

Thorin Resources
1900 Main St. Unit 1
PO Box 1030
Ouray, CO 81427

August 27th, 2025

Mr. Lucas West
Environmental Protection Specialist
Colorado Division of Reclamation Mining and Safety
101 3rd Street
Grand Junction, CO 81501

**Subject: AM-02 EPF Certification & TR-17 Adequacy Review Response
DRMS Permit No. M-2012-032
Revenue Mine, Ouray County, Colorado**

Dear Mr. West,

Below is Thorin's response pertaining to questions from AM-02 EPF Certification Adequacy Review to DRMS Permit No. M-2012-032.

1. Attached is the updated pond analysis with the changed variable to a 10-year rainfall event from a 100-year rainfall event and how it pertains to the retention capacity over a 24-hour period. The excavated pond volume is 513 CY and a 10 year – 24 hr even will produce 358 CY of water.
2. Attached is the updated map U-1 depicting the actual downgradient well locations.
3. Installation of GW-4A and GW-4B are being submitted pursuant to this TR-17 and satisfy the requirement of AM-2 Exhibit G (pg. G-4).
4. Attached is the information regarding GW-4B (GWS-46 & GWS-31)
5. Diagrams now match information presented on form GWS-31 as duplicated information has been removed and corrected information has been presented.
6. Well abandonment will include cutting the casing of the well off at the surface elevation, filling of GW-4A and GW-4B to 1 ft below surface with bentonite gel, and backfilling the remaining 1 ft of the wells with native material.
 - a. GW-4A: Diameter – 2", Depth to fill bentonite – 78"
 - b. GW-4B: Diameter – 2", Depth to fill bentonite – 108"
7. Attached is an updated photo showing locked caps on GW-4A and GW-4B.

Thank you for your attention to this data to our adequacy review response.

Sincerely,

Chris Skerik

Chris Skerik
Chief Operating Officer
Thorin Resources
cskerik@thorinresources.com

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Attachment A – Stormwater Pond

Retention Pond at Revenue Mine

8/13/2025

Ouray, CO

- Drainage Analysis of Retention Pond

Sargon Engineering was tasked with comparing the volume of the retention pond at the Revenue Mine in Ouray, Colorado and to determine if the volume of the pond built was the same or larger than the retention pond designed. After analyzing the dimensions of the retention pond using the as-built survey and design data, it was determined that the volume of the as-built pond was larger than the designed pond. The designed pond has a volume of 507 cubic yards, while the volume of the as-built pond is 513 cubic yards. Using this data, further analysis was conducted to determine if the retention pond could handle a 10 year 24 hour rainfall event. The watershed area with pond and berm included is roughly an area of 47,500 square feet, which is about 1 acre. Using the Direct Area method, the Runoff Volume in the 1 acre watershed is 9,646 cubic feet (358 cubic yards) in a 10 year 24 hour rainfall event.



Approved by:

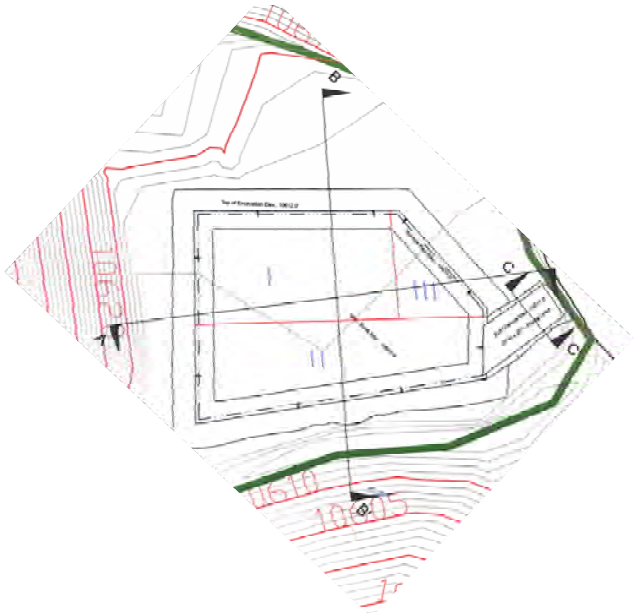
John T. Liu, PE
CO License #: 54500

Retention Pond
Revenue Mine
8/12/2025

Ouray Silver Mines, Inc.
Ouray , Colorado

Design Properties

Volume I	3500
Length:	56
Width	12.5
Depth:	5
Volume II	9855
Length:	73
Width	27
Depth:	5
1/2 BH Volume III	325
Length:	10
Width	13
Depth:	5
Total Vol (Cubic Feet)	13680
Total Vol (Cu Yd)	506.6666667



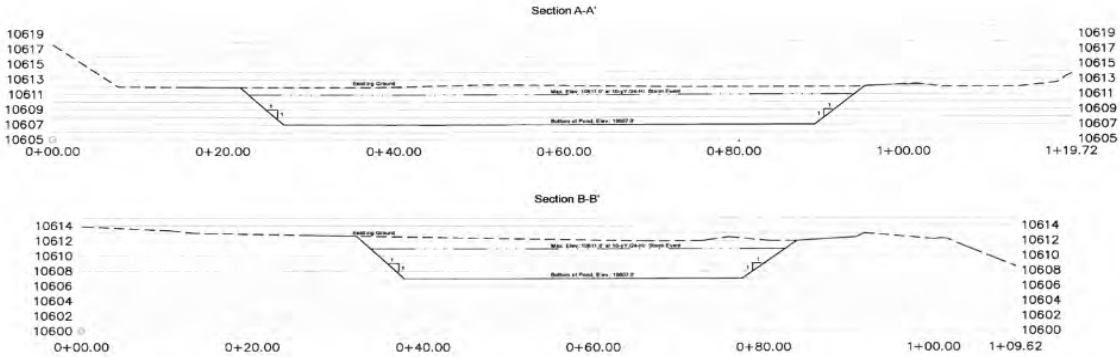
Watershed Area
(Assumed 1 Acre)

Direct Area Method

Survey (As-built) Properties

Volume I	3694.6
Length:	58
Width	13
Depth:	4.9
Volume II	9811.2
Length:	73
Width	28
Depth:	4.8
1/2 BH Volume III	350.35
Length:	11
Width	13
Depth:	4.9
Total Vol (Cubic Feet)	13856.15
Total Vol (Cu Yd)	513.1907407

Conclusion: Volume of As-built pond is larger than volume of design pond



1) Manually:

a) By location (decimal degrees, use "-" for S and W): Latitude: Longitude:

b) By station (list of CO stations):

c) By address

2) Use map:

