January 11, 2018

Mr. Todd Williams, P.E.
Williams and Weiss Consulting, LLC
5255 Ronald Reagan Boulevard, Ste 220
Johnstown, CO 80534

RE: Kauffman No. 1 Substitute Water Supply Plan (WDID 0402530, Plan ID 3039)
Kauffman No. 1 Pit, DRMS No. M-1978-327 (WDID 0403009)
Sections 20 and 21, T5N, R68W, 6th P.M.
Water Division 1, Water District 4, Larimer County

Approval Period: January 1, 2018 through December 31, 2018
Contact Information for Mr. Todd Williams: 303-653-3940; tlwwater@msn.com

Dear Mr. Williams:

We have reviewed your letter dated December 13, 2017 requesting renewal of the above referenced substitute water supply plan for a sand and gravel pit on behalf of Jake Kauffman and Son, Inc. The required fee of $257.00 for the renewal of this substitute water supply plan has been submitted (receipt number 3683869). The original substitute water supply plan was approved on April 6, 1992 and it was most recently approved on December 19, 2016 for operations through December 31, 2017.

SWSP Operation

The Kauffman No. 1 Pit (WDID 0403009, well permit no. 42901-F) is located in Larimer County in part of the E½ of Section 20 and the NW¼ of the SW¼ of Section 21, Township 5 North, Range 68 West of the 6th P.M. Active mining at the site has ceased and the site has been undergoing reclamation for several years. The site contains three unlined ponds of approximately 24.7 acres, 9.1 acres, and 1.1 acres, all exposed to the atmosphere prior to January 1, 1981. As of 2012, all groundwater exposed to the atmosphere after December 31, 1980 has been backfilled so that there are no new evaporative depletions associated with this site. The applicant placed additional backfill on the eastern side of the 24.7-acre pond to meet reclamation requirements. Consumption of water at the site during this plan period will be limited to dust control at the site required during reclamation. The replacement water will be supplied by a lease with the City of Loveland.

Pursuant to § 37-90-137(11)(b), C.R.S. and 2009CW49, a gravel pit operator or property owner does not need to replace depletions that occur due to evaporation from ground water exposed prior to January 1, 1981 as a result of open mining of sand and gravel, regardless of whether mining continued after December 31, 1980. Previous SWSPs have recognized that 36.2 acres of water surface was exposed at the Kauffman No. 1 Pit prior to January 1, 1981 ("pre-81"). Due to the backfilling at the site and an overall drop in water levels, the pit now has an exposed surface area of 34.9 acres. Per

our "General Guidelines for Substitute Water Supply Plans for Sand and Gravel Pits" updated April 1, 2011, pre-81 areas are tied to the physical location at which the groundwater was exposed prior to January 1, 1981 with the exception for areas whose reallocation was approved by the State Engineer prior to January 1, 2011. The applicant has provided a map showing the specific location of the pre-81 credit (see Map 3). Because the pre-81 credit associated with the Kauffman No. 1 Pit (36.2 acres) is greater than the current surface area of the Kauffman No. 1 Pit (34.9 acres), and the location of the currently exposed surface area is entirely within the boundaries of the pre-81 area shown in Map 3, there are no evaporative depletions associated with the Kauffman No. 1 Pit that require replacement under this SWSP. Please note that the credits for the pre-81 areas are tied to the locations identified on Map 3 and may not be re-allocated to other areas of ground water exposure within the gravel pit boundaries. Any pre-81 area that is backfilled will lose the pre-81 exemption should it be excavated in the future. Additionally the backfilling of a pre-81 area shall not create a credit to be used elsewhere.

Depletions

The Applicant projects using up to 5.72 acre-feet of groundwater at the site for dust control purposes during this plan period, as shown in the attached Table 1. Dust control use is assumed to be 100% consumptive. No other use of ground water at the site is anticipated during this plan period.

The monthly depletions to the Big Thompson River due to past and projected use were lagged from the pit site using the AWAS program developed by the IDS Group at Colorado State University. The parameters used in the model were: a distance from the site to the river (X) which varied as described below; a distance from the river through the site to the no flow aquifer boundary (W) of 4,000 ft; an aquifer transmissivity (T) of 50,000 gallons/ft/day; and a specific yield (S) of 0.2. The distance from the exposed water surface area to the river (X value) varied over the years as described in the table below.

Years	X (ft)	Justification
2000-11	250	Distance used by Applegate Group (previous consultant) for this time period
2012	1,700	Distance from the river to the pump used to provide water to the City of Loveland property
2013-14	550	Distance from the river to the point water is being pumped for dust control purposes
2015-18	1,450	Distance from the river to the point water is being pumped for dust control purposes

Consumptive use for the period of 2000 through 2012 was obtained from prior SWSP submittals. Consumptive use from 2013 through 2017 is based on records of actual dust control use at the site provided by the applicant. The lagged stream depletions due to past and projected use at the site are estimated to total 5.07 acre-feet during this plan period, as shown on the attached Table 3. The Kauffmann No. 1 Pit is directly adjacent to the Big Thompson River, and depletions are assumed to impact the stream in the E½ of Section 20, Township 5 North, Range 68 West of the 6th P.M.

Replacements

Replacement water for this pit will continue to be made available throughout the year from a lease of 65.0 acre-feet of fully consumable water from the City of Loveland ("Loveland"). A copy of the lease is attached to this letter. This leased water is also used to replace depletions at the

Wagner/Kauffman Pit #3 (M-1999-069, WDID 0403008). A total of 1.7576 acre-feet of augmentation water has been dedicated to the Wagner/Kauffman Pit #3 SWSP (WDID 0402529) during this plan period. The duration of the lease is from January 1, 2016 through December 31, 2018.

