



Tim Callaghan – Resource and Exploration Geology



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BOLD HEAD MINE
GEOLOGY, RESOURCE ESTIMATE AND MINE INFRASTRUCTURE
DIGITAL MODEL
KING ISLAND

Prepared for: King Island Scheelite Project.

Tim Callaghan, July 2009



MAP CONVENTIONS

Unless otherwise stated, coordinates in for this report and in digital data associated with this report are in Bold Head Mine Grid (BHMG), a local grid established by Geopeko during the operation of the mine during the 1970,s.

No available documentation referring to the origin and projection of the BHMG has been established. A survey control report (TCR 70_0676) makes no mention of the BHMG but does reference survey control points in the district.

Reviewing historic documents suggest an approximate location of the grid origin is:

ISG Zone 55/3	BHMG
220 000E	39 950E
566 500N	10 000N

Rotation 20 degrees west of ISG north.

This information is **NOT** sufficient for the resumption of mining operations.

It is recommended that the reference point origin and projection of the BHMG be confirmed as a matter of urgency.

RL's in this report are MSL plus 1000m.

Cross sections are drawn looking north.



EXECUTIVE SUMMARY

The Bold Head Mine is hosted in calcareous volcanoclastic sediments near the base of the Grassy Group. Scheelite mineralisation is associated with calcareous skarn developed adjacent to the contact of the Lower Grassy Group and the Bold Head Granodiorite. Mineralisation is localized in and around two main carbonate horizons termed B lens and C lens as well as occurring in calcareous sediments known as the Banded Footwall Beds. Mineralisation is best developed at the top and bottom of carbonate horizons directly in contact with faults, particularly the Boundary Fault and No2 Fault.

The host sequence is bound to the north, south and west by the Bold Head Granodiorite, and a major N-S trending reverse fault known as the Boundary Fault to the east. A major east-west trending ductile shear known as the Grahams Road Fault has attenuated and down warped the Grassy Group on its southern margin before truncation with the later granodiorite intrusion. These geological structures limit the potential for near mine resource extension drilling with the prospective area limited to a basin of 650m x 200m. Minor resource extensions are possible on the extreme southern margin and in the northwest of the basin but resource additions are likely to be small (<100 000t).

The digital compilation of historic drilling data, geological information and mine infrastructure has provided sufficient information to allow the assessment of the commercial viability of re-accessing the Bold Head Scheelite Mine.

A block model of remnant resources within the mine reconcile well with historic resource statements.

Table 1. Bold Head Resource 0.5% WO₃ Cut Off

Classification	Tonnes	WO₃ %
Inferred	140,000	1.22
Indicated	1,500,000	0.93
Total	1,650,000	0.96

There is potential for the development of an open pit at the northern end of the resource with remnant ore close to the surface. An open pit operation would allow recovery of all of the resource within the pit design. Table 2 outlines resources above the 1050m, 1000m and 950m levels, corresponding to a pit depth of 50m, 100m and 150m respectively.

There are significant Inferred Resources above 1.0% WO₃ close to the surface that require more definition drilling.



Table 2. Bold Head Resource by Level

	Classification	Tonnes	WO₃ %
1050m Level	Indicated	110,000	0.98
	Inferred	50,000	2.04
	Total	160,000	1.29
1000m level	Indicated	290,000	0.87
	Inferred	140,000	1.21
	Total	430,000	0.98
950m level	Indicated	640,000	0.92
	Inferred	310,000	1.06
	Total	950,000	0.97

It would be reasonable to assume that the historic reserve statements would reflect the potential for recoverable reserves from modern underground operations. Remnant resources remaining above unfinished flat back stopes on mine closure, resources left at the south end of the mine and to the west of the Western Fault may support low tonnage underground operations. Room and rib pillars are unlikely to be recoverable from underground operations.

Recommendations for follow up work include:

- Confirm origin and projection of the Bold Head Mine Grid.
- Short drilling program confirming shallow mineralisation associated with the Boundary fault and B-lens at the north end of the Mine.
- Provide the block model and digital mine plan to a competent Mining Engineer to allow a pit optimization study for early mine development as well as investigating the potential for underground development.
- QA/QC analysis.
- Bulk Specific gravity study.
- Conceptual targeting of additional resources between Bold Head and Grassy.



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1 INTRODUCTION

The Bold Head Scheelite Mine is located in the southeastern corner of King Island, Tasmania. The Mine was originally operated by Geopeko Ltd. as a satellite mine for the larger Dolphin Mine and Mill located several kilometers to the south at Grassy.

The Bold Head Mine was closed in the mid 1980's due to declining market conditions. The deposit had been developed as a trackless LHD decline accessed mine with room and pillar and cut and fill stopes. On closure the remaining resources were estimated to be 1.8Mt @ 0.8-0.9% WO₃.

The King Island Scheelite Project is a joint Venture between King Island Scheelite and Hunan Nonferrous Metals Corporation Ltd. The JV is currently investigating the potential of re-opening the Grassy Open Cut. The initial 10 year project involves expansion of the open cut to 180m depth necessitating the construction of a seawall. The initial project is expected to access 6.8Mt of ore grading 0.55% WO₃.

The author was requested to compile historic geological data and mine infrastructure into a digital format suitable for the operation and assessment of a modern mining operation. The Bold Head Mine may provide an early additional ore source during construction of the Grassy Open Pit and Seawall.

Scanned copies of historic drill logs and mine plans were provided in April 2009. The Drilling Database was compiled in April while the plans were being outsourced for digitization. Modeling of the Geology, Resource Estimate and Digital Mine Model was completed in June 2009 with reporting commencing in the same month.

Final products included with this report are:

- Drill Database (Access)
- Solid Models of Historic Mine Workings (Surpac)
- Solid Models of major Geological Elements (Surpac)
- Solid Models of Mineralisation Domains (Surpac)
- Block modeled Resource Estimate (Surpac)

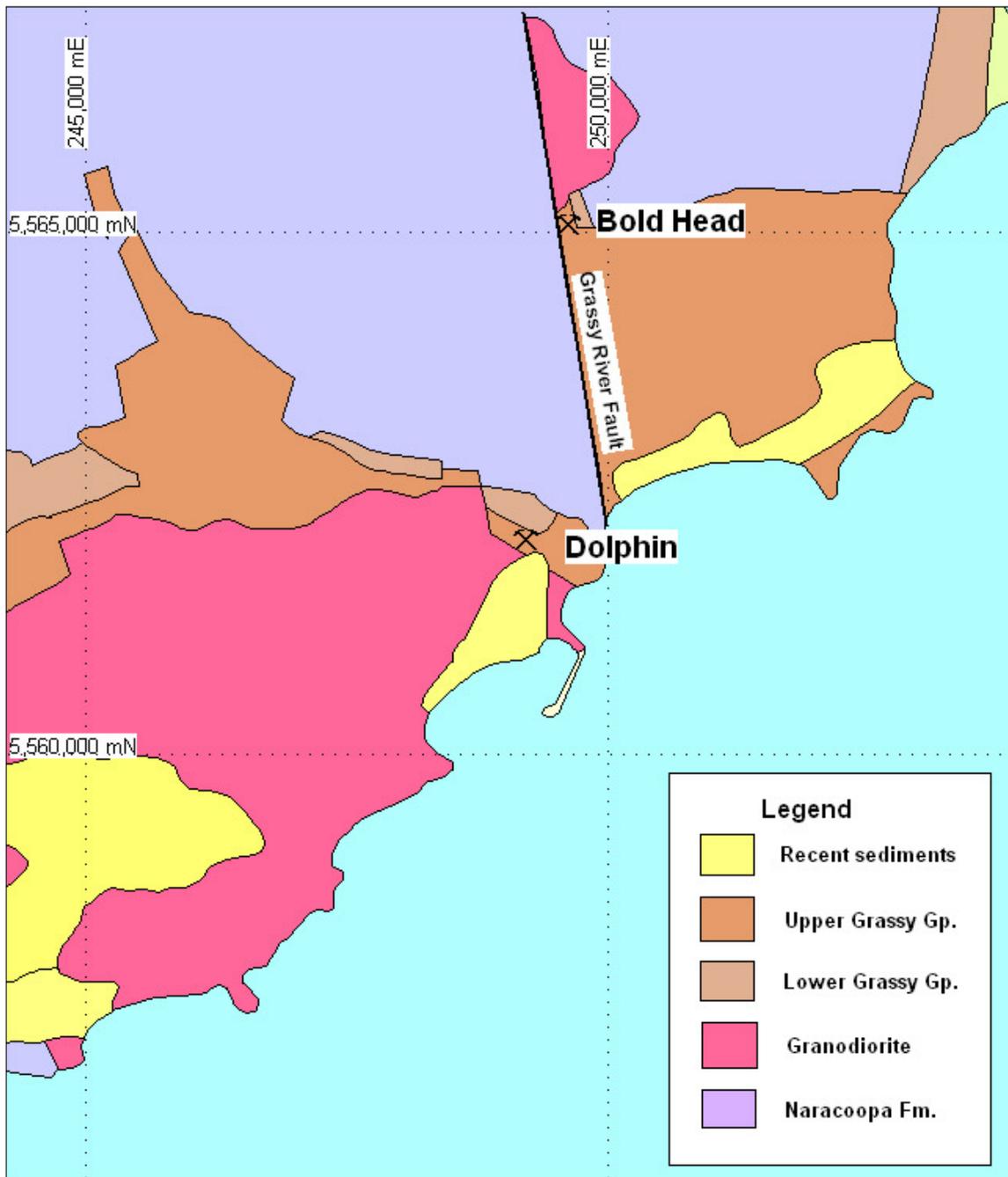


Figure 1. Bold Head Location Plan and Simplified Geology (Coordinates GDA94).



2 GEOLOGY

2.1 REGIONAL GEOLOGY

The regional geology of King Island is best described in Tasmanian Geological Record 2007/02, *Some Notes on the Geology of King Island* (Calver, 2007). Much of the geology described in this section is summarized from this publication (Figure 2).

The geology of King Island consists primarily of Proterozoic rocks with lesser Devonian Granites and extensive wind blown Pleistocene to Recent sand cover. The Proterozoic Geology of the eastern half of the island (hosting the Bold Head and Dolphin WO₃ deposits) is distinctly different from the geology of the western half. The relationship between the western and eastern halves remains problematic.

The western half is dominated by the Mesoproterozoic (1300Ma) Surprise Bay Formation. The Surprise Bay Formation is dominantly a N-S striking regionally metamorphosed amphibolite grade meta-sedimentary unit with minor mafic intrusives. The western margin of the Surprise Bay Group was intruded by a 790Ma granite body (Calver, 2007) post dating the 760Ma Wickham Orogeny (Cox, 1989, Turner *et. al.* 1998).

The Eastern half of the Island is dominated by the (1000-750Ma) Naracoopa Formation which appears to be a correlate of the Cowrie Siltstone in NW Tasmania (Calver, 2007). The Naracoopa Formation consists of a thick succession of relatively unmetamorphosed shale, siltstone and fine grained muscovite-quartz sandstone. Along the Southeast Coast the siltstone is conformably overlain by the 580Ma Grassy Group and is considered a correlate of the Togari Group in NW Tasmania, (Calver, 2007).

The Grassy Group in the City of Melbourne Bay area is well described by Calver (2007) and Meffre *et. al.* (2004). A summary of the Grassy group stratigraphic sequence is described below:

Cottons Breccia - A basal unit of polymict cobble to boulder diamictite.

Cumberland Creek Dolostone - Calcareous sediments, shale with limestone/dolomite inter-beds. (Host Horizon for the Bold Head Scheelite Mineralisation).

Yarra Creek Shale - Planar laminated shale with rare volcanoclastic interbeds.

Grimes Intrusive Suite - Gabbroic intrusive sills of andesitic composition.

City of Melbourne Volcanics - Tholeiitic pillow lava, peperite and volcanoclastic sandstone.

Shower Drop Volcanics – Picritic, high MgO pillow lava and hyaloclastite.

Bold Head Volcanics – Tholeiitic basalt, volcanoclastic sandstone and conglomerate.

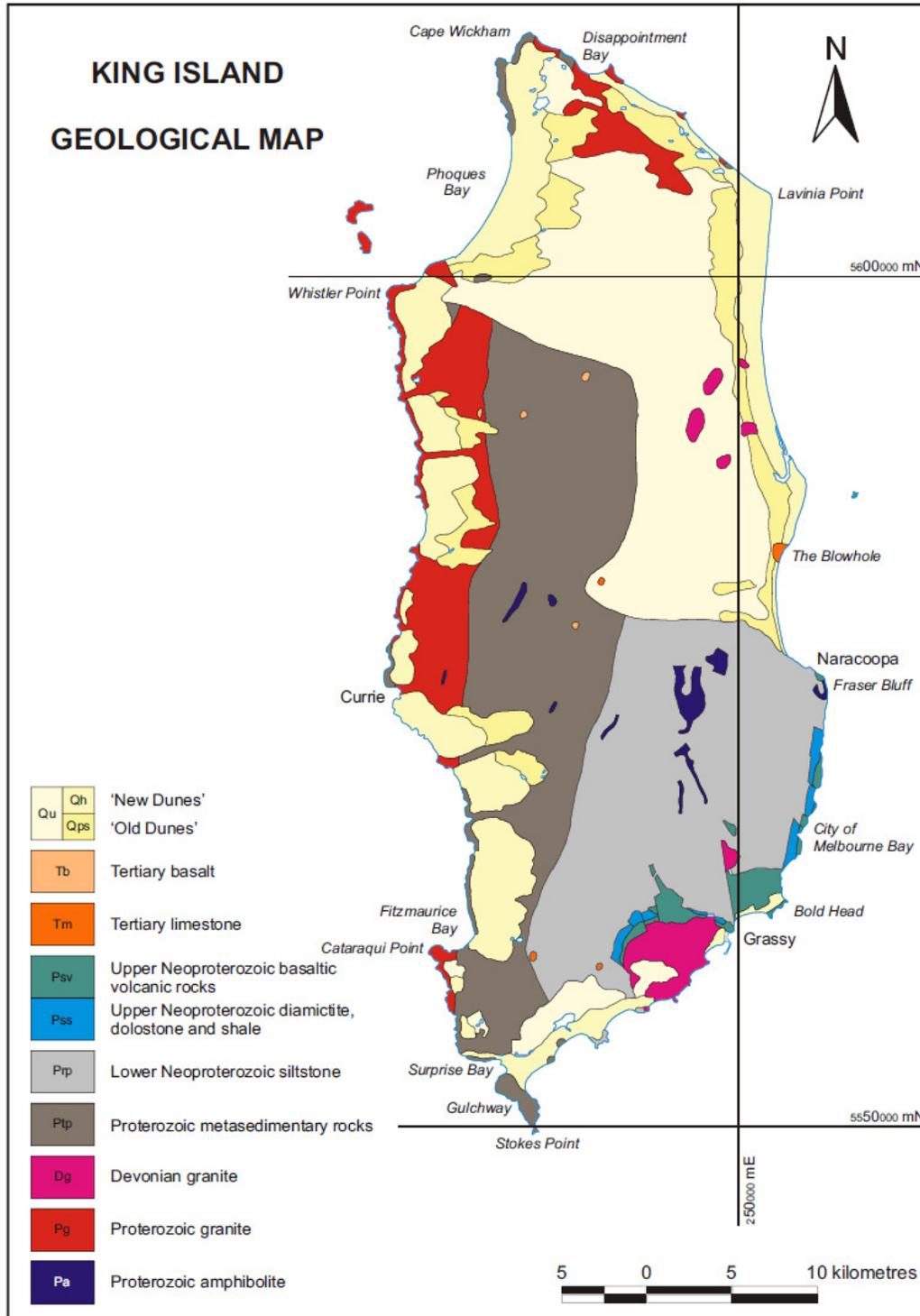


Figure 2. Regional Geology of King Island, (Calver 2007). Coordinates GDA94.



Three granite bodies, the Grassy, Bold Head and Sea Elephant plutons intrude the Proterozoic sediments on the southeast coastline of King Island. The intrusions are classified as I-type monzogranite-granodiorite (Calver, 2007). The Bold Head Granite may be a sliver of the larger grassy granite, separated by the N-S trending Grassy River Fault (Figures 1 and 2).

The Bold Head Granodiorite is porphyritic with large pink k-feldspar phenocrysts. The mineralogy consists of quartz, k-feldspar, plagioclase, biotite and amphibole with minor apatite, allanite, sphene, magnetite and zircon.

2.2 LOCAL GEOLOGY.

Scheelite skarn mineralisation has formed within the metamorphic aureole of the Bold Head and Grassy Granodiorite plutons where they have come into contact with the calcareous sediments and carbonates of the Lower grassy Group Cumberland Creek Dolostone. The Bold Head mineralisation and stratigraphic sequence is similar to that documented at the Dolphin Mine 3km to the south (Danielson, 1975, Figure 4). Mineralisation has formed by selective metasomatism, mainly within and immediately adjacent to carbonate horizons. The deposits formed over a 100-200m sequence of complex skarn mineralogy located in the lower part of the Grassy Group, with two main host horizons known as B and C lens hosted in carbonates of 10-30m thickness separated by a similar thickness of skarn altered volcanic sediments. Mineralisation appears to have occurred where carbonates come into direct contact with the intrusion, or adjacent to brittle faults tapping into the nearby intrusion.

Mine sequence rocks have been intensely contact metamorphosed and metasomatised and are described in drill logs and maps by the resultant skarn mineralogy and not the stratigraphic protolith described in the regional geology. Logging codes include:

Table 3. Bold Head DDH logging codes

Code	Geology
um	Upper metavolcanics
bh	Biotite-actinolite hornfels
pbh	Pyroxene-biotite hornfels
pgh	Pyroxene-garnet hornfels banded pyroxene andradite skarn (+/- Scheelite)
gh	Garnet hornfels, andradite skarn (+/- Scheelite)
ch	Marble
bfb	Banded footwall beds, interbedded marble and biotite-pyroxene grossularite skarn (+/- garnet, Scheelite)
lv	Lower metavolcanics

Structurally the Bold Head deposit is located within the base of the Grassy Group over a 700m embayment in the Bold Head pluton (Figures 5 and 6). It is bounded by the Boundary Fault to the east and the granodiorite to the west, north and south. The southern boundary appears to be influenced by a pre-intrusive ductile shear known as

