



**L.G. EVERIST, INC.**

*ROCK SOLID SINCE 1876*

7321 E. 88TH AVENUE, SUITE 200

HENDERSON, COLORADO 80640

PHONE 303-287-9606 • FAX 303-289-1348

June 1, 2020

Division of Reclamation, Mining, and Safety  
Department of Natural Resources  
1313 Sherman Street, Room 215  
Denver, CO 80203

**RE: 112c Reclamation Permit - Attachments for Annual Fee and Annual Report**

To Whom It May Concern:

PERMITTEE:	<b>L. G. Everist, Inc.</b>
PERMIT NO.:	<b>M-1999-120</b>
OPERATION NAME:	<b>Fort Lupton Sand and Gravel Mine</b>
ANNIVERSARY DATE:	<b>June 1 (annually)</b>
ANNUAL FEE:	<b>\$791.00</b>

The DRMS Annual Report for Fort Lupton Sand and gravel (M-1999-120) has been submitted online. The annual fee has been paid online with a credit card.

Enclosed with this letter are the attachments for the DRMS Annual Report. They include:

- Exhibit F - Reclamation Plan Map - which shows the current permit area and reclamation plan. Areas of the map are marked to show the active mining areas (MINING) and the recently sloped and seeded areas (SLOPING, SEEDING), which are shaded green. The 2020 future mining area is the Blue Ribbon Phase at the north end of the site.
- Groundwater Monitoring Report – includes recent data, data review, and wells map.

If you have any questions, feel free to contact me at 303-286-2247 or [lmshults@lgeverist.com](mailto:lmshults@lgeverist.com).

