

NI 43-101 Technical Report Yukon-Nevada Gold Corp. Ketz River Project, Yukon Territory, Canada

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Executive Summary (Item 3)

Yukon-Nevada Gold Corp. (YNG, or the Company) has elected to prepare an updated Technical Report for the Ketza River Project (Ketza River or the Project) in the Watson Lake Mining District of the Yukon Territory, Canada. This updated Technical Report meets the requirements of Canadian National Instrument 43-101 (NI 43-101). The resource stated in this report reflects all of the assay and drill hole results from the 2008 drill program (which includes drill hole numbers KR-08-1269 through KR-08-1466) that took until January 25, 2010 to receive from the assay lab. The resource stated in this report does not incorporate any of the drill holes that were drilled in 2009 or 2010 which were minimal up to January 25, 2010.

Most of the project description and exploration history listed in Sections 2 to 11 of this report are modified from the Year-End 2007 SRK NI 43-101 Technical Report (2008). The 2008 SRK report included a resource estimate dated December 31, 2007. Many of the 2008 sampling procedures and protocols were not significantly changed from that done in 2007 but are reviewed again for this document.

Information used to calculate the updated resource estimate in this Technical Report includes: all drill holes completed in 2008 and their verified Au assay results; a more comprehensive drill hole database that included capturing all 1984-1997 historic drill hole assay results, logged sulfide and oxide mineral data (by volume percent), RQD and core recovery data, and verifying drill hole sample intervals and sample ID numbers; a new geologic block model and mine design model; and newly acquired 2008 metallurgy testwork results.

Property Description and Location

The Property is located on the headwaters of Cache Creek, a tributary of the Ketza River, in the Watson Lake Mining District of the Yukon Territory, Canada. Terrain is mountainous with elevations ranging from 1,300m above mean sea level (amsl) to 2,100m amsl. The Ketza River property lies in National Topographic System (NTS) Map Sheet number 105F09. The project and resulting geologic and mine models use the UTM NAD27 Zone 8N coordinate system and horizontal datum.

The Property is accessible by a 40km all-weather road from Km 323 on the Robert Campbell Highway. The Property is approximately 80km by road from Ross River and 460km from Whitehorse.

Ownership

As of June 23, 2011 the Ketza River Project consists of 679 quartz claims and fractions of claims and 60 quartz leases that cover approximately 787.9ha. The claims are controlled by Ketza River Holdings Ltd. (KRH), which is a 100% subsidiary of YNG, through ownership and leases of the quartz claims and quartz leases. The surface is owned by the Crown and leased to the Company under the Government of Yukon Lease.

Environmental Liabilities

The existing Ketza River tailings impoundment (pond and dam) that was originally established by the historic mine operators in 1987 is the only environmental liability at the site. The Ketza River tailings impoundment is classified as a Type II site that is regulated by the Government of

the Yukon and is currently under owner-operator care and maintenance by Yukon-Nevada Gold Corp. (YNG). YNG is planning to start decommissioning the existing tailings dam prior to the startup of the next mining operation.

Past Exploration and Development

Lead-silver veins were discovered in the Ketz River area by prospectors of the Hudson Bay Mining and Smelting Company Limited in 1947. Gold mineralization on the property was first discovered in 1954 by Conwest Exploration Company Limited (Conwest). Between 1955 and 1960, Conwest explored several mineralized occurrences with trenching and drilling. In 1983, Pacific Trans Ocean Resources Ltd. (Pacific Trans Ocean) optioned the property from Conwest and carried out limited geochemical and geological surveys before entering into a joint venture with Canamax Resources Inc. (Canamax) in 1984. Canamax conducted mapping, trenching, geophysical surveys, soil sampling, drilling, and underground drifting between 1984 and 1990. In 1987, Canamax completed a feasibility study that was reviewed by Wright Engineers Ltd. (Canamax and Pacific Trans-Ocean, 1987). A decision was made to construct a mill and commercial production started in 1988.

After several months of operation, the oxide inventory was significantly reduced from the feasibility study estimates due to an error in estimation of the bulk density of the oxide material. The feed grade to the mill was also lower than expected, due to a number of factors including over-weighting of high-grade samples in the data and dilution from the lower than expected grade from the footwall mineralization (Strathcona Mineral Services Limited, 1988). Canamax purchased Pacific Trans-Ocean's interest in the Project in January 1989.

From July 1988 to November 1990, commercial production from the Ketz River mill was approximately 93,312oz of gold from 307,397 tonnes milled at an average mill head grade of 10.68g/t-Au. Average mill throughput over the life of the mine was 364t/d with an average gold recovery of 88.31 percent (Canamax, 1991). These mill production statistics do not include preproduction milling that took place from March 1988 to June 1988 that milled an additional 29,946 tonnes at an average head grade of 7.78 g/t Au to produce 4,680 oz Au.

Wheaton River Minerals Ltd. (Wheaton) acquired the property from Canamax in 1992 and in 1994 transferred it to YGC Resources Inc. (YGC) in exchange for a controlling interest. Wheaton later divested in YGC.

YGC conducted drilling, mapping and sampling programs between 1996 and 1997. YGC merged with Queenstake Resources Ltd in 2007 and formed YNG. Drilling and exploration campaigns at the Ketz River Project have been ongoing by YGC and YNG from 2005 to early August 2008, and again from mid-2009 to December 2010.

Geology and Mineralization

The Property is located in a shallow marine miogeoclinal sequence of rocks forming a carbonate platform bounded by the Omenica Tectonic Belt to the southwest and a faulted lobe of the Yukon Tanana Terrain to the northeast across the Tintina Fault. The region has been subjected to thrust faulting and possible intrusive rock emplacement.

The Ketz River property occurs within the Ketz Uplift that has been mapped by previous investigators as consisting of a large regional fault-bounded horst block which is inferred to have been uplifted by a large intrusive rock body at depth. The Ketz River Property is underlain by

Lower Cambrian carbonate and clastic sedimentary rock units. The rock types include graphitic shale, argillite, phyllite, siltstone, sandstone, quartzite, and limestone. Intrusive rocks are rarely encountered at the Ketz River Property. The property also lies on the southern flank of a westward plunging anticline. A later deformation has overprinted these structures with broad, open folds and drag folds that occur adjacent to thrust faults. Northeast-directed thrust faults exhibit displacements of up to 450m. The thrust faults have been cut by later reverse, normal and strike slip faults.

There are two general types of sedimentary-rock hosted gold deposits on the property: (1) manto-type replacement sulfide/oxide deposits; and (2) quartz-sulfide fissure vein and stockwork systems (referred to as Shamrock-type in previous reports since most of these resources are located near Shamrock Mountain). Both deposit types contain sulfide minerals that are dominated by pyrrhotite, pyrite, arsenopyrite, and trace chalcopryrite. The manto deposits consist of sub-horizontal tabular massive sulfide and/or oxide bodies. Chimneys are sub-vertical massive sulfide and/or oxide bodies and are included in the “manto” subtype; both are hosted within Lower Cambrian limestone units. The Peel, Penguin, Lab-Hoodoo, and Tarn resources are manto-type deposits.

The Au-bearing quartz-sulfide fissure vein and stockwork systems are hosted in siliciclastic-rich rocks dominated by argillite. The host rocks for this mineralization style consist of interbedded Lower Cambrian argillite, phyllite, siltite, quartzite and lesser carbonate rocks located on the eastern side of the Ketz Uplift. The QB, Gully, and 3M resources are examples of the quartz-sulfide fissure vein and stockwork systems. The Knoll resource occurs near Shamrock Mountain and contains both styles of mineralization (manto type and stockwork vein type).

Alteration assemblages that surround the Au-bearing manto-type deposits include: dolomitization and/or other iron-carbonate minerals (siderite and ankerite), limestone recrystallization, and calcite±quartz veins. Silicification, sulfidization, biotite hornfels, and bleaching are closely associated with the Au-bearing quartz-sulfide veins and stockwork type deposits hosted by the argillite-rich units.

Exploration

YGC and YNG have been drilling at the Ketz River Project since May 2005 and as of December 10, 2010 have drilled 1,029 diamond drill holes totaling 136,656m. Additional exploration conducted at the project includes: surface geologic mapping, geophysical surveys (ground magnetic, induced polarization, resistivity, and gravity), trenching, surface soil and rock-chip sampling, metallurgy sampling and testing, geotechnical surface and underground mapping, oriented core drilling, hydrogeology drilling and testing, and petrographic studies.

All of the 2008 exploration drilling results were used to help support the current resource presented in this report and includes 225 diamond drill holes (drill hole numbers KR-08-1269 to KR-08-1466; and GT-08-01 to GT-08-12; and HYD-08-01 to HYD-08-12 and HYD-08-16 and -17) totaling 30,436 m.

Topographic surveys were conducted in 2006 and 2007, producing maps with 10m and 1m, and 5m contour intervals, respectively.

Sampling and Laboratory Procedures

The core is photographed and logged prior to sampling. Core is typically sampled on 1.5m intervals for HQ-sized core and sulfide-rich replacements, and locally up to 3.05m intervals for NQ-sized core. The drill hole samples from 2006 to 2008 were prepared at the ALS Chemex lab in Terrace, BC. Drill hole samples are typically transported in sealed bean bags from the Ketza River property to Whitehorse by KRH personnel where they are shipped directly to the ALS Chemex laboratory using a local freight delivery company. The metallurgy diamond drill holes (numbers KR-08-1269 to KR-08-1300) drilled in 2008 were shipped from the project site in sealed 50-gallon barrels and prepared in the Jerritt Canyon Mine lab in Elko, Nevada.

The drill hole samples since 2006 have been analyzed at ALS Chemex in North Vancouver, BC. Samples are analyzed by fire assay with atomic absorption (AA) finish, with samples above 1.00ppm being re-assayed with a gravimetric finish. The 2008 metallurgy drill hole samples described above were analyzed by ALS Chemex in Reno, Nevada for inclusion into the drill hole database and resource model.

Multi-element geochemistry is also collected for every drill hole sample analyzed for Au. Specific gravity data on all representative rock types and mineralization types have been used to help support the current resource estimate and were analyzed at ALS-Chemex in 2007 and 2008 using the OA-GRA8a (paraffin wax) method.

Laboratory QA/QC consists of inserting a standard or blank every 15th sample. Prior to mid-2006, two samples were collected from a mineralized outcrop at the Ridge Pit in the Peel area. These two samples were used as standards, but had not been correctly prepared and certified and the results therefore are problematic. In mid-2006 up to the present, YGC and YNG have used commercial certified standard samples from CDN Resource Laboratories Ltd. The results from these standards from the 2007 and 2008 drill programs indicate that the ALS Chemex laboratory results are acceptable.

Blank samples used from 2005 to 2008 are non-certified materials and composed of local barren limestone from the site. These samples were not certified as barren and locally contain anomalous Au. As of May 15, 2010 a barren crushed marble material purchased in Whitehorse has been used as blank material. This blank material has yet to be certified but is giving more consistent results than blanks that were previously used.

Data Verification

Some data quality problems were observed in the historic Au assays from drill holes completed from 1984 to 1997 that apparently did not use project-specific assay import routines or a consistent selection criteria to enter the “best” gold assays into the master digital database. All of these original assay data for drill holes prior to 1997 are only in paper log format (i.e. hand written on the geology logs) that are stored at the Ketza River Project site. The problems observed with the historic drill hole assay data included local digital data entry errors, final Au_Best assay values that were randomly selected from various laboratories with no consistent selection criteria, missing assay values that were in the paper log files but never entered into the digital database, or the Au_Best assay value was locally entered as an average value based on several values generated from different labs.

Based on the aforementioned problematic gold assay data for years 1984 to 1997, a drill hole audit was conducted by YNG geologists from December 2009 to January 2010 at the Ketza site.

This drill hole audit digitally captured and compared all of the historical 1984-1997 assays from the various labs (and other geological data) in paper log format to the digital data stored in the existing database. From this recent data verification work, a consistent methodology for determining the Au_Best assay value was determined that primarily relied on the primary assay lab. The primary assay lab was sometimes not identified in previous reports and for these cases was determined by the identifying the lab that contained the highest number of Au assay results for that year. The Au_Best values determined from the historical Au assay data capture exercise in conjunction with the more recent 2008 drill hole results were used for this current resource estimate.

In addition to capturing the historic gold assay data, YNG geologists collected: sulfide mineral and oxide mineral data logged by the geologist as either a general intensity description or as an estimated percentage by volume; RQD and core recovery estimates; and verified from/to sample assay intervals. In addition, a data audit on the 2008 drill hole assays determined that the assays in the master digital database were properly imported. The resulting revised and verified assay database was determined to be of suitable quality for resource estimation.

Resource Estimation and Resource Statement

The resource estimation is presented in Table 1 and was conducted by mine consultants and YNG personnel using drill hole assay data received up through January 25, 2010 and includes all of the drilling completed in 2008.

The resource estimation was based on digitizing lithological contacts and major faults, and 0.5 g/t grade shells on 10m east-west cross-sections using the available drill hole data. These digitized polygons were ultimately used to construct 3-D wireframe solids around the mineralized drill intercepts, compositing the data on 1.5m intervals, with breaks at the envelope boundaries, and then using the inverse distance cubed (id3) algorithm for resource estimation limited to only within the 0.5 g/t Au envelopes. The average gold grade is calculated from the au_id3 variable in the block models. Tonnage is calculated using the digitized grade shells and resulting triangulations using the SG variable in the block models.

A Lerchs-Grossman pit optimization program was run on the new block model to differentiate potentially open pit resources from potentially underground resources. The optimization was run using current mine cost parameters and a gold price of \$1,150 US/troy oz; using measured, indicated, and inferred ore classification schemes; and only for the purpose of identifying potentially mineable resources. The resulting open-pit shapes were generated using measured, indicated and inferred resource in order to maximize the potential open-pit footprint for Yukon permitting (YESAB project proposal) purposes. Since inferred resources were used to help generate the resulting optimized pits and resource tables for this study, they cannot be referred to as proven or probable reserves as defined by CIM (2000).

The resource at Ketz River using drill hole data received as of January 25, 2010, and using all of the 2008 drilling are summarized in Table 1 which includes all REDOX types (oxide, sulfide, and mixed oxide + sulfide materials). The cutoff grade for oxide ore material and sulfide ore material inside the optimized open pit is 0.78g/t and 1.00g/t, respectively, and for material that is potentially mineable by underground methods outside of the optimized open pit is 3.44 g/t and 4.43 g/t, respectively. A total of 41% of the measured and indicated recoverable resource ounces are hosted in oxide ores which have a gold recovery of 90%; whereas the other 59% of the

Table 1: Ketz River Mineral Resource Statement Differentiated by Open Pit and Underground Including Oxide and Sulfide and Mixed Oxide + Sulfide Ores

Area	Open Pit Resource			Underground Resource			Combined (OP+UG)		
	kt	g/t-Au	koz	kt	g/t-Au	koz	kt	g/t-Au	koz
Measured									
Peel	85.2	5.76	15.8	3.7	8.41	1.0	88.9	5.87	16.8
Penguin	14.0	1.88	0.8	0.0	0.00	0.0	14.0	1.88	0.8
Lab-Hoodoo	9.4	6.92	2.1	0.0	0.00	0.0	9.4	6.92	2.1
Tarn	11.4	4.73	1.7	0.0	0.00	0.0	11.4	4.73	1.7
Gully	7.0	5.60	1.3	2.1	7.41	0.5	9.1	6.01	1.8
QB	23.4	4.55	3.4	0.4	3.81	0.0	23.8	4.47	3.4
Knoll	11.1	6.66	2.4	0.0	0.00	0.0	11.1	6.66	2.4
Total Measured	161.5	5.30	27.5	6.3	7.39	1.5	167.8	5.38	29.0
Indicated									
Peel	1,053.4	6.22	210.6	204.6	8.83	58.1	1,258.0	6.64	268.7
Penguin	233.6	2.89	21.7	0.0	0.00	0.0	233.6	2.89	21.7
Lab-Hoodoo	243.2	5.20	40.6	22.1	6.90	4.9	265.3	5.34	45.5
Tarn	79.3	3.88	9.9	0.0	0.00	0.0	79.3	3.88	9.9
Gully	45.1	3.57	5.2	14.7	8.04	3.8	59.8	4.67	9.0
QB	298.0	3.21	30.8	15.5	5.22	2.6	313.5	3.31	33.4
Knoll	2.9	4.54	0.4	0.0	0.00	0.0	2.9	4.54	0.4
Total Indicated	1,955.4	5.08	319.3	256.9	8.40	69.4	2,212.3	5.46	388.7
Measured and Indicated									
Peel	1,138.6	6.19	226.4	208.3	8.82	59.1	1,346.9	6.59	285.5
Penguin	247.6	2.84	22.6	0.0	0.00	0.0	247.6	2.84	22.6
Lab-Hoodoo	252.6	5.26	42.7	22.1	6.90	4.9	274.7	5.39	47.6
Tarn	90.7	3.99	11.6	0.0	0.00	0.0	90.7	3.99	11.6
Gully	52.1	3.85	6.4	16.9	7.91	4.3	69.0	4.84	10.7
QB	321.4	3.31	34.2	15.9	5.09	2.6	337.3	3.39	36.8
Knoll	14.0	6.22	2.8	0.0	0.00	0.0	14.0	6.22	2.8
Total M&I	2,116.9	5.09	346.8	263.2	8.38	70.9	2,380.1	5.46	417.7
Inferred									
Peel	195.2	5.30	33.2	24.2	6.55	5.1	219.4	5.43	38.3
Penguin	44.0	2.49	3.5	0.0	0.00	0.0	44.0	2.49	3.5
Lab-Hoodoo	37.5	4.38	5.3	10.1	5.54	1.8	47.6	4.62	7.1
Tarn	3.2	3.50	0.4	0.0	0.00	0.0	3.2	3.50	0.4
Gully	15.9	3.46	1.8	5.6	8.89	1.6	21.5	4.87	3.4
QB	113.5	3.80	13.9	4.4	5.66	0.8	117.9	3.87	14.7
Knoll	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0
Total Inferred	409.4	4.41	58.0	44.3	6.56	9.3	453.7	4.62	67.3

- Notes:** (1) The cutoff Au grade for oxide and sulfide ore inside the optimized open pit is 0.78 g/t and 1.00 g/t, respectively; whereas the cutoff Au grade for oxide and sulfide ore for material mineable by underground methods outside of the optimized open pit are 3.44 g/t and 4.43 g/t, respectively;
- (2) Au price used for this resource estimate is US\$1,150/troy oz;
- (3) Assigned sulfide and oxide ore Au recoveries are 70 and 90 percent, respectively;
- (4) All materials in this table include all REDOX types (oxide, sulfide, and mixed "oxide+sulfide");
- (5) Mining cost/t = \$3.00 open pit and \$80.00 underground; processing cost/t ore = \$26.00; specific gravity variable as modeled per block; 18.4:1 (waste:ore) average strip ratio for all resources; 1,500 t ore/day mill feed; A Lerchs-Grossman pit optimization has been used to differentiate potential open pit resources from potential underground resources using mining costs, Au cutoff grades, and other parameters documented in this report;
- (6) This resource includes all drill holes completed in 2008 and does not include any drill holes completed in 2009 or 2010; This resource statement has an effective date of January 25, 2010.

measured and indicated recoverable, resource ounces are hosted in sulfide or mixed sulfide+oxide ores that generally have Au recoveries of 70 percent.

Conclusions and Recommendations

Problems with the QA/QC data and with the previous drill hole database have been addressed in this document. The gold assay database for the years 1984 to 1997, and 2008 was thoroughly audited and corrected for this resource estimate.

The current resource estimation is an improvement over previously published resource reports, as it is well constrained by the drill hole assay intercepts in the z (elevation) direction, and tightly constrained to within the newly digitized 0.5 g/t Au mineralization shapes. Additional effort was taken to accurately model the previously mined underground workings for depletion in the estimated resource.

Specific gravity (SG) information was improved in the current model and included additional SG data that was collected in 2008. The SG determinations for this study were determined by using wt pct Fe data where the geochemistry data existed for recent samples (SG_ASY), or assigned by a geological characterization that incorporated rock type and a defined quantity of total oxide and total sulfide minerals logged by the geologist (SG_GEO). This model incorporates additional total sulfide and total oxide mineral data in the database to help better characterize the REDOX types which were ultimately linked and averaged with the SG determination for the SG_GEO determination.

Compared to the last reported potentially minable resource estimate for Ketz River (SRK, 2008):

- the measured resource estimate has declined from a previously reported 712.2kt averaging 6.40g/t (146.5koz recovered) to the currently estimated of 167.8 ktonnes averaging 5.38 g/t Au (29 koz Au recovered);
- the indicated resource estimate has declined from a previously reported 3,369.5 ktonnes averaging 4.61 g/t Au (499.9 koz recovered) to the currently estimated 2,212.3 ktonnes averaging 5.46 g/t Au (388.7 koz recovered) which represents a decrease of 111.2 koz of recovered gold;
- the inferred resource has declined from a previously reported 1,075.6kt averaging 3.26g/t Au (112.8 koz recovered) to the currently estimated 453.7 ktonnes averaging 4.62 g/t Au (67.3 koz Au recovered).

The decrease in measured, indicated, and inferred resources reflects new drilling, more realistic constraints placed on the construction of the 0.5 g/t Au grade shells used to constrain the estimation process, a higher quality drill hole database, better specific gravity assignments to the various ore types, and more realistic and updated mining and milling parameters and costs.

Numerous encouraging stand alone exploration targets and several resource extensions remain to be tested throughout the project area.

The authors have the following recommendations for YNG to help advance the Ketz River Property:

- (1) Continue exploration at the Ketz River property focusing on identifying new resources outside of the already defined resource areas; a reasonable 2011 drill program to complete this work includes 10,800m of total drilling at an estimated cost of \$4.9 million dollars (CAD); this work is in addition to the already completed 2009 (costs of \$3.2 million) and 2010 (cost of \$8.1 million) exploration work that drilled in both the known resource areas and away from the resource areas;
- (2) Continue with a feasibility study and capital and operating cost studies to investigate the economic viability of the current project; conduct future reserve calculations using only measured and indicated resources as per 43-101 guideline Item 19 (section i) for a true economic analysis;
- (3) Finish the detailed studies already underway that are required in order to submit a project proposal to the Yukon Environmental and Socio-Economic Assessment Board (YESAB) in August 2011; Approximate costs to complete this as of January 1, 2011 range from \$1.3-2.1 million dollars (CAD).

1 Introduction (Item 4)

Yukon-Nevada Gold Corp. (YNG) and its 100 percent Canadian owned subsidiary Company called Ketza River Holdings Ltd. (KRH, or the Company) has chosen to voluntarily prepare a Technical Report for the Ketza River Project (Ketza River or the Project) in the Watson Lake Mining District of the Yukon Territory, Canada. This Technical Report meets the requirements of Canadian National Instrument 43-101 (NI 43-101). The resource stated in this report reflects all of the assay and drill results from the 2008 drill program which took until January 25, 2010 to receive from the assay lab. YNG is considered to be a “producing issuer” for the years 2008-2010 based on the definition included in the NI 43-101 guidelines.

1.1 Terms of Reference and Purpose of the Report

This voluntary report is intended to provide YNG with a resource review and technical report that follows existing regulations in Canada. The report meets the requirements for NI 43-101 and conforms to Form 43-101F1 for technical reports. Mr. Graham Dickson, a senior manager of YNG, requested the authors to conduct this study in order to help determine the impact of the 2008 drill program on the previously published December 31, 2007 resource estimate.

Resource and Reserve definitions are as set forth in the Appendix to Companion Policy 43-101 CP, “Canadian Institute of Mining, Metallurgy and Petroleum – Definitions Adopted by CIM Council, August 20, 2000 (CIM).

1.2 Reliance on Other Experts (Item 5)

The author’s opinions contained herein is based on information provided to us by YNG throughout the course of our investigations. The sources of information include data and reports supplied by YNG and Ketza River personnel as well as documents cited in Section 19.

Much information in this report is drawn from two reports:

“NI 43-101 Technical Report, Yukon-Nevada Gold Corp., Ketza River Project, Yukon Territory, Canada” by SRK Consulting, SRK Project Number 174703, April 14, 2008;

“Metallurgical Testing of Ores from Ketza River Project, Yukon, Canada” by Steven Chen, Inspectorate Exploration & Mining Services Metallurgical Division, March 9, 2011.

1.3 Qualifications of Authors and Consultants

This report has been prepared based on a technical and economic review by a team of consultants sourced principally from the United States and Canada. These consultants are specialists in the fields of geology, exploration, mineral resource and mineral reserve estimation and classification, open pit mining, and mineral processing and mineral economics. All of the consultants and authors involved with this project have a demonstrated record of accomplishment in undertaking independent assessments of Mineral Resources and Mineral Reserves, project evaluations and audits, and technical reports on behalf of exploration and mining companies worldwide.

None of the consultants employed in the preparation of this report have any beneficial interest in YNG or in the assets of YNG. The consultants involved with writing this report will be paid a fee for this work in accordance with normal professional consulting practice. Mr. Johnson has a beneficial interest in YNG or in the assets of YNG since he owns incentive stock options in the

Company and is a current Officer. Mr. Fox is a former Director of YNG but resigned from his position in April 2010 and at the time of this report does not have any beneficial interest in YNG other than some YNG incentive stock options.

The individuals who have provided input to this technical report, who are listed below, have extensive experience in the mining industry and are members in good standing of appropriate professional institutions. Mr. Johnson is a Qualified Person for this report and is responsible for all Sections of this report. Mr. Swanson is a Qualified Person for this report and is responsible for parts of Section 15 regarding the geologic model, the grade estimation, the block model, and the mineral inventory tables. Mr. Odell is a Qualified Person for this report and is responsible for parts of Section 15 relating to the resource statement and the preliminary mine plan. Mr. Fox is a Qualified Person for this report and is responsible for Section 14 relating to the 2008 metallurgy results and proposed process flowsheet description.

The key project personnel contributing to this report are listed in Table 1.3.1. The Certificates of Author are provided in Appendix A.

Table 1.3.1: Key Project Personnel

Company	Name	Title	Discipline
YNG	Todd Johnson	Vice President Exploration (YNG)	Geology, Geological Eng.
Consultants	Karl Swanson	Mine Engineer	Resources
	Mark Odell	Mine Engineer	Resources
	John Fox	Metallurgist	Process

Many geologists (staff and contractors) working at the project site, under the direction of the Chief Geologist assigned as the qualified person (QP), helped collect and characterize the samples and drill hole data necessary to conduct this study.

1.4 Site Visit

Todd Johnson visited the property and stayed at the site camp for the following time periods: March 4-28, 2008, and again from May 9-10, 2008 as a geological consultant at the time. Operating core drill rigs were observed, and the core handling, splitting, logging practices were inspected. All major mineralized zones were visited, including small open pits at the Ridge, Break, QB, and Tarn pits in which the mineralization was exposed. Numerous historic assay certificates were inspected and compared to the database on site. Mr. Johnson and Mr. Swanson performed most of the resource estimation work (Section 15) from December 15, 2009 to March 26, 2010. Later on April 1, 2010, Mr. Johnson became Vice President of Exploration for YNG. Mr. Johnson finished writing most of the other sections of the report in March and April of 2011. Karl Swanson did not visit the project site.

Mark Odell visited the property from October 9-11, 2010 and witnessed operating drill rigs, drill core, existing underground developments and open pits, and the site topography to help with mine design and the resource estimate. Mr. Odell conducted most of his initial mine design work from October 2010 to January 2011 and finalized the resource statement in March 2011.

Mr. Fox originally helped design the original Ketz River oxide mill for Canamax in the mid-1980's. Mr. Fox visited the site in June 2008. Mr. Fox directed the 2008 metallurgy testwork while Mr. Johnson helped geologically characterize, target, and compile the metallurgy composites to make certain that the representative ores were sufficiently sampled.

1.5 Units of Measure

The metric system is used throughout this report, except where otherwise stated.

1.6 Effective Date

The effective date of this Technical Report is January 25, 2010.

2 Property Description and Location (Item 6)

2.1 Mineral Tenure in the Yukon

Hardrock mineral tenure in the Yukon consists of quartz claims and quartz leases. Both claims and leases typically measure 1,500ft x 1,500ft although fractions may exist. Quartz claims give the claimant the right to explore for one year. Renewal of a quartz claim requires that \$100 of work per claim/year, based on the Schedule of Representation Work outlined in the Quartz Mining Act. Where work is not performed, the claimant may make a payment in lieu of work. As long as the commitment is satisfied, the quartz claim remains in good standing.

Quartz leases are the most secure form of mineral title in the Yukon. Once a vein or lode is confirmed within the limits of the claim, the claimant may apply to lease the subsurface of the claim(s). Typically, companies contemplating production will take their claims to lease, which provides secure title and relieves them from their annual work requirement. Quartz leases are issued for 21 years and can be renewed for an additional 21-year term, provided that during the original term of the lease, all conditions of the lease and provisions of the legislation have been met. The cost to convert quartz claims to quartz leases is C\$50 per claim (as long as the acreage is less than or equal to 51.65 acres), and the cost to renew quartz leases for an additional 21-year period is C\$200 per claim (Yukon Government, 2008).

2.2 Property Location

2.2.1 The Ketz River Property

The Ketz River Property is located on the headwaters of Cache Creek, a tributary of the Ketz River, in the Watson Lake Mining District of the Yukon Territory, and is centered at 61° 32' N and 132° 13' W on NTS map sheet 105 F/9 (Figure 2-1).

The Ketz River property consists of 679 quartz claims and fractions of claims, and 60 quartz leases as summarized in Table 2.2.1 and shown in Figure 2-2. All Ketz River quartz claims and quartz leases are listed in Appendix B along with the expiration dates as of June 23, 2011. The 60 quartz leases cover approximately 787.9ha. The quartz leases currently owned by Ketz River Holdings Ltd. (KRH) were originally converted from quartz claims. The number of Ketz River claims identified above exclude claims associated with another nearby project to the east and those along the access road from the Roger Campbell Highway.

As of late May 2011, 146 quartz claims (claim numbers KON 604 to 733 and GF 119 to 134) were staked at the southern portion of the Ketz River claim block and recorded and are currently under the control of KRH. These 146 claims added in late May are not shown on the attached claim map figure (Fig. 2-2); however, they are listed in Appendix B. All Ketz River project claims lie in NTS Map sheet numbers 105 F/9 and 105 F/8. All of the aforementioned Ketz River claims are controlled 100 percent by Ketz River Holding Ltd. The author's of this report did not review the validity of the Ketz River claims

Table 2.2.1: Claim Summary for the Ketz River Project, Yukon

Property	No. Quartz Claims	No. Quartz Leases	No. Quartz Claims Not Owned by KRH
Ketz River	679	60 (787.9 ha)	0

Figure 2-1: Ketza River Project Location Map

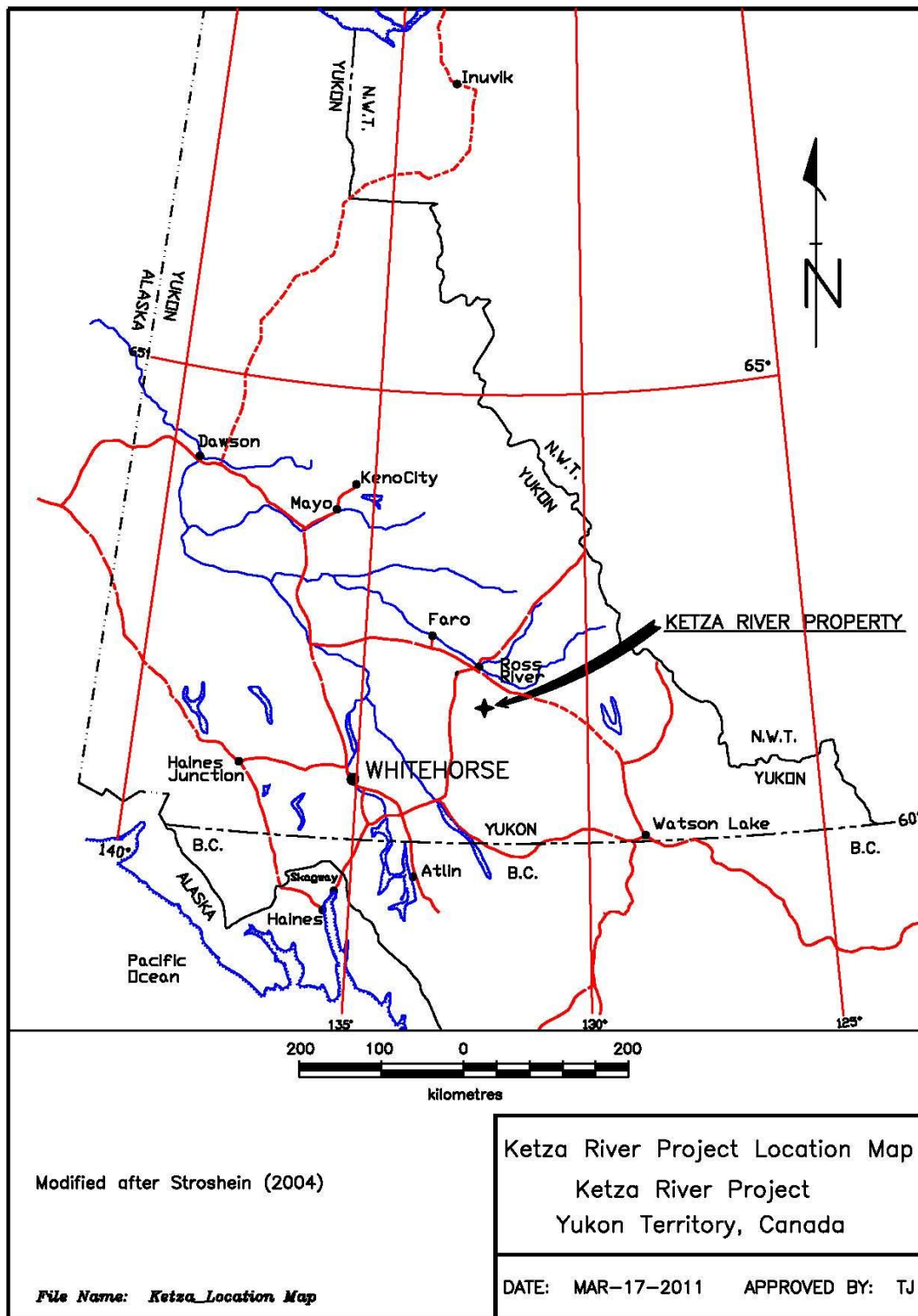
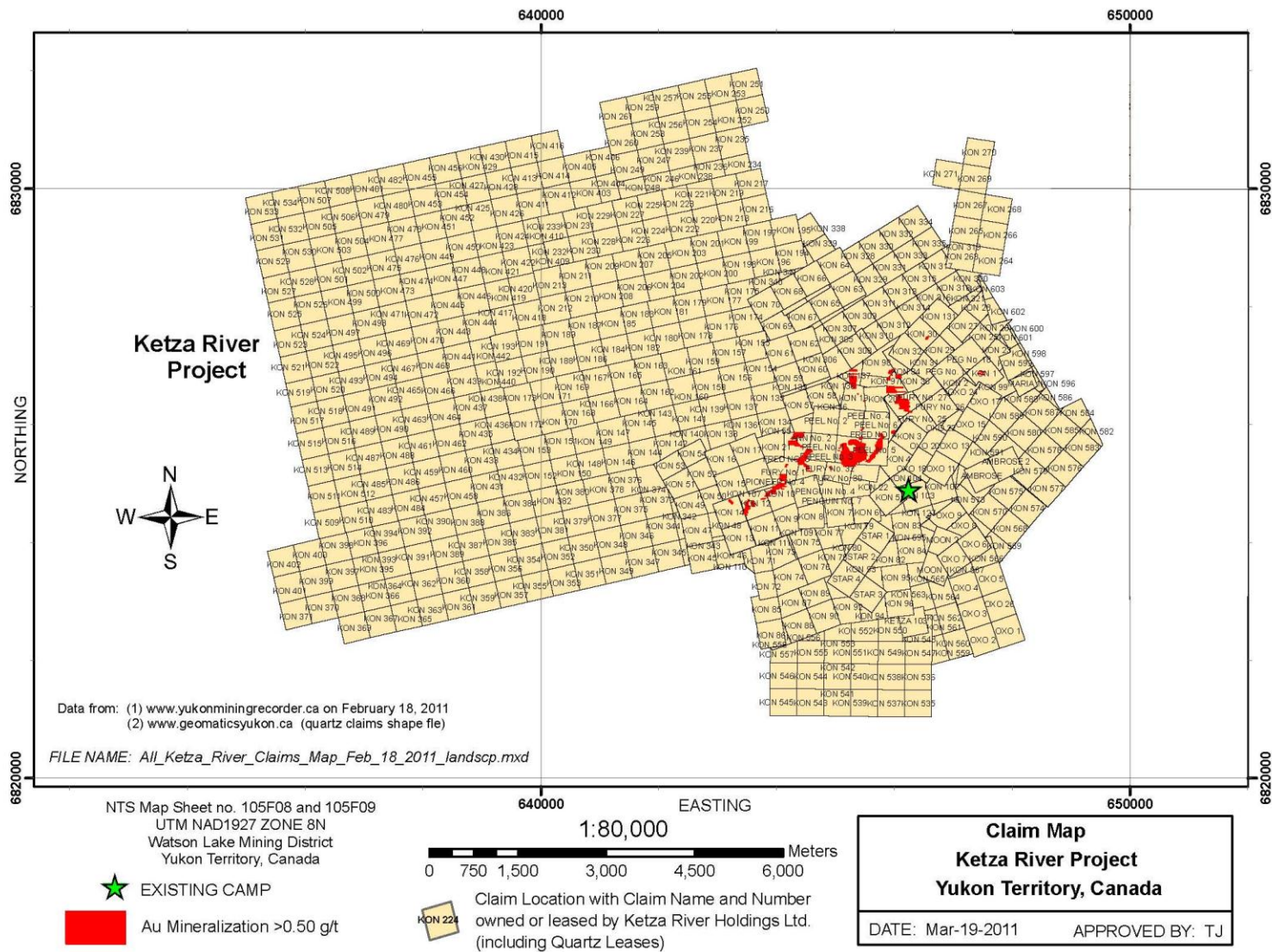


Figure 2-2: Ketza River Project Land Position



2.3 Royalties, Agreements and Encumbrances

2.3.1 Annual Royalty

An annual royalty is due to the Yukon government on every producing mine according to the Yukon Quartz Mining Act (Canada) and is described in the Information Sheet 2010-02 “Explanation of Quartz Mining Act and Royalty Regulation Amendments” that can be downloaded from the internet from the Yukon Government website (Yukon Energy, Mines, and Resources, 2010). The royalty is on any profits that exceed the sum of \$10k during any calendar year. The royalty is as follows:

On annual profits in excess of \$10k and up to \$1M, 3 percent;

On the excess above \$1M up to \$5M, 5 percent;

On the excess above \$5M up to \$10M, 6 percent; and

On the excess above \$10M a proportional increase of 1 percent for each additional \$5M with a cap on the annual royalty rate at 12 percent for any profit in excess of \$35 million.

2.4 Environmental Liabilities and Permitting

2.4.1 Permits

Environmental permits are in place for exploration and related activities, as well as the maintenance of the Ketza River camp. The Company has a staff based at the Ketza River camp to routinely monitor environmental parameters, and also maintains an office in the provincial capital of Whitehorse. Relevant permits are presented in Table 2.4.1.1. All permits except the Water License are issued by the Department of Energy, Mines and Resources or the Department of Environment. The Water License is issued by the Yukon Water Board.

The Quartz Mining Land Use Permit requires a lease-security payment to be made each year for a limited time. Under the existing permit, payments of C\$94,050 are due every April 1 up until 2014 to the Department of Energy, Mines and Resources. In addition, Ketza River Holdings Ltd. holds lease number 105F09-001 for 15 years starting July 1, 2003. The total rent due on this lease per year is C\$7,350 + GST (C\$7,717.50 total) and due on July 1.

As of mid-March 2011, the total security amount held by the Yukon Government is C\$3,508,821 (http://www.emr.gov.yk.ca/mining/security_held_mining_projects.html) of which C\$3,087,600 is being held pursuant to the Waters Act and C\$421,221 is being held pursuant to the Quartz Mining Act. This money being held by the Yukon Government may be thought of as a reclamation bond.

The Water License QZ04-063 expired on December 31, 2009 and the reapplication process is currently in progress. Yukon-Nevada Gold Corp. and Ketza River Holdings are still obeying the rules and regulations in this water license until it is renewed. The application for Environmental Acts Permits, which includes the solid waste, special waste, and storage tank permits, were submitted for approval on May 18, 2011.

Table 2.4.1.1: Permits for the Ketza River Project

Permit/Approval	Issuing Agency	Comments
Quartz Mining Land Use Permit LQ00156	Mining Land Use, Department of Energy, Mines and Resources	Covers all exploration through June 14, 2014.
Government of Yukon Lease (lease number 105F09-001)	Lands Branch, Department of Energy, Mines and Resources	For the occupation of land for the purpose of commercial mine, mill, campsite, tailings pond and other facilities.
Class A Land Permit	Lands Branch, Department of Energy, Mines and Resources	Permit to proceed with the land use operations for road maintenance.
Water License QZ04-063 (Expired December 31, 2009 but Reapplication process in progress)	Yukon Water Board	For the storage of water in, and the discharge of water from, an existing tailings impoundment.
Environmental Health Approvals	Department of Environment	Public Health and Safety Act approvals needed for drinking water, food safety and private sewage disposal.
Storage Tank Registration	Department of Environment	For registered AST's: one 45,000L, one 500L, one 10,000L, and four 90,000L tanks.
Air Emissions Permit No. 4201-60-025	Department of Environment	Permit to operate a solid waste incinerator capable of burning >5kg/day.
Special Waste Permit No. YG41-190	Department of Environment	Allows for storage and handling of waste, oil, waste batteries, waste lead nitrate, unspecified substances classified as "Corrosive Solids, NOS, Class 8, Packing Group 1.

2.4.2 Compliance Evaluation

At the time of this report, a replacement camp was being transported to the Ketza River project site for installation. A few outstanding permits for operating this replacement camp have either been submitted for approval or are in the final stages of being written for submission to the Yukon Government (i.e. building permit). YNG has notified the primary author that it holds all other permits required for exploration at the site. Additional permits will be required for mine operations.

2.4.3 Environmental Liabilities

The only environmental liability at the Ketza River project includes the existing Ketza River tailings impoundment (pond and dam) that was originally established by the historic mine operators (Canamax Resources Inc.) in 1987 and used for their mining operation from 1988 to 1990. The Ketza River tailings pond is classified as Type II site that is regulated by the Government of the Yukon. The existing tailings pond is currently under owner-operator care and maintenance by Yukon-Nevada Gold Corp. (YNG). YNG is planning to start decommissioning the existing tailings dam prior to the startup of the next mining operation.

Environmental management systems are in place and there is a qualified environmental staff associated with YNG and KRH. Numerous monitoring wells exist at the Ketza River property that have been monitored by either on-site staff or contract engineering companies. EBA Engineering, now a Tetrattech Company, has also been involved at the Ketza River property conducting environmental programs and water sampling over the recent years. Various

mitigation programs are in effect as required under the various licenses and agreements that have been filed and/or approved for the project. No unusual costs associated with any of these programs were identified.

3 Accessibility, Climate, Local Resources, Infrastructure and Physiography (Item 7)

3.1 Topography, Elevation and Land Use

The Property is located in the Pelly Mountains in south central Yukon. Terrain is mountainous with elevations ranging from 1,300m above mean sea level (amsl) to 2,100m amsl. Land use in the area is limited to mining, trapping, hunting and recreation.

3.2 Climate and Length of Operating Season

Average daytime temperatures range from highs of +25°C in summer to lows of -40°C in winter. Average annual precipitation in Faro, the nearest location for which weather statistics are available, is 31.6cm and includes annual averages of 21.4cm of rainfall and 111.6cm of snowfall (http://climate.weatheroffice.ec.gc.ca/climate_normals). Daylight extends to nearly 24hr/day in the summer months, particularly June. There are only short periods of daylight during the winter. Exploration can be conducted year-round but heavy winter snow may limit access to some areas. Mining can be conducted year-round.

3.3 Vegetation

Vegetation consists of dwarf birch, spruce, alder and balsam trees up to the tree line at approximately 1,600m amsl.

3.4 Access to Property

The Property is accessible by a 40km all-weather road from Km 323 on the Robert Campbell Highway. The Property is approximately 80km by road from Ross River and 460km from Whitehorse (Figures 2-1 and 3-1). The 40km access road is kept open year-round and is passable for tractor-trailer-size supply trucks.

3.5 Surface Rights

The surface is owned by the Crown and leased to the Company under the Government of Yukon Lease. Total annual lease payment for the occupation of land for the purpose of a commercial mine, mill, campsite, tailings pond and other mine-related facilities is C\$7,350 + GST (C\$7,717.50 total).

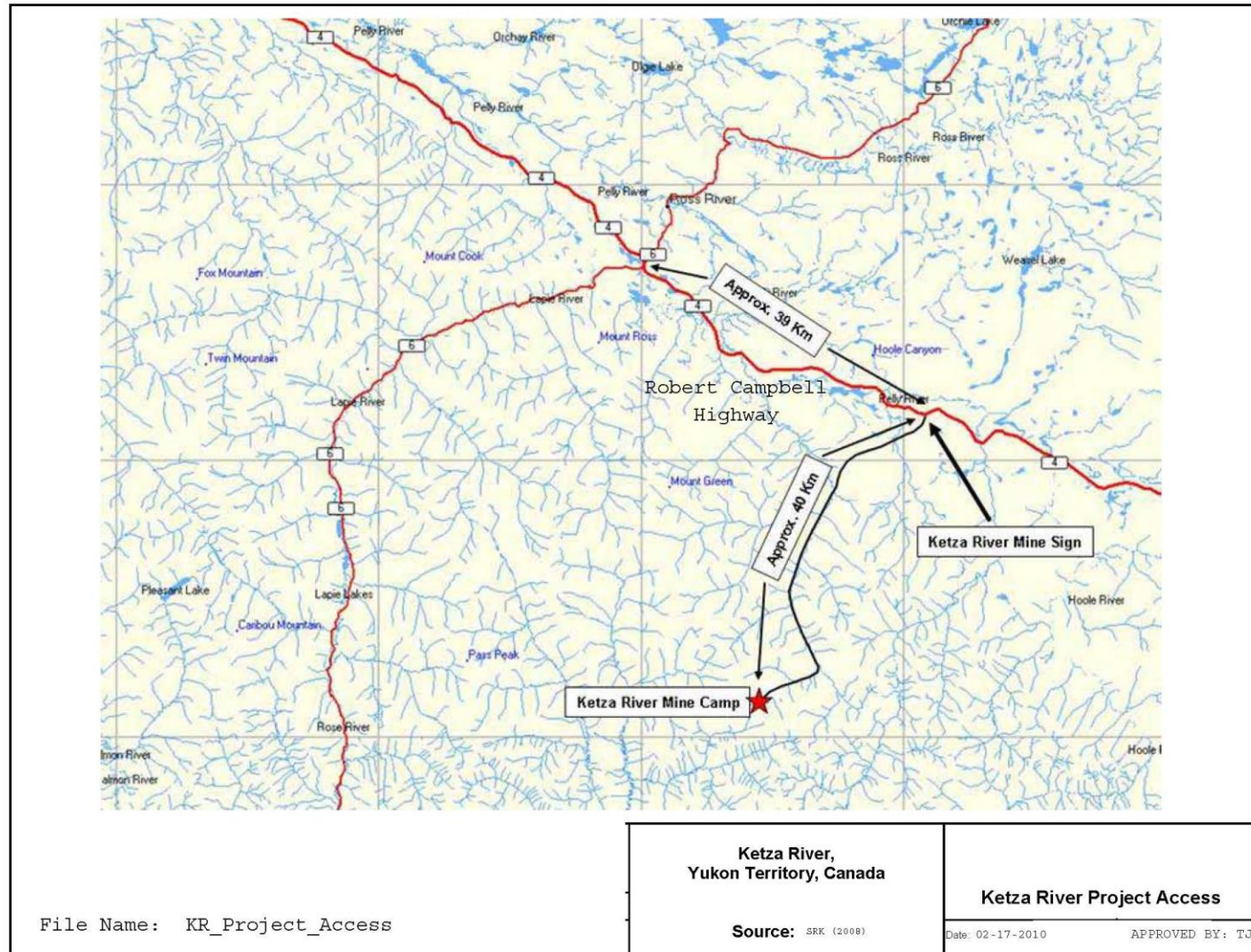
3.6 Local Resources and Infrastructure

The community of Ross River is 90km from the Project and supplies food, fuel and basic medical service. Personnel trained in first aid are on site at the Ketza River camp at all times and a fully stocked Industrial Ambulance is available. There is an airstrip in Ross River and contractors for electrical, plumbing, mechanical and vehicle maintenance are available in Ross River or Whitehorse.

3.7 Power Supply

Power to the camp and facilities is provided by 160kV and 210kV diesel generators. One generator remains off while the other generator provides power. The two are used alternately to allow for maintenance. A smaller 60kV generator is available as backup. Power for any future mining activities will be provided by additional generators.

Figure 3-1: Ketza River Project Access



3.7.1 Water Supply

The Ketz camp has recently been receiving their drinking water by pumping directly from Cache Creek into a storage tank where the water was chlorinated, and processed using reverse osmosis equipment (for arsenic treatment). Pumps that were in place could individually produce up to 30gal/min. At the present time, water pumped from the nearby creek must be boiled prior to human consumption until a new water well is installed at the site which is planned for early July 2011. Bottled water from off site is also being used in camp.

Water required for future mining operations will be assessed in future studies and will presumably be provided by water wells to be drilled on the property. A new water well that will be used to supply water to the replacement camp and the future mine is set to be drilled and installed in early July, 2011.

3.8 Buildings and Ancillary Facilities

The buildings for the existing camp, kitchen and offices are Atco trailer units. There are 48 rooms available for lodging. Additional tent facilities are set up separately from the existing trailers for staff housing. There is a kitchen unit with dining area and an office complex for technical staff. In addition there are laundry facilities and a dry room.

The existing Atco trailer units at site have recently been blocked for use and a 49-person Atco modular trailer replacement camp comprised of a bunkhouse, kitchen, and living quarters is currently being transported to the site for installation. The replacement camp will help support the 2011 exploration program and also be used to support construction of the new mine facilities.

Shop areas in the old mill building are functional and are used for maintenance of camp vehicles and equipment. The old mill building that houses some of the old process equipment is in poor to moderate condition and its use for future milling activities will be investigated in future studies. West of camp there is an operational core logging and core splitting building. All facilities have available power and water. Core is stored outdoors on-site.

3.8.1 Camp Site

The camp site is permitted for 50 personnel. Technical staff typically work four weeks on and two weeks off with schedules dependent on the needs of the camp.

A larger camp will be required for future mining operations. Approximately 150 people will be needed for mining operations while 200 people will be needed for construction.

3.8.2 Tailings Storage Area

There is an existing unlined tailings pond on the Ketz River site that was utilized in previous milling operations. This pond was constructed by October 1987 as a sub-aqueous disposal sight for oxide mill tailings with a storage volume capacity of 610,000m³ after allowing for 1.1m water cover on top of the tailings (Canamax, 1990; Golder, 1986). The amount of tailings in the existing pond is estimated by others at 342,395 tonnes (Canamax, 1991a). The majority of the future mining that is proposed will contain sulfide minerals making the current pond unsuitable for tailings disposal.

YNG is investigating implementing a thickened tailings method for tailings disposal for future operations which would be located directly below the existing tailing pond. An alternative upper

site located just north of the Penguin and Tarn resources has been proposed to be used for dry stacked tailings. For dry stacked tailings, the process slurry would be dewatered to a moisture content of around 20 percent. This material would then be stacked on a lined containment pad. The water that has been scalped out of the tailings stream would be re-used as makeup water where applicable.

3.8.3 Waste Disposal Area

Waste generated in camp and from activities associated with the Project are burned in a trash incinerator or hauled to the Ross River landfill. Trash awaiting incineration is stored in bear-proof metal storage containers. There is a chemical treatment facility for sewage located down-gradient from the camp.

Currently there are no waste dumps of any significant size on the surface. The majority of the waste material that was previously mined was used as fill material for the underground workings.

Preliminary sites for waste rock disposal have been identified. Geotechnical and environmental data is currently being collected and summarized to use in the engineering design for future waste dumps. Although some of the waste may be acid generating in nature, the abundance of high quality limestone on the site should leave several options for mitigation of acid generation potential.

3.8.4 Manpower

Geologists, engineers, surveyors and other technical people are hired on a contract basis or employed through YNG or KRH. Even though there is an expired signed Memorandum of Understanding (MOU) with the Dena Band of the Kaska Nation, KRH is still honoring this document which states that First Nation's people will be preferentially hired if they qualify for available jobs. KRH is currently negotiating with the Dena Band to make a new MOU. Personnel for mining operations will be hired and trained locally where possible. Additional personnel will be hired from other localities.

4 History (Item 8)

The Ketz River Property has a history of exploration and production dating back to the 1940's. The property consists of several discrete zones of gold mineralization as shown on Figure 4-1. The exploration camp, and core shed are shown on the map along with the historic tailings pond and old mill site.

4.1 Ownership

The history of the ownership of the Ketz River property is summarized below:

- Conwest Exploration Company Limited (Conwest), 1954-1983;
- Pacific Trans Ocean Resources Ltd (Pacific Trans-Ocean), 1983 to 1984, through an option with Conwest;
- Joint venture between Canamax Resources Inc. (Canamax) and Pacific Trans-Ocean, 1984-1989;
- Canamax, following purchase of Pacific Trans-Ocean's interest, 1989-1992;
- Wheaton River Minerals Ltd (Wheaton), after acquisition of property from Canamax, 1992-1994;
- YGC Resources Inc. (YGC), after transferral from Wheaton in exchange for controlling interest in YGC, later divested, 1994-2007; and
- Yukon-Nevada Gold Corp. (YNG) or it's 100 percent Canadian subsidiary company called Ketz River Holdings Ltd. (KRH), following merger between YGC and Queenstake Resources Ltd to create YNG, 2007 to present.

4.2 Past Exploration and Development

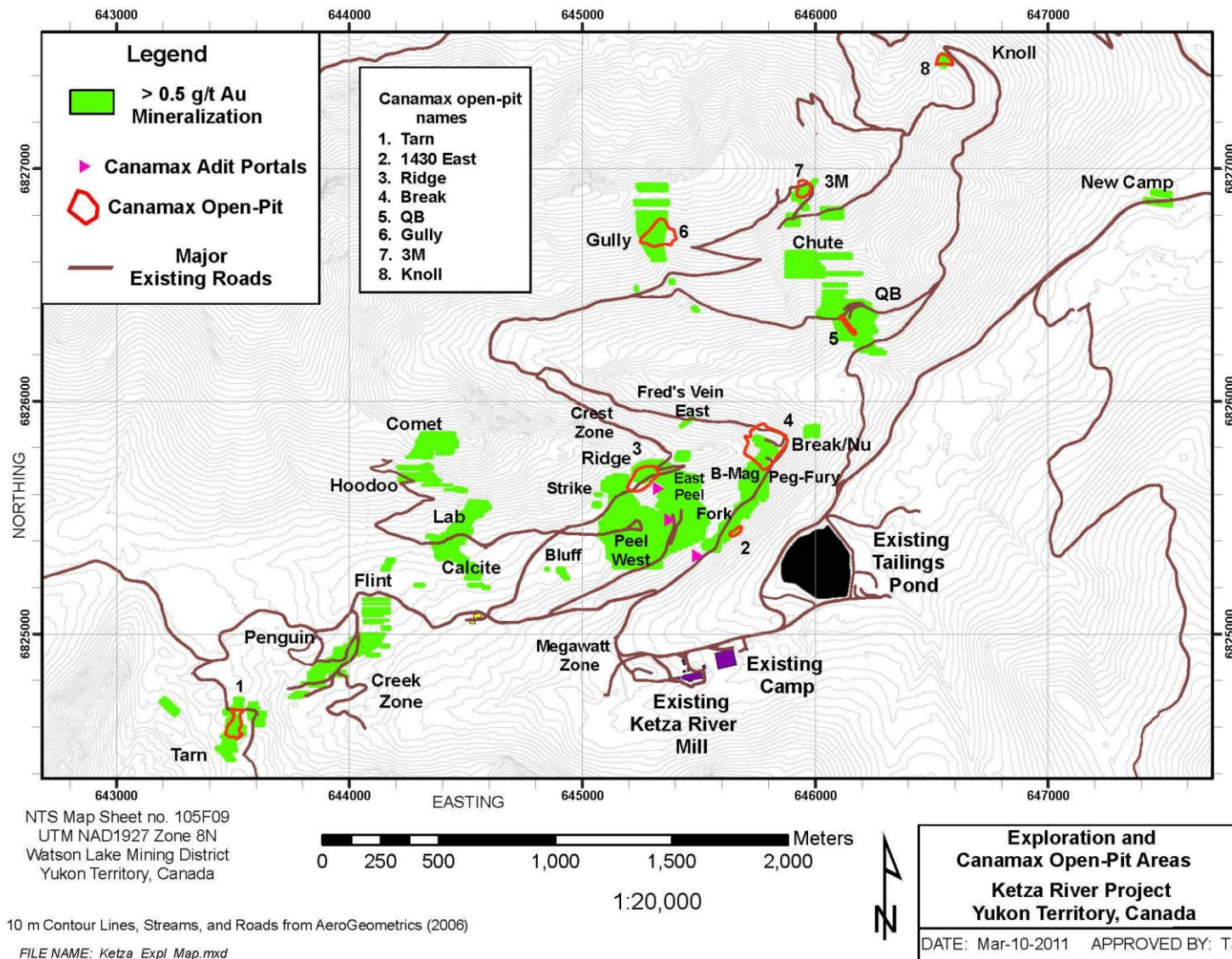
Lead-silver veins were discovered in the Ketz River area by prospectors of the Hudson Bay Mining and Smelting Company Limited in 1947. Later explorers conducted trenching, road building and diamond drilling. Exploration adits were subsequently developed on the lead-silver veins but little economic production was achieved.

Gold mineralization on the property was first discovered in 1954 by Conwest. Between 1955 and 1960, Conwest explored several mineralized occurrences with trenching and 75 AX diamond drill and packsack drill holes. A non-NI 43-101-compliant historic geological "reserve" of 68kt grading 12g/t-Au was reported for the Peel 3 and Peel 3C deposits (now known as the Peel and Ridge zones). The claims were surveyed and taken to lease during this time.

In 1983, Pacific Trans-Ocean optioned the property from Conwest and carried out limited geochemical and geological surveys before entering into a joint venture with Canamax in 1984.

In 1984, Canamax, as operator of the joint venture, completed geological mapping, a 3,500 sample soil geochemical survey for gold and arsenic, a 102 line-km airborne EM-Magnetic survey, rock sampling and 2,424m of diamond drilling in 59 drill holes. Drilling focused on the Peel, Flint, Penguin and Tarn sulfide zones and Ridge oxide manto zone. Initial oxide reserves at the Peel and Ridge zones were calculated at this time. The locations of the exploration targets and existing resources at the property are shown in Figure 4-1.

Figure 4-1: Gold Mineralized Zones and Existing Facilities



In 1985, Canamax carried out geologic mapping, 6,158m of diamond drilling in 60 holes, 409m of underground drifting on the 1510 Level and collection of a metallurgical bulk sample from the Peel and Ridge oxide zones. Preliminary geotechnical and environmental studies were also completed. The exploration led to the discovery of the QB vein. The Iona Silver property adjoining the east boundary of the property was optioned by Canamax and the Slide Lake claims immediately north of the property were staked at this time.

The 1986 field program consisted of prospecting and trenching and led to the discovery of the Break, Gully, 3M and Knoll zones. In 1986, Canamax undertook 6,278m of surface diamond drilling in 90 drill holes to define the Peel zone and to test the Break, QB and 3M showings. Underground exploration included 1,200m of development work on the 1550 and 1510 levels followed by 68 underground diamond drill holes totaling 2,331m. An option was obtained on the adjoining High River/Quillo property.

Exploration during 1987 included diamond and reverse-circulation (RC) drilling, ground geophysics and soil sampling. In addition, low-altitude aerial photography was completed over the property. Drilling during this time consisted of 61 diamond drill holes totaling 4,990m and 95 RC drill holes totaling 5,029m. Drilling focused on definition drilling on the Peel zone and exploration drilling on the Peel fault, Fred's Vein East, and 3M zones. Ground geophysical surveys included 50 line-km of magnetic and 30 line-km of HLEM surveys. Soil sampling on 25m spacing resulted in 2,298 samples for gold analysis only. The Hoodoo and Eileen oxide zones and the Lab and Raven sulfide zones were also discovered at this time.

In 1988, work consisted of diamond drilling, ground geophysics, soil sampling and underground development and exploration. Diamond drilling consisted of 70 holes, 12 of which were underground holes, totaling 5,549m on the Lab, Hoodoo, Comet, Knoll, 3M, NW fault, Megawatt, Sue Creek, Penguin, Peel, Break and Nu zones. Ground geophysical surveys included 90 line-km of magnetics and 26 line-km of VLF. A total of 2,310 soil samples were collected and analyzed for gold. One hundred sixty m of underground drifting on the Nu and Break zones was completed followed by 582m of underground diamond drilling. Sulfide mineral process investigations were initiated. Options on the Iona Silver and High River/Quillo properties were terminated in 1988.

Exploration during 1989 consisted of percussion and diamond drilling, surface geophysics, geologic mapping and soil sampling. Drilling consisted of 127 diamond drill holes (including seven underground holes) totaling 5,590m and 79 percussion holes for a total of 1,215m. Definition diamond drilling was carried out on the Knoll, Tarn, and 1430 East oxide zones and on the Peel East open pit, Peel East underground and Peel West underground and Lab sulfide zones. Preliminary percussion and diamond drilling was also carried out on the Break, B-Mag, Peg-Fury, and Nose zones. Ground geophysics consisted of 36 line-km of ground magnetics. Geological mapping and collection of 500 soil samples led to the discovery of the 1430 East, Tarn and B-Mag oxide zones. New oxide mineralization was also identified at the Knoll and QB zones.

During 1990, trenching was completed on the Penguin and Sauna zones. Drilling in 1990 focused on the Lab and Calcite Zones and consisted of 35 diamond drill holes totaling 2,620m.

In February 1987, a feasibility study (Canamax Resources Inc, 1987) was completed by Canamax and reviewed by Wright Engineers Ltd (Wright). The study recommended construction of a 320t/d mill and mine complex producing approximately 50koz-Au/year from a

mineable base of 460kt of oxide ore averaging 15.3g/t-Au. The feasibility preceded NI 43-101 requirements and is not compliant with CIM (2000) guidelines. Mine life was to be five years and the average cost per ounce of gold produced was to be in the range of US\$220 to US\$250. The estimated cost to build the mine and mill was estimated at US\$21M. A production decision was made in March 1987, and financing was obtained in October 1987. The mill achieved commercial production in July 1988.

After several months of operation, the inventory was significantly reduced from the Wright feasibility study estimates due to an error in estimation of the bulk density of the oxide ore. The feed grade to the mill was also lower than expected, due to a number of factors including over-weighting of high-grade samples in the data and dilution from the lower than expected grade from the footwall mineralization (Strathcona Mineral Services Limited, 1988). Canamax purchased Pacific Trans-Ocean's interest in the Project in January 1989.

Reported Canamax mill production is shown in Table 4.2.1. Gold produced in the preproduction milling period between March to June 1988 was used to help finance the construction of the mine which was officially opened in July 1988. Based on the two available data sources listing total gold production from March 1988 to November 1990, 337,343 tonnes were milled and 97,992 oz of Au were produced.

Table 4.2.1: Total Canamax Mill Production Data for the Ketza River Mine

Study (Reference)	Production Period	Tonnes Milled	Average Au Grade (g/t)	Average Mill Recovery	Au Oz Prod.
Canamax Project Review; Mill Statistics (A)	July 1988-Nov. 1990	307,397	10.68	88.31%	93,312
Canamax Preproduction Mill Records (B)	March-June 1988	29,946	7.78	85.33%	4,680
Total Canamax Mill Production	March 1988 – Nov. 1990	337,343	9.03	86.69%	97,992

Notes:

- (1) March-June 1988 data is from Canamax pre-production mine records found at the site;
- (2) References: (A) Canamax (1991) based on monthly and annual mill production statistics; (B) Canamax (1988) preproduction mill statistics data (from mill records);
- (3) Total mill production includes preproduction mill data; average Au grade and mill recovery is calculated using both preproduction and production mill data

Average mill throughput over the life of the mine was 364t/d (Canamax, 1991). Historical Canamax mill records indicate that the dore Au bars poured at the Ketza River mine typically contained 5 to 10 percent Ag by weight as a result of processing oxide ore. Underground mining was primarily done using the square set method.

A summary of total mine production by zone is presented in Table 4.2.2 (Hodgson, 1991). It should be noted that mine production figures are not reconciled with total mill production. The mining statistics shown in Table 4.2.2 have poor reconciliation with the mill statistics shown in Table 4.2.1. The variance between the mill and mine statistics is moderate (8 to 12% difference) and could be related to: (1) higher reported Au grade in the mine production data (up to 8% higher than the mill Au grade); and (2) higher reported tonnes in the mine production data.

Table 4.2.2: Total Canamax Mine Production Data by Area: July 1988 – November 1990*

Zone	Tonnes	g/t-Au
Ridge	95,790	13
Peel	148,844	13
Break-Nu	54,700	10
Tarn	18,169	8
QB	1,987	13
Knoll	2,936	6
Gully	8,136	10
1430 East	600	5
Peel/Ridge Mine Dump	11,233	6
Total	342,395	11.6

Notes: (1) *Hodgson (1991) mine production statistics by resource area;

(2) Mine production figures in this table have not been reconciled with total mill production so the stated tonnage values may be high by approximately 12 percent.

Table 4.2.3 below shows the total underground ore production from historical records (Steffen, Robertson, and Kirsten, 1994). Approximately 66 percent of the ore tonnes were mined from underground sources while the remaining 34 percent were mined from open pit sources.

Table 4.2.3: Summary of Total Ketza River Underground Mine Production by Area

Underground Zone	Ore Tonnes Mined
Ridge	74,653
Peel	148,843
Break	813
Nu	1,578
Total	225,887
Note: Data from Steffen, Robertson, and Kirsten (1994)	

A presumed ore stockpile exists at the Ketza River site just north of the existing mill. This stockpile was likely mined by Canamax but not processed. No reports have been found for the actual gold grade or tonnage data associated with this stockpile. Judging from the dark red-brown color of the stockpile, the material in the stockpile is likely dominated by oxide material but must be confirmed with additional work.

Tonnage calculation estimations of the stockpile material by YNG staff have recently been done in 2010 by two methods, both of which use the current topographic contour lines on 1 m contour intervals to help determine the stockpile volume: (1) cross sectional method, and (2) using shapes determined in Vulcan. Both methods have to estimate the bottom of the stockpile near an elevation that approximates the ground elevation present just outside of the stockpile area. Neither estimation method has used actual survey control of the stockpile on the ground.

The sectional method used cross-sections spaced every 10m to determine an area and an associated volume for each section. Using this methodology determined a total volume of 45,400 m³. Using Vulcan software and shapes digitized within this software (and a 13% grade to the base of the stockpile from one end to the other), a volume of 50,398 m³ was determined for the stockpile.

No specific gravity or density data has been determined for this stockpile material. So if we assume a specific gravity of 2.0 which is used for rock fill material at Jerritt Canyon mine in Nevada, a total of 90,800 tonnes and 100,796 tonnes is determined for the stockpile present near the existing Ketzka River mill using the sectional and Vulcan methods, respectively. Obtaining actual survey data and Au grade assays for this stockpile are recommended for future work in order to possibly include in a resource estimate. The redox type of this stockpile may be assumed to be oxide until confirmed with further field studies.

With the oxide zones nearing depletion, attention was given to the economic viability of the sulfide mineralization and in November 1990 the mine and mill ceased treating oxide material. Metallurgical studies were conducted on sulfide mineralization from several of the deposits. An internal feasibility study on the sulfide ores (Canamax, 1990) indicated an additional C\$3.4 million dollars in capital expenditures to help fund plant modifications, ore body development, and extra decommissioning. The 1990 Canamax feasibility study estimated gold recovery for the sulfide ores at 78 percent. The mill at the time was permitted to treat oxide ore only and additional permits were required for the treatment of sulfide ore. In June 1991 an amended water license was received but Canamax did not pursue the application due to corporate conditions, low gold prices and adverse market conditions.

Wheaton acquired the property from Canamax in 1992 and in 1994 transferred it to YGC in exchange for a controlling interest. Wheaton later divested out of YGC. The claims outside the mine area were optioned to Hemlo Gold Mines Inc. (Hemlo) from 1993 to 1995.

Hemlo carried out soil sampling, magnetic surveys, bulldozer trenching and in 1995 completed three diamond drill holes totaling 499m in the Shamrock zone area. YGC also conducted diamond drilling in 1994 and 1995 that consisted of 72 HQ-diameter diamond drill holes totaling 5,630m. The program resulted in the discovery of the Chimney and Fork zones.

In 1996, YGC completed 14 HQ-diameter holes totaling 1,954m in the mine area and 21 HQ-diameter holes totaling 3,612m in the Shamrock zone. The 1996 program also consisted of geologic mapping, prospecting and sampling a number of other anomalous zones. During 1997, 11 holes, totaling 1,217m, were drilled along the Fork – Nu trend.

From 1955 through 1997, a total of 940 diamond, RC and percussion drill holes totaling 55,096m of drilling have been completed on the property. A summary of this is presented in Table 4.2.4.

University graduate students (Cathro, 1990 and Stavely, 1992) completed studies on the property investigating the geology and mineral deposits of the Ketzka district and the mineralogy and geochemistry of the Ketzka Mine deposits. A post-graduate investigation was completed on the structural geology, stratigraphy, alteration systems, and possible age relationships of mineralization and postulated intrusive activity (Fonseca, 1998).

Canamax, the previous operator of the mine, expended \$11.6M on exploration and feasibility studies from 1984 to 1990. Exploration summary reports were prepared annually by Canamax

Table 4.2.4: Summary of Drilling from 1955 to 1997

Year	Operator	No. Holes	Type of Drilling	Length Drilled (m)
1955-60	Conwest Exploration Co.	75*	Diamond	Unknown
1984	Canamax Resources Inc.	59	Diamond	2,424
1985	Canamax Resources Inc.	60	Diamond	6,158
1986	Canamax Resources Inc.	158 ^(A)	Diamond	8,609
1987	Canamax Resources Inc.	61	Diamond	4,990
1987	Canamax Resources Inc.	95	RC	5,029
1988	Canamax Resources Inc.	70	Diamond	5,549
1989	Canamax Resources Inc.	127 ^(B)	Diamond	5,590
1989	Canamax Resources Inc.	79	Percussion	1,215
1990	Canamax Resources Inc.	35	Diamond	2,620
1994	Hemlo Gold Mines Inc./YGC Resources Ltd.	25	Diamond	2,180
1995	Hemlo Gold Mines Inc./YGC Resources Ltd.	50 ^(C)	Diamond	3,949
1996	YGC Resources Ltd.	35	Diamond	5,566
1997	YGC Resources Ltd.	11	Diamond	1,217
Total		940		55,096

Notes:

- (1) *not included in the current Ketz River drill hole database;
- (2) ^(A) = only 87 drill holes out of the 158 drill holes are in the current Ketz River drill hole database;
- (3) ^(B) = only 101 drill holes out of the 127 are in the current Ketz River drill hole database;
- (4) ^(C) = Three drill holes out of the 50 total still need to be added to the Ketz River drill hole database and include hole numbers KR-95-502, KR-95-503, and KR-95-504.

describing geophysical ground and airborne surveys, geochemical soil sampling, prospecting, trenching, percussion drilling, RC drilling, diamond drilling and underground developments.

After YGC acquired the property in 1994, it spent \$0.52M in 1994, \$0.76M in 1995, \$0.90M in 1996, and approximately \$0.2M in 1997 on exploration. Drilling on the extensions of mineralized trends, on the peripheries of developed zones and in other unexplored anomalous areas totaled 12,912m in 121 diamond drill holes. The exploration was successful, leading to the discovery of new gold-bearing oxide and sulfide mineralization on the property. Summary reports on the 1994, 1995, 1996, and 1997 drilling programs are located in the project files at the Ketz camp.

The primary author, Todd Johnson, has reviewed the previous drilling procedures and results and has deemed them to be relevant and meet industry standards, and are acceptable to use in the current resource determination. Only a few historical drill holes were rejected for use in the current resource estimation based on possible contamination issues; please see Section 15.1 for this discussion.

4.3 Historic Mineral Resource and Reserve Estimates

4.3.1 Pre-production Resource Estimates

Canamax calculated “resource and reserve” estimates prior to production using cross sectional methods in which blocks were drawn halfway to the nearest adjacent drill hole and halfway to the adjacent cross-section except where geology dictated a reduction in block size due to structural discontinuity. These estimates used a variety of cut-offs and included or excluded different satellite deposits, so it is difficult to make meaningful comparisons between the estimates from year to year. These estimates were done before NI 43-101 standards were required, and the similarity to today’s definitions regarding measured, indicated and inferred

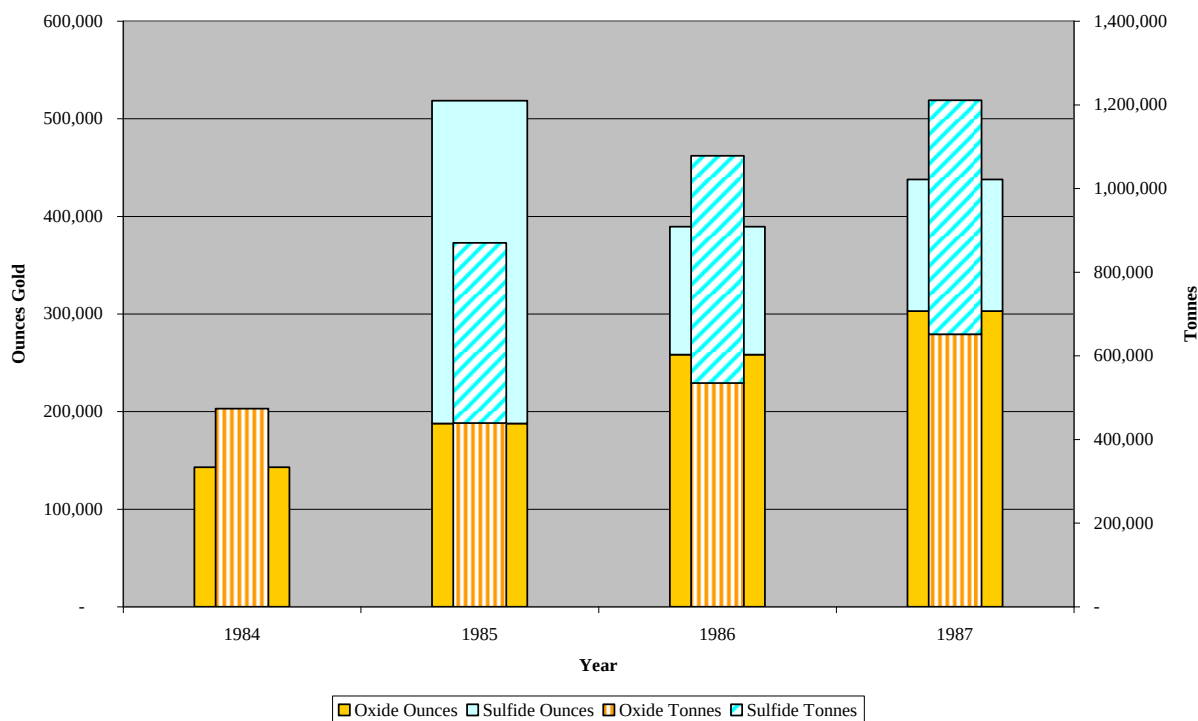
resources are uncertain. Specific Gravity (SG) values applied to sulfide and oxide materials are not mentioned in the 1984 resource, but in 1985, 2.8 was used for oxide, and 3.3 was used for sulfide. In 1986, the oxide SG was 3.1, and sulfide is not mentioned. These pre-production estimates are summarized in Table 4.3.1.1, and chart below. The estimates date from before institution of NI 43-101 reporting guidelines and should not be relied upon.

