EXHIBIT G – WATER INFORMATION

1.0 INTRODUCTION AND BACKGROUND

This exhibit addresses the hydrologic conditions at the Wattenberg Lakes Mine located in portions of Sections 25 and 36, Township 1 North, Range 66 West of the 6th Principal Meridian, Weld County, Colorado (See Figure G-1). Holcim plans to dewater and mine an additional 6.2 acres within the future Pond 1 (Struck Pond) area, followed by the conversion of the mined area and into a lined water storage facility. The water storage will be surrounded by a slurry wall with a perimeter drain to minimize hydrologic impacts to the nearby area. The exhibit documents the depth and direction of groundwater flow, the nature of the subsurface geologic materials through which it flows (Figure G-2), potential interactions with streams, lakes, canals, or other surface water bodies in the area, and the potential impacts to surrounding water users due to dewatering, mining, and slurry wall installation.

The information in this Section is intended to satisfy the requirements outlined in Sections 3.1.6, 6.3.3, 6.3.4, and 6.4.7 of the Colorado Mined Land Reclamation Board's Construction Material Rules and Regulations.

Section 3.1.6

(1) Hydrology and Water Quality: Disturbances to the prevailing hydrologic balance of the affected land and of the surrounding area and to the quantity or quality of water in surface and groundwater systems both during and after the mining operation and during reclamation shall be minimized by measures, including, but not limited to:

> *(a) compliance with applicable Colorado water laws and regulations governing injury to existing water rights;*
>
> *(b) compliance with applicable federal and Colorado water quality laws and regulations, including statewide water quality standards and site-specific classifications and standards adopted by the Water Quality Control Commission;*
>
> *(c) compliance with applicable federal and Colorado dredge and fill requirements; and*
>
> *(d) removing temporary or large siltation structures from drainage ways after disturbed areas are revegetated and stabilized, if required by the Reclamation Plan.*

Section 6.4.7

(1) If the operation is not expected to directly affect surface or groundwater systems, a statement of that expectation shall be submitted.

This site is directly adjacent to the South Platte River. The South Platte River was utilized in the past for the discharge of dewatering water during mining. Current dewatering water is being sent to the Stillwater Ski Lake (Figure G-1). Short-term dewatering will be required for the additional mined acreage prior to the construction of the slurry wall. The site has been dewatered for mining in the past, where drawdown was observed to be very localized in nature (see hydrograph Figures G-7 through G-15)) because of the presence of the river which mitigates excessive groundwater drawdown that might affect groundwater users in the area. Also, the presence of the river has the collateral benefit of mitigating the potential shadow effect potentially caused by the slurry wall that will surround the Struck Pond.

(2) If the operation is expected to directly affect surface or groundwater systems, the Operator/Applicant shall:

> *(a) Locate on the map (in Exhibit C) tributary water courses, wells, springs, stock water ponds, reservoirs, and ditches on the affected land and on adjacent lands where such structures may be affected by the proposed mining operations.*

Please see Exhibit C Pre-Mining Maps for the location of all tributary watercourses, wells, springs, stock water ponds, reservoirs, and ditches on the affected land and on adjacent lands where such structures may be affected by the proposed mining operations.

(b) Identify all known aquifers

The Wattenberg Lakes site is underlain by multiple aquifers:

- The alluvial deposits Post-Piney Creek Alluvium and Piney Creek Alluvium of the South Platte River.
  - described in: Colton, Roger B., 1976. "Geologic Map of the Boulder-Fort Collins-Greeley area, Colorado", USGS Miscellaneous Geologic Investigations Map I-855-G. (See Figure G-2)
- The Lower Arapaho Aquifer
  - described in: Robson, S.G. 1989, "Alluvial and Bedrock Aquifers of the Denver basin – Eastern Colorado's Dual Ground-Water Resource", USGS Water-Supply Paper 2302
- The Laramie-Fox Hills Aquifer
  - described in: Robson, S.G. 1989, "Alluvial and Bedrock Aquifers of the Denver basin – Eastern Colorado's Dual Ground-Water Resource", USGS Water-Supply Paper 2302

(c) Submit a brief statement or plan showing how water from de-watering operations or from runoff from disturbed areas, piled material and operating surfaces will be managed to protect against pollution of either surface or groundwater (and, where applicable, control pollution in a manner that is consistent with water quality discharge permits), both during and after the operation.

The conceptual model of the subsurface geology and groundwater flow was developed from the geologic map for the area and the subsurface conditions observed during the installation of the monitoring well network at the Wattenberg Lakes site (Figure G-3). Based on water levels measured in these wells, groundwater elevation maps were developed for both low-water conditions associated with the winter non-irrigation season and conditions that exist at the end of the irrigation season in August (Figures G-4 and G-5, respectively). Figures G-4 and G-5 indicate a northeasterly flow direction that becomes flatter and more northerly as the water crosses the site. Figure G-4 groundwater contours show the impacts of the recent and current Struck Pond dewatering, where this water is sent to the Stillwater Ski Lake. There will be minimal additional mining activities, limited to within the Struck Pond area; changes to current land surfaces will be primarily due to reclamation activities as outlined in Exhibit E.

Pond 3 currently has a slurry wall, constructed in 2013, which influences groundwater flow in the immediate vicinity. The planned Struck Pond expansion will involve dewatering prior to and during mining. Shallow groundwater flow will be impacted during dewatering activities associated with the expansion although these impacts are expected to be limited to the aquifer only around this area. Due to the permeability contrast between the gravel aquifer and the bedrock beneath it, hydraulic changes due to mining will not impact the underlying Laramie-Fox Hills aquifer. Effects on groundwater levels are projected to be limited in extent due to natural and manmade hydrologic and hydrogeologic characteristics and boundaries, principally including the transmissive nature of the alluvial aquifer, the nearby South Platte River, and the minimal additional mining operations.

The reclamation plan for the mine includes the placement of a slurry wall and perimeter drain around the Struck Pond. The Struck Pond will then be used as water storage for the City of Westminster. Changes to the hydrologic balance in the area will be limited to minor, localized alterations of the existing groundwater flow patterns due to the slurry wall.

2.0 HISTORIC USE

The Wattenberg Lakes property has been used for mining since the Colorado Division of Reclamation, Mining and Safety (DRMS) issued the original permit in 2004. The reclaimed Parker-Dersham aggregate mine and pond, with the Walker Slurry Wall around this pond and the pond to the immediate south, lies to the south of the property, as does the Stillwater Ski Lake, which is man-made and unlined. Agricultural lands exist to the west of the site. Additional aggregate mines and industrial operations occur across the South Platte River to the east.

3.0 HYDROGEOLOGIC SETTING

Geology

The geology mapped at land surface beneath the site consists of alluvial deposits comprised of sand, silt, and gravel primarily (Figure G-2) of the Piney Creek and Post-Piney Creek Alluvium units. On site wells (Figure G-3) were installed in 2002, however no boring logs were found. The depth of the wells on site indicates up to 25 feet of alluvial material overlaying bedrock. Most wells appear to be highly transmissive. Water levels measured in the wells are generally less than 10 ft deep and approach the ground surface in some cases (see hydrograph Figures G-7 through G-15).

The shallow bedrock of the Laramie-Fox Hills aquifer consists of weathered, consolidated sedimentary rock varying from claystone to siltstone. In comparison to the alluvium, the weathered bedrock is expected to be several orders of magnitude less transmissive due to the consolidated, finer-grained properties.

Groundwater

Groundwater at the site represents a combination of water that flows through the high-permeability alluvial deposits parallel to the South Platte River and water that infiltrates due to the agricultural fields that dominate the land use to the west of the river. As groundwater approaches the river, groundwater flows in a direction that is near parallel to the river due to the constant interaction with the river stage within the porous sands and gravels. The direction of regional shallow groundwater flow is therefore toward the northeast but changing to a near northerly direction near the river. This is especially apparent during the winter when compared to the end of the agricultural season in late August (Figures G-4 and G-5, respectively) and may be due to the influence of agricultural runoff coming from west of the site.

Monitoring well MW-6 has limited groundwater elevation data as this well was inaccessible and not monitored prior to 2020. The small amount of available data shows limited water in this well compared to the saturated thickness of the other site wells (hydrograph Figures G-7 through G-15). This well was refurbished in August 2021 which resulted in an additional 3 feet of water in the well. Assuming the well was installed correctly and is not damaged, it is possible this discrepancy is due to the upgradient Walker Slurry Wall around the Parker-Dersham Pond and adjacent pond to the south, which may be casting a groundwater shadow on this well. In addition, while dewatering has taken place previously, the most recent dewatering of the unlined Struck Pond began in late 2022. The resulting water is routed to the unlined Stillwater Ski Lake, where the effect of additional water into this lake is noticeable as shown in hydrograph Figures G-7 through G-15 and Figure G-4.

Existing Monitoring Wells

A network of monitoring wells was installed in 2002 to characterize the groundwater conditions at the Wattenberg Lakes property (Figure G-3). The boreholes for the wells were drilled to the bedrock contact and typically have a high saturated thickness. These wells generally show the direction of groundwater flow to be in a northeasterly to northerly direction, generally in equilibrium with the river water surface elevations, although as discussed above MW-6 may be exhibiting signs of a localized groundwater shadow caused by the upgradient Walker Slurry Wall.

Well Inventory

In April 2023, a well inventory of the Affected Area and adjacent areas was conducted to identify wells near the site. The inventory included a search of the State of Colorado Office of the State Engineer database of wells located within 1 mile of the Affected Area (Table 1). The information compiled from the State Engineer database is assumed to be accurate and appropriate for the purposes of this exhibit; only the information provided in the database is listed. The well inventory identified 442 wells within 1 mile of the Affected Area. Figure G-6 shows the Affected Area and the constructed well locations on file with the Colorado Division of Water Resources, where the numbers shown on Figure G-6 correspond to the first column numbers shown in Table 1. The majority of these wells are screened in the shallow alluvial material, although a handful are noted to be screened in the Laramie-

Fox Hills aquifer and the Lower Arapaho aquifer. Wells in this area are noted to be used for irrigation, domestic use, stock water, monitoring, industrial, and municipal use.

4.0 HISTORIC AND FUTURE GROUNDWATER LEVELS

Figures G-7 through G-15 present hydrographs for the nine on-site monitoring wells. Labeled, dashed lines are included to indicate mine dewatering in 2006 and the completion of the Pond 3 slurry wall in 2013. Wells MW-2 and MW-3 experienced noticeable groundwater elevations declines during dewatering which both recovered quickly due to the high transmissivity of the area.

Many of the monitoring wells show a rise in groundwater elevations following 2013. Upgradient wells such as MW-7 and MW-8 exhibit gradually climbing water levels, while MW-2 and MW-5 show quick water level increases at the end of 2013 followed by plateauing values. Figure G-3 shows that MW-2 and MW-5 are immediately upgradient of the Pond 3 slurry wall. In the absence of other information, the water level increases at MW-2 and MW-5 could be interpreted as groundwater mounding due to the slurry wall. However, due to the major flooding of the area in September 2013 and the gradual water elevation increase at upgradient wells MW-7 and MW-8, the late 2013 water level increase at MW-2 and MW-5 does not conclusively point to a notable groundwater mound. These wells show relatively consistent groundwater elevations since the installation of the slurry wall, although with the general water level increases across the rest of the site this could indicate some form of minor groundwater shadow.

Due to the high transmissivity of the area, and based on the hydrograph Figures G-7 through G-15, it is anticipated that implementing the remaining mining activities and associated dewatering, the Struck Pond slurry wall installation, and the reclamation work will have minimal impact on local groundwater elevations. Nevertheless, it is important to recognize that the Struck Pond may create a partial barrier to groundwater flow due to its positioning between locations that currently have slurry walls, namely Pond 3 and the Walker Slurry Wall. Due to the unique positioning, the hydraulic impacts from the Struck Pond both during dewatering and potentially after the slurry wall is installed may be greater than without the two other structures in place. The perimeter drain around the slurry wall is expected to minimize these potential effects. Structures and wells (not including monitoring wells, Figure G-6 and Table 1) located within ½ mile downgradient of the Struck Pond include:

- Stillwater Ski Lake
- Huett Seep/Ditch
- Well 10 – permit number 21385-
- Well 80 – permit number 191-WCB
- Well 231 – permit number 6291-R
- Well 272 – permit number 49717-F

Wells 10 and 272 are not screened in the shallow alluvial aquifer and would therefore be unaffected by dewatering or the slurry wall.

