

WATER PERMIT NO. 2870-2

Name of Applicant: **Town of Keystone**

Address: **PO Box 689, Keystone SD 57751**

Phone: **605-666-4827**

Amount of Water Claimed: **0.078 cfs**

Total Acres:

Source of Water Supply: **Groundwater**

Water to be used for: **Municipal**

County: **Pennington**

Type of Waste Disposal System:

Location: **In Keystone SD**

PRIORITY

Date Received: **4-24-2023**

Application/License Fee: **\$300.00**

Corrected Application Received:

Period of Annual Use: **Jan 1 – Dec 31**

Remarks:

Diversion Point: **NE 1/4 SW 1/4 Section 4 -T2S-
R6E**

Land to be Irrigated:

Depth of Well: **755**

Well Driller: **Alexander Drilling Inc.**

Remarks:

Type of Map:

			4		
		*			

Reviewed and the Number Assigned on: **4-24-2023**

By: **Rachel Rodriguez**

Notice of Hearing - date to intervene: _____

**SOUTH DAKOTA
WATER PERMIT NO. 2870-2**

Date of first receipt of application April 24, 2023.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 2870-2 to Town of Keystone, c/o Devin Lorimor, PO Box 689, Keystone SD 57751 authorizing the construction of the water use system and the placing of water to beneficial use subject to the following limitations, conditions and qualifications:

1. Water Permit No. 2870-2 appropriates 18.48 acre-feet of water annually at a maximum pump rate of 0.078 cubic feet of water per second from one well completed into the Crystalline Rock Aquifer (1,000 feet deep) located in the E 1/2 SW 1/4 Section 4 -T2S-R6E for municipal use. This site is located in the city of Keystone SD.
2. The water appropriated shall be used for the purpose of municipal use and may not exceed the amount of water needed for beneficial use.
3. The water is to be used during the following described annual period: January 1 – December 31.
4. The date of approval of Permit No. 2870-2 is July 3, 2023.
5. The date from which applicant may claim right is April 24, 2023.
6. One-fifth of the construction is to be completed on or before January 3, 2026.
7. All construction is to be completed on or before July 3, 2028.
8. Water is to be put to beneficial use on or before July 3, 2032.
9. Water rights obtained in compliance with the laws of the State of South Dakota may not be unlawfully impaired by this appropriation.

QUALIFICATIONS

1. The well approved under Water Permit No. 2870-2 is located near domestic wells and other wells which may obtain water from the same aquifer. Water withdrawals under this Permit shall be controlled so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
2. The permit holder shall report to the Chief Engineer annually the amount of water withdrawn from the Crystalline Rock aquifer.
3. Water Permit No. 2870-2 authorizes a total annual diversion of up to 18.48 acre-feet of water.

WATER MANAGEMENT BOARD

By: Eric Gronlund
Eric Gronlund, Chief Engineer
Water Rights Program
Department of Agriculture and Natural Resources

JUL 26 2023
date



FORM 2: Application for uses other than irrigation
(type or print)

Mail to:
Water Rights Program
Joe Foss Building
523 E. Capitol
Pierre, SD 57501-3181
(605) 773-3352

No. 2870-2 (office use only)
Hydrologic Unit 10120109
Basin Middle Cheyenne Spring
Newspaper Rapid City Journal

PAID

APR 24 2023

Ck# 017179
Rec't# 04-24-23

Application For Permit To Appropriate Water Within The State Of South Dakota

Check use(s) of water:

☒ Municipal ☐ Suburban Housing ☐ Recreational ☐ Institutional
☐ Rural Water System ☐ Commercial ☐ Fish & Wildlife ☐ Geothermal Heat
☐ Domestic (over 18 gpm) ☐ Industrial ☐ Other _____

Type of Application:
(check one)

☒ New ☐ Vested Right (Use predates Mar 2, 1955) ☐ Future Use Reservation
☐ Place to Beneficial Use Water Reserved by Future Use Permit No. _____
☐ Amendment/Correction to Permit No. _____

Description of amendment/correction: (i.e. change diversion point(s), add diversion point(s), change use, etc.)

1. Name of Applicant Town of Keystone Phone 605-666-4827
(check one) ☒ Owner ☐ Tenant/lessee
Mailing Address PO Box 689 Keystone State SD 57751
(Street, RR, or Box and City) (Zip Code)
2. Amount of water claimed 0.078 *CFS or 35 **GPM 18.48 ***AF
(*Cubic Feet per Second) (**Gallons per Minute) (***)Acre Feet - storage capacity of dam/dugout or annual use if applicable)
3. Source of water supply Ground Water
4. Location of point of diversion (example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W) County Pennington
NE 1/4 SW 1/4, Section 4, Twp 2S, Rg 6E
1/2
5. County or counties where water will be used Pennington
6. Annual period during which water is to be used Jan 10 - Dec 31
7. Give a description of the project. When available include any preliminary engineering report or other reports or information that will help explain the project. (Attach sheet if more space is needed)
Well to provide water to Town. Will have pump house and be linked into the Town Main for municipal water supply.

STATE OF SOUTH DAKOTA)

County of Pennington SS

Attachments: Attach Form 2A if diversion is from a well or dugout, or if storage of water is proposed. Attach map and any other technical information. (see instructions)

I, Devin Lorimer, the applicant, certify that I have read this application, have examined the attached map and that the matters stated are true and that I intend, and am able to complete the necessary construction.

Applicant's signature [Signature]

Subscribed and sworn to before me this 27 day of January 20 23



[Signature]
Notary Public signature

RECEIVED

APR 24 2023

OFFICE OF
WATER

My Commission
Expires
March 28, 2023

Supplemental Information

(type or print in ink)

1. Well Information - Proposed Construction

See well completion Report

- a) Drill Hole Diameter _____ Depth _____
- b) Casing Type _____ Diameter _____ Thickness _____
- c) Screen Type _____ Diameter _____ Thickness _____
- d) Gravel Pack _____ Length of Gravel Pack _____
- e) Depth to Top of Water Bearing Material _____
- f) Depth to Water (ground surface to water level) _____
- g) Distance to nearest existing domestic well: *Unknown - wells not allowed to be used where municipal supply available. Not in use if exists.*
On applicants property _____ On property owned by others _____

2. Wastewater Disposal System Information

- a) Type of System (i.e. septic tank, drain field) _____
- b) System Capacity (gallons) _____ Year Constructed _____
- c) Connected to the City of _____ Sanitary System

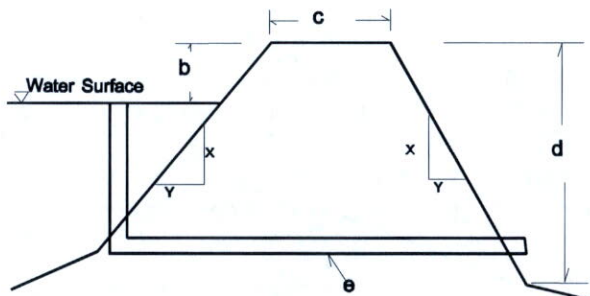
3. Dugout Information

- a) Surface Dimensions _____ Depth _____
- b) Depth to water (ground surface to water level) _____