Satellite

a) Select location
Move crosshair or double click

b) Click on station icon
☒ Show stations on map

Location information:
Name: Ridgway, Colorado, USA*
Latitude: 37.9751*
Longitude: -107.7480*
Elevation: 10608 ft **

* Source: ESRI Maps
** Source: USGS



Watershed Area (with Pond and Berm) 47,493 sqft or 1.09 Acres
(Assumed 1 Acre)

Direct Area Method

Watershed Area = A = 1 Acre

Rainfall Depth = P = 2.66 in

Runoff Volume = V = A x P x 3630 (1 Acre-inch = 3630 Cubic feet)

V = 1 acre x 2.66 in x 3630 cuft

V = 9,645.8 Cubic Feet

V = 357.3 Cubic Yards

PDS-based precipitation frequency estimates with 90% confidence intervals (in inches)¹

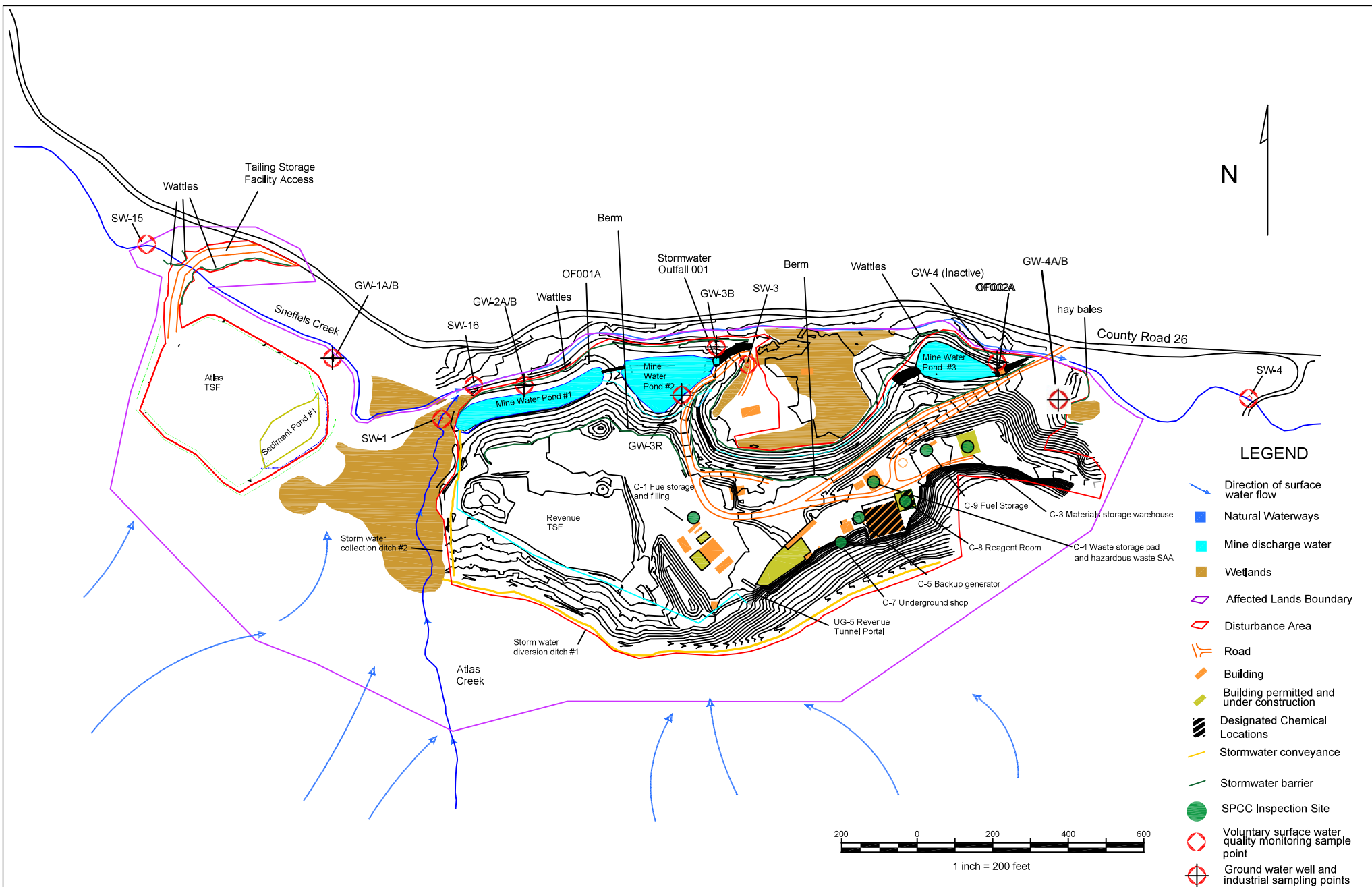
Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	0.195 (0.170-0.240)	0.222 (0.194-0.273)	0.280 (0.243-0.345)	0.342 (0.294-0.424)	0.448 (0.375-0.605)	0.546 (0.436-0.742)	0.658 (0.496-0.919)	0.786 (0.555-1.13)	0.978 (0.649-1.45)	1.14 (0.721-1.69)
10-min	0.286 (0.250-0.351)	0.325 (0.263-0.399)	0.410 (0.356-0.506)	0.501 (0.431-0.621)	0.657 (0.549-0.886)	0.800 (0.636-1.09)	0.964 (0.726-1.35)	1.15 (0.812-1.66)	1.43 (0.951-2.12)	1.67 (1.06-2.47)
15-min	0.349 (0.304-0.428)	0.396 (0.346-0.487)	0.501 (0.434-0.617)	0.612 (0.526-0.758)	0.801 (0.669-1.08)	0.976 (0.778-1.32)	1.18 (0.886-1.64)	1.40 (0.990-2.02)	1.75 (1.16-2.59)	2.03 (1.29-3.02)
30-min	0.444 (0.387-0.544)	0.507 (0.442-0.623)	0.642 (0.557-0.791)	0.783 (0.673-0.971)	1.02 (0.853-1.38)	1.24 (0.989-1.68)	1.49 (1.12-2.08)	1.77 (1.25-2.55)	2.20 (1.46-3.25)	2.55 (1.62-3.79)
60-min	0.539 (0.470-0.661)	0.609 (0.531-0.748)	0.759 (0.659-0.936)	0.916 (0.788-1.14)	1.18 (0.984-1.58)	1.42 (1.13-1.92)	1.70 (1.28-2.36)	2.01 (1.41-2.88)	2.47 (1.64-3.66)	2.86 (1.81-4.24)
2-hr	0.633 (0.470-0.771)	0.712 (0.624-0.867)	0.877 (0.765-1.07)	1.05 (0.907-1.29)	1.34 (1.12-1.78)	1.60 (1.28-2.14)	1.90 (1.44-2.62)	2.24 (1.59-3.18)	2.74 (1.84-4.02)	3.17 (2.03-4.65)
3-hr	0.712 (0.628-0.863)	0.798 (0.702-0.967)	0.971 (0.850-1.18)	1.15 (0.996-1.40)	1.44 (1.21-1.89)	1.70 (1.37-2.26)	2.00 (1.52-2.73)	2.33 (1.66-3.28)	2.82 (1.90-4.10)	3.23 (2.08-4.72)
6-hr	0.931 (0.825-1.12)	1.04 (0.920-1.25)	1.25 (1.10-1.51)	1.45 (1.27-1.76)	1.77 (1.49-2.29)	2.06 (1.66-2.68)	2.37 (1.82-3.18)	2.71 (1.96-3.77)	3.22 (2.19-4.61)	3.64 (2.37-5.25)
12-hr	1.28 (1.14-1.53)	1.43 (1.28-1.71)	1.71 (1.52-2.05)	1.98 (1.74-2.38)	2.38 (2.01-3.02)	2.72 (2.22-3.51)	3.10 (2.40-4.12)	3.51 (2.56-4.82)	4.11 (2.82-5.81)	4.59 (3.03-6.57)
24-hr	1.71 (1.54-2.03)	1.93 (1.73-2.28)	2.31 (2.06-2.75)	2.66 (2.35-3.17)	3.18 (2.69-3.98)	3.61 (2.95-4.59)	4.07 (3.17-5.33)	4.56 (3.34-6.17)	5.26 (3.65-7.35)	5.82 (3.89-8.24)
2-day	2.20 (1.99-2.58)	2.49 (2.24-2.93)	2.99 (2.68-3.52)	3.42 (3.04-4.05)	4.05 (3.44-5.00)	4.55 (3.75-5.72)	5.08 (3.99-6.57)	5.64 (4.17-7.53)	6.41 (4.50-8.84)	7.02 (4.74-9.83)
3-day	2.58 (2.34-3.02)	2.90 (2.62-3.39)	3.44 (3.10-4.04)	3.91 (3.49-4.61)	4.59 (3.92-5.63)	5.13 (4.24-6.40)	5.70 (4.49-7.32)	6.29 (4.68-8.34)	7.11 (5.02-9.74)	7.75 (5.27-10.8)
4-day	2.90 (2.63-3.37)	3.24 (2.94-3.77)	3.82 (3.45-4.46)	4.32 (3.87-5.08)	5.05 (4.33-6.17)	5.63 (4.67-6.99)	6.23 (4.93-7.96)	6.86 (5.13-9.06)	7.73 (5.48-10.5)	8.41 (5.75-11.7)
7-day	3.63 (3.31-4.20)	4.06 (3.69-4.69)	4.77 (4.32-5.54)	5.38 (4.84-6.28)	6.25 (5.38-7.57)	6.94 (5.80-8.55)	7.65 (6.10-9.70)	8.39 (6.32-11.0)	9.40 (6.73-12.7)	10.2 (7.04-14.0)
10-day	4.28 (3.92-4.93)	4.76 (4.35-5.48)	5.56 (5.05-6.42)	6.24 (5.63-7.24)	7.20 (6.23-8.67)	7.96 (6.68-9.75)	8.74 (7.00-11.0)	9.55 (7.24-12.4)	10.7 (7.67-14.3)	11.5 (8.00-15.7)
20-day	6.22 (5.72-7.09)	6.78 (6.23-7.75)	7.72 (7.07-8.85)	8.52 (7.74-9.81)	9.63 (8.39-11.5)	10.5 (8.89-12.7)	11.4 (9.21-14.2)	12.3 (9.42-15.8)	13.5 (9.86-18.0)	14.5 (10.2-19.6)
30-day	7.81 (7.21-8.87)	8.51 (7.85-9.67)	9.65 (8.86-11.0)	10.6 (9.66-12.1)	11.9 (10.4-14.0)	12.9 (10.9-15.5)	13.9 (11.3-17.2)	14.9 (11.5-19.0)	16.2 (11.9-21.4)	17.2 (12.2-23.2)
45-day	9.78 (9.06-11.0)	10.7 (9.94-12.1)	12.3 (11.3-13.9)	13.5 (12.4-15.4)	15.2 (13.3-17.8)	16.4 (14.0-19.6)	17.6 (14.3-21.6)	18.8 (14.5-23.7)	20.3 (14.9-26.5)	21.4 (15.3-28.5)
60-day	11.4 (10.6-12.9)	12.7 (11.8-14.3)	14.7 (13.5-16.6)	16.2 (14.9-18.4)	18.3 (16.0-21.3)	19.8 (16.9-23.4)	21.2 (17.3-25.8)	22.6 (17.5-28.4)	24.2 (17.9-31.5)	25.4 (18.3-33.8)

