



To: Dan Andres
Daniel B. Andres Trust
17110 E. Goshawk Road
Colorado Springs, CO 80908

From: Julia M. Murphy, PG
Professional Geologist/Hydrogeologist

Re: Water Resources Report for Circle A

Date: July 21, 2021

This Water Resources Report was completed for Daniel B. Andres' ("Applicant") Circle A Subdivision by Julia Murphy of Groundwater Investigations LLC, a Professional Geologist, in accordance with the requirements of the El Paso County Land Development Code described in Section 8.4.7 (B)(1)(c). Ms. Murphy has over 25 years' experience in hydrogeologic analysis. Locally, she has evaluated groundwater-based water supply for subdivisions in El Paso County for over 15 years. This report presents the data, documentation and analysis in sufficient detail to determine sufficiency of the Circle A subdivision water supply.

1.0 Site Location and Description

The 14.9 Acre parcel zoned RR-5 is located in the Southwest $\frac{1}{4}$ of the Northeast $\frac{1}{4}$ of Section 23, Township 11 South, Range 65 West, of the 6th P.M. ("Property"). The Property is situated within the Kiowa Bijou Designated Groundwater Basin at the address 17110 E. Goshawk Road, Colorado Springs Colorado, 80908, in El Paso County (Figure 1).

The 14.9 acre Property will be subdivided to create a three-lot minor subdivision. Lot 1 (4.957 acres) has an existing home with a well completed into the Dawson aquifer and an individual non-evaporative septic system and leach field. Lots 2 (4.96 Acres) and 3 (4.95 acres) will each have a well completed in the Dawson aquifer and wastewater will be treated with an Individual non-evaporative septic system with a leach field (Figure 2). All water will be used on the overlying land. The existing well serving Lot 1 was re-permitted from an exempt small capacity designation (Permit 101207) to a large capacity well following finalization of the Determination of Water Rights and Replacement Plan and now has Permit Number 85148-F. Lots 2 and 3 have large capacity well permits, 85145-F and 85146-F, and will also be completed in the Dawson aquifer (Attachment 1).

2.0 Sufficient Water Quantity

2.1 Water Demand

The three residential lots will collectively use up to a total of 4.05 acre-feet per year of Dawson Aquifer groundwater from the underlying Denver Basin Aquifer to provide. 0.26 acre-feet of water per year will be used for in-home use. The remaining 3.27 acre-feet per year will be available for irrigation of landscape and gardens, domestic animal watering, commercial, fire protection, recreational, greenhouse, replacement and the

watering of stock animals, either directly or after storage. Each home will be allotted 1.35 acre-feet of water annually.

2.2 Groundwater Availability

A Determination of Water Rights to the four underlying groundwater aquifers were finalized by the Colorado Ground Water Commission ("Commission") on November 9, 2020. The Dawson aquifer will be the water supply source for the subdivision. Table 1 quantifies the groundwater underlying the 14.9 acre property in each of the four aquifers.

Table 1 Groundwater Quantification				
AQUIFER	Basin Determination Number	NET SAND (Feet)	Total Available (Acre-Feet)	Annual Average Withdrawal 100 Years (Acre-Feet)²
Dawson (NNT) ¹	4043BD	445	1,360	13.18 ¹
Denver (NT)	4042BD	365	925	9.07
Arapahoe (NT)	4041BD	260	659	6.46
Laramie-Fox Hills (NT)	4040BD	190	425	4.16
¹ reduced by 42 acre -feet for the existing well ² reduced by 2%				

The Commission awarded the Applicant 1318 acre-feet of groundwater underlying Applicants' Property from the not-nontributary Dawson aquifer (Attachment 2). Of this, up to 4.05 acre-feet annually may be pumped pursuant to the Replacement Plan (Attachment 3). Therefore, a total of 1215 acre-feet of the available 1318 acre-feet of groundwater from the Dawson aquifer will provide a sufficient quantity of water to the three lots to meet the requirement of a 300-year water supply.

3.0 Sufficient Dependability

3.1 Groundwater Wells

The existing well on Lot 1 has been steadily supplying water since its construction in 1978. This well is completed in the not non-tributary Dawson Aquifer. Based on historical use, production from wells is sufficient to meet the water supply demands for the proposed uses for all three lots.

3.2 Replacement Requirements

As the withdrawal of the Dawson groundwater will, within one hundred years, deplete the flow of a natural stream or its alluvial aquifer at an annual rate greater than one-tenth of one percent of the annual rate of withdrawal, the groundwater is considered to be not-nontributary. The Colorado Ground Water Commission has approved replacement plan

4043RP to secure the replacement of actual depletions of the affected alluvial aquifers of the Kiowa- Bijou Designated Groundwater Basin, the alluvial aquifer of the Upper Big Sandy Designated Groundwater Basin and the alluvial aquifer of the Upper Black Squirrel Creek Designated Groundwater Basin to prevent any material injury to existing water rights in these alluvial aquifers. At a continuous withdrawal of 4.05 acre-feet annually for 300 years, depletions to the alluvial aquifer systems would steadily increase to 0.128 acre-feet per year in the 300th year, which is equal to 3.16% of pumping (Attachment 3).

Under the replacement plan, it is accepted that the septic and leach field return flows from each lot will consist of 90% of the water used for in-house purposes. Assuming each lot uses a total annual amount for in-house use of 0.25 acre-feet, the return flow per lot would be 0.225 acre-feet annually, and the return flows under the plan will total 0.675 acre- feet per year for all 3 lots at full build out. This exceeds the maximum depletion of 0.128 acre-feet that is projected to occur in the 300th year. The replacement water will replenish the alluvial aquifer system of the Kiowa-Bijou Designated Groundwater Basin where the wells are situated in accordance with Guideline 2007-1.

3.2.1 *Compliance*

Water use will be monitored by use of individual flow meters in compliance with 2CCR410-1, Rules and Regulations for the Management and Control of Designated Ground Water, 5.6.1.B.1.b. A Declaration of Restrictive Water Covenants will be written to assign water rights ownership to each lot and govern the administration of the replacement plan. Individual non-evaporative septic systems will be permitted by the El Paso County Department of Health and Environment and thereby in compliance with water discharge water quality standards.

4.0 Information Regarding Sufficient Quality

The groundwater sample was collected from a Dawson aquifer well having Well Permit 85571-F that serves an existing home located at 17350 W. Goshawk Road, Colorado Springs Colorado, 80908, in El Paso County, northwest of the Circle A subdivision. The sample location is in compliance with the LDC requirements of Section 8.4.7 (B)(10)(e) that states “Samples from bedrock aquifers shall be collected within ½ mile of the project site or off-site source.” (Figure 1). The water samples were collected from the domestic well via an outside pump. Representative water quality samples were collected by GWI on October 13, 2020 using standard collection and preservation. Water quality samples were received by the laboratory on October 14, 2020 and all holding times were met. Chain of Custody was maintained for the transfer of samples to a Colorado Certified Laboratory and their subcontracted laboratory. Constituents selected to be measured are listed in the Amendment to the Land Development Code dated January 27, 2021 Section 8.4.7 (B)(10)(a). These are described as “Inorganic Chemicals”, “Secondary Maximum Contaminants”, “Radionuclides” and “Bacteriological”. The Water Quality Report was submitted on July 19, 2021 as part of the subdivision review process.

4.1 Analysis Results and Recommendations

The analysis results for each constituent were compared to the Colorado Primary Drinking Water Standards maximum contaminant levels (MCL) and secondary MCLs. The primary MCL is the legal threshold limit on the amount of a substance that is allowed in public

water systems under the Safe Drinking Water Act (SDWA). Private wells are not regulated under the SDWA however the El Paso County Public Health has required that subdivisions on wells evaluate their water supply based on the same criteria. All constituent concentrations are below the primary drinking water MCL. Activity in the area since 2012 is residential development and not expected to be a risk of degrading the groundwater quality in the bedrock aquifers. There is no anticipated commercial use or agricultural use near the proposed subdivision at this time. The potential for water quality degradation from on-site and off-site sources is unlikely.

In a letter dated July 15th, 2020 (Revised July 21, 2021) from Mike McCarthy/EPCPH, Mr. McCarthy that stated "Results of the samples submitted to Colorado Analytical Laboratories, Inc., and to Hazen Research, Inc., on 14 October 2020, were acceptable under the Colorado Primary Drinking Water Regulations. Based on the sample results from both laboratories there is a finding for sufficiency in terms of water quality."

