

1. Considered: _____, 19____ Water Right No. 1849-2
2. Name of Applicant Town of Keystone
3. Post Office Address P.O. Box 689 57751
4. Amount of Water Claimed 0.67 maximum acre feet _____
5. Source of Water Supply two proposed wells Alluvium formation possible
6. Water to be used for MUN acres to be irrigated _____
7. County Pennington about _____ miles _____ of City Limits
8. PROOF OF PUBLICATION: Received 10-5-83 Not Received _____
- APPLICATION: Approved 10-5-83 Subject to Well interference
- Not Approved _____ Action Deferred _____

PRIORITY 6-9-83 Dated Received 8/9/83 Application complete-yes x no _____ FEE 275.00

Remarks _____

Corrected Application ^{fee} received 8/15/83 Period of Annual Use 1/1 - 12/31

TER ALITY Received yes _____ no _____ APPROVED/CONDITIONAL (Circle one)

WL-1 Description same as application-yes _____ no _____ Remarks _____

not applicable

Disapproved _____ Returned _____

					8

Diversion Point _____

E½ Section 8-T2S2R6E

Land to be irrigated _____

LL 100 Driller not drilled Licensed - yes _____ no _____

Depth Engineers report states Alluvium formation

Remarks Although the application does, not specify a depth, the wells will be less than 100 feet deep into the alluvium, or Pre-Cambrian

2 H

MAP Map No. 1849-2 Map located in Water Right XX Map file _____
 Type of Map drawn Prepared by Engineer=Gary Renner

+++++

REVIEWED This Application was received within 30 days of the date received, accepted as complete, Number assigned and written up for advertisement before the Board on:
8/17/83

Betty Westlund
 (Signed)

+++++

PROTESTS Letters/Petitions in File - yes _____ no _____ Remarks _____

REMARKS Date _____
 F.F. & C. Final Decision, including F.F. & C. of Law were adopted _____
 F. LAW, Date _____
 FINAL Final Decision mailed to parties and/or parties notified that Final Decision was
 DECISIONS adopted _____
 FC. Remarks _____

8/17/83

Disputed with no action at the time of the engineer's report of formation.

No. 1849-2Map No. 1849-2 Water Division No. 2 UPPER CHEYENNE District
Above for Office Use 10120109

APPLICATION FOR PERMIT To Appropriate Water within the State of South Dakota

Check one of the following:

New XX Vested Right _____ Future Use _____

Change in Diversion _____ Additional Diversion _____

Change in Acreage _____ Additional Acreage _____

1. Name of Applicant Town of Keystone Phone No. 605-666-4827
 Post Office Address P.O. Box 689 Keystone State SD 57751
 (Street, RR, or Box) (Town) (Zip Code)

If a corporation show date and place of incorporation _____

contract

2. Method of accomplishing work (contract, employment of others, or by direct labor) _____

3. Name of diversion work Keystone Municipal Water System4. Amount of water claimed (cubic feet per second) 0.67 (150 gpm each well)5. Source of water supply groundwater - two proposed wells6. Location of point of diversion E $\frac{1}{2}$, Section 8, T2S, R6E BHMCounty Pennington7. Annual period or periods during which water is to be used January 1st thru December 31st8. Use to be made of water, (irrigation, industrial, municipal, commercial, recreation, etc.) municipal

9. For irrigation use, Total number of acres to be irrigated _____

List below each forty acre subdivision, or lot, or fraction thereof and show number of acres to be irrigated in each.

Land Description	No. Acres Irr.

Land Description	No. Acres Irr.

Attach sheet if more space is needed

10. Time required to complete construction of water supply system 5 years. Additional time required to complete application of water to the proposed beneficial use 4 years.

11. Choice of county newspaper for publication of Notice of Intent to Appropriate Water Hill City Prevalier

12. Principal Features of the Proposed Water Supply System.

A. Works proposed to divert water from its natural source.

wells with pump

B. Works proposed to transport water to place of use.

8" and 6" PVC water mains

C. Works proposed to apply water to beneficial use.

storage reservoir and water distribution system

Estimated Total Cost \$ 1,000,000.00

Attachments: Attach Form 2A if diversion from a well or dugout, or if storage of water, is proposed. Attach map.
 (see instructions concerning preparation.)

STATE OF SOUTH DAKOTA)
 County of Pennington) ss.

I, R.R. Siemonsma the applicant, certify that I have read the foregoing application and have examined the attached map and that the matters therein stated are true and that I intend, and am able to complete the necessary construction.

Signed R.R. SiemonsmaSubscribed and sworn to before me this 27th day of July, 1983

Notary Public (or other qualified officer)

WATER RIGHT APPLICATION APPROVAL

The Water Management Board hereby approves Water Right Application No. 1849-2

Town of Keystone
(Applicant)
South Dakota
(State)

Box 689 Keystone
(Post Office Address)

With the following qualifications.

The wells 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 having prior water rights.

Date of first receipt of application August 9, 1983
 Date of return to applicant for correction, amendments or changes required August 9, 1983
 Date of receipt of corrected application August 15, 1983
 Approved October 5, 1983, Recorded in Book Page

WATER RIGHT PERMIT NO. 1849-2

The Water Management Board hereby grants and issues this Water Right Permit No. 1849-2 authorizing the construction of the water use system and the putting of water to beneficial use as stated in the Application and as qualified in the Water Right Application approval, subject, however, to the following limitations and conditions:

1. The date from which applicant may claim right is August 9, 1983
2. The equivalent of at least one-fifth of the work above specified is to be completed on or before January 5, 1986
3. The whole of said work is to be completed on or before October 5, 1988
4. The limit of time from proof of beneficial use of water appropriated in accordance herewith is October 5, 1992
5. The water appropriated shall be used for the purpose of municipal water supply
6. The prior right of all persons who, by compliance with the laws of the State of South Dakota, have acquired a right to the use of water must not be injuriously affected by this appropriation.
7. The amount of the appropriation herein granted shall not exceed 0.67 cubic feet per second; neither shall it exceed the capacity of the above described water supply system, nor shall it exceed the amount of water needed for beneficial uses served, and ~~if for irrigation purposes said appropriation must be limited to not more than 2 acre feet per acre per year and be limited to not more than one seventieth (1/70) of one cubic foot of water per second of time for each acre of land to which water is actually and beneficially applied~~
~~for irrigation on or before~~ October 5, 1992; said water to be used during the following described annual period: January 1 thru December 31

Witness my hand this 25th day of October, 1983

THE WATER MANAGEMENT BOARD

By: John Hatch
 Chief Engineer, Water Rights

Certificate of Construction Issued , 19

Water License Issued , 19

RECEIPT

WATER RIGHTS COMMISSION

State of South Dakota

No 4 9312

R. R. Siemonsma

PIERRE, August 15, 1983

RECEIVED OF City of Keystone, Box 689, Keystone, SD 57751

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

Fee for Application for Permit to Appropriate Water No. 1849-2 (examination, processing, recording and filing)	275	00
Fee for inspecting Construction, and issuing Cert. of Construction No.		
Fee for inspecting Beneficial Use, and issuing Water License No.		
Fee for issuing Location Certificate-Dry Draw, No.		
Fee for filing		
Fee for certified copy of		
Fee for Print copy of map		
Fee for Certifying		
Fee for (any other work as provided by law)		
TOTAL	275	00

WATER RIGHTS COMMISSION

By *John Hatch*
Chief Engineer, Executive Officer
JOHN HATCH (ms)

Ground Water Conditions
at Keystone, S.D.

April 27, 1983

Prepared by:

Perry H. Rahn, Ph.D.
201 Franklin St.
Rapid City, S.D. 57701

The purpose of this report is to briefly describe the ground water conditions at Keystone, and to suggest places where wells could be located that would serve to supply the entire community.

The bedrock is schist and granite pegmatite. These rocks have very low permeability, although some of the deep mines such as Holy Terror did hit cracks which produced a lot of water. Overlying the bedrock, along Grizzly Bear Creek and Battle Creek valleys, are alluvial deposits. The alluvium consists of sand, gravel, and boulders which have great permeability. Plate 1 is a map showing the areal distribution of the alluvium. The thickness of the alluvium varies from zero near the valley sides to about 50 ft thick near the center of the valley.

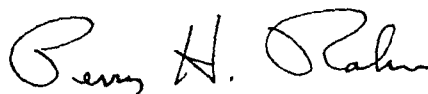
The water table is approximately at the level of Battle and Grizzly Bear Creeks. Plate 1 shows the contours of the water table. [This data was drawn from the S.D. School of Mines and Technology M.S. thesis by Thomas Lee Johnson, 1975, "Water Quality Study of a Shallow Aquifer at Keystone, South Dakota".]

Plate 1 shows seven favorable well sites. These are ranked from #1 to #7, with #1 being the best. These sites were picked using hydrogeologic information, access, topography, proximity to creek, and water quality data published by Johnson (1975). [Specifically, high nitrate and chloride areas in downtown Keystone and in old Keystone indicates sewage in the alluvial aquifer. Although the new community sewage system

may have corrected this situation, there is no recent data to show that the quality of ground water has improved since 1975.] There are numerous other places wells could be installed in the alluvial areas shown in Plate 1. It is possible to go further up either Grizzly Bear Creek or Battle Creek if it is believed that the cost of extending a water line is warranted in view of possible septic tank contamination in the more built-up areas in Keystone.

The wells should be designed to collect ground water from the alluvium. They should be either infiltration galleries or large diameter (≈ 3 ft) gravel-packed wells.

It is believed that properly installed wells at any of the above sites should yield 100 gpm.



Perry H. Rahn, Ph.D.

Cert. Prof. Geol. Scientist #3724



REPORT ON WATER RIGHT APPLICATION NO. 1849-2

TOWN OF KEYSTONE

August 17, 1983

The Town of Keystone is requesting 0.67 cfs from 2 wells for municipal use. Although the application does not specify a depth, the wells will be less than 300 feet deep and into the alluvium or Pre-Cambrian. On the application an area is specified rather than points of diversion making this similar to a future use application. I understand the SDGS (Assad Barari) is expected to begin a ground water study in the near future to further explore the quantity and quality of water available to Keystone.

AQUIFER-Pre-Cambrian rocks and alluvium along Grizzly Bear and Battle Creek

GEOLOGY AND AQUIFER CHARACTERISTICS

The description offered by P. Rahn in the letter accompanying the application is accurate. The only additional information available are the numerous domestic well log files for this area. The sand and gravel thickness varies from 0 to 45 feet in thickness with static water levels around 10 feet below land surface. Most domestic wells (Water Right, 1983) are completed into the Pre-Cambrian rocks below the alluvium with the alluvium actually cased off. Most of these wells reportedly produce 20-50 gpm.

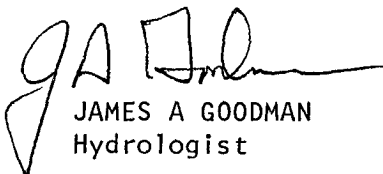
REVIEW OF EXISTING WATER RIGHTS

There are no existing water permits involved in this area specified by this application, however, there are a few ground water permits in a 1-2 mile radius of this application.