Under the terms of the lease, replacements can be made using a variety of water owned by Loveland including, but not limited to, Windy Gap reusable effluent, water stored in Loveland Storage Reservoir (commonly known as Green Ridge Glade Reservoir) (WDID 0403659) as decreed in case no. 82CW202A, and Colorado Big Thompson Project ("C-BT") water. In the event that Loveland plans to use C-BT water as a replacement source, Loveland shall comply with the Interim Rule issued by the Northern Colorado Water Conservancy District ("Northern District") in May 2005, regarding the use of Colorado-Big Thompson ("CBT") Project water in substitute water supply plans. **Prior to such use of C-BT Project water, Loveland is required to notify this office, the division engineer and the water commissioner of the amount of C-BT Project water dedicated to this plan and provide a copy of the Northern District's approval letter as required by paragraph I(g) of the Northern District's May, 2005 Interim Rule.**

The monthly depletions and replacement requirements are indicated on the attached Table 4. A four percent (4%) transit loss has been applied to the required replacement water deliveries, based on the distance from the most upstream augmentation source, Green Ridge Glade Reservoir, to the Kauffman No. 1 Pit.

Long Term Augmentation

In accordance with the attached letter dated April 30, 2010 from the Colorado Division of Reclamation, Mining, and Safety ("DRMS"), all sand and gravel mining operators must comply with the requirements of the Colorado Reclamation Act and the Mineral Rules and Regulations for the protection of water resources. Unlined ponds will create long term injurious stream depletions unless otherwise augmented. The April 30, 2010 letter from DRMS requires that you provide information to DRMS to demonstrate you can replace long term injurious stream depletions that result from mining-related exposure of ground water. The DRMS letter identifies four approaches to satisfy this requirement. Approach no. 4 is to obtain approval from the Division of Water Resources that acknowledges compliance with the SEO's requirements pursuant to § 37-90-137(11), C.R.S. Since the operator has backfilled the site so that only pre-81 groundwater areas remain, there are no long terms injurious stream depletions from mining related exposure of groundwater, and the operator is considered to be in compliance with the SEO's requirements. In addition, there is currently a surety bond outstanding for this project in the amount of $14,727.00 to assure the reclamation of the site is completed as currently proposed.

Conditions of Approval

I hereby approve the proposed substitute water supply plan in accordance with § 37-90-137(11), C.R.S., subject to the following conditions:

1. This plan is approved with the effective date of January 1, 2018 and shall be valid through December 31, 2018 unless otherwise revoked or modified. If depletions (lagged or projected) will extend beyond the plan's expiration date, a renewal request must be submitted to this office with the statutory fee (currently $257) **no later than November 1, 2018**. According to the projection shown in the attached Table 3, lagged depletions will extend through December 2020.

2. Well permit no. 42901-F was obtained for this gravel pit in accordance with § 37-90-137(2) and (11), C.R.S. On April 6, 2010 the location of this permit was amended in accordance with the Policy Memorandum 93-1 to reflect the actual location of the gravel pit. The permit allows ground water use for dewatering, evaporation, water lost in mined product, gravel washing, and dust control. The permit allows a maximum annual appropriation of 43.38 acre-feet, and a maximum post-81 exposed ground water surface of 24.3 acres. Actual ground water use and amounts shall be limited to that specifically allowed through this SWSP.
3. No additional surface area of groundwater shall be exposed at the Kauffman No. 1 Pit beyond that which was exposed prior to January 1, 1981. The annual amount of water used for dust control at the Kauffman No. 1 Pit under this SWSP shall not exceed 5.72 acre-feet. Total consumption at the Kauffman No. 1 Pit, must not be exceeded the aforementioned amount unless an amendment is made to this plan.
4. Approval of this plan is for the purposes as stated herein. Any additional uses for which the water may be used must first be approved by this office.
5. All pumping for dust control shall be measured in a manner acceptable to the water commissioner or division engineer.
6. All releases of replacement water must be sufficient to cover all out-of-priority depletions in time, place, and amount and must be made under the direction and/or the approval of the water commissioner. Notice must be provided and approval made by the water commissioner at least 48 hours prior to the release of replacement water, or as required by the water commissioner.
7. The release of replacement water may be aggregated to maximize beneficial use. The water commissioner and/or the division engineer shall determine the rate and timing of an aggregated release.
8. The replacement water that is the subject of this plan cannot be sold or leased to any other entity. As a condition of subsequent renewals of this substitute water supply plan, the replacement water must be appurtenant to this site until a plan for augmentation is obtained. All replacement water must be concurrent with depletions in quantity, timing and locations.
9. In the event Loveland plans to use C-BT Project water as a replacement source, Loveland shall comply with the Interim Rule issued by the District in May 2005 regarding the use of C-BT Project water in substitute water supply plans. Prior to the use of the C-BT Project water, Loveland shall notify this office, the division engineer and the water commissioner of the amount of C-BT Project water dedicated to this plan and provide a copy of the District's approval letter as required by paragraph I(g) of the District's May, 2005 Interim Rule.
10. The name, address and phone number of the contact person who will be responsible for the operation and accounting of this plan must be provided with the accounting form to the division engineer and water commissioner.
11. Adequate accounting of depletions and replacements must be provided to the division engineer in Greeley (DNR_Div1Accounting@state.co.us) and the water commissioner (Jean Lever at Jean.Lever@state.co.us) on a monthly basis unless otherwise approved in writing by the Water Commissioner. Submitted accounting shall conform to the Administration Protocol *"Augmentation Plan Accounting, Division One - South Platte River"* (attached).