Table 4.3.1.1: Historic Ketz River Resource Estimates (not NI 43-101 compliant)

Year	Description	Cut-off	Oxide			Sulfide		
			Tonnes	Grade (g/t)	oz	Tonnes	Grade (g/t)	oz
1984	Peel Pit & UG + Tarn Pit	4g/2.5m (Peel) 2g/2.5m (Tarn)	473,397	8.52	142,991			
1985	Peel Oxide + Misc. Sulfides	4g over 2.5m	439,077	14.62	187,703	430,913	7.46	330,693
1986	PP&P Oxide, Possible Sulfide	4g/t	535,000	15.02	258,376	543,000	7.50	130,934
1987	Same as above + new zones (Gully, QB, Break & Knoll)	4g/t	651,188	14.46	302,810	559,340	7.51	134,979

PP&P = proven, probable and possible – not NI 43-101 compliant

**Ketz River - Canamax
Preproduction Historic Resource Estimates**



4.3.2 Post-production Resource Estimates

In 2004 and 2005 resource estimates were prepared for YGC by Gary Giroux (Table 4.3.2.1). These resource estimates are listed below as measured, indicated and inferred and are considered to be NI 43-101 compliant.

Table 4.3.2.1: Ketza River Resource Estimates, 2004-2005 (using 1.0 g/t Au cutoff value)

Year	Area	Tonnes	Au Grade (g/t)	Au (oz)
Measured				
2004	Peel (Manto)	1,210,000	3.43	133,600
	Shamrock	-	-	-
2005	Peel + Peng-Lab + Tarn	1,410,000	3.54	160,500
Indicated				
2004	Peel (Manto)	3,040,000	2.57	251,400
	Shamrock	2,590,000	2.19	182,000
2005	Peel + Peng-Lab + Tarn	4,540,000	2.84	414,100
Inferred				
2004	Peel (Manto)	6,270,000	1.76	354,800
	Shamrock	4,030,000	1.92	249,200
2005	Peel + Peng-Lab + Tarn	10,550,000	2.37	805,200

Notes:

- (1) The 2004 study included historic drill holes completed from 1984 to up to and including KR-97-597; and
- (2) The 2005 study included historic drill holes completed from 1984 to up to and including KR-05-639.

The 2004 resource was divided into two parts: manto-type located south of the Peel Fault and fissure quartz-sulfide vein and stockwork vein and disseminated type located north of the Peel Fault (Shamrock type). This estimate included all of the drill holes completed by Canamax in the 1980's and 1990's, as well as the drill holes completed by YGC in the 1990's in the Peel and Shamrock areas. The 2005 resource included 37 new drill holes completed in the summer of 2005 along with an additional 121 historic drill holes in the Bluff, Hoodoo, and Lab zones to the west of the area estimated in 2004. The Shamrock resource was not updated in 2004.

The primary author has reviewed the previous 2005 resource calculations by Giroux and have found them to generally overestimate the resource. The majority of the limestone unit 1D unit was included as prospective for the 2005 block model and as a result too many blocks were included in the inferred category.

The bulk density assigned for oxide material was 2.3t/m³ which was determined during the Canamax mining operations. The bulk density for sulfide material was assigned at 3.1t/m³ based on measurements made by Canamax during the feasibility study.

A December 31, 2007 resource estimate was prepared for YNG by SRK Consulting (Table 4.3.2.2) and published in April, 2008. This resource was divided into four different areas (Peel, Penguin-Lab, Tarn, and Shamrock), categorized by Measured, Indicated, and Inferred classifications, and separated by open pit and underground resources. The Shamrock area consisted of three different zones: QB, Gully, and 3M. The Knoll zone was not included in this resource estimate. Reasonable mining and metallurgical costs at the time were applied to calculate this resource estimate as well as a \$1,000US/troy oz gold price. This estimate included

all of the drill holes completed by Canamax in the 1980's and 1990's, as well as all of the holes drilled by YGC and YNG in the 1990's and 2000's up to year-end 2007. The December 31, 2007 resource included a total of 1,360 drill holes and used drill hole assays up to and including KR-07-1268. This December 31, 2007 resource estimate included assays from an additional 630 drill holes relative to the previous 2005 resource estimate, and used newly collected specific gravity data (analyzed from ALS Chemex Lab using method no. OA-GRA08a) taken from most of the resource areas.

Table 4.3.2.2: December 31, 2007 SRK Resource Estimate (SRK, 2008)

Area	Open Pit Resource			Underground Resource			Combined (OP+UG)		
	kt	g/t-Au	koz	kt	g/t-Au	koz	kt	g/t-Au	koz
Measured									
Peel	303.2	7.17	69.8	2.0	4.34	0.3	305.2	7.15	70.1
Penguin-Lab	205.2	7.70	50.8	18.5	6.78	4.0	223.7	7.62	54.8
Shamrock	182.5	3.65	21.4	0.8	3.78	0.1	183.2	3.65	21.5
Tarn	0.0		0.00	-		-			
Total Measured	690.9	6.39	142.0	21.3	6.43	4.4	712.2	6.40	146.5
Indicated									
Peel	1,878.6	5.14	310.6	98.9	5.73	18.2	1,977.5	5.17	328.8
Penguin-Lab	567.7	3.56	65.0	70.7	5.05	11.5	638.4	3.72	76.5
Shamrock	519.6	3.58	59.8	175.8	4.74	26.8	695.5	3.87	86.6
Tarn	54.6	4.26	7.5	3.6	4.92	0.6	58.2	4.30	8.0
Total Indicated	3,020.5	4.56	442.9	349.0	5.09	57.1	3,369.5	4.61	499.9
Measured and Indicated									
Peel	2,181.80	5.42	380.4	100.9	5.70	18.5	2,283	5.44	399.0
Penguin-Lab	772.9	4.66	115.8	89.2	5.40	15.5	862.1	4.74	131.3
Shamrock	702.1	3.60	81.2	176.6	4.74	26.9	878.7	3.83	108.1
Tarn	54.6	4.26	7.5	3.6	4.92	0.5	58.2	4.3	8.0
Total M&I	3,711.4	4.90	584.9	370.3	5.16	61.5	4,081.7	4.93	646.4
Inferred									
Peel	298.1	2.79	26.7	27.6	3.72	3.3	325.7	2.86	30.0
Penguin-Lab	188.1	2.33	14.1	59.9	4.14	8.0	248.0	2.77	22.1
Shamrock	229.7	2.83	20.9	225.9	5.03	36.5	455.6	3.92	57.5
Tarn	46.3	2.20	3.3	-	-	-	46.3	2.2	3.3
Total Inferred	762.2	2.65	65.0	313.4	4.74	47.8	1,075.6	3.26	112.8

Notes:

- (1) The cutoff grade is 1.0g/t Au for material inside the optimized pit and 3.0g/t Au for material mineable by underground methods outside of the optimized pit;
- (2) The Lerchs-Grossman pit optimization program was run on the resource model to differentiate potential open pit resources from potential underground resources.
- (3) Shamrock includes the following zones: QB, Gully, and 3M
- (4) Mining costs and parameters include: gold price = \$1,000 US\$/troy oz; mining cost/t = \$2.82; processing cost/t ore = \$12.00; metallurgical Au recovery =85 percent; specific gravity variable as modeled per block; 8:1 (waste:ore) strip assumed; 1,500 t ore/day mill feed

The primary author has reviewed the SRK Year-End 2007 Ketza River resource (SRK, 2008) and has determined that it also overestimates the measured, indicated and inferred blocks primarily due to the quality of the their digitized ore grade shells which typically extended well

beyond the actual drill hole assay intercepts in primarily the z (elevation) direction. In addition, their grade shells also locally extended too far laterally from known drill hole intercepts, especially at the margins of the grade shells where no drilling data was available to define the grade shell margins.

5 Geological Setting (Item 9)

5.1 Regional Geology

The Property is located in the Pelly Mountains of central Yukon. The mountains are made up of a shallow marine miogeoclinal sequence of rocks forming a carbonate platform bounded by the Omenica Tectonic Belt to the southwest and a faulted lobe of the Yukon Tanana Terrain to the northeast across the Tintina Fault. This carbonate platform is known as the Cassiar Terrain or Pelly-Cassiar Platform (Pelly-Cassiar).

The Pelly-Cassiar is a displaced continental margin of the ancient North American continent. Rocks of the Pelly-Cassiar consist of a continental margin sedimentary sequence of the Rocky Mountain Assemblage composed of interbedded carbonate and clastic units of Paleozoic age. Several major deformation events have affected the region including a Mesozoic-age arc-continent collision, doming and uplift during the intrusion of mid-Cretaceous stocks and an estimated 450km of dextral strike-slip displacement on the Tintina Fault from the Cretaceous to Tertiary periods.

Four significant thrust faults, the McConnell, Porcupine-Seagull, Cloutier, and St. Cyr thrusts, parallel the Tintina Fault and dip generally southwest (Abbott, 1986). Thrusting is believed to have occurred during the Late Jurassic and Early Cretaceous.

Rocks in the Watson Lake District belong to the Cloutier Thrust Sheet, which is exposed within an erosional window in the overlying Porcupine-Seagull Thrust Sheet. The window, known as the Ketza-Seagull arch, forms an elongated northwest-trending structure probably related to buried Cretaceous intrusions. The intrusions are apparently centered in two areas known as the Ketza Uplift and the Seagull Uplift. Structures in the window are characterized by steeply dipping normal faults.

An apophysis of a mid-Cretaceous stock is postulated to lie beneath the core of the Ketza Uplift and the Peel Creek anticline (Fonseca, 1998; Cathro, 1988; Parry et al., 1986 and 1984); however, no major intrusive rock bodies, and only rare narrow dikelets have been identified on the property to date. The uplift exposed the oldest rocks of the Clouthier Thrust Sheet, which are Lower Cambrian carbonates and older clastic rocks. The rocks surrounding the uplift are Upper Cambrian and younger clastic and carbonate rocks. The following supporting evidence has been cited for the presence of a buried intrusive body:

- The presence of an aeromagnetic anomaly;
- Mapped biotite-rich hornfels in sedimentary rocks (unit 1a) centered near Shamrock Mountain and Peel Creek;

Hornfelsed metasedimentary rock from rock unit 1a was dated at 101 $\pm$ 4Ma (Mid-Cretaceous) using the whole rock K-Ar method (Cathro, 1988). One $^{40}\text{Ar}/^{39}\text{Ar}$ analysis of white mica from quartz+sulfide veined rock from the Shamrock zone gave a mid-Cretaceous age (108 $\pm$ 0.3Ma) for mineralization which coincides with the emplacement of the Cassiar Plutonic suite (Fonseca, 1998).

5.2 Geology of the Ketza River Property

The geology of the Ketza River property has been described by numerous investigators including Canamax (1984-1991), Abercrombie (1990), Fonseca (1998; 1998a), Stroshein (1996), and

Cathro (1988; 1986). The Property is underlain by Lower Cambrian carbonate and clastic sedimentary rock units. The Lower Cambrian units (Map Units 1a, 1b, 1c, 1d, and 1e) form a conformable series (Figure 5-1) which is unconformably overlain by Late Cambrian black shale (Fonseca, 1998). The lithostratigraphic succession described below was adopted by previous workers (Read, 1980). The general surface geology is outlined in Figure 5-2.

5.2.1 Local Lithology

The oldest rocks are Unit 1a which is composed of interbedded brown to rusty weathering argillite, phyllite, variably bedded impure siltstone, sandstone, quartzite, limestone and calcareous units. The unit outcrops in the center of the Ketzka Uplift north of the Peel Fault that encompasses the Shamrock target.

Unit 1b is a narrow bed (25 to 60m) of fossiliferous, well-laminated silty limestone that appears to be transitional from the underlying argillite to the overlying phyllitic limestone. The unit is not found at the surface on the property but has been intersected in drill holes.

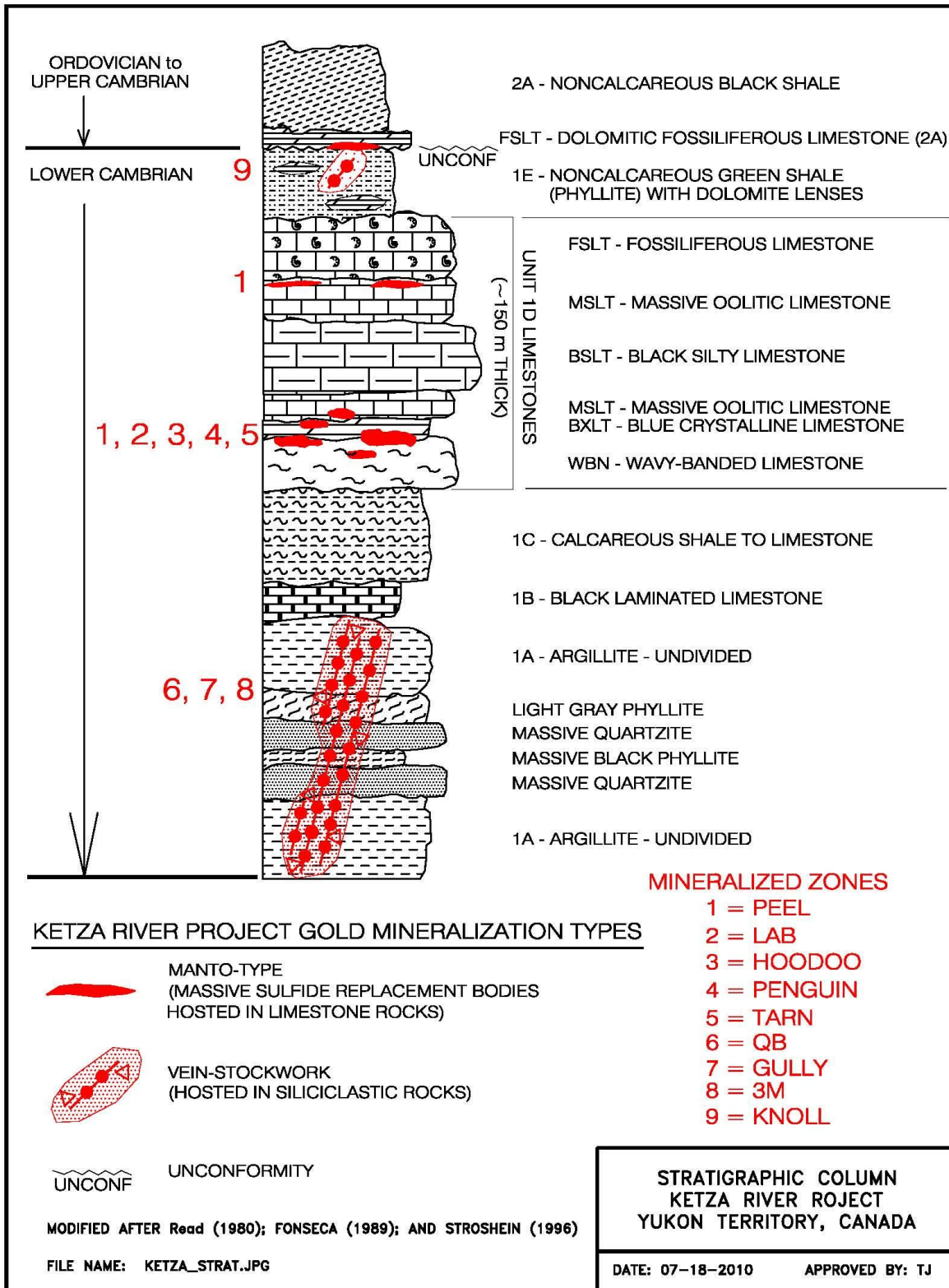
Unit 1c is a recessive weathering unit of 75 to 105m thickness composed of brown to gray-green phyllitic limestone, calcareous mudstone and argillaceous limestone. The upper contact of the unit is gradational with the overlying massive to thick bedded blue gray limestone. This unit crops out in exposures along Cache Creek above the mill site.

Unit 1d is host to the bulk of the manto-type replacement mineralization on the property. The lower contact is gradational and arbitrarily defined when the well-bedded limestone becomes the major component. The unit is from 120 to 180m thick. The limestone is a gray, uniformly bedded, clean limestone with distinctive Archeocyathid fossils occurring near the top of the unit. An internal stratigraphy has been recognized in the mine site area. The internal beds are separated on the basis of textures. Beds of massive fine-grained light-gray limestone, blue fine-grained crystalline limestone, thin and wispy silty banded limestone, and silty black limestone are recognizable in drill core and outcrop. The unit is locally dolomitized, recrystallized and weathered near the mineralization. The limestone is resistant and forms prominent cliffs and ridges throughout the region.

Unit 1e is composed of a thin (0 to 50m) green mudstone bed which forms a distinctive marker horizon. The unit is locally to pervasively clay- or talc-altered in the vicinity of mineralization. The mudstone is generally recessive, poorly exposed and often required additional ground support in the underground workings where it formed the hanging wall of the Peel zone.

Unit 2a is composed of carbonaceous to graphitic black shale with a well-developed slaty cleavage. The thickness of the unit is unknown as the top of the unit is not exposed on the property. The unit crops out in the fault-bounded panels at the Peel Oxide zone and in the Sue Creek area north of Cache Creek. A discontinuous unit of dull orange-weathering dolomite, Unit 2b, outcrops in the western portion of the property. This is a regional unit mapped by Read (1980) and was not recognized on the property by Canamax.

Figure 5-1: Stratigraphic Column



5.2.2 Alteration

Dolomitization or iron carbonate (siderite and ankerite) replacement alteration envelopes the manto mineralization and is especially well developed in areas lateral to the mantos where the host limestones are brecciated. The carbonate replacement deposits result in the migration and precipitation of calcite in the rocks surrounding the mineralization. Sheeted white calcite veinlets and veins are exposed in the footwall rocks in the Break open pit and amorphous white calcite banding occurs in the fine-grained limestone unit in proximity to the Peel/Ridge zones and in the upper plate rocks in the Hoodoo zone. The calcite-rich limestone beds are referred to as zebra rock. Skarn mineralization dominated by garnet, pyroxene, or amphibole at the property is rare and usually does not yield significant gold values. Magnetite-rich replacement and/or skarn that contains greater than 40 percent magnetite by volume has been documented in the B-Mag zone but is rare. Chlorite and talc have also been identified in diamond drill holes but are not abundant.

Silicification, sulfidization, biotite hornfels, and bleaching are closely associated with quartz-sulfide veins in sedimentary rocks in the argillite-hosted resources at Shamrock Mountain. Biotite hornfels has been mapped at the surface in unit 1a over an area approximately 2.5 square km in diameter that is centered over the QB zone and the northeast Peel area (Parry et al., 1984). Epidote and diopside hornfels have been reported but do not appear to be common. Quartz-sericite alteration has been mapped on the surface around a core of quartz and silicification in the QB zone.

5.2.3 Structure

The property is located in the Ketz Uplift that is composed of uplifted and altered Lower Cambrian Unit 1a strata. Structures within the uplift include thrust faults, upright folds, and high-angle normal faults. Block faulting likely either predates, or was contemporaneous with, the mineralizing event. The faults acted as conduits for the metal-bearing solutions. The structure of the Ketz River area has been described by Fonseca (1998; 1998a) and Abercrombie (1990).

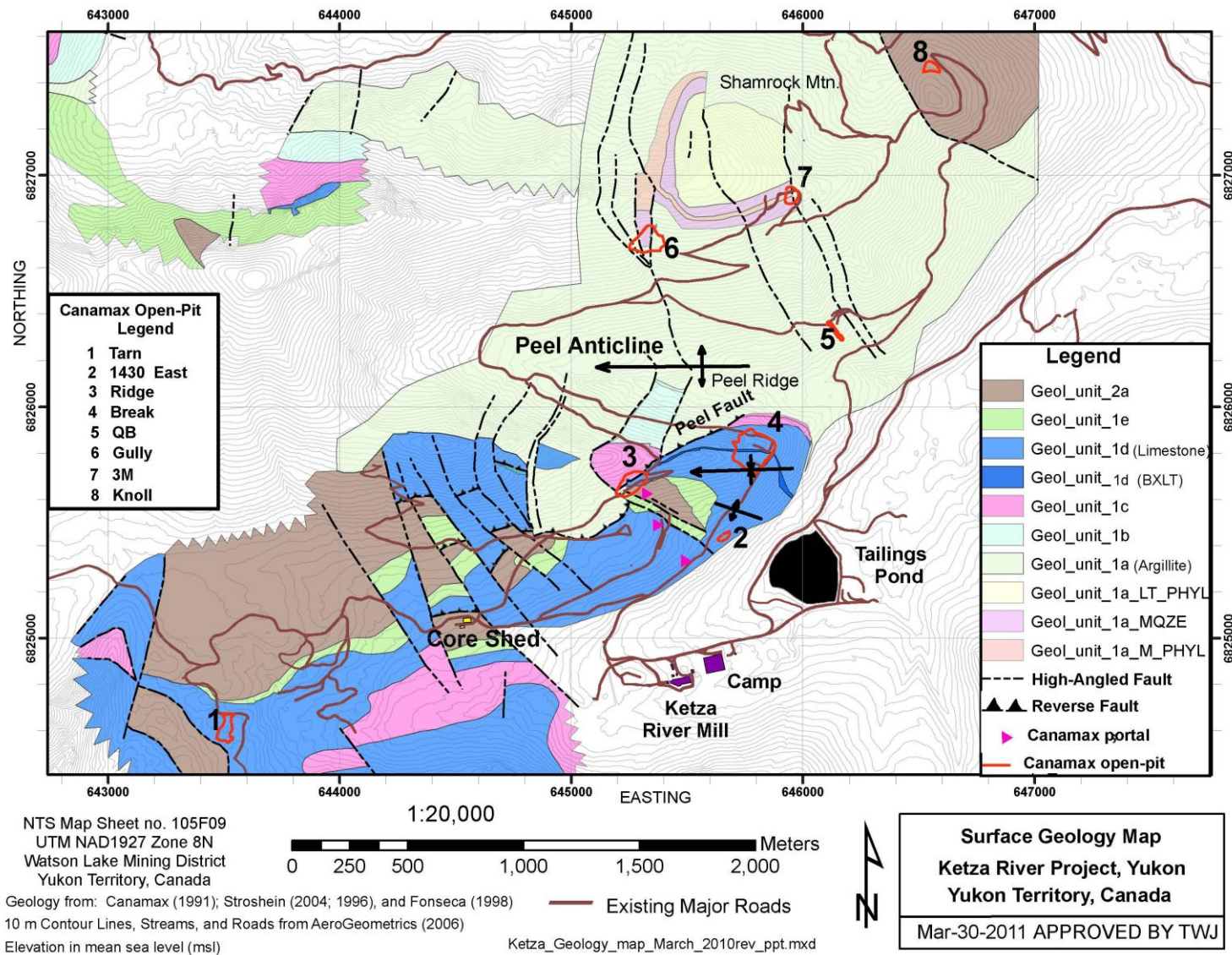
The property lies on the southern flank of a westward plunging anticline which is cored by the Unit 1a argillite exposed along Peel Creek. The strata are strongly folded with limbs ranging from steep to flat-lying. A later deformation has overprinted these structures with broad, open folds and drag folds that occur adjacent to thrust faults.

A synclinal closure has been mapped in the Peel Ridge mine site area where mineralized bodies occur on both limbs of the fold. A major synclinal fold with parasitic anticlinal folds has been mapped northwest of the mine site area in the upper plate rocks overlying the Peel thrust fault. Limestone beds of Unit 1d host gold-bearing oxides and sulfides at the Hoodoo and Comet zones in the core and on the western limb of a tight anticline.

Regionally, the thrust faults are northeast directed with displacements of up to 450m. The Peel fault is thought to be a reactivated thrust fault that pre-dates the block faulting. It is cross cut and offset in the Peel - Ridge fault by northwest-trending faults. The Peel fault intersects the Ridge zone ore deposit and juxtaposes Lower Cambrian argillite Unit 1a over the Lower Cambrian limestone Unit 1d. The fault has two different orientations, steeply dipping east of the Ridge zone and shallow dipping over the Ridge zone and to the west. The fault has been traced westward to the area of the Lab deposit.

The stratigraphy, thrust faults and folds have been disrupted by numerous reverse, normal and strike-slip faults. High angle block faults related to uplift and doming are prominent. Detailed mapping in the underground workings indicates that the Peel and Ridge oxide deposits occur within a 200m wide zone of structural deformation bounded by two northwest trending block faults.

Figure 5-2: Surface Geology Map



6 Deposit Type (Item 10)

There are two general types of gold deposits on the property: manto-type replacement sulfide deposits and quartz-sulfide fissure vein and stockwork (including quartz-breccia and disseminated) deposits (see Table 6.1). Both styles of sulfide-bearing mineralization are locally oxidized throughout the property which has partially to totally converted the sulfide minerals to oxide minerals (Fe-oxides and/or As-oxides).

Fonseca (1998) characterized the mineralization as a poorly understood type of gold-rich, base metal-poor, carbonate-hosted replacement deposit. Although no major bodies of intrusive rocks have been identified at the property, it is possible that the Au mineralization represents a distal manifestation of intrusion-related gold mineralization as suggested by Fonseca (1998) and Parry et al. (1984). The mantos are classified by Nelson (2005) as possible gold-rich polymetallic mantos, however, it should be noted that Au is the primary metal enriched in the Ketz River deposits with only minor Ag. The lead-zinc content of the mantos on the property is insignificant.

Table 6.1: Summary of the Different Resource Zones by Mineralization Style and Model

Resource Zone	Mineralization Style	Block Model Name
Peel	Manto	Peel
Break (part of Peel)	Manto	Peel
Lab-Hoodoo	Manto	North Penguin
Penguin	Manto	South Penguin
Tarn	Manto	Tarn
Knoll	Manto & Vein/Bxa/Disseminated	Knoll
QB	Vein/Bxa/Disseminated	QB
Gully	Vein/Bxa/Disseminated	Gully
3M*	Vein/Bxa/Disseminated	QB
Note: (1) Vein/Bxa/Disseminated mineralization has been referred to as Shamrock style in previous reports (2) * the 3M zone was not modeled separately in this study but included in the QB resource zone (3) Bxa = breccia		

Mantos are defined as sub-horizontal, tabular massive sulfide (or oxide) bodies and chimneys are sub-vertical, massive sulfide (or oxide) bodies and at the Ketz River property are hosted within the Lower Cambrian limestones. Sub-vertical, and some sub-horizontal, bodies are structurally controlled while the remainder of the sub-horizontal bodies occur along permissive horizons within limestone.

Massive deposits of iron sulfide minerals consist primarily of pyrrhotite with the remaining sulfide minerals consisting of approximately 10 percent arsenopyrite, 5 percent pyrite, and 2

percent chalcopyrite. Galena and sphalerite are rare. Most sulfide-rich mantos are gold-bearing, but the grade is highly variable. The sulfide minerals can be laterally zoned from an arsenopyrite-rich core grading out to a pyrrhotite-dominated fringe. Galena and sphalerite can locally occur in trace amounts distal to the gold-bearing intervals and calcite occurs in limestone-rich barren wallrock at the margins of the deposits.

The quartz-sulfide fissure vein and quartz-breccia systems occur in a sequence of interbedded Lower Cambrian phyllite, argillite, siltite, quartzite and lesser carbonate rocks on the eastern side of the Ketz Uplift. Mineralization consists of pyrrhotite, pyrite and arsenopyrite in massive quartz-sulfide fissure veins and lesser quartz-breccia veins with some stockwork and disseminated styles of mineralization. The veins are controlled by moderate to high-angle faults or fracture systems.

The Ketz River Au-rich deposits are similar to other documented carbonate-hosted Au-rich deposits such as Key East, Washington (Lowe and Larson, 1996); New World, Montana (Johnson and Meinert, 1994; Johnson and Thompson, 2006); Cananea, Mexico (Meinert, 1982); Bisbee, Arizona (Bryant, 1968), and Superior, Arizona (Friedhoff, 1998; 1995). Most of these aforementioned deposits contain significant amounts of Cu (>0.1%), have intrusive rock bodies (in some cases porphyry related) that are spatially and genetically related to the Au (Cu-Ag) mineralization, and have moderate to substantial amounts of hematite and/or specularite and pyrite in the mineralization assemblages which are major differences with the Ketz River deposits that are dominated by pyrrhotite and lesser arsenopyrite and pyrite.

The similarities between the aforementioned carbonate-hosted deposits and the Ketz River deposits include a large halo of biotite-bearing (or calc-silicate-bearing) hornfels, geochemistry enriched in Au, As, Bi, and minor Te, Cu, Pb, and Zn; gangue minerals dominated by Fe-carbonates, quartz, and lesser chlorite, and talc, and a scarcity of calc-silicate (skarn) minerals.

Carbonate hosted replacement deposits may be thought of as lower temperature equivalents to skarn deposits that typically occur farther away from the intrusive rock (heat and hydrothermal fluid) source. In some Pb-Zn skarn deposits and some copper skarn deposits, the genetically related intrusive rock body(s) has never been identified (similar to the Ketz River deposits).

There are several characteristics of the mineralization on the property that can be used to direct exploration. Massive sulfide mineralization may be detectable using surface geophysical techniques such as gravity and induced polarization surveys and the magnetic pyrrhotite may be detectable using magnetometry. Some of the geochemical characteristics of the mineralization are also useful. For example, the arsenic in arsenopyrite and its oxidation products are detectable in soil sampling. In addition, district-wide metal zoning could be used to help predict vectors towards Au-rich mineralization (e.g. Au+Cu+As proximal deposits vs. Pb+Zn+Ag distal deposits) as seen in other porphyry districts.

7 Mineralization (Item 11)

Mineralization on the property is generally of two types: manto and chimney, carbonate-hosted replacement deposits that occur south of the Peel fault and quartz-sulfide fissure veins and quartz-breccia zones in siliciclastic rocks that occur north of the Peel fault. Over 30 targets and prospects have been identified on the property (see Figure 4-1). For purposes of resource estimation, the area has been divided into seven model areas with most of the targets falling into one of the following areas (Figure 15-2-1):

Tarn Area: Tarn

North Penguin Area: Lab, Calcite, and Hoodoo

South Penguin Area: Penguin and Flint

Peel Area: Ridge, Peel, Nu-Break, Fork

QB Area: QB and 3M

Gully Area: Gully

Knoll Area: Knoll

The Tarn, North Penguin, South Penguin, and Peel areas occur south of the Peel fault and contain manto and chimney, carbonate-hosted replacement deposits while Gully, QB, 3M, and Knoll occur north of the Peel fault and contain quartz-sulfide fissure vein and quartz breccia zones in siliciclastic rocks. The Shamrock area includes Gully, QB, and 3M. The 3M zone was included in the QB model. The Knoll zone locally has some manto-type replacements.

7.1 Mineralized Zones

Peel, Penguin North, Penguin South, and Tarn areas generally consist of gold-rich carbonate-hosted chimney- and manto-style sulfide mineralization and its oxidized equivalents. Sulfide mantos include Peel Sulfides, Peel East Sulfides, Penguin, Tarn, Lab and Flint. Oxide mantos include Peel Oxides, Break-Nu, Ridge and Hoodoo.

The mantos and steeply plunging chimneys are preferentially hosted by three limestone facies of Unit 1d - massive limestone, fine-grained crystalline limestone, and wispy banded limestone - which are confined to the south side of the Peel fault. The location of mineralization is controlled by high-angle planar and listric normal faults, fold hinges and by the location of the three favorable carbonate facies. In general, the mantos have an elongate geometry.

Principal sulfide minerals in the mantos and chimneys consists of pyrrhotite, pyrite, arsenopyrite, marcasite and minor chalcopyrite. Galena and sphalerite are rare. Oxidized mineralogy primarily consists of hematite and goethite. Scorodite, after arsenopyrite, is common. A distinctive lustrous hydrous iron silicate mineral named hisingerite is present, and is often associated with high-grade gold values.

7.1.1 Tarn Model Area Occurrences

Tarn Zone

The Tarn zone is located approximately 2km west of the Ketza River Camp in the headwaters of Cache Creek. Mineralization consists of two mixed oxide-sulfide bodies ranging from 85m to

115m in length, 35m to 60m in width and 5m to 8m in thickness. Mineralization is exposed in the Tarn pit, extends to 75m in depth, and is flat lying with a strike of 015°.

Approximately 18.2kt of oxidized manto-style mineralization was mined from the Tarn zone in the late 1980's. Current exploration at Tarn focuses mainly on the sulfide manto beneath some remaining oxide material.

7.1.2 North Penguin Model Area Occurrences

Lab Zone

The Lab zone is manto-style sulfide mineralization located approximately 1.25km northwest of the Ketzar River Camp on the southern slope of Peel Ridge. The Lab zone consists of four distinct zones that occur over an area measuring 320m x 400m and average 5m in thickness. The four bodies occur in two pairs at right angles to one another with the arms striking northeast and southeast. The former Calcite Zone is located on the south end of Lab and is included in this zone. The Calcite resource consists of a narrow vein less than 7.2 m wide (averaging 1 to 3m wide) that has been traced over 225m of strike length, strikes 140°, and dips 39 to 50° to the west.

Hoodoo and Comet Zones

The Hoodoo zone contains both vein-type and manto-type oxide/sulfide mineralization located approximately 1.5km northeast of the Ketzar River Camp on the southern slope of Peel Ridge. Early drilling in this zone was halted once sulfide mineralization was reached. Recent drilling has been targeting sulfide mineralization underlying the oxide mineralization exposed at surface. Exploration has also been successful in extending the oxide mineralization. The southern Hoodoo resource dips 38 to 70° to the south and is typically less than 5m thick. Several flat-lying mantos up to 11m thick are located on the northern end in the Comet Zone.

7.1.3 South Penguin Model Area Occurrences

Penguin Zone

The Penguin Zone is manto-style sulfide mineralization located approximately 1.25km west of the Ketzar River Camp. Four main mineralized bodies occur within a presently defined area approximately 360m in length, 155m in width, and up to 10m in thickness. The Penguin mineralization strikes 226° and dips moderately to the northwest at 60°.

Flint Zone

The Flint Zone consists of two manto-style sulfide zones located approximately 1.25km west of the Ketzar River Camp, also in the Cache Creek drainage. The Flint Zone is sub-horizontal and is approximately 100m in length, 130m in width, and up to 5m in width. This zone occurs less than 85m below the surface and has a strike azimuth of 050°.

7.1.4 Peel Model Area Occurrences

Peel Zone

The Peel zone is located about 0.75km north of the Ketzar River Camp on the south flank of Peel Ridge. Manto-style mineralization at the Peel zone consists of irregular interconnected lenses and pods of both sulfide ore and some remaining pods of oxide ore in area approximately 400m long x 400m wide. The Peel zone consists of the Peel West, Ridge, Main Peel, Peel East, and

Peel oxide zones. Oxide and sulfide-rich chimneys up to 30 to 115m in height are locally present on the northern end of the main Peel zone along a northeast-trending fault zone. Other faults that cut this area are high-angled and northwest-trending. The Nu-Break and Fred's Vein East zones are also on Peel Ridge but are somewhat to the east of the main grouping of mineralized bodies that comprise the Peel zone.

Peel West and Peel East Zones

The Peel West and East zones consist dominantly of one large 400m long by 400m wide narrow flatlying to gently dipping manto with a generally circular footprint that ranges from 0.9 to 12m in thickness. An additional five smaller mineralized mantos occur below or above the large manto in a stacked configuration. The mineralized mantos are locally exposed at the surface and extend to a depth of 100m below the surface. The overall strike of these zones is 320 to 355°.

Ridge Oxide Zone

The Ridge oxide zone consists of three separate mineralized chimney bodies occurring over an area approximately 100m in length, 100m in width, and up to 10m in thickness. Individual mantos vary from 5 to 10m in thickness. The zone is exposed at the surface and extends to a depth of 120m. The mantos and chimneys dip from fairly flat-lying to 50-70° to the north. Strikes range from 068° to 83° to 255°.

Production from the oxide mineralization in the Peel and Ridge deposits was approximately 244,634t at an average grade of 13g/t-Au (Hodgson, 1991). Oxide mineralization is cut off by the bounding northwest-trending East Side fault.

Nu-Break Zone

The Nu-Break zone consists of oxide manto mineralization located approximately 1.0km north-northeast of the Ketz River Camp on the nose of Peel Ridge. The overall dimensions of the mineralized body as presently defined are approximately 175m in length, 75m in width and up to 20m in thickness. The zone is exposed at the surface and extends to a depth of 95m below the surface. The zone strikes approximately 38° with a gentle dip of up to 30° to the southeast.

Fred's Vein East

This vein is located approximately 1.0km north of the Ketz River Camp and is exposed at the surface. Fred's Vein East is a quartz+sulfide mineral vein-like occurrence in siliciclastic rocks on the north side of the Peel fault. While Fred's Vein East is geologically similar to the mineralization in the Shamrock area, it falls within the Peel area because of its location on the north side of Peel Ridge in the Peel Creek drainage.

The exposed strike length of the structure is approximately 100m. The width is difficult to characterize and the down dip extension has not yet been totally defined. The strike varies from 065° to 080° and dip varies from 80° to 85° to the south.

7.1.5 QB Model Area Occurrences

Most of the mineralization in the QB area occurs in siliciclastic rocks north of the Peel Fault. Mineralization mostly occurs as fissure veins, quartz+breccia zones and disseminated sulfide minerals.

QB Zone

The QB zone consists of multiple irregular lenses or veins of quartz-breccia occurring in siliciclastic rocks north of the Peel fault. The main QB vein swarm is located approximately 1.75km northeast of the Ketz River Camp on the south flank of Shamrock Mountain in the Peel Creek drainage. The overall dimensions of the mineralized body as presently defined are approximately 530m in length, 230m in width and 2m to 70m in thickness. The zone extends from the surface to a depth of 175m, strikes 5-355° and plunges 17-46° to the southeast.

A generalized Au grade shell was digitized around low grade gold mineralization at depth below the QB zone. The resulting Au mineralization in a mineral inventory table from this work was very small.

3M Zone

The 3M zone is located about 2.5km northeast of the Ketz River Camp on the ridge between Peel and Misery Creeks. Mineralization consists of multiple thin quartz breccias and vein-like bodies and sulfide mineral disseminations in siliciclastic rocks. The mineralized bodies have variable strike and dip orientations: 330°/70°NE; 235°/5°SW; and 227°/84°NW. The 0.5g/t Au grade shells are approximately 40-100m in length, range from 2m to 15m in width, and extend to approximately 100m in depth below the surface.

Grade shells greater than 0.5g/t opt Au were modeled in the 3M zone as part of this study and included in the QB zone resource. Only minor open-pit mining has occurred at 3M. The boundary of Canamax's 3M open pit partially covers some of the 3M 0.5 g/t Au grade shells which suggests that 3M was partially mined. However, we were unable to apply any mining depletion to the 3M zone (open-pit mining done by Canamax) since the existing compiled topographic information is not detailed enough to confirm mining has occurred.

7.1.6 Gully Model Area Occurrences

The Gully zone was previously mined by Canamax in the late 1980's and yielded approximately 8,100t of oxide ore averaging 10.0g/t-Au (Hodgson, 1991). Mining stopped when sulfide mineralization was encountered, leaving a prominent massive sulfide rib protruding from the pit floor, and a highly oxidized shear zone along its side.

Gully is a quartz+sulfide mineral vein occurring in siliciclastic rocks north of the Peel fault. The vein is located approximately 1.75km north of the Ketz River Camp on the south flank of Shamrock Mountain in the Peel Creek drainage. Assays from drill samples range up to 37.6g/t-Au. Overall dimensions of the mineralized vein as presently defined are approximately 350m in length, 100m in depth and 4 to 8m (4m average) in thickness. The zone extends from the surface to 150m with a strike of 165°, a dip of 45-60° west, and a plunge of 9°. The northern end of the Gully Vein has a shallower dip of 17° to the west as compared to the southern half of the vein.

7.1.7 Knoll Model Area Occurrences

The Knoll zone is located about 3.0km northeast of the Ketz River Camp on the north slope of Shamrock Mountain. It is comprised of multiple stacked subhorizontal (manto-like) 0.5g/t Au bodies of oxide and sulfide mineralization hosted in a dolostone bed measuring 50m x 35m with a thickness ranging from 4m to 10m. In addition, some vein-style mineralization hosted in argillite and phyllite rock has been documented at Knoll. Mineralization is exposed at the surface and has been open-pit mined on a limited scale in the past.

8 Exploration (Item 12)

This section contains a brief description of recent 2005 to 2010 exploration conducted by YGC and YNG. Historic exploration and development programs completed prior to 2005 are described in Section 4. The primary author, Todd Johnson, has reviewed the previous drilling procedures and results and has deemed them to be relevant and meet industry standards, and are acceptable to use in the current resource determination. Only a few historical drill holes were rejected for use in the current resource estimation based on possible contamination issues; please see Section 15.1 for this discussion.

8.1 2005 - 2010 Exploration

In May of 2005, YGC recommenced drilling and exploration work at the Ketz River Project after a long hiatus from 1997. In 2006, the main Project area was flown for new one-meter-contour topographic map coverage. In the spring of 2007 the Ketz claim block was expanded on the south and west. A limited amount of reconnaissance work was conducted in 2006, followed by a major effort in 2007, yielding several new target areas. Ground magnetic and gravity surveys were carried out over known mineralization. A soil sampling program was completed in the area of Peel Ridge north to the top of Shamrock Mountain. A petrographic study was completed for manto-style mineralization.

More recent exploration work from 2008 to 2010 has included additional surface geophysical studies, soil sampling, rock-chip sampling, mapping, and significant amounts of diamond drilling.

Samples from three 1996 drill holes were analyzed for multi-element geochemistry in an attempt to determine the presence of a zonation pattern that might point to the location of a postulated buried intrusive as postulated by Fonseca (1998). The drill holes were located at the QB zone, the 3M zone and one in between. The ratios of gold-arsenic and gold-bismuth indicated that the QB zone hole was closest to an inferred intrusive body at depth (Stroshein, 2006).

Since 2005, YGC and YNG have spent \$4.4M in 2005, \$7.5M in 2006, \$15.2M in 2007, \$12.9M in 2008, \$3.2M in 2009, and \$8.1M in 2010 on exploration at the Ketz River property based on published company information (Yukon-Nevada Gold Corp, 2011).

8.2 Rock Sampling

Tarn Pit

The wall of the Tarn Pit was channel sampled in the fall of 2006. A total of 40 samples were collected, each one 5.0m in length. The samples averaged 2g/t-Au, with a high of 9.7g/t-Au.

Creek Zone

Outcrops just above the pad for holes KR-06-920 through 922 contain massive pyrite with black coatings on the crystal surfaces. The black coating is assumed to be chalcocite since the samples ran approximately 0.2% Cu. Other dark grains in the rock were identified as tetrahedrite. All four samples contained gold values.

Gully Pit

In mid-August of 2006, a series of chip and channel samples were collected across the massive sulfide rib and the adjacent shear zone in the Gully zone. The assays of the samples contained significant gold.

8.3 Soil Sampling

Aurora Geosciences conducted a soil sampling program over large portions of Peel Ridge and Shamrock Mountain in 2007. The sampling was done on a 50m grid, and targeted areas where 200m spaced soil lines had identified anomalous gold.

A more recent soil sampling program was done in the summer of 2010 on an even 100m grid and targeted the South Hill target located just south of the existing camp. Results of this work, in conjunction with the recent geophysical results will be used to help target drill holes in the area.

8.4 Geophysics

Aurora Geosciences completed two geophysical surveys in 2007: (1) a gravity survey on a 50m grid from the Lab Zone to the top of Shamrock Mountain; and (2) a ground magnetic survey on a 50m grid from the Peel zone across to Peel Canyon to the northeast which included to the top of Shamrock Mountain.

Quantec Geosciences completed a Titan-24 IP ground survey in 2009 that covered 3 lines from the top of Shamrock Mountain to the top of Peel Ridge. This survey found numerous conductor anomalies some of which were at significant depths.

Aurora Geosciences completed several additional geophysical surveys in 2010: (1) a ground magnetic survey over the Shamrock, OK, South Hill and lower tailings site targets; and (2) a ground IP survey at the South Hill and OK targets. The 2010 IP survey used an expanding pole-dipole array with a 25m dipole spacing. The ground magnetic survey lines were spaced 100m apart with readings taken on stations spaced every 10m.

8.5 Topographic Surveys

In August 2006, Aero Geometrics of Vancouver flew the Project, including the existing claim block in 100km² of new topographic survey coverage. Two sets of digital topographic maps, with 10m and 1m contour intervals were produced.

In early September 2007, Aero Geometrics of Vancouver flew portions of the Project in which mining claims had been staked since the survey the previous year. Topographic maps generated by this survey have a 5m contour interval.

8.6 Petrography

Gold in sulfide ore occurs as the native metal or less commonly as electrum in finely disseminated grains up to 25 microns in size (Giroux, 2005). The gold is very often associated with chalcopyrite and native bismuth and occurs mainly in fractures in the arsenopyrite and pyrite or along sulfide grain boundaries. Less commonly gold grains occur as inclusions in pyrrhotite.

Two distinct textures of Au bearing oxide materials have been documented. The first is massive to boxwork textured brown oxide typically located in the footwall of the mineralized zones and generally containing a low Au grade. The second is a highly colorful red-orange fine-grained

variety that locally contains a colloform texture, typically occurs near the hanging wall, contains hisingerite, and is associated with higher grade Au content.

9 Drilling (Item 13)

From May of 2005 through December of 2010, YGC and YNG drilled a total of 1,029 drill holes for a total of 136,656m (Table 9.1). The principal objective of the drilling programs was the continued definition of known mineralized areas and the testing of newly discovered areas. Only a minor amount of the drilling has been dedicated towards predevelopment or YESAB project proposal studies. All diamond drill holes completed in the resource areas up to December 31, 2010 are shown in Figure 15-2-1.

Table 9.1: Summary of Diamond Drilling 2005 Through 2010

Year	Operator	No. of Holes	Type Drilling	No. of m Drilled
2005	YGC Resources Ltd.	99	Diamond	12,734
2006	YGC Resources Ltd.	270	Diamond	33,874
2007	YGC Resources Ltd./KRH	305	Diamond	41,587
2008	Ketz River Holdings Ltd.	225	Diamond	30,436
2009	Ketz River Holdings Ltd.	2	Diamond	483
2010	Ketz River Holdings Ltd.	128	Diamond	17,542
Total		1,029		136,656

- Notes: (1) the total drilling done in 2008 listed above includes 26 geotechnical and hydrogeology diamond drill holes totaling 2,562m for predevelopment studies, and 14 condemnation diamond drill holes totaling 1926.79m completed at the alternative dry-stack upper tailings site.
- (2) the total amount of drilling (in meters) done in 2010 and listed above includes 10 geotechnical and hydrogeology diamond drill holes totaling 1232.7m, and 16 tailings dam (lower site) condemnation and exploration drill holes totaling 2,695.3m. The total amount of 2010 drilling listed in this table does not include the 14 geotechnical drill holes totaling 275 m that used Becker and diamond drilling methods, or the 2 piezometer drill holes totaling 21m completed at the existing tailings pond area.
- (3) KRH = Ketz River Holdings, a 100% Canadian subsidiary company owned by Yukon-Nevada Gold Corp.
- (4) YGC Resources Ltd. was the predecessor company to KRH which merged with Queenstake Resources in mid-2003 to form Yukon-Nevada Gold Corp. (YNG);
- (5) Total drilling excludes drill holes completed at the adjacent Silver Valley Project;
- (6) The resource stated in this Technical Report does not include drill holes drilled in 2009 or 2010.

All of the drilling from 2005 through 2010 listed in Table 9.1 is diamond drilling. The diamond drill holes completed from 2005 to 2010 were started with NQ-sized core (47.6mm in diameter) or HQ-sized core (63.5mm in diameter) and reduced to NQ-sized core as required. A total of thirty drill holes (numbers KR-08-1269 to KR-08-1300) were drilled for metallurgical purposes in 2008 and are HQ-sized (63.5mm). Hydrogeology drill holes completed in 2008 (HYD-08-01 to HYD-08-12, HYD-08-16 and HYD-08-17) and 2010 (drill hole number HYD-10-01) are HQ-sized (63.5mm). Oriented diamond drill holes completed for geotechnical purposes in 2008 (drill hole numbers GT-08-01 to GT-08-12) and 2010 (drill hole numbers GT-10-01 to GT-10-10) are HQ3-sized (61.1mm) and utilized triple tubes. These geotechnical drill holes utilized the EZY-Mark core orientation system and were carefully logged and sampled for geotechnical data.

Collar locations are obtained by using a combination of a Leica total station and a Trimble R8 differential GPS. Downhole surveys are done using Reflex Maxibor II downhole survey tool. Prior to 2007 acid tests were used to measure dip changes down hole.

Drill core is currently stored on site. Drill logs are entered directly into a laptop computer in the core shack using Drill King software. Core recovery and Rock Quality Designation (RQD) are recorded for each drill hole.

The primary author, Todd Johnson, has reviewed the recent drilling procedures and results from 2005 to the present and has deemed them to be relevant and meet industry standards, and are acceptable to use in the current resource determination. Some of the in-house standards and blanks that were used in the 2005 to 2008 drilling programs were not certified and created local problems for quality assurance and quality control for drill hole assay results (see Section 11.2). However, the use of in-house standards and blanks has been discontinued in the 2009 and 2010 drilling programs.

Drilling in 2008 was successful in extending and/or defining limits of mineralization on the Peel, Tarn, Gully, QB, Hoodoo, Bluff, and Lab zones. Parts of these remain open. Drilling on the Penguin and Calcite extension of Lab Zone was successful in defining mineralization at the location of magnetic highs.

A lack of significant mineralization was found by the drilling of the Peg-Fury (south of QB zone), Creek, Megawatt (south of Peel area), and Nose zones, as well as the previously untested ground between Lab and Peel. The Thrust vein, near Tarn was found to be cut off by a low angle fault at shallow depth.

The results were inconclusive at the Crest and Fred's Vein East; more drilling will be required to either define or disprove significant mineralization at these zones. Significant mineralization was drilled at Hoodoo and Bluff, but definition of the nature and orientation of the mineralization will require more drilling.

10 Sampling Method and Approach (Item 14)

The sampling procedures associated with the drilling programs utilized by YGC after acquiring the Ketza River property are described in this section. Little is known of the sampling methods employed by earlier operators. Sampling procedures, collection and security for YGC/YNG from 2006 to May 2011 has been completed mostly under the direction of YNG's Qualified Person, Ed Gates. Erika Shepard, P.Geo., was the Qualified Person at the site for a brief period from April to December 2008.

During the diamond drilling programs, geological personnel attended the drill at regular intervals as well as during drilling of mineralized intersections. Geologic personnel are on hand to determine the completion depth of each hole and to shut down the drill hole. The core is delivered to the core shack at the end of each working shift or when the drill hole is completed.

The core is laid out in sequence at the core shack. The core is logged directly into laptop computers by geologists, and sample intervals are marked on the core and recorded on the drill logs. The core is then stored within the core shack and samples are split in sequence. Personnel conducting the sampling are supervised by the geologist who logs the core.

All drill core is logged and photographed before sampling. The descriptions are entered onto prepared log forms on laptop computers using coded entries for lithology, texture, structure and mineralogy.

Oxide and sulfide mineralization are sampled on the basis of geologic features. The maximum sample interval for HQ core is 1.5m and 3.05m for NQ core. The minimum sample interval is 0.2m. Once samples are identified and marked, sample tickets are stapled into the sample locations in the core boxes. Sample intervals and geology are then logged into Drill King software. Once all of the drill hole data is logged and entered into Drill King, the data is imported into an Access drill hole database at the project site. Once the data is verified by on site geologists is ultimately imported into the master acQuire drill hole database. The drill hole data was imported into acQuire at the Ketza site by an experienced geologist, Hua Jin, up until January 2010. From February 2010 to March 2011 the drill hole data was imported into acQuire by the same experienced geologist at the Vancouver YNG corporate office.

Core is then taken into the splitting room where sampled intervals are split or with a diamond saw. Core from oxide zones often occurs as iron oxide rubble. In these instances, the rubble is sampled with a spoon rather than split or cut.

Half of the sample is placed in the sample bag and half is retained in the core box for future reference. The detachable half of the sample ticket is removed from the core box and placed inside the sample bag. The remaining half of the sample ticket remains in the core box with the corresponding sample number. Core boxes are removed to a designated core storage yard where they are placed on core racks.

Sealed sample bags are placed in large, consecutively numbered, white rice bags (e.g. Bag 1 of 6). The rice bags are labeled with the drill hole number and the contained sample numbers. Rice bags are placed in an outside storage bin near the core shack where they await shipping to the lab.

Samples are transported by company personnel at least once per week to Byers' Transport or Canadian Freightways in Whitehorse, Yukon. A sample shipment form is filled out and kept on

file, indicating the date, truck being driven, person transporting the samples, hole numbers and number of bags. Upon arrival in Whitehorse, samples are directly loaded upon pallets at the transportation company and shipped to ALS Chemex. In 2010, samples were dropped off by company personnel at the ALS prep lab in Whitehorse.

10.1 Sample Quality

Core recovery at the Ketza River property is generally very good in limestone and sulfide mantos, very good in the Gully vein and the argillite wallrock, moderate in the QB zone stockwork and fault intersections and moderate to poor in the oxide mantos. Core recovery data and RQD values were captured for the historic Ketza River drilling done from 1984 to 1997 but still need to be compiled and analyzed.

The primary author, Todd Johnson (QP) has reviewed the sampling procedures for the recent drilling programs (2005 to the present) and find them to conform to industry standards and are thus adequate for use in the current resource determination presented in this Technical Report.

11 Sample Preparation, Analyses and Security (Item 15)

11.1 Sample Preparation and Assaying Methods

Various Labs (Pre-2006):

In the 1980's, Canamax used Bondar-Clegg in Vancouver, BC; Northern Analytical Laboratory (noncertified) in Whitehorse, Yukon; Rossbacher Labs (noncertified) in Burnaby, BC; and the Ketz River assay lab (noncertified), Yukon for drill hole sample preparation and Au analysis. The preparation and Au analysis methods for these historical drill holes are compiled in the old Canamax project file reports at the site and digitally in the Ketz Project computer server. Most of the sample preparation at the commercial labs mentioned above was completed by people not affiliated with the mining and exploration companies with the exception of those samples analyzed at the Ketz River assay mine lab. The Ketz River assay lab located at the mine site was the primary assay lab for those drill holes completed in 1987, and from 1989 to 1990. Employees of Canamax were responsible for sample preparation and assay of these drill holes analyzed at the Ketz River assay lab which is approximately 397 drill holes.

In 2005, YGC used Eco-Tech labs in Kamloops, BC. Samples were sorted and dried (if necessary), and then crushed through a jaw crusher and cone or rolls crusher to -10 mesh. The sample was then split through a Jones riffle until a -250 gram sub sample was achieved. The sub sample was then pulverized in a ring and puck pulverizer to 95 percent passing -140 mesh. The sample was next rolled to homogenize. A 30g sample size was fire assayed using appropriate fluxes. The resultant dore bead was parted and then digested with aqua regia and then analyzed on a Perkin Elmer AA instrument. Appropriate standards and repeat sample (Quality Control Components) accompany the sample results on the data sheet.

ALS-Chemex (2006-2008):

From 2006 to 2008, most sample preparation was done by ALS Chemex (ISO 9001:2008 registration and ISO 17025 accredited methods in North America) in their Terrace, British Columbia sample preparation facilities with the exception of some samples drilled for metallurgy testing purposes (see sample preparation discussion below). No sample preparation was done on site.

Samples are dried at 120°C (maximum) and then crushed with either an oscillating jaw crusher or a roll crusher. The ALS Chemex QC specification for crushed material is that greater than 70 percent of the sample must pass a 2mm (10 mesh) screen. A whole or split portion derived from the crushing process is pulverized using a ring mill. The ALS Chemex QC specification for final pulverizing is that greater than 85 percent of the sample be less than 75µm (200 mesh). A 30g split is fire assayed and the resultant bead is parted and digested with aqua regia, and the final result is measured using Atomic Absorption (AA) using the Au-AA23 analytical procedure (reported in ppm units). All assays above 1.0ppm were re-assayed by ALS Chemex using a gravimetric finish (Au-GRA21 analytical procedure) and reported in ppm units.

Since early 2006, ALS Chemex has also been analyzing every submitted sample interval for 35 element Inductively Coupled Plasma (ICP) geochemistry using the ME-ICP41 analytical method that utilizes nitric aqua regia digestion and atomic emission spectroscopy (AES). The 35 analyzed elements include Ag, Al, As, B, Ba, Be, Bi, Ca, Cd, Co, Cr, Cu, Fe, Ga, Hg, K, La, Mg,

Mn, Mo, Na, Ni, P, Pb, S, Sb, Sc, Sr, Th, Ti, Tl, U, V, W, and Zn. Since spring of 2008, all submitted drill samples that contain greater than 10,000 ppm As, which is the upper limit using the ME-ICP41 analytical method, have been reanalyzed for overlimit As using aqua regia and the ME-OG46 analytical method.

A total of 30 diamond drill holes (totaling 3,388 m and including drill hole numbers KR-08-1269 to KR-08-1300) were completed in early 2008 for metallurgical testwork and prepared at the Jerri Canyon Mine laboratory (noncertified lab), located about 51 kilometers north of Elko, Nevada. This mine lab is operated by Queenstake Resources USA, Inc. which is a 100% subsidiary company owned by YNG. The metallurgy samples were shipped to the Queenstake lab for faster processing and prep work; Queenstake employees prepared the Ketz River metallurgy samples by making pulps and performing initial Au assays. The leftover pulps were shipped to ALS for analysis for inclusion into the acQuire drill hole assay database.

These metallurgy core samples were dried at less than 93°C (maximum) and then crushed with a Rock Labs swing jaw crusher that took the sample material to 99 percent passing 25.4 mm (1 inch). Each sample was then processed through a Rock Labs Boyd crusher that took the sample to 99 percent passing 9.5 mm (3/8 inches). A whole or split portion derived from the crushing process (using a rotary splitter) was pulverized using a Bico pulverizer; the QC specification for final pulverizing was 95 percent passing 0.106 mm (150 mesh). A total of 300 grams of pulp material for each drill sample interval was made for fire assay and was initially analyzed by the Jerri Canyon Laboratory to determine ore from waste (the Jerri Canyon Lab assay results were not entered into the Ketz acQuire drill hole database or used for resource estimation).

The remaining pulp materials for each metallurgy drill sample (ore and waste) were later shipped to the ALS Chemex Reno laboratory for final assay as per the ALS Chemex assay specifications described above; these final assays from ALS Chemex were imported into the Ketz River acQuire drill hole database and used for resource modeling and estimation. The coarse reject material from the metallurgy drill hole sample were purged with nitrogen, placed in individual 2-gallon sealed plastic buckets soon after the split to minimize oxidation, and shipped to PRA Laboratory (now called Inspectorate) in Richmond, BC for metallurgy testwork. Inspectorate Lab is an International Organization for Standardization (ISO) 17025 certified lab.

11.2 Quality Controls and Quality Assurance

11.2.1 QA/QC Protocol 2005-2008 (YGC-YNG)

The YGC-YNG laboratory Quality Assurance/Quality Control (QA/QC) program consists of inserting a blank sample into the sample stream at the top of every hole and then inserting either a standard sample or blank sample at every 15th sample. If a drill hole has less than 15 samples, a standard and blank are inserted at the end of the hole.

The blanks used in the 2005 to 2008 drill programs were non-commercial material, composed of locally derived barren limestone and have not been certified to be of zero grade. The “barren” limestone source is located just southeast of the core shack (between the south projection of the Lab-Calcite resource and the West Peel resource). Since May 15, 2010, blank material being inserted into the sample sequence consists of crushed marble material that is being commercially sold in large bags in Whitehorse. This crushed marble material has not yet been certified to be of zero grade, but initial results indicate that the material contains very little Au.

Prior to mid-year 2006, a non-commercial moderate grade “pseudo-standard” was used, which had been collected from a mineralized outcrop in the Ridge pit and blended by hand. When this first “standard” was depleted, a second supply of higher grade material was collected and blended from a local high grade stockpile. These “standards” were inserted simply to ensure that the lab would catch high grade assays, and not necessarily to assess the precision of the lab. The shortfalls of these non-commercial standards was realized, and commercial standards from CDN Resource Laboratories Ltd were used starting in mid 2006.

After mid-year 2006, Gold Ore Reference Standards CDN-GS-10A (9.78+/- 0.53g/t) or CDN-GS-10B (8.6 +/- 0.49g/t) have been used for drill holes completed in manto-type mineralization. Gold Ore Reference Standards CDN-GS-1C (0.99 +/- 0.08g/t), CDN-GS-2B (2.03 +/- 0.12g/t) or CDN-GS-2C (2.06 +/- 0.15g/t) have been used for drill holes completed in stockwork- or fissure-vein-type mineralization.

Due to communication issues, the standard insertion protocol was not strictly adhered to once a particular standard supply was depleted. There were minor labeling issues where blanks and standards had labels swapped, or the wrong standard label was recorded. These issues were identified and corrected as confirmed by comparing the geochemistry of the multi-element assay results to those of the standards. The problems reflected an issue with check sample handling and not with lab results.

Occasionally, higher-grade gravimetric assays were re-assayed as a check; all of these retests were within acceptable ranges of the original.

11.3 Interpretation

Graphs (Gravimetric Au using ALS analysis method Au-GRA 21 vs. return date) were plotted for each set of standards and blanks for the 2008 drill hole program and reviewed prior to conducting this current resource estimate. Standard CDN-GS-2B is shown in Figures I-1 in Appendix I as an example. It must be emphasized that assay results for the 2008 drill holes were not all completed and finalized until January 25, 2010 due to funding issues which is the reason why some of the 2008 drill hole assay return dates extend into the 2010 year.

A total of 132 valid Au analyses using the CDN-GS-10B standard were completed in the 2008 drill program and stored in the drill hole database. A total of 119 valid Au analyses using the CDN-GS-2B standard were completed in the 2008 drill program and stored in the drill hole database. A total of 150 valid Au analyses using the CDN-GS-2C standard were completed in the 2008 drill program and stored in the drill hole database. A total of 636 valid blank standards were analyzed as part of the 2008 drill hole program.

With the exception of a few anomalies which may represent mislabeled samples, most of the commercial standards behave as well can be expected. Only a few assays are outside of the 2 standard deviations range, and most are within one standard deviation. The blank samples show several anomalous results which may be due to mislabeled samples, sample preparation contamination, or anomalous gold present within the blank.

The QA/QC program should be improved to meet industry guidelines of inserting 1 standard for every 20 samples, 1 duplicate sample for every 20 samples, and 1 blank for every 20 to 50 samples. The QA/QC data should be monitored on a regular basis to monitor the laboratory performance. In addition, a different blank material that is preferably certified by a commercial lab should be used for future drill programs.

A total of 22 pulps generated from the 2006 and 2007 drilling programs that were originally assayed at ALS Chemex, were relabeled with different sample ID numbers and reanalyzed at ALS-Chemex again in early 2008. These duplicate samples were not reviewed in the 2008 SRK NI 43-101 report. A scatter plot of these duplicate Au values are shown in Figure I-2 in Appendix I and compare well with one another. No drill hole pulps or coarse rejects have been submitted to a secondary certified assay lab for the 2008 drill program but is recommended.

The primary author, Todd Johnson (QP) has reviewed the sampling procedures, analytical procedures, and security for the recent drilling programs (2005 to the present) and find them to conform to industry standards and are thus adequate for use in the current resource determination presented in this Technical Report.

12 Data Verification (Item 16)

Drill hole data extractions (as .csv files) from the YNG acQuire Ketz River project drill hole database were inspected and audited, and numerous corrections were made to pre-2005 drill hole data, as described below. In addition, other geological and drill hole data were examined captured, and verified prior to use in the current resource estimate. An audit of the 2008 drill hole data indicated that the gold assay data were properly entered into the master acQuire drill hole database.

12.1 Drill Hole Data Audit (1984-1997 Drill Holes)

The database for the early years of drilling from 1984 to 1997 only included collar and survey information, HOLEID, LCODE, and a single gold assay. A quick comparison of the electronic digital database in early December 2009 by YNG senior geological staff identified the following errors or omissions with the original drill hole data written on the old paper drill hole-geology logs (for the drill holes completed from 1984 to 1997):

- the Au assays were not consistently selected; in some cases the best Au assay (used as the final “best” Au value for the drill hole sample interval) was averaged between two or three labs, and in some cases the Au assay analyzed by the secondary lab was selected as the best Au value over the primary lab. There appeared to be no consistent selection criteria to help decide which Au assay value to use as the best Au value for the database;
- quick initial reviews of the paper copy geological logs that contained the Au assay results by sample interval identified several data entry (Type 1) errors (e.g. transposed numbers, decimal points in the incorrect location) in both the from-to interval fields and the best Au assay value field;
- logged sulfide mineral and oxide mineral data by the geologists were not captured in the master database;
- the original assay sample ID number was never captured in the master database; and
- the core recovery and RQD geotechnical data also had not been electronically captured in the YNG database.

As a result of identifying the aforementioned errors and omissions in the 1984 to 1997 drill hole data, Yukon-Nevada Gold staff spent approximately 25 days from late December 2009 to January 26, 2010 reviewing the paper drill hole logs and compiling all of the available missing data electronically into Excel spreadsheets and verifying other data (such as the drill hole from-to intervals and total drill hole depths). Extracted data from the existing acQuire drill hole database including the HOLEID, from-to intervals, and best Au value were first copied onto the left side of the Excel spreadsheet, and the drill hole data listed on the paper drill hole log were typed into the corresponding row and cells on the right side in the same Excel worksheet by an experienced geologist. This allowed a direct visual comparison of the two data sets in Excel while at the same time viewing the original data written on the paper log, and any errors or omissions were immediately noted by the geologist in a separate column within Excel.

A total of 686 drill holes (KR-84-01 through KR-97-587) were reviewed, verified and/or updated based on this historical data capture exercise which represents approximately 10,264 individual assay sample intervals or approximately 26 percent of the entire drill hole assay database used

for this resource estimate. All of the available raw Au assay data for the 1984 to 1997 drill holes were hand written on the drill logs (and not stored in acQuire). This was common industry practice before personal computers became commonplace. In some cases two to four different laboratories analyzed for Au. Original assay certificates could only be found for the mid 1990's Au analyses.

Besides consistently selecting a Au value from the primary lab (see Section 12.5), the December 2009 to January 2010 data capture exercise also added total sulfide mineral and total oxide mineral information logged by the geologists for the years 1984 to 1997. For oxide mineral data, scorodite (an arsenic-oxide mineral) was included in the total oxide quantity. The individually logged oxide and sulfide mineral intensities were also compiled where noted. The following intensity descriptions were used in the early drilling years from 1984 to 1997 and were consistently assigned a numeric value as shown below in order to be used later to help derive a total oxide mineral and total sulfide mineral value in the Geology table of the Vulcan database.

Trace = 0.1 pct by volume

Weak = 5 pct by volume

Moderate = 30 pct by volume

Strong = 45 pct by volume

Very Strong = 51 pct by volume

Intense or Pervasive = 80 pct by volume

Other assigned values: weak to moderate = 20 pct by volume

Other assigned values: weak to moderate = 20 pct by volume

Medium to strong = 40 pct by volume

Moderate to intense = 50 pct by volume

If the percent logged sulfide or percent logged oxide was not captured from the paper logs, but contained intervals logged as "Manto," these intervals were assigned a total iron-oxide content equal to 100 percent by volume.

The following oxide intensity descriptions have been used in the Ketza River geology logging scheme from 2005 to the present:

Weak = 1-10 pct by volume

Moderate = 10-30 pct by volume

Strong = 30-50 pct by volume

Very Strong = >50 pct by volume

In order to consistently quantify the total oxide mineral quantity in a numeric value (estimated logged total volume percentage) for the 2005 to 2008 drill holes, the following values were assigned to the relative quantity descriptions:

Weak = 5 pct;

Moderate = 30 pct;

Strong = 45 pct; and

Very Strong = 51 pct.

Sulfide minerals from 2005 to the present have been quantified in volume percent by the geologist and just needed to be totaled together for this work.

After all of the oxide and sulfide mineral intensities were assigned numeric values, they were totaled in separate derived fields within the Vulcan Geology table. Both total oxide and total sulfide mineral values were later used to help modify, where warranted, the existing lithology code (LCODE) in acQuire to a new revised LCODE2 entry that still obeyed the existing lithology code naming conventions. This revision of the LCODE was most important in discriminating moderate to high oxide mineral or sulfide mineral bearing zones containing greater than 50 percent oxide minerals by volume (referred to as OXIDE in the LCODE) or greater than 50 percent sulfide minerals by volume (referred to as SULF or sulfide in the LCODE), respectively.

Although these updated geological data and assay data from 1984 to 1997 were only entered into Excel spreadsheets to help compile a master database for the current resource calculation, all of these data have since been added to the master acQuire drill hole database as of early September 2010.

As part of this drill hole audit, a few ROCK CODE changes were made to the database including:

MTRK = Magnetite-bearing rock with >40 percent magnetite by volume;

AND was changed to DIKE;

TUFF? was changed to DIKE;

UNK and UNKNOWN were changed to NOLOG (unknown lith code);

LC was changed to NOLOG;

CAS was changed to CASE (casing);

1d was changed to LST (limestone);

VN was changed to VEIN;

MW (mine workings) and WOOD were deleted since they were never used in the database.

12.2 Topography

Two sets of topography contours were entered into Vulcan from Autocad. Current topo was on one meter contours from the 2006 air survey. A pre-mine topo on 10m contours was also entered. When viewing these topos together, the elevation of the pre-mine topo was 5 meters above the current topo. The pre-mine topo was translated down 5 meters to match the current topo.

When the Canamax maps of the underground workings were entered into Vulcan, the workings and the corresponding topo was also 5 meters high in relation to the current topo. The digitizing and subsequent triangulations of the underground workings was translated down 5 meters in order to better correlate with current topo.

Drill holes drilled before mining may also have a 5 meter elevation discrepancy but upon scrutiny seemed to match topo well. No drill hole collars were adjusted based on this topo discrepancy.

12.3 Collar Locations

Collar locations were checked against topography and underground excavations, and many collar surveys were located within acceptable limits. Some drill holes which did not match topography were explained by open pit mining, mine dumps, or drill road construction, which can have a significant effect in this steep terrain. A total of 31 drill hole collars were moved to new locations (see Appendix C) based on critical reviews of historical Canamax Resources drill hole plan maps (Parry, et al., 1984; and Canamax geological maps dated March 1991 that are scanned) located in the Ketza River Project files. Most of the changed drill hole collars affected the Tarn and Penguin zones. A couple drill hole collars (KR-05-682 and KR-05-683) were moved relative to archived historic drill hole maps located in the Ketza River computer server (Autocad map file named “Shamrock_Work_Area.dwg”).

Drill hole collar azimuths and dips are based on direct measurements using a Leica TCR803ultra total station (theodolite) instrument on an upper and lower point on the drill rods (not at 0m) and then an inverse is calculated. To calculate the collar coordinate at 0m a measurement along the rod to the ground from the lowest point is taken by the total station which creates a coordinate value by projecting a line with a bearing and distance.

12.4 Downhole Orientations

Prior to 2007, many drill holes were not downhole surveyed. A total of 558 drill holes in the database do not have any downhole surveys which represents approximately 35 percent of the total drill holes in the database. Also prior to 2007, numerous drill holes contain no downhole azimuth measurements but have dip deviations as measured using acid tests every 40 to 50 meters. This practice does not follow industry standards. Previous data reviews of some of the underground drill hole data, which were in the database as vertical down holes, have been corrected to being vertical up holes as verified by historic logs and cross-sections. Near the end of our modeling work, we found a digital spreadsheet file called “Shamrock DDH survey_pre2005.xls” that contained some additional downhole survey data that is not in the drill hole database.

Starting early in 2007, downhole survey deviations were recorded using a Maxibor II downhole instrument which recorded deviations every 3 meters. The Maxibore measurements are always checked and verified after the survey is completed. A few anomalous data readings have been deleted in the past. Where Maxibore downhole survey measurements are observed to be incorrect or were not performed, the drill hole azimuth and dip at the drill hole collar are measured with the total station instrument and used for the downhole survey data. In April 2008, one of the accelerometers of the Maxibore instrument was not working which resulted in erroneous dip measurements. This instrument was sent back to the manufacturer to be repaired

and a temporary Reflex EZ-SHOT (single-shot) downhole tool was used during this short time period.

12.5 Assays (2005-2008)

Although numerous elements have been assayed at various points during the project history, only gold has been assayed consistently. The previous group that conducted the last NI 43-101 report (SRK, 2008) indicated that they had verified all of the 2005-2007 assays against electronic assay certificates.

12.5.1 2008 Assays

Todd Johnson audited approximately 11 percent of the total 2008 assay sample intervals (or about 9% of the total 2008 drill holes) by comparing the digital copy of the finalized assay lab results with the Au-Best assay value entry extracted from the acQuire database. This audit found that all of the Au-Best assay values had been correctly entered into the acQuire database. However, it was found that several of the elevated arsenic (>10,000 ppm) analytical results (n=36 total) that were reanalyzed using the ALS As-OG46 overlimit method had not been entered into the acQuire database. In one instance Pb and Zn overlimit analytical results had also not been entered into acQuire. All of the As, Pb, Zn, and Ag overlimit results from the 2008 drilling have been since entered into acQuire (as of November 2010).

The gold value has been recorded in the acQuire database using the following priority: fire assay with gravimetric finish if available, or fire assay with atomic absorption (AA) finish. Drill intervals that weren't sampled were not entered in the assay database creating gaps in the from-to sequence. Lost data had the sample number ID and from-to interval recorded but the gold and other element analysis values remain blank. Below detection limit Au values for drill holes completed in 2005 by Eco-Tech Labs were 0.03 g/t. Below detection limit Au values for drill holes completed in 2006 and up to the present by ALS-Chemex were 0.005 g/t. All BDL Au values from 2005 to the present have been entered as 0.001 g/t in the acQuire (and Vulcan) databases.

12.5.2 1984-1997 Assays

As part of the YNG 2009-2010 data capture exercise, Todd Johnson took the electronically captured Au assay data which typically included multiple final Au values from several labs, and selected the final revised drill hole Au assay data to be used as the Au best value using a consistent selection criteria. In order to help determine which laboratory Au value to use, a scatter plot was made for each drilling year that compared Au from the primary lab vs. Au from the secondary lab in order to determine the presence of any bias in the assay results. In most every case, the primary assay lab Au data compared favorably well with the secondary lab. Also in most every case, the Au assay value determined by the primary lab was used to select the final Au best assay result (Table 12.5.2.1).

Since only a few exploration and mining reports were available that stated which lab was designated as the primary lab, the primary lab was assumed by Todd based on the highest total amount of samples analyzed for that given year. Where no Au assay data existed from the primary lab, the Au best value was selected from the secondary lab. If there were no Au assay results from the primary or secondary labs, then the results from the third assay lab were used.

Table 12.5.2.1: List of Assigned Primary Assay Labs from 1984 to 1997

Year	Assigned Primary Assay Lab
1984-1986	Bondar-Clegg
1987; 1989-1990	Ketza Mine Lab
1988	Rosbacher Laboratory
1994-1997	Northern Analytical Labs
Note: The Au-best assay value selected for use in the Ketza River database was first selected from the primary lab	

For those drill holes in acQuire that do not have any associated assay samples, these drill holes need to have the total drill hole depth assigned as the default assay sample length in order for the drill hole to be visible in cross-section using Vulcan software. As of early September 2010, this has been done.

Below-detection-limit (BDL) assay values range from 0.005 to 0.10 g/t for drill holes completed from 1984 to 1997; for these years the actual detection limit value (minus the less than sign) was retained as the Au-best value in the acQuire drill hole database.

13 Adjacent Properties (Item 17)

The Stump property (containing the historic A-1 Ag-Pb Mine) is an active property located approximately 6km east of the Ketz River Project. In 2007, Klondike Silver Corp. excavated 80 tons of ore material from a trench with reported average grades of up to 1,612 g/t Ag, 42.62 percent Pb, and 1.34 percent Zn (Klondike Silver Corp, 2010). This same company extracted a 1,500 ton sample in 2008 with likely similar Ag-Pb grades. The 2008 ore material was transported to the company's Sardon mill for processing and then to Teck Cominco's Trail smelter for smelting in BC, Canada.

A total of 68,128 tonnes of Pb-Zn-Ag ore material from 6 former mines or prospects (A1, K18B, F2, F3, Lap8, and Lap10) has been either previously mined or identified within existing resources east of the Ketz River project. Average Ag and Pb grades in these deposits are 707.6 g/t and 18.6 percent, respectively (Cathro, 1988; Yukon MINFILES).

The Tay-LP gold property is located approximately 10km west of the Ketz River property and is owned by Canarc Resources Corp. and Cap-Ex Ventures Ltd. Recent exploration in 2009 has included 2,000 m of diamond drilling in 10 drill holes (Canarc, 2010).

The True Blue rare earth element (REE) exploration property in the Yukon is located immediately west of the Ketz River Project and is being actively explored by Great Western Minerals Group Ltd. and True North Gems, Inc. In 2010, heliborne geophysics, mapping, soil sampling, and mineralogical studies were performed (Great Western Minerals Group, 2010).

The primary author, Todd Johnson, has been unable to verify the above information regarding adjacent properties. The aforementioned information presented about the adjacent properties is not necessarily indicative of the mineralization present at the Ketz River property.

