



Kathleen G. Welt  
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**Mountain Coal Company, LLC**  
A subsidiary of Arch Resources, Inc.  
West Elk Mine  
5174 Highway 133  
Somerset, CO 81434

April 22, 2020

Mr. Leigh D. Simmons  
Colorado Division of Reclamation, Mining and Safety  
Office of Mined Land Reclamation  
1313 Sherman Street, Room 215  
Denver, Colorado 80203

**Re: Mountain Coal Company, LLC, West Elk Mine; Permit No. C-1980-007;  
Quarterly Summary of Subsidence Observations; 1<sup>st</sup> Quarter 2021**

Dear Mr. Simmons:

Mountain Coal Company, LLC (MCC) began longwall mining the E-Seam in December 2008. MCC has completed longwall mining of longwall panels LWE1 through LWE8 and continued mining of longwall panel LWSS1 during the 1<sup>st</sup> Quarter of 2021. At the end of the 1<sup>st</sup> Quarter, MCC had mined out longwall panel LWSS1 up to crosscut 14 in the headgate.

There were no stock ponds within twice the angle-of-draw of the mined area of LWSS1 during this quarter, and mining was not within a mile of Monument Dam. Winter weather and ground conditions did not permit inspections this quarter. All inspections will continue when weather and ground conditions allow. Routine inspection reports for Monument Dam, Forest Service Roads and Stock Ponds are included with this letter report.

Please don't hesitate to contact me or Nicki Poulos should you have questions regarding this submittal.

Sincerely,

A handwritten signature in blue ink that reads "Kathleen G. Welt".

Kathleen G. Welt  
Environmental Engineer III

Enclosures: Monument Dam Inspections – First Quarter 2021  
US Forest Service Road Inspections – First Quarter 2021  
Stock Pond Inspections – First Quarter 2021

cc: D. Gray - USFS  
R. Munz – MCC  
N. Poulos - MCC  
J. Wilczek – MCC  
Availability of Records File

# Monument Dam Inspection Form

Date: 1/29/2021

Time:

Name of Inspector: Robert Munz

Current Panel Being Mined: LWSS1

☐ Weekly Inspection ☒ Monthly Inspection

Yes No

- ☐ ☒ Is mining within 1 mile of Monument Dam?
- ☐ ☐ Are there visible surface cracks on the dam?  
If yes, indicate length and size of crack. \_\_\_\_\_.
- ☐ ☐ Is there evidence of subsided areas on or around the dam?  
If yes, indicate where and degree. \_\_\_\_\_.
- ☐ ☐ Are there bulges on the dam?  
If yes, indicate where and degree. \_\_\_\_\_.
- ☐ ☐ Are there signs of seeps on the dam?  
If yes, indicate where and estimated flow. \_\_\_\_\_.
- ☐ ☐ Are there any other potentially damaging features on the dam?  
If yes, describe. \_\_\_\_\_.
- ☐ ☐ Are there any recent evidences of slope failure on the landside south of the dam (perform visual inspection and data analysis of inclinometers)?  
If yes, describe. \_\_\_\_\_.

Notes: Unable to complete due to snow cover

Signature of Inspector: Robert Munz

*Inspections are performed under the direction of Jessica Wilczek, P.E.*

If cracks or other potentially damaging features occur, notify Jessica Wilczek immediately.

# Monument Dam Inspection Form

Date: 2/26/2021

Time:

Name of Inspector: Robert Munz

Current Panel Being Mined: LWS1

☐ Weekly Inspection ☒ Monthly Inspection

Yes No

- ☐ ☒ Is mining within 1 mile of Monument Dam?
- ☐ ☐ Are there visible surface cracks on the dam?  
If yes, indicate length and size of crack. \_\_\_\_\_
- ☐ ☐ Is there evidence of subsided areas on or around the dam?  
If yes, indicate where and degree. \_\_\_\_\_
- ☐ ☐ Are there bulges on the dam?  
If yes, indicate where and degree. \_\_\_\_\_
- ☐ ☐ Are there signs of seeps on the dam?  
If yes, indicate where and estimated flow. \_\_\_\_\_
- ☐ ☐ Are there any other potentially damaging features on the dam?  
If yes, describe. \_\_\_\_\_
- ☐ ☐ Are there any recent evidences of slope failure on the landside south of the dam (perform visual inspection and data analysis of inclinometers)?  
If yes, describe. \_\_\_\_\_

Notes: Unable to complete inspection due to snow cover.

