

WATER RESOURCES REPORT

for

***J+M Investments, LLC
Kettle Creek Estates***

EPC Parcels #: 6228005048

March 2024

Prepared By:



KETTLE CREEK ESTATES
FILING NO. 2
10245 Otero Ave
EPC Parcel # 6228005048

WATER RESOURCES REPORT

MARCH 2024

Prepared for:

J+M Investments, LLC
5655 Bridlespur Ridge Pl
Colorado Springs, CO 80918

Prepared by:

RESPEC, LLC
5540 Tech Center Drive, Suite 100
Colorado Springs, CO 80919

Table of Contents

1.0	INTRODUCTION AND EXECUTIVE SUMMARY	1
2.0	PROJECTED LAND USES	1
2.1	<i>Projected Land Uses</i>	1
3.0	WATER NEEDS AND PROJECTED DEMANDS	1
3.1	<i>Water Demand Summary</i>	1
3.2	<i>Unit Water User Characteristics</i>	2
3.3	<i>Demand versus Supply</i>	2
4.0	WATER RIGHTS AND SUPPLY	3
4.1	<i>Water Rights</i>	3
4.2	<i>Adequacy of Water Rights</i>	4
4.3	<i>Description of Current Water Rights</i>	4
5.0	WATER SYSTEM FACILITIES AND PHYSICAL SUPPLY	5
5.1	<i>Source of Supply</i>	5
5.2	<i>Water Treatment</i>	5
5.3	<i>Water Storage</i>	5
5.4	<i>Distribution, Pumping, and Transmission Lines</i>	5
5.5	<i>Water Quality</i>	5
6.0	EL PASO COUNTY MASTER PLANNING ELEMENTS	7
6.1	<i>County Water Master Plan 2040 and 2060 Projections</i>	7
6.2	<i>Buildout (Including 2040 and 2060 Buildout):</i>	7
6.3	<i>Description of Long-Term Planning and Future Sources of Supply</i>	7
6.4	<i>Water System Interconnects</i>	7
7.0	CONCLUSION	7

APPENDICES

Appendix A – Land Use Exhibit

Appendix B – Water Supply Information Summary – SEO Form

Appendix C – Determinations and Decrees

Appendix D – Water Quality Results

1.0 INTRODUCTION AND EXECUTIVE SUMMARY

The purpose of this report is to address the specific water needs of a proposed subdivision of Parcel #6228005048 in El Paso County, CO.

EXECUTIVE SUMMARY: The water rights and augmentation plan in place for the existing parcel are adequate to meet the needs of one (1) lot proposed for the subdivision on a 300-year basis.

2.0 PROJECTED LAND USES

2.1 Projected Land Uses

This report pertains to the existing 5.13-acre parcel that is proposed to be subdivided into two (2) lots, Lot 1 being 2.63 acres and Lot 2 being 2.50 acres. Lot 1 has the existing Denver well which is exempt and not included in the proposed augmentation plan. Lot 2 will be served by a new Arapahoe Well and will be served by a proposed augmentation plan. Please refer to the *Land Use Exhibit* in **Appendix A** which has Lot 1 and Lot 2 specified.

3.0 WATER NEEDS AND PROJECTED DEMANDS

3.1 Water Demand Summary

It is anticipated that the proposed two residential lots, one consisting of approximately 2.63 acres and one of 2.50-acre lots, will use approximately 0.26 AF/year/residence of water for indoor household use. Lot 1, with the existing exempt Denver well will use a total of 0.28 AF/year of water combined water uses for the lot. Lot 2, which will be served by a new Arapahoe Well, will use a total of 0.44 AF/year of water combined water uses for the lot. This estimate is based upon information provided in Chapter 8 of the *El Paso County Land Development Code* as well as the *Findings of Fact* in the proposed decree # 23CW3045 located in **Appendix C**. Water demands and wastewater loads are shown Tables 3-1A and 3-1B below:

Table 3-1A: Summary of Expected Water Demands & Wastewater Loads for Arapahoe Well

Water						Wastewater
# of SFEs	Annual Indoor Use 0.26 (AF/YR/SFE)	Average Daily Indoor Use (GPD)	Irrigation 0.0566 (AF/1,000 SF)	Domestic Watering 0.011 (AF/Horse/Year)	Total Indoor, Watering, & Irrigation (AF)	ADF (@ 90% Indoor Use) (GPD)
1	<i>Note 1</i> 0.260	232	<i>Note 2</i> 0.158	<i>Note 3</i> 0.022	0.44	209
Total					0.44	209

Note 1: *Per 23CW3045 Section 24.A.*

Note 2: *Assuming 0.0566 AF/1000 ft² per EPC Land Development Code for 2,800 ft² of lawn/garden.*

Note 3: *Per 23CW3045 Section 24.A. assume 2 horses. Assuming 0.011 AF/year per head.*

Table 3-1B: Summary of Expected Water Demands & Waste Loads for Exempt Denver Well

Water						Wastewater
# of SFEs	Annual Indoor Use 0.26 (AF/YR/SFE)	Average Daily Indoor Use (GPD)	Irrigation 0.0566 (AF/1,000 SF)	Domestic Watering 0.006 (AF/Horse/Year)	Total Indoor, Watering, & Irrigation (AF)	ADF (@ 90% Indoor Use) (GPD)
1	Note 1 0.26	232	Note 2 0.00	Note 3 0.006	0.28	209
Total					0.28	209

Note 1: *Per 23CW3045 Section 24.C.*

Note 2: *Existing permit #172655 does not allow exempt well uses for outdoor irrigation.*

Note 3: *Per 23CW3045 Section 24.A. assume 2 horses. Assuming 0.011 AF/year per head. Existing well permit #172655 allows for stock watering of non-commercial animals.*

3.2 Unit Water User Characteristics

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

3.3 Demand versus Supply

An overall demand of 0.44 AF/year for the proposed Lot 2 Arapahoe Well is less than the amount of supply listed in the proposed decrees, determinations, and *Findings of Fact* (provided in **Appendix C**) and is further discussed in Section 4.0 of this report. In addition, the proposed demand of 0.28 AF/year for the existing exempt Denver Well in Lot 1 is also less than the 0.29 AF/year on a 300-year basis reserved for the Denver Well as described in Part 16 of proposed Decree # 23CW3045.

4.0 WATER RIGHTS AND SUPPLY

4.1 Water Rights

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

Table 4-1: Water Rights Summary

Kettle Creek Estates

Overall Water Supply Inventory

Land Formation/ Aquifer	Determination	Tributary Status	Area	Total Decreed Water	Annual Allocation 100-Year	Annual Allocation 300-Year
			(Acres)	(AF)	(AF/Year)	(AF/Year)
Dawson	N/A	NNT	5.13	N/A	N/A	N/A
Denver ¹	23CW3045	NNT	5.13	0	0	0
Arapahoe	23CW3045	NNT	5.13	227	2.27	0.75
Laramie-Fox Hills	23CW3045	NT	5.13	135	1.35	0.45
Total Legal Supply					3.62	1.21
					<i>100-Year</i>	<i>300-Year</i>

Beneficial Uses: *Domestic Indoor
Indoor & Outdoor Irrigation, Livestock*

Note 1: Applicant has reserved all of the available Denver Aquifer supplies to support pumping from the existing exempt well, J+M Well No. 1, this brings the remaining available Denver Aquifer supplies to 0. The available water amounts before reservation were: Total Appropriation 87.2af, Annual Avg. Withdrawal 100 Years 0.87af, Annual Avg. Withdrawal 300 Years 0.29af

According to the *Findings of Fact contained in Proposed Decree No. 23CW3045* located in **Appendix C**, the following conditions are allowed for the subject property:

- Water may be withdrawn through the existing well (Permit #172655), also known as J+M Well No. 1 in proposed decree no. 23CW3045. The existing Denver well currently serves the existing residence on Lot 1, the North 2.63 acres of the property. Original permit number 172655 to operate this well is contained in **Appendix C**.
- The additional well on Lot 2 is to be drilled into the Arapahoe aquifer, also known as J+M Well No. 2 in proposed decree no. 23CW3045. The new well will be metered.
- Type of use to which the Arapahoe water pumped must be used for domestic indoor use, indoor and outdoor irrigation, as well as livestock, pursuant to the augmentation plan. Other uses such as commercial, industrial, fish and

wildlife propagation, fire protection, and central water supply must be approved with a modification to the current augmentation plan. Existing exempt J+M Well No. 1 may only be used for domestic indoor uses and for watering of non-commercial stock.

4.2 *Adequacy of Water Rights*

Current water rights are adequate for buildout demands of two (2) lots to meet 2040 and 2060 buildout projections on a 300-year basis.

According to the Approval of Groundwater Rights found in proposed decree No. 23CW3045 the entire 5.13-acre property has appropriated water rights located in the Denver, Arapahoe, and Laramie Fox-Hills confined aquifers. Of these formations, the Denver, and Arapahoe are considered not-nontributary while the Laramie Fox-Hills is considered non-tributary. The applicant has rights to consume water from all three formations, though use from the Arapahoe requires an augmentation and replacement plan for all uses. The associated determinations and approved augmentation plan are shown in the proposed included in **Appendix C**:

- There are 0.29 AF/year available on a 300-year supply basis out of the Denver Formation, which is reserved for exempt well J+M No. 1 (see Section 16 of proposed decree **23CW3045**). This amount is greater than the estimated annual demand of 0.28 AF/year for Lot 1 uses.
- Assuming a minimum 0.20 AF/yr domestic use per resident (*per proposed decree No. 23CW3045 Section 24.C.*) with 90% return flows through the septic system per resident, this results in a 0.18 AF/yr replacement flow back through the septic system per resident.
- Per proposed decree 23CW3045 Section 24.A, pumping in the Arapahoe aquifer will result in an estimated 22.55% depletion by the 300th year of pumping, which is equivalent to 0.11 AF total. Conservatively estimated return flows through the septic system total 0.18 AF/yr, which is in excess of required replacement water for depletions due to not-nontributary pumping from the Arapahoe aquifer.

Conclusion:

The current water rights and augmentation plan in place are adequate to meet the estimated overall demand and resulting alluvial depletions of 0.11 acre-feet for one (1) lot out of the Arapahoe Well, as well as adequate allocations out of the exempt Denver Well.

4.3 *Description of Current Water Rights*

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

Non-Renewable Denver Basin Supply

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

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

The subject property was granted water rights in the four Denver Basin formations as shown in **Table 4-1** above.

5.0 WATER SYSTEM FACILITIES AND PHYSICAL SUPPLY

5.1 Source of Supply

Supply for the two (2) lots will be met with future or existing wells completed in the Denver aquifer or Arapahoe aquifer. There is an existing well (Permit #172655) that is currently drilled into the Denver formation and serving an existing residence located on Lot 1. Any new wells will be drilled, screened, test-pumped, and completed accordance with the Colorado Division of Water Resources rules and regulations.

5.2 Water Treatment

Water from the proposed water sources (Denver and Arapahoe aquifers) were tested on 2/13/24 for constituents required by El Paso County regulations for a confined aquifer. Any desired treatment of existing and future wells will rely on the individual homeowners as this is not considered a *Community System* by the Colorado Department of Public Health and Environment.

5.3 Water Storage

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

5.4 Distribution, Pumping, and Transmission Lines

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

5.5 Water Quality

As noted above, water quality for both proposed aquifers (Denver and Arapahoe) were sampled on 02/13/24. Water from the Denver Aquifer was sampled out of the existing exempt Denver Well (Permit #172655) located on Lot 1. Representative water from the Arapahoe Aquifer was sampled from a well (Permit #78603-F) located at 10025 Kit Carson Lane.

The water quality in the Denver aquifer in this area has typically been suitable for residential potable use. Water samples were obtained from the existing exempt well on Lot 1 (well permit #172655-F, also known as J+M Well No. 1) obtained via an exterior water tap serving the residence at 2295 Old Ranch Road. Water samples were obtained from this tap on 2/13/24, with water quality testing performed Colorado Analytical Laboratories, per the El Paso County Land Development Code section 8.4.7(B). Final results from this water quality testing can be found in **Appendix D**. All results were found to be below primary and secondary Maximum Contaminant Limits (MCLs) and deemed suitable for public consumption without additional treatment.

The water quality in the Arapahoe aquifer in this area has also typically been suitable for residential potable use. Water samples were obtained from a neighboring well (well permit #78603-F) constructed serving the residence at 10025 Kit Carson Lane. Water samples were obtained from an exterior hose bib tap on 2/13/24, with water quality testing performed by Colorado Analytical Laboratories, per the El Paso County Land Development Code section 8.4.7(B). Final results from this water quality testing can be found in **Appendix D**. Most results were found to be below primary and secondary Maximum Contaminant Limits (MCLs). However, there were two constituents of concern found to be above the secondary maximum contaminant limit. These contaminants were found to be iron and manganese. The secondary maximum contaminant limit (SMCL) for iron is 0.3 mg/l and the well produced a result of 0.58 mg/l. An SMCL is not an enforceable exceedance. The secondary maximum contaminant limit (SMCL) for manganese is 0.05 mg/l and the well produced a result of 0.0667 mg/l. An SMCL is not an enforceable exceedance, and both contaminants should be considered aesthetic. Excess iron in a water system can cause red/brown staining of laundry as well staining of water appliances (i.e. washing machines and dishwashers). Iron removal treatment can be added as an under-the-sink point of use system or whole house filter system if the purchaser desires to remove iron from their well water. It is recommended that the home buyer provide a whole house filtration unit capable of removing iron and manganese, such as a water softener system (ion exchange). Another treatment option would be to employ a whole house treatment system consisting of an oxidizing agent (such as chlorine) to precipitate out the iron and manganese, followed by a cloth filter to remove the precipitant. It is recommended that Lot 2 household utilize a whole house filtration system in the basement as the well water enters the home to remove these secondary contaminants. Otherwise, the proposed water source is acceptable for potable use.

Because of the absence of any and all evidence of fecal contamination in the form of E. Coli or Total Coliform, or that all sampled and analyzed constituents were below all primary and secondary standards the proposed water source emanating from the Denver aquifer is deemed safe for public consumption. Because of the absence of any and all evidence of fecal contamination in the form of E. Coli or Total Coliform, or that most sampled and analyzed constituents

were below all primary and secondary standards the proposed water source emanating from the Arapahoe aquifer is deemed safe for public consumption. However, it is recommended that the developer or homeowner provide a whole house filtration unit to remove aesthetic and secondary contaminants such as iron and manganese, which were tested above the SMCL.

6.0 EL PASO COUNTY MASTER PLANNING ELEMENTS

6.1 County Water Master Plan 2040 and 2060 Projections

The subject property lies within the El Paso County Water Master Planning area, Region #1.

6.2 Buildout (Including 2040 and 2060 Buildout):

Expected buildout of the subject property are two (2) total lots. Demands for the entire subdivision are listed in Section 3.0 of this report, which include a total demand of 0.72 AF/year as described in proposed decree No. 23CW3045.

6.3 Description of Long-Term Planning and Future Sources of Supply

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

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

6.4 Water System Interconnects

The closest source for a potential interconnect is the Colorado Springs Utilities – which is approximately less than a half a mile to the northwest.

It is not anticipated (and Colorado Springs Utilities has not been contacted) that an interconnect is needed or warranted.

7.0 CONCLUSION

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

Appendix A

KETTLE CREEK ESTATES FILING NO. 2

A REPLAT OF LOT 1, KETTLE CREEK ESTATES LOCATED IN SECTION 28, TOWNSHIP 12 SOUTH, RANGE 66 WEST OF THE 6TH P.M. EL PASO COUNTY, COLORADO

KNOW ALL MEN BY THESE PRESENTS that J + M, INVESTMENTS, LLC, is the owner's of the following described land:

TO WIT

LOT 1, KETTLE CREEK ESTATES, AS RECORDED IN THE RECORDS OF THE EL PASO COUNTY CLERK AND RECORDERS UNDER RECEPTION NO. 223715184.

CONTAINING 5.13 ACRES MORE OR LESS

EL PASO COUNTY
STATE OF COLORADO

DEDICATION

That, J + M INVESTMENTS, LLC, being the owner of the above described land being platted and/or subdivided in El Paso County, Colorado, under the name of KETTLE CREEK ESTATES FILING NO. 2, have laid out, platted and/or subdivided the same as shown on this plat and do hereby dedicate to the public at large the streets, alleys, roads and other public areas as shown hereon and hereby dedicate those portions of land labeled as easements for the installation and maintenance of public utilities as shown hereon. The sole right to assign use or vacate is vested with the Board of County Commissioners.

