

735-2

1. Considered 2-7, 1962
2. Name of Applicant Mary, Brown and Sons
3. Post Office Address Edgemont
4. Amount of water claimed 2.23
5. Source of water supply Artesian Ground water
6. Water to be used for Commercial
Acres to be irrigated
7. Water to be diverted and used in Fillmore County about
 miles of Edgemont.
8. Proof of Publication Received ☒
Not Received ☐
9. Application Approved ☐
Subject to
Not approved ☐
Action deferred ☐
10. Remarks:

A

No. 735-2
 Water Division No. 2 South CAYENNE River District
 (Blanks to be Filled by the Engineer for the W. R. C.)

DEC 18 1954

STATE WATER RESOURCES CLERK
PIERRE SOUTH DAKOTA

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

(NOTE—Draw a line through items not applicable.)

1. Name of applicant Mines Development, Inc. "TENNESSEE VALLEY AUTHORITY"
DIVISION OF LAW, NEW SPRANGLER BLDG., KNOXVILLE, TENNESSEE 37902
 Postoffice address Edgemont, County Fall River, State S. Dakota

I. If a corporation

- (a) Name of same Mines Development, Inc., wholly owned subsidiary of
Susquehanna Corporation
 (b) Date and place of incorporation June 4, 1954, Wisconsin
 (c) Amount of capital stock See attached Stockholder's Report
 (d) Amount paid in See attached Stockholder's Report
 (e) Names and addresses of directors See attached Stockholder's Report

(NOTE—A certified copy of articles of incorporation must accompany the application.)

II. Method of accomplishing the work and financial resources of the applicant:

- (a) Method of accomplishing work (Whether by contract, employment of others, or by direct labor)
Contract
See attached Stockholder's Report
 (b) Cash on hand, \$ (c) Treasury stock, \$
 (d) Bonds to be issued, \$ (e) Other resources, \$

2. Name of diversion work Artesian deep well into Madison Formation
 3. Amount of water claimed 2.23 cubic feet per second 1,000 gallons per min.
 4. Source of water supply Madison Formation (Approximately 2950 feet below ground level.)
 5. Location of point of diversion See attached drawing
 on bank Fall River County.
 6. Annual period or periods during which water is to be used Continual
 7. To be used for:

- I. Irrigation or domestic use: Gravity, overhead sprinkling or combination system? Overhead fire
protection system

(a) Number of acres to be irrigated None acres.(b) Legal subdivisions to be irrigated None

(NOTE—A list of lands to be irrigated, giving each subdivision and fraction with acreage thereof, should be written here, or may be appended as a part of this application. Same must also be shown on accompanying map.)

(c) Statement as to domestic use (giving location, etc.) Drinking, washing, sanitary, and
lawn sprinkling in and around uranium and vanadium processing plants, employing approx-
imately eighty (80) people.

II. Stockwatering, mining, milling, power, fish culture, fire protection and public recreation:

(a) Nature of use Operation of uranium and vanadium processing plantsName a of the above uses claimed(b) Amount of power to be generated None horse power.Amount claimed for engine cooling None(c) Location of plant Edgemont, South Dakota(d) Method of developing power None(e) Point where water will be returned to stream

MAP NO 639-2

8. Estimated cost of work:

(a) Head Gates, \$ None(b) Pumping plant, \$ None(c) Fluming, \$ None(d) Canal-earth, \$ NoneRock, \$ None(e) Other structures None \$ NoneTotal, \$ None

9. Description of diversion works:

I. Nature of works: (Reservoir, dam, ditch, flume, pumping plant, etc.)

Artesian deep well into Madison Formation

II. Dimensions of works.

(a) Dam: Height None feet; length at bottom None feet; length at topNone feet; thickness at bottom None feet; thickness at top Nonefeet; slope at front water face None; slope at back face Nonematerial used in construction None(b) Reservoir: Capacity when filled None acre feet. Surface area at highwater mark None acres.

DEPTH AT OUTLET-FEET	SURFACE AREA AT EACH DEPTH AT OUTLET--ACRES	FEET	ACRE-FEET CAPACITY
	None		

(c)* Head gate: Width None feet; height None feet;
Material None(d) Canal: Total length None miles.

LOCATION BELOW HEADGATE	DEPTH	BOTTOM WIDTH	WIDTH AT WATER-LINE	GRADE PER MILE
At <u>None</u> Mile	<u>None</u> feet	<u>None</u> feet	<u>None</u> feet	<u>None</u> feet
At <u>None</u> Mile	<u>None</u> feet	<u>None</u> feet	<u>None</u> feet	<u>None</u> feet
At <u>None</u> Mile	<u>None</u> feet	<u>None</u> feet	<u>None</u> feet	<u>None</u> feet
At <u>None</u> Mile	<u>None</u> feet	<u>None</u> feet	<u>None</u> feet	<u>None</u> feet
At <u>None</u> Mile	<u>None</u> feet	<u>None</u> feet	<u>None</u> feet	<u>None</u> feet
At <u>None</u> Mile	<u>None</u> feet	<u>None</u> feet	<u>None</u> feet	<u>None</u> feet

(Give dimensions where reduction in size are made.)

10. Time required for completion of work 45 days years.11. Time required for complete application of water to the proposed beneficial use 20-7 years.

12. Choice of newspaper for publication of notice of intention to appropriate

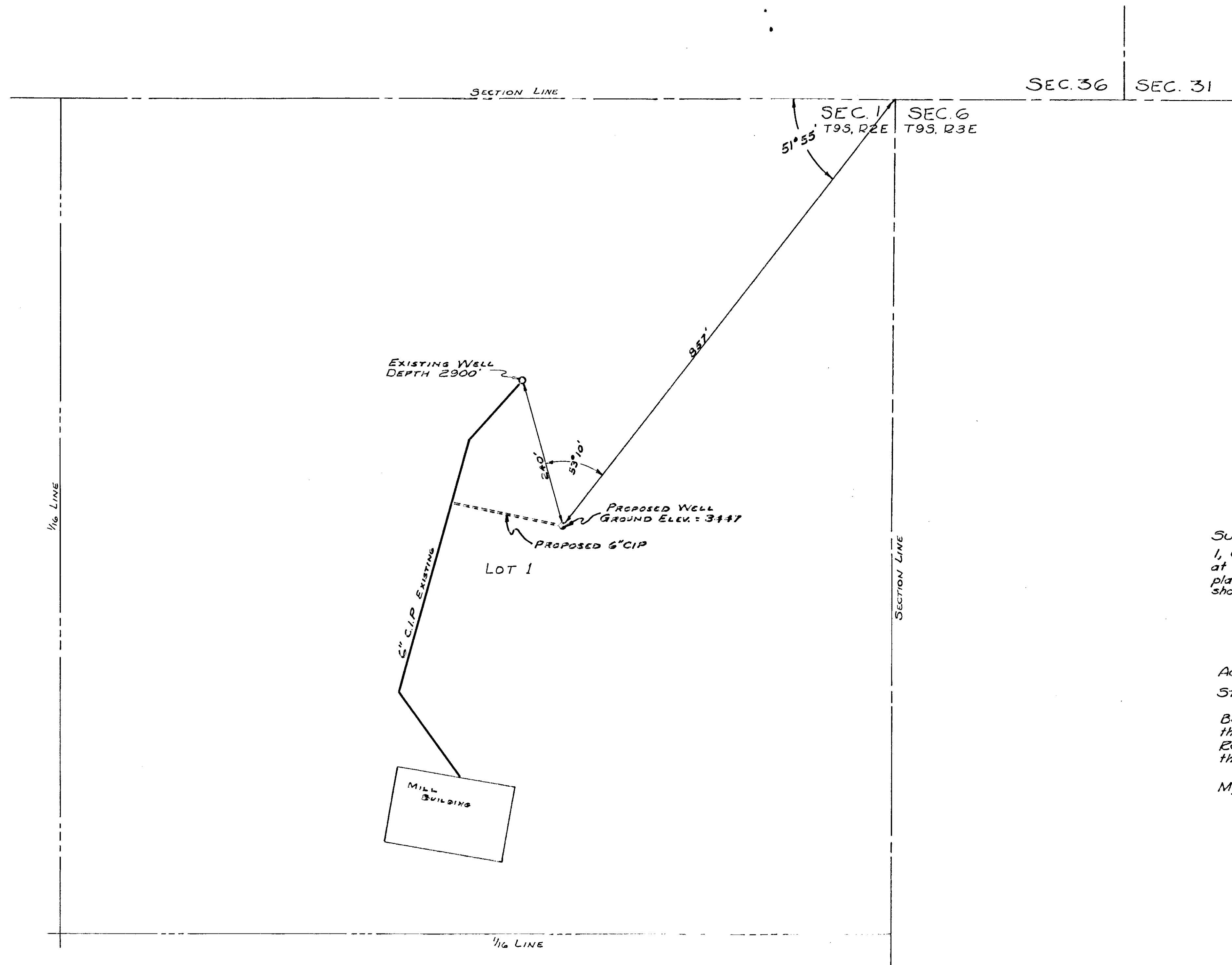
Edgemont, South Dakota Herald TribuneSTATE OF ~~SOUTH DAKOTA~~ ColoradoCounty of ~~Elbert~~ Denver