4. Water Storage Dams

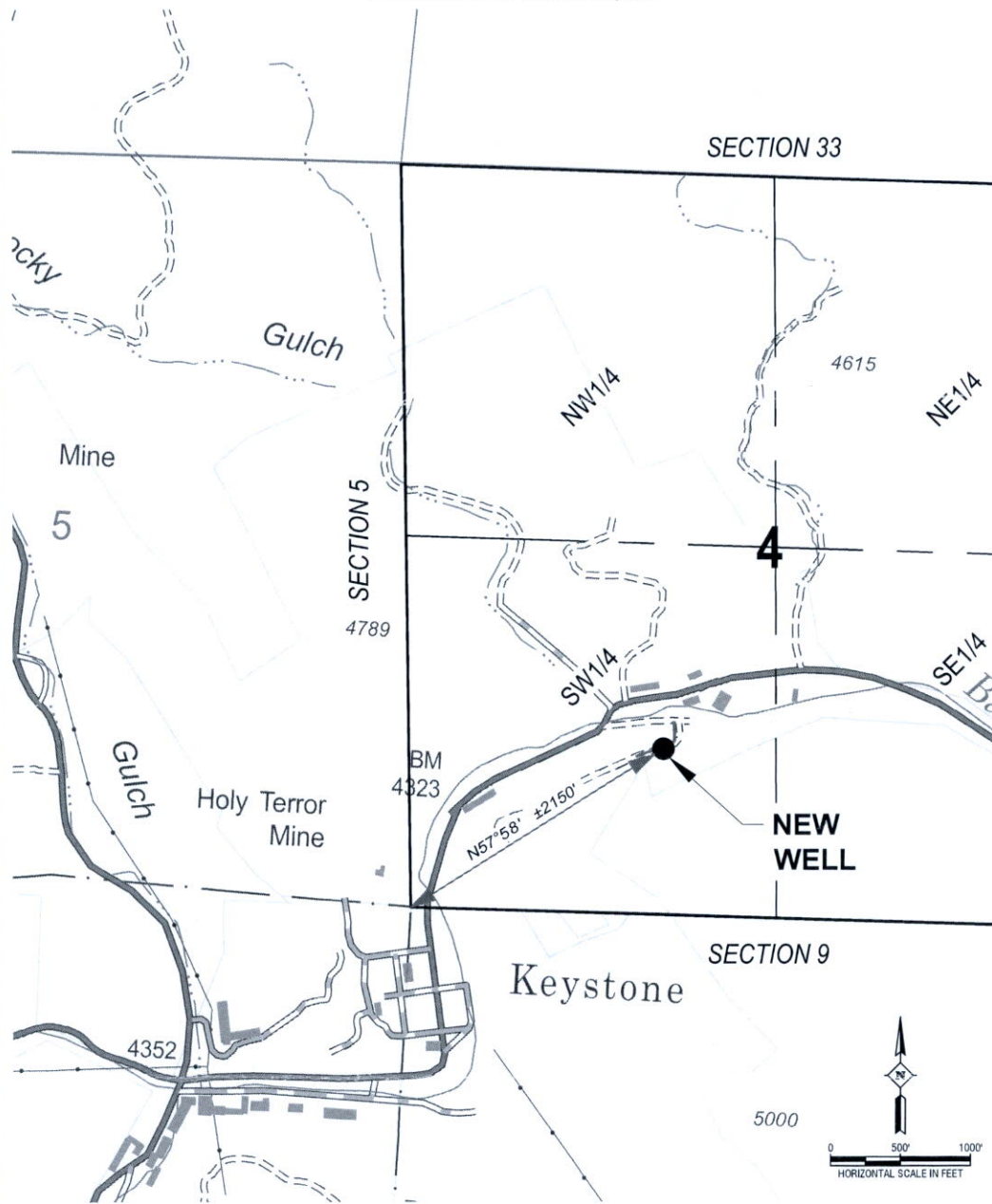
If the proposed water use system contains one or more storage dams, please furnish the information requested below for each dam. The locations of the dams need to be shown on the map submitted with the application.

- a) If a private engineering firm or government agency was involved in the design of this dam, please give their name and address:



- b) Freeboard _____
- c) Crest Width _____
Crest Length _____
- d) Height _____
- e) Primary Outlet Capacity _____
If pipe, diameter _____
- f) Secondary Spillway Capacity _____
Spillway Width _____
- g) X & Y Slope _____
Upstream _____
Downstream _____
- h) Surface Area of Impoundment _____
- i) Storage _____ Acre Feet
- j) Drainage Area Above Dam _____ Acres

**WELL LOCATION MAP
TOWN OF KEYSTONE
SECTION 4, T2S, R6E, BHM,
PENNINGTON COUNTY, SD**



SHEET NO. 1 OF 1



Interstate Engineering
120 Industrial Drive, Suite 2
PO Box 226
Spearfish, SD 57783
(605) 642.4772
www.interstateeng.com

TOWN OF KEYSTONE, PENNINGTON COUNTY, SD

OWNER(S): TOWN OF KEYSTONE
FOR: DANR
PURPOSE: WELL LOCATION MAP FOR WATER PERMIT
DRAWN BY: CDK
CHECKED BY: ZG
PROJECT NO.: WC23-03-099
DATE: 1/25/2023

SEC	T	R
4	2S	6E

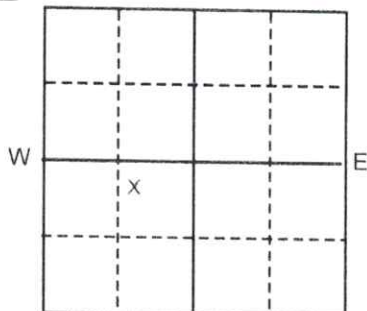
SOUTH DAKOTA WATER WELL COMPLETION REPORT

11-02

Location NE ¼ SW ¼ Sec 4 Twp 2S Rg 6E

County Pennington

North

Please mark well
location with an "X"

Well Completion Date

January 10, 2023

1 Mile

Distance to nearest potential pollution source (septic tank, abandoned well, feed lot, etc.)?
ft. from 1/2 mi from septic (identify source)

PROPOSED USE:

☐ Domestic/Stock ☒ Municipal ☐ Business ☐ Test holes
☐ Irrigation ☐ Industrial ☐ Institutional ☐ Monitoring well

METHOD OF DRILLING:

Rotary downhole hammer

CASING DATA:

☒ Steel ☐ Plastic ☐ Other
 If other describe 39' of 8" Sch 40 steel

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
LB/FT	IN	0.0 FT	37.0 FT	6.00 IN
LB/FT	IN	37.0 FT	1,000.1 FT	10.00 IN
LB/FT	IN	FT	FT	IN

GROUTING DATA:

Grout Type	No. of Sacks	Grout Weight	From	To
Portland II	15	Lb/gal	37.0 Ft	0.0 Ft
w/2% bent		Lb/gal	Ft	Ft

Describe grouting procedure through trimmie pipe

SCREEN:

☐ Perforated pipe ☐ Manufactured

Diameter _____ Inches Length _____ Feet

Material _____

Slot Size _____ Set From _____ Feet to _____ Feet

Other information _____

WAS A PACKER OR SEAL USED?

☐ Yes ☐ No

If so, what material? _____

Describe packer(s) and location _____

DISINFECTION: Was well disinfected upon completion?

☒ Yes, How? w/chlorine solution

☐ No, Why Not?
 Lab to which water quality sample sent for analysis _____

Well Owner: Town of Keystone

Business Name: _____

Address: Box 689

City, State, Zip: Keystone SD 57751

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
Drift	0	33
Schist grey hard	33	54
Fracture 5 gpm	54	55
Schist grey hard	55	300
Fracture 20 gpm	300	301
Schist grey hard	301	695
Fracture 25 gpm	695	696
Schist grey hard	696	750
Fracture 30 gpm	750	755

STATIC WATER LEVEL 15.0 FEET

If flowing: closed in pressure _____ PSI

GPM flow 35.0 through _____ Inch pipe

Controlled by ☐ Valve ☐ Reducers ☐ Other _____

Reduced flow rate _____ GPM

Can well be completely shut in?

WELL TEST DATA:

☒ Pumped Describe: w/air

☐ Bailed

☐ Other

Pumping Level Below Land Surface

_____ Ft. After _____ Hrs. pumped _____ GPM

_____ Ft. After _____ Hrs. pumped _____ GPM

If pump installed, pump rate: _____ GPM

REMARKS

Well log cont:

-Schist grey hard 755 - 960

-Fracture 35 gpm 960-962

-Schist grey hard 962-1000

This well was drilled under license # 324 and this report is true and accurate.

Drilling firm: Alexander Drilling Inc.