Sincerely,

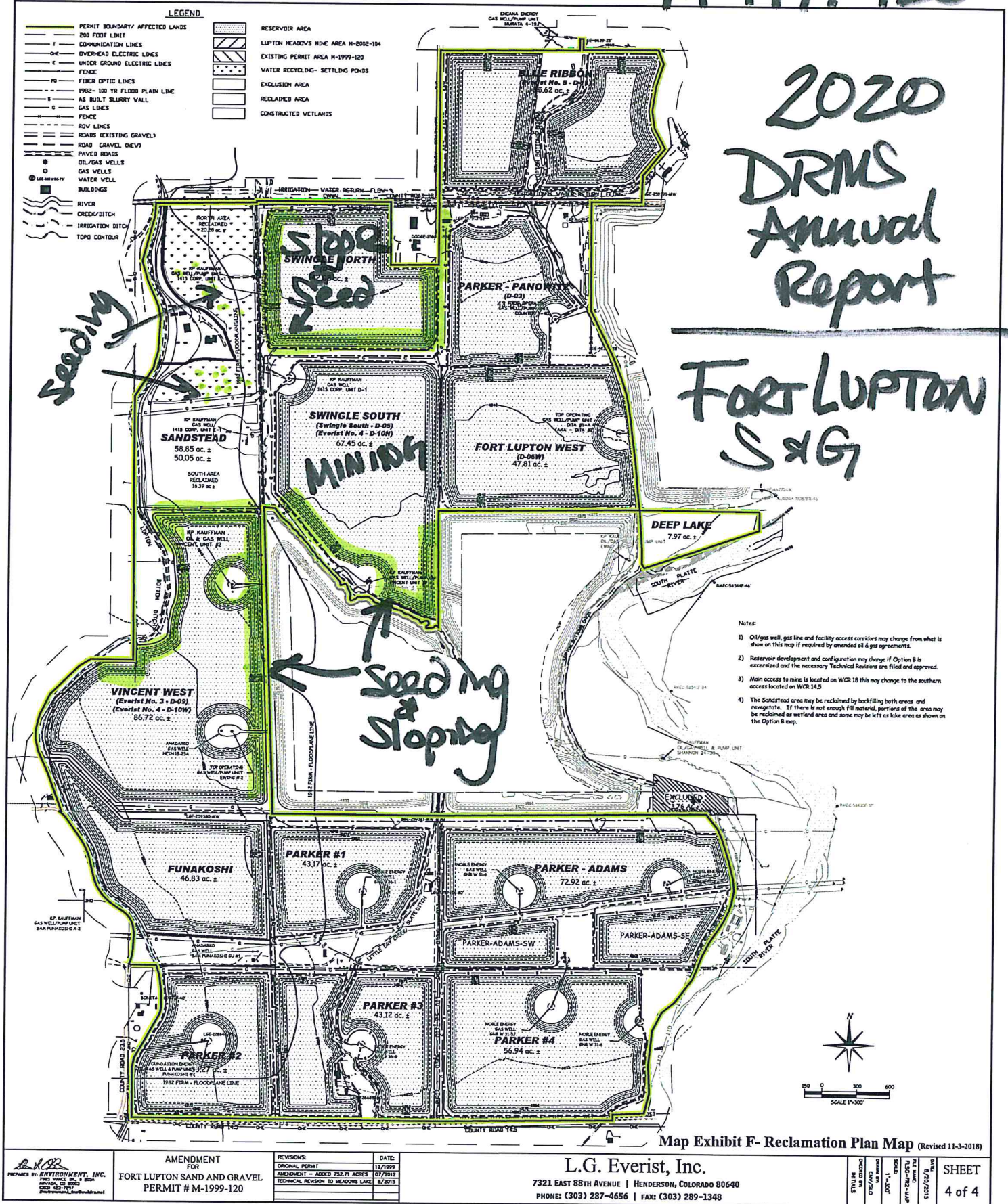
Lynn Mayer Shults  
Regulatory Manager

cc: Richard Schneider

M-1999-120

# 2020 DRMS Annual Report

## FORT LUPTON S&G





## **DRMS ANNUAL REPORT - GROUNDWATER MONITORING REPORT**

**SITE:** L.G. Everist, Inc. - Fort Lupton Sand and Gravel, M-1999-120

**DATE:** Anniversary date - June 1, 2020

Fort Lupton monitoring well data from January-2019 through May-2020 is attached. Prior data has been submitted in prior annual reports. A map of the active monitoring well locations is also attached. (MW = monitoring well). All wells that are listed in the attached data and shown on the map are active wells. (Monitoring wells that have been mined out as mining progresses no longer exist, and so are not on the map or listed in the data.)

The vast majority of the monitoring wells have maintained groundwater levels within their baseline ranges established in L.G. Everist's (LGE) final adequacy response for the DRMS permit amendment in October-2012. This includes wells in areas where we are not yet mining, and also wells within and outside the perimeters of slurry walls - showing that the water is flowing around the slurry walls in natural patterns.

A few monitoring wells at Fort Lupton have fluctuated in and out of their baseline ranges. L.G. Everist has investigated the data and compared monitoring well results with their locations and nearby activities. Most wells that have been outside of baseline ranges are internal to LGE operations, and any fluctuating water levels would only affect the operator, so no mitigation is necessary. External wells that tend to be outside baseline ranges are MW-08 and MW-09. They are affected by the unlined mining operations in a neighboring mine (see details below). For these wells, LGE's lined operations are not the cause of the groundwater decrease, so no mitigation is required by LGE.

### **ACTIVE WELLS**

Following is a listing of all active monitoring wells - with notes on whether the well is internal or external to the site, whether it is in or out of baseline ranges, whether it is accessible or not, any other notable changes, and explanations of the raw data and any contributing external (or internal) factors. Investigation and mitigation are also noted. There have been no adverse effects on neighbors with any of changes indicated in these wells. We continue to monitor all our active wells monthly.

**MW-02** - internal to site - MW-02 is not accessible, due to Little Dry Creek, which changed its course after the 2013 flood. Because it is not accessible, there is no new data, but it is still on the Well Map, as it become accessible again in the future.

**MW-04** - internal to site - near processing plant - within baseline ranges for late spring through early winter months, slightly below baseline for later winter through early spring months, and now back within baseline ranges.

**MW-06** - internal to site - MW-06 is usually not accessible due to Little Dry Creek and a field conveyor. After reclamation of nearby slopes and moving the field conveyor, MW-06 was recently read. It is slightly out of range, but internal to the site. Changes in groundwater levels around this well could only affect LGE, therefore no mitigation is necessary.

**MW-08** - external - edge of site - located on the south side of CR18, outside of the Swingle-North slurry wall, and directly across from a neighboring unlined mining operation. Not in baseline range.

