JUNO PROJECT
INDEPENDENT TECHNICAL REVIEW
June 2010

PREPARED FOR
EXCALIBUR MINING CORPORATION LIMITED

Perth, Western Australia
Cube Project: 2010_033
www.cubeconsulting.com.au

Prepared By:
Adrian Shepherd
BSc Apps., MAusIMM
Senior Consultant – Geological Projects

…………………...……………………

Reviewed By:
Ted Hansen
BSc (Geology) MAusIMM
Director – Geological Projects

Distribution:	Number of Copies
Client	2 (electronic)
Cube Consulting	1 (electronic)

Cube Consulting Pty Ltd
ABN 84 094 321 829
Level 4, 1111 Hay Street
West Perth WA 6005
Phone: +61 8 9442 2111
Website: www.cubeconsulting.com.au

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

LIST OF APPENDICES

1.0 EXECUTIVE SUMMARY

Cube Consulting Pty Ltd (Cube) was requested by Excalibur Mining Corporation Limited (Excalibur) to complete an Independent Technical Review and a resource update for the Juno project at Tennant Creek in the Northern Territory. The Juno resource update was completed at the end of May 2010, based on a resource drilling database with a data cut-off date of 17th May 2010.

The review of the drilling data involved:

- Validation of historical drilling data against original hard-copy logs
- Grid transformation of all data from local imperial mine grid to MGA 94 grid
- Historical hole azimuth correction from mine grid
- Metric conversion of all imperial drilling data

Cube compiled a validated and corrected historic drill database for Juno from an original database supplied by Excalibur, dated October 2009. The recent Excalibur drilling data was combined with the validated database into a single resource database suitable for estimation of the Juno mineralisation.

The Juno mineralisation is hydrothermal replacement style located along shears, fold axes and competent contacts. The mineralisation is localised by two main magnetite rich bodies which occur at the top of a pipe-like alteration zone that extends vertically downward, cross-cutting the sediment package. The alteration pipe that encompasses the ellipsoidal east-west orientated magnetite bodies extends at least 300m below the bodies as tooth-like protuberances containing magnetite stringers within chlorite altered sediments.

The updated Juno resource reflects the improved understanding of the geology based on the additional drilling undertaken by Excalibur. The historical Geopeko geological interpretation and mineralised domains have been updated and modified to reflect the additional Excalibur drilling. Cube applied a rigorous approach to domaining, modelling the higher grade magnetite hosted mineralisation separately from the lower grade alteration envelope.

The following key points summarise the modelling method:

- All domain outlines used to control volume and estimations have been based on geological rather than grade criteria. Only continuous mineralised domains have been included in the interpretations. The use of geological logging and the resultant concentric alteration 3D model were central to the domaining and interpretation process;
- Flagging of resource drill holes where a unique database code was assigned to all intervals passing through the interpreted mineralised volumes;
- Selective sampling of the historic drilling by Geopeko was handled in an appropriate manner by assigning a nominal background assay value to all unsampled intervals;
- Statistical analysis of 2m geologically flagged down-hole composite data and the application of high grade assay top cuts where necessary. High grade assay top cuts were applied on a domain basis and were typically around the 99th percentile of the composite distribution;
- Variography has been used to characterise the spatial continuity within the mineralised zones and to determine appropriate estimation inputs to the interpolation process;

- A 3D block model was generated and constrained by the interpreted mineralised volumes. Grade interpolation was carried out using Ordinary Kriging (OK) into Y=5m X=10m Z=2.5m parent cells;
- Search strategies were optimised using quantitative kriging neighbourhood analysis (QKNA);
- Density was assigned to each alteration and mineralised domain based on 2,834 bulk density measurements;
- Oxidation were assigned by RL;
- Depletion for historical mining activity (1965 to 1977) by the 3D mining void generated from the original Geopeko pay run mine plans and sections, with the stope and underground workings validated by 25 Excalibur drill holes;
- Model validation and reporting.

The Juno Mineral Resource estimate undertaken by Cube, has been classified as Inferred and reported in accordance with The 2004 Australasian Code for Reporting of Mineral Resources and Ore Reserves (2004 JORC Code). This Inferred classification was based on:

- The high level of historic assay data, for which no QAQC analysis could be completed;
- The low confidence in the continuity and location of the remnant mineralisation and pillars associated with the historic stoping areas;
- Resource drilling away from the mine workings was wide spaced and selectively sampled;

A summary of the remaining Juno gold resources above a cut-off of 0.0g/t Au and 1.0g/t Au as of May 31st 2010 are shown in Table 1-1 and Table 1-2 respectively. The remaining copper resource above a cut-off of 0.0% Cu within a 0.3% Cu mineralised halo is shown in Table 1-3.

Classification	Oxidation	Zone	Domain	Volume	Tonnes	Au g/t	Au Oz
Inferred	Fresh	LG talc-chl	100	288,900	953,000	1.6	50,200
		MG magnetite	500	87,400	341,000	4.9	54,000
		HG magnetite	800	6,900	28,000	91.7	81,100
Total Inf.				**383,000**	**1,322,000**	**4.4**	**185,300**
TOTAL				**383,000**	**1,322,000**	**4.4**	**185,300**

Table 1-1 Remaining Juno Gold Resources – May 31st 2010 >0.0g/t Au

Classification	Oxidation	Zone	Domain	Volume	Tonnes	Au g/t	Au Oz
INFERRED	Fresh	LG talc-chl	100	145,900	481,000	2.7	41,800
		MG magnetite	500	85,500	333,000	5.0	53,800
		HG magnetite	800	6,900	28,000	91.7	81,100
Total Inf.				**238,300**	**842,000**	**6.5**	**176,700**
TOTAL				**238,300**	**842,000**	**6.5**	**176,700**

Table 1-2 Remaining Juno Gold Resources – May 31st 2010 >1.0g/t Au

Classification	Oxidation	Zone	Domain	Volume	Tonnes	Cu %	Cu (t)
Inferred	Fresh	Cu talc-chl	1000	**312,800**	**1,040,000**	**0.5**	**5,200**

Table 1-3 Remaining Juno Copper Resources – May 31st 2010 >0.0% Cu

All tonnage, grade and ounce values have been rounded down to relevant significant figures. Slight errors may occur due to this rounding of values.

2.0 INTRODUCTION

2.1 Scope of Work

Cube Consulting Pty Ltd (Cube) was engaged to undertake an Independent Technical Review and resource update for the Juno resource at Tennant Creek in the Northern Territory.

Cube proposed to work interactively with Excalibur to develop a strategy that would enable the depleted Juno resource to be classified as suitable for reserve estimation, optimisation and mine planning. The Scope of Work involved:

- An Independent Technical Review of the relevant and available Excalibur data including historic reports that relate to the Juno Resource;
- Validate the database that underpins the current resource estimate undertaken by Excalibur;
- Review the geology and mineralisation model wireframes, depletion volumes and level plans to validate the estimate completed by Excalibur Mining;
- Recommend a strategy to upgrade the confidence in the current Juno estimate to a suitable JORC category for open pit mine planning etc;
- Recommend additional drilling and work programs to validate (QAQC) of the historical data and verify the depletion volumes;
- Work interactively with the Excalibur geology team to undertake an additional resource estimate based on geological logging as distinct from the current ~1 g/t Au outline;
- Compile and document a final updated resource estimate based on the best available technical information suitable for a Bankable Feasibility Study (BFS).

2.2 Competent Persons

The qualified persons responsible for the preparation of this report and the Mineral Resource estimation are outlined below;

- **Adrian Shepherd** (BSc., Apps., MAusIMM) is a Senior Consultant Geologist at Cube with over 15 years experience in exploration, mining and evaluation of mineral commodities within Australia. Adrian Shepherd has sufficient experience relevant to the style of mineralisation, commodity and type of deposit under consideration to qualify as Competent Person as defined in the 2004 Edition of the 'AusIMM Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'.

- **Terje (Ted) Hansen** (BSc., MAusIMM) is a Director (Geological Project Consulting) of Cube with over 30 year's extensive experience in exploration, mining and evaluation of mineral commodities both within Australia and overseas. Ted Hansen has sufficient experience relevant to the style of mineralisation, commodity and type of deposit under consideration to qualify as Competent Person as defined in the 2004 Edition of the 'AusIMM Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'.

Cube is an Australian owned company providing geological consulting services and software systems to the resources and industrial sectors. The organisation is well resourced with an established office in Perth, Western Australia and has undertaken work for a number of substantial clients. Cube Consulting comprises a team of technical professionals dedicated to providing excellence in their field of expertise.

2.3 Site Visit

Mr Terje Hansen and Mr Adrian Shepherd visited site from 21st to 22nd January 2010 to review the controls on mineralization and geological interpretation procedures as well as review data collections and QAQC processes. Survey datum's, drill collar locations and drilling/sampling practices were confirmed together with inspection of the relevant drill core.

The primary assay laboratory, Northern Assay Laboratories (NAL) was inspected at Pine Creek, NT, on 22nd January 2010.

3.0 LOCATION AND GEOLOGY

3.1 History of Previous Mining Operations

The Juno ironstone was discovered in 1963 by exploratory surface drilling of a magnetic anomaly. Shaft sinking commenced in November 1965 and production commenced in October 1967. The mine effectively closed on 4th January 1977 when production from remnant ore was completed.

The mine produced 454,938 tonnes of ore to 1977 yielding:

- 838,236 ounces of gold;
- 2,293,422 kilograms of bismuth;
- 88,480 ounces of silver;
- 1,418 tonnes of copper.

This is a production head grade of 60 g/t gold and 0.58% bismuth.

Ore was contained in two major lodes called the No.1 and No. 2 orebodies. The eastern No.1 orebody was a relatively compact lode with very high gold grades and was mined by shrink and sublevel bench stopes. The western No.2 orebody was wider and of greater lateral extent and mined using transverse shrink stopes (10-15m wide) and longitudinal stopes.

Production was from three main levels, the 900, 800 and 700 foot levels.

At mine closure, a number of areas of remnant mineralisation (uneconomic at the time) still existed as thin skins, crown and floor pillars, rib pillars and small pods adjacent to the old workings.

3.2 Geological Setting

The Juno deposit is a Proterozoic Copper-Gold deposit and forms part of the Tennant Creek field. The mineralisation style is as hydrothermal replacement bodies along shears, fold axes and competent contacts. Defining features of these small and high grade deposits are strong structural control, low sulphide content, deposition from saline fluids at 200-400°C, and an association with concentrations of iron oxide minerals. The deposit model is illustrated in Figure 3-1 as defined by Davidson and Large (1994).

The Fe-oxide dominated Tennant Creek field deposits were emplaced at moderate temperatures (~350^0 C) and are of 1900-1825 Ma age range.

Host rocks are felsic tuffaceous turbidites and rhyolitic pyroclastics of the Warramunga Group of lower Proterozoic age. All known economic mineralisation occurs within the Carraman Formation which consists principally of felsic greywacke and shales of turbiditic origin (Figure 3-2).

Mineralisation within the Tennant Creek goldfield is spatially related to distinct lithological and structural features as summarised below;

- Occur as lenticular, ellipsoidal or pipe-like bodies in magnetite and/or hematite ('ironstones") which are cross-cutting;
- Located within hematite facies or close to hematitic shales/argillaceous iron formation, rhyolitic porphyries or slump structures;
- Commonly within second order anticinal folds, especially domal positions or within faults or shear zones.

The majority of ironstones outcropping in the district (700-800 in number) rarely exceed 20 metres in thickness but may extend along strike for more than hundred metres and about 10% carry recoverable gold (Large 1975).

Tennant Creek-type ironstone bodies grade upwards from chloritic alteration into stringer zones of chlorite-magnetite, coalescing higher into massive ore bearing magnetite+/- hematite, topped with talc-dolomite-magnetite alteration. The distinct metal zonation is gold-bismuth-copper passing upwards through the ironstone body. Chemically reactive host rocks (i.e. ironstone, hematitic shales) commonly intersect the replacement zone.

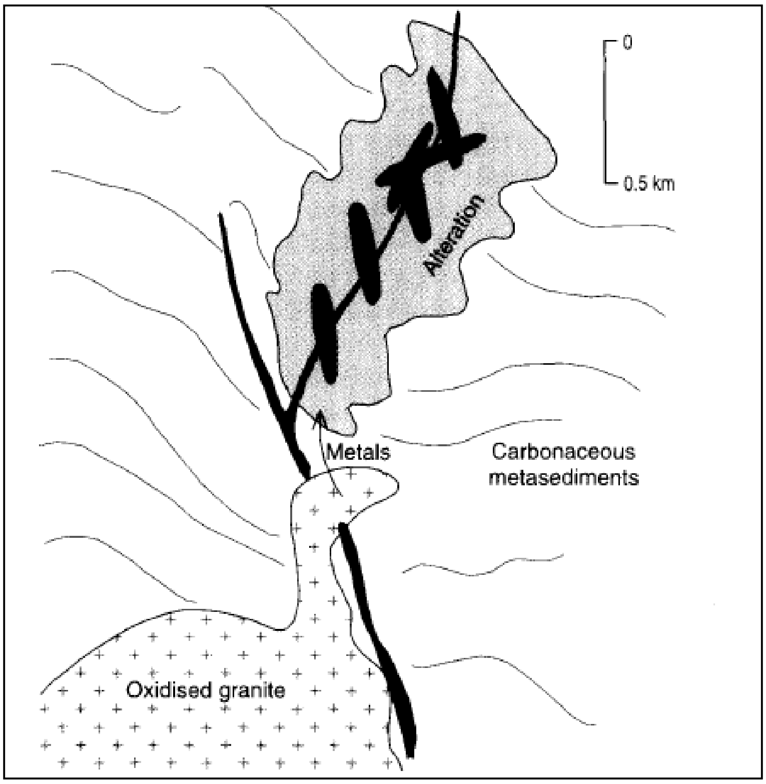


Figure 3-1 Deposit model – Regional Characteristics (from Davidson & Large 1994)

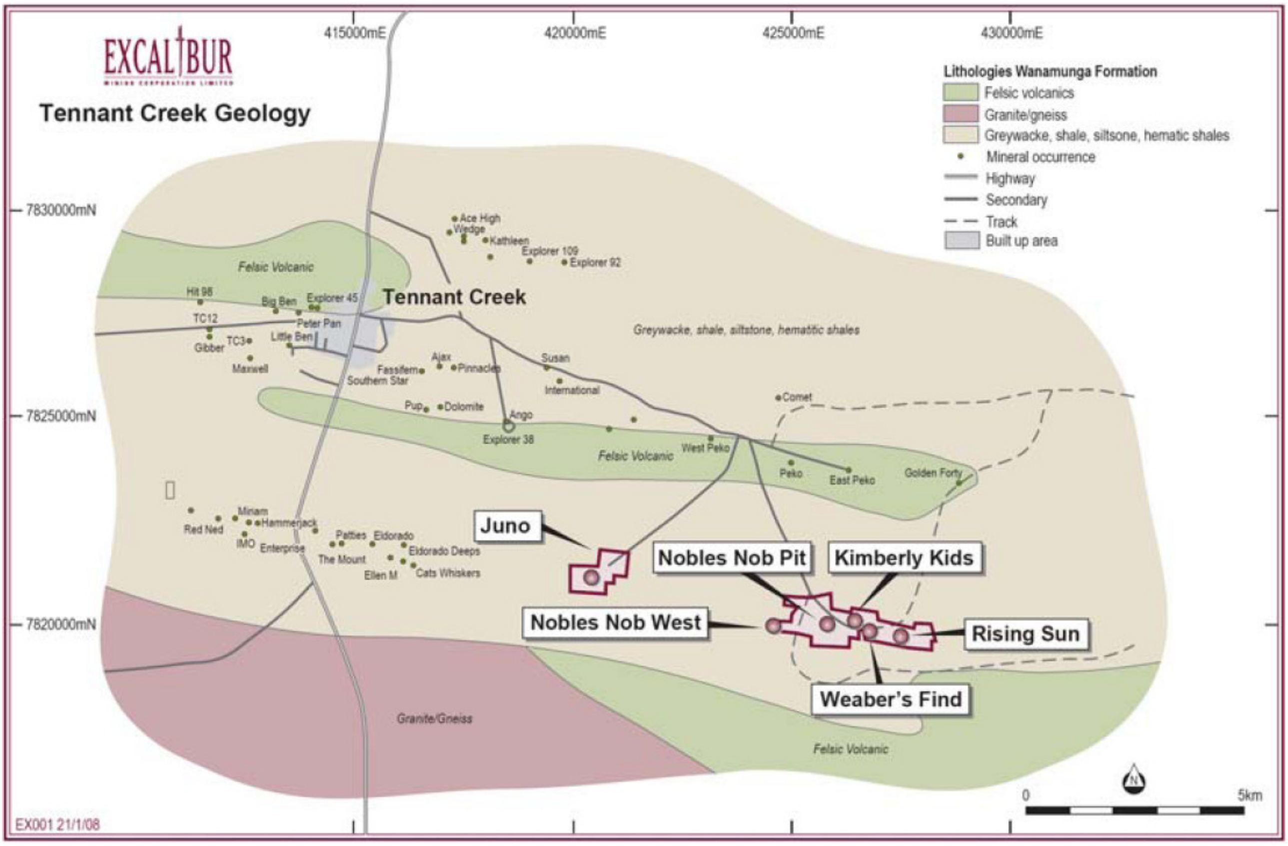


Figure 3-2 Geology of the Tennant Creek goldfield (Darcy et al, 2008)

3.3 Juno Mineralisation Style

The Juno mineralisation lies on south flank of a major anticline plunging gently to the west. The two main magnetite rich bodies occur at the top of a pipelike alteration zone which extends vertically downward, cross-cutting the sediment pile. The main No2, body has an ellipsoidal shape with its long axis parallel to the east-west axial plane of a second order anticline on the flanks of the major east-west structure.

Four major alteration zones have developed concentrically about the two main bodies of magnetite-chlorite as detailed below and illustrated in Figure 3-3 and Figure 3-4.

- A core of approximately 80% magnetite and 20% chlorite,
- The magnetite core is enclosed above by a zone of talc-magnetite with minor pyrite,
- An outermost zone of dolomite with minor hematite, quartz and jasper separates the talc-magnetite form the enclosing chloritised country rocks,
- The outermost chloritisation of sediments diminishes a few metres from the dolomite.

The hydrothermal alteration pipe extends at least 300m below the main magnetite body as tooth-like protuberances consisting of veins and disseminations of magnetite, hematite and muscovite within finer grained chlorite (Large 1975).

A distinct ore mineral zonation has developed at Juno, with the copper mineralisation restricted to the outer edge of the magnetite-chlorite core with the gold-bismuth mineralisation concentrated toward the centre of the body. Gold, bismuth and copper occur within distinct overlapping zones as outlined below and shown in Figure 3-5 (Large 1975).

- Gold is concentrated within the magnetite-chlorite body,
- Overlapping and above the gold zone are bismuth sulfosalts within an umbrella-shaped zone largely restricted to the magnetite-chlorite zone but extending at its apex into the talc-magnetite body,
- Chalcopyrite is concentrated along the outer contact of the magnetite-chlorite body with the talc-magnetite halo and forms a copper rich zone which overlaps the bismuth zone and extends up the alteration pipe.

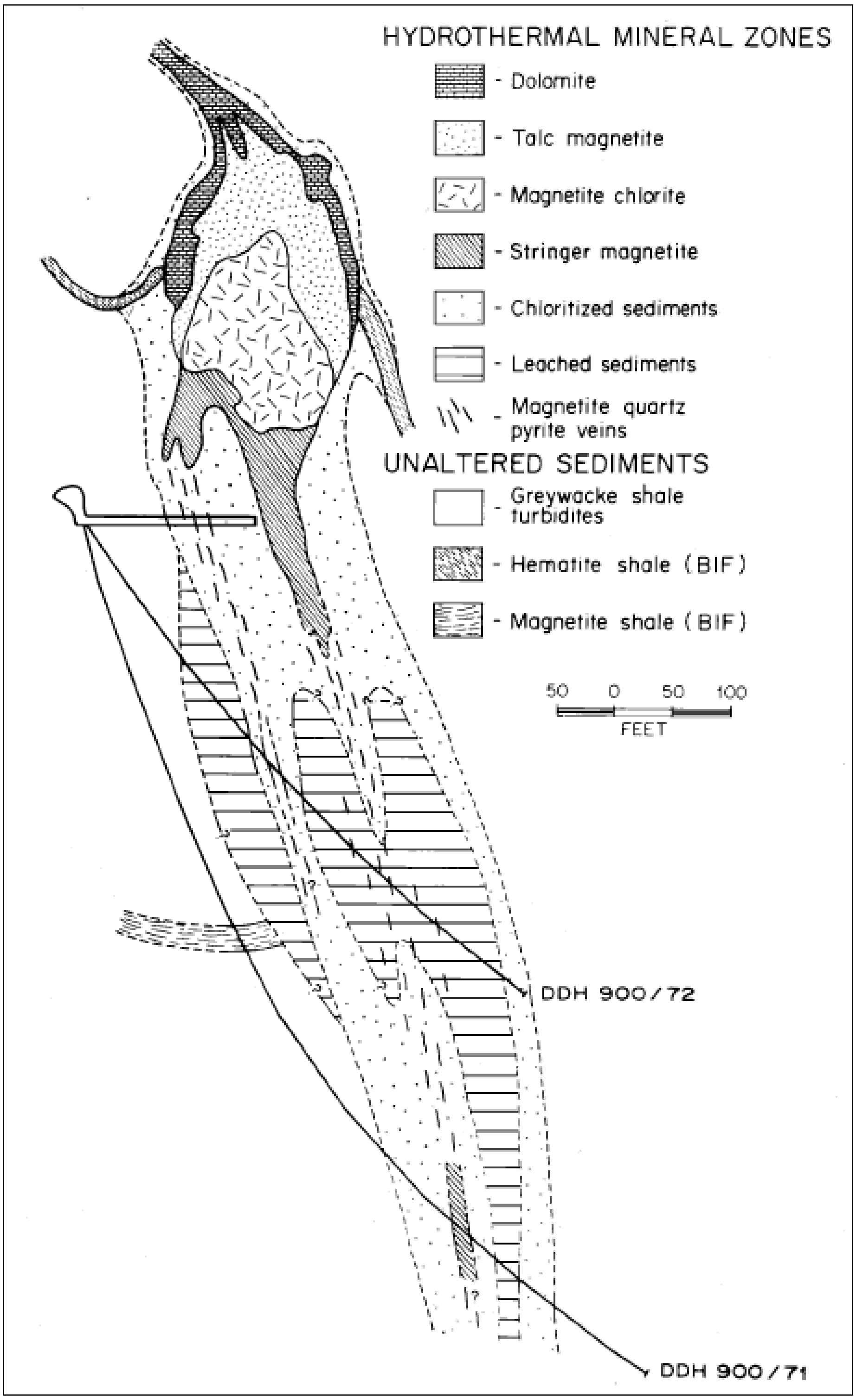


Figure 3-3 Generalised Geological Cross-section of through Juno No.2 orebody (Large 1975)

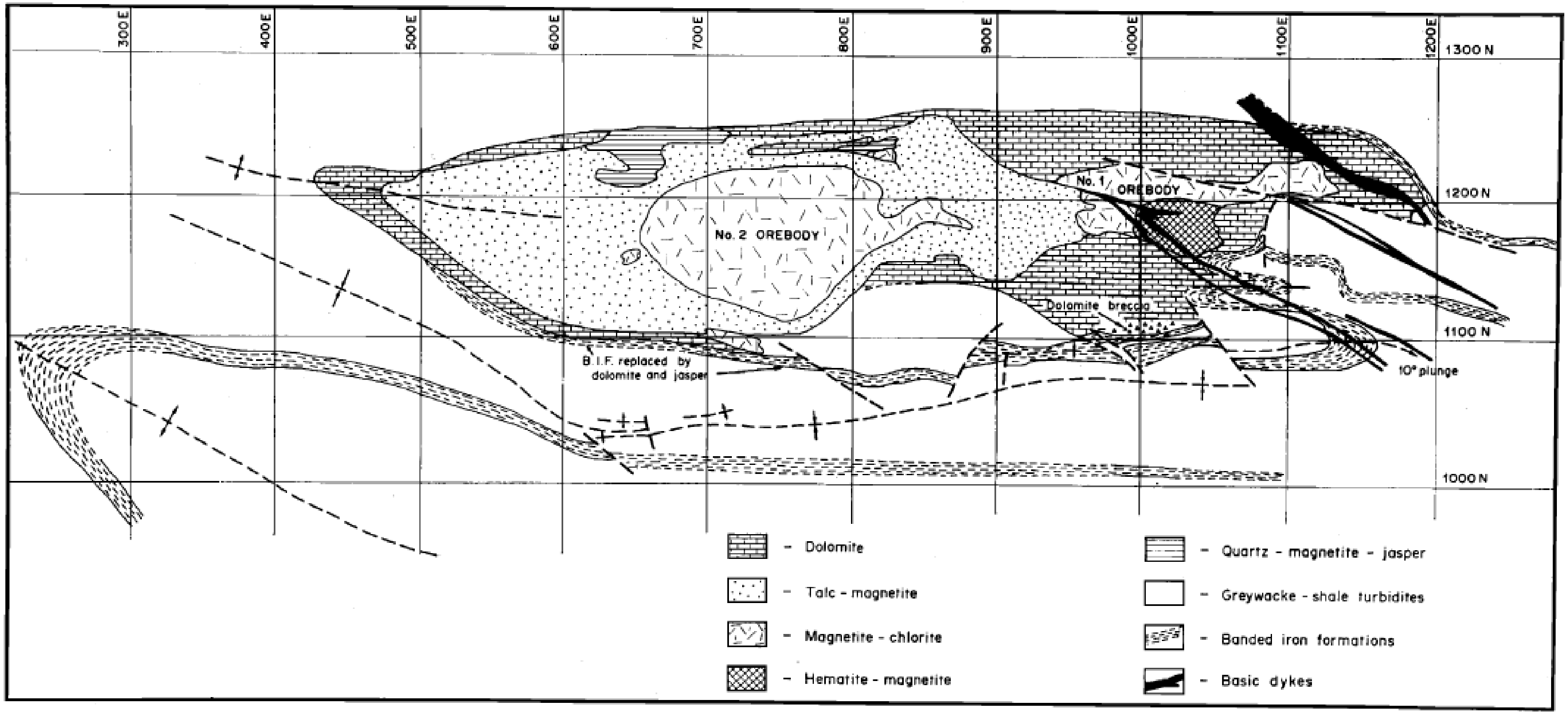


Figure 3-4 Geological Plan of the 700 level, Juno mine (Large 1975)

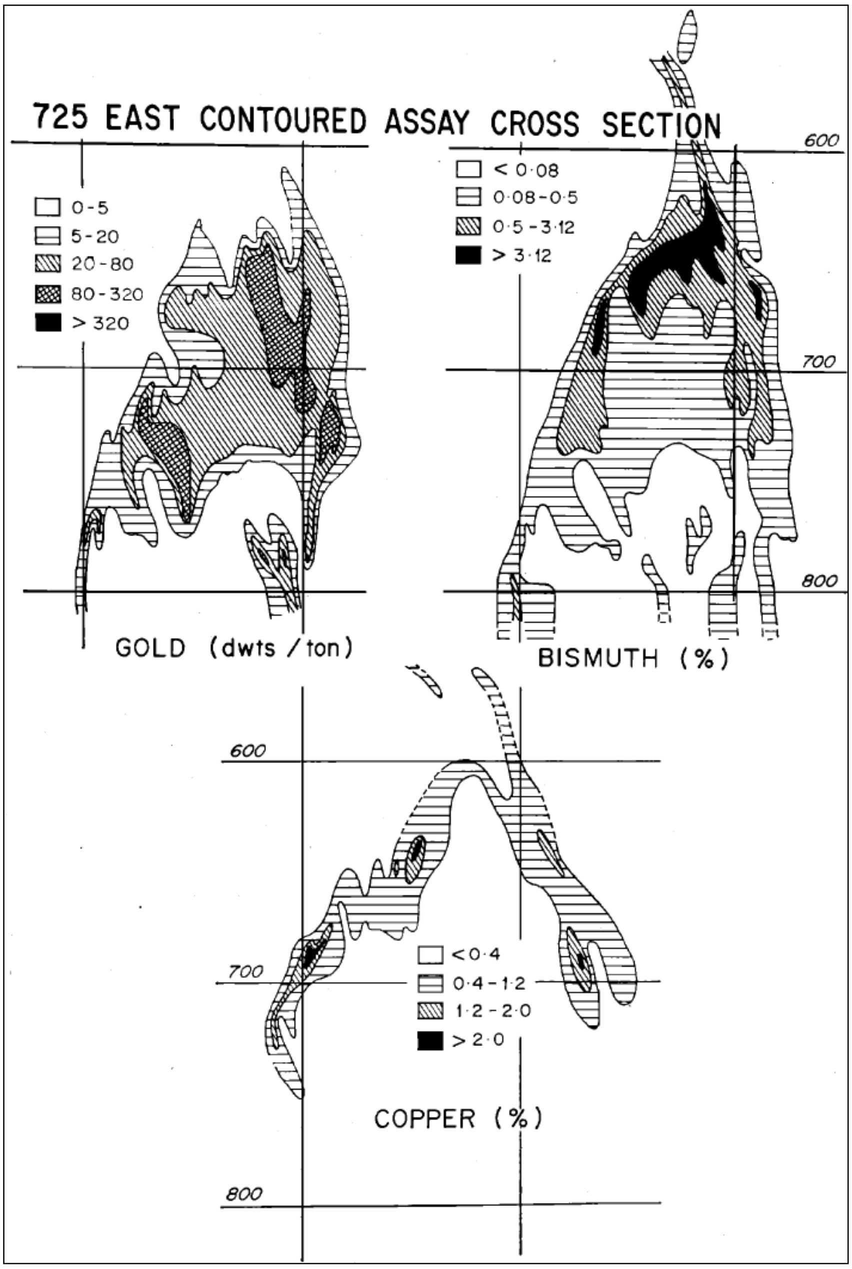


Figure 3-5 Distribution of gold, bismuth and copper, Juno No.2 orebody (Large 1975)

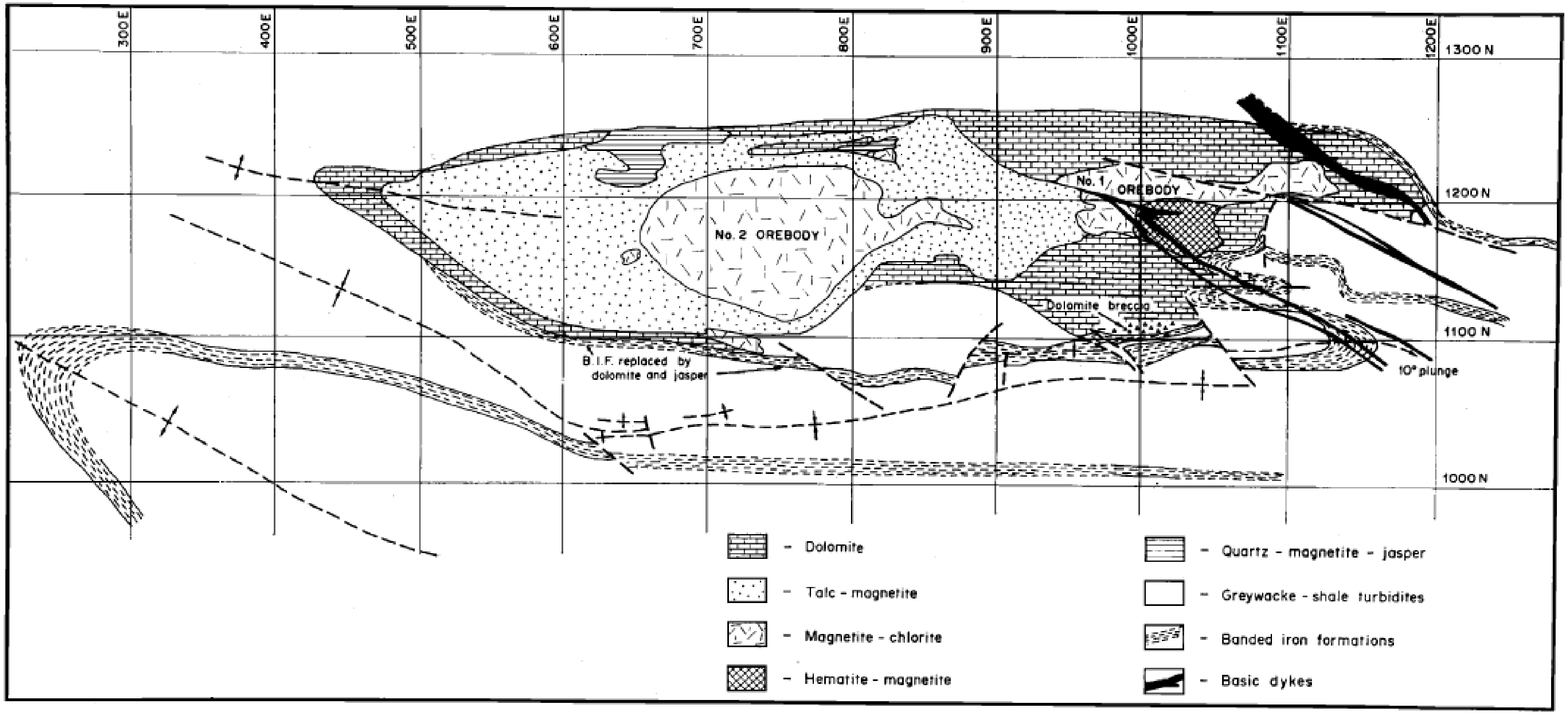


Figure 3-6 Geological Plan of the 700 level, Juno mine (Large 1975)

4.0 DATA SOURCES

4.1 Drill Hole Database

4.1.1 History

Cube was requested by Excalibur to independently review and update the Juno resource in November 2009, based on a database supplied by Excalibur which was dated October 2009. Cube in conjunction with Excalibur, commenced validation of the drilling database. This involved validation of the October 2009 database with the historic hard copy drilling files, survey and mine development plans that were acquired by Excalibur. As a result of this initial validation, significant differences were found between the original database, as supplied to Cube and the historic hard copy data, as acquired by Excalibur. These differences were systematically corrected by Cube prior to the commencement of the update of the Juno resource in May 2010.

4.1.2 Data Validation

Validation of historical drilling data

The historical Geopeko digital drilling data was validated by cross checking the collar coordinates, assays, downhole survey information and geology for all available historic hard copy drilling files against the digital database, as supplied in October 2009. From a total of 773 historic holes, 625 (85%) were able to be validated against the original drill logs.

In addition, Excalibur digitised all historical drill hole collars and mined void outlines from the original Geopeko mine development plans and assay/geology drilling plans and sections. These were compared with digital files and used where collar data was not available from the hard copy drilling logs.

Grid transformation from local imperial mine grid to MGA 94 grid

All original Geopeko digital and hardcopy data was supplied as either local imperial mine grid or metricised local mine grid coordinates. A grid transformation was performed on all data to convert to MGA 94 grid system. The local mine grid is based on the south west corner of the Juno main shaft which is the datum of the grid (1000E, 1000N, ground level at 0’). An additional common point (Juno Pillar) is located 300 metres NE of the Juno Main Shaft adjacent to the main access road. These two points form the basis of the PosGold grid conversion, and were DGPS surveyed by Excalibur and used to transform all local mine grid data (Table 4-1).

