

**Feasibility of the Purchase  
of  
Storage in Guanella Reservoir**

**Sponsored by the  
Town of Empire, Colorado  
In conjunction with the  
Colorado Water Conservation Board**

**March 2019**

**James R. Ford, P.E.  
Ford Research Group  
1723 Deweese Street  
Fort Collins, CO  
(303) 895-7738**

**FEASIBILITY STUDY APPROVAL**

Pursuant to Colorado Revised Statutes 37-60-121 & 122, and in accordance with policies adopted by the Board, the CWCB staff has determined this Feasibility Study meets all applicable requirements for approval.

  
Signed \_\_\_\_\_ Date 4/29/2019

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# **Town of Empire Feasibility Study for Storage in Guanella Reservoir**

## **Background**

The purpose of this Feasibility Study is to illustrate that the Town of Empire's purchase of raw water storage in an existing reservoir upstream of the Town of Empire is a practicable endeavor. The primary water supply for Empire is an 1863 direct flow water right on Mad Creek, a tributary to West Clear Creek and from an alluvial well in the West Clear Creek valley at the west end of town.

Empire also has a guaranteed yearly delivery of water out of Guanella Reservoir through the Water Delivery and Storage Agreement dated November 17, 2003 with the City of Golden (Golden Agreement).

Currently, however, Empire does not have a raw water reservoir for storing water in preparation of drought or for future growth. Because Empire does not own its own storage bucket, it cannot store water which they are legally entitled.

The City of Golden constructed Guanella Reservoir in 2003 just upstream from the Town. During construction of the reservoir, negotiations between Empire and Golden yielded an agreement that allowed Empire the delivery of up to 6.3-acre feet of water per year from Guanella Reservoir. In addition to the yearly delivery, Empire has the option to purchase or lease 10-acre feet of perpetual storage in the reservoir. Per the Golden Agreement, "Empire may exercise the Storage Option upon written notice given to Golden during the Option Term". The Agreement further states that the "closing on the Storage Option shall occur within 30 days of Golden receiving written notice that Empire is exercising the Storage Option". The term of the purchase/lease option of the Golden Agreement expires in 2033. The Golden Agreement is attached in Appendix A.



Figure 1: Location Map of Empire

## **Study Area Descriptions**

Guanella Reservoir is located up-stream and west of Empire in Section 29, Township 3S, Range 74W, of the 6<sup>th</sup> Prime Meridian (see Figure 1). The reservoir is off channel, adjacent to the West Fork of Clear Creek. Guanella Reservoir is filled via a diversion channel along the south bank of the Creek.

The Town of Empire – Project Sponsor

The Town of Empire is located in Clear Creek County on the West Fork of Clear Creek. Empire was incorporated April 12, 1882 as a Statutory Town.

The Town of Empire lies within the Union Mining District which was organized in the spring of 1860 by several prospectors from the area just west of Idaho Springs. In August 1860, a small amount of gold was found on Eureka Mountain. The gold discovery made the settlement more permanent. The town was first named Empire City, and by September 1860, citizen committees drafted laws, defined boundaries, and named mountains and streams. An influx of prospectors especially from Central City added to the population of the new camp.

A notable landmark in Empire, the Peck House, was built in 1860 by Frank Peck and his wife Emma Hull Peck. Other landmarks in Empire are the Guanella Ranch and Glen Arbor Lodge at the west end of Empire, which are still owned by descendants of early settlers.

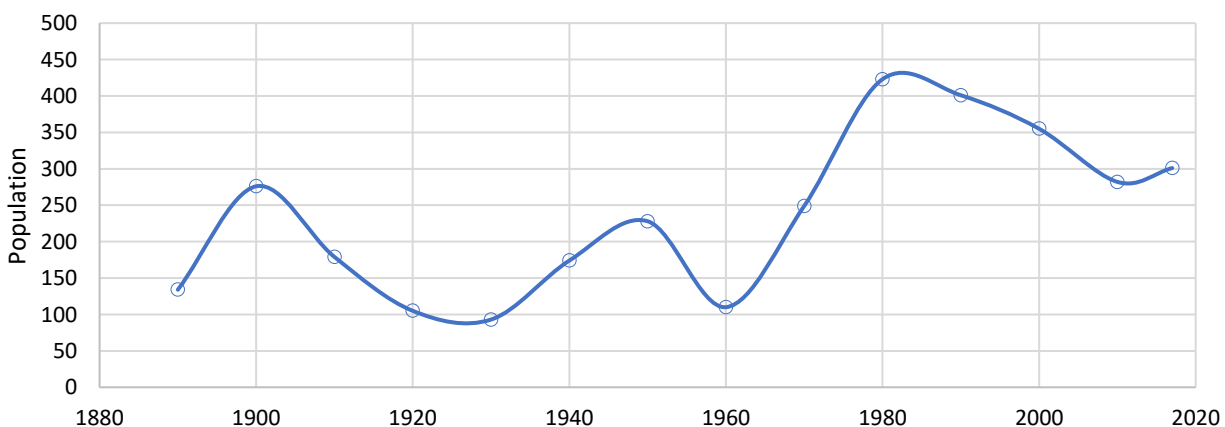
Many people know Empire as the sleepy town just off Interstate 70 on their way to Berthoud Pass and the Fraser Valley. Colorado State Highway 40 transects the town that has one traffic light, one gas station, a few restaurants, and the original Hard Rock Café (Figure 2), which was started in 1934 as a café and dormitory for miners. The Town Hall is located upstairs of the Hard Rock Café.



*Figure 2: Hard Rock Café*

Population

The 2017 population of Empire was 301 people. The Town's population has grown and declined over the years in response to the mining economy. The population's peaks and valleys are shown in Figure 3. In 1890, the population of Empire was 134 people and grew to 276 by 1900. The population dropped to 93 people in 1930 but increased to 228 by 1950. The 1960 population fell to 110 people and in 1980 the population finally peaked at 423 people. The current population is about 25% of its 1980 peak.



*Figure 3: Historic Population of Empire*

### Water Usage

Empire has 282 water taps which serve the municipal domestic, commercial, and industrial customers within the Town's boundaries. In 2017 (November 2016 – October 2017), Empire diverted 50.64-acre feet from Mad Creek and Well No. 1. Empire's 2018 diversions totaled 58-acre feet, mostly from the Mad Creek diversion. Based on a current population of 301 people, Empire's per capita demand in 2017 was 165 gallons per day per person.

### Existing Facilities

Empire's primary water supply is from the Mad Creek. The diversion consists of a head gate and screen, and an 8-inch pipeline that flows to the water treatment plant. The water treatment plant is a slow sand filter that was designed and constructed in 1983 as part of a research project sponsored by the American Water Works Association Research Foundation. The treatment plant's design capacity is 250,000 gallons per day. The disinfection system was upgraded in 2017 to ultra-violet irradiation, allowing Empire to lower the distribution system chlorine dose. A bag filter system was included as part of the disinfection upgrades.

In 1992, Empire drilled Well No.1 into the West Fork Clear Creek alluvium (Permit #25963-F). The water from the well is chlorinated at the well site before it is fed into the distribution system.

The distribution system is a looped network through Town made up of 6- and 8-inch ductile iron pipe. Potable water storage is provided by two above ground insulated steel tanks with a total capacity of 270,000 gallons. The tanks are located above North Empire Road.

Empire's wastewater treatment plant was constructed in 1983. It is an extended aeration, activated sludge process with a permitted capacity of 0.06 million gallons per day. The waste treatment plant was upgraded in 1996.

### Water Rights

The Town of Empire's decreed Water Right (W/R) is No. 14 on Clear Creek. The water right is a direct diversion of 1.83 cubic feet per second (cfs) off of Mad Creek. The diversion is located in the SW ¼ of Section 33, Township 3S, Range 74W of the 6<sup>th</sup> PM. The W/R has a priority date of December 31, 1863. The W/R was ruled in Civil Action 41340 by the District Court of the City and County of Denver on January 7, 1907. The administration number of Empire's W/R is 5113 and its WDID is 07005670

Empire's water rights are decreed for municipal uses, including domestic and household, sprinkling of streets and alleys, fire protection, lawn and garden irrigation, industrial and commercial uses, as well as other incidental uses needed for the community. The Empire Town Water Right is attached in Appendix B.

In 1983, the Town of Empire obtained a Plan for Augmentation (Case No. 82CW227). The augmentation plan supplements the Town's water supply through diversion of ground water from Well No. 1 to replace Empire's municipal depletions. The required augmentation water that is delivered to West Fork of Clear Creek is developed non-tributary water that is produced at the Henderson Mine (Amax). Empire has a 50-year lease with Amax for the augmentation water with the first right to renew the lease. The Plan for Augmentation is attached as Appendix C and the Lease Agreement with Amax is attached as Appendix D.

In 2004, Empire amended its augmentation plan to allow 16.3 AF of water to be stored in Guanella Reservoir and to be used for augmentation (Case 2004CW184). The 6.3-acre feet is the delivered water and the 10-acre feet is the proposed storage purchase pursuant to the Golden Agreement. In conjunction with the Amended Augmentation Plan, the lease with Amax was also amended. The amended Plan for Augmentation is attached in Appendix E and the Amended Amax Lease Agreement is attached in Appendix F.

The population numbers used in the 1983 Augmentation Plan was 450 people with a domestic demand of 56.8-acre feet per year. The irrigation was estimated to be 5.3 acres with an annual demand of 9.70-acre feet. The system loss would be 34.8-acre feet per year, plus a sewerage treatment loss of 0.24-acre feet. The yearly demand was 102-acre feet. The calculated domestic use would be 112 gallons per day per person.

The decree also forecasted the future population would grow to 1000 people and consume 225 AF/year. Empire has not yet reached the future demand of the Augmentation Plans but it must continue to plan for its future growth.

#### Future Growth Plans:

Empire has the potential for an active commercial area along State Highway 40. CDOT's plans to upgrade the Empire Junction (I70 and CO40) will encourage interest in development. Empire has been approached in the past regarding hotel development. The Town encourages residential growth and an RV Park is under consideration. Recently, a developer purchased a 26-acre site which is planned for higher density town homes at the east end of town.

A secure water system is imperative for Empire to grow and take advantage higher traffic as the population increases and more people escape to the mountains. The purchase of 10-acre feet of raw water storage in Guanella Reservoir will help promote Empire's plans for a sustainable water system.

#### Analysis of Alternatives

There are two raw water storage alternatives considered for Empire: the Ball Placer Reservoir and Guanella Reservoir.

Guanella Reservoir is an existing reservoir with a decreed storage right of 2600-acre feet and a direct flow diversion right of 60 cfs from West Fork Clear Creek.

During a site visit with Golden personnel, it was proposed that in the future, the Town of Empire might construct a pump station to directly feed water from the reservoir to its water treatment plant. The distance to the treatment plant is approximately 2,250 feet and the elevation difference is approximately 400 feet. This alternative gives Empire an alternate water supply for its water treatment plant.

The Ball Placer Reservoir is a reservoir site south of Empire adjacent to Bard Creek (see Figure 4). Empire acquired the storage water right from Clear Creek County (County) and the Clear Creek Economic Development Corporation (Economic Development Corp) in 2013 by way of a Special Warranty Deed. Ball Placer Reservoir was one of five reservoirs that the County and Economic Development Corp filed for in the Clear Creek and Bear Creek basins in 2001 and decreed in 2006.



The County and Economic Development Corp sold the reservoir and the diversion pipeline to Empire in June 2013.

The Ball Placer is an off-channel reservoir with a decreed volume of 110-Acre Feet. The dam is located in the NE ¼, NW ¼, Section 28, T3S, R74W, 6<sup>th</sup> P.M. The reservoir will be filled through a pipeline whose point of diversion is located on Bard Creek (NE ¼, SW ¼, Section 33, T3S, R74W, 6<sup>th</sup> P.M). The diversion has a conditional right for 5 cubic feet per second with an appropriation date of December 27, 2001.

WRC Engineering prepared a Draft Feasibility for the Ball Placer Reservoir in 2003 for the Economic Development Corporation. One of the conclusions of the WRC report is that the site is “generally suitable for construction of a water storage reservoir”. The WRC Draft Feasibility Study is attached in Appendix G



Figure 4: Ball Placer Reservoir

### Selected Alternative

As described above, the Guanella Reservoir is an existing reservoir located upstream of Empire. The Ball Placer Reservoir is a future reservoir which is located downstream of Empire. Acquiring storage space in Guanella Reservoir prior to constructing the Ball Placer Reservoir is desirable because Guanella: (1) is an existing facility; (2) is nearer to the Town’s water treatment plant; and (3) will entail lower energy expenditures; as Guanella is located above the Town. Both storage buckets have junior water rights: the Ball Placer water right is 2001 and The Guanella Reservoir water right is 2000.

This is a very straight forward project, the purchase of storage in an existing reservoir upstream of the Town of Empire. There are no environmental or institutional impacts.

### Revenue

The revenue sources for Empire’s water fund balance are through the water usage rates for customers, tap fees, and system development fees to both commercial and residential customers

within the Town's boundaries. The town has a water activity enterprise which was established by Ordinance 95-213 in 1995 (Appendix H). The water enterprise allows Empire to establish water rates and to take on debt directly instead of burdening the general fund with maintaining the water system. Empire may also explore leasing unused portions of the storage space until the space is required for the Town's direct needs.

The Town's current water and wastewater fees are regulated by Ordinance 226 of the Town Code. The current fees were adjusted in 2013 by Resolution 2012-06 (Appendix H) as shown in Table 1.

**TABLE 1: RESIDENTIAL AND COMMERCIAL MONTHLY FEES**

Type of Facility	Water Fee	Wastewater Fee	Total Fee
Single Family Residences, trailers, apartments, and cabins with kitchens	\$43	\$43	\$86
Hotel and motel rooms without kitchens (per room)	\$16	\$15	\$31
Restaurants	\$73	\$72	\$145
Other commercial establishments	\$50	\$50	\$100
Government Buildings	\$31	\$30	\$61
Laundromats (per machine)			\$21
Churches	\$31	\$30	\$61
Residential with a business	\$61.50	\$61.50	\$123

#### Financial Feasibility Analysis

Loan Amount for the perpetual storage in Guanella Reservoir is the Exercise Price as defined in the Golden Agreement [¶2.(b)] calculated as  $\$9,000/\text{acre foot} \times (1.00005479)^n$  where  $n$  = number of days between execution of the Golden Agreement (November 17, 2003) and closing on the Storage Option. For example, if the sale were to close on December 31, 2019, the Exercise Price would be \$124,263.51.

Financial Sources are through the CWCB's Water Project Loan Program. Empire plans to incorporate a special assessment to all its water users for the loan repayment.

The institutional considerations are few and straight forward. The Golden Agreement is already in place and the storage volume to be purchased already exists, the land on which the storage exists is owned by Golden. A minor consideration is that Empire and Golden's monthly storage accounting to the State Engineer's Office will need to be updated to include Empire's Guanella storage account. Other than those few items, there are no other considerations.

The Town of Empire's financial plan includes implementing a revised rate structure to guarantee that Empire's water fund continues to build a reserve and support operations and maintenance of its infrastructure, sustain its water system, as well as repay the CWCB loan. The Town of Empire is committed to maintain its facilities so it can support the growth and future development.

## **Appendix A**

### **Water Delivery and Storage Agreement**

**WATER DELIVERY AND STORAGE AGREEMENT**

This Water Delivery and Storage Agreement ("Agreement") dated this 17<sup>th</sup> day of November, 2003, is between the City of Golden, a Colorado municipal corporation ("Golden"), and the Town of Empire, a Colorado municipal corporation ("Empire").

**RECITALS**

A. Golden is the owner of Golden Reservoir Nos. 1, 2 and 3, located adjacent to the West Fork of Clear Creek in Sections 29 and 30, Township 3 South, Range 74 West of the 6th P.M., as decreed conditional by the District Court in and for Water Division No. 1 (the "Water Court") in Case No. 82CW469, for a total capacity of 2600 acre-feet, with a direct-flow component of 60 cfs and an appropriation date of June 8, 1977, and as augmented by the decrees of the Water Court in Case Nos. 83CW361 and 87CW298 (collectively "Guanella Reservoir").

B. As decreed in Case No. 82CW469, the direct sources of water for Guanella Reservoir are the West Fork of Clear Creek; nontributary, developed water produced from fractures in the rock above and surrounding the Amax, Inc. Henderson Mine (now owned by Phelps Dodge Corporation) in Clear Creek and Grand Counties, Colorado ("Henderson Mine water"); and water available under the Berthoud Canal and Berthoud Tunnel water right. The decreed points of diversion for Guanella Reservoir include the Lindstrom Ditch and First Enlargement, the headgate to which is located on the right (south) bank of the West Fork of Clear Creek, at a point whence the Southeast corner of Section 29, Township 3 South, Range 74 West of the 6th P.M. bears South 66° 20' East a distance of 7900 feet.

C. By virtue of the decrees in Case Nos. 83CW361 and 87CW298, out of priority storage in Guanella Reservoir is further augmented by imported water from the Vidler Tunnel, consumptive use credits from senior Clear Creek agricultural water rights, and other sources.

D. Empire is generally located in Sections 28 and 29, Township 3 South, Range 74 West of the 6th P.M., along the West Fork of Clear Creek, just east and downstream of Guanella Reservoir. Empire's primary source of water is the Empire Town Water Right, Priority No. 14, decreed by the District Court in and for the City and County of Denver for 1.82 cfs for domestic and irrigation uses, the source of which is Mad Creek, tributary to the West Fork of Clear Creek, with an appropriation date of December 31, 1863. In addition, Empire obtains supplemental water through two wells located immediately west of Empire, as augmented by nontributary developed water obtained from the aforementioned Henderson Mine through a Lease Agreement dated March 4, 1983, with Amax, Inc.

E. Empire desires to obtain releases of water from Guanella Reservoir and the right to use a portion of the storage capacity therein to augment out of priority diversions of its Empire Town Water Right.

F. In order to protect its exiting water supply sources, the Empire Board of Trustees adopted Municipal Ordinance No. 216 on August 7, 1996 ("Ordinance No. 216"), which established a Water Supply Protection District (the "District") and a permit system to regulate certain activities within the District. The District encompasses Empire and all water sources tributary thereto for five miles upstream of Empire's wells, including Guanella Reservoir.

G. Section 8 of Ordinance No. 216 ("Section 8") states:

Activity in Progress. The lawful use of any buildings, structures or land existing at the time of the enactment of this Ordinance may be continued even though it does not conform to the requirements of this Ordinance. . . . Any change, expansion, alteration or enlargement of such existing lawful use shall be subject to all requirements of this Ordinance.

II. Golden contends that the current design and proposed operation of Guanella Reservoir constitutes an "activity in progress" under Section 8, and is therefore exempt from regulation under Ordinance No. 216. Moreover, Golden contends that so long as the physical capacity of Guanella Reservoir does not exceed the originally decreed capacity of 2600 acre-feet, any future alterations or expansion of Guanella Reservoir falls within the exemption provided by Section 8.

I. The parties now desire to enter into an Agreement that:

- (1) grants Empire the right to 6.3 acre-feet of annual releases from Guanella Reservoir;
- (2) grants Empire the option to lease or purchase the right to use up to 10 acre-feet of the storage capacity in Guanella Reservoir;
- (3) commemorates Empire's recognition that Guanella Reservoir constitutes an "activity in progress" under Section 8; and that any future change, expansion, enlargement or alteration to the design or operation of Guanella Reservoir will qualify as an "activity in progress" under Section 8, so long as the physical capacity does not exceed 2600 acre-feet; and
- (4) commemorates each party's agreement not to oppose certain water court proceedings that have been, or will be, initiated by the other party to implement the terms of this Agreement.

## AGREEMENT

NOW, THEREFORE, in consideration of the mutual promises and covenants contained herein, and for other good and valuable consideration, the sufficiency of which is hereby acknowledged, the parties agree as follows:

1. Water Deliveries: Empire shall have the perpetual entitlement to the annual release of up to 6.3 acre-feet of water from Guanella Reservoir (the "Water Deliveries"). Any water derived under the Water Deliveries shall be used exclusively by Empire to augment out-of-priority diversions of its Empire Town Water Right necessary for the operation of Empire's water supply system, and may not be sold, leased, transferred, conveyed, or otherwise disposed of to any third party. No water rights or any ownership interest in Guanella Reservoir or the appurtenances thereto, including without limitation the diversion facilities, dam, and outlet works (the "Appurtenant Facilities"), shall be acquired or conveyed as part of the Water Deliveries.

(a) Timing and Amount: The timing and amount of the Water Deliveries shall be as requested by Empire upon 72 hours advance notice to Golden, so long as such a request is consistent with any relevant decrees of the Water Court or orders of the Water Commissioner for Water District No. 7 (the "Water Commissioner"). In addition, the requested rate of release shall not be greater than 1.0 cfs, unless otherwise approved by Golden prior to any such request.

(b) No Carry-Over: Any portion of the Water Deliveries not requested by Empire before November 1st of any year under this Agreement may not be carried over to the following year, and is forfeited to Golden for the remainder of that year. Any such forfeiture does not affect Empire's right to the Water Deliveries in subsequent years.

2. Storage Option: From the date of this Agreement to September 30, 2033 (the "Option Term"), Empire shall have the continuing option to acquire the right to use in perpetuity up to a total of 10 acre-feet of the storage capacity in Guanella Reservoir (the "Storage Option"). Empire agrees that the storage capacity use rights acquired under the Storage Option do not include any water rights or any ownership interest in Guanella Reservoir or the Appurtenant Facilities. The storage capacity use rights obtained under the Storage Option may be used by Empire to store and release Empire's interest in Henderson Mine water or any other water right to which Empire is legally entitled, subject to any required approval by the Water Court and/or the Colorado State Engineer. Empire shall be solely responsible for obtaining any such approvals.

(a) Exercise: Empire may exercise the Storage Option upon written notice given to Golden during the Option Term; provided, however, that the Storage Option may be exercised no more than once per year, and only in increments equal to or greater than 1.0 acre-foot. In no event shall the cumulative Guanella Reservoir storage capacity use right purchased by Empire under this Storage Option exceed 10 acre-feet.

(b) Exercise Price: The exercise price of the Storage Option shall be calculated according to the following formula, which is based upon a 2.0% annual increase compounded daily, less all amounts previously paid by Empire under the Lease Option described in paragraph 3 below:

$$\text{Exercise Price} = \$9,000/\text{acre-foot} \times (1.00005479)^n - \text{any amounts paid under the Lease Option}$$

$n$  = number of days between execution of this Agreement and closing on the Storage Option

(c) Closing: For each year in which Empire exercises the Storage Option, a separate closing shall occur. Closing on the Storage Option shall occur within 30 days of Golden receiving written notice that Empire is exercising the Storage Option, at a time and place mutually agreeable to the parties. At closing, Empire shall pay to Golden the Storage Option exercise price in full as set forth in paragraph 2(b) above, and the parties shall execute an amendment to this Agreement evidencing Empire's permanent right of use in the storage capacity of Guanella Reservoir obtained under the exercise of the Storage Option.

3. Lease Option: During the Option Term, Empire shall have the annual option to lease from Golden the right to use that amount of the storage capacity in Guanella Reservoir for which the Storage Option has not previously been exercised, up to a maximum of 10 acre-feet (the "Lease Option"). The storage capacity use right obtained under the Lease Option may be used by Empire to store and release Empire's interest in Henderson Mine water or any other water right to which Empire is legally entitled, subject to any required approval by the Water Court and/or the Colorado State Engineer. Empire shall be solely responsible for obtaining any such approvals.

(a) Exercise: Empire may exercise the Lease Option upon written notice given to Golden during the Option Term on or before April 1 of each year; provided, however, that the Lease Option shall only be exercised once per year, and shall only be exercised in whole number acre-foot increments.

(b) Lease Price: The annual price of said lease during the first year of the Option Term shall be \$525 per acre-foot of storage capacity (the "Lease Price"). Thereafter, the Lease Price shall increase by 2% per year. For example, the Lease Price during the second and third year of the Option Term would be \$535.50 and \$546.21 per acre-foot, respectively. Payment under the Lease Option shall be made to Golden within 90 days following written notice that Empire is exercising the Lease Option. Failure to make payment within said 90 days terminates that lease and Empire's future right to exercise the Lease Option. The Lease Option shall terminate upon the earlier of the termination of the Lease Option or the exercise of the Storage Option as to the full 10 acre-feet.



4. Reservoir Operations:

(a) Control: Any right obtained by Empire under the Storage Option or Lease Option is a right of use only. Golden shall retain the exclusive right to control the operation of Guanella Reservoir and the Appurtenant Facilities.

(b) Water Storage and Releases: Upon 72 hours advance notice by Empire following either closing and full payment under the Storage Option or full payment following exercise of the Lease Option, Golden shall divert water into, or release water from, Guanella Reservoir under the following terms:

(i) The amount and timing of such diversions or releases shall be limited by the terms of this Agreement, and any relevant decrees of the Water Court or orders of the Water Commissioner. In addition, the requested rate of diversion or release shall be no greater than 1.0 cfs, unless otherwise approved by Golden prior to any such request.

(ii) Once notice is given under this subsection, Empire shall provide to Golden a schedule of diversions or releases for each upcoming week at least 72 hours in advance. In the event that Empire does not provide such a schedule in any given week, Golden shall continue to divert or release water according to the last schedule received by Golden, to the extent such diversions or releases are permissible.

(iii) In the event that Empire leases, assigns, sells, transfers, or otherwise conveys the Storage Option, the Lease Option, any rights created by the exercise of the Storage Option or Lease Option, or any water rights owned by Empire that may be stored in Guanella Reservoir under this Agreement, Empire agrees that it will not delegate or otherwise transfer any obligations or duties created hereunder, and agrees that in the event of any such lease, assignment, sale or conveyance, the following obligations will remain the sole responsibility of Empire:

- (1) requests and notices under paragraphs 1(a), 2(a), 3(a), and 4(b);
- (2) payment and/or closing under paragraphs 2(b), 2(c), 3(b) and 4(e);
- (3) submission of diversion and release schedules under 4(b)(ii); and
- (4) accounting under paragraph 6.

Any request, notice, payment, schedules or accounting information received by Golden from any party other than Empire shall be rejected or returned and shall not satisfy any duties or obligations owed by Empire hereunder, nor constitute an exercise of any rights granted to Empire hereunder. Golden shall have no obligation to provide any notice, bill



of costs, or other information to any of Empire's assigns, lessors, or transferees, and shall continue to give any required notices or other information to Empire regardless of any assignment of rights by Empire. Any amendment or contract created as a result of any closing under paragraph 2(b) shall be among Golden and Empire only, regardless of whether Empire has assigned any part of the Storage Option. The purpose and intent of this paragraph 4(b)(iii) is to insure that Golden shall have no obligation or responsibility to deal with any third parties who have been conveyed an interest obtained by Empire under this Agreement.

(c) Carry-Over: In the event that Empire exercises the Storage Option or Lease Option in any given year and subsequently stores water in Guanella Reservoir under either of those rights, but then does not subsequently call for releases totaling the entire amount stored thereunder, the amount of water not called for shall carry-over to the subsequent years. In no event, however, shall Empire's right of use in the storage capacity in Guanella Reservoir obtained under either the Storage Option or Lease Option exceed 10 acre-feet.

