BIDJOVAGGE AU-CU-PROJECT

MINERAL RESOURCE ESTIMATION

DECEMBER 2010

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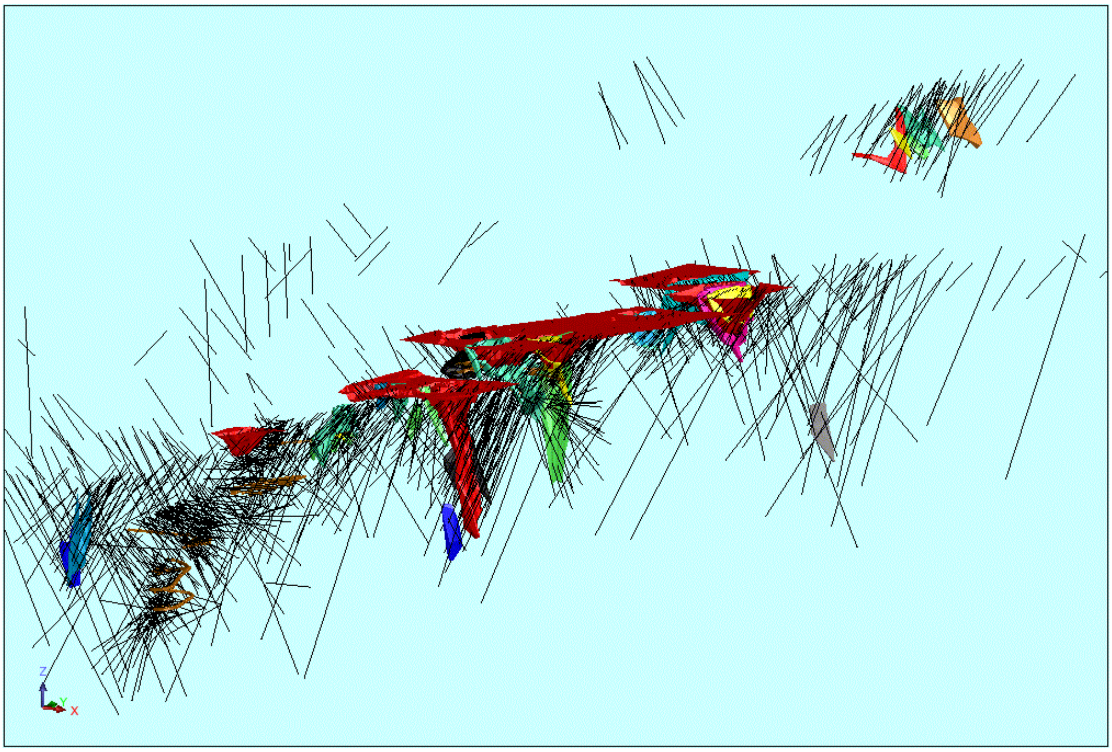

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Update Notes

*This update report adds in the remaining mineral resource of C- and Hilde deposits which were omitted from the original report because of the lack of confidence on the historical mining limits of these areas. The recent investigations of the old mine maps and consultation with Markus Ekberg (*The former chief geologist of the Bidjovagge mine) have made it possible to calculate the mineral resources of Hilde- and C-deposits with confidence high enough to be included into the Mineral Resource Statement of the Bidjovagge project.

The A-orebody was also studied but neither indicate nor inferred mineral resources could be identified.

Outotec

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1. Certificates of Authors

2. Krister Söderholm (2010); Description of histrorical production, mine geology, drilling, sample preparation and assaying in 1983-1991

1. INTRODUCTION

Outotec (Finland) Oy was requested by the Arctic Gold to provide assistance with the Bidjovagge resource update, for use in a scoping study.

1.1. Scope of work

The scope of work consists of the following:

- digitising 2D sectional interpretations and creating 3D models of geology and grade boundaries;
- assist with database validation;
- undertake statistical and geostatistical studies and calculate a resource estimate. This includes the estimation of Au and Cu grades and allocation of appropriate bulk density factors to the resource models; and
- classifying the resource estimate to internationally accepted standards as defined by the JORC guidelines.

Outotec (Finland) Oy has agreed to sign off on the resource estimate as the leader of a team of competent persons, with the provision that some of the other competent persons are also employed by Arctic Gold.

2. PREVIOUS RESOURCE ESTIMATES AND HISTORICAL PRODUCTION (AG)

The mineable ore reserves were 1 million tonnes with 2 g/t Au and 1.1 % Cu when Outokumpu Oy reopened the mine in 1985. (Björlykke et al 1987) There have been, since the shutdown of the mine in 1991, several ore reserve and mineral resource estimations performed since then. The historical production is also shown in the tables below.

2.1. Ore Reserve

The first ore reserve estimation after shut down 1991 was 280,000 tons and were made by Osmo Inkinen and Henrik Ask in the report "Bidjovagge project , The Activities and results of the phase one (1991-1992)"

Outokumpu 1993 (Ore Reserve)

Orebody in situ	ton	Cu %	Au g/t
3000N	56 000	1,6	15,3
D	566 000	1,3	3

L	98 000	2,3	3,7
M	8 000	2,3	1,1
C3	5 000	1	10,4
C4	16 000	2,1	5,2
H	39 000	1,8	2,4
total	788 000	1,49	4,00

The second estimate was made by Markus Ekberg in 1993 just before Outokumpu left the site and is found in the report “Outokumpu mining, BIP-project 14-12-1993, Table 2.3.1”(BV 2815) The result is shown above. Outokumpu used a copper equivalent of l g/t Au equaling 1% Cu and used different cutoffs according to the location of the orebody, if it was open pit or underground position.

2.2. Mineral resource estimations.

In 1996 the Canadian company Hendricks Minerals of Canada (HMC) and their consultant J.H.Reedman *and Associates* (Reedman) made a new estimation. They used a different Cu-Au equivalent than Outokumpu, 0.80% Cu equaling 1g/t Au, and had a little different approach; the figures have been compiled to indicate the deposit´s potential and should be regarded as a geological resource. Reedman used several cutoffs but below is a cutoff 2.0 gold equivalents used in this estimation.

Hendricks 1998

Orebody in situ	tonnes	Cu %	Au g/t
3000N	136 830	1,47	7,89
K	111 915	0,31	4,52
F	41 335	1,51	3,29
D	318 440	1,35	3,76
H	80 740	1,61	4,3
L	147 925	1,44	2,56
total	837 185	1,28	4,35

2.3. Public information

In the prospect for raising money to Alcaston Exploration AB 2010-06-03 a mineral resource presentation was made out of the two previous estimations. Mixing two different sources with different cutoffs is not quite optimal for getting a realistic picture of the mineral resource and ore reserves.

