301. 516.
ITM7 = DIST6 BLOCK CALC RINGS
ITM8 = NCMP6 BLOCK CALC #COMP
ITM9 = NHOL6 BLOCK CALC #COMP
ITM10 = MINZN RANGE 2. 2.
ITM11 = LNGTH FACTR
CMD = BLOCK LIMIT MINZN 2
CMD = BLOCK LIMIT TRNCH 1 2
CMD = ELEV ZMID

I-O = 0 / DEBUG LEVEL
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=RKCK10.DAT  9=RKCK09.DAT  15=RKCK15.DAT;
MEDS-624V1   3=RPT624.F05  30=
** KRIGING OF 3-D BLOCK VALUES FOR AUKR6 **

RUN = OMIT

USR = MJL  /  MON DEC 6, 2004 9:30:21 AM US MOUNTAIN STANDARD TIME

IOP3 = 1. / 1=3-D SPHERICAL SEARCH; 0=2-D SEARCH
IOP4 = 0 / 0=NO GEOLOGIC MATCHING; 1=MATCH ONE ITEM
IOP6 = 0 / 0=USE TRUE DIST.; 1=USE ANISOTROPIC DIST.
IOP7 = 3 / MIN # OF COMPS FOR INTERP
IOP11= 00 / ROW # FOR EXTENDED OUTPUT
IOP12= 0 / 0=ALL; 1=OCTANT; 2=QUADRANT SEARCH; 3=SPLIT OCTANT;
COM         4=SPLIT QUADRANT.
COM         NOTE: NEGATIVE#=USE ROTATED SEARCH.  BY DEFAULT,
COM         OCTANTS & QUADRANTS ARE DEFINED USING THE PROJECT'S AXES.
IOP16= 8 / MAX.# OF COMPOSITES FOR INTERPOLATING A BLOCK
IOP19= 2 / MAX.# OF COMPOSITES PER HOLE (DEFAULT=NO LIMIT)
IOP20= 0 / 0=STORE VARIANCE; 1=STD DEV; 2=REL. VARIANCE

PAR1 = 50. / PRIMARY X-SEARCH DISTANCE
PAR2 = 50. / PRIMARY Y-SEARCH DISTANCE
PAR3 = 50. / PRIMARY Z-SEARCH DISTANCE
PAR4 = 50. / LIMITING SEARCH DISTANCE
PAR7 = 50. / MAX DISTANCE TO CLOSEST POINT
PAR8 = 50. / MAX DISTANCE TO PROJECT SINGLE COMPOSITE
PAR27= 2 4 1 / BLOCK DISCRETIZATION IN X,Y,Z
PAR31= 7.0  / OUTLIER CUTOFF TO CHANGE THE SEARCH
PAR32= 12.5/ MAX. 3D SEARCH DISTANCE AT PAR31

IOP17 = 0   /0=ORDINARY KRIGING, 5=SIMPLE
PAR30 = 0.   /MEAN GRADE OF THE AREA TO BE SIMPLE KRIGED

CMD = SEARCH 50. 50. 10. 0. 0. 75.
CMD = NUG 0.631
CMD = EXP 0.396 22.2 18.1 8.8 0. 0. 75.

ITM1 = AUKR6 AUAJ2 CALC KRIGE
ITM2 = AUNN6 AUAJ2 CALC POLYG
ITM3 = MINZN BLOCK LIMIT
ITM4 = TRNCH BLOCK LIMIT
ITM5 = LNGTH RANGE 2.5 5.
ITM6 = DCODE RANGE 301. 516.
ITM7 = DIST6 BLOCK CALC RINGS
ITM8 = NCMP6 BLOCK CALC #COMP
ITM9 = NHOL6 BLOCK CALC #COMP
ITM10 = MINZN RANGE 2. 2.
ITM11 = LNGTH FACTR
CMD = BLOCK LIMIT MINZN 2
CMD = BLOCK LIMIT TRNCH 1 2
CMD = ELEV ZMID

I-O = 0 / DEBUG LEVEL
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=RKCK10.DAT  9=RKCK09.DAT  15=RKCK15.DAT;
MEDS-624V1   3=RPT624.F06  30=
** KRIGING OF 3-D BLOCK VALUES FOR AUKR6 **

RUN = OMIT

USR = MJL  /  MON DEC 6, 2004 9:31:03 AM US MOUNTAIN STANDARD TIME

IOP3 = 1. / 1=3-D SPHERICAL SEARCH; 0=2-D SEARCH
IOP4 = 0 / 0=NO GEOLOGIC MATCHING; 1=MATCH ONE ITEM
IOP6 = 0 / 0=USE TRUE DIST.; 1=USE ANISOTROPIC DIST.
IOP7 = 2 / MIN # OF COMPS FOR INTERP
IOP11= 00 / ROW # FOR EXTENDED OUTPUT
IOP12= 0 / 0=ALL; 1=OCTANT; 2=QUADRANT SEARCH; 3=SPLIT OCTANT;
COM         4=SPLIT QUADRANT.
COM         NOTE: NEGATIVE#=USE ROTATED SEARCH.  BY DEFAULT,
COM         OCTANTS & QUADRANTS ARE DEFINED USING THE PROJECT'S AXES.
IOP16= 8 / MAX.# OF COMPOSITES FOR INTERPOLATING A BLOCK
IOP19= 2 / MAX.# OF COMPOSITES PER HOLE (DEFAULT=NO LIMIT)
IOP20= 0 / 0=STORE VARIANCE; 1=STD DEV; 2=REL. VARIANCE

PAR1 = 15. / PRIMARY X-SEARCH DISTANCE
PAR2 = 15. / PRIMARY Y-SEARCH DISTANCE
PAR3 = 2.5 / PRIMARY Z-SEARCH DISTANCE
PAR4 = 15. / LIMITING SEARCH DISTANCE
PAR7 = 15. / MAX DISTANCE TO CLOSEST POINT
PAR8 = 15. / MAX DISTANCE TO PROJECT SINGLE COMPOSITE
PAR27= 2 4 1 / BLOCK DISCRETIZATION IN X,Y,Z
PAR31= 7.0  / OUTLIER CUTOFF TO CHANGE THE SEARCH
PAR32= 12.5 / MAX. 3D SEARCH DISTANCE AT PAR31

IOP17 = 0   /0=ORDINARY KRIGING, 5=SIMPLE
PAR30 = 0.   /MEAN GRADE OF THE AREA TO BE SIMPLE KRIGED

CMD = SEARCH 15. 15. 2.5 0. 0. 0.
CMD = NUG 0.631
CMD = EXP 0.369 22.2 18.1 8.8 0. 0. 0.

ITM1 = AUKR6 AUAJ2 CALC KRIGE
ITM2 = AUNN6 AUAJ2 CALC POLYG
ITM3 = MINZN BLOCK LIMIT
ITM4 = TRNCH BLOCK LIMIT
ITM5 = LNGTH RANGE 2.5 5.
ITM6 = DCODE RANGE 301. 716.
ITM7 = DIST6 BLOCK CALC RINGS
ITM8 = NCMP6 BLOCK CALC #COMP
ITM9 = NHOL6 BLOCK CALC #COMP
ITM10 = MINZN RANGE 2. 2.
ITM11 = LNGTH FACTR
CMD = BLOCK LIMIT MINZN 2
CMD = BLOCK LIMIT TRNCH 1 1
CMD = ELEV ZMID

I-O = 0 / DEBUG LEVEL
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=RKCK10.DAT  9=RKCK09.DAT  15=RKCK15.DAT;
MEDS-624V1   3=RPT624.F07  30=
** KRIGING OF 3-D BLOCK VALUES FOR AUKR6 **

RUN = OMIT

USR = MJL  /  MON DEC 6, 2004 9:30:28 AM US MOUNTAIN STANDARD TIME

IOP3 = 1. / 1=3-D SPHERICAL SEARCH; 0=2-D SEARCH
IOP4 = 0 / 0=NO GEOLOGIC MATCHING; 1=MATCH ONE ITEM
IOP6 = 0 / 0=USE TRUE DIST.; 1=USE ANISOTROPIC DIST.
IOP7 = 2 / MIN # OF COMPS FOR INTERP
IOP11= 00 / ROW # FOR EXTENDED OUTPUT
IOP12= 0 / 0=ALL; 1=OCTANT; 2=QUADRANT SEARCH; 3=SPLIT OCTANT;
COM         4=SPLIT QUADRANT.
COM         NOTE: NEGATIVE#=USE ROTATED SEARCH.  BY DEFAULT,
COM         OCTANTS & QUADRANTS ARE DEFINED USING THE PROJECT'S AXES.
IOP16= 12 / MAX.# OF COMPOSITES FOR INTERPOLATING A BLOCK
IOP19= 2 / MAX.# OF COMPOSITES PER HOLE (DEFAULT=NO LIMIT)
IOP20= 0 / 0=STORE VARIANCE; 1=STD DEV; 2=REL. VARIANCE

PAR1 = 50. / PRIMARY X-SEARCH DISTANCE
PAR2 = 50. / PRIMARY Y-SEARCH DISTANCE
PAR3 = 50. / PRIMARY Z-SEARCH DISTANCE
PAR4 = 50. / LIMITING SEARCH DISTANCE
PAR7 = 50. / MAX DISTANCE TO CLOSEST POINT
PAR8 = 50. / MAX DISTANCE TO PROJECT SINGLE COMPOSITE
PAR27= 2 4 1 / BLOCK DISCRETIZATION IN X,Y,Z
PAR31= 10   / OUTLIER CUTOFF TO CHANGE THE SEARCH
PAR32= 16.5 / MAX. 3D SEARCH DISTANCE AT PAR31

IOP17 = 0   /0=ORDINARY KRIGING, 5=SIMPLE
PAR30 = 0.   /MEAN GRADE OF THE AREA TO BE SIMPLE KRIGED

CMD = SEARCH 50. 50. 10. 30. 0. 75.
CMD = NUG 0.478
CMD = EXP 0.522 41.5 13.9 25.9 30. 0. 75.

ITM1 = AUKR6 AUAJ2 CALC KRIGE
ITM2 = AUNN6 AUAJ2 CALC POLYG
ITM3 = MINZN BLOCK LIMIT
ITM4 = TRNCH BLOCK LIMIT
ITM5 = LNGTH RANGE 2.5 5.
ITM6 = DCODE RANGE 301. 516.
ITM7 = DIST6 BLOCK CALC RINGS
ITM8 = NCMP6 BLOCK CALC #COMP
ITM9 = NHOL6 BLOCK CALC #COMP
ITM10 = MINZN RANGE 3. 3.
ITM11 = LNGTH FACTR
CMD = BLOCK LIMIT MINZN 3
CMD = BLOCK LIMIT TRNCH 1 2
CMD = ELEV ZMID

I-O = 0 / DEBUG LEVEL
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=RKCK10.DAT  9=RKCK09.DAT  15=RKCK15.DAT;
MEDS-624V1   3=RPT624.F08  30=
** KRIGING OF 3-D BLOCK VALUES FOR AUKR6 **

RUN = OMIT

USR = MJL  /  MON DEC 6, 2004 9:30:34 AM US MOUNTAIN STANDARD TIME

IOP3 = 1. / 1=3-D SPHERICAL SEARCH; 0=2-D SEARCH
IOP4 = 0 / 0=NO GEOLOGIC MATCHING; 1=MATCH ONE ITEM
IOP6 = 0 / 0=USE TRUE DIST.; 1=USE ANISOTROPIC DIST.
IOP7 = 3 / MIN # OF COMPS FOR INTERP
IOP11= 00 / ROW # FOR EXTENDED OUTPUT
IOP12= 0 / 0=ALL; 1=OCTANT; 2=QUADRANT SEARCH; 3=SPLIT OCTANT;
COM         4=SPLIT QUADRANT.
COM         NOTE: NEGATIVE#=USE ROTATED SEARCH.  BY DEFAULT,
COM         OCTANTS & QUADRANTS ARE DEFINED USING THE PROJECT'S AXES.
IOP16= 6 / MAX.# OF COMPOSITES FOR INTERPOLATING A BLOCK
IOP19= 2 / MAX.# OF COMPOSITES PER HOLE (DEFAULT=NO LIMIT)
IOP20= 0 / 0=STORE VARIANCE; 1=STD DEV; 2=REL. VARIANCE

PAR1 = 50. / PRIMARY X-SEARCH DISTANCE
PAR2 = 50. / PRIMARY Y-SEARCH DISTANCE
PAR3 = 50. / PRIMARY Z-SEARCH DISTANCE
PAR4 = 50. / LIMITING SEARCH DISTANCE
PAR7 = 50. / MAX DISTANCE TO CLOSEST POINT
PAR8 = 50. / MAX DISTANCE TO PROJECT SINGLE COMPOSITE
PAR27= 2 4 1 / BLOCK DISCRETIZATION IN X,Y,Z
PAR31= 10   / OUTLIER CUTOFF TO CHANGE THE SEARCH
PAR32= 16.5 / MAX. 3D SEARCH DISTANCE AT PAR31

IOP17 = 0   /0=ORDINARY KRIGING, 5=SIMPLE
PAR30 = 0.   /MEAN GRADE OF THE AREA TO BE SIMPLE KRIGED

CMD = SEARCH 50. 50. 10. 30. 0. 75.
CMD = NUG 0.478
CMD = EXP 0.522 41.5 13.9 25.9 30. 0. 75.

ITM1 = AUKR6 AUAJ2 CALC KRIGE
ITM2 = AUNN6 AUAJ2 CALC POLYG
ITM3 = MINZN BLOCK LIMIT
ITM4 = TRNCH BLOCK LIMIT
ITM5 = LNGTH RANGE 2.5 5.
ITM6 = DCODE RANGE 301. 516.
ITM7 = DIST6 BLOCK CALC RINGS
ITM8 = NCMP6 BLOCK CALC #COMP
ITM9 = NHOL6 BLOCK CALC #COMP
ITM10 = MINZN RANGE 3. 3.
ITM11 = LNGTH FACTR
CMD = BLOCK LIMIT MINZN 3
CMD = BLOCK LIMIT TRNCH 1 2
CMD = ELEV ZMID

I-O = 0 / DEBUG LEVEL
END
0 0 0 0 0 0
```

```
MEDS-624V1  10=RKCK10.DAT  9=RKCK09.DAT  15=RKCK15.DAT;
MEDS-624V1   3=RPT624.F09  30=
** KRIGING OF 3-D BLOCK VALUES FOR AUKR6 **

RUN = OMIT

USR = MJL  /  MON DEC 6, 2004 9:31:11 AM US MOUNTAIN STANDARD TIME

IOP3 = 1. / 1=3-D SPHERICAL SEARCH; 0=2-D SEARCH
IOP4 = 0 / 0=NO GEOLOGIC MATCHING; 1=MATCH ONE ITEM
IOP6 = 0 / 0=USE TRUE DIST.; 1=USE ANISOTROPIC DIST.
IOP7 = 2 / MIN # OF COMPS FOR INTERP
IOP11= 00 / ROW # FOR EXTENDED OUTPUT
IOP12= 0 / 0=ALL; 1=OCTANT; 2=QUADRANT SEARCH; 3=SPLIT OCTANT;
COM         4=SPLIT QUADRANT.
COM         NOTE: NEGATIVE#=USE ROTATED SEARCH.  BY DEFAULT,
COM         OCTANTS & QUADRANTS ARE DEFINED USING THE PROJECT'S AXES.
IOP16= 8 / MAX.# OF COMPOSITES FOR INTERPOLATING A BLOCK
IOP19= 2 / MAX.# OF COMPOSITES PER HOLE (DEFAULT=NO LIMIT)
IOP20= 0 / 0=STORE VARIANCE; 1=STD DEV; 2=REL. VARIANCE

PAR1 = 15. / PRIMARY X-SEARCH DISTANCE
PAR2 = 15. / PRIMARY Y-SEARCH DISTANCE
PAR3 = 2.5 / PRIMARY Z-SEARCH DISTANCE
PAR4 = 15. / LIMITING SEARCH DISTANCE
PAR7 = 15. / MAX DISTANCE TO CLOSEST POINT
PAR8 = 15. / MAX DISTANCE TO PROJECT SINGLE COMPOSITE
PAR27= 2 4 1 / BLOCK DISCRETIZATION IN X,Y,Z
PAR31= 10   / OUTLIER CUTOFF TO CHANGE THE SEARCH
PAR32= 16.5 / MAX. 3D SEARCH DISTANCE AT PAR31

IOP17 = 0   /0=ORDINARY KRIGING, 5=SIMPLE
PAR30 = 0.   /MEAN GRADE OF THE AREA TO BE SIMPLE KRIGED

CMD = SEARCH 15. 15. 2.5 0. 0. 0.
CMD = NUG 0.478
CMD = EXP 0.522 41.5 13.9 25.9 0. 0. 0.

ITM1 = AUKR6 AUAJ2 CALC KRIGE
ITM2 = AUNN6 AUAJ2 CALC POLYG
ITM3 = MINZN BLOCK LIMIT
ITM4 = TRNCH BLOCK LIMIT
ITM5 = LNGTH RANGE 2.5 5.
ITM6 = DCODE RANGE 301. 716.
ITM7 = DIST6 BLOCK CALC RINGS
ITM8 = NCMP6 BLOCK CALC #COMP
ITM9 = NHOL6 BLOCK CALC #COMP
ITM10 = MINZN RANGE 3. 3.
ITM11 = LNGTH FACTR
CMD = BLOCK LIMIT MINZN 3
CMD = BLOCK LIMIT TRNCH 1 1
CMD = ELEV ZMID

I-O = 0 / DEBUG LEVEL
END
0 0 0 0 0 0
```

E-3 Mineral Classification Batch and Runfiles

```
MEDS-620V1  10=rkck10.dat  9=rkck09.dat  15=rkck15.dat;
MEDS-620V1   3=rpt620.cl8
** I D W interpolation of 3-D block values for AUCLS **

RUN = OMIT

USR = MJL  /  Sat Dec 4, 2004 12:40:03 PM US Mountain Standard Time

IOP3 = 1. / 1=3-D spherical search; 0=2-D search
IOP4 = 1 / 0=No geologic matching; 1=Match one item
IOP6 = 0 / 0=Use true dist; 1=Use anisotropic dist
IOP7 = 2 / Min # of comps for interp
IOP11= 00 / Row # for extended output
IOP12= 0 / 0=All, 1=Octant; 2=Quadrant search; 3=Split Octant
COM         4=Split Quadrant.
COM        Note: Negative #=use rotated search
COM        (by DEFAULT, octants & quadrants are defined using
COM         the project's orthogonal axes).
IOP16= 12 / Max.# of composites for interpolating a block
IOP18= 0 / 0=Store local error as variance; 1=Std dev.
IOP19= 1 / Max.# of composites per hole (DEFAULT=NO LIMIT)
IOP25= 0 / 1=Apply weight factor AFTER IDW, 0=Before

PAR1 = 50. / Primary X-search distance
PAR2 = 50. / Primary Y-search distance
PAR3 = 50. / Primary Z-search distance
PAR4 = 33. / Limiting search distance
PAR5 = 2. / Inverse distance power (DEFAULT=2)
PAR7 = 15. / Max distance to closest point
PAR8 = 33. / Max distance to project single composite

CMD = SEARCH 33. 33. 11  0. 0. 75.

ITM1 = AUCLS AUAJ1 CALC INVWT
ITM2 = AURUN AURUN CALC INVWT
ITM3 = MINZN Block limit
ITM4 = AURUN Block limit
ITM5 = MINZN RANGE 1 99
ITM6 = LNGTH RANGE 2.5 5.
ITM7 = DIST0 Block calc rings
ITM8 = NCMP0 Block calc #comp
ITM9 = NHOL0 Block calc #comp
ITM10 = LNGTH FACTR
CMD = Block limit MINZN 10
CMD = Block limit AURUN 13
CMD = ELEV ZMID
END
0 0 0 0 0 0
```

```
MEDS-620V1  10=rkck10.dat  9=rkck09.dat  15=rkck15.dat;
MEDS-620V1   3=rpt620.cl7
** I D W interpolation of 3-D block values for AUCLS **

RUN = OMIT

USR = MJL  /  Sat Dec 4, 2004 12:40:03 PM US Mountain Standard Time

IOP3 = 1. / 1=3-D spherical search; 0=2-D search
IOP4 = 1 / 0=No geologic matching; 1=Match one item
IOP6 = 0 / 0=Use true dist; 1=Use anisotropic dist
IOP7 = 3 / Min # of comps for interp
IOP11= 00 / Row # for extended output
IOP12= 0 / 0=All, 1=Octant; 2=Quadrant search; 3=Split Octant
COM         4=Split Quadrant.
COM        Note: Negative #=use rotated search
COM        (by DEFAULT, octants & quadrants are defined using
COM         the project's orthogonal axes).
IOP16= 12 / Max.# of composites for interpolating a block
IOP18= 0 / 0=Store local error as variance; 1=Std dev.
IOP19= 1 / Max.# of composites per hole (DEFAULT=NO LIMIT)
IOP25= 0 / 1=Apply weight factor AFTER IDW, 0=Before

PAR1 = 50. / Primary X-search distance
PAR2 = 50. / Primary Y-search distance
PAR3 = 50. / Primary Z-search distance
PAR4 = 45. / Limiting search distance
PAR5 = 2. / Inverse distance power (DEFAULT=2)
PAR7 = 23. / Max distance to closest point
PAR8 = 45. / Max distance to project single composite

CMD = SEARCH 45. 45. 16  0. 0. 75.

ITM1 = AUCLS AUAJ1 CALC INVWT
ITM2 = AURUN AURUN CALC INVWT
ITM3 = MINZN Block limit
ITM4 = AURUN Block limit
ITM5 = MINZN RANGE 1 99
ITM6 = LNGTH RANGE 2.5 5.
ITM7 = DIST0 Block calc rings
ITM8 = NCMP0 Block calc #comp
ITM9 = NHOL0 Block calc #comp
ITM10 = LNGTH FACTR
CMD = Block limit MINZN 10
CMD = Block limit AURUN 13
CMD = ELEV ZMID
END
0 0 0 0 0 0
```

```
MEDS-620V1  10=rkck10.dat  9=rkck09.dat  15=rkck15.dat;
MEDS-620V1   3=rpt620.cl6
** I D W interpolation of 3-D block values for AUCLS **

RUN = OMIT

USR = MJL  /  Sat Dec 4, 2004 12:40:03 PM US Mountain Standard Time

IOP3 = 1. / 1=3-D spherical search; 0=2-D search
IOP4 = 1 / 0=No geologic matching; 1=Match one item
IOP6 = 0 / 0=Use true dist; 1=Use anisotropic dist
IOP7 = 1 / Min # of comps for interp
IOP11= 00 / Row # for extended output
IOP12= 0 / 0=All, 1=Octant; 2=Quadrant search; 3=Split Octant
COM         4=Split Quadrant.
COM        Note: Negative #=use rotated search
COM        (by DEFAULT, octants & quadrants are defined using
COM         the project's orthogonal axes).
IOP16= 12 / Max.# of composites for interpolating a block
IOP18= 0 / 0=Store local error as variance; 1=Std dev.
IOP19= 1 / Max.# of composites per hole (DEFAULT=NO LIMIT)
IOP25= 0 / 1=Apply weight factor AFTER IDW, 0=Before

PAR1 = 15. / Primary X-search distance
PAR2 = 15. / Primary Y-search distance
PAR3 = 15. / Primary Z-search distance
PAR4 = 10. / Limiting search distance
PAR5 = 2. / Inverse distance power (DEFAULT=2)
PAR7 = 10. / Max distance to closest point
PAR8 = 10. / Max distance to project single composite

CMD = SEARCH 10. 10. 10  0. 0. 75.

ITM1 = AUCLS AUAJ1 CALC INVWT
ITM2 = AURUN AURUN CALC INVWT
ITM3 = MINZN Block limit
ITM4 = AURUN Block limit
ITM5 = MINZN RANGE 1 99
ITM6 = LNGTH RANGE 2.5 5.
ITM7 = DIST0 Block calc rings
ITM8 = NCMP0 Block calc #comp
ITM9 = NHOL0 Block calc #comp
ITM10 = LNGTH FACTR
CMD = Block limit MINZN 2
CMD = Block limit AURUN 13
CMD = ELEV ZMID
END
0 0 0 0 0 0
```

```
MEDS-620V1  10=rkck10.dat  9=rkck09.dat  15=rkck15.dat;
MEDS-620V1   3=rpt620.cl5
** I D W interpolation of 3-D block values for AUCLS **

RUN = OMIT

USR = MJL  /  Sat Dec 4, 2004 12:40:03 PM US Mountain Standard Time

IOP3 = 1. / 1=3-D spherical search; 0=2-D search
IOP4 = 1 / 0=No geologic matching; 1=Match one item
IOP6 = 0 / 0=Use true dist; 1=Use anisotropic dist
IOP7 = 2 / Min # of comps for interp
IOP11= 00 / Row # for extended output
IOP12= 0 / 0=All, 1=Octant; 2=Quadrant search; 3=Split Octant
COM         4=Split Quadrant.
COM        Note: Negative #=use rotated search
COM        (by DEFAULT, octants & quadrants are defined using
COM         the project's orthogonal axes).
IOP16= 12 / Max.# of composites for interpolating a block
IOP18= 0 / 0=Store local error as variance; 1=Std dev.
IOP19= 1 / Max.# of composites per hole (DEFAULT=NO LIMIT)
IOP25= 0 / 1=Apply weight factor AFTER IDW, 0=Before

PAR1 = 35. / Primary X-search distance
PAR2 = 35. / Primary Y-search distance
PAR3 = 35. / Primary Z-search distance
PAR4 = 25. / Limiting search distance
PAR5 = 2. / Inverse distance power (DEFAULT=2)
PAR7 = 13. / Max distance to closest point
PAR8 = 25. / Max distance to project single composite

CMD = SEARCH 25. 25. 25  0. 0. 75.

ITM1 = AUCLS AUAJ1 CALC INVWT
ITM2 = AURUN AURUN CALC INVWT
ITM3 = MINZN Block limit
ITM4 = AURUN Block limit
ITM5 = MINZN RANGE 1 99
ITM6 = LNGTH RANGE 2.5 5.
ITM7 = DIST0 Block calc rings
ITM8 = NCMP0 Block calc #comp
ITM9 = NHOL0 Block calc #comp
ITM10 = LNGTH FACTR
CMD = Block limit MINZN 2
CMD = Block limit AURUN 13
CMD = ELEV ZMID
END
0 0 0 0 0 0
```

```
MEDS-620V1  10=rkck10.dat  9=rkck09.dat  15=rkck15.dat;
MEDS-620V1   3=rpt620.cl4
** I D W interpolation of 3-D block values for AUCLS **

RUN = OMIT

USR = MJL  /  Sat Dec 4, 2004 12:40:03 PM US Mountain Standard Time

IOP3 = 1. / 1=3-D spherical search; 0=2-D search
IOP4 = 1 / 0=No geologic matching; 1=Match one item
IOP6 = 0 / 0=Use true dist; 1=Use anisotropic dist
IOP7 = 3 / Min # of comps for interp
IOP11= 00 / Row # for extended output
IOP12= 0 / 0=All, 1=Octant; 2=Quadrant search; 3=Split Octant
COM         4=Split Quadrant.
COM        Note: Negative #=use rotated search
COM        (by DEFAULT, octants & quadrants are defined using
COM         the project's orthogonal axes).
IOP16= 12 / Max.# of composites for interpolating a block
IOP18= 0 / 0=Store local error as variance; 1=Std dev.
IOP19= 1 / Max.# of composites per hole (DEFAULT=NO LIMIT)
IOP25= 0 / 1=Apply weight factor AFTER IDW, 0=Before

PAR1 = 50. / Primary X-search distance
PAR2 = 50. / Primary Y-search distance
PAR3 = 50. / Primary Z-search distance
PAR4 = 35. / Limiting search distance
PAR5 = 2. / Inverse distance power (DEFAULT=2)
PAR7 = 18. / Max distance to closest point
PAR8 = 35. / Max distance to project single composite

CMD = SEARCH 35. 35. 35 0. 0. 75.

ITM1 = AUCLS AUAJ1 CALC INVWT
ITM2 = AURUN AURUN CALC INVWT
ITM3 = MINZN Block limit
ITM4 = AURUN Block limit
ITM5 = MINZN RANGE 1 99
ITM6 = LNGTH RANGE 2.5 5.
ITM7 = DIST0 Block calc rings
ITM8 = NCMP0 Block calc #comp
ITM9 = NHOL0 Block calc #comp
ITM10 = LNGTH FACTR
CMD = Block limit MINZN 2
CMD = Block limit AURUN 13
CMD = ELEV ZMID
END
0 0 0 0 0 0
```

```
MEDS-620V1  10=rkck10.dat  9=rkck09.dat  15=rkck15.dat;
MEDS-620V1   3=rpt620.cl3
** I D W interpolation of 3-D block values for AUCLS **

RUN = OMIT

USR = MJL  /  Sat Dec 4, 2004 12:40:03 PM US Mountain Standard Time

IOP3 = 1. / 1=3-D spherical search; 0=2-D search
IOP4 = 1 / 0=No geologic matching; 1=Match one item
IOP6 = 0 / 0=Use true dist; 1=Use anisotropic dist
IOP7 = 1 / Min # of comps for interp
IOP11= 00 / Row # for extended output
IOP12= 0 / 0=All, 1=Octant; 2=Quadrant search; 3=Split Octant
COM         4=Split Quadrant.
COM        Note: Negative #=use rotated search
COM        (by DEFAULT, octants & quadrants are defined using
COM         the project's orthogonal axes).
IOP16= 12 / Max.# of composites for interpolating a block
IOP18= 0 / 0=Store local error as variance; 1=Std dev.
IOP19= 1 / Max.# of composites per hole (DEFAULT=NO LIMIT)
IOP25= 0 / 1=Apply weight factor AFTER IDW, 0=Before

PAR1 = 15. / Primary X-search distance
PAR2 = 15. / Primary Y-search distance
PAR3 = 15. / Primary Z-search distance
PAR4 = 10. / Limiting search distance
PAR5 = 2. / Inverse distance power (DEFAULT=2)
PAR7 = 10. / Max distance to closest point
PAR8 = 10. / Max distance to project single composite

CMD = SEARCH 10. 10. 10  0. 0. 75.

ITM1 = AUCLS AUAJ1 CALC INVWT
ITM2 = AURUN AURUN CALC INVWT
ITM3 = MINZN Block limit
ITM4 = AURUN Block limit
ITM5 = MINZN RANGE 1 99
ITM6 = LNGTH RANGE 2.5 5.
ITM7 = DIST0 Block calc rings
ITM8 = NCMP0 Block calc #comp
ITM9 = NHOL0 Block calc #comp
ITM10 = LNGTH FACTR
CMD = Block limit MINZN 1 3
CMD = Block limit AURUN 13
CMD = ELEV ZMID
END
0 0 0 0 0 0
```

```
MEDS-620V1  10=rkck10.dat  9=rkck09.dat  15=rkck15.dat;
MEDS-620V1   3=rpt620.cl2
** I D W interpolation of 3-D block values for AUCLS **

RUN = OMIT

USR = MJL  /  Sat Dec 4, 2004 12:40:03 PM US Mountain Standard Time

IOP3 = 1. / 1=3-D spherical search; 0=2-D search
IOP4 = 1 / 0=No geologic matching; 1=Match one item
IOP6 = 0 / 0=Use true dist; 1=Use anisotropic dist
IOP7 = 2 / Min # of comps for interp
IOP11= 00 / Row # for extended output
IOP12= 0 / 0=All, 1=Octant; 2=Quadrant search; 3=Split Octant
COM         4=Split Quadrant.
COM        Note: Negative #=use rotated search
COM        (by DEFAULT, octants & quadrants are defined using
COM         the project's orthogonal axes).
IOP16= 12 / Max.# of composites for interpolating a block
IOP18= 0 / 0=Store local error as variance; 1=Std dev.
IOP19= 1 / Max.# of composites per hole (DEFAULT=NO LIMIT)
IOP25= 0 / 1=Apply weight factor AFTER IDW, 0=Before

PAR1 = 50. / Primary X-search distance
PAR2 = 50. / Primary Y-search distance
PAR3 = 50. / Primary Z-search distance
PAR4 = 33. / Limiting search distance
PAR5 = 2. / Inverse distance power (DEFAULT=2)
PAR7 = 15. / Max distance to closest point
PAR8 = 33. / Max distance to project single composite

CMD = SEARCH 35. 35. 16.5  0. 0. 75.

ITM1 = AUCLS AUAJ1 CALC INVWT
ITM2 = AURUN AURUN CALC INVWT
ITM3 = MINZN Block limit
ITM4 = AURUN Block limit
ITM5 = MINZN RANGE 1 99
ITM6 = LNGTH RANGE 2.5 5.
ITM7 = DIST0 Block calc rings
ITM8 = NCMP0 Block calc #comp
ITM9 = NHOL0 Block calc #comp
ITM10 = LNGTH FACTR
CMD = Block limit MINZN 1 3
CMD = Block limit AURUN 13
CMD = ELEV ZMID
END
0 0 0 0 0 0
```

```
MEDS-620V1  10=rkck10.dat  9=rkck09.dat  15=rkck15.dat;
MEDS-620V1   3=rpt620.cl1
** I D W interpolation of 3-D block values for AUCLS **

RUN = OMIT

USR = MJL  /  Sat Dec 4, 2004 12:40:03 PM US Mountain Standard Time

IOP3 = 1. / 1=3-D spherical search; 0=2-D search
IOP4 = 1 / 0=No geologic matching; 1=Match one item
IOP6 = 0 / 0=Use true dist; 1=Use anisotropic dist
IOP7 = 3 / Min # of comps for interp
IOP11= 00 / Row # for extended output
IOP12= 0 / 0=All, 1=Octant; 2=Quadrant search; 3=Split Octant
COM         4=Split Quadrant.
COM        Note: Negative #=use rotated search
COM        (by DEFAULT, octants & quadrants are defined using
COM         the project's orthogonal axes).
IOP16= 12 / Max.# of composites for interpolating a block
IOP18= 0 / 0=Store local error as variance; 1=Std dev.
IOP19= 1 / Max.# of composites per hole (DEFAULT=NO LIMIT)
IOP25= 0 / 1=Apply weight factor AFTER IDW, 0=Before

PAR1 = 50. / Primary X-search distance
PAR2 = 50. / Primary Y-search distance
PAR3 = 50. / Primary Z-search distance
PAR4 = 45. / Limiting search distance
PAR5 = 2. / Inverse distance power (DEFAULT=2)
PAR7 = 23. / Max distance to closest point
PAR8 = 45. / Max distance to project single composite

CMD = SEARCH 45. 45. 22.5  0. 0. 75.

ITM1 = AUCLS AUAJ1 CALC INVWT
ITM2 = AURUN AURUN CALC INVWT
ITM3 = MINZN Block limit
ITM4 = AURUN Block limit
ITM5 = MINZN RANGE 1 99
ITM6 = LNGTH RANGE 2.5 5.
ITM7 = DIST0 Block calc rings
ITM8 = NCMP0 Block calc #comp
ITM9 = NHOL0 Block calc #comp
ITM10 = LNGTH FACTR
CMD = Block limit MINZN 1 3
CMD = Block limit AURUN 13
CMD = ELEV ZMID
END
0 0 0 0 0 0
```

```
MEDS-612V1  10=rkck10.dat  15=rkck15.dat  3=rpt612.zcl  19=zclas.dat
  ** Assign code item in 3dbm using grade ranges

USR = MJL / Mon Dec 6, 2004 3:58:43 PM US Mountain Standard Time

IOP2 =  1 / Data retrieval
IOP3 =  2 / Call USR612 by bench, row and end-of-run
IOP4 = 0  / -1=Access USR612 but do not store
IOP9 = 2  / 2=Input file
IOP11 = 1 / Number of zones per block
IOP12 = 2 / Number of grade items
IOP13 = 13 / Default class
IOP14 = 0 / Use bench ranges in input file
IOP15 = 0 / 0=Class numbers integer, 1=Class numbers real
UPD15 = ZCLAS MINZN CLASS
END
1 60
```

```
MEDS-620V1  10=rkck10.dat  9=rkck09.dat  15=rkck15.dat;
MEDS-620V1   3=rpt620.cl9
** I D W interpolation of 3-D block values for AUCLS **

RUN = OMIT

USR = MJL  /  Sat Dec 4, 2004 12:40:03 PM US Mountain Standard Time

IOP3 = 1. / 1=3-D spherical search; 0=2-D search
IOP4 = 1 / 0=No geologic matching; 1=Match one item
IOP6 = 0 / 0=Use true dist; 1=Use anisotropic dist
IOP7 = 1 / Min # of comps for interp
IOP11= 00 / Row # for extended output
IOP12= 0 / 0=All, 1=Octant; 2=Quadrant search; 3=Split Octant
COM         4=Split Quadrant.
COM        Note: Negative #=use rotated search
COM        (by DEFAULT, octants & quadrants are defined using
COM         the project's orthogonal axes).
IOP16= 12 / Max.# of composites for interpolating a block
IOP18= 0 / 0=Store local error as variance; 1=Std dev.
IOP19= 1 / Max.# of composites per hole (DEFAULT=NO LIMIT)
IOP25= 0 / 1=Apply weight factor AFTER IDW, 0=Before

PAR1 = 15. / Primary X-search distance
PAR2 = 15. / Primary Y-search distance
PAR3 = 15. / Primary Z-search distance
PAR4 = 10. / Limiting search distance
PAR5 = 2. / Inverse distance power (DEFAULT=2)
PAR7 = 10. / Max distance to closest point
PAR8 = 10. / Max distance to project single composite

CMD = SEARCH 10. 10. 10 0. 0. 75.

ITM1 = AUCLS AUAJ1 CALC INVWT
ITM2 = AURUN AURUN CALC INVWT
ITM3 = MINZN Block limit
ITM4 = AURUN Block limit
ITM5 = MINZN RANGE 1 99
ITM6 = LNGTH RANGE 2.5 5.
ITM7 = DIST0 Block calc rings
ITM8 = NCMP0 Block calc #comp
ITM9 = NHOL0 Block calc #comp
ITM10 = LNGTH FACTR
CMD = Block limit MINZN 10
CMD = Block limit AURUN 13
CMD = ELEV ZMID
END
0 0 0 0 0 0
```

```
MEDS-620V1  10=rkck10.dat  9=rkck09.dat  15=rkck15.dat;
MEDS-620V1   3=rpt620.cl1
** I D W interpolation of 3-D block values for AUCLS **

RUN = OMIT

USR = MJL  /  Sat Dec 4, 2004 12:40:03 PM US Mountain Standard Time

IOP3 = 1. / 1=3-D spherical search; 0=2-D search
IOP4 = 1 / 0=No geologic matching; 1=Match one item
IOP6 = 0 / 0=Use true dist; 1=Use anisotropic dist
IOP7 = 3 / Min # of comps for interp
IOP11= 00 / Row # for extended output
IOP12= 0 / 0=All, 1=Octant; 2=Quadrant search; 3=Split Octant
COM         4=Split Quadrant.
COM        Note: Negative #=use rotated search
COM        (by DEFAULT, octants & quadrants are defined using
COM         the project's orthogonal axes).
IOP16= 12 / Max.# of composites for interpolating a block
IOP18= 0 / 0=Store local error as variance; 1=Std dev.
IOP19= 1 / Max.# of composites per hole (DEFAULT=NO LIMIT)
IOP25= 0 / 1=Apply weight factor AFTER IDW, 0=Before

PAR1 = 50. / Primary X-search distance
PAR2 = 50. / Primary Y-search distance
PAR3 = 50. / Primary Z-search distance
PAR4 = 45. / Limiting search distance
PAR5 = 2. / Inverse distance power (DEFAULT=2)
PAR7 = 23. / Max distance to closest point
PAR8 = 45. / Max distance to project single composite

CMD = SEARCH 45. 45. 22.5  0. 0. 75.

ITM1 = AUCLS AUAJ1 CALC INVWT
ITM2 = AURUN AURUN CALC INVWT
ITM3 = MINZN Block limit
ITM4 = AURUN Block limit
ITM5 = MINZN RANGE 1 99
ITM6 = LNGTH RANGE 2.5 5.
ITM7 = DIST0 Block calc rings
ITM8 = NCMP0 Block calc #comp
ITM9 = NHOL0 Block calc #comp
ITM10 = LNGTH FACTR
CMD = Block limit MINZN 1 3
CMD = Block limit AURUN 13
CMD = ELEV ZMID
END
0 0 0 0 0 0
```

```
MEDS-620V1  10=rkck10.dat  9=rkck09.dat  15=rkck15.dat;
MEDS-620V1   3=rpt620.cl2
** I D W interpolation of 3-D block values for AUCLS **

RUN = OMIT

USR = MJL  /  Sat Dec 4, 2004 12:40:03 PM US Mountain Standard Time

IOP3 = 1. / 1=3-D spherical search; 0=2-D search
IOP4 = 1 / 0=No geologic matching; 1=Match one item
IOP6 = 0 / 0=Use true dist; 1=Use anisotropic dist
IOP7 = 2 / Min # of comps for interp
IOP11= 00 / Row # for extended output
IOP12= 0 / 0=All, 1=Octant; 2=Quadrant search; 3=Split Octant
COM         4=Split Quadrant.
COM        Note: Negative #=use rotated search
COM        (by DEFAULT, octants & quadrants are defined using
COM         the project's orthogonal axes).
IOP16= 12 / Max.# of composites for interpolating a block
IOP18= 0 / 0=Store local error as variance; 1=Std dev.
IOP19= 1 / Max.# of composites per hole (DEFAULT=NO LIMIT)
IOP25= 0 / 1=Apply weight factor AFTER IDW, 0=Before

PAR1 = 50. / Primary X-search distance
PAR2 = 50. / Primary Y-search distance
PAR3 = 50. / Primary Z-search distance
PAR4 = 33. / Limiting search distance
PAR5 = 2. / Inverse distance power (DEFAULT=2)
PAR7 = 15. / Max distance to closest point
PAR8 = 33. / Max distance to project single composite

CMD = SEARCH 35. 35. 16.5  0. 0. 75.

ITM1 = AUCLS AUAJ1 CALC INVWT
ITM2 = AURUN AURUN CALC INVWT
ITM3 = MINZN Block limit
ITM4 = AURUN Block limit
ITM5 = MINZN RANGE 1 99
ITM6 = LNGTH RANGE 2.5 5.
ITM7 = DIST0 Block calc rings
ITM8 = NCMP0 Block calc #comp
ITM9 = NHOL0 Block calc #comp
ITM10 = LNGTH FACTR
CMD = Block limit MINZN 1 3
CMD = Block limit AURUN 13
CMD = ELEV ZMID
END
0 0 0 0 0 0
```

```
MEDS-620V1  10=rkck10.dat  9=rkck09.dat  15=rkck15.dat;
MEDS-620V1   3=rpt620.cl3
** I D W interpolation of 3-D block values for AUCLS **

RUN = OMIT

USR = MJL  /  Sat Dec 4, 2004 12:40:03 PM US Mountain Standard Time

IOP3 = 1. / 1=3-D spherical search; 0=2-D search
IOP4 = 1 / 0=No geologic matching; 1=Match one item
IOP6 = 0 / 0=Use true dist; 1=Use anisotropic dist
IOP7 = 1 / Min # of comps for interp
IOP11= 00 / Row # for extended output
IOP12= 0 / 0=All, 1=Octant; 2=Quadrant search; 3=Split Octant
COM         4=Split Quadrant.
COM        Note: Negative #=use rotated search
COM        (by DEFAULT, octants & quadrants are defined using
COM         the project's orthogonal axes).
IOP16= 12 / Max.# of composites for interpolating a block
IOP18= 0 / 0=Store local error as variance; 1=Std dev.
IOP19= 1 / Max.# of composites per hole (DEFAULT=NO LIMIT)
IOP25= 0 / 1=Apply weight factor AFTER IDW, 0=Before

PAR1 = 15. / Primary X-search distance
PAR2 = 15. / Primary Y-search distance
PAR3 = 15. / Primary Z-search distance
PAR4 = 10. / Limiting search distance
PAR5 = 2. / Inverse distance power (DEFAULT=2)
PAR7 = 10. / Max distance to closest point
PAR8 = 10. / Max distance to project single composite

CMD = SEARCH 10. 10. 10  0. 0. 75.

ITM1 = AUCLS AUAJ1 CALC INVWT
ITM2 = AURUN AURUN CALC INVWT
ITM3 = MINZN Block limit
ITM4 = AURUN Block limit
ITM5 = MINZN RANGE 1 99
ITM6 = LNGTH RANGE 2.5 5.
ITM7 = DIST0 Block calc rings
ITM8 = NCMP0 Block calc #comp
ITM9 = NHOL0 Block calc #comp
ITM10 = LNGTH FACTR
CMD = Block limit MINZN 1 3
CMD = Block limit AURUN 13
CMD = ELEV ZMID
END
0 0 0 0 0 0
```

```
MEDS-620V1  10=rkck10.dat  9=rkck09.dat  15=rkck15.dat;
MEDS-620V1   3=rpt620.cl4
** I D W interpolation of 3-D block values for AUCLS **

RUN = OMIT

USR = MJL  /  Sat Dec 4, 2004 12:40:03 PM US Mountain Standard Time

IOP3 = 1. / 1=3-D spherical search; 0=2-D search
IOP4 = 1 / 0=No geologic matching; 1=Match one item
IOP6 = 0 / 0=Use true dist; 1=Use anisotropic dist
IOP7 = 3 / Min # of comps for interp
IOP11= 00 / Row # for extended output
IOP12= 0 / 0=All, 1=Octant; 2=Quadrant search; 3=Split Octant
COM         4=Split Quadrant.
COM        Note: Negative #=use rotated search
COM        (by DEFAULT, octants & quadrants are defined using
COM         the project's orthogonal axes).
IOP16= 12 / Max.# of composites for interpolating a block
IOP18= 0 / 0=Store local error as variance; 1=Std dev.
IOP19= 1 / Max.# of composites per hole (DEFAULT=NO LIMIT)
IOP25= 0 / 1=Apply weight factor AFTER IDW, 0=Before

PAR1 = 50. / Primary X-search distance
PAR2 = 50. / Primary Y-search distance
PAR3 = 50. / Primary Z-search distance
PAR4 = 35. / Limiting search distance
PAR5 = 2. / Inverse distance power (DEFAULT=2)
PAR7 = 18. / Max distance to closest point
PAR8 = 35. / Max distance to project single composite

CMD = SEARCH 35. 35. 35 0. 0. 75.

ITM1 = AUCLS AUAJ1 CALC INVWT
ITM2 = AURUN AURUN CALC INVWT
ITM3 = MINZN Block limit
ITM4 = AURUN Block limit
ITM5 = MINZN RANGE 1 99
ITM6 = LNGTH RANGE 2.5 5.
ITM7 = DIST0 Block calc rings
ITM8 = NCMP0 Block calc #comp
ITM9 = NHOL0 Block calc #comp
ITM10 = LNGTH FACTR
CMD = Block limit MINZN 2
CMD = Block limit AURUN 13
CMD = ELEV ZMID
END
0 0 0 0 0 0
```

```
MEDS-620V1  10=rkck10.dat  9=rkck09.dat  15=rkck15.dat;
MEDS-620V1   3=rpt620.cl5
** I D W interpolation of 3-D block values for AUCLS **

RUN = OMIT

USR = MJL  /  Sat Dec 4, 2004 12:40:03 PM US Mountain Standard Time

IOP3 = 1. / 1=3-D spherical search; 0=2-D search
IOP4 = 1 / 0=No geologic matching; 1=Match one item
IOP6 = 0 / 0=Use true dist; 1=Use anisotropic dist
IOP7 = 2 / Min # of comps for interp
IOP11= 00 / Row # for extended output
IOP12= 0 / 0=All, 1=Octant; 2=Quadrant search; 3=Split Octant
COM         4=Split Quadrant.
COM        Note: Negative #=use rotated search
COM        (by DEFAULT, octants & quadrants are defined using
COM         the project's orthogonal axes).
IOP16= 12 / Max.# of composites for interpolating a block
IOP18= 0 / 0=Store local error as variance; 1=Std dev.
IOP19= 1 / Max.# of composites per hole (DEFAULT=NO LIMIT)
IOP25= 0 / 1=Apply weight factor AFTER IDW, 0=Before

PAR1 = 35. / Primary X-search distance
PAR2 = 35. / Primary Y-search distance
PAR3 = 35. / Primary Z-search distance
PAR4 = 25. / Limiting search distance
PAR5 = 2. / Inverse distance power (DEFAULT=2)
PAR7 = 13. / Max distance to closest point
PAR8 = 25. / Max distance to project single composite

CMD = SEARCH 25. 25. 25  0. 0. 75.

ITM1 = AUCLS AUAJ1 CALC INVWT
ITM2 = AURUN AURUN CALC INVWT
ITM3 = MINZN Block limit
ITM4 = AURUN Block limit
ITM5 = MINZN RANGE 1 99
ITM6 = LNGTH RANGE 2.5 5.
ITM7 = DIST0 Block calc rings
ITM8 = NCMP0 Block calc #comp
ITM9 = NHOL0 Block calc #comp
ITM10 = LNGTH FACTR
CMD = Block limit MINZN 2
CMD = Block limit AURUN 13
CMD = ELEV ZMID
END
0 0 0 0 0 0
```

```
MEDS-620V1  10=rkck10.dat  9=rkck09.dat  15=rkck15.dat;
MEDS-620V1   3=rpt620.cl6
** I D W interpolation of 3-D block values for AUCLS **

RUN = OMIT

USR = MJL  /  Sat Dec 4, 2004 12:40:03 PM US Mountain Standard Time

IOP3 = 1. / 1=3-D spherical search; 0=2-D search
IOP4 = 1 / 0=No geologic matching; 1=Match one item
IOP6 = 0 / 0=Use true dist; 1=Use anisotropic dist
IOP7 = 1 / Min # of comps for interp
IOP11= 00 / Row # for extended output
IOP12= 0 / 0=All, 1=Octant; 2=Quadrant search; 3=Split Octant
COM         4=Split Quadrant.
COM        Note: Negative #=use rotated search
COM        (by DEFAULT, octants & quadrants are defined using
COM         the project's orthogonal axes).
IOP16= 12 / Max.# of composites for interpolating a block
IOP18= 0 / 0=Store local error as variance; 1=Std dev.
IOP19= 1 / Max.# of composites per hole (DEFAULT=NO LIMIT)
IOP25= 0 / 1=Apply weight factor AFTER IDW, 0=Before

PAR1 = 15. / Primary X-search distance
PAR2 = 15. / Primary Y-search distance
PAR3 = 15. / Primary Z-search distance
PAR4 = 10. / Limiting search distance
PAR5 = 2. / Inverse distance power (DEFAULT=2)
PAR7 = 10. / Max distance to closest point
PAR8 = 10. / Max distance to project single composite

CMD = SEARCH 10. 10. 10  0. 0. 75.

ITM1 = AUCLS AUAJ1 CALC INVWT
ITM2 = AURUN AURUN CALC INVWT
ITM3 = MINZN Block limit
ITM4 = AURUN Block limit
ITM5 = MINZN RANGE 1 99
ITM6 = LNGTH RANGE 2.5 5.
ITM7 = DIST0 Block calc rings
ITM8 = NCMP0 Block calc #comp
ITM9 = NHOL0 Block calc #comp
ITM10 = LNGTH FACTR
CMD = Block limit MINZN 2
CMD = Block limit AURUN 13
CMD = ELEV ZMID
END
0 0 0 0 0 0
```

```
MEDS-620V1  10=rkck10.dat  9=rkck09.dat  15=rkck15.dat;
MEDS-620V1   3=rpt620.cl7
** I D W interpolation of 3-D block values for AUCLS **

RUN = OMIT

USR = MJL  /  Sat Dec 4, 2004 12:40:03 PM US Mountain Standard Time

IOP3 = 1. / 1=3-D spherical search; 0=2-D search
IOP4 = 1 / 0=No geologic matching; 1=Match one item
IOP6 = 0 / 0=Use true dist; 1=Use anisotropic dist
IOP7 = 3 / Min # of comps for interp
IOP11= 00 / Row # for extended output
IOP12= 0 / 0=All, 1=Octant; 2=Quadrant search; 3=Split Octant
COM         4=Split Quadrant.
COM        Note: Negative #=use rotated search
COM        (by DEFAULT, octants & quadrants are defined using
COM         the project's orthogonal axes).
IOP16= 12 / Max.# of composites for interpolating a block
IOP18= 0 / 0=Store local error as variance; 1=Std dev.
IOP19= 1 / Max.# of composites per hole (DEFAULT=NO LIMIT)
IOP25= 0 / 1=Apply weight factor AFTER IDW, 0=Before

PAR1 = 50. / Primary X-search distance
PAR2 = 50. / Primary Y-search distance
PAR3 = 50. / Primary Z-search distance
PAR4 = 45. / Limiting search distance
PAR5 = 2. / Inverse distance power (DEFAULT=2)
PAR7 = 23. / Max distance to closest point
PAR8 = 45. / Max distance to project single composite

CMD = SEARCH 45. 45. 16  0. 0. 75.

ITM1 = AUCLS AUAJ1 CALC INVWT
ITM2 = AURUN AURUN CALC INVWT
ITM3 = MINZN Block limit
ITM4 = AURUN Block limit
ITM5 = MINZN RANGE 1 99
ITM6 = LNGTH RANGE 2.5 5.
ITM7 = DIST0 Block calc rings
ITM8 = NCMP0 Block calc #comp
ITM9 = NHOL0 Block calc #comp
ITM10 = LNGTH FACTR
CMD = Block limit MINZN 10
CMD = Block limit AURUN 13
CMD = ELEV ZMID
END
0 0 0 0 0 0
```

```
MEDS-620V1  10=rkck10.dat  9=rkck09.dat  15=rkck15.dat;
MEDS-620V1   3=rpt620.cl8
** I D W interpolation of 3-D block values for AUCLS **

RUN = OMIT

USR = MJL  /  Sat Dec 4, 2004 12:40:03 PM US Mountain Standard Time

IOP3 = 1. / 1=3-D spherical search; 0=2-D search
IOP4 = 1 / 0=No geologic matching; 1=Match one item
IOP6 = 0 / 0=Use true dist; 1=Use anisotropic dist
IOP7 = 2 / Min # of comps for interp
IOP11= 00 / Row # for extended output
IOP12= 0 / 0=All, 1=Octant; 2=Quadrant search; 3=Split Octant
COM         4=Split Quadrant.
COM        Note: Negative #=use rotated search
COM        (by DEFAULT, octants & quadrants are defined using
COM         the project's orthogonal axes).
IOP16= 12 / Max.# of composites for interpolating a block
IOP18= 0 / 0=Store local error as variance; 1=Std dev.
IOP19= 1 / Max.# of composites per hole (DEFAULT=NO LIMIT)
IOP25= 0 / 1=Apply weight factor AFTER IDW, 0=Before

PAR1 = 50. / Primary X-search distance
PAR2 = 50. / Primary Y-search distance
PAR3 = 50. / Primary Z-search distance
PAR4 = 33. / Limiting search distance
PAR5 = 2. / Inverse distance power (DEFAULT=2)
PAR7 = 15. / Max distance to closest point
PAR8 = 33. / Max distance to project single composite

CMD = SEARCH 33. 33. 11  0. 0. 75.

ITM1 = AUCLS AUAJ1 CALC INVWT
ITM2 = AURUN AURUN CALC INVWT
ITM3 = MINZN Block limit
ITM4 = AURUN Block limit
ITM5 = MINZN RANGE 1 99
ITM6 = LNGTH RANGE 2.5 5.
ITM7 = DIST0 Block calc rings
ITM8 = NCMP0 Block calc #comp
ITM9 = NHOL0 Block calc #comp
ITM10 = LNGTH FACTR
CMD = Block limit MINZN 10
CMD = Block limit AURUN 13
CMD = ELEV ZMID
END
0 0 0 0 0 0
```

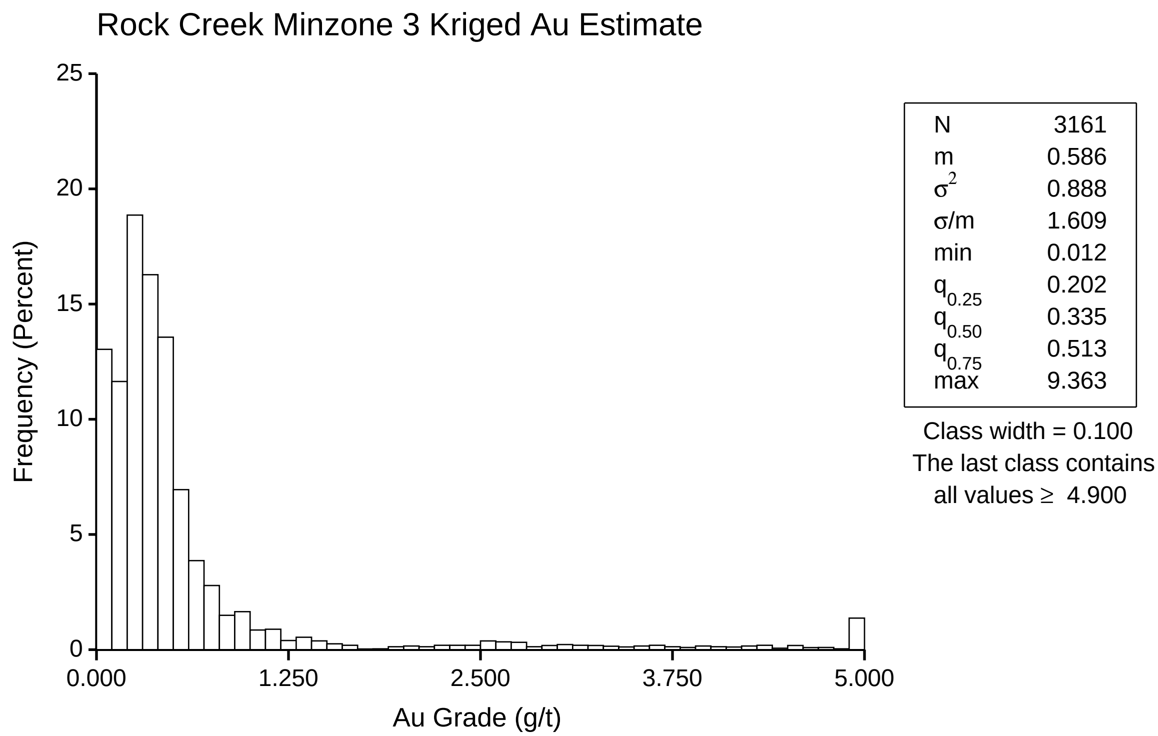
```
MEDS-620V1  10=rkck10.dat  9=rkck09.dat  15=rkck15.dat;
MEDS-620V1   3=rpt620.cl9
** I D W interpolation of 3-D block values for AUCLS **

RUN = OMIT

USR = MJL  /  Sat Dec 4, 2004 12:40:03 PM US Mountain Standard Time

IOP3 = 1. / 1=3-D spherical search; 0=2-D search
IOP4 = 1 / 0=No geologic matching; 1=Match one item
IOP6 = 0 / 0=Use true dist; 1=Use anisotropic dist
IOP7 = 1 / Min # of comps for interp
IOP11= 00 / Row # for extended output
IOP12= 0 / 0=All, 1=Octant; 2=Quadrant search; 3=Split Octant
COM         4=Split Quadrant.
COM        Note: Negative #=use rotated search
COM        (by DEFAULT, octants & quadrants are defined using
COM         the project's orthogonal axes).
IOP16= 12 / Max.# of composites for interpolating a block
IOP18= 0 / 0=Store local error as variance; 1=Std dev.
IOP19= 1 / Max.# of composites per hole (DEFAULT=NO LIMIT)
IOP25= 0 / 1=Apply weight factor AFTER IDW, 0=Before

PAR1 = 15. / Primary X-search distance
PAR2 = 15. / Primary Y-search distance
PAR3 = 15. / Primary Z-search distance
PAR4 = 10. / Limiting search distance
PAR5 = 2. / Inverse distance power (DEFAULT=2)
PAR7 = 10. / Max distance to closest point
PAR8 = 10. / Max distance to project single composite

CMD = SEARCH 10. 10. 10 0. 0. 75.

ITM1 = AUCLS AUAJ1 CALC INVWT
ITM2 = AURUN AURUN CALC INVWT
ITM3 = MINZN Block limit
ITM4 = AURUN Block limit
ITM5 = MINZN RANGE 1 99
ITM6 = LNGTH RANGE 2.5 5.
ITM7 = DIST0 Block calc rings
ITM8 = NCMP0 Block calc #comp
ITM9 = NHOL0 Block calc #comp
ITM10 = LNGTH FACTR
CMD = Block limit MINZN 10
CMD = Block limit AURUN 13
CMD = ELEV ZMID
END
0 0 0 0 0 0
```

```
MEDS-612V1  10=rkck10.dat  15=rkck15.dat  3=rpt612.zcl  19=zclas.dat
  ** Assign code item in 3dbm using grade ranges