Signature of Inspector: RM

*Inspections are performed under the direction of Jessica Wilczek, P.E.*

If cracks or other potentially damaging features occur, notify Jessica Wilczek immediately.

# Monument Dam Inspection Form

Date: 3/26/2021

Time:

Name of Inspector: Robert Munz

Current Panel Being Mined: LWSS1

☐ Weekly Inspection ☒ Monthly Inspection

Yes No

- ☐ ☒ Is mining within 1 mile of Monument Dam?
- ☐ ☐ Are there visible surface cracks on the dam?  
If yes, indicate length and size of crack. \_\_\_\_\_
- ☐ ☐ Is there evidence of subsided areas on or around the dam?  
If yes, indicate where and degree. \_\_\_\_\_
- ☐ ☐ Are there bulges on the dam?  
If yes, indicate where and degree. \_\_\_\_\_
- ☐ ☐ Are there signs of seeps on the dam?  
If yes, indicate where and estimated flow. \_\_\_\_\_
- ☐ ☐ Are there any other potentially damaging features on the dam?  
If yes, describe. \_\_\_\_\_
- ☐ ☐ Are there any recent evidences of slope failure on the landside south of the dam (perform visual inspection and data analysis of inclinometers)?  
If yes, describe. \_\_\_\_\_

Notes: Unable to complete inspection due to snow cover

Signature of Inspector: Robert Munz

*Inspections are performed under the direction of Jessica Wilczek, P.E.*

If cracks or other potentially damaging features occur, notify Jessica Wilczek immediately.

**Forest Service Roads**  
**Inspection Form**

Date: 1/29/2021

Time:

Name of Inspector: Robert Munz

Current Panel and XC Being Mined: LWSS1 Approx. 16 XC in SS1 HG

Road(s) Being Inspected: Dry Fork and Deer Creek

Yes    No

☐    ☐    Is the Forest Service road within the projected angle of draw of subsidence? If yes, which road(s):

☐    ☐    Are there visible surface cracks on the road? If yes, describe (location, width, length, etc.):

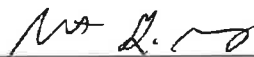
☐    ☐    Is there any recent evidence of potential subsidence induced slope failure? If yes, describe:

☐    ☐    Are there any other potentially damaging, subsidence induced features on or near the road? If yes, describe:

☐    ☐    Is mitigation needed? If yes, list suggestions:

Notes: Unable to complete inspection due to snow cover.

Signature of Inspector: \_\_\_\_\_



\* If any potential subsidence induced features are observed that could cause harm to the public or operations, notify Jessica Wilczek immediately.

**Forest Service Roads**  
**Inspection Form**

Date: 2/26/2021

Time:

Name of Inspector: Robert Munz

Current Panel and XC Being Mined: LW 551 Approx 16 XC in 551 HG

Road(s) Being Inspected: Dry Fork and Deer Creek

Yes    No

☐    ☐    Is the Forest Service road within the projected angle of draw of subsidence? If yes, which road(s):

☐    ☐    Are there visible surface cracks on the road? If yes, describe (location, width, length, etc.):

☐    ☐    Is there any recent evidence of potential subsidence induced slope failure? If yes, describe:

☐    ☐    Are there any other potentially damaging, subsidence induced features on or near the road? If yes, describe:

☐    ☐    Is mitigation needed? If yes, list suggestions:

Notes: Unable to complete inspection due to snow cover

Signature of Inspector: \_\_\_\_\_

\* If any potential subsidence induced features are observed that could cause harm to the public or operations, notify Jessica Wilczek immediately.