BIDJOVAGGE GRUVA - KVARVARANDE MINERALTILLGÅNG

Kroppar	Ton	% Cu	ppm Au	Ton Cu	Kg Au
3000 N *)	136 830	1,47	7,89	2 011	1 080
KARIN **)	111 915	0,31	4,52	347	506
FRANCISKA **)	41 335	1,51	3,29	624	136
D-ORE BODY *)	566 000	1,3	3	7 358	1 698
HILDE **)	80 740	1,61	4,3	1 300	347
C4 ORE BODY *)	16 000	2,1	5,2	336	83
LAURA **)	147 925	1,44	2,56	2 130	379
Kvarvarande tillgångar	1 100 745			14 107	4 229

Kvarvarande tillgångar	Ton	% Cu	ppm Au		
Upplag**)	325 222	0,64	2,11		

*) Outokompo OY, **) Hendrics Minerals, Canada Ltd.

2.4. Historical production

In the first mining period copper was the main metal. The production was operated from 1971 to June 1975 by A/S Bleikvassli Mining Company in its subsidiary company Bidjovagge Gruver A/S. The production 1971-1974 was in open pit A and C and started underground in the C area in 1975 according to Norsk Geologisk Tidsskrift, Volume 59, number 4. In Geologiske Tjensters rapport “Exploration within the Bidjovagge goldfield, Finnmark, north Norway, 2006” the table below is found. The planned production of the Bidjovagge plant was 250, 000 tpa. It has not been able to verify the exact production figures from 1970-1975. In other reports only a yearly production of about 100,000 tonnes is mentioned and Björlykke et al 1987 says 400,000 tons total mined from A and C during the first mining period.

Production Period	Mill Feed Tons	Head Grades % Cu	Head Grades ppm Au	Metals in Concentrate Tons of Cu	Metals in Concentrate Kg of Au
1970 - 1975	388 000	1,88	0,5	~ 6 565	~194
1985 - 1991	1 939 000	1,33	3,98	23 752	6 292
Sum produced	2 327 000			30 300	~ 6486

Outokumpu however has shown a table of its total production in the Bidjovagge mine in the report “Malmiarvion toteutuminen Bidjovaggen kultakaivoksella, 20.8.1991”. The table below is the best calculation made of the production 1985-1991 when Outokumpu was in charge for production. The capacity of the plant was in 1986 increased to 350, 000 tpa.

3. DATA

3.1. Topography

The Bidjovagge Goldfield is situated along the western part of the Finnmark plain, 40 km by road to the northwest of the Kautokeino municipality centre. From Kautokeino there is a 130 km all weather road to Alta, which has daily flight connections to the rest of the country. The actual mine area is located along the Caskias ridge around 500 to 700 metres altitude. This is above the tree line and exposures are reasonable between a cover of bogs and heather. The Bidjovagge site has still excess to a power line and water pipeline just down the hills to the south. Both services are now disconnected but are in generally good repair and would appear to be suitable for use in the future.

3.2. Grid Systems

From the very start of the exploration in the area, in the beginning of the 50´, a local grid system was establish and thereafter maintained though all exploration programs including surface and underground mining. The local grid is subparallel to the NGO grid. Compared to the UTM WGS84 system there is a slight angle to the local grid. The local grid system was partly re-established in 2006 by Hendricks Minerals of Canada (HMC). Most of the local system was then gone but still some of the wooden pegs marked with printed aluminum tags were located and controlled with handheld GPS. They then using hip chains and flagging for marking the grid. Small wooden pickets were placed at 100 to 150 meter intervals along wing lines and at 50 meter centers along the main baselines. Hence the local grid has a small angle deviation from the WGS-84 grid, different transformation figures must be used in different parts of the local grid. The Company GeoFinnmark was hired for making a transformation from local grid to WSG-84. In the north field the differences is less than 1 degree, and diminish to the south. A recalculation has been made for all coordinates to WGS-84 when Arctic Gold started its work on the site. The GPS´s of today show generally a deviation of less than 2 meters in Bidjovagge, and by making a couple of measurements at the same point at different times the accuracy is good enough.

3.3. Drilling

Drilling has been carried out by a couple of different organizations, such as Boliden, Kautokeino Kopperfelter Statens undersökelser (KKSU), NGU, A/S Bleikvaggli Mining Company and Bidjovagge Gruber A/S. When Outokumpu started their business in 1983, they compile all old data into their systems. Therefore this description will be separated in four different parts starting with Outokumpu. The description below is separated out of operating companies. The first period is from the 1950´ to Outokumpu leaving the site. The documentation of all this drillings can be found at the archive of the Directorate of Mining in Trondheim. The second period is 1996 when HMC carried out an exploration program. The third period is 2006-2008 when International Gold Exploration AB (IGE) was in charge and the last one is the current started 2010 when Arctic Gold is the operation company.

Boliden – Outokumpu

In the period earlier than 1983 the drilling was like in later periods drilled in east-west profiles. The drillhole diameter was mainly 22 mm which often results in curved holes despite that the dips and deviations were only partially measured.
In the period from 1983 to1993 the drilling was performed by many different contractors. The core size has varied but the most used sizes have been T 46, T 56, and TT46 (wire line). A substantial amount of the diamond drilling was done by the local contractor Terje Holmen A/S, today Diamantboring Nord A/S. Deviation was seldom measured sideways and the dip only in longer holes.

HMC

During 1996, HMC carried out four separate exploration programs, mineral inventory, soil sampling, sampling of low grade ore stockpiles and a drilling program of 28 drill holes. The drilling program was supervised by BCLX Consulting Ltd which worked closely with an Oslo based geological consulting firm, *Geologiske Tjenester A/S,* and developed an experienced team of Canadian and Norwegian personnel for the property. The drilling started 15th July and drilling company for the first 21 drillholes was *Terje Holmen Diamant Boring*. They used a Muskeg mounted Diamec 251 hydraulic drill. The last seven holes were drilled by *Geo Drilling A/S.* Totally 2672 meter were drilled this season. Some kind of rough deviation measurement was made due to the database but no such data could be verified by protocols or other hard copies.

IGE

In 2006 IGE made an option with Geologiske Tjenster A/S to acquire the target within 5 years. IGE financed the drilling for 3 years, 2006-2008. The drilling in 2006 started 17th July and ended 13th August. Totally 8 holes with a length of 1025.6 m were drilled by Diamantboring Nord AS with Terje Holmen as contractor. The holes were drilled with a Diamec 251 with TT56 diameter.

In 2007 IGE had transferred all its rights to the subsidiary company IGE Nordic AB and had required 90% of the Bidjovagge project and 10% was still hold by Geologiska Tjenster AS. This year the drilling was concentrated north of the B- and K ore bodies. The result this year were 5 new holes and an extension of B06-08 drilled the year before totally 1721.3 meters. The drilling took place from 4th July to 24th August, from 15th of August with two rigs. Contractor was Diamatboring Nord AS and the rig for the first 4 holes was a Diamec 262 and the last by a new Onram 1000. All holes were drilled with TT56 WL.
In 2008 IGE bought the remaining 10% of the Bidjovagge project from Geologiske Tjenster AS and thereby controlled 100% of the project. The drilling this year was concentrated in 7 profiles between 1080N and 1400N. Totally 14 drill holes were drilled of 4827m. The drill program used 2 rigs, a Diamec 262 and an Onram 1000 from Diamatboring Nord AS from 29th June to 27th September. The diameter was TT56 WL BQ. Deviation measurement was made on all drillholes from 2007 and 2008 but 08-05 and 08-12. Diamantboring Nord AS did the measurement with a Deviflex from Devico.