USR = MJL / Mon Dec 6, 2004 3:58:43 PM US Mountain Standard Time

IOP2 =  1 / Data retrieval
IOP3 =  2 / Call USR612 by bench, row and end-of-run
IOP4 = 0  / -1=Access USR612 but do not store
IOP9 = 2  / 2=Input file
IOP11 = 1 / Number of zones per block
IOP12 = 2 / Number of grade items
IOP13 = 13 / Default class
IOP14 = 0 / Use bench ranges in input file
IOP15 = 0 / 0=Class numbers integer, 1=Class numbers real
UPD15 = ZCLAS MINZN CLASS
END
1 60
```

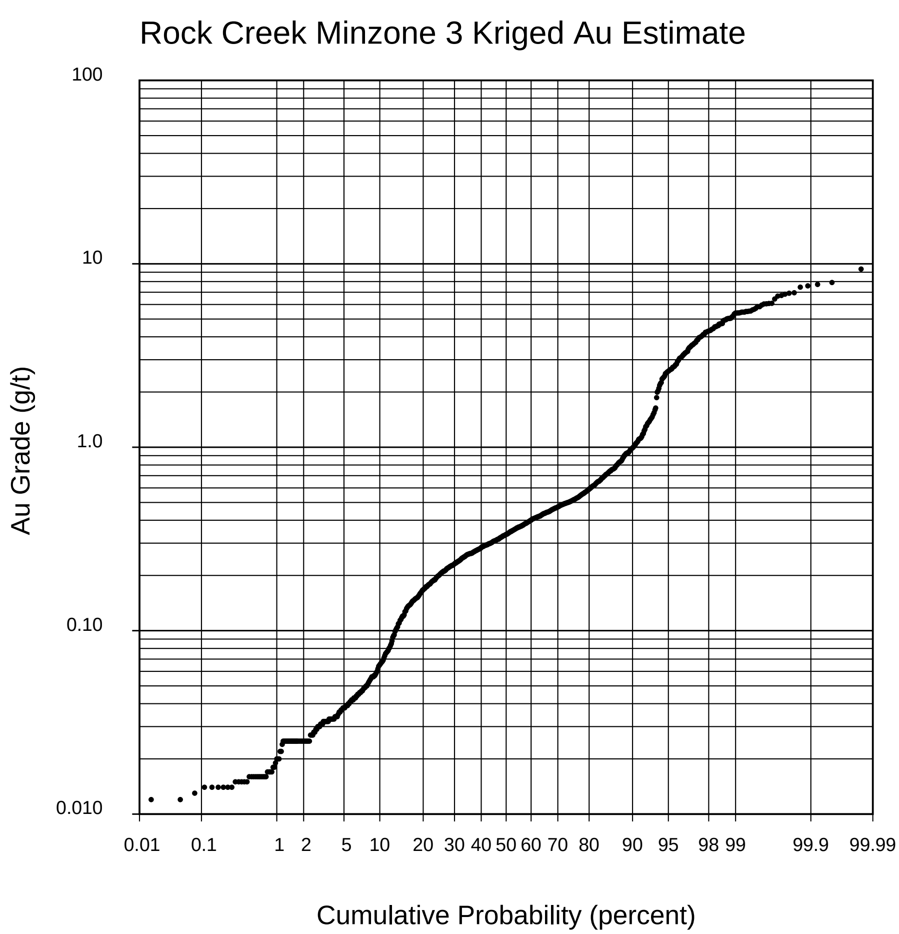
APPENDIX F

BLOCK MODEL VALIDATION

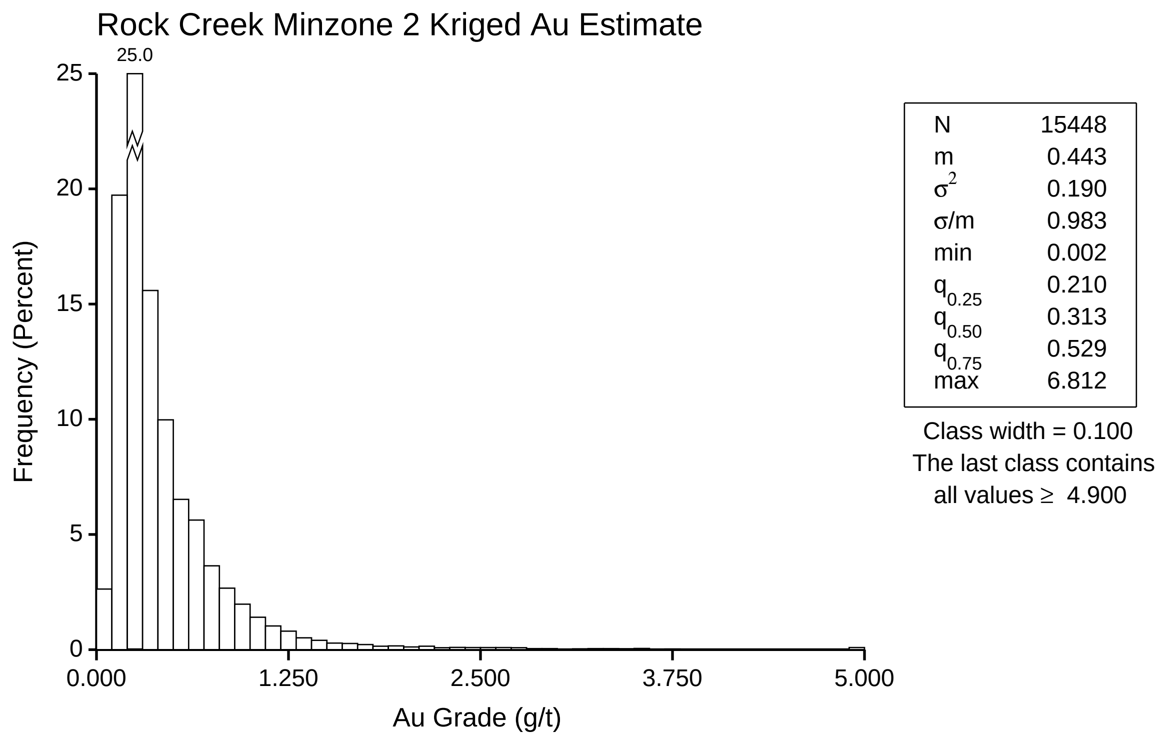
F-1 Kriged Model Histograms

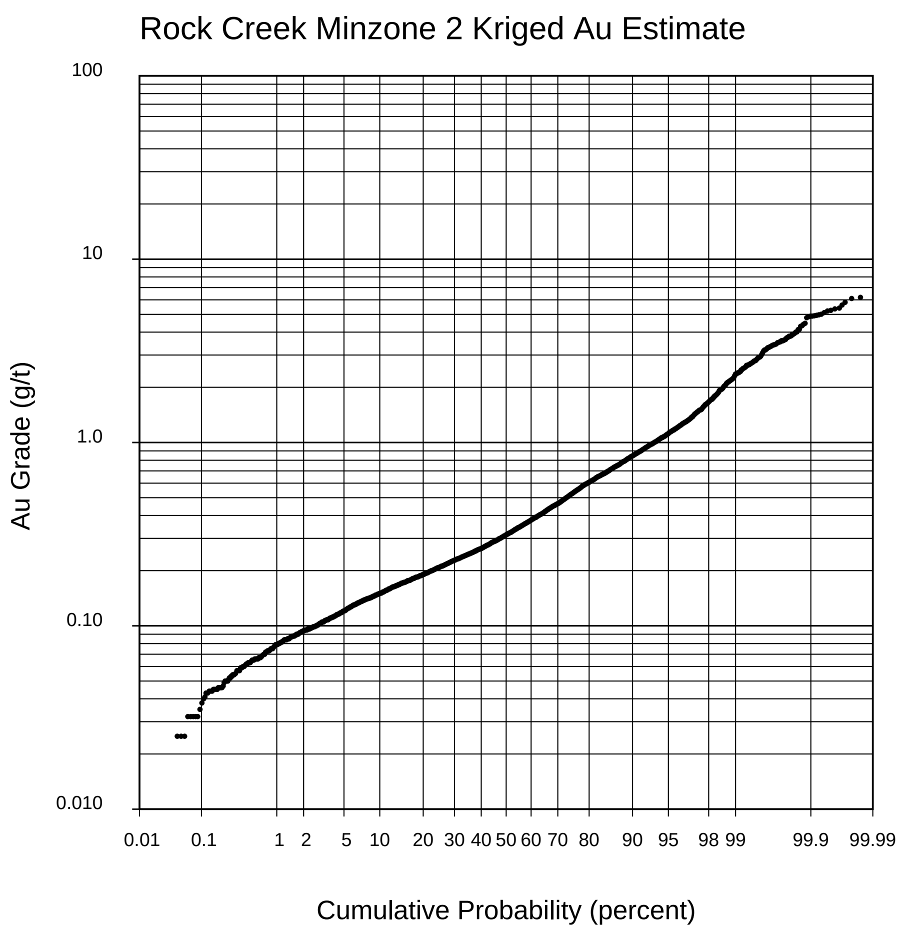


Rock Creek Minzone 3 Kriged Au Estimate
Frequency (Percent)
25
20
15
10
5
0
0.000
1.250
2.500
3.750
5.000
Au Grade (g/t)
N 3161
m 0.586
σ2 0.888
σ/m 1.609
min 0.012
q0.25 0.202
q0.50 0.335
q0.75 0.513
max 9.363
Class width = 0.100
The last class contains
all values ≥ 4.900

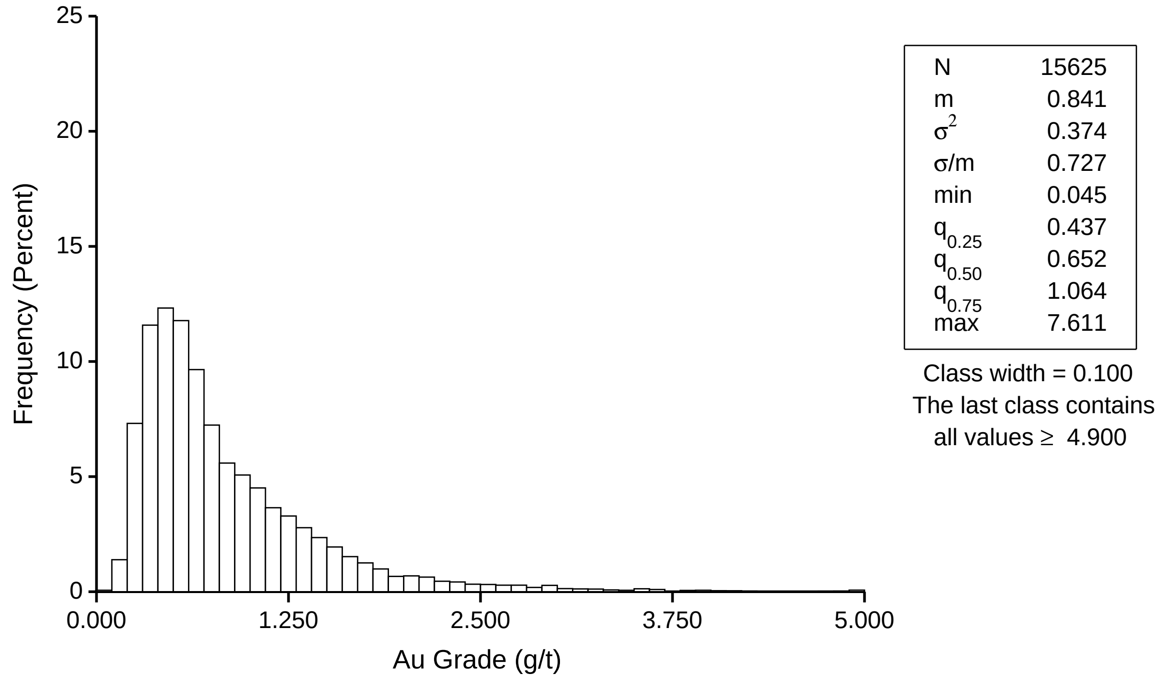


Rock Creek Minzone 3 Kriged Au Estimate
Au Grade (g/t)
100
10
1.0
0.10
0.010
0.01
0.1
1
2
5
10
20
30
40
50
60
70
80
90
95
98
99
99.9
99.99
Cumulative Probability (percent)

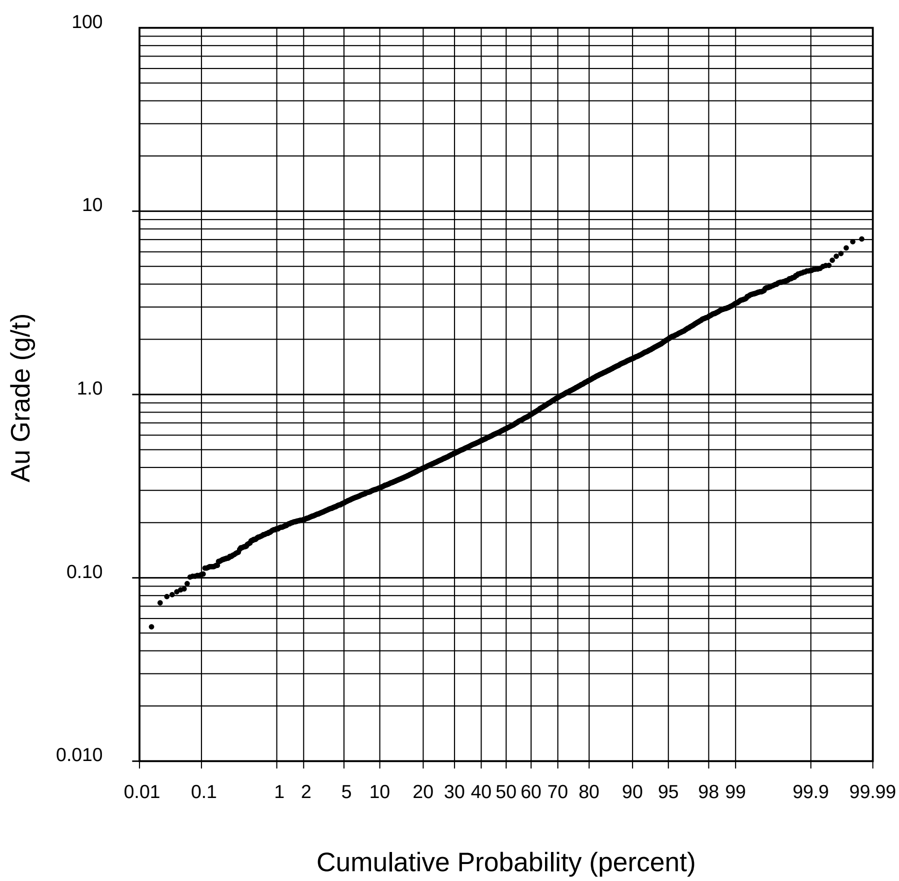

Rock Creek Minzone 2 Kriged Au Estimate
25.0
25
20
15
10
5
0
Frequency (Percent)
0.000
1.250
2.500
3.750
5.000
Au Grade (g/t)
N 15448
m 0.443
σ2 0.190
σ/m 0.983
min 0.002
q0.25 0.210
q0.50 0.313
q0.75 0.529
max 6.812
Class width = 0.100
The last class contains
all values ≥ 4.900

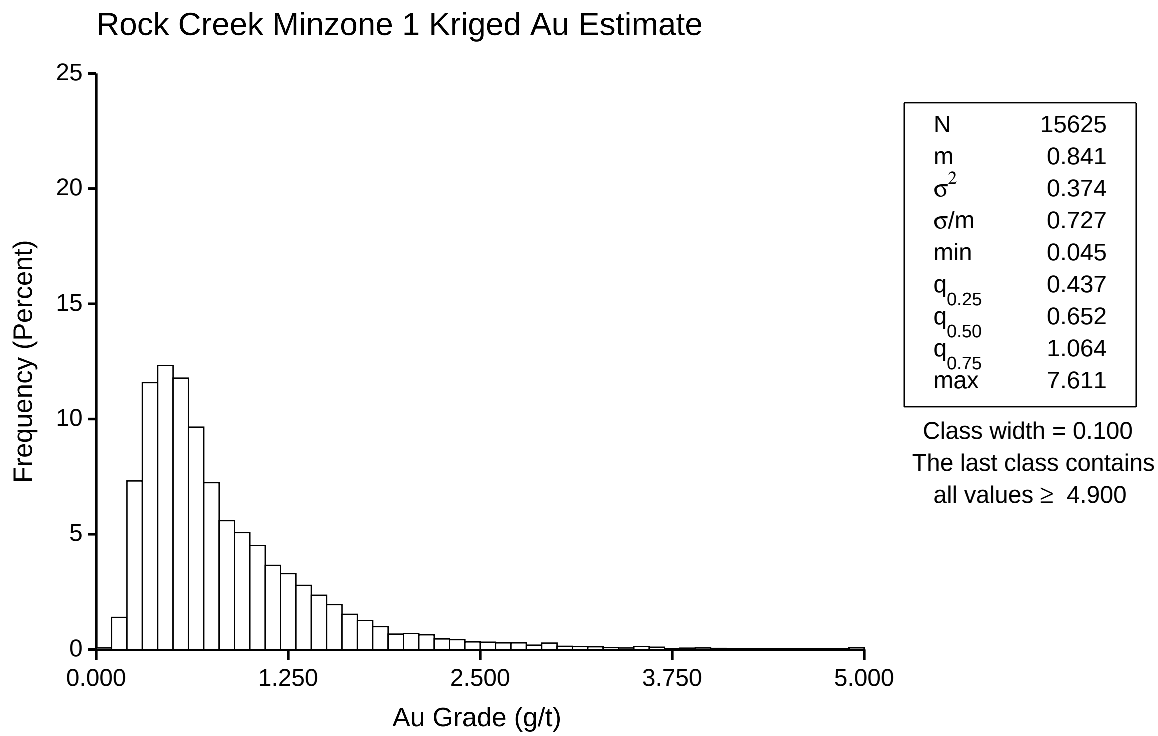

Rock Creek Minzone 2 Kriged Au Estimate
100
10
1.0
0.10
0.010
Au Grade (g/t)
0.01
0.1
1
2
5
10
20
30
40
50
60
70
80
90
95
98
99
99.9
99.99
Cumulative Probability (percent)

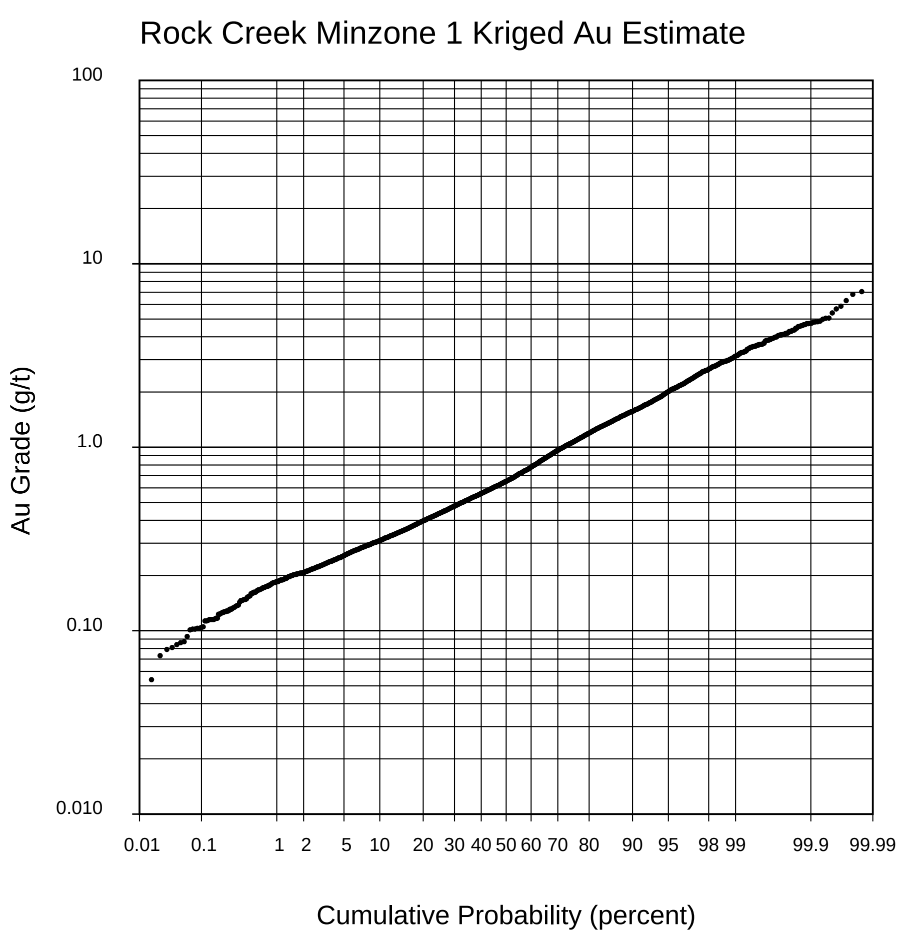
Rock Creek Minzone 1 Kriged Au Estimate

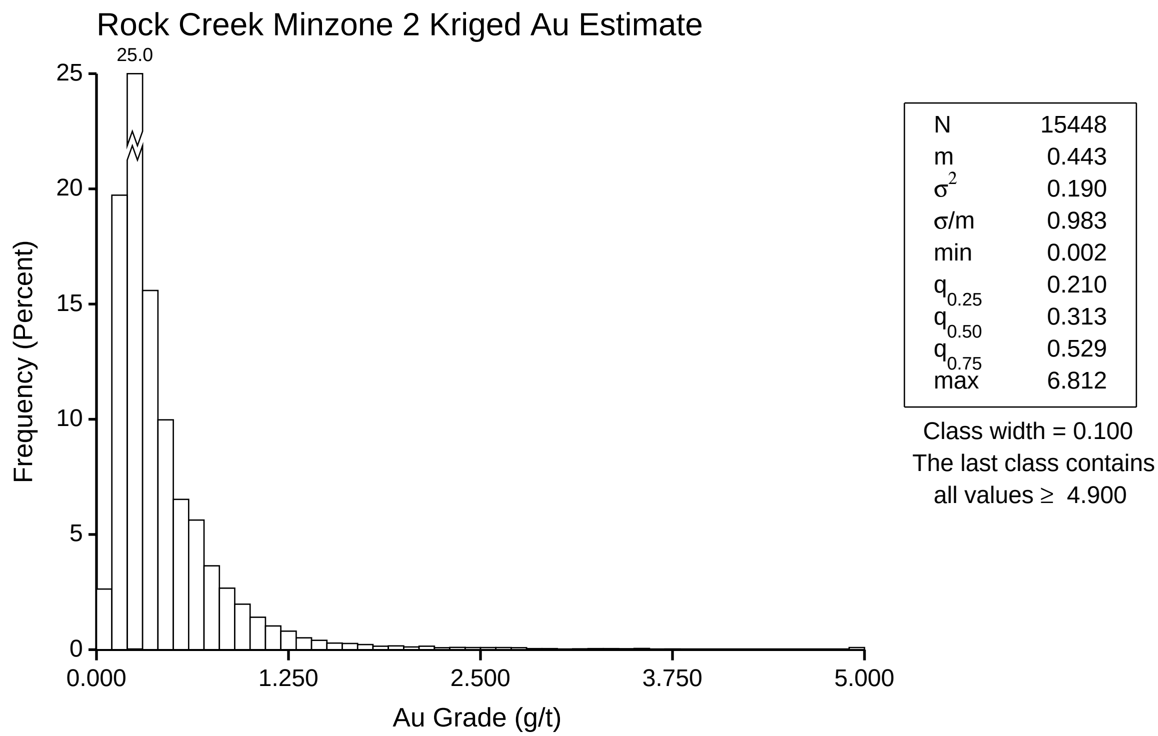


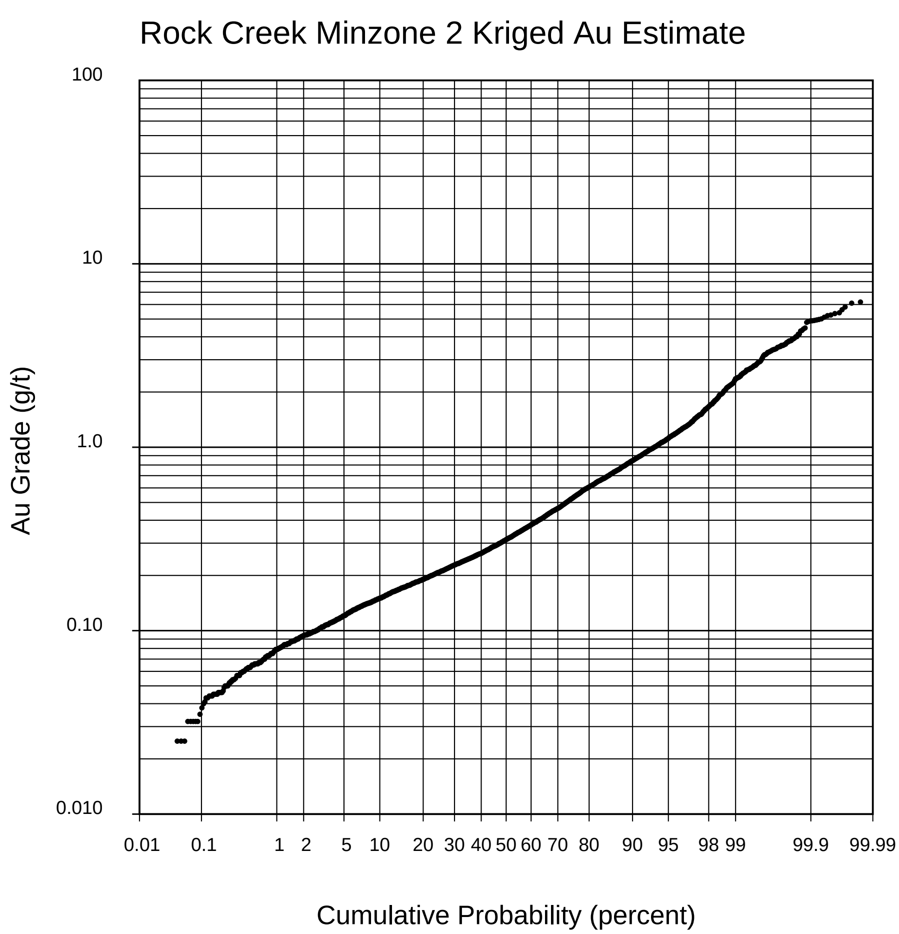
Rock Creek Minzone 1 Kriged Au Estimate

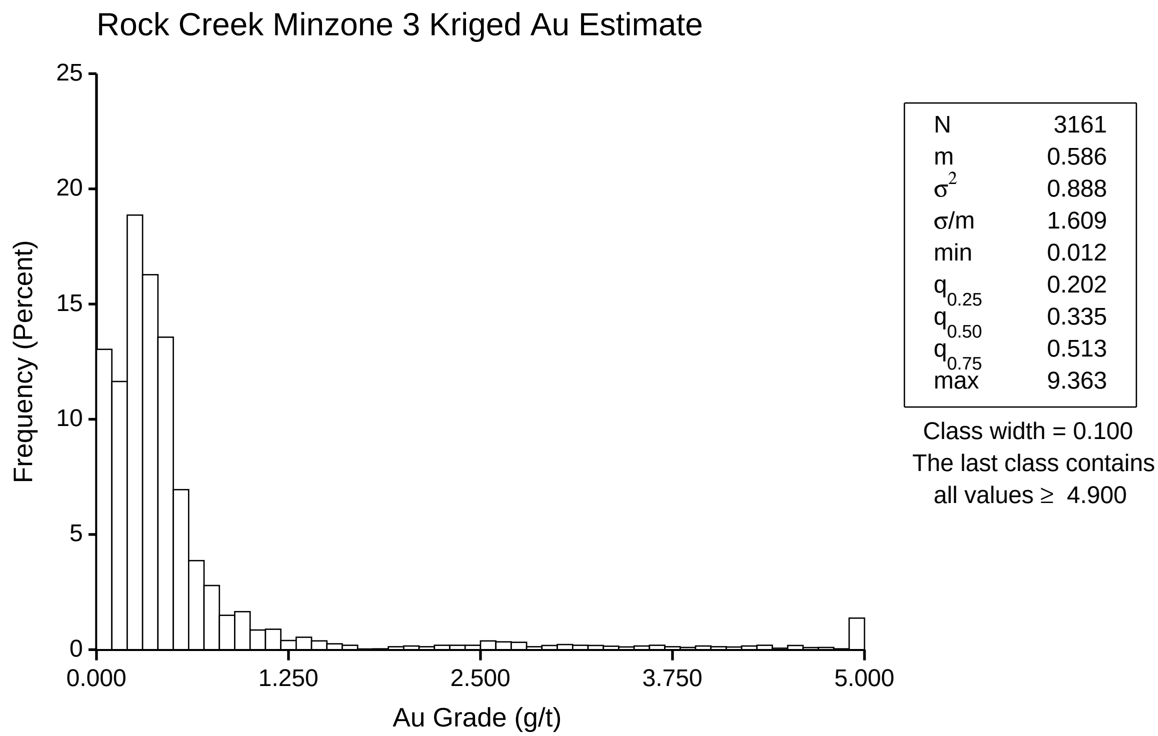


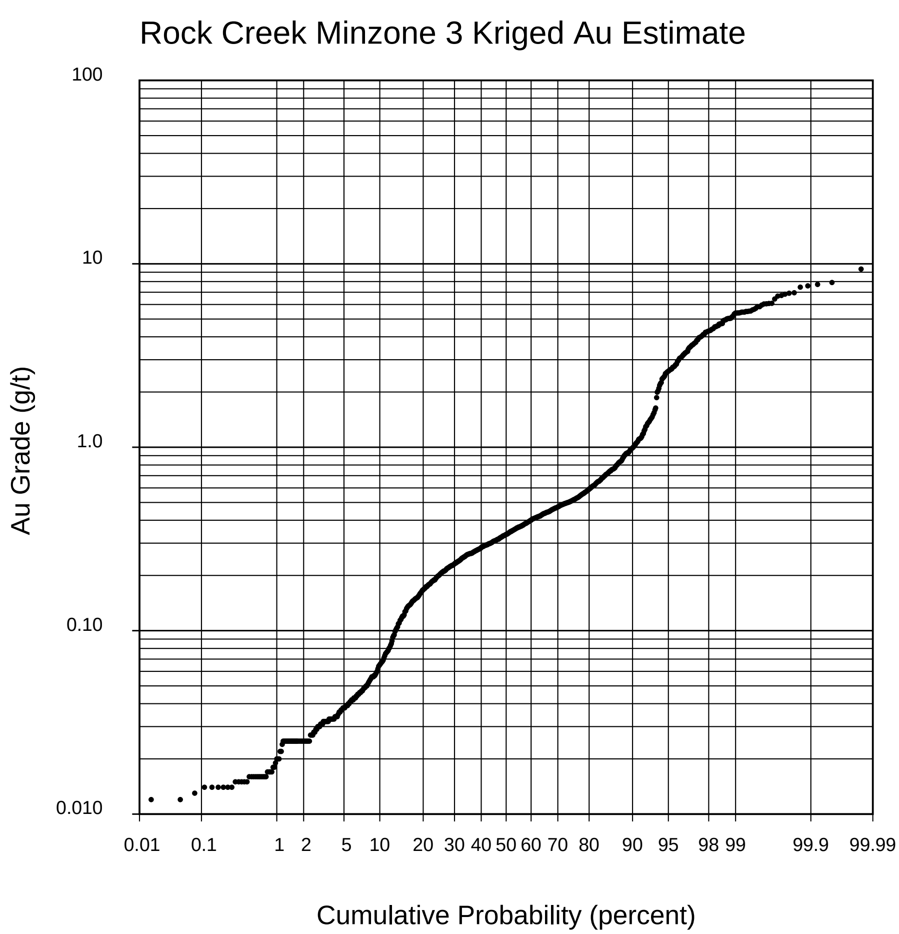

Rock Creek Minzone 1 Kriged Au Estimate
Frequency (Percent)
25
20
15
10
5
0
0.000
1.250
2.500
3.750
5.000
Au Grade (g/t)
N 15625
m 0.841
σ2 0.374
σ/m 0.727
min 0.045
q0.25 0.437
q0.50 0.652
q0.75 1.064
max 7.611
Class width = 0.100
The last class contains
all values ≥ 4.900

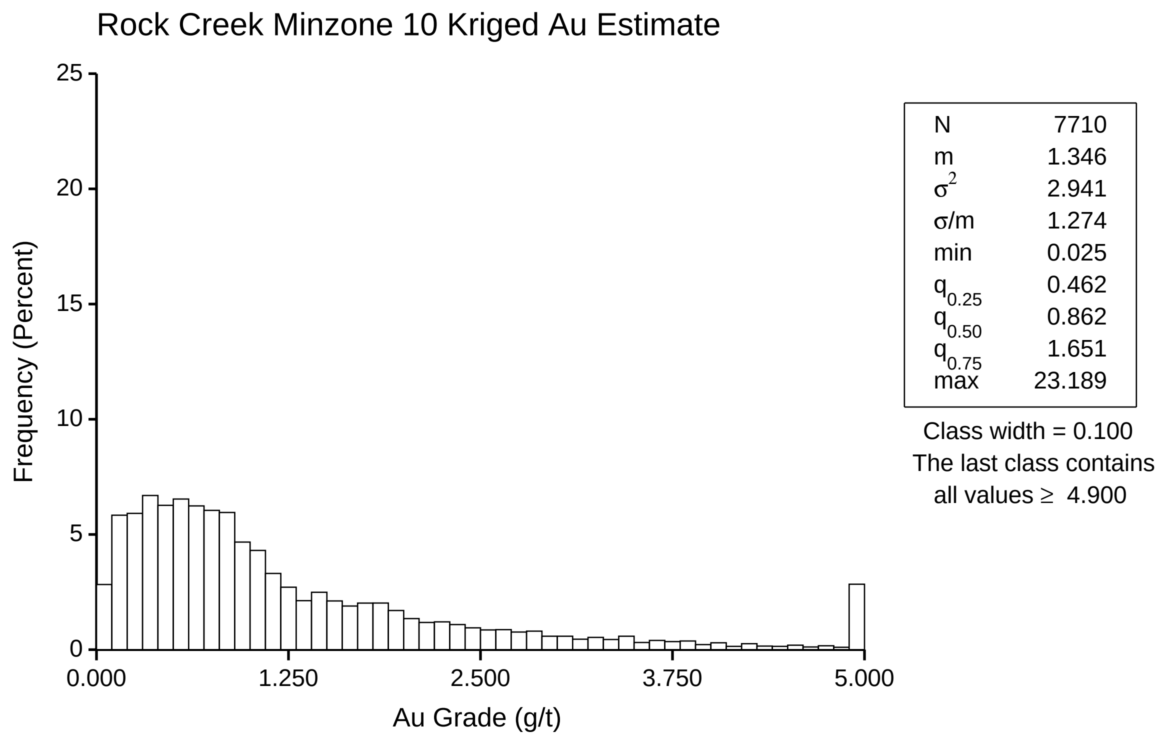

Rock Creek Minzone 1 Kriged Au Estimate
Au Grade (g/t)
100
10
1.0
0.10
0.010
0.01 0.1 1 2 5 10 20 30 40 50 60 70 80 90 95 98 99 99.9 99.99
Cumulative Probability (percent)

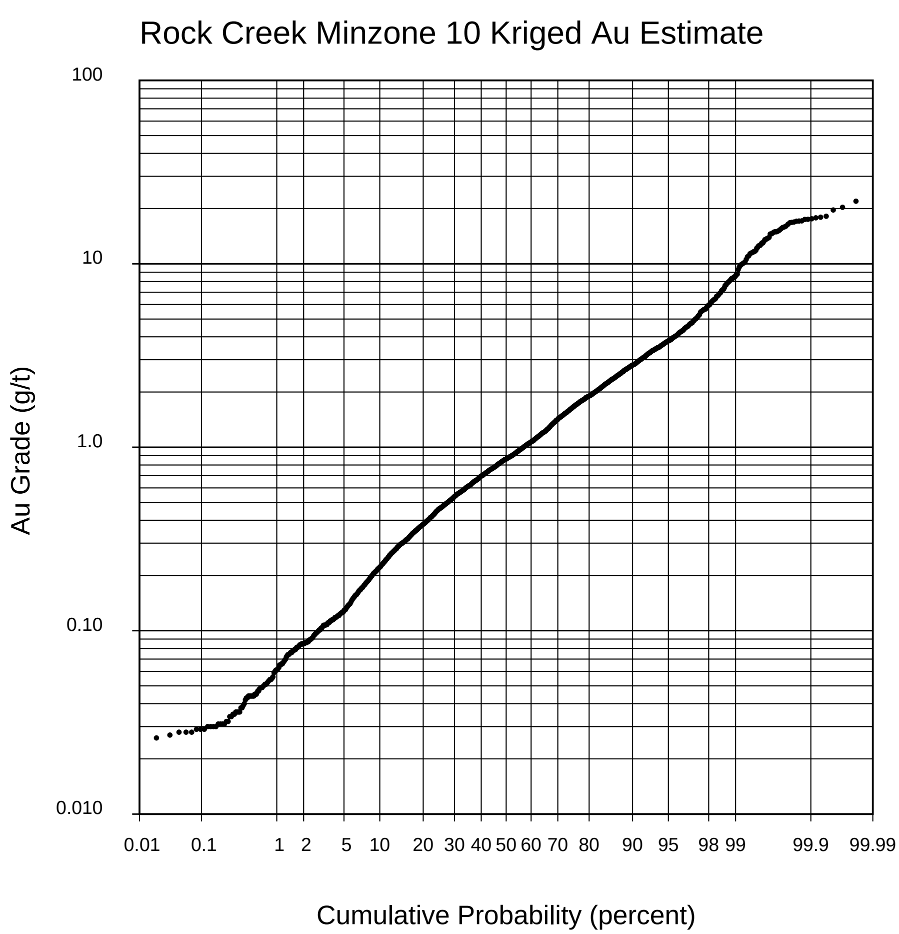

Rock Creek Minzone 2 Kriged Au Estimate
25.0
Frequency (Percent)
Au Grade (g/t)
0.000
1.250
2.500
3.750
5.000
N 15448
m 0.443
σ2 0.190
σ/m 0.983
min 0.002
q0.25 0.210
q0.50 0.313
q0.75 0.529
max 6.812
Class width = 0.100
The last class contains
all values ≥ 4.900

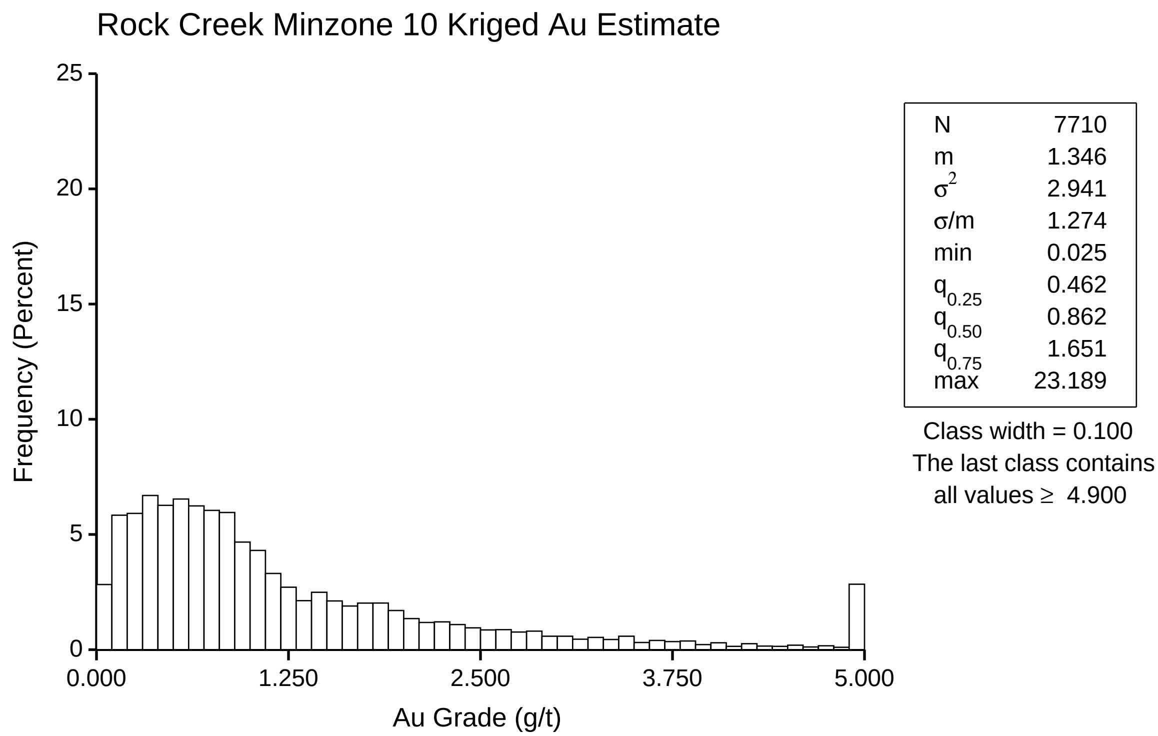

Rock Creek Minzone 2 Kriged Au Estimate
Au Grade (g/t)
100
10
1.0
0.10
0.010
0.01 0.1 1 2 5 10 20 30 40 50 60 70 80 90 95 98 99 99.9 99.99
Cumulative Probability (percent)

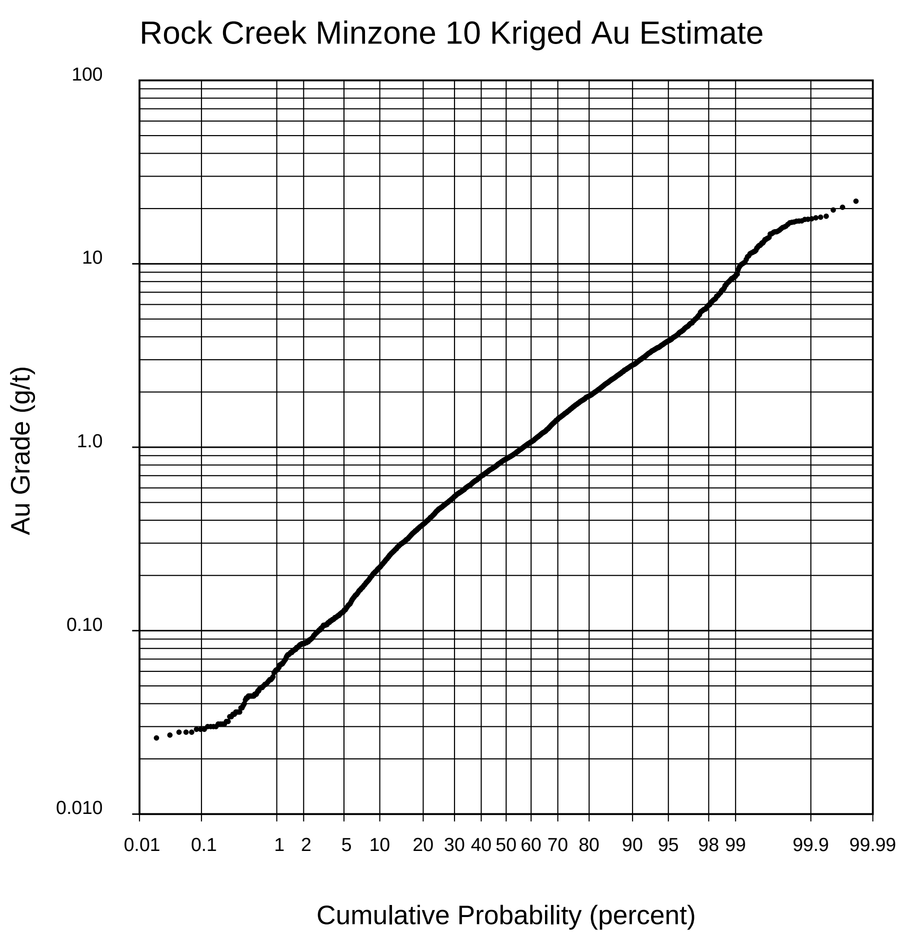

Rock Creek Minzone 3 Kriged Au Estimate
Frequency (Percent)
0
5
10
15
20
25
0.000
1.250
2.500
3.750
5.000
Au Grade (g/t)
N 3161
m 0.586
σ² 0.888
σ/m 1.609
min 0.012
q0.25 0.202
q0.50 0.335
q0.75 0.513
max 9.363
Class width = 0.100
The last class contains
all values ≥ 4.900


Rock Creek Minzone 3 Kriged Au Estimate
Au Grade (g/t)
100
10
1.0
0.10
0.010
0.01 0.1 1 2 5 10 20 30 40 50 60 70 80 90 95 98 99 99.9 99.99
Cumulative Probability (percent)


Rock Creek Minzone 10 Kriged Au Estimate
Frequency (Percent)
25
20
15
10
5
0
0.000
1.250
2.500
3.750
5.000
Au Grade (g/t)
N 7710
m 1.346
σ2 2.941
σ/m 1.274
min 0.025
q0.25 0.462
q0.50 0.862
q0.75 1.651
max 23.189
Class width = 0.100
The last class contains
all values ≥ 4.900

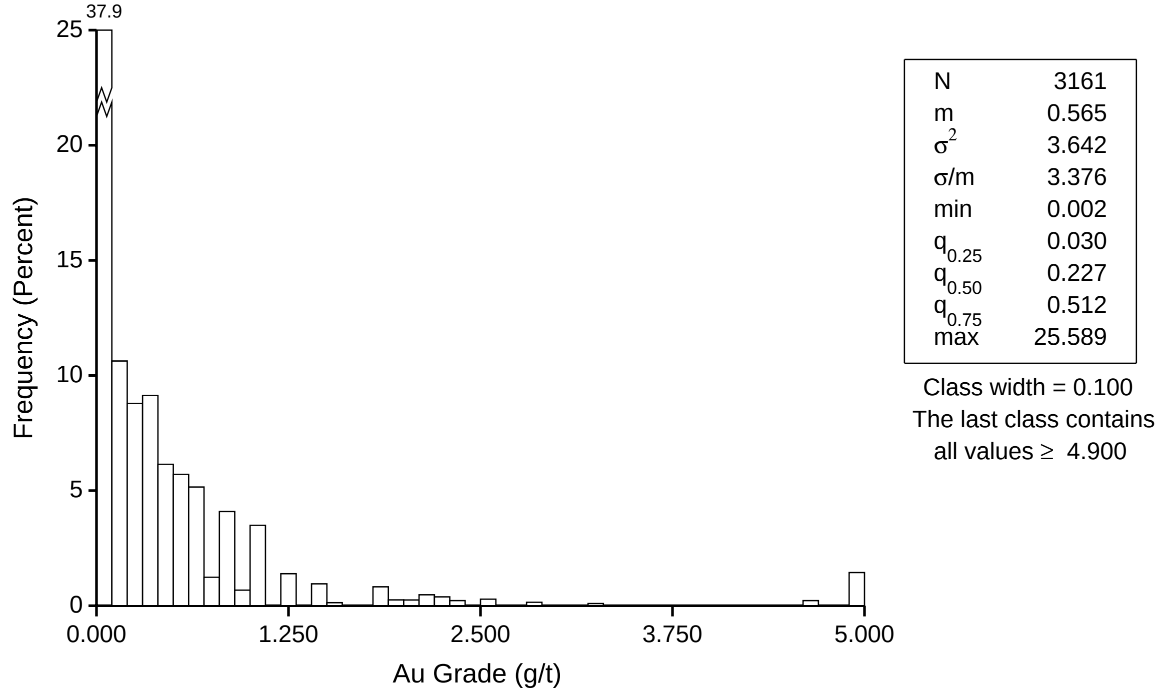

Rock Creek Minzone 10 Kriged Au Estimate
Au Grade (g/t)
100
10
1.0
0.10
0.010
0.01
0.1
1
2
5
10
20
30
40
50
60
70
80
90
95
98
99
99.9
99.99
Cumulative Probability (percent)


Rock Creek Minzone 10 Kriged Au Estimate
Frequency (Percent)
25
20
15
10
5
0
0.000
1.250
2.500
3.750
5.000
Au Grade (g/t)
N 7710
m 1.346
σ² 2.941
σ/m 1.274
min 0.025
q0.25 0.462
q0.50 0.862
q0.75 1.651
max 23.189
Class width = 0.100
The last class contains
all values ≥ 4.900

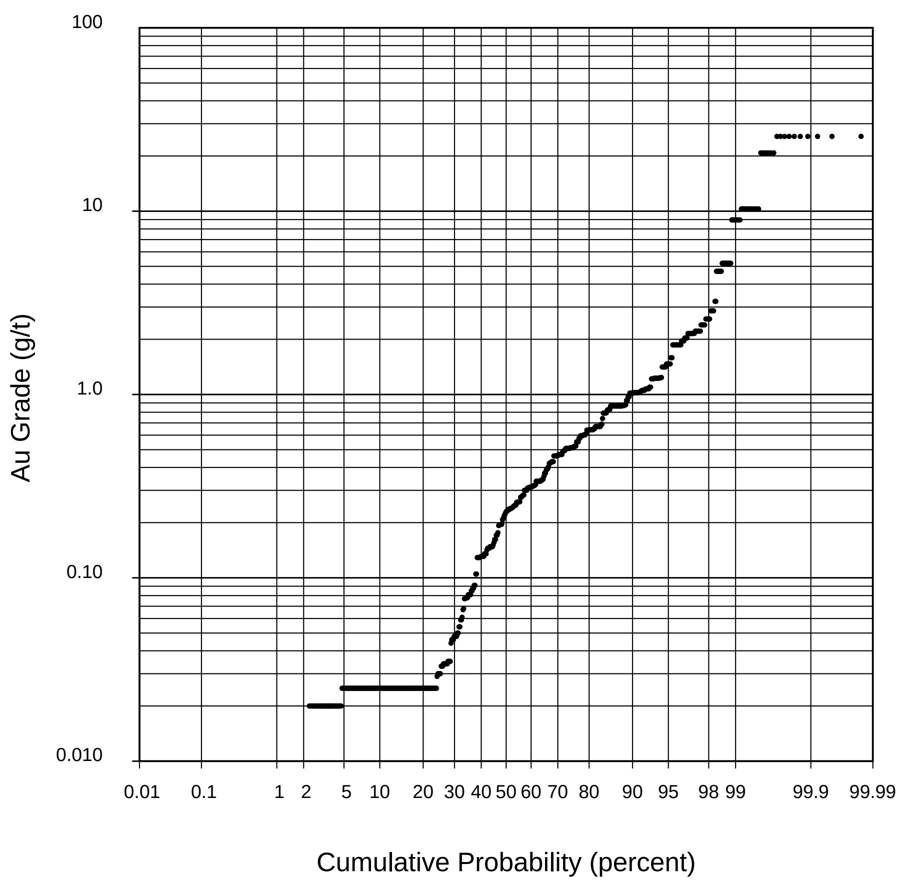

Rock Creek Minzone 10 Kriged Au Estimate
Au Grade (g/t)
100
10
1.0
0.10
0.010
0.01
0.1
1
2
5
10
20
30
40
50
60
70
80
90
95
98
99
99.9
99.99
Cumulative Probability (percent)

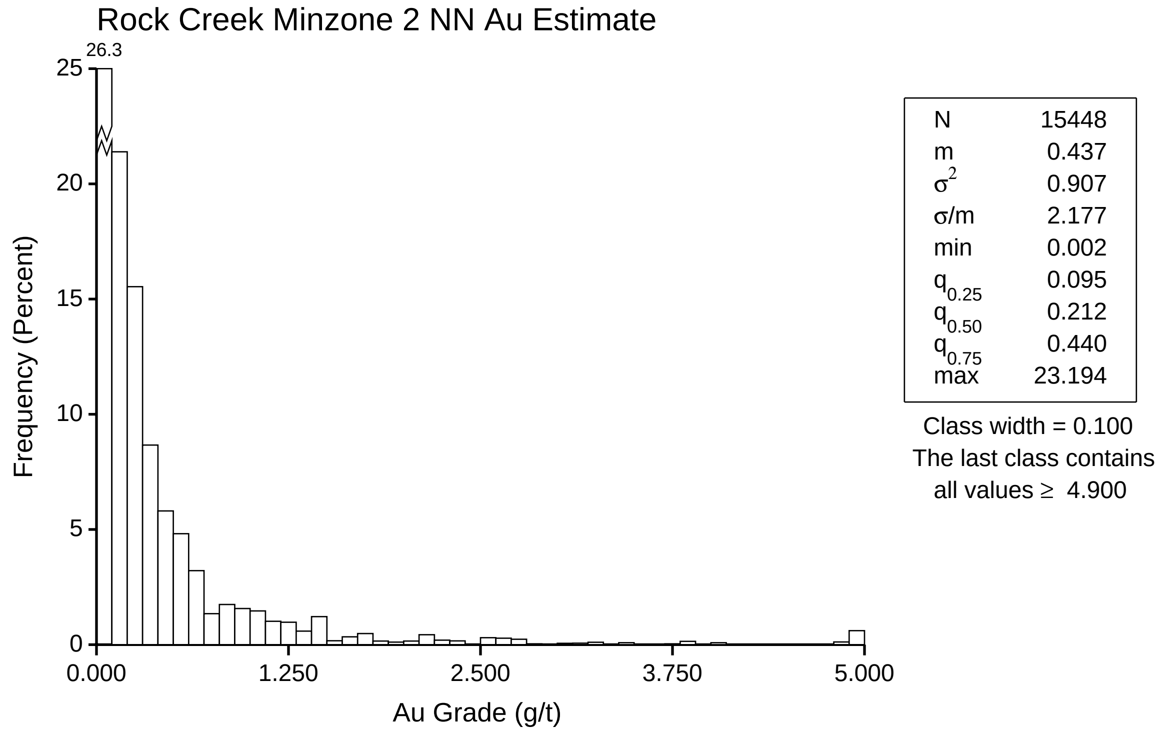
F-2 Nearest Neighbor Histograms

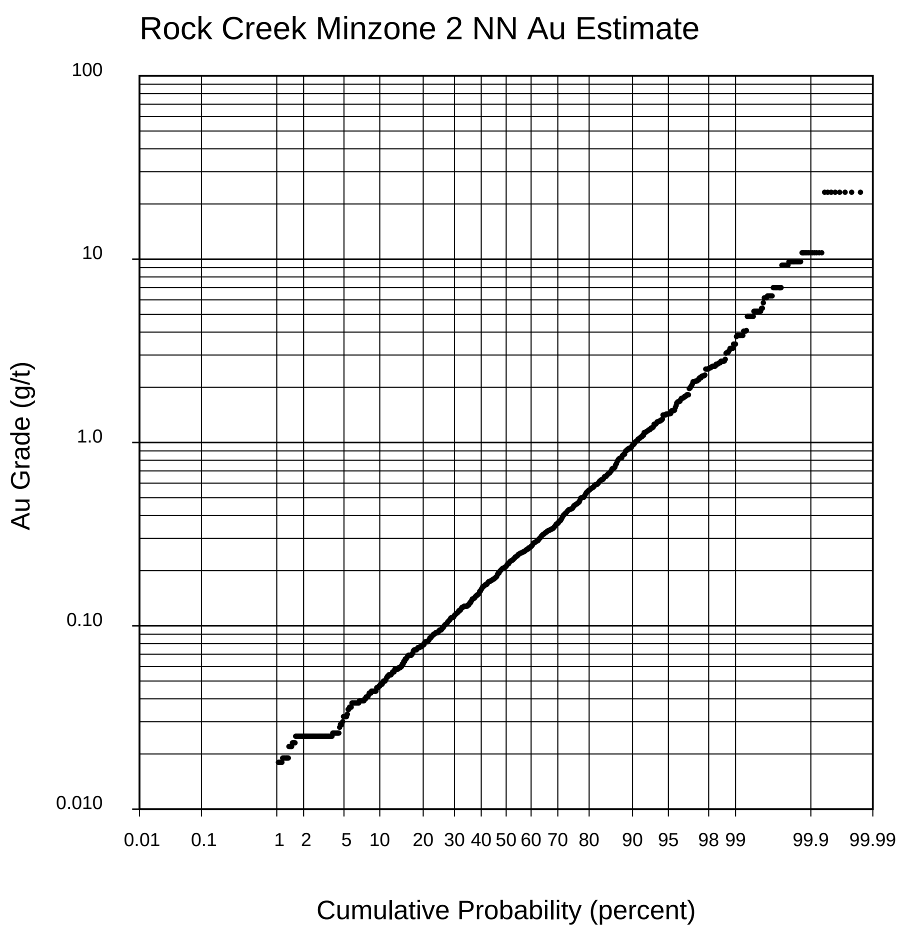
Rock Creek Minzone 3 NN Au Estimate

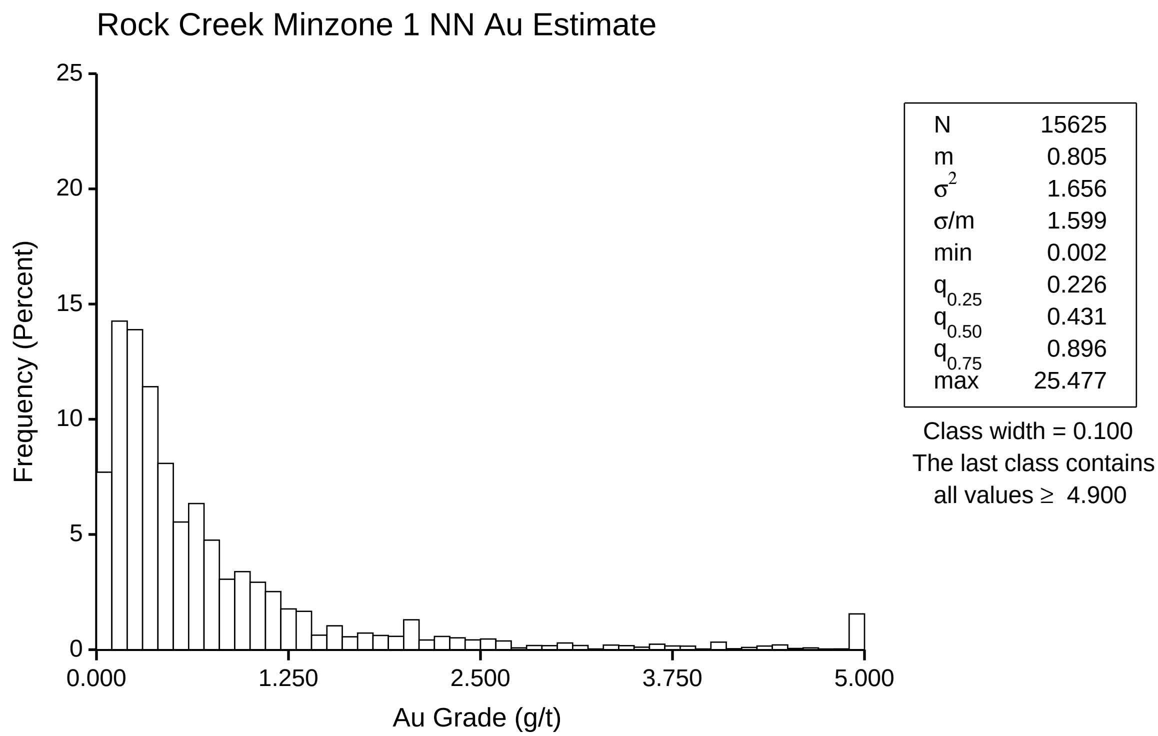


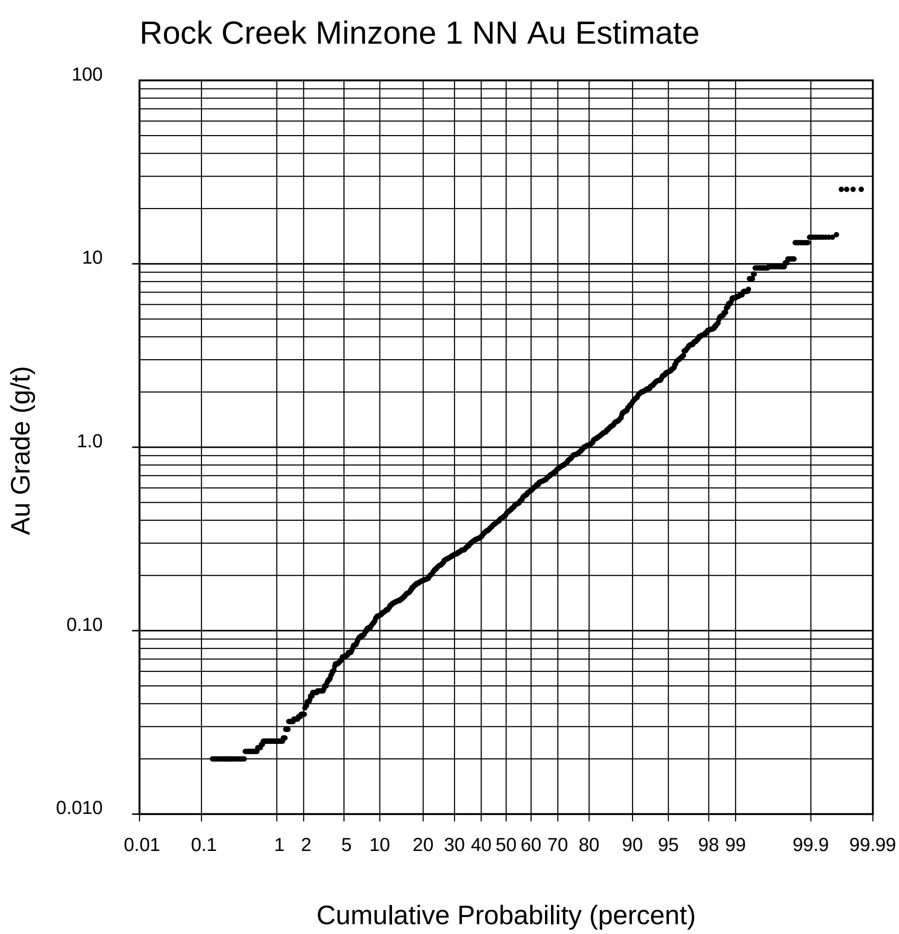
Rock Creek Minzone 3 NN Au Estimate



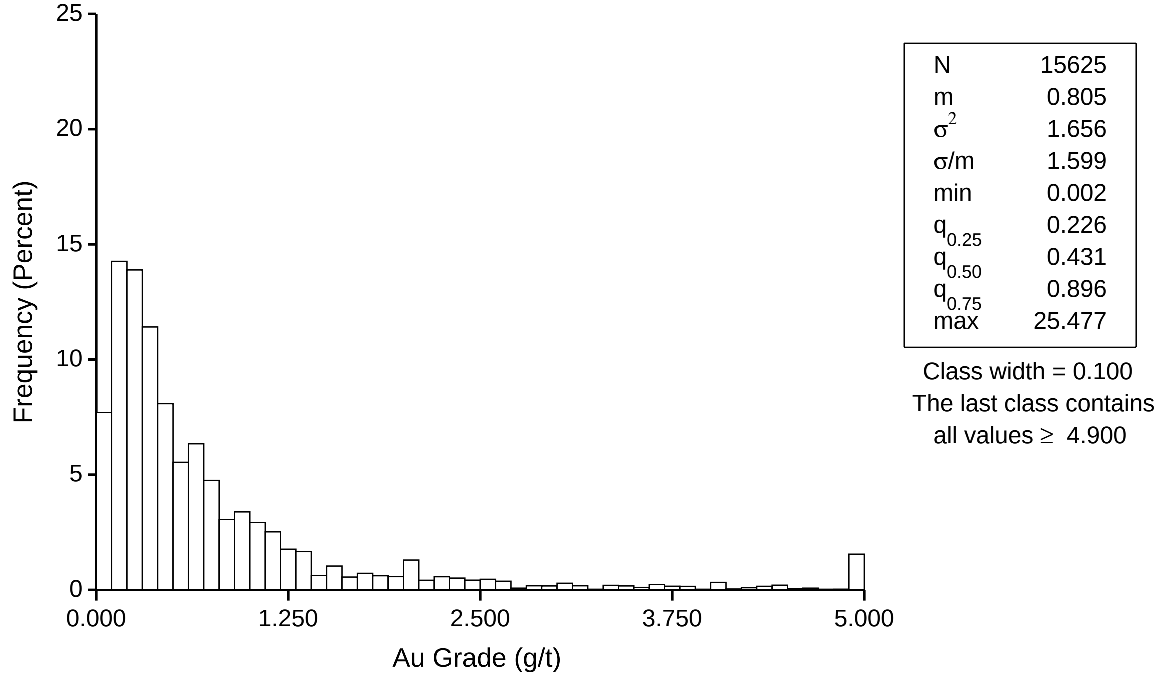

Rock Creek Minzone 2 NN Au Estimate
26.3
25
20
15
10
5
0
Frequency (Percent)
0.000
1.250
2.500
3.750
5.000
Au Grade (g/t)
N 15448
m 0.437
σ² 0.907
σ/m 2.177
min 0.002
q0.25 0.095
q0.50 0.212
q0.75 0.440
max 23.194
Class width = 0.100
The last class contains
all values ≥ 4.900


Rock Creek Minzone 2 NN Au Estimate
100
10
1.0
0.10
0.010
Au Grade (g/t)
0.01 0.1 1 2 5 10 20 30 40 50 60 70 80 90 95 98 99 99.9 99.99
Cumulative Probability (percent)

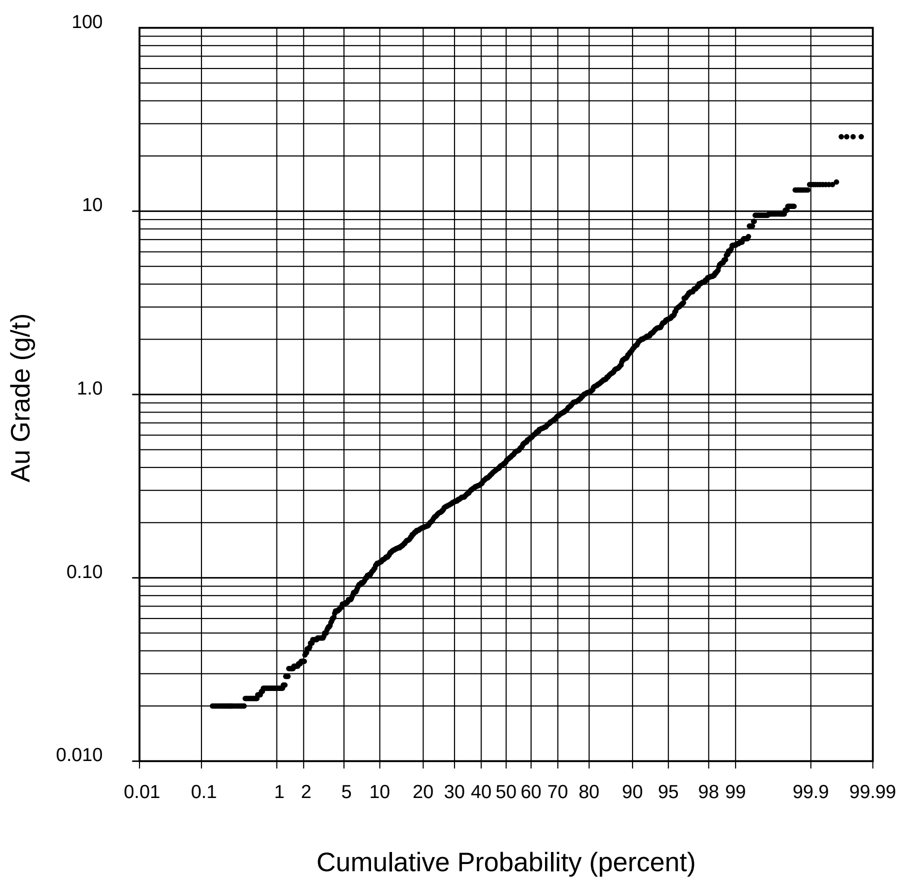

Rock Creek Minzone 1 NN Au Estimate
Frequency (Percent)
25
20
15
10
5
0
0.000
1.250
2.500
3.750
5.000
Au Grade (g/t)
N 15625
m 0.805
σ2 1.656
σ/m 1.599
min 0.002
q0.25 0.226
q0.50 0.431
q0.75 0.896
max 25.477
Class width = 0.100
The last class contains
all values ≥ 4.900

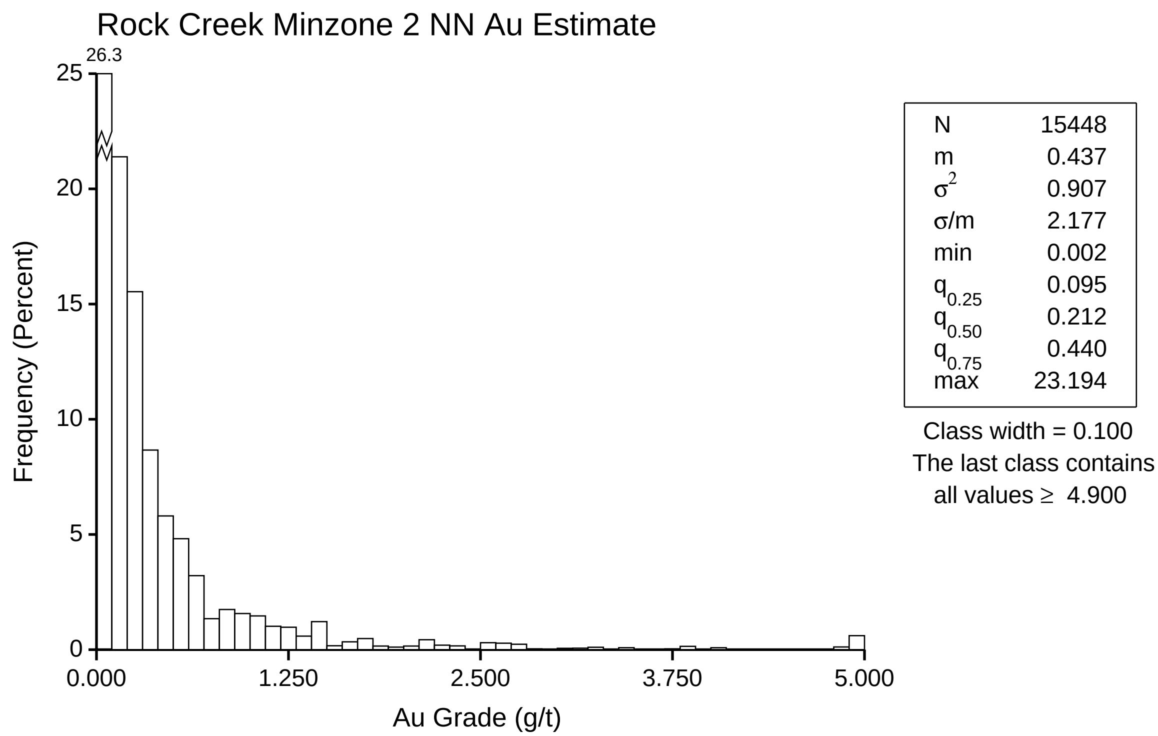

Rock Creek Minzone 1 NN Au Estimate
Au Grade (g/t)
100
10
1.0
0.10
0.010
0.01 0.1 1 2 5 10 20 30 40 50 60 70 80 90 95 98 99 99.9 99.99
Cumulative Probability (percent)

Rock Creek Minzone 1 NN Au Estimate

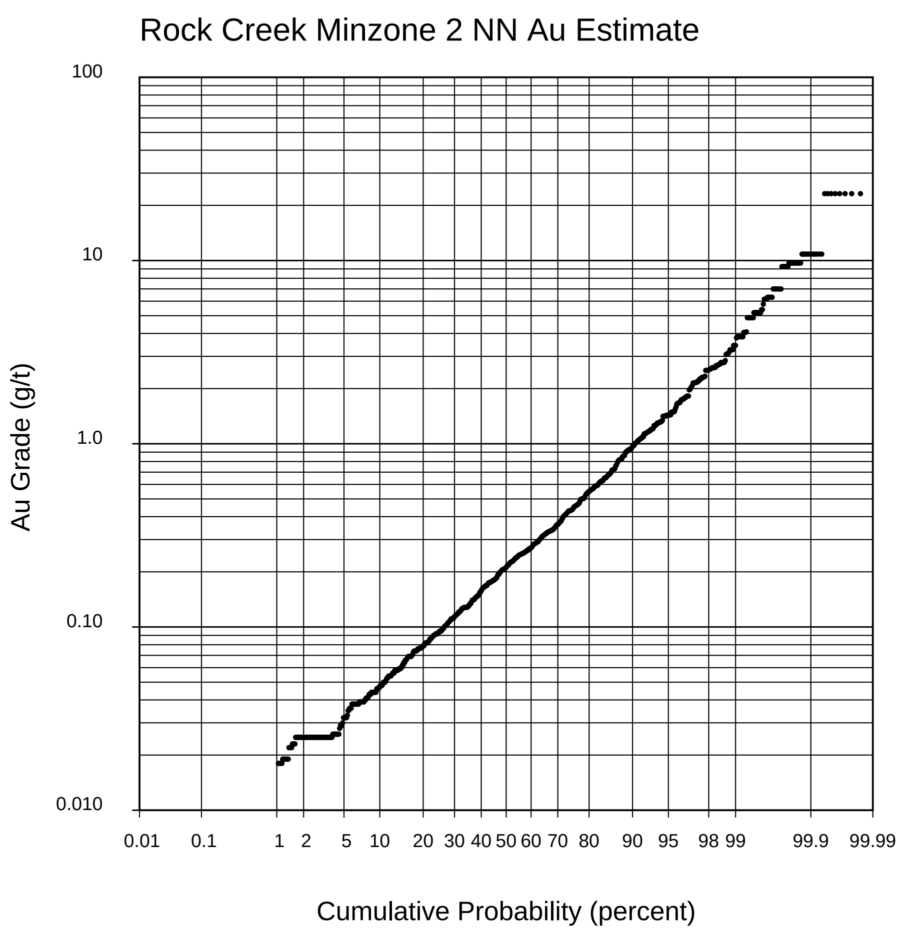


Rock Creek Minzone 1 NN Au Estimate

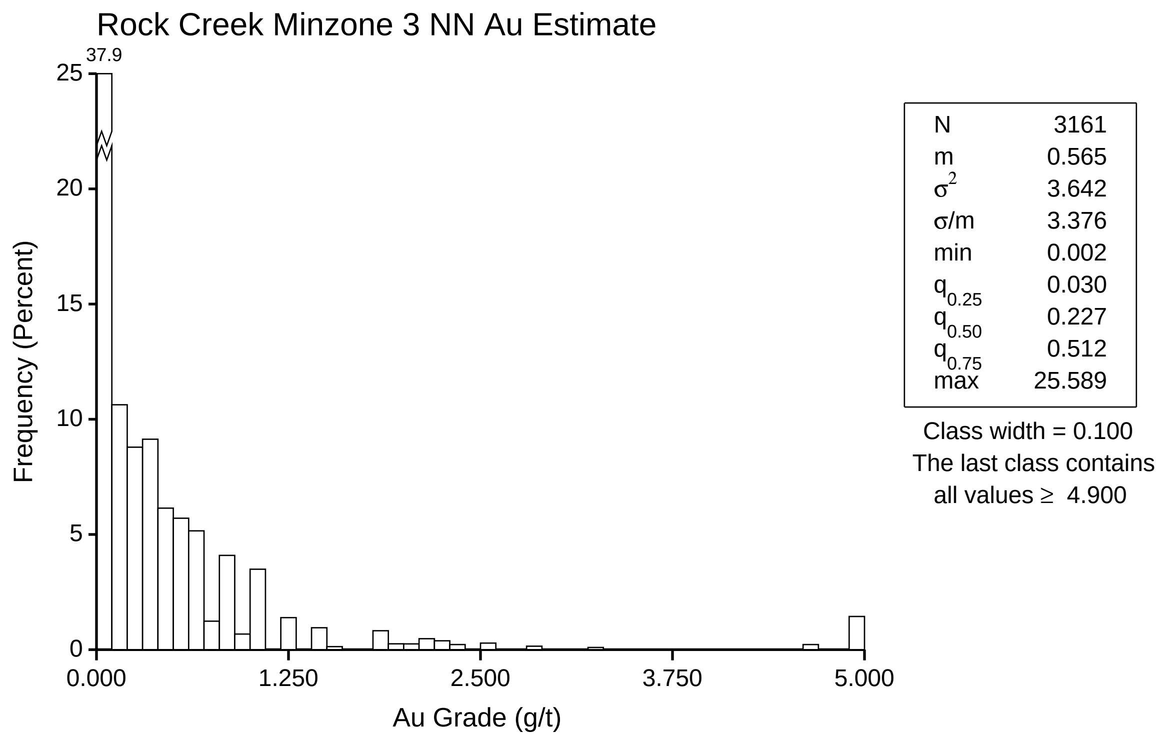


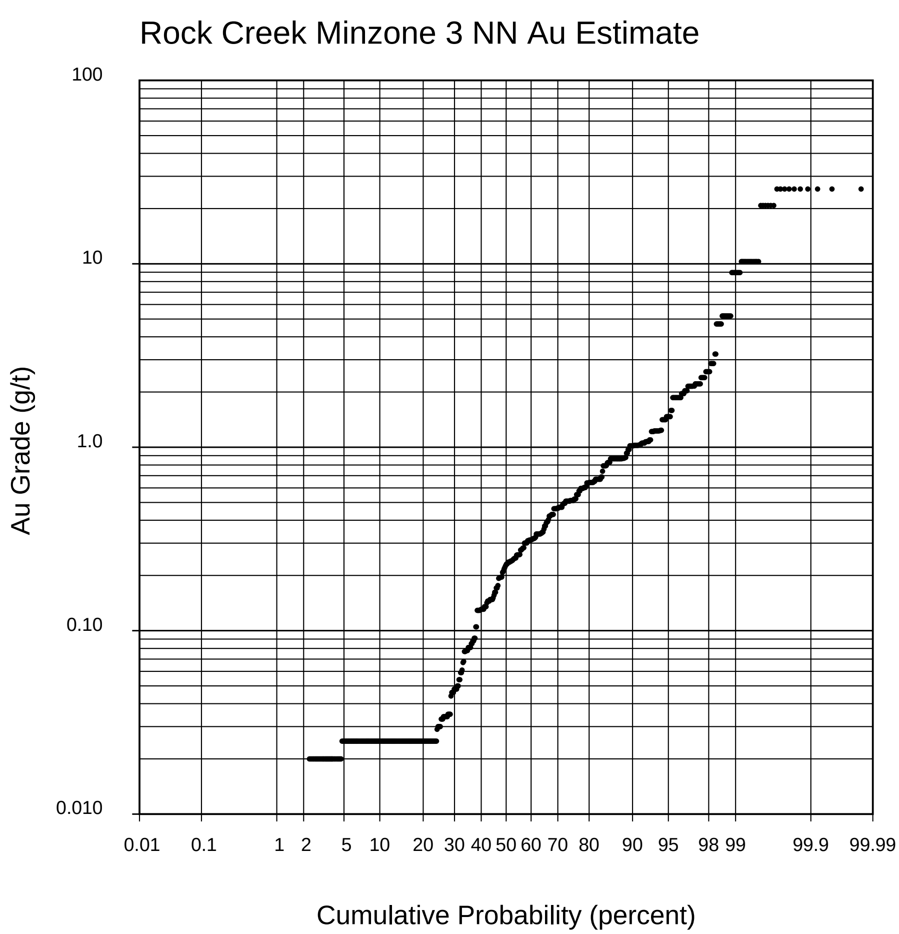


Rock Creek Minzone 2 NN Au Estimate
26.3
Frequency (Percent)
Au Grade (g/t)
0.000
1.250
2.500
3.750
5.000
N 15448
m 0.437
σ2 0.907
σ/m 2.177
min 0.002
q0.25 0.095
q0.50 0.212
q0.75 0.440
max 23.194
Class width = 0.100
The last class contains
all values ≥ 4.900

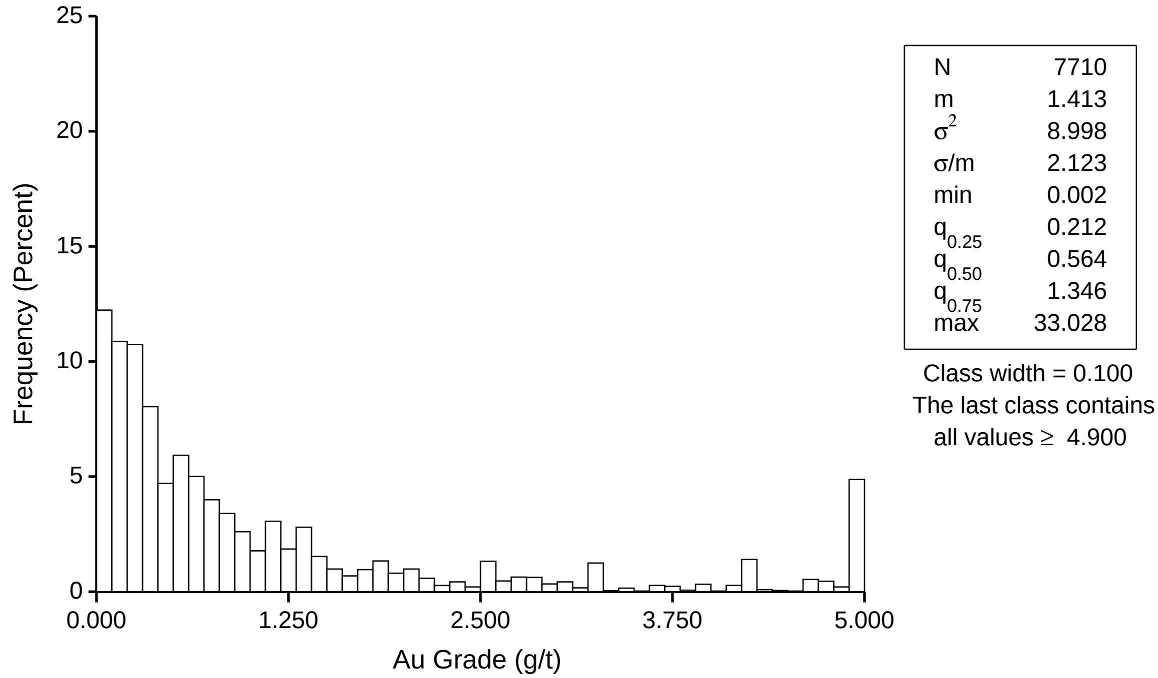


Rock Creek Minzone 2 NN Au Estimate
Au Grade (g/t)
100
10
1.0
0.10
0.010
0.01 0.1 1 2 5 10 20 30 40 50 60 70 80 90 95 98 99 99.9 99.99
Cumulative Probability (percent)

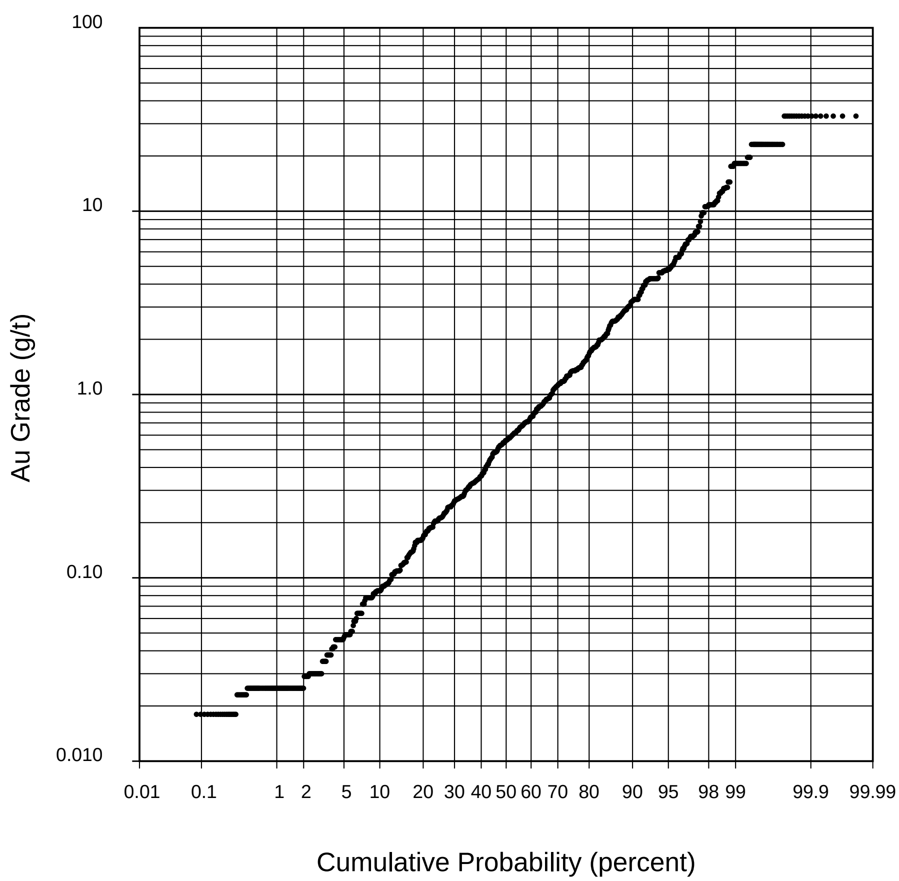

Rock Creek Minzone 3 NN Au Estimate
37.9
25
20
15
10
5
0
Frequency (Percent)
0.000
1.250
2.500
3.750
5.000
Au Grade (g/t)
N 3161
m 0.565
σ2 3.642
σ/m 3.376
min 0.002
q0.25 0.030
q0.50 0.227
q0.75 0.512
max 25.589
Class width = 0.100
The last class contains
all values ≥ 4.900

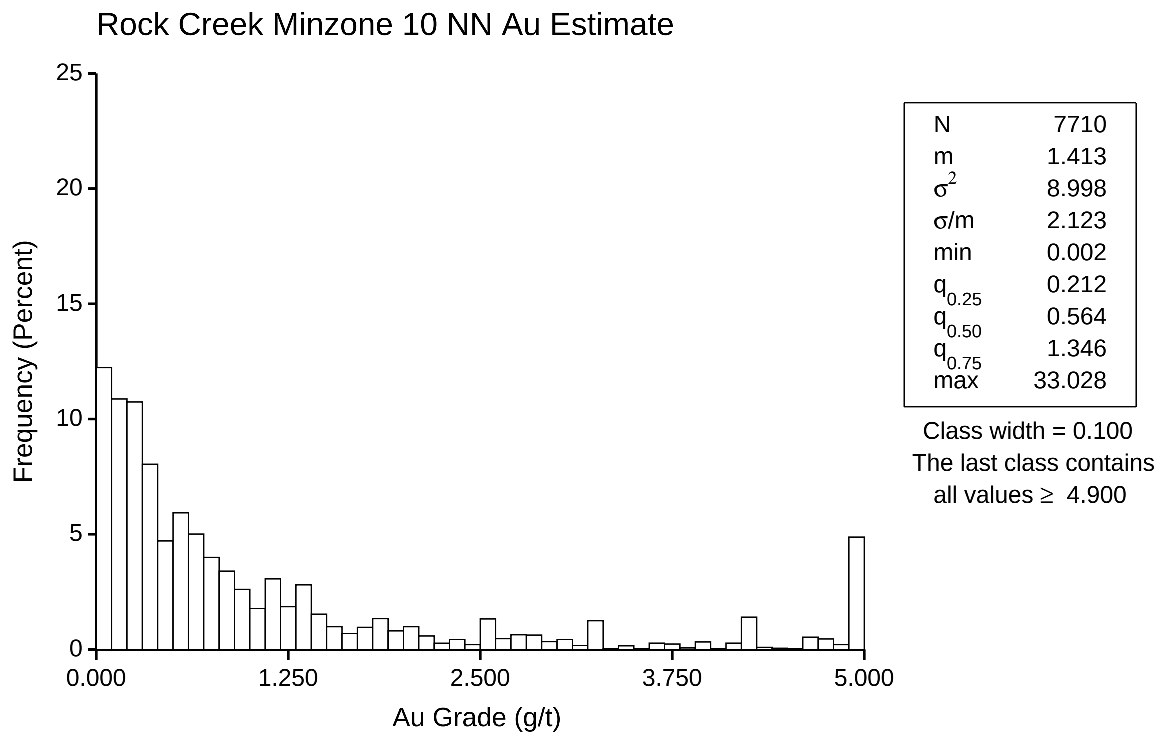

Rock Creek Minzone 3 NN Au Estimate
100
10
1.0
0.10
0.010
Au Grade (g/t)
0.01
0.1
1
2
5
10
20
30
40
50
60
70
80
90
95
98
99
99.9
99.99
Cumulative Probability (percent)

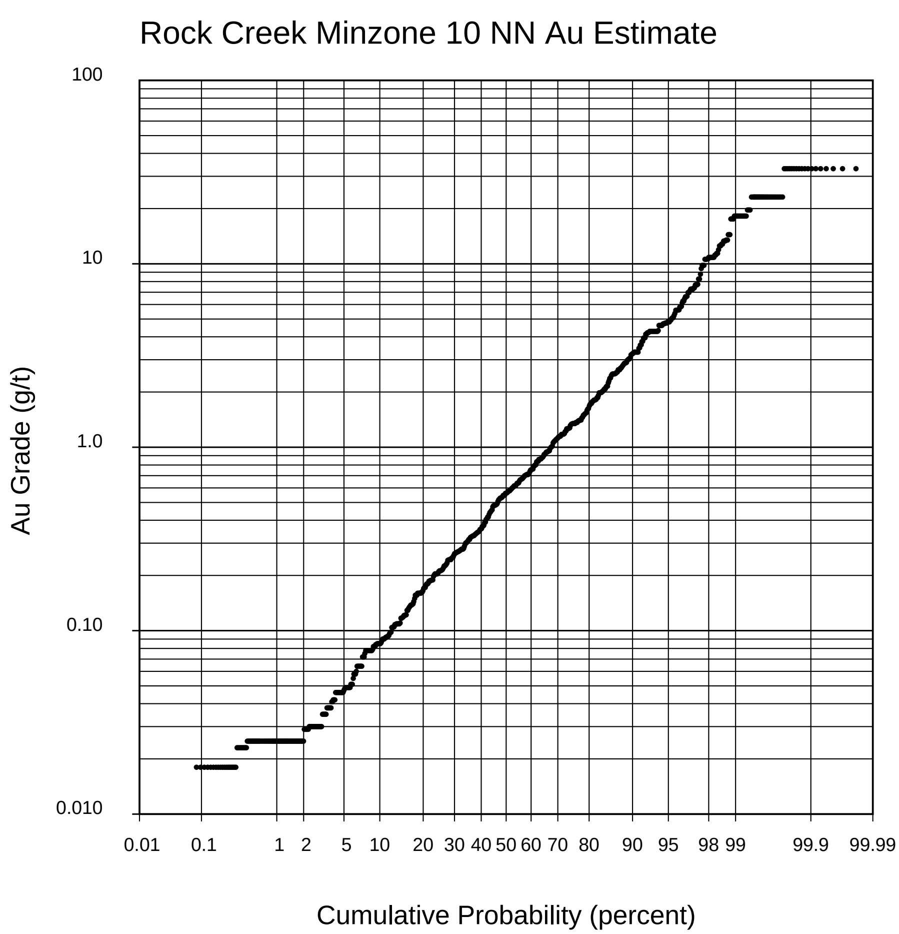
Rock Creek Minzone 10 NN Au Estimate



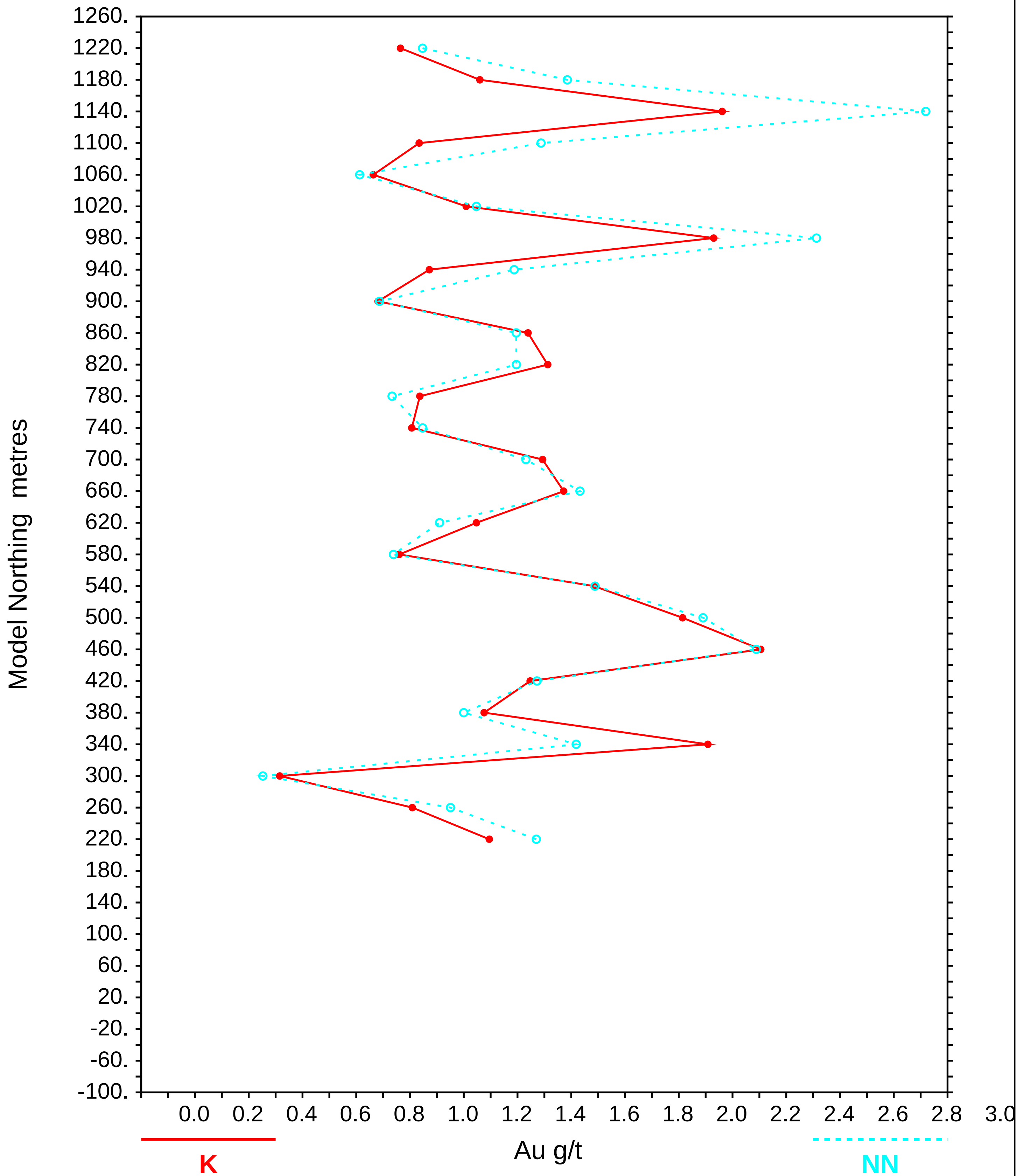
Rock Creek Minzone 10 NN Au Estimate




Rock Creek Minzone 10 NN Au Estimate
25
20
15
10
5
0
Frequency (Percent)
0.000
1.250
2.500
3.750
5.000
Au Grade (g/t)
N 7710
m 1.413
σ2 8.998
σ/m 2.123
min 0.002
q0.25 0.212
q0.50 0.564
q0.75 1.346
max 33.028
Class width = 0.100
The last class contains
all values ≥ 4.900


Rock Creek Minzone 10 NN Au Estimate
100
10
1.0
0.10
0.010
Au Grade (g/t)
0.01
0.1
1
2
5
10
20
30
40
50
60
70
80
90
95
98
99
99.9
99.99
Cumulative Probability (percent)

F-3 Swath Plots



amec

AMEC MINING AND METALS

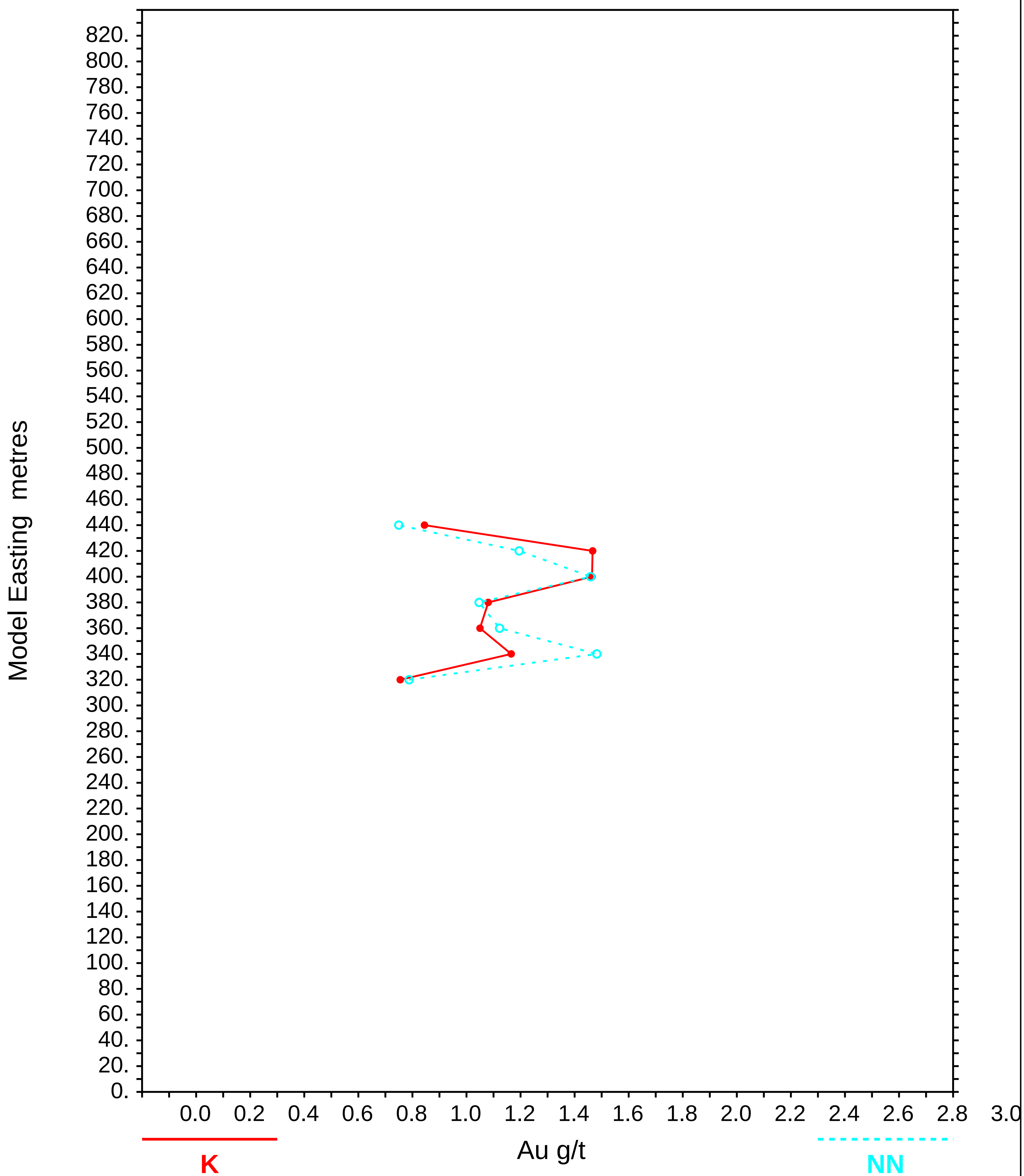
PROJECT NUMBER 146504

TITLE

Rock Creek
Kriged & NN Grades
Zone 10 Adjusted Model

FIGURE NUMBER

N



amec

AMEC MINING
AND METALS

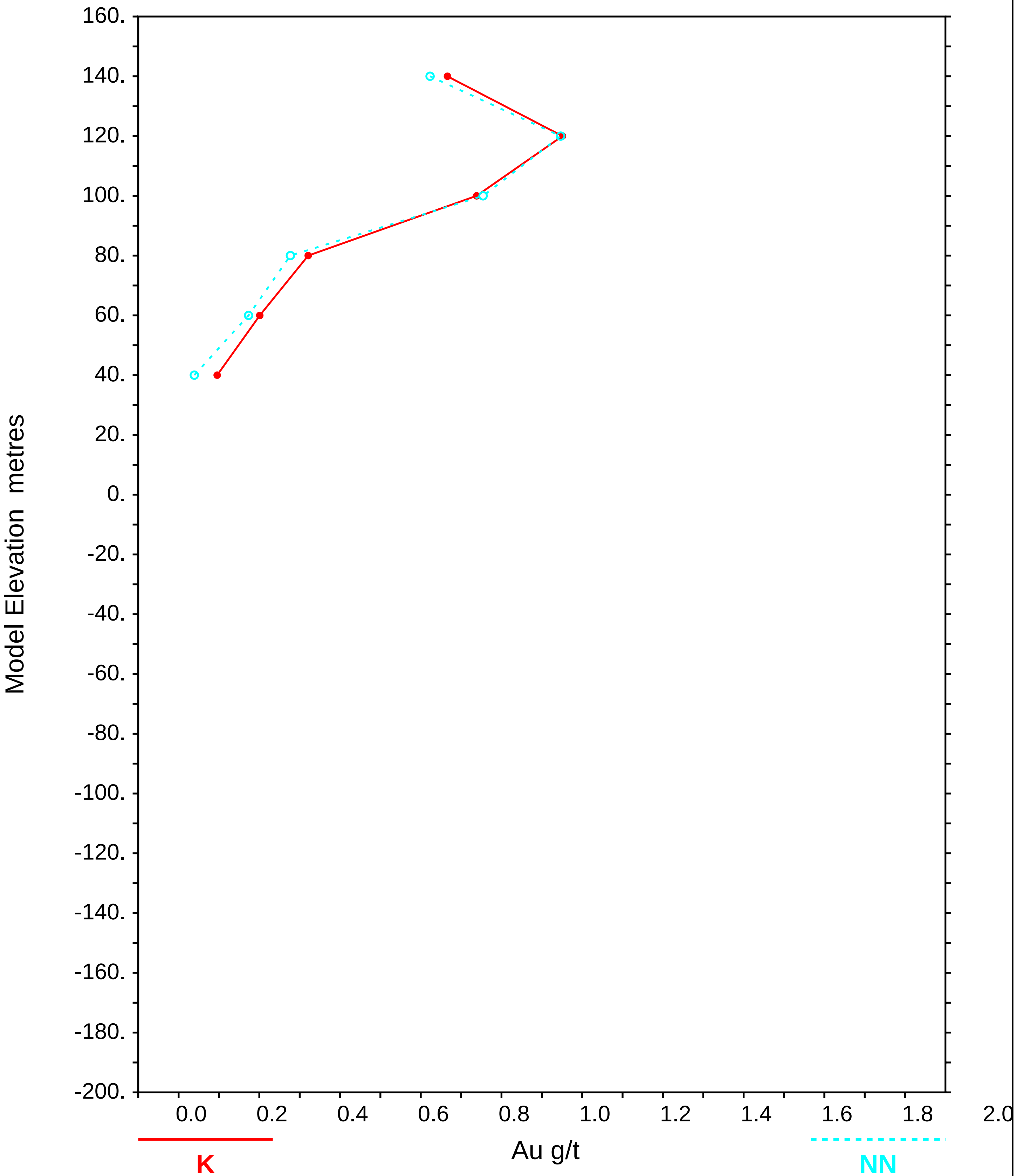
PROJECT NUMBER 146504

TITLE

Rock Creek
Kriged & NN Grades
Zone 10 Adjusted Model

FIGURE NUMBER

E



amec

AMEC MINING AND METALS

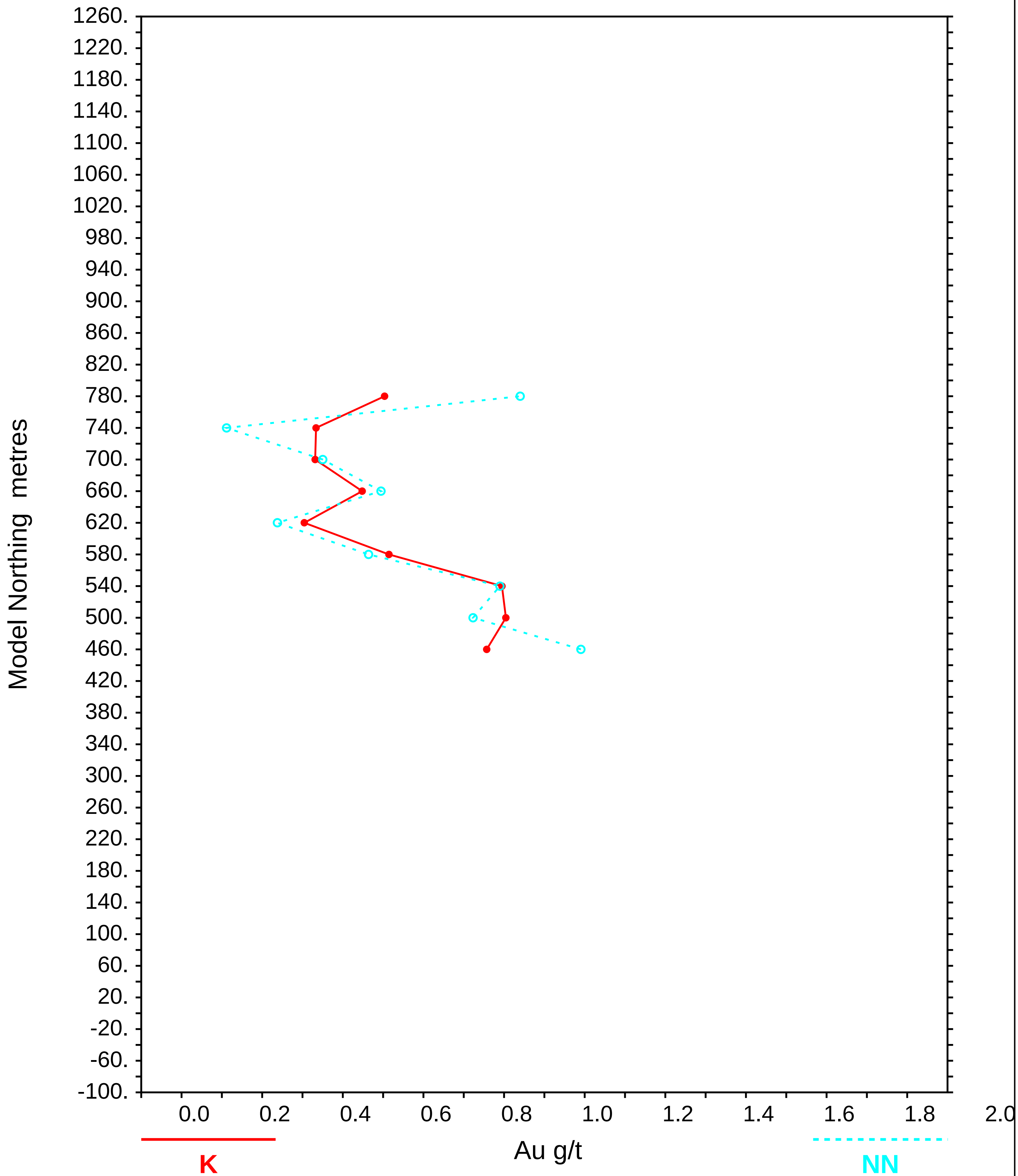
PROJECT NUMBER 146504

TITLE

Rock Creek
Kriged & NN Grades
Zone 3 Adjusted Model

FIGURE NUMBER

Z



amec

AMEC MINING AND METALS

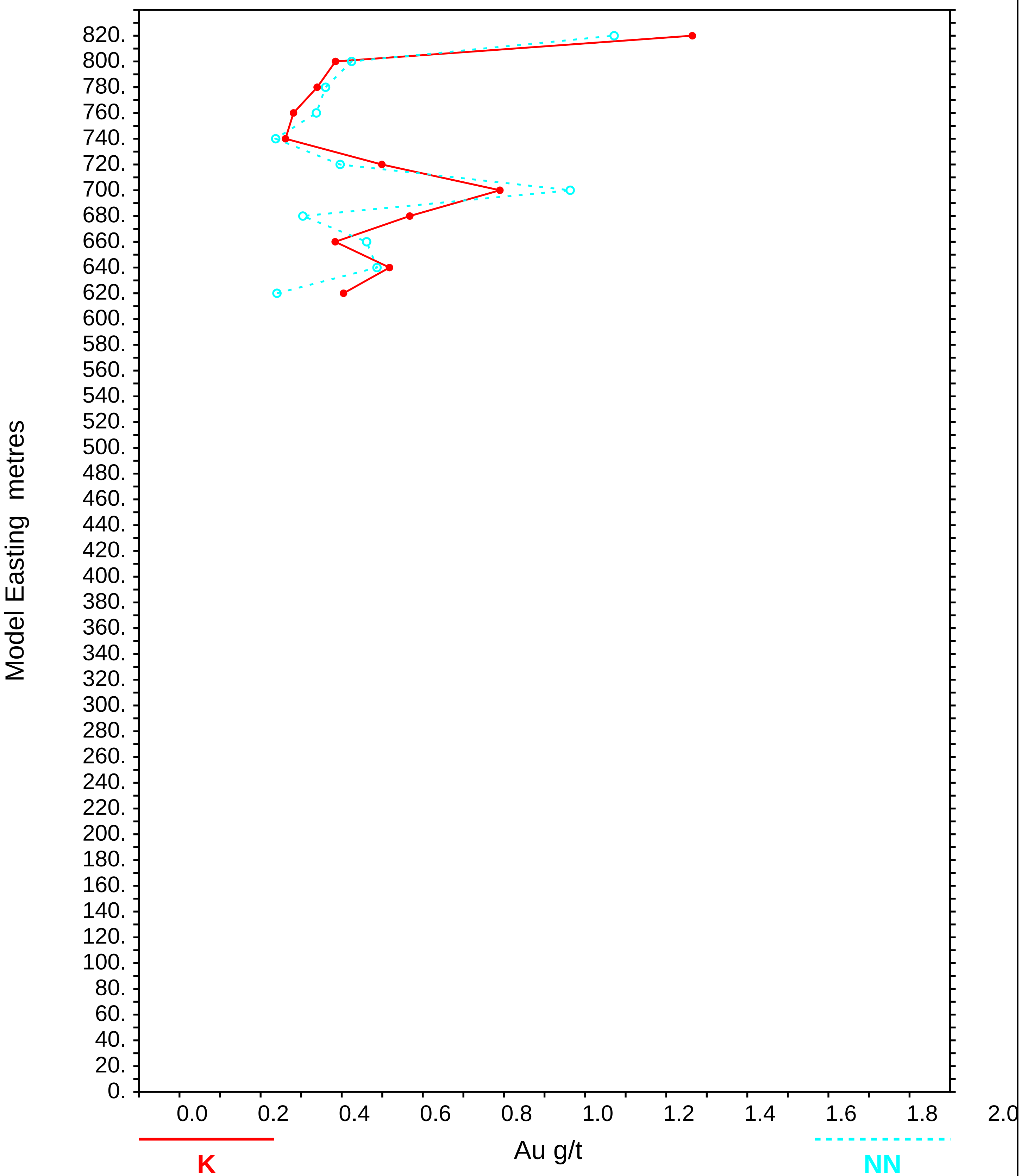
PROJECT NUMBER 146504

TITLE

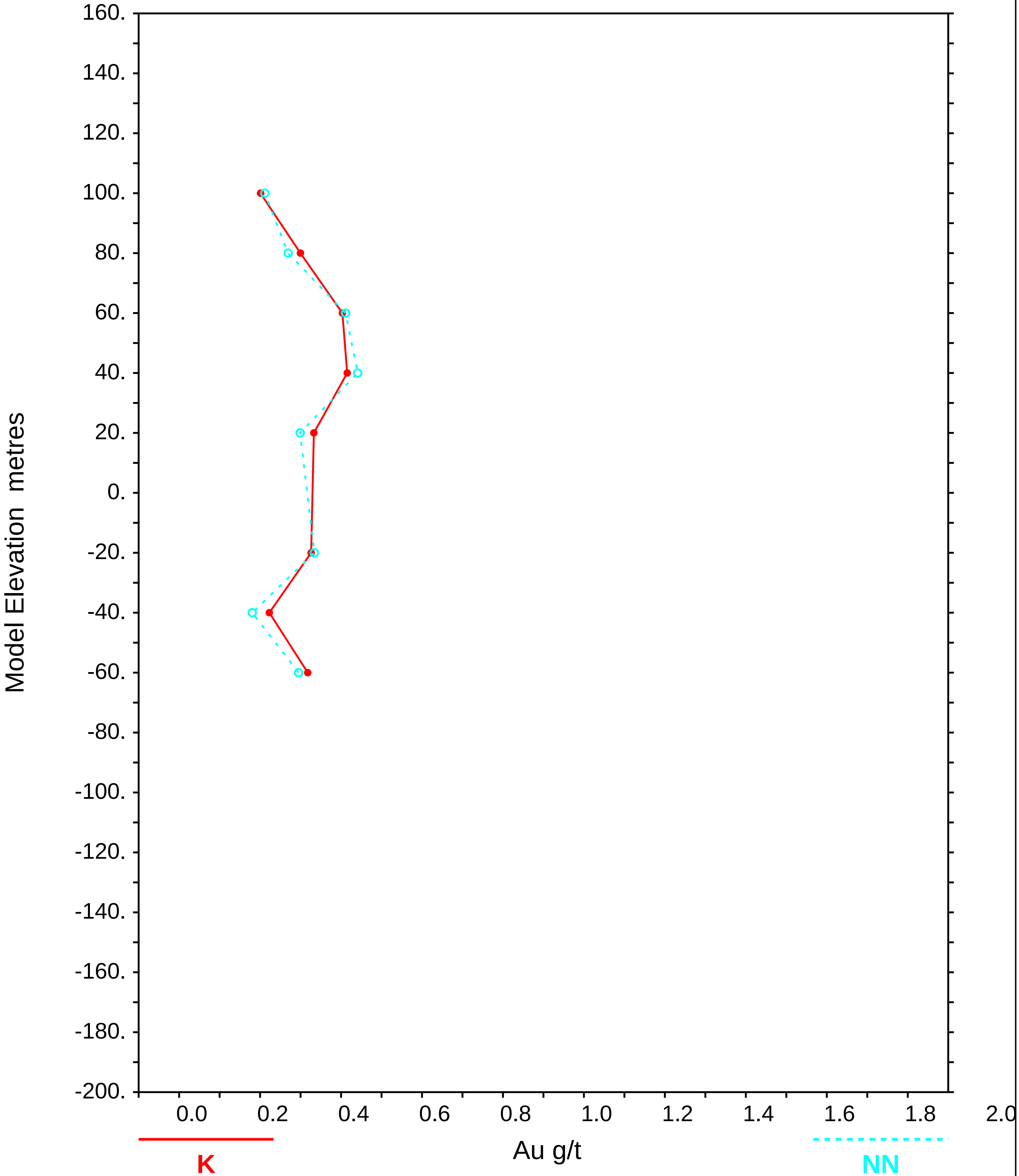
Rock Creek
Kriged & NN Grades
Zone 3 Adjusted Model

FIGURE NUMBER

N



amec	AMEC MINING AND METALS PROJECT NUMBER 146504	TITLE Rock Creek Kriged & NN Grades Zone 3 Adjusted Model	FIGURE NUMBER E



amec

AMEC MINING
AND METALS

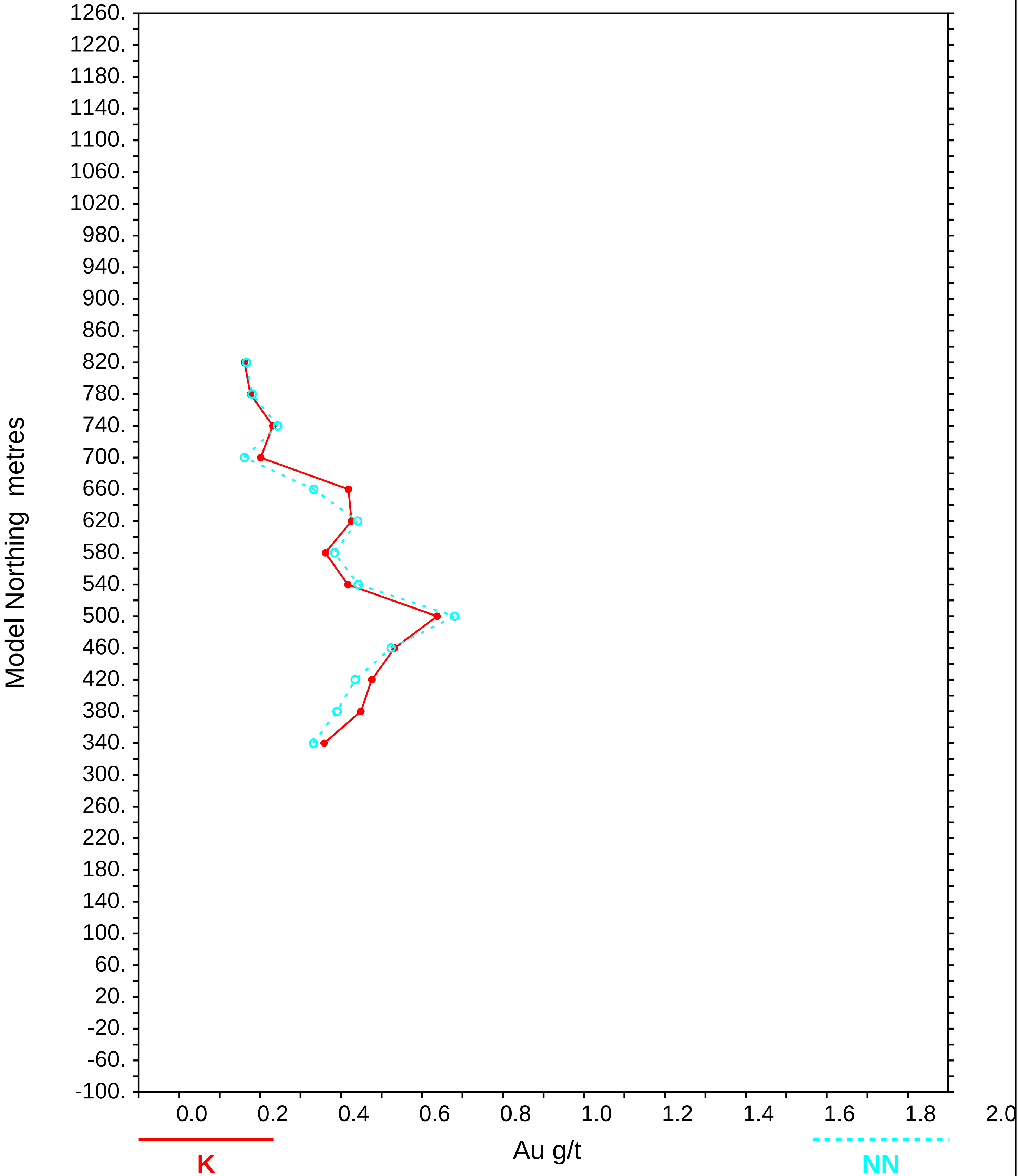
PROJECT NUMBER 146504

TITLE

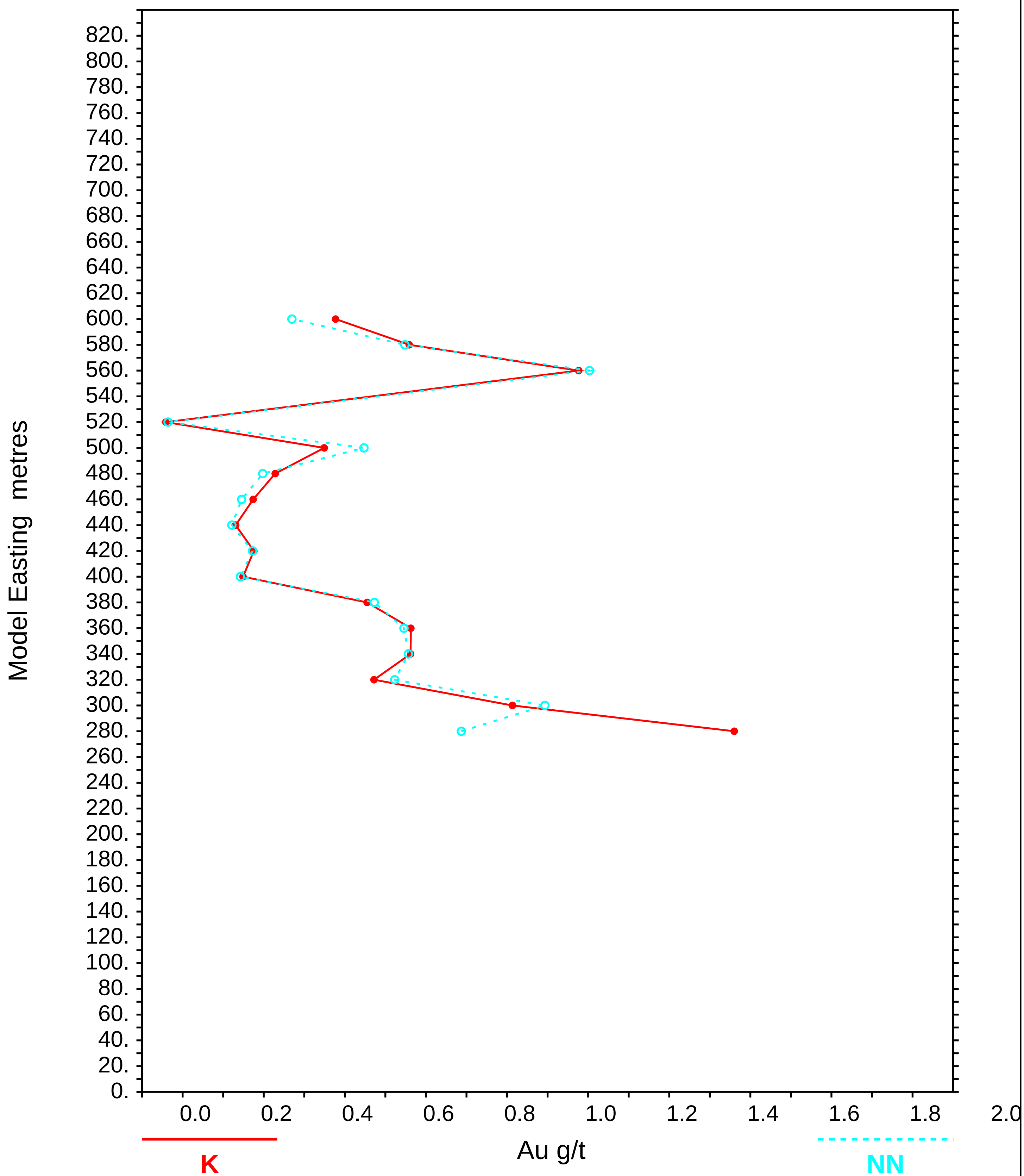
Rock Creek
Kriged & NN Grades
Zone 2 Adjusted Model

FIGURE NUMBER

Z



amec	AMEC MINING AND METALS PROJECT NUMBER 146504	TITLE Rock Creek Kriged & NN Grades Zone 2 Adjusted Model	FIGURE NUMBER N



amec

AMEC MINING
AND METALS

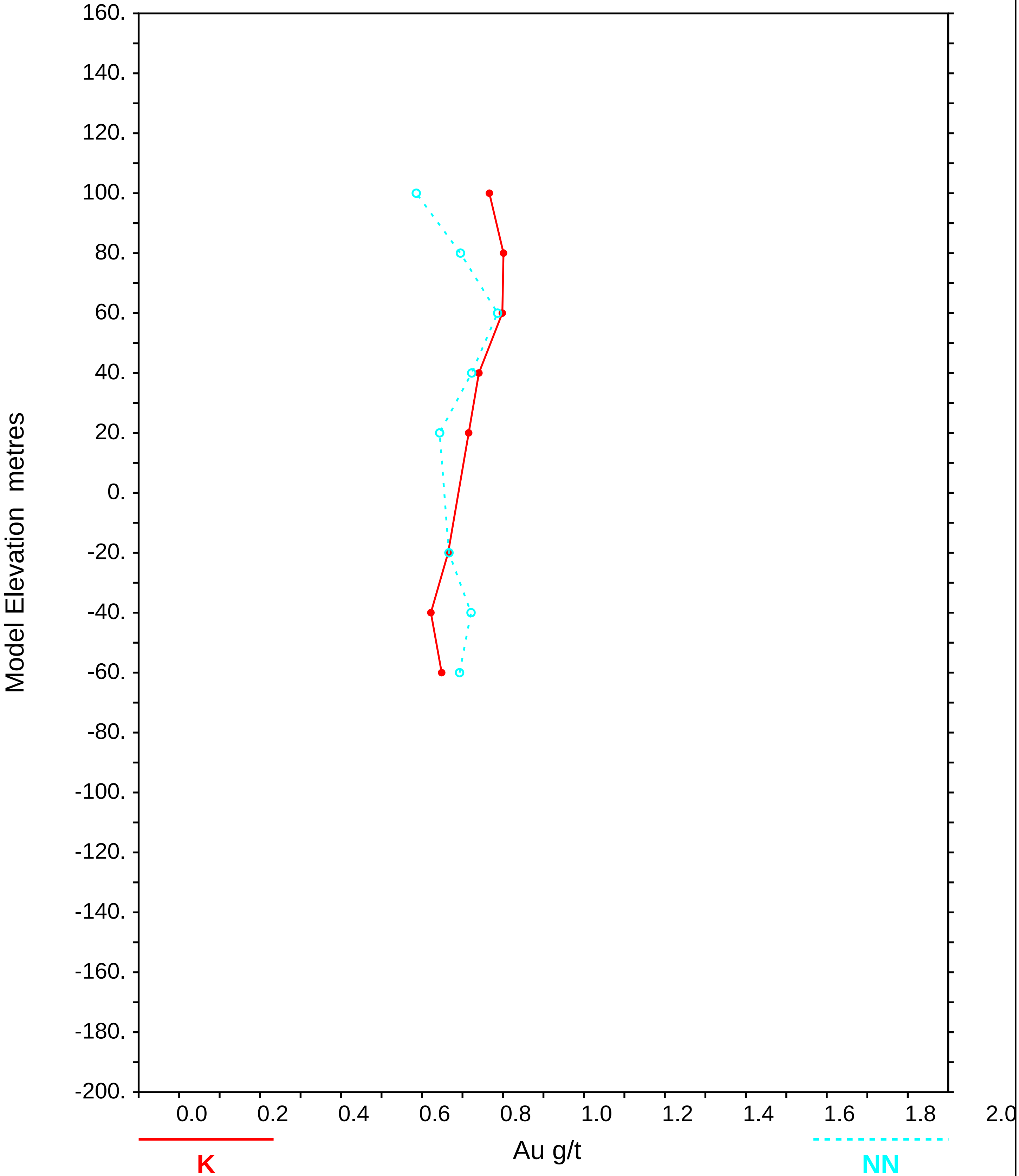
PROJECT NUMBER 146504

TITLE

Rock Creek
Kriged & NN Grades
Zone 2 Adjusted Model

FIGURE NUMBER

E



amec

AMEC MINING AND METALS

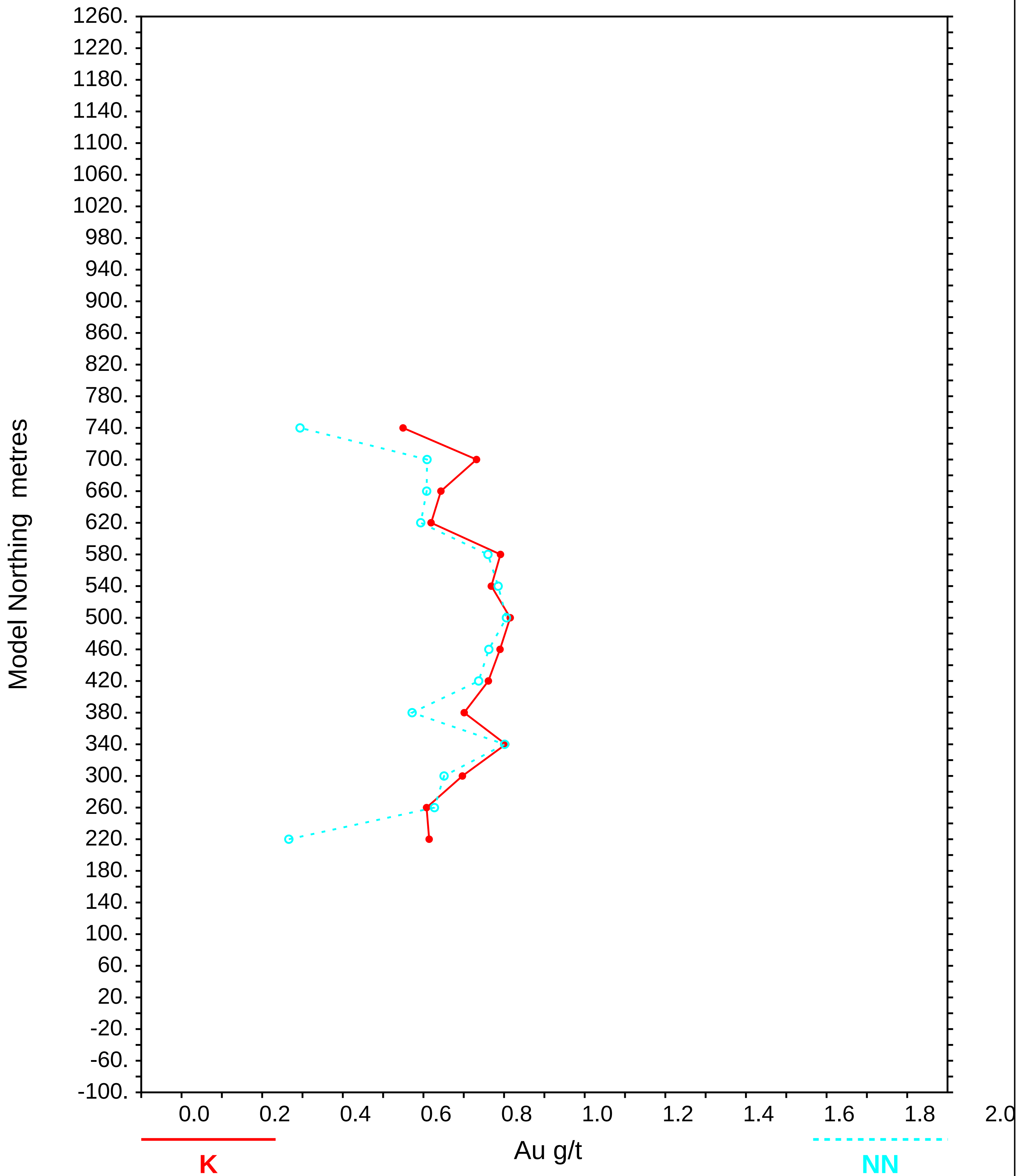
PROJECT NUMBER 146504

TITLE

Rock Creek
Kriged & NN Grades
Zone 1 Adjusted Model

FIGURE NUMBER

Z



amec

AMEC MINING AND METALS

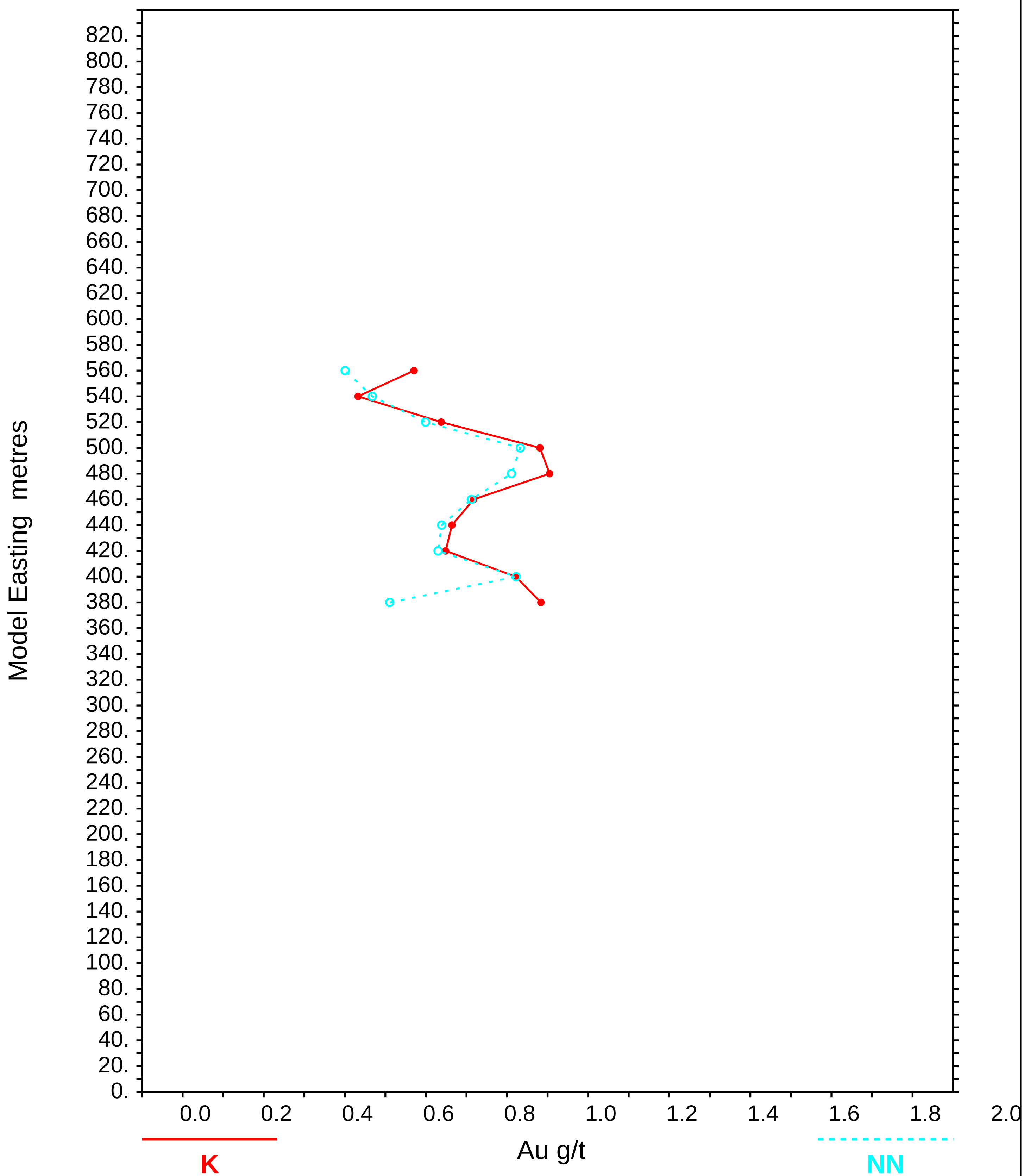
PROJECT NUMBER 146504

TITLE

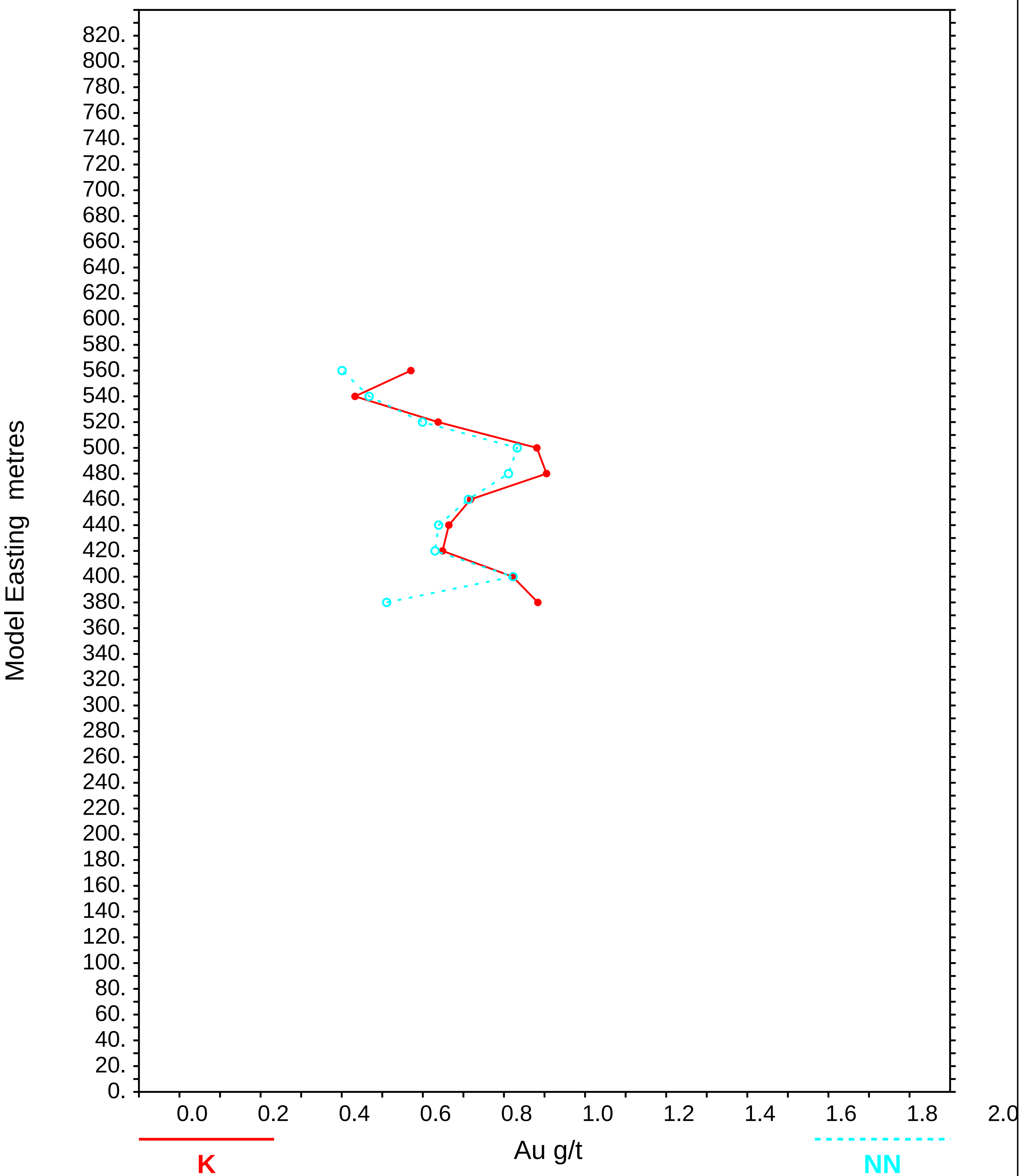
Rock Creek
Kriged & NN Grades
Zone 1 Adjusted Model

FIGURE NUMBER

N



	AMEC MINING AND METALS	TITLE	FIGURE NUMBER
amec	PROJECT NUMBER 146504	Rock Creek Kriged & NN Grades Zone 1 Adjusted Model	E



amec

AMEC MINING
AND METALS