IN WITNESS WHEREOF

The said J + M INVESTMENTS, LLC, JAY D STONER, MEMBER.

has subscribed their names this _____ day of _____ A.D. 20____

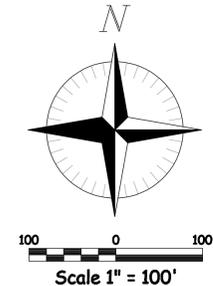
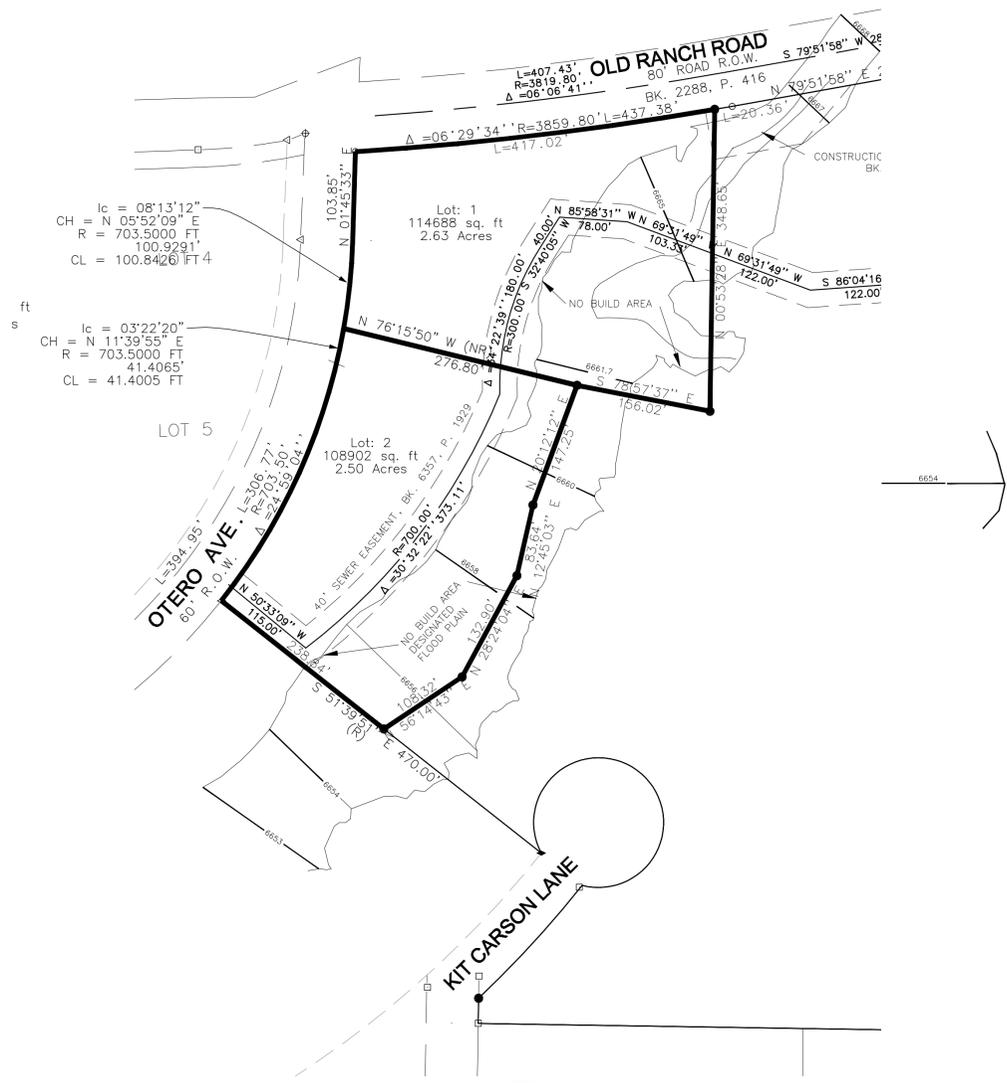
By _____
JAY D STONER - MEMBER

NOTARY STATEMENT

The foregoing instrument was acknowledged before me this _____ day of _____ A.D. 20____, by JAY D STONER.

My commission expires _____
My address is _____
Witness my hand and official seal _____

Notary Public



LEGEND:

- SET 1/2" X 18" REBAR, W/ 1" CAP L.S. NO. 37907
- ⊗ FOUND #37988 AL. CAP ON #5 REBAR
- FOUND 1/2" IRON PIPE
- ◀ FOUND ORANGE #32439 CAP ON #4 REBAR
- ⊕ FOUND #32439 ZAPPIT ON CONCRETE NAIL
- ◆ FOUND 1/2" IRON ROD
- ◇ FOUND #4 REBAR

LIMIT OF 100-YEAR FLOOD PLAN AND FLOOD ELEVATION

REGISTERED LAND SURVEYOR'S CERTIFICATE

I, MATTHEW J. KOCH, a duly registered Professional Land Surveyor in the State of Colorado, do hereby certify that this plat truly and correctly represents the results of a survey made on 8-2-2022, by me or under my direct supervision and that all monuments exist as shown hereon; that mathematical closure errors are less than 1:10,000; and that said plat has been prepared in full compliance with all applicable laws of the State of Colorado dealing with monuments, subdivision, or surveying of land and all applicable provisions of the El Paso County Land Development Code.

I attest the above on this _____ day of _____, 20____.

MATTHEW J. KOCH P.L.S. Date
Colorado registered PLS # 37907

ACKNOWLEDGMENT AND ACCEPTANCE OF PLAT

This plat for KETTLE CREEK ESTATES was approved for filing by the El Paso, Colorado Planning and Community Development Department Director on the _____ day of _____, 20____, subject to any notes or conditions specified hereon. Previous plat name in entirety is amended for the areas described by this Plat Amendment Lot Line Adjustment subject to all covenants, conditions and restrictions recorded against and appurtenant to the original plat recorded in the Office of the El Paso County Clerk and Recorder.

Reception No. _____

Planning and Community Development Director

EASEMENT STATEMENT

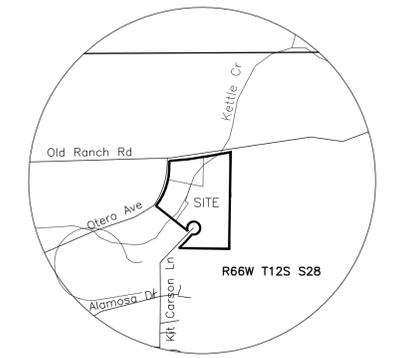
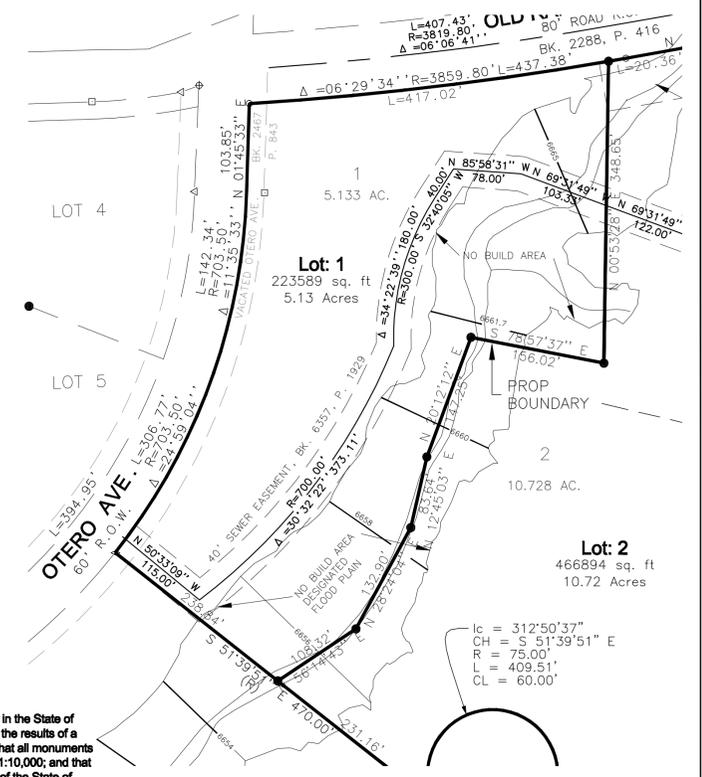
Unless otherwise indicated, all side, front, and rear lot lines are hereby platted on either side with a 10 foot public utility and drainage easement unless otherwise indicated. All exterior subdivision boundaries are hereby platted with a 20 foot public utility and drainage easement. The sole responsibility for maintenance of these easements is hereby vested with the individual property owners.

COUNTY CLERK AND RECORDERS STATEMENT

STATE OF COLORADO)
COUNTY OF EL PASO)

This plat was filed for record in the office of the County Clerk and Recorder of El Paso County, Colorado, at _____ .M., on the _____ day of _____, 20____ A.D. under reception number _____.

EL PASO County Clerk & Recorder



VICINITY MAP
N.T.S.

- NOTES:**
- 1.) BEARINGS SHOWN ARE BASED UPON THE EAST LINE OF LOTS 7 & 8, SPRING CREST AMENDED FILING, BEING S 00°53'28" W, PER RECORDED PLAT, BETWEEN THE FOUND 1/2" IRON PIPE AND THE FOUND 1" CAP L.S. NO. 37988 AS SHOWN HEREON.
 - 2.) RECORDED AND APPARENT RIGHTS-OF-WAY ARE SHOWN AS PER TITLE COMMITMENTS NO.0E1019782 AND OE1019789, BY LAND TITLE GUARANTEE COMPANY.
 - 3.) ANY CONSTRUCTION WITHIN THE FEMA FIRM FLOOD HAZARD AREA MUST BE DONE IN ACCORDANCE WITH THE EL PASO COUNTY FLOOD DAMAGE PREVENTION REGULATIONS.
 - 4.) ALL DIMENSIONS SHOWN IN U.S. SURVEY FEET
 - 5.) This property is located within a designated FEMA Floodplain as determined by the Flood Insurance Rate Map, Community Map Number 08041C0506G, effective date December 7, 2018. No structures or fences are permitted within the designated Floodplain areas.
 - 6.) The addresses exhibited on this plat are for informational purposes only. They are not the legal description and are subject to change.
 - 7.) No driveway shall be established unless an access permit has been granted by El Paso County.
 - 8.) Mailboxes shall be installed in accordance with the El Paso County and United States Postal Service regulations.
 - 9.) The subdividers agree on behalf of their self and any developer of builder, successors and assignees that subdivider and/or their successors and assigns shall be required to pay traffic impact fees in accordance with the El Paso County Road Impact Fee Program (Resolution No. 19-471), or any amendments thereto, at or prior to the time of building permit submittals. The fee obligation, if not paid at final plat recording, shall be documents on all sales documents and in plat notes to ensure a title search would find the fee obligation before sale of property.
 - 10.) All property owners are responsible for maintaining proper storm drainage in and through their property. Public drainage easements as specifically noted on the plat shall be maintained by individual lot owners unless otherwise indicated. Structures, fences, materials or landscaping that could impede the flow of runoff shall not be placed in drainage easements.

NOTICE
ACCORDING TO C.R.S. 13-80-105, YOU MUST COMMENCE ANY LEGAL ACTION BASED UPON ANY DEFECT IN THIS SURVEY WITHIN THREE YEARS AFTER YOU FIRST DISCOVER SUCH DEFECT. IN NO EVENT MAY ANY ACTION BASED UPON ANY DEFECT IN THIS SURVEY BE COMMENCED MORE THAN TEN YEARS FROM THE DATE OF THE CERTIFICATE SHOWN HEREON.

PRELIMINARY

**CORNERSTONE
LAND SURVEYING, L.L.C.**
1022 PHAY AVE.
CAÑON CITY, COLORADO 81212
719-275-8881

LEGAL DESCRIPTION
 SECTION 16, T1N, R10E, S10W, OF A TR. 6264 BY BK. 2285-48 BLAKE SPRING CREST AND P.L. 117-100, DISTRICT OF CANTON, BLAKE COUNTY, STATE OF COLORADO.

OWNER CONTACT INFORMATION
 10245 OTERO AVE
 COLORADO SPRINGS, CO 80920
 jph@denlinger.com

SITE NOTES

1. Survey, benchmark, existing grading contours, property lines, and other information necessary for the site plan are provided on the site plan by Owner E. HAHN, consulting engineer, dated 8-25-2021.
2. Builder shall provide positive drainage away from structure remainder of lot 107 and across the street 28' throughout building elevations.
3. Provide rough finished grade as portrayed on the site plan and building elevations.
4. Provide proper compaction of all backfill areas.
5. Builder shall provide service to building from existing utility and coordinate electric, cable, and gas services and meter locations.
6. Drainage service and other details depicted on the site plan are from a site plan by Owner E. HAHN, Consulting Engineer, dated 8-25-2021.
7. Mechanical engineer report by Rocky Mountain Group, project number 2021-001, dated 10/15/2021, and other documents for this project, all recommendations contained therein shall be adhered to.
8. Refer to submittal plan by other for details pertaining to mechanical and plumbing systems.
9. Refer to submittal plan by other for details pertaining to electrical systems.
10. Refer to submittal plan by other for details pertaining to fire alarm systems.
11. Refer to submittal plan by other for details pertaining to fire suppression systems.
12. Refer to submittal plan by other for details pertaining to fire alarm systems.
13. Refer to submittal plan by other for details pertaining to fire suppression systems.
14. Refer to submittal plan by other for details pertaining to fire alarm systems.
15. Refer to submittal plan by other for details pertaining to fire suppression systems.

BUILDING SQUARE FOOTAGES

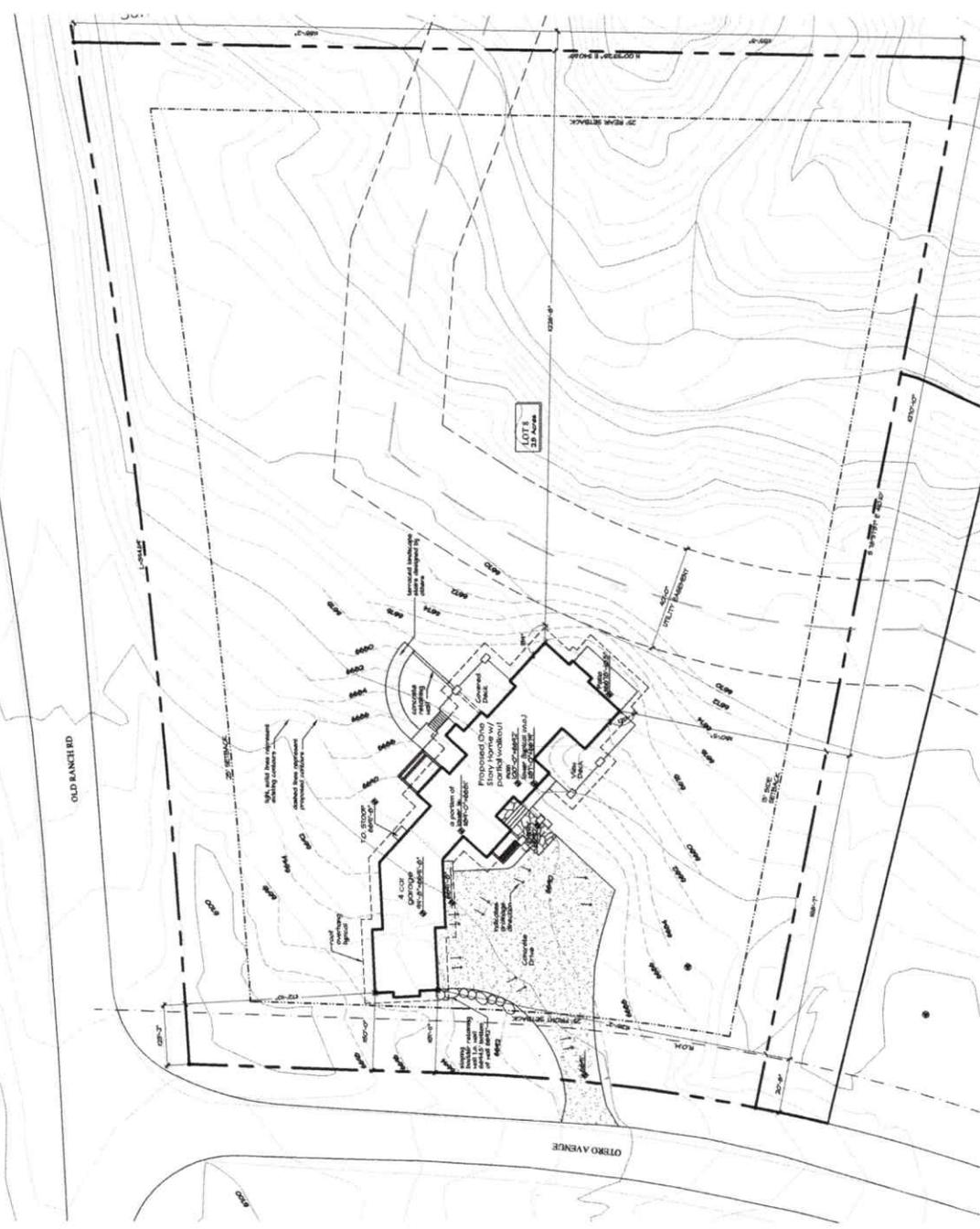
FINISHED	UNFINISHED
MAIN LEVEL	276 S.F.
LOWER LEVEL	2,250 S.F.
TOTAL	4,960 S.F.
GARAGE	1,366 S.F.

