STATE OF COLORADO

Carter - DNR, Jocelyn <jocelyn.carter@state.co.us>

Two Rivers Pit M1998-038 AM1 Fourth Adequacy Review Response

1 message

Jodi Schreiber <jodi@arycorp.com> Fri, Aug 30, 2024 at 1:59 PM
To: "Carter - DNR, Jocelyn" <jocelyn.carter@state.co.us>, "Eschberger - DNR, Amy" <amy.eschberger@state.co.us>
Cc: PFM Consulting <pfmconsultingcompany@gmail.com>

Good afternoon, Jocelyn.

Please see the adequacy response and attachments.

The Groundwater Monitoring Plan is too large to send via email. Schnabel has been kind enough to offer this link for your download.

Revised DRMS Submittal

Password: C2AUcBiwg8

https://schnabeleng.egnyte.com/fl/0C9kLhSB5U/Revised_DRMS_Submittal_

Revised DRMS Submittal on Egnyte

Folder Revised DRMS Submittal shared using Egnyte

schnabeleng.egnyte.com

Thank you,

ARY CORPORATION

Jodi Schreiber

839 Mackenzie Ave., Canon City, CO 81212
Office (719) 275-3264 | **Mobile** (719) 529-0916
jodi@arycorp.com

"Success is not final, failure is not fatal; it is the courage to continue that counts."
–Winston Churchill

4 attachments

Amendment 1 Adeqaucy Review 4 Response 8.28.2024.pdf
154K

Exhibit C r5.pdf
1541K

Phase Map R8.pdf
442K

Exhibit F r4.pdf
326K

ARY CORPORATION

August 26, 2024

Colorado Division of Reclamation, Mining and Safety
Attn: Jocelyn Carter, Environmental Specialist
1313 Sherman Street, Room 215
Denver, CO 80203

RE: Two Rivers Pit M1998-038, Amendment 1, Fourth Adequacy Review Response

Jocelyn,

Please see the responses to the Fourth Adequacy Review.

1. Please see the attached updated Exhibit C.4 Map.
2. Please see the attached updated Exhibit C.4 Map with the updated label of "Permit Boundary".
3. Please see the attached updated Exhibit D Phase Map.
4. Please see the attached updated Exhibit D Phase Map with the correction of labeling from "Unaffected" to "Unmined".
5. Please see the attached updated Exhibit D Phase Map with the acreage correction in the notes.
6. Please see the attached updated Exhibit D Phase Map with the breakdown of disturbed, undisturbed and total area of each phase.
7. Fremont commits to using 18 inches of topsoil to backfill.
8. Please see the attached updated Groundwater Monitoring Plan.
9. Please see the attached update Exhibit F Map.
10. Fremont believes that per discussion during the site inspection, the bond calculation should include what is currently disturbed. When Fremont believes they will encounter groundwater, a Technical Revision will be submitted stating such, and a new bond calculation can be formulated at that time.

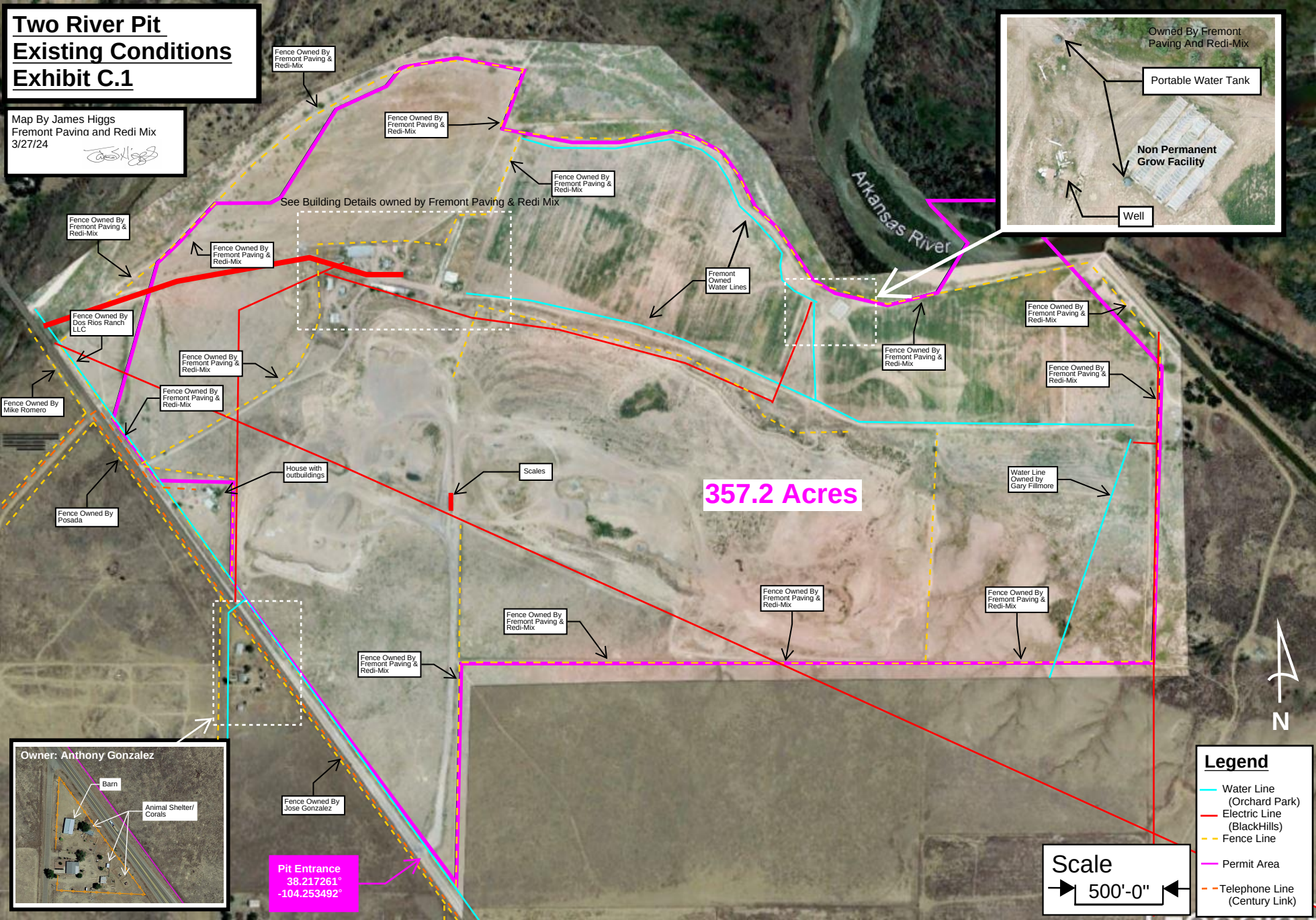
Thank you,

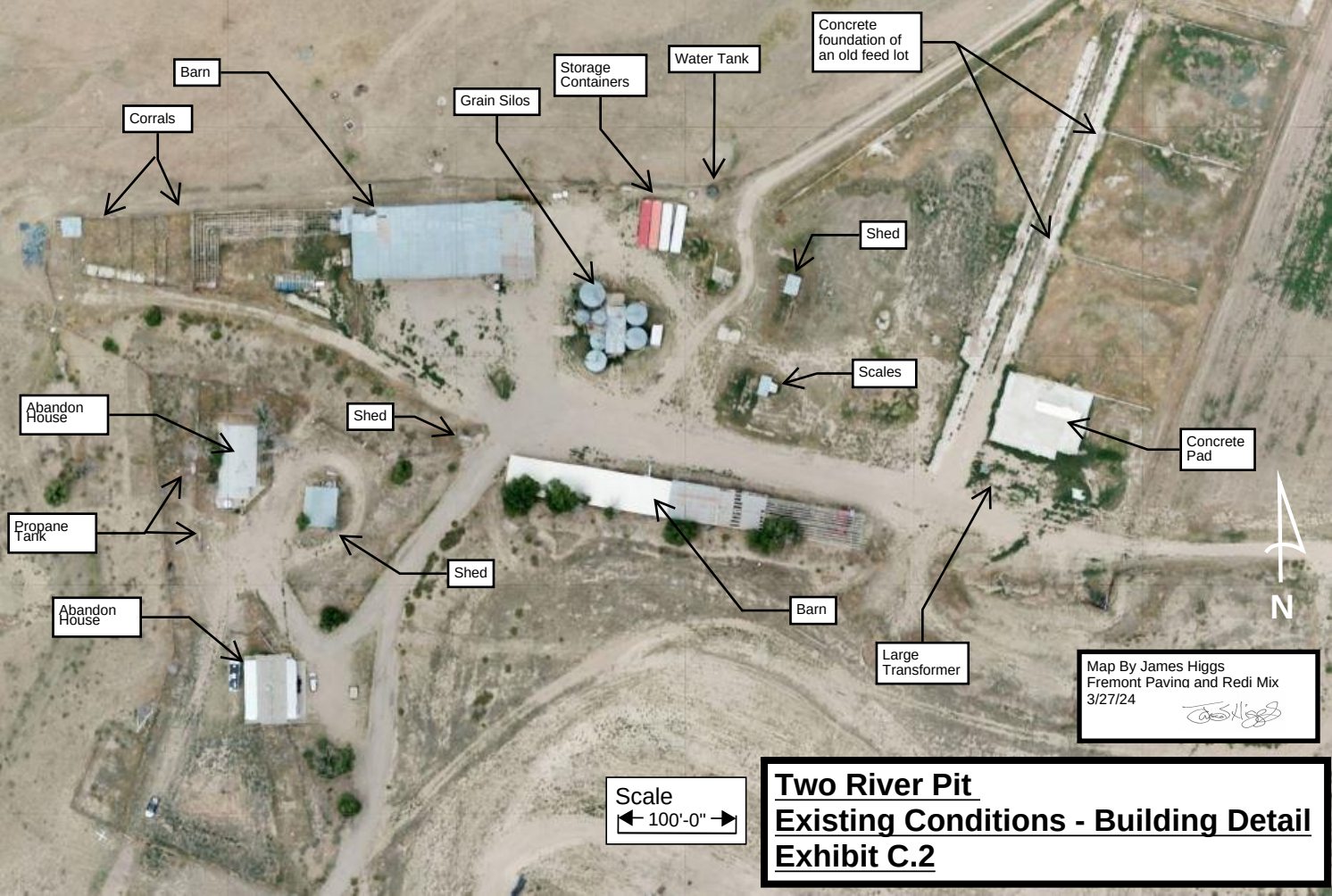
Jodi Schreiber

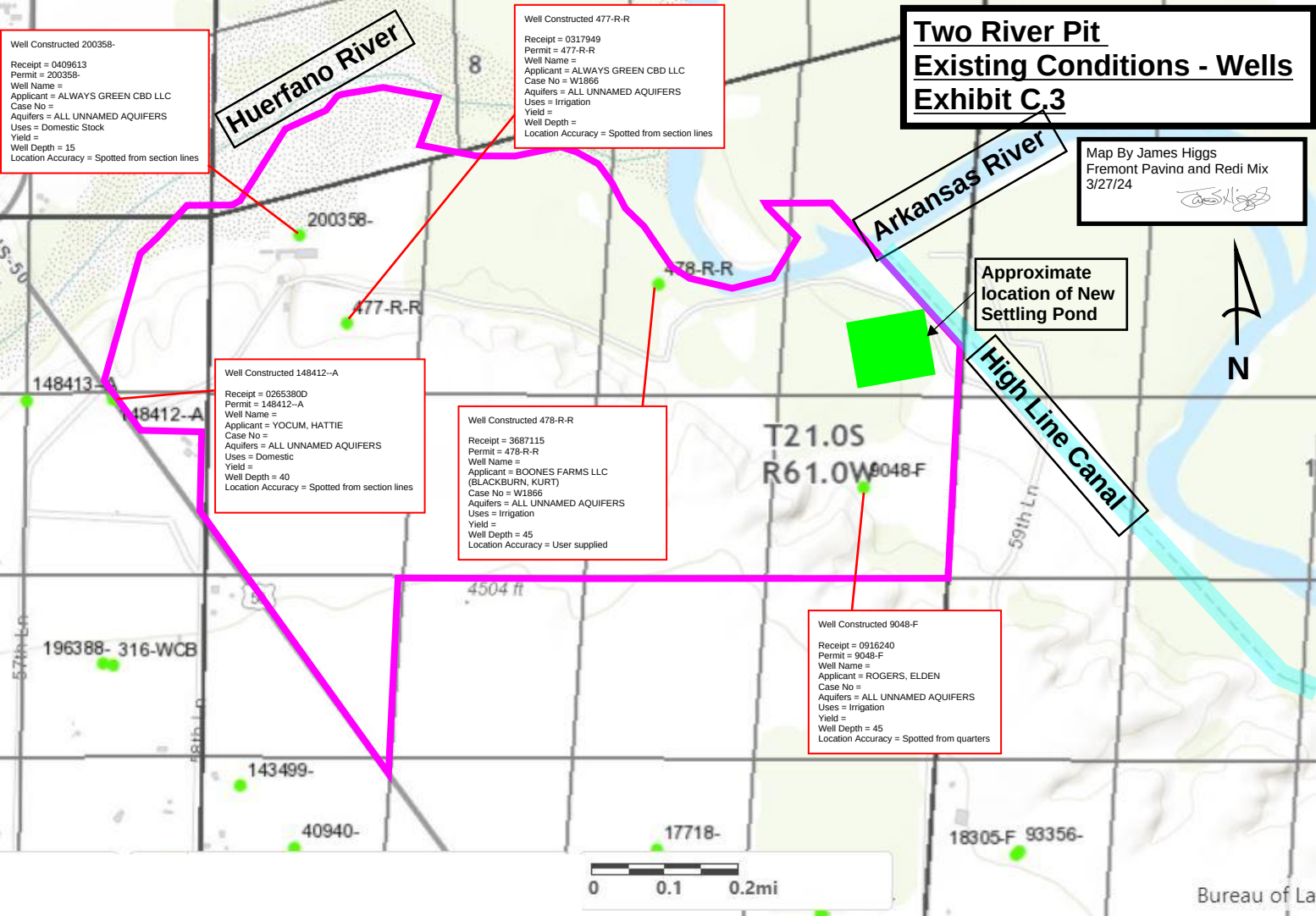
Jodi Schreiber
jodi@arycorp.com
719-529-0916

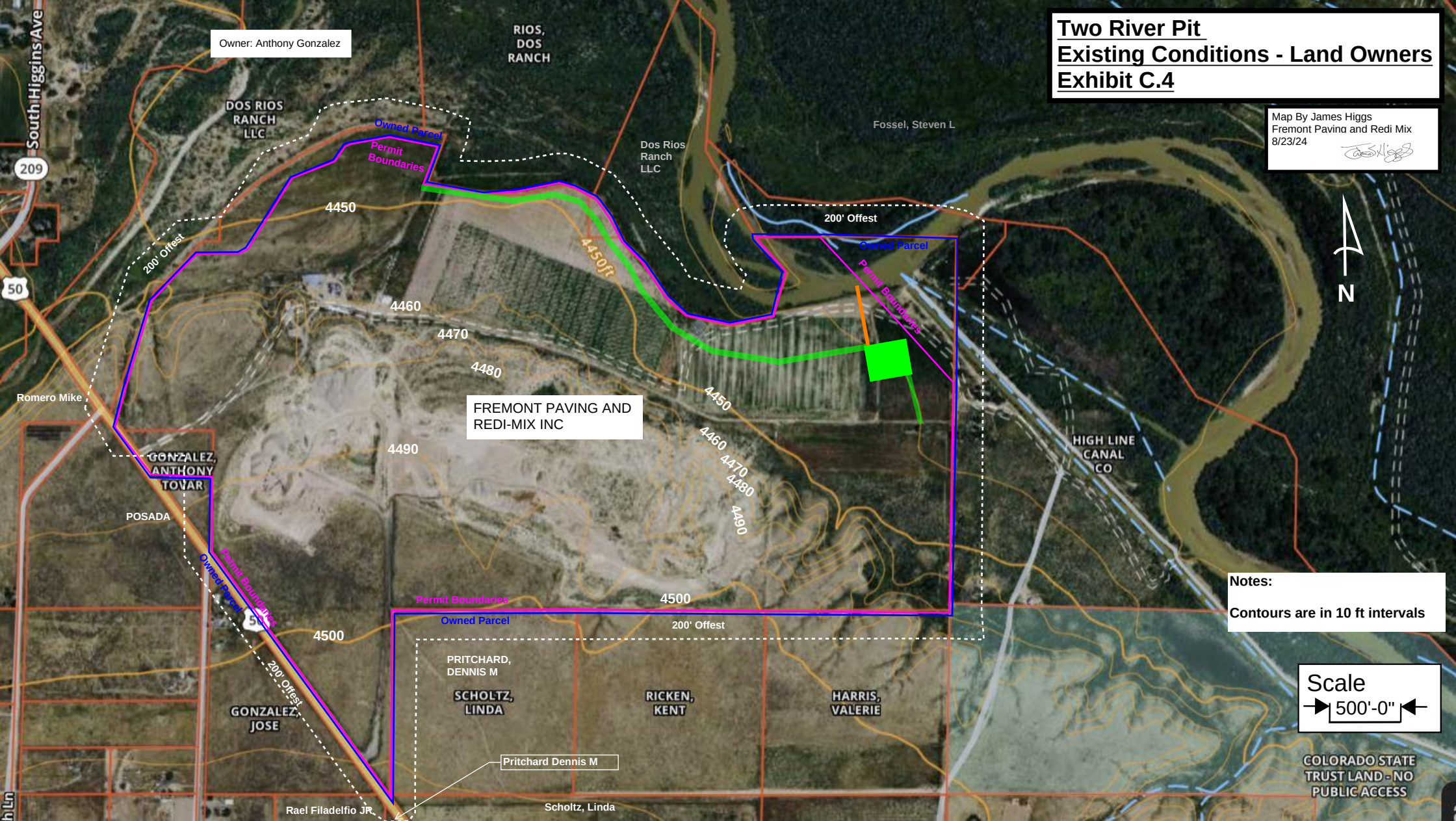
Two River Pit Existing Conditions Exhibit C.1

Map By James Higgs
Fremont Paving and Redi Mix
3/27/24



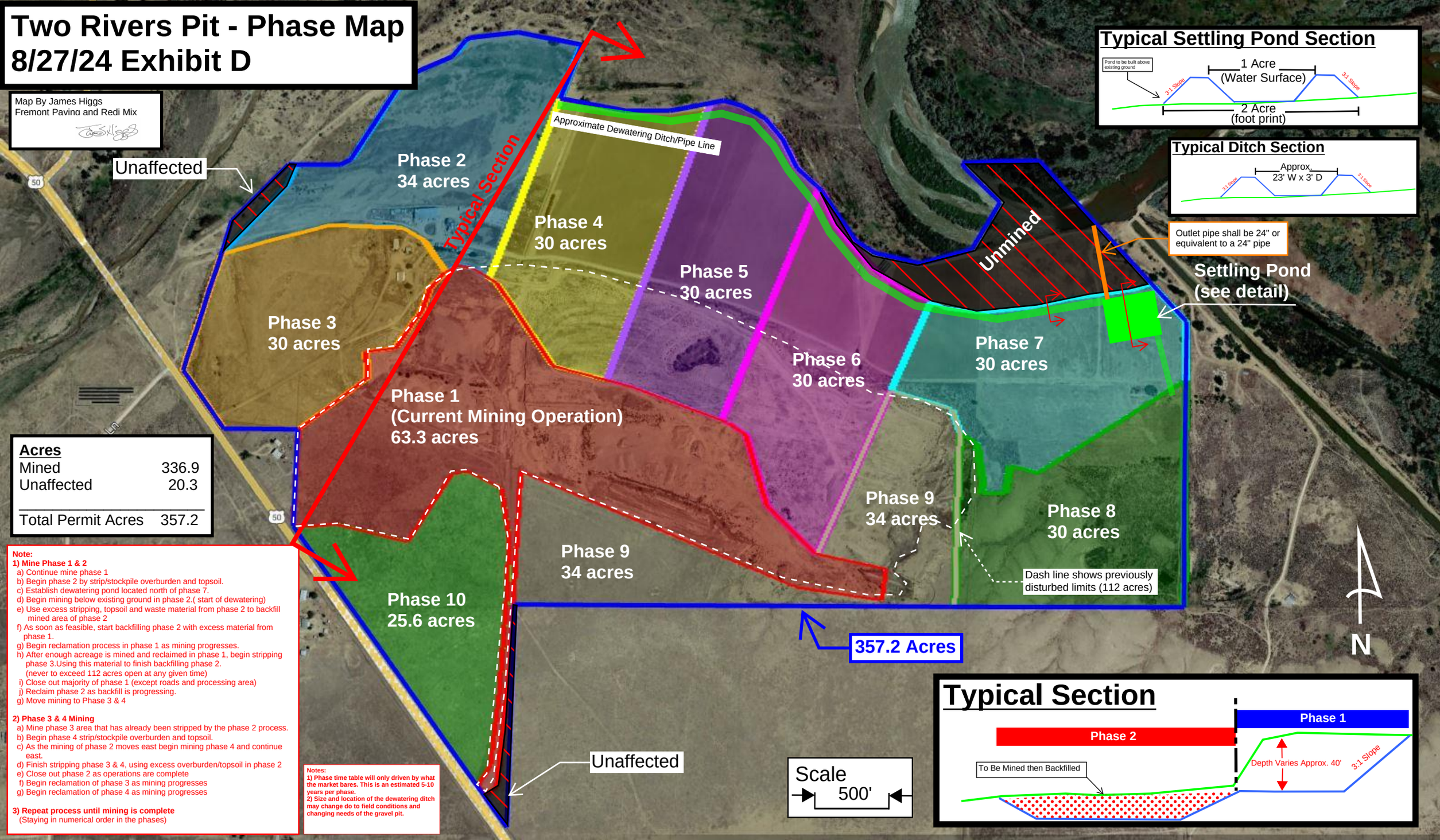

Barn
Corrals
Grain Silos
Storage Containers
Water Tank
Concrete foundation of an old feed lot
Shed
Scales
Abandon House
Shed
Concrete Pad
Propane Tank
Shed
Abandon House
Barn
Large Transformer
N
Map By James Higgs
Fremont Paving and Redi Mix
3/27/24
Scale
100'-0"
Two River Pit
Existing Conditions - Building Detail
Exhibit C.2