*Note:* The neighboring mine's dewatering efforts are having an effect on the groundwater levels because their mine is unlined. MW-08 was within baseline ranges for the first few years - prior to the other mining operation commencing. Since the other mine started, the well has generally been below the low baseline number. There are no residential neighbors nearby to be affected.

**MW-09** - external - quite far north of any LGE operations. Not in baseline range.

*Note:* The well is located across CR25 from the neighboring unlined mine's main entrance (see MW-08). Their dewatering efforts seem to be causing the local groundwater levels to decrease. The same well conditions exist as noted under MW-08. There are no residential neighbors nearby to be affected.

**MW-10** - external - farther north than MW-09, about 3000+ feet north of LGE operations, closer to other companies' mines, so therefore never a good indicator of LGE operations. The well is located in private property and the landowner has not allowed LGE personnel to access this well since Oct-2019.

*Note:* After this year's report, this well will no longer be in LGE's list of monitoring wells.

## **DRMS ANNUAL REPORT - GROUNDWATER MONITORING REPORT**

**SITE:** L.G. Everist, Inc. - Fort Lupton Sand and Gravel, M-1999-120

**DATE:** Anniversary date - June 1, 2020

**MW-14** - internal to site - located in the southeast corner of the Parker-Panowitz phase, within an approved slurry wall. Groundwater levels are below baseline ranges, which indicates that the approved slurry wall is working.

*Note:* The Parker-Panowitz phase is complete - it is mined out and reclamation sloping is complete around three sides of the area. Changes in groundwater levels around this well could only affect LGE, therefore no mitigation is necessary.

**MW-20 and MW-25** - edge of site - these two wells are located at the southwest and northeast corners of the Sandstead phase, respectively. Both wells have stayed within baseline ranges for the past year. In May, MW-20 went slightly high.

*Note:* The unlined mining operation first mentioned in MW-08 is across the road to the north of MW-25. No residential neighbors were affected.

**MW-21, MW-22, MW-24** - internal to site - these three wells are located around the south and east sides of the Sandstead phase. They are within baseline ranges.

*Note:* MW-22, an internal well, located at the SE corner of Sandstead, has been mined out. After this year's report, this well will no longer be in LGE's list of monitoring wells.

**MW-26, MW-27, MW-28, MW-29, MW-30, MW-31** - all six of these wells are located in the south third of the site where mining has not yet begun. Once mining starts in this area, MW-30 will be internal to the site, the other five wells are located along site boundaries. All wells are within baseline ranges.

**MW-32** - was internal to site, now edge of site - located at the southeast corner of the lined and released Meadows Lake phase, which is also the northeast corner of south third of site where mining has not begun. The well is within baseline ranges.

**MW-33** - internal to site - located at the southeast corner of the Vincent West phase. The well is within baseline ranges through June-2019. The well was inaccessible during last year's reclamation work. The May-2020 reading is within baseline ranges.

**MW-34, MW-37** - edge of site - located along the western side of the Vincent West phase. Both wells are within baseline ranges.

**MW-45** - edge of site - on the north side of Parker-Panowitz. It is within baseline ranges.

**MW-52** - internal to site - located within the Swingle-South slurry wall. It has usually been within baseline ranges. It dipped very slightly below starting in March-2020. Changes in groundwater levels around this well could only affect LGE, therefore no mitigation is necessary.

**MW-54 and MW-55** - new wells located in the Sandstead phase. MW-54 is internal to the site, MW-55 is along the western edge of the Sandstead phase. The 2-year baseline time period was complete in May-2019 for both wells. Groundwater level in MW-54 was a little high from Oct-Dec-2019, then came back into baseline range. Both wells are currently within baseline ranges.