(d) Evaporative Losses: Empire agrees that the quantity of water stored in Guanella Reservoir under the Storage Option or Lease Option shall take into account a proportionate share of any evaporative losses imposed on Guanella Reservoir by the Division Engineer for Water Division No. 1 (the "Division Engineer") or the Water Commissioner. Empire's share of such losses shall be proportionate to Empire's share of the actual quantity of water stored in Guanella Reservoir at the time such losses are imposed.

(e) Operation and Maintenance: In the event that Empire exercises the Storage Option, it shall be required to pay to Golden a proportionate share of any costs incurred as a result of the operation and maintenance of Guanella Reservoir and its Appurtenant Facilities. Empire's share of such costs shall be proportionate to its share of the total storage capacity existing in Guanella Reservoir at the time such costs are incurred. A bill of costs shall be provided to Empire within one year after such costs are incurred. Empire shall make payment to Golden within 60 days after receiving a bill of costs. Failure to make timely payment shall terminate Empire's right to any future use of the storage capacity of Guanella Reservoir under the Storage Option; provided, however, that such termination shall not occur until Golden gives Empire written notice of its failure to make payment, and Empire has failed to make the required payment within 30 days after receiving such notice.

5. Indemnification: In the event that Empire does lease, assign, sell or transfer any part of the Storage Option, Lease Option, or rights created by the exercise of thereof, Empire agrees to indemnify, defend and hold harmless Golden and its agents from and against all lessee, assignee, transferee, or other claims, causes of action, costs, expenses (including reasonable attorneys fees and court costs), judgments, damages and any other liabilities of any kind arising out of the Storage Option, the Lease Option, any rights created by the exercise of the Storage Option or Lease Option, or the operation of Guanella Reservoir.

6. Water Quality: Golden makes no representation as to the quality of waters released from Guanella Reservoir pursuant to the Water Deliveries, the Storage Option or the Lease Option. Golden shall not be obligated by this Agreement, including the Water Deliveries

or any agreements entered into as a result of the exercise of the Storage Option or Lease Option, to maintain or modify the quality of water released from storage for the benefit of Empire.

7. Accounting: Each party shall be responsible for providing the other party, the Division Engineer, and the Water Commissioner with all necessary accounting information relating to water diverted, stored in, or released from, Guanella Reservoir under this Agreement. It shall be Empire's sole responsibility to obtain any necessary approval from the Division Engineer and Water Commissioner for the use of such water.

8. Emergency Maintenance or Drainage: Empire acknowledges that emergency circumstances may arise that require Golden to drain Guanella Reservoir and/or to conduct maintenance or other related operations on Guanella Reservoir or its Appurtenant Facilities that could prevent Empire from receiving the Water Deliveries, or storing or obtaining the release of water under the Storage Option or Lease Option. Under such circumstances, Golden is not liable for the failure to make the Water Deliveries or deliveries of water stored by Empire under the Storage Option or Lease Option. Water quantities lost due to such failure shall not carry-over to subsequent years. However, if Empire has exercised the Lease Option in such a year and subsequently stored water thereunder, Golden shall refund the associated lease payment made by Empire, but shall not be otherwise liable for the failure to deliver water under the Lease Option under such circumstances.

9. Empire Municipal Ordinance: Empire acknowledges that the design and plan for the operation of Guanella Reservoir is an "activity in progress" under Section 8, and is therefore exempt from regulation under Ordinance No. 216. Empire further acknowledges that any and all future changes to the design, construction or operation of Guanella Reservoir, including enlargement, will continue to qualify as an "activity in progress" under Section 8, so long the physical capacity of Guanella Reservoir does not exceed 2600 acre-feet.

10. Empire Plan For Augmentation: Golden agrees not to oppose any Water Court application filed by Empire requesting approval of a plan for augmentation to use the Water Deliveries or any portion of the storage capacity use right it acquires under the Storage Option to replace out-of-priority diversions of the Empire Town Water Right. Empire shall be solely responsible for the adjudication and expense of any such application. This agreement not to oppose, however, shall not preclude Golden from filing a statement of opposition to monitor said case and insure that it is in compliance with the terms of this Agreement.

11. Case No. 02CW379: Golden has filed an Application for Approval of Plan for Augmentation and Exchange in Water Court Case No. 02CW379, to which Empire has filed a Statement of Opposition. Empire agrees to withdraw its Statement of Opposition simultaneous with the execution of this Agreement.

12. Force Majeure: Neither party shall be liable for any failure to perform any of its obligations hereunder due to causes beyond its control, including, without limitation, acts of God, acts or omissions of the other party or civil or military authorities, fire, strikes, epidemics, quarantine restrictions, floods, earthquakes, riots, wars, or inability to secure means of storage because of the foregoing.

13. Notice: Any required notice, demand, or conveyance of information shall be sent via U.S. mail or fax, or telephone call and subsequent mailing or fax to:

**Golden:**

Utilities Director  
City of Golden  
911 Tenth Street  
Golden, CO 80401  
fax: 303-384-8161

**Empire:**

Mayor  
Town of Empire  
30 East Park Avenue  
P.O. Box 100  
Empire, CO 80439-0100  
fax: 303-569-2282

**with copy to:**

Glenn E. Porzak  
Porzak Browning & Bushong LLP  
929 Pearl Street, Suite 300  
Boulder, CO 80302  
fax: 303-443-6864

**with copy to:**

Mark J. Wagner  
Hill & Robbins P.C.  
1441 18th Street, Suite 100  
Denver, CO 80202-1256  
fax: 303-296-2388

14. Miscellaneous:

(a) This Agreement may not be amended, nor any rights or obligations hereunder waived, except by an instrument in writing signed by the parties sought to be charged with such amendment or waiver.

(b) This Agreement shall be interpreted in accordance with the laws of the State of Colorado.

(c) The paragraph headings herein are inserted for convenience of reference only and do not define, limit or prescribe the scope of this Agreement.

(d) The parties agree to execute such additional documents as may be reasonably required to implement the terms of this Agreement.

(e) This Agreement may be executed in counterparts.

Executed as of the date first set forth above.

CITY OF GOLDEN, a Colorado municipal  
corporation:

By: C. J. Baruch

Name: C. J. Baruch

Title: Mayor

TOWN OF EMPIRE, a Colorado municipal  
corporation:

By: Lori Short

Name: Lori Short

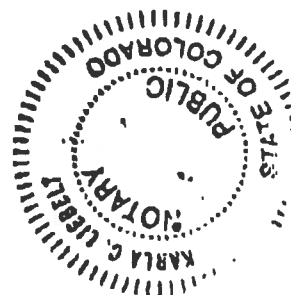
Title: Mayor

STATE OF COLORADO )  
 ) ss.  
COUNTY OF JEFFERSON )

The foregoing instrument was acknowledged before me this 11 day of Dec, 2003, by C.J. Barach as MAYOR of the City of Golden.

My commission expires Jan 2 06

Witness my hand and official seal.



[Signature]  
Notary

STATE OF COLORADO )  
 ) ss.  
COUNTY OF CLEAR CREEK )

The foregoing instrument was ncknowledged before me this 17 day of November, 2003, by Lori Short as Mayor of the Town of Empire.

My commission expires August 6, 2007

Witness my hand and official seal.



[Signature]  
Notary

## **Appendix B**

Empire Town Water Right

No. 14.

THE EMPIRE TOWN WATER RIGHT.

As to the Empire Town Water Right the Court finds:

1:-That the said The Empire Town Water Right is owned by the Town of Empire, an incorporated town duly organized and existing under and by virtue of the laws of the State of Colorado.

2:-That the head-gate of the ditch, pipe-line and water-right is located at a point on the Easterly bank of Mad Creek, Clear Creek County, Colorado, whence the Southwest corner of Section number thirty-three (33) in Township three (3) South of Range seventy-four (74) West of the Sixth (6th) Principal Meridian, bears South twenty-three degrees forty minutes (23° 40') East ten thousand one hundred and ninety-three (10,193) feet.

3:-That said Mad Creek is a tributary of Clear Creek.

4:- That the general course of said ditch or pipe line is Easterly and Southerly.

5:-That the size of said ditch or pipe line is six (6) inches in depth and six (6) inches in width, a pipe-line six (6) inches in diameter, its length is six thousand seven hundred fifty nine and three-tenths (6759.3) feet and its grade fifty-seven and six hundred and fourteen one thousandths (57.614) feet in one thousand (1000) feet. Its capacity is one and eighty-two one-hundredths (1.82) cubic feet of water per second of time.

6:-That the purpose for which the said Town of Empire claims the water conveyed through said ditch or pipe line is for domestic, ~~as~~ and household purposes of the inhabitants of

the said Town of Empire and other persons; for sprinkling the streets and alleys of the said town; for extinguishing fires in the said town and elsewhere and for watering, irrigating and irrigation in the said town of Empire.

7:-That the time of appropriation by original construction was the year A. D. 1863.

8:-That the priority number of said ditch, pipe-line and water-right, according to its appropriation of water by original construction in the year A. D. 1863 is 14, and there should be allowed to flow into the said ditch or pipe-line out of said Creek for the use and benefit of the claimant and its successors for the purposes aforesaid one and eighty-two one-hundredths (1.82) cubic feet of water per second of time.



That by reason of a certain Stipulation entered into between Roderick E. Rombauer, the owner and claimant of the Mad Creek Ditch, and the Town of Empire, which is in the words following, to-wit:

"S T I P U L A T I O N .

The use of water by said Mad Creek Ditch, by reason of a certain stipulation heretofore made and consummated between the owner and claimant of said Mad Creek Ditch and the Town of Empire, to be subject at all times to the right of the Town of Empire to use the waters of Mad Creek for domestic purposes, irrigation of lawns, sprinkling of streets and alleys, extinguishment of fires and all other uses to which same may be applied by said Town in carrying out any public or police regulations regarding the health or welfare of its inhabitants and others or any other purposes for which the owner of said Mad Creek Ditch might but for this stipulation use the same". The said Town of Empire is given a priority to the use of the waters from said Mad Creek prior to that given to the said Mad Creek Ditch for the uses and purposes hereinbefore mentioned.

## **Appendix C**

Empire Plan for Augmentation

Case 82CW227

DISTRICT COURT, WATER DIVISION NO. 1, STATE OF COLORADO

Case No. 82 CW 227

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FINDINGS OF FACT, CONCLUSIONS OF LAW, JUDGMENT AND DECREE APPROVING  
PLAN FOR AUGMENTATION

---

CONCERNING THE APPLICATION FOR WATER RIGHTS OF THE TOWN OF EMPIRE IN  
CLEAR CREEK COUNTY

---

THIS MATTER, heard this 25th day of October, 1983 upon the application of the Town of Empire, for approval of the plan of augmentation filed in Case No. 82 CW 227, as amended August 27, 1982, and the Water Referee having considered the pleadings filed, the evidence presented, and the argument of counsel makes the following Findings of Fact, Conclusions of Law, and Ruling of the Referee:

FINDINGS OF FACT  
AND  
CONCLUSIONS OF LAW

1. The Applicant is the Town of Empire ("Empire"), a municipal corporation existing under and by virtue of the laws of the State of Colorado. Empire filed the application herein for approval of a plan for augmentation on June 30, 1982, and subsequently filed an Amended Application for Approval of a Plan for Augmentation (the "Application") on August 27, 1982. Through its Application, Empire seeks to have this Court approve a plan for augmentation under which Empire will from time to time supplement its municipal water supply through diversions of groundwater from the alluvium of the West Fork of Clear Creek, a tributary of the South Platte River, and will deliver augmentation waters into the West Fork of Clear Creek from developed nontributary waters owned by AMAX Inc. (AMAX) in the Henderson Mine to replace any consequent depletions to the stream.

2. Timely and adequate notice of the Application and the claims made by Empire in the Application have been given in the manner required by law, and the Water Referee and the Water Judge sitting in this District Court for Water Division No. 1 have jurisdiction over the subject matter of these proceedings and over all parties affected hereby, whether they have appeared or not.

3. Adolph Coors Company, Marquette Minerals, Inc., the City of Westminster, and The Farmers Reservoir and Irrigation Company filed timely Statements of Opposition to the Application. Adolph Coors Company and the City of Thornton subsequently filed Entries of Appearance. Marquette Minerals, Inc., filed a Motion to Withdraw its Statement of Opposition and the Court entered an Order granting leave to withdraw the Statement of Opposition on December 1, 1982. No other Statements of Opposition or Entries of Appearance were filed.

4. Empire is located in Clear Creek County, Colorado, nine miles west of the Town of Idaho Springs and 40 miles west of the Denver Metropolitan area at an elevation of 8,600 feet. Empire is located within the drainage basin of the West Fork of Clear Creek, which is a tributary of the South Platte River drainage basin.

5. Empire filed an application with the Colorado Department of Natural Resources, Division of Water Resources on May 3, 1982 for a permit to construct a well designated as the Empire Well No. 1 to be drilled into the alluvium of the West Fork of Clear Creek. The Division of Water Resources acting by and through the State Engineer, approved the application to construct the Empire Well No. 1 on August 20, 1982 and assigned permit number 25963-F to the permit issued for the Empire Well No. 1. Empire has caused the Empire Well No. 1 to be drilled into the alluvium of the West Fork of Clear Creek and has diverted water through the Empire Well No. 1 for its municipal requirements under temporary authorization of the State Engineer.

6. Empire's current municipal water supply is diverted from surface water rights on Mad Creek, a tributary of the West Fork of Clear Creek. Empire will continue to utilize those water rights in their historic manner as the principal source of water for Empire's municipal water requirements. Empire will from time to time utilize water withdrawn from the Empire Well No. 1 and any supplemental or replacement wells thereto as a supplemental or substitute supply for Empire's municipal water requirements.

7. Empire's uses of water are municipal uses, including domestic and household uses, sprinkling of streets and alleys, fire protection, lawn and garden irrigation, industrial and commercial uses and incidental uses related thereto. Empire has shown current uses of water for irrigation of 5.3 acres of lawns and gardens, and domestic, commercial, industrial, and other municipal uses associated with 106 single family homes, 67 trailer court units, and 10 commercial developments. These uses are and are hereby found to be beneficial uses.

8. Empire has manifested an intent to appropriate waters. It is hereby found that Empire has given notice of its intention to appropriate waters to all parties who may potentially be affected by

its appropriation by the filing of this Application and the application for a permit to construct the Empire Well No. 1, and on the ground, by activity manifesting an intent to appropriate waters including the drilling and utilization of the Empire Well No. 1.

9. Empire's water supply plan operated under the terms and conditions herein may operate to provide Empire's entire water supply for its current and projected population.

10. Empire's total annual municipal water diversion requirement is and it has been shown to be 102 acre-feet for its present population of 450 and ranges to a maximum of 225 acre-feet for a projected population of 1,000. Empire's current and projected annual water diversion requirements are more specifically as follows:

(a) Domestic in-house water requirements are 56.8 acre-feet for the existing population of 450 and range to a maximum of 126 acre-feet for a projected population of 1,000 based on a 113 gallon per capita per day water requirement;

(b) Lawn and garden irrigation water requirements are 9.70 acre-feet for the irrigation of 5.3 acres of lawns and gardens and range to 21.6 acre-feet for the irrigation of lawns and gardens by a projected population of 1,000;

(c) System loss water requirements, including line leakage, winter bleeders, and overflow from storage tanks range from 34.8 acre-feet for the existing population of 450 to 77.3 acre-feet for a projected population of 1,000; and

(d) Sewage treatment water requirements range from 0.24 acre-feet for the existing population of 450 to 0.48 acre-feet for a projected population of 1,000. Empire will utilize a central wastewater treatment facility with two sludge drying beds for its current population of 450 and a maximum of 4 sludge drying beds for a projected population of 1000.

11. Empire's consumptive use of water for domestic in-house use is and has been shown to be five percent of the total annual municipal requirement for domestic in-house water requirements or 2.84 acre-feet per year for the present population of 450 and 6.31 acre-feet per year for a projected population of 1,000.

12. Empire's consumptive use for lawn and garden irrigation is and has been shown to be 70% of the water requirement for lawn and garden irrigation or 6.79 acre-feet per year for the existing population of 450 and 15.1 acre-feet per year for a projected population of 1,000. Empire's consumptive use of water for irrigation of lawns and gardens is based on a current irrigated

acreage of 5.3 acres and projected irrigated acreage of 11.77 acres associated with a population of 1,000.

13. Empire's consumptive use of water associated with system losses, including line leakage, winter bleeders and storage tanks is and has been shown to be 5% of water requirements for system losses or 1.74 acre-feet per year for the existing population of 450 and 3.87 acre-feet per year for a projected population of 1,000.

14. Empire's consumptive use of water for sewage treatment is and has been shown to be 0.24 acre-feet per year for the existing population of 450 and 0.48 acre-feet per year for a projected population of 1,000.

15. Empire's total consumptive use of water is and has been shown to be 11.6 acre-feet per year for an existing population of 450 and 25.8 acre-feet per year for a projected population of 1,000.

16. Notwithstanding that Empire's surface water rights will be utilized in their historic manner, Empire's total annual municipal water requirements will from time to time be supplied in whole or in part from water diverted through the Empire Well No. 1, permit number 25963-F, and any supplemental or replacement wells thereto. Water diverted from the Empire Well No. 1 or any replacement or supplemental wells thereto will be placed into Empire's municipal water supply system. Wastewater from Empire's municipal water requirements will be treated at a central wastewater treatment plant which will return the treated effluent to the West Fork of Clear Creek.

17. The source of water for the Empire Well No. 1 is water from the alluvium of the West Fork of Clear Creek, a tributary to the South Platte River. Additional supplemental or replacement alluvial wells for the Empire Well No. 1 may become necessary to meet Empire's municipal water requirements. With respect to any such additional or supplemental wells, the provisions contained in paragraph 32 of the decretal portion hereof have been justified and shall apply.

18. Any depletions to the West Fork of Clear Creek and the South Platte River basin caused by Empire's use of the Empire Well No. 1 and any supplemental or replacement well thereto will be replaced to the stream with nontributary developed water obtained by Empire through a Lease Agreement made effective as of March 4, 1983, by and between Empire and AMAX. By that Lease Agreement, Empire obtained the exclusive right to use a maximum continuous flow rate of up to 20 gallons per minute from certain nontributary developed water rights owned by and decreed to AMAX in the Henderson Mine as follows:

(a) A nontributary water right with an appropriation date of April 1, 1967, as decreed and adjudicated by the District Court for Water Division No. 1 to AMAX in Case No. W-7158-77 for industrial, domestic, irrigation, municipal, piscatorial, and recreational uses; and

(b) A nontributary water right with an appropriation date of July 31, 1967, as decreed and adjudicated by the District Court for Water Division No. 5 to AMAX in Case No. W-1700A-77 for industrial, domestic, irrigation, municipal, piscatorial, and recreational uses.

The legal description of points and alternate points of diversion of AMAX's nontributary water rights referred to in this paragraph 18 are set forth in Exhibit A attached hereto and by this reference incorporated herein.

19. The water under lease from AMAX will be delivered by AMAX at a maximum continuous flow rate of up to 20 gallons per minute to the West Fork of Clear Creek at a point upstream from Empire and in the vicinity of the Henderson Shaft No. 2. The actual amount of water released to the stream by AMAX will at all times equal the amount of actual depletions to the stream caused by Empire's withdrawals of water through the Empire Well No. 1 and any replacement or supplemental wells thereto. From time to time when Empire withdraws groundwater through the Empire Well No. 1 or any supplemental or replacement wells thereto, Empire will meter and record the amounts so withdrawn. The amounts so withdrawn will cause a monthly depletion to the stream which equals the amount withdrawn multiplied by the following percentages (hereinafter "depletion factors"):

January	5.3%
February	5.3%
March	5.4%
April	5.3%
May	10.1%
June	15.7%
July	18.6%
August	16.0%
September	15.8%
October	5.4%
November	5.4%
December	5.6%

The depletion factors set forth above are and are hereby found to be based on the consumptive uses of Empire's municipal water requirements and when multiplied by the amount of water withdrawn from the Empire Well No. 1 or its supplemental or replacement wells establishes the consequent depletion to the stream for the designated month. Releases of the augmentation water for the benefit of Empire

will equal the depletion amount calculated under this paragraph 19. Empire will submit monthly well pumping and depletion reports to the Division Engineer for Water Division No. 1.

20. Empire's consumptive use of water diverted from the Empire Well No. 1 and any supplemental or replacement wells thereto is and has been shown to be less than and not to exceed the amount of water replaced to the stream from AMAX's nontributary water rights under the terms and provisions of the Lease Agreement between Empire and AMAX and paragraph 19 above.

21. At a continuous release rate of up to 20 gallons per minute, the amount of augmentation water exceeds all depletions to the stream caused by the diversions necessary to supply all municipal water requirements for Empire's existing population. At a continuous flow rate of 20 gallons per minute, the amount of augmentation water supplied to the stream under paragraph 18 hereof is and is hereby found to be sufficient at all times during the non-irrigation season to replace all depletions to the stream caused by Empire's municipal water requirements.

22. During the irrigation season, defined as the months of May through September, inclusive, and as Empire's population increases, Empire will curtail its usage of the Empire Well No. 1 and any replacement or supplemental wells thereto when diversions through the same reach the following diversion values:

<u>May</u>	<u>June</u>	<u>July</u>
15.3 ac. ft.	10.8 ac. ft.	11.9 ac. ft.
<u>August</u>	<u>September</u>	
13.1 ac. ft.	16.7 ac. ft.	

Empire has shown and it is hereby found that Empire's diversions through the Empire Well No. 1 or any replacement or supplemental wells thereto in the amounts or any lesser amounts than the monthly diversion values set forth in this paragraph above will cause a depletion to the stream that is less than or equal to the amount of water replaced to the stream from Empire's augmentation waters when those augmentation waters are released to the stream at a continuous flow rate of up to 20 gallons per minute.

23. There is augmentation water available for implementation of this plan to enable withdrawal by the wells decreed herein. No material injury to vested water rights will result from the issuance of or exercise of the permits for the Empire Well No. 1 or any supplemental or replacement wells thereto operated under the terms and conditions herein.



24. Empire may construct, reconstruct, and utilize the Empire Well No. 1 and any supplemental or replacement wells without adversely affecting any vested or conditionally decreed rights on the South Platte River or its tributaries; by the institution of the augmentation plan herein approved, Empire may secure permits for use of the Empire Well No. 1 and any supplemental or replacement well thereto without adversely affecting vested water rights or conditional water rights on the South Platte River or its tributaries, and without the necessity of curtailing the withdrawal of water from any such wells.

25. Empire will install either continuous flow recording or totalizing flow meters on all wells constructed by reason of this augmentation plan and will make the records so compiled available to the Division Engineer for Water Division No. 1.

26. The plan for augmentation proposed by Empire is one contemplated by law, and if administered in accordance with this decree, will permit the depletions associated with Empire's municipal water requirements for its current existing population and for increased depletions associated with the growth of Empire without adversely affecting any vested water rights.

27. The State Engineer may lawfully be required under the terms of this decree to administer this plan for augmentation in the matter set forth herein and not to curtail diversions, in times of shortage, through the Empire Well No. 1 or any replacement or supplemental wells thereto.

#### RULING OF THE REFEREE

THE REFEREE DOES HEREBY RULE AND CONCLUDE:

28. The Application for approval of the plan for augmentation, as amended and decreed herein, is, and is hereby, approved.

29. The State Engineer, the Division Engineer of Water Division No. 1, and all other water administration officials shall recognize and administer the plan for augmentation approved herein according to its terms.

30. Empire has manifested an intent to appropriate waters in the manner decreed herein. All parties affected by Empire's plan for augmentation are bound by the terms and conditions of this decree.

31. Empire's water requirements are for municipal uses, including domestic and household uses, sprinkling of streets and alleys, fire protection, lawn and garden irrigation, industrial and

commercial uses and incidental uses related thereto and these uses are and are hereby decreed to be beneficial uses.

32. Empire's municipal water requirements may be supplied in whole or in part from water diverted through the Empire Well No. 1, permit number 25963-F, and any replacement or supplemental wells thereto. The source of water for the Empire Well No. 1 shall be water from the alluvium of the West Fork of Clear Creek, a tributary of the South Platte River. Wastewater from Empire's municipal water requirements shall be treated at a central wastewater treatment plant which shall return the treated effluent to the West Fork of Clear Creek. Additional supplemental or replacement alluvial wells for the Empire Well No. 1 may become necessary to meet Empire's total annual municipal water requirements. With respect to any such additional or supplemental wells, the following provisions are, and have been, justified and shall apply:

(a) The total amount of water diverted from the Empire Well No. 1 and any additional supplemental or replacement wells for any one month shall not exceed and shall be limited to the total amount of augmentation water released to the stream divided by the depletion percentage factors for such month set forth in Paragraph 33 below.

(b) When Empire is prepared to drill one or more wells necessary as a described in this paragraph, Empire shall apply to the State Engineer for a well permit and the State Engineer is directed to issue the permit in accordance with the conditions for equipping and constructing the same as set forth in paragraph 35 hereof.

33. Any depletions to the West Fork of Clear Creek and the South Platte River basin caused by the withdrawal of groundwater from the Empire Well No. 1 and any replacement or supplemental wells thereto shall be replaced by water from the nontributary developed water rights owned by and decreed to AMAX in the Henderson Mine and described in paragraph 18 of the Findings of Fact and Conclusions of Law hereof. The water under lease from AMAX shall be released at a maximum continuous flow rate of up to 20 gallons per minute to the West Fork of Clear Creek at a point upstream from Empire and in the vicinity of the Henderson Shaft No. 2. The actual amount of water released to the stream by AMAX shall equal the amount of actual depletions to the stream caused by Empire's withdrawal of water through the Empire Well No. 1 and any replacement or supplemental wells thereto. When from time to time Empire commences withdrawals of groundwater through the Empire Well No. 1 or any supplemental or replacement wells thereto, the amounts so withdrawn shall be metered and recorded. The consequent depletions shall be replaced to the stream in an amount calculated by multiplying the amount so withdrawn by the following depletion factors:

January	5.3%
February	5.3%
March	5.4%
April	5.3%
May	10.1%
June	15.7%
July	18.6%
August	16.0%
September	15.8%
October	5.4%
November	5.4%
December	5.6%

Empire shall submit monthly well pumping and depletion reports to the Division Engineer for Water Division No. 1.

34. During the irrigation season, defined as the months of May through September, inclusive, and as Empire's population increases, Empire shall curtail its withdrawals from the Empire Well No. 1 when the total municipal diversions from the Empire Well No. 1 and any replacement or supplemental wells thereto reach the following diversion values:

<u>May</u>	<u>June</u>	<u>July</u>
15.3 ac. ft.	10.8 ac. ft.	11.9 ac. ft.
<u>August</u>	<u>September</u>	
13.1 ac. ft.	16.7 ac. ft.	

35. Empire shall install either continuous flow recording or totalizing flow meters on all wells constructed pursuant to this decree and shall make the records therefrom available to the Division Engineer of Water Division No. 1. After construction of any such well, Empire shall attach an identification tag to the well specifying the name and permit number of the well.

36. It is hereby specifically adjudged and decreed that Empire may construct, reconstruct, and utilize the Empire Well No. 1 and any supplemental or replacement wells thereto without adversely affecting any vested or conditionally decreed rights on the South Platte River or its tributaries; by the institution of the augmentation plan herein approved, Empire may secure permits for use of the Empire Well No. 1 and any supplemental or replacement wells thereto without adversely affecting vested water rights or conditional water rights on the South Platte River or its tributaries, and without the necessity of curtailing the withdrawal of water from any such wells.

