

Cazier - DNR, Tim <tim.cazier@state.co.us>

Fwd: Martin Marietta Red Canyon Mine

1 message

Peterson - DNR, Melissa <melissa.a.peterson@state.co.us> To: Tim Cazier - DNR <tim.cazier@state.co.us>

Thu, Sep 28, 2017 at 3:20 PM

----- Forwarded message ------From: Jeff Clark < iclark@bbawater.com>

Date: Thu, Sep 14, 2017 at 10:46 AM

Subject: RE: Martin Marietta Red Canyon Mine

To: "Peterson - DNR, Melissa" < melissa.a.peterson@state.co.us>

Cc: David Heintz <dheintz@bbawater.com>, Chris Sanchez <csanchez@bbawater.com>

Melissa – Thanks for your patience on our response to your question below about exposed ground water at the Red Canyon pit. This is a somewhat new property for Martin Marietta that has historically only trucked-in water. We have only recently begun to evaluate the potential for on-site water supplies and we just didn't have much information regarding the ground water conditions out there. So, we did it the old-fashioned way; a site visit and some field work to investigate.

We have concluded that there is an aguifer system present and there is a small pit on the site that we are now convinced exposes ground water. This property is located near the 'mouth' of Red Creek as it comes out of some low hills. Based on site visits by us and Martin Marietta personnel, Red Creek is certainly ephemeral, and often flowing on the surface as it enters the property, but any flow typically soaks into the ground before leaving the property, indicating the presence of alluvial ground water. There is a small gravel pit near where the flow in Red Creek typically terminates, shown on the attached map, that we observed contains water. It is reasonable to expect that the water in the pit is in connection with the alluvial ground water, which is in connection with the stream. However, to be sure of this, Martin Marietta personnel excavated a shallow test-pit located between the pit and where the flow in the creek often terminates, and found ground water at about 10' deep. This is lower in elevation than the creek and higher in elevation than the water level in the pit, indicating a gradient away from the stream, which is what you would expect given that we know that the creek is losing. From this, we conclude that the pit is in fact exposing alluvial ground water.

Attached is a revised SWSP request, which includes the depletions from the evaporative losses at the pit. The exposed surface area was determined using GIS/aerial photography and confirmed during our site visit. To be conservative, we have assumed that the pit will be full year-round, based on the high-water mark indicated to us by Martin Marietta personnel. We will also submit a well permit application for the pit shortly and will forward a copy to you.

Please let us know what other information you may need regarding the SWSP request for this pit.

Thanks again for your patience!

Jeff

From: Jeff Clark

Sent: Thursday, July 6, 2017 11:21 AM

To: 'Peterson - DNR, Melissa' <melissa.a.peterson@state.co.us>

Cc: David Heintz <dheintz@bbawater.com> Subject: RE: Martin Marietta Red Canyon Mine

Melissa – We are still reviewing your questions below and will get back with you soon. On the lagging, I would encourage you to talk to Bill Tyner about this. We've talked to him candidly about this several times and our proposed lagging is based on some examples that he told me about on how they have 'managed' other similar well depletions (some decreed, some under SWSPs).

Jeff

From: Peterson - DNR, Melissa [mailto:melissa.a.peterson@state.co.us]

Sent: Thursday, June 15, 2017 3:14 PM

To: David Heintz dheintz@bbawater.com; Jeff Clark jclark@bbawater.com;

Subject: Re: Martin Marietta Red Canyon Mine

This time with the attachment.

On Thu, Jun 15, 2017 at 3:13 PM, Peterson - DNR, Melissa <melissa.a.peterson@state.co.us> wrote:

Hi Dan;

I have looked over this application, and I have some problems with it.

The statute under which you submitted this, 37-90-137(11) requires several parameters:

- 1. Must have a DRMS permit (it does)
- 2. Must be a sand and gravel mine (it is)
- 3. Must have exposed groundwater (see Item 5 on attached Guidelines)
- 4. All uses must take place on the site (they do)

I am not seeing where this gravel pit exposes groundwater. There is a letter in the file when the pit was originally proposed that specifically states that this pit will NOT expose groundwater.

If this is a dry pit, you will need to withdraw this application and resubmit under 37-90-308(5) if the depletions are less than five years, or under 37-90-308(4) if the depletions exceed five years.

