WATER RESOURCES REPORT

VILLAGREE DEVELOPMENT LLC

ESTATES AT CATHEDRAL PINES SUBDIVISION

WINSLOW DRIVE

EPC PARCEL #: 620000411

PREPARED FOR
Villagree Development, LLC
5710 Vessey Road
Colorado Springs, CO 80919

FEBRUARY 2023

RESPEC

RESPEC.COM

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WINSLOW DRIVE

EPC PARCEL #: 620000411

PREPARED BY

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Villagree Development, LLC
5710 Vessey Road
Colorado Springs, CO 80919

FEBRUARY 2023

Project Number 365.04

TABLE OF CONTENTS

1.0 INTRODUCTION AND EXECUTIVE SUMMARY

The purpose of this report is to address the specific water needs of a proposed subdivision of Property Record Card Parcel # 620000411 in El Paso County, CO.

EXECUTIVE SUMMARY: The water rights and augmentation plan in place for the existing parcel are adequate to meet the needs of eight (8) lots proposed for the subdivision on a 300-year basis.

2.0 PROJECTED LAND USES

2.1 PROJECTED LAND USES

This report pertains to the existing 35-acre parcel that is proposed to be divided into eight (8) lots. Please refer to the Land Use Exhibit in ***Appendix A*** depicting the proposed subdivision.

3.0 WATER NEEDS AND PROJECTED DEMANDS

3.1 WATER DEMAND SUMMARY

The eight proposed residential lots range in size from 2.93 acres to 4.23 acres as shown in the plat provide in ***Appendix A***. The estimated water use for each lot is 0.38 AF/year, each being served by Villagree Wells Nos. 1-8 for a total of 3.04 AF/year for the residential lots. Villagree Well No. 9 will be used for irrigation and other uses on the development for a total of 0.16 AF/year. The residential estimates are based on information provided in Chapter 8 of the El Paso County Land Development Code as well as Section 12 of the Findings of Fact 22CW3027 located in ***Appendix C.*** Water demands and wastewater loads are shown in Table 3-1.

Table 3-1: Summary of Expected Water Demands & Wastewater Loads

Water						Wastewater
# Of SFE's	Annual Indoor Use 0.26 (AF/YR/SFE)	Average Daily Indoor Use (GPD)	Irrigation 0.0566 (AF/1,000 SF)	Domestic Watering 0.011 (AF/Horse/Year)	Total Indoor, Watering, & Irrigation (AF)	ADF (@ 90% Indoor Use (GPD)
	Note 1		*Note 2*	*Note 3*		
8	2.080	1857	0.87	0.088	3.04	1671
1	0	0	0.16	0	0.16	0
Total	2.080	1857	1.03	0.088	**3.20**	1671

Note 1: ***Per 8.4.7(B)(7)(d) of the EPC Land Development Code***

Note 2: ***Per 8.4.7(B)(7)(d) of the EPC Land Development Code, assuming 1925 ft^2 of irrigation per residential lot and 2800 ft^2 for Villagree Well No 9***

Note 3: ***Assuming 1 horse per lot***

3.2 UNIT WATER USER CHARACTERISTICS

Unit water user characteristics are counted on a single-family equivalent (SFE) basis. All single-family homes are counted as on SFE, and user characteristics were based on information provided in the *El Paso County Land Development Code, Chapter 8.*

3.3 DEMAND VERSUS SUPPLY

An overall demand of **3.2 acre-feet/year** for the proposed subdivision is less than the amount of supply listed in the decrees, determinations, and *Findings of Fact* (provided in ***Appendix C***) and is further discussed in Section 4.0 of this report.

4.0 WATER RIGHTS AND SUPPLY

4.1 WATER RIGHTS

Water rights, determinations, and replacement plan have been applied for as shown in **Appendix C**. Table 4-1 below summarizes the information from said water rights and pending determinations.

Table 4-1: Water Rights Summary

Land Formation/ Aquifer	Determination	Tributary Status	Area	Decreed Water 100-Year	Annual Allocation 100-Year	Annual Allocation 300-Year
			(Acres)	(AF)	(AF/Year)	(AF/Year)
Dawson	22CW3027	NNT	35	1,785	17.85	5.95
Denver	22CW3027	NNT	35	3,094	30.94	10.31
Arapahoe	22CW3027	NNT	35	1,339	13.39	4.46
Laramie-Fox Hills	22CW3027	NT	35	998	9.98	3.33
				Total Legal Supply	**72.16**	**24.05**
					100-Year	*300-Year*

Beneficial Uses: *Domestic Indoor, Commercial, Stock Water, Recreation, Wildlife Lawn & Garden Irrigation, Fire Protection, Central Water Supply Water for Domestic Animals, Exchange and Augmentation Purposes*

Note: *Laramie-Fox Hills water may only be used for augmentation purposes*

Note that only the Dawson formation is to be used for the proposed lots in this subdivision. According to the *Findings of Fact* located in ***Appendix C***, the following conditions are allowed for the subject property:

- Water in the Dawson may be withdrawn through to be developed Wells No 1-9 allowing up to eight (8) parcels to be developed on the subject property and one additional well to be used for irrigation pursuant to this replacement plan shown in **Appendix C**.
- There shall be one (1) Dawson aquifer well per lot.
- Each well must provide water to a house on the same lot, ensuring that during pumping, return flows from septic systems alone will always equal or exceed stream depletions in the same year.
- It is not necessary to restrict the type of use to which the Dawson water pumped (pursuant to the augmentation plan) is put.
- Each residential well will be allocated 0.26 AF/year for indoor use and an additional 0.12 AF/year for irrigation of lawns or gardens and livestock. Well No 9 will be allotted 0.16 AF/year for all other listed uses for a total of 3.2 AF/year allotted for the subdivision.

4.2 ADEQUACY OF WATER RIGHTS

Current water rights are adequate for buildout demands for eight (8) lots and meet 2040 and 2060 buildout projections on a 300-year basis.

According to Case Number 22CW3027 (Ref. 09CS0076) located in ***Appendix C*** and as summarized in Table 4-1 above, the property has water rights adjudicated in the following formations: 1,785 AF in the not-nontributary Dawson Aquifer, 3,094 AF in the not-nontributary Denver Aquifer, 1,339 AF in the not-nontributary Arapahoe Aquifer, and 998 AF in the non-tributary Laramie-Fox Hills Aquifer. All of the above-mentioned formations would be considered confined aquifers within the Denver Basin. The proposed water source for the development would be the not-nontributary Dawson Aquifer, for which the replacement plan contained in Case Number 22CW3027 was prepared for (thus revising an existing Findings of Fact in Consolidated Decree 09MDL7). Both documents are also contained in ***Appendix C.***

- There are 5.95 AF/year available on a 300-year supply basis out of the Dawson Formation, which is greater that the estimated annual demand of 3.2 AF-year for all nine (9) Dawson wells.
- Assuming a 0.26 AF/yr domestic use per resident with 90% return flows through the septic system per resident, this results in a 0.234 AF/yr replacement flow back through the septic system per resident (or 1.872 AF/year total).
- The estimated maximum depletion to the alluvial aquifer from 300-years of pumping from the Dawson formation at 3.2 AF/year is estimated at 24% of pumping, or 0.79 AF/year by year 300. The estimated annual return flows from each residence are sufficient to cover the estimated depletions to the alluvium as shown in the Replacement Plan Application included in ***Appendix C.***
- In Part 26 of Case Number 22CW3027 the revision to the previous augmentation plan contained in Case Number 09CW0076 states that post-pumping depletions after 300-years of pumping amount to approximately 960 AF. The property can set aside 998 AF of nontributary Laramie-Fox Hills groundwater, which results in approximately 960 AF of available post-pumping augmentation water, which will be sufficient to replace post-pumping depletions.

Conclusion:
The current water rights and augmentation plan in place are adequate to meet the estimated overall demand and resulting alluvial depletions from pumping 3.2 acre-feet out of the Dawson aquifer to supply eight (8) lots and nine (9) wells.

4.3 DESCRIPTION OF CURRENT WATER RIGHTS

The subject area's current water rights involve non-renewable supplies in the Denver Basin, further discussed below.

Non-Renewable Denver Basin Supply

The Denver Basin is a vast, deep-rock aquifer that stretches from southeast of Colorado Springs to Greeley, and from the base of the front range to the eastern end of Elbert County. Rights granted in the Denver basin are based on the ownership of the surface property – the larger the parcel, the larger the allocation. This water is much deeper than typical residential wells, ranging up to 2,650 feet deep.

Denver Basin water is considered finite and therefore non-renewable. In the subject area, there are four main formations that make up the Denver Basin: Dawson, Denver, Arapahoe, and Laramie-Fox Hills, described from shallowest to deepest.

Case No. 22CW3027 contains allocations in all four (4) Denver Basin aquifers, which total 24.05 annual acre-feet on a 300-year basis, and 72.16 annual acre-feet on a 100-year basis.

5.0 WATER SYSTEM FACILITIES AND PHYSICAL SUPPLY

5.1 SOURCE OF SUPPLY

Supply for the eight (8) lots will be met with eight (8) future wells completed in the Dawson aquifer. One additional well, Well No. 9, will be drilled for subdivision irrigation as well as other decreed uses. The new wells will be drilled, screened, test-pumped, and completed accordance with the Colorado Division of Water Resources rules and regulations.

5.2 WATER TREATMENT

Water from a neighboring well, less than 0.5 miles from the subdivision, screened into the Dawson aquifer, was sampled April 19, 2022, for constituents required by El Paso County regulations for a confined aquifer. Any desired treatment of future wells will rely on the individual homeowners as this is not considered a *Community System* by the Colorado Department of Public Health and Environment.

5.3 WATER STORAGE

Water storage (other than potential individual cisterns) will not be constructed. Therefore, a central water system with treatment and fire-flow capabilities will not be provided. The residents of each subdivided lot will be made aware of this since it will be included on the subdivision plat.

5.4 DISTRIBUTION, PUMPING, AND TRANSMISSION LINES

Since there is no central water system proposed for this subdivision, no distribution, pumping, or transmission lines will be constructed.

5.5 WATER QUALITY

The water quality in the Dawson aquifer in this area has typically been suitable for residential potable water use. Water samples were obtained from a neighboring existing well located at 4310 Saxton Hollow Road (well permit #80695-F) on April 19, 2022. Water quality analysis was performed by Colorado Analytical Laboratories and Hazen Research, Inc per the El Paso County Land Development Code Section 8.4.7(B). All compounds returned results below their respective maximum contaminant levels (MCL) except the Langlier Index (LI). Acceptable results for LI range from -1.0 to 1.0. The LI result for the sampled well was -1.87 which typically defines that the groundwater is very clean, yet likely corrosive. It would be recommended that copper piping not be used for the piping of the well or home due to the low LI results.

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 Denver Aquifer is deemed safe for public consumption.

6.0 EL PASO COUNTY MASTER PLANNING ELEMENTS

6.1 COUNTY WATER MASTER PLAN 2040 AND 2060 PROJECTIONS

The subject property lies within the El Paso County Water Master Planning area, Region #2.

6.2 BUILDOUT (INCLUDING 2040 AND 2060 BUILDOUT)

Expected buildout of the subject property are eight (8) total lots with one additional well for the subdivision. Demands for the entire subdivision are listed in Section 3.0 of this report which include a total demand of 3.2 AF/year as describe in Decree 22CW3027.

6.3 DESCRIPTION OF LONG-TERM PLANNING AND FUTURE SOURCES OF SUPPLY

Per El Paso County criteria, the 300-year supply of water for the subject property appears to be more than adequate for full buildout, which would include both the 2040 and 2060 scenarios. However, the proposed supply in the Dawson aquifer is based on non-renewable sources.

If needed beyond the 300-year supply, the subdivision has nontributary water rights in the Laramie-Fox Hills formation. Please refer to *Amendment to Plan for Augmentation* in ***Appendix C***.

6.4 WATER SYSTEM INTERCONNECTS

The closest source for a potential interconnect is Colorado Springs Utilities (for water only) – approximately 1.0 miles to the south. It is not anticipated that Colorado Springs Utilities (nor have they been contacted) would be able to provide water for this subdivision at this time.

7.0 CONCLUSION

The subject property has adequate water supply to meet the needs of the proposed subdivision on a 300-year basis.

APPENDIX A

ESTATES AT CATHEDRAL PINES

TR IN SE4 SEC 2-12-66 DES AS FOLS: BEG AT SW COR OF SE4 SEC 2, TH N 00<49'17" W 1583.77 FT, N 89<17'56" E 965.20 FT, S 00<49'17" E 1583.77 FT TO A PT ON S LN OF SD SE4, TH S 89<17'56" W 965.20 FT TO POB, TOG WITH INGRESS-EGRESS EASEMENT DES BY REC #200027778. EL PASO COUNTY, COLORADO

A STATEMENT ESTABLISHING THE PURPOSE AND INTENT OF THE PUD ZONING DISTRICT

Authority This PUD is authorized by Chapter 4 of the El Paso County Land Development Code, adopted pursuant to the Colorado Planned Unit Development Act of 1972, as amended.

Applicability The provisions of this PUD shall run with the land. The landowners, their successors, heirs or assigns shall be bound by this Development Plan, as amended and approved by the Planning and Community Development Department Director or Board of County Commissioners.