All historical depletion and mineralised wireframes were also transformed using the same parameters, resulting in all spatial data being correctly related in the one MGA grid system.

Point Description	Imperial Mine Grid		Metricised Mine Grid			MGA94 Grid			Comments
	E mine ft	N mine ft	E mine (metres)	N mine (metres)	M RL local	E (metres)	N (metres)	AHD RL	
SHAFT SW Corner	1000	1000	304.8	304.8	1000	420479.806	7821208.698	348.822	Juno main shaft
Juno Concrete Pillar 2	1619.741	1491.030	493.697	454.466	1000	420612.009	7821410.555	346.195	300m NE of shaft, next to road

Table 4-1 Juno Grid Transformation Points

Using the 2 common points, the transformation parameters are detailed in Table 4-2, and resulted in a net rotation of -18.5 degrees

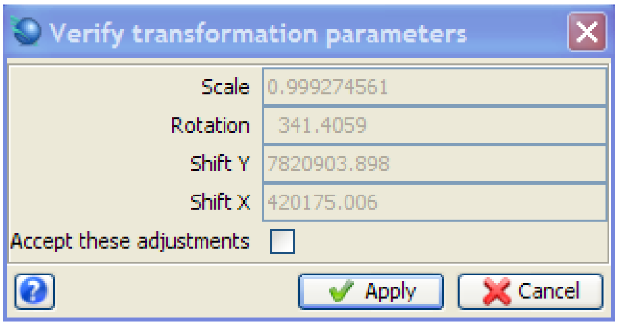


Table 4-2 Juno Grid Rotation

Historical hole azimuth correction

The hole azimuths for all historical drilling data were corrected from the original local mine grid to the MGA94 grid, using a rotation of -17 degrees. This was based on comparing all those historic holes (21 holes in total) which had all three azimuths available for the hole i.e. magnetic (from Tropari instrument), surveyed local grid and AMG azimuths. The relationships between the different grid azimuths are listed below in Table 4-3.

Grid ID (from)	Grid ID (to)	Correction	Comments
Local Mine Grid	MGA 94	-17 degrees	
Local Mine Grid	Magnetic	-21.5 degrees	
Magnetic	MGA 94	+4.5 degrees(1969) +4.6 degrees (1985)	Magnetic Declination (Geoscience Australia)

Table 4-3 Juno Historical Drill Azimuth Corrections

The drill azimuth transformation changed the spatial relationship of the previously interpreted mineralised wireframes to the mined voids.

Metric conversion of all imperial drilling data

All Imperial measurements for both length and assay values for all historical drilling were converted to metric system using the conversions listed below in Table 4-4.

Imperial	Metric	Truncated Decimal Places
1 foot	0.3048 metres	1
1 metre	3.2808399 feet	1
1 dwt/short ton	1.530612 g/t Au	2

Table 4-4 Metric Conversions

Down hole depths were converted from feet and inches to metres and truncated to 1 decimal figure. Assays were converted from penny weights per short ton to g/t Au and truncated to 2 decimal places

4.1.3 Final Resource Drill-hole Database

The validated corrected historic drilling database for Juno was combined with the more recent Excalibur drilling data into a single drilling database to be used for resource estimation.

The final validated resource drilling database for Juno is in MS Access format ***(juno_20100517.mdb)*** and designed for direct connectivity to the Surpac mining software. The data cut off date for the database was 17th May 2010. A description of the database and the relevant tables and fields are shown in Table 4-5.

TABLE	FIELD	DESCRIPTION
collar 847 records	hole_id	Hole Id
	max_depth	Total Hole Depth (metres)
	y	Collar Northing (MGA94 zone 53)
	x	Collar Easting (MGA94 zone 53)
	z	Grid Collar RL (AHD)
	hole_path	Hole de-survey method
	hole_type	DD or RC or RCD or UGDD or RAB
	flag	***old*** (historic), ***val*** (validation), ***infill***
survey **3,597** records	hole_id	Hole Id
	depth_m	Downhole Survey Depth (metres)
	dip	Dip of Hole trace
	azi_local	Local imperial mine grid hole azimuth
	azi_mag	Magnetic bearing of hole azimuth
	azi_mga	MGA94_55 hole azimuth
	azi_mga_gyro	MGA94_55 hole azimuth (gyro reading)
	instrument	Downhole survey instrument
assay **19,362** records	hole_id	Hole Id
	depth_from	Interval Depth From (metres)
	depth_to	Interval Depth To (metres)
	samp_id	Sample Id
	cube_au	1^{st} Gold Assay g/t - Numerical
	cube_cu	1^{st} Copper Assay % - Numerical
	cube_bi	1^{st} Bismuth Assay % - Numerical
geology **6,574** records	hole_id	Hole Id
	depth_from	Interval Depth From (metres)
	depth_to	Interval Depth To (metres)
	litho	Summarised Lithology Code
	litho_Major	Original Lithology Code
bulk_density **2,834** records	hole_id	Hole Id
	depth_from	Interval Depth From (metres)
	depth_to	Interval Depth To (metres)
	cube_BD	Bulk density measurement (g/cm^3)
	data_source	Density measurement source, NAL or EXM
zonecode_au **1,127** records	hole_id	Hole Id
	depth_from	Interval Depth From (metres)
	depth_to	Interval Depth To (metres)
	zonecode	Mineralised Intercept Code for Gold
zonecode_cu **556** records	hole_id	Hole Id
	depth_from	Interval Depth From (metres)
	depth_to	Interval Depth To (metres)
	zonecode	Mineralised Intercept Code for Copper

Table 4-5 Drill Hole Database Structure

A total of 74 Excalibur and 696 historical Geopeko drill holes (includes 651 underground and 45 surface diamond holes) were incorporated into the database and used to delineate the mineralisation.

Most of the historical drilling had been selectively sampled based on visually identified mineralisation. For the resource update, all intervals that had not been sampled or assayed were assumed to be waste and hence assigned a nominal background value of 0.005g/t Au and 0.0001% Cu as detailed in Table 4-6.

Element	Detection Limit (ppm)	Replacements
Au	0.01	0.005 ppm
Ag	1	0.1 ppm
Bi	10	0.0001%
Cu	1	0.0001%
Pb	5	0.0001%
Zn	2	0.0001%
Fe	10	0.0001%
Not Assayed/blank		-9999
Not Sampled (NS)		-99

Table 4-6 Assay replacement values

4.2 Survey – Collar and Down hole

4.2.1 Historical Data

Excalibur digitised all historical drill hole collars and mined void outlines from the original Geopeko mine development plans and assay/geology drilling plans and sections. These were compared with digital files and used where collar data was not available from the hard copy drilling logs.

Historical down-hole survey measurements for the Geopeko underground drilling is limited. When undertaken, holes were surveyed at 50 foot intervals (~15m) using an acid-etch tube where only the inclination of the hole recorded was recorded and the azimuth assumed from the collar pick-up. A Tropari instrument and a Magnetic Single Shot Camera were also used in a few instances with limited magnetic azimuths available.

Surface holes were surveyed using a Magnetic Single Shot Camera (photo) on 15 to 30m intervals.

Check surveys using a non magnetic tool such as a gyro have not been undertaken. A summary of down-hole survey methods used for historical drilling data is summarised below in Table 4-7.

Downhole Survey Instrument	Underground Diamond Drill Holes		Historic Surface Drill Holes	
	Number	% of total	Number	% of total
Tropari	36	6%	14	31%
Acid Etch Clinometer	127	20%	15	33%
Magnetic Single Shot Camera	2	<1%	8	18%
TOTAL	**165**	**25%**	**37**	**82%**

Table 4-7 Historical Drill Holes – Down-hole Survey Methods

4.2.2 Excalibur Data

Collar Survey

All Excalibur drill hole collars, any surface historical holes and existing infrastructure that could be located were surveyed for accurate coordinates by Brian Blakeman Surveys (BBS) in February 2010.

Measurements were carried out by the use of RTK DGPS equipment based on the MGA94-35 grid, using the GDA94 datum and based on established control points on site. The control points were occupied by a GPS base station, and measurements resolved by using the Geoscience Australia GPS processing service AUSPOS to produce adopted coordinates.

Each drill collar was measured at natural surface level and at the centre of the drill hole where possible. Relative levels are AHD transferred to the control points from known survey benchmarks in the town of Tennant Creek.

Downhole Survey

All Excalibur drill holes were down-hole surveyed by the RC and diamond drilling contractors using a Flexit multi-shot tool every 30m while drilling. A magnetic susceptibility tool was also utilised to define areas of magnetic wall-rock which could affect azimuth readings. Any erratic readings affected by highly magnetic units were discarded and an appropriate azimuth assumed to best reflect the overall curvature of the hole. Any changes to the original survey data are documented in the comments field in the survey table of the drill hole database.

After drilling, on a campaign basis, Directs Surveys were contracted to complete borehole gyroscopic surveys using a Surface Reading Gyroscope (Goodrich/Humphrey DG-69). Some holes were not surveyed due to down-hole blockages.

All 27 holes from the stope validation drilling were checked by DGPS for correct original collar azimuths. Most holes were gyro surveyed and for a number of holes a discrepancy of up to 8 degrees were noted between the original multi-shot surveys and the gyro survey.

To check that the gyro "zero" reference line was correctly set at the collar, Blakeman Surveys were instructed by Excalibur to accurately survey the collar azimuths of the holes. Each collar was measured using RTK DGPS equipment using the GDA94 datum. A calibrated aluminium rod designed to self centre within each drill hole collar at a consistent depth was used and is shown in

Figure 4-1. The rod protruded from the end of each drill casing by 2.6 metres, on which two points ('A' at the rod end, and 'B' at the collar) being 2.585 metres apart were measured. These two points were used to calculate the azimuth and inclination of each hole.

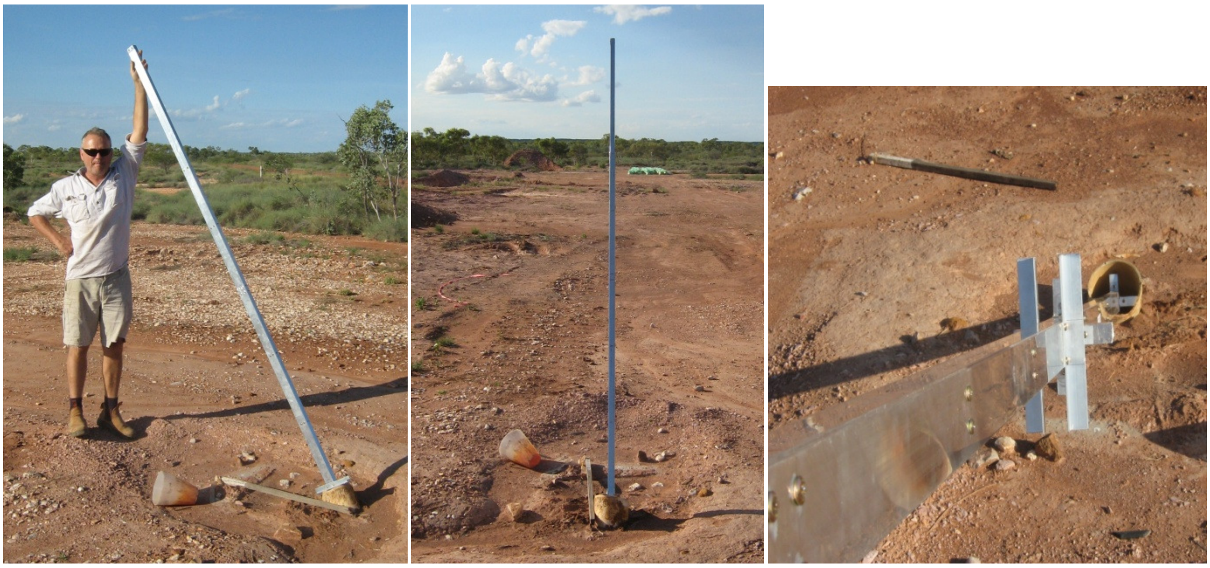


Figure 4-1 Measurement of collar azimuth using calibrated rod by DGPS survey

Twelve of the 28 holes had an azimuth discrepancy of greater than 2 degrees and up to 8 degrees when compared with the original Gyro survey at the collar. For these holes, all the downhole azimuths were adjusted to reflect the starting collar azimuth as measured by the DGPS survey.

For the estimation, the down-hole gyroscopic surveys take precedence over the down-hole surveys using a Flexit multi-shot tool.

4.3 Drilling Types

Drilling at Juno has had an extensive history, commencing with Geopeko in 1962 and culminating with the Excalibur drilling completed in 2010. The phases of drilling are summarised below;

- **JDH** prefix – Geopeko drilled these surfaces holes prior to development of the Juno Mine from 1964 to 1967.
- **JD** prefix – these are the underground diamond holes drilled by Geopeko during mine development and production from 1967 to 1973.
- **EJ** prefix – Excalibur programs consisting of RC and diamond drilling to delineate underground resources and infill drilling of shallower up-dip extensions from 2008 to 2010.

A summary of the drill holes used, and drilling types used for the purposes of this resource estimation are detailed in Table 4-8.

Drilling Phase	Type	No. of holes	Diamond (metres)	RC (metres)
Historic (Geopeko/PosGold)	Underground	651	34,598	-
	Surface	45	15,082	981
	Total	**696**	**49,680**	**981**
Excalibur	Validation	27	971	6,278
	Infill	34	1,747	6,483
	Other	13	4,053	-
	Total	**74**	**6,771**	**12,761**
TOTAL		**770**	**56,451**	**13,742**

Table 4-8 Summary of Drilling used for the Juno Resource Estimation

4.4 Drilling and Sample Collection Procedures

Drilling has been completed using various techniques at Juno over the projects history, but only reverse circulation (RC) and diamond core (DD) drill holes have been used for resource estimation purposes. No percussion or rotary air blast (RAB) holes have been used.

Excalibur utilised a number of techniques ranging from RC only holes to diamond core (HQ to NQ) from surface. A combination of drilling RC pre-collars from 100 to 300m depth with a diamond tail (NQ) to intersect the mineralised target at depth was most commonly used (Figure 4-2).

Figure 4-2 Diamond core and RC drilling in progress at Juno.

Historical sampling was performed on half core split into four-foot intervals and assayed for gold, bismuth, copper at the Assay Laboratories of Peko Mines NL and also by Australian Mineral Development Laboratories (Large 1974).

4.4.1 RC Sampling

RC drilling by Excalibur utilised a nominal hole diameter of 5 3/8 inches, with a 6 inch pre-collar drilled to 6 metres. Holes were commonly drilled using inclinations of -60 to -65 degrees, with some vertical holes for testing the upper extents of stopes. Hole azimuths varied from 150 to 185 degrees MGA and 350 to 360 degrees depending on the expected hole drift.

Assay samples (1-3kg) were collected from the RC rig using a trailer mounted cone splitter into numbered calico bags with the reject cuttings retained in bulk sample green plastic bags and stored on site (Figure 4-3). Field duplicates were collected one in 50 from the second chute of the cone splitter.

Magnetic susceptibility was monitored on a metre by metre basis during drilling.

Figure 4-3 Collection of RC bulk sample from the trailer mounted cone splitter.

Spear samples for 4m down-hole intervals were composited from the reject bulk samples, into 3-5kg calico bags and dispatched to the laboratory on a routine basis. Assay samples (1m cone split) for any visually mineralised (i.e. elevated susceptibility, visible iron oxide or sulphide enrichment, chlorite alteration or high density) or intervals that returned >0.1g/t Au were also submitted for analysis.

During the site visit, Cube observed a sampling issue that required rectification. Reject bulk sample bags were uniform in size but the calico representing one metre samples were quite variable. This was most likely caused by incorrect splitter set up, and could be remedied by better levelling of the splitter to ensure the sample falls evenly onto the cone. In addition, installation of a collection box between the cyclone and the cone splitter would prevent the problem of the sample rotating across the splitter during sample collection. The collection box would enable the entire 1 metre sample to be held and released vertically at the end of each drill metre using the shut-off gate, and result in a superior unbiased sub-sample of constant weight and size being obtained.

Weighing of the assay calico bags would help to monitor the performance of the splitter and allow feedback to rectify issues on the spot. Duplicate samples collected directly from the splitter should have the same weight if the splitter is level and operating correctly. Sample weight information should be recorded for each hole.

4.4.2 Diamond Core Sampling

Core from diamond drilling was returned to Excalibur's depot in Tennant Creek for geological logging and sampling. Geological and geotechnical features that were logged include lithology, alteration, mineralisation, structure, magnetic susceptibilities and bulk densities (2 readings per 5m tray). Visual zones of potential mineralisation (sulphides, elevated magnetic susceptibility, chlorite alteration, brecciation, and elevated iron oxide/magnetite) were selected for sampling and assay.

Selected core was cut longitudinally and sampled on 1 metre intervals. NQ sized core was cut in half for sampling and HQ sized core was quarter cut to maintain a constant sample weight. Sharp contacts visually logged in the core were used as sample boundaries in some cases resulting in samples less than the nominal one metre length.

Figure 4-4 Historical underground core from hole JD900078, ironstone with minor quartz veinlets and chalcopyrite (286 feet down-hole).

4.5 Laboratory Sample Preparation and Analysis

Historical analytical techniques are not known. Imperial pennyweight assays were converted to grams/ tonne using the conversion detailed in Table 4-4.

All Excalibur samples were despatched to ALS in Perth (after sample preparation in Alice Springs) between October 2007 and March 2008. Since March 2008, North Australian Laboratories (NAL) in Pine Creek NT has been used for all sample preparation and analysis. Samples were prepared as illustrated in the flow chart in Figure 4-5, with the final pulp analysed for gold by 50g lead collection fire assay with an AAS finish. A 0.5g aliquot was used for ICP-OES determination of Ag, Bi, Cu, Fe, K, Na, Pb and Zn.

Cube inspected the NAL facilities with Matt Sullivan on Friday 22/01/2010 to review the sample preparation and analytical procedures. The laboratory was originally opened on 24/05/1984 and operated by Australian Assay Laboratories (AAL), before being recently re-opened by NAL. Other clients in the region that use the assay laboratory include Crocodile Gold Corp (Howley and Brocks Creek projects) and Vista Gold Corp (Mt Todd project) both of which are TSX listed companies.

As a general observation from the laboratory visit, Cube noted that current laboratory housekeeping (cleanliness) was poor with a dusty sample preparation area being open to the sample weighing/preparation and fire assay area, which could result in cross contamination

.

4.5.1 Sample and Analytical Procedure

Samples are picked up from site by NAL in a 3 tonne Hiab truck and taken to the Tennant Creek laboratory for initial oven drying overnight (12 hours minimum), followed by jaw crushing ready for mill grinding (Figure 4-6).

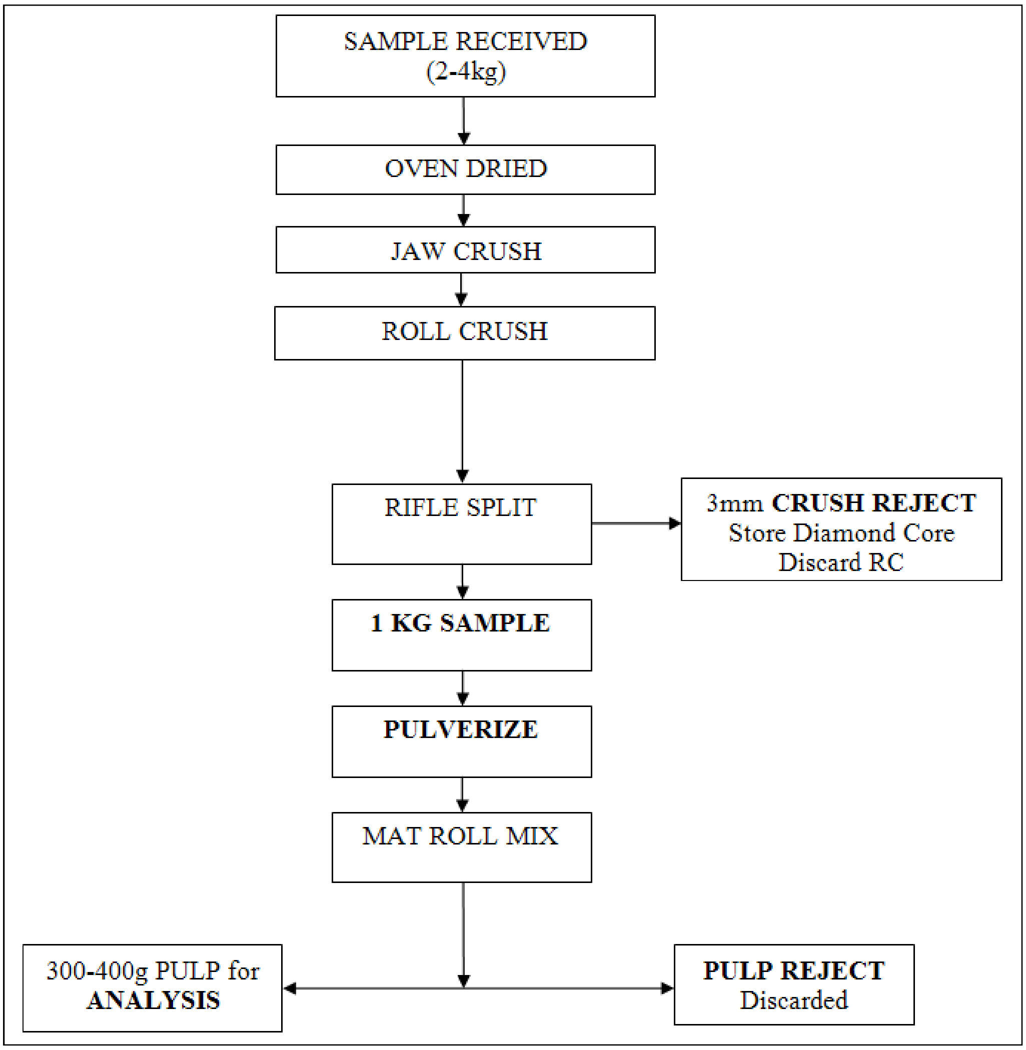


Figure 4-5 NAL Assay laboratory sample preparation flow sheet

Figure 4-6 The NAL assay laboratory at Pine Creek and jaw crushers

A Keegor Mill vertical spindle pulveriser (Figure 4-7) was used to grind the 1kg riffle split sub-sample to a size suitable for assaying (nominal 90% passing 106 microns). Keegor mills do tend to retain some sample in the cone and are not easy to clean between samples leading to potential contamination, particularly in an open high humidity area. A barren gravel flush was carried out by NAL between samples to minimize the chance of contamination.

Puck and bowl pulverisers (LM5) are the current industry standard for grinding samples (nominal 90% passing 75 microns), although they tend to be not as efficient in grinding large gold particles which can lead to smearing and longer grind times. No routine sizing of the final pulverized samples was undertaken as part of the laboratories internal QAQC

Figure 4-7 Keegor grinding mills and fusion furnaces

A 350-400g sub-sample was scooped from the pulverised sample after being roll mixed on a mat to homogenise the sample. A 50g assay charge was transferred to crucibles for firing in 50 sample batches. The crucibles are always arranged in the same order to prevent handling errors and two internal laboratory standards are added to the batch. Two duplicate 50g charges are re-fired out of each batch as part of the internal QAQC procedure. Protocols are in place for the re-use of crucibles based on the grade of the previous sample fired in that pot, using colours to identify the grade ranges and control the process.

Following cupellation of the lead button, the prill is parted using nitric acid and diluted by hydrochloric acid to dissolve the gold sponge before aspiration into the AAS machine (model Varian AA-1275) for final reading of the gold concentration (see Figure 4-8). The gold value is manually recorded and typed into spreadsheets.

A 0.5g aliquot was used for a three acid digestion (hydrochloric HCL, nitric HNO_3 and perchloric HCl_3) with multi-element ICP-OES determination of Ag, Bi, Cu, Fe, K, Na, Pb and Zn. An Optical Emission Spectrometer (Optima 5300DV) was used for analysis, with results directly downloaded to the laboratory computer.

Figure 4-8 ICP-OES Spectrometer and Fire Assay AAS.

All pulps after analysis are stored on pallets in the main shed, shrink wrapped and eventually returned to site. Rejects are stored for a limited time in cages at the laboratory before disposal by client request.

4.6 QAQC Analysis

No QAQC data is available for the Geopeko historical drilling.

All available quality control data submitted by Excalibur for the project to date, covering the period from 19/06/2008 through to the data cut-off date of 17/05/2010 was reviewed and is summarised in Table 4-9 and Table 4-10. All relevant control data graphs are presented in Appendix 1.

Analysis of standards and blanks has indicated that 99% of the quality control samples inserted into the sample stream returned values within the three standard deviations (SD) which is considered to be the acceptable limit for accessing the accuracy of the sample data. Some of the samples outside the 3 standard deviation acceptable limit can be explained by the incorrect placement/mixing of standard and blanks into the sample stream.

A total of 236 quality control samples (including duplicates) were submitted from a total of 5,187 drill samples (4-5% insertion rate).

Sample precisions issues are evident from the very limited duplicate sampling undertaken by Excalibur. Initial indications are that assay reproducibility for both RC and Diamond sampling is erratic and may be related to the coarse and erratic nature of the gold mineralisation. Increased insertion rate of control samples to 10-12% from the current 4-5% rate is recommended to assess the significance of this precision error.

4.6.1 Standards

Certified Reference Material (standards) sourced from Geostats Pty Ltd were introduced into the sample stream at a rate of 1 in 50 for gold standard, and 1 in 100 for copper standard and certified blanks, hence approximately 4% of batch is a certified reference sample.

Standard	Analyte	Expected Value (ppm)	Standard Deviation (ppm)	No. of Samples	No. of samples fail		Passing 3SD	Raw Bias
					2SD	3SD	%	%
BLANK-G01	Au-FA	0.02	0.005	42	0	0	100%	NA
G303-3	Au-FA	1.93	0.09	11	0	0	100%	3.1%
G306-4	Au-FA	21.57	0.78	28	0	0	100%	-1.4%
G397-2	Au-FA	4.49	0.18	23	1	1	96%	-3.3%
G904-1	Au-FA	12.66	0.51	18	0	0	100%	-0.1%
				80	**1**	**1**	**99%**	**-1.1%**
GBMS 304-6	Cu	4,241	215	47	3	2	96%	-10.4%

Table 4-9 Control Sample Performance Summary

The acceptable limit for assessing the accuracy of the QA/QC sample data is three standard deviations (SD) from the certified value. Two standard deviations is considered as the warning limit, with any samples outside of three standard deviations requiring follow-up investigation.

For the gold standards, one sample (sample no. EJC12415, Standard G397-2) exceeded the threshold and is most likely the result of a sample swap. Two sample swaps have also occurred for the copper standard (sample nos. ED20891 & D101280). The copper standard is also showing a consistent negative bias (-10%) from July 2008 onwards and needs to be followed up by Excalibur with the laboratory.

4.6.2 Field Duplicates

For ***Diamond Drill*** samples, a field duplicate is the quarter cut portion of the remaining half core once the assay sample has been taken, and is inserted into the sample stream at a rate of 1 in 50.

For ***RC*** samples, one field duplicate is nominally inserted into the sample stream at a rate of 1 in 50 (2%) and collected from the second chute of the cone splitter during drilling.

The number of field duplicates within mineralised material (>0.1g/t Au) was very low and inadequate to make any definitive conclusions, but from the limited samples available the correlation between the original assay and the duplicate assay is poor for both diamond core and RC samples as summarised in Table 4-10.

This poor repeatability may be a characteristic of the mineralisation style or a laboratory precision issue. It is recommended that Excalibur undertake further test work to define this issue.

		Data Filtered >0.1g/t Au					
Drill Type	**Total No. Samples**	**Filtered Samples**	**Correlation Coefficient**	**assays within 10%**	**assays within 20%**	**assays within 50%**	**Comments**
Diamond Core	30	7	0.018	0%	29%	57%	insufficient samples
RC	37	3	0.976	0%	0%	33%	insufficient samples
	67						

Table 4-10 Field Duplicate Performance Summary

4.7 Geological Logging and Lithology

Geological and geotechnical features were hardcopy logged by Excalibur personnel on-site, with data entry undertaken in the Perth office. Geological summary logs for all available drilling were coded into the data base using the legend in Appendix 2. The legend is based on the simplified coding system used by PosGold for all historical drilling data.

4.8 Oxidation and Topography Surfaces

No oxidation surfaces based on geological logging were supplied. The oxidation state was assigned based on elevation (RL) only as detailed in Table 4-11.

Oxidation State	Block Attribute	Code
Air	wx_code	0
Oxide (above 240mRL)	wx_code	1
Transition (above 190mRL)	wx_code	2
Fresh (below 190mRL)	wx_code	3

Table 4-11 Assigned Oxidation State

No topographic surface was supplied. Cube used all available surveyed drill hole collars and additional surface survey points to construct a surface DTM which was extended laterally to cover the limits of the block model.

4.9 Bulk Density

Density measurements were undertaken both on site by Excalibur and also at Northern Assay Laboratories. As part of core logging and processing, routine bulk density measurements (Archimedean method) were conducted on nominal 20cm length whole core samples at a rate of two readings per 5m core tray. The selection of these was based on the samples being representative and competent. Visually mineralised batches of core sample submitted to NAL for assay underwent bulk density determination based on a whole sample basis (Archimedean).

In addition, bulk density measurements were also carried out on historical drill core acquired by Excalibur when the tenement was purchased.

All density data was incorporated into the drilling database with a final bulk density table incorporating both datasets with precedence given to the whole sample NAL densities over the Excalibur ‘point’ data where overlapping intervals occurred.

Bulk density was assigned to each alteration and mineralisation domain based on 2,834 bulk density measurements undertaken by Excalibur and Northern Assay Laboratories. The assigned values are detailed in Table 4-12.

Domain	Attribute	Code	Bulk Density (g/cm3)
Background			2.7
Transition (above 190mRL)	wx_code	2	2.7
Oxide (above 240mRL)	wx_code	1	2.5
Chlorite Alteration Zone	geo	CHL	3.1
Talc-Carbonate-Magnetite	geo	TCM	3.4
Dolomite	geo	DOL	3.1
Magnetite	geo	IRST	3.75
Low grade Au domain	zonecode_au	100	3.3
Medium grade Au domain – magnetite dominant	zonecode_au	500	3.9
High grade Au domain – magnetite only	zonecode_au	800	4.0
Above topography (Air)	wx_code	0	0.0

Table 4-12 Assigned Density

5.0 GEOLOGICAL INTERPRETATION AND MODELLING

5.1 Geological Interpretation

Geological interpretation was initially based on historical Geopeko alteration models, which were modified to reflect the recent Excalibur drilling. Geological alteration domains reflecting the concentric zoning around the central magnetite core were interpreted on 10m spaced sections from 420280mE to 420530mE (250m strike length). Section orientation was orthogonal to mineralisation being 20 degrees oblique to MGA grid north-south.

The geological alteration domains were defined as:

- SLST – unaltered siltstone country rock, barren;
- CHL – all encompassing chlorite alteration zone;
- TCM – talc-chlorite-magnetite alteration zone which drapes over the upper portion of the main magnetite body;
- IRST – magnetite-chlorite intense alteration defining the core of high grade mineralisation;
- DOL – dolomitic alteration developed around the upper TCM zone.

These geological interpretations were digitised and wire-framed to create 3D solid models which are listed in Table 5-1.

5.2 Domaining

The domain outlines used to control volume and estimations have been predominantly based on geological attributes and observations rather than grade criteria. The rigorous approach to domaining has modelled the higher grade magnetite hosted mineralisation separately from the lower grade alteration envelopes. This approach has essentially restricted the majority of high grade core (>25g/t Au) to the mined void.

Based on the interpreted geological model, four mineralised domains were defined on 5 metre sections:

- Domain 100 – nominal 0.5g/t Au mineralised zone, low grade (1-2g/t Au) and TCM dominant;
- Domain 500 – medium grade (>1g/t Au) magnetite dominant zone peripheral to zone 800;
- Domain 800 – high grade magnetite hosted gold zone (>30g/t Au);
- Domain 1000 – nominal 0.3% Cu mineralised zone that overlaps the low and medium grade gold domains.

All interpreted domains are geologically and statistically distinct and provide a robust basis for resource estimation. The domain interpretations were digitised and wire-framed on 5m sections from 420280mE to 420520mE to create 3D solid models which are detailed in Table 5-1. Figure 5-1 to Figure 5-3 show the Juno mineralised zones together with drill traces and the underground development. Type section 420395mE (+/- 5 metres) with all the interpreted domains, mined voids and drilling is shown in Figure 5-4.

