January 11, 2024

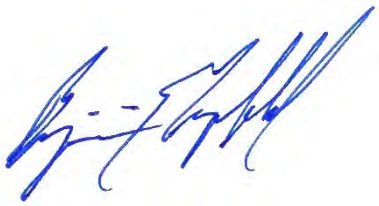
Eric Scott
Colorado Division of Reclamation, Mining, and Safety
1313 Sherman St, Rm. 215
Denver, CO 80203

Delivered Via Email
RE: Ewing Gravel Pit, DRMS File M2023-033
Adequacy Response 2

Mr. Scott

The attached letter addresses each adequacy item in your January 4, 2024 letter regarding the Ewing Gravel Pit. Items marked as adequate are omitted. Revised exhibits and maps are attached as well. Feel free to contact my office with any questions.

Regards,



Ben Langenfeld, P.E.
Lewicki & Associates, PLLC
(720) 842-5321, ex. 1
benl@lewicki.biz

Exhibit C – Pre-mining and Mining Maps

1. *Remove/correct incorrect text boxes from Figure C-2 for permit and affected area. Permit area = 156.7 acres and affected area = 127 acres. (Disturbed area of 116 acres is not relevant).*

Map C-2 has been revised to remove the conflicting labels.

2. *The application states that significant amounts of overburden, sand, and topsoil will be maintained on-site for reclamation, and that all stockpiles will be placed in Pod 3 outside of the Flood Plain. Please show the locations and expected volumes of all topsoil and overburden/sand stockpiles on the Mining Plan map. Note that the Act/Rule requires that Topsoil and Overburden/sand be segregated and maintained separately for reclamation.*

Separate topsoil and overburden stockpile locations have been labelled on the Detail 2 inset of Map C-2.

3. *What is the anticipated volume of the "concealment berm" shown on the mining plan map, and the "barrier berm" shown on the north side of the processing area?*

The berms will contain roughly 80,000 CY, combined.

3a- Please edit height of eastern concealment berm for consistency on Figure C-2 (20 ft or 35 ft?)

The label on Map C-2 has been corrected.

Exhibit D – Mining Plan

7. *Please clarify if both slurry walls will be installed at the same time prior to commencing mining activity, or if the Pod 3 slurry wall will be installed at a later date. Mining timetable does not include when second (Pod 3) slurry wall will be installed – please include*

Slurry installation has been added to the Table D-1. Mining Timetable

Exhibit E – Reclamation Plan

-The area/acreage values in Table E-1 do not match the values in the preceding paragraph – please edit for consistency.

The preceding paragraph has been corrected to match the table and maps.

-Do the required topsoil values for reclamation in Table E-2 include replacement topsoil for the Process Area? It would be useful to also include a column for acreage(s) for areas/pods where topsoil replacement and revegetation will be required that add to the totals for Rangeland provided in Table E-1.

Table E-1 has been recalculated and reformatted to better communicate the reclamation volumes for the Ewing Gravel Pit. Furthermore, Map F-1 has been updated to correct the rangeland area in Pod 3.

-Please modify Tables E-2 and E-3 to add information for required backfill volumes for the process area ponds and relate those volumes to the projected area and depth of these ponds.

Tables E-2 and E-3 show the reclamation volumes and associated areas as well as the material balance needed for backfilling. Language in Exhibit E, section 1 has been rewritten to be clearer as to material balance.

- Where will the approximately 200K c.y. of required excess sand/byproduct be placed prior to use in reclamation?

Backfill material will be maintained onsite either in stockpiles or as available material within the mining ponds.

Exhibit G – Water Information

15. *The well locations identified in Table G-4 are very difficult to find/identify or are not shown on Figure C-1. Please provide another map (or a modified copy of Figure C-1) to clearly show the wells listed, as well as the XCEL wells in Table G-5, and the 4 piezometers listed in Table G-6.*

Map G-2 has been added to the permit to clearly show the location of all water wells and piezometers listed on Table G-4 & G-6. It should be noted that Table G-5 lists the Xcel wells separately, but that all of these wells are also listed in Table G-4.

15a - As a general note, my copy contained several formatting issues with the Exhibit G, primarily with subheading numbering in Sections 6 and 7, and also within the Water Quality Monitoring Plan, but I'm not entirely sure if these are in the provided file or an artifact of viewing on my system. Please review formatting for consistency where needed.

Exhibit G formatting has been proofread to ensure clarity.

17. *The following comments (17a- 17k) are from review of the provided revised Appendix G-2 Groundwater Quality Monitoring Plan (GQMP).*

17a - Introduction, After the 5 consecutive quarters of baseline data are collected and any site specific Numeric Protection Levels (NPL) have been set (if needed) DRMS believes that quarterly water chemistry sampling may be excessive. All mining will take place within slurry walls that should isolate mining impacts from surrounding alluvial aquiver. Therefore, DRMS would suggest that quarterly water chemistry sampling from the identified POC wells would likely be sufficient for 12 months after installation of the initial slurry wall, with sampling thereafter reduced to twice a year (every 6 months). With the installation of the second slurry wall, frequency will again increase to quarterly for 12 months before

dropping again to every 6 months. This frequency should be sufficient unless additional site activity or the data warrants an increase in sampling frequency. Analytical data, and groundwater level data should be provided with the annual report, unless exceedances of Table Value Standards or Site Specific NPL are observed, or changes in Groundwater Elevations exceed trigger levels.

Please see the revised Appendix G-2 for the requested changes in monitoring frequency and reporting requirements. Groundwater level measurements up to this point have occurred on a weekly basis at the piezometers, and quarterly basis at the groundwater monitoring wells. In the future, they will be completed to meet the new frequency requirements. Past quality monitoring has been consistent with the DRMS recommendations.

17b – Section 1.2: The sampling points are referred to in Appendix 1 and on Figure 3. I believe it should read Figure 2, as there is no Figure in the GQMP – please correct as needed.

Please see the revised Appendix G-2 for the corrected labelling.

17c – Appendix 1 Map: Xcel wells should be specifically identified to match the provided permit #'s, and Piez 1 is not labelled on the map – please correct as needed.

Please see the revised G-2 map for this information.

17d – Section 1.2.1: Provide lithologic and well construction information for the seven identifies wells. If it is contained in the identified CDWR permits, provide copies of those permits. Also provide the surveyed elevations for the TOC for the seven wells.

Lithologic and well construction information are included in the CDWR documents that have been added as an appendix to the revised GW Monitoring Plan. The surveyed TOC elevations were previously, and are still provided in Table 1.

17e – Section 1.2.2: The introduction states that GW levels will be collected weekly, and Section 1.2.2 states that GW level data collection will take place no less than quarterly. DRMS will require that water level data be collected and recorded from the 3 GW wells and 4 Piezometers on a no less than monthly basis. This data will be graphed and included as a required addendum to the annual report. Please modify the GQMP as needed.

Please see the revised Appendix G-2 for more consistent language on the recommended monthly GW level data collection. As outlined in 17a, all future measurements will occur monthly at all wells and piezometers.

17f – Section 3.1: DRMS has determined that GW1, Piez 1, and Piez 2 will be the Points of Compliance for this site, and all three locations will be monitored for life of mine. Monitoring frequency may be based on the proposed schedule in comment 17a. DRMS would also suggest that at least one background location be monitored at least annually as a reference to protect the mine from any off-site influences on groundwater chemistry that may be observed, otherwise changes/exceedances in POC well data must be assumed to be a result of mining activity. Please modify the GQMP as needed.

Please see the revised Appendix G-2 for the requested changes in Points of Compliance monitoring. A few background well locations to be sampled during mining are recommended in the revised text.

> *17g - Section 4.3: First sentence should read … parameters identified in Table 2, not Table 1. Also include applicable Reg. 41 standards for the parameters identified in Table 1. Please also define the parameter MBAS, and make sure there is a reason (if so, please provide) for sampling for any total metals identified.*

Please refer to the revised Appendix G-2 for the updated text and labelling. The parameter table (now Table 5) has been updated for consistency with the 'Full parameter list for Construction Material Sites' published by the DRMS.

MBAS (foaming agents), total metals, and other miscellaneous additional parameters were included in the previous table as derived from Regulation 41 Tables 1-4. Inconsistencies are primarily due to the original GW monitoring plan being developed prior to the DRMS' September 2023 GW Monitoring Guidance document. These additional parameters were included to get the complete background profile of the groundwater, but will not continue to be measured in the future.

Also of note, lithium-dissolved testing has not taken place up to this point. The testing laboratory does not provide testing for lithium at this time. However, the conditions of the site and type of mining make it unlikely for lithium to be present or impacted throughout the life of the mine. Therefore, the lithium testing for background was foregone, and the TVS limits for lithium will be accepted for future compliance monitoring of lithium.

> *17h - Section 4.4: Samples must be preserved and shipped in accordance with method requirements (i.e. nitric acid to pH less than 2 for dissolved metals and iced to 4 deg. C.) Industry standards for field sampling logbooks or field data sheets should be maintained for all sampling locations and events. Please provide generic examples of whichever method will be utilized.*

Please refer to the revised Appendix G-2 for the requested information and documents. Sampling up to this point have been to industry standards with the required preservatives and transportation methods.

> *17i - Section 4.5.1: Site specific Numeric Protection Levels for any analytes that exceed table value standards in baseline data will be determined by DRMS when all five quarters of baseline data have been provided for review in a subsequent TR to be submitted for the site. This would also apply to groundwater level monitoring corrective action trigger levels and corrective actions. At this time the applicant will need to commit to submittal of a TR containing the full set of baseline water quality data along with any proposed NPLs for constituents that exceed Table Value Standards, along with proposed groundwater elevation trigger levels and proposed corrective actions for DRMS review prior to installation of the first slurry wall. (this commitment could be in Section 4.7 Reporting). Please acknowledge/modify as needed.*

This is acknowledged, and Burnco commits to submitting a TR with this information in the revised Appendix G-2.

> *17j - Section 4.8: as a general note, this would be a good place to include any appropriate TSOP documents or data collection sheets.*

The requested documents are provided in an added Appendix to the revised GW monitoring plan.

> *17k – Appendix 2: Consider using the tables provided in the Peak Ranch baseline data submittal as a template for this section.*
>
> *Table Value Standards for all constituents should be provided and highlighted in the data when/where they are exceeded. Consistent units should also be provided for all data (mg/L or other). It may be useful to provide a separate sheet/table for each baseline sampling location as the existing data is very awkwardly presented at this time.*
>
> *Data should be reported as "ND" - not detected at the method detection level (specify for analyte), not "0"*
>
> *Water level data should always be reported in feet ASL to correlate with data presented on any groundwater contour map(s) and any applicable graphing for water levels in each well over time. However, a row for depth to water from surveyed TOC may be included if you wish.*
>
> *All water level data should always be collected and reported to the nearest (0.01 foot).*
>
> *Explanations should be provided for any data missing from Appendix 2*

Refer to the revised Appendix G-2 for the requested changes.

Exhibit L – Reclamation Costs

19. *DRMS will evaluate the reclamation bond calculation when the other adequacy issues have been resolved. However, a significantly more detailed reclamation estimate, ideally broken down by Pod and Reclamation Task will need to be provided along with supporting documentation for provided unit costs (for example, a task list for Pods 1and 2 reclamation should include at a minimum: Installation cost for slurry wall, costs to install inlet/outlet structures, backfilling of mine slope to 3:1, topsoil replacement, soil prep., seeding and weed control costs, etc..). Initial cost estimate will need to include tasks for reclamation of Pods 1 and 2, process area, and visual berms at a minimum.*

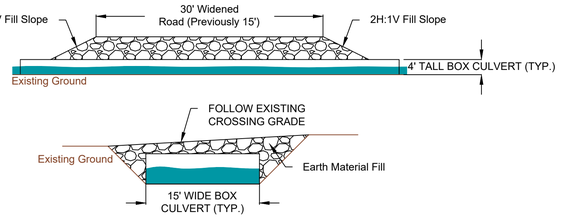
A detailed breakdown of reclamation tasks and costs can be seen in the revised Exhibit L.

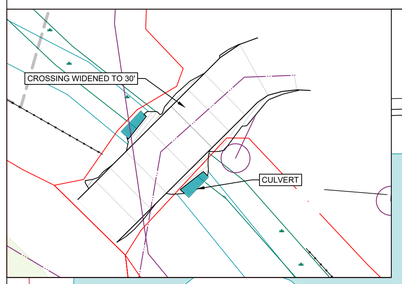
Additional Information:

The provided proof of publication is adequate, however, you will need to provide proof that adequacy responses have been included with the Weld County review copy.

Proof of adequacy filing with the Weld County clerk will be provided under separate cover.

Detail 1 - Ditch Crossing





PERMIT AREA: 156.7 ACRES

AFFECTED AREA: 127 ACRES

INFLOW/OUTFLOW STRUCTURE SEE MAP F-1

DISCHARGE DURING MINING

IMPROVED DITCH CROSSING SEE DETAIL 1

REMOVE STRUCTURES

REROUTE OVERHEAD UTILITIES

XCEL PUMP HOUSE

XCEL WELL

EWING PIEZOMETER

MIN. 125' SETBACK FROM RESIDENTIAL STRUCTURES

30'-35' TALL VEGETATED CONCEALMENT BERM

TOPSOIL STORED IN BERM

MIN 50' SETBACK FROM PROPERTY BOUNDARIES

SITE ACCESS

PROCESSING AND SALES AREA SEE DETAIL 2

TRUCK TRAFFIC LOOP

MIN. 150' SETBACK FROM GAS WELLS

MIN. 100' SETBACK FROM RIVER

MIN. 30' SETBACK FROM SLURRY WALL TO MINE HIGHWALL

CONVEYOR FOR MATERIAL (TYPICAL)

MIN. 30' SETBACK FROM ROADS, DITCHES, AND UNDERGROUND PIPELINES

MIN. 15' SETBACK FROM POWER LINE MIN. 50' SETBACK FROM DITCH

POD 1: GENERAL MINING DIRECTION (TOWARDS INCREASING SAND THICKNESS) 50.9 ACRES

POD 2: GENERAL MINING DIRECTION 20.3 ACRES

POD 3: GENERAL MINING DIRECTION 20.1 ACRES

MIN. 30' SETBACK FROM SLURRY WALL

US-85

SOUTH PLATTE RIVER

1.5 H:1V MINING SLOPES

MIN 30' SETBACK FROM SLURRY WALL TO MINE HIGHWALL

WELL REMOVED

PLATTEVILLE DITCH

POTENTIAL WETLANDS (NOT MAPPED ON NWI) WETLAND DELINEATION WILL OCCUR PRIOR TO DISTURBANCE OF THIS AREA

LEGEND

BUILDINGS AND RELATED STRUCTURES
- Building
- Well (other than water)
- Tanks
- Fence
- Easements

LAND SURVEYS
- Public Land Survey System
- Range or Township line
- Range or Township labels: R1E T2N
- Section line
- Section numbers: 1-36
- Mining claim or property boundary
- Mining claim or property monument

ROADS AND RELATED FEATURES
- Highway
- Light duty road, paved
- Light duty road, gravel
- Railroad

RIVERS, LAKES, SHORELINES, AND CANALS
- Perennial stream/ditch
- Perennial river
- Perennial lake/pond
- Waterwell
- Floodplain & Floodway
- Pipeline

VEGETATION
- Agricultural Fields
- NWI Wetlands
- Existing Trees

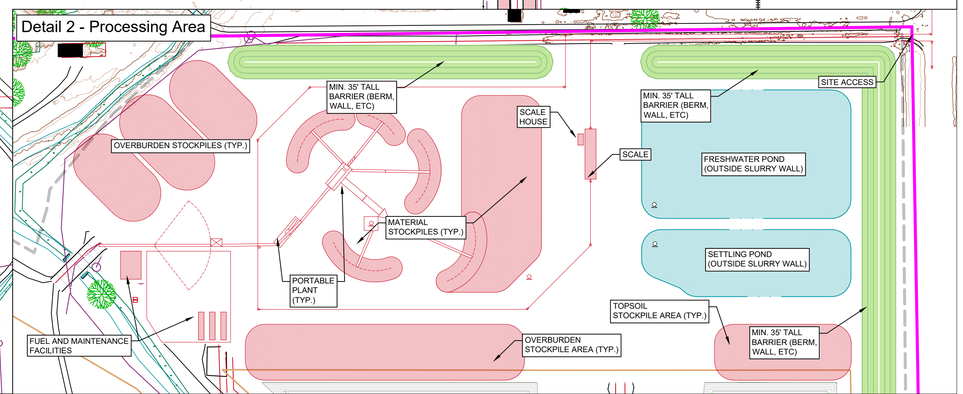
TRANSMISSION LINES AND PIPELINES
- Power transmission line; pole; tower
- Power transmission line, buried
- Telephone/data line, above ground
- Telephone/data line, buried
- Pipeline (non-water), buried

MINING FEATURES
- DRMS Permit/Affected Boundary
- Fixed Structures
- Mobile Structures
- Disturbance Extent
- Berm/windrow
- Slurry Wall

BASELINE CONTOURS
- Index
- Approximate of indefinite
- Intermediate
- Approximate of indefinite
- Supplementary

POST-MINING CONTOURS
- Index
- Approximate of indefinite
- Intermediate
- Approximate of indefinite
- Dump

Detail 2 - Processing Area



C-2 Mining Map

Ewing Gravel Pit

DRMS Permit Number: N/A — **BURNCO dba Bestway Concrete**

Mine Entry Location:	Latitude: 40.109098	Longitude: -104.810927
State: COLORADO	County: Weld	Nearest Town: Fort Lupton
Section: 30	Township: 2N	Range: 66W PM: 6th
Major Watershed:	South Platter River	MSHA ID: ----

Map Scale: 1": 200'

0 200 400

Map Georeferencing Information: **Datum:** NAD83 **Projection:** CO NORTH

Survey Source: Drone	**Drawn by:** SAC	Date: 12/15/23
Imagery Source: GoogleEarth	**Checked by:** BEL	Date: 12/15/23
Survey Date: 2019	**Approved by:** BEL	Date: 12/15/23
Imagery Date: 6/9/2017		

File Name: Ewing Gravel-Maps 240104

COLORADO LICENSED 47351 PROFESSIONAL ENGINEER 12/15/23

Lewicki & Associates
3375 West Powers Circle
Littleton, CO USA 80123
(303)-346-5196
info@lewicki.biz

Ft. Lupton Sand and Gravel Mine
SITE ACCESS
XCEL PUMP HOUSE
XCEL WELL
EWING PIEZOMETER
PERMIT AREA: 156.7 ACRES
AFFECTED AREA: 127 ACRES
INFFLOW/OUTFLOW STRUCTURE SEE MAP F-2
IMPROVED DITCH CROSSING
FRESHWATER AND SETTLING POND BACKFILLED WITH SAND (~190,000 CY)
30.3 ACRES RANGELAND
ALL DISTURBANCES REVEGETATED AS RANGELAND
POND EDGE REVEGETATED AS RANGELAND
13.5 ACRES RANGELAND
6.6 ACRES RANGELAND
MIN. 100' SETBACK FROM RIVER
37.4 ACRES WATER STORAGE POND
14.5 ACRES WATER STORAGE POND
13.7 ACRES WATER STORAGE POND
SOUTH PLATTE RIVER
3H:1V RECLAIMED SLOPES
MIN. 3' FREEBOARD IN ALL PONDS
PLATTEVILLE DITCH
US-85
30 29
31 32
TACORONTE FAMILY
LEGEND
BUILDINGS AND RELATED STRUCTURES
Building
Well (other than water)
Tanks
Fence
Easements
LAND SURVEYS
Public Land Survey System
Range or Township line
Range or Township labels
Section line
Section numbers
Mining claim or property boundary
Mining claim or property monument
R1E T2N
1-36
ROADS AND RELATED FEATURES
Highway
Light duty road, paved
Light duty road, gravel
Railroad
RIVERS, LAKES, SHORELINES, AND CANALS
Perennial stream/ditch
Perennial river
Perennial lake/pond
Waterwell
Floodplain & Floodway
Pipeline
VEGETATION
Agricultural Fields
Rangeland
NWI Wetlands
Existing Trees
TRANSMISSION LINES AND PIPELINES
Power transmission line; pole; tower
Power transmission line, buried
Telephone/data line, above ground
Telephone/data line, buried
Pipeline (non-water), buried
MINING FEATURES
DRMS Permit/Affected Boundary
Slurry Wall
BASELINE CONTOURS
Index
Approximate of indefinite
Intermediate
Approximate of indefinite
Supplementary
POST-RECLAMATION CONTOURS
Index
Approximate of indefinite
Intermediate
Approximate of indefinite
Dump

F-1 Reclamation Map

Ewing Gravel Pit

DRMS Permit Number: N/A | **BURNCO dba Bestway Concrete**

Mine Entry Location:	Latitude: 40.109098	Longitude: -104.810927
State: COLORADO	County: Weld	Nearest Town: Fort Lupton
Section: 30	Township: 2N	Range: 66W PM: 6th
Major Watershed:	South Platter River	MSHA ID: ----

Map Scale: 1": 200'

0 200 400

N

Map Georeferencing Information: **Datum: NAD83** **Projection: CO NORTH**

Survey Source: Drone
Imagery Source: GoogleEarth
Survey Date: 2019
Imagery Date: 6/9/2017

Drawn by: SAC Date: 12/15/23
Checked by: BEL Date: 12/15/23
Approved by: BEL Date: 12/15/23

File Name: Ewing Gravel-Maps 240104

Lewicki & Associates

3375 West Powers Circle Littleton, CO USA 80123 (303)-346-5196 info@lewicki.biz

COLORADO LICENSED PROFESSIONAL ENGINEER 12/15/23

Attachments

Map C-2 Mining Map

Map F-1 Reclamation Map

Map G-2 Well Map

Revised Exhibits

EXHIBIT D MINING PLAN

1. General Mining Plan

The property boundary has been surveyed on site and the permit area will be surveyed prior to any additional acreage to the site disturbance. Map C-2 shows the mining plan. The mine will affect an area of 127 acres. The primary commodity to be mined will be sand and gravel for use in construction materials. These construction materials may include crushed rock, sand, washed rock, concrete, and asphalt. Fill dirt may incidentally be produced as well. The mine will be accessed from the existing connection to US-85. This access road will require improvements to be able to support mine traffic. These road improvements will be completed prior to shipment of any construction materials from the site. Slurry walls will be installed surrounding Pod 1 and 2, and another surrounding Pod 3. These walls will stop groundwater from infiltrating into the pits, and facilitate water storage in the reclaimed pits. Slurry wall construction will be completed prior to mining in any given pod.

The sand and gravel deposit is an average 25 to 45-foot thickness within the alluvial deposit surrounding the South Platte. The deposit is overlain by an average of two feet of topsoil and two feet of overburden. It is split into two terraces: a lower terrace adjacent to the Platte River and an upper terrace along US-85. The lower terrace is made up of the primary sand and gravel layer overlain with topsoil and overburden. An additional sand layer overlies the gravel deposit, starting midway through the lower terrace and increasing in depth to the southeast. It reaches an average thickness of 28 feet in the easternmost mining area, Pod 3, on the upper terrace. The bedrock is an olive-gray claystone and siltstone that exists approximately 30 to 40 feet below the surface.

Mining will occur in three separate pods, starting on the lower terrace and proceeding east: Pod 1, Pod 2, then Pod 3. The processing area in the northern part of Pod 3 will be mined last. Mining and reclamation will occur concurrently as mining progresses in order to minimize the total disturbance. There is sufficient topsoil and overburden on site to successfully reclaim the site to its final condition as water storage ponds surrounded by rangeland. Reclamation will include backfilling and regrading of the site, topsoiling, and revegetation. The slurry walls installed prior to mining will be retained.