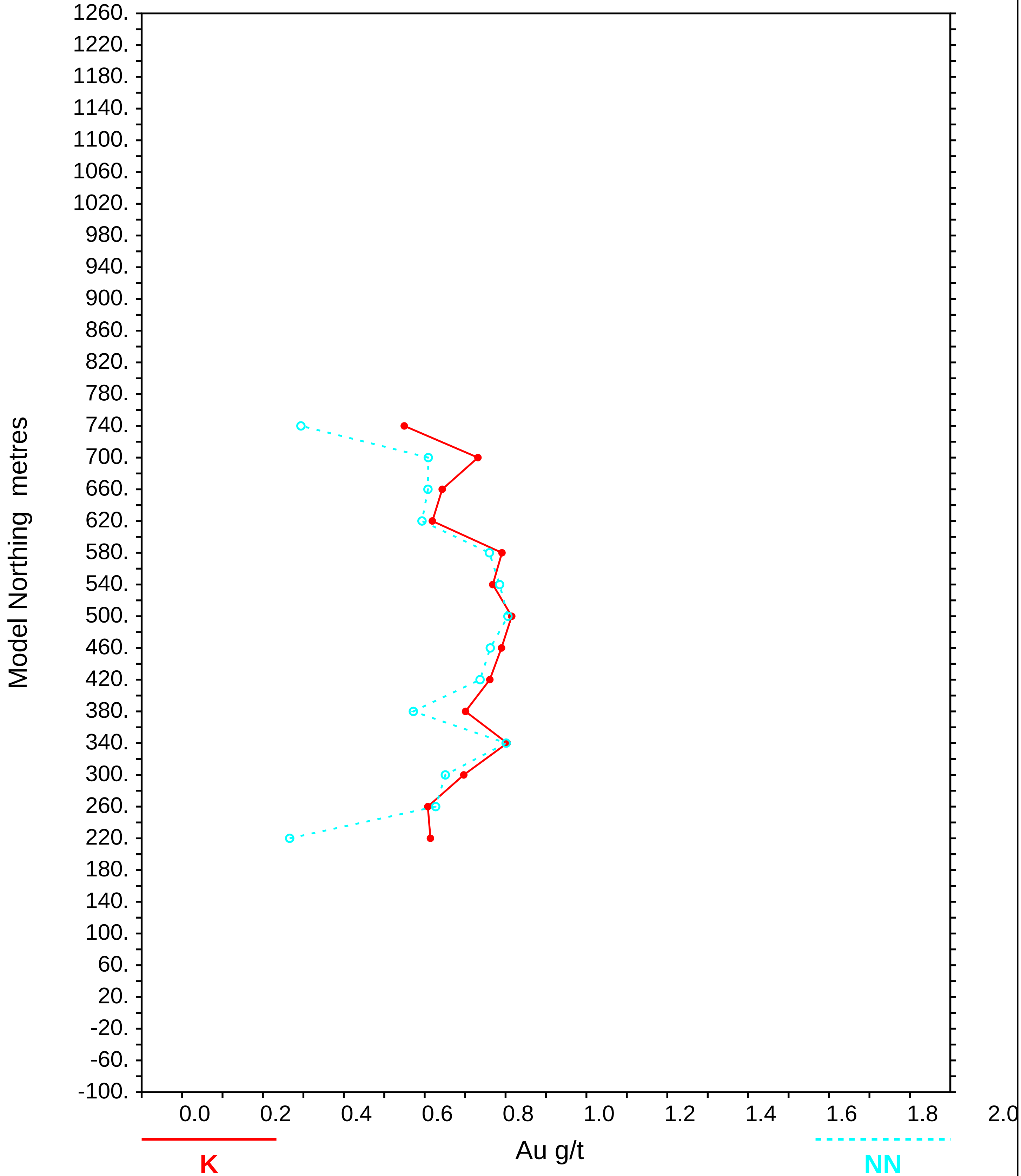
PROJECT NUMBER 146504

TITLE

Rock Creek
Kriged & NN Grades
Zone 1 Adjusted Model

FIGURE NUMBER

E



amec

AMEC MINING AND METALS

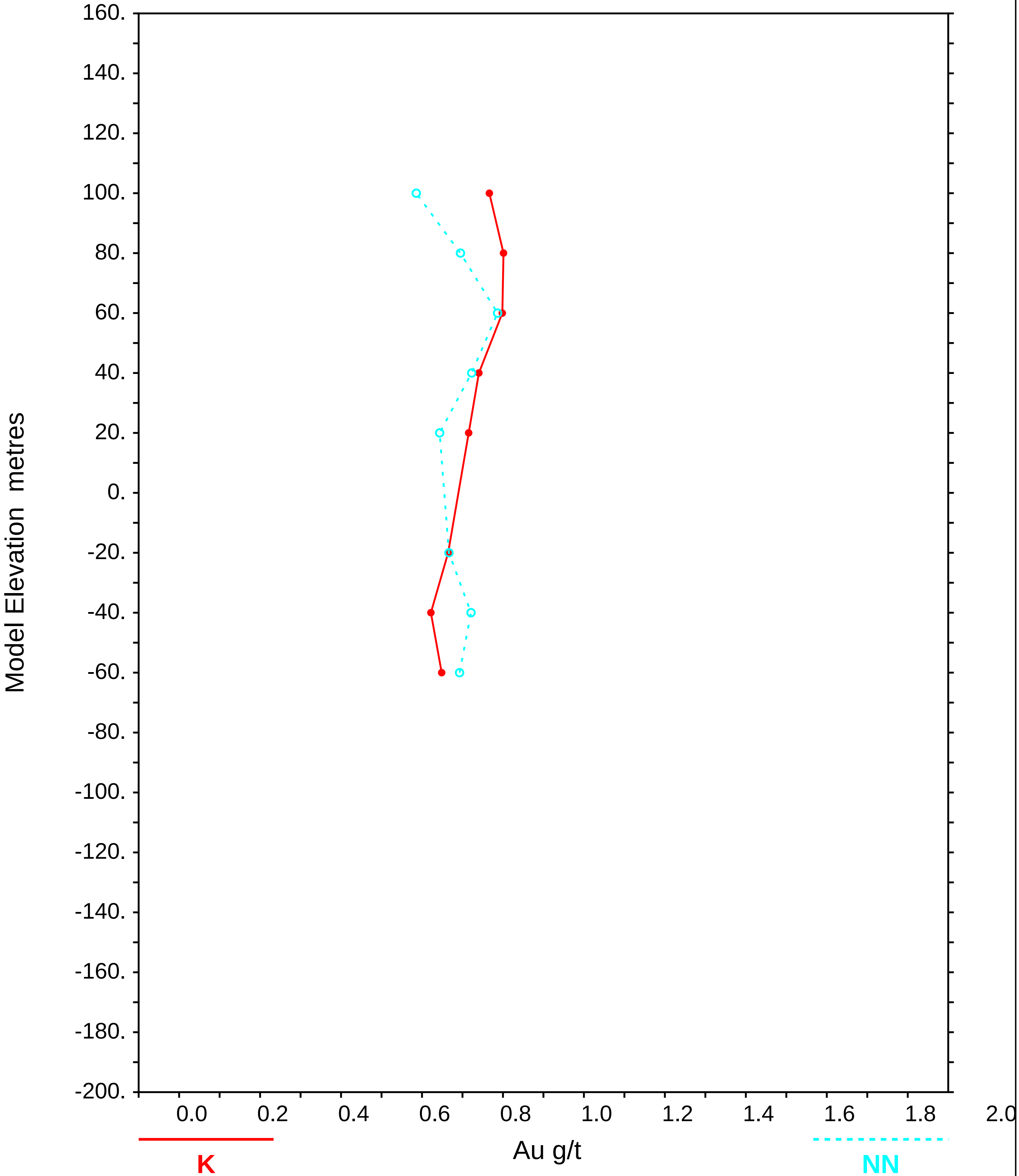
PROJECT NUMBER 146504

TITLE

Rock Creek
Kriged & NN Grades
Zone 1 Adjusted Model

FIGURE NUMBER

N



amec

AMEC MINING AND METALS

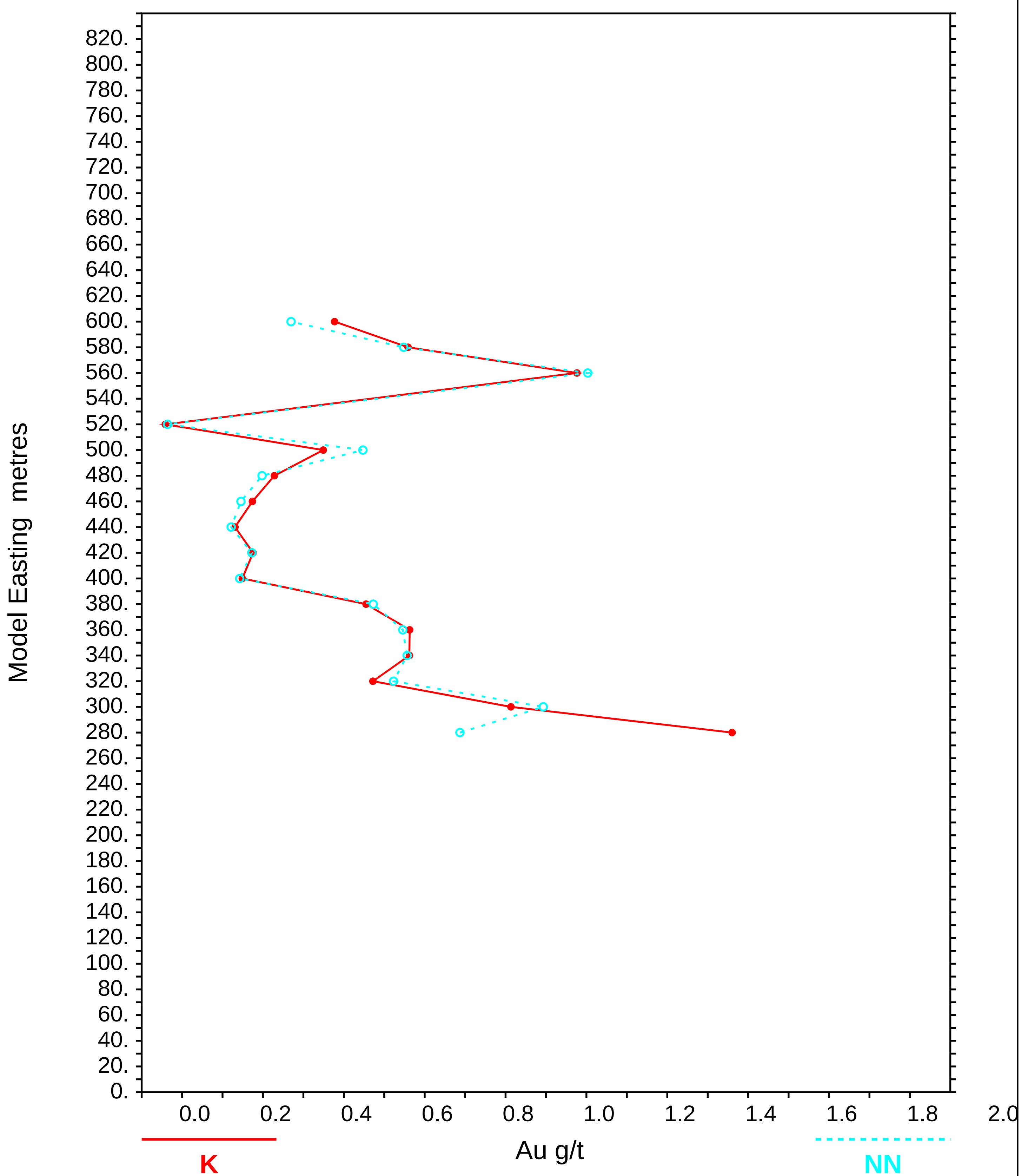
PROJECT NUMBER 146504

TITLE

Rock Creek
Kriged & NN Grades
Zone 1 Adjusted Model

FIGURE NUMBER

Z



amec

AMEC MINING AND METALS

PROJECT NUMBER 146504

TITLE

Rock Creek
Kriged & NN Grades
Zone 2 Adjusted Model

FIGURE NUMBER

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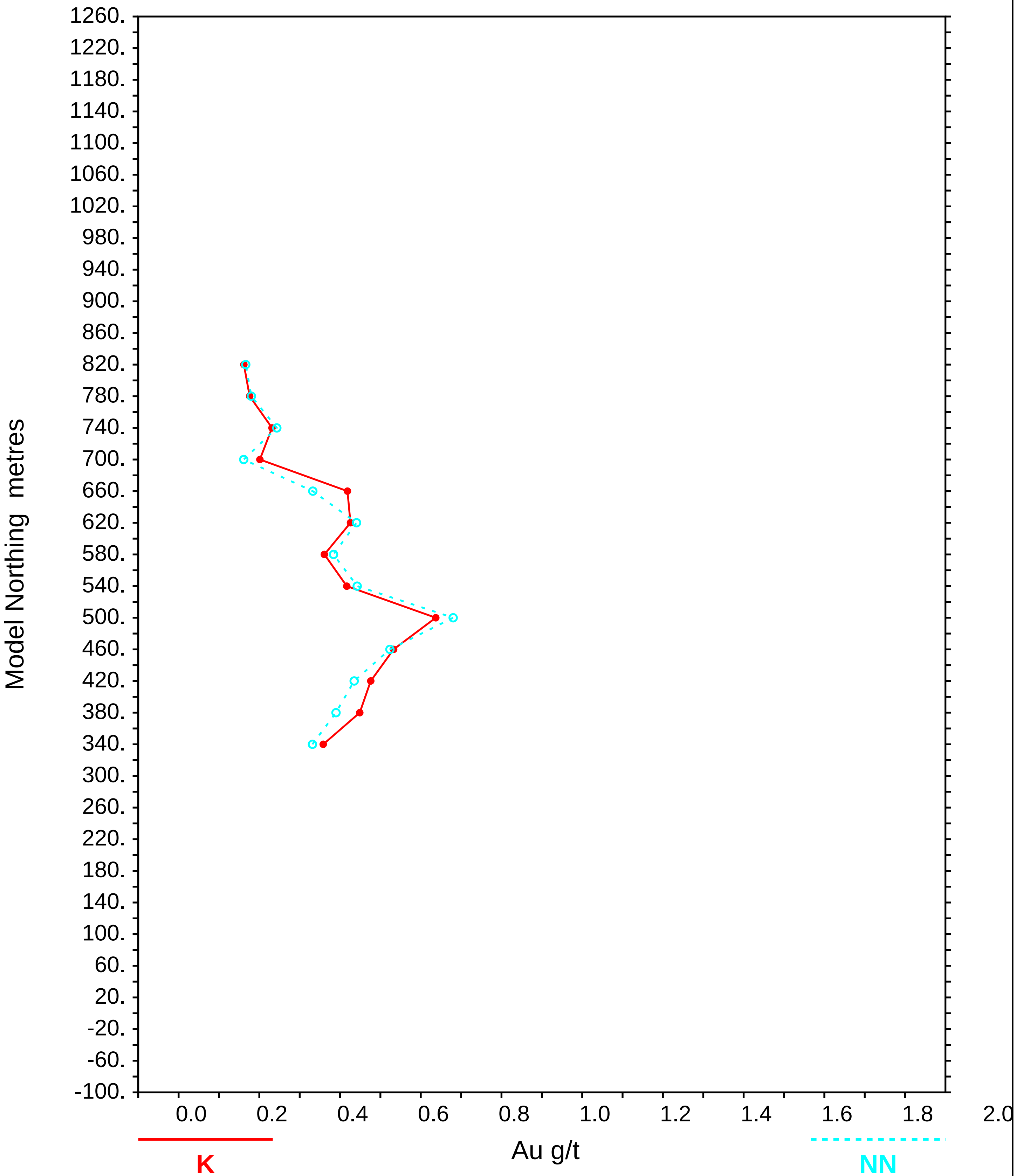


amec

AMEC MINING
AND METALS

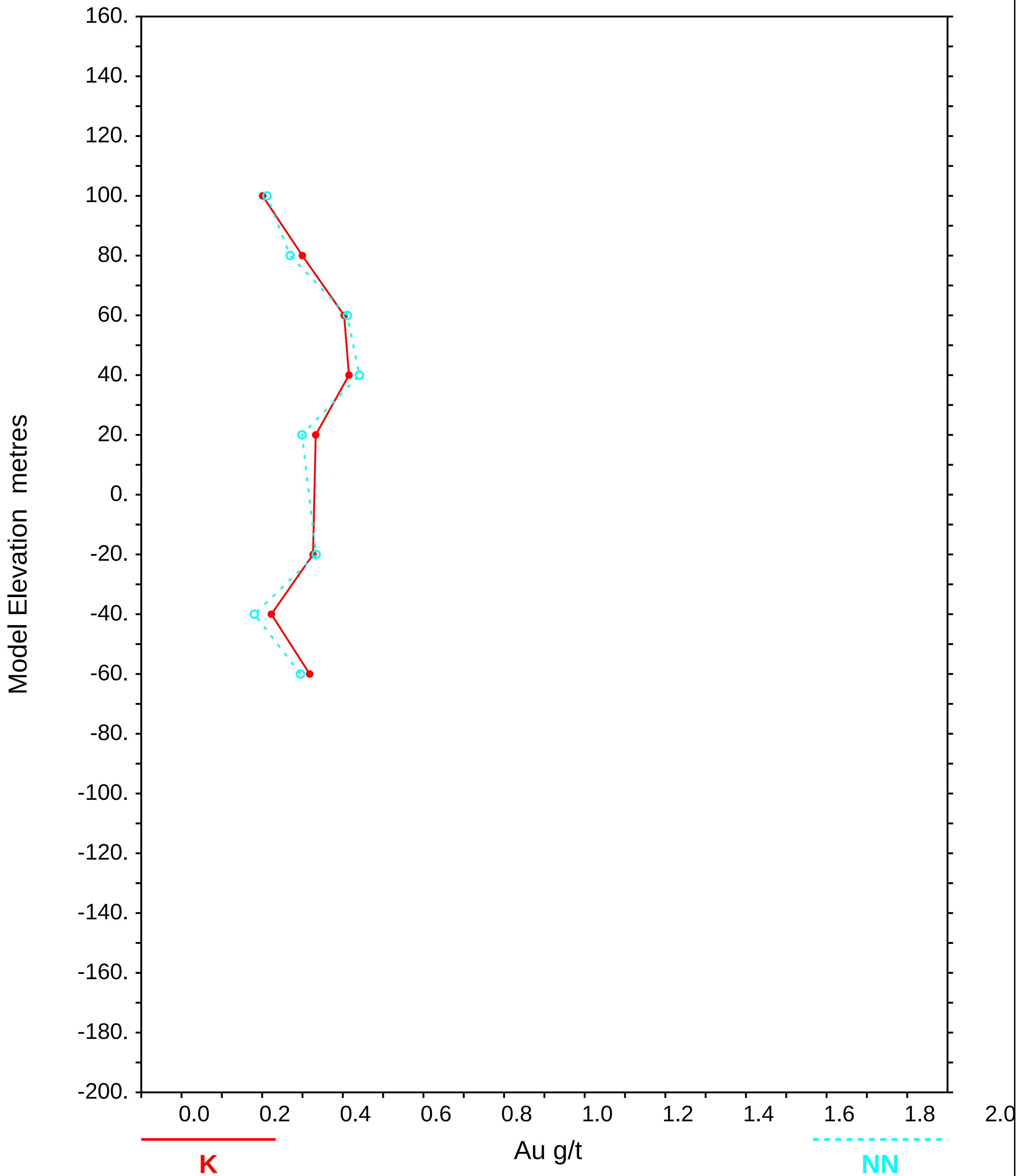
PROJECT NUMBER 146504

TITLE

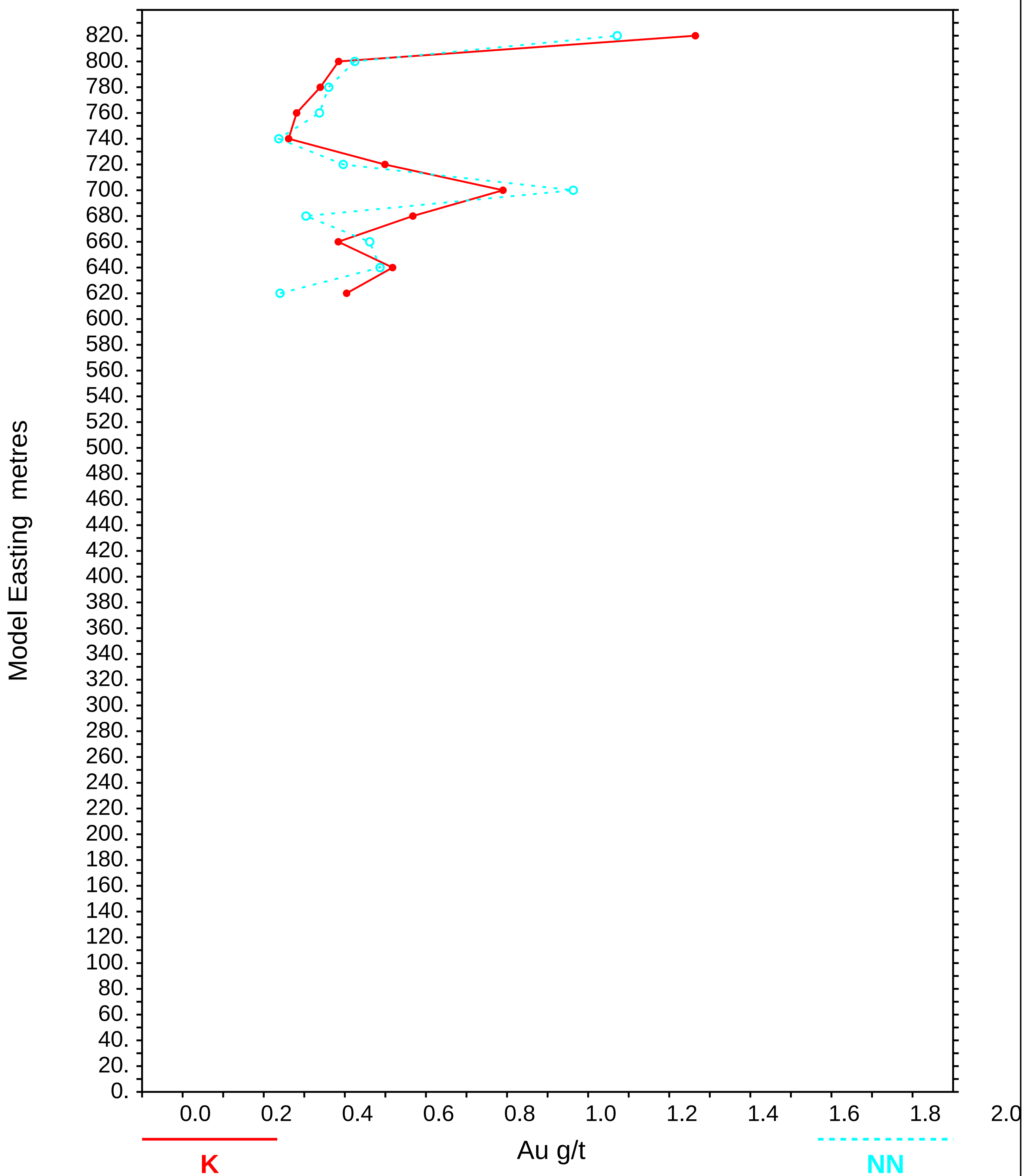
Rock Creek
Kriged & NN Grades
Zone 2 Adjusted Model

FIGURE NUMBER

N



amec	AMEC MINING AND METALS PROJECT NUMBER 146504	TITLE Rock Creek Kriged & NN Grades Zone 2 Adjusted Model	FIGURE NUMBER Z



amec

AMEC MINING
AND METALS

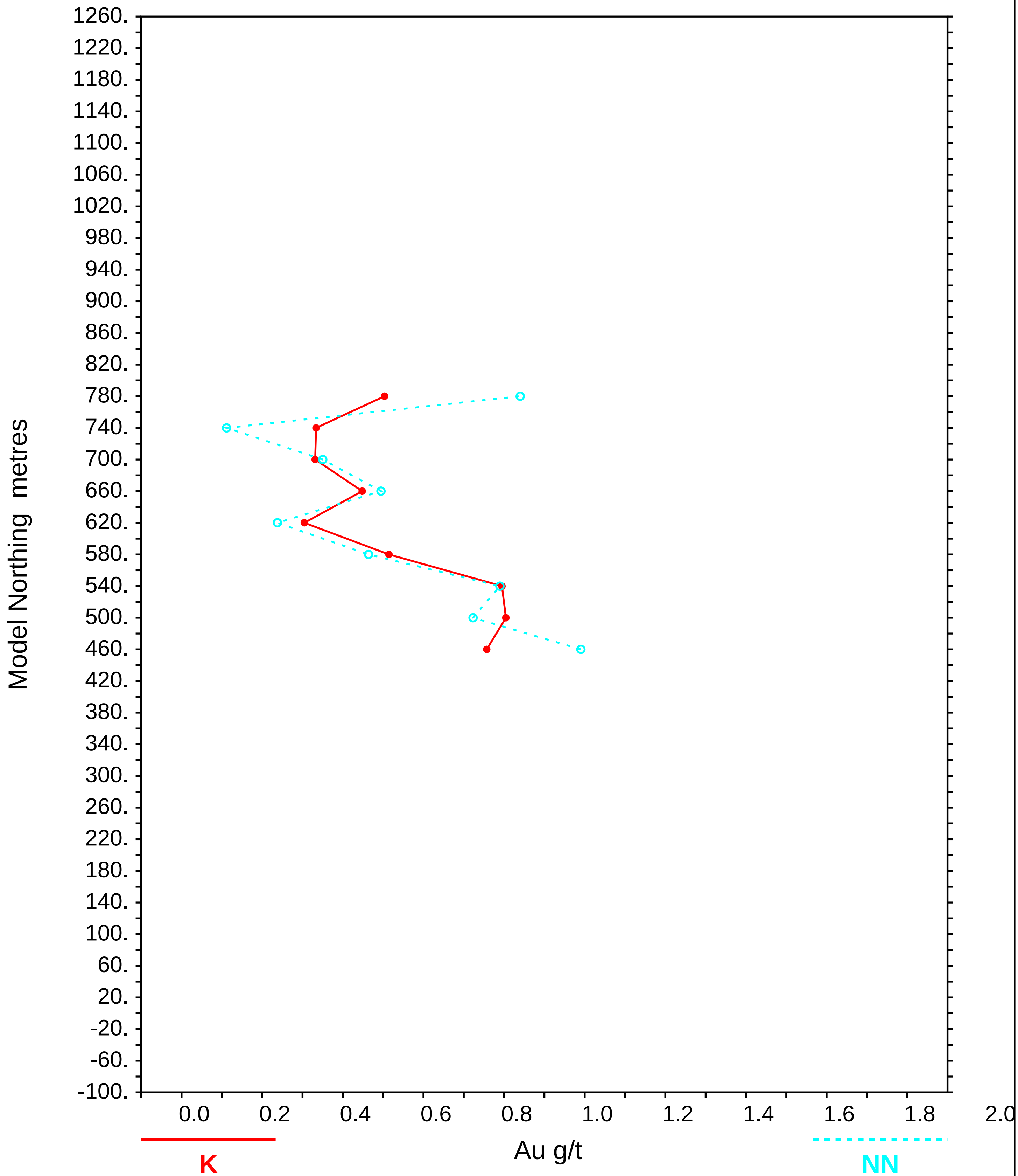
PROJECT NUMBER 146504

TITLE

Rock Creek
Kriged & NN Grades
Zone 3 Adjusted Model

FIGURE NUMBER

E



amec

AMEC MINING AND METALS

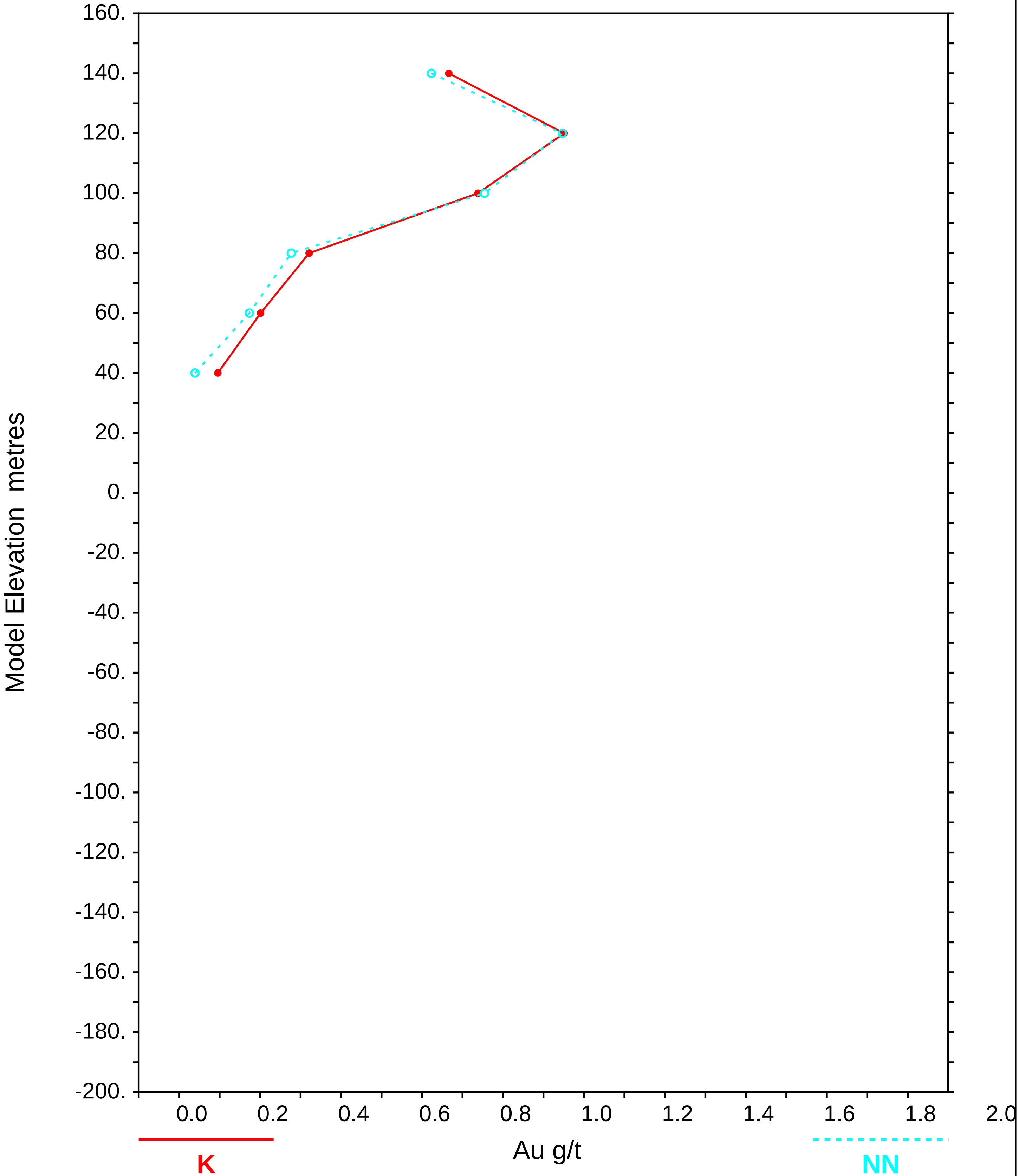
PROJECT NUMBER 146504

TITLE

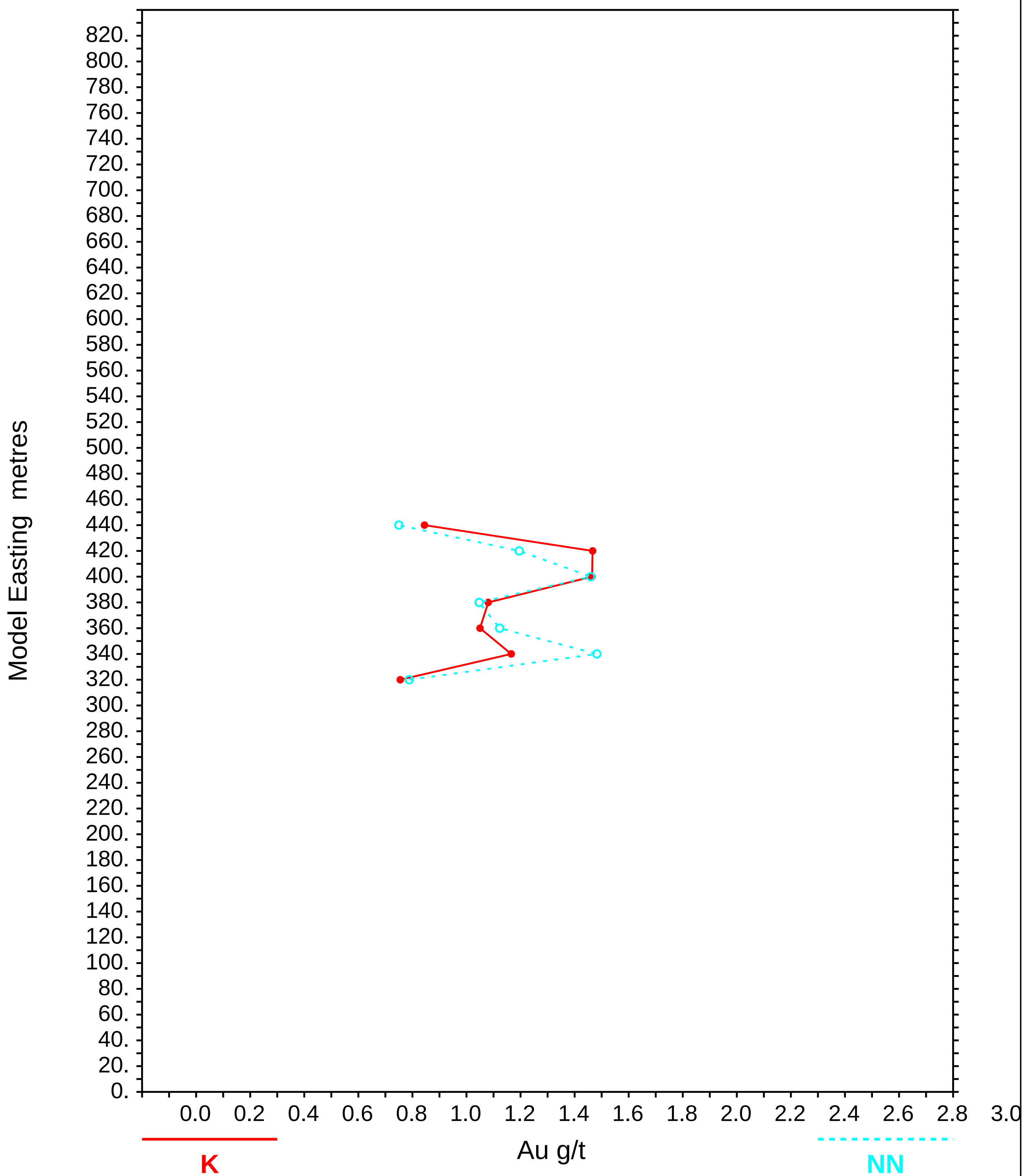
Rock Creek
Kriged & NN Grades
Zone 3 Adjusted Model

FIGURE NUMBER

N



amec	AMEC MINING AND METALS PROJECT NUMBER 146504	TITLE Rock Creek Kriged & NN Grades Zone 3 Adjusted Model	FIGURE NUMBER Z



amec

AMEC MINING AND METALS

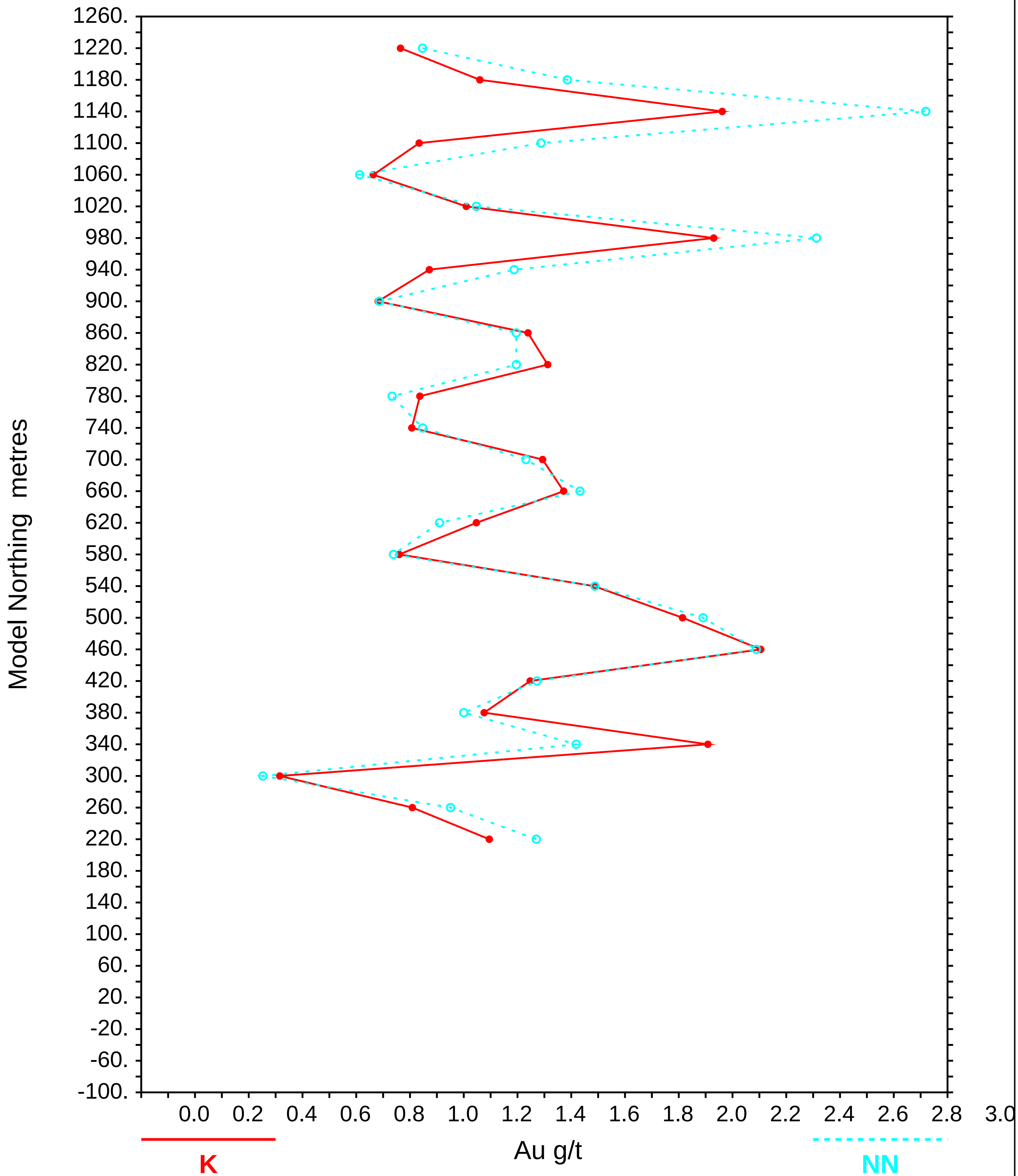
PROJECT NUMBER 146504

TITLE

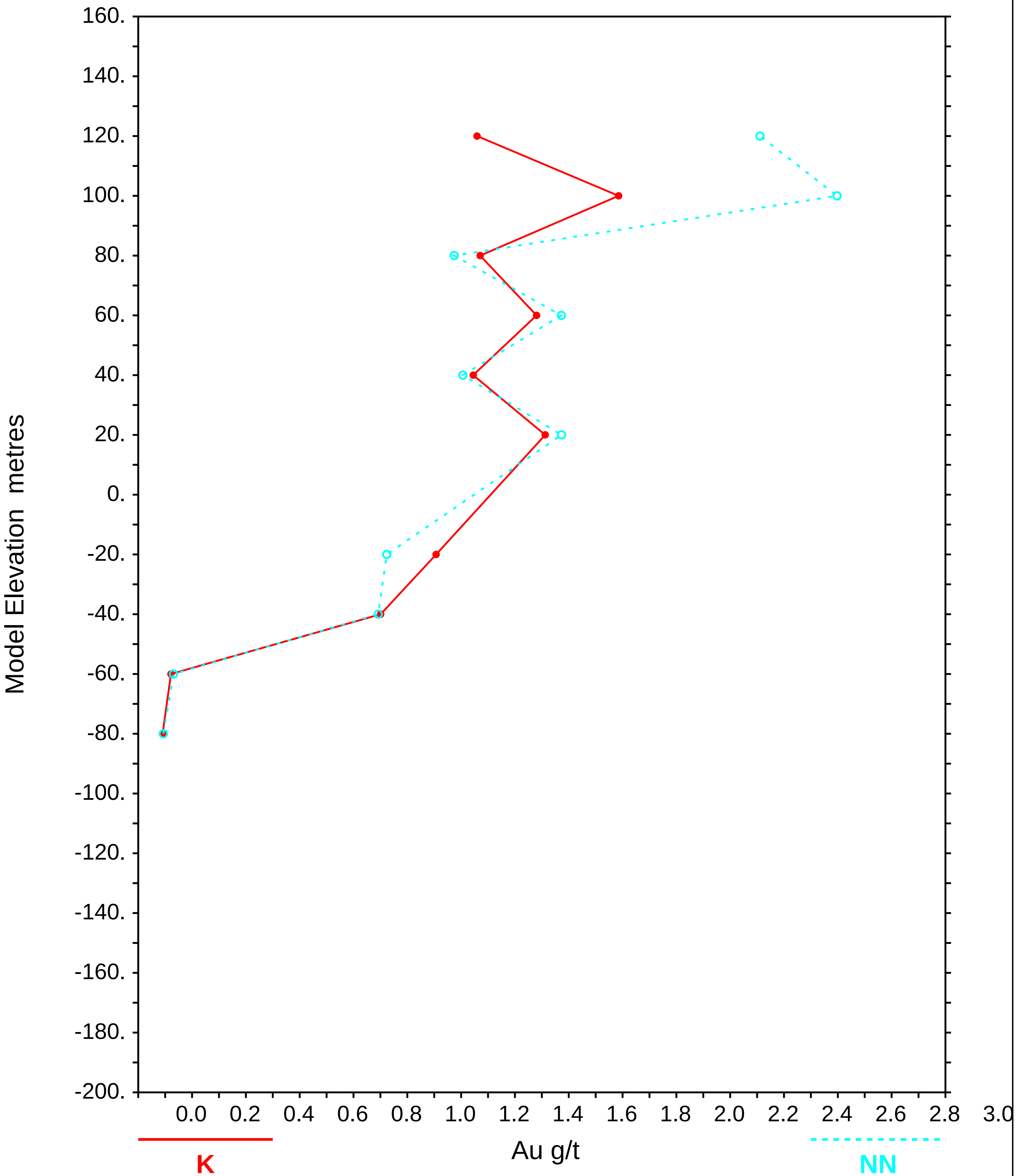
Rock Creek
Kriged & NN Grades
Zone 10 Adjusted Model

FIGURE NUMBER

E



amec	AMEC MINING AND METALS PROJECT NUMBER 146504	TITLE Rock Creek Kriged & NN Grades Zone 10 Adjusted Model	FIGURE NUMBER N



amec

AMEC MINING AND METALS

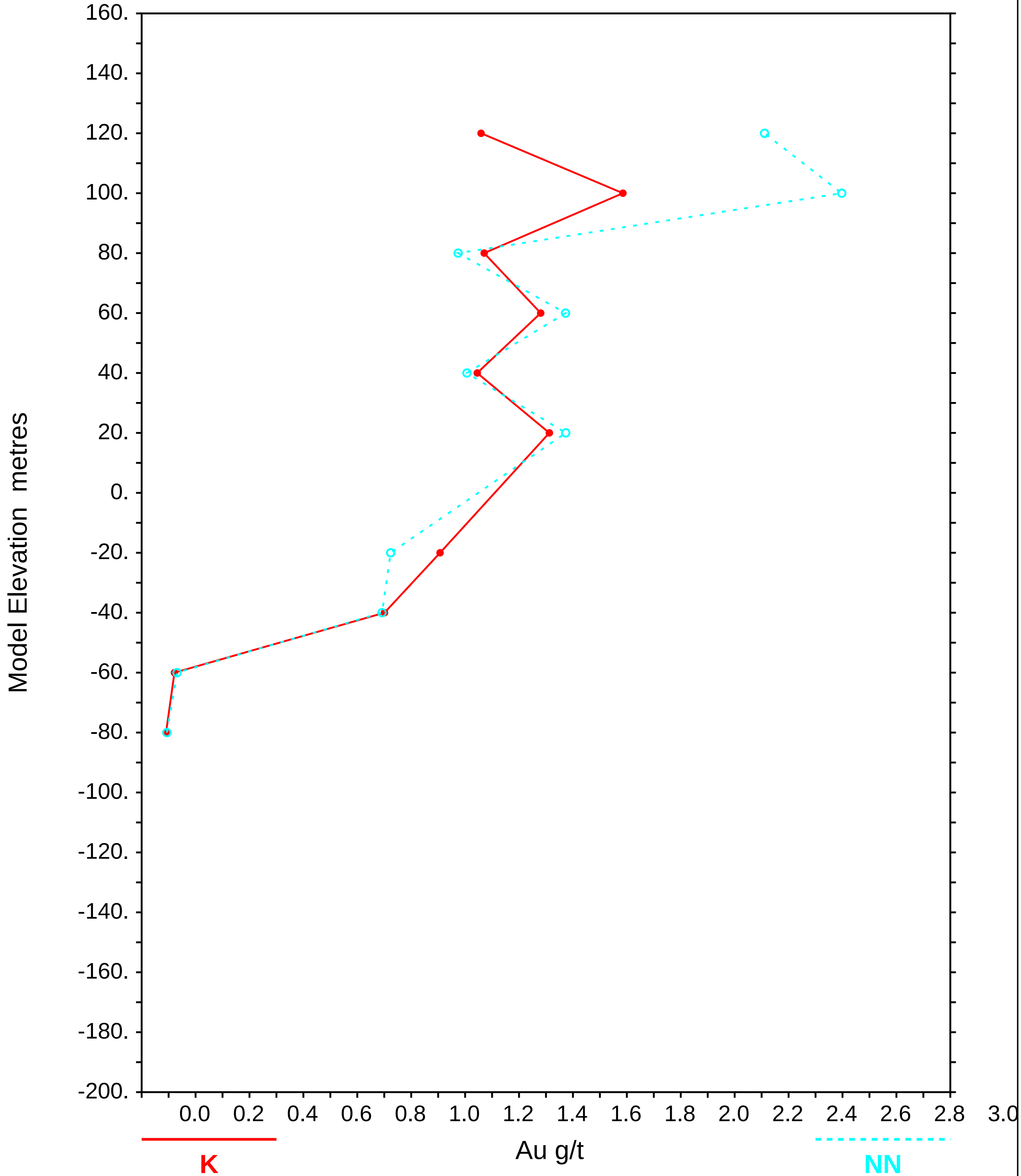
PROJECT NUMBER 146504

TITLE

Rock Creek
Kriged & NN Grades
Zone 10 Adjusted Model

FIGURE NUMBER

Z



amec

AMEC MINING AND METALS

PROJECT NUMBER 146504

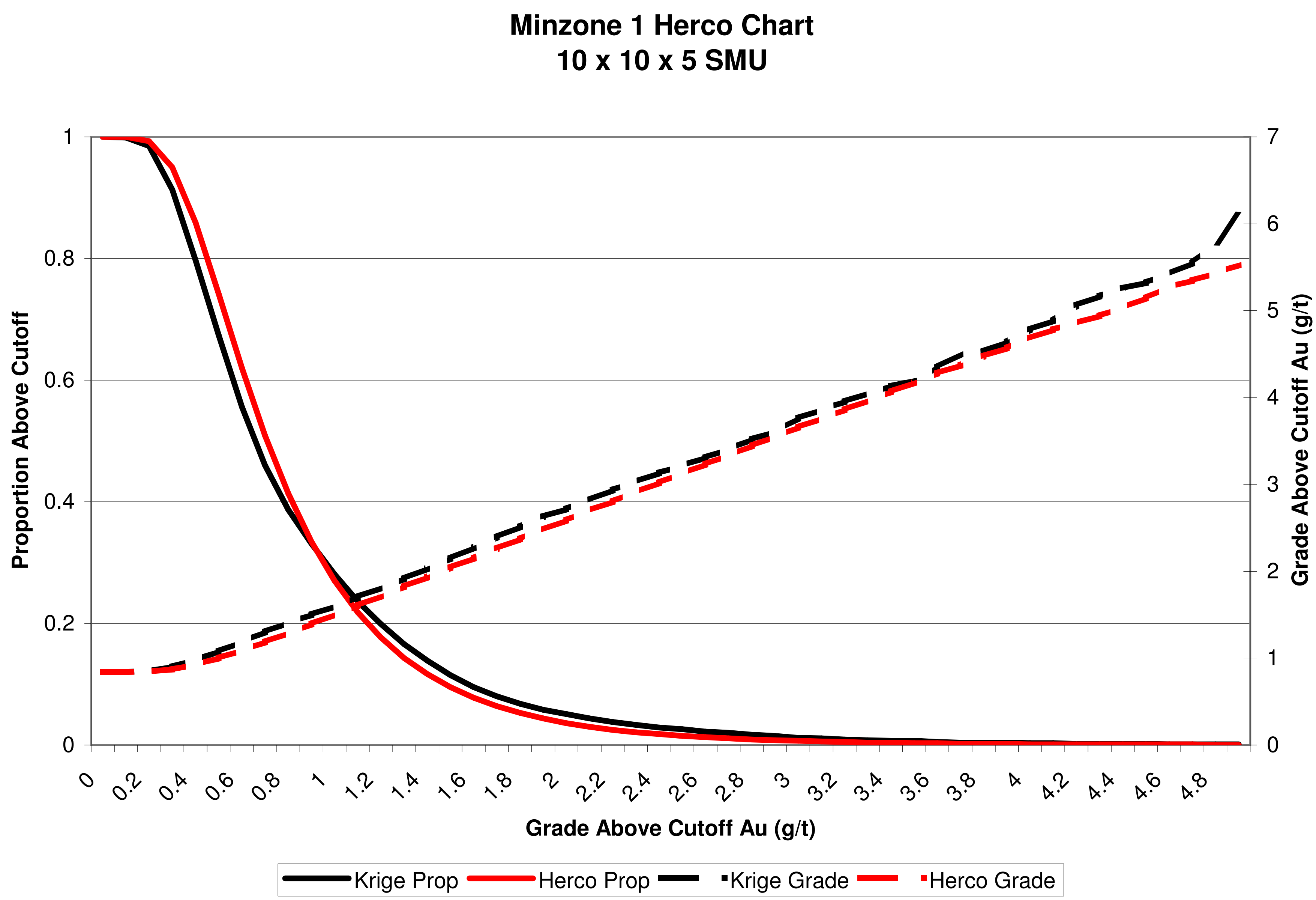
TITLE

Rock Creek
Kriged & NN Grades
Zone 10 Adjusted Model

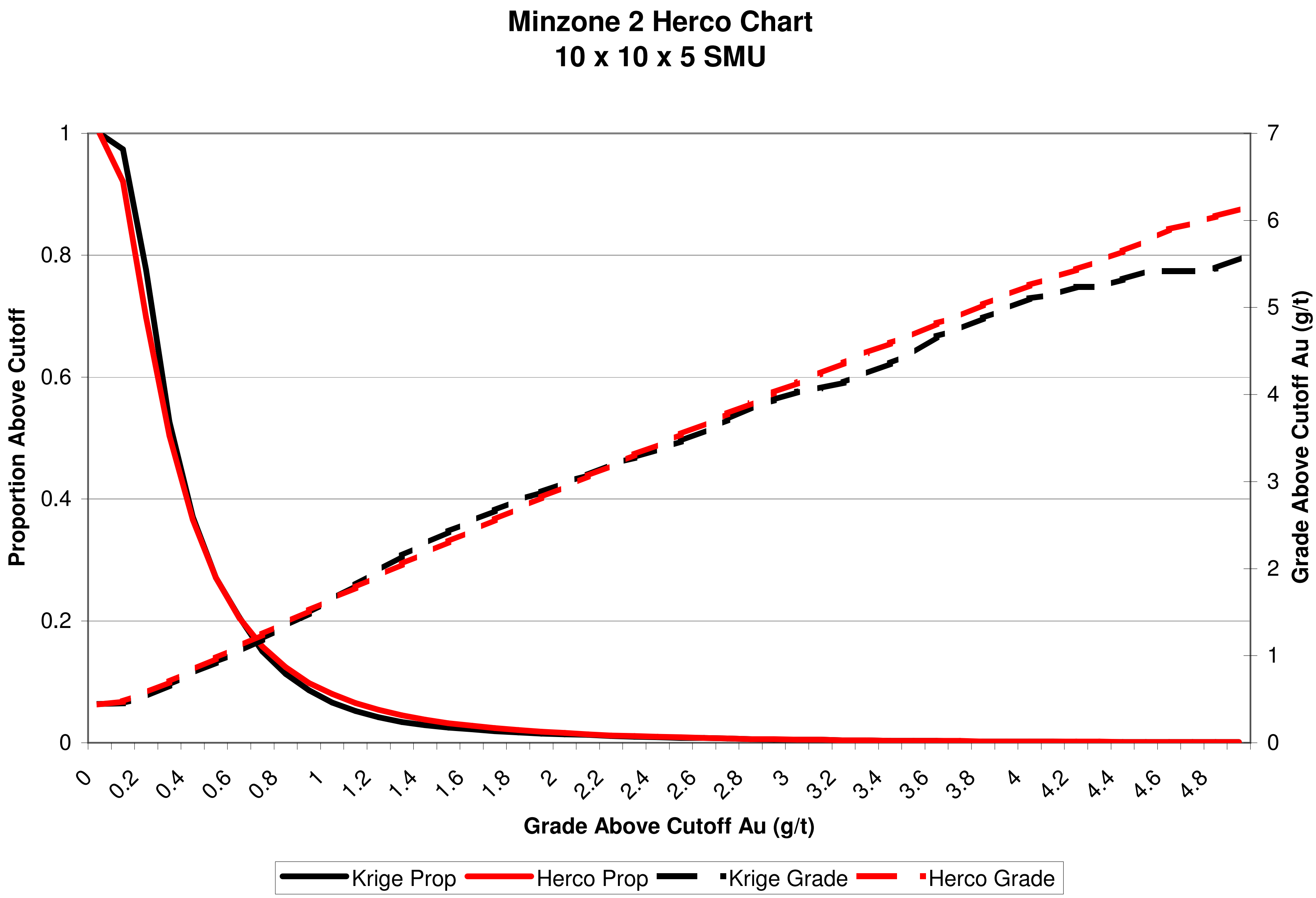
FIGURE NUMBER

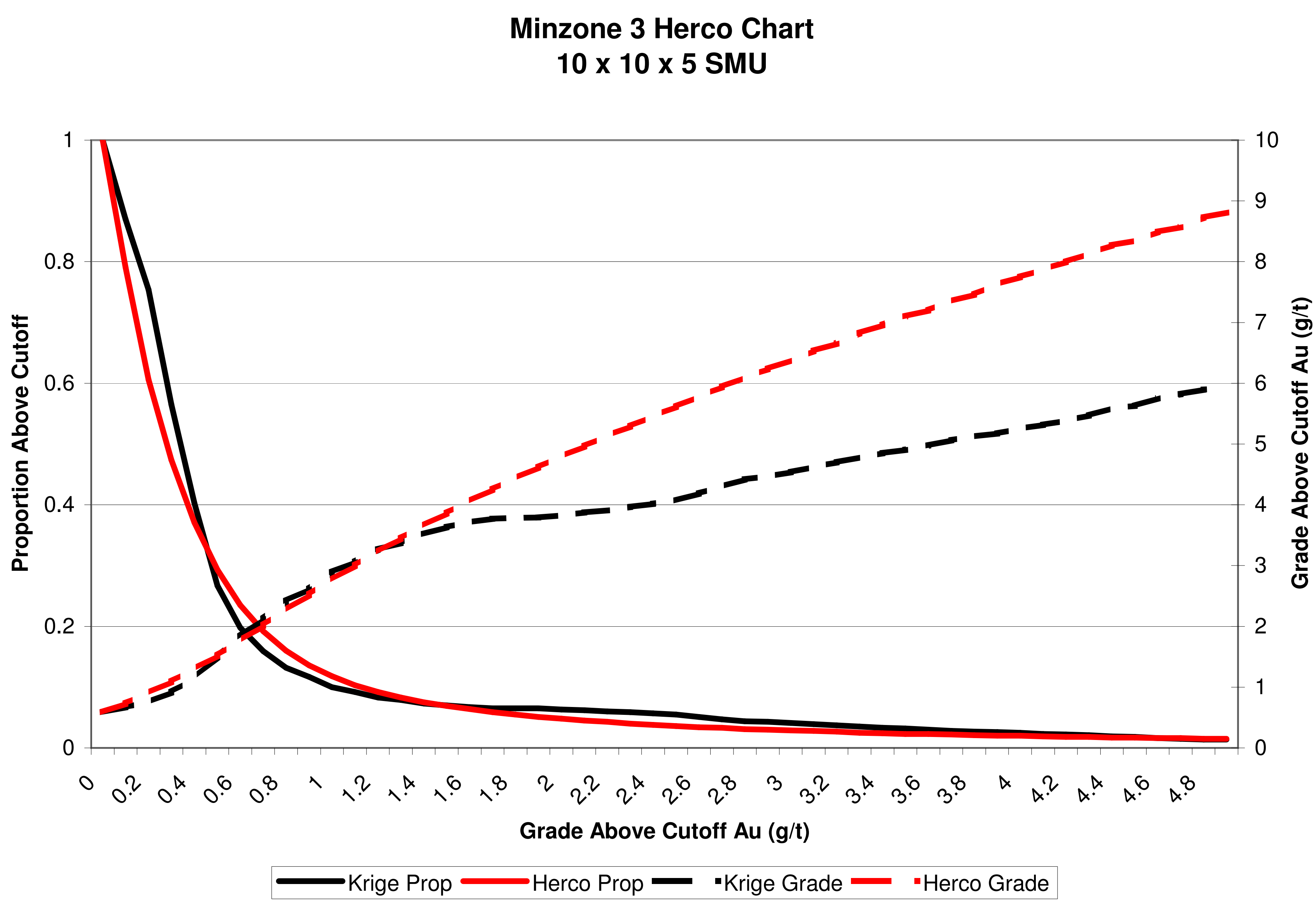
Z

F-4 HERCO CHARTS

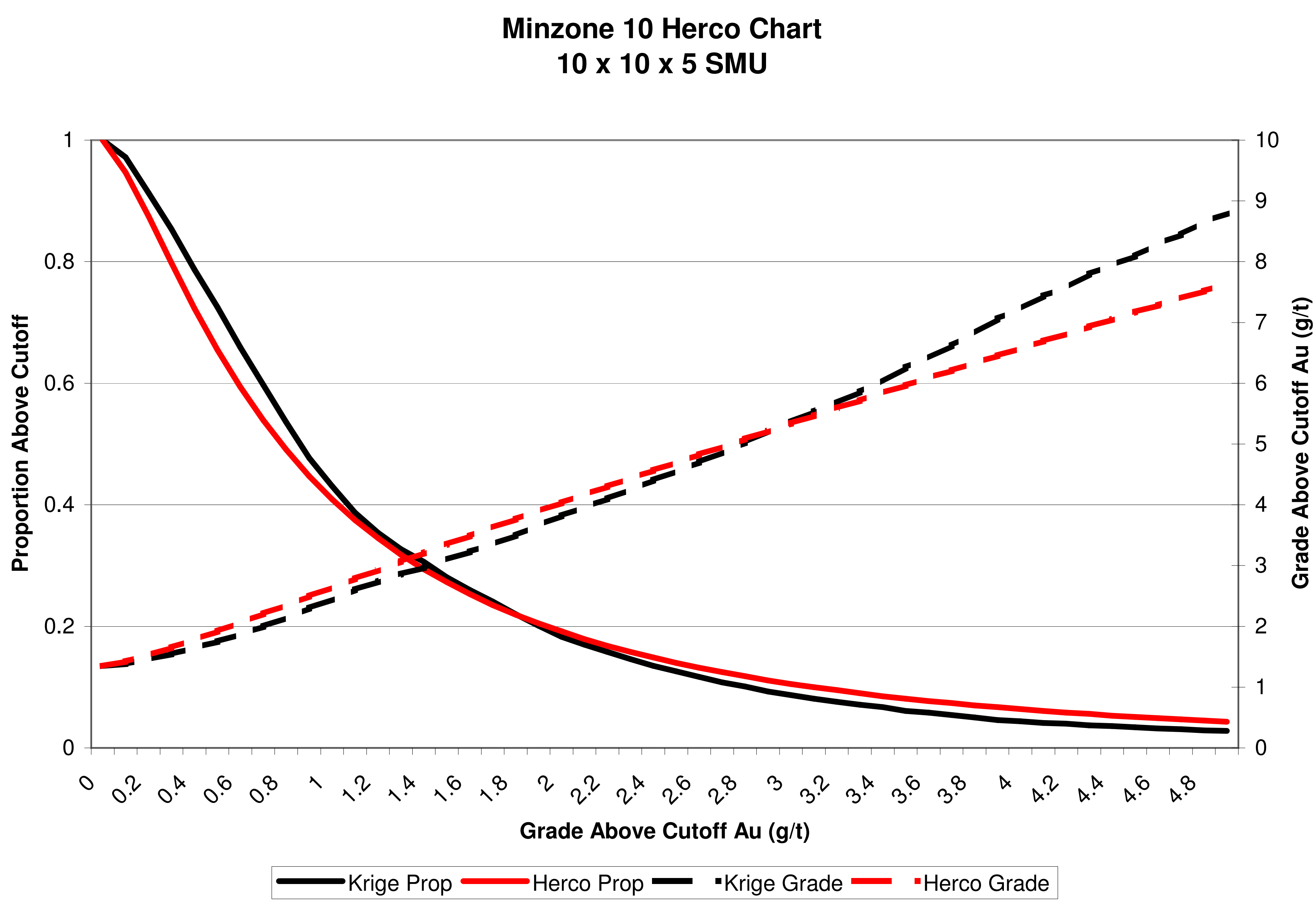


Minzone 1 Herco Chart
10 x 10 x 5 SMU
Proportion Above Cutoff
Grade Above Cutoff Au (g/t)
1
0.8
0.6
0.4
0.2
0
7
6
5
4
3
2
1
0
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2
2.2
2.4
2.6
2.8
3
3.2
3.4
3.6
3.8
4
4.2
4.4
4.6
4.8
Grade Above Cutoff Au (g/t)
Krige Prop
Herco Prop
Krige Grade
Herco Grade


Minzone 2 Herco Chart
10 x 10 x 5 SMU
Proportion Above Cutoff
Grade Above Cutoff Au (g/t)
Grade Above Cutoff Au (g/t)
1
0.8
0.6
0.4
0.2
0
7
6
5
4
3
2
1
0
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2
2.2
2.4
2.6
2.8
3
3.2
3.4
3.6
3.8
4
4.2
4.4
4.6
4.8
Krige Prop
Herco Prop
Krige Grade
Herco Grade

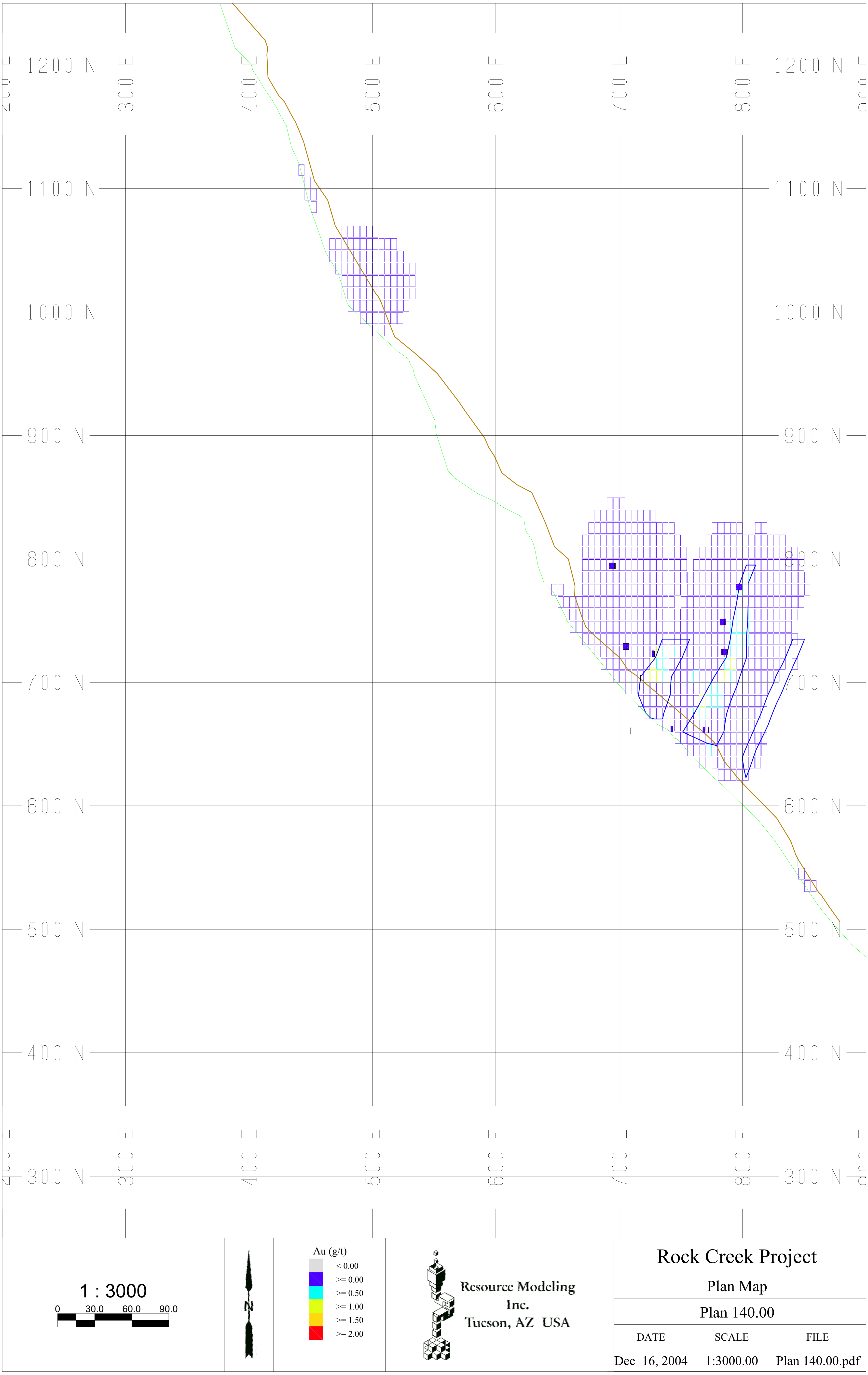


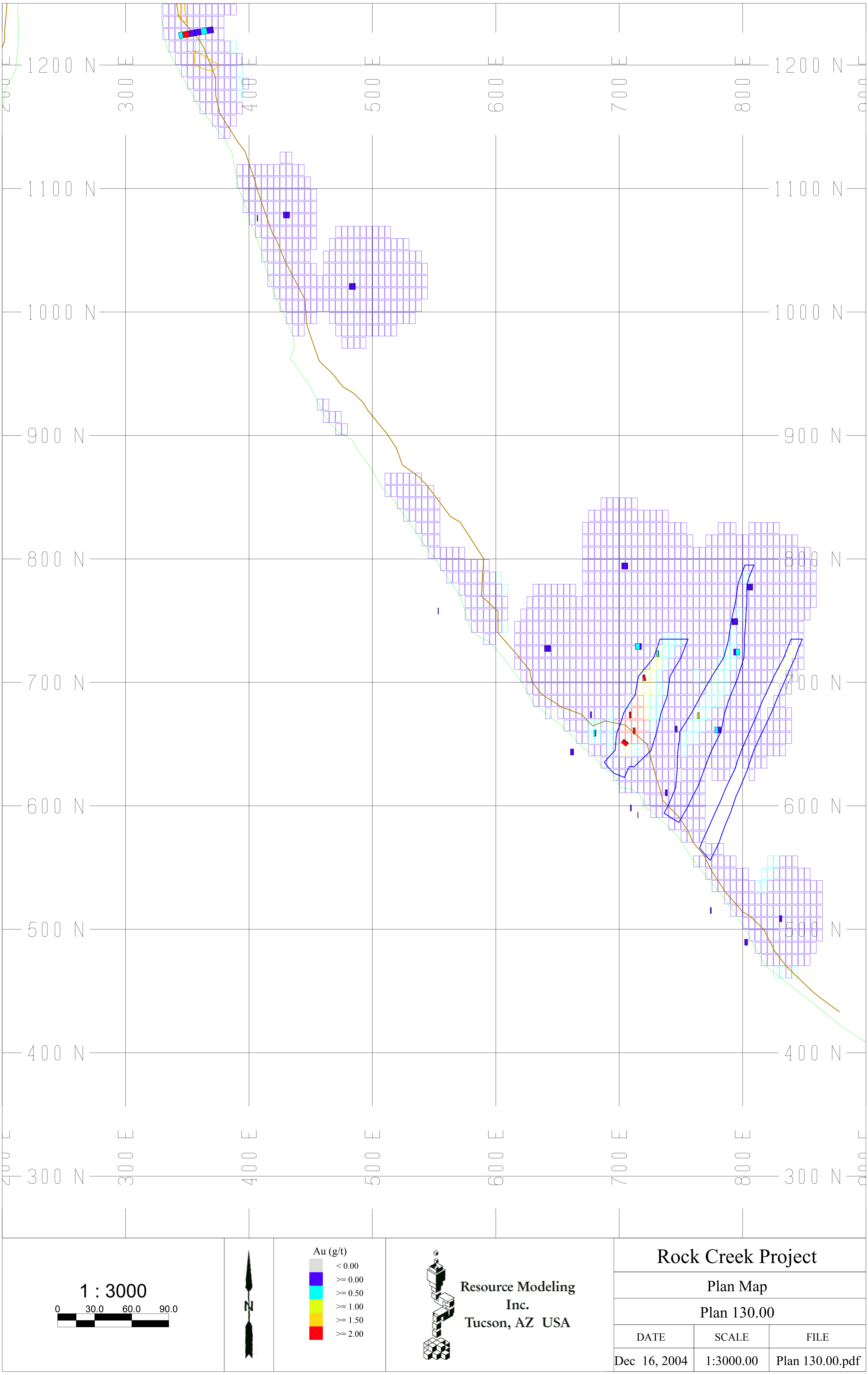
Minzone 3 Herco Chart
10 x 10 x 5 SMU
Proportion Above Cutoff
Grade Above Cutoff Au (g/t)
Grade Above Cutoff Au (g/t)
0
0.2
0.4
0.6
0.8
1
0
1
2
3
4
5
6
7
8
9
10
0
0.2
0.4
0.6
0.8
1
1.2
1.4
1.6
1.8
2
2.2
2.4
2.6
2.8
3
3.2
3.4
3.6
3.8
4
4.2
4.4
4.6
4.8
Krige Prop
Herco Prop
Krige Grade
Herco Grade



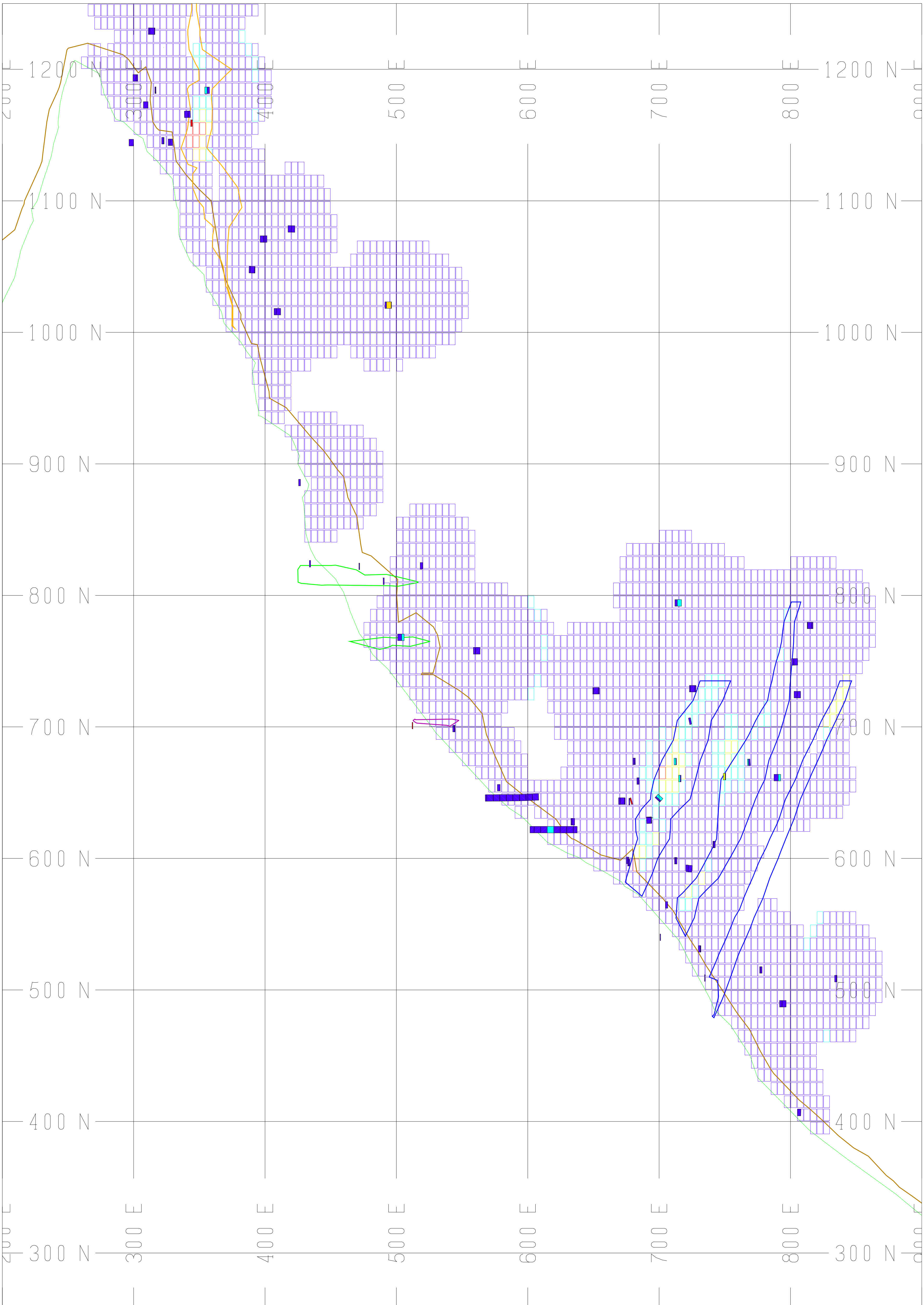
Minzone 10 Herco Chart
10 x 10 x 5 SMU
Proportion Above Cutoff
Grade Above Cutoff Au (g/t)
Grade Above Cutoff Au (g/t)
0
0.2
0.4
0.6
0.8
1
0
1
2
3
4
5
6
7
8
9
10
0.2
0.4
0.6
0.8
1.2
1.4
1.6
1.8
2
2.2
2.4
2.6
2.8
3
3.2
3.4
3.6
3.8
4
4.2
4.4
4.6
4.8
Krige Prop
Herco Prop
Krige Grade
Herco Grade

F-5 Plan Maps and Cross Sections


1200 N
1100 N
1000 N
900 N
800 N
700 N
600 N
500 N
400 N
300 N
300 E
400 E
500 E
600 E
700 E
800 E
1 : 3000
0 30.0 60.0 90.0
N
Au (g/t)
< 0.00
>= 0.00
>= 0.50
>= 1.00
>= 1.50
>= 2.00
Resource Modeling Inc.
Tucson, AZ USA
Rock Creek Project
Plan Map
Plan 140.00
DATE
SCALE
FILE
Dec 16, 2004
1:3000.00
Plan 140.00.pdf



1200 N
1100 N
1000 N
900 N
800 N
700 N
600 N
500 N
400 N
300 N
300 E
400 E
500 E
600 E
700 E
800 E
1 : 3000
0
30.0
60.0
90.0
N
Au (g/t)
< 0.00
>= 0.00
>= 0.50
>= 1.00
>= 1.50
>= 2.00
Resource Modeling
Inc.
Tucson, AZ USA
Rock Creek Project
Plan Map
Plan 130.00
DATE
SCALE
FILE
Dec 16, 2004
1:3000.00
Plan 130.00.pdf



1 : 3000

0 30.0 60.0 90.0

N

Au (g/t)

- < 0.00
- >= 0.00
- >= 0.50
- >= 1.00
- >= 1.50
- >= 2.00

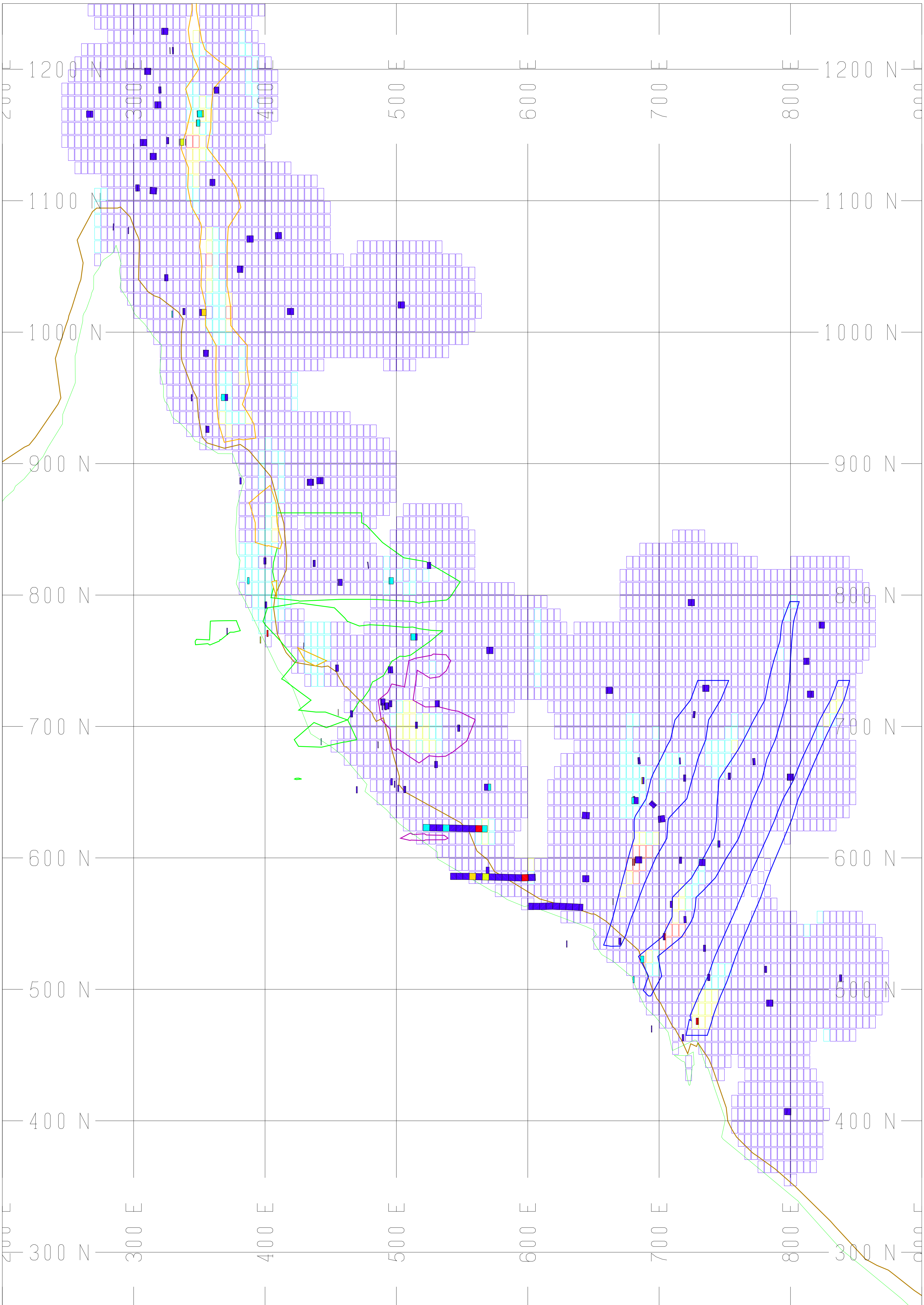
Resource Modeling Inc.
Tucson, AZ USA

Rock Creek Project

Plan Map

Plan 120.00

DATE	SCALE	FILE
Dec 16, 2004	1:3000.00	Plan 120.00.pdf



1 : 3000

0 30.0 60.0 90.0

N

Au (g/t)	
	< 0.00
	>= 0.00
	>= 0.50
	>= 1.00
	>= 1.50
	>= 2.00

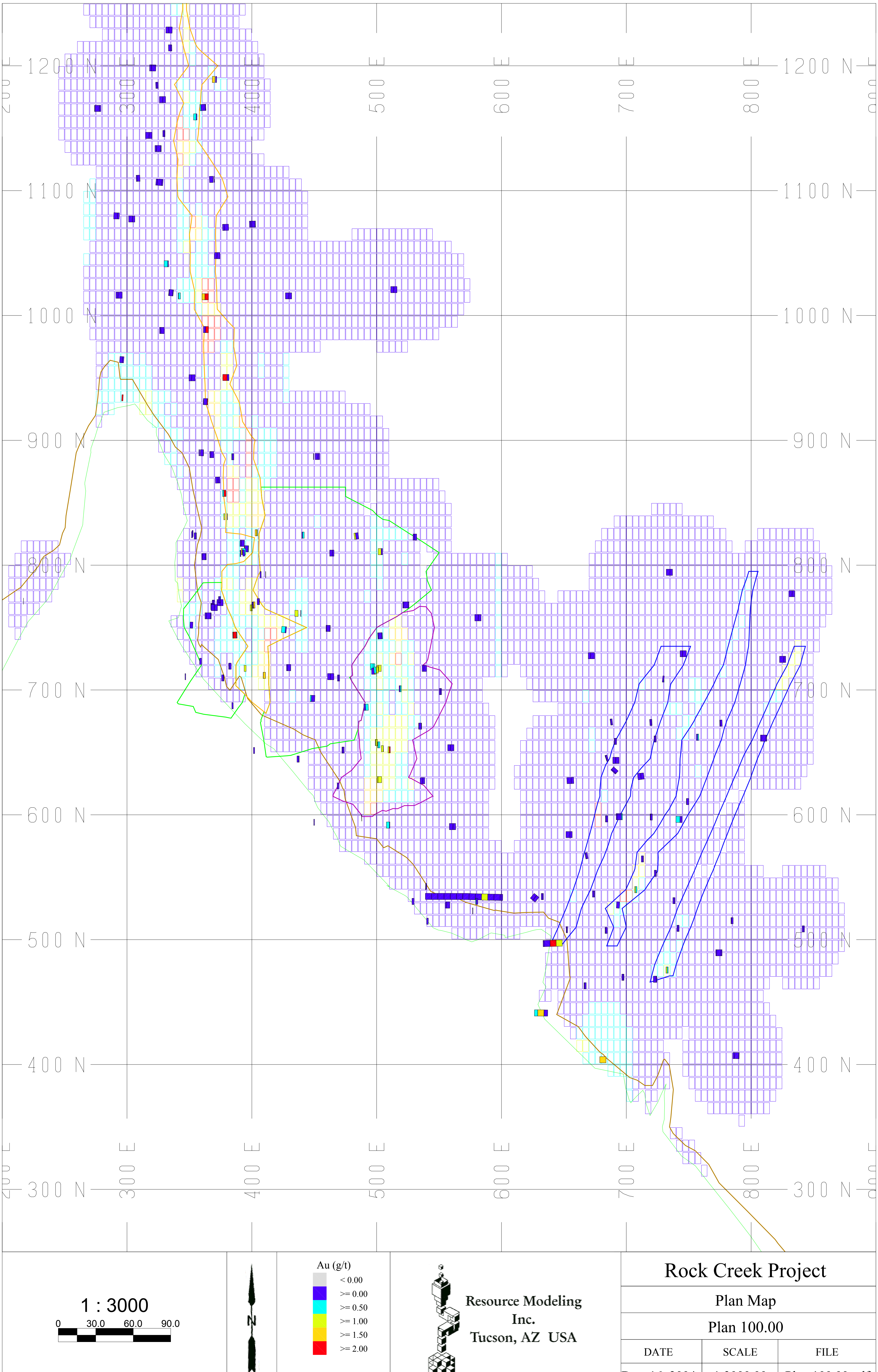
Resource Modeling Inc.
Tucson, AZ USA

Rock Creek Project

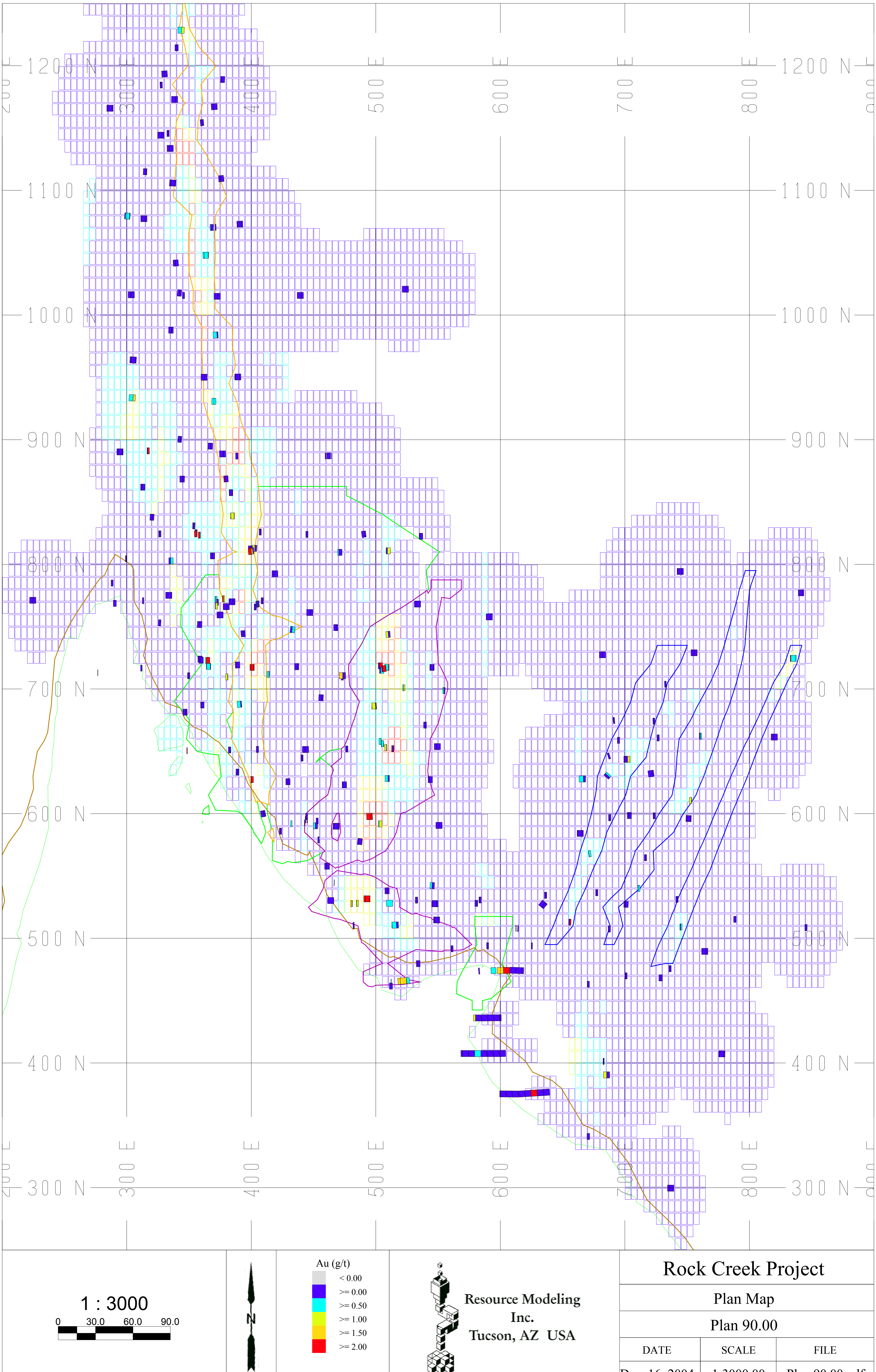
Plan Map

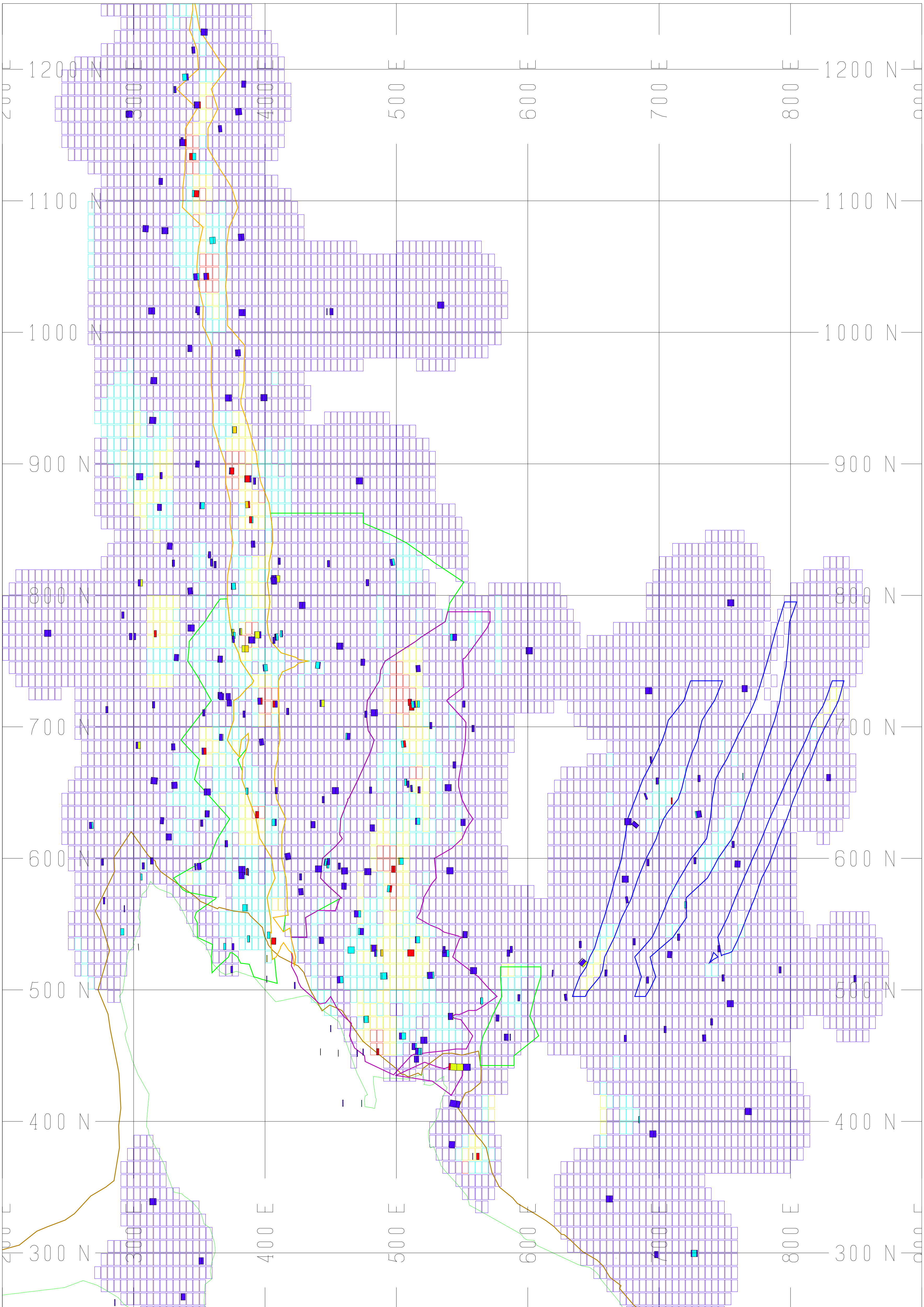
Plan 110.00

DATE	SCALE	FILE
Dec 16, 2004	1:3000.00	Plan 110.00.pdf



Rock Creek Project		
Plan Map		
Plan 100.00		
DATE	SCALE	FILE
Dec 16, 2004	1:3000.00	Plan 100.00.pdf


1200 N
1100 N
1000 N
900 N
800 N
700 N
600 N
500 N
400 N
300 N
300 E
400 E
500 E
600 E
700 E
800 E
1 : 3000
0 30.0 60.0 90.0
N
Au (g/t)
< 0.00
>= 0.00
>= 0.50
>= 1.00
>= 1.50
>= 2.00
Resource Modeling Inc.
Tucson, AZ USA
Rock Creek Project
Plan Map
Plan 90.00
DATE
SCALE
FILE
Dec 16, 2004
1:3000.00
Plan 90.00.pdf



1 : 3000

0 30.0 60.0 90.0

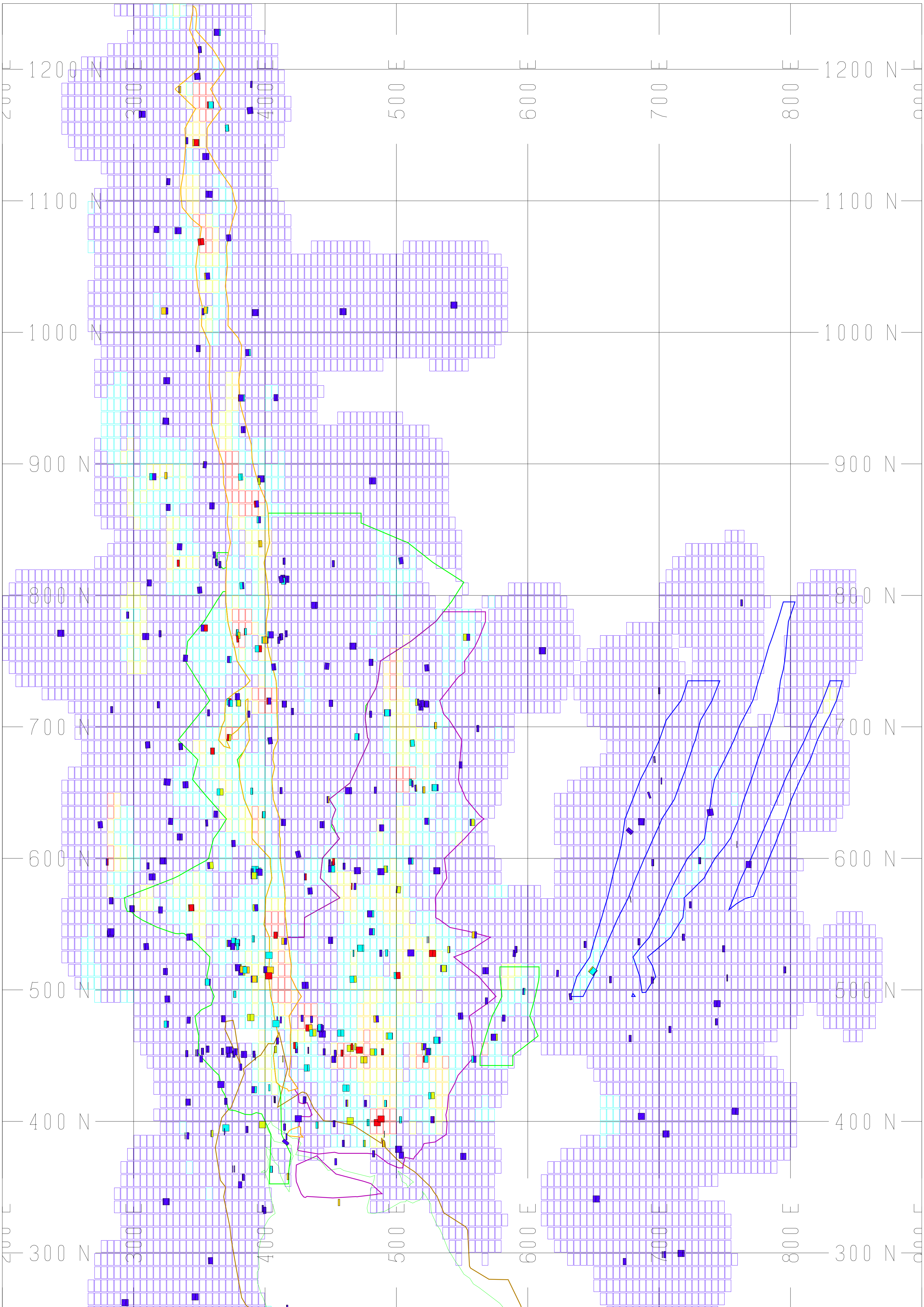
N

Au (g/t)

- < 0.00
- >= 0.00
- >= 0.50
- >= 1.00
- >= 1.50
- >= 2.00

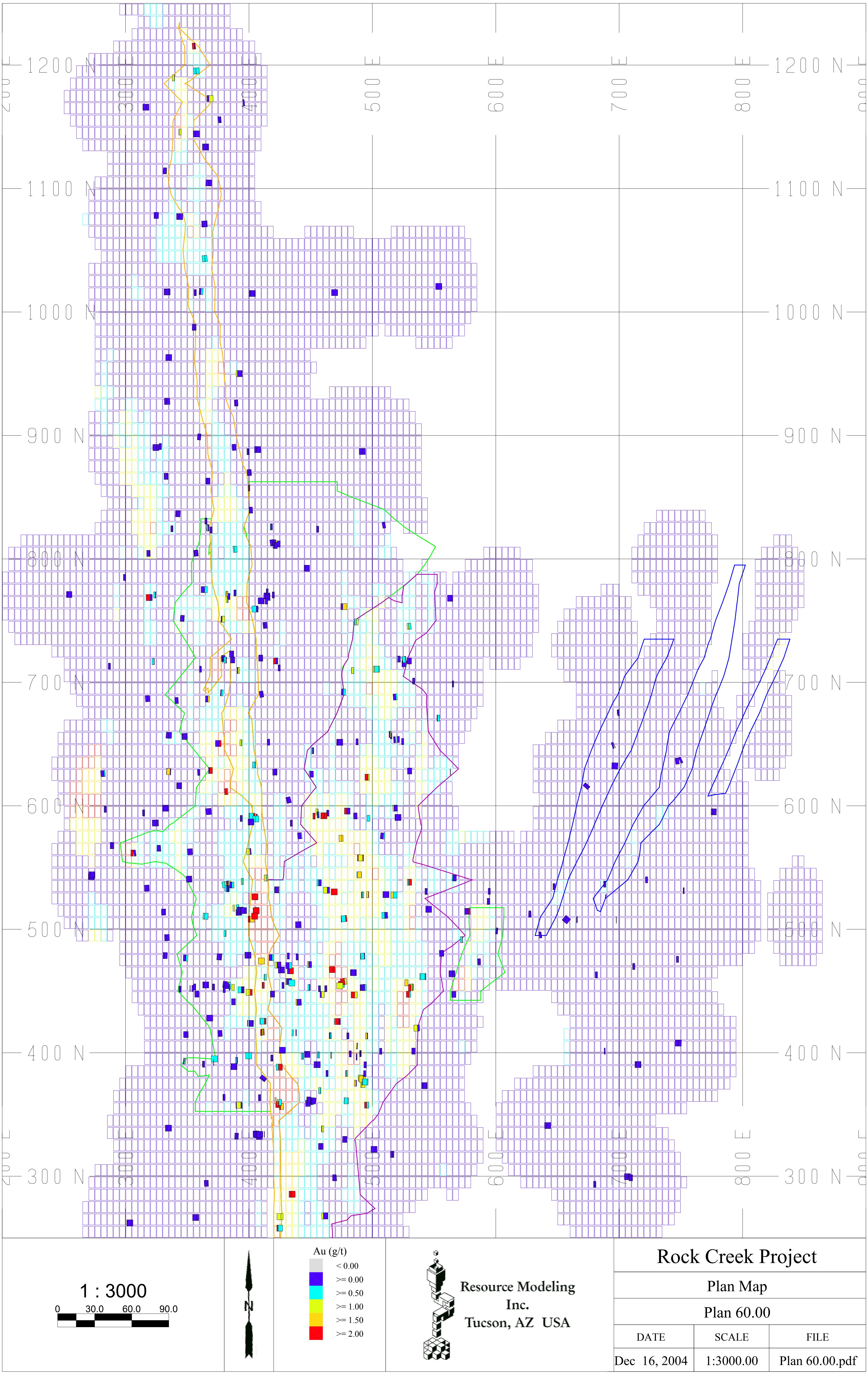
Resource Modeling Inc.
Tucson, AZ USA

Rock Creek Project		
Plan Map		
Plan 80.00		
DATE	SCALE	FILE
Dec 16, 2004	1:3000.00	Plan 80.00.pdf



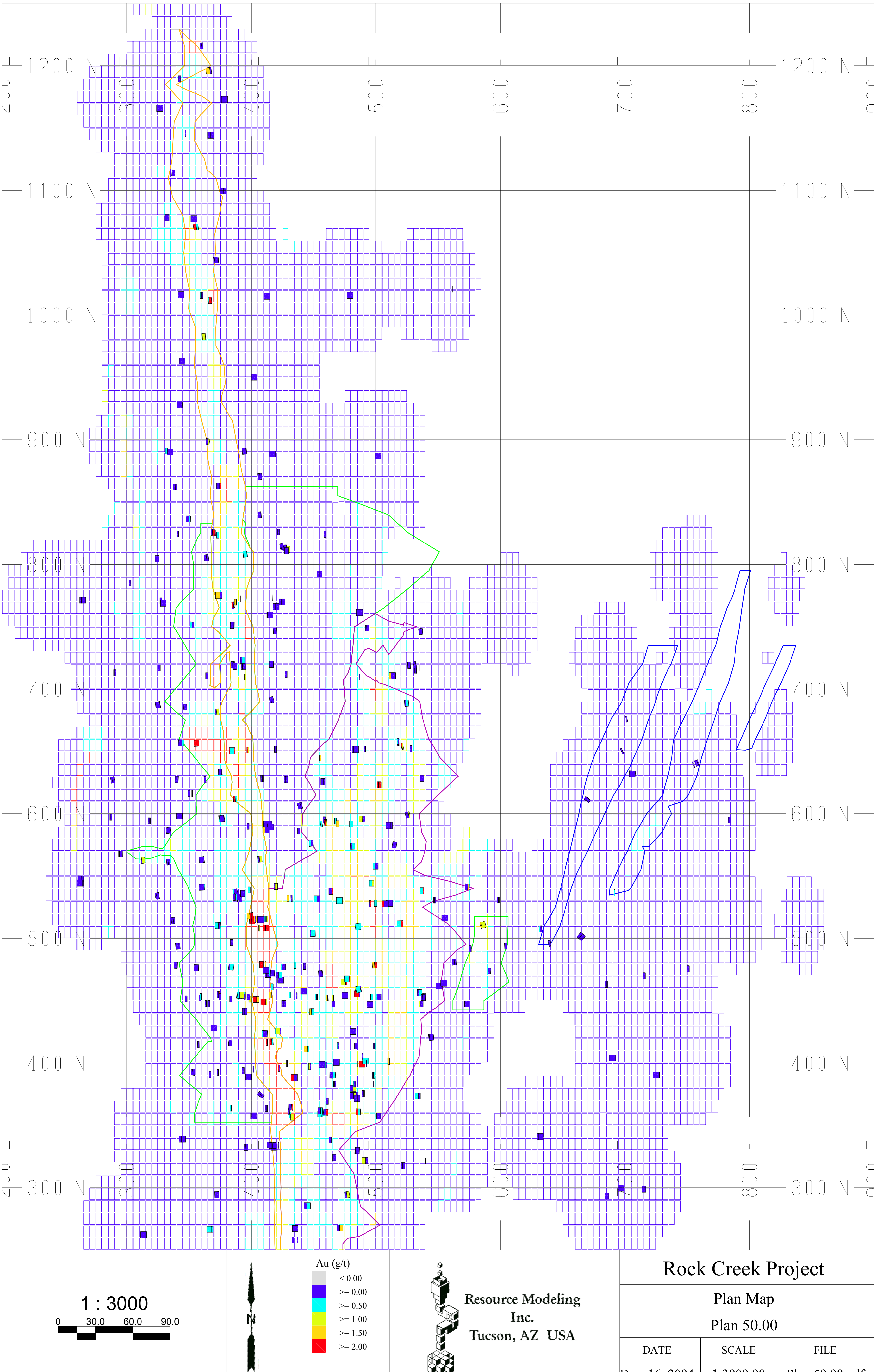
1 : 3000	N	Au (g/t)	Resource Modeling Inc. Tucson, AZ USA	Rock Creek Project
0 30.0 60.0 90.0		< 0.00 >= 0.00 >= 0.50 >= 1.00 >= 1.50 >= 2.00		Plan Map Plan 70.00

DATE	SCALE	FILE
Dec 16, 2004	1:3000.00	Plan 70.00.pdf

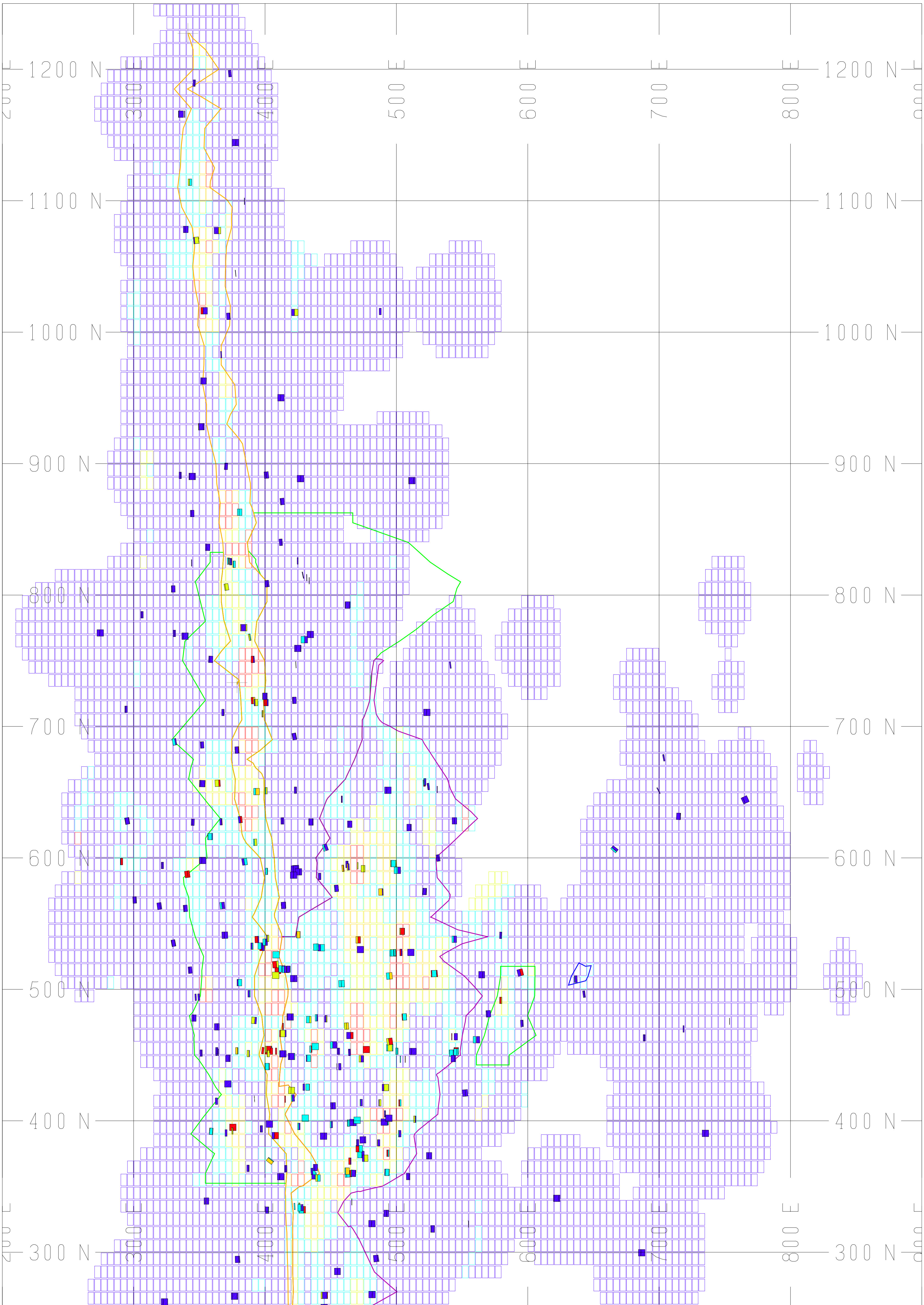


Resource Modeling Inc.
Tucson, AZ USA

Rock Creek Project		
Plan Map		
Plan 60.00		
DATE	SCALE	FILE
Dec 16, 2004	1:3000.00	Plan 60.00.pdf



Rock Creek Project		
Plan Map		
Plan 50.00		
DATE	SCALE	FILE
Dec 16, 2004	1:3000.00	Plan 50.00.pdf



1 : 3000

0 30.0 60.0 90.0

N

Au (g/t)
< 0.00
>= 0.00
>= 0.50
>= 1.00
>= 1.50
>= 2.00

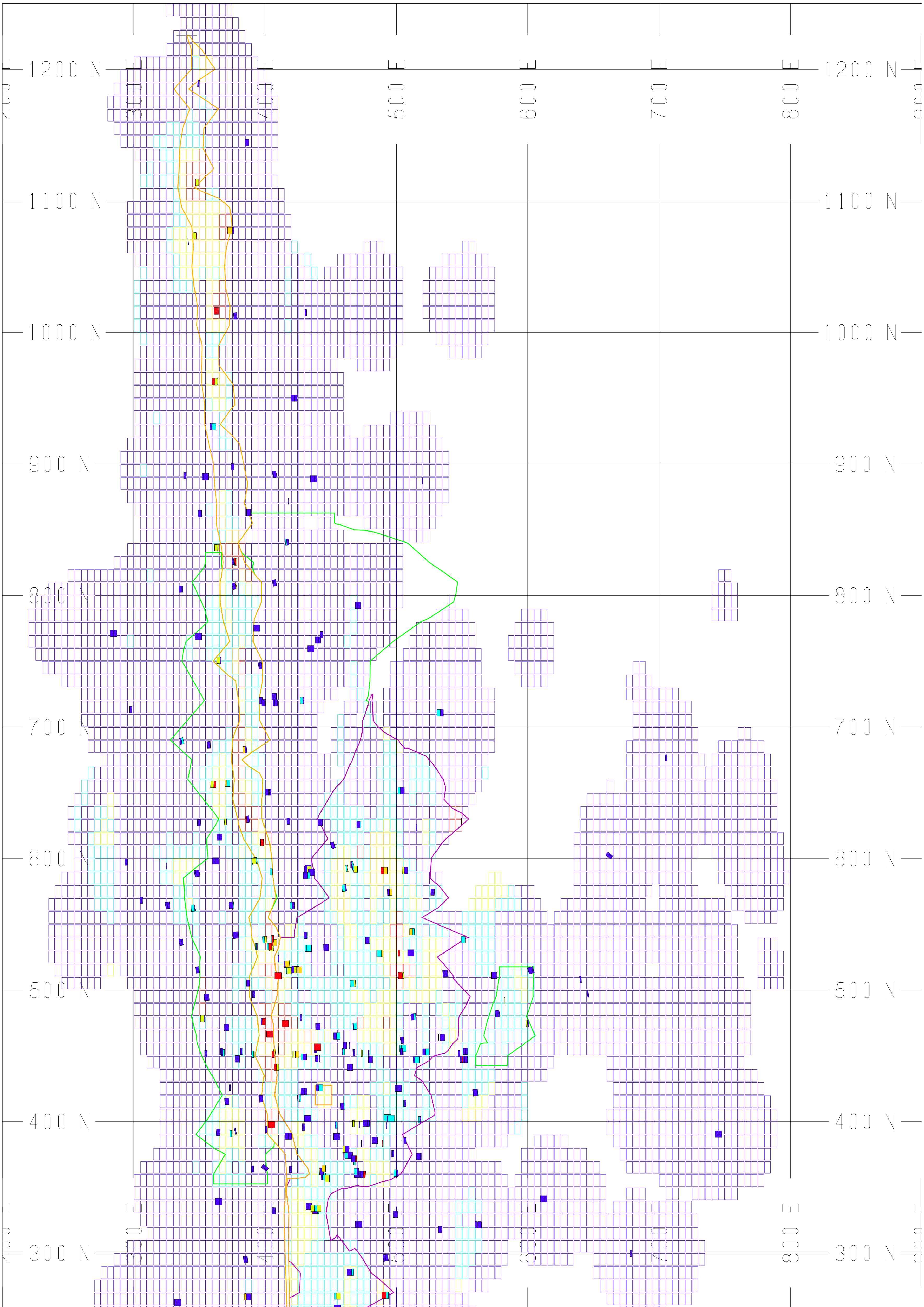
Resource Modeling Inc.
Tucson, AZ USA

Rock Creek Project

Plan Map

Plan 40.00

DATE	SCALE	FILE
Dec 16, 2004	1:3000.00	Plan 40.00.pdf



1 : 3000

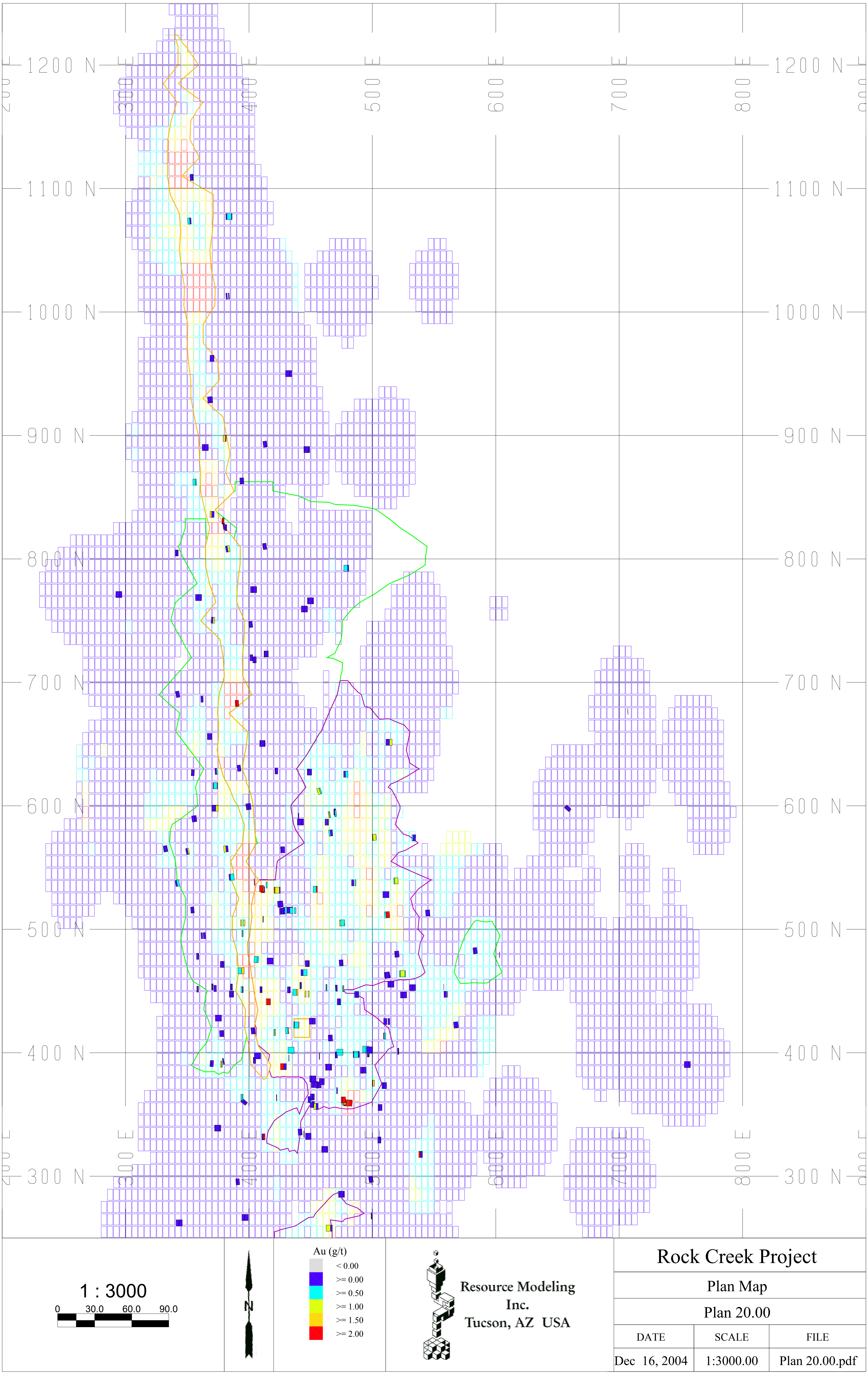
0 30.0 60.0 90.0

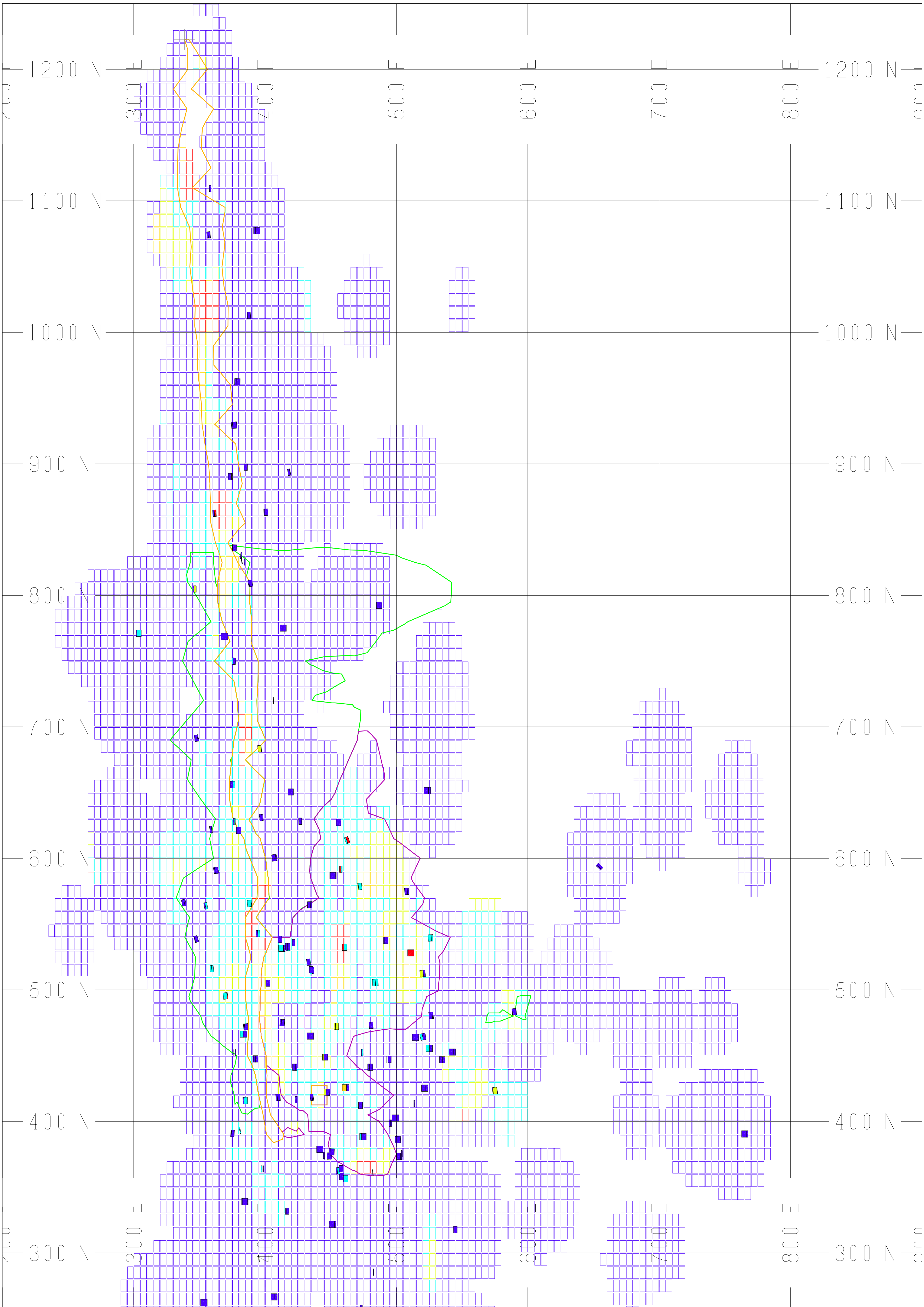
N

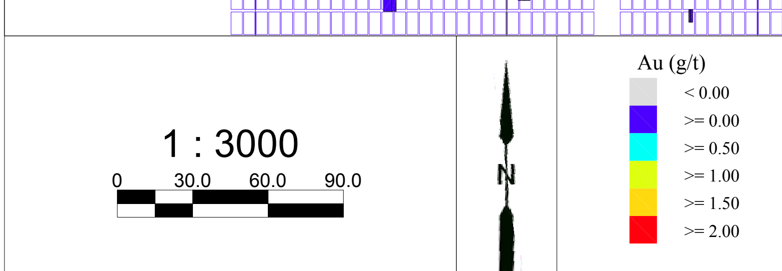
Au (g/t)
< 0.00
>= 0.00
>= 0.50
>= 1.00
>= 1.50
>= 2.00

Resource Modeling Inc.
Tucson, AZ USA

Rock Creek Project		
Plan Map		
Plan 30.00		
DATE	SCALE	FILE
Dec 16, 2004	1:3000.00	Plan 30.00.pdf

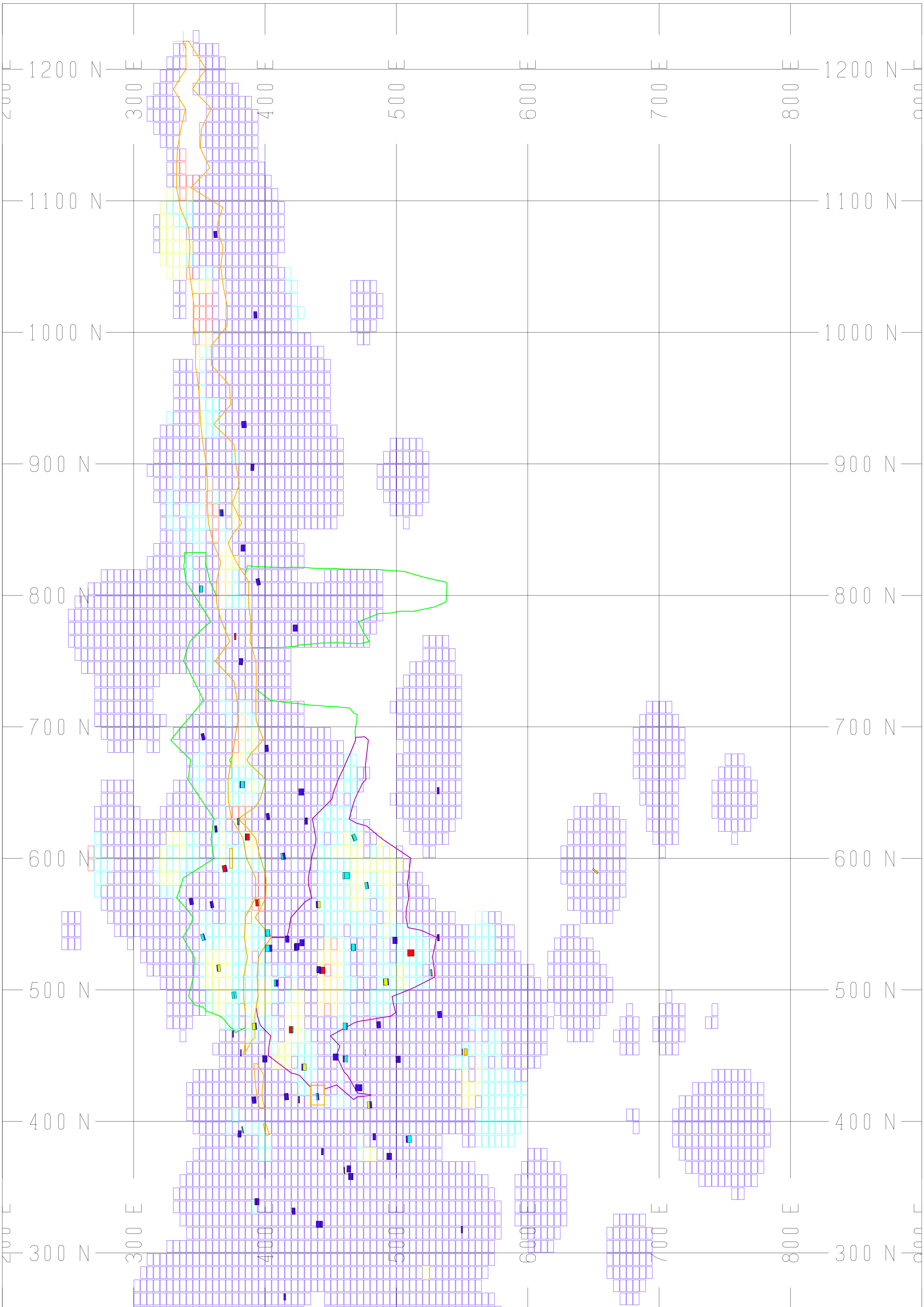

1200 N
1100 N
1000 N
900 N
800 N
700 N
600 N
500 N
400 N
300 N
300 E
400 E
500 E
600 E
700 E
800 E
1 : 3000
0 30.0 60.0 90.0
N
Au (g/t)
< 0.00
>= 0.00
>= 0.50
>= 1.00
>= 1.50
>= 2.00
Resource Modeling Inc.
Tucson, AZ USA
Rock Creek Project
Plan Map
Plan 20.00
DATE
Dec 16, 2004
SCALE
1:3000.00
FILE
Plan 20.00.pdf





Resource Modeling
Inc.
Tucson, AZ USA

Rock Creek Project		
Plan Map		
Plan 10.00		
DATE	SCALE	FILE
Dec 16, 2004	1:3000.00	Plan 10.00.pdf



1 : 3000

0 30.0 60.0 90.0

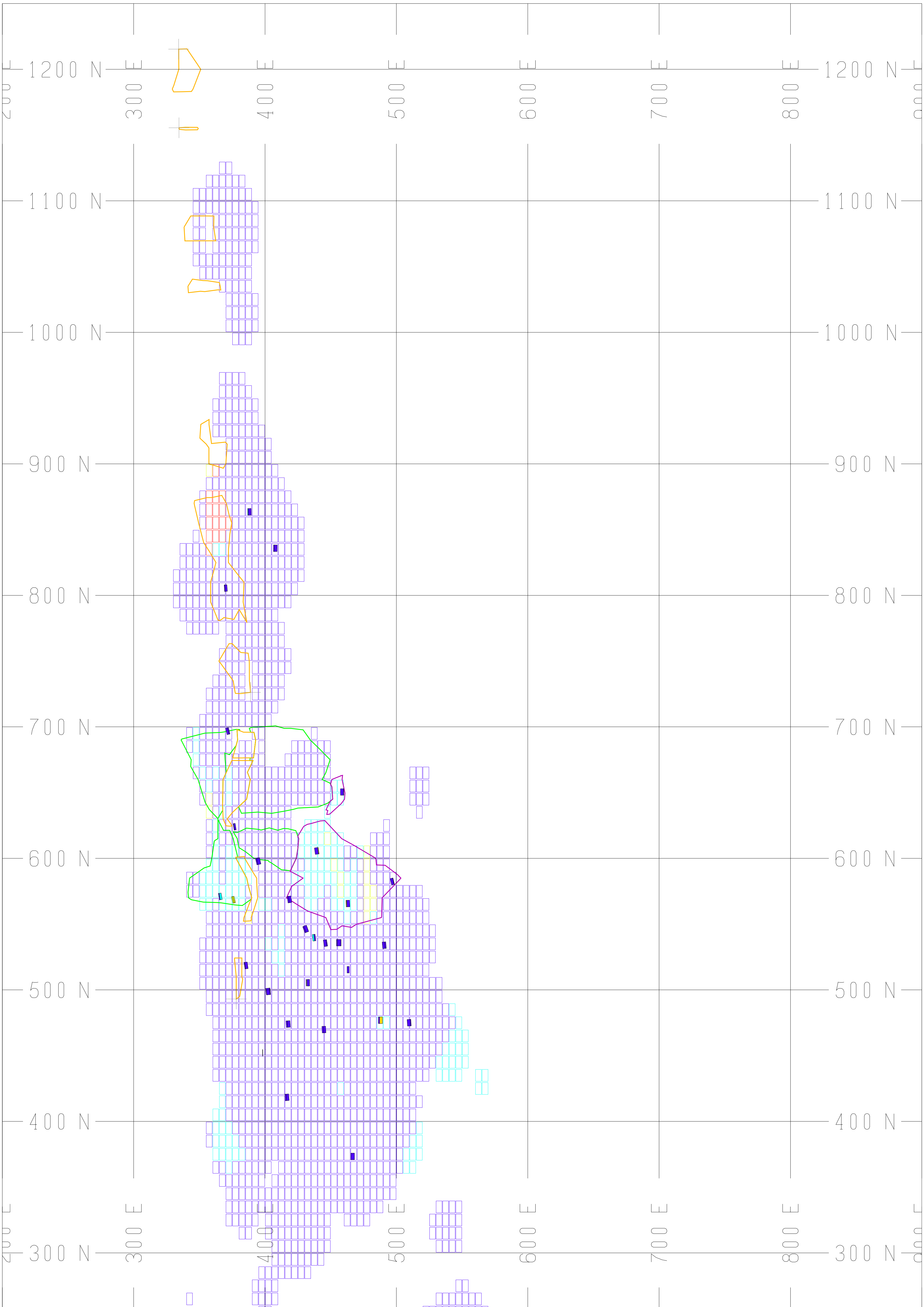
N

Au (g/t)

- < 0.00
- >= 0.00
- >= 0.50
- >= 1.00
- >= 1.50
- >= 2.00

Resource Modeling Inc.
Tucson, AZ USA

Rock Creek Project		
Plan Map		
Plan -0.00		
DATE	SCALE	FILE
Dec 16, 2004	1:3000.00	Plan -0.00.pdf



1 : 3000

0 30.0 60.0 90.0

N

Au (g/t)

- < 0.00
- >= 0.00
- >= 0.50
- >= 1.00
- >= 1.50
- >= 2.00

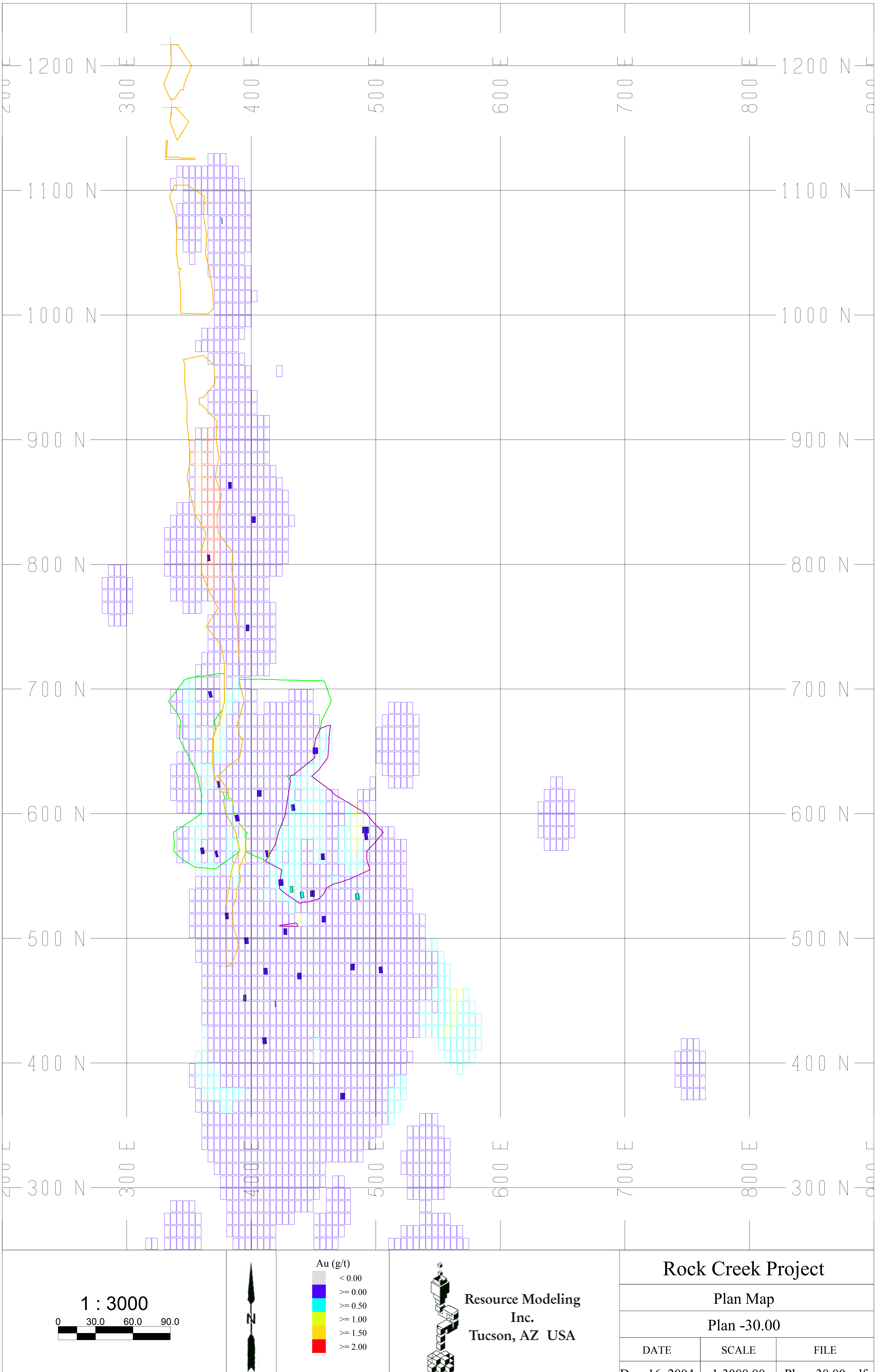
Resource Modeling Inc.
Tucson, AZ USA

Rock Creek Project

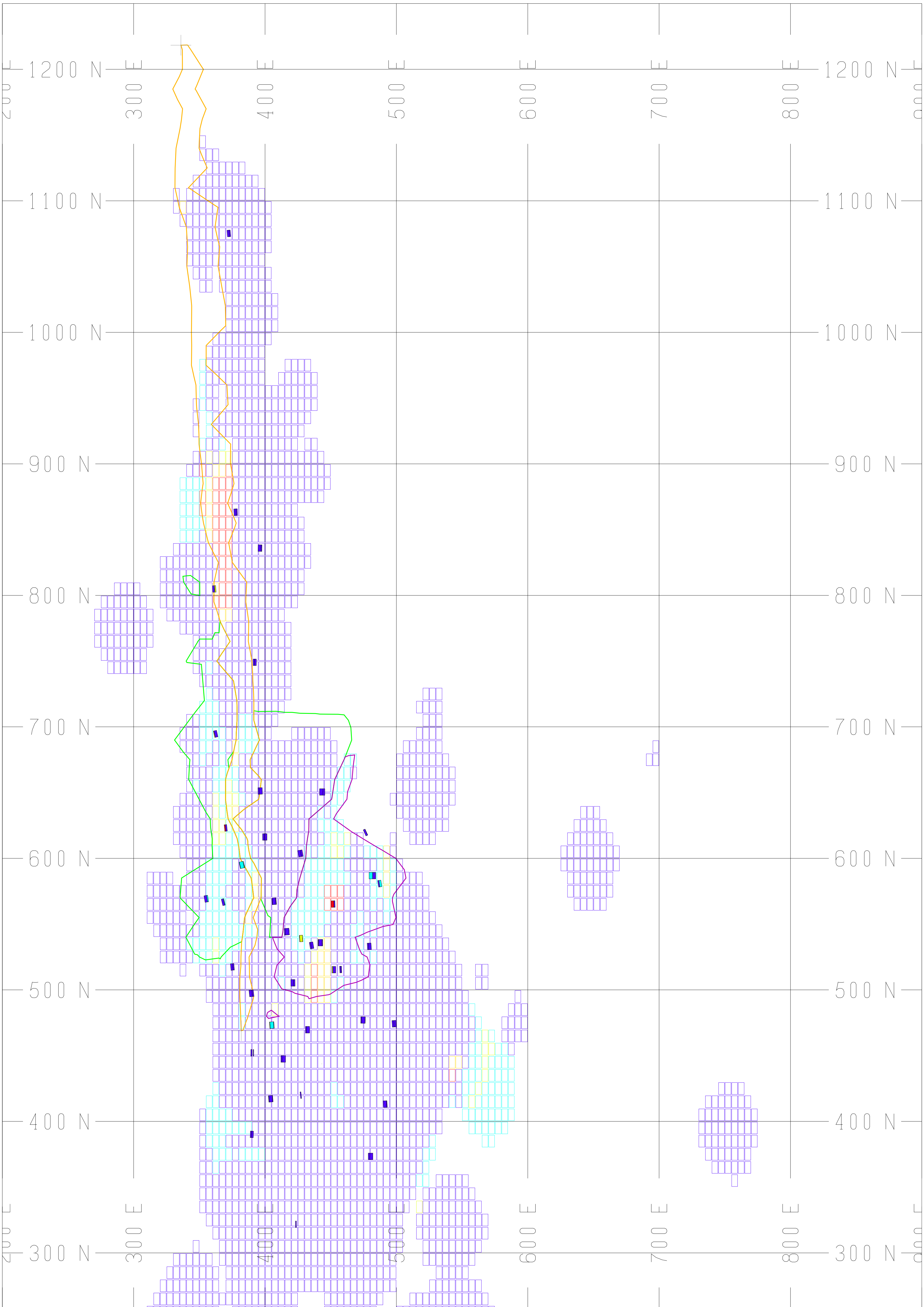
Plan Map

Plan -40.00

DATE	SCALE	FILE
Dec 16, 2004	1:3000.00	Plan -40.00.pdf



Rock Creek Project		
Plan Map		
Plan -30.00		
DATE	SCALE	FILE
Dec 16, 2004	1:3000.00	Plan -30.00.pdf



1 : 3000

0 30.0 60.0 90.0

N

Au (g/t)
< 0.00
>= 0.00
>= 0.50
>= 1.00
>= 1.50
>= 2.00

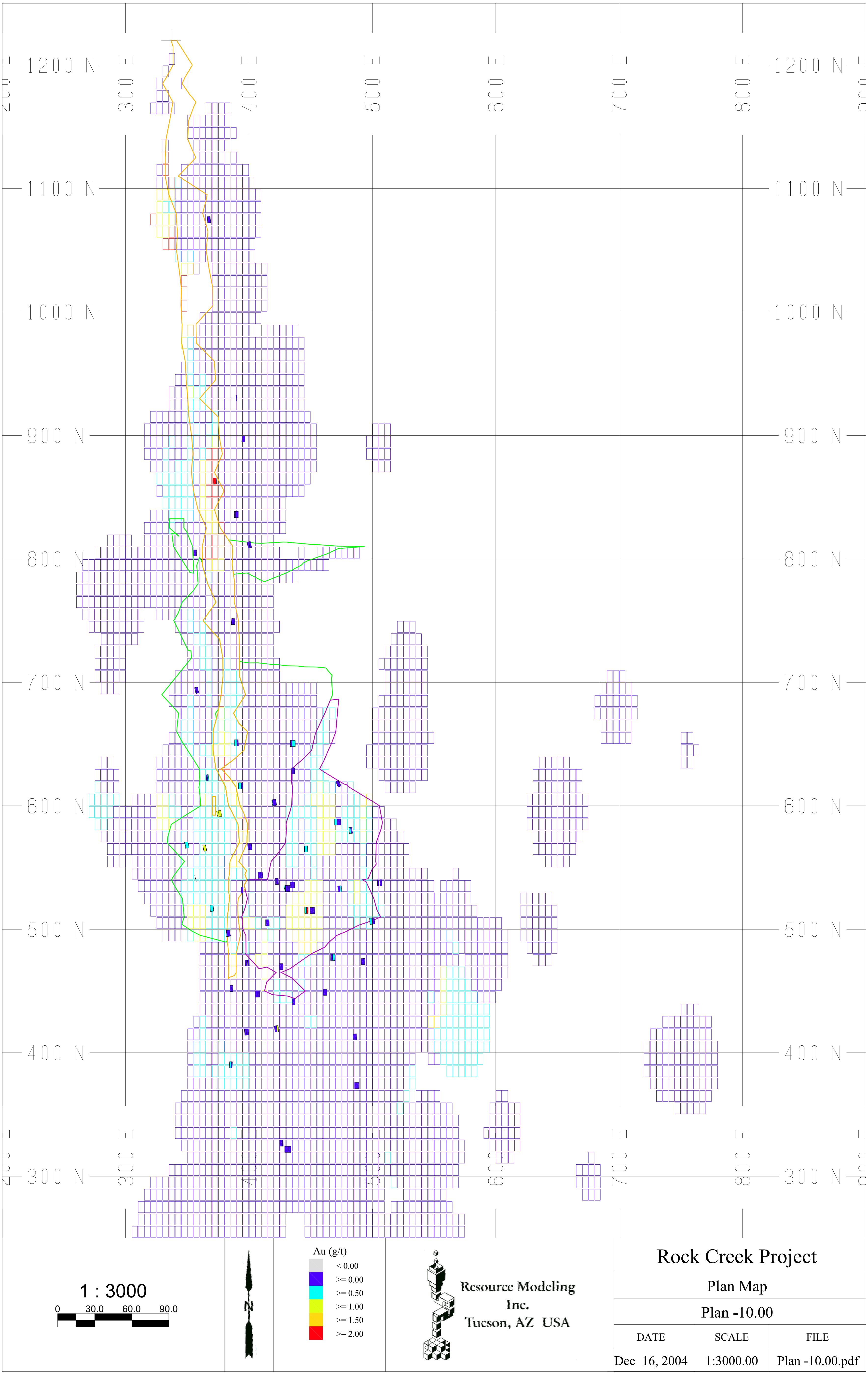
Resource Modeling Inc.
Tucson, AZ USA

Rock Creek Project

Plan Map

Plan -20.00

DATE	SCALE	FILE
Dec 16, 2004	1:3000.00	Plan -20.00.pdf



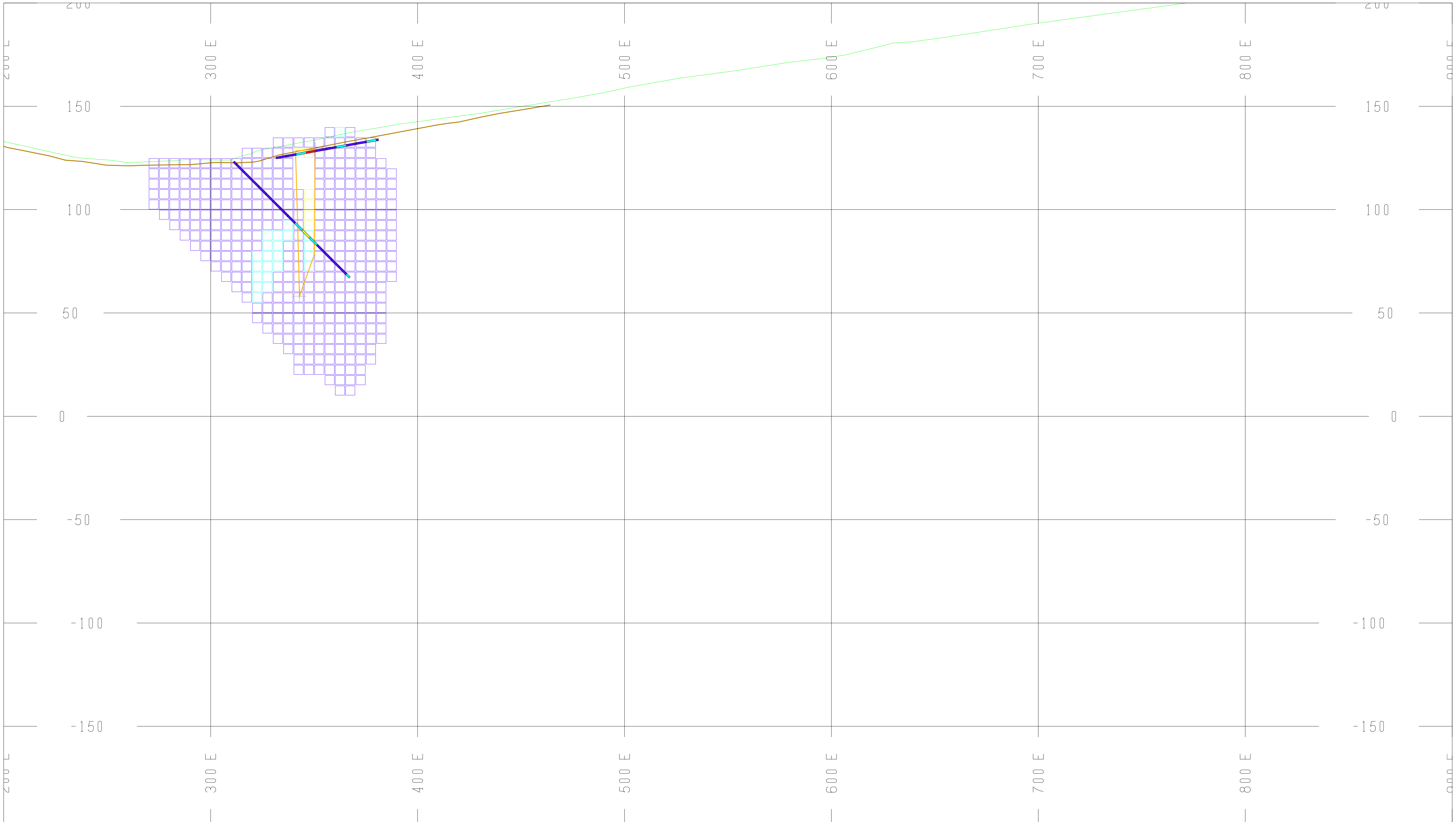
Resource Modeling Inc.
Tucson, AZ USA

Rock Creek Project

Plan Map

Plan -10.00

DATE	SCALE	FILE
Dec 16, 2004	1:3000.00	Plan -10.00.pdf



1 : 2000

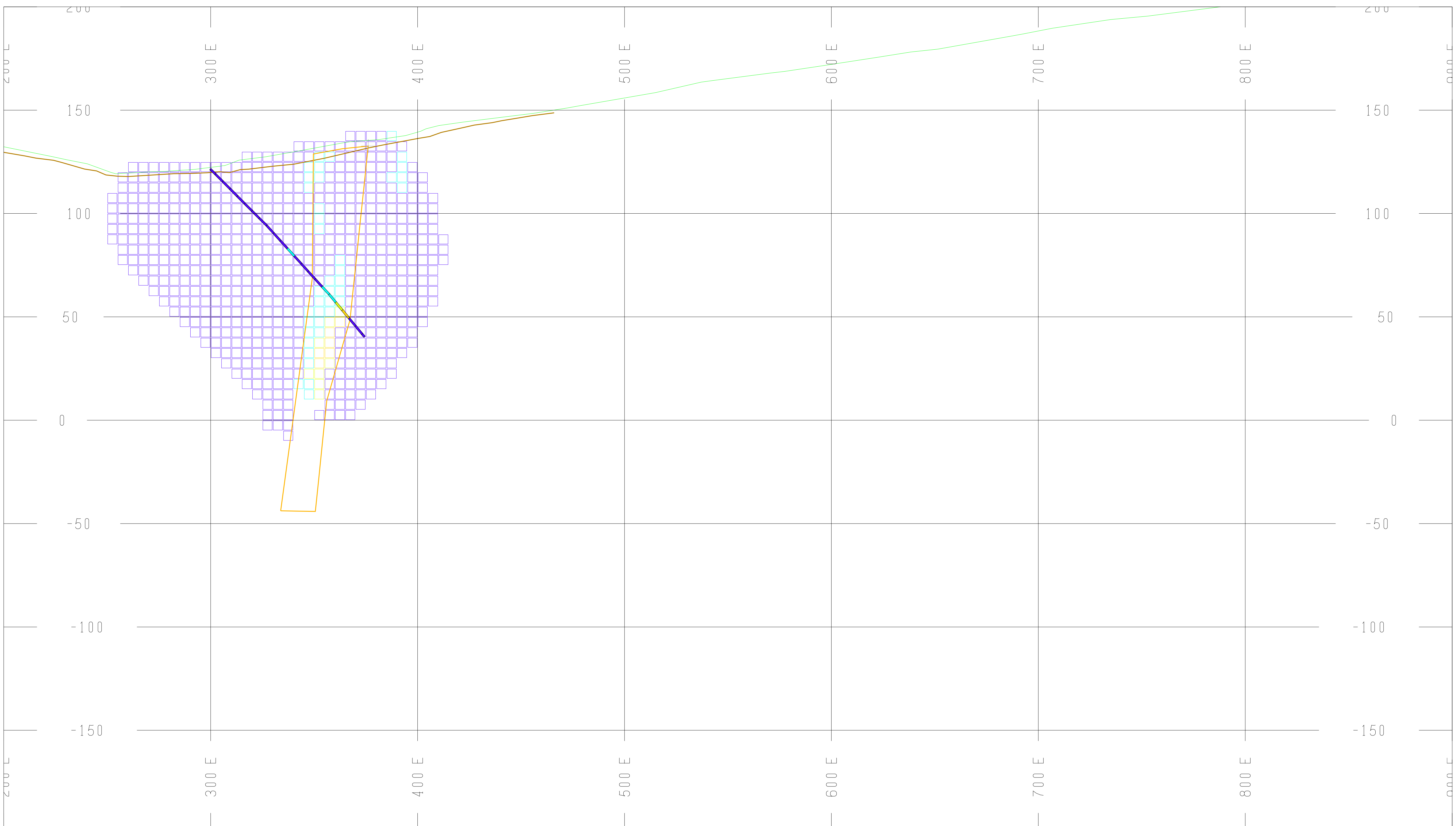
0 20.0 40.0 60.0 80.0 100 120 140 160

N

Au (g/t)
< 0.00
>= 0.00
>= 0.50
>= 1.00
>= 1.50
>= 2.00

Resource Modeling Inc.
Tucson, AZ USA

DATE:	Dec 16, 2004	**Rock Creek Project**
SCALE:	1: 2000.00	**EW Cross Sections**
FILE:	North 1230.00.pdf	**North 1230.00**



1 : 2000

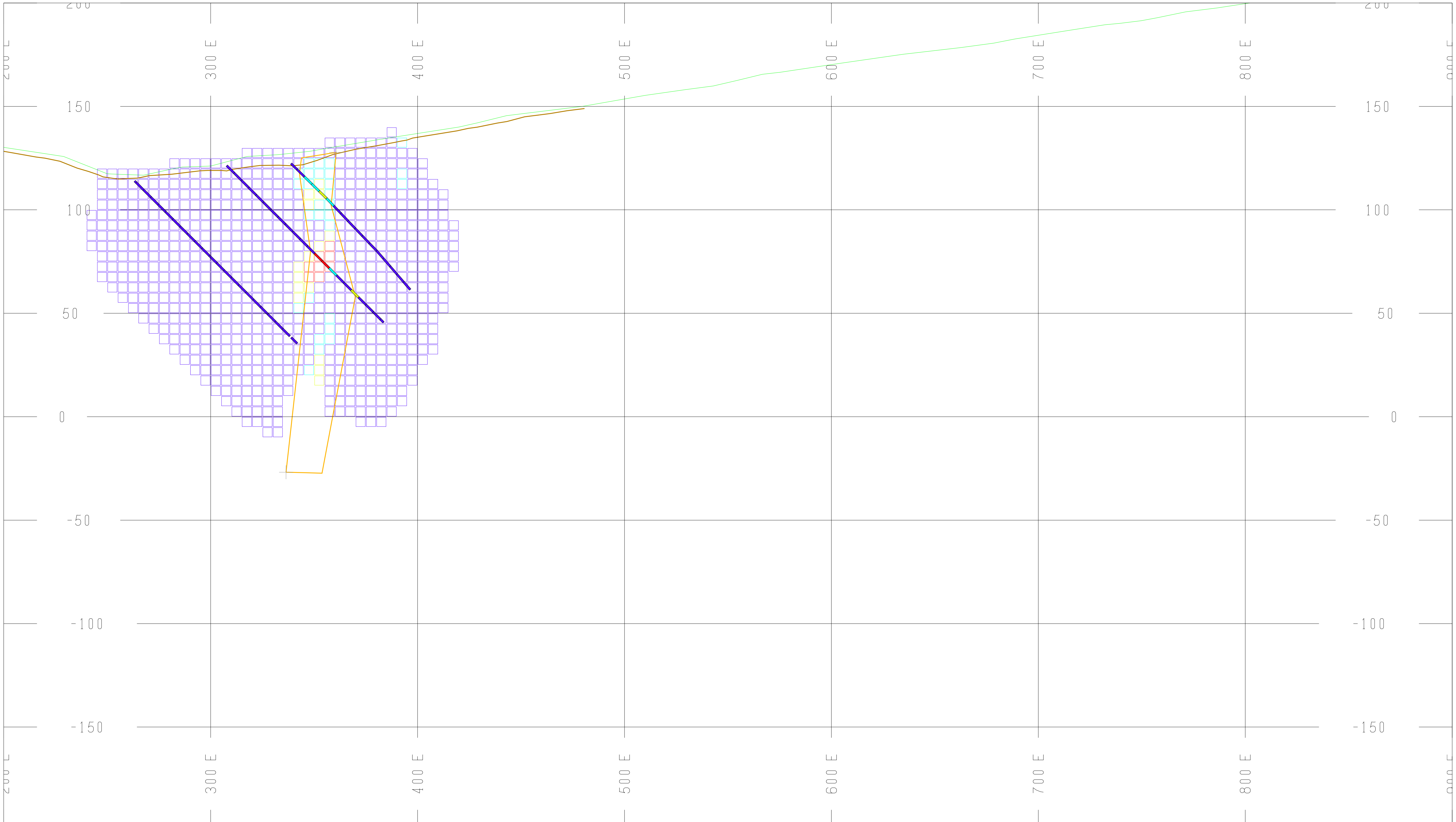
0 20.0 40.0 60.0 80.0 100 120 140 160

N

Au (g/t)
< 0.00
>= 0.00
>= 0.50
>= 1.00
>= 1.50
>= 2.00

Resource Modeling Inc.
Tucson, AZ USA

DATE:	Dec 16, 2004	**Rock Creek Project**
SCALE:	1: 2000.00	**EW Cross Sections**
FILE:	North 1200.00.pdf	**North 1200.00**



1 : 2000

0 20.0 40.0 60.0 80.0 100 120 140 160

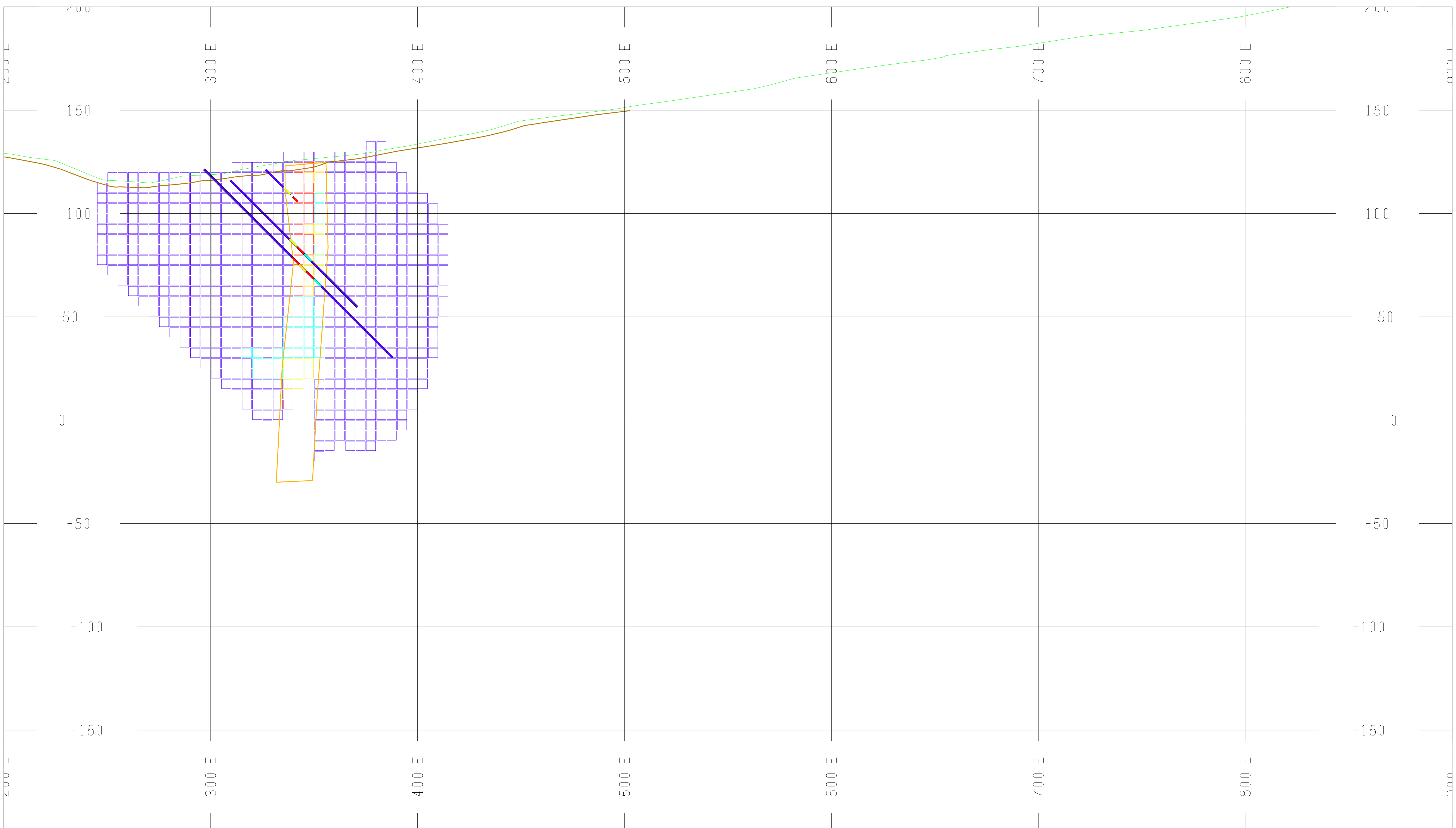
N

Au (g/t)

	< 0.00
	>= 0.00
	>= 0.50
	>= 1.00
	>= 1.50
	>= 2.00

Resource Modeling Inc.
Tucson, AZ USA

DATE:	Dec 16, 2004	**Rock Creek Project**
SCALE:	1: 2000.00	**EW Cross Sections**