BUILDING HEIGHT CALCULATIONS

T.O. SLAB & GARAGE DOOR	4'-6 1/2" @
1/2" FINISH GARAGE STEPS UP	6'-6 1/2" @
1/2" FINISH FINISH	6'-6 1/2" @
MAIN LEVEL	6'-6 1/2" @
LOWER LEVEL	6'-6 1/2" @
HIGHEST ROOF PEAK	14'-10 1/2" @
HEIGHT OF ROSE	0'-0" @

DRAINAGE INDEX

- A1 Site Plan
- A2 Overall Exterior Elevations (05P)
- A3 Front Exterior Elevations (04P)
- A4 Rear Exterior Elevations (04P)
- A5 Side Exterior Elevations (04P)
- A6 High Level Plan (House) (04P)
- A7 Low Level Plan (House) (04P)
- A8 Overall Plan & Details
- A9 Building Sections & Details
- A10 High Level Electric Plan
- A11 Low Level Electric Plan
- A12 Lower Level Electric Plan
- A13 Foundation Plan (House)
- A14 Foundation Plan (Garage)
- A15 Floor Framing Plan
- A16 Roof Framing Plan (House)
- A17 Roof Framing Plan (Garage)
- A18 Foundation Details
- A19 Details
- A20 Shear Wall Plan (House)
- A21 Shear Wall Plan (Garage)



SITE PLAN
 SCALE: 1/8" = 1'-0"
 NORTH

Appendix B

WATER SUPPLY INFORMATION SUMMARY

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

1. NAME OF DEVELOPMENT AS PROPOSED <i>Kettle Creek Estates</i>	
2. LAND USE ACTION <i>Minor Subdivision</i>	
3. NAME OF EXISTING PARCEL AS RECORDED <i>10245 Otero Ave</i>	
SUBDIVISION <i>See Above</i> FILING <i>2</i> BLOCK <i>N/A</i> Lot <i>N/A</i>	
4. TOTAL ACERAGE <i>5.13</i>	5. NUMBER OF LOTS PROPOSED <i>2</i>
6. PARCEL HISTORY - Please attach copies of deeds, plats, or other evidence or documentation. (In submittal package)	
A. Was parcel recorded with county prior to June 1, 1972? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
B. Has the parcel ever been part of a division of land action since June 1, 1972? <input type="checkbox"/> YES <input checked="" type="checkbox"/> No	
If yes, describe the previous action	
7. LOCATION OF PARCEL - Include a map delimiting the project area and tie to a section corner. (In submittal)	
<i>SE1/4</i> OF NW <i>14</i> SECTION 28 TOWNSHIP <i>12</i> S RANGE <i>66</i> W	
PRINCIPAL MERIDIAN: <input checked="" type="checkbox"/> 6TH <input type="checkbox"/> N.M. <input type="checkbox"/> UTE <input type="checkbox"/> COSTILLA	
8. PLAT - Location of all wells on property must be plotted and permit numbers provided.	
Surveyors plat <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO If not, scaled hand-drawn sketch <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
9. ESTIMATED WATER REQUIREMENTS - Gallons per Day or Acre Foot per Year	
HOUSEHOLD USE ¹	<i>2</i> of units <i>0.260</i> AF/SFE/YR <i>0.520</i> AF
COMMERCIAL USE	<i>0</i> SF <i>-</i> GPD <i>-</i> AF
IRRIGATION ²	<i>0.0566</i> AF/1000SF <i>141</i> GPD <i>0.158</i> AF
ANIMAL WATERING ³	<i>4</i> Horses <i>0.011</i> AF/Horse/Year <i>0.044</i> AF
TOTAL	<i>645</i> GPD <i>0.72</i> AF*
¹ Per 23CW3045 Section 24.A and EPC LDC ² Assuming .0566 AF/1000 ft^2 per EPC Land Development Cide for 2,800 ft^2 of lawn/garden ³ Per 23CW3045 Section 24.A assume 2 horses. Assuming 0.011 AF/year per head.	
10. WATER SUPPLY SOURCE	
<input checked="" type="checkbox"/> EXISTING <input checked="" type="checkbox"/> NEW WELLS WELLS SPRING Proposed Aquifers - (Check One) <input type="checkbox"/> Alluvial <input type="checkbox"/> Upper Dawson <input type="checkbox"/> Lower Dawson <input type="checkbox"/> Denver <input checked="" type="checkbox"/> Other <i>Arapahoe</i>	
<input type="checkbox"/> MUNICIPAL <input type="checkbox"/> ASSOCIATION <input type="checkbox"/> COMPANY <input type="checkbox"/> DISTRICT WATER COURT DECREE CASE NUMBERS <i>Existing Well Permit #172655</i> <i>Proposed Case Number - 24CW3045</i>	
NAME: <i>N/A</i>	
LETTER OF COMMITMENT FOR	
SERVICE - <i>N/A</i>	
11. ENGINEER'S WATER SUPPLY REPORT <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO If yes, please forward with this form. (This may be required before our review is completed)	
12. TYPE OF SEWAGE DISPOSAL SYSTEM	
<input checked="" type="checkbox"/> SEPTIC TANK/LEACH FIELD <input type="checkbox"/> CENTRAL SYSTEM - DISTRICT NAME:	
<input type="checkbox"/> LAGOON <input type="checkbox"/> VAULT - LOCATION SEWAGE HAULED TO:	
<input type="checkbox"/> ENGINEERED SYSTEM (Attach a copy of engineering design) <input type="checkbox"/> OTHER:	

Appendix C

<p>DISTRICT COURT, WATER DIVISION 2, COLORADO</p> <p>Court Address: 501 North Elizabeth Street, Suite 116 Pueblo, CO 81003</p> <p>Phone Number: (719) 404-8832</p>	<p style="text-align: center;">RULE 408 Settlement Communication</p> <p style="text-align: center;">▲ COURT USE ONLY ▲</p>
<p>CONCERNING THE APPLICATION FOR WATER RIGHTS OF:</p> <p>J + M INVESTMENTS, LLC</p> <p>IN EL PASO COUNTY</p>	<p>Case No.: 23CW3045</p>
<p style="text-align: center;">FINDINGS OF FACT, CONCLUSIONS OF LAW, RULING OF REFEREE AND DECREE: ADJUDICATING DENVER BASIN GROUNDWATER, APPROVING PLAN FOR AUGMENTATION, AND ADJUDICATING EXEMPT RESIDENTIAL WELL</p>	

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

FINDINGS OF FACT

1. The applicant in this case is J + M Investments, LLC, a Colorado Limited Liability Company, C/O Jay D. Stoner. Its address is 5655 Bridlespur Ridge PI, Colorado Springs, CO 80918 (“Applicant”). The Applicant is the owner of the land totaling approximately 5.13 acres on which the structures sought to be adjudicated and augmented herein are located, and under which lies the Denver Basin groundwater described in this decree, and is the owner of the place of use where the water will be put to beneficial use, except for any potential off-property uses as described in Paragraph 20.

2. The Applicants filed this Application with the Water Court for Water Divisions 2 on October 30, 2023. The Application was referred to the Water Referee in Division 2 on October 31, 2023. Per request from the Court, an amended Application was filed in Water Division 2 on November 8, 2023, to add a corrected legal description.

3. The time for filing statements of opposition to the Application expired on the last day of December 2023. A Statement of Opposition was timely filed by Kettle Creek, LLC on December 31, 2023.

4. In accordance with the notice requirements of C.R.S. §37-92-302(2), a

Notice of No Lienholders on the Applicants' Property was filed with the Division 2 Water Court on December 11, 2023.

5. On November 13, 2023, the Division 2 Water Court ordered that publication occur in *The Gazette* in El Paso County, and *The Douglas County News Press* in Douglas County.

6. The Clerk of this Court has caused publication of the Application filed in this matter as provided by statute and the publication costs have been paid. On November 22, 2023, proof of publication in *The Gazette* was filed with Division 2 Water Court. All notices of the Application have been given in the manner required by law.

7. On November 27, 2023 proof of publication in *The Douglas County News Press* was filed with Division 2 Water Court. All notices of the Application have been given in the manner required by law

8. On _____, 2024, a stipulation between the Applicants and Kettle Creek, LLC was filed with the Division 2 Water Court. By Order dated _____, 2024, the Division 2 Water Court approved such stipulation.

9. Pursuant to C.R.S. §37-92-302(2), the Office of the State Engineer has filed Determination of Facts for each Denver Basin aquifer with this Court on January 12, 2024, which have been considered by the Court in the entry of this decree.

10. Pursuant to C.R.S. §37-92-302(4), the office of the Division Engineer for Water Division No. 2 filed its Consultation Report dated February 12, 2024, and a response to the Consultation Report was not required by the Water Court. However, Applicant filed a response to the Consultation Report on February ____, 2024, to address an issue concerning post pumping replacement supplies. The Consultation Report and the Applicant's response has been considered by the Water Court in the entry of this decree.

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

GROUNDWATER RIGHTS

12. The Application requested quantification and adjudication of vested underground water rights from the Denver basin groundwater underlying the Applicant's property described in Paragraph 13, below, and use of J + M Wells No. 1, an exempt well

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

13. The land overlying the groundwater subject to the adjudication in this case is owned by the Applicant and consists of approximately 5.13 acres located in the E½ of the NW ¼ of Section 28, Township 12 South, Range 66 W. of the 6th P.M., also known as Lot 1, Kettle Creek Estates, as recorded in the records of the El Paso County Clerk and Records under Reception NO. 223715184, with a street address of 10245 Otero Ave, Colorado Springs, CO 80921, as shown on **Exhibit A** and **Exhibit C** maps ("Applicant's Property"). Applicant intends to subdivide the property into two (2) lots. All groundwater adjudicated herein shall be withdrawn from the overlying land unless there is a further order of this Court allowing otherwise following the filing of a new water court application.

14. J + M Well No. 1: J + M Well No. 1, is located on the Applicant's Property and is permitted and constructed into the Denver aquifer as an exempt domestic well pursuant to C.R.S. §37-92-602(3)(b)(II)(A) under Well Permit No. 172655. This well will continue to be used as an exempt domestic well on one of the subdivided lots on Applicant's Property pursuant to its issued well permit pursuant to C.R.S. §37-92-602(3)(b)(II)(A), and this structure and well pumping is not, and need not be, included in the plan for augmentation decreed herein. As described in Paragraph 16, below, Applicant is reserving the full amount of the Denver aquifer groundwater underlying Applicant's Property that is adjudicated herein for use by J + M Well No. 1. Pumping and use of the Applicant's Denver aquifer entitlement shall be made in accordance with the amounts and uses described in Permit No. 172655 or any replacement exempt well permit, and shall be limited to no more than the total amount adjudicated to Applicants from the Denver aquifer as described herein.

15. J + M Well No. 2: Applicant is awarded the vested right to use the J + M Well No. 2, along with any necessary additional or replacement wells associated with such structure, for the extraction and use of groundwater from the not nontributary Arapahoe aquifer pursuant to the plan for augmentation decreed herein. Upon entry of this decree and submittal by the Applicants of a complete well permit application and filing fee, the State Engineer shall issue well permits for J + M Well No. 2, pursuant to C.R.S. §37-90-137(4), consistent with and referencing the plan for augmentation decreed herein.

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

Aquifer	Net Sand (ft)	Annual Average Withdrawal 100 Years (Acre Feet)	Annual Average Withdrawal 300 Years (Acre Feet)	Total Withdrawal (Acre Feet)
Denver (NNT)	197.10*	0	0	0
Arapahoe (NNT)	246.8	2.27	0.75	227
Laramie-Fox Hills (NT)	185.6	1.35	0.45	135

*Applicant has reserved all of the available Denver Aquifer supplies to support pumping from the existing exempt well, J+M Well No. 1, this brings the remaining available Denver Aquifer supplies to 0. The available water amounts before reservation were: Total Appropriation 87.2af, Annual Avg. Withdrawal 100 Years 0.87af, Annual Avg. Withdrawal 300 Years 0.29af.

Except as specifically identified for J + M Well No. 1, the terms and conditions set forth in this decree governing the withdrawal and use of groundwater from the Denver Basin aquifers underlying the Applicant’s Property are applicable only to permitted non-exempt wells constructed into the aquifers.

17. Pursuant to C.R.S. §37-90-137(9)(c.5)(I), the augmentation requirements for wells in the Arapahoe aquifer requires the replacement to the affected stream systems of actual stream depletions on an annual basis. Applicant shall not be entitled to construct a non-exempt well or use water from the not nontributary Arapahoe aquifer except pursuant to an approved augmentation plan in accordance with C.R.S. §37-90-137(9)(c.5), including as decreed herein as concerns the Arapahoe aquifer. In addition, Applicant shall be required to comply with the requirements of Paragraph 39.A prior to constructing and using a non-exempt well completed into the Arapahoe aquifer.

18. Subject to the augmentation requirements described in Paragraphs 17 and 24 and the other requirements and limitations in this decree, Applicant shall be entitled to withdraw all legally available groundwater in the Denver Basin aquifers underlying Applicants’ Property. Said amounts may be withdrawn over the 100-year life for the aquifers as set forth in C.R.S. §37-90-137(4), or withdrawn over a longer period of time based upon local governmental regulations or Applicants’ water needs, provided withdrawals during such longer period are in compliance with the total amounts available

to Applicants as decreed herein and the augmentation requirements of this decree. This decree describes a pumping period of 300-years as to pumping from the Denver and Arapahoe aquifers, as required by El Paso County, Colorado Land Use Development Code §8.4.7(C)(1). The average annual amounts of ground water available for withdrawal from the underlying Denver Basin aquifers, based upon the 100-year and 300-year aquifer life calculations, are determined and set forth above, based upon the January 12, 2024, Office of the State Engineer Determination of Facts described in Paragraph 9.

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

20. Subject to the terms and conditions in the plan for augmentation decreed herein and final approval by the State Engineer's Office pursuant to the issuance of well permits in accordance with C.R.S. §§37-90-137(4) or 37-90-137(10), the Applicant shall have the right to use the ground water from the Denver, Arapahoe, and Laramie Fox Hills aquifers for beneficial uses upon the Applicants' Property consisting of domestic, irrigation for lawn, garden, and greenhouse, domestic animal and livestock watering, fire protection, and also for storage and augmentation purposes associated with such uses.¹ The amount of groundwater decreed for such uses upon the Applicant's Property is reasonable as such uses are to be made for the long-term use and enjoyment of the Applicant's Property and is to establish and provide for adequate water reserves. The nontributary groundwater may be used, reused, and successively used to extinction, both on and off the Applicant's Property subject, however, to the limitations imposed on the use of the Laramie-Fox Hills aquifer groundwater by this decree and the requirement under C.R.S. §37-90-137(9)(b) that no more than 98% of the amount withdrawn annually shall be consumed. Applicant may use such water by immediate application or by storage and subsequent application to the beneficial uses and purposes stated herein. Provided however, as set forth above, Applicant shall only be entitled to construct a non-exempt

¹ These uses would also apply to any non-exempt wells constructed into the Denver aquifer, should Applicant or its successors comply with the requirements of this decree to allow pumping from the Denver aquifer by a non-exempt well.

well and use water from the not nontributary Arapahoe aquifer pursuant to a decreed augmentation plan entered by the Court, including that plan for augmentation decreed herein for the Arapahoe aquifer.