Wells (not including monitoring wells) located within ½ mile upgradient and cross gradient from the Struck Pond which could be affected by dewatering include:

- Well 36 – permit number 138214--A
- Well 138 – permit number 132424--A
- Well 166 – permit number 130499--A
- Well 171 – permit number 138214-
- Well 173 – permit number 19893-
- Well 223 – permit number 202399-
- Well 295 – permit number 48617-F
- Well 387 – permit number 6647-F
- Well 392 – permit number 213-WCB
- Well 438 – permit number 158810--A

Wells 166, 295, and 438 are not screened in the shallow aquifer and would therefore be unaffected by dewatering or the slurry wall.

5.0 AVAILABLE SATURATED THICKNESS

The available well information for the monitoring wells on site indicates bedrock was encountered at depths of up to 27 feet below ground surface. Water levels at the time of well installation in 2002 ranged from 2 to 9 feet below ground surface. Based on this data, the saturated thickness of aquifer beneath the site ranges from approximately 7.5 to 22.5 ft (Table 2).

Water wells completed in sand and gravel aquifers typically provide approximately 25 to 30 gallons per minute per foot of drawdown of saturated thickness in the well. Domestic wells are typically permitted for maximum pumping rates of 15 gallons per minute (gpm). As a result, less than 2 feet of saturated thickness above the pump intake is likely to be required to provide the allowed pumping rates of 15 gpm. Mine dewatering in 2006 was not observed to have an adverse effect on off-site wells, and minimal, short-term dewatering activities are anticipated to occurring during the remaining mining, where dewatering water will be routed to the nearby Stillwater Ski Lake. Owing to this, the response to previous dewatering activities noted in Appendix G, and the high transmissivity of the shallow alluvium, adverse effects to off-site wells are not anticipated.

6.0 HYDRAULIC IMPACTS

There will be 6.2 acres of additional mining at the Wattenberg Lakes site, limited only to the Struck Pond expansion area, which will require temporary, short-term dewatering. During dewatering a cone of depression will form around the Struck Pond excavation and spread to some extent over time. Currently, dewatering water is sent to Stillwater Ski Lake; this helps to offset downgradient impacts. Nevertheless, the dewatering has the potential to impact the wells listed above in addition to the ski lake and the Huett Seep/Ditch. Due to the proximity to the South Platte River, the spread of dewatering impacts is expected to be limited as was observed during the period of time shown in the hydrographs for the wells around Pond 3. The short-term nature of the dewatering will keep any long-term impacts to a minimum. Based on the high water table and the responses shown in the hydrographs (Figures G-7 through G-15), additional dewatering is unlikely to have a long-term effect on nearby water wells.

The slurry wall construction around the Struck Pond may have a localized effect on groundwater, the Huett Seep/Ditch, and the Stillwater Ski Lake, namely some mounding and shadowing. Based on the observed hydraulic response to construction of the slurry wall around Pond 3, these responses will likely be minimal and localized in nature and will likely not affect any nearby water wells. The hydrologic effects may be amplified locally but only slightly due to the location of the Struck Pond between two structures that currently have slurry walls, but it is anticipated that the perimeter drain on the Struck Pond will help to minimize these potential effects.

7.0 WATER USE

Section 6.4.7 of the Colorado Mined Land Reclamation Board's Construction Material Rules and Regulations*:*

(3) The Operator/Applicant shall provide an estimate of the project water requirements including flow rates and annual volumes for the development, mining and reclamation phases of the project.

(*4) The Operator/Applicant shall indicate the projected amount from each of the sources of water to supply the project water requirements for the mining operation and reclamation.*

(5) The Operator/Applicant shall affirmatively state that the Operator/Applicant has acquired (or has applied for) a National Pollutant Discharge Elimination System (NPDES) permit from the Water Quality Control Division at the Colorado Department of Health and Environment, if necessary.

There will be minimal water use after mining when most of the site is in the reclamation phase. The minor amount of mining at the site will intercept some groundwater tributary to the South Platte River. Consumptive uses of

groundwater at the site include evaporation from groundwater exposed to the atmosphere, water retained in material hauled off-site for processing, and water used for dust control.

Evaporative losses at the site are attributable to exposed groundwater that is ponded or removed through dewatering for storage in the Stillwater Ski Lake. Evaporative losses were calculated as the difference between gross evaporation and effective precipitation. The NOAA Technical Report NWS 33, Evaporation Atlas for the Contiguous 48 United States (U.S. Department of Commerce) was used to determine the site's average annual gross evaporation of 45 inches. Precipitation was obtained for the nearby City of Brighton and the total annual precipitation for this site was determined to be 15.6 inches. Effective precipitation was calculated as 70 percent of total precipitation; thus, the average annual effective precipitation was determined to be 10.9 inches. The resulting evaporative loss rate is therefore 29.4 inches. The maximum total annual evaporative consumptive use during the short period of additional mining at the site is estimated at 7 acre-feet, which is primarily a function of the water used for dust control and the water retained within removed materials.

8.0 MONITORING AND MITIGATION PLAN

This Groundwater Monitoring and Mitigation Plan is prepared as part of Holcim's application to the DRMS for a revised permit for the Wattenberg Lakes in Weld County, Colorado. This plan presents the methods and locations for monitoring of groundwater during gravel mining and site reclamation activities. Although adverse impacts to other local users of groundwater are not expected due to activities at the site, this plan addresses how any adverse effects to groundwater would be mitigated, should they occur.

If needed, Holcim will submit a Temporary Substitute Water Supply Plan to the State Engineer's Office for approval. The Temporary Substitute Water Supply Plan is designed to protect senior vested water rights and mitigate potential depletions of flows in adjacent waterways.

Mining Plan

The 6.2 acres of additional mining will occur on the north and west edges of the currently ponded area of Struck Pond. Some dewatering will be required to complete this phase but will be temporary and short term in nature. Dewatering is planned for a period of approximately 10 months to accommodate earthwork activities, within which mining is planned over a period of 2 months. The mined aggregate will be placed on the conveyor (north side of Struck Pond) and conveyed to Holcim's Platte Valley Plant, and temporary stockpiles will be placed to the west and north of the current Struck Pond. Following mining activities, the Struck Pond will be expanded as shown in Figure G-1 and will be surrounded by a slurry wall and perimeter drain.

Monitoring

The monitoring plan will consist of regular data collection from the set of monitoring wells currently in place around the perimeter of the Wattenberg Lakes permit area (Figure G-3). Data collection activities will include monthly measurement of water levels in wells.

Water Quality Parameters

As mentioned above, due to the absence of large quantities of potential pollutants on site and the absence of water quality samples collected at this site in the past, additional water quality samples are not proposed.

Domestic and Irrigation Water Wells

Active domestic and irrigation wells are shown In Figure G-6 and Table 1. In the event of a well owner complaint, either due to water quality or quantity, Holcim commits to reporting any complaints received from well owners to the DRMS within 48 hours, investigating the complaint as soon as practical, and submitting the results to the DRMS for evaluation within 30 days.

Dewatering Discharge

Based on data collected from monitoring wells, the depth to groundwater is shallow and will likely be around 2 feet below ground surface in the area of the Struck Pond. Due to the absence of large quantities of potential pollutants on site (no on-site processing or concrete or asphalt production), the mining and reclamation operations are not likely to affect groundwater quality on or off the site.

Holcim's Wattenberg Lakes facility complies with applicable requirements in the Colorado Discharge Permit System (CDPS) General Permit COG500000 for Sand &, Gravel Mining Wastewater & Storm Water combined. The Colorado Department of Health and Environment (CDPHE) Water Quality Control Division (WQCD) considers stormwater runoff combined with mine dewatering water to be process water.

The available monitoring well data will be used to observe changes in alluvial groundwater flow associated with mining and reclamation activities. Baseline data collected from the monitoring program will provide a range of water levels for comparison with groundwater levels during site activities under this permit amendment. These data will be utilized to evaluate the nature and extent of the change to the prevailing hydrologic balance and, if necessary, provide for the development of corrective actions. Well owners in the section below refer specifically to owners of wells from which extracted water is put to beneficial use, such as water wells, irrigation wells, etc. Owners of monitoring wells are not considered well owners in this context since a change in water levels for these wells does not represent material damage in cases where water extraction is not being conducted.

In the event of a well owner complaint, Holcim commits to reporting any complaints received from well owners to the DRMS within 48 hours, investigating the complaint as soon as practical, and submitting the results to the DRMS for evaluation within 30 days.

For the investigation, the first level of response will be to review water level data from the monitoring well network and, if available, a measurement of the water level in the well of those making the complaint. Information will be evaluated to determine if the complaint may be tied to dewatering or the slurry walls. If the data indicates that there is no reason to believe the well of those making the complaint was impacted by dewatering or the slurry walls, then there will be no further action taken by Holcim. If the data does not clearly show there is no impact, as a second level of response Holcim will present a contract to the well owner requesting access to the well to perform mechanical and electrical inspection and testing of the well and associated system, e.g., the pressure tank. The agreement will explain that if the problem with the well is not due to a lower water level and is instead due to a mechanical or electrical issue, the well owner will be responsible for the repairs. If the well is determined to be in good working order and the problem is due to a lower water level, then the mining-associated impacts will be addressed to the satisfaction of the DRMS. If the DRMS determines that the impact on a well for which temporary mitigation has been initiated is not a result of Holcim's activities or is not solely a result of Holcim's activities, Holcim will reduce or cease mitigation accordingly.

In the event of a complaint that a well has become unusable, and based on the inspection results described above, Holcim will implement mitigation measures within 7 days. Mitigation measures would include providing a temporary alternative water supply that meets the documented historic well production or need until further investigation can be conducted to determine if the well condition is due to the mining activities.

The DRMS, and potentially the Mine Land Reclamation Board (MLRB), are responsible for determining if mitigation is required, as well as when and how any mitigation measures are implemented and discontinued after the initial complaint is received. Should DRMS or MLRB conclude that mitigation action is required, Holcim will begin to implement one or more mitigation measures.

Temporary mitigation measures may include, but are not limited to:

- Compensation for well owners to use their existing treated water system to replace the well production loss.
- Provision of a water tank and delivery water as necessary to meet documented historic well production or need.
- Other means acceptable to both the well owner and Holcim.

Long-term mitigation measures may include, but are not limited to:

- Cleaning a well to improve efficiency.
- Providing an alternative source of water or purchasing additional water to support historic well use with respect to water quantity and quality. If needed, water quality parameters will be checked in affected wells to ensure alternative sources support the historic use.
- Modifying a well to operate under lower groundwater conditions. This could include deepening existing wells or lowering the pumps. All work would be completed at Holcim's expense except for replacing equipment that was non-functional prior to mining.
- If existing wells cannot be retrofitted or repaired, replace the impacted well with a new replacement well.
- Design and installation of a cistern.

If a groundwater mitigation action is required, Holcim will notify the DRMS of the condition, action taken, and will report the results and present a plan for monitoring the mitigation.

9.0 RESPONSES TO DWR COMMENTS

Holcim responses to referral comments from DWR, received June 28, 2023, are presented in this section. Each comment is provided first, immediately followed by the response.

Comment #1: Prior to the use or exposure of any groundwater, the Applicant must first obtain a well permit and a substitute water supply plan ("SWSP") or decreed plan for augmentation to replace depletions caused by groundwater consumption. Currently, depletions to the South Platte River at the site are covered by the Holcim South Platte Combined SWSP (WDID 0202565), valid through December 31, 2023 and well permit no. 78627-F. If the proposed water uses or depletions will exceed those allowed by the current SWSP approval and/or well permit no. 78627-F, the Applicant must file an application for an amended SWSP and/or new well permit as applicable. The site must continue to be operated under a SWSP until such time as the site is reclaimed. Replacement of lagged depletions must continue until there is no longer an effect on stream.