Two River Pit
Existing Conditions - Wells
Exhibit C.3
Map By James Higgs
Fremont Paving and Redi Mix
3/27/24
Huerfano River
Arkansas River
High Line Canal
Approximate location of New Settling Pond
N
Well Constructed 200358-
Receipt = 0409613
Permit = 200358-
Well Name =
Applicant = ALWAYS GREEN CBD LLC
Case No =
Aquifers = ALL UNNAMED AQUIFERS
Uses = Domestic Stock
Yield =
Well Depth = 15
Location Accuracy = Spotted from section lines
Well Constructed 477-R-R
Receipt = 0317949
Permit = 477-R-R
Well Name =
Applicant = ALWAYS GREEN CBD LLC
Case No = W1866
Aquifers = ALL UNNAMED AQUIFERS
Uses = Irrigation
Yield =
Well Depth =
Location Accuracy = Spotted from section lines
Well Constructed 148412--A
Receipt = 0265380D
Permit = 148412--A
Well Name =
Applicant = YOCUM, HATTIE
Case No =
Aquifers = ALL UNNAMED AQUIFERS
Uses = Domestic
Yield =
Well Depth = 40
Location Accuracy = Spotted from section lines
Well Constructed 478-R-R
Receipt = 3687115
Permit = 478-R-R
Well Name =
Applicant = BOONES FARMS LLC (BLACKBURN, KURT)
Case No = W1866
Aquifers = ALL UNNAMED AQUIFERS
Uses = Irrigation
Yield =
Well Depth = 45
Location Accuracy = User supplied
Well Constructed 9048-F
Receipt = 0916240
Permit = 9048-F
Well Name =
Applicant = ROGERS, ELDEN
Case No =
Aquifers = ALL UNNAMED AQUIFERS
Uses = Irrigation
Yield =
Well Depth = 45
Location Accuracy = Spotted from quarters
T21.0S
R61.0W
4504 ft
200358-
477-R-R
478-R-R
148413-
148412--A
9048-F
196388-
316-WCB
143499-
40940-
17718-
18305-F
93356-
59th Ln
57th Ln
48th Ln
0
0.1
0.2mi
Bureau of La


Two River Pit
Existing Conditions - Land Owners
Exhibit C.4
Map By James Higgs
Fremont Paving and Redi Mix
8/23/24
Owner: Anthony Gonzalez
RIOS, DOS RANCH
DOS RIOS RANCH LLC
Dos Rios Ranch LLC
Fossel, Steven L
South Higgins Ave
209
50
Owned Parcel
Permit Boundaries
200' Offest
4450
4450ft
4460
4470
4480
4490
4500
FREMONT PAVING AND REDI-MIX INC
Romero Mike
GONZALEZ, ANTHONY TOVAR
POSADA
GONZALEZ, JOSE
HIGH LINE CANAL CO
PRITCHARD, DENNIS M
SCHOLTZ, LINDA
RICKEN, KENT
HARRIS, VALERIE
Pritchard Dennis M
Scholtz, Linda
Rael Filadelfio JR
COLORADO STATE TRUST LAND - NO PUBLIC ACCESS
N
Scale
500'-0"
Notes:
Contours are in 10 ft intervals

Two Rivers Pit - Phase Map
8/27/24 Exhibit D

Map By James Higgs
Fremont Paving and Redi Mix



Typical Settling Pond Section

Typical Ditch Section

Acres	
Mined	336.9
Unaffected	20.3
Total Permit Acres	357.2

Note:

1) Mine Phase 1 & 2

a) Continue mine phase 1
b) Begin phase 2 by strip/stockpile overburden and topsoil.
c) Establish dewatering pond located north of phase 7.
d) Begin mining below existing ground in phase 2.(start of dewatering)
e) Use excess stripping, topsoil and waste material from phase 2 to backfill mined area of phase 2
f) As soon as feasible, start backfilling phase 2 with excess material from phase 1.
g) Begin reclamation process in phase 1 as mining progresses.
h) After enough acreage is mined and reclaimed in phase 1, begin stripping phase 3.Using this material to finish backfilling phase 2. (never to exceed 112 acres open at any given time)
i) Close out majority of phase 1 (except roads and processing area)
j) Reclaim phase 2 as backfill is progressing.
g) Move mining to Phase 3 & 4

2) Phase 3 & 4 Mining

a) Mine phase 3 area that has already been stripped by the phase 2 process.
b) Begin phase 4 strip/stockpile overburden and topsoil.
c) As the mining of phase 2 moves east begin mining phase 4 and continue east.
d) Finish stripping phase 3 & 4, using excess overburden/topsoil in phase 2
e) Close out phase 2 as operations are complete
f) Begin reclamation of phase 3 as mining progresses
g) Begin reclamation of phase 4 as mining progresses

3) Repeat process until mining is complete
(Staying in numerical order in the phases)

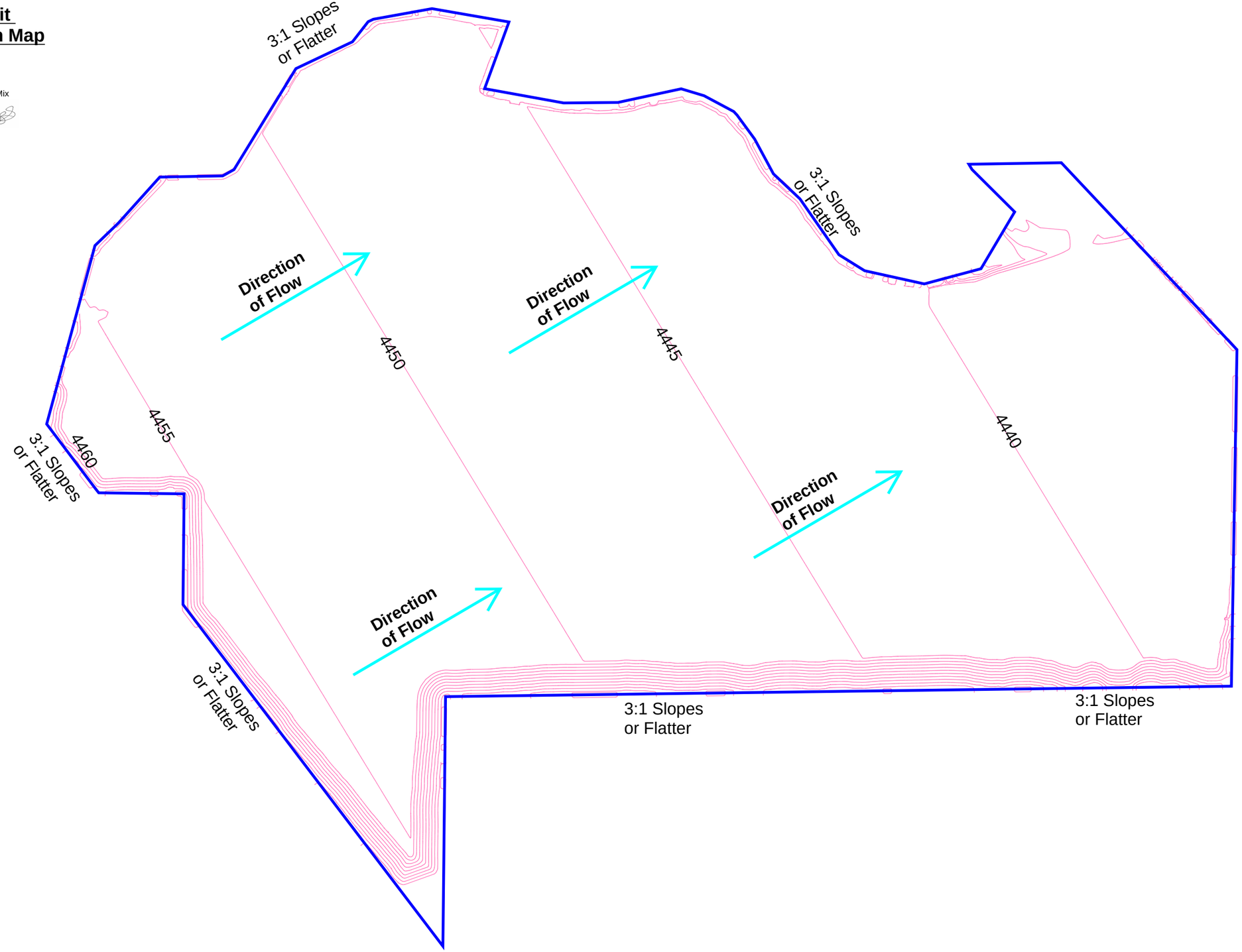
Notes:
1) Phase time table will only driven by what the market bares. This is an estimated 5-10 years per phase.
2) Size and location of the dewatering ditch may change do to field conditions and changing needs of the gravel pit.

Scale
500'

Typical Section

Two River Pit Reclamation Map Exhibit F

Map By James Higgs
Fremont Paving and Redi Mix
8/26/24



N

Notes:
1) Final use of land will be agricultural.

AGTEK
0 500 1000

Schnabel ENGINEERING
T 303.651.1468 / F 303.651.1469
600 S. Airport Road, Suite A-205 / Longmont, CO 80503 schnabel-eng.com

August 30, 2024

Jodi Schreiber
Ary Corporation
839 Mackenzie Avenue
Canon City, CO 81212

Subject: **Ary Corporation Two Rivers Pit DRMS Permit Groundwater Monitoring Plan**
Pre-Baseline Analysis and Proposed Baseline Monitoring
Two River Pit, Pueblo, Colorado
Schnabel Project No. 21C26002.000

Dear Ms. Schreiber:

SCHNABEL ENGINEERING, LLC is pleased to provide this initial analysis and proposed scope of work for baseline monitoring to satisfy the requirement of a groundwater monitoring plan for Fremont Paving & Redi-Mix, Inc. (Fremont) at the Two Rivers Pit located near Boone, Colorado. The groundwater monitoring plan is in support of the amended application to Colorado Division of Reclamation and Mining Safety (DRMS) for permit M1998038 allowing ongoing mining of construction materials at the site.

The groundwater monitoring plan described herein includes:

- A description of the site,
- An inventory of existing wells,
- A pre-baseline groundwater characterization,
- A discussion of the impact of proposed mining operations on groundwater quality and quantity,
- Proposed monitoring well locations and points of compliance, and
- Proposed monitoring methodologies.

Upon conclusion of the analyses presented herein to establish the baseline conditions, a technical revision to the groundwater monitoring plan describing the findings and any necessary revisions to proposed points of compliance or monitoring efforts at the Two Rivers Pit site will be provided to allow for continued operation of the site and to ensure groundwater quality and quantity are not adversely affected.

INTRODUCTION

The Groundwater Monitoring: Sampling and Analysis Plan Guidance, Construction Materials and Hard Rock Sites, published in September 2023, by DRMS (“The DRMS Guidance”) provides the necessary documentation to support a standard groundwater sampling plan for a site that could impact water quality or quantity during mining. Because future phases of mining at the Two Rivers Pit will require dewatering,

a groundwater monitoring plan is required by DRMS to ensure compliance. This document presents a detailed description of the site, provides a pre-baseline groundwater characterization, proposes monitoring well locations and points of compliance, and proposes methodology for establishing a pre-mining baseline at Fremont's Two Rivers Pit.

BACKGROUND INFORMATION

The Two Rivers Pit is positioned near the intersection of Highway 50 and Highway 209 between the Huerfano River and the Arkansas River in parts of Sections 8, 17, and 18 of Township 21 South, Range 61 West of the 6th P.M. in Pueblo County, Colorado (**Figure 1**). The site has two main sections: a northern section located within the Arkansas River floodplain and a higher southern section positioned on a terrace above the floodplain. Mining operations to date have exclusively focused on the southern portion of the site and have not encountered groundwater. In future mining phases where the northern part of the site is mined, groundwater in the alluvial aquifer will be encountered. Mining operations in the northern area will therefore require dewatering.

Historically, the site operated under Colorado Department of Public Health and Environment (CDPHE) Certification Number COG501830 authorizing Kirkland Construction, LLLP to perform mining operations. The certification specified the discharge outfall as stormwater runoff from the site and the receiving stream to be the Huerfano River. This permit expired on December 31, 2021.

The site construction permit, M1998038, is currently undergoing an amendment process with DRMS. As part of this amendment, DRMS is requiring that a groundwater monitoring plan be supplied with the amended application. Schnabel Engineering provided an initial scope of work for a groundwater monitoring plan dated June 6, 2024. DRMS requested the scope of work be expanded to serve as a groundwater monitoring plan with the understanding that pre-mining baseline results and final points of compliance will be incorporated through a technical revision to the groundwater monitoring plan. The most recent correspondence from DRMS regarding the permit extended the deadline for re-submitting the permit application to August 5, 2024, to allow time to revise the groundwater monitoring plan.

SITE DESCRIPTION

In advance of pre-mining baseline monitoring, relevant publicly available information and information from the M1998038 application were compiled to understand and describe the current site conditions.

Description and Land Use

The Two Rivers Pit permit boundary covers 357.2 acres (**Figure 1**). The northern edge of the area is bounded by the Arkansas River, the western edge is bounded by the Huerfano River, the southern edge abuts Highway 50, and the eastern edge is partially bounded by the Rocky Ford Highline Canal.

The document entitled, *Two Rivers Amendment Adequacy Response #1*, dated May 2, 2024, provided by Ary Corporation details in Section *6.4.10 Exhibit J: Vegetation Information* that agricultural/crop land is the main type of land use at the site. The native vegetation is described as including Buffalo Grass, Western Wheatgrass, Prickly Pear Cactus, Walking Stick, and Blue Grama Grass. The southern terraced portion of the area had been mined previously by Kirkland Construction. The northern floodplain portion of the area is actively farmed, as evidenced in the 2023 aerial imagery shown in **Figure 1**.

There are four collections of structures within or immediately adjacent to the permit extent (**Figure 1**). Structures 1 and 2, located on the southern edge of the property, are outside of the permit boundary and will not be impacted by mining operations, per Section *6.4.14 Exhibit S: Permanent Man-made Structures*. Structures 3 and 4 are located in the northern floodplain portion of the permit area.

Site Topography

The topography of the permit area is shown in **Figure 2**. The elevation of the northern floodplain portion ranges from 4440 feet to 4460 feet. The elevation of the terraced southern portion is between 4480 feet and 4500 feet.

Site Geology

Site-specific soil information was obtained from existing well logs. In general, the northern part of the proposed mine in the floodplain has approximately 5 to 10 feet of silty clay flood deposits, referred to herein as overburden, overlying 35 to 40 feet of alluvial sand and gravel deposited by the Arkansas River. The terrace forming the southern part of the site is also composed of alluvial sand and gravel deposits that have been mined in the past. Underlying the alluvial sand and gravel deposits is the near surface bedrock, named the Pierre Shale. The Pierre Shale is a Cretaceous age rock formation that is weak to moderately strong, and has very low permeability. The Pierre Shale prevents the downward migration of alluvial groundwater, thus forming the lower boundary of the alluvial aquifer.

Existing Site Wells

Per the Colorado Decision Support System (CDSS) map viewer, there are four drilled wells within the permit boundary, and one drilled well immediately adjacent to the permit boundary as shown in **Figure 1**. Well information for existing site wells obtained from CDSS are included in **Attachment 1**.

Permit Number 148412-A

Well Permit Number 148412-A is located immediately adjacent to the DRMS permit extent. The well was drilled May 23, 1987. The drilling log indicates that the overburden thickness is 6 feet thick and that the alluvial sand and gravel is 19 feet thick. Shale bedrock was encountered at a depth of 25 feet and observed to the total depth of the boring at 40 feet deep. Plain steel casing, size 6-5/8” was installed from 2 to 16 feet and perforated casing was installed from 16 to 25 feet deep.

Permit Number 477 R-R

Well Permit Number 477-R-R was acquired by Fremont Paving on February 16, 2023. The well is permitted for irrigation. No well log was identified to confirm well placement or construction.

Permit Number 478-R-R

Well Permit Number 478-R-R (aka Harpman Well No. 2, Well Structure ID 1405119) was acquired on February 20, 2023, by Fremont Paving and Redi-Mix. The 36-inch diameter well was drilled on January 24, 2019, to a depth of 45 feet. Shale bedrock was reached at a depth of 44 feet. The well was constructed with perforated casing (0.075 inch screen slot size, PVC) from 20 to 45 feet.

Permit Number 200358

Well 200358 is a domestic stock well. CDSS specifies a depth of 15 feet, although no well log was identified to confirm this information.

Permit Number 20229-R-R

Wayt Well No. 20229 (aka WDID 1405120 with associated permits 9048-F, 92198-VE, and 20229-R-R) is an irrigation well decreed in Case No. W1866. The well was re-constructed on July 20, 1992, and the previous borehole (permit 9048-F) was abandoned. The July 1992, construction log states that shale bedrock was reached at 41 feet and the total depth of the well is 45 feet. Groundwater was encountered at 10 feet deep. The well was constructed with 24-inch diameter perforated PVC casing with 0.25 inch screen slot size from 20 to 45 feet.

Surrounding Wells

Figure 3 shows both water level wells and the constructed wells per CDSS within a one mile buffer of the permit site.

Proposed Mining Operations

The proposed mining operations as presented in the May 2, 2024, Two Rivers Pit M1998038 Application, were reviewed to inform our understanding of potential impacts to groundwater due to mining operations.

The Two Rivers Pit is an active gravel mine with a total permit boundary of 357.2 acres, of which 336.9 acres will be either mined or disturbed in the process of mining (**Figure 1**). Mining is to develop the sand and gravel deposits in the alluvial aquifer below the overburden, between 5 and 10 feet, and above bedrock, approximately 45 feet deep. The life of the proposed mine based on current operations is up to fifty years, which would result in 70,000 tons per year and around six acres per year of mining.

Mining operations are currently in Phase 1, which comprises the southern terraced portion of the permit site (**Figure 1**). Mining Phases 1, 3, 8, 9, and 10, are also located in the southern terraced portion and therefore interception of groundwater during these mining phases is not anticipated. Parts of Phases 2, 4, 5, 6, and 7 are located in the northern portion of the permit area. These phases are located in the floodplain and interception of groundwater is anticipated.

Two structures (3 and 4, as shown in **Figure 1**) are located in the northern floodplain portion of the permit area. The house and outbuildings will be removed during mining activities. Additional structure details can be found in the M1998038 permit application section *6.4.14 Exhibit S: Permanent Man-made Structures*.

Water from an adjudicated and augmented well near the site will be used on-site for use in a sand wash plant. There will be two wash ponds constructed and water will be recirculated for use and re-use. The wash ponds are anticipated to consume 20 acre-feet per year.

The currently proposed mining operations at the floodplain site include the following:

- A dewatering pipeline will be established early in Phase 2, the first phase taking place in the floodplain, to convey water to the northeast corner of the site.

- If water quality tests on the discharged water demonstrate that no additional settling is required to satisfy a discharge permit, water will be discharged to the Arkansas River through an above-ground dewatering pipeline to avoid disturbing the soil (approximate location shown in **Figure 1**) at a rate equal to the sump pump at the bottom of the mined pit.
- If water quality tests on the discharged water demonstrate that additional settling is required to satisfy a discharge permit, a dewatering/settling pond will be constructed and the dewatering pipeline will be routed to supply water to the pond. Once water reaches the dewatering pond, water will be discharged from the pond to the Arkansas River through an above-ground dewatering pipeline to avoid disturbing the soil (approximate location shown in **Figure 1**).
- Exposed groundwater on-site will not exceed 1 acre.

GROUNDWATER CHARACTERIZATION

Pre-baseline Groundwater Characterization

The groundwater to be encountered on-site is solely within the Arkansas River Valley-Fill alluvial aquifer that exists above a shale confining layer. To characterize the current groundwater conditions in advance of the baseline analysis, monitoring well logs and associated well construction logs were reviewed. Information regarding depth to groundwater is presented in **Table 1** and well locations are shown in **Figure 4** and **Figure 5**. Historical water depth records are presented in **Attachment 2**. The wells are all located in the floodplain with four locations being located within the permit boundaries and an additional two wells located immediately to the west (up-gradient) from the permit boundary. Four water monitoring wells with water level data between July 1, 1962, and March 12, 1981, showed average depths to groundwater between 3 feet and 12 feet deep. The construction logs of the additional two decreed wells, one constructed in 1992 and one constructed in 2019, indicate groundwater levels of 10 feet and 15 feet deep, respectively.

The drilling logs of two decreed wells, 478-R-R and 20299-R-R, located on the down-gradient eastern portion of the site, are presented in **Table 2**. The construction logs specify overburden to a depth of five to eight feet deep above sand, gravel with mud lenses extending to the shale bedrock at around 40 feet deep.

The extent of the alluvial aquifer obtained from *Hydrogeologic Characteristics of the Valley-Fill Aquifer in the Arkansas River Valley, Pueblo County, Colorado by G. A. Nelson, R. T. Hurr, and J. E. Moore (1989)*. is shown in **Figure 3**. The depth to groundwater based on the difference between the DEM elevation and groundwater elevation contours is shown in **Figure 4**. Based on this mapping, the groundwater in the alluvial aquifer generally flows from west to east across the property.

Potential Impacts of Mining on Groundwater Quantity

The Arkansas River, the Huerfano River, and the Rocky Ford Highline Canal are assumed to serve as hydraulic boundaries, and the pumping of groundwater from the alluvial aquifer within the permit area is not anticipated to cross these hydrologic features. According to the mapping of the alluvial aquifer shown in **Figure 3** and **Figure 4**, the terrace portion of the permit area is located on the edge of the alluvial aquifer. Based on this understanding of the hydrogeology, the only known on or offsite permitted wells within the alluvial aquifer south of the Arkansas River and east of the Huerfano River that might be impacted by mining operations are the five wells shown in **Figure 1**. Well 477-R-R, Well 200358, and Well

478-R-R are owned by Fremont. During mining operations, the wells are going to be maintained to allow for re-use as agricultural wells after the mining is completed. Well 148412-A and Well 20229-R-R are not owned by Fremont. Use of the wells by the current owners is anticipated to continue throughout mining operations. Well 148412-A is located in the southern terrace and is not expected to be impacted by mining operations. Well 20229-R-R may be impacted by mining operations as the phases reach closer to the well. Water is currently pumped to a site south of the mining operations to be used for irrigation. Dewatering operations will convey pumped groundwater back to the Arkansas River such that water quantity is not adversely affected, and no nearby water rights are injured.

