



October 5, 2021

PCD File No.:

## **Water Resources Report**

Koinonia Ranch

The following describes the water supply to serve six (6) residential lots on 39.09± acres located within the southwest one-quarter of the southwest one-quarter of Section 19, Township 12 South, Range 65 west of the 6th principal meridian in El Paso County, Colorado (Subject Property). This letter is based on a decree entered in Case No. 19CW3051, Water Division 2 (consolidated with Division 1) (Decree/copy attached), which decreed the Dawson groundwater underlying the Subject Property, and approves a plan for augmentation for use of up to seven (7) wells in the Dawson aquifer to serve each lot for a 300 year water supply period. Bartels Well No. 1, as referenced in the decree, currently exists and is permitted under Permit No. 87527. Five (5) wells (Bartels Wells No. 2-6) are proposed following platting of the property into three lots.

### AMOUNTS DECREED AND AVAILABLE

There are four aquifers identified in the decree entered in Case No. 19CW3051 that exist beneath the subject property. The decreed amounts of three of the aquifers are not nontributary (Dawson, Denver, Arapahoe), and the decreed amount of the other aquifer is nontributary (Laramie-Fox Hills). The referenced decree sets forth withdrawal amounts based on 100-year aquifer life but allows withdrawal over a longer term as required by local regulations. El Paso County requires demonstration of adequate water supply for a 300 year term. Therefore the amounts in the decree are adjusted in this report to account for a 300-year term. The following annual amounts are decreed and are based on annual withdrawals over a 300 year period (one acre-foot is 325,851 gallons).

Annual withdrawals of currently constructed Bartels Well No. 1 (proposed Lot 5) from the Dawson aquifer (not-nontributary) shall not exceed 0.70 acre feet (228,096 gallons), nor more than 1200 acre feet total. Annual withdrawals from yet to be constructed Crowe Wells No. 2 & 3 (proposed Lots 1 & 3) from the Dawson aquifer (not-nontributary) shall not exceed 0.70 acre feet each (228,096 gallons), nor more than 1200 acre feet total. The State or Division Engineer shall curtail the pumping of more than those amounts from the Dawson aquifer.

### WATER SUPPLY

The residential lots (up to three potential) will be served by individual not nontributary Dawson aquifer wells to be permitted and to operate pursuant to an augmentation plan as approved in the Decree. The Decree allows the existing Dawson aquifer well to withdraw 0.535 acre-foot per year, and the six proposed Dawson aquifer wells to withdraw 0.535 acre-foot per year for 300 years for the following uses:

***Engineers • Surveyors***  
***1903 Lelaray Street, Suite 200 • Colorado Springs, CO 80909 • Phone 719-635-5736***  
***Fax 719-635-5450 • e-mail mve@mvecivil.com***

Bartels Wells No. 1 - 6 (Lots 1, 2, 3, 4, 5 & 6)

In-house use:	1.56 acre-feet per year (0.26 acre-feet per year for each lot)
Irrigation use:	1.35 acre-feet per year (0.225 acre-feet per year for each lot) limited to irrigation of 4,500 square feet of lawn or garden
Stock-watering use:	0.30 acre-feet per year (0.05 acre-feet per year for each lot) limited to watering 4 horses or equivalent livestock

Total amount over 300 years =  $300 \times 3.21 = 963$  acre-feet

Total decreed Dawson aquifer water = 963 acre-feet

The water supply for the residential lots using three (3) Dawson aquifer wells pursuant to the augmentation plan approved in the referenced Decree is sufficient and satisfies the 300 year supply requirement of El Paso County.

AUGMENTATION

The Plan for Augmentation is established in the decree entered in Case No. 19CW3051, Water Division 2 (Decree/copy attached). Use of Bartels Wells Nos. 1 through 6, and any additional or replacement wells drilled to the Dawson Aquifer, requires replacement of actual stream depletion.

Depletion caused by pumping water from the Dawson aquifer shall be replaced as provided and decreed. The augmentation obligation for Bartels Wells No. 1 through 6 are septic return flows from indoor uses. Applicants shall also reserve all of their nontributary Laramie-Fox Hills aquifer water (1,110 acre-feet) for the replacement of post-pumping depletion. The Augmentation Plan provided by the referenced decree prescribes a pumping period of a minimum of 300 years, as required to meet El Paso County's 300 year water requirement for approval of subdivisions utilizing non-renewable water resources for their source of water supply. Covenants for this subdivision will reinforce the findings and responsibilities and requirements of referenced water court decree.

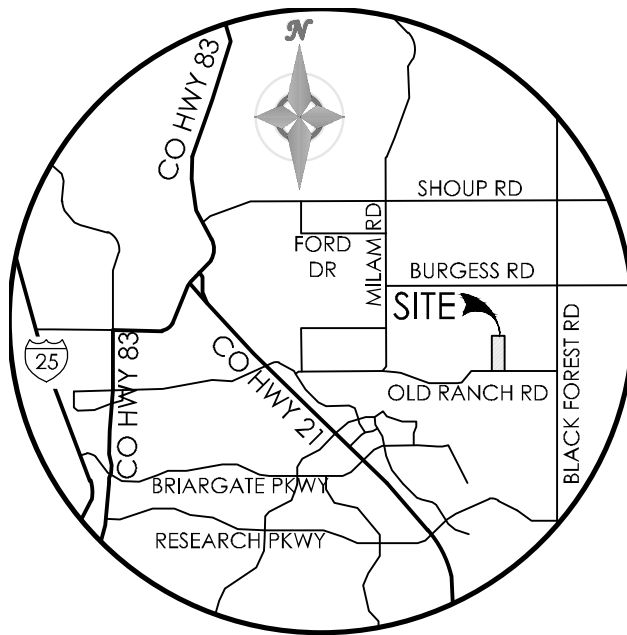
### WATER QUALITY

M.V.E., inc. has examined water quality testing results for the existing Bartels Well No. 1 (permit No. 87527) located on the subject property. The water samples were drawn from the water well fixtures connected to the State of Colorado permitted well of the Dawson Aquifer at 6170 Old Ranch Road. The samples were taken on 4/16/21. Testing for the required contaminants was performed by Colorado Analytical Laboratory and Hazen Research, Inc. The examined reports contain tests for each of the required contaminants in accordance with the El Paso County Land Development Code. The Dawson Aquifer is a confined aquifer. M.V.E. Inc. compared the test results to the Maximum Contaminant Level (MCL) for each substance and found the results of all tests other than manganese to be within acceptable levels in accordance with El Paso County standards contained in the Land Development Code. The amount of manganese found exceeds the Secondary Maximum Contaminant Level (SMCL) set forth by the El Paso County standards contained in the Land Development Code. According to the Colorado Primary Drinking Water Regulations SMCLs primarily affect the aesthetic qualities relating to the public acceptance of drinking water. At considerably higher concentrations health implications may also exist, however the levels found are only slightly above the standard. The manganese can be removed with the use of a water softener or filtration system, though this is not required. Based on these findings we recommend that the El Paso County Health Department and El Paso County Attorney's office make a finding of sufficiency for water quality for the Koinonia Ranch final plat.

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## | Attachments



## VICINITY MAP

NOT TO SCALE

<b>DISTRICT COURT, WATER DIVISION 2, COLORADO</b> Court Address: 501 North Elizabeth Street, Suite 116 Pueblo, CO 81003 Phone Number: (719) 404-8832	DATE FILED: September 21, 2020 7:46 PM CASE NUMBER: 2019CW3051  <p style="text-align: center;">▲ COURT USE ONLY ▲</p>
<b>CONCERNING THE APPLICATION FOR WATER RIGHTS OF:</b>  <b>SARAH BARKER BARTELS TRUST</b>  <b>IN EL PASO COUNTY</b>	Case No.: 19CW3051
<b>FINDINGS OF FACT, CONCLUSIONS OF LAW, RULING OF REFEREE AND DECREE ADJUDICATING DENVER BASIN GROUNDWATER AND APPROVING PLAN FOR AUGMENTATION</b>	

THIS MATTER comes before the Court on the Application filed by Sarah Barker Bartels Trust, and having reviewed said Application and other pleadings on file, and being fully advised on this matter, the Court makes the following findings and orders:

### GENERAL FINDINGS OF FACT

1. The applicant in this case is Sarah Barker Bartels Trust, whose address is 3647 Tuscanna Grove, Colorado Springs, CO 80920 ("Applicant"). Applicant is the owner of the land totaling approximately 39.10 acres on which the structures sought to be augmented herein are located, and under which lies the Denver Basin groundwater described in this decree, and is the owner of the place of use where the water will be put to beneficial use, except as described in Paragraph 20.

2. The Applicant filed this Application with the Water Courts for both Water Division 1 and Water Division 2 on August 29, 2019. The Application was referred to the Water Referees in both Divisions 1 and 2 on or about August 30, 2019.

3. The time for filing statements of opposition to the Application expired on the last day of October 2019. A Statement of Opposition was timely filed by Widefield Water and Sanitation District on October 21, 2019, and a Statement of Opposition was timely filed by Kettle Creek, LLC on October 31, 2019.

4. A Motion for Consolidation of the Division 1 and Division 2 cases into Water Division 2 was filed with the Colorado Supreme Court on November 6, 2019. The Panel on Consolidated Multidistrict Litigation certified the Motion for Consolidation to the Chief Justice on November 8, 2019. Chief Justice, Nathan B. Coats, granted the Motion for Consolidation by Order dated December 2, 2019.

5. On September 3, 2019, Applicant filed a motion requesting that publication be made in The Transcript instead of The Gazette. On the same day, the Division 2 Water Court, granted the motion.

6. The Clerk of this Court has caused publication of the Application filed in this matter as provided by statute and the publication costs have been paid. On September 19, 2019, proof of publication in *The Daily Transcript* was filed with the Division 2 Water Court. All notices of the Application have been given in the manner required by law.

7. On July 29, 2020, a stipulation between the Applicant and Widefield Water and Sanitation District was filed with the Division 2 Water Court. By Order dated August 3, 2020, the Division 2 Water Court approved such stipulation.

8. On August 4, 2020, a stipulation between the Applicant and Kettle Creek, LLC was filed with the Division 2 Water Court. By Order dated August 5, 2020, the Division 2 Water Court approved such stipulation.

9. Pursuant to C.R.S. §37-92-302(2), the Office of the State Engineer has filed Determination of Facts for each aquifer with this Court on October 2, 2019.

10. Pursuant to C.R.S. §37-92-302(4), the office of the Division Engineer for Water Division No. 2 filed its Consultation Report dated January 17, 2020, and a Response to the Consultation Report was filed by the Applicant on February 28, 2020. Both the Consultation Report and Response have been considered by the Water Court in the entry of this Ruling and Decree.

11. The Water Court has jurisdiction over the subject matter of these proceedings and over all who have standing to appear as parties whether they have appeared or not. The land and water rights involved in this case are not within a designated groundwater basin.

## **GROUNDWATER RIGHTS**

12. The Applicant requested quantification and adjudication of underground water rights for Bartels Wells Nos. 1 through 7, as currently existing and as may be constructed to the Dawson aquifer, and additional or replacement wells associated therewith, for withdrawal of Applicant's full entitlement of supply under the plan for augmentation decreed herein. Applicant also requested quantification and adjudication of water uses from the Denver, Arapahoe, and Laramie-Fox Hills aquifers. The following findings are made with respect to such underground water rights:

13. The land overlying the groundwater subject to the adjudication in this case is owned by the Applicant and consists of approximately 39.10 acres located in a portion of the NE¼ SW ¼ and the SE¼ SW¼ of Section 19, Township 12 South, Range 65 West of the 6th P.M., El Paso County, Colorado, also known as 6170 Old Ranch Road, Colorado Springs, CO 80908. The property with El Paso County Assessor's schedule no. 5219000059, is more particularly depicted on the attached **Exhibit A** map ("Applicant's Property"). Applicant intends to subdivide the property into up to seven (7) lots of +/- 5 acres each. All groundwater adjudicated herein shall be withdrawn from the overlying land.

14. There are no lienholders on the Applicant's Property, and therefore notice requirements of C.R.S. § 37-92-302 are inapplicable.