I, G. H. Bryant, being first duly sworn
 on my oath depose and say: That my relation to the above described undertaking is that of ~~owner~~ manager, that I have
 read the above foregoing statement, examined the map accompanying the same, and that I know of my own
 personal knowledge that the matters therein stated and shown are true.

Signed ANBSubscribed and sworn to before me this 21st day of October 1961Commission expires Dec. 20, 1964

Notary Public (or other qualified officer.)

*Each diversion must have a headgate or measuring device



SURVEYORS CERTIFICATE

I, George G. Ross, Registered Land Surveyor, do hereby certify that at the direction of Mines Development, Inc., I have surveyed and platted the proposed well location as shown hereon. All dimensions as shown are true and correct.

George G. Ross

ACKNOWLEDGMENT OF SURVEYOR

STATE OF SOUTH DAKOTA, COUNTY OF LAWRENCE

Be it remembered that on this 12th day of December 1961, before me, the undersigned, A Notary Public, personally appeared George G. Ross, known to me to be the person, described in, and who executed the foregoing certificate.

My Commission Expires: APRIL 28, 1969

George G. Cleveland
Notary Public

MINES DEVELOPMENT INC.
EDGEMONT, S.D.

WELL LOCATION

Brady Engineering
Consulting Engineers
Spearfish, South Dakota

Drawn By: G.G.R.
Checked By: F.R.B.

Scale: 1" = 100'
Date: DEC. 1961
Sheet 1 of 1

MND U# 639-2 (APPL U# 735)

Remarks by State Water Resources Commission:

THE WELL MUST BE CONSTRUCTED IN ACCORDANCE WITH THE MINIMUM REQUIREMENTS OF THE WATER RESOURCES COMMISSION. THE WELL MUST BE VALVED AND SHUT OFF WHEN NOT IN USE. OTHER WELLS IN THE AREA TO THE SAME FORMATION HAVE EARLIER PRIORITIES, AND RESTRICTIONS AS TO THE AMOUNT OF FLOW MAY BECOME NECESSARY.

STATE OF SOUTH DAKOTA
County of Hughes } ss.

Pierre, South Dakota, MARCH 9, 1962

This is to certify that the foregoing application was received by the Commission at 8:15 o'clock a.m. upon the 26TH day of December, 1961.

State Water Resources Commission

By:

Burton J. [Signature]
for Chief Engineer, Executive Officer

Number of permit 735-2

Date of first receipt of application December 26, 1961

Date of return to applicant for correction, amendments or changes required as follows: _____, 19____

Date of receipt of corrected application _____, 19____

Date from which applicant may claim right December 26, 1961

Approved MARCH 7, 1962, Recorded in Book 7 Page 56

This is to certify that we have examined the foregoing application for a permit to appropriate water of the State of South Dakota, and we hereby grant the same as stated herein, subject, however, to the following limitations and conditions:

1st. The equivalent of at least one-fifth of the work above specified is to be completed on or before _____

April 1, 1962

2nd. The whole of said work is to be completed on or before April 22, 1962

3rd. The limit of time for proof of beneficial use of water appropriated in accordance herewith is

MARCH 7, 1964

4th. The water appropriated shall be used for the purpose of OPERATION OF URANIUM AND VANADIUM PROCESSING PLANTS (INDUSTRIAL)

5th. 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.

6th. The amount of the appropriation herein granted shall not exceed 2.23 cubic feet per second; neither shall it exceed the capacity of the above described system of diversion works, nor the least amount of water that experience may hereafter indicate as necessary for the production of crops ~~is the exercise of the best husbandry, and further, said appropriation must be limited to not more than one seventh (1/7) of one cubic foot of water per second of time for each acre of land to which water is actually~~

USED IN PROCESSING PLANTS

and beneficially ~~applied for irrigation~~ on or before MARCH 7, 1964; said water to be used during the following described annual period:

Continuously

Witness my hand this 9TH day of MARCH, 1962.

State Water Resources Commission

By:

Joe [Signature]
Chief Engineer, Executive Officer

Certificate of Construction issued SEPTEMBER 22, 1970

Water License issued SEPTEMBER 22, 1970

Form 2A — Wells (Supplement to Form 2)

9. (Continued)

III. Well Specifications

(a) Hole and casing

Size of drill hole or excavation 14" O.D. & 10" O.D., Depth 2900 Ft-2950 Ft.

Type of casing Steel
(wood, concrete, steel, etc.)

Size of casing 10 3/4" and 7" O.D., Thickness of casing 3/8"

Length of casing 260' & 2650' If collection gallery, length, size and depth of gallery None

(b) Screens

Type of perforated screen Slotted Steel Casing

Size of perforated screen 5" O.D., 65 Feet
(diameter) (length)

Thickness of gravel pack ---, length of gravel pack ---

(c) Water Bearing Materials

Distance to water 2900'-2950' Character of water bearing materials Artesian
Madison Formation

Thickness of water bearing material Top 50' of Madison Formation

(d) Pump and Motor

Type of pump None
(centrifugal, propeller, mixed flow, etc.)

Name of pump None, size None

Kind of motor None
(gasoline, electric, diesel, etc.)

Horsepower None, Name of motor None

(e) Complete well

Capacity 2.23 cu. ft./ft. drawdown of 10' Max. Estimated cost \$37,000.00

(f) Owner of land upon which well is located Mines Development, Inc.
Name

Edgemont, South Dakota
Address

(g) Distance to nearest existing wells

On same owner's property None rods. On property owned by others 14.545 rods

WATER LICENSE NO. 735-2

(1) WHEREAS, On the 26th day of December A. D. 19 61
Mines Development, Inc.

made Water Right Application No. 735-2 for a permit to use 2.23 cubic feet per second of the waters of artesian ground water

County of Fall River State of South Dakota, for industrial

purposes; and

(2) WHEREAS, On the 9th day of March A. D. 19 62

Permit No. 735-2 with a date of priority of December 26, 1961

was issued to said applicant for the diversion of said water, and provided for the completion of construction of the water supply system therein described on or before the 22nd day of April A. D. 19 62 and for the application to beneficial use of said water on or before the 7th day of March A. D. 19 64

and:

(3) WHEREAS, It is hereby certified that the applicant has complied with the provisions of the laws of the State of South Dakota relating to completion of the construction of the water supply system and is entitled to divert .66 cubic feet per second of water for beneficial use and,

(4) WHEREAS, It is hereby certified that the applicant has complied with the provisions of the laws of the State of South Dakota relating to the application of water to beneficial use of the following extent,

water to be used for industrial purposes in processing plant

(5) NOW, THEREFORE, By the virtue of the authority vested in us by the laws of the State of South Dakota, We hereby grant and confirm to Mines Development, Inc.

Edgemont, South Dakota

the holder _____ and owner _____ of said permit No. 735-2 a water right, dating from December 26, 1961

to use of .66 cubic feet per second of the waters

of artesian ground water

in the County of Fall River and State of South Dakota, or so much thereof as may be necessary for the

purposes hereinbelow mentioned, to be diverted at a point South 51°55' West, 857 feet from the

NE Corner, Section 1, T9S, R2E

and ~~conveyance~~ conducted to and through the Company water distribution system

for the purpose of industrial use

Subject to any limitations listed in Water Right Permit No. 735-2 and subject to the laws of the State of South Dakota.