14 Mineral Processing and Metallurgical Testing (Item 18)

Over 21 metallurgical test programs have been recorded for Ketz River between 1985-2010 at the following laboratories:

- Bacon, Donaldson and Associates in 1985 and 1989;
- University of Western Ontario in 1986, 1988 and 1989;
- Coastech Research in 1990;
- Cominco Engineering Services in 1989;
- Queens University in 1989;
- University of British Columbia in 1989;
- Lakefield Research in 1986-87; and
- PRA in 2003-04 and 2008.

SRK reviewed these test programs and found that the Lakefield and PRA test programs are most relevant to the current Ketz River project. A summary of these results are discussed below. In addition, a short description of the proposed process flowsheet for the new mine is presented in Section 14.4.

14.1 Lakefield Research 1986-1987 Test Work

A series of standard cyanide leach tests were run on oxide ores under various conditions of grind, pre-aeration and leach time, with and without CIL (carbon-in-leach). The precise conditions of the individual tests are reported, along with the results, in Lakefield Research (1986a, 1986b, 1987).

The initial results reported by Lakefield (Lakefield Research (1986a, 1986b) indicated that oxide ores had excellent gold recoveries (over 94%) and could be achieved at a relatively coarse grind (69% minus 200 mesh) and 48hr retention time, without pre-aeration. Residues contained significantly less than 1g/t-Au. These tests were carried out on a single composite sample.

A series of nine additional samples from the oxide zone were subjected to confirmatory tests (Lakefield Research, 1987). The recoveries on these tests were significantly lower, with only two samples yielding residues below 1g/t-Au. Average gold recoveries were 87 percent. Further tests at finer grinds (80% minus 200 mesh) were carried out on these nine samples, and although recoveries fell short of those anticipated from Lakefield Research (1986a and 1986b), they were consistently over 90 percent.

14.2 PRA 2003-2004 Test Work

Significant Ketz River metallurgical test work for was also conducted at PRA in Vancouver, Canada between November 2003 and October 2004. Both oxide and sulfide ores were included in this bench-scale test work which tested for:

- Flotation (batch) for the production of rougher and scavenger concentrates;

- Direct cyanide leaching with and without pre-aeration;
- Bulk density determination; and
- Specific gravity determination.

None of the tested samples were identified as to representativeness of a specific ore type, and only the bulk density determinations identified the sample source from which ore types may be assumed. Others were identified only as a composite.

The results of these tests are summarized below in Table 14.2.1.

Table 14.2.1: Summary of PRA Metallurgical Test Results 2003-2004

Date	Test/Description	Sample	Units	Results
Nov-03	Flotation; P ₈₀ 74µm; Rougher-Scavenger Concs ⁽¹⁾	Composite 1; head grade of	%	Au recovery = 82.2
		9.15 g/t Au; 0.8 g/t Ag	%	Ag recovery = 66.2
Nov-03	Cyanide Leach #1; pH 10.5; 72 hrs; 40% solids; P ₈₀ 74µm; 1 g/L NaCN	Composite 1; head grade of	%	Au recovery = 77.3
		9.15 g/t Au; 0.8 g/t Ag	%	Ag recovery = 19.1
Mar-04	Cyanide Leach #2; pre-aerate 16 hrs; pH 10.5; 72 hrs; 40% solids, P ₈₀ 85µm; 1g/L NaCN	Composite 1; head grade of	%	Au recovery = 65.9
		9.15 g/t Au; 0.8 g/t Ag	%	Ag recovery = 70.3
Mar-04	Cyanide Leach #3; pre-aerate 16 hrs; pH 10.5; 72 hrs; 40% solids, P ₈₀ 85µm; 1g/L NaCN	Composite 1; head grade of	%	Au recovery = 91.3
		9.15 g/t Au; 0.8 g/t Ag	%	Ag recovery = 60.6
Mar-04	Cyanide Leach #4; pre-aerate 16 hrs; pH 10.5; 72 hrs; 40% solids, P ₈₀ 54µm; 1g/L NaCN	Composite 1; head grade of	%	Au recovery = 82.0
		9.15 g/t Au; 0.8 g/t Ag	%	Ag recovery = 74.6
Mar-04	Cyanide Leach #5; pre-aerate 16 hrs; pH 10.5; 72 hrs; 40% solids, P ₈₀ 54µm ; 1g/L NaCN	Composite 1; head grade of	%	Au recovery = 78.0
		9.15 g/t Au; 0.8 g/t Ag	%	Ag recovery = 66.6
Sep-04	Specific Gravity	Composite 1 (average 2 tests)	g/cm ³	4.265
Oct-04	Bulk Density – Waxed	KR-96-575 57.95m 5.93g/t Au	g/cm ³	2.58
Oct-04	Bulk Density – Waxed	KR-96-575 57.95m 5.93g/t Au	g/cm ³	2.57
Oct-04	Bulk Density – Waxed	KR-96-575 52.4m 0.86g/t Ag	g/cm ³	3.66
Oct-04	Bulk Density – Pulverized	KR-96-575 57.95m 5.93g/t Au	g/cm ³	2.71
Oct-04	Bulk Density – Pulverized	KR-96-575 52.4m 0.86g/t Ag	g/cm ³	3.66

⁽¹⁾ Recovery represents total recovery for rougher and scavenger concentrates.

The test results indicate the following:

- Good gold and silver recoveries of 82.2 and 66.2 percent, respectively, were obtained by flotation into rougher and scavenger concentrates at a fine grind of P₈₀ 74µm using standard flotation conditions and reagents;
- Good gold and silver recoveries averaging 72 and 68 percent, respectively, were obtained by direct cyanidation with a 16 hour pre-aeration using standard leaching conditions and a 72 hour leach time at fine grinds of P₈₀ 54µm and 74µm;
- Less favorable recoveries were achieved without pre-aeration at the same leaching conditions;

- Bulk density determinations averaged 2.62 and 3.66g/cm³ for the two samples using waxed and pulverized methods; and
- Specific gravity determinations averaged 4.265g/cm³ as an average of two tests on the same sample.

14.3 PRA (Inspectorate) 2008 Test Work

A total of 20 primary metallurgy variability composite samples consisting of selected coarse rejects from diamond drill core from various resource areas were submitted to PRA labs (now called Inspectorate Lab) in Richmond, BC for test work on April 7, 2008. Fourteen of the composites originated from the Manto resources and seven originated from the QB and Gully resources. The 20 metallurgy composite samples mostly consisted of sulfide ore types (n=14) with lesser oxide (n=4) and mixed “oxide+sulfide” types (n=2). The 2008 drill samples submitted for testing consisted of a total of 222.23 m of drill core. Each of the core samples submitted for met testwork were drilled within two months before they were sent to the prep lab in Nevada in order to minimize oxidation to the samples. Each submitted primary composite sample ranged from 16.1 to 58.3kg (average = 28.8kg).

The Inspectorate metallurgy results are documented in a report by Chen (2011) and summarized below. Drill hole numbers used for testing and sample preparation and assay methods used have been previously described in Sections 9 and 11.1. When the coarse reject samples were received at Inspectorate, the samples were first dried at room temperature then stage crushed to 6 mesh. The crushed samples were combined into composites per YNG’s instructions, with representative splits riffled out for head assay. Two kilogram test charges were split from each of the composites.

The 20 primary composites (excluding the “mixed” oxide+sulfide samples) were mixed into 7 “level 1” composites which were ultimately mixed into two separate “second level” composites and separated by REDOX type: one oxide sample called OM composite and one sulfide sample called SM composite. All metallurgy testwork done in 2008 focused on these two composites. Average head grades for the OM and SM second level composites are listed in Table 14.3.1 below. Gold head grades and multi-element ICP geochemistry were also completed on all of the 20 primary samples.

Table 14.3.1: Average Head Grades and Geochemistry for the Two 2008 Composites

Composite Sample ID	Au Grade (g/t)	Ag Grade (g/t)	As (pct)	Fe (pct)	Carbon (pct)	Total Organic Carbon (pct)	Total S (pct)
OM	4.56	1.0	3.89	18.1	2.90	0.52	0.32
SM	7.66	2.9	3.21	37.3	2.25	0.71	20.87

Notes: OM composite consists of Oxide ore and the SM composite consists of Sulfide ore derived from 2008 diamond drill core mineralized intercepts (Chen, 2011).

The OM and SM composite samples were tested for the following: acid-base accounting (ABA), work index, cyanide leaching (bottle roll tests), flotation and gravity preconcentration, and

mineralogic examination. Bond ball mill work index data for the OM and SM composite are 10.0 and 10.6 kWh/tonne, respectively. ABA tests indicate that the oxide samples should pose no threat with respect to acid-rock drainage generation, whereas the sulfide sample has a high net acid potential due to its significant sulfide mineral content.

The SM composite was tested for two sets of leaching tests at three target grinds of 80 percent passing 73 microns, 60 microns, and 48 microns; one set was done without pre-aeration and the other set was with 20 hours pre-aeration. There were not many differences in gold extraction at the different grind sizes with approximately 70 percent total Au extraction and leaving about 1.4g/t Au in the residues. In addition, a rougher flotation test preceded by gravity concentration was performed on the SM composite at a target grind of P80 -76 microns which returned a total of 80 percent Au recovery into a mass pull of 41.5 percent.

The OM composite was tested by a kinetic cyanide leaching test at a grind of P80-74 microns. A series of standard cyanide leach tests were run under various conditions.

Approximately 90 percent of the Au from oxide ore can be recovered by direct cyanide leaching methods as evidenced by the 2008 testwork and by the previous oxide milling production by Canamax. For sulfide ores, about 70 percent of the gold can be recovered by conventional methods. Various approaches including lead nitrate/ammonium chloride addition, pre-aeration, oxygenation, cyanide dosage change, change in mixing intensity, carbon-in-leach, thiosulfate leaching yielded mixed results. A combination of finer grinding and lead nitrate/ammonium chloride addition and pre-aeration generated the best results with a final gold extraction of approximately 80 percent.

Table 14.3.2 shows the results of diagnostic leach tests performed on five sulfide composite samples. The results indicate that gold deportment varies; however, there are significant amounts of Au associated with arsenopyrite in all samples tested ranging from 7.7 to 18.6 percent. Gold associated with other refractory minerals such as manganese are also present in appreciable amounts in all samples. The potential portions of refractory gold range from

Table 14.3.2: Diagnostic Leach Results on Sulfide Composite Samples

Composite Sample ID (Test no.)	Carbonaceous (pct)	Calcite/ Dolomite (pct)	Manganese (pct)	Arsenopyrite (pct)	Silicate (pct)	CN Soluble (pct)
SM (DL-1)	5.9	7.4	7.0	15.2	1.2	63.3
S1 Peel Sulphide) (DL-2)	5.3	4.1	5.1	18.6	1.2	65.6
S3 Shamrock Sulphide (DL-3)	3.2	10.8	7.2	18.6	1.5	58.7
Manto 08-09 Calcite Comp (DL-4)	9.4	4.7	15.7	7.7	6.1	56.5
Manto-08-10 Lab Comp (DL-5)	11.8	4.5	2.7	11.6	2.0	67.4

Note: The diagnostic leach tests started with normal cyanide leach to determine soluble gold. The ground sample was leached for 24 hours at 25% solids in 5g/L NaCN solution adjusted to pH 10.5; at the end of the test, residue was filtered and washed thoroughly; and PLS was collected and assayed for Au. The recovered Au was interpreted as cyanide-soluble (Chen, 2011).

approximately 31 percent to 40 percent for these samples. Pretreatment methods such as pre-oxidation might be required to achieve higher gold extraction from sulfide samples.

John Fox, the qualified person for metallurgy and mineral processing, recommends the following Au recoveries listed in Table 14.3.3 to be used for mine planning based on all metallurgy testwork completed to date.

Table 14.3.3: Recommended Au Recovery by Ore Type

Ore Type	Au Recovery (pct)
Oxide	90%
Sulfide	70%

14.4 Proposed Mineral Processing for the New Ketza River Mine

Based on the results of the previous metallurgy test work programs, the preferred Ketza River process flow sheet incorporates a standard carbon-in-leach (CIL) plant that will treat a nominal 1,500 t/day of mixed sulfide and oxide mineralization. The proposed plant is highly conventional and will consist of ore crushing followed by SAG-Ball mill grinding, with CIL to recover the gold. Gold will be removed from the carbon by pressure Zadra elution and recovered by electrowinning.

The ore storage pad will contain several weeks of plant feed (approximately 25,000 tonnes). ROM ore will be delivered to the process plant by trucks and be deposited on the ore storage pad or dumped directly into the ore feed hopper. Ore from the dump hopper will be withdrawn by an apron feeder (or possibly a vibrating grizzly or reciprocating pan feeder) into a jaw crusher where it will be crushed from run of mine size to approximately 150mm lump size and then placed on a stockpile (or in a bin). Ore will be withdrawn from the stockpile by belt feeders and placed onto the SAG mill feed conveyor, which is fitted with a weightometer. The final overflow product will consist of 80 percent passing 75µm which will be discharged over a vibrating trash removal screen. Screen underflow will be fed to a thickener where the pulp will be thickened to approximately 50 percent solids.

The thickener underflow will be pumped to the leach circuit consisting of six agitated leach tanks followed by eight CIL tanks. CIL tailings would be thickened and the thickener underflow treated for cyanide detoxification and arsenic removal using the copper catalyzed SO₂/Air oxidation method. Other technologies could be substituted if it offers better operational efficiency or worker or environmental safety. The detoxified tailings would then be pumped to the tailings impoundment area. Water would be recovered and recycled to the process plant from both the tailings thickener and tailings pond.

John Fox, the qualified person for the mineral processing and metallurgy review for the Ketza River Project, deems that the aforementioned metallurgy results to date and the recommended process flow sheet as described above are adequate for the Ketza River ores.

15 Mineral Resource Estimate (Item 19)

In 2010, YNG updated the Ketz resource estimate with additional drilling up to August 2008 including up to drill hole KR-08-1466. An additional 191 drill holes were added since the last NI 43-101 report (SRK, 2008). The 2010 resource estimate was done by Karl Swanson and Todd Johnson using the Vulcan Software version 7.5 service pack one. This new NI 43-101 resource estimate reinterpreted the 0.5 g/t grade shells and created a geologic model within the Ketz River claim area.

The geologic model separated the main limestone unit (1d) from the argillite and siltstone units which lie both above and below the main limestone unit. An additional thin and mostly unmineralized limestone bed within the upper argillite was also modeled where possible. The individually logged limestone subunits within the unit 1d limestone are described in Section 5.2.1 but were not modeled for this resource estimate.

The gold grade shells were modeled at a rigorous 0.5 g/t cutoff following geologic contact orientation where appropriate. Dilution was kept at a minimum, usually only allowing grades below the cutoff to be included internally to the grade shell or sometimes laterally to maintain ore shape continuity. This kept the grade shells tightly constrained so that the volume of both the manto mineralized bodies and the higher-angle vein style bodies were realistic based on the drilling intercepts.

15.1 Drill Hole Database

The drill hole database is currently maintained at the Ketz River camp in acQuire software, and was transferred from a Drill King (Access) database in late 2007. As of January 25, 2010 the database contained information for 1,582 drill holes, including 896 core holes from 2005 to 2008, 591 core holes from 1984 to 1997, and 95 RC drill holes from 1987.

In order to conduct the current resource estimate, data was extracted from acQuire, appended as required with the 1984-1997 audited drill hole data, and imported to Vulcan in 4 separate tables:

- Collar - HoleID, Northing, Easting, Elevation and Total Depth;
- Survey - Downhole depth, Azimuth, and Dip of drill hole at downhole depth;
- Assay - From, To, Sample ID, and gold assay for all drill holes, and Wt. percent iron for drill holes from 2005 to 2008 as well as other ICP elements. Specific gravity (SG) was calculated from the Wt. percent iron data from ALS Chemex for drill holes completed from early 2006 to 2008 and stored in the Vulcan Assay table in the SG_ASY field.
- Geology – From, To, Lithology Codes, percent sulfide minerals, and percent oxide minerals. Table 15.1.1 lists the fields recorded in Vulcan database. Table 15.1.2 lists the common lithologies logged at Ketz River. Where no Wt. percent iron data was available to calculate an SG value, the SG was assigned based on information logged by the geologists and stored in the Vulcan Geology table in the SG_GEO field (see Section 15.3.4 or details).

Table 15.1.1: Geology Database Fields

Field	Description	Entry
LCODE1	Previous Lith Code	Alpha Code
LCODE2	Edited Lith Code	Alpha Code
PO	Pyrrhotite	Percentage
PY	Pyrite	Percentage
APY	Arsenopyrite	Percentage
CPY	Chalcopyrite	Percentage
TOTSUL	Total Sulfide	Percentage
LIM	Limonite	Percentage
HEM	Hematite	Percentage
SCORO	Scorodite	Percentage
OXIDE1	Primary Oxide Mineral	Alpha Code
OX1INT	Intensity of oxidation	Percentage
OXIDE2	Secondary Oxide Mineral	Alpha Code
OX2INT	Intensity of oxidation	Percentage
TOTOX	Total Oxide	Percentage
OXDESC	Oxide Description	Alpha Code
RKMOD	Modeled Rock Name	Alpha Code
REDOX	Oxide State	Alpha Code
SG_GEO	Specific Gravity	Numeric
ZONE	Model Zone	Alpha Code
DOMAIN	Model Domain	Alpha Code
FLAG	Model Grade Shell	Alpha Code

Table 15.1.2: Most Common Lithology Codes

LCODE	Description	LCODE	Description
MSLT	Massive-oolitic limestone	BSLT	Black siltstone
WBN	Wispy banded limestone	SQA	Siltstone/Quartzite/Argillite
ARG	Argillite	VEIN	Vein
LST	Limestone	CASE	Casing
FSLT	Fossiliferous limestone	QTE	Quartzite
ARS	Argillite/Siltstone	FZ	Fault zone
OXIDE	Oxide Mineralization (≥50% by volume)	QAS	Quartzite/Argillite/Siltstone
SULF	Massive sulfide (≥50% by volume)	BA	Black argillite
QSA	Quartzite/Siltstone/Argillite	OVb	Overburden
MUD	Mudstone	HFLS	Hornfels
SAQ	SLT/ARG/QTE	AQS	Argillite/Quartzite/Siltstone
BXLT	Blue crystalline limestone	PHIL	Phyllite
SLT	Siltstone	QTZ	Quartz
ASQ	Argillite/Siltstone/Quartzite	GO	Gouge

The geologic database was used to determine the percent oxide minerals and/or percent sulfide minerals (by volume) which was then used to determine the specific gravity. The methodology is described in Section 15.3 Specific Gravity Determinations and Redox Classification.

A total of 12,038 Au assay values are present in the Vulcan database that have a value > 0.069 g/t Au (greater than the highest detection limit). A total of 10,306 Ag values are present in the Vulcan database that have a value greater than 0.1 g/t which is the maximum detection limit rounded to the nearest tenths decimal place for 2005 geochemical analyses and younger.

For this current Ketzra model, only three RC holes were removed from the database prior to variography and grade estimation (See Table 15.1.3). These three RC holes had core twins which showed downhole contamination of the RC holes. The RC holes are KR-87-RC3, KR-87-RC6, and KR-87-RC21. The core twins are KR-96-566, KR-05-676, and KR-07-1071. Drill hole KR-87-RC6 is shown in Figure 15-2-5 and shows the contamination in relation to surrounding holes and the modeled 0.5 g/t grade shells.

In addition to the three rejected RC holes, three "trench" holes located in the Tarn Zone were removed from the database leaving a total of 1,582 actual drill holes of the 1,585 collar names. These "trench" holes were named KR-06-TR2, KR-06-TR3, and KR-06-TR4. In the previous model by SRK (2008), additional holes were removed due to incorrect collar locations or orientation in relation to their modeled grade shells. As part of this study, Canamax maps were investigated and each of the other previously rejected holes were corrected and used. See Appendix C for list of moved drill holes. In remodeling the grade shells, no drill holes were rejected due to orientation. Therefore only the three contaminated RC holes were rejected from the total 1,582 drill holes.

Table 15.1.3: Summary of Drill Holes by Area

Area	Used for Modeling			Rejected			Total		
	No. of Holes	Length Drilled	Length Sampled	No. of Holes	Length Drilled	Length Sampled	No. of Holes	Length Drilled	Length Sampled
PEEL	684	63,583	19,439	3	363	244	684	63,583	19,439
PENG	408	48,027	15,847				408	48,027	15,847
SHAM	324	42,470	28,051				327	42,833	28,295
TARN	121	10,943	2,812				121	10,943	2,812
KNOLL	42	2,628	694				42	2,628	694
Total	1,579	167,651	66,843	3	363	244	1,582	168,014	67,087

Notes: (1) Penguin, Flint, Lab-Hoodoo and Calcite zones are included in the "PENG" model area;

2) Gully, 3M, and QB are included in the "SHAM" model area;

3) Break, Ridge, B-Mag, Fury, Fork and Peel are included in the "PEEL" model area;

15.2 Geology and Grade Shell Modeling

Geology was modeled at Ketzra by digitizing the major faults and geologic contacts on 10m east-west cross sections. The contacts modeled were between limestone and argillite units. No internal limestone units were modeled. The geologic units were triangulated in Vulcan as individual solids within fault blocks. The shape and orientation of these geologic units were used as a guide for the grade shell models.

Grade shells at a 0.5 g/t cutoff were digitized on 10m cross sections based upon lithology codes and gold assays, and modeled as wireframes in the Vulcan software. The cross sections were generally east-west but north-south sections were necessary in north Peel around the Break and Ridge zones. The grade shells in the Tarn, Penguin, Peel, and Knoll zones represent limestone hosted manto mineralized zones and lesser structurally-controlled chimney zones. The grade

shells in the Gully and QB zones within the Shamrock area represent veins, stockworks, and disseminated styles of mineralization hosted in siliciclastic rocks.

A total of 110 individual grade shells were created: nine in the Tarn area, 28 in the Penguin area, 42 in the Peel area, and 31 in the Shamrock area. The areas are defined in Table 15.1.3 and in Figure 15-2-1. Six of the grade shells were not used in the block models as they are small and isolated and outside of the block model limits. Four of these shells are outside of Peel, one is west of Tarn and the last is east of QB. The locations of all of the shells and block models are shown in Figure 15-2-1. Representative cross-sections of chosen areas are shown in Figures 15-2-2 through 15-2-5.

Figure 15-2-1: Plan Map of Grade Shells and Block Models by Area

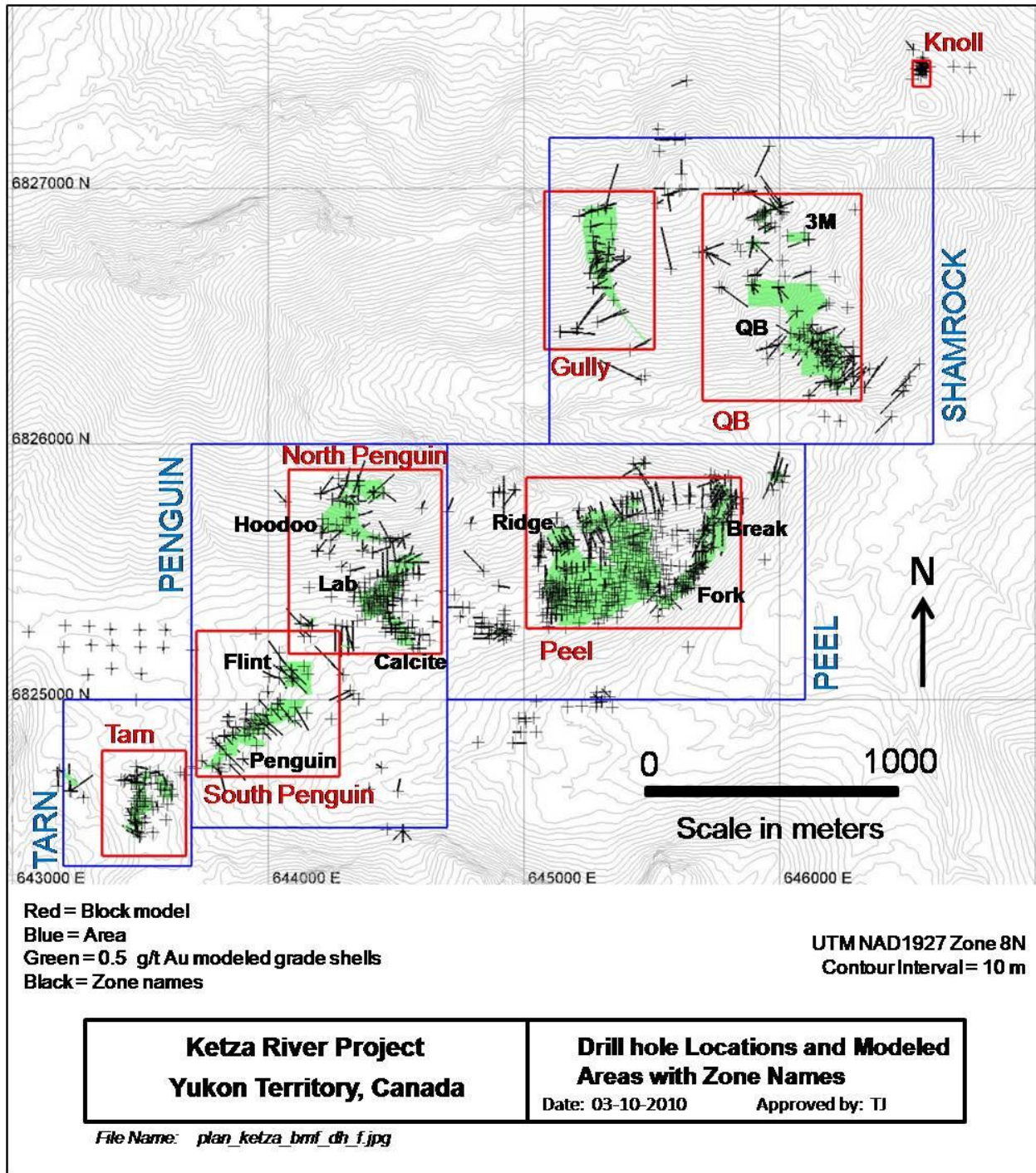


Figure 15-2-2: Cross Section of Peel Grade Shells and Drill Holes

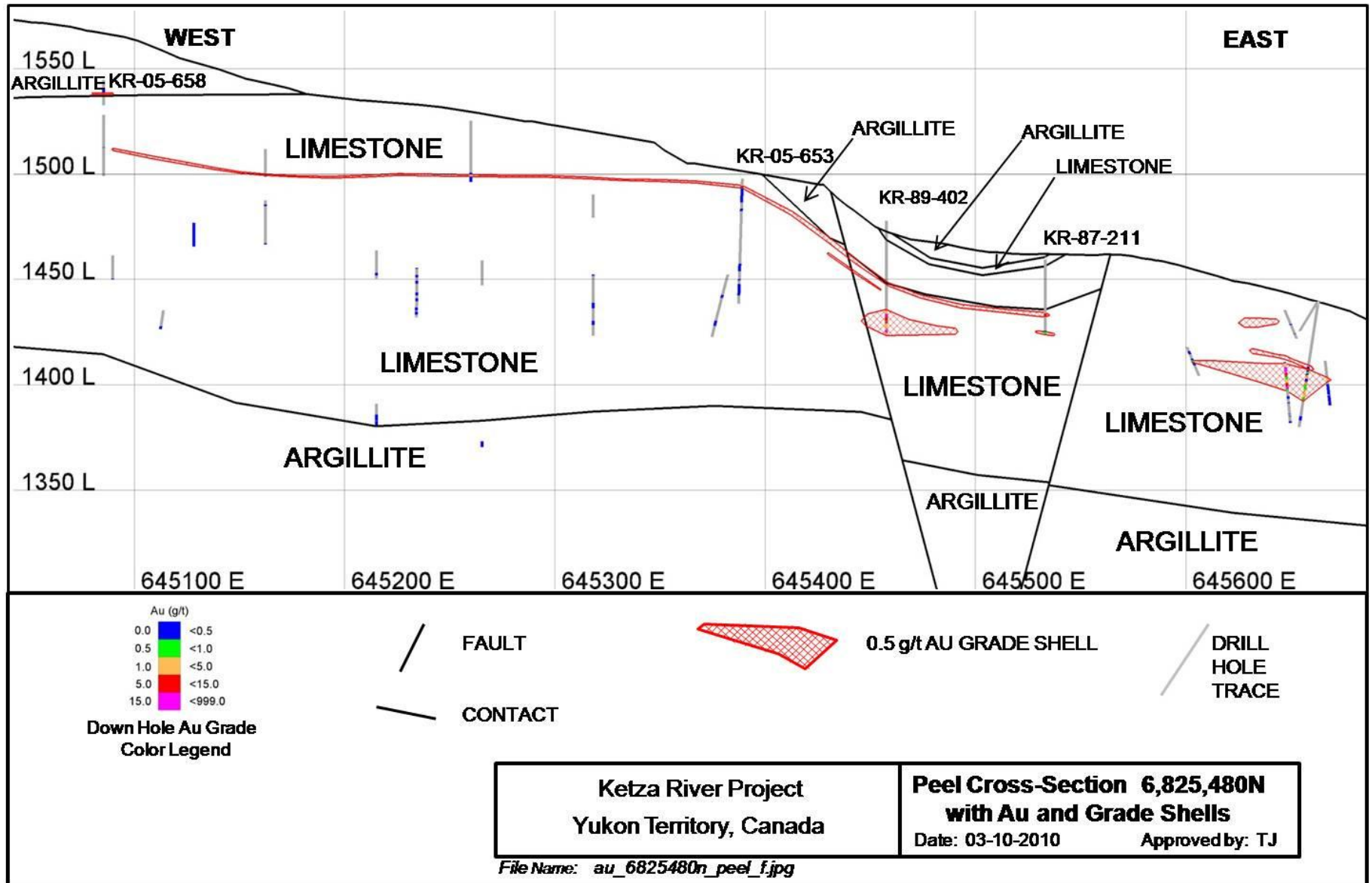


Figure 15-2-3: Cross Section of Peel Geology and Drill Holes

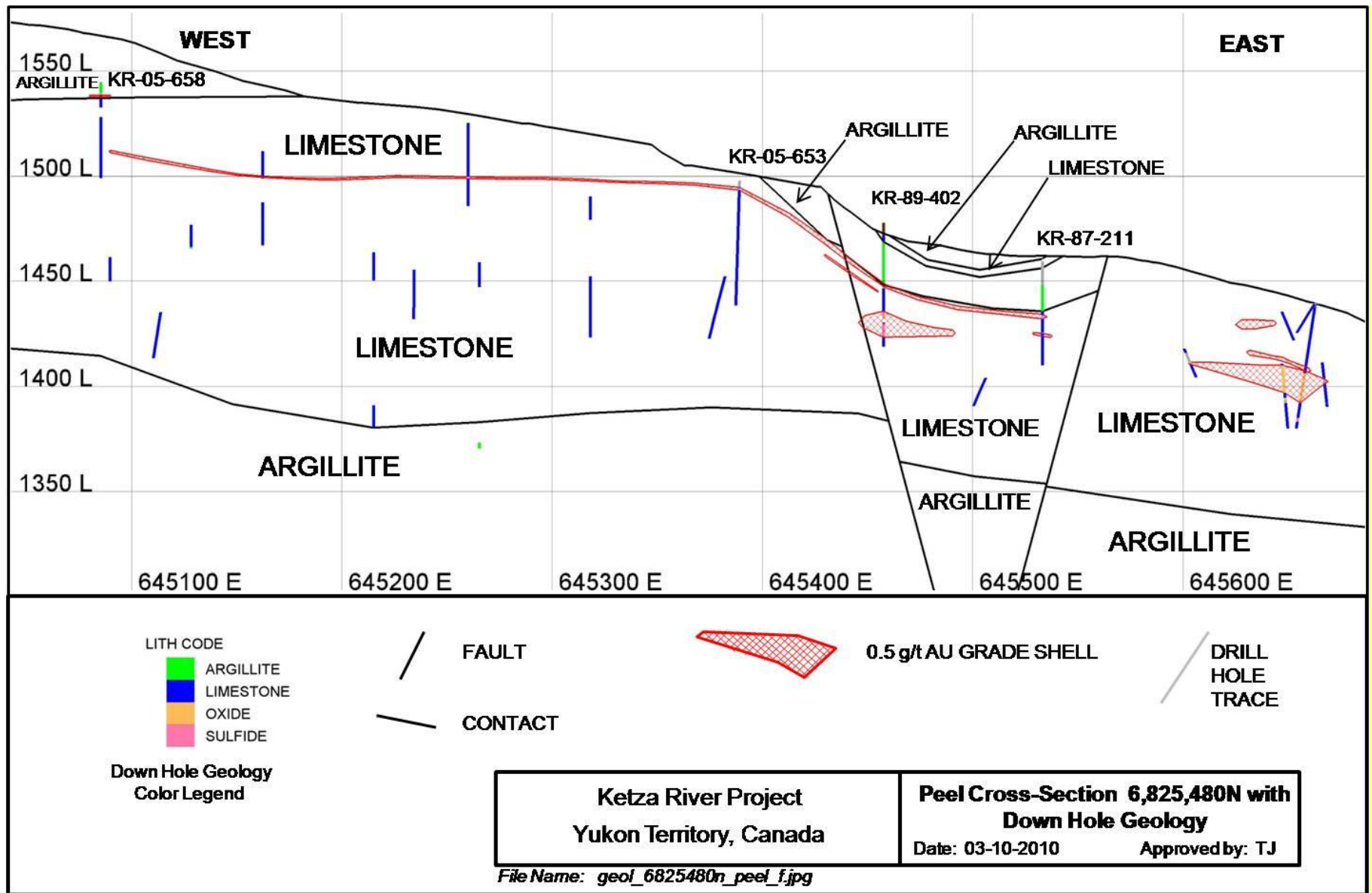


Figure 15-2-4: Cross Section of Gully Grade Shells and Drill Holes

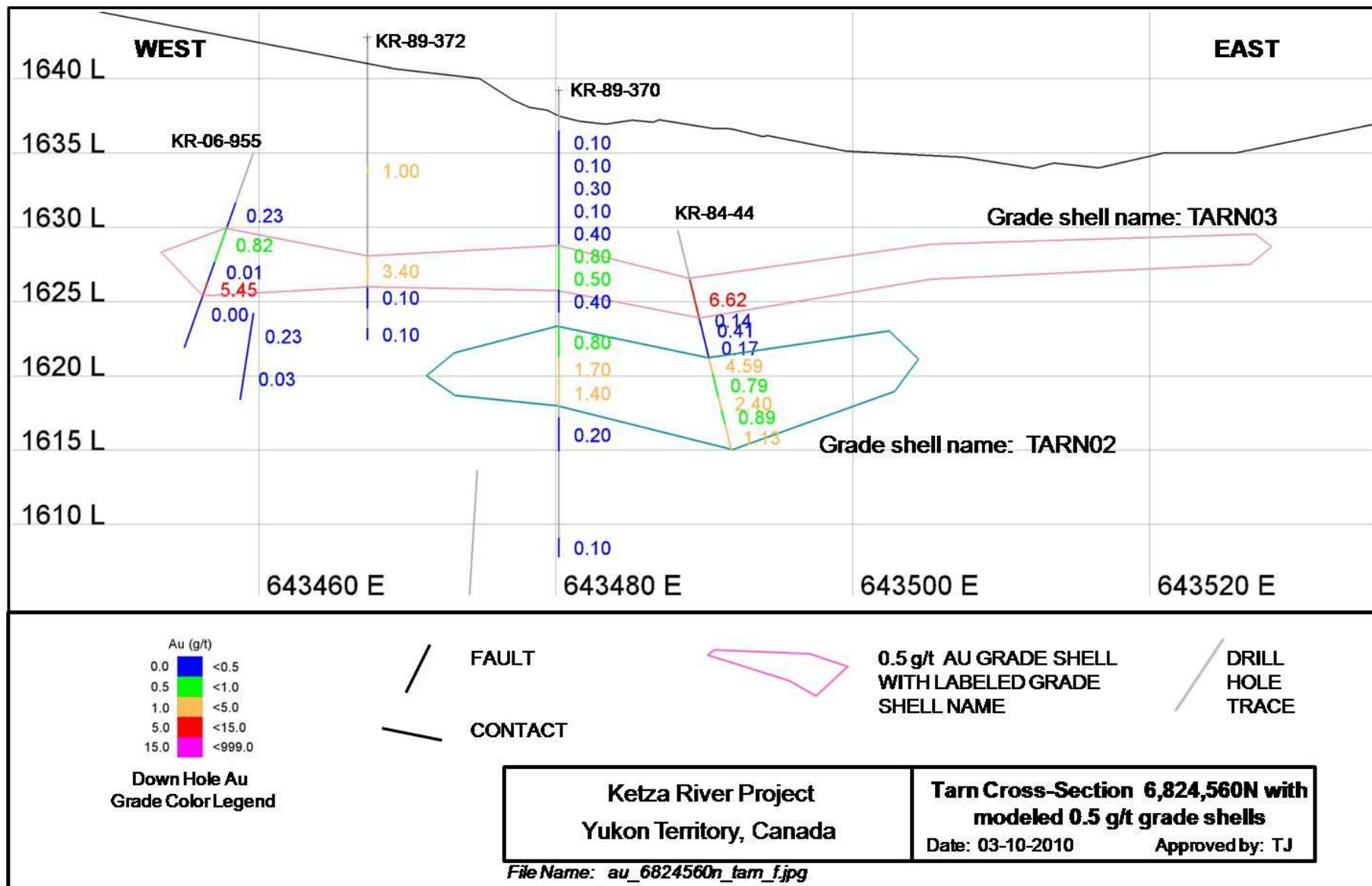
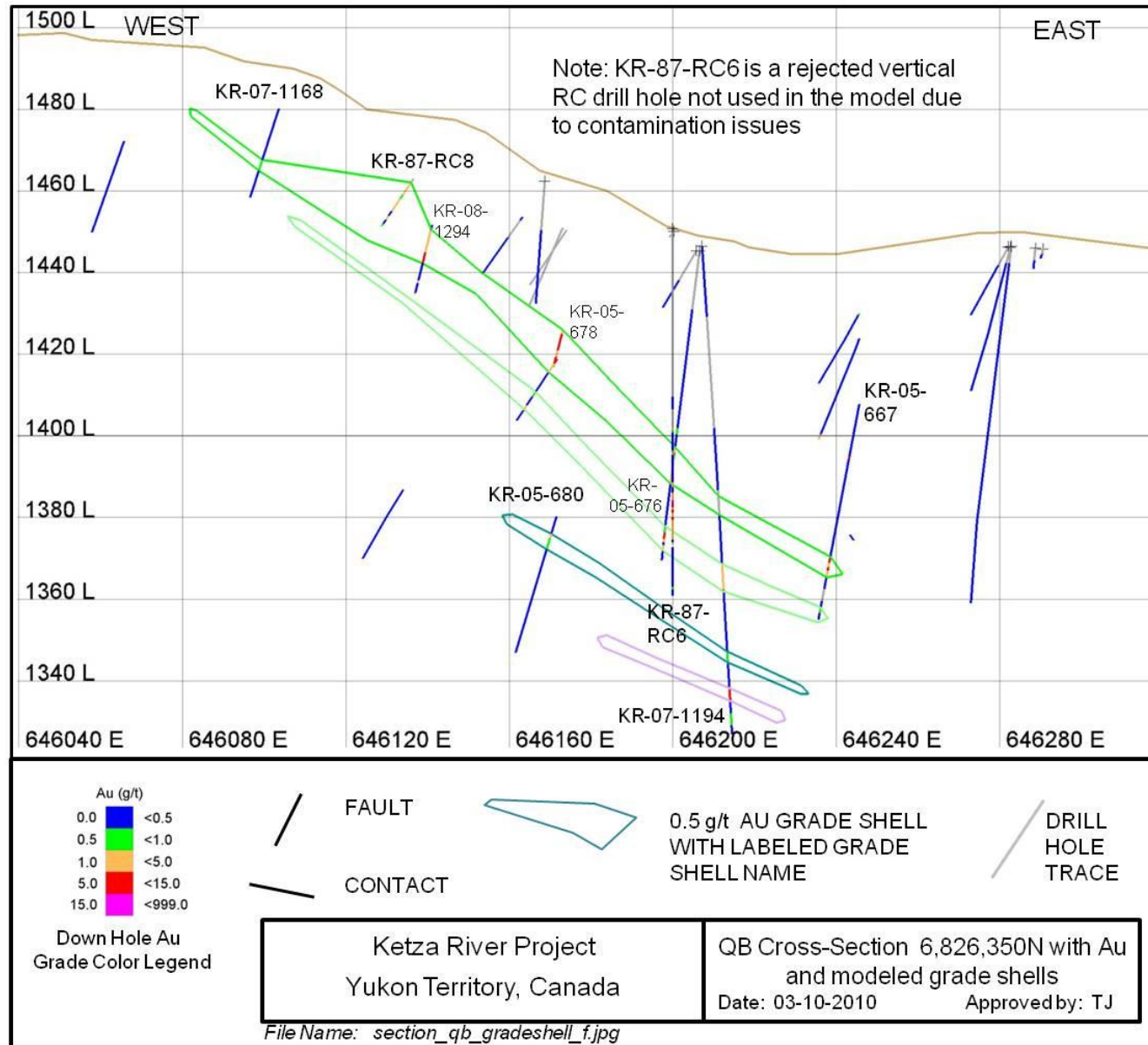


Figure 15-2-5: Cross Section of QB Grade Shells and Drill Holes



15.3 Specific Gravity Determinations and Redox Classification

Rocks with gold mineralization throughout the Ketz River Project area have widely variable specific gravity values that are primarily controlled by the total iron-oxide mineral and/or total sulfide mineral content which is typically related to the overall redox classification. A rock with high amounts of iron-oxide material is generally very light in weight and has a low dry bulk density whereas rock with high amounts of sulfide minerals is generally heavy with relatively high dry bulk density. Specific gravity determinations of mineralized materials are very important to document at any project in order to better quantify the tonnages associated with the mineralized bodies.

15.3.1 REDOX Classification

As a result of the recent drill hole data capture exercise for those drill holes drilled from 1984 to 1997 (see Section 12 Data Verification), a complete set of logged sulfide mineral data (PY, PO, CPY, APY) with quantities and total calculated sulfide minerals, and total oxide mineral content data (locally discriminated by individual oxide mineral type for the years 1984 to 1997 with LIM = limonite, HEM = hematite, and SCORO = scorodite) dominated by Fe-oxide minerals and rare arsenic-oxide minerals were compiled in the final Vulcan .isis database (see Appendix D for the .fcl scripts). These total sulfide mineral and total oxide mineral quantities were generated by adding data from the existing acQuire drill hole database that contained information from drill holes completed after 1997, and later updated with the mineral data captured from the older drill hole data capture exercise that included the years 1984 to 1997. These data did not exist electronically for any of the previous NI 43-101 studies.

Since total sulfide and total oxide minerals were sometimes not numerically quantified in the historic drill hole logging, the generalized characterizations (i.e. weak, strong, intense) logged by the geologist were changed to a number quantity representing the intensity for each sulfide mineral and oxide mineral logged (see Section 12 for details). These sulfide mineral and oxide mineral contents were totaled separately into the TOTSUL and TOTOX fields, respectively, in the Vulcan geology table. From these two fields (TOTSUL and TOTOX) a REDOX classification name was assigned to each sample interval in the geology database table. The REDOX names were classified using a script (ktza14redox_calc.fcl) shown in Appendix D and portrayed visually in Figure 15-3-1. The following REDOX names were assigned in the Geology table within the Vulcan database:

OXIDE = Oxide

TRANOX = Transitional Oxide

UNALT = Unaltered (or Host Rock)

TRANSULF (O, S) = Transitional Sulfide (Oxide or Sulfide)

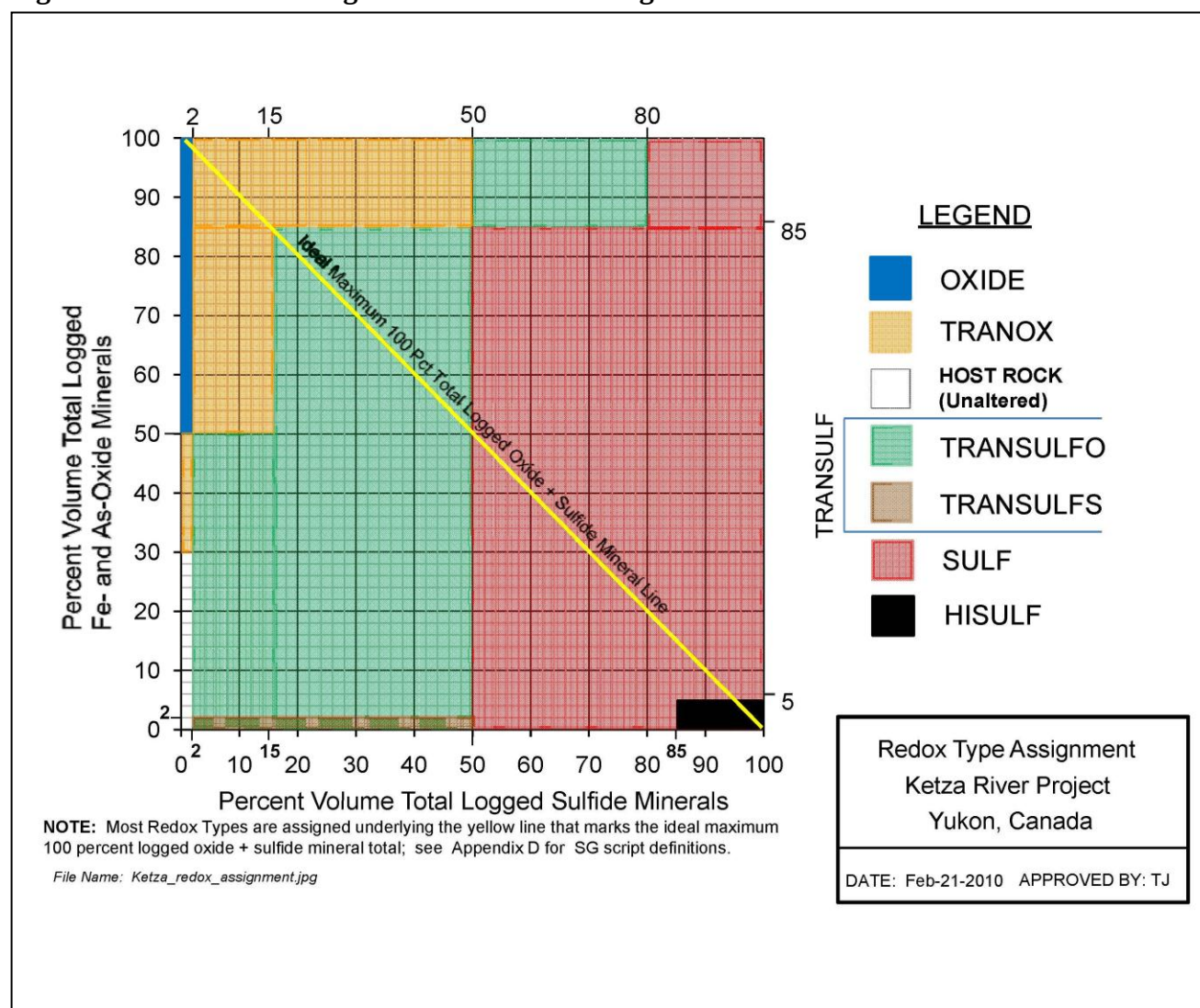
SULF = Sulfide

HISULF = High Sulfide

The Transitional Sulfide (TRANSULF) REDOX classification is broken out into two separate names TRANSULFO and TRANSULFS based on discrete bins for the oxide and sulfide minerals (see Figure 15-3-1). The High Sulfide (HISULF) REDOX type is restricted to mineralized rocks containing greater than or equal to 85 percent total sulfide minerals and less than 5 percent total oxide minerals.

Since generalized intensity descriptions have been used to quantify the amount of sulfide and oxide minerals in the geological drill hole logs, some of the associated quantities derived from the intensity description conversions may locally total to more than 100 percent by volume (represented by the ideal maximum 100 percent total logged oxide + sulfide mineral line on Figure 15-3-1) with a maximum amount not being more than 200 percent. The REDOX assignment figure below includes a bin for these rare special cases.

Figure 15-3-1: Redox Assignment Based on Geologic Data



15.3.2 Previous Specific Gravity Studies Done Before 2007

Early specific gravity determinations of oxide ores in the original Canamax feasibility study were overestimated (SG = 3.1) by Canamax Resources and Pacific Trans-Ocean Resources (1987) and proved to be problematic since they were reportedly determined using crushed and dried material (Strathcona Minerals, 1988). This original specific gravity work did not take into account the high porosity of the in-place oxide ore and the interstitial water present in the constituent minerals (Strathcona Minerals, 1988). A review of the operating Ketza River Mine Project by Strathcona Mineral Services Limited in 1988 found that the oxide ores were better characterized with a specific gravity value of 2.3 based on reconciliation studies between actual tonnes mined and actual tonnes milled that took place during the mining of the Ketza River oxide deposit.

YGC Resources conducted several in-house specific gravity studies on gold ores and limestone rocks from the Flint, Gully, Fred's Vein, and Tarn zones using mostly a paraffin wax method and a cylindrical method (Vincent and Dalsin, 2006a; Vincent, 2006b; and Vincent, 2006c). These 2006 studies resulted in the collection of 127 specific gravity determinations (corrected for wax application where applicable): SG=3.93 for mineralized rocks containing greater than 50 percent total sulfide minerals (LITHCODE=SULF); SG = 3.10 for mineralized rocks containing > 1 g/t Au and containing less than 50 percent total sulfide minerals (LST + MIN mineralization code); SG= 3.77 for combined Au mineralized rocks containing >1g/t Au; and SG = 2.72 for barren limestone (LITHCODE = LST).

15.3.3 2007-2008 Specific Gravity Studies

In late 2007, bulk sample specific gravity samples (drill core pieces greater than 15 cm in length) were collected for 102 samples from across the entire project area and submitted to ALS-Chemex Labs for a gravimetric specific gravity analysis (paraffin wax method: method number OA-GRA08a). The results of this 2007 study is in the December 2007 NI-43-101 report by SRK (2008). Due to the relatively few samples measured and the apparent irrelevance of area on the measurements, samples were analyzed primarily by lithology and ore type. Only a few samples of pure oxide and sulfide material were collected for this program since SG's of these materials were rigorously tested and verified in previous studies. The samples taken in 2007 determined the average SG for unmineralized rock materials for both limestone and siliclastic rocks (argillite, siltstone, and mudstone) to be equal to 2.75.

Geochemical data were additionally collected on the 2007 specific gravity samples using multi-element ICP method (ME-ICP41 by ALS-Chemex). From these 2007 data, Buxton and White (2008) determined a regression model equation that calculated SG for sulfide redox type rocks using weight percent Fe ($SG = 0.031 \text{ Wt.\%Fe} + 2.65$) that generally predicted SG to within 5 percent of the measured ALS-Chemex SG value. This geochemical regression model only works for drill holes listed sequentially after number KR-05-691 and analyzed by ALS-Chemex that were drilled and analyzed in late 2005 and later. These ALS-Chemex drill holes have an upper detection limit for geochemical Fe of 50 Wt. pct which is an adequate upper total Fe quantity limit that covers the majority of the mineralized rock materials at the Ketza Project. However, significant weight percent Fe data gaps were present in the 2007 regression model (mostly in the range from 16 to 46 weight percent Fe) that needed to be targeted in the future in order to confirm and verify the SG-Wt.%Fe regression model. So in late 2008, YNG geologists collected an additional 69 split and whole core samples throughout the property (from 2007 and 2008 drill

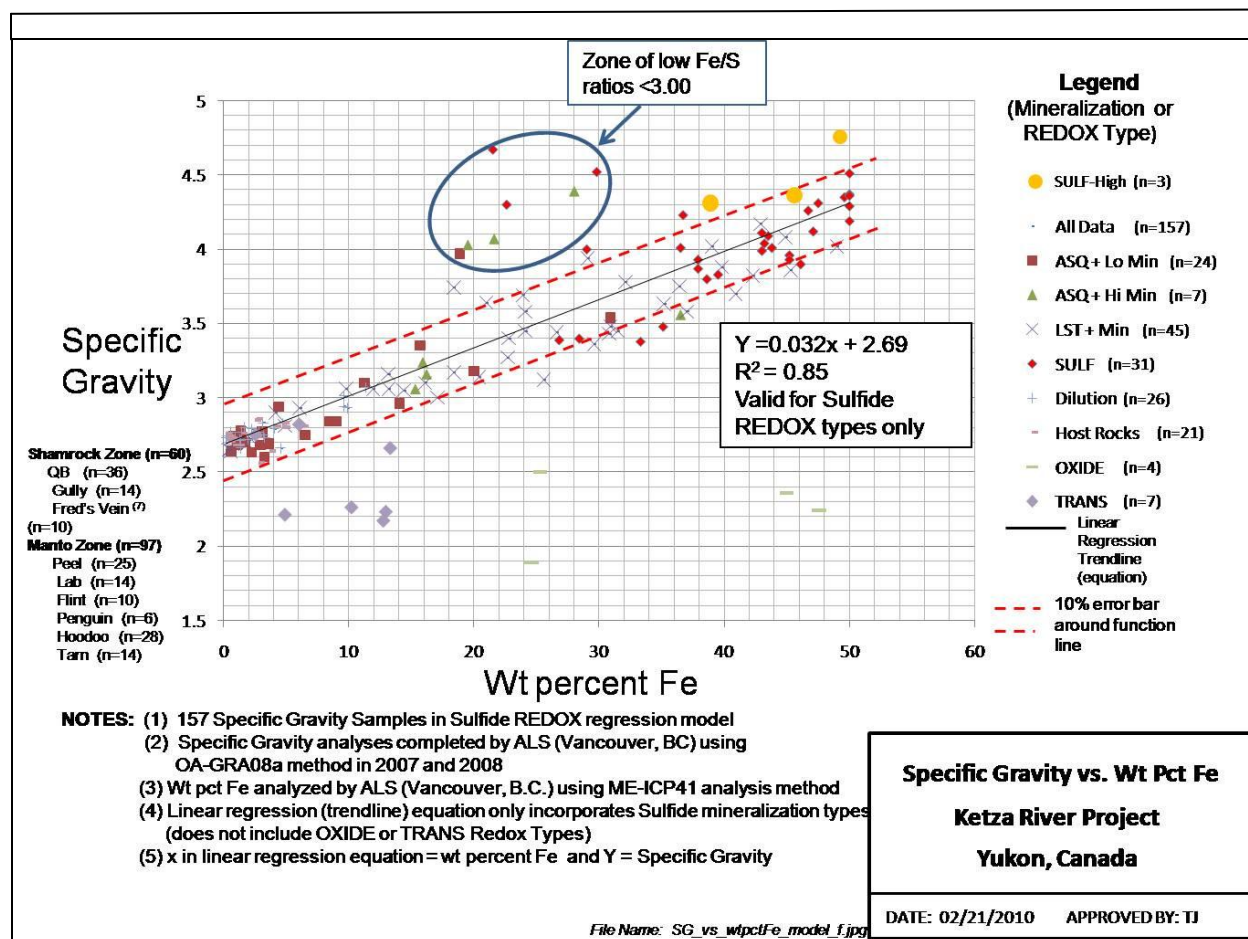
holes) that targeted the 16 to 46 weight pct Fe data range based on the initial SG-ICP results. These 69 samples were also submitted to ALS-Chemex for specific gravity analysis and multi-element ICP analysis using the same analysis methods (gravimetric OA-GRA08a and ME-ICP41) as the 2007 sample set. As a result, the existing YNG Ketzar SG-ICP database now consists of 171 samples that includes all of the different resource areas and different rock types (including waste rock or rock with low gold content but located in or near the modeled 0.5 g/t grade shell), the different mineralization types, and the different REDOX types. The summary of the tabulated SG values by REDOX type and main rock type (RKMOD) are shown in Table 15.3.3.1 and Appendix E and were used to assign SG_GEO in the Geology table database based on the logged geology.

Table 15.3.3.1: Relationship between REDOX classification, the SG assigned using the Geology table (SG_GEO), and averaged analytical SG data

RKMOD Type	Manto (LST) (Mineralization Hosted in Limestone Rock)		Shamrock (ARG) (Mineralization hosted in Siliciclastic Rock)		Gully (Mineralization hosted in Siliciclastic Rock and in Gully Zone area)	
	SG Ave (n)	Pct S Wt Pct Fe	SG Ave (n)	Pct S Wt Pct Fe	SG Ave (n)	Pct S Wt Pct Fe
Redox Type						
OXIDE	2.3* (n=4)	0.2 Pct S 35.6 Wt Pct Fe	2.3* (n=0)	ND Pct S ND Wt Pct Fe	2.3* (n=0)	ND Pct S ND Wt Pct Fe
TRANSOX	2.44 (n=7)	6.2 Pct S 9.0 Wt Pct Fe	2.44 (n=0)	ND Pct S ND Wt Pct Fe	2.44 (n=0)	ND Pct S ND Pct Fe
UNALT	2.75 (n=14)	0.4 Pct S 1.8 Wt Pct Fe	2.75 (n=7)	0.8 Pct S 3.6 Wt Pct Fe	2.75 (n=2)	0.7 Pct S 2.6 Wt Pct Fe
TRANSULF (O or S)	3.4 (n=39)	7.7 Pct S 25.0 Wt Pct Fe	2.9 (n=19)	3.8 Pct S 7.5 Wt Pct Fe	2.8 (n=5)	2.4 Pct S 4.1 Wt Pct Fe
SULF	4.1 (n=22)	8.0 Pct S 38.7 Wt Pct Fe	3.9 (n=2)	6.6 Pct S 33.8 Wt Pct Fe	4.2 (n=4)	7.4 Pct S 47.8 Wt Pct Fe
HISULF	4.3 (n=3)	9.1 Pct S 44.6 Wt Pct Fe	ND ND	ND Pct S ND Wt Pct Fe	4.3 (n=3)	6.8 Pct S 48.1 Wt Pct Fe
NOTES: (1) Pct S and Wt Pct Fe are averages based on ALS analysis (ME-ICP41 method) performed in 2007 or 2008 and based on REDOX Type assignment (2) See text for REDOX Type assignment methodology (3) * indicates average SG for OXIDE determined by Strathcona (1988) from previous mining (4) Abbreviations: SG = specific gravity determined by ALS using paraffin wax method number OA-GRA08a; Pct = percent; Wt = weight; S = sulfur; Fe = iron; TRANSOX = Transitional Oxide; UNALT = Unaltered or not mineralized; TRANSULF = Transitional Sulfide; SULF = Sulfide; HISULF = High Sulfide TRANSULFO = Transitional Sulfide-Oxide; TRANSULFS = Transitional Sulfide-Sulfide Ave = average; ND = no data; n = number of actual ALS analyzed samples used to determine the SG value						

Because the SG samples collected for analysis by ALS-Chemex are smaller than the geologically logged assay interval typically collected from each drill hole which could have drastically different quantities of sulfide and oxide minerals, it was important to quantify the total sulfide mineral content and total Fe-oxide mineral content for each of the individual 2007 and 2008 SG samples in order to help identify the appropriate REDOX type and LITHCODE type (e.g. SULF containing ≥ 50 pct total sulfide minerals, and LST + MIN that contains <50 pct total sulfide minerals). This sulfide and oxide mineral characterization was completed entirely for the 2008 SG sample set and only partially for the 2007 SG data set, the results of which are documented in Figure 15-3-2 using 157 geologically characterized SG samples.

Figure 15-3-2: Specific Gravity vs. Weight Percent Iron



15.3.4 Specific Gravity and REDOX Assignments

The specific gravity values were derived using drill hole data originally stored in both the Geology and Assay tables within the existing Ketza River acQuire database and based on two different methodologies. The modifications of these data were done in the Vulcan database.

The SG_GEO specific gravity value for each drill hole interval was first assigned using the LITHCODE2, RKM0D, and REDOX entries (see Table 15.3.3.1, Figure 15-3-1, and Appendix E) in the Geology table in the Vulcan database. The REDOX assignments were based on total

estimated oxide mineral and sulfide mineral contents as logged by the geologist and discriminated (binned) as shown in Figure 15-3-1 and Table 15.3.3.1 as described earlier in Section 15.3.1. The RKMODO designations (main rock types) were made to discriminate three separate types of mineralized rock (LST, ARG, and GULLY) that were important to help assign unique specific gravity values based on the 2007 and 2008 SG work.

Table 15.3.3.1 summarizes the specific gravity assignments and their relationship with the REDOX types for the three main RKMODO mineralized zones: limestone (Manto), siliciclastic/argillitic (Shamrock), and Gully. Although the Gully zone is very similar to the siliciclastic zone, the 2007 and 2008 SG data indicated slight differences in SG values for sulfide REDOX types. Miscellaneous SG_GEO assignments to the geology table for the 2010 model included: SG = -99 for CASING; -99 for VOID; -99 for NOLOG; and 2.75 for OVB. This method of deriving an SG value based on the logged geology was the only methodology used for historical drill holes completed from 1984 to late 2005.

The second method to derive an SG value used the drill hole assay data in the Vulcan drill hole isis database. The SG_ASY calculation was only valid for sulfide redox rock types (excluding oxide and mixed oxide-sulfide redox types) and only for drill holes greater than KR-05-691 (generally those drill holes analyzed by ALS Chemex after December 31, 2005). The SG_GEO calculation uses an empirically derived equation (regression model equation) that contains weight percent Fe from an ICP analysis conducted by ALS-Chemex Laboratory. Calculated specific gravities are based on a total of 157 of the SG samples containing ICP data collected in 2007 and 2008 that have been plotted on a specific gravity vs. weight percent Fe plot in Figure 15-3-2. This figure shows a regression model equation that approximates $SG_{\text{Sulfide Redox}} = 0.032 \text{ Wt\%Fe} + 2.69$. Also as part of the SG_ASY calculation, all drill hole intervals containing an SG value greater than 0 and < 2.75 were assigned an SG equal to 2.75 as the default value independent of lithology type.

Since both the geology and assay tables within the Vulcan database were used to help approximate SG values, these two tables needed to be merged into one inclusive database which was called ktzasg_final.asy.isis. The SG values in this database are stored in the SG_GEO field in the Geology table. Merging of these two tables was ultimately achieved but was problematic due to: (1) the necessity of flagging the data in both the geology and assay tables exported from acQuire; (2) the from-to meterage intervals in both the geology and assay tables exported from acQuire did not perfectly match one another; and (3) because there were assay gaps (intervals with no from-to meterage entries present in the assay table exported from acQuire).

The specific gravity of the individual blocks were assigned using nearest neighbor estimations (see Section 15.7 on Estimation and Block Calculation Scripts). Block and mineralized envelope volumes were converted to tonnage using the final SG values derived from the combination of the specific gravity values calculated in the assay and geology tables in the Vulcan database.

15.4 Drill Hole Flagging and Compositing

Using the digitized grade shell polygons, the assay intervals within the polygons were flagged with the grade shells name which was written to the FLAG field within the drill hole database. These flags were stored in fields in both the assay and geology tables. The flag entry name is the same as the grade shell name (i.e. PEEL01, PENGUIN12, TARN07, SHAMROCK06, etc.). The flag name for the assay intervals outside of the grade shell polygons was a default on "NONE." The assay flag name has been added to the acquire database as of early September 2010.

Drill hole assay data was composited on downhole lengths of 1.5m using the flag to start and stop the compositing run. This method of compositing ensures that no dilution occurs and that the mineralized assay population is not mixed with the unmineralized assays outside of the grade shell polygons. Missing or unsampled intervals were assigned a value of -99 which are not used for estimation or statistics. The two main fields in the composite database used for estimation are `au_ppm` and `SG_GEO`. The final composite Vulcan database for the gold assays is named `ktzafeb2010.cmp.isis`.

The specific gravity data which was stored in both the assay and geology tables in the Vulcan drill hole database as described in section 15.3 was also composited. The `SG_GEO` field in the geology table was composited on 1.5m downhole lengths and also began and ended at the flag name change. The final composited specific gravity Vulcan database is named `ktzasg_feb2010.csg.isis`.

15.5 Statistics and Variogram Analysis

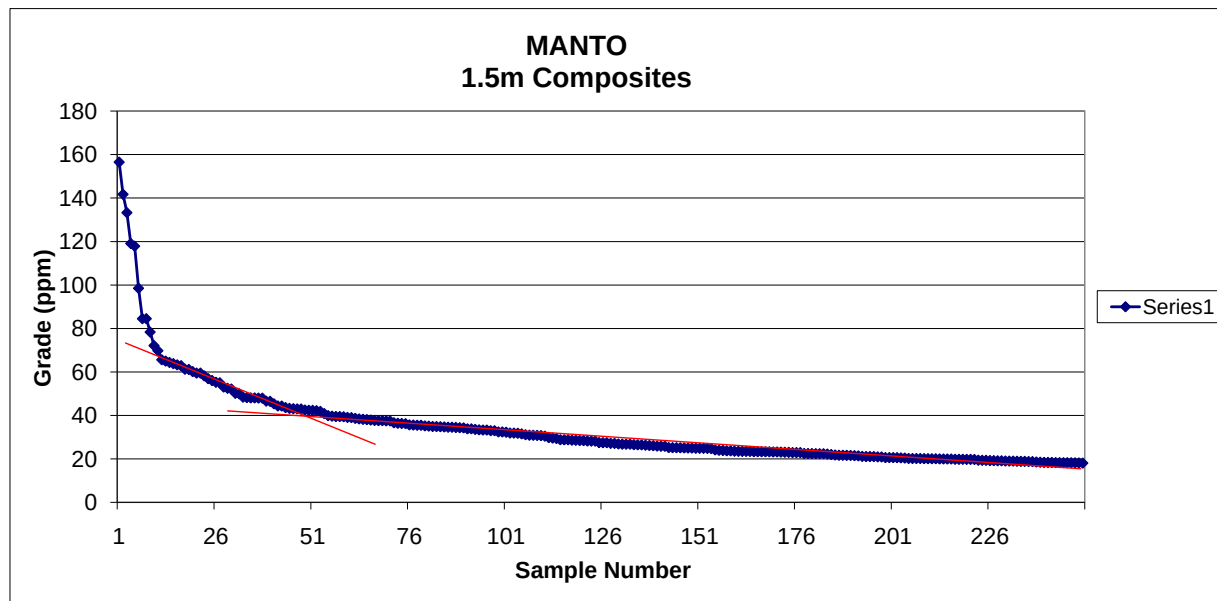
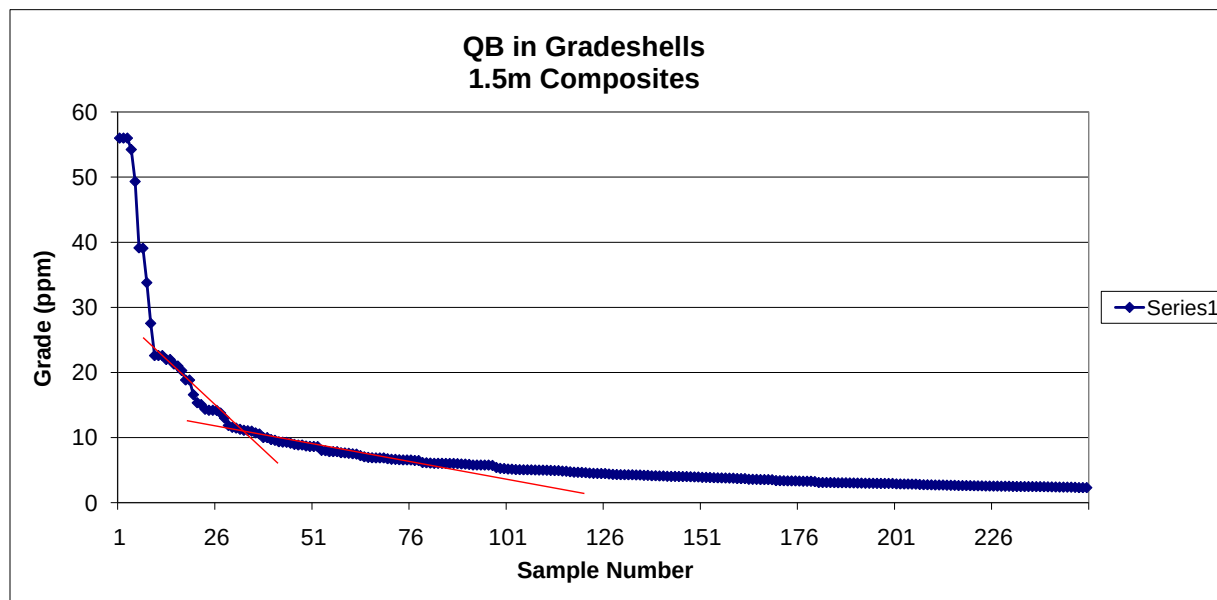
Univariate statistics were calculated for each zone in Ketz using the 1.5m composites within the digitized grade shells. The grade histogram and cumulative frequency plots are shown in Appendix F and summarized in Table 15.5.1. Using the same 1.5m composite data, cap grade plots were calculated in Excel. One cap grade plot was created from the manto grade shells from all of the zones and another of the QB grade shells (Figures 15-5-1 and 15-5-2). Even though the QB indicated a lower value, a grade of 50 g/t was chosen in restricting the estimation of the block models for all zones.

Table 15.5.1: Summary Statistics for 1.5m Gold Composites by Area or Model

Area or Model	Count	Min	Max	Mean	Std Dev	Coeff of Var
	#Comps					
Gully	354	0.001	37.60	3.42	5.00	1.46
Knoll	105	0.069	124.95	8.65	16.44	1.90
Peel	2,170	0.001	156.50	7.29	11.68	1.60
Penguin	1,114	0.001	84.50	3.82	7.18	1.88
QB	6,241	0.001	18.55	0.166	0.66	3.99
Shamrock	1,025	0.010	56.00	2.49	5.15	2.06
Tarn	276	0.042	25.91	3.97	4.80	1.21
All Zones	11,314	0.001	156.50	2.38	6.76	2.84

Notes:

- (1) Penguin area includes Lab-Hoodoo and Penguin + Flint areas (Penguin North + Penguin South Block models);
- (2) Shamrock area excludes QB, Gully, and Knoll areas; and
- (3) QB includes the high-grade and low-grade domains;

Figure 15-5-1: Grade Restriction for Manto**Figure 15-5-2: Grade Restriction for QB**

Variograms were generated in the SAGE2001 software from the 1.5m composites for each zone at Ketza. The variography was for the most part inconclusive due to the drill hole spacing irregularity, the differences in grade shell orientation, and the discontinuous nature of the mineralization. Cleaner variograms were generated for Gully, Peel, Tarn, and the QB zones (Figures 15-5-3 to 15-5-6) which showed a sill range of about 20 meters.