File Name	File Description	Object No.
mz_au_100	LOW grade gold domain (nominal 0.3g/t Au) **not** in magnetite dominant geology domain	100
mz_au_500	MEDIUM grade gold domain (nominal 1.0g/t Au) within magnetite dominant geology	500
mz_au_800	HIGH grade gold domain (nominal 30g/t Au) within magnetite dominant geology	800
mz_au_1000	Copper domain (nominal 0.25%Cu) that overlaps the low & medium grade gold zones	1000
cube_tcm_mga_1	Talc-Carbonate-Magnetite alteration zone	999
cube_ironst_mga_1	Ironstone (magnetite) dominant alteration zone	
cube_dol_mga_1	Dolomitic peripheral alteration	
cube_topo_32010	Topography derived from drill hole collars and expanded for block model	

Table 5-1 Modelled domains files

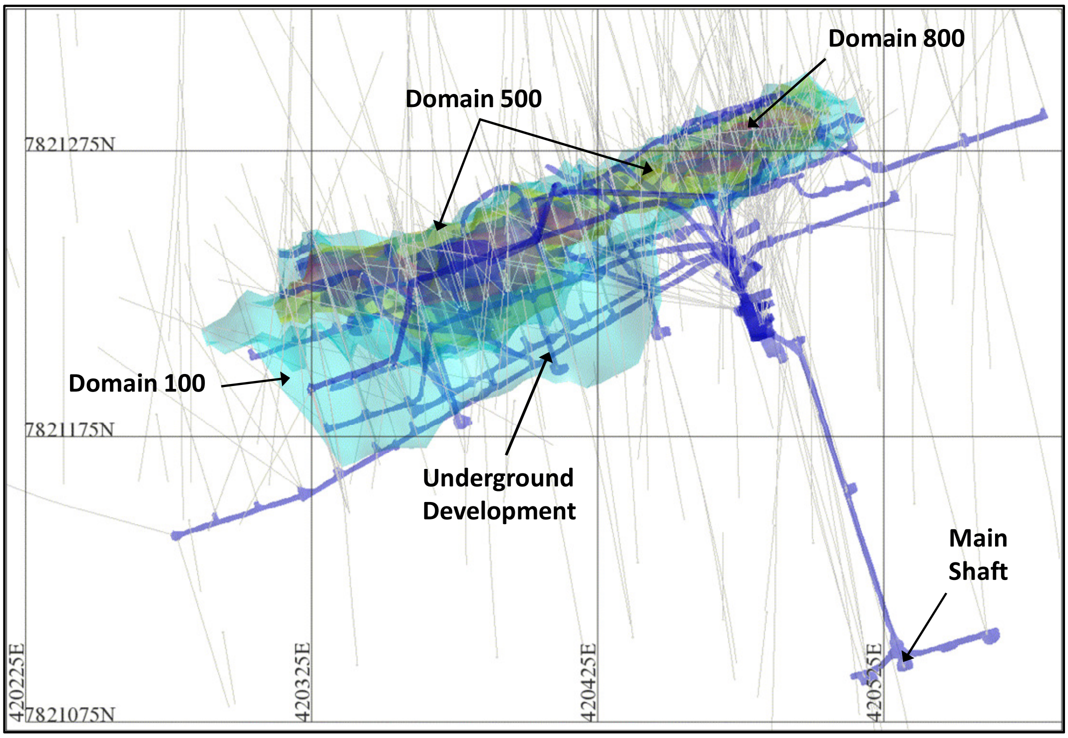


Figure 5-1 Juno Mineralised Gold Zones – Plan View

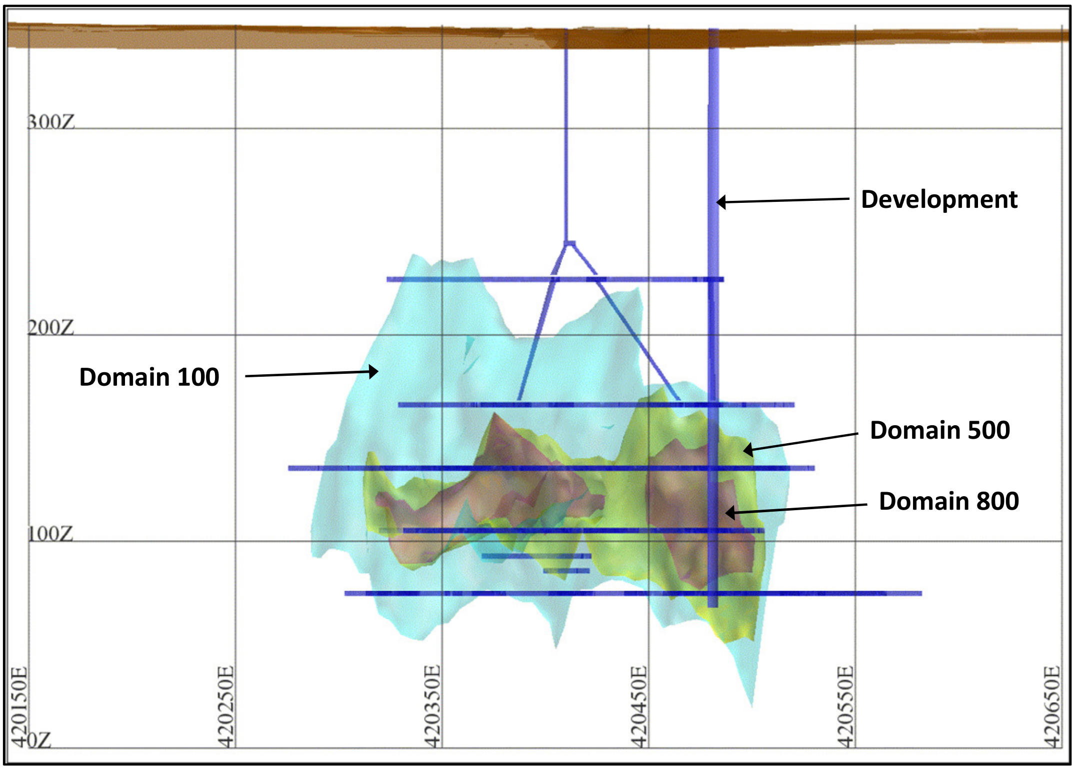


Figure 5-2 Juno Mineralised Gold Zones – Long-section looking north

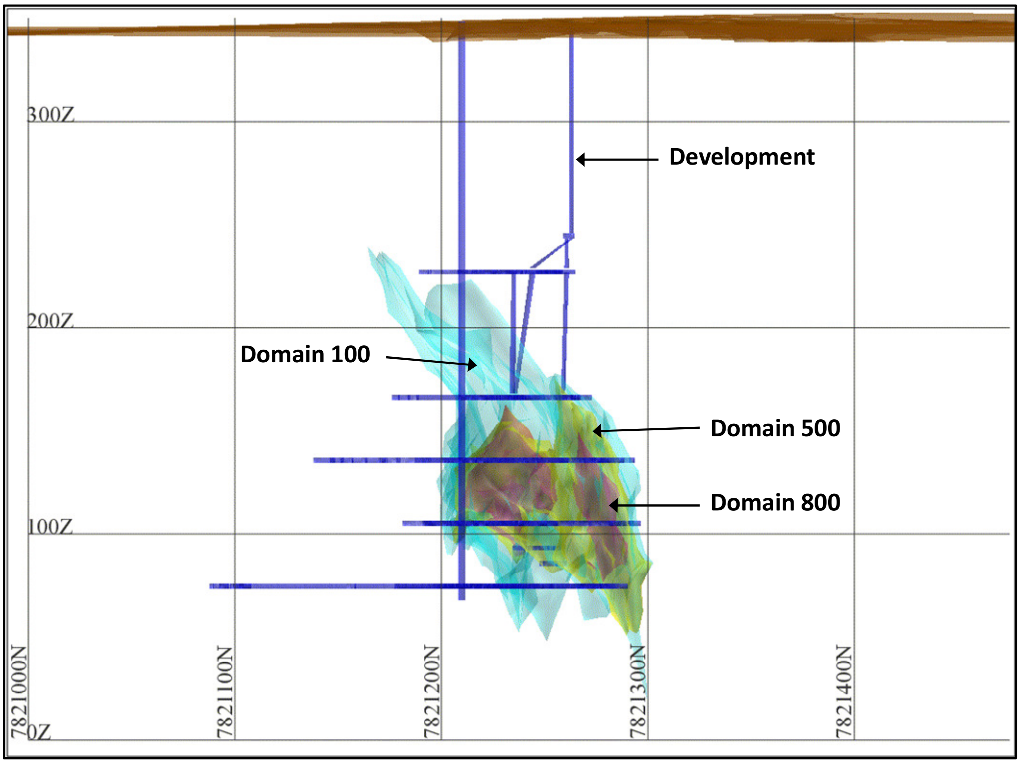


Figure 5-3 Juno Mineralised Gold Zones – Cross Section looking west

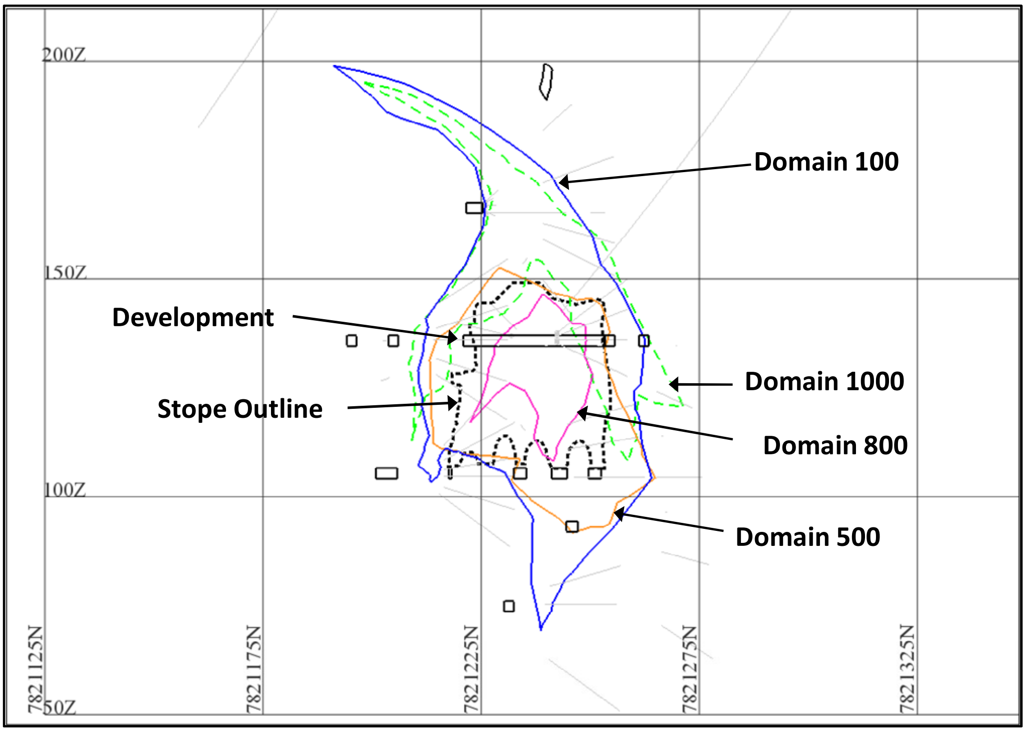


Figure 5-4 Interpreted Type Cross Section (420395mE) looking west

6.0 COMPOSITING AND STATISTICAL ANALYSIS

6.1 Compositing Technique

Each interpreted mineralised zone was manually assigned a unique database code (*zonecode*) and all drill hole intercepts within the zone were flagged with this code (Appendix 3 – list for Excalibur holes only). Downhole compositing was carried out independently for each mineralised zone whereby the *zonecode* flagging was used to control compositing. The intercept codes were stored in the database table called *zonecode'.*

All historical drill hole assay data together with the more recent Excalibur data were used in the compositing process. The flagged drill intercepts (zonecode) for the historical Geopeko data contribute about 95% of the total coded intervals used in the estimate.

A downhole composite length of 2m was used for all zones. The downhole compositing process allowed residuals of 50 percent of the composite length or more to be included as legitimate composites. Residual samples less than 50 percent were added to the last full composite creating a larger composite rather than being rejected.

The resultant composite string file has descriptive fields as summarised below in Table 6-1.

Field	Description
D1	Au – Uncut 2m downhole composite
D2	Cu – Uncut 2m downhole composite
D3	Bi – Uncut 2m downhole composite
D4	Hole ID
D5	Interval From Depth
D6	Interval To Depth
D8	Composite Length
D11	Au – Cut 2m downhole composite
D12	Cu – Cut 2m downhole composite
D13	Bi – Cut 2m downhole composite
D20	Zonecode number

Table 6-1 Composite File Data Fields

6.2 Descriptive Statistics

Statistical analysis within each of the defined mineralised domains was used to identify the requirement for any high-grade cutting and the appropriate level at which to apply the cut.

Log-probability plots of 2m composites for the three Juno gold and bismuth domains are shown in Appendix 4 and Figure 6-2. From the plots, all interpreted domains demonstrate geologically and statistically distinct populations and provide a robust basis for resource estimation

Cube used histograms, log-transformed probability plots, percentile analysis and sensitivity analysis for individual domains to identify population outliers (Appendix 4). Spatial location of the outliers was also taken into consideration for the application of top cuts. The sensitivity analysis involved analysing varying top cut values, to estimate the contribution of each sample to the overall metal content (this includes the effect of declustering the composite samples, in order to mimic the effect of kriging).

High grade assay cuts were applied to all the gold domains and to bismuth in domain 100 only. No cuts were applied to the copper domain 1000.

Summary statistics of the raw and cut gold 2m composites are shown below in Table 6-2 and Table 6-3, and raw copper 2m composites in Table 6-4. The number of composites influenced by the high grade cut is shown in parenthesis next to the maximum cut value.

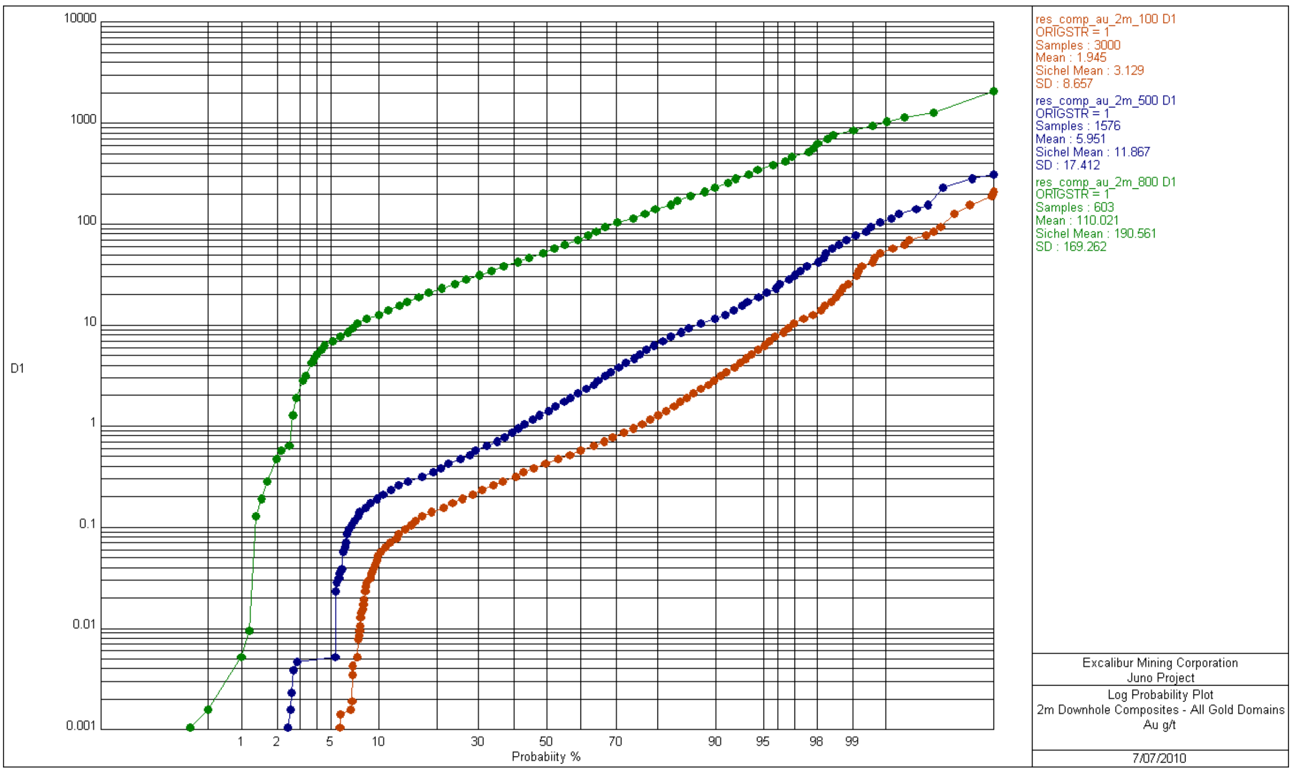


Figure 6-1 Log Probability Plot for Gold Domains – 2m composites Au g/t

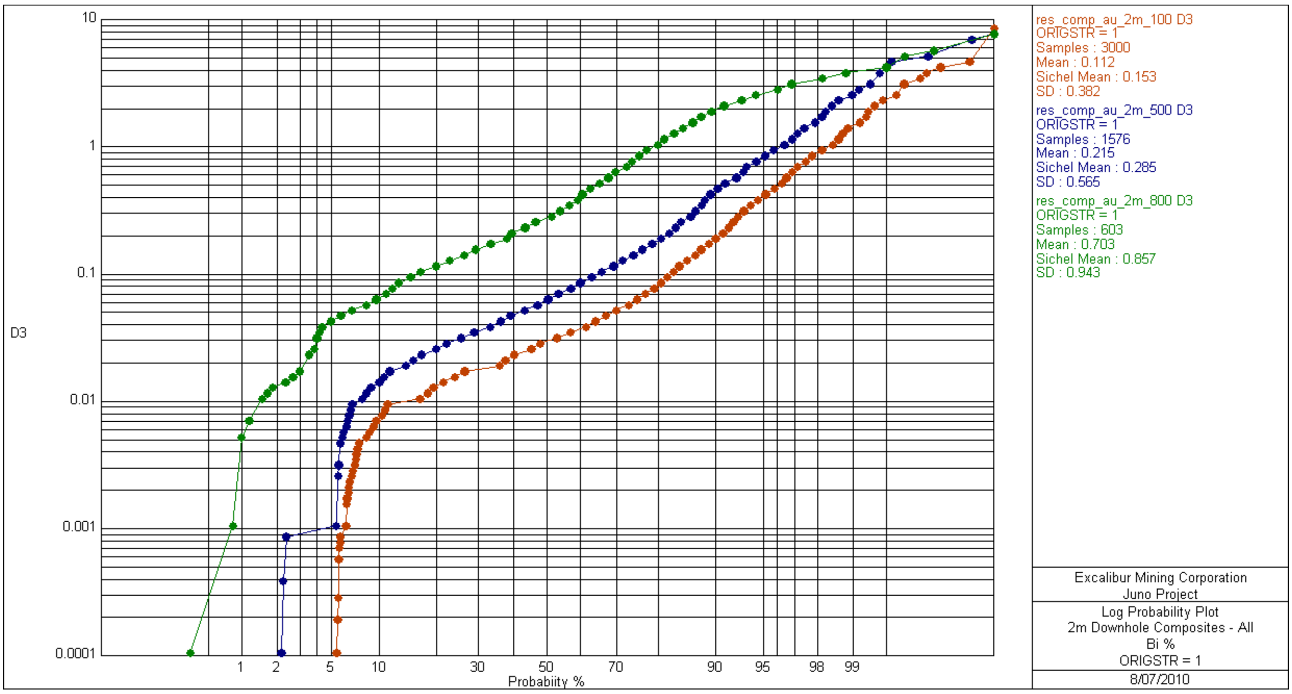


Figure 6-2 Log Probability Plot for Gold Domains – 2m composites Bi %

	DOMAIN 100		DOMAIN 500		DOMAIN 800	
	Raw Au g/t	**Cut Au g/t**	**Raw Au g/t**	**Cut Au g/t**	**Raw Au g/t**	**Cut Au g/t**
Number	3000	3000	1576	1576	603	603
Minimum	0.001	0.001	0.001	0.001	0.001	0.001
Maximum	218.76	**55.00 (17)**	299.00	**100.00 (9)**	2023.94	**700.00 (1)**
Raw Mean	1.95	1.73	5.95	5.50	110.02	103.90
Median	0.45	0.45	1.45	1.45	56.68	56.68
Std Dev	8.66	5.56	12.5	17.41	130.47	169.26
Coeff Var	4.45	3.22	2.93	2.28	1.54	1.26

Table 6-2 Juno Gold Domains Summary Statistics – 2m Composites Au g/t

	DOMAIN 100		DOMAIN 500		DOMAIN 800	
	Raw Bi %	**Cut Bi %**	**Raw Bi %**	**Cut Bi %**	**Raw Bi %**	**Cut Bi %**
Number	3000	3000	1576	NA	603	NA
Minimum	0	0	0	NA	0	NA
Maximum	8.69	**5 (1)**	7.90	NA	7.51	NA
Raw Mean	0.11	0.11	0.22	NA	0.70	NA
Median	0.03	0.03	0.07	NA	0.28	NA
Std Dev	0.38	0.34	0.57	NA	0.94	NA
Coeff Var	3.43	3.10	2.63	NA	1.34	NA

Table 6-3 Juno Gold Domains Summary Statistics – 2m Composites Bi %

	DOMAIN 1000 (Cu)	
	Raw Cu %	Cut Cu %
Number	3617	NA
Minimum	0	NA
Maximum	15.65	NA
Raw Mean	0.54	NA
Median	0.32	NA
Std Dev	0.75	NA
Coeff Var	1.40	NA

Table 6-4 Juno Copper Domain Summary Statistics – 2m Composites Cu %

7.0 VARIOGRAPHY

7.1 Methodology

Variography was undertaken using the Isatis geostatistical software package. Variography was performed on the cut 2m composites for all gold domains and the copper domain to characterise the spatial continuity of the mineralised material.

The variogram modelling process followed by Cube involved the following steps;

- Calculate and model the omni-directional or down hole variogram on raw 2m composites to characterise the Nugget Effect;
- Systematically calculate orientated variograms in 3 dimensions to identify the plane of greatest continuity;
- Calculate a fan of variograms within the plane of greatest continuity to identify the direction of maximum continuity within the plane. Model the variogram in the direction of maximum continuity and the orthogonal directions;

Variography was undertaken on Gaussian transformed 2.0 metre downhole high cut composite data. The Gaussian transformation was modelled in Isatis on declustered 2.0m composite data. The Gaussian variogram models were back transformed and modelled to obtain the appropriate variogram models for interpolation of cut composite data.

7.2 Variogram Modelling

Separate variography was performed on the three gold domains and the copper domain to characterise the spatial continuity of the mineralisation. Variography identified relative nugget effects ranging from 60% in the outer talc-carbonate-magnetite zone (Domain 100), 49% in the main magnetite body (Domain 500) to 32% in the high grade magnetite core (Domain 800). This increasing nugget effect from the central core to the outer alteration envelope reflects the highly variable and poddy development of magnetite mineralisation and associated erratic high grades outside of the central core.

Variography for most of the domains demonstrated an isotropic spatial behaviour with a flat plunge and dip. This may reflect the 'capping' of the mineralisation/alteration front, with the mineralising fluids 'ponding' in the nose of the hosting anticlinal structure. The exception is the high grade central core which has a more sub-vertical orientation and a ENE trend.

Table 7-1 to Table 7-4 summarises the variogram model parameters as implemented in Surpac for gold and copper estimation. Bismuth was estimated into each of the gold domains using the same variogram and search parameters as that derived for the gold domains. Variograms produced from Isatis geostatistical software are presented in Appendix 5.

	Sill	Relative Variance	Range	Azimuth	Plunge	Dip	Major/ Semi Major Ratio	Major/ Minor Ratio
Nugget Co	0.60	0.60						
Structure 1	0.34	0.34	7.25	0	0	0	1	1
Structure 2	0.06	0.06	48.3	0	0	0	1	1

Table 7-1 Juno Variogram Model Gold Domain 100- Au g/t

	Sill	Relative Variance	Range	Azimuth	Plunge	Dip	Major/ Semi Major Ratio	Major/ Minor Ratio
Nugget Co	0.49	0.49						
Structure 1	0.33	0.33	5.74	0	0	0	1	1
Structure 2	0.18	0.18	20.57	0	0	0	1	1

Table 7-2 Juno Variogram Model Gold Domain 500- Au g/t

	Sill	Relative Variance	Range	Azimuth	Plunge	Dip	Major/ Semi Major Ratio	Major/ Minor Ratio
Nugget Co	0.32	0.32						
Structure 1	0.54	0.54	10	64	0	80	0.8	1
Structure 2	0.14	0.14	10000	64	0	80	0.8	1

Table 7-3 Juno Variogram Model Gold Domain 800- Au g/t

	Sill	Relative Variance	Range	Azimuth	Plunge	Dip	Major/ Semi Major Ratio	Major/ Minor Ratio
Nugget Co	0.61	0.58						
Structure 1	0.25	0.24	9.49	0	0	0	1	1
Structure 2	0.14	0.13	21.03	0	0	0	1	1
Structure 3	0.05	0.05	32.02	0	0	0	1	1

Table 7-4 Juno Variogram Model Gold Domain 1000- Cu %

8.0 SEARCH NEIGHBOURHOOD ANALYSIS

Quantitative Kriging Neighbourhood Analysis (QKNA) was undertaken to establish optimum search and minimum/maximum composite parameters on a well informed block within the mineralised domains.

Analysis was undertaken on 2m cut composites for all three gold domains and the copper domain.

The aim of these tests is to optimise the kriging search neighbourhood and maximise the quality of the kriging when dealing with a non-exhaustive data set. A number of key criteria were captured for the selected block as described by the following;

- Block coordinates and dimensions.
- Estimated grade.
- Kriging variance.
- Block Dispersion variance.
- Slope of Regression of estimated blocks z*(v) and theoretical true blocks z(v).
- A listing of the actual informing intercept composites within the search volume of the block including coordinates, grades, distance from block and kriging weight.
- Statistics of the informing intercept composites including the number of composites, minimum, maximum, mean, standard deviation, variance and coefficient of variation.

Cube initially bases search distances on the analysis of theoretical kriging weight charts generated by Surpac. An examination of these kriging weight charts provides a good starting point for testing a search strategy, as they provide an indication of the distribution of kriging weights for a given variogram with respect to distance along the major axis of the search volume. Of particular interest is the approximate distance that kriging weights trend towards zero. Cube believes it is good estimation practice to use a search neighbourhood that ensures that kriging weights allocated to composites trend toward zero or slightly negative on the periphery of the search.

Based on the selected optimal search neighbourhoods, the minimum/maximum number of composites required for interpolation determined from the QKNA analysis, together with a visual analysis of the spatial grade distributions, appropriate estimation parameters were determined for each domain and are tabulated in Table 9-3.

9.0 ESTIMATION AND BLOCK MODELLING

9.1.1 Estimation Block Size

Data spacing was the primary consideration taken into account when selecting an appropriate estimation block size. Data spacing within the magnetite dominant mineralised surfaces (domains 500 & 800) is approximately 5m x 5m, while the lower grade mineralisation within the outer talc-carbonate-magnetite alteration zone, has an average data density of about 40m x 20m.

A further important consideration taken into account is the implication of the chosen block size on mining selectivity decisions.

Cube considers it good geostatistical practice to use an estimation parent cell size that approaches the composite spacing where possible while at the same time being mindful of potential mine design and selectivity implications. Cube reviewed the 'physical' data spacing relative to the geological envelopes to be estimated when deciding on the appropriate estimation block size.

9.2 Block Model Definitions

A 3D block model was created as a prototype from which individual constraints for each mineralised zone were created inside domain wireframes. The block model prototype definition is shown in Table 9-1. A list of field names and descriptions in the block model are shown in Table 9-2.

	Minimum	Maximum	Model Extent
Y (local grid north)	7820740	7821710	970
X (local grid east)	419860	420940	1080
Z (local grid RL)	400	0	4000
Parent Cell Y m	5	**Min Sub-Cell Y m**	1.25
Parent Cell X m	10	**Min Sub-Cell X m**	2.5
Parent Cell Z m	2.5	**Min Sub-Cell Z m**	0.625
		Total Blocks	959,099

Table 9-1 Juno 3D Block Model Definition

Field Name	Background	Description
x		X Block Centroid
y		Y Block Centroid
z		Z Block Centroid
au_cut	-1	Gold ppm – by Ordinary Kriging - Cut
au_uncut	-1	Gold ppm – by Ordinary Kriging - Uncut
avgdist	-1	Average Distance to Composites
bi_cut	-1	Bismuth % – by Ordinary Kriging - Cut
bi_uncut	-1	Bismuth % – by Ordinary Kriging - Uncut
classification	3	4=Unclassified, 1=Measured, 2=Indicated, 3=Inferred
cu_cut	-1	Copper % – by Ordinary Kriging - Cut
cu_uncut	-1	Copper % – by Ordinary Kriging - Uncut
density	2.6	Assigned In Situ Bulk Density
depletion	1	1 = Insitu; 0 = Mined
dns	-1	Distance to Nearest Composite
geo	SLST	Rock Type
kv	-1	Block estimate kriging variance
ns	-99	Number of Composites used in Block Estimate
wx_code	3	Oxidation State Code 0-air, 1-oxide, 2-transitional, 3-fresh
zonecode_au	BKGR	Wireframe Domain Code - Au
zonecode_cu	BKGR	Wireframe Domain Code - Cu

Table 9-2 Juno Block Model Field Names

9.3 Grade Interpolation

Ordinary Kriging (OK) was used to interpolate gold, copper and bismuth into 5mN x 10mE x 2.5mRL parent cells. All mineralised domains were estimated individually using uniquely coded 2m downhole composites.

Block descretisation points were set to Y=5 x X=5 x Z=2 points.

Gold was interpolated into the gold domains and copper into the copper domain only. Bismuth was estimated into each of the gold domains using the same variogram and search parameters derived for the gold domains.

The minimum and maximum number of composites per block estimate was as determined by the QKNA analysis.

The estimation parameters used for interpolation are listed in Table 9-3 and the interpolation output reports are attached in Appendix 6.

Parameter	Domain 100	Domain 500	Domain 800	Domain 1000
Minimum number of Comps	4	4	4	4
Maximum number of Comps	35	35	35	35
Search Major Distance	50	25	25	25
Search Orientation	0	0	0	0
Plunge of Major Axis	0	0	0	0
Dip of Major Axis	0	0	0	0
Anisotropy major/semi-major	1	1	1	1
Anisotropy major/minor	1	1	1	1

Table 9-3 Juno Estimation Parameters

9.4 Mining Depletion

The Juno resource model has been depleted for the historical mining activity by the 3D mining void constructed by Cube. The process of building a "best fit' depletion model involved several steps:

1. Original mine development and pay run mine level plans and sections were digitised in the local imperial mine grid;
2. Mined void models were re-built on the original imperial mine grid and then rotated to the MGA94 grid system using updated surveyed grid transformation points;
3. The modelled void was modified, where required, to the 25 RC and diamond holes drilled by Excalibur that verified the mining stope outlines and confirmed the existence of remnant mineralised pillars.

The validation drilling verified the position of the updated mined void model with the majority of spatial discrepancies in the order of +/- 5m laterally.

The surface expression of the main shaft was DGPS surveyed for accurate coordinates by Brian Blakeman Surveys (Figure 9-1).

The depletion of the block model by the mined voids is shown in Figure 9-2 and Figure 9-3. The block model field '*depletion*' is flagged as follows:

0 = 100% or fully depleted
1 = In-situ or remaining

The mine produced 454,938t of ore for 838,000 oz (head grade of 60g/t). Cube estimated the tonnage for the depleted void as 408,200 tonnes at 46.g/t Au (cut value) with the total contained gold ounces 20% less than the historical production. This mine call factor could be attributed to a number of issues including ore density, influence of extreme high grade isolated pods, or uncertainty of the mined void volume.

Figure 9-1 Surface expression of Juno Main Shaft

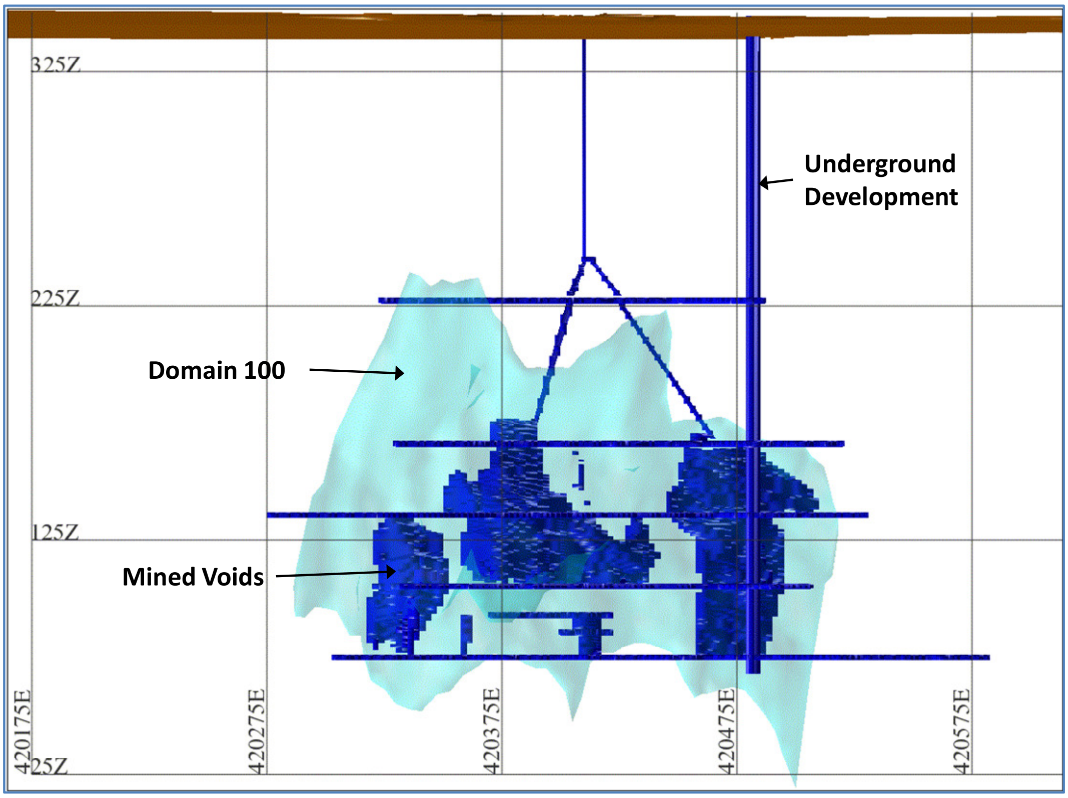


Figure 9-2 Juno Historical Mining Depletion – looking north

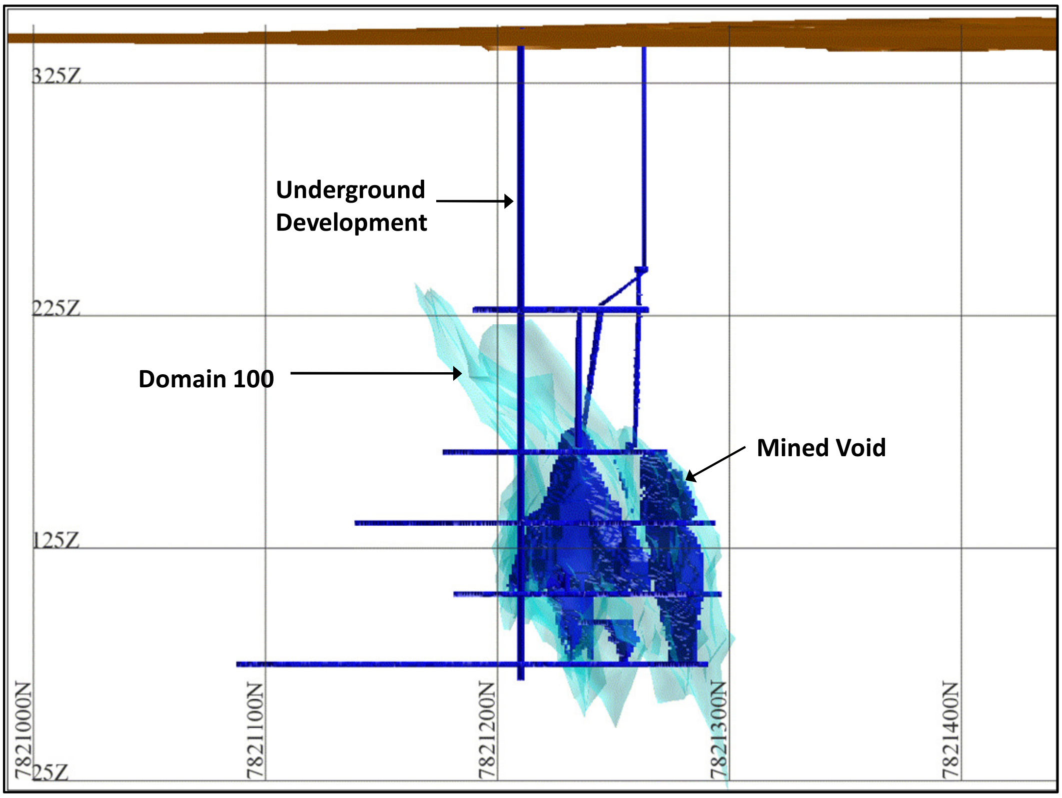


Figure 9-3 Juno Historical Mining Depletion – looking west

9.5 Oxidation

No weathering profiles were available and all material was assigned based on elevation (RL) as listed below in Table 9-4.