5.0 Summary and Conclusion

The proposed subdivision of 14.9 acres located Kiowa Bijou Designated Groundwater Basin will create three new lots, two of which will require a new well. The purpose of the water resources report is to provide the data, documentation and analysis in sufficient detail to determine sufficiency of the proposed subdivision's water supply. The amount of Dawson aquifer groundwater underlying Applicants property that has been qualified in Basin Determination 4043BD. Based on the proposed uses and quantification of available groundwater, there is sufficient quantity to meet the County required 300-year water supply criteria. Wells completed in the Dawson aquifer have successfully been supplying groundwater for similar sized homes and uses in the area at sufficient rates and duration for decades. The water source can reasonably be considered a dependable supply. The quality of the Dawson aquifer groundwater underlying the new proposed lot was evaluated within the parameters specified in the Land Development Code and have been determined to meet Primary Drinking Water Standards for the selected analytes.




CDSS

Colorado's Decision Support Systems

Location Circle A Subdivision



Legend

 County

Location



Notes

CIRCLE A SUBDIVISION
SW1/4 NE1/4 SEC 23 T11S R65W

FIGURE 1

2,339 0 1,169 2,339 Feet

1: 14,032



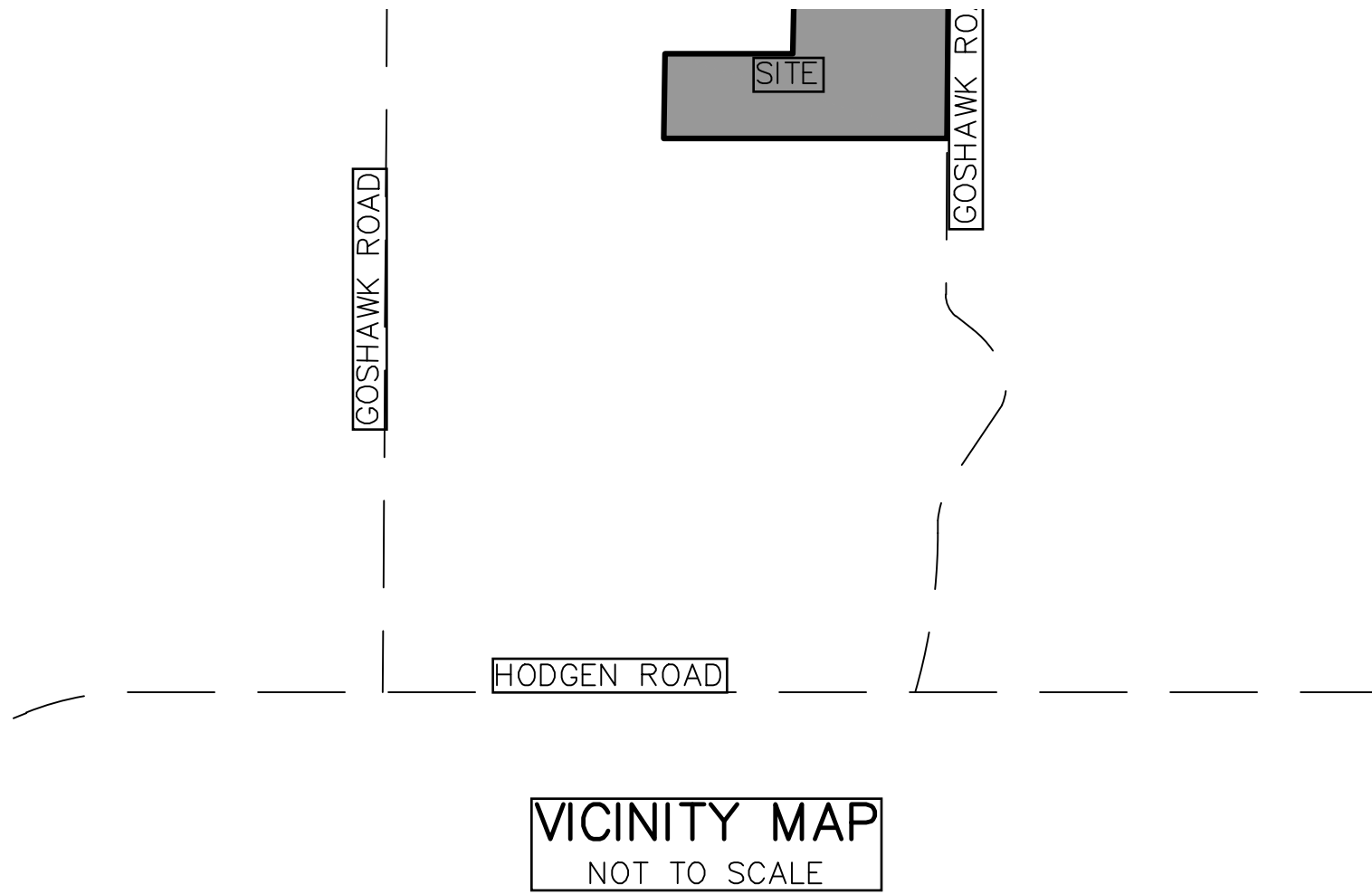
This product is for informational purposes and may not have been prepared for, or be suitable for legal, engineering, or surveying purposes. Users of this information should review or consult the primary data and information sources to ascertain the usability of the information.

Date Prepared: 8/16/2019 2:22:14 PM

CIRCLE A SUBDIVISION FILING NO. 1

A SUBDIVISION OF THE SOUTH HALF OF THE SOUTH HALF OF THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER OF SECTION 23 AND THE NORTH HALF OF THE SOUTHEAST QUARTER OF THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER OF SECTION 23. ALL IN TOWNSHIP 11 SOUTH, RANGE 65 WEST OF THE SIXTH PRINCIPAL MERIDIAN, EL PASO COUNTY, COLORADO

Figure 2 Plat Map



KNOW ALL MEN BY THESE PRESENTS:

THAT THE DANIEL B. ANDRES TRUST BEING THE OWNER OF THE FOLLOWING DESCRIBED TRACT OF LAND:

TO WIT:

THE SOUTH HALF OF THE SOUTH HALF OF THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER OF SECTION 23 AND
THE NORTH HALF OF THE SOUTHEAST QUARTER OF THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER OF SECTION 23.

ALL IN TOWNSHIP 11 SOUTH, RANGE 65 WEST OF THE SIXTH PRINCIPAL MERIDIAN, EL PASO COUNTY, COLORADO

CONTAINING 15 ACRES MORE OR LESS (14.87 ACRES ACTUAL)

OWNERS CERTIFICATE:

THE UNDERSIGNED, BEING ALL THE OWNERS, MORTGAGEES, BENEFICIARIES OF DEEDS OF TRUST AND HOLDERS OF OTHER INTERESTS IN THE LAND DESCRIBED HEREIN, HAVE LAID OUT, SUBDIVIDED, AND PLATTED SAID LANDS INTO LOTS AS SHOWN HEREON TO BE KNOWN AS "CIRCLE A SUBDIVISION FILING NO. 1", EL PASO COUNTY, COLORADO. SAID SUBDIVISION IS DRAWN TO A FIXED SCALE AS INDICATED HEREON AND ACCURATELY SETS FORTH THE BOUNDARIES AND DIMENSIONS OF SAID TRACT AND THE LOCATIONS OF SAID LOTS.

BY: DANIEL B. ANDRES, TRUSTEE, DANIEL B. ANDRES TRUST

NOTARIAL

STATE OF COLORADO }
COUNTY OF EL PASO } ss

ACKNOWLEDGED BEFORE ME THIS ____ DAY OF _____, 2019, A.D. BY
DANIEL B. ANDRES, TRUSTEE, DANIEL B. ANDRES TRUST.

WITNESS MY HAND AND OFFICIAL SEAL:

MY COMMISSION EXPIRES: _____

NOTARY PUBLIC: _____

NOTES:

1. THE BASIS OF BEARINGS USED FOR THIS SURVEY IS THE SOUTH LINE OF THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER (SW 1/4, NE 1/4) OF SECTION 23, T11S, R65W OF THE SIXTH P.M., EL PASO COUNTY, COLORADO. THE EAST 1/16TH CORNER OF SAID SECTION IS MONUMENTED WITH A 3.25" ALUMINUM CAP STAMPED "CE 1/16TH, SEC 23, T11S, R65W, LS 28658", THE CENTER OF SAID SECTION IS MONUMENTED WITH A 0.75" IRON PIPE AND A 2.5" ALUMINUM CAP WITNESS CORNER STAMPED "LWA, C1/4, T11S, R65W, W.C., LS 25955", 1.00' WEST OF SAID PIPE, SAID LINE IS ASSUMED TO BEAR S89°10'29"W, 1315.00 US SURVEY FEET (GROUND) BASED ON STATIC GPS OBSERVATIONS.

