Division of Water Resources Update & What to Expect When You're Inspected



July 9, 2021 Kevin Donegan, Chris Jones, and Doug Stephenson Hydrogeology Section



Outline

- DWR Update Kevin
 - DWR Operations
 - BOE & Well Inspection Program
 - eForms
 - Miscellaneous Updates
- What to Expect When You're Inspected Chris
- Panel Q&A Doug, Chris, and Kevin



DWR Operations

- Jason Ullmann named Assistant State Engineer
 - Dam Safety, Water Information Team
 - Potential SEO Representative on Board
- DWR starting to fill numerous positions that were held vacant for 2020 budget cuts
- "Summer of Transition" WFH/Flexplace/Hybrid
- 1313 Sherman Street may be appointment only



DWR Website

https://dwr.colorado.gov/



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In response to the Governor's COVID-19 Stay at Home Order effective March 26, 2020, DWR staff are working remotely. Customers should use electronic means to communicate with DWR staff as processing documents received via mail may be delayed. General questions may be submitted through <u>AskDWR</u> or via email to our <u>staff contacts</u>. Applications may be submitted through <u>DWRpermitsonline@state.co.us</u> and payment processing online is expected to continue.







BOE Website



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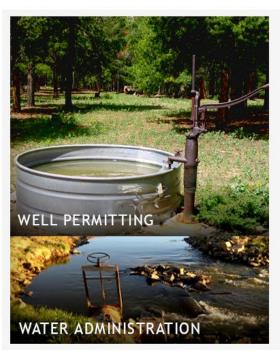
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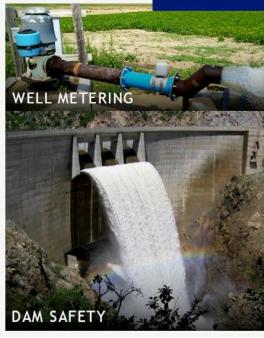
Boards and Commissions **Board of Examiners** Meetings

electronic means to communicate with r staff contacts. Applications may be











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Well Construction & Inspection



Well Inspection Program

The well inspection program was instituted for the protection of the groundwater resources and public health through enforcement of minimum well construction and pump installation standards. The program was created under Senate Bill 03-045. The objective of the program is to deal with the following concerns:

- · Board of Examiners support
- · Complaint investigation
- Education and outreach
- Enforcement of the existing Colorado Revised Statutes and Rules and Regulations for Well Construction and Pump Installation
- Monitoring/observation hole/well construction
- · Well and hole plugging and abandonment
- Well construction and pump installation inspection

Applications & Tools

Geophysical Log Search

Groundwater Levels Search

Well Permit Map Viewer

Well Permit Search

The Well Inspection Program currently has three inspectors including the Chief Well Inspector. Their contact information and locations they serve is available under Contact Us, Denver Office page, Well Inspection Section.

Approved Fluids & Additives, Log Waivers, Notifications, & Variances

- Geophysical Log Waivers
- Notifications to Well Inspection Team
- Well Construction Variances

Advance Notice

Notifications to Well Inspection Team

If listed on the permit as a condition of approval, a well construction or pump installation contractor must provide advance notification (by 11:59 pm the day before) to the State Engineer prior to constructing a well or installing a pump or cistern, pursuant to Rule 6.2.2.1. Any change in the anticipated date must be re-noticed (by 11:59 pm the day before). The link below quickly allows contractors to provide this notification to the Well Inspection Team.

SEO Advance Notification Form

Rule 6.2.2.1 A copy of the well permit must be available and posted at the well site at all times when a contractor is working on a new well or when performing any work that requires a well permit as specified in Rule 6.2.1. All such work must comply with the conditions of approval of the valid well permit, <u>including any applicable condition that the well construction or pump installation contractor provide advance notification to the State Engineer prior to constructing the well or installing the pump or cistern.</u> All work must be completed prior to the expiration of the permit.

If you have any questions regarding advance notification, please contact:

Doug Stephenson - Douglas.Stephenson@state.co.us or (303) 866-3581 x8270

Advance Notice



Well Inspection Advance Notification Form

For Well Construction Commencement, Initial Pump Installation, Initial Installation of a Cistern connected to Water Well Supply System, Well Abandonment, or Well Construction Variance

If your anticipated date(s) has changed, please edit your original response or submit an additional form.

* Required

Email *	
Your email	
First Name *	
Your answer	
Last Name *	
Your answer	

Well Inspection Advance Notification Form

* Required

- Required	
Anticipated Dates	
Anticipated Date of Construction/Installation * Please enter the date you anticipate beginning work. (Form must be submitted by midnig day before work begins) Date mm/dd/yyyy	ht the calendar
Anticipated Date Work will be Completed * Please enter the date you anticipate the phase of project for which you are providing notic completed. (i.e. date finishing well construction or date finishing initial pump installation) Date mm/dd/yyyy	
Additional Scheduling Information or Other Comments (Please provide lock/gate access code or indicate "Access locked, please contact for code	de")
Your answer	

Updating an Advance Notice

Well Inspection Advance Notification Form > Inbox X







Google Forms <forms-receipts-noreply@google.com>

3:55 PM (0 minutes ago)





to Kevin.Donegan -

Google Forms

Thanks for filling out Well Inspection Advance Notification Form

Here's what was received.