1135-2	J. Kinyon	0.03 cfs	60' Pre-Cambrian
1595-2	B & B Trailer Park	0.02 cfs	54' Pre-Cambrian
1774-2	Pacer	0.55 cfs	350' Pre-Cambrian
1775-2	Pacer	0.55 cfs	235' Pre-Cambrian
1795-2	Ingersoll Mining Co.	0.06 cfs	320' Pre-Cambrian
1811-2	G. Woldt	0.15 cfs	(3 wells) 50', 100' & 90' Pre-Cambrian

CONCLUSIONS

1. Water is available for this application. It should be noted that because of potential water quality problems and the fact that the SDGS survey is not completed, this application is a bit premature.
2. The amount of water (0.67 cfs) requested by this application will not adversely affect any existing Water Rights. However, I would recommend any new city wells be tested to obtain accurate drawdown and production data.
3. Water Rights has never received a complaint regarding groundwater in this area.


JAMES A GOODMAN
Hydrologist

BIBLIOGRAPHY

Powell, J.E., J.J. Norton and D.G. Adolphson, 1973. Water Resources and Geology of Mount Rushmore National Memorial, South Dakota, USGS Water-Supply Paper 1865.

Water Rights, 1983. Domestic well files, Joe Foss Building, Pierre SD (773-3352).

RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 1849-2, Town of Keystone

Pursuant to SDCL 46-2A-2, the following is the recommendation of the Chief Engineer, Water Rights Division, Department of Water and Natural Resources concerning Water Permit Application No. 1849-2, Town of Keystone, PO Box 689, Keystone SD.

The Chief Engineer is recommending APPROVAL of Application No. 1849-2 because 1) there is reasonable probability that there is unappropriated water available for the applicant's proposed use, 2) the proposed diversions can be developed without unlawful impairment of existing rights, 3) the proposed use is a beneficial use and 4) in the public interest with the following qualification:

The wells 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 attached report is a part of this recommendation.

A handwritten signature in cursive script that reads "John Hatch".

JOHN HATCH, Chief Engineer
August 18, 1983

Instruction to Newspaper - Publish first publication of the following Notice on or before August 25, 1983 with 2nd publication 1 week later. The applicant is responsible for payment.

NOTICE OF HEARING on Application No. 1849-2 to Appropriate Water
~~and/or to Amend Water Permit or Water Rights No. _____~~

Notice is hereby given that the Town of Keystone whose mailing address is
POB 689, Keystone, South Dakota has made an application for a permit

to appropriate 0.67 cubic feet per second from groundwater - two wells (into alluvium or pre-cambrian and less than 300 feet deep along Grizzly Bear and Battle Creeks, the point of diversion to be located in the E½ of Section 8, Twp. 2S, Range 6E. Said water to be used for the purpose of providing water supplies for municipal use.

Pursuant to SDCL 46-2A-2 the Chief Engineer of the Water Rights Division recommends approval of Application No. 1849-2 because /there is reasonable probability that
 1) unappropriated water is available,
 2) will be no unlawful impairment of existing rights, 3) is beneficial use of water and
 4) is in the public interest.

This application will be considered by the Water Management Board at Civil Defense
Room, Basement, Capitol Building, Pierre, South Dakota, October 5 1983 at 10:00 am.

The recommendation of the Chief Engineer is not final or binding upon the Board and the Board is authorized to make a determination on this application after it reaches a conclusion based upon facts presented at the public hearing. Any interested person who may be affected by a Board decision and who intends to participate in the hearing before the Board and present evidence or cross-examine witnesses according to SDCL 1-26, must file a written petition with BOTH the Applicant and the Chief Engineer by September 23, 1983. The petition may be informal, but it must include a statement describing the petitioners interest in the application, the reason for the petitioner's opposition to or support of the application, and the signature and mailing address of the petitioner or his legal counsel if legal counsel is obtained. The applicant need not file a petition.

This application is made pursuant to the provisions of SDCL 46-1-1 thru 46-1-9, 46-1-12 thru 46-1-15; 46-2-3.1, 46-2-9, 46-2-11, 46-2-13, 46-2-17, 46-5-1 thru 46-5-16, 46-5-24, 46-5-25, 46-5-30.2, 46-5-31; 46-2A-1 thru 46-2A-10, 46-2A-12; (ground) 46-6-3, 46-6-3.1, 46-6-6.1, 46-6-10, 46-6-13, 46-6-14; (future use) 46-5-38 thru 46-5-40, (transfer lands) 46-5-30.4, 46-5-33 thru 46-5-35, (10,000 AFA) 46-5-20.1, 46-5-8.1; and Board Rules ARSD 74:02:01:01 thru 74:02:01:15; (future use) 74:02:01:24 thru 74:02:01:25, (10,000 AFA) 74:02:01:15:02 thru 74:02:01:15:05.

This hearing is an adversary proceeding. The applicant or any person, after filing a petition, has the right to be present or to be represented by a lawyer. These and other due process rights will be forfeited if they are not exercised. Decisions of the Board may be appealed to the Circuit Court and the State Supreme Court as provided by law.

Any person wishing a copy of the Chief Engineer's recommendation, further information on this application or to assure access to the hearing by the handicapped can contact the Water Rights Division, DWRN, Joe Foss Bldg, Pierre SD (605 773-3352) for assistance prior to the hearing date. The time of the hearing will be automatically extended for at least twenty days upon written request of the applicant or any person who has filed a petition to oppose or support the application. The request for extension must be filed with the Chief Engineer by September 23, 1983.

**NOTICE OF HEARING
ON APPLICATION NO. 1849-2
TO APPROPRIATE WATER**

Notice is hereby given that the Town of Keystone whose mailing address is POB 689, Keystone, South Dakota has made an application for a permit to appropriate 0.67 cubic feet per second from groundwater - two

wells into alluvium or pre-cambrian and less than 300 feet deep along Grizzly Bear and Battle Creeks, the point of diversion to be located in the E $\frac{1}{2}$ of Section 8, Twp. 2S, Range 6E. Said water to be used for the purpose of providing water supplies for municipal use.