Figure 15-5-3: Gully Variogram

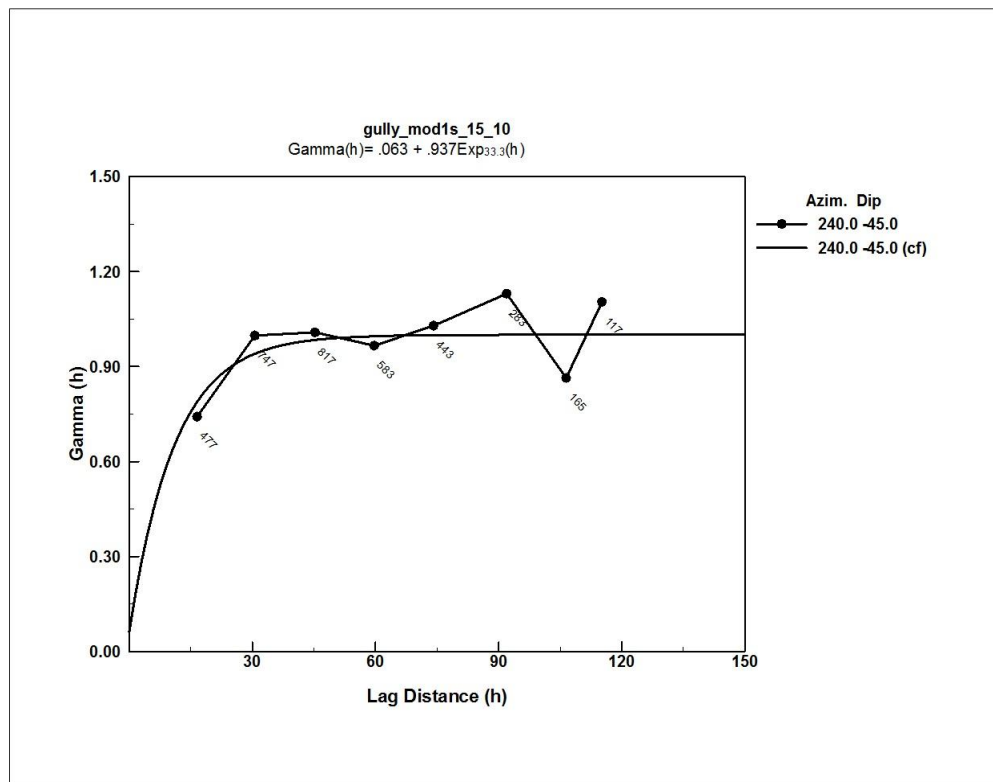


Figure 15-5-4: Peel Variogram

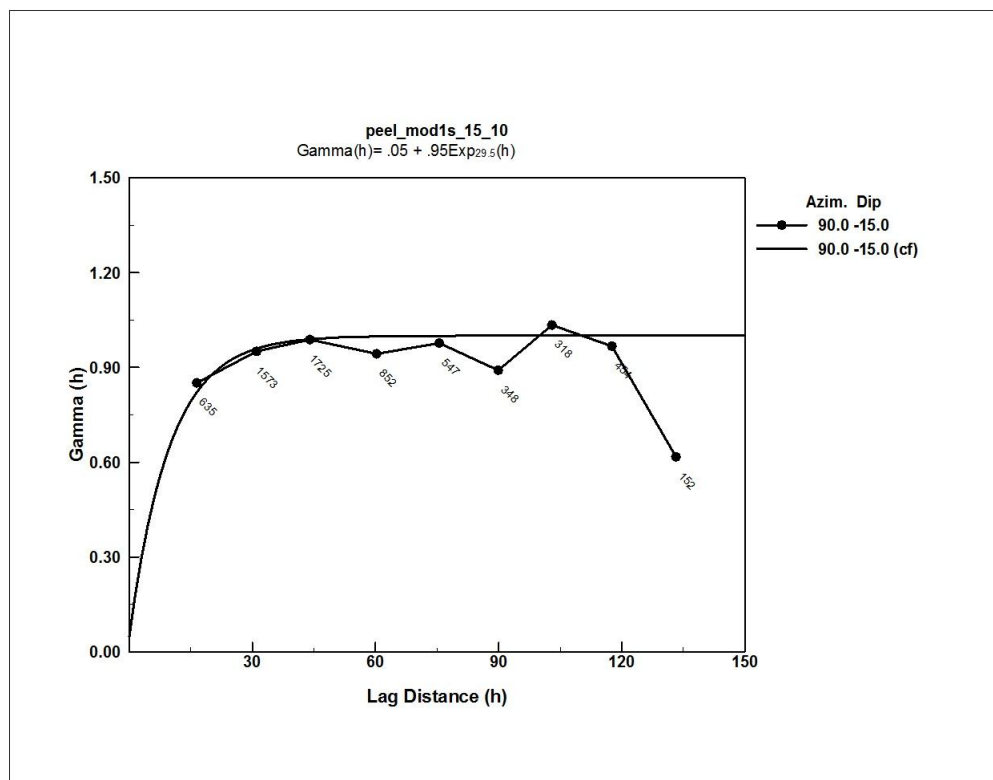


Figure 15-5-5: Tarn Variogram

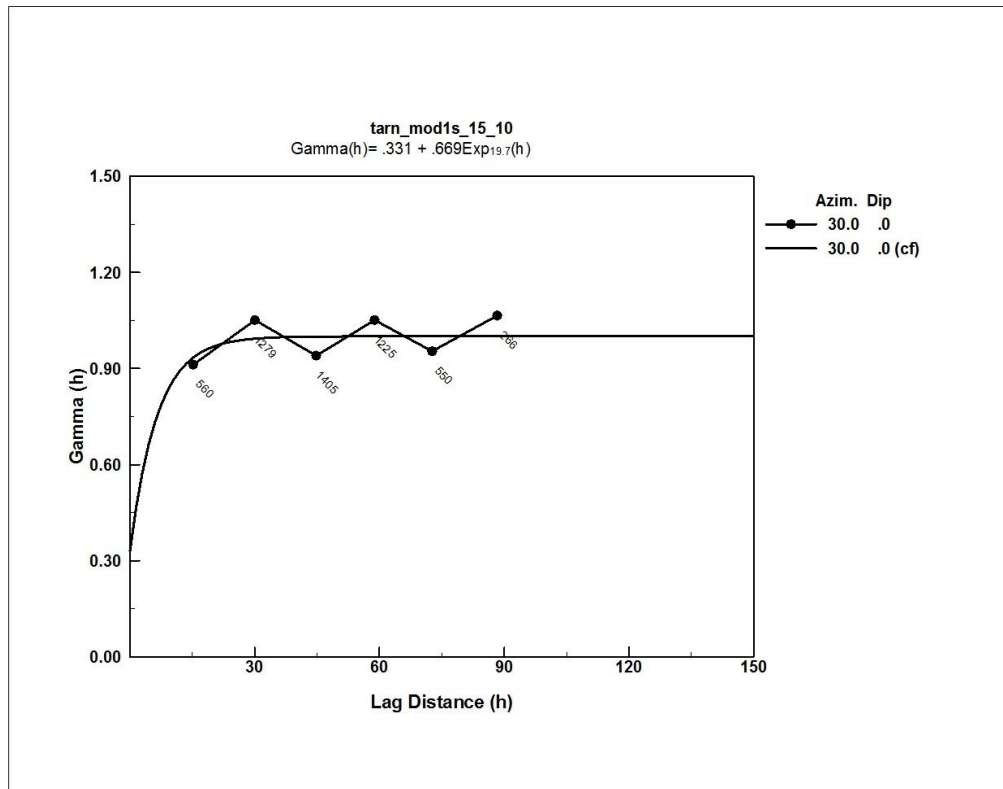
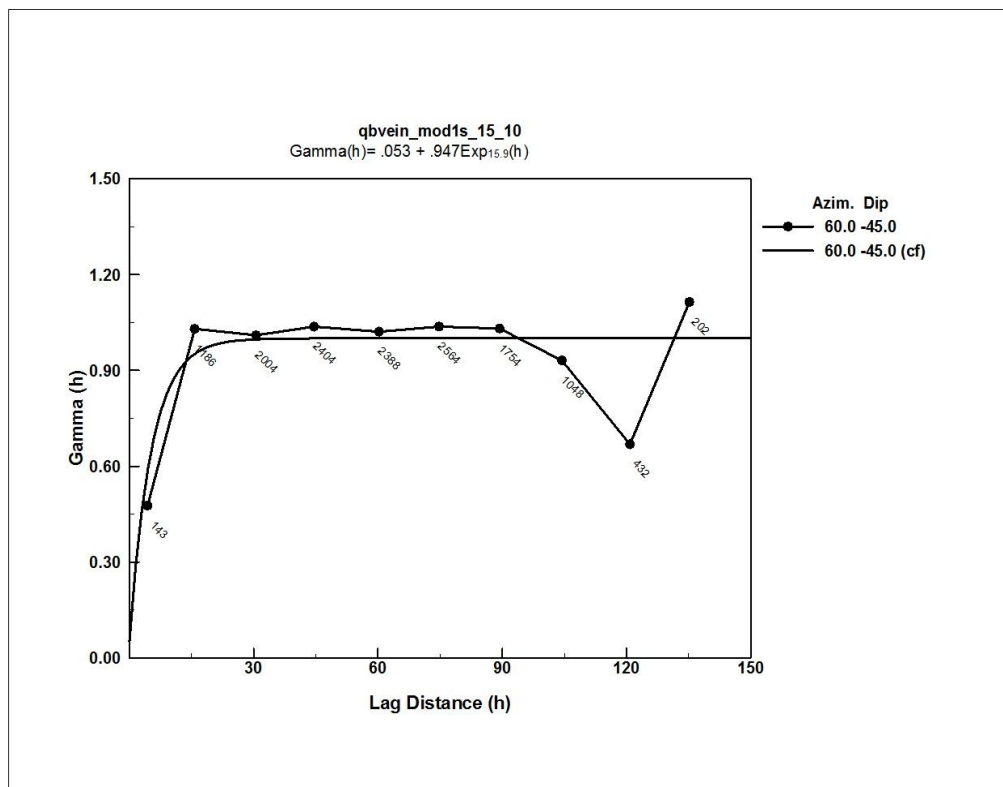
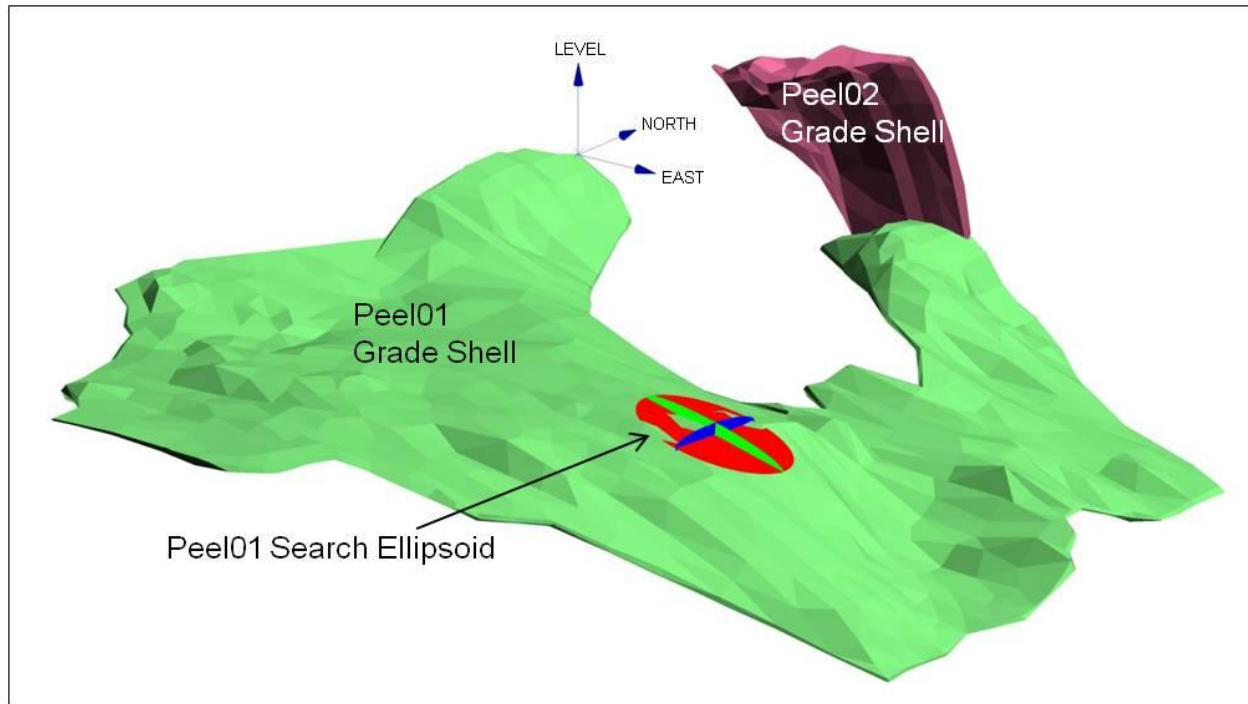


Figure 15-5-6: QB (Vein) Variogram



The grade estimation method used to determine block grades was inverse distance cubed for this 43-101 report; therefore, the nugget and sill ranges were not needed as required for kriging. Instead, the general orientation of each grade shell was used to orient the estimation ellipse and the axis radii was based on the general sill range of the variogram which was basically 20 meters. An example of the estimation search ellipse orientation in relation to the Peel01 grade shell to be estimated is shown in Figure 15-5-7.

Figure 15-5-7: Peel01 Grade shell Search Ellipse Orientation



15.6 Block Models

Seven individual block models were created for the Ketzar Project as previously shown in Figure 15-2-1. The block model names are ktzagully_feb2010.bmf, ktzaknoll_feb2010.bmf, ktzapeel_feb2010.bmf, ktzapenguinnorth_feb2010.bmf, ktzapenguinsouth_feb2010.bmf, ktzaqb_feb2010.bmf, and ktzatarn_feb2010.bmf. Details of the seven block models are given in Appendix G. Each block model has variable sized blocks which is possible using Vulcan and which enables the grade shells to be defined adequately with variable block sizes eliminating the need for storing percentages. The block size defining the grade shell and geology boundaries is 1x1x1 meter. The blocks within the grade shells are a maximum of 2x2x2 meters with the blocks increasing in size from 1x1x1 at the grade shell boundary to the maximum of 2x2x2 meters in one meter increments. The waste blocks or the geology blocks outside of the grade shells increase to a maximum size of 10x10x10 meters.

Triangulations are used to create the block models. Geology solids were used and the names stored in the ROCK field. Grade shell solid names were stored in the SHELL field and depletion used the underground or open pit solids and stored the name in the field MINED. Topography surface triangulations were used to define air blocks by first translating the topo up 20 meters. The blocks between the two surfaces were named XWASTE in the ROCK field whereas the blocks above the translated surface were called AIR. These AIR blocks were subsequently deleted from the block model.

The block model variables are listed in Table 15.6.1.

Table 15.6.1: Block Model Variables

Variable	Default	Type	Description
shell	none	name	grade shell
zone	none	name	area name
rock	none	name	rock formation
mined	none	name	ug or open pit depletion
au_id3	-99.0	float	inverse distance cubed
au_nn	-99.0	float	nearest neighbor
ag_id3	-99.0	float	inverse distance cubed
redox	none	name	oxide sulfide transition
sg	-99.0	float	specific gravity
nsamp	-99.0	float	number of samples
nhole	-99.0	float	number of holes
avgdist	-99.0	float	average distance
neardist	-99.0	float	nearest distance
class	-99.0	float	1=meas 2=ind 3=inf
flag_au	-99.0	float	estimation flag for ag
volume		predefined	
xlength		predefined	
ylength		predefined	
zlength		predefined	
xcentre		predefined	
ycentre		predefined	
zcentre		predefined	
xworld		predefined	
yworld		predefined	
zworld		predefined	

15.7 Grade Estimation and Block Calculation Scripts

Gold and silver grades for all seven block models at Ketz were estimated using inverse distance cubed. Only blocks inside the digitized and triangulated 0.5 g/t cutoff grade shells were estimated with gold and silver grades using only the composites inside the grade shells that were flagged accordingly. This method ensured that grade was not allowed to be arbitrarily projected beyond geologic contacts or beyond reason. Silver was estimated using the same parameters as Au; however, there are far fewer Ag results in the database than Au (Ag was not always analyzed or reported on the drill logs in the 1984 to 1997 drill holes). As a result, silver is not reported in the final mineral inventory resource tables. Figures 15-7-1 and 15-7-2 show the block gold grade distribution for Peel and North Penguin, respectively.

Figure 15-7-1: Peel Plan Map Showing Block Gold Grade Distribution

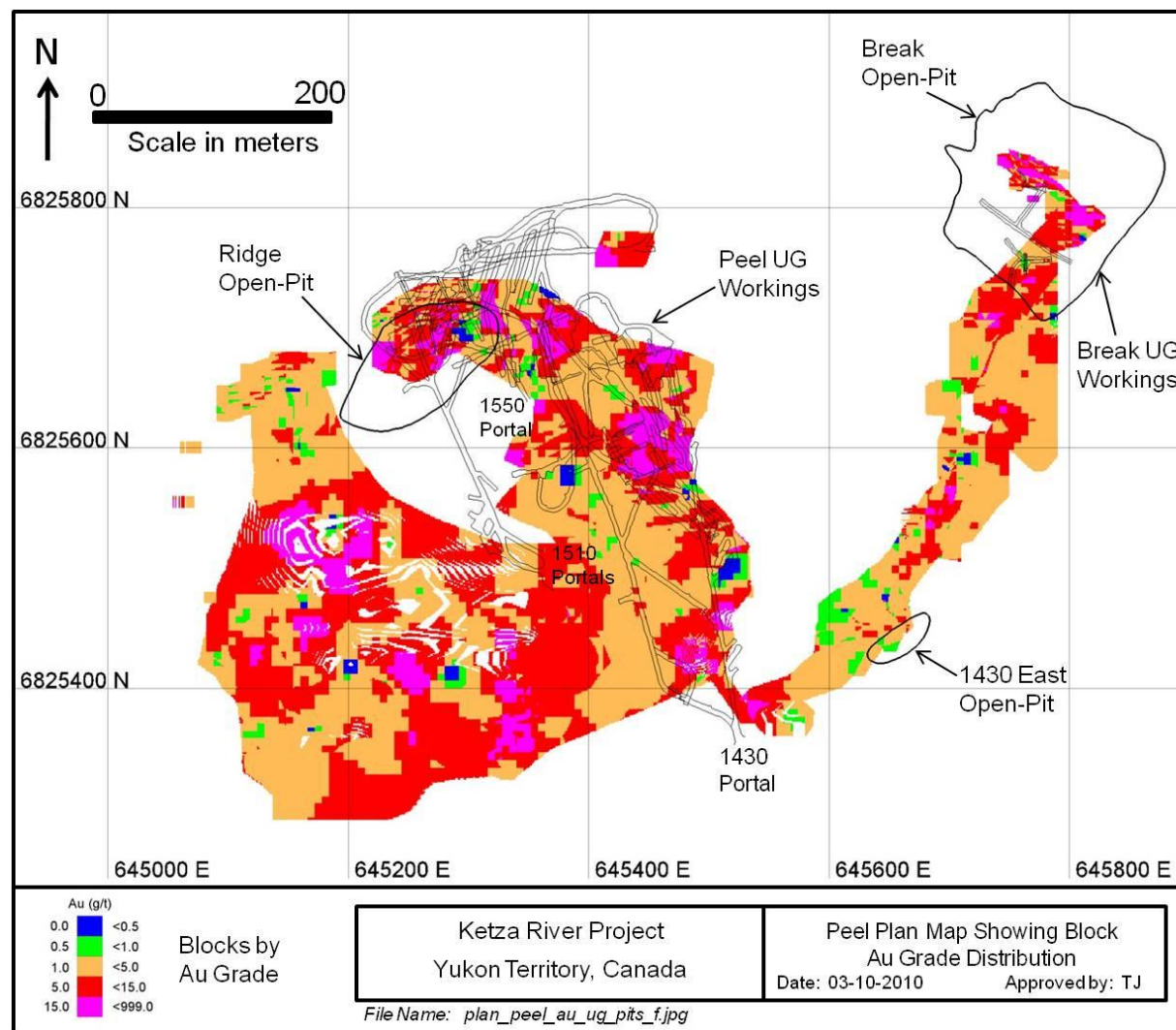
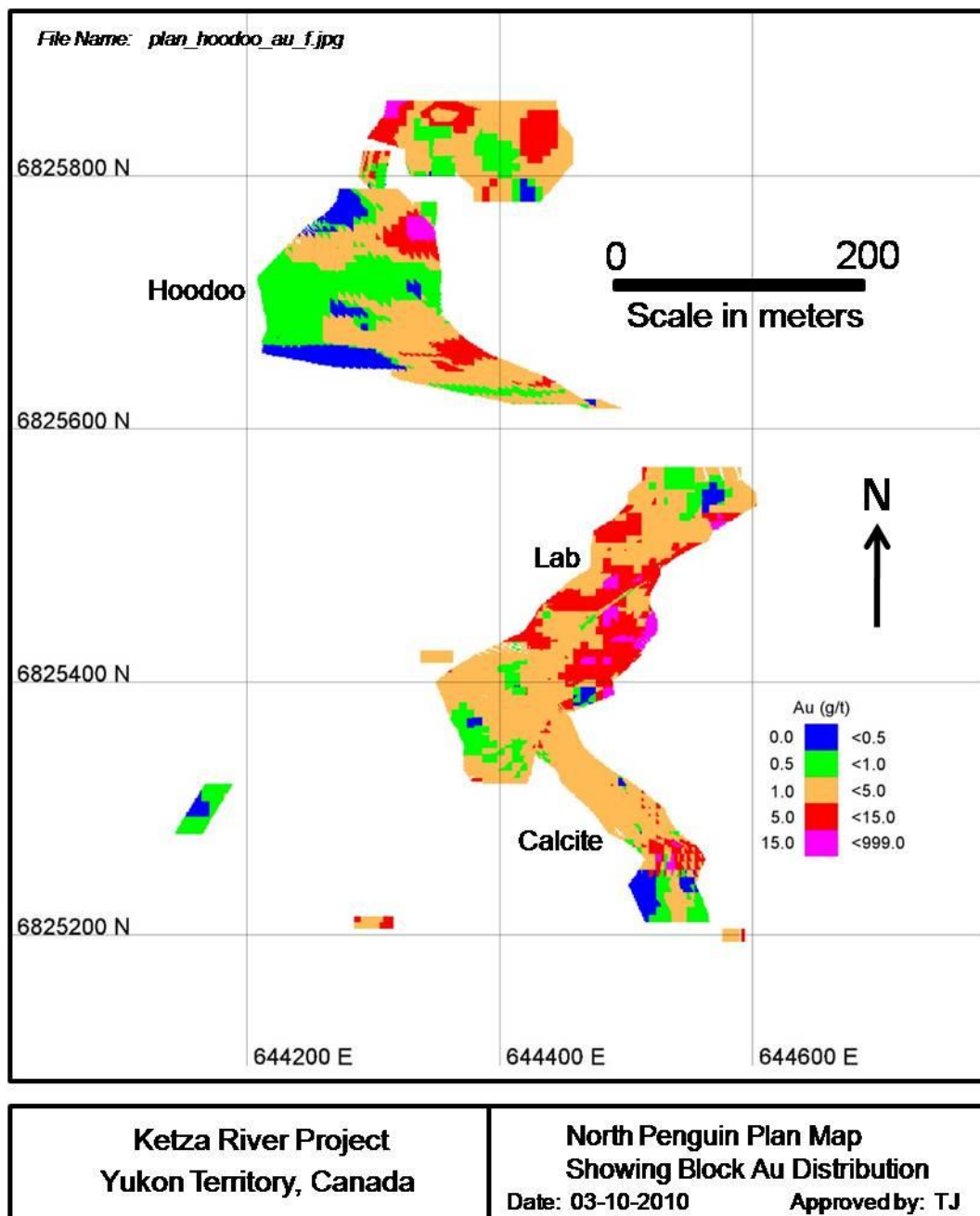


Figure 15-7-2: North Penguin Plan Map Showing Block Gold Grade Distribution



Only in the QB zone were low grade blocks outside of the 0.5 g/t grade shells estimated. In this case, the estimate was restricted such that composites greater than 0.25 g/t could only be projected a distance of 4x4x2 meters in the orientation of the adjacent high grade shell whereas all other lower grades would estimate at the normal 20x20x8 meter distance. The resource from the QB low estimation were not added to the resource tables presented in Sections 15.11 or 15.12. This is due to the very low confidence in this scattered and variable mineralization. The resource for the low-grade QB area is compiled in the digital project files.

Two passes were used to estimate the blocks for both gold and silver. The first pass used a search ellipse of 20x20x5 or 20x20x10 meters depending on the thickness of the grade shell. The ellipse was oriented in the general plunge and dip of the grade shell. The orientations for each shell are in Appendix H. A minimum of three samples and a maximum of 8 samples was used to estimate the blocks in the first pass with a maximum of two samples per drill hole.

The second estimation pass estimates only the blocks not estimated in the first pass. The second pass uses an ellipse range of 100x100x25 meters with a minimum of one sample and a maximum of eight samples with a maximum of three samples per drill hole.

The second pass estimated all of the blocks in all of the grade shells except in three shells; penguin01 in the penguin_north block model, penguin27 in the penguin_south block model, and shamrock01 in the gully block model. Blocks were not estimated in these shells because the edge of the shell was further than 100 meters from the nearest sample.

A nearest neighbor estimation of gold and silver was also calculated to compare with the inverse distance cubed estimation to determine the quality of the local estimate. The result was favorable in the areas where the grades were visually compared.

A nearest neighbor estimate was also calculated for the specific gravity for all blocks both inside and outside of the grade shells. The purpose of the nearest neighbor estimation method was to assign the specific gravity to the block from the nearest drill hole sample rather than creating a new SG value which may have given the block a different redox value.

During the inverse distance cubed estimation of gold, the values for the number of samples, number of holes, average distance to the samples used, and the pass number were calculated and stored. The distance to the nearest sample was calculated during the nearest neighbor estimate of gold. These values are used to calculate the classification of the block as discussed in Section 15.8.

Due to the average drill hole spacing and the variable block size within the grade shells, an estimation parent block was used for gold and silver estimations. The size of the parent block was 6x6x4 meters. Therefore a single estimation was calculated at the center of the 6x6x4 block and the resulting grade assigned to all of the variable sized blocks that exist within the 6x6x4 meter space. The nearest neighbor estimate of specific gravity did not use a parent block and allowed an estimate of each individual block.

The estimate of the blocks within the grade shells for gold and silver used only the samples within the grade shells. This was accomplished by flagging and naming the samples with the grade shell name from the grade shell's digitized polygons.

Extremely high-grade samples were restricted by distance during the estimations of gold and silver. Gold values greater than 50 g/t were only allowed to be used for blocks that were within 3x3x2 meters of them. Therefore the actual high grade value is used but only at a restricted distance. This is arguably a better approach at dealing with outliers than strict capping. Silver was restricted to 3x3x2 meters at 40 g/t.

After the block estimations are calculated, scripts were run to populate additional fields and unestimated blocks where necessary. The first calculation assigned the default value 2.75 to the specific gravity field for all unestimated blocks. This ensured that all blocks have a SG value so that tonnes can be calculated for all blocks.

The next script assigned a zone name (tarn, peel, etc.) to all of the blocks for each block model. This is used when calculating reserves in order to more easily group the blocks.

When creating the block models, blocks were named "pit" in the mined field if the block was within an open pit solid or "unmined" if not. A script was run on the peel block model which assigned the value "ug" to the blocks whose centroid was within the underground triangulations. The triangulations must be chosen while running the script.

From the specific gravity values and the rock type, the redox name is calculated. The script is called ktza03redox_april2010.bcf and assigns the names "unalt", "ox", "transulf", "sulf", and "hisulf" to the appropriate block. Material originally classified as TRANOX in the Geology table has been classified as oxide material for this block calculation.

Figures 15-7-3 to 15-7-5 show the redox blocks for the Gully, Peel and North Penguin block models, respectively. Figure 15-7-4 shows the Peel block REDOX distribution and confirms that previous underground mining focused on oxide (blue colored blocks) and unaltered (gray colored blocks) ore materials. Figure 15-7-4 also shows that there are irregular "holes" or gaps (white colored) within the REDOX distribution plan map. These irregular white patches show the resolution of the block model where the grade shell thickness is less than the lowest block size of 1x1x1m. In otherwords, the manto and mineralized zones are less than 1m thick where the white-colored "gaps" are present.

Figure 15-7-3 confirms that oxide and unaltered ore materials were primarily open-pit mined in the Gully Zone by Canamax, and that mining stopped when sulfide ore materials (red and orange-colored blocks) were encountered.

The last script assigns the classification, Measured, Indicated, or Inferred to the block as described in Section 15.8.

Figure 15-7-3: Gully Cross Section showing Block Redox Classifications

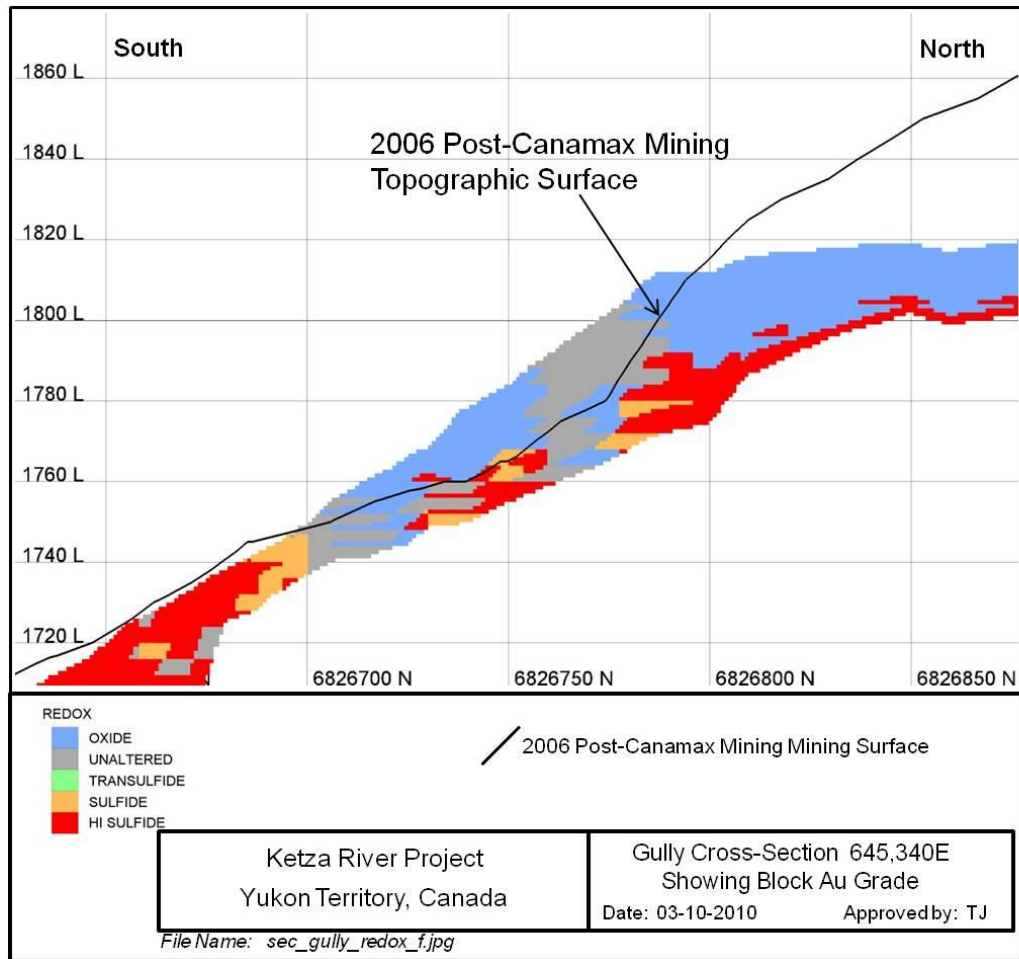


Figure 15-7-4: Peel Plan map Showing Block Redox Classifications

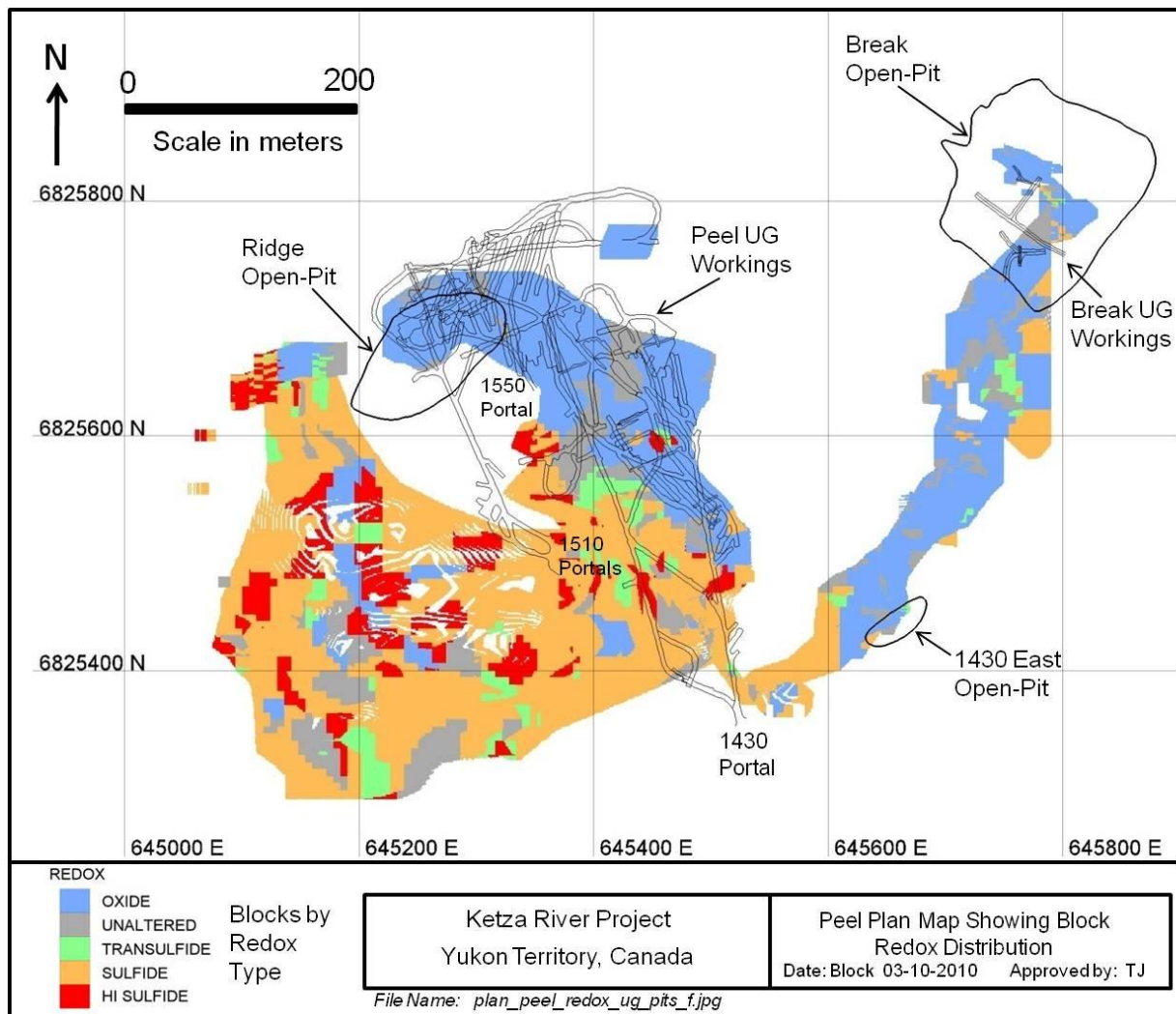
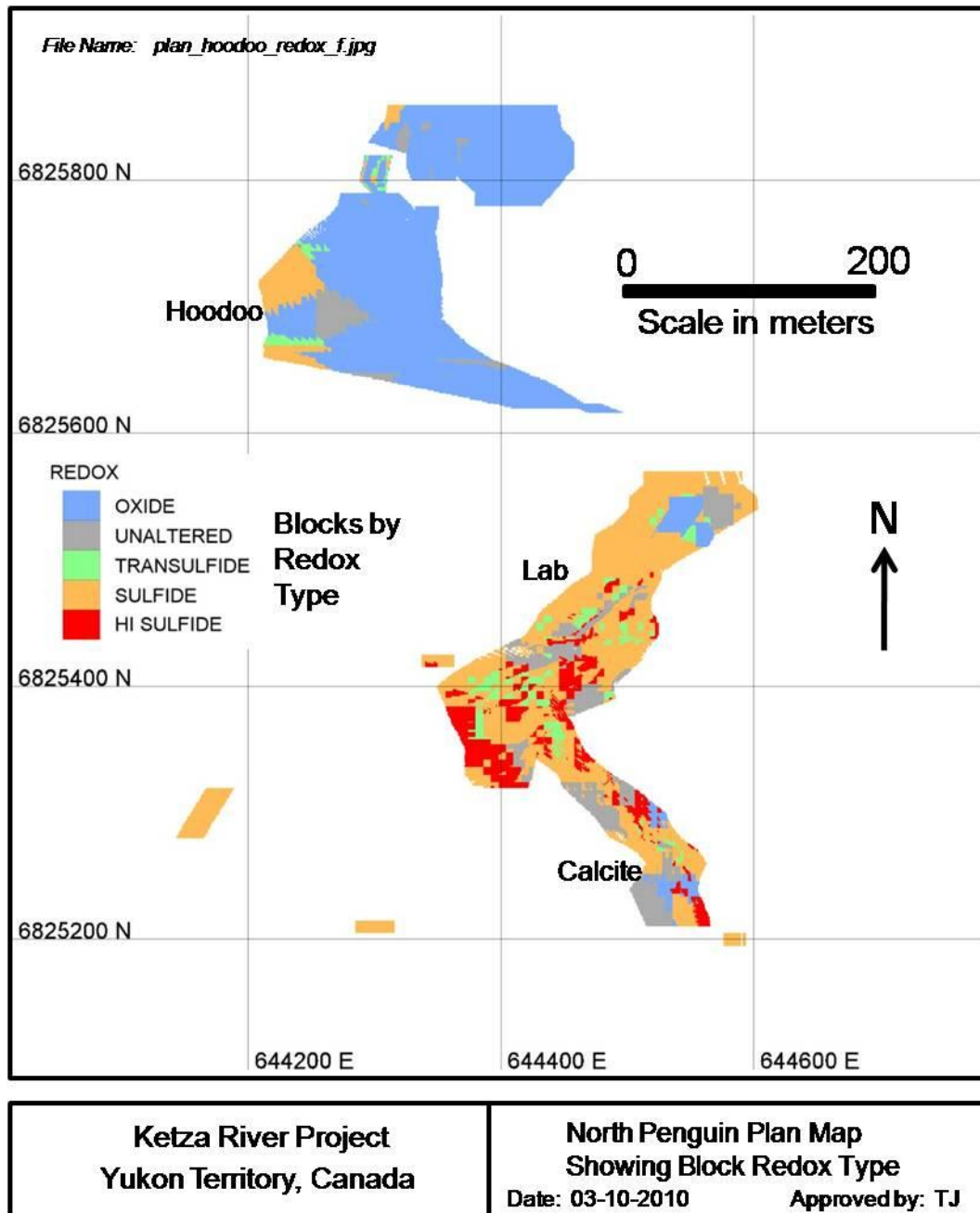


Figure 15-7-5: North Penguin Plan Map Showing Block Redox Classifications



15.8 Mineral Resource Classification

All blocks which have an estimated gold grade are subsequently classified based on the confidence in that estimated gold grade. The highest confidence is called "Measured" (value 1), the next is "Indicated" (value 2), and the lowest confidence is "Inferred" (value 3). A value of 4 is assigned to all unestimated blocks that may occur both inside and mostly outside of the 0.5 g/t Au gradeshell triangulations. The Ketza mineral resource was classified into Measured, Indicated and Inferred categories using logic consistent with the CIM (2000) definitions referred to in Canadian National Instrument 43-101 and described in Section 20.

Inferred tonnes and grade have been reported in the resource tables in Section 15.12 and as a result cannot be reported as reserves. The inferred classification of potential ore material in the current resource estimate was included in order to maximize the footprint of the Lerchs-Grossman pit shells for permitting purposes.

The criterion for the reported classes is the number of samples used in the estimate, the distance to these samples, and whether the block was estimated during the first or second estimation pass. Figure 15-8-1 shows the classification script run on the block models at Ketza.

Figures 15-8-2 and 15-8-3 show the blocks color coded by classification for the Peel and North Penguin block models.

Figure 15-8-1: Classification script run on the Ketza River Block Models

```
class = 4

if ( flag_au eq 1 and avgdist gt 0.0 and avgdist le 10.0 and nsamp gt
7.5 ) then
    class = 1
endif

if ( flag_au eq 1 and class gt 1.5 ) then
    class = 2
endif

if ( flag_au eq 2 and avgdist gt 0.0 and avgdist le 25.0 and nsamp gt
2.5 ) then
    class = 2
endif

if ( flag_au eq 2 and class gt 2.5 ) then
    class = 3
endif

if ( zone eqs "qb" ) then
    class = 3
endif
```

Figure 15-8-2: Peel Plan Map Showing Block Resource Classifications

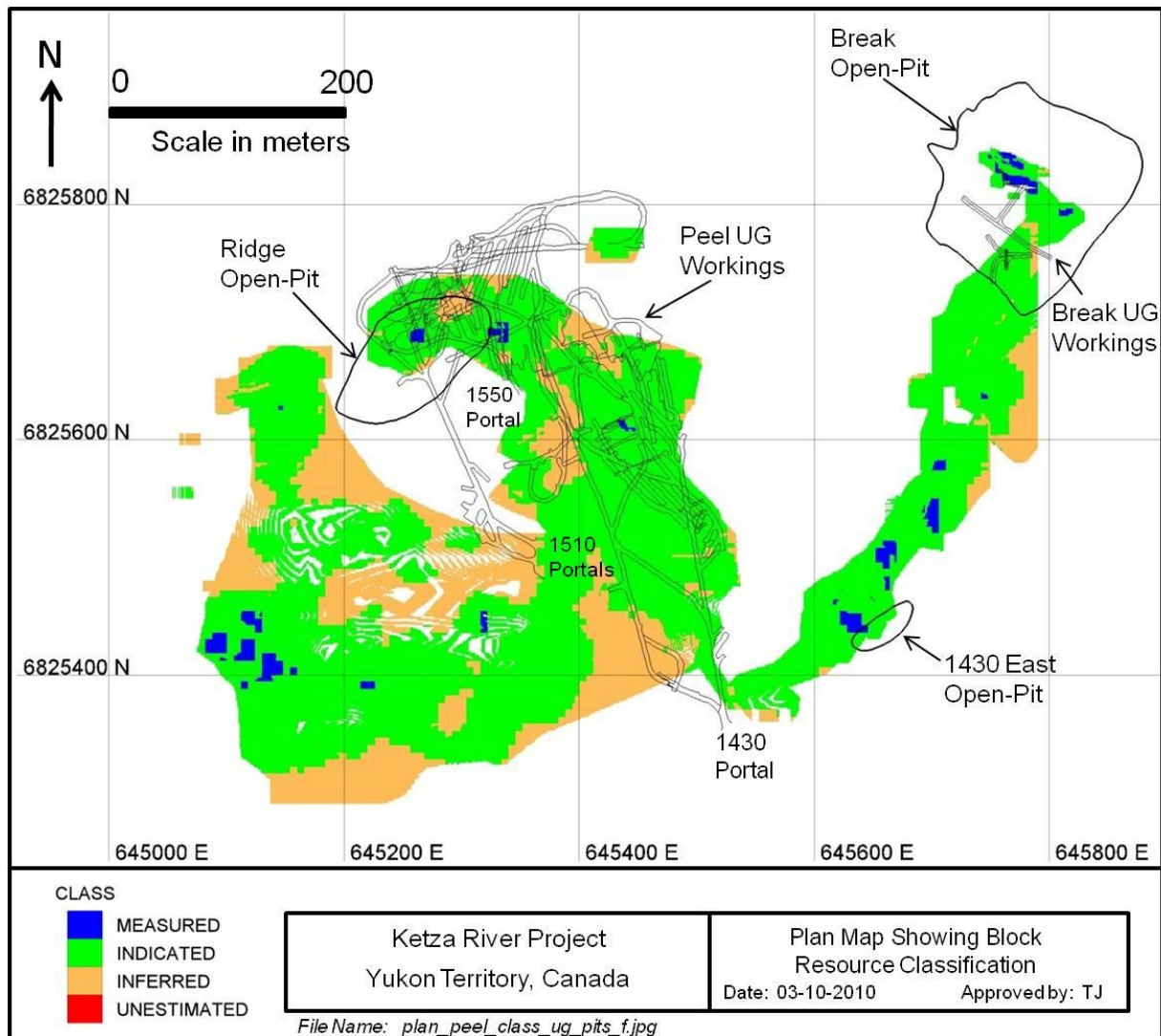
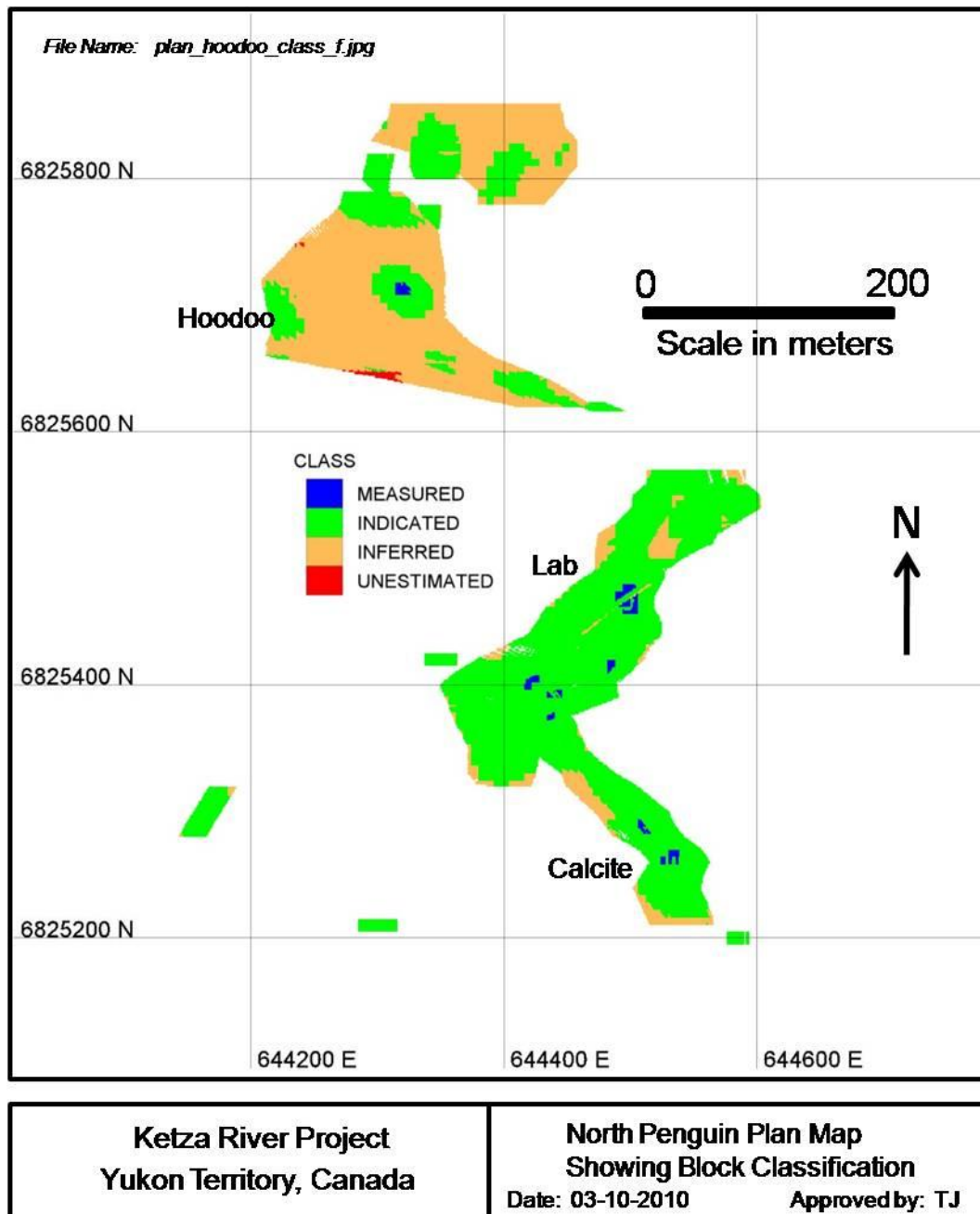


Figure 15-8-3: North Penguin Plan Map Showing Block Resource Classifications



15.9 Mined Depletion

The Ketza property was mined by Canamax between 1988 and 1990 by both open pit and underground methods. The mined volumes were represented in Vulcan by digitizing the underground and open pit shapes and then creating volumetric solids of the workings. These triangulated solids were then used to flag the estimated blocks which were inside the solids so that the tonnes and grade of the mined blocks could be calculated (Table 15.9.1). The Peel blocks within the 0.5 g/t grade shells which were flagged as mined are shown in Figure 15-9-1.

The open pit solids were created by using the original topo as the top of the pit solid and current topo as the bottom of the pit solid. Even though this produced a volume, the actual as-built surveyed pit benches would provide a more accurate pit bottom and therefore a better volume. The current topo used as the base looks to have partially filled in the bottom of the pit due to weathering and pit slope failure giving a smaller pit volume than what was actually mined.

The Canamax underground plan and cross section maps were scanned and registered in Vulcan (Figures 15-9-2 and 15-9-3) and digitized in true 3-D space. The workings were then triangulated creating drift and stope solids. Not all of the drifts are in true 3-D space as only the stopes were important for depletion. The stope solids are exaggerated to ensure that a grade shell which was mined is completely depleted as it is assumed that any ore that may have been left is no longer available to future mining. Additional stopes may exist that are not shown on the maps as the maps are dated 1989 and mining was not terminated until November 1990.

Table 15.9.1: Mined Depletion Calculated in Vulcan for All Pits and Underground

Area	Cut off	Measured			Indicated			Meas + Ind			Inferred		
		kt	Au g/t	koz	kt	Au g/t	koz	kt	Au g/t	koz	kt	Au g/t	koz
Ketza	0.0	40.99	7.1	9.42	309.530	8.8	87.74	350.528	8.6	97.193	17.794	6.5	3.725
	0.5	40.99	7.1	9.42	305.641	8.9	87.67	346.638	8.7	97.136	17.794	6.5	3.725
	1.0	39.58	7.4	9.38	295.445	9.2	87.45	335.021	9.0	96.866	17.775	6.5	3.726
	3.0	31.79	8.8	8.96	242.682	11	83.96	274.476	10	92.983	15.677	7.1	3.570
	5.0	23.47	10	7.87	196.653	12	78.05	220.128	12	85.919	9.946	9.0	2.868
	7.0	16.78	12	6.61	150.130	14	69.08	166.910	14	75.691	6.102	11	2.143

Canamax reported different statistics for total mill and mine production from July 1988 to November 1990 (along with preproduction data from March to June 1988) after mining shutdown (Tables 4.2.1 and 4.2.2). The Canamax (1991) report in Table 4.2.1 is based on monthly mill production records whereas the Hodgson (1991) report is based on mine production by general mine area as shown in Table 4.2.2. Even though the reported tonnes and average gold grade don't reconcile with ounces or metallurgical recoveries, these numbers were reported by Canamax. The tabulated mine depletion from the current model in Table 15.9.1 compares closely to the reported Canamax mill production data.

Figure 15-9-1: Plan Map of Peel Mined Out Blocks

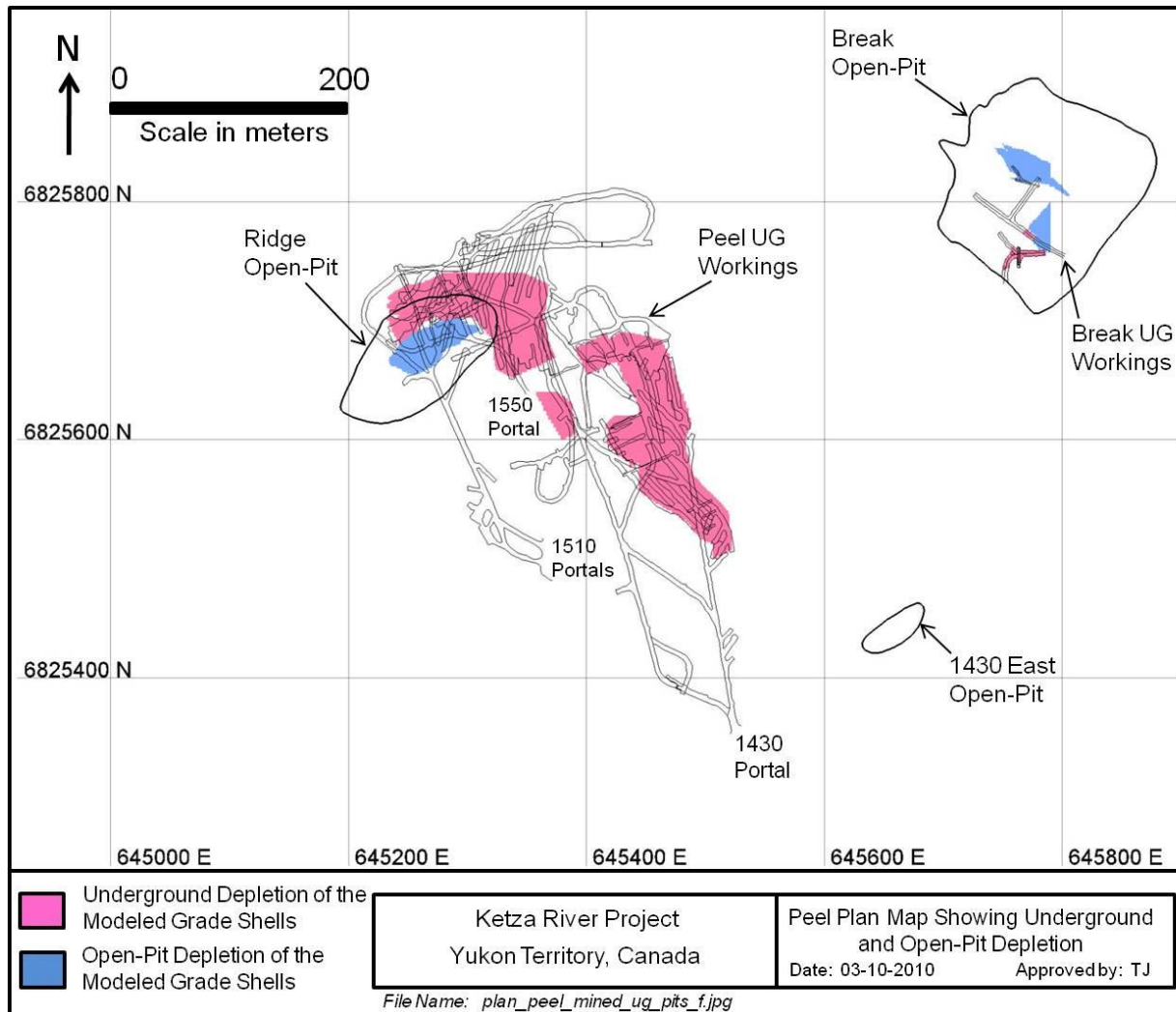


Figure 15-9-2: Plan Map of Canamax Underground Workings and Open Pits

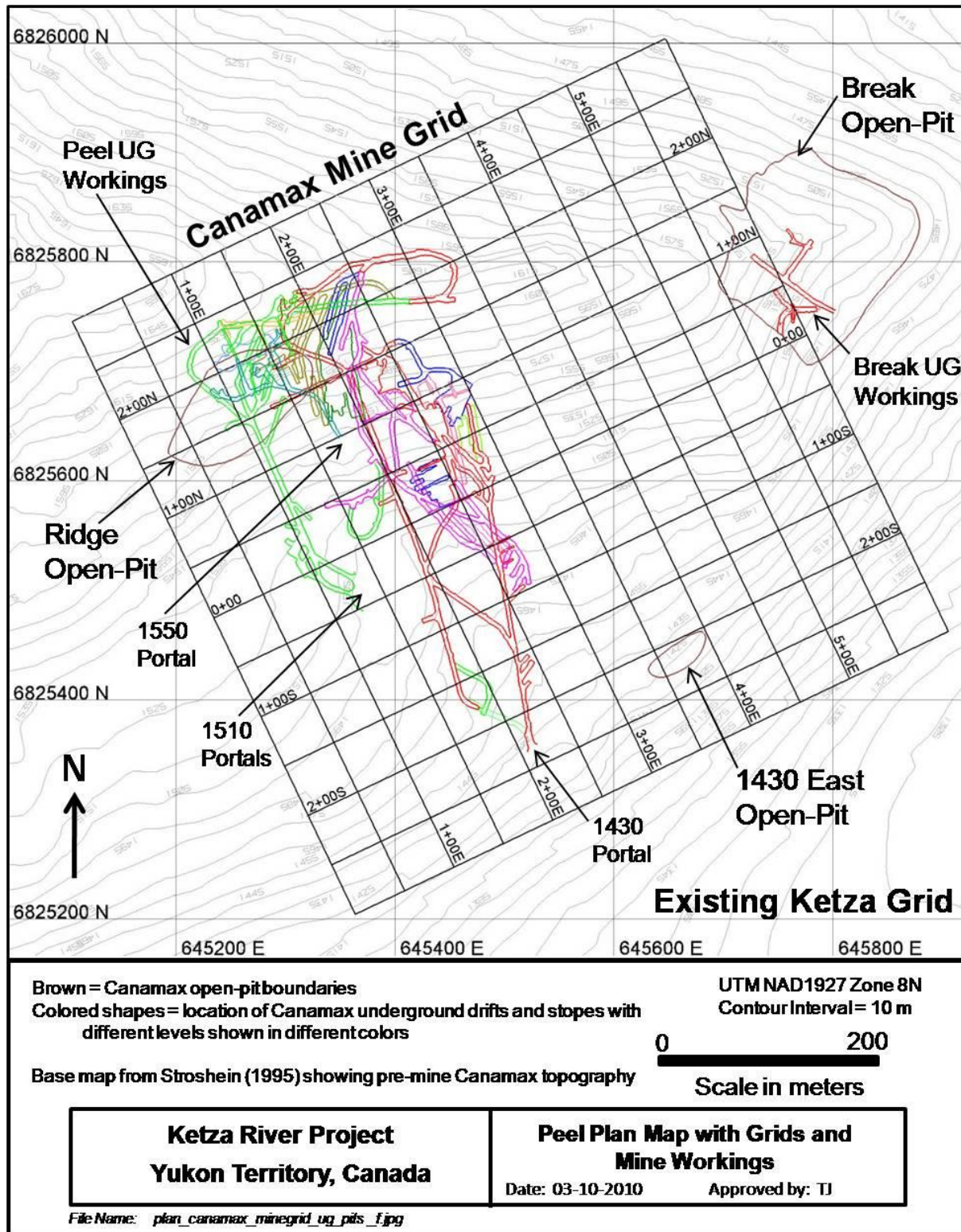
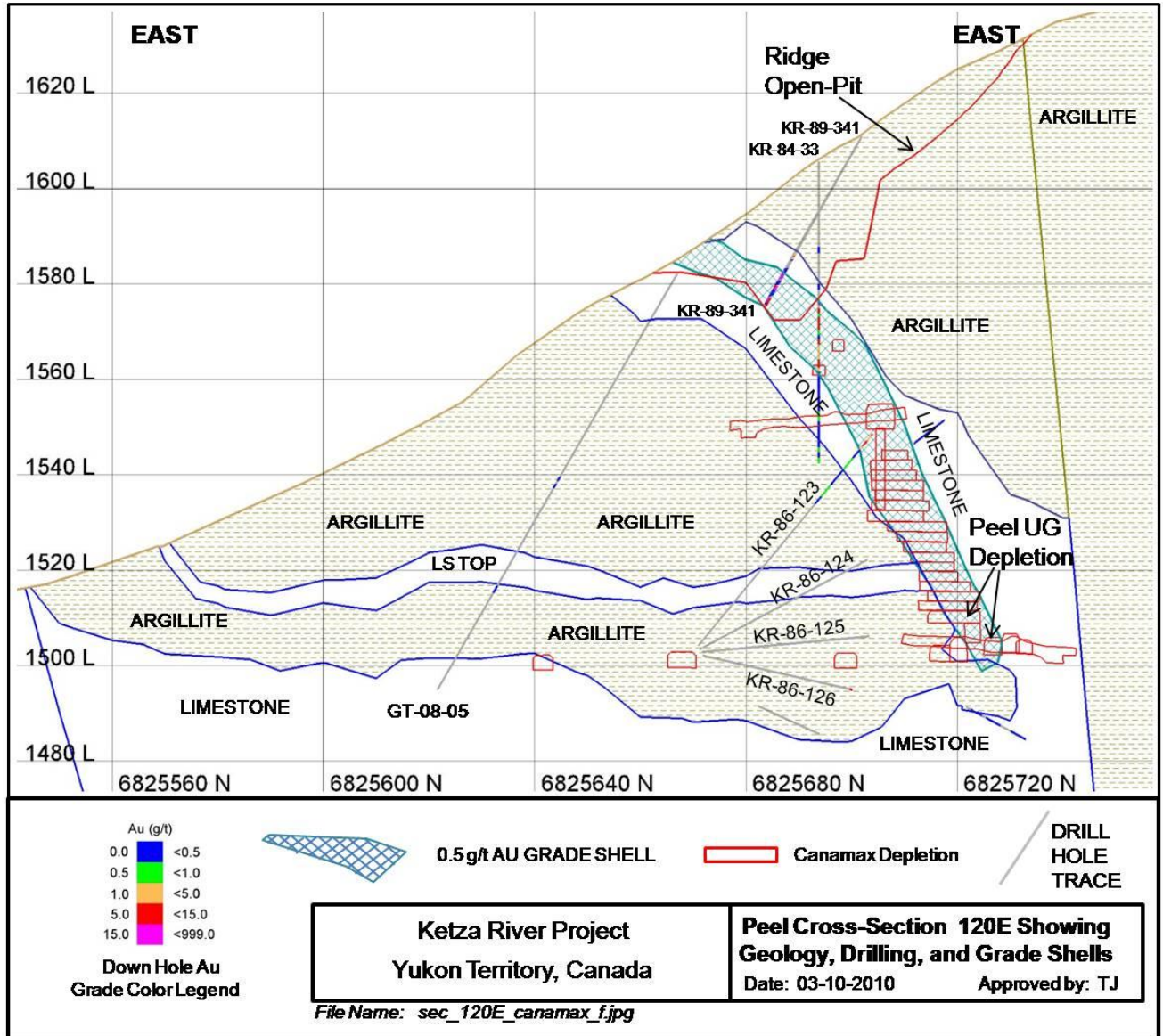


Figure 15-9-3: Cross Section of Canamax Underground Workings and Open Pits



15.10 Block Model Validation

The drill holes composites were displayed with cross section views of the block models (see Figures 15-10-1 and 15-10-2 as examples) to visually inspect the local estimations of the gold grade and specific gravity. Those areas inspected for each block model looked appropriate and correlated well given the search distance and number of samples used. The modeling method itself ensured that mineralization and the estimate was constrained within the grade shells created in Vulcan.

Drill hole composite statistics were compared to the block statistics for each block model listed in Appendix F. The comparison on this global scale was acceptable.

Figure 15-10-1: Gully Cross Section Comparing Block Grades and Drill Hole Assays

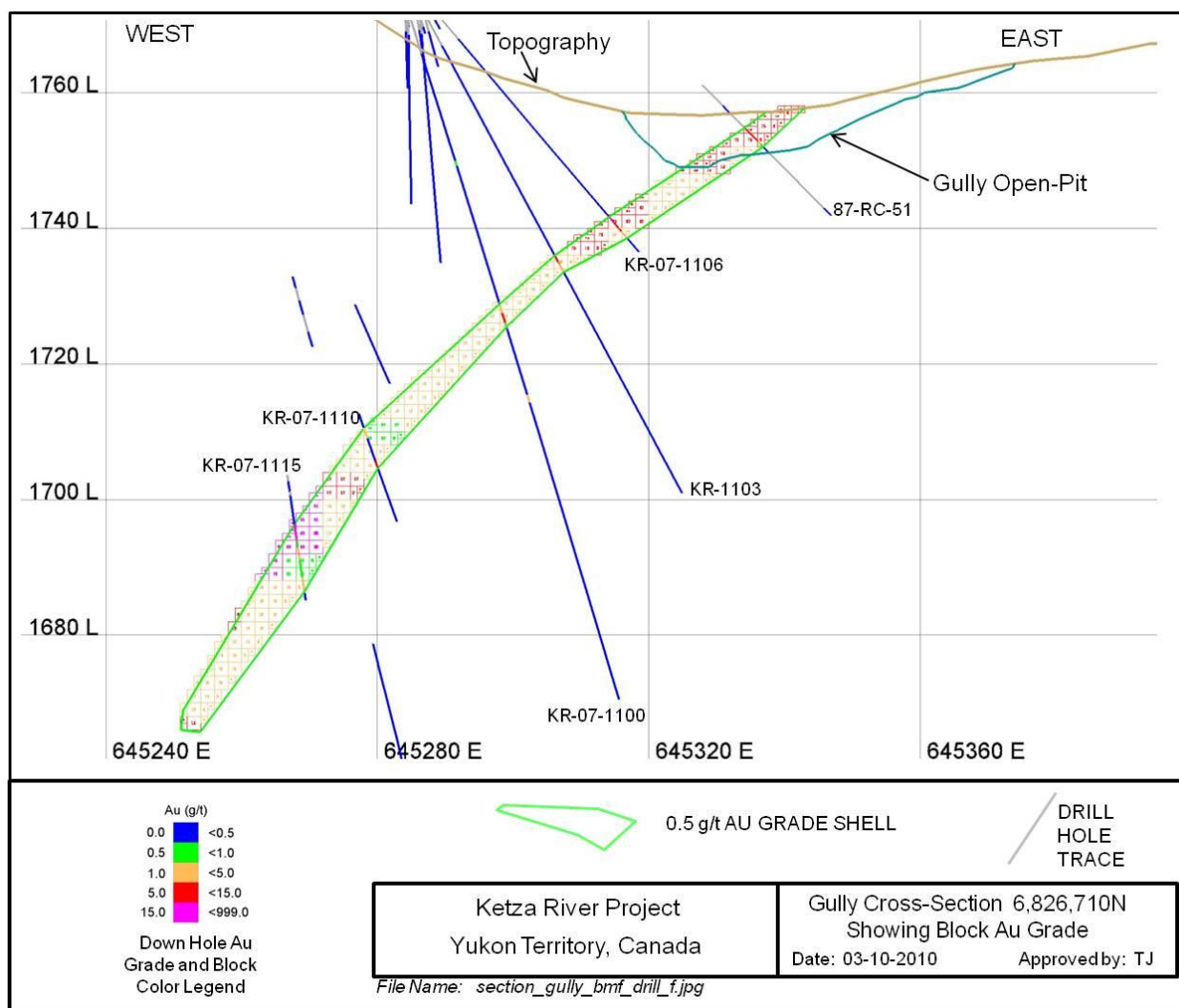
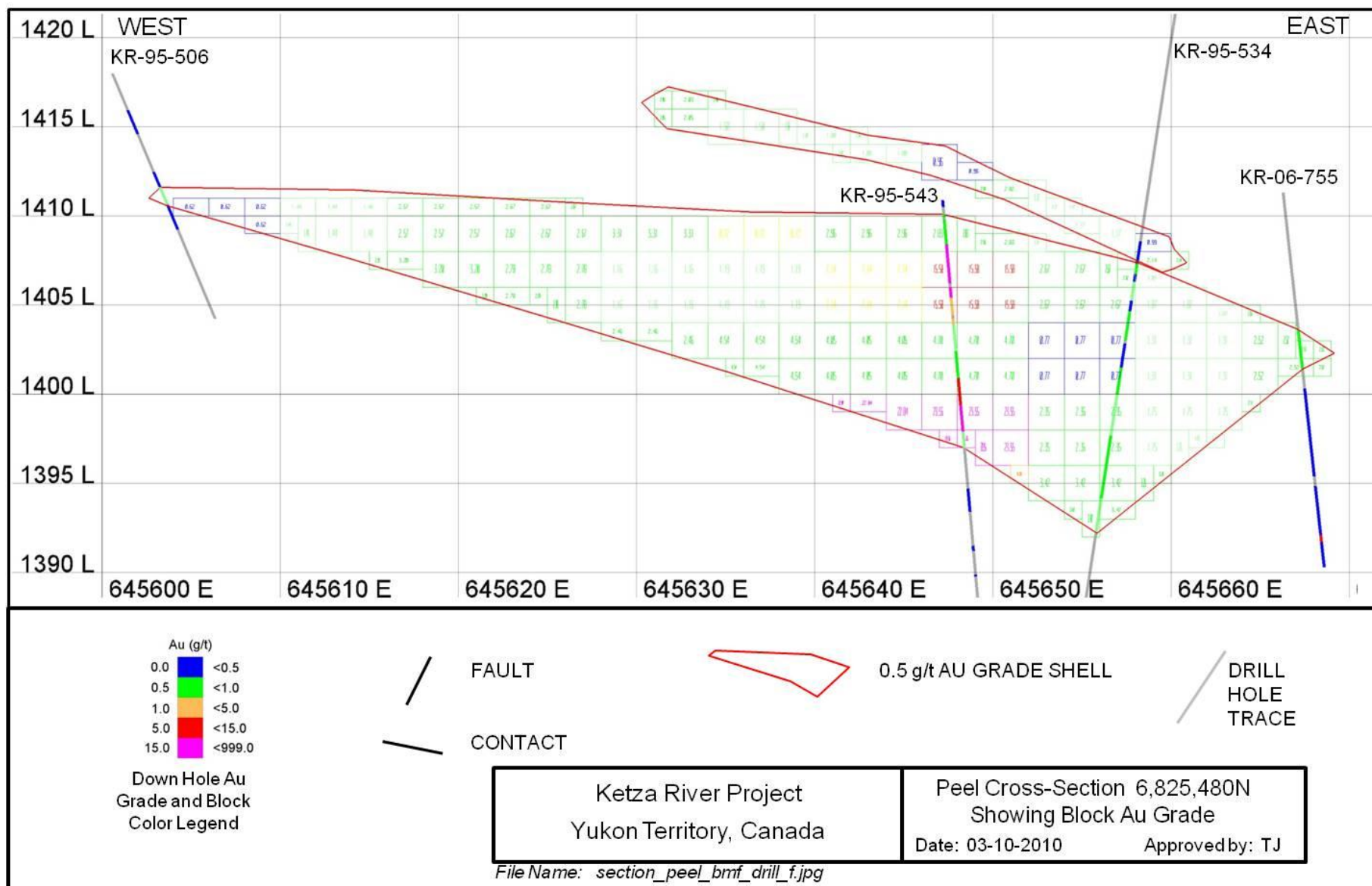


Figure 15-10-2: Peel Cross Section Comparing Block Grades and Drill Hole Assays



15.11 Mineral Inventory

The mineral inventory of all estimated material inside the 0.5 g/t grade shells for all the block models at various Au cutoff grades is shown in Table 15.11.1. The resource may be considered to be at a 0.0g/t cutoff due to the fact that all estimated blocks are restricted within a 0.5 g/t mineralized grade shell which has the potential to be mined at a profit. The additional cutoff grades are provided to show sensitivity of the estimated resource and do not reflect or imply economics or mineability. The classification of the resource, Measured, Indicated, and Inferred, reflects the confidence in the estimate of the tonnes and grade and again has no implication of mineability. The mineral inventory excludes the ore stockpile material located north of the existing mill since the grade of this material is still unknown.

The average gold grade is calculated from the au_id3 variable in the block models. Tonnage is calculated using the SG variable in the block models.

Table 15.11.1: Mineral Inventory for all of Ketz River with Depletion Subtracted

Cut off	Measured			Indicated			Meas + Ind			Inferred		
	kt	Au g/t	koz	kt	Au g/t	koz	kt	Au g/t	koz	kt	Au g/t	koz
0.0	221.3	4.76	33.8	3,925.1	4.22	532.6	4,146.4	4.25	566.4	1,851.3	2.78	165.5
0.5	214.6	4.89	33.8	3,786.7	4.36	530.9	4,001.2	4.39	564.7	1,789.8	2.86	164.8
1.0	193.3	5.35	33.2	3,263.5	4.94	518.2	3,456.9	4.96	551.7	1,408.0	3.43	155.2
3.0	109.9	7.92	28.0	1,729.2	7.67	426.2	1,839.1	7.68	454.3	492.3	6.61	104.6
5.0	65.8	10.63	22.5	1,018.6	10.31	337.6	1,084.3	10.33	360.1	272.9	8.83	77.5
7.0	47.6	12.41	19.0	685.9	12.44	274.3	733.5	12.44	293.3	163.4	10.80	56.7

The mineral inventory for Ketz segregated by REDOX (ore type) after depletion are in Tables 15.11.2 to 15.11.4. Three REDOX types based on the sulfide and iron-oxide mineral contents definitions defined in Section 15.3.1 have been separated in the three tables and include oxide (oxide + unaltered or “host rock” material), sulfide (sulfide, and hi-sulfide material); and mixed oxide and sulfide material (transulfide material).

Table 15.11.2: Oxide and Unaltered Mineral Inventory for Ketz River after Depletion

Cut off	Measured			Indicated			Meas + Ind			Inferred		
	kt	Au g/t	Au koz	kt	Au g/t	Au koz	kt	Au g/t	Au koz	kt	Au g/t	Au koz
0.0	102.5	4.30	14.2	1,455.1	3.92	183.5	1,557.6	3.95	197.6	758.2	2.47	60.1
0.5	97.4	4.50	14.1	1,384.3	4.11	182.8	1,481.6	4.13	196.9	716.5	2.59	59.8
1.0	83.7	5.11	13.8	1,137.0	4.84	176.8	1,220.6	4.85	190.5	548.3	3.15	55.5
3.0	49.7	7.26	11.6	566.6	7.87	143.4	616.3	7.82	155.0	166.1	6.42	34.3
5.0	29.0	9.69	9.0	342.7	10.48	115.5	371.6	10.42	124.5	87.0	8.86	24.8
7.0	18.7	11.82	7.1	226.5	12.84	93.5	245.2	12.75	100.6	48.8	11.11	17.4

Table 15.11.3: Mixed (Transulfide) Mineral Inventory for Ketza River after Depletion

Cut off	Measured			Indicated			Meas + Ind			Inferred		
	kt	Au g/t	Au koz	kt	Au g/t	Au koz	kt	Au g/t	Au koz	kt	Au g/t	Au koz
0.0	7.3	7.52	1.8	185.9	4.03	24.1	193.2	4.16	25.8	23.8	4.22	3.2
0.5	7.3	7.52	1.8	179.1	4.17	24.0	186.4	4.30	25.8	23.7	4.23	3.2
1.0	7.1	7.64	1.8	159.2	4.60	23.5	166.3	4.73	25.3	18.7	5.16	3.1
3.0	5.5	9.31	1.7	82.5	7.12	18.9	88.0	7.26	20.5	8.2	9.60	2.5
5.0	3.1	13.87	1.4	44.8	9.79	14.1	47.8	10.06	15.5	7.2	10.41	2.4
7.0	1.9	18.39	1.1	30.8	11.60	11.5	32.8	12.00	12.6	6.5	10.90	2.3

Table 15.11.4: Sulfide (Sulfide and Hi-Sulfide) Mineral Inventory for Ketza River after Depletion

Cut off	Measured			Indicated			Meas + Ind			Inferred		
	kt	Au g/t	Au koz	kt	Au g/t	Au koz	kt	Au g/t	Au koz	kt	Au g/t	Au koz
0.0	111.6	5.01	18.0	2,284.1	4.43	325.2	2,395.7	4.46	343.1	1,069	2.97	102.1
0.5	110.0	5.07	17.9	2,223.3	4.54	324.4	2,333.3	4.56	342.3	1,050	3.02	101.9
1.0	102.6	5.38	17.8	1,967.4	5.03	318.2	2,070.0	5.04	335.6	840.9	3.58	96.7
3.0	54.7	8.38	14.8	1,080.1	7.60	263.9	1,134.8	7.64	278.7	318.0	6.62	67.7
5.0	33.7	11.13	12.1	631.2	10.25	208.0	664.9	10.30	220.1	178.7	8.76	50.3
7.0	27.0	12.40	10.8	428.5	12.29	169.4	455.5	12.30	180.1	108.1	10.65	37.0

The mineral inventory for Ketza River segregated by resource area at a 1.0 g/t Au cutoff grade after depletion and for all REDOX types are shown in Table 15.11.5. This is shown for comparison purposes to previous Ketza River models. The 3M zone is included in the QB zone.

Table 15.11.5: Mineral Inventory for Ketza River after Depletion (All Redox Types) at 1.0 g/t Au Cutoff

Zone	Measured			Indicated			Meas + Ind			Inferred		
	kt	Au g/t	Au koz	kt	Au g/t	Au koz	kt	Au g/t	Au koz	kt	Au g/t	Au koz
Peel	90.5	6.08	17.7	1,481.2	6.59	313.8	1,571.7	6.56	331.5	336.0	5.70	61.6
Lab-Hoo	9.5	7.61	2.3	441.6	4.91	69.7	451.1	4.97	72.1	128.7	3.71	15.4
Penguin	16.7	2.08	1.1	338.9	3.20	34.9	355.6	3.15	36.0	225.7	3.21	23.3
Tarn	12.6	4.98	2.0	112.0	3.78	13.6	124.6	3.90	15.6	20.8	1.94	1.3
Gully	24.9	4.67	3.7	241.6	3.30	25.6	266.5	3.43	29.4	206.8	2.43	16.2
QB	30.4	4.54	4.4	645.2	2.90	60.2	675.6	2.98	64.7	490.0	2.38	37.5
Knoll	8.8	6.83	1.9	3.0	4.47	0.4	11.8	6.24	2.4	0.0	0.00	0.0
Total	193.3	5.35	33.2	3,263.5	4.94	518.2	3,456.9	4.96	551.7	1,408.0	3.43	155.2

15.12 Mineral Resource Definition

For this resource determination, open pit resources were distinguished from underground resources based on using the Vulcan software (version 8.04), Maptek's (KRJA System's, Inc.) Pit Optimizer Lerchs Grossman module, and the updated block models. The mine design was based on a 1,500 tonne per day ore milling rate and various parameters described below. Mark Odell, the qualified person that conducted the preliminary mine plan for the Yukon Environmental and Socio-Economic Assessment Board (YESAB) project proposal, also conducted the following resource estimate that is described in Section 15.12.1 and 15.13 below.

15.12.1 Open Pit Mining

Conventional open pit mining will utilize 90 tonne capacity haul trucks and 11m³ front end loaders. Ore and waste mining rates will be 50,000 tonne per day during the first two years of mining and decline to 20,000 tonnes per day during the last year of mining. For each deposit, a Lerchs Grossman optimal pit shell was created using the parameters listed in Table 15.12.1.1. Inter-ramp pit slope angles varied from 26-50° and correspond to those recommended in the 2008 Ketza River geotechnical reports by EBA Engineering Consultants Ltd. (2008a, 2008b, 2008c, 2008d, 2008e, 2008f). From these optimal pit shells practical pits with 25m wide haul roads, 5m bench heights, and the appropriate slope configurations were designed (Figure 15-12-1). The resource reported is that material above the cutoff grade contained within the practical pit design. These resources have been reduced by a factor of 90 percent for mining recovery and include 10 percent grade dilution.

Table 15.12.1.1: Parameters for Determining the Lerchs Grossman Optimal Pit Shells

Parameter	Open Pit	Underground
Mining Cost (\$/tonne)	\$3.00	\$80.00
Processing Cost (\$/tonne)	\$26.00	
Oxide Ores Metallurgical Au Recovery	90%	
Sulfide Ores Metallurgical Au Recovery	70%	
Refining and Selling Expenses (\$/oz.)	\$5.29	
General and Administrative Cost (\$/tonne)	\$8.00	
Gold Sales Price (\$US/troy oz)	\$1,150.00	
Oxide Ore Cutoff Grade (g/t)	0.78	3.44
Sulfide Ore Cutoff Grade (g/t)	1.00	4.43

Waste quantities for each pit are listed in Table 15.12.1.2. Waste of suitable quality will be used for the construction of haul roads and other facilities. The balance will be placed in waste rock disposal areas proximal to each pit.

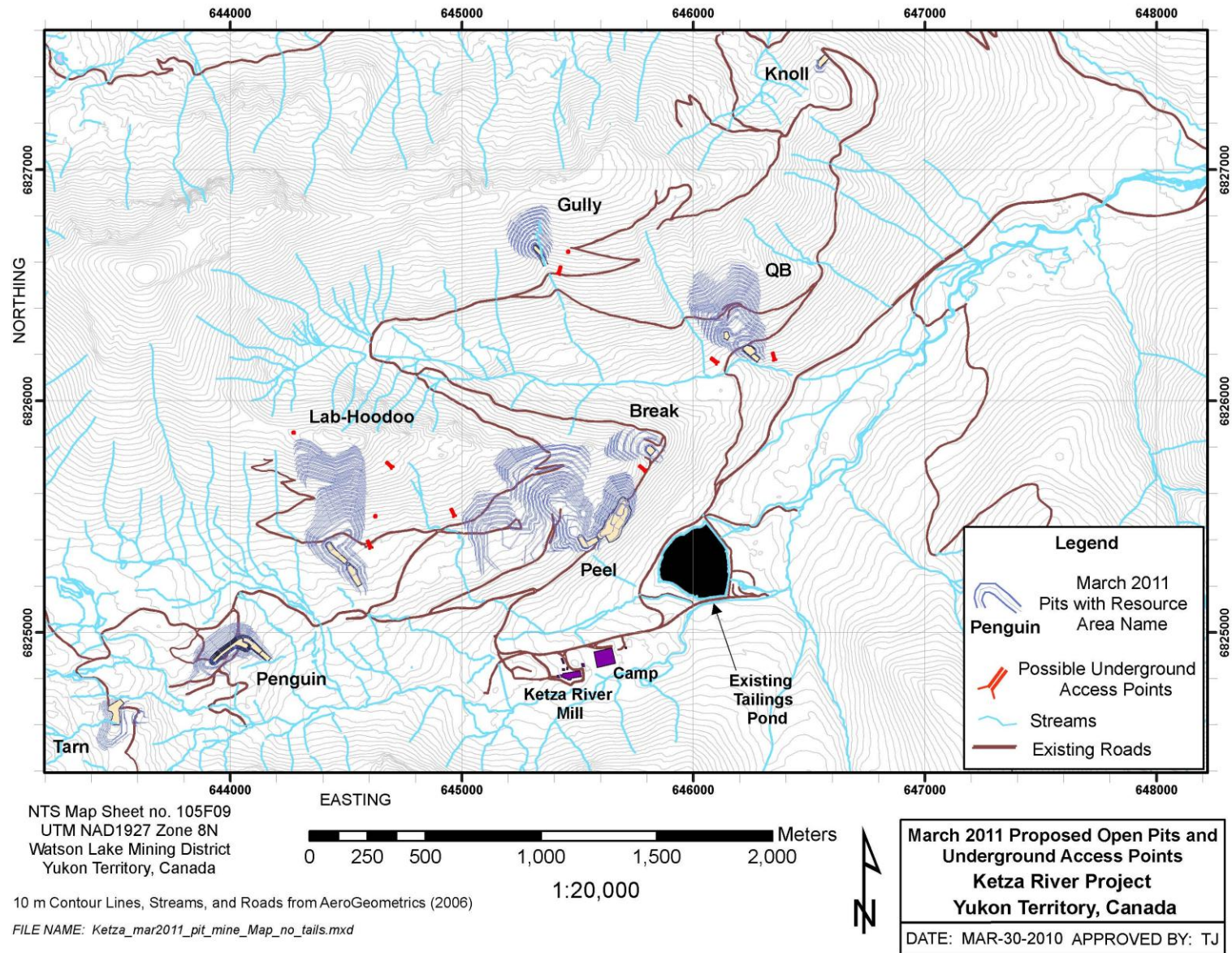
Table 15.12.1.2: Ketza River Open Pit Waste Rock Tonnage

Resource Area	Waste (kTonnes)	Stripping Ratio
Gully	1,487	21.9
Knoll	255	18.3
Lab-Hoodoo	9,888	34.1
Peel (Includes Break pit)	23,270	17.4
Penguin	3,784	13.0
Tarn	682	7.3
QB	7,216	16.6
Total	46,582	18.4

15.12.2 Underground Mining

Underground mining will employ sublevel stoping or drift and fill techniques and will occur concurrently with the open pit operations. When required for support, excavations will be backfilled with either waste rock or cemented rock fill. It is anticipated that a mining contractor will produce up to 500 tonnes per day of ore from the various underground mines. Underground resources are those resources external to the pit designs which meet or exceed the respective cutoff grades for oxide and sulfide ores following 30pct grade dilution. Mining recovery of these resources is 60pct. Potential underground mining access points are shown in Figure 15-11-1.

