

WATER PERMIT NO. 2500-2

Name of Applicant: Town of Keystone

Address: PO Box 689, Keystone SD 57751

Phone: 605 666-4827

Amount of Water Claimed: 96 AF

Total Acres: NA

Source of Water Supply: groundwater

Water to be used for: municipal

County: Pennington

Type of Waste Disposal System:

Location: Keystone

PRIORITY

Date Received: 1-16-03

Application/License Fee: \$200

Corrected Application Received:

Period of Annual Use: January 1 – December 31

Remarks:

Diversion Point: NW ¼ SE ¼ Sec 8-T2S-R6E

Land to be Irrigated: NA

Depth of Well: 200 feet

Well Driller:

Remarks:

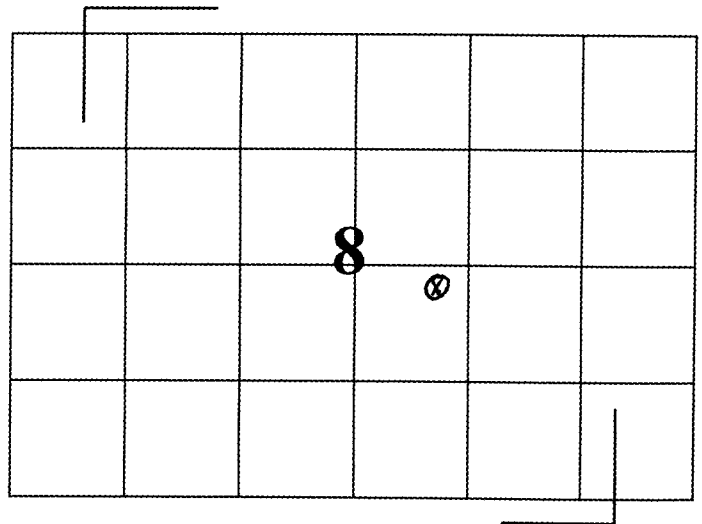
Type of Map: plat

Prepared by: Gary Renner, PE

Reviewed and the Number Assigned on: 1-17-03

By: Karen Schlaak

Notice of Hearing - date to intervene: _____



**SOUTH DAKOTA
WATER PERMIT NO. 2500-2**

Date of first receipt of application January 16, 2003.

Date of return to applicant for corrections, amendments or changes January 17, 2003.

Date of receipt of corrected application February 21, 2003.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 2500-2 to the Town of Keystone, 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. 2500-2 appropriates up to 0.22 cubic feet of water per second (96 acre-feet of water annually) from one well (Precambrian Crystalline Rock Aquifer) 200 feet deep located in the NW ¼ SE ¼ Section 8-T2S-R6E.
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. 2500-2 is April 28, 2003.
5. The date from which applicant may claim right is January 16, 2003.
6. One-fifth of the construction is to be completed on or before October 28, 2005.
7. All construction is to be completed on or before April 28, 2008.
8. Water is to be put to beneficial use on or before April 28, 2012.
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 this Permit will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
2. The well authorized by Permit No. 2500-2 shall be constructed by a licensed well driller and construction of the well and installation of the pump shall comply with Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) pursuant to Section 74:02:04:28.
3. The Town of Keystone shall report to the Chief Engineer annually the amount of water withdrawn from the Precambrian aged Crystalline Rock.

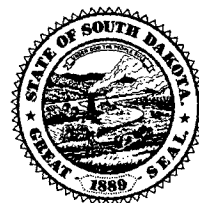
WATER MANAGEMENT BOARD

By: Garland Erbele

Garland Erbele, Chief Engineer
Water Rights Program
Department of Environment and Natural Resources

JUN 13 2003

date



(Type or print)

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

(office use only)
No. 2500-2 Hydrologic Unit 10120109
Basin Upper Cheyenne
Newspaper Rapid City Journal, Rapid City

RECEIVED

JAN 16 2003

WATER RIGHTS
PROGRAM

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: ☒ New ☐ Vested Right (Use predates Mar 2, 1955) ☐ Future Use Reservation
(check one) ☐ 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.) NA

1. Name of Applicant Town of Keystone Phone 605-666-4827
(check one) Owner ☐ Tenant/lessee ☐
Mailing Address PO Box 689 Keystone State SD 57251
(Street, RR, or Box and City) (Zip Code)

2. Amount of water claimed 0.22 *CFS or 60-100 **GPM 96 ***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 aquifer

4. Location of point of diversion (example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W)

NE 1/4 - NW 1/4 - SE 1/4 - Sec 8 - T2S - R6E - BHM

County Pennington

5. County or counties where water will be used Pennington

6. Annual period during which water is to be used all year Jan 1 - 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)

The project is 3600 ft of water main to loop the system, a new well booster station, and 150,000 gal reservoir for fire protection and to increase pressure at the high end of town.

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)

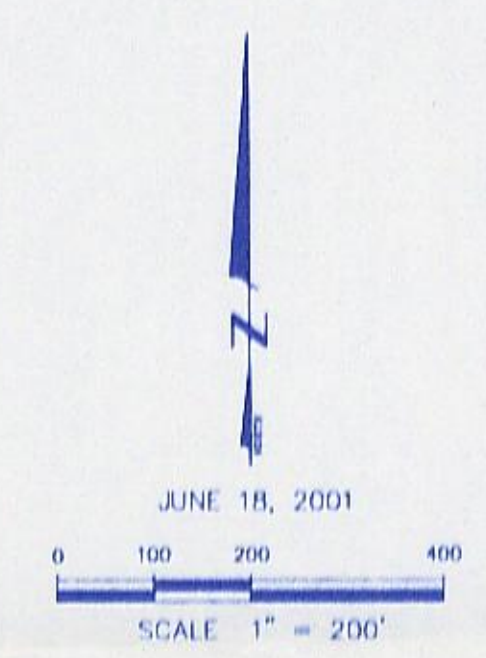
I, Kenneth Leonard, the applicant, certify that I have read this application, have examined the attached map and that the matters stated are true and that I intend, and am able to complete the necessary construction.