FILE:	North 1170.00.pdf	**North 1170.00**



1 : 2000

0 20.0 40.0 60.0 80.0 100 120 140 160

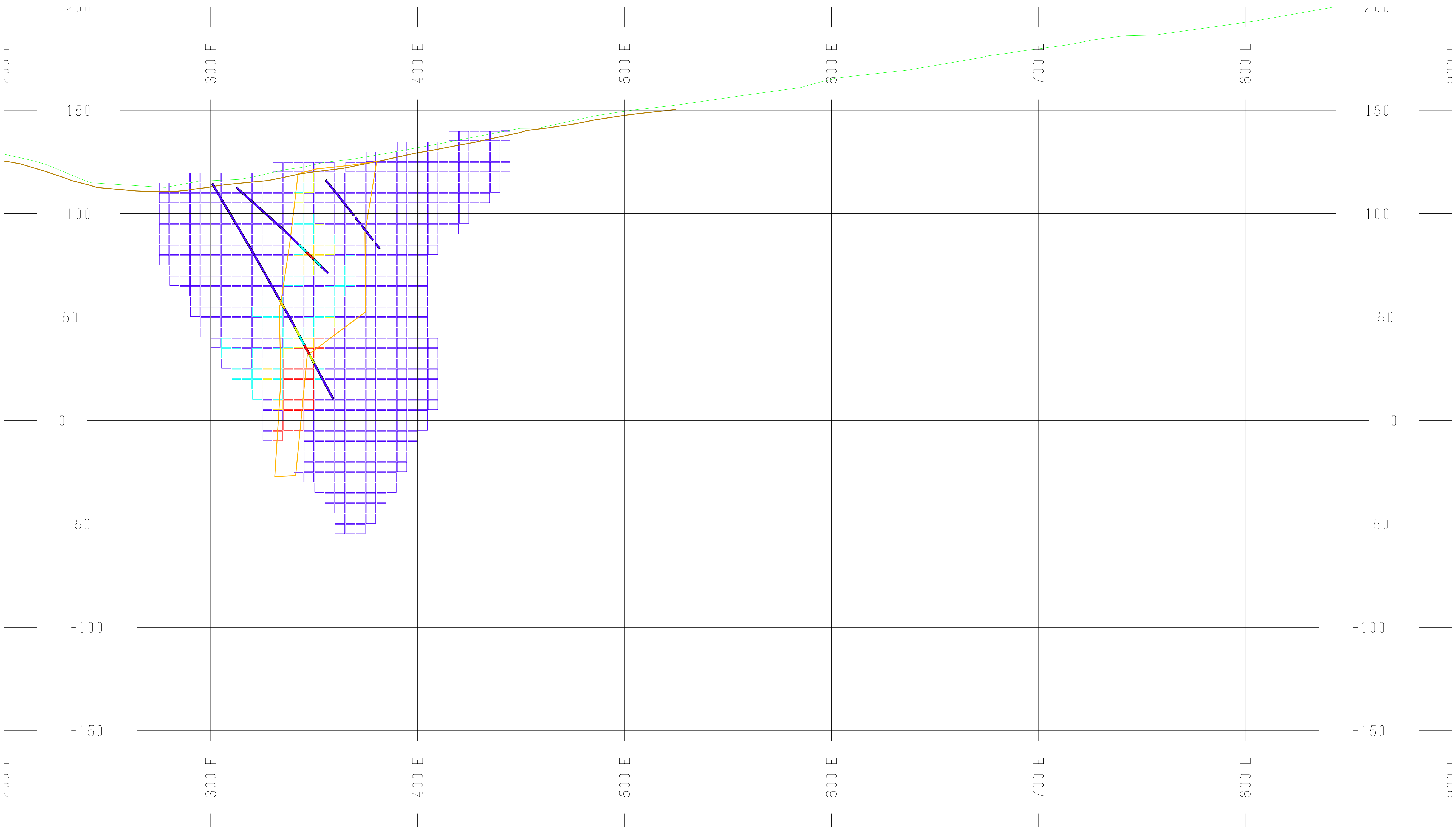
N

Au (g/t)

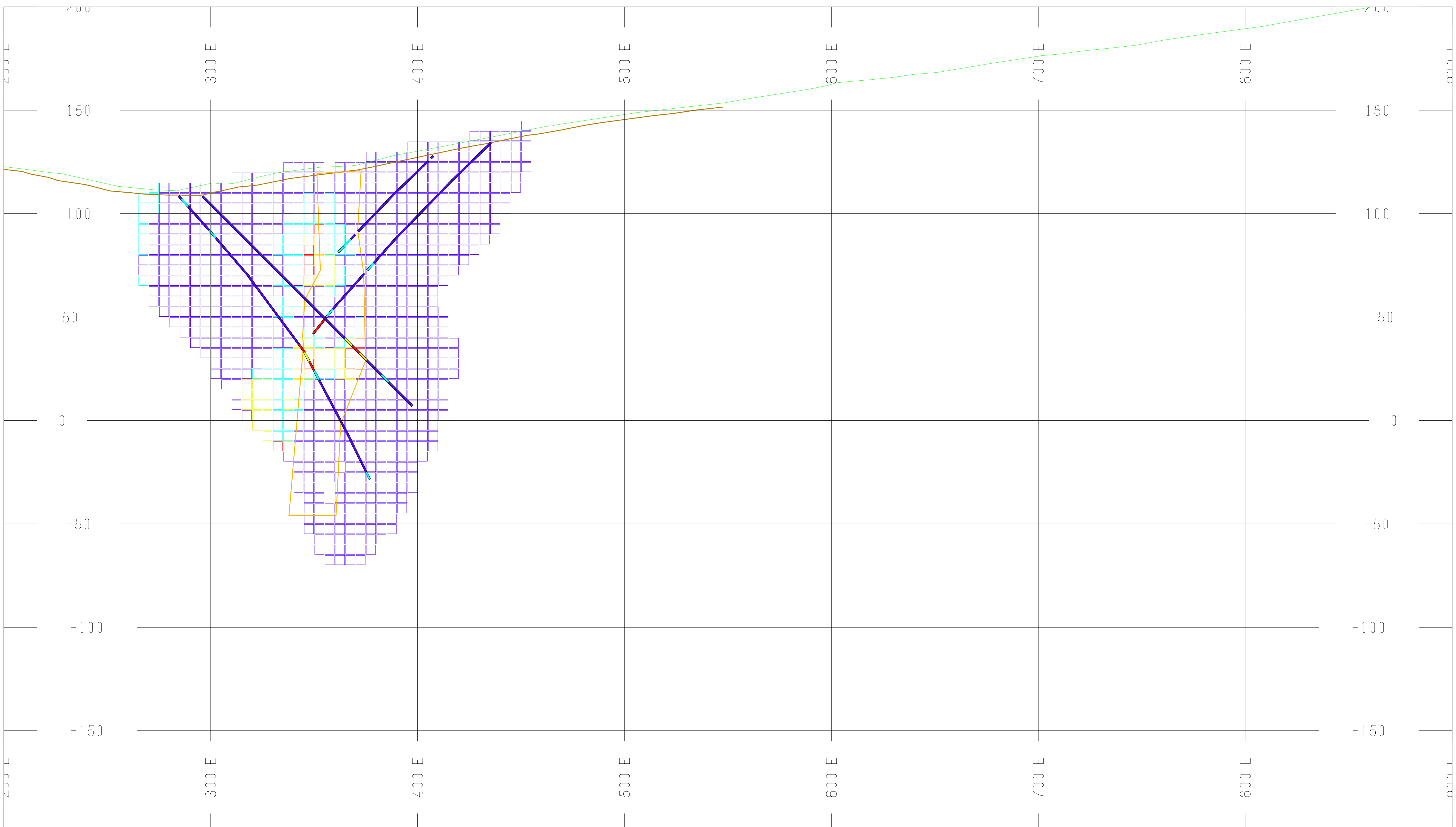
- < 0.00
- >= 0.00
- >= 0.50
- >= 1.00
- >= 1.50
- >= 2.00

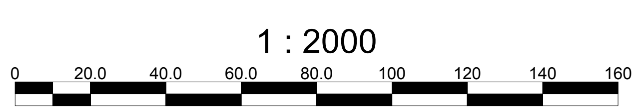
Resource Modeling Inc.
Tucson, AZ USA

DATE:	Dec 16, 2004	**Rock Creek Project**
SCALE:	1: 2000.00	**EW Cross Sections**
FILE:	North 1140.00.pdf	**North 1140.00**



1 : 2000 (scale bar 0 – 160)	N	Au (g/t): < 0.00; >= 0.00; >= 0.50; >= 1.00; >= 1.50; >= 2.00	Resource Modeling Inc. Tucson, AZ USA	DATE: Dec 16, 2004	**Rock Creek Project**
				SCALE: 1: 2000.00	**EW Cross Sections**
				FILE: North 1110.00.pdf	**North 1110.00**



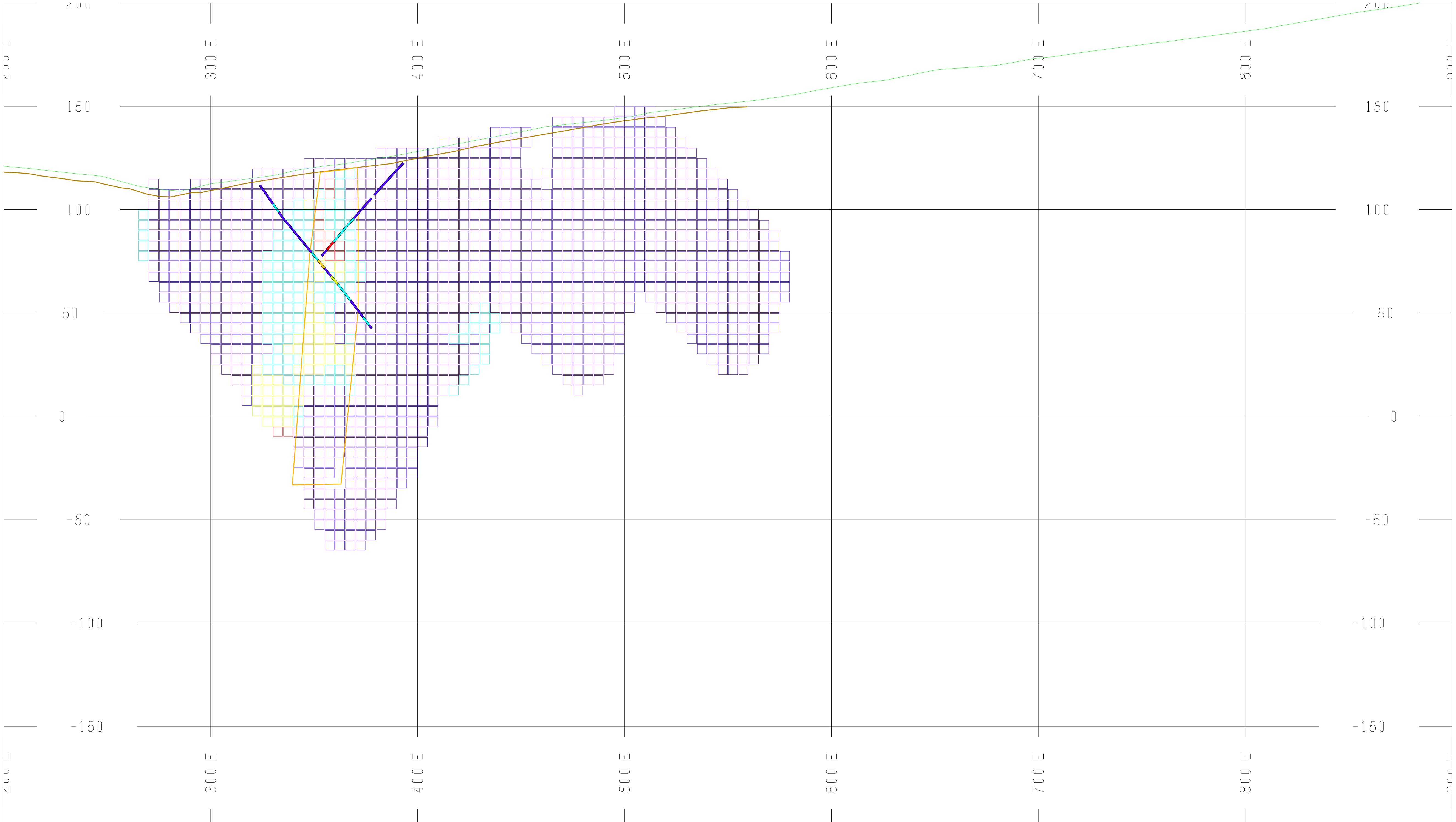


Au (g/t)

- < 0.00
- >= 0.00
- >= 0.50
- >= 1.00
- >= 1.50
- >= 2.00

Resource Modeling Inc.
Tucson, AZ USA

DATE:	Dec 16, 2004	**Rock Creek Project**
SCALE:	1: 2000.00	**EW Cross Sections**
FILE:	North 1080.00.pdf	**North 1080.00**



1 : 2000

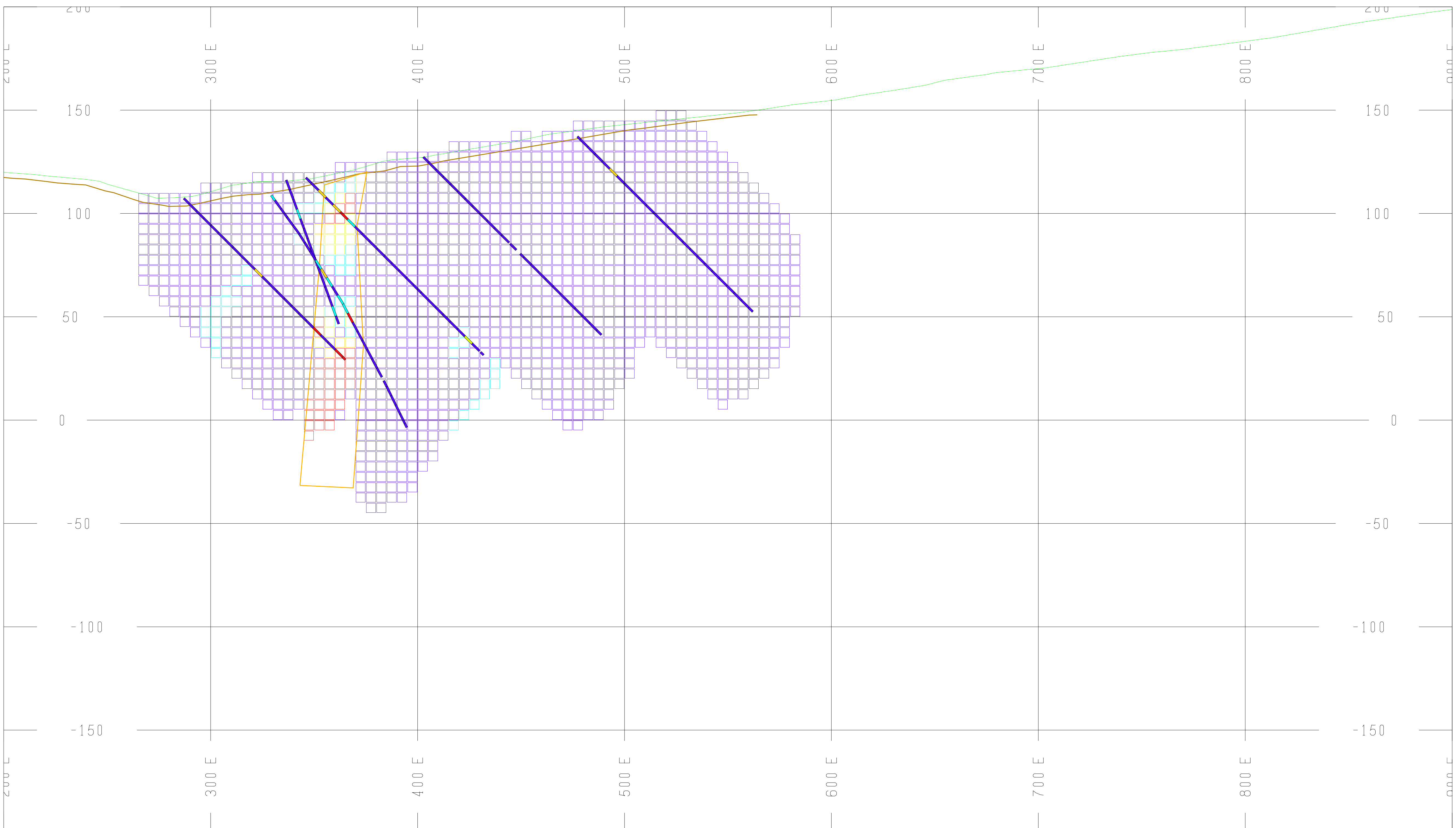
0 20.0 40.0 60.0 80.0 100 120 140 160

N

Au (g/t)
< 0.00
>= 0.00
>= 0.50
>= 1.00
>= 1.50
>= 2.00

Resource Modeling Inc.
Tucson, AZ USA

DATE:	Dec 16, 2004	**Rock Creek Project**
SCALE:	1: 2000.00	**EW Cross Sections**
FILE:	North 1050.00.pdf	**North 1050.00**



1 : 2000

0 20.0 40.0 60.0 80.0 100 120 140 160

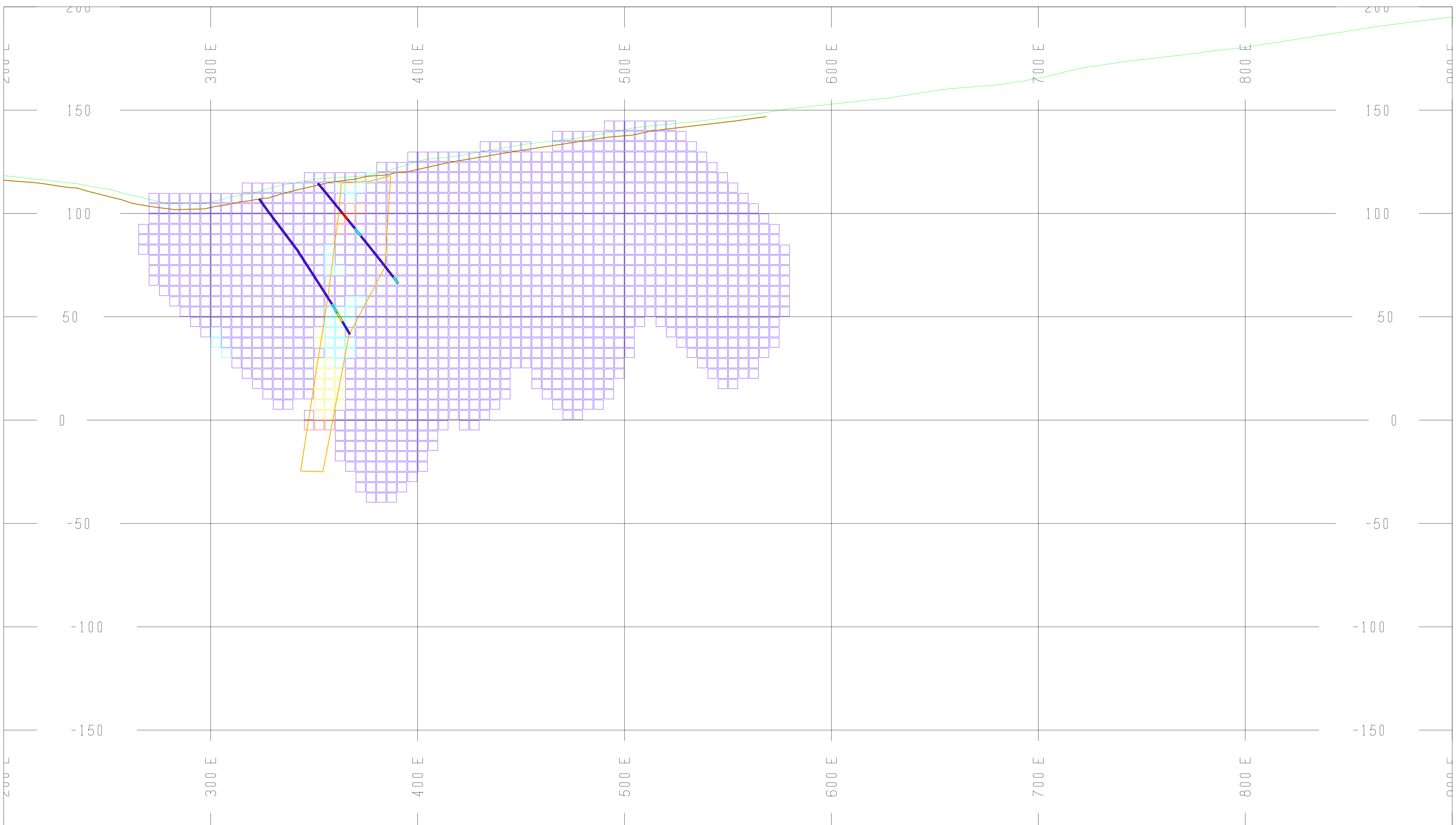
N

Au (g/t)

	< 0.00
	>= 0.00
	>= 0.50
	>= 1.00
	>= 1.50
	>= 2.00

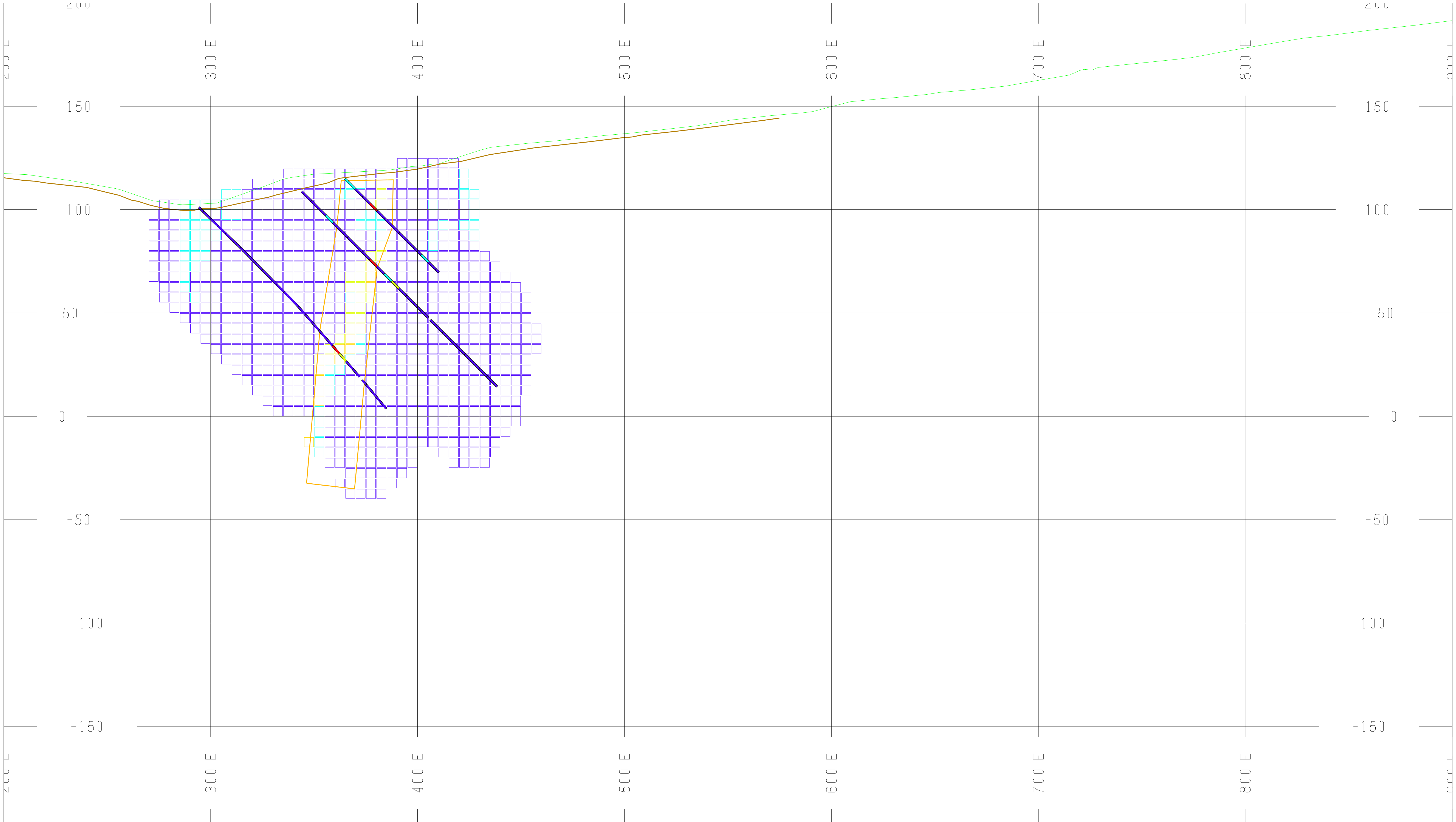
Resource Modeling Inc.
Tucson, AZ USA

DATE:	Dec 16, 2004	**Rock Creek Project**
SCALE:	1: 2000.00	**EW Cross Sections**
FILE:	North 1020.00.pdf	**North 1020.00**



1 : 2000 (scale bar 0, 20.0, 40.0, 60.0, 80.0, 100, 120, 140, 160)	N	Au (g/t): < 0.00; >= 0.00; >= 0.50; >= 1.00; >= 1.50; >= 2.00	Resource Modeling Inc. Tucson, AZ USA

DATE:	Dec 16, 2004	**Rock Creek Project**
SCALE:	1: 2000.00	**EW Cross Sections**
FILE:	North 990.00.pdf	**North 990.00**



1 : 2000

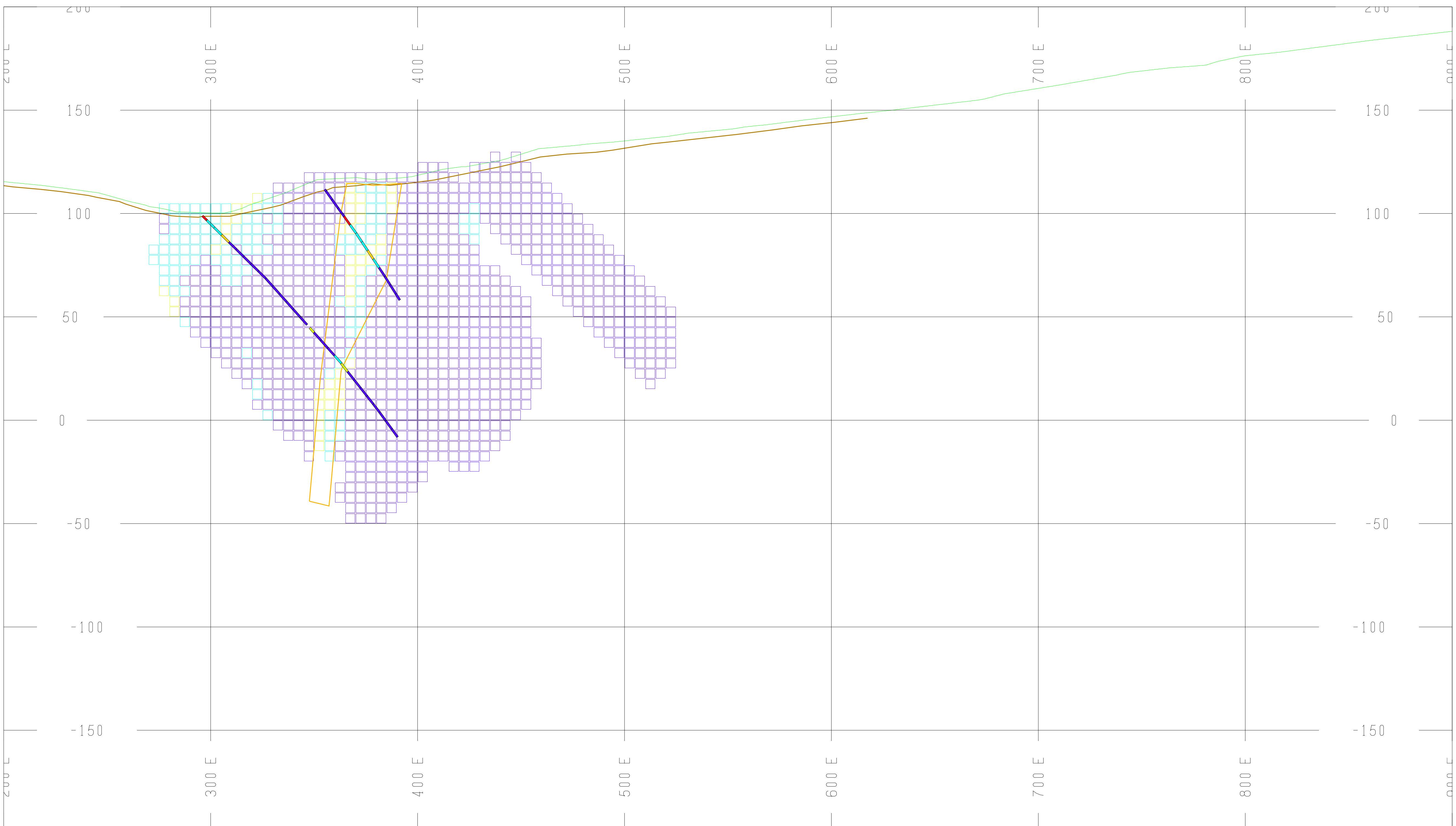
0 20.0 40.0 60.0 80.0 100 120 140 160

N

Au (g/t)
< 0.00
>= 0.00
>= 0.50
>= 1.00
>= 1.50
>= 2.00

Resource Modeling Inc.
Tucson, AZ USA

DATE:	Dec 16, 2004	**Rock Creek Project**
SCALE:	1: 2000.00	**EW Cross Sections**
FILE:	North 960.00.pdf	**North 960.00**



1 : 2000

0 20.0 40.0 60.0 80.0 100 120 140 160

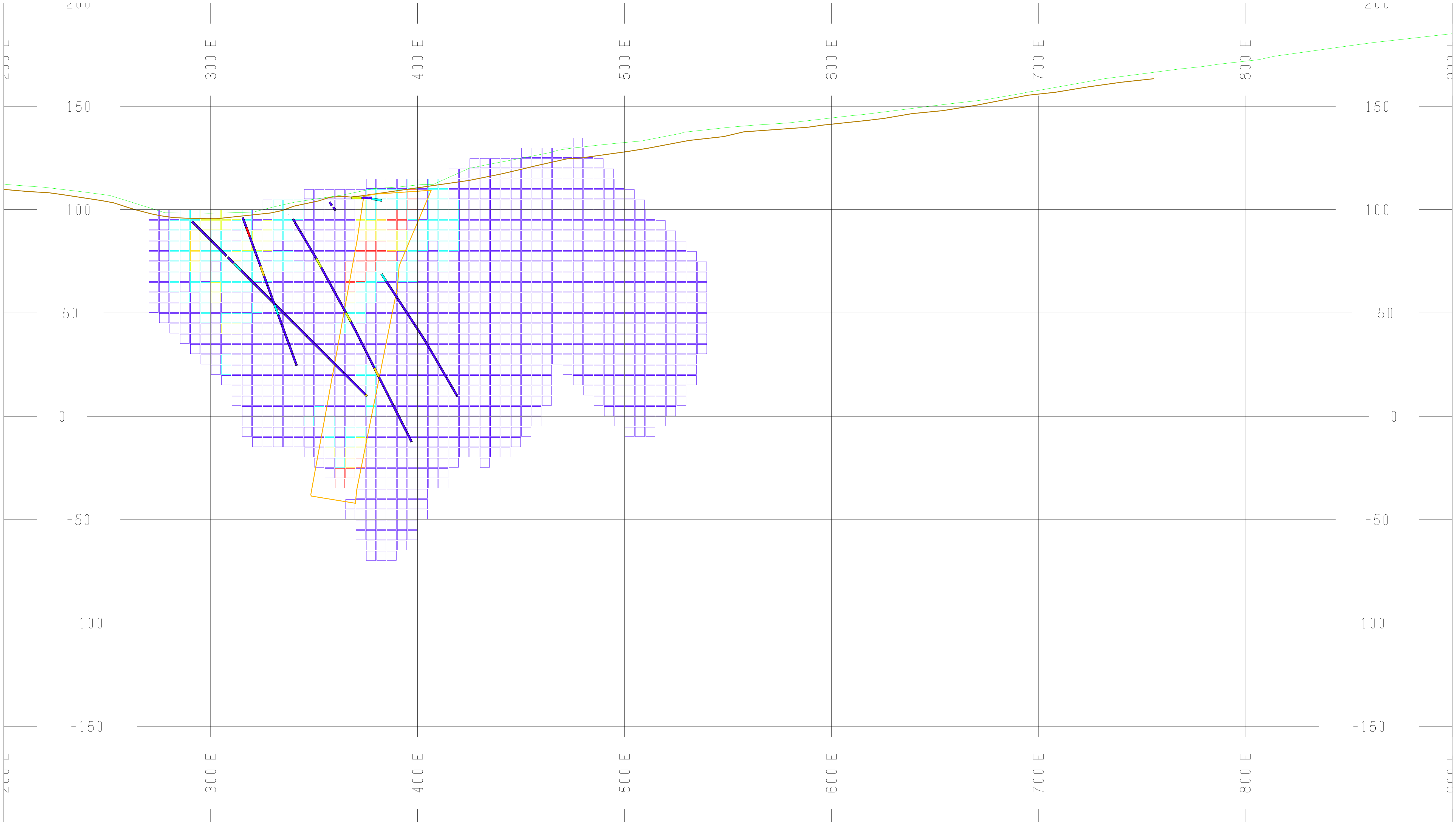
N

Au (g/t)

- < 0.00
- >= 0.00
- >= 0.50
- >= 1.00
- >= 1.50
- >= 2.00

Resource Modeling Inc.
Tucson, AZ USA

DATE:	Dec 16, 2004	**Rock Creek Project**
SCALE:	1: 2000.00	**EW Cross Sections**
FILE:	North 930.00.pdf	**North 930.00**



1 : 2000

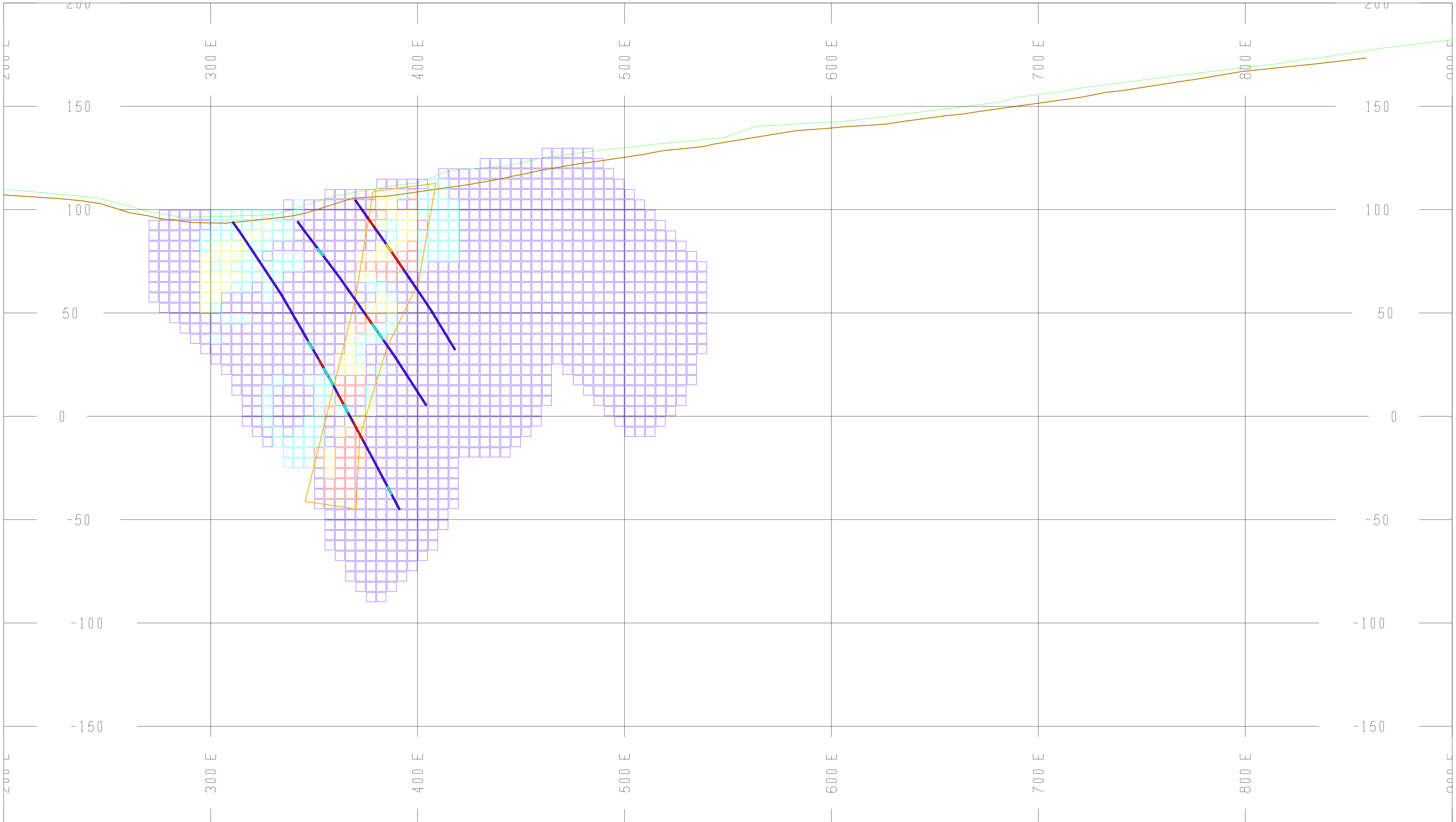
0 20.0 40.0 60.0 80.0 100 120 140 160

N

Au (g/t)
< 0.00
>= 0.00
>= 0.50
>= 1.00
>= 1.50
>= 2.00

Resource Modeling Inc.
Tucson, AZ USA

DATE:	Dec 16, 2004	**Rock Creek Project**
SCALE:	1: 2000.00	**EW Cross Sections**
FILE:	North 900.00.pdf	**North 900.00**



1 : 2000

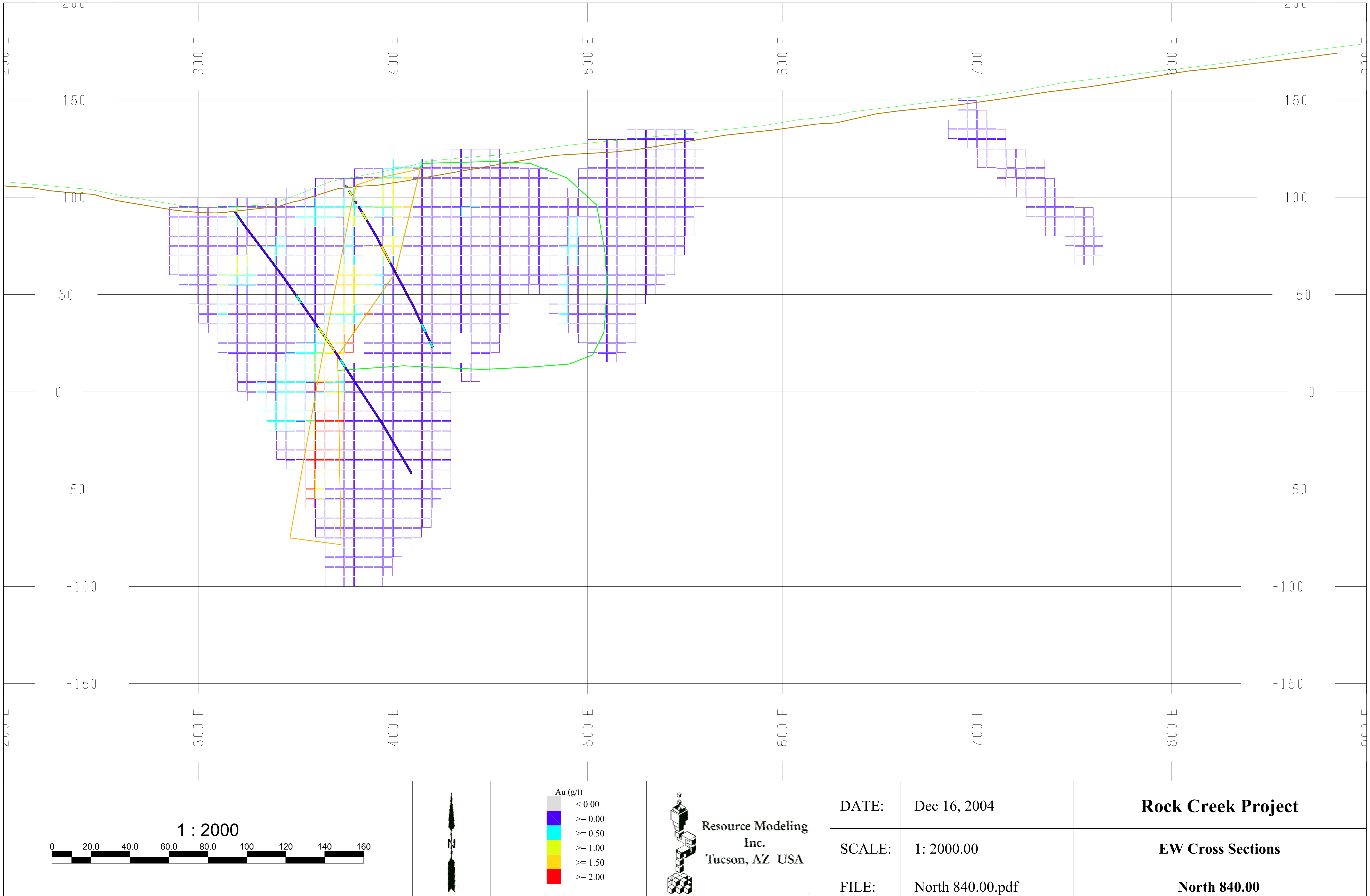
0 20.0 40.0 60.0 80.0 100 120 140 160

N

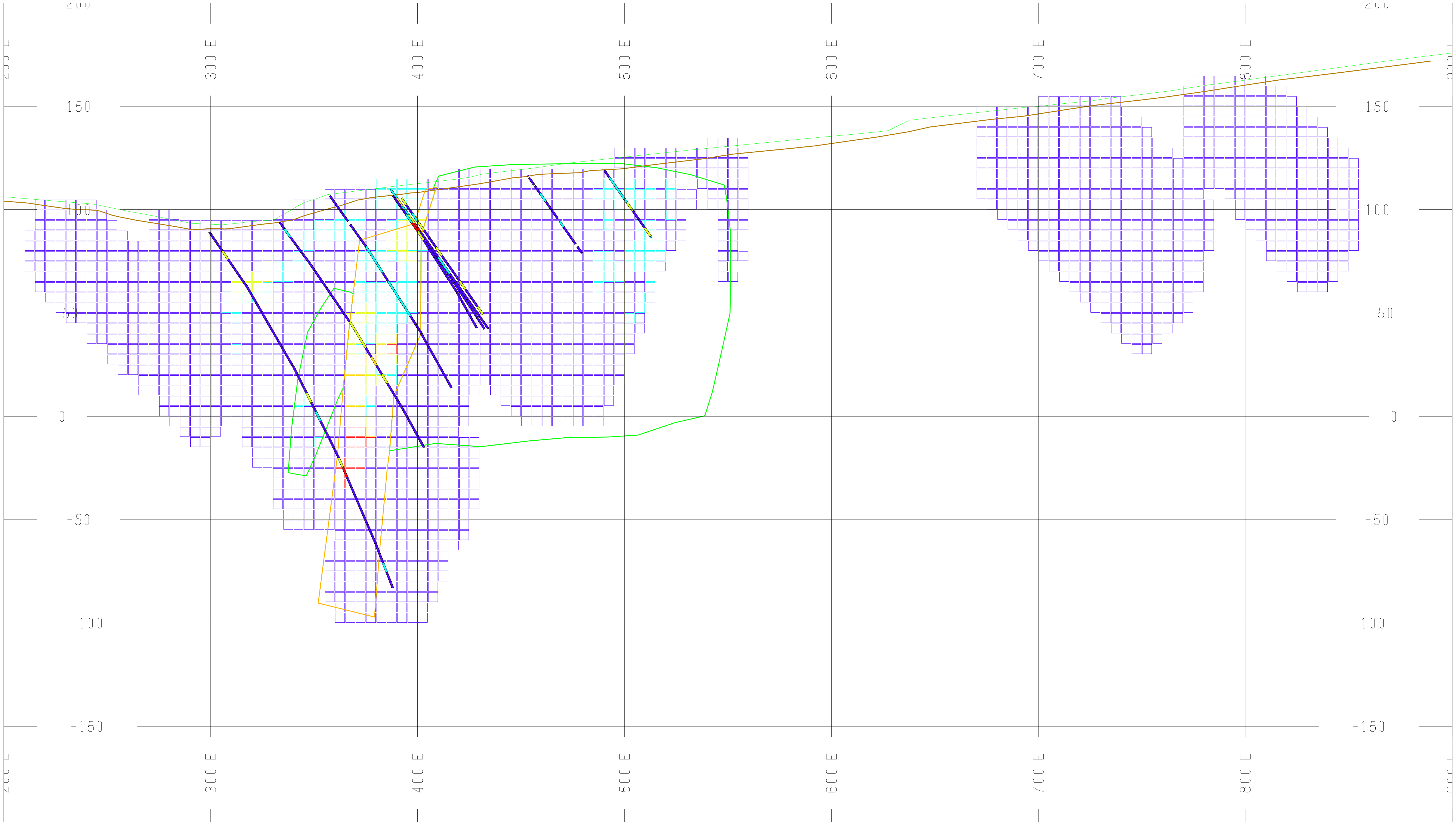
Au (g/t)
< 0.00
>= 0.00
>= 0.50
>= 1.00
>= 1.50
>= 2.00

Resource Modeling Inc.
Tucson, AZ USA

DATE:	Dec 16, 2004	**Rock Creek Project**
SCALE:	1: 2000.00	**EW Cross Sections**
FILE:	North 870.00.pdf	**North 870.00**



150
100
50
0
-50
-100
-150
300 E
400 E
500 E
600 E
700 E
800 E
1 : 2000
0 20.0 40.0 60.0 80.0 100 120 140 160
N
Au (g/t)
< 0.00
>= 0.00
>= 0.50
>= 1.00
>= 1.50
>= 2.00
Resource Modeling Inc.
Tucson, AZ USA
DATE: Dec 16, 2004
SCALE: 1: 2000.00
FILE: North 840.00.pdf
Rock Creek Project
EW Cross Sections
North 840.00



1 : 2000

0 20.0 40.0 60.0 80.0 100 120 140 160

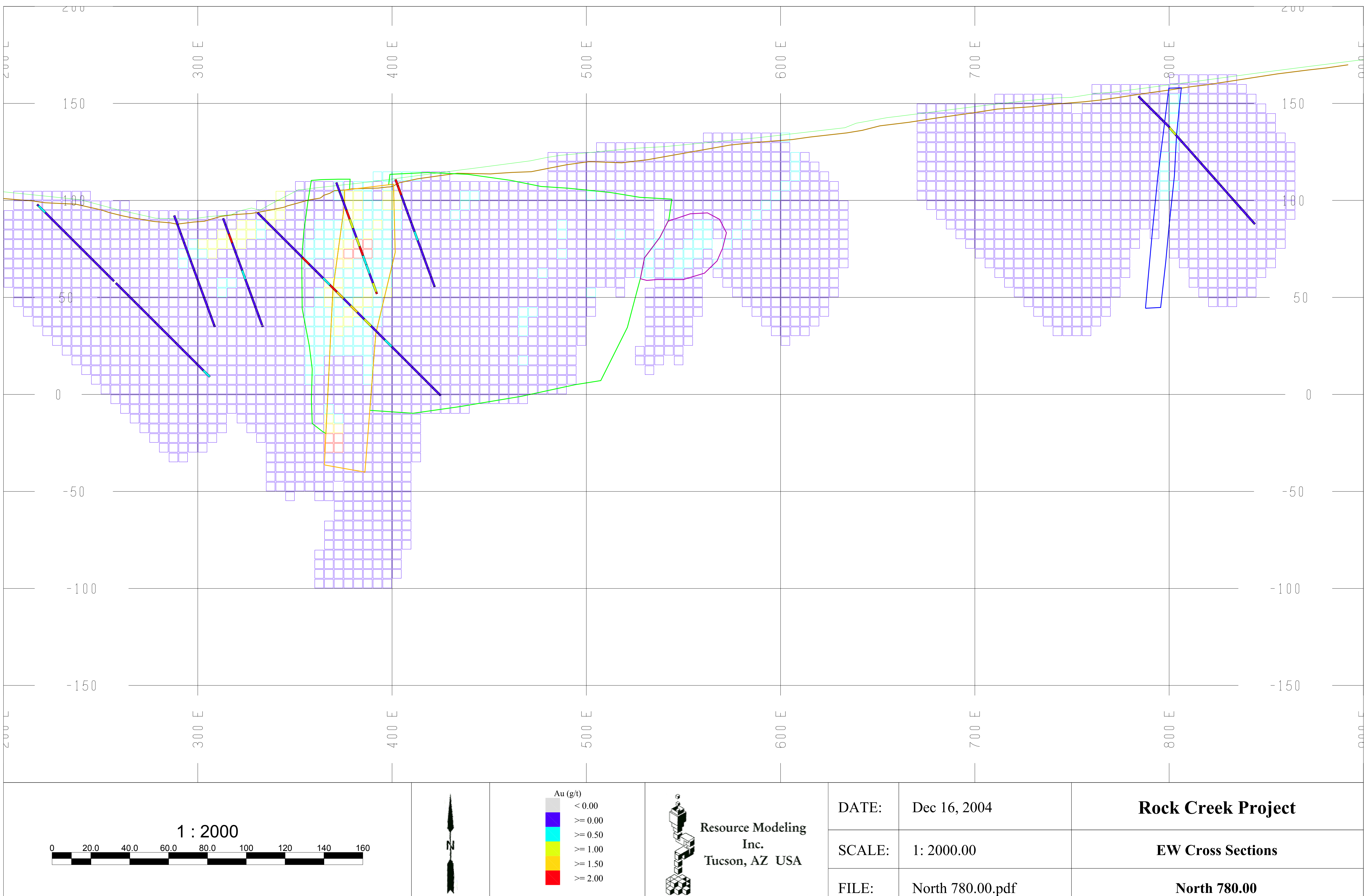
N

Au (g/t)

< 0.00
>= 0.00
>= 0.50
>= 1.00
>= 1.50
>= 2.00

Resource Modeling Inc.
Tucson, AZ USA

DATE:	Dec 16, 2004	**Rock Creek Project**
SCALE:	1: 2000.00	**EW Cross Sections**
FILE:	North 810.00.pdf	**North 810.00**



Resource Modeling Inc. Tucson, AZ USA	DATE:	Dec 16, 2004	**Rock Creek Project**
	SCALE:	1: 2000.00	**EW Cross Sections**
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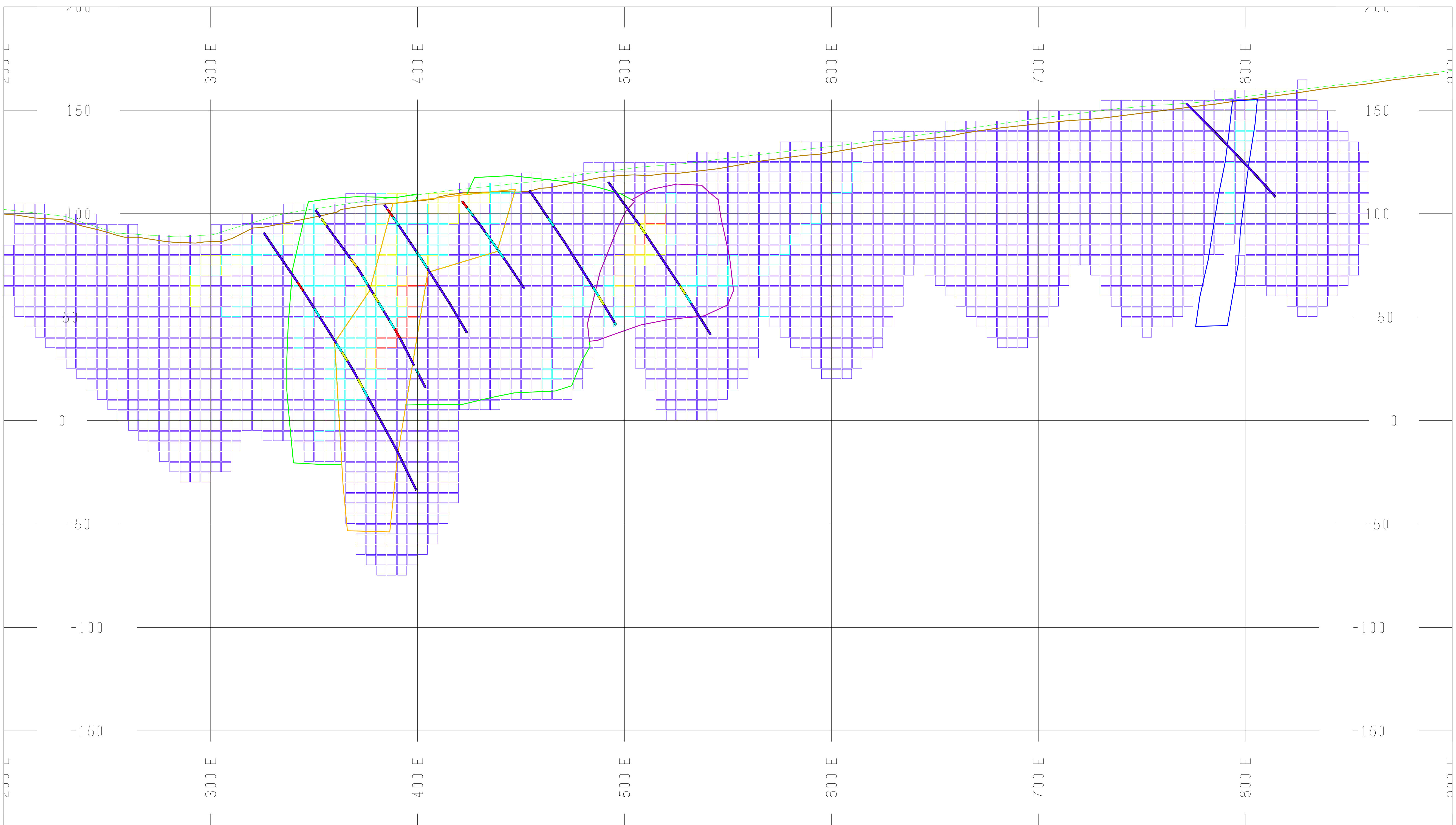

1 : 2000

0 20.0 40.0 60.0 80.0 100 120 140 160

N

Au (g/t)

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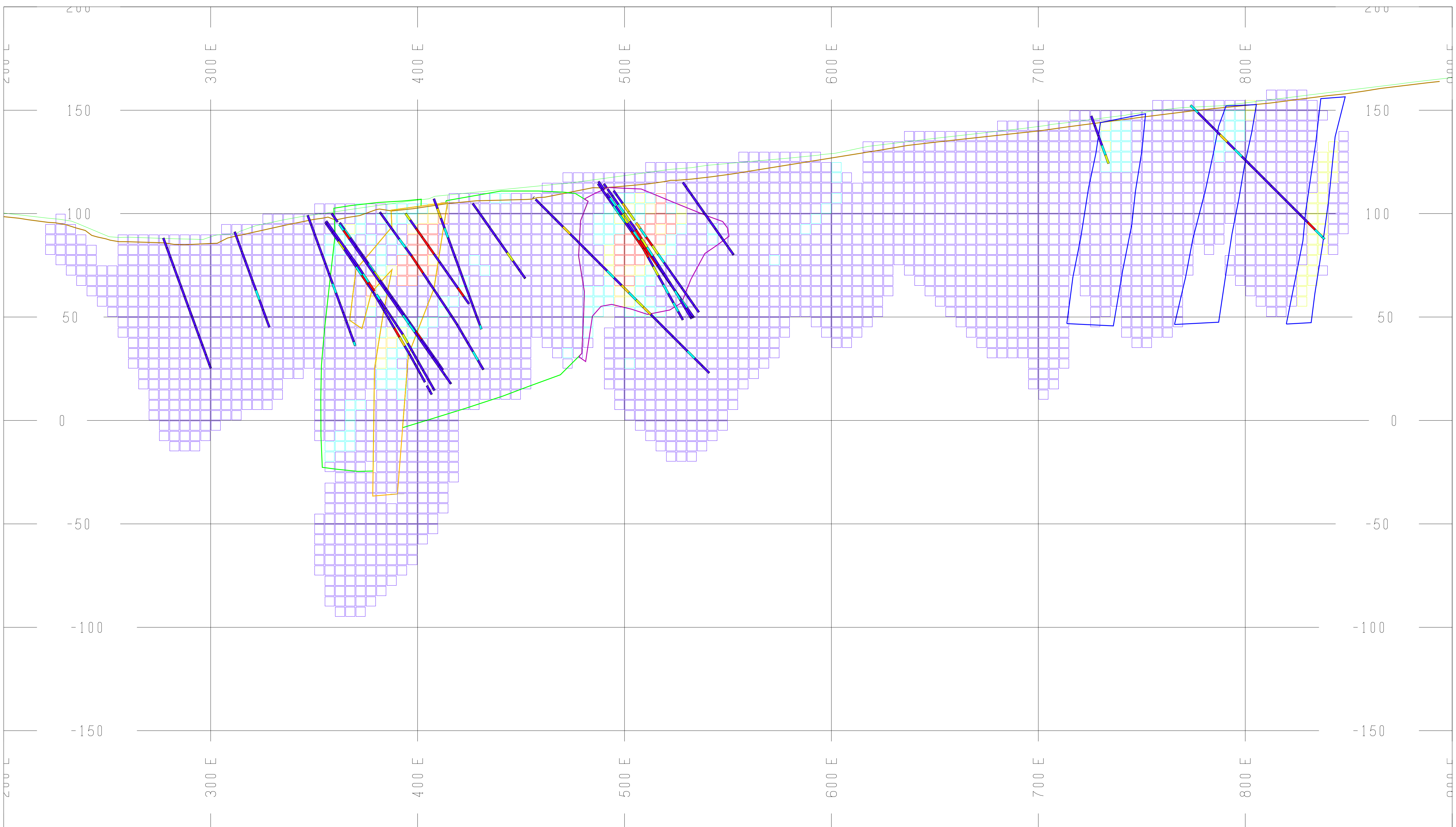
>= 0.00
>= 0.50
>= 1.00
>= 1.50
>= 2.00

Resource Modeling Inc.
Tucson, AZ USA

DATE:	Dec 16, 2004	**Rock Creek Project**
SCALE:	1: 2000.00	**EW Cross Sections**
FILE:	North 750.00.pdf	**North 750.00**



1 : 2000

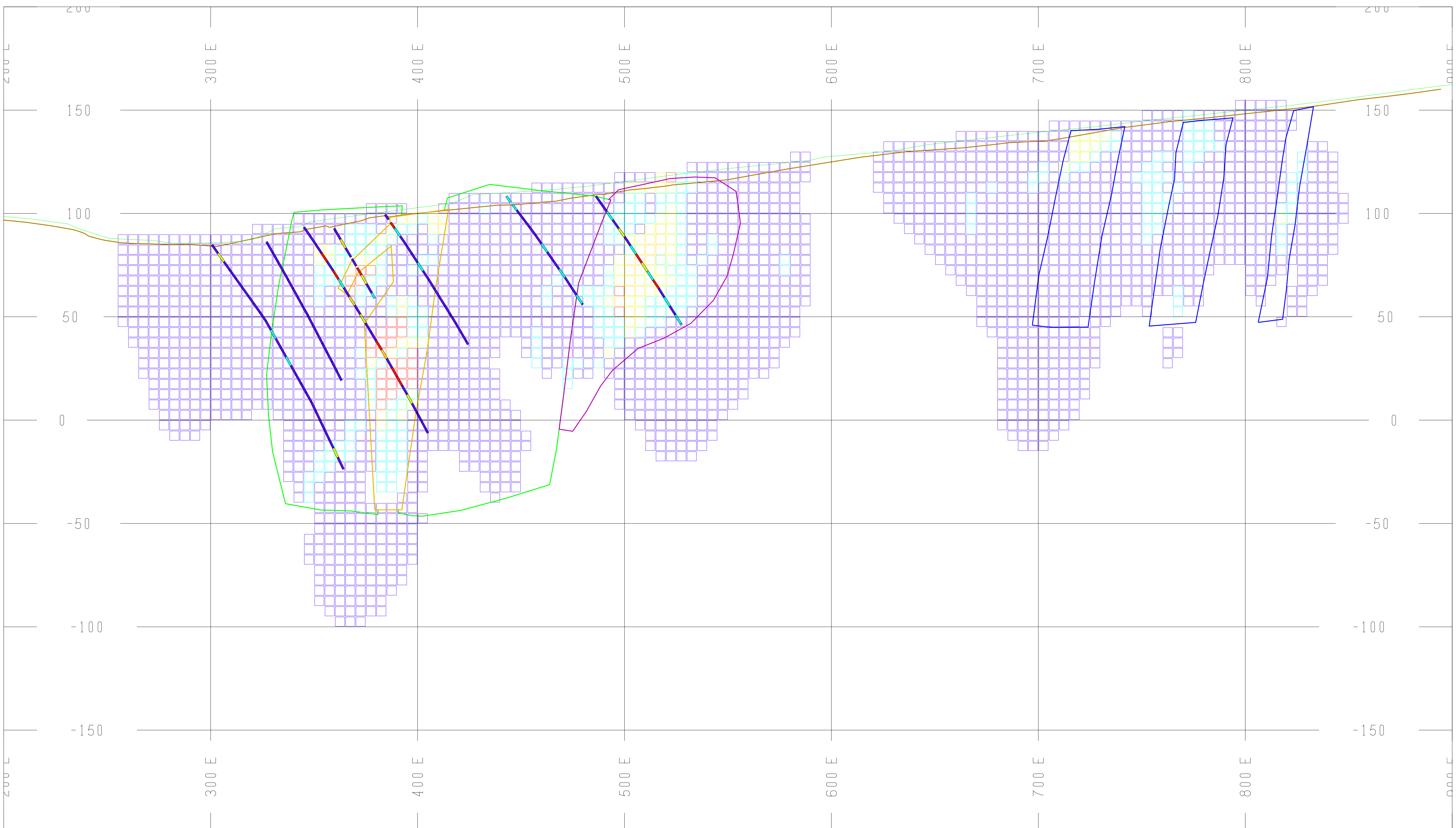
0 20.0 40.0 60.0 80.0 100 120 140 160

N

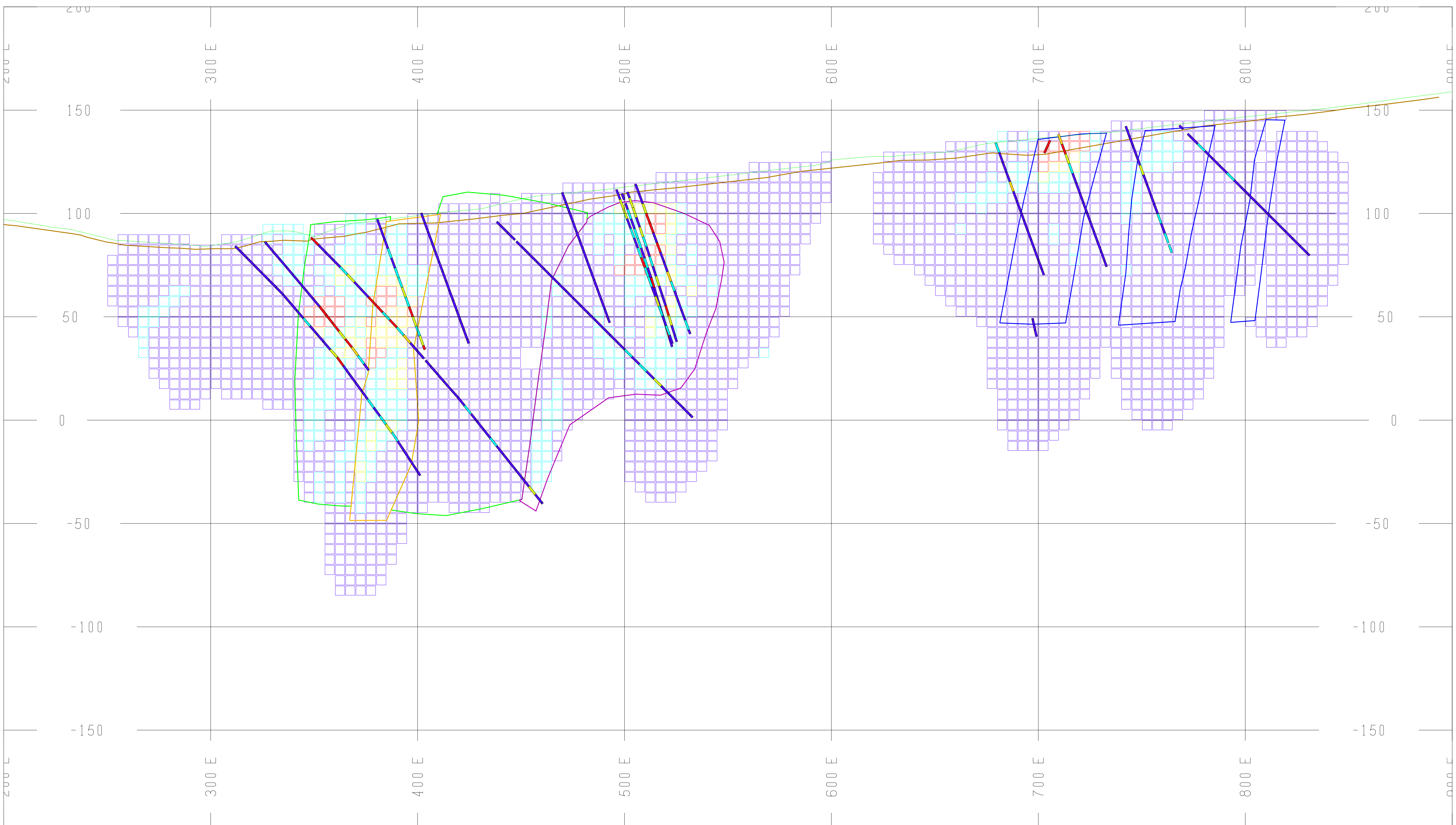
Au (g/t)
- < 0.00
- >= 0.00
- >= 0.50
- >= 1.00
- >= 1.50
- >= 2.00

Resource Modeling Inc.
Tucson, AZ USA

DATE:	Dec 16, 2004	**Rock Creek Project**
SCALE:	1: 2000.00	**EW Cross Sections**
FILE:	North 720.00.pdf	**North 720.00**



1 : 2000 (scale bar 0–160)	N	Au (g/t): < 0.00; >= 0.00; >= 0.50; >= 1.00; >= 1.50; >= 2.00	Resource Modeling Inc. Tucson, AZ USA	DATE: Dec 16, 2004	**Rock Creek Project**
				SCALE: 1: 2000.00	**EW Cross Sections**
				FILE: North 690.00.pdf	**North 690.00**



1 : 2000

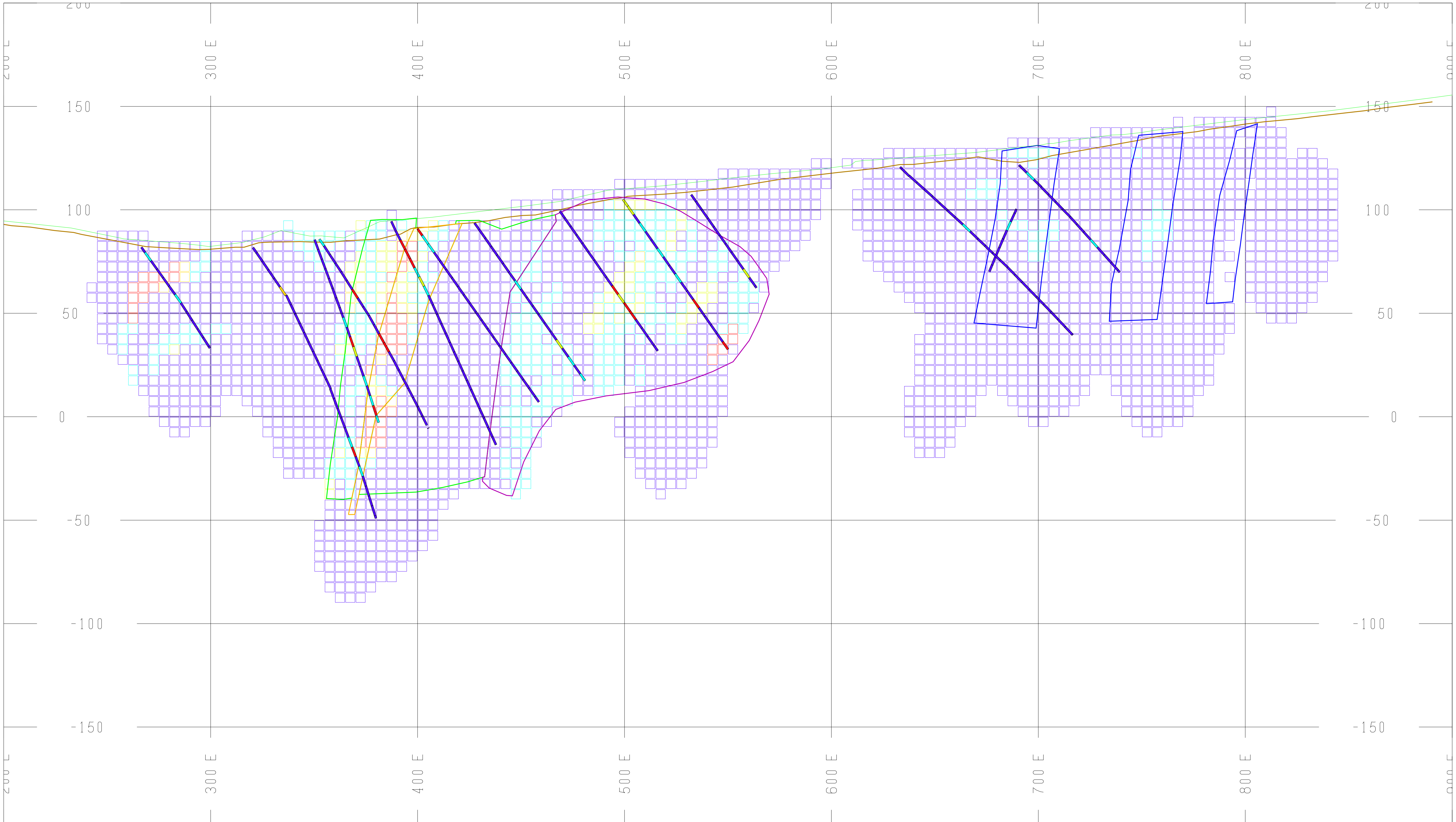
0 20.0 40.0 60.0 80.0 100 120 140 160

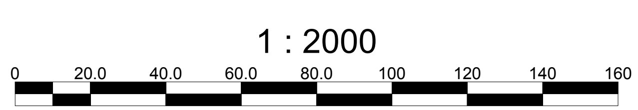
N

Au (g/t)
< 0.00
>= 0.00
>= 0.50
>= 1.00
>= 1.50
>= 2.00

Resource Modeling Inc.
Tucson, AZ USA

DATE:	Dec 16, 2004	**Rock Creek Project**
SCALE:	1: 2000.00	**EW Cross Sections**
FILE:	North 660.00.pdf	**North 660.00**



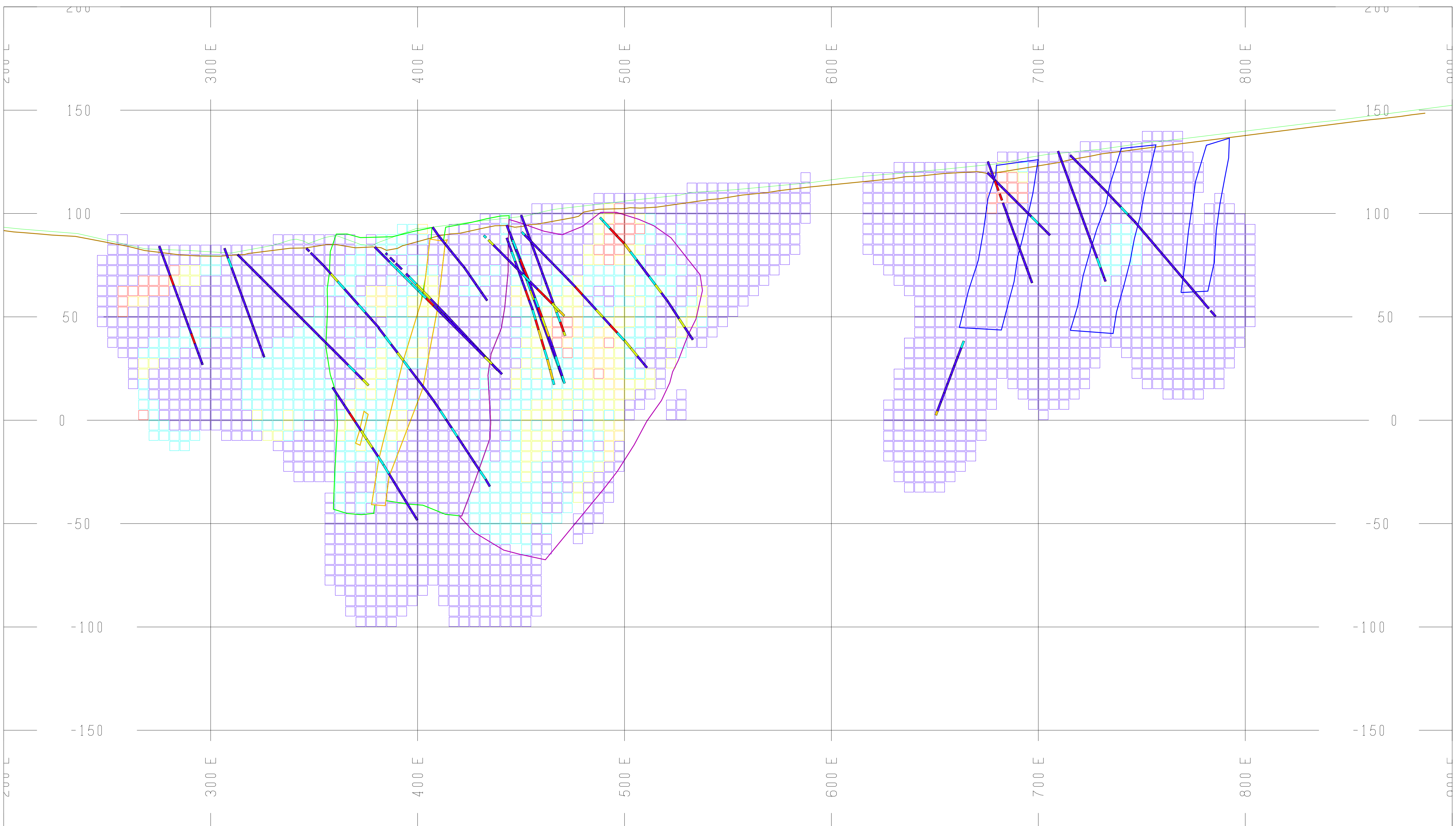


Au (g/t)

- < 0.00
- >= 0.00
- >= 0.50
- >= 1.00
- >= 1.50
- >= 2.00

Resource Modeling Inc.
Tucson, AZ USA

DATE:	Dec 16, 2004	**Rock Creek Project**
SCALE:	1: 2000.00	**EW Cross Sections**
FILE:	North 630.00.pdf	**North 630.00**



1 : 2000

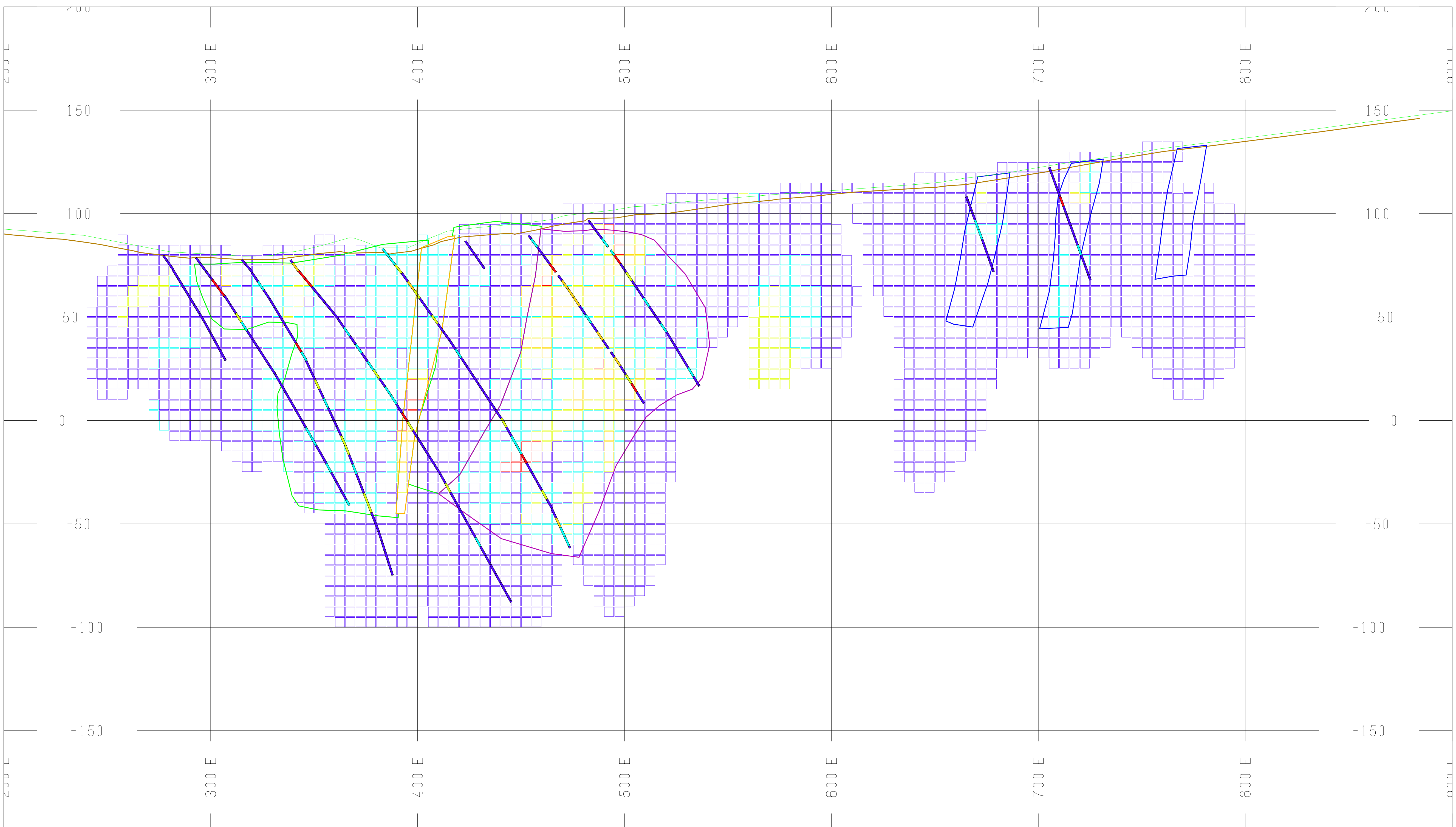
0 20.0 40.0 60.0 80.0 100 120 140 160

N

Au (g/t)
- < 0.00
- >= 0.00
- >= 0.50
- >= 1.00
- >= 1.50
- >= 2.00

Resource Modeling Inc.
Tucson, AZ USA

DATE:	Dec 16, 2004	**Rock Creek Project**
SCALE:	1: 2000.00	**EW Cross Sections**
FILE:	North 600.00.pdf	**North 600.00**



1 : 2000

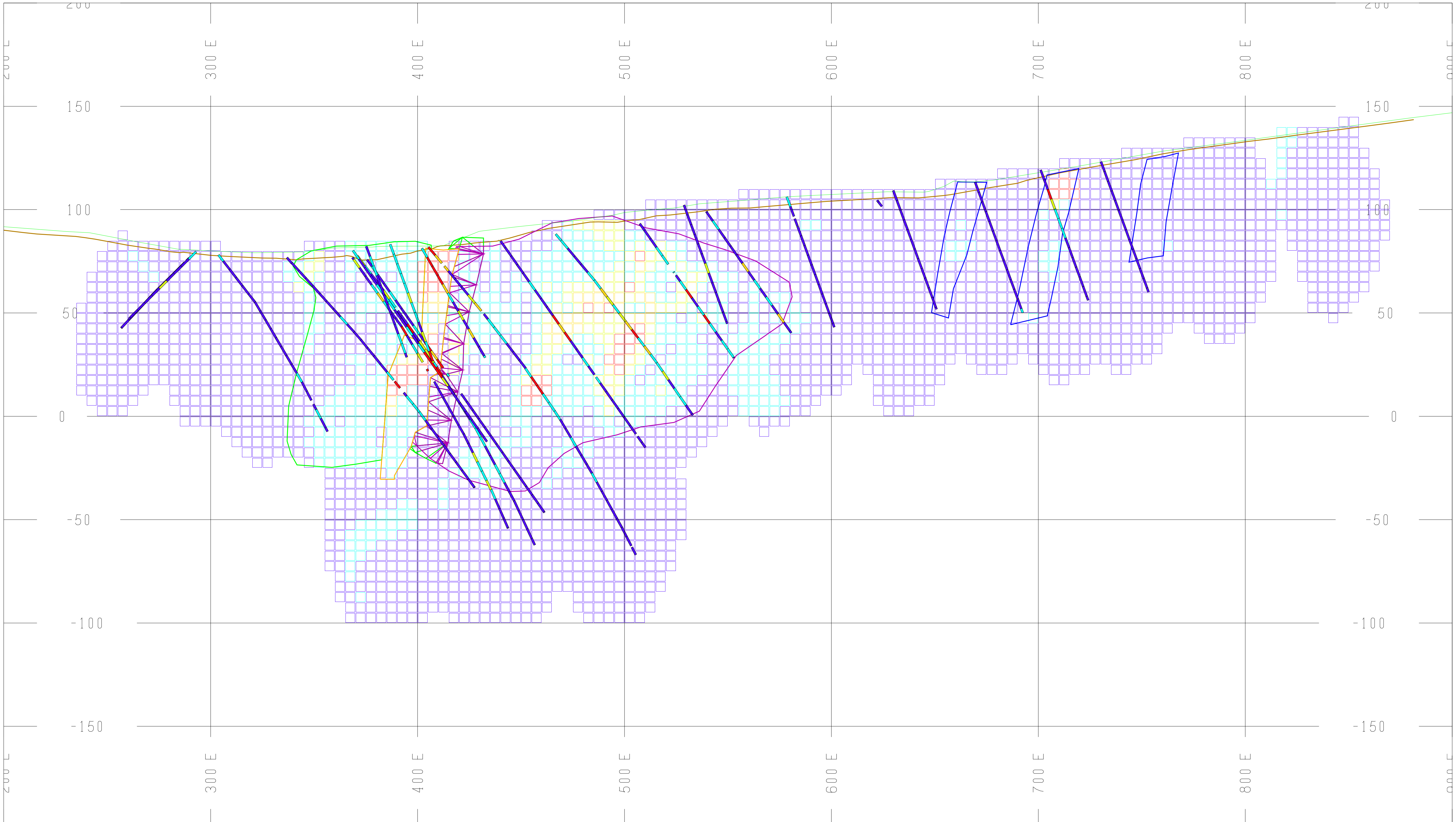
0 20.0 40.0 60.0 80.0 100 120 140 160

N

Au (g/t)
< 0.00
>= 0.00
>= 0.50
>= 1.00
>= 1.50
>= 2.00

Resource Modeling Inc.
Tucson, AZ USA

DATE:	Dec 16, 2004	**Rock Creek Project**
SCALE:	1: 2000.00	**EW Cross Sections**
FILE:	North 570.00.pdf	**North 570.00**



1 : 2000

0 20.0 40.0 60.0 80.0 100 120 140 160

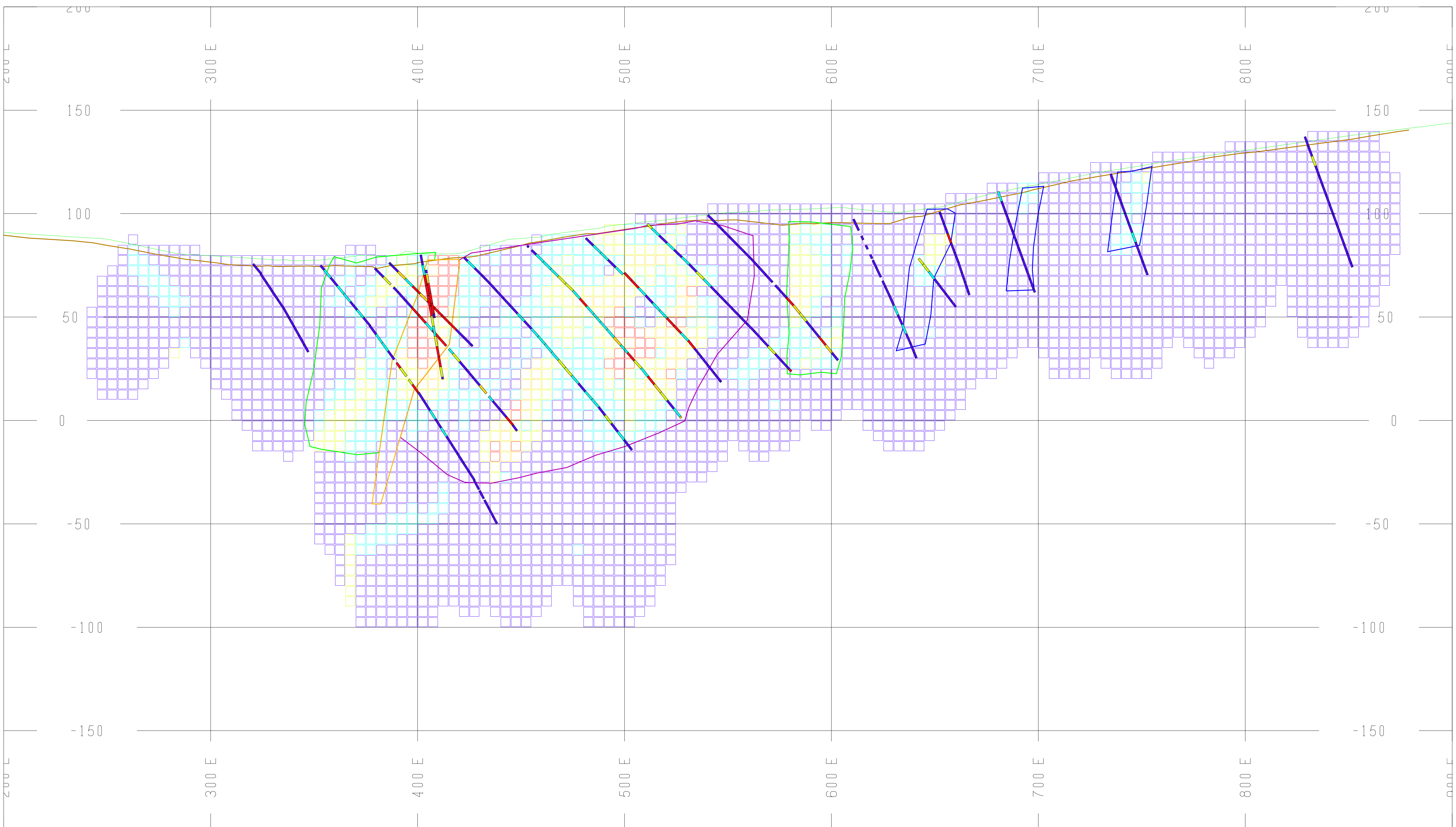
N

Au (g/t)

< 0.00
>= 0.00
>= 0.50
>= 1.00
>= 1.50
>= 2.00

Resource Modeling Inc.
Tucson, AZ USA

DATE:	Dec 16, 2004	**Rock Creek Project**
SCALE:	1: 2000.00	**EW Cross Sections**
FILE:	North 540.00.pdf	**North 540.00**



1 : 2000

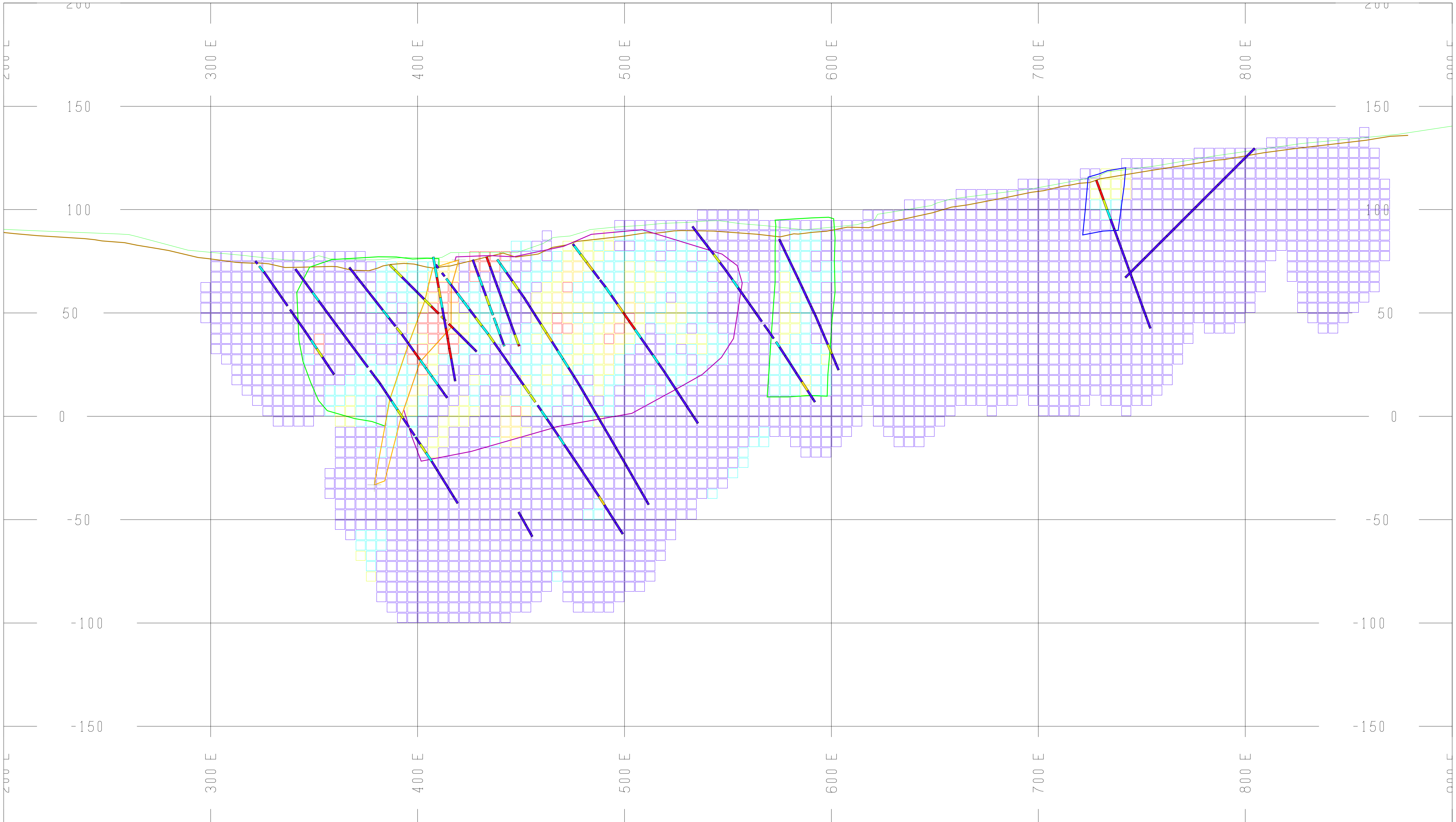
0 20.0 40.0 60.0 80.0 100 120 140 160

N

Au (g/t)
- < 0.00
- >= 0.00
- >= 0.50
- >= 1.00
- >= 1.50
- >= 2.00

Resource Modeling Inc.
Tucson, AZ USA

DATE:	Dec 16, 2004	**Rock Creek Project**
SCALE:	1: 2000.00	**EW Cross Sections**
FILE:	North 510.00.pdf	**North 510.00**



1 : 2000

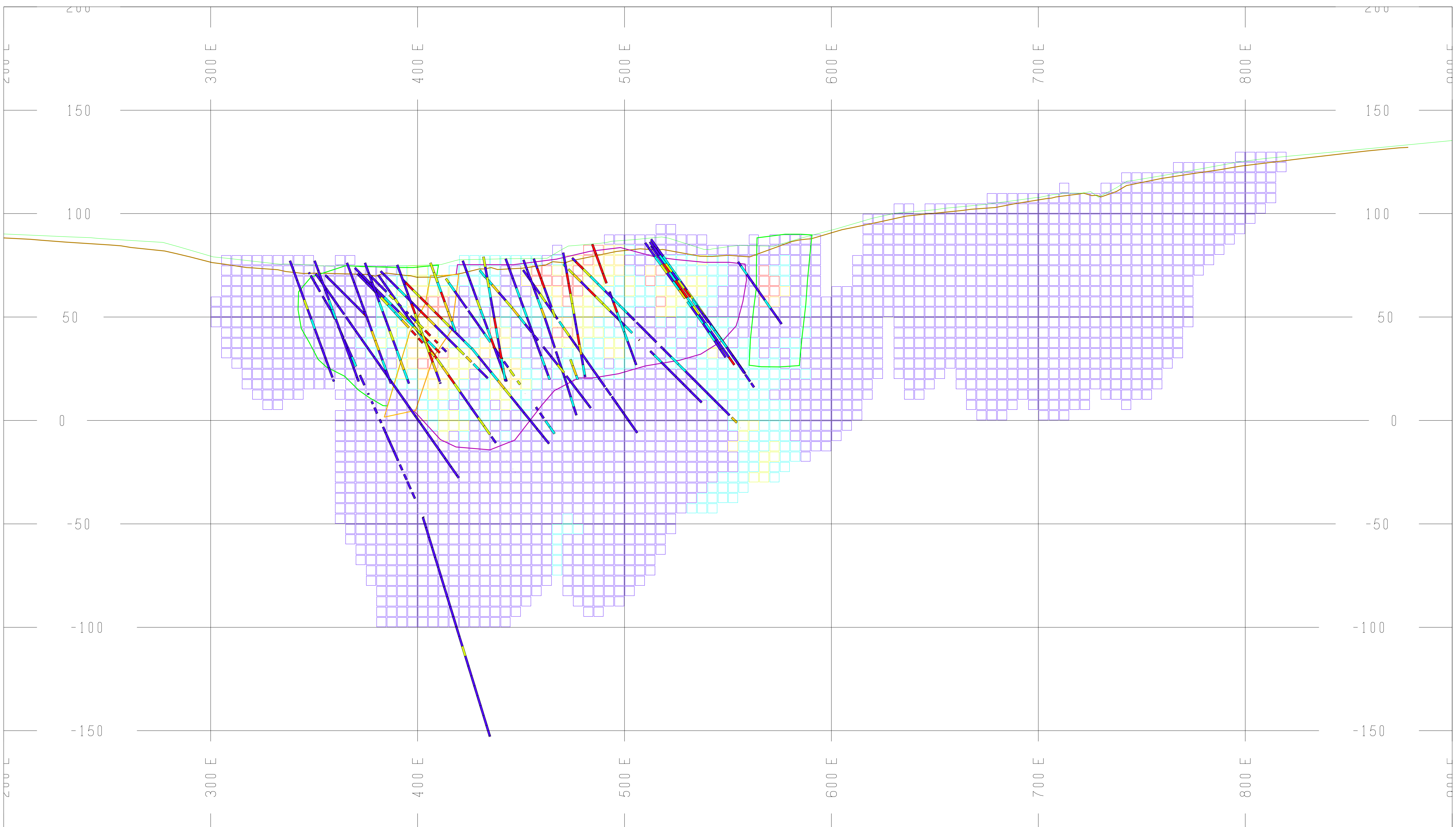
0 20.0 40.0 60.0 80.0 100 120 140 160

N

Au (g/t)
- < 0.00
- >= 0.00
- >= 0.50
- >= 1.00
- >= 1.50
- >= 2.00

Resource Modeling Inc.
Tucson, AZ USA

DATE:	Dec 16, 2004	**Rock Creek Project**
SCALE:	1: 2000.00	**EW Cross Sections**
FILE:	North 480.00.pdf	**North 480.00**



1 : 2000

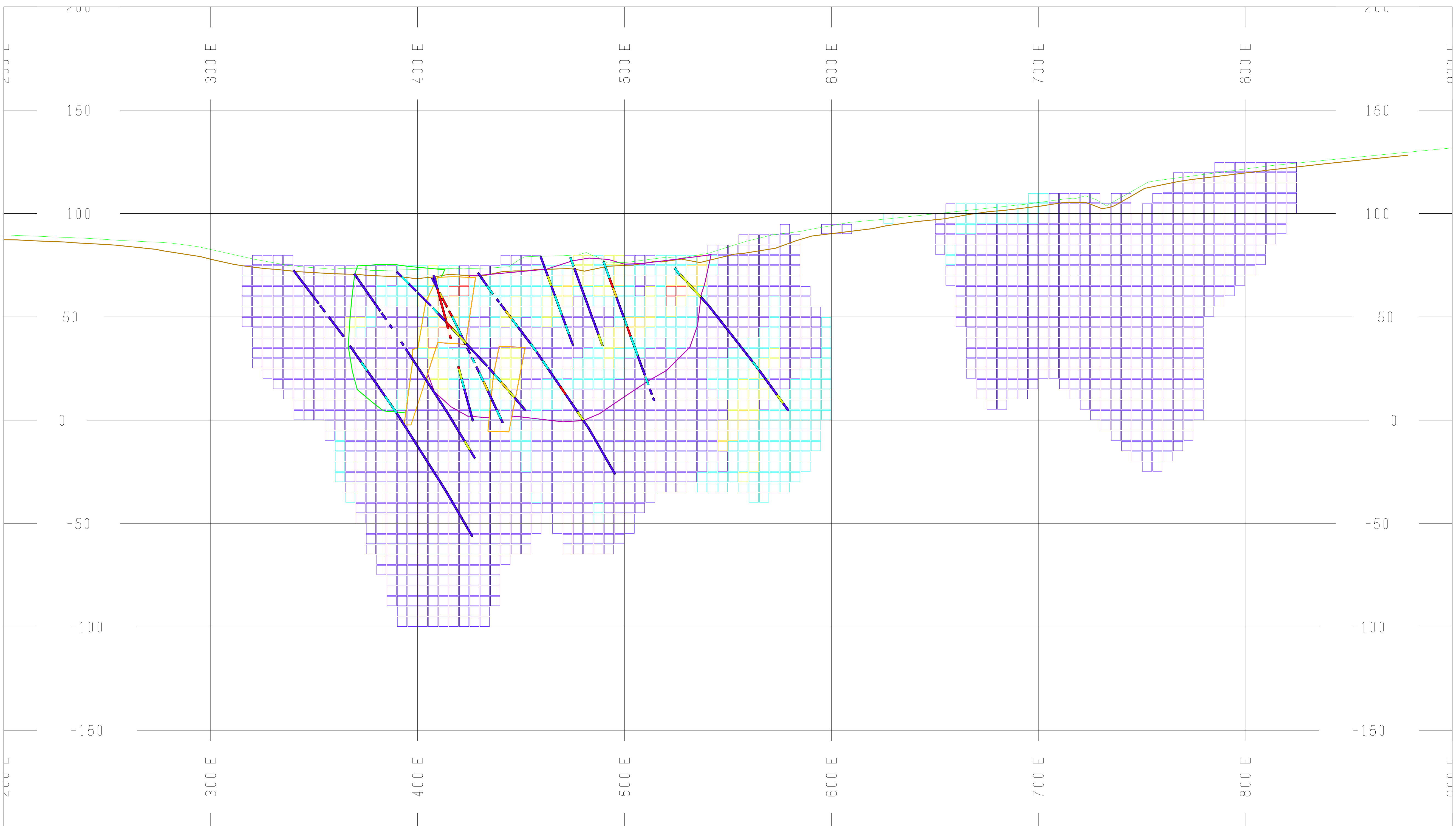
0 20.0 40.0 60.0 80.0 100 120 140 160

N

Au (g/t)
< 0.00
>= 0.00
>= 0.50
>= 1.00
>= 1.50
>= 2.00

Resource Modeling Inc.
Tucson, AZ USA

DATE:	Dec 16, 2004	**Rock Creek Project**
SCALE:	1: 2000.00	**EW Cross Sections**
FILE:	North 450.00.pdf	**North 450.00**



1 : 2000

0 20.0 40.0 60.0 80.0 100 120 140 160

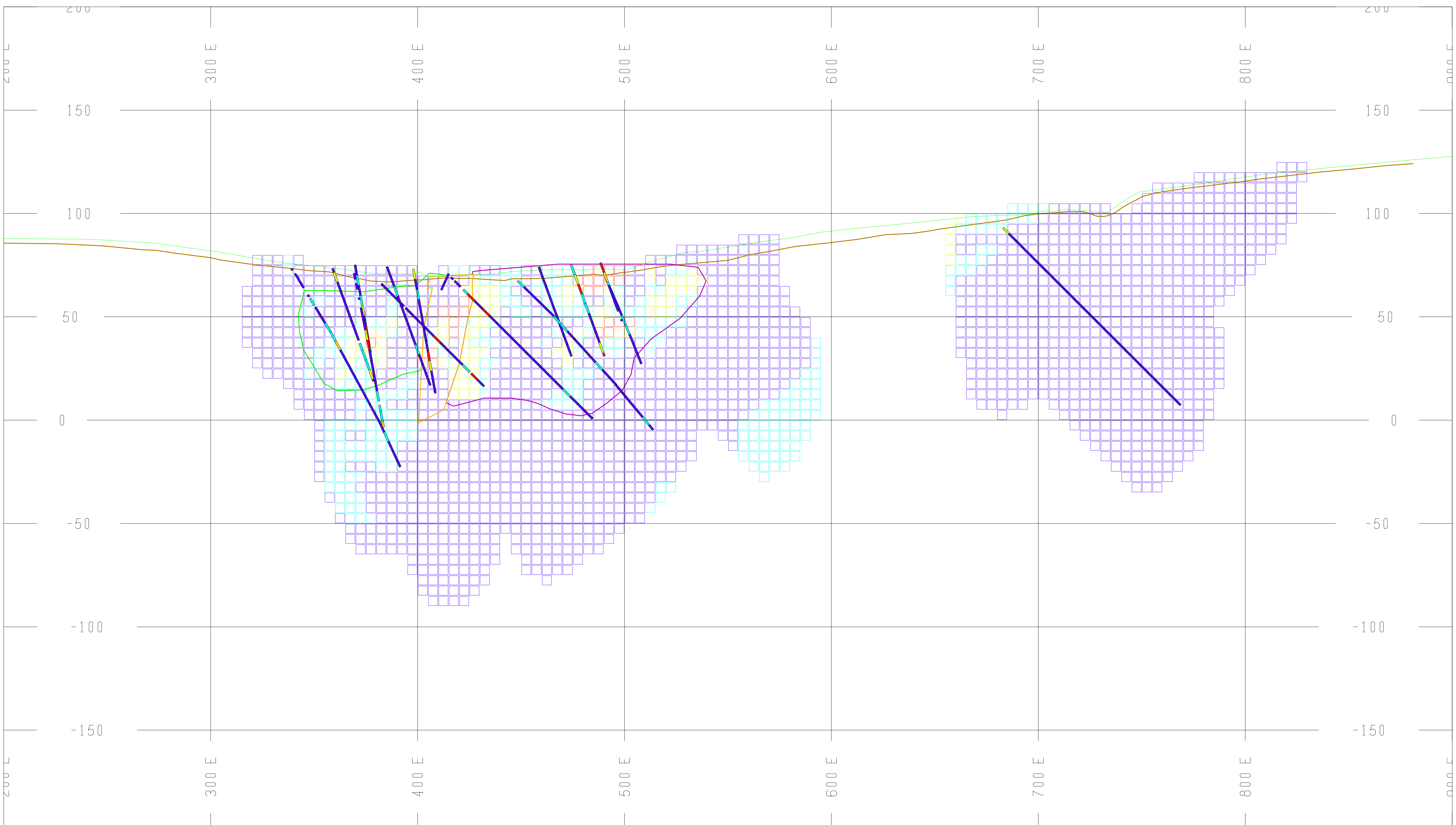
N

Au (g/t)

	< 0.00
	>= 0.00
	>= 0.50
	>= 1.00
	>= 1.50
	>= 2.00

Resource Modeling Inc.
Tucson, AZ USA

DATE:	Dec 16, 2004	**Rock Creek Project**
SCALE:	1: 2000.00	**EW Cross Sections**
FILE:	North 420.00.pdf	**North 420.00**



1 : 2000

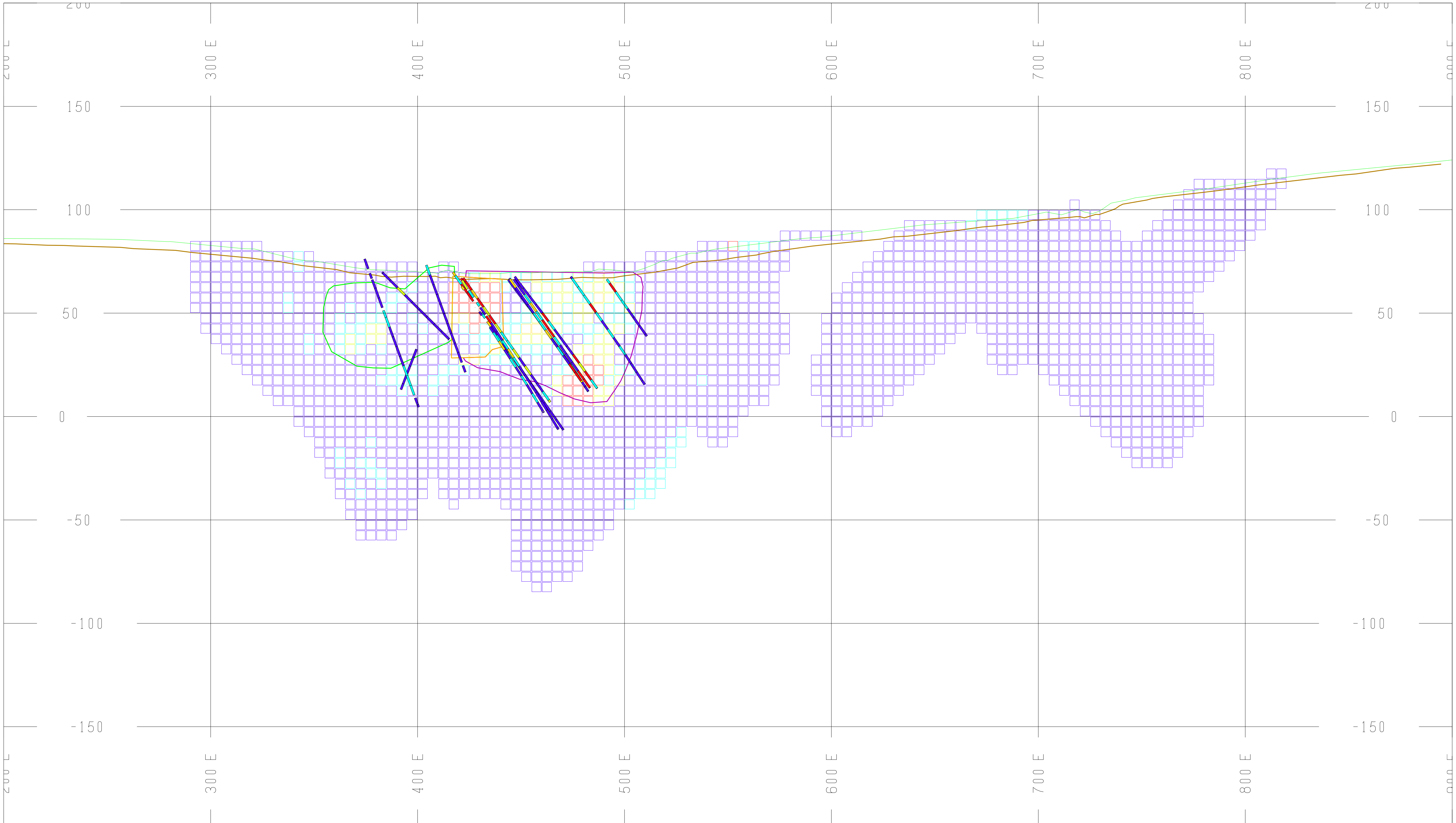
0 20.0 40.0 60.0 80.0 100 120 140 160

N

Au (g/t)
< 0.00
>= 0.00
>= 0.50
>= 1.00
>= 1.50
>= 2.00

Resource Modeling Inc.
Tucson, AZ USA

DATE:	Dec 16, 2004	**Rock Creek Project**
SCALE:	1: 2000.00	**EW Cross Sections**
FILE:	North 390.00.pdf	**North 390.00**



1 : 2000

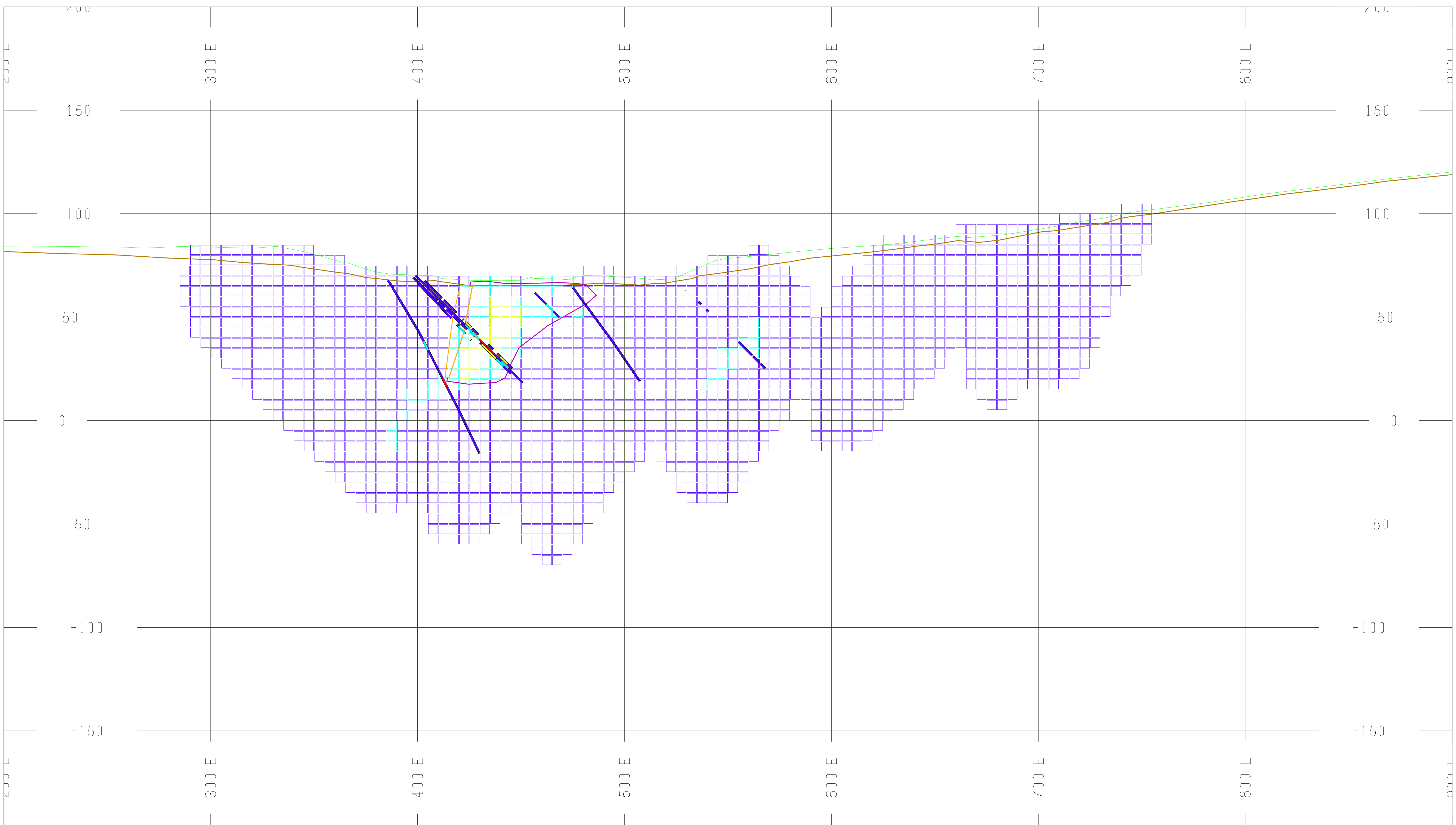
0 20.0 40.0 60.0 80.0 100 120 140 160

N

Au (g/t)
< 0.00
>= 0.00
>= 0.50
>= 1.00
>= 1.50
>= 2.00

Resource Modeling Inc.
Tucson, AZ USA

DATE:	Dec 16, 2004	**Rock Creek Project**
SCALE:	1: 2000.00	**EW Cross Sections**
FILE:	North 360.00.pdf	**North 360.00**



1 : 2000

0 20.0 40.0 60.0 80.0 100 120 140 160

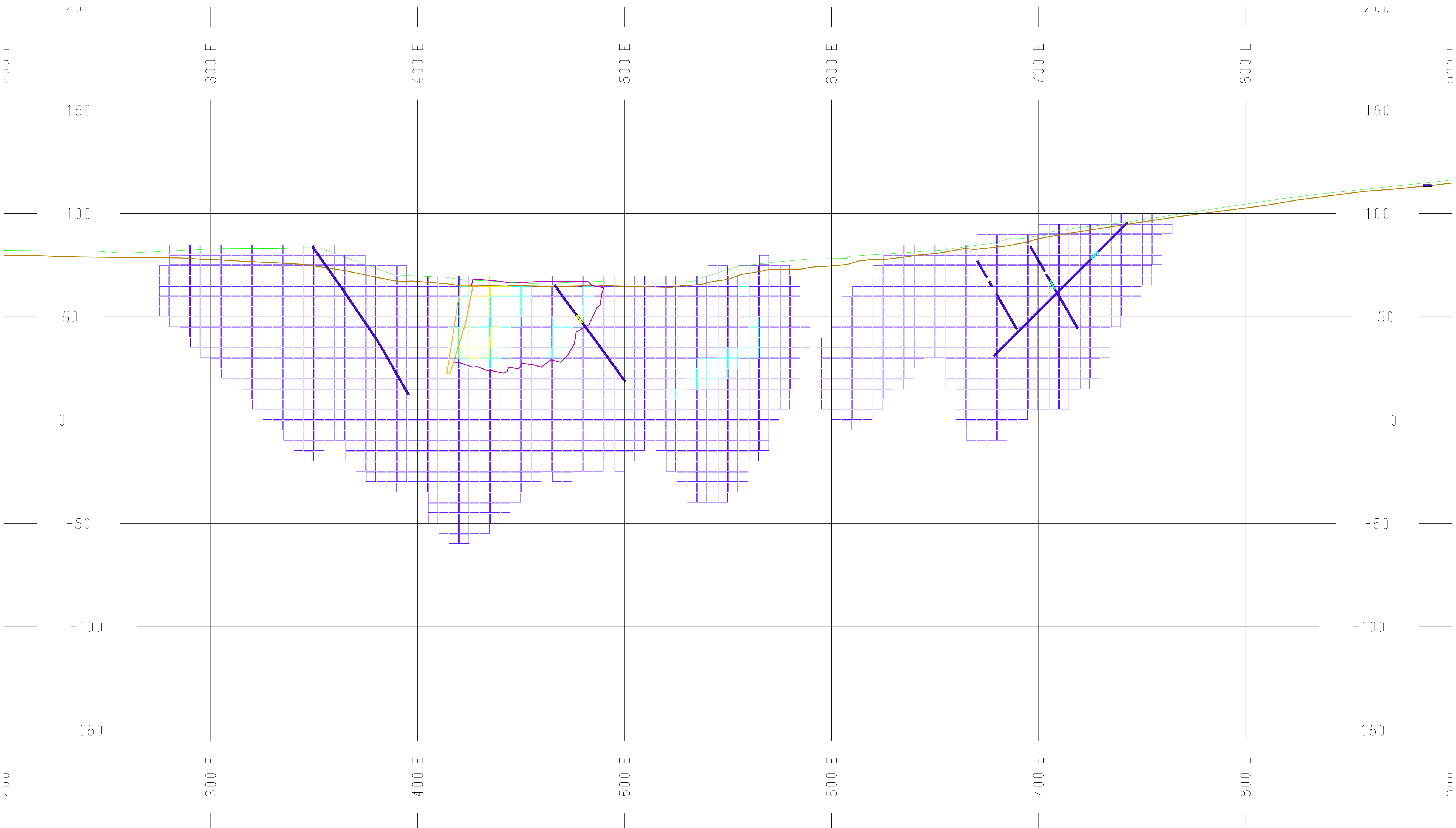
N

Au (g/t)

	< 0.00
	>= 0.00
	>= 0.50
	>= 1.00
	>= 1.50
	>= 2.00

Resource Modeling Inc.
Tucson, AZ USA

DATE:	Dec 16, 2004	**Rock Creek Project**
SCALE:	1: 2000.00	**EW Cross Sections**
FILE:	North 330.00.pdf	**North 330.00**



1 : 2000

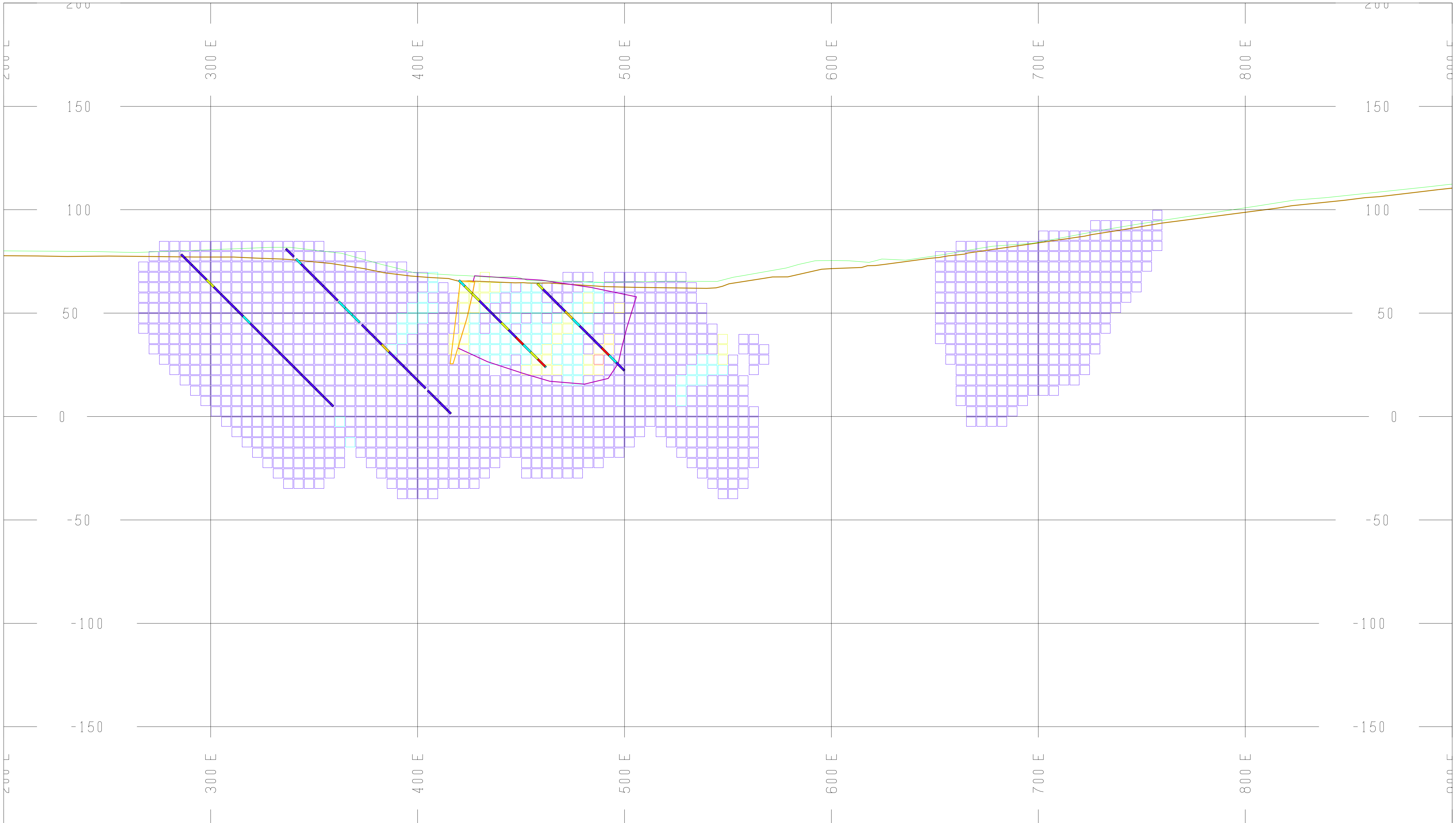
0 20.0 40.0 60.0 80.0 100 120 140 160

N

Au (g/t)
< 0.00
>= 0.00
>= 0.50
>= 1.00
>= 1.50
>= 2.00

Resource Modeling Inc.
Tucson, AZ USA

DATE:	Dec 16, 2004	**Rock Creek Project**
SCALE:	1: 2000.00	**EW Cross Sections**
FILE:	North 300.00.pdf	**North 300.00**



1 : 2000 0 20.0 40.0 60.0 80.0 100 120 140 160	N	Au (g/t) < 0.00 >= 0.00 >= 0.50 >= 1.00 >= 1.50 >= 2.00	Resource Modeling Inc. Tucson, AZ USA	DATE: Dec 16, 2004 SCALE: 1: 2000.00 FILE: North 270.00.pdf

Rock Creek Project

EW Cross Sections

North 270.00

Rock Creek Project		
