



To: Mark Davis, Managing Member  
Hodgen Settlers Ranch, LLC  
PO Box 1488, Monument, CO 80132-1488

From: Julia M. Murphy, MS PG  
Professional Geologist/Hydrogeologist  
Groundwater Investigations, LLC

Date: Jan 02, 2024

Re: Water Resources Report, Settlers Ranch Subdivision, Filing 3

This Water Resources Report was completed for Mark Davis Managing Member (“Applicant”) Settlers Ranch 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 Settlers Ranch Subdivision, Filing 3 water supply.

## 1.0 Site Location and Description

The Settlers Ranch subdivision is located within portions of the NE1/4 and the S1/2 of Section 23 and portions of the NE1/4 of Section 24, Township 11 South, Range 66 West of the 6<sup>th</sup> P.M., El Paso County, Colorado. In general, the subdivision is located west of Stepler Rd, ¼ mile north of Hodgen Rd, east of Settlers Ranch Filing 2C and south of the Settlers View and Abert Ranch subdivisions.

Settlers Ranch Filing 3 is a replat of a portion of Settlers Ranch subdivision located in a portion of the SE ¼ and portion of the SE1/4 of the NE1/4 of Section 23 & the SW1/4 and NW1/4 of Section 24 (Exhibit 1) all within Township 11 South, Range 66 West of the 6<sup>th</sup> P.M., in El Paso County, Colorado.

## 2.0 Background

The Settlers Ranch Subdivision’s (“Subdivision”) Initial PUD zoning, PUD development plan approval, preliminary plan approval, and Final Plat approval for the 307.35 acre, 86 lot Settlers Ranch Subdivision was obtained on October 13, 2005.

**Filing 1.** The Final Plat approval for the 142.2 acre, 43 lot Filing 1 of the Subdivision was obtained on October 13, 2005.

**Filing 2.** The final plat approval for Filing 2 was obtained on April 23, 2009, for the development of 43 single family lots ranging from 2.5 acres to 5.5 acres in size on 138.94 acres. The developer proposed to record the Filing 2 plat in 5 phases. To date, 3 of the 5 phases, Filing 2A, Filing 2B and Filing 2C, have been recorded. Phase 1 (Filing 2A) included 7 lots on 15.9 acres and was recorded September 10, 2013; Phase 2 (Filing 2B) was recorded in the fall of 2015 and re-platted Nov 30, 2017 for 7 lots at a minimum size of 2.5 acres on 19.5 acres; and

Phase 3 (Filing 2C) was comprised of 11 lots at a minimum lot size of 2.5 acres on a 30.70 acre parcel was recorded in March 19, 2020.

County Resolution No. 12-18 dated February 9, 2012 specified conditions for the “implementation phasing and pro-ration of final subdivision plats based on market conditions to previously approved but not recorded final subdivision plats”. The requirement stipulated in Section (10) that applications for phases be submitted within five years of the recording of the first Plat. In 2023, El Paso County determined that proposed Phases 4 and 5 of Filing 2 were expired and require complete and current Final Plat submittals. Filing 2, Phase 4 was originally approved for 10 single family residential lots ranging from 3.02 to 5.55 acres and zoned PUD. Filing 2, Phase 5 was to be comprised of 8 lots. It was agreed that Filing 2 Phases 4 and 5 could be combined to create Filing 3.

**2.1 Rezoning Request.** In October 2022, the Applicant requested approval to rezone a portion of Filing 3 (specifically the area previously identified as Filing 2 Phase 4) from PUD to RR-2.5 allowing for a minimum lot size of 2.5 acres. The requested change was based on revisions to the El Paso County Master Plan and compatibility with surrounding development. The change to RR-2.5 would allow increasing the number of lots from the originally approved 10 lots by an additional 6 lots for a total of 16 single family residential lots. Therefore Filing 3, upon approval of the rezoning request, will accommodate a total of 24 lots (16 lots from prior area described as Phase 4 of Filing 2 and 8 lots from prior area described as Phase 5 Filing 2) to be situated on 79.2 acres.

**2.2. Filing 2 Quantity and Dependability Finding.** In a letter dated August 27, 2013, the State Engineer’s Office provided a determination of sufficiency of water supply for Settlers Ranch Filing No. 2, 43 lots on 162.5 acres, stating the water supply was sufficient in quantity and dependability and can be provided without injury to prior existing decreed water rights. In a letter dated September 04, 2013 issued by the El Paso County Attorney’s office, the attorney presented his analysis and opinion on the State’s finding, concurring with the State’s recommendation of a finding of sufficiency for the 43 lots in Filing No. 2 (Exhibit 2).

Upon approval of the rezoning, the originally proposed 43 lots will be increased by 6 lots to a total of 49 lots in Filing 2 and thus a total of 92 lots for all of Settlers Ranch subdivision.

### 3.0 Sufficient Water Quantity

**3.1 Water Supply.** An application for groundwater rights for the Dawson, Denver, Arapahoe and Laramie-Fox Hills Aquifers of the Denver Basin underlying the 298.6 acres of Settlers Ranch subdivision was filed in Water Court Case 03CW241 (Water Division 1) and 03CW050 (Water Division 2) consolidated in Water Division 1 (Exhibit 3). The water Court Decree signed on July 22, 2004 provides, among other stipulations, the quantification of groundwater and the rate which it may be withdrawn based on a 100 year depletion for all four aquifers and a plan of augmentation to replace depletions and post-pumping depletions to protect the vested rights of others. Water supply for all residential lots within Settlers Ranch subdivision will be obtained from groundwater wells completed within the not non-tributary Dawson Aquifer. Table 1 summarizes the quantifiable groundwater underlying Settlers Ranch subdivision.

**Table 1  
Groundwater Quantification**

<b>AQUIFER</b>	<b>Water Division 1 Water Division 2</b>	<b>NET SAND (Feet)</b>	<b>Annual Amount (100 year) (Acre- Feet)</b>	<b>Available based on an Annual Average Withdrawal 300 Years (Acre-Feet)</b>
Dawson (NNT) <sup>1</sup>	03CW241 03CW50	460	273.7 <sup>1</sup>	91.23
Denver (NT)	03CW241 03CW50	550	279.2	-
Arapahoe (NT)	03CW241 03CW50	235	119.3	-
Laramie-Fox Hills (NT)	03CW241 03CW50	200	89.6	-

<sup>1</sup>Reduced by 24.9 acre -feet for the existing livestock well having Permit 206126

**3.2 Water Demand.** Based on established subdivision water supply requirements presented in Water Court Decree cases 03CW241 (Water Division 1) and 03CW50 (Water Division 2), each lot in Settlers Ranch is allocated 0.55 acre-feet per year. The estimated consumption is based on presumptive values of 0.3 acre-feet per year for in-home use, 0.2 acre-feet for irrigation of up to 3,500 square feet of lawn and garden and 0.05 acre-feet per year for up to four large domestic animals. For Filing 3, a total of 13.2 acre-feet per year for 24 lots for a 100-year allocation (total of 1,320 acre-feet). Based on El Paso County’s requirement for allocation based on a 300-year supply, this would amount to 3,960 acre-feet total.

**3.3 Augmentation.** The Court Decree specifies that a total of 15,180 acre-feet of the available total 27,370 acre-feet of Dawson groundwater be used exclusively to serve as the water supply for 92 residential wells to be located on the overlying land. Groundwater will be obtained by a metered well with depletions during pumping augmented by individual septic system return flow.

The Augmentation Plan requires all 89,600 acre-feet of decreed groundwater of the Laramie Fox Hills Aquifer and 6,260 of the 11,930 acre-feet of the Arapahoe Aquifer groundwater be reserved for replacement of post-pumping depletions.

**3.3.1 Compliance.** Water consumption will be monitored by use of individual flow meters placed on each well. Individual non-evaporative septic systems will be installed for each home such that returns from in-home use will be available to replace stream depletions in time and location and amount.

The administration of Augmentation Plan for pumping of wells and post-pumping depletions is the responsibility of the Settlers Ranch Homeowners Association (“HOA”) (established in 2005). Groundwater in the Arapahoe and Laramie Fox Hills aquifers are required to be reserved to augment post-pumping depletions. Groundwater from these two aquifers was deeded to the HOA and recorded at El Paso County Clerk and Recorders Office on January 4, 2006.

**3.4 Quantity Analysis.** The proposed source of Filing 3 water supply is a 3,960 acre-feet (0.55 acre-feet x 24 lots x 300 yrs) allocation of the allotted 15,180 total acre-feet of decreed Dawson Aquifer groundwater. This amount is 990 acre-feet more than the finding of sufficiency for Filing 2 issued by the State Engineers Office in their letter dated August 27, 2013 that accounted for, amongst the 42 lots, 18 of the 24 lots proposed for Settlers Ranch Filing 3. Approval for the additional 6 lots will be requested of the State Engineers Office to complete the finding of Sufficiency for Quantity and Dependability. Upon approval, the total amount of the court approved 15,180 acre-feet of Dawson Groundwater for Settlers Ranch water supply will be fully allocated. As 27,370 acre-feet of the Dawson Aquifer has been decreed in consolidated Water Court Case 03CW241, the water supply will “meet the average annual demand of the proposed subdivision.”

#### 4.0 Sufficient Dependability

The County Attorney’s Office recommended sufficiency for water quantity and dependability for the 43 lot Master Plat Exhibit for Filing 2 in their letter dated September 4, 2013 based on the States finding of Sufficiency in their letter dated August 27, 2013. This included 18 of the 24 lots proposed in Filing 3 Settlers Ranch.

**4.1 Groundwater Wells.** Existing wells in the vicinity of Settlers Ranch Filing 3, in Section 24 Township 11 S Range 66 W of the 6<sup>th</sup> PM, has been steadily supplying water beginning in 1976 in the not non-tributary Dawson Aquifer. Based on historical use, production from wells in the area is sufficient to meet the water supply demands for the proposed uses for all 24 lots.

**4.2 Augmentation Requirement.** The Colorado Water Court has approved an Augmentation Plan to secure the replacement of actual depletions from pumping the not non-tributary Dawson Aquifer to the Cherry Creek/South Platte stream system and the Monument Creek/Arkansas River stream system. Based on an annual pumping of 13.2 (0.55 acre-feet X 24 wells) at the 300<sup>th</sup> year pumping period its estimated depletion of the Cherry Creek/South Platte stream system will be 13.8% of the annual pumping or 1.82 acre-feet per year. Similarly, depletions to the Monument Creek/Arkansas River stream system at the 300<sup>th</sup> year of pumping is about 8.61% of the annual pumping or 1.13 acre-feet. Replacement of all depletions are to be made to the Cherry Creek/South Platte System. Each lot will have individual septic systems with annual return flows calculated to be 90% of the 0.3 acre-feet of household use or 6.48 acre-feet per year. This exceeds the annual estimated required combined replacement of 2.95 acre-feet (1.82 acre-feet + 1.13 acre-feet) for the collective stream systems.

Augmentation for post-pumping depletions will use the reserved Arapahoe and Laramie Fox Hills Aquifer groundwater.