**Forest Service Roads**  
**Inspection Form**

Date: 3/26/2021

Time:

Name of Inspector: Robert Munz

Current Panel and XC Being Mined: Lw SSI Approx 15xc in SSI HG

Road(s) Being Inspected: Dry Fork and Deer Creek

Yes    No

- ☐    ☐    Is the Forest Service road within the projected angle of draw of subsidence? If yes, which road(s):  
\_\_\_\_\_
- ☐    ☐    Are there visible surface cracks on the road? If yes, describe (location, width, length, etc.):  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- ☐    ☐    Is there any recent evidence of potential subsidence induced slope failure? If yes, describe:  
\_\_\_\_\_
- ☐    ☐    Are there any other potentially damaging, subsidence induced features on or near the road? If yes, describe:  
\_\_\_\_\_
- ☐    ☐    Is mitigation needed? If yes, list suggestions:  
\_\_\_\_\_

Notes: Unable to inspect due to snow cover.

Signature of Inspector: Robert H. Munz

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**Stock Pond**  
**Inspection Form**

Date: 1/29/2021

Time:

Name of Inspector: Robert Munz

Current Panel and XC Being Mined: LWSS1 Approx 16xc in SS146

Stock Pond(s) Being Inspected: DF 35

Yes No

☐ ☒ Is the stock pond within twice the projected angle of draw of subsidence? If yes, which pond(s):

☐ ☐ Are there visible surface cracks in or near the stock pond? If yes, describe (location, width, length, etc.):

☐ ☐ Is there any evidence of potential subsidence induced water loss? If yes, describe:

☐ ☐ Is there water in the pond? If yes, describe:

☐ ☐ Is mitigation needed? If yes, list suggestions:

Notes: unable to complete inspection due to snow cover

Signature of Inspector: Robert Munz

\* If any potential subsidence induced features are observed that could cause harm to the pond, notify Jessica Wilczek immediately.



**Stock Pond**  
**Inspection Form**

Date: 2/26/2021

Time: '

Name of Inspector: Robert Munz

Current Panel and XC Being Mined: LW 551 Approx 16 XC in 551 46

Stock Pond(s) Being Inspected: DF35

Yes    No

☐    ☒    Is the stock pond within twice the projected angle of draw of subsidence? If yes, which pond(s):

\_\_\_\_\_

☐    ☐    Are there visible surface cracks in or near the stock pond? If yes, describe (location, width, length, etc.):

\_\_\_\_\_

\_\_\_\_\_

☐    ☐    Is there any evidence of potential subsidence induced water loss? If yes, describe:

\_\_\_\_\_

☐    ☐    Is there water in the pond? If yes, describe:

\_\_\_\_\_

☐    ☐    Is mitigation needed? If yes, list suggestions:

\_\_\_\_\_

Notes: Unable to complete inspection due to snow cover

Signature of Inspector: MA R. Munz

\* If any potential subsidence induced features are observed that could cause harm to the pond, notify Jessica Wilczek immediately.

**Stock Pond**  
**Inspection Form**

Date: 3/26/2021

Time:

Name of Inspector: Robert Murz

Current Panel and XC Being Mined: LW SSI approx 15 xc in SSI H6

Stock Pond(s) Being Inspected: DF35

Yes    No

- ☐    ☒ Is the stock pond within twice the projected angle of draw of subsidence? If yes, which pond(s):  
\_\_\_\_\_
- ☐    ☐ Are there visible surface cracks in or near the stock pond? If yes, describe (location, width, length, etc.):  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- ☐    ☐ Is there any evidence of potential subsidence induced water loss? If yes, describe:  
\_\_\_\_\_
- ☐    ☐ Is there water in the pond? If yes, describe:  
\_\_\_\_\_
- ☐    ☐ Is mitigation needed? If yes, list suggestions:  
\_\_\_\_\_

Notes: Unable to complete inspection due to snow cover.

Signature of Inspector: Robert Murz

\* If any potential subsidence induced features are observed that could cause harm to the pond, notify Jessica Wilczek immediately.