



STATE OF
COLORADO

Cazier - DNR, Tim <tim.cazier@state.co.us>

July 2022: Daniels Slope Monitoring Report

1 message

Wyatt Webster <wyatt.webster@holcim.com>
To: "Cazier - DNR, Tim" <tim.cazier@state.co.us>

Thu, Jul 14, 2022 at 3:42 PM

Tim,

Attached monthly monitoring report for Daniels Pit.

Thanks again,

Wyatt Webster | Environmental and Land Manager
Holcim Group | Holcim - WCR, Inc.
Address: [1687 Cole Blvd., Suite 300](#)
[Golden, CO 80401](#)
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Daniels Sand Pit 2 - July 2022 Observation .pdf
4456K



July 9, 2022
Project No.: 19125

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Lakewood, Colorado 80227
303.625.9502
www.LithosEng.com

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

Attention: Wyatt Webster & Neil Whitmer
Environmental and Land Managers

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

Mr. Webster and Mr. Whitmer,

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 July 8, 2022. The ditch and the condition of the buttress slope are stable. Site notes and photographs are presented below:

- Weather: 60-86°, sunshine and clouds mixed, winds 10-15 mph
- Visual observation of the Fountain Mutual Ditch:
 - No tension cracks
 - No toe erosion that was visible
 - Vegetation growing on banks and at invert of ditch
 - Water flowing in the ditch (approximately 1.5 ft deep)
 - No sloughed slope surfaces
 - Several broken branches near crest
 - Some broken branches in ditch
 - The condition of the ditch is stable



Photo 1. Fountain Mutual Ditch looking east



Photo 2. Fountain Mutual Ditch looking west



Photo 3. Fountain Mutual Ditch invert looking north (note vegetation)



Photo 4. Fountain Mutual Ditch with branches

- Construction sequence
 - The buttress slope varies from 3H:1V to 4H:1V
 - Few branches remain on buttress
 - The final lift needs to be regraded for some portions on the eastern side of the buttress
 - Vegetation (mainly weeds) are growing on buttress
 - On the western side of the buttress, evidence of surface water runoff
 - Crew planning/working on vegetation on slope per reclamation plan



Photo 5. Buttress slope with branches



Photo 6. Buttress slope looking west from toe



Photo 7. Buttress slope looking east from toe



Photo 8. Buttress slope looking north, evidence of surface water drainage



Photo 9. Buttress slope looking south, area needs regrading



Photo 10. Buttress slope looking north, weeds growing

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