Potential Impacts of Mining on Groundwater Quality

Mining operations are not anticipated to adversely affect groundwater quality. The M1998-038 permit Section *6.4.4 Exhibit D: Mining Plan* states that bulk storage of fuels and lubricants will be contained in a lined pit with an earthen berm with a capacity of 110% of the containers being housed. Explosives will not be used during mining and acids or other toxic materials are not anticipated to be exposed. Dewatering operations are assumed to convey the pumped groundwater back to the Arkansas River without contamination.

Proposed Monitoring Wells

To establish baseline groundwater conditions, DRMS requires establishing at least three monitoring wells representing sampling locations both upgradient and downgradient of proposed mining operations and within the DRMS permit area. Proposed monitoring well locations are presented in **Table 3** and shown in **Figure 5**.

Existing wells are considered to be appropriate for monitoring well purposes if the location, top of casing, total depth, screened intervals, and date of establishment are known and considered sufficient to accurately represent groundwater quality and groundwater water levels. Upon review of the existing site wells, Well Permit Number 478-R-R and Well Permit Number 20229-R-R fit all criteria. Permit and construction information for the wells are enclosed in **Attachment 1**. Proposed Monitoring Well #1 is located above-gradient of mining operations based on the site topography in that area. Proposed Monitoring Well #2 (Well Permit Number 478-R-R) is located in the western portion of the property. Proposed Monitoring Well #3 (Well Permit Number 9048-F) is located in the eastern portion of the mine operating site.

Proposed Points of Compliance

During future operations, water depths will be measured and water quality samples will be collected from points of compliance. Points of compliance are defined as the locations where groundwater classification and quality will be evaluated by the WQCC throughout the duration of the groundwater monitoring plan, with DRMS having the authority to approve the proposed compliance points.

Based on the pre-baseline groundwater characterization, **Figure 5** shows the two proposed points of compliance. The proposed points of compliance are located in areas that will not be disturbed by mining and within the DRMS permit extent. Point of Compliance #1 is the same borehole as proposed for Monitoring Well #1 and is located hydraulically above-gradient of future proposed mining operations. Point of Compliance #2 is the same borehole as used for Monitoring Well #3 and is located hydraulically down-gradient of the proposed mining to monitoring impacts of mining.

PROPOSED BASELINE GROUNDWATER CHARACTERIZATION

Task 1 - Baseline Groundwater Characterization

Characterizing groundwater prior to mining requires measuring current water quality and water levels. Baseline data for groundwater quality and quantity prior to proposed mining operations must be comparable to groundwater quality and quantity during future mining operations to demonstrate impacts, or lack thereof, to groundwater due to mining. Establishing baseline groundwater conditions will include sampling from the three proposed monitoring well locations, or points of compliance. Samples will be taken at quarterly intervals to collect five consecutive quarters worth of data to understand seasonal variability.

Task 1.1 – Well Drilling

One proposed monitoring well will be drilled to meet the required number of monitoring well sites used as points of compliance. As described above, additional monitoring will be accomplished through use of existing wells. The well will be permitted through the Division of Water Resources in the State Engineer's Office. Construction will follow the standards outlined in *Rules and Regulations for Water Well Construction, Pump Installation, Cistern Installation, and Monitoring and Observation Hole/Well Construction (2 CCR 402-2)*. Exact placement and construction specifics will be approved by a licensed Professional Engineer or Professional Geologist prior to drilling. A licensed contractor will install all wells. The water depths in Monitoring Wells #2 and #3 were 15 feet and 6 feet deep, respectively. The anticipated top of perforated casing for Monitoring Well #1 is anticipated to be between 6 and 15 feet. The proposed monitoring well will be screened upon reaching groundwater until shale is encountered, anticipated between 40 and 45 feet deep. The plain well casing will be Schedule 40 PVC pipe and the perforated casing will be slotted PVC. The upper portion will have a gravel filter pack and a bentonite or grout seal, and there will be a 3-foot riser. The screened interval will be filled with 10/20 silica sand as the filter to two feet above the screen. The bentonite or grout seal will then be installed above the filter sand to the surface.

Task 1.2 – Establishing Baseline Groundwater Levels

Groundwater levels will be collected from each monitoring well during each sampling event. To measure water depth, a depth gauge will be used from the top of the casing to the point where water is encountered in each well during each sampling event. Measured water levels will contribute to quantifying the site hydrogeology to establish pre-mining conditions.

Task 1.3 – Establishing Baseline Groundwater Quality

Table 4 and **Table 5** show the proposed list of water quality parameters to be tested during each sampling event to establish baseline water quality. The analytes proposed in the table include all variables presented in *Appendix A*, *Full parameter list for Construction Materials Sites from Regulation 41, Tables 1-4* in *Groundwater Monitoring: Sampling and Analysis Plan Guidance Construction Materials and Hard Rock Sites, September 2023.* Analytes are classified as either being field measurements or laboratory measurements. To establish baseline groundwater quality, water quality samples will be collected quarterly from the monitoring wells for five quarters, or a total of five times. Water quality samples will be collected from each monitoring well and delivered to Eurofins Denver for testing. **Table 3** includes the proposed lab for testing each parameter. **Attachment 3** includes documentation from the

laboratory, including a summary of the approach used for each test and laboratory provided documentation regarding testing protocol.

Task 1.4 – Sampling Methods

Following well development and water level observation, Schnabel will purge the wells and collect groundwater samples for laboratory analysis. Purging and sampling will be completed using low flow methods and an appropriate groundwater sampling pump. Groundwater gauging and stabilization parameters (pH, temperature, conductivity, and turbidity) will be measured using a flow through cell. A summary of field calibration procedures and bump test results will be provided to document full calibration and instrument accuracy before and after evaluation and will include the type(s) of calibration standards and expiration date. Each instrument will be field calibrated prior to use.

Sampling methods include the baseline sampling recommendations provided below:

- Samples will be collected from all monitoring wells during each quarterly site visit.
- Samples from the wells located above gradient will be collected before the below gradient wells are sampled.
- Prior to collecting water samples, the depth of the water will be measured. Water will be measured from the ground surface.
- Wells will be purged (one casing volume) a minimum of three times before water samples are collected. Between each purging, temperature, pH, conductivity, and dissolved oxygen will be measured.
- If between the second and third purging, the measured parameters vary more than 10%, subsequent purges will be performed (up to six times total) until measured parameters are within 10% of the previous values.
- All testing equipment will be removed from the site between each sampling event.
- Sample collection and storage will follow the requirements provided by the lab testing the samples.
- Samples will be delivered to the testing laboratory within the lab-provided recommended time following sample collection.
- Each sampling event will include documentation describing the field work.
- Water samples will be filtered at the time of collection.

Task 2 - Groundwater Monitoring Plan Technical Revision

Based on the results of the Data Review and the Groundwater Characterization tasks described in Task 1.1 through 1.4, a technical revision to the groundwater monitoring plan will be prepared to present the baseline groundwater conditions and predicted impacts of mining to the hydrologic balance. This will be accomplished by quantifying the baseline water quality and quantity conditions and simulating proposed mining operations to evaluate potential impacts to water quality and quantity.

Task 2.1 – Baseline Conditions

In the technical revision, baseline groundwater levels will be presented. Water levels as measured from the monitoring wells during the baseline groundwater characterization will be provided in tabular and graphical format in addition to providing a narrative about the data collection process. The groundwater monitoring plan will include a table of baseline groundwater quality conditions and measured groundwater levels from each sampling event, in addition to a summary of the site visits.

Task 2.2 – Future Operations

Using the baseline conditions, results will be compiled to allow an analysis of an estimated duration of time that groundwater quantity and quality will be impacted during mining operations. Such an analysis can also inform the impacts of mining operations on water quality including anticipated spatial and temporal extents.

Task 2.3 – Monitoring

The report will compile the results from the baseline analyses and the simulated impacts and propose any necessary revisions to the monitoring plan and frequency of sampling based on the results.

Water quality testing will be performed on a quarterly basis and water depth will be collected and provided to DRMS on a monthly basis. Sampling methods will be consistent with those described in ***Task 1.4 – Sampling Methods*** and laboratory-specific details described in **Attachment 3**. **Table 4** and **Table 5** includes the proposed list of variables to test for during mining operations.

Sampling methods during site operations will be consistent with ***Task 4 – Sampling Methods***. Currently, it is proposed that during operations water levels will be taken once a month and water quality samples will be taken at each POC once a quarter. This sampling interval may be revisited in the future should baseline monitoring or other changes provide a basis for more of less frequent monitoring.

Finally, the proposed methodology will discuss the regularity with which the data will be provided to DRMS and what data will be provided, such as comparing predicted and actual changes to water quality and quantity. DRMS has the authority to enforce Water Quality Control Commission (WQCC) water quality standards. **Table 4** lists the proposed parameter list to be tested for during ongoing site operations.

Task 2.4 – Groundwater Points of Compliance

The current proposed points of compliance are based on pre-baseline groundwater characterization at the site to meet DRMS requirements for final permit approval. The establishment of baseline groundwater conditions from the Groundwater Characterization task (Task 1) may inform more appropriate placement of points of compliance. Changes to proposed points of compliance will be included in the technical revision to the groundwater monitoring plan if required.

CONCLUSION

Schnabel is available immediately to support Ary Corporation with the Scope of Work described herein. We appreciate the opportunity to be of service for this project. Please call with any questions or comments you may have.

Sincerely,

SCHNABEL ENGINEERING, LLC

Nathan D. Phelps, PE
Associate Engineer

Victor G. deWolfe III, PE, PG
Senior Associate Engineer

NDP:VDW:EB:em

Attachments

O:\LONGMONT\2021\21C26002.00 ARY CORP\03_SE_PRODUCTS\08-TWO RIVERS PIT\03-REPORTS\01-DRAFT\GROUNDWATER MONITORING PLAN 2024\REVISION 2\GROUNDWATER MONITORING PLAN SCOPE OF WORK_08.30.24_CLEAN.DOCX

TABLES

Table 1: Pre-Baseline Groundwater Depth Information

Name	Well Elevation (DEM)	Well Depth	Depth to Groundwater						
			Date(s) of Data Collection	Count	Avg Depth to GW	Min		Max	
						Value	Date	Value	Date
SC02106117BBB[1]	4446.22	30	07/01/1962 - 10/06/1967	10	5.0	1.4	11/17/1965	8.1	7/27/1962
SC02106117ABD[1]	4442.38	32	07/01/1962 - 10/06/1967	5	12.4	10.0	7/1/1962	13.3	3/20/1965
SC02106117ADA[1]	4440.22	45	03/20/1965 - 03/12/1981	19	12.2	11.1	3/11/1971	15.1	3/23/1966
SC02106107AAB2[1]	4449.94	40	07/01/1962 - 07/15/1969	79	3.0	-0.1[2]	7/30/1965	5.2	3/24/1969
478-R-R[3]	4444.13	45	1/24/2019	1	15.0	-	-	-	-
20299-R-R[3]	4438.65	45	7/20/1992	1	10.0	-	-	-	-

Notes: [1]: Data obtained from CDSS tabulation of existing water level monitoring wells
[2]: Data flagged (water surface elevation greater than well elevation).
[3]: Data obtained from well driller logs.

Table 2: Pre-Baseline Sub-Surface Information

Well ID	478-R-R		20229-R-R	
DEM Surface Elevation	**4444.1**		**4438.6**	
Drilling Log Description	***Depth***	***Bottom Elevation***	***Depth***	***Bottom Elevation***
Earth	8	4436.1	5	4433.6
Clay/silt or Fine Sand	13	4431.1	28	4410.6
Gravel or Sand & some gravel			35	4403.6
Blue Mud			38	4400.6
Gravel	44	4400.1	41	4397.6
Shale	45	4399.1	45	4393.6

Table 3: Monitoring Well Details

Name	Location (UTM coordinates)	Land Surface Elevation[1]	Depth to Top of Perforated Casing (Elevation) [1]	Total Depth
Monitoring Well #1 [2]	564,891.59 m, 4,231,157.53 m	4449.9 feet	20 feet (est.)	45 feet (est.)
Monitoring Well #2 (Well Permit 478-R-R)	566,016.06 m, 4,231,155.93 m	4444.1 feet	20 feet (4424.1 feet)	45 feet
Monitoring Well #3 (Well Permit 9048-F)	566,586.00 m, 4,230,906.00 m	4438.6 feet	20 feet (4418.6 feet)	45 feet

Notes: [1]: *Elevations based on the DEM elevations of the mapped CDSS coordinates for each well*
[2]: *Monitoring Well #1 information is estimated based on pre-well drilling understanding of the area and the pre-baseline groundwater characterization*

Table 4: Proposed Parameters Tested for during Baseline Monitoring, Field

Variable	Table Value Standard (mg/L, unless other units given)	Reg. 41 Table Reference (1-4)	Sampling Specifications	
			Method	Description
Temperature			Field	-
pH	6.50 – 8.50	2 and 3	Field	-
Conductivity			Field	-
Dissolved Oxygen			Field	-

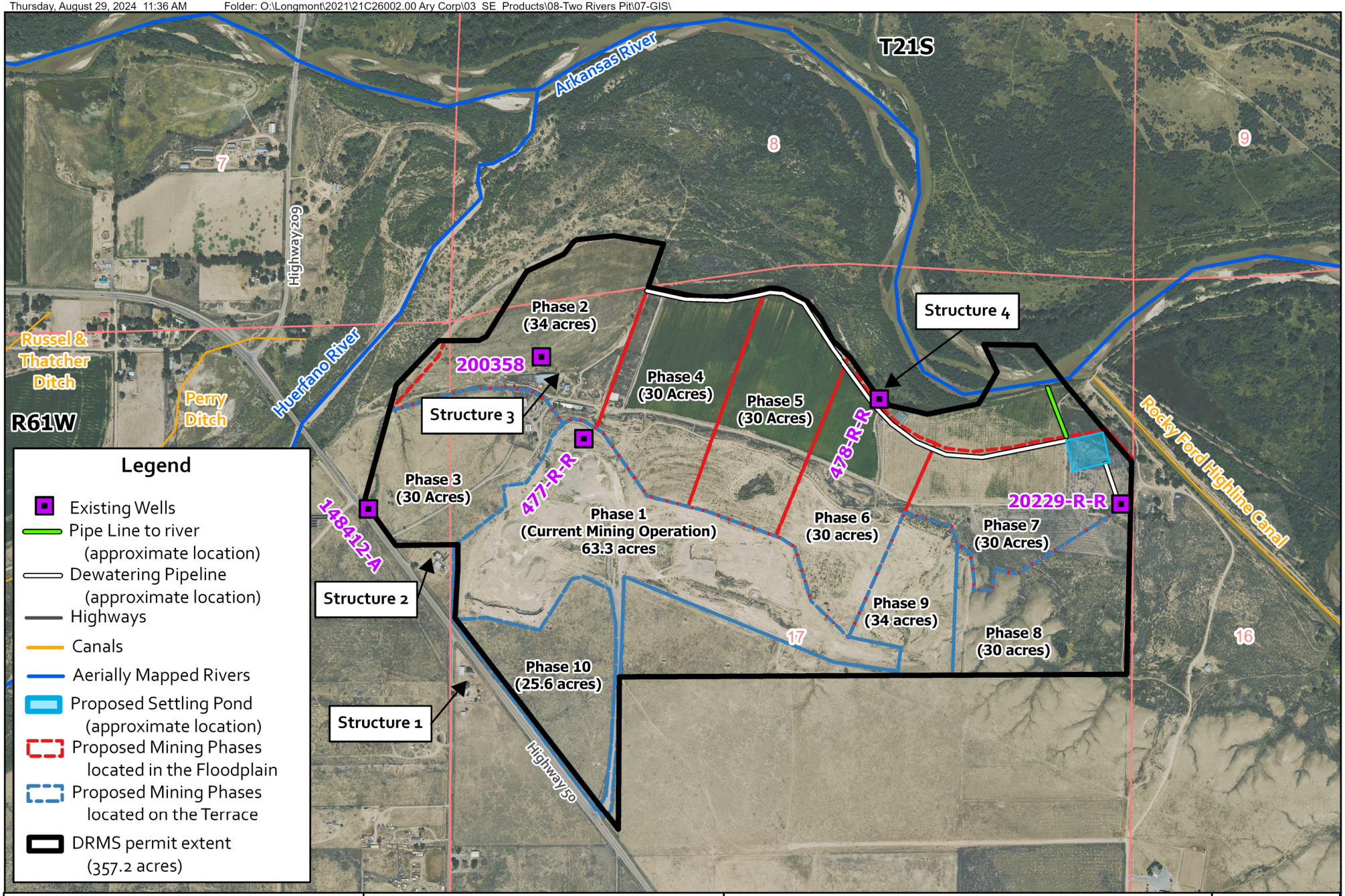
Table 5: Proposed Parameters Tested for during Baseline Monitoring, Laboratory

Variable	Table Value Standard (mg/L, unless other units given)	Reg. 41 Table Reference (1-4)	Sampling Specifications	
			Method	Description
Aluminum - Dissolved	5	3	6010D	Dissolved metals, Client List (21) - via Field Filtration
Antimony – Dissolved	0.006	1	6010D	Dissolved metals, Client List (21) - via Field filtration
Arsenic – Dissolved	0.01	1	6010D	Dissolved metals, Client List (21) - via Field filtration
Barium – Dissolved	2	1	6010D	Dissolved metals, Client List (21) - via Field filtration
Beryllium – Dissolved	0.004	1	6010D	Dissolved metals, Client List (21) - via Field filtration
Boron – Dissolved	0.75	3	6010D	Dissolved metals, Client List (21) - via Field filtration
Cadmium – Dissolved	0.005	1	6010D	Dissolved metals, Client List (21) - via Field filtration
Chloride – Dissolved	250	2	300.0	Dissolved Chloride, Fluoride, Sulfate - via Field Filtration
Chromium – Dissolved	0.1	1 and 3	6010D	Dissolved metals, Client List (21) - via Field filtration
Cobalt – Dissolved	0.05	3	6010D	Dissolved metals, Client List (21) - via Field filtration
Copper – Dissolved	0.2	3	6010D	Dissolved metals, Client List (21) - via Field filtration
Fluoride – Dissolved	2	3	300.0	Dissolved Chloride, Fluoride, Sulfate - via Field Filtration
Iron – Dissolved	0.3	2	6010D	Dissolved metals, Client List (21) - via Field filtration
Lead – Dissolved	0.05	1	6010D	Dissolved metals, Client List (21) - via Field filtration
Lithium – Dissolved	2.5	3	6010D	Dissolved metals, Client List (21) - via Field filtration
Manganese – Dissolved	0.05	2	6010D	Dissolved metals, Client List (21) - via Field filtration
Mercury – Dissolved	0.002	1	7470A	Dissolved Mercury - via Field Filtration
Molybdenum – Dissolved	0.21	1	6010D	Dissolved metals, Client List (21) - via Field filtration
Nickel – Dissolved	0.1	1	6010D	Dissolved metals, Client List (21) - via Field filtration
Nitrate (NO3)	10	1	300.0	Nitrate, Nitrite, and Combined Calculation
Nitrite (NO2)	1	1	300.0	Nitrate, Nitrite, and Combined Calculation
Nitrite + Nitrate as Nitrogen	10	1	300.0	Nitrate, Nitrite, and Combined Calculation
Selenium – Dissolved	0.02	3	6010D	Dissolved metals, Client List (21) - via Field filtration
Silver – Dissolved	0.05	1	6010D	Dissolved metals, Client List (21) - via Field filtration
Sulfate – Dissolved	250	2	300.0	Dissolved Chloride, Fluoride, Sulfate - via Field Filtration
TDS	400 mg/L, or 1.25X	4	SM 2540C	Solids, Total Dissolved
Thallium – Dissolved	0.002	1	6010D	Dissolved metals, Client List (21) - via Field filtration
Uranium – Dissolved	0.0168 to 0.03	1	6020B	Dissolved Uranium - via Field Filtration
Vanadium – Dissolved	0.1	3	6010D	Dissolved metals, Client List (21) - via Field filtration
Zinc – Dissolved	2	3	6010D	Dissolved metals, Client List (21) - via Field filtration

Notes: *Sampling specifications, including method and descriptions, summarized from Eurofins Denver Quote 28026995-0 received on July 11, 2024*

FIGURES

Thursday, August 29, 2024 11:36 AM Folder: O:\Longmont\2021\21C26002.00 Ary Corp\03 SE Products\08-Two Rivers Pit\07-GIS\