Adoption The adoption of this development plan shall evidence the findings and decisions of the El Paso County Board of County Commissioners that this Development Plan for Estates at Cathedral Pines is in general conformity with the El Paso County Master Plan, El Paso County Policy Plan and applicable Small Area Plan(s); is authorized under the provision of the El Paso County Land Development Code; and that the El Paso County Land Development Code and this development plan complies with the Colorado Planned Unit Development Act of 1972, as amended.

The provisions of this Development Plan shall prevail and govern the development of Estates at Cathedral Pines, provided, however, that where the provisions of this Development Plan do not address a particular subject, the relevant provisions of the El Paso County Land Development Code, as amended and in effect at the time of the PUD plan approval (or owner acknowledge the PUD changes with the Code), or any applicable resolutions or regulations of El Paso County, shall be applicable.

To further the mutual interest of the residents, occupants, and owners of the PUD and of the public in the preservation of the integrity of this development plan, the provisions of this plan relating to the use of land and the location of common open space shall run in favor of El Paso County and shall be enforceable law or in equity by the County without limitation on any power or regulation otherwise granted by law.

Where there is more than one provision within the development plan that covers the same subject matter, the provision which is most restrictive or imposes higher standards or requirements shall govern.

The total number of dwellings shown on the development plan for development within the specified planning areas is the maximum development requested for platting or construction (plus any approved density transfers). The actual number of dwellings or level of development may be less due to subdivision or Site Development Plan requirements, land carrying capacity, or other requirements of the Board of County Commissioners.

At the time of any final plat application, the applicant shall provide a summary of the development, to date, to Planning and Community Development Department, in order to assure maximum development limits are not exceeded.

The cover sheet shall include any cross reference to the ZCP or previous PUD Development Plan, including any recording references.

Floodplain statement: The parcel is within FEMA Floodplain Map number 08041CO315G, effective 12/7/2018. The property is regarded as Zone X, an area of minimal flood hazard.

TAX SCHEDULE NUMBER: 6200000411

PARCEL AREA: 35 ACRES

LOT AREA COVERAGE CALCULATION (BLDGS.): 28,304 SQUARE FEET (2% OF SITE AREA)

LOT AREA COVERAGE CALCULATION (TOTAL IMPERVIOUS.): 74,000 SQUARE FEET (5% OF SITE AREA)

TAX STATUS: TAXABLE

ZONING: PUD RR-5

EXISTING LAND USE: VACANT

PROPOSED LAND USE: SINGLE-FAMILY RESIDENTIAL

TOTAL GROSS BUILDING SQUARE FOOTAGE: 28,304 SQUARE FEET

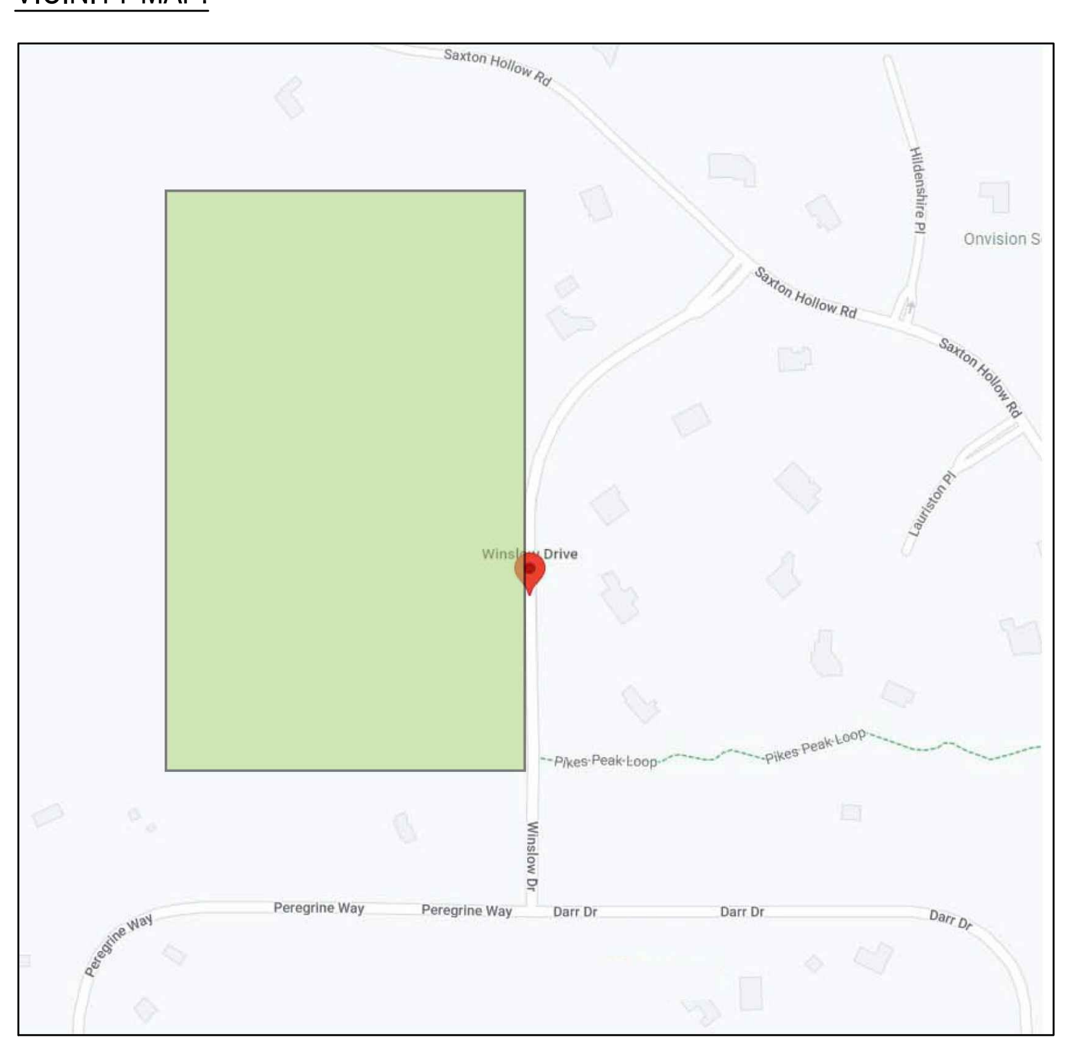
OPEN SPACE PERCENTAGE: 7%

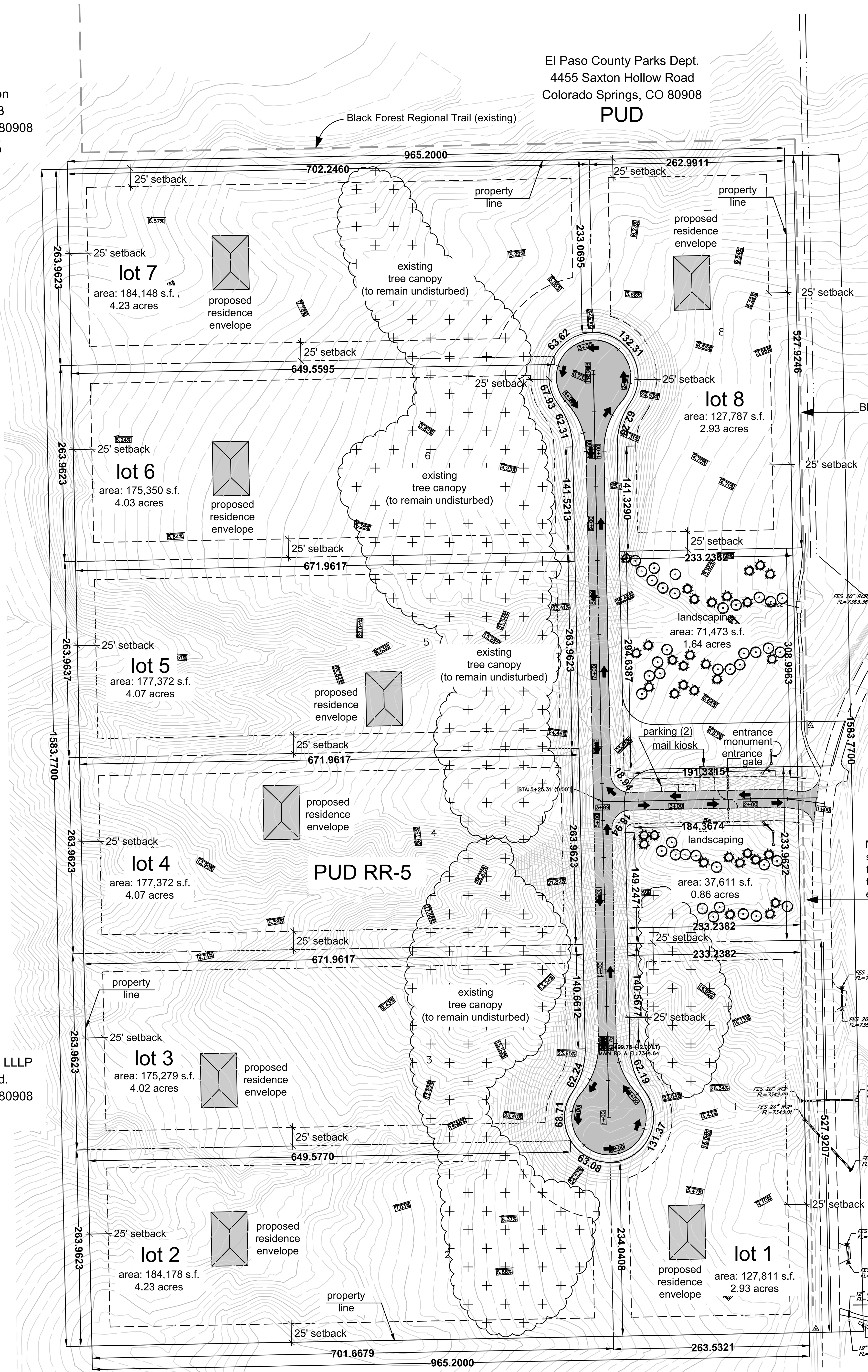
LANDSCAPE AREA PERCENTAGE: 19%

PROPOSED DENSITY: .228 DU/AC (Gross), .262 DU/AC (Net)

TOTAL NUMBER OF DWELLING UNITS: 8

VICINITY MAP:





OWNER NAME AND ADDRESS:
GREGG & ELAINE CAWLFIELD
VILLAGREE DEVELOPMENT LLC
5710 VESSEY RD
COLORADO SPRINGS, COLORADO 80908
PHONE: (719) 413-6900
EMAIL: gregg@villagree.com
Elaine@villagree.com

APPLICANT:
GREGG & ELAINE CAWLFIELD
VILLAGREE DEVELOPMENT LLC
5710 VESSEY RD
COLORADO SPRINGS, COLORADO 80908
PHONE: (719) 413-6900
EMAIL: gregg@villagree.com
Elaine@villagree.com

PLAN PREPARER:
WILLIAM GUMAN & ASSOC., LTD.
731 N. WEBER STREET
COLORADO SPRINGS, COLORADO 80903
PHONE: (719) 633-9700
EMAIL: bill@guman.net

0' 100' 200' 300'

SCALE: 1" = 100' - 0"

signature block

William Guman & Associates, Ltd.
URBAN PLANNING | COMMUNITY DESIGN | LANDSCAPE ARCHITECTURE
731 North Weber Street
Colorado Springs, CO 80903
(719) 633-9700
www.GumanLtd.com
bill@guman.net

PLAN NORTH:

PROJECT NAME: ESTATES AT CATHEDRAL PINES

PROJECT ADDRESS: WINSLOW DRIVE
BLACK FOREST, CO 80908

PROJECT DESCRIPTION: PUD DEVELOPMENT PLAN

DATE:	12/13/2022
DESIGNED:	GEM
CHECKED:	WFG

REVISIONS:

DATE:	BY:	DESCRIPTION:

NOTES:

PLAN SCALE: 1" = 100'0" (OR AS NOTED ON PLAN)

SHEET TITLE: PUD DEVELOPMENT PLAN

SHEET NO. 1

1 OF 1 SHEETS

FILE NO. FILE#

APPENDIX B

WATER SUPPLY INFORMATION SUMMARY

Section 30-28-133,(d), C.R.S. requires that the applicant submit to the County, "Adequate evidence that a Water supply that is sufficient in terms of quantity, quality, and dependability will be available to ensure an adeuate supply of water"

1. NAME OF DEVELOPMENT AS PROPOSED *Cathedral Pines Subdivision*

2. LAND USE ACTION *Minor Subdivision*

3. NAME OF EXISTING PARCEL AS RECORDED *Winslow Drive - EPC No 62000411*

SUBDIVISION *See Above* **FILING** *N/A* **BLOCK** *N/A* **Lot** *N/A*

4. TOTAL ACERAGE *35* | **5. NUMBER OF LOTS PROPOSED** *8* | **PLAT MAPS ENCLOSED** ☑

6. PARCEL HISTORY - Please attach copies of deeds, plats, or other evidence or documentation. (In submittal package)

A. Was parcel recorded with county prior to June 1, 1972? ☐ YES ☑ NO

B. Has the parcel ever been part of a division of land action since June 1, 1972? ☑ YES ☐ NO

If yes, describe the previous action Platted but not recorded.

