

Water Resources and Water Quality Report

Table Rock Homesteads

MVE Project No. 61223
January 21, 2025
PCD File No.

Prepared for **Thaddeus Jarosz** 8550 Kenosha Dr. Colorado Springs, CO 80908 (719) 201-4515

Prepared by M.V.E., Inc. 1903 Lelaray Street, Suite 200 Colorado Springs, CO 80909 (719) 635-5736

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Introduction

This Water Resources Report describes the water supply to serve the ten (10) residential lots proposed in the Table Rock Homesteads major subdivision of 106.364+/- acres located within the southeast quarter of the northeast quarter of Section 6, Township 12 South, Range 65 West of the 6th principal meridian in El Paso County, Colorado (Subject Property). This report is intended to demonstrate the sufficiency in terms of quantity, quality, and dependability, of the water rights and resources to be utilized in the proposed subdivision. The owner intends to subdivide the parcel into ten lots. The lots are sized per the following grouping: (5) +5 acre lots, (3) +10 acre lots and (2) +20 acre lots. Each of the lots are to be provided with water and sewer service through individual wells and individual Onsite Wastewater Treatment Systems (OWTS).

A water court decree facilitated by Monson, Cummins, Shohet & Farr, LLC, attorneys at law, is attached to this report showing the decreed amounts of the Dawson aquifer groundwater, along with the Denver, Arapahoe, and Laramie-Fox aquifers' groundwater, underlying the Subject Property. There is one existing well on the property, which is permitted as an exempt well and will be referred to as Gambler Well No. 1 (Permit No. 172352-A) in this report. Wells 2-10 are proposed wells and are referred to as Gambler Wells No. 2-10 in the Decree.

The Decree approves a plan for augmentation for use of up to nine (9) wells in the Dawson aquifer to serve each lot for a 300-year water supply period. Gambler Well No.2-10 are proposed wells to be constructed following platting of the property into ten lots.

Exempt Gambler Well No. 1

The Gambler Well No. 1 will remain an exempt well for use only on one of the new lots to be created within the Table Rock Homesteads. Gambler Well No. 1 is permitted to withdraw from the not-nontributary Dawson aquifer. The priority date of the Gambler Well No. 1 shall be the appropriation date of May 31, 2004 so long as the uses of the well are limited to those uses allowed under Permit Number 172352-A. A summary of expected water demands for this well is in Table 1.

Expected Water Demands of Gambler Well No.1 & Gambler Wells No. 2-10

It is expected that nine of the residential lots in the subdivision will utilize nine individual wells (one well per lot) constructed to the Dawson aquifer for domestic type uses, including indoor use, irrigation of lawn and garden and the watering of livestock. It is anticipated that the residences on the lots will each utilize up to 0.26 acre-feet annually for indoor use (2.34 acre-feet for nine lots). It is projected that each lot will also use 4.56 acre-feet per year for irrigation of lawn and garden and the watering of livestock, as consistent with the decree in Case No. 24CW3077 and the El Paso County Land Development Code Section 8.4.7. See Table 2 for a summary of the expected demands for Gambler Wells No. 2-10.

Note, the decree allocated 0.20 acre-feet per year per unit for indoor and household use and this report will apply the El Paso County Land Development Code value of 0.26 for indoor and household use. The expected water uses and demands are presented in the table below.

Table 1-Uses for Gambler Well No. 1	
Indoor and household use	0.26 acre-feet per year per unit for total of0.26 acre-feet per year
Irrigation use	0.0566 acre-feet per 1000 square feet per unit per year for total of 0.5 acre-feet per year limited to irrigation of 8,834 square feet of lawn or garden per unit for total of 8,834 square feet
Stock-watering use	0.24 acre-feet per year per unit limited to watering of 4 head per unit for total of0.24 acre-feet per year for total of 4 horses or equivalent livestock
Total annual Use per lot	1.0 acre-feet per year
Total annual Use in one lot = 1 x 1.0 = 1.0 ac Total decreed Dawson aquifer water (well per (See Decreed Amounts Below & footnote 1)	cre-feet per year ermit no. 172352-A) for 300 years = 400 acre-feet

Table 2-Uses for Gambler Wells No. 2-10	
Indoor and household use	0.26 acre-feet per year per unit for total of2.34 acre-feet per year
Irrigation use	0.0566 acre-feet per 1000 square feet per unit per year for total of
	2.4 acre-feet per year limited to irrigation of 4,711.4 square feet of lawn or garden per unit for total of 42,402.8 square feet
Stock-watering use	0.24 acre-feet per year per unit limited to watering of 4 head per unit for total of 2.16 acre-feet per year for total of 36 horses or equivalent livestock
Total annual Use per lot	0.766 acre-feet per year
Total annual Use in subdivision = 9 x 0.766 =	6.9 acre-feet per year
Total decreed Dawson aquifer water (24CV Decreed Amounts Below & footnote 1)	V3077) for 300 years = 9,340 acre-feet (See

The existing Gambler Well No. 1 and To Be Constructed Gambler Well No. 2-10 are expected to produce from the not-nontributary Dawson aquifer at a flow rate of 10 to 15 gallons per minute,

based upon past production in the immediate area. The existing well will remain an exempt well for use on one of the subdivided lots on the Applicant's property. There are no other wells currently constructed on the subject property except as listed above. Based on past experience with the numerous Dawson aquifer wells serving rural residential properties throughout El Paso County, this rate of production should be more than sufficient to meet demand for in-house use.

Amounts Decreed and Available

The decreed amount of Dawson aquifer groundwater is not-nontributary. The decreed amounts of the Denver aquifer groundwater, Arapahoe aquifer groundwater and Laramie-Fox Hills aquifer groundwater are nontributary. The referenced decree sets forth withdrawal amounts based on 100-year aquifer life required by the State of Colorado as well as the El Paso County required 300-year aquifer life. 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 the Gambler Wells No. 2-10 from the Dawson aquifer (not-nontributary) shall not exceed 0.76 acre-feet each, nor more than 6.9 acre-feet total per year.

A copy of the Decree entered in Case No. 24CW3077 is attached in the appendix, including the following specific quantities of water anticipated to be available for and utilized in Table Rock Homesteads:

AQUIFER	Annual Average Withdrawal – 100 Years (Acre Feet)	Annual Average Withdrawal – 300 Years (Acre Feet)	Total Withdrawal (Acre Feet)
Dawson (NNT)	93.4	31.13	9340 ¹
Denver (NT)	81.90	N/A	8190
Arapahoe (NT)	49.10	N/A	4910 ²
Laramie-Fox Hills (NT)	32.10	N/A	3210

¹The total amount of water available for appropriation from the Dawson Aquifer has been reduced by 400 acre-feet to serve the purposes of the exempt Gambler Well No. 1 adjudicated herein. The total amount before the reservation was 9,740 acre-feet

Based on the anticipated water demands, the water supply for the residential lots using nine (9) 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.

² 2,112 acre-feet are reserved for replacement of post-pumping depletions associated with the augmentation plan decreed herein.

Wastewater and Wastewater Treatment

A Soils and Geology Study and a Wastewater Study was prepared for this subdivision by Entech Engineering, Inc., both dated December 23, 2024. The reports address the suitability of the site to support the use of individual On-site Wastewater Treatment Systems (OWTSs) which are to be utilized. The site has been evaluated for the use of on-site wastewater treatment systems to be located on each of the new lots. Based on such evaluation, the site is suitable for on-site wastewater treatment systems.

Septic projections are based on similar Denver Basin residential uses on rural residential lots. Daily wastewater loads are expected to be approximately 232 gallons per day per single-family residence based on the El paso County Land Development Code residential demand standard of 0.26 acre-feet per year.

All single-family homes within Table Rock Homesteads shall be served by individual on-site wastewater treatment systems which will be installed according to El Paso County and State Guidelines and properly maintained to prevent contamination of surface and subsurface water resources.

Augmentation

Consistent with the Plan for Augmentation decreed in Water Division 1 Case No. 24CW3077, it is anticipated that each single-family residence will utilize a maximum of 0.76 annual acre feet of water through individual wells, with total demand for all nine lots estimated at a maximum of 6.9 annual acre feet. Of this pumping, it is anticipated that 0.26 annual acre feet will be utilized for indoor and household purposes for each residence (2.34 annual acre-feet combined), with the remainder of pumping available for other uses authorized under the augmentation plan.

A plan for augmentation utilizing the underlying Denver Basin aquifers has been decreed by the District Court, Water Division 1, in Case No. 24CW3077. As particularly described in the attached Decree, a 300-year water supply is demonstrated in the Dawson aquifer, with all depletions augmented in time, place and amount through septic return flows during pumping, and through dedication of nontributary groundwater in the Arapahoe aquifer for replacement of injurious post-pumping depletions. Applicants shall reserve a total of 2,112 acre-feet of the Arapahoe aquifer, in which no more than 98% of the water withdrawn annually shall be consumed (only 2,070 acre-feet can be consumed) of the total 4910 acre-feet of their decreed nontributary Arapahoe aquifer water.

Rural residential water supply demand will be met using not-nontributary Dawson formation wells, consistent with the plan for augmentation decreed in Case No. 24CW3077. Only one of the proposed two wells which will ultimately provide water supply to the lots within Table Rock Homesteads has been drilled, to date.

The augmentation plan decreed in Case No. 24CW3077 will provide for a 300-year water supply for each of the anticipated lots within Table Rock Homesteads, with each lot utilizing an OWTS of

a non-evaporative nature. The water resources to be utilized in the subdivision are typical to 5-acre rural residential development near the Black Forest and other parts of rural northeastern El Paso County, Colorado. The plan for augmentation decreed in Case No. 24CW3077 demonstrates a sufficient quantity and reliability of water to support compliance with El Paso County's 300-year water supply rules for subdivisions of this nature.

Water Quality

M.V.E., Inc. has examined water quality testing results for an existing well (permit No. 85835-F) located nearby in the Mariah Trail subdivision at 19205 Mariah Trail. This well is located approximately 0.50 miles from the center of the Table Rock Homesteads property (see map at Exhibit E). Said samples were collected by the applicant's consultant pursuant to instructions provided by Colorado Analytical Laboratories, Inc., who likewise assisted in maintaining a proper chain of custody on all such samples (see LDC Section 8.4.7(B)(10)(d)). All samples tested by Colorado Analytical Laboratories were obtained from the Dawson aquifer at an existing well on the project site and within ½ mile (see LDC Section 8.4.7(B)(10)(e)).

Water samples were obtained from the Mariah Trail Subdivision's tap on 2/13/2023. All results were found to be below primary and secondary Maximum Contaminant Limits (MCLs). Because of the absence of any and all evidence of fecal contamination in the form of E. Coli or Total Coliform, or that all sampled and analyzed constituents were below all primary and secondary standards the proposed water source emanating from the Dawson Aquifer is deemed safe for public consumption.

Testing for the required contaminants was performed by the Colorado-certified testing laboratories, Colorado Analytical Laboratories, Inc. and Hazen Research, Inc., per the El Paso County Land Development Code section 8.4.7(B). The examined reports contain tests for each of the required contaminants for a confined aquifer in accordance with the Land Development Code of El Paso County (LDC). M.V.E. Inc. compared the test results to the Maximum Contaminant Level (MCL) for each substance and found the results to be within acceptable levels in accordance with El Paso County standards contained in the LDC. Copies of those testing results are collectively attached hereto as Exhibit E.

So as to ensure compliance with LDC Section 8.4.7(B)(3)(d), and all provisions of the LDC Section 8.4.7(B)(10), a full spectrum water quality testing on said well was obtained, including chemical analysis (see LDC Section 8.4.7(B)(10)(a)), testing against all applicable MCL's established by the EPCPH (see LDC Section 8.4.7(B)(10)(b)), and analysis of all major ions (see LDC Section 8.4.7(B)(10)(c)).

In accordance with LDC Section 8.4.7(B)(3)(d)(3), the owner has identified no unusual or atypical on-site or off-site sources of potential contamination, which is likely to, or has the real potential to, contaminate the confined Dawson aquifer from which the owner's source water is to be obtained. The requested subdivision of the subject property into approximately 5-acre lots is typical of the region, as is the proposed water source. Potential contaminates would be non-compliant or poorly

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located septic systems (which will not be permitted within the subdivision), hazardous material spills, and sources of contamination contrary to existing law and regulation, and beyond the owner's control. Barring such misfeasance or malfeasance, the owner does not believe any on or off-site hazards of note exist.

Based on these findings we recommend that the El Paso County Public Health and El Paso County Attorney's office make a finding of sufficiency for water quality for the Table Rock Homesteads final plat. The existing Gambler Well No. 1 and To-Be-Constructed Gambler Wells No. 2-10 will meet all such regulatory requirements regarding quality testing before being utilized as a residential water source.

Exhibit A Vicinity Map and Site Map

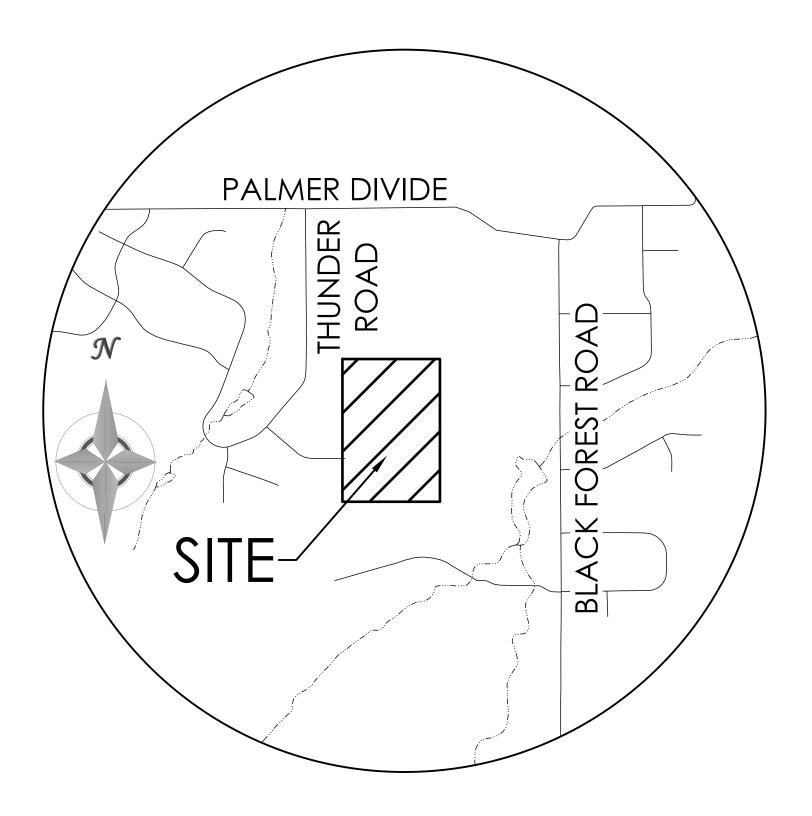
Exhibit B Water Decree (Water Division 1 Case No. 24CW3077)

Exhibit C Well Permit (Permit No. 172352-A)

Exhibit D Water Supply Information Summary (Form No. GWS-76)

Exhibit E Test Well Information & Water Quality Testing Results

Exhibit A Vicinity Map and Site Map



VICINITY MAP

NOT TO SCALE



Table Rock Homesteads Site

Exhibit B Water Decree (Water Division 1 Case No. 24CW3077)

225005859 1/22/2025 3:21 PM PGS 27 \$143.00 DF \$0.00

Electronically Recorded Official Records El Paso County CO Steve Schleiker, Clerk and Recorder

TD1000 N

DISTRICT COURT, WATER DIVISION 1, COLORADO

Court Address: 901 9th Avenue,

P.O. Box 2038

Greeley, CO 80632

Phone Number: (970) 475-2540

DATE FILED

January 22, 2025 2:43 PM

CASE NUMBER: 2024CW3077

▲ COURT USE ONLY ▲

CONCERNING THE APPLICATION FOR WATER RIGHTS OF:

THADDEUS JAROSZ
IN EL PASO COUNTY

Case No.: 24CW3077

FINDINGS OF FACT, CONCLUSIONS OF LAW, RULING OF REFEREE AND DECREE: ADJUDICATING DENVER BASIN GROUNDWATER, ADJUDICATING EXEMPT WELL, AND APPROVING PLAN FOR AUGMENTATION

THIS MATTER comes before the Water Court on the Application filed by Thaddeus Jarosz. Having reviewed said Application and other pleadings on file, and being fully advised on this matter, the Water Court makes the following findings and orders:

FINDINGS OF FACT

- 1. The applicant in this case is Thaddeus Jarosz. His address is 8550 Kenosha Drive, Colorado Springs, CO 80908 ("Applicant"). The Applicant is the owner of the land totaling approximately 107 acres on which the structures sought to be adjudicated and augmented herein are and will be 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 for any potential off-property uses as described in Paragraph 20.
- 2. The Applicant filed this Application with the Water Court for Water Division 1 on May 31, 2024. The Application was referred to the Water Referee in Water Referee for Division 1 on the same day.
- 3. The time for filing statements of opposition to the Application expired on the last day of July 2024. No Statements of Opposition were filed.
- 4. There are no lienholders on the Property, and therefore the lienholder notice provisions set forth in C.R.S. § 37-92-302(2)(b) and § 37-90-137(4)(b.5)(I), are inapplicable.

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- 5. 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 June 17, 2024, proof of publication in *The Gazette* was filed with Division 1 Water Court. All notices of the Application have been given in the manner required by law.
- 6. Pursuant to C.R.S. § 37-92-302(2), the Office of the State Engineer has filed a Determination of Facts for each Denver Basin aquifer with this Court on July 29, 2024, which have been considered by the Court in the entry of this decree.
- 7. Pursuant to C.R.S. § 37-92-302(4), the office of the Division Engineer for Water Division No. 1 filed its Consultation Report dated August 30, 2024, and a response to the Consultation Report was not required by the Water Court. The Consultation Report and the Applicant's response have been considered by the Water Court in the entry of this decree.
- 8. 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.

ADJUDICATION OF EXEMPT WELL

- 9. The Application requested the adjudication of one existing exempt well pursuant to C.R.S. § 37-92-602(4) and 37-92-302 through 37-92-306. The following findings are made with respect to the Applicant's existing exempt well.
 - a. Name of Structure. Gambler Well No. 1
- i. <u>Legal Description of Well:</u> The well is located upon the Applicant's Property in the W1/3 SE¼ of Section 6, Township 11 South, Range 65 West of the 6th P.M., El Paso County, Colorado, located 1,480 feet from the South Section Line, and 2,300 feet from the East Section Line. The well must be located within 200 feet of this decreed location in order to operate under this water right. The Gambler Well No. 1 is permitted as an exempt well pursuant to Division of Water Resources Permit No. 172352-A. The Gambler Well No. 1 will remain an exempt well pursuant to C.R.S. §§ 37-92-602(3)(b)(II)(A) and 37-92-602(3)(b)(IV) for use only on one of the news lot to be created on the Applicant's property.
- ii. <u>Source:</u> The Gambler Well **N**o. 1 is permitted to withdraw from the not-nontributary Dawson aquifer.
 - iii. Date of Initiation of Appropriation: On or before May 31, 2004.
- iv. <u>How Appropriation was Initiated:</u> Completion of the construction of the well and placement into operation during the year 2005.