Under a 308(4) or (5), you will need to submit the application to the SWSP notification list, which can be obtained from Laura Kalafus of our office. Laura.Kalafus@state.co.us

I have not yet finished reviewing the rest of the applications; I have some questions on the lagging analysis parameters and will consult with our Hydrogeological Services branch for that, so more comments will be coming. However, if you

need to get this out to the notification list, I wanted to at least give you time to get that going.

Sincerely,

Melissa A. Peterson, P.E.

Water Resources Engineer

Team 237 Leader

P 303.866.3581 x 8208

1313 Sherman St., Suite 819, Denver, CO 80203

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1204.11 BBA Letter - 2017-2018 MM Red Canyon Mine SWSP Request Itr 2017-09-14 (ID 14620).pdf 1030K



BISHOP-BROGDEN ASSOCIATES, INC.

Christopher J. Sanchez Jeffrey A. Clark Daniel O. Niemela Jonathan D. George Michael A. Sayler Charles E. Stanzione

September 14, 2017

Ms. Melissa Peterson State Engineer's Office Division of Water Resources 1313 Sherman Street, Room 818 Denver, CO 80203

Substitute Water Supply Plan Request for Martin Marietta's Red Canyon Mine, Water Re: Division 2, Water District 12

Dear Melissa:

On behalf of our client, Martin Marietta ("MM"), this letter provides a request for a Substitute Water Supply Plan ("SWSP") for MM's Red Canyon Mine (DRMS Permit M-1985-043) pursuant to C.R.S. Section 37-90-137 (11). This is the first SWSP requested for the Red Canyon Mine. The term of this SWSP request is for a period of two (2) years from September 1, 2017 through August 31, 2019.

Pursuant to 37-90-137(11) payment for the \$1,593 fee associated with the original SWSP application for the Red Canyon Mine was made to the Records Section on March 2nd, 2017.

1. PROJECT DESCRIPTION

MM's Red Canyon Mine is an existing gravel/aggregate mine located along Red Creek, a tributary to the Arkansas River. The mine is generally located in Section 36 of Township 16 South, Range 68 West of the 6th P.M. and Section 1 of Township 17 South, Range 68 West of the 6th P.M. as shown in Figure 1.

MM and its predecessor has historically trucked water to the site for dust suppression at the mine. MM has recently completed test-drilling at the site and plans on converting two of the test wells to production wells to reduce or eliminate the need to haul water. During the term of this SWSP, consumptive use at the Red Canyon Mine will consist of dust suppression and evaporation of groundwater at the site as described further below. All dust suppression uses will be 100 percent consumptive.

Under the requested plan, MM will replace all calculated depletions from the Red Canyon Mine to the Arkansas River using a lease for augmentation water with either the Arkansas Groundwater Users Association ("AGUA") or Pueblo Board of Water Works ("PBWW"). For 2017, MM has finalized a lease with PBWW and copy of the lease award letter is attached in Appendix A. MM will provide a copy of any lease obtained for this SWSP after 2017. Pursuant to the planned lease, MM will provide accounting to the lessor, which will incorporate the MM data into their accounting, and then the appropriate replacement releases will be made in coordination with the Division Engineer's Office. The calculation of depletions and replacement supplies planned for this SWSP are described in more detail respectively in Sections 2 and 3 of this letter.

2. <u>DEPLETIONS</u>

The depletions at the Red Canyon Mine during the term of this SWSP will consist of dust suppression and evaporation of exposed groundwater.

2.1 **Dust Suppression**

The use of water for dust suppression at the Red Canyon Mine will occur throughout the entire SWSP period. MM plans to pump water from the wells for dust suppression use within the mining area. Depending on the water production from the two wells, MM may also supplement the well pumping with continued deliveries of trucked-in dust suppression water. The total annual pumping for dust suppression is estimated to be approximately 20 ac-ft at the Red Canyon Mine, as shown in Column 4 of Table 1. MM will meter all water pumped for dust suppression purposes.

2.2 Evaporation

Exposed Surface Area

Based on discussions with MM and site investigations, we have determined that a portion of the mine site includes a pit located on the south side of the mining site that exposes groundwater. The pond level varies throughout the year, but has a maximum surface area of 0.1 acres, as shown in Figure 2. For purposes of this SWSP request, we have assumed the maximum surface area will be exposed year-round.