#### 5.0 Information Regarding Sufficient Quality

A letter dated January 3, 2023 by the El Paso County Department of Public Health stated that although there was a finding of sufficiency in Water Quality for the entire subdivision in 2000, the

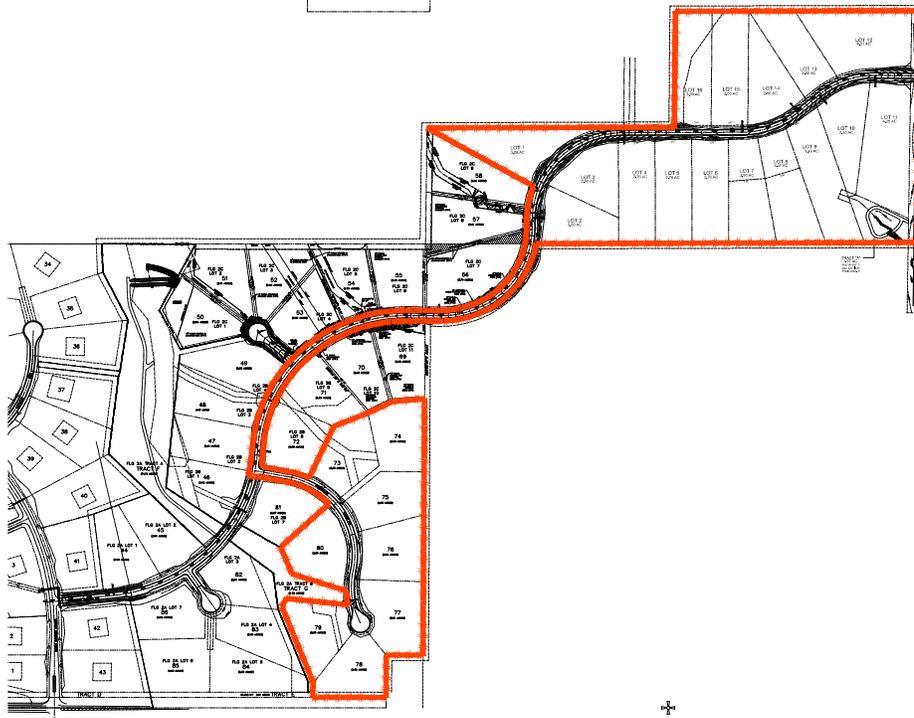
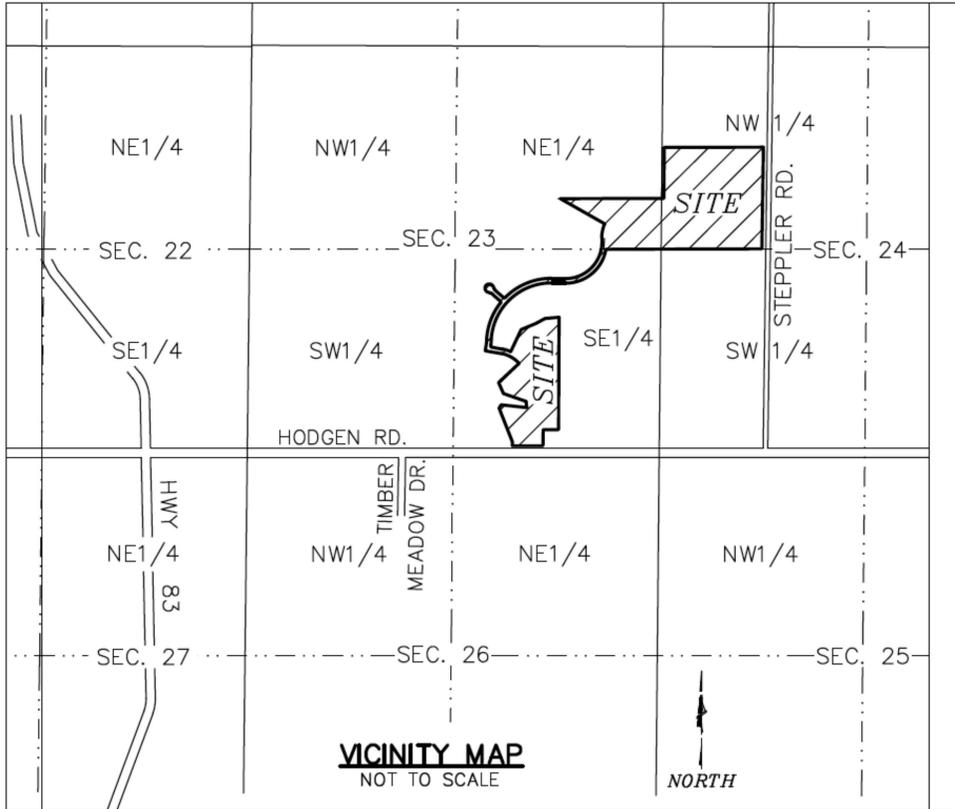
requirements have changed and the water quality of Settlers Ranch Filing 3 must be evaluated based on El Paso County Health and El Paso County Planning and Community Development's current requirements. The water sample was collected from the Dawson aquifer well having Permit 86781-F, located within Settlers Ranch Filing 2C.

**5.1 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 (SMCLs). All constituent concentrations are at or below the primary drinking water MCLs. PH of the water sample was 5.89 and exceeded the SMCL of 6.5 to 8.5 pH Units. Low Ph increases the potential for water corrosivity. The Water Quality Report has been submitted as a separate document for review by the El Paso County Public Health for a finding of sufficiency (Exhibit 4).

## **6.0 Summary and Conclusion**

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 Settlers Ranch subdivision application approved by the County included a total of 86 lots on the 298.6 acres. Upon approval of the rezoning request for the Northeast portion of Filing 3 to add 6 lots, the total number of lots in the Settlers ranch subdivision will be 92. The Water Court Decree accounts for a total of 92 lots to be situated on the overlying land with each be allocated 0.55 acre-feet per year of Dawson aquifer groundwater pursuant to a plan of augmentation. The State Engineer's Office provided a determination of sufficiency for the water supply for Settlers Ranch Filing 1 and Filing 2 that each included 43 lots for a total of 86 lots. A finding of Water Supply sufficiency from the State Engineer's Office will be needed for the additional 6 lots.

The amount of Dawson aquifer groundwater underlying Applicant's property that has been quantified in Water Court Case 03CW241 (Water Division 1) and 03CW050 (Water Division 2) consolidated in Water Division 1. Based on the proposed uses and quantification of available Dawson aquifer groundwater, there is sufficient quantity to meet the County required 300-year water supply criteria for all 92 lots. 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 Filing 3 was evaluated within the parameters specified in the Land Development Code and have been determined to meet the Colorado Primary Drinking Water Standards. Sufficiency of Water Quality will be determined based on the evaluation of the Water Quality Report by El Paso County Public Health.



**EXHIBIT 1**  
Settlers Ranch Subdivision Filing 3

# EL PASO COUNTY



**OFFICE OF THE COUNTY ATTORNEY**  
CIVIL DIVISION

Assistant County Attorneys

M. Cole Emmons  
Lori L. Seago  
Diana K. May  
Kenneth R. Hodges  
Steven A. Klaffky

**Amy R. Folsom, County Attorney**

September 4, 2013

SF-13-0104      Settlers Ranch Filing 2A, Final Plat  
& Filing 2 Phased Master Plat Exhibit

Reviewed by:      M. Cole Emmons, Sr. Assistant County Attorney

THIS IS A SUPPLEMENT TO THE WATER REVIEW DATED AUGUST 27, 2013. THIS REVIEW IS BASED ON SUBSEQUENT REVIEW OF THE MASTER PLAT EXHIBIT FOR FILING NO. 2 FOR 43 LOTS BY THE STATE ENGINEER'S OFFICE. THE RECOMMENDATION IS NOW FOR A SUFFICIENCY FINDING FOR QUANTITY AND DEPENDABILITY FOR BOTH THE 7 LOT FINAL PLAT FOR FILING NO. 2A AND THE 43 LOT MASTER PLAT EXHIBIT FOR FILING NO. 2.

**FINDINGS AND CONCLUSIONS:**

1. This is a proposal by Mark Davis, Hodgen Settlers Ranch, LLC for approval of a phased final plat approval process that includes the Final Plat for Filing No. 2A for 7 lots and a Master Plat Exhibit for Filing 2 for a total of 43 lots. The Applicant proposes to subdivide the total approximately 165.23 acres into 33.46 acres for the Filing 2A Final Plat, which includes 7 residential lots on approximately 19.35 acres and two tracts for recreation, open space, trail, drainage, and utilities purposes on the remaining 14.11 acres, with the remaining 129.13 acres platted as a tract for future phased development.

2. In a letter dated August 27, 2013, the State Engineer's Office did a supplemental review to their June 3 letter to address the Filing No. 2 Master Plat Exhibit based on a request by the County Attorney's Office. In its June 3 opinion, the State Engineer only reviewed the Final Plat for Filing No. 2A for 7 lots and found sufficiency and no injury. In its August 27 opinion, the Engineer reviewed the proposed water supply for the entire 43 lot Master Plat Exhibit. The State Engineer's Office indicated that the water supply withdrawing from the Dawson Aquifer operates pursuant to the plan for augmentation decreed in Water Court Consolidated Case Nos. 03 CW 241 (Division No. 1) and 03 CW 50 (Division No. 2). The Engineer reviewed the proposed annual demand of 23.65 acre-feet or 0.55 acre-feet per lot, which consists of 0.30 acre-feet per year for in house use, 0.20 acre-feet per year for irrigation of 3,500 square feet

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of home gardens and lawns, and 0.05 acre-feet per year for watering of 4 large domestic animals. The Engineer noted that approximately 3.7 acres located in the NE 1/4 of the SE1/4 of Section 23, Township 11 South, Range 66 West are outside of the land area claimed in the Consolidated Decree, and further admonished that “[t]he well sites must be restricted to the areas of the lots which are located within the approved water augmentation plan area, as described in case no. 2003CW050. The prohibited area would be any portion of the lot(s) located within the NE ¼ of the SE1/4 of said Section 23.” (Emphasis in original). The Engineer referenced plat notes 31 and 32 that describe restrictions on locating wells for Lots 56 and 57; however, the Engineer noted that “[t]hese areas were not designated on the Master Plat Exhibit provided to this office.” The Engineer indicated that with an annual water supply from the Dawson Aquifer of 273.7 acre-feet (91.2 acre-feet for 300 years) this water supply amount is greater than the annual demand for this subdivision and would satisfy both the State’s 100 year and the County’s 300 year Aquifer life requirements. Pursuant to §30-28-136(1)(h)(l), C.R.S., the Engineer is of the opinion that the water supply is adequate and can be provided without causing injury to decreed water rights, “. . . so long as the well areas referred to in the final plat notes correspond to the land area described in the decree entered in case no. 2003CW050.”

3. Analysis. The Court decreed a total of 27,370 acre-feet or 273.7 acre-feet annually from the Dawson Aquifer, 27,920 acre-feet or 279.2 acre-feet annually from the Denver Aquifer, 11,930 acre-feet or 119.3 acre-feet annually from the Arapahoe Aquifer, and 8,960 acre-feet or 89.6 acre-feet annually from the Laramie-Fox Hills Aquifer. The Decree requires Applicant to reserve 89.6 acre-feet annually (8,960 acre-feet total) of the Laramie-Fox Hills Aquifer and 62.6 acre-feet annually (6,260 acre-feet total) from the Arapahoe Aquifer for replacing post-pumping depletions. In addition, the Consolidated Decree allows up to 50.6 acre-feet per year for 300 years for a total of no more than 15,180 acre-feet total of Dawson Aquifer to serve 92 residential wells at full build out (27,370 acre-feet -15,180 acre-feet = 12,190 acre-feet excess water supply [Dawson]). Based on the State Engineer’s review, with 91.2 acre-feet per year available for full build out and a total demand of 23.65 acre-feet annually for the 43 lots in the Master Plat Exhibit for Filing No. 2, there should be a sufficient supply to meet the County’s 300 year water supply rule.

4. Therefore, at this time, based upon the supplemental finding of no injury and sufficiency by the State Engineer for the 43 lot Master Plat Exhibit for Filing No. 2, the decreed water rights in Water Court Consolidated Case Nos. 03 CW 241 (Div. 1) and 03 CW 50 (Div. 2) and on the requirements listed below, the County Attorney’s Office recommends a finding that the proposed water supply for both the 7 lot Final Plat for Filing No. 2A and for the 43 lot Master Plat Exhibit for Filing No. 2 are sufficient in terms of quantity and dependability. This recommendation specifically requires that no approvals, administrative or otherwise, shall be made for any lots whose wells are located in the NE ¼ of the SE1/4 of Section 23, Township 11 South, Range 66 West, which is outside of the land area claimed in the Consolidated Decrees.

The Health Department will need to make a recommendation as to water quality sufficiency.

REQUIREMENTS:

The Requirements in the August 27 Water Review are not re-stated here and remain unless otherwise indicated. Requirement I is deleted with the State Engineer's supplemental opinion. Requirement H is revised and restated as follows:

H. Applicant shall place a plat note restricting placement of wells in the NE ¼ of the SE1/4 of Section 23, Township 11 South, Range 66 West of the 6<sup>th</sup> P.M., which Applicant indicates applies to Lots 56 and 57. Said plat note shall restrict the well sites to the areas of these lots which are located within the approved water augmentation plan area. No approvals, administrative or otherwise, shall be made for any lots whose wells are located in the NE ¼ of the SE1/4 of Section 23, Township 11 South, Range 66 West, which is outside of the land area claimed in the Decree in Water Court Consolidated Case Nos. 03 CW 241 (Division No. 1) and 03 CW 50 (Division No. 2).

cc: Kari Parsons, Planner II





DEPARTMENT OF NATURAL RESOURCES

DIVISION OF WATER RESOURCES

August 28, 2008

Carol Weber  
El Paso County Planning Dept.  
27 East Vermijo Avenue  
Colorado Springs, CO 80903-2088

Re: Settlers Ranch Filing 2, SF-06-026  
Sec. 23 and 24, T11S, R66W, 6<sup>th</sup> P.M.  
Water Division 1, Water District 8

Dear Ms. Weber:

We have reviewed the additional information that you submitted on June 9, 2008 in regards to the above referenced proposal to subdivide 165.23 acres into 43 single-family residential lots ranging in size from 2.5 acres to 5.55 acres. This letter corrects our previous letter dated June 11, 2008.