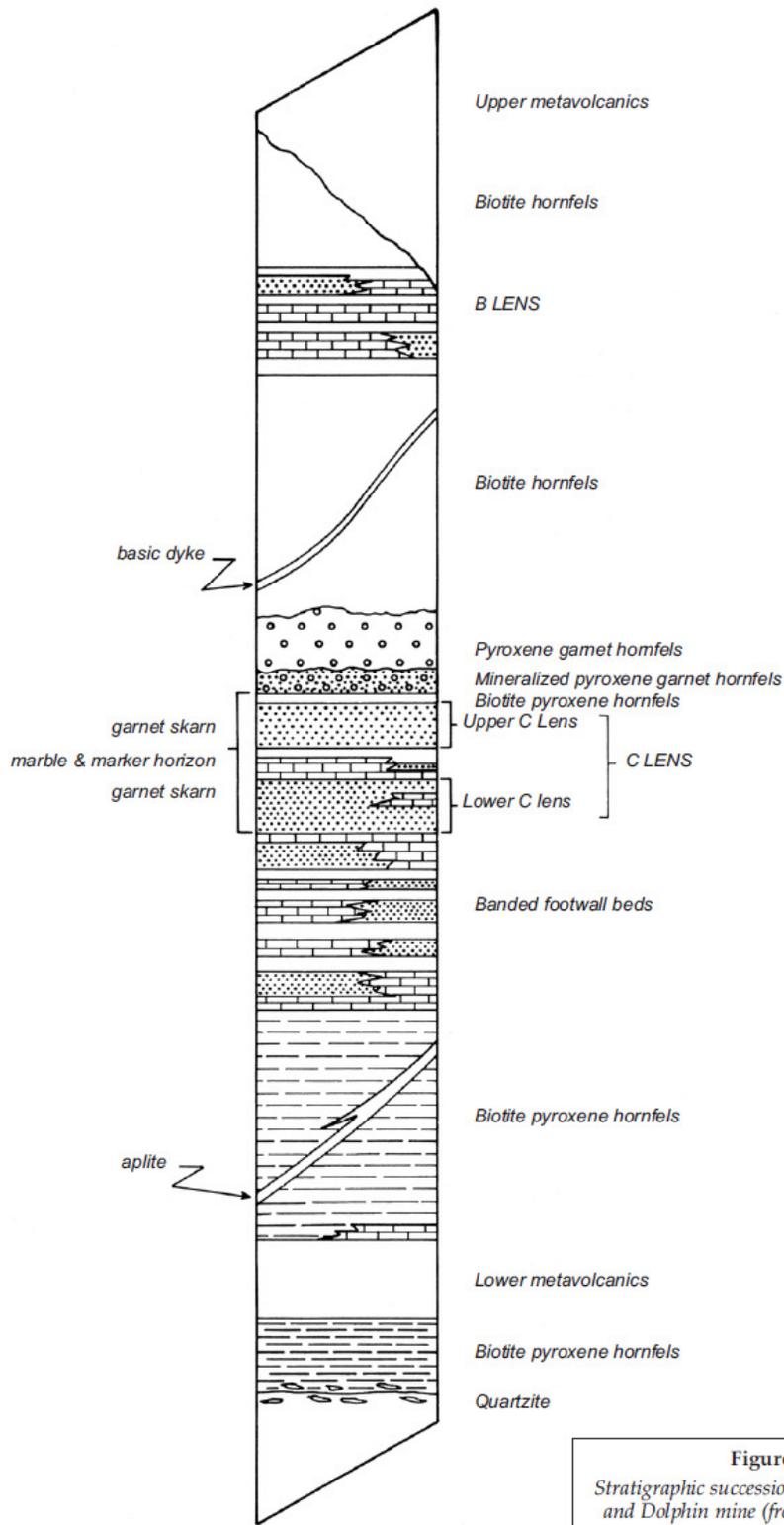
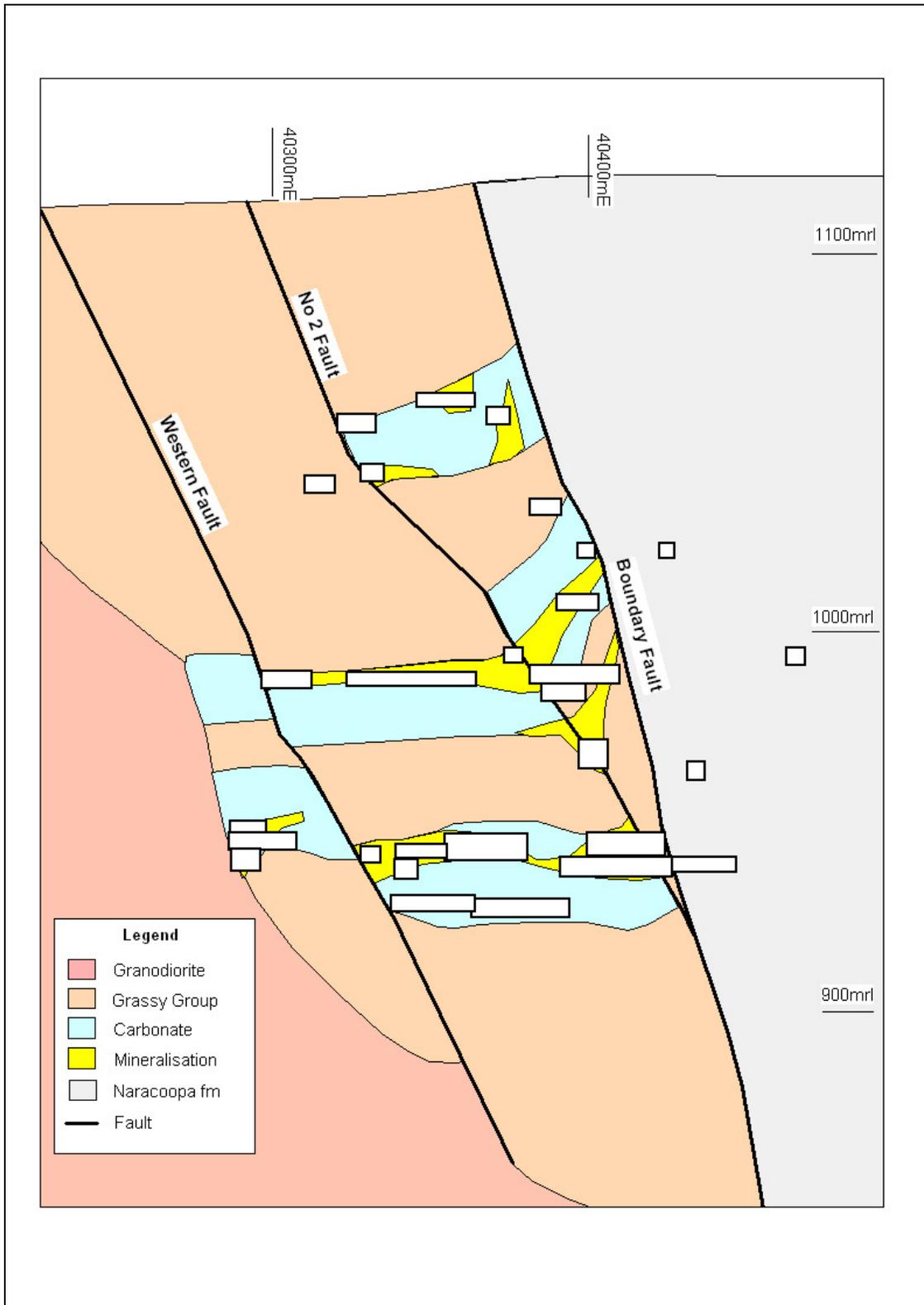


Figure 4
Stratigraphic succession, No. 1 Open Cut
and Dolphin mine (from Brown, 1990).

Figure 3. Stratigraphic column of the Grassy Group host sequence in the Grassy open cut (from Brown, 1990). The sequence is very similar to the Bold Head sequence 3km north.





the Grahams Road Fault. The Grahams Road Fault is an east-west striking, approximately 45° dipping shear zone resulting in attenuation and down-warping of the Grassy Group. The later granodiorite intrusion has truncated by the host sequence at about 10200mN BHMG. The sequence has been closed off by several deep exploration drill holes to the south.

The Boundary Fault is a north-south striking (Mine Grid) steeply east dipping reverse fault juxtaposing the basement Naracoopa Formation quartzite against the Lower Grassy Group. A significant splay off the Boundary Fault known as the No 2 Fault has resulted in a 4-500m by 40m slice of up thrown mine sequence known as the Fault Block. Immediately east of the No2 Fault there is an 80-100m wide slice of mine sequence hosting the Main B and C lens. A minor N-S striking fault termed the Western Fault has had a minor west side up displacement of the mine sequence within 20-30m of the granodiorite contact to the west. The West B and C lens are located between the Western Fault and the granodiorite.

Mineralisation in the Bold Head deposit is best developed within the C and B horizon within the fault block between the No2 Fault and Boundary Fault. The Main B and C horizon is well mineralised adjacent to the No2 Fault. Mineralisation and skarn development is generally strongest adjacent to the faults and on the upper and lower contacts of the B and C horizons. Mineralisation is also well developed in the banded footwall beds within the fault block and immediately above the granodiorite contact at the south end of the mine.



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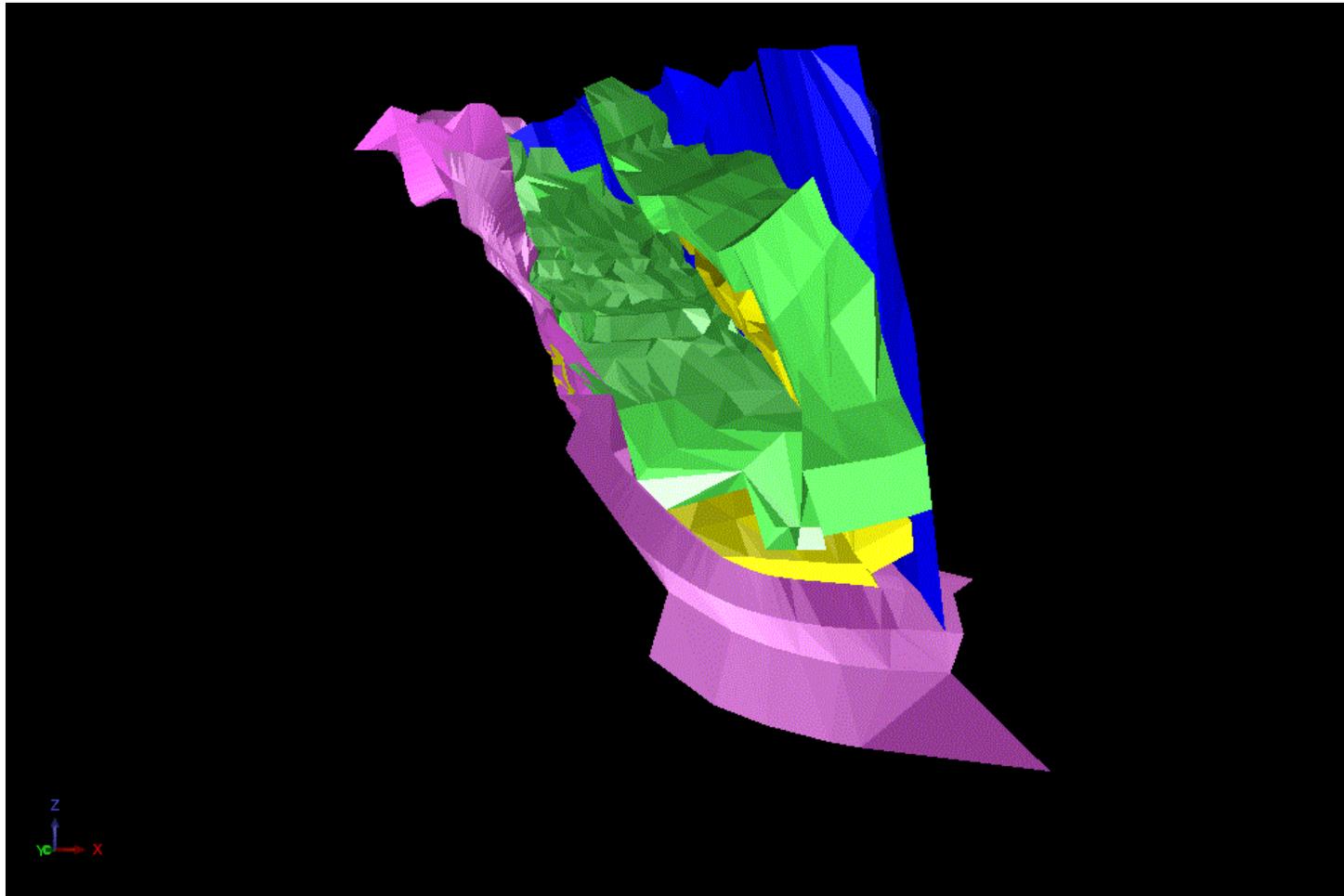


Figure 5. Bold Head Mine Sequence looking north. The sequence is bound by the Boundary Fault to the east, the granodiorite to the north, west and south. The southern margin is folded down by the Grahams Road Fault before truncation by the granodiorite. Note the offset in host sequence by the No2 fault just west of the Boundary Fault (approximately 200m width).

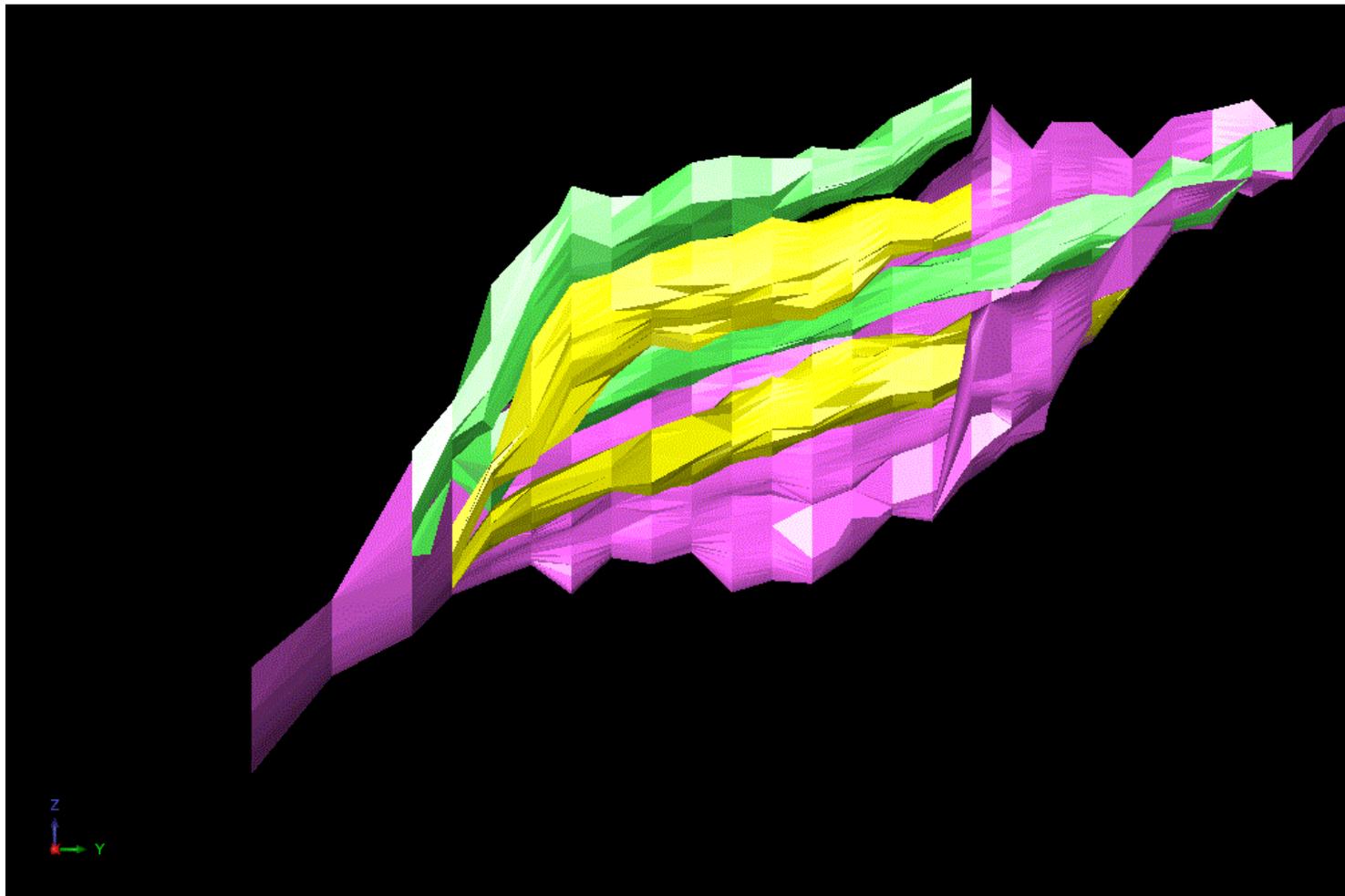


Figure 6. Long Projection of the Bold Head Mine Sequence looking west. Note the downward folding of the host sequence at the southern margin. The host sequence extends over a distance of about 700m.



3 DATA CAPTURE

All Diamond Drill Hole (DDH) logs for the Bold Head mine were completed between 1968 and 1983, prior to the widespread use of digital databases and mining software by the mining industry. All logging was completed by Geopeko geologists on site. The bulk of the logging appears to have been systematic and to a high standard with logs hand typed onto standard log sheets. The data has been drafted onto standard sections and level plans which are well presented. The technical standards set by Geopeko appear to be of a high industry standard, particularly after mining commenced.

DDH logs were available as scanned paper logs only and had to be manually entered into a digital format. A small number of DDH logs were incomplete or missing. The missing data is unlikely to have a material impact on the interpretation and estimation of the resource on a global level. Input data was validated using Surpactm software and by comparing plotted cross sections with the historic drafted sections. Minor discrepancies are evident on some sections, mainly due to survey differences between hand plotted and digitally plotted data. These discrepancies are unlikely to have a material impact on the resource estimate.

An updated and validated version of the Drill Database is located in digital format in the attached appendices.

Table 4. Summary of Bold Head DDH Sampling Techniques and Data

Criteria	Status
Drilling Techniques	<ul style="list-style-type: none">• NQ diamond core for surface DDH• BQ diamond core or equivalent for underground DDH.• 424 diamond holes for 32,388m
Sample recovery	<ul style="list-style-type: none">• Excellent. Generally 100%, with minor losses in broken ground, although not systematically reviewed in this report.
Logging	<ul style="list-style-type: none">• Geological and geotechnical logs on scanned hand typed logging sheets• Only limited drill core available in MRT core shed.• Core photographs and logs stored in MRT library
Sub-Sample preparation	<ul style="list-style-type: none">• Half core split on 1m samples while respecting geological contacts.• Historic sub-sample preparation technique not documented.
Sample preparation	<ul style="list-style-type: none">• Not documented, samples assayed in on site mine laboratories.



Criteria	Status
Assay QA/QC	<ul style="list-style-type: none">• Submission of pulp duplicates with every batch of samples.• Random independent laboratory analysis by Amdel Laboratories. QA/QC data not captured and reviewed in this report.• <i>It is recommended that a review of QAQC data be completed.</i>
Location of Data	<ul style="list-style-type: none">• All hole collar surveys by licensed mine surveyor.• All coordinates in or converted to metric BHMG.• Down hole surveys completed with Eastman Single Shot or Multi Shot cameras.• There is no interference from local magnetic fields.
Data Spacing and distribution	<ul style="list-style-type: none">• Drill spacing approximately 25 x 25 or better.• The majority of DDH have been drilled east-west or west-east, perpendicular to ore body strike.
Database Integrity	<ul style="list-style-type: none">• All data captured and stored in customised access database.• All historic drill logs entered into excel spreadsheets prior to being downloaded into database. Early logs used imperial measurements converted to metric using excel spreadsheets.• Data integrity validated with Surpac Software for EOH depth and sample overlaps.• Manual check by reviewing cross sections with the historic drafted sections and plans.



4 MINERAL RESOURCE ESTIMATION

The Bold Head Mineral Resource has been derived from a kriged block model created with Surpac™ software licensed to Tim Callaghan. The block model extends between 10100 and 10900N, 40150 and 40550E and 700 – 1150m RL.

4.1 GEOLOGICAL DOMAINING

Wire-framed solid models of geological and mineralisation domains were created from 25m and 12.5m spaced east west cross sections.

Mineralized WO₃ domains are delineated using a 0.5% cutoff and a minimum mining width of 3m as much as possible while maintaining geological continuity. Internal dilution was restricted to a maximum of 3m where possible. Solid models have been ‘snapped’ to drill holes where possible to accurately capture and model data and eliminate sectional projection inaccuracies.

Mineralised domains models are listed in Table 5. Geology solid models created during the interpretation of the geological data include the B and C horizons, the boundary fault, the granite and other major faults.

Table 5. Mineralised Domains

Domain	Code	Database flag
C lens - main upper contact	c_main_u	10
C lens - main lower contact	c_main_l	9
Mineralized banded footwall beds, sth end	bfb_275	1
C lens - west upper contact	west_c_u	14
C lens – west lower contact	west_c_l	13
B lens - main upper contact	b_main_u	8
B lens - main lower contact	b_main_l	7
B lens - west upper contact	west_b_u	12
B lens – west lower contact	west_b_l	11
C lens – fault block lower contact	fault_c_l	6
Boundary fault mineralisation	boundary_fault	3
B lens – fault block upper contact	fault_b_u	5
B lens – fault block lower contact	fault_b_l	4
Mineralized banded footwall beds, fault block	bfb_fault_350	2

4.2 COMPOSITING OF DATA

Data used for this estimation has been derived solely from DDH's.

DDH intercepts of solid models have been flagged with Surpac Software and relevant intervals stored in the access database. DDH data has been composited on 1m lengths.

Composites of less than 0.25m were not included in statistical studies or in the resource estimate.

Composited data is located as .csv files on the attached data disc in the appendices.



4.3 SAMPLE STATISTICAL STUDIES

Descriptive statistics and histograms of composited data for each domain are located in Appendix 2. All the data demonstrate a mildly positively skewed sample distribution typical of low grade base-metal deposits. Mean values for domains with greater than 150 samples range between 0.8 and 1% WO_3 . All domains have a coefficient of variation less than 1 with the exception of three. These three have been top cut to the values outlined in Table 6.

Table 6. Top cut data sets

Domain	CV	Percentile	Top Cut
B lens – fault block upper contact	1.04	97.5	3.5%
Boundary fault mineralisation	1.32	95	8%
C lens - main upper contact	1.86	97.5	5%

4.4 VARIOGRAM MODELING

Variography of 1m composited data was modeled using Surpac Software. The five larger domains with sufficient data points were modeled. Variogram models are located in Appendix 3.

Variograms typically displayed low nugget effect with ranges of about 20m. Two domains have nested spherical models that exhibit low nugget but a short range (5-7m) to the first structure, effectively a high nugget effect.

4.5 RESOURCE ESTIMATION PROCEDURE.

The Bold Head resource WO_3 grades have been interpolated into a blockmodel using an ordinary kriging algorithm. Block sizes were set at 10m x 10m x 10m with sub-celling to 1.25m in the x and z directions and 2.5m in the y direction.

Spherical variogram model parameters used for each domain are outlined in Table 7. Domains with smaller sample sets have been interpolated using parameters modeled for larger, similar domains.



Table 7. WO₃ Variogram Parameters (spherical and nested spherical models).

Domain	Nugget	Sill	Range	Major:semi	Major:minor
c_main_u	0.09	0.53	5.7	1	1
c_main_l		0.25	31.3	1	1
bfb_275					
west_c_u					
west_c_l					
b_main_u	0.05	0.77	24.6	1	1
b_main_l					
west_b_u					
west_b_l					
fault_c_l	0.09	0.55	34.3	1	1
boundary_fault					
fault_b_u	0	0.87	22.6	1	1
fault_b_l					
bfb_fault_350	0	0.42	9.5	1	1
		0.08	49.8	1	1

Table 8. Search Neighborhood

Ellipse plunge	-15
Ellipse bearing	180
Ellipse dip	0
Search Radius	100m
Major:semi major ratio	1
Major:minor ratio	2
Discretisation points	3:3:3
Minimum No of samples	5
Maximum No of samples	20

4.6 SPECIFIC GRAVITY

No specific gravity measurements were made for this estimate nor were any reports containing information concerning the specific gravity of the Bold Head mineralisation found. The Specific Gravity values used for the B and C lens at the Dolphin mine were applied to the Bold Head Mine as the geology is considered to be very similar.

This procedure is not of industry standard. Due to the variable nature of skarn formation it is likely there will be considerable variance in the bulk density of the ore.