21. Applicant has waived the 600-foot well spacing requirement for wells to be constructed upon the Applicant's Property. Pumping from J + M Well No. 2 and any additional or replacement wells for those wells, or wells constructed into the Arapahoe and Laramie-Fox Hills aquifers, will not exceed 100 g.p.m., though actual pumping rates for these wells will vary according to aquifer conditions and well production capabilities. The Applicant may withdraw groundwater from the J + M Well No. 2 and any additional or replacement wells for that well, or from wells constructed into the Arapahoe and Laramie-Fox Hills aquifers, at rates of flow necessary to withdraw the entire amounts decreed herein. The actual depth of each well to be constructed within the respective aquifers will be determined by topography and actual aquifer conditions.

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

PLAN FOR AUGMENTATION

23. The structure to be augmented is the J + M Well No. 2, to be constructed to the not nontributary Arapahoe aquifer underlying the Applicant's Property, along with any additional or replacement wells associated therewith. This plan for augmentation does not cover depletions associated with diversions from the Denver aquifer. Absent compliance with the requirements of this decree concerning the reservation of the Denver aquifer groundwater to J + M Well No. 1 and entry of a separate decreed plan for augmentation that allows such pumping, no groundwater in the Denver aquifer underlying the Applicant's Property is available for withdrawal by any well other than the J + M Well No. 1 under its exempt permit. If Applicant would like to divert their entitlement in the Denver aquifer, they must do so under a separate future decreed augmentation plan.

24. Pursuant to C.R.S. §37-90-137(9)(c.5), the augmentation obligation for the J + M Well No. 2, and any additional or replacement wells constructed to the Arapahoe aquifer, requires the replacement of actual stream depletions attributable to pumping of the residential well from the Arapahoe aquifer. The water to be used for augmentation during pumping is the septic system return flows of the not nontributary Arapahoe aquifer to be pumped from the J + M Well No. 2 as set forth in this plan for augmentation. The water to be used for augmentation of depletions following the pumping period described in this decree is the reserved portion of Applicant's nontributary water rights in the Laramie-Fox Hills aquifer as described in Paragraph 24.D. Applicant shall provide for the

augmentation of stream depletions caused by pumping J + M Well No. 2 and any additional or replacement wells as approved herein. Water use criteria is determined as follows:

A. Use: Based on a 300-year pumping period, the J + M Well No. 2 may pump a maximum total of 0.44 acre feet from the Arapahoe aquifer annually (132 acre-feet total) pursuant to the plan for augmentation authorized by this decree. Indoor use will utilize an estimated 0.2 acre feet of water per year for each residence, with the remaining 0.24 acre feet per year pumping entitlement available for other uses on the Applicant's Property, including: irrigation of lawn and garden, and the watering of up to two horses, or equivalent livestock. An example of the use breakdown for El Paso County land use planning purposes is household use of 0.26 acre-feet of water per year with the additional 0.18 acre-feet of available for irrigation of lawn and garden and the watering of up to two horses or equivalent livestock on the lot annually. The foregoing figures assume the use of one individual non-evaporative septic system, with resulting return flows from such system, as described below in Paragraph 24.C.

B. Depletions: Pumping from the Arapahoe aquifer will require replacement of actual stream depletions of the pumped amount over the 300-year pumping period. Maximum stream depletions over the 300-year pumping period for the Arapahoe aquifer amounts to approximately 22.55% of pumping. Maximum annual depletions from the J+M Well No. 2 are therefore 0.11 acre-feet in year 300. Should Applicant's pumping be less than the 0.44 total per year described herein, resulting depletions and required replacements will be correspondingly reduced.

C. Augmentation of Depletions During Pumping Life of Well: Pursuant to C.R.S. §37-90-137(9)(c.5), Applicant is required to replace actual stream depletions of the water pumped from the Arapahoe aquifer. Applicant has shown that, provided water is delivered for indoor use and treated as required by this decree, depletions during pumping will be effectively replaced by residential return flows from non-evaporative septic systems. The annual consumptive use for non-evaporative septic systems is estimated at 10% per year per residence. At the household indoor use rate of 0.2 acre-feet per year, 0.18 acre-feet per residence is replaced to the stream system per year, utilizing a non-evaporative septic system. Thus, during the pumping period, the total maximum annual stream depletions of 0.11 acre-feet will be augmented provided septic system return flows are generated by indoor use of water in the residence ($(1 \times 0.2) \times 0.9 = 0.18$). This calculation of septic system return flows from indoor residential use of 0.2 acre-feet per residence shows that depletions that result from pumping the annual amounts described in Paragraph 24.A for one lot will be adequately replaced during the pumping period for the well under the plan for augmentation.

D. Augmentation of Post Pumping Depletions: This plan for

augmentation shall have a pumping period of 300 years. For the replacement of post-pumping depletions which may be associated with the use of the J + M Well No. 2, and any additional or replacement wells, Applicant will reserve the entirety of the nontributary Laramie-Fox Hills aquifer groundwater decreed herein (135 acre-feet). The amount of nontributary Laramie-Fox Hills aquifer groundwater reserved may be reduced as may be determined through this Court's retained jurisdiction as described in this decree. If the Court, by order, reduces the Applicant's obligation to account for and replace such post-pumping depletions for any reason, it may also reduce the amount of Laramie-Fox Hills aquifer groundwater reserved for such purposes, as described herein. Applicant also reserves the right to substitute other legally available augmentation sources for such post-pumping depletions upon further approval of the Court under its retained jurisdiction. Even though this reservation is made, under the Court's retained jurisdiction, Applicant reserves the right in the future to prove that post-pumping depletions will be noninjurious. Pursuant to C.R.S. §37-90-137(9)(b), no more than 98% of water withdrawn annually from a nontributary aquifer shall be consumed. The reservation of a total of 135 acre-feet of Laramie-Fox Hills aquifer groundwater results in approximately 132.3 acre-feet of available post-pumping augmentation water, which will be sufficient to replace post-pumping depletions obligations from the pumping of 132 acre-feet from the Arapahoe aquifer over 300 years. Post pumping replacement obligations equal the total amount of water pumped from the not-nontributary Arapahoe aquifer.

E. Permit: Upon entry of a decree in this case, the Applicants will be entitled to apply for and receive a well permit for the J + M Well No. 2 for the uses in accordance with this decree and otherwise in compliance with C.R.S. §37-90-137.

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

26. Applicant or its successors shall be required to initiate pumping from the Laramie-Fox Hills aquifer for the replacement of post-pumping depletions when either: (i)

the absolute total amount of water available from the Arapahoe aquifer allowed to be withdrawn under the plan for augmentation decreed herein (132 acre-feet) has been pumped; (ii) the Applicant or its successors in interest have acknowledged in writing that all withdrawals for beneficial use through the J + M Well No. 2 has permanently ceased; (iii) a period of 10 consecutive years where no withdrawals of groundwater from the J + M Well No. 2 has occurred; or (iv) accounting shows that return flows from the use of the water being withdrawn are insufficient to replace depletions caused by the withdrawals that already occurred.

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

28. The term of this augmentation plan is for a minimum of 300 years, however, the length of the plan for a particular well or wells may be extended beyond such time provided the total plan pumping allocated to such well or wells is not exceeded. Should the actual operation of this augmentation plan depart from the planned diversions described in Paragraph 24 such that annual diversions are increased through banking or the duration of the plan is extended, the Applicant must prepare and submit a revised model of stream depletions caused by the actual pumping or intended schedule. This analysis must utilize depletion modeling acceptable to the State Engineer, and to this Court, and must represent the water use under the plan for the entire term of the plan to date. The analysis must show that return flows have equaled or exceeded actual stream depletions throughout the pumping period and that reserved nontributary water remains sufficient to replace post-pumping depletions. The Applicant shall provide notice of the revised model submissions to the State Engineer, this Court, and opposer in this case, and the State Engineer and opposer will have thirty (30) days for review and comment about the revised modeling, upon which, the Applicant will be allowed thirty (30) days to respond to the comments of the State Engineer and the opposer. After this notice and comment period, if the revised depletion modeling is acceptable to the State Engineer, this Court may give approval for the extension of this augmentation plan past the 300-year minimum.

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

30. It is determined that the timing, quantity and location of replacement water

under the protective terms in this decree are sufficient to protect the vested rights of other water users and eliminate injury thereto. The replacement water shall be of a quantity and quality so as to meet the requirements for which the water of senior appropriators has normally been used, and provided of such quality, such replacement water shall be accepted by the senior appropriators for substitution for water derived by the exercise of the J + M Well No. 2. As a result of the operation of this plan for augmentation, the depletions from the J + M Well No. 2 and any additional or replacement wells associated therewith will not result in injury to the vested water rights of others.

CONCLUSIONS OF LAW

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

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

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

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

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

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

37. The Applicant's request for approval of a plan for augmentation is contemplated and authorized by law. If administered in accordance with this decree, this plan for augmentation will permit the uninterrupted diversions from the J + M Well No. 2 and any additional or replacement wells for those wells as described herein without adversely affecting any other vested water rights in the Arkansas River or its tributaries and when curtailment would otherwise be required to meet a valid senior call for water. C.R.S. §§37-92-305(3), (5), and (8).

IT IS THEREFORE ORDERED, ADJUDGED AND DECREED AS FOLLOWS:

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

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

A. Applicant is awarded a vested right to 87.2 acre-feet of groundwater from the not nontributary Denver aquifer underlying Applicant's Property, as quantified in Paragraph 16 or as modified by the Court under its retained jurisdiction. The Denver aquifer groundwater is reserved to and will be pumped by J + M Well No. 1, an exempt well, pursuant to its permit, No. 172655. Unless Applicant or its successors in interest have amended this decree to terminate pumping by the J + M Well No. 1 under its exempt permit and the reservation of the Denver aquifer groundwater decreed herein for use by this well, and have also obtained a separate decree approving a plan for augmentation for pumping from the Denver aquifer, no groundwater in the Denver aquifer underlying the Applicant's Property is available for withdrawal by any well other than the J + M Well No. 1 under its exempt permit. Applicant and its successors in interest shall be required to cease pumping from J + M Well No. 1, or from any other well drilled into the Denver aquifer as described herein (either exempt or non-exempt), once Applicant has pumped the 195 acre-feet of groundwater from the Denver aquifer vested by this decree unless the amount is modified under the Court's retained jurisdiction pursuant to Paragraph 44.

B. Applicant is awarded a vested right to 227 acre-feet of groundwater from the not nontributary Arapahoe aquifer underlying Applicant's Property, as quantified in Paragraph 16 or as modified by the Court under its retained jurisdiction. Of this total amount, 132 acre-feet may be pumped pursuant to the plan for augmentation decreed herein. The remaining 95 acre-feet shall not be withdrawn for any purpose except pursuant to a separate court-approved plan for augmentation authorizing the pumping of such amount.

C. Applicants are awarded a vested right to 135 acre-feet of groundwater from the nontributary Laramie-Fox Hills aquifer underlying Applicant's Property, as quantified in Paragraph 16 or as modified by the Court under its retained jurisdiction. Subject to the provisions of Rule 8 of the Denver Basin Rules, 2 CCR 402-6, limiting consumption to ninety-eight percent of the amount withdrawn, and the other terms and conditions of this decree, including the reservation of the entire 135 acre feet awarded to be utilized only for replacement of post-pumping depletions under the plan for augmentation decreed herein, as described in Paragraph 24.D., above, Applicant's Laramie-Fox Hills aquifer groundwater may be utilized for all purposes described in Paragraph 20.

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

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

42. the J + M Well No. 2, and any replacement or additional wells, shall be operated such that pumping from the well does not exceed the annual (0.5 acre-feet) and total (150 acre-feet) pumping limits for the Arapahoe aquifer as decreed herein, and is in accordance with the requirements of the plan for augmentation described herein. Consistent with Rule 11.A of the Statewide Nontributary Ground Water Rules, the Denver Basin groundwater decreed herein must be withdrawn from the "overlying land" as defined in Rule 4.A.8 of the Statewide Nontributary Ground Water Rules, and the J + M Well No. 2 and any additional or replacement wells for this well shall be constructed on the overlying land. The State Engineer, the Division Engineer, and/or the Water Commissioner shall not curtail the diversion and use of water by the J + M Well No. 2 or any additional and replacement wells so long as the return flows from the annual diversions associated with the J + M Well No. 2 and such other wells accrue to the stream system pursuant to the conditions contained herein. To the extent that the Applicant or one of its successors or assigns is ever unable to provide the replacement water required, then the J + M Well No. 2 and any additional or replacement wells shall not be entitled to operate under the protection of this plan, and shall be subject to administration and curtailment in accordance with the laws, rules, and regulations of the State of Colorado.

Pursuant to C.R.S. §37-92-305(8), the State Engineer shall curtail all out-of-priority diversions, the depletions from which are not so replaced as to prevent injury to vested water rights. In order for this plan for augmentation to operate, return flows from the septic system discussed herein shall at all times during pumping be in an amount sufficient to replace the amount of stream depletions, and cannot be sold, leased, or otherwise used for any purpose inconsistent with the augmentation plan decreed herein. Applicant shall be required to have any wells pumping from the Arapahoe aquifer on the Applicant's Property providing water for in-house use and generating septic system returns prior to pumping the wells for any of the other uses identified in Paragraphs 20 or 24.A.

43. The Court retains jurisdiction over this matter to make adjustments in the allowed average annual amount of withdrawal from the Denver Basin aquifers, either upwards or downwards, to conform to actual local aquifer characteristics, and the Applicant need not file a new application to request such adjustments. The retained jurisdiction described in this Paragraph 43 is applicable only to the quantities of water available underlying Applicant's Property, and does not affect or include the augmentation plan decreed herein, the retained jurisdiction for which is described in Paragraphs 44 and 45, below.

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

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

fair hearing, including entry of an Amended Decree, if applicable in the Court's reasonable discretion.

44. Pursuant to C.R.S. §37-92-304(6), the Court shall retain continuing jurisdiction over the plan for augmentation decreed herein for reconsideration of the question of whether the provisions of this decree are necessary and/or sufficient to prevent injury to vested water rights of others, as pertains to the use of Denver Basin groundwater supplies adjudicated herein for augmentation purposes. The Court also retains continuing jurisdiction for the purpose of determining compliance with the terms of the augmentation plan. The Court further retains jurisdiction should the Applicant later seek to amend this decree by seeking to prove that post-pumping depletions are noninjurious, that the extent of replacement for post-pumping depletions is less than the amount of water reserved herein, and other post-pumping matters addressed in Paragraph 24.D. The Court's retained jurisdiction described in this paragraph may be invoked using the process set forth in Paragraph 45.

45. Except as otherwise specifically provided in Paragraphs 43-45, pursuant to the provisions of C.R.S. §37-92-304(6), this plan for augmentation decreed herein shall be subject to the reconsideration of this Court on the question of injury to vested water rights of others, for a period from the date of entry of this decree until five years following the date that Applicant begins operation of the plan for augmentation based on the subdivision of the Applicant's Property and withdrawal of water from the J + M Well No. 2. Applicant shall file a notice with the Court confirming the start of operations under the plan for augmentation within thirty-five (35) days of the start date. Any person, within such period, may petition the Court to invoke its retained jurisdiction. Any person seeking to invoke the Court's retained jurisdiction shall file a verified petition with the Court setting forth with particularity the factual basis for requesting that the Court reconsider injury to petitioner's vested water rights associated with the operation of this decree, together with proposed decretal language to effect the petition. The party filing the petition shall have the burden of proof of going forward to establish a prima facie case based on the facts alleged in the petition. If the Court finds those facts are established, Applicant shall thereupon have the burden of proof to show: (i) that the petitioner is not injured, or (ii) that any modification sought by the petitioner is not required to avoid injury to the petitioner, or (iii) that any term or condition proposed by the Applicant in response to the petition does avoid injury to the petitioner. The Division of Water Resources as a petitioner shall be entitled to assert injury to the vested water rights of others. If no petition concerning the subject of the Court's retained jurisdiction described in this paragraph 45 is filed within the period described in this paragraph, and the retained jurisdiction period is not extended by the Court in accordance with the provisions of the statute, the matter described in this paragraph shall become final under its own terms.