> ***Response**: The Wattenberg Lakes site is covered by an existing well permit under Permit No. 78627-F. It allows an exposed groundwater area of 25 acres and total depletions of up to 137.5 acre-feet per year (associated with exposed groundwater evaporation, withdrawals for dust control, and water lost with mined product). For comparison, the entire 221,000 tons of material to be mined contain only 6.5 ac-ft of water, so this amendment would not cause Holcim to exceed the well permit limits. Also, Wattenberg Lakes is covered by an existing SWSP. Holcim believes that the SWSP is adequate to cover the additional depletions anticipated from this amendment.*

Comment #2: In certain areas of the South Platte River Basin, SEO staff have observed groundwater problems that appear to be related to the lining of gravel pits located near streams, and in particular, these problems occur when multiple liners are located adjacent to each other. This office requests that DRMS consider the siting and design of lined gravel pits to ensure that they will not individually or cumulatively result in impacts to the timing and quantity of groundwater flow from upgradient locations back to the stream system. In addition to impacts to property, such as flooding upgradient and reduced water levels downgradient of the liner, there are decrees of the court that specify the timing, quantity, and amount of water depleted from the streams by wells and accreted to the stream through recharge operations. The installation of a gravel pit liner should not result in changes to the timing, location, and amount of such groundwater flow. According to the application, the Applicant proposes a perimeter drain around the slurry wall of Pond 1/Struck Pond in order to reduce the effects of mounding behind the walls.

> ***Response**: These concerns are addressed by installing a perimeter drain. The final design will be provided to DRMS.*

Comment #3: Any stormwater runoff intercepted by this operation that is not diverted or captured in priority must infiltrate into the ground or be released to the stream system within 72 hours. Otherwise, the operator will be required to make replacements for evaporation of stormwater. According to the application, stormwater will be removed during dewatering of the site.

***Response**: Holcim addresses stormwater runoff interception as a routine process in their operations and will also manage stormwater under this amendment accordingly. Furthermore, the area will be graded to limit the amount of incidental ponding.*

Comment #4: Once mining is complete, Pond 1/Struck Pond will be lined and reclaimed as reservoirs for use by the City of Westminster. Pond 2 is planned for wetland mitigation. Pond 3 has already been reclaimed. During reclamation, Pond 1 will store Brighton Ditch water for the west side of the site. Such ditch water must be decreed for storage purposes or released within 72 hours of storage. Reclamation will also include revegetation.

***Response**: See response to Comment #3. Water under this amendment will be managed in accordance with Holcim's SWSP and final Augmentation Plan.*

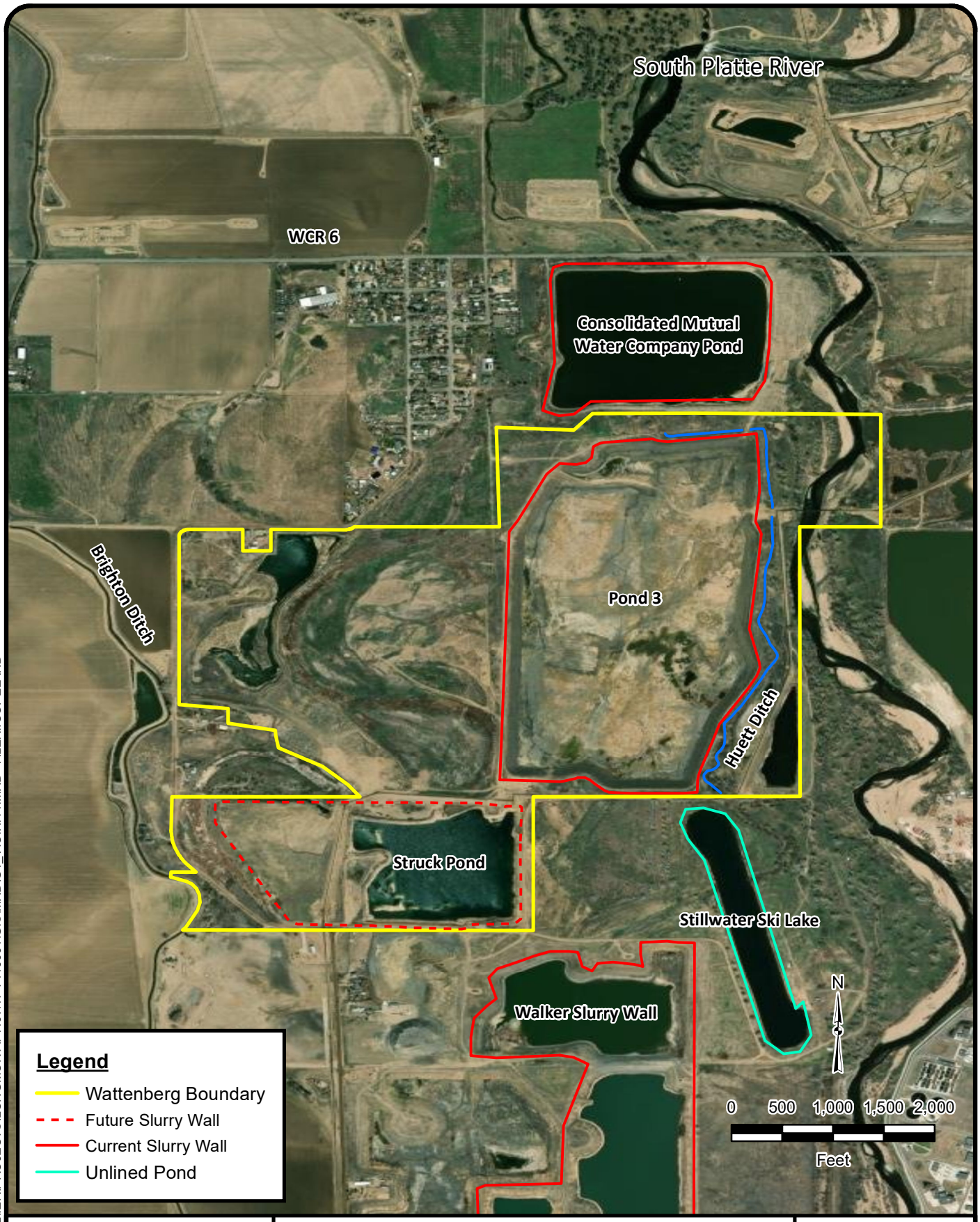
Comment #5: Concerning the wetland mitigation changed areas, there is no statutory requirement for the Applicant to obtain input from the SEO. However, the Applicant should consider if their changed areas could result in an order from the State or Division Engineers due to injury to vested water rights. The types of orders that may be relevant to stream and/or wetland mitigation or restoration projects include:

1) discontinue a diversion that is causing material injury (e.g. any water diverted for vegetation must be decreed for irrigation use and be diverted in priority);
2) release any water that has been illegally or improperly stored;
3) clear streams of unnecessary dams and obstructions that restrict or impede the flow of water (refer to sections 37-92-501 and 502, Colorado Revised Statutes, for information about DWR's authority to administer water and issue orders).

***Response**: Holcim will consider DWR's comment and Holcim plans to take steps to prevent injury to vested water rights as a result of wetland mitigation. There will be no stream restoration projects that would fall within the types of orders noted by DWR in this comment.*

Comment #6: Additional information about DWR's position on restoration/mitigation projects is available on our website at: dwr.colorado.gov/services/water-administration/pond-management-restoration-projects.

***Response**: Comment noted.*



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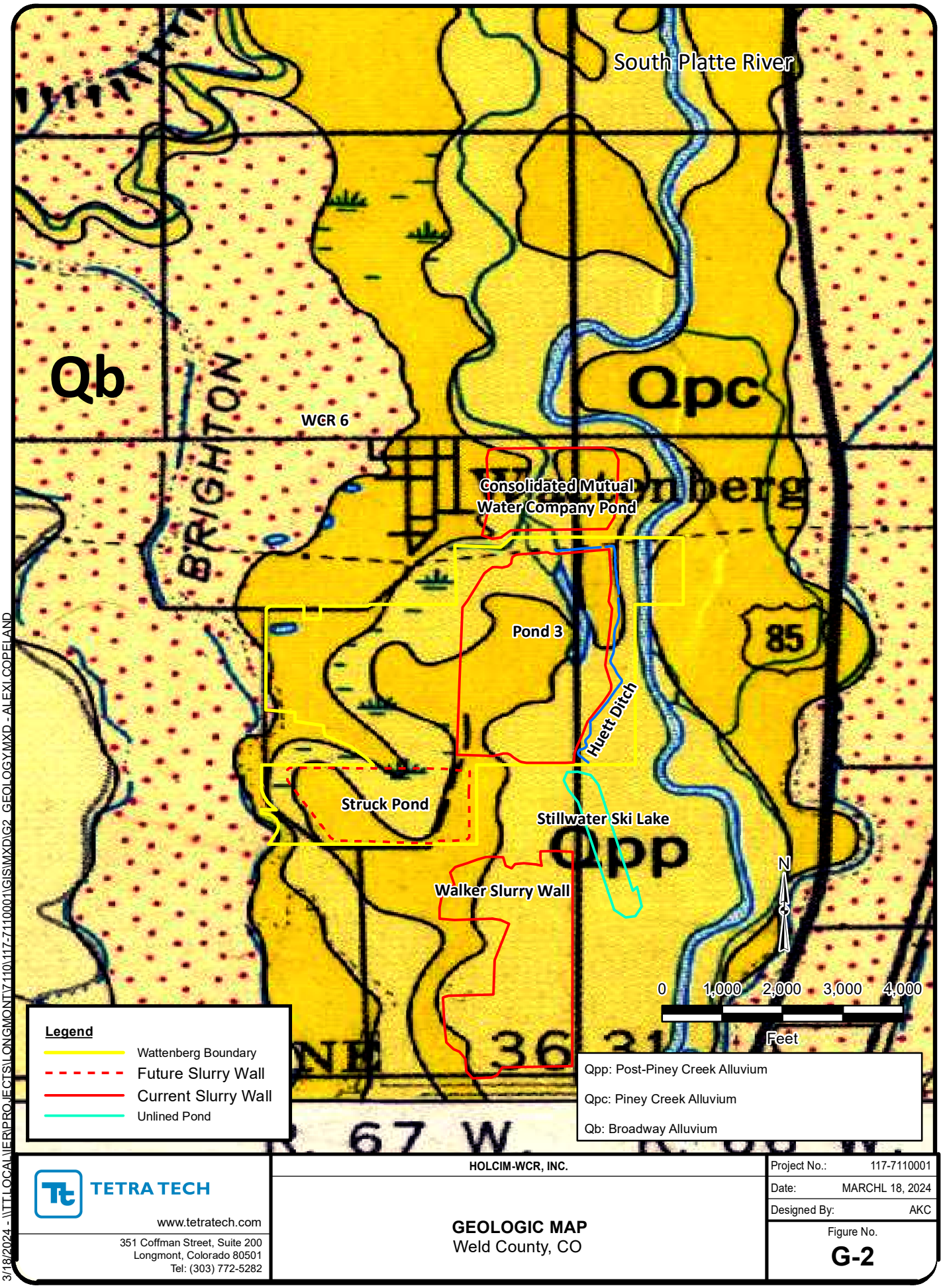
HOLCIM-WCR, INC.