37. The State Engineer shall administer this plan for augmentation in the matter set forth herein and so long as Empire complies with the terms hereof, shall not curtail diversions, in times of shortage, through the Empire Well No. 1 or any replacement or supplemental wells thereto.

38. The Plan for Augmentation herein approved shall be subject to reconsideration by this Court on the question of material injury to vested water rights for a period of four (4) years from the date this decision is rendered.

---

RAYMOND L. LIESMAN  
Water Referee  
Division No. 1

Dated this \_\_\_\_ day of \_\_\_\_\_, 1983.

THE COURT DOTH FIND: NO PROTEST WAS FILED IN THIS MATTER.  
THE FOREGOING RULING IS CONFIRMED AND APPROVED, AND IS HEREBY MADE  
THE JUDGMENT AND DECREE OF THE COURT.

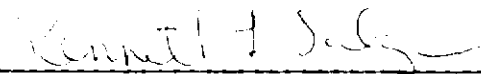
Dated this \_\_\_\_ day of \_\_\_\_\_, 1983.

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WATER JUDGE  
Water Division No. 1

APPROVED AS TO FORM AND  
SUBSTANCE:

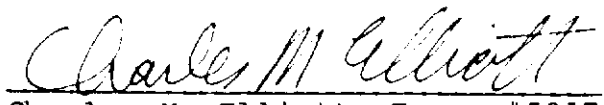
SHERMAN & HOWARD

  
\_\_\_\_\_  
Gary Greer #4482  
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633 17th Street  
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(303) 893-2900  
Attorneys for Applicant


AKOLT, DICK AND AKOLT

  
\_\_\_\_\_  
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1651 Emerson Street  
Denver, CO 80218  
Attorneys for Objector The  
Farmers Reservoir and  
Irrigation Company

HOLLARD & HART

  
\_\_\_\_\_  
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Attorneys for Objector City of  
Westminster

BROADHURST & PETROCK

  
Fredrick A. Fendel III #10476  
Kenneth L. Broadhurst #1659  
J. J. Petrock #2881  
1630 Welton Street  
Suite 200  
Denver, CO 80202

Attorneys for the City of  
Thornton

DISTRICT COURT, WATER DIVISION I, COLORADO

Case No. 82 CW227

WATER COURT  
JUL 14 1982  
8 PM 12 06

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REVISED FINDINGS AND RULING OF THE REFEREE AND DECREE OF THE WATER COURT  
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CONCERNING THE APPLICATION FOR WATER RIGHTS OF: WATER CLERK

THE TOWN OF EMPIRE in CLEAR CREEK COUNTY  
-----

THIS PLAN FOR AUGMENTATION, having been filed with the Water Clerk, Water Division I, on June 30, 1982 and amended August 27, 1982, and the Referee being fully advised in the premises, does hereby find:

All notices required by law of the filing of this application have been fulfilled, and the Referee has jurisdiction of this application.

Statements of Opposition were filed by Adolph Coors Company, Marquette Minerals, Inc., the City of Westminster, and The Farmers Reservoir and Irrigation Company. Adolph Coors Company and the City of Thornton filed Entries of Appearance. Marquette Minerals, Inc. subsequently withdrew. The time for filing additional statements has expired.

#### FINDINGS OF FACT

1. Empire is located in Clear Creek County, nine miles west of the Town of Idaho Springs and 40 miles west of the Denver Metropolitan area at an elevation of 8,600 feet. Empire is located within the drainage basin of the West Fork of Clear Creek, which is a tributary of the South Platte River drainage basin. Empire seeks to have this Court approve a plan for augmentation under which Empire will from time to time supplement its municipal water supply through diversions of groundwater from the alluvium of the West Fork of Clear Creek, a tributary of the South Platte River, and will deliver augmentation waters into the West Fork of Clear Creek from developed nontributary waters owned by AMAX Inc. (AMAX) in the Henderson Mine to replace any consequent depletions to the stream.

2. Empire filed an application with the Division of Water Resources on May 3, 1982 for a permit to construct a well to be drilled into the alluvium of the West Fork of Clear Creek. The permit was approved on August 20, 1982 and assigned permit number 25963-F. Empire has caused the Empire Well No. 1-25963-F to be drilled into the alluvium of the West Fork of Clear Creek and has diverted water under temporary authorization of the State Engineer.

3. Empire's current municipal water supply is the Empire Town Water Right diverted from surface water rights on Mad Creek, a tributary of the West Fork of Clear Creek. Empire will continue to utilize those

water rights in their historic manner as the principal source of water for Empire's municipal water requirements. Empire will from time to time utilize water withdrawn from the Empire Well No. 1-25963-F as a supplemental or substitute supply for Empire's municipal water requirements.

4. Empire's uses of water are municipal uses, including domestic and household uses, sprinkling of streets and alleys, fire protection, lawn and garden irrigation, industrial and commercial uses and incidental uses related thereto. Empire has shown current uses of water for irrigation of 5.3 acres of lawns and gardens, and domestic, commercial, industrial, and other municipal uses associated with 106 single family homes, 67 trailer court units, and 10 commercial developments.

5. Empire's total annual municipal water diversion requirement is estimated to be 101.54 AF for its present population of 450 and ranges to a maximum of 225.38 AF for a projected population of 1,000. Empire's current and projected annual water diversion requirements are more specifically as follows:

(a) Domestic in-house water requirements are 56.8 AF for the existing population of 450 and range to a maximum of 126 AF for a projected population of 1,000 based on a 113 gallon per capita per day water requirement;

(b) Lawn and garden irrigation water requirements are 9.70 AF for the irrigation of 5.3 acres of lawns and gardens and range to 21.6 AF for the irrigation of 11.77 acres of lawns and gardens by a projected population of 1,000;

(c) System loss water requirements, including line leakage, winter bleeders, and overflow from storage tanks range from 34.8 AF for the existing population of 450 to 77.3 AF for a projected population of 1,000; and

(d) Sewage treatment water requirements range from 0.24 AF for the existing population of 450 to 0.48 AF for a projected population of 1,000. Empire will utilize a central wastewater treatment facility with two sludge drying beds for its current population of 450 and a maximum of 4 sludge drying beds for a projected population of 1,000.

6. Empire's consumptive use of water for domestic in-house use is assumed to be 5% of the total annual municipal requirement for domestic in-house water requirements or 2.84 AF/yr. for the present population of 450 and 6.31 AF/yr. for a projected population of 1,000.



7. Empire's consumptive use for lawn and garden irrigation is assumed to be 70% of the water requirement for lawn and garden irrigation or 6.79 AF/yr. for the existing population of 450 and 15.1 AF/yr. for a projected population of 1,000.

8. Empire's consumptive use of water associated with system losses, including line leakage, winter bleeders and storage tanks is estimated to be 5% of water requirements for system losses or 1.74 AF/yr. for the existing population of 450 and 3.87 AF/yr. for a projected population of 1,000.

9. Empire's total consumptive use of water is estimated to be 11.6 AF/yr. for an existing population of 450 and 25.8 AF/yr. for a projected population of 1,000, with the assumptions in paragraphs 5 through 8.

10. Notwithstanding that Empire's surface water rights will be utilized in their historic manner, Empire's total annual municipal water requirements will from time to time be supplied in whole or in part from water diverted through the Empire Well No. 1-25963-F, and any supplemental or replacement wells thereto. Water diverted from the Empire Well No. 1 or any replacement or supplemental wells thereto will be placed into Empire's municipal water supply system. Wastewater from Empire's municipal water requirements will be treated at a central wastewater treatment plant which will return the treated effluent to the West Fork of Clear Creek.

11. The source of water for the Empire Well No. 1-25963-F is groundwater from the alluvium of the West Fork of Clear Creek, a tributary to the South Platte River.

12. Any depletions to the West Fork of Clear Creek and the South Platte River basin caused by Empire's use of the Empire Well No. 1-25963-F and any supplemental or replacement well thereto will be replaced to the stream with nontributary developed water obtained by Empire through a Lease Agreement made effective as of March 4, 1983, by and between Empire and AMAX. By that Lease Agreement, Empire obtained the exclusive right to use a maximum continuous flow rate of up to 20 gpm from certain nontributary developed water rights owned by and decreed to AMAX in the Henderson Mine as follows:

(a) A nontributary water right with an appropriation date of April 1, 1967, as decreed and adjudicated by the District Court for Water Division No. 1 to AMAX in Case No. W-7158-77 for industrial, domestic, irrigation, municipal, piscatorial, and recreational uses; and

(b) A nontributary water right with an appropriation date of July 31, 1967, as decreed and adjudicated by the District Court for Water Division No. 5 to AMAX in Case No. W-1700A-77 for industrial, domestic, irrigation, municipal, piscatorial, and recreational uses.

The legal description of points and alternate points of diversion of AMAX's nontributary water rights referred to in this paragraph 12 are set forth in Exhibit A attached hereto and by this reference incorporated herein.

13. The water under lease from AMAX will be delivered by AMAX at a maximum continuous flow rate of up to 20 gpm to the West Fork of Clear Creek at a point upstream from Empire and in the vicinity of the Henderson Shaft No. 2. The actual amount of water released to the stream by AMAX will at all times equal the amount of actual depletions to the stream caused by Empire's withdrawals of water through the Empire Well No. 1 and any replacement or supplemental wells thereto. From time to time when Empire withdraws groundwater through the Empire Well No. 1 or any supplemental or replacement wells thereto, Empire will meter and record the amounts so withdrawn. The amounts so withdrawn will cause a monthly depletion to the stream which equals the amount withdrawn multiplied by the following percentages (hereinafter "depletion factors"):

January	5.3%
February	5.3%
March	5.4%
April	5.3%
May	10.1%
June	15.7%
July	18.6%
August	16.0%
September	15.8%
October	5.4%
November	5.4%
December	5.6%

The depletion factors set forth above are hereby found to be based on the consumptive uses of Empire's municipal water requirements and when multiplied by the amount of water withdrawn from the Empire Well No. 1-25963-F or its supplemental or replacement wells establishes the consequent depletion to the stream for the designated month. Releases of the augmentation water for the benefit of Empire will equal the depletion amount calculated under this paragraph 13. Empire will submit monthly well pumping and depletion reports to the Division Engineer for Water Division No. 1.

14. Empire's consumptive use of water diverted from the Empire Well No. 1-25963-F and any supplemental or replacement wells thereto is and has been shown to be less than and not to exceed the amount of water replaced to the stream from AMAX's nontributary water rights under the terms and provisions of the Lease Agreement between Empire and AMAX and paragraph 13 above.

15. At a continuous release rate of up to 20 gallons per minute, the amount of augmentation water exceeds all estimated depletions to the stream caused by the diversions necessary to supply all municipal water requirements for Empire's existing population. At a continuous flow rate of 20 gpm, the amount of augmentation water supplied to the stream under paragraph 12 is hereby found to be sufficient at all times during the non-irrigation season to replace all estimated depletions to the stream caused by Empire's municipal water requirements.

16. During the irrigation season, defined as the months of May through September, inclusive, and as Empire's population increases, Empire will curtail its usage of the Empire Well No. 1 and any replacement or supplemental wells thereto when diversions through the same reach the following diversion values:

<u>May</u>	<u>June</u>	<u>July</u>
15.3 ac. ft.	10.8 ac. ft.	11.9 ac. ft.
<u>August</u>	<u>September</u>	
13.1 ac. ft.	16.7 ac. ft.	

17. There is augmentation water available for implementation of this plan to enable withdrawal by the well decreed herein. No material injury to vested water rights will result from the issuance of or exercise of the permits for the Empire Well No. 1-25963-F or any supplemental or replacement wells thereto operated under the terms and conditions herein and under the depletions assumed in paragraphs 5 through 8.

18. Empire will install either continuous flow recording or totalizing flow meters on all wells constructed by reason of this augmentation plan and any other measuring devices as requested by the Division Engineer and will make the records so compiled available to the Division Engineer for Water Division No. 1. After construction of any well, Empire shall attach an identification tag to the well specifying owner's name, name of well, permit number and aquifer.

19. The plan for augmentation proposed by Empire is one contemplated by law, and if administered in accordance with this decree, will permit the depletions associated with Empire's estimated municipal water requirements for its current existing population and for the increased depletions associated with the growth of Empire without adversely affecting any vested water rights.

IT IS HEREBY THE RULING OF THE WATER REFEREE:

20. All Findings of Fact herein are incorporated by reference.

21. The Application for approval of the plan for augmentation as decreed herein, is hereby, approved.

22. The State Engineer, the Division Engineer of Water Division No. 1, and all other water administration officials shall recognize and administer the plan for augmentation approved herein according to its terms.

23. It is hereby specifically adjudged and decreed that Empire may construct, reconstruct, and utilize the Empire Well No. 1-25963-F and any supplemental or replacement wells thereto without adversely affecting any vested or conditionally decreed rights on the South Platte River or its tributaries; by the institution of the augmentation plan herein approved, Empire may secure permits for use of the Empire Well No. 1-25963-F and any supplemental or replacement wells thereto in accordance with paragraph 24 below without adversely affecting vested water rights or conditional water rights on the South Platte River or its tributaries, and without the necessity of curtailing the withdrawal of water from any such wells, so long as the consumptive use therefrom is no greater than the values used in this decree.

24. Empire's municipal water requirements may be supplied in whole or in part from water diverted through the Empire Well No. 1-25963-F, and any replacement or supplemental wells thereto. Empire Well No. 1-25963-F is located in the SW $\frac{1}{4}$ NW $\frac{1}{4}$ , Section 28, Township 3 South, Range 74 West of the 6th P.M., Clear Creek County, at a point approximately 2210 feet from the North line and 250 feet from the West line, Section 28. Maximum flow rate of 0.28 cubic feet per second (125 gpm). Appropriation date of May 3, 1982. The source of water for the Empire Well No. 1-25963-F shall be groundwater from the alluvium of the West Fork of Clear Creek, a tributary of the South Platte River. Wastewater from Empire's municipal water requirements shall be treated at a central wastewater treatment plant which shall return the treated effluent to the West Fork of Clear Creek in the amounts estimated in paragraphs 5 and 6. Additional supplemental or replacement alluvial wells for the Empire Well No. 1-25963-F may become necessary to meet

Empire's total annual municipal water requirements. With respect to any such additional or supplemental wells, the following provisions shall apply:

(a) The total amount of water diverted from the Empire Well No. 1-25963-F and any additional supplemental or replacement wells for any one month shall not exceed and shall be limited to the total amount of augmentation water released to the stream divided by the depletion percentage factors for such month set forth in paragraph 13 above.

(b) When Empire is prepared to drill one or more wells necessary as described in this paragraph, Empire shall apply to the State Engineer for a well permit and the State Engineer is directed to issue the permit in accordance with the conditions for equipping and constructing the same as set forth in paragraph 18 hereof.

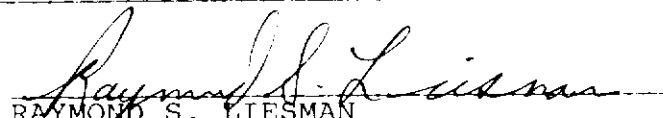
(c) Application must be filed with the water court for any supplemental wells to be included in this plan.

25. The State Engineer shall administer this plan for augmentation in the matter set forth herein and so long as Empire complies with the terms hereof, shall not curtail diversions, in times of shortage, through the Empire Well No. 1 or any replacement or supplemental wells thereto.

26. The Plan for Augmentation herein approved shall be subject to reconsideration by this Court on the question of material injury to vested water rights for a period of four (4) years from the date this decision is rendered.

27. The priority herein awarded said Empire Well No. 1-25963-F was filed in the Water Court in the year of 1982 and shall be administered as having been filed in that year; and shall be junior to all priorities filed in previous years. As between all rights, filed in the same calendar year, priorities shall be determined by historical dates of appropriation and not affected by the date of entry of ruling.

DATED this 8th day of March, 1984.

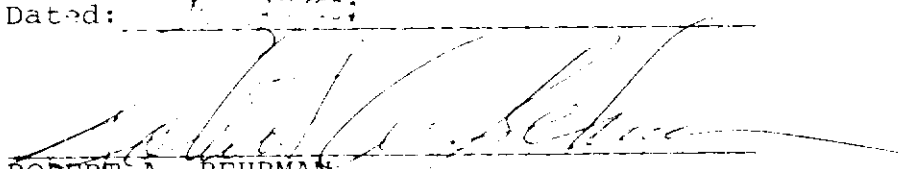
  
RAYMOND S. LIESMAN  
Water Referee  
Water Division No. I

Case No. 82 CW227  
Page 8  
Town of Empire

THE COURT FINDS: NO PROTEST WAS FILED IN THIS MATTER.

THE FOREGOING RULING IS CONFIRMED AND APPROVED, AND IS HEREBY MADE THE JUDGMENT AND DECREE OF THIS COURT.

Dated: 10-27-83

  
ROBERT A. BEHRMAN

Water Judge

Water Division No. I

State of Colorado

EXHIBIT A

Case No. W-7158-77--

Point of Diversion:

Beginning at a point at the center of Shaft No. 1 whence USLM Mineral Monument Rue bears North  $73^{\circ}42'$  East a distance of 3208.4 feet. This is an unsurveyed area but appears to be in Section 25, Township 3 South, Range 76 West of the 6th P.M., Clear Creek County.

Alternate Point of Diversion:

Henderson Shaft No. 2--Beginning at a point at the center of Shaft No. 2 whence USLM Mineral Monument Rue bears North  $77^{\circ}16'46''$  East a distance of 4931.33 feet. This is an unsurveyed area but appears to be in Section 25, Township 3 South, Range 76 West of the 6th P.M., Clear Creek County.

Alternate Point of Diversion:

Henderson New West Portal Mine Railway Tunnel--Beginning at a point on the centerline of the west tunnel portal whence the NW Corner of Section 6, Township 3 South, Range 77 West of the 6th P.M., bears North  $45^{\circ}29'35''$  West a distance of 16,086.72 feet.

Case No. W-1700A-77--

Point of Diversion:

The centerline of the West tunnel portal at a point whence the Northwest Corner of Section 6, Township 3 South, Range 77 West, of the 6 P.M. bears North  $45^{\circ}29'35''$  West a distance of 16,086.72 feet.

Alternate Point of Diversion:

Henderson Shaft No. 2, the location of which is at a point whence U.S.L.M. Mineral Monument Rue bears North  $77^{\circ}16'46''$  East a distance of 4,931.33 feet. The Rue Mineral Monument is located at North Latitude  $39^{\circ}46'17''$ , and West Longitude  $105^{\circ}49'58''$ .

Three persons who were  
not present at the  
the following  
L. Salazar, C. R. Rumbow,  
J. A. Dendel, J. P. Akelt,  
C. Elliott,

St. 100  
Date 5-2-84  
D. J. Lusk  
Deputy Water Clerk



## **Appendix D**

Amax Lease Agreement

APPLICANT'S  
EXHIBIT

Case#

82CW227

## LEASE AGREEMENT

This Lease Agreement ("this Lease") is made and entered into effective as of March 4, 1983, by and between the Town of Empire ("the Town"), a Colorado municipality duly organized and existing under the laws of the State of Colorado, whose address for the purposes of this Lease is Post Office Box 192, Empire, Colorado 80438, and AMAX Inc. ("AMAX"), a corporation organized and existing under and by virtue of the laws of the State of New York, whose address for purposes of this Lease is 1707 Cole Boulevard, Golden, Colorado 80401. The Town and AMAX are sometimes collectively referred to below as "the Parties."

## . W I T N E S S E T H :

WHEREAS, the Town has determined that improvement of the Town's water supply and delivery facilities will benefit the Town and its inhabitants and provide the Town and its inhabitants with a secure water supply for current and projected future municipal needs;

WHEREAS, the Town has further determined that in order to provide an adequate supply of water to serve the Town's current and projected future municipal needs in a reliable and efficient manner, it is imperative and a clear benefit to the Town and its inhabitants to:

(a) Acquire additional water for use as augmentation waters in a plan for augmentation devised by the Town and AMAX;

(b) Obtain a judicial decree approving a plan for augmentation and in connection therewith to construct a well or wells to supplement the Town's municipal water supply; and

(c) Enter into this Lease Agreement for the use of additional water as a necessary step in securing judicial approval of a plan for augmentation;

WHEREAS, AMAX has offered the Town the additional water to be used in the plan for augmentation;

WHEREAS, the Town filed an Amended Application for Approval of a Plan for Augmentation in District Court, Water Division No. 1, State of Colorado, on August 27, 1982, in Case No. 82 CW 227 and has

applied for and obtained a permit from the State Engineer to construct a well pursuant to the contemplated plan for augmentation;

AND WHEREAS, the Town has now constructed such a well;

NOW THEREFORE, for and in consideration of the mutual promises set forth below, the sum of one or more dollars exchanged by the Parties, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged by the Parties, the Parties agree as follows:

1. Grant of Lease. AMAX hereby leases, lets, and demises exclusively unto the Town water at a maximum continuous flow rate of twenty (20) gallons per minute from the developed non-tributary water rights owned by AMAX in the Henderson Mine as follows: (a) water with an appropriation date of April 1, 1967, as decreed and adjudicated by the District Court for Water Division No. 1 to AMAX in Case No. W-7158-77 for industrial, domestic, irrigation, municipal, piscatorial, and recreational uses; and (b) water with an appropriation date of July 31, 1967, as decreed and adjudicated by the District Court for Water Division No. 5 to AMAX in Case No. W-1700A-77 for industrial, domestic, irrigation, municipal, piscatorial, and recreational uses. The legal description of the points and alternate points of diversion of the Henderson Mine developed water is attached hereto and incorporated herein as Exhibit "A".

2. Lessee's Use of Water. The Town agrees to beneficially use the water obtained pursuant to this Lease exclusively for the Town's current and future municipal needs, and in conformance with the Amended Application for Approval of Plan for Augmentation filed in District Court, Water Division No. 1, State of Colorado, on August 27, 1982, Case No. 82 CW 227, or if there be any deviation therefrom in any decree issued pursuant to said Application, in conformance with the terms and conditions of any such decree approving the plan for augmentation (the "Plan for Augmentation").

3. Term and Extension. Unless sooner terminated as provided herein, this Lease shall remain in full force and effect for a primary term of fifty (50) years commencing on the effective date of this Lease. Should AMAX continue to make the water subject to this Lease available for lease after the expiration of the primary term, the Town shall have the first right to obtain a lease at the end of the term of this Lease by delivering written notice to AMAX of the Town's desire to obtain an additional lease at least five years prior to the expiration of this Lease.

4. Reservation of Rights. Anything to the contrary herein notwithstanding, AMAX expressly reserves the sole and exclusive right to use any and all water subject to this Lease which is not required by the Town to meet the terms and conditions of the

Plan for Augmentation as may be decreed by the District Court, Water Division No. 1, State of Colorado or any other court which may hereafter have jurisdiction to adjudicate such water rights.

5. Delivery of Water; Records.

(a) AMAX agrees to deliver to the Town on a year-round basis the non-tributary developed water subject to this Lease at a maximum continuous rate of up to but not exceeding 20 gallons per minute by delivering the same to the West Fork of Clear Creek at a point upstream of the Town and in the vicinity of the Henderson Shaft No. 2. AMAX shall use its facilities at the Henderson Shaft No. 2 to release and deliver the water subject to this Lease and to measure the quantity of such water so delivered. Records shall be maintained by AMAX and shall designate the amount, time, and place of the delivery and release of water under this Lease.

(b) The Town agrees to maintain diversion records showing the actual rate of pumping and the total monthly diversions in acre feet each month and on a cumulative total for the calendar year for any well used pursuant to the Plan for Augmentation. The Town agrees to provide AMAX with copies of these records upon AMAX's request.

(c) AMAX and the Town understand and agree that the actual amount of water released by AMAX under this Lease may vary from time to time and at any time depending on the Town's use of its well or wells pursuant to the Plan for Augmentation.

6. First Notice of Delivery. The Town shall give written notice to AMAX specifying that delivery of water pursuant to this Lease should commence and AMAX shall commence the requested delivery of water under this Lease within five days after receipt of such notice.

7. No Warranties or Representations. AMAX makes no warranties or representations about the water to be released and delivered under this Lease.

8. Notice. Notices or other communications to or between the Parties required or permitted under this Lease shall be in writing. All such communications and all items to be delivered to a Party under this Lease shall be personally delivered or placed in the United States registered or certified mail, postage prepaid, return receipt requested, addressed to the Party to receive the same at the address for that Party specified in the initial paragraph of this Lease. Each such communication or delivery shall be conclusively deemed to have been made, given, and received on the date of mailing

in the manner hereby required. Either of the Parties may change its address for notice.

9. No Assignment. The Town shall not have the right to sublease or convey the water nor assign or delegate all or any part of its rights, duties, or obligations under this Lease without the prior written consent of AMAX. Any assignment by AMAX of rights in the Henderson Mine or of its developed water shall not impair the rights of the Town under this Lease.

10. Modification. This Agreement may not be modified, amended, supplemented, extended, or altered except as herein provided and as the Parties may from time to time do so by written instrument signed and acknowledged by the authorized officers or representatives of the Parties.

11. Sole Agreement. This Lease contains the entire agreement between the Parties with regard to the subject matter hereof and supercedes completely all prior and contemporaneous written and oral agreements or communications between the Parties.

12. Force Majeure. If performance of any obligation under this Lease is prevented by Force Majeure, that obligation shall be suspended during the period in which performance is so prevented, and a period of performance of that obligation shall be extended for a period equal to the period for which performance is so suspended without penalty or liability to the Parties.

13. Indemnity. The Town and AMAX will indemnify and hold each other free and harmless from any loss, claim, damage, tax, penalty, liability, disbursement, litigation expense, attorney's fees and expenses or court cost arising out of, or in any way relating to, the execution or performance of this Lease.

14. Binding Effect. The covenants, conditions, limitations, and terms of this Agreement shall be binding upon and inure to the benefit of the Parties, and their respective successors, and assigns.

IN WITNESS WHEREOF, the authorized representatives of the Parties have executed this Lease effective as of the day and year first above written.

AMAX INC.

By William W. Bilhorn  
William W. Bilhorn, President  
Climax Molybdenum Company,  
a Division of AMAX Inc.

TOWN OF EMPIRE

By Kevin Croke  
Kevin Croke, Mayor

ATTEST: Lori Sanderson  
Town Clerk

## ACKNOWLEDGEMENTS

STATE OF COLORADO           )  
                                  ) ss.  
COUNTY OF JEFFERSON       )

The foregoing instrument was acknowledged before me by William W. Bilhorn, President of Climax Molybdenum Company, a Division of AMAX Inc., duly authorized to do so by and on behalf of AMAX Inc.

My commission expires: DECEMBER 19, 1983.

Darlene C. Grod  
Notary Public  
1707 COLE BLVD  
GOLDEN, CO 80401  
Address

[SEAL]

STATE OF COLORADO           )  
                                  ) ss.  
COUNTY OF Clear Creek     )

The foregoing instrument was acknowledged before me by The Honorable Mayor Kevin Croke, and by Lori Bandarian, Town Clerk, by and on behalf of the Town of Empire.

My commission expires: 7-2-83.

Margaret M. Cooke  
Notary Public  
30 E. Park Ave.  
Empire Colorado 80438  
Address

[SEAL]

## EXHIBIT A

to that Certain Lease Agreement

Dated March 4, 1983

by and between the

Town of Empire and AMAX Inc.