Pursuant to SDCL 46-2A-2 the Chief Engineer of the Water Rights Division recommends approval of Application No. 1849-2 because there is reasonable probability that 1) unappropriated water is available, 2) will be no unlawful impairment of existing rights, 3) is beneficial use of water and 4) is in the public interest.

This application will be considered by the Water Management Board at Civil Defense Room, Basement, Capitol Building, Pierre, South Dakota, October 5, 1983 at 10:00 a.m. The recommendation of the Chief Engineer is not final or binding upon the Board and the Board is authorized to make a determination on this application after it reaches a conclusion based upon facts presented at the public hearing. Any interested person who may be affected by a Board decision and who intends to participate in the hearing before the Board and present evidence or cross-examine witnesses according to SDCL 1-26, must file a written petition with BOTH the Applicant and the Chief Engineer by September 23, 1983. The petition may be informal, but it must include a statement describing to or support of interest in the application, the reason for the petitioner's opposition or support of the application, and the signature and mailing address of the petitioner or his legal counsel if legal counsel is obtained. The applicant need not file a petition.

This application is made pursuant to the provisions of SDCL 46-2-1 thru 46-1-9, 46-1-12 thru 46-1-15; 46-2-3.1, 46-2-9, 46-2-11, 46-2-13, 46-2-17, 46-5-1 thru 46-5-16, 46-5-24, 46-5-25, 46-5-30.2, 46-5-31; 46-2A-1 thru 46-2A-10, 46-2A-12; 46-6-3, 46-6-3.1, and Board Rules ARSD 74:02:01:01 thru 74:02:01:15;

AFFIDAVIT OF PUBLICATION

STATE OF SOUTH DAKOTA }
COUNTY OF PENNINGTON } ss.

Hugh O'Gara of said County and State, being first duly sworn, on his oath says that THE HILL CITY PREVAILER and THE GUIDE is a legal weekly newspaper of general circulation, printed and published in Hill City in said County and State and has been such legal weekly newspaper during the time hereinafter mentioned, and I, Hugh O'Gara am the editor of said newspaper, and have personal knowledge of all facts stated in this affidavit, and that advertisement headed

*Dept. of Water and Natural Resources
Notice of Hearing on application no. 1849-2
Town of Keystone
112 River St. 181 = 3027 - second issue 1631 total 36.48*

a printed copy of which is hereunto attached, was printed and published in the said newspaper for

successive weeks, not in a supplement, but in the regular and entire issue of every number of the paper during the time and period of the publication, to-wit: the first publication being

made on the 22 day of Aug., 1983

the second on the 1 day of Sept., 1983

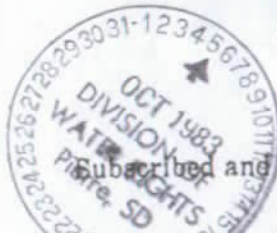
the third on the _____ day of _____, 19__

the fourth on the _____ day of _____, 19__

That the full amount of the fees charged for publishing the same, to-wit: the sum of

Thirty six dollars and 48/100 Dollars, \$ 36.48

inures solely to the benefit of the Editor of THE HILL CITY PREVAILER and THE GUIDE. That no agreement or understanding for any division thereof has been agreed to be paid to any person whomsoever



Hugh O'Gara

Subscribed and sworn to before me this 29th day of

September, 1983

Randall White

Notary Public

My Commission Expires 4/2/85

This hearing is an adversary proceeding. The applicant or any person, after filing a petition, has the right to be present or to be represented by a lawyer. This and other due process rights will be forfeited if they are not exercised. Decisions of the Board may be appealed to the Circuit Court and the State Supreme Court as provided by law.

Any person wishing a copy of the Chief Engineer's recommendation, further information on this application or to assure access to the hearing by the handicapped can contact the Water Rights Division, DWR, Joe Foss Bldg., Pierre, SD (605 773-3352) for assistance prior to the hearing date. The time of the hearing will be automatically extended for at least twenty days upon written request of the applicant or any person who has filed a petition to oppose or support the application. The request for extension must be filed with the Chief Engineer by September 23, 1983.

Prev: Aug. 25 & Sept. 1, 1983



Department of Water & Natural Resources

Joe Foss Building
523 East Capitol
Pierre, South Dakota 57501

October 25, 1983

Town of Keystone
R.R. Siemonsma
P.O. Box 689
Keystone SD 57751

Dear Mr. Siemonsma:

Enclosed herewith is your Water Permit No. 1849-2 as approved by the Water Management Board authorizing you to construct your water diversion system and the water to beneficial use, not exceeding the limits as specified in said Water Permit No. 1849-2.

Also enclosed is Form 10, Notice of Completion of Works and Application of Water to Beneficial Use, which you are to complete and submit to the Chief Engineer when you have completed the system and/or have put the water to beneficial use. An inspection can then be scheduled so that your Water License may be issued to you, thus completing your acquisition of a Water Right.

Very truly yours,

JOHN HATCH, Chief Engineer
Water Rights Division

JH: ks

enclosure

PLEASE NOTE: Certain changes can be made in your permit within the five year construction period, usually without affecting the priority date provided an application to amend your permit is made within the five year period-i.e. changes in location or number of diversion points (wells) or location of land to be irrigated. Well locations for wells into the same aquifer can be moved up to 660 feet without application.

Applications to amend a permit after the five year construction period will be assigned a new priority date. Applications to change water sources, to add lands or increase original diversion rates, if approved will usually receive the date of the new application as a priority date regardless of the five year construction period.

WNR-809-5/83



Department of Water & Natural Resources

Joe Foss Building
523 East Capitol
Pierre, South Dakota 57501-3181

November 4, 1983

Re: CDBG Keystone

Mr. Ken Gibb
Senior Planner
Black Hills Council of Local Governments
P. O. Box 1586
Rapid City, South Dakota 57709

Dear Mr. Gibb:

Thank you for your letter of October 11, 1983, requesting a review of the CDBG funded project for the City of Keystone. As to the environmental review of the Municipal Water System, the following comments are offered.

