



STATE OF ALASKA  
DEPARTMENT OF NATURAL RESOURCES  
Alaska Geologic Materials Center

*Data Report #431* Received Feb 2016

**Calista Nyac Gold LLC 2009-2014 sampling program**

In 2015, Calista Corporation donated to the Geologic Materials Center a collection of continuous drill core, skeleton core, and pulp samples representing various sample types from mineral exploration from the Nyac District conducted by Nyac Au LLC from 2009-2013. This materials donation was combined with a box of printed reports, and a database inventorying the collection.

## **Nyac Core and Pulp Donation: Metadata to describe data package and spreadsheet**

In 2015, Calista Corporation donated to the Geologic Materials Center a collection of continuous drill core, skeleton core, and pulp samples representing various sample types from mineral exploration from the Nyac District conducted by Nyac Au LLC from 2009-2013. This materials donation was combined with a box of printed reports, and a database inventorying the collection.

The intent of this document is to describe the data package and define some terms used within.

The database consists of a master spreadsheet in excel that compiles the digital data, cross referenced by sample number and organized in tab order as follows:

1. 'Master Nyac Inventory 2009-2014' contains the inventory of all samples from 2009-2014. This database is comprised of surface (rocks and soils) and subsurface (drill core) samples and displays location, sample numbers, and geochemical assay data, cross referenced with the archived physical location via GMC box number.
2. 'Rx & Soils Database 2009-2014' combines all surface samples from that period, including sample descriptions and location coordinates, which were not duplicated onto the Master
3. 'Drill Collar Summary 2009-2013' tabulates drill collar coordinates, orientations, and drilled depths from 2009-2013 (note there are no descriptions here, those are in reports and drill logs)
4. '2009 drill core Au Screen' (also abbreviated Au-Scr21) displays the 2009 drill core samples that had a special gold analytical test using a metallic sieve screen
5. '2009 Drill Core' contains all drill core assay results from that year
6. '2010 Drill Core' contains all drill core assay results from that year
7. '2011 Drill Core' contains all drill core assay results from that year
8. '2012 Drill Core' contains all drill core assay results from that year
9. '2013 Drill Core' contains all drill core assay results from that year
10. 'Drill Core Inventory 2009-2013' details box inventory of core from 2009-2013, including box weights
11. 'Display Core Labels' contains information and printable labels for the five boxes of high grade 'show core' highlighting the best of Nyac's mineralized intercepts, with diverse rock types, textures, and alteration types.

### **Sample vs lab numbers**

A sample number, with a format like E536499, is assigned to a sample at the collection site, in the field.

A lab number, with a format like AC12163515B166, is assigned to the unprocessed, original sample by the lab. The alphabetical prefix, e.g. 'AC', is the lab location code, and the first two numbers in the numeric sequence are the year the sample was analyzed at the lab. Occasionally samples were reanalyzed so instances where there are different year codes in lab sample number do occur in. The 6 digit numeric sequence following the year code contains the certificate

number that corresponds to each sampling batch and report delivered from lab. The suffix is a four digit alpha-numeric code. The letter, B or M, signifies 'bulk' or 'master' (these terms are described below under 'Pulp Types'). The last three numbers signify the lab's internal batch number.

The lab barcode number, with format like AC12163515B158-162, is a barcode that the lab puts on a box containing multiple pulp samples, and the ending suffix following the letter has the range of lab sample number suffixes within the original box. These samples within these boxes were reboxed when necessary to conserve space during the inventory process for the GMC archive. Often, there were multiple pulp types inventoried corresponding to an individual sample number; this explains why there are often multiple entries for one sample number. The drill interval data was not entered for all duplicated entries of a unique sample number. For example, skeleton core does not always have a sample number associated with it, and further, in some cases a pulp was not inventoried where a sample number existed. These are noted as 'not inventoried, retained for sample sequence continuation' in the curator remarks column.

### **Sample types**

There are raw, unprocessed field samples such as core, rock, silt, trench, and soil samples. There are also various types of analytical pulp samples from the laboratory analyses. The pulp samples were processed from the field samples. Because not all of the data fields applied to each sample type, some data fields are blank on the master inventory.

### **Pulp Types, also known on Master Inventory as 'Archived Sample Subtype'**

The following is a broad list describing different types of pulps that ALS Labs produce, and corresponds to labels on pulp bags that were inventoried in the 'archived sample subtype' data field in the Master Inventory:

- 1) Bulk master: Coarse reject. The sample is split after crushing, before pulverizing
- 2) Master: A portion of the material that gets pulverized, the other portion gets sent out for analytical. The size is usually an envelope with less than 200 grams
- 3) Master pulp: This is the same as the master described above, although different labs may use different codes at different times
- 4) Master (-) and (+): Positive and minus fractions of sieved material
- 5) Prep dup: this is an ALS internal duplicate of a selected sample and usually has an additional numeric code as a suffix, ie 'prep dup of 113'
- 6) Split for RE (+ and -): Duplicate samples that get sent to a different lab, which is Reno in this case
- 7) Split for VA: Duplicate samples that get sent to a different lab, which is Vancouver in this case
- 8) Raw sample: The crushed and split reject, which is the remainder of the original sample, the coarse reject

Note some variation in pulp labels/subtypes are because some samples were processed at one or more of three different ALS labs, located in Fairbanks, Anchorage (closed in 2012), and Reno. Sample abbreviations used are NSS, which stands for ‘insufficient sample’. LOI stands for ‘limit of detection’.

**Analytical Methods**

A variety of different laboratory analyses were performed on the samples, and they are described in the report. The majority of samples underwent 41 element ICP analysis. For example, there was occasional gold screen (especially in 2009) analysis, and rare major oxide analysis (ie, E316509-E316513, 2009, drill holes NYC09-05 and NYC09-06). In the assay result part of Master spreadsheet, on right side, the type of analytical code as defined by ALS is listed for the representative assay results. More information regarding analytical method used can be found in the Nyac Au LLC reports, in ALS documents such as assay results in excel format and Certificate of Analysis (COA) in pdf format, and the ALS ‘Geochemistry Schedule of Services & Fees’ brochure (<http://www.alsglobal.com/>). The ALS brochure defines the analytic code and gives more background description on the methods.

**Accompanying data and reports**

Detailed project information can be found within the reports, including Strater strip logs.

More detailed information about samples and locations, other than that contained within the inventory spreadsheet, is also contained within the reports.

Many of the prospects of the Nyac project are also described in the U.S. Geological Survey Alaska Resource Data File (<http://ardf.wr.usgs.gov/new.html>); the table below displays which prospects from the inventory has accompanying ARDF records.

<b>Prospect</b>	<b>ARDF</b>	<b>Quadrangle</b>
Bear Creek	RM032	Russian Mission
Bonanza	RM031, RM037	Russian Mission
Bonanza Happy Creek	RM002	Russian Mission
California Creek	RM034	Russian Mission
Granite Creek	BH015	Bethel
Pipe	RM035	Russian Mission
Rocky Creek	BH019	Bethel
Saddle Mountain	RM030	Russian Mission
Shamrock Creek	RM039	Russian Mission
Spruce Creek	RM033	Russian Mission
Wallace	RM025	Russian Mission