



## TECHNICAL MEMORANDUM

**DATE** January 22, 2025

**Reference No.** 31404755.9183-001-TM-0

**TO** Jocelyn Carter  
Colorado Division of Reclamation, Mining and Safety

**CC** Michael Toelle and Travis Weide (Holcim (US) Inc.)

**FROM** Sara Harkins and Griffin Easthouse

**EMAIL** sara\_harkins@wsp.com

### BOETTCHER LIMESTONE QUARRY: MONITORING WELL ABANDONMENT FIELD REPORT

On behalf of Holcim (US) Inc., WSP Inc. (WSP) is providing a field summary of the recent monitoring well abandonment activities conducted at the Boettcher Limestone Quarry (Site) located at 3060 West County Road 56, Laporte, Colorado 80535. The groundwater monitoring program at Boettcher Quarry has been discontinued following the Colorado Division of Reclamation, Mining and Safety (DRMS) approval of Technical Revision No. 12 (TR-12) of Permit No. M1977-348 by the dated July 15, 2024 (DRMS 2024). The field program conducted in November 2024 consisted of abandoning the eight on-site wells (MW-1 through MW-8) that were included in the discontinued monitoring program. The site layout and location these wells are presented in Figure 1.

The abandonment of monitoring wells MW-1 through MW-8 occurred between November 4, 2024, and November 7, 2024. The well abandonments were conducted in general compliance with minimum standards, as stipulated by the Division of Water Resources (DWR) of the state of Colorado (2 CCR 402-2; DWR 2016) for Type II unconfined bedrock aquifer wells. The work described below was conducted by drilling contractors Terracon Consultants (Terracon) under the direction of WSP.

The abandonment of MW-1 through MW-8 followed the same general procedure. The depth to water in the well was recorded, and the PVC well casing was filled with clean silica sand to a specified level above the measured water level (Attachment 1). During well abandonment, standard procedures include filling the PVC well casing with clean silica sand to just above the typical static water level for the given well. Based on observations from the discontinued monitoring program it is understood that the water levels in MW-1, MW-2, MW-3 and MW-5 represent the approximate static water levels. However, due to the observed slow recharge rates in MW-4, MW-6, MW7 and MW-8, the measured water level does not represent static water level conditions. Therefore, the silica sand fill level varied as follows:

- MW-1, MW-2, MW-3, and MW-5: The casing was filled with silica sand to approximately 5 feet above the measured water level.
- MW-4: The casing was filled with silica sand to approximately 20 feet above the measured water level.
- MW-6, MW-7, and MW-8: The casing was filled with silica sand to approximately 40 feet above the measured static water level.

The well casing was then filled with a grout slurry mixture of cement and bentonite that was prepared on-site. The grout mixture was pumped into the well casing, filling the casing between the top of the silica sand and the top of the PVC using a tremie pipe to displace water and fill voids and annular space

After the wells were filled with both silica sand and the grout slurry, the above ground steel well casing and cement platforms were removed with a backhoe and/or winch attached to the drill rig. For wells MW-2 through MW-8, the PVC well casing remaining below ground surface was then over drilled to approximately 10 feet below ground surface. After the over drilling and removal of the top ten feet of the PVC well casing, the borehole was filled to the ground surface with a cement slurry which was poured from the surface. MW-1 was not over drilled after the removal of the surface casing because the well was located on a sloped and elevated pad that could not be easily and safely accessed with the drilling rig. At MW-1, the top of the PVC casing was removed with a backhoe. Finally, the ground surface was graded to be level with the surrounding area. Photographs of the post abandonment surface condition at each well location are provided in Attachment 2. Terracon was responsible for off-site disposal of any trash generated, including the previous well surfaces completions (protective cover and cement pads).

Following the field activities, Well Abandonment Report eForms for the abandoned wells were completed by WSP and submitted to the DWR of the State of Colorado. The abandonment forms accepted by the DWR and posted to the Colorado's Decision Support Systems (CDSS) website are provided in Attachment 1.

If you have any questions about the above well abandonment activities, please call the undersigned at (303) 980-0540.