LEGAL DESCRIPTION OF POINTS AND ALTERNATE POINT OF DIVERSIONS OF  
WATER TO BE USED FOR AUGMENTATION

1. Case No. W-7158-77--

Point of Diversion:

Beginning at a point at the center of Shaft No. 1 whence USLM Mineral Monument Rue bears North 73°42' East a distance of 3208.4 feet. This is an unsurveyed area but appears to be in Section 25, Township 3 South, Range 76 West of the 6th P.M., Clear Creek County.

Alternate Point of Diversion:

Henderson Shaft No. 2 -- Beginning at a point at the center of Shaft No. 2 whence USLM Mineral Monument Rue bears North 77°16'46" East a distance of 4931.33 feet. This is an unsurveyed area but appears to be in Section 25, Township 3 South, Range 76 West of the 6th P.M., Clear Creek County.

Alternate Point of Diversion:

Henderson New West Portal Mine Railway Tunnel -- Beginning at a point on the centerline of the west tunnel portal whence the NW Corner of Section 6, Township 3 South, Range 77 West of the 6th P.M., bears North 45°29'35" West a distance of 16,086.72 feet.

2. Case No. W-1700A-77--

Point of Diversion:

The centerline of the West tunnel portal at a point whence the Northwest Corner of Section 6, T.3S., R.77W. of the 6th P.M. bears N. 45°29'35" W. a distance of 16,086.72 feet.

Alternate Point of Diversion:

Henderson Shaft No. 2, the location of which is at a point whence U.S.L.M. Mineral Monument Rue bears N. 77°16'46" E. a distance of 4,931.33 feet. The Rue Mineral Monument is located at North Latitude 39°46'17", and West Longitude 105°49'58".



## **Appendix E**

Empire Amended Plan for Augmentation

Case 2004CW184

District Court Water Division 1, State of Colorado Court Address:  901 9 <sup>th</sup> Avenue P.O. Box 2038 Greeley, CO. 80631	EFILED Document -- District Court 2004CW184 CO Weld County District Court 19th JD Filing Date: Apr 28 2011 12:11PM MDT Filing ID: 37294853
<b>CONCERNING THE APPLICATION FOR WATER RIGHTS OF THE TOWN OF EMPIRE IN CLEAR CREEK COUNTY</b>	<b>COURT USE ONLY</b>  Case Number: 04CW184
<b>FINDINGS OF FACT, CONCLUSIONS OF LAW, RULING OF THE WATER REFEREE AND DECREE OF THE WATER JUDGE</b>	

THIS MATTER having been filed with the Water Clerk, Water Division No. 1, on July 29, 2004, and the Referee, being fully advised in the premises, does hereby find:

All notices required by law of the filing of this application have been fulfilled, and the Referee has jurisdiction of this application.

A timely statement of opposition was filed by the City of Arvada, the City of Golden, the City of Westminster, the Farmers' Highline Canal and Reservoir Company, the Climax Molybdenum Company, and the Colorado Water Conservation Board. No other statement of opposition to the said application has been filed, and the time for filing such statements has expired. All of the statements of opposition have been resolved by stipulations filed with, and approved by, the Court

The Referee, having made such investigations as are necessary to make a determination and ruling in this matter, having considered the summary of consultation filed by the Division Engineer, and having become fully advised in the premises, does hereby make the following findings of fact, conclusions of law, and ruling:

# **I. FINDINGS OF FACT**

## **1. The name and address of the Applicant:**

Town of Empire (also referred to as "Applicant")  
 c/o Mayor  
 30 East Park Avenue  
 Empire, Colorado 80439

## **2. Name of structure to be augmented:** Empire Town Water Right as decreed by the District Court, City and County of Denver in Civil Action No. 41340 on January 7, 1907

for 1.82 cfs diverting from Mad Creek a tributary of West Clear Creek under a priority date of 1863, and having a decreed point of diversion on the easterly bank of Mad Creek at a point whence the SW corner of Section 33, T3S, R74W of the 6<sup>th</sup> P.M. bears S 23° 40' E a distance of 10193 feet.

3. **Water right(s) to be used for augmentation:** Up to 16.3 acre feet per year of water stored in Golden Reservoir Nos. 1, 2 and 3 (a/k/a Guanella Reservoir) pursuant to the terms and conditions of the Water Storage and Delivery Agreement between Empire and the City of Golden dated November 17, 2003. The said 16.3 acre-feet per year are comprised of the following two components:
  - a. Up to 6.3 of the said 16.3 acre-feet per year are derived from water rights decreed to Golden Reservoir Nos. 1, 2, and 3, located adjacent to the West Fork of Clear Creek in Sections 29 and 30, Township 3 South, Range 74 West of the 6th P.M., as decreed conditional by the District Court, Water Division 1 ("Water Court") in Case No. 82CW469, for a total capacity of 2600 acre-feet, with a direct flow component of 60 cfs and an appropriation date of June 8, 1977, and as augmented by the decrees of the Water Court in Case Nos. 83CW361 and 87CW298.
  - b. The remaining amount, up to 10 acre-feet per year will be water stored in Guanella Reservoir derived from Empire's lease of Henderson Mine developed water to the extent that it is not needed for augmentation of Empire Well No. 1-25963 and any supplemental or replacement wells thereto pursuant to the augmentation plan decreed by the Water Court in Case No. 82CW227 or other fully consumable water owned or leased by Empire. Empire's use of Henderson Mine developed water is pursuant to a Lease Agreement dated March 4, 1983 allowing Empire to use up to 20 gpm from the water rights for developed water with appropriation dates of April 1, 1967, and July 31, 1967, as decreed and adjudicated by the District Court Water Division 1 in Case No. W-7158-77 and by the District Court, Water Division 5 in Case No. W-1700A-77, respectively.
4. **Empire's water use.** Empire's uses of water are municipal uses, including domestic and household uses, sprinkling of streets and alleys, fire protection, lawn and garden irrigation, industrial and commercial uses and incidental uses related thereto. Empire has shown current uses of water for irrigation of 5.3 acres of lawns and gardens, and domestic, commercial, industrial, and other municipal uses associated with approximately 106 single family homes, 67 trailer court units, and 10 commercial developments.
5. **Empire's diversion requirement.** Empire's total annual municipal water diversion requirement is estimated to be 101.54 AF for its present population of 450 and ranges to a maximum of 225.38 AF for a projected population of 1,000. Empire's current and projected annual water diversion requirements are more specifically as follows:
  - a. Domestic in-house water requirements are 56.8 AF for the existing population of 450 and range to a maximum of 126 AF for a projected population of 1,000 based on a 113 gallon per capita per day water requirement;

- b. Lawn and garden irrigation water requirements are 9.70 AF for the irrigation of 5.3 acres of lawns and gardens and range to 21.6 AF for the irrigation of 11.77 acres of lawns and gardens by a projected population of 1,000;
  - c. system loss water requirements, including line leakage, winter bleeders, and overflow from storage tanks range from 34.8 AF for the existing population of 450 to 77.3 AF for a projected population of 1,000, and
  - d. Sewage treatment water requirements range from 0.24 AF for the existing population of 450 to 0.48 AF for a projected population of 1,000. Empire will utilize a central wastewater treatment facility with two sludge drying beds for its current population of 450 and a maximum of 4 sludge drying beds for a projected population of 1,000.
6. **Empire's consumptive use (in-house).** Empire's consumptive use of water for domestic in-house use is assumed to be 5% of the total annual municipal requirement for domestic in-house water requirements or 2.84 AF/yr for the present population of 450 and 6.31 AF/yr for a projected population of 1,000.
7. **Empire's consumptive use (irrigation).** Empire's consumptive use for lawn and garden irrigation is assumed to be 70% of the water requirement for lawn and garden or 6.79 AF/yr for the existing population of 450 and 15.1 AF/yr for a projected population of 1,000.
8. **Empire's consumptive use (system losses).** Empire's consumptive use of water associated with system losses, including line leakage, winter bleeders and storage tanks is estimated to be 5% of water requirements for system losses or 1.74 AF/yr for the existing population of 450 and 3.87 AF/yr for a projected population of 1,000.
9. **Empire's consumptive use (sewage treatment).** Empire's consumptive use of water associated with sewage treatment losses is estimated to be 0.24 AF/yr for the existing population of 450 and 0.48 AF/yr for a projected population of 1,000.
10. **Empire's consumptive use (combined total).** Empire's total consumptive use of water is estimated to be 11.6 AF/yr for an existing population of 450 and 25.8 AF/yr for a projected population of 1,000, with the assumptions in paragraphs 5 through 9.
11. **Plan for Augmentation.** The Town of Empire currently has a plan for augmentation to replace municipal depletions attributable to the municipal use of water from a Empire Well No. 1-25963-F and any replacement or supplemental wells thereto owned by the Town. That plan for augmentation was decreed by the District Court, Water Division 1, in Case No. 82CW227. That plan for augmentation will not be affected or modified in any way by the application filed herein. Depletions from diversions from such wells will be replaced pursuant to the decree in Case No. 82CW227. Depletions from diversions pursuant to the Empire Town Water Right, as described above, will be replaced pursuant to the plan for augmentation decreed herein, and the plan for augmentation decreed herein shall be used only to replace depletions attributable to diversion of the Empire

Town Water Right. The court finds that the use of monthly depletion factors to calculate the monthly augmentation requirement to replace depletions from otherwise injurious out-of-priority diversions of the Empire Town Water Right is reasonable, and shall be determined as follows:

- a. The Town will daily measure and record all diversions from the Empire Town Water Right.
- b. To quantify the depletions during those days when the Empire Town Water Right is otherwise out-of priority, the amounts diverted will be multiplied by the appropriate monthly municipal depletion factor for the Town of Empire as follows:

January	5.1%
February	5.1%
March	5.2%
April	5.3%
May	20.9%
June	25.4%
July	23.7%
August	19.4%
September	18.1%
October	5.7%
November	4.1%
December	5.0%

- c. Pursuant to the terms and conditions of the Water Storage and Delivery Agreement between Empire and the City of Golden, daily releases of the Town's stored water in Guanella Reservoir shall be made to the West Fork of Clear Creek in an amount necessary to replace the depletion calculated in subparagraph b., above, as needed to prevent injurious out-of-priority depletion; provided, however that nothing herein shall prevent the Division Engineer from ordering or allowing such releases to be aggregated.
- d. Using the depletion factors set forth in paragraph 11.b above, on the accounting form required pursuant to paragraph 14 below, Applicant shall project its monthly depletions for the succeeding month and the replacement water that will be available to it to replace such depletions. In no event shall such projection show that projected depletions will be greater than projected replacement water for the succeeding month; and Applicant shall curtail diversions of the Empire Town Water Right in the succeeding month to the extent necessary to ensure that out-of-priority depletions attributable to such diversions do not exceed the available replacement water under this decree.

**12. Instream Flow Water Rights.** Because the Empire Town Water Right has a very senior 1863 priority date, it is expected that this plan for augmentation will operate only

infrequently, i.e., during those relatively few occasions when the said water right is being called out by downstream water rights with priority dates senior to 1863. Nonetheless, when this plan is being operated, in order to prevent injury to the instream flow decree held by the CWCB, in Case No. 1-87CW276 for 11 cfs from 4/1-10/31 and 5 cfs from 11/1-3/31 for the stretch of West Clear Creek from the confluence of West Clear Creek and Woods Creek and the confluence of West Clear Creek and Clear Creek, with an appropriation date of December 11, 1987, the Applicant and the CWCB agree as follows: Applicant shall only use releases of stored water from Guanella Reservoir to replace the depletions described in this decree at times and to the extent that the flow of West Clear Creek downstream of the confluence of Mad Creek and West Clear Creek is at or above the instream flows decreed to the CWCB in Case No. 1-87CW276. At all other times, replacement of depletions pursuant to this decree will be made by foregoing diversions of the Applicant's augmentation water described in paragraph 3, above, when those diversions are in priority, into storage in Guanella Reservoir at the headgate of the Lindstrom No. 2 and Enlargement on West Clear Creek at a rate sufficient to replace the calculated depletions calculated as described in paragraph 11.b, above.

13. **Future Construction of New Wastewater Treatment Plant or Upgrade of Current Wastewater Treatment Plant.** If and when Applicant either upgrades its current wastewater treatment plant or builds a new wastewater treatment plant, the new or upgraded wastewater treatment plant will, at a minimum, incorporate Tertiary Wastewater Treatment processes, and/or other technologies ("TWT"), followed by UV disinfection or another appropriate disinfection technology. Applicant will be responsible for the design of the new or upgraded plant and will use sound engineering practices and principles in the design, which may include pilot testing of UV and/or other technologies where appropriate. Applicant will be responsible for all design and construction costs and operation and maintenance costs associated with the new or upgraded plant. The treatment processes at the new or upgraded plant will meet a monthly average (using the sampling procedures and calculation procedures set forth in Applicant's state wastewater discharge permit) of 0.3 mg/l of total phosphorus ("TP") and 10 mg/l of total inorganic nitrogen ("TIN"). Discharges on a daily basis at the new or upgraded plant that exceed 0.6 mg/l of TP will be considered phosphorus excursions and shall be limited to no more than 60 days per calendar year. Discharges on a daily basis that exceed 20 mg/l of TIN shall be considered nitrogen excursions, and shall be limited to no more than 60 days per calendar year. Applicant will use its best efforts to operate and maintain all of the new or upgraded plant processes, including the TWT. Applicant will also use its best efforts to run its entire wastewater flow through the TWT process trains at all times. Maintenance, repair, or replacement of sewer lines within the Town, or routine maintenance or repair of the existing wastewater treatment plant that does not result in an increase of the wastewater treatment capacity or organic loading of the plant, shall not trigger the requirements of this paragraph.
14. **No injury.** By the modes of augmentation described above, and the terms and conditions described herein, no injury will result to other vested water rights.

15. **Accounting and Record Keeping.** Each month Applicant shall submit a combined accounting form for both the plan for augmentation decreed in Case No. 82CW227 and the plan for augmentation decreed herein. Applicant shall send a copy of such accounting form to Climax Molybdenum Company and, upon request, to any other Objector. Applicant will, in cooperation with the Division Engineer, develop such accounting forms and implement such record keeping practices as are acceptable to the Division Engineer for administration of this plan; provided however, that, in addition to other matters that the Division may require, the accounting form shall require reporting of the amount of augmentation water available to Applicant each month.

## **II. CONCLUSIONS OF LAW**

16. **Jurisdiction.** This Court has jurisdiction of the subject matter of this case and all persons who could have appeared herein, whether they have appeared or not, pursuant to C.R.S. §§37-92-203(1), 37-92-302 and 37-92-304.
17. **Notice.** Full and adequate notice of the claims adjudicated herein has been given in the manner required by law.
18. **Non-Injury to Other Water Rights.** The plan for augmentation decreed herein is of the type contemplated by law and, if properly implemented pursuant to the terms and conditions of this decree, will allow Applicant to make otherwise out-of-priority diversions and provide replacement of depletions caused by such out-of-priority diversions to the extent necessary to prevent material injury to owners of or persons entitled to use water pursuant to any vested water right or decreed conditional water right.

## **III. RULING**


19. The foregoing Findings of Fact and Conclusions of Law are incorporated herein as if set out in full.
20. Applicant's plan for augmentation as set forth herein is hereby approved, subject to compliance with proper administration of the terms and conditions set forth in this Ruling.
21. Pursuant to C.R.S. §37-92-305(8), this plan for augmentation is sufficient to permit the continuation of diversions when curtailment would otherwise be required to meet a valid senior call for water, to the extent that this Ruling requires the Applicant to provide replacement water necessary to meet the lawful requirements of a senior diverter at the time and location and to the extent the senior would be deprived of his or her lawful entitlement by the Applicant's diversion. The state engineer shall curtail all out-of-priority diversions, the depletions from which are not so replaced as to prevent injury to vested water rights.
22. Applicant shall install and maintain such measuring devices, provide accounting, and supply calculations regarding the timing of depletions as required by the Division Engineer as required by this plan. Applicant shall also file an annual report with the

Division Engineer by November 15 of each year summarizing diversions, out-of-priority depletions and releases of augmentation water to replace such depletions pursuant to this decree.

23. The Court shall retain jurisdiction of this matter on the question of injury to the water rights of any person for a period of three (3) years from the date of this decree. The retained jurisdiction of this Court may be invoked by any party to this proceeding or by the State Engineer or the Division Engineer by filing a petition with this Court setting forth the substance of the relief sought, and the basis for that relief with service of said petition on all other parties hereto.

24. A copy of this Ruling shall be filed with the Division Engineer for Water Division No. 1 and with the State Engineer.

Dated: April 4, 2011



John S. Cowan  
Water Referee  
Water Division 1

This document was e-filed pursuant to C.R.C.P. 121 §1-16. A printable version of the electronically signed document is available in the court's electronic file.

### **DECREE**

THE COURT FINDS: NO PROTEST WAS FILED IN THIS MATTER.

THE FOREGOING RULING IS CONFIRMED AND APPROVED, AND IS HEREBY MADE THE JUDGMENT AND DECREE OF THIS COURT.

DATED: \_\_\_\_\_

\_\_\_\_\_  
James F. Hartmann  
Water Judge  
Water Division 1



This document constitutes a ruling of the court and should be treated as such.

**File & Serve**

**Transaction ID:** 36907963

**Current Date:** Apr 28, 2011

**Case Number:** 2004CW184

**Case Name:** In the interest of: TOWN OF EMPIRE

**Court Authorizer**

**Comments:**

ORDER:

There has been no protest filed to the Ruling of the Water Referee. The foregoing Ruling of the Water Referee is confirmed and approved and is hereby entered as the judgment and decree of this court.

Dated: April 28, 2011

/s/ James F. Hartmann  
Water Judge, Division No. 1

## **Appendix F**

### **Amax Amended Lease Agreement**

## AMENDMENT TO LEASE AGREEMENT

THIS AMENDMENT TO LEASE AGREEMENT ("Amendment") is made and entered into as of the 21 day of May, 2009, by and between TOWN OF EMPIRE ("the Town"), a Colorado municipality duly organized under the existing laws of the state of Colorado, whose address for the purpose of this amendment is 30 E. Park Ave., Empire, CO 80438, and CLIMAX MOLYBDENUM COMPANY, ("CLIMAX") a Delaware corporation, formerly doing business as AMAX, Inc. ("AMAX"), whose address for the purposes of this amendment is One North Central Ave, Phoenix, Arizona 85004 . The Town and CLIMAX are collectively referred to below as "the Parties."

### WITNESSETH:

WHEREAS, the Town and CLIMAX have entered into that certain Lease Agreement dated March 4, 1983 attached hereto as Exhibit 1 (the "the Lease"), whereby CLIMAX agreed to lease to the Town and the Town agreed to lease from CLIMAX certain developed non-tributary water rights in the Henderson Mine for use in the Town's plan for augmentation decreed in Case No. 82CW227, District Court, Water Division 1 as more particularly set forth in the Lease; and

WHEREAS, the Town and CLIMAX now desire to amend the Lease to allow the Town to also use such water rights in the Town's additional plan for augmentation pending in Case No. 04CW184, District Court, Water Division 1.

NOW, THEREFORE, in consideration of the foregoing and their mutual promises set forth below, and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Town and CLIMAX agree as follows:

1. Paragraph 2 of the Lease shall be amended to read as follows:

Lessee's Use of Water. The Town agrees to beneficially use the water obtained pursuant to this Lease exclusively for the Town's current and future municipal needs, in accordance with the decree entered in District Court, Water Division No. 1, State of Colorado, on January 24, 1984, Case No. 82CW227; and in accordance the application for approval of plan for augmentation filed in Case No. 04CW184, District Court Water Division 1 and with any decree entered in that case. The decree entered in Case No. 82CW227 and any decree entered in Case No. 04CW184 are collectively referred to hereinafter as "the Plan for Augmentation."

2. Paragraph 5(b) of the Lease shall be amended to read as follows:

The Town agrees to maintain records showing the instantaneous and monthly rates of pumping or diversion from the structures augmented by the Plan for Augmentation, the amount and time of any use of the leased water pursuant the Plan for Augmentation, including any diversions of the leased water from the West Fork of Clear Creek into storage in Guanella Reservoir and any release of the leased water from storage in Guanella

Reservoir. The above records shall set forth the instantaneous rates of pumping or diversion in terms of gallons per minute or cubic feet per second, and total monthly pumping or diversion in terms of acre-feet, together with a cumulative total in acre-feet for the calendar year. The Town agrees to provide CLIMAX with copies of these records upon CLIMAX's request.

3. This Amendment to Lease Agreement does not alter the primary fifty-year term of the Lease, which began in 1983, or the Town's option to extend the Lease at the end of that primary term. All other terms and conditions of the Lease shall also continue in full force and effect.

IN WITNESS WHEREOF, the authorized representatives of the Parties have executed this Amendment effective as of the day and year first above written.

CLIMAX MOLYBDENUM COMPANY

By: \_\_\_\_\_

Fred J. Menzer, Vice President

TOWN OF EMPIRE

By: \_\_\_\_\_

Richard Sprague, Mayor

## EXHIBIT 1

## LEASE AGREEMENT

This Lease Agreement ("this Lease") is made and entered into effective as of March 4, 1983, by and between the Town of Empire ("the Town"), a Colorado municipality duly organized and existing under the laws of the State of Colorado, whose address for the purposes of this Lease is Post Office Box 192, Empire, Colorado 80438, and AMAX Inc. ("AMAX"), a corporation organized and existing under and by virtue of the laws of the State of New York, whose address for purposes of this Lease is 1707 Cole Boulevard, Golden, Colorado 80401. The Town and AMAX are sometimes collectively referred to below as "the Parties."

## . W I T N E S S E T H :

WHEREAS, the Town has determined that improvement of the Town's water supply and delivery facilities will benefit the Town and its inhabitants and provide the Town and its inhabitants with a secure water supply for current and projected future municipal needs;

WHEREAS, the Town has further determined that in order to provide an adequate supply of water to serve the Town's current and projected future municipal needs in a reliable and efficient manner, it is imperative and a clear benefit to the Town and its inhabitants to:

(a) Acquire additional water for use as augmentation waters in a plan for augmentation devised by the Town and AMAX;

(b) Obtain a judicial decree approving a plan for augmentation and in connection therewith to construct a well or wells to supplement the Town's municipal water supply; and

(c) Enter into this Lease Agreement for the use of additional water as a necessary step in securing judicial approval of a plan for augmentation;

WHEREAS, AMAX has offered the Town the additional water to be used in the plan for augmentation;

WHEREAS, the Town filed an Amended Application for Approval of a Plan for Augmentation in District Court, Water Division No. 1, State of Colorado, on August 27, 1982, in Case No. 82 CW 227 and has

applied for and obtained a permit from the State Engineer to construct a well pursuant to the contemplated plan for augmentation;

AND WHEREAS, the Town has now constructed such a well;

NOW THEREFORE, for and in consideration of the mutual promises set forth below, the sum of one or more dollars exchanged by the Parties, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged by the Parties, the Parties agree as follows:

1. Grant of Lease. AMAX hereby leases, lets, and demises exclusively unto the Town water at a maximum continuous flow rate of twenty (20) gallons per minute from the developed non-tributary water rights owned by AMAX in the Henderson Mine as follows: (a) water with an appropriation date of April 1, 1967, as decreed and adjudicated by the District Court for Water Division No. 1 to AMAX in Case No. W-7158-77 for industrial, domestic, irrigation, municipal, piscatorial, and recreational uses; and (b) water with an appropriation date of July 31, 1967, as decreed and adjudicated by the District Court for Water Division No. 5 to AMAX in Case No. W-1700A-77 for industrial, domestic, irrigation, municipal, piscatorial, and recreational uses. The legal description of the points and alternate points of diversion of the Henderson Mine developed water is attached hereto and incorporated herein as Exhibit "A".

2. Lessee's Use of Water. The Town agrees to beneficially use the water obtained pursuant to this Lease exclusively for the Town's current and future municipal needs, and in conformance with the Amended Application for Approval of Plan for Augmentation filed in District Court, Water Division No. 1, State of Colorado, on August 27, 1982, Case No. 82 CW 227, or if there be any deviation therefrom in any decree issued pursuant to said Application, in conformance with the terms and conditions of any such decree approving the plan for augmentation (the "Plan for Augmentation").

3. Term and Extension. Unless sooner terminated as provided herein, this Lease shall remain in full force and effect for a primary term of fifty (50) years commencing on the effective date of this Lease. Should AMAX continue to make the water subject to this Lease available for lease after the expiration of the primary term, the Town shall have the first right to obtain a lease at the end of the term of this Lease by delivering written notice to AMAX of the Town's desire to obtain an additional lease at least five years prior to the expiration of this Lease.

4. Reservation of Rights. Anything to the contrary herein notwithstanding, AMAX expressly reserves the sole and exclusive right to use any and all water subject to this Lease which is not required by the Town to meet the terms and conditions of the

Plan for Augmentation as may be decreed by the District Court, Water Division No. 1, State of Colorado or any other court which may hereafter have jurisdiction to adjudicate such water rights.

5. Delivery of Water: Records.

(a) AMAX agrees to deliver to the Town on a year-round basis the non-tributary developed water subject to this Lease at a maximum continuous rate of up to but not exceeding 20 gallons per minute by delivering the same to the West Fork of Clear Creek at a point upstream of the Town and in the vicinity of the Henderson Shaft No. 2. AMAX shall use its facilities at the Henderson Shaft No. 2 to release and deliver the water subject to this Lease and to measure the quantity of such water so delivered. Records shall be maintained by AMAX and shall designate the amount, time, and place of the delivery and release of water under this Lease.

(b) The Town agrees to maintain diversion records showing the actual rate of pumping and the total monthly diversions in acre feet each month and on a cumulative total for the calendar year for any well used pursuant to the Plan for Augmentation. The Town agrees to provide AMAX with copies of these records upon AMAX's request.

(c) AMAX and the Town understand and agree that the actual amount of water released by AMAX under this Lease may vary from time to time and at any time depending on the Town's use of its well or wells pursuant to the Plan for Augmentation.

6. First Notice of Delivery. The Town shall give written notice to AMAX specifying that delivery of water pursuant to this Lease should commence and AMAX shall commence the requested delivery of water under this Lease within five days after receipt of such notice.

7. No Warranties or Representations. AMAX makes no warranties or representations about the water to be released and delivered under this Lease.

8. Notice. Notices or other communications to or between the Parties required or permitted under this Lease shall be in writing. All such communications and all items to be delivered to a Party under this Lease shall be personally delivered or placed in the United States registered or certified mail, postage prepaid, return receipt requested, addressed to the Party to receive the same at the address for that Party specified in the initial paragraph of this Lease. Each such communication or delivery shall be conclusively deemed to have been made, given, and received on the date of mailing

in the manner hereby required. Either of the Parties may change its address for notice.

9. No Assignment. The Town shall not have the right to sublease or convey the water nor assign or delegate all or any part of its rights, duties, or obligations under this Lease without the prior written consent of AMAX. Any assignment by AMAX of rights in the Henderson Mine or of its developed water shall not impair the rights of the Town under this Lease.

10. Modification. This Agreement may not be modified, amended, supplemented, extended, or altered except as herein provided and as the Parties may from time to time do so by written instrument signed and acknowledged by the authorized officers or representatives of the Parties.