In addition, the applicant shall verify that the City of Loveland ("Loveland") included replacement water for this SWSP in their monthly accounting. It is the Applicant's responsibility to ensure Loveland releases the leased water in the correct time, place, and amount.

12. Conveyance loss for delivery of replacement water to the location where depletions from the Kauffman No. 1 Pit impact the Big Thompson River is subject to assessment and modification as determined by the division engineer.

13. The Division Engineer, or his designated representative, will administer all such water transported in the South Platte River or its tributaries under this SWSP, including water for replacement of depletions, past intervening headgate to ensure that such water is not intercepted or otherwise diminished in quantity by diversion, use or other interference by intervening water rights and to assure that such water remains available and suitable for Applicant's uses under this SWSP, except when any intervening headgate is diverting the entire flow of ("sweeping") the river. In the event that delivery past headgate which sweep the river requires the installation of a bypass structure or the use of an existing bypass structure by agreement with a third-party, Applicant is responsible for either installation a new bypass structure with a continuous recording measuring device(s) as approved by the Water Commissioner or securing an agreement with a third-party to use an existing bypass structure and providing such information and agreement to the Division Engineer.

14. The approval of this substitute water supply plan does not relieve the Applicant and/or the landowner of the requirement to obtain a water court decree approving a permanent plan for augmentation or mitigation to ensure the permanent replacement of all depletions, including long-term evaporation losses and lagged depletions after gravel mining has ceased. If reclamation of the mine site produces a permanent water surface exposing post-81 groundwater to evaporation, an application for a plan for augmentation must be filed with the Division 1 Water Court at least three (3) years prior to the completion of mining to include, but not be limited to, long-term evaporation losses. **Since there are no new depletions occurring after reclamation is complete, only the replacement of lagged depletions shall continue until there is no longer an effect on stream.** Granting of this plan does not imply approval by this office of any such court application(s).

15. In accordance with amendments to § 25-8-202(7), C.R.S., and Senate Bill 89-181 Rules and Regulations adopted on February 4, 1992, the State Engineer shall determine whether the substitute supply is of a quality to meet requirements of use to senior appropriators. As such, water quality data or analysis may be requested at any time to determine if the water quality is appropriate for downstream water users.

16. The State Engineer may revoke this SWSP or add additional restrictions to its operation if at any time the State Engineer determines that injury to other vested water rights has or will occur as a result of this plan. Should this SWSP expire without renewal or be revoked prior to adjudication of a permanent plan for augmentation, all use of water at the pit must cease immediately.

17. The decision of the State Engineer shall have no precedential or evidentiary force, shall not create any presumptions, shift the burden of proof, or serve as a defense in any pending water court case or any other legal action that may be initiated concerning this plan. This decision shall not bind the State Engineer to act in a similar manner in any other applications involving other SWSPs, or in any proposed renewal of this SWSP, and shall not imply

concurrence with any findings of fact or conclusions of law contained herein, or with the engineering methodologies used by the Applicant.

Please contact Sarah Brucker in Denver at (303) 866-3581, or Michael Hein in Greeley at (970) 352-8712, if you have any questions concerning this approval.

Sincerely,

for Jeff Deatherage, P.E.
Chief of Water Supply

Attachments: Map 3
Tables 1, 3, and 4
City of Loveland Lease
April 30, 2010 letter from DRMS
Accounting Protocol

Cc: Michael Hein, Assistant Division Engineer, Michael.Hein@state.co.us
810 9th Street, Ste. 200, Greeley, CO 80631, (970) 352-8712

Jean Lever, Water Commissioner, Water District 4, Jean.Lever@state.co.us

Amy Eschberger, Division of Reclamation Mining and Safety, Amy.Eschberger@state.co.us