7. LOCATION OF PARCEL - Include a map deliniating the project area and tie to a section corner. (In submittal)

SE1/4 **OF** **SECTION** 2 **TOWNSHIP** 12 ☐ N ☑ S **RANGE** 66 ☐ E ☑ W

PRINCIPAL MERIDIAN: ☑ 6TH ☐ N.M. ☐ UTE ☐ COSTILLA

8. PLAT - Location of all wells on property must be plotted and permit numbers provided.

Surveyors plat ☑ YES ☐ NO If not, scaled hand -drawn sketch Y ☐ NO

9. ESTIMATED WATER REQUIREMENTS - Gallons per Day or Acre Foot per Year

HOUSEHOLD USE # [1]	*8* of units	*0.260* AF/SFE/YR		*2.080* AF
Extra Well No 9	*0.0566* AF/1000SF	*-* GPD		*0.158* AF
IRRIGATION # [2]	*0.0566* AF/1000SF	*778* GPD		*0.872* AF
ANIMAL WATERING # [3]	8 Horses	*0.011* AF/Horse/Year		*0.088* AF
		GPD		AF
TOTAL		*2,855* GPD		***3.2*** AF *

1) Per 8.4.7 (B)(7)(d) of the EPC Land Development Code (LDC)

2) Per 8.4.7.(B)(7)(d) of the EPC-LDC @ 1925 ft² of irrigatable land per residence and 2800 ft² Well No 9

3) Assuming 1 horses per lot at 0.011 AF/year per horse

10. WATER SUPPLY SOURCE

☐ EXISTING ☐ DEVELOPED ☑ NEW WELLS

WELLS SPRING

WELL PERMIT NUMBERS

Proposed Aquifers - (Check One)

☐ Alluvial ☐ Upper Arapahoe
☑ Upper Dawson ☐ Lower Arapahoe
☐ Lower Dawson ☐ Laramie Fox Hills
☐ Denver ☐ Dakota
☐ Other

☐ MUNICIPAL
☐ ASSOCIATION
☐ COMPANY
☐ DISTRICT

NAME: N/A

WATER COURT DECREE CASE NUMBERS

09CW80 Division 1 & 09CW76 Division 2

Consolidated Multidistrict Case 09MDL7 consolidates both cases into 09CW76

Findings of Fact Case No.: 22CW3027

LETTER OF COMMITMENT FOR SERVICE ☐ YES ☑ NO

11. ENGINEER'S WATER SUPPLY REPORT ☑ YES ☐ NO If yes, please forward with this form. (This may be required before our review is completed)

12. TYPE OF SEWAGE DISPOSAL SYSTEM

☑ SEPTIC TANK/LEACH FIELD ☐ CENTRAL SYSTEM - DISTRICT NAME:

☐ LAGOON ☐ VAULT - LOCATION SEWAGE HAULED TO:

☐ ENGINEERED SYSTEM (Attach a copy of engineering design) ☐ OTHER:

APPENDIX C

DISTRICT COURT, WATER DIVISION 2, COLORADO Court Address: 501 North Elizabeth Street, Suite 116 Pueblo, CO 81003 Phone Number: (719) 404-8832	DATE FILED: January 18, 2023 11:03 AM CASE NUMBER: 2022CW3027 ▲ COURT USE ONLY ▲
CONCERNING THE APPLICATION FOR WATER RIGHTS OF: **VILLAGREE DEVELOPMENT, LLC** **IN EL PASO COUNTY, COLORADO**	Case No.: 22CW3027 (Ref. 09CW0076)

FINDINGS OF FACT, CONCLUSIONS OF LAW, RULING OF REFEREE AND DECREE: APPROVING PLAN FOR AUGMENTATION

THIS MATTER comes before the Water Referee on the Application filed by Villagree Development, LLC for amendment of an existing plan for augmentation. Having reviewed said application and other pleadings on file, and being fully advised on this matter, the Water Referee makes the following findings and orders:

FINDINGS OF FACT

1. The Applicant in this case is Villagree Development, LLC, c/o Gregg Cawlfield, whose address is 5710 Vessey Road, Colorado Springs, CO 80908 ("Applicant"). Applicant is the owner of the land totaling approximately 35 acres located in the SE ¼ of Section 2, Township 12 South, Range 66 West of the 6th P.M., in El Paso County, Colorado, ("Applicant's Property") depicted on the attached **Exhibit A**.

2. The Applicant filed this Application with the Water Court for Water Division 2 on May 4, 2022. The Application was referred to the Water Referee in Division 2 on or about May 5, 2022.

3. The time for filing statements of opposition to the Application expired on the last day of July 2022. No Statements of Opposition were filed.

4. In accordance with the notice requirements of C.R.S. § 37-92-302, lienholders of the Applicant's property were sent a Letter of Notice dated May 12, 2022. A Certificate of Notice was filed with the District Court, Water Division 2, on June 30, 2022.

5. The Clerk of this Court has caused publication of the Application as provided by statute, and the publication costs have been paid. On June 29, 2022, proof of publication in the *Colorado Springs Gazette* in El Paso County was filed with the Water Court Division 2. All notices of the Application have been given in the manner required

by law.

6. Applicant seeks to amend an existing plan for augmentation decreed on March 23, 2010 in Case No. 09CW0076, by District Court, Water Division 2 ("09CW76 Decree").

7. Pursuant to C.R.S. §37-92-302(4), the office of the Division Engineer for Water Division No. 2 filed its Consultation Report dated September 22, 2022. The Consultation Report has been considered by the Water Referee in the entry of this Ruling.

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.

AMENDMENT TO PLAN FOR AUGMENTATION

9. The original decree in Case No. 09CW76 established an augmentation plan for up to seven wells located on Applicant's Property to be subdivided into seven lots. The original augmentation plan decreed that up to a combined 3.22 acre-feet of water per year may be withdrawn from either the not-nontributary Dawson, Denver, or Arapahoe aquifers from either a central water supply or from up to seven individual wells (0.46 annual acre-feet per well), and set forth the water use as in house (0.30 annual acre-feet), and irrigation of law and garden (0.16 annual acre-feet). The 09CW76 Decree reserved the entirety of the Laramie-Fox Hills aquifer, being 998 acre-feet, for replacement of post-pumping depletion obligations (a 300-year aquifer life/plan for augmentation).

10. The Applicant obtained by deed, and is the current owner of Applicant's Property, including the following quantities of water in the Denver Basin aquifers underlying the Applicant's Property, as quantified in the 09CW76 Decree:

Aquifer	Total (Acre-Feet)	Annual Amount – 100 years (Acre-Feet)	Annual Amount – 300 years (Acre-Feet)
Dawson (NNT)	1,785	17.9	5.95
Denver (4% - NNT)	3,094	30.9	10.3
Arapahoe (4% - NNT)	1,339	13.4	4.4
Laramie-Fox Hills (NT)	998	10	3.3

11. The Applicant requested to amend Case No. 09CW76 to support the development of eight lots and common space as follows:

12. Amendment: The structures to be augmented are the Villagree Wells Nos. 1 through 9, to be constructed to the not-nontributary Dawson aquifer underlying the Applicant's Property, along with any additional or replacement wells associated therewith. The amendment decreed herein allows the Villagree Wells Nos. 1 through 8 to each pump 0.38 acre-feet annually, and the Villagree Well No. 9 to pump a maximum 0.16 acre-feet

annually, for a maximum of 3.2 acre-feet of water being pumping from the Dawson aquifer per year.

a. Indoor use will utilize an estimated 0.26 acre-feet of water per year, per lot, with the additional 0.12 acre-feet per year per lot available for irrigation of lawn and garden and the watering of horses or equivalent livestock. The Villagree Well No. 9 will be used for irrigation, recreation, wildlife, fire protection, and exchange and augmentation purposes for development of Applicant's Property. The foregoing figures assume the use of an individual septic system on each lot (for a total of 8 individual septic systems), with resulting return flows for the replacement of actual stream depletions.

b. Maximum annual depletions for total residential pumping for eight lots and common space on Applicant's Property over the 300-year pumping period amounts to approximately 24% of pumping, or 0.79 acre-feet in year 300. 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. At the household indoor use rate of 0.26 acre-feet per year, per residence, 0.234 acre-feet is replaced to the stream system per year, per residence, for a total of 1.872 acre-feet replaced to the stream annually utilizing non-evaporative septic systems.

c. The previous reservation for replacement of post-pumping depletions in the 09CW76 Decree of the entirety of the Laramie-Fox Hills aquifer, being 998 acre-feet, is not amended nor changed under the revised plan for augmentation decreed herein. The Applicant reserves the 998 acre-feet in the Laramie-Fox Hills to cover post-pumping depletions from pumping 3.2 annual acre-feet from the not-nontributary Dawson aquifer underlying Applicant's Property from the Villagree Wells Nos. 1 through 9, and any additional or replacement wells associated therewith. The Applicant 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 non-injurious. The reservation of a total of 998 acre-feet of the Laramie-Fox Hills aquifer groundwater will be sufficient to replace post-pumping depletions. The Court retains continuing jurisdiction in this matter to determine if the supply is adequate.

d. Submittal by the Applicant of complete well permit applications and filing fees, the State Engineer shall issue new permits for the Villagree Wells Nos. 1 through 9 pursuant to C.R.S. §37-90-137(4), consistent with and referencing the Amendment to Plan for Augmentation decreed herein.

13. Applicant or its successors shall be required to initiate pumping from the Laramie-Fox Hills aquifer for the replacement of post-pumping depletions when either: (i) the Applicant or its successors in interest have acknowledged in writing that all withdrawals for beneficial use of the Dawson groundwater have permanently ceased, (ii) a period of 10 consecutive years where no withdrawals of Dawson groundwater has

occurred, or (iii) 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.

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

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

16. 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, injury to any owner of or person entitled to use water under a vested water right.

CONCLUSIONS OF LAW

17. The application for amendment to plan for augmentation was filed with the Water Clerk for Water Division 2, pursuant to C.R.S. §§37-92-302(1)(a) and 37-90-137(9)(c.5).

18. 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.

19. The Applicant's request for approval of amendment to 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 well without adversely affecting any other vested water rights in the Arkansas River or 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:

20. 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.

21. The Application for Amendment to Plan for Augmentation proposed by the Applicant is approved, subject to the terms of this decree.

22. The Applicant has furnished acceptable proof as to all claims and, therefore, the Application for Amendment to Plan for Augmentation, as requested 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 material injury to senior vested water rights.

23. Pursuant to C.R.S. §37-92-304(6), the Court shall retain continuing jurisdiction over the plan for augmentation decreed herein for reconsideration of the question of whether the provisions of this decree are necessary and/or sufficient to prevent injury to vested water rights of others, as pertains to the use of Denver Basin groundwater supplies adjudicated herein for augmentation purposes. The court also retains continuing jurisdiction for the purpose of determining compliance with the terms of the augmentation plan.

24. 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 essential 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 meters on the well or any additional or replacement wells associated therewith.

25. The vested water rights, water right structures, and plan for augmentation decreed herein shall be subject to all applicable administrative rules and regulations, as currently in place or as may in the future be promulgated, of the offices of Colorado State and Division Engineers for administration of such water rights, to the extent such rules and regulations are uniformly applicable to other similarly situated water rights and water users. 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 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.

26. The Villagree Wells Nos. 1 through 9 and any replacement or additional wells, shall be operated such that combined pumping from all wells does not exceed the

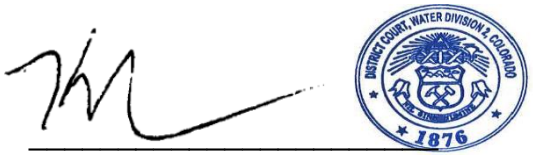
annual (3.2 acre-feet) and total (960 acre-feet) pumping limits for the Dawson aquifer as decreed herein, and is in accordance with the requirements of the plan for augmentation described herein. The State Engineer, the Division Engineer, and/or the Water Commissioner shall not curtail the diversion and use of water by the Villagree Wells Nos. 1 through 9 or any additional and replacement wells so long as the return flows from the annual diversions associated with the Villagree Wells Nos. 1 through 9 and such other wells accrue to the stream system pursuant to the conditions contained herein. To the extent that Applicant or one of its successors or assigns is ever unable to provide the replacement water required, then the Villagree Wells Nos. 1 through 9, and any additional or replacement wells, shall not be entitled to operate under the protection of this plan, and shall be subject to administration and curtailment in accordance with the laws, rules, and regulations of the State of Colorado. Pursuant to C.R.S. §37-92-305(8), the State Engineer shall curtail all out-of-priority diversions which are not so replaced as to prevent injury to vested water rights. In order for this plan for augmentation to operate, return flows from the septic system discussed herein shall at all times during pumping be in an amount sufficient to replace the amount of stream depletions, and cannot be sold, leased, or otherwise used for any purpose inconsistent with the augmentation plan decreed herein. Applicant shall be required to have any wells pumping from the Dawson aquifer on the Applicant's Property provide water for in-house use and generating septic system returns prior to pumping the wells for any of the other uses identified herein.