Sincerely,

**WSP USA Inc.**



Griffin Easthouse  
Geochemist



Sara Harkins, PG (WY)  
Senior Geochemist

GE/SH/rm

Attachments: Figure 1: Site Location Plan

Attachment 1: Well Abandonment Report eForm

Attachment 2: Post-abandonment Ground Surface Photographs

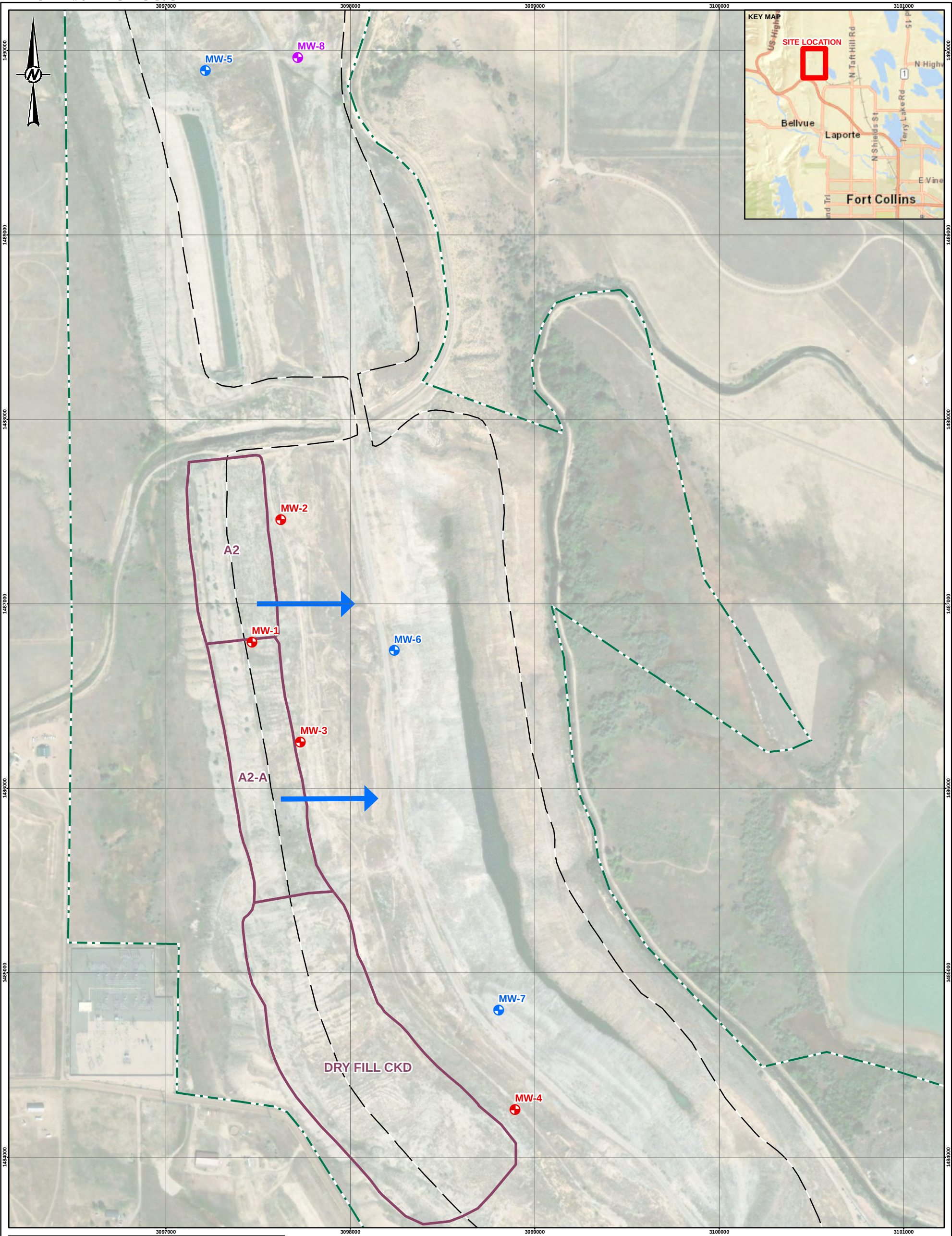
[https://wspnlinenam.sharepoint.com/sites/us-holcimboettcherqua/shared documents/2024\\_202319183\\_2024 well abandonment/6\\_deliverables/001-tm-mw\\_abandonment\\_field\\_report/rev0/31404755.9183-001-tm-0-monitoring\\_well\\_abandonment\\_field\\_report\\_22jan25.docx](https://wspnlinenam.sharepoint.com/sites/us-holcimboettcherqua/shared%20documents/2024_202319183_2024%20well%20abandonment/6_deliverables/001-tm-mw_abandonment_field_report/rev0/31404755.9183-001-tm-0-monitoring_well_abandonment_field_report_22jan25.docx)

## REFERENCES

DRMS (Colorado Division of Reclamation, Mining and Safety). 2024. *Technical Revision No. 12, permit No. M1977-348*; Colorado Division of Reclamation, Mining and Safety, July 15, 2024.

DWR (Division of Water Resources). 2016. Rules and Regulations for Water Well Construction, Pump Installation, Cistern Installation, And Monitoring and Observation Hole/Well Construction, 2 CCR 402-2, Effective September 1, 2016.

Figure



- LEGEND**
- MW-1 PRE-2012 MONITORING WELL
  - MW-6 MONITORING WELL INSTALLED 2012
  - MW-8 MONITORING WELL INSTALLED 2020
  - APPROXIMATE CKD DISPOSAL AREA BOUNDARY
  - AMENDED PERMIT BOUNDARY
  - PROPERTY BOUNDARY
  - APPROXIMATE GROUNDWATER FLOW DIRECTION

**NOTES**

- PROPERTY AND PERMIT BOUNDARIES PROVIDED BY HOLCIM (US) INC.
- COORDINATE SYSTEM: NAD83 STATE PLANE COLORADO NORTH (US FT).
- AERIAL IMAGERY: ESRI BASEMAPS, VIVID. MAXAR. IMAGERY COLLECTED 09/22/2021.

CLIENT  
HOLCIM (US) INC.

PROJECT  
BOETTCHER LIMESTONE QUARRY  
LARIMER COUNTY, COLORADO

TITLE  
**SITE LOCATION PLAN**

|            |            |            |
|------------|------------|------------|
| CONSULTANT | YYYY-MM-DD | 2024-08-02 |
|            | DESIGNED   | SAH        |
|            | PREPARED   | RHG / JM   |
|            | REVIEWED   | SAH        |
|            | APPROVED   | RSM        |

REFERENCE NO.  
31404755.001

FIGURE

**ATTACHMENT 1**

# Well Abandonment Report eForm

# Well Abandonment Report



**COLORADO**  
Division of Water Resources  
Department of Natural Resources

Form Ref Num: 34175  
Date Submitted: 11/27/2024 12:57:13 PM  
Application Type: Applications, Filings, and Submittals (No Fee)

Receipt Number: 0435151A

## Well Identification

- Does this well have a permit/receipt number: **Yes**
- Permit No **213334**
- Suffix **N/A**
- Replacement Suffix **N/A**

## Owners Well Designation

- Does the well have a designation **Yes**
- What is the wells designation \* **MW1**

## Well Owner

- Owner contact information not known **No**
- Prefix **N/A**
- First Name **N/A**
- Middle Name **N/A**
- Last Name **N/A**
- Suffix **N/A**
- Organization **N/A**
- Address **N/A**
- City **N/A**
- State **CO**
- Zip **N/A**
- Country **United States**
- Phone **N/A**
- Email **N/A**

## Well Location

- Location from Submitted Form:

| Div | County  | WD | Lat       | Long        | Q40 | Q160 | Sec   | Twnshp | Rng  | PM | UTM_X    | UTM_Y     |
|-----|---------|----|-----------|-------------|-----|------|-------|--------|------|----|----------|-----------|
| 1   | Larimer | 3  | 40.669098 | -105.148673 | SW  | SW   | 26067 | 8 N    | 69 W | S  | 487434.9 | 4502034.8 |

## Physical Address for The Well

- To verify your selection, please enter the physical ("street") address of the property on which the well is located, then click **"NEXT"**. This is for information only and does not affect the permitted well location.