15. Bartels Wells Nos. 1 through 7: Bartels Wells Nos. 1 through 7 will be located on the Applicant's Property. Bartels Well No. 1 is currently permitted and constructed as an exempt well pursuant to C.R.S. §37-92-602 under Well Permit No. 87527. Applicant is awarded the vested right to use Bartels Wells Nos. 1 through 7, along with any necessary additional or replacement wells associated with such structures, for the extraction and use of groundwater from the not-nontributary Dawson aquifer pursuant to the Plan for Augmentation decreed herein. Upon entry of this decree and submittal by the Applicant of a complete well permit application and filing fee, the State Engineer shall issue a revised permit for the existing Bartel Well No. 1, and new permits for Bartels Wells Nos. 2 through 7 pursuant to C.R.S. §37-90-137(4), consistent with and referencing the Plan for Augmentation decreed herein.

16. Of the statutorily described Denver Basin aquifers, the Dawson, Denver, Arapahoe, and Laramie-Fox Hills aquifers all exist beneath the Applicant's Property. The Dawson, Denver, and Arapahoe aquifers underlying the Applicant's Property contain not-nontributary water, while the water of the Laramie-Fox Hills aquifer underlying the Applicant's Property is nontributary. The quantity of water in the Denver Basin aquifers exclusive of artificial recharge underlying the Applicant's Property is as follows:

AQUIFER	NET SAND (ft)	Annual Average Withdrawal 100 Years (Acre Feet)	Annual Average Withdrawal 300 Years (Acre Feet)	Total Withdrawal (Acre Feet)
Dawson (NNT)	123.2	9.63	3.21	963
Denver (NNT)	307.7	20.5	6.83	2,050
Arapahoe (NNT)	272	18.1	6.03	1,810
Laramie-Fox Hills (NT)	189.7	11.1	3.7	1,110

17. Pursuant to C.R.S. §37-90-137(9)(c.5)(I), the augmentation requirements



for wells in the Dawson aquifer require the replacement to the affected stream systems of actual stream depletions on an annual basis. The Applicant's Property is located more than 1 mile from any point of contact with a surface stream. Pursuant to C.R.S. §37-90-137(9)(c.5)(I), depletions from wells on the property pumping from the Denver and Arapahoe aquifers would require replacement of 4% of the amount of water pumped on an annual basis, and such additional amounts as may be required pursuant to C.R.S. §37-90-137(9)(c.5). Applicant shall not be entitled to construct a well or use water from the not-nontributary Dawson, Denver, or Arapahoe aquifers except pursuant to an approved augmentation plan in accordance with C.R.S. §37-90-137(9)(c.5), including as decreed herein as concerns the Dawson aquifer.

18. Subject to the augmentation requirements described in Paragraphs 17 and 23 and the other requirements and limitations in this decree, Applicant shall be entitled to withdraw all legally available groundwater in the Denver Basin aquifers underlying Applicant's Property. Said amounts can be withdrawn over the 100-year life for the aquifers as set forth in C.R.S. §37-90-137(4), or withdrawn over a longer period of time based upon local governmental regulations or Applicant's water needs provided withdrawals during such longer period are in compliance with the augmentation requirements of this decree. This decree describes a pumping period of 300-years as required by El Paso County, Colorado Land Development Code §8.4.7(C)(1). The average annual amounts of ground water available for withdrawal from the underlying Denver Basin aquifers, based upon the 100-year aquifer life, are determined and set forth above, based upon the October 2, 2019 Office of the State Engineer Determination of Facts described in Paragraph 9.

19. Applicant shall be entitled to withdraw an amount of groundwater in excess of the average annual amount decreed herein from the Denver Basin aquifers underlying Applicant's Property, so long as the sum of the total withdrawals from wells in each of the aquifers does not exceed the product of the number of years since the date of issuance of the original well permit or the date of entry of the decree herein, whichever comes first, and the average annual volume of water which Applicant is entitled to withdraw from each of the aquifers underlying Applicant's Property, subject to the requirement that such banking and excess withdrawals do not violate the terms and conditions of the plan for augmentation decreed herein and any other plan for augmentation decreed by the Court that authorizes withdrawal of the Denver Basin groundwater decreed herein.

20. Subject to the terms and conditions in the plan for augmentation decreed herein and final approval by the State Engineer's Office pursuant to the issuance of well permits in accordance with C.R.S. §§37-90-137(4) or 37-90-137(10), the Applicant shall have the right to use the ground water for beneficial uses upon the Applicant's Property consisting of domestic, irrigation, stock water, recreation, wildlife, fire protection, and also for storage and augmentation purposes associated with such uses. The amount of

groundwater decreed for such uses upon the Applicant's Property is reasonable as such uses are to be made for the long term use and enjoyment of the Applicant's Property and is to establish and provide for adequate water reserves. The nontributary groundwater may be used, reused, and successively used to extinction, both on and off the Applicant's Property subject, however, to the limitations imposed on the use of the Laramie-Fox Hills aquifer groundwater by this decree and the requirement under C.R.S. §37-90-137(9)(b) that no more than 98% of the amount withdrawn annually shall be consumed. Applicant may use such water by immediate application or by storage and subsequent application to the beneficial uses and purposes stated herein. Provided however, as set forth above, Applicant shall only be entitled to construct a well or use water from the not-nontributary Dawson, Denver, and Arapahoe aquifers pursuant to a decreed augmentation plan entered by the Court, including that plan for augmentation decreed herein.

21. Withdrawals of groundwater available from the nontributary Laramie-Fox Hills aquifer beneath the Applicant's Property in the amount determined in accordance with the provisions of this decree will not result in injury to any other vested water rights or to any other owners or users of water.

### **PLAN FOR AUGMENTATION**

22. The structures to be augmented are Bartels Wells Nos. 1 through 7 as constructed and to be constructed to the not-nontributary Dawson aquifer underlying the Applicant's Property, along with any additional or replacement wells associated therewith. This plan for augmentation does not cover depletions associated with diversions in the Denver or Arapahoe aquifers. If Applicant would like to divert its entitlements in the Denver and Arapahoe aquifers, it must do so under a separate future decreed augmentation plan.

23. Pursuant to C.R.S. §37-90-137(9)(c.5), the augmentation obligation for Bartels Wells Nos. 1 through 7, and any additional or replacement wells constructed to the Dawson aquifer requires the replacement of actual stream depletions. The water to be used for augmentation during pumping is the septic system return flows of the not-nontributary Bartels Wells Nos. 1 through 7, to be pumped as set forth in this plan for augmentation. The water to be used for augmentation after pumping is the reserved portion of Applicant's nontributary water right in the Laramie-Fox Hills aquifer. Applicant shall provide for the augmentation of stream depletions caused by pumping the Bartels Wells Nos. 1 through 7 as approved herein. Water use criteria is as follows:

A. Use: The Bartels Wells Nos. 1 through 7 may each pump up to 0.46 acre feet of water per year, assuming seven lots, for a maximum total of 3.21 acre feet being withdrawn from the Dawson aquifer annually. Should fewer than seven lots be developed on Applicant's Property, but a minimum of five lots are developed, each well thereon shall be entitled to withdraw its proportional share of the total 3.21 acre feet

available. Indoor use will utilize up to 0.25 acre feet of water per year per residence, with the remaining 0.21 acre feet per year pumping entitlements available for other uses on the Applicant's Property, including, irrigation of lawn and garden and the watering of up to four horses or equivalent livestock, per residence. The foregoing figures assume the use of seven individual septic systems, with resulting return flows from each as described below in Paragraph 23.C. Should Applicant subdivide Applicant's Property into fewer than seven lots, depletions and return flows for the replacement of depletions will potentially be reduced. Under this circumstance, pumping for uses other than indoor use may be increased provided at all times septic return flows shall replace the maximum depletions resulting from pumping as described in this Paragraph 23. A minimum of five lots with indoor use and septic system returns must be developed in order for the associated wells to pump the maximum amount of 3.21 acre feet per year.

B. Depletions: Maximum annual stream depletions over the 300-year pumping period will amount to approximately 31% of pumping. Maximum annual depletions for total residential pumping from all wells of 3.21 acre feet are therefore 1.00 acre feet in year 300. Should Applicant's pumping be less than the total 3.21 annual acre feet described herein, resulting depletions and required replacements will be correspondingly reduced.

C. Augmentation of Depletions During Pumping Life of Wells: Pursuant to C.R.S. §37-90-137(9)(c.5), Applicant is required to replace actual stream depletions attributable to pumping of the maximum seven residential Dawson aquifer wells. Applicant has shown that depletions during pumping will be effectively replaced by residential return flows from non-evaporative septic systems. The annual consumptive use for non-evaporative septic systems is 10% per year per residence. At the household indoor use rate of 0.25 acre feet per residence per year, total of 1.75 acre feet (assuming seven residences), 1.575 acre feet is replaced to the stream system per year, utilizing non-evaporative septic systems. Thus, during pumping, total maximum annual stream depletions of 1.0 acre feet will be more than adequately augmented provided septic system return flows are generated by indoor use of water in at least five residences ( $(5 \times 0.25) \times 0.9 = 1.125$ ).

D. Augmentation of Post Pumping Depletions: This plan for augmentation shall have a pumping period of a minimum of 300 years. For the replacement of post-pumping depletions which may be associated with the use of the Bartels Wells Nos. 1 through 7 and any additional or replacement wells, Applicant will reserve water from the nontributary Laramie Fox Hills aquifer, accounting for actual stream depletions replaced during the plan pumping period, as necessary to replace post pumping depletions. The amount of nontributary Laramie-Fox Hills groundwater reserved may be reduced as may be determined through this Court's retained jurisdiction as described in this decree. If the Court, by order, reduces the Applicant's obligation to account for and replace such post-pumping depletions for any reason, it may also reduce the amount of Laramie-Fox Hills aquifer groundwater reserved for such

purposes, as described herein. Applicant also reserves the right to substitute other legally available augmentation sources for such post pumping depletions upon further approval of the Court under its retained jurisdiction. Even though this reservation is made, under the Court's retained jurisdiction, Applicant reserves the right in the future to prove that post pumping depletions will be noninjurious. Pursuant to C.R.S. §37-90-137(9)(b), no more than 98% of water withdrawn annually from a nontributary aquifer shall be consumed. The reservation of 920 acre feet from the Laramie-Fox Hills aquifer results in approximately 900 acre feet of available post-pumping augmentation water, which will be sufficient to replace post-pumping depletions based on total pumping of 3.21 acre feet annually. Upon entry of a decree in this case, the Applicant will be entitled to apply for and receive a new well permit for the existing Bartel Well No. 1 and new permits for the Bartels Wells Nos. 2 through 7 for the uses in accordance with this decree and otherwise in compliance with C.R.S. §37-90-137.

24. Because depletions occur to both the South Platte and Arkansas River systems under the State's groundwater flow model, the Application in this case was filed in both Water Divisions 1 and 2. The return flows set forth above as the augmentation source during the pumping period will accrue to only the Arkansas River system where most of the depletions will occur and where the Applicant's Property is located. Under this augmentation plan, the total amount of depletions will be replaced to the Arkansas River system as set forth herein, and the Court finds that those replacements are sufficient under this augmentation plan subject to Paragraphs 43-47 herein.

25. This decree, upon recording, shall constitute a covenant running with Applicant's Property, benefitting and burdening said land, and requiring construction of well(s) to the nontributary Laramie-Fox Hills aquifer and pumping of water to replace post-pumping depletions under this decree. Subject to the requirements of this decree, in order to determine the amount and timing of post-pumping replacement obligations under this augmentation plan, Applicant or its successors shall use information commonly used by the Colorado Division of Water Resources for augmentation plans of this type at the time. Pursuant to this covenant, the water from the nontributary Laramie-Fox Hills aquifer reserved herein may not be severed in ownership from the Applicant's Property. This covenant shall be for the benefit of, and enforceable by, third parties owning vested water rights who would be injured by the failure to provide for the replacement of post-pumping depletions under the decree, and shall be specifically enforceable by such third parties against the owner of the Applicant's Property.

26. Applicant or its successors shall be required to initiate pumping from the Laramie-Fox Hills aquifer for the replacement of post-pumping depletions when either: (i) the absolute total amount of water available from the Dawson aquifer allowed to be withdrawn under the plan for augmentation decreed herein (963 acre feet) has been pumped; (ii) the Applicant or its successors in interest have acknowledged in writing that all withdrawals for beneficial use through the Bartels Wells Nos. 1 through 7 have permanently ceased, (iii) a period of 10 consecutive years where no withdrawals of

groundwater has occurred, or (iv) accounting shows that return flows from the use of the water being withdrawn is insufficient to replace depletions caused by the withdrawals that already occurred.

