Wednesday, January 06, 2016

Mr/Ms ____________________ (Insert Name)
Geologist in Training
LSCB 337

Dear ____________________,

I require your assistance to complete a GSSA project that is due in our client’s office very shortly. Mr. James Smith, a senior geologist with our organization, has apparently taken ill at a very critical time. He was responsible for doing the sedimentary section of an outcrop at the core of a major research project that must be completed on time or else we will be severely penalized. I need you to finish the section using standard procedures*. Please get this too me no later than the date specified on your work calendar.

Sincerely,

Douglas W. Haywick, Ph.D, P.Geol.
Assistant Director, Sedimentology Division

* See the accompanying pages for additional information concerning the assignment. Although an activity, this assignment IS redoable (guidelines for redoable writing assignments are applicable here). In addition to completing the assignment, make sure that you attach an accompanying cover letter to your section using GSSA letterhead. In your cover letter, be sure to outline anything that you consider necessary to explain your graphic interpretation of the section (e.g., scale, symbols used etc).
GY 402 Sedimentary Petrology
James’ Sedimentary Section

Your Task: By now, we should have gone over basic sedimentary sections. They are the bread and butter of the sedimentologist’s world. You need to be able to summarize data into this graphic medium in order to communicate to others in the field. Eventually, you will collect your own data (e.g., at the Tombigbee River site or at Moscow Landing), but a bit of additional practice before then is desirable. So your task is to make a sedimentary section scaled to fit on a single piece of 8 ½ x 11” paper based upon the attached field notes. For your first submission, do it in pencil. I will look it over and give you feedback as to how to improve it. For your second submission, sections drawn using drafting-style pens are welcome. Make sure that you add a title, your name and a legend to your section.
of plant fossils (compressed coal specs) and in place rootlets. Simply overlain by unit 3.

Unit 3 well sorted conglomerate. Pebbles (50cm) to 2cm across, composed of quartz and chert. Well rounded, dissolved, and imbricated.

There is a weak thin bedding to this unit. No fossils. Delineated by pebbly layers. Gatespanic Unit 4.

Unit 4 more quartz arenite sandstone.
(1.8m) f-grained at top, vc grain at base. Compaction of mega-rippled quartz sand. (large current-ripple) Overall trend is toward the SW. No other structure. A few plant fossils in place & little wisps of organic material (coal?) along some cross beds. Sharp upper contact with unit 5.

Unit 5 Coal bed, actually more like peat.
(15cm) filled with plant stuff, but no obvious

Unit 6 Silty-sandstone. Begins in (75 cm) Colour. No structure. May be very laminated from 50 cm to top. No fossils or other structures. Specks of very gradational contact with Unit 7.


Unit 8 More Silty-sandstone (like Unit 6). (83 cm) becomes much more silty upper section (as siltstone in the upper 50 cm). Sharp upper contact with Unit 9.

Unit 9 More sandstone like Unit 9, but not tight. (17 cm) Covered upper contact.

Unit 10 50 cm covered indend.

Unit 11 More sandstone like Unit 9 (50 cm). End of section at top of cliff.