Earth Sciences PhD Annual Spring Review and Plan

Name: Example from Dotty Doctor     Committee Meeting Date: Feb. 22, 2020

**Major Research Accomplishments since last Spring Review**

Key accomplishments are given below:

- Completion of sample collection for the year of 2019. Sample collection was conducted every week from May 15\(^{th}\) to August 2\(^{nd}\) and biweekly from Aug 9\(^{th}\) to Oct 3\(^{rd}\). During this time 42 porewater samples were collected from HR-25.
- Completion of sample analyses for the year of 2019.
  - **Aqueous phase analyses:** All the samples collected were analyzed by inductively coupled plasma optical emission spectroscopy (ICP-OES) for Na, K, Ca, Fe, Mn, Cu, and Zn for aqueous phase and colloidal phase concentration.
  - **Solid-phase analyses:** Colloids separated from the porewater samples have also been analyzed with a scanning electron microscope (SEM).
- Manuscript in progress. I am currently working on a manuscript that will be ready for submission by March 2020.
- Sample Preparation for transmission electron microscope (TEM) is in progress.

I have already prepared thin-section samples prepared with the colloids separated from porewater. Now I am analyzing them with SEM to identify potential pyritic colloids to prepare Focused Ion Beam (FIB) sections to be analyzed in TEM.

**Specific plan (with timeline) for progress/graduation:**

I will complete my SEM analyses of the thin-sections by March, 2020. I want to prepare three FIB sections by May 2020. I plan to analyze the FIB sections in June and July. In the meantime, I will also be preparing a manuscript for my second paper. I also plan to set up a laboratory column experiment by the end of the August. By January 2021 I am hoping to finish all my column experiments. By April 2021 I am hoping to finish my 3\(^{rd}\) manuscript and to compete a draft of my dissertation.

Student Signature: ______________________________________

Advisor Signature: ______________________________________

Submit to mailbox of Graduate Coordinator