

SAMPLE AND DATA MANAGEMENT PLAN FOR GEOLOGICAL RESEARCH MATERIALS DEPOSITED AT THE MUSEUM OF GEOLOGY

SDSMT Department of Geology and Geological Engineering
SDSMT Museum of Geology

Field collections of geological material, as well as laboratory preparations of those collections, anchor many research projects in GGE. Preserving such materials and their associated data for posterity and future research is the role of the Museum of Geology. These guidelines have been prepared for graduate students in the department, as well as their advisors, to ensure that the collections generated by active research are secured for the future.

MATERIALS OF CONCERN

Graduate students and their advisors should plan for the documentation of specimens cited in research. In general, any physical specimens collected, prepared, and cited in a thesis or dissertation should be deposited in the Museum of Geology as part of the student's work.

These may include, but are not limited to:

- Hand samples
- Larger specimens
- Cores and cuttings
- Fossils
- Thin sections and/or other mounted material (e.g., SEM stubs)
- Powders and other preparations
- Images, 3D scans, video and audio recordings
- Field notes (with locality and georeferencing information)
- Lab notes with procedural information for all preparations
- Rock descriptions
- Raw data sheets
- Processed data sheets
- Maps and cross sections
- Memoranda of Understanding and other agreements; permits or letters of permission, and other relevant correspondence
- Other documentary materials generated as part of the research.

Materials that are exempted

- Collections which are not used or cited in the final thesis/dissertation will not be deposited at the Museum.
- Collections which are cited in a thesis/dissertation, but that are the property of another entity (Federal and other agencies, private land, corporate sponsor, etc.), will revert to

the owner of record at the conclusion of the research, unless other agreements have been made and approved in advance.

PROCEDURES

A graduate student whose research will involve collecting and or preparing geological samples should work out a plan with their research advisor and a Museum representative. A form for this is attached and should be submitted to the Museum Collections Manager at the same time as the Program of Study documents are submitted to Graduate Education.

The student should document all ongoing research according to accepted standards and best practices. This includes items listed in the section entitled “Materials of Concern”.

As soon as it is reasonably possible, the student will work with the Museum to be trained for data entry and to secure unique catalog numbers for each specimen and documentary record. The student will enter object data into the appropriate databases and add numbers physically to each item, as appropriate. SDSM numbers will be cited in the final thesis/dissertation.

Specimens which belong to other entities, but that will be deposited at the Museum, will only be cataloged with the express permission of the owner.

Specialized storage needs should be worked out with the Museum as soon as those needs are known. This may include anything from microscopic samples to oversized specimens. It may also include specialized media storage systems. Arrangements for specialized storage costs may need to be made with the GGE department and/or the project supporters.

DATA SHARING

Data generated by SDSMT research are generally shared via publication of the thesis/dissertation. The Museum also makes collections data available as appropriate to the public. Embargos and other restrictions on data sharing from Museum databases should be made known by the advisor as soon as possible.

SAMPLE AND DATA FORM FOR GRADUATE RESEARCH PROJECT

Name: _____ Date: _____

Title of the project:

Academic Advisor of the project:

Description of research project:

Will field sampling/collecting be part of this project?

Yes

No

Will preparation of geological samples (i.e. hand samples, thin sections, powders, etc.) be part of this project?

Yes

No

What will be the final preparation(s) of geological samples?

- Hand specimen(s)
- Thin sections
- SEM stubs
- Powdered samples
- Mineral grain samples
- Billets
- Cores and/or cuttings
- Fossils
- Other

What is the predicted size of the research collection in terms of cubic feet?

What documentary materials will be produced as part of this research (field notes, maps, data sheets, etc.)?

<ul style="list-style-type: none"><input type="checkbox"/> Maps, cross-sections<input type="checkbox"/> Raw data/sample sheets<input type="checkbox"/> Processed data/sample sheets<input type="checkbox"/> Field notes<input type="checkbox"/> Images, 3D scans, video and audio recordings<input type="checkbox"/> Laboratory procedure notes<input type="checkbox"/> Photomicrographs<input type="checkbox"/> Memoranda of Understanding and other agreements; permits or letters of permission, and other relevant correspondence<input type="checkbox"/> Other

For Project Advisor Only:

Is there any restriction on data sharing from Museum databases?

 Yes No

If yes, describe the restriction, it's reason and specify the duration of hold on data sharing.

Museum database training conducted on

(date) (advisor signature) (Museum signature)

Museum catalog numbers assigned on

(date) (advisor signature) (Museum signature)

Specimens and documents physically numbered and cataloged on

(date) (advisor signature) (Museum signature)

Collections transferred to Museum on

(date) (advisor signature) (Museum signature)