

Considered: _____

WATER PERMIT NO. 5317-3 43

MAP No. same 285-6350

Name of Applicant City of Bowdle c/o Robert Drake, Mayor
Post Office Address P.O. Box 553, Bowdle, SD 57428
Amount of Water Claimed 0.52 cfs Total Acres —
Source of Water Supply groundwater - 5 wells (existing)
Water to be used for municipal purposes County Edmunds
Bowdle

PROOF OF PUBLICATION: Received _____ Not Received _____

APPLICATION: Approved _____ Subject to _____

F.F. & C.L. Adopted _____ Not Approved _____ Deferred _____

PRIORITY _____ Date Received Mar 16, 1989 Fee \$275⁰⁰ Remarks See

704-3 & 770-3 for wells #1-#5

Corrected Application Received Apr 13²⁰, 1989 Period of Annual Use Jan 1 - Dec 31

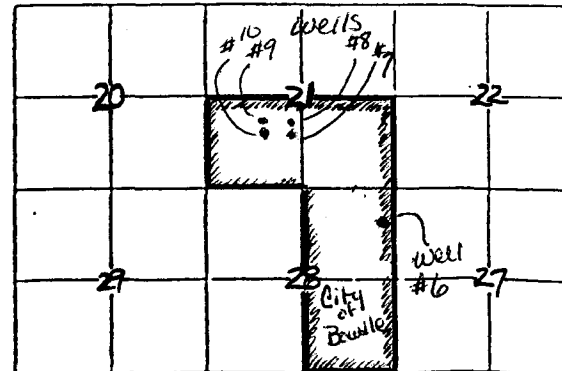
WATER QUALITY APPROVAL RECEIVED NA APPROVED/CONDITIONAL (Circle one)

WI-1 Description same as Application YES _____ NO _____ REMARKS _____

Diversion Point # SE 1/4 NE 1/4 Sect. 28 - T123N - R13W

#7, 8, 9, 10: NE 1/4 SW 1/4 Sect 21 - "

Land to be Irrigated NA



Well Log: Driller Dakota Boring
Independent Well Drilling Licensed YES X NO _____

Depth of Well 105', 37', 30', 36', 31' REMARKS _____

Drilled in 1966, 1977, 1981

Type of Map aerial photo PREPARED BY KJ Kehrweid Reviewed and the Number

assigned on April 20, 1989 By Auson A. Brown



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

No. 5317-3 Hydrologic Unit 10130106
 Map No. same Basin Missouri R.
 Newspaper Bowdle Pioneer PO Box 368 57428
 (thurs)

Mail to: Water Rights Div.
 DWNR, Foss Bldg.
 Pierre, SD 57501
 (605) 773-3352

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

Check use of water: Industrial ☐ Commercial ☒ Municipal ☐ Other Common Distribution System ☐
 Rural Water System ☐ Suburban Housing ☐ Geothermal Heat ☐ Institutional ☐ Recreational ☐
 Domestic ☐ (above 18gpm) Other ☐

Type of Application: Check one or more of the following

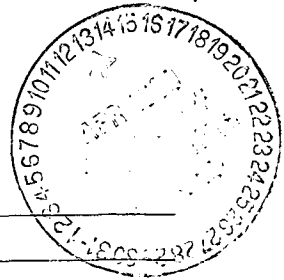
New ☒ Vested Right ☐ Future Use ☐ Change Use ☐

☐ Amend Permit No. _____ with old priority date retained

Change diversion point(s) ☐ Add diversion point(s) ☐ Other ☐

☐ Application to: Change diversion point(s) ☐ Add diversion point(s) ☐ on Permit No. _____

☐ Construction to use water reserved by Future Use Permit No. _____



1. Name of Applicant City of Bowdle % Robert Drake, Mayor Phone No. 285-6350

Post Office Address P.O. Box 553 Bowdle State SD 57428
(Street, RR or Box) (City) Zip Code

2. Amount of water claimed (c.f.s.) 0.52 cfs - 235 gpm

3. Source of water supply groundwater

4. Location of point of diversion SE¹/₄ NE¹/₄ Section 28-123-73
Well #6 - SW¹/₄ NW¹/₄ Section 27; Wells #7, #8, #9, and
#10 - NE1/4 SW1/4 Section 21; all in T123N - R73W

County Edmunds

5. Counties where water will be used Edmunds

6. Annual period during which water is to be used January 1 - December 31

7. Give a brief description of proposed 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)

City of Bowdle has Water Right Nos. 704-3 and 770-3 authorizing the diversion of water from five wells. Two of these wells have been abandoned (Wells #2 and #3). Five additional wells have been drilled for municipal use. This application is for these five additional wells (Well Nos. #6 through #10).