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- v. <u>Date Water Applied to Beneficial Use:</u> June 16, 2005.
- vi. <u>Amount:</u> 15 g.p.m., absolute, or 1 annual acre-foot.
- vii. <u>Uses:</u> Ordinary household uses in up to three single family residences, fire protection, the irrigation of not more than 1 acre of home gardens and lawns, and the watering of poultry, domestic animals, and livestock on a farm or ranch.
- 10. For the absolute groundwater right for Gambler Well No. 1, the Applicant has completed all of the elements necessary for the appropriation of a water right to wit:
 - a. Formation of the intent to appropriate water;
- b. Performance of overt acts in concurrence with this intent to manifest the intention to appropriate water to beneficial use and to demonstrate taking a substantial step toward applying water to beneficial use by the construction of the well and applying for and receiving Permit No. 172352-A. Such acts were of such nature to provide interested third parties with notice of the nature and extent of the proposed diversion and consequent demand on the river system.
- c. Groundwater in the not-nontributary Dawson aquifer in the Denver Basin has been diverted and otherwise captured, possessed, or controlled by Gambler Well No. 1, and has been beneficially used in the amount claimed and for the uses stated herein.
- Property and is permitted and constructed into the Dawson aquifer as an exempt domestic well pursuant to C.R.S. § 37-92-602(3)(b)(II)(A) under Well Permit No. 172352-A. This well will remain an exempt well for use on one of the subdivided lots on Applicant's Property. Applicant is awarded the vested right to use the Gambler Well No. 1, along with any necessary replacement wells associated with such structure, for the extraction and use of groundwater from the not-nontributary Dawson aquifer. The priority date of the Gambler Well No. 1 shall be the appropriation date set forth above, regardless of the date of application or the date of this decree. C.R.S. § 37-92-602(4). So long as the uses of the Gambler Well No. 1 are limited to those uses allowed under Permit Number 172352-A, as decreed herein (or any new exempt well permit issued by the Colorado Division of Water Resources in accordance with this decree), Gambler Well No. 1 will be exempt from administration under the priority system pursuant to C.R.S. § 37-92-602.

GROUNDWATER RIGHTS

12. The Application requested quantification and adjudication of vested underground water rights from the Denver basin groundwater underlying the Applicant's property described in Paragraph 13, below, and use of the Gambler Well No. 1 located

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on the Applicant's Property constructed to the Dawson aquifer, and the Gambler Wells No. 2-10, which are proposed wells that may be constructed to the Dawson aquifer, and any additional or replacement wells associated therewith, for withdrawal of Applicant's full entitlement of supply from the Dawson aquifer under the plan for augmentation decreed herein. Applicant also requested quantification and adjudication of vested underground water rights and uses from the Denver, Arapahoe, and Laramie-Fox Hills aquifers underlying the Applicant's property. The following findings are made with respect to such underground water rights and use of wells on the Applicant's Property:

- 13. The land overlying the groundwater subject to the adjudication in this case is owned by the Applicant and consists of two parcels of 53 and 54 acres respectively, for a total of approximately 107 acres, and are more particularly described as a piece of property located in W 1/3 of the SE ¼ of Section 6, Township 11 South, Range 65 W. of the 6th P.M., also known as Varnell Lot 1, Parcel NO. 5100000012, as recorded in the records of the El Paso County Clerk and Recorders under Reception NO. 216030733, and a piece of property located in the Middle 1/3 of the SE ¼ of Section 6, Township 11 South, Range 65 W. of the 6th P.M., also known as Varnell Lot 2, Parcel NO. 5100000026, as recorded in the records of the El Paso County Clerk and Recorders under Reception NO. 216030732, as described on the Exhibit A map and shown on the Exhibit B deed ("Applicant's Property"). Applicant intends to subdivide the property into up to ten (10) lots. All groundwater adjudicated herein shall be withdrawn from the overlying land unless there is a further order of this Court allowing otherwise following the filing of a new water court application.
- Gambler Wells No. 2-10: Applicant is awarded the vested right to use the Gambler Wells No. 2-10, along with any additional or replacement wells associated with such structure, 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, if they determine a permit can be issued, shall issue a well permit for Gambler Wells No. 2-10, pursuant to C.R.S. § 37-90-137(4), consistent with and referencing the plan for augmentation decreed herein.
- 15. 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 aquifer underlying the Applicant's Property contains not-nontributary water, while the water of the Denver, Arapahoe, and Laramie-Fox Hills aquifers 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:

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AQUIFER	NET SAND (Feet)	Total Appropriation (Acre Feet)	Annual Avg. Withdrawal 100 Years (Acre Feet)	Annual Avg. Withdrawal 300 Years (Acre Feet)
Dawson (NNT Actual)	455	9,340 ¹	93.4	31.13
Denver (NT)	450	8,190	81.90	N/A
Arapahoe (NT)	270	4 ,910 ²	49.10	N/A
Laramie Fox Hills (NT)	200	3,210	32.10	N/A

The terms and conditions set forth in this decree governing the withdrawal and use of groundwater from the Denver Basin aquifers underlying the Applicant's Property are applicable only to permitted non-exempt wells constructed into the aquifers.

- 16. 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. Applicant shall not be entitled to construct a non-exempt well or use water from the not-nontributary Dawson aquifer 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. In addition, Applicant shall be required to comply with the requirements of Paragraph 23 prior to constructing and using a non-exempt well completed into the Dawson aquifer.
- 17. Subject to the augmentation requirements described in Paragraphs 16, 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 may 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 total amounts available to Applicant as decreed herein and the augmentation requirements of this decree. This decree describes a pumping period of 300-years as to pumping from the Dawson aquifer, as required by El Paso County, Colorado Land Use Development Code § 8.4.7(C)(1). The average annual amounts of groundwater available for withdrawal from the underlying Denver Basin aquifers, based upon the 100-year and 300-year aquifer life calculations, are determined and set forth above, based upon the July 29, 2024, Office of the State Engineer Determination of Facts described in Paragraph 6.
- 18. 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

¹ The total amount of water available for appropriation from the Dawson Aquifer has been reduced by 400 acre-feet to serve the purposes of the exempt Gambler Well No. 1 adjudicated herein. The total amount before the reservation was 9,740 acre-feet

² 2,112 acre-feet are reserved for replacement of post-pumping depletions associated with the augmentation plan decreed herein.

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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. Applicant shall be permitted to produce the full legal entitlement from the Denver Basin aquifers underlying Applicant's Property through any combination of wells. The wells shall be treated as a well field

- 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 groundwater from the Dawson, Denver, Arapahoe, and Laramie Fox-Hills aguifers for beneficial uses upon the Applicant's Property consisting of domestic, irrigation, stock watering, fire protection, recreation, 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 Denver, Arapahoe, and Laramie-Fox Hills aguifers 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 non-exempt well and use water from the not-nontributary Dawson aguifer pursuant to a decreed augmentation plan entered by the Court, including that plan for augmentation decreed herein for the Dawson aquifer.
- 20. Applicant has waived the 600-feet well spacing requirement for wells to be constructed upon the Applicant's Property. Pumping from Gambler Wells No. 1-10 and any additional or replacement wells for those wells, or wells constructed into the Denver, Arapahoe, and Laramie-Fox Hills aquifers, are anticipated not to exceed 100 g.p.m., though actual pumping rates for these wells will vary according to aquifer conditions and well production capabilities. The Applicant may withdraw groundwater from the Gambler Wells No. 1-10 and any additional or replacement wells for those wells, or from wells constructed into the Denver, Arapahoe, and Laramie-Fox Hills aquifers, at rates of flow necessary to withdraw the entire amounts decreed herein. The actual depth of each well to be constructed within the respective aquifers will be determined by topography and actual aquifer conditions.

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21. Withdrawals of groundwater available from the nontributary Denver, Arapahoe, and Laramie-Fox Hills aquifers beneath the Applicant's Property in the amounts 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 the Gambler Wells No. 2-10, 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 ("Gambler Wells").
- 23. Pursuant to C.R.S. § 37-90-137(9)(c.5), the augmentation obligation for the Gambler Wells requires the replacement of actual stream depletions attributable to pumping of the residential wells from the Dawson aquifer. The water to be used for augmentation during pumping are the septic system return flows of the not-nontributary Dawson aquifer to be pumped from the Gambler Wells No. 2-10 as set forth in this plan for augmentation. The water to be used for augmentation of depletions following the pumping period described in this decree is the reserved portion of Applicant's nontributary water rights in the Arapahoe aquifer as described in Paragraph 23.D. Applicant shall provide for the augmentation of stream depletions caused by pumping the Gambler Wells, as approved herein. Water use criteria is determined as follows:
- A. <u>Use</u>: Based on a 300-year pumping period, the Gambler Wells may pump a maximum combined total of 6.9 acre feet from the Dawson aquifer annually, with each lot pumping a maximum of 0.76 acre-feet per year (2070 acre-feet total) pursuant to the plan for augmentation authorized by this decree. Indoor use will utilize a conservatively estimated 0.2 acre-feet of water per year for each residence (1.8 acre-feet combined), with the remaining 0.56 acre-feet (5.04 acre-feet combined) per year pumping entitlement available for other uses on the Applicant's Property, including: irrigation of lawn and garden and the watering of livestock. An example of the use breakdown for the more strict El Paso County land use planning purposes is household use of 0.26 acre-feet of water per year with the additional 0.5 acre-feet of available for irrigation of lawn and garden and the watering of livestock annually. The foregoing figures assume the use of individual non-evaporative septic systems, with resulting return flows from such systems as described below in Paragraph 23.C.
- B. <u>Depletions</u>: Pumping from the Dawson aquifer will require replacement of actual stream depletions of the pumped amount over the 300-year pumping period. Maximum stream depletions over the 300-year pumping period for the Dawson aquifer amounts to approximately 22.6% of pumping. Maximum annual depletions from the Gambler Wells are therefore 1.56 acre-feet in year 300. Should Applicant's pumping be less than the 6.9 total per year described herein, Applicant reserves the right to file an application to amend the augmentation plan so that resulting depletions and required replacements may be correspondingly reduced.

Ruling of Referee and Decree Thaddeus Jarosz. Case No. 24CW3077 Page 8 of 27

- Augmentation of Depletions During Pumping Life of Wells: Pursuant C. to C.R.S. § 37-90-137(9)(c.5), Applicant is required to replace actual stream depletions of the water pumped from the Dawson aguifer. Applicant has shown that, provided water is delivered for indoor use and treated as required by this decree, 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 estimated at 10% per year per residence. With a conservative estimate of the household indoor use rate of 0.2 acre-feet per year, 0.18 acre-feet per residence is replaced to the stream system per year, utilizing a non-evaporative septic system. Thus, during the pumping period, the total maximum annual stream depletions of 1.56 acre-feet will be augmented provided septic system return flows are generated by indoor use of water in the residence $((9 \times 0.2) \times 0.9 = 1.62$ acre-feet of return flows). This calculation of septic system return flows from indoor residential use of 0.2 acre-feet per residence shows that depletions that result from pumping the annual amounts described in Paragraph 23.A will be adequately replaced during the pumping period for the wells under this plan for augmentation.
- D. Augmentation of Post-Pumping Depletions: This plan for augmentation shall have a pumping period of 300 years. For the replacement of postpumping depletions which may be associated with the use of the Gambler Wells, Applicant will reserve 2,112 acre-feet of the nontributary Arapahoe aguifer groundwater decreed herein, as necessary to replace any injurious post pumping depletions. The amount of nontributary Arapahoe aguifer 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 postpumping depletions for any reason, it may also reduce the amount of Arapahoe 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 a total of 2,112 acre-feet of Arapahoe aquifer groundwater results in approximately 2,070 acre-feet of available postpumping augmentation water, which, combined with credits for replacements made during pumping, will be sufficient to replace post-pumping depletions obligations from the pumping of 2,070 acre-feet from the Dawson aguifer over 300 years. Post-pumping replacement obligations equal the total amount of water pumped from the not-nontributary Dawson aquifer during pumping.
- E. <u>Permits</u>: Upon entry of a decree in this case, the Applicant will be entitled to apply for and receive well permits, upon determination by the State Engineer that such permits may be issued, for the Gambler Wells for the uses in accordance with this decree and otherwise in compliance with C.R.S. § 37-90-137.

Ruling of Referee and Decree Thaddeus Jarosz. Case No. 24CW3077 Page 9 of 27

- 24. 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 Arapahoe 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 plan for augmentation, 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 the post-pumping obligation commences. Pursuant to this covenant, the water from the nontributary Arapahoe 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(s) of the Applicant's Property.
- 25. Applicant or its successors shall be required to initiate pumping from the Arapahoe 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 (2,070 acre-feet) has been pumped; (ii) the Applicant or its successors in interest have acknowledged in writing that all withdrawals for beneficial use through any of the Gambler Wells have permanently ceased; (iii) a period of 10 consecutive years where no withdrawals of groundwater from the Gambler Wells has occurred; or (iv) accounting shows that return flows from the use of the water being withdrawn are insufficient to replace depletions caused by the withdrawals that already occurred and no modification of pumping or treatment of the Gambler Wells is sufficient to make up for such insufficiency.
- 26. 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 Arapahoe aquifer groundwater.
- 27. 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 and the augmentation plan decreed herein is amended. 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 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

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pumping period and that reserved nontributary water remains sufficient to replace postpumping depletions.

- 28. 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.
- 29. 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 Gambler Wells. As a result of the operation of this plan for augmentation, the depletions from the Gambler Wells will not result in injury to the vested water rights of others.

CONCLUSIONS OF LAW

- 30. The application for adjudication of Denver Basin groundwater and approval of plan for augmentation was filed with the Water Clerk for Water Division 1, pursuant to C.R.S. §§ 37-92-302(1)(a) and 37-90-137(9)(c.5).
- 31. 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.
- 32. 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 as decreed herein, and the right to use that water to the exclusion of all others.
- 33. 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 a plan for augmentation pursuant to C.R.S. § 37-90-137(9)(c.5), and the issuance of a well permit by the State Engineer's Office. Applicant is entitled to a decree from this Court confirming his right to withdraw groundwater pursuant to C.R.S. § 37-90-137(4).
- 34. 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-

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nontributary groundwater meet the requirements of Colorado Law.

- 35. The determination and quantification of the nontributary and not-nontributary groundwater rights in the Denver Basin aquifers as set forth herein are contemplated and authorized by law. C.R.S. §§ 37-90-137, and 37-92-302 through 37-92-305.
- 36. 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 Gambler Wells without adversely affecting any other vested water rights in the South Platte River or its tributaries, or the Arkansas River and its 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:

- 37. 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.
- 38. The Application for Adjudication of Denver Basin Groundwater and Plan for Augmentation filed by the Applicant is approved, subject to the terms of this decree.
- A. Applicant is awarded a vested right to 9,340 acre-feet of groundwater from the not-nontributary Dawson aquifer underlying Applicant's Property, as quantified in Paragraph 15 or as modified by the Court under its retained jurisdiction. Of this total amount, 2,070 acre-feet may be pumped pursuant to the plan for augmentation decreed herein. The remaining 7,270 acre-feet shall not be withdrawn for any purpose except pursuant to a separate court-approved plan for augmentation authorizing the pumping of such amount.
- B. Applicant is awarded a vested right to 8,190 acre-feet of groundwater from the nontributary Denver aquifer underlying Applicant's Property, as quantified in Paragraph 15 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 (98%) of the amount withdrawn, and the other terms and conditions of this decree. Applicant's Denver aquifer groundwater may be utilized for all purposes described in Paragraph 19.
- C. Applicant is awarded a vested right to 4,910 acre-feet of groundwater from the nontributary Arapahoe aquifer underlying Applicant's Property, as quantified in Paragraph 15 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 (98%) of the amount withdrawn, including the reservation of the 2,112 acre-feet awarded to be utilized only for replacement of post-pumping depletions

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under the plan for augmentation decreed herein, as described in Paragraph 23.D., above, and the other terms and conditions of this decree. Applicant's Arapahoe aquifer groundwater may be utilized for all purposes described in Paragraph 19.

- D. Applicant is awarded a vested right to 3,210 acre-feet of groundwater from the nontributary Laramie-Fox Hills aquifer underlying Applicant's Property, as quantified in Paragraph 15 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 (98%) 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 19.
- 39. The Applicant has furnished acceptable proof as to all claims and, therefore, the Application for Adjudication of an Exempt Well, Adjudication of Denver Basin Groundwater, and 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.
- 40. 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 (98%) of the groundwater withdrawn annually will be consumed.
- The Gambler Wells shall be operated such that pumping from each well does not exceed the annual (0.76 acre-feet per residence, 6.9 acre-feet combined total) and total (2,070 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. Consistent with Rule 11.A of the Statewide Nontributary Ground Water Rules, the Denver Basin groundwater decreed herein must be withdrawn from the "overlying land" as defined in Rule 4.A.8 of the Statewide Nontributary Ground Water Rules, and the Gambler Wells shall be constructed on the overlying land. The State Engineer, the Division Engineer, and/or the Water Commissioner shall not curtail the diversion and use of water by the Gambler Wells so long as the conditions of the augmentation plan decreed herein are met and the return flows from the annual diversions associated with the Gambler Wells accrue to the stream system pursuant to the conditions contained herein. To the extent that the Applicant or one of his successors or assigns is ever unable to provide the replacement water required, then the Gambler 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, the depletions from 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

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discussed herein shall at all times during pumping be in an amount sufficient to replace the amount of caused stream depletions, and cannot be sold, leased, or otherwise used for any purpose inconsistent with the plan for augmentation decreed herein. Applicant shall be required to have any wells pumping from the Dawson aquifer on the Applicant's Property providing water for in-house use and generating septic system return flows prior to pumping the wells for any of the other uses identified in Paragraphs 19 or 23.A.

- 42. The Court retains 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. The retained jurisdiction described in this Paragraph 42 is applicable only to the quantities of water available underlying Applicant's Property, and does not affect or include the augmentation plan decreed herein, the retained jurisdiction for which is described in Paragraphs 43 and 44, below.
- 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, opposer, and the petitioning party.
- B. If no protest is filed with the Court to such findings by the State Engineer's Office within sixty-three (63) days, this Court shall incorporate by entry of an Amended Decree such "final determination of water rights", and the provisions of this Paragraph 42 concerning adjustments to the Denver Basin groundwater 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 42.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.
- 43. 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

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retains continuing jurisdiction for the purpose of determining compliance with the terms of the augmentation plan. 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 described in this paragraph may be invoked using the process set forth in Paragraph 42.

