



September 18, 2023

Division of Reclamation, Mining and Safety 1313 Sherman Street, Room 215 Denver, CO 80203 (submitted online as part of Online Annual Report)

### RE: DRMS Annual Report - Carbon Valley Resource, Permit M-2001-017 Anniversary Date: September 19 Annual Fee: \$791 + online processing fees

Dear Division:

L.G. Everist, Inc. respectfully submits this cover letter, mine map, and groundwater monitoring data to accompany the online submittal of the DRMS Annual Report for Carbon Valley Resource, Permit M-2001-017. The annual fee is paid online with a credit card as part of the online report submittal.

## **Mining and Reclamation Activity**

In Carbon Valley Resource, mining continued in the same area as last year - we just moved a little father into the south end of the mine area. We submitted and were approved for a Technical Revision in July-2023, the purpose of which was for a minor change to the reclamation plan due to oil and gas operations structures being abandoned and removed. We have started mining through the oil and gas area, and will continue into 2024. Materials processing is done with portable equipment.

Parts of the mining areas have been partially reclaimed in 2023. The north and far south ends of the mining area have been backfilled, sloped and sealed. Some parts have also been topsoiled and seeded, so only need time for the grass to grow. Weed management continues throughout the site, as needed. Reclamation work is started in each area after mining is complete.

Please refer to the online report for mining, reclamation and other acreage amounts. The 2023 Annual Report map is attached for a visual of the areas mentioned above and shows the reclamation plan as it was prior to the TR in July-2023. (Note: Next year, we will use the revised reclamation plan that was approved in the July-2023 TR.)

#### **Groundwater Monitoring**

Analysis of the groundwater monitoring data shows that the groundwater levels in the wells around the Carbon Valley Resource site have either remained within their baseline ranges every month, or have fluctuated slightly outside their baseline ranges - but have not adversely affected anyone, so there are no compliance issues. We continue to monitor all groundwater monitoring wells on a monthly basis.

Monitoring Wells MW01, MW02 are located along the west side of the active mining area. Both wells have stayed within their baseline ranges every month for the past year and so are in compliance.



Monitoring Wells MW03 and MW04 are located outside the active mining area to the south-west and south-east, respectively. MW03 had slight fluctuations outside baseline ranges in early-2023, but has since come back into range, and the fluctuations did not adversely affect any neighbors, so there are no compliance issues. Monitoring Well MW04 has been out of baseline range this year. It is located beyond the south end of the permitted mining area, on the far side of the Last Chance Ditch (a large irrigation ditch), and the Town of Firestone has been constructing diversion systems (near this well) for their water lined storage reservoir to the east. Multiple factors could be the causes of fluctuations in groundwater levels in this area. There are no residential or irrigation wells nearby, and no one has been adversely affected by any of these minor fluctuations, so there are no compliance issues.

Monitoring Wells MW05 and MW06 are outside of the mining area and located on property that has been reclaimed and released from the mine permit. These two monitoring wells are located over 1000 feet away from the current permit area, and on the far side of a lined water storage reservoir that has been released from this permit, so any fluctuations in groundwater levels could not be caused by the mining activity. The Town of Firestone has been developing the (released) reservoir for its own use as a municipal water storage reservoir. We still collected data from these monitoring wells in 2023. Monitoring Well MW05 has stayed within its baseline range for the past year. Monitoring Well MW06 stayed within its baseline range most of the past year, and the levels are slightly high in the past few months. This minor fluctuation has not adversely affected any neighbors, including the Town of Firestone's reservoir. Therefore, there are no compliance issues with these wells.

Monitoring Well MW07 has been out of its baseline range - the groundwater levels are slightly higher than baseline, likely due to water reservoir work (by other entities) on the north side of the road. The only building located near this well is the permittee's office/scale-house and the fluctuations are not adversely affecting us or any other neighbors. Therefore, there are no compliance issues.

The groundwater monitoring data and monitoring well map are attached.

If you have questions, feel free to contact me via phone (cell-303-514-2778, office-303-286-2247) or email (lmshults@lgeverist.com).

Sincerely

Lynn Mayer Shults Regulatory Manager

Attachments:

- Carbon Valley Resource Exhibit E-1, Reclamation Plan Map
- Groundwater Monitoring Data
- Groundwater Monitoring Well Map