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

STATE OF SOUTH DAKOTA
 County of Edmunds ss

I, City of Bowdle, % Robert Drake, Mayor the applicant, certify that I have read this application, have examined the attached map and that the matters stated are true and that I intend, and am able to complete the necessary construction.

Signed Robert Drake
Carla Knecht
 Notary Public

Subscribed and sworn to before me this 9 day of March 19 89

Carla Knecht
 Notary Public SD
 Commission Expires 8-22-96

SOUTH DAKOTA
WATER PERMIT No. 5317-3

Date of first receipt of application March 16, 1989.

Date returned to applicant for corrections, amendments or changes March 22, 1989.

Date of receipt of corrected application April 20, 1989.

The Water Management Board approved Water Permit Application No. 5317-3 on July 26, 1989 for the City of Bowdle, P.O. Box 553, Bowdle, South Dakota 57428 authorizing the construction of the water use system and the placing of water to beneficial use subject to the following limitations, conditions and qualifications:

1. Water Permit No. 5317-3 appropriates 0.52 cubic feet of water per second from five existing wells. Well No. 6, 105 feet deep, is located in the SE1/4 NE1/4 Section 28, T123N, R73W. Well Nos. 7, 8, 9 and 10 (Bowdle - Edmunds Aquifer), all approximately 30 feet deep, are located in the NE1/4 SW1/4 Section 21, T123N, R73W.
2. The water appropriated shall be used for the purpose of supplying the City of Bowdle and may not exceed the amount of water needed for beneficial use for municipal purposes.
3. The water is to be used during the following described annual period: January 1 - December 31.
4. The date from which applicant may claim right is March 16, 1989.
5. One-fifth of the construction is completed.
6. All construction is completed.
7. Water is put to beneficial use.
8. Water rights obtained in compliance with the laws of the State of South Dakota may not be unlawfully impaired by this appropriation.

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 or in adequate wells having prior water rights.

WATER MANAGEMENT BOARD

By: _____

John Hatcher
Chief Engineer, Water Rights Division
Department of Water and Natural Resources

SEP 12 1989

(date)

6/60

Well Owner: City, Bonaville
Name _____
Address _____

Well Location:

Mark location with an "X"

1 mile

County Edmunds
 & 1/4 Sec. 21 Twp. 73 Rg. 123

Proposed Use:

☐ Domestic	☒ Municipal	☒ Test Holes
☐ Irrigation	☐ Industrial	☐ Stock

Method of Drilling: ☒ Forward Rotary ☐ Bored ☐ Jetted
☐ Reverse Rotary ☐ Cable ☐ Other

Well Construction:

Diameter of Hole 4 3/4

Depth 27

Casing ☐ Steel ☒ Concrete

☐ Plastic ☐ Other

If other, specify 8" x 26"

Was casing end left open _____
Was a well screen installed _____
Describe Well Screen _____
Diameter _____ Material _____
Slot size _____
Was well gravel packed _____
Was well grouted _____
Was water sample taken _____

Remarks :

Water Level Information:
 Static water level _____ below land surface
 If flowing: closed in pressure _____ PSI
 rate of flow _____ GPM
 Controlled by:
 ☒ Valve ☐ Reducers ☐ Other
 If other; specify _____

Well Test Date: _____

☐ Pumped _____

☐ Bailed Describe: _____

☐ Other _____

Pumping Level Below Land Surface

_____ ft. After	_____ Hrs. pumped	_____ GPM
_____ " "	_____ " "	_____ "
_____ " "	_____ " "	_____ "

Well Log:

[illegible]

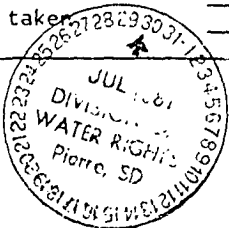
(Use Back if Necessary)

Date Completed: May 6 / 1951

Driller: Don't Boring 234
Driller's or Firm's Name License NO.

Lebanon St
Address

Signed By George H. Warner Date 4/9/81





Supplemental Information

(type or print in ink)

1966

Supplemental Information - Proposed construction - Well #6 (Independent Well Drilling)

Drill Hole Diameter 12 Depth 106

- b) Casing Type Stainless steel Diameter 12 Thickness $\frac{1}{2}$ inch
c) Screen Type Stainless steel Diameter 12 Thickness $\frac{1}{2}$ inch
d) Gravel Pack Thickness Unknown Length of Gravel Pack Unknown
e) Depth to Top of Water Bearing Material Unknown
f) Depth to Water (ground surface to water level) 60 feet
g) Distance to nearest existing domestic well:

On applicants property _____ On property owned by others 500 feet

2. Dugout Information Estimates

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

3. Water Storage Dams

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

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

b) Freeboard _____

c) Crest Width _____

Crest Length _____

d) Height _____

e) Primary Outlet Capacity _____
If Pipe, diameter _____

f) Secondary Spillway Capacity _____
Spillway width _____

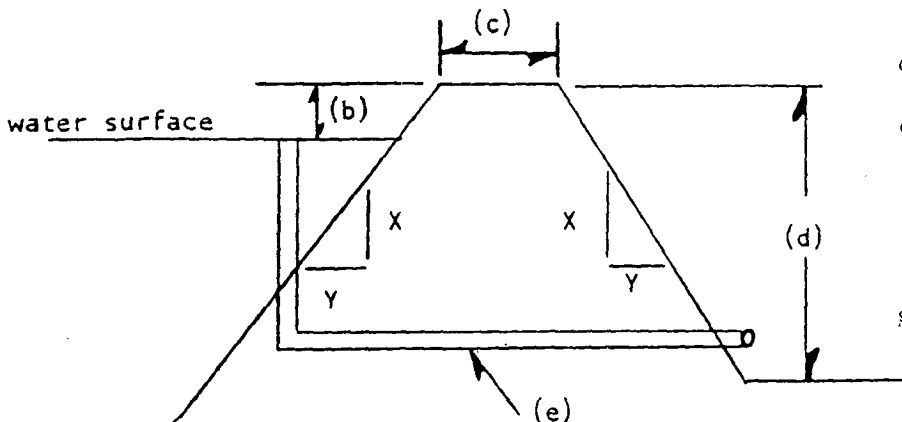
g) X & Y Slope
Upstream _____

Downstream _____

Surface Area of Impoundment _____

Storage _____ acre feet

Drainage area above dam _____



Robert D. He Mayor
Signature of Applicant
City of Bowdle

Independent Drilling Co.

Aberdeen, South Dakota

WELL REPORT



Completed well for CITY OF BOWDIE June 14, 1966
P. O. Bowdhe Depth 105' ft. { Pumps 50 Gallons per minute

Pumped _____ gals. per min. for _____ hrs. { Clear Sandy Muddy Cloudy Pumped _____ gals. per min. for _____ hrs. { Clear Sandy Muddy Cloudy
Water stands 75' feet from top. Is the water hard or soft? _____ Well is located on

NE quarter Sec. _____ T 123 R 73 Moved to this place on _____ 19

Started work on well _____ 19 Well completed on _____ 19

Left this place on _____ 19

94 ft. 12" pipe extending to a total depth of 94 feet

14 ft. 12" nominal screen pipe extending to a total depth of 105' feet

_____ ft. _____ pipe extending to a total depth of _____ feet

_____ ft. _____ pipe extending to a total depth of _____ feet

_____ ft. _____ pipe extending to a total depth of _____ feet

Cap Rock _____ ft. Rock at from _____ feet to _____ feet.

Rock from _____ feet to _____ Rock from _____ feet to _____

Tubular sand from _____ to _____ feet _____ to _____ feet

screen 14 ft. at bottom. Also _____ from _____ to _____ and from _____ to _____

For whom was the last well completed by this machine? _____

What was the date of its completion? _____ Explain loss of time, if any, between completion of last well and commencement of this one _____

What extra charges are there against this well for pipe, fittings and supplies (please itemize)? _____

Stainless screen head packer AT THE TOP

Screen slot 10-20-30

12" steel cemented in place

Pump setting 100' WATER Drawdown 95'

At whose request and by whose authority was this furnished? _____

Please state what casing and gasoline you have on hand after completion of this well _____

How much gasoline did you have on hand at commencement of this well? _____

How much gasoline have you received while on this well (give date and number of gallons)? _____

Date _____ Amount _____ gals. Date _____ Amount _____ gals.

Date _____ Amount _____ gals. Date _____ Amount _____ gals.

How much gasoline had you on hand at the completion of this well? _____ How much

gasoline did you use on this job? _____ How many days did engine

run on this job? _____

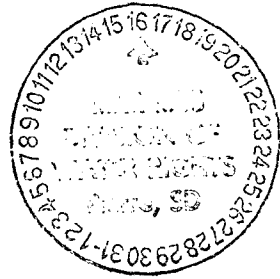
Foreman Rig. No. _____

Western Ptg. Co., Aberdeen, S. D.