N

0 1,000 2,000 Feet

Aerial Imagery: Pueblo County 2023 NAIP

Schnabel ENGINEERING

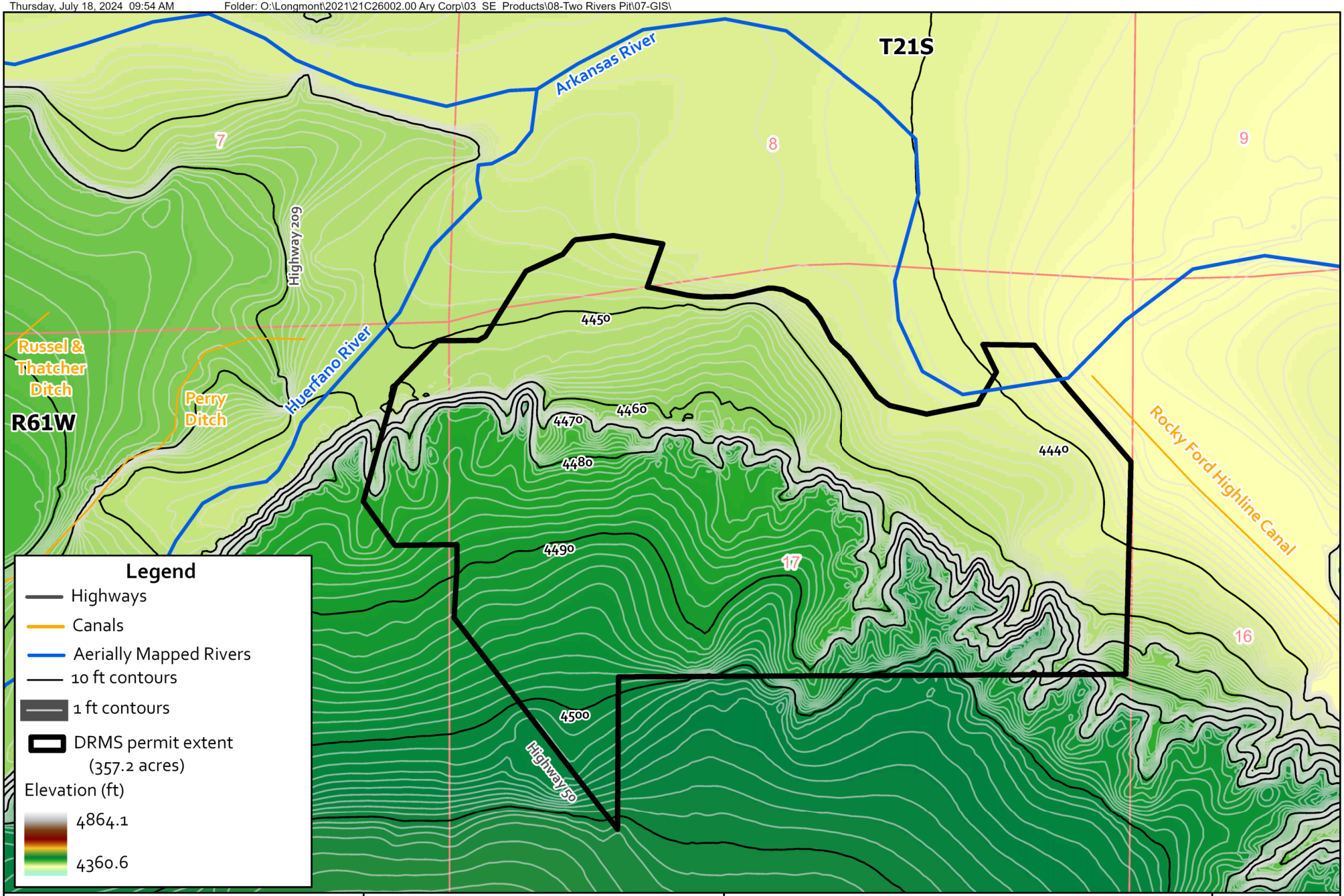
TWO RIVERS PIT GENERAL LOCATION
Site Overview

JOB NO: 21C26002.000, Task 08

SCALE: 1 inch = 1,000 feet

FIGURE NO. 1

Thursday, July 18, 2024 09:54 AM Folder: O:\Longmont\2021\21C26002.00 Ary Corp\03 SE Products\08-Two Rivers Pit\07-GIS\

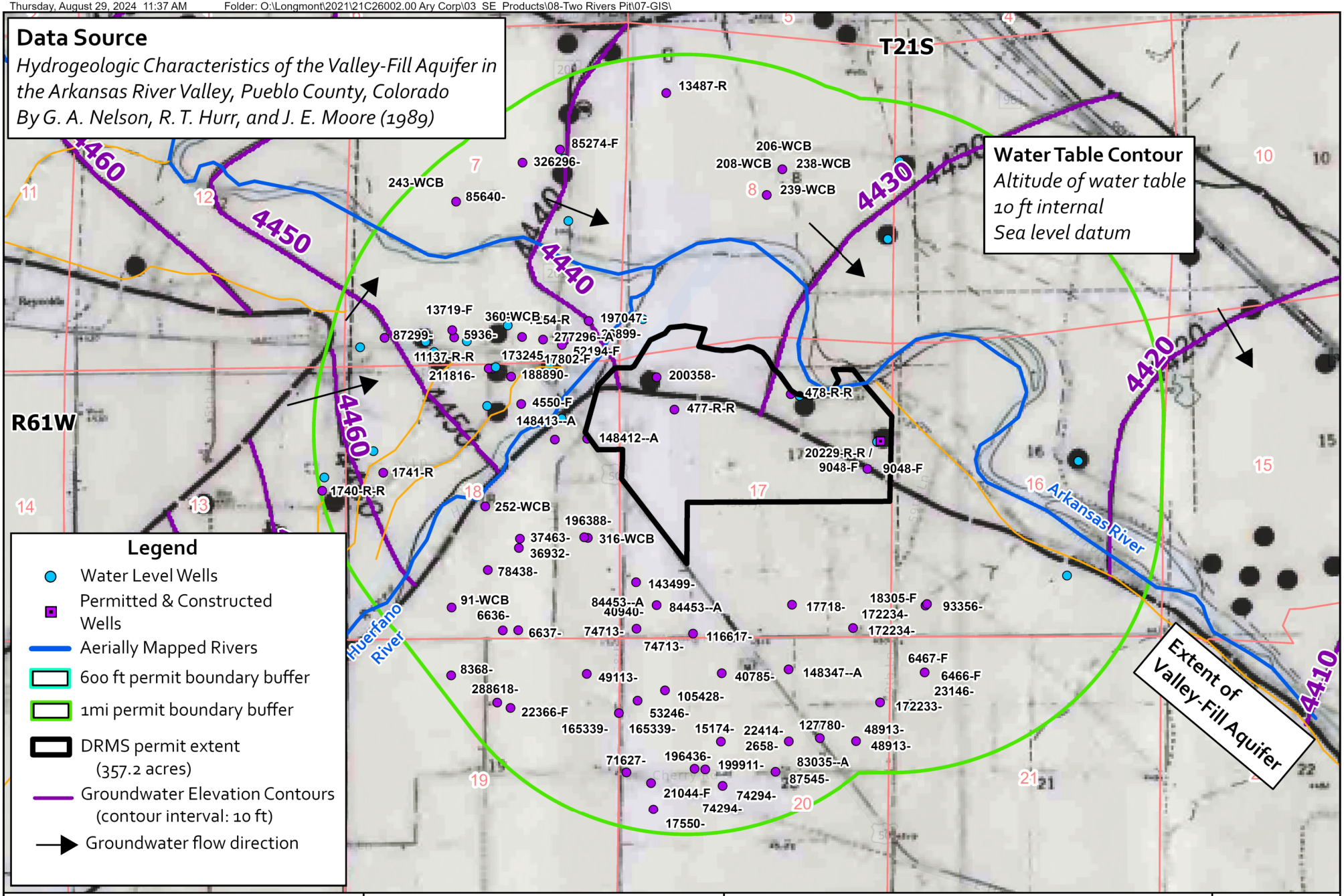


Schnabel ENGINEERING

TWO RIVERS PIT GENERAL LOCATION
Site Topography

JOB NO: 21C26002.000, Task 08 SCALE: 1 inch = 1,000 feet

FIGURE NO. 2



Schnabel ENGINEERING

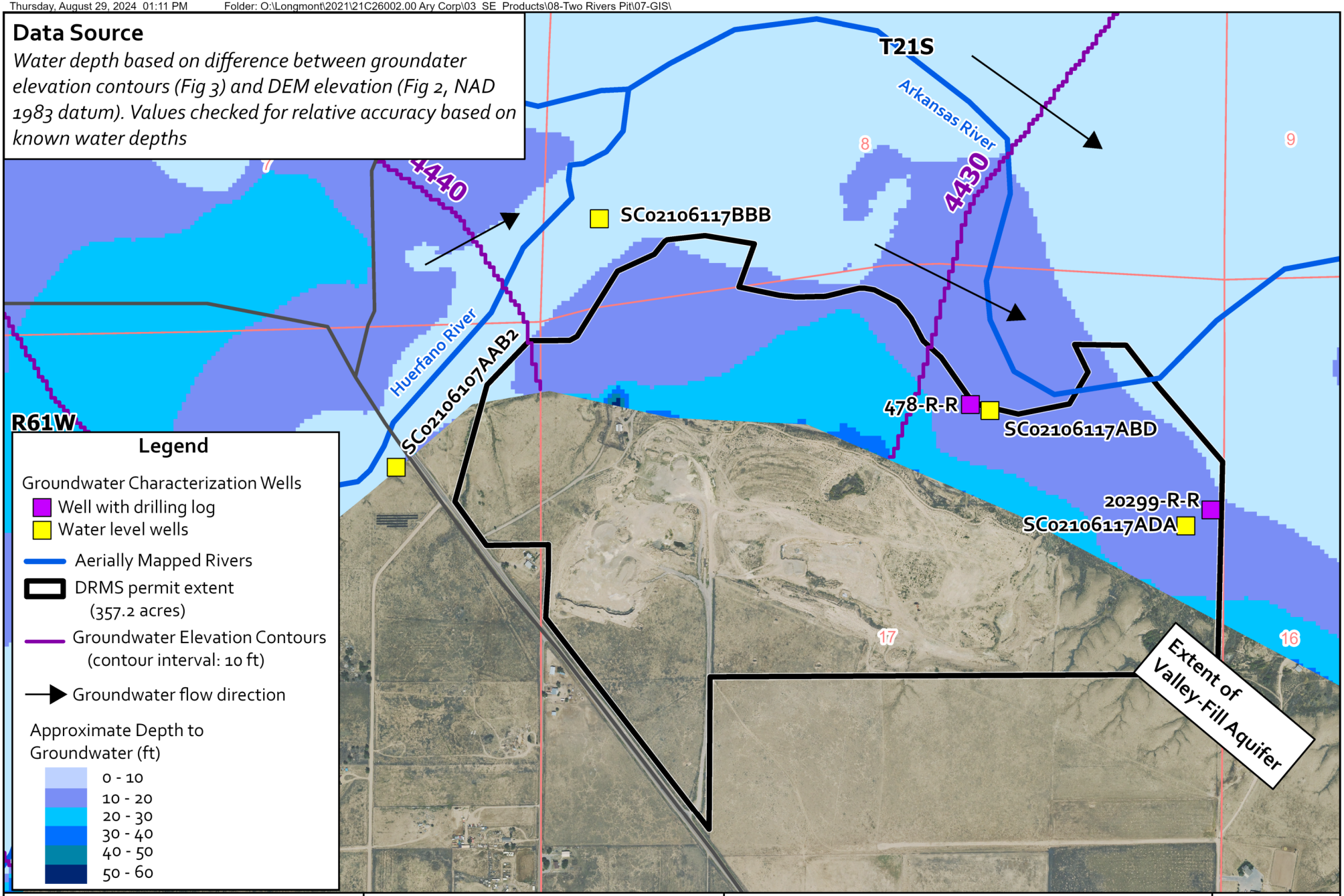
TWO RIVERS PIT GENERAL LOCATION
Alluvial Aquifer and Surrounding Wells

JOB NO: 21C26002.000, Task 08 | SCALE: 1 inch = 2,500 feet

FIGURE NO. 3

Data Source

Water depth based on difference between groundater elevation contours (Fig 3) and DEM elevation (Fig 2, NAD 1983 datum). Values checked for relative accuracy based on known water depths



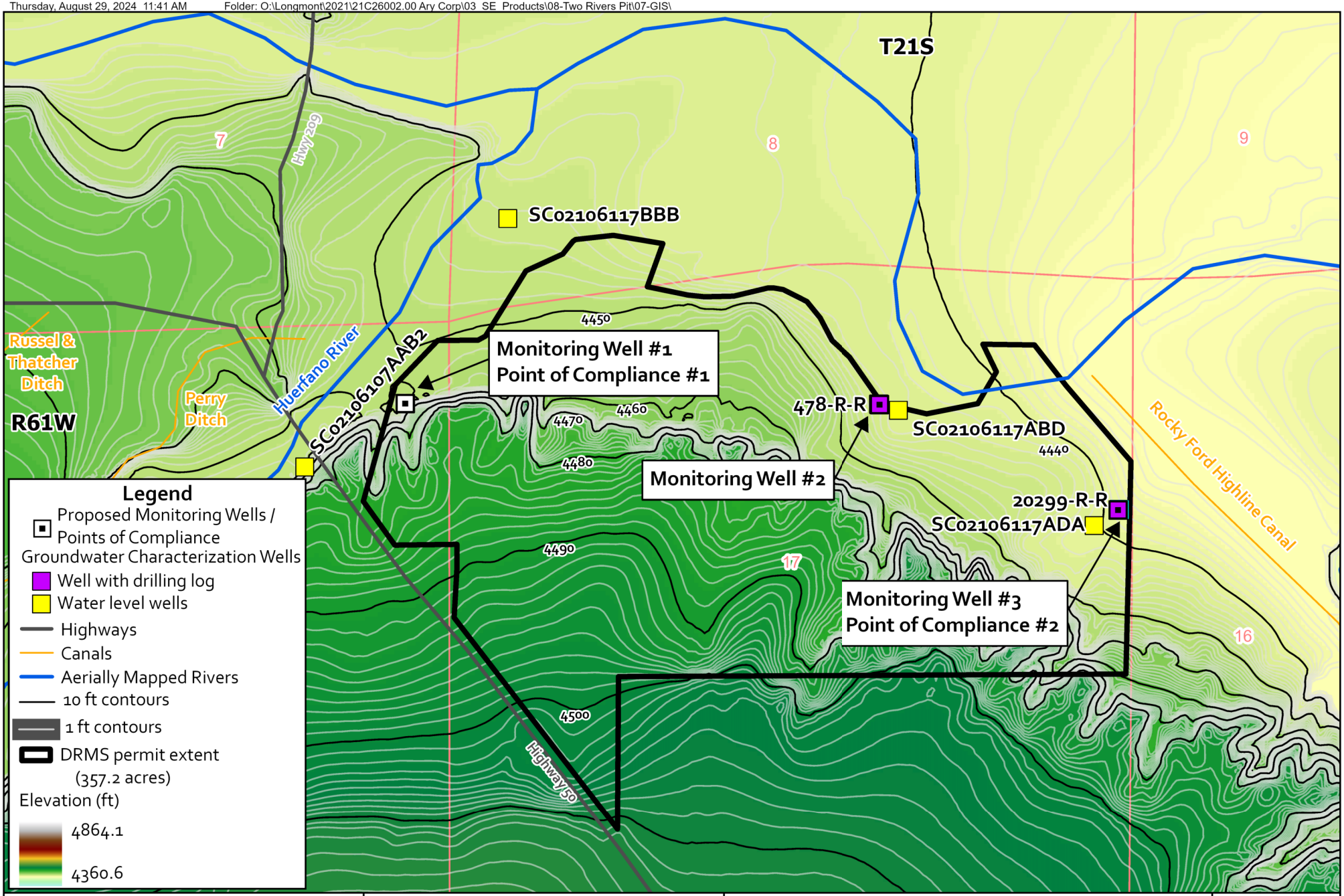
Schnabel ENGINEERING

TWO RIVERS PIT GENERAL LOCATION
Approximate Depth to Groundwater

JOB NO: 21C26002.000, Task 08 SCALE: 1 inch = 1,000 feet

FIGURE NO. 4

Thursday, August 29, 2024 11:41 AM Folder: O:\Longmont\2021\21C26002.00 Ary Corp\03 SE Products\08-Two Rivers Pit\07-GIS\



ATTACHMENT 1

EXISTING WELLS DATA

WRJ-26-72

WA AD

6/26/87

COLORADO DIVISION OF WATER RESOURCES

300 Columbine Bldg., 1845 Sherman St.
Denver, Colorado 80203

THIS FORM MUST BE SUBMITTED WITHIN 60 DAYS OF COMPLETION OF THE WORK DESCRIBED HEREON. TYPE OR PRINT IN BLACK INK.

WELL COMPLETION AND PUMP INSTALLATION REPORT

PERMIT NUMBER 148412-A

RECEIVED
AUG 10 1987
WATER RESOURCES
STATE ENGINEER

WELL OWNER Hattie Yochum

ADDRESS Gen. Del Boone, CO 81025

DATE COMPLETED May 23, 1987

SE ¼ of the NE ¼ of Sec. 18,

T. 21 S, R. 61 W, 6 P.M.

WELL LOG

From	To	Type and Color of Material	Water Loc.
0	6	Topsoil, Brown	
6	10	Course Gravel, Grey	
10	22	Sand and Gravel, Grey	17
22	25	Clay, Yellow	
25	40	Shale, Grey	

TOTAL DEPTH 40 ft.

Use additional pages necessary to complete log.

HOLE DIAMETER

10 in. from 0 to 13 ft.

6 in. from 13 to 40 ft.

____ in. from ____ to ____ ft.

DRILLING METHOD ____

CASING RECORD:

Plain Casing

Size 6 5/8 & kind Steel from +2 to 16 ft.

Size ____ & kind ____ from ____ to ____ ft.

Size ____ & kind ____ from ____ to ____ ft.

Perforated Casing

Size 6 5/8 & kind Steel from 16 to 25 ft.

Size ____ & kind Open Hole from 25 to 40 ft.

Size ____ & kind ____ from ____ to ____ ft.

GROUTING RECORD

Material Cement

Intervals 13 ft. to Surface

Placement Method Pour

GRAVEL PACK: Size ____

Interval ____

TEST DATA

Date Tested 23 May, 19 87

Static Water Level Prior to Test 14 ft.

Type of Test Pump Bailer

Length of Test 2 hr.

Sustained Yield (Metered) 5 gpm

Final Pumping Water Level 25 ft.

PUMP INSTALLATION REPORT

Pump Make _____

Type _____

Powered by _____ HP _____

Pump Serial No. _____

Motor Serial No. _____

Date Installed _____

Pump Intake Depth _____

Remarks _____

_____

WELL TEST DATA WITH PERMANENT PUMP

Date Tested _____

Static Water Level Prior to Test _____

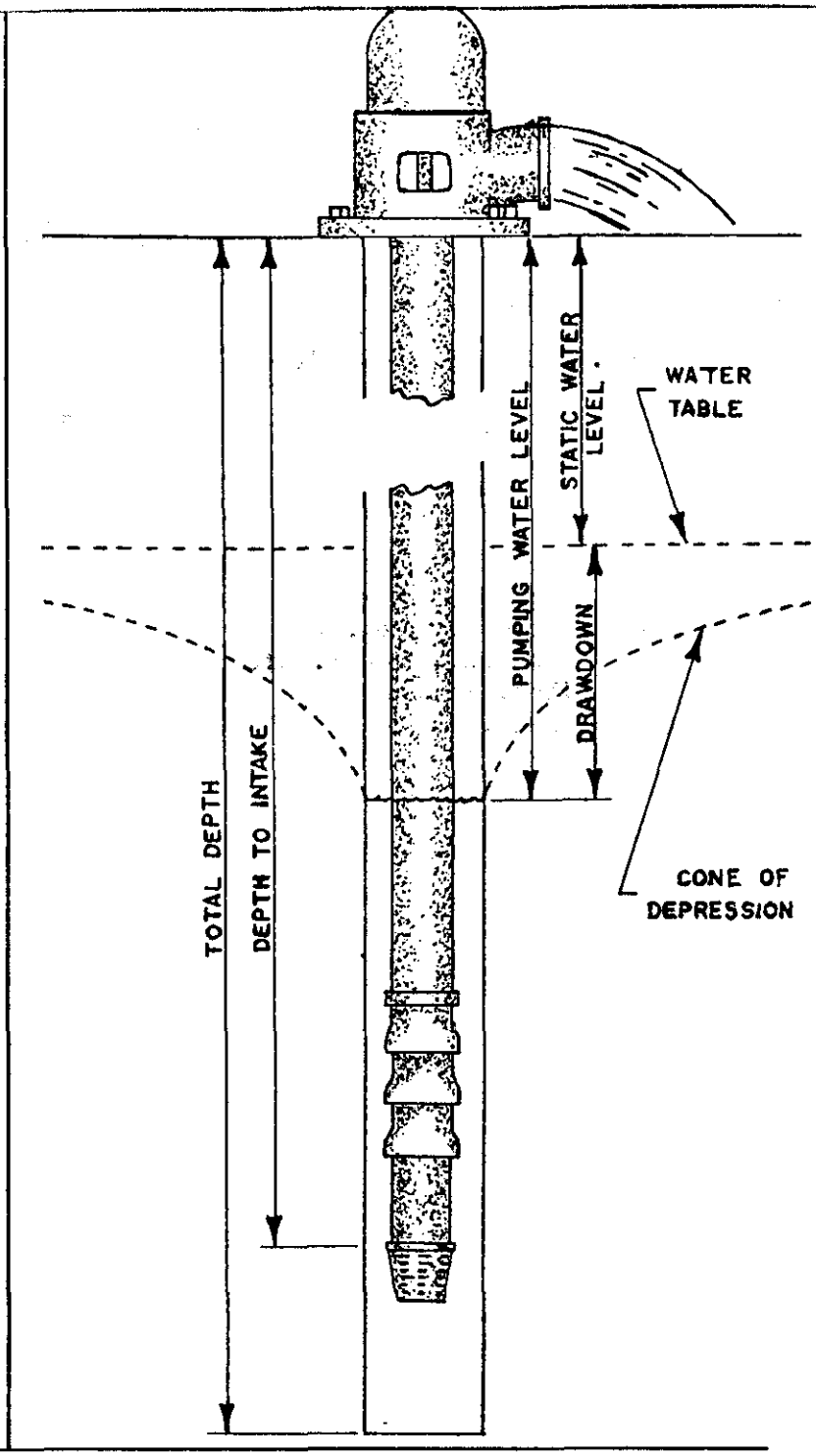
Length of Test _____ Hours

Sustained yield (Metered) _____ GPM

Pumping Water Level _____

Remarks _____

_____



CONTRACTORS STATEMENT

The undersigned, being duly sworn upon oath, deposes and says that he is the contractor of the well or pump installation described hereon; that he has read the statement made hereon; knows the content thereof, and that the same is true of his own knowledge.

Signature Helen Young License No. 997

State of Colorado, County of Fremont SS

Subscribed and sworn to before me this 4 day of August, 19 87.

My Commission expires: December 8, 19 88.

Notary Public Geraldine J. White

FORM TO BE MADE OUT IN QUADRUPLICATE: WHITE FORM must be an original copy on both sides and signed. WHITE AND GREEN copies must be filed with the State Engineer. PINK COPY is for the Owner and YELLOW COPY is for the Driller.

WRJ-5-Rev. 76

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

RECEIVED
JUN - 3 1986
WATER RESOURCES
STATE - ENGINEER
COLO.

PERMIT APPLICATION FORM

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

RECEIVED
MAY 18 1987
WATER RESOURCES
STATE - ENGINEER
COLO.