2. THE FLOOD INSURANCE RATE MAP FOR EL PASO COUNTY, COLORADO PANEL NO. 08041C0310 G WITH AN EFFECTIVE DATE OF 12/7/2018 SHOWS THE PROPERTY TO BE LOCATED IN ZONE X (AREA OF MINIMAL FLOOD HAZARD).

3. A TITLE REPORT ISSUED BY COMMONWEALTH LAND TITLE INSURANCE COMPANY TITLE REPORT NO. H0562780-710-CTO-SSC, WITH AN EFFECTIVE DATE OF JULY 22, 2019 HAS BEEN REVIEWED AS IT RELATES TO THE SUBJECT PROPERTY. THE FOLLOWING EXCEPTIONS IN SCHEDULE B ARE NOTED AND SHOWN IF APPLICABLE HEREON.

- NON-EXCLUSIVE EASEMENT FOR ROADWAY PURPOSES OVER THE EASTERLY 20 FEET AS CONTAINED IN INSTRUMENTS RECORDED IN BOOK 2422 AT PAGE 44 AND IN BOOK 2356 AT PAGE 170. (GOSHAWK ROAD)

- RIGHT OF WAY AND EASEMENT 20 FEET IN WIDTH FOR UTILITY PURPOSES GRANTED TO MOUNTAIN VIEW ELECTRIC ASSOCIATION, INC. BY INSTRUMENT RECORDED IN BOOK 3150 AT PAGE 546, IN WHICH THE SPECIFIC LOCATION IS UNDEFINED. (ASSUMED TO BE CENTERED ON THE OVERHEAD LINES ALONG GOSHAWK ROAD, AS SHOWN)

- TERMS, CONDITIONS, PROVISIONS AND OBLIGATIONS AS CONTAINED IN GOSHAWK ROAD MAINTENANCE AGREEMENT RECORDED IN BOOK 5145 AT PAGE 866. (NOTHING TO SHOW)

- TERMS, CONDITIONS, PROVISIONS, AGREEMENTS AND OBLIGATIONS CONTAINED IN THE EASEMENT AGREEMENT RECORDED IN BOOK 6062 AT PAGE 535.

4. SEWAGE TREATMENT IS THE RESPONSIBILITY OF EACH PROPERTY OWNER. THE EL PASO COUNTY HEALTH DEPARTMENT MUST APPROVE EACH SYSTEM AND, IN SOME CASES, THE DEPARTMENT MAY REQUIRE A SPECIALLY DESIGNED SYSTEM PRIOR TO APPROVAL.

5. INDIVIDUAL WELLS ARE THE RESPONSIBILITY OF EACH PROPERTY OWNER. PERMITS FOR INDIVIDUAL WELLS MUST BE OBTAINED FROM THE STATE WATER ENGINEER WHO BY LAW HAS THE AUTHORITY TO SET CONDITIONS FOR THE ISSUANCE OF THESE PERMITS.

6. ALL STRUCTURAL FOUNDATIONS AND SEPTIC SYSTEMS SHALL BE LOCATED AND DESIGNED BY A PROFESSIONAL ENGINEER CURRENTLY REGISTERED IN THE STATE OF COLORADO.

7. ACCESS TO HODGEN ROAD, A PUBLIC RIGHT-OF-WAY, IS VIA GOSHAWK ROAD, A 40 FOOT (40') WIDE PRIVATE ROADWAY. THE 40 FOOT (40') EASEMENT SHOWN HEREON FOR ACCESS TO GOSHAWK ROAD SHALL BE PRIVATELY OWNED AND MAINTAINED BY THE OWNERS OF THE THREE LOTS EQUALLY. MAINTENANCE SHALL BE PROVIDED EQUALLY BETWEEN THE THREE LOTS.

8. THE FOLLOWING REPORTS ASSOCIATED WITH THIS SUBDIVISION HAVE BEEN SUBMITTED AND ARE ON FILE AT THE COUNTY LAND USE DEPARTMENT:

- WATER AVAILABILITY STUDY
- OWTS - ON-SITE WASTEWATER TREATMENT REPORT

BOARD OF COUNTY COMMISSIONERS CERTIFICATE:

THIS PLAT FOR "CIRCLE A SUBDIVISION FILING NO. 1" WAS APPROVED FOR FILING BY THE EL PASO COUNTY, COLORADO BOARD OF COUNTY COMMISSIONERS ON THE ____ DAY OF _____, 2019, A.D., SUBJECT TO ANY NOTES SPECIFIED HEREON AND ANY CONDITIONS INCLUDED IN THE RESOLUTION OF APPROVAL. THE DEDICATIONS OF LAND TO THE PUBLIC INCLUDING STREETS AND EASEMENTS ARE ACCEPTED, BUT PUBLIC IMPROVEMENTS THEREON WILL NOT BECOME THE MAINTENANCE RESPONSIBILITY OF EL PASO COUNTY UNTIL PRELIMINARY ACCEPTANCE OF THE PUBLIC IMPROVEMENTS IN ACCORDANCE WITH THE REQUIREMENTS OF THE LAND DEVELOPMENT CODE AND ENGINEERING CRITERIA MANUAL, AND THE SUBDIVISION IMPROVEMENTS AGREEMENT.

PRESIDENT, BOARD OF COUNTY COMMISSIONERS _____ DATE _____

COUNTY APPROVAL:

APPROVAL IS GRANTED FOR THIS PLAT OF "CIRCLE A SUBDIVISION FILING NO. 1" ON THIS ____ DAY OF _____, 2019, A.D.

EL PASO COUNTY DIRECTOR OF PLANNING AND COMMUNITY DEVELOPMENT

EL PASO COUNTY ASSESSOR _____

RECORDING:

STATE OF COLORADO }
COUNTY OF EL PASO } ss

I HEREBY CERTIFY THAT THIS INSTRUMENT WAS FILED FOR RECORD AT MY OFFICE AT ____ O'CLOCK ____ M., THIS ____ DAY OF _____, 2019, A.D., AND IS DULY RECORDED UNDER RECEPTION NUMBER _____ OF THE RECORDS OF EL PASO COUNTY, COLORADO.

CHUCK BROERMAN, RECORDER

FEE: _____ BY: _____
DEPUTY

SURVEYORS CERTIFICATE

I VERNON P. TAYLOR, A DULY REGISTERED PROFESSIONAL LAND SURVEYOR IN THE STATE OF COLORADO, DO HEREBY CERTIFY THAT THIS PLAT TRULY AND CORRECTLY REPRESENTS THE RESULTS OF A SURVEY MADE ON NOVEMBER 02, 2017 BY ME OR UNDER MY DIRECT SUPERVISION AND THAT ALL MONUMENTS EXIST AS SHOWN HEREON; THAT MATHEMATICAL CLOSURE ERRORS ARE LESS THAN 1:10,000 ; AND THAT SAID PLAT HAS BEEN PREPARED IN FULL COMPLIANCE WITH ALL APPLICABLE LAWS OF THE STATE OF COLORADO DEALING WITH MONUMENTS, SUBDIVISION, OR SURVEYING OF LAND AND ALL APPLICABLE PROVISIONS OF THE EL PASO COUNTY LAND DEVELOPMENT CODE.

I ATTEST THE ABOVE ON THIS ____ DAY OF _____, 2019.

VERNON P. TAYLOR _____ DATE _____
COLORADO PLS NO. 25966, FOR AND
ON BEHALF OF M&S CIVIL CONSULTANTS, INC
20 BOULDER CRESCENT, SUITE 110
COLORADO SPRINGS, COLORADO 80903

NOTICE:
ACCORDING TO COLORADO LAW, YOU **MUST** COMMENCE ANY LEGAL ACTION BASED UPON ANY DEFECT IN THIS SURVEY WITHIN **THREE** YEARS AFTER YOU FIRST DISCOVER SUCH DEFECT. IN NO EVENT, MAY ANY ACTION BASED UPON ANY DEFECT IN THIS SURVEY BE COMMENCED MORE THAN **TEN** YEARS FROM THE DATE OF THE CERTIFICATION SHOWN HEREON.