☒ Applicant's signature Kenneth O Leonard

Subscribed and sworn to before me this 14 day of January 2003

My Commission Expires Nov. 4, 2005 Notary Public signature Vanessa

2500-2



- LEGEND**
- 359.02 SPOT ELEVATION
 - HY FIRE HYDRANT
 - WV WATER VALVE
 - LP LIGHT POLE
 - W WATER LINE
 - P POWER LINE
 - SS STORM SEWER LINE
 - ⊙ SET 5/8" REDAR W/CAP "RENNER" 2052 and SPERLICH
 - FOUND SURVEY MONUMENT
 - △ TRAVERSE POINT
 - PROPOSED FIRE HYDRANT

UTILITIES

SOUTH DAKOTA ONE CALL NOTIFICATION CENTER
2025 CENTRE POINTE BOULEVARD #310
MENDOTA HEIGHTS, MN 55120
1-800-781-7474

The locations of existing underground utilities are shown in an approximate way only and have not been independently verified by the owners or its representatives. The contractor shall determine the exact location of all existing utilities before commencing work, and agrees to be fully responsible for any and all damages which might be occasioned by the contractor's failure to exactly locate and preserve any and all underground utilities.

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH 1994 EDITION OF THE CITY OF RAPID CITY STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION.



PREPARED FOR:
TOWN OF KEYSTONE
P.O. BOX 689
KEYSTONE, SD 57751

LOCATION:
*
*
*
LOCATED IN * OF
SECTION 8, T2S, R6E, BHM
KEYSTONE, PENNINGTON COUNTY, SOUTH DAKOTA



Renner & Sperlich Engineering Co.
616 SIXTH ST. • RAPID CITY, SD 57701 • 605/342-1191
FAX: 605/342-1405 • E-MAIL: X19FIAT@AOL.COM

REVISIONS	
DATE	REVISION

PROJECT:
**WATER SYSTEM IMPROVEMENTS
PROJECT 2003**
KEYSTONE, PENNINGTON COUNTY, SOUTH DAKOTA

SURVEYOR: *
SURVEY DATE: /01
DRAWN BY: LAR
DESIGNED: GDR
APPROVED: GDR
JOB NO. 165_05A IMPROVE

SHEET
1
OF
1

2500-2

Supplemental Information

(Complete applicable portions only)

(type or print in ink)

1. Well Information - Proposed Construction

- a) Drill Hole Diameter 8" Depth 200 ft
- b) Casing Type PVC Diameter 6" Thickness _____
- c) Screen Type ? Diameter ? Thickness ?
- d) Gravel Pack ? Length of Gravel Pack ?
- e) Depth to Top of Water Bearing Material Unknown - approx 15 ft
- f) Depth to Water (ground surface to water level) Unknown
- g) Distance to nearest existing domestic well:
- On applicants property NA On property owned by others 175 ft

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 Keystone Sanitary System _____

3. Dugout Information

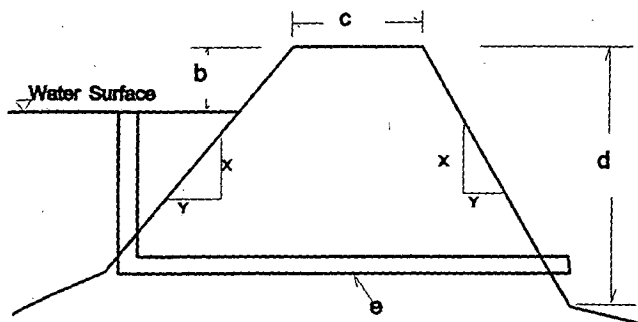
- a) Surface Dimensions NA Depth NA
- b) Depth to water (ground surface to water level) NA

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:

NA



- 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

SOUTH DAKOTA WATER WELL COMPLETION REPORT

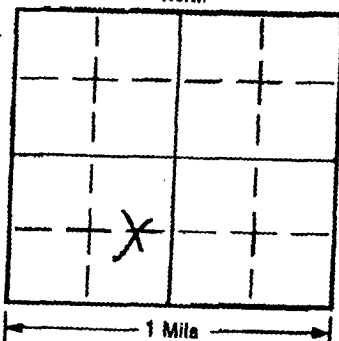
07-92

Location 1/4 SW 1/4 Sec 4 Twp 25 Rg 6E
County Penn.

Please mark well location with an "X"
Well #2 By
Between Fire Hall
& Pump House.

Well Completion Date

7-21-00



Well Owner: Heystone City
Business Name: P.O. Box 689
Address: Heystone, S.D. 57751

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
<u>Original Well Drilled</u>		
<u>5-23-84.</u>	<u>0</u>	<u>125</u>
<u>Schist Hd. grey</u>	<u>125</u>	<u>145</u>
<u>Quartz-Fracture H₂O-75gpm</u>	<u>145</u>	<u>147</u>
<u>Schist Hd. grey</u>	<u>147</u>	<u>180</u>
<u>Schist Fracture</u>	<u>180</u>	<u>182</u>
<u>H₂O-100^{gpm}</u>		
<u>Schist Hd. grey.</u>	<u>182</u>	<u>200</u>

LOCATION:

Distance from nearest potential pollution source (septic tank, abandoned well, lead lot, etc.): 100 ft. from Battle Creek. (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 44'-6" 280 wall, 84'-5" steel.

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
LB/FT <u>5</u>	IN <u>5</u>	FT <u>40</u>	FT <u>200</u>	IN <u>5</u>
LB/FT	IN	FT	FT	IN
LB/FT	IN	FT	FT	IN

GROUTING DATA

Grout Type	No. of Sacks	Grout Weight	From	To
<u>1</u>		lb./gal	ft	R
		lb./gal	ft	R

Describe grouting procedure

SCREEN: ☒ Perforated pipe ☐ Manufactured

Diameter 5" IN Length 41-114 FEET

Material Steel

Slot Size 1/8 Set From 41 Feet to 114 Feet

Other information 125' to 200' open hole

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:

Chlorine Solution

Laboratory sent to for water quality analysis

NO. Why Not?