Arctic Gold

The target was sold to Arctic Gold in January 2010 and a rapid work to plan a drilling program for the summer started. Partly due to the Samic people with reindeers the drilling could only be performed between 1st of July to 1st September. The drilling started with one rig, Onram 1000/3 with BQ TK, on the 1st of July in the north field with Terje Holmen´s Diamantboring Nord A/S as operator. A second rig, Diamec 262 with the same drill dimension, started 30th July to speed up the drilling. At the 20th August when stopping for the season, 16 drill holes of totally 2050 meters were drilled.
In drill holes longer than 100 meters deviation measurement were made by the drilling company. The equipment used was a Deviflex from Devico.

3.4. Sampling

Boliden – Outokumpu

There are no descriptions of how the sampling was made in general, but the oldest drillcores were only 22 mm and the whole core was sent to analyses.

During the Outokumpu period the logging was done indoors but in many different facilities ranging from poor to fairly good. The cores were stored in wodden core boxes mostly outside. During the production period in 1985 to 1991 the splitting, crushing and grinding were made at the mine and final small samples were sent in plastic tubes for assaying in laboratories in Finland and to external laboratories elsewhere. The mine has its own laboratory using AAS but it was mostly reserved for production samples. The core was splitted in halfs by a mechanical guillotine cutter and one half of the core was sent to analyses and the other half stored in core boxes. The crushing was made with small jaw crushers and the grinding was made by a swing grinding device. All equipment was cleaned before preparation of the next sample (see Söderholm 2010).

Today a part of the old drillcores is stored (in poor to moderate order) in the thickener at Bidjovagge and a representative amount of drillholes from all known orebodies are stored in NGU´s central storages in Lökken.

HMC

The logging was made on site by the Norwegian/Canadan team of geologists. The drillcore logging, sampling, splitting and packing was made outdoor on site. The splitting was made by a hand hold guillotine splitter by Johan A. Gaup. The splitter was wiped clean with a brush before a new section was spitted. There are no reports or writings about replicates and duplicates done during the analysis procedure and all analyses are made on the same lab.

IGE

The cores were preliminary logged by the geologist on site and thereafter carted in to the premises of Diamantboring Nord in Kautokeino where the final logging and sampling were

done by the geologist and splitting was carried out indoor. The core is currently stored in the same place. Splitting and packing of the samples were carried out by Johan A. Gaup by a small handhold guillotine splitter.
In 2007, ten old drillholes stored in NGU:s core archive in Lökken were relogged by geologists from IGE and Geologiske Tjenster A/S (GT) and four of them were resampled as well. The new samples were from sections not previous analyzed so a verification of old samples were not the issue of this work.

Arctic Gold

The cores were transported to a warehouse in Kautokeino after every work shift by the drillers. The logging and sampling were made indoor by Ingolf Rui (GT), Toni Björkvik and Matz Jönsson Forssell (Mirab). The results of the logging were directly transferred into a digital data base. The samplings of the cores were made by the geologists at the same time.
Splitting of the core in halves for sending to analysis was made in the warehouse with a hand hold guillotine splitter. The equipment was carefully wiped clean with a brush between every sample. The samples were marked and carefully packed in double paper bags before put into boxes for the transport. The same man, Johann A. Gaup, has done the splitting and packing since 1996 except the last two weeks when he got help by a relative, Karen A Gaup. The cores are stored in the locked warehouse.

3.5. Assaying

Boliden – Outokumpu

The earliest samples from the 50´ and until Outokumpu took over the project was most frequently analyzed at NGU´s lab in Trondheim. Some analyses protocol from this period is found in the reports. Gold assays were expensive in the first mining period (1970-1975) and the occurrence of gold was not that important for the mine in that period. Most of the drill holes made by Outokumpu were analyzed at their lab GAL in Outokumpu town in Finland. There are a lot faxed protocols from assays made by the GAL lab (see attachment). The analyses numbers are traceable to the record in the folders kept at the Directorate of Mining in Trondheim, Norway (see 3.6.1 below). Some of the later drilling programs were analyzed at other labs. In 1987 the analyses were made at Caleb Brett Laboratories Ltd in Britten. From these analyses there are signed protocols (attachment). In 1989 most of the samples were analyzed by AAS at GAL in Outokumpu, a minor part were also analyzed by fire assay or ICP or XRF. The GAL Laboratory was accredited and certified. There was a program for replicate and duplicate samples during the mining period accordning to Söderholm and some traces of that was found in the material in Trondheim.

HMC

All assaying were made on M-TECH Incorporated´s laboratory in *Nova Scotia, Canada*. Copies of the lab results and most of the core logs are in the report *HMC* -1996 *Report -*

Bidjovagge Project Part 1- 1996 *Exploration Summary, APPENDIX 2A* and *2D* and has been followed and compared with the database.

IGE

During the IGE exploration period all samples were sent to ALS Sweden AB in Öjebyn outside Piteå, Sweden. After crushing, milling and splitting the samples have been forwarded by ALS Sweden to ALS Chemex in Vancouver where they have been submitted to the following assay programs: Au- AA26 and ME-ICP41 (34 elements) or ME-MS61 (47 elements) In 2008 the samples with copper grade over 1% were also analyzed by Cu-AA62. The lab is certified.

Actic Gold

The samples were sent from Kautokeino by Wiiks Transport to the certified laboratory ALS Scandinavia AB in Piteå for sample preparation (crushing, milling and splitting). The samples were sent by ALS Scandinavia to their analysis labs in Romania for Gold and in Vancouver, Canada, for the IPC-MS assays. The methods used were acid IPC-MS on 48 elements and for gold FA-AA Fire Assay on 30 gram sample. All original assay reports are available at Arctic Gold´s office in Uppsala, Sweden. There are 9 replicate samples and two blank samples analyzed by another lab this year.

3.6. Quality assurance – quality control procedures

The database was obtained from IGE both as ASCII-files and as Excel-files. We also got the same ASCII-files from Reedman, consult for HMC. He had originally got it from Outokumpu but if and how Reedman has compiled the files are not known. There are indications by Bclx, consultant to HMC that some data could have been added by Reedman, but it has not been verified. The ASCII-files were compared and found identical. The data from IGE´s work was kept in the Excel-file separate from the early dataset. Both datasets contains 4 different files or tables, Collars, Geology, Surveys and Assays. The collars file contain coordinate and length data, the coordinates in local grid, The Geology file contains lithological data, Surveys file deviation data and Assays file analysis data, mostly only copper and gold analyses. The coordinates were recalculated to UTM WGS-84 by Matz Jönsson Forssell coordinates and all data is now incorporated in an Access database. The new database has been checked and verified by random samples in the documentation from log protocols and lab analysis protocols from the whole historic time period. It seems like the data is correct compiled to the database.