Figure 15-11-1: Open Pits and Potential Underground Access Points at US\$1,150/troy oz Au



15.13 Mineral Resource Statement

The Ketz River open pit and underground resources are summarized in Tables 15.13.1, and separated by oxide and sulfide REDOX ore types (as defined in Section 15.7) in Tables 15.13.2, and 15.13.3. The cutoff grade for open pit resources is 0.78 g/t Au for oxide ore and 1.00 g/t Au for sulfide ores for blocks contained inside the optimized pit, and 3.44 g/t Au for oxide and 4.43 g/t Au for sulfide ores for underground resources outside the optimized pit. The mineral resources tabulated below include Measured, Indicated and Inferred classifications as described in Section 15.13.

A total of 41% of the measured and indicated recoverable resource ounces are hosted in oxide ores which have a gold recovery of 90%; whereas the other 59% of the measured and indicated recoverable, resource ounces are hosted in sulfide or mixed sulfide+oxide ores that generally have Au recoveries of 70 percent. The previous Year-End 2007 NI 43-101 report (SRK, 2008) did not quantify the amounts of oxide vs. sulfide ores.

Table 15.13.1: Ketz River Mineral Resource Statement (Oxide and Sulfide Combined)

Area	Open Pit Resource			Underground Resource			Combined (OP+UG)		
	kt	g/t-Au	koz	kt	g/t-Au	koz	kt	g/t-Au	koz
Measured									
Peel	85.2	5.76	15.8	3.7	8.41	1.0	88.9	5.87	16.8
Penguin	14.0	1.88	0.8	0.0	0.00	0.0	14.0	1.88	0.8
Lab-Hoodoo	9.4	6.92	2.1	0.0	0.00	0.0	9.4	6.92	2.1
Tarn	11.4	4.73	1.7	0.0	0.00	0.0	11.4	4.73	1.7
Gully	7.0	5.60	1.3	2.1	7.41	0.5	9.1	6.01	1.8
QB	23.4	4.55	3.4	0.4	3.81	0.0	23.8	4.47	3.4
Knoll	11.1	6.66	2.4	0.0	0.00	0.0	11.1	6.66	2.4
Total Measured	161.5	5.30	27.5	6.3	7.39	1.5	167.8	5.38	29.0
Indicated									
Peel	1,053.4	6.22	210.6	204.6	8.83	58.1	1,258.0	6.64	268.7
Penguin	233.6	2.89	21.7	0.0	0.00	0.0	233.6	2.89	21.7
Lab-Hoodoo	243.2	5.20	40.6	22.1	6.90	4.9	265.3	5.34	45.5
Tarn	79.3	3.88	9.9	0.0	0.00	0.0	79.3	3.88	9.9
Gully	45.1	3.57	5.2	14.7	8.04	3.8	59.8	4.67	9.0
QB	298.0	3.21	30.8	15.5	5.22	2.6	313.5	3.31	33.4
Knoll	2.9	4.54	0.4	0.0	0.00	0.0	2.9	4.54	0.4
Total Indicated	1,955.4	5.08	319.3	256.9	8.40	69.4	2,212.3	5.46	388.7
Measured and Indicated									
Peel	1,138.6	6.19	226.4	208.3	8.82	59.1	1,346.9	6.59	285.5
Penguin	247.6	2.84	22.6	0.0	0.00	0.0	247.6	2.84	22.6
Lab-Hoodoo	252.6	5.26	42.7	22.1	6.90	4.9	274.7	5.39	47.6
Tarn	90.7	3.99	11.6	0.0	0.00	0.0	90.7	3.99	11.6
Gully	52.1	3.85	6.4	16.9	7.91	4.3	69.0	4.84	10.7
QB	321.4	3.31	34.2	15.9	5.09	2.6	337.3	3.39	36.8
Knoll	14.0	6.22	2.8	0.0	0.00	0.0	14.0	6.22	2.8
Total M&I	2,116.9	5.09	346.8	263.2	8.38	70.9	2,380.1	5.46	417.7
Inferred									
Peel	195.2	5.30	33.2	24.2	6.55	5.1	219.4	5.43	38.3
Penguin	44.0	2.49	3.5	0.0	0.00	0.0	44.0	2.49	3.5
Lab-Hoodoo	37.5	4.38	5.3	10.1	5.54	1.8	47.6	4.62	7.1
Tarn	3.2	3.50	0.4	0.0	0.00	0.0	3.2	3.50	0.4
Gully	15.9	3.46	1.8	5.6	8.89	1.6	21.5	4.87	3.4
QB	113.5	3.80	13.9	4.4	5.66	0.8	117.9	3.87	14.7
Knoll	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0
Total Inferred	409.4	4.41	58.0	44.3	6.56	9.3	453.7	4.62	67.3

- Notes:** (1) The cutoff Au grade for oxide and sulfide ore inside the optimized open pit is 0.78 g/t and 1.00 g/t, respectively; whereas the cutoff Au grade for oxide and sulfide ore for material mineable by underground methods outside of the optimized open pit are 3.44 g/t and 4.43 g/t, respectively;
- (2) Au price used for this resource estimate is US\$1,150/troy oz;
- (3) Assigned sulfide and oxide ore Au recoveries are 70 and 90 percent, respectively;
- (4) All materials in this table include all REDOX types (oxide, sulfide, and mixed "oxide+sulfide") as defined in Section 15.3;
- (5) Mining cost/t = \$3.00 open pit and \$80.00 underground; processing cost/t ore = \$26.00; specific gravity variable as modeled per block; 18.4:1 (waste:ore) average strip ratio for all resources; 1,500 t ore/day mill feed; A Lerchs-Grossman pit optimization has been used to differentiate potential open pit resources from potential underground resources using mining costs, Au cutoff grades, and other parameters documented in this report;
- (6) This resource includes all drill holes completed in 2008 and does not include any drill holes completed in 2009 or 2010; This resource statement has an effective date of January 25, 2010.

Table 15.13.2 Ketz River Mineral Resource Statement (Oxide Material Only)

Area	Open Pit Resource			Underground Resource			Combined (OP+UG)		
	kt	g/t-Au	koz	kt	g/t-Au	koz	kt	g/t-Au	koz
Measured									
Peel	43.4	5.52	7.7	3.3	7.16	0.8	46.7	5.67	8.52
Penguin	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0
Lab-Hoodoo	0.9	4.55	0.1	0.0	0.00	0.0	0.9	4.55	0.1
Tarn	8.5	5.64	1.5	0.0	0.00	0.0	8.5	5.64	1.5
Gully	0.7	5.33	0.1	0.0	4.65	0.0	0.7	5.33	0.1
QB	18.0	2.70	1.6	0.3	3.63	0	18.3	2.65	1.6
Knoll	9.7	6.65	2.1	0.0	0.00	0.0	9.7	6.65	2.1
Total Measured	81.2	5.03	13.1	3.6	6.91	0.8	84.8	5.11	13.9
Indicated									
Peel	357.3	6.41	73.6	168.1	8.85	47.8	525.4	7.19	121.4
Penguin	4.4	2.95	0.4	0.0	0.00	0.0	4.4	2.95	0.4
Lab-Hoodoo	48.0	3.15	4.9	6.8	5.99	1.3	54.8	3.50	6.2
Tarn	47.6	4.07	6.2	0.0	0.00	0.0	47.6	4.07	6.2
Gully	11.4	3.50	1.3	3.3	4.38	0.5	14.7	3.77	1.8
QB	209.5	2.81	19.0	8.8	4.82	1.4	218.3	2.90	20.4
Knoll	2.2	4.51	0.3	0.0	0.00	0.0	2.2	4.51	0.3
Total Indicated	680.5	4.83	105.7	186.9	8.47	50.9	867.4	5.62	156.6
Measured and Indicated									
Peel	400.8	6.31	81.4	171.4	8.81	48.6	572.2	7.06	130.0
Penguin	4.4	2.95	0.4	0.0	0.00	0.0	4.4	2.95	0.4
Lab-Hoodoo	48.9	3.18	5.0	6.8	5.99	1.3	55.7	3.52	6.3
Tarn	56.1	4.31	7.8	0.0	0.00	0.0	56.1	4.31	7.8
Gully	12.1	3.60	1.4	3.3	4.38	0.5	15.4	3.84	1.9
QB	227.5	2.80	20.5	9.1	4.79	1.4	236.6	2.88	21.9
Knoll	12.0	6.25	2.4	0.0	0.00	0.0	12.0	6.25	2.4
Total M&I	761.7	4.85	118.9	190.5	8.45	51.7	952.2	5.57	170.6
Inferred									
Peel	51.4	5.88	9.7	14.7	6.16	2.9	66.1	5.94	12.6
Penguin	2.4	2.09	0.2	0.0	0.00	0.0	2.4	2.09	0.2
Lab-Hoodoo	31.1	4.57	4.6	8.5	4.89	1.3	39.6	4.61	5.9
Tarn	3.0	3.58	0.4	0.0	0.00	0.0	3.0	3.58	0.4
Gully	2.2	2.18	0.2	0.3	5.39	0.0	2.5	1.91	0.2
QB	83.1	3.32	8.9	2.5	5.11	0.4	85.6	3.37	9.3
Knoll	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0
Total Inferred	173.1	4.28	23.8	25.9	5.64	4.7	199.0	4.46	28.5

Notes: (1) the Au cutoff grade for oxide ore within the optimized pit is 0.78 g/t; whereas the Au cutoff grade for underground oxide ore outside of the optimized open pit is 3.44 g/t;
(2) Material included in this table consists of oxide and unaltered REDOX types as defined in Section 15.3.
(3) These resources have an effective date of January 25, 2010.

Table 15.13.3 Ketz River Mineral Resource Statement (Sulfide and Mixed Materials Only)

Area	Open Pit Resource			Underground Resource			Combined (OP+UG)		
	kt	g/t-Au	koz	kt	g/t-Au	koz	kt	g/t-Au	koz
Measured									
Peel	41.8	6.00	8.1	0.4	13.01	0.2	42.2	6.09	8.3
Penguin	14.0	1.88	0.8	0.0	0.00	0.0	14.0	1.88	0.8
Lab-Hoodoo	8.5	7.18	2.0	0.0	0.00	0.0	8.5	7.18	2.0
Tarn	2.9	2.09	0.2	0.0	0.00	0.0	2.9	2.09	0.2
Gully	6.3	5.63	1.2	2.1	7.45	0.5	8.4	6.07	1.7
QB	5.4	10.71	1.9	0.1	4.33	0.0	5.5	10.51	1.9
Knoll	1.3	6.75	0.3	0.0	0.00	0.0	1.3	6.75	0.3
Total Measured	80.2	5.57	14.36	2.7	8.04	0.7	82.9	5.65	15.1
Indicated									
Peel	696.0	6.12	137.0	36.5	8.78	10.3	732.5	6.25	147.3
Penguin	229.2	2.89	21.3	0.0	0.00	0.0	229.2	2.89	21.3
Lab-Hoodoo	195.2	5.70	35.8	15.3	7.39	3.6	210.5	5.82	39.4
Tarn	31.7	3.59	3.7	0.0	0.00	0.0	31.7	3.59	3.7
Gully	33.7	3.60	3.9	11.4	8.95	3.3	45.1	4.97	7.2
QB	88.4	4.15	11.8	6.7	5.64	1.2	95.1	4.25	13.0
Knoll	0.7	4.63	0.10	0.0	0.00	0.0	0.7	4.63	0.1
Total Indicated	1,275.0	5.21	213.6	70.0	8.20	18.5	1,345.0	5.37	232.1
Measured and Indicated									
Peel	737.8	6.12	145.1	36.9	8.82	10.5	774.7	6.25	155.6
Penguin	243.2	2.83	22.2	0.0	0.00	0.0	243.2	2.83	22.2
Lab-Hoodoo	203.7	5.76	37.7	15.3	7.39	3.6	219.0	5.87	41.3
Tarn	34.6	3.47	3.9	0.0	0.00	0.0	34.6	3.47	3.9
Gully	40.1	3.92	5.1	13.6	8.71	3.8	53.7	5.13	8.9
QB	93.9	4.53	13.7	6.8	5.62	1.2	100.7	4.60	14.9
Knoll	2.0	6.02	0.4	0.0	0.00	0.0	2.0	6.02	0.4
Total M&I	1,355.2	5.23	227.9	72.7	8.2	19.2	1,427.9	5.38	247.1
Inferred									
Peel	143.9	5.09	23.5	9.5	7.06	2.2	153.4	5.22	25.7
Penguin	41.6	2.52	3.4	0.0	0.00	0.0	41.6	2.52	3.4
Lab-Hoodoo	6.4	3.42	0.7	1.6	9.99	0.5	8.0	4.67	1.2
Tarn	0.2	2.01	0.0	0.0	0.00	0.0	0.2	2.01	0.0
Gully	13.8	3.66	1.6	5.3	9.36	1.6	19.1	5.25	3.2
QB	30.4	5.12	5.0	1.9	5.83	0.4	32.3	5.20	5.4
Knoll	0.0	0.00	0.0	0.0	0.00	0.0	0.0	0.00	0.0
Total Inferred	236.2	4.51	34.2	18.4	7.86	4.6	254.6	4.74	38.8

Notes: (1) the Au cutoff grade for sulfide ore within the optimized pit is 1.00 g/t; whereas the Au cutoff grade for underground oxide ore outside of the optimized open pit is 4.43 g/t;

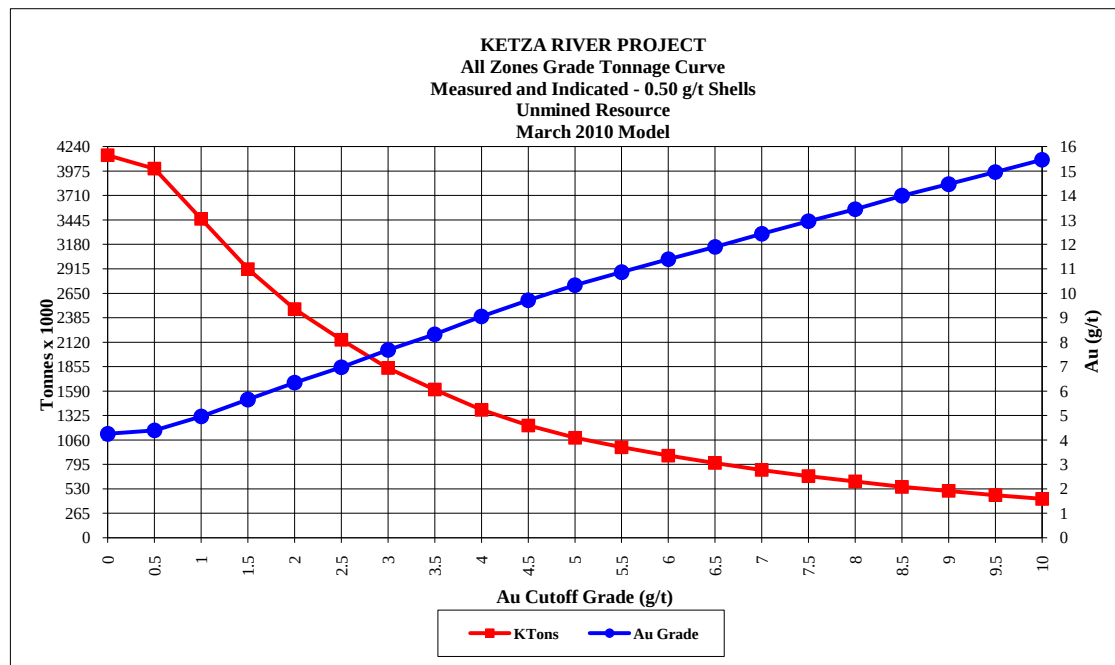
(2) Material included in this table consists of transulfide (mixed oxide + sulfide), sulfide, and hisulfide REDOX types as defined in Section 15.3;

(3) These resources have an effective date of January 25, 2010.

15.14 Mineral Resource Sensitivity

A grade tonnage curve (Figure 15-14-1) was calculated at 0.5 g/t cutoff increments for the Measured and Indicated mineral inventory after depletion as stated in Table 15.9.1.

Figure 15-14-1: Grade Tonnage Curve



As an upside sensitivity case, a US\$1,300 per troy oz Au price was determined for the open pit resource to support the YESAB Project Proposal and in order to define the maximum environmental impact to the project. The total open pit resource at the \$1,300 Au price includes:

- A measured resource of 166.1ktonnes averaging 5.17g/t Au totaling 27.6koz;
- An indicated resource of 2,018.2ktonnes averaging 4.95 g/t Au totaling 321.4 koz; and
- An Inferred resource of 414.8ktonnes averaging 4.37 g/t Au totaling 58.2koz.

The Au cutoff grades for oxide and sulfide ores inside the optimized open pit for this case are 0.735 g/t and 0.833 g/t, respectively.

16 Other Relevant Data and Information (Item 20)

There is no other relevant data for this project.

17 Interpretation and Conclusions (Item 21)

17.1 Analytical , QA/QC, and Data Verification

Issues relating to QA/QC data including standards, blanks, possible sample preparation problems, and assay performance have been addressed in the preceding sections. All historic drill hole data from 1984 to 1997 have been audited and corrected in the master acQuire drill hole database as part of this study.

Although older drill holes previous to 1998 were not surveyed and do not have well-documented QA/QC protocols, the newer drilling from 2005 to the present contain drill holes that have been surveyed and have well documented QA/QC protocols. These newer drill holes have been completed throughout the existing resource areas in order to verify the older data. Some additional drilling may be warranted in a few of the resource areas as part of a feasibility level study again to help validate the older drill hole data.

Additional drilling may be warranted at the QB zone, the upper Hoodoo zone, and the Flint zone. Some of the shallower well drilled zones have enough reliable information to qualify for measured status; however, for the purposes of this resource estimate, the bulk of the estimated mineralized material has been classified within the indicated category.

17.2 Exploration Conclusions

Results in the Hoodoo Zone are promising and further drilling will help to define additional indicated resources and the final boundaries to the 0.5 g/t Au mineralization. Several other deposits need additional drilling to convert inferred resources to indicated (e.g. Peel, QB, and Lab-Hoodoo). A couple deposits remain open down dip or along strike, and further step out drilling is likely to add resources (e.g. Gully and Hoodoo Zones). Exploration drilling in the Gully Zone area at depth should only proceed if underground mining on these potentially deep vein ores can be proven to be economical.

Drilling of magnetic highs has been successful in Penguin and Lab and other resource areas and should be continued on other targets throughout the claim block. There are a number of undrilled gold targets remaining on the property that should be pursued with geophysics, soil and/or rock-chip sampling, and drilling in order to help increase the resource base and add value to the proposed mining project.

17.3 Resource Estimation

The current Ketz River resource estimation uses additional drilling completed in 2008 (225 more drill holes than the previous NI 43-101 report published by SRK in 2008), additional total oxide and total sulfide logged mineral data from early drill holes, audited historical drill hole assay data from 1984 to 1997, additional specific gravity data, a new geologic model, and new block models. In addition, this current resource estimate used a higher Au price, a higher processing cost, a higher open-pit mining cost, and a higher overall stripping ratio relative to the previous model.

A total of 41% of the measured and indicated recoverable resource ounces are hosted in oxide ores which have a gold recovery of 90%; whereas the other 59% of the measured and indicated recoverable, resource ounces are hosted in sulfide or mixed sulfide+oxide ores that generally

have Au recoveries of 70 percent. The previous Year-End 2007 NI 43-101 report (SRK, 2008) did not quantify the amounts of oxide vs. sulfide ores.

As a result of this new work, the current resource estimate is lower in contained tonnages and contained ounces relative to the previous NI 43-101 resource estimation (SRK, 2008).

Compared to the last reported resource estimate for Ketz River (SRK, 2008):

- the current measured resource estimate represents: a decrease of 544.4 ktonnes from a previously estimated 712.2 ktonnes;
- the current indicated resource estimate represents: a decrease of 1,157.2 ktonnes from a previously estimated 3,369.5 ktonnes;
- the current measured resource estimate represents a decrease of 117.5 koz of recoverable gold from a previously estimated 146.5 koz;
- the current indicated resource estimate represents a decrease of 111.2 koz of recoverable gold from a previously estimated 499.9 koz;
- The current measured resource estimate contains an average Au grade of 5.38 g/t which is lower than the previously estimated Au grade of 6.40 g/t Au;
- The current indicated resource estimate contains an estimated average Au grade of 5.46 g/t which is higher than the previously estimated Au grade of 4.61 g/t Au;

Based on cross-section review of grade shells in the current model vs. the last model, it is clear that the current model incorporates smaller grade shell shapes relative to the previous SRK 2008 model that more accurately honors a 0.5 g/t Au cutoff, which explains the decreased tonnage difference between the two resource estimations. Because of not allowing external waste dilution into our grade shell shapes, and limiting internal waste dilution in our grade shells to the best of our ability, the overall average indicated Au grade in the current model generally increased.

The current resource model utilizes more detailed and more complete specific gravity data within the database relative to the previous model. In addition, the specific gravity values in this current resource were calculated, assigned, and ultimately estimated into the blocks using a different methodology than the previous NI 43-101 resource estimate. Since there were so many significant changes to the modeling parameters and drill hole data in the current model (i.e. different grade shell shapes and sizes; historical drill hole data capture; different ore classification scripts; additional SG data; additional 2008 drill hole data; different estimation methodology; and different mining parameters, mining costs, and economics), the specific impact of the new specific gravity derivations to the total tonnage of the current resource is unknown.

The current resource model is more realistic and defensible in comparison to all previous resource estimates. The current model, which used additional 2008 drill hole data and tighter grade shells modeled at a rigid 0.5 g/t Au grade cutoff, has resulted in a better local resource estimate for the Au grade and specific gravity, but globally did not increase the overall contained ounces. The current model compares better than all previous models with the oxide mining done by Canamax with regards to depletion of the predicted oxide blocks, and with regards to the overall total mined tonnes and total produced ounces. The inferred classification of potential ore

material in the current resource estimate was included in order to maximize the footprint of the Lerchs-Grossman pit shells for permitting purposes.

17.4 Other Relevant Information

YNG is in the process of finalizing the Project Proposal to be submitted to the the Yukon Environmental and Socio-Economic Assessment Board in August 2011.

Exploration is continuing at the property in 2011. Additional exploration at the property is warranted based on review of the existing drill hole results and because of the large property size that includes additional favorable areas for manto and vein-stockwork mineralization.

18 Recommendations (Item 22)

Based on the current resource estimate work, we can make the following recommendations for the Ketz River property:

1. Due to the flat-lying and bedded nature of most of the Ketz manto-style mineralized zones, assay sample intervals should not exceed 3.0 meters; assay samples in areas believed to be mineralized should not exceed 1.5 m in width;
2. The standard samples should be certified and should consist of at least 1 sample at the average grade and 1 sample at a higher grade. The blank samples should also be of certifiably barren material. In addition, approximately 5 percent of the samples should be submitted to a second certified umpire lab for check assays. The QA/QC program has improved in the 2010 exploration program, but some of the above issues still need to be addressed;
3. A number of the older drilling programs completed before 1995 have no documented QA/QC sampling program protocols and many of these drill holes have no down hole surveys. As a result of these deficiencies, and because certain portions of the existing resource areas do not have any recent drilling from 2005 to the present, it is recommended that future feasibility studies target 5 to 10 percent of the older drill holes to help confirm the historical Au assay data and down hole survey data. Specific areas that may require additional drilling include the Hoodoo, Flint, and QB zones. Such a drill program could also be utilized to help convert inferred blocks to indicated or measured blocks;
4. All raw Au assay results for drill holes completed from the years 1984 to 1997 should be entered into the acQuire drill hole database for historical reference documentation purposes;
5. The next model should separate out all (or at least the two most important) limestone subunits that host the Au mineralization (e.g. subunits MSLT and BXLTL) which exist in the main limestone 1d unit. This will help better understand the local lithological control to the manto mineralization; paper cross-sections exist in the historical documents that already have these penciled-in interpreted contacts;
6. Three 1995 Hemlo Gold drill holes (numbers KR-95-502 to KR-95-504) need to be added to the drill hole database; additional drill hole data from the digital spreadsheet file called "Shamrock DDH survey_pre2005.xls" contains some additional downhole survey data that is not in the drill hole database (e.g. for KR-95-503) and should be reviewed prior to the next model;
7. Future specific gravity determinations should only be assigned using the Geology table using the assignments outlined in Figure 15-3-1 and Table 15.3.3.1, and should not use the Wt pct Fe regression model in order to avoid problems encountered in the merging of the Geology and Assay tables; Future SG samples should be analyzed at ALS-Chemex using the same OA-GRA08a method followed up with the ME-ICP41 analysis in order to be compiled with the previously collected SG data;

8. Future block models should consider only using 2x2x2m sized blocks that would represent high grade, low grade, and waste blocks and that could be used for both open pit and underground mine planning. The current block models use variously sized blocks which are difficult and in some cases impossible for other software programs to use for analysis and design work;
9. Future block models should consider estimating Au grades in the waste blocks outside of the 0.5 g/t grade shells to help with pit optimizations, but only using highly restrictive estimation parameters in order to constrain the Au grades directly adjacent to existing drill hole data. The current block model assigned all waste blocks outside of the 0.5 g/t Au grade shell with -99 Au grades (effectively containing no Au);
10. YNG should continue exploring the property in order to define the margins of the identified resources, and to discover additional Au mineralized zones outside of the existing resource areas. A proposed 10,800 m total drilling program for the 2011 year is estimated to cost \$4.9 million dollars (\$CAD); this cost does not include any money for completing the YESAB Project Proposal which is estimated to cost an additional \$1.3 to 2.1 million dollars (\$CAD) in 2011. Drill hole intercepts with significant Au mineralization in the Hoodoo zone remain open to the north. In addition, the geological and mineralization controls at the Knoll zone should be reinvestigated in order to explore for similar mineralization in the area. Most exploration drilling should focus outside of the known resource footprints to add additional resources to the project. These underexplored targets on the property include: South Hill, Shamrock, OK, and Gold Flow. Several surface magnetic and IP geophysical anomalies that lie outside the main mineralized resource areas still need to be drill tested. In addition, several exploration targets with little to no drilling should be advanced with additional soil sampling, and surface geophysics in order to better identify drill targets;
11. Obtain actual survey data and Au grade estimations for the stockpile located just north of the existing mill in order to possibly include as a resource;
12. Another Lerchs-Grossman (LG) pit optimization should be performed only using Measured and Indicated block classifications (excluding inferred) in order to determine proven and probable reserves as per NI 43-101 guidelines; in addition, the new LG optimizations should use the updated 2010 recommended pit slope angles recommended by EBA (2010a; 2010b);
 - (4) YNG should continue to pursue and finalize the Yukon Environmental and Socio-Economic Assessment Board (YESAB) project proposal, which will include a first-pass mine plan, which is due to be submitted in August 2011; Approximate costs to complete this as of January 1, 2011 range from \$1.3-2.1 million dollars (CAD);
13. YNG should pursue a feasibility study during or soon after the YESAB project proposal is submitted or approved to better assess the economic viability of the project.

19 References (Item 23)

Abbott, G.A. (1986), Epigenetic mineral deposits of the Ketz-Seagull district, Yukon, Yukon Geology, Indian and Northern Affairs Canada, v.1, p. 56-66.

Abercrombie, S.M., 1990, Geology of the Ketz River Gold Mine, in Mineral Deposits of the Northern Canadian Cordillera, Yukon, Northeastern British Columbia, Abbott, J.G., and Turner, R.J.W., eds., 8th IAGOD Symposium Field Trip 14 Guidebook, Geological Survey of Canada Open-File 2169, p. 259-282.

Abercrombie, S.M. et al., (1987a), 1986 Exploration Report on the Ketz River Property prepared on behalf of Canamax Resources Inc. and Pacific Trans-Ocean Resources Ltd.

Austin, Jeffrey B. et al (February, 1990), Interim Report No. 1 on the Sulphide Ore Metallurgical Scoping Testwork Canamax Resources, Inc., Coastech Research, Inc., 122p.

Austin, Jeffrey B. et al (June 1990), Final Report on the Sulphide Ore Metallurgical Scoping Testwork Canamax Resources Incorporated, prepared for Canamax Resources Inc., Coastech Research, Inc., 61p.

Bacon, Donaldson and Associates Ltd., 1989, Cyanidation of Ketz River Samples, Progress Report no. 2, File no. M89-140, by Beattie, M.J.V., June 6, 1989, 16 pp.

_____, 1989, Cyanidation of Ketz River Oxide Samples, File no. M89-140, by Beattie, M.J.V., June 6, 1989, 8 pp.

_____, (March 28, 1989), Cyanidation of Ketz River Project Samples, File no. M89-048, by Beattie, M.J.V., 15 pp.

_____, (January 4, 1985), Preliminary cyanidation testing of sulphide and oxide ores, File no. 5470, by Beattie, M.J.V., 12 pp.

Beattie, M.J.V. (January 4, 1985), Report on the Ketz Preliminary Cyanidation Testing of Sulphide and Oxide Ores, for Canamax Resources Inc., Bacon, Donaldson and Associates, Ltd., 13p.

_____, (March 28, 1989), Report on the Cyanidation of Ketz River Project Samples, for Canamax Resources Inc., Bacon, Donaldson and Associates, Ltd., 71p.

_____, (June 6, 1989), Report on the Cyanidation of Ketz River Oxide Samples, for Canamax Resources Inc., Bacon, Donaldson and Associates, Ltd., 34p.

_____, (June 6, 1989), Progress Report No. 2 on the Cyanidation of Ketz River Project Samples, for Canamax Resources Inc., Bacon, Donaldson and Associates, Ltd., 48p.

Bryant, D.G., 1968, Intrusive breccias associated with ore, Warren (Bisbee) mining district, Arizona: Economic Geology, v.63, p. 1-12.

Bulman, V.J.M., et al. (1987b), 1987 Exploration Report on the Ketz River Property prepared on behalf of Canamax Resources Inc. and Pacific Trans-Ocean Resources Ltd.

Buxton, C., White, R., July 3, 2008, 2008 Specific Gravity analysis, SRK Consulting Memorandum, 5p.

Canamax Resources Inc. (April 4, 1991), Ketzar River Mine Project Review (includes Ketzar River Mine Monthly Production Statistics Summary Table from July 1988 to November 1990), 8 pp.

_____, (August 7, 1991a), Ketzar River Project, Ross River, Yukon, Mine Development Plan, unpublished report, 12 pp.

_____, (May 14, 1990), Ketzar River Mine, Sulphide Ore Project Feasibility Study, 28 pp.

_____, (September 6, 1988), Ketzar River Project Mill Preproduction Monthly Summary Table (from Canamax Mill records), 1p.

Canamax Resources Inc. and Pacific Trans-Ocean Resources (February, 1987), Ketzar River Project Feasibility Study, Reviewed by Wright Engineers Ltd., 110pp., 17 sections with Appendices and maps.

Canarc Resource Corp., March 31, 2010, Management Discussion and Analysis, 25p.

Cathro, M.S. (1992), Geology and Mineral Deposits of the Ketzar River Mining District, Yukon Territory, Canada, unpublished MSc. Thesis, Colorado School of Mines, 196 pp.

_____, (1988), Gold and silver, lead deposits of the Ketzar River District, Yukon: Preliminary Results of Field Work, in Yukon Geology, Vol. 2, Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, p. 8-25.

Cathro, M.S. et al. (1984), 1984 Summary Report on the Ketzar River Property, prepared on behalf of Canamax Resources Inc., Pacific Trans-Ocean Resources Ltd., and Ketzar River Mines Ltd.

Chen, S. (March 9, 2011), Metallurgical testing of ores from Ketzar River Project, Yukon, Canada, Inspectorate Exploration & Mining Services Metallurgical Division, 27 pp.

Chrysosoulis, S.L. (September, 1988), Direct determination of the invisible gold and complete gold mineralogical distribution in the massive sulphide ore from Ketzar River (Y.T.), Process Mineralogy – Surface Science Western, University of Western Ontario, Report no. SSW/PM/88/09, 11 pp.

_____, (December 21, 1986), Gold mineralogical balance in the cyanide leach residue from the Ketzar River ore (Y.T.), RPC report, no. MDP/86/09, 13 pp.

Chrysosoulis, S.L., and Cook, N.J., 1989, Process mineralogical study of the Peel zone high grade and AB composites and the Lab zone composite from the Ketzar River Mine, Yukon Territories, Process Mineralogy – Surface Science Western, University of Western Ontario, Report no. SSW/PMS/89/06, 23 pp.

_____, (October, 1988), Metallurgical testing of the Ketzar River massive sulfide ore, Process Mineralogy – Surface Science Western, University of Western Ontario, Report no. SSW/PM/88/10, 9 pp.

CIM, (August 20, 2000), CIM Definition Standards – For Mineral Resources and mineral reserves, prepared by the CIM Standing Committee on reserve definitions, adopted by the CIM Council on December 11, 2005, www.cim.org; 10 pp.

Coastech Research (February, 1990), Sulphide ore – Metallurgical scoping testwork, Canamax Resources Ltd., Interim Report No. 1, by Austin, J.B., Marchant, P.B., and Lawrence, R.W., Project no. 92143, 18 pp.

Cominco Engineering Services Ltd. (June, 1989), Metallurgical testwork on Ketz River sulphide and oxide ore samples, by Tucker, R.J, 16 pp.

Coastech Research (June, 1990), Sulphide ore – Metallurgical scoping testwork, Canamax Resources Ltd., Final Report, Project no. 92143, by Austin, J.B., Marchant, P.B., and Lawrence, R.W., 1990, June, 1990, 16 pp.

EBA Engineering Consultants Ltd., December 2010a, 2008 and 2010 Geotechnical Site Investigations and Geotechnical Pre-Feasibility Study for the QB, Gully, 3M and Knoll Pits at the Ketz River Property, Yukon, unpublished Draft report prepared for Yukon Nevada Gold Corp., project no. V15101019.001, 418 pp.

_____, December 2010b, 2008 and 2010 Geotechnical Site Investigations and Geotechnical Pre-Feasibility Study for the Peel, Lab-Hoodoo, Penguin and Tarn Pits at the Ketz River Property, Yukon, unpublished Draft report prepared for Yukon Nevada Gold Corp., project no. V15101019.001, 714 pp.

_____, June 2008a, Geotechnical Site Investigations and Geotechnical Preliminary Assessment for the Gully Pit at the Ketz River Property, Yukon, unpublished report prepared for Yukon Nevada Gold Corp.

_____, June 2008b, Geotechnical Site Investigations and Geotechnical Preliminary Assessment for the Lab Hoodoo Pit at the Ketz River Property, Yukon, unpublished report prepared for Yukon Nevada Gold Corp.

_____, June 2008c, Geotechnical Site Investigations and Geotechnical Preliminary Assessment for the Peel Pit at the Ketz River Property, Yukon, unpublished report prepared for Yukon Nevada Gold Corp.

_____, June 2008d, Geotechnical Site Investigations and Geotechnical Preliminary Assessment for the Penguin Pit at the Ketz River Property, Yukon, unpublished report prepared for Yukon Nevada Gold Corp.

_____, June 2008e, Geotechnical Site Investigations and Geotechnical Preliminary Assessment for the QB Pit at the Ketz River Property, Yukon, unpublished report prepared for Yukon Nevada Gold Corp.

_____, June 2008f, Geotechnical Site Investigations and Geotechnical Preliminary Assessment for the Tarn Pit at the Ketz River Property, Yukon, unpublished report prepared for Yukon Nevada Gold Corp.

Environment Canada (2007), *National Climate Archive, Climate Normals and Averages*: http://climate.weatheroffice.ec.gc.ca/climate_normals

Fleming, D.B., 1990, Ketz River Property – Geology and mineralization of the QB vein, Canamax Resources Inc. memorandum, 3 pp. (with cyanidation results from Bacon and Donaldson and Associates, 1989).

Friehauf, K.C., 1998, Characteristics of carbonate-hosted high sulfidation state copper-gold ores in porphyry systems- a case study of the Superior district, Arizona [abs.]” Geological Association of Canada and Mineralogical Society of America, May 18-20, Quebec, Canada, Abstract Volume, p. A-58.

Friehauf, K.C., 1995, Skarn and Cu-(Au)-rich massive sulfide/acicular hematite carbonate-replacement deposits of the Superior district, Arizona [abs.]: Geology and Ore Deposits of the American Cordillera, Geological Society of Nevada, April 10-13, Reno/Sparks, Proceedings, p. A32-A33.

Fonseca, A.L. (May, 1998), Origin of Carbonate-Hosted Gold Rich Replacement Deposits and Related Mineralization Styles in the Ketz River Deposit, Yukon Territory: unpublished Masters of Science Thesis, University of British Columbia, 109p.

_____, (1998a), Structural evolution of the Ketz River gold deposit, In Yukon Exploration and Geology 1997, Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, p. 77-81.

Fox, John R. W. (November 24, 1987), *Ketz River Design Criteria for Canamax Resources Inc.*, Ross River Service Center, Orocon, Inc., 9p.

Gates, E.E. (2007), Report on the 2005 to 2007 Exploration Program on the Ketz River Project, Yukon Territory, internal report prepared on behalf of Yukon-Nevada Gold Corp., 93p.

Giroux, G.H. (2004), Mineral Resource Report on the Ketz River Project prepared on behalf of YGC Resources Inc., 68p.

_____, (November 14, 2005), Mineral Resource Update Manto zone Ketz River Project prepared on behalf of YGC Resources Inc., 76p.

Golder Associates, December 1986, Geotechnical Investigation – Proposed tailings pond camp and mill site, Ketz River Project, Yukon, report to Canamax Resources Inc.

Great Western Minerals Group, November 23, 2010, Management Discussion and Analysis, Form 51-102F1, 18p.

Harvey, T. (August 1989), Investigation Report on the Cyanidation of Peel Zone Sulphides of Ketz River Mine for Canamax Resources, Inc., Mining Engineering, Queen’s University, Kingston, Ontario, Canada, 73p.

Hodgson, C.J. (June 5, 1989), Memorandum: Ketz River Metallurgical Testwork Samples, 1958-1989, for Canamax Resources Inc., Bacon, Donaldson and Associates, Ltd., 36p.

Hodgson, C.J. (November, 1991), *Ketz River Project Exploration History and Potential*, prepared on behalf of Canamax Resources Inc., 18p.

Johnson, T.J., 2008, 2008 Ketz River Project Metallurgy Sampling Program Flowsheet, Yukon-Nevada Gold Corporation memorandum, February 8, 2008 revised distribution, 13 pp.

Johnson, T.W., 1994, Au-Cu-Ag skarn and replacement mineralization in the McLaren deposit, New World district, Park County, Montana: *Economic Geology*, v.89, p. 969-993.

Johnson, T.W., and Thompson, T., 2006, Breccia- and carbonate-hosted Au-Cu-Ag mineralization associated with the Homestake porphyry intrusive complex, New World District, Montana: *Economic Geology*, v.101, p. 955-980.

Jorgensen, N.B., and Gardiner, S.L., 1982, Iona Industries Inc.: Reserve Calculations and Evaluation of the Ketza River Property, Ross River Area, Yukon Territory, 26 pp.

Klondike Silver Corp., November 30, 2010, Management Discussion and Analysis Form 51-102F1, 18p.

Lakefield Research, 1986a, An investigation of the Recovery of Gold from samples submitted by Canamax Res. Inc. (per Ross Engineering), Progress Report no. 1, Project no. LR 3073.

_____, 1986, An investigation of the Recovery of Gold from samples submitted by Canamax Res. Inc. (per Ross Engineering), Progress Report no. 2, Project no. LR 3073, by Salter, R.S., and Jackman, I., August 11, 1986, 59 pp.

_____, 1987, An investigation of the Recovery of Gold from Ketza River project samples submitted by Canamax Resources Inc., Progress Report no. 3, Project no. LR 3073, by Salter, R.S., and Jackman, I., January 23, 1987, 82 pp.

_____, 1987a, An investigation of the Recovery of Gold from Ketza River project samples submitted by Canamax Resources Inc., Progress Report no. 4, Project no L.R. 3073, by Salter, R.S., and Jackman, I., March 3, 1987, 34 pp.

Leitch, C.H.B., et al (February 6, 1989), *Report on the Gold Losses to Tails at Ketza River Mines, Yukon*, University of British Columbia, Vancouver, B.C., 21p.

Lowe, C.H., and Larson, P.B., 1996, Geology of the Key East gold deposit, Ferry County, Washington, in Coyner, A.R., and Fahey, P.L., eds., *Geology and Ore Deposits of the American Cordillera: Geological Society of Nevada Symposium Proceedings*, Reno/Sparks, Nevada, April 1995, p. 1111-1132.

Meinert, L.D., Skarn, manto, and breccias formation in sedimentary rocks of the Cananea mining district, Sonora, Mexico: *Economic Geology*, v.77, p. 919-949.

Melis Engineering, Ltd. (July 1988), Ketza River Gold Mine, Yukon, Canada Gold Mill Operating Manual, for Canamax Resources Inc. and Pacific Trans-Ocean Resources Ltd., 170 p.

Nelson, J.L. AA (2005), Polymetallic Mantos of Pb-Zn-Ag, Fonseca, A. and Bradshaw, G., eds., *Yukon Mineral Deposit Profiles*, Yukon Geological Survey, Open File 2005-5, 163p.

Orocon Inc., (November 24, 1987, Design criteria for Ketza River Mill, memo by John Fox, 9 pp.

Parry, S.E., Harris, Cathro, M.S., Wytrwal, Z.J., 1984, Summary Report, Ketza River Property, Caamax Resources, Inc., Figure 4, geology map.

Parry, S.E., Sellmer, H.W., Wytrwal, Z.J., Toohey, J.R., (1986), 1985 Technical Summary on the Ketza River Property, prepared on behalf of Canamax Resources Inc., Pacific Trans-Ocean Resources Ltd., and Ketza River Mines Ltd., unpublished report, 58 pp.

PRA Laboratory, 2003, Comp 1: scoping flotation tests (F1 through F3 tests on Comp 1 at $P_{80}=76$ microns and $P_{80}=114$ microns), laboratory test sheets, November 14 and December 5, 2003.

_____, March 12, 2004, Comp 1: Cyanidation Tests C1 through C5 with grind size of P_{80} , and specific gravity, laboratory test sheets.

_____, September 27 and October 8, 2004, Specific gravity and bulk density determinations on drill core, PRA laboratory sheets.

_____, March 12, 2004, "Cyanidation C2-C5," excel file containing cyanide leaching results.

_____, September 27, 2004, "SG," excel file containing specific gravity results.

_____, November 3, 2003, "F1," excel file containing flotation testing results.

_____, November 19, 2003, "Cyanidation C1," excel file containing cyanide leaching results.

Queen's University at Kingston, Ontario, Canada, 1989, Cyanidation of Peel Zone Sulphides, Ketz River Mine, Canamax Resources Inc., by Harvey, T., August 1989, 17 pp.

Read, B.C. (1980), *Lower Cambrian Archeocyathid Buildups, Pelly Mountains, Yukon*, Geological Survey of Canada, Paper 78-18, 54p.

Ross Engineering (March 7, 1986), Progress Report No. 1 on An Investigation of The Recovery of Gold from Samples Submitted by Canamax Resources Incorporated, Lakefield Research, a Division of Falconbridge Ltd., 93p.

Ross Engineering (August 11, 1986), Progress Report No. 2 on An Investigation of The Recovery of Gold from Samples Submitted by Canamax Resources Incorporated, Lakefield Research a Division of Falconbridge Ltd, 68p.

Ross, Michael (April 3, 1986), Report on Ketz River Testwork Conducted by Lakefield Research, Ross Engineering, 11p.

Salter, R.S. (March 13, 1987), Progress Report No. 4 on An Investigation of The Recovery of Gold from Ketz River Project Samples Submitted by Canamax Resources Inc., Lakefield Research, a Division of Falconbridge Ltd, 38p.

SRK Consulting (April 14, 2008), NI 43-101 Technical Report – Yukon-Nevada Gold Corp., Ketz River Project, Yukon Territory, Canada, SRK Project No. 174703, April 18, 2008, 98 pp.

Steffen, Robertson, and Kirsten, February 1994, Ketz River Mine Abandonment Plan, Report no. N106101/1, prepared for Wheaton River Minerals Ltd. (underground mine production statistics).

Strathcona Mineral Services Ltd. (1988), A Review of the Ketz River Project, Watson Lake Mining District, Yukon Territory for Pacific Trans-Ocean Resources Ltd., 121p.

Stroshein, R.W. and Rodger, R.J. (May 14, 2004), Unpublished report on the Ketz River Mineral Property prepared on behalf of YGC Resources Inc., 49p.

_____, (1996), Geology and gold deposits at Ketz River, Yukon Territory, a Progress Report, In Yukon Exploration and Geology 1995, Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, p. 43-48.

Tucker, R.J. (June 1989), Report on Metallurgical Testwork on Ketz River Sulphide and Oxide Ore Samples, Cominco Engineering Services Ltd., 45p.

University of British Columbia, Department of Geological Sciences, 1989, Gold losses to tails at Ketz River Mine, Yukon, a report for Shirley Abercrombie of Canamax Resources Inc., by Leitch, C.H.B., and Knight, J.B., February 6, 1989, 9 pp.

Vincent, J., Dalsin, M., 2006a, Density determination of ore-grade mineralization, Ketz River, Yukon, unpublished YGC Resources Ltd. report, June 28, 11p.

Vincent, J., 2006b, Density determination of ore-grade mineralization using the cylindrical method and comparison with wax method, Ketz River, Yukon, unpublished YGC Resources Ltd. report, 6p.

Vincent, J., 2006c, Analytical comparison of the cylindrical and wax methods using calipers and limestone, Ketz River, Yukon, unpublished YGC Resources Ltd. report, September, 6p.

White, M.K. and Karklin, G.A. (September 12, 1986), Review of Metallurgical Testwork Conducted on the Ketz River Project for Canamax Resources Inc., Project no. 5227, Witteck Development, Inc., 16p.

Wright Engineers Ltd. (1987), Ketz River Gold Deposit, Phase II, Audit of Feasibility Study, prepared on behalf of Canamax Resources Inc., 35p.

Wytrwal, Z., 1989, Ketz metallurgical samples: Break, QB, and Knoll Zones, Canamax Resources Inc. memorandum, April, 11, 1989, 1 page (sample list for oxide sample met testing by Bacon, Donaldson and Associates, June 6, 1989).

Yukon Energy, Mines and Resources, (September 24, 2010), Information Sheet 2010-02, Explanation of Quartz Mining Act and Royalty Regulation Amendments, http://www.emr.gov.yk.ca/mining/royalty_narrative.html, Royalty_guidelines.pdf, 6 p.

Yukon Government (2008), *Guide to Hard Rock Prospecting, Exploration and Mining in Yukon - Mineral Tenure on Commissioner's Land*:
http://www.emr.gov.yk.ca/mining/mineral_tenure_commissioners_land_yukon.html

Yukon-Nevada Gold Corp., (March 30, 2011), Management Discussion and Analysis (MD&A), for the year ending December 31, 2010, <http://www.sedar.com>, 31 pp.

Zeising, G. (2005), Mineral Resource Update on the Ketz River Project prepared on behalf of YGC Resources Inc., 57p.

_____ (2004b), Report on the Ketz River Mineral Property revised on behalf of YGC Resources Inc., 49p.

_____ (August 1, 1989), Results of Spiral-table Concentration Tests (using a Reichert spiral), memo, 16 pp.

_____ (1987), An Investigation of The Recovery of Gold From Samples Submitted by Canamax Resources Incorporated, Progress Report No. 3.

_____ (1986b), An Investigation of The Recovery of Gold From Samples Submitted by Canamax Resources Incorporated, Progress Report No. 2.

20 Glossary

20.1 Mineral Resources and Reserves

20.1.1 Mineral Resources

The mineral resources and mineral reserves have been classified according to the “CIM Standards on Mineral Resources and Reserves: Definitions and Guidelines” (2000; 2005). Accordingly, the Resources have been classified as Measured, Indicated or Inferred, the Reserves have been classified as Proven, and Probable based on the Measured and Indicated Resources as defined below.

A Mineral Resource is a concentration or occurrence of diamonds, natural solid inorganic material, or natural solid fossilized organic material including base and precious metals, coal, and industrial minerals in or on the Earth’s crust in such form and quantity and of such a grade or quality that it has reasonable prospects for economic extraction. The location, quantity, grade, geological characteristics and continuity of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge.

An ‘Inferred Mineral Resource’ is that part of a Mineral Resource for which quantity and grade or quality can be estimated on the basis of geological evidence and limited sampling and reasonably assumed, but not verified, geological and grade continuity. The estimate is based on limited information and sampling gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes.

An ‘Indicated Mineral Resource’ is that part of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics can be estimated with a level of confidence sufficient to allow the appropriate application of technical and economic parameters, to support mine planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough for geological and grade continuity to be reasonably assumed.

A ‘Measured Mineral Resource’ is that part of a Mineral Resource for which quantity, grade or quality, densities, shape, physical characteristics are so well established that they can be estimated with confidence sufficient to allow the appropriate application of technical and economic parameters, to support production planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough to confirm both geological and grade continuity.

20.1.2 Mineral Reserves

A Mineral Reserve is the economically mineable part of a Measured or Indicated Mineral Resource demonstrated by at least a Preliminary Feasibility Study. This Study must include adequate information on mining, processing, metallurgical, economic and other relevant factors that demonstrate, at the time of reporting, that economic extraction can be justified. A Mineral Reserve includes diluting materials and allowances for losses that may occur when the material is mined.

A 'Probable Mineral Reserve' is the economically mineable part of an Indicated, and in some circumstances a Measured Mineral Resource demonstrated by at least a Preliminary Feasibility Study. This Study must include adequate information on mining, processing, metallurgical, economic, and other relevant factors that demonstrate, at the time of reporting, that economic extraction can be justified.

A 'Proven Mineral Reserve' is the economically mineable part of a Measured Mineral Resource demonstrated by at least a Preliminary Feasibility Study. This Study must include adequate information on mining, processing, metallurgical, economic, and other relevant factors that demonstrate, at the time of reporting, that economic extraction is justified.

20.2 Glossary

Table 20.2.1: Glossary

Term	Definition
Assay:	The chemical analysis of mineral samples to determine the metal content.
Capital Expenditure:	All other expenditures not classified as operating costs.
Composite:	Combining more than one sample result to give an average result over a larger distance.
Concentrate:	A metal-rich product resulting from a mineral enrichment process such as gravity concentration or flotation, in which most of the desired mineral has been separated from the waste material in the ore.
Crushing:	Initial process of reducing ore particle size to render it more amenable for further processing.
Cut-off Grade (CoG):	The grade of mineralized rock, which determines as to whether or not it is economic to recover its gold content by further concentration.
Dilution:	Waste, which is unavoidably mined with ore.
Dip:	Angle of inclination of a geological feature/rock from the horizontal.
Fault:	The surface of a fracture along which movement has occurred.
Footwall:	The underlying side of an orebody or stope.
Gangue:	Non-valuable components of the ore.
Grade:	The measure of concentration of gold within mineralized rock.
Hanging wall:	The overlying side of an orebody or stope.
Haulage:	A horizontal underground excavation which is used to transport mined ore.
Igneous:	Primary crystalline rock formed by the solidification of magma.
Kriging:	An interpolation method of assigning values from samples to blocks that minimizes the estimation error.
Level:	Horizontal tunnel the primary purpose is the transportation of personnel and materials.
Lithological:	Geological description pertaining to different rock types.
Material Properties:	Mine properties.
Milling:	A general term used to describe the process in which the ore is crushed and ground and subjected to physical or chemical treatment to extract the valuable metals to a concentrate or finished product.
Mineral/Mining Lease:	A lease area for which mineral rights are held.
Mineral Inventory:	A tabulation of tonnes, grade, and contained metal of all estimated material remaining in the ground that has no economic, mining, or metallurgical parameters applied, and not dependent upon the current fair-market metal price; tables can include data above a specific cutoff grade to help assess potential gross metal quantities and average metal grades.
Mining Assets:	The Material Properties and Significant Exploration Properties.
Ore Reserve:	See Mineral Reserve.
Oxide:	An oxide-bearing mineral; an anion of oxygen in the oxidation state of -2 or a chemical compound formerly containing an oxygen in this state; result when elements are oxidized by oxygen in air.
Pillar:	Rock left behind to help support the excavations in an underground mine.
RoM:	Run-of-Mine.
Sedimentary:	Pertaining to rocks formed by the accumulation of sediments, formed by the erosion of other rocks.

Shaft:	An opening cut downwards from the surface for transporting personnel, equipment, supplies, ore and waste.
Sill:	A thin, tabular, horizontal to sub-horizontal body of igneous rock formed by the injection of magma into planar zones of weakness.
Smelting:	A high temperature pyrometallurgical operation conducted in a furnace, in which the valuable metal is collected to a molten matte or doré phase and separated from the gangue components that accumulate in a less dense molten slag phase.
Stope:	Underground void created by mining.
Stratigraphy:	The study of stratified rocks in terms of time and space.
Strike:	Direction of line formed by the intersection of strata surfaces with the horizontal plane, always perpendicular to the dip direction.
Sulfide:	A sulfur bearing mineral.
Tailings:	Finely ground waste rock from which valuable minerals or metals have been extracted.
Thickening:	The process of concentrating solid particles in suspension.
Total Expenditure:	All expenditures including those of an operating and capital nature.
Variogram:	A statistical representation of the characteristics (usually grade).

Abbreviations

The metric system has been used throughout this report unless otherwise stated. All currency is in U.S. dollars. Market prices are reported in US\$ per troy oz of gold and silver. Tonnes are metric of 1,000kg, or 2,204.6lbs. Tables 20.2.1 and 20.2.2 contain general mining terms and may be used in this report.

Table 20.2.2: Abbreviations

Abbreviation	Unit or Term
A	ampere
AA	atomic absorption
A/m ²	amperes per square meter
ANFO	ammonium nitrate fuel oil
Ag	silver
Au	gold
AuEq	gold equivalent grade
°C	degrees Centigrade
CCD	counter-current decantation
CIL	carbon-in-leach
CoG	Cut-off-Grade
cm	centimeter
cm ²	square centimeter
cm ³	cubic centimeter
cfm	cubic feet per minute
ConfC	confidence code
CRec	core recovery
CSS	closed-side setting
CTW	estimated true width
°	degree (degrees)
dia.	diameter
EIS	Environmental Impact Statement
EMP	Environmental Management Plan
FA	fire assay
ft	foot (feet)
ft ²	square foot (feet)
ft ³	cubic foot (feet)
g	gram
gal	gallon
g-mol	gram-mole
gpm	gallons per minute
g/t	grams per tonne
ha	hectares
HDPE	Height Density Polyethylene
hp	horsepower
HTW	horizontal true width
ICP	induced couple plasma
ID2	inverse-distance squared
ID3	inverse-distance cubed
IFC	International Finance Corporation
ILS	Intermediate Leach Solution
kA	kiloamperes
kg	kilograms
km	kilometer
km ²	square kilometer
koz	thousand troy ounces

Abbreviation	Unit or Term
kt	thousand tonnes
kt/d	thousand tonnes per day
kt/y	thousand tonnes per year
kV	kilovolt
kW	kilowatt
kWh	kilowatt-hour
kWh/t	kilowatt-hour per metric tonne
l	liter
lps	liters per second
lb	pound
LHD	Long-Haul Dump truck
LLDDP	Linear Low Density Polyethylene Plastic
LOI	Loss On Ignition
LoM	Life-of-Mine
lps	liters per second
m	meter
m ²	square meter
m ³	cubic meter
masl	meters above sea level
MARN	Ministry of the Environment and Natural Resources
MDA	Mine Development Associates
mg/l	milligrams/liter
mm	millimeter
mm ²	square millimeter
mm ³	cubic millimeter
MME	Mine & Mill Engineering
Moz	million troy ounces
Mt	million tonnes
MTW	measured true width
MW	million watts
m.y.	million years
NGO	non-governmental organization
NI 43-101	Canadian National Instrument 43-101
OSC	Ontario Securities Commission
oz	troy ounce
%	Percent
pct	Percent
PLC	Programmable Logic Controller
PLS	Pregnant Leach Solution
PMF	probable maximum flood
ppb	parts per billion
ppm	parts per million
QA/QC	Quality Assurance/Quality Control
RC	rotary circulation drilling
RoM	Run-of-Mine
RQD	Rock Quality Description
SEC	U.S. Securities & Exchange Commission
s	second
SG	specific gravity
SPT	standard penetration testing
st	short ton (2,000 pounds)
t	tonne (metric ton) (2,204.6 pounds)
t/h	tonnes per hour
t/d	tonnes per day
t/y	tonnes per year

Abbreviation	Unit or Term
TSF	total suspended particulates
TSP	tailings storage facility
μ	micron or microns
V	volts
VFD	variable frequency drive
W	watt
XRD	x-ray diffraction
yr	year

21 Date and Signature Page (Item 24)

The undersigned prepared this Technical Report, titled *NI 43-101 Technical Report, Ketz River Project, Yukon Territory, Canada*, dated June 28, 2011, with an effective date of 25 January, 2010 in support of the public disclosure of Mineral Resource estimates for the Ketz River Property as of June 28, 2011. The format and content of this report are intended to conform to Form 43-101F1 of National Instrument 43-101 (NI 43-101) of the Canadian Securities Administrators.

Signed and Sealed
Todd Johnson, P.E.
No. 16748, Nevada

28 June 2011

Signed and Sealed
Karl Swanson,
MAusIMM (No. 304871)
SME (No. 4043076)

28 June 2011

Signed and Sealed
Mark Odell, P.E.
No. 13708, Nevada

28 June 2011

Signed and Sealed
John Fox, P.Eng
No. 12578, British Columbia

28 June 2011

Appendix A

Certificates of Author

CERTIFICATE OF AUTHOR

Todd W. Johnson, P.E., MAusIMM
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Re: *NI 43-101 Technical Report, Yukon-Nevada Gold Corp., Ketza River Project, Yukon Territory, Canada*, and dated 28 June 2011, with an effective date of 25 January, 2010:

I, Todd W. Johnson, P.E., MAusIMM, do hereby certify that:

- 1) As of April 1, 2010 and including up to June 28, 2011, I am employed as Vice President of Exploration of: Yukon-Nevada Gold Corp.
900 – 688 West Hastings St., Vancouver, BC V6B 1P1 Canada

I was employed as an independent geological consultant with Queenstake Resources USA, Inc. from January 2008 to March 31, 2010. My business address at that time was:
550 N. McCarran Blvd. #254 Sparks, NV 89431 USA

- 2) I graduated with a Bachelor of Science degree in Geology from Washington State University in 1988. In addition I obtained a Masters of Science degree in Geology from Washington State University in 1991. In addition I obtained a second Masters of Science degree in Geological Engineering from the University of Nevada-Reno in 2003.
- 3) I am a member of the Australian Institute of Mining and Metallurgy (AusIMM) #227374. In addition, I am a registered Professional Engineer (P.E.) #16748 in the State of Nevada (USA). I am also an active member of the following professional societies: Society of Economic Geologists, Association of Engineering Geologists, the Geological Society of Nevada, and the Association of Civil Engineers.
- 4) I have worked as a geologist or geological engineer for a total of 20 years since my 1991 graduation from university.
- 5) I have read the definition of “qualified person” set out in National Instrument 43-101 (“NI 43-101”) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a “qualified person” for the Purposes on NI 43-101.
- 6) I am responsible for the preparation of all sections of the technical report titled *NI 43-101 Technical Report, Yukon-Nevada Gold Corp., Ketza River Project, Yukon Territory, Canada*, and dated 28 June 2011, with an effective date of 25 January, 2010 (“the Technical Report”) relating to the Ketza River property. I visited the Ketza River property from March 4-28, 2008, and again from May 8-15, 2008.

- 7) I have had prior involvement with the property that is the subject of the Technical Report. I was responsible for supervising a 12 drill hole geotechnical drilling program at the Ketz River property from March 4-28, 2008, and also for selecting and compositing several diamond drill core samples for metallurgy testwork during the same time period. I also helped log Ketz River exploration drill holes from May 9-10, 2008.
- 8) I am not aware of any material fact or material change with respect to the subject matter of the Technical Report that is not reflected in the Technical Report, the omission to disclosure which makes the Technical Report misleading.
- 9) I am not independent of the issuer applying all of the tests in Section 1.4 of National Instrument 43-101. I am currently employed by Yukon-Nevada Gold Corp. (YNG) and I have been granted stock options with YNG in November 2009 and again in April 2010. I do not have any other interest in adjoining properties in the Ketz River project area; however, I have conducted additional work on several other properties owned or evaluated by YNG or it's subsidiary companies:
- a. Silver Valley Project from May 11 to June 19, 2008 located approximately 6 km to the east of the Ketz River Project in the Yukon;
 - b. Discovery Creek Project near Mount Nansen, Yukon Territory from Sept. 8-14, 2008;
 - c. Skukum Creek Project north of Carcross, Yukon Territory from September 15-23, 2008 and again from June 9 to September 18, 2009;
 - d. Jerritt Canyon Mine property, Nevada (USA) on numerous occasions from 2008 to 2011;

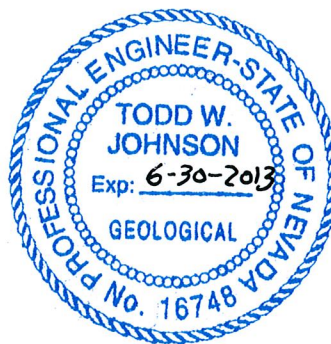
I was paid a daily rate for geological consulting services performed at the Ketz River Project, and other projects listed above from January 2008 up until March 31, 2010. I have been a salary employee, Vice President of Exploration, and Officer for YNG starting on April 1, 2010 to the present. I do not have any other interests relating to the Ketz River Project.

- 10) I have read National Instrument 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.
- 11) I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them for regulatory purposes, including electronic publication in the public company files on their websites accessible by the public, of the Technical Report.
- 12) As of the date of this certificate, to the best of my knowledge, information and belief, the Technical Report contains all the scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated this 28th Day of June 2011.



Todd W. Johnson, M.Sc., P.E., MAusIMM



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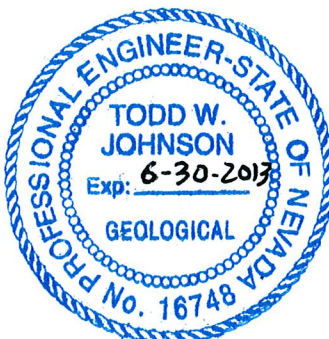
TO: British Columbia Securities Commission
Alberta Securities Commission
Saskatchewan Securities Commission
Manitoba Securities Commission
Ontario Securities Commission
Commission des valeurs mobilières du Québec
Nunavut Legal Registry
Office of the Administrator, New Brunswick
Nova Scotia Securities Commission
Registrar of Securities, Prince Edward Island
Securities Commission of Newfoundland
Registrar of Securities, Government of the Yukon Territories
Securities Registry, Government of the Northwest Territories

I, Todd W. Johnson, P.E., MAusIMM, do hereby consent to the filing of the technical report titled *NI 43-101 Technical Report, Yukon-Nevada Gold Corp., Ketza River Project, Yukon Territory, Canada*, and dated 28 June 2011, with an effective date of 25 January, 2010 (the "Technical Report") with the securities regulatory authorities referred to above. I am a "qualified person" as defined by National Instrument 43-101 and I consent to the extracts from, or summary of the Technical Report in such written disclosure. I also confirm that as a qualified person that I have read the written disclosure being filed and that it fairly and accurately represents the information in the Technical Report that supports the disclosure.

Dated this 28th day of June 2011.



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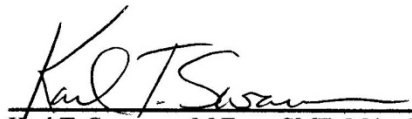
Re: *NI 43-101 Technical Report, Yukon-Nevada Gold Corp., Ketz River Project, Yukon Territory, Canada*, and dated 28 June 2011, with an effective date of 25 January, 2010:

I, Karl T. Swanson, SME, MAusIMM, do hereby certify that:

- 1) As of June 28, 2011, I am an independent geological and mining engineering consultant at:
Karl Swanson
PO Box 86
Larkspur, CO 80118, USA
- 2) I graduated with a Bachelor of Science degree in Geological Engineering from Colorado School of Mines in 1990. In addition, I obtained a Master of Engineering degree in Mining Engineering from Colorado School of Mines in 1994.
- 3) I am a registered member of the Society for Mining, Metallurgy & Exploration (SME) #4043076. I am a member of the Australian Institute of Mining and Metallurgy (AusIMM) #304871.
- 4) I have worked as a geological and mining engineer for a total of 20 years since my 1990 graduation from university.
- 5) I have read the definition of "qualified person" set out in National Instrument 43-101 ("NI 43-101") and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "qualified person" for the Purposes on NI 43-101.
- 6) I am responsible for the preparation of sections 15.1 to 15.11, and 15.14 of the technical report titled *NI 43-101 Technical Report, Ketz River Project, Yukon-Nevada Gold Corp., Yukon Territory, Canada*, and dated 28 June 2011, with an effective date of 25 January, 2010 ("the Technical Report") relating to the Ketz River property.
- 7) I have not had prior involvement with the property that is the subject of the Technical Report.
- 8) I am independent of the issuer applying all of the tests in Section 1.4 of National Instrument 43-101.

- 9) I was paid a daily rate for geological consulting services performed at the Ketz River Project and do not have any other interests relating to the project. I did not visit the Ketz River property. I do not have any interest in adjoining properties in the Ketz River project area; however, I did conduct work on the adjacent Silver Valley Project from December 2009 to January 2010 located approximately 2 kilometers to the east of the Ketz River Project that is also owned by Yukon-Nevada Gold Corp. I have also conducted work (from early 2010 to June 28, 2011) on the Jerritt Canyon property in Elko, Nevada, USA owned by Queenstake Resources USA, Inc which is a wholly owned subsidiary company owned by Yukon-Nevada Gold Corp.
- 10) I have read National Instrument 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.
- 11) I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them for regulatory purposes, including electronic publication in the public company files on their websites accessible by the public, of the Technical Report.
- 12) As of the date of this certificate, to the best of my knowledge, information and belief, the Technical Report contains all the scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated this 28th Day of June 2011.



Karl T. Swanson, M.Eng., SME, MAusIMM

PO Box 86
Larkspur, CO 80118, USA
Fax: (501) 638-9162
E:mail: karl.swanson@yahoo.com

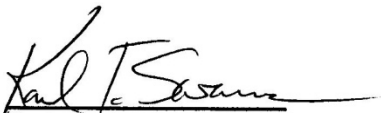
CONSENT OF AUTHOR

Karl T. Swanson, SME, MAusIMM
PO Box 86
Larkspur, CO 80118, USA
Fax: (501) 638-9162
E:mail: karl.swanson@yahoo.com

TO: British Columbia Securities Commission
Alberta Securities Commission
Saskatchewan Securities Commission
Manitoba Securities Commission
Ontario Securities Commission
Commission des valeurs mobilières du Québec
Nunavut Legal Registry
Office of the Administrator, New Brunswick
Nova Scotia Securities Commission
Registrar of Securities, Prince Edward Island
Securities Commission of Newfoundland
Registrar of Securities, Government of the Yukon Territories
Securities Registry, Government of the Northwest Territories

I, Karl T. Swanson, SME, MAusIMM, do hereby consent to the filing of the technical report titled *NI 43-101 Technical Report, Yukon-Nevada Gold Corp., Ketz River Project, Yukon Territory, Canada*, and dated 28 June 2011, with an effective date of 25 January, 2010 (the "Technical Report") with the securities regulatory authorities referred to above. I am a "qualified person" as defined by National Instrument 43-101 and I consent to the extracts from, or summary of the Technical Report in such written disclosure. I also confirm that as a qualified person that I have read the written disclosure being filed and that it fairly and accurately represents the information in the Technical Report that supports the disclosure.

Dated this 28th day of June 2011.



Karl T. Swanson, M.Eng., SME, MAusIMM

PO Box 86
Larkspur, CO 80118, USA
Fax: (501) 638-9162
E:mail: karl.swanson@yahoo.com



CERTIFICATE OF AUTHOR

Mark A. Odell, P.E.
Practical Mining LLC
313 S. Greencrest Lane
Spring Creek, Nevada 89815
775-778-9276

Re: *NI 43-101 Technical Report, Yukon-Nevada Gold Corp., Ketz River Project, Yukon Territory, Canada*, and dated 28 June 2011, with an effective date of 25 January, 2010:

I, Mark A. Odell, P.E., do hereby certify that:

- 1) As of June 28th, 2011, I am a consulting mining engineer at:

Practical Mining LLC
313 S. Greencrest Lane
Spring Creek, Nevada 89815
775-778-9276

- 2) I am a Registered Professional Mining Engineer in the State of Nevada (# 13708), and a Registered Member (#2402150) of the Society for Mining, Metallurgy and Exploration (SME).
- 3) I am a graduate of The Colorado School of Mines, Golden, Colorado with a Bachelor of Science Degree in Mining Engineering in 1985. I have practiced my profession continuously since 1985.
- 4) Since 1985, I have been involved with mine engineering and operations for base and precious metals and coal in both surface and underground environments, in the western United States.
- 5) I have read the definition of “qualified person” set out in National Instrument 43-101 (“NI 43-101”) and certify that by reason of my experience and qualifications and good standing with proper designation within a recognized professional organization fully meet the criteria as a Qualified Person as defined under the terms of NI 43-101.
- 6) I am a contract consulting engineer for the Issuer and landowner Yukon-Nevada Gold Corp. and have inspected the Ketz River site in October 2010.
- 7) I am responsible for the preparation of section 15.12 and 15.13 of the Technical Report titled *NI 43-101 Technical Report, Yukon-Nevada Gold Corp., Ketz River Project, Yukon Territory, Canada*, and dated 28 June 2011, with an effective date of January 25, 2010 (“the Technical Report”) relating to the Ketz River property. I visited the Ketz River property from October 9-11, 2010.

- 8) As of the date of this certificate, to the best of my knowledge, information and belief, this Technical Report contains all the scientific and technical information in my field of expertise that is required to make the Technical Report not misleading.
- 9) I am independent of the Issuer in accordance with the application of Section 1.4 of NI 43-101. However, I have worked previously (from July 2003 to June 2005, and again from 2009 to the present as Mine Manager and mining consultant, respectively) at the Jerritt Canyon mine in Elko, Nevada, USA with Queenstake Resources USA, Inc. which is a wholly-owned subsidiary company of Yukon-Nevada Gold Corp. I last visited the Jerritt Canyon mine on May 18, 2011.
- 10) I have read National Instrument 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.
- 11) I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them for regulatory purposes, including electronic publication in the public company files on their websites accessible by the public, of the Technical Report.
- 12) As of the date of this certificate, to the best of my knowledge, information and belief, the Technical Report contains all the scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated this 28th Day of June 2011.



Mark A. Odell, P.E.

Practical Mining LLC
313 S. Greencrest Lane
Spring Creek, Nevada 89815
775-778-9276
markodell@practicalmining.com





CONSENT OF AUTHOR

Mark A. Odell, PE
Practical Mining LLC
313 S. Greencrest Lane
Spring Creek, Nevada 89815
775-778-9276
markodell@practicalmining.com

TO: British Columbia Securities Commission
Alberta Securities Commission
Saskatchewan Securities Commission
Manitoba Securities Commission
Ontario Securities Commission
Commission des valeurs mobilières du Québec
Nunavut Legal Registry
Office of the Administrator, New Brunswick
Nova Scotia Securities Commission
Registrar of Securities, Prince Edward Island
Securities Commission of Newfoundland
Registrar of Securities, Government of the Yukon Territories
Securities Registry, Government of the Northwest Territories

I, Mark Odell, P.E., do hereby consent to the filing of the technical report titled *NI 43-101 Technical Report, Yukon-Nevada Gold Corp., Ketz River Project, Yukon Territory, Canada*, and dated 28 June 2011, with an effective date of January 25, 2010 (the "Technical Report") with the securities regulatory authorities referred to above. I am a "qualified person" as defined by National Instrument 43-101 and I consent to the extracts from, or summary of the Technical Report in such written disclosure. I also confirm that as a qualified person that I have read the written disclosure being filed and that it fairly and accurately represents the information in the Technical Report that supports the disclosure.

Dated this 28th day of June 2011.

Mark A. Odell, P.E.

Practical Mining LLC
313 S. Greencrest Lane
Spring Creek, Nevada 89815
775-778-9276
markodell@practicalmining.com



CERTIFICATE of AUTHOR

John R.W. Fox, P.Eng
302 – 304 W. Cordova St.
Vancouver, British Columbia, Canada V6B 1E8
(604) 681-6355
Fax: (604) 681-4415
E:mail: laurion@telus.net

Re: *NI 43-101 Technical Report, Yukon-Nevada Gold Corp., Ketza River Project, Yukon Territory, Canada*, and dated 28 June 2011, with an effective date of 25 January, 2010:

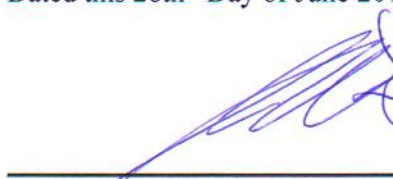
I, John R.W. Fox, P.Eng, do hereby certify that:

- 1) As of 28 June, 2011, I am a consulting metallurgical engineer at:
John Fox, Laurion Consulting Inc.
302 – 304 W. Cordova St.
Vancouver, British Columbia, Canada V6B 1E8
- 2) I graduated with a Bachelor of Science degree in Applied Minerals Sciences from the University of Leeds (UK) in 1971.
- 3) I am a member in good standing of the Association of Professional Engineers and Geoscientists of the Province of British Columbia (No. 12578).
- 4) I have practiced my profession continuously for a total of 40 years since my 1971 graduation from university.
- 5) I have read the definition of “qualified person” set out in National Instrument 43-101 (“NI-43-101”) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a “qualified person” for the Purposes on NI 43-101.
- 6) I am responsible for the preparation of section 15 of the technical report titled *NI 43-101 Technical Report, Ketza River Project, Yukon Territory, Canada*, and dated 28 June 2011, with an effective date of 25 January, 2011 (“the Technical Report”) relating to the Ketza River property. I visited the property in June 2008.
- 7) I have had prior involvement with the property that is the subject of the Technical Report. I helped design the original Canamax mill in 1986.
- 8) I am not aware of any material fact or material change with respect to the subject matter of the Technical Report that is not reflected in the Technical Report, the omission to disclosure which makes the Technical Report misleading.
- 9) I am independent of the issuer applying all of the tests in Section 1.4 of National Instrument 43-101.

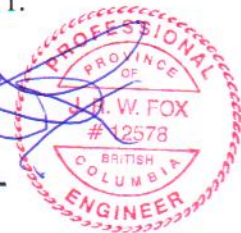


- 10) I was paid a daily rate for metallurgical consulting services performed at the Ketza River Project and do not have any other interests relating to the project. I do not have any interest in adjoining properties in the Ketza River project area;
- 11) I have read National Instrument 43-101 and Form 43-101F1, and the Technical Report has been prepared in compliance with that instrument and form.
- 12) I consent to the filing of the Technical Report with any stock exchange and other regulatory authority and any publication by them for regulatory purposes, including electronic publication in the public company files on their websites accessible by the public, of the Technical Report.
- 13) As of the date of this certificate, to the best of my knowledge, information and belief, the Technical Report contains all the scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated this 28th Day of June 2011.