STATIC WATER LEVEL 15' Feet

If flowing: closed in pressure _____ PSI

GPM flow _____ through _____ inch pipe

Controlled by ☐ Valve ☐ Reducers ☐ Other

Reduced Flowrate _____ GPM

Can well be completely shut in?

WELL TEST DATA:

☒ Pumped w/air Describe: 100^{gpm}

☐ 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 production was down from original testing. Set on well drilled to 200ft, from 125' Flow-100^{gpm}.

This well was drilled under license # 324

And this report is true and accurate.

Drilling firm Alexander Drilling Inc

Signature of License Representative:

Ray Alexander Jr.

Signature of Well Owner or Equitable Property Holder:

Date:

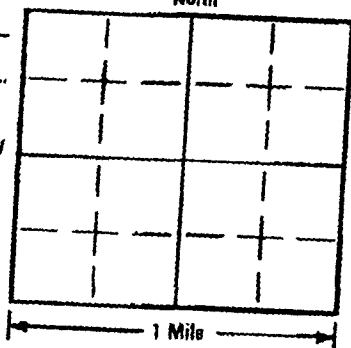
SOUTH DAKOTA WATER WELL COMPLETION REPORT

07-92

 Location 1/4 SW 1/4 Sec 4 Twp 2S Rg 6E
 County FRANKLIN North

 Please mark well location with an "X"
Keystone Well
No. 1 By City
Civic Center

Well Completion Date

10-9-00

LOCATION:

 Distance from nearest potential pollution source (septic tank, abandoned well, feed lot, etc.)? 200 ft. from Battle Creek (identify source).

PROPOSED USE:

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

METHOD OF DRILLING:

Rotary Downhole HammerCASING DATA: ☒ Steel ☐ Plastic ☐ Other

If other describe _____

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
LB/FT <u>6</u>	IN <u>6</u>	FT _____	FT _____	IN _____
LB/FT _____	IN _____	FT _____	FT _____	IN _____
LB/FT _____	IN _____	FT _____	FT _____	IN _____

GROUTING DATA

Grout Type	No. of Sacks	Grout Weight	From	To
_____	_____	lb./gal _____	ft. _____	ft. _____
_____	_____	lb./gal _____	ft. _____	ft. _____

Describe grouting procedure _____

SCREEN: ☐ Perforated pipe ☐ Manufactured NONE

Diameter _____ IN Length _____ FEET

Material _____

Slot Size _____ Set From _____ Feet to _____ Feet

Other information _____

WAS A PACKER OR SEAL USED? ☐ YES ☒ NOIf so, what material? CASING SET HD ROCK

Describe packer(s) and location? _____

DISINFECTION: Was well disinfected upon completion? YES How: Chlorine solutionYES How: _____

NO. Why Not? _____

Laboratory sent to for water quality analysis _____

Super chlorinated before put onlineWell Owner: Keystone CityBusiness Name: P.O. Box 689Address: Keystone, S.D. 57751

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
Old Hole - 60 gpm H ₂ O	0	125
Schist BLK Hd.	125	140
Quartz Fracture	140	145
H ₂ O - 80 gpm		
Schist BLK Hd.	145	180
Schist Fracture H ₂ O - 100 gpm	180	185
Schist BLK Hd.	185	190
Schist Fracture	190	192
Schist BLK Hd. 100 gpm	192	200

STATIC WATER LEVEL 15'

Feet

If flowing: closed in pressure _____

PSI

GPM flow _____ through _____

inch pipe

Controlled by ☐ Valve ☐ Reducers ☐ Other _____

Reduced Flowrate _____

GPM

Can well be completely shut in? _____

WELL TEST DATA:

☒ Pumped w/AIR Describe: 100' + gpm☐ Bailed _____☐ Other _____

Pumping Level Below Land Surface _____

ft. After _____ Hrs. pumped _____

GPM

ft. After _____ Hrs. pumped _____

GPM

If pump installed, pump rate _____

GPM

REMARKS Cleaned well & deepened for increase production.Pump 7 1/2 HP 3 phaseThis well was drilled under license # 324

And this report is true and accurate.

Drilling firm Alexander Drilling Inc.Signature of License Representative: Ray Alexander Jr.

Signature of Well Owner or Equitable Property Holder: _____

Date: _____

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date SEPTEMBER 21, 20 08

RECEIVED OF Howe OS Keyatone, PO Box 686, Keyatone SD 57751

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

Fee for Application for Permit No. <u>2500-3</u> to Appropriate Water, to construct and to put water to beneficial use	150	00
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>2500-2</u>	50	00
Fee for Filing Transfer Form _____		
Fee for _____		
Fee for Issuing New Well Driller's License No. _____ for C.Y. _____		
Fee for Renewal of Well Driller's License No. _____ for C.Y. _____		
Fee for Issuing Well Pump Installer's License No. _____ for C.Y. _____		
Fee for Renewal of Well Pump Installer's License No. _____ for C.Y. _____		
(Any Other Work Provided by Law)	TOTAL	200.00

No. 000000

By Barbara D. Erbe

Chief Engineer gm



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
www.state.sd.us/denr

January 17, 2003

Town of Keystone
Vanessa Row, Finance Officer
PO Box 689
Keystone SD 57751

Dear Ms. Row:

Thank you for submitting the *Application for a Permit to Appropriate Water* for the Town of Keystone.

The application filing fee will be \$200. I understand this amount will be received sometime after your February 19th meeting. In the meantime, we will proceed with processing the application.

If you have any questions, please contact me.

Sincerely,

Karen Schlaak

Karen Schlaak
Water Rights Program
605 773-3352

Water Rights Program - File Documentation

NAME: Town of Keystone

ADDRESS: PO Box 689, 57751

DATE: 1-17-03 **COUNTY:** PE **TELEPHONE:** 605 666-4827

RE: pending application

COMMENTS:

I called Gary Renner with Renner & Sperlich Engineering Co. (381-2808). Mr. Renner stated he was ok with amending the application to 96 acre-feet of water annually.