Elevation (mRL)	Description	Code
Below 190mRL	Fresh	3
Between 190-240mRL	Transition	2
Above 240mRL, below topography	Oxide	1
Above topography	Air	0

Table 9-4 Juno Oxidation States Assigned

9.6 Model Validation

The final Surpac block model is called **juno_52010.mdl.**

Table 9-5 shows the statistical comparisons between de-clustered composite gold grades and model grades for all the gold domains. A de-clustering cell size of X=40m, Y=20m, Z=10m was used which is approximately the average data density spacing away from the central high grade and depleted magnetite core.

Domain	No. of Samples	No. of Composites	Raw Composite Au g/t mean	Composite Cut Au g/t mean	Declustered Cut Au g/t mean	Model Cut Au g/t	Ratio % (Model/Comp)
100	4,926	3,000	1.95	1.72	1.96	1.69	98.3%
500	2,685	1,576	5.95	5.50	5.84	5.44	98.9%
800	1,053	603	110.02	103.90	103.41	104.86	100.9%

Table 9-5 Juno Gold Zones De-Clustered Composite versus Modelled Mean Grades

Visual and statistical validation of the Juno mineralised zones generally demonstrate robust model outcomes with all model grades zones within 15% of informing de-clustered composite grades.

The modelled estimates for gold have been compared to the cut de-clustered and raw composite grades every 10m by Easting for the three gold domains, and also for modelled copper in the copper domain as presented in Figure 9-4 to Figure 9-7.

There does not appear to be any obvious areas where excessively high model grades have been estimated. For domain 100 the extreme de-clustered composite grade at 420430mE (Figure 9-4) reflects the isolated high grade down dip intersection in EJDD004 which the model has restricted and smoothed as expected.

The de-clustering method uses a moving grid technique where samples are weighted according to their proximity to other samples. This method can have limitations as it is purely statistical and does not take the volume of the mineralised zone into account. Nevertheless it provides a reasonable basis for such de-clustering analysis and it would be expected that a well implemented Ordinary Kriging would result in a global gold grade similar to that represented by the de-clustering results.

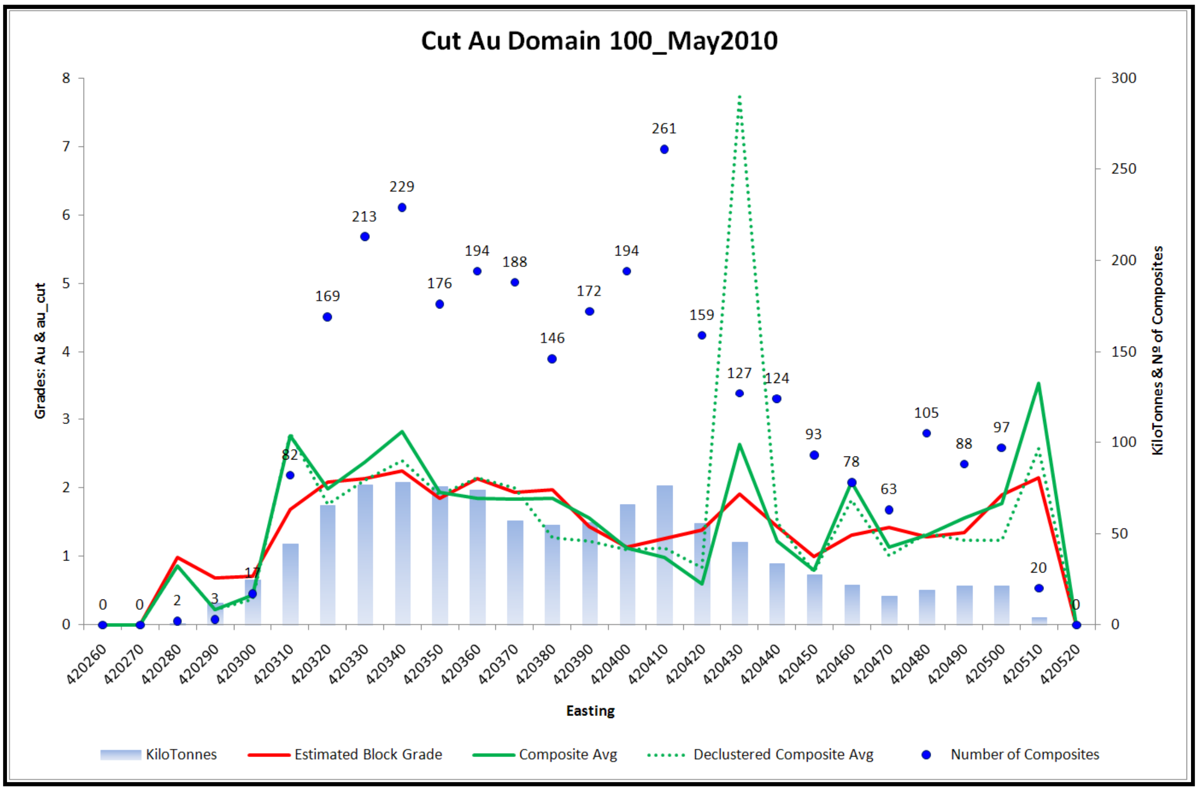


Figure 9-4 Domain 100 – Au g/t validation by 10m easting increments

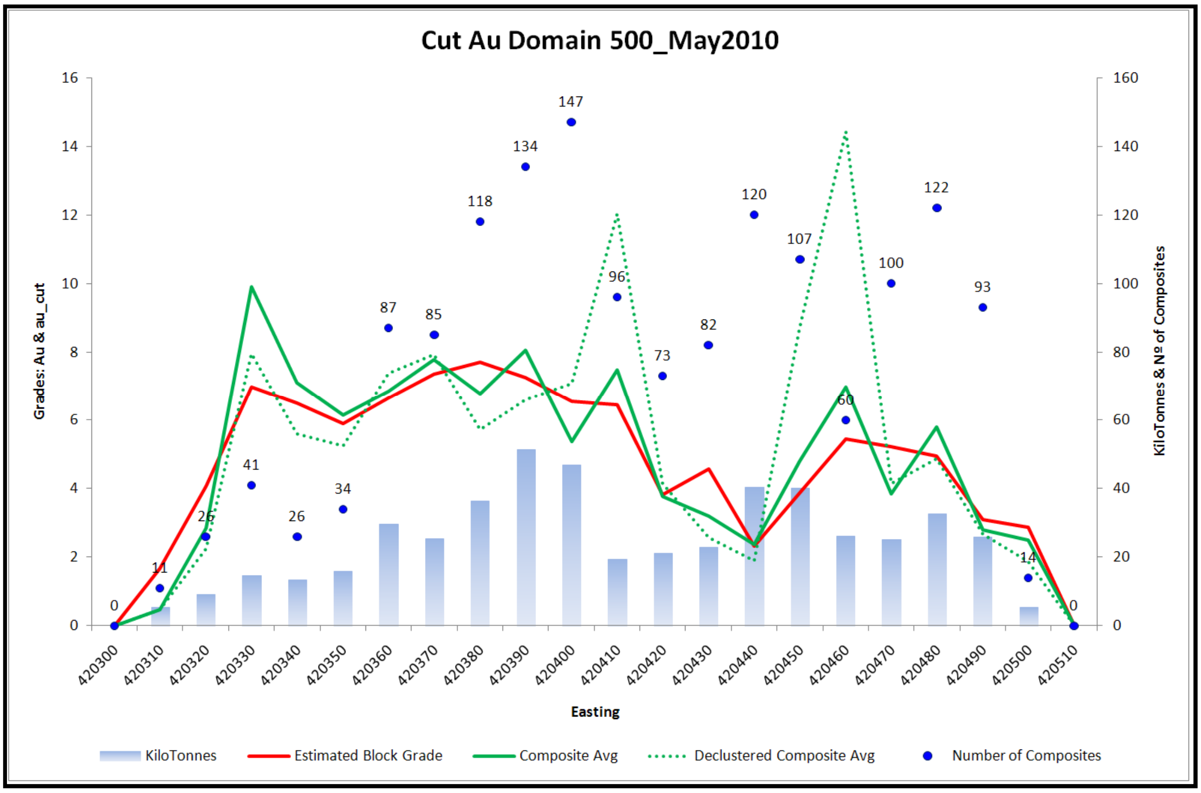


Figure 9-5 Domain 500 – Au g/t validation by 10m easting increments

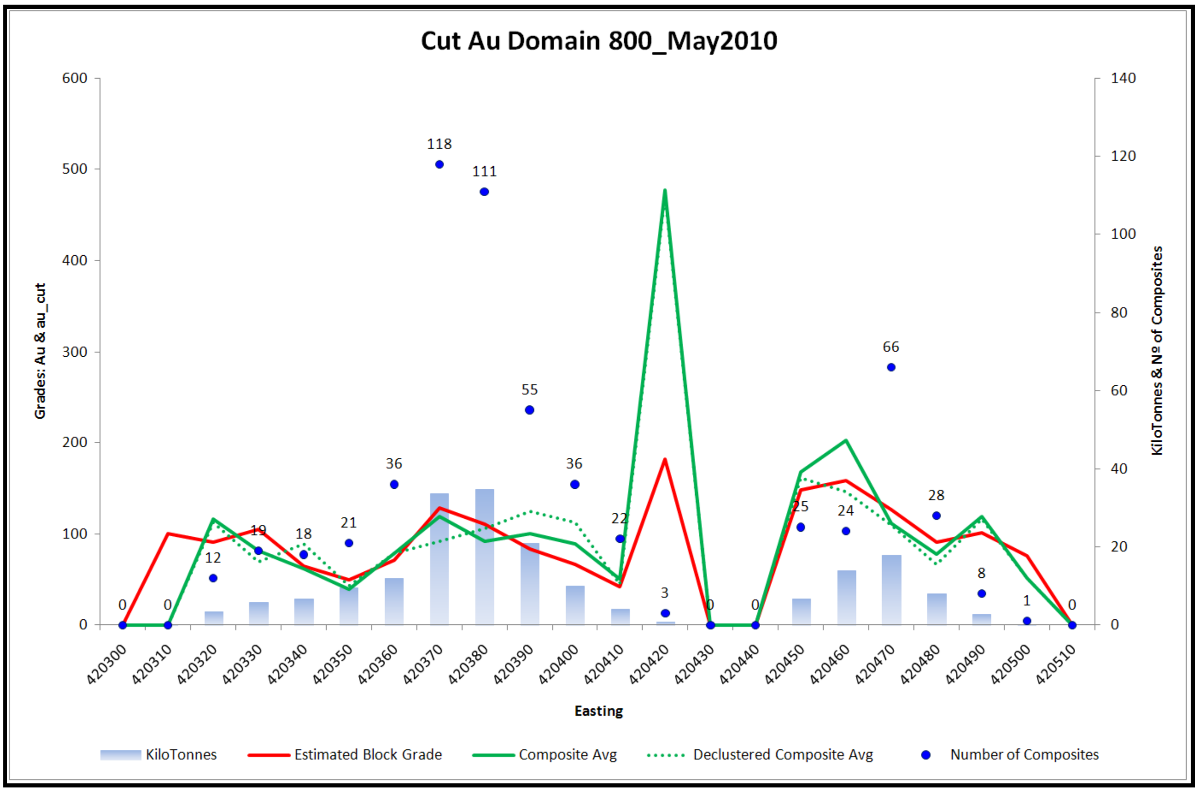


Figure 9-6 Domain 800 – Au g/t validation by 10m easting increments

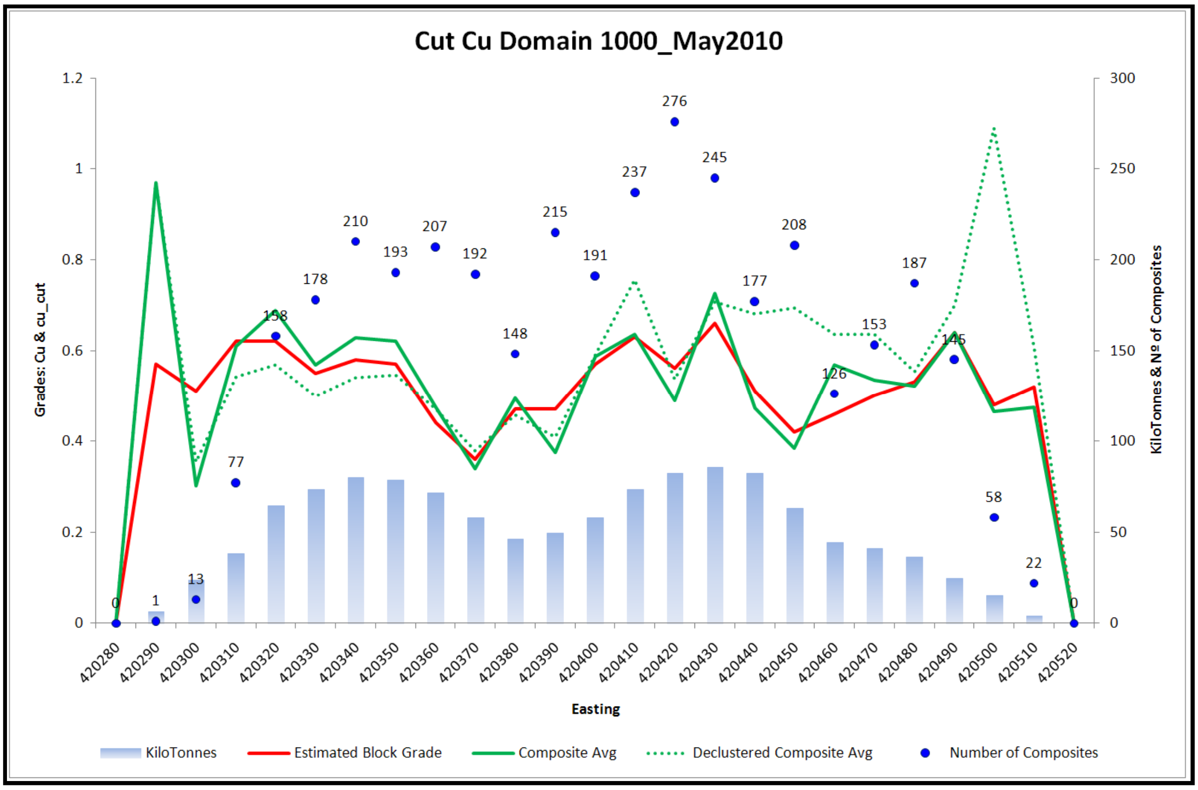


Figure 9-7 Domain 1000 – Cu % validation by 10m easting increments

10.0 RESOURCE CLASSIFICATION AND REPORTING

The Mineral Resource estimate undertaken by Cube, has been classified as Inferred and reported in accordance with The 2004 Australasian Code for Reporting of Mineral Resources and Ore Reserves (2004 JORC Code).

10.1 Resource Classification

A range of criteria were considered when assessing resource classification and are detailed below.

10.1.1 Data Integrity and QAQC

The resource estimate is based on a high level of historic assay data, where the recent Excalibur flagged drill intercepts (zonecode) contribute less than 5% of the total coded intervals used in the estimate. No QAQC assay data was available for the historical assay data.

Selective sampling based on visually mineralised intervals was done by Geopeko and Australian Development Limited for all the historic diamond drilling. Cube has therefore assumed for this estimate, that any unsampled intervals were not mineralised and hence they have been assigned an assay grade of 0.005g/t Au.

10.1.2 Drilling Density and Mining History

Recent drilling by Excalibur has indicated low confidence in the continuity, volume and location of the remnant mineralisation and pillars associated with the historic stoping areas. Resource drilling away from the mine workings is widely spaced and selectively sampled.

The majority of the magnetite dominant resources which are located within and around the mined stopes have been drilled from underground on an average intercept spacing of 5m x 5m. Lower grade mineralisation being within the talc-carbonate-magnetite alteration zone, has an average drill density of about 40m x 20m.

In order to increase the confidence in the estimate for Juno, close spaced drilling is required to establish continuity of the mineralisation. This is best achieved from underground. This cannot be achieved effectively from the surface, as intersecting a small target zone with 300 to 400m diamond holes is not feasible, because of hole deviation issues. As an added difficulty, any surface drilling would need to take into account the numerous voids associated with extensive mining development in the footwall.

10.1.3 Modelling Technique

The 3D modelling method and associated parameters is considered appropriate for estimation of the Juno mineralisation. Appropriate risk adjustments in the form of high grade assay cuts have been applied to limit the influence of statistical outliers and rigorous model validation has been undertaken.

10.1.4 Conclusion

Cube has considered all the criteria and has classified the remaining (insitu) Juno mineralised resource as Inferred.

10.2 Resource Statement

A summary of the insitu Juno gold resources above a cut-off of 0.0g/t Au and 1.0g/t Au as of May 31st 2010 are shown in Table 10-1 and Table 10-2 respectively. The insitu copper resource above a cut-off of 0.0% Cu within a 0.3% Cu mineralised halo is shown in Table 10-3.

Classification	Oxidation	Zone	Domain	Volume	Tonnes	Au g/t	Au Oz
Inferred	Fresh	LG talc-chl	100	288,900	953,000	1.6	50,200
		MG magnetite	500	87,400	341,000	4.9	54,000
		HG magnetite	800	6,900	28,000	91.7	81,100
Total Inf.				**383,000**	**1,322,000**	**4.4**	**185,300**
TOTAL				**383,000**	**1,322,000**	**4.4**	**185,300**

Table 10-1 Insitu Juno Gold Resources – May 31st 2010 >0.0g/t Au

Classification	Oxidation	Zone	Domain	Volume	Tonnes	Au g/t	Au Oz
INFERRED	Fresh	LG talc-chl	100	145,900	481,000	2.7	41,800
		MG magnetite	500	85,500	333,000	5.0	53,800
		HG magnetite	800	6,900	28,000	91.7	81,100
Total Inf.				**238,300**	**842,000**	**6.5**	**176,700**
TOTAL				**238,300**	**842,000**	**6.5**	**176,700**

Table 10-2 Insitu Juno Gold Resources – May 31st 2010 >1.0g/t Au

Classification	Oxidation	Zone	Domain	Volume	Tonnes	Cu %	Cu (t)
Inferred	Fresh	Cu talc-chl	1000	**312,800**	**1,040,000**	**0.5**	**5,200**

Table 10-3 Insitu Juno Copper Resources – May 31st 2010 >0.0% Cu

All tonnage, grade and ounce values have been rounded down to relevant significant figures. Slight errors may occur due to this rounding of values.

The grade tonnage curve for all insitu gold resources is presented in Figure 10-1 below.

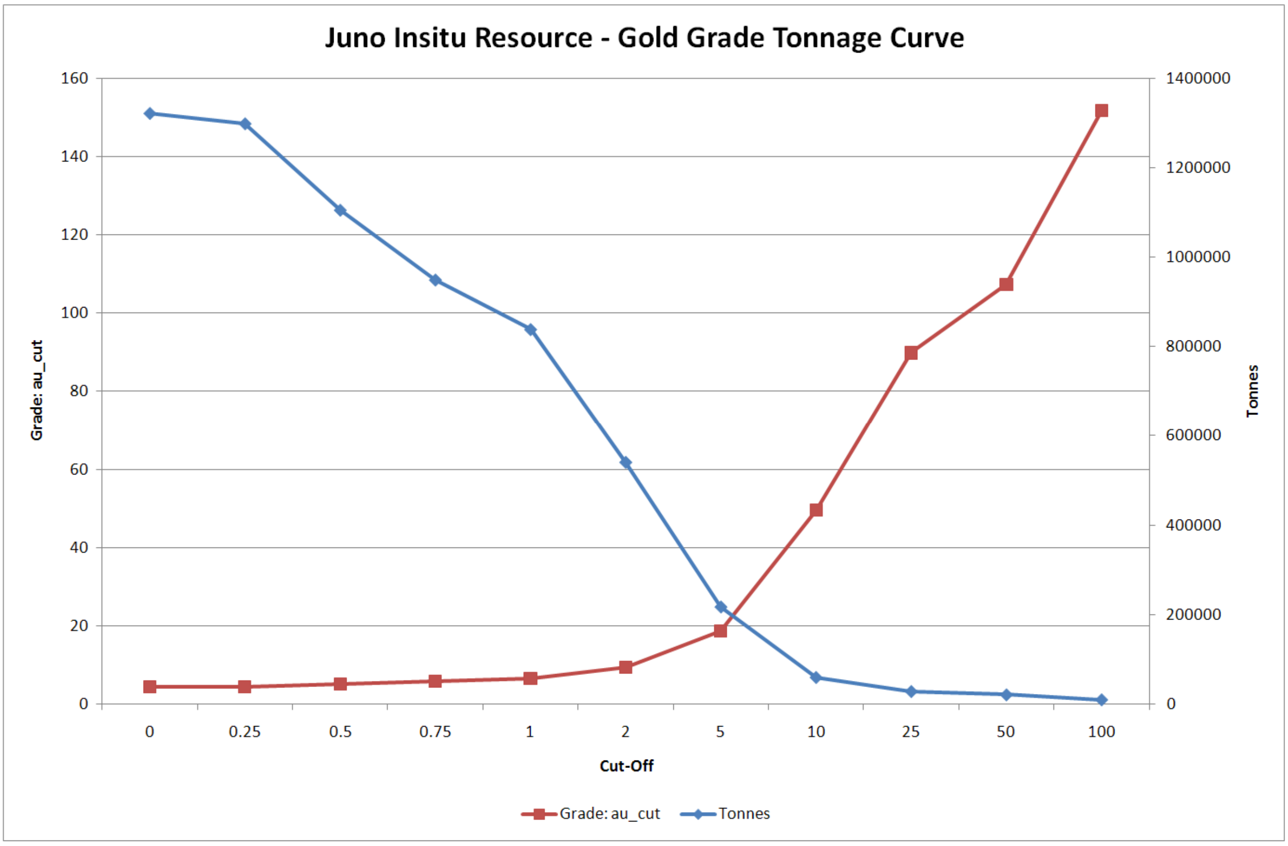


Figure 10-1 Juno Insitu Gold Resource – Grade Tonnage Curve

10.3 References

Davidson, G.J., Large, R.R., (1994). Gold metallogeny and the copper-gold association of the Australian Proterozoic. Mineralium Deposita, 29, p208-223.

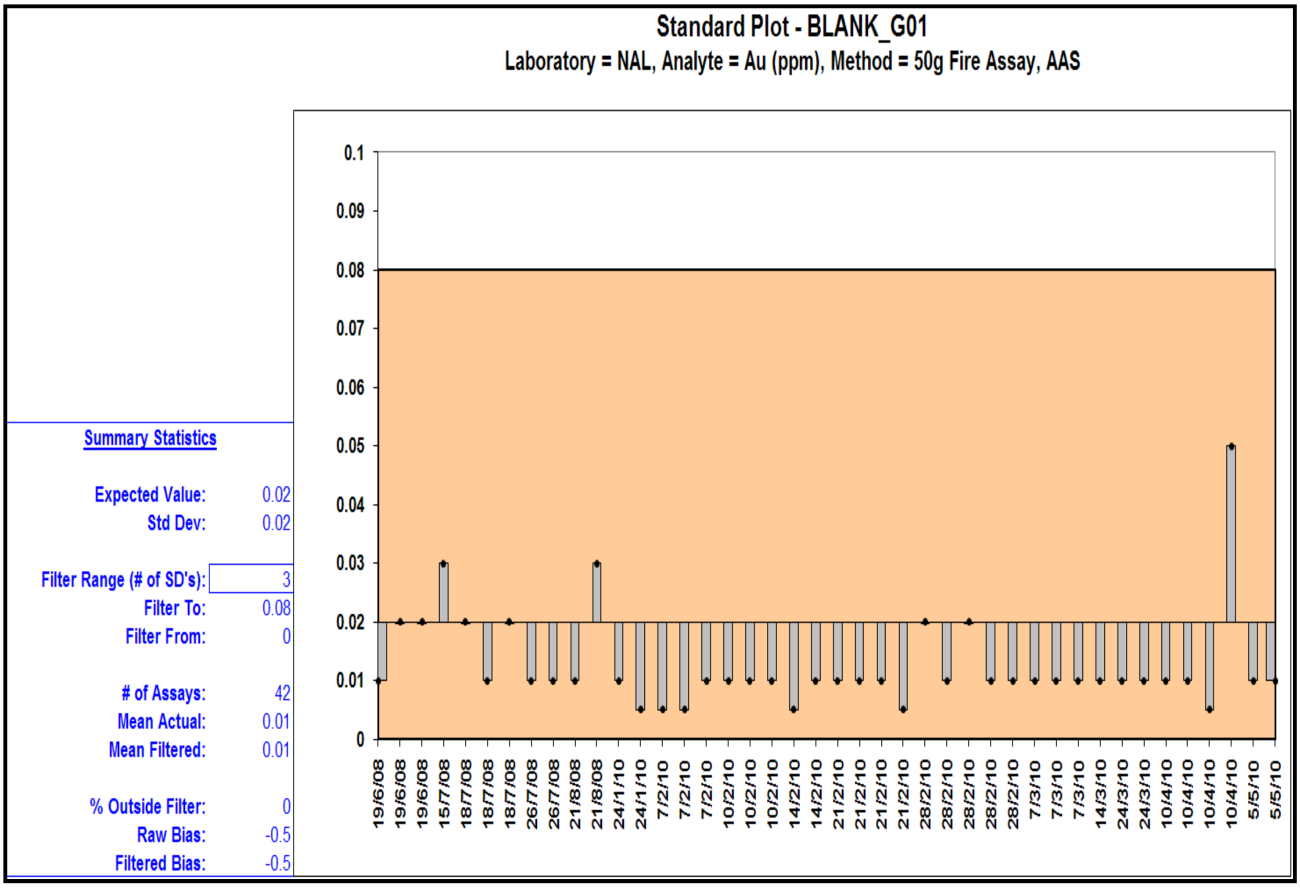
Darcy, B., Robson, C., Sullivan M., (2008). Tennant Creek Project Resource Report October 2008. Excalibur Mining Corporation Limited. Internal Report.

Large, R.R., (1975). Zonation of hydrothermal minerals at the Juno Mine, Tennant Creek goldfield, Central Australia. Economic Geology, 70, p1387-1413.

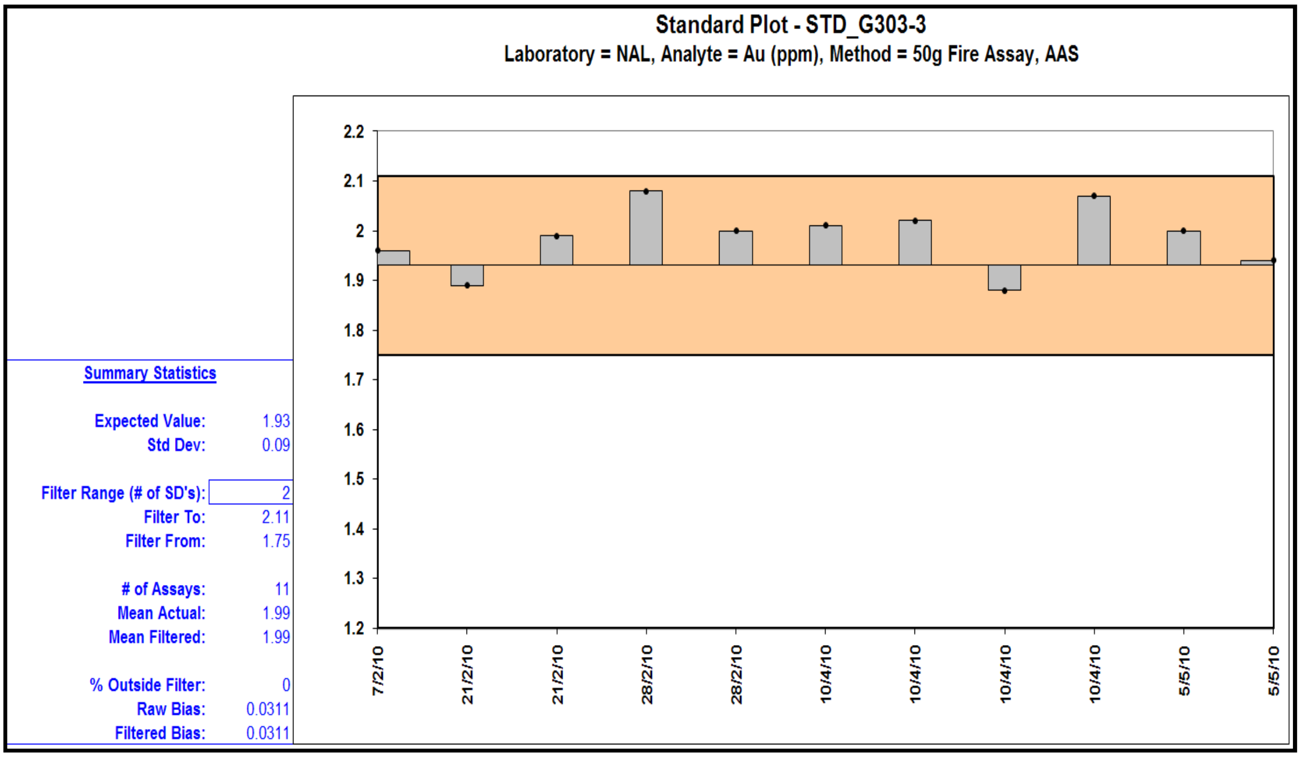
Unknown Source, Statement in Support of Renewals for MLC68, 578 and 579.