A large number of unsafe bacteriological samples have been collected from existing private wells within the area. It is our understanding that the proposed well will be developed in the same aquifer. Because of this possibility, chlorination of the new water supply may be required to insure that bacteriologically safe water is provided.

Many of the wells now existing have also shown high nitrate levels in the past. Because the water supply will have to meet all the requirements of the State and Federal Safe Drinking Water Acts, the water from the proposed source aquifer should also be tested for compliance with State standards for inorganic and radiological parameters.

The South Dakota Geological Survey (SDGS) is in the process of conducting an evaluation of the area. In doing so, more than 30 water samples were collected from alluvial aquifers and schists in the area and now being analyzed. The SDGS will advise the City of their findings and recommend a source location.

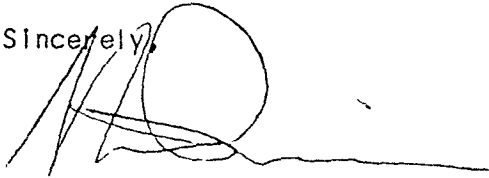
The City must assure that any required permits for stream or wetland crossings are obtained. To retard possible dust and erosion problems disturbed areas should be regraded, resurfaced, and/or reseeded to eliminate long-term dust and erosion problems. Consideration should be given to ensuring adequate separation of water and sewer lines. Finally, a water right permit is required for all municipal wells and should be secured through the Division of Water Rights before construction begins.

Equal Opportunity Employer

Ken Gibb
November 4, 1983
Page 2 .

If there are any questions, please do not hesitate to contact Reed Caldwell of my staff.

Sincerely,

A handwritten signature in black ink, appearing to read 'Steven M. Pirner', with a large circular flourish and a horizontal line extending to the right.

Steven M. Pirner
Office Administrator
Office of Water Quality
Phone: (605) 773-3351

cc: Mark Steichen, Office of Drinking Water
John Hatch, Division of Water Rights

B02707RC.wq



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

December 12, 2001

2386-2 & 1849-2

Town of Keystone
Jerald Forgey, Public Works Director
PO Box 689
Keystone SD 57751

Dear Mr. Forgey:

On October 10, 2001 the investigation of the town's water use system, including the extent of application of water to beneficial use, as developed under Water Permit Nos. 1849-2 and 2386-2, was completed by Ken Buhler, a staff engineer with our program. The final water right document, the water license, can now be issued.

State law requires that we charge a \$50.00 fee for the investigation and issuance of each water license. Upon receipt of the \$100.00 fee from the town, we will complete processing the water licenses. The check or money order for the fee should be made payable to the "Water Rights Program".

The licensed water right will be similar to a property right that can not be lost as long as the water use continues and you abide by the permit requirements.

If you have any questions regarding the water permits, investigation of the water use system or payment of the fee, please contact Genny McMath with our program at (605) 773-3352.

Sincerely,

Karen Schlaak
Environmental Scientist
Water Rights Program
(605) 773-3352

RECEIPT

Water Rights Program

South Dakota Department of Environment and Natural Resources

417030

Pierre, December 21, 20 01

RECEIVED OF Town of Keystone, PO Box 689, Keystone, SD 57751
the following amount in fees for services rendered as provided for by law:

Fee for Application for Permit No. _____ to Appropriate Water, to construct
and to put water to beneficial use _____

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. 1849-2

Fee for Filing Transfer Form _____

Fee for Filing Extension Request _____

Fee for _____

(Any Other Work Provided by Law)

Total

50 00

50 00

By

Darland Erbele

Chief Engineer

gm

SOUTH DAKOTA WATER WELL COMPLETION REPORT

07-92

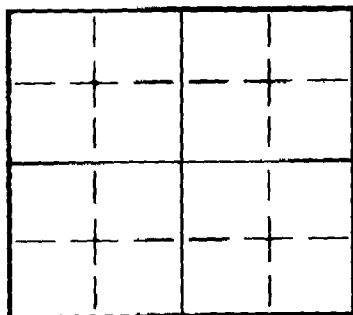
Location 1/4 1/4 Sec 4 Twp 2S Rg 6E
County FRANKLIN North

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 Hammer

CASING 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? chlorine
☒ YES, How: solution

Laboratory sent to for water quality analysis

NO, Why Not? Super chlorinated
Before put online

Well 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 Bk Hd.	125	140
Quartz Fracture	140	145
H ₂ O - 80° gpm		
Schist Bk Hd.	145	180
Schist Fracture H ₂ O - 100° gpm	180	185
Schist Bk Hd.	185	190
Schist Fracture	190	192
Schist Bk 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: _____

SOUTH DAKOTA WATER WELL COMPLETION REPORT

07-92

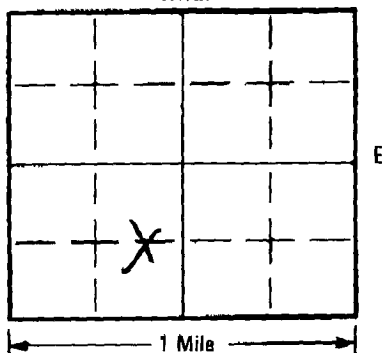
Location $\frac{1}{4}$ SW $\frac{1}{4}$ Sec 4 Twp 25 Rg 6E
County Penn. North

Please mark well location with an "X"

Well #2 By
Between Fire Hall
& Pump House.

Well Completion Date

7-21-00



LOCATION:

Distance from nearest potential pollution source (septic tank, abandoned well, feed 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 5	IN 40	FT 200	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

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:

NO, Why Not?