# FORT LUPTON SAND GRAVEL - M-1999-120 - DRMS ANNUAL REPORT 2020 - GROUNDWATER MONITORING

<b>FORT LUPTON S&amp;G MONITOR WELL NO.</b>	MW-02 (can't access)	<b>MW-04</b>	MW-06 (can't access)	<b>MW-08</b>	<b>MW-09</b>	<b>MW-10</b>	<b>MW-14</b>	<b>MW-20</b>
<b>NORTHING, FT</b>	1280952.82	1283290.42	1283728.10	1285900.46	1287365.87	1288925.73	1284654.27	1283584.51
<b>EASTING, FT</b>	3187993.46	3187818.84	3185934.31	3186592.51	3187426.10	3188991.48	3188830.71	3185761.31
<b>ELEVATION (TOG), FT</b>	4880.09	4,875.66	4,873.53	4,869.20	4,866.27	4,863.10	4,874.69	4878.63
<b>CASING HEIGHT, FT</b>	3.05	2.36	3.02	3.18	3.20	3.08	2.88	3.24
<b>ELEVATION (TOC), FT</b>	4,883.14	4,878.02	4,876.55	4,872.38	4,869.47	4,866.18	4,877.57	4881.87
<b>HIGH (max of first 2 yrs + 1)</b>	<b>4,880.69</b>	<b>4,875.43</b>	<b>4,874.39</b>	<b>4,866.30</b>	<b>4,863.12</b>	<b>4,859.88</b>	<b>4,867.40</b>	<b>4,876.48</b>
<b>LOW (min of first 2 yrs - 1)</b>	<b>4,875.22</b>	<b>4,868.67</b>	<b>4,867.68</b>	<b>4,857.83</b>	<b>4,855.35</b>	<b>4,854.00</b>	<b>4,861.77</b>	<b>4,859.47</b>
01/07/19	can't access	4,868.57	can't access	4,838.58	4,834.62	4,853.43	4,854.27	4,870.77
02/15/19	-	4,868.37	-	4,838.58	4,834.22	4,853.28	4,853.77	4,870.07
03/12/19	-	4,868.42	-	4,838.58	4,834.32	4,853.33	4,853.67	4,869.87
04/09/19	-	4,868.52	-	4,838.48	4,834.22	4,853.33	4,859.57	4,869.52
05/22/19	-	4,869.67	-	4,838.48	4,834.97	4,855.18	4,855.87	4,870.92
06/05/19	-	4,870.12	-	4,838.48	4,836.67	4,854.93	4,857.17	4,871.17
07/09/19	-	4,871.19	-	4,839.33	4,836.87	4,856.10	4,859.79	4,872.63
08/06/19	-	4,870.37	-	4,838.43	4,836.32	4,855.88	4,858.47	4,876.10
09/09/19	-	-	-	4,839.73	4,834.99	4,855.08	4,857.64	4,877.24
10/07/19	-	4,870.44	-	4,838.41	4,834.87	4,854.75	4,857.84	4,876.72
11/05/19	-	4,870.32	-	4,838.40	4,835.70	-	4,858.87	4,875.67
12/06/19	-	4,869.57	-	4,838.53	4,834.37	-	4,858.04	4,874.58
01/10/20	-	4,867.89	-	4,838.68	4,834.02	no access	4,857.37	4,873.25
02/10/20	-	4,868.17	-	4,838.75	4,833.77	-	4,857.12	4,872.57
03/11/20	-	4,868.30	-	4,838.48	4,834.27	-	4,857.35	4,871.85
04/29/20	-	4,868.82	4,863.47	4,838.53	4,834.37	-	4,859.72	4,872.73
05/27/20	-	4,869.63	4,864.54	4,845.73	4,835.67	-	4,861.22	4,876.85
	internal, can't access due to LDCreek	internal	internal, usually can't access due to LDCreek & conveyor	out of range, but next to NCCI	out of range, but next to NCCI	very far north, landowner no longer allowing access	internal	within range

# FORT LUPTON SAND GRAVEL - M-1999-120 - DRMS ANNUAL REPORT 2020 - GROUNDWATER MONITORING

FORT LUPTON S&G MONITOR WELL NO.	MW-21	MW-22	MW-24	MW-25	MW-26	MW-27	MW-28	MW-29
NORTHING, FT	1283603.67	1283651.45	1285220.96	1286191.14	1278473.10	1278442.03	1278427.71	1279705.24
EASTING, FT	3186195.02	3186672.94	3186629.91	3186587.77	3190083.81	3188252.28	3185716.95	3185920.94
ELEVATION (TOG), FT	4876.93	4877.39	4870.81	4868.97	4887.10	4885.69	4895.11	4891.42
CASING HEIGHT, FT	3.31	3.10	3.08	3.68	2.94	2.95	2.60	3.30
ELEVATION (TOC), FT	4880.24	4880.49	4873.89	4872.65	4890.04	4888.64	4897.71	4894.72