Edit response

Well Inspection Advance Notification **Form**

For Well Construction Commencement, Initial Pump Installation, Initial Installation of a Cistern connected to Water Well Supply System, Well Abandonment, or Well Construction Variance

If your anticipated date(s) has changed, please edit your original response or submit an



COLORADO

Division of Water Resources

Department of Natural Resources

Any Other Website Questions?

About Us > Division Offices > Public Information > Services >

Home > Public Information > Boards and Commissions

Boards and Commissions

Board of Examiners of Water Well Construction and Pump Installation Contractors (BOE)

The Board of Examiners (BOE) has general supervision and authority over the construction and abandonment of wells and the installation of pumping equipment with the ability to adopt and revise related rules. BOE has authority to examine for, deny, approve, revoke, suspend, and renew the licenses of applicants and disseminate information to pump installation contractors and well construction contractors in order to protect and preserve the groundwater resources of the state. See the <u>Statutory Duties of the Board of Examiners</u> for additional details.



BOE Meeting Information

Board of Examiners Meetings

BOE Meeting Schedule

DATE	TIME	LOCATION / JOINING INFORMATION	MEETING DOCUMENTS & RECORDINGS
February 1, 2021	10:00 AM - 2:00 PM	Virtual Meeting: <u>Join Google Hangout Meeting</u> By Phone: (US) +1 307-264-0155 PIN: 495 771 394#	Check link below, 1 week prior to meeting 1st Quarter Meeting
May 3, 2021	10:00 AM - 2:00 PM	Virtual Meeting: <u>Join Google Hangout Meeting</u> By Phone: (US) +1 317-939-1676 PIN: 421 559 491#	Check link below, 1 week prior to meeting 2nd Quarter Meeting
August 13, 2021	10:00 AM - 2:00 PM	Virtual Meeting: <u>Join Google Hangout Meeting</u> By Phone: (US) +1 218-321-0349 PIN: 734 568 334#	Check link below, 1 week prior to meeting 3rd Quarter Meeting
November 1, 2021	10:00 AM - 2:00 PM	To be determined	Check link below, 1 week prior to meeting 4th Quarter Meeting

Last Meeting of 2020

DATE	TIME	LOCATION / JOINING INFORMATION	MEETING DOCUMENTS & RECORDINGS
November 2, 2020	10:30 AM	Virtual Meeting: <u>Join Google Hangout Meeting</u> By Phone: (US) +1 502-632-7718 PIN: 359 759 263#	Check link below, 1 week prior to meeting 4th Quarter Meeting



Important Links:

- Complaint Process & Procedure BOE
- Current Board Members (Previous Members)
- Well Construction & Inspection

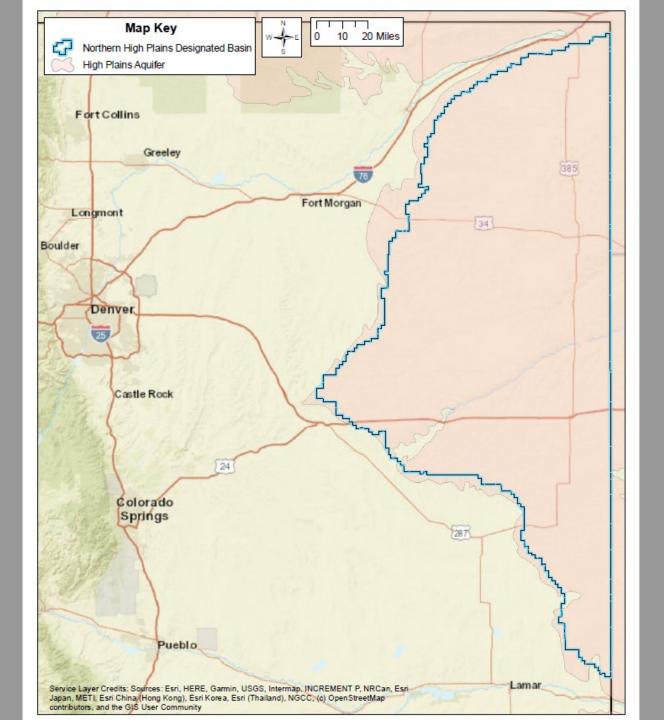
- Governor Polis appointed Todd Hunter (Lic. 1206) to fill the vacant seat on the Board.
- Todd owns Ground Water Pump Systems in Boulder
- Licensed for Well Construction and Pump Installation
- 2017 NGWA President