Signature of License Representative

Signature of Well Owner or Equitable Property Holder:

RECEIVED

MAR 21 2023

Date: _____

OFFICE OF
WATER

RECEIPT

WATER RIGHTS PROGRAM South Dakota Department of Agriculture and Natural Resources

Date April 24, 2023

RECEIVED OF Town of Keystone PO Box 689 Keystone SD 55751

The following amount in fees for services rendered as provided for by law:

Fee for Application for Permit No. <u>2870-2</u> to Appropriate Water, to construct and to put water to beneficial use	\$ <u>100.00</u>
Fee for Application for Permit No. _____ to Appropriate Water for Future use	\$ _____
Fee to retain Future Use Permit No. _____ after period of seven years.	\$ _____
Fee for Inspecting Constructed Works, confirming beneficial use and issuing Water License No. <u>2870-2</u>	\$ <u>200.00</u>
Fee for Filing Transfer Form _____	\$ _____
Fee for _____	\$ _____
Fee for Issuing New Well Driller's License No. _____	\$ _____
Fee for Renewal of Well Driller's License No. _____	\$ _____
Fee for Issuing Well Pump Installer's License No. _____	\$ _____
Fee for Renewal of Well Pump Installer's License No. _____	\$ _____
(Any Other Work Provided by Law) TOTAL	\$ <u>300.00</u>

By Eric Gronlund
Chief Engineer
EG

Schlaak, Karen

From: Mathiowetz, Adam (DENR)
Sent: Thursday, January 19, 2023 2:10 PM
To: Gronlund, Eric; Duvall, Ron; Blood, Sammi; Friedeman, Barbara
Cc: Schlaak, Karen
Subject: Town of Keystone new well

Devon the water system operator for the Town of Keystone called with 2 questions. One was for the Drinking Water Program and the other for the Water Rights Program.

Barb and Sammi

Devon wanted to know what type of sampling was needed for the new well. I did tell him about the new well sampling requirements but also told him they may be other requirements since they are a municipal system. Devon intends to call back later to talk to one of you.

Eric and Ron

This is a new additional well to the town's current well. I informed Devon there is an application process for adding a well to their permit. Devon plans to call back later to talk to one of you regarding the process.



Adam Mathiowetz, PE
Engineer, Water Rights Program
Department of Agriculture and Natural Resources
523 E. Capitol Ave. Pierre SD, 57501
605.773.3352
danr.sd.gov



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 E. CAPITOL AVE
PIERRE SD 57501-3182
danr.sd.gov

March 27, 2023

Town of Keystone
Jerry Przybylski, Public Works Director
PO Box 689
Keystone SD 57751

Dear Mr. Przybylski:

A well driller's report filed with us by Alexander Drilling Inc. shows a new well was completed for the Town of Keystone on January 10, 2023, for municipal use.

It is my understanding that Adam Mathiowetz, with our office has talked with Devon, the water system operator for Keystone regarding this well.

Enclosed are application forms and instruction sheet to apply for a water permit. The completed forms with the application fee and map can be returned to: Water Rights Program, 523 E. Capitol, Pierre, SD 57501.

If help is needed completing the application forms, please contact Ron Duvall or me at (605) 773-3352. We will be happy to assist you in any way possible.

Sincerely,

Karen Schlaak
Water Rights Program
karen.schlaak@state.sd.us

enclosures



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 E. CAPITOL AVE
PIERRE SD 57501-3182
danr.sd.gov

**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 2870-2, Town of Keystone**

Pursuant to SDCL 46-2A-2, the following is the recommendation of the Chief Engineer, Water Rights Program, Department of Agriculture and Natural Resources concerning Water Permit Application No. 2870-2, Town of Keystone, PO Box 689, Keystone SD 57751.

The Chief Engineer is recommending APPROVAL of Application No. 2870-2 because 1) there is reasonable probability that there is unappropriated water available for the applicant's proposed use, 2) the proposed diversion can be developed without unlawful impairment of existing domestic water uses and water rights, 3) the proposed use is a beneficial use and 4) it is in the public interest as it pertains to matters of public interest within the regulatory authority of the Water Management Board with the following qualifications:

1. The well approved under Water Permit No. 2870-2 is located near domestic wells and other wells which may obtain water from the same aquifer. Water withdrawals under this Permit shall be controlled so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
2. The permit holder shall report to the Chief Engineer annually the amount of water withdrawn from the Crystalline Rock aquifer.
3. Water Permit No. 2870-2 authorizes a total annual diversion of up to 18.48 acre-feet of water.

See report on application for additional information.

Eric Gronlund, Chief Engineer
June 5, 2023

Report to the Chief Engineer
On Water Permit Application No. 2870-2

Town of Keystone

c/o Devin Lorimor

June 5, 2023

Water Permit Application No. 2870-2 proposes to appropriate an amount of water not to exceed 18.48 acre-feet annually at a maximum instantaneous diversion rate of 0.078 cubic feet per second (cfs) (approximately 35 gallons per minute (GPM)) from one well completed into the Crystalline Rock aquifer (approximately 1,000 feet deep) located in the E $\frac{1}{2}$ SW $\frac{1}{4}$ of Section 4-T2S-R6E for municipal use. The site of interest is located in the Town of Keystone in Pennington County.

AQUIFER: Crystalline Rock (CRSL)

HYDROGEOLOGY:

The Crystalline Rock aquifer consists of many localized aquifers within the Precambrian-aged, crystalline core of the Black Hills, where extensive fractures and weathering zones allow for the transmission of water (Driscoll and Carter, 2001). The crystalline rock is generally exposed at land surface except where overlain by localized gravel deposits and alluvium along stream beds and topsoil (Martin et al., 2004; Redden et al., 2016). The crystalline rocks that comprise the aquifer have very low primary porosity, so water movement in the aquifer is controlled by secondary porosity, where groundwater flow is through fractures and faults (Rahn, 1979). The nature of secondary porosity is highly variable and unpredictable; therefore, local aquifer characteristics are site specific. The Crystalline Rock aquifer is estimated to have an outcrop area of approximately 574,000 acres (Rahn, 1979). Rahn (1979) estimated the effective porosity of the Crystalline Rock aquifer to be one percent of the outcrop area, while assuming groundwater is only recoverable in fractures and joints that typically only occur within a depth of 500 feet of ground surface, resulting in an estimated 2,900,000 acre-feet of recoverable water in storage for the Crystalline Rock aquifer in western South Dakota. Driscoll and Carter (2001) estimated the outcrop of the “Localized aquifers in the crystalline core area (Precambrian/Tertiary/Other)” to be approximately 616,800 acres.

The geology underlying the general location of the existing well site consists primarily of the Metagraywacke 2 (Xgw₂) (quartz-mica schist and phyllite) and some Metagabbro (Xmg) (hornblende plagioclase amphibolite and chloritic amphibole schist) (Redden et al., 2016).

Due to the unpredictable nature of secondary porosity, and the very low primary porosity of crystalline rock, it is very difficult to determine if the aquifer is confined or unconfined at a specific site. Depending on exactly what depth the secondary porosity was encountered in the well bore and the water level in the well compared to the secondary porosity features, the well may change from acting as a confined well to an unconfined well at various water levels that are not comparable to adjacent wells completed into the same aquifer.

A water well completion report was submitted with Water Permit Application No. 2870-2. A reiteration of the hydrogeology from the water well completion report is displayed in Table 1.

Table 1. Water well completion report submitted with Water Permit Application No. 2870-2

Formation Log	From	To
Drift	0	33
Schist grey hard	33	54
Fracture (5 gpm)	54	55
Schist grey hard	55	300
Fracture (20 gpm)	300	301
Schist grey hard	301	695
Fracture (25 gpm)	695	696
Schist grey hard	696	750
Fracture (30 gpm)	750	755
Schist grey hard	755	960
Fracture (35 gpm)	960	962
Schist grey hard	962	1,000
Date of Well Completion	01/10/2023	
Estimated Static Water Level (at well completion)	15	

Figure 1 displays the existing well location proposed to be used for Water Permit Application No. 2870-2, with the Crystalline Rock aquifer water rights/permits within approximately one mile (Water Rights, 2023b), and the significant fault locations (modified from Redden et al., 2016). Table 1 lists the water rights/permits displayed in Figure 1. It is highly likely the localized portion of the Crystalline Rock aquifer this application proposes to use is limited by these mapped faults and other significant geological features (such as, synclines and anticlines). Furthermore, the actual areal extent of the localized aquifer is likely even further limited by localized secondary porosity. However, information is not available to delineate an exact extent of the localized aquifer.

South Dakota Codified Law (SDCL) 46-2A-9

Pursuant to SDCL 46-2A-9, “A permit to appropriate water may be issued only if there is a reasonable probability that there is unappropriated water available for the applicant’s proposed use, that the diversion point can be developed without unlawful impairment of existing domestic water uses and water rights, and that the proposed use is a beneficial use and in the public interest as it pertains to matters of public interest within the regulatory authority of the Water Management Board as defined by SDCL 46-2-9 and 46-2-11.” This report will address the availability of unappropriated water and the potential for unlawful impairment of existing domestic water uses and water rights within the Crystalline Rock aquifer.