11. Sole Agreement. This Lease contains the entire agreement between the Parties with regard to the subject matter hereof and supercedes completely all prior and contemporaneous written and oral agreements or communications between the Parties.

12. Force Majeure. If performance of any obligation under this Lease is prevented by Force Majeure, that obligation shall be suspended during the period in which performance is so prevented, and a period of performance of that obligation shall be extended for a period equal to the period for which performance is so suspended without penalty or liability to the Parties.

13. Indemnity. The Town and AMAX will indemnify and hold each other free and harmless from any loss, claim, damage, tax, penalty, liability, disbursement, litigation expense, attorney's fees and expenses or court cost arising out of, or in any way relating to, the execution or performance of this Lease.

14. Binding Effect. The covenants, conditions, limitations, and terms of this Agreement shall be binding upon and inure to the benefit of the Parties, and their respective successors, and assigns.



IN WITNESS WHEREOF, the authorized representatives of the Parties have executed this Lease effective as of the day and year first above written.

AMAX INC.

By William W. Bilhorn  
William W. Bilhorn, President  
Climax Molybdenum Company,  
a Division of AMAX Inc.

TOWN OF EMPIRE

By Kevin Croke  
Kevin Croke, Mayor

ATTEST: Lori Bandagian  
Town Clerk

## ACKNOWLEDGEMENTS

STATE OF COLORADO )  
COUNTY OF JEFFERSON ) ss.

The foregoing instrument was acknowledged before me by William W. Bilhorn, President of Climax Molybdenum Company, a Division of AMAX Inc., duly authorized to do so by and on behalf of AMAX Inc.

My commission expires: DECEMBER 19, 1983.

Darlene Grad  
Notary Public  
1707 GOLF BLVD  
GOLDEN, CO 80401  
Address

[SEAL]

STATE OF COLORADO )  
COUNTY OF Clear Creek ) ss.

The foregoing instrument was acknowledged before me by The Honorable Mayor Kevin Croke, and by Lori Bandezian, Town Clerk, by and on behalf of the Town of Empire.

My commission expires: 7-2-83.

Margaret M. Cooke  
Notary Public  
301 E. Park Ave.  
Empire Colorado 80438  
Address

[SEAL]

## EXHIBIT A

to that Certain Lease Agreement

Dated March 4, 1983

by and between the

Town of Empire and ANAX Inc.

LEGAL DESCRIPTION OF POINTS AND ALTERNATE POINT OF DIVERSIONS OF  
WATER TO BE USED FOR AUGMENTATION

## 1. Case No. W-7158-77--

## Point of Diversion:

Beginning at a point at the center of Shaft No. 1 whence USLM Mineral Monument Rue bears North 73°42' East a distance of 3208.4 feet. This is an unsurveyed area but appears to be in Section 25, Township 3 South, Range 76 West of the 6th P.M., Clear Creek County.

## Alternate Point of Diversion:

Henderson Shaft No. 2 -- Beginning at a point at the center of Shaft No. 2 whence USLM Mineral Monument Rue bears North 77°16'46" East a distance of 4931.33 feet. This is an unsurveyed area but appears to be in Section 25, Township 3 South, Range 76 West of the 6th P.M., Clear Creek County.

## Alternate Point of Diversion:

Henderson New West Portal Mine Railway Tunnel -- Beginning at a point on the centerline of the west tunnel portal whence the NW Corner of Section 6, Township 3 South, Range 77 West of the 6th P.M., bears North 45°29'35" West a distance of 16,086.72 feet.

## 2. Case No. W-1700A-77--

## Point of Diversion:

The centerline of the West tunnel portal at a point whence the Northwest Corner of Section 6, T.3S., R.77W. of the 6th P.M. bears N. 45°29'35" W. a distance of 16,086.72 feet.

## Alternate Point of Diversion:

Henderson Shaft No. 2, the location of which is at a point whence U.S.L.M. Mineral Monument Rue bears N. 77°16'46" E. a distance of 4,931.33 feet. The Rue Mineral Monument is located at North Latitude 39°46'17", and West Longitude 105°49'58".

## **Appendix G**

Ball Placer Draft Feasibility Report

**DRAFT**

**FEASIBILITY STUDY  
FOR  
BALL PLACER RESERVOIR  
EMPIRE, COLORADO**

**Prepared for:**

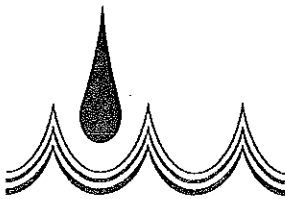
**Clear Creek County Economic  
Development Corporation  
P.O. Box 2030  
Georgetown, Colorado 80444**

**Prepared by:**

**WRC Engineering, Inc.  
950 South Cherry Street  
Denver, Colorado 80246  
(303) 757-8513  
(303 758-3208 FAX**

**WRC File: 2111/3**

**February 2003**



WRC ENGINEERING, INC.

DRAFT

February 13, 2003

Ms. Peggy Stokstad, Director  
Clear Creek Economic Development Corporation  
P.O. Box 2030  
Georgetown, Colorado 80444

WRC File: 2111/2

RE: Feasibility Study for Ball Placer Reservoir

Dear Ms. Stokstad:

Presented herein is the feasibility study report for the Ball Placer reservoir site in the Town of Empire. The Ball Placer reservoir was presented as a potential reservoir site in the "Reservoir Siting Analysis" prepared by WRC Engineering, Inc. in November 2002. This report was prepared in accordance with our proposal dated May 2, 2002 and presents information regarding the physical site characteristics and feasibility of the site as a raw water storage and augmentation reservoir. This report summarizes available storage, budget information and provides recommendations for further evaluation and analysis.

We appreciate the opportunity to perform these services and look forward to continued work on this project.

Respectfully submitted,

WRC ENGINEERING, INC.

Roger L. Mieden, P.E.  
Project Manager

Alan J. Leak, P.E.  
Principal-in-Charge

ajl/ell

CONSULTING ENGINEERS

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### **Appendix**

**FEASIBILITY STUDY  
FOR  
BALL PLACER RESERVOIR  
EMPIRE, COLORADO**

**INTRODUCTION**

**Purpose**

The purpose of this study is to evaluate the feasibility of constructing a water storage reservoir on the Ball Placer site in the Town of Empire, Colorado. The site was identified as a potential reservoir site in a previous study, "Clear Creek County Economic Development Corporation, Reservoir Siting Analysis", prepared by WRC Engineering, Inc. in 2002 (Reference 1). The reservoir would be used as a water source for augmentation and potentially as a municipal raw water supply for the Town of Empire.

**Scope**

The scope of work for the study included meetings and coordination with the Town of Empire, Clear Creek County and others to obtain information relevant to the site. Engineering analysis was inducted with the intent of identifying any "fatal flaws" with potential use of the site for a water storage reservoir. A topographic survey and preliminary grading plan was prepared for the site and preliminary design information was developed to provide a basis for determination of budget level costs. A preliminary geotechnical evaluation was also prepared as part of this study. The project scope does not include final design and additional analysis and design will be necessary in the event that construction of the reservoir is deemed to be viable.

**PROJECT SITE DESCRIPTION**

**Location**

The Ball Placer Reservoir site is located in the Southwest 1/4 of Section 28, T. 3 S., R. 74 W., of the 6<sup>th</sup> P.M. in the Town of Empire, Clear Creek County, Colorado. The site is bordered by the West Fork of Clear Creek on the north, Bard Creek Road on the west, a town ballpark to the south and the town cemetery and private land to the east (see Figure 1). Raw water for the reservoir would be obtained from a diversion located on Bard Creek approximately 2 mile south of the reservoir site along Bard Creek Road.

**Site Description**

The proposed reservoir site covers an area of approximately 10 acres. The site was previously utilized



**DRAFT**

**FEASIBILITY STUDY  
FOR  
BALL PLACER RESERVOIR  
EMPIRE, COLORADO**

**Prepared for:**

**Clear Creek County Economic  
Development Corporation  
P.O. Box 2030  
Georgetown, Colorado 80444**

**Prepared by:**

**WRC Engineering, Inc.  
950 South Cherry Street  
Denver, Colorado 80246  
(303) 757-8513  
(303) 758-3208 FAX**

**WRC File: 2111/3**

**February 2003**

**DRAFT**

**FEASIBILITY STUDY  
FOR  
BALL PLACER RESERVOIR  
EMPIRE, COLORADO**

**Prepared for:**

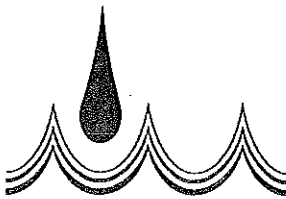
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**February 2003**



WRC ENGINEERING, INC.

DRAFT

February 13, 2003

Ms. Peggy Stokstad, Director  
Clear Creek Economic Development Corporation  
P.O. Box 2030  
Georgetown, Colorado 80444

WRC File: 2111/2

RE: Feasibility Study for Ball Placer Reservoir

Dear Ms. Stokstad:

Presented herein is the feasibility study report for the Ball Placer reservoir site in the Town of Empire. The Ball Placer reservoir was presented as a potential reservoir site in the "Reservoir Siting Analysis" prepared by WRC Engineering, Inc. in November 2002. This report was prepared in accordance with our proposal dated May 2, 2002 and presents information regarding the physical site characteristics and feasibility of the site as a raw water storage and augmentation reservoir. This report summarizes available storage, budget information and provides recommendations for further evaluation and analysis.

We appreciate the opportunity to perform these services and look forward to continued work on this project.

Respectfully submitted,

WRC ENGINEERING, INC.

Roger L. Mieden, P.E.  
Project Manager

Alan J. Leak, P.E.  
Principal-in-Charge

ajl/ell

CONSULTING ENGINEERS

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- General
- Streamflow Availability
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- Town of Empire
- Colorado State Engineer's Office
- Potential Hazardous Material Concerns
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### **Appendix**

# **FEASIBILITY STUDY FOR BALL PLACER RESERVOIR EMPIRE, COLORADO**

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The scope of work for the study included meetings and coordination with the Town of Empire, Clear Creek County and others to obtain information relevant to the site. Engineering analysis was inducted with the intent of identifying any "fatal flaws" with potential use of the site for a water storage reservoir. A topographic survey and preliminary grading plan was prepared for the site and preliminary design information was developed to provide a basis for determination of budget level costs. A preliminary geotechnical evaluation was also prepared as part of this study. The project scope does not include final design and additional analysis and design will be necessary in the event that construction of the reservoir is deemed to be viable.

## **PROJECT SITE DESCRIPTION**

### **Location**

The Ball Placer Reservoir site is located in the Southwest 1/4 of Section 28, T. 3 S., R. 74 W., of the 6<sup>th</sup> P.M. in the Town of Empire, Clear Creek County, Colorado. The site is bordered by the West Fork of Clear Creek on the north, Bard Creek Road on the west, a town ballpark to the south and the town cemetery and private land to the east (see Figure 1). Raw water for the reservoir would be obtained from a diversion located on Bard Creek approximately 2 mile south of the reservoir site along Bard Creek Road.

### **Site Description**

The proposed reservoir site covers an area of approximately 10 acres. The site was previously utilized

as part of a gold mining operation located west of Empire. The site has been previously disturbed and contains both earth fill and tailings deposited on the site as a result of the gold mining operation. On the north side of the site, a very steep (nearly vertical) slope approximately 30 feet high slopes down to the West Fork of Clear Creek. Steep fill slopes are located along the west and south sides of the site and a steep hillside lies along the east side of the site.

Vegetation on the site is sparse and consists of occasional coniferous trees along the perimeter of the site and along a fill area that extends from Bard Creek Road into the site. Other than the steeply sloped portions of the site, the majority of the site is covered by layers of tailing material deposited by the gold mining operation. There is no significant native vegetation grass cover other than along the perimeter of the site.

The site generally slopes toward the northeast with a ridge located along the West Fork of Clear Creek preventing any site runoff from flowing into the stream. The elevation of the site varies from approximately 8525 along the northeast side to 8580 along the south side.

The majority of the site is owned by the Town of Empire. A portion of the site along the east side is currently in private ownership, however, it is our understanding that it would most likely be possible to acquire the property.

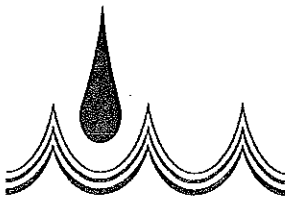
### **Climatic Information**

The climate of the reservoir site can be considered a semi-arid environment with relatively little precipitation. Based on weather data collected at Georgetown, Colorado (approximately 4 miles south of the site, with a period of record of 53 years), average annual total precipitation is 16.0 inches per year. Average annual evaporation is 36 inches per year (Reference 2).

### **Environmental Concerns**

Typical environmental concerns for water storage reservoir sites include aesthetic concerns, potential wetland impacts and temporary impacts during the construction period. Based on visual observation of the site, no large wetland impacts would be necessary to construct the reservoir. A limited wetland impact may be present where the reservoir would release to the West Fork of Clear Creek, however, we anticipate that if a US Army Corps of Engineers 404 is required, that improvements could be implemented under a Nationwide Permit.

Typical impacts during construction include increased traffic during the construction period and increased dust that result from earthmoving operations. These concerns are typically mitigated to the extent possible by adding water for dust control and providing a traffic control plan.



WRC ENGINEERING, INC.

DRAFT

February 13, 2003

Ms. Peggy Stokstad, Director  
Clear Creek Economic Development Corporation  
P.O. Box 2030  
Georgetown, Colorado 80444

WRC File: 2111/2

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The majority of the site is owned by the Town of Empire. A portion of the site along the east side is currently in private ownership, however, it is our understanding that it would most likely be possible to acquire the property.

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The climate of the reservoir site can be considered a semi-arid environment with relatively little precipitation. Based on weather data collected at Georgetown, Colorado (approximately 4 miles south of the site, with a period of record of 53 years), average annual total precipitation is 16.0 inches per year. Average annual evaporation is 36 inches per year (Reference 2).

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Typical impacts during construction include increased traffic during the construction period and increased dust that result from earthmoving operations. These concerns are typically mitigated to the extent possible by adding water for dust control and providing a traffic control plan.

For the Ball Placer reservoir site, an additional environmental concern is the impact of potentially hazardous materials in the tailings material present at the site. Materials could pose potentially hazardous conditions by increased mobilization of dust during the construction period or by potential leaching of materials to groundwater or the West Fork of Clear Creek. Material could also potentially leach into the water stored in the reservoir. Concerns are greater if the reservoir would be used as a raw water supply since the water use would be much more direct than storage for augmentation purposes.

The reservoir site was originally a location evaluated for the Clear Creek/Central City Superfund Site which was listed on the National Priorities List in 1983 due to concerns regarding the tailings material. Environmental sampling was conducted in 1989 and again in 1992 to determine priority cleanup locations. The tailings exhibited low levels of arsenic and lead and it is our understanding that the EPA does not consider the Empire tailings to be part of the Clear Creek/Central City Superfund Site at this time. Correspondence summarizing environmental testing and results is included in the Appendix. It should be noted that limited testing was conducted on the site and additional testing and evaluation of the environmental risk should be done prior to implementation of the reservoir.

## **WATER RIGHTS**

### **General**

An Application for Water Rights was filed in District Court, Water Division N° 1 of the State of Colorado (Case N° 01CW290) on December 31, 2001. The application filed for conditional water rights to divert up to 5 c.f.s. from Bard Creek at the point of diversion for filling the reservoir. For the Ball Placer Reservoir, the application filed for a total and active capacity of 110 acre feet, dead storage of 0 acre feet, a surface area of 7.3 acres and a 900 foot long dam with a maximum height of 30 feet.

### **Streamflow Availability**

Bard Creek at the point of diversion has a drainage area of approximately 11.0 square miles (see Figure 2). Physical availability of streamflow for diversion to the Ball Placer reservoir was determined by analysis of USGS streamflow records for USGS gaging stations at Clear Creek Near Lawson (USGS Gage N° 06716500, with approximately 55 years of record) and West Fork Clear Creek Above Mouth Near Empire, Colorado (USGS Gage N° 06716100, with 7 years of record).

For the Clear Creek Near Lawson station, the average yield for the period of record is 709.5 acre-feet/square mile with the driest year on record (1954) yielding 356.2 Acre-Feet/Square Mile (50% of the average yield). For the West Fork Clear Creek station, the average yield for the period of record is 1059.3 acre-feet/square mile. Since the period of record is relatively short for the West Fork station, the driest year yield is estimated at 50% of the average year yield or 529.7 acre-feet/square mile.

At the Bard Creek point of diversion, average year yields would be about 11,665 acre-feet/year and dry year yield would be about 5832 acre-feet/year.

### **Water Rights Evaluation**

Several existing water rights exist on Bard Creek that are senior to the application for Ball Placer Reservoir. These existing water rights are summarized in Table 1. Historic senior division calls are common on the stream and it is anticipated that water can be diverted one year in four on average.

## **LEGAL/REGULATORY CONSIDERATIONS**

### **Town of Empire**

The majority of the site is currently owned by the Town of Empire with a small portion in private ownership. The site is currently zoned Residential R-1 and use of the site as a reservoir will require approval by the Town of Empire as a "Use By Special Review". The majority of the property was deeded to the Town of Empire by a warranty deed subject to the following restriction:

"The property shall at all times be used by persons, groups, organizations and schools authorized by the Town of Empire, and shall be used only as open space, a public park or a place of recreation including such structures and improvements consistent with, and supporting such uses. Consistent uses shall include park benches, playground equipment, picnic tables, drinking fountains, play sets, soccer fields, bicycle paths, outdoor basketball courts, or outdoor skateboard or in-line skating facilities; and In no event shall any portion of the property be used for a golf course, driving range, or any other golf facility."

The above restriction allows relatively broad uses, however, it would be advisable to obtain an amendment to the warranty deed or seek legal opinion that a reservoir would be an acceptable use. Prior to construction, plan review and approval would be subject to Town of Empire review, approval and construction permits in accordance with typical requirements.

### **Colorado State Engineers Office**

Construction of the proposed reservoir is subject to requirements of the Colorado State Engineer's Office (SEO) dam safety requirements. Due to the height and volume of the reservoir as currently proposed, the reservoir will be considered a "Jurisdictional Dam" as defined by Rules and Regulations For Dam Safety and Dam Construction prepared by the SEO (Reference 3).

The following definitions are provided in the regulations and are relevant to the site:

"Classification of a Dam" is the placement of a dam into a category based upon an evaluation of the consequences of the failure of the dam absent flooding conditions, assuming the reservoir is at the high-water line. No loss of life nor significant damage is expected to occur if the increased depth of flow is two feet or less and the product of the average flood plain flow velocity and the depth of flow at a critical area is less than seven in the incremental zone.

A "Class I" dam is a dam for which loss of human life is expected in the event of failure of the dam.

A "Class II" dam is a dam for which significant damage is expected to occur, but no loss of human life is expected in the event of failure of the dam. Significant damage is defined as damage to structures where people generally live, work, or recreate, or public or private facilities exclusive of unpaved roads and picnic areas. Damage means rendering the structures uninhabitable or inoperable.

A "Class III" dam is a dam for which loss of human life is not expected, and damage to structures and public facilities as defined for a "Class II" dam is not expected in the event of failure of the dam.

Based on site conditions, we anticipate that the Hazard Classification would most likely be a Class II or Class III dam which requires design for an Inflow Design Flood of  $0.5 \times$  Probable Maximum Precipitation or the 100-year storm for the Class II or Class III dam respectively. This classification would be verified during final design of the reservoir. A reservoir classification and design report will be required as part of the final design and will require approval of the SEO along with final construction drawings and specifications..

### **Potential Hazardous Material Concerns**

Potential hazardous materials associated with the mine tailings at the reservoir site represent a potential legal and financial liability which must be considered in addition to potential physical risks of contamination of either adjoining areas or the water supply within the reservoir. Although available correspondence and other information regarding the environmental testing and analysis conducted on the site was reviewed, additional detailed testing and analysis of on-site materials was beyond the scope of this feasibility study.

Based on our review of information, while it appears that the tailings material may be relatively benign in comparison to other sites, construction of a reservoir at the site still poses risks which warrant additional testing and analysis prior to a final design process. This will allow a better definition of the risks involved and will help identify design measures or alternatives which may mitigate the risks and the costs of such measures.

## **Miscellaneous Permitting/Regulatory Concerns**

Several other permitting issues must be addressed during the design and construction phase of the project. These include obtaining a Stormwater Management Plan and Fugitive Dust Permit from the Colorado Department of Health and Public Environment. Local approvals from the Town of Empire will be necessary for construction plan approval.

## **PRELIMINARY DESIGN**

### **General**

Water storage reservoir siting and design considers a variety of components. Land ownership, site accessibility and proximity to appropriate diversion and release points is a key consideration in addition to physical site characteristics. The geologic setting is important to avoid unacceptable hazards to a reasonable extent and to readily obtain suitable material for construction. For earth dams, a balance is desired between the volume of excavated material available and the volume of fill required to minimize or eliminate the additional expense of acquiring and transporting fill material to the site.

### **Preliminary Design**

A preliminary design for the Ball Placer Reservoir is shown on Figure 3 in this report. The preliminary design shown provides a storage volume of 110 acre-feet in accordance with the water rights decree. Cuts up to 21 feet deep and fill heights up to 22 feet high would be required to construct the reservoir and when full, the water level would be approximately 5 feet below the top of embankment. Based on the soils report prepared for the feasibility study, we currently anticipate using both native onsite material as well as overlying earth fill and tailings material as part of the reservoir. The tailings material is less desirable as fill material and will be used in portions of the reservoir where structural strength is not critical. Based on the preliminary grading shown, approximately 15,000 cubic yards of fill would have to be imported in addition to the onsite material. A portion or all of this material import may be able to be reduced or eliminated during final design but may also reduce the storable volume of the reservoir to obtain a no import solution.

Although removal of the tailings material could reduce potential risk, doing so would result in greater earthwork costs since more imported fill would be required and tailings would have to be disposed of offsite. Site soils are relatively sandy and a PVC or membrane liner will be utilized to control seepage from the reservoir. Liners may eventually puncture or leak and a double liner with internal drainage material could be provided to reduce the risk of seepage or impacts to potentially hazardous materials in the tailings or underlying material, however, construction costs would increase substantially.

A soil cover will be placed on the liner and soil cement will be utilized along the dam embankment to

minimize soil erosion due to waves when the reservoir is full. A pipe riser and outlet pipe will serve as the spillway of the reservoir to release storm flows in excess of reservoir capacity safely to the West Fork of Clear Creek. A low level gated outlet pipe will be utilized to release augmentation flows when necessary or to drain the reservoir for maintenance.

Flow will be diverted into the reservoir via a control structure and pipeline along Bard Creek Road from its crossing with Bard Creek approximately ½ mile south of the reservoir to the reservoir site. A plan/profile of the diversion pipeline is shown in Figure 4 of this report.

### **Alternatives Considered**

During an initial site visit with Town of Empire officials, interest was expressed in providing a bench above the normal pool elevation for use as an amphitheater. This was considered and would be possible, but would significantly increase construction costs since a larger quantity of earth fill would have to be imported to facilitate the request. Providing the bench would also reduce available storage volume below the desired 110 acre-feet of storage capacity.

The eastern portion of the embankment extends onto property not currently owned by the Town of Empire and it would have been desirable to avoid the necessity of acquiring additional land or easements if feasible. Again, avoiding the privately owned property would be physically possible, but would greatly increase the volume of imported fill required and substantially decrease storage volume.

## **ECONOMIC EVALUATION**

### **Project Capital Costs**

A Preliminary Engineer's Estimate of Probable Construction Cost was developed to provide budget level costs for the reservoir project (Table 3). Costs include budget level costs for major components of the project and include additional costs for contingencies (15%), engineering design and construction period services, an allowance for permitting costs and for additional environmental testing and evaluation. Costs are not included for land acquisition or easements. The total cost as noted in Table 3 is \$1,621,213. Cost per gross acre-foot of storage is \$14,738.

A reservoir simulation was prepared for two four-year periods assuming that the reservoir was full at the beginning of the period, that the reservoir would be emptied to meet demands equally each year, and that the source of water would be only from the 2001 appropriation. The first simulation was for average year conditions and the second simulation was for the driest year assuming 50% rainfall. With consideration of evaporation from the reservoir surface, of the 110 acre-foot storage, approximately 76 acre-feet would be available for use during an average rainfall four-year period (Table 4) and 64 acre-feet would be available



for use during the driest four year period (Table 5).

It should be noted that costs for environmental testing and evaluation are estimated and could vary significantly depending on the extent of testing necessary and results. Costs are not specifically included for additional mitigation measures if required to reduce risks associated with the tailings material.

### **Operation and Maintenance**

Budgets will be required for operation and maintenance along with a determination of responsibilities for operation. Routine operation and maintenance will be necessary for the reservoir and will include items such as mowing, debris removal, repairs, and operation of control structures. Inspections and reporting to the State Engineer's Office will also be necessary to comply with water rights requirements and dam safety requirements.

## **CONCLUSIONS AND RECOMMENDATIONS**

### **Conclusions**

Based on the information reviewed and developed as part of this feasibility study, site characteristics of the Ball Placer site are generally suitable for construction of a water storage reservoir. An unknown degree of risk is associated with gold mining tailings present at the site.

Alternatives with respect to the environmental risks are to:

- Proceed with the project with an understanding and acceptance of the risks.
- Provide additional mitigation measures such as a double liner or other measures that will result in a higher construction cost but will lower the risk.
- Remove the potentially hazardous material from the site at a higher construction cost and eliminate the risk.