It is recommended that specific gravity measurements be made during all subsequent drilling programs and the remaining core stored at MRT be accessed for specific gravity measurements

Specific Gravity factors applied for this estimate are:

B - Lens	SG = 3.1
C - Lens	SG = 3.4
Waste	SG = 2.9



5 DIGITAL MINE MODEL

A digital mine model was created from scanned level plans of the Bold Head Mine stored in the Library of MRT. Individual plans were digitized before being imported into Surpac as .dxf files. The files were converted to Surpac string files and RL's read from the plans assigned to adjacent points on the string files. Lines of best fit between recorded RL's were adjusted on screen to build up 3 dimension back plans of historical mine development. Solid models were created from the plans by projecting them down 5m in most cases.

It is apparent that the sill drives were surveyed on completion before the backs were stripped and fill placed to take the first lift from cut and fill stopes. This frequently has the result of an apparent gap evident between the sill plan and the backs of the first lift. Some flat back lifts were extended down by as much as 10m to cover gaps in the mined stopes apparent when visualized on screen.

Cut and fill accesses do not appear to have been surveyed either so there are filled voids accessing all stopes not represented on historic plans or the mine model.

There are obviously going to be some differences between the digital model and reality. These are unlikely to have a material impact on the Resource Estimate or preliminary technical investigations into re-accessing the Bold Head Mine. However they may well be significant on a local scale when mining commences. ***It is recommended that a procedure be developed for all areas being re-accessed near old workings to involve some exploratory drilling including some diamond drilling to test the resource and probe holes to test for voids.***

The Bold Head Digital Mine model is located in the disc attached in the appendices. Several views of the historic workings are shown in Figures 7-10. The model was used to assess remnant resources in this estimate.



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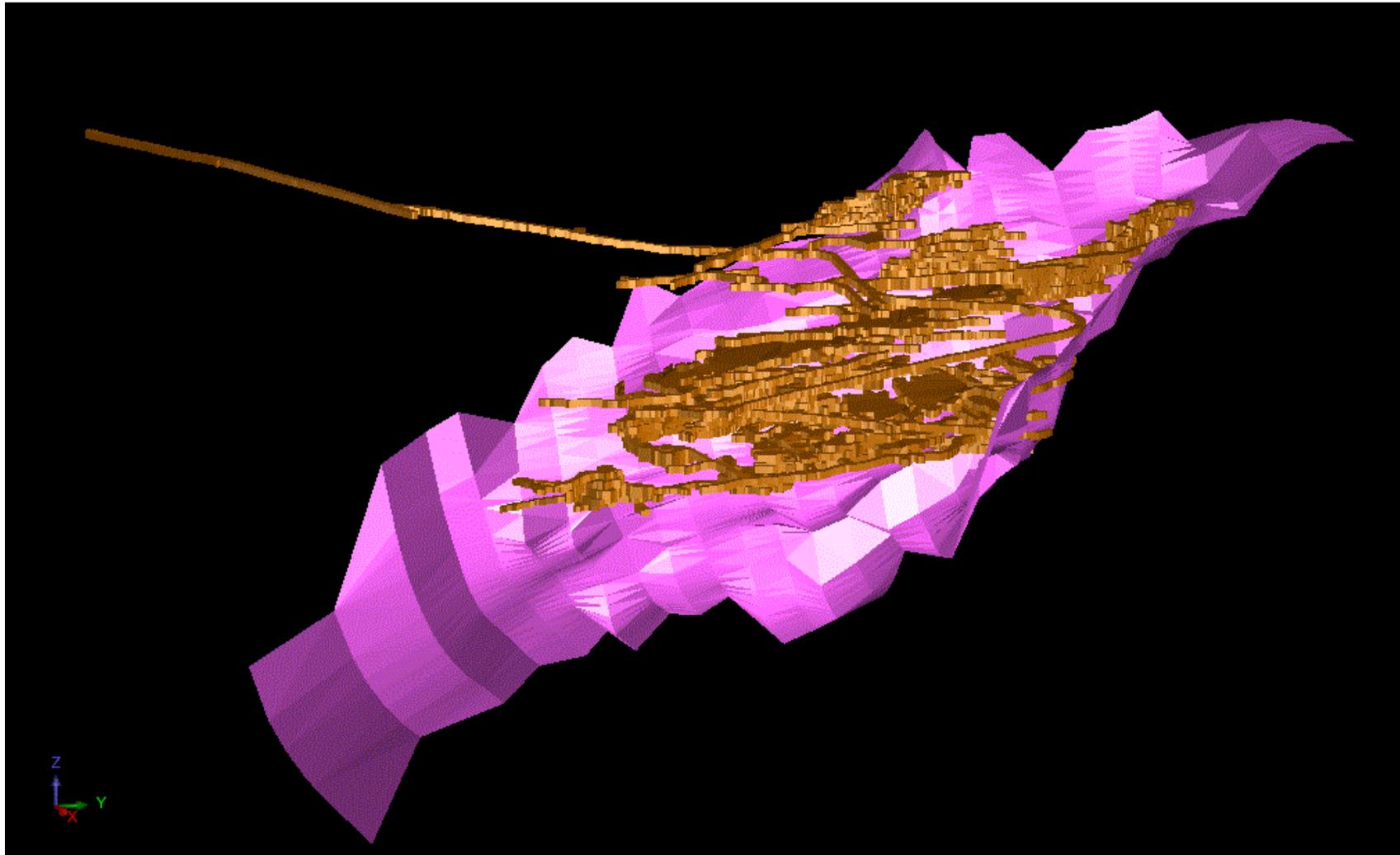


Figure 7. Bold Head Mine and granite surface looking northwest. Mine workings extend over about 600m in length and to a depth of 225m.



6 RESULTS

The Bold Head Resource results are located in Table 9.

Table 9. Bold Head Resource 0.5% WO₃ Cut Off

Classification	Tonnes	WO ₃ %
Inferred	140,000	1.22
Indicated	1,500,000	0.93
Total	1,650,000	0.96

The Resource includes areas that were not accessed by the time of mine closure particularly much of the south end of the deposit, western areas, and the upper levels of some stopes. There is also significant remnant resource in stope pillars, rib pillars and areas abandoned due to access difficulties. Some of these in the upper levels may be amenable to exploitation from an open pit. Remnant resources close to the mine workings at deeper levels are probably not recoverable with the exception of the resource remaining in crowns above working levels left after mine closure.

There remain significant resources close to the surface that may be exploitable from an open pit where all remnant pillars could potentially be recoverable. Table 10 demonstrates the tonnages available at 50m, 100m and 150m below the surface.

Table 10. Bold Head Resource by Level

	Classification	Tonnes	WO ₃ %
1050m Level	Indicated	110,000	0.98
	Inferred	50,000	2.04
	Total	160,000	1.29
1000m level	Indicated	290,000	0.87
	Inferred	140,000	1.21
	Total	430,000	0.98
950m level	Indicated	640,000	0.92
	Inferred	310,000	1.06
	Total	950,000	0.97

Figures 8 -10 demonstrate the remaining resources available above the 1050mRL (50m depth), 1000mRL (100m Depth) and 950mRL (150m depth) respectively.



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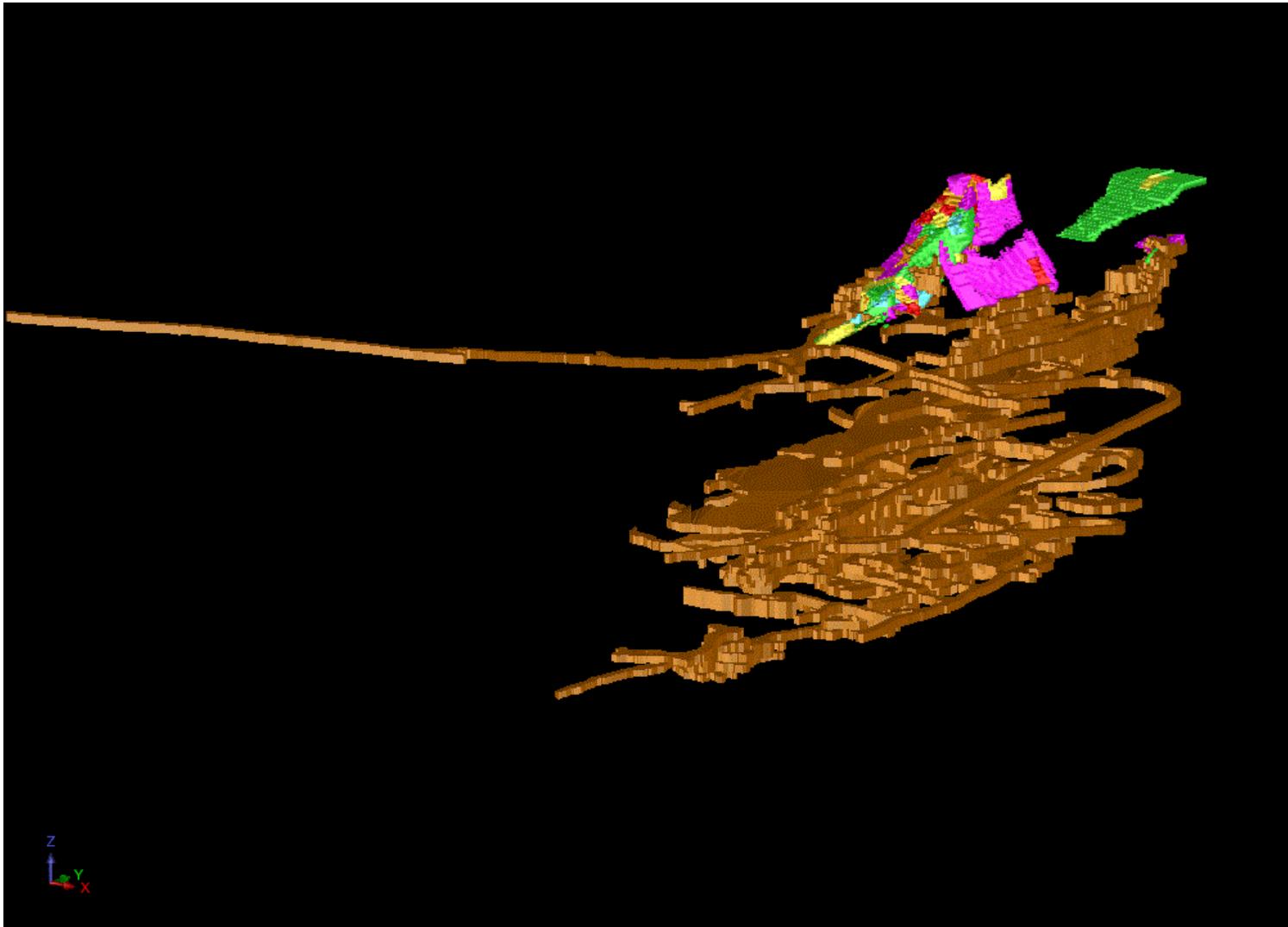


Figure 8. Bold Head Mine with Remnant Resources above 1050mRL, looking NW. Remnant Indicated and Inferred Resource of 160,000t @ 1.29% WO₃.



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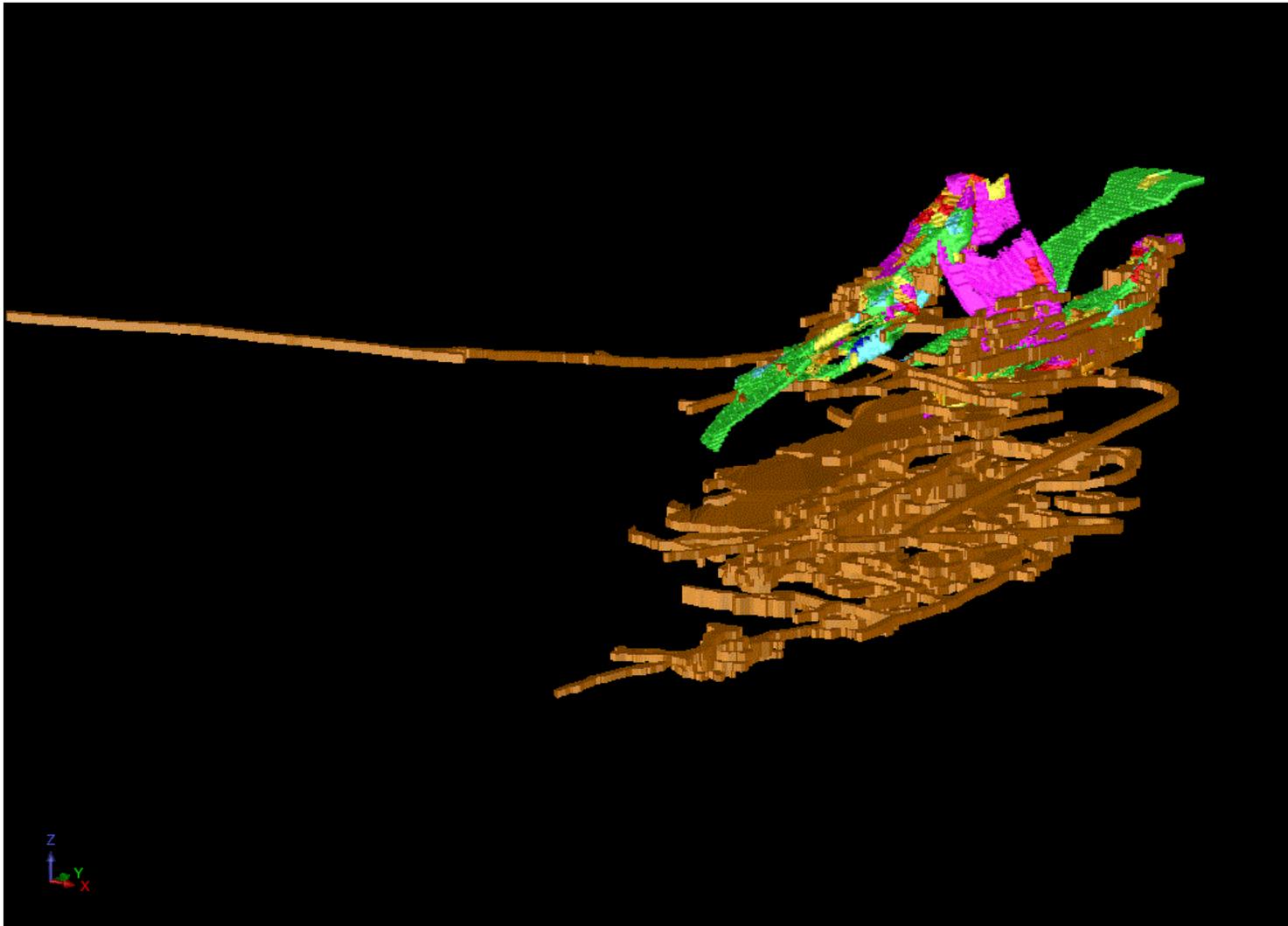


Figure 9. Bold Head Mine with Remnant Resources above 1000mRL, looking NW. Remnant Indicated and Inferred resource of 430,000t @ 0.98% WO₃.



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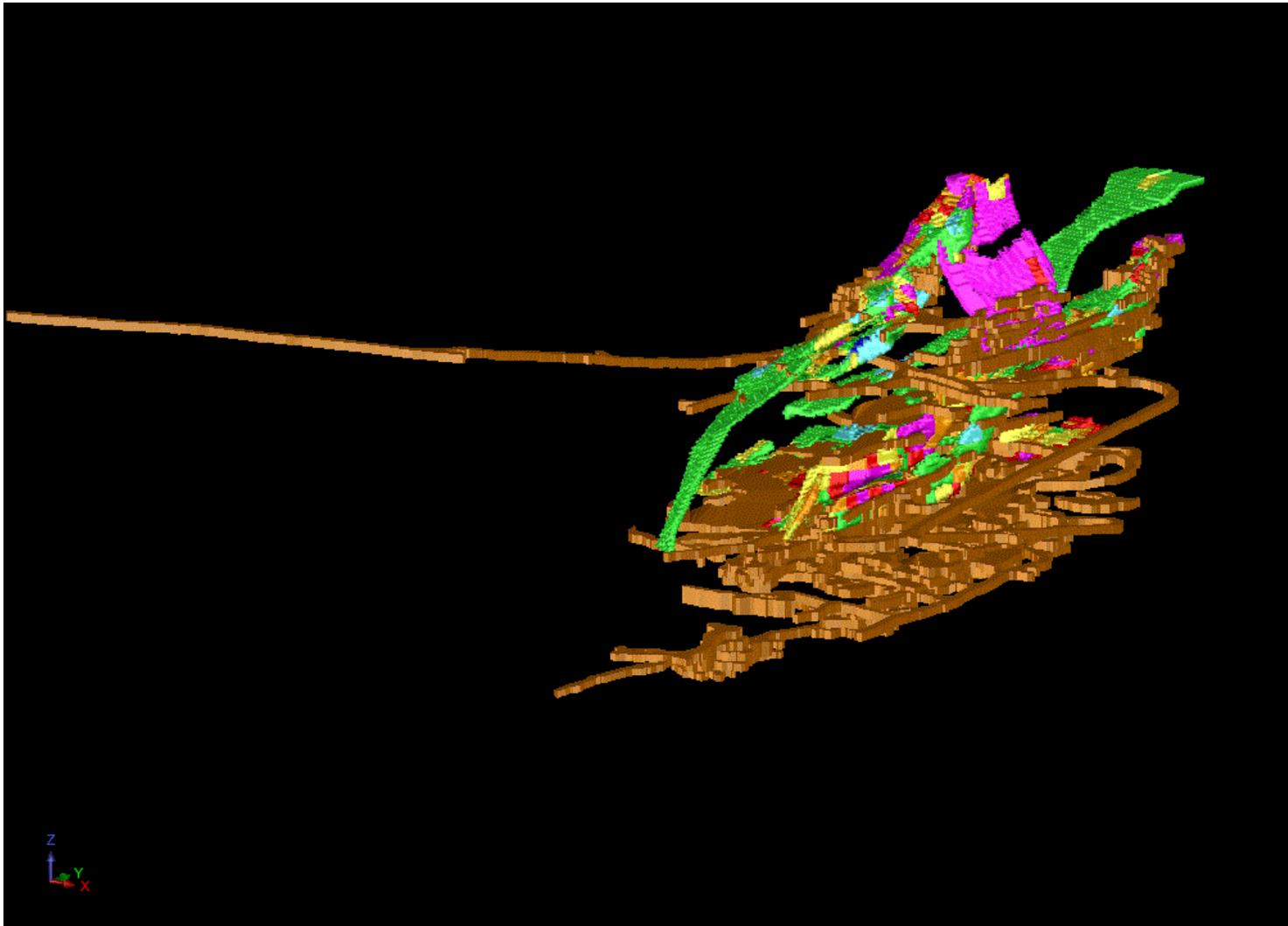


Figure 10. Bold Head Mine with Remnant Resources above 950mRL, looking NW. Remnant Indicated and Inferred resource of 950,000t @ 0.97% WO₃.



7 VALIDATION AND CLASSIFICATION

The blockmodel and digital mine model were validated by comparing the sliced models with the drafted Geopeko cross sections. No significant discrepancies were observed.

An inverse distance squared estimate was also run as a comparison with the kriged grades to check the grade interpolation. There is no appreciable difference between the two estimates with the inverse distance squared estimate at 0.98% WO₃ compared to 0.96% WO₃ for the kriged estimate.

The estimated grade compares well with historic resource estimates of 1.8Mt @ 0.9% WO₃ at a 0.3% cutoff (Fudge, 1990).

The majority of the resource has been classified as an Indicated Resource. None of the resource has been classified as measured due to the uncertainty of the historic mine workings, the lack of industry standard bulk specific gravity measurements, and the need for QA/QC analysis.

The southern end of the resource has been classified as Inferred due to lower density of drill intercepts.

The Boundary Fault Ore has also been classified as Inferred as there is some uncertainty on the grade interpolation which may be conditionally biased by a few high grade drill intercepts and one drill hole that has drilled down the geological structure.

Classification codes built into the block model are as follows:

Code	Status
1	Previously Mined
2	Inferred resource
3	Indicated Resource



8 RECOMMENDATIONS

The remnant resource in the upper mine provides an excellent opportunity for early mill feed. The mineralisation associated with the Boundary Fault Ore body is higher grade than much of the remaining resource and also happens to be the most accessible in the upper levels of the mine. There is some uncertainty in the grade interpolation and geological interpretation of the Boundary Fault and a short drilling program (approximately 1-2000m) is recommended to confirm the mineralisation and improve the resource classification to Indicated or Measured.

It is recommended that several pit optimizations be run to determine the feasibility of open cut mining of the upper mine levels as this would be the easiest and most efficient early option.

There is some opportunity for low tonnage underground production with remnant resources remaining at the deep southern end of the mine and above some of the historic stopes such as the crown pillar above the 1960 level in the C-Lens Fault Block on section 10500 (Figure 4 and 11). It is unlikely that rib and room pillars can be recovered from underground.

There is limited opportunity for significant resource extensions in and around the Bold Head mine as the host horizon is bound structurally in all directions and is limited to a small basin of 650m x 200m. Minor resource extensions (in the order of 50-100,000t) are likely from the northwest and southern ends of the mine area. There is minor exploration potential west of the western fault, particularly to the north.

Unfortunately the Grahams Road Fault, Boundary Fault and granite contact mean that conceptual grass roots exploration is required south of the Bold Head Mine and north of Grassy.

A summary of recommendations in order of priority is:

- Confirm origin and projection of the Bold Head Mine Grid.
- Short drilling program confirming and extending shallow mineralisation at the north end of the Mine.
- Provide the block model and digital mine plan to a competent Mining Engineer to allow a pit optimization study for early mine development as well as investigating the potential for underground development.
- QA/QC analysis.
- Bulk Specific gravity study.
- Conceptual targeting of additional resources between Bold Head and Grassy.