HIGH (max of first 2 yrs + 1)	4,875.84	4,875.53	4,870.89	4,866.45	4,891.04	4,889.64	4,898.71	4,895.72
LOW (min of first 2 yrs - 1)	4,854.54	4,856.59	4,856.19	4,853.95	4,878.03	4,880.84	4,884.39	4,880.89
01/07/19	4,869.29	4,865.79	4,862.44	4,855.65	4,878.89	4,881.34	4,884.81	4,882.97
02/15/19	4,868.79	4,864.99	4,860.64	4,854.60	4,878.94	4,881.24	4,884.41	4,882.72
03/12/19	4,868.94	4,865.24	4,860.69	4,854.60	4,878.94	4,881.24	4,884.26	4,882.62
04/09/19	4,868.39	4,864.29	4,860.54	4,854.85	4,878.54	4,881.24	4,884.51	4,882.82
05/22/19	4,869.74	4,867.79	4,862.39	4,856.55	4,878.94	4,881.44	4,884.61	4,884.02
06/05/19	4,870.34	4,870.69	4,864.29	4,857.90	4,878.89	4,882.59	4,886.71	4,885.02
07/09/19	4,870.59	4,869.99	4,864.73	4,858.87	4,881.38	4,883.10	4,887.07	4,885.74
08/06/19	4,875.24	-	4,861.01	4,855.52	4,879.92	4,883.31	4,887.07	4,885.51
09/09/19	4,874.56	-	4,863.09	4,858.28	4,879.93	4,882.94	4,886.84	4,885.32
10/07/19	4,874.79	-	4,865.59	4,858.97	4,878.84	4,882.84	4,886.91	4,885.11
11/05/19	4,873.99	-	4,865.59	4,858.04	4,879.61	4,882.40	4,886.53	4,884.42
12/06/19	4,873.09	-	4,864.51	4,856.65	4,879.31	4,882.34	4,886.11	4,884.44
01/10/20	4,871.69	mined out	4,862.81	4,855.74	4,879.04	4,882.17	4,885.89	4,884.12
02/10/20	4,871.56	-	4,862.26	4,854.72	4,879.20	4,881.94	4,885.56	4,883.45
03/11/20	4,870.31	-	4,860.24	4,854.20	4,879.29	4,882.22	4,885.53	4,883.47
04/29/20	4,871.19	-	4,860.79	4,855.01	4,879.10	4,882.69	4,886.41	4,883.82
05/27/20	4,871.49	-	4,862.94	4,859.85	4,879.72	4,882.69	4,887.02	4,884.93
	within range	internal, mined out	within range	within range	within range	within range	within range	within range