**THERE IS NO PHYSICAL ADDRESS ASSOCIATED WITH THIS WELL**

## Abandonment Details

- What was the reason for abandonment: \* **Other**
- Please explain why the well was abandoned: \* **Monitoring program discontinued**
- What was the abandonment date: \* **11/7/2024**
- Was the well destroyed and/or not locatable: \* **No**

## Well Condition

- In what aquifer was the well (or hole) completed: **N/A**
- In what aquifer type was the well (or hole) completed: \* **Type 2 (Overlain by Type III)**
- Static Water Level at Time of Abandonment (feet) \* **2**
- In what condition did you leave the wellhead: \* **Casing grouted and cut off below ground surface**

An incorrect static water level measurement was provided on the submitted form. The correct static water level (42.6 ft) was provided to the DWR via email.

#### Interval Data

- List the interval for which the casing was perforated, ripped, or removed.

| From (feet)* | To (feet)* | Casing Condition* |
|--------------|------------|-------------------|
| 0            | 2          | Ripped            |

- For each interval, please state the type and amount of material, and the placement method.

| From (feet) | To (feet) | Type of Material | Method of Placement | Amount of Material | Units      | Density                                                                                                                                                                                                     |
|-------------|-----------|------------------|---------------------|--------------------|------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 0           | 37.6      | Other            | Tremie              | 0.82               | Cubic Feet | Casing filled (Mixture: 59 lbs cement, 0.25 lb bentonite and 8 gallons of water) from 37.6 ft below ground surface to the top of casing, then the casing was removed and well backfilled to ground surface. |
| 37.6        | 63.4      | Clean Sand       | Tremie              | 0.56               | Cubic Feet | N/A                                                                                                                                                                                                         |

#### Responsible Party - Type

- Who was responsible for the plugging/sealing of the well: \* **Water Well Driller Licensed in Colorado**
- Select driller (start typing a name or license number) \* **1367**

#### Responsible Party - Contact Information

- Prefix **N/A**
- First Name **RICHARD C.**
- Middle Name **N/A**
- Last Name **ROGERS**
- Suffix **N/A**
- Organization **TERRACON CONSULTANTS INC.**
- Address **1309 DUFF DRIVE**
- City **FORT COLLINS**
- State **CO**
- Zip **80524**
- Country **United States**
- Phone **9704845183**
- Email **RICK.ROGERS@TERRACON.COM**

#### Additional Information

- Please provide any additional information regarding the abandonment of the well. **N/A**

#### Signature and Certification

1. 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.
2. The filing of a document that contains false statements is a violation of section 37-91-108(1)(e), CRS, and is punishable by fines up to \$1,000 and/or revocation of the contracting license.
3. The State Engineer considers the entry of the licensed contractor's name to be in compliance with Rule 17.4.

- I have read and agree to the Terms and Conditions listed above \* **Yes**
- Organization: **WSP USA Inc.**
- Name: \* **Griffin Easthouse**
- Email Address: \* **Griffin.Easthouse@wsp.com**

# Well Abandonment Report



**COLORADO**  
Division of Water Resources  
Department of Natural Resources

Form Ref Num: 34321  
Date Submitted: 11/27/2024 1:22:28 PM  
Application Type: Applications, Filings, and Submittals (No Fee)

Receipt Number: 0435151B

## Well Identification

- Does this well have a permit/receipt number: **Yes**
- Permit No **213335**
- Suffix **N/A**
- Replacement Suffix **N/A**

## Owners Well Designation

- Does the well have a designation **Yes**
- What is the wells designation \* **MW2**

## Well Owner

- Owner contact information not known **No**
- Prefix **N/A**
- First Name **N/A**
- Middle Name **N/A**
- Last Name **N/A**
- Suffix **N/A**
- Organization **HOLNAM INC**
- Address **4629 N OVERLAND TRPO BOX 1548**
- City **LAPORTE**
- State **CO**
- Zip **80535**
- Country **United States**
- Phone **9704824065**
- Email **N/A**

## Well Location

- Location from Submitted Form:

| Div | County  | WD | Lat       | Long        | Q40 | Q160 | Sec   | Twnshp | Rng  | PM | UTM_X    | UTM_Y     |
|-----|---------|----|-----------|-------------|-----|------|-------|--------|------|----|----------|-----------|
| 1   | Larimer | 3  | 40.670912 | -105.148085 | SW  | SW   | 26172 | 8 N    | 69 W | S  | 487485.0 | 4502236.0 |

## Physical Address for The Well

- To verify your selection, please enter the physical ("street") address of the property on which the well is located, then click "**NEXT**". This is for information only and does not affect the permitted well location.

**THERE IS NO PHYSICAL ADDRESS ASSOCIATED WITH THIS WELL**

## Abandonment Details

- What was the reason for abandonment: \* **Other**
- Please explain why the well was abandoned: \* **Monitoring program discontinued**
- What was the abandonment date: \* **11/7/2024**
- Was the well destroyed and/or not locatable: \* **No**

## Well Condition

- In what aquifer was the well (or hole) completed: **N/A**
- In what aquifer type was the well (or hole) completed: \* **Type 2 (Not Overlain by Type III)**
- Static Water Level at Time of Abandonment (feet) \* **72.1**
- In what condition did you leave the wellhead: \* **Casing grouted and cut off below ground surface**

#### Interval Data

- List the interval for which the casing was perforated, ripped, or removed.

| From (feet)* | To (feet)* | Casing Condition* |
|--------------|------------|-------------------|
| 0            | 10         | Removed           |

- For each interval, please state the type and amount of material, and the placement method.