WATER AVAILABILITY:

Water Permit Application No. 2870-2 proposes to appropriate water from the Crystalline Rock aquifer. The probability of unappropriated water being available from the aquifer can be evaluated by considering SDCL 46-6-3.1, which requires “No application to appropriate groundwater may be approved if, according to the best information reasonably available, it is probable that the quantity of water withdrawn annually from a groundwater source will exceed the quantity of the average estimated annual recharge of water to the groundwater source. An application may be approved, however, for withdrawals of groundwater from any groundwater formation older than or stratigraphically lower than the greenhorn formation in excess of the average estimated annual recharge for use by water distribution systems.” The Crystalline Rock aquifer is older than and stratigraphically lower than the Greenhorn Formation (Fahrenbach et al., 2010) and the applicant’s proposed use is for use in a water distribution system as defined by SDCL 46-1-6(17). Therefore, the Water Management Board’s authority to approve this application is not restricted by whether or not recharge exceeds withdrawals. However, a hydrologic budget analyzing average annual recharge and average annual withdrawal rates to and from the Crystalline Rock aquifer were included in this technical report for the information of the Chief Engineer and Water Management Board.

Table 2. Water rights/permits authorized to appropriate water from the Crystalline Rock aquifer within approximately one mile of the existing well, as shown in Figure 1 (Water Rights, 2023b)

Permit No.	Name	Status	Use	Authorized Diversion Rate (cfs)	Authorized Annual Volume (acre-feet)
1595-2	Rocky Gulch LLC	LC	COM	0.07	
1774-2	Mineral Technology Corp	LC	COM	0.09	
1811-2	Breeze Inc	LC	COM, DOM	0.067	
1849-2	Town of Keystone	LC	MUN	0.56	
2329-2	Little Guys LLC	LC	COM	0.1	
2342-2	Danielle Banks	LC	COM	0.044	
2341-2	Danielle Banks	LC	COM	0.013	
2344-2	Mike Vinton	LC	COM	0.044	
2386-2	Town of Keystone	LC	MUN	0.089	
2460-2	Kenneth D Knapp	LC	COM	0.033	
2500-2	Town of Keystone	LC	MUN	0.22	96
2587-2	Town of Keystone	LC	MUN	0.133	
2598-2	Granite Point LLC	LC	SHD	0.067	
2785-2	Town of Keystone	LC	MUN	0.167	24.6
LC: Licensed Water Right; COM: Commercial; DOM: Domestic; MUN: Municipal; SHD: Suburban Housing Development					

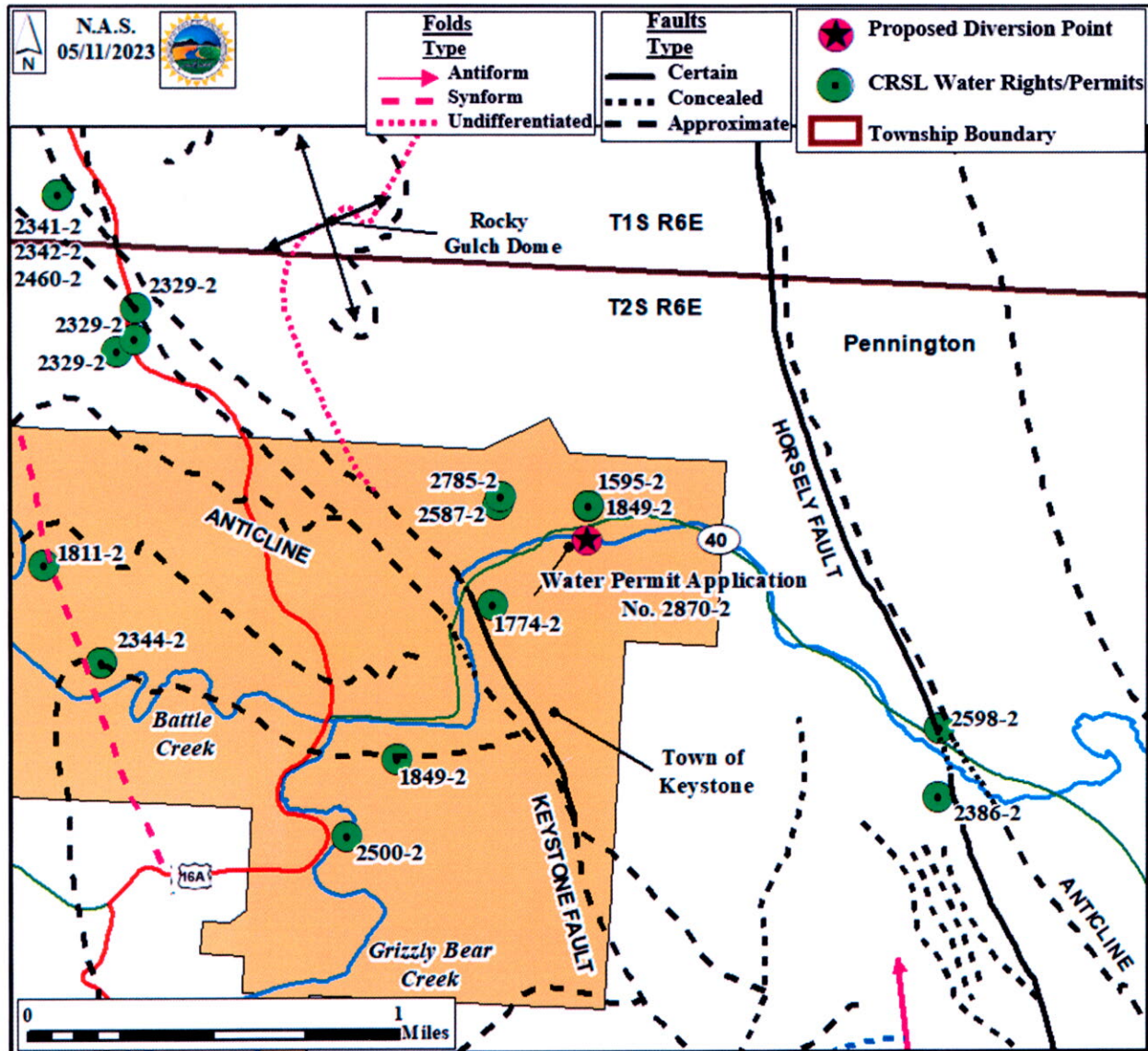


Figure 1. Location of the existing well proposed to be used by Water Permit Application No. 2870-2 with the Crystalline Rock aquifer water rights/permits within approximately one mile (Water Rights, 2023b), and the significant fault locations (modified from Redden et al., 2016)

HYDROLOGIC BUDGET:

Recharge

Recharge to the Crystalline Rock aquifer is through the infiltration of precipitation and streamflow losses (likely to Battle Creek near the existing well site) (Driscoll and Carter, 2001).

Driscoll and Carter (2001) estimated the average annual recharge rate, over the water years 1950 to 1998, to the Crystalline Rock aquifer in its entirety within the core of the Black Hills, must be at least equal to the average withdrawal rate of 3,600 acre-feet per year. Driscoll and Carter (2001) further concluded that the recharge to the Crystalline Rock aquifer must be much larger than the estimated 3,600 acre-feet per year to account for discharge to streams. Driscoll and

Carter (2001) stated, in regard to the Crystalline Rock aquifer, “Recharge conditions are highly transient and have large spatial variability; thus, quantification is not attempted.” While looking at faults and other significant geological features may allow for some limiting of the areal extent, there is not sufficient data available to attempt a delineation of the localized Crystalline Rock aquifer at the existing well site with any level of certainty. Furthermore, the spatial variability and transient nature of the recharge means that even if there was a delineation for this Crystalline Rock aquifer at the applicant’s proposed location, simply applying the 3,600 acre-feet per year equally over the entirety of the aquifer is inappropriate. However, by utilizing Driscoll and Carter’s (2001) estimated recharge rate of 3,600 acre-feet per year, or 0.07 inches per year, for the Crystalline Rock aquifer, a general sense of the minimum average annual recharge rate is provided. It must be emphasized that, due to the transient and variable nature of the recharge conditions, this number is not necessarily reliable. Furthermore, Driscoll and Carter (2001) noted that average annual recharge rate must be much greater to account for discharge from the Crystalline Rock aquifer to streamflow. Therefore, there is no estimated average annual recharge rate available for the localized Crystalline Rock aquifer the applicant proposes to use.