Plan Map		
Plan 150.00		
DATE	SCALE	FILE
Dec 16, 2004	1:3000.00	Plan 150.00.pdf

APPENDIX G

RESOURCE STATEMENTS

Rock Creek Project
Base Case Resource Summary by Mineral Zone

Mineral Zone	Au Cutoff (g/t)	Indicated			Inferred			Indicated + Inferred			% Inferred
		Tonnes (000)	Au (g/t)	Au Ozs (000)	Tonnes (000)	Au (g/t)	Au Ozs (000)	Tonnes (000)	Au (g/t)	Au Ozs (000)	
1	0.10	10,255	0.80	264	265	0.59	5	10,520	0.80	269	3%
	0.20	10,112	0.81	263	253	0.61	5	10,365	0.80	268	2%
	0.30	9,366	0.85	256	219	0.67	5	9,585	0.85	261	2%
	0.40	8,159	0.93	244	178	0.74	4	8,337	0.93	248	2%
	0.50	6,873	1.02	225	139	0.82	4	7,012	1.02	229	2%
	0.60	5,641	1.12	203	108	0.91	3	5,749	1.11	206	2%
	0.70	4,608	1.22	181	75	1.02	2	4,683	1.22	183	2%
	0.80	3,831	1.32	163	51	1.15	2	3,882	1.32	165	1%
	0.90	3,236	1.41	147	43	1.21	2	3,279	1.41	149	1%
	1.00	2,693	1.50	130	33	1.29	1	2,726	1.49	131	1%
2	0.10	8,660	0.43	120	2,797	0.31	28	11,457	0.40	148	24%
	0.20	7,001	0.50	113	2,026	0.37	24	9,027	0.47	137	22%
	0.30	4,804	0.61	94	1,115	0.46	16	5,919	0.58	110	19%
	0.40	3,334	0.72	77	602	0.56	11	3,936	0.70	88	15%
	0.50	2,399	0.83	64	326	0.66	7	2,725	0.81	71	12%
	0.60	1,780	0.93	53	174	0.77	4	1,954	0.91	57	9%
	0.70	1,253	1.05	42	96	0.87	3	1,349	1.04	45	7%
	0.80	908	1.17	34	49	0.99	2	957	1.17	36	5%
	0.90	652	1.29	27	30	1.10	1	682	1.28	28	4%
	1.00	451	1.44	21	19	1.18	1	470	1.46	22	4%
3	0.10	1,686	0.52	28	496	0.48	8	2,182	0.51	36	23%
	0.20	1,455	0.58	27	454	0.51	7	1,909	0.55	34	24%
	0.30	1,074	0.70	24	381	0.56	7	1,455	0.66	31	26%
	0.40	755	0.85	21	213	0.74	5	968	0.84	26	22%
	0.50	482	1.07	17	121	0.98	4	603	1.08	21	20%
	0.60	340	1.29	14	100	1.07	3	440	1.20	17	23%
	0.70	265	1.47	13	85	1.14	3	350	1.42	16	24%
	0.80	205	1.69	11	72	1.22	3	277	1.57	14	26%
	0.90	169	1.87	10	64	1.26	3	233	1.74	13	27%
	1.00	130	2.14	9	52	1.33	2	182	1.88	11	29%
10	0.10	4,979	1.27	203	727	1.00	23	5,706	1.23	226	13%
	0.20	4,666	1.34	201	494	1.40	22	5,160	1.34	223	10%
	0.30	4,318	1.43	199	437	1.56	22	4,755	1.45	221	9%
	0.40	3,964	1.53	195	410	1.63	21	4,374	1.54	216	9%
	0.50	3,632	1.63	190	378	1.74	21	4,010	1.64	211	9%
	0.60	3,278	1.74	183	349	1.83	21	3,627	1.75	204	10%
	0.70	2,946	1.87	177	319	1.95	20	3,265	1.88	197	10%
	0.80	2,621	2.01	169	301	2.02	20	2,922	2.01	189	10%
	0.90	2,308	2.16	160	277	2.12	19	2,585	2.15	179	11%
	1.00	2,054	2.31	153	261	2.19	18	2,315	2.30	171	11%
99	0.10	0	0.00	0	45,529	0.27	395	45,529	0.27	395	100%
	0.20	0	0.00	0	22,679	0.39	284	22,679	0.39	284	100%
	0.30	0	0.00	0	11,110	0.54	193	11,110	0.54	193	100%
	0.40	0	0.00	0	6,496	0.67	140	6,496	0.67	140	100%
	0.50	0	0.00	0	4,343	0.79	110	4,343	0.79	110	100%
	0.60	0	0.00	0	2,852	0.91	83	2,852	0.91	83	100%
	0.70	0	0.00	0	2,121	1.01	69	2,121	1.01	69	100%
	0.80	0	0.00	0	1,467	1.12	53	1,467	1.12	53	100%
	0.90	0	0.00	0	1,067	1.23	42	1,067	1.22	42	100%
	1.00	0	0.00	0	846	1.30	35	846	1.29	35	100%
All	0.10	25,580	0.75	615	49,814	0.29	459	75,394	0.44	1,074	66%
	0.20	23,234	0.81	604	25,906	0.41	342	49,140	0.60	946	53%
	0.30	19,562	0.91	573	13,262	0.57	243	32,824	0.77	816	40%
	0.40	16,212	1.03	537	7,899	0.71	181	24,111	0.93	718	33%
	0.50	13,386	1.15	496	5,307	0.86	146	18,693	1.07	642	28%
	0.60	11,039	1.28	453	3,583	0.99	114	14,622	1.21	567	25%
	0.70	9,072	1.42	413	2,696	1.12	97	11,768	1.35	510	23%
	0.80	7,565	1.55	377	1,940	1.28	80	9,505	1.50	457	20%
	0.90	6,365	1.68	344	1,481	1.41	67	7,846	1.63	411	19%
	1.00	5,328	1.83	313	1,211	1.46	57	6,539	1.76	370	19%

APPENDIX H

CALCULATION OF ESTIMATION VARIANCE FOR ROCK CREEK BULK SAMPLE

Memo

To	Henrik Thalenhorst;John Odden;Doug Nicholson;Dominique Francois-Bongarcon	File No.	
From	Harry Parker	Cc	
Tel			
Fax			
Date	May 30 2004		

Subject **Calculation of Estimation Variance for Rock Creek Bulk Sample**

1.0 INTRODUCTION AND SUMMARY

On May 17, 2004 Henrik Thalenhorst provided a list of blocks for a base-case bulk sample and an expanded-case bulk sample. The base-case bulk sample contains 16 blocks of dimension 5 X 10 X 5 m in X, Y, Z. There are eight blocks on the 80 m bench and eight blocks on the 75 m bench. These blocks are centered on 525 N and extend from 475 to 515 E. In an expanded case 5 blocks are added centered on 535 N on the 80 m bench and 5 blocks are added centered on 515 N on the 80 m bench. These blocks extend from 475 E to 500 E. The base case has 10,800 t and the expanded case has 17,550 t.

Henrik asked what the estimation accuracy would be if holes at various spacings were used. The holes will be drilled at a 45 degree angle to the east. The analysis assumes that the pattern would be repeated (though offset) for both core and RC holes.

Table 1 shows relative standard errors and relative 90 % confidence limits for four spacings:

A. Six holes on 10 m spacing in X and Y, with Y alternating between 520 and 530 North.
B. Eleven holes on 5 m spacing in X and 10 m spacing in Y alternating between 520 and 530 North.
C. Thirty holes on 5 m spacing in X and Y, in three lines centered on 520, 525 and 530 North.
D. Fifty holes on 5 m spacing in X and Y, in five lines centered on 510, 515, 520, 525, 530, 535 and 540 N.

AMEC E&C Services Inc.
980 Lincoln Avenue No. 200
San Rafael, California
USA 94901
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Table 1: Relative Standard Errors and 90 % Confidence Limits

Data Configuration	Base Case (10,800 t)		Expanded Case (17,550 t)	
	Relative Standard Error of Estimate	± 90 % Relative Confidence Interval	Relative Standard Error of Estimate	± 90 % Relative Confidence Interval
Case A	32 %	53 %	31 %	51 %
Case B	25 %	41 %	23 %	38 %
Case C	15 %	24 %		
Case D			12 %	19 %

It is planned to estimate the grade of the bulk sample from offset patterns of core and RC holes. To establish a correction factor for exploration data, the estimates must be accurate. **Table 1 shows that Cases A (envisioned in the program design) and B are inaccurate. Cases C and D could be used to establish approximate adjustment factors for Core and RC data, but these still could be less accurate than desirable.**

The base case comprises 4 SMUs and the expanded case comprises 6.5 SMUs. It is clear from this analysis that accurate segregation of ore and waste will be extremely difficult, even if sampling is carried out using a 5 m grid. All that can be hoped for is to delineate broad zones of ore and waste. This must be confirmed at the feasibility stage using conditional simulation.

2.0 SETUP

The variogram model used is that for Zones 1+2, Table 7-3, AMEC 2004 Resource Report. This is a double nested unit sill exponential model with C0 = 0.502, C1= 0.437 and C2=0.060. The practical ranges in the N-S direction are 16.3 and 76.3 m. In the W direction dipping 83 degrees the ranges are 17.1 and 553.0 m. In the E direction dipping 7 degrees the ranges are 10.0 and 680.3 m.

The squared coefficient of variation for 5 m composites is 2.14, drawn from Zone 1, Table 7-4, AMEC 2004 Resource Report. The relative ordinary kriging variance is:

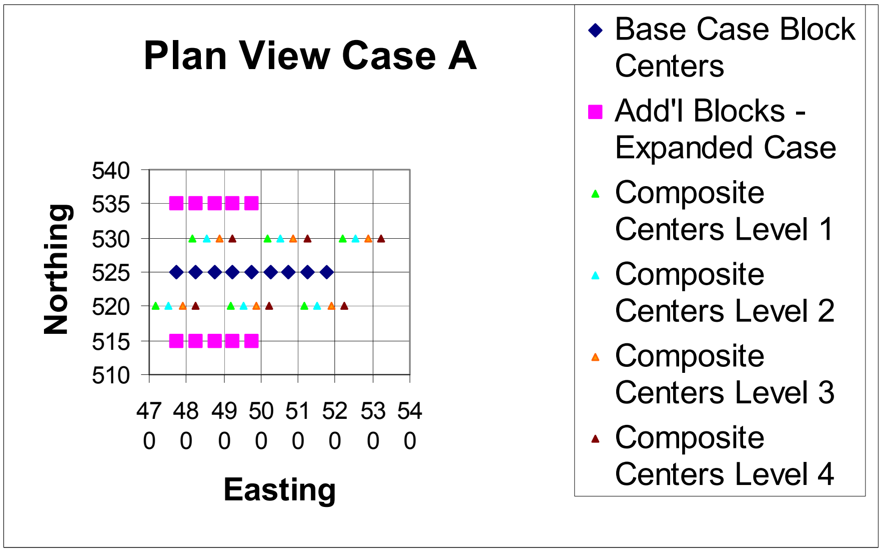
Rokv = (ok variance, unit sill variogram model)(Coefficient of Variation)^2

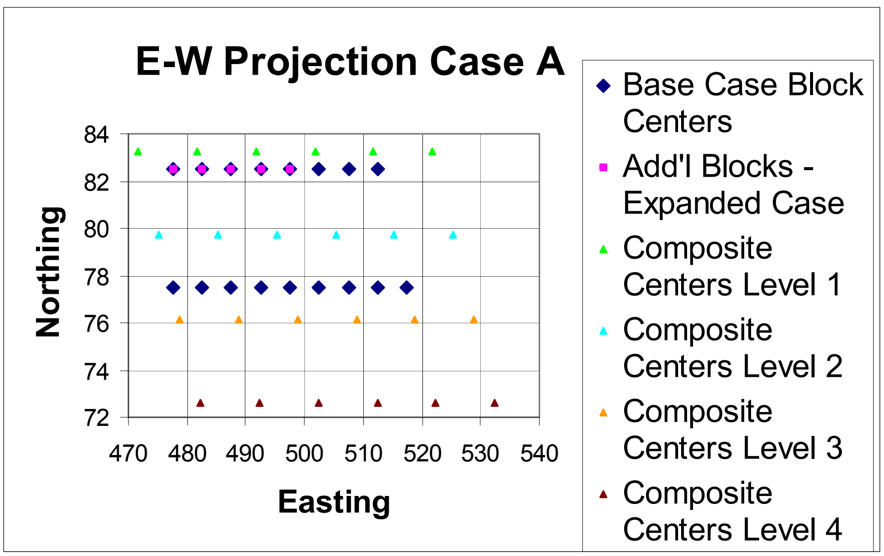
The relative standard error of estimate is Rokv$^{0.5}$.

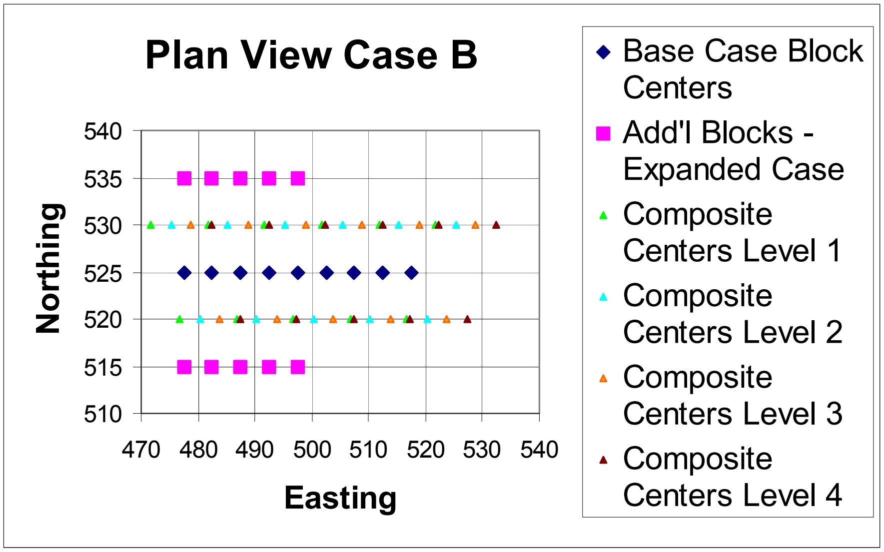
The ±90 % confidence interval is approximately ± 1.645 (Rokv$^{0.5}$.)

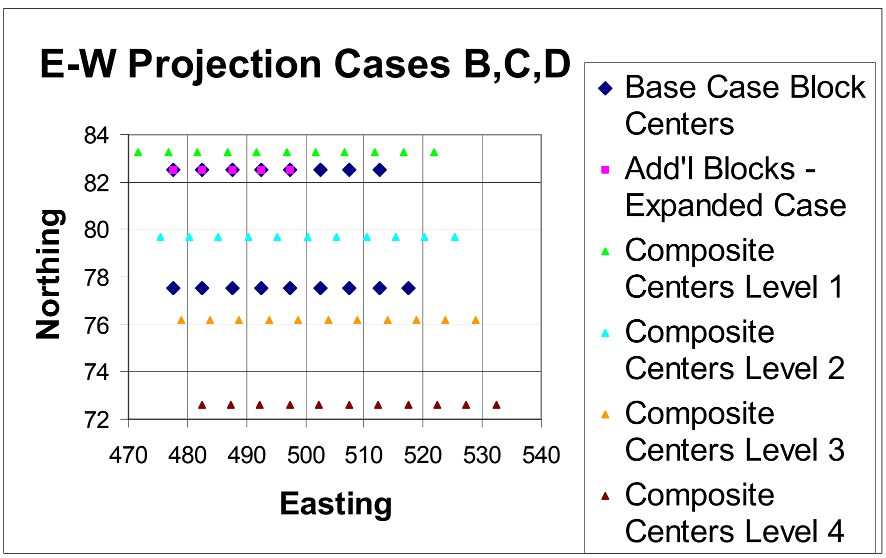
The discretization spacing for ordinary kriging was 2.5 m in X and Y and 5 m in Z. In a special version of AMEC's single-block kriger, the 5 X 10 X 5 m blocks are aggregated and discretized.

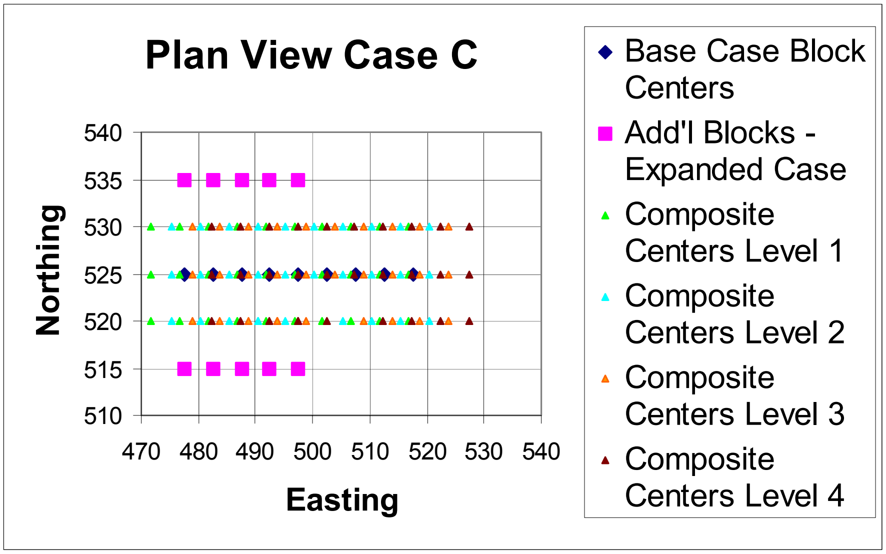
The attached spreadsheet setup.xls shows the configuration of holes and blocks. Hole "collars" represent pierce-points on the 85 m bench. The holes at 520, 525 and 530 m north have four composites extending from the 85 m elevation downward at an inclination of 45 degrees. This provides coverage for blocks on the 75 and 80 m benches and one composite underneath. No composites "above" the blocks are used, as these probably would come from the weathered zone and be suspect. For the expanded case, the holes on the 510, 515, 535 and 540 bench have two composites extending from the 85 m elevation, as the incremental bulk sampled blocks are all on the 80 m bench.

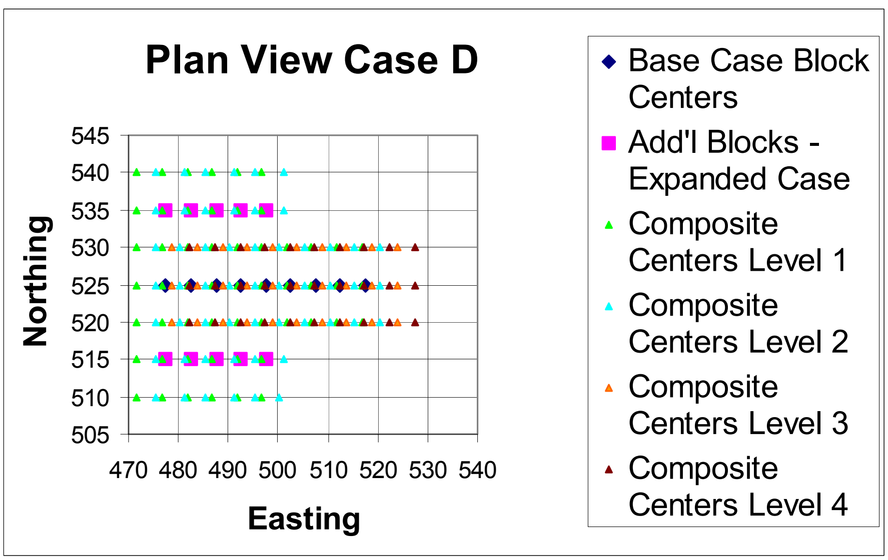

Plan View Case A
Northing
540
535
530
525
520
515
510
47 0
48 0
49 0
50 0
51 0
52 0
53 0
54 0
Easting
Base Case Block Centers
Add'l Blocks - Expanded Case
Composite Centers Level 1
Composite Centers Level 2
Composite Centers Level 3
Composite Centers Level 4


E-W Projection Case A
Northing
84
82
80
78
76
74
72
470
480
490
500
510
520
530
540
Easting
Base Case Block Centers
Add'l Blocks - Expanded Case
Composite Centers Level 1
Composite Centers Level 2
Composite Centers Level 3
Composite Centers Level 4


Plan View Case B
Northing
540
535
530
525
520
515
510
470
480
490
500
510
520
530
540
Easting
Base Case Block Centers
Add'l Blocks - Expanded Case
Composite Centers Level 1
Composite Centers Level 2
Composite Centers Level 3
Composite Centers Level 4


E-W Projection Cases B,C,D
Northing
84
82
80
78
76
74
72
470
480
490
500
510
520
530
540
Easting
Base Case Block Centers
Add'l Blocks - Expanded Case
Composite Centers Level 1
Composite Centers Level 2
Composite Centers Level 3
Composite Centers Level 4


Plan View Case C
540
535
530
525
520
515
510
Northing
470 480 490 500 510 520 530 540
Easting
Base Case Block Centers
Add'l Blocks - Expanded Case
Composite Centers Level 1
Composite Centers Level 2
Composite Centers Level 3
Composite Centers Level 4


Plan View Case D
545