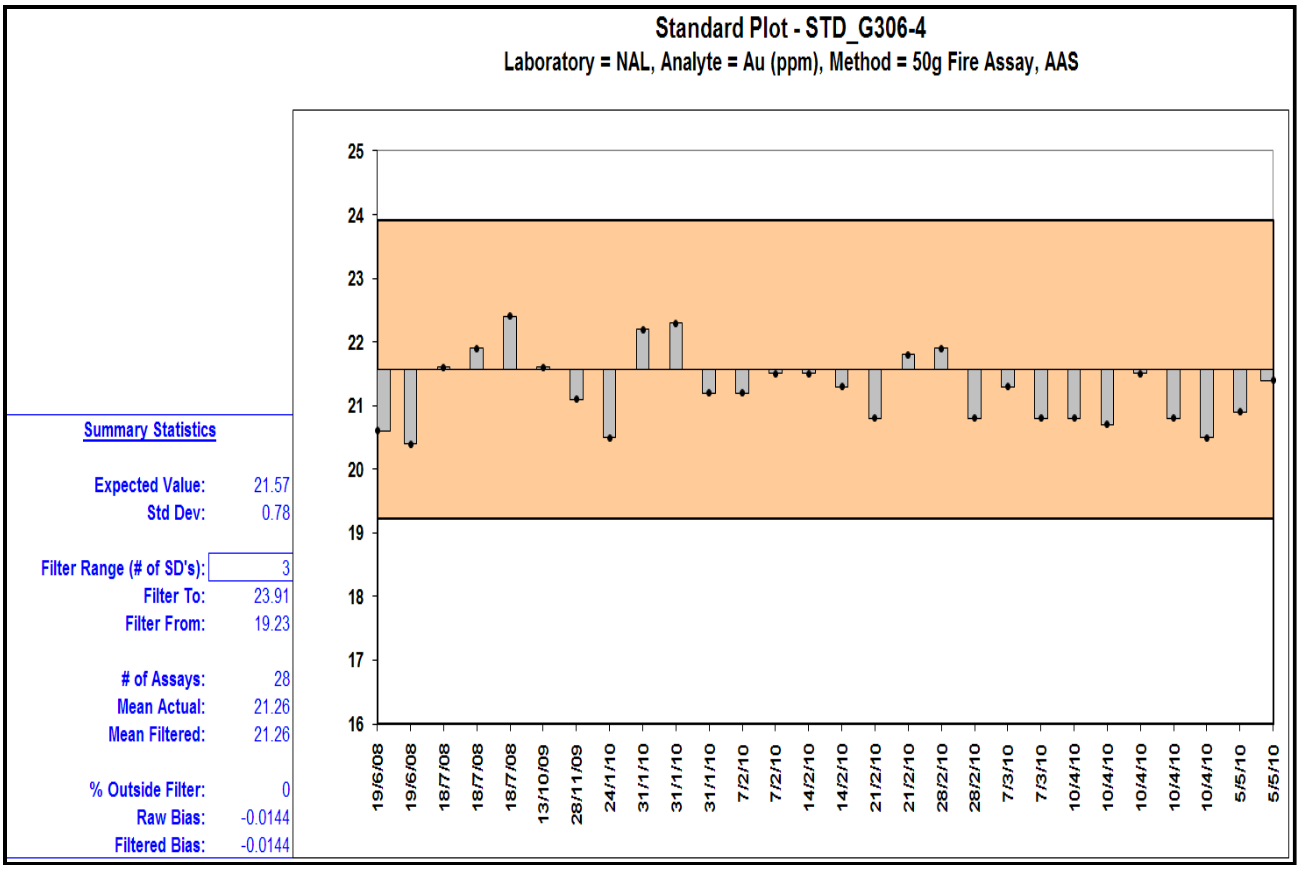
APPENDIX 1. QAQC graphs and plots

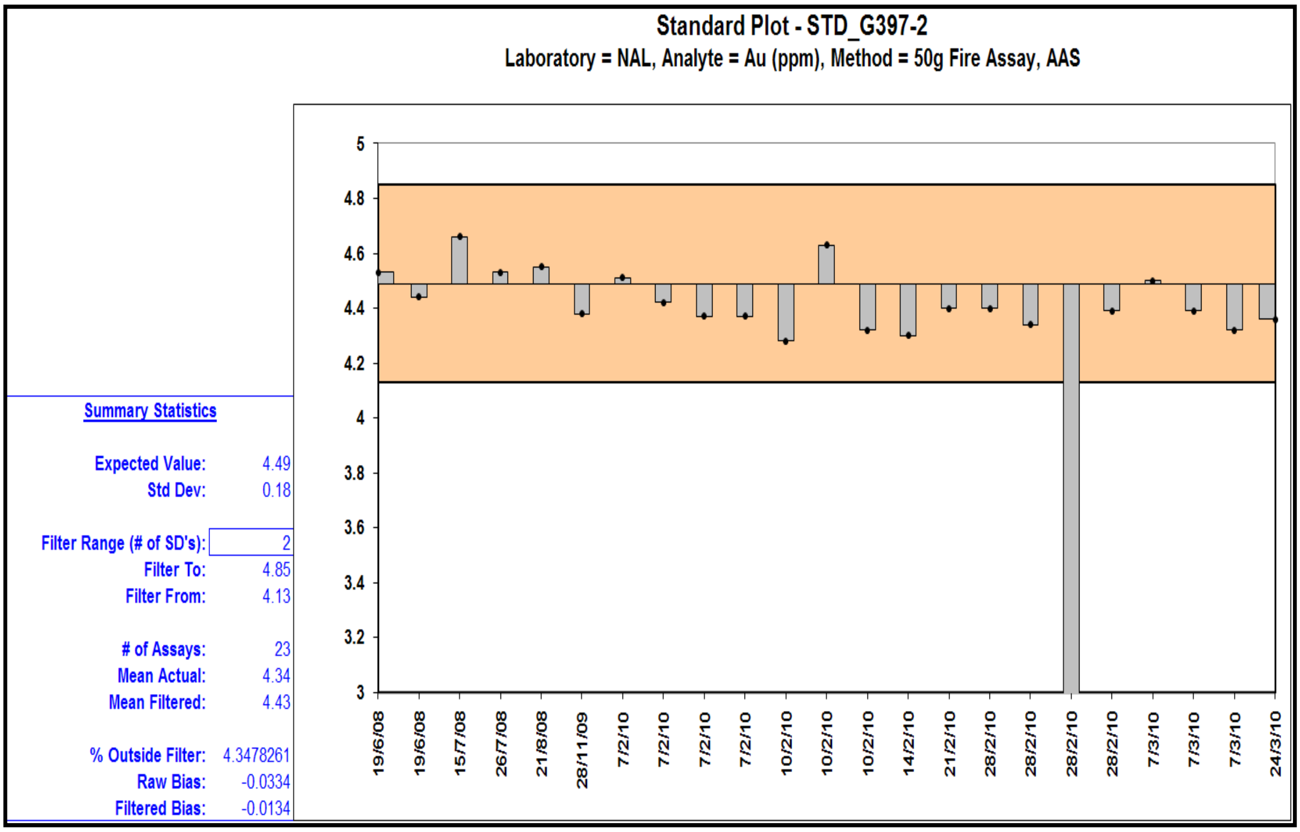
BLANKS

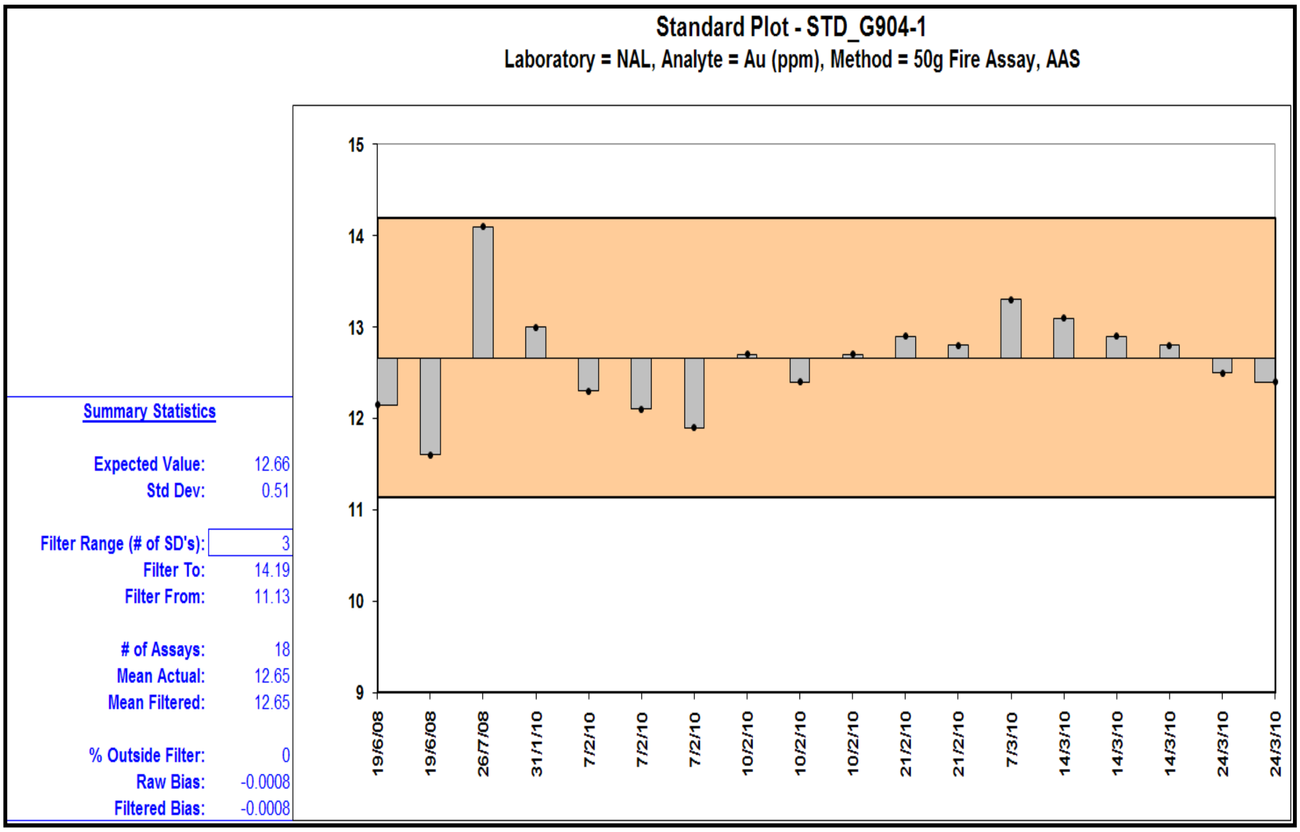


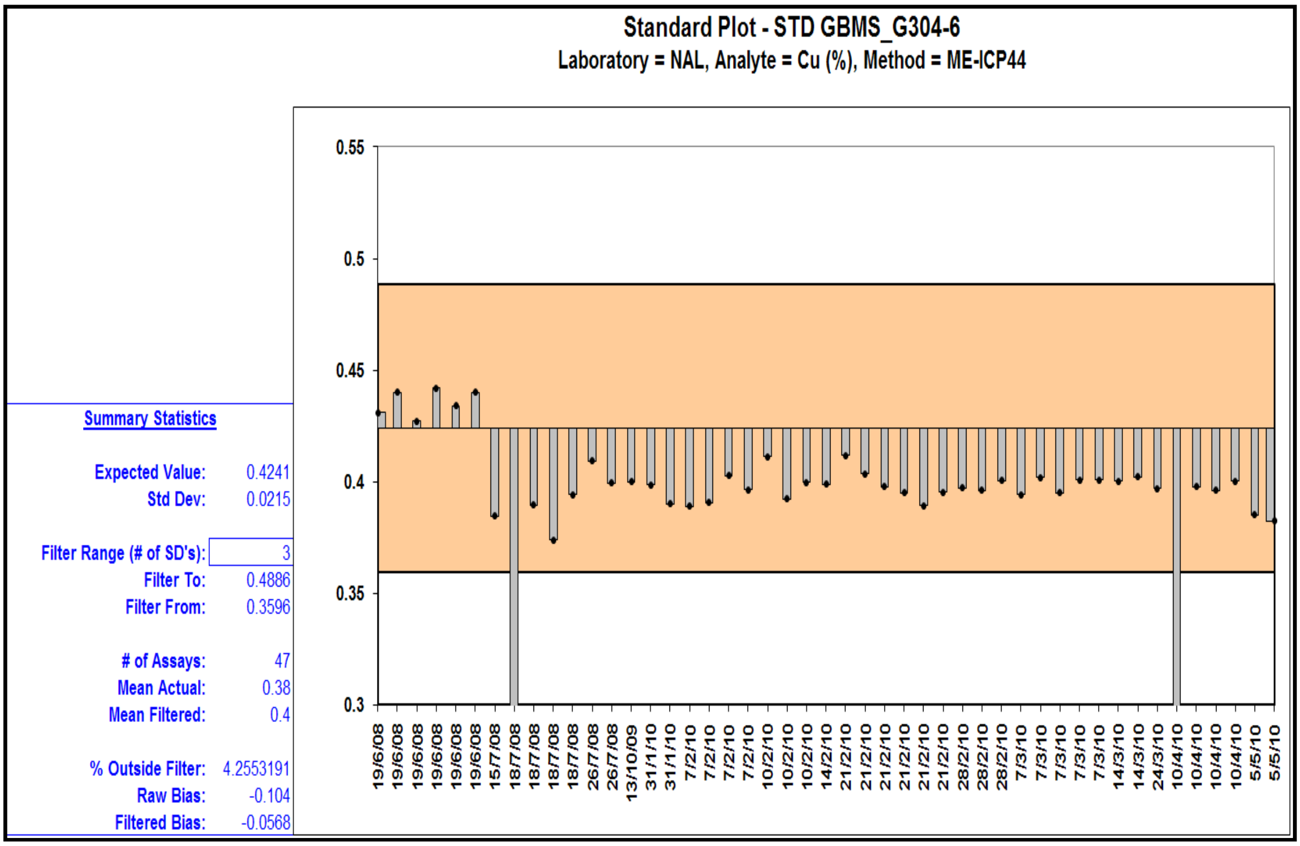
STANDARDS




Standard Plot - STD_G306-4
Laboratory = NAL, Analyte = Au (ppm), Method = 50g Fire Assay, AAS
Summary Statistics
Expected Value: 21.57
Std Dev: 0.78
Filter Range (# of SD's): 3
Filter To: 23.91
Filter From: 19.23
# of Assays: 28
Mean Actual: 21.26
Mean Filtered: 21.26
% Outside Filter: 0
Raw Bias: -0.0144
Filtered Bias: -0.0144
25
24
23
22
21
20
19
18
17
16
19/6/08
19/6/08
18/7/08
18/7/08
18/7/08
13/10/09
28/11/09
24/1/10
31/1/10
31/1/10
31/1/10
7/2/10
7/2/10
14/2/10
14/2/10
21/2/10
21/2/10
28/2/10
28/2/10
7/3/10
7/3/10
10/4/10
10/4/10
10/4/10
10/4/10
10/4/10
5/5/10
5/5/10


Standard Plot - STD_G397-2
Laboratory = NAL, Analyte = Au (ppm), Method = 50g Fire Assay, AAS
Summary Statistics
Expected Value: 4.49
Std Dev: 0.18
Filter Range (# of SD's): 2
Filter To: 4.85
Filter From: 4.13
# of Assays: 23
Mean Actual: 4.34
Mean Filtered: 4.43
% Outside Filter: 4.3478261
Raw Bias: -0.0334
Filtered Bias: -0.0134
5
4.8
4.6
4.4
4.2
4
3.8
3.6
3.4
3.2
3
19/6/08
19/6/08
15/7/08
26/7/08
21/8/08
28/11/09
7/2/10
7/2/10
7/2/10
7/2/10
10/2/10
10/2/10
10/2/10
14/2/10
21/2/10
28/2/10
28/2/10
28/2/10
28/2/10
7/3/10
7/3/10
7/3/10
24/3/10


Standard Plot - STD_G904-1
Laboratory = NAL, Analyte = Au (ppm), Method = 50g Fire Assay, AAS
Summary Statistics
Expected Value: 12.66
Std Dev: 0.51
Filter Range (# of SD's): 3
Filter To: 14.19
Filter From: 11.13
# of Assays: 18
Mean Actual: 12.65
Mean Filtered: 12.65
% Outside Filter: 0
Raw Bias: -0.0008
Filtered Bias: -0.0008
15
14
13
12
11
10
9
19/6/08
19/6/08
26/7/08
31/1/10
7/2/10
7/2/10
7/2/10
10/2/10
10/2/10
10/2/10
21/2/10
21/2/10
7/3/10
14/3/10
14/3/10
14/3/10
24/3/10
24/3/10

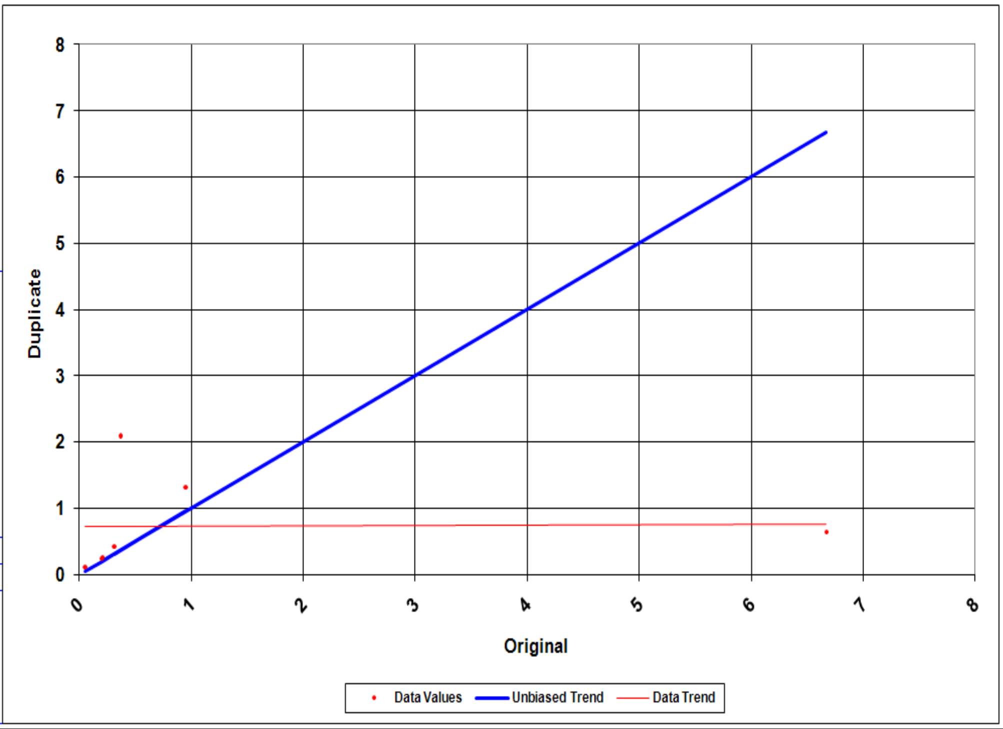

Standard Plot - STD GBMS_G304-6
Laboratory = NAL, Analyte = Cu (%), Method = ME-ICP44
Summary Statistics
Expected Value: 0.4241
Std Dev: 0.0215
Filter Range (# of SD's): 3
Filter To: 0.4886
Filter From: 0.3596
# of Assays: 47
Mean Actual: 0.38
Mean Filtered: 0.4
% Outside Filter: 4.2553191
Raw Bias: -0.104
Filtered Bias: -0.0568
0.55
0.5
0.45
0.4
0.35
0.3
19/6/08
19/6/08
19/6/08
19/6/08
19/6/08
19/6/08
15/7/08
18/7/08
18/7/08
18/7/08
18/7/08
26/7/08
26/7/08
13/10/09
31/1/10
31/1/10
7/2/10
7/2/10
7/2/10
7/2/10
10/2/10
10/2/10
10/2/10
14/2/10
21/2/10
21/2/10
21/2/10
21/2/10
21/2/10
21/2/10
28/2/10
28/2/10
28/2/10
7/3/10
7/3/10
7/3/10
7/3/10
7/3/10
14/3/10
14/3/10
24/3/10
10/4/10
10/4/10
10/4/10
10/4/10
5/5/10
5/5/10

FIELD DUPLICATES – Diamond Core

Scatter Plot - FIELD DUPLICATES (Diamond Core)
Laboratory = NAL, Analyte = Au (ppm), Method = 50g Fire Assay

Summary Statistics

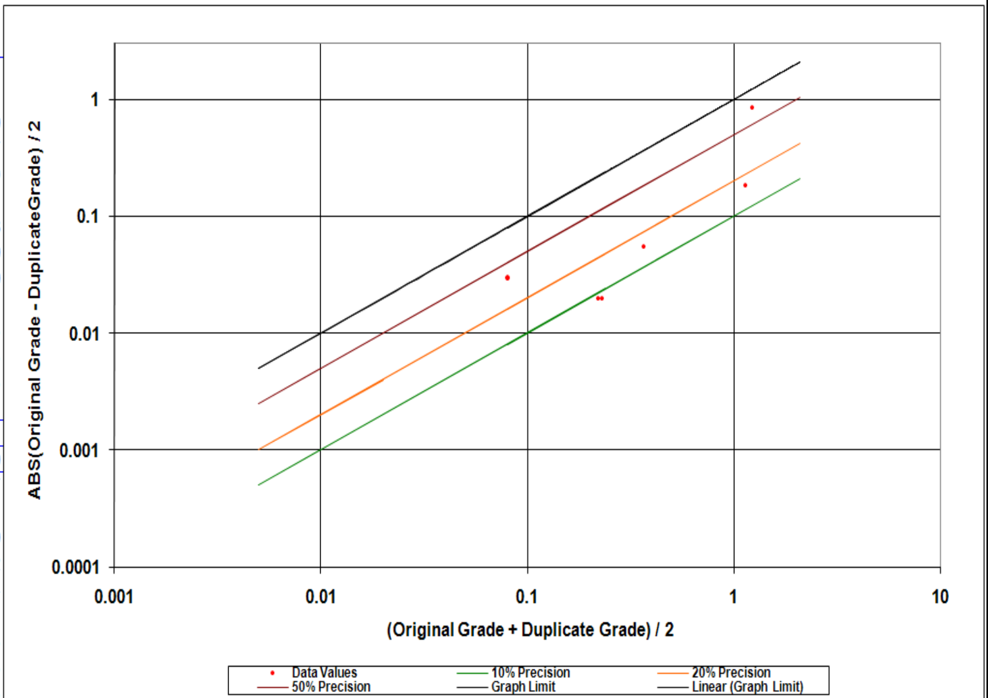
# of Assays:	30
Max X:	6.67
Max Y:	2.09
Correl. Coeff.:	0.3104
Slope:	0.1151
Y-Intercept:	0.1413
Filter Values From:	0.1
Filter Values To:	30
Filtered # of Assays:	7
Filtered Corel. Coeff.:	0.0179
Filtered Slope:	0.0054
Filtered Y-Intercept:	0.7175



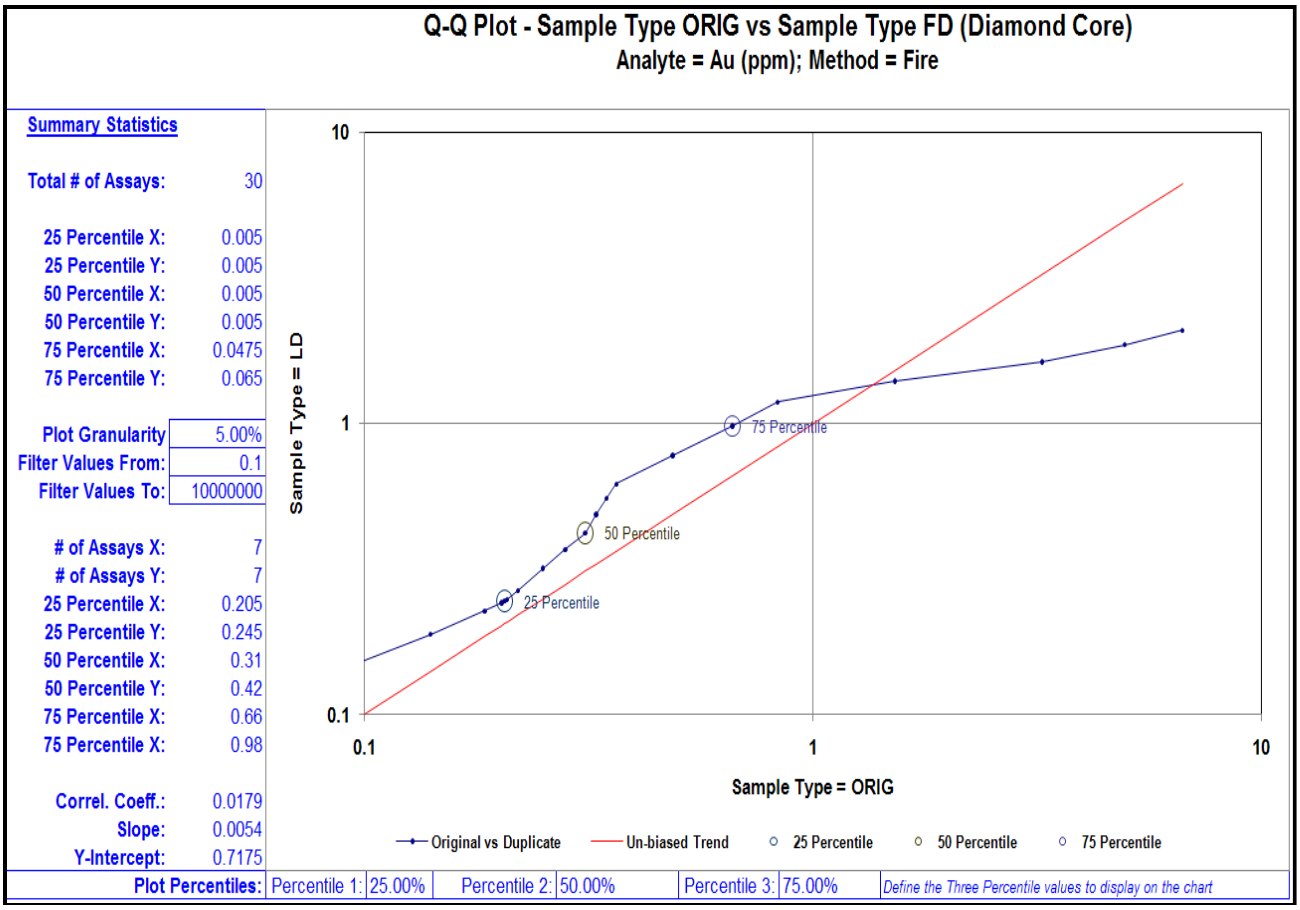
Scatter Plot - FIELD DUPLICATES (Diamond Core)
Laboratory =NAL, Analyte = Au (ppm), Method = 50g Fire Assay

Summary Statistics

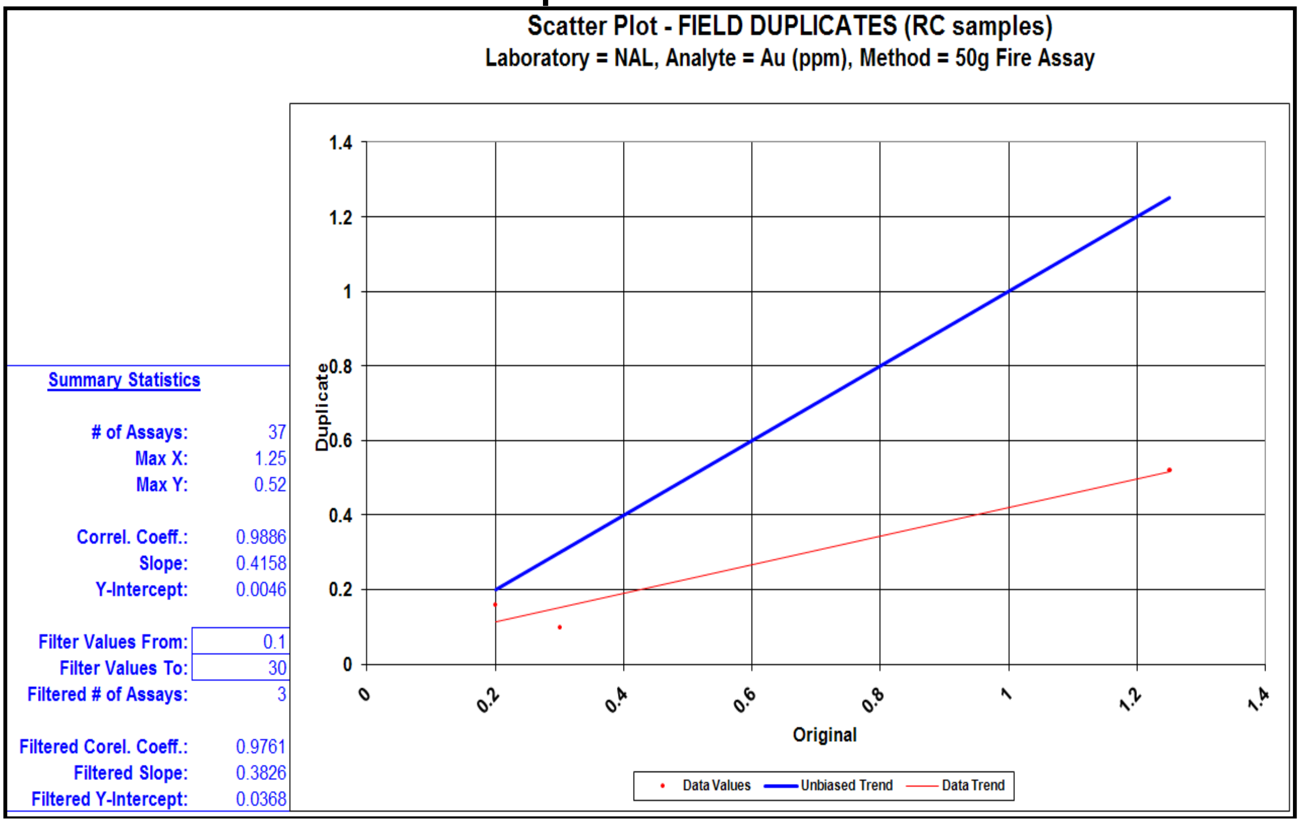
# of Assays:	30
Max X:	6.67
Max Y:	2.09
# of Assays Within 10%:	18
# of Assays Within 20%:	20
# of Assays Within 50%:	20
% of Assays Within 10%:	60.00%
% of Assays Within 20%:	66.67%
% of Assays Within 50%:	66.67%
Filter Values From:	0.1
Filter Values To:	1000000
Filtered # of Assays:	7
# of Assays Within 10%:	0
# of Assays Within 20%:	2
# of Assays Within 50%:	4
% of Assays Within 10%:	0.00%
% of Assays Within 20%:	28.57%
% of Assays Within 50%:	57.14%



Plot Percent Precision:	Percent 1:	0.1	Percent 2:	0.2	Percent 3:	0.5	*Define the Three Precision Percentages to display on the chart*



FIELD DUPLICATES – RC samples

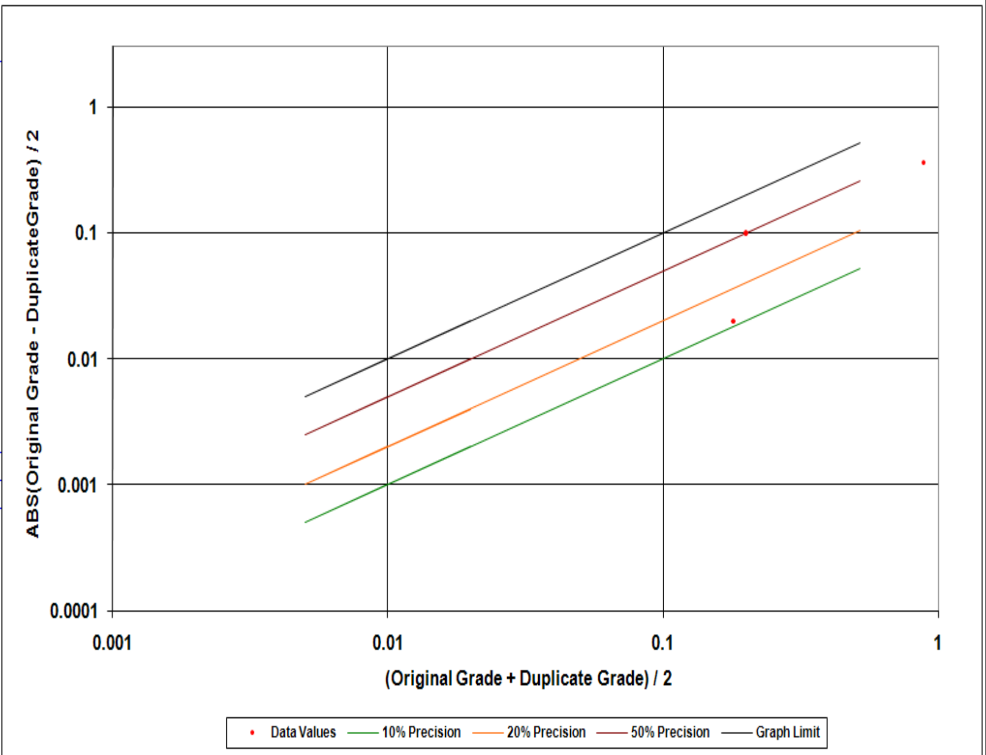


Scatter Plot - FIELD DUPLICATES (RC samples)

Laboratory =NAL, Analyte = Au (ppm), Method = 50g Fire Assay

Summary Statistics

# of Assays:	37
Max X:	1.25
Max Y:	0.52
# of Assays Within 10%:	31
# of Assays Within 20%:	31
# of Assays Within 50%:	31
% of Assays Within 10%:	83.78%
% of Assays Within 20%:	83.78%
% of Assays Within 50%:	83.78%
Filter Values From:	0.1
Filter Values To:	1000000
Filtered # of Assays:	3
# of Assays Within 10%:	0
# of Assays Within 20%:	0
# of Assays Within 50%:	1
% of Assays Within 10%:	0.00%
% of Assays Within 20%:	0.00%
% of Assays Within 50%:	33.33%



Plot Percent Precision:	Percent 1:	0.1	Percent 2:	0.2	Percent 3:	0.5

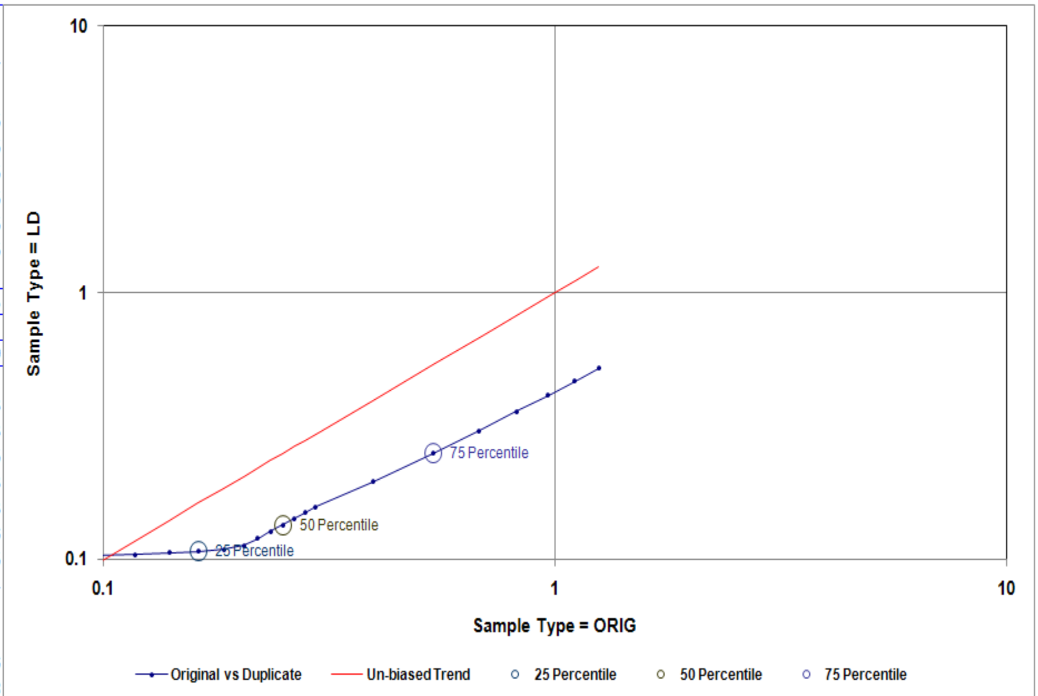
Define the Three Precision Percentages to display on the chart

Q-Q Plot - Sample Type ORIG vs Sample Type FD (RC samples)

Analyte = Au (ppm); Method = Fire

Summary Statistics

Total # of Assays:	37
25 Percentile X:	0.005
25 Percentile Y:	0.005
50 Percentile X:	0.005
50 Percentile Y:	0.005
75 Percentile X:	0.005
75 Percentile Y:	0.005
Plot Granularity	5.00%
Filter Values From:	0.1
Filter Values To:	10000000
# of Assays X:	3
# of Assays Y:	3
25 Percentile X:	0.25
25 Percentile Y:	0.13
50 Percentile X:	0.3
50 Percentile Y:	0.16
75 Percentile X:	0.775
75 Percentile X:	0.34
Correl. Coeff.:	0.9761
Slope:	0.3826
Y-Intercept:	0.0368



Plot Percentiles:	Percentile 1:	25.00%	Percentile 2:	50.00%	Percentile 3:	75.00%

Define the Three Percentile values to display on the chart

APPENDIX 2. Geological Logging Codes

CODE	Colour	Description
Lithology		
SL		Siltstone
SLC		Siltstone Chloritic (***quickstone***)
AS		Sediment
D		Dolomite
DOL		Dolerite/ophiolite
Structure		
SZ		shear
QV		quartz veins
BX		breccia
Alteration		
M		Magnetite, ironstone
MS		Magnetite Stringers
TCM		Talc-Chlorite-Magnetite Rock (***spewstone***)
C		Chlorite rock, strong alteration +/- magnetite/talc
QMJ		Quartz-Magnetite-Jasper Rock
H		Hematitic rock
HS		Hematite Shale
CH		Cherty

CODE	Description
Other	
NOLOGS	not logged
NOCORE	no core recovered
Historical Mine Workings	
STOPE	stope
FILL	consolidated fill
VOID	void
Weathering	
CO	Colluvium
CLAY	Clay
Mineralisation Qualifers	
act	actinolite
au	gold
bi	bismuthinite
c	chlorite
cp	chalcopyrite
d	dolomite
goe	goethite
h	hematite
j	jasper
kao	kaolinite
m	magnetite
po	pyrrhotite
py	pyrite
q	quartz
s	sericite
si	siliceous/silicified
t	talc
tr	tremolite

APPENDIX 3. Flagged Drill Intercept Intervals (Excalibur drill holes only)

GOLD INTERCEPT CODES FOR EXCALIBUR DRILLHOLES ONLY (zonecode_au)

hole_id	depth_from	depth_to	zonecode
EJDD003	184.00	187.00	100
EJDD004	152.00	199.00	100
EJDD004	215.00	221.00	100
EJDD004	230.00	253.30	100
EJDD005_2A	243.00	245.00	100
EJDD005_2A	245.00	248.00	500
EJDD005_2B	249.00	254.00	100
EJDD005_2B	254.00	277.80	500
EJDD005_2B	277.80	293.99	100
EJDD009	150.00	152.00	100
EJRC001	183.00	191.00	100
EJRC002	148.00	156.00	100
EJRC032	181.00	194.00	100
EJRC034	167.00	180.00	100
EJRC036	191.00	210.00	100
EJRC038	190.89	231.00	100
EJRC038	246.00	248.98	500
EJRC048	217.92	224.00	100
EJRC067	228.99	236.99	100
EJRC075	253.99	257.00	100
EJRC075	257.00	259.00	500
EJRD003	193.86	202.99	100
EJRD004	199.00	205.00	100
EJRD005	207.99	210.99	100
EJRD049	238.00	242.90	100
EJRD053B	267.00	267.50	500
EJRD053B	281.50	287.00	500
EJRD053B	287.00	293.00	800
EJRD053B	293.00	305.00	100
EJRD056	268.97	274.59	100
EJRD058A	278.00	279.00	500
EJRD058A	279.00	282.20	800
EJRD063	313.00	328.91	100
EJRD065	253.99	263.96	100
EJRD065	263.97	265.99	500
EJRD065	265.99	302.79	100
EJRD066	270.99	275.99	500
EJRD066	275.99	276.49	800
EJRD072B	249.90	252.99	100
EJRD072B	318.00	325.00	100
EJRD079	365.99	367.99	100