Laboratory sent to for water quality analysis

Well Owner: Keystone City

Business Name: P.O. Box 689

Address: Keystone, S.D. 57751

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
Original well drilled		
5-23-84	0	125
Schist Hd. grey	125	145
Quartz-Fracture H ₂ O-75gpm	145	147
Schist Hd. grey	147	180
Schist Fracture	180	182
H ₂ O-100°gpm		
Schist Hd. grey	182	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 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:

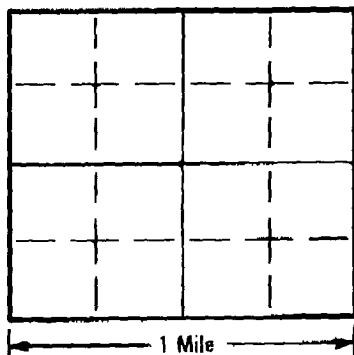
SOUTH DAKOTA WATER WELL COMPLETION REPORT

07-92

Location NE 1/4 ~~1/4~~ Sec 8 Twp 25 Rg 6E
 County Penn. North

Please mark well location with an "X"

Keystone Well
No. 3 By.
Holiday Express
 Well Completion Date

9-26-00

LOCATION:

Distance from nearest potential pollution source (septic tank, abandoned well, feed 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 Double Hole Hammer

CASING DATA:

☐ Steel ☐ Plastic ☐ Other

If other describe ft in place

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
LB/FT	IN	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

Diameter _____ IN 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?

X YES, How: chlorine solution

NO, Why Not? _____

Laboratory sent to for water quality analysis

Before putting on line Super chlorineWell Owner: Keystone CityBusiness Name: P.O. Box 689Address: Keystone, S.D. 57751

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
Old Hole - H ₂ O - 50gpm	0	80
Schist Black H ₂ O	80	110
Schist Fracture 70 ⁺ gpm	110	115
Schist Black H ₂ O	115	145
Schist Fracture 75 ⁺ gpm	145	148
Schist Black H ₂ O	148	180
Schist Fracture	180	181
H ₂ O - 80 ⁺ gpm		
Schist B.K. H ₂ O	181	200

STATIC WATER LEVEL 8' 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 1/4" IR Describe: 80+ 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 old well 80ft; cleaned well
& Deepened for more production
Set 5HP pump at 168ft.
230 Volt - 75 gpm

This well was drilled under license # 324

And this report is true and accurate.

Drilling firm Alexander Drilling Eng

Signature of License Representative:

Roy Alexander Jr.

Signature of Well Owner or Equitable Property Holder:

Date: _____

Permit No. 1849-2
Upper Cheyenne River - Water District

Other permit/license(s) associated with project: 2386-2

Contact Person & Address: Jerald Forgey, Public Works Director, PO Box 689, Keystone, SD 57751

Report Of Examination Of Works

On, **October 10, 2001**, I made a thorough examination of the water use system constructed by **The Town of Keystone of PO Box 689, Keystone, SD 57751** holder of Permit No. **1849-2**, bearing the priority of **August 9, 1983** authorizing the diversion of **0.67** cu. ft. per second of the waters of **groundwater** for **municipal** purposes, in **Pennington** County.

The system is in the following condition **good**. The points of diversion is located: **"Well #1": 1680 feet north and 2240 feet east of the south west corner of Sec. 4, T2S-R6E** with a longitude of **-103.4108540** and a latitude of **43.9016750**; **"Well #2": 1560 feet north and 1860 feet east of the south west corner of Sec. 4, T2S-R6E** with a longitude of **-103.4122440** and a latitude of **43.9013690**; **"Well #3": 1350 feet south and 425 feet west of the north east corner of Sec. 8, T2S-R6E** with a longitude of **-103.4210250** and a latitude of **43.8934460**. The works are capable of diverting and conveying to the place of use **0.56** cu. ft. per second of water which is to be used for **municipal use**. Water has been put to beneficial use and the license should be issued for **0.56** cfs.

Review of Permit Qualifications And Regulations:

- 1) Special qualifications to permit being abided by **yes**
- 2) All structures, wells and lands on map **yes**
- 3) Irrigation Questionnaires checked to determine if permit owner started irrigation by the end of construction period **yes**
- 4) Exceptions to compliance are: **yes**

Report On the Specifics of the System

Diversion Point Information:

Well #1

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

Casing:

- 1) Diameter **8** inches
- 2) Length **38** feet
- 3) Type **steel**

Screen:

- 1) Type **none (open hole completion)**
- 2) Length **162** feet of open hole

3) Static water level 11 feet

Pump\ Motor:

1) Pump Make Grundfos

2) Pump Model 80S75-8

3) Capacity 90 GPM

4) Motor Make Franklin Electric

6) Horsepower rating 7.5 hp

Well #2

1) Well Drilling Firm: Alexander Drilling 2) No. of Wells one

3) Depth(s) 200 feet

4) Well log is available yes

Casing:

1) Diameter 6 inches

2) Length 44 feet

3) Type steel

Screen:

1) Type none (open hole completion)

2) Length 156 feet of open hole

3) Static water level 12 feet

Pump\ Motor:

1) Pump Make Flint & Walling

2) Pump Model 4F55-B75

3) Capacity 80 GPM

4) Horsepower rating 7.5 hp

Well #3

1) Well Drilling Firm: Alexander Drilling 2) No. of Wells one

3) Depth(s) 200 feet

4) Well log is available yes

Casing:

1) Diameter 6 inches

2) Length 35 feet

3) Type steel

Screen:

1) Type none (open hole completion)

2) Length 165 feet

3) Static water level 8 feet

Pump\ Motor:

1) Pump Make Grundfos

2) Pump Model 75S75-11

3) Capacity 80 GPM

4) Motor Make Franklin

5) Horsepower rating 7.5 hp

Distribution System:

1) Type PVC 2) Size 8 & 6 inches

COMMENTS: Water is pumped to a 177,000 gallon Agrastore above ground storage tank located 550 feet south and 750 feet west of the north east corner of Sec. 8, T2S-R6E. The water is distributed through the city mains from the tank.