- 44. Except as otherwise specifically provided in Paragraphs 42-43, 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, for a period from the date of entry of this decree until five years following the date that Applicant begins operation of the plan for augmentation based on the subdivision of the Applicant's Property and withdrawal of water from the Gambler Wells. Applicant shall file a notice with the Court confirming the start of operations under the plan for augmentation within thirty-five (35) days of the start date. 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 the 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 petition concerning the subject of the Court's retained jurisdiction described in this paragraph 45 is filed within the period described in this paragraph, and the retained jurisdiction period is not extended by the Court in accordance with the provisions of the statute, the matter described in this paragraph shall become final under its own terms.
- 45. 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 the Gambler Wells and are required to include geophysical logging on each newly constructed well. Applicant shall read and record the well meter readings on March 31 and October 31 of each year and shall submit the meter readings to the Water Commissioner by April 15 and November 15 of each year, or more frequently as requested by the Water Commissioner.
- 46. The vested water rights, water right structures, and plan for augmentation decreed herein shall be subject to all applicable administrative rules and regulations, as

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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. The Gambler Wells shall be permitted as non-exempt structures under the plan for augmentation decreed herein, which plan shall be implemented upon the permitting and construction and use of the Gambler Wells No. 2-10. 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.

47. The 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 December 30, 2024

BY THE REFEREE:

John Cowan Water Referee

Water Division One

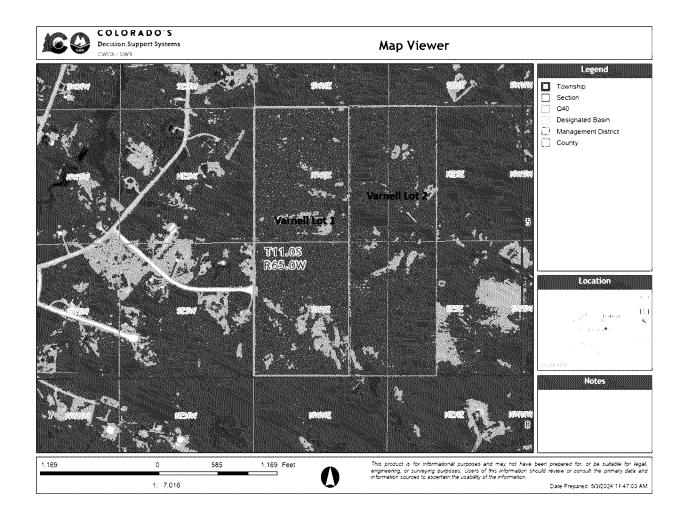
The Court finds that no protest was filed in this matter. The foregoing ruling is confirmed and approved and is hereby made the judgment and decree of this Court.

Dated: January 22, 2025

BY THE COURT:

Shannon Lyons,

Alternate Water Judge Water Division One



224056445 PGS 2

7/23/2024 11:45 AM \$18.00 DF \$120.00

Decument Fee: \$120.00

Electronically Recorded Official Records El Pasa County CO Steve Schleiker, Clark and Records TO1000 Y

RETURN RECORDED DOCUMENT TO:

Thaddeus J. Jarosz

THIS GENERAL WARRANTY DEED, dated 23rd day of July, 2024, is made between Joel N. Varnell, Jeffrey L. Vornell, Julia F. Varnell-Sarjeant, Jon M. Varnell ("Grantor"), of the County of El Paso and the State of Colocado.

GENERAL WARRANTY DEED

AND

Thaddeus J. Jarosz ("Grantee"), of the County of El Paso and the State of Colorado., whose legal address is 8550 Kenosha Dr. Colorado Springs, CO 80908.

WITNESS, that the Grantor(s), for and in consideration of ONE MILLION TWO HUNDRED THOUSAND AND 00/100 EXXLLARS (\$1,200,000.00) and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, has granted, bargained, sold and conveyed, and by these presents does grant, bargain, sell, and convey unto the Grantee, IN SEVERALTY and the heirs, successors and assigns of the Grantee forever, all the real property, together with fixtures and improvements located thereon, if any, situate, lying and being in the County of 1/1 Paso and State of Colorado, described as follows:

FOR LEGAL DESCRIPTION SEE EXHIBIT A

ALSO KNOWN AS: 0 Gumbler Place, Colorado Springs, CO 80908

TOGETHER WITH, all and singular the hesoditaments and appurtenances therounto belonging, or in anywise apportaining, and the reversion and reversions, remainder and remainders, rents, issues and profits thereof, and all the estate, right, title, interest, claim and demand whatsoever of the Grantor(s), either in law or in equity, of, in and to the above-bargained premises, with the hereditaments and appurtenances.

TO HAVE AND TO HOLD the said premises above bargained and described, with the appartenances, unto the Grantee, and the heirs, successors and essigns of the Grantee forever. The Granter, for the Granter and the heirs, successors and assigns or the Grantor, <u>warrunts title to the same,</u>, subject to *the Statutory Exceptions*

EXECUTED AND DELIVERED by Grantor on the date first set forth above.

SEE ATTACHED EXHIBIT A FOR SIGNATURE

Jon M. Varnell

State of : Colorado

County Of JEFFERSON

The foregoing instrument was subscribed, sworn to, and acknowledged before me this July _____, 2024, by Joel N. Varnell, Jeffrey L. Varnell, Julia F. Varnell-Sarjeant.

My Commission expires: 9-1-2025

ANNE FIORETTO Notary Public State of Colorado Notary ID # 20094028479 My Commission Expires 09-02-2025

**If tenancy is unspecified, the legal presumption shall be tenants in common (C.R.S. 38-31-101)

General Warranty Dood

12537GTG

Jarosz 24CW3077

224056445 Page 2 of 2

GENERAL WARRANTY DEED

SOT M. Varnell

State of:

county or Las Angeles

) ss.

The foregoing instrument was subscribed, sworn to, and acknowledged before me this July 10, 2024, by Jon

My Commission expires:

12-16-25

Witness my hand and official scal.



Exhibit 'A'

Parcel A:

That portion of the Southeast Quarter, Section 6, Township 11 South, Range 65 West of the 6th Principal Meridian, more particularly described as follows: Commencing at the Southeast corner of said Section 6, thence Westerly along the South line of said Section 6, a distance of 880.03 feet to a point of beginning; thence Northerly more or less parallel to the East line of said Section 6, a distance of 2640.79 feet; thence Westerly along the North line of said Southeast Quarter, 891.37 feet; thence Southerly more or less parallel to the East line of said Section 6, a distance of 2641.58 feet; thence Easterly 880.03 feet to the point of beginning.

Parcel B:

The West one-third of the Southeast Quarter, Section Six (6), Township Eleven (11) South, Range 63 West of the 6th P.M., more particularly described as follows: Commencing at the Southwest corner of said Southeast Quarter, thence Northerly along the West line of said Southeast Quarter 2642.37 feet; thence Easterly along the North line of said Southeast Quarter 891.36 feet; thence southearly, more or loss parallel to the West line of said Southeast Quarter 2641.58 feet; thence Westerly 880.03 feet to the point of beginning, Country of El Paso, State of Colorado.

Special Warranty Deed 12537GTG

Summary Table 1			Summary Table 2					
			Model Period (years)	700				
Applicant Name	Thaddeus Jarosz		Applicant Name	Thaddeus Jarosz				
Case No. or Receipt No.	24CW3077		Case No. or Receipt No.	24CW3077				
Number of Years of Pumping	300		Number of Years of Pumping	300				
Pumping Rate (ac-ft/yr)	6.90		Pumping Rate (ac-ft/yr)	6.90				
Total Volume (ac-ft)	2070		Total Volume (ac-ft)	2070				
Legal for All Sections	Sec. 6, T11S, R65W,	6th P.M.	Legal for All Sections	Sec. 6, T11S, R65W	6th P.M.			
Model	DA02		Model	DA02				
Aquifer	DAWSON		Aquifer	DAWSON				
100th Year Strea	m Depletion		Maxim	ium Stream Deple	etion			
Streams	100th Year Depletion (ac-ft/yr)	q/Q (%)	Streams	Max.Depletion during model period (ac-ft/yr)	Year during model period	Max. Depletion during pumping period (ac-ft/yr)	Year during pumping period	
MONUMENT	0.05	0.68	MONUMENT	0.24	370		300	
EAST PLUM-W&E BRANCH	0.00	0.06	EAST PLUM-W&E BRANCH	0.13	605	0.06	300	
RUNNING CREEK	0.00	0.01	RUNNING CREEK	0.02	525	0.01	300	
WEST CHERRY	0.20	2.86	WEST CHERRY	0.42	305	0.42	300	
EAST CHERRY	0.26	3. 8 3	EAST CHERRY	0.48	300	0.48	300	
CHERRY	0.02	0:29	CHERRY	0.14	410	0.12	300	
KIOWA	0.02	0.26	KIOWA	0.17	465	0.13	300	
KETTLE	0.01	0.16	KETTLE	0.06	370	0.05	300	
SAND-DIV2	0.01	0:07	SAND-DIV2	0.11	475	0.07	300	
BIG SANDY	0.00	0.00	BIG SANDY	0.00	1900	0.00	300	
BLACK SQUIRREL-UBSCDB	0.00	0.00	BLACK SQUIRREL-UBSCDB	0.02	610	0.01	300	
Total	0.57	8.23	Total	1.56	300	1.56	300	
South Platte (No Designated Basin Streams)	0.49	7.06	South Platte (No Designated Basin Streams)	1.09	300	1.09	300	
Arkansas (No Designated Basin Streams)	0.06	0.90	Arkansas (No Designated Basin Streams)	0.39	395		300	
Designated Basin	0.02	0.26	Designated Basin	0.19	490		300	

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Values for 'Depletion as a % of Pumping' (q/Q) are not calculated when the pumping rate (Q) is changed to anything but zero

		Summary	of Total D	epletion (S	outh Platte	+Arkansa	s+Designat	ted Basin S	treams)		
	Depletion	Annual		Depletion	Annual		Depletion	Annual		Depletion	Annual
	asa % of	Depletion		as a % of	Depletion		as a % of	Depletion		as a % of	Depletion
Year	Pumping	(AF/YR)	Year	Pumping	(AF/YR)	Year	Pumping	(AF/YR)	Year	Pumping	(AF/YR)
5	0.37	0.025	255	19.57	1.350	505	18.41	1.270	755	13.60	0.938
10	0.81	0.056	260	19.92	1.374	510	18.31	1.263	760	13.51	0.932
15	1.28	0.088	265	20.25	1.397	515	18.21	1.256	765	13.43	0.927
20	1.73	0.120	270	20.59	1.421	520	18.10	1.249	770	13.35	0.921
25	2.18	0.151	275	20.93	1.444	525	18.00	1.242	775	13.26	0.915
30	2.62	0.181	280	21.26	1.467	530	17.89	1.234	780	13.18	0.909
35	3.05	0.211	285	21.60	1.490	535	17.79	1.227	785	13.09	0.903
40	3.47	0.240	290	21.92	1.513	540	17.68	1.220	790	13.02	0.898
45	3.89	0.268	295	22.26	1.536	545	17.58	1.213	795	12.94	0.893
50	4.30	0.296	300	22.59	1.558	550	17.48	1.206	800	12.85	0.887
55	4.70	0.324	305	22.54	1.555	555	17.38	1.199	805	12.78	0.882
60	5.10	0.352	310	22.42	1.547	560	17.27	1.192	810	12.69	0.876
65	5.50	0.379	315	22.28	1.537	565	17.17	1.184	815	12.62	0.871
70	5.89	0.407	320	22.14	1.528	570	17.06	1.177	820	12.54	0.865
75	6.29	0.434	325	22.01	1.518	575	16.97	1.171	825	12.46	0.860
80	6.68	0.461	330	21.89	1.511	580	16.86	1.163	830	12.39	0.855
85	7.07	0.487	335	21.78	1.503	585	16.76	1.156	835	12.31	0.849
90	7.45	0.514	340	21.66	1.495	590	16.66	1.150	840	12.23	0.844
95	7.84	0.541	345	21.56	1.487	595	16.56	1.142	845	12.16	0.839
100	8.23	0.568	350	21.46	1.481	600	16.46	1.136	850	12.09	0.834
105	8.61	0.594	355	21.37	1.474	605	16.36	1.129	855	12.01	0.829
110	8.99	0.621	360	21.27	1.468	610	16.26	1.122	860	11.93	0.823
115	9.38	0.647	365	21.18	1.461	615	16.16	1.115	865	11.85	0.818
120	9.76	0.673	370	21.08	1.455	620	16.06	1.108	870	11.79	0.814
125	10.14	0.699	375	20.99	1.448	625	15.97	1.102	875	11.72	0.809
130	10.52	0.726	380	20.89	1.442	630	15.87	1.095	880	11.64	0.803
135	10.90	0.752	385	20.81	1.436	635	15.77	1.088	885	11.57	0.798
140	11.28	0.778	390	20.72	1.429	640	15.68	1.082	890	11.50	0.793
145	11.64	0.803	395	20.62	1.423	645	15.58	1.075	895	11.42	0.788
150	12.02	0.830	400	20.53	1.416	650	15.49	1.069	900	11.36	0.784
155	12.40	0.856	405	20.43	1.410	655	15.39	1.062	905	11.29	0.779
160	12.77	0.881	410	20.34	1.403	660	15.30	1.056	910	11.21	0.774
165	13.15	0.907	415	20.24	1.397	665	15.20	1.049	915	11.15	0.769
170	13.51	0.932	420	20.14	1.390	670	15.11	1.043	920	11.08	0.764
175	13.88	0.958	425	20.04	1.383	675	15.01	1.036	925	11.01	0.760
180	14.25	0.983	430	19.95	1.376	680	14.92	1.029	930	10.94	0.755
185	14.62	1.008	435	19.84	1.369	685	14.83	1.023	935	10.88	0.751
190	14.97	1.033	440	19.75	1.363	690	14.74	1.017	940	10.81	0.746
195	15.34	1.058	445	19.65	1.355	695	14.65	1.011	945	10.74	0.741
200	15.70	1.083	450	19.54	1.348	700	14.55	1.004	950	10.68	0.737
205	16.06	1.108	455	19.45	1.342	705	14.47	0.998	955	10.62	0.732
210	16.42	1.133	460	19.34	1.334	710	14.37	0.992	960	10.55	0.728
215	16.78	1.158	465	19.24	1.327	715	14.29	0.986	965	10.49	0.724
220	17.14	1.182	470	19.14	1.321	720	14.20	0.979	970	10.42	0.719
225	17.48	1.206	475	19.04	1.313	725	14.11	0.974	975	10.36	0.715
230	17.84	1.231	480	18.93	1.306	730	14.03	0.968	980	10.30	0.710
235	18.19	1.255	485	18.83	1.299	735	13.93	0.961	985	10.23	0.706
240	18.53	1.279	490	18.72	1.292	740	13.85	0.956	990	10.17	0.702
245	18.89	1.303	495	18.62	1.284	745	13.77	0.950	995	10.11	0.697
250	19.23	1.326	500	18.51	1.277	750	13.68	0.944	1000	10.05	0.693

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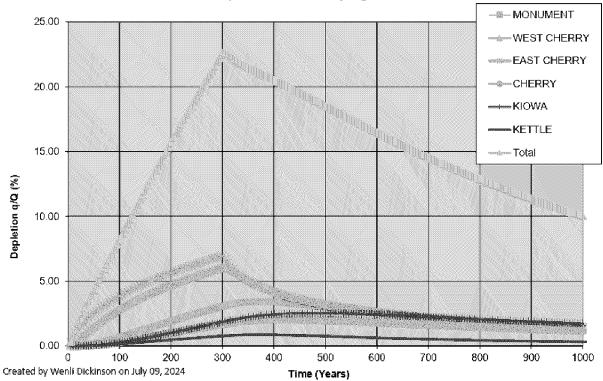
Values for 'Depletion as a % of Pumping' (q/Q) are not calculated when the pumping rate (Q) is changed to anything but zero

Year Pumping (AF/YR) Year Pumping AF/YR) Year Pumping AF/YR Year Pumping AF/YR Year AF/YR Year AF/YR Year AF/YR Year AF/YR Year AF/YR Year	letion Annual 1% of Depletion nping (AF/YR .43 0.167 .42 0.167 .41 0.166 .40 0.166 .39 0.165 .38 0.164 .37 0.164 .36 0.163 .35 0.162
Year Pumping (AF/YR) Year Pumping (AF/YR) Year Depletion Pumping Year Year Pumping (AF/YR) Year Pumping (AF/YR) Year Pumping AF/YR) AF/YR) Year Pumping ABF AF/YR) Year ABF	w of Depletion (AF/YR) 43 0.167 42 0.167 41 0.166 40 0.166 39 0.165 38 0.164 37 0.163
Year Pumping (AF/YR) Year Pumping AF/YR) Year Pumping AF/YR) Year Pumping AB BB AB AB AB Date AB AB </th <th>nping (AF/YR .43 0.167 .42 0.167 .41 0.166 .40 0.166 .39 0.165 .38 0.164 .37 0.164 .36 0.163</th>	nping (AF/YR .43 0.167 .42 0.167 .41 0.166 .40 0.166 .39 0.165 .38 0.164 .37 0.164 .36 0.163
5 0.00 0.000 255 1.54 0.106 505 2.76 0.191 755 2 10 0.00 0.000 260 1.59 0.110 510 2.76 0.191 760 2 15 0.00 0.000 0.000 265 1.63 0.113 515 2.76 0.190 765 2 20 0.00 0.000 270 1.68 0.116 520 2.76 0.190 765 2 25 0.01 0.000 275 1.73 0.119 525 2.75 0.190 775 2 30 0.01 0.001 280 1.78 0.122 530 2.75 0.190 786 2 35 0.01 0.001 285 1.82 0.126 535 2.75 0.190 786 2 40 0.02 0.002 295 1.92 0.132 545 2.75 0.189 790	.43 0.167 .42 0.167 .41 0.166 .40 0.166 .39 0.165 .38 0.164 .37 0.164 .36 0.163
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	.23 0.154
404 405 465	.22 0.153
	.21 0.153
	.20 0.152
	.19 0.151
	.19 0.151
140 0.54 0.037 390 2.61 0.180 640 2.62 0.181 890 2	.18 0.150
	.17 0.150
	.16 0.149
	.15 0.148
	.14 0.148
	.13 0.147
170 0.78 0.054 420 2.70 0.186 670 2.58 0.178 920 2	.12 0.146
	.11 0.146
	.10 0.145
	.09 0.144 .08 0.144
000 101 0000 100 001 0100 000 000 0101 000 0	.07 0.143
	.07 0.143 .06 0.142
	.05 0.142
	.05 0.141
	.03 0.140
	.03 0.140
	.01 0.139
	.00 0.138
	.99 0.138
250 1.49 0.103 500 2.76 0.191 750 2.44 0.168 1000 1	.99 0.137

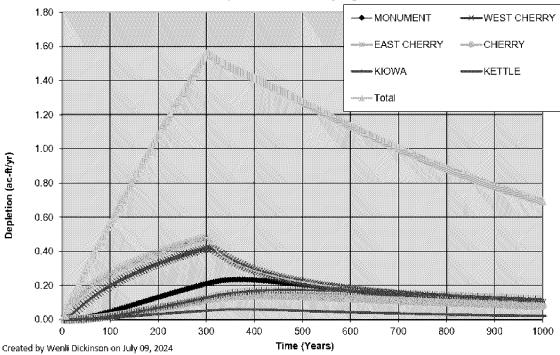
Created by Wenli Dickinson on July 09, 2024

Values for 'Depletion as a % of Pumping' (q/Q) are not calculated when the pumping rate (Q) is changed to anything but zero

Stream Depletion from Pumping in Sec. 6, T11S, R65W, 6th P.M.