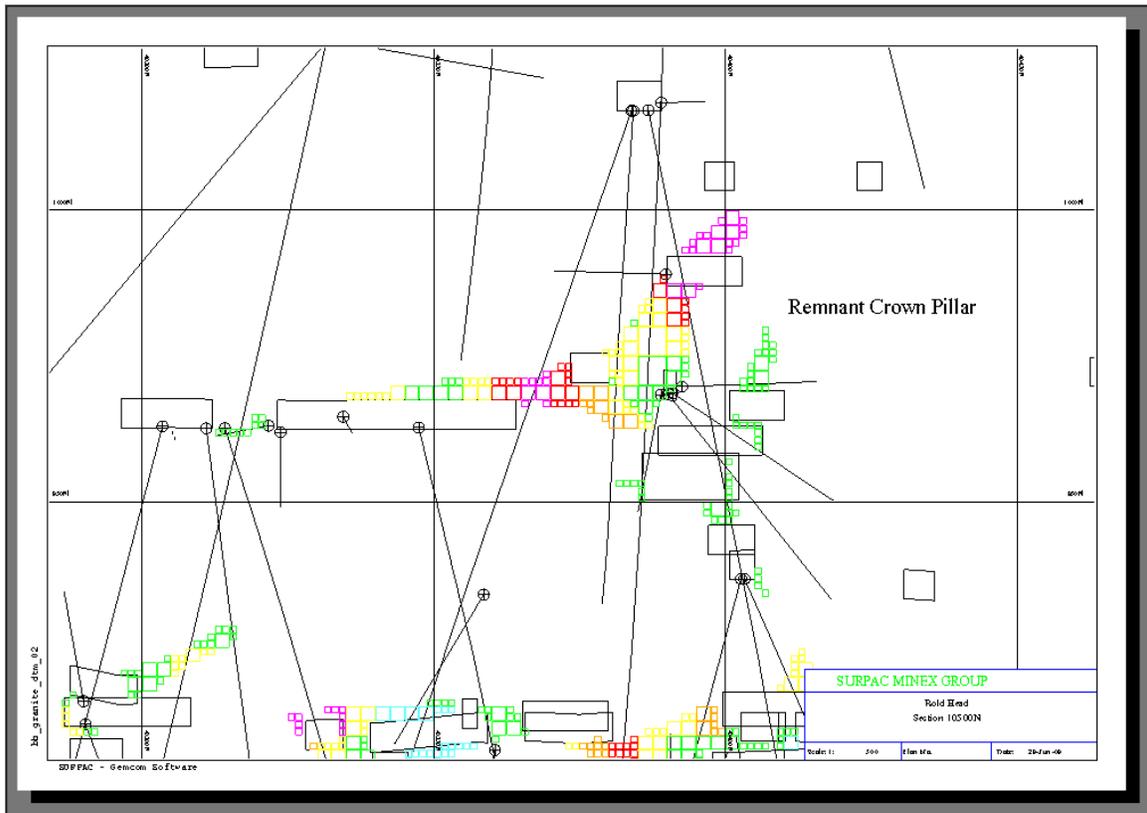


Figure 11. Section 10500N with remnant crown pillar



ADDITIONAL NOTES

LIMITATIONS AND CONSENT

The report is provided to the King Island Scheelite Project in the context of an independent review and compilation of geological information, Mine Infrastructure and Mineral Resource Estimates and should not be used or relied upon for any other purpose.

This report has been prepared using information available to the Author at the time of writing. The opinions stated herein are given in good faith and with the belief that the basic assumptions are factual and correct and the interpretations reasonable.

This report is not intended for the use as a public document nor, in whole or in part, in a public document without written consent to the form and context in which it appears.

COMPETENT PERSON AND JORC CODE

This report was prepared in accordance with the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' ("JORC Code") by Tim Callaghan, who is a Member of The Australian Institute of Mining and Metallurgy ("AusIMM"), has a minimum of five years experience in the estimation and assessment and evaluation of Mineral Resources of this style and is the competent Person as defined in the JORC Code. This announcement accurately summarises and fairly reports his estimations and he has consented to the resource report in the form and context it appears.

STATEMENT OF INDEPENDENCE

Tim Callaghan has no material interest or entitlement in the securities or assets of the King Island Scheelite project or any associated companies.



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Appendix 1

Bold Head Scheelite Domain intercepts



wo3_impacts			
bhid	depth_from	depth_to	flag
BH221	177.64	181.68	8
BH221	235.6	236.8	10
BH221	92.8	95.1	5
BH222	157.55	161.36	8
BH229	141.7	145.2	8
BH229	211.2	218.5	9
BH229	60	69.49	5
BH231	87.59	94.9	4
BH231	156.36	158.13	8
BH231	201.8	211.8	10
BH234	132.9	138.7	8
BH234	26.52	43.89	5
BH237	83.13	85.82	4
BH238	159.17	162.82	8
BH238	220.17	223.49	13
BH239	84.77	89.7	8
BH240	79.9	85.79	8
BH241	28	46.76	5
BH243	95.4	98.5	12
BH244	115.71	118.77	12
BH246	100.47	104.41	4
BH246	157.15	161.53	8
BH246	82.3	86.77	5
BH249	130.6	135.57	2
BH249	102.6	106.2	6
BH250_1WR02	302	307	9
BH250_1WR02	293	295	10
BH251	141.8	142.03	8
BH251	171.3	185	14
BH252	95.9	120.26	8
BH252	152.4	155.4	10
BH253A	153.8	163.4	8
BH253A	65.1	69.6	5
BH254	77.72	81.38	12



wo3_impacts			
bhid	depth_from	depth_to	flag
BH264	57.6	62	3
BH264	123.4	128.57	8
BH264	190.8	201.58	9
BH264	170.2	178.9	10
BH265	81.94	82.18	4
BH265	188.4	195.7	10
BH265	53.09	56.84	5
BH268	121.9	125	8
BH268	157.1	163.7	13
BH269	136.25	161.48	6
BH269	171.51	176	7
BH269	163.92	165.33	8
BH269	217.3	219.2	10
BH270	169.77	183.22	13
BH277	85.47	89.89	4
BH277	151.32	154.5	8
BH277	220.14	228.29	9
BH277	200.95	209.57	10
BH277	63.14	70	5
BH279	185.66	191.28	2
BH279	148.23	171.88	6
BH279	224.03	229.2	10
BH282	128.77	131.58	8
BH282	211.5	214.3	9
BH282	176.74	186.3	10
BH282	24.16	43.74	5
BH285	203.6	221.3	10
BH300_1	93	100	6
BH300_1	118	123.1	9
BH300_1	112	115	10
BH300_1	15	19	5
BH300_2	90	94	6
BH300_3	92	95	6
BH300_5	142	144	1
BH300_5	120	128	9
BH300_5	18	21	5
BH300_8	43.26	43.63	10
BH301	128.2	132.3	12
BH306	248.2	249.36	10
BH307	165.01	168.91	8
BH307	220.7	223.1	10



wo3_impacts			
bhid	depth_from	depth_to	flag
BH307	81.1	85	5
BH308	176.2	179.72	8
BH308	242.01	244.4	13
BH309	215.8	221.77	7
BH309	201.18	203.08	8
BH309	270.92	280.2	9
BH309	250.97	251.91	10
BH309	118.01	119.57	5
BH312	162.2	167.6	11
BH313	136.2	141.79	2
BH313	102.74	117.03	6
BH313	156.53	161.22	7
BH313	142.63	143.29	2
BH313	141.79	142.63	8
BH313	182.58	191.1	10
BH314	209.05	218.07	9
BH314	191.4	195.1	10
BH315	99.7	102.7	4
BH315	162.09	165.85	8
BH315	226.2	228.6	13
BH315	88.7	93.9	5
BH316	129.75	134.66	8
BH316	26.95	43.25	5
BH319	201.2	207.9	2
BH319	110.4	114.23	8
BH319	181.7	184.56	9
BH319	158.06	161.23	10
BH320	202.8	226.92	2
BH320	63.4	66.4	3
BH320	112.06	116.86	8
BH320	177.5	183.73	9
BH320	159.88	163.83	10
BH322	61.6	65.8	12
BH325_1	76.95	78.97	6
BH325_11	0	0.1	7
BH325_17	39	44	9
BH325_18	20.5	28.5	9
BH325_2	136	143	1
BH325_2	74	82.27	6
BH325_2	106.02	113.97	9
BH325_3	67	74	6



wo3_impacts			
bhid	depth_from	depth_to	flag
BH325_3	107.26	109.69	9
BH325_5	56	62	8
BH325_6	74.79	76.55	7
BH325_6	50	53.05	8
BH325_6	135	139	9
BH326	28	30.2	12
BH327	28	31.4	12
BH350_11	28	40	9
BH350_11	13.5	16.5	10
BH350_12	29	35	9
BH350_12	14	17	10
BH350_14	21	30	9
BH350_2	40	44	2
BH350_2	26.23	28.58	6
BH350_2	98	101	9
BH350_3	35.38	62	6
BH350_4	39.77	59	6
BH350_4	59	63	7
BH350_4	124	128	9
BH350_4	94	97	10
BH350_5	50	54	8
BH350_6	57	63	2
BH350_6	30.8	45.22	6
BH350_6	100	104	9
BH370	49	54	4
BH370	30.89	37.62	5
BH372	35.51	35.75	3
BH373	66	69	3
BH373	130	135.71	8
BH374	27.06	40	4
BH374	13.52	27.06	5
BH375_10	19	22	13
BH375_2	6.82	8.03	6
BH375_3	6.28	10	6
BH375_4	39.21	42	8
BH375_5	40	42	2
BH375_5	15	33.02	6
BH375_5	42	51.19	7
BH375_6	24	28	2
BH375_6	6	16	6
BH375_6	73	76	10



wo3_impacts			
bhid	depth_from	depth_to	flag
BH375_7	5.6	15	6
BH375_7	82.66	92	10
BH375_8	0	2	8
BH375_8	76	89	13
BH375_9	0.46	2	8
BH400_1	37	47	2
BH400_1	4	14	6
BH400_10	0	0.3	8
BH400_10	79	83	13
BH400_12	10	18	6
BH400_2	3	13.55	6
BH400_3	35	37.27	2
BH400_3	10	13	6
BH400_3	68	71	10
BH400_4	3	14.03	6
BH400_5	11	18	6
BH400_5	28	34	8
BH400_6	35	42	2
BH400_6	6	15	6
BH400_7	12	24	6
BH400_7	24.33	25.95	8
BH400_7	78	81	10
BH400_8	81	84	10
BH400_9	0	0.24	8
BH400_9	67	78.1	13
BH415_1	0	2.08	5
BH420_1	76.02	80.34	2
BH420_1	0	0.06	5
BH420_2	97.8	108.89	2
BH420_2	66.11	81.93	6
BH420_2	0	0.11	5
BH425_1	0	9	6
BH425_10	10	26.23	2
BH425_10	59	64	10
BH425_11	0	4	8
BH425_11	71.58	71.98	13
BH425_12	0	4	8
BH425_12	76	80	13
BH425_13	0	7	8
BH425_2	16	27	2
BH425_2	0	5	6



wo3_impacts			
bhid	depth_from	depth_to	flag
BH425_3	21	35	2
BH425_3	0	5.37	6
BH425_4	19	25	2
BH425_4	0	7.68	6
BH425_5	0	8	6
BH425_5	17.09	20	8
BH425_6	0	10	6
BH425_6	15	20	8
BH425_7	18	36	2
BH425_7	0	6.87	6
BH425_8	0	3	6
BH425_8	15.7	22.68	8
BH425_9	0	20.8	2
BH430_1	0	4	5
BH430_2	0	3.73	5
BH440_1	0	11.71	5
BH450_1	83	95	2
BH450_1	70	80	6
BH450_1	0	0.28	5
BH450_10	53	58	10
BH450_11	0.54	4.66	8
BH450_11	63	66	10
BH450_12	0.8	4.81	8
BH450_12	60	64	13
BH450_2	89.4	100.21	2
BH450_2	76.12	87.4	6
BH450_2	143.4	146.4	10
BH450_2	0	0.3	5
BH450_3	14.79	23	2
BH450_3	0	1.15	6
BH450_4	11	24	2
BH450_4	0	2	6
BH450_5	12	27	2
BH450_5	0	5.6	6
BH450_6	0	8.01	6
BH450_6	9.9	10	6
BH450_6	8.01	9.9	8
BH450_7	0	3	5
BH450_9	0	6	2
BH450_9	60	65	10
BH460_1	2.92	24.53	5



wo3_impacts			
bhid	depth_from	depth_to	flag
BH465_1	0	1.68	5
BH475_10	0	17	8
BH475_11	0	15.94	8
BH475_12	0	0.25	8
BH475_13	0	1	8
BH475_14	0	1	8
BH475_15	0	1	8
BH475_16	0	0.17	8
BH475_16	62.79	71	10
BH475_17	76	85	10
BH475_2	56	66	2
BH475_2	28	45	6
BH475_3	34	57	6
BH475_3	103	111	10
BH475_4	54.83	59	8
BH475_5	20	26	2
BH475_5	0	5	6
BH475_6	16	34	2
BH475_6	0	6.03	6
BH475_7	0	7	6
BH490_1	16.37	21.3	4
BH490_1	22.45	24.97	4
BH490_2	0	1	8
BH490_4	0	5	13
BH500_1	58.4	72	2
BH500_1	25	33	6
BH500_1	123	126	9
BH500_1	106	113	10
BH500_10	0	3	6
BH500_10	8.48	10	8
BH500_10	15.76	20.09	7
BH500_11	0	13.1	8
BH500_12	1.71	16.41	8
BH500_13	0	0.65	8
BH500_13	45	57.05	13
BH500_14	0	0.57	6
BH500_16	16.5	20.5	4
BH500_17	68.03	71.28	9
BH500_17	49	53	10
BH500_18	33	36.81	13
BH500_19	33	37	10



wo3_impacts			
bhid	depth_from	depth_to	flag
BH500_19	18	33	10
BH500_20	22	35	10
BH500_21	0	2	8
BH500_21	73.18	76.13	9
BH500_21	51	61	10
BH500_22	2.24	19	10
BH500_23	0	16.51	10
BH500_24	1.29	12.39	10
BH500_25	20.3	30	10
BH500_26	19	24	9
BH500_27	14	17	10
BH500_3	40	45.84	6
BH500_3	45.84	46.46	8
BH500_3	46.46	54	8
BH500_4	48	52.94	8
BH500_4	130	134	9
BH500_4	107	118	10
BH500_5	65	68.12	8
BH500_5	106.07	109.11	13
BH500_6	82	85	11
BH500_7	10	15	2
BH500_8	12	18	2
BH500_8	0	0.37	6
BH500_9	12	16.18	2
BH500_9	0	0.82	6
BH510_1	4	8.38	5
BH510_2	0.28	4.18	4
BH525_1	13.62	14.05	2
BH525_10	16	21	9
BH525_10	0	3	10
BH525_11	0	3.17	14
BH525_12	0	2.52	14
BH525_13	11	22	13
BH525_13	0	6	14
BH525_2	11.03	28.22	2
BH525_2	0	5	8
BH525_3	60	63	9
BH525_3	42.25	50	10
BH525_4	0	18	2
BH525_4	46	56	9
BH525_4	36	39	10



wo3_impacts			
bhid	depth_from	depth_to	flag
BH525_5	0	0.12	8
BH525_5	59	62	9
BH525_5	41.48	49	10
BH525_7	0	1.87	8
BH525_7	48.53	53.97	10
BH525_8	0	0.24	8
BH525_8	0.34	0.66	8
BH525_8	71.64	77.42	9
BH525_8	53.42	62	10
BH525_9	0	0.4	10
BH530_1	5	14.96	5
BH530_2	7	12	5
BH530_3	18.27	22	5
BH530_4	7	14	4
BH530_6	3	8	5
BH530_8	8	17	5
BH535_6	0	0.18	10
BH550_1	2	14	6
BH550_1	32	35	8
BH550_1	79.71	86.33	10
BH550_11	0	2	10
BH550_12	0	1.53	13
BH550_13	0	4	13
BH550_14	0	5	13
BH550_15	0	15	13
BH550_16	0	7	13
BH550_17	0	10	13
BH550_2	16	19.36	2
BH550_2	0	11	6
BH550_3	22	50	2
BH550_3	0	12	6
BH550_4	0	3.55	6
BH550_6	0	11	8
BH550_7	30.07	41	10
BH550_7	3	8	7
BH550_8	69	74	9
BH550_8	48	56	10
BH550_9	1.14	20.52	10
BH560_1	0	13.05	4
BH560_2	8.24	11.43	3
BH565_1	0	15.72	8



wo3_impacts			
bhid	depth_from	depth_to	flag
BH565_2	0	2.91	8
BH570_1	0	3.9	4
BH570_1	10	18	5
BH575_1	0	6.16	6
BH575_10	39	44	13
BH575_12	0	10	10
BH575_13	0.32	12	10
BH575_14	1.41	2.13	10
BH575_16	0	7.28	10
BH575_2	25	29	2
BH575_2	0	0.25	6
BH575_2	92	96	9
BH575_3	0	0.84	2
BH575_4	11	13	2
BH575_6	0	3.39	8
BH575_6	45	53	10
BH575_7	0	2.91	8
BH575_7	67	76	9
BH575_7	48	55	10
BH575_9	0	1.02	12
BH586_1	2	6.8	7
BH588_2	0	1.09	12
BH595_1	0	2.9	10
BH595_2	0	2.61	10
BH600_10	0	0.3	12
BH600_13	0	1	8
BH600_13	36.88	42.45	13
BH600_2	16	20	8
BH600_2	73.46	77.9	10
BH600_2	35	40	7
BH600_3	17	19	8
BH600_4	17	21	3
BH600_4	0	4	6
BH600_6	0	2	8
BH600_6	67	79	9
BH600_6	49	52	10
BH600_7	0	4	8
BH600_7	67	78	9
BH600_7	50	53	10
BH600_8	0	3.85	8
BH600_8	63	76	9



wo3_impacts			
bhid	depth_from	depth_to	flag
BH600_8	46	52	10
BH600_9	0	0.43	12
BH605_1	10	14.99	12
BH605_3	0	0.31	9
BH605_4	0	1	9
BH605_5	0	1.18	9
BH615_5	0	8.09	2
BH615_6	1.48	1.5	3
BH615_6	35	36.2	4
BH615_6	26.09	35	4
BH615_6	1.5	26.09	5
BH620_1	24	28	6
BH620_2	52.27	53.98	2
BH620_2	27.99	41.9	6
BH620_3	36.65	36.67	6
BH620_3	36.71	48	6
BH620_3	116	122	9
BH620_3	97.95	108.29	10
BH620_3	63	66	7
BH620_4	62.88	70.04	8
BH620_5	46.98	50	8
BH620_6	16	26	4
BH620_6	38.04	44.91	5
BH620_7	0	4.72	10
BH625_1	7	9	3
BH625_13	96.53	103.97	2
BH625_13	0	1.23	8
BH625_13	62	71	9
BH625_13	53	55	10
BH625_14	0	23	2
BH625_15	0	12	2
BH625_16	0	0.34	13
BH625_17	0	4.1	2
BH625_18	6.55	26.4	3
BH625_2	8	21	8
BH625_3	104.51	127	2
BH625_3	10	13	8
BH625_3	78	89	9
BH625_4	16.37	22.83	8
BH625_4	99	103	13
BH625_4	78	81	14



wo3_impacts			
bhid	depth_from	depth_to	flag
BH625_5	0	0.98	8
BH625_7	8	11	3
BH625_8	97.63	98.89	2
BH625_8	100.43	104.56	2
BH625_8	70	73	9
BH625_9	91	93	2
BH625_9	0	1.61	8
BH635_1	87	107	2
BH635_1	64.27	70.46	9
BH635_1	46	50	10
BH635_2	93	103	2
BH635_2	59.89	67	9
BH635_2	40	45	10
BH635_3	3.03	10	2
BH635_4	0	12.78	2
BH635_5	0	16.78	2
BH635_6	0	7.18	2
BH635_8	0.15	8.71	13
BH635_8	25	29	14
BH635_9	0.06	7.5	13
BH635_9	28	32.84	14
BH650_2	13	17.11	8
BH650_4	95.32	100.2	2
BH650_4	58	63	9
BH650_4	42	45	10
BH650_5	60	69	9
BH650_5	46	49	10
BH650_6	53.36	62.87	13
BH650_6	34	38	14
BH665_1	0	3.2	8
BH675_1	99	104	8
BH675_10	0	4	8
BH675_11	0	5	8
BH675_12	0	2	8
BH675_13	0	2.36	8
BH675_15	0	5	8
BH675_2	11	13	8
BH675_3	0	14	8
BH675_3	16	18	7
BH675_4	0	6	8
BH675_5	0	6	7



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wo3_impacts			
bhid	depth_from	depth_to	flag
BH675_7	14	16.94	8
BH675_8	0	3	8
BH675_9	0	3.87	8
BH675_9	49	55	9
BH700_1	21	27.62	12
BH700_2	7.42	9.51	12
BH700_3	2.58	7	8
BH700_4	2.52	7.33	8
BH710_1	0	3.65	8
BH725_2	61.89	75.38	8
BH725_5	0	9	8
BH725_6	0	12	8
BH750_2	57	60	8
BH775_1	33.07	36.73	12
BH800_1	28	34	12