46. Pursuant to C.R.S. §37-92-502(5)(a), the Applicant shall install and maintain such water measurement devices and recording devices as are deemed necessary by the State Engineer or Division Engineers, and the same shall be installed and operated in accordance with instructions from said entities. Applicant is to install and maintain a totalizing flow meter on the J + M Wells Nos. 1 and 2 or any additional or replacement wells associated therewith and are required to include geophysical logging on each newly constructed well. Applicant shall read and record the well meter readings on March 31st and October 31st of each year and shall submit the meter readings to the Water Commissioner by April 15th and November 15th of each year, or more frequently as requested by the Water Commissioner.

47. The vested water rights, water right structures, and plan for augmentation decreed herein shall be subject to all applicable administrative rules and regulations, as currently in place or as may in the future be promulgated, of the offices of Colorado State and Division Engineers for administration of such water rights, to the extent such rules and regulations are uniformly applicable to other similarly situated water rights and water users. The J + M Well No. 2 shall be permitted as a non-exempt structure under the plan for augmentation decreed herein, which plan shall be implemented upon the construction and use of the J + M Well No. 2. The State Engineer shall identify in any permits issued pursuant to this decree the specific uses which can be made of the groundwater to be withdrawn, and, to the extent the well permit application requests a use that has not been specifically identified in this decree, shall not issue a permit for any proposed use, which use the State Engineer determines to be speculative at the time of the well permit application or which would be inconsistent with the requirements of this decree, any separately decreed plan for augmentation, or any modified decree and augmentation plan.

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

DATED THIS ___ day of _____, 2024.

BY THE REFEREE:

Kate Brewer, Water Referee
Water Division 2

THE COURT FINDS THAT NO PROTEST WAS MADE IN THIS MATTER, THEREFORE

THE FORGOING RULING IS CONFIRMED AND APPROVED, AND IS HEREBY MADE
THE JUDGMENT AND DECREE OF THIS COURT.

DATED:

BY THE COURT:

Honorable Gregory J. Styduhar,
Water Judge, Water Division 2
State of Colorado

WELL CONSTRUCTION AND TEST REPORT
STATE OF COLORADO, OFFICE OF THE STATE ENGINEER

For Office Use only

RECEIVED
MAR 10 1997
STATE ENGINEER
COLORADO

1. WELL PERMIT NUMBER 172655
2. OWNER NAME(S) GLENN HUNSINGER
Mailing Address 10140 OTERO AVE
City, St. Zip CS, CO. 80920
Phone (719) 598-2994

3. WELL LOCATION AS DRILLED: NE 1/4 NW 1/4, Sec. 28 Twp. 12S, Range 66W 6N
DISTANCES FROM SEC. LINES:
3997 ft. from SOUTH Sec. line. and 3153 ft. from EAST Sec. line. OR
(north or south) (east or west)
SUBDIVISION: SPRINGCREST LOT 8 BLOCK E FILING(UNIT) AMD
STREET ADDRESS AT WELL LOCATION:

4. GROUND SURFACE ELEVATION _____ ft. DRILLING METHOD AIR ROTARY
DATE COMPLETED 2/12/97 TOTAL DEPTH 460 ft. DEPTH COMPLETED 460 ft.

5. GEOLOGIC LOG:

Depth	Description of Material (Type, Size, Color, Water Location)
0-10	SHALE
10-21	SANDROCK
21-100	SHALE
100-110	GRAVEL, SANDROCK
110-160	SAND, CLAY,
168-180	GRAVEL, SANDROCK
190-260	SHALE
260-290	SAND CLAY
290-295	SHALE
295-310	GRAVEL, SANDROCK
310-450	SHALE
450-460	SANDROCK

REMARKS: H2O 295-310

6. HOLE DIAM. (in.) From (ft) To (ft)

Hole Diam. (in.)	From (ft)	To (ft)
<u>8 3/4</u>	<u>0</u>	<u>20</u>
<u>6 1/8</u>	<u>20</u>	<u>460</u>

7. PLAIN CASING

OD (in)	Kind	Wall Size	From (ft)	To (ft)
<u>6 5/8</u>	<u>STEEL</u>	<u>188</u>	<u>+1</u>	<u>20</u>
<u>4 1/2</u>	<u>PVC</u>	<u>200 PSI</u>	<u>7</u>	<u>280</u>

PERF. CASING: Screen Slot Size: 1/8" holes / 0.020 slots

Screen Slot Size	From (ft)	To (ft)
<u>4 1/2 PVC sch 40</u>	<u>280</u>	<u>320</u>
<u>4 1/2 PVC 200 PSI</u>	<u>320</u>	<u>360</u>
<u>4 1/8 PVC sch 40</u>	<u>360</u>	<u>460</u>

8. FILTER PACK:
Material GRAVEL
Size 1/4"
Interval 19-260

9. PACKER PLACEMENT:
Type RUBBER
Depth 280

10. GROUTING RECORD:

Material	Amount	Density	Interval	Placement
<u>Cement</u>	<u>2 sacks</u>	<u>125 lb</u>	<u>6-20</u>	<u>Poured</u>
<u>Volclay</u>	<u>4 Bkts</u>	<u>14"</u>	<u>260-280</u>	<u>Poured</u>

11. DISINFECTION: Type H + B Amt. Used 60Z.

12. WELL TEST DATA: Check box if Test Data is submitted on Form No. GWS 39 Supplemental Well Test.
TESTING METHOD BAILED
Static Level 160 ft. Date/Time measured _____, Production Rate 20 gpm.
Pumping level 260 ft. Date/Time measured 2/12/97, Test length (hrs.) 4
Remarks _____

13. I have read the statements made herein and know the contents thereof, and that they are true to my knowledge. [Pursuant to Section 24-4-104 (13)(a) C.R.S., the making of false statements herein constitutes perjury in the second degree and is punishable as a class 1 misdemeanor.]
CONTRACTOR KUNAW DRILLING & Exc. Phone (719) 683-3720 Lic. No. 1148
Mailing Address 23945 Lucky Ln., CAWAN, CO. 80808
Name/Title (Please type or print) Tim Kunaw/OWNER Signature Tim Kunaw Date 3-6-97

The report must be typed or printed in **BLACK INK**. All changes on the form must be initialed and dated. Attach additional sheets if more space is required. Each additional sheet must be identified at the top by the well owner's name, the permit number, form name/number and a sequential page number. Report depths in feet below ground surface.

This form may be reproduced by photocopy methods, or by computer generation with prior approval by the State Engineer. Photocopy reproductions must retain margins and print quality of the original form.

The original form must be submitted to the State Engineer's Office within 60 days after completing the well or 7 days after the permit expiration date, whichever is earlier.

A copy of the form must be provided to the well owner.

1. Complete the **Well Permit Number** in full.
2. Fill in **Name and Mailing Address of Well Owner** where correspondence should be sent.
3. Complete the blocks for the **actual** location of the well where drilled. If the owner has more than one well serving this property, provide the identification (**Owner's Designation**) for this well. **DO NOT USE THE OWNER SUPPLIED LOCATION** unless a survey has been provided. For wells located in subdivisions the lot, block and subdivision information must also be provided.
4. Report the ground surface elevation in feet above sea level if available. This value may be obtained from a topographic map. Describe the drilling method used to construct the well and the date completed. Indicate the total depth drilled and the actual completed depth of the well.
5. Fully describe the materials encountered in drilling. Do not use formation names unless they are in conjunction with a description of materials.
Examples of descriptive terms include:
Grain size--Boulders, gravel, sand, silt, clay.
Hardness--Loose, soft, tight, hard, very hard.
Color--All materials. Most critical in sedimentary rock.
Depth when water is encountered (if it can be determined).
6. Provide the diameters of the drilled bore hole.
7. The outside diameter, kind, wall thickness and interval of casing lengths must be indicated.
8. Indicate the type and size of filter (gravel) pack and the interval where placed.
9. Indicate the type and setting depth for any packers installed.
10. The density of the grout slurry must be reported and may be indicated as pounds per gallon, gallons of water per sack, total gallons of water and number of sacks used, etc. Specify the grout placement method, i.e. tremie pipe or positive displacement. The percentage of additives mixed with the grout should be reported under remarks.
11. Record the type and the amount of disinfection used, how placed and the length of time left in the hole.
12. Report well test data as required by Rule 10.7. Spaces are provided to report all measurements made during the test. The report should show that the test complied with the provisions of the rules. If a test was not performed explain when it will be done. If available, report clock time when measurements were taken.
13. Fill in **Company Name and Address of Contractor** who constructed the well. The report must be signed by the licensed contractor responsible for the construction of the well.

OFFICE OF THE STATE ENGINEER
COLORADO DIVISION OF WATER RESOURCES

818 Centennial Bldg., 1313 Sherman St., Denver, Colorado 80203
(303) 868-3581

LIC

WELL PERMIT NUMBER 172655
DIV. 2 CNTY. 21 WD 10 DES. BASIN MD

APPLICANT

GLENN HUNSINGER
10140 OTERO AVE
CO SPGS CO 80920

(719)598-2994

Lot: 8 Block: E Filing: AMD Subdiv: SPRINGCREST

APPROVED WELL LOCATION
EL PASO COUNTY

NE 1/4 NW 1/4 Section 28
Twp 12 S RANGE 66 W 6th P.M.

DISTANCES FROM SECTION LINES

3997 Ft. from South Section Line
3153 Ft. from East Section Line

PERMIT TO CONSTRUCT A WELL

ISSUANCE OF THIS PERMIT DOES NOT CONFER A WATER RIGHT
CONDITIONS OF APPROVAL

- 1) This well shall be used in such a way as to cause no material injury to existing water rights. The issuance of the permit does not assure the applicant that no injury will occur to another vested water right or preclude another owner of a vested water right from seeking relief in a civil court action.
- 2) The construction of this well shall be in compliance with the Water Well Construction and Pump Installation Rules 2 CCR 402-2, unless approval of a variance has been granted by the State Board of Examiners of Water Well Construction and Pump Installation Contractors in accordance with Rule 17.
- 3) Approved pursuant to CRS 37-92-602(3)(b)(II)(A) as the only well on a residential site of 5.84 acres described as Lot 8, Block BE Filing Amended, Spring Crest Subdivision, El Paso County.
- 4) The use of ground water from this well is limited to ordinary household purposes inside a single family dwelling and the watering of the user's noncommercial domestic animals. The ground water shall not be used for irrigation or other purposes.
- 5) The total depth of the well shall not exceed 460 feet, which corresponds to the base of the Denver aquifer.
- 6) The maximum pumping rate shall not exceed 15 GPM.
- 7) The return flow from the use of the well must be through an individual waste water disposal system of the non-evaporative type where the water is returned to the same stream system in which the well is located.
- 8) This well shall be constructed not more than 200 feet from the location specified on this permit.

Note: To insure 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. MAS 9-8-93

PERMIT EXPIRATION DATE EXTENDED Jun 30, 1996
MD 6-20-95

PERMIT EXPIRATION DATE EXTENDED Jun 30, 1997
MD 6-14-96

APPROVED
MAS

Hal D. Simpson
State Engineer

Glenn Hunsinger
By

Receipt No. 0355709

DATE ISSUED JUN 30 1993

EXPIRATION DATE JUN 30 1995

COLORADO DIVISION OF WATER RESOURCES
818 Centennial Bldg., 1313 Sherman St., Denver, Colorado 80203

RECEIVED

JUN 24 '93

WATER RESOURCES
STATE ENGINEER

172655

PERMIT APPLICATION FORM

RECEIVED

AUG 23 '93

WATER RESOURCES
STATE ENGINEER

Application must be complete where applicable. Type or print in BLACK INK. No overstrikes or erasures unless initialed.

- () A PERMIT TO USE GROUND WATER
- (X) A PERMIT TO CONSTRUCT A WELL
- FOR: () A PERMIT TO INSTALL A PUMP

- () REPLACEMENT FOR NO. _____
- () OTHER _____
- WATER COURT CASE NO. _____

0030

(1) APPLICANT - mailing address

NAME GLENN HUNSINGER
 STREET 10140 OTERO AVE.
 CITY COLORADO SPRINGS, CO 80920
(State) (Zip)
 TELEPHONE NO. (719) 598-2994

FOR OFFICE USE ONLY: DO NOT WRITE IN THIS COLUMN

Receipt No. 355709
 Basin _____ Dist. _____

CONDITIONS OF APPROVAL

This well shall be used in such a way as to cause no material injury to existing water rights. The issuance of the permit does not assure the applicant that no injury will occur to another vested water right or preclude another owner of a vested water right from seeking relief in a civil court action.

(2) LOCATION OF PROPOSED WELL

County EL PASO
NE $\frac{1}{4}$ of the NW $\frac{1}{4}$, Section 28
 Twp. 12 S, Rng. 66 W, 6TH P.M.
(N.S) (E.W)

(3) WATER USE AND WELL DATA

Proposed maximum pumping rate (gpm) 15 GPM
 Average annual amount of ground water to be appropriated (acre-feet): 1 AF
 Number of acres to be irrigated: 0
 Proposed total depth (feet): 340 FT
 Aquifer ground water is to be obtained from:
DENVER
 Owner's well designation #8

GROUND WATER TO BE USED FOR:

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

DETAIL THE USE ON BACK IN (11)

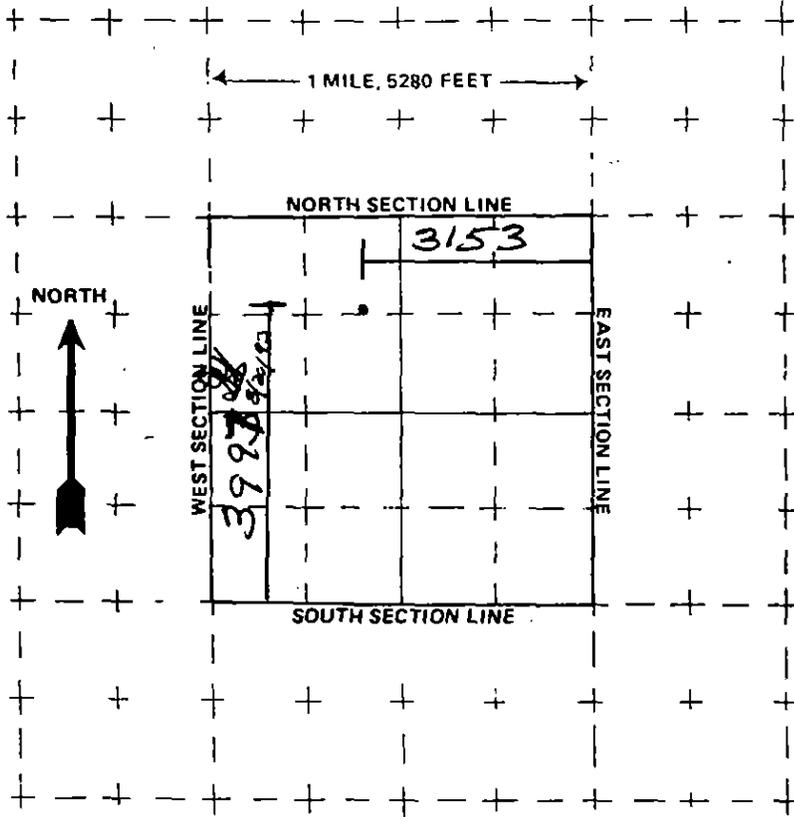
(4) DRILLER

Name LICENSED
 Street _____
 City _____
(State) (Zip)
 Telephone No. _____ Lic. No. _____

APPLICATION APPROVED

PERMIT NUMBER _____
 DATE ISSUED _____
 EXPIRATION DATE _____
 _____ (STATE ENGINEER)
 BY _____
 I.D. 2 COUNTY 21-10

(5) THE LOCATION OF THE PROPOSED WELL and the area on which the water will be used must be indicated on the diagram below. Use the CENTER SECTION (1 section, 640 acres) for the well location.



The scale of the diagram is 2 inches = 1 mile
Each small square represents 40 acres.

WATER EQUIVALENTS TABLE (Rounded Figures)

An acre-foot covers 1 acre of land 1 foot deep
1 cubic foot per second (cfs) . . . 449 gallons per minute (gpm)
A family of 5 will require approximately 1 acre-foot of water per year.
1 acre-foot . . . 43,560 cubic feet . . . 325,900 gallons.
1,000 gpm pumped continuously for one day produces 4.42 acre-feet.

(6) THE WELL MUST BE LOCATED BELOW by distances from section lines.