¹ Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS).

Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values.

Please refer to NOAA Atlas 14 document for more information.

Attachment B – Groundwater Sampling Wells



REVENUE - VIRGINIUS MINE
Map U-1
Environmental Protection Plan

Prepared By:
 Todd Jesse
 Environmental Specialist
Todd Jesse

December 2021
 PO Box 564
 Ouray CO 81427



ORIGINAL PERMIT APPLICANT(S)

THORIN RESOURCES LLC (CHRIS SKERIK)

APPROVED WELL LOCATION

Water Division: 4 Water District: 68
Designated Basin: N/A
Management District: N/A
County: OURAY
Parcel Name: N/A
Physical Address: 1416 CR 26 OURAY, CO 81427
NW 1/4 NE 1/4 Section 21 Township 43.0 N Range 8.0 W New Mexico
P.M.

UTM COORDINATES (Meters, Zone:13, NAD83)

Easting: 258676.0 Northing: 4206615.0

PERMIT TO USE AN EXISTING WELL

ISSUANCE OF THIS PERMIT DOES NOT CONFER A WATER RIGHT

CONDITIONS OF APPROVAL

- 1) This well shall be used in such a way as to cause no material injury to existing water rights. The issuance of this permit does not ensure that no injury will occur to another vested water right or preclude another owner of a vested water right from seeking relief in a civil court action.
- 2) The construction of this well shall be in compliance with the Water Well Construction Rules 2 CCR 402-2, unless approval of a variance has been granted by the State Board of Examiners of Water Well Construction and Pump Installation Contractors in accordance with Rule 18.
- 3) Approved pursuant to CRS 37-92-602(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 known as GW-4A.
- 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 e-Form available at: <https://dwr.state.co.us/eforms> 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 location 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.)