Stream Depletion from Pumping in Sec. 6, T11S, R65W, 6th P.M.



Case No or Receipt No.: 24CW3877 Aquifer: DAWSON Applicant Name: Thaddeus Jarc

			Pumping	Dala		South Pla	itle Dapi	letion (Na D Streams)	esignated	Basin	Arkansas	Deple	tion (No Di Streams)	esignated t	Sasin		acional	ed Basin C	Vanlation		Total Depl		South Platte		as+
Time	Time Step Length	Pumping	vol. this time step	cumulativ vol.	vol./yr	Depletion	q/Q	vol. this time step	cumulativ vol.	vol./yr	Depletion	q/Q	vol. this time step	cumulativ vol.	vol./yr		wD.	vol. this time step	cumulativ vol.	vol./yr	Depletion	q/Q	vol. this time step	oumulativ vol.	volJyr
(Yr)	(Yr)	(cfs)	(af)	(af)	(af/yr)	(cfs)	(%)	(af)	(af)	(af/yr)	(cfs)	(%)	(af)	(af)	(af/yr)	(cfs)	(%)	(af)	(af)	(af/yr)	(cfs)	(%)	(af)	(af)	(af/yr)
5	5	9.524E-03	34.499	34.499	6.900	3.478E-05		0.126	0.126	0.025	1.077E-07		0.000	0.000	0.000	5.504E-09		0.000	0.000	0.000	3.490E-05	0.366	0.126	0.126	0.025
10	6	9.524E-03	34.499	68.998	6.900			0.279	0.405	0.056	4.764E-07		0.002	0.002	0.000	3.136E-08		0.000	0.000	0.000	7.747E-05	0.813	0.281	0.407	0.056
15 20	5	9.524E-03 9.524E-03	34.499 34.499	103.497 137.996	6.900	1.201E-04 1.624E-04	1.261	0.435 0.588	0.840 1.428	0.087	1.239E-06 2.488E-06		0.004	0.007 0.016	0.001	1.011E-07 2.432E-07		0.000 0.001	0.000	0.000	1.215E-04 1.651E-04	1.275 1.733	0.440 0.598	0.847 1.445	0.088 0.120
25	5	9.524E-03	34.499	172.495			2.133	0.736	2.164		4.270E-06		0.015	0.031	0.003	4.873E-07		0.002	0.003	0.000	2.079E-04	2.182	0.753	2.198	0.151
30	5	9.524E-03	34.499	206.994	6.900	2.422E-04	2.543	0.877	3.041		6.605E-06		0.024	0.055		8.608E-07		0.003	0.006	0.001	2.497E-04	2.622	0.905	3.103	0.181
35	5	9.524E-03	34.499	241.492	6.900		2.937	1.013	4.055		9.488E-06		0.034	0.089	0.007	1.386E-06		0.005	0.011	0.001	2.906E-04	3.052	1.053	4.155	0.211
40	5	9.524E-03	34.499	275.991		3.158E-04	3.315	1.144	5.198	0.229	1.290E-05		0.047	0.136	0.009	2.083E-06		0.008	0.019	0.002	3.307E-04	3.473	1.198	5.353	0.240
45	5	9.524E-03	34.499	310.490	6.900		3.679	1.269	6.468	0.254	1.684E-05		0.061	0.197	0.012	2.962E-06		0.011	0.030	0.002	3.702E-04	3.887	1.341	6.694	0.268
50	5	9.524E-03 9.524E-03	34.499 34.499	344.989 379.488		3.839E-04	4.031	1.391 1.508	7.858 9.366		2.126E-05		0.077	0.274	0.015	4.032E-06		0.015 0.019	0.044	0.003	4.092E-04	4.297	1.482 1.622	8.177 9.798	0.296 0.324
55 60	5	9.524E-03	34.499	413.987		4.183E-04 4.477E-04	4.701	1.622	10.988		2.613E-05 3.143E-05		0.114	0.483		5.295E-06 6.751E-06		0.024	0.088	0.005	4.477E-04 4.859E-04	5.101	1.760	11.558	0.352
65	5	9.524E-03	34.499	448.486		4.781E-04	5.020	1.732	12.720	0.346	3.714E-05		0.135	0.617	0.027	8.398E-06		0.030	0.118	0.006	5.237E-04	5.498	1.897	13.455	0.379
70	5	9.524E-03	34,499	482.985		5.077E-04	5.331	1.839	14.559	0.368	4.321E-05		0.157	0.774	0.031	1.023E-05		0.037	0.155	0.007	5.612E-04	5.892	2.033	15.488	0.407
75	5	9.524E-03	34.499	517.484	6.900	5.368E-04	5.636	1.944	16.503	0.389	4.963E-05	0.521	0.180	0.953	0.036	1.224E-05	0.129	0.044	0.200	0.009	5.986E-04	6.285	2.168	17.656	0.434
80	5	9.524E-03	34.499	551.983		5.651E-04	5.933	2.047	18.550		5.638E-05		0.204	1.158	0.041	1.442E-05		0.052	0.252	0.010	6.359E-04	6.677	2.303	19.960	0.461
85	5	9.524E-03	34.499	586.482		5.927E-04		2.147	20.697		6.342E-05		0.230	1.387	0.046	1.677E-05		0.061	0.313	0.012	6.728E-04	7.065	2.437	22.397	0.487
90 95	5	9.524E-03 9.524E-03	34.499 34.499	620.981 655.479		6.198E-04 6.464E-04	6.508 6.787	2.245 2.341	22.942 25.283		7.075E-05 7.832E-05		0.256 0.284	1.644	0.051	1.927E-05 2.191E-05		0.070 0.079	0.382	0.014	7.098E-04 7.466E-04	7.453 7.839	2.571 2.704	24.968 27.673	0.514 0.541
100	5	9.524E-03	34.499	689.978		6.725E-04	7.061	2.436	27.720		8.614E-05		0.204	2.239	0.062	2.470E-05		0.089	0.551	0.018	7.834E-04	8.225	2.838	30.510	0.568
105	5	9.524E-03	34.499	724.477		6.982E-04	7.331	2.529	30.249		9.417E-05		0.341	2.581		2.761E-05		0.100	0.551		8.20012E-04		2.970	33.481	0.594
110	5	9.524E-03	34.499	758.976		7.234E-04	7.596	2.620	32.869	0.524	1.024E-04		0.371	2.951	0.074	3.064E-05		0.111	0.762	0.022	8.55460E-04		3.102	36.583	0.620
115	5	9.524E-03	34.499	793.475	6.900	7.483E-04	7.857	2.710	35.580	0.542	1.108E-04	1.163	0.401	3.353	0.080	3.378E-05	0.355	0.122	0.885	0.024	8.929E-04	9.375	3.234	39.817	0.647
120	5	9.524E-03	34.499	827.974		7.728E-04	8.114	2.799	38.379	0.560	1.194E-04		0.432	3.785		3.704E-05		0.134	1.019	0.027	9.292E-04	9.756	3.366	43.183	0.673
125	5	9.524E-03	34.499	862.473		7.970E-04	8.368	2.887	41.266	0.577	1.281E-04		0.464	4.249	0.093	4.038E-05		0.146	1.165	0.029	9.655E-04	10.138	3.497	46.680	0.699
130 135	5	9.524E-03 9.524E-03	34.499 34.499	896.972 931.471		8.208E-04 8.443E-04	8.618 8.865	2.973 3.058	44.239 47.297	0.595 0.612	1.370E-04 1.459E-04		0.496 0.529	4.746 5.274		4.383E-05 4.736E-05		0.159 0.172	1.324 1.495	0.032	1.002E-03 1.038E-03	10.517	3.628 3.758	50.308 54.067	0.726 0.752
140	5	9.524E-03	34.499	965.970				3.142	50.439	0.628	1.551E-04		0.562	5.836		5.096E-05		0.172	1.580	0.037	1.073E-03	11.271	3.888	57.955	0.732
145	5	9.524E-03	34.499			8.905E-04	9.350	3.226	53,665	0.645	1.643E-04		0.595	6.431	0.119	5.464E-05		0.198	1.878	0.040	1.109E-03	11.648	4.018	61.974	0.804
150	5	9.524E-03	34.499			9.132E-04	9.589	3.308	56.973	0.662	1.735E-04	1.822	0.629	7.059	0.126	5.839E-05		0.212	2.089	0.042	1.145E-03	12.024	4.148	66.122	0.830
155	5	9.524E-03	34.499					3.389	60.361	0.678	1.830E-04		0.663	7.722	0.133	6.221E-05		0.225	2.315	0.045	1.181E-03	12.396	4.277	70.398	0.855
160	5	9.524E-03	34.499			9.577E-04		3.469	63.831	0.694	1.924E-04		0.697	8.419	0.139	6.608E-05		0.239	2.554	0.048	1.216E-03	12.769	4.405	74.804	0.881
165	5	9.524E-03	34.499			9.798E-04		3.549	67.380		2.018E-04		0.731	9.150				0.254	2.808	0.051	1.252E-03	13.141	4.534	79.337	0.907
170 175	6	9.524E-03 9.524E-03	34.499 34.499	1172.963		1.001E-03 1.023E-03		3.627 3.705	71.007 74.712		2.113E-04 2.210E-04		0.765	9.91 <i>5</i> 10.716	0.153	7.399E-05 7.802E-05		0.268	3.076 3.358	0.054	1.287E-03 1.322E-03	13.510	4.661 4.788	83.098 88.786	0.932 0.958
180	5	9.524E-03	34.499	1241.961					78.495		2.306E-04		0.835	11.551		8.210E-05		0.297	3,556	0.059	1.357E-03	14.248	4.915	93.702	0.983
185	- 6	9.524E-03	34.499			1.065E-03			82.354		2.402E-04		0.870	12.421		8.621E-05		0.312	3.968	0.062	1.392E-03	14.613	5.041	98.743	1.008
190	5	9.524E-03	34.499	1310.959	6.900	1.086E-03	11.406	3.935	86.289	0.787	2.499E-04	2.623	0.905	13.326	0.181	9.037E-05	0.949	0.327	4.295	0.065	1.427E-03	14.978	5.167	103.910	1.033
195	5	9.524E-03	34.499			1.107E-03			90.299		2.595E-04		0.940	14.256		9.455E-05		0.343	4.638	0.069	1.461E-03	15.340	5.292	109.202	1.058
200	5	9.524E-03	34.499	1379.957					94.383	0.817	2.692E-04		0.975	15.241	0.195	9.877E-05		0.358	4.995	0.072	1.496E-03	15.703	5.417	114.620	1.083
205 210	5	9.524E-03 9.524E-03	34.499 34.499			1.148E-03 1.168E-03			98.541 102.773	0.832	2.789E-04 2.884E-04		1.010	16.251 17.296	0.202	1.030E-04 1.073E-04		0.373 0.389	5.369 5.757	0.075	1.530E-03 1.564E-03	16.063	5.541 5.665	120.161 125.826	1.108
215	5	9.524E-03	34.499	1483,454				4.304	107.076		2.981E-04		1.080	18.376	0.216	1.116E-04		0.404	6.161	0.0781	1.598E-03	16,776	5.788	131.613	1.158
220	5	9.524E-03	34.499			1.208E-03		4.376	111.452		3.078E-04		1.115	19.491	0.223	1.160E-04		0.420	6.581	0.084	1.632E-03	17.133	5.911	137.524	1.182
225	5	9.524E-03	34.499	1552.451				4.447	115.899		3.174E-04		1.150	20.640	0.230	1.203E-04		0.436	7.017	0.087	1.665E-03	17.487	6.033	143,556	1.207
230	5	9.524E-03	34.499	1586.950	6.900	1.247E-03	13.096	4.518	120.417	0.904	3.270E-04	3.434	1.185	21.825	0.237	1.247E-04	1.309	0.452	7.469	0.090	1.699E-03	17.839	6.154	149.711	1.231
235	5	9.524E-03	34.499	1621.449		1.267E-03			125.005		3.366E-04		1.219	23.044	0.244	1.290E-04		0.467	7.936	0.093	1.732E-03	18.168	6.275	155.985	1.255
240	5	9.524E-03	34.499			1.286E-03					3.462E-04		1.254	24.298	0.251	1.334E-04		0.483	8.419	0.097	1.766E-03	18.538	6.395	162.381	1.279
245 250	5	9.524E-03 9.524E-03	34.499 34.499	1690.447		1.305E-03 1.324E-03		4.727 4.796	134.390 139.186	0.945	3.557E-04 3.652E-04		1.288	25.587 26.909	0.258	1.379E-04 1.423E-04		0.499 0.516	8.919 9.434	0.100	1.799E-03 1.831E-03	19.230	6.515 6.634	168.896 175.530	1.303 1.327
255	5	9.524E-03	34.499	1759.445		1.343E-03			144.050		3.746E-04		1.357	28.256	0.205	1.468E-04		0.532	9.966	0.103	1.864E-03	19.574	6.753	182.283	1.351
260	5	9.524E-03	34.499			1.361E-03			148.982		3.840E-04		1.391	29.657	0.278	1.512E-04		0.548	10.514	0.110	1.897E-03	19.915	6.870	189,153	1.374
265	5	9.524E-03	34.499	1828.443					153.981		3.934E-04		1.425	31.082				0.564	11.078	0.113	1.929E-03	20.254	6.987	195.140	1.397
270	5	9.524E-03	34.499	1862.942	6.900	1.398E-03	14.682	5.065	159.046	1.013	4.027E-04	4.229	1.459	32.541	0.292	1.601E-04	1.681	0.580	11.658	0.116	1.961E-03	20.592	7.104	203.245	1.421

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Case No or Receipt No.: 24CW3077 Aquifer: DAWSON Applicant Name: Thaddeus Jarosz