**Water Supply Demand**

According to the submittal, the estimated water requirements total 23.65 acre-feet annually. This amount breaks down to 0.55 acre-feet/year for each lot, consisting of 0.30 acre-feet/year for in house use, 0.20 acre-feet/year for irrigation of 3,500 square feet of home gardens and lawns, and 0.05 acre-feet/year for the watering of 4 large domestic animals.

**Source of Water Supply**

The proposed source of water is individual on lot wells producing from the non-tributary Dawson aquifer that will operate pursuant to the decree and plan for augmentation decreed in Division 1 Water Court case no. 2003CW241 and Division 2 Water Court case no. 2003CW050 ("Decrees"). The allowed average annual amount of withdrawal decreed from the Dawson aquifer is 273.7 acre-feet. The amount decreed is based on a total claimed land area of 298.6 acres. With the exception of approximately 3.7 acres located in the NE1/4 of the SE1/4 of Section 23, Township 11 South, Range 66 West, the land area claimed in this proposal is a portion of the land area claimed in the court decree.

The plan for augmentation provides for 92 residential wells, each with an allowed average annual diversion of 0.55 acre-feet (50.6 acre-feet total). The proposed Dawson aquifer wells must be located on the land claimed in the Decrees, pursuant to paragraph 19 of the Decrees and rule 11.A of the Statewide Nontributary Ground Water Rules (2 CCR 402-7). Based on the land area described in the Decrees, and the amended plat map for the subdivision, portions of proposed lots 56 and 57 are not within the Decreed

Bill Ritter, Jr.  
Governor

Harris D. Sherman  
Executive Director

Dick Wolfe, P.E.  
Director

**RECEIVED**

SEP 02 2008

EPC DEVELOPMENT SERVICES

Office of the State Engineer

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land area. According to the January 17, 2008 letter from David Jones, a plat note will be added that restricts the well sites to the areas of the lots which are located within the approved water augmentation plan area. That plat note must clearly specify that the requirement is for both lots 56 and 57, since both lots have land area outside of the area described in case no. 2003CW050.

According to 37-90-137(4)(b)(I), C.R.S., "Permits issued pursuant to this subsection (4) shall allow withdrawals on the basis of an aquifer life of one hundred years." Based on this allocation approach, the annual amounts of water decreed is equal to one percent of the total amount available as determined by rules 8.A and 8.B of the Statewide Nontributary Ground Water Rules, 2 CCR 402-7. Therefore, the water may be withdrawn in those amounts for a maximum of 100-years.

In the *El Paso County Land Development Code*, effective November, 1986, Chapter 5, Section 49.5, (D), (2) states:

"- Finding of Sufficient Quantity - The water supply shall be of sufficient quantity to meet the average annual demand of the proposed subdivision for a period of three hundred (300) years."

Using an allocation approach based on three hundred years, the allowed average annual amount of withdrawal of 273.7 acre-feet/year would be reduced to one third of that amount, or 91.2 acre-feet/year, which is greater than the annual demand for this subdivision. In addition, the augmentation plan decreed in case nos. 2003CW241 and 2003CW050 is also based on the county's allocation approach. As a result, this water may be withdrawn in the amount of 91.2 acre-feet annually for a maximum of 300-years.

Pursuant to Paragraph 11 of the referenced decree, the decree shall be recorded in the real property records of El Paso County. The decree calls for the creation of a Property Owners Association which all lot purchasers are required to join. The water rights and the plan for augmentation will be assigned to the Property Owners Association, therefore, if lot owners apply for on lot well permits they will not be required to provide evidence that the applicant has acquired the right to the portion of the water being requested on the application.

#### **State Engineer's Office Opinion**

Based upon the above and pursuant to Section 30-28-136(1)(h)(I), C.R.S., it is our opinion that the proposed water supply is adequate and can be provided without causing injury to decreed water rights, **if the plat note described in the January 17, 2008 letter from David Jones is included on the final plat.**

Our opinion that the water supply is **adequate** is based on our determination that the amount of water required annually to serve the subdivision is currently physically available, based on current estimated aquifer conditions.

Our opinion that the water supply can be **provided without causing injury** is based on our determination that the amount of water that is legally available on an annual

basis, according to the statutory allocation approach, for the proposed uses is greater than the annual amount of water required to supply existing water commitments and the demands of the proposed subdivision.

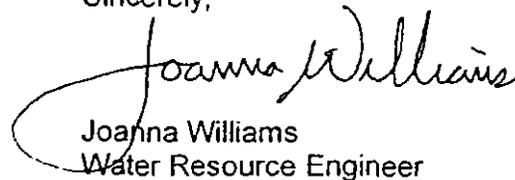
Our opinion is qualified by the following:

The Division 1 Water Court has retained jurisdiction over the final amount of water available pursuant to the above-referenced decree, pending actual geophysical data from the aquifer.

**The amounts of water in the Denver Basin aquifers, and identified in this letter, are calculated based on estimated current aquifer conditions. For planning purposes the county should be aware that the economic life of a water supply based on wells in a given Denver Basin aquifer may be less than the 300 years used for allocation due to anticipated water level declines. We recommend that the county determine whether it is appropriate to require development of renewable water resources for this subdivision to provide for a long-term water supply.**

Should you have any questions, please contact me at 303-866-3581.

Sincerely,



Joanna Williams  
Water Resource Engineer

cc: Jim Hall, Division 1 Office  
Water Supply Branch  
Subdivision File

# EL PASO COUNTY



OFFICE OF THE COUNTY ATTORNEY  
CIVIL DIVISION

Assistant County Attorneys  
M. Cole Emmons  
Lori L. Seago  
Andrew C. Gorgey  
John N. Franklin, Of Counsel

William H. Louis, County Attorney

August 21, 2008

VERSION # 4  
DATE 9/29/08

SF-06-026 Settlers Ranch, Filing No. 2  
(Final Plat)

Reviewed by: M. Cole Emmons, Assistant County Attorney  
Kristine Beatty, Paralegal

PROJECT SAVED  
DATE 9/29/08

**FINDINGS AND CONCLUSIONS:**

1. This is a proposal by Hodgen Settlers Ranch, LLC to subdivide 165.23 acres into 43 single-family residential lots consisting of 2.5 acres – 5.55 acres each and open space consisting of 15 acres. The property is currently zoned PUD (Planned Unit Development).

2. The Applicant provided for the source of water to be from individual on-lot wells withdrawing from the not nontributary Dawson Aquifer. Applicant estimates its annual water requirements for household use at 12.9 acre-feet, irrigation of lawn and gardens at 8.6 acre-feet, and watering of large domesticated animals at 2.15 acre-feet, resulting in a total of 23.65 acre-feet, or 0.55 acre-foot per lot. Applicant will have to be able to provide a supply of 7,095 acre-feet of water (23.65 ac.ft./yr. x 300 yrs.) to meet the County's 300 year water supply requirement. Applicant is not dedicating water for open space as Applicant does not see any reason for use of water for such open space. **The Board of County Commissioners may require dedication of water pursuant to the Land Development Code.**

3. In a letter dated June 11, 2008, the State Engineer's Office indicates that the water supply withdrawing from the Dawson Aquifer operates pursuant to the plan for augmentation decreed in Water Court, Division No. 1, in Case Nos. 03 CW 241, and Division No. 2, 03 CW 50. The Engineer notes that portions of lots 56 and 57 are not within the Decreed Area. The Engineer indicates that with a water supply from the Dawson Aquifer of 237.7 acre-feet (79.2 acre-feet – 300 years) this water supply amount is greater than the annual demand for this subdivision and would satisfy both the State's 100 year and the County's 300 year Aquifer life requirement. Pursuant to §30-28-136(1)(h)(I), C.R.S., the Engineer is of the opinion that the water supply is adequate and can be provided without causing injury to decreed water rights under the provision that a plat note is included as discussed below.

NOTE: The State Engineer transposed the number from the Replacement Plan. The correct amount is 273.7 acre-feet available for annual withdrawal or 91.2 acre-feet annually for

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300 years. Since the Engineer found sufficiency at the lower amount, his finding of sufficiency and no injury would stand with a higher amount of water available.

NOTE: The Applicant indicated to the State Engineer that a Plat note will be added that restricts the well sites to the areas of lots, which are located within the approved water augmentation plan area and that does not include portions of lot numbers 56 and 57, which are outside of the area described in the Court Decree, Case No. 2003 CW 050.

4. The water quality requirements of Section 8.4.7.B.10 of the Land Development Code must be satisfied.

5. The Water Court approved the Judgment and Decree for Water Rights/Augmentation Plan, Case Nos. 03 CW 241 (Water Division No. 1) and 03 CW 50 (Water Division No. 2). The Court ruled that no vested water right or decreed conditional water right will be injured or injuriously affected by operation of the plan for augmentation as decreed.

6. Analysis. The Court decreed a total of 27,370 acre-feet or 273.7 acre-feet annually from the Dawson Aquifer, 27,920 acre-feet or 279.2 acre-feet annually from the Denver Aquifer, 11,930 acre-feet or 119.3 acre-feet annually from the Arapahoe Aquifer, and 8,960 acre-feet or 89.6 acre-feet annually from the Laramie-Fox Hills Aquifer. The Decree requires Applicant to reserve 89.6 acre-feet annually (8,960 acre-feet total) of the Laramie-Fox Hills Aquifer and 62.6 acre-feet annually (6,260 acre-feet total) from the Arapahoe Aquifer for replacing post-pumping depletions. In addition, the Court Decree allows up to 50.6 acre-feet per year for 300 years for a total of no more than 15,180 acre-feet total of Dawson Aquifer to serve (92) residents at full build-out (27,370 acre-feet -15,180 acre-feet = 12,190 acre-feet excess water supply [Dawson]). The 43 residents for this filing will be served from the 15,180 acre-feet available supply. There appears to be a sufficient supply to meet the County's 300 year water supply rule.

7. Therefore, at this time, based upon the finding of no injury and sufficiency by the State Engineer, the decreed water rights in Water Court Case Nos. 03 CW 241 (Div. 1) and 03 CW 50 (Div. 2) and, on the requirements listed below, the County Attorney's Office recommends a finding that the proposed water supply is sufficient in terms of quantity and dependability. The El Paso County Health Department shall provide an opinion as to quality.

#### REQUIREMENTS:

Plat Notes and Documentation are required to address the following:

A. Applicants, their successors and assigns, shall create an HOA and advise the HOA and all future owners of these lots of all applicable requirements of the decrees entered in Case Nos. 03 CW 241 (Div. 1) and 03 CW 50 (Div. 2), as well as their obligations to comply with the decrees, including, but not limited to, costs of operating the plan for augmentation

WATER RESOURCE SUPPORT DATA  
SETTLERS RANCH FINAL PLAT FILING 2C  
June 12, 2018

ENTITLEMENT HISTORY

Initial PUD zoning, PUD development plan approval and preliminary plan approval for the 307 acre, 86 lot Settlers Ranch subdivision was obtained in January of 2005. Final Plat approval for the 132.2 acre, 43 lot Filing No. 1 portion of the Settlers Ranch subdivision was obtained in May of 2005. Final Plat approval for the 162.6 acre, 43 lot Filing No. 2 subdivision was obtained in April of 2009. Though approved, the Filing 2 Final Plat was not recorded in total. Instead, the developer opted to record the Filing 2 plat in phases.

Filing 2A, Phase One, Final Plat, totaling 7 lots, was recorded in the fall of 2013. Filing 2B, Phase Two, Final Plat, totaling 7 lots, was recorded in the fall of 2015. Filing 2C is the third phase of a five phase recording process as documented on the approved and recorded Settlers Ranch Filing 2 Master Phasing Plan.

Filing 2C, the subject of this application, totals 109.59 acres facilitating 11 lots at a minimum of 2.5 acres each on 33.55 acres and two tracts (Tract A – 53.53 acres and Tract B – 22.51 acres) held for future development of later phases.