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Appendix 2

1m Composite statistics



Output Filename: Fault_C_Lower

Jun 18, 2009

Statistics Report

File Fault C L.str-3.40282e+038.str

String range All
Variable D1

Number of samples 512
Minimum value 0.010000
Maximum value 5.880000

	Ungrouped Data	Grouped Data
Mean		0.901164
0.900637		
Median		0.710000
0.708611		
Geometric Mean		0.625601
0.652966		
Variance		0.665624
0.669811		
Standard Deviation		0.815858
0.818420		
Coefficient of variation		0.905337
0.908712		

Moment 1 About Arithmetic Mean	0.000000
0.000000	
Moment 2 About Arithmetic Mean	0.665624
0.669811	
Moment 3 About Arithmetic Mean	1.530091
1.569631	
Moment 4 About Arithmetic Mean	6.342464
6.558619	

Skewness	2.817565
2.863313	
Kurtosis	14.315292
3.498586	

Natural Log Mean	-0.469042	-
0.426230		
Log Variance	0.925110	
0.672147		

10.0 Percentile	0.187700
20.0 Percentile	0.365000
30.0 Percentile	0.490000
40.0 Percentile	0.598300
50.0 Percentile (median)	0.710000
60.0 Percentile	0.820000
70.0 Percentile	1.005000



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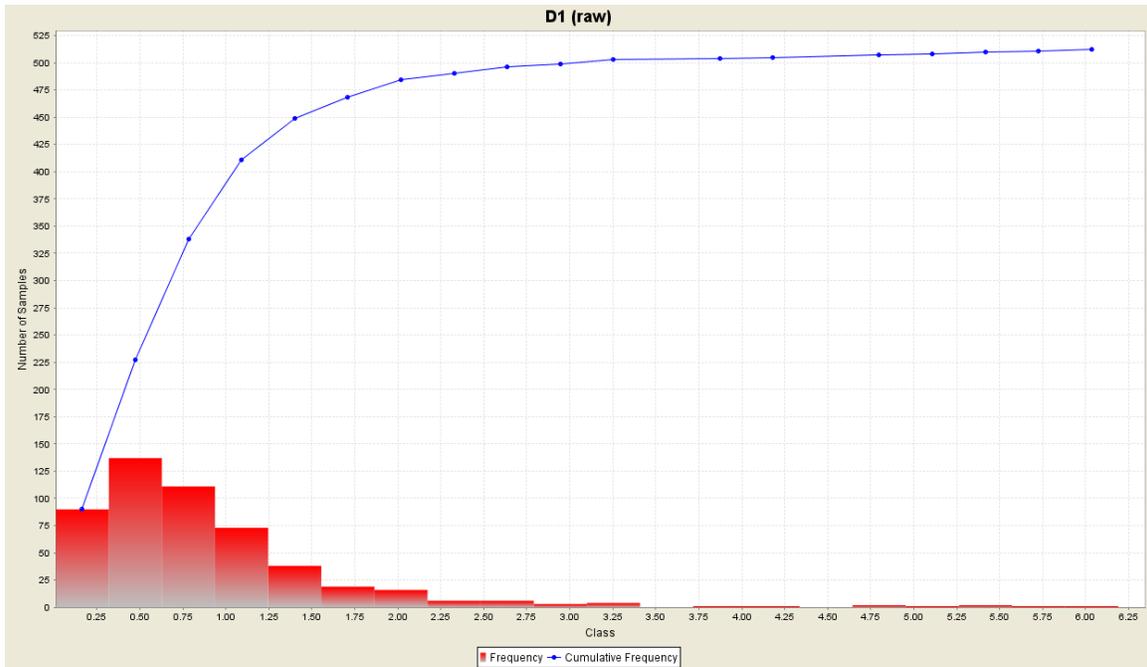
80.0 Percentile	1.240000
90.0 Percentile	1.740000
95.0 Percentile	2.239600
97.5 Percentile	3.095001
Trimean	0.743837
Biweight	0.716307
MAD	0.326307
Alpha	0.349620
Sichel-t	0.992226

Normal Histogram Tabulation

D1

Class From Dec Mean	Class To Dec Freq %	Count	Mean	Freq %	Cum Count	Cum Mean	Cum Freq %	Dec Count
0.010000	0.318947	90	0.165867	0.176	90	0.165867	17.5781	512
0.901164	100.0000							
0.318947	0.627895	137	0.495031	0.268	227	0.364525	44.3359	422
1.057982	82.4219							
0.627895	0.936842	111	0.767442	0.217	338	0.496844	66.0156	285
1.328593	55.6641							
0.936842	1.245789	73	1.082730	0.143	411	0.600907	80.2734	174
1.686568	33.9844							
1.245789	1.554737	38	1.398492	0.074	449	0.668408	87.6953	101
2.123006	19.7266							
1.554737	1.863684	19	1.719563	0.037	468	0.711083	91.4063	63
2.560014	12.3047							
1.863684	2.172632	16	2.022569	0.031	484	0.754438	94.5313	44
2.922936	8.5938							
2.172632	2.481579	6	2.298133	0.012	490	0.773341	95.7031	28
3.437432	5.4688							
2.481579	2.790526	6	2.591800	0.012	496	0.795338	96.8750	22
3.748150	4.2969							
2.790526	3.099474	3	2.936333	0.006	499	0.808210	97.4609	16
4.181781	3.1250							
3.099474	3.408421	4	3.255000	0.008	503	0.827667	98.2422	13
4.469192	2.5391							
3.717368	4.026316	1	3.820000	0.002	504	0.833605	98.4375	9
5.008833	1.7578							
4.026316	4.335263	1	4.287500	0.002	505	0.840444	98.6328	8
5.157437	1.5625							
4.644211	4.953158	2	4.756000	0.004	507	0.855890	99.0234	7
5.281714	1.3672							
4.953158	5.262105	1	4.980000	0.002	508	0.864008	99.2188	5
5.492000	0.9766							
5.262105	5.571053	2	5.450000	0.004	510	0.881993	99.6094	4
5.620000	0.7813							
5.571053	5.880000	1	5.700000	0.002	511	0.891421	99.8047	2
5.790000	0.3906							
5.880000	6.188947	1	5.880000	0.002	512	0.901164	100.0000	1
5.880000	0.1953							

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Fault_C_Lower, Cumulative Frequency Histogram, 1m composites.



Output Filename: **Fault_B_Lower**
18, 2009

Jun

Statistics Report

File Fault B L.str-3.40282e+038.str

```

-----
String range           All
Variable              D1

Number of samples           75
Minimum value              0.010000
Maximum value              4.500000

```

	Ungrouped Data	Grouped
Data		
Mean	0.765623	
0.777239		
Median	0.560000	
0.575470		
Geometric Mean	0.485365	
0.539479		
Variance	0.572199	
0.555612		
Standard Deviation	0.756439	
0.745394		
Coefficient of variation	0.988004	
0.959028		
Moment 1 About Arithmetic Mean	0.000000	
0.000000		
Moment 2 About Arithmetic Mean	0.572199	
0.555612		
Moment 3 About Arithmetic Mean	1.037997	
1.059519		
Moment 4 About Arithmetic Mean	3.400088	
3.595256		
Skewness	2.398143	
2.558298		
Kurtosis	10.384734	
3.432143		
Natural Log Mean	-0.722854	-
0.617151		
Log Variance	1.151602	
0.758659		
10.0 Percentile	0.086500	
20.0 Percentile	0.263450	
30.0 Percentile	0.369900	
40.0 Percentile	0.415400	
50.0 Percentile (median)	0.560000	
60.0 Percentile	0.699151	



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70.0 Percentile	0.820000
80.0 Percentile	1.068000
90.0 Percentile	1.650000
95.0 Percentile	2.168250
97.5 Percentile	2.915400
Trimean	0.579975
Biweight	0.552775
MAD	0.287775
Alpha	0.277170
Sichel-t	0.853084

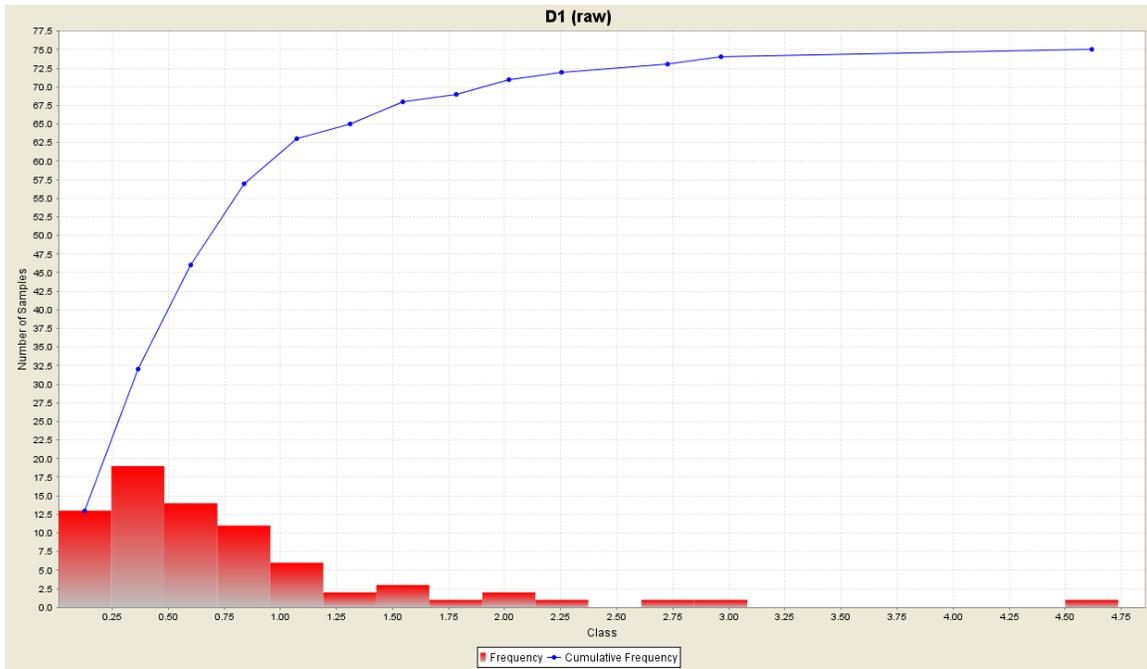
Normal Histogram Tabulation
D1

Class	From	Class To	Count	Mean	Freq %	Cum Count	Cum Mean	Cum
Freq %	Dec	Count	Dec	Mean	Dec	Freq %		
0.010000	0.246316	13	0.105623	0.173	13	0.105623		
17.3333	75	0.765623	100.0000					
0.246316	0.482632	19	0.347979	0.253	32	0.249522		
42.6667	62	0.904010	82.6667					
0.482632	0.718947	14	0.577993	0.187	46	0.349491		
61.3333	43	1.149698	57.3333					
0.718947	0.955263	11	0.815909	0.147	57	0.439502		
76.0000	29	1.425693	38.6667					
0.955263	1.191579	6	1.062600	0.080	63	0.498844		
84.0000	18	1.798339	24.0000					
1.191579	1.427895	2	1.345200	0.027	65	0.524886		
86.6667	12	2.166208	16.0000					
1.427895	1.664211	3	1.596800	0.040	68	0.572176		
90.6667	10	2.330410	13.3333					
1.664211	1.900526	1	1.860000	0.013	69	0.590841		
92.0000	7	2.644814	9.3333					
1.900526	2.136842	2	1.996451	0.027	71	0.630435		
94.6667	6	2.775617	8.0000					
2.136842	2.373158	1	2.330000	0.013	72	0.654040		
96.0000	4	3.165200	5.3333					
2.609474	2.845789	1	2.800000	0.013	73	0.683437		
97.3333	3	3.443600	4.0000					
2.845789	3.082105	1	3.030800	0.013	74	0.715158		
98.6667	2	3.765400	2.6667					
4.500000	4.736316	1	4.500000	0.013	75	0.765623		
100.0000	1	4.500000	1.3333					

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Fault_B_lower, Cumulative Frequency Histogram, 1m composites.



Output Filename: Fault_B_Upper

Jun 18, 2009

Statistics Report

File Fault B U.str-3.40282e+038.str

```

-----
String range                All
Variable                    D1

Number of samples          217
Minimum value              0.020000
Maximum value              6.600000

Data
Mean                      0.868717
0.882598
Median                    0.640000
0.656869
Geometric Mean            0.556115
0.610144
Variance                  0.823226
0.817977
Standard Deviation        0.907318
0.904421
Coefficient of variation   1.044434
1.024726

Moment 1 About Arithmetic Mean 0.000000
0.000000
Moment 2 About Arithmetic Mean 0.823226
0.817977
Moment 3 About Arithmetic Mean 2.276293
2.341080
Moment 4 About Arithmetic Mean 10.545530
11.152826

Skewness                  3.047541
3.164496
Kurtosis                  15.560746
3.498920

Natural Log Mean          -0.586780    -
0.494060
Log Variance              1.058383
0.728351

10.0 Percentile           0.130000
20.0 Percentile           0.266000
30.0 Percentile           0.417950
40.0 Percentile           0.518200
50.0 Percentile (median)  0.640000
60.0 Percentile           0.770000

```



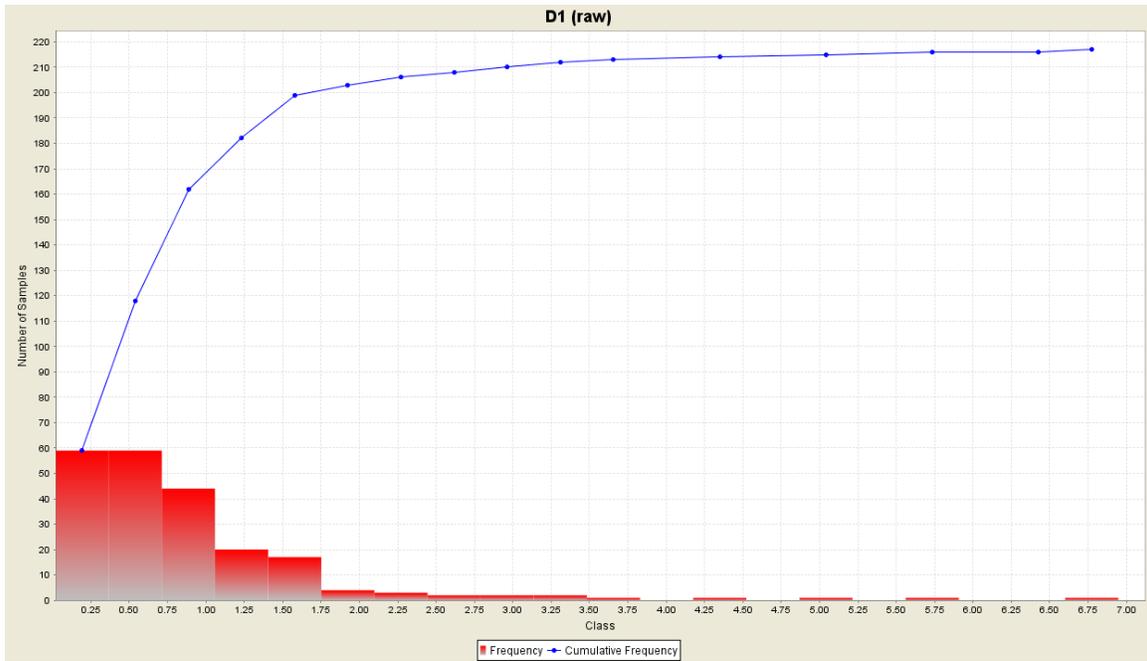
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70.0 Percentile	0.924600
80.0 Percentile	1.254000
90.0 Percentile	1.700000
95.0 Percentile	2.520000
97.5 Percentile	3.540000

Trimean	0.671613
Biweight	0.647939
MAD	0.335001
Alpha	0.342909
Sichel-t	0.940549

Normal Histogram Tabulation
D1

Class	From	Class To	Count	Mean	Freq %	Cum Count	Cum Mean	Cum
Freq %	Dec	Count	Dec	Mean	Dec	Freq %		
0.020000	0.366316	59	0.184005	0.272	59	0.184005		
27.1889	217	0.868717	100.0000					
0.366316	0.712632	59	0.533788	0.272	118	0.358897		
54.3779	158	1.124401	72.8111					
0.712632	1.058947	44	0.844427	0.203	162	0.490769		
74.6544	99	1.476382	45.6221					
1.058947	1.405263	20	1.204660	0.092	182	0.569219		
83.8710	55	1.981945	25.3456					
1.405263	1.751579	17	1.593576	0.078	199	0.656727		
91.7051	35	2.426109	16.1290					
1.751579	2.097895	4	1.910000	0.018	203	0.681422		
93.5484	18	3.212389	8.2949					
2.097895	2.444211	3	2.310000	0.014	206	0.705139		
94.9309	14	3.584500	6.4516					
2.444211	2.790526	2	2.670000	0.009	208	0.724032		
95.8525	11	3.932091	5.0691					
2.790526	3.136842	2	2.959500	0.009	210	0.745322		
96.7742	9	4.212556	4.1475					
3.136842	3.483158	2	3.290000	0.009	212	0.769328		
97.6959	7	4.570571	3.2258					
3.483158	3.829474	1	3.700000	0.005	213	0.783087		
98.1567	5	5.082800	2.3041					
4.175789	4.522105	1	4.410000	0.005	214	0.800036		
98.6175	4	5.428500	1.8433					
4.868421	5.214737	1	5.140000	0.005	215	0.820221		
99.0783	3	5.768000	1.3825					
5.561053	5.907368	1	5.564000	0.005	216	0.842183		
99.5392	2	6.082000	0.9217					
6.253684	6.600000	0	0.000000	0.000	216	0.842183		
99.5392	1	6.600000	0.4608					
6.600000	6.946316	1	6.600000	0.005	217	0.868717		
100.0000	1	6.600000	0.4608					



Fault_B_Upper, Cumulative Frequency Histogram, 1m composites.



Output Filename: BFB_Fault_350
18, 2009

Jun

Statistics Report

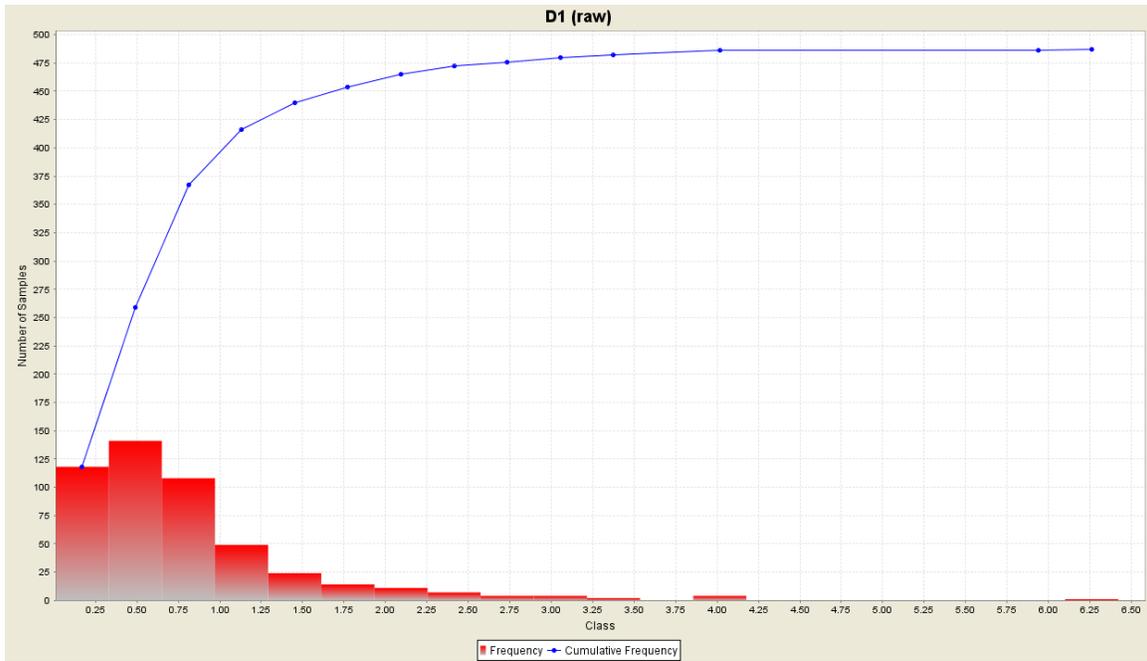
File	Bfb Fault350.str	
String range	All	
Variable	D1	
Number of samples	487	
Minimum value	0.010000	
Maximum value	6.100000	
	Ungrouped Data	Grouped Data
Mean	0.783885	0.788938
Median	0.620000	0.615817
Geometric Mean	0.517803	0.567155
Variance	0.506797	0.504114
Standard Deviation	0.711897	0.710010
Coefficient of variation	0.908165	0.899956
Moment 1 About Arithmetic Mean	0.000000	0.000000
Moment 2 About Arithmetic Mean	0.506797	0.504114
Moment 3 About Arithmetic Mean	0.905649	0.932226
Moment 4 About Arithmetic Mean	3.320353	3.490885
Skewness	2.510199	2.604526
Kurtosis	12.927526	3.668297
Natural Log Mean	-0.658161	-0.567123
Log Variance	1.124066	0.682933
10.0 Percentile	0.141450	
20.0 Percentile	0.272000	
30.0 Percentile	0.410000	
40.0 Percentile	0.501000	
50.0 Percentile (median)	0.620000	
60.0 Percentile	0.727650	
70.0 Percentile	0.885000	
80.0 Percentile	1.090000	
90.0 Percentile	1.580000	
95.0 Percentile	2.135000	
97.5 Percentile	2.775000	
Trimean	0.642500	
Biweight	0.611203	
MAD	0.308797	
Alpha	0.334217	
Sichel-t	0.906717	
Normal Histogram Tabulation		
D1		



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Class From	Class To	Count	Mean	Freq %	Cum Count	Cum Mean	Cum
Freq %	Dec	Count	Dec	Freq %			
0.010000	0.330526	118	0.166158	0.242	118	0.166158	
24.2300		487	0.783885	100.0000			
0.330526	0.651053	141	0.495507	0.290	259	0.345456	
53.1828		369	0.981424	75.7700			
0.651053	0.971579	108	0.796621	0.222	367	0.478224	
75.3593		228	1.281925	46.8172			
0.971579	1.292105	49	1.128041	0.101	416	0.554765	
85.4209		120	1.718698	24.6407			
1.292105	1.612632	24	1.441746	0.049	440	0.603146	
90.3491		71	2.126335	14.5791			
1.612632	1.933158	14	1.766464	0.029	454	0.639019	
93.2238		47	2.475913	9.6509			
1.933158	2.253684	11	2.064845	0.023	465	0.672748	
95.4825		33	2.776891	6.7762			
2.253684	2.574211	7	2.377857	0.014	472	0.698036	
96.9199		22	3.132914	4.5175			
2.574211	2.894737	4	2.712800	0.008	476	0.714967	
97.7413		15	3.485273	3.0801			
2.894737	3.215263	4	3.132475	0.008	480	0.735113	
98.5626		11	3.766173	2.2587			
3.215263	3.535789	2	3.425000	0.004	482	0.746274	
98.9733		7	4.128286	1.4374			
3.856316	4.176842	4	3.987000	0.008	486	0.772947	
99.7947		5	4.409600	1.0267			
5.779474	6.100000	0	0.000000	0.000	486	0.772947	
99.7947		1	6.100000	0.2053			
6.100000	6.420526	1	6.100000	0.002	487	0.783885	
100.0000		1	6.100000	0.2053			

1/1



Fault_B_Upper, Cumulative Frequency Histogram, 1m composites.