| From (feet) | To (feet) | Type of Material | Method of Placement | Amount of Material | Units      | Density                                                                                                                                                                                                                                                                  |
|-------------|-----------|------------------|---------------------|--------------------|------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 66.8        | 110.6     | Clean Sand       | Poured              | 0.948              | Cubic Feet | N/A                                                                                                                                                                                                                                                                      |
| 0           | 66.8      | Other            | Tremie              | 5                  | Cubic Feet | Casing filled (Mixture: 59 lbs cement, 1 lb bentonite and 10 gallons of water) from 66.8 ft below ground surface to the top of casing, then over drilled to 10 ft below ground surface and hole backfilled to ground surface (Mixture: 71 lbs cement, 15 gallons water). |

#### Responsible Party - Type

- Who was responsible for the plugging/sealing of the well: \* **Water Well Driller Licensed in Colorado**
- Select driller (start typing a name or license number) \* **1367**

#### Responsible Party - Contact Information

- Prefix **N/A**
- First Name **RICHARD C.**
- Middle Name **N/A**
- Last Name **ROGERS**
- Suffix **N/A**
- Organization **TERRACON CONSULTANTS INC.**
- Address **1309 DUFF DRIVE**
- City **FORT COLLINS**
- State **CO**
- Zip **80524**
- Country **United States**
- Phone **9704845183**
- Email **RICK.ROGERS@TERRACON.COM**

#### Additional Information

- Please provide any additional information regarding the abandonment of the well. **N/A**

#### Signature and Certification

1. 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.
2. The filing of a document that contains false statements is a violation of section 37-91-108(1)(e), CRS, and is punishable by fines up to \$1,000 and/or revocation of the contracting license.
3. The State Engineer considers the entry of the licensed contractor's name to be in compliance with Rule 17.4.

- I have read and agree to the Terms and Conditions listed above \* **Yes**
- Organization: **WSP USA Inc.**
- Name: \* **Griffin Easthouse**
- Email Address: \* **Griffin.Easthouse@wsp.com**

# Well Abandonment Report



**COLORADO**  
Division of Water Resources  
Department of Natural Resources

Form Ref Num: 34492  
Date Submitted: 11/27/2024 1:34:37 PM  
Application Type: Applications, Filings, and Submittals (No Fee)

## Well Identification

- Does this well have a permit/receipt number: **Yes**
- Permit No **214094**
- Suffix **N/A**
- Replacement Suffix **N/A**

## Owners Well Designation

- Does the well have a designation **Yes**
- What is the wells designation \* **MW3**

## Well Owner

- Owner contact information not known **No**
- Prefix **N/A**
- First Name **N/A**
- Middle Name **N/A**
- Last Name **N/A**
- Suffix **N/A**
- Organization **HOLNAM INC**
- Address **4629 N OVERLAND TRPO BOX 1548**
- City **LAPORTE**
- State **CO**
- Zip **80535**
- Country **United States**
- Phone **9704824065**
- Email **N/A**

## Well Location

- Location from Submitted Form:

| Div | County  | WD | Lat       | Long        | Q40 | Q160 | Sec   | Twnshp | Rng  | PM | UTM_X    | UTM_Y     |
|-----|---------|----|-----------|-------------|-----|------|-------|--------|------|----|----------|-----------|
| 1   | Larimer | 3  | 40.666764 | -105.147558 | NW  | NW   | 26316 | 8 N    | 69 W | S  | 487528.7 | 4501775.5 |

## Physical Address for The Well

- To verify your selection, please enter the physical ("street") address of the property on which the well is located, then click **"NEXT"**. This is for information only and does not affect the permitted well location.

**THERE IS NO PHYSICAL ADDRESS ASSOCIATED WITH THIS WELL**

## Abandonment Details

- What was the reason for abandonment: \* **Other**
- Please explain why the well was abandoned: \* **Monitoring program discontinued**
- What was the abandonment date: \* **11/7/2024**
- Was the well destroyed and/or not locatable: \* **No**

## Well Condition

- In what aquifer was the well (or hole) completed: **N/A**
- In what aquifer type was the well (or hole) completed: \* **Type 2 (Not Overlain by Type III)**
- Static Water Level at Time of Abandonment (feet) \* **44.8**
- In what condition did you leave the wellhead: \* **Casing grouted and cut off below ground surface**

#### Interval Data

- List the interval for which the casing was perforated, ripped, or removed.

| From (feet)* | To (feet)* | Casing Condition* |
|--------------|------------|-------------------|
| 0            | 10         | Removed           |

- For each interval, please state the type and amount of material, and the placement method.

| From (feet) | To (feet) | Type of Material | Method of Placement | Amount of Material | Units      | Density                                                                                                                                                                                                                                                                 |
|-------------|-----------|------------------|---------------------|--------------------|------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 33.8        | 102.9     | Clean Sand       | Poured              | 1.5                | Cubic Feet | N/A                                                                                                                                                                                                                                                                     |
| 0           | 33.8      | Other            | Tremie              | 4.2                | Cubic Feet | Casing filled (Mixture: 39 lbs cement, 1 lb bentonite and 7 gallons of water) from 33.8 ft below ground surface to the top of casing, then over drilled to 10 ft below ground surface and hole backfilled to ground surface (Mixture: 94 lbs cement, 10 gallons water). |

#### Responsible Party - Type

- Who was responsible for the plugging/sealing of the well: \* **Water Well Driller Licensed in Colorado**
- Select driller (start typing a name or license number) \* **1367**

#### Responsible Party - Contact Information

- Prefix **N/A**
- First Name **RICHARD C.**
- Middle Name **N/A**
- Last Name **ROGERS**
- Suffix **N/A**
- Organization **TERRACON CONSULTANTS INC.**
- Address **1309 DUFF DRIVE**
- City **FORT COLLINS**
- State **CO**
- Zip **80524**
- Country **United States**
- Phone **9704845183**
- Email **RICK.ROGERS@TERRACON.COM**

#### Additional Information

- Please provide any additional information regarding the abandonment of the well. **N/A**

#### Signature and Certification

1. 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.
2. The filing of a document that contains false statements is a violation of section 37-91-108(1)(e), CRS, and is punishable by fines up to \$1,000 and/or revocation of the contracting license.
3. The State Engineer considers the entry of the licensed contractor's name to be in compliance with Rule 17.4.