Supplemental Information

(type or print in ink)



1. Well Information - Proposed construction - Well #8

- a) Drill Hole Diameter 26 Depth 30
- b) Casing Type P.V.C. Diameter 16 Thickness $\frac{1}{2}$ inch
- c) Screen Type P.V.C. Diameter 16 Thickness
- d) Gravel Pack Thickness Length of Gravel Pack
- e) Depth to Top of Water Bearing Material
- f) Depth to Water (ground surface to water level) 16
- g) Distance to nearest existing domestic well:
On applicants property 250 feet On property owned by others

2. Dugout Information Estimates

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

3. Water Storage Dams

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

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

b) Freeboard

c) Crest Width

Crest Length

d) Height

e) Primary Outlet Capacity
If Pipe, diameter

f) Secondary Spillway Capacity
Spillway width

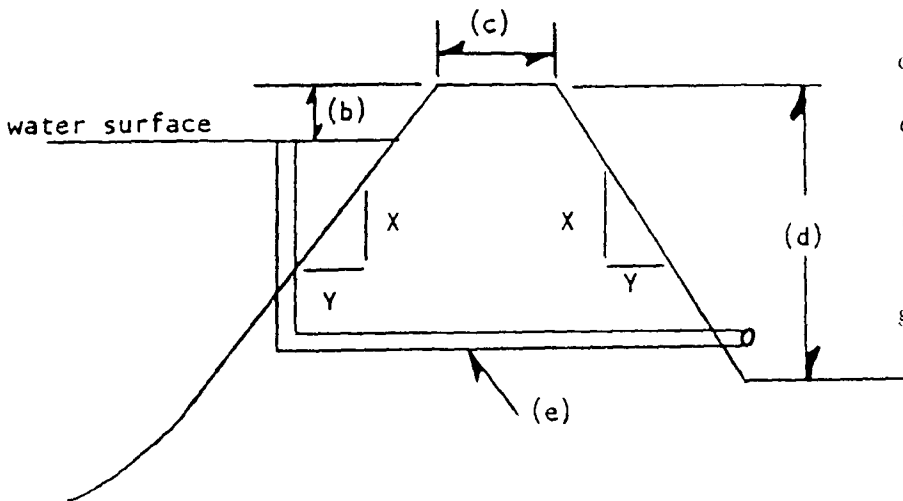
g) X & Y Slope
Upstream

Downstream

Surface Area of Impoundment

Storage acre feet

Drainage area above dam



Robert Drake, Mayor
Signature of Applicant

Supplemental Information

(type or print in ink)



1. Well Information - Proposed construction - Well #9

- a) Drill Hole Diameter 26 Depth 36
- b) Casing Type P.V.C. Diameter Thickness
- c) Screen Type P.V.C. Diameter 16 Thickness
- d) Gravel Pack Thickness Length of Gravel Pack
- e) Depth to Top of Water Bearing Material
- f) Depth to Water (ground surface to water level)
- g) Distance to nearest existing domestic well:
- On applicants property 100 feet On property owned by others

2. Dugout Information Estimates

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

3. Water Storage Dams

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

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

b) Freeboard

c) Crest Width

Crest Length

d) Height

e) Primary Outlet Capacity
If Pipe, diameter

f) Secondary Spillway Capacity
Spillway width

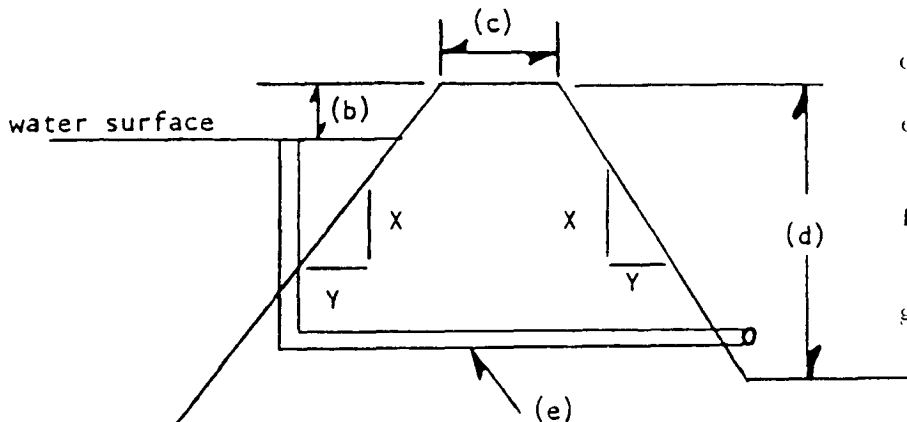
g) X & Y Slope
Upstream

Downstream

Surface Area of Impoundment

Storage acre feet

Drainage area above dam



Robert Drake, Mayor
Signature of Applicant

City of Bowdle

Supplemental Information

(type or print in ink)



1. Well Information - Proposed construction - Well #10

- a) Drill Hole Diameter 26 Depth 31
- b) Casing Type PVC Diameter 16 Thickness _____
- c) Screen Type PVC Diameter 16 Thickness _____
- d) Gravel Pack Thickness _____ Length of Gravel Pack _____
- e) Depth to Top of Water Bearing Material _____
- f) Depth to Water (ground surface to water level) _____
- g) Distance to nearest existing domestic well:
- On applicants property 100 feet On property owned by others _____