- Next meeting: Friday August 13, 2021
- Meetings will remain virtual until technology allows for hybrid
- https://dwr.colorado.gov/publicinformation/boards-and-commissions/board-ofexaminers-meetings

- BOE Policy 2021-1
 - Continuing Education by Internet or Online Participation
 - CY 2021: all 8 hours CE taken online may be used to obtain require hours of CE
 - Will be reviewed at November BOE Meeting

- BOE Policy 2021-2
 - Wells Constructed in Alluvial, Ogallala, and White River Aquifer in Northern High Plains Designated Basin
 - Eastern Plains



- BOE Policy 2021-2
 - DWR Administers Ogallala Fm and White River Group as one unit, "High Plains Aquifer"

Era	System		Series	Stratigraphic unit		Ну	drogeologic unit	Physical characteristics					
			Holocene and Pleistocene	Alluvial deposits, valley-fill deposits and dune sand		osits Type 3		Gravel, sand, silt, and clay					
io				Ogall: Forma			High Plains	Unconsolidated, poorly sorted gravel, sand, silt, and clay					
Cenozoio	Tertiary		1	per Miocene	Arikar Forme		Type 2		Sandstone, fine to very fine. Local beds of volcanic ash, siltstone, claystone, and marl				
			Lower Oligocene	Lauren	Louise	Louise	Laurar Olia	Oligonopo	Brule Formation	White		JPC Z	Siltstone with sandstone as beds and channel deposits
				Chadron Formation	River Group		Confining unit	Clay and silt					

- BOE Policy 2021-2
 - Wells constructed solely to produce from modern alluvial aquifer -> Rule 10.4.7 (Type 3)
 - Well constructed to produce from High Plains Aquifer -> Rule 10.4.6 (Type 2)

- BOE Bulletin 2021-1 (Not a Policy)
 - Updates Bulletin 2000-2
 - Identify other sources of poor quality water other than coal
 - Contractor should advise the well owner if/when poor quality zone encountered
 - Owner and Contractor consult whether the interval should be sealed within production



Well Inspection Program

- DWR report back to Legislative Audit Committee
 - June 2021 postponed...
 - August 2021 postponed...
 - Scheduled for September 28, 2021

Well Inspection Program

Will present one year of well inspection data

May 1, 2020 - May 1, 2021 Summary					
Type of Well Wells Percent Inspected					
High Risk	313	68%			
Low Risk	146	32%			
Total	459				

High Risk Wells

	July 1,	2017 - June 30 (Audit)), 2018	May 1, 2020 - May 1, 2021 (Implementation)			Difference between Audit and Implementation		
Type of Well	Number of Wells Constructed	Number of Wells Inspected	Percent Inspected	Number of wells Constructed ¹	Number of Wells Inspected	Percent Inspected	Percent Change of Number of Wells Inspected	Difference in Percent Inspected	
Total - All Wells	4,462	310	7 %	3,509	459	13%	48%	Increased from 7% to 13%	
High Risk Total	206	15	7 %	625	313	50%	1987%	Increased from 7% to 50%	
Division 3	-	-	-	224	145	65%	-	-	
Laramie-Fox Hills	83	6	7%	98	96	98%	1500%	Increased from 7% to 98%	
Multiple Confining Layers	68	7	10%	34	27	79%	286%	Increased from 10% to 79%	
Variances	45	2	4%	49	25	51%	1150%	Increased from 4% to 51%	
Single Confining Layer	-	-	-	214	20	9%	-	-	
Property Owner Constructed ²	15	0	0%	6	0	0%	-	-	
Low Risk Total	4,256	295	7%	2,884	146	5%	-51%	Decreased from 7% to 5%	
Alluvial/Type 3	-	-	-	710	59	8%	-	-	
Unconfined Bedrock ³	-	-	-	1,169	37	3%	-	-	
Pump Install ⁴	-	-	-	4,204	10	0.24%	-	•	
Other	-	-	-	1,005	40	4%	-	-	



¹Number of type wells constructed in 2020/2021 could vary (some report aquifer as "all unnamed")

²Property owners did not provide notice to the Well Inspection Team as required by their permit or their variance

³Many "All Unnamed" Aquifer Wells were assumed to be Type 2

⁴Number reflects total number of pumps installed (potentially more than one pump installation per well)