Issued By GEOFFREY DAVIS

Date Issued: 11/8/2024

Expiration Date: N/A

COLORADO DIVISION OF WATER RESOURCES DEPARTMENT OF NATURAL RESOURCES 1313 SHERMAN ST., Ste 821, DENVER CO 80203 Phone: (303) 866-3581 dwrpermitsonline@state.co.us				Office Use Only		Form GWS-46 (01/2020)	
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 Thorin Resources LLC							
Mailing address Po Box 1030							
City Ouray		State Co		Zip code 81427			
Telephone # 9703162294				E-Mail (If filing online it is required) cjdickerson@thorinresources.co			
2. Type Of Application (check applicable boxes)							
<input checked="" type="checkbox"/> Use existing well <input type="checkbox"/> Replacement for existing monitoring well: <input type="checkbox"/> Construct new well Permit no.: <input type="checkbox"/> Other:							
3. Refer To (if applicable)							
Monitoring hole acknowledgment MH-				Well name or # GW-4A			
4. Location Of Proposed Well (Important! See Instructions)							
County Ouray				NW 1/4 of the NE 1/4			
Section 21	Township 43	N or S <input checked="" type="checkbox"/> N <input type="checkbox"/> S	Range 8	E or W <input type="checkbox"/> E <input checked="" type="checkbox"/> W	Principal Meridian New Mexico		
Distance of well from section lines (section lines are typically not property lines) 1100 Ft. from <input type="checkbox"/> N <input checked="" type="checkbox"/> S 3165 Ft. from <input type="checkbox"/> E <input checked="" type="checkbox"/> W							
For replacement wells only – distance and direction from old well to new well <div style="display: flex; justify-content: space-between;"> feet direction </div>							
Well location address (Include City, State, Zip) <input type="checkbox"/> Check if well address is same as Item 1. 1416 CR 26 Ouray, Co 81427							
Optional: GPS well location information in UTM format You must check GPS unit for required settings as follows:							
Format must be UTM <input type="checkbox"/> Zone 12 or <input checked="" type="checkbox"/> Zone 13 Units must be Meters Datum must be NAD83 Unit must be set to true north Was GPS unit checked for above? <input type="checkbox"/> YES				Easting <u>258676</u> Northing <u>4206615</u> Remember to set Datum to NAD83			
5. Property Owner Information							
Name of property owner Thorin Resources LLC							
Mailing address Po Box 1030							
City Ouray		State Co		Zip Code 81427			
Telephone # 9703162294							
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 7.5 feet				Aquifer Alluvial			
8. Consultant Information (if applicable)							
Name of contact person							
Company name							
Mailing address							
City			State		Zip Code		
Telephone #							
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 <div style="font-family: cursive; font-size: 1.2em;">Chris Skerik</div>						Date (mm/dd/yyyy) 10/24/2024	
If signing print name. Print title if other than land owner. Chris Skerik, COO							
Office Use Only							
USGS map name				DWR map no.		Surface elev.	
Receipt area only							
DIV ____ WD ____ BA ____ MD ____							

MONITORING/OBSERVATION WELL PERMIT APPLICATION INSTRUCTIONS

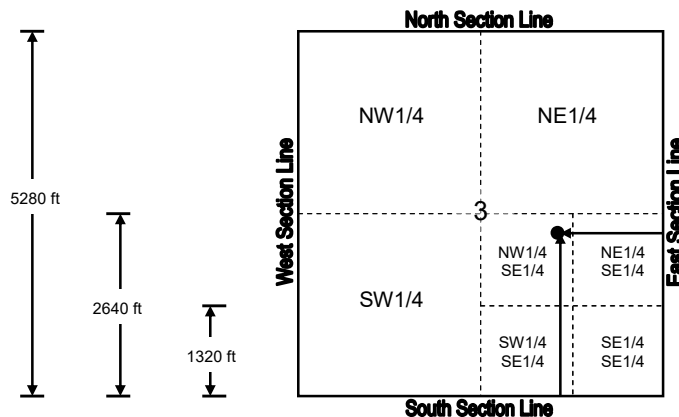
Applications must be computer generated on-line, typewritten or printed in BLACK or BLUE INK. ALL ITEMS in the application must be completed. Incomplete applications may be returned for more information. Applications are evaluated in chronological order. Please allow approximately six weeks for processing. This form may be reproduced by photocopying or computer generation. Reproductions must retain margins and print quality of the original form. If filing online, see online filing instructions for further information. You may also save, print, scan and email the completed form to: dwrpermitsonline@state.co.us

FEES: This application must be submitted with a **\$100 filing fee**. (The fee for an application to replace or deepen an existing permitted monitoring/observation well is \$100 for locations outside Designated Ground Water Basins, and \$60 inside Designated Ground Water Basins.) **Fees are nonrefundable.** Please visit our website (dwr.colorado.gov) for acceptable payment information or contact DWR at (303) 866-3581.

USES: This form (GWS-46) is to be used when applying for a permit where the only uses are monitoring of water levels and/or water quality sampling. For well construction criteria refer to the Colorado Water Well Construction Rules, 2CCR 402-2. A copy of the Rules may be obtained from any Division of Water Resources Office for a fee of \$5, or you may access them online on our website (dwr.colorado.gov)

ITEM INSTRUCTIONS: (numbers correspond with those on the front of this form)

1. Provide the name of the well owner and the mailing address where all correspondence will be sent.
2. Check and complete all boxes that apply.
3. Provide the MH number assigned by the Division of Water Resources in response to the notice of intent to construct a monitoring/observation well. Complete the well name if the structure has a name or identifying number.
4. If applying for a permit to **construct a new well**, you **must** provide the county, section #, township, range and principal meridian. You **do not** need to provide the $\frac{1}{4}$ of the $\frac{1}{4}$ section designation, distances from section lines or an optional GPS location (UTM coordinates). If a permit is issued and a well constructed, the authorized individual will be required to provide an accurate GPS location (UTM coordinates) of the "as-built" well location. If applying for a permit to **use an existing well** you **must** provide the well location information stated above, as well as either a GPS location (UTM coordinates) of the existing well site, or distances from section lines (**including the $\frac{1}{4}$ of the $\frac{1}{4}$ section designation**) as follows: In a typical case, a township is comprised of 36 sections, with each section ideally one mile square, or 5,280 feet on each side. Sections are further divided into quarter sections. Each $\frac{1}{4}$ Section is 2,640 feet by 2,640 feet and comprises 160 acres. Each $\frac{1}{4}$ section can be further divided into additional quarters. Each $\frac{1}{4}$ of the $\frac{1}{4}$ Section is 1,320 feet by 1,320 feet and comprises 40 acres. The distances are measured from the section lines. In the following example, the well is located 2,500 feet from the South Section line and 1,400 feet from the East Section line:



Well Location Example:
NW1/4 of the SE1/4 of
Section 3, being 2500 feet
from the South Section Line
and 1400 feet from the East
Section Line.