All mining will continue to the bottom of the gravel deposit with 1.5H:1V final mining slopes along the perimeter. The active highwall will be at a near vertical slope, and will progress to the halfway point of the final mining slope. This allows for the remaining highwall to be knocked down via dozer to create the completed mining slope. Slopes will then be backfilled with sand or overburden to the reclaimed 3H:1V slopes. Refer to the cross sections on Map C-3 for the various slope details throughout mining.

Dozers and scrapers will be used to strip topsoil and overburden from the areas to be mined to be stored in the designated stockpiles. Any stockpile to be in place longer than 90 days will be

seeded to prevent erosion. While pre-mine stripping is occurring, all existing buildings, except for the oil wells and their related structures, will be demolished. All debris will be removed from the site. Sand and gravel will be extracted using loaders, excavators, dozers, and trucks. Excavated material will be conveyed to processing area from the active mining area. Processing of material will include screening, washing, crushing, and the production of concrete and asphalt.

No blasting will take place at the Ewing Gravel Pit. No refuse, acid, or toxic producing material are expected to be encountered in this operation. If these materials are encountered, at least two feet of inert material will be placed over the area and mining will move to a different area.

2. Mining Timetable

Mining operations at the Ewing Gravel Pit are expected to take approximately 10.5 years to complete, based on an annual average production of 700,000 tons. Actual production rates will fluctuate based on market conditions. An approximate mining timetable based on this production and the phased mining plan is shown in Table D-1.

Table D-1 Mining Timetable

Description	Time Required
Construction of access road and slurry wall.	2 months
Initial stripping of processing area and Pod 1 (west portion on lower terrace)	1 month
Mine and reclaim Pod 1 according to approved plans. Reclamation occurs as mining has reached its maximum extents in an area. Construction of Pod 2 slurry wall.	4 years
Initial stripping of new mining area for Pod 2 (center portion on lower terrace)	1 month
Mine and reclaim Pod 2 according to approved plans. Reclamation occurs as mining has reached its maximum extents in an area. Construction of Pod 3 slurry wall.	2 years
Initial stripping of new mining area for Pod 3 (east portion on upper terrace)	1 month
Mine and reclaim Pod 3 according to approved plans. Reclamation occurs as mining has reached its maximum extents in an area.	4 years
Total	10.5 years

3. Mine Facilities and Operation

The site will contain the following facilities and equipment:

Facilities:

- Portable hot mix asphalt (HMA) plant
- Concrete batch plant
- Portable wash plant
- Portable crushing & screening unit

- Gradation screen/conveyor (portable)
- Portable toilet
- Mine office (portable)
- Scale
- Portable fuel storage

Equipment:

- Front-end loaders
- Bulldozers
- Scrapers
- Haul trucks (off highway)
- Water trucks
- Graders
- Excavators
- Conveyors

Only a loader and scale will be located on the site full time, as most of the year the mine will not need to be running at full production. No permanent structures will be built within the mining area. All production facilities and equipment will be portable. BURNCO will provide portable toilets and bottled water to employees on site during operations. These will be located in the processing area. Any fuel stored on site will have full secondary containment that can carry 110% of the fuel tank volume. All facilities will be removed during reclamation. Explosives will not be used at the site.

4. Topsoil and Overburden Handling

Topsoil averages two feet overlying two feet of overburden. Topsoil and overburden will be stripped with appropriate earthmoving equipment as deemed suitable for the operation such as front-end loaders, dozers, excavators, and water trucks. Topsoil and overburden will be stockpiled separately onsite in either designated stockpiles, berms, or directly placed to create final reclamation slopes. These materials will be directly placed in the designated stockpile areas or berms which can be seen on Map C-2. Stockpiles to be in place longer than 90 days will be seeded with the permanent seed mix to prevent erosion (see Exhibit E for seed mix). Screening berms will be constructed immediately with overburden, topsoil, and/or sand extracted from Pod 1. These berms will be vegetated to prevent erosion and provide noise and visual screening. An average of two feet of topsoil and two feet of overburden were assumed to determine the overall material balance shown in Table D-2.

Table D-2 Topsoil and Overburden Material Generated During Mining

Material Generated (CY)	
Topsoil	271,360
Overburden	271,360

Due to the reclaimed land use as water storage ponds, there will be an excess of topsoil than what is needed for reclamation. This is because the lakes make up the majority of the reclaimed land and do not need to be topsoiled entirely. There is not enough overburden to meet

reclamation needs by itself. Excess topsoil and sand will be used to augment the overburden in achieving the final grading shown in the reclamation map in Exhibit F. Overburden, topsoil, and sand will be used to backfill mining slopes to their final reclaimed state. Topsoil will be replaced on all disturbances outside of the ponds and on the pond slopes. It will not be replaced on the pond floor. Topsoil will be replaced in an average two-foot layer to restore the existing soil conditions. Details pertaining to reclamation can be found in Exhibit E and the maps in Exhibit F.

5. Site Access and Internal Road Improvements

The Ewing Gravel Pit will be accessed via the existing northeast access connecting to U.S. Highway 85. All improvements will be covered by appropriate CDOT permits. Improvements to this road will be completed prior to shipment of any construction materials from the site.

The remainder of the site will be accessed internally. The ditch separating the upper and lower terraces has an existing crossing which is currently 15 feet wide. BURNCO plans to widen this crossing to facilitate access from the lower mining areas to the processing area. The crossing will be widened to 30 feet, and a box culvert will be inserted below to maintain flow through the ditch. Details of the crossing improvements are shown on Map C-2. This will be completed prior to the start of mining.

The location and details of these items are all shown on Map C-2 in Exhibit C.

6. Water Information, Rights, and Augmentation

All water rights issues such as availability of water for this operation, consumption rates, dust control, etc. is presented in Exhibit G – Water Information.

7. Schedule of Operations

Mining operations will occur as dictated by demand with an average annual production of 700,000 tons. Mining, screening, and processing will be conducted on site with portable equipment throughout the year. Asphalt and concrete production will occur onsite at various times of the year. Product will be sold from these activities throughout the year. The operator will not have night gravel mining operations, although minor truck activity and repairs may occur after hours.

8. Fort Lupton Impacts and Environmental Impacts

All potential county impacts and concerns are addressed in the Fort Lupton Special Use Permit and Fort Lupton Annexation Application.

EXHIBIT E RECLAMATION PLAN

1. General Reclamation Plan

The total affected area to be reclaimed under this permit is 127 acres out of the 156.7-acre permit area. Reclamation of the Ewing Gravel Pit will convert the site to a final land use of water storage ponds and rangeland.. Reclamation will occur concurrently with mining. Final reclamation will be completed after mining has finished. The pre-mine land use is predominantly agriculture with some oil production areas and one residence. Rangeland exists along the South Platte River corridor. Surroundings land uses include agriculture, open space, and mining. Pursuant to Rule 6.4.5.2(b), the applicant evaluated the post-mine land use in regard to adopted state and local land use plans for this area and adjacent land uses. The proposed post-mine land use of water storage ponds and rangeland is compatible with the general agricultural character of the area and the current zoning with is Agriculture

The permit and affected area of the site are 156.7 acres and 127 acres respectively, not all of which will be disturbed and require reclamation. Approximately 116.0 acres will be disturbed. There will be 65.6 acres of water storage while the remaining area will be rangeland (50.4 acres). Table E-1 below summarize the final land uses within the affected area upon completion of reclamation.

Table E-1 Reclamation Areas

Description	Area (Acres)
Rangeland	50.4
Water Storage Ponds	65.6
Disturbed Area Total	116.0
Undisturbed Area	11.0
Total Affected Area	127
Total Permit Area	**156.7**

Reclamation will occur concurrently as mining progresses through each pod. No more than 1000 feet of highwall will be unreclaimed at a time. Mining slopes will be backfilled and graded to a maximum 3H:1V slope. The slopes will then be compacted for stabilization and to prevent erosion. All portable facilities and equipment will be removed from the area. All berms will be flattened. The slurry wall will remain during and after reclamation. The pond slopes and any other surrounding disturbances will be topsoiled and seeded for revegetation. Topsoil will be replaced in a two-foot layer to restore the current soil profile. Revegetation will be completed using a native seed mix recommended by the Natural Resource Conservation Service. Revegetation efforts will be monitored following reclamation. The pits will be used for freshwater storage after they have been fully reclaimed and revegetated. The ponds must have a minimum of three feet of freeboard at all times. Wildlife fencing may need to be installed surrounding the

reservoirs for reclamation. These will be installed by BURNCO at the request of Colorado Parks and Wildlife (CPW) or the City of Fort Lupton.

There will be more than enough material stockpiled from on-site materials to fulfill reclamation needs as the groundwater lakes take up the majority of the reclamation area. Table E-2 shows the volumes of topsoil and overburden required for reclamation and the material volumes that will be stripped and stockpiled. As shown, there is an excess of topsoil that is stripped versus what is required for reclamation. The stripped overburden does not meet the amount required for backfilling the pits. However, there will be an excess of topsoil and sand that will be more than enough to meet these requirements. These calculations were made assuming that the site has a uniform two feet of topsoil and two feet of overburden across all areas. Topsoil will be replaced in an average two foot layer across all non-pond disturbances, while overburden will be used to backfill the pit slopes from 1.5H:1V to 3H:1V.

Table E-2 Reclamation Volumes

Pod	Area Stripped (ac.)	Topsoil Stripped (CY)	Overburden Stripped (CY)	Rec. Rangeland Areas (ac.)	Topsoil Required (CY)	Overburden Backfill Required (CY)[2]
1	50.9	164,237	246,356	13.5	43,560	287,407
2	20.3	65,501	32,751	6.6	21,296	165,037
3	23.7	76,343	133,826	9.2	29,556	449,066
Proc. Area[1]	21.1	68,212	-	21.1	68,211	190,000[3]
Totals	**116**	**374,293**	**412,933**	**50.4**	**162,623**	**1,091,510**

[1]Processing area topsoil removal includes topsoil under screening berms.
[2]Overburden reclamation requirements not met by the stripped overburden. There is an excess of topsoil (~200,000 CY) and sand (>2M CY) present at the site that can be used to augment the backfill requirements.
[3]Backfill volume for freshwater and settling ponds in processing area: three-acre ponds 40-ft deep.

Overburden reclamation requirements will not be met by the stripped overburden alone. There is an excess of topsoil and sand present at the site that can be used to satisfy the backfill requirements. Sand volumes have been determined from pre-mine drilling conducted on the site. Table E-3 shows the excess topsoil available for use as backfill as well as the sand that will be needed to make up for backfill shortfalls in Pods 2 and 3. Total Sand Needed is the difference between backfill requirement, backfill stripped (from Table E-2), and excess topsoil. The information in Table E-3 is for the entirety of the operation and is therefore greater than the material requirements of backfill at any given snapshot in time of the operation. The volume of material needed to reclaim at a given snapshot in time is roughly 284,000 CY to cover backfilling of the active highwall and the ponds within the processing area. The operator will maintain enough sand available onsite to backfill the processing area (190,000 CY) and reclaim the 1000-ft of active highwall (94,000 CY). This sand volume will be maintained in either stockpiles or be available within the current mining pod.

Table E-3 Additional Backfill Material Requirements

Pod	Topsoil Required (CY)	Excess Topsoil Available (CY)	Overburden Backfill Required (CY)	Overburden Stripped (CY)	Total Sand Needed (CY)
1	43,560	120,677	287,407	246,356	0
2	21,296	44,205	165,037	32,751	88,081
3	29,556	46,787	449,066	133,826	268,454
Proc. Area	68,211	-	190,000	-	190,000
Totals	**162,623**	**211,669**	1,091,510	**412,933**	**546,535**

2. Topsoil Replacement

An average of two feet of topsoil will be stripped and stockpiled prior to mining. After backfilling and grading has been completed during reclamation, topsoil will be replaced at an average depth of feet in a manner that is similar to the pre-mine soil profile. Topsoil will only be placed on the pond slopes and other surrounding disturbances. Topsoil will not be replaced on the pond floors. Replaced topsoil will be directly placed by loaders and haul trucks. All topsoiled areas will be disced to aid in root penetration.

3. Haul Roads and Access

All internal haul roads will remain following reclamation to sustain access to the various water and oil wells throughout the site. The main access will be via US-85. The ditch crossing and secondary property access will also remain in place.

4. Reclamation Timetable and Sequence

The sequence and timing of reclamation can be seen in Table E-4 below. The reclamation schedule is dependent on the rate of mining and fluctuating market demands. The operator will reclaim the site concurrently with the progression of mining to limit the total disturbance.

Table E-4 Reclamation Timetable

Description	Time Required
Develop and mine pod 1	4 years
Develop and mine pod 2 while reclaiming previous phases	2 years
Develop and mine pod 3 while reclaiming previous phases	4 years
Backfill, topsoil, and revegetate remaining disturbances	1 year
Vegetation monitoring	2 years

Total	13 years

5. Revegetation Plans

Seed will be placed in all areas to be vegetated following grading, topsoiling, and discing of the soil. All disturbances that are retopsoiled will be seeded with a Rangeland Seed Mix. The Weld County recommended mix to be used is as follows:

5.1. Rangeland Seed Mix

Species	**Pounds of pure live seed per acre (drilled)**
Sand Bluestem	1.0
Sand Lovegrass	2.5
Indian Ricegrass	3.0
Prairie Sandreed	0.75
Green Needlegrass	1.5
Little Bluestem	0.75
Yellow Indiangrass	0.5
Switchgrass	1.5
Sand Dropseed	0.5
Total	**12.0**

Broadcast seeding will be done at double the drill rate. Mulch will be placed at roughly 4000 pounds per acre.

6. Post Reclamation Site Drainage

The site will drain internally following reclamation. All water that enters the site will drain to the water storage ponds across the site. Refer to map F-1 for the post reclamation drainage of the site.

7. Revegetation Success Criteria

Revegetation will be deemed adequate when erosion is controlled, the vegetation cover matches neighboring wildlife habitat areas, and when it is considered satisfactory according to Division standards. This will be monitored in the two years following the completion of reclamation.

8. Monitoring Reclamation Success

Measures will be employed for the control of any noxious weed species. The objective of this weed management plan is to control undesirable plants on the Ewing property. Plants identified through the Colorado Noxious Weed Act (C.R.S 35-5.5) and the Weld County Noxious Weed List as undesirable and designated for management within the county will be removed. Any weeds identified as List A species will be eradicated. Other lower listed plants identified as noxious weeds will be managed by control measures. A Weed Control Plan will be utilized as follows:

1) Each April, a weed survey will be taken of the permit area.
2) If any patches or plants have been identified, they will be sprayed by backpack sprayer or 4-wheeler using chemicals approved for use by the weed control staff of Weld County.
3) After reclamation, weed surveys and spraying will continue until the perennial cover and production of the site have met DRMS requirements and bond release has been obtained.

The Division and Weld County staff will be consulted regarding any weed infestation areas and any control measures prior to their initiation. The plan does not contemplate total weed removal on the property. Rather, the goal is to prevent the spread of weeds into uninfected areas as is the primary goal of the Weld County Weed Management Plan.

Each year during the mining operation, the permit area will be monitored closely, through which the operator may determine if any additional weeds have grown. If any new species of weeds are found, Weld County and the Division will be consulted in order to formulate the best plan for the new infestation.

8.1. Weed List

Weeds listed in Table E-1 will be eradicated or suppressed according to Weld County requirements.

Table E-1. Weld County Weed List

Eradication	Suppression
List A (in Weld County)	
Cypress Spurge	
Haire Willow-Herb	
Japanese	
Myrtle Spurge	
Purple Loosestrife	
Yellow Flag Iris	
List B (in Weld County)	
Absinth Wormwood	Canada Thistle
Black Henbane	Common & Cutleaf Thistle
Bull Thistle	Eurasian Watermilfoil
Chamomile species	Jointed Goatgrass

Eradication	Suppression
Chinese Clematis	Musk Thistle
Houndstongue	Russian knapweed
Moth Mullein	Scotch Thistle
Oxeye Daisy	Yellow Nutsedge
Plumeless thistle	Bouncingbet
Spotted knapweed	Common Tansy
Sulfur Cinquefoil	Dalmation Toadflax
Tamarisk	Dames Rocket
Wild Caraway	Diffuse Knapweed
Yellow Toadflax	Hoary Cress
	Leafy Spurge
	Perrenial Pepperweed
	Russian Olive
List C (in Weld County)	
	Common Mullein
	Cheatgrass/Downy Brome
	Field Bindweed
	Puncturevine/Goatheads

EXHIBIT G WATER INFORMATION

1. General

The Ewing Gravel Pit is within the floodplain and floodway of the South Platte River. The Platteville Ditch traverses the site from south to north roughly halfway across it. Mining pods 1 and 2 are located on the lower, western terrace which is within the floodplain. Mining pod 3 is located on the upper, eastern terrace along US-85, outside of the floodplain. Mining within the floodway/floodplain will be conducted with no filling or stockpiling above the natural ground grade. Groundwater is located roughly five feet below the natural grade in mining pods 1 and 2; 25-feet below grade in mining pod 3. All groundwater onsite is part of the South Platte River alluvial aquifer. Prior to mining any pod, a slurry wall will be installed around the perimeter of each terrace of gravel, as shown on Map C-2. These slurry walls will be for the development of water storage reservoirs following reclamation.

Xcel Energy maintains a system of groundwater wells on the property for the purpose of supplying water to their power plant to the east, in Keensburg. These wells will be protected from groundwater impacts by their proximity to the South Platte River. Analysis conducted by BURNCO and shown in Appendix G-3 demonstrates this protection.

BURNCO is committed to protecting the hydrological balance and water quality at the site.

2. Water Quality Protection

The primary concerns surrounding water quality protection at the Ewing Gravel Pit site are the potential impacts to the surface and groundwater from sediment, hydraulic fluids, and diesel fuel. Sediment will be controlled through the use of stormwater retention within the disturbance area through the life of the mine. The site will be graded in a manner that maintains all surficial flows within the disturbed area, in turn containing all sediment and unwanted discharges from leaving the site. Hydraulic fluids and diesel fuels will be contained within vehicles or with adequate storage methods that follow best practices of maintenance; these practices including regular inspections of vehicles, hydraulic lines, and any other potential spill sources. Diesel fuel will be stored on-site in double walled tanks with secondary containment. Fuel storage will be stored away from exposed groundwater and other waterways. Spill kits will be located near all fueling areas to clean up inadvertent spills as soon as possible. An SPCC plan will be in place to prevent oil discharges and establish a response procedure in the event of spills.

Any surface water discharges from the site will be sampled in accordance with the NPDES discharge permit. All discharge will be via the approved Outfall, the proposed location of which is shown on Map C-2.

Table G-1. Surface Water Discharge Monitoring Requirements in NPDES Discharge Permit

Parameter	Monitoring Frequency	Sample Type
Flow	Instantaneous, Monthly	In-situ
pH	2x/month	Grab
Total Suspended Solids	2x/month	Grab
Oil and Grease Visual	2x/month	Visual
Oil and Grease	Contingent on visibility of oil and grease	Grab
Total Flow	Instantaneous, Monthly	Calculated
Selenium, Potentially Dissolved	2x/month	Grab
Total Dissolved Solids	Quarterly	Grab

Note: these are the anticipated analytes based on operator experience at similar sites. CDPHE may issue different sampling requirements with the permit.

3. Floodplain

The majority of the site is within the 100-year floodplain and floodway as reported by the Federal Emergency Management Agency. These boundaries are shown in the Exhibit C and F maps. The minimum distance maintained from the South Platte River to excavation activities is 100 feet. Additionally, no stockpiling or filling above the natural grade will occur in the floodway or floodplain. All topsoil and overburden stockpiles will be placed on the upper terrace. Overall, the downstream flood impacts should remain the same or be reduced from activity at the site as the removal of material results in more storage space for flood water below the existing grade. A no-rise certification has been provided to the City of Fort Lupton as part of its floodplain development permit.

In accordance with the Mile High Flood Control District technical guidelines, inflow/outflow structures will be installed near the riverbank where mining Pod 1 reaches its closest point to the South Platte River. Details of these designs can be seen on the Map F-2.

In the event of flooding at the site, equipment from the active mining floor will be removed and the pit will be allowed to fill with water. The flooded pit will be pumped only after the flood has subsided. All fuel will be stored at least one foot above the base flood elevation and in sufficient secondary containment with 110% carrying capacity.

4. Wetlands

The National Wetlands Inventory aerial-based mapping indicates the presence of wetlands within the permit area. These wetlands are mostly associated with the vegetated banks along the South Platte River. BURNCO commits to conducting a wetlands survey prior to disturbing any potential wetlands. Exhibit C and F maps show the NWI mapped wetlands.

5. Aquifers

The only identified aquifer located at the site is the shallow alluvial aquifer of the South Platte River. The depth to this aquifer varies throughout the year but is typically five feet below surface for the lower terrace (Pods 1 and 2) and 25 feet below the upper terrace (Pod 3). According to the U.S. Geological Survey's Ground Water Atlas of the United States[1], the underlying bedrock aquifer is the Laramie Fox Hills Aquifer of the Denver Basin system. The entirety of the Ewing Gravel Pit mining operation will take place in the overlaying alluvium above a shale/siltstone layer; the Laramie Fox Hills Aquifer will not be mined.

6. Surface Water

The mining operation will impact surface water in the area through the stormwater runoff that enters the site. Map G-1 – Drainage Map shows the drainage patterns and how they are affected throughout the life of the mine. The maps include information on the drainage basins currently, during mining, and post reclamation as well as the drainage directions throughout these stages. The primary concern for surface water protection at the site is preventing the discharge of sediment, oil, and/or hydraulic fluids from the operation areas. Oils and hydraulic fluids are stored on site following the standard best management practices. These practices include the use of secondary containment at fluid storage and transfer points, spill kits, and employee training regarding safe handling practices. Sediment is trapped onsite using controls and best management practices by directing and controlling surface water runoff that enters the disturbed areas. More information on sediment and surface water control is provided below.

6.1. Surface Water Handling

There are three drainage basins that collect all stormwater runoff on and around the Ewing site. These are shown on the Drainage Map. The first two consist of the lower terrace and cover Pods 1 and 2 respectively, as well as undisturbed portions to the south. Runoff from this drainage basin will be collected in the mining pods during mining and in the water reservoirs following reclamation.

The second drainage basin exists on the upper terrace and consists of mining pod 3 and undisturbed upland to the south. Runoff from this drainage basin will be collected to the mining pod and processing area during mining and the water storage reservoir following reclamation.

[1] https://pubs.usgs.gov/ha/ha730/ch_c/

All drainage basins are shown on the Drainage Map.

6.1.1. Mining

During all phases of mining, and for each drainage basin, surface water runoff will drain to the active mining pod, reclaimed reservoir, or the processing area. Water collected in the active mining pod will be allowed to evaporate or will be discharge via the approved CDPHE outfall once sediment has settled out. Water collected within the processing area will be allowed to evaporate or discharged via the approved CDPHE outfall once sediment has settled out.

6.1.2. Post Reclamation

The drainage patterns during mining will be retained following reclamation of the site. Any surface water runoff will collect in the reclaimed reservoirs. There is enough storage capacity above the anticipated reservoir levels and the top of the shore to store the 100-year storm events. More on those calculations is provided below.