John R.W. Fox, P.Eng



302 – 304 W. Cordova St.
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(604) 681-6355
Fax: (604) 681-4415
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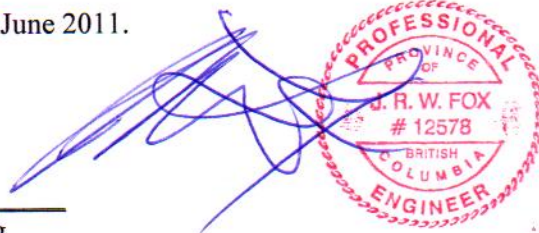
CONSENT OF AUTHOR

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TO: British Columbia Securities Commission
Alberta Securities Commission
Saskatchewan Securities Commission
Manitoba Securities Commission
Ontario Securities Commission
Commission des valeurs mobilières du Québec
Nunavut Legal Registry
Office of the Administrator, New Brunswick
Nova Scotia Securities Commission
Registrar of Securities, Prince Edward Island
Securities Commission of Newfoundland
Registrar of Securities, Government of the Yukon Territories
Securities Registry, Government of the Northwest Territories

I, John R.W. Fox, P.Eng., do hereby consent to the filing of the technical report titled *NI-43-101 Technical Report, Ketz River Project, Yukon Territory, Canada*, and dated 28 June 2011, with an effective date of 25 January, 2010 (the "Technical Report") with the securities regulatory authorities referred to above. I am a "qualified person" as defined by National Instrument 43-101 and I consent to the extracts from, or summary of the Technical Report in such written disclosure. I also confirm that as a qualified person that I have read the written disclosure being filed and that it fairly and accurately represents the information in the Technical Report that supports the disclosure.

Dated this 28th day of June 2011.



John R.W. Fox, P.Eng
302 – 304 W. Cordova St.
Vancouver, British Columbia V6B 1E8
(604) 681-6355
Fax: (604) 681-4415
E:mail: laurion@telus.net

Appendix B

List of Claims

Project	District name	NTS sheet No.	Registration type	Claim Name and No.	Grant No.	Non standard size	Claim owner	Claim expiry date	Claim status	Acres for Leases	Quartz lease no.
Ketza River	Watson Lake	105f09	Quartz	AMBROSE 1	Y426124		KETZA RIVER HOLDINGS LTD.	1-May-2015	Active		
Ketza River	Watson Lake	105f09	Quartz	AMBROSE 2	Y4A5008		KETZA RIVER HOLDINGS LTD.	1-May-2015	Active		
Ketza River	Watson Lake	105f09	Quartz	ANN No. 2	71527		KETZA RIVER HOLDINGS LTD.	14-Dec-2030	Active	45.62	OL00193
Ketza River	Watson Lake	105f09	Quartz	FRED No. 3	Y 16895	Full Quartz fraction (25+ acres)	KETZA RIVER HOLDINGS LTD.	14-Dec-2030	Active	0.36	OL00198
Ketza River	Watson Lake	105f09	Quartz	FURY No. 4	Y 16896	Full Quartz fraction (25+ acres)	KETZA RIVER HOLDINGS LTD.	14-Dec-2030	Active	17.14	OL00199
Ketza River	Watson Lake	105f09	Quartz	FURY No. 1	71077	Full Quartz fraction (25+ acres)	KETZA RIVER HOLDINGS LTD.	14-Dec-2030	Active	53.36	OL00188
Ketza River	Watson Lake	105f09	Quartz	FURY No. 25	69833		KETZA RIVER HOLDINGS LTD.	14-Dec-2030	Active	33.49	OL00181
Ketza River	Watson Lake	105f09	Quartz	FURY No. 26	69834		KETZA RIVER HOLDINGS LTD.	14-Dec-2030	Active	51.62	OL00182
Ketza River	Watson Lake	105f09	Quartz	FURY No. 27	69835		KETZA RIVER HOLDINGS LTD.	14-Dec-2030	Active	40.67	OL00183
Ketza River	Watson Lake	105f09	Quartz	FURY No. 28	69836		KETZA RIVER HOLDINGS LTD.	14-Dec-2030	Active	27.83	OL00184
Ketza River	Watson Lake	105f09	Quartz	FURY No. 29	69837		KETZA RIVER HOLDINGS LTD.	14-Dec-2030	Active	29.03	OL00185
Ketza River	Watson Lake	105f09	Quartz	FURY No. 30	69838		KETZA RIVER HOLDINGS LTD.	14-Dec-2030	Active	36.56	OL00186
Ketza River	Watson Lake	105f09	Quartz	FURY No. 32	69839		KETZA RIVER HOLDINGS LTD.	14-Dec-2030	Active	40	OL00187
Ketza River	Watson Lake	105f09	Quartz	KETZA 103	YB00958		KETZA RIVER HOLDINGS LTD.	25-Mar-2032	Active		
Ketza River	Watson Lake	105f09	Quartz	KON 1	YA56473		KETZA RIVER HOLDINGS LTD.	25-Mar-2032	Active	46.1	3462
Ketza River	Watson Lake	105f09	Quartz	KON 2	YA56474		KETZA RIVER HOLDINGS LTD.	25-Mar-2032	Active	47.7	3473
Ketza River	Watson Lake	105f09	Quartz	KON 3	YA56475		KETZA RIVER HOLDINGS LTD.	25-Mar-2032	Active	50.3	3464
Ketza River	Watson Lake	105f09	Quartz	KON 4	YA56476		KETZA RIVER HOLDINGS LTD.	25-Mar-2032	Active	43.6	3465
Ketza River	Watson Lake	105f09	Quartz	KON 5	YA56477		KETZA RIVER HOLDINGS LTD.	25-Mar-2032	Active	51.5	3466
Ketza River	Watson Lake	105f09	Quartz	KON 6	YA56478		KETZA RIVER HOLDINGS LTD.	25-Mar-2032	Active	45.7	3467
Ketza River	Watson Lake	105f09	Quartz	KON 7	YA56479		KETZA RIVER HOLDINGS LTD.	25-Mar-2032	Active	51.6	3468
Ketza River	Watson Lake	105f09	Quartz	KON 8	YA56480		KETZA RIVER HOLDINGS LTD.	25-Mar-2032	Active	44.1	3469
Ketza River	Watson Lake	105f09	Quartz	KON 9	YA56481		KETZA RIVER HOLDINGS LTD.	25-Mar-2032	Active	42.2	3470
Ketza River	Watson Lake	105f09	Quartz	KON 10	YA56482		KETZA RIVER HOLDINGS LTD.	25-Mar-2032	Active	41.1	3471
Ketza River	Watson Lake	105f09	Quartz	KON 11	YA56483		KETZA RIVER HOLDINGS LTD.	25-Mar-2032	Active	52.1	3472
Ketza River	Watson Lake	105f09	Quartz	KON 12	YA56484		KETZA RIVER HOLDINGS LTD.	25-Mar-2032	Active	47.7	3473
Ketza River	Watson Lake	105f09	Quartz	KON 13	YA56485		KETZA RIVER HOLDINGS LTD.	25-Mar-2032	Active	51.7	3474
Ketza River	Watson Lake	105f09	Quartz	KON 14	YA56486		KETZA RIVER HOLDINGS LTD.	25-Mar-2032	Active	51.7	3475
Ketza River	Watson Lake	105f09	Quartz	KON 15	YA56487		KETZA RIVER HOLDINGS LTD.	25-Mar-2032	Active	50.5	3476
Ketza River	Watson Lake	105f09	Quartz	KON 16	YA56488		KETZA RIVER HOLDINGS LTD.	1-May-2015	Active		
Ketza River	Watson Lake	105f09	Quartz	KON 17	YA56489		KETZA RIVER HOLDINGS LTD.	1-May-2015	Active		
Ketza River	Watson Lake	105f09	Quartz	KON 18	YA56490		KETZA RIVER HOLDINGS LTD.	1-May-2015	Active		
Ketza River	Watson Lake	105f09	Quartz	KON 19	YB45994		KETZA RIVER HOLDINGS LTD.	1-May-2015	Active		
Ketza River	Watson Lake	105f09	Quartz	KON 20	YB45995		KETZA RIVER HOLDINGS LTD.	1-May-2015	Active		
Ketza River	Watson Lake	105f09	Quartz	KON 21	YA56493		KETZA RIVER HOLDINGS LTD.	1-May-2015	Active		
Ketza River	Watson Lake	105f09	Quartz	KON 22	YA56494	Full Quartz fraction (25+ acres)	KETZA RIVER HOLDINGS LTD.	25-Mar-2032	Active	15.2	3477
Ketza River	Watson Lake	105f09	Quartz	KON 23	YA70931		KETZA RIVER HOLDINGS LTD.	25-Mar-2032	Active	28.6	3478
Ketza River	Watson Lake	105f09	Quartz	KON 24	YA70935		KETZA RIVER HOLDINGS LTD.	25-Mar-2032	Active	3.08	3479
Ketza River	Watson Lake	105f09	Quartz	KON 25	YA70936		KETZA RIVER HOLDINGS LTD.	25-Mar-2032	Active	30.4	3480
Ketza River	Watson Lake	105f09	Quartz	KON 26	YA70937		KETZA RIVER HOLDINGS LTD.	25-Mar-2032	Active	19.4	3481
Ketza River	Watson Lake	105f09	Quartz	KON 27	YA70938		KETZA RIVER HOLDINGS LTD.	1-May-2015	Active		
Ketza River	Watson Lake	105f09	Quartz	KON 28	YA70940		KETZA RIVER HOLDINGS LTD.	1-May-2015	Active		
Ketza River	Watson Lake	105f09	Quartz	KON 29	YA70940		KETZA RIVER HOLDINGS LTD.	1-May-2015	Active		
Ketza River	Watson Lake	105f09	Quartz	KON 30	YA70941		KETZA RIVER HOLDINGS LTD.	1-May-2015	Active		
Ketza River	Watson Lake	105f09	Quartz	KON 31	YA70942		KETZA RIVER HOLDINGS LTD.	1-May-2015	Active		
Ketza River	Watson Lake	105f09	Quartz	KON 32	YA70943		KETZA RIVER HOLDINGS LTD.	1-May-2015	Active		
Ketza River	Watson Lake	105f09	Quartz	KON 33	YA70944		KETZA RIVER HOLDINGS LTD.	1-May-2015	Active		
Ketza River	Watson Lake	105f09	Quartz	KON 34	YA70945		KETZA RIVER HOLDINGS LTD.	1-May-2015	Active		
Ketza River	Watson Lake	105f09	Quartz	KON 45	YA70956		KETZA RIVER HOLDINGS LTD.	1-May-2015	Active		
Ketza River	Watson Lake	105f09	Quartz	KON 46	YA70957		KETZA RIVER HOLDINGS LTD.	1-May-2015	Active		
Ketza River	Watson Lake	105f09	Quartz	KON 47	YA70958		KETZA RIVER HOLDINGS LTD.	1-May-2015	Active		
Ketza River	Watson Lake	105f09	Quartz	KON 48	YA70959		KETZA RIVER HOLDINGS LTD.	1-May-2015	Active		
Ketza River	Watson Lake	105f09	Quartz	KON 49	YA70960		KETZA RIVER HOLDINGS LTD.	1-May-2015	Active		
Ketza River	Watson Lake	105f09	Quartz	KON 50	YA70961		KETZA RIVER HOLDINGS LTD.	1-May-2015	Active		
Ketza River	Watson Lake	105f09	Quartz	KON 51	YA70962		KETZA RIVER HOLDINGS LTD.	1-May-2015	Active		
Ketza River	Watson Lake	105f09	Quartz	KON 52	YA70963		KETZA RIVER HOLDINGS LTD.	1-May-2015	Active		
Ketza River	Watson Lake	105f09	Quartz	KON 53	YA70964		KETZA RIVER HOLDINGS LTD.	1-May-2015	Active		
Ketza River	Watson Lake	105f09	Quartz	KON 54	YA70965		KETZA RIVER HOLDINGS LTD.	1-May-2015	Active		
Ketza River	Watson Lake	105f09	Quartz	KON 55	YA70966		KETZA RIVER HOLDINGS LTD.	1-May-2015	Active		
Ketza River	Watson Lake	105f09	Quartz	KON 56	YA70967		KETZA RIVER HOLDINGS LTD.	1-May-2015	Active		
Ketza River	Watson Lake	105f09	Quartz	KON 57	YA70968		KETZA RIVER HOLDINGS LTD.	1-May-2015	Active		
Ketza River	Watson Lake	105f09	Quartz	KON 58	YA70969		KETZA RIVER HOLDINGS LTD.	1-May-2015	Active		
Ketza River	Watson Lake	105f09	Quartz	KON 59	YA70970		KETZA RIVER HOLDINGS LTD.	1-May-2015	Active		
Ketza River	Watson Lake	105f09	Quartz	KON 60	YA70971		KETZA RIVER HOLDINGS LTD.	1-May-2015	Active		
Ketza River	Watson Lake	105f09	Quartz	KON 61	YA70972		KETZA RIVER HOLDINGS LTD.	1-May-2015	Active		
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Ketza River	Watson Lake	105f09	Quartz	KON 63	YA70974		KETZA RIVER HOLDINGS LTD.	1-May-2015	Active		
Ketza River	Watson Lake	105f09	Quartz	KON 64	YA70975		KETZA RIVER HOLDINGS LTD.	1-May-2015	Active		
Ketza River	Watson Lake	105f09	Quartz	KON 65	YA70976		KETZA RIVER HOLDINGS LTD.	1-May-2015	Active		
Ketza River	Watson Lake	105f09	Quartz	KON 66	YA70977		KETZA RIVER HOLDINGS LTD.	1-May-2015	Active		
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Ketza River	Watson Lake	105f09	Quartz	KON 68	YA70979		KETZA RIVER HOLDINGS LTD.	1-May-2015	Active		
Ketza River	Watson Lake	105f09	Quartz	KON 69	YA70980		KETZA RIVER HOLDINGS LTD.	1-May-2015	Active		
Ketza River	Watson Lake	105f09	Quartz	KON 70	YA70981		KETZA RIVER HOLDINGS LTD.	1-May-2015	Active		
Ketza River	Watson Lake	105f09	Quartz	KON 71	YA71526		KETZA RIVER HOLDINGS LTD.	1-May-2015	Active		
Ketza River	Watson Lake	105f09	Quartz	KON 72	YA71527		KETZA RIVER HOLDINGS LTD.	1-May-2015	Active		
Ketza River	Watson Lake	105f09	Quartz	KON 73	YA71528		KETZA RIVER HOLDINGS LTD.	1-May-2015	Active		
Ketza River	Watson Lake	105f09	Quartz	KON 74	YA71529		KETZA RIVER HOLDINGS LTD.	1-May-2015	Active		
Ketza River	Watson Lake	105f09	Quartz	KON 75	YA71530		KETZA RIVER HOLDINGS LTD.	1-May-2015	Active		
Ketza River	Watson Lake	105f09	Quartz	KON 76	YA71531		KETZA RIVER HOLDINGS LTD.	1-May-2015	Active		
Ketza River	Watson Lake	105f09	Quartz	KON 77	YA71532		KETZA RIVER HOLDINGS LTD.	1-May-2015	Active		
Ketza River	Watson Lake	105f09	Quartz	KON 78	YA71533		KETZA RIVER HOLDINGS LTD.	1-May-2015	Active		
Ketza River	Watson Lake	105f09	Quartz	KON 79	YA71534		KETZA RIVER HOLDINGS LTD.	1-May-2015	Active		
Ketza River	Watson Lake	105f09	Quartz	KON 80	YA71535		KETZA RIVER HOLDINGS LTD.	1-May-2015	Active		
Ketza River	Watson Lake	105f09	Quartz	KON 81	YA71536		KETZA RIVER HOLDINGS LTD.	25-Mar-2032	Active	11.2	3482
Ketza River	Watson Lake	105f09	Quartz	KON 82	YA71537		KETZA RIVER HOLDINGS LTD.	1-May-2015	Active		
Ketza River	Watson Lake	105f09	Quartz	KON 83	YA71538		KETZA RIVER HOLDINGS LTD.	25-Mar-2032	Active	52	3483
Ketza River	Watson Lake	105f09	Quartz	KON 84	YA71539		KETZA RIVER HOLDINGS LTD.	1-May-2015	Active		
Ketza River	Watson Lake	105f09	Quartz	KON 85	YA71540		KETZA RIVER HOLDINGS LTD.	1-May-2015	Active		
Ketza River	Watson Lake	105f09	Quartz	KON 86	YA71541		KETZA RIVER HOLDINGS LTD.	1-May-2015	Active		
Ketza River	Watson Lake	105f09	Quartz	KON 87	YA71542		KETZA RIVER HOLDINGS LTD.	1-May-2015	Active		
Ketza River	Watson Lake	105f09	Quartz	KON 88	YA71543		KETZA RIVER HOLDINGS LTD.	1-May-2015	Active		
Ketza River	Watson Lake	105f09	Quartz	KON 89	YA71544		KETZA RIVER HOLDINGS LTD.	1-May-2015	Active		
Ketza River	Watson Lake	105f09	Quartz	KON 90	YA71545		KETZA RIVER HOLDINGS LTD.	1-May-2015	Active		
Ketza River	Watson Lake	105f09	Quartz	KON 91	YA71546		KETZA RIVER HOLDINGS LTD.	1-May-2015	Active		
Ketza River	Watson Lake	105f09	Quartz	KON 92	YA71547		KETZA RIVER HOLDINGS LTD.	1-May-2015	Active		
Ketza River	Watson Lake	105f09	Quartz	KON 93	YA71548		KETZA RIVER HOLDINGS LTD.	1-May-2015	Active		
Ketza River	Watson Lake	105f09	Quartz	KON 94	YA71549		KETZA RIVER HOLDINGS LTD.	1-May-2015	Active		
Ketza River	Watson Lake	105f09	Quartz	KON 95	YA71550		KETZA RIVER HOLDINGS LTD.	1-May-2015	Active		
Ketza River	Watson Lake	105f09	Quartz	KON 96	YA71551	Full Quartz fraction (25+ acres)	KETZA RIVER HOLDINGS LTD.	1-May-2015	Active		
Ketza River	Watson Lake	105f09	Quartz	KON 97	YA72106	Full Quartz fraction (25+ acres)	KETZA RIVER HOLDINGS LTD.	1-May-2015	Active		
Ketza River	Watson Lake	105f09	Quartz	KON 98	YA72107	Full Quartz fraction (25+ acres)	KETZA RIVER HOLDINGS LTD.	1-May-2015	Active		
Ketza River	Watson Lake	105f09	Quartz	KON 99	YA90399	Full Quartz fraction (25+ acres)	KETZA RIVER HOLDINGS LTD.	25-Mar-2032	Active	23.1	3484
Ketza River	Watson Lake	105f09	Quartz	KON 100	YA90400	Full Quartz fraction (25+ acres)	KETZA RIVER HOLDINGS LTD.	25-Mar-2032	Active	0.81	3485
Ketza River	Watson Lake	105f09	Quartz	KON 101	YA90401	Partial Quartz fraction (<25 acres)	KETZA RIVER HOLDINGS LTD.	1-May-2015	Active	0	
Ketza River	Watson Lake	105f09	Quartz	KON 102	YA90402		KETZA RIVER HOLDINGS LTD.	25-Mar-2032	Active	0	3486
Ketza River	Watson Lake	105f09	Quartz	KON 103	YA90403		KETZA RIVER HOLDINGS LTD.	1-May-2015	Active	48.3	3487
Ketza River	Watson Lake	105f09	Quartz	KON 104	YA90404	Full Quartz fraction (25+ acres)	KETZA RIVER HOLDINGS LTD.	25-Mar-2032	Active	22	3488
Ketza River	Watson Lake	105f09	Quartz	KON 105	YA90405	Full Quartz fraction (25+ acres)	KETZA RIVER HOLDINGS LTD.	1-May-2015	Active	0	
Ketza River	Watson Lake	105f09	Quartz	KON 107	YA90407	Full Quartz fraction (25+ acres)	KETZA RIVER HOLDINGS LTD.	25-Mar-2032	Active	0.628	3489
Ketza River	Watson Lake	105f09	Quartz	KON 109	YA90409	Full Quartz fraction (25+ acres)	KETZA RIVER HOLDINGS LTD.	1-May-2015	Active	0.727	3490
Ketza River	Watson Lake	105f09	Quartz	KON 109	YA90409	Full Quartz fraction (25+ acres)	KETZA RIVER HOLDINGS LTD.	1-May-2015	Active	0	
Ketza River	Watson Lake	105f09	Quartz	KON 110	YA90410	Full Quartz fraction (25+ acres)	KETZA RIVER HOLDINGS LTD.	1-May-2015	Active	0	
Ketza River	Watson Lake	105f09	Quartz	KON 111	YA90411	Full Quartz fraction (25+ acres)	KETZA RIVER HOLDINGS LTD.	1-May-2015	Active	0	
Ketza River	Watson Lake	105f09	Quartz	KON 113	YA90413	Full Quartz fraction (25+ acres)	KETZA RIVER HOLDINGS LTD.	25-Mar-2032	Active	3.76	3491
Ketza River	Watson Lake	105f09	Quartz	KON 114	YA90414	Full Quartz fraction (25+ acres)	KETZA RIVER HOLDINGS LTD.	25-Mar-2032	Active	0.596	3

[illegible]

Project	District name	NTS sheet No.	Regulation type	Claim Name and No.	Grant No.	Non standard size	Claim owner	Claim expiry date	Claim status	Acres for Leases	Quartz lease No.
Ketza River	Watson Lake	105F09	Quartz	KON 450	YC53424		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 451	YC53425		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 452	YC53426		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 453	YC53427		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 454	YC53428		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 455	YC53429		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 456	YC53430		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 457	YC53431		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 458	YC53432		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 459	YC53433		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 460	YC53439		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 461	YC53435		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 462	YC53436		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 463	YC53437		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 464	YC53438		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 465	YC53439		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 466	YC53440		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 467	YC53441		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 468	YC53442		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 469	YC53443		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 470	YC53444		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 471	YC53445		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 472	YC53446		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 473	YC53447		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 474	YC53448		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 475	YC53449		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 476	YC53450		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 477	YC53451		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 478	YC53452		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 479	YC53453		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 480	YC53454		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 481	YC53455		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 482	YC53456		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 483	YC53457		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 484	YC53458		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 485	YC53459		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 486	YC53460		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 487	YC53461		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 488	YC53462		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 489	YC53463		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 490	YC53464		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 491	YC53465		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 492	YC53466		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 493	YC53467		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 494	YC53468		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 495	YC53469		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 496	YC53470		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 497	YC53471		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 498	YC53472		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 499	YC53473		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 500	YC53474		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 501	YC53475		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 502	YC53476		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 503	YC53477		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 504	YC53478		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 505	YC53479		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 506	YC53480		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 507	YC53481		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 508	YC53482		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 509	YC53483		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 510	YC53484		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 511	YC53485		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 512	YC53486		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 513	YC53487		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 514	YC53488		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 515	YC53489		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 516	YC53490		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 517	YC53491		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 518	YC53492		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 519	YC53493		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 520	YC53494		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 521	YC53495		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 522	YC53496		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 523	YC53497		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 524	YC53498		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 525	YC53499		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 526	YC53500		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 527	YC71001		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 528	YC71002		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 529	YC71003		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 530	YC71004		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 531	YC71005		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 532	YC71006		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 533	YC71007		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 534	YC71008		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 535	YC71009		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 536	YC71010		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 537	YC71011		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 538	YC71012		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 539	YC71013		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 540	YC71014		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 541	YC71015		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 542	YC71016		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 543	YC71017		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 544	YC71018		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 545	YC71019		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 546	YC71020		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 547	YC71021		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 548	YC71022		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 549	YC71023		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 550	YC71024		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 551	YC71025		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 552	YC71026		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 553	YC71027		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 554	YC71028		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 555	YC71029		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 556	YC71030		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 557	YC71031		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 558	YC71032		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 559	YC71033		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 560	YC71034		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 561	YC71035		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 562	YC71036		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 563	YC71037		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 564	YC71038		KETZA RIVER HOLDINGS LTD - 100	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 565	YC71039	Full Quartz fraction (25+ acres)	KETZA RIVER HOLDINGS LTD - 100	1-May-2			

County	District name	NTS Sheet No.	Regulation type	Claim Name and No.	Grant No.	Non standard size	Claim owner	Claim expiry date	Claim status	Acres for Leases	Quartz lease no.
Ketza River	Watson Lake	105F09	Quartz	KON 584	YC71058		KETZA RIVER HOLDINGS LTD. - 100.	1-May-2015	Active		
	Watson Lake	105F09	Quartz	KON 585	YC71059		KETZA RIVER HOLDINGS LTD. - 100.	1-May-2015	Active		
	Watson Lake	105F09	Quartz	KON 586	YC71060		KETZA RIVER HOLDINGS LTD. - 100.	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 587	YC71061		KETZA RIVER HOLDINGS LTD. - 100.	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 588	YC71062		KETZA RIVER HOLDINGS LTD. - 100.	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 589	YC71063		KETZA RIVER HOLDINGS LTD. - 100.	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 590	YC71064		KETZA RIVER HOLDINGS LTD. - 100.	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 591	YC71065		KETZA RIVER HOLDINGS LTD. - 100.	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 592	YC71066	Full Quartz fraction (25+ acres)	KETZA RIVER HOLDINGS LTD. - 100.	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 593	YC71067	Full Quartz fraction (25+ acres)	KETZA RIVER HOLDINGS LTD. - 100.	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 594	YC71068	Full Quartz fraction (25+ acres)	KETZA RIVER HOLDINGS LTD. - 100.	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 595	YC71069	Full Quartz fraction (25+ acres)	KETZA RIVER HOLDINGS LTD. - 100.	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 596	YC71070		KETZA RIVER HOLDINGS LTD. - 100.	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 597	YC71071		KETZA RIVER HOLDINGS LTD. - 100.	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 598	YC71072		KETZA RIVER HOLDINGS LTD. - 100.	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 599	YC71073		KETZA RIVER HOLDINGS LTD. - 100.	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 600	YC71074	Full Quartz fraction (25+ acres)	KETZA RIVER HOLDINGS LTD. - 100.	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 601	YC71075	Full Quartz fraction (25+ acres)	KETZA RIVER HOLDINGS LTD. - 100.	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 602	YC71076		KETZA RIVER HOLDINGS LTD. - 100.	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	KON 603	YC71077		KETZA RIVER HOLDINGS LTD. - 100.	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	MARIA 1	YA45007		KETZA RIVER HOLDINGS LTD. - 100.	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	MOON 1	Y 16629		KETZA RIVER HOLDINGS LTD. - 100.	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	MOON 2	Y 16630		KETZA RIVER HOLDINGS LTD. - 100.	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	OXO 1	75628		KETZA RIVER HOLDINGS LTD. - 100.	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	OXO 2	75629		KETZA RIVER HOLDINGS LTD. - 100.	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	OXO 3	75632		KETZA RIVER HOLDINGS LTD. - 100.	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	OXO 4	75633		KETZA RIVER HOLDINGS LTD. - 100.	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	OXO 5	75634		KETZA RIVER HOLDINGS LTD. - 100.	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	OXO 6	75630		KETZA RIVER HOLDINGS LTD. - 100.	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	OXO 7	75631		KETZA RIVER HOLDINGS LTD. - 100.	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	OXO 8	75630		KETZA RIVER HOLDINGS LTD. - 100.	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	OXO 9	75636		KETZA RIVER HOLDINGS LTD. - 100.	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	OXO 11	89164		KETZA RIVER HOLDINGS LTD. - 100.	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	OXO 13	89166		KETZA RIVER HOLDINGS LTD. - 100.	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	OXO 15	89168		KETZA RIVER HOLDINGS LTD. - 100.	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	OXO 17	89170		KETZA RIVER HOLDINGS LTD. - 100.	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	OXO 18	89171		KETZA RIVER HOLDINGS LTD. - 100.	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	OXO 20	89173		KETZA RIVER HOLDINGS LTD. - 100.	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	OXO 22	89175		KETZA RIVER HOLDINGS LTD. - 100.	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	OXO 24	89177		KETZA RIVER HOLDINGS LTD. - 100.	1-May-2015	Active		
Ketza River	Added in May 2011	Watson Lake	Quartz	PEEL No. 1	69368		KETZA RIVER HOLDINGS LTD. - 100.	14-Dec-2030	Active	50.12	OL00172
Ketza River	Added in May 2011	Watson Lake	Quartz	PEEL No. 2	69369		KETZA RIVER HOLDINGS LTD. - 100.	14-Dec-2030	Active	50.12	OL00173
Ketza River	Added in May 2011	Watson Lake	Quartz	PEEL No. 3	69370		KETZA RIVER HOLDINGS LTD. - 100.	14-Dec-2030	Active	46.96	OL00174
Ketza River	Added in May 2011	Watson Lake	Quartz	PEEL No. 4	69371		KETZA RIVER HOLDINGS LTD. - 100.	14-Dec-2030	Active	46.96	OL00175
Ketza River	Added in May 2011	Watson Lake	Quartz	PEEL No. 5	69372		KETZA RIVER HOLDINGS LTD. - 100.	14-Dec-2030	Active	52.92	OL00176
Ketza River	Added in May 2011	Watson Lake	Quartz	PEEL No. 6	69373		KETZA RIVER HOLDINGS LTD. - 100.	14-Dec-2030	Active	50.38	OL00177
Ketza River	Added in May 2011	Watson Lake	Quartz	PEG No. 17	69488		KETZA RIVER HOLDINGS LTD. - 100.	14-Dec-2030	Active	47.4	OL00179
Ketza River	Added in May 2011	Watson Lake	Quartz	PEG No. 18	69489		KETZA RIVER HOLDINGS LTD. - 100.	14-Dec-2030	Active	47.4	OL00180
Ketza River	Added in May 2011	Watson Lake	Quartz	PENGUN No. 10	72784		KETZA RIVER HOLDINGS LTD. - 100.	14-Dec-2030	Active	31.17	OL00195
Ketza River	Added in May 2011	Watson Lake	Quartz	PENGUN No. 4	69367		KETZA RIVER HOLDINGS LTD. - 100.	14-Dec-2030	Active	51.65	OL00171
Ketza River	Added in May 2011	Watson Lake	Quartz	PENGUN No. 7	72781		KETZA RIVER HOLDINGS LTD. - 100.	14-Dec-2030	Active	29.3	OL00194
Ketza River	Added in May 2011	Watson Lake	Quartz	PIONEER No. 4	69377		KETZA RIVER HOLDINGS LTD. - 100.	14-Dec-2030	Active	51.65	OL00178
Ketza River	Watson Lake	105F09	Quartz	STAR 1	Y 74098		KETZA RIVER HOLDINGS LTD. - 100.	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	STAR 2	Y 74099		KETZA RIVER HOLDINGS LTD. - 100.	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	STAR 3	Y 74100		KETZA RIVER HOLDINGS LTD. - 100.	1-May-2015	Active		
Ketza River	Watson Lake	105F09	Quartz	STAR 4	Y 74101		KETZA RIVER HOLDINGS LTD. - 100.	1-May-2015	Active		
Ketza River	Added in May 2011	Watson Lake	Quartz	KON 604	YD71154		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River	Added in May 2011	Watson Lake	Quartz	KON 605	YD71155		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River	Added in May 2011	Watson Lake	Quartz	KON 606	YD71156		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River	Added in May 2011	Watson Lake	Quartz	KON 607	YD71157		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River	Added in May 2011	Watson Lake	Quartz	KON 608	YD71158		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River	Added in May 2011	Watson Lake	Quartz	KON 609	YD71159		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River	Added in May 2011	Watson Lake	Quartz	KON 610	YD71160		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River	Added in May 2011	Watson Lake	Quartz	KON 611	YD71161		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River	Added in May 2011	Watson Lake	Quartz	KON 612	YD71162		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River	Added in May 2011	Watson Lake	Quartz	KON 613	YD71163		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River	Added in May 2011	Watson Lake	Quartz	KON 614	YD71164		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River	Added in May 2011	Watson Lake	Quartz	KON 615	YD71165		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River	Added in May 2011	Watson Lake	Quartz	KON 616	YD71166		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River	Added in May 2011	Watson Lake	Quartz	KON 617	YD71167		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River	Added in May 2011	Watson Lake	Quartz	KON 618	YD71168		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River	Added in May 2011	Watson Lake	Quartz	KON 619	YD71169		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River	Added in May 2011	Watson Lake	Quartz	KON 620	YD71170		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River	Added in May 2011	Watson Lake	Quartz	KON 621	YD71171		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River	Added in May 2011	Watson Lake	Quartz	KON 622	YD71172		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River	Added in May 2011	Watson Lake	Quartz	KON 623	YD71173		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River	Added in May 2011	Watson Lake	Quartz	KON 624	YD71174		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River	Added in May 2011	Watson Lake	Quartz	KON 625	YD71175		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River	Added in May 2011	Watson Lake	Quartz	KON 626	YD71176		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River	Added in May 2011	Watson Lake	Quartz	KON 627	YD71177		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River	Added in May 2011	Watson Lake	Quartz	KON 628	YD71178		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River	Added in May 2011	Watson Lake	Quartz	KON 629	YD71179		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River	Added in May 2011	Watson Lake	Quartz	KON 630	YD71180		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River	Added in May 2011	Watson Lake	Quartz	KON 631	YD71181		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River	Added in May 2011	Watson Lake	Quartz	KON 632	YD71182		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River	Added in May 2011	Watson Lake	Quartz	KON 633	YD71183		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River	Added in May 2011	Watson Lake	Quartz	KON 634	YD71184		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River	Added in May 2011	Watson Lake	Quartz	KON 635	YD71185		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River	Added in May 2011	Watson Lake	Quartz	KON 636	YD71186		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River	Added in May 2011	Watson Lake	Quartz	KON 637	YD71187		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River	Added in May 2011	Watson Lake	Quartz	KON 638	YD71188		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River	Added in May 2011	Watson Lake	Quartz	KON 639	YD71189		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River	Added in May 2011	Watson Lake	Quartz	KON 640	YD71190		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River	Added in May 2011	Watson Lake	Quartz	KON 641	YD71191		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River	Added in May 2011	Watson Lake	Quartz	KON 642	YD71192		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River	Added in May 2011	Watson Lake	Quartz	KON 643	YD71193		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River	Added in May 2011	Watson Lake	Quartz	KON 644	YD71194		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River	Added in May 2011	Watson Lake	Quartz	KON 645	YD71195		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River	Added in May 2011	Watson Lake	Quartz	KON 646	YD71196		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River	Added in May 2011	Watson Lake	Quartz	KON 647	YD71197		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River	Added in May 2011	Watson Lake	Quartz	KON 648	YD71198		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River	Added in May 2011	Watson Lake	Quartz	KON 649	YD71199		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River	Added in May 2011	Watson Lake	Quartz	KON 650	YD71200		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River	Added in May 2011	Watson Lake	Quartz	KON 651	YD71201		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River	Added in May 2011	Watson Lake	Quartz	KON 666	YD72116		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River	Added in May 2011	Watson Lake	Quartz	KON 667	YD72117		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River	Added in May 2011	Watson Lake	Quartz	KON 668	YD72118		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River	Added in May 2011	Watson Lake	Quartz	KON 669	YD72119		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River	Added in May 2011	Watson Lake	Quartz	KON 670	YD72200		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River	Added in May 2011	Watson Lake	Quartz	KON 671	YD72221		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River	Added in May 2011	Watson Lake	Quartz	KON 672	YD72222		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		

Project	District name	NTS Sheet No.	Regulation type	Claim Name and No.	Grant No.	Non standard size	Claim owner	Claim expiry date	Claim status	Acres for Leases	Quartz lease no.
Ketza River: Added in May 2011	Watson Lake	105F08	Quartz	KON 707	YD77257		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River: Added in May 2011	Watson Lake	105F08	Quartz	KON 708	YD77258		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River: Added in May 2011	Watson Lake	105F08	Quartz	KON 709	YD77259		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River: Added in May 2011	Watson Lake	105F08	Quartz	KON 710	YD77260		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River: Added in May 2011	Watson Lake	105F08	Quartz	KON 711	YD77261		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River: Added in May 2011	Watson Lake	105F08	Quartz	KON 712	YD77262		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River: Added in May 2011	Watson Lake	105F08	Quartz	KON 713	YD77263		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River: Added in May 2011	Watson Lake	105F09	Quartz	KON 714	YD77264		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River: Added in May 2011	Watson Lake	105F09	Quartz	KON 715	YD77265		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River: Added in May 2011	Watson Lake	105F09	Quartz	KON 716	YD77266		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River: Added in May 2011	Watson Lake	105F09	Quartz	KON 717	YD77267		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River: Added in May 2011	Watson Lake	105F09	Quartz	KON 718	YD77268		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River: Added in May 2011	Watson Lake	105F09	Quartz	KON 719	YD77269		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River: Added in May 2011	Watson Lake	105F09	Quartz	KON 720	YD77270		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River: Added in May 2011	Watson Lake	105F09	Quartz	KON 721	YD77271		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River: Added in May 2011	Watson Lake	105F09	Quartz	KON 722	YD77272		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River: Added in May 2011	Watson Lake	105F09	Quartz	KON 723	YD77273		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River: Added in May 2011	Watson Lake	105F09	Quartz	KON 725	YD77275		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River: Added in May 2011	Watson Lake	105F09	Quartz	KON 726	YD77276		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River: Added in May 2011	Watson Lake	105F09	Quartz	KON 727	YD77277		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River: Added in May 2011	Watson Lake	105F09	Quartz	KON 728	YD77278		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River: Added in May 2011	Watson Lake	105F09	Quartz	KON 729	YD77279		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River: Added in May 2011	Watson Lake	105F09	Quartz	KON 730	YD77280		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River: Added in May 2011	Watson Lake	105F09	Quartz	KON 731	YD77281		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River: Added in May 2011	Watson Lake	105F09	Quartz	KON 732	YD77282		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River: Added in May 2011	Watson Lake	105F09	Quartz	KON 733	YD77283		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River: Added in May 2011	Watson Lake	105F08	Quartz	GF 119	YD77285		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River: Added in May 2011	Watson Lake	105F08	Quartz	GF 120	YD77286		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River: Added in May 2011	Watson Lake	105F08	Quartz	GF 121	YD77287		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River: Added in May 2011	Watson Lake	105F08	Quartz	GF 122	YD77288		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River: Added in May 2011	Watson Lake	105F08	Quartz	GF 123	YD77289		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River: Added in May 2011	Watson Lake	105F08	Quartz	GF 124	YD77290		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River: Added in May 2011	Watson Lake	105F08	Quartz	GF 125	YD77291		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River: Added in May 2011	Watson Lake	105F08	Quartz	GF 126	YD77292		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River: Added in May 2011	Watson Lake	105F09	Quartz	GF 127	YD77293		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River: Added in May 2011	Watson Lake	105F09	Quartz	GF 128	YD77294		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River: Added in May 2011	Watson Lake	105F09	Quartz	GF 129	YD77295		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River: Added in May 2011	Watson Lake	105F09	Quartz	GF 130	YD77296		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River: Added in May 2011	Watson Lake	105F09	Quartz	GF 131	YD77297		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River: Added in May 2011	Watson Lake	105F09	Quartz	GF 132	YD77298		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River: Added in May 2011	Watson Lake	105F09	Quartz	GF 133	YD77299		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		
Ketza River: Added in May 2011	Watson Lake	105F09	Quartz	GF 134	YD77300		KETZA RIVER HOLDINGS LTD. - 100.	24-Mar-2012	Active		

Appendix C

Drill Hole Collar Corrections

Appendix C. Drill Hole Collar Corrections: Ketz River Project (to support the January 25, 2011 Resource).

HOLE	EAST_OLD	NORTH_OLD	ELEV_OLD	EAST_NEW	NORTH_NEW	ELEV_NEW	EW-DIFF	NS-DIFF	EL-DIFF	GRADE SHELL IMPACT	DESCRIPTION
KR-84-38	643600.600	6824740.600	1621.500	643605.600	6824680.600	1621.500	5	-60		no effect	changed per Canamax map
KR-84-39	643580.600	6824700.600	1629.100	643580.600	6824650.600	1629.100		-50		east Tarn ore	changed per Canamax map
KR-84-40	643545.600	6824670.600	1638.100	643545.600	6824600.600	1638.100		-70		Tarn ore	changed per Canamax map
KR-84-41	643580.600	6824770.600	1613.600	643570.600	6824720.600	1613.600	-10	-50		no effect	changed per Canamax map
KR-84-42	643550.600	6824750.600	1618.100	643520.600	6824695.600	1618.100	-30	-55		Tarn ore modelled thru dead hole	changed per Canamax map
KR-84-43	643540.600	6824620.600	1633.400	643510.600	6824580.600	1633.400	-30	-40		Tarn ore modelled thru dead hole	changed per Canamax map
KR-84-44	643520.600	6824610.600	1640.500	643485.600	6824570.600	1640.500	-35	-40		Tarn ore	changed per Canamax map
KR-84-45	643560.600	6824620.600	1640.000	643550.600	6824570.600	1640.000	-10	-50		limits Tarn ore to east	changed per Canamax map
KR-84-46	643620.600	6824690.600	1621.600	643615.600	6824650.600	1621.600	-5	-40		east Tarn ore	changed per Canamax map
KR-84-47	643620.600	6824670.600	1624.700	643590.600	6824620.600	1624.700	-30	-50		east Tarn ore	changed per Canamax map
KR-84-48	643620.600	6824640.600	1619.800	643605.600	6824590.600	1619.800	-15	-50		no effect	changed per Canamax map
KR-84-49	643660.600	6824670.600	1617.100	643620.600	6824620.600	1617.100	-40	-50		east Tarn ore	changed per Canamax map
KR-84-50	643600.600	6824580.600	1642.200	643600.600	6824530.600	1642.200		-50		no effect	moved to match topo elev
KR-84-51	643839.530	6824916.560	1601.840	643839.530	6824916.560	1601.840	0	0		no effect	ok per Canamax map
KR-84-52	643830.600	6824920.600	1587.400	643830.600	6824855.600	1587.400		-65		no effect	changed per Canamax map
KR-84-53	643864.680	6824872.420	1589.000	643864.680	6824872.420	1589.000	0	0		no effect	ok per Canamax map
KR-84-54	643940.600	6824940.600	1579.500	643920.600	6824885.600	1579.500	-20	-55		Penguin ore	changed per Canamax map
KR-84-55	643961.130	6824831.210	1559.560	643956.130	6824821.210	1559.560	-5	-10		Penguin ore	changed per Canamax map
KR-84-56	643990.600	6824920.600	1565.700	643980.600	6824865.600	1565.700	-10	-55		Penguin ore	changed per Canamax map
KR-84-57	644080.600	6825130.600	1571.300	644100.600	6825080.600	1571.300	20	-50		Penguin ore	changed per Canamax map
KR-84-58	644170.600	6825140.600	1564.200	644155.600	6825100.600	1564.200	-15	-40		Penguin ore	changed per Canamax map
KR-84-59	644160.600	6825170.600	1567.200	644140.600	6825130.600	1567.200	-20	-40		Penguin ore	changed per Canamax map
KR-86-178	646127.100	6826343.100	1450.100	646197.100	6826343.100	1450.100	70			Shamrock ore	typo? now with 86-177 per map
KR-87-251	645776.200	6825716.100	1532.200	645776.200	6825816.100	1532.200		100		mined out Peel ore in Break Pit	typo? no map confirmation
KR-88-315	644507.400	6825494.900	1630.920	644507.400	6825494.900	1625.920			-5	Penguin ore	old topo 5m high
KR-89-368	645622.700	6825546.600	1435.800	645622.700	6825446.600	1435.800		-100		Peel ore	typo? assumed shift ok per Canamx
KR-96-584	645630.600	6827400.600	1805.800	645590.600	6827190.600	1805.800	-40	-210		no effect	changed per map
KR-96-558	646245.000	6826300.000	1450.000	646245.000	6826300.000	1420.000			-30	Shamrock ore	x-y ok per map, elev per topo
KR-97-592	645700.600	6825660.600	1497.800	645700.600	6825660.600	1515.350			1515.35	limits Peel ore to north	with 97-591 and 97-594 per map
KR-05-682	645241.200	6825389.900	1514.680	645253.000	6825380.000	1514.680	11.8	9.9	5	Peel ore	changed per map
KR-05-683	645239.200	6825420.900	1522.980	645252.000	6825411.000	1522.980	12.8	9.9	5	Peel ore	changed per map

Appendix D

Specific Gravity Calculation Scripts

ktza12ox_calc.fcl

```
{
  "apply" = "all true",
  "equations" =
  [
    [
      "GEOL",
      "",
      "TOTOX",
      "0"
    ],
    [
      "GEOL",
      "OX1INT >= 0 and OX2INT >= 0",
      "TOTOX",
      "OX1INT+OX2INT"
    ],
    [
      "GEOL",
      "TOTOX > 100",
      "TOTOX",
      "100"
    ],
    [
      "GEOL",
      "TOTOX > 0 and TOTOX < 0.1",
      "TOTOX",
      "0.1"
    ]
  ],
  "key0" = "*"
}
```

ktza13sulf_calc.fcl

```
{
  "apply" = "all true",
  "equations" =
  [
    [
      "GEOL",
      "",
      "TOTSUL",
      "0"
    ],
    [
      "GEOL",
      "PO >= 0 and PY >= 0 and APY >= 0 and CPY >= 0",
      "TOTSUL",
      "PO+PY+APY+CPY"
    ],
    [
      "GEOL",
      "TOTSUL > 100",
      "TOTSUL",
      "100"
    ],
    [
      "GEOL",
      "TOTSUL > 0 and TOTSUL < 0.1",
      "TOTSUL",
      "0.1"
    ]
  ],
  "key0" = "*"
}
```

ktza14redox_calc.fcl

```

{
  "apply" = "all true",
  "equations" =
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    [
      "GEOL",
      "TOTSUL >= 50 and TOTOX < 85",
      "REDOX",
      "\"SULF\""
    ],
    [
      "GEOL",
      "TOTSUL >= 50 and TOTSUL < 80 and TOTOX >= 85",
      "REDOX",
      "\"TRANSULFO\""
    ],
    [
      "GEOL",
      "TOTSUL >= 80 and TOTOX >= 85",
      "REDOX",
      "\"SULF\""
    ],
    [
      "GEOL",
      "TOTOX >= 50 and TOTSUL < 2",
      "REDOX",
      "\"OX\""
    ],
    [
      "GEOL",
      "TOTOX >= 50 and TOTSUL >= 2 and TOTSUL < 15",
      "REDOX",
      "\"TRANOX\""
    ],
    [
      "GEOL",
      "TOTOX >= 50 and TOTOX < 85 and TOTSUL >= 15 and TOTSUL < 50",
      "REDOX",
      "\"TRANSULFO\""
    ],
    [
      "GEOL",
      "TOTOX >= 85 and TOTSUL >= 15 and TOTSUL < 50",
      "REDOX",
      "\"TRANOX\""
    ],
    [
      "GEOL",
      "TOTOX < 50 and TOTOX >= 30 and TOTSUL < 2",

```

```

        "REDOX",
        "\"TRANOX\""
    ],
    [
        "GEOL",
        "TOTOX < 50 and TOTSUL >= 2 and TOTSUL < 50",
        "REDOX",
        "\"TRANSULFO\""
    ],
    [
        "GEOL",
        "LCODE2 like \"OXIDE\" and TOTSUL < 2",
        "REDOX",
        "\"OX\""
    ],
    [
        "GEOL",
        "LCODE2 like \"GO\" and TOTSUL < 2",
        "REDOX",
        "\"OX\""
    ],
    [
        "GEOL",
        "LCODE2 like \"FZ\" and TOTSUL < 2",
        "REDOX",
        "\"OX\""
    ],
    [
        "GEOL",
        "LCODE2 like \"SULF\"",
        "REDOX",
        "\"SULF\""
    ],
    [
        "GEOL",
        "TOTSUL >= 85 and TOTOX < 5",
        "REDOX",
        "\"HISULF\""
    ],
    [
        "GEOL",
        "TOTOX < 2 and REDOX like \"TRANSULFO\"",
        "REDOX",
        "\"TRANSULFS\""
    ]
],
"key0" = "*"
}

```

ktza15sg_g_calc.fcl

```

{
  "apply" = "all true",
  "equations" =
  [
    [
      "GEOL",
      "RKMODO like \"LST\" and REDOX like \"OX\"",
      "SG_GEO",
      "2.3"
    ],
    [
      "GEOL",
      "RKMODO like \"LST\" and REDOX like \"TRANOX\"",
      "SG_GEO",
      "2.44"
    ],
    [
      "GEOL",
      "RKMODO like \"LST\" and REDOX like \"TRANSULF\"",
      "SG_GEO",
      "3.4"
    ],
    [
      "GEOL",
      "RKMODO like \"LST\" and REDOX like \"SULF\"",
      "SG_GEO",
      "4.1"
    ],
    [
      "GEOL",
      "RKMODO like \"ARG\" and REDOX like \"OX\"",
      "SG_GEO",
      "2.3"
    ],
    [
      "GEOL",
      "RKMODO like \"ARG\" and REDOX like \"TRANOX\"",
      "SG_GEO",
      "2.44"
    ],
    [
      "GEOL",
      "RKMODO like \"ARG\" and REDOX like \"TRANSULF\"",
      "SG_GEO",
      "2.9"
    ],
    [
      "GEOL",
      "RKMODO like \"ARG\" and REDOX like \"SULF\"",

```

```
"SG_GEO",
"3.9"
],
[
  "GEOL",
  "RKMOD like \"GULLY\" and REDOX like \"OX\"",
  "SG_GEO",
  "2.3"
],
[
  "GEOL",
  "RKMOD like \"GULLY\" and REDOX like \"TRANOX\"",
  "SG_GEO",
  "2.44"
],
[
  "GEOL",
  "RKMOD like \"GULLY\" and REDOX like \"TRANSULF\"",
  "SG_GEO",
  "2.8"
],
[
  "GEOL",
  "RKMOD like \"GULLY\" and REDOX like \"SULF\"",
  "SG_GEO",
  "4.2"
],
[
  "GEOL",
  "RKMOD like \"GULLY\" and REDOX like \"HISULF\"",
  "SG_GEO",
  "4.3"
],
[
  "GEOL",
  "RKMOD like \"LST\" and REDOX like \"HISULF\"",
  "SG_GEO",
  "4.3"
],
[
  "GEOL",
  "LCODE2 like \"CASE\"",
  "SG_GEO",
  "-99"
],
[
  "GEOL",
  "LCODE2 like \"VOID\"",
  "SG_GEO",
  "-99"
],
],
```

```
[
  "GEOL",
  "LCODE2 like \"NOLOG\"",
  "SG_GEO",
  "-99"
],
[
  "GEOL",
  "LCODE2 like \"OVB\"",
  "SG_GEO",
  "2.75"
]
],
"key0" = "*"
}
```

ktza16sg_a_calc.fcl

```
{
  "apply" = "all true",
  "equations" =
  [
    [
      "ASSAY",
      "FE_PCT > 0",
      "SG_ASY",
      "(0.032*FE_PCT)+2.69"
    ],
    [
      "ASSAY",
      "SG_ASY > 0 and SG_ASY <2.75",
      "SG_ASY",
      "2.75"
    ]
  ],
  "key0" = "*"
}
```

Appendix E

Specific Gravity Data

Appendix E. Specific Gravity Data, Ketzá River Project

[illegible]

Appendix E. Specific Gravity Data, Ketz River Project

[illegible]

Appendix E. Statistics for Specific Gravity Data Analyzed at the ALS-Chemex Lab

Material->	LITH CODE or MIN TYPE							DILUTION				
LITH CODE	#	# >1.0 g/t Au	Avg SG	Min SG	Max SG	Ave pct Fe	Ave pct S	#	# >1.0 g/t Au	Avg SG	Min SG	Max SG
Vein (no sulfide mineral content requirement)												
Vein: Dilution	-		-	-	-			3	0	2.80	2.72	2.94
<50% logged sulfides - ASQ+Min (Qtz Vn) - Shamrock Zone	19	2	2.86	2.63	3.54	7.53	3.78					
>50% logged sulfides - ASQ+Min (Qtz Vn) - QB Only (Shamrock)	3	1	3.86	3.56	4.03	28.33	10.00					
<50% logged sulfides - Manto Zone	5	0	2.75	2.64	3.10	2.99	1.52					
VEIN SUBTOTAL	27	3	2.95	2.63	4.03	9.00	4.05	3	0	2.80	2.72	2.94
SULF (>50% logged sulfide minerals)												
SULF: dilution	-		-	-	-			2	0	2.92	2.83	3.01
SULF: manto zones	14	2	3.98	3.38	4.52	40.04	9.76					
SULF: ASQ+Min (Qtz Vn) or Shamrock zones (No Gully data) ⁽⁶⁾	4	2	3.62	3.39	3.87	32.93	8.08					
SULF: Gully and Fred's Vein (Shamrock Zone) ⁽⁴⁾	7	4	4.27	4.12	4.37	48.43	7.24					
SULF-HIGH (>85% Sulfide minerals)	3	1	4.48	4.31	4.77	44.60	9.10					
SULF SUBTOTAL	28	9	4.06	3.38	4.77	41.61	8.82	2	0	2.92	2.83	3.01
LST + Min (<50% logged sulfide minerals)												
LST + Min: manto zones	39	10	3.43	2.64	4.17	24.98	7.67					
VEIN + SULF + (LST + Min) TOTAL	94	22	3.48	2.63	4.77	34.55	6.97	5	0	2.85	2.72	3.01

- Notes: (1)** Although Fred's Vein is located north of the Peel Fault in the Manto Zone, Au mineralization is dominated by veins hosted in siliciclastic rocks;
- (2) Total number of specific gravity analyses in this table = 94;
- (3) Ave wt. pct Fe and pct S values based on ALS-Chemex method ME-ICP41;
- (4) mostly includes LITHCODE referred to as SULF; but that may also be classified as discrete vein intervals from the Gully and Fred's Vein Zones;
- (5) Gully SULF data is included in the SULF listing below (AVE SG for Gully = 4.25);
- (6) Material Definitions:
ASQ + Min (Qtz Vn) = Argillite > Siltstone > Quartzite with Quartz Veins;
LST + Min = Limestone + <50 pct logged sulfide minerals;
SULF-High = > 85% logged sulfide minerals;
- (7) All specific gravity analyses in this table were analyzed by ALS (Vancouver, B.C.) using method no. OA-GRA08a

Copy of SG_Summary_Table_2009_Jan7_2010.xls (sheet "Summary tab_by Ore-Lithcode")

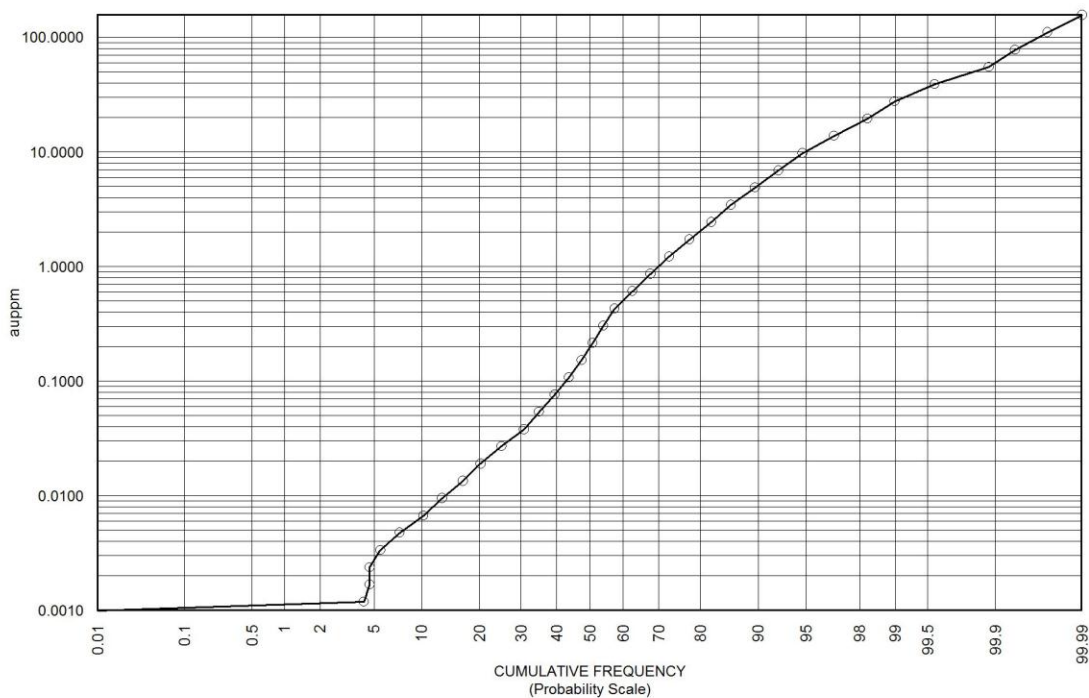
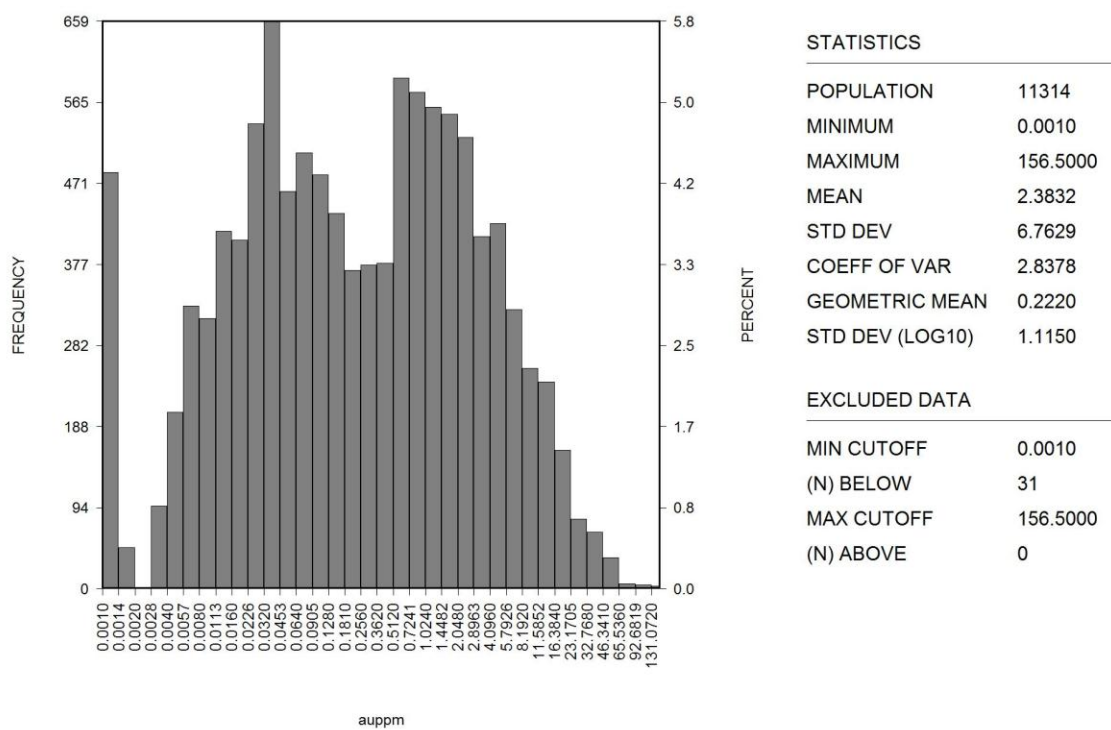
Actual data used in this table located in file name:

All_SG_ICP_Data_compilation_January_2010_sortedby_rk_typ_and_Sulftype Graph Edited_Fields.xls

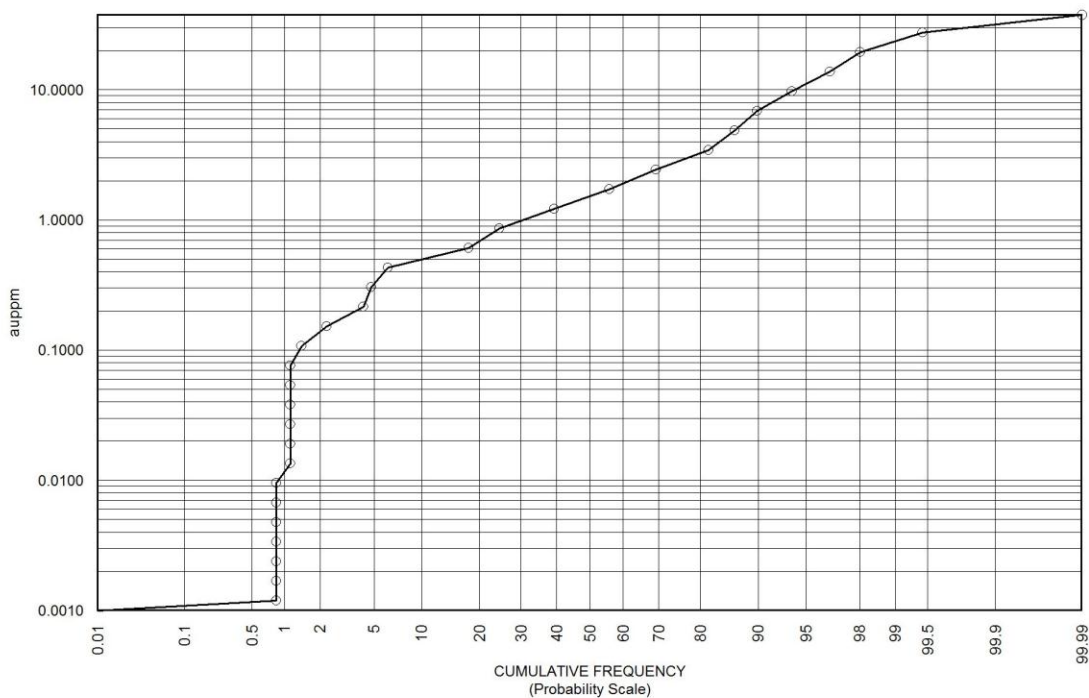
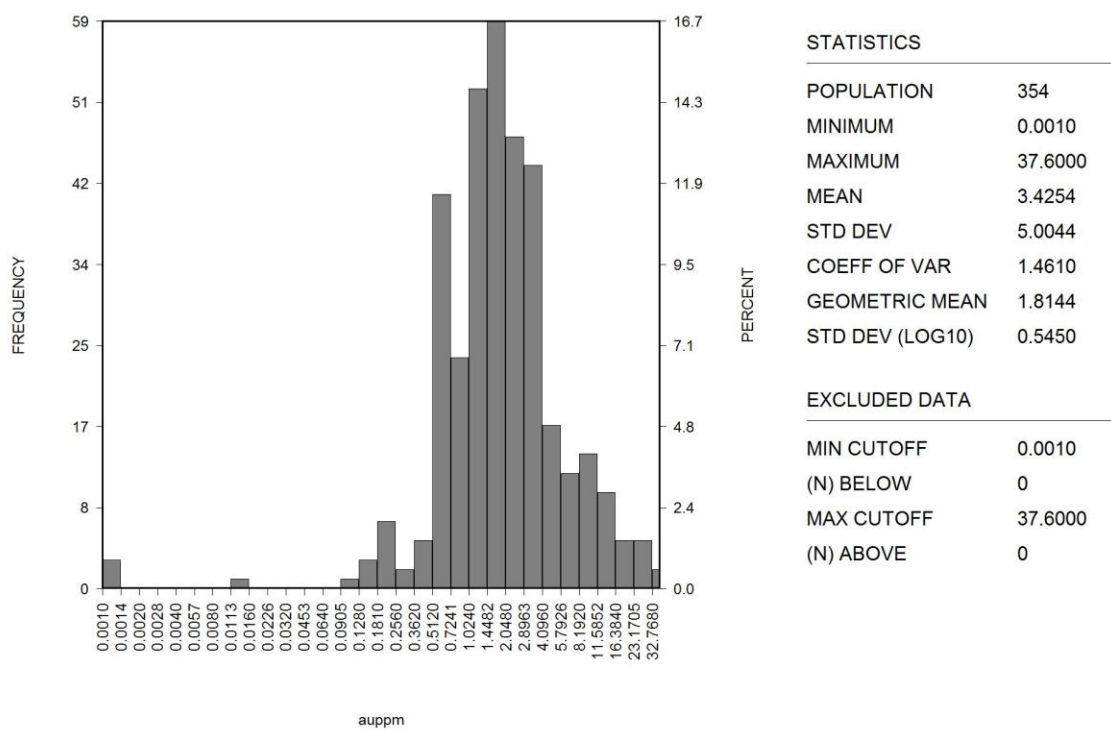
Appendix F

Statistics and Variograms

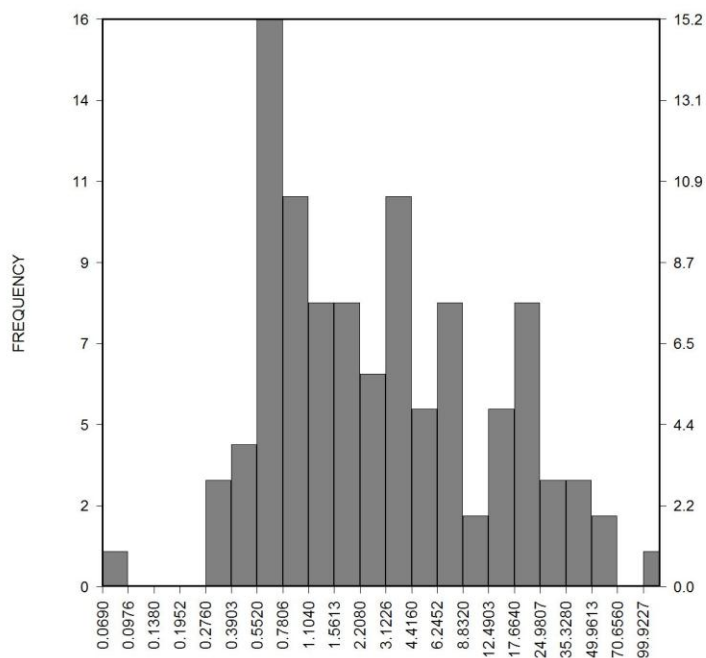
auppm from Ktzafeb2010_1pt5m_cmps



auppm from Query_Gully



auppm from Query_Knoll

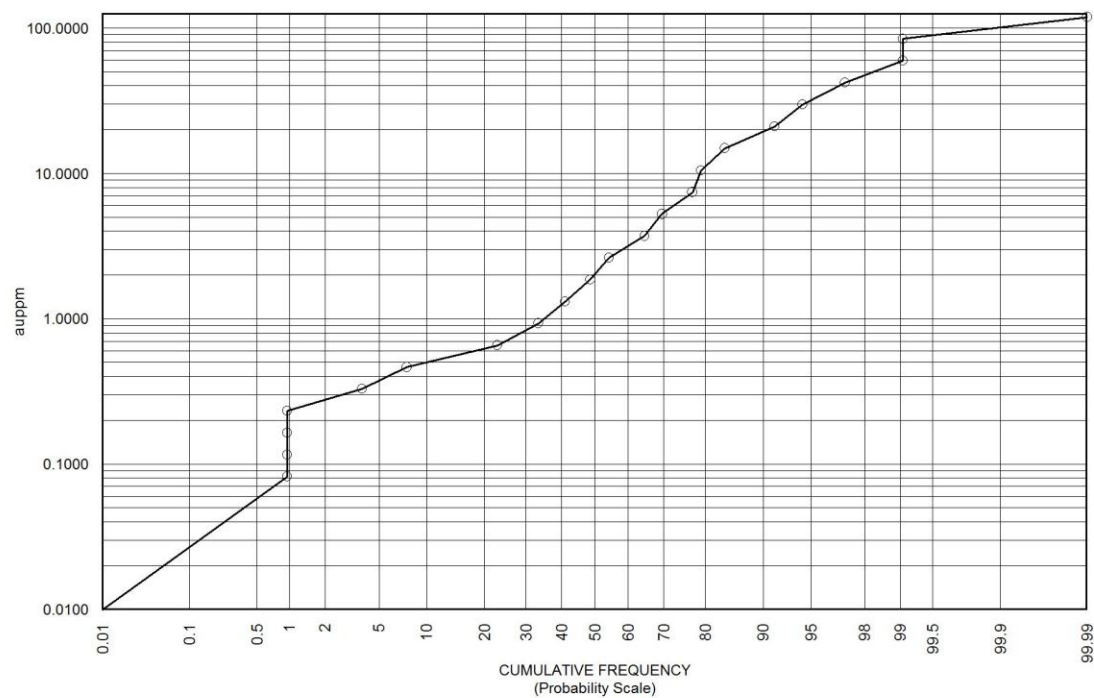


STATISTICS

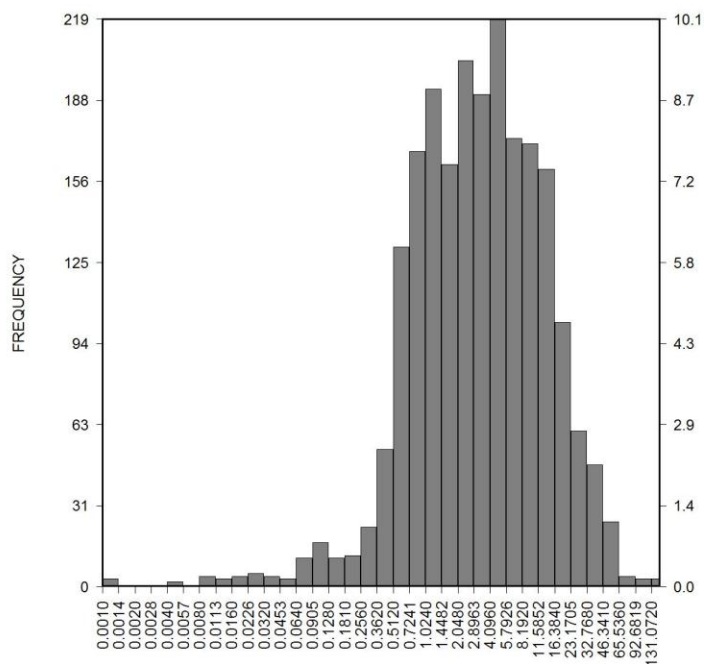
POPULATION	105
MINIMUM	0.0690
MAXIMUM	124.9540
MEAN	8.6534
STD DEV	16.4476
COEFF OF VAR	1.9007
GEOMETRIC MEAN	2.9050
STD DEV (LOG10)	0.6377

EXCLUDED DATA

MIN CUTOFF	0.0690
(N) BELOW	0
MAX CUTOFF	124.9540
(N) ABOVE	0



auppm from Query_Peel



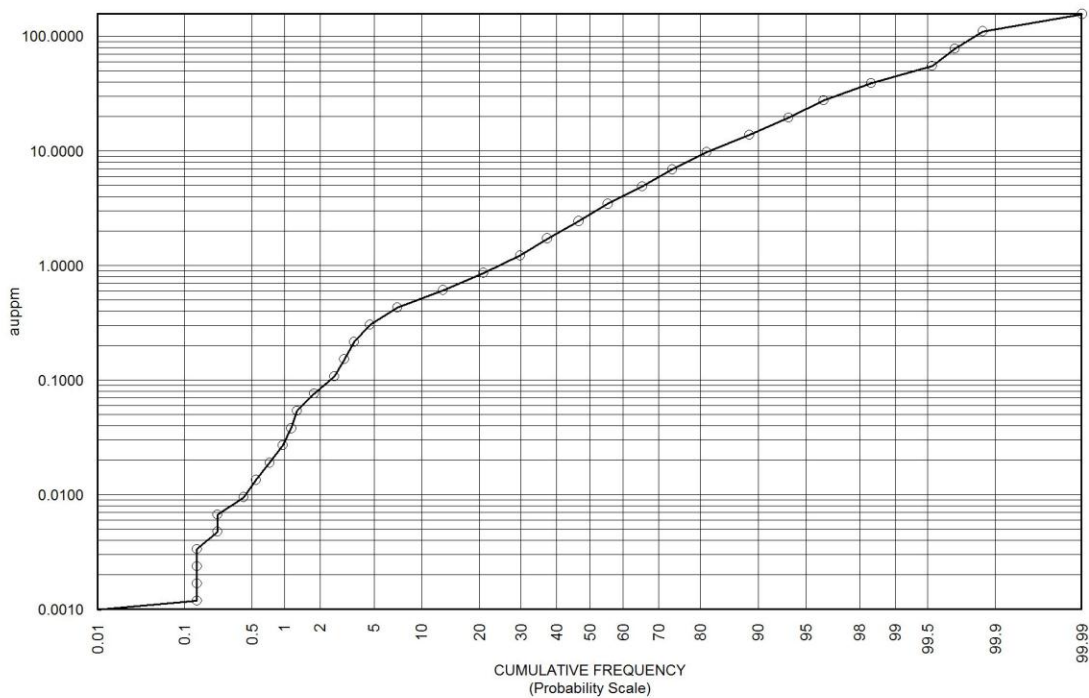
STATISTICS

POPULATION	2170
MINIMUM	0.0010
MAXIMUM	156.5000
MEAN	7.2973
STD DEV	11.6828
COEFF OF VAR	1.6010
GEOMETRIC MEAN	3.1064
STD DEV (LOG10)	0.6282