SUMMARY:

3 LOTS	15 ACRES	100%
TOTAL	15 ACRES (14.87 ACTUAL)	100.00%

FEES:

DRAINAGE FEE: _____

BRIDGE FEE: _____

SCHOOL FEE: _____

PARK FEE: _____

FINAL PLAT
CIRCLE A SUBDIVISION FILING NO. 1
JOB NO. 70-072
DATE PREPARED: 07/15/2019
DATE REVISED:

FILE NO. AR FP _____

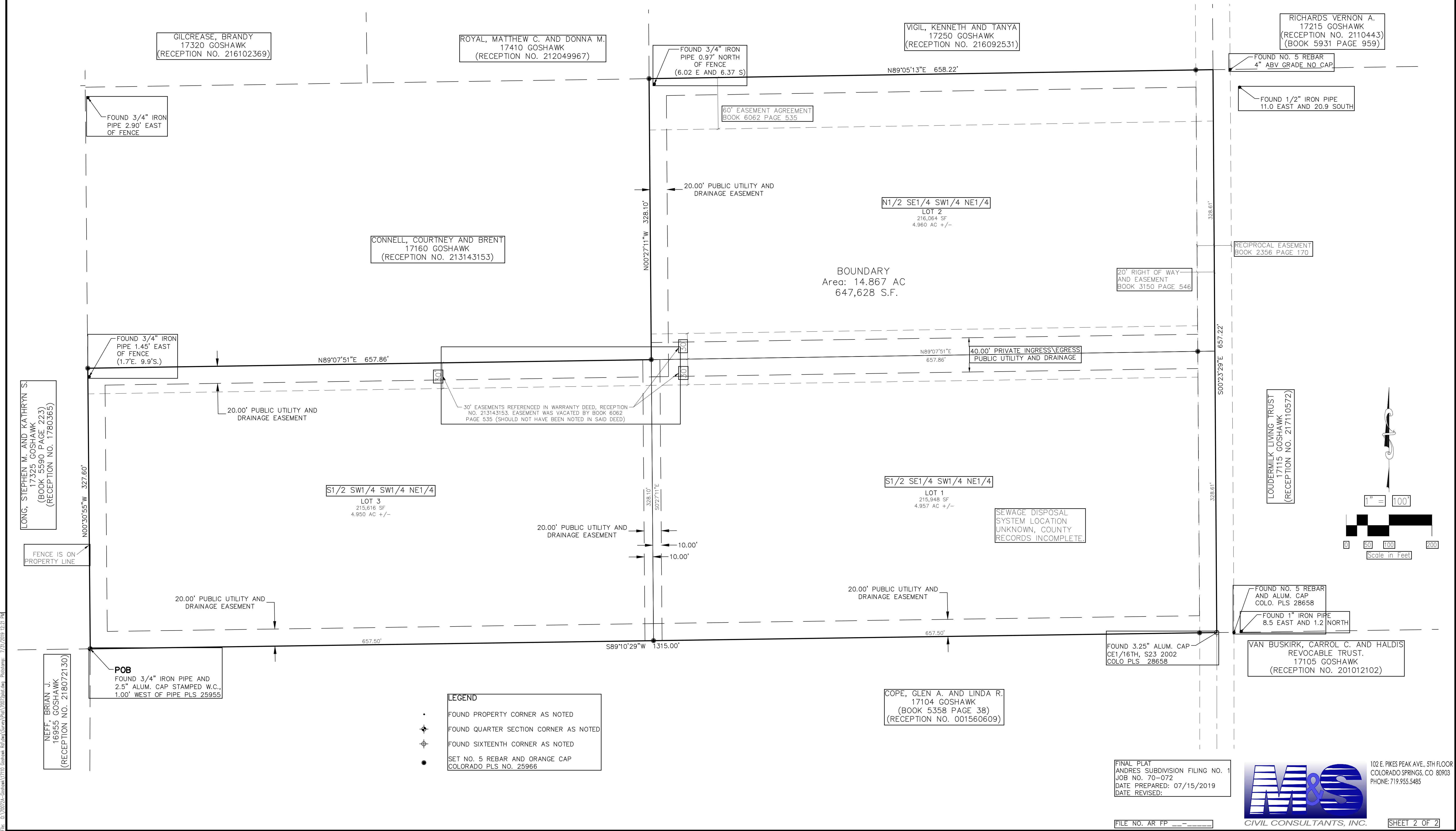


102 E. PIKES PEAK AVE., 5TH FLOOR
COLORADO SPRINGS, CO 80903
PHONE: 719.955.5485

SHEET 1 OF 2

CIRCLE A SUBDIVISION FILING NO. 1

A SUBDIVISION OF THE SOUTH HALF OF THE SOUTH HALF OF THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER OF SECTION 23 AND THE NORTH HALF OF THE SOUTHEAST QUARTER OF THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER OF SECTION 23. ALL IN TOWNSHIP 11 SOUTH, RANGE 65 WEST OF THE SIXTH PRINCIPAL MERIDIAN, EL PASO COUNTY, COLORADO





COLORADO
Division of Water Resources
 Department of Natural Resources

WELL PERMIT NUMBER 85148-F
RECEIPT NUMBER 10008850

ORIGINAL PERMIT APPLICANT(S)

DANIEL B. ANDRES TRUST

APPROVED WELL LOCATION

Water Division: 1 Water District: 1
 Designated Basin: KIOWA-BIJOU
 Management District: N/A
 County: EL PASO
 Parcel Name: CIRCLE A

Lot: 1

Block: Filing:

Physical Address: N/A

SW 1/4 NE 1/4 Section 23 Township 11.0 S Range 65.0 W Sixth P.M.

UTM COORDINATES (Meters, Zone:13, NAD83)

Easting: 531915.0 Northing: 4325559.0

PERMIT TO USE AN EXISTING WELL

ISSUANCE OF THIS PERMIT DOES NOT CONFER A WATER RIGHT

CONDITIONS OF APPROVAL

- 1) This well shall be used in such a way as to cause no material injury to existing water rights. The issuance of this permit does not ensure that no injury will occur to another vested water right or preclude another owner of a vested water right from seeking relief in a civil court action.
- 2) The construction of this well shall be in compliance with the Water Well Construction Rules 2 CCR 402-2, unless approval of a variance has been granted by the State Board of Examiners of Water Well Construction and Pump Installation Contractors in accordance with Rule 18.
- 3) Approved pursuant to CRS 37-90-107(7), and the Findings and Order of the Colorado Ground Water Commission dated November 9, 2020, for Determination of Water Right No. 4043-BD and its associated Replacement Plan for a change of use of an existing well, constructed under permit no. 101207. In the event the well is not operated in accordance with the conditions of this determination and replacement plan, it will be subject to administration, including orders to cease diverting water.
- 4) Issuance of this permit cancels permit no. 101207.
- 5) The use of ground water from this well is limited to domestic including in-home use, irrigation of landscape and gardens, domestic animal watering, commercial, fire protection, recreational, greenhouse, replacement and the watering of stock animals, either directly or after storage. The place of use shall be limited to the 4.95 acre parcel known as Lot 1 of the Circle A Subdivision, being a part of the 14.9 acre land area in the above described Order of the Commission.
- 6) The pumping rate of this well shall not exceed 50 GPM.
- 7) The annual withdrawal of ground water from this well shall not exceed 1.35 acre-feet, subject to the total annual withdrawal limitations and conditions as specified by the above referenced Order of the Commission.
- 8) Production from this well is limited to the Dawson aquifer.
- 9) The owner shall mark the well in a conspicuous place with the well permit number and name of aquifer as appropriate, and shall take necessary means and precautions to preserve these markings.
- 10) A totalizing flow meter or Commission approved measuring device must be installed on this well and maintained in good working order. Permanent records of all diversions must be maintained by the well owner (collected at least annually) and submitted to the Ground Water Commission upon request.
- 11) This well shall be located within 200 feet of the location specified on this permit.
- 12) The return flows from the inhouse supply component of this well use have been claimed as a replacement source, pursuant to the Findings and Order of the Commission dated November 9, 2020. As a result, the return flow from the use of this well must be through an individual waste water disposal system of the non-evaporative type where the water is returned to the same stream system in which the well is located.

WELL PERMIT NUMBER 85148-F

RECEIPT NUMBER 10008850

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



Issued By SHANNON PORTER

Date Issued: 2/23/2021

Expiration Date: N/A

ATTACHMENT 1 - CONT-



COLORADO
Division of Water Resources
Department of Natural Resources

WELL PERMIT NUMBER 85145-F
RECEIPT NUMBER 10008848

ORIGINAL PERMIT APPLICANT(S)

DANIEL B. ANDRES TRUST

APPROVED WELL LOCATION

Water Division: 1 Water District: 1
Designated Basin: KIOWA-BIJOU
Management District: N/A
County: EL PASO
Parcel Name: N/A
Lot: 2 Block: Filing:
Physical Address: N/A
SW 1/4 NE 1/4 Section 23 Township 11.0 S Range 65.0 W Sixth P.M.