WATTENBERG LAKES VICINITY MAP
Weld County, CO

Project No.:	117-7110001
Date:	MARCH 18, 2024
Designed By:	AKC

Figure No.
G-1



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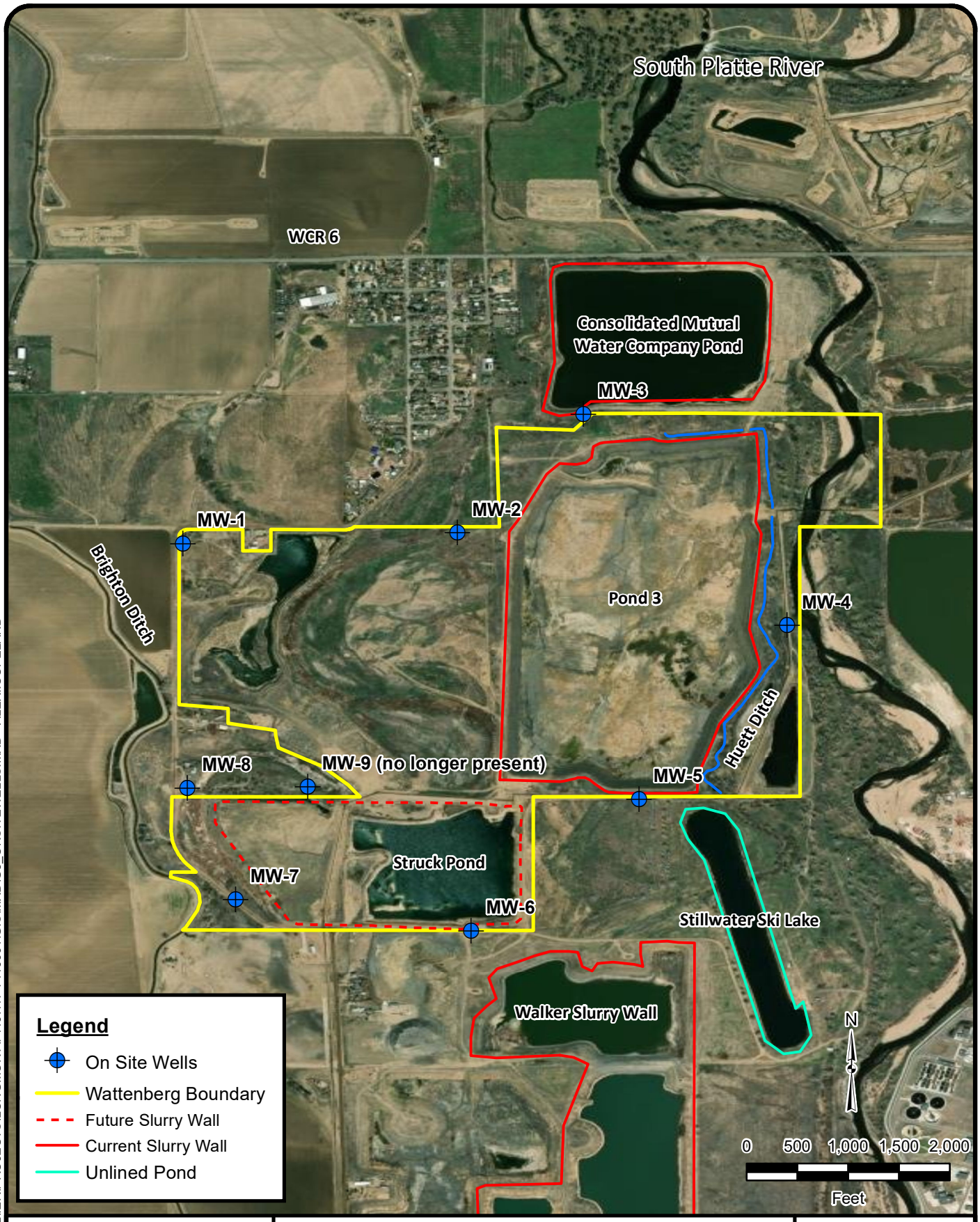
HOLCIM-WCR, INC.

GEOLOGIC MAP
Weld County, CO

Project No.:	117-7110001
Date:	MARCHL 18, 2024
Designed By:	AKC

Figure No.
G-2



3/18/2024 - \\TT.LOCAL\IER\PROJECTS\LONGMONT\7110\117-7110001\GIS\MXD\G3_ONSITEWELLS.MXD - ALEXI.COPELAND

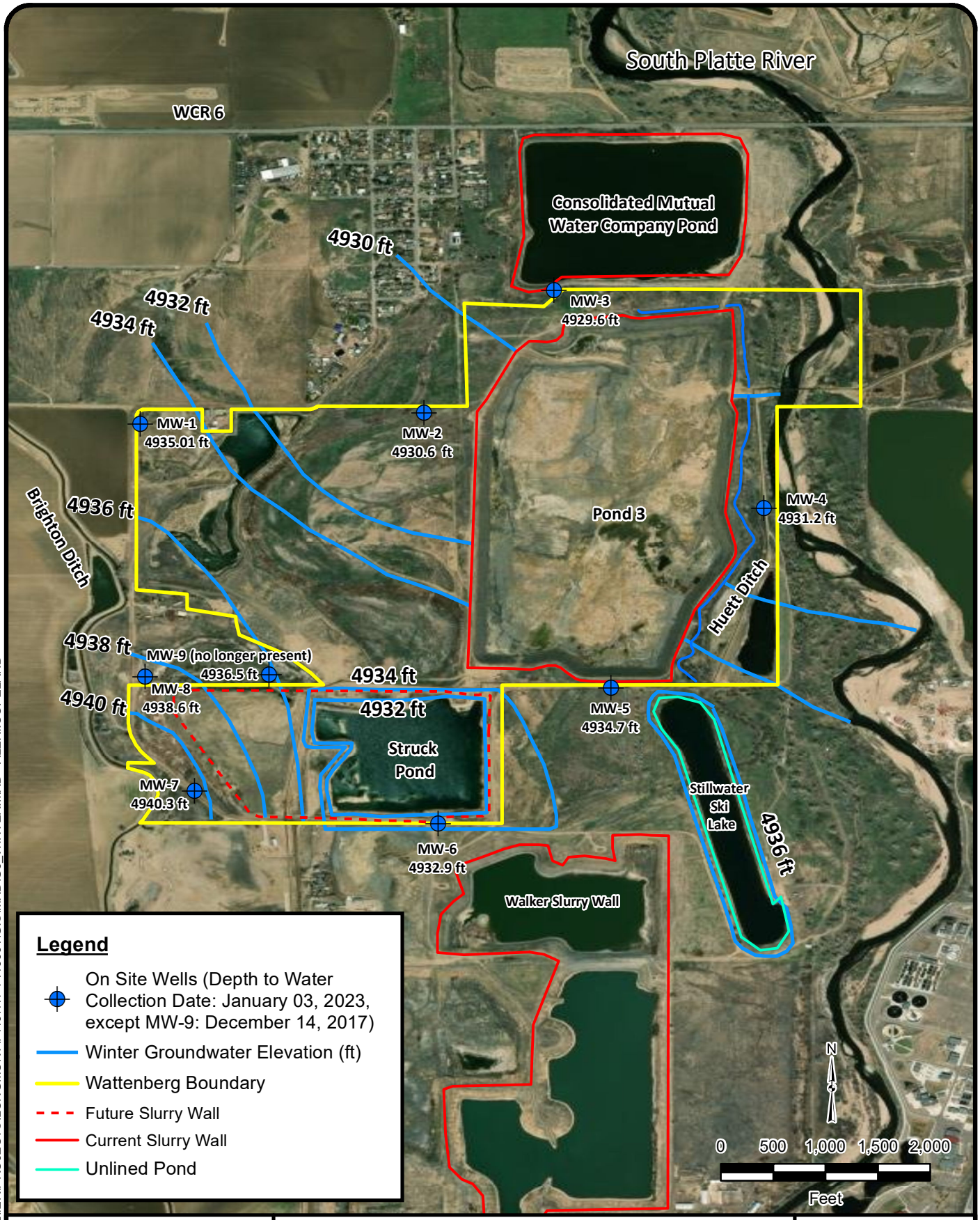
TETRA TECH
www.tetratech.com
351 Coffman Street, Suite 200
Longmont, Colorado 80501
Tel: (303) 772-5282

HOLCIM-WCR, INC.

ON SITE MONITORING WELLS
Weld County, CO

Project No.:	117-7110001
Date:	MARCH 18, 2024
Designed By:	AKC

Figure No.
G-3



3/18/2024 - \\TT.LOCAL\IER\PROJECTS\LONGMONT\7110\117-7110001\GIS\MXD\G6_WINTER.MXD - ALEXI.COPELAND

TETRA TECH
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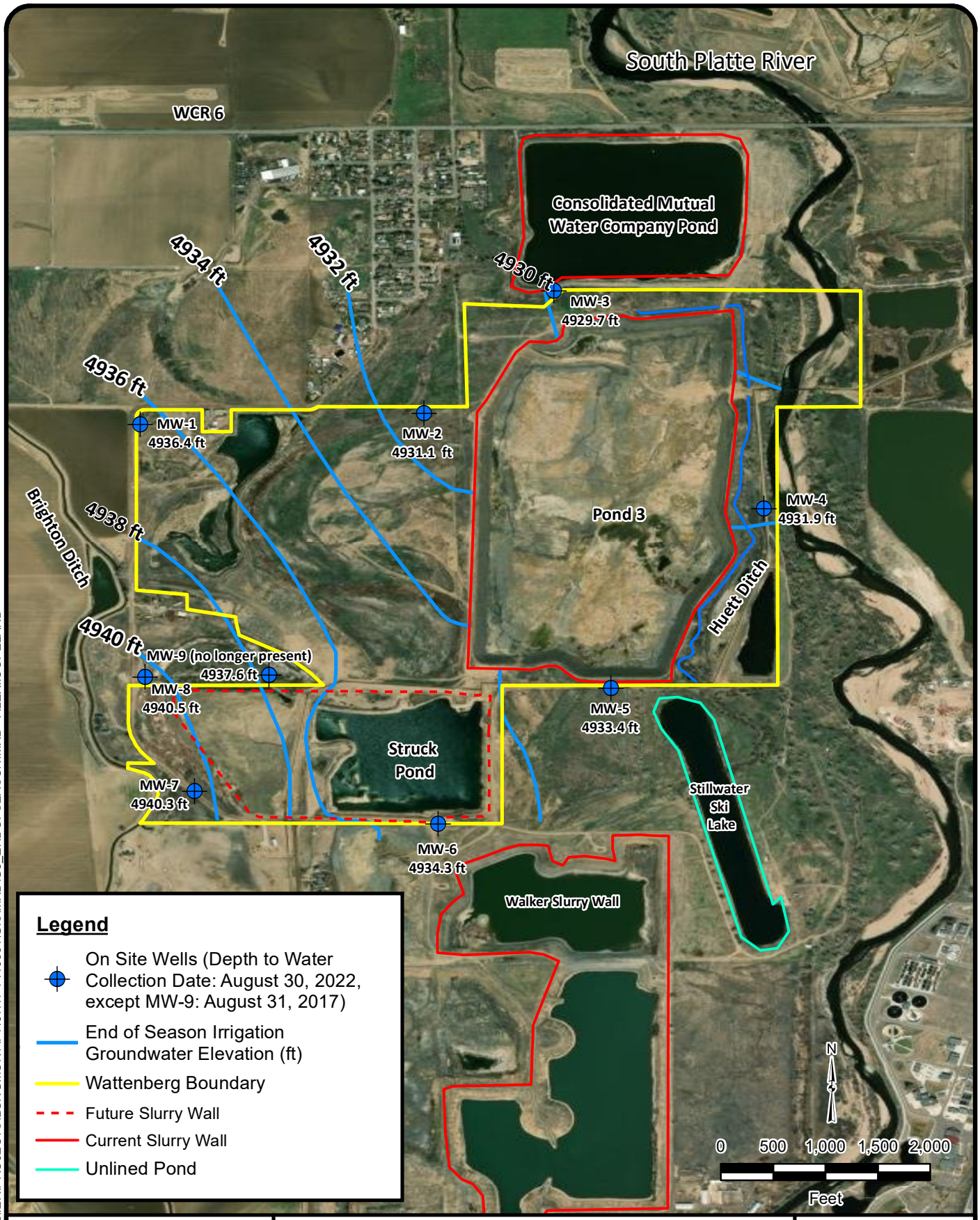
Longmont, Colorado 80501
Tel: (303) 772-5282

HOLCIM-WCR, INC.