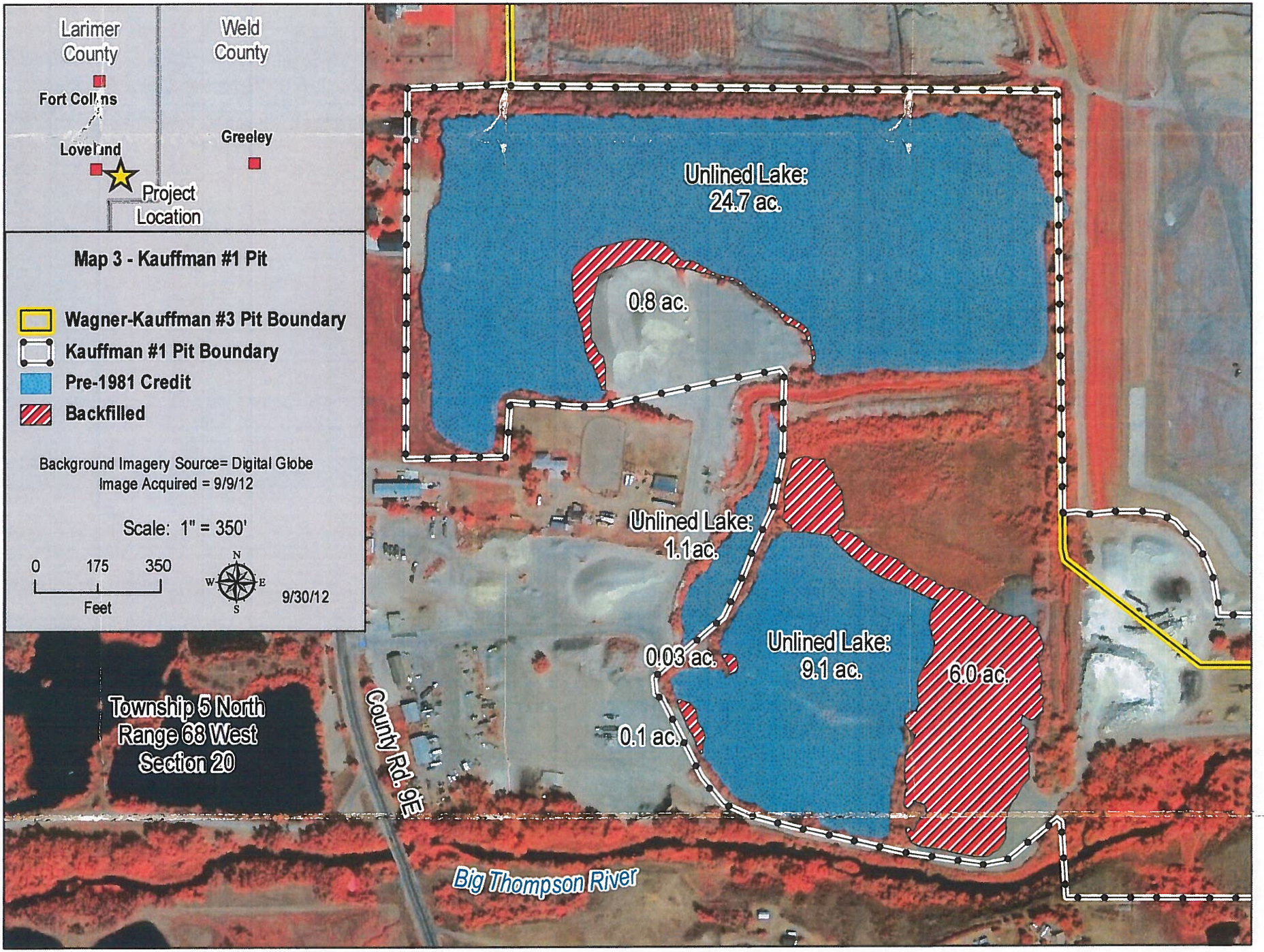

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Table 1

Kauffman Pit #1
Jake Kauffman and Son, Inc.

Consumptive Use - 2018

Month	Aggregate Production (Tons)	Water Retained in Product (ac-ft)	Water Used for Dust Control (ac-ft)	Water Used for Irrigation (ac-ft)	Total Operational Consumptive Use (ac-ft)	Evaporative Consumptive Use (ac-ft)	Total Consumptive Use (ac-ft)
January	0	0.00	0.00	0.00	0.00	0.00	0.00
February	0	0.00	0.00	0.00	0.00	0.00	0.00
March	0	0.00	0.74	0.00	0.74	0.00	0.74
April	0	0.00	0.74	0.00	0.74	0.00	0.74
May	0	0.00	0.74	0.00	0.74	0.00	0.74
June	0	0.00	0.74	0.00	0.74	0.00	0.74
July	0	0.00	0.74	0.00	0.74	0.00	0.74
August	0	0.00	0.74	0.00	0.74	0.00	0.74
September	0	0.00	0.74	0.00	0.74	0.00	0.74
October	0	0.00	0.55	0.00	0.55	0.00	0.55
November	0	0.00	0.00	0.00	0.00	0.00	0.00
December	0	0.00	0.00	0.00	0.00	0.00	0.00
Totals	**0**	**0.00**	**5.72**	**0.00**	**5.72**	**0.00**	**5.72**

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Table 3

Kauffman Pit #1
Jake Kauffman and Son, Inc.