UTM COORDINATES (Meters, Zone:13, NAD83)

Easting: 531842.0 Northing: 4325667.0

PERMIT TO CONSTRUCT A NEW WELL

ISSUANCE OF THIS PERMIT DOES NOT CONFER A WATER RIGHT

CONDITIONS OF APPROVAL

- 1) This well shall be used in such a way as to cause no material injury to existing water rights. The issuance of this permit does not ensure that no injury will occur to another vested water right or preclude another owner of a vested water right from seeking relief in a civil court action.
- 2) The construction of this well shall be in compliance with the Water Well Construction Rules 2 CCR 402-2, unless approval of a variance has been granted by the State Board of Examiners of Water Well Construction and Pump Installation Contractors in accordance with Rule 18.
- 3) Approved pursuant to CRS 37-90-107(7), and the Findings and Order of the Colorado Ground Water Commission dated November 9, 2020, for Determination of Water Right No. 4043-BD and its associated Replacement Plan. In the event the well is not operated in accordance with the conditions of this determination and replacement plan, it will be subject to administration, including orders to cease diverting water.
- 4) The use of ground water from this well is limited to domestic including in-home use, irrigation of landscape and gardens, domestic animal watering, commercial, fire protection, recreational, greenhouse, replacement and the watering of stock animals, either directly or after storage. The place of use shall be limited to the 4.96 acre parcel known as Lot 2 of the Circle A Subdivision, being a part of the 14.9 acre land area in the above described Order of the Commission.
- 5) The pumping rate of this well shall not exceed 50 GPM.
- 6) The annual withdrawal of ground water from this well shall not exceed 1.35 acre-feet, subject to the total annual withdrawal limitations and conditions as specified by the above referenced Order of the Commission.
- 7) Production from this well is limited to the Dawson aquifer. The total depth of the well shall not exceed 1035 feet below ground surface, which corresponds to the base of the Dawson aquifer. At this location the well must be constructed in accordance with Well Construction Rule 10.4.6 (2 CCR 402-2) for a Type 2 aquifer.
- 8) A totalizing flow meter or Commission approved measuring device must be installed on this well and maintained in good working order. Permanent records of all diversions must be maintained by the well owner (collected at least annually) and submitted to the Ground Water Commission upon request.
- 9) The owner shall mark the well in a conspicuous place with the well permit number and name of aquifer as appropriate, and shall take necessary means and precautions to preserve these markings.
- 10) This well shall be constructed within 200 feet of the location specified on this permit.
- 11) The entire length of the hole shall be geophysically logged as required by Rule 9 of the Statewide Nontributary Ground Water Rules prior to installing casing.
- 12) The return flows from the inhouse supply component of this well use have been claimed as a replacement source, pursuant to the Findings and Order of the Commission dated November 9, 2020. As a result, the return flow from the use of this well must be through an individual waste water disposal system of the non-evaporative type where the water is returned to the same stream system in which the well is located.

WELL PERMIT NUMBER 85145-F

RECEIPT NUMBER 10008848

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

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



Issued By SHANNON PORTER

Date Issued: 2/23/2021

Expiration Date: 2/23/2022

ATTACHMENT 1 CONT-



COLORADO
Division of Water Resources
Department of Natural Resources

WELL PERMIT NUMBER 85146-F
RECEIPT NUMBER 10008849

ORIGINAL PERMIT APPLICANT(S)

DANIEL B. ANDRES TRUST

APPROVED WELL LOCATION

Water Division: 1 Water District: 1
Designated Basin: KIOWA-BIJOU
Management District: N/A
County: EL PASO
Parcel Name: CIRCLE A

Lot: 3

Block: Filing:

Physical Address: N/A

SW 1/4 NE 1/4 Section 23 Township 11.0 S Range 65.0 W Sixth P.M.

UTM COORDINATES (Meters, Zone:13, NAD83)

Easting: 531691.0 Northing: 4325615.0

PERMIT TO CONSTRUCT A NEW WELL

ISSUANCE OF THIS PERMIT DOES NOT CONFER A WATER RIGHT

CONDITIONS OF APPROVAL

- 1) This well shall be used in such a way as to cause no material injury to existing water rights. The issuance of this permit does not ensure that no injury will occur to another vested water right or preclude another owner of a vested water right from seeking relief in a civil court action.
- 2) The construction of this well shall be in compliance with the Water Well Construction Rules 2 CCR 402-2, unless approval of a variance has been granted by the State Board of Examiners of Water Well Construction and Pump Installation Contractors in accordance with Rule 18.
- 3) Approved pursuant to CRS 37-90-107(7), and the Findings and Order of the Colorado Ground Water Commission dated November 9, 2020, for Determination of Water Right No. 4043-BD and its associated Replacement Plan. In the event the well is not operated in accordance with the conditions of this determination and replacement plan, it will be subject to administration, including orders to cease diverting water.
- 4) The use of ground water from this well is limited to domestic including in-home use, irrigation of landscape and gardens, domestic animal watering, commercial, fire protection, recreational, greenhouse, replacement and the watering of stock animals, either directly or after storage. The place of use shall be limited to the 4.95 acre parcel known as Lot 3 of the Circle A Subdivision, being a part of the 14.9 acre land area in the above described Order of the Commission.
- 5) The pumping rate of this well shall not exceed 50 GPM.
- 6) The annual withdrawal of ground water from this well shall not exceed 1.35 acre-feet, subject to the total annual withdrawal limitations and conditions as specified by the above referenced Order of the Commission.
- 7) Production from this well is limited to the Dawson aquifer. The total depth of the well shall not exceed 1030 feet below ground surface, which corresponds to the base of the Dawson aquifer. At this location the well must be constructed in accordance with Well Construction Rule 10.4.6 (2 CCR 402-2) for a Type 2 aquifer.
- 8) The owner shall mark the well in a conspicuous place with the well permit number and name of aquifer as appropriate, and shall take necessary means and precautions to preserve these markings.
- 9) A totalizing flow meter or Commission approved measuring device must be installed on this well and maintained in good working order. Permanent records of all diversions must be maintained by the well owner (collected at least annually) and submitted to the Ground Water Commission upon request.
- 10) This well shall be constructed within 200 feet of the location specified on this permit.
- 11) The entire length of the hole shall be geophysically logged as required by Rule 9 of the Statewide Nontributary Ground Water Rules prior to installing casing.
- 12) The return flows from the inhouse supply component of this well use have been claimed as a replacement source, pursuant to the Findings and Order of the Commission dated November 9, 2020. As a result, the return flow from the use of this well must be through an individual waste water disposal system of the non-evaporative type where the water is returned to the same stream system in which the well is located.

WELL PERMIT NUMBER 85146-F

RECEIPT NUMBER 10008849

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

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



Issued By SHANNON PORTER

Date Issued: 2/23/2021

Expiration Date: 2/23/2022

ATTACHMENT 2
DAWSON DETERMINATION OF WATER RIGHTS
COLORADO GROUND WATER COMMISSION
FINDINGS AND ORDER

IN THE MATTER OF AN APPLICATION FOR A DETERMINATION OF A RIGHT TO AN ALLOCATION OF
GROUNDWATER IN THE KIOWA-BIJOU DESIGNATED GROUNDWATER BASIN

DETERMINATION NO.: 4043-BD

AQUIFER: Dawson

APPLICANT: Daniel B. Andres Trust

In compliance with section 37-90-107(7), C.R.S., and the Designated Basin Rules, 2 CCR 410-1, Daniel B. Andres Trust (Applicant) submitted an application to the Colorado Ground Water Commission (Commission) for a determination of a right to an allocation of designated groundwater from the Dawson Aquifer.