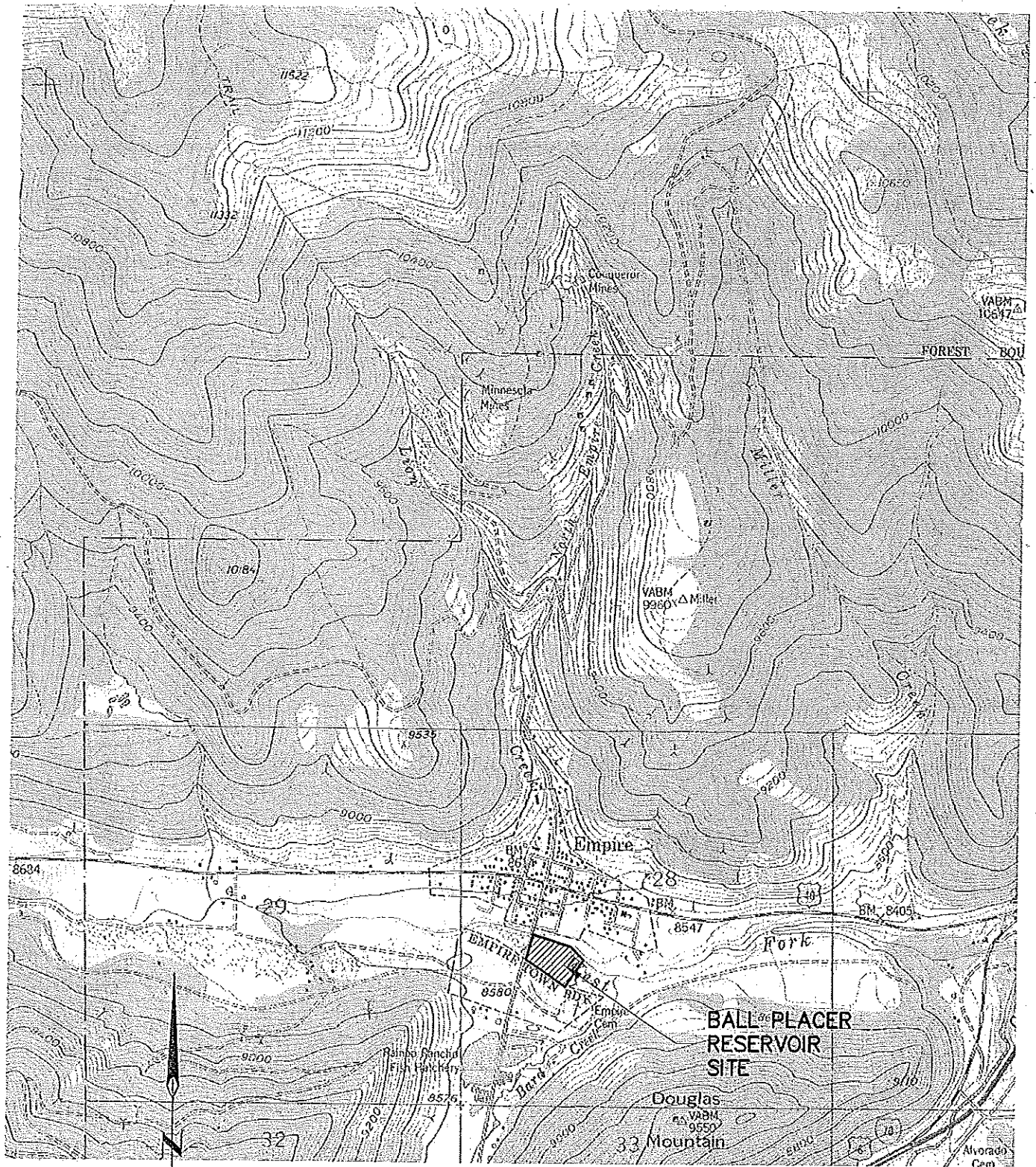
### **Recommendations**

In the event that the proposed reservoir site is selected for further development and construction of a storage reservoir, additional environmental study should be conducted prior to the final design process to better define the risks involved with the tailings material. Addressing the issue first would allow review of reasonable design modifications that could mitigate the risks at a more reasonable cost. In the event that significant risks are apparent, the environmental and cost impacts can be determined and then a decision to move forward with the project can be reevaluated in light of the additional information.

## REFERENCES

1. Clear Creek County Economic Development Corporation, Reservoir Siting Analysis, WRC Engineering, Inc., November 2002.
2. Evaporation Atlas for the Contiguous 48 United States, NOAA Technical Report NWS 33, U.S. Department of Commerce, June 1982.
3. Dam Safety Project Review Guide, Dam Safety Branch, Division of Water Resources, Office of the State Engineer, Revised May 1996.
4. Hydro meteorological Report N° 55A, Probable Maximum Precipitation Estimates - United States Between the Continental Divide and the 103<sup>rd</sup> Meridian, U.S. Department of Commerce, National Oceanic and Atmospheric Administration, June 1988.
5. HEC-1, Flood Hydrograph Package, User's Manual, U.S. Army Corps of Engineers, Hydrologic Engineering Center, June 1998.

## FIGURES



# **BALL PLACER RESERVOIR VICINITY MAP**

FIGURE 1

1000 0 1000 2000

SCALE: 1"=2000'

## **Appendix H**

Ordinance 95-213

Ordinance 226

Resolution 2012-06

**RESOLUTION 2012- 06**  
**A RESOLUTION TO INCREASE WATER AND WASTEWATER FEES**  
**IN THE TOWN OF EMPIRE, COLORADO**

WHEREAS, The Empire Board of Trustees has reviewed the costs necessary to operate the Town's water and wastewater facilities in a safe and reasonable matter.

WHEREAS, maintenance upkeep, repairs, and equipment replacement costs have risen dramatically and depleted the current budget for water and wastewater expenses.

WHEREAS, after consultation with the Town's accountant and the Town's water/wastewater service provider, the Board determined that the present water/sewer rates are insufficient to operate, maintain and otherwise run the water and wastewater facilities.

WHEREAS, in order to continue to provide water and wastewater services, a fee increase of \$13 for wastewater and \$12 for water is necessary.

WHEREAS, the Board of Trustees of the Town of Empire has determined that it is the Town's best interest to increase the water and wastewater fees equitably among the Town's citizens.

WHEREAS, Ordinance 226 provides that the Board may, by Resolution, make the necessary changes to the rates.

**NOW, THEREFORE, BE IT RESOLVED** by the Board of Trustees of the Town of Empire that the water and waste water fees be amended and increased as follows:

That the monthly charges for water and waste water services within the Town of Empire shall be increased beginning January 1, 2013, and shall be set as follows:

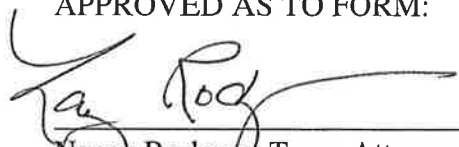
	<b>Water</b>	<b>Wastewater</b>	<b>Total</b>
Single family residence, trailers, apartments and cabins with kitchens	\$43	\$43	\$86
Hotel and motel rooms without kitchens –per room	\$16	\$15	\$31
Restaurants	\$73	\$72	\$145
Other commercial establishments	\$50	\$50	\$100
Government buildings	\$31	\$30	\$61
Laundromats-per machine			\$21
Churches	\$31	\$30	\$61
Residential with a Business	\$61.50	\$61.50	\$123


BE IT FURTHER RESOLVED WHEREAS, that all other sections and provisions of Empire's Ordinance 226 remain in force and effect until amended or revised in the future.

PASSED, ADOPTED & APPROVED this 19<sup>th</sup> day of February, 2013.

  
\_\_\_\_\_  
Mayor Wendy Koch

APPROVED AS TO FORM:

  
\_\_\_\_\_  
Nancy Rodgers, Town Attorney

ATTEST:   
\_\_\_\_\_  
Jennifer Cade, Town Clerk

ORDINANCE NO. 213

SERIES 1995

AN ORDINANCE RECOGNIZING AND CONFIRMING THE EXISTENCE OF THE TOWN OF EMPIRE, WATER UTILITY ENTERPRISE AND, IN CONNECTION THEREWITH, AUTHORIZING THE EXECUTION AND DELIVERY OF A LOAN AGREEMENT BETWEEN THE COLORADO WATER RESOURCES AND POWER DEVELOPMENT AUTHORITY AND THE TOWN OF EMPIRE, ACTING BY AND THROUGH ITS WATER UTILITY ENTERPRISE, AND THE ISSUANCE OF A GOVERNMENTAL AGENCY BOND IN AN AGGREGATE PRINCIPAL AMOUNT NOT TO EXCEED \$332,000.00 EVIDENCING THE SPECIAL AND LIMITED OBLIGATION OF THE TOWN, ACTING BY AND THROUGH SUCH ENTERPRISE, UNDER THE LOAN AGREEMENT;

WHEREAS, the Town of Empire, Colorado, a statutory municipality of the State of Colorado (the "Town") is the operator of a municipal water system (the "System"), which System has historically been operated on a self-supporting basis with its financial operations accounted for in an enterprise fund of the Town; and

WHEREAS, the Mayor and Trustees (the "Board") of the Town are authorized, pursuant to Section 37-45.1-103, Colorado Revised Statutes, to operate the System as an enterprise (the "Water Utility Enterprise" or the "Enterprise") of the Town within the meaning of Art. X, Sec. 20 of the Colorado Constitution, and the Board is authorized under such statute to act as the governing body of the Enterprise; and

WHEREAS, the Town has made an application to the Colorado Water Resources and Power Development Authority (the "Authority") for a loan to finance the addition of improvements to the System, together with appurtenances (the "Project"); and

WHEREAS, the Authority has accepted such application and expressed its interest in making such loan, subject to certain conditions; and

WHEREAS, there has been filed with the Town Clerk the form of Loan Agreement (the "Loan Agreement"), proposed to be entered into between the Authority and the Town, acting by and through the Enterprise; and

WHEREAS, the Loan Agreement provides for the issuance by the Town, acting by and through the Enterprise, of a Governmental Agency Bond in the principal amount not exceeding \$332,000.00 (the "Bond") evidencing the special and limited



obligation of the Town, acting by and through the Enterprise, under the Loan Agreement; and

WHEREAS, pursuant to Sections 37-45.1-103(4) and 37-45.1-104, Colorado Revised Statutes, the Board, as the governing body of the Enterprise, is authorized to issue revenue bonds in the name of the Enterprise;

BE IT ORDAINED BY THE BOARD OF TRUSTEES OF THE TOWN OF EMPIRE, COLORADO, ACTING AS SUCH AND AS THE GOVERNING BODY OF THE TOWN OF EMPIRE, COLORADO, WATER UTILITY ENTERPRISE:

1. To the extent that it has not already done so, the Board hereby designates the Enterprise as an "enterprise" within the meaning of Art. X, Sec. 20 of the Colorado Constitution, and the Board hereby designates itself as the governing body of the Enterprise. The taxing powers of the Town shall never be pledged to the support of the Enterprise or the obligations thereof.

2. The forms of the Loan Agreement and the Bond and any changes thereto as may be necessary in the opinion of the town attorney and bond counsel for the Enterprise to effectuate the intentions of the parties or to comply with the provisions of applicable law are hereby approved.

3. The Mayor and the Town Clerk are hereby authorized and directed to execute and deliver the Loan Agreement to the Authority.

4. The Town shall issue the Bond to evidence the obligations of the Town, acting by and through the Enterprise, under the Loan Agreement. The Bond shall be in the principal amount, mature on the date, bear interest payable at the rate and on the dates, be prepayable at the option of the Town, acting by and through the Enterprise, on the dates and at the prices, be in the form and be secured in the manner provided in the Loan Agreement. The net effective interest rate of the Bond shall not exceed 4.5%, and the term of the Bond shall not exceed forty years as provided by law. The Bond shall be payable solely from the revenues of the Enterprise pledged therefor, which shall be derived from the operation of the System, and the Bond shall never constitute the debt, indebtedness or multiple fiscal year obligation of the Town or a charge against its general credit or taxing powers.

5. The Mayor and the Town Clerk are hereby authorized and directed to execute and deliver the Loan Agreement and the Bond to the Authority.

6. This Ordinance is, and shall constitute, a legislative measure of the Town, acting by and through the Enterprise, and after the Bond is issued, this Ordinance shall constitute an irrevocable contract between the Town, acting by and through the Enterprise, and the Authority, and this Ordinance shall be and shall remain irrepealable until the Bond shall be fully paid, satisfied or discharged.

7. All action not inconsistent with the provisions of this Ordinance heretofore taken by the Town or its officers and otherwise directed toward the authorization of the undertaking and completion of the Project and the authorization of the Enterprise to have and in connection therewith to exercise the necessary powers is hereby ratified, approved and confirmed.

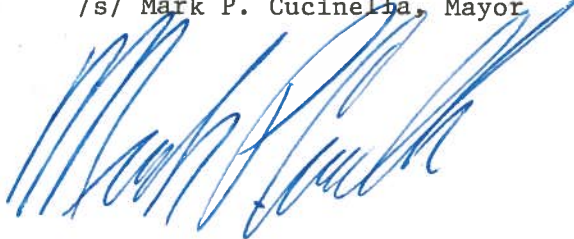
8. All ordinances, resolutions, bylaws, orders and other instruments, or parts thereof, inconsistent herewith are hereby repealed to the extent only of such inconsistency. This repealer shall not be construed to revive any ordinance, resolution, bylaw, order or other instrument, or part thereof, heretofore repealed.

9. If any section, subsection, paragraph, clause or other provision of this Ordinance shall for any reason be held to be invalid or unenforceable, the invalidity or unenforceability thereof shall not affect any of the remaining sections, subsections, paragraphs, clauses or provisions of this Ordinance.

INTRODUCED, READ, ADOPTED AND ORDERED PUBLISHED on this the 5th day of July, 1995;

TOWN OF EMPIRE, COLORADO,  
Acting By and Through its  
Water Utility Enterprise

/s/ Mark P. Cucinella, Mayor



*Julia Holmes*

Attest: /s/ Julia Holmes, Town Clerk

BECKER STOWE BOWLES & LYNCH

PROFESSIONAL CORPORATION

ATTORNEYS AT LAW

THE CHANCERY, SUITE 1002

1120 LINCOLN STREET

DENVER, COLORADO 80203-2138

TELEPHONE: (303) 830-0101

TELECOPIER: (303) 860-9306

DANIEL C. LYNCH

June 29, 1995

Ms. Julie Holmes  
Town Clerk  
Town of Empire  
P.O. Box 187  
Empire, CO 80438

Re: Town of Empire, Colorado - Loan from Colorado  
Water Resources and Power Development Authority

Dear Julie:

I am enclosing, for consideration by the Mayor and Trustees at their July 5, 1995 meeting, a proposed form of ordinance authorizing the above transaction and the taking of related actions.

Copies of the enclosure are also being delivered for review and comment to Ken Fellman and Marilyn Leonard of Kissinger & Fellman, P.C.

Please call if you wish to discuss the enclosure or if I may provide anything further.

Very truly yours,

  
Daniel C. Lynch

DCL/s  
Enclosure

cc: Kenneth S. Fellman, Esq. (w/encl.)  
Marilyn Leonard, Esq. (w/encl.)

**PROOF OF PUBLICATION  
THE CLEAR CREEK COURANT  
Idaho Springs CO 80452**

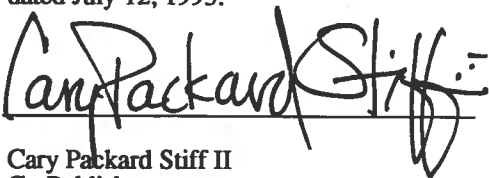
State of Colorado )

County of Clear Creek )

ss.

I, Cary Packard Stiff II, do solemnly swear that I am co-publisher of *The Clear Creek Courant*; that the same is a weekly newspaper printed, in whole or in part, and published in the County of Clear Creek, State of Colorado, and has a general circulation therein; that said newspaper has been published continuously and un-interruptedly in said County of Clear Creek for a period of more than fifty-two consecutive weeks next prior to the first publication of the annexed legal notice or advertisement; that said newspaper has been admitted to the United States mails as second-class matter under the provisions of the Act of March 3, 1879, or any amendments thereof, and that said newspaper is a weekly newspaper duly qualified for publishing legal notices and advertisements within the meaning of the laws of the State of Colorado.

I also swear that the annexed legal notice or advertisement was published in the regular and entire issue of said newspaper dated July 12, 1995.



Cary Packard Stiff II  
Co-Publisher  
*The Clear Creek Courant*  
1634 Miner St., P.O. Box 2020  
Idaho Springs CO 80452-2020

Subscribed and sworn to before me, a notary public in and for the County of Clear Creek, State of Colorado, the

*13th* day of *July*, A.D. 1995.



Notary Public  
1634 Miner St., P.O. Box 2020  
Idaho Springs CO 80452-2020  
My Commission Expires Nov. 21, 1996.

**L-712-6  
TOWN OF EMPIRE  
ORDINANCE NO. 213  
SERIES 1995**

AN ORDINANCE RECOGNIZING AND CONFIRMING THE EXISTENCE OF THE TOWN OF EMPIRE, WATER UTILITY ENTERPRISE AND, IN CONNECTION THEREWITH, AUTHORIZING THE EXECUTION AND DELIVERY OF A LOAN AGREEMENT BETWEEN THE COLORADO WATER RESOURCES AND POWER DEVELOPMENT AUTHORITY AND THE TOWN OF EMPIRE, ACTING BY AND THROUGH ITS WATER UTILITY ENTERPRISE, AND THE ISSUANCE OF A GOVERNMENTAL AGENCY BOND IN AN AGGREGATE PRINCIPAL AMOUNT NOT TO EXCEED \$332,000.00 EVIDENCING THE SPECIAL AND LIMITED OBLIGATION OF THE TOWN, ACTING BY AND THROUGH SUCH ENTERPRISE, UNDER THE LOAN AGREEMENT;

WHEREAS, the Town of Empire, Colorado, a statutory municipality of the State of Colorado (the "Town") is the operator of a municipal water system (the "System"), which System has historically been operated on a self-supporting basis with its financial operations accounted for in an enterprise fund of the Town; and

WHEREAS, the Mayor and Trustees (the "Board") of the Town are authorized, pursuant to Section 37-45.1-103, Colorado Revised Statutes, to operate the System as an enterprise (the "Water Utility Enterprise" or the "Enterprise") of the Town within the meaning of Art. X, Sec. 20 of the Colorado Constitution, and the Board is authorized under such statute to act as the governing body of the Enterprise; and

WHEREAS, the Town has made an application to the Colorado Water Resources and Power Development Authority (the "Authority") for a loan to finance the addition of improvements to the System, together with appurtenances (the "Project"); and

WHEREAS, the Authority has accepted such application and expressed its interest in making such loan, subject to certain conditions; and

WHEREAS, there has been filed with the Town Clerk the form of Loan Agreement (the "Loan Agreement"), proposed to be entered into between the Authority and the Town, acting by and through the Enterprise; and

WHEREAS, the Loan Agreement provides for the issuance by the Town, acting by and through the Enterprise, of a Governmental Agency Bond in the principal amount not exceeding \$332,000.00 (the "Bond") evidencing the special and limited obligation of the Town, acting by and through the Enterprise, under the Loan Agreement; and

WHEREAS, pursuant to Sections 37-45.1-103(4) and 37-45.1-104, Colorado Revised Statutes, the Board, as the governing body of the Enterprise, is authorized to issue revenue bonds in the name of the Enterprise;

BE IT ORDAINED BY THE BOARD OF TRUSTEES OF THE TOWN OF EMPIRE, COLORADO, ACTING AS SUCH AND AS THE GOVERNING BODY OF THE TOWN OF EMPIRE, COLORADO, WATER UTILITY ENTERPRISE:

1. To the extent that it has not already done so, the Board hereby designates the Enterprise as an "enterprise" within the meaning of Art. X, Sec. 20 of the Colorado Constitution, and the Board hereby designates itself as the governing body of the Enterprise. The taxing powers of the Town

shall never be pledged to the support of the Enterprise or the obligations thereof.

2. The forms of the Loan Agreement and the Bond and any changes thereto as may be necessary in the opinion of the town attorney and bond counsel for the Enterprise to effectuate the intention of the parties or to comply with the provisions of applicable law are hereby approved.

3. The Mayor and the Town Clerk are hereby authorized and directed to execute and deliver the loan agreement to the Authority.

4. The Town shall issue the Bond to evidence the obligations of the Town, acting by and through the Enterprise, under the Loan Agreement. The Bond shall be in the principal amount, mature on the date, bear interest payable at the rate and on the dates, be prepayable at the option of the Town, acting by and through the Enterprise, on the dates and at the prices, be in the form and be secured in the manner provided in the Loan Agreement. The net effective interest rate of the Bond shall not exceed 4.5%, and the term of the Bond shall not exceed forty years as provided by law. The Bond shall be payable solely from the revenues of the Enterprise pledged therefor, which shall be derived from the operation of the System, and the Bond shall never constitute the debt, indebtedness or multiple fiscal year obligation of the Town or a charge against its general credit or taxing powers.

5. The Mayor and the Town Clerk are hereby authorized and directed to execute and deliver the Loan Agreement and the Bond to the Authority.

6. This Ordinance is, and shall constitute, a legislative measure of the Town, acting by and through the Enterprise, and after the Bond is issued, this Ordinance shall constitute an irrevocable contract between the Town, acting by and through the Enterprise, and the Authority, and this Ordinance shall be and shall remain irrevocable until the Bond shall be fully paid, satisfied or discharged.

7. All action not inconsistent with the provisions of this Ordinance heretofore taken by the Town or its officers and otherwise directed toward the authorization of the undertaking and completion of the Project and the authorization of the Enterprise to have and in connection therewith to exercise the necessary powers is hereby ratified, approved and confirmed.

8. All ordinances, resolutions, bylaws, orders and other instruments, or parts thereof, inconsistent herewith are hereby repealed to the extent only of such inconsistency. This repealer shall not be construed to revive any ordinance, resolution, bylaw, order or other instrument, or part thereof, heretofore repealed.

9. If any section, subsection, paragraph, clause or other provision of this Ordinance shall for any reason be held to be invalid or unenforceable, the invalidity or unenforceability thereof shall not affect any of the remaining sections, subsections, paragraphs, clauses or provisions of this Ordinance.

INTRODUCED, READ, ADOPTED AND ORDERED PUBLISHED on this the 5th day of July, 1995;

**TOWN OF EMPIRE, COLORADO,  
Acting By and Through its  
Water Utility Enterprise**

/s/ MARK P. CUCINELLA, Mayor

Attest: /s/ JULIA HOMES, Town Clerk

Published in *The Clear Creek Courant* issue dated July 12, 1995.

# **Appendix I**

## **Financial Statements**

# **Appendix J**

## **Loan Application**




COLORADO

Colorado Water Conservation Board

Department of Natural Resources

Water Project Loan Program

Projects financed by the Water Project Loan Program must align with the goals identified in Colorado's Water Plan and its measurable objectives.

Application Type	
<input type="checkbox"/> Prequalification (Attach 3 years of financial statements)	<input checked="" type="checkbox"/> Loan Approval (Attach Loan Feasibility Study)
Agency/Company Information	
Company / Borrower Name: Town of Empire	
Authorized Agent &Title: Richard Sprague, Mayor	
Address: P.O. Box 100 Empire, CO 80438	
Phone: ( 303 ) 569-2978	Email: mayor@empirecogov.us
Organization Type: <input type="checkbox"/> Ditch Co, <input type="checkbox"/> District, <input checked="" type="checkbox"/> Municipality <input type="checkbox"/> other: _____	Incorporated? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
County: Clear Creek	Number of Shares/Taps: 178
Water District: 7	Avg. Water Diverted/Yr <sup>50</sup> _____ acre-feet
Number of Shareholders/Customers Served:	Current Assessment per Share \$ _____ (Ditch Co)
	Average monthly water bill \$ <sup>43</sup> _____ (Municipality)
Contact Information	
Project Representative: Richard Sprague	
Phone: ( 303 ) 569-2978	Email: mayor@empirecogov.us
Engineer: James R. Ford, P.E.	
Phone: ( 303 ) 895-7738	Email: jrf@jamesrford.net
Attorney: Matthew Montgomery	
Phone: ( 303 ) 905-9729	Email: matthewmontgomery@hillandrobbins.com
Project Information	
Project Name: Purchase of Guanella Reservoir Storage	
Brief Description of Project: (Attach separate sheets if needed)	
Empire has the option to purchase 10 acre feet of perpetual storage in the existing Guanella Reservoir through and agreement with the City of Golden	
Project Start Date(s) Design: <u>N/A</u> Construction: <u>N/A</u>	
General Location: (Attach Map of Area)	
See Attached	
Project Costs - Round to the nearest thousand	
Estimated Engineering Costs: N/A	Estimated Construction Costs: N/A
Other Costs (Describe Above): Purchase cost	Estimated Total Project Costs: \$123,000.00
Requested Loan Amount: \$123,000.00	Requested Loan Term(10, 20, or 30 years): <u>30</u> Years
Signature	
 Signature / Title _____ Date 3-8-19	Return to: Finance Section Attn: Anna Mauss 1313 Sherman St #718 Denver, CO 80203 Ph. 303/866.3449 e-mail: anna.mauss@state.co.us

## FINDINGS OF THE STATE ENGINEER

---

IN THE MATTER OF AN APPLICATION FOR A PERMIT TO CONSTRUCT A WELL IN CLEAR CREEK COUNTY, COLORADO

APPLICANT: TOWN OF EMPIRE

AQUIFER : SURFACE, SAND AND GRAVEL

PERMIT NO: 25<sup>8</sup>63-F

---

In compliance with the provisions of Section 37-90-137, C.R.S. 1973, Town of Empire, P.O. Box 187, Empire, Colorado 80438, submitted an application for a permit to construct a well to withdraw water from a tributary Aquifer. The application was received by the State Engineer on May 3, 1982. On the basis of the information submitted by the applicant and the records in the State Engineer's office, the State Engineer makes the following findings:

1. The applicant proposes to construct the well in the SW $\frac{1}{4}$  of the NW $\frac{1}{4}$  of Section 28, Township 3 South, Range 74 West, 6th Principal Meridian.
2. The proposed well is located outside the boundaries of a designated ground water basin.
3. The applicant proposes to apply the water diverted from the proposed well to municipal use.
4. The proposed maximum pumping rate for this well is 125 gpm with a proposed annual appropriation of 107.53 acre-feet.
5. The location of the proposed well is more than six-hundred feet from any existing well completed in the tributary aquifer.
6. The applicant is the owner of the land on which the well will be constructed.
7. The proposed well would divert ground water from the alluvial aquifer which is hydraulically connected to West Fork of Clear Creek, and the South Platte River System. This is "underground water" as defined in C.R.S. 1973, Section 37-92-103(11).
8. The South Platte River System is overappropriated. At some or all times of the year, the water supply in the river is insufficient to satisfy all the decreed water rights senior to an appropriation by the applicant.
9. A diversion of ground water from the subject well would add to the depletion of the South Platte River System at times when the river is overappropriated and would cause material injury to the vested water rights of others.



THIS FORM MUST BE SUBMITTED  
WITHIN 60 DAYS OF COMPLETION  
OF THE WORK DESCRIBED HERE-  
ON. TYPE OR PRINT IN BLACK  
INK.

COLORADO DIVISION OF WATER RESOURCES

1313 Sherman Street - Room 818  
Denver, Colorado 80203

WELL COMPLETION AND PUMP INSTALLATION REPORT

PERMIT NUMBER 25963-T

RECEIVED

OCT 25 1982

WATER RESOURCES  
STATE - ENGINEER  
COLO.

WELL OWNER Town of Empire  
P. O. Box 187

ADDRESS Empire, CO

DATE COMPLETED 10/1, 19 82

1/4 of the NW 1/4 of Sec. 28  
T. 3 S. R. 74 W. 6th P.M.

WELL LOG

From	To	Type and Color of Material	Water Loc.
0	8	Top soil	
8	31	Boulders, sand, gravel	
31	60	Gravel and sand	
60	74	Silt	
74	80	Gravel and rocks	
80	156	Gravel, sand and rock	X
156	157	Granite	
- TOTAL DEPTH <u>157 ft.</u>			

Use additional pages necessary to complete log.

HOLE DIAMETER

17 1/2 in. from 0 to 157 ft.

\_\_\_\_\_ in. from \_\_\_\_\_ to \_\_\_\_\_ ft.

\_\_\_\_\_ in. from \_\_\_\_\_ to \_\_\_\_\_ ft.

DRILLING METHOD Rotary

CASING RECORD: Plain Casing

Size 8-5/8 & kind Steel from 157 to 132 ft.

Size 8-5/8 & kind Steel from 82 to + 2 ft.

Size \_\_\_\_\_ & kind \_\_\_\_\_ from \_\_\_\_\_ to \_\_\_\_\_ ft.

Perforated Casing  
wire-

Size 8" P.S. & kind wrapped from 132 to 82 ft.

Size \_\_\_\_\_ & kind \_\_\_\_\_ from \_\_\_\_\_ to \_\_\_\_\_ ft.