If providing a GPS location (UTM coordinates), the required GPS unit settings must be as indicated on this form. Colorado contains two UTM zones (12 & 13). Zone 13 covers most of Colorado. The boundary between Zone 12 and Zone 13 is the 108th Meridian (longitude). West of the 108th Meridian is UTM Zone 12 and east of the 108th Meridian is UTM Zone 13. The 108th Meridian is approximately 57 miles east of the Colorado-Utah state line. On most GPS units, the UTM zone is given as part of the Easting measurement, e.g. 12T0123456. Check the appropriate box for the zone. Provide the property address of the well location if one exists. If it is the same as the mailing address, check the box next to the well location address.

5. Provide property owner information.
 6. Use of this well is limited to monitoring water levels and/or water quality sampling only.
 7. The actual or anticipated total depth must be provided. Provide the name of the aquifer in which the well will be completed.
 8. Provide consultant information (if applicable). Note: A consultant may sign this application on behalf of their client.
 9. Monitoring/observation wells must be constructed by a Colorado licensed well construction contractor or authorized individual, as defined in the Well Construction Rules, 2CCR 402-2. Only a licensed contractor may construct any monitoring/observation well that penetrates a confining layer, or, is to be converted into a future production well. The well must be constructed in compliance with the Well Construction Rules, unless a variance has been approved allowing an alternative construction design.
 10. The individual signing the application or entering their name (and title if applicable) must be the applicant or an officer of the corporation/company/ agency identified as the applicant, their attorney or consultant. An authorized agent may also sign the application, if a letter signed by the applicant or their attorney is submitted with the application authorizing that agent to sign or enter their name on the applicant's behalf. Payment must be received via phone, fax or mail prior to processing the application. If filing online please call the Records Section at 303.866.3581 to pay via credit card.
- IF YOU HAVE ANY QUESTIONS** regarding any item on the application form, please call the Division of Water Resources Ground Water Information Desk (303-866-3587), or the nearest Division of Water Resources Field Office located in Greeley (970-352-8712), Pueblo (719-542-3368), Alamosa (719-589-6683), Montrose (970-249-6622), Glenwood Springs (970-945-5665), Steamboat Springs (970-879-0272), or Durango (970-247-1845), or refer to the CDWR web site at dwr.colorado.gov for general information.

[illegible]

INSTRUCTIONS FOR WELL CONSTRUCTION AND YIELD ESTIMATE REPORT

This report must be computer generated online, typed or printed in **BLACK OR BLUE INK** and may be reproduced by photocopy or computer generation. Photocopy reproductions must retain margins and print quality. Attach additional sheets if more space is required. Each additional sheet must be identified at the top by the well owner's name, the permit number, form name/number and a sequential page number. Report depths in feet below ground surface. If filing online please see the [Form Submittal, Payment Options, & Fee Schedule](#). You may also save, print and email the completed form to: dwrpermitsonline@state.co.us

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

Item Instructions: (numbers correspond with those on the front of this form)

1. Complete the well permit and receipt number.
2. Provide the identification (owner's well designation) for the well.
3. Fill in well owner name.
4. Provide the street address where the well is located.
5. Provide the GPS location where the well was drilled (required field).

Colorado contains two (2) UTM zones. Zone 13 covers most of Colorado. The boundary between Zone 12 and Zone 13 is the 108th Meridian (longitude). West of the 108th Meridian is UTM Zone 12 and east of the 108th Meridian is UTM Zone 13. The 108th Meridian is approximately 57 miles east of the Colorado-Utah state line. On most GPS units, the UTM zone is given as part of the Easting measurement, e.g. 12T0123456. Check the appropriate box for the zone.
6. Complete the legal description location of the well and county. For wells located in subdivisions, the name, lot, block, and filing, must be provided.
7. Report the ground surface elevation in feet above sea level if available. This value may be obtained from a topographic map. Provide the date the well was completed and describe the drilling method used to construct the well.
8. Indicate the aquifer in which the well was completed, the total depth drilled, and the actual completed depth of the well.
9. Indicate whether or not the well inspection team was required to be notified prior to construction. If required, provide the date notification was given. See <https://dwr.colorado.gov/services/well-construction-inspection> for more information on Notifications.
10. Check the box indicating the type aquifer in which the well is completed (See Rule 5.2.2 Well Construction Rules).
11. Fully describe the materials encountered in drilling. Do not use formation names unless they are in conjunction with a description of materials. Examples of descriptive terms include:
Type - sandstone, sand, etc.
Grain size - Boulders, gravel, sand, silt, clay, etc.
Color - Denote for all materials, most critical in sedimentary rock
Water Location - Depth where water is encountered (if it can be determined)
12. Provide the diameters of the drilled borehole.
13. The outside diameter, type, wall thickness, and interval of plain and perforated casing lengths must be indicated. For perforated casing, the screen size must be indicated.
14. Indicate the material and size of filter pack (e.g. sand, gravel, etc.) and the interval where placed.
15. Indicate the type and setting depth for any packers installed.
16. The material, amount, and interval of the grout slurry must be reported. Density may be indicated as pounds per gallon, gallons of water per sack, total gallons of water used, or number of sacks used, etc. Specify the grout placement method, i.e. tremie pipe or positive placement. The percentage of additives mixed with the grout should be reported under remarks.
17. Record the type and the amount of disinfection used, how placed, and the length of time left in the hole.
18. Report Well Yield Estimate data as required by Rule 17.1.1. Spaces are provided to report all estimates made during the assessment. The report should show that the estimate complied with the provisions of the rules. If available, report clock time when measurements were taken. If an estimate was not performed, explain when it will be done. A full Well Yield Test may be performed instead of an estimate; if so, check the appropriate box and submit the data on form GWS-39. If this is to report the construction of a dry hole, check the appropriate box regarding the permit status.
19. Fill in Company Name, Email, and Address and License Number (or PE/PG) of the Individual who is responsible for the well construction. The licensed contractor or authorized individual responsible for the construction of the well must sign or if filing online, enter his/her name on the report. If filing online the State Engineer considers the entering of the licensed contractors name on the form to be a certification of accuracy and truthfulness in compliance with Rule 17.4 of the Water Well Construction Rules and Regulations, 2 CCR 402-2.
Rule 17.4 Certification - Work reports must be signed and certified as to accuracy and truthfulness of the information on the report by the well construction or pump installation contractors or authorized individuals responsible for the work performed by them or under their direction or supervision, or by the private driller or private pump installer if the work was performed by them. Such reports are deemed to be completed, signed and certified under oath.