6.1.3. Flood Protection

Mining Pod 1 will extend to within 150 feet from the South Platte River in two locations as shown on the Drainage Map. Due to this proximity to the river, measures will be taken to protect the riverbank from erosion during a flood event. An inflow and outflow structure will be constructed between the River and the mining pod once mining is within 300 feet of the river. These structures will allow for the safe exchange of flood waters between the pit and river which prevents erosion of the riverbank and pitside slope during flood events. These structures are of a design approved for use by the Mile High Flood District. Details of the inflow/outflow structure are shown on the Map F-2.

6.2. Disturbed Area Runoff

During all stages of mining, there is enough water storage capacity to contain the 5-year and 100-year 24-hour storm events and prevent erosion from surface water discharge. The expected rainfall from these events at the Ewing Site is provided in Table G-2 below.

Table G-2. Area Storm Events (from NOAA[2])

Event Probability	Event Rainfall (inches)
5-YR 24-HR	2.28
100-YR 24-HR	4.64

The peak runoff was generated from these values for the three drainage basins during all stages of mining. Pre-mine, mining, and reclamation conditions are delineated on the Drainage Map. The discharge volumes from these storm events are calculated in Appendix G-1 at the end of this exhibit. Table G-3 summarizes the runoff volumes and storage volumes for each

[2] National Oceanic and Atmospheric Administration

drainage. All drainage calculations were made using the Rational Method identified in the Mile High Flood Control District.

Table G-3. Drainage Calculations

Drainage Basin 1					
Site Condition	Area (ac)	Runoff Coefficient	100-Yr 24-Hr Runoff (ac-ft)	Discharge Flow Rate (gpm)*	Detention Capacity (ac-ft)***
Base	60.8	0.5	10.8	15,450	N/A
Mine	60.8	0.9	11.0	1000-3000**	191.5
Reclamation	60.8	0.9	11.0	0	191.5
Drainage Basin 2					
Site Condition	Area (ac)	Runoff Coefficient	100-Yr 24-Hr Runoff (ac-ft)	Discharge Flow Rate (gpm)*	Lake Storage Capacity (ac-ft)***
Base	22.4	0.5	2.3	5,300	N/A
Mine	22.4	0.9	4.2	1000-3000**	71.6
Reclamation	22.4	0.9	4.2	0	71.6
Drainage Basin 3					
Site Condition	Area (ac)	Runoff Coefficient	100-Yr 24-Hr Runoff (ac-ft)	Discharge Flow Rate (gpm)*	Lake Storage Capacity (ac-ft)***
Base	107.8	0.5	6.1	27,400	N/A
Mine	107.8	0.9	19.4	1000-3000**	146.8
Reclamation	107.8	0.9	19.4	0	146.8

* The discharge flow rate is calculated from the peak discharge of the 100-Yr 24-Hr storm event.

**Discharge flow rate is variable and controlled during mining as all discharges are pumped from the settling pond.
***Detention Capacity calculated in CAD.

7. Groundwater

Groundwater is located approximately five feet below the surface of the lower terrace and approximately 25 feet below the upper terrace at the Ewing site. This was determined from wells installed onsite. 12 wells are located onsite for different uses. Table G-4 outlines all wells within 600' of the permit area. These well locations are shown in Map C-1.

Table G-4. Wells Within 600' of Permit Area

Applicant/Well ID	Permit ID	Total Depth (feet)	Purpose	Distance from nearest mining area (ft)
L G EVERIST INC	53518-MH	39	Monitoring/Sampling	29
MARTINEZ, HUMBERTO C.	215110--A	53	Domestic	106
DITIRRO JOHN JR	11082-F-R	45	Irrigation	606
TRICYCLE LANE TEXASS LLC (HAHNE, CLIFFORD)	151399--A	55	Domestic	31
EWING, DALE	151398-		Domestic	0
ROCKY MOUNTAIN ENERGY CENTER LLC	58545-F	50	Industrial	375
BACHOFER, ROSS	310554-		Stock	365
ROCKY MOUNTAIN ENERGY CENTER LLC	58543-F	52	Industrial	88
TRICYCLE LANE TEXASS LLC (HAHNE, CLIFFORD)	146-R	55	Irrigation	0
ROCKY MOUNTAIN ENERGY CENTER LLC	58540-F	50	Industrial	472
L G EVERIST INC	53509-MH	55	Monitoring/Sampling	0
L G EVERIST INC	297890-	51	Monitoring/Sampling	0
ROCKY MOUNTAIN ENERGY CENTER LLC	58541-F	54	Industrial	319
L G EVERIST INC	53510-MH	60	Monitoring/Sampling	84
L G EVERIST INC	57957-F	45	Industrial	590
L G EVERIST INC	57958-F	0	Other	528
FORMBY, ERNEST	98266-VE	53	Domestic	159
TRICYCLE LANE TEXASS LLC (HAHNE, CLIFFORD)	6912-F	54	Irrigation	47
L G EVERIST INC	297892-	27	Monitoring/Sampling	10
GAYTAN, ROCIO	215110--A	53	Domestic	159
ROCKY MOUNTAIN ENERGY CENTER LLC	58544-F	46	Industrial	65
EWING, DALE	151399-	40	Domestic	27
TRICYCLE LANE TEXASS LLC (HAHNE, CLIFFORD)	151398--A	55	Domestic	30
L G EVERIST INC	297891-	58	Monitoring/Sampling	84
L G EVERIST INC	77371-F		Industrial	590
OTTESENS INC	22612-F-R	52	Irrigation	270
FORMBY, EMMETT	215110-		Domestic	156
ROCKY MOUNTAIN ENERGY CENTER LLC	58542-F	58	Industrial	52
DITIRRO JOHN JR	11082-F	45	Irrigation	600

*Ewing, Tricycle Lane, and LG Everist listed wells on the property are under the applicant's control.

The Rocky Mountain Energy Center listed wells are the Xcel wells for powerplant water. They are listed separately in Table G-5. The landowner has recently installed piezometers onsite for groundwater level monitoring. These are listed in Table G-6. The piezometers will be used to track groundwater changes before and during mining. They will remain following reclamation for the benefit of the landowner.

Table G-5. Xcel Supply Wells Within 600' of Permit Area

Applicant/Well ID	Permit ID	Total Depth (feet)	Purpose	Distance from nearest mining area (ft)
ROCKY MOUNTAIN ENERGY CENTER LLC	58545-F	50	Industrial	375
ROCKY MOUNTAIN ENERGY CENTER LLC	58543-F	52	Industrial	88
ROCKY MOUNTAIN ENERGY CENTER LLC	58540-F	50	Industrial	472
ROCKY MOUNTAIN ENERGY CENTER LLC	58541-F	54	Industrial	319
ROCKY MOUNTAIN ENERGY CENTER LLC	58544-F	46	Industrial	65
ROCKY MOUNTAIN ENERGY CENTER LLC	58542-F	58	Industrial	52

Table G-6. Piezometers

Applicant/Well ID	Total Depth (feet)	Purpose	Distance from nearest mining area (ft)
Piez-1	50	Industrial	208
Piez-2	50	Industrial	50
Piez-3	50	Industrial	97
Piez-4	50	Industrial	450

Groundwater quality data was gathered in advance of mining. This data and discussion of it can be seen in the Groundwater Monitoring Plan in Appendix G-2.

7.1. Groundwater – Mining

Prior to mining of each pod, a slurry wall will be installed around the perimeter of the pod to prevent groundwater flow into the mining area. Following slurry wall installation, the operator will mine out the pod by dewatering it via the approved CDPHE discharge point. Pumping to conduct this dewatering will take place during the initial mining of each pod and then pumping will cease. Stormwater runoff that is collected in an active pod may be pumped out to protect local water rights, once sediment has settled. For this reason, the CDPHE discharge point will be maintained over the life of the mine. The pump will be located at least two feet below the active mining floor at the lowest point of the pit. It will be surrounded by a gravel filter. This configuration minimizes the risk of sediment being pumped out of the pit.

The typical pit pump location can be seen on Map C-2.

7.2. Groundwater – Reclamation

Permanent water storage reservoirs will be left behind within each pod, as can be seen on Map F-1. There will be no groundwater consumptive use in reclamation.

7.3. Groundwater – Slurry Wall Impact

The installation of several slurry walls within the alluvial aquifer of the South Platte River creates two main potential impacts to the aquifer: the creation of local groundwater shadows or mounding that damage neighboring structures or property and the potential exacerbation of regional groundwater impacts. For these reasons, the applicant has had a groundwater model developed by GSI. The groundwater model looks at the potential impacts of the slurry wall installation on neighboring property and structures, particularly the Xcel supply wells.

7.3.1. Xcel Supply Wells

A set of five groundwater wells run along the west side of the mining pod 1 (Map C-1). Xcel Energy pumps from these wells to supply their operations near Keenesburg, CO. The wells feed a pump house on the northwest corner of the property, from there the water is pumped east to Keenesburg. The wells are located both upstream and downstream of a proposed slurry wall. GSI analyzed the impact of the slurry wall on the Xcel wells to determine if the wall would prevent the wells from producing as Xcel required. The GSI report is in Appendix G-3.

Monitoring of the groundwater level along the South Platte River and the slurry wall will take place as outlined in the groundwater monitoring plan in Appendix G-2.

8. Water Related Permits

The operator is applying for all necessary permits that have not already been acquired for water handling at the Ewing Gravel Pit. This includes a discharge permit with the Colorado Department of Public Health and Environment and a gravel well permit for initial dewatering of each pod with the Colorado Division of Water Resources.

9. Water Consumption and Source

Water for dust control will be the primary consumptive use at the Ewing Gravel Pit site. Water will also be used for aggregate washing, dust control, and concrete/asphalt production. Water will be purchased from the local water conservancy district during operations. No ongoing water consumptive use exists in reclamation, since the water storage pods are lined. This water will be sourced from a freshwater pond in the processing area. This pond will be covered by a gravel well permit. Table G-7 summarizes the estimated water consumption for the operation throughout the year.

Table G-7. Water Consumption

Month	Aggregate Washing (ac-ft)	Concrete/Asphalt Production (ac-ft)	Dust Control (ac-ft)	Evaporative Depletions (ac-ft)	Water Removed from Mining (ac-ft)	Total (ac-ft)
Jan	0	0	0.11	0.00	0.00	0.1
Feb	0	0	0.12	0.00	0.00	0.1
Mar	0	0	0.19	0.00	0.00	0.2
Apr	2.88	3.00	0.32	1.62	0.00	7.8
May	2.99	3.12	0.42	1.68	0.00	8.2
Jun	2.88	3.00	0.51	1.62	0.00	8.0
Jul	2.99	3.12	0.53	1.68	0.00	8.3
Aug	2.99	3.12	0.47	1.68	0.00	8.3
Sep	2.88	3.00	0.35	1.62	0.00	7.9
Oct	2.99	3.12	0.25	1.68	0.00	8.0
Nov	0	0	0.14	0.00	0.00	0.1
Dec	0	0	0.11	0.00	0.00	0.1
Total	**20.62**	**21.48**	**3.50**	**11.56**	**0**	**57.2**

The Ewing Gravel Pit sources water for operations via water contract. Any groundwater exposure will be covered by a gravel well permit with the Colorado Division of Water Resources.

Appendix G-2 Groundwater Quality Monitoring Plan

Table of Contents

Introduction

This groundwater quality monitoring plan will be implemented at the Ewing Gravel Pit located in Weld County, just north of Fort Lupton, Colorado. This plan outlines the methods that the mine operator will follow to protect and monitor the integrity of the local groundwater quality and quantity. This plan is intended to meet the requirements of the Division of Reclamation, Mining, and Safety (DRMS) Mineral Rules and Regulations Rule 3.1.7(7)(b) and the Colorado Department of Public Health & Environment (CDPHE) Regulation No. 41. The Ewing site is not located on any classified areas regarding groundwater; therefore, the statewide regulations (CDPHE Regulation 41) will be followed.

This monitoring plan requires the collection of pre-operational groundwater data that will be used as the baseline data to compare to the results of continued long-term groundwater monitoring. At least five quarters of monitoring data will be collected prior to operations commencing onsite. As shown in Appendix 2, this baseline data collection began in Q4 of 2022 and will achieve five quarters of data collection by Q4 of 2023. Continued monitoring will take place during operations. Results of this monitoring will be used to evaluate if any adverse impacts on groundwater have taken place as a result of the Ewing gravel mining operations.

The Ewing Gravel Pit will create three slurry-wall-encased water storage reservoirs. Initial dewatering of the mining pods following slurry wall installation will be via CDPHE approved discharge outfalls. There will be no ongoing interaction between mining operations and the local groundwater aquifer. The presence of slurry walls may impact local groundwater levels through mounding or shadow effects during mining and following reclamation. Based on these conditions, sampling of water chemistry at the Ewing Gravel Pit will be conducted on a quarterly basis to begin the baseline characterization. Sampling of water levels onsite will take place monthly. The operator may apply to reduce sampling frequency with CDRMS.

1. Background Information

1.1. Site Description

The Ewing Gravel Pit Site is located directly north of Fort Lupton in Weld County, Colorado. An address associated with the site is 7501 US-85, Fort Lupton, 80621. The site is a total of 156.7 acres.

It is bounded by the South Platte River to the west and US-85. The site is currently multiple active agricultural fields on two terraces, the lower one being closer to the river, while the upper terrace is adjacent to the highway. Each terrace is mostly flat with the Platteville irrigation ditch diving them. There are various abandoned residences and agricultural buildings on the upper terrace. Active oil wells and facilities are scattered across the site on both terraces. Additionally, Excel energy makes use of the site through multiple groundwater wells along the river to supply water to their power plant in the east. The site location is shown in the vicinity map in Figure 1 below.

Figure 1 – Vicinity Map

The geology of the site is composed of a sand and gravel alluvial deposit created by the South Platte River. The deposit is overlain by approximately two feet of overburden and two feet of topsoil. The deposit itself is composed of a layer of sand at the top, with an average thickness of 28 feet. An interbedded sand and clay deposit exists on the lower terrace with a thickness of 12 feet that dips shallowly to the east. Below this is the gravel deposit with an average 16-foot thickness. The bedrock below the alluvial deposit is claystone and siltstone with an approximate depth of 30-40 feet below the surface.

The groundwater aquifer present in the general vicinity is the South Platte alluvial aquifer. This aquifer is approximately 5 feet below the surface of the lower terrace, and 25 feet below the upper terrace. Characterization data of this aquifer was sourced from the *South Platte Decision Support System Alluvial Groundwater Model Update Documentation* published by the Colorado Water Conservation Board and Division of Water Resources[1]. The alluvial aquifer is unconfined and spreads along the South Platte River across much of northeastern Colorado, extending up towards Nebraska. Groundwater flows are generally in the direction of the South Platte River moving towards the northeast. The aquifer ranges from 20 feet in thickness in the upper tributaries of the river, to more than 300 feet further downstream along the mainstem South Platte River extending towards Nebraska. The hydraulic conductivity generally ranges from 200-600 feet/day, but can reach up to 2,000 feet/day in the more productive sand and gravel deposits. The aquifer is recharged in various ponds and canals throughout the basin.

Underlying the South Platte aquifer is the Laramie Fox Hills bedrock aquifer which will not be interacted with as it is over 1,000 feet below the surface.

An estimated potentiometric contour model for the groundwater aquifer was developed based on groundwater data measured at the site. This data was measured through the wells identified to be used in this monitoring plan, over the course of five quarters. This mapped data, averaged throughout the seasonal fluctuations, is attached in Appendix 1. Also included in this map are all existing wells at and around the site, as well as other physical features of the site.

[1] Brown and Caldwell, *South Platte Decision Support System Alluvial Groundwater Model Update Documentation*. The Colorado Water Conservation Board and Division of Water Resources. June 2017

1.2. Baseline Groundwater Characterization

Water quality and quantity sampling will take place at seven locations for five quarters prior to mining operations in order to establish the baseline groundwater characterization. As shown in Appendix 2, this baseline data collection began in Q4 of 2022 and will achieve five quarters of data collection by Q4 of 2023.

Each sample point can be seen on the map in Appendix 1 and on Figure 2

Figure 2. Details on the sampling locations are provided in

Table 1.

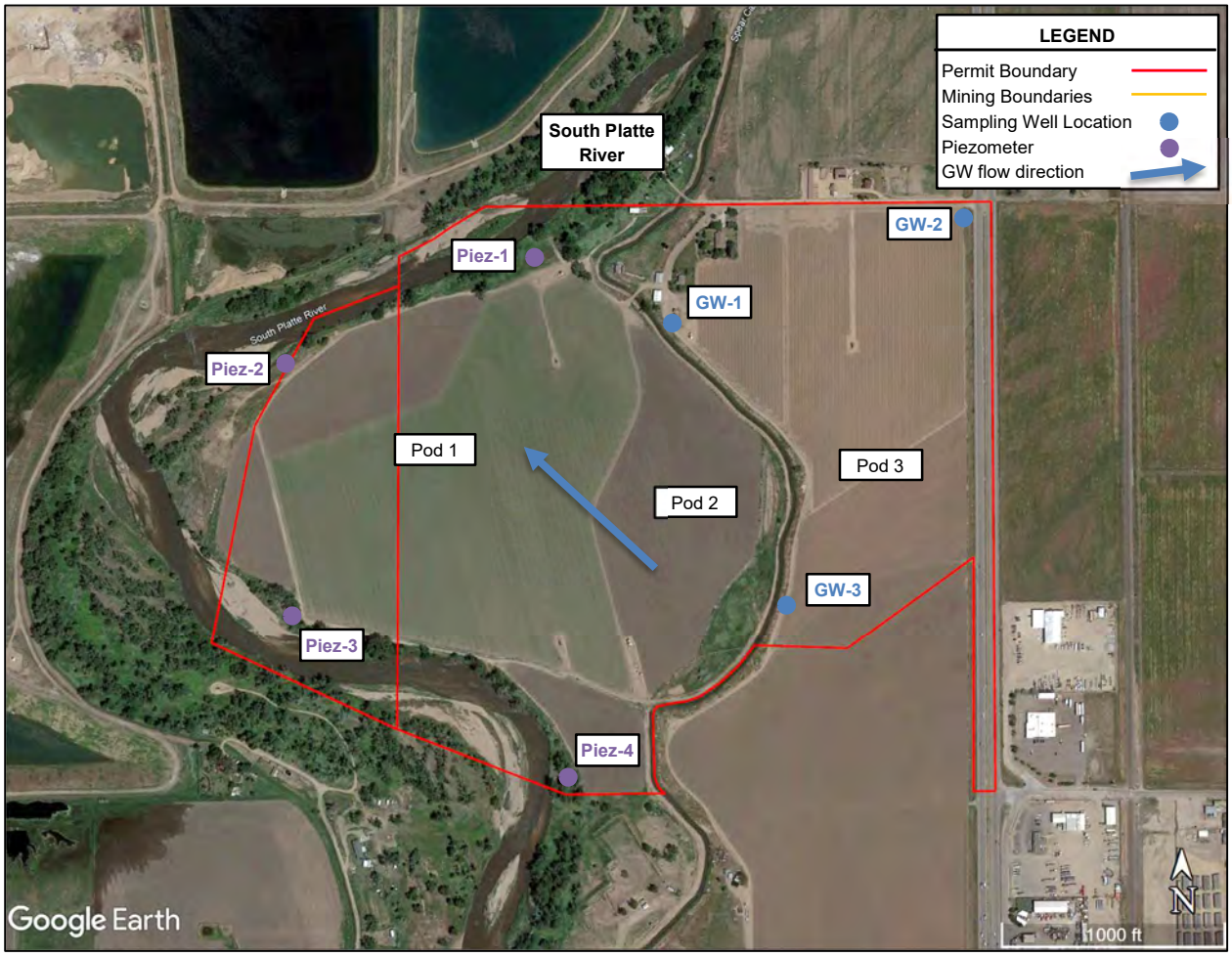


Figure 2 – Groundwater Sampling Locations

Table 1 – Groundwater Sampling Location Data

ID	Location Description	Lat	Long	Surface Elev.	Top of Casing Elev.	Total depth (ft)	Completion Date
GW-1	NE upper terrace near US-85	40.10834	-104.81558	4830'	4831'	55.0	1/30/2014
GW-2	NW upper terrace near residences	40.10897	-104.81108	4830'	4834'	58.0	4/6/2015
GW-3	W upper terrace in field	40.10537	-104.81356	4830'	4833'	51.0	4/6/2015
Piez-1	N lower terrace by river	40.10848	-104.81794	4815'	4819'	43.0	2/1/2023
Piez-2	W lower terrace by river	40.10705	-104.82193	4820'	4824'	45.0	2/1/2023
Piez-3	SW lower terrace by river	40.10405	-104.82176	4820'	4824'	50.0	2/1/2023
Piez-4	S lower terrace by river	40.10207	-104.81735	4825'	4829'	46.0	2/1/2023

1.2.1. Monitoring Well Installation

All wells being used for monitoring have already been constructed and permitted with the Colorado Division of Water Resources (CDWR). They have been constructed by a licensed contractor following the State Engineer's Office (SEO) guidelines. Construction information and lithology for each well is provided in Appendix 3 under the associated CDWR permit documents. Other characteristics of the wells are provided in Table 1 above. Table 2 below lists the permit CDWR permit numbers for each of these wells.

Table 2 – CDWR Well Permits

ID	CDWR Permit No.
GW-1	151398-A
GW-2	297891-
GW-3	297890-
Piez-1	329516-
Piez-2	329532-
Piez-3	329517-
Piez-4	329518-

1.2.2. Baseline Groundwater Quantity

The baseline water level will be quantified with at least five quarters of static water level measurements at all seven sampling locations. It will be taken quarterly prior to quality sampling at groundwater wells GW-1, GW-2, and GW-3 . It will also be taken monthly, at a minimum, from piezometers Piez-1, Piez-2, Piez-3, Piez-4. The water level will be measured using depth measuring equipment such as a sounder from the top of the well casing, using the sampling methods outlined later in this plan. Data will be recorded in table and graph format in Appendix 1.

This data will be analyzed to show the water level against time in graph format, as well as to create a potentiometric head model. This model will be developed by averaging the five quarters of water level measurements at three or more points. A spatial model will be developed using the average water level and well location in geospatial mapping software. A contour map created from the baseline level data is provided in Appendix 1.

Quantity sampling will continue following the installation of slurry walls on a monthly basis with quality sampling. This sampling will occur at all seven sampling locations across the site. Results will be reported to the DRMS in table and graph format with the annual report.

1.2.3. Baseline Groundwater Quality

The baseline water quality will be quantified with at least five quarters of water quality sampling at three of the seven sampling locations. Field and laboratory samples will be taken quarterly at groundwater wells GW-1, GW-2, and GW-3. While these wells do not represent the upstream

and downstream locations of all the mining areas, they will work to quantify the ambient baseline quality of the groundwater aquifer as it should be homogenous across the site. Quality sampling will meet Regulation 41 standards and parameters using the sampling methods described in this plan. Data will be recorded in a table and reported in Appendix 1.

2. Predicted Impacts to Hydrologic Balance

Predicted impacts to the hydrologic balance due to operations at the Ewing Gravel Pit will primarily include water quantity impacts from the slurry wall. Mounding of the groundwater in the aquifer will likely occur surrounding the slurry wall. Water quality is not anticipated to be impacted as the slurry wall separates mining operations from the groundwater aquifer. The mounding of groundwater has been quantified through a groundwater model to determine the cumulative effects of the slurry wall with the surrounding conditions. This report is attached in Appendix G-3 of the CDRMS permit. Water quality is not anticipated to occur as all mining is surrounded by slurry walls such that no continued groundwater action takes place.