1			Quencina	Date		South Pla	itte Depl		Designated	Basin	Arkansa	s Deple		esignated E	Sasin	۱ ۲		ted Basin (Janlatina		Total Dep			+ Arkansı	as+
\vdash	Time		Pumping	Rate		_	1	Streams)				1	Streams)				esigna	ed Basin (Aepieuon			Desig	nated Bas	n	-
Time	Step	Pumping	vol. this	cumulativ	vol./yr	Depletion	qłΩ	vol. this	cumulativ	val./yr	Depletion	q/O	vol. this	cumulativ	vol./yr	Depletion	q/Q	vol. this	cumulativ	vol./yr	Depletion	q/Q	vol. this	cumulativ	vol./yr
	Length		time step	vol.		, i	·	time step	vol.			Ľ	time step	vol.				time step	vol.			ļ ·	time step	vol.	
(Yr)	(Yr)	(cfs)	(af)	(af)	(af/yr)	(cfs)	(%)	(af)	(af)	(affyr)	(cfs)	(%)	(af)	(af)	(af/yr)	(cts)	(%)	(af)	(af)	(af/yr)	(cfs)	(%)	(af)	(af)	(af/yr)
275	5	9.524E-03	34.499	1897.441					164.177	1.026	4.120E-04			34.033	0.298	1.646E-04		0.596	12.254	0.119	1.993E-03	20.929	7.220	210.465	1.444
280	5	9.524E-03	34.499 34.499	1931.939				5.198	169.375	1.040	4.212E-04		1.526 1.559	35.559	0.305	1.691E-04		0.612 0.629	12.866	0.122	2.025E-03	21.264	7.336 7.450	217.801	1.467
285 290	5	9.524E-03 9.524E-03	34.499			1.453E-03 1.471E-03		5.263 5.328	174.638 179.965	1.053	4.304E-04 4.396E-04		1.592	37.118 38.711	0.312			0.645	13.495 14.140	0.120	2.057E-03 2.088E-03	21.595 21.928	7.565	225.251 232.816	1.490
295	5	9.524E-03	34.499			1.489E-03		5.392	185.357	1.078	4.486E-04		1.625	40.336	0.325			0.661	14.801	0.132	2.120E-03	22.257	7.678	240.494	1.536
300	5	9.524E-03	34.499			1.506E-03		5.456	190.813	1.091	4.576E-04		1.658	41.993	0.332	1.870E-04		0.678	15.479	0.136	2.151E-03	22.584	7.791	248.286	
305	5	0.000E+00	0.000	2069.935	0.000	1.489E-03	15.633	5.393	196.207	1.079	4.665E-04	4.898	1.690	43.683	0.338	1.915E-04	2.011	0.694	16.173	0.139	2.147E-03	22.542	7.777	256.062	1.555
310	5	0.000E+00	0.000			1.464E-03			201.510	1.061	4.750E-04			45.404	0.344			0.710	16.883	0.142	2.135E-03	22.420	7.735	263.797	1.547
315	5	0.000E+00	0.000			1.438E-03		5.210	206.720	1.042	4.832E-04		1.750	47.154	0.350	2.004E-04		0.726	17.609	0.145	2.122E-03	22.279	7.686	271.483	1.537
320	5	0.000E+00	0.000			1.413E-03		5.119	211.840		4.907E-04		1.778	48.932	0.356			0.742	18.351	0.148	2.109E-03	22.142	7.639	279.122	
325 330	5	0.000E+00 0.000E+00	0.000			1.390E-03 1.367E-03		5.033 4.953	216.873 221.826	1.007	4.977E-04 5.040E-04		1.803 1.826	50.735 52.560	0.361	2.091E-04 2.132E-04		0.767	19.108 19.880	0.151	2.096E-03 2.085E-03	22.011	7.594 7.551	286.715 294.266	
335	5	0.000E+00	0.000			1.347E-03		4.878	226,705	0.976	5.098E-04		1.847	54.407	0.369			0.772	20.667	0.154	2.065E-03	21.774	7.512	301.778	
340	5	0.000E+00	0.000			1.327E-03				0.952	5.149E-04		1.865	56.272	0.373			0.800	21.467	0.160		21.664	7.474	309.252	
345	5	0.000E+00	0.000			1.309E-03		4.743		0.949	5.195E-04		1.882	58.154		2.245E-04		0.813	22.280	0.163	2.053E-03	21.561	7.438	316.690	1.488
350	5	0.000E+00	0.000	2069.935	0.000	1.293E-03	13.571	4.682	240.938	0.936	5.236E-04	5.497	1.896	60.051	0.379	2.279E-04	2.392	0.825	23.105	0.165	2.044E-03	21.461	7.404	324.094	1.481
355	5	0.000E+00	0.000			1.277E-03		4.624		0.925	5.271E-04	5.534	1.909	61.950	0.382	2.311E-04	2.426	0.837	23.942	0.167	2.035E-03	21.365	7.371	331.465	1.474
360	5	0.000E+00	0.000			1.262E-03			250.132	0.914	5.301E-04		1.920	63.880	0.384	2.341E-04		0.848	24.790	0.170	2.026E-03	21.270	7.338	338.803	
365	5	0.000E+00	0.000			1.247E-03		4.518	254.650		5.327E-04		1.930	65.810	0.386			0.858	25.649	0.172	2.017E-03	21.177	7.306	346.108	1.461
370 375	5	0.000E+00 0.000E+00	0.000			1.234E-03 1.221E-03		4.469 4.422	259.119 263.540	0.894 0.884	5.349E-04 5.365E-04		1.937 1.943	67. 747 69.691	0.387	2.395E-04 2.419E-04		0.868 0.876	26.516 27.393	0.174	2.008E-03 1.999E-03	21.084 20.991	7.274 7.2 4 2	353.382 360.624	1.455
380	5	0.000E+00	0.000			1.208E-03				0.875	5.379E-04		1.949	71.639	0.390			0.885	28.277	0.177	1.991E-03	20.901	7.211	367.834	1.442
385	5	0.000E+00	0.000			1.196E-03		4.334		0.857	5.389E-04		1.952	73.591	0.390			0.892	29.170	0.178	1.982E-03	20.807	7.178	375.012	
390	5	0.000E+00	0.000			1.185E-03				0.858	5.395E-04		1.954	75.545	0.391			0.899	30.069	0.180	1.973E-03	20.713	7.146	382.158	
395	5	0.000E+00	0.000	2069.935	0.000	1.174E-03	12.326	4.252	280.797	0.850	5.399E-04	5.669	1.956	77.501	0.391	2.500E-04	2.625	0.906	30.974	0.181	1.964E-03	20.620	7.114	389.272	1.423
400	5	0.000E+00	0.000			1.163E-03		4.214	285.011	0.843	5.399E-04	5.669	1.956	79.457	0.391	2.516E-04	2.642	0.911	31.886	0.182	1.955E-03	20.525	7.081	396.353	1.416
405	5	0.000E+00	0.000			1.153E-03		4.177	289.187	0.835	5.396E-04		1.955	81.411	0.391	2.531E-04		0.917	32.802	0.183	1.946E-03	20.430	7.048	403.401	1.410
410	- 6	0.000E+00	0.000			1.143E-03		4.141	203.320	0.828	6.391E-04		1.963	83.364	0.391	2.544E-04		0.922	33.724	0.184	1.937E-03	20.336	7.016	410.417	1.403
415 420	5	0.000E+00 0.000E+00	0.000			1.133E-03 1.124E-03		4.186 4.072	297.434 301.506	0.821 0.814	5.384E-04 5.375E-04		1.950 1.947	85.315 87.261	0.390	2.557E-04 2.567E-04		0.926 0.930	34.650 35.580	0.185	1.928E-03 1.918E-03	20.239	6.982 6.948	417.399 424.347	1.396
425	5	0.000E+00	0.000			1.115E-03		4.039	305.545	0.808	5.362E-04		1.942	89.204	0.388			0.934	36.514	0.187	1.909E-03	20.044	6.915	431.262	1.383
430	5	0.000E+00	0.000			1.106E-03			309.551	0.801	5.348E-04			91.141	0.387	2.587E-04		0.937	37.451	0.187	1.900E-03	19.945	6.881	438.143	
435	5	0.000E+00	0.000			1.097E-03			313.526	0.795	5.333E-04		1.932	93.073	0.386	2.595E-04		0.940	38.391	0.188	1.890E-03	19.847	6.847	444.990	
440	5	0.000E+00	0.000	2069.935	0.000	1.089E-03	11.433	3.944	317.471	0.789	5.315E-04	5.581	1.925	94.998	0.385	2.602E-04	2.732	0.943	39.334	0.189	1.881E-03	19.746	6.812	451.802	1.362
445	5	0.000E+00	0.000			1.081E-03			321.385	0.783	5.298E-04			96.917	0.384	2.608E-04		0.945	40.278	0.189	1.871E-03	19.647	6.778	458.580	1.356
450	5	0.000E+00	0.000			1.073E-03		3.885		0.777	5.276E-04		1.911	98.828	0.382	2.614E-04		0.947	41.225	0.189	1.861E-03	19.545	6.743	465.323	1.349
455 460	5	0.000E+00	0.000			1.064E-03		3.856 3.828	329.126 332.953	0.771	5.254E-04		1.903 1.895	100.732	0.381	2.619E-04		0.949 0.950	42.174	0.190	1.852E-03	19.443	6.708	472.031	1.342
465	5	0.000E+00 0.000E+00	0.000			1.057E-03 1.049E-03					5.232E-04 5.208E-04		1.895	102.627 104.513	0.379	2.622E-04 2.626E-04		0.951	43.124 44.075	0.190	1.842E-03 1.832E-03	19.342 19.240	6.673 6.638	478.704 485.342	1.335
470	5	0.000E+00	0.000			1.049E-03		3.773	340.526	0.755	5.183E-04		1.877	106.390				0.952	45.027	0.190	1.823E-03	19.137	6.602	491.944	1.320
475	5	0.000E+00	0.000			1.034E-03			344.272		5.167E-04			108.259		2.631E-04		0.953	45.980	0.191	1.813E-03	19.035	6.567	498.511	1.313
480	5	0.000E+00	0.000			1.027E-03		3.719	347.991	0.744	5.130E-04		1.858	110.117	0.372			0.953	46.934	0.191	1.803E-03	18.931	6.531	505.042	
485	5	0.000E+00	0.000			1.020E-03		3.694	351.685	0.739	5.101E-04	5.356	1.848	111.985	0.370	2.632E-04	2.764	0.954	47.887	0.191	1.793E-03	18.826	6.495	511.537	1.299
490	5	0.000E+00	0.000			1.012E-03		3.668	355.353		5.073E-04		1.838	113.802	0.368			0.954	48.841	0.191	1.783E-03	18.722	6.459	517.996	
495	5	0.000E+00	0.000			1.006E-03		3.643			5.044E-04		1.827	115.629	0.365			0.954	49.795	0.191	1.773E-03	18.620	6.424	524.419	
500	5	0.000E+00	0.000			9.988E-04		3.618 3.593			5.014E-04		1.816	117.445		2.632E-04		0.954	50.748	0.191	1.763E-03	18.515	6.388	530.807	
505 510	5	0.000E+00 0.000E+00	0.000			9.920E-04 9.854E-04			366.206 369.776		4.983E-04 4.953E-04		1.805	119.250	0.361	2.632E-04 2.630E-04		0.953	51.702 52.654	0.191	1.753E-03 1.744E-03	18.411 18.308	6.351 6.316	537.158 543.474	1.270
515	5	0.000E+00	0.000			9.854E-04 9.787E-04			373,321				1.783	122.827	0.357	2.630E-04 2.628E-04		0.952	52.607	0.191	1.734E-03	18.204	6.280	549,754	1.256
520	5	0.000E+00	0.000			9.722E-04				0.704			1.771	124.598	0.354			0.951	54.558	0.190	1.724E-03	18.099	6.244	555.998	
525	5	0.000E+00	0.000			9.657E-04			380.341	0.700	4.857E-04		1.759	126.357	0.352	2.623E-04		0.950	55.508	0.190	1.714E-03	17.995	6.208	562.206	1.242
530	5	0.000E+00	0.000			9.594E-04		3.475	383.816	0.695	4.824E-04		1.748	128.105	0.350			0.949	56.457	0.190	1.704E-03	17.891	6.172	568.379	
535	5	0.000E+00	0.000			9.531E-04			387.269		4.792E-04			129.841		2.618E-04		0.948	57.406	0.190	1.694E-03	17.789	6.137	574.516	
540	5	0.000E+00	0.000	2069.935	0.000	9.469E-04	9.942	3.430	390.699	0.686	4.759E-04	4.997	1.724	131.565	0.345	2.616E-04	2.745	0.947	58.353	0.189	1.684E-03	17.685	6.101	580.617	1.220

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Case No or Receipt No.: 24CW3077 Aquifer: DAWSON Applicant Name: Thaddeus Jarosz

	-					South Pla	tte Depl	etion (Na D	Designated	Basin	Arkansas	Deple		esignated E	Basin						Tatal Depl				as +
\vdash	1	ļ	Pumping	Rate				Streams)				_	Streams)		_	D.	esigna	ted Basin (Aspletion			Desig	nated 8as	n	
Time	Time Step Length	Pumping	vol. this time step	cumulativ vol.	vol./yr	Depletion	q/Q	vol. this time step	cumulativ vol.	volJyr	Depletion	q/Q	vol. this time step	cumulativ vol.	vol./yr	Depletion	q/Q	vol. this time step	cumulativ vol.	vol./yr	Depletion	q/Q	vol. this time step	cumulativ vol.	volJyr
(Yr)	(Yr)	(cfs)	(af)	(af)	(af/yr)	(cfs)	(%)	(af)	(af)	(affyr)	(cfs)	(%)	(af)	(af)	(af/yr)	(cfs)	(%)	(af)	(af)	(al/yr)	(cfs)	(%)	(af)	(af)	(affyr)
545	5	0.000E+00	0.000	2069.935	0.000	9.408E-04	9.878	3.408	394,107	0.682	4.725E-04	4.961	1.712	133.276	0.342	2.611E-04	2.741	0.946	59.299	0.189	1.674E-03	17.581	6.065	586.682	1.213
560	5	0.000E+00	0.000			9.347E-04	9.814	3.386	397.492	0.677	4.693E-04		1.700	134.977	0.340	2.507E-04		0.944	60.243	0.189	1.665E-03	17.479	6.030	592.712	1.206
565	5	0.000E+00	0.000			9.286E-04	9.750	3.364	400.856	0.673	4.660E-04		1.688	136.664	0.338	2.502E-04		0.942	61.185	0.188	1.655E-03	17.375	5.994	598.706	1.199
560	- 5	0.000E+00	0.000			9.226E-04	9.687	3.342	404.198	0.668	4.626E-04		1.676	138.340	0.335	2.598E-04		0.941	62.126	0.188	1.645E-03	17.272	5.958	604.664	1.192
565	5	0.000E+00	0.000			9.166E-04	9.625	3.320	407.518	0.664	4.592E-04		1.663	140.003		2.593E-04		0.939	63.066	0.188	1.635E-03	17.168	5.923	610.587	1.185
570 575	5	0.000E+00 0.000E+00	0.000			9.108E-04 9.050E-04	9.563	3.299 3.278	410.818 414.096	0.660 0.656	4.559E-04		1.651 1.639	141.655 143.294		2.588E-04 2.582E-04		0.937 0.935	64.003 64.938	0.187	1.625E-03 1.616E-03	17.067 16.966	5.888 5.853	616.475 622.328	1.178
580	5	0.000E+00	0.000			8.992E-04	9.441	3.257	417.353	0.651	4.525E-04 4.491E-04		1.627	144.920	0.325	2.577E-04		0.934	65.872	0.187	1.606E-03	16.862	5.817	628.145	1.163
585	5	0.000E+00	0.000			8.936E-04	9.383	3.237	420.590	0.647	4.45BE-04		1.615	146,535		2.572E-04		0.932	66.804	0.186	1.597E-03	16.764	5,783	633,929	1.157
590	5	0.000E+00	0.000			8.879E-04	9.323	3.216	423.806	0.643	4.423E-04		1.602	148.137	0.320	2.566E-04		0.929	67.733	0.186	1.587E-03	16.661	5.748	639.677	1.150
595	5	0.000E+00	0.000			8.824E-04	9.265	3.196	427.003	0.639	4.391E-04		1.590	149.728		2.560E-04		0.927	68.660	0.185	1.577E-03	16.563	5.714	645.391	1.143
600	5	0.000E+00	0.000			8.767E-04	9.205	3.176	430.178	0.635	4.357E-04	4.575	1.578	151.306	0.316	2.554E-04	2.681	0.925	69.585	0.185	1.568E-03	16.461	5.679	651.070	1.136
605	- 5	0.000E+00	0.000	2069.935	0.000	8.713E-04	9.148	3.156	433.334	0.631	4.324E-04	4.540	1.566	152.873	0.313	2.547E-04	2.674	0.923	70.508	0.185	1.558E-03	16.363	5.645	656.715	1.129
610	5	0.000E+00	0.000	2069.935	0.000	8.658E-04	9.091	3.136	436.470	0.627	4.290E-04	4.505	1.554	154.427		2.541E-04		0.920	71.428	0.184	1.549E-03	16.263	5.611	662.325	1.122
615	5	0.000E+00	0.000			8.603E-04	9.033	3.116	439.587	0.623	4.257E-04		1.542	155.969		2.534E-04		0.918	72.346	0.184	1.539E-03	16.164	5.576	667.902	1.115
620	5	0.000E+00	0.000			8.548E-04	8.976	3.096		0.619	4.224E-04		1.530	157.499		2.527E-04		0.916	73.262	0.183	1.530E-03	16.064	5.542	673.444	1.108
625	5	0.000E+00	0.000			8.496E-04	8.921	3.078	445.761	0.616	4.191E-04		1.518	159.017	0.304	2.521E-04		0.913	74.175	0.183	1.521E-03	15.969	5.509	678.953	1.102
630	5	0.000E+00 0.000E+00	0.000			8.442E-04	8.864	3.058	448.819				1.506	160.523 162.018	0.301	2.514E-04		0.911	75.085	0.182	1.511E-03	15.870	5.475	684.428	1.095 1.088
635 640	5	0.000E+00	0.000			8.390E-04 8.338E-04	8.810 8.755	3.020	451.858 454.879	0.608 0.604	4.126E-04 4.093E-04		1.495 1.483	163,500	0.299	2.506E-04 2.499E-04		0.90B 0.905	75.993 76.899	0.182	1.502E-03 1.493E-03	15.773 15.677	5.442 5.408	689.869 695.278	1.082
645	5	0.000E+00	0.000			8.287E-04	8.701	3.002	457.881	0.600	4.061E-04		1.471	164,971		2.492E-04		0.903	77.801	0.181	1.484E-03	15.581	5.375	700.653	1.075
650	5	0.000E+00	0.000			8.235E-04	8.647	2.983	460.864	0.597	4.029E-04		1.459	166,431	0.292	2.485E-04		0.900	78.701	0.180	1.475E-03	15.486	5.342	705.996	1.068
655	5	0.000E+00	0.000			8.184E-04	8.593	2.965	463.828	0.593	3.997E-04		1.448	167,879	0.290	2.477E-04		0.897	79.598	0.179	1.466E-03	15.390	5.310	711.305	1.062
660	5	0.000E+00	0.000			8.134E-04	8.541	2.946	466,775	0.589	3.965E-04		1.436	169,315	0.287	2.469E-04		0.894	80.493	0.179	1.457E-03	15.296	5.277	716.582	1.055
665	- 5	0.000E+00	0.000	2069.935	0.000	8.082E-04	8.486	2.927	469.702	0.585	3.934E-04	4.131	1.425	170.740	0.285	2.462E-04	2.585	0.892	81.384	0.178	1.448E-03	15.201	5.244	721.826	1.049
670	5	0.000E+00	0.000	2069.935	0.000	8.033E-04	8.434	2.910	472.612	0.582	3.902E-04	4.097	1.414	172.153	0.283	2.454E-04	2.576	0.889	82.273	0.178	1.439E-03	15.108	5.212	727.038	1.042
675	- 5	0.000E+00	0.000			7.984E-04	8.383	2.892	475.504	0.578	3.871E-04		1.402	173.656	0.280	2.446E-04		0.886	83.159	0.177	1.430E-03	15.015	5.180	732.218	1.036
680	5	0.000E+00	0.000			7.933E-04	8.330	2.874	478.377	0.575	3.840E-04		1.391	174.946		2.438E-04		0.883	84.042	0.177	1.421E-03	14.921	5.148	737.366	1.030
685	5	0.000E+00	0.000			7.885E-04	8.279	2.856	481.234	0.571	3.809E-04		1.380	176.326		2.430E-04		0.880	84.922	0.176	1.412E-03	14.830	5.116	742.482	1.023
690	5	0.000E+00	0.000			7.835E-04	8.226	2.838 2.821	484.072	0.568	3.779E-04		1.369 1.358	177.695		2.422E-04		0.877	85.800	0.175	1.404E-03	14.736	5.084 5.054	747.566	1.017
695 700	5	0.000E+00 0.000E+00	0.000			7.789E-04 7.739E-04	8.178 8.126	2.821	486.893 489.696	0.564 0.561	3.749E-04 3.719E-04		1.358	179.053 180.400	0.272	2.413E-04 2.405E-04		0.874 0.871	86.674 87.545	0.175	1.395E-03 1.386E-03	14.648 14.556	5.022	752.620 757.641	1.011
705	5	0.000E+00	0.000			7.691E-04	8.076	2.786	492,482	0.557	3.689E-04		1.336	181.736	0.267	2.397E-04		0.868	88.413	0.174	1.388E-03	14.466	4.991	762.632	0.998
710	5	0.000E+00	0.000			7.646E-04	8.028	2.770	495,252	0.554	3.659E-04		1.325	183.062		2.389E-04		0.865	89.279	0.173	1.369E-03	14.378	4.960	767.592	0.992
715	5	0.000E+00	0.000			7.597E-04	7.976	2.752	498.004	0.550	3.629E-04		1.315	184.376		2.381E-04		0.862	90.141	0.172	1.361E-03	14.287	4.929	772.521	0.986
720	5	0.000E+00	0.000			7.550E-04	7.928	2.735	500.739	0.547	3.601E-04		1.304	185.681	0.261	2.371E-04		0.859	91.000	0.172	1.352E-03	14.199	4.898	777.419	0.980
725	5	0.000E+00	0.000			7.505E-04	7.880	2.719	503.457	0.544	3.572E-04		1.294	186.974		2.363E-04		0.856	91.856	0.171	1.344E-03	14.112	4.868	782.288	0.974
730	5	0.000E+00	0.000			7.459E-04	7.832	2.702	506.159	0.540	3.543E-04		1.283	188.258	0.257	2.355E-04			92.709	0.171	1.336E-03	14.024	4.838	787.126	0.968
735	5	0.000E+00	0.000			7.413E-04	7.783	2.685	508.844	0.537	3.515E-04		1.273	189.531	0.255	2.346E-04		0.850	93.559	0.170	1.327E-03	13.938	4.808	791.934	0.962
740	5	0.000E+00	0.000			7.366E-04	7.734	2.668	511.512	0.534	3.487E-04		1.263	190.794	0.253	2.338E-04		0.847	94.406	0.169	1.319E-03	13.851	4.778	796.712	0.956
745	5	0.000E+00	0.000			7.323E-04	7.689	2.653	514.165	0.531	3.458E-04		1.253	192.047	0.251	2.329E-04		0.844	95.249	0.169	1.311E-03	13.765	4.749	801.461	0.950
750	5	0.000E+00	0.000			7.278E-04	7.641	2.636	516.801	0.527	3.431E-04		1.243	193.290		2.320E-04		0.840	96.090	0.168	1.303E-03	13.680	4.720	806.181	0.944
755 760	5	0.000E+00 0.000E+00	0.000			7.233E-04 7.188E-04	7.595 7.547	2.620 2.604	519.421 522.025	0.524 0.521	3.403E-04 3.377E-04		1.233 1.223	194.523 195.746	0.247	2.312E-04 2.303E-04		0.837 0.834	96.927 97.761	0.167 0.167	1.295E-03 1.287E-03	13.596 13.511	4.690 4.661	810.871 815.532	0.938
765	5	0.000E+00	0.000			7.144E-04	7.501	2.588	524.613	0.518	3.349E-04		1.223	196,959	0.243	2.303E-04 2.294E-04		0.834	98.592	0.166	1.287E-03 1.279E-03	13.426	4.632	820.164	0.932
770	5	0.000E+00	0.000			7.099E-04	7.454	2.572	527.184	0.514	3.324E-04		1.204	198.163	0.241	2.286E-04		0.828	99.420	0.166	1.273E-03	13.344	4.603	824.767	0.921
775	5	0.000E+00	0.000			7.057E-04	7.410	2.556	529,741	0.511	3.296E-04		1.194	199,357	0.239	2.276E-04		0.825		0.165	1.263E-03	13.260	4.575	829.342	0.915
780	5	0.000E+00	0.000			7.013E-04	7.363	2.540	532.281	0.508	3.270E-04		1.184	200.541	0.237	2.268E-04		0.821	101.066	0.164	1.255E-03	13.178	4.546	833.888	0.909
785	5	0.000E+00	0.000			6.969E-04	7.318	2.525	534.805	0.505	3.244E-04		1.175	201.716	0.235	2.259E-04		0.818	101.884	0.164	1.247E-03	13.096	4.518	838.406	0.904
790	- 5	0.000E+00	0.000	2069.935	0.000	6.928E-04	7.274	2.510	537.315	0.502	3.219E-04	3.379	1.166	202.882	0.233	2.250E-04	2.362	0.815	102.699	0.163	1.240E-03	13.016	4.490	842.896	0.898
795	5	0.000E+00	0.000			6.886E-04	7.230	2.494	539.809	0.499	3.193E-04		1.157	204.039	0.231	2.241E-04		0.812	103.511	0.162	1.232E-03	12.935	4.463	847.359	0.893
800	5	0.000E+00	0.000			6.843E-04	7.185	2.479	542.288	0.496	3.167E-04		1.147	205.186	0.229	2.233E-04		0.809	104.320	0.162	1.224E-03	12.855	4.435	851.794	0.887
805	- 5	0.000E+00	0.000			6.801E-04		2.464	544.751				1.138	206.324		2.223E-04		0.805	105.125	0.161	1.217E-03	12.774	4.407	856.201	0.881
810	5	0.000E+00	0.000	2069.935	0.000	6.760E-04	7.098	2.449	547.200	0.490	3.117E-04	3.273	1.129	207.453	0.226	2.215E-04	2.325	0.802	105.928	0.160	1.209E-03	12.696	4.380	860.581	0.876