3997 ft. from NS sec. line (north or south)
3153 ft. from WE sec. line (east or west)

LOT 8 BLOCK E FILING AMENDED
SUBDIVISION SPRING CREST

(7) TRACT ON WHICH WELL WILL BE LOCATED Owner: GLENN HUNSINGER

No. of acres 5.84 Will this be the only well on this tract? YES

(8) PROPOSED CASING PROGRAM

Plain Casing
5" STEEL in. from ABOVE ft. to 19 ft.
5" PLASTIC in. from 19 ft. to 150 ft.
Perforated casing
5" PLASTIC in. from 150 ft. to 340 ft.
_____ in. from _____ ft. to _____ ft.

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

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

Owner(s): GLENN HUNSINGER No. of acres: 5.84

Legal description: LOT 8 BLK E SPRING CREST AMENDED FILING

(11) DETAILED DESCRIPTION of the use of ground water: Household use and domestic wells must indicate type of disposal system to be used. IRRIGATION OF UP TO 1 AC, WATERING OF ANIMALS, SINGLE FAMILY HOME, SEPTIC AND LEACH FIELD.

(12) OTHER WATER RIGHTS used on this land, including wells. Give Registration and Water Court Case Numbers.

Type or right	Used for (purpose)	Description of land on which used

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

Glenn Hunsinger JUNE 23, 1993
SIGNATURE OF APPLICANT(S)

EXEMPT WELL DATA SHEET - DENVER BASIN, COLORADO

APPLICANT: HUNSINGER RECEIPT NO. 35709
 LOCATION: NE1/4 OF NW1/4 OF SEC. 28, T.12S., R.66W. (1283 NSL, 2127 WSL)

PROPOSED AQUIFER:
 SURFACE ELEVATION: 6665 NUMBER OF ACRES IN TRACT: 5.84

 IS PROPERTY WITHIN SERVICE BOUNDARIES OF MUNICIPALITY S.B.5 CONSENT MAPS? NO ___ YES ___
 IF SUBDIVISION IS UNDER AUGMENTATION PLAN, CASE NO. IS _____, DIV. _____
 IF SUBDIVISION WAS RECOMMENDED FOR APPROVAL BY THE WATER MANAGEMENT BRANCH, DATE OF LETTER IS _____
 INFORMATION ON SUBDIVISION OR TRACT OF LAND/SPECIAL RESTRICTIONS:

 evaluated by MAS on SEPTEMBER 7, 1993

AQUIFER	ELEVATION		NET SAND	DEPTH TO		ANNUAL APPROP A-F	STATUS
	BOT.	TOP		BOT.	TOP		
UPPER DAWSON	----	----	----	----	----	----	---
LOWER DAWSON	----	----	----	----	----	----	---
DENVER	6206	6713	173	459	-48	1.708 E	NNT
UPPER ARAPAHOE	5680	6146	247	985	519	2.442	NNT
LOWER ARAPAHOE	----	----	----	----	----	----	---
LARAMIE-FOX HILLS	4923	5213	185	1742	1452	1.621	NT

note: E indicates location is at aquifer boundary and values may be more approximate.
 * indicates the proposed aquifer.

All values are interpolated from the S.B.5 data base assembled in November of 1986.

TO: <i>Dir. Water Resources</i>	FROM: <i>Glenn Hunsinger</i>	DATE: <i>6/13/95</i>	OBERN BOK
FAX (303) 866-3589	FAX: <i>637-0155</i>	PAGES INCLUDING THIS PAGE: <i>1</i>	
	PHONE: <i>596-7082</i>		

Division of Water Resources
 Centennial Building, Room 818
 1313 Sherman Street
 Denver, Colorado 80203

June 12, 1995

FAX 303-866-3589
 Attention: Vera Davis

RECEIVED

Re: Well permit Extension.

JUN 13 1995

My property is located just outside of the City of Colorado Springs and there is a possibility that I may have to annex.

If annexed all wells must be plugged and abandoned. The cost of installing the wells is high, but the cost of annexation and development is probably prohibitive. I need more time to determine which route to take. Please grant me an extension for one year on the following eight well permits:
 172648, 172649, 172650, 172651, 172652, 172653, 172654 & 172655.

My mailing address is: 10,140 Otero Ave.
 Colorado Springs, Colorado
 80920

Sincerely;

Glenn W. Hunsinger
 Glenn W. Hunsinger

PERMIT EXPIRATION DATE EXTENDED Jul 30, 1996

RECEIVED
JUN 12 1996
WATER RESOURCES
STATE ENGINEER
COLO

Division of Water Resources
Centennial Building, Room 818
1313 Sherman Street
Denver, Colorado 80203

June 12, 1996

FAX 303-866-3589
Attention: Vera Davis

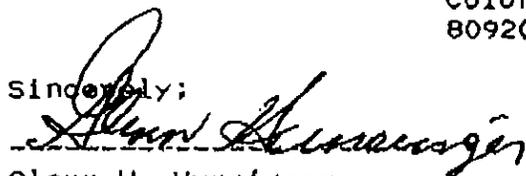
Re: Well permit Extension.

My property is located just outside of the City of Colorado Springs and there is a possibility that I may have to annex.

If annexed all wells must be plugged and abandoned. The cost of installing the wells is high, but the cost of annexation and development is probably prohibitive. I have not determined which route to take. Please grant me an extension for one year on the following eight well permits: 172648, 172649, 172650, 172651, 172652, 172653, 172654 & 172655.

My mailing address is: 10,140 Otero Ave.
Colorado Springs, Colorado
80920

Sincerely;


Glenn W. Hunsinger

PERMIT EXPIRATION DATE EXTENDED Jun 30/97

*Original copy required
6/12/96*

Appendix D

Analytical Results

TASK NO: 240214098

Report To: Lexi Yoder

Company: RESPEC Company, LLC
5540 Tech Center Drive
Suite 100
Colorado Springs CO 80919

Bill To: Accounts Payable

Company: RESPEC Company, LLC
5540 Tech Center Drive
Suite 100
Colorado Springs CO 80919

Task No.: 240214098
Client PO:
Client Project: Otero - Old Ranch Road

Date Received: 2/14/24
Date Reported: 2/21/24
Matrix: Water - Drinking

Customer Sample ID #1

Sample Date/Time: 2/13/24 10:37 AM

Lab Number: 240214098-01

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
Bicarbonate	63.0 mg/L as CaCO3	SM 2320-B	0.2 mg/L as CaCO3	2/16/24	-	TAB
Calcium as CaCO3	31.1 mg/L	EPA 200.7	0.1 mg/L	2/16/24	-	MBN
Carbonate	ND mg/L as CaCO3	SM 2320-B	0.2 mg/L as CaCO3	2/16/24	-	TAB
Hydroxide	ND mg/L as CaCO3	SM 2320-B	0.2 mg/L as CaCO3	2/16/24	-	TAB
Langelier Index	-0.21 units	SM 2330-B	units	2/20/24	-	DPL
pH	8.40 units	SM 4500-H-B	0.01 units	2/13/24	-	Sampler
Temperature	13 °C	SM 4500-H-B	1 °C	2/13/24	-	Sampler
Total Alkalinity	63.0 mg/L as CaCO3	SM 2320-B	4.0 mg/L as CaCO3	2/16/24	QC71375	TAB
Total Dissolved Solids	118 mg/L	SM 2540-C	5 mg/L	2/20/24	QC71397	ISG

Abbreviations/ References:

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

(d) RPD acceptable due to low duplicate and sample concentrations.
(s) Spike amount low relative to the sample amount.
ND = Not Detected at Reporting Limit.

**Analytical QC
Summary**

TASK NO: 240214098

Report To: Lexi Yoder
Company: RESPEC Company, LLC

Receive Date: 2/14/24
Project Name: Otero - Old Ranch Road

Test	QC Batch ID	QC Type	Result	Method	Prep Date
Total Alkalinity	QC71375	Blank	ND	SM 2320-B	2/16/24
Total Dissolved Solids	QC71397	Blank	ND	SM 2540-C	2/19/24

Test	QC Batch ID	QC Type	Limits	% Rec	RPD	Method
Total Alkalinity	QC71375	Duplicate	0 - 20	-	4.6	SM 2320-B
		LCS	90 - 110	104.1	-	
		LCS-2	90 - 110	98.1	-	
Total Dissolved Solids	QC71397	Duplicate	0 - 10	-	1.1	SM 2540-C
		LCS	85 - 115	99.3	-	

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
 mpr/100 mls = Most Probable Number Index/ 100 mls
 Date Analyzed = Date Test Completed

(d) RPD acceptable due to low duplicate and sample concentrations.
 (s) Spike amount low relative to the sample amount.
 ND = Not Detected at Reporting Limit.

EPC Confined Aquifer Sampling Requirements

**CAL Task
240214098**

Field Measurements

pH

Temp

CJF

Radionuclides

Radium 226 and Radium 228

Gross alpha/Beta

Inorganics

Antimony

Arsenic

Barium

Beryllium

Cadmium

Chromium

Cyanide (Total)

Fluoride

Mercury

Nitrate

Nitrite

Selenium

Thallium

Secondary MCLs

Aluminum

Chloride

Corrosivity

Iron

Manganese

Silver

Sulfate

Zinc

TDS

Bacteriological:

Total Coliform

Analytical Results

TASK NO: 240214098

Report To: Lexi Yoder

Company: RESPEC Company, LLC
5540 Tech Center Drive
Suite 100
Colorado Springs CO 80919

Bill To: Accounts Payable

Company: RESPEC Company, LLC
5540 Tech Center Drive
Suite 100
Colorado Springs CO 80919

Task No.: 240214098
Client PO:
Client Project: Otero - Old Ranch Road

Date Received: 2/14/24
Date Reported: 2/21/24
Matrix: Water - Drinking

Customer Sample ID #1

Sample Date/Time: 2/13/24 10:37 AM

Lab Number: 240214098-01

Test	Result	Method	RL	MCL	Date Analyzed	QC Batch ID	Analyzed By
Total Coliform	ND mpn/100ml	Colilert	1 mpn/100ml		2/15/24	-	NRP
Chloride	1.5 mg/L	EPA 300.0	0.1 mg/L		2/14/24	QC71330	AMJ
Fluoride	1.89 mg/L	EPA 300.0	0.10 mg/L	4	2/14/24	QC71335	AMJ
Nitrate Nitrogen	ND mg/L	EPA 300.0	0.05 mg/L	10	2/14/24	QC71331	AMJ
Nitrite Nitrogen	ND mg/L	EPA 300.0	0.03 mg/L	1	2/14/24	QC71332	AMJ
Sulfate	23.7 mg/L	EPA 300.0	0.1 mg/L		2/14/24	QC71333	AMJ
Cyanide-Total	ND mg/L	EPA 335.4	0.005 mg/L	0.02	2/16/24	QC71353	JCB
Total							
Iron	ND mg/L	EPA 200.7	0.005 mg/L	0.3	2/16/24	QC71360	MBN
Aluminum	0.002 mg/L	EPA 200.8	0.001 mg/L	0.05	2/16/24	QC71378	MBN
Antimony	ND mg/L	EPA 200.8	0.0012 mg/L	0.006	2/16/24	QC71378	MBN
Arsenic	ND mg/L	EPA 200.8	0.0006 mg/L	0.01	2/16/24	QC71378	MBN
Barium	0.0028 mg/L	EPA 200.8	0.0007 mg/L	2	2/16/24	QC71378	MBN
Beryllium	ND mg/L	EPA 200.8	0.0001 mg/L	0.004	2/16/24	QC71378	MBN
Cadmium	ND mg/L	EPA 200.8	0.0001 mg/L	0.005	2/16/24	QC71378	MBN
Chromium	ND mg/L	EPA 200.8	0.0015 mg/L	0.1	2/16/24	QC71378	MBN
Manganese	0.0095 mg/L	EPA 200.8	0.0008 mg/L	0.05	2/16/24	QC71378	MBN
Mercury	ND mg/L	EPA 200.8	0.0001 mg/L	0.002	2/16/24	QC71378	MBN
Selenium	ND mg/L	EPA 200.8	0.0008 mg/L	0.05	2/16/24	QC71378	MBN
Silver	ND mg/L	EPA 200.8	0.0005 mg/L	0.1	2/16/24	QC71378	MBN

Abbreviations/ References:

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

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

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

Analytical Results

TASK NO: 240214098

Report To: Lexi Yoder
Company: RESPEC Company, LLC
5540 Tech Center Drive
Suite 100
Colorado Springs CO 80919

Bill To: Accounts Payable
Company: RESPEC Company, LLC
5540 Tech Center Drive
Suite 100
Colorado Springs CO 80919

Task No.: 240214098
Client PO:
Client Project: Otero - Old Ranch Road

Date Received: 2/14/24
Date Reported: 2/21/24
Matrix: Water - Drinking

Customer Sample ID #1
Sample Date/Time: 2/13/24 10:37 AM
Lab Number: 240214098-01

Test	Result	Method	RL	MCL	Date Analyzed	QC Batch ID	Analyzed By
<i>Total</i>							
Thallium	ND mg/L	EPA 200.8	0.0002 mg/L	0.002	2/16/24	QC71378	MBN
Zinc	0.002 mg/L	EPA 200.8	0.001 mg/L	5	2/16/24	QC71378	MBN

Abbreviations/References:

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

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

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

Analytical QC Summary

TASK NO: 240214098

Report To: Lexi Yoder
Company: RESPEC Company, LLC

Receive Date: 2/14/24
Project Name: Otero - Old Ranch Road

Test	QC Batch ID	QC Type	Result	Method	Prep Date
Chloride	QC71330	Blank	ND	EPA 300.0	2/14/24
Cyanide-Total	QC71353	Blank	ND	EPA 335.4	2/15/24
Fluoride	QC71335	Blank	ND	EPA 300.0	2/14/24
Aluminum	QC71378	Method Blank	ND	EPA 200.8	2/14/24
Antimony	QC71378	Method Blank	ND	EPA 200.8	2/14/24
Arsenic	QC71378	Method Blank	ND	EPA 200.8	2/14/24
Barium	QC71378	Method Blank	ND	EPA 200.8	2/14/24
Beryllium	QC71378	Method Blank	ND	EPA 200.8	2/14/24
Cadmium	QC71378	Method Blank	ND	EPA 200.8	2/14/24
Chromium	QC71378	Method Blank	ND	EPA 200.8	2/14/24
Manganese	QC71378	Method Blank	ND	EPA 200.8	2/14/24
Mercury	QC71378	Method Blank	ND	EPA 200.8	2/14/24
Selenium	QC71378	Method Blank	ND	EPA 200.8	2/14/24
Silver	QC71378	Method Blank	ND	EPA 200.8	2/14/24
Thallium	QC71378	Method Blank	ND	EPA 200.8	2/14/24
Zinc	QC71378	Method Blank	ND	EPA 200.8	2/14/24
Iron	QC71360	Method Blank	ND	EPA 200.7	2/14/24
Nitrate Nitrogen	QC71331	Blank	ND	EPA 300.0	2/14/24
Nitrite Nitrogen	QC71332	Blank	ND	EPA 300.0	2/14/24
Sulfate	QC71333	Blank	ND	EPA 300.0	2/14/24

Test	QC Batch ID	QC Type	Limits	% Rec	RPD	Method
Chloride	QC71330	Duplicate	0 - 20	-	0.4	EPA 300.0
		LCS	90 - 110	99.9	-	
		MS	75 - 125	97.2	-	
Cyanide-Total	QC71353	Duplicate	0 - 20	-	7.8	EPA 335.4
		LCS	90 - 110	105.1	-	
		MS	75 - 125	110.5	-	
Fluoride	QC71335	Duplicate	0 - 20	-	1.1	EPA 300.0
		LCS	90 - 110	95.9	-	
		MS	75 - 125	88.1	-	
Aluminum	QC71378	LCS	90 - 110	99.1	-	EPA 200.8
		MS	70 - 130	94.8	-	
		MSD	0 - 10	-	4.5	
Antimony	QC71378	LCS	90 - 110	103.4	-	EPA 200.8
		MS	70 - 130	97.4	-	
		MSD	0 - 10	-	0.9	
Arsenic	QC71378	LCS	90 - 110	99.6	-	EPA 200.8
		MS	70 - 130	102.1	-	
		MSD	0 - 10	-	3.6	
Barium	QC71378	LCS	90 - 110	97.8	-	EPA 200.8

Abbreviations/ References:

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

(d) RPD acceptable due to low duplicate and sample concentrations.
 (s) The accuracy of the spike recovery value is reduced due to the analyte 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	QC71378	MS	70 - 130	91.3	-	EPA 200.8
		MSD	0 - 10	-	2.7	
		LCS	90 - 110	101.2	-	
Cadmium	QC71378	MS	70 - 130	105.6	-	EPA 200.8
		MSD	0 - 10	-	0.0	
		LCS	90 - 110	98.3	-	
Chromium	QC71378	MS	70 - 130	99.7	-	EPA 200.8
		MSD	0 - 10	-	0.1	
		LCS	90 - 110	101.2	-	
Manganese	QC71378	MS	70 - 130	105.4	-	EPA 200.8
		MSD	0 - 10	-	3.0	
		LCS	90 - 110	103.6	-	
Mercury	QC71378	MS	70 - 130	94.0	-	EPA 200.8
		MSD	0 - 10	-	4.5	
		LCS	90 - 110	92.0	-	
Selenium	QC71378	MS	70 - 130	106.6	-	EPA 200.8
		MSD	0 - 10	-	2.7	
		LCS	90 - 110	98.0	-	
Silver	QC71378	MS	70 - 130	105.4	-	EPA 200.8
		MSD	0 - 10	-	4.8	
		LCS	90 - 110	99.4	-	
Thallium	QC71378	MS	70 - 130	90.0	-	EPA 200.8
		MSD	0 - 10	-	3.4	
		LCS	90 - 110	100.8	-	
Zinc	QC71378	MS	70 - 130	107.3	-	EPA 200.8
		MSD	0 - 10	-	6.2	
		LCS	90 - 110	96.6	-	
Iron	QC71360	MS	75 - 125	99.0	-	EPA 200.7
		Duplicate	0 - 20	-	0.6	
		LCS	90 - 110	105.0	-	
Nitrate Nitrogen	QC71331	Duplicate	0 - 20	-	0.3	EPA 300.0
		LCS	90 - 110	101.0	-	
		MS	75 - 125	90.9	-	
Nitrite Nitrogen	QC71332	Duplicate	0 - 20	-	0.0	EPA 300.0
		LCS	90 - 110	106.5	-	
		MS	75 - 125	96.6	-	
Sulfate	QC71333	Duplicate	0 - 20	-	2.5	EPA 300.0
		LCS	90 - 110	100.2	-	
		MS	75 - 125	99.1	-	

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.