Lagged Depletion Values (ac-ft) - Consumptive Use from 2000 - 2018 (projected)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
2004	-0.90	-1.04	-1.31	-2.19	-2.96	-3.97	-4.50	-4.21	-2.93	-2.35	-1.41	-1.05	-28.82
2005	-0.80	-0.89	-1.15	-1.88	-2.53	-3.36	-3.79	-3.55	-2.47	-1.98	-1.20	-0.87	-24.47
2006	-0.75	-0.86	-1.12	-1.85	-2.51	-3.34	-3.78	-3.54	-2.46	-1.97	-1.19	-0.86	-24.23
2007	-0.75	-0.85	-1.04	-1.74	-2.33	-3.14	-3.57	-3.35	-2.33	-1.87	-1.12	-0.86	-22.94
2008	-0.73	-0.82	-0.96	-1.61	-2.16	-2.93	-3.33	-3.13	-2.19	-1.76	-1.04	-0.83	-21.48
2009	-0.63	-0.67	-0.79	-1.31	-1.74	-2.35	-2.67	-2.50	-1.74	-1.40	-0.83	-0.67	-17.29
2010	-0.57	-0.64	-0.76	-1.28	-1.72	-2.33	-2.66	-2.49	-1.73	-1.39	-0.83	-0.66	-17.06
2011	-0.57	-0.63	-0.76	-1.28	-1.72	-2.33	-2.65	-2.49	-1.73	-1.39	-0.83	-0.66	-17.03
2012	-0.26	-0.24	-0.33	-0.54	-0.73	-0.95	-1.18	-1.33	-1.37	-1.32	-1.18	-0.96	-10.39
2013	-0.79	-0.64	-0.54	-0.46	-0.43	-0.71	-0.74	-0.70	-0.48	-0.29	-0.21	-0.17	-6.17
2014	-0.15	-0.13	-0.11	-0.09	-0.13	-0.41	-0.49	-0.50	-0.56	-0.44	-0.19	-0.10	-3.30
2015	-0.08	-0.06	-0.09	-0.16	-0.15	-0.11	-0.17	-0.32	-0.39	-0.31	-0.23	-0.16	-2.23
2016	-0.13	-0.11	-0.10	-0.14	-0.21	-0.31	-0.42	-0.48	-0.48	-0.46	-0.39	-0.26	-3.51
2017	-0.21	-0.17	-0.19	-0.27	-0.30	-0.32	-0.39	-0.47	-0.49	-0.37	-0.25	-0.20	-3.63
2018	**-0.17**	**-0.14**	**-0.23**	**-0.40**	**-0.47**	**-0.52**	**-0.55**	**-0.58**	**-0.60**	**-0.60**	**-0.48**	**-0.33**	**-5.07**
2019	-0.27	-0.22	-0.19	-0.16	-0.14	-0.12	-0.10	-0.09	-0.07	-0.06	-0.05	-0.05	-1.52
2020	-0.04	-0.03	-0.03	-0.02	-0.02	-0.02	-0.02	-0.01	-0.01	-0.01	-0.01	-0.01	-0.23

Notes:

For the 2000 - 2011 period, the following parameters were used in the AWAS Model: W -= 4,000 ft, Transmissivity = 50,000, Specific Yield = 0.2, X = 250 ft
For 2012, the following parameters were used in the AWAS Model: W -= 4,000 ft, Transmissivity = 50,000, Specific Yield = 0.2, X = 1,700 ft
For the 2013-2014 period, the following parameters were used in the AWAS Model: W -= 4,000 ft, Transmissivity = 50,000, Specific Yield = 0.2, X = 550 ft
For 2015 - 2018, the following parameters were used in the AWAS Model: W -= 4,000 ft, Transmissivity = 50,000, Specific Yield = 0.2, X = 1,450 ft

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Table 4

Kauffman Pit #1
Jake Kauffman and Son, Inc.

2018 Water Balance - Lagged Depletions and Replacement Supplies from City of Loveland

Month	Consumptive Use (ac-ft)	Lagged Depletions (ac-ft)	City of Loveland Transit Losses (ac-ft)	Total Water Required from City of Loveland (ac-ft)
January	0.00	-0.17	-0.007	-0.177
February	0.00	-0.14	-0.006	-0.146
March	0.74	-0.23	-0.009	-0.239
April	0.74	-0.40	-0.016	-0.416
May	0.74	-0.47	-0.019	-0.489
June	0.74	-0.52	-0.021	-0.541
July	0.74	-0.55	-0.022	-0.572
August	0.74	-0.58	-0.023	-0.603
September	0.74	-0.60	-0.024	-0.624
October	0.55	-0.60	-0.024	-0.624
November	0.00	-0.48	-0.019	-0.499
December	0.00	-0.33	-0.013	-0.343
Totals	**5.72**	**-5.07**	**-0.203**	**-5.273**

2019 Water Balance - Lagged Depletions and Replacement Supplies from City of Loveland

Month	Consumptive Use (ac-ft)	Lagged Depletions (ac-ft)	City of Loveland Transit Losses (ac-ft)	Total Water Required from City of Loveland (ac-ft)
January	0.00	-0.270	-0.011	-0.281
February	0.00	-0.220	-0.009	-0.229
March	0.00	-0.190	-0.008	-0.198
April	0.00	-0.160	-0.006	-0.166
May	0.00	-0.140	-0.006	-0.146
June	0.00	-0.120	-0.005	-0.125
July	0.00	-0.100	-0.004	-0.104
August	0.00	-0.090	-0.004	-0.094
September	0.00	-0.070	-0.003	-0.073
October	0.00	-0.060	-0.002	-0.062
November	0.00	-0.050	-0.002	-0.052
December	0.00	-0.050	-0.002	-0.052
Totals	**0.00**	**-1.52**	**-0.061**	**-1.581**

2020 Water Balance - Lagged Depletions and Replacement Supplies from City of Loveland

Month	Consumptive Use (ac-ft)	Lagged Depletions (ac-ft)	City of Loveland Transit Losses (ac-ft)	Total Water Required from City of Loveland (ac-ft)
January	0.00	-0.040	-0.002	-0.042
February	0.00	-0.030	-0.001	-0.031
March	0.00	-0.030	-0.001	-0.031
April	0.00	-0.020	-0.001	-0.021
May	0.00	-0.020	-0.001	-0.021
June	0.00	-0.020	-0.001	-0.021
July	0.00	-0.020	-0.001	-0.021
August	0.00	-0.010	0.000	-0.010
September	0.00	-0.010	0.000	-0.010
October	0.00	-0.010	0.000	-0.010
November	0.00	-0.010	0.000	-0.010
December	0.00	-0.010	0.000	-0.010
Totals	**0.00**	**-0.23**	**-0.009**	**-0.239**

WATER LEASE

THIS WATER LEASE ("Lease") is made and entered into this 16 day of NOV, 2015, by and between the CITY OF LOVELAND, COLORADO, a home rule municipality, whose address is 500 East Third Street, Loveland, Colorado 80537 ("City"), and JAKE KAUFFMAN & SON, INC., a Colorado corporation, whose address is 808 South County Road 9E, Loveland, Colorado 80537 ("Lessee").