Boliden – Outokumpu

The documentation of the first period of work has been checked at the Directorate of Mining in Trondheim. There are differences depending on when the drillholes were made but there is documentation of all drillhole logs and assays collected section for section in folders. Most individual assay result has a unique assay number. All analysis protocols from the labs are not saved but when checking random samples at the documentation record with the database the figures are the same. In some early drillholes some sample sections have been added together in the database and in a few drillholes the gold analysis in the protocol is not found in the database. In 1993, at the time of the closure at Bidjovagge, Outokumpu prepared a mineral inventory for the in site reserves left in place following that companies six year mining program. The data from Outokumpu contained over 1,500 drill holes for a total of 146,OOO meters of drilling and were stored in computers at Outokumpus archive. Krister Söderholm and Marus Ekberg, chief geologists during the Outokumpu mine period, have made a quality document for that period describing the production, drilling, logging, sampling and assaying.

In the originals from the early 80´ and older a compass with 400 degrees was used in Norway and the dip was measured with 100 degrees scale. This could be a bit confusing but Outokumpu has rectify this when compiling the data to modern standard (360° resp. 90°).

HMC

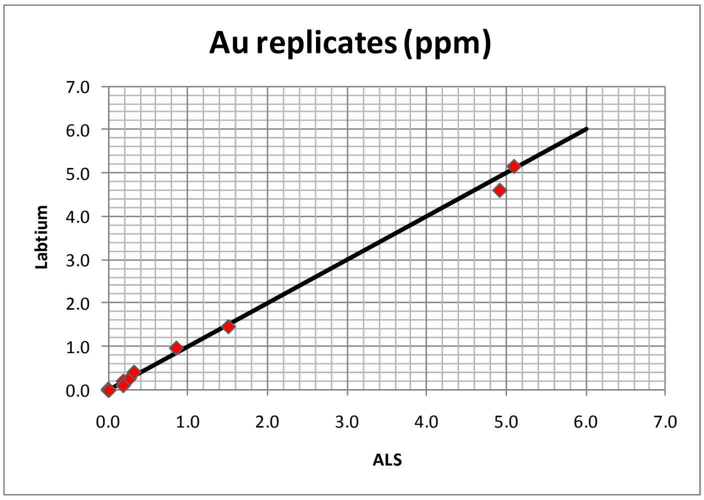
HMC worked at the site in 1996 by it consultant BCLX CONSULTING LTD. They retained to *J.H.Reedman and Associates* (Reedman) to review the Outokumpu inventory and give HMC some assessment of that resource. Reedman obtained the Outokumpu database as ASCII files. BCLX was in complete agreement with the conclusions reached by Reedman in his report and BCLX did no effort to assess the entire drill data base and define a reserve. HMC began to compile a detailed data base for the project. A dataset of digital records was obtained from Outokumpu and this data was given to Reedman to compile drill plans and sections. The data from Outokumpu was imported into the BORSURV software for plotting and processing. In addition, plans of the underground workings and open pits were obtained from Outokumpu for determining the mined out parts of the deposit. In the case of the open pit workings the final open pit topographies were fitted to block models computed for each zone using 2.5-metre downhole composites to interpolate 5m x 5m x 5m blocks. In the case of the underground workings all the main workings levels and some of the access ramps were entered into the drillhole database. The record of this is not complete so it is not possible to use that data alone as base for a resource calculation.
There is a mismatch of hole length between total drillcore length written in the report *HMC* -1996 *Report -Bidjovagge Project Part 1-* 1996 *Exploration Summary* and core length in the core log in two of the drillholes B96-15 and B96-17. There are also 5 drillholes, B96-15, B96-18 to B96-21 not included in the digital geological database. For all those holes except B96-20 and B96-21 there are hard copies of the logs so they can easily be added to the database.

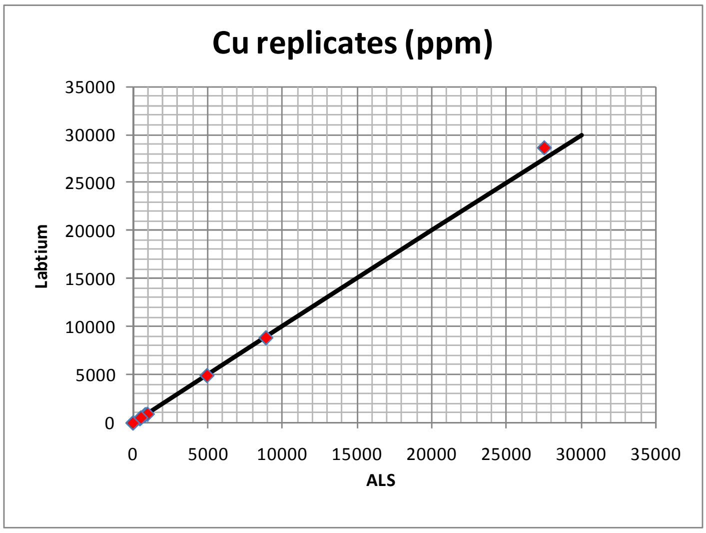
IGE

The documentation of how the drilling programs were performed are found in three reports, one for each year. Attached to the reports is a CD with digital information with the original assay results. The project got an abrupt finish in 2008 due to lack of money and there were sections prepared for assaying but not assayed that year. They were however assayed in 2010 by Arctic Gold. The last three core logs are also incomplete. No duplicates and replicates were made from this drillings and the same lab, ALS Chemex in Pitea, Sweden, was used all the time. The collaring of the drillholes was made by GPS and then fitted to the local grid by compass and tape measure according to older drillholes in the local grid. There are some question marks about the Z-coordinates that due to the 2008 GPS-measuring is about 5 meter higher than the older ones. (This was not observed in 2010 when height measurement also was made by GPS.)

Arctic Gold

The documentation of the 2010 year prospecting activities in the area is documented by the consultant firm Mirab in a PM where the working is described. The analyses from ALS Chemex in Piteå and core logs are digitally kept in databases. There are 11 duplicate analysis done at Labtium lab. The results show good correlation between the assays (see graphs below). The collaring of the drillholes was made by GPS and then fitted to the local grid both by compass and tape measure and according to older drillholes in the local grid. It was also double-checked in a digital GIS-system according to multimeasurments by a handhold GPS.





3.7. Density determinations

In the BIP-project in 1993 the Outokumpu used the density 2.85 as an average for the ore in Bidjovagge. When they know the copper content in the mineralization, they modified the density to 2.7 for Cu>1%, 2.85 for 2.5% >Cu>1 and 3.0 for Cu>2.5. Reedman did not measure the density of the mineralization in the area when he made his calculations in 1996 but was using 2.85 tonnes/m^3.