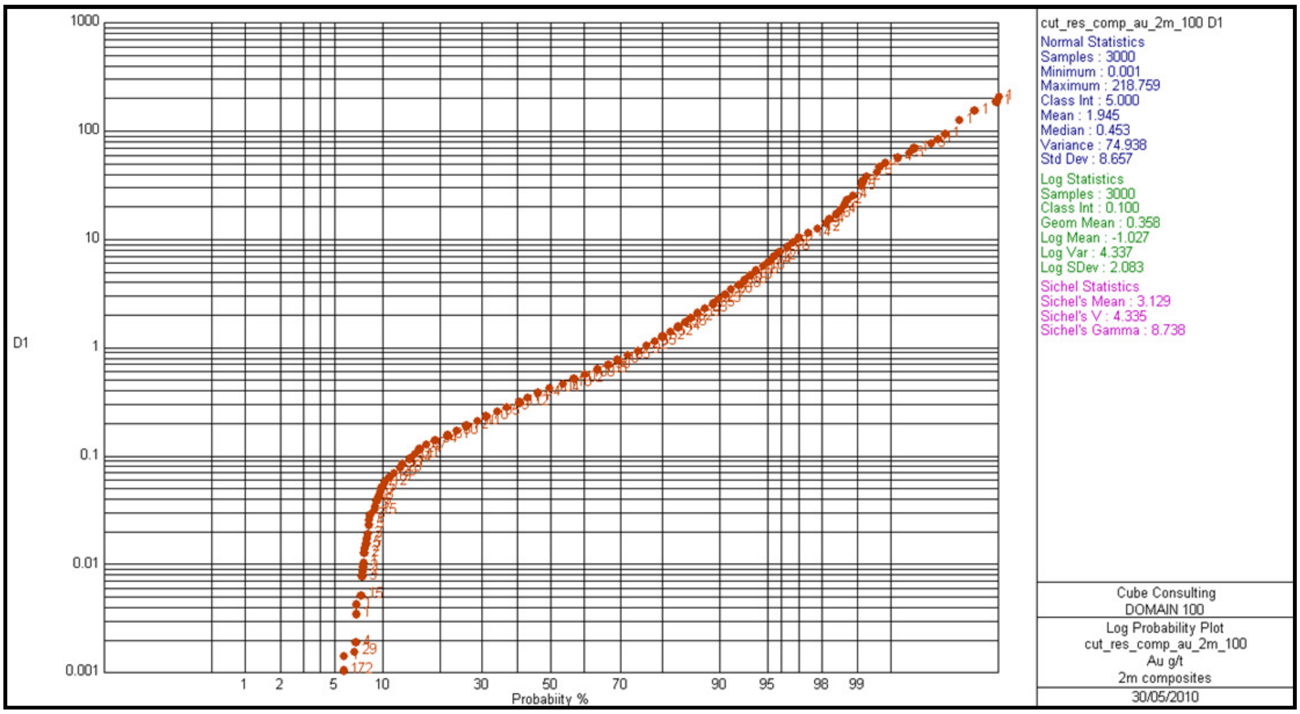
COPPER INTERCEPT CODES FOR EXCALIBUR DRILLHOLES ONLY (zonecode_cu)

hole_id	depth_from	depth_to	zonecode
EJDD003	181.00	183.00	1000
EJDD004	161.00	253.30	1000
EJDD005_2A	231.00	250.00	1000
EJDD005_2B	236.19	269.00	1000
EJDD005_2B	274.00	276.00	1000
EJDD009	150.00	152.00	1000
EJRC001	186.00	191.98	1000
EJRC002	148.00	153.00	1000
EJRC032	178.00	185.00	1000
EJRC035	175.00	196.00	1000
EJRC036	180.00	209.00	1000
EJRC038	177.00	231.00	1000
EJRC048	215.00	228.00	1000
EJRC067	224.99	236.99	1000
EJRC076	252.00	254.00	1000
EJRC077	231.00	240.00	1000
EJRD003	194.99	199.49	1000
EJRD004	195.00	205.00	1000
EJRD005	209.95	212.21	1000
EJRD049	224.00	238.00	1000
EJRD053B	252.00	260.00	1000
EJRD056	251.00	254.95	1000
EJRD056	258.99	274.59	1000
EJRD065	229.99	282.99	1000
EJRD071	241.00	248.00	1000
EJRD072B	250.00	270.00	1000

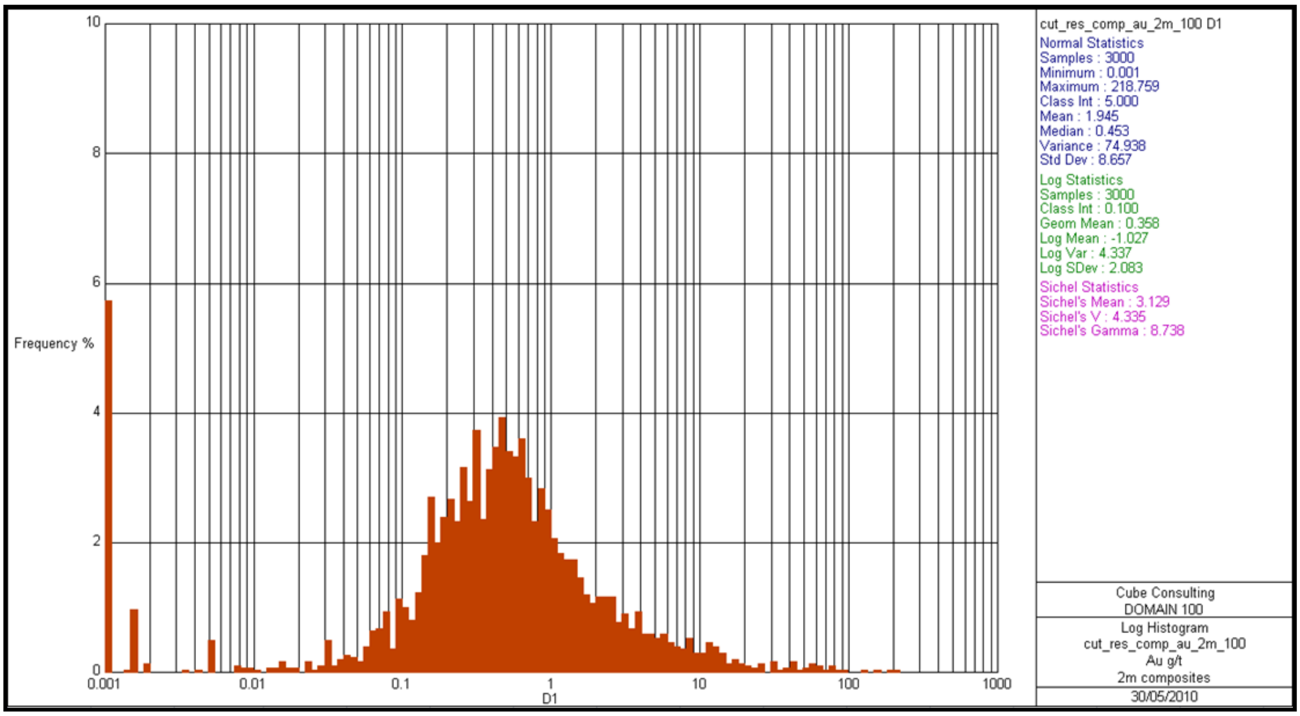
APPENDIX 4. Summary Composite Statistics

GOLD DOMAIN 100

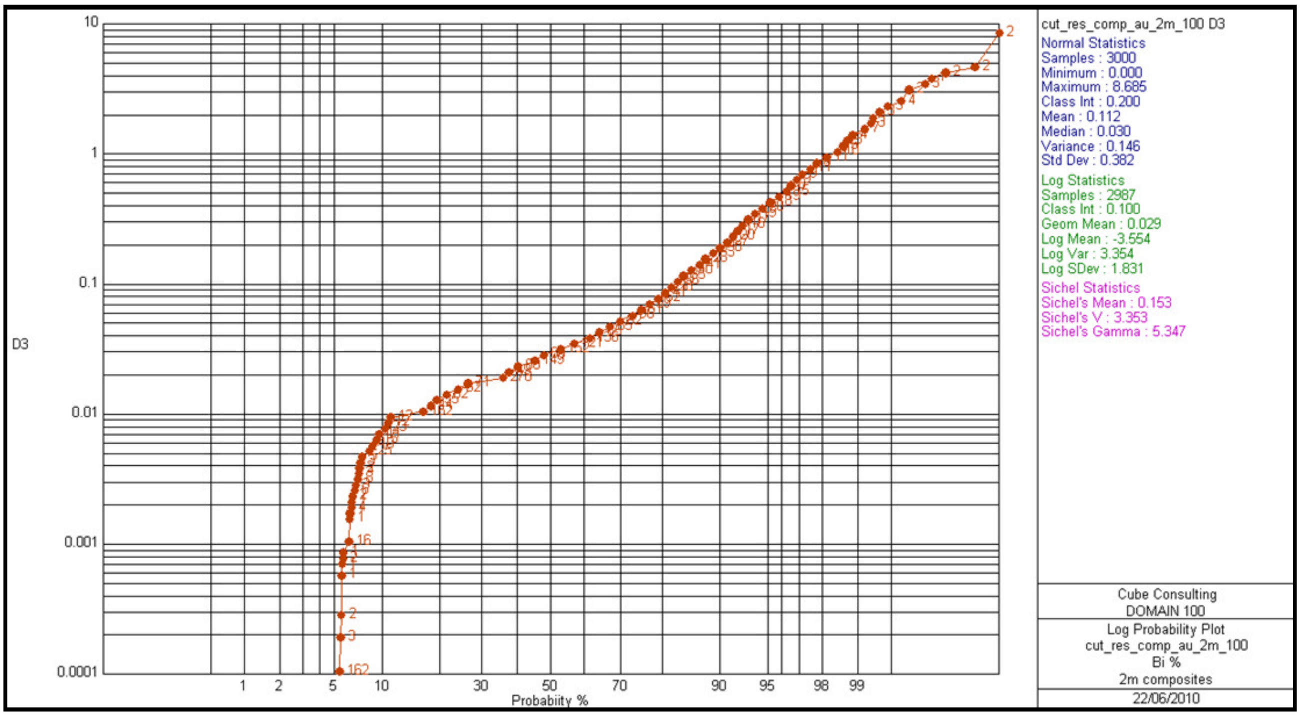
Summary Stats - cut_res_comp_au_2m_100.str				
	cut_Au_p	**Au_ppm**	**Cu_pct**	**Bi_pct**
Number	3000	3000	3000	3000
Minimum	0.001	0.001	0	0
Maximur	55	**218.759**	**12.2**	**8.685**
Mean	1.729	**1.945**	**0.356**	**0.112**
Median	0.453	0.453	0.156	0.03
Std Dev	5.559	8.657	0.585	0.382
Variance	30.903	74.938	0.342	0.146
Std Error	0.002	0.003	0	0
Coeff Var	3.215	**4.451**	**1.644**	**3.427**
Log Num	3000	3000	2987	2987
Geom Me	0.357	0.358	0.1	0.029
Log Min	-6.908	-6.908	-9.21	-9.21
Log Max	4.007	5.388	2.501	2.162
Log Mean	-1.029	-1.027	-2.299	-3.554
Log S Dev	1.197	2.229	1.831	1.041
Log Var	1.434	4.971	3.354	1.085
Sichel Stats				
Mean	3.081	3.129	1.204	0.153
V	4.309	4.335	4.969	3.353
Gamma	8.624	8.738	11.994	5.347
Percentiles				
10	0.055	0.055	0.01	0.007
20	0.153	0.153	0.028	0.014
30	0.233	0.233	0.056	0.02
40	0.325	0.325	0.098	0.024
50	0.453	0.453	0.156	0.03
60	0.598	0.598	0.235	0.04
70	0.84	0.84	0.35	0.054
80	1.331	1.331	0.548	0.086
90	3.034	3.034	0.922	0.198
95	6.591	6.591	1.342	0.432
97.5	12.272	12.272	1.8	0.804
99	32.653	32.653	2.705	1.52



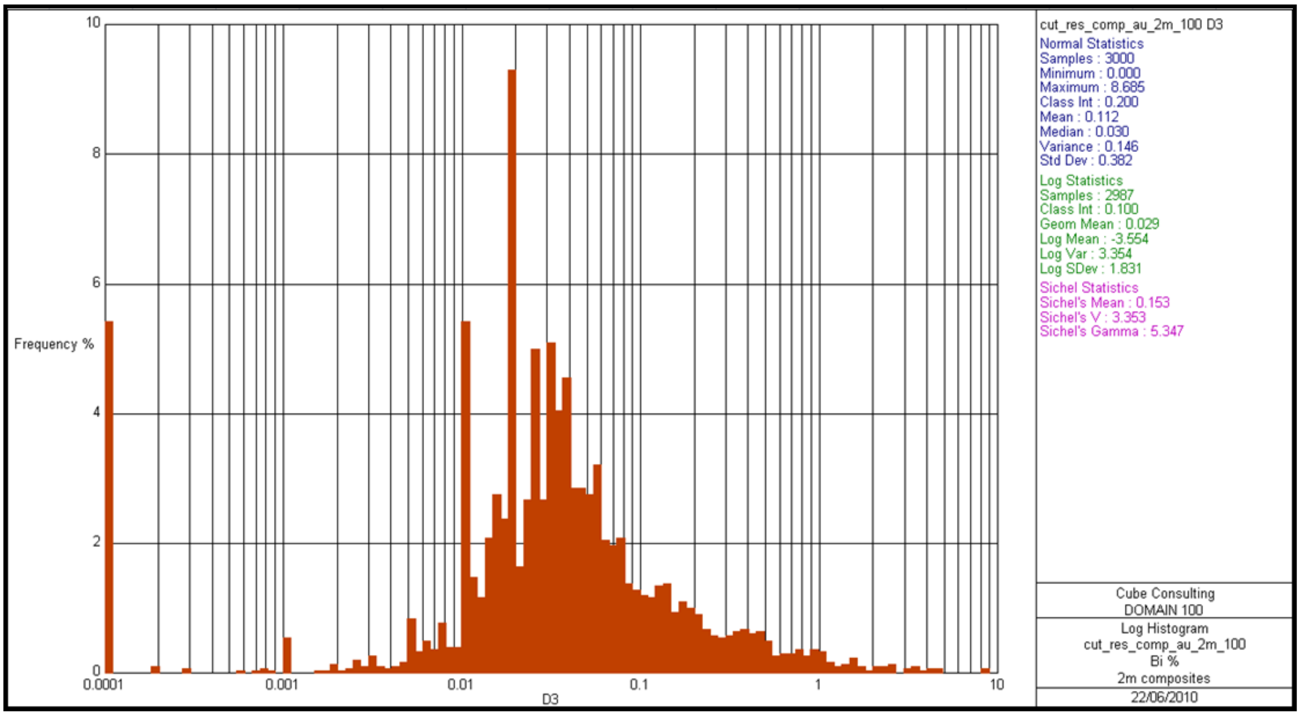
Log Probability Plot – Domain 100 Au g/t



Log Histogram Plot – Domain 100 Au g/t



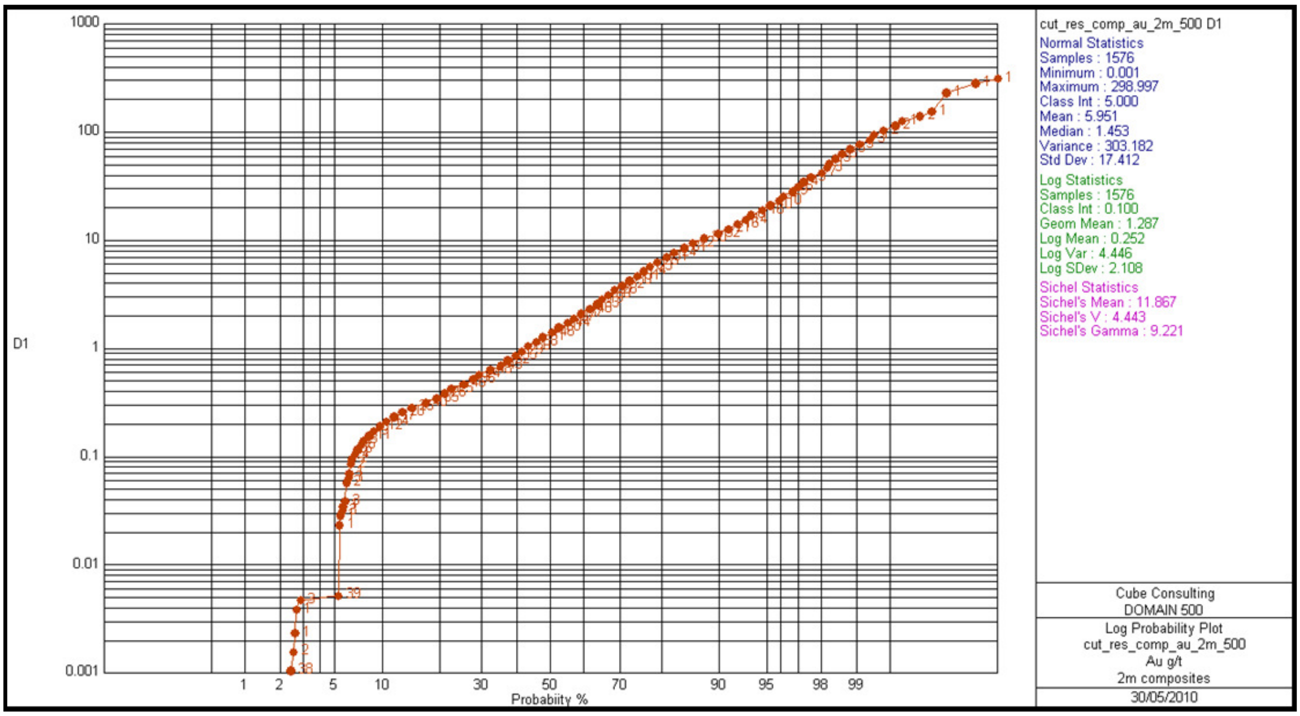
Log Probability Plot – Domain 100 Bi %



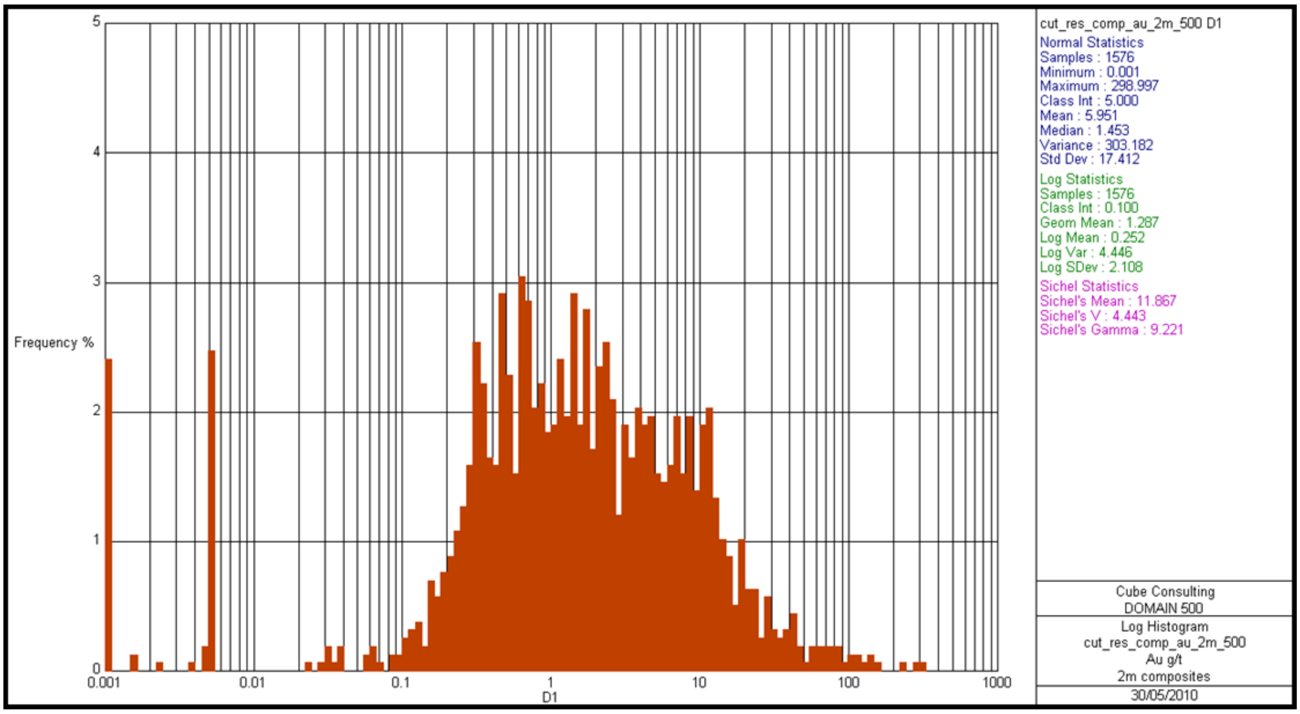
Log Histogram Plot – Domain 100 Bi %

GOLD DOMAIN 500

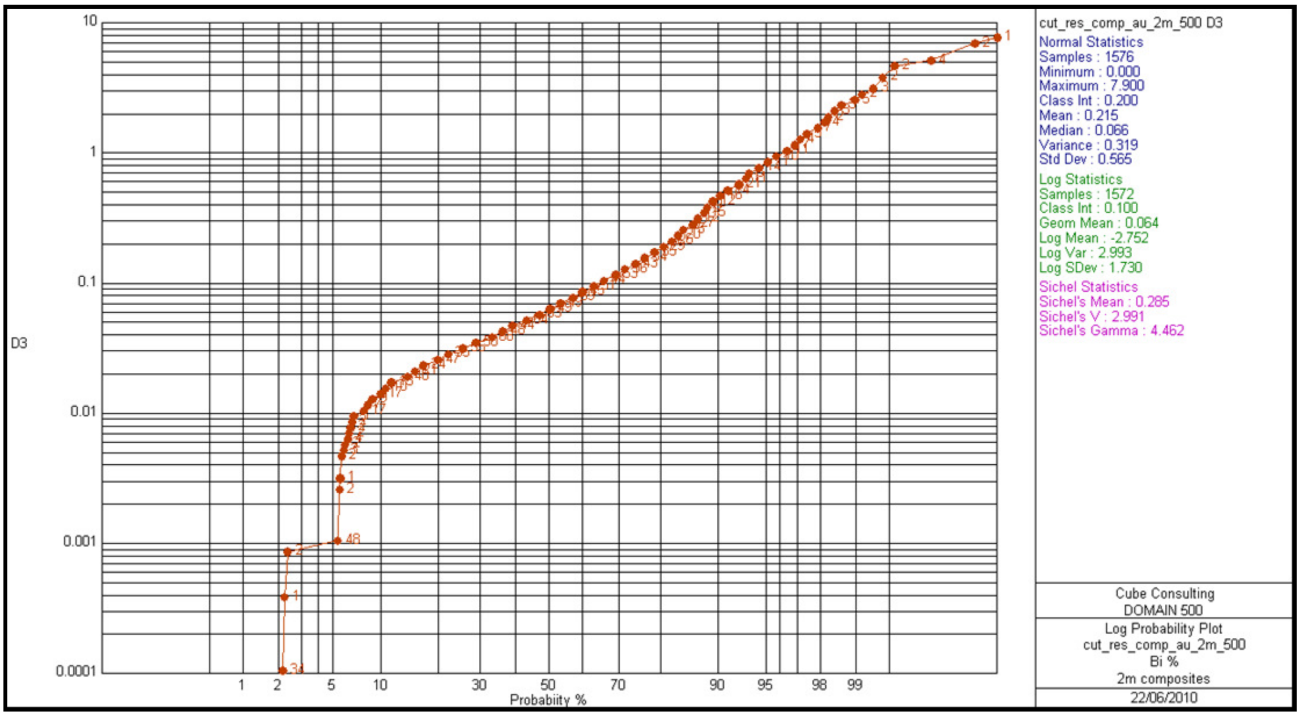
Summary Stats - cut_res_comp_au_2m_500.str				
	cut_Au_p	Au_ppm	Cu_pct	Bi_pct
Number	1576	1576	1576	1576
Minimum	0.001	0.001	0	0
Maximum	**100**	**298.997**	**6.248**	**7.9**
Mean	5.497	**5.951**	**0.333**	**0.215**
Median	1.453	1.453	0.074	0.066
Std Dev	12.502	17.412	0.63	0.565
Variance	156.299	303.182	0.397	0.319
Std Error	0.008	0.011	0	0
Coeff Var	2.275	**2.926**	**1.891**	**2.625**
Log Num	1576	1576	1572	1572
Geom Me	1.283	1.287	0.077	0.064
Log Min	-6.908	-6.908	-9.21	-9.21
Log Max	4.605	5.7	1.832	2.067
Log Mean	0.249	0.252	-2.569	-2.752
Log S Dev	0	2.043	1.73	1.036
Log Var	0	4.175	2.993	1.074
Sichel Stats				
Mean	11.664	11.867	0.617	0.285
V	4.415	4.443	4.173	2.991
Gamma	9.091	9.221	8.055	4.462
Percentiles				
10	0.211	0.211	0.01	0.014
20	0.383	0.383	0.017	0.027
30	0.612	0.612	0.028	0.038
40	0.925	0.925	0.04	0.05
50	1.453	1.453	0.074	0.066
60	2.289	2.289	0.14	0.09
70	3.868	3.868	0.27	0.125
80	6.999	6.999	0.475	0.192
90	12.226	12.226	0.979	0.477
95	20.593	20.593	1.495	0.878
97.5	38.243	38.243	2.024	1.477
99	79.19	79.19	3.094	2.682



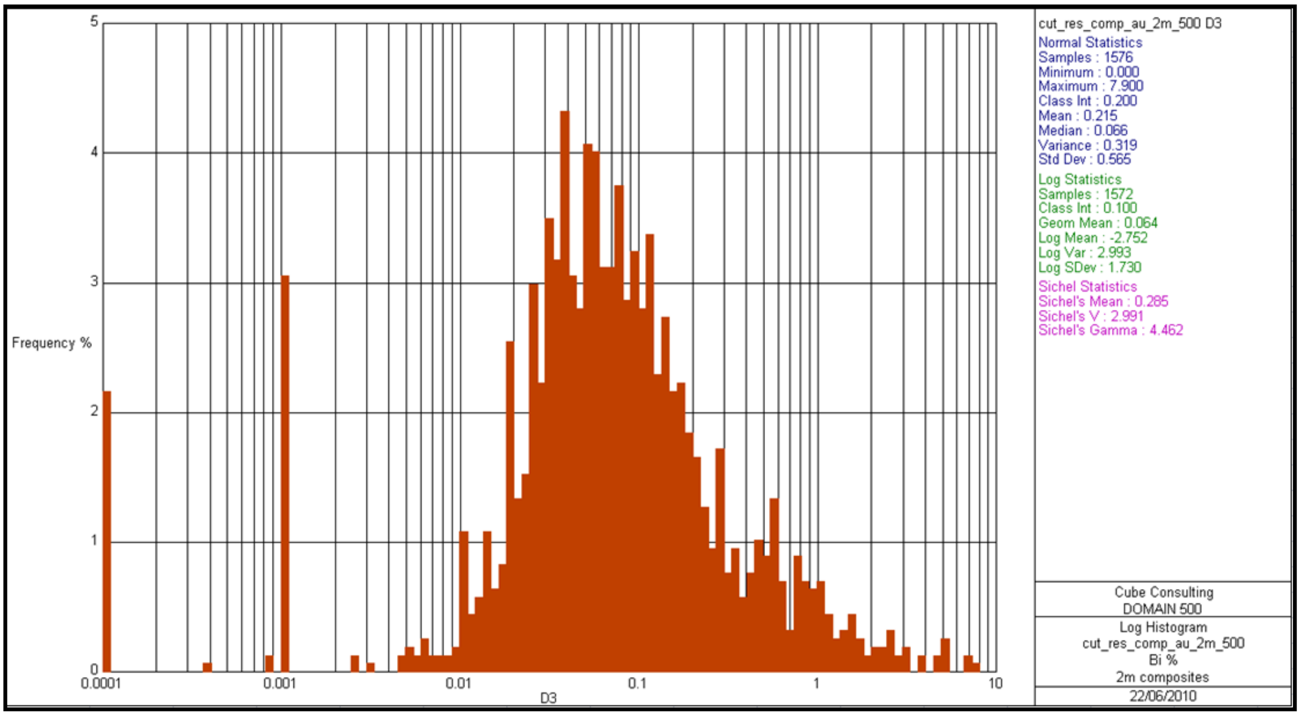
Log Probability Plot – Domain 500 Au g/t



Log Histogram Plot – Domain 500 Au g/t



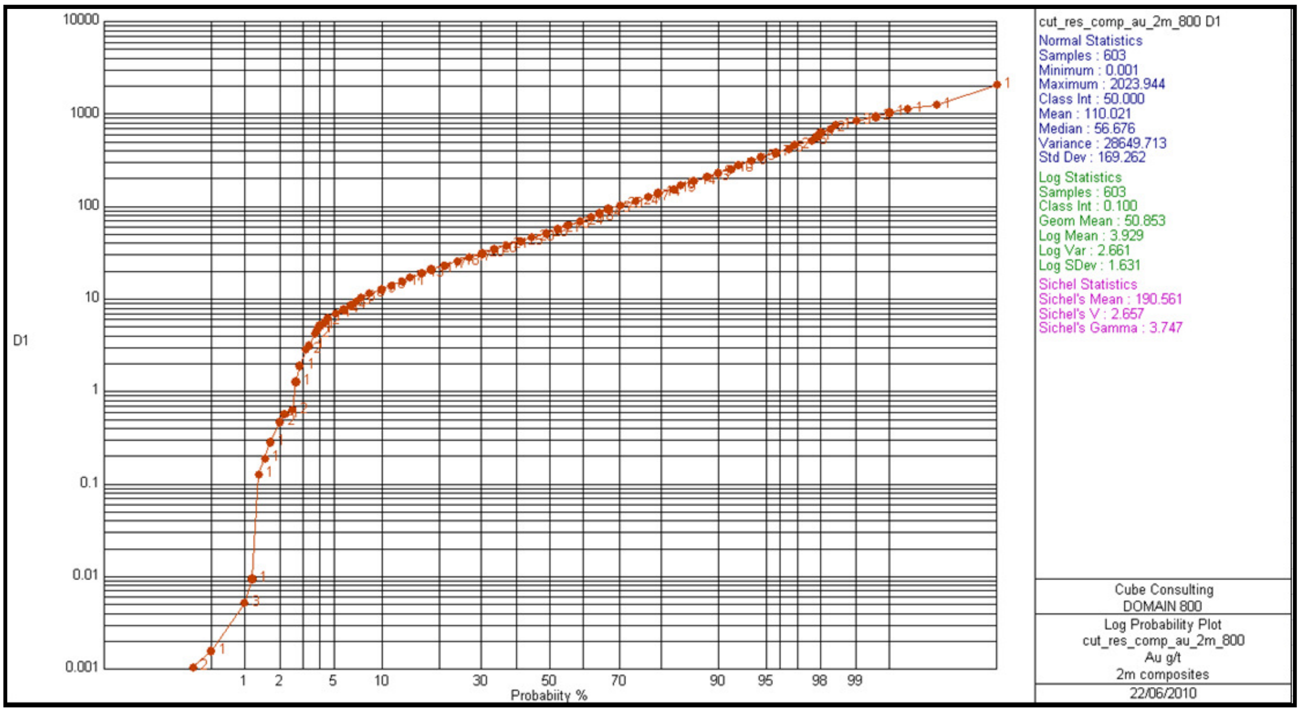
Log Probability Plot – Domain 500 Bi %



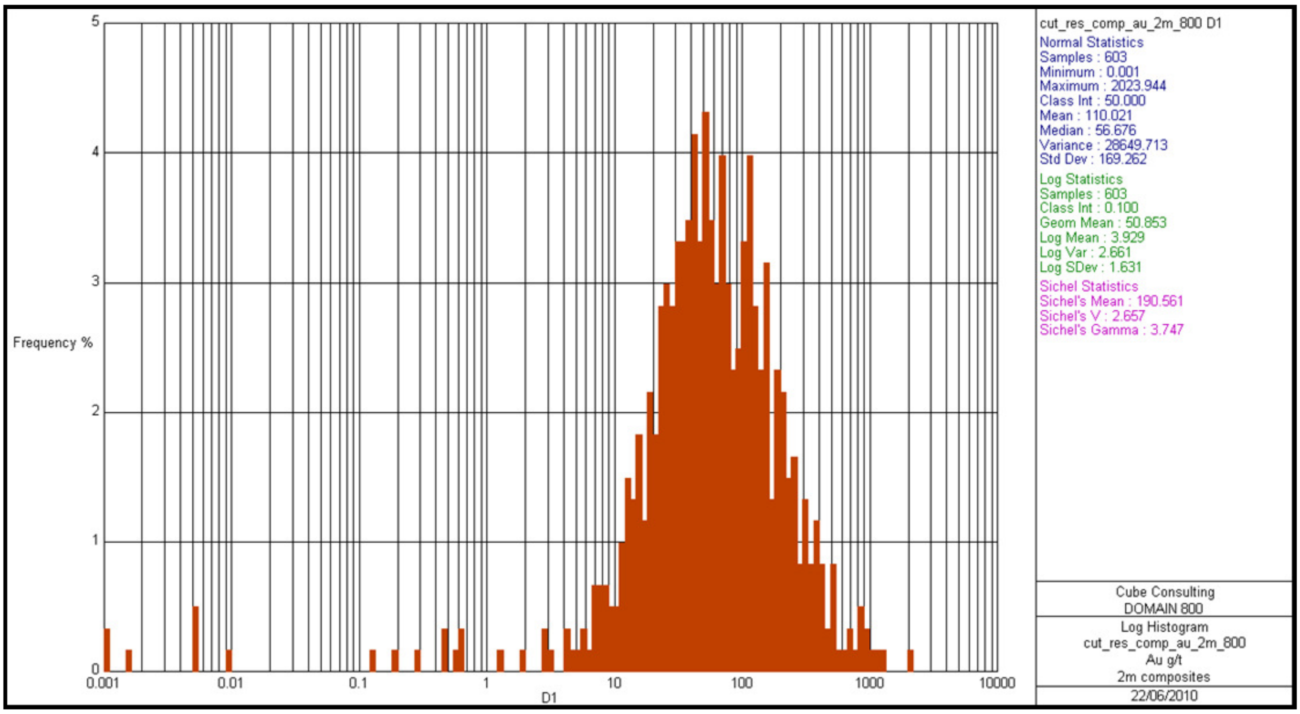
Log Histogram Plot – Domain 500 Bi %

GOLD DOMAIN 800

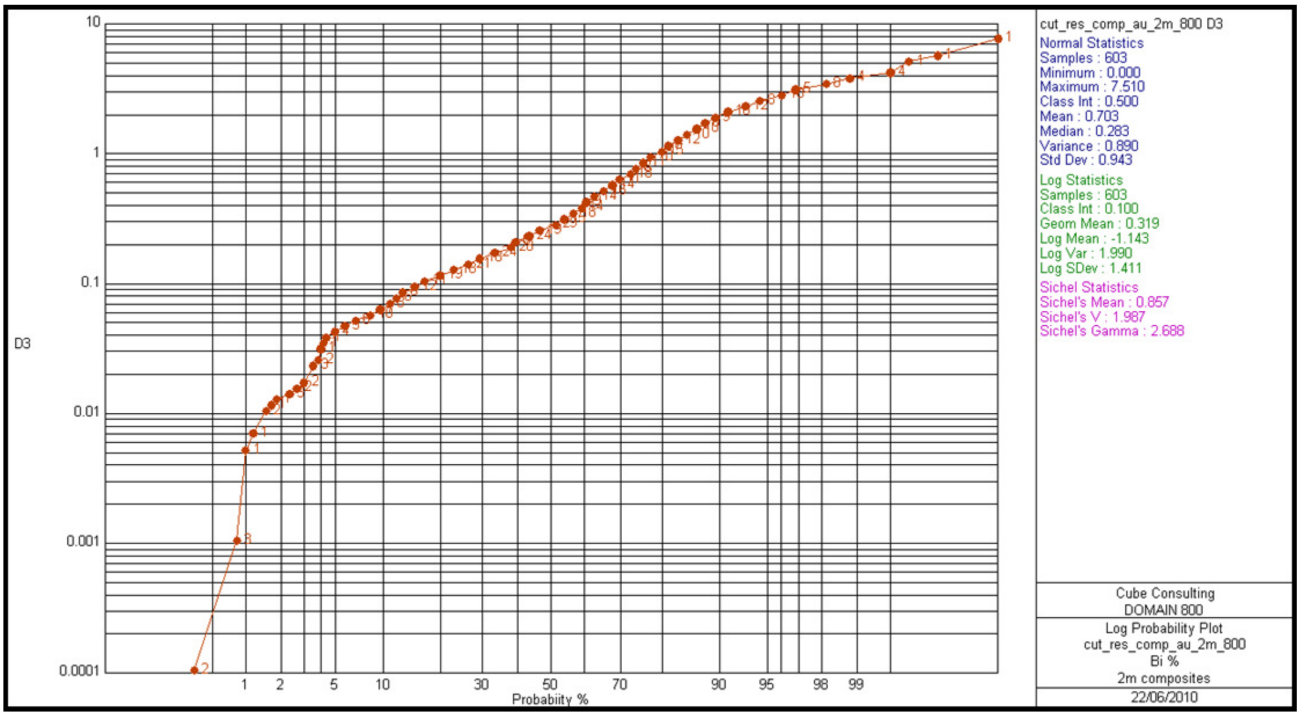
Summary Stats - cut_res_comp_au_2m_800.str				
	cut_Au_p	**Au_ppm**	**Cu_pct**	**Bi_pct**
Number	603	603	603	603
Minimum	0.001	0.001	0	0
Maximum	**700**	**2023.94**	**6.6**	**7.51**
Mean	103.901	**110.021**	**0.164**	**0.703**
Median	56.676	56.676	0.043	0.283
Std Dev	130.473	169.262	0.389	0.943
Variance	17023.3	28649.7	0.151	0.89
Std Error	0.216	0.281	0.001	0.002
Coeff Var	1.256	**1.538**	**2.372**	**1.343**
Log Num	603	603	603	603
Geom Me	50.533	50.853	0.053	0.319
Log Min	-6.908	-6.908	-9.21	-9.21
Log Max	6.551	7.613	1.887	2.016
Log Mean	3.923	3.929	-2.929	-1.143
Log S Dev	0	1.493	1.411	1.16
Log Var	0	2.23	1.99	1.346
Sichel Stats				
Mean	186.003	190.561	0.157	0.857
V	2.62	2.657	2.226	1.987
Gamma	3.681	3.747	2.94	2.688
Percentiles				
10	13.332	13.332	0.01	0.07
20	23.156	23.156	0.014	0.121
30	32.516	32.516	0.021	0.166
40	43.335	43.335	0.033	0.223
50	56.676	56.676	0.043	0.283
60	77.37	77.37	0.066	0.427
70	107.992	107.992	0.118	0.674
80	149.634	149.634	0.214	1.089
90	242.733	242.733	0.398	2.065
95	369.567	369.567	0.709	2.844
97.5	520.896	520.896	0.978	3.358
99	700	856.983	1.471	4.056