27. Unless modified by the Court under its retained jurisdiction, Applicant and its successors shall be responsible for accounting and replacement of post-pumping depletions as set forth herein. Should Applicant's obligation hereunder to account for and replace such post-pumping stream depletions be reduced or abrogated for any reason, Applicant may petition the Court to also modify or terminate the reservation of the Laramie-Fox Hills aquifer groundwater.

28. The term of this augmentation plan is for a minimum of 300 years, however, the length of the plan for a particular well or wells may be extended beyond such time provided the total plan pumping allocated to such well or wells is not exceeded. Should the actual operation of this augmentation plan depart from the planned diversions described in Paragraph 23 such that annual diversions are increased through banking measures, or the duration of the plan is extended, the Applicant must prepare and submit a revised model of stream depletions caused by the actual pumping or intended schedule. This analysis must utilize depletion modeling acceptable to the State Engineer, and to this Court, and must represent the water use under the plan for the entire term of the plan to date. The analysis must show that return flows have equaled or exceeded actual stream depletions throughout the pumping period and that reserved nontributary water remains sufficient to replace post-pumping depletions. The Applicant shall provide notice of the revised model submissions to the State Engineer, this Court, and the opposers in this case, and the State Engineer and opposers will have thirty (30) days for review and comment of the revised modeling, upon which, the Applicant will be allowed thirty (30) days to respond to the comments of the State Engineer and the opposers. After this notice and comment period, if the revised depletion modeling is acceptable to the State Engineer, this Court may give approval for the extension of this augmentation plan past the 300 year minimum.

29. Consideration has been given to the depletions from Applicant's use and proposed uses of water, in quantity, time and location, together with the amount and timing of augmentation water which will be provided by the Applicant, and the existence, if any, of injury to any owner of or person entitled to use water under a vested water right.

30. It is determined that the timing, quantity and location of replacement water under the protective terms in this decree are sufficient to protect the vested rights of other water users and eliminate injury thereto. The replacement water shall be of a quantity and quality so as to meet the requirements for which the water of senior appropriators has normally been used, and provided of such quality, such replacement water shall be accepted by the senior appropriators for substitution for water derived by

the exercise of the Bartels Wells Nos. 1 through 7. As a result of the operation of this plan for augmentation, the depletions from the Bartels Wells Nos. 1 through 7 and any additional or replacement wells associated therewith will not result in injury to the vested water rights of others.

## **CONCLUSIONS OF LAW**

31. The application for adjudication of Denver Basin groundwater and approval of plan for augmentation was filed with the Water Clerks for Water Divisions 1 and 2, pursuant to C.R.S. §§37-92-302(1)(a) and 37-90-137(9)(c.5). These cases were properly consolidated before Water Division 2.

32. The Applicant's request for adjudication of these water rights is contemplated and authorized by law, and this Court and the Water Referee have exclusive jurisdiction over these proceedings. C.R.S. §§37-92-302(1)(a), 37-92-203, and 37-92-305.

33. Subject to the terms of this decree, the Applicant is entitled to the sole right to withdraw all the legally available water in the Denver Basin aquifers underlying the Applicant's Property, and the right to use that water to the exclusion of all others.

34. The Applicant has complied with C.R.S. §37-90-137(4), and the groundwater is legally available for withdrawal by the requested nontributary well(s), and legally available for withdrawal by the requested not-nontributary well(s) upon the entry of this decree approving an augmentation plan pursuant to C.R.S. §37-90-137(9)(c.5), and the issuance of well permits by the State Engineer's Office. Applicant is entitled to a decree from this Court confirming its rights to withdraw groundwater pursuant to C.R.S. §37-90-137(4).

35. The Denver Basin water rights applied for in this case are not conditional water rights, but are vested water rights determined pursuant to C.R.S. §37-90-137(4). No applications for diligence are required. The claims for nontributary and not-nontributary groundwater meet the requirements of Colorado Law.

36. The determination and quantification of the nontributary and not-nontributary groundwater rights in the Denver Basin aquifers as set forth herein is contemplated and authorized by law. C.R.S. §§37-90-137, and 37-92-302 through 37-92-305.

37. The Applicant's request for approval of a plan for augmentation is contemplated and authorized by law. If administered in accordance with this decree, this plan for augmentation will permit the uninterrupted diversions from the Bartels Wells Nos. 1 through 7 without adversely affecting any other vested water rights in the Arkansas River and South Platte River or their tributaries and when curtailment would

otherwise be required to meet a valid senior call for water. C.R.S. §§37-92-305(3), (5), and (8).

**IT IS THEREFORE ORDERED, ADJUDGED AND DECREED AS FOLLOWS:**

38. All of the foregoing Findings of Fact and Conclusions of Law are incorporated herein by reference, and are considered to be a part of this decretal portion as though set forth in full.

39. The Application for Adjudication of Denver Basin Groundwater and for Approval of Plan for Augmentation filed by the Applicant is approved, subject to the terms of this decree.

A. Applicant is awarded a vested right to the entire 963 acre feet of groundwater from the not-nontributary Dawson aquifer underlying Applicant's Property, as quantified in Paragraph 16 or as modified by the Court under its retained jurisdiction. Said 963 acre feet may be pumped pursuant to the plan for augmentation decreed herein.

B. Applicant is awarded a vested right to 2,050 acre feet of groundwater from the not-nontributary Denver aquifer underlying Applicant's Property, as quantified in Paragraph 16 or as modified by the Court under its retained jurisdiction. However, none of the not-nontributary Denver aquifer water vested and decreed herein shall be withdrawn for any purpose except pursuant to a separate court-approved plan for augmentation authorizing the pumping of such amount.

C. Applicant is awarded a vested right to 1,810 acre feet of groundwater from the not-nontributary Arapahoe aquifer underlying Applicant's Property, as quantified in Paragraph 16 or as modified by the Court under its retained jurisdiction. However, none of the not-nontributary Arapahoe aquifer water vested and decreed herein shall be withdrawn for any purpose except pursuant to a separate court-approved plan for augmentation authorizing the pumping of such amount.

D. Applicant is awarded a vested right to 1,110 acre feet of groundwater from the nontributary Laramie-Fox Hills aquifer underlying Applicant's Property, as quantified in Paragraph 16 or as modified by the Court under its retained jurisdiction. Subject to the provisions of Rule 8 of the Denver Basin Rules, 2 CCR 402-6, limiting consumption to ninety-eight percent of the amount withdrawn, and the other terms and conditions of this decree, Applicant's Laramie-Fox Hills aquifer groundwater may be utilized for all purposes described in Paragraph 20, although a portion has been reserved for use in the plan for augmentation decreed herein consistent with Paragraph 23.D., above.

40. The Applicant has furnished acceptable proof as to all claims and, therefore, the Application for Adjudication of Denver Basin Groundwater and For Approval of Plan for Augmentation, as filed by the Applicant, is granted and approved in accordance with the terms and conditions of this decree. Approval of this Application will not result in any injury to senior vested water rights.

41. The Applicant shall comply with C.R.S. §37-90-137(9)(b), requiring the relinquishment of the right to consume two percent (2%) of the amount of the nontributary groundwater withdrawn annually. Ninety-eight percent (98%) of the nontributary groundwater withdrawn annually may therefore be consumed. No plan for augmentation shall be required to provide for such relinquishment. Applicant shall be required to demonstrate to the State Engineer prior to the issuance of a well permit that no more than ninety-eight percent of the groundwater withdrawn annually will be consumed.

42. The Bartels Wells Nos. 1 through 7, and any replacement or additional wells, shall be operated such that combined pumping from all wells does not exceed the annual (3.21 acre feet) and total (963 acre feet) pumping limits for the Dawson aquifer as decreed herein, and is in accordance with the requirements of the plan for augmentation described herein. The State Engineer, the Division Engineer, and/or the Water Commissioner shall not curtail the diversion and use of water by the Bartels Wells Nos. 1 through 7 or any additional and replacement wells so long as the return flows from the annual diversions associated with the Bartels Wells Nos. 1 through 7 and such other wells accrue to the stream system pursuant to the conditions contained herein. To the extent that Applicant or one of its successors or assigns is ever unable to provide the replacement water required, then the Bartels Wells Nos. 1 through 7 and any additional or replacement wells shall not be entitled to operate under the protection of this plan, and shall be subject to administration and curtailment in accordance with the laws, rules, and regulations of the State of Colorado. Pursuant to C.R.S. §37-92-305(8), the State Engineer shall curtail all out-of-priority diversions which are not so replaced as to prevent injury to vested water rights. In order for this plan for augmentation to operate, return flows from the septic systems discussed herein shall at all times during pumping be in an amount sufficient to replace the amount of stream depletions. Applicant shall be required to have any wells pumping on the Applicant's Property providing water for in-house uses and generating septic system returns prior to pumping the wells for any of the other uses identified in Paragraphs 20 or 23.A.

43. The Court retains continuing jurisdiction over this matter to make adjustments in the allowed average annual amount of withdrawal from the Denver Basin aquifers, either upwards or downwards, to conform to actual local aquifer characteristics, and the Applicant need not file a new application to request such adjustments.



A. At such time as adequate data may be available, Applicant or the State Engineer may invoke the Court's retained jurisdiction as provided in this Paragraph 43 for purposes of making a final determination of water rights as to the quantities of water available and allowed average annual withdrawals from any of the Denver Basin aquifers quantified and adjudicated herein. Any person seeking to invoke the Court's retained jurisdiction for such purpose shall file a verified petition with the Court setting forth with particularity the factual basis for such final determination of Denver Basin water rights under this decree, together with the proposed decretal language to effect the petition. Within four months of the filing of such verified petition, the State Engineer's Office shall utilize such information as available to make a final determination of water rights finding, and shall provide such information to the Court, Applicant, opposers, and the petitioning party.

B. If no protest is filed with the Court to such findings by the State Engineer's Office within sixty (60) days, this Court shall incorporate by entry of an Amended Decree such "final determination of water rights", and the provisions of this Paragraph 43 concerning adjustments to the Denver Basin ground water rights based upon local aquifer conditions shall no longer be applicable. In the event of a protest being timely filed, or should the State Engineer's Office make no timely determination as provided in Paragraph 43.A., above, the "final determination of water rights" sought in the petition may be made by the Water Court after notice to all parties and following a full and fair hearing, including entry of an Amended Decree, if applicable in the Court's reasonable discretion.

44. Pursuant to C.R.S. §37-92-304(6), the Court shall retain continuing jurisdiction over the plan for augmentation decreed herein for reconsideration of the question of whether the provisions of this decree are necessary and/or sufficient to prevent injury to vested water rights of others, as pertains to the use of Denver Basin groundwater supplies adjudicated herein for augmentation purposes. The court also retains continuing jurisdiction for the purpose of determining compliance with the terms of the augmentation plan, including the requirement to construct a well in the Laramie-Fox Hills aquifer as described in Paragraph 25. The Court further retains jurisdiction should the Applicant later seek to amend this decree by seeking to prove that post-pumping depletions are noninjurious, that the extent of replacement for post-pumping depletions is less than the amount of water reserved herein, and other post-pumping matters addressed in Paragraph 23.D. The Court's retained jurisdiction may be invoked using the process set forth in Paragraph 47.

45. As pertains to the Denver Basin groundwater supplies, the Court shall retain continuing jurisdiction for so long as Applicant is required to replace depletions to the Arkansas River system, to determine whether the replacement of depletions to the Arkansas River system instead of the South Platte River system is causing injury to water rights tributary to the South Platte River system.

46. Any person may invoke the Court's retained jurisdiction at any time that Applicant is causing depletions, including ongoing post-pumping depletions, to the South Platte River system and is replacing such depletions to only the Arkansas River system. Any person seeking to invoke the Court's retained jurisdiction shall file a verified petition with the Court setting forth with particularity the factual basis for the alleged injury and to request that the Court reconsider injury to petitioners' vested water rights associated with the above replacement of depletions under this decree, together with the proposed decretal language to effect the petition. The party filing the petition shall have the burden of proof going forward to establish a prima facie case based on the facts alleged in the petition and that Applicant's failure to replace depletions to the South Platte River system is causing injury to water rights owned by that party invoking the Court's retained jurisdiction, except that the State and Division Engineer may invoke the Court's retained jurisdiction by establishing a prima facie case that injury is occurring to any vested or conditionally decreed water rights in the South Platte River system due to the location of Applicant's replacement water. If the Court finds that those facts are established, the Applicant shall thereupon have the burden of proof to show (i) that petitioner is not injured, or (ii) that any modification sought by the petitioner is not required to avoid injury to the petitioner, or (iii) that any term or condition proposed by Applicant in response to the petition does avoid injury to the petitioner. The Division of Water Resources as a petitioner shall be entitled to assert injury to the vested water rights of others.