Gross and Net Evaporation

The NOAA Technical Report NWS 33, <u>Evaporation Atlas for the Contiguous 48 United States</u> (TR-NWS 33) was used to determine the gross evaporation at the Red Canyon Mine. According to TR-NWS 33, the total average annual gross evaporation at the site is equal to 46 inches, or 3.83 feet. The total annual gross evaporation is distributed monthly according to Senate Bill 89-120¹,

¹ Senate Bill 89-120 distributes gross evaporation for elevations below 6,500 feet as follows: November: 4%, December: 3%, January: 3%, February: 3.5%, March: 5.5%, April: 9%, May: 12%, June: 14.5%, July: 15.0%, August: 13.5%, September 10%, October 7%.

as shown in Table 2. Net evaporation is equal to the gross evaporation less the effective precipitation, which is equal to 70% of the average monthly precipitation. Average monthly precipitation at the Red Canyon Mine is based upon the precipitation at the Cripple Creek 3NNW (USC00051977) NOAA weather station for the time period 2006-2017 which averages 16.39 inches per year, or 1.37 feet per year. Therefore, the net evaporation rate for the Red Canyon mine site is 2.87 feet per year. As described above, we have assumed that the maximum of 0.1 acres of ground water will be exposed throughout the SWSP period. During the SWSP period, the resulting annual net evaporative depletion is 0.29 ac-ft, as shown in Table 2.

2.3 Lagged Depletions

The wells will pump water and the pond exposes groundwater tributary to Red Creek, which is normally a dry channel downstream of the mine site. Red Creek is tributary to Beaver Creek and the total distance between the mine site and the confluence of Beaver Creek and the Arkansas River is approximately 20 miles. There are no known water rights located on Beaver Creek between Red Creek and the Arkansas River, which confirmed by the Water Commissioner. The projected point of depletion on the Arkansas River is at the confluence with Beaver Creek, located above Pueblo Reservoir, as shown in Figure 1. Due to the distance from the Red Canyon Mine to the Arkansas River and the indeterminate hydrologic connection, the delayed effects of the depletions to the river are assumed to be similar to the "bedrock", steady-state well conditions described in the Colorado Water Protective and Development Association's ("CWPDA") decree in Case No. 07CW128. As a result, for this SWSP the mine use water depletions will be replaced based on using the average of the total pumping from the prior five (5) years of operations. Specifically, MM proposes to measure and record the total annual well pumping from both wells for dust suppression. This will be combined with the maximum total evaporation of exposed groundwater. The volume of water to be replaced in any one year will be the average of the prior five years total pumping and evaporation. Replacement water from the leased augmentation supplies will be provided on a daily basis throughout the year, or as otherwise allowed by the Division Engineer.

As indicated above, the site hydrology, ground water hydrology between the site and the river, the impacts to the Arkansas River and the proposed replacement methodology for the Red Canyon wells is very similar to the 'bedrock' or 'steady state' wells described in Colorado Water Protective & Development Association's (CWPDA's) decree in Case No. 07CW128. For this SWSP request, we are proposing to replace the lagged depletions using a similar approach as presented below. We have discussed this approach with the Division Engineers Office to confirm its applicability to the Red Canyon Mine.

2.4 Total Plan Lagged Depletions

As described above, MM proposes to replace the depletions from the well pumping and from the exposed groundwater evaporation in any year based on an average of the annual total pumping and evaporation from the prior five years. Given that this SWSP period would constitute the first two years of operation under this methodology, MM proposes to operate the first and second years as follows.

First Year

During the first year of operations under this methodology, there would be no prior pumping and a total of 0.29 ac-ft of evaporation, and the total lagged depletions from the Red Canyon Mine would be minimal. Nevertheless, as discussed with the Division Engineer, MM proposes to replace during this first SWSP plan year the volume of water that would be due **as if** MM had pumped an annual total of 20 ac-ft the prior year, averaged with 4 years of zero. Specifically, MM proposes to replace under this SWSP plan year 4 ac-ft, or 20 ac-ft divided by five, associated with pumping in addition to the 0.29 ac-ft of evaporation.

Second Year

During the second year of operations under this SWSP, MM will replace the 'projected' pumping in year 1 with the actual metered total pumping during the first year of operation, averaged with 4 years of zero in the prior years, and use that volume along with 0.29 ac-ft of annual evaporation. Total actual pumping from years 1 and 2 will then be carried over and included future SWSP renewals.