# FORT LUPTON SAND GRAVEL - M-1999-120 - DRMS ANNUAL REPORT 2020 - GROUNDWATER MONITORING

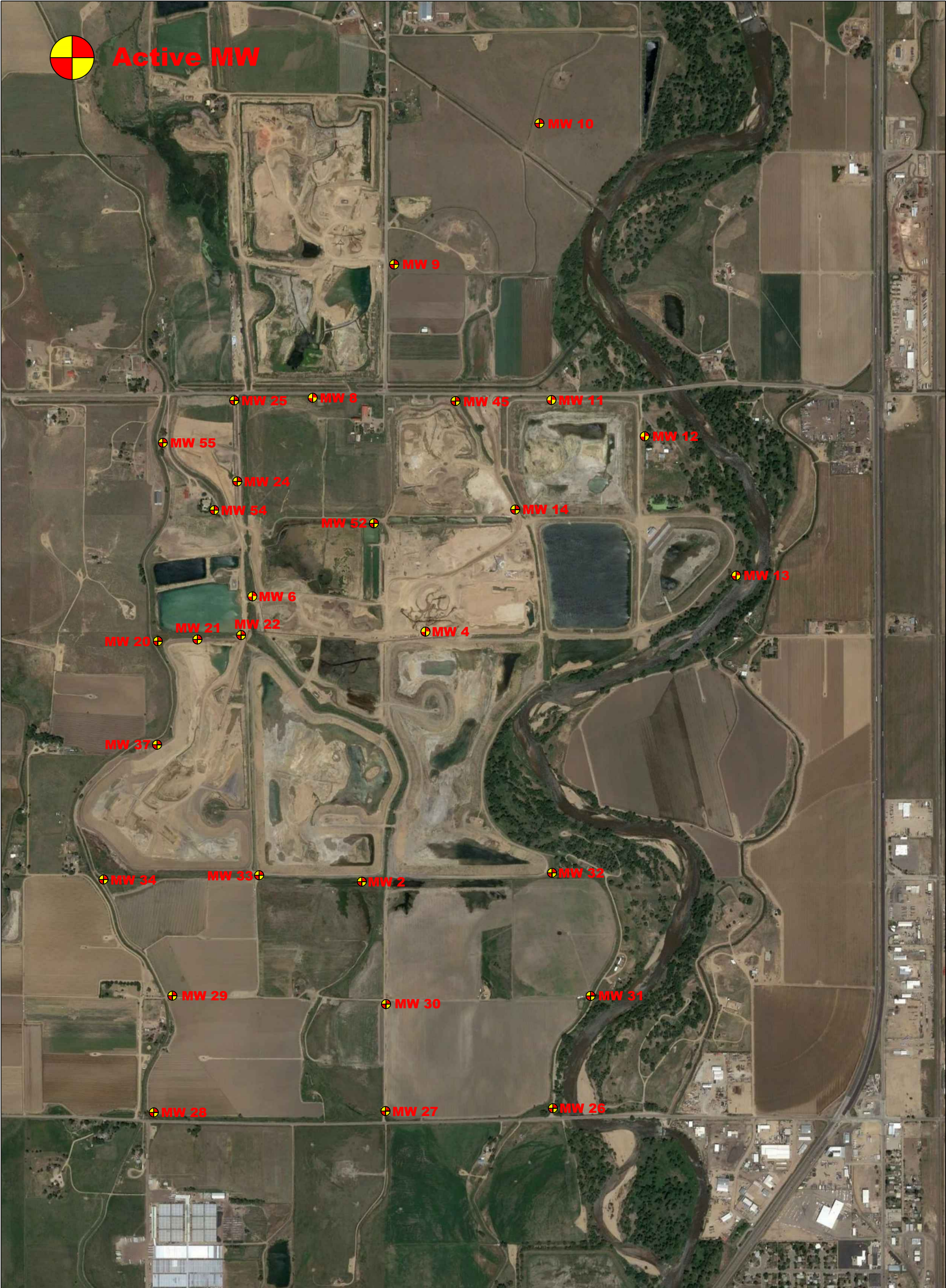
FORT LUPTON S&G MONITOR WELL NO.	MW-30	MW-31	MW-32	MW-33	MW-34	MW-37	MW-45	MW-52
NORTHING, FT	1279612.81	1279702.73	1281049.34	1281023.27	1280976.36	1282451.42	1286212.47	1284875.58
EASTING, FT	3188258.35	3190495.90	3190074.13	3186869.81	3185167.73	3185753.31	3189018.10	3188125.52
ELEVATION (TOG), FT	4883.91	4884.66	4882.40	4883.59	4887.04	4883.69	4870.99	---
CASING HEIGHT, FT	2.83	3.53	3.07	2.70	3.72	3.49	3.28	---
ELEVATION (TOC), FT	4886.74	4888.19	4885.47	4886.29	4890.76	4887.18	4874.27	4878.28