The sampling and monitoring methods in this plan will work to identify any impacts to hydrologic balance once mining starts. Also outlined in this plan are actions to take in the case that adverse impacts to the groundwater are encountered.

3. Ongoing Groundwater Monitoring Plan

When operations commence onsite, this groundwater monitoring plan will be enacted at the Ewing Gravel Pit to identify and quantify and potential impacts of mining to the local groundwater aquifer.

3.1. Groundwater Points of Compliance

The points of compliance (POC) at the Ewing Gravel Pit will be used to monitor quality and quantity of groundwater during mining operations to ensure compliance with Regulation 41. These points of compliance are downstream of mining. GW-1, Piez-1, and Piez-2 will be the POC during the life of the mine. Monitoring will begin quarterly at the designated POC for the first 12 months after the installation of any new slurry walls. If monitoring shows no adverse effects of mining at these POC's, monitoring frequency will be decreased to twice a year (every 6 months). With the installation of the second slurry wall around Pod 3, quarterly sampling will begin again for 12 months at the designated POC's. It will then be reduced to twice a year after this time period. Results of the quality and quantity sampling at the POC's will be provided to the DRMS with the annual report. If adverse effects are identified, the DRMS will be notified immediately and BURNCO will start a water quality mitigation plan as advised by the DRMS.

It is recommended, but not required, to monitor upgradient water locations. This quality sampling would work as a reference point to protect the mine from any exceedances due to off-site influences. Upgradient locations will be investigated by the operator for this sampling.

4. Sampling Methods

This section identifies the sampling methods that will be used to quantify the groundwater conditions at the Ewing Gravel Pit.

4.1. Sampling Location

The sampling locations, including frequency and sampling type, are detailed in the table below.

Table 3 – Sampling Type and Frequency

	Baseline Sampling		POC Sampling		Background Sampling	
ID	Quantity Sampling Frequency	Quality Sampling Frequency	Quantity Sampling Frequency	Quality Sampling Frequency		
GW-1	Quarterly	Quarterly for five quarters	Monthly	Quarterly then semi-annually*		
GW-2	Quarterly	Quarterly for five quarters				
GW-3	Quarterly	Quarterly for five quarters			Monthly	Quarterly then semi-annually*
Piez-1	Monthly	--	Monthly	Quarterly then semi-annually*		
Piez-2	Monthly	--	Monthly	Quarterly then semi-annually*		
Piez-3	Monthly	--				
Piez-4	Monthly	--			Monthly	Quarterly then semi-annually*

*Quarterly sampling will take place at all POC's after the first 12 months of any new slurry wall. After 12 months, it can be decreased to a semi-annual schedule.

4.2. Sampling Frequency

Baseline groundwater sampling will begin at least five quarters in advance of mining at the Ewing Gravel Mine. One sample per quarter will be taken at each of the groundwater sampling locations to define the baseline conditions of groundwater (GW-1, GW-2, and GW-3).

Point of compliance sampling will begin after mining has started. It will start out as quarterly sampling for the initial 12 months after slurry wall installation. If adverse impacts have not been encountered after five quarters of sampling, the frequency may be decreased to every six months. After the installation of the second slurry wall, the sampling frequency will return to quarterly for 12 months, then decrease to semi-annually.

4.3. Sampling Parameters

BURNCO will perform field and laboratory analysis of their samples for the water quality parameters identified in Table 4**Error! Not a valid bookmark self-reference.**. These

parameters are consistent with those required by the DRMS for Construction Material Sites, derived from Regulation 41 Tables 1-4. All laboratory analysis of the groundwater samples will be performed by a State of Colorado certified laboratory that follows industry standards and quality assurance/quality control (QA/QC) procedures.

Table 4 – Water Quality Parameters

Analyte		Table Value Standard (mg/L unless stated otherwise)	Reg.41 Table Reference (1-4)
1	pH (Field)	6.5-8.5 units	2 & 3
2	TDS	400, or 1.25 x Background	4
3	Chloride - Dissolved	250	2
4	Fluoride - Dissolved	2	3
5	Nitrate (NO3)	10	1
6	Nitrite (NO2)	1.0	1
7	Nitrite + Nitrate as Nitrogen	10	1
8	Sulfate - Dissolved	250	2
9	Aluminum - Dissolved	5	3
10	Antimony - Dissolved	0.006	1
11	Barium - Dissolved	0.01	1
12	Beryllium - Dissolved	2	1
13	Boron - Dissolved	0.004	1
14	Cadmium - Dissolved	0.75	3
15	Chromium - Dissolved	0.005	1
16	Cobalt - Dissolved	0.1	1 & 3
17	Cobalt - Dissolved	0.05	3
18	Copper - Dissolved	0.2	3
19	Iron - Dissolved	0.3	2
20	Lead - Dissolved	0.05	1
21	Lithium - Dissolved	2.5	3
22	Manganese - Dissolved	0.05	2
23	Mercury - Dissolved	0.002	1
24	Molybdenum - Dissolved	0.21	1
25	Nickel - Dissolved	0.1	1
26	Selenium - Dissolved	0.02	3
27	Silver - Dissolved	0.05	1
28	Thallium - Dissolved	0.002	1
29	Uranium - Dissolved	0.0168-0.03	1
30	Vanadium - Dissolved	0.1	3
31	Zinc - Dissolved	2	3

4.4. Sampling Procedure

The following protocol will be used for the collection and testing of water samples:

1) Specific bottles will be ordered from an appropriate laboratory which will be used for collecting water samples.

2) The static water level of the groundwater well will be measured and recorded using a water level well sounder prior to pumping of the well. The measurement location at the top edge of the well casing will be marked with a permanent ink pen. This mark will be touched up with fresh ink each time a sample is taken.
3) The contents of the well will be purged prior to sample collection using a low-flow, submersible pump. This pump will be cleaned prior to being placed in the well. At least three well volumes will be removed prior to sampling.
4) The following field measurements will be taken with cleaned and calibrated meters:
    a. pH
    b. Temperature
    c. Dissolved Oxygen
    d. Conductivity
5) Water will be pumped from the well into a clean pitcher or bottle which will be used to fill the bottles from the laboratory. The bottles will be marked with the date, time, and site location of the sample as well as the person who collected the sample. If a pump controller system is used, the sample bottles may be filled directly from the well. Samples will be preserved and shipped in accordance with the method requirements. Filled sample bottles will then be placed in a cooler with ice for transport to the lab.
6) A chain of custody will be completed for the sample which indicates what analyses need to be performed, the date and time of sampling, sample identification, and who assembled the sample. The samples will be delivered to the lab the day of collection.

Field measurements will be reported consistent with industry standards for field sampling logbooks. An example of the logbook to be used is shown in Appendix 4.

4.5. Analytical Procedures

The results from the analytical water quality testing will be evaluated through comparison with the State groundwater quality standards. The Ewing Gravel Mine is not within any WQCC specified areas that would require conformance with anything other than statewide water quality standards. Baseline groundwater data can be found in Appendix 2.

4.5.1. Site-Specific Numeric Protection Levels

Based on the pre-mine baseline water quality data gathered at the Ewing Gravel Pit, the following Site-Specific Numeric Protection Levels are proposed for the parameters identified below. The Site-Specific Numeric Protection Levels is based on the two-sigma (95-percentile) statistical value for the parameter sampled. While this is the proposed standard from BURNCO, Site-Specific Numeric Protection Levels will ultimately be determined by the DRMS following the submittal of five quarters of baseline data. BURNCO commits to the submittal of Technical Revision (TR) with the Division to comply with the DRMS defined table value standards, as well as the DRMS' proposed action trigger levels and corrective actions.

Table 5. Proposed Ambient Standards

Parameter (mg/L)	Average	Two-Sigma	Reg 41 – Drinking Water	Reg 41 – Ag. Water	Reg 41 – Human Health	Samples in Excess of Standards
Manganese	0.325	1.20	0.05	0.2	N/A	4
Uranium	0.018	0.04	N/A	N/A	0.03	3

4.6. State Water Quality Standards

The analytical results of water quality testing during mining will be compared to the regulatory limits established by Water Quality Control Commission (WQCC) and those otherwise defined by the DRMS. The groundwater of the Ewing Gravel Mine is subject to the statewide groundwater quality standards as defined in Tables 1-4 of the WQCC Regulation 41. The site is not within any specified areas identified by the WQCC to have specific groundwater quality standards. Final site-specific standards will be determined by the DRMS and implemented as the exceedance action trigger level in a subsequent TR. If any exceedance of these standards or the ambient values are detected during mining at the Ewing Gravel Mine, the DRMS will be notified in accordance with Rule 3.1.7(9) and BURNCO will initiate a water quality mitigation plan as proposed by the DRMS.

If any exceedances of the WQCC Regulation 41 basic groundwater standards are encountered, BURNCO will implement the following reporting and mitigation procedures:

- Notify the DRMS of the exceedance within five (5) working days of receiving the analytical report from the laboratory.
- Implement DRMS proposed corrective actions, as defined in a subsequent TR, such as the following:
- Identify the potential cause or source of the exceedance.
- Implement supplemental water quality sampling. Sampling and testing of the groundwater well will be increased until the parameter(s) drop below the allowable limit. Only parameter(s) that were in exceedance will be measured as part of this supplemental sampling.
- Consult with the Weld County Department of Environmental Health on appropriate mitigation methods of the exceedance.
- Provide a report to Weld County staff and the DRMS with details of the exceedance, mitigation measures, and results.

4.7. Reporting

Baseline water quality and quantity data for the initial five quarters will be reported to the CDRMS prior to operations. Reporting of POC data will be included with the mine's annual

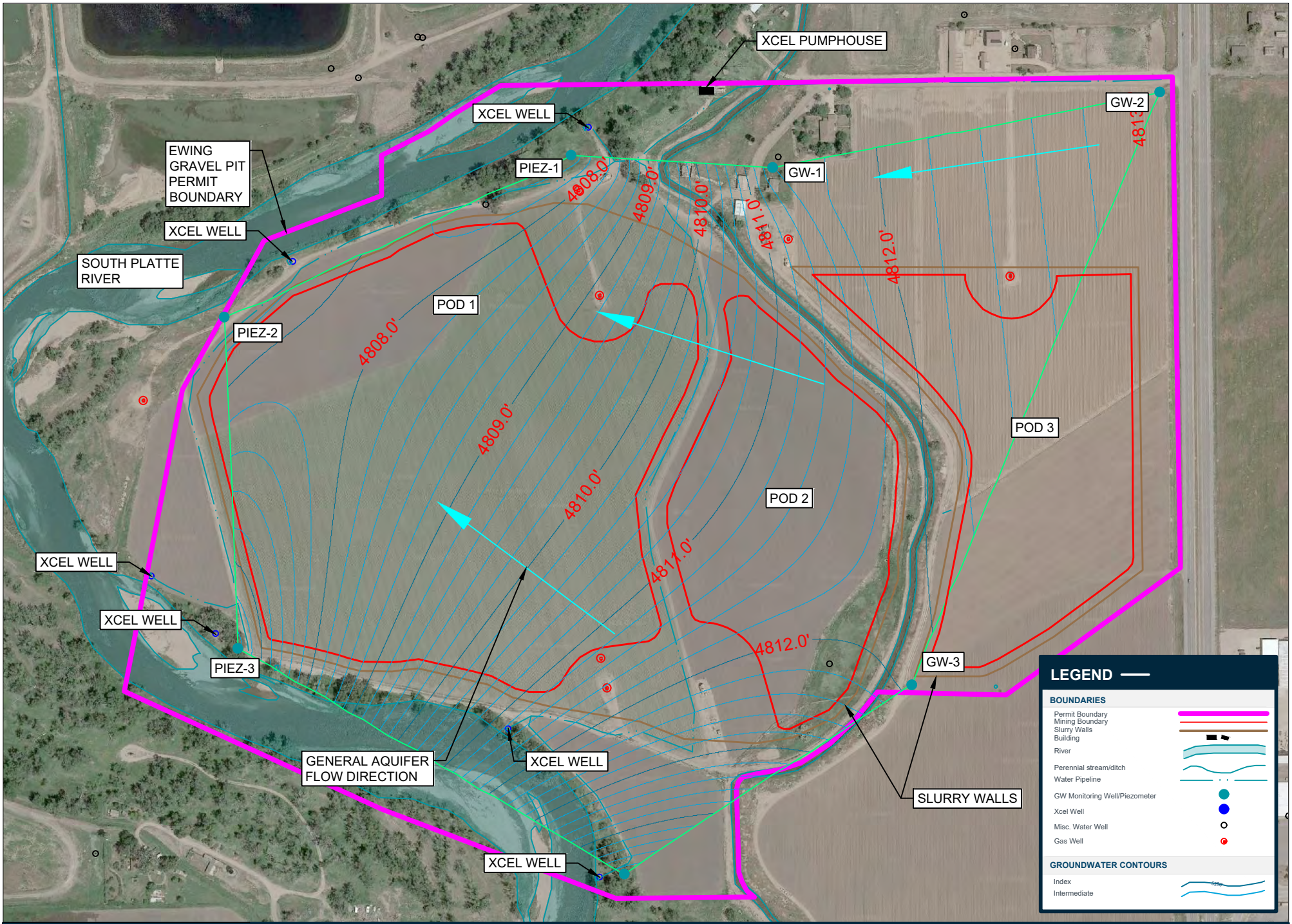
report. Data reporting will be in table format and graph format when necessary. If water quality sampling shows exceedances of the parameter table value standards as defined by the DRMS, they must immediately be reported to the Division.

BURNCO commits to the submittal of a TR containing the full set of baseline water quality data along with any proposed Numeric Protection Levels that exceed Table Value Standards. The TR will also include proposed groundwater elevation trigger levels and proposed corrective actions for DRMS review prior to the installation of the first slurry wall.

4.8. Sampling Quality Assurance Project Plan (QAPP)

BURNCO's quality assurance methods for water sampling includes only using Colorado State certified laboratories with an industry standard Quality Assurance/Quality Control plan in place. On-site quality assurance for field sampling is included in the Sampling Procedure described in Section 1.4. Certain steps of the procedure such as clearing three well volumes before sampling and using cleaned and calibrated testing equipment help to ensure that the testing results are accurate and free of altering contaminants. Any samples that are collected will include information on who took the sample, when it was taken, sample identification, and the chain of custody. A sample data collection sheet from previous baseline monitoring at the site is provided in Appendix 5.

Appendix 1 - Map



GW Monitoring Map

Ewing Gravel Pit

File Name: Groundwater Monitoring Plan Map

DRMS Permit Number: M-2023-033 — Burnco Colorado, LLC

Mine Entry Location: Latitude: 40.10910 Longitude: -104.81093

State: CO County: Weld Nearest Town: Fort Lupton

Section: 30 Township: 2N Range: 66W PM: 6th

Major Watershed: South Platte

Map Scale: 1": 400'

0 200 400

Map Geo. Info.: Datum: NAD83 Projection: CO NORTH

Survey Source: ---- Survey Date: ----

Imagery Source: GoogleEarth Imagery Date: 6/9/2017

Drawn by: SAC Date: 12/13/23

Checked by: BEL Date: 12/13/23

Approved by: BEL Date: 12/15/23

Lewicki & Associates

3375 West Powers Circle Littleton, CO USA 80123 (303)-346-5196 info@lewicki.biz

G-2 Well Map
Ewing Gravel Pit
DRMS Permit Number: N/A
BURNCO dba Bestway Concrete
Mine Entry Location: Latitude: 40.109098 Longitude: -104.810927
State: COLORADO County: Weld Nearest Town: Fort Lupton
Section: 30 Township: 2N Range: 66W PM: 6th
Major Watershed: South Platter River MSHA ID: ----
Map Scale: 1": 200'
0 200 400
N
Map Georeferencing Information: Datum: NAD83 Projection: CO NORTH
Survey Source: Drone
Imagery Source:GoogleEarth
Survey Date: 2019
Imagery Date: 6/9/2017
Drawn by: SAC Date: 12/15/23
Checked by: BEL Date: 12/15/23
Approved by: BEL Date: 12/15/23
File Name: Ewing Gravel-Maps 240104
Lewicki & Associates
3375 West Powers Circle
Littleton, CO USA 80123
(303)-346-5196
info@lewicki.biz
LEGEND
BUILDINGS AND RELATED STRUCTURES
Building
Well (other than water)
Well Name
Tanks
Fence
Easements
LAND SURVEYS
Public Land Survey System
Range or Township line
Range or Township labels
R1E T2N
Section line
Section numbers
1-36
Mining claim or property boundary
Mining claim or property monument
ROADS AND RELATED FEATURES
Highway
Light duty road, paved
Light duty road, gravel
Railroad
RIVERS, LAKES, SHORELINES, AND CANALS
Perennial stream/ditch
Perennial river
Perennial lake/pond
Waterwell
Well Name
Piezometer
Piezo. Name
Floodplain & Floodway
Pipeline
VEGETATION
Agricultural Fields
NWI Wetlands
Existing Trees
Soils (NRCS)
Soil ID
TRANSMISSION LINES AND PIPELINES
Power transmission line; pole; tower
Power transmission line, buried
Telephone/data line, above ground
Telephone/data line, buried
Pipeline (non-water), buried
MINING FEATURES
DRMS Permit Boundary
200' Offset of DRMS Permit Boundary
Affected Area Boundary
BASELINE CONTOURS
Index
Approximate of indefinite
Intermediate
Approximate of indefinite
PERMIT AREA: 156.7 ACRES
AFFECTED AREA: 127 ACRES
Xcel Well
Piez-1
Piez-2
Piez-3
Piez-4
GWell
GW-2
GW-3
130930200001
130930000039
130930000007
130930000033
130930100036
130930100035
130929000067
130931103001
130931104002
130931100068

Appendix 2 - Baseline Groundwater Quality Data

Missing Data		
Parameter	**Date(s)**	**Reason**
Lithium, Dissolved	All	Lithium testing was not available at chosen testing laboratory. Conditions of the site and mining make it unlikely for any lithium to be detected or impacted by the operation. This parameter will be tested in the future, and the defined Table Value standard of 2.5 mg/L will be accepted as the limit.
Mercury, Dissolved	9/28/22	This parameter was not tested at the laboratory for the first quarter of background. However, subsequent testing shows that this parameter is not detected.

	GW-1					GW-2					GW-3					
Parameter, Limit	9/28/22	2/8/23	3/30/23	6/29/23	12/12/23	9/28/22	2/8/23	3/30/23	6/29/23	12/12/2023	9/28/22	2/8/23	3/30/2023	6/29/23	12/12/23	Compiled Standards
Aluminum, Dissolved	ND	0.002	ND	0.003	ND	ND	0.006	0.002	0.005	.001	ND	0.003	0.006	0.003	ND	5.0
Antimony, Dissolved	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.006
Arsenic, Dissolved	0.0018	0.0008	0.0006	ND	0.002	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.01
Barium, Total	0.094	0.09	0.078	0.069	0.125	0.111	0.039	0.057	0.049	0.041	0.053	0.053	0.095	0.063	0.064	2.0
Beryllium, Dissolved	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.004
Boron, Dissolved	0.22	0.22	0.35	0.25	0.16	0.24	0.24	0.30	0.31	0.21	0.21	0.16	0.21	0.23	0.20	0.75
Cadmium, Dissolved	0.0001	0.0002	ND	0.0001	ND	ND	0.0002	0.0002	0.0002	0.0002	0.0002	0.0001	ND	0.0001	ND	0.005
Chloride	128.97	150.66	137.06	141.61	136.00	164.92	173.75	164.13	156.98	161.00	160.13	174.77	177.58	198.43	165.00	250
Chromium, Dissolved	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.1
Cobalt, Dissolved	0.0004	0.0008	0.0011	0.0016	0.0002	0.0009	0.001	0.001	0.0009	0.0009	0.0066	0.0058	0.0057	0.0078	0.002	0.05
Copper, Dissolved	0.0062	0.0015	0.0017	0.002	.003	0.0008	0.0009	0.0008	0.0008	.001	0.0025	0.0022	0.002	0.0029	.001	0.2
Cyanide-Weak Acid Dissociable	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
Field - Dissolved Oxygen	3.9	0.0033	0.001	0.69	4.8	2.75	0.0219	12.8937	1.13	5.27	0.9	ND	12.04	1.19	4.83	
Field - Electroconductivity	1290.0	0.01	0.0	1180.0	1073.0	893.0	ND	19.59	1614.0	1520.0	771.0	7.27	16.08	1506.0	1353.0	
Field - pH	6.9	7.2	7.1	7.3	7.0	7.8	7.3	7.4	7.4	6.9	7.4	7.3	10.2	7.5	6.9	6.5-8.5
Field - Temperature	20.0	20.0	20.0	19.4	14.0	15.5	20.0	20.0	15.9	13.8	17.8	20.0	20.0	14.4	12.2	
Field - Water Depth	4811.00	4808.80	4810.02	4812.91	4810.18	4810.60	4806.70	4809.99	4814.32	4811.40	4810.70	4806.70	4809.33	4813.63	4810.74	
Fluoride	0.91	1.52	1.5	1.45	0.76	1.58	1.69	1.64	1.65	1.63	1.24	1.32	1.26	1.21	1.09	2.0
Iron, Dissolved	0.007	0.027	0.012	ND	0.006	ND	ND	ND	ND	ND	ND	ND	ND	0.012	ND	0.3
Lead, Dissolved	ND	ND	ND	ND	0.000	ND	ND	ND	ND	ND	ND	ND	ND	0.000	ND	0.05
Manganese, Dissolved	0.001	0.057	0.065	0.102	0.001	0.571	1.1	0.995	0.999	0.926	0.001	0.004	0.005	0.004	0.002	0.05
Mercury, Dissolved		ND	ND	ND	ND		ND	ND	ND	ND		ND	ND	ND	ND	0.002
Molybdenum, Dissolved	0.006	0.004	0.004	0.004	0.004	0.009	0.006	0.005	0.004	0.005	0.003	0.004	0.004	0.003	0.003	0.21
Nickel, Dissolved	0.0023	0.003	0.003	0.0038	0.0016	0.0033	0.0032	0.0031	0.0029	0.003	0.0052	0.0052	0.0046	0.0054	0.0023	0.1
Nitrate Nitrogen	0.72	5.9	4.1	3.95	3.01	7.27	7.83	7.28	7.91	6.27	2.9	3.7	4.94	9.4	9.35	10.0
Nitrate/ Nitrite Nitrogen	0.72	5.9	4.1	3.95	3.01	7.27	7.83	7.28	7.91	6.27	2.9	3.7	4.94	9.4	9.35	10.0
Nitrite Nitrogen	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.0
Selenium, Dissolved	ND	0.002	ND	ND	0.001	0.007	0.01	0.011	0.01	0.009	ND	ND	ND	ND	0.002	0.02
Silver, Dissolved	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.05
Sulfate	144.6	198.1	167.4	166.0	257.0	276.1	286.6	266.0	243.6	257.0	168.6	187.3	186.7	202.6	198.0	250
Thallium, Dissolved	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0002	ND	ND	ND	ND	0.002
Total Dissolved Solids	596.0	757.0	699.0	704.0		1012.0	1047.0	1029.0	1009.0		733.0	738.0	788.0	918.0		400 or 1.25x Background
Uranium, Dissolved	0.0084	0.0167	0.0094	0.0097	0.0074	0.0219	0.0398	0.0366	0.0338	0.29	0.0069	0.0082	0.0082	0.02	0.0127	0.0168 - 0.03
Vanadium, Dissolved	0.001	ND	ND	ND	0.001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.1
Zinc, Dissolved	0.001	ND	0.001	0.001	ND	ND	ND	ND	ND	ND	0.001	ND	ND	ND	ND	2.0

Appendix 3 – CDWR Permits

Documents provided in the following order:

ID	CDWR Permit No.
GW-1	151398-A
GW-2	297891-
GW-3	297890-
Piez-1	329516-
Piez-2	329532-
Piez-3	329517-
Piez-4	329518-

WRJ-25-75

TYPE OR PRINT IN BLACK INK. COPY OF ACCEPTED STATEMENT MAILED ON REQUEST.