27. The wells shall be installed and metered as reasonably required by the State Engineer. The wells will be equipped with a totalizing flow meter and Applicant shall submit diversion records to the Division Engineer by April 1st and November 1st annually, or as otherwise requested by the Division Engineer.

28. All other provisions of the 09CW76 decree remain the same and in full force and effect.

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

Dated: January 18, 2023.



Kate Brewer
Water Referee
Water Division Two

DECREE

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

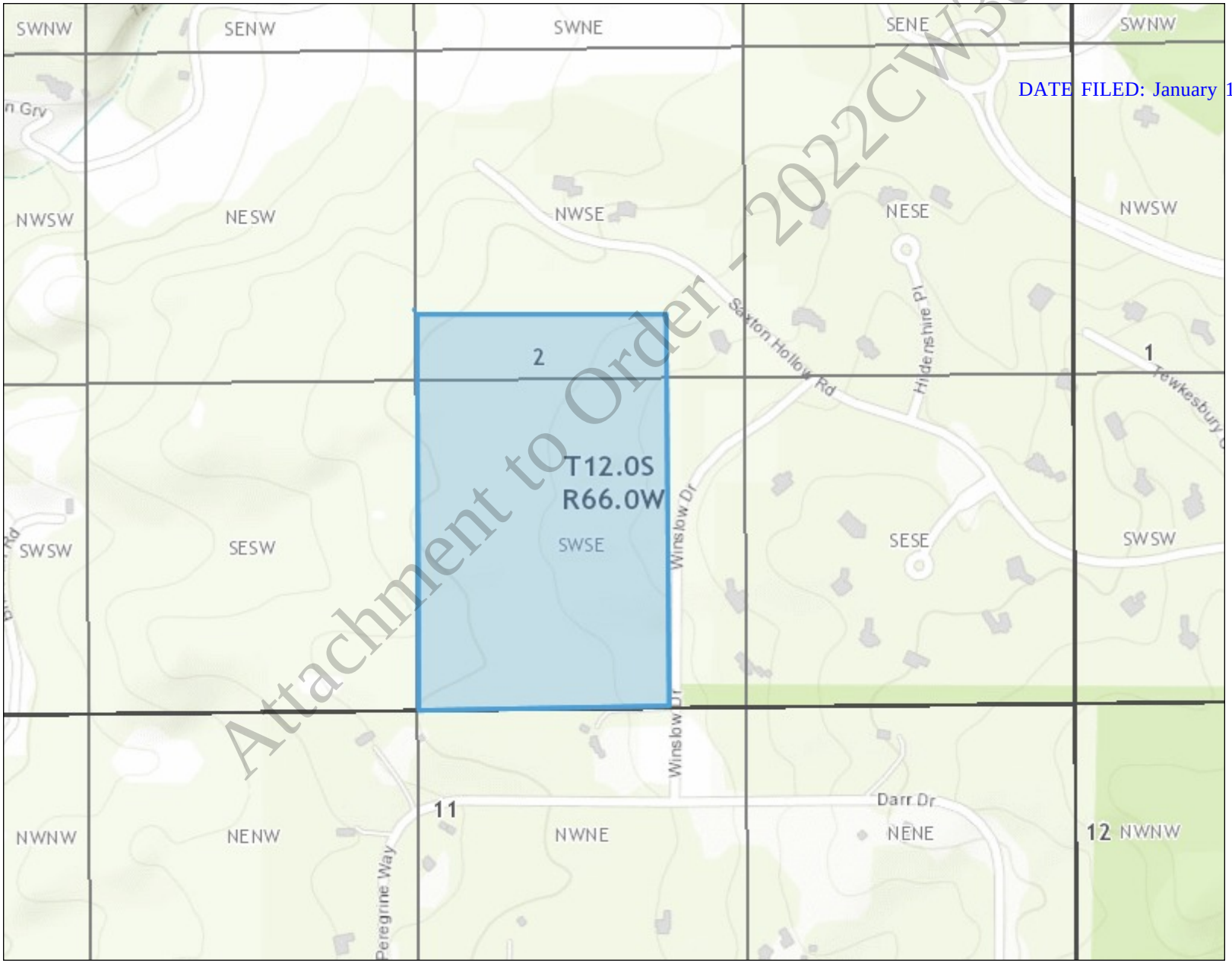
Date:

_____
Larry C. Schwartz
Water Judge
Water Division Two

EXHIBIT A

COLORADO'S
Decision Support Systems
CWCB / DWR

Villagree Development, LLC Property



Legend

- Township
- Section
- Q40
- County

Location

Notes

1,169 0 585 1,169 Feet

1: 7,016

This product is for informational purposes and may not have been prepared for, or be suitable for legal, engineering, or surveying purposes. Users of this information should review or consult the primary data and information sources to ascertain the usability of the information.

Date Prepared: 4/28/2022 9:40:40 AM

DISTRICT COURT, WATER DIVISION 2, COLORADO Pueblo County Judicial Building 501 North Elizabeth Street, Suite 116 Pueblo, CO 81003 (719) 404-8832	**▲ COURT USE ONLY ▲**
IN THE MATTER OF THE APPLICATION OF THE WATER RIGHTS OF: **VILLAGREE DEVELOPMENT LLC** IN THE ARKANSAS RIVER OR ITS TRIBUTARIES IN EL PASO COUNTY	Case Number: 2022CW3027 Previous Case No: 09CW0076
NOTICE OF TRANSMITTAL AND CERTIFICATE OF SERVICE	

To: All Parties

Ruling of Referee enclosed. If you wish to protest said Ruling, a pleading in protest must be filed within the time provided by statute. (Forms available at Clerk's Office).

Please check carefully, and if you find any errors or have any questions, call the Water Referee right away. In the absence of any protest, the Water Judge will enter a judgment and decree, or may reverse, or reverse and remand any ruling which he deems contrary to law, or may modify same, after the expiration of the time for protests.

I hereby certify that I served through the approved judicial branch e-filing service provider a true and correct copy of the foregoing and Ruling to:

Name	Party	Attorney
Villagree Development LLC	Applicant	Polley, Emilie Blake #51296 Cummins, Christopher Dale #35154
Division 2 Engineer	Division Engineer	Division 2 Water Engineer #905101
State Engineer	State Engineer	Colorado Division Of Water Resources #900040

Witness my hand and the seal of this Court. Date: January 18, 2023.

Michele M. Santistevan, Clerk
District Court Water Div. 2
501 N. Elizabeth Street, Suite 116
Pueblo, CO 81003
Telephone: (719) 404-8832

By:_____
Clerk

DISTRICT COURT, WATER DIVISION 2 **STATE OF COLORADO** Court Address: 320 W. 10th Street Pueblo, CO 81003	FILED Document - District Court 2009CW76 CO Pueblo County District Court 10th JD Filing Date: Feb 25 2010 3:05PM MST Filing ID: 29762800 Review Clerk: Mardell Didomenico Δ COURT USE ONLY Δ
CONCERNING THE APPLICATION OF: **SANDCASTLE DEVELOPMENT 1, LLC** **IN EL PASO COUNTY**	Case No.:09CW80 Division 1 09CW76 Division 2 Consolidated in Div. 2 09MDL7

FINDINGS OF FACT, CONCLUSIONS OF LAW, AND RULING OF REFEREE

THIS MATTER comes before the Court on the Application for Adjudication of Denver Basin Groundwater Rights and for Approval of Plan for Augmentation filed by Sandcastle Development 1, LLC and, having reviewed said Application and other pleadings on file, and being fully advised on this matter, the following findings and orders have been made:

FINDINGS OF FACT

General Findings

1. The Applicant in this case is Sandcastle Development 1, LLC, a Colorado limited liability company ("Applicant"). This case involves the adjudication of Denver Basin ground water underlying Applicant's Property in El Paso County, Colorado. It also involves the adjudication of a plan for augmentation to replace stream depletions caused by pumping from up to seven wells that may be drilled in the not-nontributary Dawson, Denver or Arapahoe aquifers. The water rights application was filed in both Water Divisions 1 and 2 because the State Engineer's Denver Basin Ground Water Flow Model indicates stream depletions occur in both the South Platte River and Arkansas River drainages.

2. The water rights Applications in this case were filed in Water Division 1 on May 29, 2009 (Case No. 09CW80) and in Water Division 2 (Case No. 09CW76) on May 29, 2009.

3. Water Division 1, Case 09CW80, was referred to its Water Referee as of the date of the filing of the Application on May 29, 2009. By Order of Referral from Water Division 2, dated June 2, 2009, Case No. 09CW76 was referred to its Water Referee.

4. On August 6, 2009 the Panel on Consolidated Multidistrict Litigation in Case No. 09MDL7, recommended that the Division 1 and Division 2 cases be consolidated into this Division 2 case, Case No. 09CW76. By Order dated August 31, 2009 consolidation of the Division 1 and Division 2 cases was approved by the Chief Justice of the Colorado Supreme Court. By an Order from Water Division 2 the consolidated case was referred to its Water Referee.

5. The Office of the State Engineer has filed its Determination of Facts reports on July 30, 2009. The Division Engineer's Office for Division 1 filed a Consultation Report dated August 31, 2009 and the Division Engineer's Office for Division 2 filed a Consultation Report dated August 5, 2009. Due consideration has been given to those Consultation Reports.

6. This Court has jurisdiction over the subject matter of this proceeding and over all parties affected hereby, whether or not they have appeared in this action. The land and water rights involved herein are not included within the boundaries of any designated groundwater basin.

7. A Statement of Opposition was filed by the City of Colorado Springs in Case No. 09CW76 (Water Division 2). Applicant entered into a stipulation with the City of Colorado Springs consenting to the entry of a decree in accordance with the provisions of this Findings of Fact and Ruling of the Referee dated February 17, 2020. That Stipulation has been approved as an Order of the Court dated February 19, 2010.

Ground Water Rights

8. The land overlying the ground water to be adjudicated in this case is owned by the Applicant and consists of approximately 35 acres located in the SE1/4 of Section 2, Township 12 South, Range 66 West of the 6th P.M. in El Paso County, Colorado ("Applicant's Property"). The Applicant's Property is more particularly described in the attached Exhibit A legal description, and a map of the Applicant's Property is attached hereto as Exhibit B.

9. There are no lienholders on Applicant's Property and no service was necessary pursuant to C.R.S. §37-92-302.

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

Aquifer	Saturated Thickness (Feet)	Depth (Feet)[1]	Total Water Adjudicated (Acre Feet)	Annual Average Withdrawal100/300 years (Acre Feet)
Dawson	255	0-675	1,785.0	17.9/5.95
Denver	520	715-1550	3,094.0	30.9/10.3
Arapahoe	225	1610-2085	1,339.0	13.4/4.4
Laramie Fox Hills	190	2470-2775	998.0	10/3.3

11. The Denver and Arapahoe Aquifers are more than one mile from the point of contact of a live natural stream, including its alluvium. Pursuant to C.R.S. 37-90-137(9)(c)(1), 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, to the extent necessary to prevent material injury, and the augmentation requirements for the Denver and Arapahoe Aquifer require replacement to the affected stream system of four percent of the amount of water withdrawn from the aquifer on an annual basis. Applicant shall not be entitled to construct wells or use water from the not-nontributary Dawson, Denver, and Arapahoe aquifers except pursuant to the augmentation plan decreed herein, and in accordance with C.R.S. §37-90-137(9)(c).

12. Subject to the requirements and limitations of this decree, Applicant shall be entitled to withdraw all legally available ground water in the Denver Basin aquifers underlying Applicant's Property. Said amounts can be withdrawn over the 100 year life of the aquifers as set forth in C.R.S. §37-90-137(4), or withdrawn over a longer time based upon local governmental regulations or Applicant's water needs. The average annual amounts of ground water available for withdrawal from the underlying Dawson, Denver, and Arapahoe aquifers of the Denver Basin, based upon the 300 year aquifer life required by the El Paso County Land Development Code, is determined and set forth above, based upon the July 30, 2009 Office of the State Engineer Determination of Facts.

13. Applicant shall be entitled to withdraw an amount of ground water in excess of the average annual amount decreed from the Denver Basin aquifers underlying Applicant's

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[1] The actual depth of each well to be constructed within the respective aquifers will be determined by topographic and actual aquifer conditions.

Property, so long as the sum of the total withdrawals from wells in the aquifers do not exceed the product of the number of years since the date of issuance of the original well permits or the date of entry of a decree herein, whichever comes first, and the annual volume of water which Applicant is entitled to withdraw from the aquifer underlying Applicant's Property, and further subject to the requirement that such excess withdrawals do not violate the terms and conditions of the plan for augmentation decreed herein and in any other plan for augmentation decreed by the Court that authorizes withdrawal of the Denver Basin ground water rights decreed herein.

14. Applicant shall be entitled to produce the full legal entitlement from the respective Denver Basin aquifers underlying Applicant's Property through any combination of wells constructed into each aquifer, subject to the requirement of obtaining plans for augmentation for withdrawal of the not-nontributary ground water. These wells may be treated as a well field, and may be located at any point within the boundaries of Applicant's Property without the necessity of filing an amendment to the Application, republishing, or petitioning the Court for the opening this decree. The pumping rates for each well may vary according to aquifer conditions and well production capabilities. All wells shall be cased to prevent withdrawal of water from more than one aquifer. The Applicant shall be entitled to withdraw ground water at rates of flow not to exceed those necessary to withdraw the entire decreed amounts or the decreed amounts as limited by compliance with El Paso County subdivision regulations.

