

GY 402: Sedimentary Petrology Moscow Landing Project: Advise and Guidelines

The Project: This is the second and final major project that you will do in GY 402. It is meant to be a compilation exercise; one that requires you to draw on all of your experiences in the class in order to finish it. In format and layout, it should follow the grain size project that you did earlier in the course. The sedimentary section correlation diagram should follow the format that you did for the Tombigbee River exercise. In other words, refer to your previous exercises (and the comments that I put on them) to help you with this project.

1) Sedimentary Sections: During the Moscow Landing field trip, each of you were responsible for examining 5 separate sections. Using the data that you recorded in your note book, produce a correlation diagram drawn to scale. You may use any paper size you wish, but the best size (in my opinion) is around 2' by 3'. Use the "stratigraphy" roll at the back of 337 for your paper supply. Vertical positioning of your sections should be tied into the "*Gryphaea*" layer that you should have identified in each section. Horizontal positioning should be done according to the pacing that you did during the final stage of your field work.

In addition to a legend, horizontal and vertical scale bars, grain size scale, title and your name, be sure to add a small location map and a stratigraphic nomenclature column. This was not necessary at the Tombigbee site because we worked over a narrow area, but the Moscow Landing fieldwork covered much more terrain. **Seek help from Doug** before you get too far into your diagram.

2) The Written Report: As with the grain size project, your written report should follow a standard format. The items in the list below that are in **bold** text are new additions or significantly modified sections that are required for this report. Unless otherwise stated, use the guidelines that I provided to you for the grain size report for the components that are not in bold text.

- Title Page (1 full page)
- Abstract (1/2 page)
- Introduction (1/2 page: state the purpose of your project)
- Background** (2 to 3 pages, 1 or 2 figures)
- Methodology** (1/2 to 1 page)
- Results** (1 page; includes your sedimentary sections correlation figure)
- Discussion** (3 to 5 pages)
- Conclusions (1 page)
- References (? pages)

Background: The previous work section should briefly summarize all of the previous work that has been done on the outcrop. At a bare minimum, you need to discuss Charlie Smith's study and at least five additional references. In particular, outline the stratigraphy of the study site. If I were you, I'd also do a bit more literature reviewing to find as many references as possible pertaining to your individual research project. Include any relevant figures from these sources, but be sure to reference them correctly.

Methodology: In your grain size report, it is necessary to outline your lab methods. This time, it's your field methodology that needs to be briefly outlined. Discuss how you chose your section locations, how you measured them, what data you recorded etc. If you did additional work (e.g., collected samples for paleontology assessment, or for thin sectioning, or if you measured additional fault stuff, explain how and why you did it.

Results: Refer to your correlation diagram and outline any interesting things that you found (fossils, faults etc).

Discussion: The discussion in this project is likely to be longer than it was in the grain size project simply because you saw more stuff and hopefully, observed more interesting sedimentary features. You have full freedom to go in any direction that you wish, but beware that a good chunk of your evaluation will come from this part of the project. Impress me somehow. Each of you will be expected to develop a stand-alone separate "research" component.

The assignment requires a GSSA cover letter and is redo-able (see assignment one for the guidelines concerning resubmissions).

Due date/Revision date: refer to the due dates page on the website/calendar.