COLORADO DIVISION OF WATER RESOURCES

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

RECEIVED
DEC 0 1 1988
WATER RESOURCES
STATE ENGINEER
COLO.

STATE OF COLORADO
COUNTY OF Weld } SS.

AFFIDAVIT

_x_ STATEMENT OF BENEFICIAL USE OF GROUND WATER
_____ AMENDMENT OF EXISTING RECORD
_____ LATE REGISTRATION

PERMIT NUMBER 151399-X

LOCATION OF WELL

THE AFFIANT(S) Dale Ewing whose mailing address is 7503 Hwy. 85

City Fort Lupton (STATE) Co. 80621 (ZIP)

County Weld

NE ¼ of the SE ¼, Section 30

Twp. 2 N (N OR S), Rng. 66 W (E OR W), 6 P M

being duly sworn upon oath, deposes and says that he (they) is (are) the owner(s) of the well described hereon; the well is located as described above, at distances of 2600 feet from the south (NORTH OR SOUTH) section line and 1200 feet from the east (EAST OR WEST) section line; water from this well was first applied to a beneficial use for the purpose(s) described herein on the 5 day of Oct., 1988; the maximum sustained pumping rate of the well is 15 gallons per minute, the pumping rate claimed hereby is 15 gallons per minute; the total depth of the well is 55 feet; the average annual amount of water to be diverted is 1 acre-feet; for which claim is hereby made for Domestic purpose(s); the legal description of the land on which the water from this well is used is NE 1/4 SE 1/4 Sec. 30 Twp. 2 N Rng/ 66 W 6 P.M. of which 10,000 Sq. ft. acres are irrigated and which is illustrated on the map on the reverse side of this form; that this well was completed in compliance with the permit approved therefor; this statement of beneficial use of ground water is filed in compliance with law; he (they) has (have) read the statements made hereon; knows the content thereof; and that the same are true of his (their) knowledge.

(COMPLETE REVERSE SIDE OF THIS FORM)

Signature(s) Dale W. Ewing

Subscribed and sworn to before me on this 17 day of November, 1988

My Commission Expires Feb. 12, 1991

My Commission expires: _____ (SEAL)

Margaret J. Clement
NOTARY PUBLIC

ACCEPTED FOR FILING BY THE STATE ENGINEER OF COLORADO PURSUANT TO THE FOLLOWING CONDITIONS:

THAT THOSE CONDITIONS OF APPROVAL AS STATED ON THE PERMIT ARE COMPLIED WITH.

FOR OFFICE USE ONLY

Court Case No. _____

Prior. _____ Mo. _____ Day _____ Yr. _____

Div. 1 Cty. 62

Sec. _____ _____ ¼ _____ ¼ _____ ¼

Well Use 8 _____ _____ _____

Dist. 2 Basin _____ Man Dis. _____

SEP 25 1989
DATE

Jim A. Davidson
STATE ENGINEER

Melissa Long
BY

Well drilled by R & R Well & Pump Inc. Lic. No. 857

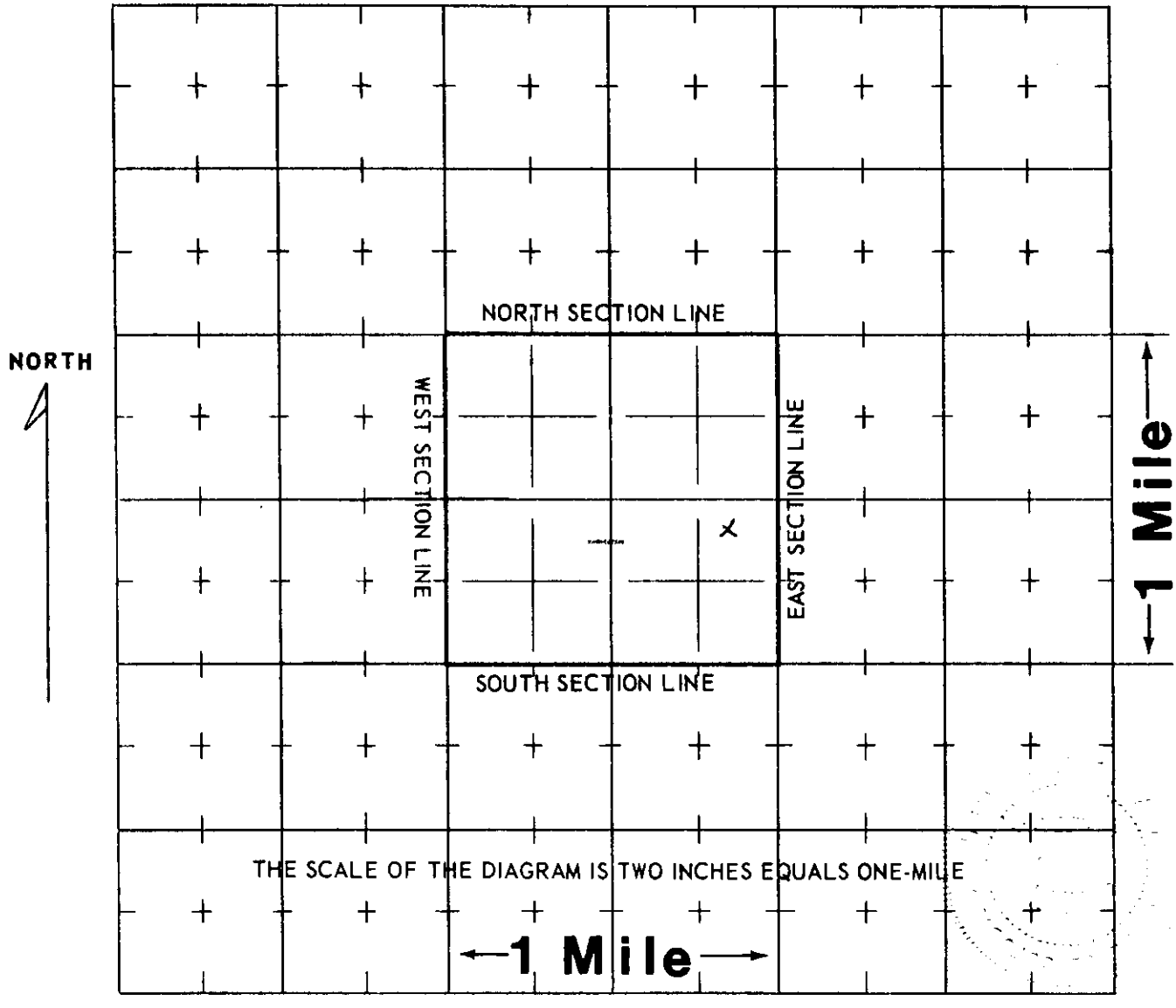
Permanent
Pump installed by Spains Pump Service Lic. No. 715

Meter Serial No. _____ ☐ Flow Meter Date Installed 10-5-88

Owner of land on which
water is being used Dale Ewing

THE LOCATION OF THE WELL MUST BE SHOWN AND FOR LARGE CAPACITY IRRIGATION WELLS THE AREA ON WHICH THE WATER IS USED MUST BE SHADED OR CROSS-HATCHED ON THE DIAGRAM BELOW.

This diagram represents nine (9) sections. Use the **CENTER SQUARE** (one section) to indicate the location of the well, if possible.



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).
1 acre-foot . . . 43,560 cubic feet . . . 325,900 gallons.
1,000 gpm pumped continuously for one day produces 4.42 acre-feet.
100 gpm pumped continuously for one year produces 160 acre-feet.

**(WHITE AND PINK COPY TO BE FILED WITH THE STATE ENGINEER
PINK COPY WILL BE RETURNED TO OWNER)**

WJR-26-77

PIEAD

10-3-88

RECEIVED

JAN 2 5 1989

WATER RESOURCES
STATE ENGINEER
COLO.

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

COLORADO DIVISION OF WATER RESOURCES

1313 Sherman Street - Room 818
Denver, Colorado 80203

WELL COMPLETION AND PUMP INSTALLATION REPORT

PERMIT NUMBER 151399-A

WELL OWNER Dale Ewing

ADDRESS 7503 Hwy. 85, Ft. Lupton, CO 80621

DATE COMPLETED 9/26/ , 19 88

NE ¼ of the SE ¼ of Sec. 30 ,

T. 2 N , R. 66 W , 6 P.M.

WELL LOG

From	To	Type and Color of Material	Water Loc.

TOTAL DEPTH ______

Use additional pages necessary to complete log.

HOLE DIAMETER

_____ in. from _____ to _____ ft.

_____ in. from _____ to _____ ft.

_____ in. from _____ to _____ ft.

DRILLING METHOD ______

CASING RECORD:

Plain Casing

Size _____ & kind _____ from _____ to _____ ft.

Size _____ & kind _____ from _____ to _____ ft.

Size _____ & kind _____ from _____ to _____ ft.

Perforated Casing

Size _____ & kind _____ from _____ to _____ ft.

Size _____ & kind _____ from _____ to _____ ft.

Size _____ & kind _____ from _____ to _____ ft.

GROUTING RECORD

Material ______

Intervals ______

Placement Method ______

GRAVEL PACK:

Size ______

Interval ______

TEST DATA

Date Tested ______ , 19 ___

Static Water Level Prior to Test ______ ft.

Type of Test Pump ______

Length of Test ______

Sustained Yield (Metered) ______

Final Pumping Water Level ______

PUMP INSTALLATION REPORT

Pump Make JACUZZI

Type submersible

Powered by electricity HP 3/4

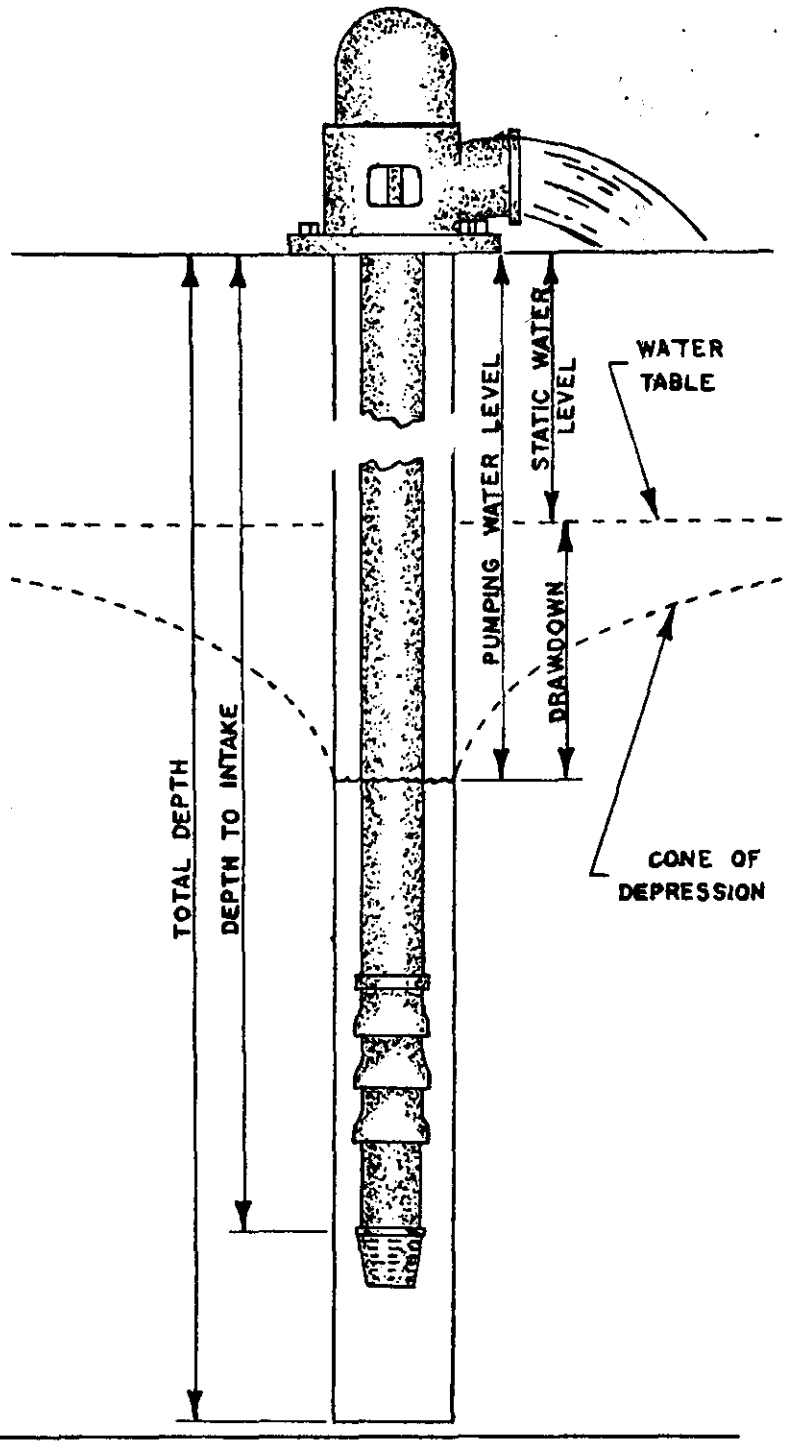
Pump Serial No. 5AUG88

Motor Serial No. F-88

Date Installed 10/5/88

Pump Intake Depth 40'

Remarks



WELL TEST DATA WITH PERMANENT PUMP

Date Tested 10/5/88

Static Water Level Prior to Test 19'

Length of Test Two (2) Hours

Sustained yield (Metered) Fifteen(15) GPM

Pumping Water Level 21'

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 Thomas A. Quinn License No. 715

State of Colorado, County of Weld SS

Subscribed and sworn to before me this 24 day of January, 1989.

My Commission expires: Nov. 2, 1992

Notary Public Linda D. McCollam

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.

WJR-

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

SP MAHEAD

10-3-88

COLORADO DIVISION OF WATER RESOURCES

1313 Sherman Street - Room 818
Denver, Colorado 80203

RECEIVED
DEC 0 1 1988
WATER RESOURCES STATE ENGINEER COLO.

WELL COMPLETION AND PUMP INSTALLATION REPORT

PERMIT NUMBER 151399-A

WELL OWNER Dale Ewing

ADDRESS 7503 Hwy. 85 Fort Lupton, Co.

DATE COMPLETED 9-28 , 1988

NE ¼ of the SE ¼ of Sec. 30 ,

T. 2 N , R. 66 W , 6 P.M.

WELL LOG

From	To	Type and Color of Material	Water Loc.
0	3	Top soil	
3	10	Coarse sand/fine gravel	
10	20	Pea gravel-1" gravel	x
20	41	Coarse sand/ pea gravel	x
41	43	Gray clay	
43	53	Pea gravel	x
53	55	Shale	

TOTAL DEPTH 55

Use additional pages necessary to complete log.

HOLE DIAMETER

7 7/8 in. from 0 to 55 ft.

_____ in. from _____ to _____ ft.

_____ in. from _____ to _____ ft.

DRILLING METHOD Rotary

CASING RECORD:

Plain Casing

Size 5 & kind PVC from +1 to 35 ft.

Size _____ & kind _____ from _____ to _____ ft.

Size _____ & kind _____ from _____ to _____ ft.

Perforated Casing

Size 5 & kind PVC from 35 to 55 ft.

Size _____ & kind _____ from _____ to _____ ft.

Size _____ & kind _____ from _____ to _____ ft.

GROUTING RECORD

Material cement

Intervals 0-10

Placement Method poured

GRAVEL PACK: Size 3/8

Interval 10-55

TEST DATA

Date Tested 9-28 , 1988

Static Water Level Prior to Test 19 ft.

Type of Test Pump Bailed

Length of Test 2½ Hrs.

Sustained Yield (Metered) 15 GPM

Final Pumping Water Level 23'

PUMP INSTALLATION REPORT

Pump Make Not installed by R & R

Type _____

Powered by _____ HP _____

Pump Serial No. _____

Motor Serial No. _____

Date Installed _____

Pump Intake Depth _____

Remarks _____

_____

WELL TEST DATA WITH PERMANENT PUMP

Date Tested Not installed by R & R

Static Water Level Prior to Test _____

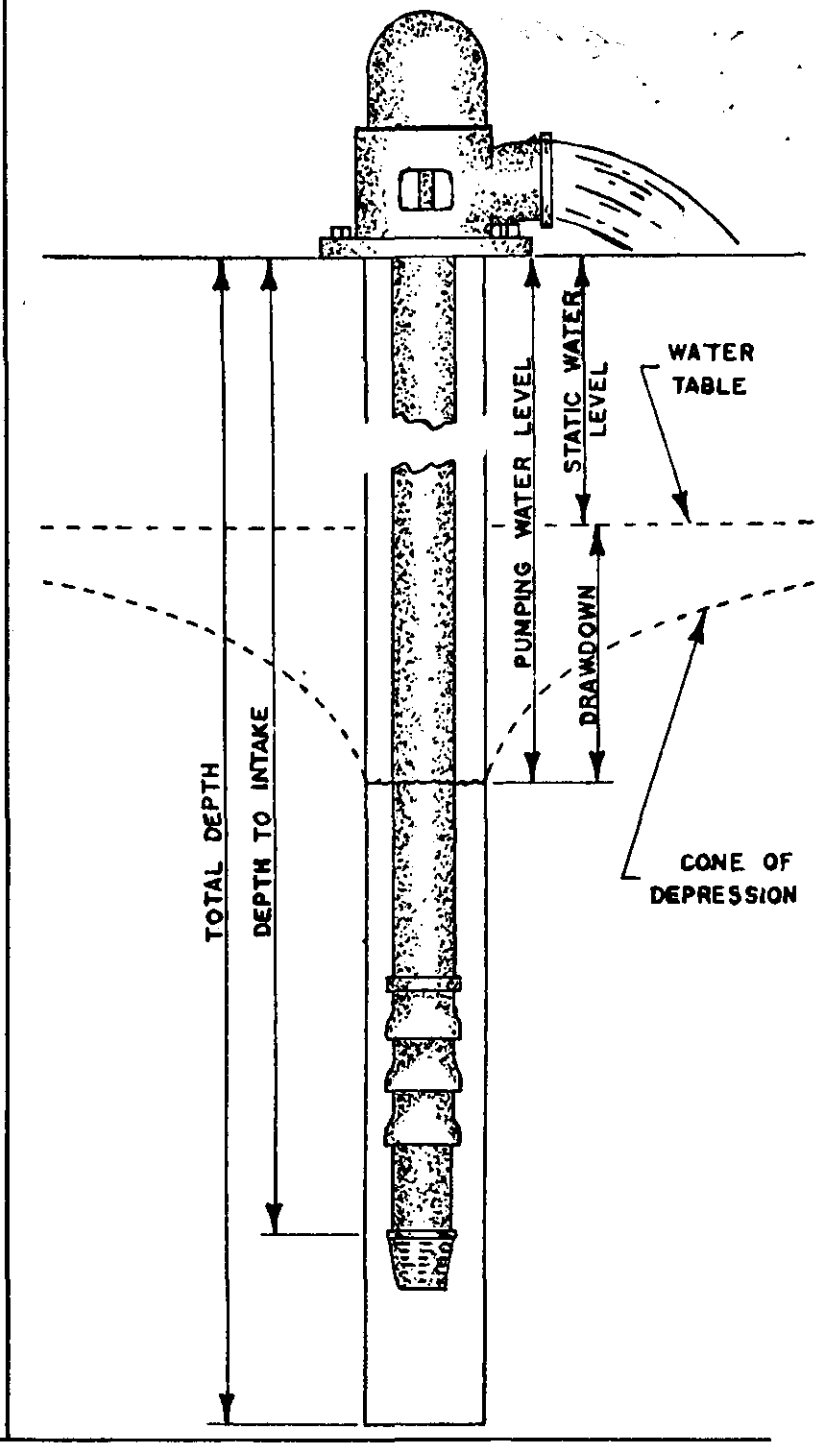
Length of Test _____ Hours

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 _____ License No. 857

State of Colorado, County of Weld SS

Subscribed and sworn to before me this 17 day of November, 1988.

My Commission Expires:

My Commission expires: Feb. 12, 1991, 19___.

Notary Public Margaret J Clement

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.

Verbal #

WRJ-5-Rev. 76

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.

RECEIVED
SEP 28 1988
WATER CONSERVATION BOARD

FOR: ( ) A PERMIT TO USE GROUND WATER
( ) A PERMIT TO CONSTRUCT A WELL
( ) A PERMIT TO INSTALL A PUMP
(X) REPLACEMENT FOR NO. 151399
( ) OTHER
WATER COURT CASE NO.

09-28-88 8:54 A
232472 20.00
RECEIPT P0015
TL 20.00
TOTAL 20.00

(1) APPLICANT - mailing address

NAME Dale W. Ewing

STREET 7503 U.S. Hwy. 85

CITY Ft. Lupton, Colo. 80621 (State) (Zip)

TELEPHONE NO. 857-4319

(2) LOCATION OF PROPOSED WELL

County Weld

NE ¼ of the SE ¼, Section 30

Twp. 2 N (N,S), Rng. 66 W (E,W), 6th 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

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

Proposed total depth (feet): 40

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 Licensed

Street

City (State) (Zip)

Telephone No. Lic. No.

FOR OFFICE USE ONLY: DO NOT WRITE IN THIS COLUMN

Receipt No. 92789 CL-1 242789

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.

ISSUANCE OF THIS PERMIT DOES NOT CONFER A DECREED WATER RIGHT

1) APPROVED PURSUANT TO CRS 37-92-602(3)(c) FOR THE RELOCATION OF EXISTING WELL PERMIT NO. 151399. THE EXISTING WELL MUST BE PLUGGED AND ABANDONED ACCORDING TO THE RULES AND REGULATIONS FOR WATER WELL CONSTRUCTION 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 ORDINARY HOUSEHOLD PURPOSES INSIDE ONE SINGLE FAMILY DWELLING, THE WATERING OF DOMESTIC ANIMALS, AND THE IRRIGATION OF NOT MORE THAN 10,000 SQUARE FEET OF HOME GARDENS AND LAWNS.

3) THE DEPTH OF THIS WELL SHALL NOT EXCEED 40 FEET.