WHEREAS, Lessee desires to acquire augmentation water for the purpose of augmenting certain wells, ponds, or pumps along the Big Thompson River; and

WHEREAS, the City is the owner of certain water that may be used for the purpose of augmentation; and

WHEREAS, the City is willing to lease, on a temporary basis, a portion of its fully consumable water, which may include, but is not limited to, Windy Gap re-use water or water stored in the Loveland Storage Reservoir (commonly known as Green Ridge Glade Reservoir) under the terms and conditions of the Transfer Decrees entered in Case No. 82CW202A or Case No. 2002CW392 to Lessee on the terms and conditions set forth herein.

NOW, THEREFORE, in consideration of the mutual covenants and agreements herein contained, the parties agree as follows:

1. Term. This Lease shall be effective for a term of three (3) years commencing January 1, 2016 and ending December 31, 2018, unless sooner terminated as provided herein.

2. Water. The City shall supply up to sixty-five (65) acre-feet of augmentation water per year to Lessee for Lessee's temporary substitute supply plan(s) for replacement of depletions, including evaporation, at Kauffman #1 Pit and Wagner/Kauffman #3 Pit, M-99-069, at Kauffman Pit M-78-327 (also known as Great Western Pit #1), or as directed by the River Commissioner or the Office of the State Engineer.

3. Annual Lease Payment.

a. Regardless of water supply source, Lessee shall annually pay the City Four Hundred Dollars ($400) per acre-foot of water delivered under this Lease.

b. The Lessee's engineer shall supply to the City an anticipated schedule of replacement for the calendar year, by November 15 of the previous calendar year. The Lessee is responsible for notifying the City if this schedule changes.

c. The City shall coordinate replacement of the water to the Big Thompson River with the River Commissioner or the Office of the State Engineer. Accounting of such will be made available to the River Commissioner and the Office of the State Engineer.

d. The City will submit a bill annually to the Lessee for all water replaced to the Big Thompson River, in accordance with this Lease.

e. Lessee shall pay said amount to the City within thirty (30) days of receiving the City's bill.

4. Termination by City. In the event the City has an urgent need for water, as determined in the sole discretion of the City, for reasons including, but not limited to, drought, the City may terminate this Lease. The City will endeavor to give Lessee thirty (30) days notice of such termination, but shall not be required to do so. In the event of such termination, Lessee shall be liable to pay the City for augmentation water received to the effective date of termination.

5. Termination of Delivery for Nonpayment. In the event Lessee fails to pay for augmentation water when payment is due as set forth in paragraph 3, above, the City, in addition to seeking recovery of sums due, may terminate delivery of augmentation water to Lessee.

6. Lease Contingent Upon Plan Approval. The parties understand and agree that this Lease shall be contingent upon approval of Lessee's temporary substitute supply plan by the office of the State Engineer.

7. No Warranties. Delivery of water by the City under this Lease shall be on an "as is" basis only, and the City neither expressly nor impliedly warrants the quality of the water. The water leased hereunder is not warranted as suitable for any particular purpose.

8. Notices. Written notices required under this Lease and all other correspondence between the parties shall be directed to the following and shall be deemed received when hand-delivered or three (3) days after being sent by certified mail, return receipt requested:

If to the City:
City of Loveland Water and Power Department
Attention: Stephen C. Adams, Director
200 North Wilson Avenue
Loveland, Colorado 80537

If to Lessee:
Jake Kauffman & Son, Inc.
Attention: Mary Kauffman
808 South County Road 9E
Loveland, Colorado 80537

9. Governing Law and Venue. This Lease shall be governed by the laws of the State of Colorado, and venue shall be in the County of Larimer, State of Colorado.

10. Severability. In the event a court of competent jurisdiction holds any provision of this lease invalid or unenforceable, such holding shall not invalidate or render unenforceable any other provision of this Lease.

11. Headings. Paragraph headings used in this Lease are for convenience of reference and shall in no way control or affect the meaning or interpretation of any provision of this Lease.

12. Assignability. Lessee shall not assign this Lease without the City's prior written consent.

13. Binding Effect. This Lease shall be binding upon, and shall inure to the benefit of, the parties hereto and their respective heirs, personal representatives, successors, and assigns.

14. Entire Agreement. This Lease contains the entire agreement of the parties relating to the subject matter hereof and, except as provided herein, may not be modified or amended except by written agreement of the parties.

IN WITNESS WHEREOF, the parties have executed this Lease on the day and year first above written.

CITY OF LOVELAND, COLORADO

By: Stephen C. Adams

Stephen C. Adams
Department of Water and Power

CITY OF LOVELAND SEAL COLORADO

ATTEST:

Deputy City Clerk

APPROVED AS TO FORM:

Assistant City Attorney

JAKE KAUFFMAN & SON, INC.

By: _____
Frank Kauffman, President

STATE OF COLORADO)
) ss.
COUNTY OF LARIMER)

JENAE ABBOTT
NOTARY PUBLIC
STATE OF COLORADO
NOTARY ID 20114005726
MY COMMISSION EXPIRES 02-04-2019

The foregoing Lease was acknowledged before me this 30 day of October, 2015, by Frank Kauffman as President of Jake Kauffman & Son, Inc.