2. Dugout Information Estimates

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

3. Water Storage Dams

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

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

b) Freeboard _____

c) Crest Width _____

Crest Length _____

d) Height _____

e) Primary Outlet Capacity _____
If Pipe, diameter _____

f) Secondary Spillway Capacity _____
Spillway width _____

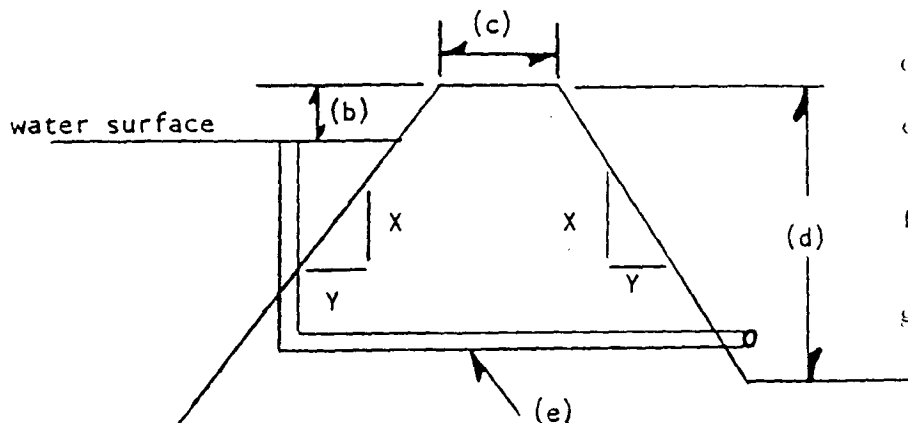
g) X & Y Slope
Upstream _____

Downstream _____

Surface Area of Impoundment _____

Storage _____ acre feet

Drainage area above dam _____



Robert Oak Mayo
Signature of Applicant

City of Bowdle

WELL DRILLERS REPORT
Division of Water Rights
Department of Water & Natural Resources

Well Owner: City Boulder
Name Boulder
Address Boulder

W: 11 Location:

Mark location with an "X"

North

W

E

Proposed Use:

☐ Domestic	☒ Municipal	☐ Test Holes
☐ Irrigation	☒ Industrial	☐ Stock

Method of Drilling: ☐ Forward Rotary ☒ Bored ☐ Jetted
☐ Reverse Rotary ☐ Cable ☐ Other

Diameter of Hole 26
Depth 31
Casing ☐ Steel ☒ Concrete
☒ Plastic ☐ Other
If other, specify _____

Was casing end left open no
Was a well screen installed yes
Describe Well Screen
Diameter 1 1/2" Material Plastic
Slot size 100
Was well gravel packed yes
Was well grouted no
Was water sample taken yes

☐ Pumped _____
☐ Bailed Describe: _____
☐ Other _____

Well Log:

[illegible]

(Use Back if Necessary)

Date Completed: Sept-14-81

Driller: Palante Boring Co 239
Driller's or Firm's Name License NO.

Address

Signed By

Date _____

Remarks:

NOTICE OF WELL CONSTRUCTION

(1) WELL CONSTRUCTION

Bondell Outshot 6-A

Location of well: 2 1/4 1/4 Section 21 Township 123-N Range 73-W

Well owner City Bowdle
(Name)

Bowdle & D.

Date well drilling completed 10-17-77

Purpose of well _____ (domestic, irrigation, municipal, industrial, other)

WELL LOG

No #2 well
west 1/4 1/2

[illegible]

Test Pumped at 576 P.M.

Dakota Boring Co.
Name of Drilling Contractor

Name of Drilling Contractor

Drilling Contractor
Daniel E. Cook

(2) PUMP INSTALLATION

Company name and size of pump _____ HP _____

Type of pump _____ Capacity of installed pump _____ G.P.M.

Depth of pump placement _____ ft., Date of pump installation _____

(3) WATER SURFACE MEASURING TUBE

On some wells an air-tight water surface measuring tube is required: See Section 46.408 of Chapter 46.4, MINIMUM WELL CONSTRUCTION STANDARDS.

Show exact vertical length of water surface measuring tube, when installed _____ ft, tube diameter _____ tube material _____

Name of Pump Installation Contractor





NOTICE OF WELL CONSTRUCTION

(1) WELL CONSTRUCTION

Location of well: 1/4 1/4 Section 21 Township 123 Range 73
Well owner City Bowdle (Name) (Address)
Well drilling completed _____ Purpose of well _____ (domestic, irrigation, municipal, industrial, other)

WELL LOG

Layers, top to top in feet	Description of layer	Depth to top of water producing aquifer	ft.
<u>0-1</u>	<u>Top Soil</u>	Depth to static water level	<u>16</u> ft.
<u>1-16</u>	<u>Dry Gravel</u>	Name of producing aquifer (if known)	
<u>16-26</u>	<u>Water Gravel</u>	Total depth of drill hole	<u>30</u> ft.
<u>26-30</u>	<u>Blue Clay</u>	Depth to bottom of casing	<u>30</u> ft.
		Casing information: In the space below show kind, size, weight, length, per diameter, etc., for production casing and surface casing, if used.	
		<u>16" P.V.C.</u>	
		Screen information: In the space below show length of screen below bottom of casing, diameter and kind of screen or casing perforations.	
		<u>16" slotted P.V.C.</u>	
		If a flowing well, flow of completed well _____ G.P.M.	