Size \_\_\_\_\_ & kind \_\_\_\_\_ from \_\_\_\_\_ to \_\_\_\_\_ ft.

GROUTING RECORD

Material Cement

Intervals 26' to surface

Placement Method tremie pipe

GRAVEL PACK: Size 4-8 Fountain Sand

Interval 157' - 57'

Pea gravel 57' - 26'

TEST DATA

Date Tested September 28 - 29, 1982

Static Water Level Prior to Test 43 ft.

Type of Test Pump Turbine - Submersible

Length of Test 24 hour

Sustained Yield (Metered) 100 ft.

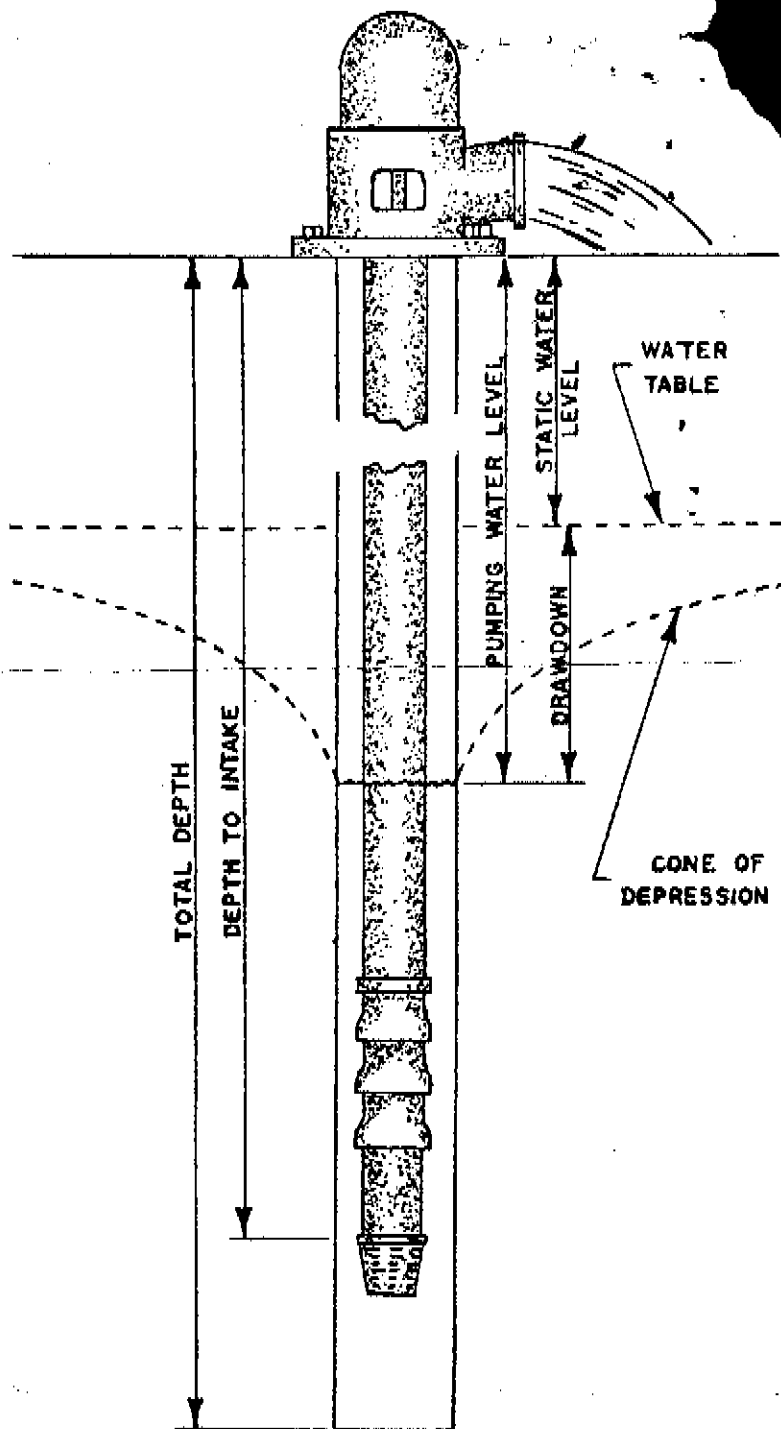
Final Pumping Water Level 63 ft.

# PUMP INSTALLATION REPORT

Pump Make NOT INSTALLED AT THIS TIME  
 Type \_\_\_\_\_  
 Powered by \_\_\_\_\_ HP \_\_\_\_\_  
 Pump Serial No. \_\_\_\_\_  
 Motor Serial No. \_\_\_\_\_  
 Date Installed \_\_\_\_\_  
 Pump Intake Depth \_\_\_\_\_  
 Remarks \_\_\_\_\_

## WELL TEST DATA WITH PERMANENT PUMP

Date Tested \_\_\_\_\_  
 Static Water Level Prior to Test \_\_\_\_\_  
 Length of Test \_\_\_\_\_ Hours  
 Sustained yield (Metered) \_\_\_\_\_ GPM  
 Pumping Water Level \_\_\_\_\_  
 Remarks \_\_\_\_\_



## CONTRACTORS STATEMENT

The undersigned, being duly sworn upon oath, deposes and says that he is the contractor of the well or pump installation described hereon; that he has read the statement made hereon; knows the content thereof, and that the same is true of his own knowledge.

Signature Gary V. Lanzer License No. 162

Gary V. Lanzer

State of Colorado, County of ARAPAHOE SS

Subscribed and sworn to before me this 21st day of October 19 82

My Commission expires: July 27, 19 85

Notary Public Margaret Butterfield

FORM TO BE MADE OUT IN QUADRUPPLICATE: WHITE FORM must be an original copy on both sides and signed. WHITE AND GREEN copies must be filed with the State Engineer. PINK COPY is for the Owner and YELLOW COPY is for the Driller.

**COLORADO DIVISION OF WATER RESOURCES**  
818 Centennial Bldg., 1313 Sherman St., Denver, Colorado 80203

**PERMIT APPLICATION FORM**

Application must be complete where applicable. Type or print in **BLACK INK**. No overstrikes or erasures unless initialed.

FOR: ( ) A PERMIT TO USE GROUND WATER  
(X) A PERMIT TO CONSTRUCT A WELL  
( ) A PERMIT TO INSTALL A PUMP

( ) REPLACEMENT FOR NO. \_\_\_\_\_  
( ) OTHER \_\_\_\_\_  
WATER COURT CASE NO. \_\_\_\_\_

**RECEIVED**  
**MAY 03 1982**

WATER RESOURCES  
STATE ENGINEER  
COLO.

**(1) APPLICANT - mailing address**

NAME Town of Empire  
STREET P.O. Box 187  
CITY Empire, Colorado 80438  
(State) (Zip)  
TELEPHONE NO. 534-2450

**(2) LOCATION OF PROPOSED WELL**

County Clear Creek  
SW 1/4 of the NW 1/4, Section 28  
Twp. 3 S, Rng. 74 W, 6th P.M.  
(N.S.) (E.W.)

**(3) WATER USE AND WELL DATA**

Proposed maximum pumping rate (gpm) 175 125  
Average annual amount of ground water to be appropriated (acre-feet): 225 107.53  
Number of acres to be irrigated: NA  
Proposed total depth (feet): 200 feet  
Aquifer ground water is to be obtained from:  
W Fork Clear Creek alluvium  
Owner's well designation Empire 1

**GROUND WATER TO BE USED FOR:**

( ) HOUSEHOLD USE ONLY - no irrigation (0)  
( ) DOMESTIC (1) ( ) INDUSTRIAL (5)  
( ) LIVESTOCK (2) ( ) IRRIGATION (6)  
( ) COMMERCIAL (4) (X) MUNICIPAL (8)  
( ) OTHER (9) \_\_\_\_\_

DETAIL THE USE ON BACK IN (11)

**(4) DRILLER**

Name Licensed  
Street \_\_\_\_\_  
City \_\_\_\_\_  
(State) (Zip)  
Telephone No. \_\_\_\_\_ Lic. No. \_\_\_\_\_

FOR OFFICE USE ONLY: DO NOT WRITE IN THIS COLUMN

Receipt No. 25961  
Basin \_\_\_\_\_ Dist. \_\_\_\_\_

**CONDITIONS OF APPROVAL**

This well shall be used in such a way as to cause no material injury to existing water rights. The issuance of the permit does not assure the applicant that no injury will occur to another vested water right or preclude another owner of a vested water right from seeking relief in a civil court action.

- 1) APPROVED PURSUANT TO THE ATTACHED FINDINGS OF THE STATE ENGINEER.
- 2) THIS APPROVAL IS LIMITED TO THE CONSTRUCTION OF A WELL. WATER FROM THIS WELL SHALL NOT BE PUT TO USE UNTIL THE PLAN FOR AUGMENTATION, CASE NO. 82-CW-227, HAS BEEN APPROVED BY THE WATER COURT. USE OF THIS WELL IS SUBJECT TO THE TERMS AND CONDITIONS OF THE AUGMENTATION PLAN.
- 3) A TOTALIZING FLOW METER SHALL BE INSTALLED ON THE WELL. DIVERSION RECORDS SHALL BE MAINTAINED BY THE WELL OWNER AND SUBMITTED TO THE DIVISION OF WATER RESOURCES UPON REQUEST.
- 4) MAXIMUM PUMPING RATE FROM THIS WELL SHALL NOT EXCEED 125 GPM.

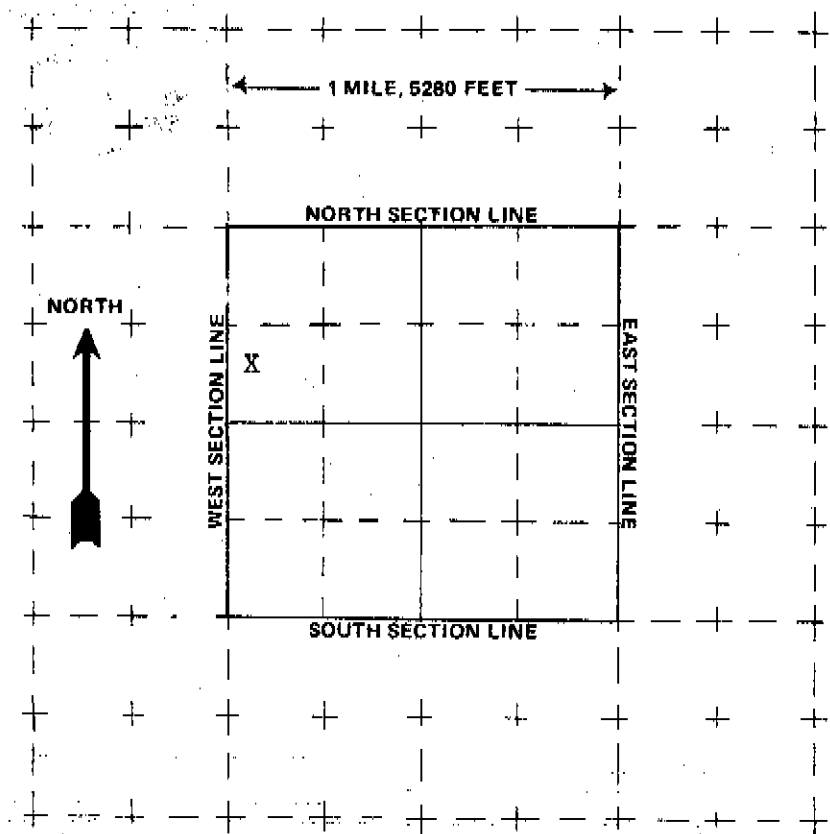
**SEE 41458-F**

**APPLICATION APPROVED**

PERMIT NUMBER [REDACTED]  
DATE ISSUED AUG 20 1982  
EXPIRATION DATE AUG 20 1983

BY John A. Danielson  
(STATE ENGINEER)  
BY Robert A. Longmeyer, Asst. State Eng.  
I.D. 1-07 COUNTY 10

(5) **THE LOCATION OF THE PROPOSED WELL** and the area on which the water will be used must be indicated on the diagram below. Use the CENTER SECTION (1 section, 640 acres) for the well location.



The scale of the diagram is 2 inches = 1 mile  
Each small square represents 40 acres.

**WATER EQUIVALENTS TABLE (Rounded Figures)**

An acre-foot covers 1 acre of land 1 foot deep  
1 cubic foot per second (cfs) . . . 449 gallons per minute (gpm)  
A family of 5 will require approximately 1 acre-foot of water per year.  
1 acre-foot . . . 43,560 cubic feet . . . 325,900 gallons.  
1,000 gpm pumped continuously for one day produces 4.42 acre-feet.

(6) **THE WELL MUST BE LOCATED BELOW** by distances from section lines.

2210 ft. from north sec. line  
(north or south)  
250 ft. from west sec. line  
(east or west)

LOT NA BLOCK NA FILING # NA

SUBDIVISION NA

(7) **TRACT ON WHICH WELL WILL BE LOCATED** Owner: Byron Guanella, et al

No. of acres 1/2 Will this be the only well on this tract? Yes

(8) **PROPOSED CASING PROGRAM**

Plain Casing

10 in. from 0 ft. to 135 ft.

in. from ft. to ft.

Perforated casing

8 in. from 135 ft. to 200 ft.

in. from ft. to ft.

(9) **FOR REPLACEMENT WELLS** give distance and direction from old well and plans for plugging it:

NA

(10) **LAND ON WHICH GROUND WATER WILL BE USED:**

Owner(s): Town of Empire citizens No. of acres: NA

Legal description: NA

(11) **DETAILED DESCRIPTION** of the use of ground water: Household use and domestic wells must indicate type of disposal system to be used. Municipal use for the Town of Empire, Colorado. Empire owns and

operates a wastewater treatment facility for discharge.

(12) **OTHER WATER RIGHTS** used on this land, including wells. Give Registration and Water Court Case Numbers.

Type or right	Used for (purpose)	Description of land on which used
See Attachment A		

(13) **THE APPLICANT(S) STATE(S) THAT THE INFORMATION SET FORTH HEREON IS TRUE TO THE BEST OF HIS KNOWLEDGE.**

*Kevin C. Crote, Mayor, Town of Empire, Colorado*  
SIGNATURE OF APPLICANT(S)

RICHARD D. LAMM  
Governor



JERIS A. DANIELSON  
State Engineer

**OFFICE OF THE STATE ENGINEER**  
**DIVISION OF WATER RESOURCES**

1313 Sherman Street-Room 818  
Denver, Colorado 80203  
(303) 866-3581

August 18, 1982

Mr. Gary L. Greer  
Sherman & Howard  
Attorneys and Counselors  
At Law  
2900 First Denver Plaza  
633 17th Street  
Denver, CO 80202

RE: Permit No. <sup>8</sup>25~~463~~-F

Dear Mr. Greer:

The subject application for a permit to construct a well has been approved. Enclosed are the Findings of the State Engineer as well as a copy of the permit.

In making inquiries regarding this permit, please contact Mr. Krishna Murthy of this office and refer to the file number shown above.

Very truly yours,

Robert A. Longenbaugh  
Assistant State Engineer  
Ground Water Section

RAL/KM:jmm

Enclosures

cc: Town of Empire  
Bert Leautaud

10. The applicant has submitted an application to the Division 1 Water Court for augmentation, Case No. 82CW227, in which he proposes to replace depletions to the West Fork of Clear Creek by releasing water from Henderson Mine Shaft No. 1.

11. Henderson Shaft No. 1 was decreed in Case No. W-7158 by Division 1 Water Court for 5 cubic feet per second absolute, and 20 cubic feet per second conditional water right. The source of water was decreed to be non-tributary to any natural stream. The decree states that it is an unsurveyed area, but it appears that Shaft No. 1 is located in Section 25, Township 3 South, Range 76 West. The Shaft No. 1 is decreed to Amax Inc.

12. The applicant estimates that the consumptive use of ground water diverted from the subject well will not exceed 32.26 acre-feet. Augmentation water in an amount of up to 32.26 acre-feet annually will be released to the West Fork of Clear Creek at a point upstream from applicant's well and in the vicinity of Henderson Shaft No. 1 by Amax Inc. at the applicant's request to augment the flow of the West Fork of Clear Creek. Augmentation water will be made available to the applicant under the terms of a fifty-year renewable agreement between the applicant and Amax Inc.

13. The proposed augmentation plan appears reasonable; however, the location of the Henderson Shaft No. 1 from which the replacement water will be released to the West Fork of Clear Creek is about nine miles west of the location of the proposed well. Therefore, additional water should be released to compensate transportation losses between the two points.

14. Since unappropriated water will be made available by the proposed plan for augmentation and senior water rights will not be injured if the proposed well is operated according to the plan, the subject application may be approved subject to the following conditions.

a. This approval is limited to construction of a well. Water from this well cannot be put to use until the plan for augmentation, Case No. 82CW227, has been approved by the Water Court.

b. Use of this well is subject to the terms and conditions of the plan for augmentation to be approved by Division 1 Water Court.


c. A totalizing flow meter shall be installed on the well. Diversion records shall be maintained by the well owner and submitted to the Division of Water Resources upon request.

TOWN OF EMPIRE

-3-

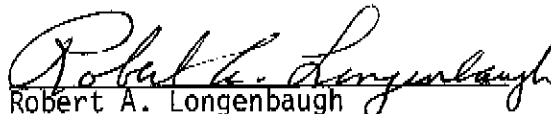
PERMIT NO. 25863-F<sup>8</sup>

Dated this 19<sup>th</sup> day of August, 1982.



Jeris A. Danielson  
State Engineer

By:



Robert A. Longenbaugh  
Assistant State Engineer  
Ground Water Section

**Sherman & Howard**  
(DAWSON, NAGEL, SHERMAN & HOWARD)

ATTORNEYS AND COUNSELORS AT LAW

2900 FIRST OF DENVER PLAZA  
633 SEVENTEENTH STREET  
DENVER, COLORADO 80202

**RECEIVED**

**MAY 03 1982**

**WATER RESOURCES  
STATE ENGINEER  
COLD.**

TELEPHONE: 303 893-2900  
TELECOPIER: 303 893-2940  
TELEX: 454368

May 3, 1982

Colorado Division of Water Resources  
1313 Sherman Street  
Denver, Colorado 80203

Gentlemen:

Enclosed is an application for a permit to construct a well to be filed in behalf of the Town of Empire, Colorado, together with copies of supporting documents and decrees.

Please address questions concerning this application to the attention of the undersigned.

Very truly yours,



Gary L. Greer, #4482

GLG:s11

Enclosures



. Attachment A

RECEIVED  
MAY 3 1982  
WATER RESOURCES  
STATE ENGINEER  
CONO.

Well Permit Application

Empire 1

Town of Empire, Colorado

Date This Application Submitted May 3, 1982

	<u>Name of Structure</u>	<u>Source</u>	<u>Amount</u>	<u>Use</u>	<u>Adjudication Date</u>	<u>Appropriation Date</u>	<u>1981 Basin Rank</u>
1.	Empire Town Water Right	Mad Creek	1.82 cfs	Muni- cipal Domestic	10/1/1914	12/31/1863	111

2. (List here rights obtained from AMAX and note here that they are being used to augment this water supply well, filed under Augmentation Plan W - )

AMAX Inc. has agreed to provide augmentation water to Applicant in the amount of up to thirty-two and one-half acre-feet annually (20 g.p.m.) from the developed water right and priority for the Henderson Shaft No. 1, adjudicated in Case No. W-7158-77 in Water Division No. 1. AMAX Inc. and Applicant have agreed to enter into a long-term lease (fifty years) for the augmentation water. During the month of May, 1982, Applicant will file an application for a plan for augmentation with the Water Clerk for Water Division No. 1 to utilize the developed water from AMAX Inc. under this lease as depletion make-up water for this well, as required and necessary to prevent injury from depletion by virtue of use of the well. The amount of augmentation water available is more than adequate for this purpose.

**CLIMAX MOLYBDENUM COMPANY**

AMAX MOLYBDENUM DIVISION

**AMAX** INC.

WESTERN OPERATIONS

RECEIVED  
MAY 13 1982  
A R I X

WATER RESOURCES  
STATE ENGINEER  
COLO. JAN 27 1982

October 13, 1981

The Honorable Kevin Croke  
Mayor  
Town of Empire  
P. O. Box 187  
Empire, Colorado 80438

Re: Empire Water System

Dear Mayor Croke:

If it should be required, AMAX will lease to the Town of Empire the right to take water from the West Fork of Clear Creek for municipal purposes. It is our understanding that the Town intends to develop a well field in the alluvium from which it could pump water for domestic, irrigation, and fire protection purposes. If the average consumptive use were equivalent to 20 gallons per minute, we would estimate that a right to use this water would have a value of at least \$165,000. If requested, AMAX has agreed to provide other assistance in the form of equipment, supplies, or manpower.

It is our understanding that you have asked us to describe our commitment to you in this letter so that you might pursue your application to the State Impact Assistance Advisory Committee for \$250,000 from the impact fund. Please advise if this letter is suitable for your purpose or if anything further is required.

Very truly yours,

*J. J. Ludwig*  
J. J. Ludwig  
Senior Vice President  
Western Operations

JJL:dp

cc: Harold Wright



**CLIMAX MOLYBDENUM COMPANY**

AMAX MOLYBDENUM DIVISION

**AMAX INC.**

**RECEIVED**

**MAY 03 1982**

**WATER RESOURCES  
STATE ENGINEER  
COLO.**

LAW DEPARTMENT

January 19, 1982

Kevin Croke, Mayor  
Town of Empire  
P. O. Box 192  
Empire, Colorado 80438

Dear Mayor Croke:

As we discussed this morning, I am attaching for your information, and for Hal Simpson of the State Engineer's Office, copies of our developed water right decree in Division No. 1. It is pursuant to this right that we have agreed to make water available to the Town of Empire for the improvement of its water system as described in our October 16, 1981 letter to you signed by Mr. Ludwig.

Please let me know whether you need anything further in order to obtain a well permit.

Very truly yours,

AMAX INC.

*J. F. Engelking*  
J. F. Engelking  
Division Attorney

JFE:grh

Enclosures

cc: Mr. Hal Simpson (w/enc.)  
J. J. Ludwig  
H. R. Wright  
M. Gelwix

Attachment A

Well Permit Application  
 Empire 1  
 Town of Empire, Colorado  
 Date This Application Submitted May 3, 1982

<u>Name of Structure</u>	<u>Source</u>	<u>Amount</u>	<u>Use</u>	<u>Adjudication Date</u>	<u>Appropriation Date</u>	<u>1981 Basin Rank</u>
1. Empire Town Water Right	Mad Creek	1.82 cfs	Municipal Domestic	10/1/1914	12/31/1863	111

2. (List here rights obtained from AMAX and note here that they are being used to augment this water supply well, filed under Augmentation Plan W - )

AMAX Inc. has agreed to provide augmentation water to Applicant in the amount of up to thirty-two and one-half acre-feet annually (20 g.p.m.) from the developed water right and priority for the Henderson Shaft No. 1, adjudicated in Case No. W-7158-77 in Water Division No. 1. AMAX Inc. and Applicant have agreed to enter into a long-term lease (fifty years) for the augmentation water. During the month of May, 1982, Applicant will file an application for a plan for augmentation with the Water Clerk for Water Division No. 1 to utilize the developed water from AMAX Inc. under this lease as depletion make-up water for this well, as required and necessary to prevent injury from depletion by virtue of use of the well. The amount of augmentation water available is more than adequate for this purpose.

*Duplicate*

DISTRICT COURT, WATER DIVISION 1, COLORADO

FILED IN DISTRICT COURT

Case No.

82 CW 227

82 JUN 30 P 1: 26

APPLICATION FOR APPROVAL OF PLAN FOR AUGMENTATION <sup>1ST DIST. WATER COURT</sup>  
WELD COUNTY COLO.

CONCERNING THE APPLICATION FOR WATER RIGHTS OF:

Town of Empire in Clear Creek County

1. Name, address, telephone number(s) (residence and business) of applicant(s)

Town of Empire

P. O. Box 187

Empire, Colorado 80438

Telephone: 534-2450

2. Name of structures to be augmented:

Empire No. 1 Well, in Clear Creek County, located within the SW1/4 of the NW1/4 of Section 28, Twp 3 S., Rng 74 W., 6th P.M., at a point approximately 2210 feet from the north section line and 250 feet from the west section line of Section 28.

*Duplicate*

3. Describe water rights to be used for augmentation:

- a. Owner: AMAX Inc.
- b. Structure: Henderson Shaft No. 1, legal description attached as Exhibit 1
- c. Source of water: A complex system of fractures in the rock above and surrounding applicant's Henderson Mine. Said water is not tributary to any natural stream
- d. Date of appropriation: April 1, 1967
- e. Amount of water: 5 cfs absolute, 20 cfs conditional
- f. Uses: Industrial, domestic, irrigation, municipal, piscatorial, and recreational
- g. Adjudication: Decreed in Case No. W-7158-77 (July 16, 1980)

4. Statement of plan for augmentation, covering all applicable matters under C.R.S. 1973, 37-92-103(9), 302(1) and 305(8): (give full details of plan)

See Exhibit 2 attached.

Sherman & Howard

Gary L. Greer #004482  
Kenneth L. Salazar #11648

Signature of Applicant (or Attorney)  
*Gary L. Greer*

2900 First of Denver Plaza  
Denver, Colorado 80202  
Address of Applicant (or Attorney)

Telephone No. (303) 893-2900

Attorney Registration No. See above

STATE OF COLORADO

COUNTY OF Denver

SS. }

I, Gary L. Greer

\_\_\_\_\_, state under oath that I have read this application, and verify its content.

Applicant  
*Gary L. Greer*

Subscribed under oath before me on June 30, 1972 date

My commission expires: July 23, 1984 date

Notary Public  
*John C. Brown*

2900 FIRST OF DENVER PLAZA  
833 SEVENTEENTH STREET  
DENVER, COLORADO 80202

Exhibit 1 to  
Application of Town of Empire  
for  
Approval of Plan for Augmentation  
of Empire No. 1 Well

Item

3.

b. Legal description of water rights to be used for  
augmentation:

Beginning at a point at the center of Shaft No. 1  
whence USLM Mineral Monument Rue bears North 73°42'  
East a distance of 3208.4 feet. This is an unsurveyed  
area but appears to be in Section 25, Township 3 South,  
Range 76 West of the 6th P.M., Clear Creek County.

Alternate Point of Diversion:

Henderson Shaft No. 2--Beginning at a point at the center  
of Shaft No. 2 whence USLM Mineral Monument Rue bears  
North 77°16'46" East a distance of 4931.33 feet. This  
is an unsurveyed area but appears to be in Section 25,  
Township 3 South, Range 76 West of the 6th P.M., Clear  
Creek County.

Alternate Point of Diversion:

Henderson New West Portal Mine Railway Tunnel--Beginning  
at a point on the centerline of the west tunnel portal  
whence the NW Corner of Section 6, Township 3 South,  
Range 77 West of the 6th P.M., bears North 45°29'35"  
West a distance of 16,086.72 feet.

Exhibit 2

Incorporated in and Made a Part of  
Application of Town of Empire  
for  
Approval of Plan for Augmentation  
of Empire Well No. 1

Item

4. Statement of Plan for Augmentation

Applicant, the Town of Empire, Colorado, is located in Clear Creek County. The Town is located along U. S. Highway 40, one mile west of its intersection with Interstate 70, nine miles west of the Town of Idaho Springs and forty miles west of the Denver Metropolitan area. Empire is at an approximate elevation of 8600 feet above sea level and is located within the drainage basin of the west fork of Clear Creek. The Town's population according to the 1980 Census is approximately 400. Its rate of growth as of November, 1980 was estimated at 8.4% per year.