Output Filename: Main_B_lower

Jun 18, 2009

Statistics Report

File Main B L.str-3.40282e+038.str

```

-----
---
String range                All
Variable                    D1

Number of samples          51
Minimum value              0.100000
Maximum value              2.500000

                                Ungrouped Data   Grouped

Data
Mean                        0.821329
0.819505
Median                       0.790000
0.758647
Geometric Mean              0.582744
0.586770
Variance                    0.364449
0.364803
Standard Deviation          0.603696
0.603989
Coefficient of variation     0.735023
0.737017

Moment 1 About Arithmetic Mean 0.000000
0.000000
Moment 2 About Arithmetic Mean 0.364449
0.364803
Moment 3 About Arithmetic Mean 0.158449
0.167706
Moment 4 About Arithmetic Mean 0.359751
0.380830

Skewness                    0.720166
0.761134
Kurtosis                    2.708492
1.260178

Natural Log Mean            -0.540007   -
0.533123
Log Variance                0.816489
0.772227

10.0 Percentile             0.172200
20.0 Percentile             0.210000
30.0 Percentile             0.300000
40.0 Percentile             0.475000
50.0 Percentile (median)    0.790000
60.0 Percentile             0.855000

```

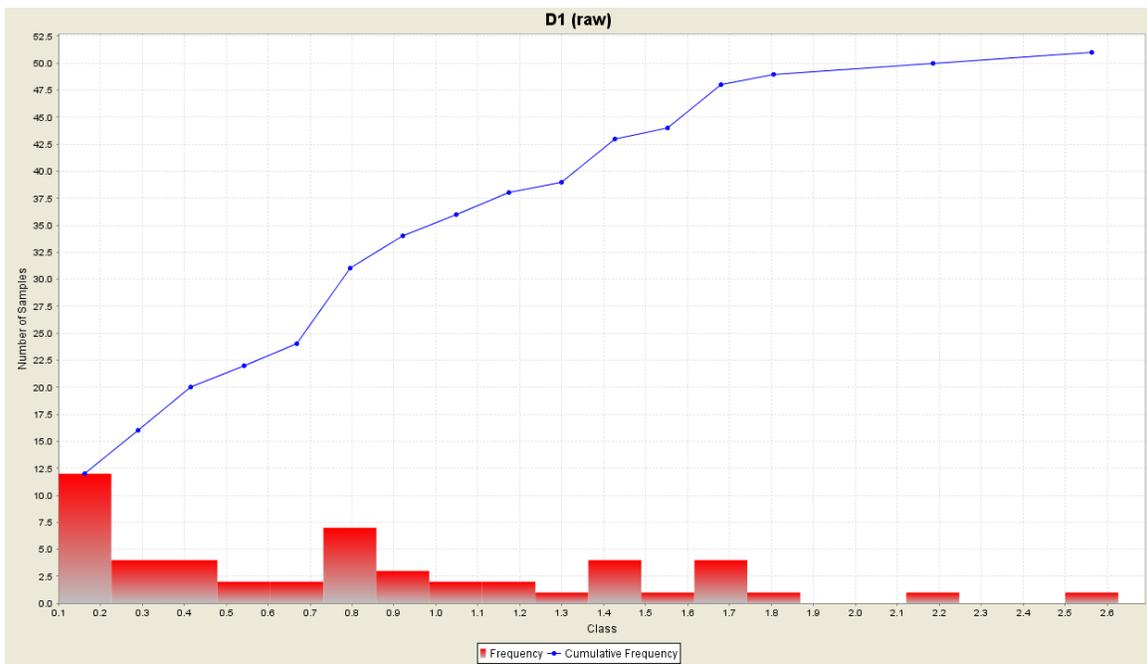


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70.0 Percentile	1.115000
80.0 Percentile	1.395000
90.0 Percentile	1.710000
95.0 Percentile	1.780000
97.5 Percentile	2.330000
Trimean	0.776500
Biweight	0.784454
MAD	0.545000
Alpha	1.090794
Sichel-t	0.866937

Normal Histogram Tabulation
D1

Class	From	Class To	Count	Mean	Freq %	Cum Count	Cum Mean	Cum
Freq %	Dec	Count	Dec	Mean	Dec	Freq %		
0.100000	0.226316	12	0.165267	0.235	12	0.165267		
23.5294	51	0.821329	100.0000					
0.226316	0.352632	4	0.278000	0.078	16	0.193450		
31.3725	39	1.023195	76.4706					
0.352632	0.478947	4	0.445000	0.078	20	0.243760		
39.2157	35	1.108360	68.6275					
0.478947	0.605263	2	0.500000	0.039	22	0.267055		
43.1373	31	1.193955	60.7843					
0.605263	0.731579	2	0.675000	0.039	24	0.301050		
47.0588	29	1.241814	56.8627					
0.731579	0.857895	7	0.794800	0.137	31	0.412542		
60.7843	27	1.283801	52.9412					
0.857895	0.984211	3	0.933001	0.059	34	0.458465		
66.6667	20	1.454950	39.2157					
0.984211	1.110526	2	1.025000	0.039	36	0.489939		
70.5882	17	1.547059	33.3333					
1.110526	1.236842	2	1.210000	0.039	38	0.527837		
74.5098	15	1.616667	29.4118					
1.236842	1.363158	1	1.310000	0.020	39	0.547892		
76.4706	13	1.679231	25.4902					
1.363158	1.489474	4	1.400000	0.078	43	0.627158		
84.3137	12	1.710000	23.5294					
1.489474	1.615789	1	1.600000	0.020	44	0.649268		
86.2745	8	1.865000	15.6863					
1.615789	1.742105	4	1.705000	0.078	48	0.737246		
94.1176	7	1.902857	13.7255					
1.742105	1.868421	1	1.840000	0.020	49	0.759751		
96.0784	3	2.166667	5.8824					
2.121053	2.247368	1	2.160000	0.020	50	0.787756		
98.0392	2	2.330000	3.9216					
2.500000	2.626316	1	2.500000	0.020	51	0.821329		
100.0000	1	2.500000	1.9608					



Main_B_Lower, Cumulative Frequency Histogram, 1m composites.



Tim Callaghan – Resource and Exploration Geology

Output Filename: Main_b_u
18, 2009

Jun

Statistics Report

File Main B U.str-3.40282e+038.str

String range All
Variable D1

Number of samples 355
Minimum value 0.010000
Maximum value 6.300000

	Ungrouped Data	Grouped
Data		
Mean	0.914681	
0.926223		
Median	0.680000	
0.678472		
Geometric Mean	0.582875	
0.638255		
Variance	0.814250	
0.819214		
Standard Deviation	0.902358	
0.905105		
Coefficient of variation	0.986527	
0.977199		
Moment 1 About Arithmetic Mean	0.000000	
0.000000		
Moment 2 About Arithmetic Mean	0.814250	
0.819214		
Moment 3 About Arithmetic Mean	2.027054	
2.098209		
Moment 4 About Arithmetic Mean	9.388567	
9.839662		
Skewness	2.758853	
2.829779		
Kurtosis	14.160668	
3.126466		
Natural Log Mean	-0.539783	-
0.449017		
Log Variance	1.172178	
0.766357		
10.0 Percentile	0.160000	
20.0 Percentile	0.295000	
30.0 Percentile	0.450000	
40.0 Percentile	0.560700	
50.0 Percentile (median)	0.680000	
60.0 Percentile	0.795000	



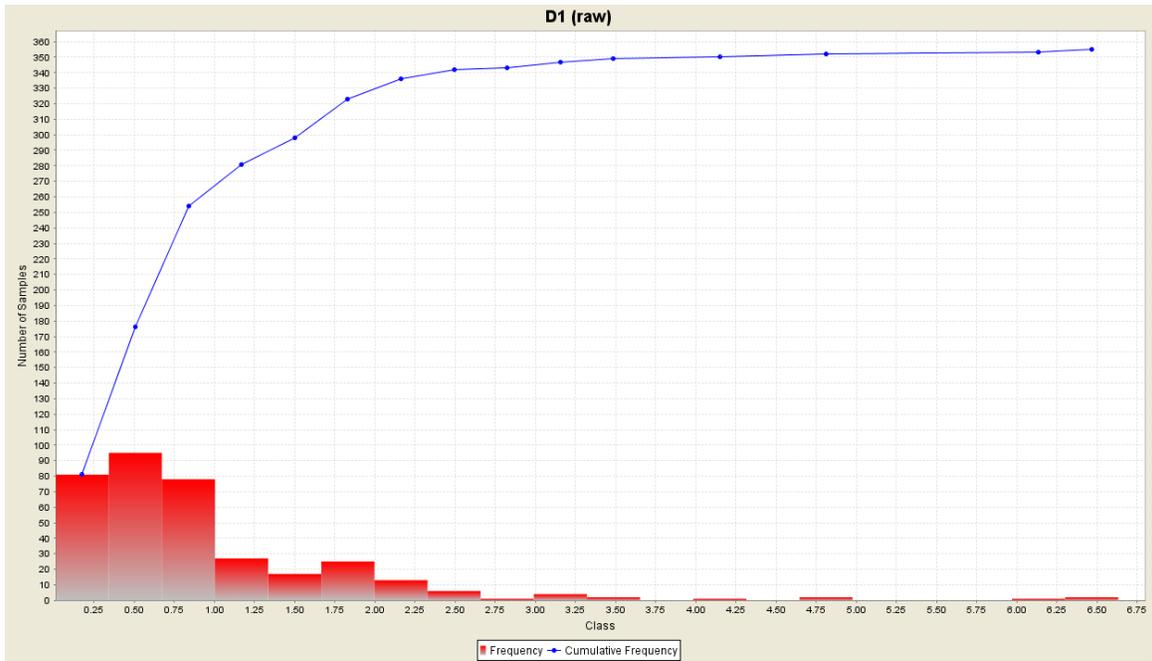
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70.0 Percentile	0.980000
80.0 Percentile	1.395000
90.0 Percentile	1.972200
95.0 Percentile	2.385000
97.5 Percentile	3.225000
Trimean	0.705000
Biweight	0.686633
MAD	0.345600
Alpha	0.190168
Sichel-t	1.044668

Normal Histogram Tabulation
D1

Class From	Class To	Count	Mean	Freq %	Cum Count	Cum Mean	Cum
Freq %	Dec Count	Dec Mean	Dec	Freq %			
0.010000	0.341053	81	0.167137	0.228	81	0.167137	
22.8169		355	0.914681	100.0000			
0.341053	0.672105	95	0.502967	0.268	176	0.348409	
49.5775		274	1.135671	77.1831			
0.672105	1.003158	78	0.822835	0.220	254	0.494099	
71.5493		179	1.471463	50.4225			
1.003158	1.334211	27	1.145074	0.076	281	0.556648	
79.1549		101	1.972384	28.4507			
1.334211	1.665263	17	1.492441	0.048	298	0.610032	
83.9437		74	2.274241	20.8451			
1.665263	1.996316	25	1.830509	0.070	323	0.704496	
90.9859		57	2.507409	16.0563			
1.996316	2.327368	13	2.129508	0.037	336	0.759631	
94.6479		32	3.036237	9.0141			
2.327368	2.658421	6	2.463333	0.017	342	0.789520	
96.3380		19	3.656632	5.3521			
2.658421	2.989474	1	2.700000	0.003	343	0.795090	
96.6197		13	4.207385	3.6620			
2.989474	3.320526	4	3.157501	0.011	347	0.822322	
97.7465		12	4.333000	3.3803			
3.320526	3.651579	2	3.437000	0.006	349	0.837306	
98.3099		8	4.920750	2.2535			
3.982632	4.313684	1	4.100000	0.003	350	0.846628	
98.5915		6	5.415333	1.6901			
4.644737	4.975789	2	4.796000	0.006	352	0.869068	
99.1549		5	5.678400	1.4085			
5.968947	6.300000	1	6.200000	0.003	353	0.884170	
99.4366		3	6.266667	0.8451			
6.300000	6.631053	2	6.300000	0.006	355	0.914681	
100.0000		2	6.300000	0.5634			

1/1



Main_B_Upper, Cumulative Frequency Histogram, 1m composites.



Tim Callaghan – Resource and Exploration Geology

Output Filename: Main_c_l
18, 2009

Jun

Statistics Report

File Main C L.str-3.40282e+038.str

String range		All
Variable		D1
Number of samples		274
Minimum value		0.014000
Maximum value		6.000000
	Ungrouped Data	Grouped
Data		
Mean	1.010243	
1.021249		
Median	0.754000	
0.799474		
Geometric Mean	0.710337	
0.744780		
Variance	0.789862	
0.788942		
Standard Deviation	0.888742	
0.888224		
Coefficient of variation	0.879731	
0.869743		
Moment 1 About Arithmetic Mean	0.000000	
0.000000		
Moment 2 About Arithmetic Mean	0.789862	
0.788942		
Moment 3 About Arithmetic Mean	1.724302	
1.728582		
Moment 4 About Arithmetic Mean	7.071816	
7.160791		
Skewness	2.456328	
2.466733		
Kurtosis	11.335177	
2.777152		
Natural Log Mean	-0.342015	-
0.294666		
Log Variance	0.869294	
0.674294		
10.0 Percentile	0.215000	
20.0 Percentile	0.394000	
30.0 Percentile	0.550000	
40.0 Percentile	0.675000	
50.0 Percentile (median)	0.754000	
60.0 Percentile	0.885000	

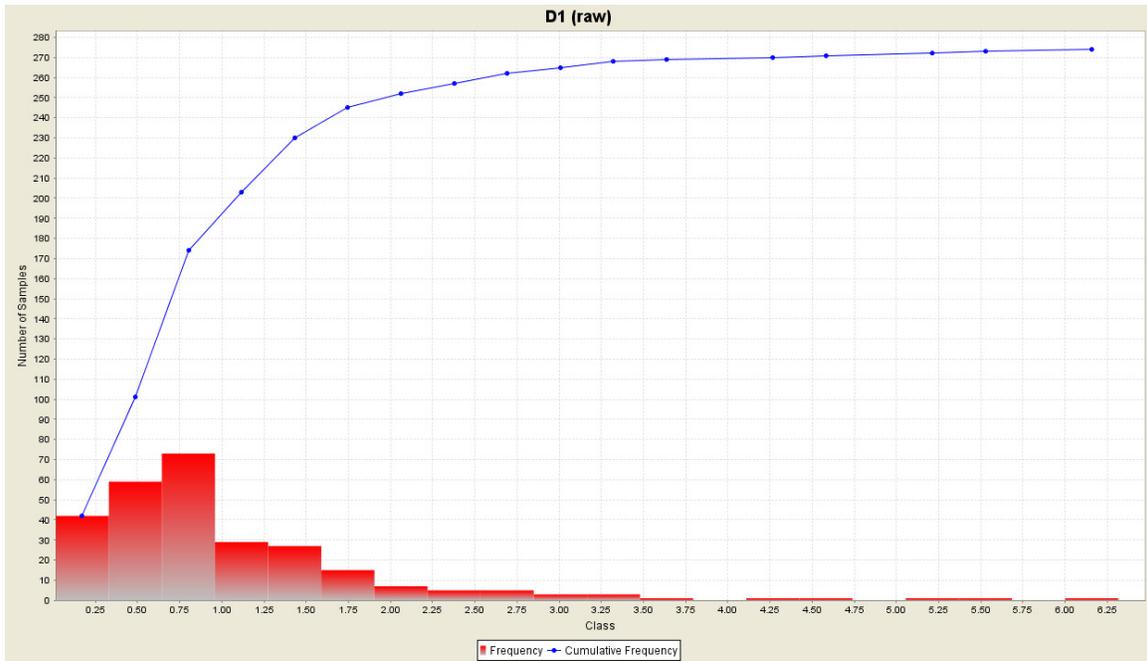


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70.0 Percentile	1.145000
80.0 Percentile	1.455000
90.0 Percentile	1.965001
95.0 Percentile	2.710000
97.5 Percentile	3.325000
Trimean	0.815200
Biweight	0.798962
MAD	0.383962
Alpha	0.217323
Sichel-t	1.094574

Normal Histogram Tabulation
D1

Class	From	Class To	Count	Mean	Freq %	Cum Count	Cum Mean	Cum
Freq %	Dec	Count	Dec	Mean	Dec	Freq %		
0.014000	0.329053	42	0.178483	0.153	42	0.178483		
15.3285	274	1.010243	100.0000					
0.329053	0.644105	59	0.483534	0.215	101	0.356681		
36.8613	232	1.160820	84.6715					
0.644105	0.959158	73	0.776319	0.266	174	0.532736		
63.5036	173	1.391802	63.1387					
0.959158	1.274211	29	1.113090	0.106	203	0.615644		
74.0876	100	1.841104	36.4964					
1.274211	1.589263	27	1.428233	0.099	230	0.711035		
83.9416	71	2.138462	25.9124					
1.589263	1.904316	15	1.703233	0.055	245	0.771782		
89.4161	44	2.574284	16.0584					
1.904316	2.219368	7	2.034286	0.026	252	0.806851		
91.9708	29	3.024828	10.5839					
2.219368	2.534421	5	2.364000	0.018	257	0.837146		
93.7956	22	3.340000	8.0292					
2.534421	2.849474	5	2.686000	0.018	262	0.872429		
95.6204	17	3.627059	6.2044					
2.849474	3.164526	3	2.913333	0.011	265	0.895534		
96.7153	12	4.019167	4.3796					
3.164526	3.479579	3	3.290000	0.011	268	0.922338		
97.8102	9	4.387778	3.2847					
3.479579	3.794632	1	3.780000	0.004	269	0.932961		
98.1752	6	4.936667	2.1898					
4.109684	4.424737	1	4.400000	0.004	270	0.945802		
98.5401	5	5.168000	1.8248					
4.424737	4.739789	1	4.710000	0.004	271	0.959692		
98.9051	4	5.360000	1.4599					
5.054842	5.369895	1	5.280000	0.004	272	0.975575		
99.2701	3	5.576667	1.0949					
5.369895	5.684947	1	5.450000	0.004	273	0.991965		
99.6350	2	5.725000	0.7299					
6.000000	6.315053	1	6.000000	0.004	274	1.010243		
100.0000	1	6.000000	0.3650					



Main_C_Lower, Cumulative Frequency Histogram, 1m composites.