15. The Applicant has waived the 600 foot well spacing requirement of C.R.S. §37-90-137(2)(b) with respect to the spacing of Applicant's wells in relation to one another on Applicant's Property.

16. Well permit applications for the wells to be drilled pursuant to this decree shall be applied for prior to drilling wells in the Denver Basin Aquifers. No exact location is required for the wells in this decree, as that information will be provided when the well permit applications are submitted.

17. Applicant is granted a vested right to use the ground water in the not-nontributary Dawson, Denver, and Arapahoe aquifers underlying Applicant's Property as quantified in paragraph 10 or as modified by the Court under its retained jurisdiction. The Applicant shall have the right to use the not-nontributary ground water adjudicated herein through individual wells or through a central water supply system for beneficial uses upon Applicant's Property consisting of domestic, commercial (i.e., in home occupations), irrigation, stock water, recreation, wildlife, fire protection, central water supply for such uses, and also for exchange and augmentation purposes. The amount of ground water decreed for such uses upon Applicant's Property is reasonable as such uses are to be made for the long term use and enjoyment of Applicant's Property and are to establish and provide for adequate water reserves. 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 not be entitled to

construct a well or use water from the not-nontributary Dawson, Denver, and Arapahoe aquifers except as provided in the decreed augmentation plan entered by the Court herein. Furthermore, any of the not-nontributary Denver Basin ground water adjudicated herein that is not included in the plan for augmentation decreed herein shall not be withdrawn unless and until a specific plan for augmentation authorizing its withdrawal and use is decreed or the plan for augmentation decreed herein is modified to allow for such withdrawals.

18. Applicant is awarded a vested right to the use of the ground water in the nontributary Laramie-Fox Hills aquifer underlying the Property, as quantified in paragraph 10 or as modified by the Court under its retained jurisdiction. As a term and condition of this decree, Applicant has reserved the entire volume of Laramie-Fox Hills aquifer groundwater decreed herein (998 acre-feet) for the purpose of replacing depletions under the plan for augmentation decreed herein. Under this reservation, the Laramie-Fox Hills aquifer groundwater may only be used for augmentation and replacement purposes as described in this decree. To the extent the Court reduces the amount reserved herein under its retained jurisdiction, and 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, Applicant shall have the right to use the Laramie-Fox Hills aquifer groundwater adjudicated herein through individual wells or through a central water supply system for beneficial uses upon the Property consisting of domestic, commercial, irrigation, stock water, recreation, wildlife, and fire protection, and also for augmentation purposes and for trade or exchange upon the Property for the above uses. The nontributary water maybe used and reused and successively used to extinction. Applicant may use such water by immediate application or by incidental storage and subsequent application to the beneficial uses and purposes stated herein on the Property.

19. Water is available from the Denver Basin aquifers beneath Applicant's Property and the withdrawal of that water from wells in the amounts of water determined in accordance with the provisions of this decree will not result in material injury to any other vested water rights or to any other owners or users of water.

Plan for Augmentation

20. Applicant intends to subdivide Applicant's Property into as many as seven lots. The structures to be augmented are up to seven wells to be completed in the not-nontributary Dawson, Denver, and/or Arapahoe aquifers underlying Applicant's Property, including any replacement wells. Applicant requested the right to have a central well system as an alternative to for all or part of the water allotment for the individual wells.

21. The up to seven augmented wells are to be used for the water supply for up to seven single family residences and other uses as stated herein upon Applicant's Property. The maximum annual pumping from each well for these uses shall not exceed

0.46 annual acre-feet and a total of 3.22 annual acre-feet for all seven wells except as may be allowed under paragraph 13. The Applicant's consultant has operated the State Engineer's Denver Basin Ground Water Flow Model for the determination of stream depletions from the Dawson aquifer pumping. The actual stream depletions during plan pumping are a maximum of approximately 24.00 percent of the Dawson aquifer well pumping, assuming 300 years of withdrawal under this plan. The actual annual stream depletions associated with the Dawson aquifer during plan pumping are, therefore, found to be a maximum of 0.11 acre-feet per lot with a maximum total annual stream depletion under this plan during plan pumping of 0.77 acre-feet for all seven wells. Attached hereto as Exhibit C are the Dawson aquifer stream depletion factors produced by the State's Denver Basin Groundwater Flow Model. To the extent Applicant utilizes ground water in the Denver or Arapahoe aquifers, 4 percent of the water withdrawn on an annual basis shall be replaced to the affected stream system, which is found to total 0.13 annual acre-feet for all seven lots.

22. Pumping from the Dawson, Denver and Arapahoe aquifers under the plan for augmentation decreed herein is limited to 966 acre-feet total during the term of the plan (3.22 annual acre feet for all seven wells times 300 years). This maximum pumping may be provided from wells completed into either or all of these aquifers. However, combined pumping shall not exceed the total volume of 966 acre-feet, and also shall not exceed the full quantifications of these aquifers under this decree.

23. Pursuant to C.R.S. §37-90-137(9)(c), the augmentation obligation for the Dawson Aquifer Wells requires the replacement of actual stream depletions to the extent necessary to prevent any injurious effect. Pursuant to C.R.S. §37-90-137(9)(c), the augmentation obligation for wells utilizing the Denver aquifer requires the replacement to the affected stream system of a total amount of water equal to 4 percent of the ground water withdrawn on an annual basis. The water rights to be used for augmentation during pumping are the return flows from the not-nontributary wells to be pumped as set forth in this plan for augmentation. The water rights to be used for augmentation after pumping are Applicant's nontributary water rights in the Laramie-Fox Hills aquifer. Applicant shall provide for the augmentation of stream depletions caused by pumping the wells approved herein. Water use criteria for the wells is as follows:

A. Household Use Only: 0.30 acre feet annually per single family dwelling with a ten percent consumptive use based upon non-evaporative septic leach field disposal systems. Any other type of waste water disposal shall require an amendment to this plan of augmentation.

B. Landscape and Garden Irrigation: 0.05 acre feet annually per 1,000 square feet (2.0 acre feet per acre) per year, with an eighty-five percent assumed consumptive use rate.

Based on these estimates of diversions and consumptive use components, and based upon a three hundred year aquifer life for each well, the seven wells should be able to pump a combined total of 3.22 acre feet per year, which is sufficient to support use for in-house purposes in seven single family residences and additional law and garden irrigation. Total depletions from Applicant's withdrawals shall in no instance exceed the 966 acre-feet reserved and available for replacement in the Laramie-Fox Hills aquifer, less replacement made during the pumping life of the wells.

24. Waste water from the in-house residential uses shall be disposed of through nonevaporative septic systems which are hereby determined to have return flows to the tributary stream system of ninety percent of the in-house residential pumping of 0.30 annual acre feet. In-house consumptive use is ten percent of diversions and return flows for each in-house residential use is therefore ninety percent of the above 0.30 annual acre feet of pumping, or 0.27 acre feet per residence. Total return flows from the in-house use from the seven wells will be 1.89 annual acre feet. These return flows will adequately augment the tributary stream system in excess of the maximum actual stream depletion amount of approximately 0.77 annual acre feet for wells in the Dawson aquifer, or 0.13 for wells in the Denver or Arapahoe aquifers or in excess of any other combination thereof. These in-house use return flows are committed to this plan for augmentation and cannot be used, sold, traded, or assigned for any purpose without a subsequent order of this Court under the Court's retained jurisdiction or under a further water rights application filed with this Court and notice to the objectors in this case. The total pumping may vary, provided however that the total annual pumping of 3.22 acre-feet shall not be exceeded, and septic return flows from in-house use, as calculated above, shall equal or exceed maximum stream depletions. The allocation of water for uses within the maximum pumping limit may vary provided that there shall always be adequate return flows through the septic systems to provide adequate replacement water to cover stream depletions from the wells. To ensure adequate return flows, commercial, stock watering, recreational use, wildlife, fire-protection, and irrigation of lawns, gardens and landscaping uses will not occur on an individual lot unless that lot is occupied by a single-family dwelling utilizing a non-evaporative septic system.

25. Applicant's use of the remaining pumping allotment, other than for household use, will be for stock watering, recreational use, wildlife, commercial, fire protection, and/or for the irrigation of lawns, gardens and landscaping. Applicant asserts that irrigation water accrues to the stream as return flows which could be used for additional augmentation. The irrigation return flows are not part of this augmentation plan, but Applicant preserves its right to prove and claim those return flows and does not waive its rights to any such amounts.

26. The return flows set forth above will accrue to only the Arkansas River system where the Applicant's Property is located. Because depletions occur to both the South Platte and Arkansas River systems under the State's ground water flow model, this

Application was filed in both Water Divisions 1 and 2. The return flows set forth above as augmentation will accrue to only the Arkansas River system where most depletions occur. Under this augmentation plan, the total amount of depletions will be replaced to the Arkansas River system as set forth herein, and the Court finds that those replacements are sufficient under this augmentation plan.

27. This plan for augmentation shall have a pumping period of three hundred years. It is necessary for the Applicant to address the replacement of injurious post-pumping depletions which may be caused to the stream system by the not-nontributary wells after the operation of those wells ceases. In order to ensure the replacement of all injurious depletions as a result of pumping Applicant's Dawson and Denver aquifer wells, Applicant shall reserve the entire 998 acre-feet of water adjudicated in this decree from the nontributary Laramie-Fox Hills aquifer underlying Applicant's Property (subject to the limitation of consuming only 98% of this amount, or 978 acre-feet). Applicant's post-pumping obligations shall not exceed the amount pumped under the augmentation plan (966 acre feet total), and may be reduced by the Court under its retained jurisdiction as set forth in paragraph 46 to reflect the amount of actual stream replacements made during the plan pumping period. The reserved Laramie-Fox Hills aquifer water will be used to replace injurious post-pumping depletions. This reservation will provide sufficient water to replace any and all depletions from the pumping of the Dawson, Denver or Arapahoe aquifer wells which may exist after the operative life of the well pumping under this plan, and is consistent with C.R.S. 37-90-137(9)(b). The Court retains jurisdiction under this decree to reduce the amount reserved herein for post-pumping obligations as follows: (1) to reflect the actual volume of water available from the Laramie-Fox Hills aquifer, if adjusted by the Court under its retained jurisdiction; (2) to reflect the amount of actual replacements made under the plan for augmentation decreed herein during the plan pumping period; or (3) if the Court has authorized use of other replacement sources under the plan for augmentation decreed herein.

28. This decree, upon recording, shall constitute a covenant running with the Applicant's Property, benefitting and burdening said land, and requiring construction of the wells to the Laramie-Fox Hills aquifer and pumping of water to replace injurious post-pumping stream depletions under this decree. Subject to the requirements of this decree, to determine the amount and timing of post-pumping replacement obligations under this augmentation plan from pumping in the Dawson, Denver, and Arapahoe aquifers combined, Applicant or its successors shall use information commonly used by the Colorado Division of Water Resources for augmentation plans of this type at the time. Pursuant to this covenant, the water from the nontributary Laramie-Fox Hills aquifer reserved herein may not be severed in ownership from the overlying subject property. This covenant shall be for the benefit of, and enforceable by, third parties owning vested water rights who would be materially injured by the failure to provide for the replacement of post-

pumping depletions under the decree, and shall be specifically enforceable by such third parties against the owner of the Property. In the event of a court action to specifically enforce the covenant as set forth above, the prevailing party in such action shall be entitled to recover its reasonable attorney fees and costs incurred in such enforcement action in addition to all other remedies available. In addition, to satisfy post-pumping depletion obligations, upon application to and approval of this Court under its retained jurisdiction, Applicant may use other legally available augmentation supplies which, as determined by the Court, are sufficient in quantity, time, and location to meet injurious depletions, including those which may occur post-pumping.

29. Applicant or its successors shall be required to initiate pumping from the Laramie-Fox Hills aquifer for the replacement of post pumping depletions when either: (1) the absolute total amount of water available from the Dawson, Denver and/or Arapahoe aquifers under the plan for augmentation decreed herein has been pumped (966 af); (2) the Applicant or his successors in interest has acknowledged in writing that all withdrawals from the Dawson, Denver and/or Arapahoe aquifers under the augmentation plan decreed herein have permanently ceased; (3) for a period of ten (10) consecutive years no withdrawals of ground water have occurred through the Dawson, Denver, and/or Arapahoe aquifer wells pursuant to the augmentation plan decreed herein; or (4) the accounting required under the augmentation plan decreed herein shows that return flows from use of the water being withdrawn are insufficient to replace depletions caused by the withdrawals that have already occurred.

30. Under the Court's retained jurisdiction, upon motion to the Court with service to the opposes and the State Engineer's Office, the Applicant may request that accounting and responsibility for post-pumping depletions in the amount set forth herein be reduced based upon: (1) actual stream replacements made during the augmentation plan pumping period, (2) the period specified by any subsequent change in statute, or (3) the period or amounts as established by Colorado Supreme Court final decisions. If the Court, by Order, reduces Applicant's obligation hereunder to account for and replace such post-pumping stream depletions for any reason, it may also reduce the amount of Laramie-Fox Hills aquifer groundwater reserved for such purposes as described in paragraph 27.