Key Phase Inspections

	July 1, 20	17 - June 30	, 2018	May 1, 2020 - May 1, 2021		Difference between		
		(Audit)		(Imp	lementation)		Audit a	nd Implementation
Key Phase	Number of the 310 Total Wells Inspected for which the Key Phase was Applicable	Number of Wells Inspected for Key Phase	Percent Inspected	Number of the 459 Total Wells Inspected for which the Key Phase was Applicable	Number of Wells Inspected for Key Phase	Percent Inspected	Percent Change of Number of Wells Inspected for Key Phase	Difference in Percent Inspected
Well Location	310	19	6%	459	403	88%	2021%	Increased from 6% to 88%
Annular Space	310	94	30%	459	201	44%	114%	Increased from 30% to 44%
Total Depth ¹	175	14	8%	-	•	-	-	-
Total Depth	310	14	5%	459	153	33%	993%	Increased from 5% to 33%
Minimum Grout ¹	117	22	19%	-	-	-	-	-
Minimum Grout	310	22	7 %	459	180	39%	718%	Increased from 7% to 39%
Disinfection	310	40	13%	459	106	23%	165%	Increased from 13% to 23%
Perforated Casing ¹	117	22	19%	-	•	•	-	-
Perforated Casing	310	22	7 %	459	83	18%	277%	Increased from 7% to 18%
Pump Install ²	NA	NA	NA	Unknown	43	Unknown	Unknown	Unknown
Cistern Install ²	NA	NA	NA	Unknown	2	Unknown	Unknown	Unknown
Abandonment ²	NA	NA	NA	Unknown	13	Unknown	Unknown	Unknown



¹The Audit portrayed that some key phases are applicable to some wells, but not others. DWR believes total depth, minimum grout, and perforated casing are key phases that can be observed for all wells. The comparison between the implementation and the audit assumes the key phases are applicable to all wells.

²Not Analyzed in 2018 Audit

eForms



eForms

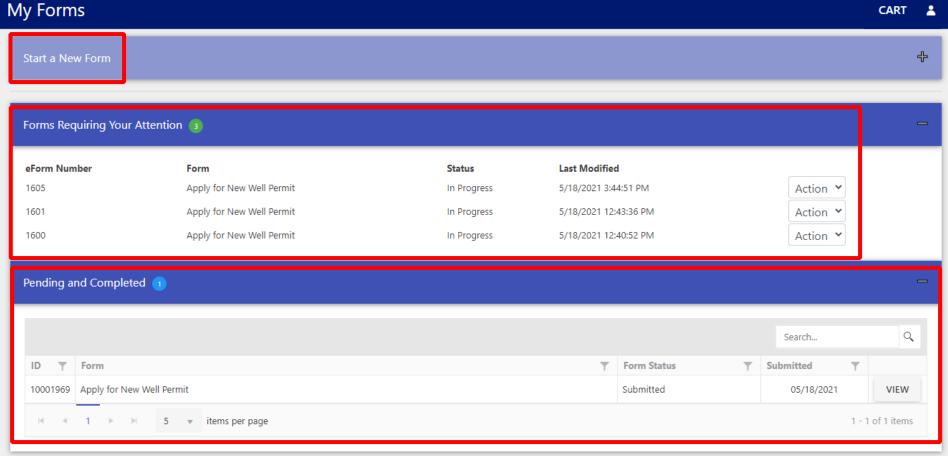
- Simple forms moving to production site
- UAT (User Testing) to begin shortly on
 - Apply for Well Permit
 - Change in Owner/Location
- Data migration to HydroBase is limiting