3. REPLACEMENT SOURCES

Depletions from pumping under the first and second year of this SWSP described above will be replaced pursuant to the water lease with PBWW or AGUA. The lease amount in the first year is 5 ac-ft, and MM plans to lease additional water as needed in subsequent years. MM will provide a copy of the lease for subsequent years under this SWSP. The leased water will be delivered in adequate amount, timing, and location to protect existing water rights.

4. **OPERATION OF PLAN**

4.1 SWSP Operation

MM will pump water from the two wells and meter total annual pumping, which shall be considered 100% consumptive. MM will also replace the evaporative losses from the maximum exposed surface area of 0.1 acres. Under this SWSP plan, and any future renewals, MM will replace to the Arkansas River a volume equal to the average of the total annual well pumping plus the evaporative depletions from the prior five years. The water replaced under this SWSP shall be provided on an average daily basis throughout the year, or as otherwise directed by the Division Engineer. The total out-of-priority depletions will be replaced pursuant to the water lease with AGUA or PBWW.

Under the first year of this SWSP, MM will replace water as if these wells had pumped a total annual volume of 20 ac-ft in the prior year, averaged with zeros for the other four years along with the 0.29 ac-ft of evaporative depletions. Under the second year of this SWSP, MM will use the actual total pumping from the prior, averaged with zeros for the other four years, along with the 0.29 ac-ft of evaporative depletions. In future years' SWSP, this volume will be replaced with actual annual pumping total for next year and for the following years added to the 0.29 ac-ft of

evaporative depletions. Accordingly, the average depletions will increase for the first four years of this SWSP.

4.2 Measurement and Accounting

MM will meter and will keep records of all well pumping for dust suppression water use from the wells at the Red Canyon Mine. MM will also monitor the exposed ground water area to ensure that it does not exceed 0.1 acres. MM will provide accounting for site operations on a monthly basis, or as otherwise required by the Division Engineer's Office. The accounting forms will be substantially the same as Tables 1 and 2, with the actual depletion and replacement volumes shown for each month instead of the projections shown in this SWSP request.

4.4 Well Permit

The two wells located on the Red Canyon Mine are currently permitted as monitoring wells under Permit Nos. 302359 and 302360 as seen in Figure 1. Well permit applications were submitted to the State Engineer's Office on April 20, 2017 to convert the two wells from monitoring wells to production wells to be used at the Red Canyon Mine. The receipt numbers for each of the well permit applications are 3679456A and 3679456B. Additionally, MM will provide a gravel pit well permit application concurrently with this SWSP request and a receipt number will be provided once received.

5. TERMS AND CONDITIONS

- 1. The SWSP shall be valid for the two-year period from September 1, 2017 through August 31, 2019.
- 2. All pumping for dust suppression will be metered and included in the accounting.
- 3. The exposed surface area of groundwater will not exceed 0.1 acres during the SWSP period.
- 4. The total depletions requiring replacement at the Red Canyon Mine for the SWSP period are projected to be 4.29 ac-ft for the first year of this plan period, which will be replaced with actual first-year pumping totals for the second year of this plan period.
- 5. Depletions to the Arkansas River will be replaced on a daily basis, or as directed by the Division Engineer, using water leased from AGUA or PBWW.
- 6. MM will submit accounting for the Red Canyon Mine to the Division Engineer on a monthly basis, or as directed by the Division Engineer.
- 7. For matters related to this SWSP please contact:

David M. Heintz, P.E. Bishop-Brogden Associates 333 West Hampden Avenue, Suite 1050 Englewood, CO 80110 303-806-8952 dheintz@bbawater.com

Opinion of Non-Injury

It is our opinion that so long as the terms and conditions in this SWSP request are followed, no injury to other water rights will result.

Please feel free to give us a call if you have any questions or need any additional information.