WITNESS, My hand and seal of our office at Pierre, South Dakota
this 22nd day of September A. D.
Nineteen Hundred and Seventy

WATER RESOURCES COMMISSION

By: _____
Chief Engineer, Executive Officer, J.W. GRIMES

Permit No. 735-2

Water Diversion No. 2 SOUTH CHEYENNE RIVER Water District

CERTIFICATE OF CONSTRUCTION

This is to Certify, That Mines Development, Inc.

_____ the holder _____ of
Permit No. 735-2, issued upon Application No. 735-2, bearing date of priority of December 26,
1961 authorizing the diversion of 2.23 cu. ft. per second of the waters of _____
artesian ground water County of Fall River, State of South Dakota at _____
a point South 51° 55' West, 857 feet from the NE Corner, Section 1, T9S, R2E
_____, for industrial

purposes, has a complied with the provisions of the laws of the State of South Dakota relating to proof of
completion of the works of diversion set out and described in said Permit; that said works are found in satisfactory
condition for diverting and conveying to the place of intended use .66 cu. ft. per second of water.

Date September 23, 1970

WATER RESOURCES COMMISSION

By:

J.W. GRIMES, Executive Officer

on or before February 8 1962.
(First Publication _____)

APPROPRIATION OF WATER

Office of State Water Resources Commission,

Pierre, S. Dak., January 23, 1962

Notice is hereby given that Mines Development, Inc. whose postoffice address is Edgemont S. Dak., has made an application in accordance with the provisions of the water laws of South Dakota for a permit to appropriate for beneficial use 2.23 cubic feet of water per second of time from xxx artesian ground water through the artesian well the point of diversion of which is to be located xxx

XXXXXX in the Lot 1 XXXXX of Section 1
Twp. 9 S Range 2E Said water to be used for the purpose of providing XXXXX
XXXXXX
supplies for operation of uranium and vanadium processing plants

SECRET

This application will be taken up by the State Water Resources Commission at their office at Pierre for consideration upon the 7th day of March, 1962, at 2 P. M. All interested persons may appear and be heard.

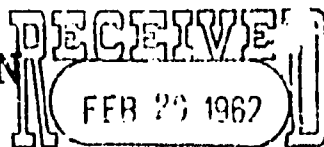
Appropriate action will be taken by the Water Resources Commission after suitable time has elapsed for the consideration of any or all information presented.

State Water Resources Commission

By:

CC: Charles E. Donnelly, Jr., Publisher
Herald-Tribune
Edgemont, S. Dak.

PROOF OF PUBLICATION

STATE WATER RESOURCES COMM.
PIERRE, SOUTH DAKOTASTATE OF SOUTH DAKOTA } ss.
County Fall River

APPROPRIATION OF WATER
Office of State Water Resources
Commission,
Pierre, S. Dak., January 25, 1962
Notice is hereby given that
Mines Development, Inc. whose
post office address is Edgemont,
S. Dak., has made an applica-
tion in accordance with the pro-
visions of the water laws of
South Dakota for a permit to
appropriate for beneficial use
2.23 cubic feet of water per
second of time from artesian
ground water through the arte-
sian well, the point of diversion
of which is to be located in Lot
1 of Section 1 Twp. 8S Range
2E. Said water to be used for
the purpose of providing supplies
for operation of uranium and
vanadium processing plants.
This application will be taken
up by the State Water Resources
Commission at their office at
Pierre for consideration upon
the 7th day of March, 1962 at
2 P. M. All interested persons
may appear and be heard.
Appropriate action will be
taken by the Water Resources
Commission at a suitable time
has elapsed for the consideration
of any or all information pre-
sented.

State Water Resources Com-
mission
By: BURTON F. JONES,
Water Right Specialist

Charles E. Donnelly, Jr. being duly
sworn, deposes and says the annexed printed copy of Notice
of Intention to Appropriate Water was taken from the _____
Edgemont Herald-Tribune a newspaper which
during the whole itre of publication of said notice herein
after stated, has been and is printed and published in the
_____ city _____ of _____ Edgemont _____ County of
Fall River _____ and State of South Dakota;
that the said notice was published in said newspaper on the
following dates:

January 25, 1962February 1, 1962February 8, 1962February 15, 1962

in each and every issue of the full number thereof, the first
publication being made on the 25th day of January
1962 and the last publication on the 15th day of
February 1962, upon which days or times
of publication aforesaid the newspaper was regularly pub-
lished, and that during the whole time of said publication he
was editor the printer X and publisher X of
the said newspaper.

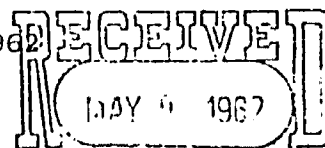
Charles E. Donnelly, Jr.Subscribed and sworn to before me this 16th day of February A. D. 1962Notary Public Fall River County, S. D.



MINES DEVELOPMENT, INC.

777 GRANT STREET • DENVER 3, COLORADO • ~~REGISTRATION~~
TAGOR 5-7681

May 7, 1967



STATE WATER RESOURCES COMM.
PIERRE, SOUTH DAKOTA

South Dakota State
Water Resources Commission
State Office Building
Pierre, South Dakota

Attention: Mr. J.W. Grimes, Chief Engineer

Gentlemen:

This letter is to notify you that the Mines Development Inc. water well at Edgemont, South Dakota has been completed. Construction of the well has been as specified in the original plans and specifications, with the exception that the depth was increased 110 feet over the originally specified depth. Attached to this letter is a data sheet summarizing the original well specifications and the actual as-built construction of the well.

We wish to thank you for your co-operation in connection with the approval for construction of this well. If there is any additional data that you desire, please do not hesitate to call on us.

Sincerely,
MINES DEVELOPMENT, INC.

R.L. Dean
Staff Assistant

RLD/rmp

cc: H.D. Webb

Attachment

DATA SHEET ON THE MINES DEVELOPMENT INC. WATER WELL AT
EDGEMONT. SOUTH DAKOTA

Construction as Proposed and Approved in Well Specifications

CASING: 10-3/4" O.D. 32[±] lbs. per foot,
0'-260'
7" O.D. 23[±] lbs. per foot, 260'-2890'

SEAL: 10-3/4" O.D. casing cemented from
0'-260'
7" O.D. casing cemented from 260'-2890'

OPEN HOLE IN MADISON
LIMESTONE: 2890'-2950'

PRODUCING FORMATION: Madison Limestone

As-Built Well Construction (Completed May 6, 1962)

CASING: 10-3/4" O.D. 32 lbs. per foot,
0'-257'
7" O.D. 23 lbs. per foot, 223'-2891'

CASING OVERLAP: 7" O.D. casing extends 34' up into
10-3/4" O.D. casing.

SEAL: 10-3/4" O.D. casing cemented from
0'-257'
7" O.D. casing cemented from 223'-2891'
(All cementing was performed by
Halliburton Oil Well Cementing Co.)

OPEN HOLE IN MADISON
FORMATION: 2891'-3060'

PRODUCING FORMATION: Madison Limestone

YIELD: Flowing 450 gpm.

Engineering Geologic Supervision
By Woodward-Clyde-Sherard & Associates
Denver, Colorado

E. B. Waggoner
Vice President

Permit No. 735-2
 Water Division 2 SOUTH CHEYENNE Water District
RIVER

REPORT OF EXAMINATION OF WORKS
 AND/OR APPLICATION OF WATER TO BENEFICIAL USE

TO: Water Resources Commission, State Office Building No. 2, Pierre, South Dakota 57501

I have this day made a thorough examination of the water use system constructed by MINES DEVELOPMENT, INC. of DENVER, COLORADO holder of Permit No. 735-2, bearing date of priority of DECEMBER 26, 1961 authorizing the diversion of 2.23 cu. ft. per second of the waters of ARTESIAN GROUND WATER for INDUSTRIAL purposes, in FALL RIVER County.