eForms Dashboard

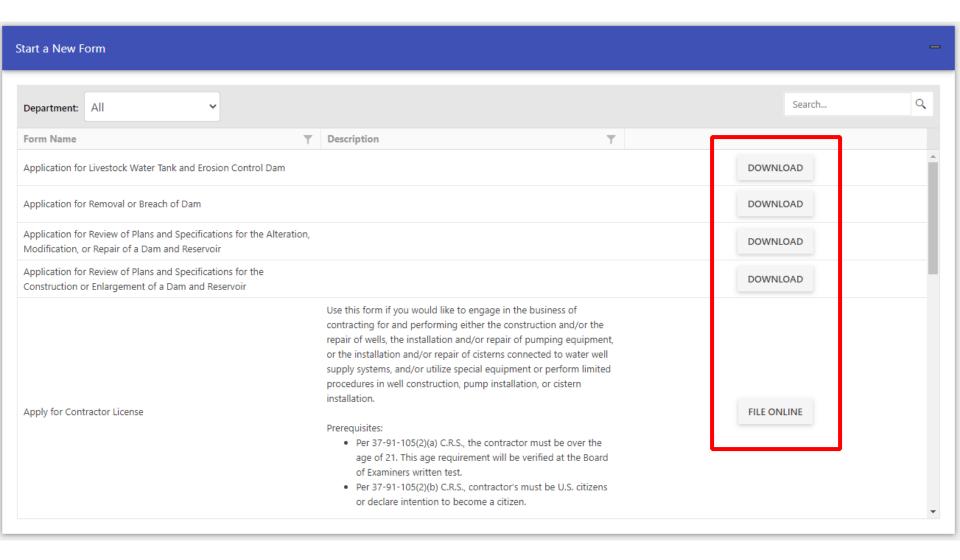


Welcome Donegan, Kevin, Click here to Logout



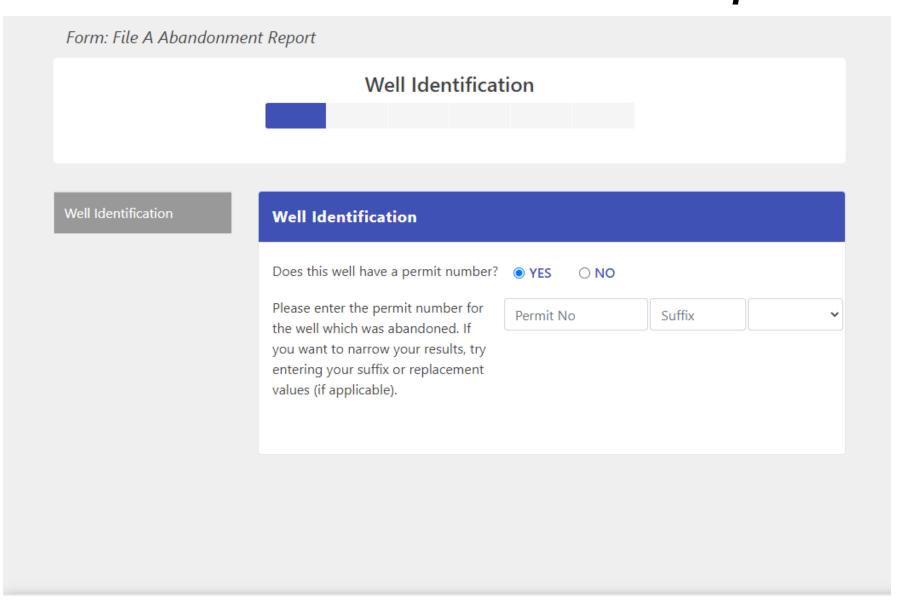


Start a New Form



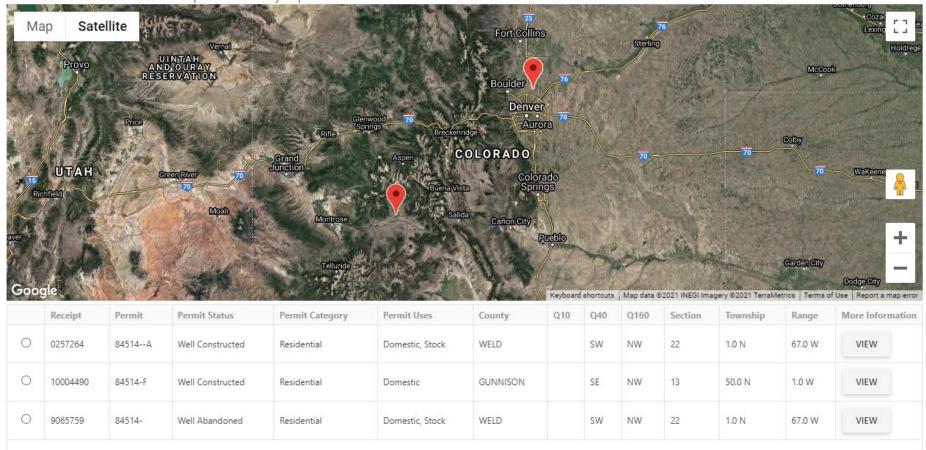


https://dwr.state.co.us/eFormsUAT/



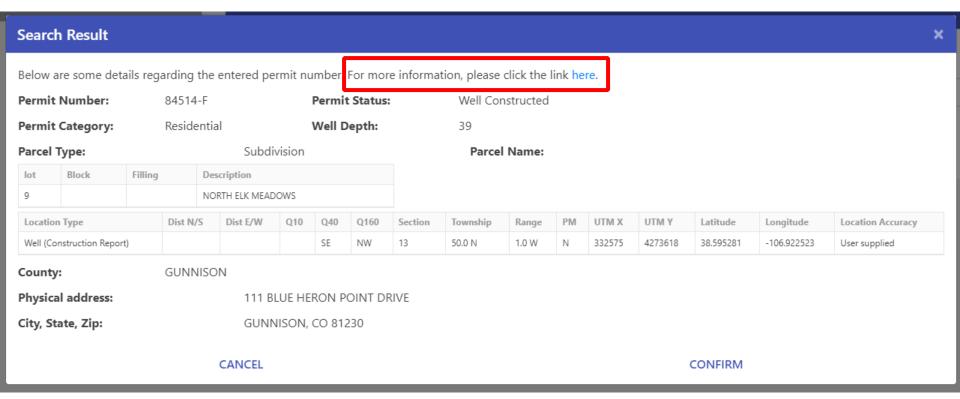
EXIT FORM NEXT

Below are the search results for the permit number you provided:

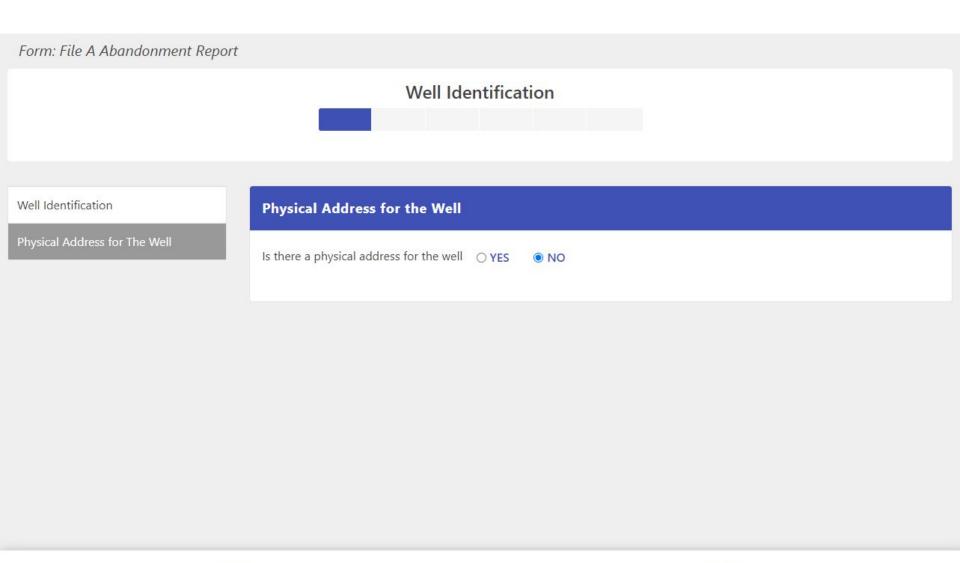


Below are the search results for the permit number you provided:





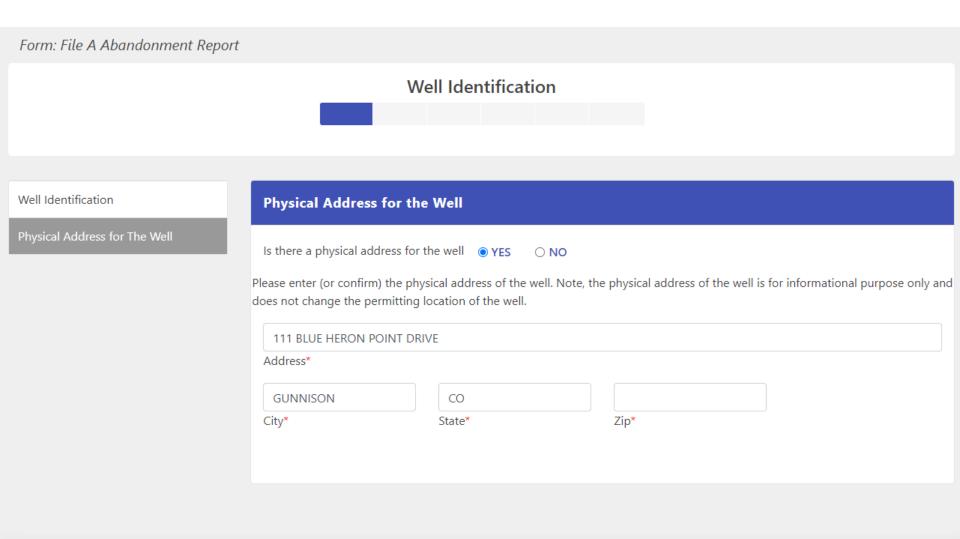




EXIT FORM

NEXT

BACK



NEXT

BACK

Form: File A Abandonment Report

Responsible Parties

< Well Identification

Responsible Party - Type

Responsible Party - Type

Who was responsible for the plugging/sealing of the well?

Water Well Driller Licensed in Colorado

Pump Installation Contractor Licensed in Colorado

Professional Engineer Registered in Colorado

Professional Geologist as defined in section 23-41-208(b), C.R.S.

Authorized Individual

Well Owner (Private Driller as defined in section 37-91-102(12), C.R.S.)