Attach sheet if more space is needed

Dakota Boring Co.
Name of Drilling Contractor
Donnell Cook

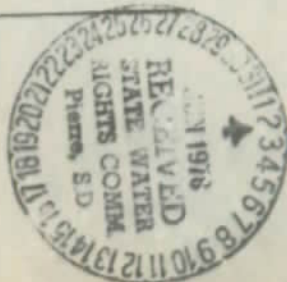
(2) PUMP INSTALLATION

Company name and size of pump _____ HP
Type of pump _____ Capacity of installed pump _____ G.P.M.
Depth of pump placement _____ ft., Date of pump installation _____

(3) WATER SURFACE MEASURING TUBE

On some wells an air-tight water surface measuring tube is required: See Section 46.408 of Chapter 46.4, MINIMUM WELL CONSTRUCTION STANDARDS.

Show exact vertical length of water surface measuring tube, when installed _____ ft., tube diameter _____, tube material _____



Name of Pump Installation Contractor

6/60

Water Level Information:
 Static water level _____ below land surface
 If flowing: closed in pressure _____ PSI
 rate of flow _____ GPM
 Controlled by:
☒ Valve ☒ Reducers ☒ Other
 If other; specify _____

1 mile

Well Test Data:

☒ Pumped _____ 75 Gpm
☐ Bailed Describe: _____
☐ Other _____

Pumping Level Below Land Surface

Ft. After		Hrs. pumped		GPM
_____	" "	_____	" "	_____
_____	" "	_____	" "	_____

☐ Domestic ☒ Municipal ☐ Test
☐ Irrigation ☐ Industrial ☐ Holes
 ☐ Stock

☐ Forward Rotary ☒ Bored ☐ Jetted
☐ Reverse Rotary ☐ Cable ☐ Other

Diameter of Hole 24
Depth 36
Casing ☐ Steel ☐ Concrete
☒ Plastic ☐ Other
If other, specify _____

Was casing end left open no
Was a well screen installed yes
Describe Well Screen Plastic
Diameter 16" Material Plastic
Slot size 100
Was well gravel packed yes
Was well grouted yes
Was water sample taken yes

[illegible]

(Use Back if Necessary)

Date Completed: Sept 1-31

Driller: Lakota Borings 234
Driller's or Firm's Name License NO.

Lebanon 5d
Address

Signed By Darrell Baker Date Sept 18

Remarks:

PLEASE COMPLETE
ENTIRE FORM

WELL DRILLERS REPORT
Division of Water Rights
Department of Water & Natural Resources

6/60

Well Owner:

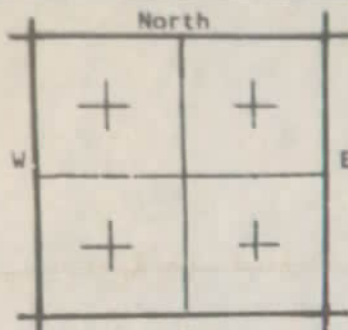
Name

City Boulder

Address

Boulder

Well Location:



Mark location
with an "X"

County

Lot 12 Hubers 1st

Ad. 1.0N

Sec. 21

Twp. 12S

Rg. 7E

Proposed Use:

☐ Domestic



Municipal



Test

☐ Irrigation



Industrial



Stock

Method of Drilling:

☐ Forward Rotary



Bored



Jetted

☐ Reverse Rotary



Cable



Other

Well Construction:

Diameter of Hole

26

Depth

31

Casing



Steel



Concrete



Plastic



Other

If other, specify

Was casing end left open

no

Was a well screen installed

yes

Describe Well Screen

Diameter

16"

Material

Plastic

Slot size

1/8"

Was well gravel packed

yes

Was well grouted

no

Was water sample taken

yes

Remarks:



Water Level Information

Static water level 12 below land surface

If flowing: closed in pressure PSI

rate of flow GPM

Controlled by:



Valve



Reducers



Other

If other; specify

Well Test Data:

☐ Pumped

☐ Bailed

Describe:

☐ Other

Pumping Level Below Land Surface

ft. After

Hrs. pumped

GPM

" "

" "

" "

" "

" "

" "

Well Log:

Depth

Formation

From

To

Top Soil

0

3

dry sand

3

13

water gravel

14

26

B. clay

26

31

(Use Back if Necessary)

Date Completed:

Sept - 4 - 81

Driller:

Dakota Drilling

Driller's or Firm's Name

234

License NO

LeRoux 58

Address

Danell Eike

Signed By

Sept 8 81

Date

Water Rights Division
605 773-3352

May 1, 1983

704-3
770-3

City of Bowdle
Bowdle SD 57428

Dear Sir:

In checking our records it has been discovered the City of Bowdle's water rights do not cover all of the wells used for municipal purposes.