Output Filename: Main_C_Upper

Jun 18, 2009

Statistics Report

File Main C U.str-3.40282e+038.str

String range All
Variable D1

Number of samples 456
Minimum value 0.010000
Maximum value 30.500000

Ungrouped Data Grouped

Data
Mean 0.954598
1.192438
Median 0.585000
0.926992
Geometric Mean 0.544623
0.964203
Variance 3.166789
3.063228
Standard Deviation 1.779547
1.750208
Coefficient of variation 1.864184
1.467756

Moment 1 About Arithmetic Mean 0.000000
0.000000
Moment 2 About Arithmetic Mean 3.166789
3.063228
Moment 3 About Arithmetic Mean 62.083617
64.910287
Moment 4 About Arithmetic Mean 1710.543967
1836.859579

Skewness 11.016618
12.107222
Kurtosis 170.567376
6.917590

Natural Log Mean -0.607662 -
0.036453
Log Variance 1.145860
0.235672

10.0 Percentile 0.142900
20.0 Percentile 0.252800
30.0 Percentile 0.373500
40.0 Percentile 0.470500
50.0 Percentile (median) 0.585000
60.0 Percentile 0.712800



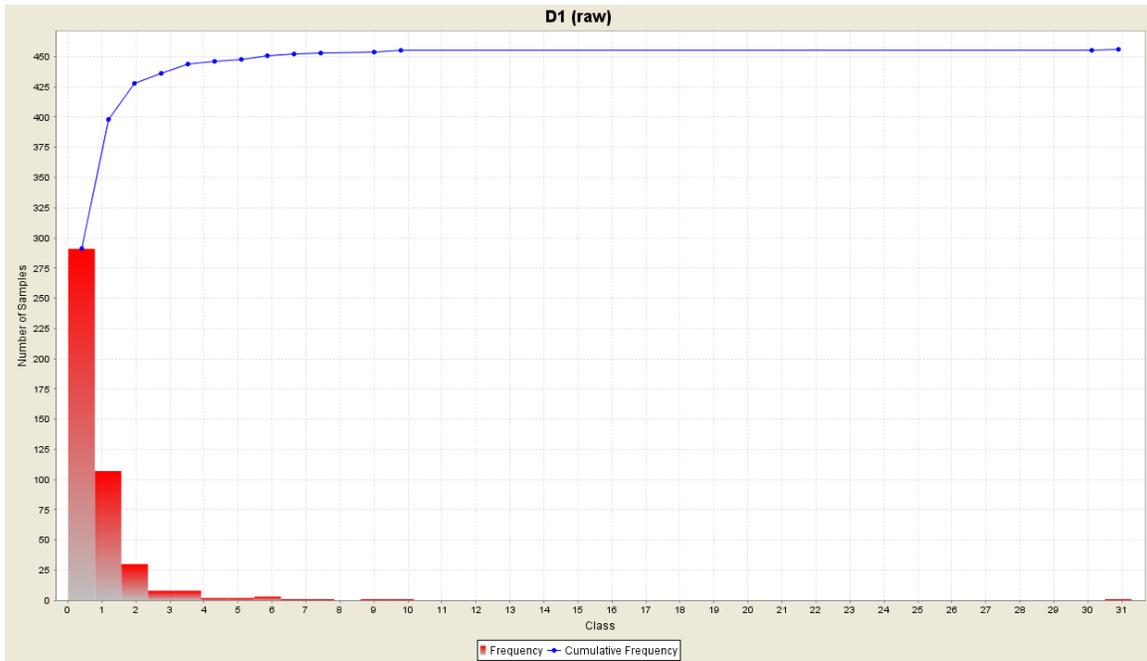
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70.0 Percentile	0.904500
80.0 Percentile	1.200000
90.0 Percentile	1.773000
95.0 Percentile	2.830000
97.5 Percentile	4.244000
Trimean	0.631312
Biweight	0.597594
MAD	0.337594
Alpha	0.119136
Sichel-t	0.963964

Normal Histogram Tabulation
D1

Class From	Class To	Count	Mean	Freq %	Cum Count	Cum Mean
Cum Freq %	Dec Count	Dec Mean	Dec Freq %			
0.010000	1.614737	399	0.578938	0.875	399	0.578938
87.5000	456	0.954598	100.0000			
1.614737	3.219474	38	2.101042	0.083	437	0.711295
95.8333	57	3.584225	12.5000			
3.219474	4.824211	10	3.767920	0.022	447	0.779675
98.0263	19	6.550589	4.1667			
4.824211	6.428947	4	5.649050	0.009	451	0.822863
98.9035	9	9.642444	1.9737			
6.428947	8.033684	2	7.124400	0.004	453	0.850684
99.3421	5	12.837160	1.0965			
8.033684	9.638421	1	9.337000	0.002	454	0.869376
99.5614	3	16.645667	0.6579			
9.638421	11.243158	1	10.100000	0.002	455	0.889664
99.7807	2	20.300000	0.4386			
28.895263	30.500000	0	0.000000	0.000	455	0.889664
99.7807	1	30.500000	0.2193			
30.500000	32.104737	1	30.500000	0.002	456	0.954598
100.0000	1	30.500000	0.2193			

1/1



Main_C_Upper, Cumulative Frequency Histogram, 1m composites.



Tim Callaghan – Resource and Exploration Geology

Output Filename: west_b_upper
18, 2009

Jun

Statistics Report

File West B U.str-3.40282e+038.str

String range	All	
Variable	D1	
Number of samples	60	
Minimum value	0.000000	
Maximum value	2.120000	
	Ungrouped Data	Grouped
Data		
Mean	0.628797	
0.639719		
Median	0.547000	
0.545497		
Geometric Mean	Not Calculated	
0.390115		
Variance	0.314208	
0.298949		
Standard Deviation	0.560542	
0.546762		
Coefficient of variation	0.891453	
0.854691		
Moment 1 About Arithmetic Mean	0.000000	
0.000000		
Moment 2 About Arithmetic Mean	0.314208	
0.298949		
Moment 3 About Arithmetic Mean	0.175670	
0.179355		
Moment 4 About Arithmetic Mean	0.324303	
0.314697		
Skewness	0.997406	
1.097282		
Kurtosis	3.284857	
2.006873		
Natural Log Mean	Not Calculated	-
0.941313		
Log Variance	Not Calculated	
1.310109		
10.0 Percentile	0.000000	
20.0 Percentile	0.085650	
30.0 Percentile	0.290000	
40.0 Percentile	0.480000	
50.0 Percentile (median)	0.547000	
60.0 Percentile	0.570000	

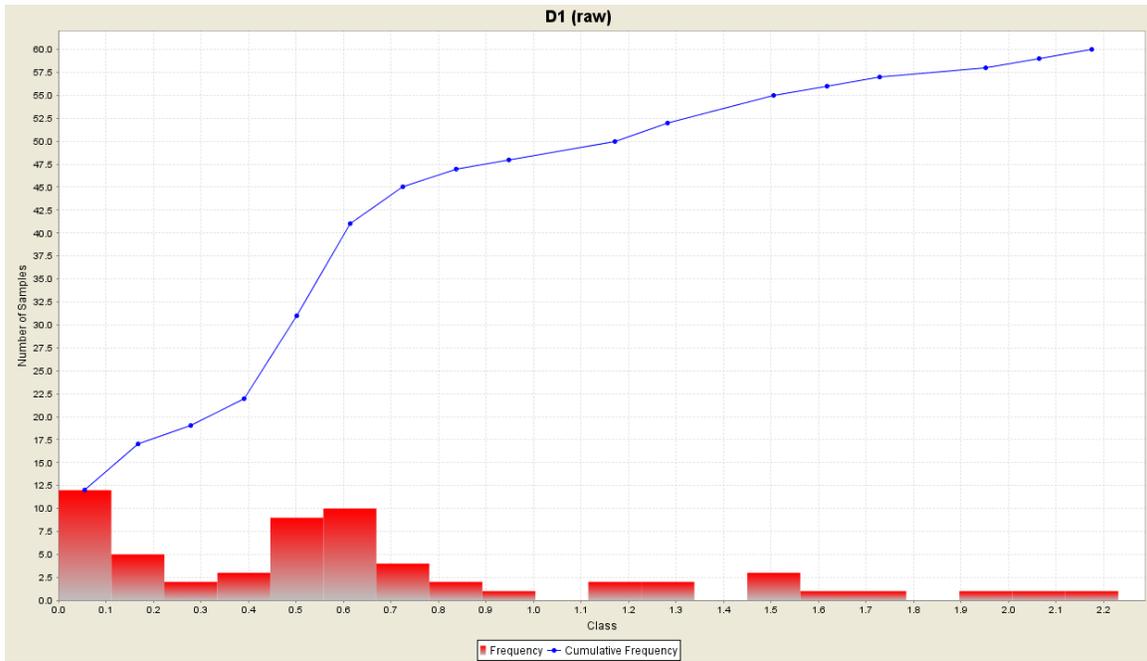


Tim Callaghan – Resource and Exploration Geology

70.0 Percentile	0.710000
80.0 Percentile	1.081500
90.0 Percentile	1.550000
95.0 Percentile	1.815000
97.5 Percentile	2.090000
Trimean	0.507000
Biweight	0.528203
MAD	0.373203
Alpha	0.656160
Sichel-t	0.000000

Normal Histogram Tabulation
D1

Class	From	Class To	Count	Mean	Freq %	Cum Count	Cum Mean	Cum
Freq %	Dec	Count	Dec	Mean	Dec	Freq %		
0.000000	0.111579	12	0.006658	0.200	12	0.006658		
20.0000	60	0.628797	100.0000					
0.111579	0.223158	5	0.144260	0.083	17	0.047129		
28.3333	48	0.784331	80.0000					
0.223158	0.334737	2	0.290000	0.033	19	0.072695		
31.6667	43	0.858758	71.6667					
0.334737	0.446316	3	0.400267	0.050	22	0.117364		
36.6667	41	0.886502	68.3333					
0.446316	0.557895	9	0.512222	0.150	31	0.232000		
51.6667	38	0.924889	63.3333					
0.557895	0.669474	10	0.583200	0.167	41	0.317659		
68.3333	29	1.052959	48.3333					
0.669474	0.781053	4	0.739700	0.067	45	0.355173		
75.0001	19	1.300200	31.6667					
0.781053	0.892632	2	0.846000	0.033	47	0.376060		
78.3333	15	1.449667	25.0000					
0.892632	1.004211	1	0.986600	0.017	48	0.388779		
80.0000	13	1.542538	21.6667					
1.115789	1.227368	2	1.193200	0.033	50	0.420956		
83.3333	12	1.588867	20.0000					
1.227368	1.338947	2	1.315000	0.033	52	0.455342		
86.6667	10	1.668000	16.6667					
1.450526	1.562105	3	1.533333	0.050	55	0.514142		
91.6667	8	1.756250	13.3333					
1.562105	1.673684	1	1.610000	0.017	56	0.533711		
93.3333	5	1.890000	8.3333					
1.673684	1.785263	1	1.690000	0.017	57	0.553996		
95.0000	4	1.960000	6.6667					
1.896842	2.008421	1	1.940000	0.017	58	0.577893		
96.6667	3	2.050000	5.0000					
2.008421	2.120000	1	2.090000	0.017	59	0.603522		
98.3333	2	2.105000	3.3333					
2.120000	2.231579	1	2.120000	0.017	60	0.628797		
100.0000	1	2.120000	1.6667					



West_B_Upper, Cumulative Frequency Histogram, 1m composites.



Tim Callaghan – Resource and Exploration Geology

Output Filename: west_c_l
18, 2009

Jun

Statistics Report

File West C L.str-3.40282e+038.str

String range All
Variable D1

Number of samples 180
Minimum value 0.010000
Maximum value 14.100000

Ungrouped Data Grouped

Data
Mean 1.021978
1.048211
Median 0.743400
0.727657
Geometric Mean 0.675815
0.740400
Variance 1.627854
1.748196
Standard Deviation 1.275874
1.322194
Coefficient of variation 1.248435
1.261382

Moment 1 About Arithmetic Mean 0.000000
0.000000
Moment 2 About Arithmetic Mean 1.627854
1.748196
Moment 3 About Arithmetic Mean 13.693516
14.867067
Moment 4 About Arithmetic Mean 168.138917
186.736392

Skewness 6.593134
6.431912
Kurtosis 63.450861
4.864577

Natural Log Mean -0.391836 -
0.300565
Log Variance 0.983885
0.576636

10.0 Percentile 0.220000
20.0 Percentile 0.409200
30.0 Percentile 0.520000
40.0 Percentile 0.614200
50.0 Percentile (median) 0.743400
60.0 Percentile 0.880000



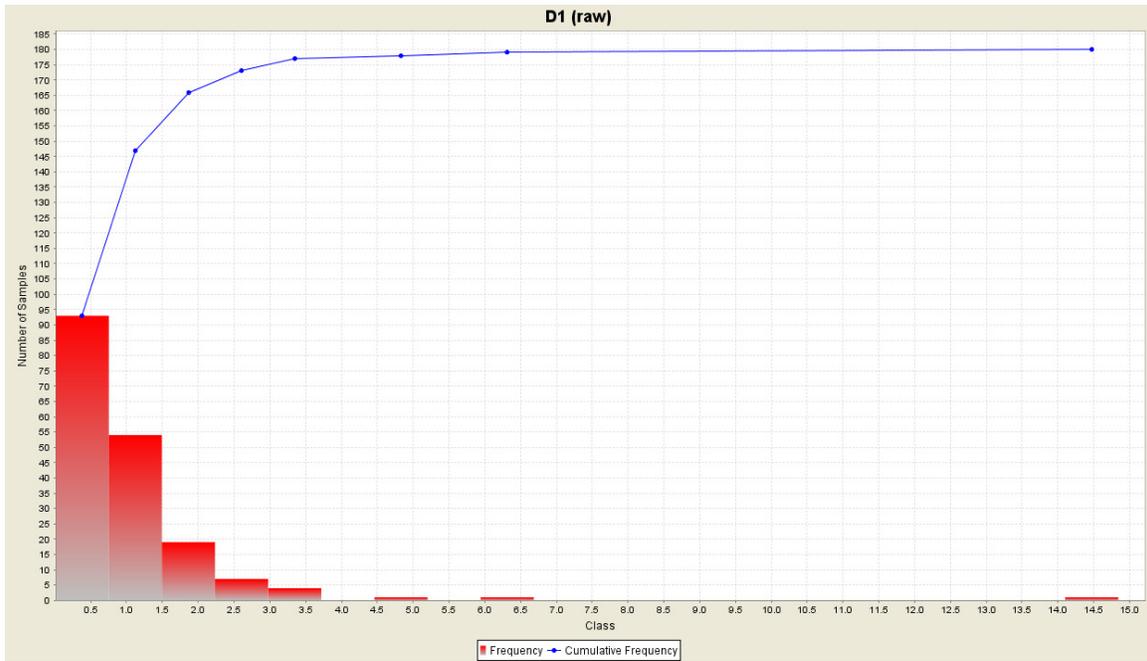
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70.0 Percentile	1.064300
80.0 Percentile	1.265000
90.0 Percentile	1.915000
95.0 Percentile	2.600000
97.5 Percentile	3.200000
Trimean	0.783575
Biweight	0.744575
MAD	0.335375
Alpha	0.202628
Sichel-t	1.100826

Normal Histogram Tabulation
D1

Class From	Class To	Count	Mean	Freq %	Cum Count	Cum Mean
Cum Freq %	Dec Count	Dec Mean	Dec Freq %			
0.010000	0.751579	93	0.437047	0.517	93	0.437047
51.6667	180	1.021978	100.0000			
0.751579	1.493158	54	1.009454	0.300	147	0.647319
81.6667	87	1.647249	48.3333			
1.493158	2.234737	19	1.770389	0.106	166	0.775863
92.2222	33	2.690915	18.3333			
2.234737	2.976316	7	2.536114	0.039	173	0.847087
96.1111	14	3.940200	7.7778			
2.976316	3.717895	4	3.155000	0.022	177	0.899244
98.3333	7	5.344286	3.8889			
4.459474	5.201053	1	4.500000	0.006	178	0.919472
98.8889	3	8.263333	1.6667			
5.942632	6.684211	1	6.190000	0.006	179	0.948917
99.4444	2	10.145000	1.1111			
14.100000	14.841579	1	14.100000	0.006	180	1.021978
100.0000	1	14.100000	0.5556			

1/1



West_C_Lower, Cumulative Frequency Histogram, 1m composites.



Tim Callaghan – Resource and Exploration Geology

Output Filename: west_c_upper
18, 2009

Jun

Statistics Report

File West C U.str-3.40282e+038.str

String range All
Variable D1

Number of samples 39
Minimum value 0.090000
Maximum value 1.410000

Ungrouped Data Grouped

Data
Mean 0.619590
0.619960
Median 0.560000
0.567632
Geometric Mean 0.496829
0.503153
Variance 0.128180
0.126031
Standard Deviation 0.358022
0.355008
Coefficient of variation 0.577837
0.572631

Moment 1 About Arithmetic Mean 0.000000
0.000000
Moment 2 About Arithmetic Mean 0.128180
0.126031
Moment 3 About Arithmetic Mean 0.013800
0.014937
Moment 4 About Arithmetic Mean 0.032854
0.032402

Skewness 0.300706
0.333842
Kurtosis 1.999654
0.940378

Natural Log Mean -0.699510 -
0.686860
Log Variance 0.533379
0.490324

10.0 Percentile 0.155000
20.0 Percentile 0.290000
30.0 Percentile 0.343001
40.0 Percentile 0.475000
50.0 Percentile (median) 0.560000
60.0 Percentile 0.652500

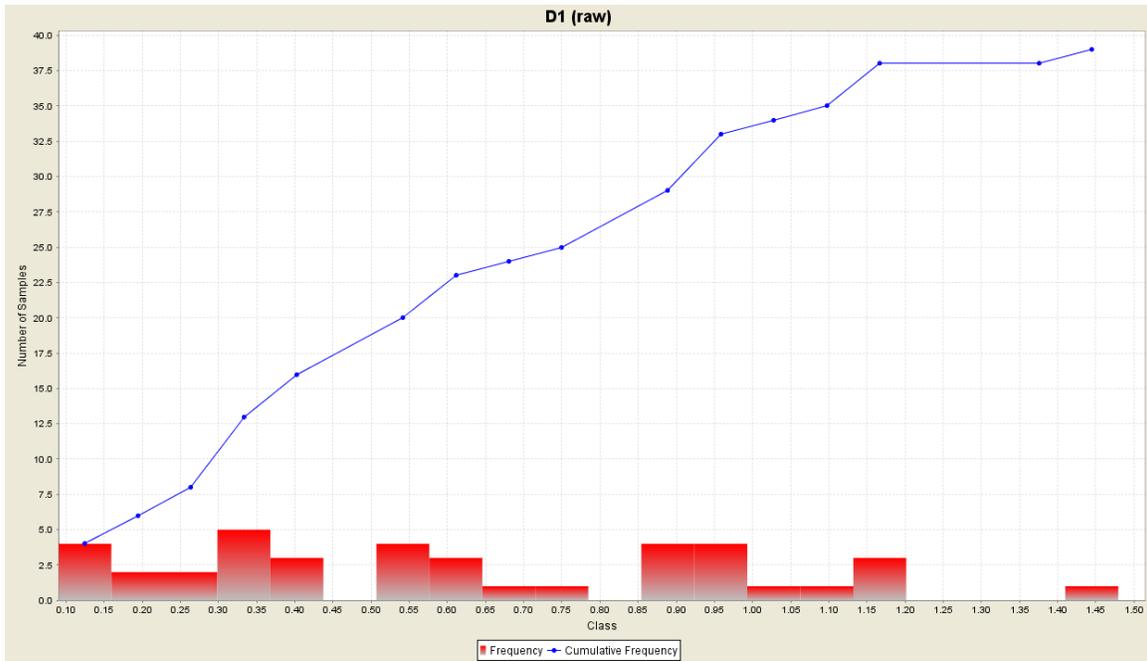


Tim Callaghan – Resource and Exploration Geology

70.0 Percentile	0.870000
80.0 Percentile	0.945000
90.0 Percentile	1.140000
95.0 Percentile	1.200000
97.5 Percentile	1.305000
Trimean	0.590125
Biweight	0.602484
MAD	0.312484
Alpha	0.782286
Sichel-t	0.643187

Normal Histogram Tabulation
D1

Class	From	Class To	Count	Mean	Freq %	Cum Count	Cum Mean	Cum
Freq %	Dec	Count	Dec	Mean	Dec	Freq %		
0.090000	0.159474	4	0.115000	0.103	4	0.115000		
10.2564	39	0.619590	100.0000					
0.159474	0.228947	2	0.180000	0.051	6	0.136667		
15.3846	35	0.677257	89.7436					
0.228947	0.298421	2	0.266000	0.051	8	0.169000		
20.5128	33	0.707394	84.6154					
0.298421	0.367895	5	0.323400	0.128	13	0.228385		
33.3333	31	0.735871	79.4872					
0.367895	0.437368	3	0.426667	0.077	16	0.265563		
41.0256	26	0.815192	66.6667					
0.506842	0.576316	4	0.541000	0.103	20	0.320650		
51.2821	23	0.865870	58.9744					
0.576316	0.645789	3	0.616667	0.077	23	0.359261		
58.9744	19	0.934263	48.7179					
0.645789	0.715263	1	0.665000	0.026	24	0.372000		
61.5385	16	0.993812	41.0256					
0.715263	0.784737	1	0.780000	0.026	25	0.388320		
64.1026	15	1.015733	38.4615					
0.854211	0.923684	4	0.880000	0.103	29	0.456138		
74.3590	14	1.032571	35.8974					
0.923684	0.993158	4	0.951500	0.103	33	0.516182		
84.6154	10	1.093600	25.6410					
0.993158	1.062632	1	1.040000	0.026	34	0.531588		
87.1795	6	1.188333	15.3846					
1.062632	1.132105	1	1.100000	0.026	35	0.547829		
89.7436	5	1.218000	12.8205					
1.132105	1.201579	3	1.193333	0.077	38	0.598789		
97.4359	4	1.247500	10.2564					
1.340526	1.410000	0	0.000000	0.000	38	0.598789		
97.4359	1	1.410000	2.5641					
1.410000	1.479474	1	1.410000	0.026	39	0.619590		
100.0000	1	1.410000	2.5641					



West_C_Upper, Cumulative Frequency Histogram, 1m composites.