- I have read and agree to the Terms and Conditions listed above \* **Yes**
- Organization: **WSP USA Inc.**
- Name: \* **Griffin Easthouse**
- Email Address: \* **Griffin.Easthouse@wsp.com**

# Well Abandonment Report



**COLORADO**  
Division of Water Resources  
Department of Natural Resources

Form Ref Num: 34493 -- 2025001-AB Receipt 2025001  
Date Submitted: 11/27/2024 1:17:42 PM  
Application Type: Applications, Filings, and Submittals (No Fee)

## Well Identification

- Does this well have a permit/receipt number: **No**

## Owners Well Designation

- Does the well have a designation **Yes**
- What is the wells designation \* **MW4**

## Well Owner

- Owner contact information not known **No**
- Prefix **N/A**
- First Name **N/A**
- Middle Name **N/A**
- Last Name **N/A**
- Suffix **N/A**
- Organization **HOLCIM (US) INC**
- Address **N/A**
- City **N/A**
- State **N/A**
- Zip **N/A**
- Country **United States**
- Phone **N/A**
- Email **N/A**

## Well Location

- Location from Submitted Form:

| Div | County  | WD | Lat       | Long        | Q40 | Q160 | Sec   | Twnshp | Rng  | PM | UTM_X    | UTM_Y     |
|-----|---------|----|-----------|-------------|-----|------|-------|--------|------|----|----------|-----------|
| 1   | Larimer | 3  | 40.662478 | -105.143981 | SE  | NW   | 26318 | 8 N    | 69 W | S  | 487830.3 | 4501299.3 |

## Physical Address for The Well

- To verify your selection, please enter the physical ("street") address of the property on which the well is located, then click **"NEXT"**. This is for information only and does not affect the permitted well location.

**THERE IS NO PHYSICAL ADDRESS ASSOCIATED WITH THIS WELL**

## Abandonment Details

- What was the reason for abandonment: \* **Other**
- Please explain why the well was abandoned: \* **Monitoring program discontinued**
- What was the abandonment date: \* **11/7/2024**
- Was the well destroyed and/or not locatable: \* **No**

## Well Condition

- In what aquifer was the well (or hole) completed: **N/A**
- In what aquifer type was the well (or hole) completed: \* **Type 2 (Not Overlain by Type III)**
- Static Water Level at Time of Abandonment (feet) \* **74.2**

- In what condition did you leave the wellhead: \* **Casing grouted and cut off below ground surface**

#### Interval Data

- List the interval for which the casing was perforated, ripped, or removed.

| From (feet)* | To (feet)* | Casing Condition* |
|--------------|------------|-------------------|
| 0            | 10         | Removed           |

- For each interval, please state the type and amount of material, and the placement method.

| From (feet) | To (feet) | Type of Material | Method of Placement | Amount of Material | Units      | Density                                                                                                                                                                                                                                                                  |
|-------------|-----------|------------------|---------------------|--------------------|------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 53.7        | 181       | Clean Sand       | Poured              | 2.8                | Cubic Feet | N/A                                                                                                                                                                                                                                                                      |
| 0           | 53.7      | Other            | Tremie              | 4.7                | Cubic Feet | Casing filled (Mixture: 47 lbs cement, 1 lb bentonite and 10 gallons of water) from 53.7 ft below ground surface to the top of casing, then over drilled to 10 ft below ground surface and hole backfilled to ground surface (Mixture: 82 lbs cement, 10 gallons water). |

#### Responsible Party - Type

- Who was responsible for the plugging/sealing of the well: \* **Water Well Driller Licensed in Colorado**
- Select driller (start typing a name or license number) \* **1367**

#### Responsible Party - Contact Information

- Prefix **N/A**
- First Name **RICHARD C.**
- Middle Name **N/A**
- Last Name **ROGERS**
- Suffix **N/A**
- Organization **TERRACON CONSULTANTS INC.**
- Address **1309 DUFF DRIVE**
- City **FORT COLLINS**
- State **CO**
- Zip **80524**
- Country **United States**
- Phone **9704845183**
- Email **RICK.ROGERS@TERRACON.COM**

#### Additional Information

- Please provide any additional information regarding the abandonment of the well. **N/A**

#### Signature and Certification

1. 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.
2. The filing of a document that contains false statements is a violation of section 37-91-108(1)(e), CRS, and is punishable by fines up to \$1,000 and/or revocation of the contracting license.
3. The State Engineer considers the entry of the licensed contractor's name to be in compliance with Rule 17.4.

- I have read and agree to the Terms and Conditions listed above \* **Yes**
- Organization: **WSP USA Inc.**
- Name: \* **Griffin Easthouse**
- Email Address: \* **Griffin.Easthouse@wsp.com**

# Well Abandonment Report



**COLORADO**  
Division of Water Resources  
Department of Natural Resources

Form Ref Num: 34494  
Date Submitted: 11/27/2024 1:11:36 PM  
Application Type: Applications, Filings, and Submittals (No Fee)

Receipt Number: 3659022A

## Well Identification

- Does this well have a permit/receipt number: **Yes**
- Permit No **290442**
- Suffix **N/A**
- Replacement Suffix **N/A**

## Owners Well Designation

- Does the well have a designation **Yes**
- What is the wells designation \* **MW-5**

## Well Owner

- Owner contact information not known **No**
- Prefix **N/A**
- First Name **N/A**
- Middle Name **N/A**
- Last Name **N/A**
- Suffix **N/A**
- Organization **HOLCIM US INC**
- Address **C/O GOLDER ASSOCIATES INC44 UNION BOULEVARD SUITE 300**
- City **DENVER**
- State **CO**
- Zip **80228**
- Country **United States**
- Phone **3039800540**
- Email **N/A**

## Well Location

- Location from Submitted Form:

| Div | County  | WD | Lat       | Long        | Q40 | Q160 | Sec   | Twnshp | Rng  | PM | UTM_X    | UTM_Y     |
|-----|---------|----|-----------|-------------|-----|------|-------|--------|------|----|----------|-----------|
| 1   | Larimer | 3  | 40.677731 | -105.149551 | SW  | NW   | 26319 | 8 N    | 69 W | S  | 487362.3 | 4502993.2 |

## Physical Address for The Well

- To verify your selection, please enter the physical ("street") address of the property on which the well is located, then click "**NEXT**". This is for information only and does not affect the permitted well location.