WINTER GROUNDWATER ELEVATION
REPRESENTATIVE OF NOVEMBER THROUGH MARCH CONDITIONS
Weld County, CO

Project No.:	117-7110001
Date:	MARCH 18, 2024
Designed By:	SRG/AKC

Figure No.
G-4



3/18/2024 - \\TT.LOCAL\IER\PROJECTS\LONGMONT\7110\117-7110001\GIS\MXD\G5_ENDOFSEASON.MXD - ALEXI.COPELAND

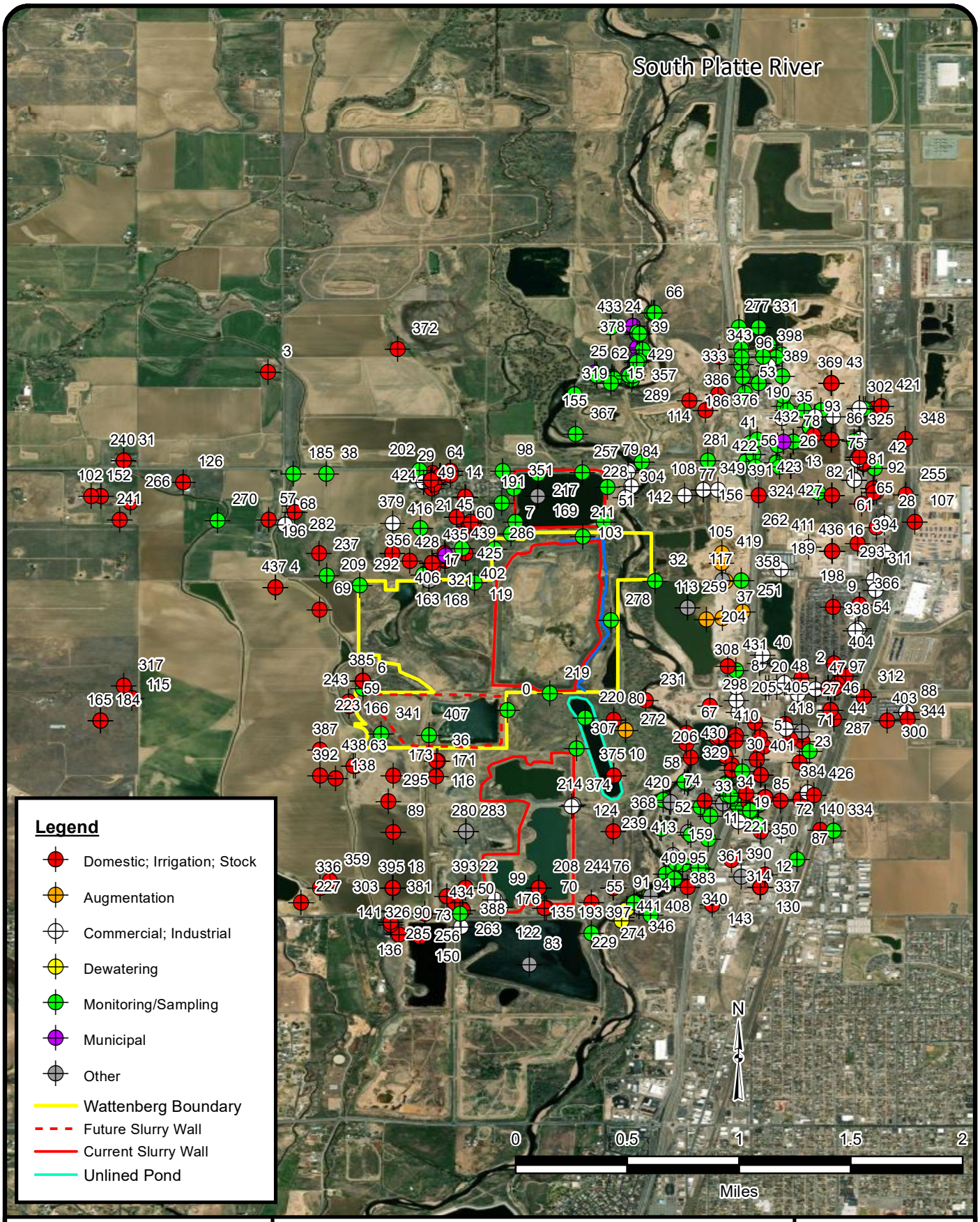
TETRA TECH
www.tetratech.com
351 Coffman Street, Suite 200
Longmont, Colorado 80501
Tel: (303) 772-5282

HOLCIM-WCR, INC.

END OF IRRIGATION SEASON GROUNDWATER ELEVATION REPRESENTATIVE OF JULY THROUGH SEPTEMBER CONDITIONS
Weld County, CO

Project No.:	117-7110001
Date:	MARCH 18, 2024
Designed By:	SRG/AKC

Figure No.
G-5



3/18/2024 - \\TT.LOCAL\IER\PROJECTS\LONGMONT\7110\117-7110001\GIS\MXD\G4OFFSITEWELLS.MXD - ALEXI.COPELAND

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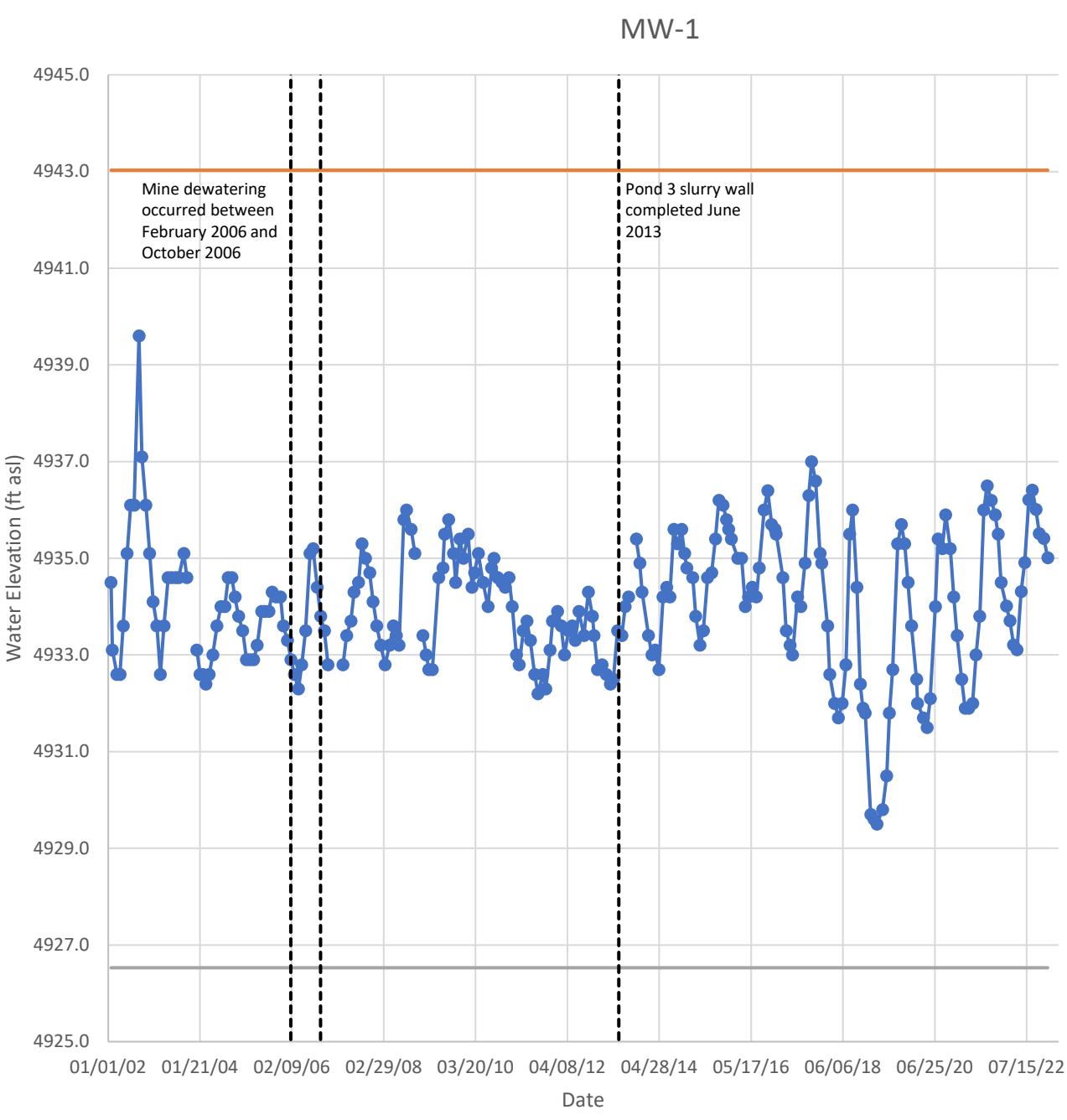
www.tetratech.com
351 Coffman Street, Suite 200
Longmont, Colorado 80501
Tel: (303) 772-5282

HOLCIM-WCR, INC.

REGISTERED WELLS WITHIN 1 MILE
Weld County, CO

Project No.:	117-7110001
Date:	MARCH 18, 2024
Designed By:	AKC

Figure No.
G-6



GW Elev. (ft)

Ground Elevation

Bedrock Elevation

TITLE: **Water Level Elevation at Monitoring Well MW-1 HOLCIM-WCR, INC.**

LOCATION: **Wattenberg Lakes Mine, Weld County, Colorado**

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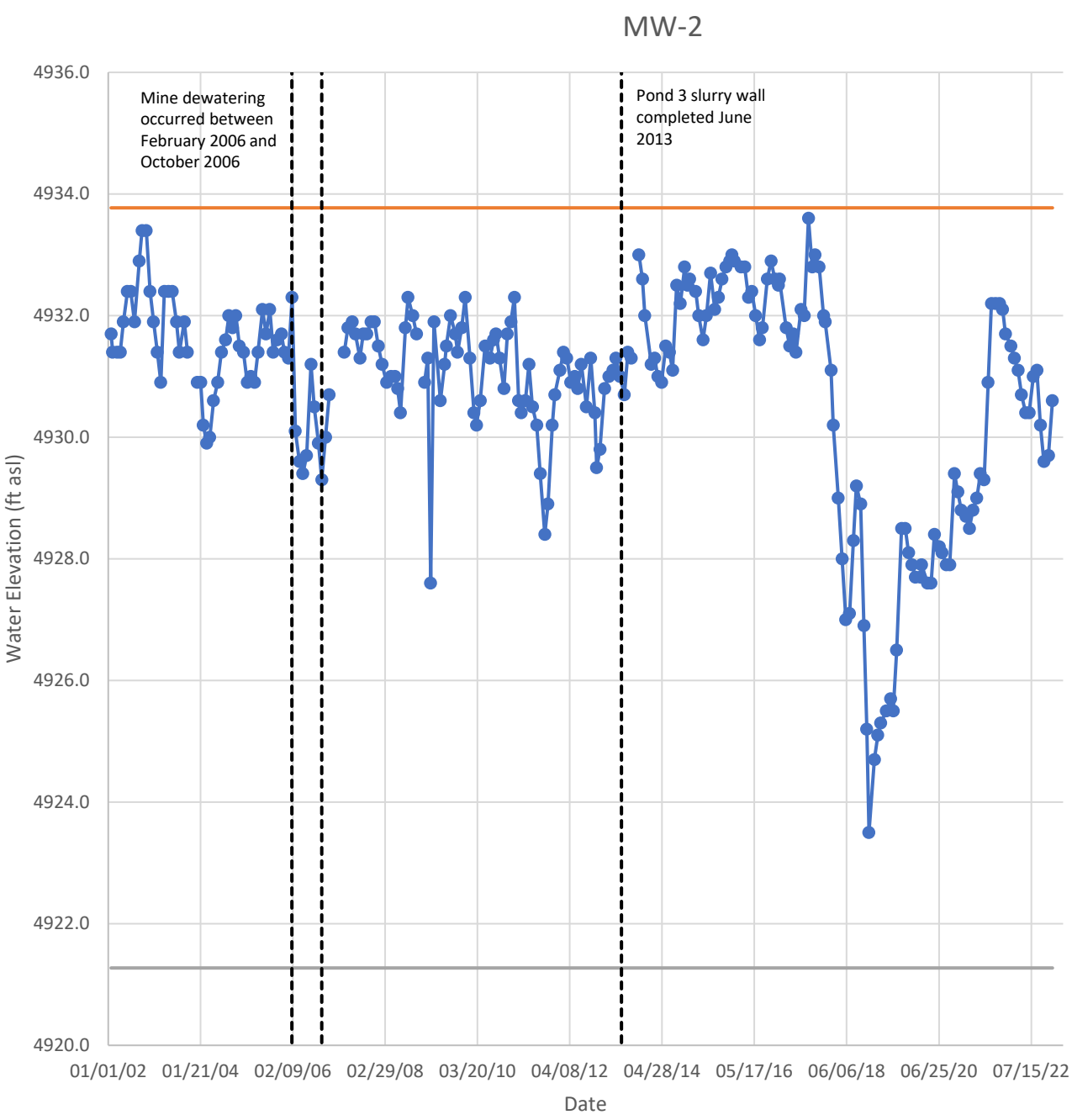
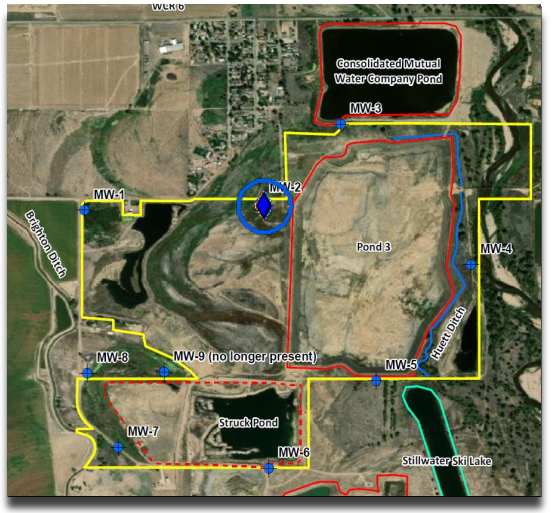
PROJECT #	117-7110001
DATE	05/02/2023