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Output Filename: Boundary_Fault_Ore
18, 2009

Jun

Statistics Report

File Boundary Fault.str-3.40282e+038.str

String range All
Variable D1

Number of samples 35
Minimum value 0.223800
Maximum value 12.900000

Ungrouped Data

Grouped Data
Mean 2.151209
2.196712
Median 0.670000
0.807572
Geometric Mean 1.111318
1.194292
Variance 8.147011
8.478598
Standard Deviation 2.854297
2.911803
Coefficient of variation 1.326834
1.325528

Moment 1 About Arithmetic Mean 0.000000
0.000000
Moment 2 About Arithmetic Mean 8.147011
8.478598
Moment 3 About Arithmetic Mean 49.957877
54.254333
Moment 4 About Arithmetic Mean 483.476436
538.133500

Skewness 2.148357
2.197598
Kurtosis 7.284148
0.754721

Natural Log Mean 0.105547
0.177554
Log Variance 1.194792
1.021709

10.0 Percentile 0.300000
20.0 Percentile 0.490000
30.0 Percentile 0.551000
40.0 Percentile 0.639250
50.0 Percentile (median) 0.670000
60.0 Percentile 1.181750



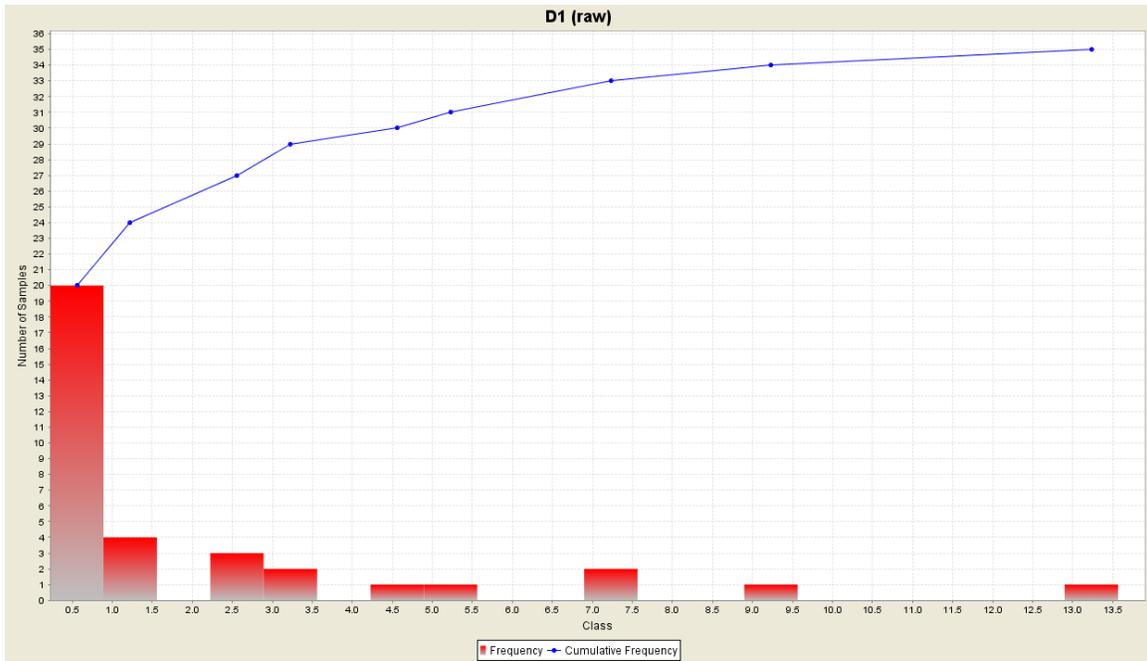
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70.0 Percentile	2.500000
80.0 Percentile	3.185000
90.0 Percentile	7.100000
95.0 Percentile	8.023000
97.5 Percentile	10.899000
Trimean	1.093125
Biweight	0.999375
MAD	0.604375
Alpha	-0.221562
Sichel-t	1.967730

Normal Histogram Tabulation
D1

Class From	Class To	Count	Mean	Freq %	Cum Count	Cum Mean
Cum Freq %	Dec Count	Dec Mean	Dec Freq %			
0.223800	0.890968	20	0.520340	0.571	20	0.520340
57.1429	35	2.151209	100.0000			
0.890968	1.558137	4	1.292375	0.114	24	0.649013
68.5714	15	4.325701	42.8571			
2.225305	2.892474	3	2.500000	0.086	27	0.854678
77.1429	11	5.428727	31.4286			
2.892474	3.559642	2	3.185000	0.057	29	1.015390
82.8571	8	6.527000	22.8571			
4.226811	4.893979	1	4.600000	0.029	30	1.134877
85.7143	6	7.641000	17.1429			
4.893979	5.561147	1	5.200000	0.029	31	1.266010
88.5714	5	8.249200	14.2857			
6.895484	7.562653	2	7.124000	0.057	33	1.621039
94.2857	4	9.011500	11.4286			
8.896989	9.564158	1	8.898000	0.029	34	1.835068
97.1429	2	10.899000	5.7143			
12.900000	13.567168	1	12.900000	0.029	35	2.151209
100.0000	1	12.900000	2.8571			

1/1



Boundary_Fault_Ore, Cumulative Frequency Histogram, 1m composites.



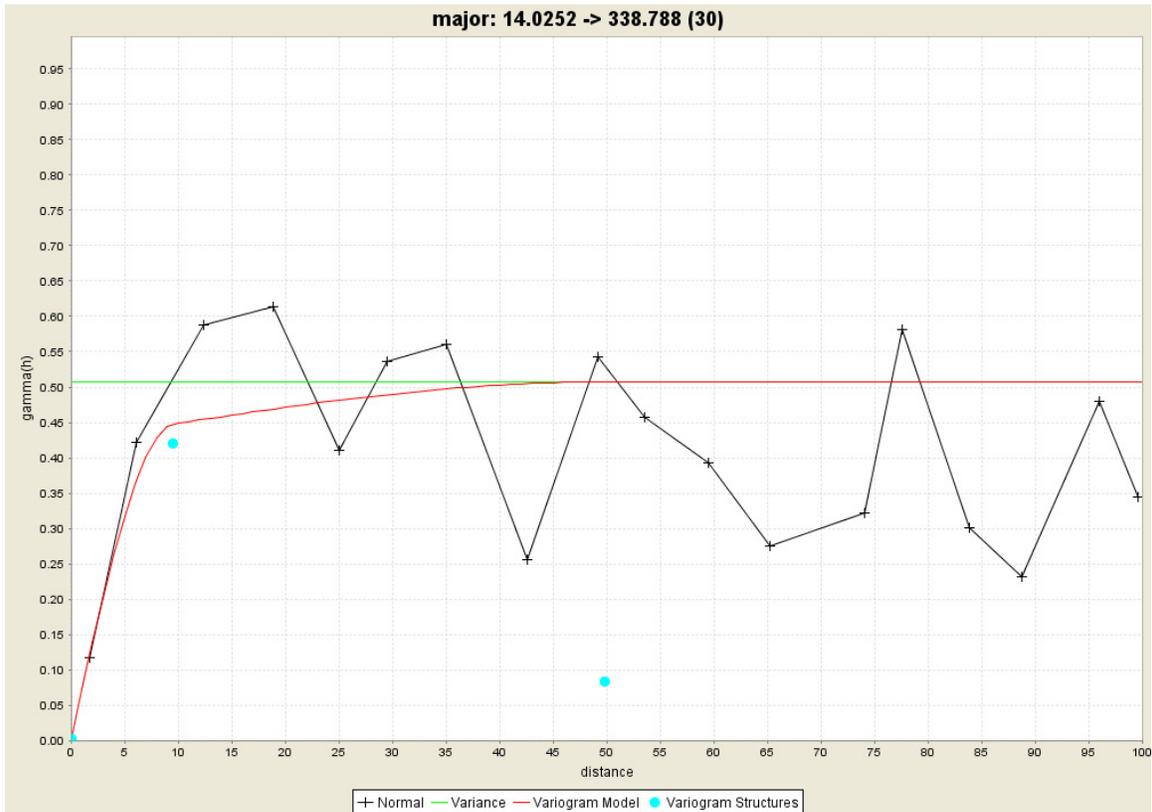
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Appendix 3

Bold Head Variography



BFB_350 Variogram Model



VARIOGRAM MODELLING

27-Jun-2009

Current anisotropy parameters

Ellipsoid plunge : 14.025162
Ellipsoid bearing: 338.787645
Ellipsoid dip : 5.373472
major:semi-major : 1.000000
major:minor : 1.000000

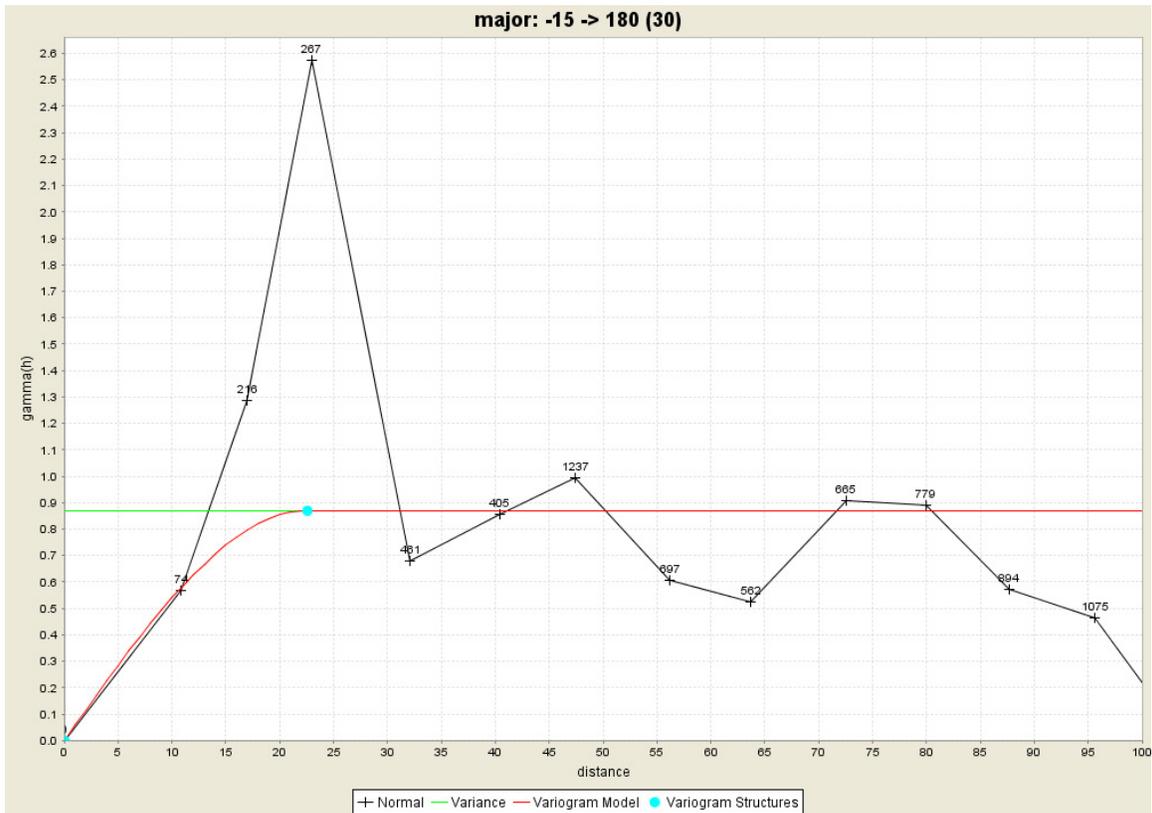
Current variogram model parameters

Model Type : Spherical
Nugget : 0.002804

Structure Sill Range
1 0.420864 9.510
2 0.083646 49.813



Fault B Upper Variogram Model



VARIOGRAM MODELLING

27-Jun-2009

Current anisotropy parameters

Ellipsoid plunge : -15.000000
Ellipsoid bearing: 180.000000
Ellipsoid dip : 0.000000
major:semi-major : 1.000000
major:minor : 1.000000

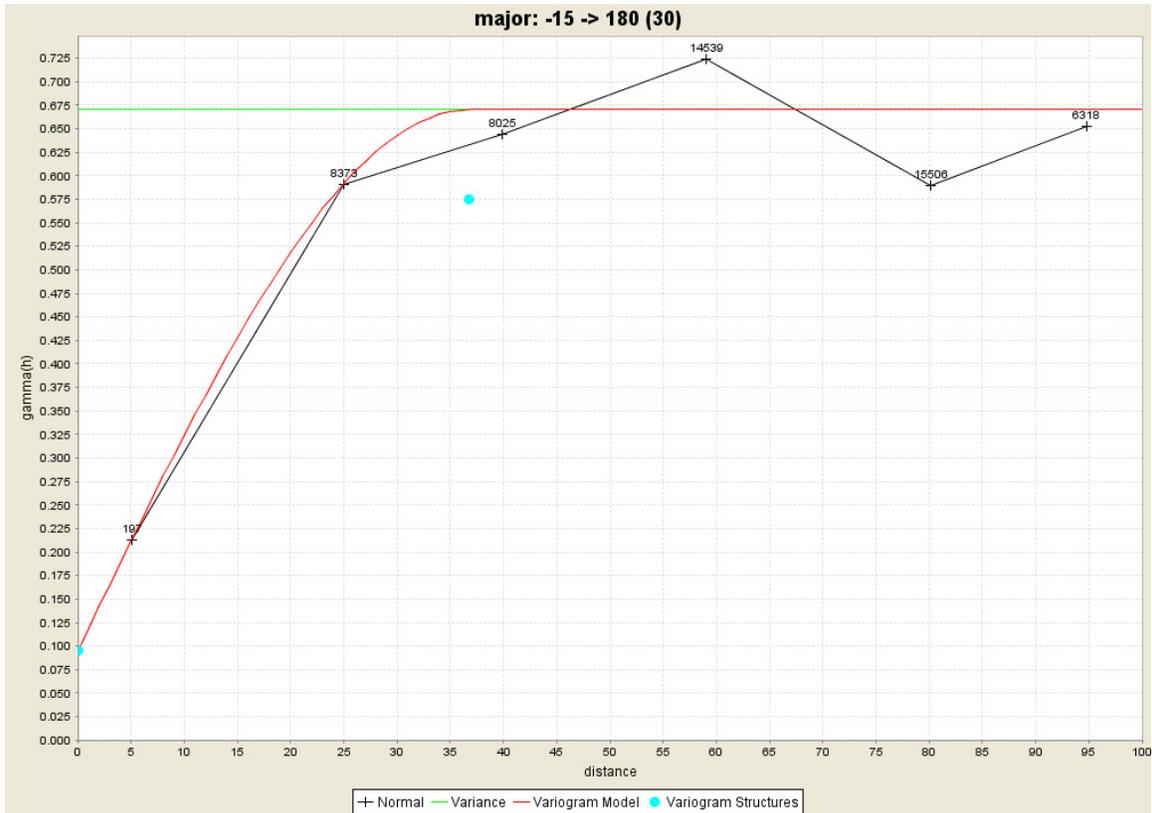
Current variogram model parameters

Model Type : Spherical
Nugget : 0.000000

Structure Sill Range
1 0.870294 22.591



Fault C Lower Variogram Model



VARIOGRAM MODELLING

27-Jun-2009

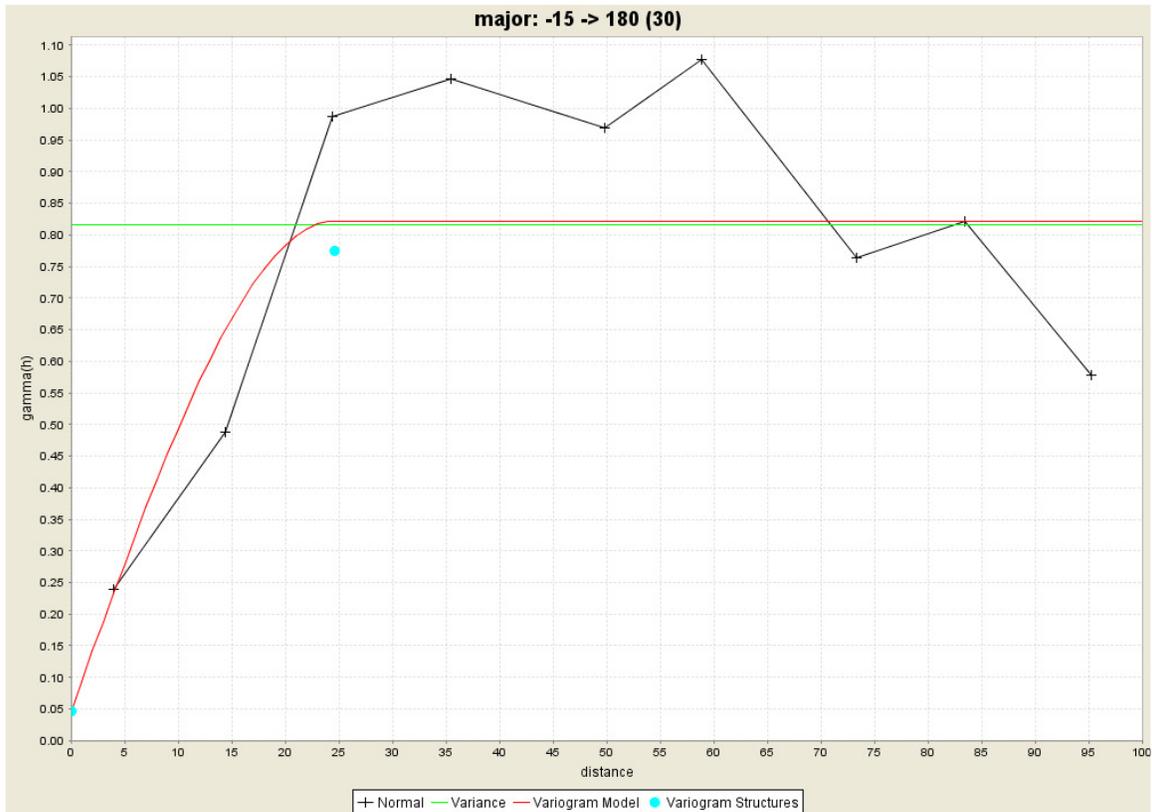
Current variogram model parameters

Model Type : Spherical
Nugget : 0.091102

Structure	Sill	Range
1	0.554636	34.322



Main B Upper - Variogram Model



VARIOGRAM MODELLING

27-Jun-2009

Current anisotropy parameters

Ellipsoid plunge : -15.000000
Ellipsoid bearing: 180.000000
Ellipsoid dip : 0.000000
major:semi-major : 1.000000
major:minor : 1.000000

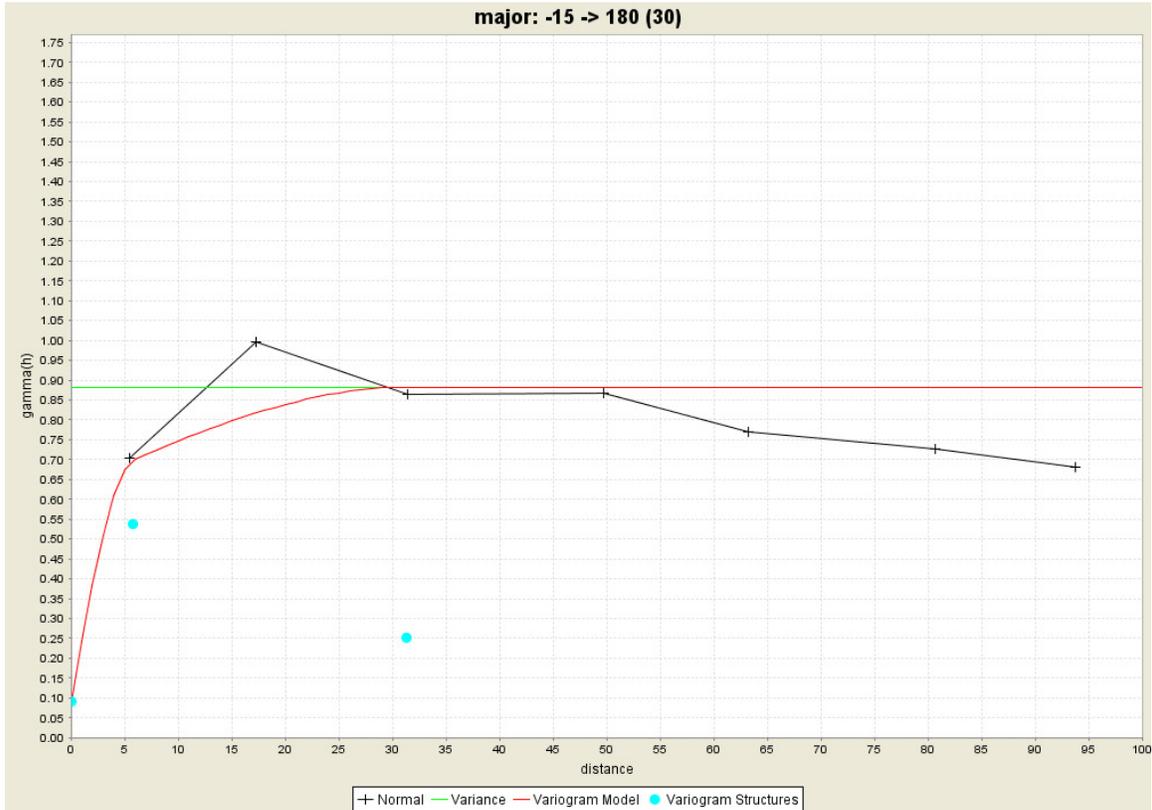
Current variogram model parameters

Model Type : Spherical
Nugget : 0.046861

Structure	Sill	Range
1	0.774822	24.610



Main C Upper - Variogram Model



VARIOGRAM MODELLING

27-Jun-2009

Current anisotropy parameters

Ellipsoid plunge : -14.999978
Ellipsoid bearing: 179.999848
Ellipsoid dip : -0.000001
major:semi-major : 1.000000
major:minor : 1.000000

Current variogram model parameters

Model Type : Spherical
Nugget : 0.092272

Structure	Sill	Range
1	0.537324	5.772
2	0.252500	31.324