Page 3 of 4

Case No or Receipt No.: 24CW3077 Aquifer: DAWSON Applicant Name: Thaddeus Jarosz

		1				South Pla	tte Dep	letion (Na C	lesignated I	Basin	Arkansa	s Deple	tion (No D	esignated f	Basin						Total Depl	ation = S	outh Platte	+ Arkansa	as+
			Pumping	Rate				Streams)	_				Streams)			D	asigna	ted Basin (Sepletion			Desig	nated Bas	in	
Time	Time Step Length	Pumping	vol. this time step	cumulativ vol.	vol./yr	Depletion	q/Q	vol. this time step	cumulativ vol.	valJyr	Depletion	qfQ	vol. this time step	cumulativ vol.	vol./yr	Depletion	q/Q	vol. this time step	cumulativ vol.	vol./yr	Depletion	φO	vol. this time step	cumulativ vol.	volJyr
(Yr)	(Yr)	(cfs)	(af)	(af)	(affyr)	(cfs)	(%)	(af)	(al)	(affyr)	(cfs)	(%)	(af)	(af)	(af/yr)	(cfs)	(%)	(af)	(af)	(af/yr)	(cfs)	(%)	(af)	(af)	(af/yr)
815	- 5	0.000E+00	0.000	2069.935	0.000	6.717E-04	7.053	2.433	549,633	0.487	3.093E-04	3.248	1.120	208.574	0.224	2.206E-04	2.316	0.799	106.727	0.160	1.202E-03	12.617	4.353	864.934	0.871
820	- 5	0.000E+00	0.000	2069.935	0.000	6.677E-04	7.011	2.419	552,052	0.484	3.069E-04	3.222	1.112	209,685	0.222	2.197E-04	2.306	0.796	107.522	0.159	1.194E-03	12.539	4.326	869.259	0.865
825	- 5	0.000E+00	0.000	2069.935	0.000	6.637E-04	6.968	2.404	554.456	0.481	3.045E-04	3.197	1.103	210.788	0.221	2.188E-04	2.297	0.793	108.315	0.159	1.187E-03	12.463	4.299	873.559	0.860
830	- 5	0.000E+00	0.000	2069.935	0.000	6.595E-04	6.925	2.389	556.845	0.478	3.020E-04	3.171	1.094	211.882	0.219	2.179E-04	2.288	0.789	109.104	0.158	1.180E-03	12.385	4.273	877.831	0.855
835	- 6	0.000E+00	0.000			6.555E-04	6.883	2.374	559.220	0.475	2.996E-04	3.146	1.085	212.987	0.217	2.170E-04	2.278	0.786	109.890	0.157	1.172E-03	12.307	4.246	882.077	0.849
840	- 5	0.000E+00	0.000			6.515E-04	6.840	2.360			2.974E-04		1.077	214.045		2.161E-04		0.783		0.157	1.165E-03	12.232	4.220	886.297	
845	- 5	0.000E+00	0.000	2069.935	0.000	6.475E-04	6.799	2.346	563,925	0.469	2.951E-04	3.098	1.069	215.113	0.214	2.153E-04	2.260	0.780	111.453	0.156	1.158E-03	12.157	4.194	890.491	0.839
850	5	0.000E+00	0.000			6.435E-04	6.757	2.331	566.256		2.927E-04		1.060	216.174		2.144E-04		0.777		0.155	1.151E-03	12.081	4.168	894.659	0.834
855	- 5	0.000E+00	0.000			6.396E-04	6.715	2.317		0.463	2.904E-04		1.052	217.226		2.134E-04		0.773		0.155	1.143E-03	12.006	4.142	898.801	0.828
860	- 5	0.000E+00	0.000			6.358E-04	6.675	2.303		0.461	2.882E-04		1.044	218.270		2.126E-04				0.154	1.136E-03	11.933	4.117	902.918	
865	- 5	0.000E+00	0.000			6.319E-04	6.635	2.289			2.859E-04		1.036	219.305		2.117E-04		0.767		0.153	1.130E-03	11.860	4.092	907.009	
870	5	0.000E+00	0.000			5.280E-04	6.594	2.275			2.837E-04		1.028	220.333		2.108E-04		0.764		0.153	1.123E-03	11.786	4.066	911.075	
875	5	0.000E+00	0.000			6.243E-04	6 554	2.261		0.452	2.816E-04		1.020	221.353	0.204	2.099E-04		0.760		0.152	1.116E-03	11.714	4.041	915.117	
880	- 5	0.000E+00	0.000			6.203E-04	6.513	2.247			2.794E-04		1.012	222.365		2.090E-04		0.757		0.151	1.109E-03	11.641	4.016	919.133	0.803
885	- 5	0.000E+00	0.000			6.166E-04	6.474	2.233			2.772E-04		1.004	223.369	0.201	2.081E-04			117.575		1.102E-03	11.571	3.992	923.124	
890	5	0.000E+00	0.000			6.128E-04	6.434	2.220			2.750E-04		0.996	224.365		2.073E-04				0.150	1.095E-03	11.498	3.967	927.091	0.793
895	- 5	0.000E+00	0.000			6.089E-04	6 3 9 4	2.206			2.730E-04		0.989	225.354		2.064E-04		0.748	119.073		1.088E-03	11.427	3.942	931.033	
900	5	0.000E+00	0.000			6.053E-04	6.356	2.193			2.709E-04		0.981	226.335		2.055E-04		0.745		0.149	1.082E-03	11.358	3.918	934.952	
905	5	0.000E+00	0.000			6.017E-04	6.318	2.179	590.979	0.436	2.688E-04		0.974	227.309	0.195	2.047E-04		0.741		0.148	1.075E-03	11.289	3.895	938.846	
910	5	0.000E+00	0.000			5.980E-04	6.278	2.166			2.667E-04		0.966	228.275		2.037E-04		0.738 0.735		0.148	1.068E-03	11.218	3.870 3.846	942,716	
915		0.000E+00	0.000			5.942E-04	6.239	2.152	595.297		2.647E-04		0.959	229.234		2.028E-04				0.147	1.062E-03	11.148		946.562	
920 925	5 5	0.000E+00 0.000E+00	0.000			5.908E-04 5.871E-04	6.203 6.164	2.140 2.127		0.428	2.627E-04		0.952 0.944	230.185		2.020E-04		0.73 2 0.728		0.146	1.055E-03 1.049E-03	11.082	3. 823 3.799	950.386 954.185	0.765 0.760
930	5	0.000E+00	0.000			5.835E-04	6.127	2.127	601.677		2.607E-04 2.588E-04		0.937	232.067		2.011E-04 2.002E-04		0.725		0.145	1.043E-03	10.947	3.776	957,961	0.755
935	5	0.000E+00	0.000			5.798E-04	6.088	2.100			2.568E-04		0.930	232.997		1.994E-04		0.723		0.144	1.036E-03	10.877	3,752	961,714	0.750
940	5	0.000E+00	0.000			5.764E-04	6.052	2.088			2.549E-04		0.923	233.920		1.985E-04		0.719		0.144	1.030E-03	10.812	3.730	965,444	0.746
945	5	0.000E+00	0.000			5.729E-04	6.015	2.075			2.530E-04		0.923	234.837		1.976E-04			126,374		1.023E-03	10.746	3.707	969,151	0.741
950	6	0.000E+00	0.000			5.693E-B4	5.978	2.062			2.511E-04		0.909	235,746		1.967E-04		0.713		0.143	1.017E-03	10.680	3.684	972.835	
955	5	0.000E+00	0.000			5.659E-04	5.942	2.050			2.492E-04		0.903	236.649		1.960E-04		0.710		0.142	1.011E-03	10.616	3.662	976.498	
960	5	0.000E+00	0.000			5,625E-04	5 906	2,038	614.090	0.408	2.473E-04		0.896	237.545		1.951E-04		0.707		0.141	1.005E-03	10.551	3.640	980,138	
965	5	0.000E+00	0.000			5.591E-04	5.870	2.025		0.405	2.455E-04		0.889	238.434		1.942E-04		0.704		0.141	9.987E-04	10.487	3.618	983,756	
970		0.000E+00	0.000			5.556E-04	5.834	2.013	618.128		2.436E-04		0.882	239,316		1.934E-04		0.700		0.140	9.926E-04	10.422	3,595	987.351	0.719
975	5	0.000E+00	0.000			5,523E-04	5 7 9 9	2.001	620.129	0.400	2.418E-04		0.876	240.192		1.925E-04		0.697		0.139	9.866E-04	10.359	3.574	990,925	
980	5	0.000E+00	0.000			5.488E-04	5.762	1.988	622.117	0.398	2.400E-04		0.869	241.082		1.916E-04				0.139	9.804E-04	10.294	3.551	994.476	
985	5	0.000E+00	0.000			5.456E-04	5.728	1.976			2.383E-04		0.863	241.925		1.908E-04		0.691		0.138	9.747E-04	10.234	3.531	998.007	
990		0.000E+00	0.000			5.422E-04	5.692	1.964	626.057	0.393	2.365E-04		0.856	242,781	0.171	1.900E-04		0.688		0.138	9.686E-04	10.170	3.508	1001.515	
995	5	0.000E+00	0.000			5.389E-04	5.659	1.952	628.009		2.347E-04		0.850	243.631		1.891E-04		0.685		0.137	9.627E-04	10.109	3.487	1005 003	
1000		0.000E+00	0.000			5.356E-04	5.624	1.940			2.330E-04		0.844			1.883E-04		0.682			9.569E-04	10.048	3.466	1008.469	

Page 4 of 4

Exhibit C Well Permit (Permit No. 172352-A)

Form No. **GWS-25**

OFFICE OF THE STATE ENGINEER COLORADO DIVISION OF WATER RESOURCES 818 Centennial Bidg., 1313 Sherman St., Denver, Colorado 80203

(303) 866-3581

797

	WELL PER	RMIT NUMBER	172352	<u>-</u>	A
APPLICANT	DIV. 1	WD8	DES. BASIN	MD	

APPROVED WELL LOCATION

EL PASO COUNTY

NW 1/4 SE 1/4 Section 6

Township 11 S Range 65 W Sixth P.M.

DISTANCES FROM SECTION LINES

1480 Ft. from South

Section Line

2300 Ft. from East

Section Line

(303) 933-2943

PERMIT TO CONSTRUCT A WELL

JEANNE VARNELL

10331 WEST INDORE DR

LITTLETON, CO 80127-

UTM COORDINATES (Meters, Zone: 13, NAD83) Easting: Northing:

ISSUANCE OF THIS PERMIT DOES NOT CONFER A WATER RIGHT **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 this permit does not ensure 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.
- The construction of this well shall be in compliance with the Water Well Construction Rules 2 CCR 402-2, unless approval 2) of a variance has been granted by the State Board of Examiners of Water Well Construction and Pump Installation Contractors in accordance with Rule 18.
- Approved pursuant to CRS 37-92-602(3)(c) for the relocation of an existing well, permit no. 172352. The old well must be plugged in accordance with Rule 16 of the Water Well Construction Rules within ninety (90) days of completion of the new well. The enclosed Well Abandonment Report form must be completed and submitted to affirm that the old well was plugged.
- Approved as the only well on a tract of land of 53.30 acres described as that portion of the W 1/3 of the SE 1/4, Sec. 6, Twp. 11 S, Rng. 65 W, Sixth P.M., El Paso County.
- The use of ground water from this well is limited to fire protection, ordinary household purposes inside not more than 3 single family dwelling(s), the irrigation of not more than 1 acre of home gardens and lawns, and the watering of poultry, domestic animals, and livestock on a farm or ranch.
- The total depth of the well shall not exceed 1050 feet, which corresponds to the base of the Dawson aquifer. At a 6) minimum, plain casing shall be installed and grouted through all unconsolidated materials and shall extend a minimum of ten feet into the bedrock formation to prevent production from other zones.
- 7) The pumping rate of this well shall not exceed 15 GPM.
- This well shall be constructed not more than 200 feet from the location specified on this permit.

NOTE: The ability of this well to withdraw its authorized amount of water from this non-renewable aguifer may be less than the 100 years upon which the amount of water in the aquifer is allocated, due to anticipated water level declines.

NOTE: To ensure a maximum productive life of this well, perforated casing should be set through the entire producing interval of the approved zone or aquifer indicated above. COM 5/31/65

APPROVED CDK

Receipt No. 0539176

State Engineer

DATE ISSUED

05-31-2005

PIRATION DATE

05-31-2007

Exhibit D Water Supply Information Summary (Form No. GWS-76)

FORM NO. GWS-76 05/2011

WATER SUPPLY INFORMATION SUMMARY

STATE OF COLORADO, OFFICE OF THE STATE ENGINEER 1313 Sherman St., Room 821, Denver, CO 80203

Main (303) 866-3581 <u>dwr.colorado.gov</u>

				ant submit to the County, "Adequaty will be available to ensure an a		
1. NAME OF D	EVELOPMENT AS I	PROPOSED:	-	tead Subdivision		
2. LAND USE	ACTION: Final F	Plat				
3. NAME OF E	XISTING PARCEL A	AS RECORDED:		EILING (LINIT)	, BLOCK	. LOT
4 TOTAL ACE	REAGE: 106.364	5 NUMBER	OF LOTS PROPO	, FILING (UNIT) OSED 10 BLATMA	P ENCLOSED? 🛛 `	, -
		•		evidence or documentation.	LINCEOSED: M	
	cel recorded with cou					
•				une 1, 1972? ☐ YES or 🏿 NO		
,	escribe the previous		and action since of	unc 1, 1972:		
-	•		ting the project are	ea and tie to a section corner.		
] N or 🏝 S, Range <u>65</u> ☐ E	or 🕅 W	
	eridian (choose only o				ог <u> </u>	
1	`	, — —		Format must be UTM , Units	Easting:	
				I, Zone 12 or Zone 13	<u> </u>	
O DIAT I	- #				Northing:	
	ation of all wells on p		•	•		
	O WATER REQUIRE		u nanu urawn skei	ch: ☐ YES or ☐ NO 10. WATER SUPPLY SOURCE		
9. ESTIMATEL				10. WATER SUFFET SOURCE	NEW WELLS -	
	USE		QUIREMENTS	■ EXISTING □ DEVELOPED	PROPOSED AQUIFERS	CHECK ONE)
		Gallons per Day	Acre-Feet per Year 2.6	WELL SPRING	□ ALLUVIAL	UPPER ARAPAHOE
HOUSEHOLD US	SE # <u>10</u> of units			WELL PERMIT NUMBERS		
COMMERCIAL U	SE # of S. F			172352-A	UPPER DAWSON	☐ LOWER ARAPAHOE
					LOWER DAWSON	☐ LARAMIE FOX HILLS
IRRIGATION # _	1.18		2.9		☐ DENVER	□ DAKOTA
IRRIGATION#_	of acres		2.9		-	
	40			│		
STOCK WATERI	NG # <u>40</u> of head		2.4	☐ MONICI AL ASSOCIATION	WATER COURT D	ECREE CASE
OTHER:				COMPANY	NUMBERS:	
TOTAL			7.9	☐ DISTRICT	24CW3077	
	arly total for annual re-feet/yr. for 9 lots			NAME	_	
and existing exen	npt well is allowed 1.0			LETTER OF COMMITMENT FOR		
acre-foot/yr. per t		0110011100	DT DEVEL 00ED	SERVICE YES or NO	LOE EODIMARD IA	TI TI II O E O D.M.
	NGINEER'S WATER be required before ou			? ☑ YES or ☐ NO IF YES, PLEA	ASE FURWARD WI	IH IHIS FORM.
	SEWAGE DISPOSAL		.5.54.,			
3.7	C TANK/LEACH FIEL			☐ CENTRAL SYSTEM		
				DISTRICT NAME:		
☐ LAGOO	ON			☐ VAULT		
				LOCATION SEWAGE HAL	JLED TO:	
│ ∐ ENGIN	EERED SYSTEM (At	tach a copy of engine	ering design.)	C OTHER:		

Exhibit E Test Well Information & Water Quality Testing Results

Test Well Information

WELL PERMIT NUMBER 85835-F RECEIPT NUMBER 10013578

ORIGINAL PERMIT APPLICANT(S)

ARVINA LEE DONAHUE

THOMAS D KIRK Jr.