I called Vanessa Row, Finance officer with the town. She indicated that the town's next meeting would be February 19th. We will not receive the application fee until after that time. I told we would proceed with processing the application.



Karen Schlaak
Environmental Scientist

WATER PERMIT APPLICATION NO. 2500-2
TOWN OF KEYSTONE
FEBRUARY 20, 2003

Water Permit Application No. 2500-2 proposes to appropriate up to 0.22 cubic feet of water per second (cfs) (96 acre-feet of water annually) from one well (Precambrian Crystalline Rock aquifer) approximately 200 feet deep located in the NW¼ SE¼ Sec. 8, T2S-R6E. The water is for municipal use.

AQUIFER: Precambrian aged Crystalline Rock (CRSL)

Geology and Aquifer Characteristics:

The crystalline rock in this area consists of metamorphosed greywacke (sandstone or fine-grained conglomerate), and quartz-mica schist (Redden and Norton, 1975), and (Strobel and others, 1999). The aquifer (crystalline rock), which is exposed at the surface throughout this area is under unconfined conditions and the static water level of a well at this site is expected to be about the same elevation as Battle Creek and Grizzly Bear Creek. Groundwater is derived primarily through joints, fractures and foliation within the rock. The distribution, orientation and interconnection of these zones of secondary porosity and permeability are unpredictable, and the aquifer characteristics are site specific and highly variable. Recharge to the crystalline rock occurs through infiltration of precipitation and streamflow losses. Average annual recharge to the aquifer has not been quantified.

The Water Rights Program does not monitor any observation wells completed into the Crystalline aquifer in this immediate area. The nearest observation well completed into this aquifer is located in Custer, about 12 miles southwest of this site. Water levels in the observation well fluctuate over 50 feet in response to varying climatic conditions, rising during wet years and gradually declining water levels during dry years. The aquifer in this area should behave similarly to the aquifer in the Custer area.

Review of Existing Water Rights:

There are a number of domestic wells completed into the crystalline rock in this area and there are six Water Rights appropriating water from the aquifer within approximately one mile of this site. The water rights include:

PERMIT NO	NAME	STATUS	USE	CFS
1774-2	MINERAL TECHNOLOGY CORP	LC	COM	0.09
2198-2	MINERAL TECHNOLOGY CORP	PE	IND	0.33
2344-2	VINTON, MIKE	LC	COM	0.04
US560-2A	NAT'L PARK SERVICE	LC	COM	0.07
1849-2	KEYSTONE	LC	MUN	0.56
2344-2	VINTON	LC	COM	0.04

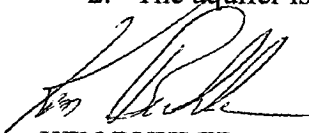
Since the porosity of the Crystalline aquifer is small, 0.03-0.10, (Driscoll and others, 2002) drawdown from a pumped well or wells, may extend over a fairly widespread area. The nearest

appropriation not belonging to the Town of Keystone, US560-2A, is located about 0.4 miles west of this proposed well site. The next nearest water rights/permits that do not belong to the Town of Keystone is Water Right No. 2344-2, Mike Vinton. The Vinton wells are located approximately 0.75 miles north of this proposed well site. The DENR-Office of Drinking Water information suggests that the US560-2A well is no longer in use by Mt. Rushmore National Monument (Barbara Freidaman, South Dakota Department of Environment and Natural Resources- Drinking Water Program, oral commun., 2003). It is possible that drawdown from this proposed well could be measurable in the Mt. Rushmore well, if the well still exists. Interference should not be significant to other area wells.

ARSD 74:02:04:20(6) defines an adequate well as a well constructed to allow the inlet to the pump to be placed not less than 20 feet into the saturated aquifer. An adversely impacted domestic well is defined by 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 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. Since the porosity of the Crystalline aquifer is low, 20 feet of saturated thickness may not be sufficient for a well to be a reliable water supply. In other words, in this hydrogeologic setting, wells that are "adequate" by definition may not be reliable water supplies. Under these circumstances it can be argued that, any measurable interference (drawdown), from a competing well is actually an adverse impact. However, with natural water level fluctuations in this aquifer measured in excess of 50' at the Water Rights' Observation well; well interference of a few feet could be considered a "futile call".

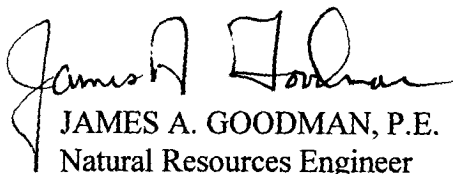
Conclusions:

1. The Precambrian aged Crystalline Rock is a viable aquifer in this area.
2. The aquifer is unconfined and interference is not expected to be a concern



KEN BUHLER
Natural Resource Engineer

approved by:



JAMES A. GOODMAN, P.E.
Natural Resources Engineer

REFERENCES:

Driscoll, D.G., Carter J.M., Williamson, J.E., and Putnam, L.D., 2002, Hydrology of the Black Hills Area, South Dakota: U.S. Geological Survey Water-Resources Investigations Report 02-4094, 1503 p.

Redden, J.A., and Norton, J.J., 1975, Precambrian Geology of the Black Hills in Mineral And Water Resources of South Dakota: U.S. Geological Survey report to Committee on Interior and Insular Affairs, United States Senate. P. 21-32

Strobel, M.L, Jarrell, G.J., Sawyer, J.F., Schleicher, J.R., Fahrenbach, M.D., 1999, Distribution of Hydrogeologic Units in the Black Hills Area, South Dakota: U.S. Geological Survey Hydrologic Investigations Atlas HA-743, 3 sheets, scale 1:100,000

Water Rights, 2003a, Domestic Well Logs, SD DENR-Water Rights Program, Joe Foss Bldg, Pierre, SD.

Water Rights, 2003b, Observation Well Files, SD DENR-Water Rights Program, Joe Foss Bldg, Pierre, SD.

Water Rights, 2003c, Water Permit/Right Files, SD DENR-Water Rights Program, Joe Foss Bldg, Pierre, SD.