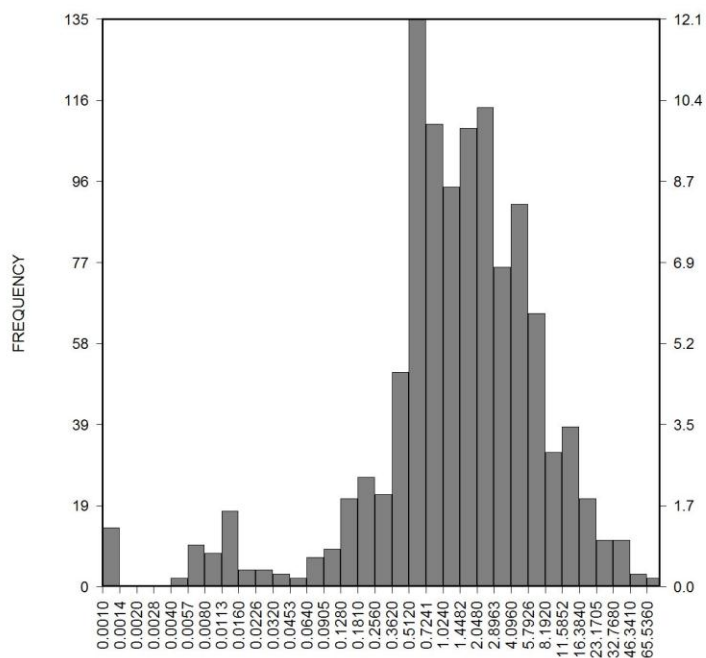
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(N) BELOW	3
MAX CUTOFF	156.5000
(N) ABOVE	0

auppm



auppm from Query_Penguin



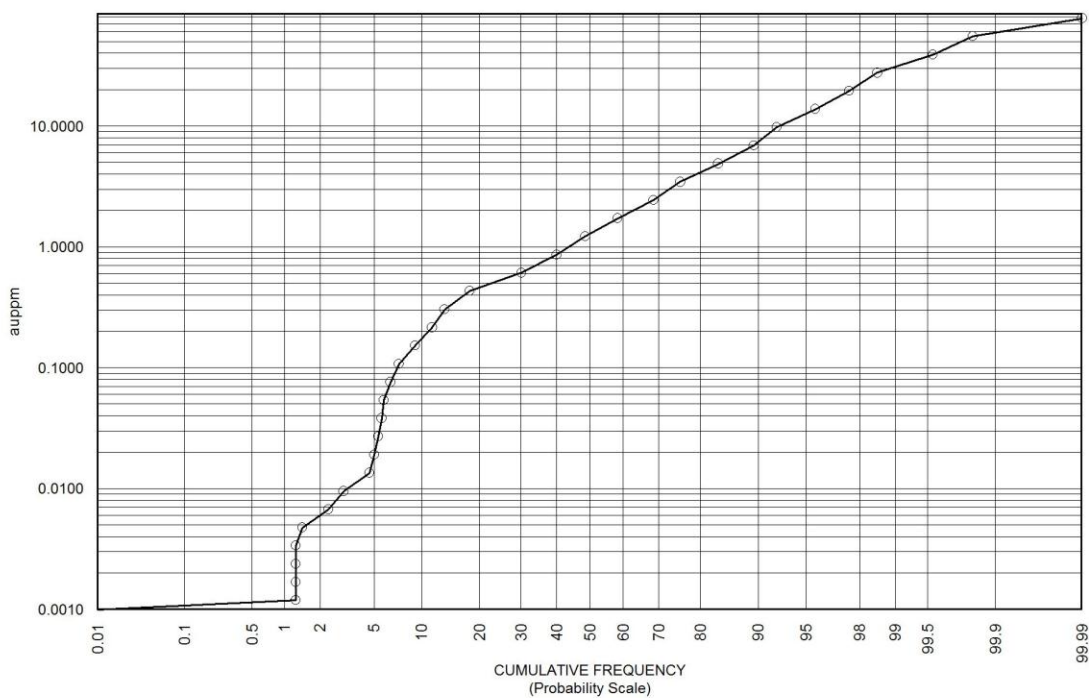
STATISTICS

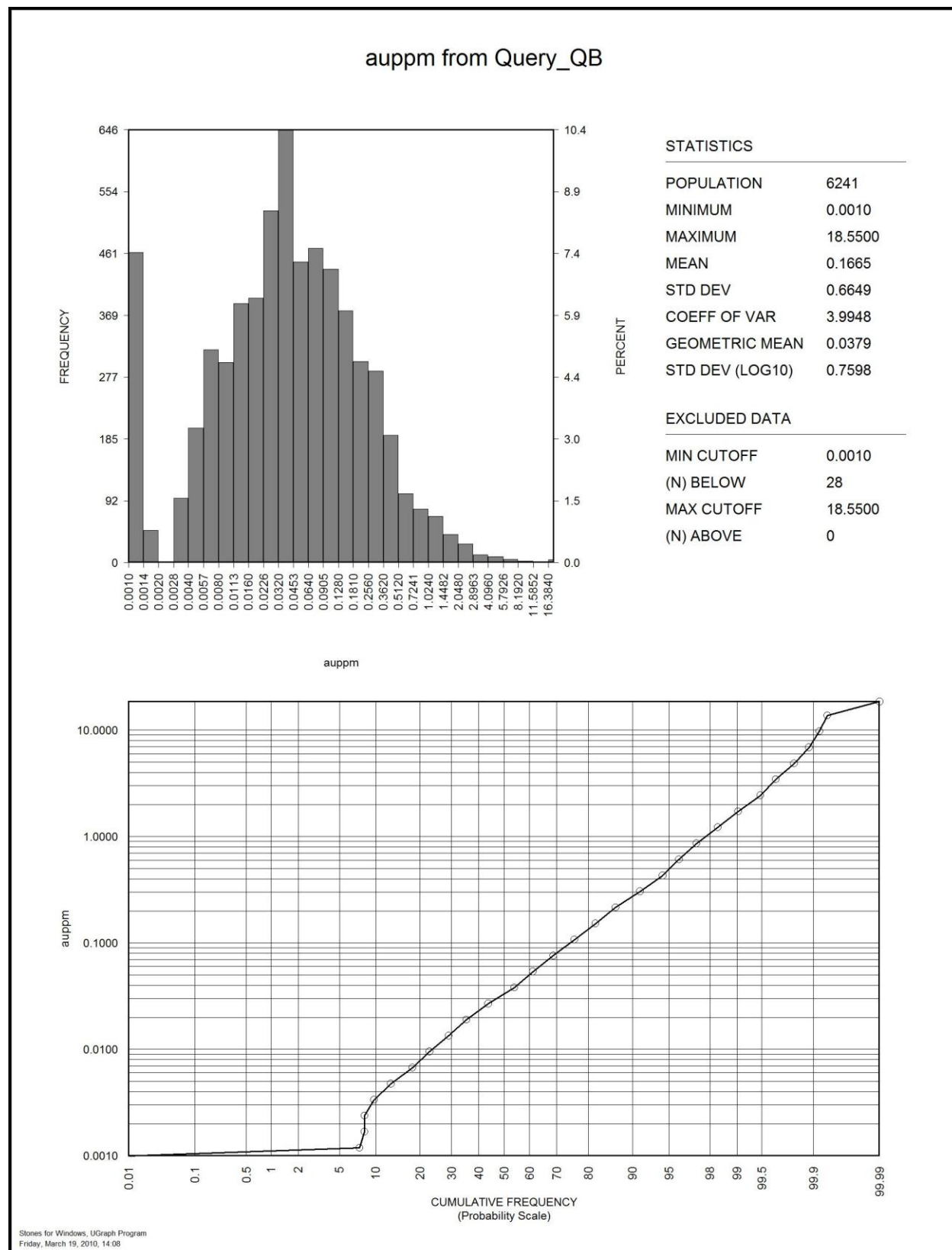
POPULATION	1114
MINIMUM	0.0010
MAXIMUM	84.5000
MEAN	3.8266
STD DEV	7.1801
COEFF OF VAR	1.8764
GEOMETRIC MEAN	1.3021
STD DEV (LOG10)	0.7786

EXCLUDED DATA

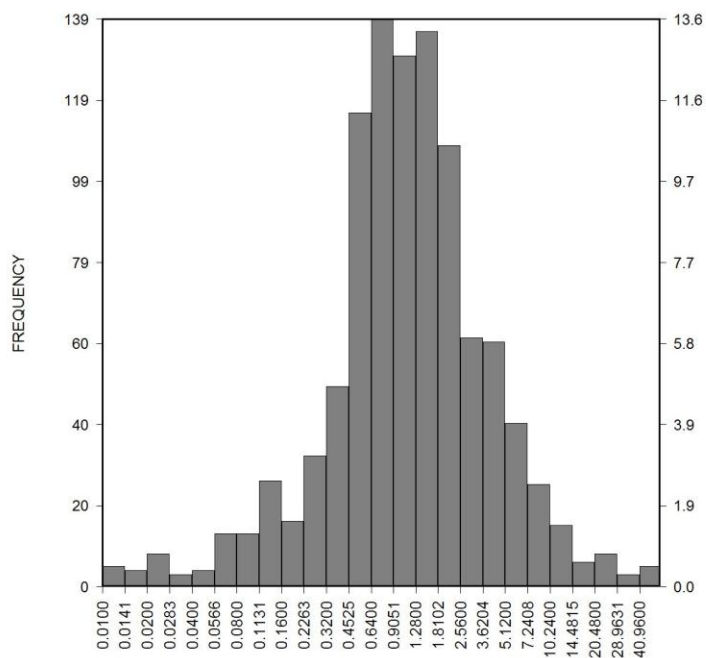
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(N) ABOVE	0

auppm





auppm from Query_Shamrock

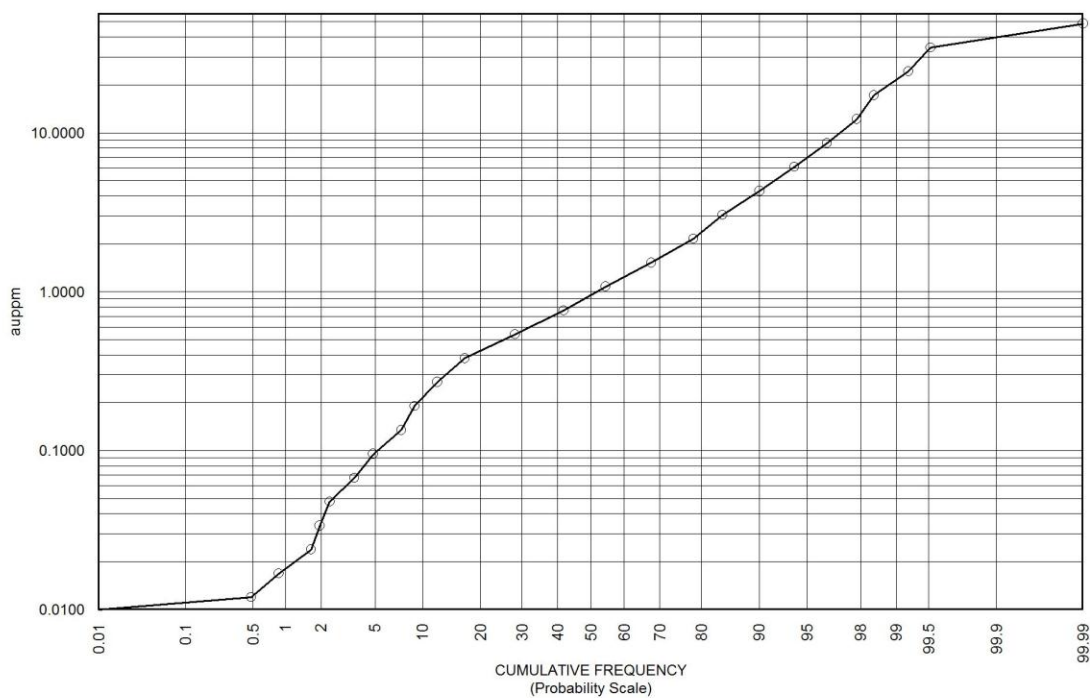


STATISTICS

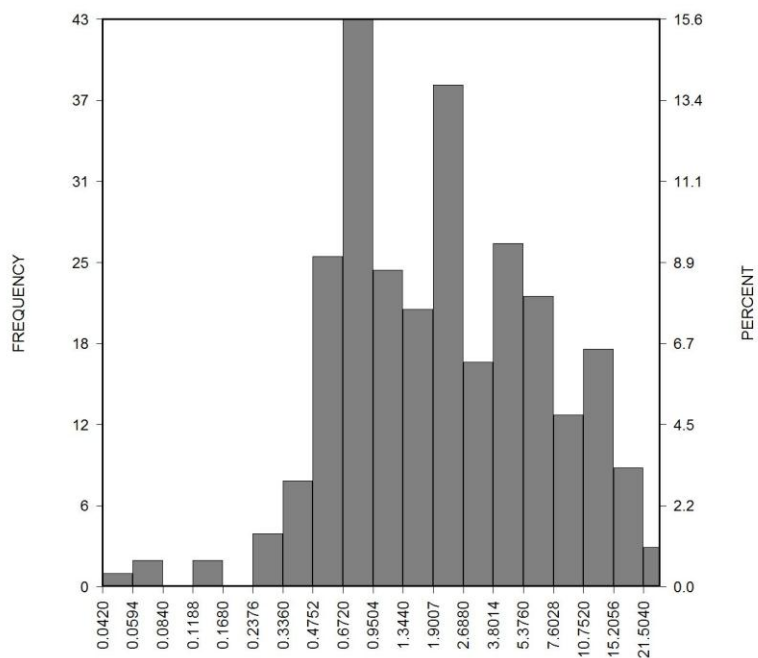
POPULATION	1025
MINIMUM	0.0100
MAXIMUM	56.0000
MEAN	2.4933
STD DEV	5.1514
COEFF OF VAR	2.0661
GEOMETRIC MEAN	1.1171
STD DEV (LOG10)	0.5572

EXCLUDED DATA

MIN CUTOFF	0.0100
(N) BELOW	0
MAX CUTOFF	56.0000
(N) ABOVE	0



auppm from Query_Tarn

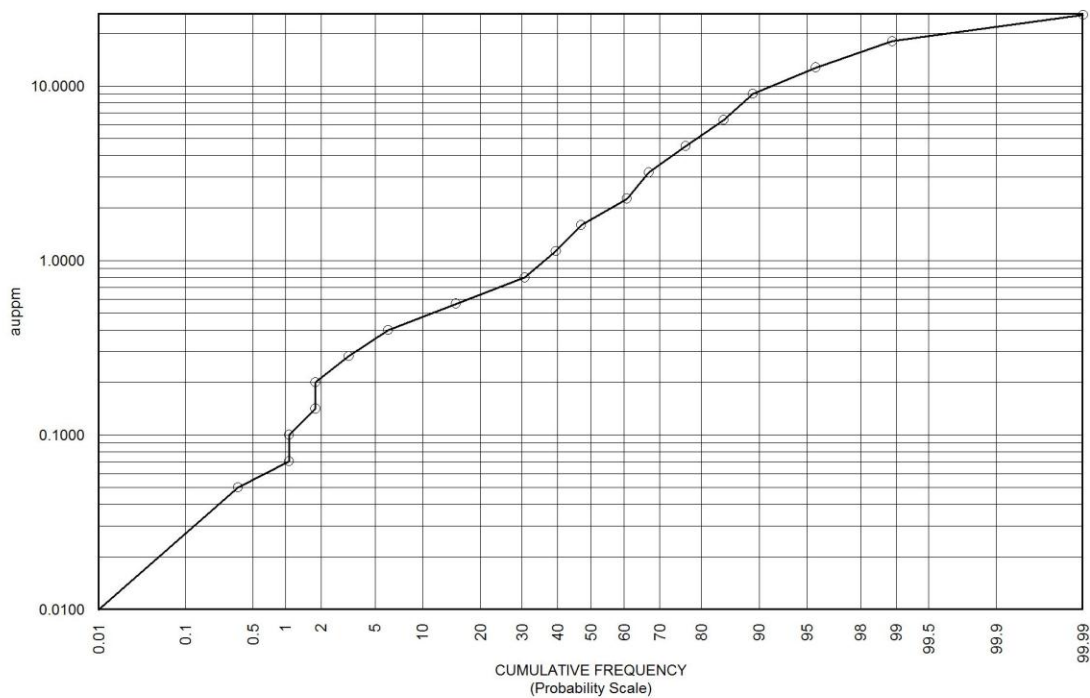


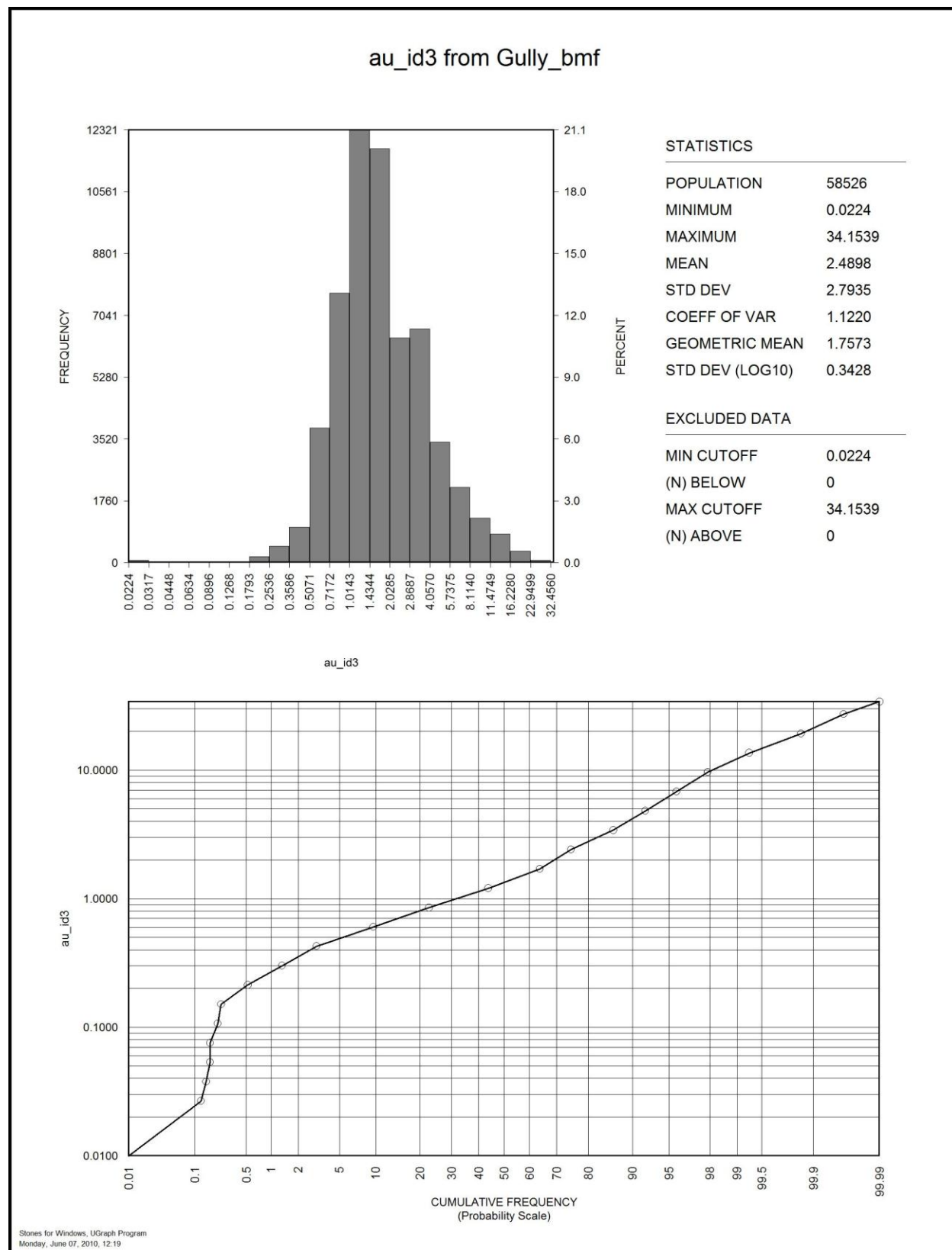
STATISTICS

POPULATION	276
MINIMUM	0.0420
MAXIMUM	25.9160
MEAN	3.9723
STD DEV	4.8068
COEFF OF VAR	1.2101
GEOMETRIC MEAN	2.0966
STD DEV (LOG10)	0.5090

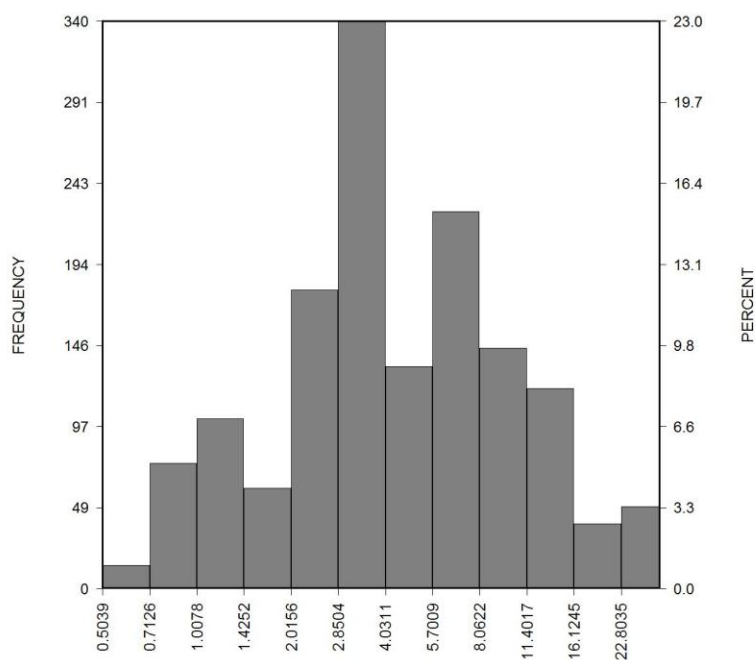
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MAX CUTOFF	25.9160
(N) ABOVE	0





au_id3 from Knoll_bmf



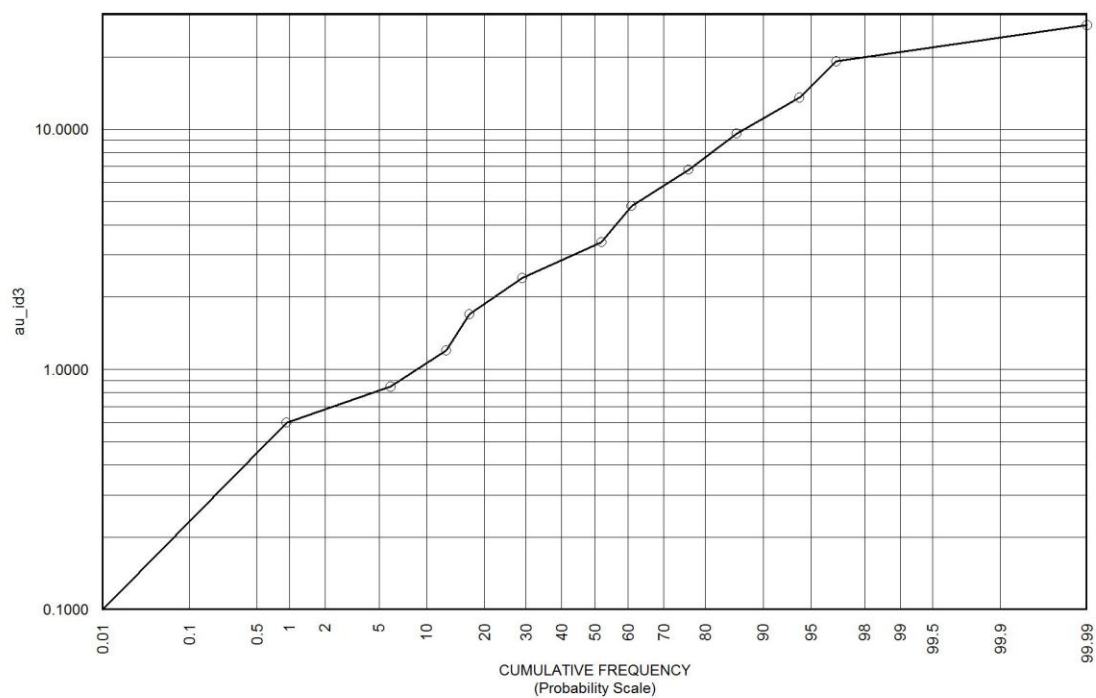
STATISTICS

POPULATION	1481
MINIMUM	0.5039
MAXIMUM	30.2605
MEAN	6.0775
STD DEV	5.5041
COEFF OF VAR	0.9056
GEOMETRIC MEAN	4.2846
STD DEV (LOG10)	0.3720

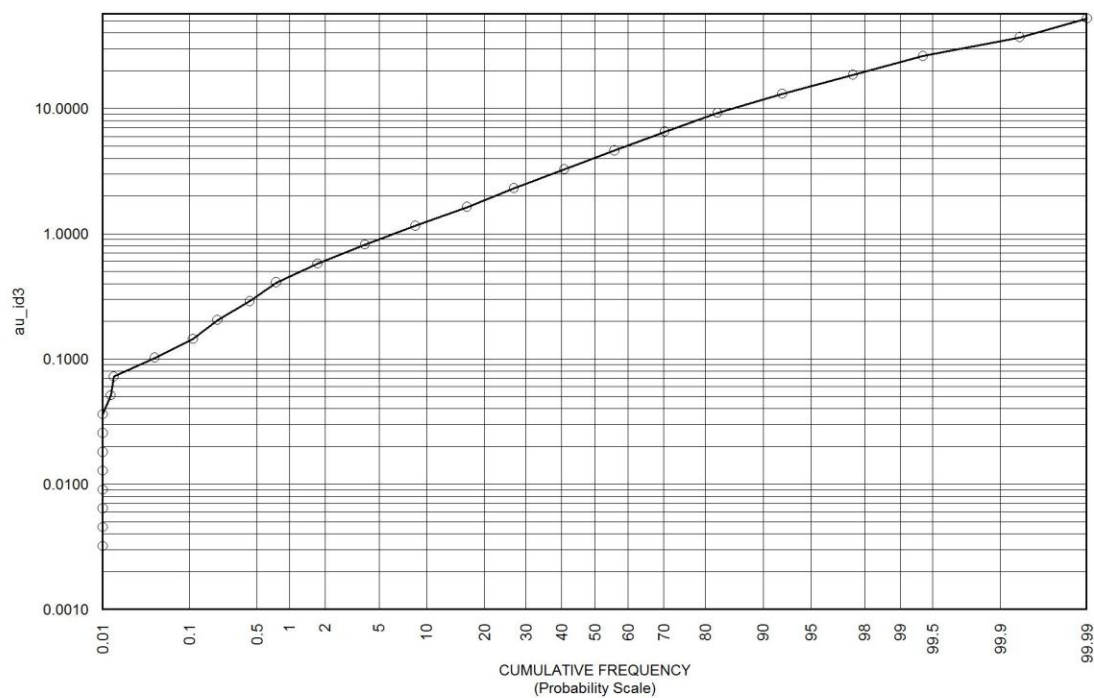
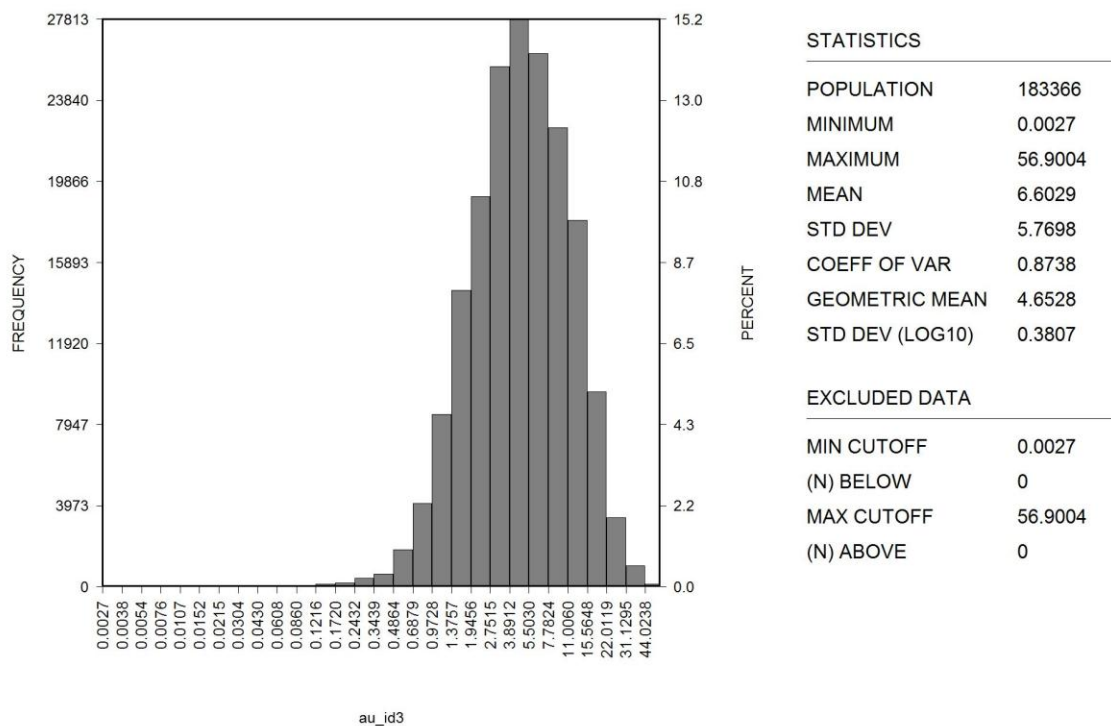
EXCLUDED DATA

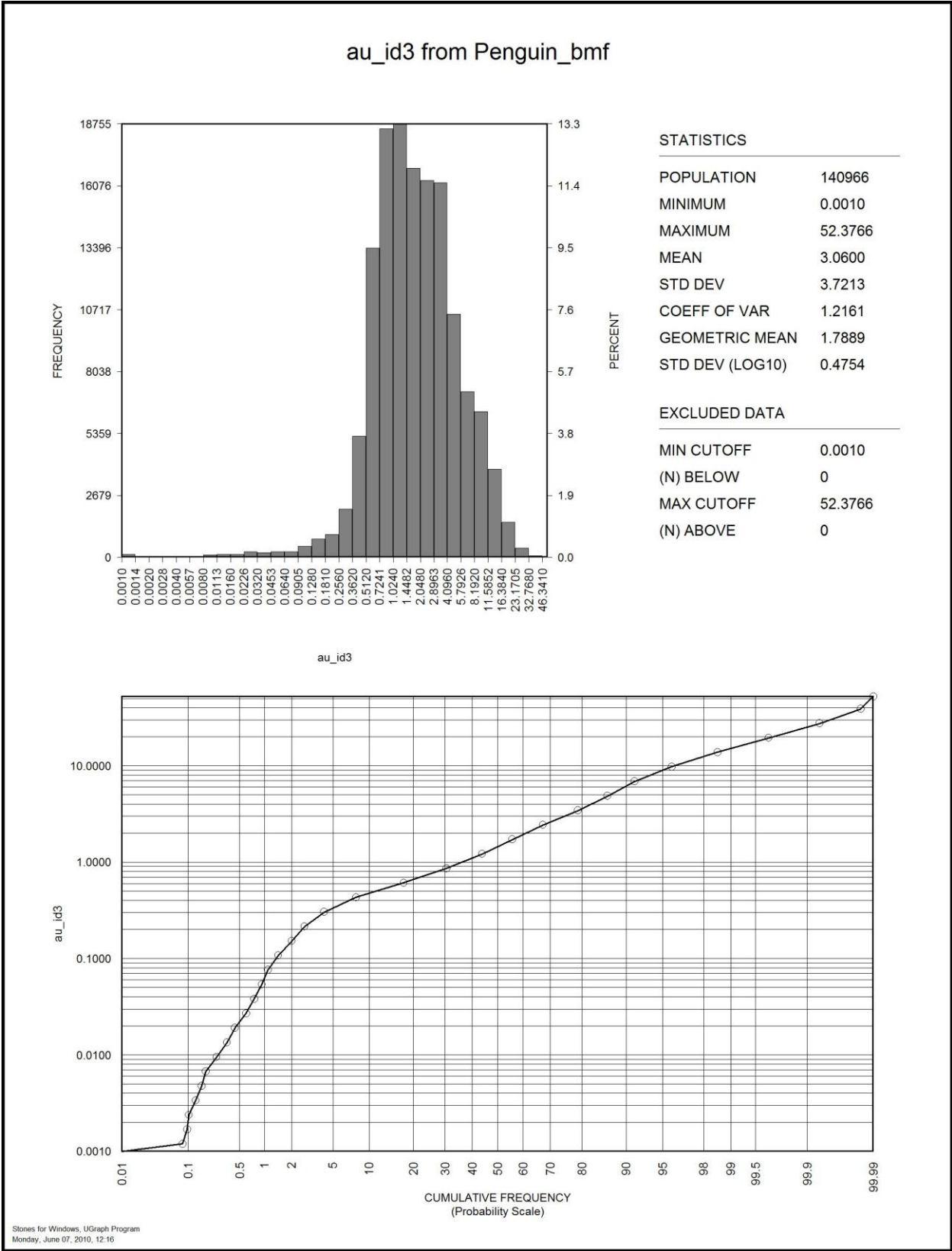
MIN CUTOFF	0.5039
(N) BELOW	0
MAX CUTOFF	30.2605
(N) ABOVE	0

au_id3

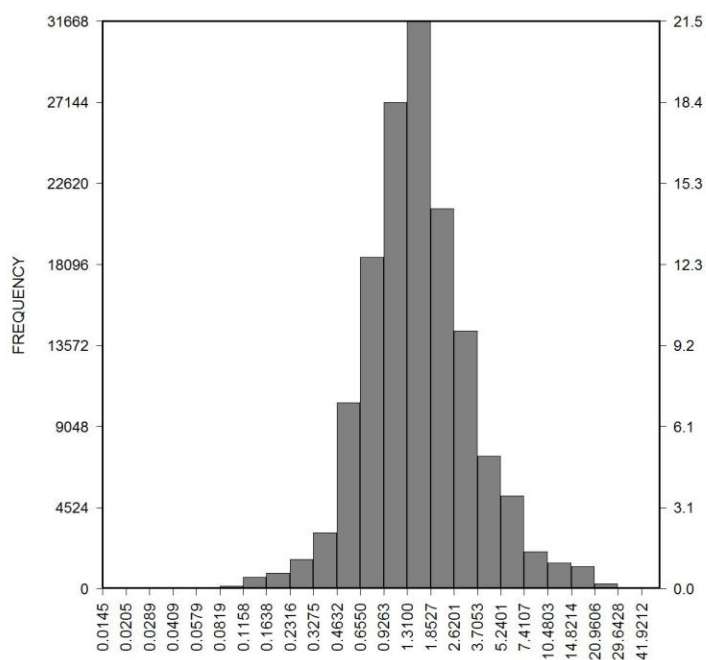


au_id3 from Peel_bmf





au_id3 from Shamrock Qb_bmf



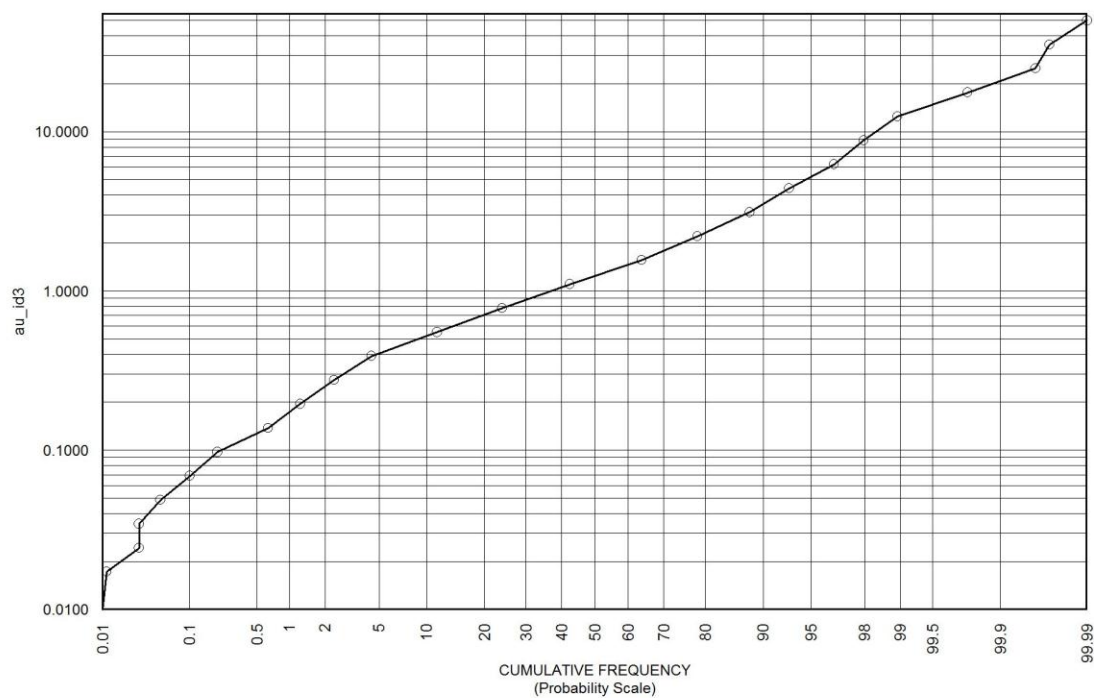
STATISTICS

POPULATION	147509
MINIMUM	0.0145
MAXIMUM	54.8374
MEAN	2.1919
STD DEV	2.6714
COEFF OF VAR	1.2188
GEOMETRIC MEAN	1.5335
STD DEV (LOG10)	0.3465

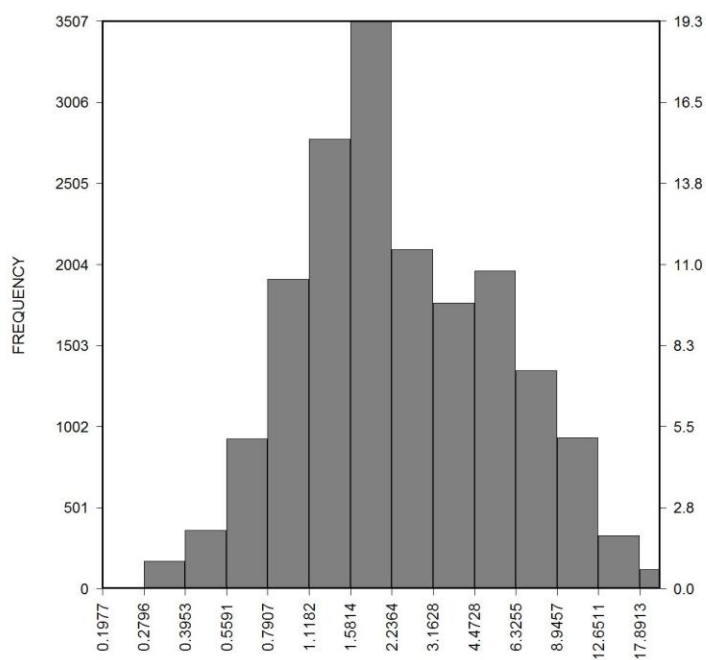
EXCLUDED DATA

MIN CUTOFF	0.0145
(N) BELOW	0
MAX CUTOFF	54.8374
(N) ABOVE	0

au_id3



au_id3 from Tarn_bmf

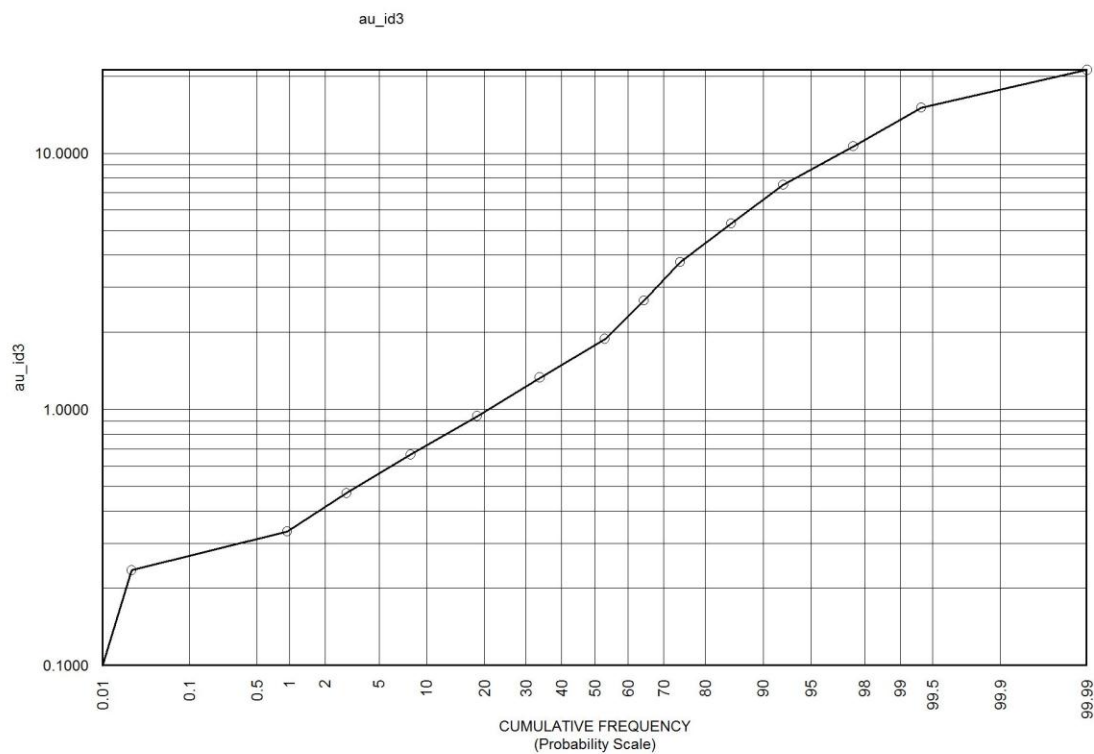


STATISTICS

POPULATION	18210
MINIMUM	0.1977
MAXIMUM	21.1512
MEAN	3.4676
STD DEV	3.3017
COEFF OF VAR	0.9522
GEOMETRIC MEAN	2.4201
STD DEV (LOG10)	0.3633

EXCLUDED DATA

MIN CUTOFF	0.1977
(N) BELOW	0
MAX CUTOFF	21.1512
(N) ABOVE	0



Appendix G

Block Model Details

```

Model name      : ktzagully_feb2010
History list    : ktzagully_feb201020Mar2010.bhst
Format          : extended
Structure       : non-regular
Number of blocks : 1423996
Number of variables : 15
Number of schemas : 2
Origin          : 0.000000 0.000000 0.000000
Bearing/Dip/Plunge : 90.000000 0.000000 0.000000
Created on      : Sat Mar 20 15:42:48 2010
Last modified on : Sat Mar 20 16:33:11 2010
Model is indexed.

```

Translation Tables :

```

variable entry      triangulation
shell :
    none            = 0
    sham01n         = 1 au_shamrock01north_topo_feb2010.00t
    sham01s         = 2 au_shamrock01south_topo_feb2010.00t
    sham24          = 3 au_shamrock24_feb2010.00t
    sham30          = 4 au_shamrock30_feb2010.00t
    sham31          = 5 au_shamrock31_feb2010.00t

```

```

zone :
    none           = 0
    waste          = 1
    gully          = 2
    xwaste         = 3

```

```

rock :
    none           = 0
    argbase        = 1 block_shamrock.00t
    xwaste         = 2 topo_orig_10m.00t
    air            = 3 topo_orig_10m_up20m.00t

```

```

mined :
    none           = 0
    pit            = 1 pit_gully_solid.00t
    unmined        = 2

```

```

redox :
    none           = 0
    unalt          = 1
    sulf           = 2
    ox             = 3
    hisulf         = 4
    transulf       = 5

```

Model name : ktzagully_feb2010

Schema <parent>

Offset minimum : 645080.000000 6826370.000000 1400.000000

maximum : 645510.000000 6826990.000000 1920.000000

Blocks minimum : 10.000000 10.000000 10.000000

maximum : 10.000000 10.000000 10.000000

No of blocks : 43 62 52

Schema <sub>

Offset minimum : 645080.000000 6826370.000000 1400.000000

maximum : 645510.000000 6826990.000000 1920.000000

Blocks minimum : 1.000000 1.000000 1.000000

maximum : 2.000000 2.000000 2.000000

No of blocks : 430 620 520

```

Model name      : ktzaknoll_feb2010
History list    : ktzaknoll_feb201020Mar2010.bhst
Format          : extended
Structure       : non-regular
Number of blocks : 28653
Number of variables : 15
Number of schemas : 2
Origin          : 0.000000 0.000000 0.000000
Bearing/Dip/Plunge : 90.000000 0.000000 0.000000
Created on      : Sat Mar 20 16:37:01 2010
Last modified on : Sat Mar 20 16:57:19 2010
Model is indexed.

```

Translation Tables :

shell :

```

    none      = 0
    sham25    = 1 au_shamrock25_topo_feb2010.00t
    sham26    = 2 au_shamrock26_feb2010.00t
    sham27    = 3 au_shamrock27_feb2010.00t
    sham28    = 4 au_shamrock28_topo_feb2010.00t

```

zone :

```

    none      = 0
    waste     = 1
    knoll     = 2
    xwaste    = 3

```

rock :

```

    none      = 0
    arg       = 1 block_shamrock.00t
    xwaste    = 2 topo_orig_10m.00t
    air       = 3 topo_orig_10m_up20m.00t

```

mined :

```

    none      = 0
    pit       = 1 pit_knoll_solid.00t
    unmined   = 2

```

redox :

```

    none      = 0
    unalt     = 1
    ox        = 2

```

Schema <parent>

```

Offset minimum : 646520.000000 6827400.000000 1570.000000
                maximum : 646590.000000 6827500.000000 1620.000000
Blocks minimum : 10.000000 10.000000 10.000000
                maximum : 10.000000 10.000000 10.000000
No of blocks   : 7 10 5

```

Model name : ktzaknoll_feb2010

Schema <sub>

Offset minimum : 646520.000000 6827400.000000 1570.000000

maximum : 646590.000000 6827500.000000 1620.000000

Blocks minimum : 1.000000 1.000000 1.000000

maximum : 2.000000 2.000000 2.000000

No of blocks : 70 100 50

```

Model name      : ktzapeel_feb2010
History list    : ktzapeel_feb201019Mar2010.bhst
Format         : extended
Structure      : non-regular
Number of blocks : 4356864
Number of variables : 15
Number of schemas : 2
Origin         : 0.000000 0.000000 0.000000
Bearing/Dip/Plunge : 90.000000 0.000000 0.000000
Created on     : Fri Mar 19 22:59:05 2010
Last modified on : Sat Mar 20 14:25:51 2010
Model is indexed.

```

Translation Tables :

shell :

```

none          = 0
peel01        = 1 au_peel01_topo_feb2010.00t
peel02        = 2 au_peel02_topo_feb2010.00t
peel03        = 3 au_peel03_feb2010.00t
peel04        = 4 au_peel04_feb2010.00t
peel05        = 5 au_peel05_feb2010.00t
peel06        = 6 au_peel06_feb2010.00t
peel07        = 7 au_peel07_feb2010.00t
peel08        = 8 au_peel08_feb2010.00t
peel09        = 9 au_peel09_feb2010.00t
peel10        = 10 au_peel10_feb2010.00t
peel11        = 11 au_peel11_feb2010.00t
peel12        = 12 au_peel12_feb2010.00t
peel13        = 13 au_peel13_feb2010.00t
peel14        = 14 au_peel14_feb2010.00t
peel15        = 15 au_peel15_feb2010.00t
peel16        = 16 au_peel16_feb2010.00t
peel17        = 17 au_peel17_feb2010.00t
peel18        = 18 au_peel18_feb2010.00t
peel19        = 19 au_peel19_feb2010.00t
peel20        = 20 au_peel20_feb2010.00t
peel21        = 21 au_peel21_feb2010.00t
peel31        = 22 au_peel31_feb2010.00t
peel22        = 23 au_peel22_feb2010.00t
peel32        = 24 au_peel32_feb2010.00t
peel23        = 25 au_peel23_feb2010.00t
peel33        = 26 au_peel33_feb2010.00t
peel24        = 27 au_peel24_feb2010.00t
peel34        = 28 au_peel34_feb2010.00t
peel25        = 29 au_peel25_feb2010.00t
peel35        = 30 au_peel35_topo_feb2010.00t
peel26        = 31 au_peel26_feb2010.00t
peel36        = 32 au_peel36_topo_feb2010.00t
peel27        = 33 au_peel27_feb2010.00t

```

Model name : ktzapeel_feb2010

peel37 = 34 au_peel37_feb2010.00t
 peel28 = 35 au_peel28_feb2010.00t
 peel38 = 36 au_peel38_feb2010.00t
 peel29 = 37 au_peel29_feb2010.00t
 peel30 = 38 au_peel30_feb2010.00t

zone :
 none = 0
 waste = 1
 xwaste = 2
 peel = 3

rock :
 none = 0
 argbase = 1 block_topo_peel_n1.00t, block_se.00t,
 arg_base_solid_peel_s1.00t,
 arg_base_solid_peel_s2.00t,
 arg_base_solid_peel_s3.00t
 lsbase = 2 ls_base_solid_peel_s1.00t, ls_base_solid_peel_s2.00t
 ls_base_solid_peel_s3.00t
 argtop = 3 arg_top_solid_peel_s1.00t,
 arg_top_solid_peel_s2.00t,
 arg_top_solid_peel_s3.00t
 xwaste = 4 topo_orig_10m.00t
 air = 5 topo_orig_10m_up20m.00t
 lstop = 6 ls_top_solid_peel_s1a.00t,
 ls_top_solid_peel_s2a.00t

mined :
 none = 0
 pit = 1 pit_1430east_solid.00t, pit_break_solid.00t
 pit_ridge_solid.00t
 unmined = 2
 ug = 3

redox :
 none = 0
 unalt = 1
 sulf = 2
 transulf = 3
 ox = 4
 hisulf = 5

Model name : ktzapeel_feb2010

Schema <parent>

Offset minimum : 645010.000000 6825280.000000 1360.000000

maximum : 645850.000000 6825870.000000 1720.000000

Blocks minimum : 10.000000 10.000000 10.000000

maximum : 10.000000 10.000000 10.000000

No of blocks : 84 59 36

Schema <sub>

Offset minimum : 645010.000000 6825280.000000 1360.000000

maximum : 645850.000000 6825870.000000 1720.000000

Blocks minimum : 1.000000 1.000000 1.000000

maximum : 2.000000 2.000000 2.000000

No of blocks : 840 590 360

```
Model name      : ktzapenguinnorth_feb2010
History list    : ktzapenguinnorth_feb201015Mar2010.bhst
Format          : extended
Structure       : non-regular
Number of blocks : 4458759
Number of variables : 15
Number of schemas : 2
Origin          : 0.000000 0.000000 0.000000
Bearing/Dip/Plunge : 90.000000 0.000000 0.000000
Created on      : Mon Mar 15 17:57:19 2010
Last modified on : Fri Mar 19 22:45:08 2010
Model is indexed.
```

Translation Tables :

shell :

```
none          = 0
penguin01     = 1 au_penguin01_topo_feb2010.00t
penguin02     = 2 au_penguin02_feb2010.00t
penguin03     = 3 au_penguin03_feb2010.00t
penguin04     = 4 au_penguin04_feb2010.00t
penguin05     = 5 au_penguin05_feb2010.00t
penguin06     = 6 au_penguin06_feb2010.00t
penguin07     = 7 au_penguin07_feb2010.00t
penguin08     = 8 au_penguin08_feb2010.00t
penguin09     = 9 au_penguin09_feb2010.00t
penguin10     = 10 au_penguin10_feb2010.00t
penguin11     = 11 au_penguin11_feb2010.00t
penguin12     = 12 au_penguin12_topo_feb2010.00t
penguin13     = 13 au_penguin13_feb2010.00t
penguin14     = 14 au_penguin14_feb2010.00t
penguin15     = 15 au_penguin15_feb2010.00t
penguin16     = 16 au_penguin16_feb2010.00t
penguin17     = 17 au_penguin17_feb2010.00t
penguin18     = 18 au_penguin18_feb2010.00t
penguin19     = 19 au_penguin19_feb2010.00t
penguin20     = 20 au_penguin20_feb2010.00t
```

zone :

```
none          = 0
waste         = 1
penguin       = 2
xwaste        = 3
```

Model name : ktzapenguinnorth_feb2010

rock :

```

none           = 0
argbase        = 1 block_topo_peel_n1.00t,
                  block_topo_penguin_n1.00t,
                  arg_base_solid_penguin_s1.00t,
                  arg_base_solid_penguin_s2.00t,
                  arg_base_solid_penguin_s3.00t,
                  arg_base_solid_penguin_s4.00t,
                  arg_base_solid_penguin_s5.00t
lsbase         = 2 ls_base_solid_penguin_s1.00t,
                  ls_base_solid_penguin_s2.00t,
                  ls_base_solid_penguin_s3.00t,
                  ls_base_solid_penguin_s4.00t,
                  ls_base_solid_penguin_s5.00t
argtop         = 3 arg_top_solid_penguin_s1.00t,
                  arg_top_solid_penguin_s2.00t,
                  arg_top_solid_penguin_s3.00t,
                  arg_top_solid_penguin_s4.00t,
                  arg_top_solid_penguin_s5.00t
xwaste         = 4 topo_orig_10m.00t
air            = 5 topo_orig_10m_up20m.00t
lstop         = 6 ls_top_solid_penguin_s1a.00t,
                  ls_top_solid_penguin_s2a.00t,
                  ls_top_solid_penguin_s3a.00t

```

mined :

```

none           = 0
unmined        = 1

```

redox :

```

none           = 0
unalt          = 1
sulf           = 2
transulf       = 3
ox             = 4
hisulf         = 5

```

Schema <parent>

```

Offset minimum : 644080.000000 6825180.000000 1480.000000
                  maximum : 644680.000000 6825900.000000 1890.000000
Blocks minimum : 10.000000 10.000000 10.000000
                  maximum : 10.000000 10.000000 10.000000
No of blocks   : 60 72 41

```

Schema <sub>

```

Offset minimum : 644080.000000 6825180.000000 1480.000000
                  maximum : 644680.000000 6825900.000000 1890.000000
Blocks minimum : 1.000000 1.000000 1.000000
                  maximum : 2.000000 2.000000 2.000000
No of blocks   : 600 720 410

```

```

Model name      : ktzapenguinsouth_feb2010
History list    : ktzapenguinsouth_feb201015Mar2010.bhst
Format          : extended
Structure       : non-regular
Number of blocks : 2032498
Number of variables : 15
Number of schemas : 2
Origin          : 0.000000 0.000000 0.000000
Bearing/Dip/Plunge : 90.000000 0.000000 0.000000
Created on      : Mon Mar 15 18:10:05 2010
Last modified on : Fri Mar 19 17:52:45 2010
Model is indexed.

```

Translation Tables :

shell :

```

none          = 0
penguin21     = 1 au_penguin21_feb2010.00t
penguin22     = 2 au_penguin22_topo_feb2010.00t
penguin23     = 3 au_penguin23_topo_feb2010.00t
penguin24     = 4 au_penguin24_feb2010.00t
penguin25     = 5 au_penguin25_feb2010.00t
penguin26     = 6 au_penguin26_feb2010.00t
penguin27     = 7 au_penguin27_topo_feb2010.00t
penguin28     = 8 au_penguin28_feb2010.00t

```

zone :

```

none          = 0
waste         = 1
penguin       = 2
xwaste        = 3

```

rock :

```

none          = 0
lsbase        = 1 ls_base_solid_penguin_s1.00t,
                  ls_base_solid_penguin_s2.00t,
                  ls_base_solid_penguin_s3.00t,
                  ls_base_solid_penguin_s4.00t,
                  ls_base_solid_penguin_s5.00t,
                  ls_base_solid_tarn_s2.00t
argtop        = 2 arg_top_solid_penguin_s1.00t,
                  arg_top_solid_penguin_s2.00t,
                  arg_top_solid_penguin_s3.00t,
                  arg_top_solid_penguin_s4.00t,
                  arg_top_solid_penguin_s5.00t,
                  arg_top_solid_tarn_s2.00t

```

```

Model name           : ktzapenguinsouth_feb2010

argbase      = 3 block_topo_peel_n1.00t, block_topo_penguin_n1.00t
                arg_base_solid_penguin_s1.00t,
                arg_base_solid_penguin_s2.00t,
                arg_base_solid_penguin_s3.00t,
                arg_base_solid_penguin_s4.00t,
                arg_base_solid_penguin_s5.00t,
                block_topo_tarn_n1.00t,
                arg_base_solid_tarn_s2.00t
    xwaste      = 4 topo_orig_10m.00t
    air         = 5 topo_orig_10m_up20m.00t
    lstop       = 6 ls_top_solid_penguin_s1a.00t,
                ls_top_solid_penguin_s2a.00t,
                ls_top_solid_penguin_s3a.00t

mined :
    none        = 0
    unmined     = 1

redox :
    none        = 0
    unalt       = 1
    sulf        = 2
    hisulf      = 3
    ox          = 4
    transulf    = 5

Schema <parent>
Offset minimum : 643720.000000 6824700.000000 1440.000000
                maximum : 644280.000000 6825270.000000 1650.000000
Blocks minimum : 10.000000 10.000000 10.000000
                maximum : 10.000000 10.000000 10.000000
    No of blocks : 56 57 21

Schema <sub>
Offset minimum : 643720.000000 6824700.000000 1440.000000
                maximum : 644280.000000 6825270.000000 1650.000000
Blocks minimum : 1.000000 1.000000 1.000000
                maximum : 2.000000 2.000000 2.000000
    No of blocks : 560 570 210

```

```
Model name      : ktzaqb_feb2010
History list    : ktzaqb_feb201020Mar2010.bhst
Format         : extended
Structure      : non-regular
Number of blocks : 4576580
Number of variables : 15
Number of schemas : 2
Origin         : 0.000000 0.000000 0.000000
Bearing/Dip/Plunge : 90.000000 0.000000 0.000000
Created on     : Sat Mar 20 16:59:56 2010
Last modified on : Sat Mar 20 21:55:13 2010
Model is indexed.
```

Translation Tables :

shell :

none	= 0
qb	= 1 au_qbshamrock_topo_feb2010.00t
sham02	= 2 au_shamrock02_feb2010.00t
sham03	= 3 au_shamrock03_feb2010.00t
sham04	= 4 au_shamrock04_feb2010.00t
sham05	= 5 au_shamrock05_feb2010.00t
sham06	= 6 au_shamrock06_feb2010.00t
sham07	= 7 au_shamrock07_topo_feb2010.00t
sham08	= 8 au_shamrock08_topo_feb2010.00t
sham09	= 9 au_shamrock09_feb2010.00t
sham10	= 10 au_shamrock10_feb2010.00t
sham11	= 11 au_shamrock11_feb2010.00t
sham12	= 12 au_shamrock12_feb2010.00t
sham13	= 13 au_shamrock13_feb2010.00t
sham14	= 14 au_shamrock14_feb2010.00t
sham15	= 15 au_shamrock15_feb2010.00t
sham16	= 16 au_shamrock16_feb2010.00t
sham17	= 17 au_shamrock17_topo_feb2010.00t
sham18	= 18 au_shamrock18_topo_feb2010.00t
sham19	= 19 au_shamrock19_feb2010.00t
sham20	= 20 au_shamrock20_feb2010.00t
sham21	= 21 au_shamrock21_feb2010.00t
sham22	= 22 au_shamrock22_feb2010.00t
sham23	= 23 au_shamrock23_feb2010.00t

zone :

none	= 0
waste	= 1
qb	= 2
sham	= 3
xwaste	= 4

```
Model name          : ktzaqb_feb2010

rock :
  none              = 0
  arg               = 1 block_shamrock.00t
  xwaste            = 2 topo_orig_10m.00t
  air               = 3 topo_orig_10m_up20m.00t
```

```
mined :
  none              = 0
  unmined           = 1
```

```
redox :
  none              = 0
  unalt             = 1
  ox                = 2
  sulf              = 3
  transulf          = 4
  hisulf            = 5
```

Schema <parent>

```
Offset minimum : 645700.000000 6826170.000000 1220.000000
                  maximum : 646320.000000 6826980.000000 1880.000000
Blocks minimum : 10.000000 10.000000 10.000000
                  maximum : 10.000000 10.000000 10.000000
No of blocks   : 62 81 66
```

Schema <sub>

```
Offset minimum : 645700.000000 6826170.000000 1220.000000
                  maximum : 646320.000000 6826980.000000 1880.000000
Blocks minimum : 1.000000 1.000000 1.000000
                  maximum : 2.000000 2.000000 2.000000
No of blocks   : 620 810 660
```

```

Model name      : ktzatarn_feb2010
History list    : ktzatarn_feb201015Mar2010.bhst
Format          : extended
Structure       : non-regular
Number of blocks : 629496
Number of variables : 15
Number of schemas : 2
Origin          : 0.000000 0.000000 0.000000
Bearing/Dip/Plunge : 90.000000 0.000000 0.000000
Created on      : Mon Mar 15 17:25:52 2010
Last modified on : Sat Mar 20 13:24:31 2010
Model is indexed.

```

Translation Tables :

shell :

```

none          = 0
tarn01        = 1 au_tarn01_feb2010.00t
tarn02        = 2 au_tarn02_feb2010.00t
tarn03        = 3 au_tarn03_topo_feb2010.00t
tarn04        = 4 au_tarn04_topo_feb2010.00t
tarn05        = 5 au_tarn05_feb2010.00t
tarn06        = 6 au_tarn06_topo_feb2010.00t
tarn07        = 7 au_tarn07_feb2010.00t
tarn08        = 8 au_tarn08_topo_feb2010.00t

```

zone :

```

none          = 0
waste         = 1
tarn          = 2
xwaste        = 3

```

rock :

```

none          = 0
lsbase        = 1 ls_base_solid_tarn_s1.00t,
               ls_base_solid_tarn_s2.00t
argbase       = 2 arg_base_solid_tarn_s1.00t,
               arg_base_solid_tarn_s2.00t
argtop        = 3 arg_top_solid_tarn_s2.00t
xwaste        = 4 topo_orig_10m.00t
air           = 5 topo_orig_10m_up20m.00t

```

mined :

```

none          = 0
mined         = 1 pit_tarn_solid.00t
unmined       = 2
pit           = 3

```

Model name : ktzatarn_feb2010

redox :

none	= 0
unalt	= 1
ox	= 2
transulf	= 3
sulf	= 4
hisulf	= 5

Schema <parent>

Offset minimum :	643350.000000	6824390.000000	1550.000000
maximum :	643680.000000	6824800.000000	1710.000000
Blocks minimum :	10.000000	10.000000	10.000000
maximum :	10.000000	10.000000	10.000000
No of blocks :	33	41	16

Schema <sub>

Offset minimum :	643350.000000	6824390.000000	1550.000000
maximum :	643680.000000	6824800.000000	1710.000000
Blocks minimum :	1.000000	1.000000	1.000000
maximum :	2.000000	2.000000	2.000000
No of blocks :	330	410	160

Appendix H

Estimation Parameters

Tarn Estimation Parameters

est	model	est_id	est_type	grade variable	parent x	parent y	parent z	bearing (z)	plunge (y)	dip (x)	major axis	semi axis	minor axis	min samps	max samps	power
PASS1	TARN	trn01a	INVERSE DISTANCE	AU_ID3	6	6	4	270	-25	10	20	20	5	3	8	3
PASS1	TARN	trn02a	INVERSE DISTANCE	AU_ID3	6	6	4	0	0	0	20	20	5	3	8	3
PASS1	TARN	trn03a	INVERSE DISTANCE	AU_ID3	6	6	4	0	0	0	20	20	5	3	8	3
PASS1	TARN	trn04a	INVERSE DISTANCE	AU_ID3	6	6	4	0	0	0	20	20	5	3	8	3
PASS1	TARN	trn05a	INVERSE DISTANCE	AU_ID3	6	6	4	49	-72	0	20	20	5	3	8	3
PASS1	TARN	trn06a	INVERSE DISTANCE	AU_ID3	6	6	4	90	-9	0	20	20	5	3	8	3
PASS1	TARN	trn07a	INVERSE DISTANCE	AU_ID3	6	6	4	90	-26	16	20	20	5	3	8	3
PASS1	TARN	trn08a	INVERSE DISTANCE	AU_ID3	6	6	4	90	-14	-8	20	20	5	3	8	3
PASS2	TARN	trn01b	INVERSE DISTANCE	AU_ID3	6	6	4	270	-25	10	100	100	25	1	8	3
PASS2	TARN	trn02b	INVERSE DISTANCE	AU_ID3	6	6	4	0	0	0	100	100	25	1	8	3
PASS2	TARN	trn03b	INVERSE DISTANCE	AU_ID3	6	6	4	0	0	0	100	100	25	1	8	3
PASS2	TARN	trn04b	INVERSE DISTANCE	AU_ID3	6	6	4	0	0	0	100	100	25	1	8	3
PASS2	TARN	trn05b	INVERSE DISTANCE	AU_ID3	6	6	4	49	-72	0	100	100	25	1	8	3
PASS2	TARN	trn06b	INVERSE DISTANCE	AU_ID3	6	6	4	90	-9	0	100	100	25	1	8	3
PASS2	TARN	trn07b	INVERSE DISTANCE	AU_ID3	6	6	4	90	-26	16	100	100	25	1	8	3
PASS2	TARN	trn08b	INVERSE DISTANCE	AU_ID3	6	6	4	90	-14	-8	100	100	25	1	8	3
SG	TARN	trn01a	INVERSE DISTANCE	SG	6	6	4	270	-25	10	100	100	25	1	1	3
SG	TARN	trn02a	INVERSE DISTANCE	SG	6	6	4	0	0	0	100	100	25	1	1	3
SG	TARN	trn03a	INVERSE DISTANCE	SG	6	6	4	0	0	0	100	100	25	1	1	3
SG	TARN	trn04a	INVERSE DISTANCE	SG	6	6	4	0	0	0	100	100	25	1	1	3
SG	TARN	trn05a	INVERSE DISTANCE	SG	6	6	4	49	-72	0	100	100	25	1	1	3
SG	TARN	trn06a	INVERSE DISTANCE	SG	6	6	4	90	-9	0	100	100	25	1	1	3
SG	TARN	trn07a	INVERSE DISTANCE	SG	6	6	4	90	-26	16	100	100	25	1	1	3
SG	TARN	trn08a	INVERSE DISTANCE	SG	6	6	4	90	-14	-8	100	100	25	1	1	3
SG	TARN	waste1	INVERSE DISTANCE	SG	0	0	0	0	0	0	20	20	10	1	1	3

est	model	est_id	sample dbase	assay	char field	char value	hi yield field	threshold	maj radius	semi radius	minor radius	max per dh	zone variable	zone value	blks by cond	condition
PASS1	TARN	trn01a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["TARN"]	AUPPM	50	3	3	2	2	shell	tarn01		
PASS1	TARN	trn02a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["TARN"]	AUPPM	50	3	3	2	2	shell	tarn02		
PASS1	TARN	trn03a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["TARN"]	AUPPM	50	3	3	2	2	shell	tarn03		
PASS1	TARN	trn04a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["TARN"]	AUPPM	50	3	3	2	2	shell	tarn04		
PASS1	TARN	trn05a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["TARN"]	AUPPM	50	3	3	2	2	shell	tarn05		
PASS1	TARN	trn06a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["TARN"]	AUPPM	50	3	3	2	2	shell	tarn06		
PASS1	TARN	trn07a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["TARN"]	AUPPM	50	3	3	2	2	shell	tarn07		
PASS1	TARN	trn08a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["TARN"]	AUPPM	50	3	3	2	2	shell	tarn08		
PASS2	TARN	trn01b	ktzafeb2010.cmp.isis	AUPPM	ZONE	["TARN"]	AUPPM	50	3	3	2	3	shell	tarn01	1	au_id3 lt 0
PASS2	TARN	trn02b	ktzafeb2010.cmp.isis	AUPPM	ZONE	["TARN"]	AUPPM	50	3	3	2	3	shell	tarn02	1	au_id3 lt 0
PASS2	TARN	trn03b	ktzafeb2010.cmp.isis	AUPPM	ZONE	["TARN"]	AUPPM	50	3	3	2	3	shell	tarn03	1	au_id3 lt 0
PASS2	TARN	trn04b	ktzafeb2010.cmp.isis	AUPPM	ZONE	["TARN"]	AUPPM	50	3	3	2	3	shell	tarn04	1	au_id3 lt 0
PASS2	TARN	trn05b	ktzafeb2010.cmp.isis	AUPPM	ZONE	["TARN"]	AUPPM	50	3	3	2	3	shell	tarn05	1	au_id3 lt 0
PASS2	TARN	trn06b	ktzafeb2010.cmp.isis	AUPPM	ZONE	["TARN"]	AUPPM	50	3	3	2	3	shell	tarn06	1	au_id3 lt 0
PASS2	TARN	trn07b	ktzafeb2010.cmp.isis	AUPPM	ZONE	["TARN"]	AUPPM	50	3	3	2	3	shell	tarn07	1	au_id3 lt 0
PASS2	TARN	trn08b	ktzafeb2010.cmp.isis	AUPPM	ZONE	["TARN"]	AUPPM	50	3	3	2	3	shell	tarn08	1	au_id3 lt 0
SG	TARN	trn01a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["TARN"]	AUPPM	1	2	2	2	0	shell	tarn01		
SG	TARN	trn02a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["TARN"]	AUPPM	1	2	2	2	0	shell	tarn02		
SG	TARN	trn03a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["TARN"]	AUPPM	1	2	2	2	0	shell	tarn03		
SG	TARN	trn04a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["TARN"]	AUPPM	1	2	2	2	0	shell	tarn04		
SG	TARN	trn05a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["TARN"]	AUPPM	1	2	2	2	0	shell	tarn05		
SG	TARN	trn06a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["TARN"]	AUPPM	1	2	2	2	0	shell	tarn06		
SG	TARN	trn07a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["TARN"]	AUPPM	1	2	2	2	0	shell	tarn07		
SG	TARN	trn08a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["TARN"]	AUPPM	1	2	2	2	0	shell	tarn08		
SG	TARN	waste1	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["NONE"]	AUPPM	1	2	2	2	0	shell	none	1	sg lt 0

QB Estimation Parameters

est	model	est_id	est_type	grade variable	parent x	parent y	parent z	bearing (z)	plunge (y)	dip (x)	major axis	semi axis	minor axis	min samps	max samps	power
PASS1	QB	sh02a	INVERSE DISTANCE	AU_ID3	6	6	4	90	0	0	20	20	5	3	8	3
PASS1	QB	sh03a	INVERSE DISTANCE	AU_ID3	6	6	4	90	-20	0	20	20	5	3	8	3
PASS1	QB	sh04a	INVERSE DISTANCE	AU_ID3	6	6	4	90	-20	0	20	20	5	3	8	3
PASS1	QB	sh05a	INVERSE DISTANCE	AU_ID3	6	6	4	90	-10	0	20	20	5	3	8	3
PASS1	QB	sh06a	INVERSE DISTANCE	AU_ID3	6	6	4	90	-20	0	20	20	5	3	8	3
PASS1	QB	sh07a	INVERSE DISTANCE	AU_ID3	6	6	4	90	-40	-10	20	20	10	3	8	3
PASS1	QB	sh08a	INVERSE DISTANCE	AU_ID3	6	6	4	90	-40	-5	20	20	5	3	8	3
PASS1	QB	sh09a	INVERSE DISTANCE	AU_ID3	6	6	4	90	-28	0	20	20	5	3	8	3
PASS1	QB	sh10a	INVERSE DISTANCE	AU_ID3	6	6	4	90	-28	0	20	20	5	3	8	3
PASS1	QB	sh11a	INVERSE DISTANCE	AU_ID3	6	6	4	90	-28	0	20	20	5	3	8	3
PASS1	QB	sh12a	INVERSE DISTANCE	AU_ID3	6	6	4	90	-20	0	20	20	5	3	8	3
PASS1	QB	sh13a	INVERSE DISTANCE	AU_ID3	6	6	4	90	0	0	20	20	5	3	8	3
PASS1	QB	sh14a	INVERSE DISTANCE	AU_ID3	6	6	4	90	-47	0	20	20	5	3	8	3
PASS1	QB	sh15a	INVERSE DISTANCE	AU_ID3	6	6	4	90	-48	0	20	20	5	3	8	3
PASS1	QB	sh16a	INVERSE DISTANCE	AU_ID3	6	6	4	90	-25	0	20	20	5	3	8	3
PASS1	QB	sh17a	INVERSE DISTANCE	AU_ID3	6	6	4	70	-77	0	20	20	5	3	8	3
PASS1	QB	sh18a	INVERSE DISTANCE	AU_ID3	6	6	4	90	0	0	20	20	5	3	8	3
PASS1	QB	sh19a	INVERSE DISTANCE	AU_ID3	6	6	4	90	0	0	20	20	5	3	8	3
PASS1	QB	sh20a	INVERSE DISTANCE	AU_ID3	6	6	4	270	-45	0	20	20	5	3	8	3
PASS1	QB	sh21a	INVERSE DISTANCE	AU_ID3	6	6	4	90	0	0	20	20	5	3	8	3
PASS1	QB	sh22a	INVERSE DISTANCE	AU_ID3	6	6	4	90	0	0	20	20	5	3	8	3
PASS1	QB	sh23a	INVERSE DISTANCE	AU_ID3	6	6	4	137	-80	0	20	20	5	3	8	3
PASS2	QB	sh02b	INVERSE DISTANCE	AU_ID3	6	6	4	90	0	0	100	100	25	1	8	3
PASS2	QB	sh03b	INVERSE DISTANCE	AU_ID3	6	6	4	90	-20	0	100	100	25	1	8	3
PASS2	QB	sh04b	INVERSE DISTANCE	AU_ID3	6	6	4	90	-20	0	100	100	25	1	8	3
PASS2	QB	sh05b	INVERSE DISTANCE	AU_ID3	6	6	4	90	-10	0	100	100	25	1	8	3
PASS2	QB	sh06b	INVERSE DISTANCE	AU_ID3	6	6	4	90	-20	0	100	100	25	1	8	3
PASS2	QB	sh07b	INVERSE DISTANCE	AU_ID3	6	6	4	90	-40	-10	100	100	25	1	8	3
PASS2	QB	sh08b	INVERSE DISTANCE	AU_ID3	6	6	4	90	-40	-5	100	100	25	1	8	3
PASS2	QB	sh09b	INVERSE DISTANCE	AU_ID3	6	6	4	90	-28	0	100	100	25	1	8	3
PASS2	QB	sh10b	INVERSE DISTANCE	AU_ID3	6	6	4	90	-28	0	100	100	25	1	8	3
PASS2	QB	sh11b	INVERSE DISTANCE	AU_ID3	6	6	4	90	-28	0	100	100	25	1	8	3
PASS2	QB	sh12b	INVERSE DISTANCE	AU_ID3	6	6	4	90	-20	0	100	100	25	1	8	3
PASS2	QB	sh13b	INVERSE DISTANCE	AU_ID3	6	6	4	90	0	0	100	100	25	1	8	3
PASS2	QB	sh14b	INVERSE DISTANCE	AU_ID3	6	6	4	90	-47	0	100	100	25	1	8	3
PASS2	QB	sh15b	INVERSE DISTANCE	AU_ID3	6	6	4	90	-48	0	100	100	25	1	8	3
PASS2	QB	sh16b	INVERSE DISTANCE	AU_ID3	6	6	4	90	-25	0	100	100	25	1	8	3
PASS2	QB	sh17b	INVERSE DISTANCE	AU_ID3	6	6	4	70	-77	0	100	100	25	1	8	3
PASS2	QB	sh18b	INVERSE DISTANCE	AU_ID3	6	6	4	90	0	0	100	100	25	1	8	3
PASS2	QB	sh19b	INVERSE DISTANCE	AU_ID3	6	6	4	90	0	0	100	100	25	1	8	

est	model	est_id	est_type	grade variable	parent x	parent y	parent z	bearing (z)	plunge (y)	dip (x)	major axis	semi axis	minor axis	min samps	max samps	power
PASS2	QB	sh20b	INVERSE DISTANCE	AU_ID3	6	6	4	270	-45	0	100	100	25	1	8	3
PASS2	QB	sh21b	INVERSE DISTANCE	AU_ID3	6	6	4	90	0	0	100	100	25	1	8	3
PASS2	QB	sh22b	INVERSE DISTANCE	AU_ID3	6	6	4	90	0	0	100	100	25	1	8	3
PASS2	QB	sh23b	INVERSE DISTANCE	AU_ID3	6	6	4	137	-80	0	100	100	25	1	8	3
SG	QB	sh02a	INVERSE DISTANCE	SG	6	6	4	90	0	0	100	100	25	1	1	3
SG	QB	sh03a	INVERSE DISTANCE	SG	6	6	4	90	-20	0	100	100	25	1	1	3
SG	QB	sh04a	INVERSE DISTANCE	SG	6	6	4	90	-20	0	100	100	25	1	1	3
SG	QB	sh05a	INVERSE DISTANCE	SG	6	6	4	90	-10	0	100	100	25	1	1	3
SG	QB	sh06a	INVERSE DISTANCE	SG	6	6	4	90	-20	0	100	100	25	1	1	3
SG	QB	sh07a	INVERSE DISTANCE	SG	6	6	4	90	-40	-10	100	100	25	1	1	3
SG	QB	sh08a	INVERSE DISTANCE	SG	6	6	4	90	-40	-5	100	100	25	1	1	3
SG	QB	sh09a	INVERSE DISTANCE	SG	6	6	4	90	-28	0	100	100	25	1	1	3
SG	QB	sh10a	INVERSE DISTANCE	SG	6	6	4	90	-28	0	100	100	25	1	1	3
SG	QB	sh11a	INVERSE DISTANCE	SG	6	6	4	90	-28	0	100	100	25	1	1	3
SG	QB	sh12a	INVERSE DISTANCE	SG	6	6	4	90	-20	0	100	100	25	1	1	3
SG	QB	sh13a	INVERSE DISTANCE	SG	6	6	4	90	0	0	100	100	25	1	1	3
SG	QB	sh14a	INVERSE DISTANCE	SG	6	6	4	90	-47	0	100	100	25	1	1	3
SG	QB	sh15a	INVERSE DISTANCE	SG	6	6	4	90	-48	0	100	100	25	1	1	3
SG	QB	sh16a	INVERSE DISTANCE	SG	6	6	4	90	-25	0	100	100	25	1	1	3
SG	QB	sh17a	INVERSE DISTANCE	SG	6	6	4	70	-77	0	100	100	25	1	1	3
SG	QB	sh18a	INVERSE DISTANCE	SG	6	6	4	90	0	0	100	100	25	1	1	3
SG	QB	sh19a	INVERSE DISTANCE	SG	6	6	4	90	0	0	100	100	25	1	1	3
SG	QB	sh20a	INVERSE DISTANCE	SG	6	6	4	270	-45	0	100	100	25	1	1	3
SG	QB	sh21a	INVERSE DISTANCE	SG	6	6	4	90	0	0	100	100	25	1	1	3
SG	QB	sh22a	INVERSE DISTANCE	SG	6	6	4	90	0	0	100	100	25	1	1	3
SG	QB	sh23a	INVERSE DISTANCE	SG	6	6	4	137	-80	0	100	100	25	1	1	3
SG	QB	waste1	INVERSE DISTANCE	SG	0	0	0	100	-34	0	20	20	10	1	1	3