Witness my hand and official seal.

My commission expires 2.04.2019.

_____
Notary Public

April 30, 2010

Permittee Address

RE: Mining Operations with Exposed Ground water

To Whom It May Concern:

The Division of Reclamation Mining and Safety is responsible for ensuring that Sand and Gravel mining operators comply with the requirements of the Colorado Land Reclamation Act for the Extraction of Construction Materials (Act) and the Mineral Rules and Regulations of the Colorado Mined Land Reclamation Board for the Extraction of Construction Materials (Rules). Among these requirements are provisions for the protection of water resources. The Act requires that reclamation plans must ensure minimization of disturbances to the prevailing hydrologic balance, including disturbances to the quantity of water in the area affected by mining and in the surrounding areas. § 34-32.5-116(4)(h). Rule 3.1.6(1)(a) requires compliance with Colorado water laws and regulations governing injury to existing water rights both during and after mining. Permits must specify how the permittee will comply with applicable Colorado water laws and regulations governing injury to existing water right rights. Rule 6.3.3(j); Rule 6.4.5(2)(c). After an extensive review, the Division determined that several operators may not have appropriate permit conditions to address certain reclamation liabilities arising from impacts to water resources.

In September 2009 the Division of Water Resources (DWR) updated its Guidelines for Sand and Gravel Pits. These guidelines provide guidance on achieving compliance with state law regarding replacement of depletions from sand and gravel mining, thus the guidelines provide a benchmark for the protection of hydrologic balance required under the Act and Rules. As noted in the Guidelines, sand and gravel operations which expose groundwater without complying with state law create a reclamation liability by impacting available groundwater.

State law requires that any person exposing ground water must obtain a well permit from the SEO pursuant to § 37-90-137(11). Because exposed groundwater results in out-of-priority water depletions, operations which expose ground water must also eventually obtain a water-court approved augmentation plan. Currently, several operators do not have either an augmentation plan or bonding to provide an alternative method to mitigate injurious stream depletions that result from mining-related exposure of ground water. The Division has a statutory duty to ensure that lands affected by mining are reclaimed in a manner that complies with state law and to ensure that operators have sufficient bonding to achieve reclamation. In order to assist operators in achieving compliance with these requirements, the Division proposes that, by April 30, 2011, operators should contact the Division and agree upon a plan for achieving compliance.

The Division has identified four approaches for operators:

1. File a financial warranty that will ensure backfilling of the pit to cover the exposed ground water to a depth of two feet above the static ground water level or,

2. Obtain a court approved augmentation plan prior to exposing ground water or,

3. File a financial warranty to cover the cost of installing a clay liner or slurry wall that meets the Division of Water Resources requirements for preventing ground water exposure or,

4. Obtain approval from the Division of Water Resources that acknowledges compliance with the SEO's requirements pursuant to § 37-90-137(11).

The Division will work with operators on an individual basis as they move to implement one of these plans. It is likely that options 1 and 3 will require the submittal of a technical revision or an amendment to the existing permit depending on the nature of the current mining and reclamation plan and the proposed changes. Increased financial warranties, as a result of these modifications, may be posted in a phased manner not to exceed three years. Amendments or revisions currently under review will be required to be approved by April 30, 2011 and may use the phased financial warranty approach described above. New applications going forward or presently under review by the Division will be required to meet the requirements of one of the options 1-4 at the time of application approval. Failure of affected operators to initiate contact with the Division and gain compliance as described above could result in an enforcement action being issued by the Division.

If you have any questions, please contact Tony Waldron at 303-866-3567, extension 8150.

cc: Permit Id Site Name

ADMINISTRATION PROTOCOL
Augmentation Plan Accounting
Division One – South Platte River

This protocol establishes the accounting and reporting process required to enable the division engineer's office to confirm that depletions from all out-of-priority diversions are being replaced so as to prevent injury to vested water rights. The accounting must comport with established "cradle to grave" accounting standards, which allow an audit of the information to track exactly how the data is manipulated as it is translated from raw input data to the resultant impact on the river. While this protocol is subordinate to any decreed language addressing specific accounting requirements, it generally addresses the minimum requirements of such accounting.

The accounting must use the standard convention where a depletion is "negative" and an accretion or other replacement source is "positive". The sum of the impacts will then result in either a "negative" or "positive" impact on the stream.

Wells in plans that have a negative stream impact must provide additional replacement water, curtail pumping or both until the impact is no longer negative. Plans with a negative stream impact that fail to curtail pumping will be ordered to stop pumping until such time as the projected impact of the wells is no longer negative.