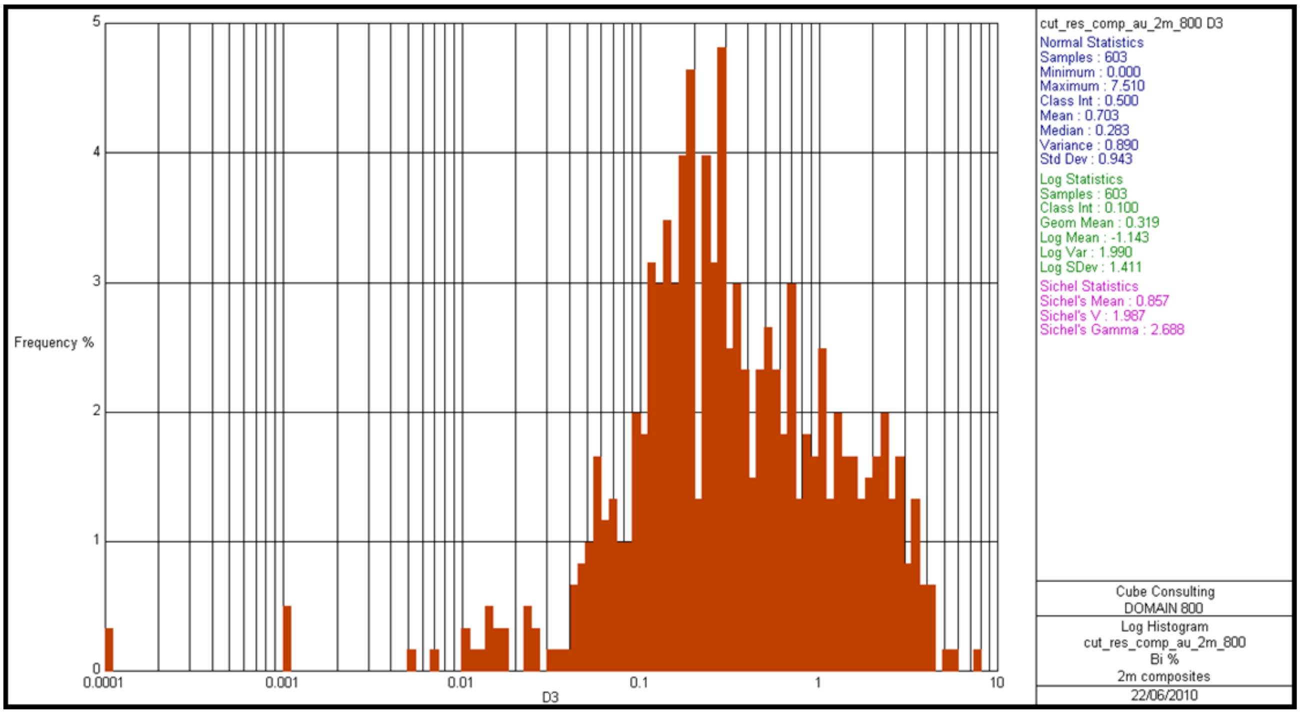
Log Probability Plot – Domain 800 Au g/t



Log Histogram Plot – Domain 800 Au g/t



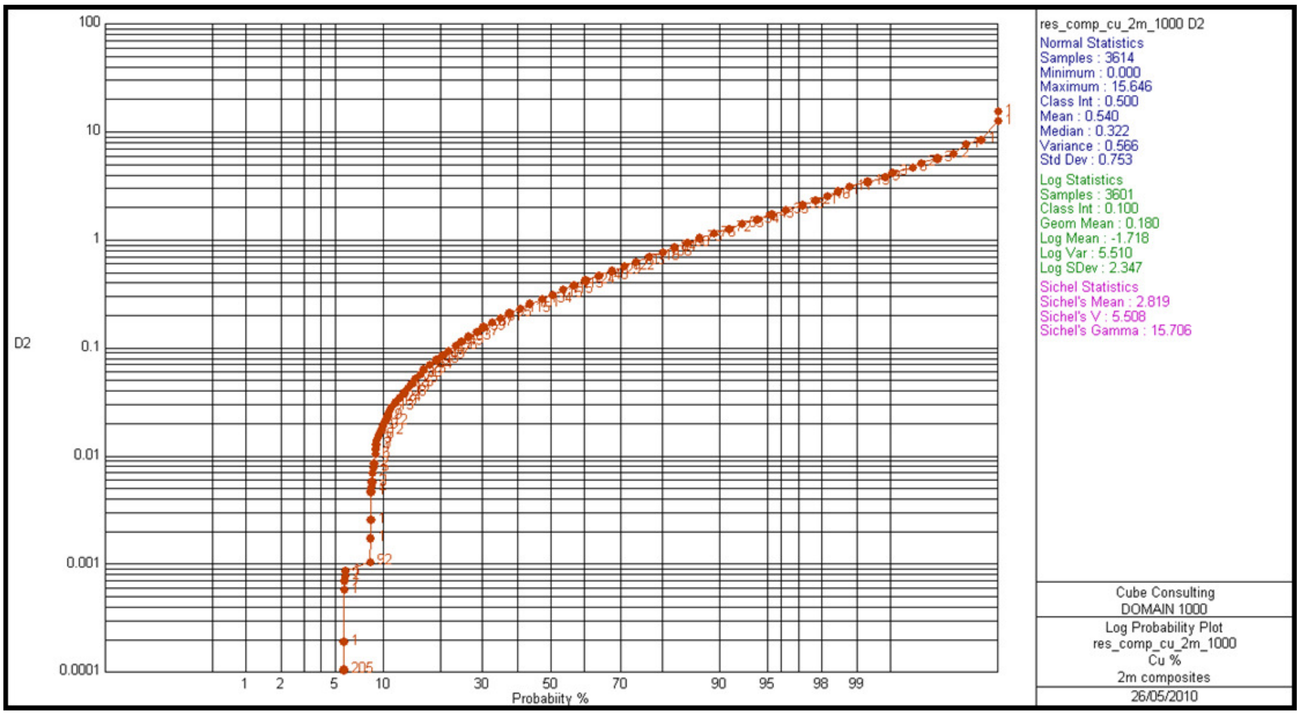
Log Probability Plot – Domain 800 Bi %



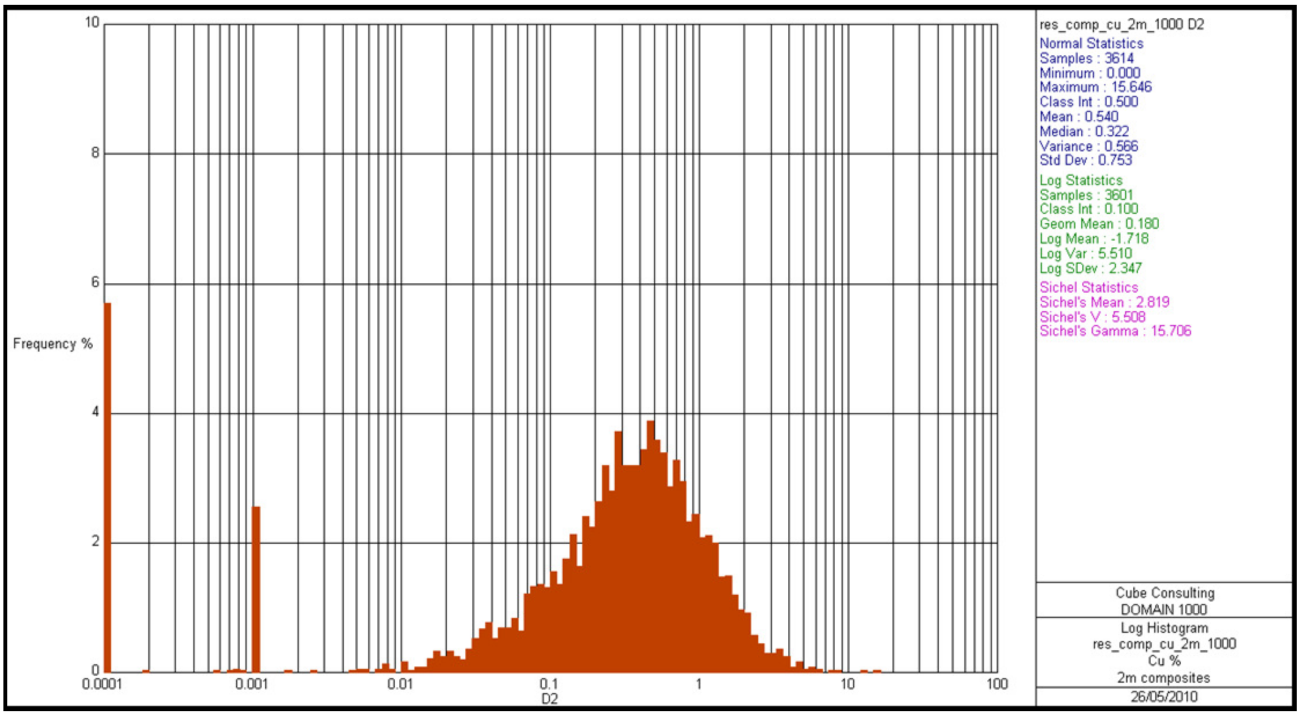
Log Histogram Plot – Domain 800 Bi %

COPPER DOMAIN 1000

Summary Stats - cut_re	
	Cu_pct
Number	3617
Minimum	0
Maximum	**15.646**
Mean	**0.539**
Median	0.322
Std Dev	0.752
Variance	0.566
Std Error	0
Coeff Var	**1.395**
Log Num	3604
Geom Mean	0.179
Log Min	-9.21
Log Max	2.75
Log Mean	-1.718
Log S Dev	2.167
Log Var	4.698
Sichel Stats	
Mean	2.809
V	5.501
Gamma	15.652
Percentiles	
10	0.018
20	0.086
30	0.16
40	0.238
50	0.322
60	0.44
70	0.579
80	0.805
90	1.259
95	1.75
97.5	2.321
99	3.39

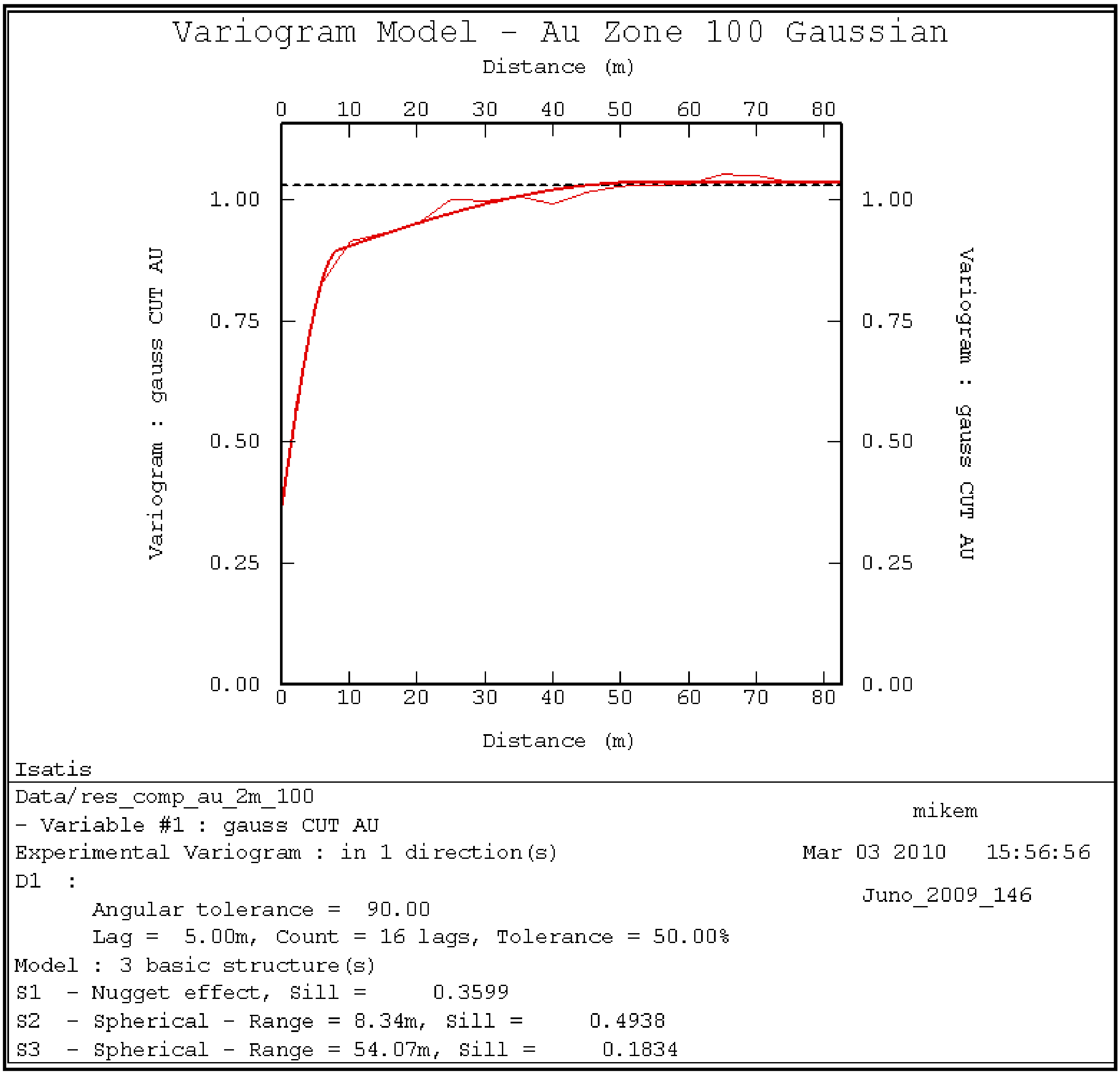


Log Probability Plot – Domain 1000 Cu %

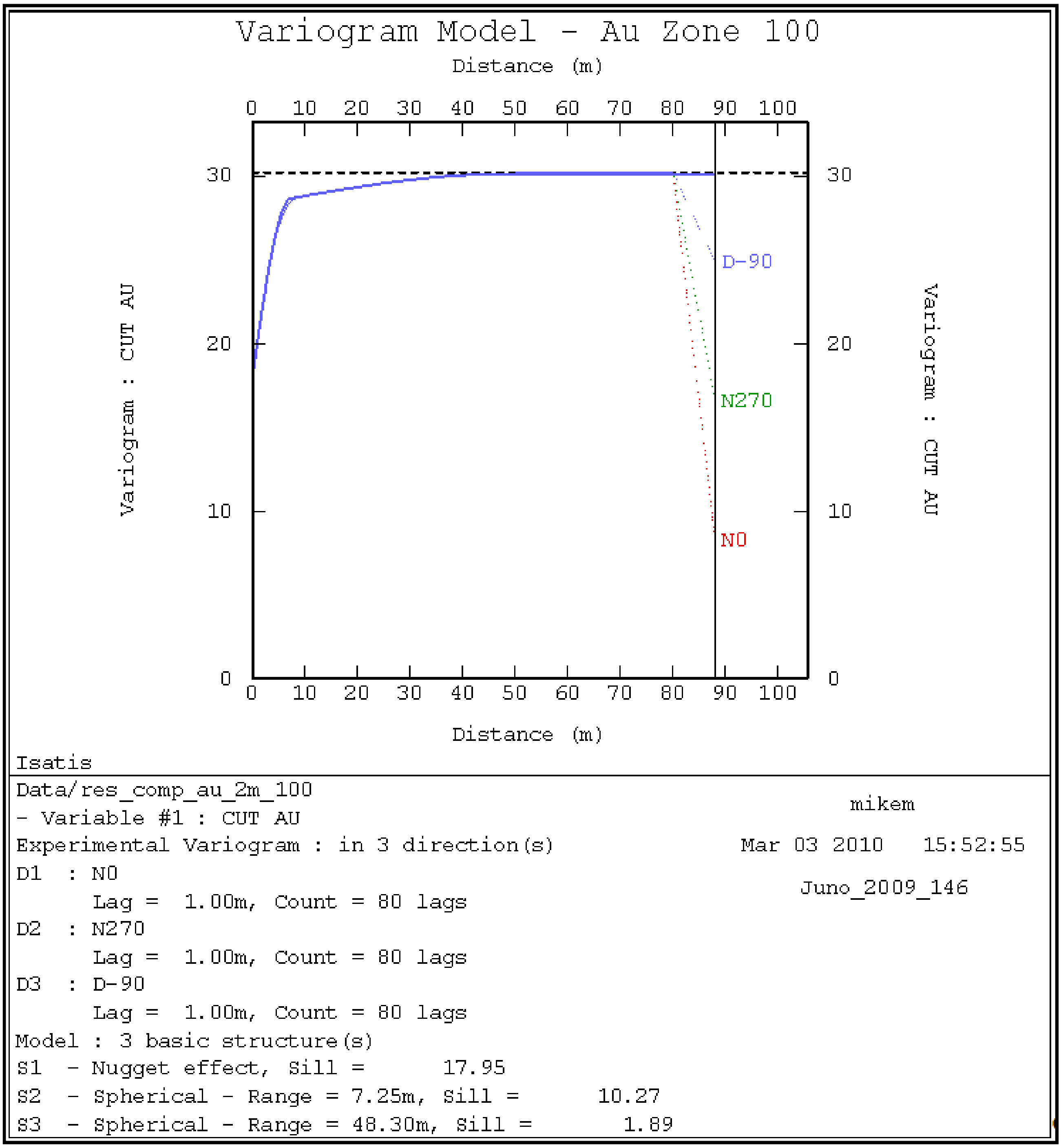


Log Histogram Plot – Domain 1000 Cu %

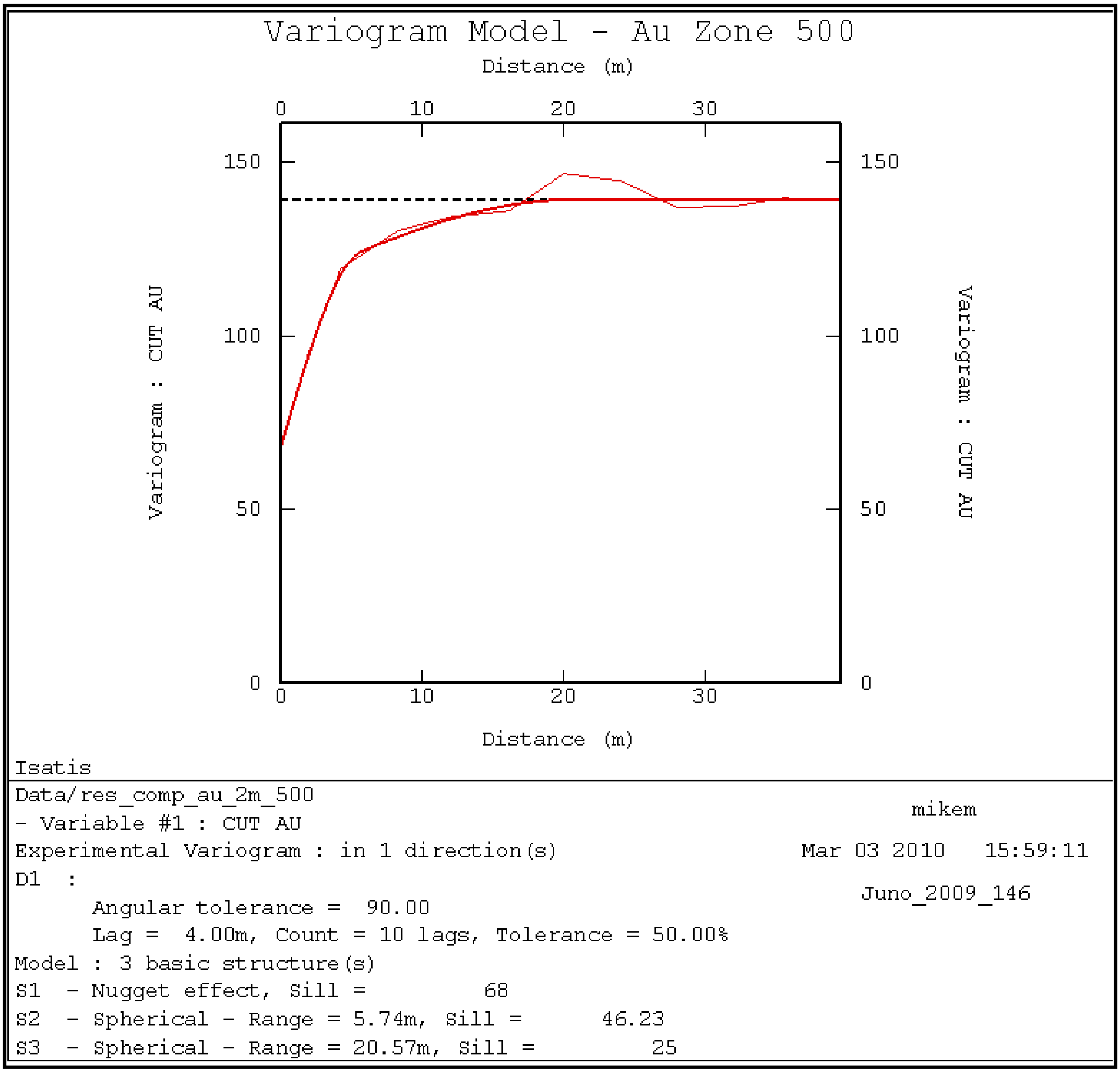
APPENDIX 5. Variograms



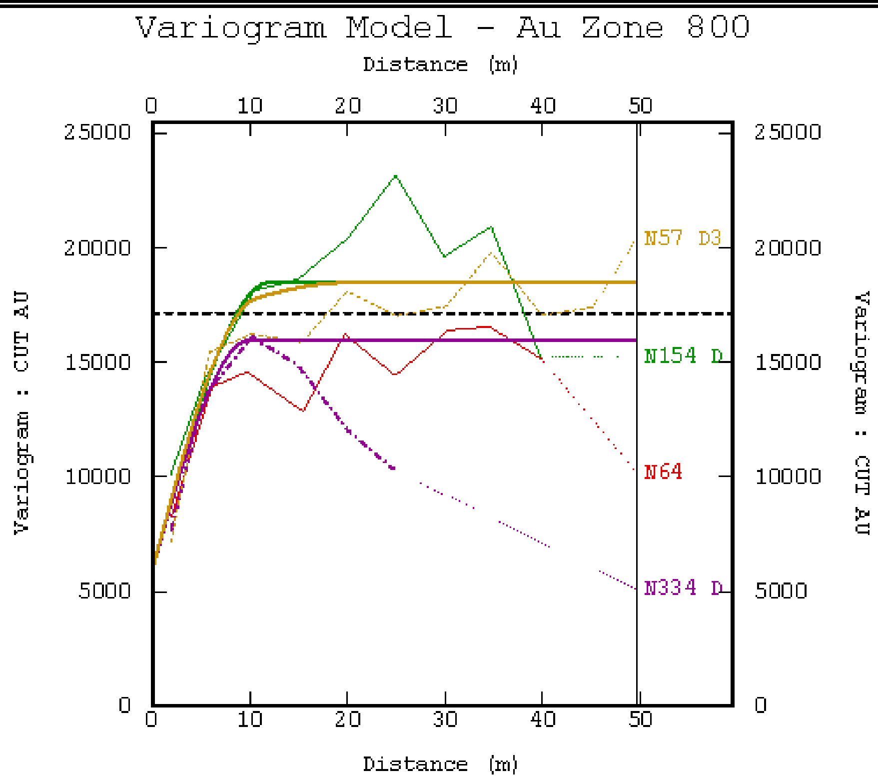
Domain 100 Au Gaussian Model



Domain 100 Au Model - Back Transformed from Gaussian Model



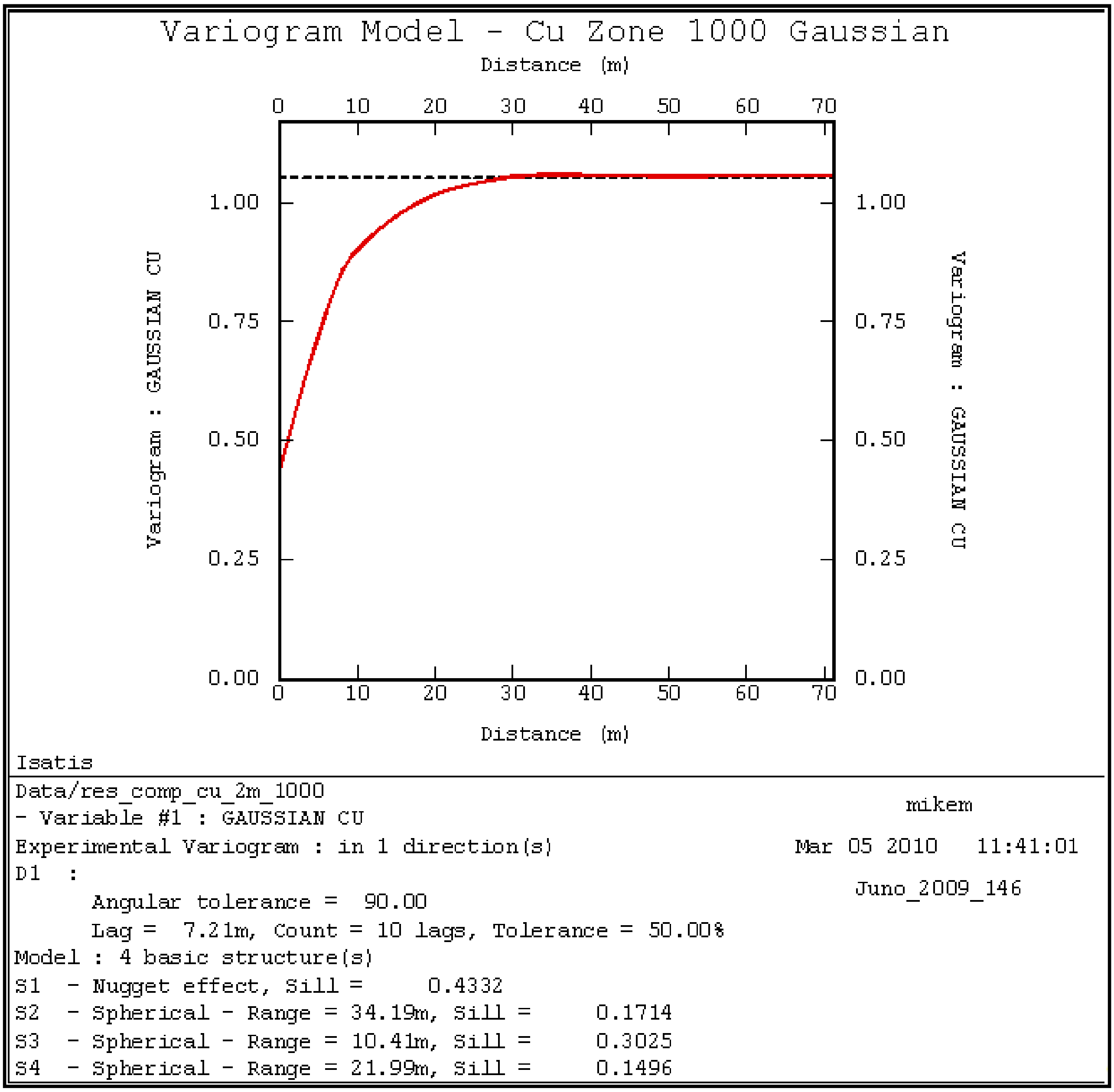
Domain 500 Au Model - Back Transformed from Gaussian Model



Isatis

```
Data/res_comp_au_2m_800                                          mikem
- Variable #1 : CUT AU
Experimental Variogram : in 4 direction(s)               Mar 03 2010   16:00:01
D1   : N64                                                  Juno_2009_146
       Angular tolerance =   45.00
       Lag =   5.00m, Count = 9 lags, Tolerance = 50.00%
       Vertical Slicing =   7.00m
D2   : N154 D-80
       Angular tolerance =   45.00
       Lag =   5.00m, Count = 9 lags, Tolerance = 50.00%
       Vertical Slicing =   7.00m
D3   : N334 D-10
       Angular tolerance =   45.00
       Lag =   5.00m, Count = 6 lags, Tolerance = 50.00%
D4   : N57 D36
       Angular tolerance =   45.00
       Lag =   5.00m, Count = 10 lags, Tolerance = 50.00%
Model : 3 basic structure(s)
Global rotation = Az=26.00 Ay=0.00 Ax=-80.00 (Mathematician)
S1   - Nugget effect, Sill =        6000
S2   - Spherical - Range = 10.00m, Sill =      1e+004
       Directional Scales = (      10.00m,      12.00m,      10.00m)
S3   - Spherical - Range = 12.00m, Sill =        2500
       Directional Scales = ( N/A,      12.00m, N/A)
```

Domain 800 Au Model - Back Transformed from Gaussian Model



Domain 1000 Cu Gaussian Model

APPENDIX 6. Estimation Parameters - Interpolator Output Reports

DOMAIN 100 – Cut Au g/t - Run 1

Interpolator Output Report

Interpolation Date	Sunday - 11 July - 2010 - at 17:51:12						
Interpolation Run Number	1						
Interpolarion ipar file	juno_52010.ipar						
Working Directory	g:/cube/excalibur mining corporation/2010_033_juno_resource/blockmodel						
Input Assay File Details			***Block Model Details***				
Assay File Location	../composites/cut_res_		Block Model			juno_52010	
Assay File Id	100		Block Model Field			au_cut	
Assay String Numbers	1						
Assay Description Field	11						
Assay File Constraint Details			***Block Model Constraint Details***				
Constrain Assays	N		Constrain Estimation			Y	
Assay Constraint File			Estimation Constraints File			au_100	
Save Constrained Assays	N		Domain Name			100	
Output Constrained Assay File Location							
Output Constrained Assay File Id							
Interpolation Search Details							
Octant or Ellipsoid	E						
Max No of Adjacent Empty Octants							
Minimum Number of Samples	4						
Maximum Number of Samples	35						
Limit Samples by Hole Id	Y						
Hole Id Field	D4						
Maximum Number of Samples per Hole	7						
Maximum Search Distance for Major Axis	50						
Maximum Vertical Search Distance	99999						
Bearing of Major Axis	0						
Plunge of Major Axis	0						
Dip of Semi-Major Axis	0						
Major / Semi-Major Ratio	1						
Major / Minor Ratio	1						
Pass Details	**Pass 1**		**Pass 2**		**Pass 3**		
Pass Field							
Pass Field Value							
Pass Ratio							
Pass Minimum Samples							
Pass Maximum Samples							
Interpolation Method Details							
Inverse Distance or Ordinary Krigging	OK						
Inverse Distance Power							
No of X Descretisation Points	5						
No of Y Descretisation Points	5						
No of Z Descretisation Points	2						
Variogram Parameters if OK is chosen							
Number of Structures	2						
Nugget	0.6						
Relative Nugget	**60%**					Major/Semi	Major/
	Sill	Range	Azimuth	Plunge	Dip	Major Ratio	Minor Ratio
Structure 1	0.34	7.25	**0**	**0**	**0**	**1**	**1**
Structure 2	0.06	48.3	**0**	**0**	**0**	**1**	**1**
Structure 3	0	0	**0**	**0**	**0**	**1**	**1**
Structure 4	0	0	**0**	**0**	**0**	**1**	**1**
Structure 5	0	0	**0**	**0**	**0**	**1**	**1**
Interpolation Output Fields							
Distance to Nearest Sample Field							
Average Distance Field							
Number of Samples Field							
Kriging Variance Field							
Output Report File Name *.XLS	***juno_52010_au_100_cut_au***						