Water Rights No. 704-3 for wells #1, #2 & #3 located in Block 1, Schmidtgal First Addition, Section 28, T123N, R73W.

Water Right No. 770-3 for wells #4 and #5 located in SW $\frac{1}{4}$ Section 21, T123N, R73W.

Hospital

Enclosed are our forms and instructions to make application. If you have any questions feel free to contact this office.

Sincerely,

BETTY WESTLUND
Water Rights Specialist

BW:ks

enclosures

#1-102'

#4-95'

#6-105'

RECEIPT

Division of Water Rights

South Dakota Department of Water and Natural Resources

411682

Pierre, March 16, 19 89

RECEIVED OF City of Bowdle, P.O. Box 553, Bowdle, SD 57428

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

Fee for Application for Permit No. <u>5317-3</u> to Appropriate Water, to construct works and to put water to beneficial use _____	275	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. _____		
Fee for Filing Transfer Form _____		
Fee for Filing Extension Request _____		
Fee for Certified Copy of _____		
Fee for Print Copy of Map _____		
Fee for Certifying _____		
Fee for _____		
(Any Other Work Provided by Law)	Total	275 00

By

Chief Engineer

John Hatch Kura

SOUTH Dakota Department of
Water & Natural Resources

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

February 13, 1989

Robert Drake, Mayor
City of Bowdle
P.O. Box 553
Bowdle, SD 57428

Dear Mr. Drake:

This past summer I spoke to your Utility Manager, Frank Gabriel, concerning the City of Bowdle's Water Right Nos. 704-3 and 770-3. Mr. Gabriel indicated the City had drilled five additional wells and had abandoned two of the wells authorized by the City's current water rights. A permit application will be necessary for these five additional wells.

I have enclosed the following:

1. Instructions for applying for a water right.
2. Two partially completed application forms.
3. Five copies of Form 2A.
4. A map showing the well locations.

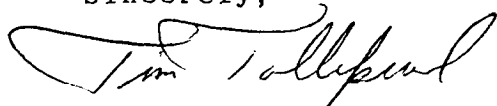
Please review the application for any errors. Both application forms need to be signed and notarized. Each copy of Form 2A need to be completed for each well. This form needs to be signed but not notarized. Please mark the location of the two abandoned wells (Well Nos. 2 and 3) on the enclosed map.

For the amount of water claimed (Item #2 on the application forms) I added the pumping rate for well nos. 6 through 10. These rates were taken from a document entitled 'Bowdle Well Inventory'.

Please return the completed application forms, five copies of Form 2A, the map, well logs for each well as specified in Item #3 of the instruction sheet, and the required \$275 application fee to the Division of Water Rights, Joe Foss Building, Pierre, SD 57501. The procedure for calculating the required fee can be found on item #4 on the instruction sheet.

If we may answer any questions please contact this office. Ron Duvall will be able to supply you with any information on the water permit application procedure.

Sincerely,

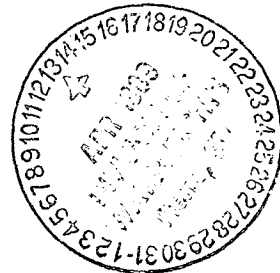


Tim Tollefsrud
Natural Resources Engineer
(605)773-3352
enclosures



SOUTH DAKOTA Department of
Water & Natural Resources

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



March 22, 1989

Robert Drake, Mayor
City of Bowdle
P.O. Box 553
Bowdle, SD 57428

Dear Mr. Drake:

This is in response to the water permit application received from you on March 16, 1989.

The application is incomplete for the following reason(s):

- (1) The location of well #6 needs to be indicated on the enclosed city map that was submitted with your application.
- (2) The location of well #6, as indicated on the enclosed topographic map that was also submitted, is the SW1/4 NW1/4 Section 27, T123N, R73W. The location of this well as described on the enclosed application forms is the SE1/4 NE1/4 Section 28, T123N R73W. Please specify the correct location of this well and make any necessary changes on the application forms and/or the map.
- (3) Both of the enclosed maps need to be signed by a South Dakota Registered Engineer, a South Dakota Licensed Land Surveyor, or by a government employee who prepares maps as part of his/her regular duties (ASCS or SCS).

The Water Management Board cannot consider a water permit application until it is complete. Please indicate the location of well #6 on the enclosed city map, specify the correct location of well #6 on both the enclosed maps and the enclosed application forms. Return the enclosed maps with the proper signatures and application forms to begin processing of your water permit application.