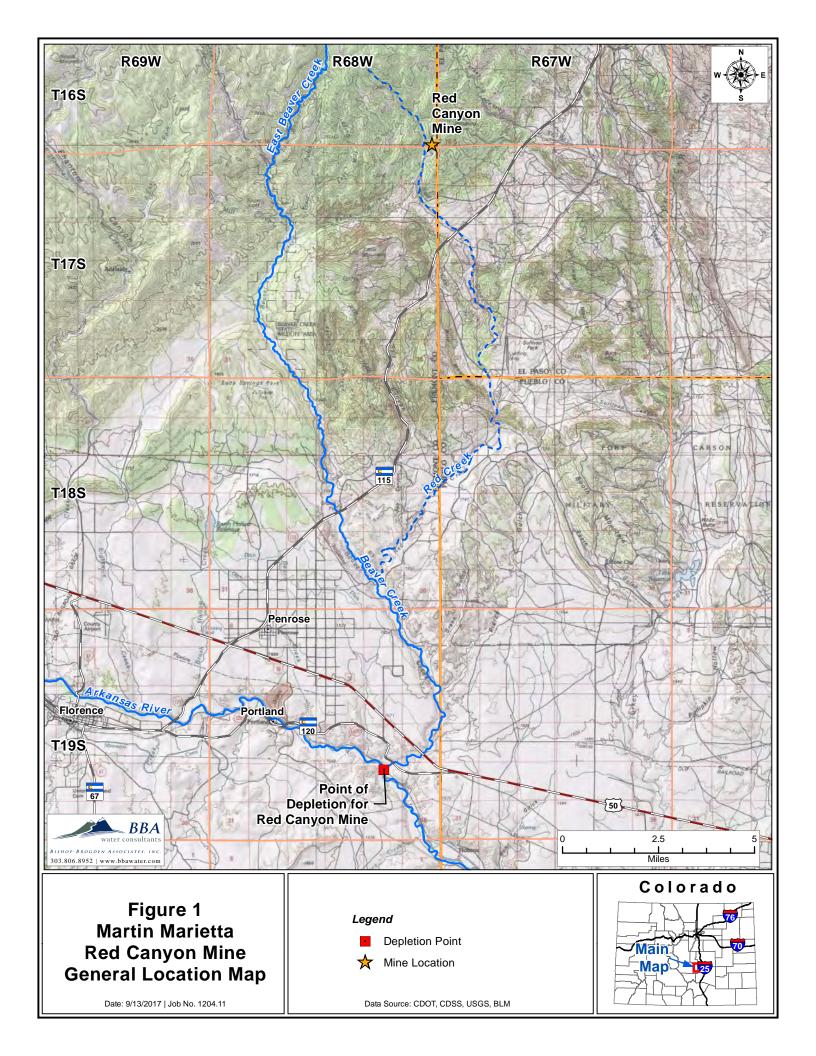
Very truly yours,

BISHOP-BROGDEN ASSOCIATES, INC.

David M. Heintz, P.E. Water Resources Engineer

DMH/JAC/jeb Enclosures 1204.11 Reviewed by:

Jeffrey A. Clark Principal - Hydrologist



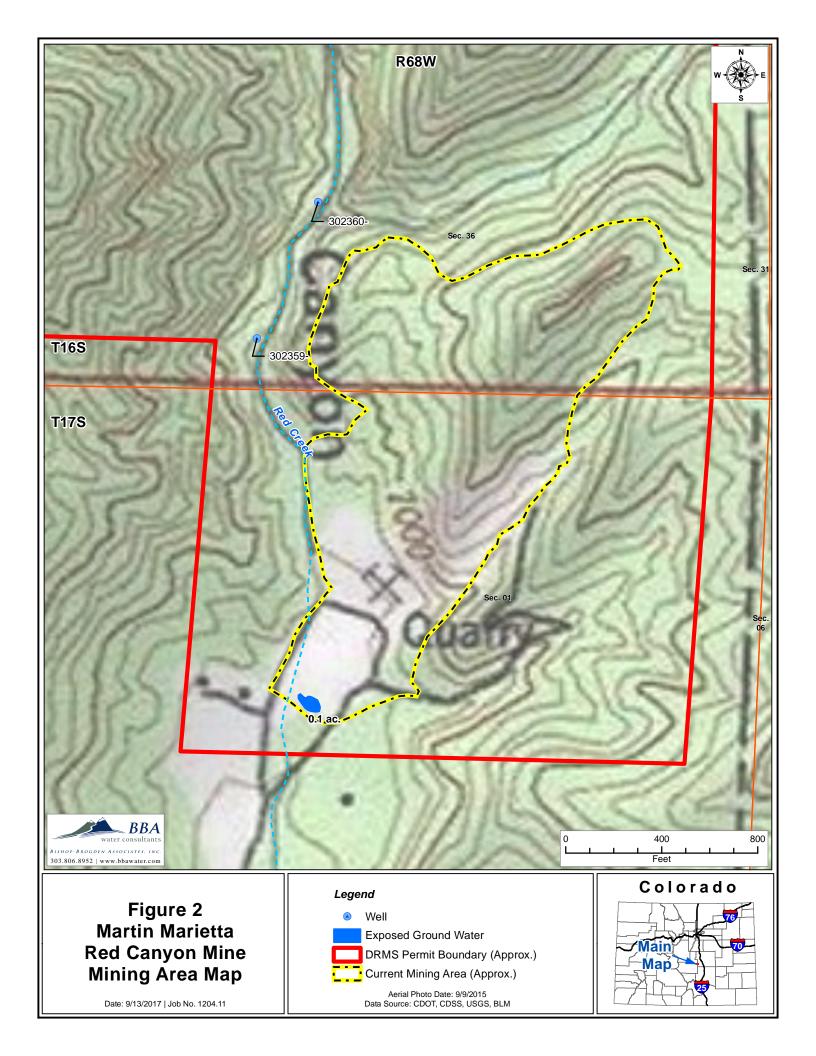


Table 1 Martin Marietta Red Canyon Mine 2017-2019 SWSP Projected Pumping Depletions

(all values are in ac-ft)

Operational Year	September 1st BOY Well Meter Reading (gallons)	August 31st EOY Well Meter Reading (gallons)	Total Annual Metered Well Pumping	5-Year Running Average	Depletion to be Replaced during SWSP Period
[1]	[2]	[3]	[4]	[5]	[6]
2012-2013	-	=	0.00	=	=
2013-2014	-	-	0.00	-	=
2014-2015	-	-	0.00	-	=
2015-2016	-	-	0.00	-	-
2016-2017	-	=	20.00	4.00	=
2017-2018					4.00
2018-2019					

Notes:

- [1] SWSP period is September 1st through August 31st. The 2017-2019 SWSP request is the first SWSP request to be submitted for the Red Canyon Mine.
- [2] Beginning of the SWSP period well totalizing flow meter reading. Measurement is taken on September 1st of each year.
- [3] End of the SWSP period well totalizing flow meter reading. Measurement is taken on August 31st of each year.
- [4] No well pumping has occurred at MM's Red Canyon Mine prior to the 2017-2019 SWSP request. 20 ac-ft of pumping is shown for pumping during the 2016-2017 period in order to ensure replacement requirements for the first year of operation under the SWSP would be greater than zero as described in the 2017-2019 SWSP request.
- [5] Equal to the 5-year running average of total annual pumping from [4].
- [6] Equal to the 5-year running average of total annual pumping over the previous 5 year period.
- *Shaded cell values will be based upon actual well pumping which occurs during the 2017-2018 SWSP period.

Table 2 Martin Marietta **Red Canyon Mine** 2017-2019 SWSP Projected Water Balance