47. Except as otherwise specifically provided in Paragraphs 43-46, above, pursuant to the provisions of C.R.S. §37-92-304(6), this plan for augmentation decreed herein shall be subject to the reconsideration of this Court on the question of injury to vested water rights of others from the date of entry of this decree until five years following the date when Applicant has provided notice to the court and opposers that at least 70% of the wells are completed in the Dawson aquifer and pumping regularly. Any person, within such period, may petition the Court to invoke its retained jurisdiction. Any person seeking to invoke the Court's retained jurisdiction shall file a verified petition with the Court setting forth with particularity the factual basis for requesting that the Court reconsider injury to petitioner's vested water rights associated with the operation of this decree, together with proposed decretal language to effect the petition. The party filing the petition shall have the burden of proof of going forward to establish a prima facie case based on the facts alleged in the petition. If the Court finds those facts are established, Applicant shall thereupon have the burden of proof to show: (i) that the petitioner is not injured, or (ii) that any modification sought by the petitioner is not required to avoid injury to the petitioner, or (iii) that any term or condition proposed by Applicant in response to the petition does avoid injury to the petitioner. The Division of Water Resources as a petitioner shall be entitled to assert injury to the vested water rights of others. If no such petition is filed within such period and the retained jurisdiction period is not extended by the Court in accordance with the provisions of the statute, this matter shall become final on the question of injury to vested water rights of

others under its own terms, although the Court retains continuing jurisdiction as specifically provided in Paragraphs 43-46.

48. Pursuant to C.R.S. §37-92-502(5)(a), the Applicant shall install and maintain such water measurement devices and recording devices as are deemed necessary by the State Engineer or Division Engineers, and the same shall be installed and operated in accordance with instructions from said entities. Applicant is to install and maintain a totalizing flow meter on each of Bartels Wells Nos. 1 through 7, or any additional or replacement wells associated therewith and are required to include geophysical logging on each well. Applicant shall read and record their well meter readings on April 1<sup>st</sup> and November 1<sup>st</sup> of each year and shall submit their meter readings to the Water Commissioner by April 15<sup>th</sup> and November 15<sup>th</sup> of each year or more frequently as requested by the Water Commissioner.

49. The vested water rights, water right structures, and plan for augmentation decreed herein shall be subject to all applicable administrative rules and regulations, as currently in place or as may in the future be promulgated, of the offices of Colorado State and Division Engineers for administration of such water rights, to the extent such rules and regulations are uniformly applicable to other similarly situated water rights and water users. Bartels Well No. 1 shall be permitted as a non-exempt structure under the plan for augmentation decreed herein. The State Engineer shall identify in any permits issued pursuant to this decree the specific uses which can be made of the groundwater to be withdrawn, and, to the extent the well permit application requests a use that has not been specifically identified in this decree, shall not issue a permit for any proposed use, which use the State Engineer determines to be speculative at the time of the well permit application or which would be inconsistent with the requirements of this decree, any separately decreed plan for augmentation, or any modified decree and augmentation plan.

50. This Ruling of Referee, when entered as a decree of the Water Court, shall be recorded in the real property records of El Paso County, Colorado. Copies of this ruling shall be mailed as provided by statute.

DATED THIS 14th day of August, 2020.

BY THE REFEREE:



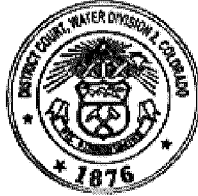
Kate Brewer, Water Referee  
Water Division 2




## DECREE

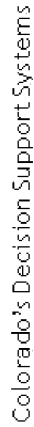
THE COURT FINDS THAT NO PROTEST WAS MADE IN THIS MATTER, THEREFOR THE FORGOING RULING IS CONFIRMED AND APPROVED, AND IS HEREBY MADE THE JUDGMENT AND DECREE OF THIS COURT.

Dated: September 21, 2020



BY THE COURT:

  
\_\_\_\_\_  
LARRY C. SCHWARTZ, WATER JUDGE  
WATER DIVISION 2



# Exhibit A



**EL PASO COUNTY - COLORADO**

5219000059  
6170 OLD RANCH RD

**OVERVIEW**

Owner:	BARTELS SARAH BARKER TRUST
Mailing Address:	3647 TUSCANNA GRV COLORADO SPRINGS CO, 80920
Location:	6170 OLD RANCH RD
Tax Status:	Taxable
Zoning:	RR-5
Plat No:	-
Legal Description:	TRACT IN SW4 OF SEC 19-12-65 AS FOLS, BEG AT A PT 3300 FT W + 30 FT N OF SE COR OF SD SEC, TH W + PARA TO S LN OF SD SEC 660 FT, N + PARA TO E LN OF SEC TO A PT 30 FT S OF E-W C/L OF SEC, E PARA TO SD E-W C/L 660 FT, TH S PARA TO E LN OF SEC TO POB

**LAND DETAILS**

Sequence Number	Land Use	Assessment Rate	Area	Market Value
1	SINGLE FAMILY RES.	7.150	39.09 Acres	\$444,100
2	WELL AND SEPTIC	7.150	0	\$5,000



**Disclaimer**

We have made a good-faith effort to provide you with the most recent and most accurate information available. However, if you need to use this information in any legal or official venue, you will need to obtain official copies from the Assessor's Office. Do be aware that this data is subject to change on a daily basis. If you believe that any of this information is incorrect, please call us at (719) 520-6600.

<div>FORM NO. GWS-11 9/79</div> <div>STATE OF COLORADO OFFICE OF THE STATE ENGINEER 818 Centennial Bldg., 1313 Sherman St., Denver, Colorado 80203 (303) 860-3581</div>		<div>For Office Use only</div> <div>RECEIVED</div> <div>DEC 13 '94</div> <div>WATER RESOURCES STATE ENGINEER COLO.</div>	
PRIOR TO COMPLETING FORM, SEE INSTRUCTIONS ON REVERSE SIDE			
CHANGE IN OWNERSHIP/ADDRESS / LOCATION			
WELL PERMIT, LIVESTOCK TANK OR EROSION CONTROL DAM			
1. NEW OWNER			
NAME(S) <u>Mary Nash</u>			
Mailing Address <u>6170 Old Ranch Old</u>			
City, St. Zip <u>Colorado Springs, CO 80908</u>			
Phone (719) <u>495-</u>			
2. THIS CHANGE IS FOR ONE OF THE FOLLOWING:			
<input checked="" type="checkbox"/> WELL PERMIT NUMBER <u>87527</u>			
<input type="checkbox"/> LIVESTOCK WATER TANK NUMBER			
<input type="checkbox"/> EROSION CONTROL DAM NUMBER			
3. WELL LOCATION: COUNTY <u>E.L. Paso</u> OWNER'S WELL DESIGNATION <u>Domestic</u>			
<u>6170 Old Ranch Road, Colorado Springs, CO 80908</u>			
(Address) (City) (State) (Zip)			
<u>SE</u> 1/4 of the <u>SW</u> 1/4, Sec. <u>19</u> Twp. <u>12</u> <input type="checkbox"/> N. or <input checked="" type="checkbox"/> S., Range <u>65</u> <input type="checkbox"/> E. or <input checked="" type="checkbox"/> W. <u>64</u> P.M.			
Distances from Section Lines <u>600</u> Ft. from <input type="checkbox"/> N. or <input checked="" type="checkbox"/> S. Line, <u>1600</u> Ft. from <input type="checkbox"/> E. or <input checked="" type="checkbox"/> W. Line.			
Subdivision <u>See attached</u> Lot Block Filing (Unit)			
4. LIVESTOCK TANK OR EROSION CONTROL DAM LOCATION: COUNTY			
1/4, Sec. Twp. <input type="checkbox"/> N. or <input type="checkbox"/> S., Range <input type="checkbox"/> E. or <input type="checkbox"/> W. P.M.			
5. The above listed owner(s) say(s) that he (they) own the structure described herein.			
The existing record is being amended for the following reason(s):			
<input type="checkbox"/> Change in name of owner. <input type="checkbox"/> Change in mailing address. <input checked="" type="checkbox"/> Correction of location.			
6. I (we) have read the statements made herein, know the contents thereof, and state that they are true to my (our) knowledge.			
(Pursuant to Section 24-4-104 (13)(a) C.R.S., the making of false statements herein constitutes perjury in the second degree and is punishable as a class 1 misdemeanor.)			
Name/Title (Please type or print)		Signature	Date
<u>Mary Nash /owner</u>		<u>Mary Nash</u>	<u>12-8-94</u>
FOR OFFICE USE ONLY			
ACCEPTED AS A CHANGE IN OWNERSHIP AND/OR MAILING ADDRESS.			
<u>He D. Simpson</u>		<u>[Signature]</u>	<u>MAY 30 1995</u>
State Engineer		By	Date
Court Case No.		Div. <u>2</u> Co. <u>21</u> WD <u>10</u> Basin MD Use	

CHECKS TRM378649 121394 20.00 DIV OF WATER RESOURCES

**COLORADO DIVISION OF WATER RESOURCES**  
300 Columbine Bldg., 1845 Sherman St., Denver, Colorado 80203

62B

x

**RECEIVED****NOV 09 '76**WATER RESOURCES  
STATE ENGINEER  
COLO.**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  
☒ A PERMIT TO CONSTRUCT A WELL  
☒ A PERMIT TO INSTALL A PUMP

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

**(1) APPLICANT - mailing address**

NAME Mrs. Edwin Nash  
STREET P.O. B. 45  
CITY Mayman, Okla. 73942  
(State) (Zip)  
TELEPHONE NO. \_\_\_\_\_

FOR OFFICE USE ONLY: DO NOT WRITE IN THIS COLUMN

Receipt No. 752501

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.

**APPROVED FOR HOUSEHOLD USE ONLY, FOR ONE (1) SINGLE FAMILY DWELLING AND NOT TO BE USED FOR IRRIGATION. THE RETURN FLOW FROM THE USE OF THIS WELL MUST BE RETURNED TO THE SAME STREAM SYSTEM IN WHICH THE WELL IS LOCATED.**  
THE MUNICIPAL OR COUNTY GOVERNMENT SHALL BE CONSULTED WHEN LOCATING THIS WELL, AND THEIR REGULATIONS SHALL BE COMPLIED WITH.

**(2) LOCATION OF PROPOSED WELL**

County El Paso  
SW  $\frac{1}{4}$  of the SW  $\frac{1}{4}$ , Section 19  
Twp. 12 S, Rng. 65 W, 6TH P.M.  
(N.S) (E.W)

**(3) WATER USE AND WELL DATA**Proposed maximum pumping rate (gpm) 10Average annual amount of ground water to be appropriated (acre-feet): 1Number of acres to be irrigated: NoneProposed total depth (feet): 400

Aquifer ground water is to be obtained from:

ALLUVIUM

Owner's well designation \_\_\_\_\_

**GROUND WATER TO BE USED FOR:**

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

DETAIL THE USE ON BACK IN (11)

**(4) DRILLER**

Name M. B. Dily Co  
Street Rk  
City Calhan, Colo 80808  
(State) (Zip)  
Telephone No. 1-683-2371 Lic. No. 69

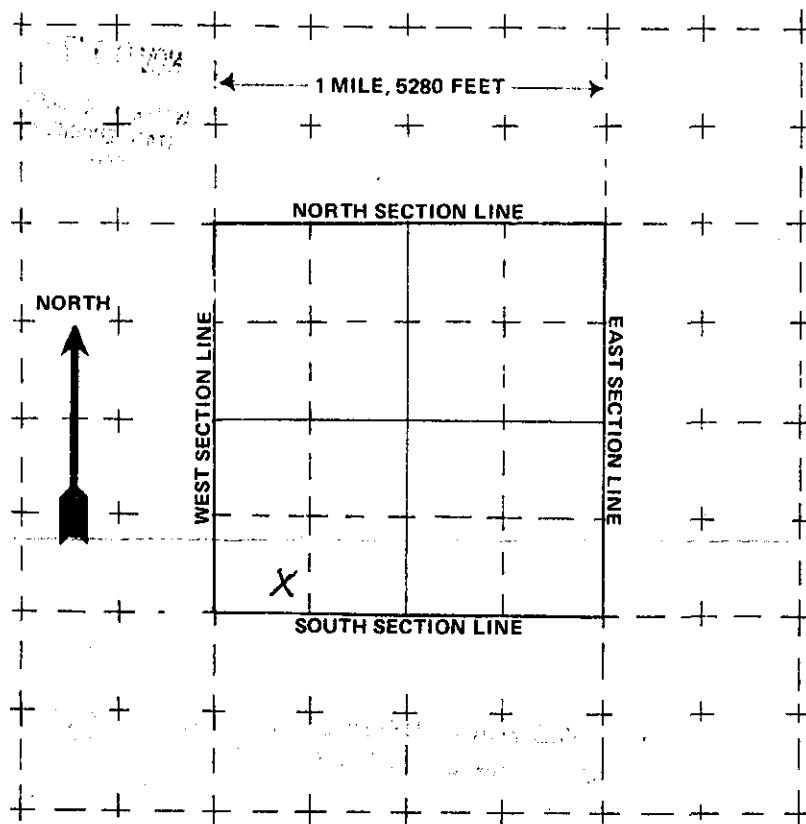
**APPLICATION APPROVED**PERMIT NUMBER 87527DATE ISSUED DEC 01 1976EXPIRATION DATE DEC 01 1978

Bruce E. DeBune  
DEPUTY (STATE ENGINEER)

BY John M. GodI.D. 2-10 COUNTY 21



(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.