**THERE IS NO PHYSICAL ADDRESS ASSOCIATED WITH THIS WELL**

## Abandonment Details

- What was the reason for abandonment: \* **Other**
- Please explain why the well was abandoned: \* **Monitoring program discontinued**
- What was the abandonment date: \* **11/4/2024**
- Was the well destroyed and/or not locatable: \* **No**

## Well Condition

- In what aquifer was the well (or hole) completed: **N/A**
- In what aquifer type was the well (or hole) completed: \* **Type 2 (Not Overlain by Type III)**
- Static Water Level at Time of Abandonment (feet) \* **48.7**
- In what condition did you leave the wellhead: \* **Casing grouted and cut off below ground surface**

#### Interval Data

- List the interval for which the casing was perforated, ripped, or removed.

| From (feet)* | To (feet)* | Casing Condition* |
|--------------|------------|-------------------|
| 0            | 10         | Removed           |

- For each interval, please state the type and amount of material, and the placement method.

| From (feet) | To (feet) | Type of Material | Method of Placement | Amount of Material | Units      | Density                                                                                                                                                                                                                                                                       |
|-------------|-----------|------------------|---------------------|--------------------|------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 43          | 57.1      | Clean Sand       | Poured              | 0.3                | Cubic Feet | N/A                                                                                                                                                                                                                                                                           |
| 0           | 43        | Other            | Tremie              | 4.4                | Cubic Feet | Casing filled (Mixture: 282 lbs cement, 5 lb bentonite and 30 gallons of water) from 43 ft below ground surface to the top of casing, then over drilled to 10 ft below ground surface and hole backfilled to ground surface (same mixture used to fill over drilled section). |

#### Responsible Party - Type

- Who was responsible for the plugging/sealing of the well: \* **Water Well Driller Licensed in Colorado**
- Select driller (start typing a name or license number) \* **1367**

#### Responsible Party - Contact Information

- Prefix **N/A**
- First Name **RICHARD C.**
- Middle Name **N/A**
- Last Name **ROGERS**
- Suffix **N/A**
- Organization **TERRACON CONSULTANTS INC.**
- Address **1309 DUFF DRIVE**
- City **FORT COLLINS**
- State **CO**
- Zip **80524**
- Country **United States**
- Phone **9704845183**
- Email **RICK.ROGERS@TERRACON.COM**

#### Additional Information

- Please provide any additional information regarding the abandonment of the well. **N/A**

#### Signature and Certification

1. 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.
2. The filing of a document that contains false statements is a violation of section 37-91-108(1)(e), CRS, and is punishable by fines up to \$1,000 and/or revocation of the contracting license.
3. The State Engineer considers the entry of the licensed contractor's name to be in compliance with Rule 17.4.

- I have read and agree to the Terms and Conditions listed above \* **Yes**
- Organization: **WSP USA Inc.**
- Name: \* **Griffin Easthouse**
- Email Address: \* **Griffin.Easthouse@wsp.com**

# Well Abandonment Report



**COLORADO**  
Division of Water Resources  
Department of Natural Resources

Form Ref Num: 34495  
Date Submitted: 11/27/2024 12:19:32 PM  
Application Type: Applications, Filings, and Submittals (No Fee)

Receipt Number: 3659022B

## Well Identification

- Does this well have a permit/receipt number: **Yes**
- Permit No **290443**
- Suffix **N/A**
- Replacement Suffix **N/A**

## Owners Well Designation

- Does the well have a designation **Yes**
- What is the wells designation \* **MW-6**

## Well Owner

- Owner contact information not known **No**
- Prefix **N/A**
- First Name **N/A**
- Middle Name **N/A**
- Last Name **N/A**
- Suffix **N/A**
- Organization **HOLCIM US INC**
- Address **C/O GOLDER ASSOCIATES INC44 UNION BOULEVARD SUITE 300**
- City **DENVER**
- State **CO**
- Zip **80228**
- Country **United States**
- Phone **3039800540**
- Email **N/A**

## Well Location

- Location from Submitted Form:

| Div | County  | WD | Lat       | Long        | Q40 | Q160 | Sec | Twncshp | Rng  | PM | UTM_X    | UTM_Y     |
|-----|---------|----|-----------|-------------|-----|------|-----|---------|------|----|----------|-----------|
| 1   | Larimer | 3  | 40.668660 | -105.145804 | NE  | NW   | 0   | 8 N     | 69 W | S  | 487677.3 | 4501985.7 |

## Physical Address for The Well

- To verify your selection, please enter the physical ("street") address of the property on which the well is located, then click **"NEXT"**. This is for information only and does not affect the permitted well location.

**THERE IS NO PHYSICAL ADDRESS ASSOCIATED WITH THIS WELL**

## Abandonment Details

- What was the reason for abandonment: \* **Other**
- Please explain why the well was abandoned: \* **Monitoring program concluded**
- What was the abandonment date: \* **11/7/2024**
- Was the well destroyed and/or not locatable: \* **No**

## Well Condition

- In what aquifer was the well (or hole) completed: **N/A**
- In what aquifer type was the well (or hole) completed: \* **Type 2 (Not Overlain by Type III)**
- Static Water Level at Time of Abandonment (feet) \* **203.6**
- In what condition did you leave the wellhead: \* **Casing grouted and cut off below ground surface**

#### Interval Data

- List the interval for which the casing was perforated, ripped, or removed.

| From (feet)* | To (feet)* | Casing Condition* |
|--------------|------------|-------------------|
| 0            | 10         | Removed           |

- For each interval, please state the type and amount of material, and the placement method.