APPROVED WELL LOCATION

Water Division: 1 Water District: 8

Designated Basin: N/A
Management District: N/A
County: EL PASO

Parcel Name: N/A

Physical Address: 19205 MARIAH TRAIL COLORADO

SPRINGS, CO 80908

NW 1/4 NW 1/4 Section 7 Township 11.0 S Range 65.0 W Sixth P.M.

UTM COORDINATES (Meters, Zone: 13, NAD83)

Easting: 524528.0 Northing: 4329473.0

PERMIT TO CONSTRUCT A NEW WELL

ISSUANCE OF THIS PERMIT DOES NOT CONFER A WATER RIGHT 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 this permit does not
 ensure 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.
- The construction of this well shall be in compliance with the Water Well Construction Rules 2 CCR 402-2, unless approval of a variance has been granted by the State Board of Examiners of Water Well Construction and Pump Installation Contractors in accordance with Rule 18.
- 3) Approved pursuant to CRS 37-90-137(4) on the condition that this well is operated in accordance with the augmentation plan approved by the Division 1 Water Court in Case No. 06CW0189. If the well is not operated in accordance with the terms of said decree, it will be subject to administration including orders to cease diverting water.
- 4) The use of groundwater from this well is limited to in-house use and irrigation of 7,000 square-feet.
- 5) Production from this well is limited to the Dawson aquifer. The total depth of the well shall not exceed 1,080 feet below ground surface, which corresponds to the base of the Dawson aquifer. At this location the well must be constructed in accordance with Well Construction Rule 10.4.6 (2 CCR 402-2) for a Type 2 aquifer.
- The pumping rate of this well shall not exceed 15 GPM.
- The average annual amount of groundwater to be withdrawn shall not exceed 0.7 acre-feet and the total volume of groundwater to be withdrawn shall not exceed 210 acre-feet.
- CONDITION REVOKED ON 09/14/2021 REPLACED BY CONDITION #9.
 - The entire length of the hole shall be geophysically logged as required by Rule 9 of the Statewide Nontributary Ground Water Rules prior to installing casing.
- 9) This well will not be drilled deeper than the base of the Dawson aquifer, which is present at the surface, therefore a geophysical log would not provide DWR with data useful to the administration of groundwater in this area. The requirement of Rule 9 of the Statewide Nontributary Ground Water Rules to geophysically log the entire length of the hole, is therefore waived. 09/14/2021 AML
- 10) The owner shall mark the well in a conspicuous location with well permit number(s), name of the aquifer, and court case number(s) as appropriate. The owner shall take necessary means and precautions to preserve these markings.
- 11) A totalizing flow meter must be installed on this well and maintained in good working order. Permanent records of all diversions must be maintained by the well owner (recorded at least annually) and submitted to the Division Engineer upon request.
- 12) This well shall be constructed not more than 200 feet from the location specified on this permit.
- 13) The return flow from the use of this well must be through an individual wastewater disposal system of the non-evaporative type where the water is returned to the same stream system in which the well is located.
- 14) This well is subject to administration by the Division Engineer in accordance with applicable decrees, statutes, rules, and regulations.

WELL PERMIT NUMBER 85835-F

RECEIPT NUMBER 10013578

NOTE: This well is withdrawing water from a non-renewable aquifer. While the withdrawals from this aquifer are administered based on a 100 year aquifer life, water level declines may prevent this well from diverting the permitted amounts for that 100 years.

NOTE: To ensure a maximum productive life of this well, perforated casing should be set through the entire producing interval of the approved zone or aquifer indicated above.

NOTE: This permit will expire on the expiration date unless the well is constructed and a pump is installed by that date. A Well Construction and Yield Estimate Report (GWS-31) and Pump Installation and Production Equipment Test Report (GWS-32) must be submitted to the Division of Water Resources to verify the well has been constructed and the pump has been installed. A one-time extension of the expiration date may be available. Contact the DWR for additional information or refer to the extension request form (GWS-64) available at: dwr.colorado.gov

Wenti Dickinson

Date Issued: 7/28/2021

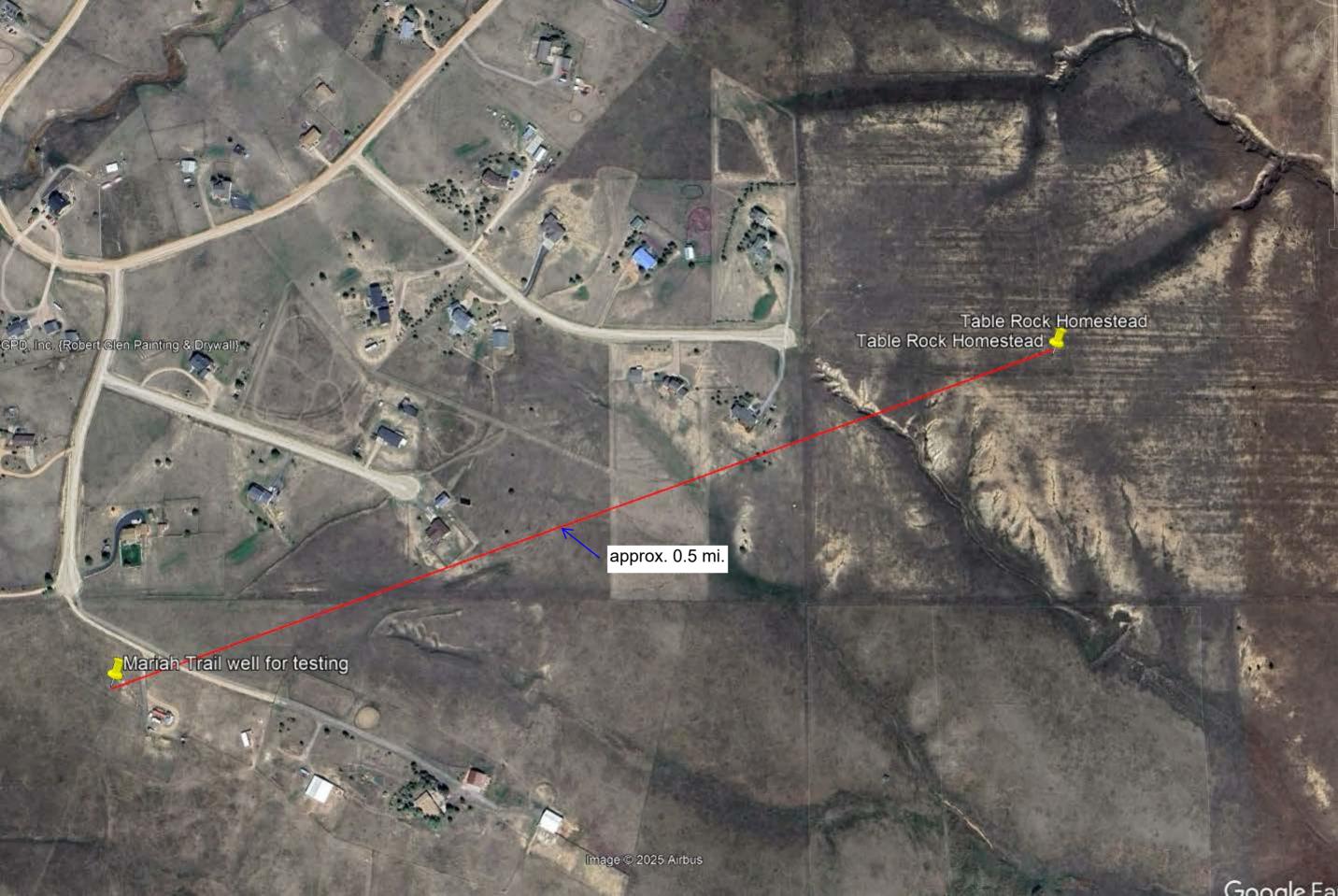
Issued By WENLI DICKINSON

Expiration Date: 7/28/2022

PERMIT HISTORY

09-14-2021 GEOPHYSICAL LOG WAIVED





Water Quality Testing Results

El Paso County Land Development Code Water Quality Requirements and Results Dawson Confined Aquifer Mariah Trail Minor Subdivision Sampled February 13, 2023

Compound	Units	MCL/SMCL	Result
Antimony	mg/l	0.006	ND
Arsenic	mg/l	0.01	0.0012
Barium	mg/l	2	0.0969
Beryllium	mg/l	0.004	0.0002
Cadmium	mg/l	0.005	0
Chromium	mg/l	0.1	0
Cyanide (Total)	mg/l	0	ND
Fluoride	mg/l	4	0.18
Mercury	mg/l	0.002	0
Nitrate as N	mg/l	10	3.32
Nitrite as N	mg/l	1	0
Total Nitrate/Nitrite as N	mg/l	10	3.32
Selenium	mg/l	0.05	0.0021
Thallium	mg/l	0.002	0
Aluminum	mg/l	0.05-0.2	0.062
Chloride	mg/l	250	4
Langlier Index			-1.7
Iron	mg/l	0.3	0.124
Manganese	mg/l	0.05	0.0217
рН		6.5 - 8.5	6.98
Silver	mg/l	0.1	0
Sulfate	mg/l	250	10.5
TDS	mg/l	500	143
Zinc	mg/l	5	0.113
Gross Alpha/Beta	pCi/l	15	1.2
Combined Radium 226+228	pCi/l	5	4.5
Total Coliform	#/100 ml	Absent	Absent

Green = Result below MCL - Acceptable Water Quality



Analytical Results

TASK NO: 230214135

Report To: Stephanie Schwenke

Company: RESPEC

5540 Tech Center Drive

Suite 100

Colorado Springs CO 80919

Bill To: Stephanie Schwenke

Company: RESPEC

5540 Tech Center Drive

Suite 100

Colorado Springs CO 80919

 Task No.: 230214135
 Date Received: 2/14/23

 Client PO:
 Date Reported: 3/20/23

Client Project: New Ground Water Source Matrix: Water - Drinking

Lab Number	Customer Sample ID	Sample	Date/Time	Test	Result	Method	Date Analyzed
230214135-01A	Kirk Well #1	2/13/23	12:30 PM	Total Coliform	Absent	SM 9223	2/15/23
				E-Coli	Absent	SM 9223	2/15/23

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

· ·	Company Name:	N/A
Contact Name: Jeghanile Cinisente Contac	Contact Name:	System Name:
Address: Address: 5540 Tech Center Dr Ste 100	ess:	Compliance Samples: Yes □ No [X
CityColo 2008 State: (D Zip: 809 19 City:	State: Zip:	Send Results to CDPHE: Yes No X
1		Task Number (Lab Use Only)
Email: Ste Ohante, Shuzen Ke @ (espec, German);		230214135
Sample Collector: Stephanie Schwenke		
Sample Collector Phone: 719-321-534 PO Number:	umber:	



Commerce City Lab 10411 Heinz Way Commerce City CO 80640 Lakewood Service Center 610 Garrison Street, Unit E Lakewood CO 80215

Phone: 303-659-2313

www.coloradolab.com

Subcontract Analyses	Radium 226/228 Uranium Uranium	\ \ \			1	Volume						Headspace Yes 🔲 No 🔲		Date/Times		
Subco	Gross Alpha/Beta	X		>	1.0	-						Headspa	-	Date/1		
	Total Garide	\bowtie			_								č	<u> </u>		
	SUVA, UV 254 (Circle)						-	-				ž П	Y	<u> </u> ;		
	TOC, DOC (Circle)	V		_								Yes		ved B		
	Inorganics Alk./Lang. Index (Circle)	V			_							Seals Present Yes No	4	Received By		
	Fluoride	\ \ \		_								eals P	(0	ciub		
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JML

EPC Confined Aquifer Sampling Requirements

Field Measurements

рΗ

Temp

Radionuclides

Radium 226 and Radium 228

Gross alpha/Beta

Inorganics

Antimony

Arsenic

Barium

Beryllium

Cadmium

Chromium

Cyanide (Total)

Fluoride

Mercury

Nitrate

Nitrite

Selenium

Thallium

Secondary MCLs

Aluminum

Chloride

Corrosivity

Iron

Manganese

Silver

Sulfate

Zinc

TDS

Bacteriological:
Total Coliform



Analytical Results

TASK NO: 230214135

Report To: Stephanie Schwenke

Company: RESPEC

5540 Tech Center Drive

Suite 100

Colorado Springs CO 80919

Bill To: Stephanie Schwenke

Company: RESPEC

5540 Tech Center Drive

Suite 100

Colorado Springs CO 80919

 Task No.: 230214135
 Date Received: 2/14/23

 Client PO:
 Date Reported: 3/20/23

Client Project: New Ground Water Source

Matrix: Water - Drinking

Customer Sample ID Kirk Well #1

Sample Date/Time: 2/13/23 12:30 PM

Lab Number: 230214135-01

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
Bicarbonate	50.6 mg/L as CaCO3	SM 2320-B	0.2 mg/L as CaCO3	2/15/23	QC62933	NH
Calcium as CaCO3	42.3 mg/L	EPA 200.7	0.1 mg/L	2/15/23	-	MAT
Carbonate	ND	SM 2320-B	0.2 mg/L as CaCO3	2/15/23	QC62933	NH
Hydroxide	ND	SM 2320-B	0.2 mg/L as CaCO3	2/15/23	QC62933	NH
Langelier Index	-1.70 units	SM 2330-B	units	2/17/23	-	SAN
рН	6.98 units	SM 4500-H-B	0.01 units	2/13/23	-	Collector
Temperature	8 °C	SM 4500-H-B	1 °C	2/13/23	-	Collector
Total Alkalinity	50.6 mg/L as CaCO3	SM 2320-B	4.0 mg/L as CaCO3	2/15/23	QC62933	NH
Total Dissolved Solids	143 mg/L	SM 2540-C	5 mg/L	2/15/23	QC62905	DEK

Abbreviations/ References:

RL = Reporting Limit = Minimum Level 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 (d) RPD acceptable due to low duplicate and sample concentrations.

(s) Spike amount low relative to the sample amount.

ND = Not Detected at Reporting Limit.



Analytical QC Summary

TASK NO: 230214135

Report To: Stephanie Schwenke

Company: RESPEC

Receive Date: 2/14/23

Project Name: New Ground Water Source

Test	QC Batch ID	QC Type	Result		Method	
Total Alkalinity	QC62933	Blank	ND		SM 2320-B	
Total Dissolved Solids	QC62905	Blank	ND		SM 2540-C	
Test	QC Batch ID	QC Type	Limits	% Rec	RPD	Method
Total Alkalinity	QC62933	Duplicate	0 - 20	-	1.5	SM 2320-B
		LCS	90 - 110	106.0	-	
		LCS-2	90 - 110	105.5	-	
Total Dissolved Solids	QC62905	Duplicate	0 - 20	-	0.6	SM 2540-C
		LCS	85 - 115	101.7	-	

All analyses were performed in accordance with approved methods under the latest revision to 40 CFR Part 136 unless otherwise identified. Based on my inquiry of the person or persons directly responsible for analyzing the wastewater samples and generating the report (s), the analyses, report, and information submitted are, to the best of my knowledge and belief, true, accurate, and complete.

DATA APPROVED FOR RELEASE BY

Abbreviations/ References:

RL = Reporting Limit = Minimum Level 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



Analytical Results

TASK NO: 230214135

Report To: Stephanie Schwenke

Company: RESPEC

5540 Tech Center Drive

Suite 100

Colorado Springs CO 80919

Bill To: Stephanie Schwenke

Company: RESPEC

5540 Tech Center Drive

Suite 100

Colorado Springs CO 80919

Task No.: 230214135

Client PO:

Client Project: New Ground Water Source

Date Received: 2/14/23 Date Reported: 3/20/23

Matrix: Water - Drinking

Customer Sample ID Kirk Well #1

Sample Date/Time: 2/13/23 12:30 PM Lab Number: 230214135-01

Test	Result	Method	RL	MCL	Date Analyzed	QC Batch ID	Analyzed By
	•		·				
Chloride	4.0 mg/L	EPA 300.0	0.1 mg/L		2/15/23	QC62951	MLT
Fluoride	0.18 mg/L	EPA 300.0	0.10 mg/L	4	2/15/23	QC62952	MLT
Nitrate Nitrogen	3.32 mg/L	EPA 300.0	0.05 mg/L	10	2/15/23	QC62949	MLT
Nitrite Nitrogen	ND	EPA 300.0	0.03 mg/L	1	2/15/23	QC62950	MLT
Sulfate	10.5 mg/L	EPA 300.0	0.1 mg/L		2/15/23	QC62953	MLT
Cyanide-Total	ND	EPA 335.4	0.005 mg/L	0.02	2/16/23	QC62986	DPL
<u>Total</u>							
Iron	0.124 mg/L	EPA 200.7	0.005 mg/L	0.3	2/15/23	QC62935	MAT
Aluminum	0.062 mg/L	EPA 200.8	0.001 mg/L	0.05	2/16/23	QC62979	MBN
Antimony	ND	EPA 200.8	0.0012 mg/L	0.006	2/16/23	QC62979	MBN
Arsenic	0.0012 mg/L	EPA 200.8	0.0006 mg/L	0.01	2/16/23	QC62979	MBN
Barium	0.0969 mg/L	EPA 200.8	0.0007 mg/L	2	2/16/23	QC62979	MBN
Beryllium	0.0002 mg/L	EPA 200.8	0.0001 mg/L	0.004	2/16/23	QC62979	MBN
Cadmium	ND	EPA 200.8	0.0001 mg/L	0.005	2/16/23	QC62979	MBN
Chromium	ND	EPA 200.8	0.0015 mg/L	0.1	2/16/23	QC62979	MBN
Manganese	0.0217 mg/L	EPA 200.8	0.0008 mg/L	0.05	2/16/23	QC62979	MBN
Mercury	ND	EPA 200.8	0.0001 mg/L	0.002	2/16/23	QC62979	MBN
Selenium	0.0021 mg/L	EPA 200.8	0.0008 mg/L	0.05	2/16/23	QC62979	MBN
Silver	ND	EPA 200.8	0.0005 mg/L	0.1	2/16/23	QC62979	MBN
Thallium	ND	EPA 200.8	0.0002 mg/L	0.002	2/16/23	QC62979	MBN
Zinc	0.113 mg/L	EPA 200.8	0.001 mg/L	5	2/16/23	QC62979	MBN

Abbreviations/ References:

RL = Reporting Limit = Minimum Level 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

(d) RPD acceptable due to low duplicate and sample concentrations. (s) The accuracy of the spike recovery value is reduced due to the analyte concentration in the sample being disproportionate to the spike level. The laboratory control sample recovery was acceptable

MCL = Maximum contaminant level per the EPA ND = Not Detected at Reporting Limit.