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
www.state.sd.us/denr

**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 2500-2, Town of Keystone**

Pursuant to SDCL 46-2A-2, the following is the recommendation of the Chief Engineer, Water Rights Program, Department of Environment and Natural Resources concerning Water Permit Application No. 2500-2, Town of Keystone, c/o Kenneth Leonard, President, PO Box 689, Keystone SD 57751.

The Chief Engineer is recommending APPROVAL of Application No. 2500-2 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 rights, 3) the proposed use is a beneficial use and 4) it is in the public interest with the following qualifications:

1. The well approved under this Permit will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
2. The well authorized by Permit No. 2500-2 shall be constructed by a licensed well driller and construction of the well and installation of the pump shall comply with Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) pursuant to Section 74:02:04:28.
3. The Town of Keystone shall report to the Chief Engineer annually the amount of water withdrawn from the Precambrian aged Crystalline Rock.

See report on application for additional information.

Garland Erbele, Chief Engineer
March 31, 2003

RECEIVED

APR 17 2003

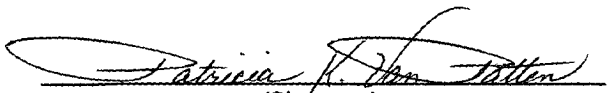
WATER RIGHTS
PROGRAM

PROOF OF PUBLICATION

STATE OF SOUTH DAKOTA)
) SSCounty of Pennington)I, Patricia K. Van Pattencertify that the attached printed Notice was
takenfrom the Rapid City Journalprinted and published in Rapid CityCounty of Pennington and

state of South Dakota. The notice was published

in the newspaper on the following two dates:

April 9, 2003April 16, 2003Cost of Printing Eighty-four dollarsand twenty-four cents (\$84.24)
(Signature)Legal Advertising Representative
(Title)04/16/03
(Date Signed)

April 9, 16 L1357418

NOTICE OF
APPLICATION NO. 2500-2
TO APPROPRIATE WATER

Notice is given that the Town of Keystone, Kenneth Leonard, President, P.O. Box 689, Keystone, SD 57751, has filed an application for a water permit to appropriate up to 0.22 cubic feet of water per second (96 acre-feet of water annually) from one well (Precambrian Crystalline Rock Aquifer) 200 feet deep located in the NW¼SE¼ Section 8-T2S-R6E. The water is for municipal use.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 2500-2 because 1) unappropriated water is available, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest. In accordance with SDCL 46-2A-23, the Chief Engineer will act on the application, as recommended, unless a petition is filed opposing the application or the applicant files a petition contesting the Chief Engineer's recommendation. 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 the application. Notice of the hearing will be given to the applicant and any person filing a petition.

Any person interested in opposing or supporting this application or recommendation must file a written petition with BOTH the applicant and Chief Engineer. The applicant must also file a petition if contesting the Chief Engineer's recommendation. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E. Capitol, Pierre, SD 57501 (605-773-3352)," and the applicant's mailing address is given above. A petition filed by either an interested person or the applicant must be filed by April 28, 2003.

The petition may be informal, but must include a statement describing the petitioner's interest in the application, the petitioner's reasons for opposing or supporting the application, and the signature and mailing address of the petitioner or the petitioner's legal counsel, if legal counsel is obtained. Contact Eric Gronlund at the above Water Rights Program address to request copies of information pertaining to this application.

Steven M. Pirmer, Secretary
Department of Environment
and Natural Resources



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182

www.state.sd.us/denr

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

March 31, 2003

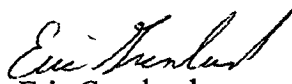
Town of Keystone
%Kenneth Leonard President
PO Box 689
Keystone SD 57751

Dear Mr. Leonard:

Water Permit Application No. 2500-2 for municipal use has been examined and found to comply with the South Dakota Water Laws and applicable rules. A notice of hearing has been sent to the Publisher of the Rapid City Journal printed at Rapid City, SD (Ph # 605-394-8300). You will need to contact the newspaper and authorize publication of this notice. For your information, a copy of the notice, the recommendation of the Chief Engineer and a 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 newspaper to authorize publication of your Notice of Hearing and to arrange for payment. Early contact with the paper can eliminate delays. Upon receiving authorization, the publisher has been instructed to publish your notice once each week for two consecutive weeks with the last publication to occur twenty days before the board meeting. The newspaper has 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,


Eric Gronlund
Natural Resources Engineer
(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.

Instruction to Newspaper - Publish first Notice on April 9, 2003 with the second publication 7 days later. The applicant is responsible for payment.

NOTICE OF APPLICATION NO. 2500-2 to Appropriate Water

Notice is given that the Town of Keystone, Kenneth Leonard, President, PO Box 689, Keystone SD 57751 has filed an application for a water permit to appropriate up to 0.22 cubic feet of water per second (96 acre-feet of water annually) from one well (Precambrian Crystalline Rock Aquifer) 200 feet deep located in the NW ¼ SE ¼ Section 8-T2S-R6E. The water is for municipal use.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 2500-2 because 1) unappropriated water is available, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest. In accordance with SDCL 46-2A-23, the Chief Engineer will act on the application, as recommended, unless a petition is filed opposing the application or the applicant files a petition contesting the Chief Engineer's recommendation. 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 the application. Notice of the hearing will be given to the applicant and any person filing a petition.

Any person interested in opposing or supporting this application or recommendation must file a written petition with BOTH the applicant and Chief Engineer. The applicant must file a petition if contesting the Chief Engineer's recommendation. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E Capitol, Pierre SD 57501 (605 773-3352)" and the applicant's mailing address is given above. A petition filed by either an interested person or the applicant must be filed by April 28, 2003.

The petition may be informal, but must include a statement describing the petitioner's interest in the application, the petitioner's reasons for opposing or supporting the application, and the signature and mailing address of the petitioner or the petitioner's legal counsel, if legal counsel is obtained. Contact Eric Gronlund at the above Water Rights Program address to request copies of information pertaining to this application. Steven M. Pirner, Secretary, Department of Environment and Natural Resources.