JWB 9/30/88

APPLICATION APPROVED

PERMIT NUMBER 151399-A

DATE ISSUED OCT 03 1988

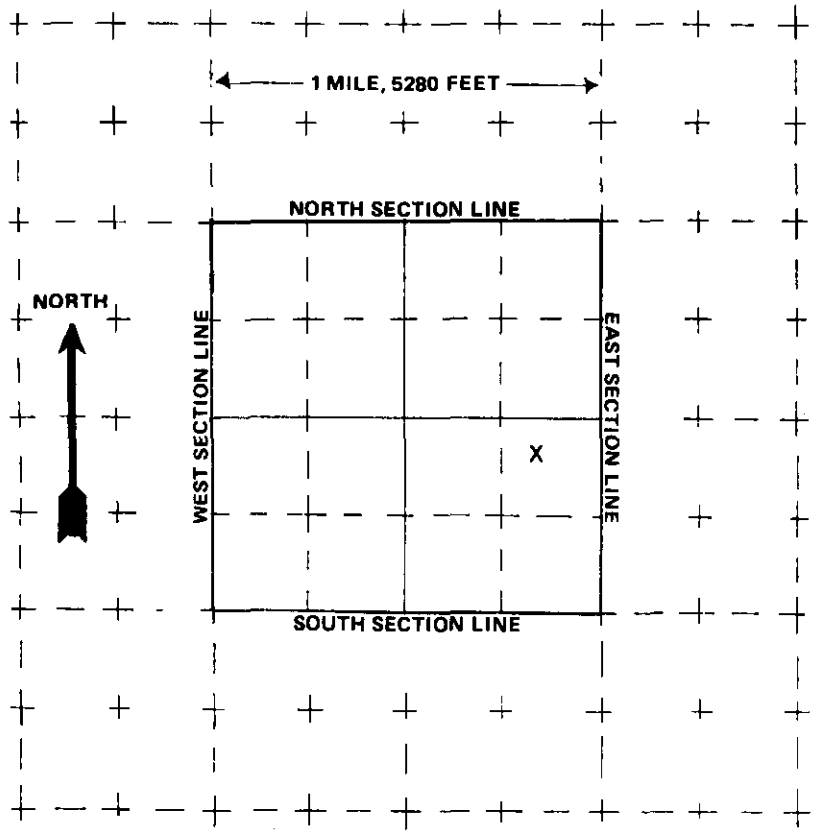
EXPIRATION DATE OCT 03 1990

Jim A. Davidson
(STATE ENGINEER)

BY John W. Billingsley

I.D. 1702 COUNTY 62

(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.

2600 ft. from South (north or south) sec. line

1200 ft. from East (east or west) sec. line

LOT _____ BLOCK _____ FILING # _____

SUBDIVISION _____

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

No. of acres 156. Will this be the only well on this tract? no

(8) PROPOSED CASING PROGRAM

Plain Casing

6 5/8 in. from 0 ft. to 20 ft.

_____ in. from _____ ft. to _____ ft.

Perforated casing

4 1/2 in. from 20 ft. to 40 ft.

_____ in. from _____ ft. to _____ ft.

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

Offset - old well will be plugged and abandoned per rules and regs.

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

Owner(s): _____ No. of acres: _____

Legal description: _____

(11) DETAILED DESCRIPTION of the use of ground water: **Household use and domestic wells must indicate type of disposal system to be used.** Domestic - one single family dwelling, watering of domestic animals and livestock, the irrigation of 10,000 sq. ft. of home gardens and lawns and fire protection. Existing septic tank and leach field.

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

Type or right	Used for (purpose)	Description of land on which used
3 wells	1 domestic, 2 irrigation	

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

Dale W. Ewing

SIGNATURE OF APPLICANT(S)

Use additional sheets of paper if more space is required.

EXEMPT WELL DATA SHEET - DENVER BASIN, COLORADO

APPLICANT: DALE EWING RECEIPT NO. 292789
LOCATION: NE1/4 OF SE1/4 OF SEC. 30, T.2N., R.66W. (2600 SSL, 1200 ESL)

PROPOSED AQUIFER:
SURFACE ELEVATION: 4880 NUMBER OF ACRES IN TRACT: 156

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

evaluated by JWB on SEPTEMBER 30, 1988

	ELEVATION			DEPTH TO		ANNUAL	
			NET			APPROP	STATUS
AQUIFER	BOT.	TOP	SAND	BOT.	TOP	A-F	
UPPER DAWSON	----	----	----	----	----	----	---
LOWER DAWSON	----	----	----	----	----	----	---
DENVER	----	----	----	----	----	----	---
UPPER ARAPAHOE	----	----	----	----	----	----	---
LOWER ARAPAHOE	----	----	----	----	----	----	---
LARAMIE-FOX HILLS	4207	4449	142	673	431	33.228	NT

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

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

EXEMPT WELL DATA SHEET - DENVER BASIN, COLORADO

APPLICANT: DALE EWING RECEIPT NO. 292789
LOCATION: NE1/4 OF SE1/4 OF SEC. 30, T.2N., R.66W. (2600 SSL, 1200 ESL)

PROPOSED AQUIFER:
SURFACE ELEVATION: 4880 NUMBER OF ACRES IN TRACT: 156

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

evaluated by JWB on SEPTEMBER 30, 1988

AQUIFER	ELEVATION BOT.	ELEVATION TOP	NET SAND	DEPTH TO BOT.	DEPTH TO TOP	ANNUAL APPROP A-F	STATUS
UPPER DAWSON	----	----	----	----	----	----	---
LOWER DAWSON	----	----	----	----	----	----	---
DENVER	----	----	----	----	----	----	---
UPPER ARAPAHOE	----	----	----	----	----	----	---
LOWER ARAPAHOE	----	----	----	----	----	----	---
LARAMIE-FOX HILLS	4207	4449	142	673	431	33.228	NT

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

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

COLORADO
Division of Water Resources
Department of Natural Resources

WELL PERMIT NUMBER 151399--A
RECEIPT NUMBER 0292789

ORIGINAL PERMIT APPLICANT(S)

DALE EWING

APPROVED WELL LOCATION

Water Division: 1 Water District: 2
Designated Basin: N/A
Management District: N/A
County: WELD
Parcel Name: N/A
Physical Address: 7501 U.S. 85 FORT LUPTON, CO 80621

NE 1/4 SE 1/4 Section 30 Township 2.0 N Range 66.0 W Sixth P.M.

UTM COORDINATES (Meters, Zone: 13, NAD83)

Easting: 515774.2 Northing: 4439874.7

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 www.water.state.co.us

Date Issued: 10/3/1988
Expiration Date: 10/3/1990

Issued By

PERMIT HISTORY

01-28-2019	CHANGE IN OWNER NAME/MAILING ADDRESS. CHANGED TO TRICYCLE LANE TEXASS LLC (HAHNE, CLIFFORD)
01-08-2019	CHANGE IN OWNER NAME/MAILING ADDRESS. CHANGED TO BURNCO COLORADO LLC (HAHNE, CLIFFORD)

FORM NO. GWS-31 04/2005

WELL CONSTRUCTION AND TEST REPORT

STATE OF COLORADO, OFFICE OF THE STATE ENGINEER
1313 Sherman St., Room 818, Denver, CO 80203
Phone – Info (303) 866-3587 Main (303) 866-3581
Fax (303) 866-3589 http://www.water.state.co.us

For Office Use Only

RECEIVED
MAY 07 2015
WATER RESOURCES
STATE ENGINEER
COLO

1. WELL PERMIT NUMBER: 053510-MH

2. WELL OWNER INFORMATION

NAME OF WELL OWNER: L.G. Everist, Inc.

MAILING ADDRESS: 7321 E. 88th Avenue, Suite 200, Henderson, CO

CITY: Henderson STATE: CO ZIP CODE: 80604

TELEPHONE NUMBER: (303) 286-2248

3. WELL LOCATION AS DRILLED: NE1/4, SE1/4, Sec. 30, Twp. 2 ☒ N or ☐ S, Range 66 ☐ E or ☒ W

DISTANCES FROM SEC. LINES: _____ ft. from ☐ N or ☐ S section line and _____ ft. from ☐ E or ☐ W section line.

SUBDIVISION: _____, LOT _____, BLOCK _____, FILING (UNIT) _____

Optional GPS Location: GPS Unit must use the following settings: Format must be **UTM**, Units must be **meters**, Datum must be **NAD83**, Unit must be set to **true N**, ☒ Zone 12 or ☒ Zone 13

Owner's Well Designation: LGEBH01

Easting: 516105

STREET ADDRESS AT WELL LOCATION:

Northing: 4439852

4. GROUND SURFACE ELEVATION 4893 feet DRILLING METHOD Hollow Stem Augers

DATE COMPLETED 4/6/15 TOTAL DEPTH 60.0' feet DEPTH COMPLETED 58.0' feet

5. GEOLOGIC LOG:

Depth	Type	Grain Size	Color	Water Loc.
0.0-6.5'	Topsoil	Sandy Clay	Brown	
6.5-55'	Alluvuim	Sand Grav	Pink Brown	x
55.0-60'	Bedrock	Clay	Gray	

6. HOLE DIAM (in.)

	From (ft)	To (ft)
8	0	58

7. PLAIN CASING:

OD (in)	Kind	Wall Size (in)	From (ft)	To (ft)
2.375	PVC	.154	43	-3.0
2.375	PVC	.154	58'	53'

PERFORATED CASING: Screen Slot Size (in): 0.01

2.375	PVC	.154	53.0	43.0

8. FILTER PACK:

Material Sand
Size 10/20
Interval 58-10'

9. PACKER PLACEMENT:

Type
Depth

10. GROUTING RECORD

Material	Amount	Density	Interval	Placement

Remarks: Bentonite Seal 10'-7.0',
Cutting 4.5'-1'
Stick Up Casing w/ concret surface completion

11. DISINFECTION: Type Amt. Used

12. WELL TEST DATA: ☐ Check box if Test Data is submitted on Form Number GWS 39 Supplemental Well Test.

TESTING METHOD NA

Static Level 18.5 ft. Date/Time measured: 4/1/2015, Production Rate _____ gpm.

Pumping Level _____ ft. Date/Time measured _____, Test Length (hrs) _____

Remarks:

13. I have read the statements made herein and know the contents thereof, and they are true to my knowledge. This document is signed 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 $5000 and/or revocation of the contracting license.]

Company Name:	Phone:	License Number:
Deere & Ault Consultants	(303)651-1468	NA

Mailing Address: 600 S. Airport Rd. Bldg A Suite 205

RECEIVED
MAR 26 2015
WATER RESOURCES
STATE ENGINEER
COLO

GWS-51
3/2013

NOTICE OF INTENT TO CONSTRUCT MONITORING HOLE(S)

Please type or print legibly in black or blue ink or file online @ dwrpermitsonline@state.co.us
COLORADO DIVISION OF WATER RESOURCES-1313 SHERMAN ST-STE 821-DENVER-CO-80203
PHONE: 303-866-3581---FAX: 303-866-3589 WEB: www.water.state.co.us

Well Owner Name(s): L.G. Everist, Inc.
Address : 7321 E. 88th Avenue, Suite 200, Henderson, CO
Phone (area code & no.): 303-286-2248
Landowner's Name: DW Ewing Farms

Please check one and complete as indicated including contact info:

☐ Water Well Driller Licensed in Colorado – Lic. No. _____

☐ Professional Engineer Registered in Colorado – Reg. No. _____

☐ Professional Geologist per CRS 34-1-201(3)

■ Other -anyone directly employed by or under the supervision of a licensed driller, registered professional engineer or professional geologist

Contact / Company Deere & Ault Consultants, Inc.
Address 600 South Airport Rd., BLDG A, STE 205
City, State & Zip Longmont, Colorado 80503
Phone 303-651-1468 Fax 303-651-1469

Print Name: Theodore Deere
Sign or enter full name here: Theodore Deere

Location: NE ¼ SE ¼, Section 30
Township 2 ☒N ☐S, Range 66 ☐E ☒W, 6 PM
County Weld
Subdivision: _____
Lot: _____ Block: _____ Filing Unit: _____
Site/Property Address _____

GPS Location in UTM format (optional):
Set GPS unit to true north, datum NAD83, and use meters for the distance units, ☐ Zone 12 or ☒ Zone 13.
Easting _____ Northing _____

# of Monitoring Hole(s) to be constructed: 1
Estimated Depth 40 **Ft., Aquifer** Unconfined
Purpose of Monitoring Hole(s) Measure shallow water levels

Anticipated Date of Construction (mm/dd/yyyy) 04/01/2015

Date Notice Submitted (mm/dd/yyyy): 03/26/2015
(Must be at least 3 days prior to construction)

ACKNOWLEDGEMENT FROM STATE ENGINEER'S OFFICE
FOR OFFICE USE ONLY

053510 - MH PROCESSED BY JM

DIV. 1 WD 2 BAS _____ MD _____ DATE ACKNOWLEDGED 03/26/2015

CONDITIONS OF MONITORING HOLE ACKNOWLEDGEMENT

A COPY OF THE WRITTEN NOTICE OR ACKNOWLEDGEMENT SHALL BE AVAILABLE AT THE DRILLING SITE.

1) **Notice was provided to the State Engineer at least 3 days prior to construction of monitoring & observation hole(s).**
2) **Construction of the hole(s) must be completed within 90 days of the date notice was given to the State Engineer.** Testing and/or pumping shall not exceed a total of 200 hours unless prior written approval is obtained from the State Engineer. Water diverted during testing shall not be used for beneficial purposes. The owner of the hole(s) is responsible for obtaining permit(s) and complying with all rules and regulations pertaining to the discharge of fluids produced during testing.
3) **All work must comply with the Water Well Construction Rules, 2 CCR 402-2.** Minimum construction standards must be met or a variance obtained. Standard permit application and work report forms, including **online filing instructions**, are found on the DWR website at http://www.water.state.co.us. **Well Construction and Test Reports (GWS-31)** must be completed for each hole drilled. The licensed contractor or authorized individual must submit the completed forms to this office within 60 days of monitoring hole completion.
4) **Unless a well permit is obtained, or variance approved, the hole(s) must be plugged and sealed within one (1) year after construction. An Abandonment Report (form GWS-9) must be submitted within 60 days of plugging & sealing.** The above MH acknowledgement number, owner's structure name, and owner's name and address must be provided on all well permit application(s), well construction and abandonment reports.
5) **The owner of the hole(s) shall maintain records of water quality testing and submit this data to the State Engineer upon request.**
6) **A MONITORING HOLE CANNOT BE CONVERTED TO A PRODUCTION WATER WELL, except for purposes of remediation (recovery) or as a permanent dewatering system, if constructed in accordance with the Water Well Construction Rules and policies of the State Engineer.**
7) **IF HOLES WILL NOT BE CONSTRUCTED UNDER THIS NOTICE WITHIN 90 DAYS, PLEASE WRITE, "NO HOLES CONSTRUCTED" ON A COPY OF THE ACKNOWLEDGED NOTICE WITH THE FILE NUMBER AND FAX THE COPY TO THE DIVISION OF WATER RESOURCES.**

THIS ACKNOWLEDGEMENT OF NOTICE DOES NOT INDICATE THAT WELL PERMIT(S) CAN BE APPROVED.

FORM NO. GWS-31 04/2005

WELL CONSTRUCTION AND TEST REPORT

STATE OF COLORADO, OFFICE OF THE STATE ENGINEER
1313 Sherman St., Room 818, Denver, CO 80203
Phone – Info (303) 866-3587 Main (303) 866-3581
Fax (303) 866-3589 http://www.water.state.co.us

For Office Use Only

RECEIVED

MAY 07 2015

WATER RESOURCES
STATE ENGINEER
COLO

1. **WELL PERMIT NUMBER:** 053509-MH 297890

2. **WELL OWNER INFORMATION**

NAME OF WELL OWNER: L.G. Everist, Inc.

MAILING ADDRESS: 7321 E. 88th Avenue, Suite 200, Henderson, CO

CITY: Henderson STATE: CO ZIP CODE: 80604

TELEPHONE NUMBER: (303) 286-2248

3. WELL LOCATION AS DRILLED: SE1/4, SE1/4, Sec. 30, Twp. 2 ☒ N or ☐ S, Range 66 ☐ E or ☒ W

DISTANCES FROM SEC. LINES: _____ ft. from ☐ N or ☐ S section line and _____ ft. from ☐ E or ☐ W section line.

SUBDIVISION: _____, LOT ____, BLOCK ____, FILING (UNIT) ____

Optional GPS Location: GPS Unit must use the following settings: Format must be **UTM**, Units must be **meters**, Datum must be **NAD83**, Unit must be set to **true N**, ☐ Zone 12 or ☒ Zone 13

Owner's Well Designation: LGEBH04

Easting: 515870

STREET ADDRESS AT WELL LOCATION:

Northing: 4439337

4. GROUND SURFACE ELEVATION 4889 feet DRILLING METHOD Hollow Stem Augers

DATE COMPLETED 4/6/15 TOTAL DEPTH 55.0' feet DEPTH COMPLETED 51.0' feet

5. GEOLOGIC LOG:

Depth	Type	Grain Size	Color	Water Loc.
0.0-3.5'	Topsoil	Sandy Clay	Gray Brown	
3.5-52.5'	Alluvuim	Sand Gravl	Pink Brown	x
52.5-55.0'	Bedrock	Clay	Gray	

6. HOLE DIAM (in.)

	From (ft)	To (ft)
8	0	55.0

7. PLAIN CASING:

OD (in)	Kind	Wall Size (in)	From (ft)	To (ft)
2.375	PVC	.154	36.0'	-3.0'
2.375	PVC	.154	51'	46'

PERFORATED CASING: Screen Slot Size (in): 0.01

OD (in)	Kind	Wall Size (in)	From (ft)	To (ft)
2.375	PVC	.154	46.0'	36.0'

8. FILTER PACK:
Material Sand
Size 10/20
Interval 51.0'-10'

9. PACKER PLACEMENT:
Type
Depth

10. GROUTING RECORD

Material	Amount	Density	Interval	Placement

Remarks: Bentonite Seal 10.0'-6.0'
Cutting 6.0-1', Hole Caved 55-51'
Stick Up Casing w/ concret surface completion

11. DISINFECTION: Type Amt. Used

12. WELL TEST DATA: ☐ Check box if Test Data is submitted on Form Number GWS 39 Supplemental Well Test.

TESTING METHOD NA

Static Level 19.1 ft. Date/Time measured: 4/6/2015, Production Rate _____ gpm.

Pumping Level _____ ft. Date/Time measured _____, Test Length (hrs) _____.

Remarks:

13. I have read the statements made herein and know the contents thereof, and they are true to my knowledge. This document is signed 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 $5000 and/or revocation of the contracting license.]

Company Name:	Phone:	License Number:
Deere & Ault Consultants	(303)651-1468	NA

Mailing Address: 600 S. Airport Rd. Bldg A Suite 205

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

EXST

WELL PERMIT NUMBER 297890 - - -
DIV. 1 WD 2 DES. BASIN MD

APPLICANT

L G EVERIST INC
C/O DEERE & AULT CONSULTANTS
600 S AIRPORT RD BLDG A # 205
LONGMONT, CO 80503-

(303) 651-1468

APPROVED WELL LOCATION
WELD COUNTY
SE 1/4 SE 1/4 Section 30
Township 2 N Range 66 W Sixth P.M.

DISTANCES FROM SECTION LINES
834 Ft. from South Section Line
892 Ft. from East Section Line

UTM COORDINATES (Meters,Zone:13,NAD83)
Easting: 515870 Northing: 4439337

PERMIT TO USE AN EXISTING WELL

ISSUANCE OF THIS PERMIT DOES NOT CONFER A WATER RIGHT

CONDITIONS OF APPROVAL

1) This well shall be used in such a way as to cause no material injury to existing water rights. The issuance of this permit does not ensure that no injury will occur to another vested water right or preclude another owner of a vested water right from seeking relief in a civil court action.
2) The construction of this well shall be in compliance with the Water Well Construction Rules 2 CCR 402-2, unless approval of a variance has been granted by the State Board of Examiners of Water Well Construction and Pump Installation Contractors in accordance with Rule 18.
3) Approved pursuant to CRS 37-92-602(3)(b)(I) for uses as described in CRS 37-92-602(1)(f). Use of this well is limited to monitoring water levels and/or water quality sampling.
4) Approved for the use of an existing well acknowledged for construction under monitoring hole notice MH-053509, and known as LGEBH04.
5) This well must be equipped with a locking cap or seal to prevent well contamination or possible hazards as an open well. The well must be kept capped and locked at all times except during sampling or measuring.
6) Records of water level measurements and water quality analyses shall be maintained by the well owner and submitted to the Division of Water Resources upon request.
7) Upon conclusion of the monitoring program the well owner shall plug this well in accordance with Rule 16 of the Water Well Construction Rules. A Well Abandonment Report must be completed and submitted to the Division of Water Resources within 60 days of plugging.
8) The owner shall mark the well in a conspicuous place with the well permit number and name of aquifer as appropriate, and shall take necessary means and precautions to preserve these markings.
9) This well must have been constructed by or under the supervision of a licensed well driller or other authorized individual according to the Water Well Construction Rules.
10) This well must be located not more than 200 feet from the location specified on this permit.

NOTE: Issuance of this permit does not guarantee that this well can be converted to a production well under a future permit. Additionally, pursuant to Rule 14.2 of the Water Well Construction Rules (2 CCR 402-2), monitoring holes constructed pursuant to a monitoring hole notice shall not be converted to a production well. (Upon obtaining a permit from the State Engineer, a monitoring hole may be converted to a monitoring well, recovery well for remediation of the aquifer, or a dewatering system for dewatering the aquifer.)

NOTICE: This permit has been approved subject to the following changes: The distances from section lines were calculated from UTM coordinate values provided with the permit application. You are hereby notified that you have the right to appeal the issuance of this permit, by filing a written request with this office within sixty (60) days of the date of issuance, pursuant to the State Administrative Procedures Act. (See Section 24-4-104 through 106, C.R.S.)

APPROVED
SVJ

State Engineer

By

Receipt No. 3669627B DATE ISSUED 06-22-2015 EXPIRATION DATE N/A

25 x 3ab

COLORADO DIVISION OF WATER RESOURCES
DEPARTMENT OF NATURAL RESOURCES
1313 SHERMAN ST., Ste 821, DENVER CO 80203
Phone: (303) 866-3581 Fax: (303) 866-2223 dwrpermitsonline@state.co.us

Office Use Only

Form GWS-46 (11/2011)

RECEIVED
MAY 13 2015
WATER RESOURCES
STATE ENGINEER
COLO

MONITORING/OBSERVATION Water Well Permit Application

Review instructions on reverse side prior to completing form.
The form must be typed, completed online or in black or blue ink.

1. Well Owner Information

Name of well owner: L.G. Everist, Inc.

Mailing address: 7321 E. 88th Avenue, Suite 200, Henderson, CO

City	State	Zip code
Henderson	CO	80604

Telephone #: 303-286-2248

E-Mail (If filing online it is required):

2. Type Of Application (check applicable boxes)

- [x] Use existing well
- [ ] Construct new well
- [ ] Other:
- [ ] Replacement for existing monitoring well: Permit no.:

3. Refer To (if applicable)

Monitoring hole acknowledgment	Well name or #
MH- 053509	LGEBH04

4. Location Of Proposed Well (Important! See Instructions)

County: Weld

SE 1/4 of the SE 1/4

Section	Township	N or S	Range	E or W	Principal Meridian
30	2	[x] N [ ] S	66	[ ] E [x] W	6

Distance of well from section lines (section lines are typically not property lines)
Ft. from [ ] N [ ] S Ft. from [ ] E [ ] W

For replacement wells only – distance and direction from old well to new well
feet direction

Well location address (Include City, State, Zip) [ ] Check if well address is same as Item 1.

Optional: GPS well location information in UTM format
You must check GPS unit for required settings as follows:

Format must be UTM
[ ] Zone 12 or [x] Zone 13
Units must be Meters
Datum must be NAD83
Unit must be set to true north
Was GPS unit checked for above? [x] YES

Easting 515870
Northing 4439337
Remember to set Datum to NAD83

834'S
892'E

5. Property Owner Information

Name of property owner: DW Ewing Farms

Mailing address: 7501 U.S. HW. 85

City	State	Zip Code
Fort Lupton	CO	80621

Telephone #

6. Use Of Well

Use of this well is limited to monitoring water levels and/or water quality sampling

7. Well Data (proposed)

Total depth	Aquifer
55.0 feet	Alluvial

8. Consultant Information (if applicable)

Name of contact person: Theodore W. Deere, Engineering Geologist

Company name: Deere & Ault Consultants, Inc.