WATER RESOURCE SUPPORT DATA INCLUDED

- Filing 2C Water Supply Information Summary
- Filing 2 (total) Water Supply Information Summary
- Filing 2 Master Phasing Plan
- Division of Water Resources Letter Dated August 28, 2008
- Office of the County Attorney Letter Dated August 21, 2008
- Wm Curtis Wells & Co, Water Resource Report Dated April 15, 2003
- Special Warranty Deed, Hodgen Settlers Ranch LLC to Settlers Ranch HOA
- County Dept of Health & Environment Water Quality Sufficiency Ltr (all Phases)
- County Dept of Health & Environment Water Quality Requirements
- Aspen Analytical Water Quality Report
- Dist Court, Water Divs 1 & 2, Judgement and Decree

which will include construction and pumping of the Laramie-Fox Hills Aquifer well or the Arapahoe Aquifer Well to replace post-pumping depletions, and responsibility for metering and collecting data regarding water withdrawals from wells.

B. Applicant shall assign or convey to the HOA Applicant's interests, rights, and obligations in the plan for augmentation, and create restrictive covenants upon and running with the property which shall obligate individual lot owners and the HOA to carry out the requirements of the plan for augmentation. Such assignment or conveyance shall be accomplished by an appropriate agreement and assignment or conveyance instrument that shall be reviewed and approved by both the Development Services Department and the County Attorney's Office prior to recording of the final plat.

C. Applicant shall reserve in any deeds of the property 8,960 acre-feet of water in the Laramie-Fox Hills Aquifer and 6,260 acre-feet of water in the Arapahoe Aquifer for use in the augmentation plan. Applicant shall convey by recorded warranty deed these reserved Laramie-Fox Hills and Arapahoe Aquifer water rights to the HOA for use in the augmentation plan. Applicant shall provide copies of such reservation and conveyance instruments that shall be reviewed and approved by both the Development Services Department and the County Attorney's Office prior to recording of the final plat.

D. Applicant, its successors and assigns, at the time of lot sales, shall convey by warranty deed to individual lot owners sufficient water rights in the Dawson Aquifer underlying each lot to satisfy El Paso County's 300 year water supply requirement: (Dawson) 165 acre-feet (0.55 ac. ft./lot x 300 yrs.). Pumping from the Dawson Aquifer is limited to no more than 15,180 acre-feet. It is anticipated that these conveyances will satisfy the State Engineer's evidentiary requirement that an applicant for an individual on-lot well has acquired the right to the portion of water being requested on the application. Applicant shall provide a form deed for such conveyance that shall be reviewed and approved by both the Development Services Department and the County Attorney's Office prior to recording of the final plat.

E. Applicant shall submit Declaration of Covenants, Conditions, and Restrictions as well as Bylaws and Articles of Incorporation of the HOA to the Development Services Department and the County Attorney's Office for review, and the same shall be approved by the Development Services Department and the County Attorney's Office prior to recording of the final plat approval. Said Declaration shall cross-reference the decreed plan for augmentation, the related water rights decrees, and shall recite the obligations of the individual lot owners and the HOA under each of these documents. Applicant shall provide a copy of the Certificate of Incorporation of the HOA by the Secretary of State to the Development Services Department and the County Attorney's Office.

F. Applicant, its successors and assigns, shall record all applicable documents including, but not limited to, the decreed plan for augmentation in Case Nos. 03 CW 241 (Div. 1) and 03 CW 50 (Div. 2), agreements, assignments, and warranty deeds regarding the water

rights, Declaration of Covenants, By-laws, and Articles of Incorporation in the land records of the Office of the Clerk and Recorder of El Paso County, Colorado.

G. The following plat note shall be added that addresses the State Engineer's admonition to advise landowners of potential limited water supplies in the Denver Basin:

*"Water in the Denver Basin Aquifers is allocated based on a 100 year aquifer life; however, for El Paso County planning purposes, water in the Denver Basin Aquifers is evaluated based on a 300 year aquifer life. Applicants, the Home Owners Association, and all future owners in the subdivision should be aware that the economic life of a water supply based on wells in a given Denver Basin aquifer may be less than either the 100 years or 300 years indicated due to anticipated water level declines. Furthermore, the water supply plan should not rely solely upon non-renewable aquifers. Alternative renewable water resources should be acquired and incorporated in a permanent water supply plan that provides future generations with a water supply."*

H. Prior to hearing by the Board, Development Services and County Attorney's Office will make best efforts to obtain a corrected letter from the State Engineer.

I. Applicant shall place a plat note restricting placement of wells on Lots 56 and 57 that restricts the well sites to the areas of these lots which are located within the approved water augmentation plan area and that does not include portions of lot numbers 56 and 57, which are outside of the area described in the Court Decree, Case No. 2003 CW 050.

cc: Carol Weber, Project Manager

6600

Return To:  
Hodgen Settlers Ranch  
17583 Colonial Park Dr  
Monument, CO 80132

ROBERT C. "BOB" BALINK	El Paso County, CO
01/14/2005 09:47:27 AM	
Doc \$0.00 Page	205007424
Rec \$66.00 1 of 13	

DISTRICT COURT, WATER DIVISIONS 1 and 2, COLORADO	
Court Addresses: Water Division 1                      Water Division 2 901 9 <sup>th</sup> Street                              320 W. 10th St., #207 Greeley, CO 80632                        Pueblo, CO 81003	
<b>HODGEN SETTLERS RANCH, LLC, Applicant,</b>  <b>IN EL PASO COUNTY.</b>	
Attorneys: Petrock & Fendel, P.C. Carmen S. Hall, Atty. Reg. #19985 Scott M. Huyler, Atty. Reg. #27342 700 Seventeenth Street, Suite 1800 Denver, Colorado 80202-4162 Telephone: (303) 534-3636	Case Number: 03CW241 (WD #1) 03CW50 (WD #2)
<b>FINDINGS OF FACT, CONCLUSIONS OF LAW, RULING OF THE REFEREE,          JUDGMENT AND DECREE,          IN THE NONTRIBUTARY DENVER, ARAPAHOE AND LARAMIE-FOX HILLS          AND THE NOT NONTRIBUTARY DAWSON AQUIFERS.</b>	

This claim for nontributary and not nontributary ground water and approval of a plan for augmentation having been filed in May, 2003, and all matters contained in the application having been reviewed, and testimony having been taken where such testimony is necessary, and such corrections made as are indicated by the evidence presented herein, the following is hereby the Judgment and Decree of the Court:

**FINDINGS OF FACT**

- Name, Address, Telephone Number of Applicant:  
  
 Hodgen Settlers Ranch, LLC  
 17583 Colonial Park Drive  
 Monument, Colorado 80132  
 (719) 481-9435
- History of Case. The Applicants are represented by Petrock & Fendel, P.C. The applications for approval of groundwater rights and a plan for augmentation were filed in Case No. 03CW50 in Water Division 2 and in Case No. 03CW241 in Water Division 1. A statement

**ACCOMMODATION RECORDING ONLY**

of opposition was filed on behalf of the City of Colorado Springs in Case No. 03CW50. No other statements of opposition were filed and the time for filing such statements has expired. A motion to consolidate the cases was filed before the Panel on Consolidated Multidistrict Litigation in Case No. 03MDL31. The cases were re-referred to the Water Judge by Order of this Court.

3. Subject matter jurisdiction: Timely and adequate notice of the application was published as required by statute. The Court has jurisdiction over the subject matter of this proceeding and the parties affected hereby, whether they have appeared or not.

### APPROVAL OF GROUND WATER RIGHTS

4. Aquifers and location of ground water: Applicant seeks a decree for rights to all ground water recoverable from the nontributary Denver, Arapahoe, and Laramie-Fox Hills and the not nontributary Dawson aquifers underlying approximately 298.6 acres of land located in parts of Sections 23 and 24, T11S, R66W of the 6th P.M., as more particularly described and shown on Attachment A hereto ("Subject Property"). Applicant is the owner of the Subject Property and said land is not located within the boundaries of a designated ground water basin.

5. Well locations, pumping rates and annual amounts: The groundwater may be withdrawn at rates of flow necessary to efficiently withdraw the amounts decreed herein. Applicant will withdraw the subject ground water through wells to be located at any location on the Subject Property. Applicant waives the 600 foot spacing rule as described in Section 37-90-137(2)(b)(I), C.R.S., for wells located on the Subject Property, but must satisfy Section 37-90-137(4), C.R.S. for wells owned by others on adjacent properties. The following average annual amounts are available for withdrawal subject to the Court's retained jurisdiction in this matter:

<u>Aquifer</u>	<u>Saturated Thickness</u>	<u>Annual Amount</u>
Dawson	460 feet	273.7 acre-feet(NNT)*
Denver	550 feet	279.2 acre-feet(NT)
Arapahoe	235 feet	119.3 acre-feet(NT)
Laramie-Fox Hills	200 feet	89.6 acre-feet(NT)

\*Annual amount reduced for water associated with existing well Permit No. 206126 as referenced in the Determination of Facts for the Dawson aquifer issued in this case.

The amounts conform with the values and amounts referenced in the State Engineer's Determination of Facts dated December 10, 2003, for each aquifer.

6. Proposed use: The water withdrawn from the subject aquifers will be used, reused, successively used, leased, sold, or otherwise disposed of for the following beneficial purposes: domestic, industrial, commercial, irrigation, livestock watering, recreational, fish and wildlife, fire protection, and for exchange and augmentation purposes.

7. Final average annual amounts of withdrawal:

A. Final determination of the applicable average saturated sand thickness and resulting average annual amounts available to Applicant will be made pursuant to the retained jurisdiction of this Court, as described in paragraph 24 below. The Court shall use the acre-foot amounts in paragraph 5 herein in the interim period, until a final determination of water rights is made.

B. The allowed annual amount of ground water which may be withdrawn through the wells specified above and any additional wells, pursuant to Section 37-90-137(10), C.R.S., may exceed the average annual amount of withdrawal, as long as the total volume of water withdrawn through such wells and any additional wells therefore subsequent to the date of this decree does not exceed the product of the number of years since the date of the issuance of any well permits or the date of this decree, whichever is earliest in time, multiplied by the average annual amount of withdrawal, as specified above or as determined pursuant to the retained jurisdiction of the Court. However, amounts set forth in well permits will not be exceeded.

8. Source of ground water and limitations on consumption:

A. The ground water to be withdrawn from the Denver, Arapahoe, and Laramie-Fox Hills aquifers is "nontributary ground water" as defined in Section 37-90-103(10.5), C.R.S. and in the Denver Basin Rules, the withdrawal of which will not, within 100 years, deplete the flow of a natural stream, including a natural stream as defined in Section 37-82-101(2) and Section 37-92-102(1)(b), C.R.S., at an annual rate greater than 1/10 of 1% of the annual rate of withdrawal. Ground water to be withdrawn in the Dawson aquifer is "not nontributary" as defined in Sections 37-90-103(10.7) and 37-90-137(9)(c), C.R.S. and part of the Dawson water decreed herein and may be withdrawn pursuant to the augmentation plan decreed herein.

B. Applicants may not consume more than 98% of the annual quantity of water withdrawn from the nontributary aquifers. The relinquishment of 2% of the annual amount of water withdrawn to the stream system, as required by the Denver Basin Rules effective January 1, 1986, may be satisfied by any method selected by the Applicants and satisfactory to the State Engineer, so long as Applicant can demonstrate that an amount equal to 2% of such withdrawals (by volume) has been relinquished to the stream system.

C. There is unappropriated ground water available for withdrawal from the subject aquifers beneath the Subject Property, and the vested water rights of others will not be materially injured by such withdrawals as described herein. Withdrawals hereunder are allowed on the basis of an aquifer life of 100 years, assuming no substantial artificial recharge within 100 years. No material injury to vested water rights of others will result from the issuance of permits for wells which will withdraw not nontributary and nontributary ground water or the exercise of the rights and limitations specified in this decree.

9. Additional wells and well fields:

A. Applicant may construct additional and replacement wells in order to maintain levels of production, to meet water supply demands or to recover the entire amount of groundwater in the subject aquifers underlying the Subject Property. As additional wells are planned, applications shall be filed in accordance with Section 37-90-137(10), C.R.S.

B. Two or more wells constructed into a given aquifer shall be considered a well field. In effecting production of water from such well field, Applicants may produce the entire amount which may be produced from any given aquifer through any combination of wells within the well field.

C. In considering applications for permits for wells or additional wells to withdraw the groundwater which are the subject of this decree, the State Engineer shall be bound by this decree and shall issue said permits in accordance with provisions of Section 37-90-137(10), C.R.S.