Carter and Driscoll (2001) also estimated average annual yield potential. The average annual yield potential is essentially how much precipitation is left after subtracting evapotranspiration. Carter and Driscoll (2001) utilized a recharge factor to estimate how much of the annual yield could infiltrate and recharge a bedrock aquifer in the Black Hills, such as the Madison and Minnelusa aquifers. However, Carter and Driscoll (2001) did not estimate a recharge factor for the crystalline core of the Black Hills because the localized Crystalline Rock aquifers are not extensive regional aquifers and are highly variable in nature.

Figure 2 displays a map of the estimated annual yield potential from Carter and Driscoll's (2001) report, with the location of the existing well site for Water Permit Application No. 2870-2, and the location of the Crystalline Rock aquifer observation wells in western South Dakota (Water Rights, 2023a). The Crystalline Rock aquifer near the existing well site has an estimated average annual yield potential of between approximately 1 and 2 inches per year (Driscoll and Carter, 2001). Average annual yield potential is not appropriate to use as a recharge rate for the Crystalline Rock aquifer, but it does provide a general sense of an upper limit of a possible recharge rate.

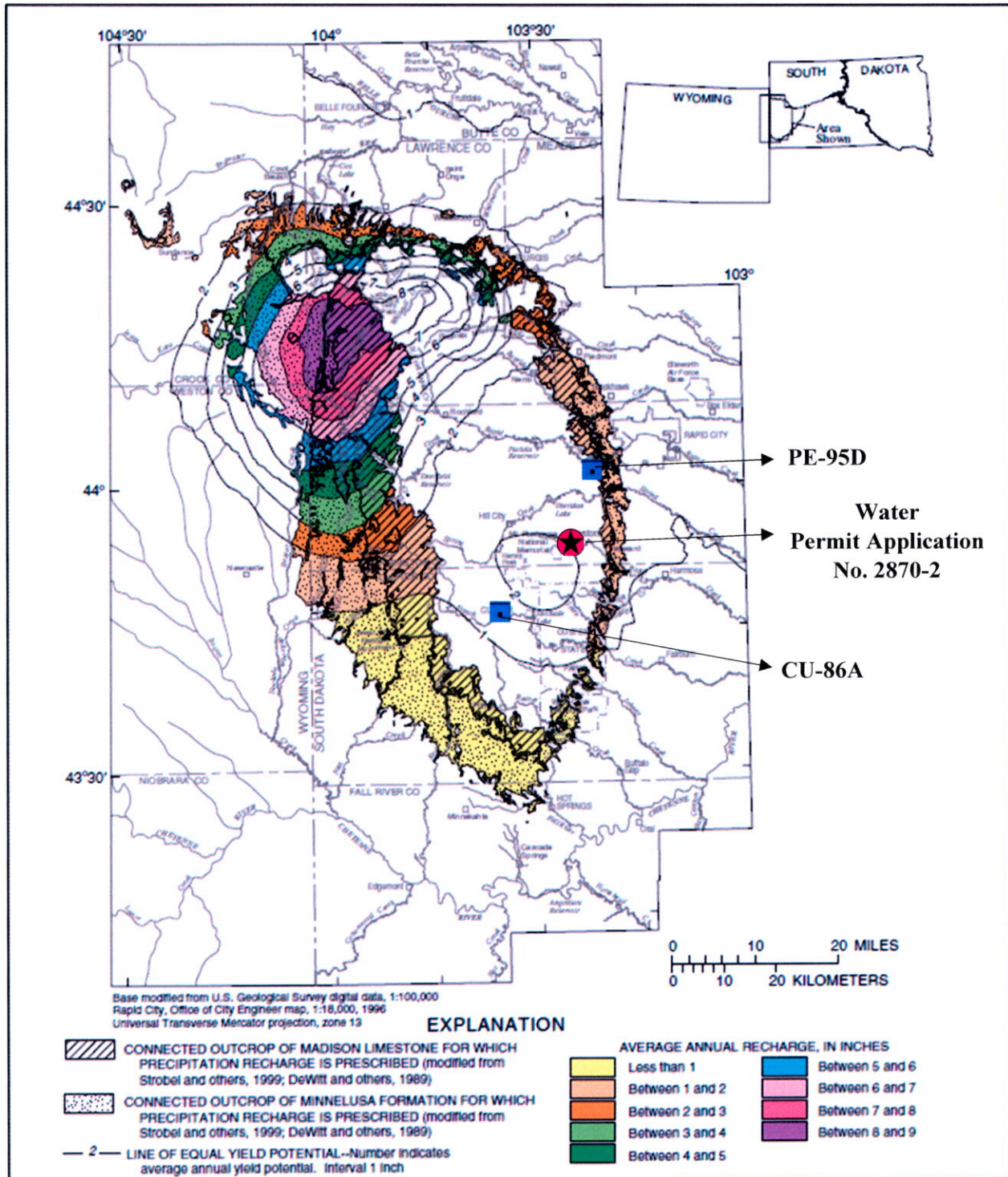


Figure 2. Estimated annual yield potential for the Black Hills in South Dakota and Wyoming for water years 1950 to 1998 (modified from Carter, J. M., Driscoll, D. G., Hamade, G. R., & Jarrell, G.J., 2001), with the location of the existing well proposed to be used by Water Permit Application No. 2870-2, and the Crystalline Rock aquifer observation wells in western South Dakota (Water Rights, 2023a)

Discharge

Discharge from the Crystalline Rock aquifer is primarily through well withdrawals (Water Rights, 2023b and 2023c), seepage to streams (likely to Battle Creek near the existing well site) (Driscoll and Carter, 2001), and evapotranspiration where the static water level of the aquifer is at or near the ground surface.

As shown in Figure 1, the existing well proposed to be used by this application, and Water Right Nos. 1595-2, 1774-2, 1849-2, 2386-2, 2587-2, and 2785-2, are separated from other the nearby water rights by several faults (modified from Redden et al., 2016; Water Rights, 2023b).

Table 3 summarizes the water rights/permits authorized to appropriate water from the localized Crystalline Rock aquifer within the same region bounded by faults as the existing well, with the estimated annual use for each water right/permit as determined by their permitted maximum diversion rate or annual volume. Historically, average water use by non-irrigation appropriations limited by an instantaneous diversion rate have been assumed to be pumping 60% of full time at the respective permitted diversion rate. Water rights/permits limited by an annual volume are assumed to withdraw their entire respective annual volume limitation. This is a standard method used by the DANR-Water Rights Program for estimating annual withdrawals by non-irrigation appropriations from an aquifer and is likely an overestimation of average annual withdrawals (Water Rights, 2023b). Overall, the estimated average annual withdrawal rate from the localized Crystalline Rock aquifer by the currently authorized water rights/permits is approximately 434 acre-feet per year (Table 3) (Water Rights, 2023b).

Table 3. Estimated average annual water use for the water rights authorized to withdraw water from the localized Crystalline Rock aquifer within the same faults as the existing well, with estimated use for Water Permit Application No. 2870-2 (if approved) (Water Rights, 2023b)

Permit No.	Name	Status	Use	Authorized Diversion Rate (cfs)	Authorized Annual Volume (acre-feet)	Estimated Use (acre-feet/year)
1595-2	Rocky Gulch LLC	LC	COM	0.07		30.4
1774-2	Mineral Technology Corp	LC	COM	0.09		39.1
1849-2	Town of Keystone	LC	MUN	0.56		243.3
2386-2	Town of Keystone	LC	MUN	0.089		38.7
2587-2	Town of Keystone	LC	MUN	0.133		57.8
2785-2	Town of Keystone	LC	MUN	0.167	24.6	24.6
					TOTAL:	434
2870-3	Town of Keystone	this app	MUN	0.078	18.48	18.48
LC: Licensed Water Right; COM: Commercial; MUN: Municipal					TOTAL:	452

There are a number of domestic wells completed into the Crystalline Rock aquifer within the area of the existing well site that do not require a water right/permit, so the withdrawal amount from those wells is unknown (Water Rights, 2023c). There could potentially be other domestic wells completed into the Crystalline Rock aquifer near the existing well site that are not on file with the DANR-Water Rights Program. As noted earlier in the report, it is difficult to determine the areal extent of the localized Crystalline Rock aquifer due to the unpredictable nature of secondary porosity, therefore it is difficult to determine exactly how large a component of the hydrologic budget domestic use may represent.