FOR: (X) A PERMIT TO USE GROUND WATER
(X) A PERMIT TO CONSTRUCT A WELL
(X) A PERMIT TO INSTALL A PUMP
( ) REPLACEMENT FOR NO. _____
( ) OTHER _____
WATER COURT CASE NO. _____

(1) APPLICANT - mailing address

NAME Hattie Yochum

STREET Gen. Del.

CITY Boone CO (State) 81025 (Zip)

TELEPHONE NO. 947-3551

(2) LOCATION OF PROPOSED WELL

County Pueblo

SE ¼ of the NE¼ ¼, Section 18

Twp. 21 S (N,S), Rng. 61 W (E,W), 6 P.M.

(3) WATER USE AND WELL DATA

Proposed maximum pumping rate (gpm) 15

Average annual amount of ground water to be appropriated (acre-feet): 1.5

Number of acres to be irrigated: 10,000 Sq. Ft.

Proposed total depth (feet): 60

Aquifer ground water is to be obtained from:

Owner's well designation _____

GROUND WATER TO BE USED FOR:

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

DETAIL THE USE ON BACK IN (11)

(4) DRILLER

Name Baski Drilling, Inc.

Street 33490 Hwy. 50 East

City Pueblo CO (State) (Zip)

Telephone No. 948-2201 Lic. No. _____

FOR OFFICE USE ONLY: DO NOT WRITE IN THIS COLUMN

Receipt No. 65380 D

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.

1) APPROVED PURSUANT TO C.R.S. 37-90-602(3)(c) FOR THE RELOCATION OF EXISTING WELL PERMIT NO. 148412. THE EXISTING WELL MUST BE PLUGGED AND ABANDONED ACCORDING TO THE RULES AND REGULATIONS FOR WATER WELL AND PUMP INSTALLATION CONTRACTORS WITHIN NINETY (90) DAYS OF COMPLETION OF THE NEW WELL. THE ENCLOSED AFFIDAVIT FORM MUST BE COMPLETED AND SUBMITTED AFFIRMING THAT THE OLD WELL WAS PLUGGED AND ABANDONED.
2) THE USE OF GROUND WATER FROM THIS WELL IS LIMITED TO FIRE PROTECTION, ORDINARY HOUSEHOLD PURPOSES INSIDE 1 SINGLE FAMILY DWELLING(S), THE IRRIGATION OF NOT MORE THAN 10,000 SQ. FT. OF HOME GARDENS AND LAWNS, AND THE WATERING OF DOMESTIC ANIMALS. 6/25/87

APPLICATION APPROVED

PERMIT NUMBER 148412-A

DATE ISSUED JUN 26 1987

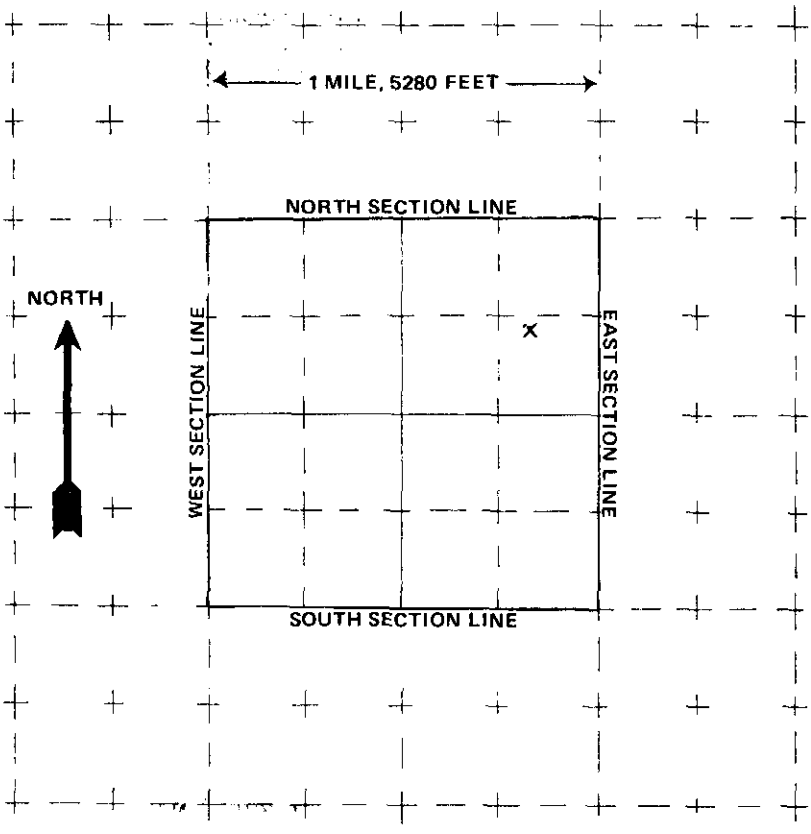
EXPIRATION DATE JUN 26 1989

Jeris A. Danielson
(STATE ENGINEER)

BY _____

I.D. 2-14 COUNTY 51

(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.

1340 ft. from north (north or south) sec. line

690 ft. from east (east or west) sec. line

LOT _____ BLOCK _____ FILING # _____

SUBDIVISION _____

(7) TRACT ON WHICH WELL WILL BE LOCATED Owner: Hattie Yockum

No. of acres 30 . Will this be the only well on this tract? no

(8) PROPOSED CASING PROGRAM

Plain Casing

6 in. from 0 ft. to 40 ft.

6 in. from 40 ft. to 60 ft.

Perforated casing

_____ in. from _____ ft. to _____ ft.

_____ in. from _____ ft. to _____ ft.

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

10 ft. from old well
Old well plugged according to rules and regulations

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

Owner(s): Hattie Yockum No. of acres: 30

Legal description: SE¼NE¼, Sec. 18, T. 21 S., R. 61 W., 6 P.M.

(11) DETAILED DESCRIPTION of the use of ground water: **Household use and domestic wells must indicate type of disposal system to be used.**

Domestic Septic tank installed 1983

(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
Well	Domestic	SE¼NE¼, Sec. 18, T. 21 S., R. 61 W., 6 P.M.

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

Hattie Yockum
SIGNATURE OF APPLICANT(S)

Use additional sheets of paper if more space is required.

COLORADO
Division of Water Resources
Department of Natural Resources

WELL PERMIT NUMBER 477-R-R
RECEIPT NUMBER 0317949

ORIGINAL PERMIT APPLICANT(S)

ALWAYS GREEN CBD LLC

APPROVED WELL LOCATION

Water Division: 2 Water District: 14
Designated Basin: N/A
Management District: N/A
County: PUEBLO
Parcel Name: N/A
Physical Address: N/A

NW 1/4 NW 1/4 Section 17 Township 21.0 S Range 61.0 W Sixth P.M.

UTM COORDINATES (Meters, Zone:13, NAD83)

Easting: 565320.8 Northing: 4231059.5

See the original well permit file for permit conditions of approval and additional details. The original permit file can be viewed using the Well Permit Search Tool at https://dwr.colorado.gov/

See Original Permit

Issued By

Date Issued: 11/2/1990
Expiration Date: 11/2/1991

PERMIT HISTORY

02-16-2023	CHANGE IN OWNER NAME/MAILING ADDRESS. CHANGED TO FREMONT PAVING AND REDI-MIX
03-04-2016	CHANGE IN OWNER NAME/MAILING ADDRESS

FORM NO. GWS-11 07/93

STATE OF COLORADO
OFFICE OF THE STATE ENGINEER
818 Centennial Bldg., 1313 Sherman St., Denver, Colorado 80203
(303) 866-3581

For Office Use only
RECEIVED
JUN 27 1995
DIVISION ENGINEER
PUEBLO, COLORADO

PRIOR TO COMPLETING FORM, SEE INSTRUCTIONS ON REVERSE SIDE

CHANGE IN OWNERSHIP/ADDRESS / LOCATION

WELL PERMIT, LIVESTOCK TANK OR EROSION CONTROL DAM

RECEIVED
JUN 28 '95
WATER RESOURCES
STATE ENGINEER
COLO

1. NEW OWNER
NAME(S) CARL PANTALEO
Mailing Address 57935 HWY 50 E
City, St. Zip Boone Co 81025
Phone (719) 947 3033

2. THIS CHANGE IS FOR ONE OF THE FOLLOWING:
☐ WELL PERMIT NUMBER 0477R W 1866
☐ LIVESTOCK WATER TANK NUMBER
☐ EROSION CONTROL DAM NUMBER

3. WELL LOCATION: COUNTY PUEBLO OWNER'S WELL DESIGNATION WELL #2
(Address) (City) (State) (Zip)
NW 1/4 of the NW 1/4, Sec. 17 Twp. 21 ☐ N. or ☒ S., Range 61 ☐ E. or ☒ W. 6 P.M.
Distances from Section Lines 1000 Ft. from ☒ N. or ☐ S. Line, 1000 Ft. from ☐ E. or ☒ W. Line.
Subdivision Lot Block Filing (Unit)

4. LIVESTOCK TANK OR EROSION CONTROL DAM LOCATION: COUNTY
1/4, Sec. Twp. ☐ N. or ☐ S., Range ☐ E. or ☐ W. P.M.

5. The above listed owner(s) say(s) that he (they) own the structure described herein.
The existing record is being amended for the following reason(s):
☒ Change in name of owner. ☐ Change in mailing address. ☐ Correction of location.

6. I (we) have read the statements made herein, know the contents thereof, and state that they are true to my (our) 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.]

Name/Title (Please type or print)	Signature	Date
CARL PANTALEO	Carl Pantaleo	6-26-95

FOR OFFICE USE ONLY

ACCEPTED AS A CHANGE IN OWNERSHIP AND/OR MAILING ADDRESS.

Hal D. Simpson
State Engineer

By

JUL 19 1995
Date

Court Case No. Div. 2 Co. 51 WD 14 Basin MD Use

FORM NO. GWS-11 10/89

STATE OF COLORADO
OFFICE OF THE STATE ENGINEER
818 Centennial Bldg., 1313 Sherman St., Denver, Colorado 80203
(303) 866-3581

For Office Use only

RECEIVED
JAN 28 '91
WATER RESOURCES
STATE ENGINEER
COLO.

PRIOR TO COMPLETING FORM, SEE INSTRUCTIONS ON REVERSE SIDE

CHANGE IN OWNERSHIP / ADDRESS

WELL PERMIT, LIVESTOCK TANK OR EROSION CONTROL DAM

1. NEW OWNER

NAME(S) O. W. Carruth
Mailing Address 3009 Country Club Dr.
City, St. Zip Pueblo, Co. 81008
Phone (719) 542-3371

2. THIS CHANGE IS FOR ONE OF THE FOLLOWING:

[X] WELL PERMIT NUMBER 0477 RR

[ ] LIVESTOCK WATER TANK NUMBER _____

[ ] EROSION CONTROL DAM NUMBER _____

3. WELL LOCATION: COUNTY Pueblo OWNER'S WELL DESIGNATION Irrigation & Livestock (corrected)

57935 Hwy. 50 E. (Address) Boone, (City) Co. (State) 81025 (Zip)

NW 1/4 of the NW 1/4, Sec. 17 Twp. 21 [ ] N. or [X] S., Range 61 [ ] E. or [X] W. 6th P.M.

Distances from Section Lines _____ Ft. from [ ] N. or [ ] S. Line, _____ Ft. from [ ] E. or [ ] W. Line.

Subdivision _____ Lot _____ Block _____ Filing (Unit) _____

4. LIVESTOCK TANK OR EROSION CONTROL DAM LOCATION: COUNTY _____

_____ 1/4, Sec. _____ Twp. _____ [ ] N. or [ ] S., Range _____ [ ] E. or [ ] W. _____ P.M.

5. The above listed owner(s) say(s) that he (they) own the structure described herein.
The existing record is being amended for the following reason(s):

[X] Change in name of owner. [ ] Change in mailing address.

6. I (we) have read the statements made herein, know the contents thereof, and state that they are true to my (our) 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.]

Name/Title (Please type or print)	Signature	Date
O. W. Carruth, Owner		1-23-91

FOR OFFICE USE ONLY

State Engineer _____ By _____ Date _____

Court Case No. _____ Div. 2 Co. 51 WD 14 Basin _____ MD _____ Use 1

[redacted]

FORM NO. GWS-11 10/89

STATE OF COLORADO
OFFICE OF THE STATE ENGINEER
818 Centennial Bldg., 1313 Sherman St., Denver, Colorado 80203
(303) 866-3581

For Office Use only

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FEB 27 '91
WATER RESOURCES
STATE ENGINEER
COLO.

321753 CHEQUE $16.00

PRIOR TO COMPLETING FORM, SEE INSTRUCTIONS ON REVERSE SIDE

CHANGE IN OWNERSHIP / ADDRESS

WELL PERMIT, LIVESTOCK TANK OR EROSION CONTROL DAM

1. NEW OWNER

NAME(S) O. W. Carruth
Mailing Address 3009 Country Club Dr.
City, St. Zip Pueblo, Co. 81008
Phone (719) 542-3371

2. THIS CHANGE IS FOR ONE OF THE FOLLOWING:

[x] WELL PERMIT NUMBER [redacted]
[ ] LIVESTOCK WATER TANK NUMBER
[ ] EROSION CONTROL DAM NUMBER

not necessary

3. WELL LOCATION: COUNTY Pueblo OWNER'S WELL DESIGNATION Irrigation

57935 Hwy. 50 E (Address) Boone (City) CO. (State) 81025 (Zip)

NW 1/4 of the NW 1/4, Sec. 17 Twp. 21 [ ] N. or [x] S., Range 61 [ ] E. or [x] W. 6th P.M.

Distances from Section Lines ______ Ft. from [ ] N. or [ ] S. Line, ______ Ft. from [ ] E. or [ ] W. Line.

Subdivision ______ Lot ______ Block ______ Filing (Unit) ______

4. LIVESTOCK TANK OR EROSION CONTROL DAM LOCATION: COUNTY ______

______ 1/4, Sec. ______ Twp. ______ [ ] N. or [ ] S., Range ______ [ ] E. or [ ] W. ______ P.M.

5. The above listed owner(s) say(s) that he (they) own the structure described herein.
The existing record is being amended for the following reason(s):

[x] Change in name of owner. [ ] Change in mailing address.

6. I (we) have read the statements made herein, know the contents thereof, and state that they are true to my (our) 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.]

Name/Title (Please type or print)	Signature	Date
O. W. Carruth, Owner	[signature]	1-23-91

FOR OFFICE USE ONLY

[signature] State Engineer — [signature] By — FEB 28 1991 Date

Court Case No. ______ Div. 2 Co. 51 WD 14 Basin ______ MD ______ Use 1

11-2-90

FORM NO. GWS-10 10/88

STATE OF COLORADO
OFFICE OF THE STATE ENGINEER
818 Centennial Bldg., 1313 Sherman St., Denver, Colorado 80203
(303) 866-3581

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JUL 29'91
WATER RESOURCES
STATE ENGINEER
COLO

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SP&mo

FOR INSTRUCTIONS, SEE REVERSE SIDE

STATEMENT OF BENEFICIAL USE

WELL PERMIT NUMBER 477 R.R

1. WELL OWNER

NAME(S) O. W. Carruth

Mailing Address 3009 Country Club Dr.

City, St. Zip Pueblo, CO 81008

Phone (719) 542-3371

10-9-91

2. WELL LOCATION: COUNTY Pueblo OWNER'S WELL DESIGNATION Irrigation

Boone, CO 81025
(Address) (City) (State) (Zip)

NW 1/4 of the NW 1/4, Sec. 17 Twp. 21 ☐ N. or ☒ S., Range 61 ☐ E. or ☒ W. 6th P.M.

Distances from Section Lines 700 Ft. from ☒ N. or ☐ S. Line, 700 Ft. from ☐ E. or ☒ W. Line.

3. The well is being used for the following purpose(s): Irrigation

4. Water from the well was first used beneficially for the above purpose(s) on Dec. 1, 1990

5. The pumping rate claimed is 325.8 gallons per minute.

6. The average annual amount of water diverted is 230 acre feet.

7. The land area irrigated (watered) by water from this well is: 90 (Number) ☒ Acres or ☐ Square feet,

described as: N½ of Sec. 17 & NE¼ of Sec. 18, Twp. 21 South, Rng. 61 West, 6th P.M.
(Legal Description)

or as _____ Subdivision Lot(s)_____ Block_____ Filing/Unit _____

8. Well drilled by: B & B Drilling Lic. No: 72

Pump installed by: B & B Drilling Lic. No: 72

9. Meter Mfg. by Badger Serial No.: SN 90888882 Date Installed: Dec. 1, 1990

I (we) have read the statements made herein, know the contents thereof, and state that they are true to my (our) 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.]

10. Name/Title (Please type or print)	Signature	Date
O. W. Carruth		7-26-91

FOR OFFICE USE ONLY

State Engineer
Court Case No. Div. 2 By Co. 51 WD 14 Basin MD Date Use 1

Form No. GWS-25

OFFICE OF THE STATE ENGINEER
COLORADO DIVISION OF WATER RESOURCES

818 Centennial Bldg., 1313 Sherman St., Denver, Colorado 80203
(303) 866-3581

X 12-14-90

72

WELL PERMIT NUMBER 477 - R - R

DIV. 2 CNTY. 51 WD 14 DES. BASIN ___ MD ___

APPLICANT

O W CARRUTH
3009 COUNTRY CLUB
PUEBLO, CO 81008

APPROVED WELL LOCATION

COUNTY PUEBLO

NW 1/4 NW 1/4 Section 17

Twp 21 S , Range 61 W S P.M.

DISTANCES FROM SECTION LINES

700 Ft. from North Section Line

700 Ft. from West 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) Approved pursuant to CRS 37-90-137(2) for the replacement of an existing well, permit no. 477-R (decreed by the Division 2 Water Court as well no. 1, case no. W-1866). The old well (Battery of two wells) must be plugged and abandoned according to the Water Well Construction and Pump Installation Rules. An abandonment report must be submitted within sixty (60) days after construction of the new well, affirming that the old well was plugged and abandoned.

3) The maximum pumping rate shall not exceed 325.8 GPM. (.72 CFS).

4) The average annual amount of ground water to be appropriated shall not exceed 230 acre-feet.

5) Approval of this replacement permit shall not result in an expanded use of ground water. The use of ground water from this well combined with well no. 478-R is restricted to the irrigation of 90 acres in parts of N 1/2 of Sec. 17 and NE 1/4 of Sec. 18, Twp. 21 South, Rng. 61 West, 6th P.M.

6) A totalizing flow meter must be installed on the well and maintained in good working order. Permanent records of all diversions must be maintained by the well owner (recorded at least annually) and submitted to the Division Engineer upon request.

7) The owner shall mark the well in a conspicuous place with well permit number(s), name of the aquifer, and court case number(s) as appropriate. He shall take necessary means and precautions to preserve these markings.

8) This well shall be constructed at least 600 feet from any existing well.

9) This well is subject to administration by the Division Engineer in accordance with applicable decrees, statutes, rules, and regulations. KBM 11/1/90.

APPROVED: KBM

Jim A. Davidson
State Engineer

Bruce E. DeBrine
By

Receipt No. 0317949

DATE ISSUED NOV 02 1990

EXPIRATION DATE NOV 02 1991

80-K

WR 1.5 Rev. 76

RECEIVED

SEP 18 '90

WATER RESOURCES
STATE ENGINEER
COLO.

COLORADO DIVISION OF WATER RESOURCES

818 Centennial Bldg., 1313 Sherman St., Denver, Colorado 80203

PERMIT APPLICATION FORM

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

FOR: ( ) A PERMIT TO USE GROUND WATER
( ) A PERMIT TO CONSTRUCT A WELL
( ) A PERMIT TO INSTALL A PUMP
(X) REPLACEMENT FOR NO. 0477
( ) OTHER
WATER COURT CASE NO. W1866

09-18-90 2:57 P
032472 60.00
RNXODE P0017
TTL 60.00
CHEQUE 60.00
CHG 0.00

(1) APPLICANT - mailing address

NAME O. W. Carruth

STREET 3009 Country Club

CITY Pueblo, Co. 81008 (State) (Zip)

TELEPHONE NO. 542-3371 (719)

(2) LOCATION OF PROPOSED WELL

County Pueblo

NW ¼ of the NW ¼, Section 17

Twp. 21S (N,S), Rng. 61W (E,W), 6 P.M.

(3) WATER USE AND WELL DATA

Proposed maximum pumping rate (gpm) 600

Average annual amount of ground water to be appropriated (acre-feet): 230 AF

Number of acres to be irrigated: ~~100~~ 92

Proposed total depth (feet): 48

Aquifer ground water is to be obtained from:

Surface

Owner's well designation 0477

GROUND WATER TO BE USED FOR:

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

DETAIL THE USE ON BACK IN (11)

(4) DRILLER

Name B. B. Drilling

Street 4639 Zion

City Greeley Co. (State) 80634 (Zip)

Telephone No. _____ Lic. No. 72

FOR OFFICE USE ONLY: DO NOT WRITE IN THIS COLUMN
CL-1 1A7949

Receipt No. 317949 /

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.

APPLICATION APPROVED

PERMIT NUMBER _____

DATE ISSUED _____

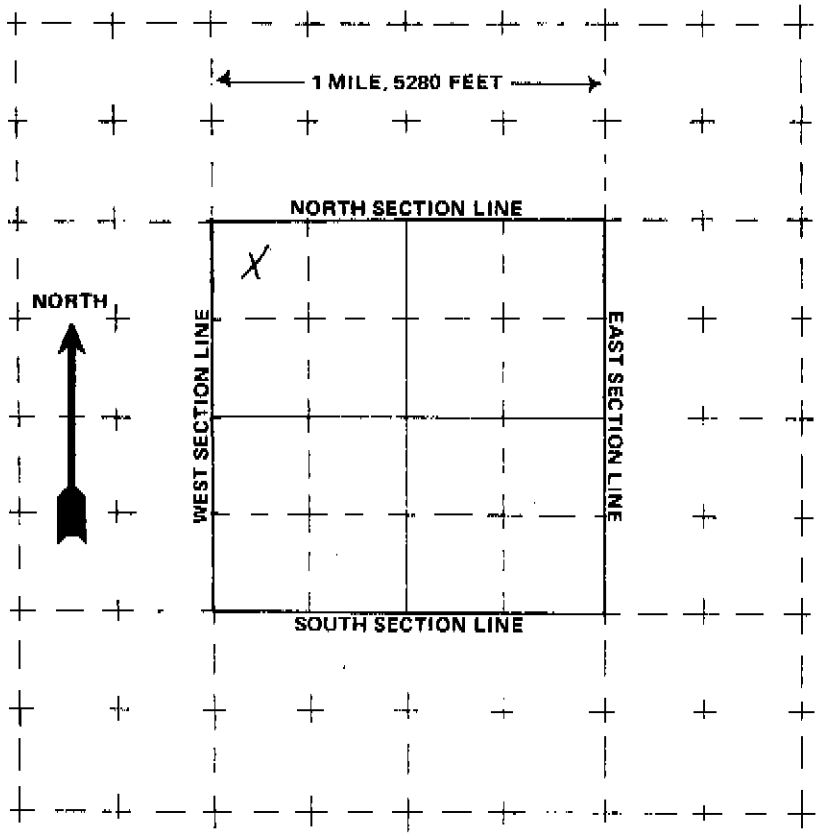
EXPIRATION DATE _____

(STATE ENGINEER)

BY _____

I.D. 2 COUNTY 51 14

(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.