Form: File A Abandonment Report **Responsible Parties** < Well Identification Responsible Party - Type Responsible Party - Type Who was responsible for the plugging/sealing of the well? Water Well Driller Licensed in Colorado Pump Installation Contractor Licensed in Colorado Professional Engineer Registered in Colorado Professional Geologist as defined in section 23-41-208(b), C.R.S. Authorized Individual Well Owner (Private Driller as defined in section 37-91-102(12), C.R.S.) What is the license number for the contractor (if known)? 1179

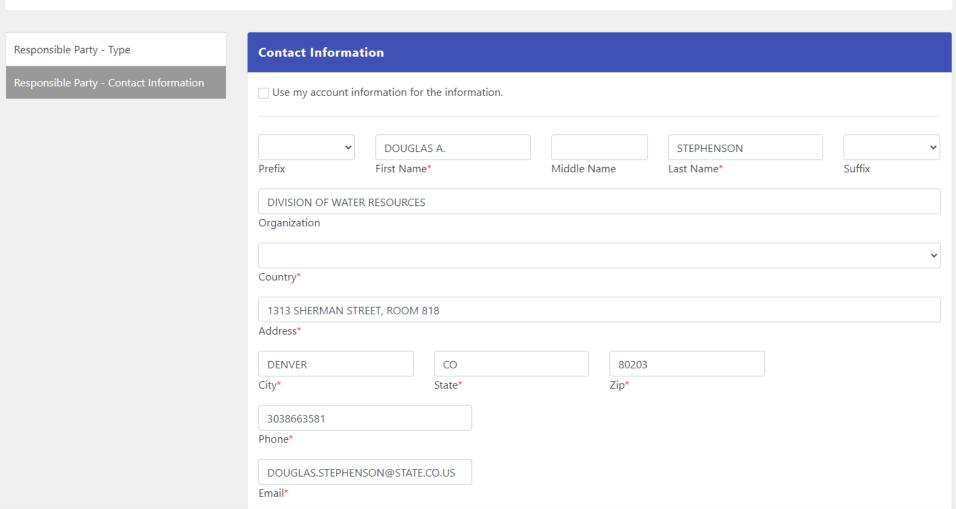
EXIT FORM

NEXT

BACK

Responsible Parties

< Well Identification



BACK

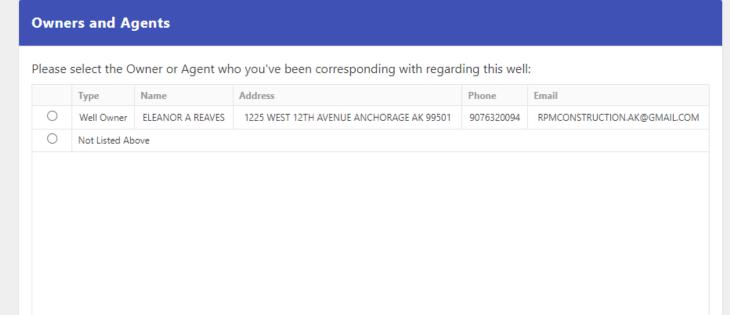
Form: File A Abandonment Report



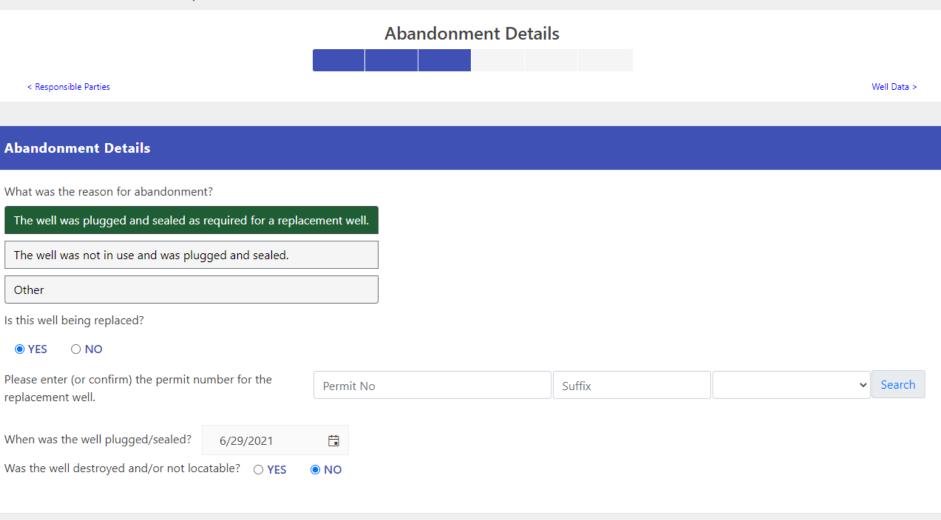
Responsible Party - Type

Responsible Party - Contact
Information

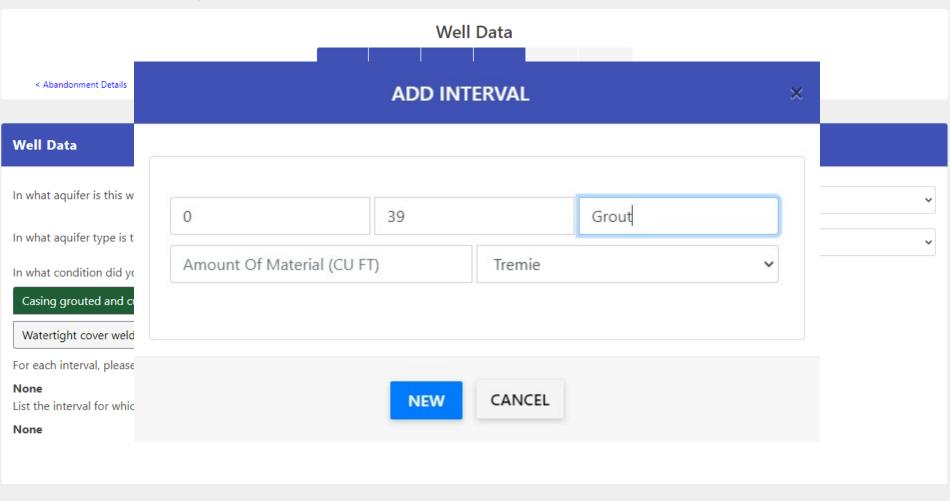
Owners And Agents



Form: File A Abandonment Report



Form: File A Abandonment Report



Please provide any additional information regarding the abandonment of the well.	Additional Information
	Please provide any additional information regarding the abandonment of the well.

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.

REVIEW APPLICATION

Name:*			
Organization:			
Email Address:*			



Summary Information Overview



Apply for New Well Permit

Summary Information Overview

Order Number: 1834 Receipt Number: 10001969

Date Submitted: 5/18/2021 12:31:31 PM

Application Type Notice of Monitoring/Observation/Test Hole

Applicant Information

Applicants currently listed on the application:

# Pr	efix Name	Suffix Organization	Address	Phone	Email
	KEVIN	COLORADO DIVISION OF WATER	1313 SHERMAN ST DENVER, CO	20206625	81 KEVIN.DONEGANØSTATE.CO.US
	DONEGAN	RESOURCES	80203	30300033	SI KEVIN.DONEGAN @ SIA IE.CO.OS

Use of Well

- · Will this well be used for any of the following residential or livestock purposes:
 - Ordinary household use inside one single family dwelling (no outside water use allowed).
 - Ordinary household use in 1 to 3 single-family dwellings, irrigation of up to one acre of home garden and lawn, and water of domestic animals
 - Livestock watering on farm, ranch, range, or pasture (on parcels of 35 or more acres).

N

General Use Options

. Which type of well are you proposing to construct: Test Hole/Monitoring and Observation

Test Hole/Monitoring and Observation

. Are you here to: A) Provide Notice of Intent to Construct Monitoring and Observation Hole

