NGGDPP Project Final Report

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Project Title: Nevada Collections Inventory and Metadata for the National Catalog

Name of the State Geological Survey: Nevada Bureau of Mines and Geology

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Nevada Collections Inventory and Metadata for the National Catalog

Abstract

Through this project, the Nevada Bureau of Mines and Geology (NBMG) entered a total of 1816 new records to and updated about 1800 existing records in the NBMG Sample Collection Database (CORECUT). These entries were formatted in accordance with the NGGDPP Metadata Preparation Guide and entered in the National Catalog of archived materials in the National Geologic and Geophysical Data Preservation Program. CORECUT is a combination of a few large and many small sample collections, the largest of which was previously entered as a separate database into the National Catalog as Collection ID P706 in 2009. Five smaller databases had also been created from collections in the original database and previously entered as separate items into the National Catalog. The updated CORECUT supersedes and replaces all six of these earlier items. This project has helped continue the ongoing efforts of the NBMG to index, preserve, and make available to the public a variety of sample, geologic, and mineral resource information.

Project Report

Through this project, the Nevada Bureau of Mines and Geology (NBMG) entered a total of 1816 new records to and updated about 1800 existing records in the NBMG Sample Collection Database (CORECUT) which combines and supersedes six smaller databases previously entered in the National Catalog of archived materials in the National Geologic and Geophysical Data Preservation Program. This collection was formatted in accordance with the NGGDPP Metadata Preparation Guide (01/2013).

Sample Collection Database (CORECUT)

The data set submitted was an update of the NBMG Sample Collection Database (CORECUT), which is an index of a number of large and small collections housed at the NBMG. The samples indexed include hand samples, drill cuttings and core, chipboards, slabs, thin sections, and some samples crushed for geochemical analysis. The samples have identifying paperwork that has been curated in separate collections. Many of the samples are from now inaccessible places, and the core and cuttings are from mining, oil, and geothermal projects which cost from several hundred thousand to several million dollars to conduct. About 5,000 of the samples were geochemically analyzed through various USGS grants.

In 2009, CORECUT contained about 9300 entries. The main part of the database, about 5500 records with UTM locations, was then entered into the National Catalog as “Collection of Mineral Exploration Sample Library from NV”, with the NGGDPP-assigned unique metadata collection ID No. 4f4e49cbe4b07f02db5d88ee (formerly P706). About 1400 other records with UTMs were not entered at the time, though a number of records which were also a part of CORECUT were included in five smaller databases submitted to the National Catalog. These were “Collection of Rock Cores from NV”, ID No. 4f4e49cbe4b07f02db5d88f0; “Collection of Geochemical and Characterization Program Samples from NV”, ID No. 4f4e49d8e4b07f02db5dbf32a; “Collection of Oil and Gas Well Cuttings and Core from NV”, ID No. 4f4e49cbe4b07f02db5d88d6; “Collection of Geothermal Well Cuttings and Core from NV”, ID No.

4f4e49cbe4b07f02db5d88d5; and “Collection of Consolidated Small Sample Collections from NV”, ID No. 4f4e49d8e4b97f02db5df326.

CORECUT was updated with the addition of about 1816 new records acquired since 2009. Between 2009 and 2013, about 900 samples from various sources had been added. For this grant, over 900 samples were added including about 200 sets of cuttings from oil and geothermal wells; 162 thin sections from geologic mapping in Elko County by USGS geologist Robert Coats in the 1950s; and core, cuttings, and chipboards from 515 of the 993 drill holes donated from 55 Freeport McMoRan Gold Co. mineral exploration projects; and core and cuttings from 55 drill holes from four other mineral exploration projects. Also, about 1800 existing records were updated, mostly by adding UTM locations and editing typos when found.

The updated CORECUT was submitted to the National Catalog. Since it partially updates and supersedes the above mentioned six previously submitted databases, it was requested that these should be removed from the National Catalog as redundant and to reduce clutter.

Field Descriptions:

-Collection ID: Number assigned by NGGDPP personnel
-Title: Document Title, which will mainly include: collection or project name and sample number and usually a rock or location name sometimes with a brief description for collection samples, project and hole name for mineral exploration, and operator and well name for oil and geothermal well samples.
-Abstract: Compilation containing the NBMG Index No. for all samples and other information including but not limited to: original sample, drill hole, and well descriptions and notes; collection or project name; collector; commodities; drill sample intervals; location problems; logs if available; missing or condensed samples; and well status.
-Type: Sample type: chip board, chip tray, concentrates, core, core, crushed sample, cuttings, hand sample, jar, pulp, slab, thin section, and/or thin section plug.
-SupplementalInformation: Website containing database and related search engine.
-Coordinates: Site location in Latitude and Longitude (NAD 83), which marks the exact site for most samples, but when exact site is uncertain, it may mark the center point location of a mining district, the center point of a topographic map, or center point of a portion of the public land survey.
-DatasetReferenceDate: Date data table was created for NGGDPP.
-AlternateTitle: Other indentifying information when applicable including: alternate collection or project names, alternate sample numbers, API numbers, codes, and permit numbers.
-AlternateGeometry: Various other location references when known and applicable including: county; known geothermal resource area, mining district, oil field, public land survey, and UTMs (for all entries) in NAD 1927.
-Date: Date when sample was taken or hole completed.
-BrowseGraphic: HTML online link to PDFs of scanned documents.
-VerticalExtent: Units (ft – feet), maximum depth, and minimum depth for core and/or cuttings interval for drill hole samples.

CORECUT was submitted to Tamar Norkin, USGS Core Science Systems, for addition to the National Catalog. At the time of this report, the records are on-line and searchable via the National Digital Catalog of Geological and Geographical Data website.

Summary

The additions to and updating of the NBMG Sample Collection Database (CORECUT) and its inclusion in the NGGDPP National Catalog will help increase public awareness and access to this significant earth-science collection at the NBMG as the smaller databases in the National Catalog that it supersedes have already done. It will increase efficiency in responding to information inquiries, make significantly more Earth-science information about Nevada universally available on the Web, and add significantly to the development of the National Digital Catalog of the National Geologic and Geophysical Data Preservation Program.