700 ft. from North (north or south) sec. line

700 ft. from West (east or west) sec. line

LOT _____ BLOCK _____ FILING # _____

SUBDIVISION _____

(7) TRACT ON WHICH WELL WILL BE LOCATED Owner: O. W. Carruth

No. of acres 90 . Will this be the only well on this tract? No

(8) PROPOSED CASING PROGRAM

Plain Casing

24 in. from 0 ft. to 20 ft.

_____ in. from _____ ft. to _____ ft.

Perforated casing

24 in. from 25 ft. to 45 ft.

_____ in. from _____ ft. to _____ ft.

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

40' N

According to Rules & Reg.

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

Owner(s): O. W. Carruth No. of acres: 90

Legal description: Same As Above

(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 90 acres Decreed in W 1866

(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
Well	Irrigation	Land Decreed in W 1866 # 478

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

SIGNATURE OF APPLICANT(S)

Use additional sheets of paper if more space is required.

STATE OF COLORADO

OFFICE OF THE STATE ENGINEER
Division of Water Resources
Department of Natural Resources
1313 Sherman Street, Room 818
Denver, Colorado 80203
Phone (303) 866-3581
FAX (303) 866-3589

September 22, 1995

Dean Bechtold
B & B Drilling
4639 Zion
Greeley, CO 80634

RE: Construction and Pump Installation of Well Permit Nos. 477-R-R and 478-R-R.

Dear Mr. Bechtold:

Information has been received that your firm constructed the wells and/or installed pumping equipment under the subject well permit numbers on or about December 1990. A copy of the well permits are enclosed.

X The records show that a well construction and test report has not been received.

X The records show that a pump installation and test report has not been received.

The requested information is necessary to complete our well file records. Your timely response to this request is appreciated. If you have any questions, contact this office.

Sincerely

Richard Bell
Water Resource Geologist

wells were Bailed out some old pumps
Back in wells at that time

Dean Bechtold

STATE OF COLORADO

OFFICE OF THE STATE ENGINEER
Division of Water Resources
Department of Natural Resources
1313 Sherman Street, Room 818
Denver, Colorado 80203
Phone (303) 866-3581
FAX (303) 866-3589

September 22, 1995

Dean Bechtold
B & B Drilling
4639 Zion
Greeley, CO 80634

RE: Construction and Pump Installation of Well Permit Nos. 477-R-R and 478-R-R.

Dear Mr. Bechtold:

Information has been received that your firm constructed the wells and/or installed pumping equipment under the subject well permit numbers on or about December 1990. A copy of the well permits are enclosed.

X The records show that a well construction and test report has not been received.

X The records show that a pump installation and test report has not been received.

The requested information is necessary to complete our well file records. Your timely response to this request is appreciated. If you have any questions, contact this office.

Sincerely

Richard Bell
Water Resource Geologist

ROY ROMER
Governor

JERIS A. DANIELSON
State Engineer

OFFICE OF THE STATE ENGINEER
DIVISION OF WATER RESOURCES

1313 Sherman Street-Room 818
Denver, Colorado 80203
(303) 866-3581

October 9, 1991

B+B Drilling Sales + Service
4639 E Lon D Drive
Greeley, Co. 80634

RE: Construction of Well Permit No. 477-RR.

Dear Mr. Beckstead:

On July 29, 1991, this office received information in the form of a Statement of Beneficial Use that your firm constructed a well under the subject well permit number on or about December 1, 1990. A copy of the well permit is enclosed.

Our records do not show that a well completion report was received. As a result the permit was expired. If this information is correct, a work report must be submitted.

The requested information is required under the Rules and Regulations and is necessary to complete our well file records. Your timely response to this request is appreciated. If you have any questions, contact this office.

Sandy Johnson

COLORADO
Division of Water Resources
Department of Natural Resources

WELL PERMIT NUMBER 478-R-R
RECEIPT NUMBER 3687115

ORIGINAL PERMIT APPLICANT(S)

LORENZO RODRIGUEZ

APPROVED WELL LOCATION

Water Division: 2 Water District: 14
Designated Basin: N/A
Management District: N/A
County: PUEBLO
Parcel Name: N/A
Physical Address: N/A

NW 1/4 NE 1/4 Section 17 Township 21.0 S Range 61.0 W Sixth P.M.

UTM COORDINATES (Meters, Zone:13, NAD83)

Easting: 566023.0 Northing: 4231125.0

PERMIT TO REPLACE EXISTING WELL

ISSUANCE OF THIS PERMIT DOES NOT CONFER A WATER RIGHT

CONDITIONS OF APPROVAL

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

2) The construction of this well shall be in compliance with the Water Well Construction Rules 2 CCR 402-2, unless approval of a variance has been granted by the State Board of Examiners of Water Well Construction and Pump Installation Contractors in accordance with Rule 18.

3) Approved pursuant to CRS 37-90-137(2), for the replacement of an existing well, permit no. 478-R-R (known as Well No. 2 in Division 2 Water Court case no. W-1866). Upon completion of the new well, the old well must be plugged and sealed according to the Water Well Construction Rules within ninety (90) days of completion of the new well. A Well Abandonment Report form must be completed and submitted to affirm that the old well was properly plugged and sealed.

4) Approved on the condition that this well is operated in accordance with the Amended Rules and Regulations Governing the Diversion and Use of Tributary Ground Water in the Arkansas River Basin, Colorado.

5) Approval of this replacement permit shall not result in an expanded use of ground water. The use of ground water from this well is limited to the irrigation of 90 acres (per W-1866) in a portion of the NE 1/4 of Section 17, Twp. 21 South, Rng. 61 West, 6th P.M. (per 478-R-R dated May 9, 1990).

6) The pumping rate of this well shall not exceed 550.9 GPM, per W-1866.

7) The annual withdrawal of ground water from this well shall not exceed 385 acre-feet, per W-1866.

8) The owner shall mark the well in a conspicuous place with well permit number(s), name of the aquifer, and court case number (s) as appropriate. The owner shall take necessary means and precautions to preserve these markings.

9) A metering method must be established for this well pursuant to the Amended Rules Governing the Measurement of Tributary Ground Water Diversions Located in the Arkansas River Basin.

10) This well shall be constructed not more than 200 feet from the location specified on this permit, and within the NW 1/4 of the NE 1/4 of Section 17, Twp. 21 South, Rng. 61 West, 6th P.M., as decreed.

11) This replacement well shall not be constructed any closer to any other existing well than the well it is replacing, if such other well is within 600 feet of the replacement, is completed in the same aquifer, and is not owned by the applicant.

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

NOTE: The well structure I.D. # is 1405119, and is also known as Harpman Well No. 2.

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

WELL PERMIT NUMBER 478-R-R **RECEIPT NUMBER 3687115**

NOTE: Parcel Identification Number (PIN): 1117000020.

Issued By JOHN GABERT

Date Issued: 7/3/2018

Expiration Date: 7/3/2019

PERMIT HISTORY

02-16-2023	CHANGE IN OWNER NAME/MAILING ADDRESS. CHANGED TO FREMONT PAVING AND REDI-MIX
06-20-2019	CHANGE IN OWNER NAME/MAILING ADDRESS. CHANGED TO BOONES FARMS LLC (KURT BLACKBURN)

Form No. GWS-31
02/2017

WELL CONSTRUCTION AND YIELD ESTIMATE REPORT

State of Colorado, Office of the State Engineer
1313 Sherman St., Room 821, Denver, CO 80203 303.866.3581
www.water.state.co.us and dwrpermitsonline@state.co.us

For Office Use Only
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MAR 14 2019
WATER RESOURCES
STATE ENGINEER
COLO

1. **Well Permit Number:** 478-R-R **Receipt Number:** 3687115
2. **Owner's Well Designation:** 1405119 HARPMAN WELL NO. 2
3. **Well Owner Name:** LORENZO RODRIGUEZ
4. **Well Location Street Address:**
5. **As Built GPS Well Location (required):** ☐ Zone 12 ☒ Zone 13 Easting: 566011.0 Northing: 4231151
6. **Legal Well Location:** NW 1/4, NE 1/4, Sec., 17 Twp. 21 ☐ N or S ☒, Range 61 ☐ E or W ☒, 6TH P.M.
   County: PUEBLO
   Subdivision: _____, Lot ____, Block _____, Filing (Unit) _____
7. **Ground Surface Elevation:** 4470 feet **Date Completed:** 01/24/2019 **Drilling Method:** MUD ROTARY
8. **Completed Aquifer Name :** ALLUVIAL **Total Depth:** 45 feet **Depth Completed:** 45 feet
9. **Advance Notification:** Was Notification Required Prior to Construction? ☐ Yes ☒ No, Date Notification Given: _____
10. **Aquifer Type:** (Check one) ☐ Type I (One Confining Layer) ☐ Type I (Multiple Confining Layers) ☐ Laramie-Fox Hills ☐ Type II (Not overlain by Type III) ☐ Type II (Overlain by Type III) ☒ Type III (alluvial/colluvial)

11. **Geologic Log:**

Depth	Type	Grain Size	Color	Water Loc.
0-8	EARTH			
8-13	CLAY/SILT			
13-44	GRAVEL	FINE TO +6"	MULTI	YES
44-45	SHALE		BLUE	

12. **Hole Diameter (in.)**

	From (ft)	To (ft)
36	0	45

13. **Plain Casing**

OD (in)	Kind	Wall Size (in)	From (ft)	To (ft)
24	STEEL	.5	+2	20
16	PVC	SCH 40	+2	20

Perforated Casing Screen Slot Size (in): .075

OD (in)	Kind	Wall Size (in)	From (ft)	To (ft)
16	PVC	SCH 40	20	45

14. **Filter Pack:** Material GRAVEL, Size 3/4, Interval _____

15. **Packer Placement:** Type _____, Depth _____

16. **Grouting Record**

Material	Amount	Density	Interval	Method
CEMENT	2 1/2 YARD	3500	0-10	POURED

Remarks:

17. **Disinfection:** Type HTH Amt. Used 1#

18. **Well Yield Estimate Data:** ☐ Check box if Test Data is submitted on Form Number GWS-39, Well Yield Test Report
    Well Yield Estimate Method: PUMPED
    Static Level: 15
    Date/Time measured: 01/24/2019 3PM
    Estimated Yield (gpm) 600
    Estimate Length (hrs) 2

Remarks:

19. I have read the statements made herein and know the contents thereof, and they are true to my knowledge. This document is signed (or name entered if filing online) and certified in accordance with Rule 17.4 of the Water Well Construction Rules, 2 CCR 402 2. The filing of a document that contains false statements is a violation of section 37 91 108(1)(e), C.R.S., and is punishable by fines up to $1,000 and/or revocation of the contracting license. If filing online the State Engineer considers the entry of the licensed contractor's name to be compliance with Rule 17.4.

Company Name:	Email:	Phone w/area code:	License Number:
BROCE WELL SERVICE	frankbroce@outlook.com	(719) 469-9355	1204

Mailing Address: P.O. BOX 101 CHERAW, COLORADO 81030

Sign (or enter name if filing online)	Print Name and Title	Date:
FRANK BROCE	FRANK BROCE/DRILER	03/12/2019

FORM NO. GWS-9 7/89

STATE OF COLORADO
OFFICE OF THE STATE ENGINEER
818 Centennial Bldg., 1313 Sherman St., Denver, Colorado 80203
(303) 866-3581

For Office Use only

RECEIVED

NOV 09 '92

WATER RESOURCES STATE ENGINEER COLO.

TYPE OR PRINT IN BLACK INK

WELL ABANDONMENT REPORT

ABANDONED WELL NUMBER IF REGISTERED 20229R

1. **INDIVIDUAL/COMPANY RESPONSIBLE FOR PLUGGING**

NAME(S) O. W. Carruth
Mailing Address 3009 Country Club Dr.
City, St. Zip Pueblo, CO 81008
Phone (719) 542-3371

2. **ACTUAL WELL LOCATION:** COUNTY Pueblo

PROPERTY ADDRESS 2087 (Address) 59th Lane Pueblo (City) CO (State) 81025 (Zip)

SE 1/4 NE 1/4, Sec. 17 Twp. 21 ☐ N. ☒ S., Range 61 ☐ E. ☒ W. 6th P.M.

Distances from Section Lines 1350 Ft. from ☒ N. ☐ S. Line, 50 Ft. from ☒ E. or ☐ W. Line.

3. I (we), report that an existing well was plugged and abandoned for the following reason(s):

☒ The well was plugged and abandoned as required under the conditions of approval of Well Permit No. 20229-R-R.

☐ The well was not in use and was abandoned.

☐ Other (please explain) _____

4. The well was plugged and abandoned according to the Water Well Construction and Pump Installation Rules on 9-15, 19 92.

5. The well was plugged with the following materials placed at the indicated intervals:

AMOUNT AND TYPE OF MATERIAL	METHOD OF PLACEMENT	INTERVAL
Existing sand & gravel to 5 foot	backfilled &	from 40 feet to 5 feet
from top, then poured concrete	concrete	from ____ feet to ____ feet
		from ____ feet to ____ feet
		from ____ feet to ____ feet
INTERVALS OF CASING REMOVED/RIPPED IN FEET		from ____ feet to ____ feet
		from ____ feet to ____ feet

6. I (we) have read the statements made herein and know the contents thereof, and that they are true to my (our) 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.]

Name/Title (Please type or print)	Signature	Date
O. W. Carruth	O. W. Carruth by Ann Carruth P.R.	11-6-92

–INFORMATION– It is the responsibility of the well owner to have the well properly plugged and abandoned. The well construction contractor is responsible for notifying the well owner of the plugging and abandonment requirement. This form may be reproduced by photocopy or word processing means.

Form No.
GWS-25

OFFICE OF THE STATE ENGINEER
COLORADO DIVISION OF WATER RESOURCES

818 Centennial Bldg., 1313 Sherman St., Denver, Colorado 80203
(303) 866-3581

72

WELL PERMIT NUMBER [redacted] 20229 R R

DIV. 2 CNTY. 51 WD 14 DES. BASIN ___ MD ___

Lot: Block: Filing: Subdiv:

APPLICANT

O. W. CARRUTH
3009 COUNTRY CLUB DR
PUEBLO CO 81008

719/545-2189

APPROVED WELL LOCATION

COUNTY PUEBLO

SE 1/4 NE 1/4 Section 17

Twp 21 S, Range 61 W 6th P.M.

DISTANCES FROM SECTION LINES

1350 Ft. from North Section Line

50 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 37-90-137(2) for the replacement of an existing well, permit no. 20229-R (decreed by the Division 2 Water Court as well no. 20229, case no. W-2146-77). The old well must be plugged and abandoned according to the Water Well Construction and Pump Installation Rules. An abandonment report must be submitted within sixty (60) days after construction of the new well, affirming that the old well was plugged and abandoned.

4) The maximum pumping rate shall not exceed 832 GPM.

5) The average annual amount of ground water to be appropriated shall not exceed 590 acre-feet.

6) Approval of this replacement permit shall not result in an expanded use of ground water. The use of ground water from this well is restricted to the irrigation of 160 acres in the E 1/2 of the NE 1/4, part of the SE 1/4 and NW 1/4, Sec. 20, Twp. 21 South, Rng. 61 West, 6th P.M.

7) A totalizing flow meter must be installed on the well and maintained in good working order. Permanent records of all diversions must be maintained by the well owner (recorded at least annually) and submitted to the Division Engineer upon request.

8) The owner shall mark the well in a conspicuous place with well permit number(s), name of the aquifer, and court case number(s) as appropriate. The owner shall take necessary means and precautions to preserve these markings.

9) This well shall be constructed not more than 200 feet from the location decreed for well no. 20229-R in case no. W-2146-77.

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

11) Verbal Approval No. 92VE198 was given on June 12, 1992 for construction of this well. HF 6-25-92

APPROVED: HCF Hal D. Simpson
State Engineer (Acting)

By Bruce E. DeBruine

Receipt No. 0339959A DATE ISSUED JUN 26 1992 EXPIRATION DATE JUN 26 1993

6-26-92

FORM NO. GWS-31 11/90

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

For Office Use Only
RECEIVED
SEP 11 '92
WATER RESOURCES STATE ENGINEER COLO.

1. WELL PERMIT NUMBER 92 VE 198 20229 R R

2. OWNER NAME(S) O.W CARRUTH
Mailing Address 3009 COUNTRY CLUB DR
City, St. Zip PUEBLO CO 81008
Phone (719) 545-2189

3. WELL LOCATION AS DRILLED: SE 1/4 NE 1/4, Sec. 17 Twp. 21 S, Range 64 W
DISTANCES FROM SEC. LINES:
1350 ft. from N (north or south) Sec. line, and 50 ft. from E (east or west) Sec. line, OR
SUBDIVISION: LOT BLOCK FILING(UNIT)
STREET ADDRESS AT WELL LOCATION:

4. GROUND SURFACE ELEVATION ft. DRILLING METHOD AUG
DATE COMPLETED JULY 20/92 TOTAL DEPTH 45 ft. DEPTH COMPLETED 45 ft.

5. GEOLOGIC LOG:

Depth	Description of Material (Type, Size, Color, Water Location)
EARTH	0 - 5
fine sand	5 - 28'
sand some gravel	28 - 33'
BLUE MUD	33' - 38'
gravel	38 - 41'
shale	41 - 45'
WATER LEVEL 10'	

REMARKS:

6. HOLE DIAM. (in.) / From (ft) / To (ft)
48" / 0 / 45

7. PLAIN CASING

OD (in)	Kind	Wall Size	From(ft)	To(ft)
24"	S	20	+2	20

PERF. CASING: Screen Slot Size: 40"

24	PLASTIC	5 80	20	45

8. FILTER PACK:
Material 3/4 GRAVEL
Size
Interval 20' - 45'

9. PACKER PLACEMENT:
Type
Depth

10. GROUTING RECORD:

Material	Amount	Density	Interval	Placement
CEMENT	5 YRD	3500	0-10	PUMPED

11. DISINFECTION: Type HTH Amt. Used 2 LBS

12. WELL TEST DATA: ☐ Check box if Test Data is submitted on Supplemental Form.
TESTING METHOD TURB
Static Level 10 ft. Date/Time measured July 14 8:00 AM, Production Rate 1500 gpm.
Pumping level 25 ft. Date/Time measured July 14 2 PM, Test length (hrs.) 12
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 B&D DRLG Phone (719) 336-2332 Lic. No. 72
Mailing Address 4639 ZUNI DR GREELEY CO 80

Name/Title (Please type or print)	Signature	Date
DEAN BECHTOLD	Dean Bechtold	July 29/92

ATTACHMENT 2

HISTORICAL WATER DEPTH RECORDS

Well Name: SC02106117BBB

Data Source: https://dwr.state.co.us/Tools/Groundwater/WaterLevels/9033

Mimumum Depth to Water: 1.4 **Date:** 11/17/1965

Maximum Depth to Water: 8.1 **Date:** 7/27/1962

Average Depth to Water: 5.0 **Date:** 07/01/1962 - 10/06/1967

Well ID	Well Name	Date	Depth to Water (ft)	Measure Point Above Land Surface	WI Depth Calc	Elevation of Water (ft)	Water Level Change (ft)	Meas By	Publication Name	Modified
9033	SC02106117BBB	7/1/1962	8	0	8	4442.56		USGS	Yes	02/17/2005 14:06
9033	SC02106117BBB	7/27/1962	8.1	0	8.1	4442.46	-0.1	USGS	Yes	02/17/2005 14:06
9033	SC02106117BBB	10/4/1963	6.57	0	6.57	4443.99	1.53	USGS	Yes	02/17/2005 14:06
9033	SC02106117BBB	10/8/1964	7.35	0	7.35	4443.21	-0.78	USGS	Yes	02/17/2005 14:06
9033	SC02106117BBB	3/20/1965	3.99	0	3.99	4446.57	3.36	USGS	Yes	02/17/2005 14:06
9033	SC02106117BBB	7/21/1965	3.39	0	3.39	4447.17	0.6	USGS	Yes	02/17/2005 14:06
9033	SC02106117BBB	11/17/1965	1.35	0	1.35	4449.21	2.04	USGS	Yes	02/17/2005 14:06
9033	SC02106117BBB	3/23/1966	2.14	0	2.14	4448.42	-0.79	USGS	Yes	02/17/2005 14:06
9033	SC02106117BBB	3/20/1967	4.11	0	4.11	4446.45	-1.97	USGS	Yes	02/17/2005 14:06
9033	SC02106117BBB	10/6/1967	5.06	0	5.06	4445.5	-0.95	USGS	Yes	02/17/2005 14:06

Well Name: SC02106117ABD

Data Source: SC02106117ABD (state.co.us)

Mimumum Depth to Water: 10.0 **Date:** 7/1/1962

Maximum Depth to Water: 13.3 **Date:** 3/20/1967

Average Depth to Water: 12.4 **Date:** 07/01/1962 - 10/06/1967

Well ID	Well Name	Date	Depth to Water (ft)	Measure Point Above Land Surface (ft)	WI Depth Calc	Elevation of Water (ft)	Water Level Change (ft)	Meas By	Publication Name	Modified
10512	SC02106117ABD	7/1/1962	10	0	10	4432.56		USGS	Yes	02/17/2005 14:06
10512	SC02106117ABD	3/20/1965	12.8	0	12.8	4429.76	-2.8	USGS	Yes	02/17/2005 14:06
10512	SC02106117ABD	3/23/1966	13.08	0	13.08	4429.48	-0.28	USGS	Yes	02/17/2005 14:06
10512	SC02106117ABD	3/20/1967	13.26	0	13.26	4429.3	-0.18	USGS	Yes	02/17/2005 14:06
10512	SC02106117ABD	10/6/1967	13.05	0	13.05	4429.51	0.21	USGS	Yes	02/17/2005 14:06