3.8. Data used for study

Outotec received a copy of the Bidjovagge Access database 5.10.2010 and updated the database with new data received until 28.10.2010 in order to create a drillhole database suitable for use in this study
The Bidjovagge database contains information on 1580 drill holes with a total length of 154790.08m. The number of assayed intervals is 40640. The database does not include records of the density measurements.

In addition to the drill hole database the topography of the old open pits was also obtained from Artic Gold.

3.9. Database validation

Outotec (Finland) Oy and Arctic Gold were jointly responsible for database validation of the input data used for mineral resource models. The Bidjovagge database used in resource modelling includes data prior the date of 28.10.2010.

Minor edits have been done by Outotec (Finland) Oy prior to resource modelling include the following:

- Removing overlapping samples in assay and geology tables (holes: B06-07, B07-01, B07-02, B08-02, B08-07, B08-10, N108B, N108D, N112A, N116C, N132A, N140A N302D, N316A, N88C)

A limited set of database records were compared against the original logging and assay hard copies. The checked records are mainly from the drillings from 1970' and are drilled to A and C areas. The checked records contains many errors such as missing gold assays have been inputted as zeros, geological codes are missing and assay intervals are missing.

In Outotec's opinion the drill hole database as it is now is suitable for this resource estimation but has to be carefully audited and corrected for the further studies.

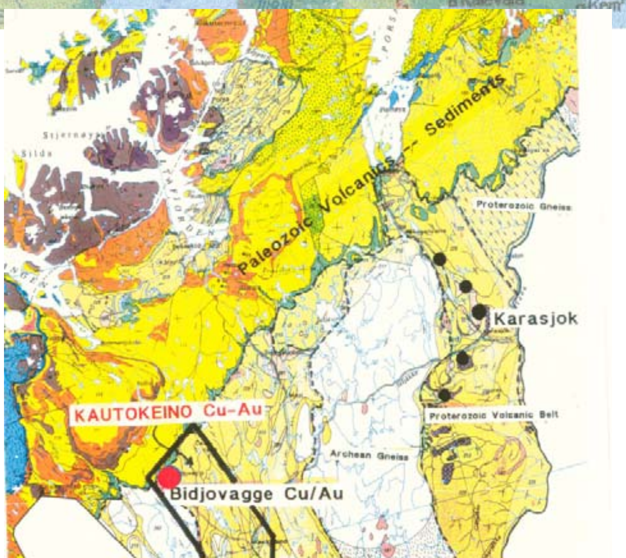
4. GEOLOGICAL MODEL

The Bidjovagge gold-copper deposit is situated 40 km northwest of Kautokeino in the Caskias Mountains of Finnmark, northern Norway. The first ore floats were discovered in the early 1950´s and the first claims were staked in 1952 by the Boliden Mining Company. Exploration was later performed by the Geological Survey of Norway. By 1966, four separate orebodies had been discovered over a strike length of 2.5 km.
A/S Bidjovagge Gruber was founded in 1968 and mining started in 1970. In 1975, the production was stopped because of low copper price. During this first production period

only copper ore was mined from the A and C orebodies and some minor prospecting was done in the area. In 1983-1986 infill drilling was made in some of the known deposits; B, A, D and CAu. Also brown field exploration was successfully done, several many new mineable orebodies were discovered especially in the period 1987-1989; Eva, Fransisca, Gerd, Hilde, Inger and Karin were found and mined. By the end of 1990 ore had been mined from 11 separate orebodies. The production ceased in the end of 1991 due to low metal prices, small mineable reserves and a decision by the management of the Outokumpu group to exit mining.

4.1. Regional geology

The deposit is located in the lower Proterozoic Kautokeino greenstone belt. It sits in a north-south striking anticline and the deposit occurs in a north-south trending volcanic belt between domes with older Archean gneisses and amphibolites. The anti form can be followed over an axial length of 8.5 km. The Bidjovagge area is intersected by several north-south trending faults, which are probably related to the N-S-trending megashear. Detailed mapping has revealed a complex zone with dextral and sinistral strike slip as well as normal and reverse fault. Related to this shear zone, lenses of diorite occurs together with the ore as veins, breccias and low grade dissemination in a mostly strata bound environment.



4.2. Geology in Bidjovagge Minefield

The geological setting of the ore is mostly in albitic felsite and graphitic albitic felsite. All known deposits but the northern one occurs on the eastern limb of the anticline. The general stratigraphy of the formation consists in the lowermost part of carbonates followed by argillites often carbonaceous and usually altered to albitic felsite. The upper part consists of tuffites and amphibolites and the sequence has been intruded by diabase sills. The carbonate rock is often albitized and most of the dolomite is replaced by albite. The most common alteration is of sodic type and the argillites are albitized as well and when completely altered it could be called an albitic felsite or graphitic felsite thou the carbon content can be up to 40 %. The normal stratigraphy is a graphitic unit with albitic felsite on both sides.
The main mineralization is probably pre- or syndeformation. There are indications that small scale faults acted as the channels for the ore forming solutions. There is a theory of 3 main zones of deposits. Zone A in the center of the light albitic felsite, contains mostly of chalcopyrite. The mineralization event seems to be related to brecciation of the host rock, formation of ankerite-actinolite veins and oxidation of the graphitic felsite. Zone B contains gold, some copper, minor uranium and occurs in light albitic felsite near the border of graphitic felsite and is hosted in grey and reddish albitic felsite. The brecciation is less intense and the carbonate actinolite veins are thinner than and not as frequent as in Zone A. The mineralization occurs partly in the veins and partly in veinlets and as dissemination near these veins. The gold is often correlated with the uranium content; davidite, tellurides and chalcopyrite are often part of the same paragenesis. There are also gold rich zones associated with an actinolite-chlorite-hematite alteration. Zone C contains pyrite and chalcopyrite in graphitic felsites near the border of light albitic felsite.
The spatial separation of mineralization in zone A and B and the poor correlation between gold and copper indicate that the deposition of the two metals was controlled by different factors. Boiling and temperature drop may have been an important factor for the formation of copper minerals and some gold within the sulfides. The increased gold content near the oxidation front of the graphitic felsite indicate that changes in oxygen fugacity or pH may have been responsible for the gold rich paragenesis.

4.3. Ore types

The deposits are generally tabular with an individual strike length between 100 and 200 meter. The thickness varies from less than 5 up to 35 meters. Copper and gold are the only metals of economic value. The ore is hosted in the albitic felsite but the graphitic felsite is often mineralized close to the albite felsites contact. Three types of chalcopyrite mineralization in albitic felsite can be distinguished but there are gradual transitions between them.