600 ft. from SOUTH sec. line  
(north or south)  
600 ft. from WEST sec. line  
(east or west)

LOT \_\_\_\_\_ BLOCK \_\_\_\_\_ FILING # \_\_\_\_\_

SUBDIVISION \_\_\_\_\_

(7) TRACT ON WHICH WELL WILL BE LOCATED

Owner: C. EDWIN NASH

No. of acres 40. Will this be the only well on this tract? yes

(8) PROPOSED CASING PROGRAM

Plain Casing

4 1/2 in. from 0 ft. to 125 ft.

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

Perforated casing

4 1/2 in. from 125 ft. to 400 ft.

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

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

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

Owner(s): C. Edwin Nash and Mary Nash

No. of acres: 40

Legal description: SE of SEC. 19, Township 12 South, Range 65

(11) DETAILED DESCRIPTION of the use of ground water: Household use and domestic wells must indicate type of disposal system to be used.

Household - County approved Disposal System.

(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

None

Range Hold Hold

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

C. Edwin Nash - Mary Nash  
SIGNATURE OF APPLICANT(S)

NOV 23 1965

448355

HARJET BEAT

Best Copy Available  
DCS/IMU

# Warranty Deed

(STATUTORY FORM)

DEC 13 '94

WATER RESOURCES  
STATE ENGINEER  
CITY

Know all Men by these Presents, That we, FRED WOLF and  
MACELLE WOLF  
of the County of El Paso and State of Colorado, for the  
consideration of One Dollar and other good and valuable considerations, in hand paid, hereby sell  
and convey to C. EDWIN NASH and MARY NASH, as joint tenants,

of the County of El Paso and State of Colorado, the  
following Real Property situate in the County of El Paso and State of  
Colorado, to-wit:

Commencing at the Southeast corner of Section 19, Township  
12 South, Range 65 West of the 6th P.M., thence West along  
the South line of said section, a distance of 3300 feet;  
thence North parallel to the East line of said section, a  
distance of 30 feet for the point of beginning of the tract  
to be described hereby; thence West and parallel with the  
South line of said section, a distance of 660 feet; thence  
North and parallel with the East line of said section to a  
point which is 30 feet South of the East-West center line  
of said section; thence East and parallel with said East-West  
center line, a distance of 660 feet; thence South and parallel  
to the East line of said section to the point of beginning,

with all its appurtenances and warrant the title to the same, except  
rights of way, reservations and conditions of record, and 1965 real  
property taxes. The said grantees, for themselves, their successors  
and assigns, covenant and agree with the said grantors, their  
successors and assigns, as follows:

1. That no more than four dwellings shall be constructed on the  
tract hereby conveyed, and such dwellings shall be single family  
residences only.

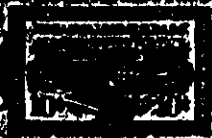
2. That the tract shall be used for residential purposes only.

3. That no dogs shall be raised, bred or kept on the tract.

Page 1 of 35



8th day of September 1965



FRED WOLF

*Fred Wolf*

MACELLE WOLF

*Macelle Wolf*

STATE OF COLORADO

County of El Paso

STATUTORY ACKNOWLEDGMENT

The foregoing instrument was acknowledged before me  
this 8th day of September, 1965  
by Fred Wolf and Macelle Wolf.

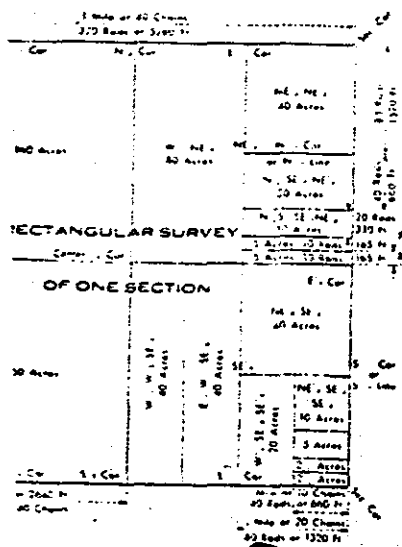


Witness my hand and official seal.

My commission expires June 2, 1966

*Mary Ellen Hall*

NOTARY PUBLIC



RECEIVED

DEC 13 1964

WATER RESOURCES  
STATE ENGINEERING

REVISED

9/79

9/81

Q/83

SCALE OF FEET



REY

S. (10)

8

**B**

SUB.  
002

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C  
E  
D

SUB.  
2

455.14

330

330

330

660

2/02

52190-0

## COLORADO DIVISION OF WATER RESOURCES

300 Columbine Bldg., 1845 Sherman St.  
Denver, Colorado 80203THIS FORM MUST BE SUBMITTED  
WITHIN 60 DAYS OF COMPLETION  
OF THE WORK DESCRIBED HERE-  
ON. TYPE OR PRINT IN BLACK  
INK.

## WELL COMPLETION AND PUMP INSTALLATION REPORT

PERMIT NUMBER 87527WELL OWNER Mr + Mrs. Edwin Nash SW ¼ of the SW ¼ of Sec. 19ADDRESS P.O. Box 45 Gayman OKla 73944 12 S, R. 65 W, 6th P.M.DATE COMPLETED 1-12, 1978

## HOLE DIAMETER

8" in. from 0 to 460 ft.7 7/8 in. from 460 to 579 ft.

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

DRILLING METHOD Rotary

CASING RECORD: Plain Casing

Size 6 5/8 & kind Steel from 0 to 6' ft.Size 4 1/2 & kind Steel from 6 to 460 ft.

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

## Perforated Casing

Size 4 1/2 & kind Steel from 460 to 579 ft.

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

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

## GROUTING RECORD

Material CementIntervals 0-10Placement Method pouredGRAVEL PACK: Size 3/8 -

Interval \_\_\_\_\_

## TEST DATA

Date Tested 1-12, 1978Static Water Level Prior to Test 360 ft.Type of Test Pump BailedLength of Test 2 1/2 hrSustained Yield (Metered) 15Final Pumping Water Level 530

## WELL LOG

From	To	Type and Color of Material	Water Loc.
0	2	top Soil	
2	207	Sand gravel + Clay	
207	280	Shale layers + Sand Stone	
280	282	Sand Stone	
282	330	Shale	
330	339	Sand Stone	
339	425	Shale	
425	428	Sand Stone	
428	450	Shale	
450	455	Sand Stone	
455	465	Shale	
465	497	Sand Stone	
497	510	Shale	
510	513	Sand Stone	
513	515	Shale	
515	523	Sand Stone	
523	530	Shale	
530	541	Sand Stone	
541	555	Shale	
555	570	Sand Stone	
570	579	Shale	
TOTAL DEPTH <u>579</u>			

Use additional pages necessary to complete log.

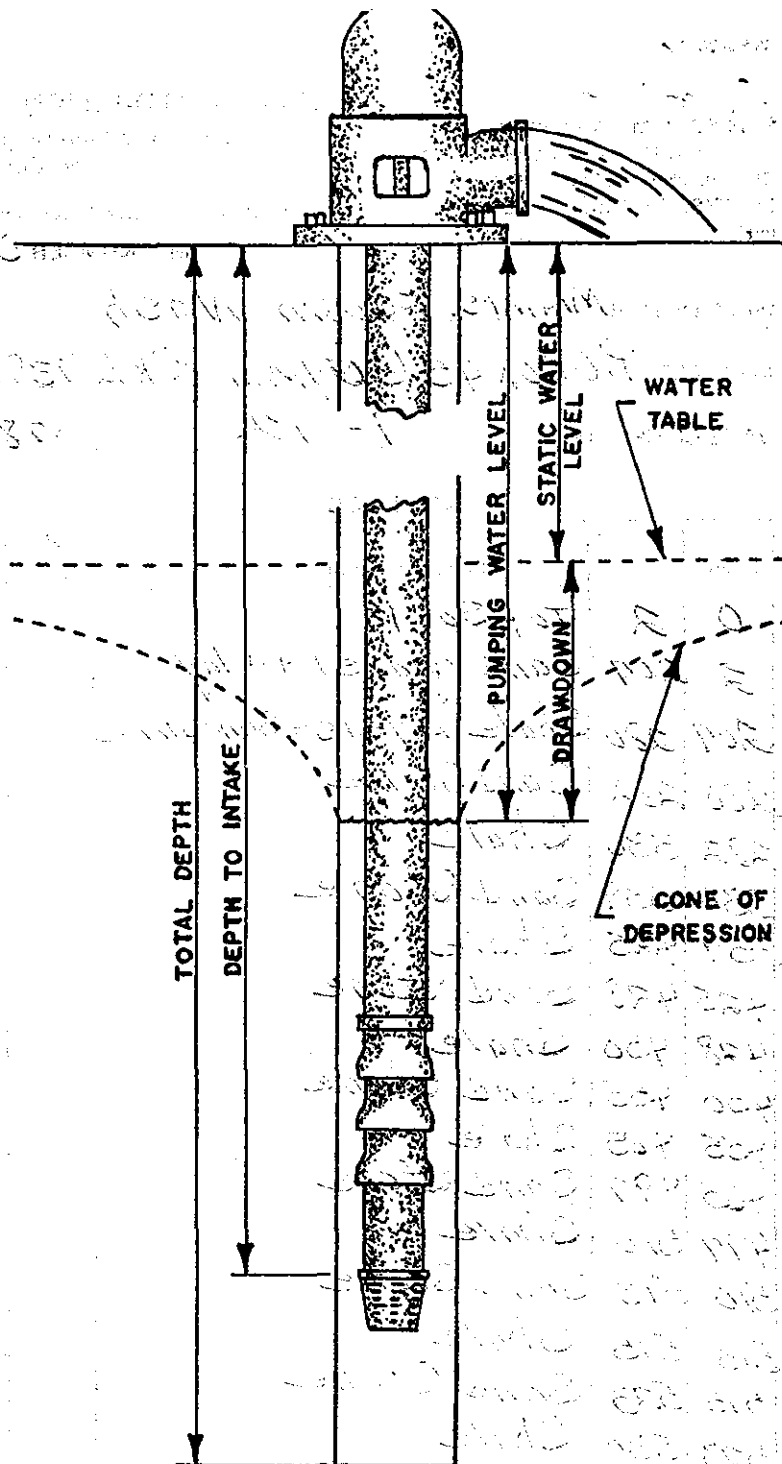
APR 27 1978  
WATER RESOURCES  
STATE ENGINEER  
BOLD

# PUMP INSTALLATION REPORT

Pump Make Berkeley  
 Type Subm 4BL-35  
 Powered by 6/1c HP 3  
 Pump Serial No. 7779351  
 Motor Serial No. "  
 Date Installed 1-17-78  
 Pump Intake Depth 504  
 Remarks \_\_\_\_\_

## WELL TEST DATA WITH PERMANENT PUMP

Date Tested \_\_\_\_\_  
 Static Water Level Prior to Test 360  
 Length of Test \_\_\_\_\_ Hours  
 Sustained yield (Metered) \_\_\_\_\_ GPM  
 Pumping Water Level \_\_\_\_\_  
 Remarks No flow yet



## 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 J. R. Hamacher License No. 71  
 State of Colorado, County of Elbert SS  
 Subscribed and sworn to before me this 13 day of Feb, 1978.  
 My Commission expires: Dec 6, 1978.  
 Notary Public Bennie Dalores Hamacher