Hydrologic Budget Summary

There is no estimated average annual recharge rate available for the localized Crystalline Rock aquifer. However, to provide a general sense of minimum and maximum recharge to the aquifer, Driscoll and Carter (2001) estimated a minimum recharge rate of 3,600 acre-feet per year, or 0.07 inches per year. It must be emphasized that, due to the transient and variable nature of the recharge conditions, this number is not necessarily reliable. Additionally, the average annual recharge rate must be much greater to account for losses from the Crystalline Rock aquifer to streamflow (Driscoll and Carter, 2001). Utilizing average annual yield potential, Driscoll and Carter (2001) provided a general sense of an upper limit on a possible recharge rate to the Crystalline Rock aquifer ranging between approximately 1 to 2 inches per year.

The estimated average annual withdrawal rate for the water rights within the same faults as the existing well, plus the estimated use for Water Permit Application No. 2870-2 (if approved), is approximately 452 acre-feet per year.

OBSERVATION WELL DATA:

Administrative Rule of South Dakota (ARSD) 74:02:05:07 requires that the Water Management Board shall rely upon the record of observation well measurements in addition to other data to determine that the quantity of water withdrawn annually from the aquifer does not exceed the estimated average annual recharge of the aquifer.

Observation wells provide data on how the aquifer reacts to regional climatic conditions and local pumping. The DANR-Water Rights Program monitors two observation wells that have been historically considered as completed into the Crystalline Rock aquifer in western South Dakota (Water Rights, 2023a). These observation wells are PE-95D (approximately eight miles northeast of the existing well site) and CU-86A (approximately 12.5 miles southwest of the existing well site) (Water Rights, 2023a). Kilts (2018) determined that observation well PE-95D is open to both the Deadwood Formation and the Crystalline Rock, so it is uncertain how representative observation well PE-95D is of either the Deadwood or Crystalline Rock aquifer. Therefore, only observation well CU-86A will be used in this analysis. The hydrograph for observation well CU-86A is displayed in Figure 3 (Water Rights, 2023a). The data points utilized to construct the hydrographs are measurements of the static water level in the observation wells from the top of the well casing. It is worth noting the hydrograph title displays DENR Water Rights Observation Well on the hydrographs when the titles should display DANR Water Rights Observation Well on the hydrographs.

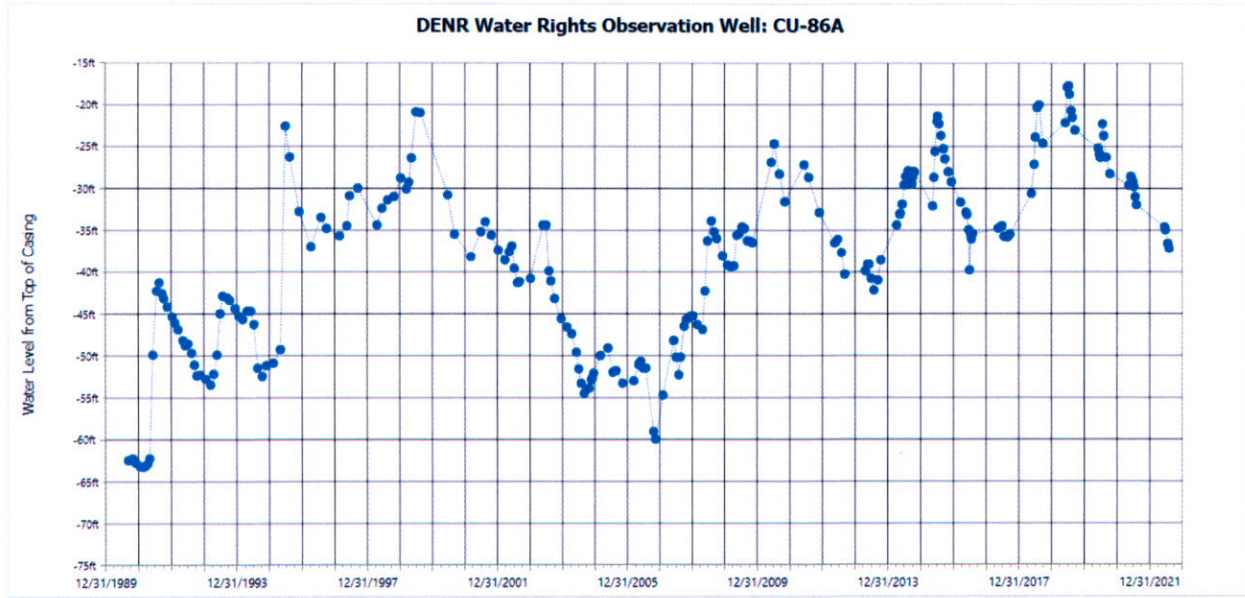


Figure 3. Hydrograph for observation well CU-86A (Water Rights, 2023a)

The hydrograph for CU-86A indicates the aquifer responds well to climatic conditions because water levels are rising during wetter periods (early spring snowmelt and precipitation) and declining to a stable water level during drier periods. Over the period of record, the water levels displayed on the hydrograph for observation well CU-86A have fluctuated approximately 45 feet in response to climatic conditions (Water Rights, 2023a). An examination of the hydrograph shows that any effects caused by pumping on the water levels of CU-86A are masked by climatic conditions indicating that changes in water levels are governed by natural conditions, that is to say recharge to and natural discharge from the aquifer. Both recharge to and natural discharge from an aquifer can be captured for pumping. Although observation well CU-86A is located approximately 12.5 miles southwest of the existing well site, the hydrograph still provides proof of recharge to the Crystalline Rock aquifer over the period of record (Water Rights, 2023a).

Driscoll and Carter (2001) stated that recharge to the Crystalline Rock aquifer must be much greater than the estimated 3,600 acre-feet per year to account for the groundwater discharge that contributes to the base flow to many streams and this statement is supported by the hydrograph for observation well CU-86A (Figure 3), which displays the water level generally rising over its period of record despite increased development of the localized aquifer in the area of the observation well.

When considering the hydrograph for observation well CU-86A, Driscoll's and Carter's (2001) commentary regarding recharge to the Crystalline Rock aquifer, and the relatively small annual appropriation requested by this application, there is a reasonable probability unappropriated water is available for this proposed appropriation.

POTENTIAL FOR UNLAWFUL IMPAIRMENT OF EXISTING WATER RIGHTS:

As shown in Figure 1, the existing well, and Water Right Nos. 1595-2, 1774-2, 1849-2, 2386-2, 2587-2, and 2785-2, are separated from other the nearby water rights by several faults (modified from Redden et al., 2016; Water Rights, 2023b). The nearest (approximately 0.1 miles north) Crystalline Rock aquifer water right/permit to the existing well site (not held by the applicant) is Water Right No. 1595-2 (Table 1) (Figure 1) (Water Rights, 2023b). The licensing investigation for Water Right No. 1595-2 authorizes a well completed 60 feet deep, which indicates this well is likely withdrawing from a shallower fracture than the existing well proposed to be used by Water Permit Application No. 2870-2 (Water Rights, 2023c).

There are domestic wells on file with the DANR-Water Rights Program that are completed into the Crystalline Rock aquifer, with the closest domestic well on file (not held by the applicant) approximately 0.1 miles southwest of the existing well site (Water Rights, 2023c). There could potentially be other domestic wells completed into the Crystalline Rock aquifer near the existing well site that are not on file with the DANR-Water Rights Program. The location of the domestic wells is based on the location provided at the time of completion by the well driller. The well completion report for this domestic well noted the well was completed into a fracture in the Crystalline Rock aquifer 360 feet deep, which indicates this domestic well is likely withdrawing from a shallower fracture than the existing well proposed to be used by Water Permit Application No. 2870-2 (Water Rights, 2023c).