	Depletions					Replacements				Balance		
Month	5-Year Average Well Pumping Monthly Distribution	Gross Evaporation (ft)	Average Annual Precipitation	Effective Precipitation (ft)	Net Evaporation (ft)	Net Evaporation Volume	Total Depletion (ac-ft)	Replacement Supply	Total Transit Loss % of Release	Total Transit Loss	Total Replacement Available at Point of Depletion	Credit (+) Deficit (-)
	(ac-ft)		(ft)	` '	` '	(ac-ft)	(ac it)	(ac-ft)		(ac-ft)	(ac-ft)	(ac-ft)
-	[1]	[2]	[3]	[4]	[5]	[6]		[7]	[8]	[9]	[10]	[11]
Sep-17	0.33	0.38	0.16	0.11	0.27	0.03	0.36	0.40	11.00%	0.04	0.36	0.00
Oct-17	0.34	0.27	0.06	0.04	0.22	0.02	0.36	0.41	11.00%	0.04	0.36	0.00
Nov-17	0.33	0.15	0.03	0.02	0.13	0.01	0.34	0.38	11.00%	0.04	0.34	0.00
Dec-17	0.34	0.11	0.05	0.03	0.08	0.01	0.35	0.39	11.00%	0.04	0.35	0.00
Jan-18	0.34	0.11	0.04	0.03	0.09	0.01	0.35	0.39	11.00%	0.04	0.35	0.00
Feb-18	0.31	0.13	0.05	0.04	0.10	0.01	0.32	0.36	11.00%	0.04	0.32	0.00
Mar-18	0.34	0.21	0.06	0.04	0.17	0.02	0.36	0.40	11.00%	0.04	0.36	0.00
Apr-18	0.33	0.34	0.08	0.06	0.29	0.03	0.36	0.40	11.00%	0.04	0.36	0.00
May-18	0.34	0.46	0.14	0.10	0.36	0.04	0.38	0.42	11.00%	0.05	0.38	0.00
Jun-18	0.33	0.56	0.13	0.09	0.47	0.05	0.38	0.42	11.00%	0.05	0.38	0.00
Jul-18	0.34	0.57	0.27	0.19	0.38	0.04	0.38	0.42	11.00%	0.05	0.38	0.00
Aug-18	0.34	0.52	0.30	0.21	0.31	0.03	0.37	0.42	11.00%	0.05	0.37	0.00
Sep-18		0.38	0.16	0.11	0.27	0.03	0.03		11.00%			
Oct-18		0.27	0.06	0.04	0.22	0.02	0.02		11.00%			
Nov-18		0.15	0.03	0.02	0.13	0.01	0.01		11.00%			
Dec-18		0.11	0.05	0.03	0.08	0.01	0.01		11.00%			
Jan-19		0.11	0.04	0.03	0.09	0.01	0.01		11.00%			
Feb-19		0.13	0.05	0.04	0.10	0.01	0.01		11.00%			
Mar-19		0.21	0.06	0.04	0.17	0.02	0.02		11.00%			
Apr-19		0.34	0.08	0.06	0.29	0.03	0.03		11.00%			
May-19		0.46	0.14	0.10	0.36	0.04	0.04		11.00%			
Jun-19		0.56	0.13	0.09	0.47	0.05	0.05		11.00%			
Jul-19		0.57	0.27	0.19	0.38	0.04	0.04		11.00%			
Aug-19		0.52	0.30	0.21	0.31	0.03	0.03		11.00%			
2017-2018 Total	4.00	3.83	1.37	0.96	2.87	0.29	4.29	4.82	-	0.53	4.29	0.00
2018-2019 Total		3.83	1.37	0.96	2.87	0.29			-			

- [1] Well pumping depletions for water use at the Red Canyon Mine are based upon the average annual well pumping over the pervious 5 years, calculated in Column [4] of Table 1. The total annual values is evenly
- [2] Total gross evaporation (3.83 feet) is based upon NOAA Technical Report NWS 33 and distributed according to SEO Senate Bill 89-120 criteria.

May: 12.0% November: 4.0% February: 3.5% August: 13.50% December: 3.0% March: 5.5% June: 14.5% September: 10.0% January: 3.0% April: 9.0% July: 15.0% October: 7.0% [3] Based upon the average precipitation at the Cripple Creek 3NNW (USC00051977) NOAA weather station for the time period 2006-2017. October: 7.0%

- [4] Assumed 70% effective precipitation. Equal to [3] x 70%.
- [5] Equal to [2] [4].
- [6] Equal to exposed groundwater area of 0.1 acres multiplied by [5].
- [7] Total water provided for replacement by either PBWW or AGUA.
- [8] Equal to the maximum potential transit loss from the point at which the replacement is made to the point of depletion on the Arkansas River. Assumed 22 miles with a transit loss rate of 0.5% per mile. If there is no call between the point of depletion and Pueblo Reservoir, PBWW is able to make replacements directly from Pueblo Reservoir no transit loss will be assessed.
- [9] Equal to [2] x [3].
- [10] Equals [2] [4]. [11] Equal to [5] - [1].
- * The values shown are an projected estimate of replacement credits available. Actual monthly values will be used in accounting submitted under the SWSP.
- **Shaded cell values will be based upon actual well pumping which occurs during the 2017-2018 SWSP period.