| From (feet) | To (feet) | Type of Material | Method of Placement | Amount of Material | Units      | Density                                                                                                                                                                                                                                                                       |
|-------------|-----------|------------------|---------------------|--------------------|------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 160.6       | 227       | Clean Sand       | Poured              | 5.8                | Cubic Feet | N/A                                                                                                                                                                                                                                                                           |
| 0           | 160.6     | Other            | Tremie              | 16.9               | Cubic Feet | Casing filled (Mixture: 627 lbs cement, 38 lb bentonite and 100 gallons of water) from 160.6 ft below ground surface to the top of casing, then over drilled to 10 ft below ground surface and hole backfilled to ground surface (Mixture: 259 lbs cement, 25 gallons water). |

#### Responsible Party - Type

- Who was responsible for the plugging/sealing of the well: \* **Water Well Driller Licensed in Colorado**
- Select driller (start typing a name or license number) \* **1367**

#### Responsible Party - Contact Information

- Prefix **N/A**
- First Name **RICHARD C.**
- Middle Name **N/A**
- Last Name **ROGERS**
- Suffix **N/A**
- Organization **TERRACON CONSULTANTS INC.**
- Address **1309 DUFF DRIVE**
- City **FORT COLLINS**
- State **CO**
- Zip **80524**
- Country **United States**
- Phone **9704845183**
- Email **RICK.ROGERS@TERRACON.COM**

#### Additional Information

- Please provide any additional information regarding the abandonment of the well. **N/A**

#### Signature and Certification

1. 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.
2. The filing of a document that contains false statements is a violation of section 37-91-108(1)(e), CRS, and is punishable by fines up to \$1,000 and/or revocation of the contracting license.
3. The State Engineer considers the entry of the licensed contractor's name to be in compliance with Rule 17.4.

- I have read and agree to the Terms and Conditions listed above \* **Yes**
- Organization: **WSP USA Inc.**
- Name: \* **Griffin Easthouse**
- Email Address: \* **Griffin.Easthouse@wsp.com**

# Well Abandonment Report



**COLORADO**  
Division of Water Resources  
Department of Natural Resources

Form Ref Num: 34498  
Date Submitted: 11/27/2024 12:36:58 PM  
Application Type: Applications, Filings, and Submittals (No Fee)

Receipt Number: 3659022C

## Well Identification

- Does this well have a permit/receipt number: **Yes**
- Permit No **290444**
- Suffix **N/A**
- Replacement Suffix **N/A**

## Owners Well Designation

- Does the well have a designation **Yes**
- What is the wells designation \* **MW-7**

## Well Owner

- Owner contact information not known **No**
- Prefix **N/A**
- First Name **N/A**
- Middle Name **N/A**
- Last Name **N/A**
- Suffix **N/A**
- Organization **HOLCIM US INC**
- Address **C/O GOLDER ASSOCIATES INC44 UNION BOULEVARD SUITE 300**
- City **DENVER**
- State **CO**
- Zip **80228**
- Country **United States**
- Phone **3039800540**
- Email **N/A**

## Well Location

- Location from Submitted Form:

| Div | County  | WD | Lat       | Long        | Q40 | Q160 | Sec   | Twnshp | Rng  | PM | UTM_X    | UTM_Y     |
|-----|---------|----|-----------|-------------|-----|------|-------|--------|------|----|----------|-----------|
| 1   | Larimer | 3  | 40.663468 | -105.143716 | SE  | NW   | 26323 | 8 N    | 69 W | S  | 487852.9 | 4501409.1 |

## Physical Address for The Well

- To verify your selection, please enter the physical ("street") address of the property on which the well is located, then click **"NEXT"**. This is for information only and does not affect the permitted well location.

**THERE IS NO PHYSICAL ADDRESS ASSOCIATED WITH THIS WELL**

## Abandonment Details

- What was the reason for abandonment: \* **Other**
- Please explain why the well was abandoned: \* **Monitoring program discontinued**
- What was the abandonment date: \* **11/7/2024**
- Was the well destroyed and/or not locatable: \* **No**

## Well Condition

- In what aquifer was the well (or hole) completed: **N/A**
- In what aquifer type was the well (or hole) completed: \* **Type 2 (Not Overlain by Type III)**
- Static Water Level at Time of Abandonment (feet) \* **225.9**
- In what condition did you leave the wellhead: \* **Casing grouted and cut off below ground surface**

#### Interval Data

- List the interval for which the casing was perforated, ripped, or removed.

| From (feet)* | To (feet)* | Casing Condition* |
|--------------|------------|-------------------|
| 0            | 10         | Removed           |

- For each interval, please state the type and amount of material, and the placement method.

| From (feet) | To (feet) | Type of Material | Method of Placement | Amount of Material | Units      | Density                                                                                                                                                                                                                                                                       |
|-------------|-----------|------------------|---------------------|--------------------|------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 185.6       | 253.6     | Clean Sand       | Poured              | 5.9                | Cubic Feet | N/A                                                                                                                                                                                                                                                                           |
| 0           | 185.6     | Other            | Tremie              | 19                 | Cubic Feet | Casing filled (Mixture: 705 lbs cement, 25 lb bentonite and 125 gallons of water) from 185.6 ft below ground surface to the top of casing, then over drilled to 10 ft below ground surface and hole backfilled to ground surface (Mixture: 212 lbs cement, 25 gallons water). |

#### Responsible Party - Type

- Who was responsible for the plugging/sealing of the well: \* **Water Well Driller Licensed in Colorado**
- Select driller (start typing a name or license number) \* **1367**

#### Responsible Party - Contact Information

- Prefix **N/A**
- First Name **RICHARD C.**
- Middle Name **N/A**
- Last Name **ROGERS**
- Suffix **N/A**
- Organization **TERRACON CONSULTANTS INC.**
- Address **1309 DUFF DRIVE**
- City **FORT COLLINS**
- State **CO**
- Zip **80524**
- Country **United States**
- Phone **9704845183**
- Email **RICK.ROGERS@TERRACON.COM**

#### Additional Information

- Please provide any additional information regarding the abandonment of the well. **N/A**

#### Signature and Certification

1. 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.
2. The filing of a document that contains false statements is a violation of section 37-91-108(1)(e), CRS, and is punishable by fines up to \$1,000 and/or revocation of the contracting license.
3. The State Engineer considers the entry of the licensed contractor's name to be in compliance with Rule 17.4.