FINDINGS

1. The application was received by the Commission on August 26, 2019.
2. The Applicant requests a determination of right to an allocation of designated groundwater (Determination) in the Dawson aquifer (Aquifer) underlying 14.9 acres, generally described as the S1/2 of the S1/2 of the SW1/4 of the NE1/4 and the N1/2 of the SE1/4 of the SW1/4 of the NE1/4 of Section 23, Township 11 South, Range 65 West, 6th P.M., in El Paso County (Overlying Land). According to a Nontributary Groundwater Landownership Statement dated August 19, 2019, attached hereto as Exhibit A, the Applicant owns the 14.9 acres of land, which are further described in said Ownership Statement, and claims control of the right to the groundwater in the Aquifer underlying the land.
3. The Overlying Land is located within the boundaries of the Kiowa-Bijou Designated Groundwater Basin. The Commission has jurisdiction over the designated groundwater that is the subject of this Determination.
4. The Commission's Staff has evaluated the application relying on the claims to control of the groundwater in the Aquifer underlying the Overlying Land made by the Applicant.
5. The Applicant intends to apply the groundwater in the Aquifer underlying the Overlying Land to the following beneficial uses: domestic including in-home use, irrigation of landscape and gardens, domestic animal watering, commercial, fire protection, recreational, greenhouse, replacement and the watering of stock animals, either directly or after storage. The Applicant's proposed place of use of the groundwater in the Aquifer underlying the Overlying Land is the above described 14.9 acres of Overlying Land.
6. Pursuant to section 37-90-107(7)(a), and in accordance with the Designated Basin Rules, the Commission shall allocate the groundwater in the Aquifer underlying the Overlying Land on the basis of the ownership of the Overlying Land.
7. The amount of water in storage in the Aquifer underlying the 14.9 acres of Overlying Land claimed by the Applicant is 1,360 acre-feet. This determination was based on the following as specified in the Designated Basin Rules.
 - a. The average specific yield of those saturated aquifer materials containing sufficient water that can be drained by gravity and placed to beneficial use is 20 percent.

- b. The average thickness of those saturated aquifer materials containing sufficient water that can be drained by gravity and placed to beneficial use is 455 feet.
8. A review of the records in the Office of the State Engineer has disclosed that a well operating pursuant to section 37-90-105, C.R.S., (i.e. a small-capacity well), permit no. 101207, is located on the Overlying Land and is permitted to withdraw 1 acre-feet per year of groundwater from the Aquifer from beneath the Overlying Land. The applicant has indicated that permit no. 101207 will be cancelled and the well re-permitted to operate pursuant to this Determination. The amount of water considered to have been historically withdrawn from the aquifer by this well is 42 acre-feet. In applying Rule 5.3.2.5 of the Designated Basin Rules to computing the amount of water available for allocation in this Determination, the amount of groundwater in the Aquifer underlying the Overlying Land available for allocation in this Determination is reduced by 42 acre-feet to 1,318 acre-feet. Except for that well, review of the records in the Office of the State Engineer finds no other previous allocations or permitted withdrawals from the Aquifer underlying the Overlying Land.
9. Pursuant to section 37-90-107(7)(c)(III), an approved determination of a right to an allocation shall be considered a final determination of the amount of groundwater so determined; except that the Commission shall retain jurisdiction for subsequent adjustment of such amount to conform to the actual local aquifer characteristics from adequate information obtained from well drilling or test holes.
10. Pursuant to section 37-90-107(7)(d), the Commission has authority to issue well permits pursuant to subsection 107(7) (i.e. permits for large capacity wells) for the withdrawal of designated groundwater from the Aquifer. Pursuant to section 37-90-107(7)(a) the Commission shall adopt the necessary rules to carry out the provisions of subsection (7). Pursuant to section 37-90-111(h), C.R.S., the Commission is empowered to adopt rules necessary to carry out the provisions of Article 90 of Title 37. In accordance with that authority, the Commission has adopted the Rules and Regulations for the Management and Control of Designated Ground Water (2 CCR 410-1) ("Designated Basin Rules", or "Rules").
11. Large capacity well permits issued pursuant to section 37-90-107(7) are subject to the following provisions of statute and the Designated Basin Rules.
 - a. Pursuant to section 37-90-107(7)(a) well permits issued pursuant to subsection 107(7) shall allow withdrawals on the basis of an aquifer life of one hundred years. The 1,318 acre-feet of water in the Aquifer underlying the Overlying Land available for allocation in this Determination, if permitted for withdrawal by large capacity wells on the basis of an aquifer life of one hundred years, would result in an allowed average annual amount of withdrawal of 13.18 acre-feet per year.
 - b. Any amounts of groundwater in the Aquifer allocated in this Determination that are permitted for withdrawal pursuant to section 37-90-105, by small capacity well permits issued after the issuance of this Determination reduce the amount of water, and the allowed average annual amount of withdrawal, that may be withdrawn by wells permitted pursuant to section 37-90-107(7).
 - c. In accordance with Rule 5.3.6 of the Designated Basin Rules, it has been determined that withdrawal of groundwater from the Aquifer underlying the Overlying Land will, within one hundred years, deplete the flow of a natural stream or an alluvial aquifer at

an annual rate greater than one-tenth of one percent of the annual rate of withdrawal and, therefore, the groundwater in the Aquifer underlying the Overlying Land is considered to be not-nontributary groundwater as defined in Rule 4.2.23 of the Designated Basin Rules. Withdrawal of water from the Aquifer underlying the Overlying Land would impact the alluvial aquifer of the Kiowa-Bijou Designated Groundwater Basin, which has been determined to be over-appropriated. Commission approval of a replacement plan pursuant to section 37-90-107.5, C.R.S., and Rule 5.6 of the Designated Basin Rules, that provides for the replacement of the actual depletion to the alluvial aquifer and is adequate to prevent any material injury to existing water rights of other appropriators, is required prior to approval of well permits for wells to be located on this land area to withdraw the groundwater in the Aquifer underlying the Overlying Land. Pursuant to the Rules the replacement plan shall provide for the depletion of the alluvial water for the first 100 years due to all previous pumping, and if pumping continues beyond 100 years shall replace actual impact until pumping ceases, assuming water table conditions in the Aquifer.

12. Pursuant to section 37-90-105(1), the State Engineer has the authority to approve small capacity well permits. While water withdrawn from the Aquifer from beneath the Overlying Land by small capacity wells may consist of the groundwater allocated herein, the Commission recognizes that in approving small capacity permits the State Engineer is not bound by the terms and conditions of this Determination, and may approve small capacity permits based on standards and with such conditions as the State Engineer considers appropriate.
13. The ability of wells permitted to withdraw the authorized amount of water from this nonrenewable Aquifer may be less than the one hundred years upon which the amount of water in the Aquifer is allocated, due to anticipated water level declines.
14. In accordance with sections 37-90-107(7)(c)(II) and 37-90-112, C.R.S., the application was published in the Ranchland News newspaper on September 17, 2020 and September 24, 2020. No objections to the application were received within the time limit set by statute.

ORDER

In accordance with section 37-90-107(7) and the Designated Basin Rules, the Commission hereby determines a right to an allocation of designated groundwater in the Dawson Aquifer underlying 14.9 acres of land, generally described as the S1/2 of the S1/2 of the SW1/4 of the NE1/4 and the N1/2 of the SE1/4 of the SW1/4 of the NE1/4 of Section 23, Township 11 South, Range 65 West, 6th P.M., further described in Exhibit A, subject to the following conditions.

15. The amount (i.e. volume) of water in the Aquifer underlying the 14.9 acres of Overlying Land allocated herein is 1,318 acre-feet (Underlying Groundwater).
16. The amount (i.e. volume) of Underlying Groundwater allocated herein shall be considered final, except that the Commission shall retain jurisdiction for subsequent adjustment of such amount to conform to the actual local aquifer characteristics from adequate information obtained from well drilling or test holes, if such information indicates that the initial estimate of the amount of Underlying Groundwater in the Aquifer was incorrect.