The Town's municipal water supply is from the Empire Town Water Right, a surface diversion from Mad Creek, a tributary of the west fork of Clear Creek. In the winter months of January through April, the physical supply of water from Mad Creek is insufficient to meet the Town's requirements for water and to fulfill the entitlement of the Empire Town Water Right. From September through December the quantity and quality of water in Mad Creek are inadequate for the Town's use.

The purpose of this plan for augmentation is to enable Applicant to obtain a supplemental source of supply of water for its municipal water system to serve existing and foreseen future water demands of the Town. The Town of Empire has applied to the Colorado Division of Water Resources for a permit to construct the Empire Well No. 1 to be operated pursuant to this plan for augmentation. The Town's application for a well permit has not been acted on as of the date of this application.

Under this plan water for the same uses as those made by the Town under the Empire Town Water Right, i.e., municipal uses, including domestic and household uses, sprinkling of steets and alleys, fire protection, lawn and garden irrigation and limited commercial uses for small businesses served by the Town's water supply, will be diverted through the Empire Well No. 1 from the alluvium of the west fork of Clear Creek at a



maximum pumping rate of 125 gallons per minute (g.p.m.) (.2783 c.f.s.). Water from the well will be introduced into and distributed through Applicant's municipal water system for all municipal uses. Water diverted from the well will be returned to the west fork of Clear Creek after use, through Applicant's holding tank overflow, two bleed lines and Applicant's municipal wastewater treatment plant.

Based on estimated average water demands of 91 gallons per capita per day and estimated maximum water demands of 250 gallons per capita per day for a water system sized to serve a present population of 400 and a projected population of 1,000, and based on existing lawn and garden irrigation of 2.75 acres, the total annual volume of supplemental water to be diverted from the Empire Well No. 1 will not exceed 107.53 acre feet. Applicant's consumptive use of water diverted from the Empire Well No. 1 will not exceed 30% of water diverted annually and will not exceed 32.26 acre feet annually.

Operation of Applicant's well will be limited as follows:

- (1) Between January 1 and April 30 of each year the well will be limited to 121 days of pumping at a maximum rate of 125 gpm and will be limited to 66.53 acre feet of total diversions.
- (2) The well will not be operated between May 1 and August 31 of each year.
- (3) Between September 1 and December 31 of each year the well will be limited to 74 days of pumping at a maximum rate of 125 gpm and will be limited to 41 acre feet of total diversions.
- (4) In any year in which total diversions for the period January 1 through April 30 are less than 66.53 acre feet, Applicant shall be entitled to carry forward the difference between 66.53 acre feet and the number of acre feet actually diverted from January 1 through April 30 as a credit against pumping during the period September 1 through December 31 of the same year. The credit will be used from September 1 through December 31, until exhausted, to enlarge the number of

days of permitted pumping, at a rate not to exceed 125 gpm, during that period, provided that the total number of days of pumping for the calendar year shall not exceed 195 and the total number of acre-feet diverted during the calendar year shall not exceed 107.53.

- (5) Applicant will maintain diversion records for the well showing the number of days each month the well is pumped, the actual rate of pumping, and the total monthly diversions in acre feet each month and the cumulative total in acre feet for the calendar year.

Augmentation water to make up stream depletions will be made available year-round to Applicant by AMAX Inc. from AMAX Inc.'s non-tributary, developed water right for the Henderson Shaft No. 1. Augmentation water in an amount of up to 32.26 acre-feet annually (20 gpm) will be released to the west fork of Clear Creek at a point upstream from Applicant's well and in the vicinity of the Henderson Shaft No. 1 by AMAX Inc. at Applicant's request to augment the flow of the west fork of Clear Creek to the extent of depletions therefrom by diversions from Applicant's well. The amount of augmentation water committed to this purpose is more than adequate to prevent injury to other vested water rights from depletion by virtue of use of the well. Augmentation water will be made available to Applicant under the terms of a fifty-year renewable agreement between Applicant and AMAX Inc. entered into for this purpose.

Applicant claims a date of appropriation for the Empire Well No. 1 of May 3, 1982, the date of Applicant's application to the Division of Water Resources for a permit to construct a well, for an appropriation of .2783 cubic feet per second (125 gpm) of water from the alluvium of the west fork of Clear Creek for municipal use with priority as of said date.

WHEREFORE, Applicant requests the issuance of a decree which

- 1) approves this plan for augmentation;
- 2) authorizes construction and operation of the Empire Well No. 1 pursuant to this plan for augmentation;

3) orders the Colorado State Engineer and the Division Engineer for Water Division No. 1 to recognize the existence and operation of the Empire Well No. 1 and to grant permits to construct and use the Empire Well No. 1 or any necessary supplemental or replacement wells;

4) orders that no curtailment of diversions and use of water from Empire Well No. 1 shall be required by or in behalf of any person so long as such diversion and use is being implemented in accordance with this plan for augmentation; and

5) determines that as a result of implementation of this plan for augmentation, an increased supply of water will be available to the west fork of Clear Creek within Water Division No. 1 and that there is unappropriated water thereby available for the Empire Well No. 1 and for groundwater withdrawals therefrom and that no vested water rights will be injured thereby.

RICHARD D. LAMM  
Governor



*file*  
JERIS A. DANIELSON  
State Engineer

**OFFICE OF THE STATE ENGINEER  
DIVISION OF WATER RESOURCES**

1313 Sherman Street-Room 818  
Denver, Colorado 80203  
(303) 866-3581

*Application  
was Filed  
Please code in  
Test well T handles  
Rich*

May 19, 1982

Kavin C. Croke, Mayor  
Town of Empire  
Box 187  
Empire, CO 80438

RE: Test well--Town of Empire, Clear Creek County

Dear Mayor Croke:

This will acknowledge receipt of your letter of May 18, 1982, requesting a permit to drill a test well near or at Empire.

A permit is not required to drill a test well. The State Engineer's office must be notified in advance of the drilling of a test well and we are considering your letter to be that notice.

Pump testing of the well shall not exceed seven (7) days and the testing must be completed within sixty (60) days after the initial drilling, unless prior approval of a longer testing period or a permit to construct a well has been obtained from the office of the State Engineer. Test wells must be plugged and abandoned within three (3) days after testing is completed. Notify this office when the hole was plugged and the intervals and type of materials used on an affidavit form. Copies of all logs and test data must be submitted to this office.

Very truly yours,

Dewayne R. Schroeder  
Water Resources Engineer  
Ground Water Section

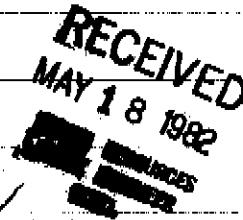
DRS/ew

cc: Division 1  
Water Commissioner, District 7

07798

Town of Empire, Colorado  
Box 187  
Empire, Colorado  
80438

State of Colorado  
State Engineers Office  
1313 Sherman St.  
Denver Colo. 80203



Attn: Mr. Chas. Schrader  
Re: Permit for Test Drilling - Water  
Well - Empire, Colorado.

Gentlemen,

The Town of Empire, Colorado hereby requests a permit to drill a test well for water to be used as a source for the Municipal Supply of the Town. Application has been made for a well permit and is on file with the State Engineers Office.

The Town is most anxious to receive a permit for test drilling, as bids for same will be sought from interested drilling contractors immediately upon issuance of the permit.

Sincerely,

Town of Empire, Colorado  
By Harris C. Cook, Mayor



# Sherman & Howard

A LAW PARTNERSHIP INCLUDING PROFESSIONAL CORPORATIONS

2900 FIRST OF DENVER PLAZA  
633 SEVENTEENTH STREET  
DENVER, COLORADO 80202

TELEPHONE: 303.893-2900  
TELECOPIER: 303.893-2940  
TELEX: 454368

IN RENO, NEVADA:  
Hill Cassas de Lippman and Erwin, P.C.  
POST OFFICE BOX 2790  
RENO, NEVADA 89505  
TELEPHONE 702.323-1601

August 30, 1982

BY MESSENGER

Mr. Krishna Murthy  
State Engineer  
Office of the State Engineer  
Division of Water Resources  
1313 Sherman Street, Room 818  
Denver, Colorado 80203

Re: Permit No. 25863-F

Dear Mr. Murthy:

By letter dated August 18, 1982 you transmitted a permit to construct the Empire Well No. 1 and the Findings of the State Engineer. Your approval to construct the Empire Well No. 1 was made pursuant to the Plan for Augmentation filed in Case No. 82CW227. Use of the well was conditioned upon the approval of the Water Court of the Plan for Augmentation.

On August 27, 1982 we filed an Amended Application for Approval of Plan for Augmentation in Case No. 82CW227 in the Water Court for Water Division No. 1. I enclose herewith a copy of the Amended Application for your review.

I will contact you very soon to ascertain whether the permit you have already issued to construct the Empire Well No. 1 is still effective as to the construction of the well in light of the Amended Application. It would appear that the permit would still be effective since the permit only approves the construction of the well and conditions the use of water from the well on the approval by the Water Court of a Plan for Augmentation.

Thank you for your assistance.

Very truly yours,

*Kenneth L. Salazar*  
Kenneth L. Salazar

KLS:sll

Enclosure

cc: Mr. Kevin Croke  
Ms. Gayle Bradbeer

*Called and told that  
amended permit is not required.  
8/21/82*

RECEIVED  
AUG 30 1982  
WATER RESOURCES  
STATE - ENGINEER  
COLO.

RECEIVED

AUG 30 1982

FILED IN DISTRICT COURT

WATER RESOURCES  
STATE ENGINEER

82 AUG 27 AM: 27

DISTRICT COURT, WATER DIVISION 1, COLORADO

Case No. 82 CW 227

AMENDED APPLICATION FOR APPROVAL OF PLAN FOR AUGMENTATION

1ST DISTRICT COURT  
WELD COUNTY COLO.

CONCERNING THE APPLICATION FOR WATER RIGHTS OF:

Town of Empire in Clear Creek County

1. Name, address, telephone number(s) (residence and business) of applicant(s):

Town of Empire

P. O. Box 187

Empire, Colorado 80438

Telephone: 534-2450

2. Name of structures to be augmented:

Empire No. 1 Well, in Clear Creek County, located within the SW1/4 of the NW1/4 of Section 28, Twp 3 S., Rng 74 W., 6th P.M., at a point approximately 2210 feet from the north section line and 250 feet from the west section line of Section 28 and other additional wells as they may become necessary. (See Statement of Plan for Augmentation)

3. Describe water rights to be used for augmentation:

a. Owner: AMAX Inc.

b. Structure: Henderson Shaft No. 1, legal description attached as Exhibit 1

c. Source of water: A complex system of fractures in the rock above and surrounding AMAX Inc.'s Henderson Mine.

d. Date of appropriation: April 1, 1967

e. Amount of water: 5 cfs absolute, 20 cfs conditional

f. Uses: Industrial, domestic, irrigation, municipal, piscatorial, and recreational

g. Adjudication: Decreed in Case No. W-7158-77 (July 16, 1980)

4. Statement of plan for augmentation, covering all applicable matters under C.R.S. 1973, 37-92-103(9), 302(1) and 305(8): (give full details of plan)

See Exhibit 2 attached.



SHERMAN & HOWARD

By: Kenneth L. Salazar  
Gary L. Greer, #4482  
Kenneth L. Salazar, #11648  
2900 First of Denver Plaza  
633 Seventeenth Street  
Denver, Colorado 80202  
(303) 893-2900  
(attorneys for applicant)

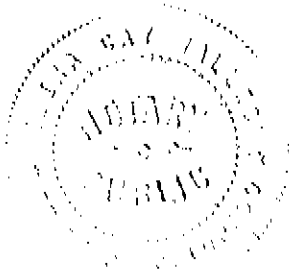
STATE OF COLORADO     )  
                                  )SS.  
COUNTY OF DENVER     )

I, Kenneth L. Salazar, state under oath that I have read this application, and verify its content.

Kenneth L. Salazar  
(attorney for applicant)

Subscribed under oath before me on 8/27/82.

My commission expires: My Commission Expires Feb, 25, 1986



Victoria C. Wallick

2900 FIRST OF DENVER PLAZA  
633 SEVENTEENTH STREET  
DENVER, COLORADO 80202

Exhibit 1 to the  
Amended Application  
for  
Approval of Plan for Augmentation  
of the  
Town of Empire

Item

3.

b. Legal description of water rights to be used for  
augmentation:

Beginning at a point at the center of Shaft No. 1  
whence USLM Mineral Monument Rue bears North 73°42'  
East a distance of 3208.4 feet. This is an unsur-  
veyed area but appears to be in Section 25, Town-  
ship 3 South, Range 76 West of the 6th P.M., Clear  
Creek County.

Alternate Point of Diversion:

Henderson Shaft No. 2 -- Beginning at a point at the  
center of Shaft No. 2 whence USLM Mineral Monument  
Rue bears North 77°16'46" East a distance of 4931.33  
feet. This is an unsurveyed area but appears to be  
in Section 25, Township 3 South, Range 76 West of the  
6th P.M., Clear Creek County.

Alternate Point of Diversion:

Henderson New West Portal Mine Railway Tunnel --  
Beginning at a point on the centerline of the west  
tunnel portal whence the NW Corner of Section 6,  
Township 3 South, Range 77 West of the 6th P.M.,  
bears North 45°29'35" West a distance of 16,086.72  
feet.

Exhibit 2  
Incorporated in and Made a Part  
of the Amended Application of the  
Town of Empire for Approval  
of Plan of Augmentation

Item

4. Statement of Plan for Augmentation.

Applicant, the Town of Empire (the "Town"), is located in Clear Creek County. The Town is located along U.S. Highway 40, one mile west of its intersection with Interstate 70, nine miles west of the Town of Idaho Springs and forty miles west of the Denver Metropolitan area. Empire is at an approximate elevation of 8600' above sea level and is located within the drainage basin of the West Fork of Clear Creek. The Town's population according to the 1980 Census is approximately 400. Its rate of growth as of November, 1980 Census is 8.4% per year.

The Town's present municipal water supply is from the Empire Town Water Right, a surface diversion from Mad Creek, a tributary of the West Fork of Clear Creek. The purpose of this plan for augmentation is to enable the Town to obtain a supplemental and reliable source of supply of water for its municipal water system to serve an existing population of 450 and a projected population of 1,000.

The Town applied to the Colorado Division of Water Resources for a permit to construct the Empire Well No. 1. The State Engineer issued permit number 25963-F on August 20, 1982 for the construction of the Empire Well No. 1 with a proposed maximum pumping rate of 125 gallons per minute based on the original Application for Approval of Plan for Augmentation filed in this case. This Amended Application for a Plan of Augmentation (the "Plan") will forthrightly be submitted to the State Engineer, and if necessary, the Applicant will submit a new application to the Colorado Division of Water Resources for the reissuance of the permit to construct the Empire Well No. 1.

Under this Plan water for the same uses as those made by the Town under the Empire Town Water Right, i.e., municipal uses, including domestic and household uses, sprinkling of streets and alleys, fire protection, lawn and garden irrigation

and limited commercial uses for small businesses served by the Town's water supply, will be diverted through the Empire Well No. 1 (the "Well") from the alluvium of the West Fork of Clear Creek at a permitted maximum pumping rate of 125 gpm. Additional alluvial wells will become necessary to divert the amount of water needed to meet future municipal needs. The depletions to the stream resulting from the total diversions under this Plan will always be limited to and will not exceed 20 gpm. Additional well permit applications will be filed with the Colorado Division of Water Resources as it becomes necessary.

Water from the Well or wells will be introduced into and distributed through Applicant's municipal water system for all municipal uses. Water diverted from the Well or wells less any municipal consumptive use will be returned to the West Fork of Clear Creek passing through Applicant's holding tank overflow, two bleed lines and Applicant's municipal wastewater treatment plant.

Based upon an estimated average domestic in-house water demand of 110 gallons per capita per day, and an existing year round population of 450 and a projected population of 1,000, the total annual domestic in-house water requirement is estimated to range from 55.5 acre-feet for the existing population to a maximum of 123.2 acre-feet for the projected population. Additional annual water requirements estimated to range from 40.0 acre-feet for the existing population to 88.7 acre-feet for the projected population consist of system losses including line leakage, winter bleeders and overflow from the Town's storage tank. Based upon the present irrigation of about 5.3 acres of lawns and gardens and projected irrigation of approximately 14.7 acres, the water requirement each year (May 1 - September 30) for irrigation is estimated to range from 12.4 acre-feet for the existing population to 27.5 acre-feet for the projected population. Therefore, the total annual municipal requirement is estimated to range from 107.9 acre-feet for the present population of 450 to 239.4 acre-feet for a projected population of 1,000.

Applicant's consumptive use of water resulting from domestic in-house use and from the system losses is estimated to be five percent of the total water diverted for these purposes and is estimated to range from 4.8 acre-feet per year for the present population of 450 to 10.7 acre-feet per year for the projected population of 1,000. Consumptive use of irrigation water for each year (May 1 - September 30) is estimated to range from 8.7 acre-feet for the existing population to 19.3 acre-feet for the projected population. Therefore the Applicant's total consumptive use is estimated to range from 13.5 acre-feet for the existing population of 450 to 30.0 acre-feet for a projected population of 1,000.

To prevent injury to other water users, augmentation water to make up stream depletions resulting from Applicant's municipal water use will be made available year round to Applicant by AMAX, Inc. from AMAX, Inc.'s non-tributary developed water right for the Henderson Shaft No. 1, more particularly described in Exhibit 1 of this Amended Application. Augmentation water at a continuous rate of 20 gallons per minute (gpm) will be delivered to the West Fork of Clear Creek at a point upstream of the Applicant's well and in the vicinity of the Henderson Shaft No. 1 by AMAX, Inc. at Applicant's request to augment the flow of the West Fork of Clear Creek to the extent of depletions therefrom by diversions from the Applicant's well.

The augmentation water is more than adequate to sustain a pumping rate of 400 gpm during the period October 1 through April 30. For the period between May 1 and September 30 of each year, when irrigation water is used, the amount of augmentation water is adequate to replace the depletions to the stream caused by the diversions necessary to supply all the water requirements of the existing population. As the Town's population increases, the augmentation water will be adequate to augment the population's consumptive use to the extent that the population's consumptive use of water does not exceed 20 gpm (approximately 2.65 acre-feet per month). When the projected population growth progresses to the point where the monthly depletions exceed 2.65 acre-feet per month, Applicant will make use of the Empire Town Water Right for municipal diversions or will impose restrictions limiting the use of water for irrigation purposes in a manner such that the monthly stream depletion resulting from the Applicant's municipal water use will not exceed 2.65 acre-feet per month. This will occur only with projected population increases during the irrigation season, May 1 through September 30.

Using the current projections of the rate of increase in irrigated area, it is estimated that the consumptive use will exceed 2.65 acre-feet/month when during periods of irrigation the total municipal diversions exceed the following values:

<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>	<u>September</u>
15.3 ac-ft	10.8 ac-ft	11.9 ac-ft	13.1 ac-ft	16.7 ac-ft
(114 gpm)	(80 gpm)	(88 gpm)	(97 gpm)	(124 gpm)

When these total monthly diversion values are reached, the Applicant will reexamine the actual irrigated area, calculate the actual consumptive use, and if necessary revise the estimates of the total diversion when the consumptive use exceeds 2.65 acre-feet per month.

Applicant's total consumptive use under the Plan will not at any time be allowed to exceed the amount of augmentation water supplied to the stream. Totalizing flow meters will be installed on Applicant's well diversions to allow an easy administration of this Plan. Applicant will maintain diversion records showing the actual rate of pumping and the total monthly diversions in acre feet each month and the cumulative total in acre feet for the calendar year.

Augmentation water will be made available to Applicant under the terms of a fifty-year renewable agreement between Applicant and AMAX Inc. The amount of augmentation water committed to this purpose is more than adequate to prevent injury to other vested water rights from depletions to the stream caused by Applicant's diversions under this Plan.

Applicant claims a date of appropriation for the Empire Well No. 1 of May 3, 1982 the date of Applicant's application to the Division of Water Resources for a permit to construct a well, for an appropriation of 0.2785 CFS (125 gpm) of water from the alluvium of the West Fork of Clear Creek for municipal use with priority as of said date.

WHEREFORE, Applicant requests the issuance of a decree which

- 1) approves this plan for augmentation;
- 2) authorizes construction and operation of the Empire Well No. 1 pursuant to this plan for augmentation;
- 3) authorizes construction and operation of additional wells as it becomes necessary subject to the terms and conditions of this plan for augmentation;
- 4) orders the Colorado State Engineer and the Division Engineer for Water Division No. 1 to recognize the existence and operation of the Empire Well No. 1 and to grant permits to construct and use the Empire Well No. 1 or any necessary supplemental or replacement wells;
- 5) orders that no curtailment of diversions and use of water from Empire Well No. 1 shall be required by or in behalf of any person so long as such diversion and use is being implemented in accordance with this plan for augmentation; and
- 6) determines that as a result of implementation of this plan for augmentation, an increased supply of water will be available to the west fork of Clear Creek within Water Division No. 1 and that there is unappropriated water thereby available for groundwater withdrawals pursuant to this plan for augmentation and that no vested water rights will be injured thereby.

RECEIVED

SEP 12 1982

WATER RESOURCES  
STATE - ENGINEER  
COLO.

IN RENO, NEVADA:

Hill Cassas deLipkau and Erwin, P.C.

POST OFFICE BOX 2790  
RENO, NEVADA 89505  
TELEPHONE 702 323-1601

**Sherman & Howard**

A LAW PARTNERSHIP INCLUDING PROFESSIONAL CORPORATIONS

2900 FIRST OF DENVER PLAZA  
633 SEVENTEENTH STREET  
DENVER, COLORADO 80202

TELEPHONE: 303 893-2900  
TELECOPIER: 303 893-2940  
TELEX: 454368

September 1, 1982

Mr. Krishna Murthy  
State Engineer  
Office of the State Engineer  
Division of Water Resources  
1313 Sherman Street, Room 818  
Denver, Colorado 80203

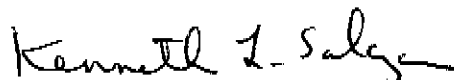
Re: Permit No. 25963-F

Dear Mr. Murthy:

This letter is to confirm our telephone conversation of August 31, 1982, in which you stated that the State Engineer would not require the Town of Empire to reapply for the reissuance of Permit No. 25963-F to construct the Empire Well No. 1. You also stated that since the permit was simply a permit to construct the well, and the use of the water from the well was conditioned upon the approval by the Water Court of the Plan for Augmentation, the permit you have already issued for the construction of the well would suffice. I have advised the Town of Empire accordingly, and the construction of the well should begin very soon.

Thank you for your assistance.

Very truly yours,



Kenneth L. Salazar

KLS:sll

cc: Mr. Kevin Croke  
Ms. Gayle Bradbeer  
Mr. John Johnson



STATE OF  
COLORADO

Pittinger - DNR, Rachel <rachel.pittinger@state.co.us>

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## FW: Fwd: Draft CWCB Board memo and datasheet for review and comment

2 messages

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Mayor, Richard Sprague <mayor@empirecolorado.us>  
To: Rachel Pittinger - DNR <rachel.pittinger@state.co.us>

Thu, May 2, 2019 at 9:22 AM

I asked Jim Ford to review the attachments and below is his input. I also review and it looks good to me. Thanks for all your help.

Richard Sprague

Mayor Empire, CO

[mayor@empirecolorado.us](mailto:mayor@empirecolorado.us)

---

From: [jrf@jamesrford.net](mailto:jrf@jamesrford.net) <[jrf@jamesrford.net](mailto:jrf@jamesrford.net)>

Sent: Wednesday, May 1, 2019 7:26:58 PM

To: Mayor, Richard Sprague

Subject: RE: Fwd: Draft CWCB Board memo and datasheet for review and comment

Rick,

It appears the CWCB staff is recommending Empire's loan to their Board of Directors. That is great news.

To answer Ms. Pittenger's question about the water rates, Empire does not use an EQR at this time.

Empire will be preparing a rate study that will analyze all of its current and future (anticipated growth) customers and establish rates based on type of use and tap size. The rate study will more than likely use something similar to an EQR to determine an equitable rate for all its customers.

Regards,

Jim

---

----- Original Message -----

Subject: Fwd: Draft CWCB Board memo and datasheet for review and comment

From: "Mayor, Richard Sprague" <[mayor@empirecolorado.us](mailto:mayor@empirecolorado.us)>

Date: Wed, May 01, 2019 5:10 pm

To: "[jrf@jamesrford.net](mailto:jrf@jamesrford.net)" <[jrf@jamesrford.net](mailto:jrf@jamesrford.net)>

Jim

I just recieved these attachments, any chance you could just take a look and see if anything stands out to you. I need to responded by tomorrow afternoon . Thanks for your assistance anyway you can.

Rick Sprague  
Mayor

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located beginning at a point at the center of Shaft No. 2 whence USLM Mineral Monument Rue bears N. 77 degrees 16' 46" E. a distance of 4931.33 feet. This is an unsurveyed area but appears to be in Section 25, Township 3 South, Range 76 West of the 6<sup>th</sup> P.M. in Clear Creek County. The Rue Monument is located at North Latitude 39 Degrees 46' 17" and West Longitude 105 Degrees 49' 58".

10.2.1.2.2. Source: Nontributary ground water from the Henderson Mine.

10.2.1.2.3. Appropriation Date: April 1, 1967.

10.2.1.2.4. Amount: 5.0 cfs absolute from Water Division 1; 0.349 cfs absolute from Water Division 5.

10.2.1.2.5. Use: Industrial, domestic, irrigation, municipal, piscatorial, recreational, and all other lawful uses.

10.2.1.2.6. The Henderson Mine water rights were decreed for industrial, domestic, irrigation, municipal, piscatorial, recreational, and all other lawful purposes. Because the Henderson Mine water rights are nontributary and fully reusable, data on historical use is not provided.

10.2.2. Storage Rights: The Applicant will replace out-of-priority depletions in part by releasing water stored in the following reservoirs.

*10.2.2.1. On-Site Storage:*

10.2.2.1.1. Upper Reservoir No. 1: See paragraph 10.1.7., above.

10.2.2.1.2. Upper Reservoir No. 2: See paragraph 10.1.8., above.

10.2.2.1.3. Warren Gulch Reservoir No. 1: See paragraph 10.1.9., above.

10.2.2.2. *Golden Reservoirs No. 1, 2 and 3 (collectively known as "Guanella Reservoir")*: Pursuant to its April 1, 2005 agreement with Clear Creek, the Applicant also obtained the right to use 35 acre feet of storage space per year in the Golden Reservoirs Nos. 1, 2 and 3. Pursuant to that agreement, the Applicant's right to storage space in the Golden Reservoirs Nos. 1, 2 and 3 decreased to 30 acre feet on April 5, 2010, and the right to the remaining 30 acre feet of storage space will expire on April 5, 2015, subject to negotiation of a new agreement or renewal of the original agreement with Clear Creek.

10.2.2.2.1. Golden Reservoir No. 1: Located in the NW¼ SW¼ of Section 29, Township 3 South, Range 74 West of the 6<sup>th</sup> P.M., in Clear Creek