31. Accounting and responsibility for post pumping depletions in the amount set forth herein shall continue for the shortest of the following periods: (1) the period provided by statute; (2) the period specified by any subsequent change in statute; (3) the period required by this Court under its retained jurisdiction; (4) the period determined by the State Engineer; or (5) the period as established by Colorado Supreme Court final decisions. Should Applicant's obligation hereunder to account for and replace such post-pumping stream depletions be abrogated for any reason, then the Laramie-Fox Hills aquifer ground water reserved for such purposes shall be free from the reservation herein and such ground water may be used or conveyed by its owner without restriction for any post-pumping obligations.

32. The term of this augmentation plan is for a minimum of 300 years, however the length of the plan for a particular well or wells may be extended beyond such time provided the total plan pumping allocated to such well or wells is not exceeded. Should the actual operation of this augmentation plan depart from the planned diversions described herein such that annual diversions are increased or the duration of the plan is extended, the Applicant must prepare and submit to the Court, the State Engineer, and the objectors in this case a revised model of stream depletions caused by the actual pumping schedule. This analysis must utilize depletion modeling acceptable to the State Engineer, and to this Court, and must represent the water use under the plan for the entire term of the plan to date. The analysis must show that return flows have equaled or exceeded actual stream depletions throughout the pumping period and that reserved nontributary water remains sufficient to replace post-pumping depletions. Applicant and/or its successors in interest shall be responsible for the operation of the augmentation plan decreed herein and all necessary accounting until such time as all injurious depletions (pumping and post-pumping) have been adequately replaced.

33. 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.

34. 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 material injury thereto. Pursuant to C.R.S. §37-92-305(5), the replacement water is of a quantity and quality so as to meet the requirements for which the water of senior appropriators has normally been used and such replacement water shall be accepted by the senior appropriators for substitution for water derived by the exercise of the Applicant's Dawson, Denver and Arapahoe aquifer wells. As a result of the operation of this plan for augmentation, the depletions from the Dawson, Denver and Arapahoe aquifer wells will not result in material injury to the vested water rights of others.

Conclusions of Law

35. The application was filed with the Water Clerks in Division No. 1 and Division No. 2, pursuant to C.R.S. §37-92-302(1)(a) and C.R.S. §37-90-137(9)(c). These cases were properly consolidated before Water Division 2.

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

37. The Applicant has complied with C.R.S. §37-90-137(4), and the ground water is legally available for withdrawal by the nontributary well in the Laramie-Fox Hills and is legally available for withdrawal by the requested not-nontributary Dawson, Denver and/or Arapahoe wells upon the entry of a decree approving the augmentation plan set forth herein pursuant to C.R.S. §37-90-137(9)(c). Applicant is entitled to a decree from this Court confirming their rights to withdraw ground water pursuant to C.R.S. §37-90-137(4).

38. The Denver Basin water rights applied for in this claim are not conditional water rights, but are absolute water rights determined pursuant to C.R.S. §37-90-137. No applications for diligence are required. The claims for nontributary and not nontributary ground water meet the requirements of Colorado law.

39. The determination and quantification of the nontributary ground water rights in the Denver Basin aquifers as set forth herein is contemplated and authorized by law. C.R.S. §37-90-137 and C.R.S. §37-92-302 to §37-92-305.

40. 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 for the Dawson, Denver, and Arapahoe aquifer wells as described herein, without adversely affecting any other vested water rights in the Arkansas River and South Platte River or their tributaries and when curtailment would otherwise be required to meet a valid senior call for water. C.R.S. §38-92-305(3), (5), and (8).

NOW, THEREFORE, IT IS HEREBY ORDERED, ADJUDGED, AND DECREED AS FOLLOWS:

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

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

43. The Applicant shall comply with C.R.S. §37-90-137(9)(b), requiring the relinquishment of the right to consume up to two percent of the amount of the nontributary ground water withdrawn. Ninety-eight percent of the nontributary ground water withdrawn may be consumed. No plan of augmentation shall be required to provide for such relinquishment.

Applicant and its successors in interest may withdraw up to 966 acre feet of not-nontributary ground water from the Dawson, Denver, and or Arapahoe aquifers underlying Applicant's property under the plan for augmentation decreed herein pursuant to C.R.S. §37-90-137(9)(c). The remaining not-nontributary ground water adjudicated herein, but not included in the plan for augmentation decreed herein, shall not be withdrawn unless and until such withdrawals are authorized pursuant to a separate court-approved plan for augmentation.

44. The State Engineer, the Division Engineer, and/or the Water Commissioner shall not, at the request of appropriators, or on their own initiative, curtail the diversion and use of water covered by the proposed Dawson, Denver, or Arapahoe aquifer wells and plan for augmentation, so long as the in-house return flows from the annual diversions associated with the Wells accrue to the stream system pursuant to the conditions contained herein. To the extent that Applicant or one of their successors or assigns is ever unable to provide the replacement water required, then the Dawson, Denver, or Arapahoe Aquifer Wells shall not be entitled to operate under the protection of this augmentation plan, and shall be subject to administration and curtailment in accordance with the laws, rules, and regulations of the State of Colorado. Pursuant to C.R.S. §37-92-305(8), the State Engineer shall curtail all out-of-priority diversions which are not so replaced as to prevent injury to vested water rights. In order for this plan for augmentation to operate, return flows from the septic systems described herein shall at all times during pumping be in an amount sufficient to replace the amount of stream depletions.

45. 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 after at least one geophysical log has been obtained, and the Applicant need not refile, republish, or otherwise amend this application to request such adjustments. 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 this decree.

46. The Court shall retain jurisdiction for so long as depletions occur to the South Platte River system in order to reconsider whether the replacement of depletions to only the Arkansas River system, instead of the South Platte River system, is causing material injury to the vested water rights tributary to the South Platte River. Any person may invoke the Court's retained jurisdiction at any time that Applicant is causing depletions, including ongoing post-pumping depletions, to the South Platte River system and is replacing such depletions to only the Arkansas River system. Any person seeking to invoke the Court's retained jurisdiction shall file a verified petition with the Court setting forth with particularity the factual basis for the alleged material injury and for requesting that the Court reconsider material injury to petitioners' vested water rights associated with the above replacement of depletions under this decree, together with the proposed decretal language to effect the petition. The party filing the petition shall have the burden of proof of going forward to

establish a prima facie case based on the facts alleged in the petition and that Applicant's failure to replace depletions to the South Platte River system is causing material injury to water rights owned by that party invoking the Court's retained jurisdiction, except that the State and Division Engineer may invoke the Court's retained jurisdiction by establishing a prima facie case that material injury is occurring to any vested or conditionally decreed water rights in the South Platte River system due to the location of Applicant's replacement water. If the Court finds that those facts are established, the Applicant shall thereupon have the burden of proof to show (a) that petitioner is not materially injured, or (b) that any modification sought by the petitioner is not required to avoid material injury to the petitioner, or (c) that any term or condition proposed by Applicant in response to the petition does avoid material injury to the petitioner. The Division of Water Resources as a petitioner shall be entitled to assert material injury to the vested water rights of others. The retained jurisdiction of the Court may also be involved to ensure compliance with the requirements to replace post-pumping depletions as decreed herein, including the construction of the Laramie-Fox Hills aquifer well.

47. Pursuant to the provisions of §37-92-304(6), this plan for augmentation decreed herein shall be subject to the reconsideration of this Court on the question of material injury to vested water rights of others, for a period of five years from the date at least half of the subject lots have been developed. Applicant shall inform Objector Colorado Springs in writing of the date that half of the subject lots have been developed. 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 material 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: (a) that the petitioner is not materially injured, or (b) that any modification sought by the petitioner is not required to avoid material injury to the petitioner, or (c) that any term or condition proposed by Applicant in response to the petition does avoid material injury to the petitioner. The Division of Water Resources as a petitioner shall be entitled to assert material injury to the vested water rights of others. If no such petition is filed within such period and the retained jurisdiction period is not extended by the Court in accordance with the revisions of the statute, this matter shall become final under its own terms.

48. The Court determines and orders that the State Engineer shall issue well permits in accordance with the decree entered herein. Should applicant fail to construct any well prior to the expiration of the well permit, Applicant may reapply to the State Engineer for a new well permit and the State Engineer shall issue a new well permit with terms and conditions no more burdensome than those contained herein.

49. The wells shall be installed and metered as reasonably required by the Division Engineer and the State Engineer. The Wells shall be equipped with a totalizing flow meter and Applicant shall submit diversion records to the Division Engineer or his representative on an annual basis or as otherwise requested by the Division Engineer. The Applicant shall also provide accountings to the Division Engineer and Water Commissioner as required by them to demonstrate compliance under this plan of augmentation. The accountings shall include the specific amounts for diversion from the not-nontributary Dawson, Denver, and Arapahoe aquifers. The Division Engineer and Water Commissioner shall be notified of any change in the party responsible for providing these accountings.

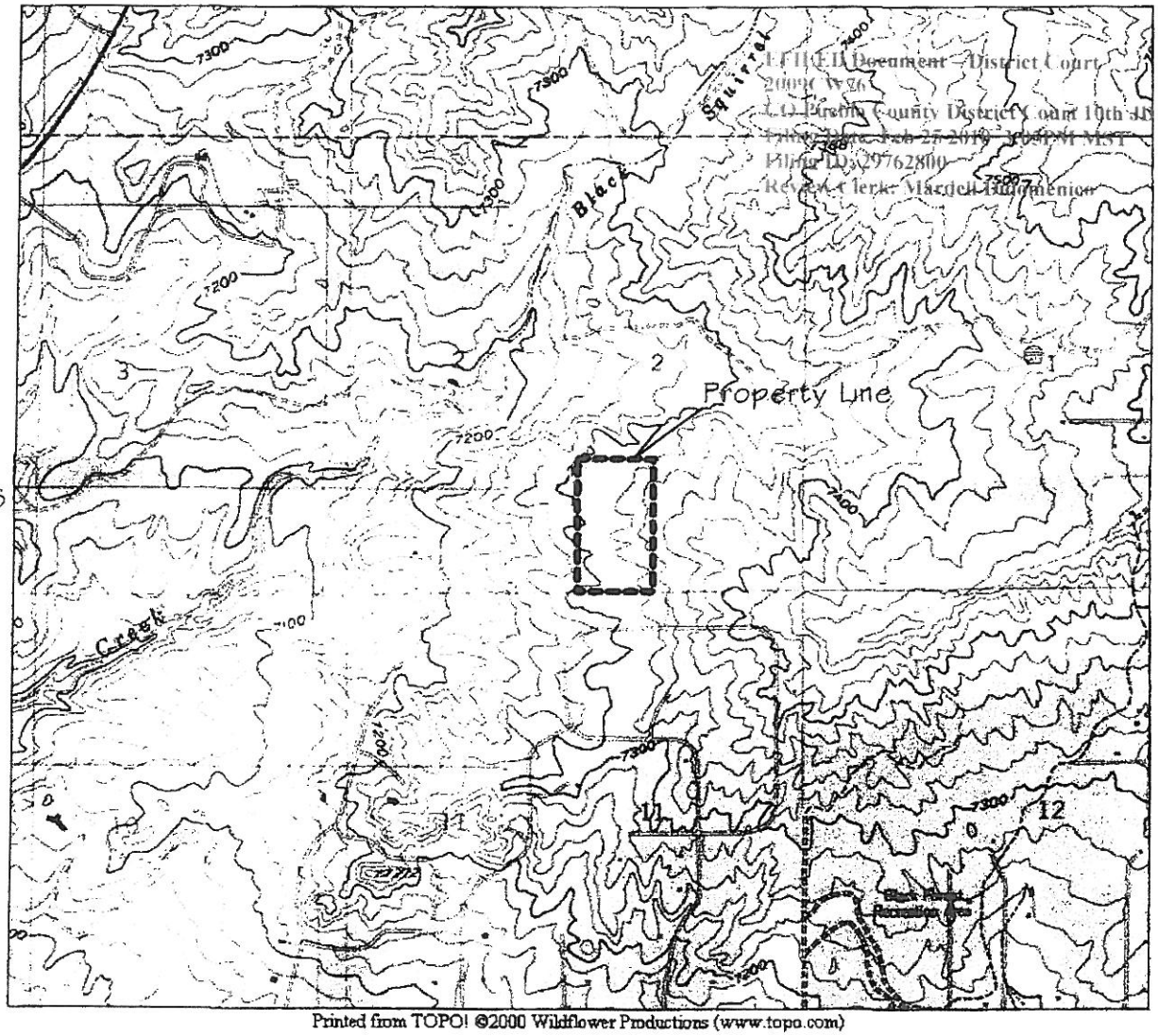
50. This decree shall be recorded in the real property records of El Paso County so that a title examination of the property, or any part thereof, shall reveal to all future purchasers the existence of this decree. Copies of this decree, when entered by the Court, shall be mailed to the parties as required by statute. Applicant or its successors in interest shall establish a homeowners association, or some other equivalent satisfactory financial and legal infrastructure, to ensure compliance with the post-pumping obligations decreed herein, including Applicant's obligation to fund, construct, and operate the nontributary Laramie-Fox Hills aquifer well for replacement of post-pumping depletions.