## Analytical Results

**TASK NO: 210416045**

**Report To:** David R Gorman, P.E.

**Company:** Monument Valley Engineers - MVE Civil  
1903 Lelaray St  
Suite 200  
Colorado Springs CO 80909

**Bill To:** David R Gorman, P.E.

**Company:** Monument Valley Engineers - MVE Civil  
1903 Lelaray St  
Suite 200  
Colorado Springs CO 80909

**Task No.:** 210416045  
**Client PO:**  
**Client Project:** 61148

**Date Received:** 4/16/21  
**Date Reported:** 4/30/21  
**Matrix:** Water - Drinking

Lab Number	Customer Sample ID	Sample Date/Time	Test	Result	Method	Date Analyzed
210416045-01C	MVE - 61148	4/16/21 8:45 AM	Total Coliform	<b>Absent</b>	SM 9223	4/17/21
			E-Coli	<b>Absent</b>	SM 9223	4/17/21

**Abbreviations/ References:**

*Absent = Coliform Not Detected*

*Present = Coliform Detected - Chlorination Recommended*

*Date Analyzed = Date Test Completed*

*SM = "Standard Methods for the Examination of Water and Wastewater"; APHA; 19th Edition; 1995*



DATA APPROVED FOR RELEASE BY

# Drinking Water Chain of Custody



Report To Information		Bill To Information (If different from report to)		Project Information	
Company Name: Monument Valley Engineers	Company Name:	PWSID:	System Name: 61148		
Contact Name: Michael Kenner	Contact Name:	Address:	Compliance Samples: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Address: 1403 LeLaney St Ste 200	City: CO	State: CO	Send Results to CDPHE: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
City: Colorado Springs	Zip: 80907	Phone: 719 635 5736	Task Number (Lab Use Only)		
Phone: 719 635 5736	Email: Mike K@mvecivil.com	CAL Task			
Sample Collector: Michael Kenner	Sample Collector Phone: 381960 1143	210416045			
		JML			

Commerce City Lab  
10411 Heinz Way  
Commerce City CO 80640  
Lakewood Service Center  
12860 W. Cedar Dr, Suite 100A  
Lakewood CO 80228  
Phone: 303-659-2313  
www.coloradolab.com

PHASE I, II, V Drinking Water Analyses (check requested analysis)										Subcontract Analyses																				
Date	Time	Client Sample ID / Sample Pt ID	No. of Containers	Residual Chlorine (mg/L)	Total Coliform P/A	504.1 EDB/DBP	505 Pests/PCBs	515.4 Herbicides	524.2 VOCs	525.2 SOCs-Pest	53.1.1 Carbamates	547 Glyphosate	548.1 Endothal	549.2 Diquat	524.2 TTHMs	552.2 HAA5s	Lead/Copper	Nitrate	Nitrite	Fluoride	Inorganics	Alk./Lang. Index (Circle)	TOC, DOC (Circle)	SUVA, UV 254 (Circle)	Gross Alpha/Beta	Radium 226/228	Radon	Uranium	Chloride	
4/16	8:45	001																												
4/16	8:45	002																												
4/16	8:45	003																												
4/16	8:45	004																												
4/16	8:45	005																												
4/16	8:45	006																												
4/16	8:45	007																												
4/16	8:45	008																												
4/16	8:45	009																												

Instructions: 2 P/A containers received, per Michael only analyze one - W  
C2BO 21040026

Delivered Via: Hand  
Relinquished By: 4/16/11 11:06 AM  
Received By: 4/16/11 11:06 AM  
Date/Time: 4/16/11 11:06 AM  
Date/Time: 4/16/11 11:06 AM

Seals Present Yes ☐ No ☐ Headspace Yes ☐ No ☐  
Temp. °C / Ice 7.4 4  
Sample Pres. Yes ☒ No ☐  
Received By: Date/Time:



CAL Task  
210416045

JML

## Bottle Order Test Detail

Order ID: QBO21040026

Date Created: 4/8/21

**Ship To:** Monument Valley Engineers - MVE Civil  
1903 Lelaray St  
Suite 200  
Colorado Springs CO 80909

**Shipping Options:**

Ship Via: UPS

Cooler: Yes

Chain of Custody

Drinking Water: 2

Standard:

**Attention:** Michael Kenna

719-635-5736

**\*\*Verify All Shipping Addresses\*\***

**Customer Needs By: 4/12/21**

**Ships From: Commerce City**

Project:

Qty.	Bottle / Preservative / Test
2	100 ml sterile - Na2SO4 Total Coliform P/A - Water - Drinking

2	1l Cylinder - <del>HNO3</del> <i>unpreserved</i> Gross Alpha/Beta (Sub) - Water - Drinking
---	---

2	3 - 1L Cylinder - <del>HNO3</del> <i>unpreserved</i> Radium 226 (Sub) - Water - Drinking Radium 228 (Sub) - Water - Drinking
---	--

2	500 ml Cylinder - HNO3 Ag - Total - Water - Drinking Al - Total - Water - Drinking As - Total - Water - Drinking Ba - Total - Water - Drinking Be - Total - Water - Drinking Cd - Total - Water - Drinking Cr - Total - Water - Drinking Fe - Total - Water - Drinking Hg - Water - Drinking Mn - Total - Water - Drinking Sb - Total - Water - Drinking Se - Total - Water - Drinking Tl - Total - Water - Drinking
---	---

**\*\*Samples should be shipped or hand delivered the same day as they are collected.**

**Internal Shipping Instructions:**

Customer has requested two cooler for two different projects. 1 set of containers in each cooler

10411 Heinz Way / Commerce City, CO 80640 / 303-659-2313  
Mailing Address: P.O. Box 507 / Brighton, CO 80601-0507



# CAL Task

**Ship To:** Monument Valley Engineers - MVE Civil  
1903 Lelaray St  
Suite 200  
Colorado Springs CO 80909

210416045

JML

## Shipping Options:

Ship Via: UPS

Cooler: Yes

Chain of Custody

Drinking Water: 2

Standard:

**Attention:** Michael Kenna

719-635-5736

**\*\*Verify All Shipping Addresses\*\***

**Customer Needs By: 4/12/21**

**Ships From: Commerce City**

Project:

**Qty. Bottle / Preservative / Test**  
Zn - Total - Water - Drinking

2 500 ml Cylinder - NaOH  
Cyanide-Total - Water - Drinking

2 500 ml Cylinder - Unpreserved  
Chloride - Water - Drinking  
Fluoride - Water - Drinking  
Langelier Index - Water - Drinking  
Nitrate Nitrogen - Water - Drinking  
Nitrate/ Nitrite Nitrogen - Water - Drinking  
Nitrite Nitrogen - Water - Drinking  
Sulfate - Water - Drinking

**\*\*Samples should be shipped or hand delivered the same day as they are collected.**

### Internal Shipping Instructions:

Customer has requested two cooler for two different projects. 1 set of containers in each cooler.

10411 Heinz Way / Commerce City, CO 80640 / 303-659-2313  
Mailing Address: P.O. Box 507 / Brighton, CO 80601-0507

## Analytical Results

**TASK NO: 210416045**

**Report To:** David R Gorman, P.E.

**Company:** Monument Valley Engineers - MVE Civil  
1903 Lelaray St  
Suite 200  
Colorado Springs CO 80909

**Bill To:** David R Gorman, P.E.

**Company:** Monument Valley Engineers - MVE Ci  
1903 Lelaray St  
Suite 200  
Colorado Springs CO 80909

**Task No.:** 210416045  
**Client PO:**  
**Client Project:** 61148

**Date Received:** 4/16/21  
**Date Reported:** 4/30/21  
**Matrix:** Water - Drinking

**Customer Sample ID** MVE - 61148

**Sample Date/Time:** 4/16/21 8:45 AM

**Lab Number:** 210416045-01

Test	Result	Method	ML	Date Analyzed	Analyzed By
Bicarbonate	59.0 mg/L as CaCO <sub>3</sub>	SM 2320-B	4	4/20/21	ECM
Calcium as CaCO <sub>3</sub>	45.1 mg/L	EPA 200.7	0.1	4/20/21	MLT
Carbonate	< 4 mg/L as CaCO <sub>3</sub>	SM 2320-B	4	4/20/21	ECM
Hydroxide	< 4 mg/L as CaCO <sub>3</sub>	SM 2320-B	4	4/20/21	ECM
Langelier Index	-0.80 units	SM 2330-B		4/30/21	SAN
pH	7.55 units	SM 4500-H-B	0.01	4/16/21	MBN
Temperature	20 °C	SM 4500-H-B	1	4/16/21	MBN
Total Alkalinity	59.0 mg/L as CaCO <sub>3</sub>	SM 2320-B	4	4/20/21	ECM
Total Dissolved Solids	123 mg/L	SM 2540-C	5	4/22/21	ISG

**Abbreviations/ References:**

ML = Minimum Level = LRL = RL  
mg/L = Milligrams Per Liter or PPM  
ug/L = Micrograms Per Liter or PPB  
mpn/100 mls = Most Probable Number Index/ 100 mls  
Date Analyzed = Date Test Completed



DATA APPROVED FOR RELEASE BY

# Drinking Water Chain of Custody



LABORATORIES, INC.

Report To Information		Bill To Information (If different from report to)		Project Information	
Company Name: Monument Valley Engineers		Company Name:		PWSID:	
Contact Name: Michael Kenner		Contact Name:		System Name: 61148	
Address: 1403 LeLaney St Ste 200		Address:		Compliance Samples: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
City: Cedar Rapids State: CO Zip: 50907		City: State: Zip:		Send Results to CDPHE: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Phone: 719 635 5736		Phone:		Task Number (Lab Use Only)	
Email: Mike K@mvecivil.com		Email:		CAL Task	
Sample Collector: Michael Kenner		Sample Collector:		210416045	
Sample Collector Phone: 381960 1143		Sample Collector Phone:		JML	

Commerce City Lab  
10411 Heinz Way  
Commerce City CO 80640  
Lakewood Service Center  
12860 W. Cedar Dr, Suite 100A  
Lakewood CO 80228  
Phone: 303-659-2313  
www.coloradolab.com

PHASE I, II, V Drinking Water Analyses (check requested analysis)										Subcontract Analyses																					
Date	Time	Client Sample ID / Sample Pt ID	No. of Containers	Residual Chlorine (mg/L)	Total Coliform P/A	504.1 EDB/DBP	505 Pests/PCBs	515.4 Herbicides	524.2 VOCs	525.2 SOCs-Pest	53.1.1 Carbamates	547 Glyphosate	548.1 Endothal	549.2 Diquat	524.2 TTHMs	552.2 HAAs	Lead/Copper	Nitrate	Nitrite	Fluoride	Inorganics	Alk./Lang. Index (Circle)	TOC, DOC (Circle)	SUVA, UV 254 (Circle)	Gross Alpha/Beta	Radium 226/228	Radon	Uranium	Chloride		
4/16	8:45	001																													
4/16	8:45	002																													
4/16	8:45	003																													
4/16	8:45	004																													
4/16	8:45	005																													
4/16	8:45	006																													
4/16	8:45	007																													
4/16	8:45	008																													
4/16	8:45	009																													

Instructions: 2 P/A containers received, per Michael only analyze one - W  
CBO 21040026

Delivered Via: Hand  
Relinquished By: 4/16/11 11:06 AM  
Received By: 4/16/11 11:06 AM  
Date/Time: 4/16/11 11:06 AM  
Date/Time: 4/16/11 11:06 AM

Seals Present Yes ☐ No ☐ Headspace Yes ☐ No ☐  
Temp. °C / Ice 7.4 4  
Sample Pres. Yes ☒ No ☐  
Received By: Date/Time:



LABORATORIES, INC.