In Pennington County, there has been one complaint submitted to the DANR-Water Rights Program regarding potential well interference for wells completed into the Crystalline Rock aquifer (Water Rights, 2023d). The complaint involved Water Right No. 2572-2, held by Sheridan Lake Highlands HOA, during the initial development of the permit. In October of 2006, the Chief Engineer limited Water Right No. 2572-2 to a maximum diversion rate of 18 gallons per minute, also known as the limit for reasonable domestic use detailed in ARSD 74:02:01:01(7) (Water Rights, 2023b and 2023d). The permit holder reported to the Water Rights Program that the issue was resolved sometime before January of 2009 (Water Rights, 2023d). The diversion points authorized under Water Right No. 2572-2 are located approximately 7 miles northeast of the existing well site (Water Rights, 2023b). There have been no other complaints submitted to the DANR-Water Rights Program regarding well interference for adequate wells completed into the Crystalline Rock aquifer within Pennington County (Water Rights, 2023d).

In May of 2021, the Chief Engineer received a complaint regarding a number of entities near Rockerville, South Dakota (Pennington County) that were suspected of using water without proper permitting. Since then, the entities mentioned in this complaint have either obtained or are in the process of obtaining the proper permitting necessary for their respective water withdrawals (Mathiowetz, 2021a and 2021b; Water Rights, 2023c).

The development of both appropriative and domestic users' wells completed into the Crystalline Rock aquifer has continued with minimal history of well interference complaints in Pennington County. Water Permit Application No. 2870-2 is requesting a relatively limited diversion rate,

appropriation volume, and the Crystalline Rock aquifer has large natural fluctuations of water levels that often mask or exceed drawdown caused by well pumping. Therefore, there is a reasonable probability this application can be developed without unlawful impairment of existing water right/permit holders or domestic users with adequate wells (Water Rights, 2023b, 2023c, and 2023d).

An adequate well as defined in ARSD 74:02:04:20(6):

“A well constructed or rehabilitated to allow various withdrawal methods to be used, to allow the inlet to the pump to be placed not less than 20 feet into the saturated aquifer or formation material when the well is constructed, or to allow the pump to be placed as near to the bottom of the aquifer as is practical if the aquifer thickness is less than 20 feet.”

The Water Management Board recognizes that putting water to beneficial use requires a certain amount of drawdown to occur. The Board has developed rules to allow water to be placed to maximum beneficial use without the necessity of maintaining artesian head pressure for domestic use. The Water Management Board defined an “adversely impacted domestic well” in ARSD 74:02:04:20(7) as:

“A well in which the pump intake was set at least 20 feet below the top of the aquifer at the time of construction or, if the aquifer is less than 20 feet thick, is as near to the bottom of the aquifer as is practical and the water level of the aquifer has declined to a level that the pump will no longer deliver sufficient water for the well owner’s needs.”

Due to the very low primary porosity of the Crystalline Rock aquifer, and the highly variable and uneven nature of secondary porosity, 20 feet of saturated thickness above the pump inlet may not be sufficient for a dependable water supply. Without conducting an aquifer performance test, the precise drawdown effects caused by pumping a well cannot be determined. Over the period of record, the water levels shown on the hydrograph for observation well CU-86A (Figure 3) have fluctuated approximately 45 feet due to climatic conditions. Pump depth requirements for a well are detailed in ARSD 74:02:04:60(2), which states in part, “The depth of the pump setting shall be determined by dividing the specific capacity into the required yield and adding at least 10 additional feet to maintain pump inlet submergence below the maximum anticipated drawdown, where possible.”

There is a reasonable probability that the proposed diversion by Water Permit Application No. 2870-2 will not unlawfully impair adequate wells for existing water rights/permits and domestic users because:

- Continued development of the Crystalline Rock aquifer has occurred without a significant history of well interference complaints (Water Rights, 2023d);

- The hydrograph for observation well CU-86A (Figure 3) showing natural fluctuations in water levels over the period of record (Water Rights, 2023a), along with Driscoll's and Carter's (2001) commentary, indicate recharge occurs to the Crystalline Rock aquifer;
- Adequate domestic wells are protected under South Dakota Codified Water Law; and
- Water Permit Application No. 2870-2 seeks to appropriate a relatively small annual volume of water.

If this application is approved, a qualification requiring the applicant to control their water withdrawals, so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights, should be included.

CONCLUSIONS:

1. Water Permit Application No. 2870-2 proposes to appropriate an amount of water not to exceed 18.48 acre-feet annually at a maximum instantaneous diversion rate of 0.078 cfs (approximately 35 GPM) from one well completed into the Crystalline Rock aquifer (approximately 1,000 feet deep) for municipal use. The site of interest is located in the Town of Keystone in Pennington County.
2. Based on observation well data and the hydrologic budget, there is a reasonable probability that unappropriated water is available from the Crystalline Rock aquifer to supply the proposed appropriation.
3. There is a reasonable probability that the proposed diversion by Water Permit Application No. 2870-2 will not unlawfully impair adequate wells for existing water rights/permits and domestic users.
4. If this application is approved, a qualification requiring the applicant to control their water withdrawals, so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights, should be included.



Nakaila Steen
Natural Resources Engineer II
SD DANR - Water Rights Program

Reviewed by:


Adam Mathiowetz, PE
Natural Resources Engineer IV
SD DANR - Water Rights Program

References

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- Water Rights, 2023c. Well Completion Reports, SD DANR-Water Rights Program, Joe Foss Bldg, Pierre, SD.
- Water Rights, 2023d. County Files, SD DANR-Water Rights Program, Joe Foss Bldg, Pierre, SD.



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 E CAPITOL AVE
PIERRE SD 57501-3182
danr.sd.gov

**NOTE: TO BE SURE OF PUBLICATION ON
THE CORRECT DATES, CONTACT
THE NEWSPAPERS RIGHT AWAY.**

June 15, 2023

Town of Keystone
c/o Devin Lorimor
PO Box 689
Keystone SD 57751

Dear Mr. Lorimor:

Water Permit Application No. 2870-2 for municipal use have been examined and found to comply with the South Dakota Water Laws and applicable rules. A notice has been sent to the Rapid City Journal printed at Rapid City SD (see attachment for contact number). This newspaper requires prepayment. You will need to contact the newspapers and authorize publication of this notice. For your information, a copy of the notice, the recommendation of the Chief Engineer and report on the application are enclosed. Please review the notice prior to publication and notify this office, if you have any corrections or questions.

Be sure to contact the above newspapers to authorize publication of your Notice and to arrange for payment. Early contact with the papers can eliminate delays. Upon receiving authorization from you, the publishers have been instructed to publish your notice. The newspapers have also been instructed to send us the Proof of Publication. We must receive Proof of Publication before action can be taken on the application.

Sincerely,

Rachel Rodriguez

Rachel Rodriguez
Water Rights Program
(605) 773-3352

enclosures

NOTE: If you plan to contest any part of the Chief Engineer's recommendation, you must file a petition pursuant to the procedures outlined in the attached notice of hearing. The Water Management Board will then consider your concerns during a hearing on the application.

NOTICE OF APPLICATION NO. 2870-2 to Appropriate Water

Notice is given that the Town of Keystone, c/o Devin Lorimor, PO Box 689, Keystone SD 57751 has filed an application for a water permit to appropriate 18.48 acre-feet of water annually at a maximum pump rate of 0.078 cubic feet of water per second from one well completed into the Crystalline Rock Aquifer (1,000 feet deep) located in the E 1/2 SW 1/4 Section 4 -T2S-R6E for municipal use. This site is located in the city of Keystone SD.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 2870-2 with qualifications because 1) unappropriated water is available, 2) existing domestic water uses and water rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest as it pertains to matters within the regulatory authority of the Water Management Board. The Chief Engineer's recommendation with qualifications, the application, and staff report are available at <https://danr.sd.gov/public> or contact Ron Duvall for this information, or other information, at the Water Rights Program address provided below.

Any person interested in opposing this application or recommendation shall allege that the application, upon approval, will cause injury to the person that is unique from any injury suffered by the public in general. The injury must concern a matter either within the regulatory authority found in SDCL 46-2A-9 for approval or denial of the application, or other matter concerning the application within the regulatory authority of the board to act upon as defined by SDCL 46-2-9 and 46-2-11, or both. Any person meeting the petitioner requirements and wishing to be a party of record in a contested case hearing shall file a written petition to oppose the application with BOTH the applicant and Chief Engineer. A petition opposing the application shall be filed on a form provided by the Chief Engineer. The petition form is available online at <https://danr.sd.gov/public> or by contacting the Chief Engineer. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E Capitol, Pierre SD 57501" or call (605) 773-3352. The applicant's mailing address is given above. If contesting the Chief Engineer's recommendation, the applicant shall also file a petition. A petition filed by either an interested person or the applicant must be filed by July 3, 2023.