D. In the event that the allowed average annual amounts decreed herein are adjusted pursuant to the retained jurisdiction of the Court, Applicant shall obtain permits to reflect such adjusted average annual amounts. Subsequent permits for any wells herein shall likewise reflect any such adjustment of the average annual amounts decreed herein.

E. The water in the Denver, Arapahoe and Laramie-Fox Hills aquifers is nontributary and the water in the Dawson aquifers is not nontributary and up to 50.6 acre-feet per year and no more than 15,180 acre-feet total of water from the Dawson aquifer may be withdrawn pursuant to the augmentation plan decreed herein.

**APPROVAL OF PLAN FOR AUGMENTATION**

10. Approval of plan for augmentation:

A. Groundwater to be augmented: Up to 50.6 acre-feet per year of not nontributary Dawson aquifer groundwater decreed herein over a 300 year period.

B. Water to be used for augmentation: Return flows associated with use of the not nontributary Dawson aquifer and return flows or direct discharge of nontributary ground water decreed herein.

C. Development and Consumptive Use: The subject Dawson aquifer ground water will be used through individual wells to serve up to 92 residential lots for a 300 year period, which wells will withdraw at a rates of flow of 15 gpm. Each well will be limited to an annual amount of 0.55 acre-feet per year for in-house use in one single family residence (0.3 acre-feet) and irrigation (0.2 acre-feet/limited to irrigation of 3500 square-feet of home lawn and garden),

and watering of up to four large domestic animals (0.05 acre-feet). Sewage treatment will be provided by a non-evaporative septic system. Before any other type of sewage treatment is proposed in the future, including incorporation of the Subject Property into a central sewage collection and treatment system, Applicant or successors and assigns, will amend this decree prior to such change and thereby provide notice of the proposed change to other water users by publication procedures required by then existing law. Consumptive use from in-house use is estimated to be 10% of that use and consumptive use from irrigation use will be approximately 90% of that use. Stockwatering use is 100% consumed.

D. Replacement of Depletions During Pumping:

Based on assumed annual pumping of 50.6 acre-feet over a 300 year pumping period, it is estimated that the depletion to the Cherry Creek/South Platte stream system will be approximately 13.8% of average annual pumping or 6.98 acre-feet. (Depletion at 100 years of pumping is approximately 5.05% of average annual pumping or 2.55 acre-feet). It is estimated that depletions to the Monument Creek/Arkansas River stream system at 300 years of pumping is approximately 8.61% of average annual pumping or 4.3 acre-feet. (Depletion at 100 years of pumping is approximately 2.56% of average annual pumping or 1.3 acre-feet). Applicants do not have the physical ability to replace depletions to the Monument Creek stream system, but shall instead replace all such depletions to the Cherry Creek/South Platte stream system. During pumping of the water for use on 92 residential lots for 300 years, annual septic return flows are estimated to be 24.82 acre-feet annually, which is in excess of the combined maximum annual depletion of 11.28 acre-feet to the Monument Creek and South Platte systems during pumping for 300 years.

E. Replacement of Post-pumping Depletions:

Applicant agrees to replace depletions for the shortest of the following periods: the period provided by the Colorado Legislature, should it eventually specify one and if the Applicants obtain water court approval for such modification; the period determined by the State Engineer, should the State Engineer lawfully establish such a period; the period established through rulings of the Colorado Supreme Court on relevant cases; or until Applicants petition the water court and after notice to parties in the case proves that it has complied with all statutory requirements. The court finds that the provisions of this paragraph are adequate to comply with existing law and to prevent injury to others. It is estimated that maximum total depletions to Monument Creek and the South Platte stream systems from pumping of 50.6 acre-feet per year for 300 years will be approximately 22.51% of average annual pumping in the 310th year and will decline thereafter. Applicant's replacement obligation will be the total stream depletion factor for both Monument Creek and the South Platte stream system as shown on Attachment B hereto. That required amount of water will be pumped from the Arapahoe and Laramie-Fox Hills aquifers, decreed and reserved herein or such other source of water as receives judicial approval after notice, into the Cherry Creek stream system.

F. Applicants shall reserve and dedicate to this plan for augmentation, all of the nontributary Laramie-Fox Hills aquifer (89.6 acre-feet per year and 8960 acre-feet total) and 62.6 acre-feet per year and 6260 acre-feet total of the nontributary Arapahoe aquifer water decreed herein for the purpose of replacing to Cherry Creek all post-pumping depletions. If at some time replacement of post-pumping depletions is no longer required pursuant to paragraph 10.E above, said reservation will become null and void at such time as the obligation to replace post-pumping depletions terminates. Applicants will be required to construct a well into the Arapahoe or Laramie-Fox Hills aquifers to provide for post-pumping depletions herein.

11. Applicants shall pay the cost imposed by operation of this augmentation plan until such time as Applicant's shall create a Property Owner's Association which all purchasers of the subject lots shall be required to join. Applicant shall assign to the Property Owner's Association, Applicant's interest and rights and responsibilities in and under this plan for augmentation; Applicant shall also assign to the Property Owner's Association all of the nontributary Laramie-Fox Hills aquifer (89.6 acre-feet per year and 8960 acre-feet total) and 62.6 acre-feet per year and 6260 acre-feet total of the nontributary Arapahoe aquifer water decreed herein. Failure of either the Applicant or the Property Owner's Association to comply with the terms of the decree may result in an order of the Division Engineer's office to curtail or eliminate pumping of the owners wells. 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.

12. Administration of plan for augmentation:

A. Applicant shall report to the Division Engineer for Water Division 1 and 2 upon request, a summary of the monthly metered withdrawals of the subject wells on an accounting form acceptable to the Division Engineer, for the withdrawals during the previous calendar year. Said accounting will be completed by the end of January for the previous calendar year.

B. All withdrawals which are the subject of this decree will be metered.

C. Pursuant to Section 37-92-305(8), C.R.S., the State Engineer shall curtail all out-of-priority diversions, the depletions from which are not so replaced as to prevent injury to vested water rights.

D. The Applicant at the direction of the Division Engineer, shall make total post-pumping replacements to the Cherry Creek stream system pursuant to the total percentage of depletion caused by pumping as referenced on the depletion curve attached hereto on Attachment B.

13. Retained jurisdiction for plan for augmentation:

A. Pursuant to Section 37-92-304(6), C.R.S., the Court retains continuing jurisdiction over the plan for augmentation decreed herein for reconsideration of the question whether the

provisions of this decree are necessary and/or sufficient to prevent injury to vested water rights of others. The Court also has jurisdiction for the purposes of determining compliance with the terms of the augmentation plan. Objector City of Colorado Springs owns senior water rights on Monument Creek that will be negatively impacted by the operation of this decree wherein depletions to the Arkansas River will not be replaced to the Arkansas River, but rather will be replaced to the South Platte River. In addition, Colorado Springs reserves the right to claim that the cumulative negative impacts of this and other similar decrees constitutes injury to its senior Monument Creek rights. In the interest of settlement only, Colorado Springs consents to the entry of this decree. However, by doing so, Colorado Springs does not waive its right to claim injury and to seek relief in the future according to this paragraph.

B. Any person seeking to invoke the retained jurisdiction of the Court shall file a verified petition with the Court. The petition to invoke retained jurisdiction or to modify the Decree shall set forth with particularity the factual basis and the requested decretal language to effect the petition. The party lodging the petition shall have the burden of going forward to establish prima facie facts alleged in the petition. If the Court finds those facts to be established, Applicant shall thereupon have the burden of proof to show: (1) that any modification sought by Applicant will avoid injury to other appropriators, or (2) that any modification sought by Objector is not required to avoid injury to other appropriators, or (3) that any term or condition proposed by Applicant in response to the Objector's petition does avoid injury to other appropriators.

C. The Court retains jurisdiction for the purpose of determining whether the continued reservation of the nontributary water for use on the Subject Property is required. After notice to the State Engineer's Office, if Applicant can demonstrate to the Court that post-pumping depletions need no longer be replaced, the Court may remove the requirement that the nontributary water must be reserved.

### CONCLUSIONS OF LAW

14. The Water Court has jurisdiction over this proceeding pursuant to Section 37-90-137(6), C.R.S. This Court concludes as a matter of law that the application herein is one contemplated by law. Section 37-90-137(4), C.R.S. The application for a decree confirming Applicant's right to withdraw and use all unappropriated ground water from the nontributary aquifer beneath the property as described herein pursuant to Section 37-90-137(4), C.R.S., should be granted, subject to the provisions of this decree. The application for a decree confirming Applicant's right to withdraw and use Dawson aquifer groundwater as decreed herein should be granted pursuant to Section 37-90-137(4) and (9)(c), C.R.S., subject to the provisions of this decree. The withdrawal of part of the Dawson aquifer water decreed herein in accordance with the terms of this decree will not result in material injury to vested water rights of others.

15. This plan for augmentation satisfies the requirements of Section 37-90-137(9)(c), C.R.S., for replacement of actual depletions to the affected stream systems for withdrawals of up to 50.6 acre-feet per year and 15,180 acre-feet total of Dawson aquifer water.

16. The rights to ground water determined herein shall not be administered in accordance with priority of appropriation. Such rights are not "conditional water rights" as defined by Section 37-92-103(6), C.R.S., requiring findings of reasonable diligence and are not applicable to the ground water rights determined herein. The determination of ground water rights herein need not include a date of initiation of the withdrawal project. See Section 37-92-305(11), C.R.S.

### JUDGMENT AND DECREE

The Findings of Fact and Conclusions of Law set forth above are hereby incorporated into the terms of this Ruling and Decree as if the same were fully set forth herein.

17. Full and adequate notice of the application was given, and the Court has jurisdiction over the subject matter and over the parties whether they have appeared or not.

18. Applicant may withdraw the subject ground water herein through wells to be located anywhere on the Subject Property, in the average annual amounts and at the estimated average rates of flow specified herein, subject to the limitations herein and the retained jurisdiction by this Court.

19. Applicant may withdraw up to 50.6 acre-feet per year and 15,180 acre-feet total of not nontributary ground water from the Dawson aquifer under the plan for augmentation decreed herein pursuant to Section 37-90-137(9)(c), C.R.S. Applicant will not withdraw the remaining amount of Dawson aquifer water decreed herein until such withdrawal has been approved in a court approved augmentation plan in a separate case.

20. Applicant has complied with all requirements and met all standards and burdens of proof, including but not limited to Sections 37-90-137(9)(c), 37-92-103(9), 37-92-302, 37-92-304(6), 37-92-305(1), (2), (3), (4), (6), (8), (9), C.R.S., to adjudicate their plan for augmentation and is therefor entitled to a decree confirming and approving their plan for augmentation as described in the findings of fact.

21. Pursuant to Section 37-92-305(5), C.R.S., the replacement water herein shall be of a quality so as to meet the requirements for which the water of the senior appropriator has normally used.

22. The proposed plan for augmentation as described in the findings of fact is hereby approved, confirmed, and adjudicated, including and subject to the terms and conditions specified herein.

23. No owners of or person entitled to use water under a vested water right or decreed conditional water right will be injured or injuriously affected by the operation of the plan for augmentation as decreed herein.

24. Retained Jurisdiction:

A. The Court retains jurisdiction as necessary to adjust the average annual amounts of ground water available under the property to conform to actual local aquifer characteristics as determined from adequate information obtained from wells, pursuant to Section 37-92-305(11), C.R.S. Within 60 days after completion of any well decreed herein or any test hole(s), Applicants or any successor in interest to these water rights shall serve copies of such log(s) upon the State Engineer.

B. At such time as adequate data is available, any person, including the State Engineer, may invoke the Court's retained jurisdiction to make a Final Determination of Water Right. Within four months of notice that the retained jurisdiction for such purpose has been invoked, the State Engineer shall use the information available to him to make a final determination of water rights findings. The State Engineer shall submit such finding to the Water Court and to the Applicant.

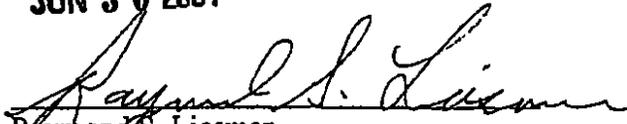
C. If no protest to such finding is made within 60 days, the Final Determination of Water Rights shall be incorporated into the decree by the Water Court. In the event of a protest, or in the event the State Engineer makes no determination within four months, such final determination shall be made by the Water Court after notice and hearing.