I have to report on the condition of the same as follows:

The Water Use System consists of,

A. Works used to divert the water:

WELL 2450' DEEP W/ 10" CASING

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

STORAGE BASIN W/ 6" PIPELINE TO PLANT

C. Works used to apply water to beneficial use.

THRU SERIES OF PIPELINES TO AREAS OF THE PLANT WHERE WATER IS USED

The system is in the following condition: GOOD

The point of diversion is located S 52° 55' W, 857 FEET FROM THE NE CORNER, SECTION 1, T9S, R2E

The works are capable of diverting and conveying to the place of use .66

cu. ft. per second of water which is to be used for INDUSTRIAL USE

Water has been put to beneficial use to the maximum extent as follows.

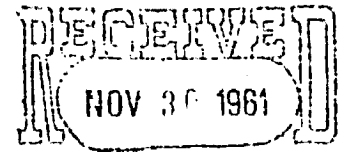
comprising a total of _____ acres of land.

Date SEPTEMBER 16, 1970

Burton J. Jones
 (Signature)

WATER RIGHT SPECIALIST
 WATER RESOURCES COMMISSION

PAUL H RUSSELL
ATTORNEY AT LAW
BOX 514
EDGEMONT, SOUTH DAKOTA
TEL MOHAWK 2-7751



November 29, 1961

STATE WATER RESOURCES COMM.
PIERRE, SOUTH DAKOTA

Mr. J. W. Grimes
Chief Engineer
Water Resources Commission
Pierre, South Dakota

Dear Mr. Grimes:

Mines Development, Inc., of Edgemont, South Dakota, the uranium people, are making plans to drill themselves a deep well on their property at Edgemont, to secure an adequate water supply. They have been using the big railroad well for their chief water supply, but that well has now eaten through the casing and requires extensive repairs. The mill would like to have their own water supply.

Will you please write the mill a letter of suggestions and instructions with proper application forms necessary to initiate the application for permit for this project? Please forward this material directly to the following address: Mr. R. L. Dean, Staff Assistant, Metallurgical Division, Mines Development, Inc., 777 Grant Street, Denver 3, Colorado.

The well they are planning to drill would be located on the mill property somewhere close to the mill and would be in the neighborhood of 3,000 feet deep. This would hit the same water supply as the railroad well and the city wells. They expect to start with 12 inch casing and finish with 7 inch casing.

Thank you very much for your assistance in this matter.

Yours very truly,

Paul H. Russell
Paul H. Russell

PHR:b

NOTICE OF TRANSFER OF WATER PERMIT

TO: Water Rights Commission
State Office Building No. 2
Pierre, South Dakota 57501

Date October 25, 1974

This is to notify you that title to the lands described as follows:

the artesian well located in Lot 1, Section 1, T9S, R2Eformerly owned by Mines Development, Inc., Edgemont, S.D.

has been transferred to Tennessee Valley Authority, with mailing address
of Division of Law, New Sprinkle Building, Knoxville, Tennessee 37902,

together with any rights to the beneficial use of water thereon as evidenced
by Water Right Permit No. 735-2 as provided for in Section 61.0127 of the
1960 Supplement to the South Dakota Code of 1939, as amended.

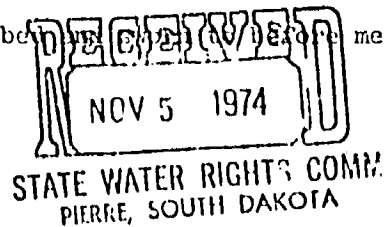
You are therefore hereby requested to file this "Notice of Transfer of
Water Permit" in its appropriate file at the Office of Water Rights Commission
as evidence of the change of ownership.

A fee of one dollar is hereto attached to cover filing fees as required
under Section 61.0159 of the 1960 Supplement to the South Dakota Code of 1939,
as amended.

State of Tennessee)
) ss.
County of Knox)

I, Lynn Seeber being first duly sworn on my
oath depose and say: That I am the General Manager of the
Tennessee Valley Authority, that I have read the above foregoing statement,
and I know of my own personal knowledge that the information herein stated is
true.

Lynn Seeber
(Signed)

Subscribed and sworn to before me this 25th day of October, 1974

Walter McElaine
(Notary Public)

My Commission Expires: July 18, 1978

This application prompted the approval of an additional diversion point authorized October 10, 2017.

SD EForm - 1585LD V5

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

RECEIVED

JUL 10 2017

WATER RIGHTS
PROGRAM

Mail to: DENR - Water Rights 523 E Capitol Ave Pierre, SD 57501-3182 ph. (605) 773-3352	No. <u>735-2</u> (office use only) Hydrologic Unit
	Basin _____
	Newspaper _____

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

Check use(s) of water:

- | | | | |
|---|--|--|--|
| ☒ Municipal | ☐ Water Distribution System | ☐ Recreational | ☐ Institutional |
| ☐ Rural Water System | ☐ Commercial | ☐ Fish & Wildlife | ☐ Geothermal |
| ☐ Domestic (over 18 gpm) | ☐ Industrial | ☐ Other _____ | |

Type of Application:
(check one)

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

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

1. Name to Appear on Water Permit Edgemont City Well No. 6Mailing Address 412 2nd Avenue Edgemont SD 57735
(Address) (City) (State) (Zip Code)Phone 605-662-7422 Mobile _____ Email city@gwtc.net2. Amount of water claimed 0.56 *CFS or 250 **GPM and 123 ***AF or 40 Million Gallons/yr
Flow rate and volume are both required. (*Cubic Feet per Second) (**Gallons per Minute) (***Acre Feet - storage capacity of dam/dugout or annual use)3. Source of water supply Madison Limestone4. Location of point of diversion NE 1/4 SW 1/4, Section 1, T9S, R2E County Fall River
(example - 3 wells in SW 1/4 NE 1/4 section 12-T104N-R53W)If not a public water supply (e.g. municipal), will water be used outside of the area described above? ☐ Yes ☐ No

If "Yes," where will water be used? _____

(example - NW 1/4 section 12-T104N-R53W)

5. County or counties where water will be used Fall River6. Annual period during which water is to be used All Year

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)

New Madison well to replace existing municipal Well No. 2
 10-3/4" casing to 300' below surface.
 7" casing from 3000' to 3050' below surface.
 6-1/4" open hole in Madison from 3050' to 3450' below surface.
 Pitless unit at surface.
 20 HP Submersible pump set at 250' below surface, pump rate 250 gpm.
 See Drawings and Specifications included with application.

I, Jerry J. Dibble MAYOR, the applicant, certify under
Name of Person Title (if applicable)

penalty of perjury that I have read this application, examined the attached map, and that the matters stated are true. I further certify, if acting on behalf of an entity or individual other than myself, that I am authorized to submit this application.

Supplemental Information

(type or print)

1. Well Information (check one or both as applicable) ☒ Drilling new well(s) ☐ Using existing well(s)

a) If new wells, how many 1 Have test holes been drilled ☐ Yes ☒ No Drilled by _____
(if yes, please provide copies of logs)

b) If existing wells, how many -- Provide copy of log(s), if available. Drilled by _____

For either Existing or Proposed Wells:

c) Well Depth (required) 3450' Depth to Top of Water Bearing Material 3050' Depth to Water from Surface Flowing

d) Distance to nearest domestic well on applicant's property 300'(to Well #2) Property owned by others N/A

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 Edgemont Sanitary System

3. Dugout Information

a) Surface Dimensions n/a Depth _____

b) Depth to water (ground surface to water level) _____

4. Water Storage Dams

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

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

n/a

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 (e.g. 3 to 1 is a typical slope)