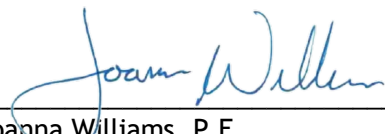
17. Approval of this Determination meets the requirements of section 37-90-107(7)(d)(II), that requires a determination of groundwater to be withdrawn by a well be made prior to the granting of a well permit pursuant to section 37-90-107(7).
18. Well permits issued pursuant to section 37-90-107(7), (i.e. large capacity wells) and this Determination are subject to the following conditions.
 - a. The total amount of Underlying Groundwater that may be withdrawn from the Aquifer by all large capacity wells permitted pursuant to this Determination may not exceed a volume of 1,318 acre-feet, less any amount of the Underlying Groundwater allocated herein permitted to be withdrawn by small capacity wells issued permits pursuant to section 37-90-105 after the issuance of this Determination. The amounts of water permitted to be withdrawn by such small capacity wells shall be considered to be one-hundred times the annual withdrawals permitted to be withdrawn by those wells.
 - b. The allowed average annual amount of withdrawal by any large capacity well (or well field) permitted to withdraw the allocated water shall be equal to the volume of water permitted to be withdrawn by that well (or well field) divided by one-hundred years.
 - c. The allowed maximum annual amount of withdrawal by any large capacity well (or well field) permitted to withdraw the allocated water may exceed the allowed average annual amount of withdrawal allowed by the well permit(s) as long as the total volume of water withdrawn by such well(s) does not exceed the product of the number of years since the date(s) of issuance of the well permit(s) times the allowed average annual amount of withdrawal allowed by the well permit(s).
 - d. The Applicant may pump the allowed average annual amount of withdrawal and the allowed maximum annual amount of withdrawal from one or more wells of a well field in any combination, so long as the total combined withdrawal of the wells does not exceed the amounts described in this Order.
 - e. Commission approval of a replacement plan, that provides for the replacement of the actual depletion to the alluvial aquifer and is adequate to prevent any material injury to existing water rights of other appropriators in the alluvial aquifer, is required prior to approval of well permits that allow the withdraw of the Underlying Groundwater. The replacement plan shall provide for the depletion of the alluvial water for the first 100 years due to all previous pumping, and if pumping continues beyond 100 years shall replace actual impact until pumping ceases, assuming water table conditions in the Aquifer.
 - f. The use of the Underlying Groundwater shall be limited to the following beneficial uses: domestic including in-home use, irrigation of landscape and gardens, domestic animal watering, commercial, fire protection, recreational, greenhouse, replacement and the watering of stock animals, either directly or after storage. The place of use of the Underlying Groundwater shall be limited to the above described 14.9 acres of Overlying Land. The Underlying Groundwater that is the subject of this Determination may be reused and successively used to extinction to the extent dominion and control over the water is maintained and its volume can be distinguished from the volume of any stream system into which it is introduced to the satisfaction of the Commission.
 - g. The wells must be located on the above described 14.9 acres of Overlying Land.

- h. No well shall be located within 600 feet of any existing large-capacity well in the same Aquifer unless a Waiver of Claim of Injury is obtained from the owner of the existing well or unless the Commission, after a hearing, finds that circumstances in a particular instance warrant that a well may be permitted without regard to this limitation.
 - i. The wells must be constructed to withdraw water from only the Dawson Aquifer.
 - j. The entire depth of each well must be geophysically logged prior to installing the casing in the same manner as set forth in Rule 9 of the Statewide Nontributary Ground Water Rules, 2 CCR 402-7.
 - k. A totalizing flow meter or other Commission approved measuring device shall be installed on each well and maintained in good working order by the well owner. Annual diversion records shall be collected and permanently maintained by the well owner and submitted to the Commission.
 - l. The well shall be marked in a conspicuous place with this determination number, the well permit number, and the name of the Aquifer. The well owner shall take necessary means and precautions to preserve these markings.
19. Existing well permit no. 101207 must be canceled and a new permit issued for that well to operate pursuant to this Determination.
20. A copy of this Determination shall be recorded by the Applicant in the public records of the county in which the Overlying Land is located so that a title examination of the above described 14.9 acres of Overlying Land area, or any part thereof, shall reveal the existence of this Determination.
21. The right to an allocation of designated groundwater determined herein is a vested property right with specific ownership. Some or all of the water right may be transferred independent of the land under which the right originated. Any action taken that is intended to convey, transfer, and/or sell the subject water right shall explicitly identify this Determination number, the specific Aquifer, and the total amount (i.e. volume) of the right that is being conveyed.

Dated this 9th day of November, 2020.



Kevin G. Rein, P.E.
Executive Director
Colorado Ground Water Commission

By: 
Joanna Williams, P.E.
Water Resource Engineer

ATTACHMENT 3
DAWSON AQUIFER REPLACEMENT PLAN
COLORADO GROUND WATER COMMISSION
FINDINGS AND ORDER

IN THE MATTER OF AN APPLICATION FOR REPLACEMENT PLAN TO ALLOW THE WITHDRAWAL OF GROUNDWATER FROM THE DAWSON AQUIFER IN THE KIOWA-BIJOU DESIGNATED GROUNDWATER BASIN.

REPLACEMENT PLAN NO. 4043-RP

FOR DETERMINATION OF WATER RIGHT NO. 4043-BD

AQUIFER: DAWSON

APPLICANT: DANIEL B. ANDRES TRUST

In compliance with section 37-90-107.5, C.R.S. and the Designated Basin Rules, 2 CCR 410-1 (Rules or Rule), Daniel B. Andres Trust (Applicant) submitted an application for a replacement plan to allow the withdrawal of groundwater from the Dawson Aquifer that has been allocated by Determination of Water Right No. 4043-BD.

FINDINGS

1. Pursuant to section 37-90-107(7), C.R.S., in a Findings and Order dated November 9, 2020, the Ground Water Commission (Commission) approved a Determination of a Right to an Allocation of Groundwater, No. 4043-BD, from the Dawson Aquifer (Aquifer), summarized as follows.
 - a. The determination quantified an amount of water from beneath 14.9 acres generally described as the S1/2 of the S1/2 of the SW1/4 of the NE1/4 and the N1/2 of the SE1/4 of the SW1/4 of the NE1/4 of Section 23, Township 11 South, Range 65 West, 6th P.M., in El Paso County (Overlying Land).
 - b. The amount of water in the aquifer that was allocated was 1,318 acre-feet, and the allowed average annual amount of groundwater to be withdrawn from the aquifer was limited to 13.18 acre-feet per year (subject to adjustment by the Commission to conform to actual local aquifer characteristics).
 - c. The use of groundwater is limited to the following beneficial uses: domestic including in-home use, irrigation of landscape and gardens, domestic animal watering, commercial, fire protection, recreational, greenhouse, replacement and the watering of stock animals, either directly or after storage.
 - d. Withdrawal of the subject groundwater will, within one hundred years, deplete the flow of a natural stream or its alluvial aquifer at an annual rate greater than one-tenth of one percent of the annual rate of withdrawal, the groundwater is considered to be not-nontributary, and Commission approval of a replacement plan providing for actual depletion of affected alluvial aquifers and adequate to prevent any material injury to existing water rights in such alluvial aquifers is required prior to approval of well permits for wells to withdraw the subject groundwater.
2. The subject water is Designated Groundwater located within the boundaries of the Kiowa-Bijou Designated Groundwater Basin. The Commission has jurisdiction over the withdrawal of the water by large capacity wells that are permitted pursuant to section 37-90-107(7).
3. Withdrawal of the subject groundwater would deplete the alluvial aquifer of the Kiowa-Bijou Designated Groundwater Basin, the alluvial aquifer of the Upper Big Sandy Designated Groundwater Basin and the alluvial aquifer of the Upper Black Squirrel Creek Designated Groundwater Basin, all of which, according to Rules 5.2.4.2, 5.2.7.2 and 5.2.6.2,

Aquifer: Dawson

Applicant: Daniel B. Andres Trust

respectively, have been determined to be over appropriated. Such depletion would unreasonably impair existing large capacity alluvial rights withdrawing water from those alluvial aquifers.

4. Pursuant to Rule 5.6.1.A this plan must be adequate to prevent any material injury to water rights of other appropriators, which for purposes of this plan means large capacity wells withdrawing water from the alluvial aquifer of the Kiowa-Bijou Designated Groundwater Basin, the alluvial aquifer of the Upper Big Sandy Designated Groundwater Basin and the alluvial aquifer of the Upper Black Squirrel Creek Designated Groundwater Basin.
5. Pursuant to Rule 5.3.6.2(C) the amount of replacement water shall provide for the depletion of alluvial water for the first 100 years due to all previous pumping and if pumping continues beyond 100 years, shall replace actual impact until pumping ceases.
6. The application for the replacement plan was received by the Commission on August 26, 2019.
7. The Applicant proposes to divert 4.05 acre-feet annually from the Dawson Aquifer for a period of 300 years. The Dawson aquifer water will be withdrawn through 3 wells, including the existing well that was constructed under well permit no. 101207, to be located on 3 residential lots. Each Dawson Aquifer well is proposed to divert 1.35 acre-feet of water annually for domestic purposes including in-home use, irrigation of landscape and gardens, domestic animals, commercial, fire protection, recreational, greenhouse, replacement and the watering of stock animals, either directly or after storage. The land on which the wells will be located is the 14.9 acres of Overlying Land described above.
8. At a continuous withdrawal of 4.05 acre-feet annually for 300 years, depletions to the alluvial aquifer systems of the Kiowa-Bijou Designated Groundwater Basin, Upper Big Sandy Designated Groundwater Basin and Upper Black Squirrel Creek Designated Groundwater Basin would steadily increase to 0.128 acre-feet per year in the 300th year, which is equal to 3.16% of pumping, as shown in Exhibit A.
9. The Applicant proposes to provide 0.675 acre-feet per year of replacement water to the alluvial aquifer system of the Kiowa-Bijou Designated Groundwater Basin. The proposed source of replacement water is septic and leaching field return flows from the in-house use of the groundwater to be pumped under the plan. The Applicant estimates that return flows from each lot will consist of 90% of the water used for in-house purposes. Assuming each lot uses a total annual amount for in-house use of 0.25 acre-feet, the return flow per lot would be 0.225 acre-feet annually, and the return flows under the plan will total 0.675 acre-feet per year for all 3 lots at full build out.
10. The subject property is located within the drainage of West Kiowa Creek, and the return flows will flow to the alluvial aquifer of the Kiowa-Bijou Designated Ground Water Basin. The Applicant proposes to aggregate all replacements to the drainage in which the well or wells will operate, in accordance with Guideline 2007-1.
11. Pursuant to Rule 5.6.1.B this plan must be adequate to prevent unreasonable impairment of water quality. Pursuant to Rule 5.6.1.B.1.b, if the replacement source water is from an onsite wastewater treatment system permitted by a local health agency and the applicant demonstrates the source is in compliance with that permit there shall be a rebuttable presumption of no unreasonable impairment of water quality.