25. Continuing Jurisdiction:

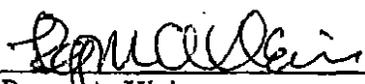
Pursuant to Section 37-92-304(6), C.R.S., the Court retains continuing jurisdiction over the plan for augmentation decreed herein for reconsideration of the question of whether the provisions of this decree are necessary and/or sufficient to prevent injury to vested water rights of others. The Court also retains continuing jurisdiction for the purpose of determining compliance with the terms of the augmentation.

RULING ENTERED this

**JUN 30 2004**

  
Raymond S. Liesman  
Water Referee  
Water Division 1

THE COURT DOTH FIND THAT NO PROTEST TO THE RULING OF THE REFEREE HAS BEEN FILED. THE FOREGOING RULING IS CONFIRMED AND APPROVED AND IS HEREBY MADE THE JUDGMENT AND DECREE OF THIS COURT



Roger A. Klein  
Water Court Judge  
Water Division 1

JUL 22 2004

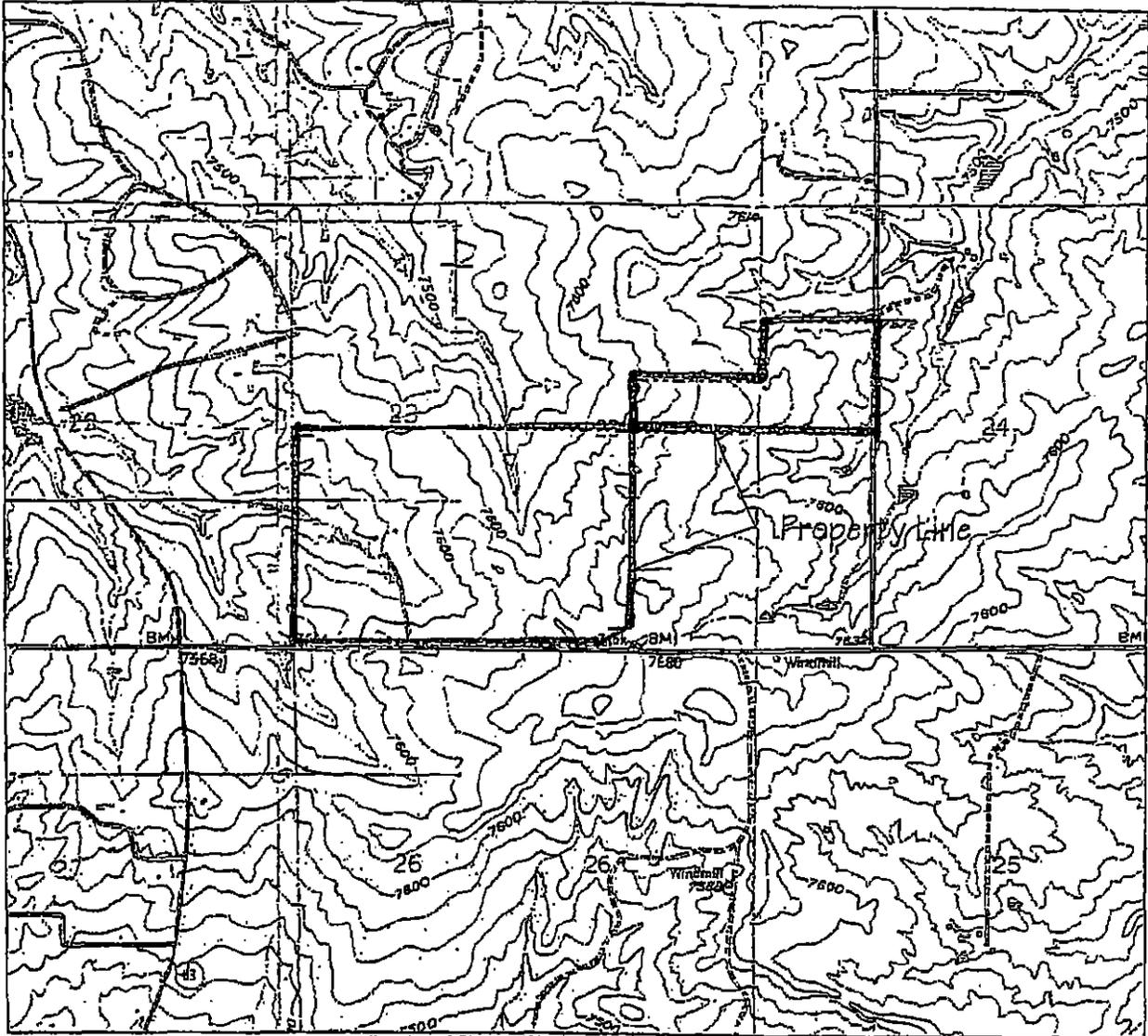
03CW241

ATTACHMENT A

SW1/4; W1/2SE1/4, except for 200' X 300' square in southeast corner, and  
S1/2SE1/4NE1/4 of Section 23; and the SW1/4NW1/4 of Section 24, T11S, R66W of the  
6<sup>th</sup> P.M.

R 66 W

T 11 S



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Scale 1" = 2000'

Location Map

Wm Curtis Wells & Co.  
consulting ground water geologists

Figure 1

## Attachment B

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

Year	South Platte River	Arkansas	Total	Year	South Platte River	Arkansas	Total
10	0.47	0.11	0.57	310	13.74	8.77	22.51
20	1.01	0.28	1.29	320	13.60	8.85	22.45
30	1.56	0.49	2.05	330	13.47	8.88	22.34
40	2.09	0.74	2.83	340	13.33	8.88	22.20
50	2.61	1.02	3.63	350	13.20	8.84	22.04
60	3.13	1.29	4.42	360	13.09	8.79	21.87
70	3.62	1.60	5.22	370	12.99	8.71	21.69
80	4.10	1.92	6.01	380	12.88	8.63	21.51
90	4.58	2.23	6.81	390	12.80	8.53	21.32
100	5.05	2.56	7.60	400	12.71	8.41	21.12
110	5.51	2.88	8.39	410	12.60	8.31	20.91
120	5.97	3.21	9.18	420	12.51	8.20	20.71
130	6.43	3.54	9.97	430	12.42	8.07	20.50
140	6.89	3.86	10.75	440	12.33	7.95	20.28
150	7.34	4.18	11.53	450	12.25	7.81	20.06
160	7.79	4.51	12.30	460	12.16	7.68	19.84
170	8.24	4.83	13.07	470	12.08	7.54	19.62
180	8.68	5.15	13.83	480	11.99	7.42	19.40
190	9.12	5.46	14.58	490	11.89	7.27	19.17
200	9.57	5.77	15.34	500	11.80	7.15	18.95
210	10.00	6.08	16.07	510	11.71	7.02	18.73
220	10.43	6.38	16.81	520	11.62	6.89	18.51
230	10.86	6.67	17.54	530	11.52	6.76	18.28
240	11.29	6.97	18.26	540	11.44	6.63	18.06
250	11.71	7.26	18.97	550	11.34	6.50	17.84
260	12.14	7.54	19.67	560	11.24	6.39	17.63
270	12.55	7.82	20.37	570	11.15	6.26	17.41
280	12.97	8.09	21.06	580	11.06	6.13	17.20
290	13.38	8.35	21.74	590	10.95	6.03	16.98
300	13.80	8.61	22.41	600	10.86	5.92	16.78



Ground Water Investigations LLC · (719) 338-1805

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To: Mark Davis, Managing Member  
Hodgen Settlers Ranch, LLC  
PO Box 1488, Monument, CO 80132-1488

From: Julia M. Murphy, MS, PG

Re: Water Quality Report, Settlers Ranch Subdivision, Filing 3

Date: January 2, 2024

This Water Quality Report was completed for Mark Davis (“Applicant”) by Julia Murphy of Groundwater Investigations LLC (“GWI”), a Professional Geologist, in accordance with the requirements of the El Paso County Land Development Code and the Amendment to the Land Development Code Section 8.4.7 (B)(10). Ms. Murphy has over 25 years’ experience in geologic and hydrogeologic investigations with 10 years’ experience in water quality sampling and analysis of drinking water aquifers with specialization in contaminant hydrogeology.

This report presents a description of groundwater sampling and analysis for the purpose of providing all necessary information for a determination of sufficiency in water quality for Filing 3 of the Settlers Ranch subdivision (“Subdivision”) water supply. The Subdivision water supply is required to meet the Primary Drinking Water Regulations as defined by the Water Quality Control Commissions Regulation 11 under 5CCR 1002-1.

## **1.0 Site Location**

The Settlers Ranch subdivision is located within portions of the NE1/4 and the S1/2 of Section 23 and portions of the NE1/4 of Section 24, Township 11 South, Range 66 West of the 6<sup>th</sup> P.M., El Paso County, Colorado. In general, the subdivision is located west of Stepler Rd, ¼ mile north of Hodgen Rd, east of Settlers Ranch Filing 2C and south of the Settlers View and Abert Ranch subdivisions.

Settlers Ranch Filing 3 is a replat of a portion of Settlers Ranch subdivision located in a portion of the SE ¼ and portion of the SE1/4 of the NE1/4 of Section 23 & the SW1/4 and NW1/4 of Section 24 (Exhibit 1) all within Township 11 South, Range 66 West of the 6<sup>th</sup> P.M., in El Paso County, Colorado.

## **2.0 Subdivision Water Source**

The Dawson aquifer will be the primary source of water to supply groundwater for in-home purposes, irrigation of home gardens and lawns and watering of domestic animals. Each home will discard wastewater through an individual non-evaporative septic disposal system in compliance with and permitted by the El Paso County Department of Health and Environment. The treated water quality discharged to the subsurface meets the water quality sufficiency requirement in compliance with Section 8.4.7(3)(d) of the El Paso County Land Development Code.

### **3.0 Sample Location**

A letter dated January 3, 2023 by the El Paso County Department of Public Health stated that although there was a finding of sufficiency in Water Quality for the entire subdivision in 2000, the requirements have changed and the water quality of Settlers Ranch Filing 3 must be evaluated based on El Paso County Health and El Paso County Planning and Community Development's new requirements. The water sample was collected from the Dawson aquifer well having Permit 86781-F located within Settlers Ranch Filing 2C (Exhibits 1 & 2).

### **4.0 Sample Collection**

Representative water quality samples were collected and received by the laboratory on May 23, 2023; All holding times were met. A Chain of Custody was maintained for the transfer of samples to the Colorado Certified Laboratory and their subcontracted laboratory. Analytes included Inorganic Chemicals, Secondary Maximum Contaminants, Radionuclides, and Bacteriological. Wells for the subdivision will be drawing from the Dawson confined aquifer therefore, in accordance with the LDC 8.4.7 (B) (10), Volatile Organic Compounds and Synthetic Organic Compounds were not included for analysis.

### **5.0 Analysis Results**

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. Secondary contaminants are not health threatening however are included in analysis of public water systems as their presence above the SMCL concentrations may be a nuisance in taste, odor, color or corrosivity; these are non-enforceable for public systems but are intended to give the public guidance on how to mitigate these chemicals.

The analysis results for each constituent were compared to the Colorado Primary Drinking Water Standards maximum contaminant levels (MCL) and secondary MCLs (SMCLs) (EXHIBIT 3). All concentrations are at or below the primary drinking water MCLs. PH of the water sample was 5.89 and exceeded the SMCL of 6.5 to 8.5 pH Units. Low pH increases the potential for water corrosivity. The Langelier Saturation Index was calculated to evaluate corrosivity.

**5.1. Corrosivity.** The Langelier Saturation Index serves as a guide in evaluating the degree of potential corrosivity of well water. Results indicate the groundwater at the sample location is considered "moderately" corrosive and treatment "may" be needed. A simple pretreatment system such as a neutralizing tank can change the water to a less corrosive chemistry.