540
535
530
525
520
515
510
505
Northing
470 480 490 500 510 520 530 540
Easting
Base Case Block Centers
Add'l Blocks - Expanded Case
Composite Centers Level 1
Composite Centers Level 2
Composite Centers Level 3
Composite Centers Level 4

Strathcona Letterhead

June 9, 2004

Joe R. Piekenbrock
NovaGold Resources Inc.
7853 Red Fox Drive
Evergreen, Colorado 80439 USA

E-MAIL AND MAIL
joep@novagold.net

Dear Joe:

Rock Creek Bulk Sample

Following our lengthy discussions on a bulk sampling program for the Rock Creek project, we are proving a summary of our thoughts on the factors to be considered, and the analysis that has been done to date to guide a sampling program on this challenging gold deposit.

Background and Definition of Sampling Challenge

The Rock Creek project is an example of a low-grade gold deposit with relatively coarse gold, one of the most difficult situations when attempting to quantify mineral resources and reserves. After a considerable in-fill drilling campaign conducted by Alaska Gold Company in 2003, Amec have recently completed an estimate of the mineral resources for the project. One of their main observations was that different drilling techniques have given rise to different gold grade regimes which in turn result in significantly differing resource estimates for the project, depending on which type of drill results are being used. Given the low-grade nature of the deposit, the question of which drilling technique provides the most reliable data is of great importance. To solve the question, AMEC have concluded that bulk sampling is required, a conclusion that we share in principle.

Based on the analysis by Amec of 29 twin drill hole results, the difference in gold assay results is in the order of 25 to 30%, with reverse circulation (RC) drilling showing systematically higher values than core holes, even after the removal of low-recovery intervals from the core holes and the removal of obvious or suspected contamination problems in RC holes. To be effective, a bulk sample should have an expected sample error considerably smaller than the variance between the two types of drilling. As well, the grade estimation variance for the bulk sample itself should also be well below the drill hole grade bias.

Bulk Sample Error

We have developed a protocol for the bulk sample, that can be summarized as follows:

$ ***Field Activities***. Crush the entire sample (nominally 10 000 tonnes) to 95% passing 1.27 cm (2 inch). Split out 160 tonnes (1.6%) using a sample tower. Crush 160 tonnes to 95% passing 0.64 cm (3 inch) using the rolls crusher on the sample tower. Split out 20 tonnes (an additional split of 12.5%) as the final field sample.

$ ***Further Sample Comminution, Splitting and Assaying***. Ship the field sample to F. L. Smidth Inc. Process Laboratories in Bethlehem, PA for dry grinding to 95% passing 100 microns (140 mesh) in a vertical mill. Ship the pulverized sample to SGS Lakefield Research in Ontario for treatment in a Knelson concentrator to recover gold particles >30 to 40 microns. The gold content of the Knelson concentrate will be put into solution by intense cyanidation and then determined by solution assay. From the Knelson tailings a one-eighth sample (12.5%) will be split out with a pulp splitter and subjected to intense cyanidation. Assaying of the final tailings will complete the gold grade determination process.

The sample error for this protocol, assuming four sub-samples of 2500 tonnes each at gold grades of 0.5, 1.0, 1.5 and 2.0 g/t, respectively (a head grade of 1.25 g/t for the entire lot), is around ∀7% for the whole lot, at the 95% confidence level.

Grade Estimation Variance for the Bulk Sample Tonnage

In preparation for the bulk sample test, the bulk sample area needs to be drilled off with the competing drilling techniques in some detail, and a separate gold grade estimate would be prepared for each technique used. Two of these techniques would repeat, as exactly as possible, the two historical methods giving rise to the estimation problems for the entire deposit.

Harry Parker of Amec has prepared a memo dated May 30, 2004 in which he evaluates the grade estimation variance for the bulk sample for different tonnages and for different drilling densities. His conclusions are contained in a table, reproduced below:

Table 1 - Relative Standard Errors and 90 % Confidence Limits

Data Configuration	Base Case (10 800 tones)		Expanded Case (17 550 tonnes)	
	Relative Standard Error of Estimate	∀ 90 % Relative Confidence Interval	Relative Standard Error of Estimate	∀ 90 % Relative Confidence Interval
Case A	32 %	53 %	31 %	51 %
Case B	25 %	41 %	23 %	38 %
Case C	15 %	24 %		
Case D			12 %	19 %

Case A Six holes [for each type of drilling] on ten-metre spacing in X (grid-east) and Y (grid-north), along the centre line.

Case B Eleven holes [for each type of drilling] on five-metre spacing in X and on ten-metre spacing in Y along the centre line.

Case C Thirty holes [for each type of drilling] on a five-metre spacing in X and Y, in three lines. And finally

Case D Fifty holes [for each type of drilling] on a five-metre spacing in X and Y in five lines.

We have not yet received an update of these calculations that would spell out the tonnage and drill pattern required for a ∀ 90% relative confidence interval of say ten percent that we think would be required for the bulk sample to provide the grade certainty needed. However, it is obvious from Table 1 that a substantial tonnage of perhaps 25 000 tonnes or more, and an extensive drilling program on five-metre centres would be required.

Discussion and Conclusions

The sample protocol chosen for the Rock Creek bulk sample would yield a sample error of ∀ 7% that would allow a decision to be made which of the grade data are the more realistic to use for the resource estimate of the Rock Creek deposit and for its economic evaluation. However, a large bulk sample with a very substantial pre-sample drill program on five-metre centres would be required to reduce the forecast grade variance for the bulk sample to a compatible level.

There are three possible outcomes to such a bulk sample exercise:

1. The grade forecast based on diamond drilling is verified. In this case, the project would be evaluated using the AUKR4 case, the risk-adjusted grades with the RC grades reduced mathematically to match what the DDH grades would have been, based on the twin-hole analysis.

2. The grade forecast does not support either the previous core or RC results, but is somewhat intermediate. In this case, the more cautious approach of using the AUKR4 case would be retained.

3. The grade forecast based on reverse circulation drilling is verified. In this case, the grade data as is, case AUKR5, would be used for the evaluation of the project. However, upgrading of the diamond drill core grades, currently constituting two-thirds of the project database, would **not** be possible without a significant program of additional RC drilling using best practices to improve the statistical base that compares RC and DDH gold grades.

With only a limited knowledge of the project itself, but after having spent a few hours looking at part of the drill core left from the 2002 and 2003 diamond drilling programs, we are of the opinion that there is a greater chance that a bulk sampling program would verify the diamond drill core grades, rather than showing the core sample grades to be biased low.

Our initial estimate for the cost of the bulk sample Case A, while not entirely firm, came to about $1.3 to $1.5 million. The much larger program required to achieve a reasonable estimation variance for the anticipated gold grade of the bulk sample would probably double that figure. There is also, as we have pointed out, a real problem in securing a sample tower in time for this summer=s program.

It is not obvious that the Rock Creek project would warrant such a large outlay for a program that, if the results are negative, would add nothing but certainty to a marginal grade estimate, and that, if positive, (a less likely outcome), might add 125 000 ounces to its mineral resource inventory (at a cut-off grade of 0.6 g/t) by moving below-cut-off material above that line, without truly lifting the project above the realm of marginality because of the virtually unchanged gold grade.

There is the alternative to extend the scope of the existing twin hole data by re-drilling all of the 29 sites in such a way that, at the end, each site has a full complement of one old-style and one best-practice RC hole, one Aregular@ diamond drill hole repeating the 2003 drilling protocol, and one large-diameter (PQ) triple-tube DDH. Sampling of the RC holes would include a significant number of field duplicates (say 20%). The PQ core would be sampled *in toto*, in one-half metre intervals. The sample preparation and assay protocols would follow the 2003 practice.

One would hope that, for the 29 sites combined, there would be very little grade difference between the triple-tube DDH and the best-practice RC holes, thus establishing the true grade of the intersections which in turn would be used to make a call as to which of the currently existing grade forecasts are more believable. It is anticipated that such a program would require some 4000 metres of drilling and would thus be expected to be a more economically sensible approach.