Board of Water Works

319 W. 4th Street • P.O. Box 400 • Pueblo, Colorado 81002-0400 • 719/584-0250

February 27, 2017

Mr. David M. Heintz Martin Marietta c/o Bishop Brogden Associates, Inc. 333 W. Hampden Ave. Suite 1050 Englewood, CO 80110

Dear Mr. Heintz,

This letter is notice that the Board of Water Works accepts your proposal submitted for the February 15, 2017 water lease bid opening. A copy of the proposal summary is enclosed for your information.

Delivery arrangements can be made by contacting Sharon Carleo, Water Resources Coordinator at 719-584-0238. Thanks for your interest in this water lease opportunity.

Sincerely,

Tina Garcia

Purchasing Agent

enclosure

cc: Sharon Carleo

Accounting Department

Tina Marcia

				Running Total
Name	Unit Price	Quantity (AF)	Total Price	Quantity (AF)
MARTIN MARIETTA MATERIALS	\$200.00	18	\$3,600.00	18
SYLVAN LAKES METRO DIST	\$200.00	15	\$3,000.00	33
CITY OF FOUNTAIN	\$150.00	250	\$37,500.00	283
ACA PRODUCTS	\$120.00	50	\$6,000.00	333
CWPDA	\$103.00	1,000	\$103,000.00	1,333
MARTIN MARIETTA MATERIALS	\$100.00	5	\$500.00	1,338
MT MASSIVE GOLF COURSE	\$100.00	10	\$1,000.00	1,348
AGUA	\$95.00	500	\$47,500.00	1,848
CWPDA	\$81.00	1,000	\$81,000.00	2,848
AGUA	\$75.00	500	\$37,500.00	3,348
CWPDA	\$63.00	1,000	\$63,000.00	4,348
CITY OF VICTOR	\$50.00	150	\$7,500.00	4,498
LOWER ARK WATER CONSERVANCY DIST	\$45.00	500	\$22,500.00	4,998
CWPDA	\$43.00	1,000	\$43,000.00	5,998
BESSEMER DITCH	\$42.50	5,000	\$212,500.00	10,998
MAURO FARMS	\$42.50	50	\$2,125.00	11,048
BESSEMER DITCH	\$35.50	2,000	\$71,000.00	13,048
OXFORD FARMERS DITCH	\$35.00	1,000	\$35,000.00	14,048
CWPDA	\$33.00	1,000	\$33,000.00	15,048
ENLARGED SOUTHSIDE DITCH	\$31.00	100	\$3,100.00	15,148
LAWMA	\$30.00	2,500	\$75,000.00	17,648
DALE BAKER	\$28.50	150	\$4,275.00	17,798
CHARLES ZIMMERMAN	\$25.75	50	\$1,287.50	17,848
DANNY BREWER	\$25.00	200	\$5,000.00	18,048
HIGH LINE CANAL	\$21.00	3,000	\$63,000.00	21,048
ENLARGED SOUTHSIDE DITCH	\$21.00	400	\$8,400.00	21,448
LEIF BERG	\$21.00	100	\$2,100.00	21,548
TRANSIT MIX OF PUEBLO	\$20.00	2,500	\$50,000.00	24,048
LAWMA	\$20.00	2,500	\$50,000.00	26,548
NORMAN HOPKINS	\$20.00	150	\$3,000.00	26,698
LOWER ARK WATER CONSERVANCY DIST	\$20.00	500	\$10,000.00	27,198
MATT HEIMERICH	\$15.56	225	\$3,501.00	27,423
LOWER ARK WATER CONSERVANCY DIST	\$15.00	500	\$7,500.00	27,923
CWPDA	\$12.50	3,000	\$37,500.00	30,923
FT LYON CANAL	\$12.50	14,000	\$175,000.00	44,923
DAVID TOMKY	\$12.00	90	\$1,080.00	45,013
ENLARGED SOUTHSIDE DITCH	\$12.00	1,000	\$12,000.00	46,013
LEIF BERG	\$11.00	100	\$1,100.00	46,113
HOLBROOK MUTUAL IRRIGATING CO	\$5.02	10,000	\$50,200.00	56,113

 Total AF recommended for lease:
 14,048 Total Revenue:
 \$777,225.00

 Avg. \$/AF:
 \$55.33

¹lt is anticipated that about 400 AF of return flow that is otherwise unusable to Pueblo Water will be used to satisfy the bids from the well augmentation groups (AGUA and CWPDA).