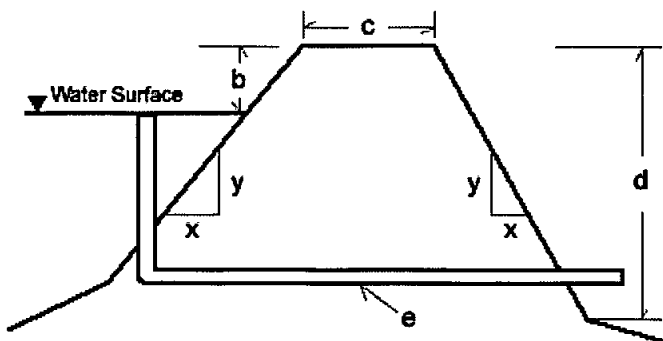
Upstream _____

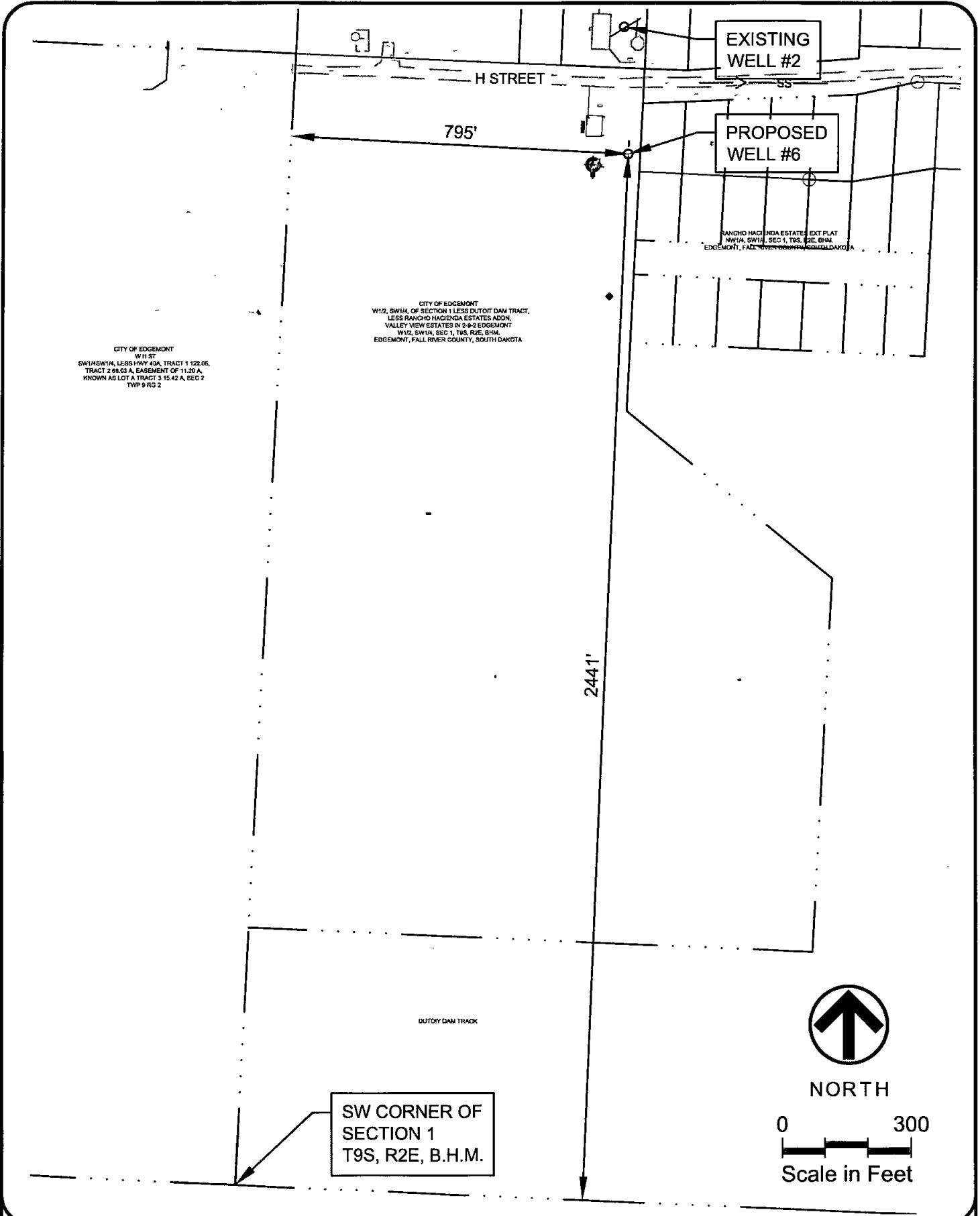
Downstream _____

h) Surface Area of Impoundment _____

i) Storage _____ Acre Feet

j) Drainage Area Above Dam _____ Acres





NEW WELL NO. 6

EDGE MONT, SOUTH DAKOTA

LOCATION MAP

DRAWING TYPE
 Preliminary
 PREPARED BY
 RF

CHECKED / APPROVED
 GW GW
 DATE
 APRIL 2017

SHEET
 1 1
 DRAWING
E1

12020-2014-000



Schlaak, Karen

From: Schlaak, Karen
Sent: Tuesday, July 11, 2017 10:56 AM
To: 'Dustin.Dale@ae2s.com'
Subject: Water Permit Application for the City of Edgemont

Dustin,

We received the application for the City of Edgemont. I am not certain if you helped prepare the application or not, but Eric said he had correspondence with you regarding another City of Edgemont matter and your company logo was on the map submitted with the application.

Couple of items need to be clarified. The application states the new well is to be located in the NE $\frac{1}{4}$ SW $\frac{1}{4}$ Section 1-T9S-R2E. From the map it appears the well will be located in the NW $\frac{1}{4}$ SW $\frac{1}{4}$ Section 1-T9S-R2E. *correct*

Also the map identifies the location of Existing Well #2 which appears to be located in the SW $\frac{1}{4}$ NW $\frac{1}{4}$ Section 1. What water right does the city associate with this well? Water Right No. 306-2 is for a Madison well and correspondence in the file refers to City Well #2, but the legal description on the water right identifies a well located in the NE $\frac{1}{4}$ NE $\frac{1}{4}$ Section 1-T9S-R2E.

Once these items are clarified, we can determine how to proceed with the new application.

Give me a call, if you have questions.

Karen Schlaak

SD DENR, Water Rights Program
(605) 773-3352



Water Rights Program - File Documentation

NAME: Dustin Dale

ADDRESS: with AE2S

DATE: 7-11-17 **COUNTY:** FR **TELEPHONE:** 605 290 2555

RE: Pending application for the City of Edgemont

COMMENTS:

Dustin Dale agreed that the location of the proposed new well is the NW 1/4 SW 1/4 Sec 1-T9S-R2E.



Karen Schlaak
Water Rights Program

Gronlund, Eric

From: Gronlund, Eric
Sent: Wednesday, August 02, 2017 11:25 AM
To: 'Dustin.Dale@ae2s.com'; Schlaak, Karen
Subject: RE: [EXT] Application for Edgemont
Attachments: edgemont1.docx

Dustin

Attached is a table that is my understanding of the wells used for municipal purposes for the city of Edgement.

I believe the best way to get a handle on what permitting is necessary is to talk this through. Therefore, Karen & I will try to call you this afternoon (Wednesday, August 2nd).

DENR's goal is to get a water permit in place for the city of Edgemont that accurately reflect the water system that will be in place.

Eric

From: Dustin.Dale@ae2s.com [mailto:Dustin.Dale@ae2s.com]
Sent: Monday, July 31, 2017 3:35 PM
To: Schlaak, Karen
Cc: Gronlund, Eric
Subject: RE: [EXT] Application for Edgemont

Karen-

Thank you for the information.

Water right no. 2298-2 (City refers to as Well No. 5) is not used as part of the municipal system, you are correct.

Water right no. 468-2 is not used as part of the municipal system, I am aware of this well once you showed the location.

Answers Underlined below:

1. How many wells does the city currently rely on for their municipal water supply? Currently the City relies on 3 wells for their Municipal Service, Well No. 2, the TVA Well, and the BN Well. Well No. 4 has just been rehabilitated, but not brought back into municipal use.
2. Does the attached map DENR provided reflect the approximate well locations authorized by Water Rights Nos. 761-2 and 306-2? Water Rights No. 761-2 is referred to as Well No. 4 and is shown accurately, Water Right 306-2 is referred to as the BN Well and is shown accurately.
3. What is the diversion capability for the wells currently used to serve the city's municipal supply? I'm sorry I'm not understanding the question, currently all three wells (Well No. 2, BN, and TVA) flow into the system as artesian wells.
4. Are there other water rights held by the city that DENR is somehow overlooking? The City uses the three wells mentioned, but well completion reports are 00001882.pdf for the TVA Well and 00007796.pdf for Well No. 2.