We regret that the planning for a bulk sampling program for the Rock Creek project has raised some questions about the economics and benefits, and scale of program required to achieve reliable and useful results, but hope that our comments contribute to NovaGold arriving at the most appropriate decision as to what the next step should be.

Yours sincerely,

H. Thalenhorst

cc: Harry Parker (harry.parker@amec.com)

APPENDIX I

ROCK CREEK RECONCILIATION

RESOURCE MODELING INC.

February 9, 2005

To: Harry Parker

Fr: Mike Lechner

Re: Rock Creek Reconciliation

- **Scope of Study**

The scope of this study was to summarize gold resources inside of three Lerchs-Grossmann (LG) pits using six block models that were constructed for the Rock Creek deposit. Tonnes, grade, and contained gold ounces above a 0.62 g/t cutoff grade (specified by NovaGold) were tabulated for all estimated blocks in the various models. The resources were summarized by mineral zones and also as a function of distance to the closest drill hole that was used to estimate block grades.

In addition to summarizing gold resources, several representative cross sections were created in order to compare and contrast the different models. General observations were made during the course of performing the reconciliation comparisons and are discussed.

- **Methods**

NovaGold provided the three LG pits as MineSight geometry objects. The LG's were generated by Norwest personnel using a $325 gold price and consistent cost parameters. The three pits were generated from different resource models. The table below summarizes the three pits that were used in the reconciliation study.

Table 1: LG Pits

Pit/Model/Vintage	*MineSight Pit Object*	*Block Model File*	*Comments*
Spring 2003	Au 325.msr	R515.DAT	Based on 2003 PACK model
Spring 2004	LG AUKR4 $325 shell.msr	RK15.DAT	Based on AMEC krige model
November 2004	LG $325 shell.msr	RKCK15.DAT	Based on AMEC kriged & inverse distance model

Each of the three LG pits was intersected with the top of bedrock surface that was updated for the November 2004 model. The resultant solids were visually inspected and interrogated for mathematical correctness (no holes, overlapping triangles, etc.). No problems were detected for the three pit solids, and cubic volume was calculated and recorded for each pit. Three-dimensional block partials were created for each solid and used for summarizing resources.

A default constant density of 2.71 tonnes/m^3 was used to calculate tonnes for each pit/model. This density was determined by AMEC in the spring of 2004 to be reasonable for the Rock Creek deposit.

A copy of the 2003 PACK model was obtained from Norwest associate Robert Proudfoot. Resource summarizes were tabulated and then compared with previous statements. Total model resources were verified, ensuring that the correct model was used. A summary of resources inside of the 2003 scoping study pit was prepared at a 1.0 g/t gold cutoff grade using a 2.6 tonnes/m^3 density and was found to compare very closely with a summary of pit material that was supplied by Robert Proudfoot.

Four of the other models were extracted from their original source files and imported into a single MineSight reconciliation model (grade items, zone codes, distance to data, etc). The 2003 PACK model could not be imported into the reconciliation model without reblocking because it had a different block size than the other two models. The 2003 PACK model contained equidimensional blocks measuring 5m x 5m x 5m, while the 2004 AMEC models used a block size of 5m x 10m x 5m. It was decided that reblocking the 2003 PACK model would add another variable into the mix that could be difficult to explain. A sixth model was created for this study using the November 2004 drill hole database that was then adjusted using the spring 2004 AMEC adjustment factors. Table 2 summarizes the six grade models that were used for this study.

Table 2: Resource Models

Model	***Original Grade Items***	***Original Model***
2003 PACK	AUK1, AUK2, PART1, PART2	R515.DAT
2004 PACK	AUK20	RK15.DAT
Spring 2004 AMEC Recommended	AUKR4	RK15.DAT
Nov. '04 Data - Spring '04 Adjustments	n/a	n/a
Nov. 2004 AMEC Recommended	AUKR4	RKCK15.DAT
Nov. 2004 AMEC Upside	AUKR6	RKCK15.DAT

The 2004 PACK model was obtained by AMEC in the spring of 2004 and loaded to their model for comparative purposes. The recommended spring and November 2004 AMEC models were based on downward adjustments that were made to reverse circulation assays with metal at risk removed. The "Nov. '04 Data – Spring Adjustments" entry uses the same data used to construct the November 2004 AMEC model, but uses spring 2004 adjustment equations (different from those developed for November 2004 AMEC model). The November 2004 AMEC upside model was constructed using core data that were factored upward based on correlations that were made with reverse circulation data (i.e. core assays multiplied times 1.25).

The MineSight procedure "pitres" was used to summarize gold resources for each pit. The total tonnes at a zero cutoff grade as reported by "pitres" checked very closely with the theoretical tonnes for each of the three-dimensional pit solids using a density of 2.71 tonnes/m^3. Distance to data bins were calculated in 10-meter increments for the 2003 PACK and November 2004 AMEC models using the distance to the closest drill hole composite that was stored in the blocks. This allowed the resources to be summarized as a function of distance to data.

- **Results**

Resources for all estimated blocks were summarized in each of the pits using a 0.62 g/t gold cutoff grade by mineral zone and distance to data. Table 3 tabulates the resources for the 2003 scoping study pit, the spring 2004 pit and the November 2004 pit. Table 4 summarizes incremental and cumulative tonnes, grade, and contained gold ounces for the 2003 PACK and November 2004 AMEC models as a function of distance to data. There are some minor differences in the calculated gold ounces in Tables 3 and 4 due to grade rounding differences.

Table 3: Summary of Resources by Mineral Zone

2003 $325 Scoping Study LG Pit

Model	Total Above Cutoff			Albion Shear			Zone 1			Zone 2			Zone 3			Zone 99		
	Tonnes (000)	Au (g/t)	Ozs (000)	Tonnes (000)	Au (g/t)	Ozs (000)	Tonnes (000)	Au (g/t)	Ozs (000)	Tonnes (000)	Au (g/t)	Ozs (000)	Tonnes (000)	Au (g/t)	Ozs (000)	Tonnes (000)	Au (g/t)	Ozs (000)
2003 PACK	16,708	1.60	859.5	1,610	3.08	159.4	15,098	1.44	699.0	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2004 PACK	9,657	2.10	651.5	2,036	2.97	194.4	3,629	1.94	226.3	2,053	1.68	110.9	4	8.89	1.1	1,935	1.91	118.8
Spring 2004 AMEC Recommended [1]	11,796	1.18	446.0	3,487	1.61	180.5	5,741	1.02	188.3	2,053	0.94	62.0	19	1.20	0.7	496	0.91	14.5
Nov. '04 Data - Spring '04 Adj. [2]	11,337	1.26	459.3	3,069	1.71	168.7	5,163	1.17	194.2	1,466	0.97	45.7	4	1.22	0.2	1,635	0.96	50.5
Nov. 2004 AMEC Recommended [3]	11,217	1.28	459.9	3,195	1.75	179.8	4,972	1.16	185.4	1,411	0.97	44.0	4	1.22	0.2	1,635	0.96	50.5
Nov. 2004 AMEC Upside [4]	13,385	1.34	576.7	3,207	1.76	181.5	6,389	1.33	273.2	2,149	1.03	71.2	5	1.75	0.3	1,635	0.96	50.5

Spring 2004 $325 LG Pit

Model	Total Above Cutoff			Albion Shear			Zone 1			Zone 2			Zone 3			Zone 99		
	Tonnes (000)	Au (g/t)	Ozs (000)	Tonnes (000)	Au (g/t)	Ozs (000)	Tonnes (000)	Au (g/t)	Ozs (000)	Tonnes (000)	Au (g/t)	Ozs (000)	Tonnes (000)	Au (g/t)	Ozs (000)	Tonnes (000)	Au (g/t)	Ozs (000)
2003 PACK	8,650	1.66	462.6	913	3.3	96.9	7,737	1.47	365.7	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2004 PACK	5,750	2.41	445.6	1,271	3.25	132.8	2,611	2.08	174.6	1,199	1.95	75.2	32	6.33	6.5	637	2.76	56.5
Spring 2004 AMEC Recommended [1]	7,847	1.27	319.5	1,965	1.87	118.1	4,126	1.08	143.3	1,418	0.97	44.2	100	1.99	6.4	238	0.98	7.5
Nov. '04 Data - Spring '04 Adj. [2]	6,869	1.36	301.1	1,801	1.9	110.0	3,690	1.23	145.9	1,045	1.00	33.6	81	1.76	4.6	252	0.86	7.0
Nov. 2004 AMEC Recommended [3]	6,815	1.39	304.6	1,897	1.97	120.2	3,581	1.22	140.5	1,005	1.00	32.3	80	1.79	4.6	252	0.86	7.0
Nov. 2004 AMEC Upside [4]	8,097	1.48	385.9	1,904	1.97	120.6	4,392	1.42	200.5	1,457	1.08	50.6	92	2.44	7.2	252	0.86	7.0

December 2004 $325 LG Pit

Model	Total Above Cutoff			Albion Shear			Zone 1			Zone 2			Zone 3			Zone 99		
	Tonnes (000)	Au (g/t)	Ozs (000)	Tonnes (000)	Au (g/t)	Ozs (000)	Tonnes (000)	Au (g/t)	Ozs (000)	Tonnes (000)	Au (g/t)	Ozs (000)	Tonnes (000)	Au (g/t)	Ozs (000)	Tonnes (000)	Au (g/t)	Ozs (000)
2003 PACK	8,862	1.60	455.9	859	3.14	87	8,003	1.43	367.9	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2004 PACK	5,899	2.46	466.1	1,225	3.34	131.5	2,868	2.03	187.2	1,157	1.92	71.4	46	9.96	14.7	603	3.16	61.3
Spring 2004 AMEC Recommended [1]	7,906	1.22	309.3	1,768	1.79	101.7	4,522	1.05	152.7	1,282	0.95	39.2	98	2.63	8.3	236	0.98	7.4
Nov. '04 Data - Spring '04 Adj. [2]	7,408	1.38	328.1	1,724	1.97	109.2	4,126	1.23	163.2	1,000	1.01	32.5	114	2.14	7.8	444	1.08	15.4
Nov. 2004 AMEC Recommended [3]	7,331	1.40	330.5	1,803	2.05	118.8	4,014	1.22	157.4	957	1.01	31.1	113	2.15	7.8	444	1.08	15.4
Nov. 2004 AMEC Upside [4]	8,673	1.51	419.7	1,810	2.05	119.3	4,895	1.42	223.5	1,407	1.08	48.9	117	3.34	12.6	444	1.08	15.4

Model Definition	Description
2003 PACK	2003 Robert Prevost PACK model
2004 PACK	2004 Robert Prevost PACK model
Spring 2004 AMEC Recommended [1]	Spring 2004 AMEC recommended model (AUKR4) - (RC adjusted to core)
Nov. '04 Data - Spring '04 Adj. [2]	Nov. 2004 Database - Spring 2004 AMEC adjustment factors
Nov. 2004 AMEC Recommended [3]	Nov. 2004 AMEC recommended model (AUKR4) - (RC adjusted to core)
Nov. 2004 AMEC Upside [4]	Nov. 2004 AMEC upside model (AUKR6) - (core adjusted to RC)