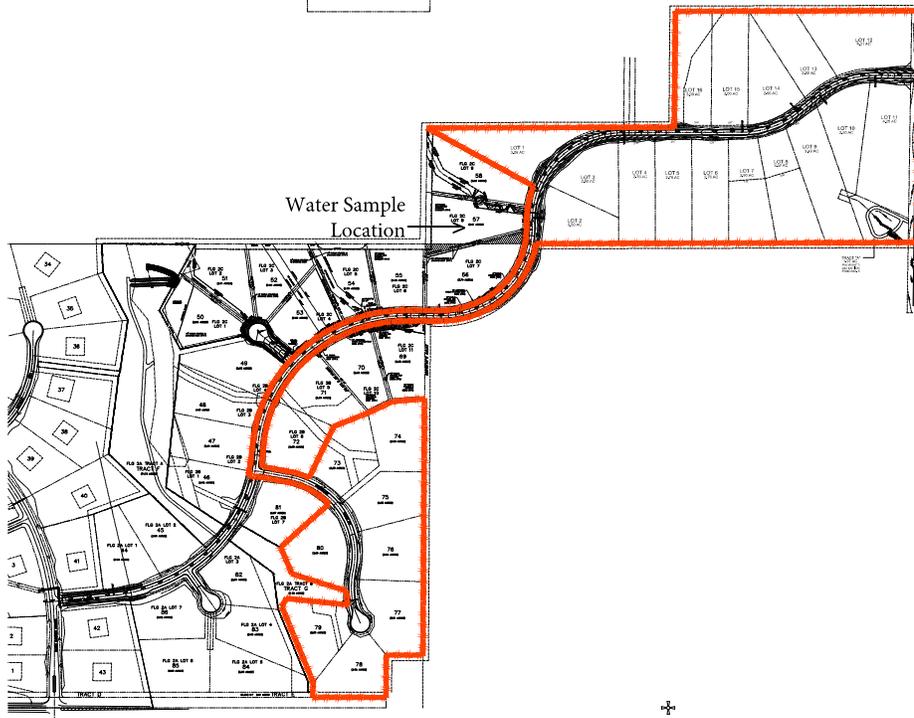
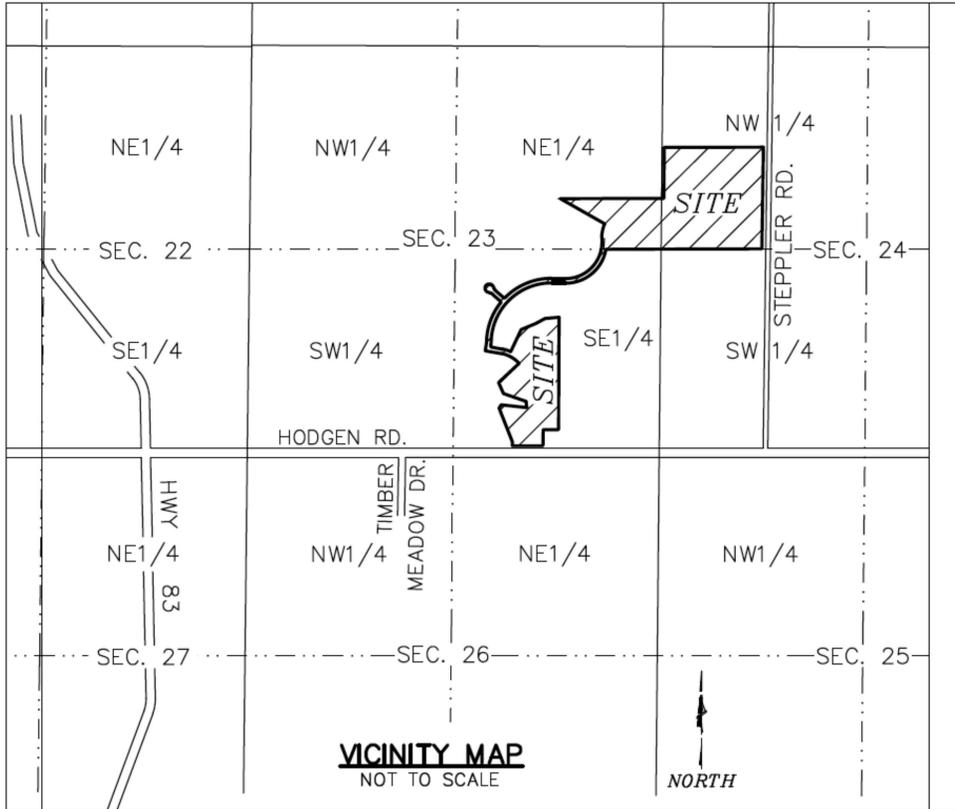
### **6.0 Sources of Potential Contaminants**

Settlers Ranch Subdivision is situated in a rural residential area surrounded by lots of 2.5 to 40 acres. There are no existing commercial sites. Zoning is rural residential and there is no proposed plan that would indicate future commercial or industrial use. Due to slow vertical infiltration as a result of impeding clay layers, there is a low possibility for on-site or off-site

sources of potential water quality degradation. On-site septic system with leach field will be used to treat wastewater, however they are not considered a potential contaminant source when they are designed in accordance with existing protective regulations. Each Septic system will meet permit criteria specified by the El Paso County Public Health and will thereby in compliance with water discharge water quality standards.

## **7.0 Recommendations**

The analysis results for each constituent were shown to meet or exceed Colorado Primary Drinking Water Standards. Only pH exceeded the SMCL. Results indicate the groundwater at the sample location is considered “moderately” corrosive and treatment “may” be needed depending on the type of plumbing installed which is at the discretion of the new homeowner. If applicable, the corrosivity can be controlled by a simple pretreatment system such as a neutralizing tank. Based on the analysis results, the water supply is sufficient in terms of water quality.



**EXHIBIT 1**  
 Settlers Ranch Subdivision Filing 3



14) This well is subject to administration by the Division Engineer in accordance with applicable decrees, statutes, rules, and regulations.

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

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

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

NOTE: A hydrogeologic aquifer evaluation has been completed for this permit and the details of the evaluation can be viewed in the hydrogeologic aquifer evaluation imaged document and the original permit file.



Issued By DEBRA GONZALES

Date Issued: 3/15/2022

Expiration Date: 3/15/2023

**PERMIT HISTORY**

04-11-2022 GEOPHYSICAL LOG WAIVED



## Analytical Results

TASK NO: 230522036

Report To: Julia M. Murphy

Company: Groundwater Investigations LLC  
11590 Black Forest Road, Suite 15  
Colorado Springs CO 80908

Bill To: Julia M. Murphy

Company: Groundwater Investigations LLC  
11590 Black Forest Road, Suite 15  
Colorado Springs CO 80908

Task No.: 230522036  
Client PO:  
Client Project: Settlers Ranch Filing 3

Date Received: 5/22/23  
Date Reported: 6/5/23  
Matrix: Water - Drinking

Customer Sample ID SR522  
Sample Date/Time: 5/22/23 8:30 AM  
Lab Number: 230522036-01

Test	Result	Method	RL	MCL	Date Analyzed	QC Batch ID	Analyzed By
Nitrate/ Nitrite Nitrogen	0.49 mg/L	Calculation	0.05 mg/L		5/24/23	-	NRP
Chloride	1.4 mg/L	EPA 300.0	0.1 mg/L		5/23/23	QC65198	NRP
Fluoride	0.12 mg/L	EPA 300.0	0.10 mg/L	4	5/23/23	QC65199	NRP
Nitrate Nitrogen	0.49 mg/L	EPA 300.0	0.05 mg/L	10	5/23/23	QC65201	NRP
Nitrite Nitrogen	ND	EPA 300.0	0.03 mg/L	1	5/23/23	QC65202	NRP
Sulfate	3.2 mg/L	EPA 300.0	0.1 mg/L		5/23/23	QC65200	NRP
Cyanide-Total	ND	EPA 335.4	0.005 mg/L	0.02	5/24/23	QC65250	DPL
<b>Total</b>							
Iron	ND	EPA 200.7	0.005 mg/L	0.3	5/24/23	QC65217	MAT
Aluminum	0.005 mg/L	EPA 200.8	0.001 mg/L	0.05	5/24/23	QC65182	MBN
Antimony	ND	EPA 200.8	0.0012 mg/L	0.006	5/24/23	QC65182	MBN
Arsenic	ND	EPA 200.8	0.0006 mg/L	0.01	5/24/23	QC65182	MBN
Barium	0.0390 mg/L	EPA 200.8	0.0007 mg/L	2	5/24/23	QC65182	MBN
Beryllium	0.0001 mg/L	EPA 200.8	0.0001 mg/L	0.004	5/24/23	QC65182	MBN
Cadmium	ND	EPA 200.8	0.0001 mg/L	0.005	5/24/23	QC65182	MBN
Chromium	ND	EPA 200.8	0.0015 mg/L	0.1	5/24/23	QC65182	MBN
Manganese	ND	EPA 200.8	0.0008 mg/L	0.05	5/24/23	QC65182	MBN
Mercury	ND	EPA 200.8	0.0001 mg/L	0.002	5/24/23	QC65182	MBN
Selenium	0.0033 mg/L	EPA 200.8	0.0008 mg/L	0.05	5/24/23	QC65182	MBN
Silver	ND	EPA 200.8	0.0005 mg/L	0.1	5/24/23	QC65182	MBN

**Abbreviations/ References:**

RL = Reporting Limit - Minimum Level  
mg/L = Milligrams Per Liter or PPM  
ug/L = Micrograms Per Liter or PPB  
mpn/100 ml = Most Probable Number Index/ 100 ml  
Date Analyzed = Date Test Completed

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

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

**Report To:** Julia M. Murphy  
**Company:** Groundwater Investigations LLC

**Receive Date:** 5/22/23  
**Project Name:** Settlers Ranch Filing 3

Test	QC Batch ID	QC Type	Result	Method	Prep Date
Chloride	QC85198	Blank	ND	EPA 300.0	5/23/23
Cyanide-Total	QC85250	Blank	ND	EPA 335.4	5/24/23
Fluoride	QC85199	Blank	ND	EPA 300.0	5/23/23
Aluminum	QC85182	Method Blank	ND	EPA 200.8	5/22/23
Antimony	QC85182	Method Blank	ND	EPA 200.8	5/22/23
Arsenic	QC85182	Method Blank	ND	EPA 200.8	5/22/23
Barium	QC85182	Method Blank	ND	EPA 200.8	5/22/23
Beryllium	QC85182	Method Blank	ND	EPA 200.8	5/22/23
Cadmium	QC85182	Method Blank	ND	EPA 200.8	5/22/23
Chromium	QC85182	Method Blank	ND	EPA 200.8	5/22/23
Manganese	QC85182	Method Blank	ND	EPA 200.8	5/22/23
Mercury	QC85182	Method Blank	ND	EPA 200.8	5/22/23
Selenium	QC85182	Method Blank	ND	EPA 200.8	5/22/23
Silver	QC85182	Method Blank	ND	EPA 200.8	5/22/23
Thallium	QC85182	Method Blank	ND	EPA 200.8	5/22/23
Zinc	QC85182	Method Blank	ND	EPA 200.8	5/22/23
Iron	QC85217	Method Blank	ND	EPA 200.7	5/22/23
Nitrate Nitrogen	QC85201	Blank	ND	EPA 300.0	5/23/23
Nitrite Nitrogen	QC85202	Blank	ND	EPA 300.0	5/23/23
Sulfate	QC85200	Blank	ND	EPA 300.0	5/23/23

Test	QC Batch ID	QC Type	Limits	% Rec	RPD	Method
Chloride	QC85198	Duplicate	0 - 20	-	0.4	EPA 300.0
		LCS	90 - 110	97.9	-	
		MS	75 - 125	100.2	-	
Cyanide-Total	QC85250	Duplicate	0 - 20	-	9.5	EPA 335.4
		LCS	90 - 110	105.1	-	
		MS	75 - 125	106.5	-	
Fluoride	QC85199	Duplicate	0 - 20	-	1.9	EPA 300.0
		LCS	90 - 110	90.8	-	
		MS	75 - 125	98.2	-	
Aluminum	QC85182	LCS	90 - 110	108.2	-	EPA 200.8
		MS	70 - 130	106.8	-	
		MSD	0 - 10	-	2.3	
Antimony	QC85182	LCS	90 - 110	108.8	-	EPA 200.8
		MS	70 - 130	111.4	-	
		MSD	0 - 10	-	0.3	
Arsenic	QC85182	LCS	90 - 110	109.1	-	EPA 200.8
		MS	70 - 130	120.2	-	
		MSD	0 - 10	-	4.4	
Barium	QC85182	LCS	90 - 110	108.5	-	EPA 200.8

**Abbreviations/References:**

RL = Reporting Limit - Minimum Level  
mg/L = Milligrams Per Liter or PPM  
ug/L = Micrograms Per Liter or PPB  
mpn/100 ml = Most Probable Number Index/ 100 ml  
Date Analyzed = Date Test Completed