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
www.state.sd.us/denr

March 31, 2003

Rapid City Journal
PO Box 450
Rapid City SD 57709-0450

ATTENTION: Legal Public Notice

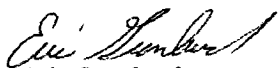
Enclosed is a Notice of Hearing on Application No. 2500-2 to Appropriate Water to be published twice. Please publish the first notice on April 9, 2003 with the second publication 7 days later.

The applicant must verify to you that the notice is to be published, before you make the first publication. **Please BILL the APPLICANT for the cost of publication.** The APPLICANT is Town of Keystone, %Kenneth Leonard, President, PO Box 689, Keystone SD 57751 (Ph # 605-666-4827).

Please send the Water Rights Program the first publication immediately. The publication is checked for accuracy so any corrections can be made in the second publication. You may use the form below or fax a copy of the first publication. Any fax should be sent to the attention of Karen Schlaak at (605) 773-4068. Publication errors can invalidate the public notice.

After the second publication, **please send us an affidavit or use the enclosed Proof of Publication form.** The applicant pays the cost of publication, but the Water Rights Program records require an affidavit or Proof of Publication. Delays in receiving the affidavit can be costly to the applicant.

Sincerely,


Eric Gronlund
Natural Resources Engineer
605 773-3352

enclosures

CUT HERE

TO: Eric Gronlund
Water Rights Program
Joe Foss Building
Pierre SD 57501-3181

No. 2500-2

Date _____

We are in receipt of your letter of March 31, 2003 enclosing Notice of Hearing to Appropriate Water by Application No. 2500-2 which was first published in our issue of _____. **ENCLOSED IS A COPY OF THIS FIRST PUBLICATION.**

Name _____

Newspaper _____



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
www.state.sd.us/denr

JUN 13 2003

Town of Keystone
Vanessa Row Finance Officer
PO Box 689
Keystone SD 57751

Dear Ms. Row:

Enclosed is Water Permit No. 2500-2 authorizing construction of your 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,

Garland Erbele, Chief Engineer
Water Rights Program
(605) 773-3352

enclosures

2500-2



DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
NOTICE OF INTENT &
CERTIFICATE OF APPLICANT FORM
TO RECEIVE COVERAGE UNDER THE
GENERAL PERMIT FOR TEMPORARY DEWATERING
AND A TEMPORARY WATER USE PERMIT

This form is provided by the Secretary of the South Dakota Department of Environment and Natural Resources in accordance with §74:52:02:09 of the Administrative Rules of South Dakota. No South Dakota Surface Water Discharge Permit will be issued except under completion and submittal of this form to the following addresses:

original to: South Dakota Department of Environment and Natural Resources
Surface Water Quality Program
Joe Foss Building
523 East Capitol Avenue
Pierre, South Dakota 57501-3181
Telephone: (605) 773-3351 FAX: (605) 773-4068

PLEASE PRINT OR TYPE

I. Facility Operator Information/ Contractor Information

Name Alexander Drilling Phone (605) 574-2331
Street PO Box 615
City Hill City
State SD County Pennington Zip Code 57745

II. Mailing Address of Facility/Site Location

Name Alexander Drilling Phone (605) 574-2331
Responsible Contact Person Travis Sewell
Street PO Box 615
City Hill City
State SD County Pennington Zip Code 57703

III. Standard Industrial Classification (SIC) Code of facility: _____

IV. Facility/Site Location

A. Is this facility located in Indian Country? ☐ Yes ☒ No

B. Section 8 Quarter _____ Township 25 Range 6E
or Latitude _____ Longitude _____

City of Key Stone

FORM 7000-100-0001	
Permit Number: _____	Date Received: _____
Date Issued: _____	MC: _____

Notice of Intent General Dewatering Permit

Revised January 5, 2000

This request is for a "test pump" for new well authorized under 2500-2. A temporary dewatering permit is required (Surface Water quality program) however the test pump activity as far as ^{the} Water Rights Program is covered by 2500-2.

- F. Is there any reason to believe that the discharge may contain any pollutant other than those limited in the permit (i.e. TSS, pH, and TPH)? ☐ Yes ☐ No
If yes, list any pollutants that may be present:

NOTE: Attach any analytical data which indicate levels of pollutants present in water to be discharged.

VII. Pollution Prevention Plan

- A. Has the facility written a pollution prevention plan in lieu of sampling for TSS and pH?
☐ Yes ☒ No

Brief description of best management practices being used in lieu of sampling:

VIII. Hydrostatic Testing

- A. Type of vessel being tested: _____
B. Material from which vessel is constructed: _____
C. Check appropriate box: ☐ Vessel has been previously used ☐ Vessel is virgin material
D. Description of fluid material normally contained/transported through the vessel:

- IX. List other information which you feel should be brought to the attention of the SDDENR regarding coverage under this general permit.
Attach additional sheets if necessary.

Would like to discharge into
creek.
Battle Creek

V. Please list all the activities which require the applicant to obtain a discharge permit.

to test pump a well and to discharge the water

VI. Discharge Information

A. Estimate the following:

Date water withdrawal will commence: 10/28/03

Date for commencement of discharge: 10/28/03

Termination date of withdrawal: 11/28/03

Termination date of discharge: 11/28/03

Total volume of withdrawal: 5,184,000 gallons

Total volume of discharge: 5,184,000 gallons

Average flow rate of withdrawal: 120 gpm

Average flow rate of discharge: 120 gpm

B. Source of water which is to be discharged: Well

C. Name of Receiving Waters: _____

D. Brief description of water treatment processes employed, if any:

E. Describe the discharge and the type of wastewater from each outfall. Include all overflows, bypasses, or discharges from holding ponds, trenches, excavations, vessels, pipelines, etc.:

Outfall 001: _____

Outfall 002: _____

Outfall 003: _____

Attach additional sheets if necessary.

NOTE: Please place points of withdrawal and discharge on a topographic map, or other map if a topographic map is unavailable. This map should extend to one (1) square mile beyond the property boundaries of the facility and each of its discharge facilities, and those wells, springs, and other surface water bodies, drinking water wells, and surface water intake structures listed in public records, or otherwise known to the applicant in the map area.