5. The map submitted with the application identified "existing well # 2" and the application indicated the new Madison well will replace the existing municipal well No. 2. What water right is associated with existing well #2? This well has been in operation by the City of Edgemont since 1936.

Thank you,

Dustin

From: Schlaak, Karen [<mailto:Karen.Schlaak@state.sd.us>]

Sent: Wednesday, July 19, 2017 7:29 AM

To: Dustin Dale

Cc: Gronlund, Eric

Subject: Application for Edgemont

Sorry for the delay in getting back to you. Eric Gronlund and I have reviewed the existing water rights for the City of Edgemont. The attachment is a listing of the those water rights and the aerial photo map shows the approximate locations. Several Items need to be addressed prior to proceeding with the new application.

Summary of City of Edgemont water rights

- It is assumed that the well authorized by Water Right No. 2298-2 authorized for recreational use for the two dams is not part of the municipal system.
- You indicated that the you were unaware the Inyan Kara aquifer authorized by Water Right No. 468-2 so it is presumed that it is not part of the municipal system although this well appears to be a little north of the "Existing Well No. 2" on the submitted map.
- That leaves two water rights in existence that are authorized to serve the city's municipal needs
 - o No. 761-2 appropriating 0.41 cfs from the well in the NE ¼ SE ¼ Section 2 (that you identify as Well No. 4).
 - o No. 306-2 appropriating 0.31 cfs from a well in the NE ¼ NE ¼ Section 1 (that you indicate will be discontinued).
- All total the city of Edgemont holds an appropriation of 0.72 cfs (323 gpm) to supply the city's municipal water system.

Questions:

1. How many wells does the city currently rely on for their municipal water supply?
2. Does the attached map DENR provided reflect the approximate well locations authorized by Water Rights Nos. 761-2 and 306-2?
3. What is the diversion capability for the wells currently used to serve the city's municipal supply?
4. Are there other water rights held by the city that DENR is somehow overlooking?
5. The map submitted with the application identified "existing well # 2" and the application indicated the new Madison well will replace the existing municipal well No. 2. What water right is associated with existing well #2?

DENR believes the application should serve to appropriate water for the diversion rate in excess of 0.72 cfs (again, unless we are overlooking a water right the city holds) and if necessary serve to clarify/correct the location of the wells.

That being said, DENR requests a map showing the location in reference to a section corner, of the current and proposed Madison wells that will supply the city's municipal water system and identify the diversion capability of each well. The application currently reflects an appropriation of 0.56 cfs (250 gpm). If necessary, this should be amended if the total

production for all the wells the city identifies as being used to meet their municipal supply is greater than 0.72 cfs (323 gpm). The application should also state the intended annual peak volume of water be used from the Madison aquifer from all its wells (the submitted application states 40 million gallons per year – is that correct for all the wells or just the new well to be drilled?)

You can search each water right file by going to our website at <http://denr.sd.gov/des/wr/dbwrsearch.aspx>

Call Eric or I if you have questions.

Karen Schlaak

SD DENR, Water Rights Program
(605) 773-3352

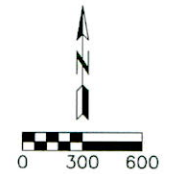
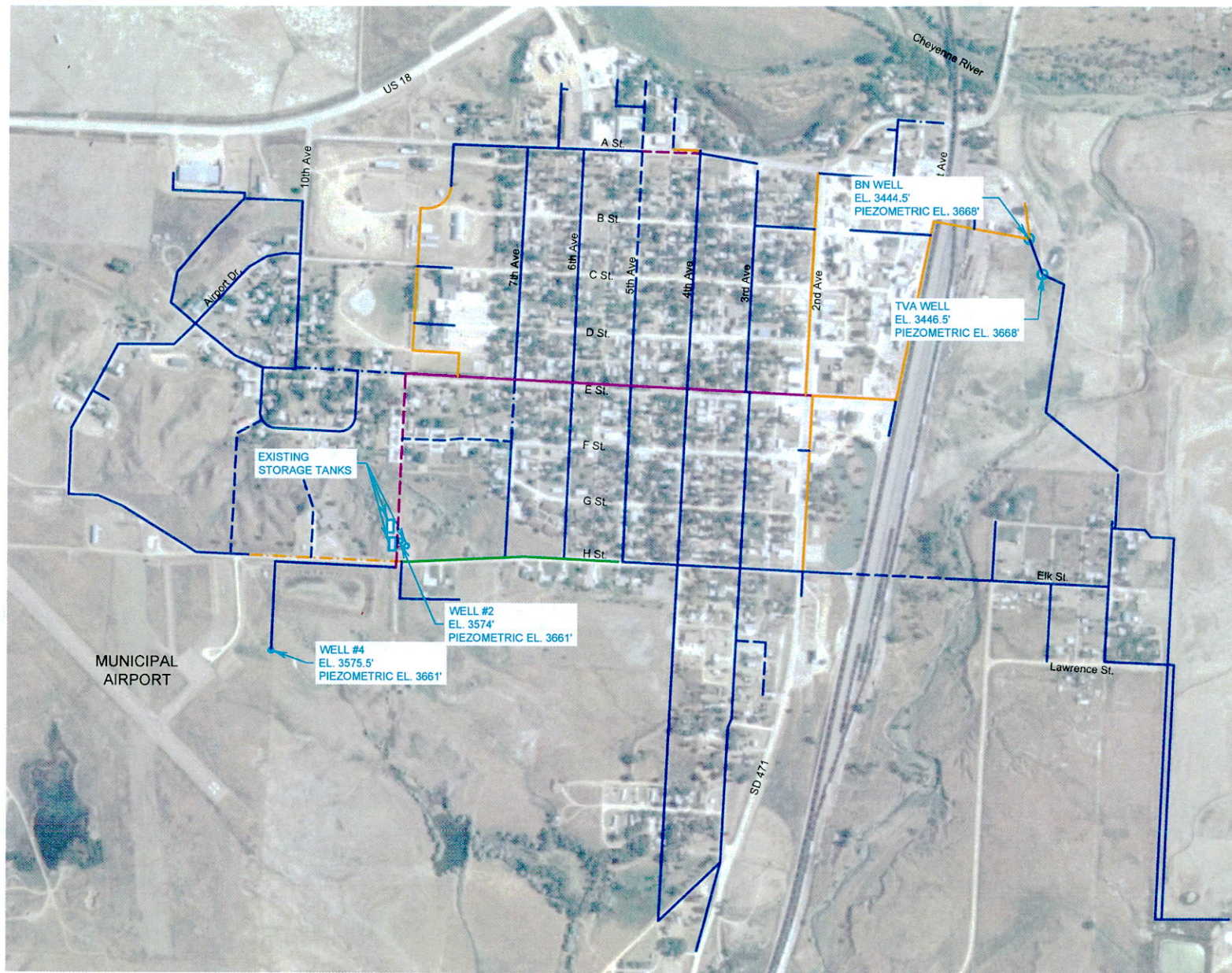


WELLS USED FOR MUNICIPAL USE BY THE CITY OF EDGEMONT

Well Designation	Water Right No.	Quantity (cfs)	Location	Comment
TVA	735-2 *	0.66	NE ¼ NE ¼ Sec 1-T9S-R2E	Use is listed as Industrial use not municipal use. Also a transfer of ownership should be submitted to put water right in name of Edgemont instead of TVA
BN	306-2 *	0.31	NE ¼ NE ¼ Sec 1-T9S-R2E	
Well 4	761-2	0.41	SE ¼ NE ¼ Sec 2-T9S-2E	Recently rehabilitated – assumed will be put back into service
Well 2	none	**	SW ¼ NW ¼ Sec 1-T9N-R2E	Seems odd has been in place since 1936 without a permit

*The notes Karen Schlaak made when you talked on the phone indicates these two wells will be discontinued

** current application request 250 gpm. If the original use from the well has been 250 gpm and continuously used to an extent that the use was not forfeited may qualify for a vested water right which would retain the 1936 priority date as you indicate it has been in operation by the city since then.