- I have read and agree to the Terms and Conditions listed above \* **Yes**
- Organization: **WSP USA Inc.**
- Name: \* **Griffin Easthouse**
- Email Address: \* **Griffin.Easthouse@wsp.com**

# Well Abandonment Report



**COLORADO**  
Division of Water Resources  
Department of Natural Resources

Form Ref Num: 34500  
Date Submitted: 11/27/2024 1:39:33 PM  
Application Type: Applications, Filings, and Submittals (No Fee)

Receipt Number: 10009710

## Well Identification

- Does this well have a permit/receipt number: **Yes**
- Permit No **320845**
- Suffix **N/A**
- Replacement Suffix **N/A**

## Owners Well Designation

- Does the well have a designation **Yes**
- What is the wells designation \* **MW-8**

## Well Owner

- Owner contact information not known **No**
- Prefix **N/A**
- First Name **N/A**
- Middle Name **N/A**
- Last Name **N/A**
- Suffix **N/A**
- Organization **HOLCIM (US) INC**
- Address **3500 STATE HIGHWAY 120**
- City **FLORENCE**
- State **CO**
- Zip **81226**
- Country **United States**
- Phone **7192881402**
- Email **MIKE.TOELLE@LAFARGEHOLCIM.COM**

## Well Location

- Location from Submitted Form:

| Div | County  | WD | Lat       | Long        | Q40 | Q160 | Sec   | Twtnshp | Rng  | PM | UTM_X    | UTM_Y     |
|-----|---------|----|-----------|-------------|-----|------|-------|---------|------|----|----------|-----------|
| 1   | Larimer | 3  | 40.677851 | -105.147635 | SW  | NW   | 26325 | 8 N     | 69 W | S  | 487524.3 | 4503006.2 |

## Physical Address for The Well

- To verify your selection, please enter the physical ("street") address of the property on which the well is located, then click **"NEXT"**. This is for information only and does not affect the permitted well location.

### ADDRESS

- Address **MV27+R5 LAPORTE**
- City **LAPORTE**
- State **CO**
- Zip **80535**

## Abandonment Details

- What was the reason for abandonment: \* **Other**
- Please explain why the well was abandoned: \* **Monitoring program discontinued**
- What was the abandonment date: \* **11/7/2024**

- Was the well destroyed and/or not locatable: \* **No**

## Well Condition

- In what aquifer was the well (or hole) completed: **N/A**
- In what aquifer type was the well (or hole) completed: \* **Type 2 (Not Overlain by Type III)**
- Static Water Level at Time of Abandonment (feet) \* **173**
- In what condition did you leave the wellhead: \* **Casing grouted and cut off below ground surface**

## Interval Data

- List the interval for which the casing was perforated, ripped, or removed.

| From (feet)* | To (feet)* | Casing Condition* |
|--------------|------------|-------------------|
| 0            | 10         | Removed           |

- For each interval, please state the type and amount of material, and the placement method.

| From (feet) | To (feet) | Type of Material | Method of Placement | Amount of Material | Units      | Density                                                                                                                                                                                                                                                                      |
|-------------|-----------|------------------|---------------------|--------------------|------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 132.5       | 226.6     | Clean Sand       | Poured              | 8.2                | Cubic Feet | N/A                                                                                                                                                                                                                                                                          |
| 0           | 132.5     | Other            | Tremie              | 14.4               | Cubic Feet | Casing filled (Mixture: 578 lbs cement, 17 lb bentonite and 135 gallons of water) from 132.5 ft below ground surface to the top of casing, then over drilled to 10 ft below ground surface and hole backfilled to ground surface (Mixture: 71 lbs cement, 10 gallons water). |

## Responsible Party - Type

- Who was responsible for the plugging/sealing of the well: \* **Water Well Driller Licensed in Colorado**
- Select driller (start typing a name or license number) \* **1367**

## Responsible Party - Contact Information

- Prefix **N/A**
- First Name **RICHARD C.**
- Middle Name **N/A**
- Last Name **ROGERS**
- Suffix **N/A**
- Organization **TERRACON CONSULTANTS INC.**
- Address **1309 DUFF DRIVE**
- City **FORT COLLINS**
- State **CO**
- Zip **80524**
- Country **United States**
- Phone **9704845183**
- Email **RICK.ROGERS@TERRACON.COM**

## Additional Information

- Please provide any additional information regarding the abandonment of the well. **N/A**

## Signature and Certification

1. 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.
2. The filing of a document that contains false statements is a violation of section 37-91-108(1)(e), CRS, and is punishable by fines up to \$1,000 and/or revocation of the contracting license.
3. The State Engineer considers the entry of the licensed contractor's name to be in compliance with Rule 17.4.

- I have read and agree to the Terms and Conditions listed above \* **Yes**
- Organization: **WSP USA Inc.**

- *Name:* \* **Griffin Easthouse**
- *Email Address:* \* **Griffin.Easthouse@wsp.com**

**ATTACHMENT 2**

# Post-abandonment Ground Surface Photographs

**Attachment 2: Post Abandonment Ground Surface Photographs****MW-1**

Ground Surface Post  
Abandonment

**MW-2**

Ground Surface Post  
Abandonment



**Attachment 2: Post Abandonment Ground Surface Photographs****MW-3**

Ground Surface Post  
Abandonment

**MW-4**

Ground Surface Post  
Abandonment



**Attachment 2: Post Abandonment Ground Surface Photographs****MW-5**

Ground Surface Post  
Abandonment

**MW-6**

Ground Surface Post  
Abandonment



**Attachment 2: Post Abandonment Ground Surface Photographs****MW-7**Ground Surface Post  
Abandonment**MW-8**Ground Surface Post  
Abandonment