Submit completed report to: State of Colorado, Office of the State Engineer, 1313 Sherman St, Room 818, Denver, CO 80203. You may also save, print, scan and email the completed form to dwrpermitsonline@state.co.us

IF YOU HAVE ANY QUESTIONS regarding any item on this form, please call the Division of Water Resources Ground Water Information Desk (303-866-3587), or the nearest Division of Water Resources Field Office located in Greeley (970-352-8712), Pueblo (719-542-3368), Alamosa (719-589-6683), Montrose (970-249-6622), Glenwood Springs (970-945-5665), Steamboat Springs (970-879-0272), or Durango (970-247-1845), or refer to our web site at dwr.colorado.gov for general information, forms, online filing instructions and access to state rules and statutes.



ORIGINAL PERMIT APPLICANT(S)

THORIN RESOURCES LLC (CHRIS SKERIK)

APPROVED WELL LOCATION

Water Division: 4 Water District: 68
Designated Basin: N/A
Management District: N/A
County: OURAY
Parcel Name: N/A
Physical Address: 1416 CR 26 OURAY, CO 81427
NW 1/4 NE 1/4 Section 21 Township 43.0 N Range 8.0 W New Mexico
P.M.

UTM COORDINATES (Meters, Zone:13, NAD83)

Easting: 258672.0 Northing: 4206613.0

PERMIT TO USE AN EXISTING WELL

ISSUANCE OF THIS PERMIT DOES NOT CONFER A WATER RIGHT

CONDITIONS OF APPROVAL

- 1) This well shall be used in such a way as to cause no material injury to existing water rights. The issuance of this permit does not ensure that no injury will occur to another vested water right or preclude another owner of a vested water right from seeking relief in a civil court action.
- 2) The construction of this well shall be in compliance with the Water Well Construction Rules 2 CCR 402-2, unless approval of a variance has been granted by the State Board of Examiners of Water Well Construction and Pump Installation Contractors in accordance with Rule 18.
- 3) Approved pursuant to CRS 37-92-602(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 known as GW-4B.
- 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 e-Form available at: <https://dwr.state.co.us/eforms> 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 location 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.)

Issued By GEOFFREY DAVIS

Date Issued: 11/8/2024

Expiration Date: N/A

COLORADO DIVISION OF WATER RESOURCES DEPARTMENT OF NATURAL RESOURCES 1313 SHERMAN ST., Ste 821, DENVER CO 80203 Phone: (303) 866-3581 dwrpermitsonline@state.co.us					Office Use Only		Form GWS-46 (01/2020)	
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 Thorin Resources LLC								
Mailing address Po Box 1030								
City Ouray			State Co		Zip code 81427			
Telephone # 9703162294			E-Mail (If filing online it is required) cjdickerson@thorinresources.co					
2. Type Of Application (check applicable boxes)								
<input checked="" type="checkbox"/> Use existing well <input type="checkbox"/> Replacement for existing monitoring well: <input type="checkbox"/> Construct new well Permit no.: <input type="checkbox"/> Other:								
3. Refer To (if applicable)								
Monitoring hole acknowledgment MH-			Well name or # GW-4B					
4. Location Of Proposed Well (Important! See Instructions)								
County Ouray			NW 1/4 of the NE 1/4					
Section 21		Township 43	N or S <input checked="" type="checkbox"/> N <input type="checkbox"/> S	Range 8	E or W <input type="checkbox"/> E <input checked="" type="checkbox"/> W	Principal Meridian New Mexico		
Distance of well from section lines (section lines are typically not property lines) 1100 Ft. from <input type="checkbox"/> N <input checked="" type="checkbox"/> S 3165 Ft. from <input type="checkbox"/> E <input checked="" type="checkbox"/> W								
For replacement wells only – distance and direction from old well to new well feet direction								
Well location address (Include City, State, Zip) <input type="checkbox"/> Check if well address is same as Item 1. 1416 CR 26 Ouray, Co 81427								
Optional: GPS well location information in UTM format You must check GPS unit for required settings as follows:								
Format must be UTM <input type="checkbox"/> Zone 12 or <input checked="" type="checkbox"/> Zone 13 Units must be Meters Datum must be NAD83 Unit must be set to true north Was GPS unit checked for above? <input type="checkbox"/> YES			Easting 258672 Northing 4206613 Remember to set Datum to NAD83					
5. Property Owner Information								
Name of property owner Thorin Resources LLC								
Mailing address Po Box 1030								
City Ouray			State Co		Zip Code 81427			
Telephone # 9703162294								
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 10 feet					Aquifer Alluvial			
8. Consultant Information (if applicable)								
Name of contact person								
Company name								
Mailing address								
City			State		Zip Code			
Telephone #								
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 Chris Skerik							Date (mm/dd/yyyy) 10/24/2024	
If signing print name. Print title if other than land owner. Chris Skerik, COO								
Office Use Only								
USGS map name			DWR map no.		Surface elev.			
			Receipt area only					
DIV ____ WD ____ BA ____ MD ____								

MONITORING/OBSERVATION WELL PERMIT APPLICATION INSTRUCTIONS

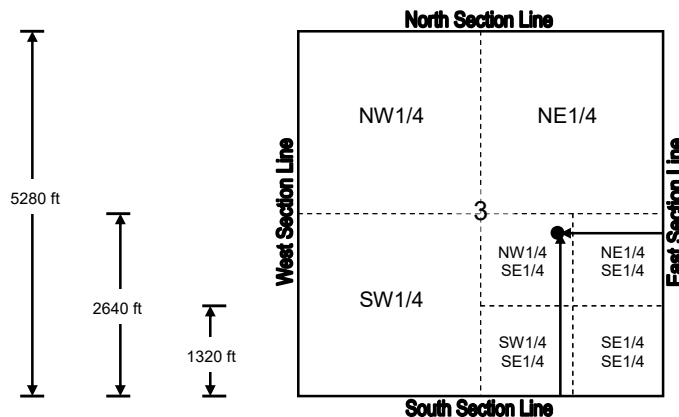
Applications must be computer generated on-line, typewritten or printed in BLACK or BLUE INK. ALL ITEMS in the application must be completed. Incomplete applications may be returned for more information. Applications are evaluated in chronological order. Please allow approximately six weeks for processing. This form may be reproduced by photocopying or computer generation. Reproductions must retain margins and print quality of the original form. If filing online, see online filing instructions for further information. You may also save, print, scan and email the completed form to: dwrpermitsonline@state.co.us

FEES: This application must be submitted with a **\$100 filing fee**. (The fee for an application to replace or deepen an existing permitted monitoring/observation well is \$100 for locations outside Designated Ground Water Basins, and \$60 inside Designated Ground Water Basins.) **Fees are nonrefundable.** Please visit our website (dwr.colorado.gov) for acceptable payment information or contact DWR at (303) 866-3581.