Wells were constructed prior to expiration of construction period (October 5, 1988) and deepened in the same aquifer in 2000.



Ken Buhler
Natural Resources Engineering Specialist
DENR, Water Rights Program

12/11/01
Date

DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
WATER RIGHTS PROGRAM

December 5, 2001

RE: Additional Diversion Point for Water Permit No. 1849-2 Town of Keystone

An inspection of Permit No. 1849-2 found an additional diversion point not authorized by Permit No. 1849-2. In addition, two of the wells used to supply this permit were located in a different legal location than that specified in the original advertising. SDCL 46-5-13.1 provides that a point of diversion may be changed or additional points of diversion may be approved without application or publication of a notice of hearing if the additional point of diversion is from the same source of water, no additional water is appropriated and the chief engineer makes a finding that the change does not increase the potential for interference with existing diversions.

Water Permit No. 1849-2 appropriates 0.67 cubic feet of water per second (cfs) from two wells located in the E ½ of Section 8, T2S-R6E. An inspection found the addition of two diversion points from wells located in the SW¼ of Section 4, T2S-R6E. No additional appropriation of water is required for this diversion.



Ken Buhler

Natural Resources Engineering Specialist

The Chief Engineer makes a finding that the additional diversion points do not increase the potential for interference with existing diversions. In making the finding, "does not increase the potential for interference" is interpreted to mean potential for adverse interference.



Garland Ergele, Chief Engineer
Water Rights Program

Water Right Map 1849-2



STATE OF SOUTH DAKOTA

WATER LICENSE NO. 1849-2

(1) The Town of Keystone, PO Box 689, Keystone SD 57751 made Application No. 1849-2, August 9, 1983 for a water permit to divert 0.67 cubic feet of water per second from groundwater (two wells), Pennington County, South Dakota for municipal purposes. Permit No. 1849-2, with a priority date of August 9, 1983 was approved October 5, 1983 and issued to the applicant for diversion of water with construction of the described water supply system to be completed on or before October 5, 1988 and for the application to beneficial use of said water on or before October 5, 1992.

An investigation conducted for licensing purposes found the wells under Water Permit No. 1849-2 were not in the location authorized by the permit and an additional diversion point was developed. Pursuant to SDCL 46-5-13.1, the Chief Engineer makes a finding that the change in location of diversion points and the additional well does not increase the potential for interference with existing rights.

(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 0.56 cubic feet of water per second for beneficial use. The location of the diversion points are:

Well # 1 – 1,680 feet north and 2,240 feet east of the southwest corner of Section 4 (NE $\frac{1}{4}$ SW $\frac{1}{4}$);

Well # 2 - 1,560 feet north and 1,860 feet east of the southwest corner of Section 4 (NE $\frac{1}{4}$ SW $\frac{1}{4}$);

Well # 3 – 1,350 feet south and 425 feet west of the northwest corner of Section 8 (SE $\frac{1}{4}$ NE $\frac{1}{4}$); all in T2S-R6E.

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

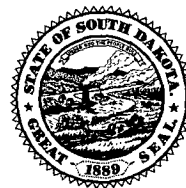
(4) Pursuant to South Dakota Water Law 46-5-30.1 the Town of Keystone, PO Box 689, Keystone SD 57751 the holder and/or owner of Water Right No. 1849-2 is issued a license to appropriate water, the right to use 0.56 cubic feet of water per second from groundwater (three wells) with a priority date of August 9, 1983 from the locations specified in (2) of this license for municipal purposes. This license is subject to any limitations or qualifications listed in Water Right No. 1849-2 and subject to South Dakota State Law.



GARLAND ERBELE, Chief Engineer
Water Rights Program
Department of Environment and Natural Resources

JAN 15 1992

date





**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

JAN 15 2002

1849-2
2386-2

Town of Keystone
Jerald Forgey, Public Works Director
PO Box 689
Keystone, SD 57751

Dear Mr. Forgey:

Enclosed are Water License Nos. 1849-2 & 2386-2. This is the final water right document completing your process of obtaining a Water Right. Enclosed are Receipt Nos. 417029 and 417030 each in the amount of \$50.00 which you paid for the investigation and issuance of the Water License.

For your information SDCL 46-6-27 requires that if the owner of an existing well, such as the wells authorized by Water Right Nos. 1849-2 and 2386-2, 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,