Mailing address: 600 South Airport Rd., BLDG A, STE 205

City	State	Zip Code
Longmont	CO	80503

Telephone #: 303-651-1468

9. Proposed Well Driller License #(optional):

10. Name of Well Owner or Authorized Agent

The making of false statements herein constitutes perjury in the second degree, which is punishable as a class 1 misdemeanor pursuant to C.R.S. 24-4-104 (13)(a). I have read the statements herein, know the contents thereof and state that they are true to my knowledge.

Sign or enter full name here: Theodore Deere Date (mm/dd/yyyy): 5/11/15

If signing print name. Print title if other than land owner.
Theodore W. Deere, Engineering Geologist

Office Use Only

USGS map name	DWR map no.	Surface elev.

Receipt area only

Transaction #: 3669627 B
Date: 5/13/2015 10:19:59 AM
Transaction Total: $300.00
CHECK#10997 $300.00

DIV 1 WD 2 BA ____ MD ____

COLORADO
Division of Water Resources
Department of Natural Resources

WELL PERMIT NUMBER 329516-
RECEIPT NUMBER 10025439

ORIGINAL PERMIT APPLICANT(S)

TRICYCLE LANE TEXAS LLC

AUTHORIZED AGENT

LEWICKI & ASSOCIATES (LANGENFELD, BEN)

APPROVED WELL LOCATION

Water Division: 1 Water District: 2
Designated Basin: N/A
Management District: N/A
County: WELD
Parcel Name: N/A
Physical Address: 7501 HWY 85 FORT LUPTON, CO 80621

Section 30 Township 2.0 N Range 66.0 W Sixth P.M.

Well to be constructed on specified tract of land

PERMIT TO CONSTRUCT A NEW WELL

ISSUANCE OF THIS PERMIT DOES NOT CONFER A WATER RIGHT

CONDITIONS OF APPROVAL

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

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

3) Approved pursuant to CRS 37-92-602(3)(b)(I) for uses as described in CRS 37-92-602(1)(f). Use of this well is limited to monitoring water levels and/or water quality sampling.

4) This well must be equipped with a locking cap or seal to prevent well contamination or possible hazards as an open well. The well must be kept capped and locked at all times except during sampling or measuring.

5) Records of water level measurements and water quality analyses shall be maintained by the well owner and submitted to the Division of Water Resources upon request.

6) Upon conclusion of the monitoring program the well owner shall plug this well in accordance with Rule 16 of the Water Well Construction Rules. A Well Abandonment Report must be completed and submitted to the Division of Water Resources within 60 days of plugging.

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

8) This well must be constructed by or under the supervision of a licensed well driller or other authorized individual according to the Water Well Construction Rules. If non-standard construction is anticipated, a variance request must be submitted in accordance with Rule 18 and approved prior to well construction.

9) A Well Construction and Yield Estimate Report (Form GWS-31), including lithologic log must be submitted by the individual authorized to construct the well. For non-standard construction, the report must include an as-built drawing showing details such as depth, casing, perforated zones, and a description of the grouting type and interval.

10) Pursuant to Rule 6.2.3 of the Water Well Construction Rules, the well construction contractor shall submit the as-built well location on work reports required by Rule 17.1 within 60 days of completion of the well. The measured location must be accurate to 200 feet of the actual location. The location information must include a GPS location (UTM coordinates) pursuant to the Division of Water Resources' guidelines.

NOTE: Issuance of this permit does not guarantee that this well can be converted to a production well under a future permit.

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

WELL PERMIT NUMBER 329516- **RECEIPT NUMBER 10025439**

Issued By ANITIA ARCHULETA

Date Issued: 1/11/2023

Expiration Date: 1/11/2025

COLORADO
Division of Water Resources
Department of Natural Resources

WELL PERMIT NUMBER 329532-
RECEIPT NUMBER 10025440

ORIGINAL PERMIT APPLICANT(S)

TRICYCLE LANE TEXAS LLC

AUTHORIZED AGENT

LEWICKI & ASSOCIATES (LANGENFELD, BEN)

APPROVED WELL LOCATION

Water Division: 1	Water District: 2
Designated Basin:	N/A
Management District:	N/A
County:	WELD
Parcel Name:	N/A
Physical Address:	7501 HWY 85 ARISTOCRAT RANCHETTES, CO 80621

Section 30 Township 2.0 N Range 66.0 W Sixth P.M.

Well to be constructed on specified tract of land

PERMIT TO CONSTRUCT A NEW WELL

ISSUANCE OF THIS PERMIT DOES NOT CONFER A WATER RIGHT

CONDITIONS OF APPROVAL

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

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

3) Approved pursuant to CRS 37-92-602(3)(b)(I) for uses as described in CRS 37-92-602(1)(f). Use of this well is limited to monitoring water levels and/or water quality sampling.

4) This well must be equipped with a locking cap or seal to prevent well contamination or possible hazards as an open well. The well must be kept capped and locked at all times except during sampling or measuring.

5) Records of water level measurements and water quality analyses shall be maintained by the well owner and submitted to the Division of Water Resources upon request.

6) Upon conclusion of the monitoring program the well owner shall plug this well in accordance with Rule 16 of the Water Well Construction Rules. A Well Abandonment Report must be completed and submitted to the Division of Water Resources within 60 days of plugging.

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

8) This well must be constructed by or under the supervision of a licensed well driller or other authorized individual according to the Water Well Construction Rules. If non-standard construction is anticipated, a variance request must be submitted in accordance with Rule 18 and approved prior to well construction.

9) A Well Construction and Yield Estimate Report (Form GWS-31), including lithologic log must be submitted by the individual authorized to construct the well. For non-standard construction, the report must include an as-built drawing showing details such as depth, casing, perforated zones, and a description of the grouting type and interval.

10) Pursuant to Rule 6.2.3 of the Water Well Construction Rules, the well construction contractor shall submit the as-built well location on work reports required by Rule 17.1 within 60 days of completion of the well. The measured location must be accurate to 200 feet of the actual location. The location information must include a GPS location (UTM coordinates) pursuant to the Division of Water Resources' guidelines.

NOTE: Issuance of this permit does not guarantee that this well can be converted to a production well under a future permit.

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

WELL PERMIT NUMBER 329532- **RECEIPT NUMBER 10025440**

Issued By ANITIA ARCHULETA

Date Issued: 1/12/2023

Expiration Date: 1/12/2025

COLORADO
Division of Water Resources
Department of Natural Resources

WELL PERMIT NUMBER 329517-
RECEIPT NUMBER 10025441

ORIGINAL PERMIT APPLICANT(S)

TRICYCLE LANE TEXAS LLC

AUTHORIZED AGENT

LEWICKI & ASSOCIATES (LANGENFELD, BEN)

APPROVED WELL LOCATION

Water Division: 1	Water District: 2
Designated Basin:	N/A
Management District:	N/A
County:	WELD
Parcel Name:	N/A
Physical Address:	7501 HWY 85 ARISTOCRAT RANCHETTES, CO 80621

Section 30 Township 2.0 N Range 66.0 W Sixth P.M.

Well to be constructed on specified tract of land

PERMIT TO CONSTRUCT A NEW WELL

ISSUANCE OF THIS PERMIT DOES NOT CONFER A WATER RIGHT

CONDITIONS OF APPROVAL

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

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

3) Approved pursuant to CRS 37-92-602(3)(b)(I) for uses as described in CRS 37-92-602(1)(f). Use of this well is limited to monitoring water levels and/or water quality sampling.

4) This well must be equipped with a locking cap or seal to prevent well contamination or possible hazards as an open well. The well must be kept capped and locked at all times except during sampling or measuring.

5) Records of water level measurements and water quality analyses shall be maintained by the well owner and submitted to the Division of Water Resources upon request.

6) Upon conclusion of the monitoring program the well owner shall plug this well in accordance with Rule 16 of the Water Well Construction Rules. A Well Abandonment Report must be completed and submitted to the Division of Water Resources within 60 days of plugging.

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

8) This well must be constructed by or under the supervision of a licensed well driller or other authorized individual according to the Water Well Construction Rules. If non-standard construction is anticipated, a variance request must be submitted in accordance with Rule 18 and approved prior to well construction.

9) A Well Construction and Yield Estimate Report (Form GWS-31), including lithologic log must be submitted by the individual authorized to construct the well. For non-standard construction, the report must include an as-built drawing showing details such as depth, casing, perforated zones, and a description of the grouting type and interval.

10) Pursuant to Rule 6.2.3 of the Water Well Construction Rules, the well construction contractor shall submit the as-built well location on work reports required by Rule 17.1 within 60 days of completion of the well. The measured location must be accurate to 200 feet of the actual location. The location information must include a GPS location (UTM coordinates) pursuant to the Division of Water Resources' guidelines.

NOTE: Issuance of this permit does not guarantee that this well can be converted to a production well under a future permit.

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

WELL PERMIT NUMBER 329517- **RECEIPT NUMBER 10025441**

Issued By ANITIA ARCHULETA

Date Issued: 1/11/2023

Expiration Date: 1/11/2025

COLORADO
Division of Water Resources
Department of Natural Resources

WELL PERMIT NUMBER 329518-
RECEIPT NUMBER 10025442

ORIGINAL PERMIT APPLICANT(S)

TRICYCLE LANE TEXAS LLC

AUTHORIZED AGENT

LEWICKI & ASSOCIATES (LANGENFELD, BEN)

APPROVED WELL LOCATION

Water Division: 1	Water District: 2
Designated Basin:	N/A
Management District:	N/A
County:	WELD
Parcel Name:	N/A
Physical Address:	7501 HWY 85 ARISTOCRAT RANCHETTES, CO 80621

Section 30 Township 2.0 N Range 66.0 W Sixth P.M.

Well to be constructed on specified tract of land

PERMIT TO CONSTRUCT A NEW WELL

ISSUANCE OF THIS PERMIT DOES NOT CONFER A WATER RIGHT

CONDITIONS OF APPROVAL

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

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

3) Approved pursuant to CRS 37-92-602(3)(b)(I) for uses as described in CRS 37-92-602(1)(f). Use of this well is limited to monitoring water levels and/or water quality sampling.

4) This well must be equipped with a locking cap or seal to prevent well contamination or possible hazards as an open well. The well must be kept capped and locked at all times except during sampling or measuring.

5) Records of water level measurements and water quality analyses shall be maintained by the well owner and submitted to the Division of Water Resources upon request.

6) Upon conclusion of the monitoring program the well owner shall plug this well in accordance with Rule 16 of the Water Well Construction Rules. A Well Abandonment Report must be completed and submitted to the Division of Water Resources within 60 days of plugging.

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

8) This well must be constructed by or under the supervision of a licensed well driller or other authorized individual according to the Water Well Construction Rules. If non-standard construction is anticipated, a variance request must be submitted in accordance with Rule 18 and approved prior to well construction.

9) A Well Construction and Yield Estimate Report (Form GWS-31), including lithologic log must be submitted by the individual authorized to construct the well. For non-standard construction, the report must include an as-built drawing showing details such as depth, casing, perforated zones, and a description of the grouting type and interval.

10) Pursuant to Rule 6.2.3 of the Water Well Construction Rules, the well construction contractor shall submit the as-built well location on work reports required by Rule 17.1 within 60 days of completion of the well. The measured location must be accurate to 200 feet of the actual location. The location information must include a GPS location (UTM coordinates) pursuant to the Division of Water Resources' guidelines.

NOTE: Issuance of this permit does not guarantee that this well can be converted to a production well under a future permit.

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

WELL PERMIT NUMBER 329518- **RECEIPT NUMBER 10025442**

Issued By ANITIA ARCHULETA

Date Issued: 1/11/2023

Expiration Date: 1/11/2025

Appendix 4 – Industry Standard Field Sampling Logbook

Groundwater Quality Sampling Form (EXAMPLE)

Site Name _____ Permit No. _____

Monitoring Point No. _____ Date/Time _____

Name of Person Sampling _____

Name of Person Filling out Form _____

Type of Monitoring Point

☐ Groundwater Monitoring Well ☐ Piezometer ☐ Other: _____

Purpose of Monitoring

☐ Baseline ☐ Point of Compliance (POC) ☐ POC Background ☐ Corrective Action Monitoring

☐ Other: _____

Monitoring Point Conditions

General Description/Condition/Other Comments: _____

_____

_____

Was water discolored? If so, describe: _____

Does water have odor? If so, describe: _____

Time pumped before sample: _____

Field Measurements

Time Sampled: _____

Weather Conditions: _____

Equipment Used: _____

Time Pumped Before Sample: _____ Pump Rate: _____

Measurements After Stabilization (Include Units):

Depth _____ Temperature _____ pH _____ Dissolved Oxygen _____

Conductivity _____Specific Conductivity_____

Appendix 5 – Sample Data Collection Sheet

Colorado Analytical LABORATORIES, INC.

Analytical Results

TASK NO: 231212140

Report To: Libby Hyde
Company: Trinity Consultants, Inc.
1391 North Speer Blvd
Suite 350
Denver CO 80204

Bill To: Libby Hyde
Company: Trinity Consultants, Inc.
1391 North Speer Blvd
Suite 350
Denver CO 80204

Task No.: 231212140
Client PO:
Client Project: Ewing Gravel Mine

Date Received: 12/12/23
Date Reported: 12/19/23
Matrix: Water - Ground

Customer Sample ID GW-1
Sample Date/Time: 12/12/23 11:00 AM
Lab Number: 231212140-01

Test	Result / Units	Method	RL	MDL	Date Analyzed	QC Batch ID	Analyzed By
Chloride	**136 mg/L**	EPA 300.0	1.00	0.007	12/13/23	QC69975	NRP
Cyanide-Total	**ND mg/L**	EPA 335.4	0.005	0.0005	12/13/23	QC70031	JCB
Cyanide-Weak Acid Dissociable	**ND mg/L**	ASTM 2036-09C	0.005	0.0005	12/13/23	QC70030	JCB
Fluoride	**0.76 mg/L**	EPA 300.0	0.10	0.024	12/13/23	QC69979	NRP
MBAS (calculated as LAS, mol wt 340)	**ND mg/L**	SM 5540-C	0.1	0.052	12/13/23	QC69987	LEH
Nitrate Nitrogen	**3.01 mg/L**	EPA 300.0	0.05	0.02	12/13/23	QC69976	NRP
Nitrate/ Nitrite Nitrogen	**3.01 mg/L**	Calculation	0.05	0.02	12/13/23	-	AMJ
Nitrite Nitrogen	**ND mg/L**	EPA 300.0	0.03	0.01	12/13/23	QC69980	NRP
pH	**6.74 units**	SM 4500-H-B	0.01	0.01	12/12/23	-	ARH
Phenols - Total	**ND ug/L**	EPA 420.4	15.0	1.5	12/15/23	QC70077	DPL
Sulfate	**163 mg/L**	EPA 300.0	1.00	0.012	12/13/23	QC69978	NRP
Dissolved							
Mercury	**ND mg/L**	EPA 245.7	0.0002	0.00002	12/14/23	QC70056	MBN
Aluminum	**ND mg/L**	EPA 200.8	0.001	0.00003	12/15/23	QC70079	MBN
Antimony	**ND mg/L**	EPA 200.8	0.0012	0.00012	12/15/23	QC70079	MBN
Arsenic	**0.0020 mg/L**	EPA 200.8	0.0006	0.00006	12/15/23	QC70079	MBN
Beryllium	**ND mg/L**	EPA 200.8	0.0001	0.000008	12/15/23	QC70079	MBN
Cadmium	**ND mg/L**	EPA 200.8	0.0001	0.000006	12/15/23	QC70079	MBN
Chromium	**ND mg/L**	EPA 200.8	0.0015	0.00015	12/15/23	QC70079	MBN
Cobalt	**0.0002 mg/L**	EPA 200.8	0.0002	0.00005	12/15/23	QC70079	MBN
Copper	**0.0034 mg/L**	EPA 200.8	0.0008	0.00001	12/15/23	QC70079	MBN
Lead	**ND mg/L**	EPA 200.8	0.0001	0.000006	12/15/23	QC70079	MBN
Manganese	**0.0014 mg/L**	EPA 200.8	0.0008	0.00001	12/15/23	QC70079	MBN

Abbreviations/ References:

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

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

ND = Not Detected at Reporting Limit.

Colorado Analytical LABORATORIES, INC.

Analytical Results

TASK NO: 231212140

Report To: Libby Hyde
Company: Trinity Consultants, Inc.
1391 North Speer Blvd
Suite 350
Denver CO 80204

Bill To: Libby Hyde
Company: Trinity Consultants, Inc.
1391 North Speer Blvd
Suite 350
Denver CO 80204

Task No.: 231212140
Client PO:
Client Project: Ewing Gravel Mine

Date Received: 12/12/23
Date Reported: 12/19/23
Matrix: Water - Ground

Customer Sample ID GW-1
Sample Date/Time: 12/12/23 11:00 AM
Lab Number: 231212140-01

Test	Result / Units	Method	RL	MDL	Date Analyzed	QC Batch ID	Analyzed By
Dissolved							
Molybdenum	**0.0034 mg/L**	EPA 200.8	0.0005	0.00005	12/15/23	QC70079	MBN
Nickel	**0.0016 mg/L**	EPA 200.8	0.0009	0.00005	12/15/23	QC70079	MBN
Selenium	**0.0008 mg/L**	EPA 200.8	0.0008	0.00008	12/15/23	QC70079	MBN
Silver	**ND mg/L**	EPA 200.8	0.0005	0.000003	12/15/23	QC70079	MBN
Thallium	**ND mg/L**	EPA 200.8	0.0002	0.000003	12/15/23	QC70079	MBN
Uranium	**0.0074 mg/L**	EPA 200.8	0.0002	0.000002	12/15/23	QC70079	MBN
Vanadium	**0.001 mg/L**	EPA 200.8	0.001	0.0001	12/15/23	QC70079	MBN
Zinc	**ND mg/L**	EPA 200.8	0.001	0.00003	12/15/23	QC70079	MBN
Boron	**0.16 mg/L**	EPA 200.7	0.05	0.01	12/14/23	QC70025	MBN
Iron	**0.006 mg/L**	EPA 200.7	0.005	0.0005	12/14/23	QC70025	MBN
Total							
Mercury	**ND mg/L**	EPA 245.7	0.0002	0.00002	12/14/23	QC70056	MBN
Aluminum	**0.012 mg/L**	EPA 200.8	0.001	0.00003	12/15/23	QC70079	MBN
Arsenic	**0.0024 mg/L**	EPA 200.8	0.0006	0.00006	12/15/23	QC70079	MBN
Barium	**0.1252 mg/L**	EPA 200.8	0.0007	0.00007	12/15/23	QC70079	MBN
Cadmium	**0.0001 mg/L**	EPA 200.8	0.0001	0.000006	12/15/23	QC70079	MBN
Copper	**0.0042 mg/L**	EPA 200.8	0.0008	0.00001	12/15/23	QC70079	MBN
Lead	**0.0002 mg/L**	EPA 200.8	0.0001	0.000006	12/15/23	QC70079	MBN
Molybdenum	**0.0036 mg/L**	EPA 200.8	0.0005	0.00005	12/15/23	QC70079	MBN
Zinc	**0.002 mg/L**	EPA 200.8	0.001	0.00003	12/15/23	QC70079	MBN
Iron	**0.155 mg/L**	EPA 200.7	0.005	0.0005	12/14/23	QC70025	MBN

Abbreviations/ References:

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

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

ND = Not Detected at Reporting Limit.

Colorado Analytical LABORATORIES, INC.

Analytical Results

TASK NO: 231212140

Report To: Libby Hyde
Company: Trinity Consultants, Inc.
1391 North Speer Blvd
Suite 350
Denver CO 80204

Bill To: Libby Hyde
Company: Trinity Consultants, Inc.
1391 North Speer Blvd
Suite 350
Denver CO 80204

Task No.: 231212140
Client PO:
Client Project: Ewing Gravel Mine

Date Received: 12/12/23
Date Reported: 12/19/23
Matrix: Water - Ground

Customer Sample ID GW-2
Sample Date/Time: 12/12/23 10:15 AM
Lab Number: 231212140-02

Test	Result / Units	Method	RL	MDL	Date Analyzed	QC Batch ID	Analyzed By
Chloride	**161 mg/L**	EPA 300.0	1.00	0.007	12/13/23	QC69975	NRP
Cyanide-Total	**ND mg/L**	EPA 335.4	0.005	0.0005	12/13/23	QC70031	JCB
Cyanide-Weak Acid Dissociable	**ND mg/L**	ASTM 2036-09C	0.005	0.0005	12/13/23	QC70030	JCB
Fluoride	**1.63 mg/L**	EPA 300.0	0.10	0.024	12/13/23	QC69979	NRP
MBAS (calculated as LAS, mol wt 340)	**ND mg/L**	SM 5540-C	0.1	0.052	12/13/23	QC69987	LEH
Nitrate Nitrogen	**6.27 mg/L**	EPA 300.0	0.05	0.02	12/13/23	QC69976	NRP
Nitrate/ Nitrite Nitrogen	**6.27 mg/L**	Calculation	0.05	0.02	12/13/23	-	AMJ
Nitrite Nitrogen	**ND mg/L**	EPA 300.0	0.03	0.01	12/13/23	QC69980	NRP
pH	**6.94 units**	SM 4500-H-B	0.01	0.01	12/12/23	-	ARH
Phenols - Total	**ND ug/L**	EPA 420.4	15.0	1.5	12/15/23	QC70077	DPL
Sulfate	**257 mg/L**	EPA 300.0	1.00	0.012	12/13/23	QC69978	NRP
Dissolved							
Mercury	**ND mg/L**	EPA 245.7	0.0002	0.00002	12/14/23	QC70056	MBN
Aluminum	**0.001 mg/L**	EPA 200.8	0.001	0.00003	12/15/23	QC70079	MBN
Antimony	**ND mg/L**	EPA 200.8	0.0012	0.00012	12/15/23	QC70079	MBN
Arsenic	**ND mg/L**	EPA 200.8	0.0006	0.00006	12/15/23	QC70079	MBN
Beryllium	**ND mg/L**	EPA 200.8	0.0001	0.000008	12/15/23	QC70079	MBN
Cadmium	**0.0002 mg/L**	EPA 200.8	0.0001	0.000006	12/15/23	QC70079	MBN
Chromium	**ND mg/L**	EPA 200.8	0.0015	0.00015	12/15/23	QC70079	MBN
Cobalt	**0.0009 mg/L**	EPA 200.8	0.0002	0.00005	12/15/23	QC70079	MBN
Copper	**0.0009 mg/L**	EPA 200.8	0.0008	0.00001	12/15/23	QC70079	MBN
Lead	**ND mg/L**	EPA 200.8	0.0001	0.000006	12/15/23	QC70079	MBN
Manganese	**0.9262 mg/L**	EPA 200.8	0.0008	0.00001	12/15/23	QC70079	MBN

Abbreviations/ References:

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

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

ND = Not Detected at Reporting Limit.

Colorado Analytical LABORATORIES, INC.