1. Accounting must be submitted electronically to the water commissioner (call 970-352-8712 to obtain email address) and division engineer at Div1Accounting@state.co.us within 30 days of the end of the month for which the accounting is being submitted.
2. The accounting must provide the **contact information** including name and address for:
    a. the owner(s) of each well
    b. the person responsible for submitting the accounting
    c. the plan administrator and/or the plan attorney.
3. All **input data** must be in one location, such as an "Input" worksheet, etc. The accounting must show all pumping. Input data includes the information listed below.
    a. The required input data for each **well** is:
        i. the monthly meter reading for wells that use a **presumptive depletion factor** (PDF) to determine the associated consumptive use (CU); or
        ii. the monthly CU in acre-feet (AF) for wells that have a decree or approved SWSP that allows the wells to use a **water balance methodology** to determine the CU of the well. The analysis used to determine the CU must be included with the accounting.
        iii. Wells that are decreed as an **alternate point of diversion** (APOD) to a surface water right must report pumping on a daily basis if any of the diversion during the month is claimed as being "in priority". (See *Administration Protocol – APOD Wells* for more details.)

iv. The well meter serial readings for each meter shall be included if there is more than one meter on a well.

b. Each **recharge site** must comply with the *Administration Protocol - Recharge* and must report the:

i. daily volume in AF diverted into the site;

ii. monthly volume in AF released from the site;

iii. monthly net evaporative loss in AF;

iv. volume of water in AF remaining at the end of the month.

c. The accounting must identify each source of **fully consumable replacement water** actually delivered to the location impacted by the depletions. To demonstrate the water was actually delivered to the required location will require the following information:

i. the originating source of the water, date released and volume of water released;

ii. transportation losses to point of diversion or use, if any, using stream loss factors approved by the water commissioner;

iii. the volume of water actually delivered on a daily basis past any surface water diversion that was sweeping the river as corroborated by the water commissioner.

(See *Administration Protocol – Delivery of Water* for more details on delivering water.)

d. For each source of **replacement water that has been "changed"** for use as a source of augmentation, such as changed reservoir shares, ditch bypass credits or credits from dry-up, etc., the following input information must be reported:

i. the basis and volume of the return flow obligation;

ii. the location the changed water was historically used; this will be the location used to determine the timing of the return flow impact on the river.

4. The accounting must include a monthly **projection** of the plan's operation at least through March 31 of the next calendar year.

5. The accounting must include all input and output files associated with **modeling the delayed impact** of diversions. The output from the modeling must report to a summary table that shows, by month, the ongoing depletions associated with pumping, return flow obligations, etc. and accretions from recharge operations.

6. A **net impact** summary must show the out-of-priority depletions, accretions from each recharge site, volume of replacement water actually delivered to the location of the depletions and the resultant net impact on **a daily basis**. If necessary, the net impact must be done by river reach.

   While **modeling** may use a **monthly step function** to determine the depletions from pumping and accretions from recharge, the monthly result must then be **divided by the number of days in the month** in order to **simulate a daily impact**, as water rights are administered on a daily and not monthly basis.

Replacement water must be provided such that the **daily net impact** (using the simulated daily numbers from the modeling) **is not negative**. If a well is out-of-priority for 15 days during a month, replacement must be made only for the 15 days the well is out-of-priority. The replacement must be made, however, on a daily basis as opposed to, for instance, making an aggregated release equal to the volume of the out-of-priority depletions. Likewise, the simulated daily accretion will only count toward replacing the depletion on the days the well is out-of-priority. The accretions that report to the river when the well is in priority cannot be used to replace the out-of-priority depletions.

The **accretions that impact the river when the well is in priority** are not considered "excess" unless the cumulative net impact of the well is not negative for the entire irrigation year to date. (The irrigation year for this purpose is April 1 thru the following March 31.) Until such time as the cumulative net impact is not negative, the accretions must simply be released to the river and cannot be leased to other plans or recaptured. Plans that show a positive cumulative net impact are still required to make replacements on a daily basis; the cumulative analysis only effects whether or not accretions reporting to the river when the well is in priority are considered "excess" and are, therefore, able to be recaptured.

7. The basis for determining that the depletions are **out-of-priority** must be clearly established and all steps in the calculation included in the accounting. The analysis may be done, unless otherwise limited by decree, for each well or groups of wells, provided the most junior water right associated with the group of wells is used as the reference water right for the group's out-of-priority status.

8. Accounting must include **actual information** for the irrigation year through the month for which the accounting is being submitted **AND projections** of the plan operation through March 31 of the next calendar year.

9. The following **naming convention** must be used for all files submitted pursuant to item 1:

   "Plan**WDID**_YYMMDD"

   where: PlanWDID is the WDID assigned by the division engineer's office
   YYMMDD corresponds to the date the accounting is submitted.

   As an example, the assigned WDID for the former GASP plan was 0103333. If accounting using Excel® was submitted for that plan on May 15, 2004, the file name would be:

   "0103333_040515.xls"

   The name of the file must be in the subject line of the email.

10. All accounting must be reported using the **WDID** for the structure, at a minimum. Other information such as well name, permit number, etc. may also be included as desired. <u>All wells must be decreed by the water court, permitted by the state engineer or included in a decreed plan for augmentation</u>. Unregistered and undecreed wells cannot, in the opinion of the division engineer, be effectively administered because of the need to know the location, allowable diversion rate and use of the well - information that is only available from the decree or permitting process.

11. If a well is covered in multiple SWSP's or augmentation plans, the monthly meter readings must be the same in the accounting for each plan covering the subject well. The accounting for every plan covering the well shall state the proportionate pumping amount covered by each plan to assure all out-of-priority depletions are replaced.

12. The following additional accounting is required for sources of replacement water used for more than one plan. The water right owner of the replacement water is responsible for accounting for the total replacement amount and how much each plan is using of that total amount. The accounting for portions of the replacement water by other users must match the accounting of the water right owner. The amount of replacement water used by the water right owner and other users together shall not exceed the total replacement amount available.

    (See *Administration Protocol – Use Of Unnamed Sources For Replacement* for additional requirements concerning required notice and approval of sources of replacement not specifically described in a SWSP or augmentation plan*)*