Est	model	est_id	sample dbase	assay	char field	char value	hi yield field	threshold	maj radius	semi radius	minor radius	max per dh	zone variable	zone value	blks by cond	condition
PASS1	QB	sh02a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["SHAMROCK"]	AUPPM	50	3	3	2	2	shell	sham02		
PASS1	QB	sh03a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["SHAMROCK"]	AUPPM	50	3	3	2	2	shell	sham03		
PASS1	QB	sh04a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["SHAMROCK"]	AUPPM	50	3	3	2	2	shell	sham04		
PASS1	QB	sh05a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["SHAMROCK"]	AUPPM	50	3	3	2	2	shell	sham05		
PASS1	QB	sh06a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["SHAMROCK"]	AUPPM	50	3	3	2	2	shell	sham06		
PASS1	QB	sh07a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["SHAMROCK"]	AUPPM	50	3	3	2	2	shell	sham07		
PASS1	QB	sh08a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["SHAMROCK"]	AUPPM	50	3	3	2	2	shell	sham08		
PASS1	QB	sh09a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["SHAMROCK"]	AUPPM	50	3	3	2	2	shell	sham09		
PASS1	QB	sh10a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["SHAMROCK"]	AUPPM	50	3	3	2	2	shell	sham10		
PASS1	QB	sh11a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["SHAMROCK"]	AUPPM	50	3	3	2	2	shell	sham11		
PASS1	QB	sh12a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["SHAMROCK"]	AUPPM	50	3	3	2	2	shell	sham12		
PASS1	QB	sh13a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["SHAMROCK"]	AUPPM	50	3	3	2	2	shell	sham13		
PASS1	QB	sh14a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["SHAMROCK"]	AUPPM	50	3	3	2	2	shell	sham14		
PASS1	QB	sh15a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["SHAMROCK"]	AUPPM	50	3	3	2	2	shell	sham15		
PASS1	QB	sh16a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["SHAMROCK"]	AUPPM	50	3	3	2	2	shell	sham16		
PASS1	QB	sh17a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["SHAMROCK"]	AUPPM	50	3	3	2	2	shell	sham17		
PASS1	QB	sh18a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["SHAMROCK"]	AUPPM	50	3	3	2	2	shell	sham18		
PASS1	QB	sh19a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["SHAMROCK"]	AUPPM	50	3	3	2	2	shell	sham19		
PASS1	QB	sh20a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["SHAMROCK"]	AUPPM	50	3	3	2	2	shell	sham20		
PASS1	QB	sh21a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["SHAMROCK"]	AUPPM	50	3	3	2	2	shell	sham21		
PASS1	QB	sh22a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["SHAMROCK"]	AUPPM	50	3	3	2	2	shell	sham22		
PASS1	QB	sh23a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["SHAMROCK"]	AUPPM	50	3	3	2	2	shell	sham23		
PASS2	QB	sh02b	ktzafeb2010.cmp.isis	AUPPM	ZONE	["SHAMROCK"]	AUPPM	50	3	3	2	3	shell	sham02	1	au_id3 lt 0
PASS2	QB	sh03b	ktzafeb2010.cmp.isis	AUPPM	ZONE	["SHAMROCK"]	AUPPM	50	3	3	2	3	shell	sham03	1	au_id3 lt 0
PASS2	QB	sh04b	ktzafeb2010.cmp.isis	AUPPM	ZONE	["SHAMROCK"]	AUPPM	50	3	3	2	3	shell	sham04	1	au_id3 lt 0
PASS2	QB	sh05b	ktzafeb2010.cmp.isis	AUPPM	ZONE	["SHAMROCK"]	AUPPM	50	3	3	2	3	shell	sham05	1	au_id3 lt 0
PASS2	QB	sh06b	ktzafeb2010.cmp.isis	AUPPM	ZONE	["SHAMROCK"]	AUPPM	50	3	3	2	3	shell	sham06	1	au_id3 lt 0
PASS2	QB	sh07b	ktzafeb2010.cmp.isis	AUPPM	ZONE	["SHAMROCK"]	AUPPM	50	3	3	2	3	shell	sham07	1	au_id3 lt 0
PASS2	QB	sh08b	ktzafeb2010.cmp.isis	AUPPM	ZONE	["SHAMROCK"]	AUPPM	50	3	3	2	3	shell	sham08	1	au_id3 lt 0
PASS2	QB	sh09b	ktzafeb2010.cmp.isis	AUPPM	ZONE	["SHAMROCK"]	AUPPM	50	3	3	2	3	shell	sham09	1	au_id3 lt 0
PASS2	QB	sh10b	ktzafeb2010.cmp.isis	AUPPM	ZONE	["SHAMROCK"]	AUPPM	50	3	3	2	3	shell	sham10	1	au_id3 lt 0
PASS2	QB	sh11b	ktzafeb2010.cmp.isis	AUPPM	ZONE	["SHAMROCK"]	AUPPM	50	3	3	2	3	shell	sham11	1	au_id3 lt 0
PASS2	QB	sh12b	ktzafeb2010.cmp.isis	AUPPM	ZONE	["SHAMROCK"]	AUPPM	50	3	3	2	3	shell	sham12	1	au_id3 lt 0
PASS2	QB	sh13b	ktzafeb2010.cmp.isis	AUPPM	ZONE	["SHAMROCK"]	AUPPM	50	3	3	2	3	shell	sham13	1	au_id3 lt 0
PASS2	QB	sh14b	ktzafeb2010.cmp.isis	AUPPM	ZONE	["SHAMROCK"]	AUPPM	50	3	3	2	3	shell	sham14	1	au_id3 lt 0
PASS2	QB	sh15b	ktzafeb2010.cmp.isis	AUPPM	ZONE	["SHAMROCK"]	AUPPM	50	3	3	2	3	shell	sham15	1	au_id3 lt 0
PASS2	QB	sh16b	ktzafeb2010.cmp.isis	AUPPM	ZONE	["SHAMROCK"]	AUPPM	50	3	3	2	3	shell	sham16	1	au_id3 lt 0
PASS2	QB	sh17b	ktzafeb2010.cmp.isis	AUPPM	ZONE	["SHAMROCK"]	AUPPM	50	3	3	2	3	shell	sham17	1	au_id3 lt 0
PASS2	QB	sh18b	ktzafeb2010.cmp.isis	AUPPM	ZONE	["SHAMROCK"]	AUPPM	50	3	3	2	3	shell	sham18	1	au_id3 lt 0
PASS2	QB	sh19b	ktzafeb2010.cmp.isis	AUPPM	ZONE	["SHAMROCK"]	AUPPM	50	3	3	2	3	shell	sham19	1	au_id3 lt 0
PASS2	QB	sh20b	ktzafeb2010.cmp.isis	AUPPM	ZONE	["SHAMROCK"]	AUPPM	50	3	3	2	3	shell	sham20	1	au_id3 lt 0
PASS2	QB	sh21b	ktzafeb2010.cmp.isis	AUPPM	ZONE	["SHAMROCK"]	AUPPM	50	3	3	2	3	shell	sham21	1	au_id3 lt 0

est	model	est_id	sample dbase	assay	char field	char value	hi yield field	threshold	maj radius	semi radius	minor radius	max per dh	zone variable	zone value	blks by cond	condition
PASS2	QB	sh22b	ktzafeb2010.cmp.isis	AUPPM	ZONE	["SHAMROCK"]	AUPPM	50	3	3	2	3	shell	sham22	1	au_id3 lt 0
PASS2	QB	sh23b	ktzafeb2010.cmp.isis	AUPPM	ZONE	["SHAMROCK"]	AUPPM	50	3	3	2	3	shell	sham23	1	au_id3 lt 0
SG	QB	sh02a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["SHAMROCK"]	AUPPM	1	2	2	2	0	shell	sham02		
SG	QB	sh03a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["SHAMROCK"]	AUPPM	1	2	2	2	0	shell	sham03		
SG	QB	sh04a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["SHAMROCK"]	AUPPM	1	2	2	2	0	shell	sham04		
SG	QB	sh05a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["SHAMROCK"]	AUPPM	1	2	2	2	0	shell	sham05		
SG	QB	sh06a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["SHAMROCK"]	AUPPM	1	2	2	2	0	shell	sham06		
SG	QB	sh07a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["SHAMROCK"]	AUPPM	1	2	2	2	0	shell	sham07		
SG	QB	sh08a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["SHAMROCK"]	AUPPM	1	2	2	2	0	shell	sham08		
SG	QB	sh09a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["SHAMROCK"]	AUPPM	1	2	2	2	0	shell	sham09		
SG	QB	sh10a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["SHAMROCK"]	AUPPM	1	2	2	2	0	shell	sham10		
SG	QB	sh11a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["SHAMROCK"]	AUPPM	1	2	2	2	0	shell	sham11		
SG	QB	sh12a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["SHAMROCK"]	AUPPM	1	2	2	2	0	shell	sham12		
SG	QB	sh13a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["SHAMROCK"]	AUPPM	1	2	2	2	0	shell	sham13		
SG	QB	sh14a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["SHAMROCK"]	AUPPM	1	2	2	2	0	shell	sham14		
SG	QB	sh15a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["SHAMROCK"]	AUPPM	1	2	2	2	0	shell	sham15		
SG	QB	sh16a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["SHAMROCK"]	AUPPM	1	2	2	2	0	shell	sham16		
SG	QB	sh17a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["SHAMROCK"]	AUPPM	1	2	2	2	0	shell	sham17		
SG	QB	sh18a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["SHAMROCK"]	AUPPM	1	2	2	2	0	shell	sham18		
SG	QB	sh19a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["SHAMROCK"]	AUPPM	1	2	2	2	0	shell	sham19		
SG	QB	sh20a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["SHAMROCK"]	AUPPM	1	2	2	2	0	shell	sham20		
SG	QB	sh21a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["SHAMROCK"]	AUPPM	1	2	2	2	0	shell	sham21		
SG	QB	sh22a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["SHAMROCK"]	AUPPM	1	2	2	2	0	shell	sham22		
SG	QB	sh23a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["SHAMROCK"]	AUPPM	1	2	2	2	0	shell	sham23		
SG	QB	waste1	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["NONE"]	AUPPM	1	2	2	2	0	shell	none	1	sg lt 0

North Penguin Estimation Parameters

est	model	est_id	est_type	grade variable	parent x	parent y	parent z	bearing (z)	plunge (y)	dip (x)	major axis	semi axis	minor axis	min samps	max samps	power
PASS1	NPENG	pgn01a	INVERSE DISTANCE	AU_ID3	6	6	4	270	-35	0	20	20	5	3	8	3
PASS1	NPENG	pgn02a	INVERSE DISTANCE	AU_ID3	6	6	4	0	0	0	20	20	10	3	8	3
PASS1	NPENG	pgn03a	INVERSE DISTANCE	AU_ID3	6	6	4	270	-15	0	20	20	10	3	8	3
PASS1	NPENG	pgn04a	INVERSE DISTANCE	AU_ID3	6	6	4	180	-24	0	20	20	5	3	8	3
PASS1	NPENG	pgn05a	INVERSE DISTANCE	AU_ID3	6	6	4	0	0	0	20	20	20	3	8	3
PASS1	NPENG	pgn06a	INVERSE DISTANCE	AU_ID3	6	6	4	270	-35	0	20	20	5	3	8	3
PASS1	NPENG	pgn07a	INVERSE DISTANCE	AU_ID3	6	6	4	270	-36	0	20	20	5	3	8	3
PASS1	NPENG	pgn08a	INVERSE DISTANCE	AU_ID3	6	6	4	0	0	0	20	20	5	3	8	3
PASS1	NPENG	pgn09a	INVERSE DISTANCE	AU_ID3	6	6	4	0	0	0	20	20	20	3	8	3
PASS1	NPENG	pgn10a	INVERSE DISTANCE	AU_ID3	6	6	4	0	0	0	20	20	20	3	8	3
PASS1	NPENG	pgn11a	INVERSE DISTANCE	AU_ID3	6	6	4	270	-31	0	20	20	5	3	8	3
PASS1	NPENG	pgn12a	INVERSE DISTANCE	AU_ID3	6	6	4	230	-50	0	20	20	5	3	8	3
PASS1	NPENG	pgn13a	INVERSE DISTANCE	AU_ID3	6	6	4	90	-12	-18	20	20	5	3	8	3
PASS1	NPENG	pgn14a	INVERSE DISTANCE	AU_ID3	6	6	4	323	-81	0	20	20	5	3	8	3
PASS1	NPENG	pgn15a	INVERSE DISTANCE	AU_ID3	6	6	4	270	-9	0	20	20	5	3	8	3
PASS1	NPENG	pgn16a	INVERSE DISTANCE	AU_ID3	6	6	4	0	0	0	20	20	5	3	8	3
PASS1	NPENG	pgn17a	INVERSE DISTANCE	AU_ID3	6	6	4	0	0	0	20	20	5	3	8	3
PASS1	NPENG	pgn18a	INVERSE DISTANCE	AU_ID3	6	6	4	230	-62	0	20	20	5	3	8	3
PASS1	NPENG	pgn19a	INVERSE DISTANCE	AU_ID3	6	6	4	0	0	0	20	20	20	3	8	3
PASS1	NPENG	pgn20a	INVERSE DISTANCE	AU_ID3	6	6	4	300	-24	0	20	20	5	3	8	3
PASS2	NPENG	pgn01b	INVERSE DISTANCE	AU_ID3	6	6	4	270	-35	0	100	100	25	1	8	3
PASS2	NPENG	pgn02b	INVERSE DISTANCE	AU_ID3	6	6	4	0	0	0	100	100	25	1	8	3
PASS2	NPENG	pgn03b	INVERSE DISTANCE	AU_ID3	6	6	4	270	-15	0	100	100	25	1	8	3
PASS2	NPENG	pgn04b	INVERSE DISTANCE	AU_ID3	6	6	4	180	-24	0	100	100	25	1	8	3
PASS2	NPENG	pgn05b	INVERSE DISTANCE	AU_ID3	6	6	4	0	0	0	100	100	50	1	8	3
PASS2	NPENG	pgn06b	INVERSE DISTANCE	AU_ID3	6	6	4	270	-35	0	100	100	25	1	8	3
PASS2	NPENG	pgn07b	INVERSE DISTANCE	AU_ID3	6	6	4	270	-36	0	100	100	25	1	8	3
PASS2	NPENG	pgn08b	INVERSE DISTANCE	AU_ID3	6	6	4	0	0	0	100	100	25	1	8	3
PASS2	NPENG	pgn09b	INVERSE DISTANCE	AU_ID3	6	6	4	0	0	0	100	100	50	1	8	3
PASS2	NPENG	pgn10b	INVERSE DISTANCE	AU_ID3	6	6	4	0	0	0	100	100	25	1	8	3
PASS2	NPENG	pgn11b	INVERSE DISTANCE	AU_ID3	6	6	4	270	-31	0	100	100	25	1	8	3
PASS2	NPENG	pgn12b	INVERSE DISTANCE	AU_ID3	6	6	4	230	-50	0	100	100	25	1	8	3
PASS2	NPENG	pgn13b	INVERSE DISTANCE	AU_ID3	6	6	4	90	-12	-18	100	100	25	1	8	3
PASS2	NPENG	pgn14b	INVERSE DISTANCE	AU_ID3	6	6	4	323	-81	0	100	100	25	1	8	3
PASS2	NPENG	pgn15b	INVERSE DISTANCE	AU_ID3	6	6	4	270	-9	0	100	100	25	1	8	3
PASS2	NPENG	pgn16b	INVERSE DISTANCE	AU_ID3	6	6	4	0	0	0	100	100	25	1	8	3
PASS2	NPENG	pgn17b	INVERSE DISTANCE	AU_ID3	6	6	4	0	0	0	100	100	25	1	8	3
PASS2	NPENG	pgn18b	INVERSE DISTANCE	AU_ID3	6	6	4	230	-62	0	100	100	25	1	8	3
PASS2	NPENG	pgn19b	INVERSE DISTANCE	AU_ID3	6	6	4	0	0	0	100	100	50	1	8	3
PASS2	NPENG	pgn20b	INVERSE DISTANCE	AU_ID3	6	6	4	300	-24	0	100	100	25	1	8	3

est	model	est_id	est_type	grade variable	parent x	parent y	parent z	bearing (z)	plunge (y)	dip (x)	major axis	semi axis	minor axis	min samps	max samps	power
SG	NPENG	pgn02a	INVERSE DISTANCE	SG	6	6	4	0	0	0	100	100	25	1	1	3
SG	NPENG	pgn03a	INVERSE DISTANCE	SG	6	6	4	270	-15	0	100	100	25	1	1	3
SG	NPENG	pgn04a	INVERSE DISTANCE	SG	6	6	4	180	-24	0	100	100	25	1	1	3
SG	NPENG	pgn05a	INVERSE DISTANCE	SG	6	6	4	0	0	0	100	100	50	1	1	3
SG	NPENG	pgn06a	INVERSE DISTANCE	SG	6	6	4	270	-35	0	100	100	25	1	1	3
SG	NPENG	pgn07a	INVERSE DISTANCE	SG	6	6	4	270	-36	0	100	100	25	1	1	3
SG	NPENG	pgn08a	INVERSE DISTANCE	SG	6	6	4	0	0	0	100	100	25	1	1	3
SG	NPENG	pgn09a	INVERSE DISTANCE	SG	6	6	4	0	0	0	100	100	50	1	1	3
SG	NPENG	pgn10a	INVERSE DISTANCE	SG	6	6	4	0	0	0	100	100	50	1	1	3
SG	NPENG	pgn11a	INVERSE DISTANCE	SG	6	6	4	270	-31	0	100	100	25	1	1	3
SG	NPENG	pgn12a	INVERSE DISTANCE	SG	6	6	4	230	-50	0	100	100	25	1	1	3
SG	NPENG	pgn13a	INVERSE DISTANCE	SG	6	6	4	90	-12	-18	100	100	25	1	1	3
SG	NPENG	pgn14a	INVERSE DISTANCE	SG	6	6	4	323	-81	0	100	100	25	1	1	3
SG	NPENG	pgn15a	INVERSE DISTANCE	SG	6	6	4	270	-9	0	100	100	25	1	1	3
SG	NPENG	pgn16a	INVERSE DISTANCE	SG	6	6	4	0	0	0	100	100	25	1	1	3
SG	NPENG	pgn17a	INVERSE DISTANCE	SG	6	6	4	0	0	0	100	100	25	1	1	3
SG	NPENG	pgn18a	INVERSE DISTANCE	SG	6	6	4	230	-62	0	100	100	25	1	1	3
SG	NPENG	pgn19a	INVERSE DISTANCE	SG	6	6	4	0	0	0	100	100	50	1	1	3
SG	NPENG	pgn20a	INVERSE DISTANCE	SG	6	6	4	300	-24	0	100	100	25	1	1	3
SG	NPENG	waste1	INVERSE DISTANCE	SG	0	0	0	0	0	0	20	20	10	1	1	3

est	model	est_id	sample dbase	assay	char field	char value	hi yield field	threshold	maj radius	semi radius	minor radius	max per dh	zone variable	zone value	blks by cond	condition
PASS1	NPENG	pgn01a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PENGUIN"]	AUPPM	50	3	3	2	2	shell	penguin01		
PASS1	NPENG	pgn02a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PENGUIN"]	AUPPM	50	3	3	2	2	shell	penguin02		
PASS1	NPENG	pgn03a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PENGUIN"]	AUPPM	50	3	3	2	2	shell	penguin03		
PASS1	NPENG	pgn04a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PENGUIN"]	AUPPM	50	3	3	2	2	shell	penguin04		
PASS1	NPENG	pgn05a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PENGUIN"]	AUPPM	50	3	3	2	2	shell	penguin05		
PASS1	NPENG	pgn06a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PENGUIN"]	AUPPM	50	3	3	2	2	shell	penguin06		
PASS1	NPENG	pgn07a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PENGUIN"]	AUPPM	50	3	3	2	2	shell	penguin07		
PASS1	NPENG	pgn08a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PENGUIN"]	AUPPM	50	3	3	2	2	shell	penguin08		
PASS1	NPENG	pgn09a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PENGUIN"]	AUPPM	50	3	3	2	2	shell	penguin09		
PASS1	NPENG	pgn10a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PENGUIN"]	AUPPM	50	3	3	2	2	shell	penguin10		
PASS1	NPENG	pgn11a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PENGUIN"]	AUPPM	50	3	3	2	2	shell	penguin11		
PASS1	NPENG	pgn12a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PENGUIN"]	AUPPM	50	3	3	2	2	shell	penguin12		
PASS1	NPENG	pgn13a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PENGUIN"]	AUPPM	50	3	3	2	2	shell	penguin13		
PASS1	NPENG	pgn14a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PENGUIN"]	AUPPM	50	3	3	2	2	shell	penguin14		
PASS1	NPENG	pgn15a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PENGUIN"]	AUPPM	50	3	3	2	2	shell	penguin15		
PASS1	NPENG	pgn16a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PENGUIN"]	AUPPM	50	3	3	2	2	shell	penguin16		
PASS1	NPENG	pgn17a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PENGUIN"]	AUPPM	50	3	3	2	2	shell	penguin17		
PASS1	NPENG	pgn18a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PENGUIN"]	AUPPM	50	3	3	2	2	shell	penguin18		
PASS1	NPENG	pgn19a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PENGUIN"]	AUPPM	50	3	3	2	2	shell	penguin19		
PASS1	NPENG	pgn20a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PENGUIN"]	AUPPM	50	3	3	2	2	shell	penguin20		
PASS2	NPENG	pgn01b	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PENGUIN"]	AUPPM	50	3	3	2	3	shell	penguin01	1	au_id3 lt 0
PASS2	NPENG	pgn02b	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PENGUIN"]	AUPPM	50	3	3	2	3	shell	penguin02	1	au_id3 lt 0
PASS2	NPENG	pgn03b	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PENGUIN"]	AUPPM	50	3	3	2	3	shell	penguin03	1	au_id3 lt 0
PASS2	NPENG	pgn04b	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PENGUIN"]	AUPPM	50	3	3	2	3	shell	penguin04	1	au_id3 lt 0
PASS2	NPENG	pgn05b	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PENGUIN"]	AUPPM	50	3	3	2	3	shell	penguin05	1	au_id3 lt 0
PASS2	NPENG	pgn06b	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PENGUIN"]	AUPPM	50	3	3	2	3	shell	penguin06	1	au_id3 lt 0
PASS2	NPENG	pgn07b	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PENGUIN"]	AUPPM	50	3	3	2	3	shell	penguin07	1	au_id3 lt 0
PASS2	NPENG	pgn08b	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PENGUIN"]	AUPPM	50	3	3	2	3	shell	penguin08	1	au_id3 lt 0
PASS2	NPENG	pgn09b	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PENGUIN"]	AUPPM	50	3	3	2	3	shell	penguin09	1	au_id3 lt 0
PASS2	NPENG	pgn10b	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PENGUIN"]	AUPPM	50	3	3	2	3	shell	penguin10	1	au_id3 lt 0
PASS2	NPENG	pgn11b	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PENGUIN"]	AUPPM	50	3	3	2	3	shell	penguin11	1	au_id3 lt 0
PASS2	NPENG	pgn12b	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PENGUIN"]	AUPPM	50	3	3	2	3	shell	penguin12	1	au_id3 lt 0
PASS2	NPENG	pgn13b	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PENGUIN"]	AUPPM	50	3	3	2	3	shell	penguin13	1	au_id3 lt 0
PASS2	NPENG	pgn14b	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PENGUIN"]	AUPPM	50	3	3	2	3	shell	penguin14	1	au_id3 lt 0
PASS2	NPENG	pgn15b	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PENGUIN"]	AUPPM	50	3	3	2	3	shell	penguin15	1	au_id3 lt 0
PASS2	NPENG	pgn16b	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PENGUIN"]	AUPPM	50	3	3	2	3	shell	penguin16	1	au_id3 lt 0
PASS2	NPENG	pgn17b	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PENGUIN"]	AUPPM	50	3	3	2	3	shell	penguin17	1	au_id3 lt 0
PASS2	NPENG	pgn18b	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PENGUIN"]	AUPPM	50	3	3	2	3	shell	penguin18	1	au_id3 lt 0
PASS2	NPENG	pgn19b	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PENGUIN"]	AUPPM	50	3	3	2	3	shell	penguin19	1	au_id3 lt 0
PASS2	NPENG	pgn20b	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PENGUIN"]	AUPPM	50	3	3	2	3	shell	penguin20	1	au_id3 lt 0
SG	NPENG	pgn01a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["PENGUIN"]	AUPPM	1	2	2	2	0	shell	penguin01		

est	model	est_id	sample dbase	assay	char field	char value	hi yield field	threshold	maj radius	semi radius	minor radius	max per dh	zone variable	zone value	blks by cond	condition
SG	NPENG	pgn02a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["PENGUIN"]	AUPPM	1	2	2	2	0	shell	penguin02		
SG	NPENG	pgn03a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["PENGUIN"]	AUPPM	1	2	2	2	0	shell	penguin03		
SG	NPENG	pgn04a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["PENGUIN"]	AUPPM	1	2	2	2	0	shell	penguin04		
SG	NPENG	pgn05a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["PENGUIN"]	AUPPM	1	2	2	2	0	shell	penguin05		
SG	NPENG	pgn06a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["PENGUIN"]	AUPPM	1	2	2	2	0	shell	penguin06		
SG	NPENG	pgn07a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["PENGUIN"]	AUPPM	1	2	2	2	0	shell	penguin07		
SG	NPENG	pgn08a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["PENGUIN"]	AUPPM	1	2	2	2	0	shell	penguin08		
SG	NPENG	pgn09a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["PENGUIN"]	AUPPM	1	2	2	2	0	shell	penguin09		
SG	NPENG	pgn10a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["PENGUIN"]	AUPPM	1	2	2	2	0	shell	penguin10		
SG	NPENG	pgn11a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["PENGUIN"]	AUPPM	1	2	2	2	0	shell	penguin11		
SG	NPENG	pgn12a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["PENGUIN"]	AUPPM	1	2	2	2	0	shell	penguin12		
SG	NPENG	pgn13a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["PENGUIN"]	AUPPM	1	2	2	2	0	shell	penguin13		
SG	NPENG	pgn14a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["PENGUIN"]	AUPPM	1	2	2	2	0	shell	penguin14		
SG	NPENG	pgn15a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["PENGUIN"]	AUPPM	1	2	2	2	0	shell	penguin15		
SG	NPENG	pgn16a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["PENGUIN"]	AUPPM	1	2	2	2	0	shell	penguin16		
SG	NPENG	pgn17a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["PENGUIN"]	AUPPM	1	2	2	2	0	shell	penguin17		
SG	NPENG	pgn18a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["PENGUIN"]	AUPPM	1	2	2	2	0	shell	penguin18		
SG	NPENG	pgn19a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["PENGUIN"]	AUPPM	1	2	2	2	0	shell	penguin19		
SG	NPENG	pgn20a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["PENGUIN"]	AUPPM	1	2	2	2	0	shell	penguin20		
SG	NPENG	waste1	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["NONE"]	AUPPM	1	2	2	2	0	shell	none	1	sg lt 0

South Penguin Estimation Parameters

est	model	est_id	est_type	grade variable	parent x	parent y	parent z	bearing (z)	plunge (y)	dip (x)	major axis	semi axis	minor axis	min samps	max samps	power
PASS1	SPENG	pgs21a	INVERSE DISTANCE	AU_ID3	6	6	4	0	0	0	20	20	10	3	8	3
PASS1	SPENG	pgs22a	INVERSE DISTANCE	AU_ID3	6	6	4	90	-18	6	20	20	5	3	8	3
PASS1	SPENG	pgs23a	INVERSE DISTANCE	AU_ID3	6	6	4	90	-12	0	20	20	5	3	8	3
PASS1	SPENG	pgs24a	INVERSE DISTANCE	AU_ID3	6	6	4	325	-76	0	20	20	10	3	8	3
PASS1	SPENG	pgs25a	INVERSE DISTANCE	AU_ID3	6	6	4	0	0	0	20	20	20	3	8	3
PASS1	SPENG	pgs26a	INVERSE DISTANCE	AU_ID3	6	6	4	90	-25	0	20	20	5	3	8	3
PASS1	SPENG	pgs27a	INVERSE DISTANCE	AU_ID3	6	6	4	130	-68	0	20	20	5	3	8	3
PASS1	SPENG	pgs28a	INVERSE DISTANCE	AU_ID3	6	6	4	270	-5	-14	20	20	10	3	8	3
PASS2	SPENG	pgs21b	INVERSE DISTANCE	AU_ID3	6	6	4	0	0	0	100	100	25	1	8	3
PASS2	SPENG	pgs22b	INVERSE DISTANCE	AU_ID3	6	6	4	90	-18	6	100	100	25	1	8	3
PASS2	SPENG	pgs23b	INVERSE DISTANCE	AU_ID3	6	6	4	90	-12	0	100	100	25	1	8	3
PASS2	SPENG	pgs24b	INVERSE DISTANCE	AU_ID3	6	6	4	325	-76	0	100	100	25	1	8	3
PASS2	SPENG	pgs25b	INVERSE DISTANCE	AU_ID3	6	6	4	0	0	0	100	100	50	1	8	3
PASS2	SPENG	pgs26b	INVERSE DISTANCE	AU_ID3	6	6	4	90	-25	0	100	100	25	1	8	3
PASS2	SPENG	pgs27b	INVERSE DISTANCE	AU_ID3	6	6	4	130	-68	0	100	100	25	1	8	3
PASS2	SPENG	pgs28b	INVERSE DISTANCE	AU_ID3	6	6	4	270	-5	-14	100	100	25	1	8	3
SG	SPENG	pgs21a	INVERSE DISTANCE	SG	6	6	4	0	0	0	100	100	25	1	1	3
SG	SPENG	pgs22a	INVERSE DISTANCE	SG	6	6	4	90	-18	6	100	100	25	1	1	3
SG	SPENG	pgs23a	INVERSE DISTANCE	SG	6	6	4	90	-12	0	100	100	25	1	1	3
SG	SPENG	pgs24a	INVERSE DISTANCE	SG	6	6	4	325	-76	0	100	100	25	1	1	3
SG	SPENG	pgs25a	INVERSE DISTANCE	SG	6	6	4	0	0	0	100	100	50	1	1	3
SG	SPENG	pgs26a	INVERSE DISTANCE	SG	6	6	4	90	-25	0	100	100	25	1	1	3
SG	SPENG	pgs27a	INVERSE DISTANCE	SG	6	6	4	130	-68	0	100	100	25	1	1	3
SG	SPENG	pgs28a	INVERSE DISTANCE	SG	6	6	4	270	-5	-14	100	100	25	1	1	3
SG	SPENG	waste1	INVERSE DISTANCE	SG	0	0	0	0	0	0	20	20	10	1	1	3

est	model	est_id	sample dbase	assay	char field	char value	hi yield field	threshold	maj radius	semi radius	minor radius	max per dh	zone variable	zone value	blks by cond	condition
PASS1	SPENG	pgs21a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PENGUIN"]	AUPPM	50	3	3	2	2	shell	penguin21		
PASS1	SPENG	pgs22a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PENGUIN"]	AUPPM	50	3	3	2	2	shell	penguin22		
PASS1	SPENG	pgs23a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PENGUIN"]	AUPPM	50	3	3	2	2	shell	penguin23		
PASS1	SPENG	pgs24a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PENGUIN"]	AUPPM	50	3	3	2	2	shell	penguin24		
PASS1	SPENG	pgs25a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PENGUIN"]	AUPPM	50	3	3	2	2	shell	penguin25		
PASS1	SPENG	pgs26a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PENGUIN"]	AUPPM	50	3	3	2	2	shell	penguin26		
PASS1	SPENG	pgs27a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PENGUIN"]	AUPPM	50	3	3	2	2	shell	penguin27		
PASS1	SPENG	pgs28a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PENGUIN"]	AUPPM	50	3	3	2	2	shell	penguin28		
PASS2	SPENG	pgs21b	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PENGUIN"]	AUPPM	50	3	3	2	3	shell	penguin21	1	au_id3 lt 0
PASS2	SPENG	pgs22b	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PENGUIN"]	AUPPM	50	3	3	2	3	shell	penguin22	1	au_id3 lt 0
PASS2	SPENG	pgs23b	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PENGUIN"]	AUPPM	50	3	3	2	3	shell	penguin23	1	au_id3 lt 0
PASS2	SPENG	pgs24b	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PENGUIN"]	AUPPM	50	3	3	2	3	shell	penguin24	1	au_id3 lt 0
PASS2	SPENG	pgs25b	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PENGUIN"]	AUPPM	50	3	3	2	3	shell	penguin25	1	au_id3 lt 0
PASS2	SPENG	pgs26b	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PENGUIN"]	AUPPM	50	3	3	2	3	shell	penguin26	1	au_id3 lt 0
PASS2	SPENG	pgs27b	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PENGUIN"]	AUPPM	50	3	3	2	3	shell	penguin27	1	au_id3 lt 0
PASS2	SPENG	pgs28b	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PENGUIN"]	AUPPM	50	3	3	2	3	shell	penguin28	1	au_id3 lt 0
SG	SPENG	pgs21a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["PENGUIN"]	AUPPM	1	2	2	2	0	shell	penguin21		
SG	SPENG	pgs22a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["PENGUIN"]	AUPPM	1	2	2	2	0	shell	penguin22		
SG	SPENG	pgs23a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["PENGUIN"]	AUPPM	1	2	2	2	0	shell	penguin23		
SG	SPENG	pgs24a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["PENGUIN"]	AUPPM	1	2	2	2	0	shell	penguin24		
SG	SPENG	pgs25a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["PENGUIN"]	AUPPM	1	2	2	2	0	shell	penguin25		
SG	SPENG	pgs26a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["PENGUIN"]	AUPPM	1	2	2	2	0	shell	penguin26		
SG	SPENG	pgs27a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["PENGUIN"]	AUPPM	1	2	2	2	0	shell	penguin27		
SG	SPENG	pgs28a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["PENGUIN"]	AUPPM	1	2	2	2	0	shell	penguin28		
SG	SPENG	waste1	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["NONE"]	AUPPM	1	2	2	2	0	shell	None	1	sg lt 0

Peel Estimation Parameters

est	model	est_id	est_type	grade variable	parent x	parent y	parent z	bearing (z)	plunge (y)	dip (x)	major axis	semi axis	minor axis	min samps	max samps	power
PASS1	PEEL	pl01a	INVERSE DISTANCE	AU_ID3	6	6	4	90	-5	0	20	20	10	3	8	3
PASS1	PEEL	pl02a	INVERSE DISTANCE	AU_ID3	6	6	4	0	-66	20	20	20	10	3	8	3
PASS1	PEEL	pl03a	INVERSE DISTANCE	AU_ID3	6	6	4	180	-15	0	20	20	5	3	8	3
PASS1	PEEL	pl04a	INVERSE DISTANCE	AU_ID3	6	6	4	180	-15	0	20	20	5	3	8	3
PASS1	PEEL	pl05a	INVERSE DISTANCE	AU_ID3	6	6	4	90	-10	-17	20	20	5	3	8	3
PASS1	PEEL	pl06a	INVERSE DISTANCE	AU_ID3	6	6	4	90	-17	0	20	20	5	3	8	3
PASS1	PEEL	pl07a	INVERSE DISTANCE	AU_ID3	6	6	4	90	-30	0	20	20	5	3	8	3
PASS1	PEEL	pl08a	INVERSE DISTANCE	AU_ID3	6	6	4	270	-8	12	20	20	5	3	8	3
PASS1	PEEL	pl09a	INVERSE DISTANCE	AU_ID3	6	6	4	0	0	0	20	20	5	3	8	3
PASS1	PEEL	pl10a	INVERSE DISTANCE	AU_ID3	6	6	4	0	0	0	20	20	5	3	8	3
PASS1	PEEL	pl11a	INVERSE DISTANCE	AU_ID3	6	6	4	0	-12	0	20	20	5	3	8	3
PASS1	PEEL	pl12a	INVERSE DISTANCE	AU_ID3	6	6	4	180	-39	0	20	20	5	3	8	3
PASS1	PEEL	pl13a	INVERSE DISTANCE	AU_ID3	6	6	4	90	-22	0	20	20	5	3	8	3
PASS1	PEEL	pl14a	INVERSE DISTANCE	AU_ID3	6	6	4	90	-33	0	20	20	5	3	8	3
PASS1	PEEL	pl15a	INVERSE DISTANCE	AU_ID3	6	6	4	90	-17	0	20	20	5	3	8	3
PASS1	PEEL	pl16a	INVERSE DISTANCE	AU_ID3	6	6	4	270	-26	0	20	20	5	3	8	3
PASS1	PEEL	pl17a	INVERSE DISTANCE	AU_ID3	6	6	4	90	-21	0	20	20	5	3	8	3
PASS1	PEEL	pl18a	INVERSE DISTANCE	AU_ID3	6	6	4	0	0	0	20	20	5	3	8	3
PASS1	PEEL	pl19a	INVERSE DISTANCE	AU_ID3	6	6	4	0	-46	8	20	20	5	3	8	3
PASS1	PEEL	pl20a	INVERSE DISTANCE	AU_ID3	6	6	4	0	-46	0	20	20	5	3	8	3
PASS1	PEEL	pl21a	INVERSE DISTANCE	AU_ID3	6	6	4	90	-7	0	20	20	5	3	8	3
PASS1	PEEL	pl22a	INVERSE DISTANCE	AU_ID3	6	6	4	0	0	0	20	20	5	3	8	3
PASS1	PEEL	pl23a	INVERSE DISTANCE	AU_ID3	6	6	4	0	0	0	20	20	5	3	8	3
PASS1	PEEL	pl24a	INVERSE DISTANCE	AU_ID3	6	6	4	90	-8	20	20	20	5	3	8	3
PASS1	PEEL	pl25a	INVERSE DISTANCE	AU_ID3	6	6	4	90	-8	-5	20	20	5	3	8	3
PASS1	PEEL	pl26a	INVERSE DISTANCE	AU_ID3	6	6	4	180	-4	0	20	20	5	3	8	3
PASS1	PEEL	pl27a	INVERSE DISTANCE	AU_ID3	6	6	4	180	-10	0	20	20	5	3	8	3
PASS1	PEEL	pl28a	INVERSE DISTANCE	AU_ID3	6	6	4	180	-26	0	20	20	5	3	8	3
PASS1	PEEL	pl29a	INVERSE DISTANCE	AU_ID3	6	6	4	180	-27	-14	20	20	5	3	8	3
PASS1	PEEL	pl30a	INVERSE DISTANCE	AU_ID3	6	6	4	180	-7	0	20	20	5	3	8	3
PASS1	PEEL	pl31a	INVERSE DISTANCE	AU_ID3	6	6	4	180	-10	0	20	20	5	3	8	3
PASS1	PEEL	pl32a	INVERSE DISTANCE	AU_ID3	6	6	4	180	-17	0	20	20	5	3	8	3
PASS1	PEEL	pl33a	INVERSE DISTANCE	AU_ID3	6	6	4	180	-24	0	20	20	5	3	8	3
PASS1	PEEL	pl34a	INVERSE DISTANCE	AU_ID3	6	6	4	270	-10	35	20	20	5	3	8	3
PASS1	PEEL	pl35a	INVERSE DISTANCE	AU_ID3	6	6	4	270	-32	52	20	20	5	3	8	3
PASS1	PEEL	pl36a	INVERSE DISTANCE	AU_ID3	6	6	4	180	-65	-20	20	20	5	3	8	3
PASS1	PEEL	pl37a	INVERSE DISTANCE	AU_ID3	6	6	4	180	-68	0	20	20	5	3	8	3
PASS1	PEEL	pl38a	INVERSE DISTANCE	AU_ID3	6	6	4	180	-20	0	20	20	25	3	8	3
PASS2	PEEL	pl01b	INVERSE DISTANCE	AU_ID3	6	6	4	90	-5	0	100	100	25	1	8	3
PASS2	PEEL	pl02b	INVERSE DISTANCE	AU_ID3	6	6	4	0	-66	20	100	100	25	1	8	3

est	model	est_id	est_type	grade variable	parent x	parent y	parent z	bearing (z)	plunge (y)	dip (x)	major axis	semi axis	minor axis	min samps	max samps	power
PASS2	PEEL	pl03b	INVERSE DISTANCE	AU_ID3	6	6	4	180	-15	0	100	100	25	1	8	3
PASS2	PEEL	pl04b	INVERSE DISTANCE	AU_ID3	6	6	4	180	-15	0	100	100	25	1	8	3
PASS2	PEEL	pl05b	INVERSE DISTANCE	AU_ID3	6	6	4	90	-10	-17	100	100	25	1	8	3
PASS2	PEEL	pl06b	INVERSE DISTANCE	AU_ID3	6	6	4	90	-17	0	100	100	25	1	8	3
PASS2	PEEL	pl07b	INVERSE DISTANCE	AU_ID3	6	6	4	90	-30	0	100	100	25	1	8	3
PASS2	PEEL	pl08b	INVERSE DISTANCE	AU_ID3	6	6	4	270	-8	12	100	100	25	1	8	3
PASS2	PEEL	pl09b	INVERSE DISTANCE	AU_ID3	6	6	4	0	0	0	100	100	25	1	8	3
PASS2	PEEL	pl10b	INVERSE DISTANCE	AU_ID3	6	6	4	0	0	0	100	100	25	1	8	3
PASS2	PEEL	pl11b	INVERSE DISTANCE	AU_ID3	6	6	4	0	-12	0	100	100	25	1	8	3
PASS2	PEEL	pl12b	INVERSE DISTANCE	AU_ID3	6	6	4	180	-39	0	100	100	25	1	8	3
PASS2	PEEL	pl13b	INVERSE DISTANCE	AU_ID3	6	6	4	90	-22	0	100	100	25	1	8	3
PASS2	PEEL	pl14b	INVERSE DISTANCE	AU_ID3	6	6	4	90	-33	0	100	100	25	1	8	3
PASS2	PEEL	pl15b	INVERSE DISTANCE	AU_ID3	6	6	4	90	-17	0	100	100	25	1	8	3
PASS2	PEEL	pl16b	INVERSE DISTANCE	AU_ID3	6	6	4	270	-26	0	100	100	25	1	8	3
PASS2	PEEL	pl17b	INVERSE DISTANCE	AU_ID3	6	6	4	90	-21	0	100	100	25	1	8	3
PASS2	PEEL	pl18b	INVERSE DISTANCE	AU_ID3	6	6	4	0	0	0	100	100	25	1	8	3
PASS2	PEEL	pl19b	INVERSE DISTANCE	AU_ID3	6	6	4	0	-46	8	100	100	25	1	8	3
PASS2	PEEL	pl20b	INVERSE DISTANCE	AU_ID3	6	6	4	0	-46	0	100	100	25	1	8	3
PASS2	PEEL	pl21b	INVERSE DISTANCE	AU_ID3	6	6	4	90	-7	0	100	100	25	1	8	3
PASS2	PEEL	pl22b	INVERSE DISTANCE	AU_ID3	6	6	4	0	0	0	100	100	25	1	8	3
PASS2	PEEL	pl23b	INVERSE DISTANCE	AU_ID3	6	6	4	0	0	0	100	100	25	1	8	3
PASS2	PEEL	pl24b	INVERSE DISTANCE	AU_ID3	6	6	4	90	-8	20	100	100	25	1	8	3
PASS2	PEEL	pl25b	INVERSE DISTANCE	AU_ID3	6	6	4	90	-8	-5	100	100	25	1	8	3
PASS2	PEEL	pl26b	INVERSE DISTANCE	AU_ID3	6	6	4	180	-4	0	100	100	25	1	8	3
PASS2	PEEL	pl27b	INVERSE DISTANCE	AU_ID3	6	6	4	180	-10	0	100	100	25	1	8	3
PASS2	PEEL	pl28b	INVERSE DISTANCE	AU_ID3	6	6	4	180	-26	0	100	100	25	1	8	3
PASS2	PEEL	pl29b	INVERSE DISTANCE	AU_ID3	6	6	4	180	-27	-14	100	100	25	1	8	3
PASS2	PEEL	pl30b	INVERSE DISTANCE	AU_ID3	6	6	4	180	-7	0	100	100	25	1	8	3
PASS2	PEEL	pl31b	INVERSE DISTANCE	AU_ID3	6	6	4	180	-10	0	100	100	25	1	8	3
PASS2	PEEL	pl32b	INVERSE DISTANCE	AU_ID3	6	6	4	180	-17	0	100	100	25	1	8	3
PASS2	PEEL	pl33b	INVERSE DISTANCE	AU_ID3	6	6	4	180	-24	0	100	100	25	1	8	3
PASS2	PEEL	pl34b	INVERSE DISTANCE	AU_ID3	6	6	4	270	-10	35	100	100	25	1	8	3
PASS2	PEEL	pl35b	INVERSE DISTANCE	AU_ID3	6	6	4	270	-32	52	100	100	25	1	8	3
PASS2	PEEL	pl36b	INVERSE DISTANCE	AU_ID3	6	6	4	180	-65	-20	100	100	25	1	8	3
PASS2	PEEL	pl37b	INVERSE DISTANCE	AU_ID3	6	6	4	180	-68	0	100	100	25	1	8	3
PASS2	PEEL	pl38b	INVERSE DISTANCE	AU_ID3	6	6	4	180	-20	0	100	100	25	1	8	3
SG	PEEL	pl01a	INVERSE DISTANCE	SG	6	6	4	90	-5	0	100	100	25	1	1	3
SG	PEEL	pl02a	INVERSE DISTANCE	SG	6	6	4	0	-66	20	100	100	25	1	1	3
SG	PEEL	pl03a	INVERSE DISTANCE	SG	6	6	4	180	-15	0	100	100	25	1	1	3
SG	PEEL	pl04a	INVERSE DISTANCE	SG	6	6	4	180	-15	0	100	100	25	1	1	3
SG	PEEL	pl05a	INVERSE DISTANCE	SG	6	6	4	90	-10	-17	100	100	25	1	1	3
SG	PEEL	pl06a	INVERSE DISTANCE	SG	6	6	4	90	-17	0	100	100	25	1	1	3
SG	PEEL	pl07a	INVERSE DISTANCE	SG	6	6	4	90	-30	0	100	100	25	1	1	3

est	model	est_id	est_type	grade variable	parent x	parent y	parent z	bearing (z)	plunge (y)	dip (x)	major axis	semi axis	minor axis	min samps	max samps	power
SG	PEEL	pl08a	INVERSE DISTANCE	SG	6	6	4	270	-8	12	100	100	25	1	1	3
SG	PEEL	pl09a	INVERSE DISTANCE	SG	6	6	4	0	0	0	100	100	25	1	1	3
SG	PEEL	pl10a	INVERSE DISTANCE	SG	6	6	4	0	0	0	100	100	25	1	1	3
SG	PEEL	pl11a	INVERSE DISTANCE	SG	6	6	4	0	-12	0	100	100	25	1	1	3
SG	PEEL	pl12a	INVERSE DISTANCE	SG	6	6	4	180	-39	0	100	100	25	1	1	3
SG	PEEL	pl13a	INVERSE DISTANCE	SG	6	6	4	90	-22	0	100	100	25	1	1	3
SG	PEEL	pl14a	INVERSE DISTANCE	SG	6	6	4	90	-33	0	100	100	25	1	1	3
SG	PEEL	pl15a	INVERSE DISTANCE	SG	6	6	4	90	-17	0	100	100	25	1	1	3
SG	PEEL	pl16a	INVERSE DISTANCE	SG	6	6	4	270	-26	0	100	100	25	1	1	3
SG	PEEL	pl17a	INVERSE DISTANCE	SG	6	6	4	90	-21	0	100	100	25	1	1	3
SG	PEEL	pl18a	INVERSE DISTANCE	SG	6	6	4	0	0	0	100	100	25	1	1	3
SG	PEEL	pl19a	INVERSE DISTANCE	SG	6	6	4	0	-46	8	100	100	25	1	1	3
SG	PEEL	pl20a	INVERSE DISTANCE	SG	6	6	4	0	-46	0	100	100	25	1	1	3
SG	PEEL	pl21a	INVERSE DISTANCE	SG	6	6	4	90	-7	0	100	100	25	1	1	3
SG	PEEL	pl22a	INVERSE DISTANCE	SG	6	6	4	0	0	0	100	100	25	1	1	3
SG	PEEL	pl23a	INVERSE DISTANCE	SG	6	6	4	0	0	0	100	100	25	1	1	3
SG	PEEL	pl24a	INVERSE DISTANCE	SG	6	6	4	90	-8	20	100	100	25	1	1	3
SG	PEEL	pl25a	INVERSE DISTANCE	SG	6	6	4	90	-8	-5	100	100	25	1	1	3
SG	PEEL	pl26a	INVERSE DISTANCE	SG	6	6	4	180	-4	0	100	100	25	1	1	3
SG	PEEL	pl27a	INVERSE DISTANCE	SG	6	6	4	180	-10	0	100	100	25	1	1	3
SG	PEEL	pl28a	INVERSE DISTANCE	SG	6	6	4	180	-26	0	100	100	25	1	1	3
SG	PEEL	pl29a	INVERSE DISTANCE	SG	6	6	4	180	-27	-14	100	100	25	1	1	3
SG	PEEL	pl30a	INVERSE DISTANCE	SG	6	6	4	180	-7	0	100	100	25	1	1	3
SG	PEEL	pl31a	INVERSE DISTANCE	SG	6	6	4	180	-10	0	100	100	25	1	1	3
SG	PEEL	pl32a	INVERSE DISTANCE	SG	6	6	4	180	-17	0	100	100	25	1	1	3
SG	PEEL	pl33a	INVERSE DISTANCE	SG	6	6	4	180	-24	0	100	100	25	1	1	3
SG	PEEL	pl34a	INVERSE DISTANCE	SG	6	6	4	270	-10	35	100	100	25	1	1	3
SG	PEEL	pl35a	INVERSE DISTANCE	SG	6	6	4	270	-32	52	100	100	25	1	1	3
SG	PEEL	pl36a	INVERSE DISTANCE	SG	6	6	4	180	-65	-20	100	100	25	1	1	3
SG	PEEL	pl37a	INVERSE DISTANCE	SG	6	6	4	180	-68	0	100	100	25	1	1	3
SG	PEEL	pl38a	INVERSE DISTANCE	SG	6	6	4	180	-20	0	100	100	50	1	1	3
SG	PEEL	waste1	INVERSE DISTANCE	SG	0	0	0	0	0	0	20	20	10	1	1	3

est	model	est_id	sample dbase	assay	char field	char value	hi yield field	threshold	maj radius	semi radius	minor radius	max per dh	zone variable	zone value	blks by cond	condition
PASS1	PEEL	pl01a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PEEL"]	AUPPM	50	3	3	2	2	shell	peel01		
PASS1	PEEL	pl02a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PEEL"]	AUPPM	50	3	3	2	2	shell	peel02		
PASS1	PEEL	pl03a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PEEL"]	AUPPM	50	3	3	2	2	shell	peel03		
PASS1	PEEL	pl04a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PEEL"]	AUPPM	50	3	3	2	2	shell	peel04		
PASS1	PEEL	pl05a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PEEL"]	AUPPM	50	3	3	2	2	shell	peel05		
PASS1	PEEL	pl06a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PEEL"]	AUPPM	50	3	3	2	2	shell	peel06		
PASS1	PEEL	pl07a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PEEL"]	AUPPM	50	3	3	2	2	shell	peel07		
PASS1	PEEL	pl08a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PEEL"]	AUPPM	50	3	3	2	2	shell	peel08		
PASS1	PEEL	pl09a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PEEL"]	AUPPM	50	3	3	2	2	shell	peel09		
PASS1	PEEL	pl10a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PEEL"]	AUPPM	50	3	3	2	2	shell	peel10		
PASS1	PEEL	pl11a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PEEL"]	AUPPM	50	3	3	2	2	shell	peel11		
PASS1	PEEL	pl12a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PEEL"]	AUPPM	50	3	3	2	2	shell	peel12		
PASS1	PEEL	pl13a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PEEL"]	AUPPM	50	3	3	2	2	shell	peel13		
PASS1	PEEL	pl14a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PEEL"]	AUPPM	50	3	3	2	2	shell	peel14		
PASS1	PEEL	pl15a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PEEL"]	AUPPM	50	3	3	2	2	shell	peel15		
PASS1	PEEL	pl16a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PEEL"]	AUPPM	50	3	3	2	2	shell	peel16		
PASS1	PEEL	pl17a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PEEL"]	AUPPM	50	3	3	2	2	shell	peel17		
PASS1	PEEL	pl18a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PEEL"]	AUPPM	50	3	3	2	2	shell	peel18		
PASS1	PEEL	pl19a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PEEL"]	AUPPM	50	3	3	2	2	shell	peel19		
PASS1	PEEL	pl20a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PEEL"]	AUPPM	50	3	3	2	2	shell	peel20		
PASS1	PEEL	pl21a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PEEL"]	AUPPM	50	3	3	2	2	shell	peel21		
PASS1	PEEL	pl22a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PEEL"]	AUPPM	50	3	3	2	2	shell	peel22		
PASS1	PEEL	pl23a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PEEL"]	AUPPM	50	3	3	2	2	shell	peel23		
PASS1	PEEL	pl24a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PEEL"]	AUPPM	50	3	3	2	2	shell	peel24		
PASS1	PEEL	pl25a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PEEL"]	AUPPM	50	3	3	2	2	shell	peel25		
PASS1	PEEL	pl26a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PEEL"]	AUPPM	50	3	3	2	2	shell	peel26		
PASS1	PEEL	pl27a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PEEL"]	AUPPM	50	3	3	2	2	shell	peel27		
PASS1	PEEL	pl28a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PEEL"]	AUPPM	50	3	3	2	2	shell	peel28		
PASS1	PEEL	pl29a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PEEL"]	AUPPM	50	3	3	2	2	shell	peel29		
PASS1	PEEL	pl30a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PEEL"]	AUPPM	50	3	3	2	2	shell	peel30		
PASS1	PEEL	pl31a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PEEL"]	AUPPM	50	3	3	2	2	shell	peel31		
PASS1	PEEL	pl32a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PEEL"]	AUPPM	50	3	3	2	2	shell	peel32		
PASS1	PEEL	pl33a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PEEL"]	AUPPM	50	3	3	2	2	shell	peel33		
PASS1	PEEL	pl34a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PEEL"]	AUPPM	50	3	3	2	2	shell	peel34		
PASS1	PEEL	pl35a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PEEL"]	AUPPM	50	3	3	2	2	shell	peel35		
PASS1	PEEL	pl36a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PEEL"]	AUPPM	50	3	3	2	2	shell	peel36		
PASS1	PEEL	pl37a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PEEL"]	AUPPM	50	3	3	2	2	shell	peel37		
PASS1	PEEL	pl38a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PEEL"]	AUPPM	50	3	3	2	2	shell	peel38		
PASS2	PEEL	pl01b	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PEEL"]	AUPPM	50	3	3	2	3	shell	peel01	1	au_id3 lt 0
PASS2	PEEL	pl02b	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PEEL"]	AUPPM	50	3	3	2	3	shell	peel02	1	au_id3 lt 0
PASS2	PEEL	pl03b	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PEEL"]	AUPPM	50	3	3	2	3	shell	peel03	1	au_id3 lt 0
PASS2	PEEL	pl04b	ktzafeb2010.cmp.isis	AUPPM	ZONE	["PEEL"]	AUPPM	50	3	3	2	3	shell	peel04	1	au_id3 lt 0

est	model	est_id	sample dbase	assay	char field	char value	hi yield field	threshold	maj radius	semi radius	minor radius	max per dh	zone variable	zone value	blks by cond	condition
PASS2	PEEL	pl05b	ktzafef2010.cmp.isis	AUPPM	ZONE	["PEEL"]	AUPPM	50	3	3	2	3	shell	peel05	1	au_id3 lt 0
PASS2	PEEL	pl06b	ktzafef2010.cmp.isis	AUPPM	ZONE	["PEEL"]	AUPPM	50	3	3	2	3	shell	peel06	1	au_id3 lt 0
PASS2	PEEL	pl07b	ktzafef2010.cmp.isis	AUPPM	ZONE	["PEEL"]	AUPPM	50	3	3	2	3	shell	peel07	1	au_id3 lt 0
PASS2	PEEL	pl08b	ktzafef2010.cmp.isis	AUPPM	ZONE	["PEEL"]	AUPPM	50	3	3	2	3	shell	peel08	1	au_id3 lt 0
PASS2	PEEL	pl09b	ktzafef2010.cmp.isis	AUPPM	ZONE	["PEEL"]	AUPPM	50	3	3	2	3	shell	peel09	1	au_id3 lt 0
PASS2	PEEL	pl10b	ktzafef2010.cmp.isis	AUPPM	ZONE	["PEEL"]	AUPPM	50	3	3	2	3	shell	peel10	1	au_id3 lt 0
PASS2	PEEL	pl11b	ktzafef2010.cmp.isis	AUPPM	ZONE	["PEEL"]	AUPPM	50	3	3	2	3	shell	peel11	1	au_id3 lt 0
PASS2	PEEL	pl12b	ktzafef2010.cmp.isis	AUPPM	ZONE	["PEEL"]	AUPPM	50	3	3	2	3	shell	peel12	1	au_id3 lt 0
PASS2	PEEL	pl13b	ktzafef2010.cmp.isis	AUPPM	ZONE	["PEEL"]	AUPPM	50	3	3	2	3	shell	peel13	1	au_id3 lt 0
PASS2	PEEL	pl14b	ktzafef2010.cmp.isis	AUPPM	ZONE	["PEEL"]	AUPPM	50	3	3	2	3	shell	peel14	1	au_id3 lt 0
PASS2	PEEL	pl15b	ktzafef2010.cmp.isis	AUPPM	ZONE	["PEEL"]	AUPPM	50	3	3	2	3	shell	peel15	1	au_id3 lt 0
PASS2	PEEL	pl16b	ktzafef2010.cmp.isis	AUPPM	ZONE	["PEEL"]	AUPPM	50	3	3	2	3	shell	peel16	1	au_id3 lt 0
PASS2	PEEL	pl17b	ktzafef2010.cmp.isis	AUPPM	ZONE	["PEEL"]	AUPPM	50	3	3	2	3	shell	peel17	1	au_id3 lt 0
PASS2	PEEL	pl18b	ktzafef2010.cmp.isis	AUPPM	ZONE	["PEEL"]	AUPPM	50	3	3	2	3	shell	peel18	1	au_id3 lt 0
PASS2	PEEL	pl19b	ktzafef2010.cmp.isis	AUPPM	ZONE	["PEEL"]	AUPPM	50	3	3	2	3	shell	peel19	1	au_id3 lt 0
PASS2	PEEL	pl20b	ktzafef2010.cmp.isis	AUPPM	ZONE	["PEEL"]	AUPPM	50	3	3	2	3	shell	peel20	1	au_id3 lt 0
PASS2	PEEL	pl21b	ktzafef2010.cmp.isis	AUPPM	ZONE	["PEEL"]	AUPPM	50	3	3	2	3	shell	peel21	1	au_id3 lt 0
PASS2	PEEL	pl22b	ktzafef2010.cmp.isis	AUPPM	ZONE	["PEEL"]	AUPPM	50	3	3	2	3	shell	peel22	1	au_id3 lt 0
PASS2	PEEL	pl23b	ktzafef2010.cmp.isis	AUPPM	ZONE	["PEEL"]	AUPPM	50	3	3	2	3	shell	peel23	1	au_id3 lt 0
PASS2	PEEL	pl24b	ktzafef2010.cmp.isis	AUPPM	ZONE	["PEEL"]	AUPPM	50	3	3	2	3	shell	peel24	1	au_id3 lt 0
PASS2	PEEL	pl25b	ktzafef2010.cmp.isis	AUPPM	ZONE	["PEEL"]	AUPPM	50	3	3	2	3	shell	peel25	1	au_id3 lt 0
PASS2	PEEL	pl26b	ktzafef2010.cmp.isis	AUPPM	ZONE	["PEEL"]	AUPPM	50	3	3	2	3	shell	peel26	1	au_id3 lt 0
PASS2	PEEL	pl27b	ktzafef2010.cmp.isis	AUPPM	ZONE	["PEEL"]	AUPPM	50	3	3	2	3	shell	peel27	1	au_id3 lt 0
PASS2	PEEL	pl28b	ktzafef2010.cmp.isis	AUPPM	ZONE	["PEEL"]	AUPPM	50	3	3	2	3	shell	peel28	1	au_id3 lt 0
PASS2	PEEL	pl29b	ktzafef2010.cmp.isis	AUPPM	ZONE	["PEEL"]	AUPPM	50	3	3	2	3	shell	peel29	1	au_id3 lt 0
PASS2	PEEL	pl30b	ktzafef2010.cmp.isis	AUPPM	ZONE	["PEEL"]	AUPPM	50	3	3	2	3	shell	peel30	1	au_id3 lt 0
PASS2	PEEL	pl31b	ktzafef2010.cmp.isis	AUPPM	ZONE	["PEEL"]	AUPPM	50	3	3	2	3	shell	peel31	1	au_id3 lt 0
PASS2	PEEL	pl32b	ktzafef2010.cmp.isis	AUPPM	ZONE	["PEEL"]	AUPPM	50	3	3	2	3	shell	peel32	1	au_id3 lt 0
PASS2	PEEL	pl33b	ktzafef2010.cmp.isis	AUPPM	ZONE	["PEEL"]	AUPPM	50	3	3	2	3	shell	peel33	1	au_id3 lt 0
PASS2	PEEL	pl34b	ktzafef2010.cmp.isis	AUPPM	ZONE	["PEEL"]	AUPPM	50	3	3	2	3	shell	peel34	1	au_id3 lt 0
PASS2	PEEL	pl35b	ktzafef2010.cmp.isis	AUPPM	ZONE	["PEEL"]	AUPPM	50	3	3	2	3	shell	peel35	1	au_id3 lt 0
PASS2	PEEL	pl36b	ktzafef2010.cmp.isis	AUPPM	ZONE	["PEEL"]	AUPPM	50	3	3	2	3	shell	peel36	1	au_id3 lt 0
PASS2	PEEL	pl37b	ktzafef2010.cmp.isis	AUPPM	ZONE	["PEEL"]	AUPPM	50	3	3	2	3	shell	peel37	1	au_id3 lt 0
PASS2	PEEL	pl38b	ktzafef2010.cmp.isis	AUPPM	ZONE	["PEEL"]	AUPPM	50	3	3	2	3	shell	peel38	1	au_id3 lt 0
SG	PEEL	pl01a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["PEEL"]	AUPPM	1	2	2	2	0	shell	peel01		
SG	PEEL	pl02a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["PEEL"]	AUPPM	1	2	2	2	0	shell	peel02		
SG	PEEL	pl03a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["PEEL"]	AUPPM	1	2	2	2	0	shell	peel03		
SG	PEEL	pl04a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["PEEL"]	AUPPM	1	2	2	2	0	shell	peel04		
SG	PEEL	pl05a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["PEEL"]	AUPPM	1	2	2	2	0	shell	peel05		
SG	PEEL	pl06a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["PEEL"]	AUPPM	1	2	2	2	0	shell	peel06		
SG	PEEL	pl07a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["PEEL"]	AUPPM	1	2	2	2	0	shell	peel07		
SG	PEEL	pl08a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["PEEL"]	AUPPM	1	2	2	2	0	shell	peel08		
SG	PEEL	pl09a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["PEEL"]	AUPPM	1	2	2	2	0	shell	peel109		

est	model	est_id	sample dbase	assay	char field	char value	hi yield field	threshold	maj radius	semi radius	minor radius	max per dh	zone variable	zone value	blks by cond	condition
SG	PEEL	pl10a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["PEEL"]	AUPPM	1	2	2	2	0	shell	peel10		
SG	PEEL	pl11a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["PEEL"]	AUPPM	1	2	2	2	0	shell	peel11		
SG	PEEL	pl12a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["PEEL"]	AUPPM	1	2	2	2	0	shell	peel12		
SG	PEEL	pl13a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["PEEL"]	AUPPM	1	2	2	2	0	shell	peel13		
SG	PEEL	pl14a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["PEEL"]	AUPPM	1	2	2	2	0	shell	peel14		
SG	PEEL	pl15a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["PEEL"]	AUPPM	1	2	2	2	0	shell	peel15		
SG	PEEL	pl16a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["PEEL"]	AUPPM	1	2	2	2	0	shell	peel16		
SG	PEEL	pl17a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["PEEL"]	AUPPM	1	2	2	2	0	shell	peel17		
SG	PEEL	pl18a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["PEEL"]	AUPPM	1	2	2	2	0	shell	peel18		
SG	PEEL	pl19a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["PEEL"]	AUPPM	1	2	2	2	0	shell	peel19		
SG	PEEL	pl20a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["PEEL"]	AUPPM	1	2	2	2	0	shell	peel20		
SG	PEEL	pl21a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["PEEL"]	AUPPM	1	2	2	2	0	shell	peel21		
SG	PEEL	pl22a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["PEEL"]	AUPPM	1	2	2	2	0	shell	peel22		
SG	PEEL	pl23a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["PEEL"]	AUPPM	1	2	2	2	0	shell	peel23		
SG	PEEL	pl24a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["PEEL"]	AUPPM	1	2	2	2	0	shell	peel24		
SG	PEEL	pl25a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["PEEL"]	AUPPM	1	2	2	2	0	shell	peel25		
SG	PEEL	pl26a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["PEEL"]	AUPPM	1	2	2	2	0	shell	peel26		
SG	PEEL	pl27a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["PEEL"]	AUPPM	1	2	2	2	0	shell	peel27		
SG	PEEL	pl28a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["PEEL"]	AUPPM	1	2	2	2	0	shell	peel28		
SG	PEEL	pl29a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["PEEL"]	AUPPM	1	2	2	2	0	shell	peel29		
SG	PEEL	pl30a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["PEEL"]	AUPPM	1	2	2	2	0	shell	peel30		
SG	PEEL	pl31a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["PEEL"]	AUPPM	1	2	2	2	0	shell	peel31		
SG	PEEL	pl32a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["PEEL"]	AUPPM	1	2	2	2	0	shell	peel32		
SG	PEEL	pl33a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["PEEL"]	AUPPM	1	2	2	2	0	shell	peel33		
SG	PEEL	pl34a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["PEEL"]	AUPPM	1	2	2	2	0	shell	peel34		
SG	PEEL	pl35a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["PEEL"]	AUPPM	1	2	2	2	0	shell	peel35		
SG	PEEL	pl36a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["PEEL"]	AUPPM	1	2	2	2	0	shell	peel36		
SG	PEEL	pl37a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["PEEL"]	AUPPM	1	2	2	2	0	shell	peel37		
SG	PEEL	pl38a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["PEEL"]	AUPPM	1	2	2	2	0	shell	peel38		
SG	PEEL	waste1	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["NONE"]	AUPPM	1	2	2	2	0	shell	none	1	sg lt 0

Knoll Estimation Parameters

est	model	est_id	est_type	grade variable	parent x	parent y	parent z	bearing (z)	plunge (y)	dip (x)	major axis	semi axis	minor axis	min samps	max samps	power
PASS1	KNOLL	sh25a	INVERSE DISTANCE	AU_ID3	6	6	4	110	0	0	20	20	5	3	8	3
PASS1	KNOLL	sh26a	INVERSE DISTANCE	AU_ID3	6	6	4	110	0	0	20	20	5	3	8	3
PASS1	KNOLL	sh27a	INVERSE DISTANCE	AU_ID3	6	6	4	110	0	0	20	20	5	3	8	3
PASS1	KNOLL	sh28a	INVERSE DISTANCE	AU_ID3	6	6	4	110	0	0	20	20	5	3	8	3
SG	KNOLL	sh25a	INVERSE DISTANCE	SG	6	6	4	110	0	0	100	100	25	1	1	3
SG	KNOLL	sh26a	INVERSE DISTANCE	SG	6	6	4	110	0	0	100	100	25	1	1	3
SG	KNOLL	sh27a	INVERSE DISTANCE	SG	6	6	4	110	0	0	100	100	25	1	1	3
SG	KNOLL	sh28a	INVERSE DISTANCE	SG	6	6	4	110	0	0	100	100	25	1	1	3
SG	KNOLL	waste1	INVERSE DISTANCE	SG	0	0	0	0	0	0	20	20	10	1	1	3

est	model	est_id	sample dbase	assay	char field	char value	hi yield field	threshold	maj radius	semi radius	minor radius	max per dh	zone variable	zone value	blks by cond	condition
PASS1	KNOLL	sh25a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["SHAMROCK"]	AUPPM	50	3	3	2	2	shell	sham25		
PASS1	KNOLL	sh26a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["SHAMROCK"]	AUPPM	50	3	3	2	2	shell	sham26		
PASS1	KNOLL	sh27a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["SHAMROCK"]	AUPPM	50	3	3	2	2	shell	sham27		
PASS1	KNOLL	sh28a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["SHAMROCK"]	AUPPM	50	3	3	2	2	shell	sham28		
SG	KNOLL	sh25a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["SHAMROCK"]	AUPPM	1	2	2	2	0	shell	sham25		
SG	KNOLL	sh26a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["SHAMROCK"]	AUPPM	1	2	2	2	0	shell	sham26		
SG	KNOLL	sh27a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["SHAMROCK"]	AUPPM	1	2	2	2	0	shell	sham27		
SG	KNOLL	sh28a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["SHAMROCK"]	AUPPM	1	2	2	2	0	shell	sham28		
SG	KNOLL	waste1	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["NONE"]	AUPPM	1	2	2	2	0	shell	none	1	sg lt 0

Gully Estimation Parameters

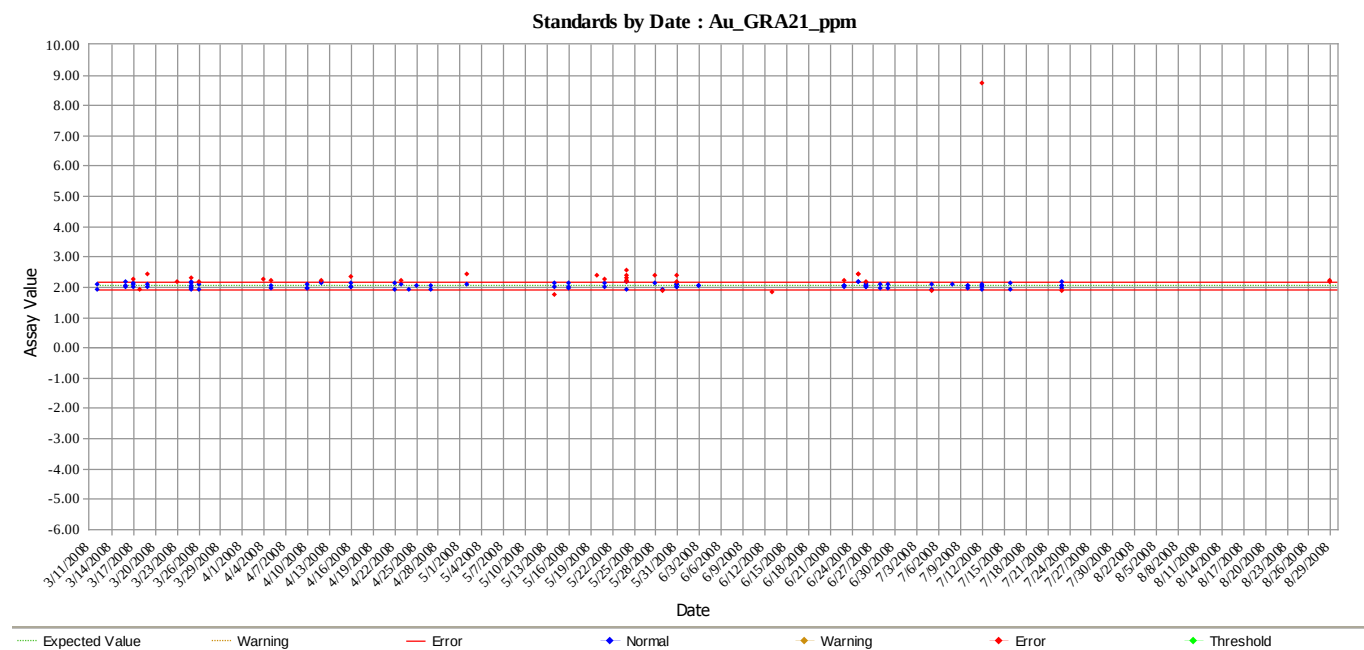
est	model	est_id	est_type	grade variable	parent x	parent y	parent z	bearing (z)	plunge (y)	dip (x)	major axis	semi axis	minor axis	min samps	max samps	power
PASS1	GULLY	sh01na	INVERSE DISTANCE	AU_ID3	6	6	4	270	-45	0	20	20	5	3	8	3
PASS1	GULLY	sh01sa	INVERSE DISTANCE	AU_ID3	6	6	4	270	-80	0	20	20	5	3	8	3
PASS1	GULLY	sh24a	INVERSE DISTANCE	AU_ID3	6	6	4	90	-20	0	20	20	5	3	8	3
PASS1	GULLY	sh30a	INVERSE DISTANCE	AU_ID3	6	6	4	90	-88	0	20	20	5	3	8	3
PASS1	GULLY	sh31a	INVERSE DISTANCE	AU_ID3	6	6	4	90	-5	0	20	20	5	3	8	3
PASS2	GULLY	sh01nb	INVERSE DISTANCE	AU_ID3	6	6	4	270	-45	0	100	100	25	1	8	3
PASS2	GULLY	sh01sb	INVERSE DISTANCE	AU_ID3	6	6	4	270	-80	0	100	100	25	1	8	3
PASS2	GULLY	sh24b	INVERSE DISTANCE	AU_ID3	6	6	4	90	-20	0	100	100	25	1	8	3
PASS2	GULLY	sh30b	INVERSE DISTANCE	AU_ID3	6	6	4	90	-88	0	100	100	25	1	8	3
PASS2	GULLY	sh31b	INVERSE DISTANCE	AU_ID3	6	6	4	90	-5	0	100	100	25	1	8	3
SG	GULLY	sh01na	INVERSE DISTANCE	SG	6	6	4	270	-45	0	100	100	25	1	1	3
SG	GULLY	sh01sa	INVERSE DISTANCE	SG	6	6	4	270	-85	0	100	100	25	1	1	3
SG	GULLY	sh24a	INVERSE DISTANCE	SG	6	6	4	90	-20	0	100	100	25	1	1	3
SG	GULLY	sh30a	INVERSE DISTANCE	SG	6	6	4	90	-88	0	100	100	25	1	1	3
SG	GULLY	sh31a	INVERSE DISTANCE	SG	6	6	4	90	-5	0	100	100	25	1	1	3
SG	GULLY	waste1	INVERSE DISTANCE	SG	0	0	0	0	0	0	20	20	10	1	1	3

est	model	est_id	sample dbase	assay	char field	char value	hi yield field	threshold	maj radius	semi radius	minor radius	max per dh	zone variable	zone value	blks by cond	condition
PASS1	GULLY	sh01na	ktzafeb2010.cmp.isis	AUPPM	ZONE	["SHAMROCK"]	AUPPM	50	3	3	2	2	shell	sham01n		
PASS1	GULLY	sh01sa	ktzafeb2010.cmp.isis	AUPPM	ZONE	["SHAMROCK"]	AUPPM	50	3	3	2	2	shell	sham01s		
PASS1	GULLY	sh24a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["SHAMROCK"]	AUPPM	50	3	3	2	2	shell	sham24		
PASS1	GULLY	sh30a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["SHAMROCK"]	AUPPM	50	3	3	2	2	shell	sham30		
PASS1	GULLY	sh31a	ktzafeb2010.cmp.isis	AUPPM	ZONE	["SHAMROCK"]	AUPPM	50	3	3	2	2	shell	sham31		
PASS2	GULLY	sh01nb	ktzafeb2010.cmp.isis	AUPPM	ZONE	["SHAMROCK"]	AUPPM	50	3	3	2	3	shell	sham01n	1	au_id3 lt 0
PASS2	GULLY	sh01sb	ktzafeb2010.cmp.isis	AUPPM	ZONE	["SHAMROCK"]	AUPPM	50	3	3	2	3	shell	sham01s	1	au_id3 lt 0
PASS2	GULLY	sh24b	ktzafeb2010.cmp.isis	AUPPM	ZONE	["SHAMROCK"]	AUPPM	50	3	3	2	3	shell	sham24	1	au_id3 lt 0
PASS2	GULLY	sh30b	ktzafeb2010.cmp.isis	AUPPM	ZONE	["SHAMROCK"]	AUPPM	50	3	3	2	3	shell	sham30	1	au_id3 lt 0
PASS2	GULLY	sh31b	ktzafeb2010.cmp.isis	AUPPM	ZONE	["SHAMROCK"]	AUPPM	50	3	3	2	3	shell	sham31	1	au_id3 lt 0
SG	GULLY	sh01na	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["SHAMROCK"]	AUPPM	1	2	2	2	0	shell	sham01n		
SG	GULLY	sh01sa	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["SHAMROCK"]	AUPPM	1	2	2	2	0	shell	sham01s		
SG	GULLY	sh24a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["SHAMROCK"]	AUPPM	1	2	2	2	0	shell	sham24		
SG	GULLY	sh30a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["SHAMROCK"]	AUPPM	1	2	2	2	0	shell	sham30		
SG	GULLY	sh31a	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["SHAMROCK"]	AUPPM	1	2	2	2	0	shell	sham31		
SG	GULLY	waste1	ktzasg_feb2010.csg.isis	SG_GEO	ZONE	["NONE"]	AUPPM	1	2	2	2	0	shell	none	1	sg lt 0

Appendix I

Mineral 2008 QA/QC Data

Appendix I-1. Standard CDN-GS-2B 2008 Performance



Notes: (1) Au Fire Assay Value listed on the Y-Axis in ppm and analyzed by ALS Chemex Lab using Au-GRA 21 method;

(2) Red lines indicate 2 standard deviations above and below the ideal Au value for Gold Reference Standard no. CDN-GS-2B

Appendix I-2. Duplicate Assays Performed at ALS Chemex in 2006 and 2007, Ketza River Project