CAL Task  
210416045

JML

## Bottle Order Test Detail

Order ID: QBO21040026

Date Created: 4/8/21

**Ship To:** Monument Valley Engineers - MVE Civil  
1903 Lelaray St  
Suite 200  
Colorado Springs CO 80909

**Attention:** Michael Kenna

719-635-5736

**\*\*Verify All Shipping Addresses\*\***

**Shipping Options:**

Ship Via: UPS

Cooler: Yes

Chain of Custody

Drinking Water: 2

Standard:

**Customer Needs By: 4/12/21**

**Ships From: Commerce City**

Project:

Qty.	Bottle / Preservative / Test
2	100 ml sterile - Na2SO4 Total Coliform P/A - Water - Drinking

2	1l Cylinder - <del>HNO3</del> <i>unpreserved</i> Gross Alpha/Beta (Sub) - Water - Drinking
---	---

2	3 - 1L Cylinder - <del>HNO3</del> <i>unpreserved</i> Radium 226 (Sub) - Water - Drinking Radium 228 (Sub) - Water - Drinking
---	--

2	500 ml Cylinder - HNO3 Ag - Total - Water - Drinking Al - Total - Water - Drinking As - Total - Water - Drinking Ba - Total - Water - Drinking Be - Total - Water - Drinking Cd - Total - Water - Drinking Cr - Total - Water - Drinking Fe - Total - Water - Drinking Hg - Water - Drinking Mn - Total - Water - Drinking Sb - Total - Water - Drinking Se - Total - Water - Drinking Tl - Total - Water - Drinking
---	---

**\*\*Samples should be shipped or hand delivered the same day as they are collected.**

**Internal Shipping Instructions:**

Customer has requested two cooler for two different projects. 1 set of containers in each cooler

10411 Heinz Way / Commerce City, CO 80640 / 303-659-2313  
Mailing Address: P.O. Box 507 / Brighton, CO 80601-0507

# CAL Task

**Ship To:** Monument Valley Engineers - MVE Civil  
1903 Lelaray St  
Suite 200  
Colorado Springs CO 80909

210416045

JML

## Shipping Options:

Ship Via: UPS

Cooler: Yes

Chain of Custody

Drinking Water: 2

Standard:

**Attention:** Michael Kenna

719-635-5736

**\*\*Verify All Shipping Addresses\*\***

**Customer Needs By: 4/12/21**

**Ships From: Commerce City**

Project:

**Qty. Bottle / Preservative / Test**  
Zn - Total - Water - Drinking

2 500 ml Cylinder - NaOH  
Cyanide-Total - Water - Drinking

2 500 ml Cylinder - Unpreserved  
Chloride - Water - Drinking  
Fluoride - Water - Drinking  
Langelier Index - Water - Drinking  
Nitrate Nitrogen - Water - Drinking  
Nitrate/ Nitrite Nitrogen - Water - Drinking  
Nitrite Nitrogen - Water - Drinking  
Sulfate - Water - Drinking

**\*\*Samples should be shipped or hand delivered the same day as they are collected.**

### Internal Shipping Instructions:

Customer has requested two cooler for two different projects. 1 set of containers in each cooler.

10411 Heinz Way / Commerce City, CO 80640 / 303-659-2313  
Mailing Address: P.O. Box 507 / Brighton, CO 80601-0507

## Analytical Results

**TASK NO: 210416045**

**Report To:** David R Gorman, P.E.

**Company:** Monument Valley Engineers - MVE Civil  
1903 Lelaray St  
Suite 200  
Colorado Springs CO 80909

**Bill To:** David R Gorman, P.E.

**Company:** Monument Valley Engineers - MVE Ci  
1903 Lelaray St  
Suite 200  
Colorado Springs CO 80909

**Task No.:** 210416045  
**Client PO:**  
**Client Project:** 61148

**Date Received:** 4/16/21  
**Date Reported:** 4/30/21  
**Matrix:** Water - Drinking

**Customer Sample ID** MVE - 61148

**Sample Date/Time:** 4/16/21 8:45 AM

**Lab Number:** 210416045-01

Test	Result	Method	ML	Date Analyzed	Analyzed By	MCL
Nitrate/ Nitrite Nitrogen	< 0.05 mg/L	Calculation	0.05 mg/L	4/20/21	MAT	
Chloride	1.1 mg/L	EPA 300.0	0.1 mg/L	4/16/21	MAT	
Fluoride	0.46 mg/L	EPA 300.0	0.10 mg/L	4/16/21	MAT	4
Nitrate Nitrogen	< 0.05 mg/L	EPA 300.0	0.05 mg/L	4/16/21	MAT	10
Nitrite Nitrogen	< 0.03 mg/L	EPA 300.0	0.03 mg/L	4/16/21	MAT	1
Sulfate	13.7 mg/L	EPA 300.0	0.1 mg/L	4/16/21	MAT	
Cyanide-Total	< 0.005 mg/L	EPA 335.4	0.005 mg/L	4/20/21	CES	0.02
<b>Total</b>						
Iron	0.026 mg/L	EPA 200.7	0.005 mg/L	4/20/21	MLT	0.3
Aluminum	< 0.001 mg/L	EPA 200.8	0.001 mg/L	4/19/21	IPC	0.05
Antimony	< 0.0012 mg/L	EPA 200.8	0.0012 mg/L	4/19/21	IPC	0.006
Arsenic	< 0.0006 mg/L	EPA 200.8	0.0006 mg/L	4/19/21	IPC	0.01
Barium	0.0213 mg/L	EPA 200.8	0.0007 mg/L	4/19/21	IPC	2
Beryllium	< 0.0001 mg/L	EPA 200.8	0.0001 mg/L	4/19/21	IPC	0.004
Cadmium	< 0.0001 mg/L	EPA 200.8	0.0001 mg/L	4/19/21	IPC	0.005
Chromium	< 0.0015 mg/L	EPA 200.8	0.0015 mg/L	4/19/21	IPC	0.1
Manganese	0.0664 mg/L	EPA 200.8	0.0008 mg/L	4/19/21	IPC	0.05
Mercury	< 0.0001 mg/L	EPA 200.8	0.0001 mg/L	4/19/21	IPC	0.002
Selenium	< 0.0008 mg/L	EPA 200.8	0.0008 mg/L	4/19/21	IPC	0.05

**Abbreviations/ References:**

ML = Minimum Level = LRL = RL

MCL = Maximum Contaminant Level per The EPA

mg/L = Milligrams Per Liter or PPM

ug/L = Micrograms Per Liter or PPB

mpn/100 mls = Most Probable Number Index/ 100 mls

Date Analyzed = Date Test Completed



DATA APPROVED FOR RELEASE BY

## Analytical Results

**TASK NO: 210416045**

**Report To:** David R Gorman, P.E.

**Company:** Monument Valley Engineers - MVE Civil  
1903 Lelaray St  
Suite 200  
Colorado Springs CO 80909

**Bill To:** David R Gorman, P.E.

**Company:** Monument Valley Engineers - MVE Ci  
1903 Lelaray St  
Suite 200  
Colorado Springs CO 80909

**Task No.:** 210416045  
**Client PO:**  
**Client Project:** 61148

**Date Received:** 4/16/21  
**Date Reported:** 4/30/21  
**Matrix:** Water - Drinking

**Customer Sample ID** MVE - 61148

**Sample Date/Time:** 4/16/21 8:45 AM

**Lab Number:** 210416045-01

Test	Result	Method	ML	Date Analyzed	Analyzed By	MCL
<i>Total</i>						
Silver	< 0.0005 mg/L	EPA 200.8	0.0005 mg/L	4/19/21	IPC	
Thallium	< 0.0002 mg/L	EPA 200.8	0.0002 mg/L	4/19/21	IPC	0.002
Zinc	0.008 mg/L	EPA 200.8	0.001 mg/L	4/19/21	IPC	5

**Abbreviations/ References:**

ML = Minimum Level = LRL = RL

MCL = Maximum Contaminant Level per The EPA

mg/L = Milligrams Per Liter or PPM

ug/L = Micrograms Per Liter or PPB

mpn/100 mls = Most Probable Number Index/ 100 mls

Date Analyzed = Date Test Completed



DATA APPROVED FOR RELEASE BY

# Drinking Water Chain of Custody



LABORATORIES, INC.

Report To Information		Bill To Information (If different from report to)		Project Information	
Company Name: Monument Valley Engineers	Company Name:	PWSID:	System Name: 61148		
Contact Name: Michael Kenner	Contact Name:	Address:	Compliance Samples: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Address: 1403 LeLaney St Ste 200	City: CO	State: CO	Send Results to CDPHE: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
City: Colorado Springs	State: CO	Zip: 80907	Task Number (Lab Use Only)		
Phone: 719 635 5736	Phone:		CAL Task		
Email: Mike K@mvecivil.com	Email:		210416045		
Sample Collector: Michael Kenner	Sample Collector:		JML		
Sample Collector Phone: 381960 1143	PO Number:				

Commerce City Lab  
10411 Heinz Way  
Commerce City CO 80640  
Lakewood Service Center  
12860 W. Cedar Dr, Suite 100A  
Lakewood CO 80228  
Phone: 303-659-2313  
www.coloradolab.com

PHASE I, II, V Drinking Water Analyses (check requested analysis)										Subcontract Analyses																					
Date	Time	Client Sample ID / Sample Pt ID	No. of Containers	Residual Chlorine (mg/L)	Total Coliform P/A	504.1 EDB/DBP	505 Pests/PCBs	515.4 Herbicides	524.2 VOCs	525.2 SOCs-Pest	53.1.1 Carbamates	547 Glyphosate	548.1 Endothal	549.2 Diquat	524.2 TTHMs	552.2 HAAs	Lead/Copper	Nitrate	Nitrite	Fluoride	Inorganics	Alk./Lang. Index (Circle)	TOC, DOC (Circle)	SUA, UV 254 (Circle)	Gross Alpha/Beta	Radium 226/228	Radon	Uranium	Chloride		
4/16	8:45	001																													
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4/16	8:45	007																													
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4/16	8:45	009																													

Instructions: 2 P/A containers received, per Michael only analyze one - 11  
C2BO 21040026

Delivered Via: Hand  
Relinquished By: 4/16/11 11:06 AM  
Received By: 4/16/11 11:06 AM  
Date/Time: 4/16/11 11:06 AM  
Date/Time: 4/16/11 11:06 AM

Seals Present Yes ☐ No ☐ Headspace Yes ☐ No ☐  
Temp. °C / Ice 7.4 4  
Sample Pres. Yes ☒ No ☐  
Received By: Date/Time:





CAL Task  
210416045

JML

## Bottle Order Test Detail

Order ID: QBO21040026

Date Created: 4/8/21

**Ship To:** Monument Valley Engineers - MVE Civil  
1903 Lelaray St  
Suite 200  
Colorado Springs CO 80909

**Shipping Options:**

Ship Via: UPS

Cooler: Yes

Chain of Custody

Drinking Water: 2

Standard:

**Attention:** Michael Kenna

719-635-5736

**\*\*Verify All Shipping Addresses\*\***

**Customer Needs By: 4/12/21**

**Ships From: Commerce City**

Project:

Qty.	Bottle / Preservative / Test
2	100 ml sterile - Na2SO4 Total Coliform P/A - Water - Drinking

2	1l Cylinder - <del>HNO3</del> <i>unpreserved</i> Gross Alpha/Beta (Sub) - Water - Drinking
---	---

2	3 - 1L Cylinder - <del>HNO3</del> <i>unpreserved</i> Radium 226 (Sub) - Water - Drinking Radium 228 (Sub) - Water - Drinking
---	--

2	500 ml Cylinder - HNO3 Ag - Total - Water - Drinking Al - Total - Water - Drinking As - Total - Water - Drinking Ba - Total - Water - Drinking Be - Total - Water - Drinking Cd - Total - Water - Drinking Cr - Total - Water - Drinking Fe - Total - Water - Drinking Hg - Water - Drinking Mn - Total - Water - Drinking Sb - Total - Water - Drinking Se - Total - Water - Drinking Tl - Total - Water - Drinking
---	---

**\*\*Samples should be shipped or hand delivered the same day as they are collected.**

**Internal Shipping Instructions:**

Customer has requested two cooler for two different projects. 1 set of containers in each cooler

10411 Heinz Way / Commerce City, CO 80640 / 303-659-2313  
Mailing Address: P.O. Box 507 / Brighton, CO 80601-0507

# CAL Task

**Ship To:** Monument Valley Engineers - MVE Civil  
1903 Lelaray St  
Suite 200  
Colorado Springs CO 80909

210416045

JML

## Shipping Options:

Ship Via: UPS

Cooler: Yes

Chain of Custody

Drinking Water: 2

Standard:

**Attention:** Michael Kenna

719-635-5736

**\*\*Verify All Shipping Addresses\*\***

**Customer Needs By: 4/12/21**

**Ships From: Commerce City**

Project:

**Qty. Bottle / Preservative / Test**  
Zn - Total - Water - Drinking

2 500 ml Cylinder - NaOH  
Cyanide-Total - Water - Drinking

2 500 ml Cylinder - Unpreserved  
Chloride - Water - Drinking  
Fluoride - Water - Drinking  
Langelier Index - Water - Drinking  
Nitrate Nitrogen - Water - Drinking  
Nitrate/ Nitrite Nitrogen - Water - Drinking  
Nitrite Nitrogen - Water - Drinking  
Sulfate - Water - Drinking

**\*\*Samples should be shipped or hand delivered the same day as they are collected.**

### Internal Shipping Instructions:

Customer has requested two cooler for two different projects. 1 set of containers in each cooler.