12. Pursuant to Rule 5.6.1.C this plan, including the proposed uses of the water withdrawn pursuant to the plan, must not be speculative, and must be technically and financially feasible and within the Applicant's ability to complete. The plan, including the proposed uses of the water withdrawn pursuant to the plan, is not speculative. The plan appears technically and financially feasible and within the Applicant's ability to complete.
13. Pursuant to Rule 5.6.1.D this plan must be able to be operated and administered on an ongoing and reliable basis. The plan appears to be able to be operated and administered on an ongoing and reliable basis.
14. Pursuant to Rule 5.6.1.F replacement source water must be physically and legally available in time, place and amount to prevent material injury. As determined in Determination of Water Right No. 4043-BD water is currently available in the amounts and for the number of years proposed to be diverted.
15. Pursuant to Rule 5.6.1.G the replacement source water must be legally available for use. Records in this office indicate that the Applicant controls the water right to be used as the source of replacement water, consisting of Determination of Water Right No. 4043-BD, and such water is legally available for use pursuant to this plan.
16. In accordance with sections 37-90-107.5 and 37-90-112, C.R.S., the application was published in the Ranchland News newspaper on September 17, 2020 and September 24, 2020. No objections to the application were received within the time limit set by statute.
17. According to Rule 5.6.1:
 - a. The Applicant has the burden of proving the adequacy of the plan in all respects.
 - b. If the applicant meets its burden of proof, the Commission shall grant approval of the plan which shall include any terms and conditions established the Commission.
18. The Commission Staff has evaluated the application pursuant to section 37-90-107.5, and the requirements of Rule 5.3.6.2(C) and Rule 5.6, and finds that the requirements have been meet and the plan may be approved to allow diversions from the Dawson Aquifer if operated subject to the conditions given below.

ORDER

In accordance with section 37-90-107.5, and the Designated Basin Rules, the Colorado Ground Water Commission orders that the application for a replacement plan to allow the withdrawal of groundwater from the Dawson Aquifer underlying 14.9 acres that are the subject of Determination of Water Right no. 4043-BD is approved subject to the following conditions:

19. The Dawson aquifer water will be withdrawn through 3 wells, including the existing well that was constructed under well permit no. 101207, to be located on 3 residential lots. Each Dawson Aquifer well may divert 1.35 acre-feet of water annually for domestic purposes including in-home use, irrigation of landscape and gardens, domestic animals, commercial, fire protection, recreational, greenhouse, replacement and the watering of stock animals, either directly or after storage. The land on which the wells will be located is the 14.9 acres of Overlying Land described above.
20. The applicant must obtain a new permit for the existing well (currently permit no. 101207)

to operate that well pursuant to this replacement plan.

21. The allowed annual amount of groundwater to be withdrawn from the Aquifer by all wells operating under this plan shall not exceed 4.05 acre-feet. The allowed annual amount of water to be withdrawn from each on-lot well shall not exceed 1.35 acre-feet.
22. A totalizing flow meter shall be installed on each well. The well owner shall maintain the meter in good working order.
23. Permanent records of all withdrawals of groundwater from each well shall be recorded at least annually by the well owners, permanently maintained, and provided to the Commission.
24. Pumping under this plan is limited to a period of 300 years. The year of first use of this replacement plan shall be the calendar year of construction of a well permitted pursuant to this plan or permitting of an existing well pursuant to the plan.
25. Return flows from in-house use of groundwater shall occur through individual on-lot non-evaporative septic systems located within the 14.9 acres of Overlying Land that are the subject of Determination of Water Right No. 4043-BD. The septic systems must be constructed and operated in compliance with a permit issued by a local health agency.
26. Replacement of depletions must be provided annually in the acre-feet amounts shown in Exhibit A. Annual replacement requirements may be computed by pro-rating between the values given on Exhibit A, or for simplicity may be taken as the amount shown in the next succeeding 5 year increment.
27. The Applicant or their successor(s) are responsible for ensuring that replacement water is provided to the alluvial aquifer as required by this plan. The annual replacement requirement and the annual amount of replacement water provided shall be calculated and reported on a form acceptable to the Commission. The annual amount of replacement water provided must be no less than the annual replacement requirement on a yearly basis. No credit shall be claimed by the Applicant for an oversupply of replacement water provided to the alluvium during previous years.
28. The Applicant must provide the required annual amount of replacement water for the first 100 years, or for as long as a well is operated pursuant to this plan, whichever is longer.
29. To assure adequate return flows, at least one well must be serving an occupied single-family dwelling that is generating return flows via a non-evaporative septic system before any irrigation or animal watering is allowed to be served by any of the wells.
30. So long as at least one well continues to pump and supply an occupied dwelling, the plan's required replacement obligations, shown in Exhibit A, will be met. Should all wells cease pumping for in-house use within the first 100 years an amended or alternate replacement plan must be obtained that will replace actual depletions to the alluvial aquifer so as to prevent any material injury to water rights of other appropriators.
31. The Applicant (and their successors) must gather and maintain permanent records of all information pertaining to operation of this plan, which shall include, but is not be limited to, those items identified below. The Applicant must submit records to the Commission on forms acceptable to the Commission, on an annual basis for the previous calendar year, by

Aquifer: Dawson

Applicant: Daniel B. Andres Trust

February 15th of the following year.

- a. Identification of all well permits issued and wells constructed under this plan.
 - b. The amount of water diverted by each well and all wells in total, both annually and cumulatively since operation of the plan began.
 - c. The number of occupied dwellings served by each well.
 - d. The number of square feet irrigated by each well.
 - e. The number of large domestic animals served by each well.
 - f. The return flows occurring from use of all wells operating under the plan, assuming 0.225 acre-feet per year per occupied single family dwelling (90% of the water used for in-house purposes) enters the alluvial aquifer as replacement water.
 - g. Any other information the Commission deems relevant and necessary to operation, monitoring, accounting, or administration of the plan.
32. The Applicant (and their successors) are fully responsible for the operation, monitoring, and accounting of the replacement plan. In the event a lot with a well permitted or operating pursuant to this plan is sold, identification of the well that was sold and evidence that the new owner has been notified of their responsibilities under the replacement plan shall accompany that year's accounting.
33. Any covenants adopted for this subdivision should contain a description of the replacement plan, including the limitations on diversions and use of water for each well and lot, the requirement to meter and record all well pumping, and information on how records are to be reported and the plan is to be administered.
34. In the event the permitted well or wells are not operated in accordance with the conditions of this replacement plan, they shall be subject to administration, including orders to cease diverting groundwater.
35. All terms and conditions of Determination of Water Right No. 4043-BD must be met.
36. Pursuant to Rule 5.6.1.E, a copy of this Findings and Order shall be recorded by the Applicant in the clerk and recorder's records of El Paso County, so that a title examination of the land on which the structures involved in this plan are located reveals the existence of this plan.

Dated this 9th day of November, 2020.



Kevin G. Rein, P.E.
Executive Director
Colorado Ground Water Commission

By: 

Keith Vander Horst, P.E.
Chief of Water Supply, Designated Basins

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Prepared by: jmw