FIGURE G-7





GW Elev. (ft)

Ground Elevation

Bedrock Elevation

TITLE: **Water Level Elevation at Monitoring Well MW-2**
HOLCIM-WCR, INC.

LOCATION: **Wattenberg Lakes Mine, Weld County, Colorado**

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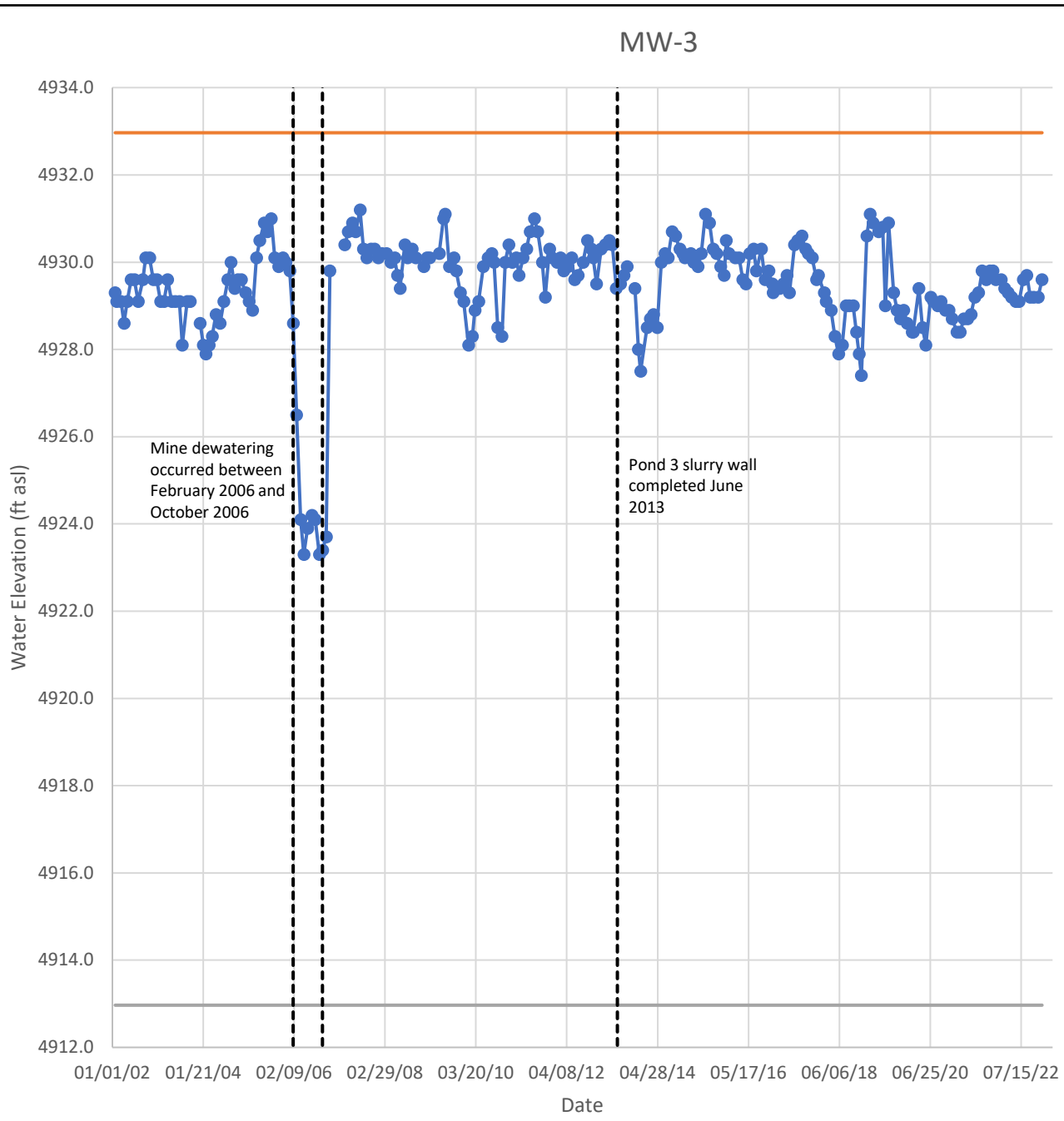
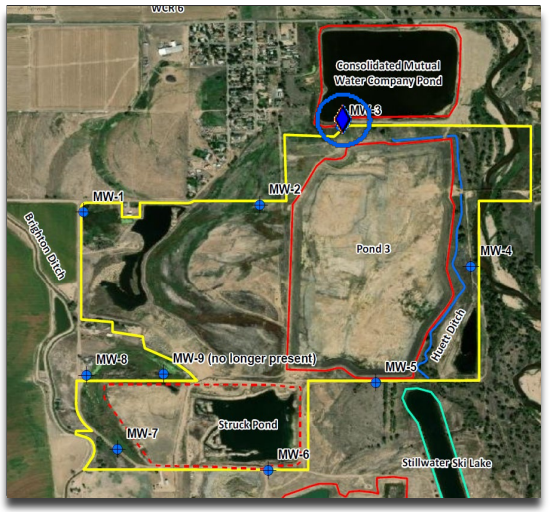
PROJECT #	117-7110001
DATE	05/02/2023

FIGURE G-8





GW Elev. (ft)

Ground Elevation

Bedrock Elevation

TITLE:	**Water Level Elevation at Monitoring Well MW-3 HOLCIM-WCR, INC.**
LOCATION:	**Wattenberg Lakes Mine, Weld County, Colorado**

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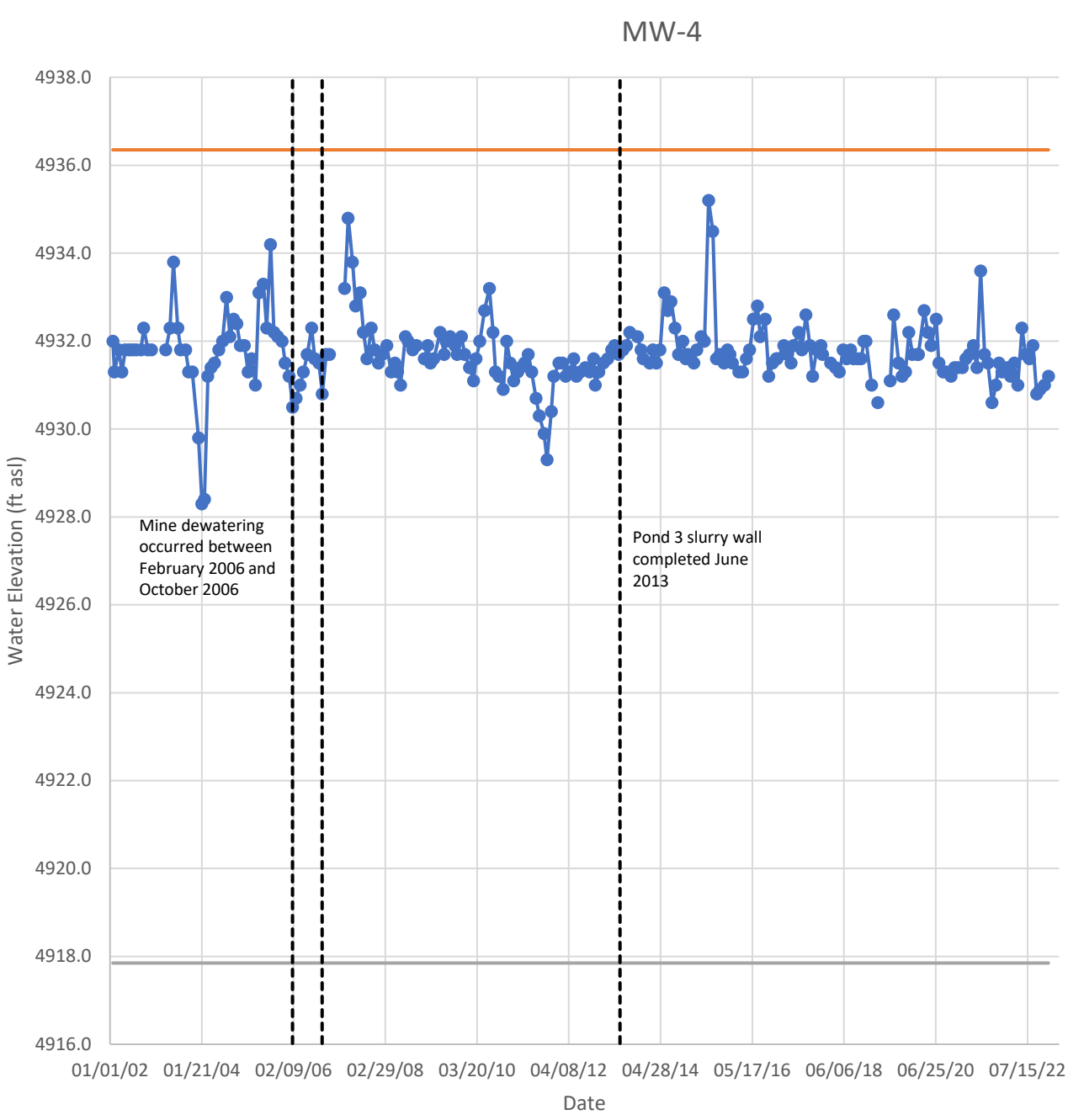
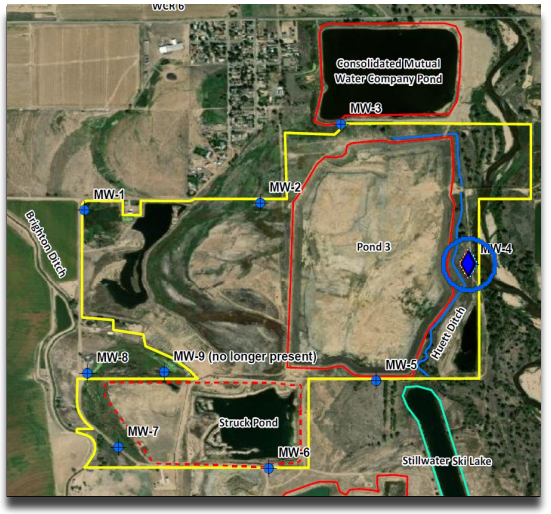
APPROVED		FIGURE
DRAFTED	AKC	G-9
PROJECT #	117-7110001	
DATE	05/02/2023	