Notes:

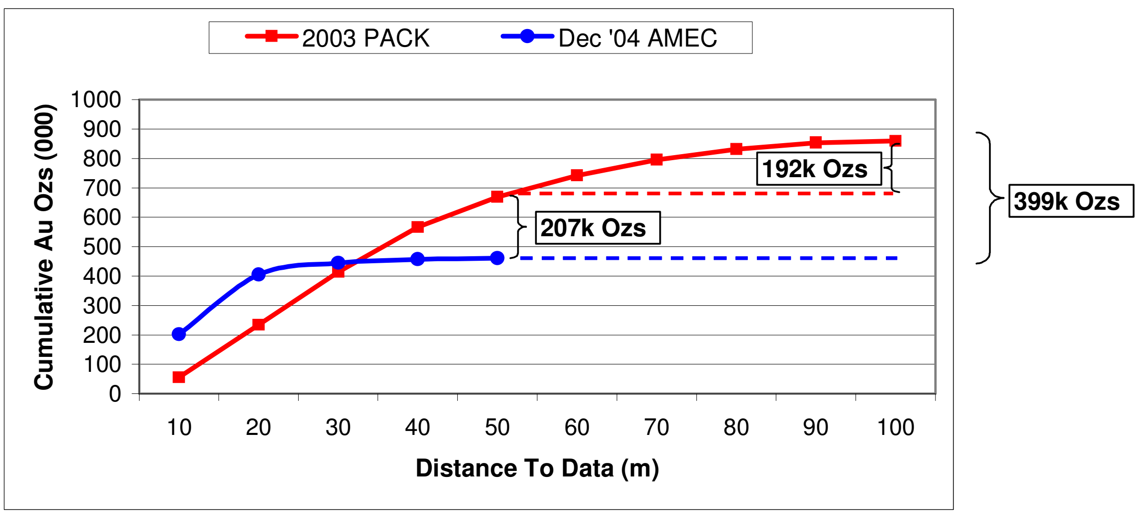
LG pits clipped to top of bedrock surface
Density of 2.71 tonnes/m^3 used
All estimated block grades inside of pits were tallied
2003 PACK mineral zones summarized as Albion shear and tension vein types
2004 PACK mineral zones obtained from Spring 2004 AMEC model

Table 4: Resource Summary by Distance – Scoping Study Pit

Distance to Data (m)	2003 PACK						Nov 2004 AMEC					
	Incremental			Cumulative			Incremental			Cumulative		
	Tonnes (000)	Au (g/t)	Au Ozs (000)	Tonnes (000)	Au (g/t)	Au Ozs (000)	Tonnes (000)	Au (g/t)	Au Ozs (000)	Tonnes (000)	Au (g/t)	Au Ozs (000)
0 to 10	1,116	1.53	54.9	1,116	1.53	54.9	4,486	1.40	201.9	4,486	1.40	201.9
10 to 20	3,748	1.49	179.5	4,864	1.50	234.4	5,083	1.24	202.6	9,569	1.31	404.5
20 to 30	3,829	1.46	179.7	8,693	1.48	414.1	1,137	1.10	40.2	10,706	1.29	444.7
30 to 40	3,016	1.57	152.2	11,709	1.50	566.3	376	1.00	12.1	11,082	1.28	456.8
40 to 50	1,959	1.62	102	13,668	1.52	668.3	135	1.00	4.3	11,217	1.28	461.1
50 to 60	1,303	1.75	73.3	14,971	1.54	741.6						
60 to 70	893	1.88	54	15,864	1.56	795.6						
70 to 80	491	2.28	36	16,355	1.58	831.6						
80 to 90	270	2.52	21.9	16,625	1.60	853.5						
90 to 100	81	2.37	6.2	16,706	1.60	859.7						
Total	**16,706**	**1.60**	**859.7**	**16,706**	**1.60**	**859.7**	**11,217**	**1.28**	**461.1**	**16,706**	**1.28**	**461.1**

Cumulative contained gold ounces are graphed for the two models as a function of distance to data in Figure 1.

Figure 1: Cumulative Ounces vs. Distance to Data



- **Discussion**

The 2003 scoping study pit contains nearly three times as much total material as the 2004 LG pits (56.7 million tonnes vs. 18.6 million tonnes). Similarly, this pit contains roughly 40% more material above a 0.62 g/t cutoff grade than the other pits. The 2003 PACK model contains about 400,000 more contained gold ounces than the other AMEC models within the scoping study pit. Approximately half of the difference is due to the fact that the 2003 scoping study pit was optimized using all estimated blocks from the 2003 PACK model. Block grades were estimated up to 100 meters from drill hole data in that model. The maximum distance that drill hole grades were projected in the AMEC models was 50 meters.

Differences in estimation methods account for the remaining 200,000 ounce difference between the 2003 PACK model and the various AMEC models. In addition to estimation differences between the various models, the November 2004 AMEC model was estimated with significantly more drill hole data than were available for the 2003 PACK model. The additional drilling data consisted of core and RC twin holes and local infill data. Table 5 summarizes the differences between the 2003 PACK and November 2004 AMEC model for resources inside of the 2003 scoping study pit.

Table 5: Summary of Differences

Resource Model	***Contained Au Ozs (000)***
2003 PACK Model	860
November 2004 AMEC	461
Difference	**399**

Main Differences	***Contained Au Ozs (000)***
Ozs Beyond 50m	192
Estimation Differences	207
Total Difference	**399**

The difference in contained ounces between the two models shown in Table 5 that were attributed to differing estimation methods is difficult to quantify by individual categories. The principal differences include: 1) reverse circulation assays were factored downward by AMEC for the November 2004 model, while no factoring of assays was done for the 2003 PACK model, 2) more drilling data were available for the 2004 model and the proportion of meters drilled using core increased from 50 to 67 percent of the total, 3) there are a number of cases where excessive grade projection occurred from high-grade intercepts at the bottom of drill holes in the 2003 PACK model, 4) some localized grade smearing in the 2003 PACK model, and 5) differences in the way in which metal at risk was handled for each model.

The decision by AMEC to factor reverse circulation assay data are discussed in the June 2004 and February 2005 AMEC reports and will not be discussed in this memorandum. There are several examples were 2003 PACK block grades could not be supported based on newly acquired infill drilling data (e.g. section 480 north). Similarly, in the 2003 PACK model, it was observed that the last drill hole composite in at least five drill holes generated a large volume of blocks in excess of 2 g/t gold. In these cases, the high-grade composites were only loosely constrained by a grade probability contour (0.37 probability of the block being in excess of 0.25 g/t). In the 2003 PACK model, metal at risk was removed by capping gold composites at 15, and 17 g/t for the tension vein regime (mineral zones 1 and 2) and the Albion Shear zone material, respectively. Metal at risk was removed by the outlier restriction method in the November 2004 AMEC model.

A series of east-west cross sections were prepared for the 2003 PACK, spring 2004 AMEC, and November 2004 AMEC models and are shown as Figures 2 through 10. These cross sections contain the 2003 scoping study and December 2004 LG pit outlines based on a $325 gold price. Mineral zone outlines, including the 0.25 g/t probability outline used in the 2003 PACK model are also shown on the sections along with the trace of the Sophie Gulch Fault.

Figure 2: Section 360 North

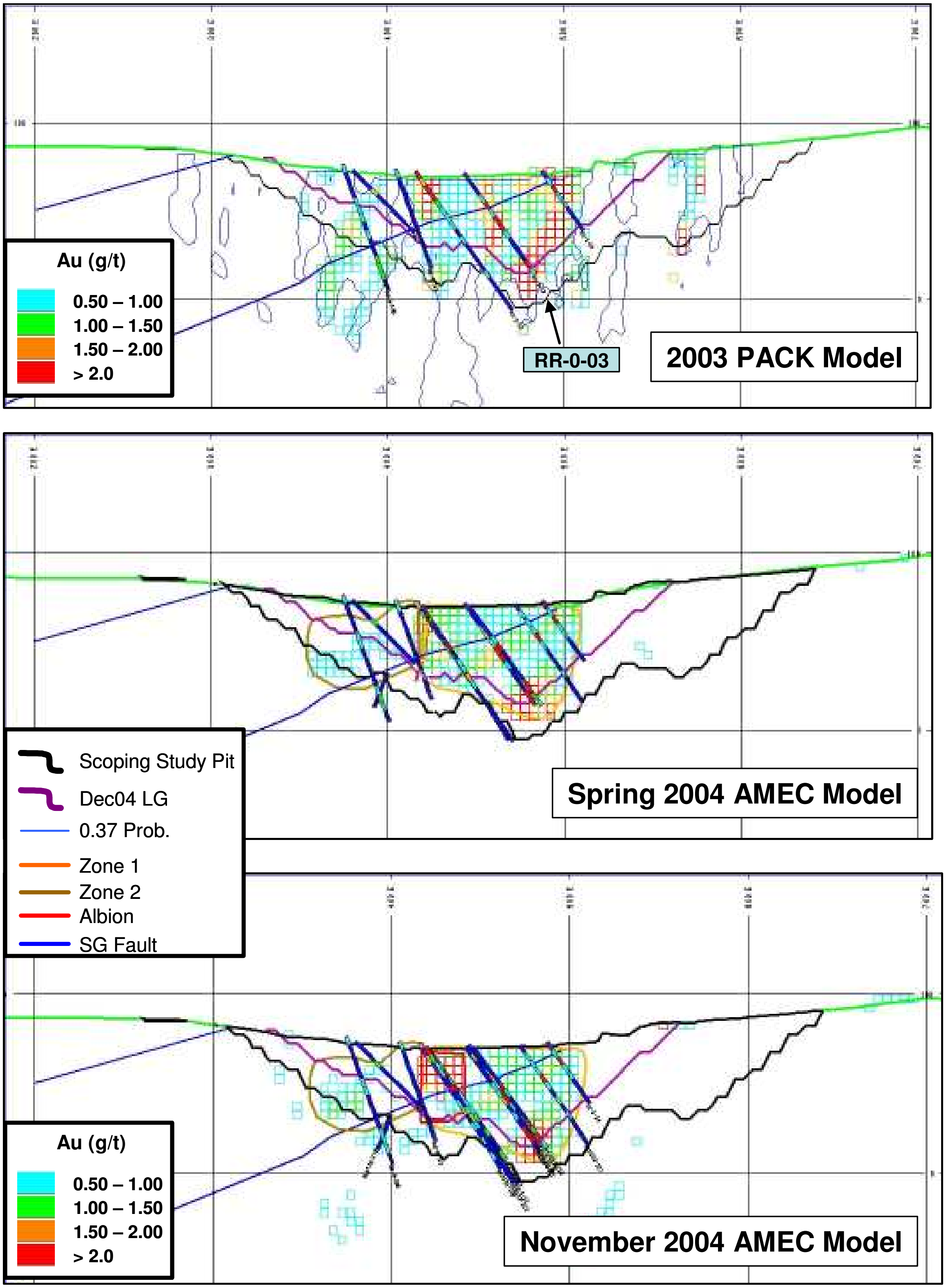


Figure 3: Section 450 North

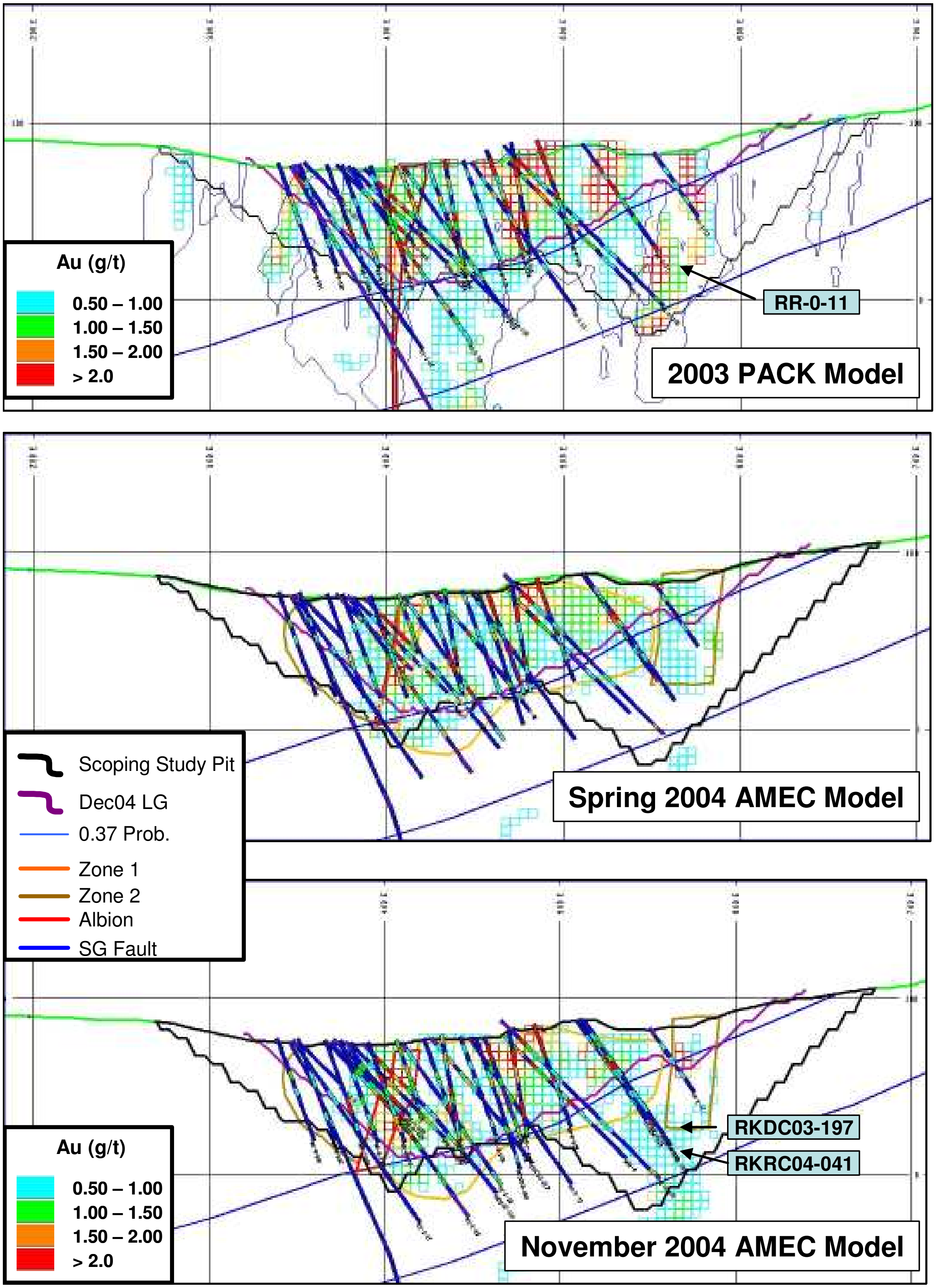


Figure 4: Section 630 North

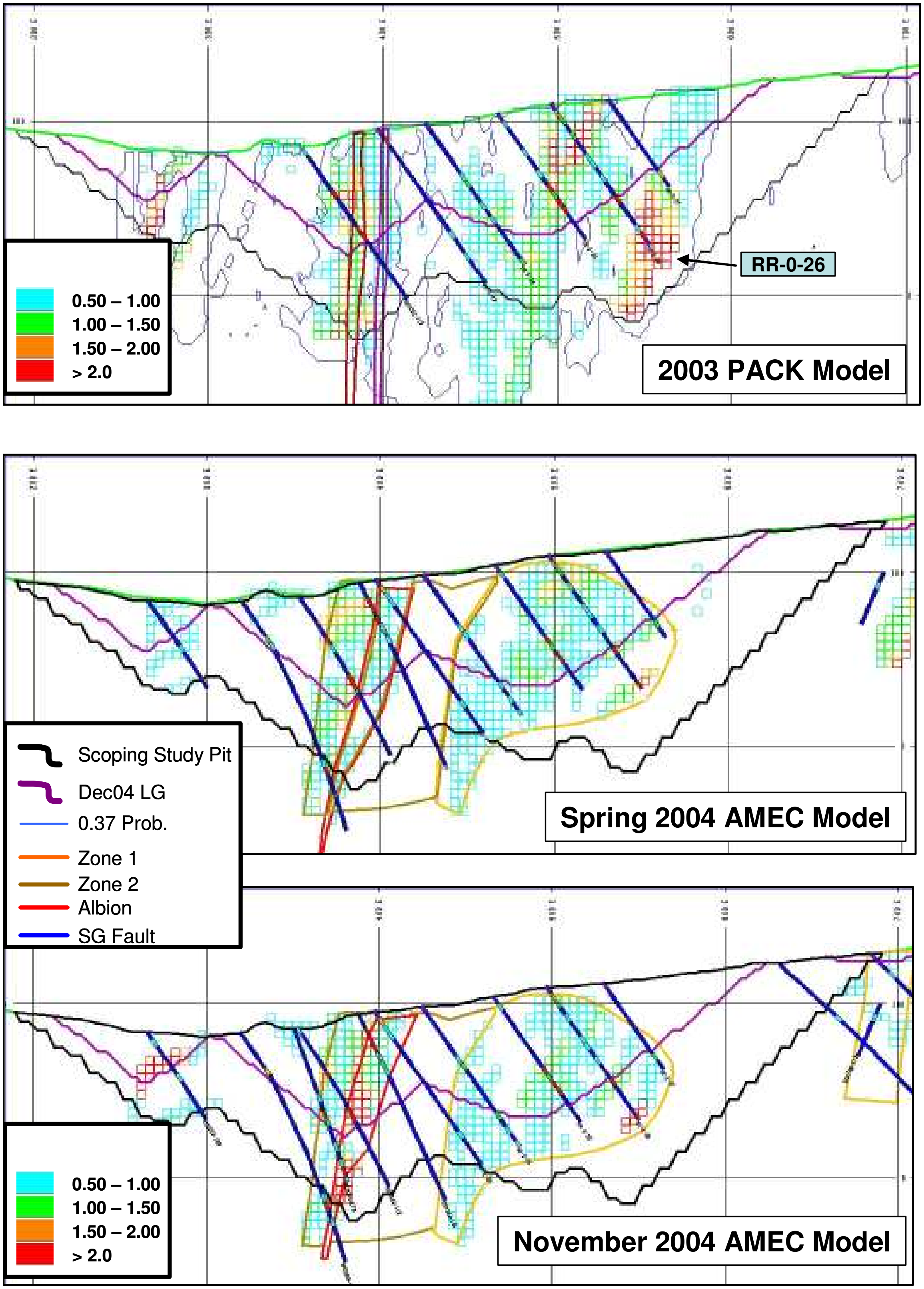


Figure 5: Section 780 North

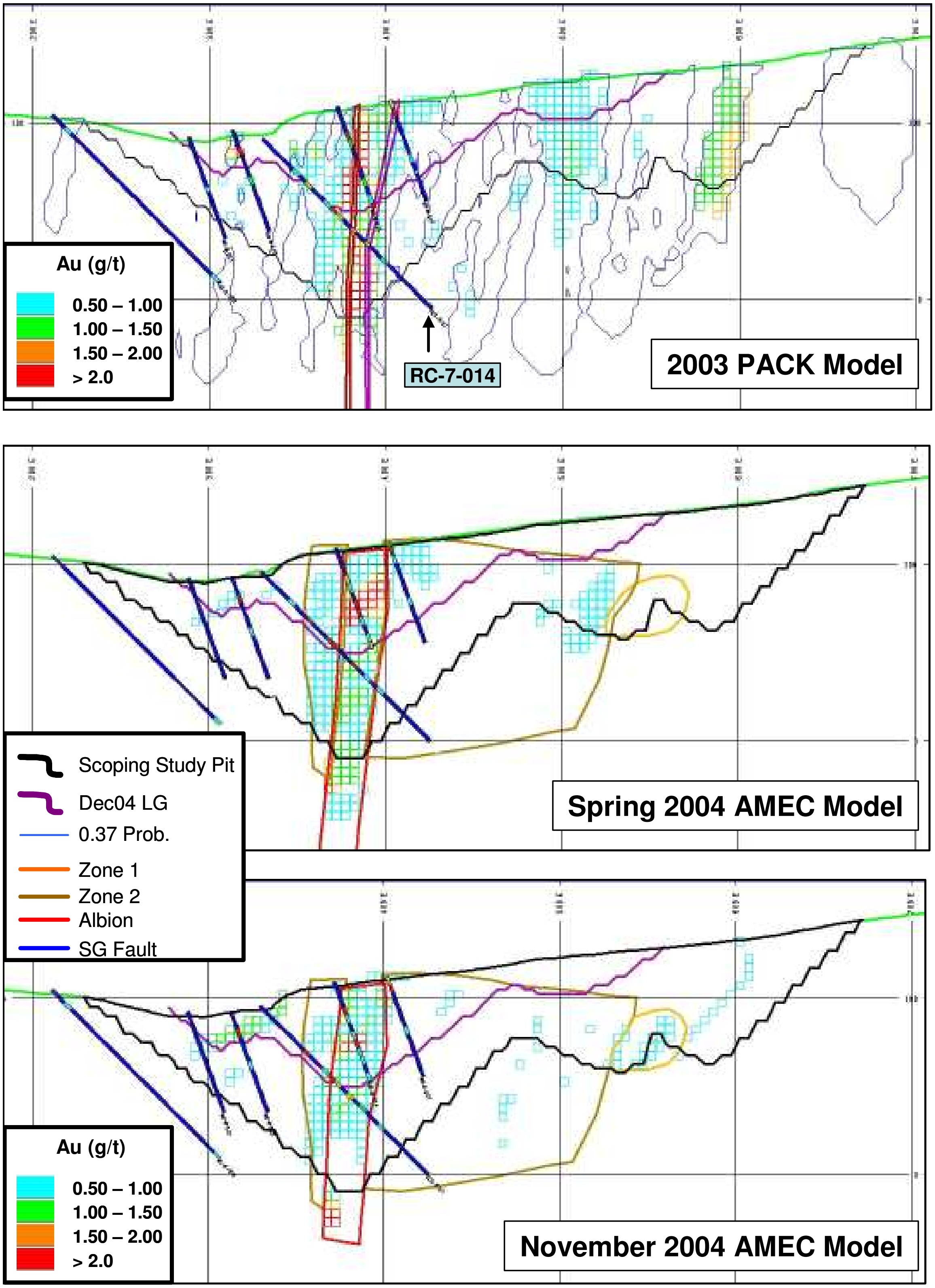


Figure 6: Section 825 North

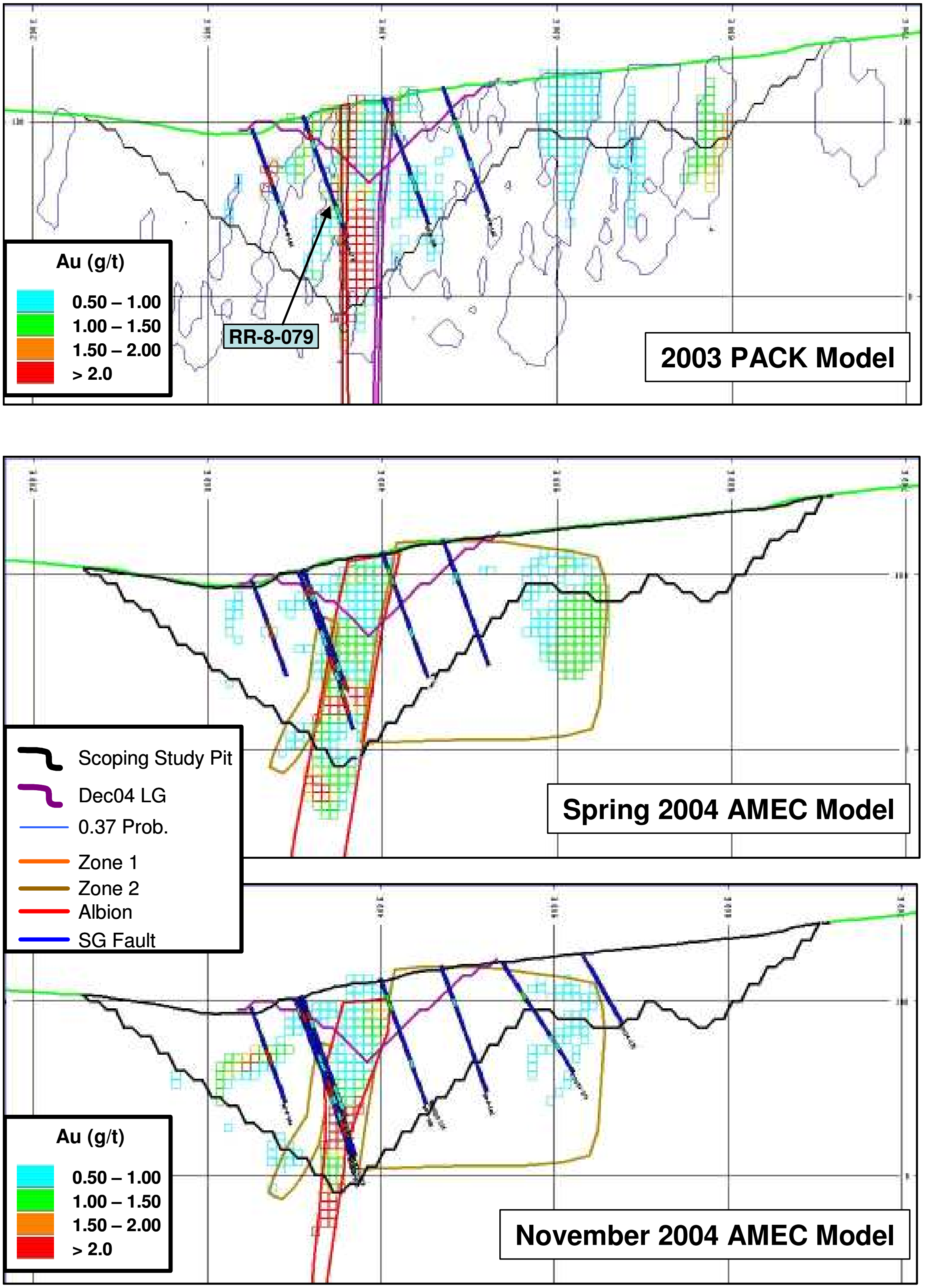


Figure 7: 570 – 600 North

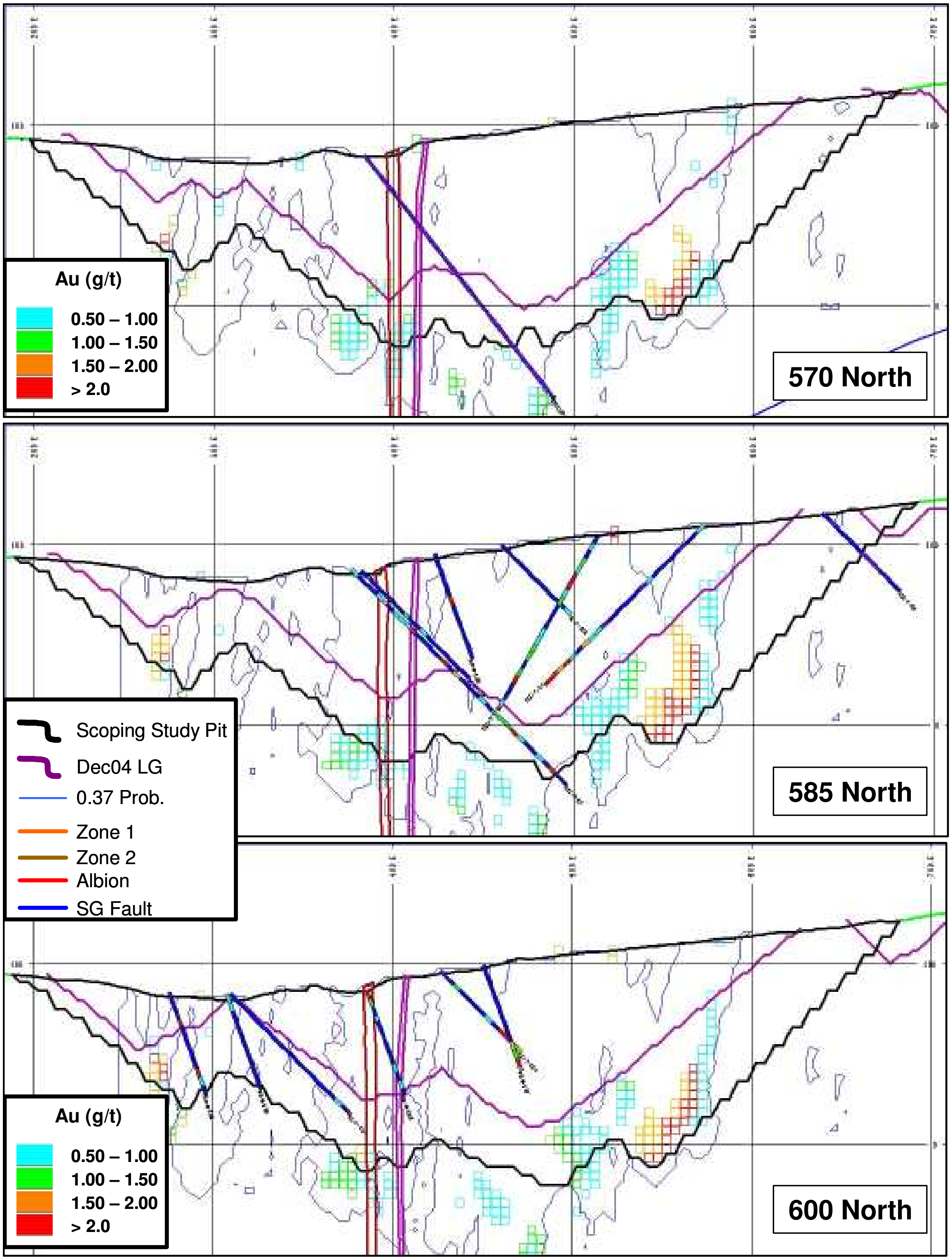


Figure 8: 945 – 975 North

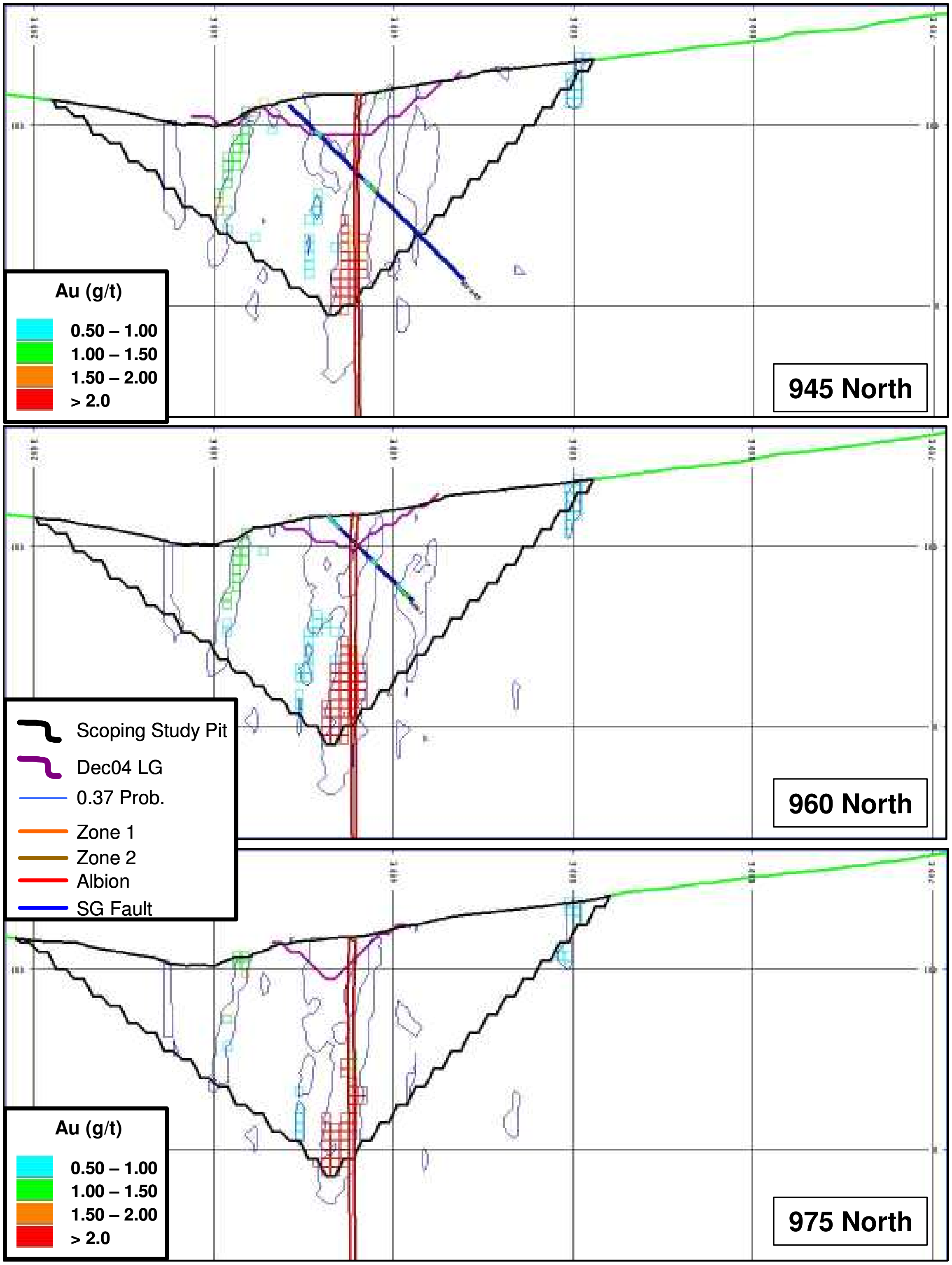


Figure 9: 450 North

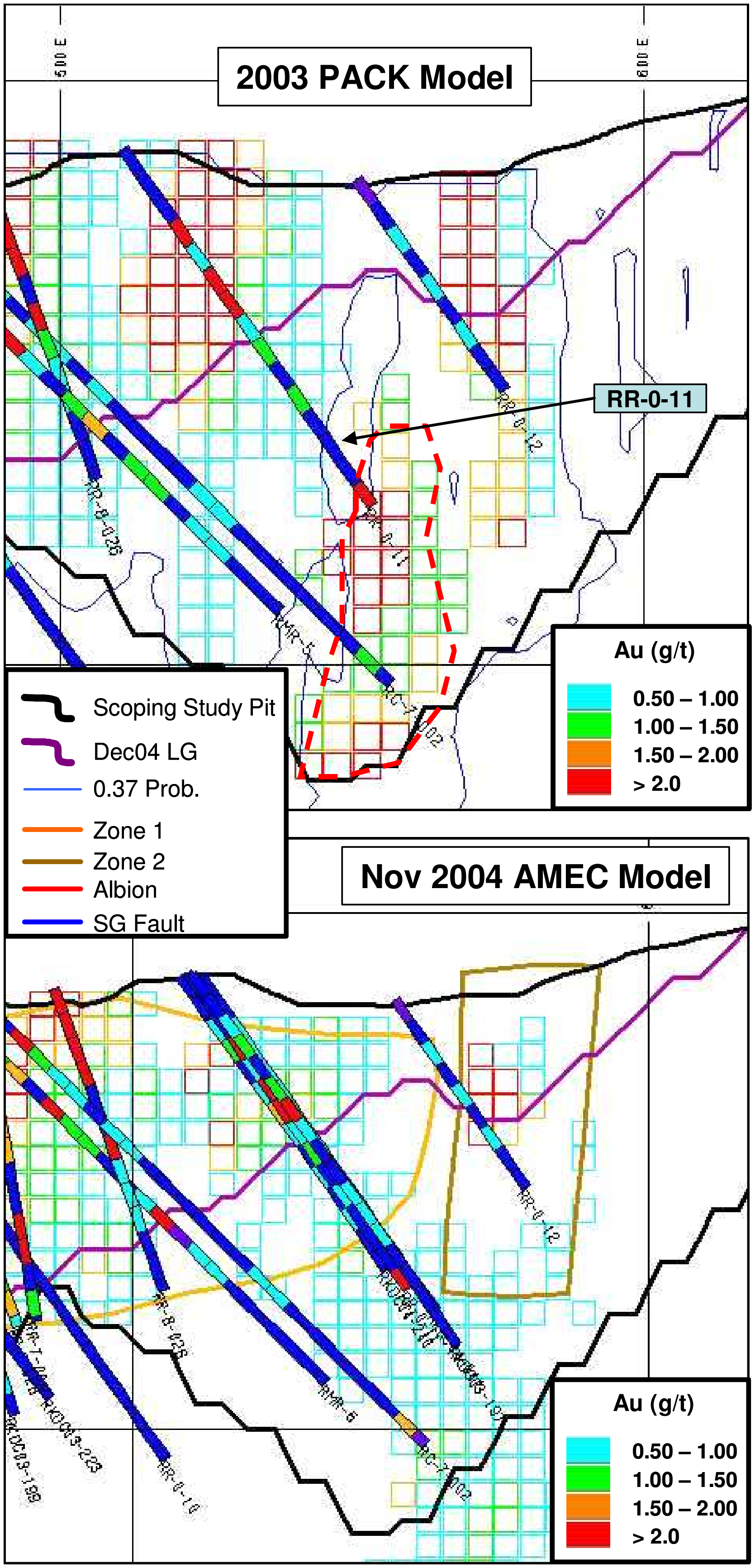
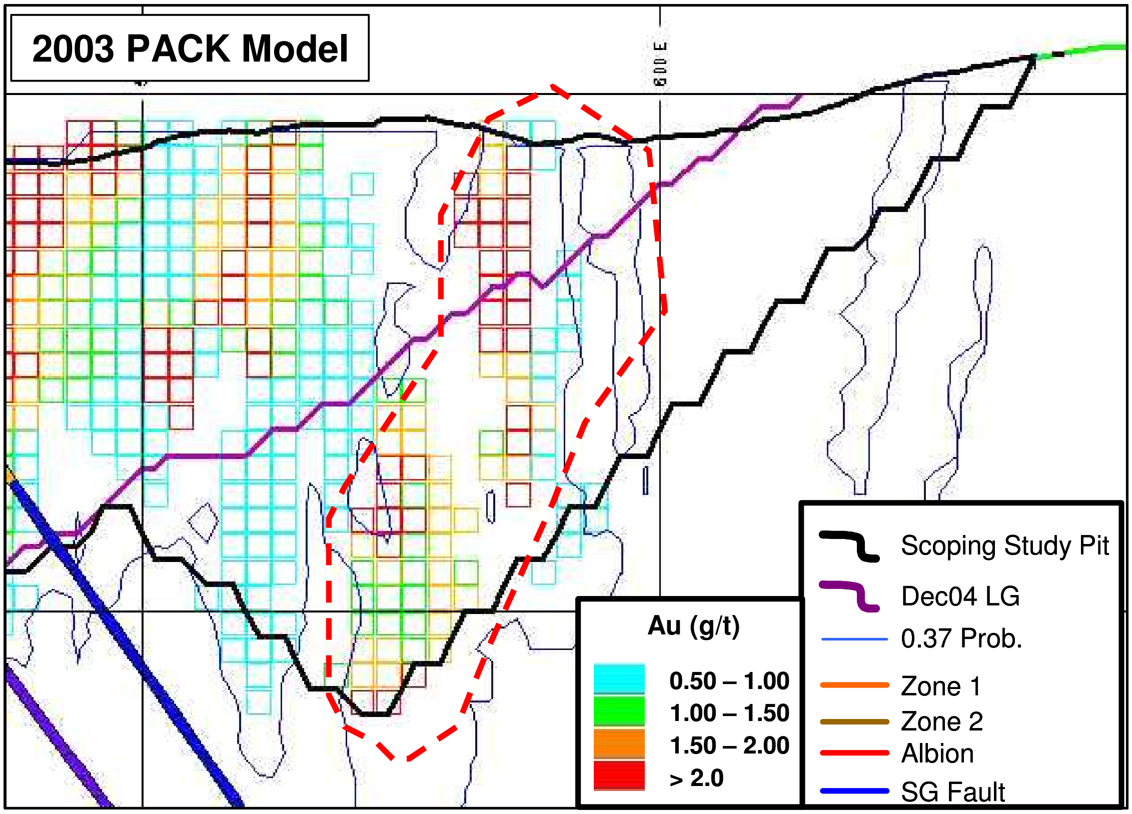
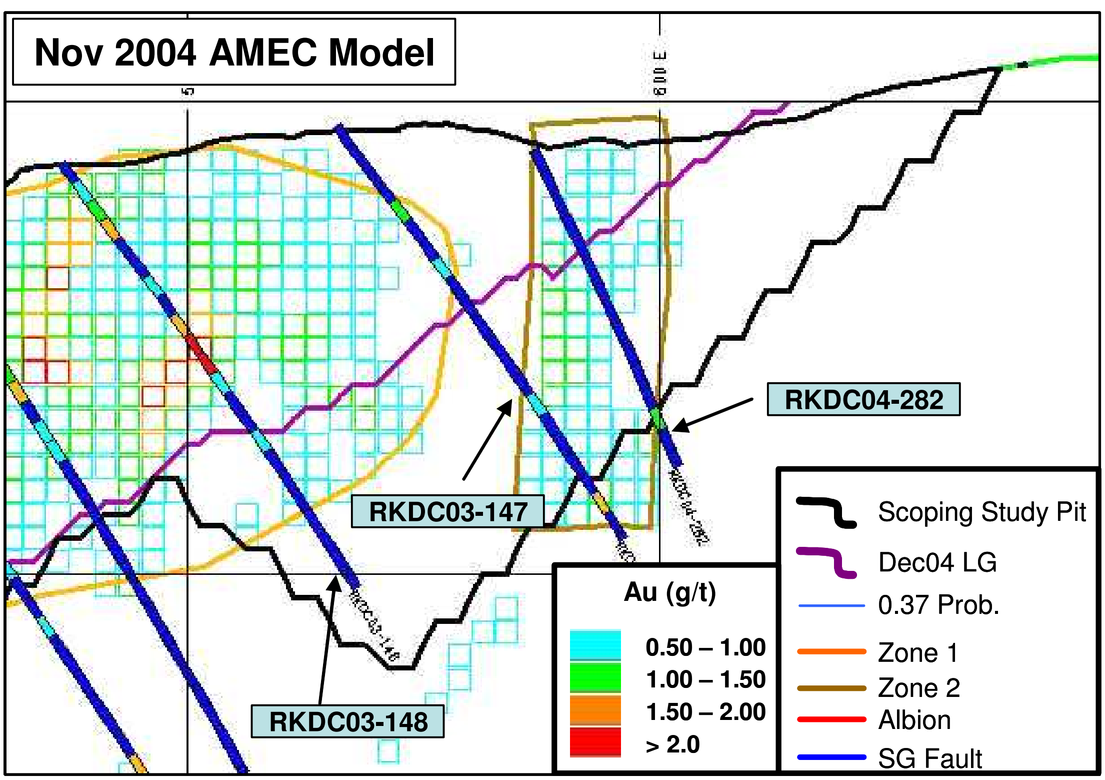


Figure 10: 480 North





Comments are provided below for each cross section shown in Figures 2 through Figure 10. These comments explain major differences between the 2003 PACK and November 2004 AMEC resource models.

- **Figure 2: Section 360 North** – In this section, the 2003 PACK model shows a relatively thick continuous high-grade zone that is driven in part by the second to last composite in hole RR-0-03 (second hole from right on top panel). Subsequent infill drilling did not confirm the PACK model's steep west plunging shoot on the east end of the section. The Albion was modeled as a square-shaped body in the November 2004 AMEC based on new drill hole information. The Albion was not modeled on this section in the 2003 PACK and spring 2004 AMEC models.

- **Figure 3: Section 450 North** – In this section, the last composite in hole RR-0-11 (second hole from right on top panel - 4.68m of 10.878 g/t Au) created a large zone of mineralization in the 2003 PACK model. Subsequent twin holes (RKDC03-197, and RKRC04-041) did not confirm the mineralization in RR-0-11, resulting in less high-grade mineralization in the November 2004 AMEC model. Block grades from the 2003 PACK model generated from the last composite in RR-0-11 essentially "carried" the eastern lobe of the scoping study pit.

- **Figure 4: Section 630 North** – In this section, the last composite in RR-0-26 (second hole from right - 4.5m of 10.861 g/t Au) generated a large zone of relatively high-grade material that helped to "carry" the eastern lobe of the scoping study pit.

- **Figure 5: Section 780 North** – In this section, the last composite in hole RC-7-014 (1.98m of 4.241 g/t Au) created a relatively continuous zone of high-grade mineralization in the Albion that helped to "carry" the western lobe of the scoping study pit

- **Figure 6: Section 825 North** – The last two composites in hole RR-8-079 (second from left on top panel - 5m of 7.057 and 0.49m of 8.948 g/t Au) generated a continuous zone of high-grade that helped to "carry" the western lobe of the scoping study pit.

- **Figure 7: 570 – 600 North** – This figure contains a series of three east-west cross sections through the 2003 PACK model that only shows block grades that were estimated by drill holes that were more than 50 meters from the blocks. A pod of high-grade mineralization that should be classified as inferred material is shown to "carry" the eastern lobe of the scoping study pit.

- **Figure 8: 945 – 975 North** – This figure shows three consecutive cross sections through the 2003 PACK model where block grades were projected more than 50 meters from the closest drill hole. The high-grade pod adjacent to the Albion Shear zone appears to "carry" the western lobe of the scoping study pit. The 2004 models show a more restricted interpretation to the Albion Shear zone.

- **Figure 9: 450 North** – In this close-up view of section 450 north, a zone of high-grade mineralization in the 2003 PACK model, shown as a dashed red line, was generated by the last composite in hole RR-0-11. Subsequent twin hole drilling essentially negated that zone of mineralization in the November 2004 AMEC model.

- **Figure 10: 480 North** - In this close-up view of a portion of section 480 north, a zone of relatively high-grade material in the 2003 PACK model (dashed red line) was not confirmed by subsequent drilling (RKDC03-147, RKDC03-148, and RKDC04-282). The November 2004 LG pit reflects the new grade estimate based on additional data.

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