|      | MONITOR WELL NO.              | MW-01        | MW-02        | MW-03        | MW-04        | MW-05        | MW-06        | MW-07        |
|------|-------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
|      | NORTHING, FT                  | 1,307,353.84 | 1,306,390.31 | 1,305,531.41 | 1,305,207.10 | 1,306,084.75 | 1,307,521.49 | 1,307,522.07 |
|      | EASTING, FT                   | 3,156,990.45 | 3,156,962.85 | 3,156,965.85 | 3,157,915.49 | 3,159,231.68 | 3,159,255.52 | 3,158,242.86 |
|      | ELEVATION (TOG), FT           | 4,814.364    | 4,820.651    | 4,824.874    | 4,827.098    | 4,819.53     | 4,819.87     | 4,816.45     |
|      | CASING HEIGHT, FT             | 4.34         | 2.48         | (2.59)       | 2.45         | 2.56         | 2.22         | 2.70         |
|      | ELEVATION (TOC), FT           | 4,818.702    | 4,823.127    | 4,822.280    | 4,829.552    | 4,822.10     | 4,822.09     | 4,819.15     |
|      |                               | MW-01        | MW-02        | MW-03        | MW-04        | MW-05        | MW-06        | MW-07        |
|      | HIGH (max of first 2 yrs + 2) | 4,812.60     | 4,816.83     | 4,819.18     | 4,820.95     | 4,816.25     | 4,807.19     | 4,800.35     |
|      | LOW (min of first 2 yrs - 2)  | 4,800.50     | 4,804.83     | 4,812.98     | 4,816.30     | 4,811.20     | 4,801.57     | 4,790.65     |
|      |                               |              |              |              |              |              |              |              |
| 2022 | 01/21/22                      | 4,807.39     | 4,805.16     | 4,810.87     | 4,815.91     | 4,807.34     | 4,802.81     | 4,792.05     |
|      | 02/09/22                      | 4,807.34     | 4,805.12     | 4,810.82     | 4,815.69     | 4,806.91     | 4,802.38     | 4,791.70     |
|      | 03/14/22                      | 4,807.24     | 4,805.02     | 4,810.69     | 4,815.46     | 4,806.82     | 4,802.00     | 4,791.20     |
|      | 04/26/22                      | 4,807.97     | 4,813.11     | 4,813.79     | 4,816.31     | 4,811.82     | 4,802.27     | 4,791.46     |
|      | 05/18/22                      | 4,808.97     | 4,815.21     | 4,815.03     | 4,816.67     | 4,812.57     | 4,803.10     | 4,790.69     |
|      | 06/20/22                      | 4,809.37     | 4,814.57     | 4,814.82     | 4,814.47     | 4,813.05     | 4,804.13     | 4,801.37     |
|      | 07/20/22                      | 4,810.61     | 4,815.60     | 4,814.12     | 4,812.12     | 4,813.27     | 4,805.04     | 4,803.85     |
|      | 08/30/22                      | 4,810.54     | 4,814.82     | 4,813.86     | 4,812.06     | 4,813.36     | 4,805.76     | 4,805.59     |
|      | 09/30/22                      | 4,810.51     | 4,815.01     | 4,813.75     | 4,812.06     | 4,813.33     | 4,805.80     | 4,805.91     |
|      | 10/24/22                      | 4,810.17     | 4,814.21     | 4,813.65     | 4,812.08     | 4,813.18     | 4,805.60     | 4,805.83     |
|      | 11/22/22                      | 4,810.05     | 4,813.98     | 4,813.38     | 4,812.05     | 4,813.00     | 4,805.84     | 4,806.40     |
|      | 12/20/22                      | 4,809.90     | 4,813.75     | 4,813.08     | 4,812.05     | 4,812.90     | 4,806.09     | 4,806.95     |
| 2023 | 01/11/23                      | 4,810.00     | 4,813.48     | 4,812.65     | 4,811.55     | 4,812.85     | 4,805.89     | 4,806.50     |
|      | 02/20/23                      | 4,810.10     | 4,813.23     | 4,812.23     | 4,811.05     | 4,812.80     | 4,805.84     | 4,806.10     |
|      | 03/30/23                      | 4,809.90     | 4,813.23     | 4,812.16     | 4,810.95     | 4,812.65     | 4,805.64     | 4,806.00     |
|      | 04/28/23                      | 4,810.20     | 4,814.18     | 4,812.63     | 4,811.10     | 4,812.80     | 4,805.49     | 4,805.55     |
|      | 05/25/23                      | 4,810.97     | 4,814.70     | 4,813.00     | 4,811.35     | 4,813.35     | 4,806.49     | 4,806.85     |
|      | 06/21/23                      | 4,811.75     | 4,815.23     | 4,813.38     | 4,811.60     | 4,813.90     | 4,807.49     | 4,808.15     |
|      | 07/18/23                      | 4,811.55     | 4,815.38     | 4,813.18     | 4,811.65     | 4,814.00     | 4,807.34     | 4,807.50     |
|      | 08/21/23                      | damaged      | 4,815.63     | 4,813.33     | 4,811.85     | 4,814.35     | 4,807.49     | 4,807.40     |
|      | sep                           |              |              |              |              |              |              |              |
|      | sep                           |              |              |              |              |              |              |              |
|      | oct                           |              |              |              |              |              |              |              |
|      | nov                           |              |              |              |              |              |              |              |

# L.G. Everist, Inc. - Carbon Valley Resource (M-2001-017) - Groundwater Monitoring Well Data

# L.G. Everist, Inc. - Carbon Valley Resource (M-2001-017) - Groundwater Monitoring Well Map