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

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

Test	QC Batch ID	QC Type	Limits	% Rec	RPD	Method
Beryllium	QC85182	MS	70 - 130	112.3	-	EPA 200.8
		MSD	0 - 10	-	3.8	
		LCS	90 - 110	107.4	-	
Cadmium	QC85182	MS	70 - 130	110.3	-	EPA 200.8
		MSD	0 - 10	-	4.7	
		LCS	90 - 110	104.6	-	
Chromium	QC85182	MS	70 - 130	111.4	-	EPA 200.8
		MSD	0 - 10	-	0.4	
		LCS	90 - 110	108.4	-	
Manganese	QC85182	MS	70 - 130	111.4	-	EPA 200.8
		MSD	0 - 10	-	0.4	
		LCS	90 - 110	109.2	-	
Mercury	QC85182	MS	70 - 130	111.2	-	EPA 200.8
		MSD	0 - 10	-	0.1	
		LCS	90 - 110	104.3	-	
Selenium	QC85182	MS	70 - 130	85.2	-	EPA 200.8
		MSD	0 - 10	-	6.9	
		LCS	90 - 110	104.7	-	
Silver	QC85182	MS	70 - 130	121.1	-	EPA 200.8
		MSD	0 - 10	-	8.2	
		LCS	90 - 110	99.8	-	
Thallium	QC85182	MS	70 - 130	101.0	-	EPA 200.8
		MSD	0 - 10	-	1.0	
		LCS	90 - 110	107.0	-	
Zinc	QC85182	MS	70 - 130	105.5	-	EPA 200.8
		MSD	0 - 10	-	2.3	
		LCS	90 - 110	108.5	-	
Iron	QC85217	MS	70 - 130	112.8	-	EPA 200.7
		MSD	0 - 10	-	0.6	
		Duplicate	0 - 20	-	0.2	
Nitrate Nitrogen	QC85201	LCS	90 - 110	97.9	-	EPA 300.0
		MS	75 - 125	79.5	-	
		Duplicate	0 - 20	-	0.1	
Nitrite Nitrogen	QC85202	LCS	90 - 110	94.3	-	EPA 300.0
		MS	75 - 125	81.8	-	
		Duplicate	0 - 20	-	0.0	
Sulfate	QC85200	LCS	90 - 110	91.0	-	EPA 300.0
		MS	75 - 125	99.6	-	
		Duplicate	0 - 20	-	0.3	
		LCS	90 - 110	97.1	-	
		MS	75 - 125	87.4	-	
		Duplicate	0 - 20	-	0.3	

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

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





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

Lab Control ID: 23H01943

Received: May 23, 2023

Reported: Jul 21, 2023

Purchase Order No.

None Received

Customer ID: 20040H

Account ID: Z01034

Rebecca Manzanares  
Colorado Analytical Laboratories, Inc.  
10411 Heinz Way  
Commerce City, CO 80640

## REVISED ANALYTICAL REPORT

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

By: Michelle Stringer for  
Roxanne Sullivan  
Analytical Laboratories Director



Customer ID: 20040H  
 Account ID: Z01034

**REVISED ANALYTICAL REPORT**

Rebecca Manzanares  
 Colorado Analytical Laboratories, Inc.

<b>Lab Sample ID</b>			23H01943-001					
<b>Customer Sample ID</b>			230522047-01 - Settlers Ranch Subdivision - SR522 sampled on 05/22/23 @ 0830					
Parameter	Units	Code	Precision* Detection			Method	Analysis	
			Result	+/-	Limit		Date / Time	Analyst
Gross Alpha	pCi/L	T	1.1	1.5	0.1	SM 7110 B	6/22/23 @ 1352	KT
Gross Beta	pCi/L	T	<3.1	2.5	3.1	SM 7110 B	6/22/23 @ 1352	KT
Radium-226	pCi/L	T	NR	-	-	SM 7500-Ra B	-	-
Radium-228	pCi/L	T	NR	-	-	EPA pg.19	-	-

<b>Lab Sample ID</b>			23H01943-002					
<b>Customer Sample ID</b>			230522047-01A - Settlers Ranch Subdivision - SR522 sampled on 05/22/23 @ 0830					
Parameter	Units	Code	Precision* Detection			Method	Analysis	
			Result	+/-	Limit		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	0.5	0.3	0.2	SM 7500-Ra B	7/5/23 @ 1245	KT
Radium-228	pCi/L	T	1.2	0.9	0.1	EPA pg.19	7/3/23 @ 1125	JR

7-21-23: Report revised to change project name per client's request.

5-24-23: Gross alpha analysis was changed to gross alpha and beta per client request.

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

Certification ID's: CO/EPA CO00008

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

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

**Batch QC Summary Form**

Analyte: Gross Alpha

Control Standard/LFB: ID: C11a-004 pCi/mL: 57.4 (use 1 diluted)

Spike Solution: ID: C11a-004 pCi/mL: 57.4 (use 1 mL)

Spike Recovery Calculation: Sample: Tap\*

$$\text{Calculation: } \frac{(54.4) - (1.000) - (0.9) - (0.200)}{57.4} \times 100 = 94\%$$

Batch QC Evaluation:

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

\* Required for batch size greater than 10 samples.

Conclusions:

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

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

Narrative:

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

Batch Listing by Lab Control Number:

<u>23H01900</u>	<u>23H01923</u>
<u>23H01915</u>	<u>23H01924</u>
<u>23H02001</u>	<u>23H01925</u>
<u>23H02016</u>	<u>23H01926</u>
<u>23H02018</u>	<u>23H01939</u>
<u>23H02035</u>	<u>23H01943</u>
<u>23H02064</u>	<u>23H01981</u>
<u>23H02070</u>	_____
<u>23H01908</u>	_____
<u>23H01914</u>	_____

Evaluator:

*Michelle Stringer* \_\_\_\_\_

06/29/2023

Date

**Batch QC Summary Form**

Analyte: Gross Beta

Control Standard/LFB: ID: C11a-004 pCi/mL: 44 (use 1 diluted)

Spike Solution: ID: C11a-004 pCi/mL: 44 (use 1 mL)

Spike Recovery Calculation: Sample: Tap\*

$$\text{Calculation: } \frac{(40.4) - (1.000) - (0.0)}{44} + \frac{(0.200)}{44} \times 100 = 92\%$$

Batch QC Evaluation:

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

\* Required for batch size greater than 10 samples.

Conclusions:

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

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

Narrative:

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

Batch Listing by Lab Control Number:

<u>23H01900</u>	<u>23H01923</u>
<u>23H01915</u>	<u>23H01924</u>
<u>23H02001</u>	<u>23H01925</u>
<u>23H02016</u>	<u>23H01926</u>
<u>23H02018</u>	<u>23H01939</u>
<u>23H02035</u>	<u>23H01943</u>
<u>23H02064</u>	<u>23H01981</u>
<u>23H02070</u>	_____
<u>23H01908</u>	_____
<u>23H01914</u>	_____

Evaluator:

*Michelle Stringer* \_\_\_\_\_

06/29/2023

Date

**Batch QC Summary Form**

Analyte: Radium-226

Control Standard/LFB: ID: C73-001 pCi/mL: 21.1 (use 2 diluted)

Spike Solution: ID: C73-001 pCi/mL: 21.1 (use 2 mL)

Spike Recovery Calculation: Sample: 23H01944-02b

$$\text{Calculation: } \frac{(47.5) (1.000) - (1.1) (1.000)}{42.2} \times 100 = 110\%$$

Batch QC Evaluation:

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

\* Required for batch size greater than 10 samples.

Conclusions:

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

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

Narrative:

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

Batch Listing by Lab Control Number:

<u>23H01934</u>	<u>          </u>
<u>23H01943</u>	<u>          </u>
<u>23H01944</u>	<u>          </u>
<u>23H02136</u>	<u>          </u>
<u>23H02158</u>	<u>          </u>
<u>          </u>	<u>          </u>

Evaluator:  
 \_\_\_\_\_

07/10/2023  
Date

**Batch QC Summary Form**

Analyte: Radium-228

Control Standard/LFB: ID: C6-005 pCi/mL: 14.5 (use 5 diluted)

Spike Solution: ID: C6-005 pCi/mL: 14.5 (use 5 mL)

Spike Recovery Calculation: Sample: 23H01943-2b

$$\text{Calculation: } \frac{(72.1) (1.000) - (1.2) (1.000)}{72.5} \times 100 = 97.8\%$$

Batch QC Evaluation:

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

\* Required for batch size greater than 10 samples.

Conclusions:

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

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

Narrative:

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

Batch Listing by Lab Control Number:

<u>23H01934</u>	_____
<u>23H01942</u>	_____
<u>23H01943</u>	_____
<u>23H02116</u>	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Evaluator:  
 \_\_\_\_\_

\_\_\_\_\_ 07/10/2023  
Date

23HØ1943



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

<b>Report To Information</b> Company Name: <u>Colorado Analytical Laboratory</u> Report To: <u>Stuart Nielson</u> E-Mail: <u>stuartnielson@coloradolab.com</u>	<b>Bill To Information (if different from report to)</b>	<b>Project Name</b> <u>New Breed Ranch Subdivision</u>
<b>Address:</b> <u>10411 Heinz Way</u> <u>Commerce City, CO 80640</u> <b>Phone:</b> <u>303-659-2313</u>	<b>Address:</b>	<b>Compliance Samples:</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> <b>Submit Data to CDPHE:</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
	<b>CAL TASK</b> <u>230522047</u> <u>NAB</u>	

**Tests Requested**

Sample Date/Time	Sample ID	Matrix	Container Type
5/22/23	8:30 AM 230522047-01 - SR522	Water - Drinking	1L - Unpreserved
5/22/23	8:30 AM 230522047-01A - SR522	Water - Drinking	4 - 1L - Unpreserved

Comment:

Radium 228 (Sub)	
Gross Alpha (Sub)	X
Radium 226 (Sub)	X

*Preservation on 5/24/23 1500*  
*All preserved by 5/23/23 1320*

Relinquished by: <i>[Signature]</i> (Signature)	Date: <u>5/23/23</u> Time: <u>1030</u>	Received by: <u>[Signature]</u> (Signature)	Date: <u>23 MAY 2023</u> Time: <u>1245</u>
--	---	--	---

23H01943

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



<b>Report To Information</b> Company Name: <u>Colorado Analytical Laboratory</u> Report To: <u>Stuart Nielson</u> E-Mail: <u>stuartnielson@coloradolab.com</u>	<b>Bill To Information (if different from report to)</b> Project Name <u>New Breed Ranch Subdivision</u>
<b>Address:</b> <u>10411 Heinz Way</u> <u>Commerce City, CO 80640</u> Phone: <u>303-659-2313</u>	<b>Address:</b> CAL TASK <u>230522047</u> NAB
<b>Compliance Samples:</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> <b>Submit Data to CDPHE:</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	

**Tests Requested**

Sample Date/Time	Sample ID	Matrix	Container Type
5/22/23	8:30 AM 230522047-01 - SR522	Water - Drinking	1L - Unpreserved
5/22/23	8:30 AM 230522047-01A - SR522	Water - Drinking	4 - 1L - Unpreserved

Comment:

Radium 228 (Sub)   
 Gross Alpha/Beta (Sub)   
 Radium 226 (Sub)

Relinquished by: (Signature) <i>[Signature]</i>	Date: Time: 5/23/23 1030	Relinquished by: (Signature)	Date: Time:
Received by: (Signature)	Date: Time:	Received by: (Signature)	Date: Time:



**Analytical Results**

**TASK NO: 230522036**

**Report To:** Julia M. Murphy  
**Company:** Groundwater Investigations LLC  
 11590 Black Forest Road, Suite 15  
 Colorado Springs CO 80908

**Bill To:** Julia M. Murphy  
**Company:** Groundwater Investigations LLC  
 11590 Black Forest Road, Suite 15  
 Colorado Springs CO 80908

<b>Task No.:</b> 230522036	<b>Date Received:</b> 5/22/23
<b>Client PO:</b>	<b>Date Reported:</b> 6/5/23
<b>Client Project:</b> Settlers Ranch Filing 3	<b>Matrix:</b> Water - Drinking

Lab Number	Customer Sample ID	Sample Date/Time	Test	Result	Method	Date Analyzed
230522036-01C	SR522	5/22/23 8:30 AM	Total Coliform E-Coli	<b>Absent</b> <b>Absent</b>	SM 9223 SM 9223	5/23/23 5/23/23

**Abbreviations/References:**

Absent - Coliform Not Detected  
 Present - Coliform Detected - Chlorination Recommended  
 Date Analyzed - Date Test Completed  
 SM - "Standard Methods for the Examination of Water and Wastewater", APHA, 19th Edition, 1995



DATA APPROVED FOR RELEASE BY