<b>HIGH</b> (max of first 2 yrs + 1)	<b>4,887.74</b>	<b>4,889.19</b>	<b>4,886.47</b>	<b>4,887.29</b>	<b>4,891.76</b>	<b>4,888.18</b>	<b>4,875.27</b>	<b>4,874.40</b>
<b>LOW</b> (min of first 2 yrs - 1)	<b>4,877.04</b>	<b>4,875.56</b>	<b>4,873.15</b>	<b>4,877.98</b>	<b>4,878.96</b>	<b>4,864.78</b>	<b>4,851.42</b>	<b>4,858.08</b>
01/07/19	4,879.44	4,876.74	4,874.32	4,881.09	4,884.26	4,871.78	4,852.57	4,872.18
02/15/19	4,879.34	4,876.84	4,874.37	4,880.84	4,883.71	4,870.88	4,852.27	4,872.13
03/12/19	4,879.44	4,876.89	4,874.37	4,880.89	4,883.56	4,870.53	4,852.27	4,872.78
04/09/19	4,879.44	4,876.49	4,874.22	4,880.89	4,883.46	4,870.33	4,852.47	4,870.08
05/22/19	4,879.94	4,876.64	4,874.47	4,881.34	4,883.76	4,872.08	4,855.27	4,869.18
06/05/19	4,880.84	4,876.89	4,874.97	4,882.59	4,885.56	4,872.48	4,855.52	4,864.28
07/09/19	4,881.09	-	4,877.10	-	4,886.43	4,874.25	4,859.12	4,862.16
08/06/19	4,881.74	-	4,875.92	-	4,886.39	4,876.50	4,855.68	4,860.54
09/09/19	4,880.81	-	4,874.54	-	4,886.51	4,878.76	4,857.30	4,859.92
10/07/19	4,881.17	-	4,875.02	-	4,886.09	4,877.91	4,858.27	4,859.70
11/05/19	4,880.47	-	4,875.17	-	4,886.44	4,876.63	4,858.62	4,858.91
12/06/19	4,880.79	-	4,875.13	-	4,885.36	4,875.28	4,857.77	4,858.43
01/10/20	4,880.74	-	4,874.72	-	4,884.87	4,873.93	4,857.33	4,858.23
02/10/20	4,880.34	4,877.23	4,874.49	-	4,883.95	4,873.03	4,857.05	4,858.28
03/11/20	4,880.64	4,877.14	4,874.77	-	4,883.83	4,872.30	4,857.59	4,857.88
04/29/20	4,880.39	4,876.96	-	-	4,884.76	4,873.53	4,859.01	4,857.95
05/27/20	4,880.49	4,877.48	4,875.14	4,881.76	4,885.25	4,874.45	4,861.76	4,857.63
	within range	within range	within range	within range (couldn't access during reclamation)	within range	within range	within range	internal

# FORT LUPTON SAND GRAVEL - M-1999-120 - DRMS ANNUAL REPORT 2020 - GROUNDWATER MONITORING

FORT LUPTON S&G MONITOR WELL NO.	MW-54	MW-55
NORTHING, FT	1285027.37	1285705.08
EASTING, FT	3186385.20	3185816.56
ELEVATION (TOG), FT	---	---
CASING HEIGHT, FT	---	---
ELEVATION (TOC), FT	4887.35	4879.99
Baseline June2017-May2019		
<b>HIGH</b> (max of first 2 yrs + 1)	<b>4,866.40</b>	<b>4,868.59</b>
<b>LOW</b> (min of first 2 yrs - 1)	<b>4,854.65</b>	<b>4,854.99</b>
01/07/19	4,864.35	4,864.04
02/15/19	4,862.45	4,862.24
03/12/19	4,862.35	4,861.99
04/09/19	4,862.15	4,861.84
05/22/19	4,862.45	4,862.69
06/05/19	4,863.95	4,863.49
07/09/19	4,865.18	4,864.92
08/06/19	4,863.25	4,863.48
09/09/19	4,865.72	4,865.99
10/07/19	4,866.60	4,866.62
11/05/19	4,867.10	4,866.93
12/06/19	4,866.47	4,866.36
01/10/20	4,865.45	4,865.19
02/10/20	4,863.43	4,863.05
03/11/20	4,862.43	4,862.19
04/29/20	4,862.65	4,862.44
05/27/20	4,863.94	4,864.08
	internal	within range





				DRAWN BY: HGK		L.G. Everist, Inc. Aggregate Producers 7321 E. 88th Ave, Suite 200 Henderson, CO, 80640 (303) 286-2245	Active MW Locations
				DATE: 5/29/2018			
				SCALE: Not to scale			
				SIZE: 11x17			
							L.G.E. Ft. Lupton Resource Weld County, CO