The petition shall include a statement describing the unique injury upon approval of the application on the petitioner, the petitioner's reasons for opposing the application, and the name and mailing address of the petitioner or the petitioner's legal counsel, if legal counsel is obtained.

Any interested person may file a comment on the application with the Chief Engineer. The comment shall be filed on a form provided by the Chief Engineer and is available online at <https://danr.sd.gov/public> or by calling (605) 773-3352 or writing the Chief Engineer at the address provided above. Filing a comment does not make the commenter a party of record or a participant in any hearing that may be held. Any comment must be filed by July 3, 2023.

If the applicant does not contest the recommendation of the Chief Engineer and no petition to oppose the application is received, the Chief Engineer shall act on the application pursuant to the recommendation with no hearing held before the Water Management Board. If a petition opposing the application or contesting the recommendation is filed, then a hearing will be scheduled, and the Water Management Board will consider this application. Notice of the hearing will be given to the applicant and any person filing a petition.

Published once at the total approximate cost of_

Rodriguez, Rachel

From: Rodriguez, Rachel
Sent: Friday, June 9, 2023 2:42 PM
To: RCY Legals
Subject: 2870-2 Town of Keystone - Public Notice
Attachments: 2870-2 public.short_final.docx; FORM8.FRM.doc

Attached is a notice to be published on June 21, 2023.

Town of Keystone, c/o Devin Lorimor, PO Box 689, Keystone SD 57751, (605 666-4827) has been notified to contact you to authorize publication and arrange for payment.

Please send the affidavit or return the attached Proof of Publication form ASAP to the Water Rights Program, 523 E Capitol, Pierre SD 57501.

Let me know if you have questions. Please acknowledge receipt of this email.

Thank you,

Rachel Rodriguez
DANR | Program Assistant
Rachel.Rodriguez@state.sd.us



*** Proof of Publication ***

STATE OF INDIANA)

County of Lake)

SS:

S.D. DANR - GROUND WATER

523 E CAPITOL AVE

PIERRE SD 57501

ORDER NUMBER 57854

I, Abrianna Sims, being
duly sworn, upon his/her oath says: That he/she is now and was at all
time hereinafter mentioned, a clerk of the RAPID CITY JOURNAL, a
corporation of Rapid City, South Dakota, a legal and daily newspaper
printed and published in Rapid City, in said County of Pennington, and
has full and personal knowledge of all the facts herein stated as
follows: that said newspaper is and at all of the times herein
mentioned has been a legal and daily newspaper with a bonafide paid
circulation of at least Two Hundred copies daily, and has been printed
and published for at least one year prior to the first date of the
published notice.

This affidavit is a true and corrected copy of notice which appeared
in said newspaper on the following dates:

6/20

Section: Legal

Category: 0072 Public Notices

PUBLISHED ON: 06/20/2023

TOTAL AD COST: 89.12

FILED ON: 6/23/2023

Subscribed and sworn to before me this

23 day of June, 20 23.

Dawn Renee Heili Notary Public

My commission expires



**NOTICE OF APPLICATION NO.
2870-2 to Appropriate Water**

Notice is given that the Town of Keystone, c/o Devin Lorimor, PO Box 689, Keystone SD 57751 has filed an application for a water permit to appropriate 18.48 acre-feet of water annually at a maximum pump rate of 0.078 cubic feet of water per second from one well completed into the Crystalline Rock Aquifer (1,000 feet deep) located in the E 1/2 SW 1/4 Section 4 -T2S-R6E for municipal use. This site is located in the city of Keystone SD.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends AP-PROVAL of Application No. 2870-2 with qualifications because 1) unappropriated water is available, 2) existing domestic water uses and water rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest as it pertains to matters within the regulatory authority of the Water Management Board. The Chief Engineer's recommendation with qualifications, the application, and staff report are available at <https://danr.sd.gov/public> or contact Ron Duvall for this information, or other information, at the Water Rights Program address provided below.

Any person interested in opposing this application or recommendation shall allege that the application, upon approval, will cause injury to the person that is unique from any injury suffered by the public in general. The injury must concern a matter either within the regulatory authority found in SDCL 46-2A-9 for approval or denial of the application, or other matter concerning the application within the regulatory authority of the board to act upon as defined by SDCL 46-2-9 and 46-2-11, or both. Any person meeting the petitioner requirements and wishing to be a party of record in a contested case hearing shall file a written petition to oppose the application with BOTH the applicant and Chief Engineer. A petition opposing the application shall be filed on a form provided by the Chief Engineer. The petition form is available online at <https://danr.sd.gov/public> or by contacting the Chief Engineer. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E Capitol, Pierre SD 57501" or call (605) 773-3352. The applicant's mailing address is given above. If contesting the Chief Engineer's recommendation, the applicant shall also file a petition. A petition filed by either an interested person or the applicant must be filed by July 3, 2023.

The petition shall include a statement describing the unique injury upon approval of the application on the petitioner, the petitioner's reasons for opposing the application, and the name and mailing address of the petitioner or the petitioner's legal counsel, if legal counsel is obtained.

Any interested person may file a comment on the application with the Chief Engineer. The comment shall be filed on a form provided by the Chief Engineer and is available online at <https://danr.sd.gov/public> or by calling (605) 773-3352 or writing the Chief Engineer at the address provided above. Filing a comment does not make the commenter a party of record or a participant in any hearing that may be held. Any comment must be filed by July 3, 2023.

If the applicant does not contest the recommendation of the Chief Engineer and no petition to oppose the application is received, the Chief Engineer shall act on the application pursuant to the recommendation with no hearing held before the Water Management Board. If a petition opposing the application or contesting the recommendation is filed, then a hearing will be scheduled and the

***** Proof of Publication *****

hearing will be scheduled, and the Water Management Board will consider this application. Notice of the hearing will be given to the applicant and any person filing a petition.

(Published Jun 20, 2023 for a total approximate cost of \$89.12 and may be viewed for free at www.sdpublicnotices.com)
Legal No: 57854



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 E. CAPITOL AVE
PIERRE SD 57501-3182
danr.sd.gov

JUL 26 2023

Town of Keystone
c/o Devin Lorimor
PO Box 689
Keystone SD 57751

Dear Mr. Lorimor:

Enclosed is Water Permit No. 2870-2 authorizing construction of the water diversion system and beneficial use of the water, not exceeding the limits as specified in the Water Permit.

Form 10, *Notice of Completion of Works and Application of Water to Beneficial Use*, is enclosed. Please return this completed form after you have finished the system and have put the water to beneficial use. An investigation can then be scheduled so the water license may be issued, thus completing the acquisition of a water right.

An informational sheet *Common Water Right Questions* is also enclosed. This sheet is intended to answer some of the questions associated with obtaining and keeping a water right.

Sincerely,

Eric Gronlund, Chief Engineer
Water Rights Program
(605) 773-3352

enclosures



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 E. CAPITOL AVE
PIERRE SD 57501-3182
danr.sd.gov

STATE OF SOUTH DAKOTA)
) SS
COUNTY OF HUGHES)

**Affidavit of Public Notice
on DANR Website**

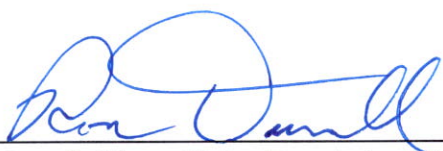
Pursuant to SDCL § 46-2A-4, public notice of the following application was posted on the DANR web site at <https://danr.sd.gov/public>. The posted public notice is the same notice as published in the pertinent newspaper(s) and a copy of the public notice is maintained in the application file. If the application is contested, the posting is moved to the DANR contested case website at <https://danr.sd.gov/public/ContestedCase.aspx> until final action is taken on the application pursuant to SDCL § 46-2A-4.

Application No.: 2870-2

Name of Applicant: Town of Keystone, Devin Lorimor

Date of Posting: 6/21/2023

Date of Removal: 7/26/2023



Ron Duvall, Water Rights Permitting Administrator

7/31/23

Date

Subscribed and sworn to before me, a notary public, this 31 day of July, 2023.



Notary Public - South Dakota
My commission expires:
Rachel Rodriguez
My Commission Expires
May 16, 2029

(SEAL)

