

September 20, 2021

Project No.: 191

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Aggregate Industries – WCR, Inc
1687 Cole Boulevard, Suite 300
Golden, CO 80401

Attention: Jeremy Pritchett
Environmental and Land Manager

Regarding: Daniels Sand Pit 2, Permit No. M-1973-007-SG
Slope Stability Monthly Monitoring Report – Revised

Mr. Pritchett,

The report below has been modified to include the correct geotextile nomenclature. Construction included a Winfab 450n which is a needle-punched nonwoven geotextile intended for drainage, separation and filtration applications.

Lithos Engineering (Lithos) has been retained by Aggregate Industries to implement a slope stability monitoring plan for the Fountain Mutual Ditch within Daniels Sand Pit 2. Monthly monitoring will occur for the first year after construction completion. Lithos Engineering (Lithos) visited the site on September 14, 2021 and was escorted by Grant Smith (Daniels Sand Plant Manager). Site notes and photographs are presented below:

- Weather: 50-77°, partially cloudy, wind 5-10 mph, light rain
- Visual observation:
 - No tension cracks
 - No toe erosion
 - No moisture changes
 - No sloughed slope surfaces
- Construction sequence discussion
 - Onsite recycled concrete was pushed into the New Wash Fines Ponds up to 80 feet



Photo 1. Recycled concrete

- Vegetation (including Cotton Wood Trees) was removed from the mine slope
- Needle-punched nonwoven geotextile intended for drainage, separation and filtration applications. (WinFab 450N 15ftx360ft NTPEP) was placed over the recycled concrete (overlap approximately 2 ft)



Photo 2. Onsite geotextile

- Sand was placed in 12 to 18 inch loose lifts. Mostly onsite sand, some imported native sand (located on other side of the property)
- Compaction with dozer



Photo 3. Butress slope with equipment tracks

- At this time, the buttress slope varies from 3H:1V to 4H:1V
- Preparation for final lift
 - Stockpiled sand located at crest of embankment
 - Will be completed within a month
 - Working on obtaining materials for seeding



Photo 4. Stockpiled sand for final lift

If you have any questions regarding the contents of this report, please contact Aggregate Industries or Lithos Engineering.

Sincerely,

Lithos Engineering



Steve Kuehr, PE
Senior Consultant

Sarah Myers, EIT
Project Engineer