LEGEND

- 3" PVC WATER MAIN
- 6" PVC WATER MAIN
- 6" AC WATER MAIN
- . - . 6" CI WATER MAIN
- 8" PVC WATER MAIN
- . - . 8" CI WATER MAIN
- 10" PVC WATER MAIN
- 10" AC WATER MAIN
- o EXISTING WELL

FIGURE 2
 CITY OF EDMONT
 EXISTING WATER
 SYSTEM LAYOUT

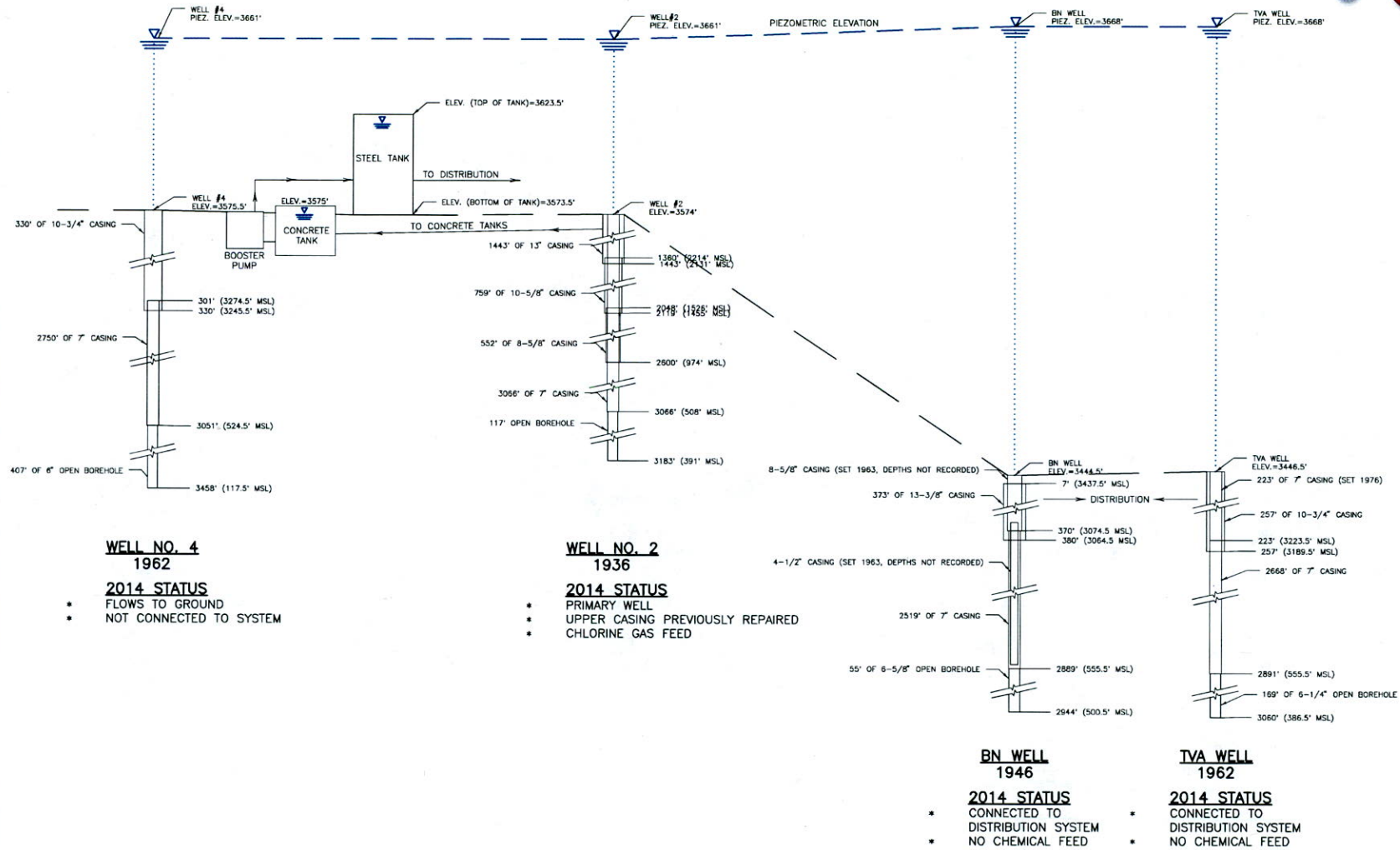


FIGURE 3
CITY OF EDMONTON
EXISTING WELL PROFILES

GENERAL LOCATION OF WELLS AUTHORIZED UNDER WATER RIGHTS HELD BY THE CITY OF EDMONT



Gronlund, Eric

From: Dustin.Dale@ae2s.com
Sent: Thursday, August 24, 2017 4:38 PM
To: Gronlund, Eric
Cc: Karen Cain
Subject: RE: [EXT] Edgemont

Eric-

We did here a response from the City and they would like to pursue adding an additional diversion point, without increasing their permitted diversion rate authority under their existing water rights.

Thank you,
Dustin

From: Gronlund, Eric [<mailto:Eric.Gronlund@state.sd.us>]
Sent: Tuesday, August 22, 2017 12:28 PM
To: Dustin Dale
Subject: RE: Edgemont

Dustin – what is the status regarding the Edgemont’s pending water permit application. My recollection after our conversation is you planned to check with the city about amending the application to be just an additional diversion point without an increase in the permitted diversion rate authority under the city’s existing water rights.

Eric

From: Gronlund, Eric
Sent: Wednesday, August 09, 2017 2:15 PM
To: Dustin.Dale@ae2s.com
Cc: Schlaak, Karen
Subject: Edgemont

Dustin

Thanks for taking the time to talk with Karen and I about Edgemont’s water rights for its potable water supply. Our discussion was helpful in understanding the city’s plan for its water supply.

Currently the city holds three water rights from the Madison aquifer to supply the system. The total appropriation is 1.38 cfs (619 gpm). This is from three wells commonly known at TVA, BN and Well No. 4. The city also has Well No. 2 that is set to be replaced but DENR is unable to find that a water right was ever obtained for this well.

The city plans to replace Well No. 2 with a new well (No. 6). The reason is to move the well site closer to the plant that treats the water for among other things - radionuclides. It is more cost effective to drill a new well than to pipe the water from the TVA & BN wells to the water treatment facility. Ultimately, Well Nos. 4 & 6 will be used primarily for the municipal supply and the TVA & BN wells be kept for backup purposes including emergency fire suppression. The plan is to discontinue using the TVA & BN wells for the city potable supply.

The city applied for a permit to appropriate 250 gpm (123 acre feet/annually) from Well No. 6. This pump rate is the water treatment plants capacity. DENR can certainly process this application as a new permit.

However I explained there is a statute that allows for a change of diversion point or additional diversion points to a water right if certain conditions are met. The statute reads:

46-5-13.1. Change of location of diversion point. The location of a point of diversion may be changed or additional points of diversion may be approved if the new or additional point of diversion is from the same source of water, no additional water is appropriated, and, if the water use is for irrigation, no new land is to be irrigated. The change in location of diversion points may be allowed without application or publication pursuant to § 46-2A-4, if the chief engineer is contacted and makes a finding that the change does not increase the potential for interference with existing diversions.

If there is to be no increase in the permitted diversion rate, the city may request Well No. 6 be an additional diversion point to Water Rights Nos. 735-2 (TVA) and 306-2 (BN). In doing so the request will need to state the water source will continue to be the Madison aquifer and that no additional water is to be appropriated. Water Rights Nos. 735-2 and 306-2, combined, appropriate 0.97 cfs (435 gpm). Given that the treatment plant capacity is 0.56 cfs (250 gpm) it certainly appears the city will remain within its existing diversion authority.

If this is the direction the city wants to go, I believe you can request the current application be amended to be a request for an additional diversion point to Water Rights Nos. 735-2 and 306-2 from the Madison aquifer without an increase to the current permitted amount. If the finding can be made that the additional diversion point does not increase the potential for interference with existing diversions, the established priority date will be retained.