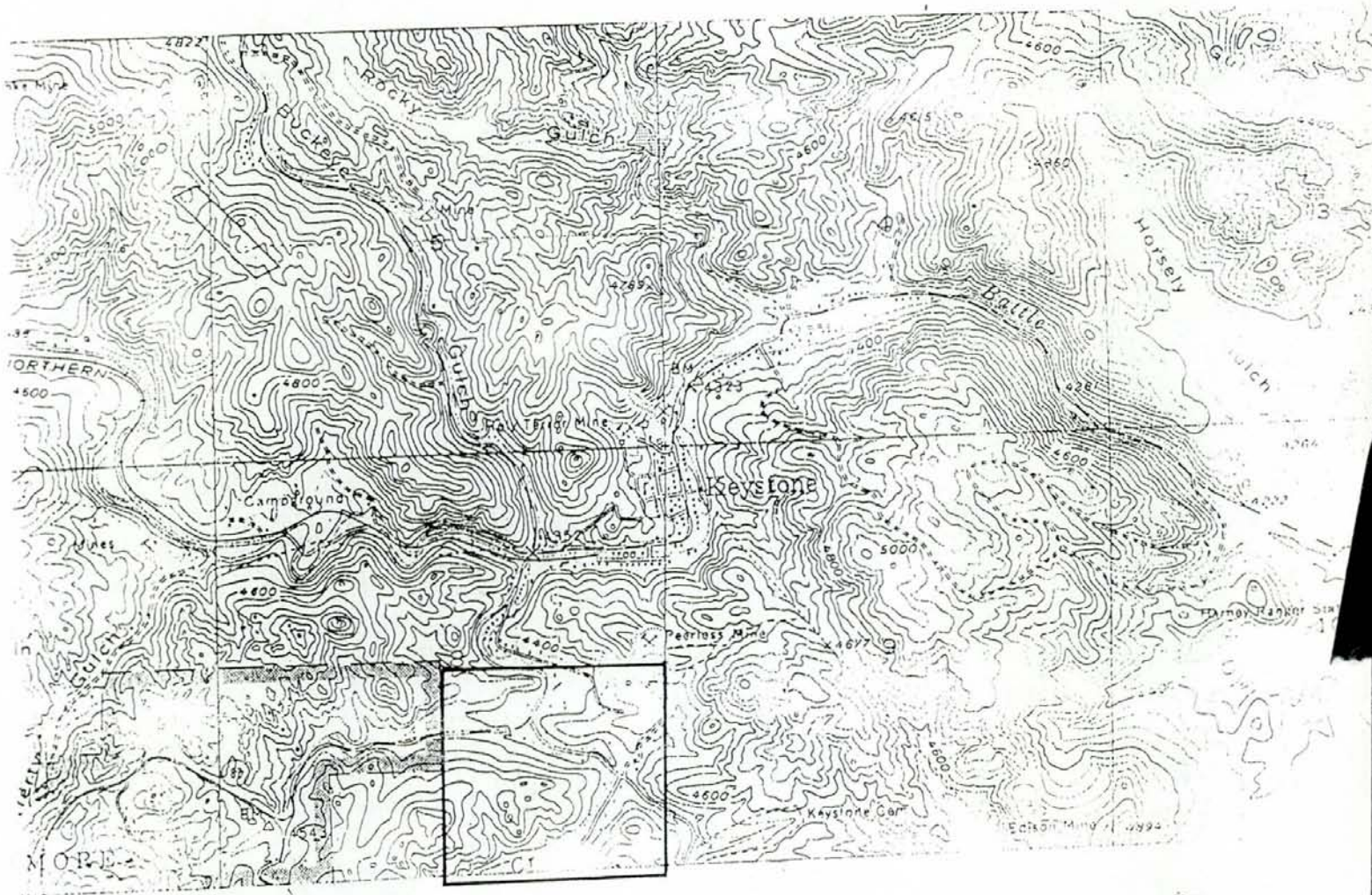
Garland Erbele, Chief Engineer
Water Rights Program
(605) 773-3352

enclosures

WELL LOCATION MAP

KEYSTONE MUNICIPAL WATER SYSTEM

LOCATED IN SE 1/4 OF SECTION 8,
T2S, R6E, BHM,
PENNINGTON COUNTY, SOUTH DAKOTA



SURVEYOR'S CERTIFICATE State of South Dakota County of Pennington

I, Gary D. Renner, Registered Land Surveyor No. 2652 of the State of South Dakota, do hereby certify that being so authorized, I prepared the map of the land shown and described hereon, and that to the best of my knowledge and belief, the map correctly shows the proposed location of the Keystone municipal well.

By:

Gary D. Renner
Gary D. Renner

Date: _____



Renner & Sperlich Engineering Company

P.O. Box 9165 • Rapid City, South Dakota 57701 • 605/342-1191

APPL & MAP # 1849-2



1849-2

SOUTH DAKOTA WELL REHABILITATION REPORT

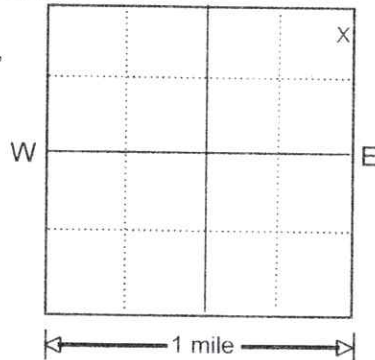
11-02

Location 2S 1/4 6E 1/4 Sec 8 Twp NE Rg NE

Well owner:

County Pennington

North

Please mark well
location with an "X"

Name

City of Keystone Well #3

Address

PO Box 689City, State, Zip KeystoneSD57751Describe original construction if possible.
(Attach original log if available)

Hard Schist	with 200-242
Schist Fracture 40 gpm	242-245
Hard Schist	245-515
Schist & Quartz Fracture 60 gpm	515-518
Hard Schist	518-600

Rehabilitation Completion Date 4-15-2024

PROPOSED USE:

☐ Domestic	☒ Municipal	☐ Stock
☐ Irrigation	☐ Industrial	

Description of condition of well before rehabilitation:

Well was 6" in diameter and 200 feet deep. It produced 30 gpm.

RECEIVED

MAY 06 2024

Description of rehabilitation work completed:

Deepened well with 6" diameter bit. from 200 to 600 feet. Produced 60 gpm after deepening.

OFFICE OF
WATER

Recasing information: Material _____ Diameter _____ Inches Depth _____ Feet

Describe screen or perforations _____ Screen Location From _____ To _____
From _____ To _____Grout: ☐ YES Describe grouting
☒ NO procedure and grout:Well Test Data: Specific capacity _____ Static water level 8 ft
If a flowing well _____ GPM Shut in _____ PSIThis well rehabilitation was completed under license # 324 and this report is true and accurate.Drilling firm: Alexander Drilling, Inc.Signature of Licensed Representative: [Signature]Signature of Well Owner: [Signature]Date: 5/3/24