WYOMING DEPT. OF ENVIRONMENT

Project Number: _____

Date Received: _____

Date Received: _____

Notice of Intent General Dewatering Permit

Revised January 5, 2000

DEPARTMENT OF ENVIRONMENT & NATURAL
RESOURCES

WATER RIGHTS PROGRAM

523 E CAPITOL

PIERRE, SD 57501

PHONE (605) 773-3352 FAX (605) 773-4068

FACSIMILE TRANSMITTAL SHEET

TO:	FROM:
Travis	Genny McMath
COMPANY:	DATE:
Alexander Drilling	10/7/2003
FAX NUMBER:	TOTAL NO. OF PAGES INCLUDING COVER:
605 574-4986	
PHONE NUMBER:	SENDER'S REFERENCE NUMBER:
605 574-2331	
RE:	YOUR REFERENCE NUMBER:
temporary water permit	

☐ URGENT ☐ FOR REVIEW ☐ PLEASE COMMENT ☐ PLEASE REPLY ☐ PLEASE RECYCLE

NOTES/COMMENTS:

If you have any questions when completing the application - you can call Al Spangler with the Surface Water Program (605) 773-3351 or you can give me a call at 773-3352.

Thanks,

Genny McMath

Note: The last two pages of the material I am sending is the "Notice of Termination of Coverage..."
You can complete that portion and fax it in when you are finished with the test pumping.

Permit No. 2500-2
Upper Cheyenne River - Water District

Report of Examination of Works and/or Application of Water to Beneficial Use

TO: Chief Engineer, Water Rights Program, DENR, Foss Bldg., Pierre, SD 57501

I have on this day, 6/8/2010, made a thorough examination of the water use system constructed by City of Keystone, PO Box 689, Keystone, SD 57751 holder of Permit No. 2500-2, bearing the priority date of January 16, 2003. Permit No. 2500-2 is authorized to appropriate a total of 0.22 cfs (96 acre-feet annually) from one groundwater well (Precambrian Crystalline Aquifer) for Municipal purposes, in Pennington County.

Inspection contact and relationship to
permit holder, if applicable:

Todd Taylor,
Public Works

A. Works used to divert the water:

A Gould submersible pump - 100 gallons per minute capacity (0.22 cfs).

B. Works used to transport water to place of use:

Municipal distribution system.

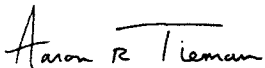
The system is in the following condition good. The point of diversion (well) is located specifically at Lat/Lon - N43.889000/W-103.424031 which is the approximately 2300 feet north and 1150 feet west of the SE corner of Section 8, T2S, R6E. The works are capable of diverting 0.22 cfs which is to be used for municipal purposes.

Water has been put to beneficial use to the maximum extent and the license should be issued for 0.22 cfs (96 acre feet annually).

All structures, wells and lands on map Y

Exceptions to compliance are: none.

Comments:



Aaron Tieman
Natural Resources Project Engineer
DENR, Water Rights Program

Date report completed: July 14, 2010

FIELD INVESTIGATION REPORT FOR PERMIT NO. 2500-2

DATE OF INVESTIGATION:	June 8, 2010
NAME & ADDRESS OF PERMIT HOLDER	Town of Keystone PO Box 689 Keystone, SD 57751
NAME & ADDRESS OF INVESTIGATION CONTACT/ RELATIONSHIP TO PERMIT HOLDER, IF APPLICABLE	Todd Taylor (Public works)
DIVERSION POINT LEGAL LOCATION	NW¼ SE¼ Section 8, T2S-R6E
WATER SUPPLY SOURCE	Ground water, Precambrian Crystalline Aquifer

Other permit(s) associated with the project:

WELL INFORMATION:

- 1) Well Drilling Firm: Alexander Drilling
- 2) No. of Wells One
- 3) Depth(s) 200 feet
- 4) Well log is available yes
- 5) Comment:

Casing:

- 1) Diameter: 6 inches
- 2) Length: 80 feet
- 3) Type: PVC

Screen:

- 1) Type: Open Hole
- 2) Length: N/A feet
- 3) Static water level: 8 feet

Pump:

- 1) Make: Gould
- 2) Model: 100S10-16
- 3) Capacity: 100 GPM

Motor:

- 1) Make: Franklin
- 2) Model No.: 2099378
- 3) Horsepower rating: 10 hp

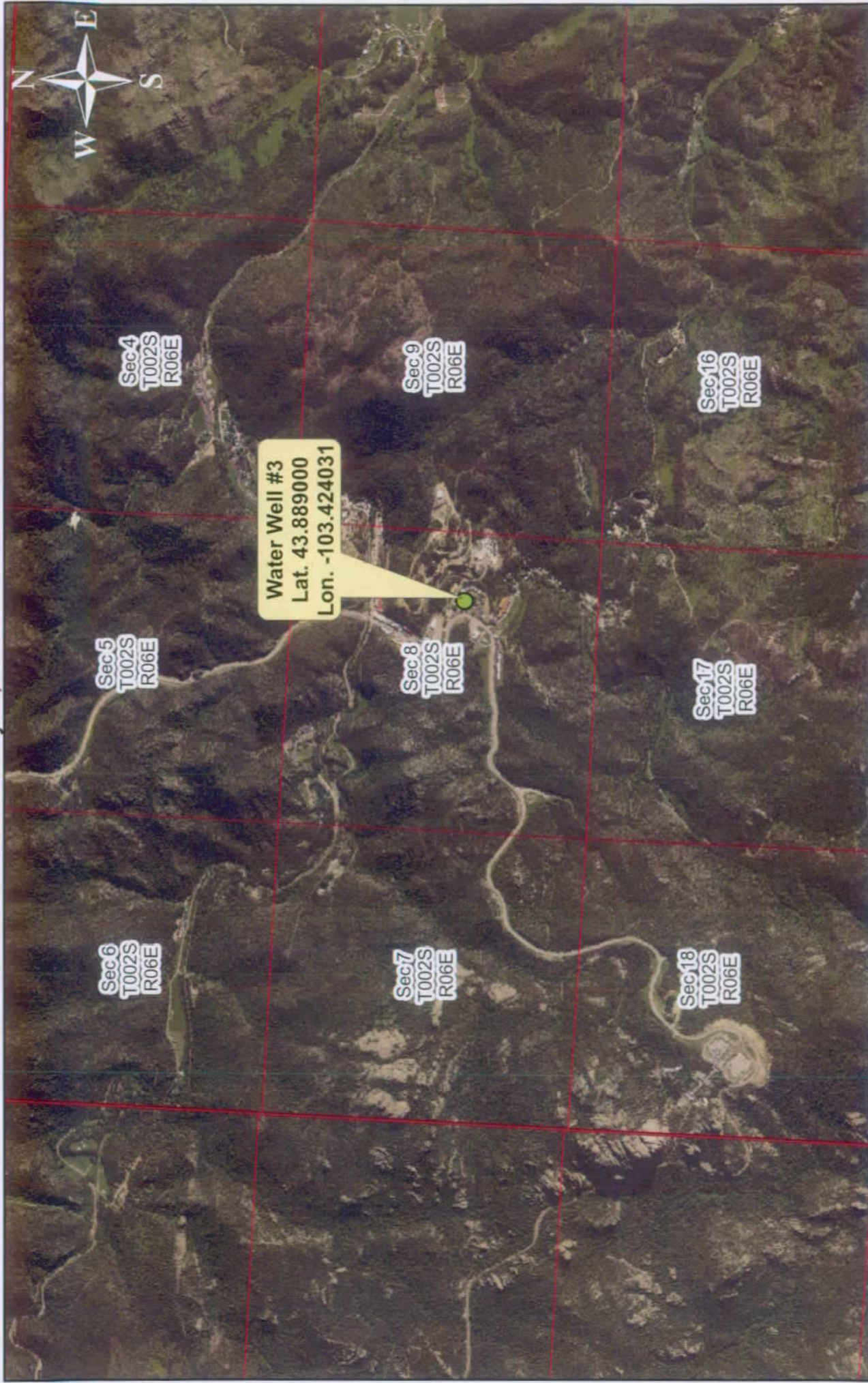
DISTRIBUTION LINES OR CANALS:

- 1) Type: Municipal distribution system.

PERMIT QUALIFICATIONS:

- 1) Special qualifications to permit being abided by Yes
- 2) All structures, wells and lands on map Yes

COMMENTS:



Aaron R. Tieman

Aaron Tieman
Natural Resources Project Engineer
DENR Water Rights Program





**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
PMB 2020
523 EAST CAPITOL
PIERRE SOUTH DAKOTA 57501-3182
www.state.sd.us/denr

JUL 21 2010

2500-2

Todd Taylor, Public Works Director
Town of Keystone
PO Box 689
Keystone SD 57751

Dear Mr. Taylor:

Enclosed is Water License No. 2500-2. This is the final water right document completing your process of obtaining a Water Right. Included with your license is a map prepared by the staff engineer who conducted the field investigation.

For your information SDCL 46-6-27 requires that if the owner of an existing well, such as the well authorized by Water Right No. 2500-2, constructs a replacement well and does not plan to use the old well, the old well is considered abandoned and must be plugged. Also, any well that is being used or is not considered abandoned must be valved and controlled, if flowing, or sealed and capped so that no leaking occurs either underground or at the surface.

As long as you use the water beneficially, as stated in the Water License, the State Water Laws provide that you have a continuing right to use the water. If you have any questions, please contact our office.

Sincerely,

A handwritten signature in black ink, appearing to read "Garland Erbele".

Garland Erbele, Chief Engineer
Water Rights Program
(605) 773-3352

enclosures

STATE OF SOUTH DAKOTA

WATER LICENSE NO. 2500-2

(1) The Town of Keystone, PO Box 689, Keystone SD 57751 made Application No. 2500-2, January 16, 2003 for a water permit to divert 0.22 cubic feet of water per second (96 acre-feet annually) from ground water (one well – Precambrian Crystalline Rock Aquifer), Pennington County, South Dakota for municipal purposes. Permit No. 2500-2, with a priority date of January 16, 2003 was approved April 28, 2003 and issued to the town for diversion of water with construction of the described water supply system to be completed on or before April 28, 2008 and the application to beneficial use of water on or before April 28, 2012.

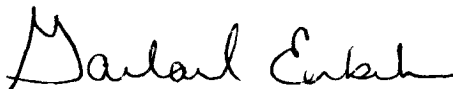
(2) It is certified that the permit holder has complied with the provisions of South Dakota State Law relating to completion of the construction of the water supply system and is entitled to divert 0.22 cubic feet of water per second (96 acre-feet annually) for beneficial use. The location of the diversion point is 2,300 feet north and 1,150 feet west of the SE corner of Section 8, T2S, R6E (NW ¼ SE ¼).

(3) The permit holder has complied with the provisions of South Dakota State Law relating to the application of water to beneficial use.

(4) Pursuant to South Dakota Water Law 46-5-30.1 the Town of Keystone, PO Box 689, Keystone SD 57751 the holder and/or owner of Water Right No. 2500-2 is issued a license to appropriate water, the right to use 0.22 cubic feet of water per second (96 acre-feet annually) from ground water (one well – Precambrian Crystalline Rock Aquifer), with a priority date of January 16, 2003 from the location specified in (2) of this license for municipal purposes.

This license is subject to South Dakota Water Law, any limitations or conditions listed in Water Right No. 2500-2 and subject to the following qualifications:

- The well approved under this Permit will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
- The well authorized by Permit No. 2500-2 shall be constructed by a licensed well driller and construction of the well and installation of the pump shall comply with the Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) pursuant to Section 74:02:04:28 (*well was constructed in October 2000 by Alexander Drilling; log on file with the Water Rights Program*).
- The Town of Keystone shall report to the Chief Engineer annually the amount of water withdrawn from the Precambrian aged Crystalline Rock.


Garland Erbele, Chief Engineer
Water Rights Program
Department of Environment and Natural Resources

JUL 21 2010
date

