

Memorandum - Meeting Minutes

To: Bridget Bero, Ph.D, P.E., Grading Instructor
 From: AZ Magma Mine Capstone Team;
 David Finley, Josue Juarez, and Jessica Szaro
 Date: 1/26/2017
 Re: Technical Advising Meeting #1

Attendance: David Finley, Josue Juarez, and Jessica Szaro
 Prepared by: Jessica Szaro

Topic	Notes
Drying and sieving	<ul style="list-style-type: none"> - Consider mouth cover or aeration mask - Drying up to 13 samples at a time (6 ceramic, 7 tin bowls) - Bottom tin, 60, 35, 20, 14, 4, top cover), 10 minutes - Talk to Gary re: waste buckets <ul style="list-style-type: none"> - Get 6 or 7 waste buckets <ul style="list-style-type: none"> - Lined with trash bags - Decontaminate mortar and pestle between every sample - Use log sheet to track drying, sieving, XRF, and digestion/AA

Action Item	Notes & Responsibility	Due Date
Dry samples	Come in at any time after 1pm, update team via text (All of team)	Ongoing

Memorandum - Meeting Minutes

To: Bridget Bero, Ph.D, P.E., Grading Instructor
 From: AZ Magma Mine Capstone Team;
 David Finley, Josue Juarez, and Jessica Szaro
 Date: 2/9/2017
 Re: Technical Advising Meeting #2

Attendance: David Finley, Josue Juarez, and Jessica Szaro
 Prepared by: Jessica Szaro

Topic	Notes
XRF info	<ul style="list-style-type: none"> - Password: 1234 - System check before every session - Use cabinet doors for x-ray protection - Sample type <ul style="list-style-type: none"> - Above 5000 ppm for lead → mining
Data logging	<ul style="list-style-type: none"> - Sample naming: M17-1, M17-2 ... M17-9
Acid Digestion	<ul style="list-style-type: none"> - Taylor will let us know when they're doing acid digestion, when they finish

Action Item	Notes & Responsibility	Due Date
XRF samples	Order: <ul style="list-style-type: none"> - 1st Jessica: finish 25 samples by 2/11 - 2nd Josue: finish 25 samples by 2/17 - 3rd David: finish 24 samples by 2/19 	2/19

Memorandum - Meeting Minutes

To: Bridget Bero, Ph.D, P.E., Grading Instructor
 From: AZ Magma Mine Capstone Team;
 David Finley, Josue Juarez, and Jessica Szaro
 Date: 3/30/2017
 Re: Technical Advising Meeting #3

Attendance: David Finley, Josue Juarez, and Jessica Szaro
 Prepared by: Jessica Szaro

Topic	Notes
Eco Risk Assessment	<ul style="list-style-type: none"> ● Find out what is the normal animals in that area ● Plants <ul style="list-style-type: none"> ○ Cactus, graph ● Routes of adsorption <ul style="list-style-type: none"> ○ Eating it ● Tolerance levels for animals and plants <ul style="list-style-type: none"> ○ Arsenic levels before they start dying ● Can do similar risk assessment to animals <ul style="list-style-type: none"> ○ How much soil they eat, how long are they exposed, how much they weigh, etc. ● mg of lead/ kg of body weight per day <ul style="list-style-type: none"> ○ Biggest animals at risk ● Toxicity pathway diagram <p>Outline 4.2 ECOLOGICAL RISK ASSESSMENT 4.2.1 Species of Concern 4.2.2 Toxicity Assessment 4.2.3 Qualitative Assessment</p>
Recreational Scenarios	<ul style="list-style-type: none"> ● Should we do two types of recreational? <ul style="list-style-type: none"> ○ Camping and 4-wheeling
XRF Correction	<ul style="list-style-type: none"> ● We don't need to necessarily "correct" our data, just state our correlation <ul style="list-style-type: none"> ○ If R is over 0.9, then no correction needed

Action Item	Notes & Responsibility	Due Date
N/A		

Memorandum - Meeting Minutes

To: Bridget Bero, Ph.D, P.E., Grading Instructor
 From: AZ Magma Mine Capstone Team;
 David Finley, Josue Juarez, and Jessica Szaro
 Date: 4/13/2017
 Re: Technical Advising Meeting #4

Attendance: David Finley, Josue Juarez, and Jessica Szaro
 Prepared by: Jessica Szaro

Topic	Notes
Correlation	<ul style="list-style-type: none"> • Mislabeling error? • Finding the reliability of the XRF • See what Bero wants us to do for adjusting our values
GIS	<ul style="list-style-type: none"> • Do a gradient for the concentrations (green - yellow - orange - red) • Play around with bins to see what color gradient will look best • Adjust values on GIS for As
Ecological Risk Assessment	<ul style="list-style-type: none"> • Look around on google for reference dose for different species
Human Health Risk Assessment	<ul style="list-style-type: none"> • Hazard index for Mn = 510 -- too high?
PA/SI	<ul style="list-style-type: none"> • Conclusion - The levels of the contaminants were above the the remediation standards so further analysis should be done • Appendices - Keep the work plan as its own document - can keep table of contents and page numbers
TA Eval	<ul style="list-style-type: none"> • Contact Taylor with when Dr. Bero wants the TA team eval

Action Item	Notes & Responsibility	Due Date
Adjust GIS map bins	Adjust colors and bin ranges for GIS maps (Jessica)	4/16