USES: This form (GWS-46) is to be used when applying for a permit where the only uses are monitoring of water levels and/or water quality sampling. For well construction criteria refer to the Colorado Water Well Construction Rules, 2CCR 402-2. A copy of the Rules may be obtained from any Division of Water Resources Office for a fee of \$5, or you may access them online on our website (dwr.colorado.gov)

ITEM INSTRUCTIONS: (numbers correspond with those on the front of this form)

1. Provide the name of the well owner and the mailing address where all correspondence will be sent.
2. Check and complete all boxes that apply.
3. Provide the MH number assigned by the Division of Water Resources in response to the notice of intent to construct a monitoring/observation well. Complete the well name if the structure has a name or identifying number.
4. If applying for a permit to **construct a new well**, you **must** provide the county, section #, township, range and principal meridian. You **do not** need to provide the $\frac{1}{4}$ of the $\frac{1}{4}$ section designation, distances from section lines or an optional GPS location (UTM coordinates). If a permit is issued and a well constructed, the authorized individual will be required to provide an accurate GPS location (UTM coordinates) of the "as-built" well location. If applying for a permit to **use an existing well** you **must** provide the well location information stated above, as well as either a GPS location (UTM coordinates) of the existing well site, or distances from section lines (**including the $\frac{1}{4}$ of the $\frac{1}{4}$ section designation**) as follows: In a typical case, a township is comprised of 36 sections, with each section ideally one mile square, or 5,280 feet on each side. Sections are further divided into quarter sections. Each $\frac{1}{4}$ Section is 2,640 feet by 2,640 feet and comprises 160 acres. Each $\frac{1}{4}$ section can be further divided into additional quarters. Each $\frac{1}{4}$ of the $\frac{1}{4}$ Section is 1,320 feet by 1,320 feet and comprises 40 acres. The distances are measured from the section lines. In the following example, the well is located 2,500 feet from the South Section line and 1,400 feet from the East Section line:



If providing a GPS location (UTM coordinates), the required GPS unit settings must be as indicated on this form. Colorado contains two UTM zones (12 & 13). Zone 13 covers most of Colorado. The boundary between Zone 12 and Zone 13 is the 108th Meridian (longitude). West of the 108th Meridian is UTM Zone 12 and east of the 108th Meridian is UTM Zone 13. The 108th Meridian is approximately 57 miles east of the Colorado-Utah state line. On most GPS units, the UTM zone is given as part of the Easting measurement, e.g. 12T0123456. Check the appropriate box for the zone. Provide the property address of the well location if one exists. If it is the same as the mailing address, check the box next to the well location address.

5. Provide property owner information.
 6. Use of this well is limited to monitoring water levels and/or water quality sampling only.
 7. The actual or anticipated total depth must be provided. Provide the name of the aquifer in which the well will be completed.
 8. Provide consultant information (if applicable). Note: A consultant may sign this application on behalf of their client.
 9. Monitoring/observation wells must be constructed by a Colorado licensed well construction contractor or authorized individual, as defined in the Well Construction Rules, 2CCR 402-2. Only a licensed contractor may construct any monitoring/observation well that penetrates a confining layer, or, is to be converted into a future production well. The well must be constructed in compliance with the Well Construction Rules, unless a variance has been approved allowing an alternative construction design.
 10. The individual signing the application or entering their name (and title if applicable) must be the applicant or an officer of the corporation/company/ agency identified as the applicant, their attorney or consultant. An authorized agent may also sign the application, if a letter signed by the applicant or their attorney is submitted with the application authorizing that agent to sign or enter their name on the applicant's behalf. Payment must be received via phone, fax or mail prior to processing the application. If filing online please call the Records Section at 303.866.3581 to pay via credit card.
- IF YOU HAVE ANY QUESTIONS** regarding any item on the application form, please call the Division of Water Resources Ground Water Information Desk (303-866-3587), or the nearest Division of Water Resources Field Office located in Greeley (970-352-8712), Pueblo (719-542-3368), Alamosa (719-589-6683), Montrose (970-249-6622), Glenwood Springs (970-945-5665), Steamboat Springs (970-879-0272), or Durango (970-247-1845), or refer to the CDWR web site at dwr.colorado.gov for general information.

[illegible]

INSTRUCTIONS FOR WELL CONSTRUCTION AND YIELD ESTIMATE REPORT

This report must be computer generated online, typed or printed in **BLACK OR BLUE INK** and may be reproduced by photocopy or computer generation. Photocopy reproductions must retain margins and print quality. Attach additional sheets if more space is required. Each additional sheet must be identified at the top by the well owner's name, the permit number, form name/number and a sequential page number. Report depths in feet below ground surface. If filing online please see the [Form Submittal, Payment Options, & Fee Schedule](#). You may also save, print and email the completed form to: dwrpermitsonline@state.co.us

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

Item Instructions: (numbers correspond with those on the front of this form)

1. Complete the well permit and receipt number.
2. Provide the identification (owner's well designation) for the well.
3. Fill in well owner name.
4. Provide the street address where the well is located.
5. Provide the GPS location where the well was drilled (required field).