10411 Heinz Way / Commerce City, CO 80640 / 303-659-2313  
Mailing Address: P.O. Box 507 / Brighton, CO 80601-0507



**Hazen Research, Inc.**  
4601 Indiana Street  
Golden, CO 80403 USA  
Tel: (303) 279-4501  
Fax: (303) 278-1528

Lab Control ID: 21M01707

Received: Apr 19, 2021

Reported: May 06, 2021

Purchase Order No.

None Received

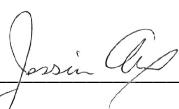
Customer ID: 20040H

Account ID: Z01034

Stuart Nielson  
Colorado Analytical Laboratories, Inc.  
10411 Heinz Way  
Commerce City, CO 80640

## ANALYTICAL REPORT

*Report may only be copied in its entirety.  
Results reported herein relate only to discrete samples  
submitted by the client. Hazen Research, Inc. does not warrant  
that the results are representative of anything other than the  
samples that were received in the laboratory*

By:   
Jessica Axen  
Analytical Laboratories Director

Customer ID: 20040H  
 Account ID: Z01034

## ANALYTICAL REPORT

Stuart Nielson  
 Colorado Analytical Laboratories, Inc.

<b>Lab Sample ID</b>			21M01707-001					
<b>Customer Sample ID</b>			210416048-01 - MVE - 61148 sampled on 04/16/21 @ 0845					
<b>Parameter</b>	<b>Units</b>	<b>Code</b>	<b>Result</b>	<b>Precision* +/-</b>	<b>Detection Limit</b>	<b>Method</b>	<b>Analysis Date / Time</b>	<b>Analyst</b>
Gross Alpha	pCi/L	T	0.4	1.0	0.1	SM 7110 B	4/22/21 @ 0955	KT
Gross Beta	pCi/L	T	<4.3	2.6	4.3	SM 7110 B	4/22/21 @ 0955	KT
Radium-226	pCi/L	T	NR	-	-	SM 7500-Ra B	-	-
Radium-228	pCi/L	T	NR	-	-	EPA Ra-05	-	-

NR - Not Requested - Analysis not requested on this sample.

Certification ID's: CO/EPA CO00008

\*Variability of the radioactive decay process (counting error) at the 95% confidence level, 1.96 sigma.

Codes: (T) = Total (D) = Dissolved (S) = Suspended (R) = Total Residual (AR) = As Received < = Less Than

Customer ID: 20040H  
 Account ID: Z01034

## ANALYTICAL REPORT

Stuart Nielson  
 Colorado Analytical Laboratories, Inc.

<b>Lab Sample ID</b>			21M01707-002					
<b>Customer Sample ID</b>			210416048-01A - MVE - 61148 sampled on 04/16/21 @ 0845					
<b>Parameter</b>	<b>Units</b>	<b>Code</b>	<b>Result</b>	<b>Precision* +/-</b>	<b>Detection Limit</b>	<b>Method</b>	<b>Analysis Date / Time</b>	<b>Analyst</b>
Gross Alpha	pCi/L	T	NR	-	-	SM 7110 B	-	-
Gross Beta	pCi/L	T	NR	-	-	SM 7110 B	-	-
Radium-226	pCi/L	T	0.4	0.2	0.1	SM 7500-Ra B	4/19/21 @ 1602	AS
Radium-228	pCi/L	T	1.5	0.9	0.2	EPA Ra-05	4/29/21 @ 1330	JR

NR - Not Requested - Analysis not requested on this sample.

Certification ID's: CO/EPA CO00008

\*Variability of the radioactive decay process (counting error) at the 95% confidence level, 1.96 sigma.

Codes: (T) = Total (D) = Dissolved (S) = Suspended (R) = Total Residual (AR) = As Received < = Less Than

HAZEN RESEARCH, INC.  
RADIOCHEMISTRY LABORATORY

Date: 04/22/2021

**Batch QC Summary Form**

Analyte: Gross Alpha

Control Standard/LFB: ID: C-11 pCi/mL: 57.4 (use 1 diluted)

Spike Solution: ID: C-11 pCi/mL: 57.4 (use 1 mL)

Spike Recovery Calculation: Sample: Tap\*

$$\text{Calculation: } \frac{(51.5) - (1.000) - (0.0)}{57.4} \times 100 = 90\%$$

Batch QC Evaluation:

Parameter	Criteria	Pass	Fail	N/A
Control Std./LFB	+/- 30 %	x		
Spike Recovery	70 - 130 %	x		
Blank	< or = 3 x Uncertainty	x		
Duplicate 1	95% confidence interval overlap	x		
Duplicate 2 *	95% confidence interval overlap			x

\* Required for batch size greater than 10 samples.

Conclusions:

    x     Batch QC Passes\*\*  
       Batch QC Fails  
       Batch QC Passes, with exceptions\*\*:

Reruns Required: \_\_\_\_\_

Narrative:

\*\*All QC data provided in this section of the report met the acceptance criteria specified in the analytical methods and procedures. State Maximum Contamination Levels (MCLs) are not evaluated in this report.

Batch Listing by Lab Control Number:

21M01678	_____
21M01700	_____
21M01701	_____
21M01702	_____
21M01707	_____
21M01711	_____
_____	_____
_____	_____
_____	_____
_____	_____

Evaluator:

*Gynnea Rockwell* \_\_\_\_\_

04/27/2021

Date

**HAZEN RESEARCH, INC.**  
**RADIOCHEMISTRY LABORATORY**

Date: 04/22/2021

**Batch QC Summary Form**

Analyte: Gross Beta

Control Standard/LFB: ID: C-11 pCi/mL: 44 (use 1 diluted)

Spike Solution: ID: C-11 pCi/mL: 44 (use 1 mL)

Spike Recovery Calculation: Sample: Tap\*

$$\text{Calculation: } \frac{(39.8) (1.000) - (0.0) (0.200)}{44} \times 100 = 90\%$$

**Batch QC Evaluation:**

Parameter	Criteria	Pass	Fail	N/A
Control Std./LFB	+/- 20 %	<b>x</b>		
Spike Recovery	80 - 120 %	<b>x</b>		
Blank	< or = 3 x Uncertainty	<b>x</b>		
Duplicate 1	95% confidence interval overlap	<b>x</b>		
Duplicate 2 *	95% confidence interval overlap			<b>x</b>

\* Required for batch size greater than 10 samples.

**Conclusions:**

    **x** Batch QC Passes\*\*  
     Batch QC Fails  
     Batch QC Passes, with exceptions\*\*:

Reruns Required: \_\_\_\_\_

Narrative:

\*\*All QC data provided in this section of the report met the acceptance criteria specified in the analytical methods and procedures. State Maximum Contamination Levels (MCLs) are not evaluated in this report.

**Batch Listing by Lab Control Number:**

21M01678	_____
21M01700	_____
21M01701	_____
21M01702	_____
21M01707	_____
21M01711	_____
_____	_____
_____	_____
_____	_____
_____	_____

Evaluator:

*Gynnea Rockwell* \_\_\_\_\_

04/27/2021

Date

HAZEN RESEARCH, INC.  
RADIOCHEMISTRY LABORATORY

Date: 04/19/2021

**Batch QC Summary Form**

Analyte: Radium-226

Control Standard/LFB: ID: NBL-6A pCi/mL: 23 (use 2 diluted)

Spike Solution: ID: NBL-6A pCi/mL: 23 (use 2 mL)

Spike Recovery Calculation: Sample: 21M01228-1c spike

$$\text{Calculation: } \frac{(52.0) (1.000) - (4.5) (1.000)}{46} \times 100 = 103\%$$

Batch QC Evaluation:

Parameter	Criteria	Pass	Fail	N/A
Control Std./LFB	+/- 20 %	x		
Spike Recovery	80 - 120 %	x		
Blank	< or = 3 x Uncertainty	x		
Duplicate 1	95% confidence interval overlap	x		
Duplicate 2 *	95% confidence interval overlap	x		

\* Required for batch size greater than 10 samples.

Conclusions:

    x     Batch QC Passes\*\*  
       Batch QC Fails  
       Batch QC Passes, with exceptions\*\*:

Reruns Required: \_\_\_\_\_

Narrative:

\*\*All QC data provided in this section of the report met the acceptance criteria specified in the analytical methods and procedures. State Maximum Contamination Levels (MCLs) are not evaluated in this report.

Batch Listing by Lab Control Number:

<u>21M01228</u>	<u>21M01674</u>
<u>21M01652</u>	<u>21M01700</u>
<u>21M01672</u>	<u>21M01701</u>
<u>21M01673</u>	<u>21M01610</u>
<u>21M01675</u>	<u>21M01707</u>
<u>21M01678</u>	<u>21M01711</u>
<u>21M01705</u>	_____
<u>21M01649</u>	_____
<u>21M01650</u>	_____
<u>21M01665</u>	_____

Evaluator:

Gynnea Rockwell

04/27/2021

Date



**HAZEN RESEARCH, INC.**  
**RADIOCHEMISTRY LABORATORY**

Date: 04/29/2021

**Batch QC Summary Form**

Analyte: Radium-228

Control Standard/LFB: ID: NBL-7A pCi/mL: 13 (use 10 diluted)

Spike Solution: ID: NBL-7A pCi/mL: 13 (use 10 mL)

Spike Recovery Calculation: Sample: 21M01736-04c

$$\text{Calculation: } \frac{(159.8) - (0.900) - (0.2) - (0.900)}{130} \times 100 = 110\%$$

**Batch QC Evaluation:**

Parameter	Criteria	Pass	Fail	N/A
Control Std./LFB	+/- 20 %	<b>x</b>		
Spike Recovery	80 - 120 %	<b>x</b>		
Blank	< or = 3 x Uncertainty	<b>x</b>		
Duplicate 1	95% confidence interval overlap	<b>x</b>		
Duplicate 2 *	95% confidence interval overlap			<b>x</b>

\* Required for batch size greater than 10 samples.

**Conclusions:**

    **x** Batch QC Passes\*\*  
     Batch QC Fails  
     Batch QC Passes, with exceptions\*\*:

Reruns Required: \_\_\_\_\_

Narrative:

\*\*All QC data provided in this section of the report met the acceptance criteria specified in the analytical methods and procedures. State Maximum Contamination Levels (MCLs) are not evaluated in this report.

**Batch Listing by Lab Control Number:**

21M01701	_____
21M01707	_____
21M01711	_____
21M01726	_____
21M01736	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Evaluator:

*Gynnes Rockwell* \_\_\_\_\_

05/05/2021

Date

Sub-Lab Chain of Custody Form

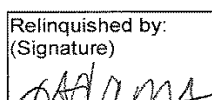
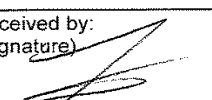
21m01707

<b>Report To Information</b> Company Name: <u>Colorado Analytical Laboratory</u> Report To: <u>Stuart Nielson</u> E-Mail: <u>stuartnielson@coloradolab.com</u>	<b>Bill To Information (If different from report to)</b>	<b>Project Name</b> <u>61148</u>
<b>Address:</b> <u>10411 Heinz Way</u> <u>Commerce City, CO 80640</u>  Phone: <u>303-659-2313</u>	<b>Address:</b>  CAL TASK 210416048  JML	<b>Compliance Samples:</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> <b>Submit Data to CDPHE:</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>

Tests Requested

Sample Date/Time		Sample ID	Matrix	Radium 226 (Sub)	Gross Alpha/Beta (Sub)	Radium 228 (Sub)											Container Type
4/16/21	8:45 AM	210416048-01 - MVE - 61148	Water - Drinking		X												11 Cylinder - HNO3
4/16/21	8:45 AM	210416048-01A - MVE - 61148	Water - Drinking	X		X											3 - 1L Cylinder - HNO3

Comment:

Relinquished by: (Signature) 	Date: Time: 4/19/21 10:20	Received by: (Signature) 	Date: Time: 4/19/21 1411	Relinquished by: (Signature)	Date: Time:	Received by: (Signature)	Date: Time:
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