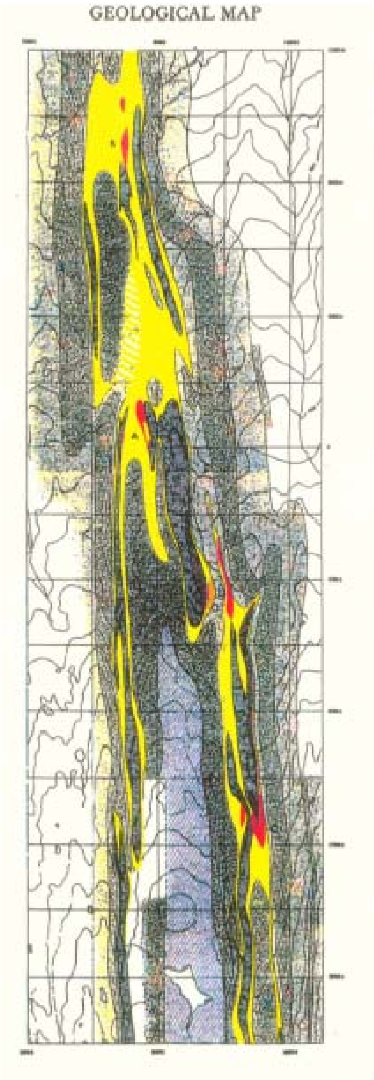
1 Most of the chalcopyrite occurs in veins with ankerite, actinolite and some pyrite and pyrrhotite. The sizes of the veins are usually 2 to 10 centimeters and forms a brecciated texture in the cherty-looking albitic felsite. There are also some wider veins, up to several meters, that are folded and boudinaged.
2 Chalcopyrite with minor gangue minerals (ankerite and actionolite) in veinlets in a stockwork-like texture. In some areas the veinlets are parallel to the bedding.
3 Disseminated chalcopyrite in association with the vein mineralization is common.

There are always some gold in the copper mineralizations but a positive correlation between copper and gold has only been observed in the southernmost orebody. The highest gold grades are always found in low sulfide zones. The chalcopyrite also forms irregular veins with small amounts of gangue minerals in the graphitic felsite. Copper grade are sometimes high but gold is low and poor recovery make mineralizations in the graphite felsites uneconomic.

There are also some typical occurrences of gold ore.

Fracture veins in microbrecciated albitic felsites with quartz, actinolite, sulphides (pyrite, pyrrhotite and minor chalcopyrite), tellurides, davidite and gold (Cu 0.1 % - 0.5% and Au 5 to 20 g / t). These types are associated with a weak dissemination of the radioactive mineral davidite. The correlation between davidite and gold mineralization is common in the area and the host rock is usually reddish to brownish albitic felsite with quarts veinlets. The E orebody is a representative of this ore type and the hanging wall of D orebody also belong to this ore type

The gold can also be associated with tellurides and davidite and quartz veinlets. Gold-telluride ore is similar in structure as the gold ore type above, but it has different mineralogy. Gold occurs mainly as tellurides (calaverite). The K ore is a pure member of this type.


GEOLOGICAL MAP

5. RESOURCE MODLLING

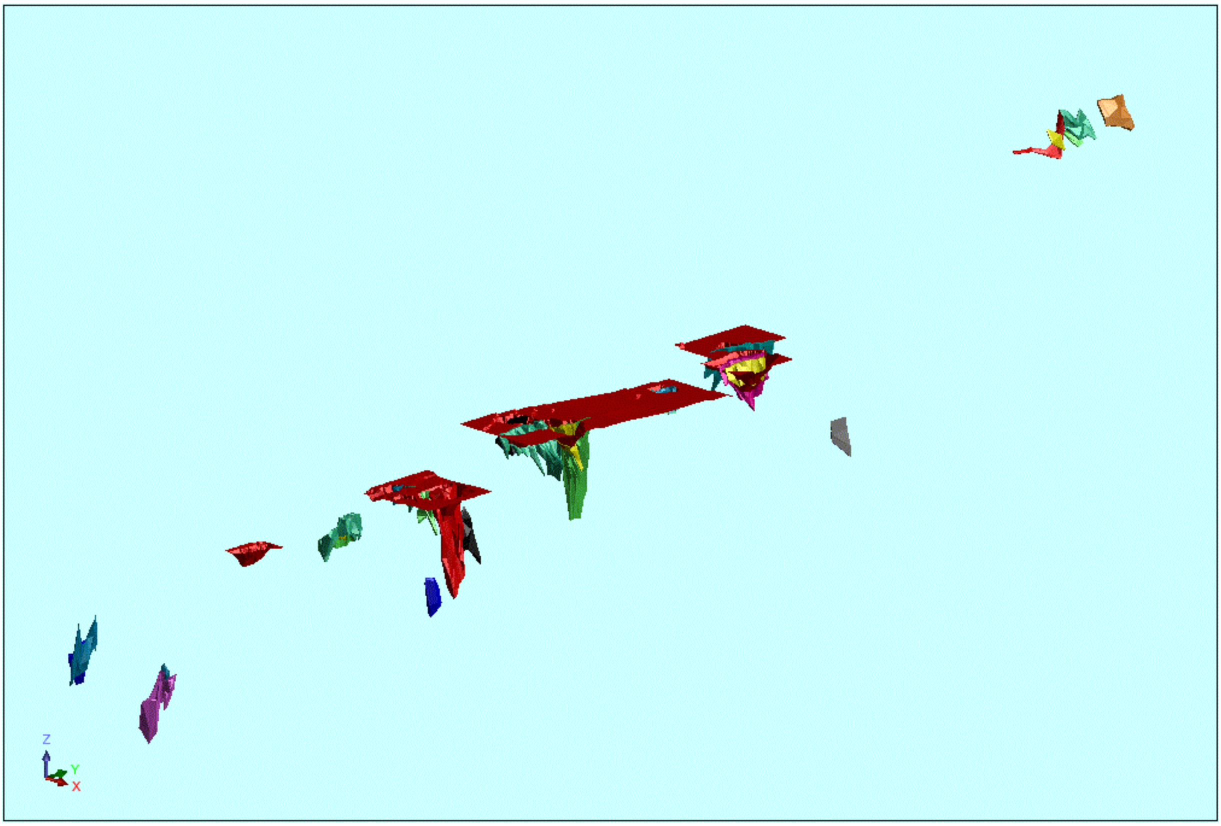
Mineral resources in Bidjovagge are situated mainly directly below the past ore production areas.

The geological model defining the remaining resource is based on the nominal 2.0 g/t Au-equivalent (aueq=au+2.1*cu).

The resource model was constructed using Surpac Vision software. The resources were outlined in vertical sections using the cut-off of 2.0 g/t Aueq for all the resource areas. The distance between the drilling profiles varies from 10 m to 20 m. The direction of drilling is mainly from East to West, in some occasion from West to East.

From these 3D-strings 3D-digital solid models were created separately for each resource area.

The resource areas include the following areas: North field, B, Karin, Fransisca, D, Hilde, C and Laura.