DOMAIN 100 – Uncut Au g/t - Run 2

Interpolator Output Report

Interpolation Date	Sunday - 11 July - 2010 - at 17:54:26						
Interpolation Run Number	2						
Interpolarion ipar file	juno_52010.ipar						
Working Directory	g:/cube/excalibur mining corporation/2010_033_juno_resource/blockmodel						
Input Assay File Details			***Block Model Details***				
Assay File Location	../composites/cut_res_		Block Model			juno_52010	
Assay File Id	100		Block Model Field			au_uncut	
Assay String Numbers	1						
Assay Description Field	1						
Assay File Constraint Details			***Block Model Constraint Details***				
Constrain Assays	N		Constrain Estimation			Y	
Assay Constraint File			Estimation Constraints File			au_100	
Save Constrained Assays	N		Domain Name			100	
Output Constrained Assay File Location							
Output Constrained Assay File Id							
Interpolation Search Details							
Octant or Ellipsoid	E						
Max No of Adjacent Empty Octants							
Minimum Number of Samples	4						
Maximum Number of Samples	35						
Limit Samples by Hole Id	Y						
Hole Id Field	D4						
Maximum Number of Samples per Hole	7						
Maximum Search Distance for Major Axis	50						
Maximum Vertical Search Distance	99999						
Bearing of Major Axis	0						
Plunge of Major Axis	0						
Dip of Semi-Major Axis	0						
Major / Semi-Major Ratio	1						
Major / Minor Ratio	1						
Pass Details	**Pass 1**		**Pass 2**		**Pass 3**		
Pass Field							
Pass Field Value							
Pass Ratio							
Pass Minimum Samples							
Pass Maximum Samples							
Interpolation Method Details							
Inverse Distance or Ordinary Krigging	OK						
Inverse Distance Power							
No of X Descretisation Points	5						
No of Y Descretisation Points	5						
No of Z Descretisation Points	2						
Variogram Parameters if OK is chosen							
Number of Structures	2						
Nugget	0.6						
Relative Nugget	**60%**					Major/Semi	Major/
	Sill	Range	Azimuth	Plunge	Dip	Major Ratio	Minor Ratio
Structure 1	0.34	7.25	**0**	**0**	**0**	**1**	**1**
Structure 2	0.06	48.3	**0**	**0**	**0**	**1**	**1**
Structure 3	0	0	**0**	**0**	**0**	**1**	**1**
Structure 4	0	0	**0**	**0**	**0**	**1**	**1**
Structure 5	0	0	**0**	**0**	**0**	**1**	**1**
Interpolation Output Fields							
Distance to Nearest Sample Field							
Average Distance Field							
Number of Samples Field							
Kriging Variance Field							
Output Report File Name *.XLS	***juno_52010_au_100_uncut_au***						

DOMAIN 500 –Cut Au g/t - Run 3

Interpolator Output Report

Interpolation Date	Sunday - 11 July - 2010 - at 17:57:41						
Interpolation Run Number	3						
Interpolarion ipar file	juno_52010.ipar						
Working Directory	g:/cube/excalibur mining corporation/2010_033_juno_resource/blockmodel						
Input Assay File Details			***Block Model Details***				
Assay File Location	../composites/cut_res_		Block Model			juno_52010	
Assay File Id	500		Block Model Field			au_cut	
Assay String Numbers	1						
Assay Description Field	11						
Assay File Constraint Details			***Block Model Constraint Details***				
Constrain Assays	N		Constrain Estimation			Y	
Assay Constraint File			Estimation Constraints File			au_500	
Save Constrained Assays	N		Domain Name			500	
Output Constrained Assay File Location							
Output Constrained Assay File Id							
Interpolation Search Details							
Octant or Ellipsoid	E						
Max No of Adjacent Empty Octants							
Minimum Number of Samples	4						
Maximum Number of Samples	35						
Limit Samples by Hole Id	Y						
Hole Id Field	D4						
Maximum Number of Samples per Hole	7						
Maximum Search Distance for Major Axis	25						
Maximum Vertical Search Distance	99999						
Bearing of Major Axis	0						
Plunge of Major Axis	0						
Dip of Semi-Major Axis	0						
Major / Semi-Major Ratio	1						
Major / Minor Ratio	1						
Pass Details	**Pass 1**		**Pass 2**		**Pass 3**		
Pass Field							
Pass Field Value							
Pass Ratio							
Pass Minimum Samples							
Pass Maximum Samples							
Interpolation Method Details							
Inverse Distance or Ordinary Kriging	OK						
Inverse Distance Power							
No of X Descretisation Points	5						
No of Y Descretisation Points	5						
No of Z Descretisation Points	2						
Variogram Parameters if OK is chosen							
Number of Structures	2						
Nugget	0.49						
Relative Nugget	**49%**					Major/Semi	Major/
	Sill	Range	Azimuth	Plunge	Dip	Major Ratio	Minor Ratio
Structure 1	0.33	5.74	**0**	**0**	**0**	**1**	**1**
Structure 2	0.18	20.57	**0**	**0**	**0**	**1**	**1**
Structure 3	0	0	**0**	**0**	**0**	**1**	**1**
Structure 4	0	0	**0**	**0**	**0**	**1**	**1**
Structure 5	0	0	**0**	**0**	**0**	**1**	**1**
Interpolation Output Fields							
Distance to Nearest Sample Field							
Average Distance Field							
Number of Samples Field							
Kriging Variance Field							
Output Report File Name *.XLS	***juno_52010_au_500_cut_au***						

DOMAIN 500 –Uncut Au g/t - Run 4

Interpolator Output Report

Interpolation Date	Sunday - 11 July - 2010 - at 17:59:02						
Interpolation Run Number	4						
Interpolarion ipar file	juno_52010.ipar						
Working Directory	g:/cube/excalibur mining corporation/2010_033_juno_resource/blockmodel						
Input Assay File Details			***Block Model Details***				
Assay File Location	../composites/cut_res_		Block Model			juno_52010	
Assay File Id	500		Block Model Field			au_uncut	
Assay String Numbers	1						
Assay Description Field	1						
Assay File Constraint Details			***Block Model Constraint Details***				
Constrain Assays	N		Constrain Estimation			Y	
Assay Constraint File			Estimation Constraints File			au_500	
Save Constrained Assays	N		Domain Name			500	
Output Constrained Assay File Location							
Output Constrained Assay File Id							
Interpolation Search Details							
Octant or Ellipsoid	E						
Max No of Adjacent Empty Octants							
Minimum Number of Samples	4						
Maximum Number of Samples	35						
Limit Samples by Hole Id	Y						
Hole Id Field	D4						
Maximum Number of Samples per Hole	7						
Maximum Search Distance for Major Axis	25						
Maximum Vertical Search Distance	99999						
Bearing of Major Axis	0						
Plunge of Major Axis	0						
Dip of Semi-Major Axis	0						
Major / Semi-Major Ratio	1						
Major / Minor Ratio	1						
Pass Details	**Pass 1**		**Pass 2**		**Pass 3**		
Pass Field							
Pass Field Value							
Pass Ratio							
Pass Minimum Samples							
Pass Maximum Samples							
Interpolation Method Details							
Inverse Distance or Ordinary Krigging	OK						
Inverse Distance Power							
No of X Descretisation Points	5						
No of Y Descretisation Points	5						
No of Z Descretisation Points	2						
Variogram Parameters if OK is chosen							
Number of Structures	2						
Nugget	0.49						
Relative Nugget	**49%**					Major/Semi	Major/
	Sill	Range	Azimuth	Plunge	Dip	Major Ratio	Minor Ratio
Structure 1	0.33	5.74	**0**	**0**	**0**	**1**	**1**
Structure 2	0.18	20.57	**0**	**0**	**0**	**1**	**1**
Structure 3	0	0	**0**	**0**	**0**	**1**	**1**
Structure 4	0	0	**0**	**0**	**0**	**1**	**1**
Structure 5	0	0	**0**	**0**	**0**	**1**	**1**
Interpolation Output Fields							
Distance to Nearest Sample Field							
Average Distance Field							
Number of Samples Field							
Kriging Variance Field							
Output Report File Name *.XLS	***juno_52010_au_500_uncut_au***						

DOMAIN 800 –Cut Au g/t - Run 5

Interpolator Output Report

Interpolation Date	Sunday - 11 July - 2010 - at 18:00:19						
Interpolation Run Number	5						
Interpolarion ipar file	juno_52010.ipar						
Working Directory	g:/cube/excalibur mining corporation/2010_033_juno_resource/blockmodel						
Input Assay File Details			***Block Model Details***				
Assay File Location	../composites/cut_res_		Block Model			juno_52010	
Assay File Id	800		Block Model Field			au_cut	
Assay String Numbers	1						
Assay Description Field	11						
Assay File Constraint Details			***Block Model Constraint Details***				
Constrain Assays	N		Constrain Estimation			Y	
Assay Constraint File			Estimation Constraints File			au_800	
Save Constrained Assays	N		Domain Name			800	
Output Constrained Assay File Location							
Output Constrained Assay File Id							
Interpolation Search Details							
Octant or Ellipsoid	E						
Max No of Adjacent Empty Octants							
Minimum Number of Samples	4						
Maximum Number of Samples	35						
Limit Samples by Hole Id	Y						
Hole Id Field	D4						
Maximum Number of Samples per Hole	7						
Maximum Search Distance for Major Axis	25						
Maximum Vertical Search Distance	99999						
Bearing of Major Axis	0						
Plunge of Major Axis	0						
Dip of Semi-Major Axis	0						
Major / Semi-Major Ratio	1						
Major / Minor Ratio	1						
Pass Details	**Pass 1**		**Pass 2**		**Pass 3**		
Pass Field							
Pass Field Value							
Pass Ratio							
Pass Minimum Samples							
Pass Maximum Samples							
Interpolation Method Details							
Inverse Distance or Ordinary Krigging	OK						
Inverse Distance Power							
No of X Descretisation Points	5						
No of Y Descretisation Points	5						
No of Z Descretisation Points	2						
Variogram Parameters if OK is chosen							
Number of Structures	2						
Nugget	0.32						
Relative Nugget	**32%**					Major/Semi	Major/
	Sill	Range	Azimuth	Plunge	Dip	Major Ratio	Minor Ratio
Structure 1	0.54	10	**64**	**0**	**80**	**0.8**	**1**
Structure 2	0.14	10000	**64**	**0**	**80**	**833.3**	**1**
Structure 3	0	0	**0**	**0**	**0**	**1**	**1**
Structure 4	0	0	**0**	**0**	**0**	**1**	**1**
Structure 5	0	0	**0**	**0**	**0**	**1**	**1**
Interpolation Output Fields							
Distance to Nearest Sample Field							
Average Distance Field							
Number of Samples Field							
Kriging Variance Field							
Output Report File Name *.XLS	***juno_52010_au_800_cut_au***						

DOMAIN 800 –Uncut Au g/t - Run 6

Interpolator Output Report

Interpolation Date	Sunday - 11 July - 2010 - at 18:01:12						
Interpolation Run Number	6						
Interpolarion ipar file	juno_52010.ipar						
Working Directory	g:/cube/excalibur mining corporation/2010_033_juno_resource/blockmodel						
Input Assay File Details			***Block Model Details***				
Assay File Location	../composites/cut_res_		Block Model			juno_52010	
Assay File Id	800		Block Model Field			au_uncut	
Assay String Numbers	1						
Assay Description Field	1						
Assay File Constraint Details			***Block Model Constraint Details***				
Constrain Assays	N		Constrain Estimation			Y	
Assay Constraint File			Estimation Constraints File			au_800	
Save Constrained Assays	N		Domain Name			800	
Output Constrained Assay File Location							
Output Constrained Assay File Id							
Interpolation Search Details							
Octant or Ellipsoid	E						
Max No of Adjacent Empty Octants							
Minimum Number of Samples	4						
Maximum Number of Samples	35						
Limit Samples by Hole Id	Y						
Hole Id Field	D4						
Maximum Number of Samples per Hole	7						
Maximum Search Distance for Major Axis	25						
Maximum Vertical Search Distance	99999						
Bearing of Major Axis	0						
Plunge of Major Axis	0						
Dip of Semi-Major Axis	0						
Major / Semi-Major Ratio	1						
Major / Minor Ratio	1						
Pass Details	**Pass 1**		**Pass 2**		**Pass 3**		
Pass Field							
Pass Field Value							
Pass Ratio							
Pass Minimum Samples							
Pass Maximum Samples							
Interpolation Method Details							
Inverse Distance or Ordinary Krigging	OK						
Inverse Distance Power							
No of X Descretisation Points	5						
No of Y Descretisation Points	5						
No of Z Descretisation Points	2						
Variogram Parameters if OK is chosen							
Number of Structures	2						
Nugget	0.32						
Relative Nugget	**32%**					Major/Semi	Major/
	Sill	Range	Azimuth	Plunge	Dip	Major Ratio	Minor Ratio
Structure 1	0.54	10	**64**	**0**	**80**	**0.8**	**1**
Structure 2	0.14	10000	**64**	**0**	**80**	**833.3**	**1**
Structure 3	0	0	**0**	**0**	**0**	**1**	**1**
Structure 4	0	0	**0**	**0**	**0**	**1**	**1**
Structure 5	0	0	**0**	**0**	**0**	**1**	**1**
Interpolation Output Fields							
Distance to Nearest Sample Field							
Average Distance Field							
Number of Samples Field							
Kriging Variance Field							
Output Report File Name *.XLS	***juno_52010_au_800_uncut_au***						

DOMAIN 1000 –Cut Cu % - Run 7

Interpolator Output Report

Interpolation Date	Sunday - 11 July - 2010 - at 18:02:04
Interpolation Run Number	7
Interpolarion ipar file	juno_52010.ipar
Working Directory	g:/cube/excalibur mining corporation/2010_033_juno_resource/blockmodel

Input Assay File Details		***Block Model Details***	
Assay File Location	../composites/cut_res_	Block Model	juno_52010
Assay File Id	1000	Block Model Field	cu_cut
Assay String Numbers	1		
Assay Description Field	11		
Assay File Constraint Details		***Block Model Constraint Details***	
Constrain Assays	N	Constrain Estimation	Y
Assay Constraint File		Estimation Constraints File	cu_1000
Save Constrained Assays	N	Domain Name	1000
Output Constrained Assay File Location			
Output Constrained Assay File Id			

Interpolation Search Details	
Octant or Ellipsoid	E
Max No of Adjacent Empty Octants	
Minimum Number of Samples	4
Maximum Number of Samples	35
Limit Samples by Hole Id	Y
Hole Id Field	D4
Maximum Number of Samples per Hole	7
Maximum Search Distance for Major Axis	25
Maximum Vertical Search Distance	99999
Bearing of Major Axis	0
Plunge of Major Axis	0
Dip of Semi-Major Axis	0
Major / Semi-Major Ratio	1
Major / Minor Ratio	1

Pass Details	**Pass 1**	**Pass 2**	**Pass 3**
Pass Field			
Pass Field Value			
Pass Ratio			
Pass Minimum Samples			
Pass Maximum Samples			

Interpolation Method Details	
Inverse Distance or Ordinary Krigging	OK
Inverse Distance Power	
No of X Descretisation Points	5
No of Y Descretisation Points	5
No of Z Descretisation Points	2
Variogram Parameters if OK is chosen	
Number of Structures	3
Nugget	0.61
Relative Nugget	**58%**

	Sill	Range	Azimuth	Plunge	Dip	Major/Semi Major Ratio	Major/ Minor Ratio
Structure 1	0.25	9.49	**0**	**0**	**0**	**1**	**1**
Structure 2	0.14	21.03	**0**	**0**	**0**	**1**	**1**
Structure 3	0.05	32.02	**0**	**0**	**0**	**1**	**1**
Structure 4	0	0	**0**	**0**	**0**	**1**	**1**
Structure 5	0	0	**0**	**0**	**0**	**1**	**1**

Interpolation Output Fields	
Distance to Nearest Sample Field	
Average Distance Field	
Number of Samples Field	
Kriging Variance Field	
Output Report File Name *.XLS	***juno_52010_cu_1000_cut_cu***

DOMAIN 1000 –Uncut Cu % - Run 8

Interpolator Output Report

Interpolation Date	Sunday - 11 July - 2010 - at 18:21:10						
Interpolation Run Number	8						
Interpolarion ipar file	juno_52010.ipar						
Working Directory	g:/cube/excalibur mining corporation/2010_033_juno_resource/blockmodel						
Input Assay File Details			***Block Model Details***				
Assay File Location	../composites/cut_res_		Block Model			juno_52010	
Assay File Id	1000		Block Model Field			cu_uncut	
Assay String Numbers	1						
Assay Description Field	2						
Assay File Constraint Details			***Block Model Constraint Details***				
Constrain Assays	N		Constrain Estimation			Y	
Assay Constraint File			Estimation Constraints File			cu_1000	
Save Constrained Assays	N		Domain Name			1000	
Output Constrained Assay File Location							
Output Constrained Assay File Id							
Interpolation Search Details							
Octant or Ellipsoid	E						
Max No of Adjacent Empty Octants							
Minimum Number of Samples	4						
Maximum Number of Samples	35						
Limit Samples by Hole Id	Y						
Hole Id Field	D4						
Maximum Number of Samples per Hole	7						
Maximum Search Distance for Major Axis	25						
Maximum Vertical Search Distance	99999						
Bearing of Major Axis	0						
Plunge of Major Axis	0						
Dip of Semi-Major Axis	0						
Major / Semi-Major Ratio	1						
Major / Minor Ratio	1						
Pass Details	**Pass 1**		**Pass 2**		**Pass 3**		
Pass Field							
Pass Field Value							
Pass Ratio							
Pass Minimum Samples							
Pass Maximum Samples							
Interpolation Method Details							
Inverse Distance or Ordinary Krigging	OK						
Inverse Distance Power							
No of X Descretisation Points	5						
No of Y Descretisation Points	5						
No of Z Descretisation Points	2						
Variogram Parameters if OK is chosen							
Number of Structures	3						
Nugget	0.61						
Relative Nugget	**58%**					Major/Semi	Major/
	Sill	Range	Azimuth	Plunge	Dip	Major Ratio	Minor Ratio
Structure 1	0.25	9.49	**0**	**0**	**0**	**1**	**1**
Structure 2	0.14	21.03	**0**	**0**	**0**	**1**	**1**
Structure 3	0.05	32.02	**0**	**0**	**0**	**1**	**1**
Structure 4	0	0	**0**	**0**	**0**	**1**	**1**
Structure 5	0	0	**0**	**0**	**0**	**1**	**1**
Interpolation Output Fields							
Distance to Nearest Sample Field							
Average Distance Field							
Number of Samples Field							
Kriging Variance Field							
Output Report File Name *.XLS	***juno_52010_cu_1000_uncut_cu***						

DOMAIN 100 –Cut Bi % - Run 9

Interpolator Output Report

Interpolation Date	Sunday - 11 July - 2010 - at 18:04:11						
Interpolation Run Number	9						
Interpolarion ipar file	juno_52010.ipar						
Working Directory	g:/cube/excalibur mining corporation/2010_033_juno_resource/blockmodel						
Input Assay File Details			***Block Model Details***				
Assay File Location	../composites/cut_res_		Block Model			juno_52010	
Assay File Id	100		Block Model Field			bi_cut	
Assay String Numbers	1						
Assay Description Field	13						
Assay File Constraint Details			***Block Model Constraint Details***				
Constrain Assays	N		Constrain Estimation			Y	
Assay Constraint File			Estimation Constraints File			au_100	
Save Constrained Assays	N		Domain Name			100	
Output Constrained Assay File Location							
Output Constrained Assay File Id							
Interpolation Search Details							
Octant or Ellipsoid	E						
Max No of Adjacent Empty Octants							
Minimum Number of Samples	4						
Maximum Number of Samples	35						
Limit Samples by Hole Id	Y						
Hole Id Field	D4						
Maximum Number of Samples per Hole	7						
Maximum Search Distance for Major Axis	50						
Maximum Vertical Search Distance	99999						
Bearing of Major Axis	0						
Plunge of Major Axis	0						
Dip of Semi-Major Axis	0						
Major / Semi-Major Ratio	1						
Major / Minor Ratio	1						
Pass Details	**Pass 1**		**Pass 2**		**Pass 3**		
Pass Field							
Pass Field Value							
Pass Ratio							
Pass Minimum Samples							
Pass Maximum Samples							
Interpolation Method Details							
Inverse Distance or Ordinary Kriging	OK						
Inverse Distance Power							
No of X Descretisation Points	5						
No of Y Descretisation Points	5						
No of Z Descretisation Points	2						
Variogram Parameters if OK is chosen							
Number of Structures	2						
Nugget	0.6						
Relative Nugget	**60%**					Major/Semi	Major/
	Sill	Range	Azimuth	Plunge	Dip	Major Ratio	Minor Ratio
Structure 1	0.34	7.25	**0**	**0**	**0**	**1**	**1**
Structure 2	0.06	48.3	**0**	**0**	**0**	**1**	**1**
Structure 3	0	0	**0**	**0**	**0**	**1**	**1**
Structure 4	0	0	**0**	**0**	**0**	**1**	**1**
Structure 5	0	0	**0**	**0**	**0**	**1**	**1**
Interpolation Output Fields							
Distance to Nearest Sample Field							
Average Distance Field							
Number of Samples Field							
Kriging Variance Field							
Output Report File Name *.XLS	***juno_52010_au_100_cut_bi***						

DOMAIN 500 –Cut Bi % - Run 10

Interpolator Output Report

Interpolation Date	Sunday - 11 July - 2010 - at 18:07:21						
Interpolation Run Number	10						
Interpolarion ipar file	juno_52010.ipar						
Working Directory	g:/cube/excalibur mining corporation/2010_033_juno_resource/blockmodel						
Input Assay File Details			***Block Model Details***				
Assay File Location	../composites/cut_res_		Block Model			juno_52010	
Assay File Id	500		Block Model Field			bi_cut	
Assay String Numbers	1						
Assay Description Field	13						
Assay File Constraint Details			***Block Model Constraint Details***				
Constrain Assays	N		Constrain Estimation			Y	
Assay Constraint File			Estimation Constraints File			au_500	
Save Constrained Assays	N		Domain Name			500	
Output Constrained Assay File Location							
Output Constrained Assay File Id							
Interpolation Search Details							
Octant or Ellipsoid	E						
Max No of Adjacent Empty Octants							
Minimum Number of Samples	4						
Maximum Number of Samples	35						
Limit Samples by Hole Id	Y						
Hole Id Field	D4						
Maximum Number of Samples per Hole	7						
Maximum Search Distance for Major Axis	25						
Maximum Vertical Search Distance	99999						
Bearing of Major Axis	0						
Plunge of Major Axis	0						
Dip of Semi-Major Axis	0						
Major / Semi-Major Ratio	1						
Major / Minor Ratio	1						
Pass Details	**Pass 1**		**Pass 2**		**Pass 3**		
Pass Field							
Pass Field Value							
Pass Ratio							
Pass Minimum Samples							
Pass Maximum Samples							
Interpolation Method Details							
Inverse Distance or Ordinary Kriging	OK						
Inverse Distance Power							
No of X Descretisation Points	5						
No of Y Descretisation Points	5						
No of Z Descretisation Points	2						
Variogram Parameters if OK is chosen							
Number of Structures	2						
Nugget	0.49						
Relative Nugget	**49%**					Major/Semi	Major/
	Sill	Range	Azimuth	Plunge	Dip	Major Ratio	Minor Ratio
Structure 1	0.33	5.74	**0**	**0**	**0**	**1**	**1**
Structure 2	0.18	20.57	**0**	**0**	**0**	**1**	**1**
Structure 3	0	0	**0**	**0**	**0**	**1**	**1**
Structure 4	0	0	**0**	**0**	**0**	**1**	**1**
Structure 5	0	0	**0**	**0**	**0**	**1**	**1**
Interpolation Output Fields							
Distance to Nearest Sample Field							
Average Distance Field							
Number of Samples Field							
Kriging Variance Field							
Output Report File Name *.XLS	***juno_52010_au_500_cut_bi***						

DOMAIN 800 –Cut Bi % - Run 11

Interpolator Output Report

Interpolation Date	Sunday - 11 July - 2010 - at 18:08:38						
Interpolation Run Number	11						
Interpolarion ipar file	juno_52010.ipar						
Working Directory	g:/cube/excalibur mining corporation/2010_033_juno_resource/blockmodel						
Input Assay File Details			***Block Model Details***				
Assay File Location	../composites/cut_res_		Block Model			juno_52010	
Assay File Id	800		Block Model Field			bi_cut	
Assay String Numbers	1						
Assay Description Field	13						
Assay File Constraint Details			***Block Model Constraint Details***				
Constrain Assays	N		Constrain Estimation			Y	
Assay Constraint File			Estimation Constraints File			au_800	
Save Constrained Assays	N		Domain Name			800	
Output Constrained Assay File Location							
Output Constrained Assay File Id							
Interpolation Search Details							
Octant or Ellipsoid	E						
Max No of Adjacent Empty Octants							
Minimum Number of Samples	4						
Maximum Number of Samples	35						
Limit Samples by Hole Id	Y						
Hole Id Field	D4						
Maximum Number of Samples per Hole	7						
Maximum Search Distance for Major Axis	25						
Maximum Vertical Search Distance	99999						
Bearing of Major Axis	0						
Plunge of Major Axis	0						
Dip of Semi-Major Axis	0						
Major / Semi-Major Ratio	1						
Major / Minor Ratio	1						
Pass Details	**Pass 1**		**Pass 2**		**Pass 3**		
Pass Field							
Pass Field Value							
Pass Ratio							
Pass Minimum Samples							
Pass Maximum Samples							
Interpolation Method Details							
Inverse Distance or Ordinary Krigging	OK						
Inverse Distance Power							
No of X Descretisation Points	5						
No of Y Descretisation Points	5						
No of Z Descretisation Points	2						
Variogram Parameters if OK is chosen							
Number of Structures	2						
Nugget	0.32						
Relative Nugget	**32%**					Major/Semi	Major/
	Sill	Range	Azimuth	Plunge	Dip	Major Ratio	Minor Ratio
Structure 1	0.54	10	**64**	**0**	**80**	**0.8**	**1**
Structure 2	0.14	10000	**64**	**0**	**80**	**833.3**	**1**
Structure 3	0	0	**0**	**0**	**0**	**1**	**1**
Structure 4	0	0	**0**	**0**	**0**	**1**	**1**
Structure 5	0	0	**0**	**0**	**0**	**1**	**1**
Interpolation Output Fields							
Distance to Nearest Sample Field							
Average Distance Field							
Number of Samples Field							
Kriging Variance Field							
Output Report File Name *.XLS	***juno_52010_au_800_cut_bi***						

DOMAIN 100 –Uncut Bi % - Run 12

Interpolator Output Report							
Interpolation Date	Sunday - 11 July - 2010 - at 18:09:31						
Interpolation Run Number	12						
Interpolarion ipar file	juno_52010.ipar						
Working Directory	g:/cube/excalibur mining corporation/2010_033_juno_resource/blockmodel						
Input Assay File Details			***Block Model Details***				
Assay File Location	../composites/cut_res_		Block Model			juno_52010	
Assay File Id	100		Block Model Field			bi_uncut	
Assay String Numbers	1						
Assay Description Field	3						
Assay File Constraint Details			***Block Model Constraint Details***				
Constrain Assays	N		Constrain Estimation			Y	
Assay Constraint File			Estimation Constraints File			au_100	
Save Constrained Assays	N		Domain Name			100	
Output Constrained Assay File Location							
Output Constrained Assay File Id							
Interpolation Search Details							
Octant or Ellipsoid	E						
Max No of Adjacent Empty Octants							
Minimum Number of Samples	4						
Maximum Number of Samples	35						
Limit Samples by Hole Id	Y						
Hole Id Field	D4						
Maximum Number of Samples per Hole	7						
Maximum Search Distance for Major Axis	25						
Maximum Vertical Search Distance	99999						
Bearing of Major Axis	0						
Plunge of Major Axis	0						
Dip of Semi-Major Axis	0						
Major / Semi-Major Ratio	1						
Major / Minor Ratio	1						
Pass Details	**Pass 1**		**Pass 2**		**Pass 3**		
Pass Field							
Pass Field Value							
Pass Ratio							
Pass Minimum Samples							
Pass Maximum Samples							
Interpolation Method Details							
Inverse Distance or Ordinary Kriging	OK						
Inverse Distance Power							
No of X Descretisation Points	5						
No of Y Descretisation Points	5						
No of Z Descretisation Points	2						
Variogram Parameters if OK is chosen							
Number of Structures	2						
Nugget	0.6						
Relative Nugget	**60%**					Major/Semi	Major/
	Sill	Range	Azimuth	Plunge	Dip	Major Ratio	Minor Ratio
Structure 1	0.34	7.25	**0**	**0**	**0**	**1**	**1**
Structure 2	0.06	48.3	**0**	**0**	**0**	**1**	**1**
Structure 3	0	0	**0**	**0**	**0**	**1**	**1**
Structure 4	0	0	**0**	**0**	**0**	**1**	**1**
Structure 5	0	0	**0**	**0**	**0**	**1**	**1**
Interpolation Output Fields							
Distance to Nearest Sample Field							
Average Distance Field							
Number of Samples Field							
Kriging Variance Field							
Output Report File Name *.XLS	***juno_52010_au_100_uncut_bi***						

DOMAIN 500 –Uncut Bi % - Run 13

Interpolator Output Report

Interpolation Date	Sunday - 11 July - 2010 - at 18:11:24						
Interpolation Run Number	13						
Interpolarion ipar file	juno_52010.ipar						
Working Directory	g:/cube/excalibur mining corporation/2010_033_juno_resource/blockmodel						
Input Assay File Details			***Block Model Details***				
Assay File Location	../composites/cut_res_		Block Model			juno_52010	
Assay File Id	500		Block Model Field			bi_uncut	
Assay String Numbers	1						
Assay Description Field	3						
Assay File Constraint Details			***Block Model Constraint Details***				
Constrain Assays	N		Constrain Estimation			Y	
Assay Constraint File			Estimation Constraints File			au_500	
Save Constrained Assays	N		Domain Name			500	
Output Constrained Assay File Location							
Output Constrained Assay File Id							
Interpolation Search Details							
Octant or Ellipsoid	E						
Max No of Adjacent Empty Octants							
Minimum Number of Samples	4						
Maximum Number of Samples	35						
Limit Samples by Hole Id	Y						
Hole Id Field	D4						
Maximum Number of Samples per Hole	7						
Maximum Search Distance for Major Axis	25						
Maximum Vertical Search Distance	99999						
Bearing of Major Axis	0						
Plunge of Major Axis	0						
Dip of Semi-Major Axis	0						
Major / Semi-Major Ratio	1						
Major / Minor Ratio	1						
Pass Details	**Pass 1**		**Pass 2**		**Pass 3**		
Pass Field							
Pass Field Value							
Pass Ratio							
Pass Minimum Samples							
Pass Maximum Samples							
Interpolation Method Details							
Inverse Distance or Ordinary Krigging	OK						
Inverse Distance Power							
No of X Descretisation Points	5						
No of Y Descretisation Points	5						
No of Z Descretisation Points	2						
Variogram Parameters if OK is chosen							
Number of Structures	2						
Nugget	0.49						
Relative Nugget	**49%**					Major/Semi	Major/
	Sill	Range	Azimuth	Plunge	Dip	Major Ratio	Minor Ratio
Structure 1	0.33	5.74	**0**	**0**	**0**	**1**	**1**
Structure 2	0.18	20.57	**0**	**0**	**0**	**1**	**1**
Structure 3	0	0	**0**	**0**	**0**	**1**	**1**
Structure 4	0	0	**0**	**0**	**0**	**1**	**1**
Structure 5	0	0	**0**	**0**	**0**	**1**	**1**
Interpolation Output Fields							
Distance to Nearest Sample Field							
Average Distance Field							
Number of Samples Field							
Kriging Variance Field							
Output Report File Name *.XLS	***juno_52010_au_500_uncut_bi***						

DOMAIN 800 –Uncut Bi % - Run 14

Interpolator Output Report							
Interpolation Date	Sunday - 11 July - 2010 - at 18:12:40						
Interpolation Run Number	14						
Interpolarion ipar file	juno_52010.ipar						
Working Directory	g:/cube/excalibur mining corporation/2010_033_juno_resource/blockmodel						
Input Assay File Details			***Block Model Details***				
Assay File Location	../composites/cut_res_		Block Model			juno_52010	
Assay File Id	800		Block Model Field			bi_uncut	
Assay String Numbers	1						
Assay Description Field	3						
Assay File Constraint Details			***Block Model Constraint Details***				
Constrain Assays	N		Constrain Estimation			Y	
Assay Constraint File			Estimation Constraints File			au_800	
Save Constrained Assays	N		Domain Name			800	
Output Constrained Assay File Location							
Output Constrained Assay File Id							
Interpolation Search Details							
Octant or Ellipsoid	E						
Max No of Adjacent Empty Octants							
Minimum Number of Samples	4						
Maximum Number of Samples	35						
Limit Samples by Hole Id	Y						
Hole Id Field	D4						
Maximum Number of Samples per Hole	7						
Maximum Search Distance for Major Axis	25						
Maximum Vertical Search Distance	99999						
Bearing of Major Axis	0						
Plunge of Major Axis	0						
Dip of Semi-Major Axis	0						
Major / Semi-Major Ratio	1						
Major / Minor Ratio	1						
Pass Details	**Pass 1**		**Pass 2**		**Pass 3**		
Pass Field							
Pass Field Value							
Pass Ratio							
Pass Minimum Samples							
Pass Maximum Samples							
Interpolation Method Details							
Inverse Distance or Ordinary Krigging	OK						
Inverse Distance Power							
No of X Descretisation Points	5						
No of Y Descretisation Points	5						
No of Z Descretisation Points	2						
Variogram Parameters if OK is chosen							
Number of Structures	2						
Nugget	0.32						
Relative Nugget	**32%**					Major/Semi	Major/
	Sill	Range	Azimuth	Plunge	Dip	Major Ratio	Minor Ratio
Structure 1	0.54	10	**64**	**0**	**80**	**0.8**	**1**
Structure 2	0.14	10000	**64**	**0**	**80**	**833.3**	**1**
Structure 3	0	0	**0**	**0**	**0**	**1**	**1**
Structure 4	0	0	**0**	**0**	**0**	**1**	**1**
Structure 5	0	0	**0**	**0**	**0**	**1**	**1**
Interpolation Output Fields							
Distance to Nearest Sample Field							
Average Distance Field							
Number of Samples Field							
Kriging Variance Field							
Output Report File Name *.XLS	***juno_52010_au_800_uncut_bi***						