DATED this 25th day of February, 2010.

BY THE REFEREE:

Mardell R. DiDomenico
Water Referee
Water Division 2
State of Colorado

R 66 W



Location Map

Sandcastle Development Property

N

Scale 1" = 2000'

Wm Curtis Wells & Co.
consulting ground water geologists

Figure 1

EXHIBIT
tabbies
Ex A

Exhibit B

Legal Description

TR IN SE4 SEC 2-12-66 DES AS FOLS: BEG AT SW COR OF SE4 SEC 2, TH N 00<49'17" W 1583.77 FT,
N 89<17'56" E 965.20 FT, S 00<49'17" E 1583.77 FT
TO A PT ON S LN OF SD SE4, TH
S 89<17'56" W 965.20 FT TO POB, TOG WITH
INGRESS-EGRESS EASEMENT DES BY REC #200027778

Table I
Ingels Property
Dawson Aquifer Stream Depletion Factors
(as % of pumping)

Years	Arkansas River	South Platte River	Total	Years	Arkansas River	South Platte River	Total
10	1.50	0.06	1.56	310	14.13	9.33	23.46
20	2.46	0.19	2.65	320	13.46	9.56	23.02
30	3.25	0.36	3.61	330	12.98	9.74	22.72
40	3.92	0.60	4.52	340	12.57	9.87	22.44
50	4.55	0.86	5.41	350	12.23	9.95	22.18
60	5.15	1.12	6.27	360	11.91	10.03	21.94
70	5.71	1.42	7.13	370	11.59	10.11	21.70
80	6.26	1.71	7.97	380	11.31	10.15	21.46
90	6.78	2.03	8.81	390	11.03	10.19	21.22
100	7.30	2.34	9.64	400	10.78	10.18	20.96
110	7.79	2.68	10.47	410	10.53	10.21	20.74
120	8.28	3.01	11.29	420	10.27	10.23	20.50
130	8.77	3.33	12.10	430	10.03	10.25	20.28
140	9.23	3.68	12.91	440	9.80	10.24	20.04
150	9.70	4.01	13.71	450	9.56	10.25	19.81
160	10.14	4.36	14.50	460	9.36	10.22	19.58
170	10.58	4.70	15.28	470	9.13	10.21	19.34
180	11.01	5.05	16.06	480	8.92	10.19	19.11
190	11.41	5.38	16.79	490	8.71	10.17	18.88
200	11.83	5.69	17.52	500	8.50	10.15	18.65
210	12.22	6.03	18.25	510	8.30	10.12	18.42
220	12.59	6.37	18.96	520	8.11	10.08	18.19
230	12.97	6.69	19.66	530	7.91	10.06	17.97
240	13.33	7.03	20.36	540	7.74	10.01	17.75
250	13.68	7.36	21.04	550	7.55	9.97	17.52
260	14.03	7.69	21.72	560	7.38	9.93	17.31
270	14.36	8.04	22.40	570	7.21	9.88	17.09
280	14.69	8.37	23.06	580	7.05	9.83	16.88
290	15.01	8.71	23.72	590	6.88	9.79	16.67
300	15.32	9.04	24.36	600	6.72	9.74	16.46

APPENDIX D

El Paso County Land Development Code
Water Quality Requirements and Results
Dawson Confined Aquifer
For Estates at Cathedral Pines
Sampled April 19, 2022

Compound	Units	MCL/SMCL	Result
Antimony	mg/l	0.006	0
Arsenic	mg/l	0.01	0
Barium	mg/l	2	0.0301
Beryllium	mg/l	0.004	0.0002
Cadmium	mg/l	0.005	0
Chromium	mg/l	0.1	0
Cyanide (Total)	mg/l	0	0
Fluoride	mg/l	4	0
Mercury	mg/l	0.002	0
Nitrate as N	mg/l	10	0.33
Nitrite as N	mg/l	1	0
Selenium	mg/l	0.05	0.0027
Thallium	mg/l	0.002	0
Aluminum	mg/l	0.05	0.002
Chloride	mg/l	250	2
Langelier Index			-1.87
Iron	mg/l	0.3	0
Manganese	mg/l	0.05	0
pH		6.5 - 8.5	6.87
Silver	mg/l	0.1	0
Sulfate	mg/l	250	6.3
TDS	mg/l	500	103
Zinc	mg/l	5	0.008
Gross Alpha/Beta	pCi/l	15	7.1
Combined Radium 226+228	pCi/l	5	2.1
E.Coli	#/100 ml	Absent	Absent
Total Coliform	#/100 ml	Absent	Absent

Green = Result below MCL - Acceptable Water Quality

Colorado Analytical LABORATORIES, INC.

Analytical Results

TASK NO: 220420053

Report To: Doug Schwenke
Company: JDS Hydro Consultants
5540 Tech Center Dr.
Suite 100
Colorado Springs CO 80919

Bill To: Doug Schwenke
Company: JDS Hydro Consultants
5540 Tech Center Dr.
Suite 100
Colorado Springs CO 80919

Task No.: 220420053
Client PO:
Client Project: Retreat at CP

Date Received: 4/20/22
Date Reported: 5/19/22
Matrix: Water - Drinking

Lab Number	Customer Sample ID	Sample Date/Time		Test	Result	Method	Date Analyzed
220420053-01B	#1 - Retreat at CP	4/19/22	1:55 PM	Total Coliform	**Absent**	SM 9223	4/21/22
				E-Coli	**Absent**	SM 9223	4/21/22

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

Colorado Analytical LABORATORIES, INC.

Commerce City Lab
10411 Heinz Way
Commerce City CO 80640

Lakewood Service Center
12860 W. Cedar Dr, Suite 100A
Lakewood CO 80228

Phone: 303-659-2313

www.coloradolab.com

Report To Information	Bill To Information (If different from report to)	Project Information
Company Name: JDS-Hydro	Company Name:	PWSID: N/A
Contact Name: Doug Schwenke	Contact Name:	System Name:
Address: 5540 TechCenter Drive #100	Address:	Compliance Samples: Yes ☐ No ☑
City: CS State: CO Zip: 80919	City: State: Zip:	Send Results to CDPHE: Yes ☐ No ☑
Phone: 719-227-0072	Phone:	Task Number (Lab Use Only): CAL Task 220420053 JAK
Email: douglas.schwenke@respec.com	Email:	
Sample Collector: Stephanie Schwenke		
Sample Collector Phone: 719-321-5341	PO Number:	

Retreat @ CP

Date	Time	Client Sample ID / Sample Pt ID	No. of Containers	Residual Chlorine (mg/L) P/A Samples Only	PHASE I, II, V Drinking Water Analyses (check requested analysis)																			Subcontract Analyses				
					Total Coliform P/A	504.1 EDB/DBCP	505 Pests/PCBs	515.4 Herbicides	524.2 VOCs	525.2 SOCs-Pest	531.1 Carbamates	547 Glyphosate	548.1 Endothall	549.2 Diquat	524.2 TTHMs	552.2 HAA5s	Lead/Copper	Nitrate	Nitrite	Fluoride	Inorganics	Alk./Lang. Index (Circle)	TOC, DOC (Circle)	SUVA, UV 254 (Circle)	Cyanide	Gross Alpha/Beta	Radium 226/228	Radon	Uranium	Chlorite
4/19/22	1755pm	#1	9		X													X	X	X	X	X			X	X	X			
		Field pH: 6.85																												
		Field temp: [redacted]																												

Instructions: Please analyze for all chemicals listed on included WORD doc (to be emailed)

C/S Info:

Delivered Via: FedEx C/S Charge ☑ K

Seals Present Yes ☐ No ☐ Headspace Yes ☐ No ☐

Temp. 6 °C /Ice ✓ Sample Pres. Yes ☐ No ☐ K

Relinquished By:	Date/Time:	Received By:	Date/Time:	Relinquished By:	Date/Time:	Received By:	Date/Time:
[signature]	4/19/22 3pm	[signature]	4/20/22 1100				

Colorado Analytical LABORATORIES, INC.

Analytical Results

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Report To: Doug Schwenke
Company: JDS Hydro Consultants
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Bill To: Doug Schwenke
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Suite 100
Colorado Springs CO 80919

Task No.: 220420053
Client PO:
Client Project: Retreat at CP

Date Received: 4/20/22
Date Reported: 5/19/22
Matrix: Water - Drinking

Customer Sample ID #1 - Retreat at CP
Sample Date/Time: 4/19/22 1:55 PM
Lab Number: 220420053-01

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
Bicarbonate	**40.0 mg/L as CaCO3**	SM 2320-B	0.2 mg/L as CaCO3	4/21/22	-	TAB
Calcium as CaCO3	**27.6 mg/L**	EPA 200.7	0.1 mg/L	4/21/22	-	MBN
Carbonate	**ND**	SM 2320-B	0.2 mg/L as CaCO3	4/21/22	-	TAB
Hydroxide	**ND**	SM 2320-B	0.2 mg/L as CaCO3	4/21/22	-	TAB
Langelier Index	**-1.87 units**	SM 2330-B	units	4/26/22	-	SAN
pH	**6.87 units**	SM 4500-H-B	0.01 units	4/20/22	-	AKF
Temperature	**20 °C**	SM 4500-H-B	1 °C	4/20/22	-	AKF
Total Alkalinity	**40.0 mg/L as CaCO3**	SM 2320-B	4.0 mg/L as CaCO3	4/21/22	QC56406	TAB
Total Dissolved Solids	**103 mg/L**	SM 2540-C	5 mg/L	4/22/22	QC56401	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.

Colorado Analytical LABORATORIES, INC.

Analytical QC Summary

TASK NO: 220420053

Report To: Doug Schwenke
Company: JDS Hydro Consultants

Receive Date: 4/20/22
Project Name: Retreat at CP

Test	QC Batch ID	QC Type	Result	Method
Total Alkalinity	QC56406	Blank	ND	SM 2320-B
Total Dissolved Solids	QC56401	Blank	ND	SM 2540-C

Test	QC Batch ID	QC Type	Limits	% Rec	RPD	Method
Total Alkalinity	QC56406	Duplicate	0 - 20	-	1.1	SM 2320-B
		LCS	90 - 110	100.8	-	
Total Dissolved Solids	QC56401	Duplicate	0 - 20	-	0.4	SM 2540-C
		LCS	85 - 115	101.2	-	

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.
(s) Spike amount low relative to the sample amount.
ND = Not Detected at Reporting Limit.

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

Lab Control ID: 22M01734
Received: Apr 21, 2022
Reported: May 19, 2022
Purchase Order No.
None Received

Customer ID: 20040H
Account ID: Z01034

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

ANALYTICAL REPORT

By: Roxanne Sullivan
Roxanne Sullivan
Analytical Laboratories Director

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

Lab Control ID: 22M01734
Received: Apr 21, 2022
Reported: May 19, 2022
Purchase Order No.
None Received

Customer ID: 20040H
Account ID: Z01034

ANALYTICAL REPORT

Stuart Nielson
Colorado Analytical Laboratories, Inc.

Lab Sample ID			22M01734-001					
Customer Sample ID			**220420053-1D** - Retreat at CP - #1 - Retreat at CP sampled on 04/19/22 @ 1355					
Parameter	**Units**	**Code**	Result	Precision* +/-	Detection Limit	Method	Analysis Date / Time	Analyst
Gross Alpha	**pCi/L**	**T**	2.8	1.6	0.1	SM 7110 B	4/28/22 @ 0909	RG
Gross Beta	**pCi/L**	**T**	4.3	2.6	3.0	SM 7110 B	4/28/22 @ 0909	RG
Radium-226	**pCi/L**	**T**	NR	-	-	SM 7500-Ra B	-	-
Radium-228	**pCi/L**	**T**	NR	-	-	EPA Ra-05	-	-

Certification ID's: CO/EPA CO00008

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

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

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

Lab Control ID: 22M01734
Received: Apr 21, 2022
Reported: May 19, 2022
Purchase Order No.
None Received

Customer ID: 20040H
Account ID: Z01034

ANALYTICAL REPORT

Stuart Nielson
Colorado Analytical Laboratories, Inc.

Lab Sample ID			22M01734-002					
Customer Sample ID			**220420053-1E** - Retreat at CP - #1 - Retreat at CP sampled on 04/19/22 @ 1355					
Parameter	**Units**	**Code**	Result	Precision* +/-	Detection Limit	Method	Analysis Date / Time	Analyst
Gross Alpha	**pCi/L**	**T**	NR	-	-	SM 7110 B	-	-
Gross Beta	**pCi/L**	**T**	NR	-	-	SM 7110 B	-	-
Radium-226	**pCi/L**	**T**	0.6	0.2	0.1	SM 7500-Ra B	5/5/22 @ 1400	KT
Radium-228	**pCi/L**	**T**	1.5	0.7	0.2	EPA Ra-05	4/26/22 @ 0801	RG

Certification ID's: CO/EPA CO00008

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

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

HAZEN RESEARCH, INC.
RADIOCHEMISTRY LABORATORY Date: 04/28/2022

Batch QC Summary Form

Analyte: Gross Alpha

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

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

Spike Recovery Calculation: Sample: Tap*

$$\text{Calculation: } \frac{(48.6)\ (1.000) - (0.6)\ (0.200)}{57.4} \times 100 = 84\%$$

Batch QC Evaluation:

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

* Required for batch size greater than 10 samples.