One other water rights issue that needs to be addressed is that Water Right No. 735-2 (TVA well) is held in the name of Tennessee Valley Authority for industrial use. The city should file a notice of transfer of ownership to get the water right held in their name. Also, it would be prudent to file an application to amend Water Right No. 735-2 to change the use from industrial to municipal use. The cost to amend the water right is \$300. The city paid \$1,450 for the application for Well No. 6. If the city is agreeable DENR will apply \$300 of the previous fee to the amendment for the TVA well and refund \$1,150 to the city.

Please let me know if you have questions. We'll wait to hear back from you on the city's intentions prior to proceeding to process the pending application

Eric Gronlund
Water Rights Program, DENR
605 773-3352
Eric.gronlund@state.sd.us

Request for Additional Diversion Point

NAME: City of Edgemont c/o Jerry Dibble

ADDRESS: 412 2nd Ave, Edgemont, SD 57735

DATE: October 3, 2017

COUNTY: Fall River

TELEPHONE: 605-662-7422

BACKGROUND:

The City of Edgemont, SD currently has 3 Water Rights from the Madison Aquifer for their municipal drinking water system. Water Right No. 306-2 with a priority date of Dec. 14, 1945, is for 0.31 cfs from the "BN" well, located in the NE ¼ NE ¼ Sec. 1 T9S R2E and completed to a depth of 2,944 feet. Water Right No. 735-2 with a priority date of Dec. 26, 1961, is for 0.66 cfs from the "TVA" well, located in the NE ¼ NE ¼ Sec. 1 T9S R2E and completed to a depth of 3,060 feet. Water Right No. 761-2 with a priority date of April 9, 1962, is for 0.41 cfs from the "#4" city well, located in the NE ¼ SE ¼ Sec. 2 T9S R2E and completed to a depth of 3,458 feet. The city also uses "City Well No. 2" for their municipal drinking water system. This well is 3,183 feet deep, located in the SW ¼ NW ¼ Sec. 1 T9S R2E, and does not have a Water Right associated with it.

An application for 0.56 cfs (250 gpm) of water from the Madison aquifer from a new well, "City Well No. 6", was submitted to the South Dakota DENR Water Rights Program. This well is for the replacement of "City Well No. 2", which has no Water Right associated with it. After the completion of the new well, the wells for Water Rights 306-2 and 735-2 are going to be maintained for backup and emergency fire suppression needs. It was determined that the City did not need to submit an application for their new well as they met the requirements for an additional diversion point. The pump rate of the new well is 0.56 cfs, which is lower than the maximum diversion rate of 0.66 cfs for Water Right 735-2, allowing the requested change to be satisfied entirely using Water Right 735-2. Water Right 735-2 retains a maximum diversion rate of 0.66 cfs, and the combined usage between the new and existing wells at any time is to not exceed this rate.

The additional diversion point is located in the NW ¼ SW ¼ Sec. 1 T9S R2E, approximately 0.85 miles southwest of the diversion point authorized by Water Right 735-2. Information on the submitted application states that the expected well depth is going to be 3,450 feet. The Madison aquifer is confined in this area, with the potentiometric surface being located approximately 87 feet above ground surface, resulting in wells that flow at the ground surface.

AUTHORITY:

Pursuant to SDCL 46-5-13.1, the location of a diversion point may be changed or additional diversion points may be licensed provided the following conditions are met and the potential for interference with other existing diversions is not increased:

- **Developed water source same as permitted source**

The water source authorized by Water Right No. 735-2 is the Madison aquifer. The "TVA" well is completed to a depth of 3,060 feet. The proposed "City Well No. 6" is expected to be completed to a depth of approximately 3,450 feet. Both of these wells are within the Madison aquifer.

- **No additional water appropriated**

No additional appropriation of water is requested. This request is to add an additional diversion point. Water Right No. 735-2 appropriates 0.66 cfs (296 gpm) for the municipal water supply.

Review of Existing Diversions

The well completion report and water rights databases were reviewed for the nearest domestic wells and water rights/permits on file. The nearest domestic/stock well on file and completed into this aquifer is approximately 4.4 miles south of the new diversion location. The nearest water right/permit completed into this aquifer is located approximately 0.6 miles southwest of the new diversion location, and is Water Right No. 2298-2 for the City of Edgemont for recreational purposes. The nearest water right/permit in the Madison aquifer, besides the City of Edgemont, is located approximately two miles north-northwest of the existing and proposed diversion locations. Based upon the small change in distance from users besides the City of Edgemont in the Madison aquifer, interference is not expected to be a concern.

Observation Well Data

The Water Rights Program has 26 observation wells completed into the Madison aquifer. The nearest observation well completed into this aquifer (FR-92A) is located approximately 11 miles northeast of the well sites. This well was installed in 1992 and has a water level record going back to 1992. The record shows that the static water level has fluctuated from 518.6 to 540.7 feet below the top of the casing. Historic water levels in FR-92A show that the aquifer is predominately controlled by climatic conditions.

CONCLUSION

- The addition of a diversion point does not propose to appropriate additional water.
- The water source continues to be the Madison aquifer.
- Unlawful impairment of existing water rights/permits and domestic wells is not expected to occur.

RECOMMENDED ACTION

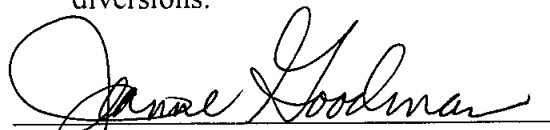
Based on the above criteria, it is recommended that the additional diversion point under Water Right No. 735-2 should be approved.



John Farmer
Water Rights Program

The Chief Engineer makes a finding pursuant SDCL 46-5-13.1 and ARSD 74:02:01:14.01 that:

The additional diversion point does not increase the potential for adverse effects to existing diversions.



Jeanne Goodman, Chief Engineer
Water Rights Program

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date July 10, 2017

RECEIVED OF City of Edgemont, 422 2nd Ave, Edgemont SD 57735

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	1450 2	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. _____	200	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	1450 00

No. 08291

By

Jeanne Goodman
Chief Engineer
ym

October 10, 2017

PAYMENT REQUEST FORM

PAYEE: City of Edgemont
% Jerry Dibble, Mayor
412 2nd Ave
Edgemont, SD 57735

FROM: DENR Water Rights Program
523 E. Capitol Ave
Pierre, SD 57501-3181

DESCRIPTION OF SERVICE, PRODUCE OR TRANSFER

Refund-Water Permit Application Fee was not required.

AMOUNT: \$1450.00

FUNDING SOURCE:

GENERAL: X

FEDERAL:

OTHER:

COMMENTS:

AUTHORIZATION:



I declare and affirm under the penalties of perjury that this claim is in all things, true and correct.
I further agree to comply with the provisions of the Civil Rights Act of 1964 and regulations issued thereunder relating to nondiscrimination in federal assisted programs.



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

denr.sd.gov

October 10, 2017

Jerry Dibble, Mayor
City of Edgemont
412 2nd Ave
Edgemont, SD 57735

Dear Mayor Dibble:

Edgemont submitted an application for the appropriation of water from the Madison aquifer at a diversion rate of 0.56 cubic feet per second for Edgemont City Well No. 6 to the South Dakota DENR Water Rights Program. It was determined the application was in reality a request for an additional diversion point for Water Right No. 735-2. This Water Right currently appropriates 0.66 cubic feet of water per second (cfs) from the "TVA" well completed in the Madison aquifer in the NE ¼ NE ¼ Sec. 1 T9S R2E. Edgemont City Well No. 6 will be located in NW ¼ SW ¼ Sec. 1 T9S R2E, approximately 0.85 miles to the southwest of the "TVA" well.

Upon review of the request and pursuant to SDCL 46-5-13.1, the addition of a diversion point for Water Right No. 735-2 is authorized without application or publication of a notice of hearing pursuant to SDCL 46-2A-4. No increase in the authorized diversion rate of 0.66 cfs has been requested or approved. Any well that is abandoned must be plugged in accordance with South Dakota well construction standards.

The application filing fee of \$1,450.00 submitted with the application will be refunded to the city.

If you have any questions, please contact John Farmer at (605) 773-3352.

Sincerely,


Jeanne Goodman, Chief Engineer
Water Rights Program

cc: Dustin Dale, AE2S, 1560 Concourse Drive, Rapid City, SD 57703