Commerce City Lab
10411 Heinz Way
Commerce City CO 80640

Lakewood Service Center
610 Garrison Street, Unit E
Lakewood CO 80215

Phone: 303-659-2313

www.coloradolab.com

Chain of Custody Form

Report To Information		Bill To Information (If different from report to)		Project Name / Number	
Company Name: <u>RESPEC</u>		Company Name: _____		<u>Otero - Old Ranch</u>	
Contact Name: <u>Lexi Yoder</u>		Contact Name: _____		<u>road</u>	
Address: <u>5540 Tech Center drive Suite 100</u>		Address: _____		Task Number (Lab Use Only)	
City: <u>CO Springs</u>	State: <u>CO</u>	City: _____	State: _____	CAL Task	
Phone: <u>719-227-0072</u>	Zip: <u>80919</u>	Phone: _____	Zip: _____	240214098	
Email: <u>Lexi.Yoder@Respec.com</u>		Email: _____		CJF	
Sample Collector: <u>Lexi Yoder</u>		PO No.: _____			
Sample Collector Phone: <u>330-844-4966</u>					

Sample Matrix (Select One Only)		No. of Containers	Grab or (Check One Only) Composite	Tests Requested
Waste Water <input type="checkbox"/>	Soil <input type="checkbox"/>			
Ground Water <input type="checkbox"/>	Sludge <input type="checkbox"/>			
Surface Water <input type="checkbox"/>				
Date	Time	Sample ID		
2/13/24	10:37am	#1	10	X List attached
field test pH: 8.4 temp: 12.6°C				
<div style="border: 1px solid black; border-radius: 50%; width: 50px; height: 50px; display: flex; align-items: center; justify-content: center; margin: 0 auto;"> 10 </div>				
Instructions: Please analyze for constituents listed in attached document				
Relinquished By: <u>Lexi Yoder</u>		Date/Time: <u>2/13/24</u>		Received By: <u>JA</u>
Date/Time: <u>2/13/24</u>		Date/Time: <u>2/14/24</u>		Date/Time: <u>2/14/24</u>
Sample Pres. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Temp. <u>1</u> °C/Fce		Seals Present Yes <input type="checkbox"/> No <input type="checkbox"/>
CIS Charge <u>KA</u>		CIS Info: <u>UPS</u>		Deliver Via: <u>UPS</u>
Relinquished By: _____		Date/Time: _____		Relinquished By: _____
Date/Time: _____		Date/Time: _____		Date/Time: _____

EPC Confined Aquifer Sampling Requirements

**CAL Task
240214098**

Field Measurements

pH
Temp

CJF

Radionuclides

Radium 226 and Radium 228
Gross alpha/Beta

Inorganics

Antimony
Arsenic
Barium
Beryllium
Cadmium
Chromium
Cyanide (Total)
Fluoride
Mercury
Nitrate
Nitrite
Selenium
Thallium

Secondary MCLs

Aluminum
Chloride
Corrosivity
Iron
Manganese
Silver
Sulfate
Zinc
TDS

Bacteriological:

Total Coliform



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

Lab Control ID: 24H01291
Received: Feb 14, 2024
Reported: Mar 12, 2024
Purchase Order No.
None Received

Customer ID: 05377Z
Account ID: Z01034

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

ANALYTICAL REPORT

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

By: *Roxanne Sullivan*
Roxanne Sullivan
Analytical Laboratories Director

Customer ID: 05377Z
 Account ID: Z01034
ANALYTICAL REPORT

Rebecca Manzanares
 Colorado Analytical Laboratories, Inc.

Lab Sample ID		24H01291-001						
Customer Sample ID		240214102-01 - Otero - Old Ranch Road - #1 sampled on 02/13/24 @ 1037						
Parameter	Units	Code	Result	Precision* +/-	Detection Limit	Method	Analysis Date / Time	Analyst
Gross Alpha	pCi/L	T	2.0	2.0	0.1	SM 7110 B	03/07/24 @ 1413	KT
Gross Beta	pCi/L	T	<3.2	2.2	3.2	SM 7110 B	03/07/24 @ 1413	KT

Lab Sample ID		24H01291-002						
Customer Sample ID		240214102-01A - Otero - Old Ranch Road - #1 sampled on 02/13/24 @ 1037						
Parameter	Units	Code	Result	Precision* +/-	Detection Limit	Method	Analysis Date / Time	Analyst
Radium-226	pCi/L	T	<0.2	0.1	0.2	SM 7500-Ra B	03/01/24 @ 1428	KT
Radium-228	pCi/L	T	0.3	0.6	0.2	EPA pg.19	03/04/24 @ 1140	KR

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: C11-005 pCi/mL: 57.4 (use 1 diluted)

Spike Solution: ID: C11-005 pCi/mL: 57.4 (use 1 mL)

Spike Recovery Calculation: Sample: Tap*

$$\text{Calculation: } \frac{(329.8) - (0.200) - (0.1)}{57.4} \times 100 = 115\%$$

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: _____

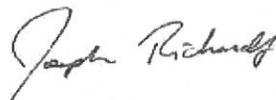
Narrative:

**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>24H01256</u>	<u>24H01289</u>
<u>24H01257</u>	<u>24H01290</u>
<u>24H01273</u>	<u>24H01291</u>
<u>24H01275</u>	<u>24H01292</u>
<u>24H01277</u>	<u>24H01186</u>
<u>24H01278</u>	<u>24H01251</u>
<u>24H01280</u>	<u>24H01298</u>
<u>24H01285</u>	<u>24H01299</u>
<u>24H01286</u>	_____
<u>24H01288</u>	_____

Evaluator:

 _____

03/11/2024

Date

Batch QC Summary Form

Analyte: Gross Beta

Control Standard/LFB: ID: C11-005 pCi/mL: 44 (use 1 diluted)

Spike Solution: ID: C11-005 pCi/mL: 44 (use 1 mL)

Spike Recovery Calculation: Sample: Tap*

$$\text{Calculation: } \frac{(218.8) - (0.200)}{44} \times 100 = 99.4\%$$

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:

- 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>24H01256</u>	<u>24H01289</u>
<u>24H01257</u>	<u>24H01290</u>
<u>24H01273</u>	<u>24H01291</u>
<u>24H01275</u>	<u>24H01292</u>
<u>24H01277</u>	<u>24H01186</u>
<u>24H01278</u>	<u>24H01251</u>
<u>24H01280</u>	<u>24H01298</u>
<u>24H01285</u>	<u>24H01299</u>
<u>24H01286</u>	_____
<u>24H01288</u>	_____

Evaluator:

Joseph Richard _____

03/11/2024

Date

Batch QC Summary Form

Analyte: Radium-226

Control Standard/LFB: ID: C73-004 pCi/mL: 21.1 (use 2 diluted)

Spike Solution: ID: C73-004 pCi/mL: 21.1 (use 2 mL)

Spike Recovery Calculation: Sample: 24H01300-02c

$$\text{Calculation: } \frac{(37.2) (1.000) - (0.8) (1.000)}{42.2} \times 100 = 86.3\%$$

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:

24H01291 _____
24H01292 _____
24H01293 _____
24H01300 _____
24H01304 _____
24H01314 _____
24H01334 _____

Evaluator:

Joseph Richard _____

_____ 03/11/2024
 Date

Batch QC Summary Form

Analyte: Radium-228

Control Standard/LFB: ID: C6-007 pCi/mL: 14.1 (use 5 diluted)

Spike Solution: ID: C6-007 pCi/mL: 14.1 (use 5 mL)

Spike Recovery Calculation: Sample: 24H01304-001d

$$\text{Calculation: } \frac{(68.8) (1.000) - (3.1) (1.000)}{70.5} \times 100 = 93.2\%$$

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:

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:

24H01290 _____
 24H01291 _____
 24H01292 _____
 24H01293 _____
 24H01300 _____
 24H01304 _____
 24H01314 _____

Evaluator:

Joseph Richard _____

03/11/2024
 Date _____

24H 01291



Ship To: Hazen Research
Preserved: Y/N
HNO3 Lot #: 2021041412
Date Preserved: 2-15-24

Report To Information Company Name <u>Colorado Analytical Laboratory</u> Report To: <u>Rebecca Manzanares</u> E-Mail: <u>rebeccamanzanares@coloradolab.com</u> Address: <u>10411 Heinz Way</u> <u>Commerce City, CO 80640</u> Phone: <u>303-659-2313</u>	Bill To Information: (if different from report to) Project Name <u>Otero - Old Ranch Road</u> Compliance Samples: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Submit Data to CDPHE: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Address: <u>10411 Heinz Way</u> <u>Commerce City, CO 80640</u> Phone: <u>303-659-2313</u>	CAL TASK <u>240214102</u> CJF

Tests Requested

Sample Date/Time	Sample ID	Matrix	Relinquished by: (Signature)	Date: Time	Received by: (Signature)	Date: Time
2/13/24 10:37 AM	240214102-01 - #1	Water - Drinking				
2/13/24 10:37 AM	240214102-01A - #1	Water - Drinking				

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

Container Type	1L - Unpreserved
	4 - 1L - Unpreserved

HAND 3

Comment:

PHV = Less than 2
2/15/24
2/16/24

Relinquished by: (Signature) <u>[Signature]</u>	Date: Time <u>2/15/24</u>	Received by: (Signature) <u>[Signature]</u>	Date: Time <u>2/15/24</u>
RECEIVED FEB 14 2024		RECEIVED FEB 14 2024	

830

Analytical Results

TASK NO: 240214144

Report To: Lexi Yoder

Company: RESPEC Company, LLC
5540 Tech Center Drive
Suite 100
Colorado Springs CO 80919

Bill To: Accounts Payable

Company: RESPEC Company, LLC
5540 Tech Center Drive
Suite 100
Colorado Springs CO 80919

Task No.: 240214144
Client PO:
Client Project: Otero Kit Carson Lane

Date Received: 2/14/24
Date Reported: 2/21/24
Matrix: Water - Drinking

Customer Sample ID #2

Sample Date/Time: 2/13/24 9:35 AM

Lab Number: 240214144-01

Test	Result	Method	RL	Date Analyzed	QC Batch ID	Analyzed By
Bicarbonate	72.7 mg/L as CaCO3	SM 2320-B	0.2 mg/L as CaCO3	2/16/24	-	TAB
Calcium as CaCO3	46.3 mg/L	EPA 200.7	0.1 mg/L	2/16/24	-	MBN
Carbonate	ND mg/L as CaCO3	SM 2320-B	0.2 mg/L as CaCO3	2/16/24	-	TAB
Hydroxide	ND mg/L as CaCO3	SM 2320-B	0.2 mg/L as CaCO3	2/16/24	-	TAB
Langelier Index	-0.95 units	SM 2330-B	units	2/20/24	-	DPL
pH	7.42 units	SM 4500-H-B	0.01 units	2/13/24	-	Sampler
Temperature	15 °C	SM 4500-H-B	1 °C	2/13/24	-	Sampler
Total Alkalinity	72.7 mg/L as CaCO3	SM 2320-B	4.0 mg/L as CaCO3	2/16/24	QC71375	TAB
Total Dissolved Solids	138 mg/L	SM 2540-C	5 mg/L	2/20/24	QC71397	ISG

Abbreviations/References:

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

(d) RPD acceptable due to low duplicate and sample concentrations.
(s) Spike amount low relative to the sample amount.
ND = Not Detected at Reporting Limit.

Analytical QC Summary

TASK NO: 240214144

Report To: Lexi Yoder
Company: RESPEC Company, LLC

Receive Date: 2/14/24
Project Name: Otero Kit Carson Lane

Test	QC Batch ID	QC Type	Result	Method	Prep Date
Total Alkalinity	QC71375	Blank	ND	SM 2320-B	2/16/24
Total Dissolved Solids	QC71397	Blank	ND	SM 2540-C	2/19/24

Test	QC Batch ID	QC Type	Limits	% Rec	RPD	Method
Total Alkalinity	QC71375	Duplicate	0 - 20	-	4.6	SM 2320-B
		LCS	90 - 110	104.1	-	
		LCS-2	90 - 110	98.1	-	
Total Dissolved Solids	QC71397	Duplicate	0 - 10	-	1.1	SM 2540-C
		LCS	85 - 115	99.3	-	

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

EPC Confined Aquifer Sampling Requirements

Field Measurements

pH
Temp

Radionuclides

Radium 226 and Radium 228
Gross alpha/Beta

Inorganics

Antimony
Arsenic
Barium
Beryllium
Cadmium
Chromium
Cyanide (Total)
Fluoride
Mercury
Nitrate
Nitrite
Selenium
Thallium

Secondary MCLs

Aluminum
Chloride
Corrosivity
Iron
Manganese
Silver
Sulfate
Zinc
TDS

Bacteriological:

Total Coliform

Analytical Results

TASK NO: 240214144

Report To: Lexi Yoder
Company: RESPEC Company, LLC
5540 Tech Center Drive
Suite 100
Colorado Springs CO 80919

Bill To: Accounts Payable
Company: RESPEC Company, LLC
5540 Tech Center Drive
Suite 100
Colorado Springs CO 80919