Well Name: SC02106117ADA

Data Source: https://dwr.state.co.us/Tools/Groundwater/WaterLevels/10515

Mimumum Depth to Water: 11.1 **Date:** 3/11/1971

Maximum Depth to Water: 15.1 **Date:** 3/23/1966

Average Depth to Water: 12.2 **Date:** 03/20/1965 - 03/12/1981

Well ID	Well Name	Date	Depth to Water (ft)	Measure Point Above Land Surface (ft)	WI Depth Calc	Elevation of Water (ft)	Water Level Change (ft)	Meas By	Publication Name	Modified
10515	SC02106117ADA	3/20/1965	12.42	0	12.42	4428.14		USGS	Yes	02/17/2005 14:06
10515	SC02106117ADA	3/23/1966	15.08	0	15.08	4425.48	-2.66	USGS	Yes	02/17/2005 14:06
10515	SC02106117ADA	10/1/1966	13	0	13	4427.56	2.08	USGS	Yes	02/17/2005 14:06
10515	SC02106117ADA	10/5/1966	13.37	0	13.37	4427.19	-0.37	USGS	Yes	02/17/2005 14:06
10515	SC02106117ADA	3/20/1967	12.81	0	12.81	4427.75	0.56	USGS	Yes	02/17/2005 14:06
10515	SC02106117ADA	10/6/1967	12.22	0	12.22	4428.34	0.59	USGS	Yes	02/17/2005 14:06
10515	SC02106117ADA	10/8/1968	13.38	0	13.38	4427.18	-1.16	USGS	Yes	02/17/2005 14:06
10515	SC02106117ADA	11/1/1969	11.22	0	11.22	4429.34	2.16	USGS	Yes	02/17/2005 14:06
10515	SC02106117ADA	3/3/1970	11.26	0	11.26	4429.3	-0.04	USGS	Yes	02/17/2005 14:06
10515	SC02106117ADA	3/11/1971	11.06	0	11.06	4429.5	0.2	USGS	Yes	02/17/2005 14:06
10515	SC02106117ADA	2/28/1972	11.64	0	11.64	4428.92	-0.58	USGS	Yes	02/17/2005 14:06
10515	SC02106117ADA	3/1/1973	11.85	0	11.85	4428.71	-0.21	USGS	Yes	02/17/2005 14:06
10515	SC02106117ADA	1/15/1975	12.15	0	12.15	4428.41	-0.3	USGS	Yes	02/17/2005 14:06
10515	SC02106117ADA	12/17/1975	11.51	0	11.51	4429.05	0.64	USGS	Yes	02/17/2005 14:06
10515	SC02106117ADA	3/16/1977	11.99	0	11.99	4428.57	-0.48	USGS	Yes	02/17/2005 14:06
10515	SC02106117ADA	3/7/1978	11.37	0	11.37	4429.19	0.62	USGS	Yes	02/17/2005 14:06
10515	SC02106117ADA	3/6/1979	11.7	0	11.7	4428.86	-0.33	USGS	Yes	02/17/2005 14:06
10515	SC02106117ADA	3/13/1980	11.21	0	11.21	4429.35	0.49	USGS	Yes	02/17/2005 14:06
10515	SC02106117ADA	3/12/1981	11.99	0	11.99	4428.57	-0.78	USGS	Yes	02/17/2005 14:06

Well Name: SC02106107AAB2

Data Source: https://dwr.state.co.us/Tools/Groundwater/WaterLevels/10499

Mimumum Depth to Water: -0.1 **Date:** 7/30/1965

Maximum Depth to Water: 5.2 **Date:** 3/24/1969

Average Depth to Water: 3.0 **Date:** 07/01/1962 - 07/15/1969

Well ID	Well Name	Date	Depth to Water (ft)	Measure Point Above Land Surface (ft)	WI Depth Calc	Elevation of Water (ft)	Water Level Change (ft)	Meas By	Publication Name	Modified
10499	SC02106107AAB2	7/1/1962	4	0	4	4441.59		USGS	Yes	02/17/2005 14:06
10499	SC02106107AAB2	7/23/1962	3.61	0	3.61	4441.98	0.39	USGS	Yes	02/17/2005 14:06
10499	SC02106107AAB2	8/31/1962	3.83	0	3.83	4441.76	-0.22	USGS	Yes	02/17/2005 14:06
10499	SC02106107AAB2	10/1/1962	4.04	0	4.04	4441.55	-0.21	USGS	Yes	02/17/2005 14:06
10499	SC02106107AAB2	10/30/1962	3.75	0	3.75	4441.84	0.29	USGS	Yes	02/17/2005 14:06
10499	SC02106107AAB2	12/3/1962	3.36	0	3.36	4442.23	0.39	USGS	Yes	02/17/2005 14:06
10499	SC02106107AAB2	1/7/1963	3	0	3	4442.59	0.36	USGS	Yes	02/17/2005 14:06
10499	SC02106107AAB2	2/5/1963	2.8	0	2.8	4442.79	0.2	USGS	Yes	02/17/2005 14:06
10499	SC02106107AAB2	3/11/1963	2.58	0	2.58	4443.01	0.22	USGS	Yes	02/17/2005 14:06
10499	SC02106107AAB2	4/1/1963	2.52	0	2.52	4443.07	0.06	USGS	Yes	02/17/2005 14:06
10499	SC02106107AAB2	5/1/1963	2.43	0	2.43	4443.16	0.09	USGS	Yes	02/17/2005 14:06
10499	SC02106107AAB2	6/3/1963	2.48	0	2.48	4443.11	-0.05	USGS	Yes	02/17/2005 14:06
10499	SC02106107AAB2	7/2/1963	2.47	0	2.47	4443.12	0.01	USGS	Yes	02/17/2005 14:06
10499	SC02106107AAB2	8/5/1963	2.47	0	2.47	4443.12	0	USGS	Yes	02/17/2005 14:06
10499	SC02106107AAB2	9/3/1963	2.38	0	2.38	4443.21	0.09	USGS	Yes	02/17/2005 14:06
10499	SC02106107AAB2	9/30/1963	2.4	0	2.4	4443.19	-0.02	USGS	Yes	02/17/2005 14:06
10499	SC02106107AAB2	11/5/1963	2.27	0	2.27	4443.32	0.13	USGS	Yes	02/17/2005 14:06
10499	SC02106107AAB2	12/2/1963	2.16	0	2.16	4443.43	0.11	USGS	Yes	02/17/2005 14:06
10499	SC02106107AAB2	1/6/1964	2.12	0	2.12	4443.47	0.04	USGS	Yes	02/17/2005 14:06
10499	SC02106107AAB2	2/3/1964	2.05	0	2.05	4443.54	0.07	USGS	Yes	02/17/2005 14:06
10499	SC02106107AAB2	3/2/1964	2.12	0	2.12	4443.47	-0.07	USGS	Yes	02/17/2005 14:06
10499	SC02106107AAB2	4/13/1964	2.07	0	2.07	4443.52	0.05	USGS	Yes	02/17/2005 14:06
10499	SC02106107AAB2	5/7/1964	2.06	0	2.06	4443.53	0.01	USGS	Yes	02/17/2005 14:06
10499	SC02106107AAB2	6/5/1964	2.01	0	2.01	4443.58	0.05	USGS	Yes	02/17/2005 14:06
10499	SC02106107AAB2	7/1/1964	2.12	0	2.12	4443.47	-0.11	USGS	Yes	02/17/2005 14:06
10499	SC02106107AAB2	7/30/1964	2.21	0	2.21	4443.38	-0.09	USGS	Yes	02/17/2005 14:06
10499	SC02106107AAB2	9/2/1964	2.18	0	2.18	4443.41	0.03	USGS	Yes	02/17/2005 14:06
10499	SC02106107AAB2	10/8/1964	2.08	0	2.08	4443.51	0.1	USGS	Yes	02/17/2005 14:06
10499	SC02106107AAB2	11/17/1964	1.96	0	1.96	4443.63	0.12	USGS	Yes	02/17/2005 14:06
10499	SC02106107AAB2	12/10/1964	2.94	0	2.94	4442.65	-0.98	USGS	Yes	02/17/2005 14:06
10499	SC02106107AAB2	1/7/1965	2.9	0	2.9	4442.69	0.04	USGS	Yes	02/17/2005 14:06
10499	SC02106107AAB2	2/4/1965	2.6	0	2.6	4442.99	0.3	USGS	Yes	02/17/2005 14:06
10499	SC02106107AAB2	3/16/1965	2.85	0	2.85	4442.74	-0.25	USGS	Yes	02/17/2005 14:06
10499	SC02106107AAB2	4/13/1965	2.88	0	2.88	4442.71	-0.03	USGS	Yes	02/17/2005 14:06
10499	SC02106107AAB2	5/4/1965	2.88	0	2.88	4442.71	0	USGS	Yes	02/17/2005 14:06
10499	SC02106107AAB2	6/14/1965	2.98	0	2.98	4442.61	-0.1	USGS	Yes	02/17/2005 14:06
10499	SC02106107AAB2	7/30/1965	-0.12	0	-0.12	4445.71	3.1	USGS	Yes	02/17/2005 14:06
10499	SC02106107AAB2	8/31/1965	1.7	0	1.7	4443.89	-1.82	USGS	Yes	02/17/2005 14:06

Well Name: SC02106107AAB2

Data Source: https://dwr.state.co.us/Tools/Groundwater/WaterLevels/10499

Mimumum Depth to Water: -0.1 **Date:** 7/30/1965

Maximum Depth to Water: 5.2 **Date:** 3/24/1969

Average Depth to Water: 3.0 **Date:** 07/01/1962 - 07/15/1969

Well ID	Well Name	Date	Depth to Water (ft)	Measure Point Above Land Surface (ft)	WI Depth Calc	Elevation of Water (ft)	Water Level Change (ft)	Meas By	Publication Name	Modified
10499	SC02106107AAB2	10/4/1965	2.96	0	2.96	4442.63	-1.26	USGS	Yes	02/17/2005 14:06
10499	SC02106107AAB2	11/12/1965	3.02	0	3.02	4442.57	-0.06	USGS	Yes	02/17/2005 14:06
10499	SC02106107AAB2	12/9/1965	3.19	0	3.19	4442.4	-0.17	USGS	Yes	02/17/2005 14:06
10499	SC02106107AAB2	1/6/1966	3.1	0	3.1	4442.49	0.09	USGS	Yes	02/17/2005 14:06
10499	SC02106107AAB2	2/10/1966	3.13	0	3.13	4442.46	-0.03	USGS	Yes	02/17/2005 14:06
10499	SC02106107AAB2	3/10/1966	3.02	0	3.02	4442.57	0.11	USGS	Yes	02/17/2005 14:06
10499	SC02106107AAB2	3/26/1966	3.2	0	3.2	4442.39	-0.18	USGS	Yes	02/17/2005 14:06
10499	SC02106107AAB2	5/12/1966	3.1	0	3.1	4442.49	0.1	USGS	Yes	02/17/2005 14:06
10499	SC02106107AAB2	6/10/1966	3.73	0	3.73	4441.86	-0.63	USGS	Yes	02/17/2005 14:06
10499	SC02106107AAB2	7/14/1966	4.36	0	4.36	4441.23	-0.63	USGS	Yes	02/17/2005 14:06
10499	SC02106107AAB2	8/11/1966	4.11	0	4.11	4441.48	0.25	USGS	Yes	02/17/2005 14:06
10499	SC02106107AAB2	9/15/1966	4.38	0	4.38	4441.21	-0.27	USGS	Yes	02/17/2005 14:06
10499	SC02106107AAB2	10/6/1966	4.39	0	4.39	4441.2	-0.01	USGS	Yes	02/17/2005 14:06
10499	SC02106107AAB2	11/8/1966	3.82	0	3.82	4441.77	0.57	USGS	Yes	02/17/2005 14:06
10499	SC02106107AAB2	12/5/1966	3.48	0	3.48	4442.11	0.34	USGS	Yes	02/17/2005 14:06
10499	SC02106107AAB2	1/9/1967	3.39	0	3.39	4442.2	0.09	USGS	Yes	02/17/2005 14:06
10499	SC02106107AAB2	2/6/1967	3.05	0	3.05	4442.54	0.34	USGS	Yes	02/17/2005 14:06
10499	SC02106107AAB2	3/6/1967	3.04	0	3.04	4442.55	0.01	USGS	Yes	02/17/2005 14:06
10499	SC02106107AAB2	3/23/1967	3.17	0	3.17	4442.42	-0.13	USGS	Yes	02/17/2005 14:06
10499	SC02106107AAB2	4/24/1967	3.71	0	3.71	4441.88	-0.54	USGS	Yes	02/17/2005 14:06
10499	SC02106107AAB2	7/18/1967	2.41	0	2.41	4443.18	1.3	USGS	Yes	02/17/2005 14:06
10499	SC02106107AAB2	8/16/1967	3.38	0	3.38	4442.21	-0.97	USGS	Yes	02/17/2005 14:06
10499	SC02106107AAB2	8/22/1967	3.53	0	3.53	4442.06	-0.15	USGS	Yes	02/17/2005 14:06
10499	SC02106107AAB2	9/18/1967	3.63	0	3.63	4441.96	-0.1	USGS	Yes	02/17/2005 14:06
10499	SC02106107AAB2	10/4/1967	3.6	0	3.6	4441.99	0.03	USGS	Yes	02/17/2005 14:06
10499	SC02106107AAB2	11/15/1967	3.08	0	3.08	4442.51	0.52	USGS	Yes	02/17/2005 14:06
10499	SC02106107AAB2	12/11/1967	2.81	0	2.81	4442.78	0.27	USGS	Yes	02/17/2005 14:06
10499	SC02106107AAB2	1/12/1968	2.7	0	2.7	4442.89	0.11	USGS	Yes	02/17/2005 14:06
10499	SC02106107AAB2	2/12/1968	2.52	0	2.52	4443.07	0.18	USGS	Yes	02/17/2005 14:06
10499	SC02106107AAB2	3/26/1968	2.41	0	2.41	4443.18	0.11	USGS	Yes	02/17/2005 14:06
10499	SC02106107AAB2	4/29/1968	2.64	0	2.64	4442.95	-0.23	USGS	Yes	02/17/2005 14:06
10499	SC02106107AAB2	6/3/1968	2.92	0	2.92	4442.67	-0.28	USGS	Yes	02/17/2005 14:06
10499	SC02106107AAB2	7/8/1968	3.45	0	3.45	4442.14	-0.53	USGS	Yes	02/17/2005 14:06
10499	SC02106107AAB2	7/29/1968	3.44	0	3.44	4442.15	0.01	USGS	Yes	02/17/2005 14:06
10499	SC02106107AAB2	9/4/1968	3.41	0	3.41	4442.18	0.03	USGS	Yes	02/17/2005 14:06
10499	SC02106107AAB2	10/1/1968	3.93	0	3.93	4441.66	-0.52	USGS	Yes	02/17/2005 14:06
10499	SC02106107AAB2	11/6/1968	3.19	0	3.19	4442.4	0.74	USGS	Yes	02/17/2005 14:06
10499	SC02106107AAB2	1/20/1969	2.48	0	2.48	4443.11	0.71	USGS	Yes	02/17/2005 14:06

Well Name: SC02106107AAB2

Data Source: https://dwr.state.co.us/Tools/Groundwater/WaterLevels/10499

Mimumum Depth to Water: -0.1 **Date:** 7/30/1965

Maximum Depth to Water: 5.2 **Date:** 3/24/1969

Average Depth to Water: 3.0 **Date:** 07/01/1962 - 07/15/1969

Well ID	Well Name	Date	Depth to Water (ft)	Measure Point Above Land Surface (ft)	WI Depth Calc	Elevation of Water (ft)	Water Level Change (ft)	Meas By	Publication Name	Modified
10499	SC02106107AAB2	3/24/1969	5.22	0	5.22	4440.37	-2.74	USGS	Yes	02/17/2005 14:06
10499	SC02106107AAB2	5/6/1969	3.12	0	3.12	4442.47	2.1	USGS	Yes	02/17/2005 14:06
10499	SC02106107AAB2	7/15/1969	3.16	0	3.16	4442.43	-0.04	USGS	Yes	02/17/2005 14:06

ATTACHMENT 3

WATER QUALITY TESTING LABORATORY INFORMATION

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Prepared by: Grimaldi, Anthony R
Date: 7/11/2024 Expiration Date: 10/9/2024

Project: Agricultural Monitoring Wells

Quote Number: 28026995 - 0

PROJECT DETAILS

Clarifications and Exceptions

Escalation Rate Note:
Pricing in this quote will be fixed for years 2024/2025.

Sample Receiving/HT/TAT

Sample Receiving Hours
8 AM to 5 PM, Monday - Friday
Samples received at the laboratory after 11 AM are considered received on the following business day (Monday-Friday, no holidays). We will do our best to meet rush samples received after 3 PM, but to ensure success this should be arranged with your PM prior to sample submittal. Eurofins Environment Testing Denver accepts Saturday deliveries via Fed Ex and client drop off every Saturday from 9 AM - 12 PM. If Saturday delivery is not specified with prior to shipment, shipments are held by Fed Ex until Monday. **Please note that samples received on Saturday will not be processed until the next business day.**

Holding Time
Eurofins Environment Testing requests that samples be hand delivered the same day of collection or shipped to the laboratory via overnight priority service on the day of collection. For samples received with less than one half the holding time remaining, Eurofins Environment Testing will make our best effort to extract and analyze these samples within the holding time; however, **Eurofins Environment Testing will not be held responsible for meeting holding times if samples are received with less than one half the holding time remaining.** For methods that require a short holding time (less than 7 days from collection), Eurofins Environment Testing requests prior notification before samples are shipped to the laboratory. **Samples that must be analyzed and/or extracted on an expedited basis to meet hold time will incur a surcharge.**

Turnaround Time

- Quoted Turnaround Time - Data will be delivered at the proposed turnaround time in Business Days from Sample Receipt unless otherwise agreed upon. TAT begins the day the laboratory performing analyses receives the samples (day of lab receipt = day zero).

  Samples received after 11 AM will be considered received the next business day.

- Expedited Turnaround Time: Expedited turnaround times may be available and must be pre-approved by the laboratory. Expedited turnaround delivery is contingent upon meeting the agreed upon delivery date/time and number of samples. Samples received after 11 AM will be considered received the next business day. Results will be provided via web portal by the end of the day, unless another time has been agreed to in advance.

  Expedited turnaround time surcharges for analyses on a standard 10 Business Day TAT are:
  - 5 Business Days TAT = 30%
  - 4 Business Days TAT = 45%
  - 3 Business Days TAT = 60%
  - 2 Business Days TAT = 75%

  Expedited turnaround time surcharges for analyses on a standard 15 Business Day TAT are:
  - 10 Business Days TAT = 20%
  - 7 Business Days TAT = 30%
  - 5 Business Days TAT = 45%
  - 4 Business Days TAT = 60%
  - 3 Business Days TAT = 75%

  Any expediting request that requires a pre-prep such as TCLP, SPLP, ISM, CA WET, etc. would be billed at different expediting rates,

typically 2 days less than requested TAT, based on the above chart. For example, a 5 Business Day rush request for 8270 analysis would incur a 30% surcharge. A 5 Business Day rush request for TCLP 8270 would incur a 60% rush surcharge.

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Eurofins TestAmerica Business T&Cs

Confidentiality -
This quote has been prepared by Eurofins Environment Testing, solely for the use of the customer to whom it is addressed in evaluating Eurofins Environment Testing's qualifications and capabilities in connection with a particular project. The user of this document agrees by its acceptance to return it to Eurofins Environment Testing upon request and not to reproduce, copy, lend, or otherwise disclose its contents, directly or indirectly, and not to use it for any purpose other than that for which it was specifically provided. The user also agrees that where consultants or other outside parties are involved in the evaluation process, access to this document shall not be given to said parties unless those parties also specifically agree to these conditions. In the absence of signed acceptance, submittal of samples will indicate acceptance of this quotation.

Terms and Conditions -
This quotation is based solely upon Eurofins Environment Testing's standard product (routine QA/QC, detection limits, deliverables, and standard turnaround times) and noted exceptions herein. The discounts incorporated into the pricing are based upon the sample quantity, test method, and schedule quoted. Any deviations may impact pricing and/or the acceptance of work. Final acceptance of this work is contingent upon a mutually agreed Sample Delivery Schedule. All sales are subject to Eurofins Environment Testing's Terms and Conditions **unless alternative terms have been agreed to in writing**. Submittal of samples will indicate acceptance of this quotation.

PROJECT SETUP

Coolers and Sampling Supplies -

- Sampling Supplies: Including in the pricing herein, Eurofins Environment Testing will provide sample containers and coolers to support the sampling of water and soil samples. Eurofins Environment Testing expects that all supplies will be returned to the lab. Coolers not received back by the projected deadline or as agreed with the PM may be charged at $30 per cooler. Similarly, if the sample containers received as samples are less than 90% of the containers provided, the sample containers not received as samples will be charged at a flat rate of $2 per container.

- Supply Shipping: The supplies required for the project are based on pricing which assumes they will be delivered via ground transportation. For sites in the contiguous 48 states, a minimum of **5 business days** advance notice is required in order to achieve shipment by ground transportation. Supply shipments requiring priority delivery due to insufficient lead time for ground transportation shall be charged to the client at markup of Eurofins Environment Testing's cost, plus $30 per cooler. Alternatively, Eurofins Environment Testing can ship the supplies via carrier of choice by the client using the client's shipping account, with only the $30 per cooler fee applied. Projects outside the contiguous 48 states may require additional notice and/or charges.

  Eurofins Environment Testing does not supply wet ice, blue ice, or gel ice for shipments.

QC Limit Disclaimer -
The laboratory's reporting limits, detection limits, and control limits are subject to change as these values are updated periodically to reflect analytical sensitivity and capability.