A) Provide Notice of Intent to Construct Monitoring and Observation Hole

- · What is the purpose of the Notice to Hole: monitoring
- Anticipated date construction will start: 5/24/2021
- Anticipated date work will be completed: 5/25/2021

Well Location

· Locations currently listed on this application:

# Section	Township	Range	Principal Meridian	Number Holes(Wells)	
1 3	45	68 W	s	1	

Proposed Well Data

- What is the anticipated depth of well(s): 3
- . In what aquifer is this well (or hole) anticipated to be completed: DENVER

Proposed Well Driller

Who will be constructing the well: Professional Geologist as defined in section 23-41-208(b), C.R.S.

Construction Contact Information

- Prefix N/A
- First Name Kevin
- Middle Name N/A
- Last Name Donegan
- Suffix N/A
- Organization Colorado Division of Water Resources
- Address 1313 Sherman St
- City DENVER
- State CO
- Zip 80203
- Phone 3038663581
- Email Kevin.Donegan@state.co.us

Additional Information

Please provide any additional information that will assist us in the processing of your submission N/A

Signature and Certification

- 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.
- The Monitoring and Observation Hole(s) must be constructed at least 72 hours after notice was received by the State Engineer.
- 3. I understand that the person(s) listed have permission to construct the hole at the location specified on this notice.
- 4. Construction of the hole(s) must be completed within 90 days of the date notice was given to the State Engineer. Testing and/or pumping shall not exceed a total of 200 hours unless prior written approval is obtained from the State Engineer. Water diverted during testing must not be used for beneficial purposes. The owner of the hole(s) is

Miscellaneous Updates

- Nontributary Rulemaking terminated 4/15/2021
 - Users disagree with DWR that §37-90-137(4)(b)(II), C.R.S. limits total groundwater withdrawals to the volume of water underlying subject property
 - Complaint 21CW3046 (Division 1) allows Court to Interpret the Statute

Miscellaneous Updates

- Apply for New License/License Renewal will be online through eForms
- Aquifer lists have been updated and will be County-specific as eForms roll out
- Dakota Group Aquifer: Dakota Sandstone and Cheyenne Sandstone
- · High Plains Aquifer: Ogallala and White River



Questions?

https://dwr.state.co.us/ Portal/dwr/AskDWR

Groundwater Info Desk 303-866-3587

Hydrogeo/BOE Staff 303-866-3581

Doug x8270

Laura x8220

Matt x8290

Kevin x8221

Andy x8218

Ashley x8283