GW Elev. (ft)

Ground Elevation

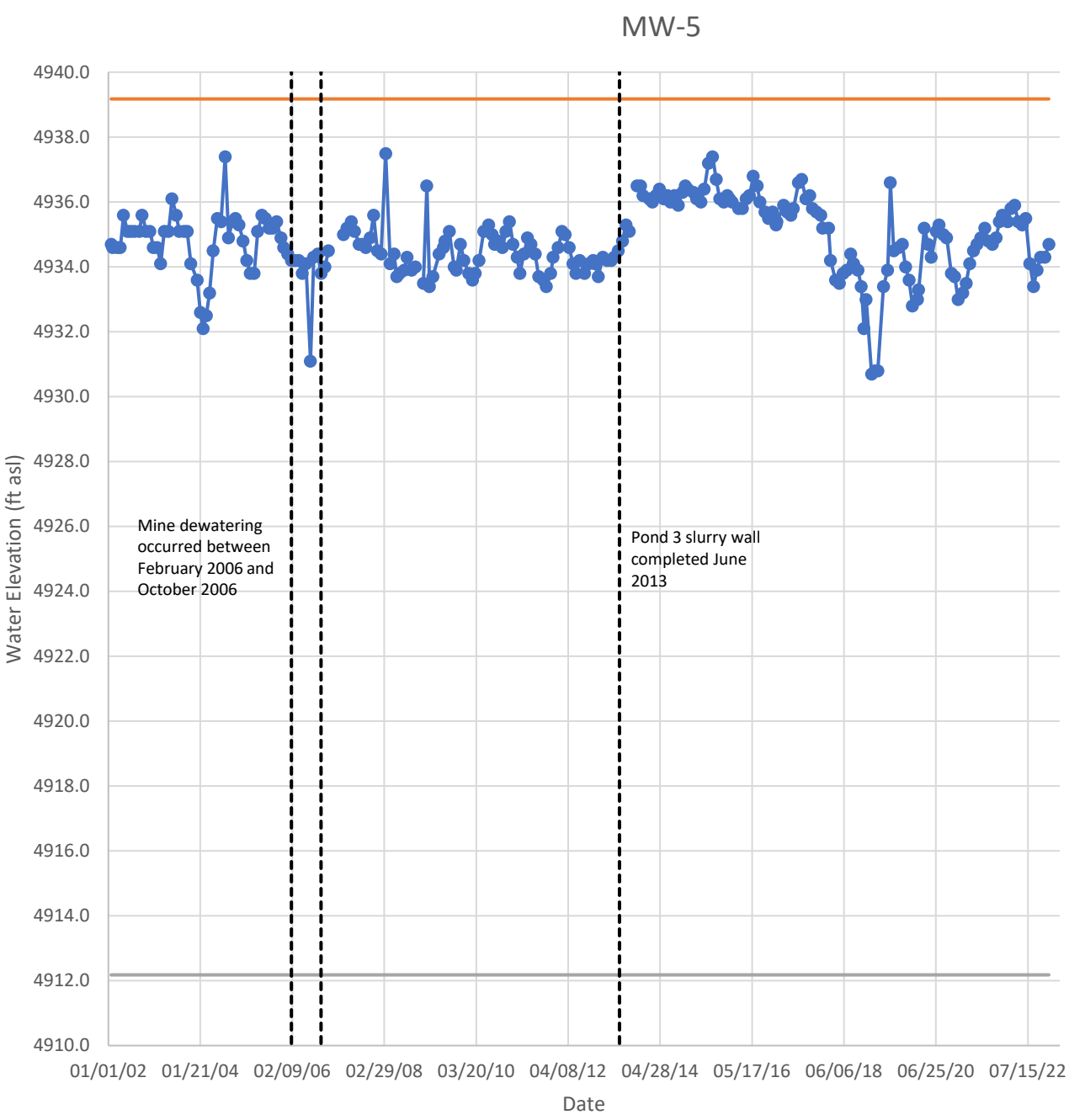
Bedrock Elevation

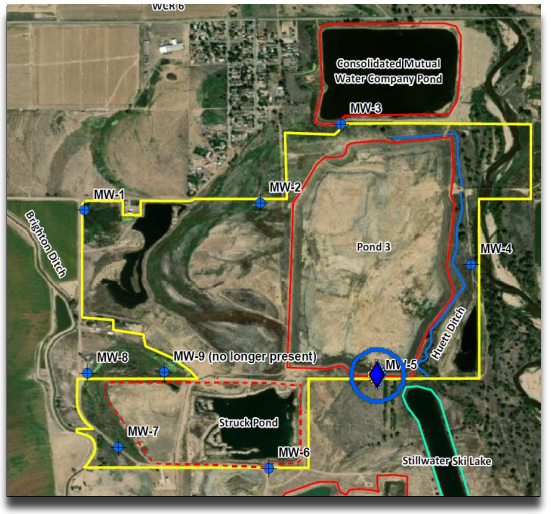
TITLE:	**Water Level Elevation at Monitoring Well MW-4 HOLCIM-WCR, INC.**
LOCATION:	**Wattenberg Lakes Mine, Weld County, Colorado**

TETRA TECH

APPROVED	
DRAFTED	AKC
PROJECT #	117-7110001
DATE	05/02/2023

FIGURE G-10





GW Elev. (ft)

Ground Elevation

Bedrock Elevation

TITLE: **Water Level Elevation at Monitoring Well MW-5**
HOLCIM-WCR, INC.

LOCATION: **Wattenberg Lakes Mine, Weld County, Colorado**

TETRA TECH

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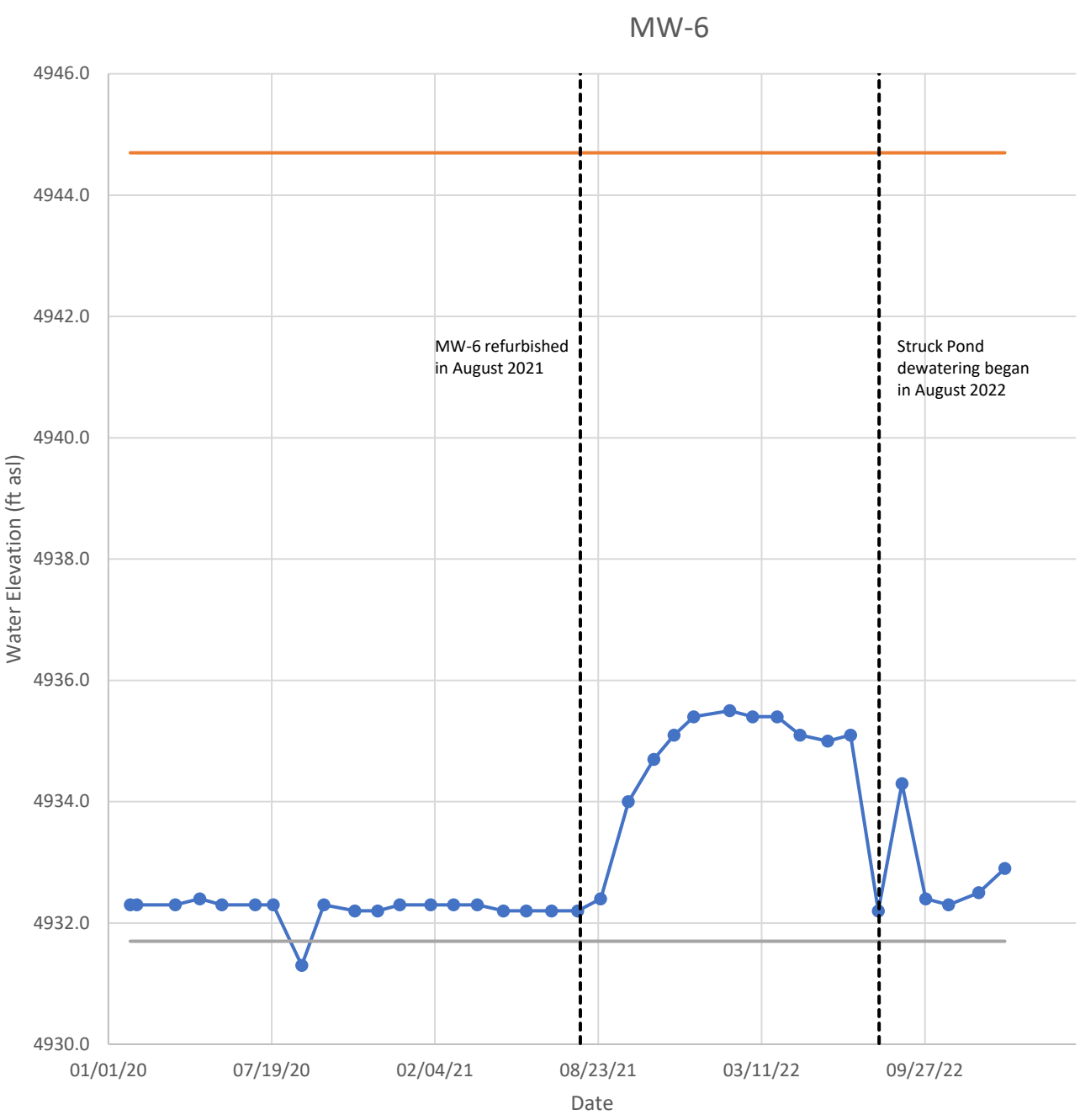
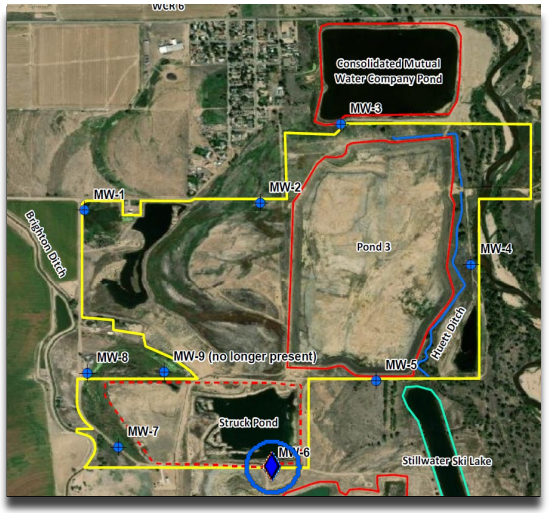
DRAFTED	AKC
PROJECT #	117-7110001
DATE	05/02/2023

FIGURE G-11





GW Elev. (ft)

Ground Elevation

Bedrock Elevation

MW-6 was installed in 2002 but was unavailable for monitoring until 2020.