Conclusions:

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

Reruns Required: _____

Narrative:

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

Batch Listing by Lab Control Number:

22M01749	22M01753
22M01750	22M01769
22M01751	22M01763
22M01752	22M01773
22M01734	22M01756
22M01357	
22M01736	
22M01737	
22M01746	
22M01748	

Evaluator: C. L. Shl

04/30/2022
Date

HAZEN RESEARCH, INC.
RADIOCHEMISTRY LABORATORY Date: 04/28/2022

Batch QC Summary Form

Analyte: Gross Beta

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

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

Spike Recovery Calculation: Sample: Tap*

$$\text{Calculation: } \frac{(37.6)\ (1.000) - (1.5)\ (0.200)}{44} \times 100 = 85\%$$

Batch QC Evaluation:

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

* Required for batch size greater than 10 samples.

Conclusions:

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

Reruns Required: _____

Narrative:

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

Batch Listing by Lab Control Number:

22M01749	22M01753
22M01750	22M01769
22M01751	22M01763
22M01752	22M01773
22M01734	22M01756
22M01357	
22M01736	
22M01737	
22M01746	
22M01748	

Evaluator:

04/30/2022
Date

HAZEN RESEARCH, INC.
RADIOCHEMISTRY LABORATORY Date: 05/04/2022

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: 22M01762-01c

$$\text{Calculation: } \frac{(39.3)\ (1.000) - (0.6)\ (1.000)}{46} \times 100 = 84\%$$

Batch QC Evaluation:

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

* Required for batch size greater than 10 samples.

Conclusions:

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

Reruns Required: _____

Narrative:

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

Batch Listing by Lab Control Number:

22M01734	22M01788
22M01735	22M01791
22M01747	22M01795
22M01760	22M01796
22M01761	22M01797
22M01762	22M01798
22M01763	22M01801
22M01769	22M01789
22M01774	
22M01785	

Evaluator: Roxanne Sullivan

05/17/2022
Date

HAZEN RESEARCH, INC.
RADIOCHEMISTRY LABORATORY Date: 04/26/2022

Batch QC Summary Form

Analyte: Radium-228

Control Standard/LFB: ID: C6-002 pCi/mL: 12.8 (use 5 diluted)

Spike Solution: ID: C6-002 pCi/mL: 12.8 (use 5 mL)

Spike Recovery Calculation: Sample: 22M01357-2b

$$\text{Calculation: } \frac{(74.9)\ (1.000) - (10.2)\ (1.000)}{64} \times 100 = 101\%$$

Batch QC Evaluation:

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

* Required for batch size greater than 10 samples.

Conclusions:

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

Reruns Required: _____

Narrative:

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

Batch Listing by Lab Control Number:

22M01240	
22M01357	
22M01712	
22M01724	
22M01728	
22M01734	

Evaluator: C. L. Shl

04/30/2022
Date

Colorado Analytical LABORATORIES, INC.

22MO1734

Ship To: Hazen Research
Preserved: Y (N)
HNO3 Lot #: N/A
Date Preserved: N/A

Report To Information	Bill To Information (If different from report to)	Project Name
Company Name: Colorado Analytical Laboratory Report To: Stuart Nielson E-Mail: stuartnielson@coloradolab.com		Retreat at CP
Address: 10411 Heinz Way Commerce City, CO 80640 Phone: 303-659-2313	Address: CAL TASK 220420053 JAK	Compliance Samples: Yes ☐ No ☑ Submit Data to CDPHE: Yes ☐ No ☑

Tests Requested

Sample Date/Time		Sample ID	Matrix	Radium 226 (Sub)	Gross Alpha/Beta (Sub)	Radium 228 (Sub)	Container Type
4/19/22	1:55 PM	220420053-01D - #1 - Retreat at CP	Water - Drinking		X		1l Cylinder - Unpreserved
4/19/22	1:55 PM	220420053-01E - #1 - Retreat at CP	Water - Drinking	X		X	4 - 1L - Unpreserved

Comment:

Preserved
A03 04/21/22 1341 JS

16 Hour Check
04/22/22 1103 JS

Relinquished by: (Signature)	Date: Time:	Received by: (Signature)	Date: Time:	Relinquished by: (Signature)	Date: Time:	Received by: (Signature)	Date: Time:
Adam A	4/21/22 830					Jacob Scheel	04/21/22 1335 JS

fedex 5736 5555 3043

04/21/22

Page 1 of 1

Colorado Analytical LABORATORIES, INC.

Analytical Results

TASK NO: 220420053

Report To: Doug Schwenke
Company: JDS Hydro Consultants
5540 Tech Center Dr.
Suite 100
Colorado Springs CO 80919

Bill To: Doug Schwenke
Company: JDS Hydro Consultants
5540 Tech Center Dr.
Suite 100
Colorado Springs CO 80919

Task No.: 220420053
Client PO:
Client Project: Retreat at CP

Date Received: 4/20/22
Date Reported: 5/19/22
Matrix: Water - Drinking

Customer Sample ID #1 - Retreat at CP
Sample Date/Time: 4/19/22 1:55 PM
Lab Number: 220420053-01

Test	Result	Method	RL	MCL	Date Analyzed	QC Batch ID	Analyzed By
Chloride	**2.0 mg/L**	EPA 300.0	0.1 mg/L		4/21/22	QC56462	AMJ
Fluoride	**ND**	EPA 300.0	0.10 mg/L	4	4/21/22	QC56463	AMJ
Nitrate Nitrogen	**0.33 mg/L**	EPA 300.0	0.05 mg/L	10	4/21/22	QC56464	AMJ
Nitrite Nitrogen	**ND**	EPA 300.0	0.03 mg/L	1	4/21/22	QC56466	AMJ
Sulfate	**6.3 mg/L**	EPA 300.0	0.1 mg/L		4/21/22	QC56465	AMJ
Cyanide-Total	**ND**	EPA 335.4	0.005 mg/L	0.02	4/22/22	QC56419	ECM
Total							
Iron	**ND**	EPA 200.7	0.005 mg/L	0.3	4/21/22	QC56416	MBN
Aluminum	**0.002 mg/L**	EPA 200.8	0.001 mg/L	0.05	4/22/22	QC56412	MBN
Antimony	**ND**	EPA 200.8	0.0012 mg/L	0.006	4/22/22	QC56412	MBN
Arsenic	**ND**	EPA 200.8	0.0006 mg/L	0.01	4/22/22	QC56412	MBN
Barium	**0.0301 mg/L**	EPA 200.8	0.0007 mg/L	2	4/22/22	QC56412	MBN
Beryllium	**0.0002 mg/L**	EPA 200.8	0.0001 mg/L	0.004	4/22/22	QC56412	MBN
Cadmium	**ND**	EPA 200.8	0.0001 mg/L	0.005	4/22/22	QC56412	MBN
Chromium	**ND**	EPA 200.8	0.0015 mg/L	0.1	4/22/22	QC56412	MBN
Manganese	**ND**	EPA 200.8	0.0008 mg/L	0.05	4/22/22	QC56412	MBN
Mercury	**ND**	EPA 200.8	0.0001 mg/L	0.002	4/22/22	QC56412	MBN
Selenium	**0.0027 mg/L**	EPA 200.8	0.0008 mg/L	0.05	4/22/22	QC56412	MBN
Silver	**ND**	EPA 200.8	0.0005 mg/L	0.1	4/22/22	QC56412	MBN
Thallium	**ND**	EPA 200.8	0.0002 mg/L	0.002	4/22/22	QC56412	MBN
Zinc	**0.008 mg/L**	EPA 200.8	0.001 mg/L	5	4/22/22	QC56412	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) Spike amount low relative to the sample amount.
ND = Not Detected at Reporting Limit.

Colorado Analytical LABORATORIES, INC.

Analytical QC Summary

TASK NO: 220420053

Report To: Doug Schwenke
Company: JDS Hydro Consultants

Receive Date: 4/20/22
Project Name: Retreat at CP

Test	QC Batch ID	QC Type	Result	Method
Chloride	QC56462	Blank	ND	EPA 300.0
Cyanide-Total	QC56419	Blank	ND	EPA 335.4
Fluoride	QC56463	Blank	ND	EPA 300.0
Aluminum	QC56412	Method Blank	ND	EPA 200.8
Antimony	QC56412	Method Blank	ND	EPA 200.8
Arsenic	QC56412	Method Blank	ND	EPA 200.8
Barium	QC56412	Method Blank	ND	EPA 200.8
Beryllium	QC56412	Method Blank	ND	EPA 200.8
Cadmium	QC56412	Method Blank	ND	EPA 200.8
Chromium	QC56412	Method Blank	ND	EPA 200.8
Manganese	QC56412	Method Blank	ND	EPA 200.8
Mercury	QC56412	Method Blank	ND	EPA 200.8
Selenium	QC56412	Method Blank	ND	EPA 200.8
Silver	QC56412	Method Blank	ND	EPA 200.8
Thallium	QC56412	Method Blank	ND	EPA 200.8
Zinc	QC56412	Method Blank	ND	EPA 200.8
Iron	QC56416	Method Blank	ND	EPA 200.7
Nitrate Nitrogen	QC56464	Blank	ND	EPA 300.0
Nitrite Nitrogen	QC56466	Blank	ND	EPA 300.0
Sulfate	QC56465	Blank	ND	EPA 300.0

Test	QC Batch ID	QC Type	Limits	% Rec	RPD	Method
Chloride	QC56462	Duplicate	0 - 20	-	5.0	EPA 300.0
		LCS	90 - 110	100.5	-	
		MS	75 - 125	91.8	-	
Cyanide-Total	QC56419	Duplicate	0 - 20	-	1.7	EPA 335.4
		LCS	90 - 110	98.9	-	
		MS	75 - 125	116.8	-	
Fluoride	QC56463	Duplicate	0 - 20	-	5.1	EPA 300.0
		LCS	90 - 110	93.9	-	
		MS	75 - 125	89.6	-	
Aluminum	QC56412	LCS	90 - 110	106.2	-	EPA 200.8
		MS	70 - 130	116.1	-	
		MSD	0 - 10	-	1.9	
Antimony	QC56412	LCS	90 - 110	101.6	-	EPA 200.8
		MS	70 - 130	101.1	-	
		MSD	0 - 10	-	0.2	
Arsenic	QC56412	LCS	90 - 110	102.0	-	EPA 200.8
		MS	70 - 130	106.0	-	
		MSD	0 - 10	-	4.4	
Barium	QC56412	LCS	90 - 110	97.0	-	EPA 200.8

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(s) Spike amount low relative to the sample amount.
ND = Not Detected at Reporting Limit.

Test	QC Batch ID	QC Type	Limits	% Rec	RPD	Method
		MS	70 - 130	99.8	-	
		MSD	0 - 10	-	2.3	
Beryllium	QC56412	LCS	90 - 110	98.5	-	EPA 200.8
		MS	70 - 130	104.9	-	
		MSD	0 - 10	-	1.3	
Cadmium	QC56412	LCS	90 - 110	97.2	-	EPA 200.8
		MS	70 - 130	103.7	-	
		MSD	0 - 10	-	0.1	
Chromium	QC56412	LCS	90 - 110	98.4	-	EPA 200.8
		MS	70 - 130	70.3	-	
		MSD	0 - 10	-	1.2	
Manganese	QC56412	LCS	90 - 110	102.5	-	EPA 200.8
		MS	70 - 130	107.9	-	
		MSD	0 - 10	-	1.3	
Mercury	QC56412	LCS	90 - 110	98.1	-	EPA 200.8
		MS	70 - 130	97.9	-	
		MSD	0 - 10	-	5.0	
Selenium	QC56412	LCS	90 - 110	101.9	-	EPA 200.8
		MS	70 - 130	97.6	-	
		MSD	0 - 10	-	9.8	
Silver	QC56412	LCS	90 - 110	92.5	-	EPA 200.8
		MS	70 - 130	90.5	-	
		MSD	0 - 10	-	0.3	
Thallium	QC56412	LCS	90 - 110	99.7	-	EPA 200.8
		MS	70 - 130	98.3	-	
		MSD	0 - 10	-	0.7	
Zinc	QC56412	LCS	90 - 110	104.2	-	EPA 200.8
		MS	70 - 130	106.2	-	
		MSD	0 - 10	-	0.7	
Iron	QC56416	Duplicate	0 - 20	-	3.4	EPA 200.7
		LCS	90 - 110	103.0	-	
		MS	75 - 125	79.4	-	
Nitrate Nitrogen	QC56464	Duplicate	0 - 20	-	0.0	EPA 300.0
		LCS	90 - 110	96.2	-	
		MS	75 - 125	92.2	-	
Nitrite Nitrogen	QC56466	Duplicate	0 - 20	-	0.4	EPA 300.0
		LCS	90 - 110	96.5	-	
		MS	75 - 125	88.6	-	
Sulfate	QC56465	Duplicate	0 - 20	-	5.4	EPA 300.0
		LCS	90 - 110	99.3	-	
		MS	75 - 125	95.8	-	

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
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