PROJECT DELIVERABLES
Eurofins Environment Testing will provide two analytical report formats, a final report in PDF format and a standard Eurofins Environment Testing EDD. Both electronic report formats will be delivered via web portal. If additional formats or retroactive deliverables are requested, the costs of report generation will be billable. Charges will be based on labor and materials for the cost of report generation and data retrieval. Please contact your PM to inquire about availability and the price of additional deliverables.

- Report Format: Unless a level III or IV deliverable is specifically listed on the pricing page, this quotation includes delivery of a Level II report. Level III or IV reports are available at an additional charge.

- EDD Format: Eurofins Environment Testing has many EDD formats available to our clients including the most widely used commercial formats. Other EDD formats are available for a cost per format. The development of EDD formats that are not already available, including modification to existing formats to fit client specific needs, can potentially be provided for a fee.

PROJECT SPECIFICATIONS

Cancellation Fee -
A fee will be charged for cancellation of samples/analyses after a project is received in the laboratory. The fee will be based on the status of analysis at the time of cancellation in accordance with the following categories:
- Received - 35%
- Prepped - 70%
- Analyzed - 95%

Changes in Scope and Work Revisions -
Project requirements must be agreed upon prior to sample receipt. Samples will be logged according to the chain of custody received with the samples. Changes after initiation of the project will be subject to additional charges, including labor time required to change the project, communicate changes to laboratory staff, and rework data. Turnaround time will be reset, or rush surcharges will be assessed where applicable. Analyses added with less than 1/2 of the analytical hold time remaining will incur rush turnaround charges. Your project manager will evaluate project specific charges at the time a change order is received.

Held Samples -

Any samples that are planned to be submitted on hold and not analyzed pending other analysis, or that are going to be requested to be extracted and held need to be arranged and have approval prior to submittal. This process is not standard and cannot be guaranteed to be availabe pending numerous factors, including but not limited to: project size, specific methods, lab analytical capacity, and lab storage capacity. Please contact your PM or the Denver Business Unit Manager to discuss these options if your project requires. If this service is available and approved, costs are are follows:

- Held samples not analyzed: Samples submitted on hold will be billed at 35% of the analysis fee (minimum $10/sample). If samples are later analyzed, the handling fee will be waived and only the analysis price will be charged. Samples taken off hold with less than 1/2 of the analytical hold time remaining may incur rush turnaround charges. Samples will be disposed of 30 days after the report for analyzed samples in the same job is issued, unless alternate archival arrangements are made in advance.

- Extracted/Prepped and Held samples: Samples submitted for prep and hold will be billed at 70% of the analysis fee for each prepped sample (minimum $30/sample). Samples taken off hold with less than 1/2 of the analytical hold time remaining may incur rush turnaround charges. Samples will be disposed of 30 days after the report for analyzed samples in the same job is issued, unless alternate archival arrangements are made in advance.

Matrix Spike/Matrix Spike Duplicate (MS/MSD) Samples -
When MS/MSDs are not specifically requested, Eurofins Environment Testing will perform the required QC, but will not report QC results specifically requested. The reporting of client requested MS/MSD results will be charged at applicable unit rates. If client MS/MSDs are specifically requested, client must provide additional sample volume.

Dilutions -
Eurofins Environment Testing strives to analyze samples without dilution or with the minimum dilution required. Samples may require dilution for a variety of reasons, primarily due to matrix and concentration of both target and non-target analytes. Analytical screening runs are not reported. If project specific data quality objectives require additional runs, analyses will be billable unless otherwise noted in this quote. Please contact your PM to inquire about the availability of this service for your project.

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Prepared by: Grimaldi, Anthony R
Date: 7/11/2024 Expiration Date: 10/9/2024

Project: Agricultural Monitoring Wells

Quote Number: 28026995 - 0

Sample Disposal -
Eurofins Environment Testing will dispose of non-hazardous samples, sample extracts and digestates 30 days after the final report is issued. Charges for disposal of non-routine or uniquely hazardous samples will be billed to the client.

Special Sample Handling Fees/Difficult Matrix Surcharge -
Unit prices assume that samples are a single-phase matrix and that analyses can be performed in accordance with the laboratory's standard analytical procedures. A Special Handling/Difficult Matrix Surcharge may be applied if additional chemistry/handling is required to analyze or dispose of a given sample above and beyond routine SOP. The amount will be communicated before any testing is performed, but will vary depending on the specifics needed and the suite of testing required. Examples include (but are not limited to):

- Matrices requiring additional dilutions or special clean up steps
- Multiphasic samples requiring separate preparations and/or analyses
- Particle size reduction or special sub-sampling procedures
- Extra disposal costs for unique waste streams

Trip Blanks -
Eurofins Environment Testing typically provides trip blanks with our sample kits containing volatile analysis. When samples are received at the laboratory with trip blanks, the lab will analyze, report, and charge the unit rate for the analysis. Please add this sample to your chain of custody. If you do not want the trip blank analyzed, please note this on the COC.

Field Parameters -
pH, Temperature, Dissolved Oxygen, Sulfite, and Ferrous Iron analyses, along with any other immediate hold time methods, are properly performed and treated in the field at the time of sample collection. Laboratory analysis will result in a holding time exceedance qualifier.

Network or Subcontract Labs -

- Networking: Eurofins Environment Testing reserves the right to perform the services at any laboratory in the Eurofins Environment Testing America network.

- Subcontracting: Eurofins Environment Testing reserves the right to subcontract services ordered by the Client to another laboratory or laboratories, if, in Eurofins Environment Testing's sole judgment, it is reasonably necessary, appropriate, or advisable to do so. Eurofins Environment Testing will make every effort to notify the client prior to delivering samples to an out-of-network laboratory. Eurofins Environment Testing will in no way be liable for any subcontracted services (outside the Eurofins Environment Testing network).

Surcharge Due To Sample Quantity -
Unless dictated by contract/MSA terms, this quotation is based on the scope of work defined in the quote request. If the volume of samples submitted is less than 70% of the quoted quantity, a surcharge may be assessed.

Taxes -
Where reports are issued in or delivered to a state which assesses sales tax on Eurofins Environment Testing's services, applicable sales taxes will be added to the invoice as required by law, unless an appropriate sales tax exemption form is on file with Eurofins Environment Testing.

Rev: 6/29/2023

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Analytical Sample Information

Analysis Method	Matrix	Preservative	Client Sub List Desc Container	Volume Required	Holding Time
Anions, Ion Chromatography			Dissolved Chloride, Fluoride, Sulfate - via Field Filtration		
300.0_28D	Water	None	Plastic 250ml - unpreserved	100 mL	28 Days
Anions, Ion Chromatography			Nitrate, Nitrite, and Combined Calculation		
300_48HR	Water	None	Plastic 250ml - unpreserved	100 mL	48 Hours
Mercury (CVAA)			Dissolved Mercury - via Field Filtration		
7470A	Water	Nitric Acid	Plastic 500ml - with Nitric Acid	150 mL	28 Days
Metals (ICP)			Dissolved Metals, Client List (21) - via Field Filtration		
6010D	Water	Nitric Acid	Plastic 500ml - with Nitric Acid	150 mL	180 Days
Metals (ICP/MS)			Dissolved Uranium - via Field Filtration		
6020B	Water	Nitric Acid	Plastic 500ml - with Nitric Acid	150 mL	180 Days
Solids, Total Dissolved (TDS)			Solids, Total Dissolved		
2540C_Calcd	Water	None	Plastic 1 liter - unpreserved	200 mL	7 Days

Hold Times listed above represent the minimum allotted time between sampling and lab extraction, prep or analysis.

Multiple analyses may be consolidated into fewer containers. Please contact your Project Manager for clarification when requesting sample containers.

Except for some special tests, all samples should be kept cold at 6 degrees C.

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TESTAMERICA LABORATORIES, INC.
TERMS AND CONDITIONS OF SALE (Short Form)

When a purchaser ("Client") places an order for laboratory, consulting or sampling services from TestAmerica Laboratories, Inc., d/b/a Eurofins TestAmerica ("ETA"), a Delaware corporation, ETA shall provide the ordered services pursuant to these Terms and Conditions and the related Quotation or Price Schedule, or as agreed in a negotiated contract. In the absence of a written agreement to the contrary, a client order constitutes an acceptance by the Client of ETA's offer to do business under these Terms and Conditions, and an agreement to be bound by these Terms and Conditions. Receipt of a Client's samples at an ETA laboratory constitutes acceptance of these Terms and Conditions (in the absence of any other negotiated contract). No contrary or additional terms and conditions expressed in a Client's document shall be deemed to become a part of the contract created upon acceptance of these Terms and Conditions, unless accepted by ETA in writing.

1. ORDERS AND RECEIPT OF SAMPLES

1.1 A Client may place an order (i.e., specify a Scope of Work) either by submitting a purchase order to ETA in writing or by telephone subsequently confirmed in writing, or by negotiated contract. Whichever option the Client selects for placing an order, the order shall not be valid unless it contains sufficient specification to enable ETA to carry out the Client's requirements. In particular, samples must be accompanied by: a) adequate instruction on type of analysis requested, and b) complete written disclosure of the known or suspected presence of any hazardous substances, as defined by applicable federal or state law. If a Client fails to provide these required disclosures accompanying the submission of samples, and such failure results in an interruption in the lab's ability to process work due to contamination of instruments or work areas, the Client will be responsible for the costs of clean-up and recovery.

1.2 The Client shall provide one week's advance notice of the sample delivery schedule, or any changes to the schedule, whenever possible. Upon timely delivery of samples, ETA will use its best efforts to meet mutually agreed turnaround times. All turnaround times will be calculated from the point in time when ETA has determined that it can proceed with defined work following receipt, inspection of samples, and resolution of any discrepancies in Chain-of-Custody forms and project guidance regarding work to be done (Sample Delivery Acceptance). Rush turnaround times not requested in advance of the delivery of samples and specifically agreed to by the lab are not guaranteed. If the Client changes the sample delivery schedule prior to Sample Delivery Acceptance, ETA reserves its rights to modify its turnaround time commitment, change the date upon which ETA will accept samples, or refuse Sample Delivery Acceptance for the affected samples.

1.3 ETA reserves the right, exercisable at any time, to refuse or revoke Sample Delivery Acceptance for any sample which in the sole judgment of ETA: a) is of unsuitable volume; b) may pose a risk or become unsuitable for handling, transport, or processing for any health, safety, environmental or other reason, whether or not due to the presence of any hazardous substance in the sample and whether or not such presence has been disclosed to ETA by the Client; or
c) holding times cannot be met, due to passage of more than 48 hours from the time of sampling or 1/2 the holding time for the requested test, whichever is less.

1.4 Prior to Sample Delivery Acceptance, the entire risk of loss or damage to samples remains with the Client, except where ETA provides courier services. In no event will ETA have any responsibility or liability for the action or inaction of any carrier shipping or delivering any sample to or from ETA's premises. Client is responsible for assuring that any sample that contains or may contain any hazardous substance to be delivered to ETA's premises is properly packaged, labeled, transported and delivered, all in accordance with applicable laws.

1.5 ETA reserves the right to begin processing samples upon receipt, unless the Client specifically notifies ETA in writing prior to sample receipt that the samples are to be held without preparation or other processing or pending receipt of a purchase order. ETA shall under no circumstances be responsible for missed holding times or turnaround times or for re-sampling costs if samples are released from hold with less than 48 hours or 1/2 the holding time for the requested test remaining, whichever is less.

2. PAYMENT TERMS

2.1 Services performed by ETA will be in accordance with prices quoted and later confirmed in writing or as stated in the Price Schedule. Quoted prices do not include sales tax. Applicable sales tax will be added to invoices where required by law.

2.2 Invoices may be submitted to Client upon completion of any sample delivery group. Billing corrections must be requested within 30 days of invoice date. Payment in advance is required for all clients except those whose credit has been established with ETA. For clients with approved credit, payment terms are net 30 days from the date of invoice by ETA, unless alternative terms have been agreed in a separate written agreement. Payment shall be made without retainage and shall not be contingent upon the receipt of funds from third parties. All overdue payments are subject to an additional interest and service charge of one- and one-half percent (1.5%) (or the maximum rate permissible by law, whichever is less) per month or portion thereof from the due date until the date of payment. All fees are charged or billed directly to the Client. The billing of a third party will not be accepted without a statement, signed by the third party, acknowledging, and accepting payment responsibility in accordance with these payment terms.

2.3 If Client fails to make timely payment of its invoices, ETA reserves the right to pursue all appropriate remedies, including withdrawing certifications, suspending work, and withholding delivery of data under this order without recourse. Client shall be responsible for all reasonable fees, expenses, and costs of collection including but not limited to arbitrator's and attorney's fees. ETA reserves the right to refuse to proceed with work at any time based upon an unfavorable Client credit report.

3. CHANGE ORDERS, TERMINATION

3.1 Changes to the Scope of Work, price, or result delivery date may be initiated by ETA after Sample Delivery Acceptance due to any condition which conflicts with analytical, QA or other protocols warranted in these Terms and Conditions. ETA will not proceed with such changes until an agreement with the Client is reached on the amount of any cost, schedule change or technical change to the Scope of Work, and such agreement is documented in writing.

3.2 Changes to the Scope of Work, including but not limited to increasing or decreasing the work, changing test and analysis specification, or acceleration in the performance of the work may be initiated by the Client after Sample Delivery Acceptance. Such change must be documented in writing and may result in a change in cost and turnaround time commitment. ETA's acceptance of such changes is contingent upon technical feasibility and operational capacity.

3.3 Suspension or termination of all or any part of the work may be initiated by Client upon thirty (30) days written notice to ETA. ETA will be compensated consistent with Section 2 of these Terms and Conditions. ETA will complete all work in progress and be paid in full for all work completed, including all costs incurred and reasonable profit margin, even if ETA does not issue a final or partial report.

4. WARRANTIES AND LIABILITY

4.1 Where applicable, ETA will use appropriate and approved analytical test methods. ETA has referenced these methods in its Laboratory Quality Manuals and has documented them in Standard Operating Procedures. ETA reserves the right based on its reasonable judgment to deviate from these methodologies as necessary or appropriate to the extent required by the nature or composition of the sample, which deviations, if any, will be made on a basis consistent with recognized standards of the industry and/or ETA's Laboratory Quality Manuals. Client may request that ETA perform according to a mutually agreed Quality Assurance Project Plan (QAPP). If samples arrive prior to agreement on a QAPP, ETA will proceed with analyses under its standard Quality Manuals then in effect. ETA will not be responsible for any resampling or other charges if work must be repeated to comply with a subsequently finalized QAPP.

4.2 ETA shall start preparation and/or analysis within holding times provided that Sample Delivery Acceptance occurs within 48 hours of sampling or 1/2 of the holding time for the test, whichever is less,

unless the Client has specifically requested that ETA hold the samples without preparation or other processing or pending receipt of a purchase order. Where resolution of inconsistencies leading to Sample Delivery Acceptance does not occur within this period, ETA will use its best efforts to meet holding times and will proceed with the work provided that, in ETA's judgment, the chain-of-custody or definition of the Scope of Work provide sufficient guidance. Reanalysis of samples to comply with ETA's Quality Manuals will be deemed to have met holding times provided the initial analysis was performed within the applicable holding time. Where reanalysis demonstrates that sample matrix interference is the cause of failure to meet any Quality Manual requirements, the warranty will be deemed to have been met.

4.3 ETA warrants that it possesses and maintains all licenses and certifications that are required to perform services under these Terms and Conditions provided that such requirements are specified in writing to ETA prior to Sample Delivery Acceptance. ETA will notify the Client in writing of any decertification or revocation of any license, or notice of either, that affects work in progress.

4.4 The warranty obligations set forth in Sections 4.1, 4.2 and 4.3 are the sole and exclusive warranties given by ETA in connection with any services performed by ETA or any results generated from such services, and ETA gives and makes NO OTHER REPRESENTATION OR WARRANTY OF ANY KIND, EXPRESS OR IMPLIED. No representative of ETA is authorized to give or make any other representation or warranty or modify this warranty in any way.

4.5 Client's sole and exclusive remedy for breach of warranty in connection with any services performed by ETA will be limited to repeating any services performed, contingent on the Client's providing, at the request of ETA and at the Client's expense, additional sample(s) if necessary. Any reanalysis requested by the Client generating results consistent with the original results will be at the Client's expense. If resampling is necessary, ETA's liability for resampling costs will be limited to actual cost or one hundred and fifty dollars ($150) per sample, whichever is less.

4.6 ETA's liability for any and all causes of action arising hereunder, whether based in contract, tort, warranty, negligence or otherwise, shall be limited to the lesser amount of compensation for the services performed or $100,000. All claims, including those for negligence, shall be deemed waived unless suit thereon is filed within one year after ETA's completion of the services. Under no circumstances, whether arising in contract, tort (including negligence), or otherwise, shall ETA be responsible for loss of use, loss of profits, or for any special, indirect, incidental or consequential damages occasioned by the services performed or by application or use of the reports prepared.

4.7 In no event shall ETA have any responsibility or liability to the Client for any failure or delay in performance by ETA that results, directly or indirectly, in whole or in part, from any cause or circumstance beyond the reasonable control of ETA. Such causes and circumstances include, but are not limited to, acts of God, acts of Client, acts or orders of any governmental authority, strikes or other labor disputes, natural disasters, accidents, wars, civil disturbances, equipment breakdown, matrix interference or unknown highly contaminated samples that impact instrument operation, unavailability of supplies from usual suppliers, difficulties or delays in transportation, mail or delivery services, or any other cause beyond ETA's reasonable control.

5. RESULTS, WORK PRODUCT

5.1 Data or information provided to ETA or generated by services performed under this agreement shall only become the property of the Client upon receipt in full by ETA of payment for the entire order. Ownership of any analytical method, QA/QC protocols, software programs or equipment developed by ETA for performance of work will be retained by ETA. Client shall not disclose such information to any third party without ETA’s express prior consent.

5.2 Data and sample materials provided by Client or at Client’s request, and the result obtained by ETA shall be held in confidence (unless such information is generally available to the public or is in the public domain or Client has failed to pay ETA for all services rendered or is otherwise in breach of these Terms and Conditions), subject to any disclosure required by law or legal process.

5.3 Should the results delivered by ETA be used by the Client or Client's client, even though subsequently determined not to meet the warranties described in these Terms and Conditions, then the compensation will be adjusted based upon mutual agreement. In no case shall the Client unreasonably withhold ETA's right to independently defend its data.

5.4 ETA reserves the right to perform the services at any laboratory in the ETA network. If a Client has requested a particular location for the work, ETA will inform the Client when operational constraints require the work to be performed at another ETA location. In addition, ETA reserves the right to subcontract services ordered by the Client to another laboratory or laboratories, if, in ETA's sole judgment, it is reasonably necessary, appropriate or advisable to do so. ETA will in no way be liable for any subcontracted services (outside the ETA network) except for work performed at laboratories which have been audited and approved by ETA.

5.5 ETA will dispose of non-hazardous samples, sample extracts and digestates 30 days after the final analytical report is issued, unless instructed to store them for an alternate period of time or to return such samples to the Client, in a manner consistent with U.S. Environmental Protection Agency regulations or other applicable federal, state or local requirements. Charges for disposal will be billed to the client. Alternatively, samples can be returned to the client for disposal. Cost of return shipping will be billable to the client. Air samples in Summa canisters and tedlar bags are used and the containers cleaned immediately after testing, such that those samples are not retained. Longer storage periods may be requested and may be accommodated if space allows, and for an additional charge. Any samples for projects that are canceled or not accepted, or for which return was requested, will be returned to the Client at its own expense. ETA reserves the right to return to the Client any sample or unused portion of a sample that is not within ETA's permitted capability or the capabilities of ETA's designated waste disposal vendor(s). ALL DIOXIN, MIXED WASTE, AND RADIOACTIVE SAMPLES WILL BE RETURNED TO THE CLIENT, unless
prior arrangements for disposal are made.

5.6 Unless a different time period is agreed to in an order under these Terms and Conditions, ETA agrees to retain all records for five (5) years.

5.7 If ETA is required to respond to legal process related to services for Client, Client agrees to reimburse ETA for hourly charges for personnel involved in the response and attorney's fees reasonably incurred in obtaining advice concerning the response, preparation to testify, and appearances related to the legal process, travel and all reasonable expenses associated with the litigation. Additional consulting beyond that normally associated with lab reports will be billed at ETA’s current published rates.

6. INSURANCE

6.1 During the performance of services under these Terms and Conditions, ETA shall maintain in force Workers' Compensation and Employer's Liability Insurance in accordance with the laws of the states having jurisdiction over ETA's employees who are engaged in the performance of the work. ETA shall also maintain during such period Comprehensive General and Contractual Liability (limit of $1,000,000 per occurrence; $2,000,000 aggregate), Comprehensive Automobile Liability, owned and hired ($1,000,000 combined single limit), Professional Liability Insurance (limit of $5,000,000 per claim/aggregate), and Pollution Liability Insurance (limit of $1,000,000 per claim/aggregate).

7. MISCELLANEOUS PROVISIONS

7.1 These Terms and Conditions, together with any additions or revisions which may be agreed to in writing by ETA, embody the whole agreement of the parties and provide the only remedies available. There are no promises, terms, conditions, understandings, obligations or

agreements other than those contained herein, and these Terms and Conditions shall supersede all previous communications, representations, or agreements, either verbal or written, between the Client and ETA. These Terms and Conditions, and any transactions or agreements to which they apply, shall be governed both as to interpretation and performance by the laws of the state where ETA's services are performed.

7.2 The invalidity or unenforceability, in whole or in part, of any provision, term or condition hereof shall not affect in any way the validity or enforceability of the remainder of these Terms and Conditions, the intent of the parties being that the provisions be severable. The section headings of these Terms and Conditions are intended solely for convenient reference and shall not define, limit or affect in any way these Terms and Conditions or their interpretations. No waiver by either party of any provision, term or condition hereof or of any obligation of the other party hereunder shall constitute a waiver of any subsequent breach or other obligation.

7.3 The obligations, liabilities, and remedies of the parties, as provided herein, are exclusive and in lieu of any others available at law or in equity. Indemnifications, releases from liability and limitations of liability shall apply, notwithstanding the fault, negligence, or strict liability of the party to be indemnified, released, or whose liability is limited, except to the extent of sole negligence or willful misconduct.