TITLE: **Water Level Elevation at Monitoring Well MW-6 HOLCIM-WCR, INC.**

LOCATION: **Wattenberg Lakes Mine, Weld County, Colorado**

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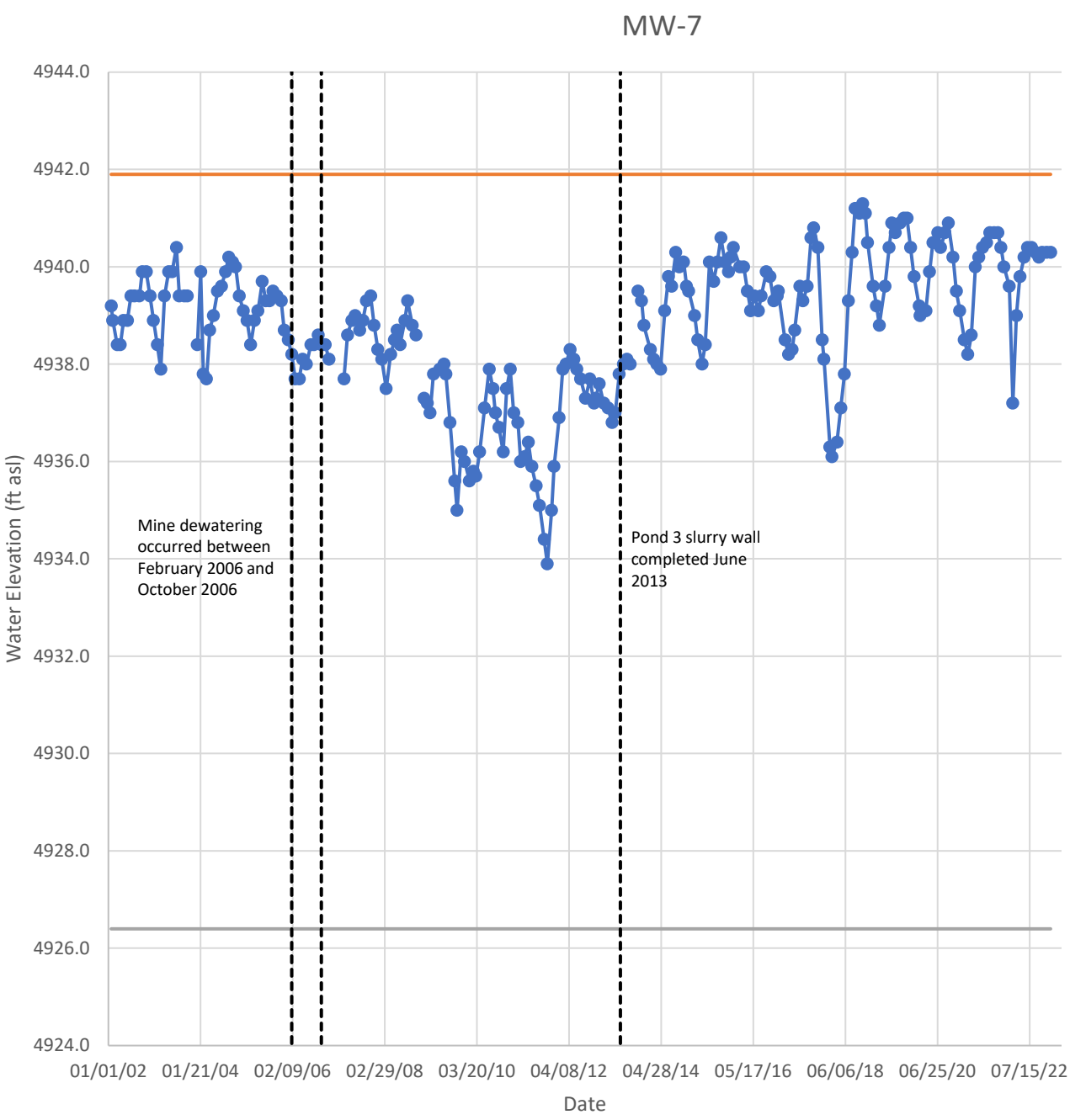
PROJECT #	117-7110001
DATE	05/02/2023

FIGURE G-12



GW Elev. (ft)

Ground Elevation

Bedrock Elevation

TITLE: **Water Level Elevation at Monitoring Well MW-7**
HOLCIM-WCR, INC.

LOCATION: **Wattenberg Lakes Mine, Weld County, Colorado**

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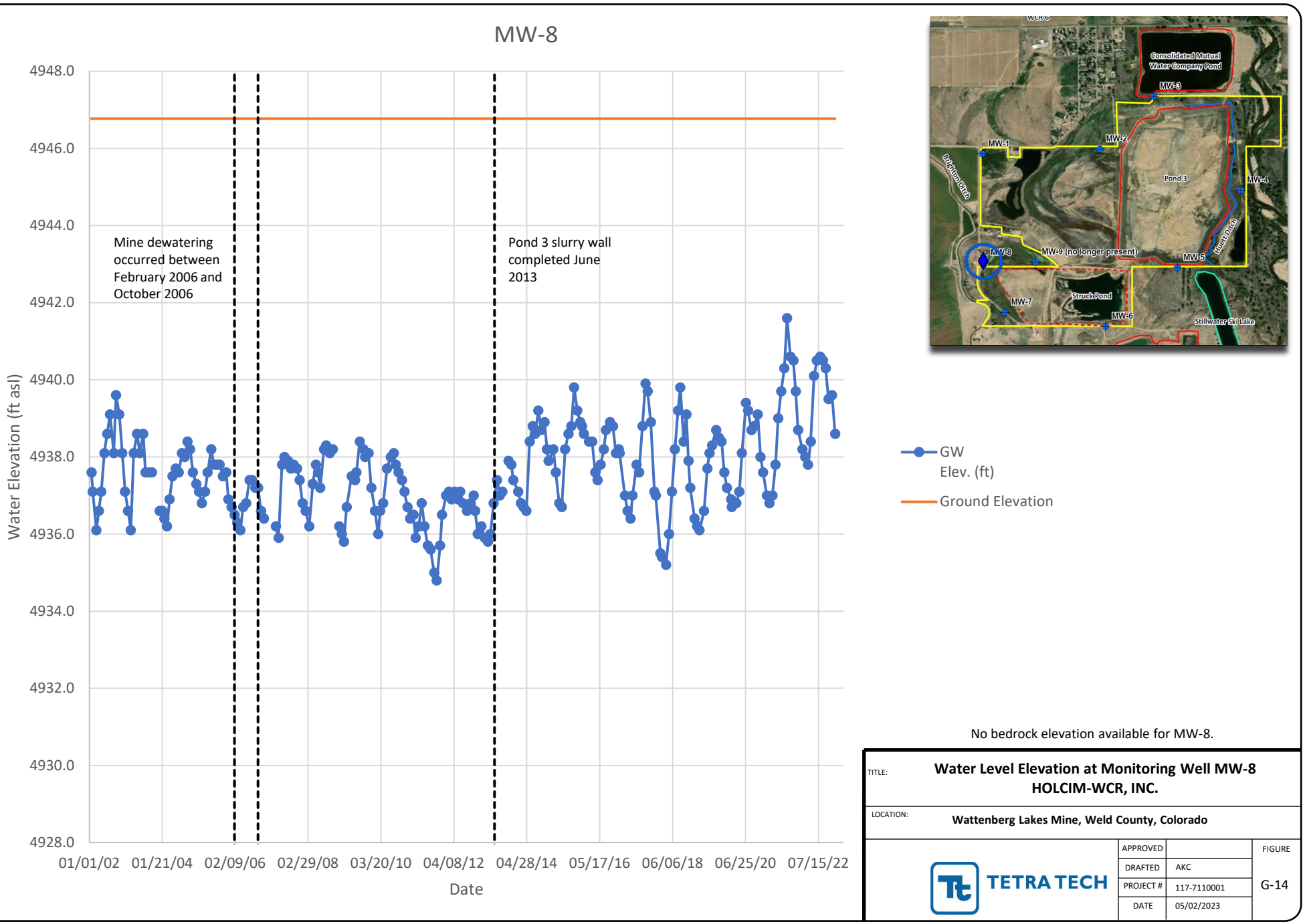
APPROVED	
DRAFTED	AKC
PROJECT #	117-7110001
DATE	05/02/2023

FIGURE G-13



No bedrock elevation available for MW-8.

TITLE:	**Water Level Elevation at Monitoring Well MW-8 HOLCIM-WCR, INC.**
LOCATION:	**Wattenberg Lakes Mine, Weld County, Colorado**

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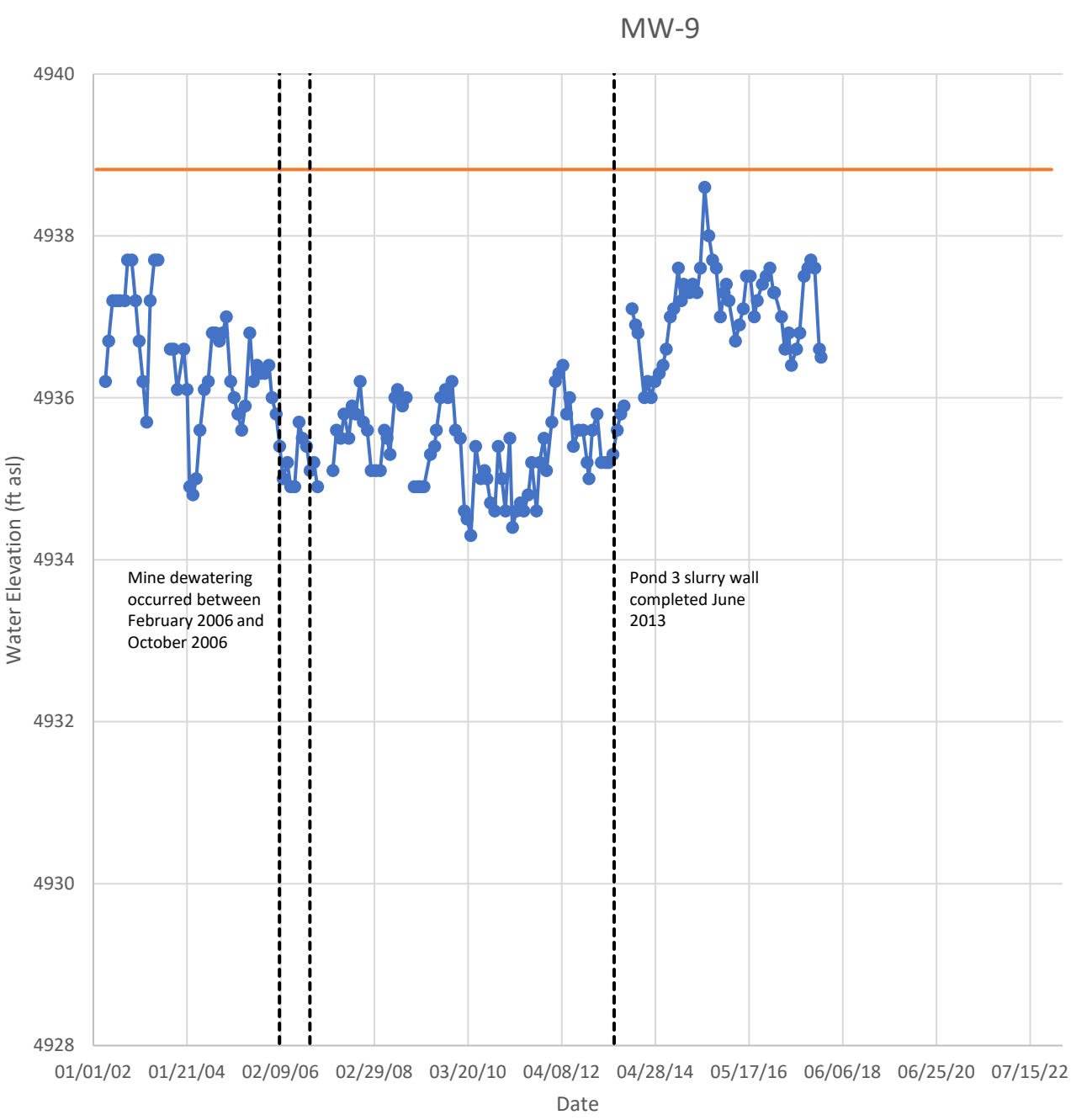
APPROVED		FIGURE
DRAFTED	AKC	G-14
PROJECT #	117-7110001	
DATE	05/02/2023	



GW Elev. (ft)

Ground Elevation

No bedrock elevation available for MW-9.
MW-9 lost in January 2018 due to unknown causes.

TITLE:	**Water Level Elevation at Monitoring Well MW-9 HOLCIM-WCR, INC.**
LOCATION:	**Wattenberg Lakes Mine, Weld County, Colorado**

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PROJECT #	117-7110001
DATE	05/02/2023

FIGURE G-15