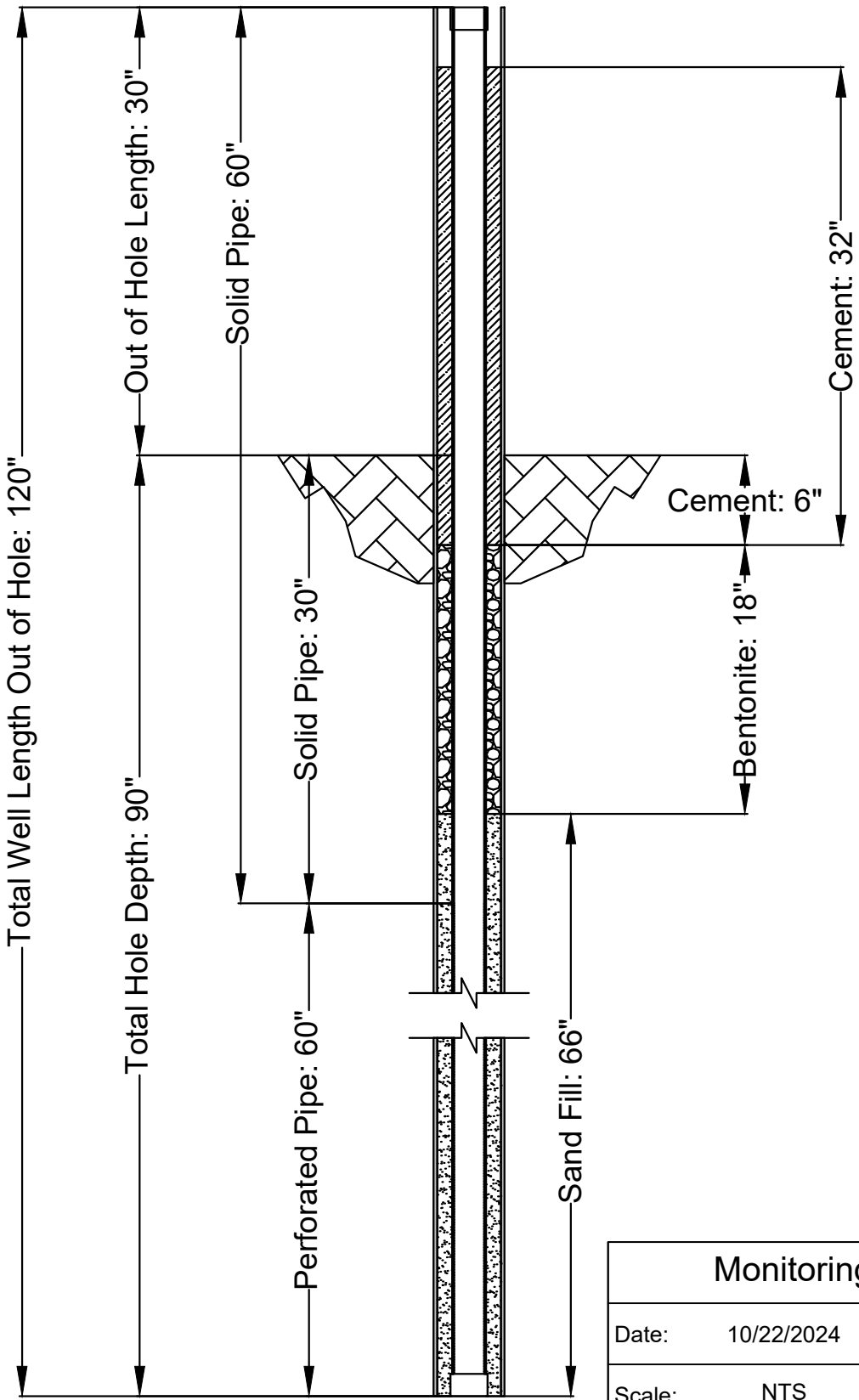
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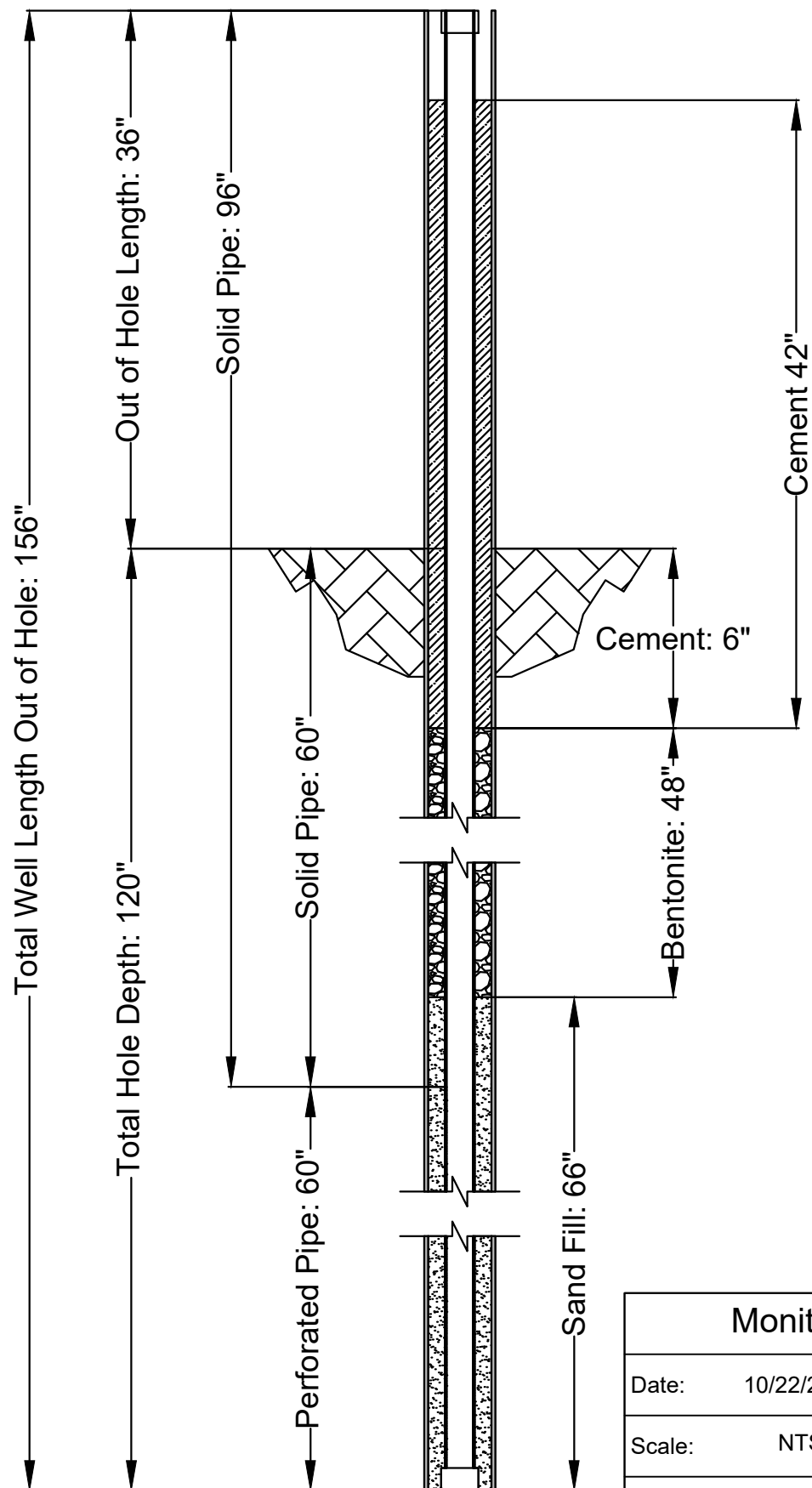
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Monitoring Well GW-4A		
Date:	10/22/2024	Drawn By: cjd
Scale:	NTS	Approved By:
File Name: GW_4A_4B		



Monitoring Well GW-4B

Date: 10/22/2024

Drawn By: cjd

Scale: NTS

Approved By:

File Name: GW_4A_4B