Markus Ekberg (The chief geologist of the Bidjovagge mine during the final years of Outokumpu operation) has verified (December 10, 2010) the Outotec model of remaining resource of Bidjovagge. Markus Ekberg states that there is no fatal error in the model and he can consent the work and supports the report observations and conclusions

6. STATISTICAL ANALYSIS

6.1. Drill hole coding

The assay data was coded using the wireframes of the mineralized zones to define the resource intersections. The intersection codes were used to extract samples for statistical analysis and for compositing the data for grade interpolation.

6.2. Data compositing

Prior to the grade interpolation the assay data was composited into 1.5 m downhole composites honoring the mineralised lens boundaries. Compositing of drill hole samples is carried out in order to standardize the database for further statistical and geostatistical evaluation. This step eliminates any effect relating to the sample length, which exist in the data.

6.3. Basic statistics

The basic statistics of the composites used in the grade interpolations of the resource areas are summarized in the table below. It should be noted that the composites represent the original, pre mining situation including the already mined out portions of the deposits.

North		
Variable	au	cu
Number of samples	178	178
Minimum value	0.00	0.00
Maximum value	111.59	13.15
Mean	5.10	1.28
Median	0.40	0.85
Geometric Mean	0.55	0.65
Variance	281.60	2.88
Standard Deviation	16.78	1.70
Coefficient of variation	3.29	1.32
Skewness	4.69	4.03
Kurtosis	25.80	25.00

Fransesca		
Variable	au	cu
Number of samples	155	155
Minimum value	0.00	0.01
Maximum value	32.61	6.16
Mean	2.95	1.05
Median	1.34	0.59
Geometric Mean	NA	0.46
Variance	21.60	1.36
Standard Deviation	4.65	1.17
Coefficient of variation	1.57	1.11
Skewness	3.38	1.57
Kurtosis	16.40	5.24

B		
Variable	au	cu
Number of samples	711	711
Minimum value	0.00	0.00
Maximum value	65.45	9.24
Mean	2.64	1.07
Median	0.91	0.78
Geometric Mean	NA	NA
Variance	26.66	1.13
Standard Deviation	5.16	1.06
Coefficient of variation	1.95	0.99
Skewness	6.13	2.28
Kurtosis	58.52	11.18

D		
Variable	au	cu
Number of samples	847	847
Minimum value	0.00	0.00
Maximum value	417.06	7.51
Mean	4.02	0.99
Median	0.97	0.73
Geometric Mean	NA	NA
Variance	384.05	0.97
Standard Deviation	19.60	0.98
Coefficient of variation	4.88	1.00
Skewness	14.57	2.65
Kurtosis	266.93	13.20

Karin		
Variable	au	cu
Number of samples	741	741
Minimum value	0.00	0.01
Maximum value	433.67	7.73
Mean	9.81	0.66
Median	3.14	0.44
Geometric Mean	NA	NA
Variance	658.45	0.56
Standard Deviation	25.66	0.75
Coefficient of variation	2.62	1.13
Skewness	9.15	3.60
Kurtosis	122.02	24.01

Hilde		
Variable	au	cu
Number of samples	414	414
Minimum value	0.00	0.00
Maximum value	32.25	7.57
Mean	1.83	1.19
Median	0.80	0.92
Geometric Mean	NA	NA
Variance	10.82	1.22
Standard Deviation	3.29	1.10
Coefficient of variation	1.80	0.93
Skewness	4.93	2.37
Kurtosis	33.65	10.38

C		
Variable	au	cu
Number of samples	244	244
Minimum value	0.00	0.00
Maximum value	20.25	4.63
Mean	0.99	0.95
Median	0.61	0.75
Geometric Mean	NA	NA
Variance	3.16	0.71
Standard Deviation	1.78	0.84
Coefficient of variation	1.80	0.88
Skewness	7.12	1.98
Kurtosis	67.70	7.74

Laura		
Variable	au	cu
Number of samples	127	127
Minimum value	0.00	0.08
Maximum value	44.31	5.98
Mean	1.80	1.30
Median	0.80	0.95
Geometric Mean	NA	0.92
Variance	19.49	1.34
Standard Deviation	4.42	1.16
Coefficient of variation	2.45	0.89
Skewness	7.53	1.89
Kurtosis	69.14	6.43

7. RESOURCE ESTIMATION

7.1. Block model

The block model in the Surpac modeling system was setup with the dimensions and parameters shown in the Table 6.1. The block size was selected partly based on the data density and partly based on geometric constraints.

Table 6.1. Blockmodel summary

Block Model Summarybidjo.mdl				
Type	Y	X	Z	
Minimum Coordinates	7685000	557400	250	
Maximum Coordinates	7690750	559500	750	
User Block Size	10	5	5	
Min. Block Size	10	5	5	
Rotation	0	0	0	
Total Blocks	92624			
Storage Efficiency %	99.61			
Attribute Name	Type	Decimals	Backgrour	Description
au	Float	3	0	
aueq	Calculated	-	-	au+2.1*cu
avgdst	Float	1	-1	
cu	Float	3	0	
cut_100_au	Float	3	0	
cut_30_au	Float	3	0	
dst2ns	Float	1	-1	
ns	Integer	-	0	

7.2. Top cuts

The reconciliation work carried out by Markus Ekberg in 1992 (Malmiarvion toteutuminen Bidjovaggen kultakaivoksella) suggests that the cutting point of high gold values varies between 3 g/t and 30 g/t depending on the ore type and the ore lens. Based on the statistical analysis for each of the mineralized zones the following top cut limits were applied:

Mineralzed zone	Au top cut limit (g/t)
North zone	15
B	15

Karin	20
Fransisca	10
D	10
Hilde	30
C	5
Laura	10

7.3. Grade interpolation

Inverse Distance squared method was used to interpolate the Au, Cut(x)au, and Cu grades into the blocks.

Resource areas were estimated with the composites inside the resource wireframes. The maximum search distance was 20m for all estimations. The minimum of 3 and maximum of 20 composites were used to estimate the block grade. The search ellipsoid was oriented to match the assumed grade continuity directions.

7.4. Resource estimate validation

The resource estimates were validated using visual checks to confirm that the block model grades represent the drill hole grades.

Outotec reviewed sections and plans throughout the resource and found the association between samples and block grades to be adequate.

8. RESOURCE CLASSIFICATION

The updated report includes also C- and Hilde deposits which were omitted from the original report (December 2010) because of the lack of confidence on the historical mining limits of these areas. The recent investigations of the old mine maps and consultation with Markus Ekberg (The former chief geologist of Bidovagge mine) have made it possible to classify the mineral resources of Hilde- and C-deposits with confidence high enough to be included into the Mineral Resource Statement of the Bidjovagge project.

The A-orebody was also studied but neither indicate nor inferred mineral resources could be identified. However, the ore potential zone continues downwards under the known A-orebody.

The Remaining mineralisation below the old open pits and/or underground workings of the B & K, F, D, C and Hilde areas and unmined areas on the northernmost (North Field) and southernmost (the Laura area) extensions of the mineralized zone is classified mainly as Indicated and few minor lenses as Inferred Mineral Resources. The bottom level and other dimensions of the old pits of these areas are known in detail and are included into the used data base.