Task No.: 240214144
Client PO:
Client Project: Otero Kit Carson Lane

Date Received: 2/14/24
Date Reported: 2/21/24
Matrix: Water - Drinking

Customer Sample ID #2

Sample Date/Time: 2/13/24 9:35 AM

Lab Number: 240214144-01

Test	Result	Method	RL	MCL	Date Analyzed	QC Batch ID	Analyzed By
Total Coliform	ND mpn/100ml	Colilert	1 mpn/100ml		2/15/24	-	NRP
Chloride	2.6 mg/L	EPA 300.0	0.1 mg/L		2/15/24	QC71330	AMJ
Fluoride	1.84 mg/L	EPA 300.0	0.10 mg/L	4	2/15/24	QC71335	AMJ
Nitrate Nitrogen	ND mg/L	EPA 300.0	0.05 mg/L	10	2/15/24	QC71331	AMJ
Nitrite Nitrogen	ND mg/L	EPA 300.0	0.03 mg/L	1	2/15/24	QC71332	AMJ
Sulfate	30.2 mg/L	EPA 300.0	0.1 mg/L		2/15/24	QC71333	AMJ
Cyanide-Total	ND mg/L	EPA 335.4	0.005 mg/L	0.02	2/16/24	QC71353	JCB
Total							
Iron	0.580 mg/L	EPA 200.7	0.005 mg/L	0.3	2/16/24	QC71360	MBN
Aluminum	0.001 mg/L	EPA 200.8	0.001 mg/L	0.05	2/16/24	QC71378	MBN
Antimony	ND mg/L	EPA 200.8	0.0012 mg/L	0.006	2/16/24	QC71378	MBN
Arsenic	ND mg/L	EPA 200.8	0.0006 mg/L	0.01	2/16/24	QC71378	MBN
Barium	0.0104 mg/L	EPA 200.8	0.0007 mg/L	2	2/16/24	QC71378	MBN
Beryllium	ND mg/L	EPA 200.8	0.0001 mg/L	0.004	2/16/24	QC71378	MBN
Cadmium	0.0001 mg/L	EPA 200.8	0.0001 mg/L	0.005	2/16/24	QC71378	MBN
Chromium	ND mg/L	EPA 200.8	0.0015 mg/L	0.1	2/16/24	QC71378	MBN
Manganese	0.0667 mg/L	EPA 200.8	0.0008 mg/L	0.05	2/16/24	QC71378	MBN
Mercury	ND mg/L	EPA 200.8	0.0001 mg/L	0.002	2/16/24	QC71378	MBN
Selenium	ND mg/L	EPA 200.8	0.0008 mg/L	0.05	2/16/24	QC71378	MBN
Silver	ND mg/L	EPA 200.8	0.0005 mg/L	0.1	2/16/24	QC71378	MBN

Abbreviations/ References:

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

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

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

Analytical Results

TASK NO: 240214144

Report To: Lexi Yoder

Company: RESPEC Company, LLC
5540 Tech Center Drive
Suite 100
Colorado Springs CO 80919

Bill To: Accounts Payable

Company: RESPEC Company, LLC
5540 Tech Center Drive
Suite 100
Colorado Springs CO 80919

Task No.: 240214144
Client PO:
Client Project: Otero Kit Carson Lane

Date Received: 2/14/24
Date Reported: 2/21/24
Matrix: Water - Drinking

Customer Sample ID #2

Sample Date/Time: 2/13/24 9:35 AM

Lab Number: 240214144-01

Test	Result	Method	RL	MCL	Date Analyzed	QC Batch ID	Analyzed By
<i>Total</i>							
Thallium	ND mg/L	EPA 200.8	0.0002 mg/L	0.002	2/16/24	QC71378	MBN
Zinc	0.426 mg/L	EPA 200.8	0.001 mg/L	5	2/16/24	QC71378	MBN

Abbreviations/ References:

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

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

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

Analytical QC Summary

TASK NO: 240214144

Report To: Lexi Yoder
Company: RESPEC Company, LLC

Receive Date: 2/14/24
Project Name: Otero Kit Carson Lane

Test	QC Batch ID	QC Type	Result	Method	Prep Date
Chloride	QC71330	Blank	ND	EPA 300.0	2/14/24
Cyanide-Total	QC71353	Blank	ND	EPA 335.4	2/15/24
Fluoride	QC71335	Blank	ND	EPA 300.0	2/14/24
Aluminum	QC71378	Method Blank	ND	EPA 200.8	2/14/24
Antimony	QC71378	Method Blank	ND	EPA 200.8	2/14/24
Arsenic	QC71378	Method Blank	ND	EPA 200.8	2/14/24
Barium	QC71378	Method Blank	ND	EPA 200.8	2/14/24
Beryllium	QC71378	Method Blank	ND	EPA 200.8	2/14/24
Cadmium	QC71378	Method Blank	ND	EPA 200.8	2/14/24
Chromium	QC71378	Method Blank	ND	EPA 200.8	2/14/24
Manganese	QC71378	Method Blank	ND	EPA 200.8	2/14/24
Mercury	QC71378	Method Blank	ND	EPA 200.8	2/14/24
Selenium	QC71378	Method Blank	ND	EPA 200.8	2/14/24
Silver	QC71378	Method Blank	ND	EPA 200.8	2/14/24
Thallium	QC71378	Method Blank	ND	EPA 200.8	2/14/24
Zinc	QC71378	Method Blank	ND	EPA 200.8	2/14/24
Iron	QC71360	Method Blank	ND	EPA 200.7	2/14/24
Nitrate Nitrogen	QC71331	Blank	ND	EPA 300.0	2/14/24
Nitrite Nitrogen	QC71332	Blank	ND	EPA 300.0	2/14/24
Sulfate	QC71333	Blank	ND	EPA 300.0	2/14/24

Test	QC Batch ID	QC Type	Limits	% Rec	RPD	Method
Chloride	QC71330	Duplicate	0 - 20	-	0.4	EPA 300.0
		LCS	90 - 110	99.9	-	
		MS	75 - 125	97.2	-	
Cyanide-Total	QC71353	Duplicate	0 - 20	-	7.8	EPA 335.4
		LCS	90 - 110	105.1	-	
		MS	75 - 125	110.5	-	
Fluoride	QC71335	Duplicate	0 - 20	-	1.1	EPA 300.0
		LCS	90 - 110	95.9	-	
		MS	75 - 125	88.1	-	
Aluminum	QC71378	LCS	90 - 110	99.1	-	EPA 200.8
		MS	70 - 130	94.8	-	
		MSD	0 - 10	-	4.5	
Antimony	QC71378	LCS	90 - 110	103.4	-	EPA 200.8
		MS	70 - 130	97.4	-	
		MSD	0 - 10	-	0.9	
Arsenic	QC71378	LCS	90 - 110	99.6	-	EPA 200.8
		MS	70 - 130	102.1	-	
		MSD	0 - 10	-	3.6	
Barium	QC71378	LCS	90 - 110	97.8	-	EPA 200.8

Abbreviations/ References:

RL = Reporting Limit = Minimum Level
 mg/L = Milligrams Per Liter or PPM
 ug/L = Micrograms Per Liter or PPB
 mpr/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.

Test	QC Batch ID	QC Type	Limits	% Rec	RPD	Method
		MS	70 - 130	91.3	-	
		MSD	0 - 10	-	2.7	
Beryllium	QC71378	LCS	90 - 110	101.2	-	EPA 200.8
		MS	70 - 130	105.6	-	
		MSD	0 - 10	-	0.0	
Cadmium	QC71378	LCS	90 - 110	98.3	-	EPA 200.8
		MS	70 - 130	99.7	-	
		MSD	0 - 10	-	0.1	
Chromium	QC71378	LCS	90 - 110	101.2	-	EPA 200.8
		MS	70 - 130	105.4	-	
		MSD	0 - 10	-	3.0	
Manganese	QC71378	LCS	90 - 110	103.6	-	EPA 200.8
		MS	70 - 130	94.0	-	
		MSD	0 - 10	-	4.5	
Mercury	QC71378	LCS	90 - 110	92.0	-	EPA 200.8
		MS	70 - 130	106.6	-	
		MSD	0 - 10	-	2.7	
Selenium	QC71378	LCS	90 - 110	98.0	-	EPA 200.8
		MS	70 - 130	105.4	-	
		MSD	0 - 10	-	4.8	
Silver	QC71378	LCS	90 - 110	99.4	-	EPA 200.8
		MS	70 - 130	90.0	-	
		MSD	0 - 10	-	3.4	
Thallium	QC71378	LCS	90 - 110	100.8	-	EPA 200.8
		MS	70 - 130	107.3	-	
		MSD	0 - 10	-	6.2	
Zinc	QC71378	LCS	90 - 110	96.6	-	EPA 200.8
		MS	70 - 130	96.8	-	
		MSD	0 - 10	-	2.5	
Iron	QC71360	Duplicate	0 - 20	-	0.6	EPA 200.7
		LCS	90 - 110	105.0	-	
		MS	75 - 125	99.0	-	
Nitrate Nitrogen	QC71331	Duplicate	0 - 20	-	0.3	EPA 300.0
		LCS	90 - 110	101.0	-	
		MS	75 - 125	90.9	-	
Nitrite Nitrogen	QC71332	Duplicate	0 - 20	-	0.0	EPA 300.0
		LCS	90 - 110	106.5	-	
		MS	75 - 125	96.6	-	
Sulfate	QC71333	Duplicate	0 - 20	-	2.5	EPA 300.0
		LCS	90 - 110	100.2	-	
		MS	75 - 125	99.1	-	

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
 mprv/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.

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



Commerce City Lab
10411 Heinz Way
Commerce City CO 80640

Lakewood Service Center
610 Garrison Street, Unit E
Lakewood CO 80215

Phone: 303-659-2313

www.coloradolab.com

Chain of Custody Form

Report To Information		Bill To Information (If different from report to)	
Company Name: <u>RESPEC</u>	Project Name / Number: <u>Utero - Kit Carson</u>	Company Name:	Task Number (Lab Use Only):
Contact Name: <u>Lexi Yoder</u>	Address: <u>5540 Tech Center dr. Suite 100</u>	Contact Name:	CAL Task <u>240214144</u>
Address: <u>5540 Tech Center dr. Suite 100</u>	City: <u>CO Springs</u> State: <u>CO</u> Zip: <u>80919</u>	Address:	JML
City: <u>CO Springs</u> State: <u>CO</u> Zip: <u>80919</u>	Phone: <u>719-227-0072</u>	City:	
Phone: <u>719-227-0072</u>	Email: <u>Lexi.Yoder@Respec.com</u>	Phone:	
Email: <u>Lexi.Yoder@Respec.com</u>	Sample Collector: <u>Lexi Yoder</u>	Email:	
Sample Collector: <u>Lexi Yoder</u>	Sample Collector Phone: <u>303-844-4966</u>	PO No.:	
Sample Collector Phone: <u>303-844-4966</u>			

Sample Matrix (Select One Only)		No. of Containers	Grab or (Check One Only) Composite	Tests Requested											
Waste Water <input type="checkbox"/>	Soil <input type="checkbox"/>			Drinking Water <input checked="" type="checkbox"/>	Ground Water <input type="checkbox"/>	Sludge <input type="checkbox"/>	Surface Water <input type="checkbox"/>	Date	Time	Sample ID	C/S Charge <input type="checkbox"/>	Temp. <input type="checkbox"/>	Seals Present Yes <input type="checkbox"/> No <input type="checkbox"/>	Sample Pres. Yes <input type="checkbox"/> No <input type="checkbox"/>	
		10				2/13/24	9:35am	#2							
Field Test PH: 7.42 Temp: 15°C															
Instructions: Please analyze for constituents listed in attached document															
Relinquished By: <u>Lexi Yoder</u>		Date/Time: <u>2/13/24</u>		Relinquished By: <u>faller</u>		Date/Time: <u>2/14</u>		C/S Charge <input checked="" type="checkbox"/>		Temp. <u>2</u> °C/°F		Received By: <u>AP</u>			
Date/Time: <u>2/13/24</u>		Date/Time: <u>2/14</u>		Date/Time: <u>2/14</u>		Date/Time: <u>2/14</u>		Date/Time: <u>2/14</u>		Date/Time: <u>2/14</u>		Date/Time: <u>2/14</u>			

EPC Confined Aquifer Sampling Requirements

Field Measurements

pH
Temp

Radionuclides

Radium 226 and Radium 228
Gross alpha/Beta

Inorganics

Antimony
Arsenic
Barium
Beryllium
Cadmium
Chromium
Cyanide (Total)
Fluoride
Mercury
Nitrate
Nitrite
Selenium
Thallium

Secondary MCLs

Aluminum
Chloride
Corrosivity
Iron
Manganese
Silver
Sulfate
Zinc
TDS

Bacteriological:

Total Coliform



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

Lab Control ID: 24H01290
Received: Feb 14, 2024
Reported: Mar 12, 2024
Purchase Order No.
None Received

Customer ID: 05377Z
Account ID: Z01034

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

ANALYTICAL REPORT

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

By: *Roxanne Sullivan*
Roxanne Sullivan
Analytical Laboratories Director

Customer ID: 05377Z
 Account ID: Z01034
ANALYTICAL REPORT

Rebecca Manzanares
 Colorado Analytical Laboratories, Inc.

Lab Sample ID		24H01290-001						
Customer Sample ID		240214149-01 - Otero Kit Larson Lane - #2 sampled on 02/13/24 @ 0935						
Parameter	Units	Code	Precision* Detection			Method	Analysis	
			Result	+/-	Limit		Date / Time	Analyst
Gross Alpha	pCi/L	T	0.9	1.8	0.1	SM 7110 B	03/07/24 @ 1412	KT
Gross Beta	pCi/L	T	<3.3	2.3	3.3	SM 7110 B	03/07/24 @ 1412	KT

Lab Sample ID		24H01290-002						
Customer Sample ID		240214149-01A - Otero Kit Larson Lane - #2 sampled on 02/13/24 @ 0935						
Parameter	Units	Code	Precision* Detection			Method	Analysis	
			Result	+/-	Limit		Date / Time	Analyst
Radium-226	pCi/L	T	0.2	0.2	0.2	SM 7500-Ra B	02/28/24 @ 0940	KT
Radium-228	pCi/L	T	0.8	0.6	0.2	EPA pg.19	03/04/24 @ 1136	KR

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: C11-005 pCi/mL: 57.4 (use 1 diluted)

Spike Solution: ID: C11-005 pCi/mL: 57.4 (use 1 mL)

Spike Recovery Calculation: Sample: Tap*

$$\text{Calculation: } \frac{(329.8) - (0.200) - (0.1) (0.200)}{57.4} \times 100 = 115\%$$

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>24H01256</u>	<u>24H01289</u>
<u>24H01257</u>	<u>24H01290</u>
<u>24H01273</u>	<u>24H01291</u>
<u>24H01275</u>	<u>24H01292</u>
<u>24H01277</u>	<u>24H01186</u>
<u>24H01278</u>	<u>24H01251</u>
<u>24H01280</u>	<u>24H01298</u>
<u>24H01285</u>	<u>24H01299</u>
<u>24H01286</u>	_____
<u>24H01288</u>	_____

Evaluator:

Joseph Richard _____

03/11/2024

Date

Batch QC Summary Form

Analyte: Gross Beta

Control Standard/LFB: ID: C11-005 pCi/mL: 44 (use 1 diluted)

Spike Solution: ID: C11-005 pCi/mL: 44 (use 1 mL)

Spike Recovery Calculation: Sample: Tap*

$$\text{Calculation: } \frac{(218.8) - (0.200) - (0.2) - (0.200)}{44} \times 100 = 99.4\%$$

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>24H01256</u>	<u>24H01289</u>
<u>24H01257</u>	<u>24H01290</u>
<u>24H01273</u>	<u>24H01291</u>
<u>24H01275</u>	<u>24H01292</u>
<u>24H01277</u>	<u>24H01186</u>
<u>24H01278</u>	<u>24H01251</u>
<u>24H01280</u>	<u>24H01298</u>
<u>24H01285</u>	<u>24H01299</u>
<u>24H01286</u>	_____
<u>24H01288</u>	_____

Evaluator:

 _____

Date 03/11/2024

Batch QC Summary Form

Analyte: Radium-226

Control Standard/LFB: ID: C73-003 pCi/mL: 21.1 (use 2 diluted)

Spike Solution: ID: C73-003 pCi/mL: 21.1 (use 2 mL)

Spike Recovery Calculation: Sample: 24H01289-02b

$$\text{Calculation: } \frac{(44.1) (1.000) - (8.2) (1.000)}{42.2} \times 100 = 85.1\%$$

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:

24H01281 _____
 24H01282 _____
 24H01284 _____
 24H01285 _____
 24H01288 _____
 24H01289 _____
 24H01290 _____

Evaluator:

Joseph Richard _____

03/01/2024

Date

Batch QC Summary Form

Analyte: Radium-228

Control Standard/LFB: ID: C6-007 pCi/mL: 14.1 (use 5 diluted)

Spike Solution: ID: C6-007 pCi/mL: 14.1 (use 5 mL)

Spike Recovery Calculation: Sample: 24H01304-001d

Calculation:
$$\frac{(68.8) (1.000) - (3.1) (1.000)}{70.5} \times 100 = 93.2\%$$

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:

24H01290 _____
24H01291 _____
24H01292 _____
24H01293 _____
24H01300 _____
24H01304 _____
24H01314 _____

Evaluator:
 _____

_____ 03/11/2024
 Date