Analytical QC Summary

TASK NO: 230214135

Report To: Stephanie Schwenke

Company: RESPEC

Receive Date: 2/14/23

Project Name: New Ground Water Source

Test	QC Batch ID	QC Type	Result		Method	
Chloride	QC62951	Blank	ND		EPA 300.0	
Cyanide-Total	QC62986	Blank	ND		EPA 335.4	
Fluoride	QC62952	Blank	ND		EPA 300.0	
Aluminum	QC62979	Method Blank	ND		EPA 200.8	
Antimony	QC62979	Method Blank	ND		EPA 200.8	
Arsenic	QC62979	Method Blank	ND		EPA 200.8	
Barium	QC62979	Method Blank	ND		EPA 200.8	
Beryllium	QC62979	Method Blank	ND		EPA 200.8	
Cadmium	QC62979	Method Blank	ND		EPA 200.8	
Chromium	QC62979	Method Blank	ND		EPA 200.8	
Manganese	QC62979	Method Blank	ND		EPA 200.8	
Mercury	QC62979	Method Blank	ND		EPA 200.8	
Selenium	QC62979	Method Blank	ND		EPA 200.8	
Silver	QC62979	Method Blank	ND		EPA 200.8	
Thallium	QC62979	Method Blank	ND		EPA 200.8	
Zinc	QC62979	Method Blank	ND		EPA 200.8	
Iron	QC62935	Method Blank	ND		EPA 200.7	
Nitrate Nitrogen	QC62949	Blank	ND		EPA 300.0	
Nitrite Nitrogen	QC62950	Blank	ND		EPA 300.0	
Sulfate	QC62953	Blank	ND		EPA 300.0	
Test	QC Batch ID	QC Type	Limits	% Rec	RPD	Method
Chloride	QC62951	Duplicate	0 - 20	-	0.3	EPA 300.0
		LCS	90 - 110	103.8	-	
		MS	75 - 125	97.8	-	
Cyanide-Total	QC62986	D II4 -	0 00			
	QC02900	Duplicate	0 - 20	-	0.0	EPA 335.4
	QC62966	Duplicate LCS	0 - 20 90 - 110	- 94.4	0.0	EPA 335.4
	QC62966					EPA 335.4
_ Fluoride	QC62952	LCS	90 - 110	94.4	-	EPA 335.4 EPA 300.0
Fluoride		LCS MS	90 - 110 75 - 125	94.4 99.0	-	
Fluoride		LCS MS Duplicate	90 - 110 75 - 125 0 - 20 90 - 110	94.4 99.0	0.2	
Fluoride		LCS MS Duplicate LCS	90 - 110 75 - 125 0 - 20	94.4 99.0 - 99.3	0.2	EPA 300.0
	QC62952	LCS MS Duplicate LCS MS	90 - 110 75 - 125 0 - 20 90 - 110 75 - 125	94.4 99.0 - 99.3 89.7	- 0.2 -	
	QC62952	LCS MS Duplicate LCS MS LCS	90 - 110 75 - 125 0 - 20 90 - 110 75 - 125 90 - 110	94.4 99.0 - 99.3 89.7 98.0	- 0.2 - -	EPA 300.0
	QC62952	LCS MS Duplicate LCS MS LCS MS MS MS	90 - 110 75 - 125 0 - 20 90 - 110 75 - 125 90 - 110 70 - 130	94.4 99.0 - 99.3 89.7 98.0 110.2	- 0.2 - - -	EPA 300.0
Aluminum	QC62952 QC62979	LCS MS Duplicate LCS MS LCS MS LCS MS LCS MS LCS	90 - 110 75 - 125 0 - 20 90 - 110 75 - 125 90 - 110 70 - 130 0 - 10	94.4 99.0 - 99.3 89.7 98.0 110.2	- 0.2 - - - 1.0	EPA 300.0 EPA 200.8
Aluminum	QC62952 QC62979	LCS MS Duplicate LCS MS LCS MS MS MS	90 - 110 75 - 125 0 - 20 90 - 110 75 - 125 90 - 110 70 - 130 0 - 10	94.4 99.0 - 99.3 89.7 98.0 110.2 - 100.4	- 0.2 - - - 1.0	EPA 300.0 EPA 200.8
Aluminum	QC62952 QC62979 QC62979	LCS MS Duplicate LCS MS LCS MS MSD LCS MS	90 - 110 75 - 125 0 - 20 90 - 110 75 - 125 90 - 110 70 - 130 0 - 10 90 - 110 70 - 130	94.4 99.0 - 99.3 89.7 98.0 110.2 - 100.4 106.2	- 0.2 - - - 1.0	EPA 200.8 EPA 200.8
Aluminum	QC62952 QC62979	LCS MS Duplicate LCS MS LCS MS MSD LCS MS MSD LCS	90 - 110 75 - 125 0 - 20 90 - 110 75 - 125 90 - 110 70 - 130 0 - 10 90 - 110 70 - 130 0 - 10	94.4 99.0 - 99.3 89.7 98.0 110.2 - 100.4	- 0.2 - - - 1.0 - 1.2	EPA 300.0 EPA 200.8
Aluminum	QC62952 QC62979 QC62979	LCS MS Duplicate LCS MS LCS MS MSD LCS MS	90 - 110 75 - 125 0 - 20 90 - 110 75 - 125 90 - 110 70 - 130 0 - 10 90 - 110 70 - 130 0 - 10 90 - 110	94.4 99.0 - 99.3 89.7 98.0 110.2 - 100.4 106.2 - 98.5	- 0.2 - - - 1.0 - 1.2	EPA 200.8 EPA 200.8

Abbreviations/ References:

RL = Reporting Limit = Minimum Level
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

(d) RPD acceptable due to low duplicate and sample concentrations.
(s) The accuracy of the spike recovery value is reduced due to the analyte

MCL = Maximum contaminant level per the EPA ND = Not Detected at Reporting Limit.

concentration in the sample being disproportionate to the spike level. The laboratory control sample recovery was acceptable

est	QC Batch ID	QC Type	Limits	% Rec	RPD	Method
		MS	70 - 130	94.2	-	
		MSD	0 - 10	-	0.1	
Beryllium	QC62979	LCS	90 - 110	95.8	-	EPA 200.8
		MS	70 - 130	102.2	-	
		MSD	0 - 10	-	2.8	
Cadmium	QC62979	LCS	90 - 110	94.9	-	EPA 200.8
		MS	70 - 130	108.0	-	
		MSD	0 - 10	-	3.6	
Chromium	QC62979	LCS	90 - 110	102.3	-	EPA 200.8
		MS	70 - 130	107.2	-	
		MSD	0 - 10	-	1.6	
Manganese	QC62979	LCS	90 - 110	100.2	-	EPA 200.8
-		MS	70 - 130	104.5	-	
		MSD	0 - 10	-	1.5	
Mercury	QC62979	LCS	90 - 110	99.2	-	EPA 200.8
•		MS	70 - 130	96.7	-	
		MSD	0 - 10	-	0.3	
Selenium	QC62979	LCS	90 - 110	99.7	-	EPA 200.8
		MS	70 - 130	108.5	-	
		MSD	0 - 10	-	10.0	
Silver	QC62979	LCS	90 - 110	91.7	_	EPA 200.8
		MS	70 - 130	84.3	-	
		MSD	0 - 10	-	5.2	
Thallium	QC62979	LCS	90 - 110	95.9	-	EPA 200.8
		MS	70 - 130	102.1	-	
		MSD	0 - 10	-	3.6	
Zinc	QC62979	LCS	90 - 110	100.3	_	EPA 200.8
		MS	70 - 130	114.7	-	
		MSD	0 - 10	-	6.2	
ron	QC62935	Duplicate	0 - 20	-	8.5	EPA 200.7
		LCS	90 - 110	98.0	-	
		MS	75 - 125	107.1	-	
Nitrate Nitrogen	QC62949	Duplicate	0 - 20	-	0.0	EPA 300.0
Č		LCS	90 - 110	99.9	-	
		MS	75 - 125	90.0	-	
 Nitrite Nitrogen	QC62950	Duplicate	0 - 20	-	0.0	EPA 300.0
J		LCS	90 - 110	93.2	-	
		MS	75 - 125	89.5	-	
Sulfate	QC62953	Duplicate	0 - 20	-	0.2	EPA 300.0
		LCS	90 - 110	103.4	-	
		MS	75 - 125	97.6	_	

All analyses were performed in accordance with approved methods under the latest revision to 40 CFR Part 136 unless otherwise identified. Based on my inquiry of the person or persons directly responsible for analyzing the wastewater samples and generating the report (s), the analyses, report, and information submitted are, to the best of my knowledge and belief, true, accurate, and complete.

DATA APPROVED FOR RELEASE BY

Abbreviations/ References:

RL = Reporting Limit = Minimum Level 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 (d) RPD acceptable due to low duplicate and sample concentrations.

MCL = Maximum contaminant level per the EPA ND = Not Detected at Reporting Limit.

⁽s) The accuracy of the spike recovery value is reduced due to the analyte concentration in the sample being disproportionate to the spike level. The laboratory control sample recovery was acceptable



Customer ID: 20040H Account ID: Z01034 Lab Control ID: 23H01288
Received: Feb 15, 2023
Reported: Mar 16, 2023
Purchase Order No.
None Received

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

File: 23H01288 R1.pdf

Roxanne Sullivan
Analytical Laboratories Director

By:

Lab Control ID: 23H01288

Received: Feb 15, 2023 Reported: Mar 16, 2023 Purchase Order No. None Received

Customer ID: 20040H Account ID: Z01034 ANALYTICAL REPORT

Stuart Nielson Colorado Analytical Laboratories, Inc.

La	ab Sam	ple ID	23H01288-001					
Custom	er Sam	ple ID	230214135-0	1D - New G	Fround Wat	er Source - Kirk Well #1		
				sampled or	n 02/13/23 (@ 1230		
				Precision*	Detection		Analysis	
Parameter	Units	Code	Result	+/-	Limit	Method	Date / Time	Analyst
Gross Alpha	pCi/L	Т	1.2	1.4	0.1	SM 7110 B	3/6/23 @ 0901	KT
Gross Beta	pCi/L	Т	<3.1	2.5	3.1	SM 7110 B	3/6/23 @ 0901	KT
Radium-226	pCi/L	Т	NR	-	-	SM 7500-Ra B	-	-
Radium-228	pCi/L	Т	NR	-	-	EPA Ra-05	-	-

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

Certification ID's: CO/EPA CO00008

File: 23H01288 R1.pdf

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

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

Lab Control ID: 23H01288

Received: Feb 15, 2023 Reported: Mar 16, 2023 Purchase Order No. None Received

Customer ID: 20040H Account ID: Z01034

ANALYTICAL REPORT

Stuart Nielson Colorado Analytical Laboratories, Inc.

Lá	ab Sam	ple ID	23H01288-002					
Custom	er Sam	ple ID	230214135-0)1E - New G	round Wat	er Source - Kirk Well #1		
				sampled or	า 02/13/23 (@ 1230		
				Precision*	Detection		Analysis	
Parameter	Units	Code	Result	+/-	Limit	Method	Date / Time	Analyst
Gross Alpha	pCi/L	Т	NR	-	-	SM 7110 B	-	-
Gross Beta	pCi/L	T	NR	-	-	SM 7110 B	-	-
Radium-226	pCi/L	Т	1.6	0.5	0.2	SM 7500-Ra B	3/2/23 @ 1256	KT
Radium-228	pCi/L	Т	2.9	0.8	0.2	EPA Ra-05	3/7/23 @ 0717	JR

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

Certification ID's: CO/EPA CO00008

File: 23H01288 R1.pdf

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

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

HAZEN RESEARCH, INC. RADIOCHEMISTRY LABORATORY

Batch QC Summary Form

Analyte: Gross Alpha

Control Standard/LFB: ID: C11a-003 pCi/mL: 57.4 (use 1 diluted)

Spike Solution: ID: C11a-003 pCi/mL: 57.4 (use 1 mL)

Spike Recovery Calculation: Sample: Tap*

> Calculation: (43.7)(1.000)(0.0)(0.200)x 100 =76%

Date:

03/06/2023

Batch QC Evaluation:

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

^{*} Required for batch size greater than 10 samples.

Conclusions:

X	Batch QC Passes**
	Batch QC Fails
	Batch QC Passes, with exceptions**:
	Reruns Required:
	Narrative:

Batch Listing by Lab Control Number:

23H01252	23H01306	
23H01284	23H01311	
23H01287	23H01312	
23H01288	23H01316	
23H01290	23H01217	<u>Evaluator:</u>
23H01291	23H01300	
23H01292	23H01299	Minhous Chair
23H01293		Michelle Stringer -
23H01304		V
23H01305		03/07/2023
		Date

^{**}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 evaluted in this report.

HAZEN RESEARCH, INC. RADIOCHEMISTRY LABORATORY

Batch QC Summary Form

Analyte: Gross Beta

Control Standard/LFB: ID: C11a-003 pCi/mL: 44 (use 1 diluted)

Spike Solution: D: pCi/mL: 44 (use 1 mL)

Spike Recovery Calculation: Sample: Tap*

Calculation: $(37.8) (1.000) - (0.0) (0.200) \times 100 = 86\%$

Date:

03/06/2023

Batch QC Evaluation:

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

^{*} Required for batch size greater than 10 samples.

Conclusions:

X	Batch QC Passes**
	Batch QC Fails
	Batch QC Passes, with exceptions**:
	Reruns Required:
	Narrative:

Batch Listing by Lab Control Number:

23H01252	23H01306	
23H01284	23H01311	
23H01287	23H01312	
23H01288	23H01316	
23H01290	23H01217	<u>Evaluator:</u>
23H01291	23H01300	
23H01292	23H01299	Mishell Ch.
23H01293		Michelle Stringer —
23H01304		V
23H01305		03/07/2023
		Date

^{**}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 evaluted in this report.

HAZEN RESEARCH, INC.
RADIOCHEMISTRY LABORATORY

Batch QC Summary Form

Analyte: Radium-226

Control Standard/LFB: ID: C1-002 pCi/mL: 23 (use 2 diluted)

Spike Solution: ID: C1-002 pCi/mL: 23 (use 2 mL)

Spike Recovery Calculation: Sample: 23H01287-02b

Calculation: (47.4) (1.000) - (0.0) (0.200) x 100 = 103%

Date:

03/02/2023

Batch QC Evaluation:

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

^{*} Required for batch size greater than 10 samples.

Conclusions:

X	Batch QC Passes**
	Batch QC Fails
	Batch QC Passes, with exceptions**:
	Reruns Required:
	Narrative:

Batch Listing by Lab Control Number:

23H01252 23H01254 23H01283	
23H01287 23H01288	Evaluator:
23H01289 23H01286	 Michelle Stringer -
	 03/09/2023
	 Date

^{**}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 evaluted in this report.

HAZEN RESEARCH, INC.	
RADIOCHEMISTRY LABORATORY	

Batch QC Summary Form

Analyte: Radium-228

Control Standard/LFB: ID: C6-004 pCi/mL: 12.7 (use 5 diluted)

Spike Solution: ID: C6-004 pCi/mL: 12.7 (use 5 mL)

Spike Recovery Calculation: Sample: 23H01254

Calculation: (66.2) (1.000) - (3.3) (1.000) x 100 = 99% 63.5

03/01/2023

Date:

Batch QC Evaluation:

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

^{*} Required for batch size greater than 10 samples.

\sim	
Conc	lusions

X	Batch QC Passes**
	Batch QC Fails
	Batch QC Passes, with exceptions**:
	Reruns Required:
	Narrative:

Batch Listing by Lab Control Number:

23H01242		
23H01252		
23H01253		
23H01254		<u>Evaluator:</u>
23H01283		
23H01286		Minlate Chair
23H01287		Michelle Stringer -
23H01288		V
		03/15/2023
	·	Data

Date

^{**}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 evaluted in this report.

LABORATORIES, INC.

Ship To: Hazen Research Preserved: Y/N HNO3 Lot #:

23401208

Date Preserved:

≥ % 8 8 Yes Yes New Ground Water Source Submit Data to CDPHE: Compliance Samples: Project Name 230214135 CAL TASK JML Bill To Information (If different from report to) Address: stuartnielson@coloradolab.com Company Name: Colorado Analytical Laboratory Stuart Nielson Commerce City, CO 80640 303-659-2313 Report To Information 10411 Heinz Way Report To: Address: E-Mail: Phone:

Tests Requested

	Container Type	1L - Unpreserved	3.5 % 1L - Unpreserved	ustions. Tranks! Les &
Radium 228 (Sub) Gross Alpha/Beta (S Radium 226 (Sub)	Matrix (qn	Vater - Drinking	Water - Drinking X X	comment: Limited volume provided for Radium Bald 338. Plus is eall ut problems fourstions. Then
	Sample ID	2/13/23 12:30 PM 230214135-01D - Kirk Well #1 Water	2/13/23 12:30 PM 230214135-01E - Kirk Well #1 Water	red volum provided for Rodium 36
	Sample Date/Time	2/13/23 12:30 PM	2/13/23 12:30 PM	Comment: Cimit

Received by: (Signature) Time: Date:

Relinquished by: (Signature)

Time:

Date:

MCEIVED FEB 15 1003

Page 1 of 1

Fed Ex 6318 88018615" Received by: 3/5/33 (Signature)

page 8 of 8

Relinquished by: (Signature)