Analytical Results

TASK NO: 231212140

Report To: Libby Hyde
Company: Trinity Consultants, Inc.
1391 North Speer Blvd
Suite 350
Denver CO 80204

Bill To: Libby Hyde
Company: Trinity Consultants, Inc.
1391 North Speer Blvd
Suite 350
Denver CO 80204

Task No.: 231212140
Client PO:
Client Project: Ewing Gravel Mine

Date Received: 12/12/23
Date Reported: 12/19/23
Matrix: Water - Ground

Customer Sample ID GW-2
Sample Date/Time: 12/12/23 10:15 AM
Lab Number: 231212140-02

Test	Result / Units	Method	RL	MDL	Date Analyzed	QC Batch ID	Analyzed By
Dissolved							
Molybdenum	**0.0050 mg/L**	EPA 200.8	0.0005	0.00005	12/15/23	QC70079	MBN
Nickel	**0.0030 mg/L**	EPA 200.8	0.0009	0.00005	12/15/23	QC70079	MBN
Selenium	**0.0085 mg/L**	EPA 200.8	0.0008	0.00008	12/15/23	QC70079	MBN
Silver	**ND mg/L**	EPA 200.8	0.0005	0.000003	12/15/23	QC70079	MBN
Thallium	**ND mg/L**	EPA 200.8	0.0002	0.000003	12/15/23	QC70079	MBN
Uranium	**0.0290 mg/L**	EPA 200.8	0.0002	0.000002	12/15/23	QC70079	MBN
Vanadium	**ND mg/L**	EPA 200.8	0.001	0.0001	12/15/23	QC70079	MBN
Zinc	**ND mg/L**	EPA 200.8	0.001	0.00003	12/15/23	QC70079	MBN
Boron	**0.21 mg/L**	EPA 200.7	0.05	0.01	12/14/23	QC70025	MBN
Iron	**ND mg/L**	EPA 200.7	0.005	0.0005	12/14/23	QC70025	MBN
Total							
Mercury	**ND mg/L**	EPA 245.7	0.0002	0.00002	12/14/23	QC70056	MBN
Aluminum	**0.479 mg/L**	EPA 200.8	0.001	0.00003	12/15/23	QC70079	MBN
Arsenic	**ND mg/L**	EPA 200.8	0.0006	0.00006	12/15/23	QC70079	MBN
Barium	**0.0412 mg/L**	EPA 200.8	0.0007	0.00007	12/15/23	QC70079	MBN
Cadmium	**0.0002 mg/L**	EPA 200.8	0.0001	0.000006	12/15/23	QC70079	MBN
Copper	**0.0014 mg/L**	EPA 200.8	0.0008	0.00001	12/15/23	QC70079	MBN
Lead	**0.0003 mg/L**	EPA 200.8	0.0001	0.000006	12/15/23	QC70079	MBN
Molybdenum	**0.0051 mg/L**	EPA 200.8	0.0005	0.00005	12/15/23	QC70079	MBN
Zinc	**0.002 mg/L**	EPA 200.8	0.001	0.00003	12/15/23	QC70079	MBN
Iron	**0.356 mg/L**	EPA 200.7	0.005	0.0005	12/14/23	QC70025	MBN

Abbreviations/ References:

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

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

ND = Not Detected at Reporting Limit.

Colorado Analytical LABORATORIES, INC.

Analytical Results

TASK NO: 231212140

Report To: Libby Hyde
Company: Trinity Consultants, Inc.
1391 North Speer Blvd
Suite 350
Denver CO 80204

Bill To: Libby Hyde
Company: Trinity Consultants, Inc.
1391 North Speer Blvd
Suite 350
Denver CO 80204

Task No.: 231212140
Client PO:
Client Project: Ewing Gravel Mine

Date Received: 12/12/23
Date Reported: 12/19/23
Matrix: Water - Ground

Customer Sample ID GW-3
Sample Date/Time: 12/12/23 10:40 AM
Lab Number: 231212140-03

Test	Result / Units	Method	RL	MDL	Date Analyzed	QC Batch ID	Analyzed By
Chloride	**165 mg/L**	EPA 300.0	1.00	0.007	12/13/23	QC69975	NRP
Cyanide-Total	**ND mg/L**	EPA 335.4	0.005	0.0005	12/13/23	QC70031	JCB
Cyanide-Weak Acid Dissociable	**ND mg/L**	ASTM 2036-09C	0.005	0.0005	12/13/23	QC70030	JCB
Fluoride	**1.09 mg/L**	EPA 300.0	0.10	0.024	12/13/23	QC69979	NRP
MBAS (calculated as LAS, mol wt 340)	**ND mg/L**	SM 5540-C	0.1	0.052	12/13/23	QC69987	LEH
Nitrate Nitrogen	**9.35 mg/L**	EPA 300.0	0.05	0.02	12/13/23	QC69976	NRP
Nitrate/ Nitrite Nitrogen	**9.35 mg/L**	Calculation	0.05	0.02	12/13/23	-	AMJ
Nitrite Nitrogen	**ND mg/L**	EPA 300.0	0.03	0.01	12/13/23	QC69980	NRP
pH	**6.75 units**	SM 4500-H-B	0.01	0.01	12/12/23	-	ARH
Phenols - Total	**ND ug/L**	EPA 420.4	15.0	1.5	12/15/23	QC70077	DPL
Sulfate	**198 mg/L**	EPA 300.0	1.00	0.012	12/13/23	QC69978	NRP
Dissolved							
Mercury	**ND mg/L**	EPA 245.7	0.0002	0.00002	12/14/23	QC70056	MBN
Aluminum	**ND mg/L**	EPA 200.8	0.001	0.00003	12/15/23	QC70079	MBN
Antimony	**ND mg/L**	EPA 200.8	0.0012	0.00012	12/15/23	QC70079	MBN
Arsenic	**ND mg/L**	EPA 200.8	0.0006	0.00006	12/15/23	QC70079	MBN
Beryllium	**ND mg/L**	EPA 200.8	0.0001	0.000008	12/15/23	QC70079	MBN
Cadmium	**ND mg/L**	EPA 200.8	0.0001	0.000006	12/15/23	QC70079	MBN
Chromium	**ND mg/L**	EPA 200.8	0.0015	0.00015	12/15/23	QC70079	MBN
Cobalt	**0.0020 mg/L**	EPA 200.8	0.0002	0.00005	12/15/23	QC70079	MBN
Copper	**0.0011 mg/L**	EPA 200.8	0.0008	0.00001	12/15/23	QC70079	MBN
Lead	**ND mg/L**	EPA 200.8	0.0001	0.000006	12/15/23	QC70079	MBN
Manganese	**0.0015 mg/L**	EPA 200.8	0.0008	0.00001	12/15/23	QC70079	MBN

Abbreviations/ References:

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

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

ND = Not Detected at Reporting Limit.

Colorado Analytical LABORATORIES, INC.

Analytical Results

TASK NO: 231212140

Report To: Libby Hyde
Company: Trinity Consultants, Inc.
1391 North Speer Blvd
Suite 350
Denver CO 80204

Bill To: Libby Hyde
Company: Trinity Consultants, Inc.
1391 North Speer Blvd
Suite 350
Denver CO 80204

Task No.: 231212140
Client PO:
Client Project: Ewing Gravel Mine

Date Received: 12/12/23
Date Reported: 12/19/23
Matrix: Water - Ground

Customer Sample ID GW-3
Sample Date/Time: 12/12/23 10:40 AM
Lab Number: 231212140-03

Test	Result / Units	Method	RL	MDL	Date Analyzed	QC Batch ID	Analyzed By
Dissolved							
Molybdenum	**0.0030 mg/L**	EPA 200.8	0.0005	0.00005	12/15/23	QC70079	MBN
Nickel	**0.0023 mg/L**	EPA 200.8	0.0009	0.00005	12/15/23	QC70079	MBN
Selenium	**0.0017 mg/L**	EPA 200.8	0.0008	0.00008	12/15/23	QC70079	MBN
Silver	**ND mg/L**	EPA 200.8	0.0005	0.000003	12/15/23	QC70079	MBN
Thallium	**ND mg/L**	EPA 200.8	0.0002	0.000003	12/15/23	QC70079	MBN
Uranium	**0.0127 mg/L**	EPA 200.8	0.0002	0.000002	12/15/23	QC70079	MBN
Vanadium	**ND mg/L**	EPA 200.8	0.001	0.0001	12/15/23	QC70079	MBN
Zinc	**ND mg/L**	EPA 200.8	0.001	0.00003	12/15/23	QC70079	MBN
Boron	**0.20 mg/L**	EPA 200.7	0.05	0.01	12/14/23	QC70025	MBN
Iron	**ND mg/L**	EPA 200.7	0.005	0.0005	12/14/23	QC70025	MBN
Total							
Mercury	**ND mg/L**	EPA 245.7	0.0002	0.00002	12/14/23	QC70056	MBN
Aluminum	**0.146 mg/L**	EPA 200.8	0.001	0.00003	12/15/23	QC70079	MBN
Arsenic	**ND mg/L**	EPA 200.8	0.0006	0.00006	12/15/23	QC70079	MBN
Barium	**0.0636 mg/L**	EPA 200.8	0.0007	0.00007	12/15/23	QC70079	MBN
Cadmium	**ND mg/L**	EPA 200.8	0.0001	0.000006	12/15/23	QC70079	MBN
Copper	**0.0014 mg/L**	EPA 200.8	0.0008	0.00001	12/15/23	QC70079	MBN
Lead	**0.0002 mg/L**	EPA 200.8	0.0001	0.000006	12/15/23	QC70079	MBN
Molybdenum	**0.0030 mg/L**	EPA 200.8	0.0005	0.00005	12/15/23	QC70079	MBN
Zinc	**0.001 mg/L**	EPA 200.8	0.001	0.00003	12/15/23	QC70079	MBN
Iron	**0.162 mg/L**	EPA 200.7	0.005	0.0005	12/14/23	QC70025	MBN

Abbreviations/ References:

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

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

ND = Not Detected at Reporting Limit.

Colorado Analytical LABORATORIES, INC.

Analytical QC Summary

TASK NO: 231212140

Report To: Libby Hyde
Company: Trinity Consultants, Inc.

Receive Date: 12/12/23
Project Name: Ewing Gravel Mine

Test	QC Batch ID	QC Type	Result	Method	Prep Date
Chloride	QC69975	Blank	ND	EPA 300.0	12/12/23
Cyanide-Total	QC70031	Blank	ND	EPA 335.4	12/13/23
Cyanide-Weak Acid Dissociable	QC70030	Blank	ND	ASTM 2036-09C	12/13/23
Fluoride	QC69979	Blank	ND	EPA 300.0	12/12/23
MBAS (calculated as LAS, mol wt 340)	QC69987	Blank	ND	SM 5540-C	12/13/23
Mercury	QC70056	Method Blank	ND	EPA 245.7	12/14/23
Aluminum	QC70079	Method Blank	ND	EPA 200.8	12/12/23
Antimony	QC70079	Method Blank	ND	EPA 200.8	12/12/23
Arsenic	QC70079	Method Blank	ND	EPA 200.8	12/12/23
Barium	QC70079	Method Blank	ND	EPA 200.8	12/12/23
Beryllium	QC70079	Method Blank	ND	EPA 200.8	12/12/23
Cadmium	QC70079	Method Blank	ND	EPA 200.8	12/12/23
Chromium	QC70079	Method Blank	ND	EPA 200.8	12/12/23
Cobalt	QC70079	Method Blank	ND	EPA 200.8	12/12/23
Copper	QC70079	Method Blank	ND	EPA 200.8	12/12/23
Lead	QC70079	Method Blank	ND	EPA 200.8	12/12/23
Manganese	QC70079	Method Blank	ND	EPA 200.8	12/12/23
Molybdenum	QC70079	Method Blank	ND	EPA 200.8	12/12/23
Nickel	QC70079	Method Blank	ND	EPA 200.8	12/12/23
Selenium	QC70079	Method Blank	ND	EPA 200.8	12/12/23
Silver	QC70079	Method Blank	ND	EPA 200.8	12/12/23
Thallium	QC70079	Method Blank	ND	EPA 200.8	12/12/23
Uranium	QC70079	Method Blank	ND	EPA 200.8	12/12/23
Vanadium	QC70079	Method Blank	ND	EPA 200.8	12/12/23
Zinc	QC70079	Method Blank	ND	EPA 200.8	12/12/23
Boron	QC70025	Method Blank	ND	EPA 200.7	12/12/23
Iron	QC70025	Method Blank	ND	EPA 200.7	12/12/23
Nitrate Nitrogen	QC69976	Blank	ND	EPA 300.0	12/12/23
Nitrite Nitrogen	QC69980	Blank	ND	EPA 300.0	12/12/23
Phenols - Total	QC70077	Blank	ND	EPA 420.4	12/15/23
Sulfate	QC69978	Blank	ND	EPA 300.0	12/12/23

Test	QC Batch ID	QC Type	Limits	% Rec	RPD	Method
Chloride	QC69975	Duplicate	0 - 20	-	0.7	EPA 300.0
		LCS	90 - 110	103.3	-	
		MS	75 - 125	92.6	-	
Cyanide-Total	QC70031	Duplicate	0 - 20	-	0.0	EPA 335.4
		LCS	90 - 110	96.9	-	
		MS	75 - 125	101.0	-	
Cyanide-Weak Acid Dissociable	QC70030	Duplicate	0 - 20	-	0.0	ASTM 2036-09C
		LCS	90 - 110	95.1	-	
		MS	75 - 125	105.0	-	

Abbreviations/ References:

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

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

ND = Not Detected at Reporting Limit.

Test	QC Batch ID	QC Type	Limits	% Rec	RPD	Method
Fluoride	QC69979	Duplicate	0 - 20	-	2.0	EPA 300.0
		LCS	90 - 110	96.5	-	
		MS	75 - 125	94.8	-	
MBAS (calculated as LAS, mol wt 340)	QC69987	LCS	90 - 110	90.0	-	SM 5540-C
		MS	90 - 110	106.0	-	
		MSD	0 - 10	-	4.8	
Mercury	QC70056	Duplicate	0 - 20	-	0.0	EPA 245.7
		LCS	90 - 110	99.8	-	
		MS	80 - 120	88.0	-	
Aluminum	QC70079	LCS	90 - 110	95.7	-	EPA 200.8
		MS	70 - 130	105.7	-	
		MSD	0 - 10	-	8.7	
Antimony	QC70079	LCS	90 - 110	98.5	-	EPA 200.8
		MS	70 - 130	98.3	-	
		MSD	0 - 10	-	0.3	
Arsenic	QC70079	LCS	90 - 110	97.9	-	EPA 200.8
		MS	70 - 130	111.9	-	
		MSD	0 - 10	-	1.7	
Barium	QC70079	LCS	90 - 110	95.7	-	EPA 200.8
		MS	70 - 130	71.4	-	
		MSD	0 - 10	-	0.8	
Beryllium	QC70079	LCS	90 - 110	93.8	-	EPA 200.8
		MS	70 - 130	91.8	-	
		MSD	0 - 10	-	0.3	
Cadmium	QC70079	LCS	90 - 110	94.3	-	EPA 200.8
		MS	70 - 130	96.4	-	
		MSD	0 - 10	-	0.4	
Chromium	QC70079	LCS	90 - 110	100.6	-	EPA 200.8
		MS	70 - 130	105.1	-	
		MSD	0 - 10	-	1.0	
Cobalt	QC70079	LCS	90 - 110	100.4	-	EPA 200.8
		MS	70 - 130	100.4	-	
		MSD	0 - 10	-	0.2	
Copper	QC70079	LCS	90 - 110	94.1	-	EPA 200.8
		MS	70 - 130	94.7	-	
		MSD	0 - 10	-	0.2	
Lead	QC70079	LCS	90 - 110	94.3	-	EPA 200.8
		MS	70 - 130	83.6	-	
		MSD	0 - 10	-	0.3	
Manganese	QC70079	LCS	90 - 110	98.8	-	EPA 200.8
		MS	70 - 130	83.8	-	
		MSD	0 - 10	-	0.6	
Molybdenum	QC70079	LCS	90 - 110	93.4	-	EPA 200.8
		MS	70 - 130	101.5	-	
		MSD	0 - 10	-	0.5	
Nickel	QC70079	LCS	90 - 110	101.7	-	EPA 200.8
		MS	70 - 130	103.9	-	
		MSD	0 - 10	-	0.3	
Selenium	QC70079	LCS	90 - 110	91.7	-	EPA 200.8
		MS	70 - 130	100.0	-	
		MSD	0 - 10	-	7.9	

Abbreviations/ References:

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

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

ND = Not Detected at Reporting Limit.

Test	QC Batch ID	QC Type	Limits	% Rec	RPD	Method
Silver	QC70079	LCS	90 - 110	98.3	-	EPA 200.8
		MS	70 - 130	89.3	-	
		MSD	0 - 10	-	4.9	
Thallium	QC70079	LCS	90 - 110	93.2	-	EPA 200.8
		MS	70 - 130	83.7	-	
		MSD	0 - 10	-	0.9	
Uranium	QC70079	LCS	90 - 110	90.9	-	EPA 200.8
		MS	70 - 130	78.4	-	
		MSD	0 - 10	-	0.1	
Vanadium	QC70079	LCS	90 - 110	102.4	-	EPA 200.8
		MS	70 - 130	109.1	-	
		MSD	0 - 10	-	1.5	
Zinc	QC70079	LCS	90 - 110	94.8	-	EPA 200.8
		MS	70 - 130	91.6	-	
		MSD	0 - 10	-	1.8	
Boron	QC70025	Duplicate	0 - 20	-	18.7	EPA 200.7
		LCS	90 - 110	96.3	-	
		MS	75 - 125	102.6	-	
Iron	QC70025	Duplicate	0 - 20	-	4.0	EPA 200.7
		LCS	90 - 110	90.6	-	
		MS	75 - 125	99.0	-	
Nitrate Nitrogen	QC69976	Duplicate	0 - 20	-	8.0	EPA 300.0
		LCS	90 - 110	102.0	-	
		MS	75 - 125	93.4	-	
Nitrite Nitrogen	QC69980	Duplicate	0 - 20	-	0.0	EPA 300.0
		LCS	90 - 110	93.9	-	
		MS	75 - 125	96.6	-	
Phenols - Total	QC70077	Duplicate	0 - 20	-	1.2	EPA 420.4
		LCS	90 - 110	96.8	-	
		MS	75 - 125	77.0	-	
Sulfate	QC69978	Duplicate	0 - 20	-	0.9	EPA 300.0
		LCS	90 - 110	100.9	-	
		MS	75 - 125	105.0	-	

All analyses were performed in accordance with approved methods under the latest revision to 40 CFR Part 136 unless otherwise identified. Based on my inquiry of the person or persons directly responsible for analyzing the wastewater samples and generating the report (s), the analyses, report, and information submitted are, to the best of my knowledge and belief, true, accurate, and complete.

DATA APPROVED FOR RELEASE BY

Abbreviations/ References:

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

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

ND = Not Detected at Reporting Limit.

Chain of Custody Form

Colorado Analytical Laboratories, Inc

Commerce City Lab
10411 Heinz Way
Commerce City CO 80640

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

Phone: 303-659-2313

www.coloradolab.com

Report To Information	Bill To Information (If different from report to)	Project Name / Number
Company Name: Trinity Consultants	Company Name:	Burnco Ewing
Contact Name: Libby Hyde	Contact Name:	
Address: 1391 Speer Blvd, Ste 360	Address:	Task Number (Lab Use Only)
City Denver State CO Zip 80205	City State Zip	CAL Task 231212140 JML
Phone: (913) 226-8421	Phone:	
Email: libby.hyde@trinityconsultants.com	Email:	
Sample Collector: Libby Hyde		
Sample Collector Phone: 913-226-8421	PO No.:	

Sample Matrix (Select One Only)

Waste Water ☐ Soil ☐ Drinking Water ☐
Ground Water ☒ Sludge ☐
Surface Water ☐

Date	Time	Sample ID	No. of Containers	Grab	Composite	Tests Requested
12/12	11:00	GW-1	5			
12/12	10:15	GW-2	5			
12/12	10:40	GW-3	5			

Instructions: Reference 220928083

C/S Info:
Deliver Via: Hand C/S Charge ☐

Seals Present Yes ☐ No ☐
Temp. 12 °C/Ice N Sample Pres. Yes ☒ No ☐

Relinquished By:	Date/Time:	Received By:	Date/Time:	Relinquished By:	Date/Time:	Received By:	Date/Time:
Libby Hyde	12/12	RB	12/12/23				

1322

CAL Task
231212140

JML

Colorado Analytical
LABORATORIES, INC.

Bottle Order

Order ID: QBO23120038
Date Created: 12/7/23

Ship To: Trinity Consultants
1391 North Speer Blvd
Suite 350
Denver CO 80204

Attention: Libby Hyde

720-638-7647
Verify All Shipping Addresses*

Shipping Options:
Ship Via: Customer Pickup Cooler: No

Chain of Custody | Drinking Water: Standard: 1

Customer Needs By: 12/12/23
Ships From: Commerce City

Project:
Ewing Gravel Mine

Qty.	Bottle	
3	*250 ml Amber - H2SO4*	phenol
3	*500 ml Cylinder - HNO3*	metals
3	*500 ml Cylinder - NaOH/ Zn Acetate*	cyanide
6	*500 ml Cylinder - Unpreserved*	foaming agents / other

****Samples should be shipped or hand delivered the same day they are collected. Orders that require sub-lab analysis should be delivered to the lab Monday thru Wednesday only.****

Internal Shipping Instructions:

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

CJF

EXHIBIT L RECLAMATION COSTS

The Ewing Gravel Pit will have a bond to cover the worst-case reclamation scenario. Prior to the start of mining in Pod 1, the operator/applicant will post the necessary bond.

The worst-case reclamation scenario will occur at the beginning of Pod 1, before any mining commences due to the cost of slurry wall construction. Pod 1 and 2 slurry wall is the longer of the two to be constructed. During the beginning of Pod 1, it is anticipated that the processing area will also be developed. Therefore, the worst-case reclamation scenario also includes the cost of reclaiming the processing area and a section of active highwall.

Once the first slurry wall is installed, the permittee may pursue a reduced bond via a bond reduction request to CDRMS.

Reclamation bond unit costs are based on cost calculation for the Inouye Gravel Mine (M-2018-037).

A breakdown of the estimated worst-case reclamation cost is shown in Table L-1.

Table L-1 Ewing Gravel Pit Bond Estimate.

Task	Quantity	Units	Unit Costs	Cost
Pods 1 and 2				
Slurry wall installation around Pods 1 and 2. Excavation, materials, and dewatering. Slurry wall dimensions: 6500-ft by 50-ft deep.	325,000	Sq. ft.	$4.30	$1,397,500
Inflow/outflow structures including excavation, riprap, concrete, and vegetation.	2	each	$35,000	$70,000
Topsoiling to 2 FT. deep along the slurry wall installation path. 20-ft wide x 6500-ft long (3 acres) x 2-ft deep.	26,200	CY	$1.05	$27,510
1000-ft of highwall backfilled from 1H:1V to 3H:1V to a depth of 50-ft.	94,000	CY	$1.05	$98,700
Topsoiling rangeland areas in Pods 1 and 2 above mining highwall to 2 FT. deep (4 acres)	9,680	CY	$1.05	$10,164
Processing Area				
Freshwater and groundwater pond backfill.	190,000	CY	$1.05	$199,500
Topsoil processing area to 2 FT. deep (21.1 acres)	68,083	CY	$1.50	$102,124
Remove office and scale. All other plants and equipment are portable.	2	each	$500.00	$1,000
Revegetation				
Scarify topsoiled areas prior to seeding.	28.1	acres	$150.00	$4,215
Seeding of processing area, slurry wall top, and mining highwall area above water level.	28.1	acres	$400	$11,240
Mulching of processing area, slurry wall top, and mining highwall area above water level.	28.1	acres	$500	$14,050
Weed control management for two years.	2	each	$1,500	$3,000
Subtotal				**$1,939,003**
DRMS Indirect Costs (28% of direct costs)				$542,921
Total				**$2,481,924**