The resource estimate and the classification are based on diamond drilling done from the surface, from the bottom of open pits and from the production drifts and some limited mapping data from the old open pits and underground workings. The average drill hole spacing is considered to be adequate to define the grade continuity and geological framework with a reasonable degree of confidence.

Measured Mineral Resource class was not used at all in this stage, even if the drilling density is high enough below the old open pits and grade continuities are well defined in the known geological frame work. Measured Mineral Resource classification needs that Quality Assurance/Quality Control procedures will be completed. Also the original geological mapping data from the bottom levels of the old pits, if available, will support significantly classification into measured resource.

The available drill hole spacing (profile distance and distance of holes in profiles) is shown by resource area in the following table:

	Indicated Resource		Inferred Resource	
	Profile Distance (m)	Hole Spacing (m)	Profile Distance (m)	Hole Spacing (m)
North Field	20 - 40	10 - 40	40	30 - 50
B & K	10 - 20	5 - 30	-	-
Pit F	10	5 - 20	-	-
Pit D	10 - 20	5 - 30	20	30 [1]
Hilde	10 - 20	5 - 25	-	-
C-Area	10 – 20	5 - 20	-	-
L (Laura)	20	20 - 40	-	-

[1] Two holes parallel with the main continuity of the mineralization. The thickness of the mineralization is not sufficiently confirmed.

The mineralizations, which have good grade continuation in albitic felsites or in graphitic albitic felsites conforming the general stratigraphy, are classified as Indicate Mineral Resource. In many cases the mineralizations are controlled also by tuffites and graphitic felsites, which form the limiting hangingwall or footwall contact layer. In this resource estimate no other more detailed grade controlling factors are used, like U-Th grade or radiation, actinolite-chlorite-hematite alteration, some indicator elements or elemental ratios etc..

Some small, mineralized layers are classified as Inferred Mineral Resource. In these layers drilling density is low or not done in optimal direction.

9. RESOURCE STATEMENT

The tables below summarize the Mineral Resource Estimate by Outotec (Finland) Oy. The North Field and Laura deposits are unmined whereas the other deposits represent the remaining resource under the old open pits.

The bulk density used in all tonnage calculations is 2.8.

The Au equivalent (Aueq g/t), used as cut off, has been calculated using formula:

$$Aueq = Au + 2.1*Cu$$

Indicated Mineral Resource				
North Field				
Aueq cut off	Tonnes	Au Uncut	Cut15au	Cu
1	317800	2.75	1.23	1.31
2	225400	3.78	1.61	1.59
B				
Aueq cut off	Tonnes	Au Uncut	Cut15au	Cu
1	104300	1.91	1.61	1.00
2	87500	2.21	1.80	1.06
Karin				
Aueq cut off	Tonnes	Au Uncut	Cut20au	Cu
1	154700	2.93	2.74	0.48
2	117600	3.61	3.33	0.49
Fransesca				
Aueq cut off	Tonnes	Au Uncut	Cut10au	Cu
1	74200	2.34	1.85	1.10
2	70000	2.42	1.87	1.15
D				
Aueq cut off	Tonnes	Au Uncut	Cut10au	Cu
1	752500	2.38	1.50	1.15
2	711900	2.47	1.53	1.19
Hilde				
Aueq cut off	Tonnes	Au Uncut	Cut 30 Au	Cu
1	60200	1.30	1.29	1.22
2	58100	1.33	1.32	1.24
C				
Aueq cut off	Tonnes	Au Uncut	Cut5au	Cu
1	144900	1.13	0.88	0.89
2	107800	1.33	0.99	1.02
Laura				
Aueq cut off	Tonnes	Au Uncut	Cut10au	Cu
1	162400	2.07	1.54	1.34
2	150500	2.19	1.60	1.41
Total Indicated Mineral Resource				
Aueq cut off	**Tonnes**	Au Uncut	**Au**	**Cu**
1	**1 771 000**	2.30	**1.53**	**1.11**
2	**1 529 000**	2.58	**1.68**	**1.20**

Inferred Mineral resource				
North Field				
Aueq cut off	Tonnes	Au	Cut15au	Cu
1	35700	1.7	1.7	1.1
2	25200	2.3	1.9	1.2
D				
Aueq cut off	Tonnes	Au	Cut10au	Cu
1	8400	1.6	1.5	0.8
2	7000	1.9	1.8	0.8
Total Inferred Mineral Resource				
Aueq cut off	**Tonnes**	Au	**Cut_Au**	**Cu**
1	**40 000**	1.7	**1.7**	**1.0**
2	**30 000**	2.2	**1.9**	**1.1**

APPENDIX 1

CERTIFICATE of AUTHOR

I, **Pekka Lovén**, MAusIMM, MSc (Mining), do hereby certify that:

1. I am a Senior Technology Advisor – Mining of Outotec (Finland) Oy, Riihitontuntie 7 E, 02200 Espoo, Finland
2. I graduated with MSc degree in Mining Engineering from Helsinki University of Technology in 1980.
3. I am a Member of the Australian Institution of Mining and Metallurgy (Member# 301822).
4. I have worked as a mining engineer for a total of 30 years since my graduation from the university.
5. I am a Competent Person in accordance with the JORC Code (2004).
6. I am responsible for the preparation of resource estimate for the Bidjovagge Au-CU-project, Mineral Resource Estimation, 13th December 2010
7. I am not aware of any material fact or material change with respect to the subject matter of the report that is not reflected in the report, the omission to disclose which makes the report misleading.
8. I am independent of Arctic Gold Ab
9. I have read the guidelines of JORC (2004) with regards to the reporting of mineral Resources and Reserves
10. I consent to the filing of the 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 Report.

Dated this 13th day of December, 2010.

Pekka Lovén

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Certificate of Competent Person

I **Markku Meriläinen,** AusIMM, MSc. Do hereby certify that:

1. I am a Senior Technology Advisor – Geology of Outotec (Finland) Riihitontuntie 7 E, 02200 Espoo, Finland

2. I graduated from the University of Helsinki with a Master of Science (Geology and Petrology) in 1979.

3. I am a member of the Australian Institute Of Mining and Metallurgy (AusIMM; Member # 224922).

4. I have worked as a geologist for a total of 30 years since my graduation from the university.

5. I am a Competent Person in accordance with the JORC Code (2004)

6. I am responsible for the geological interpretation and 3D modeling of the resource estimation, Mineral Resource Estimation, 13th December 2010

7. I am not aware of any material fact or material change with respect to the subject matter of the report that is not reflected in the report, the omission to disclose which makes the report misleading.

8. I am independent of Arctic Gold AB

9. I have read the guidelines of JORC (2004) with regards to the reporting of Mineral Resources and Reserves

Dated this 13th Day of December, 2010

Markku Meriläinen