Feel free to contact us if you have any questions.

Sincerely,

Susan A. Bowar

Susan A. Bowar
Natural Resources Engineer
Water Rights Division
(605) 773-3352

enclosure



Conversation or File Documentation

NAME OF PERSON OR FILE: City of BouldleADDRESS: P.O. Box 553 Bouldle STS 57428 COUNTY EdmundsDATE: April 18, 1989 TELEPHONE 285-6350RE: Well log for well #6

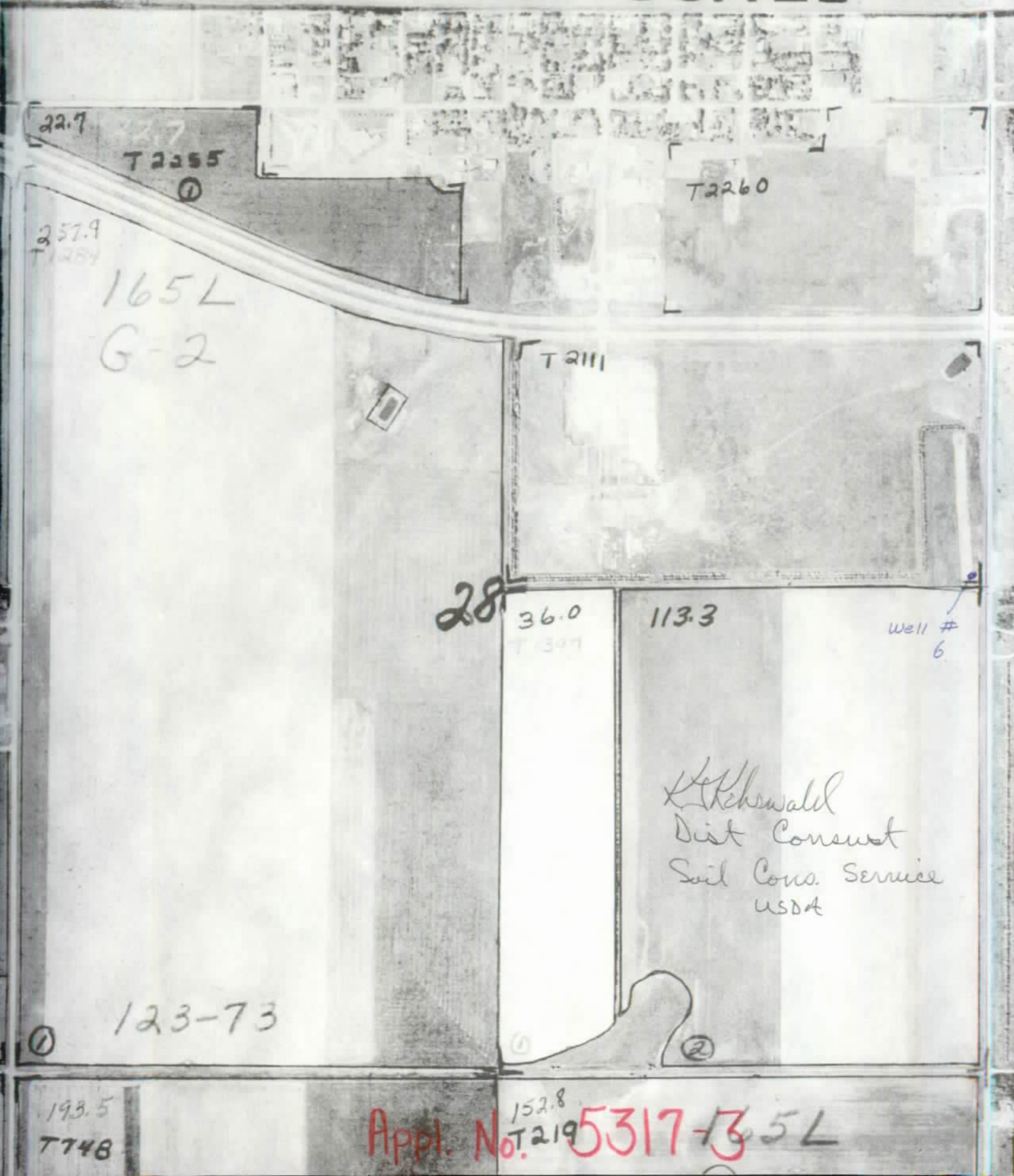
COMMENTS:

I called Elmer Hanson of Corporate Well Drilling (225-9956) to see if it would be possible to get a copy of the log for well #6 (SE $\frac{1}{4}$ NE $\frac{1}{4}$ Sect 28-T123N-R73W) for the City of Bouldle. It was drilled in 1966 by Independent Well Drilling. He thought he should be able to find it and will send a copy. I asked him to call me if he could not locate it.

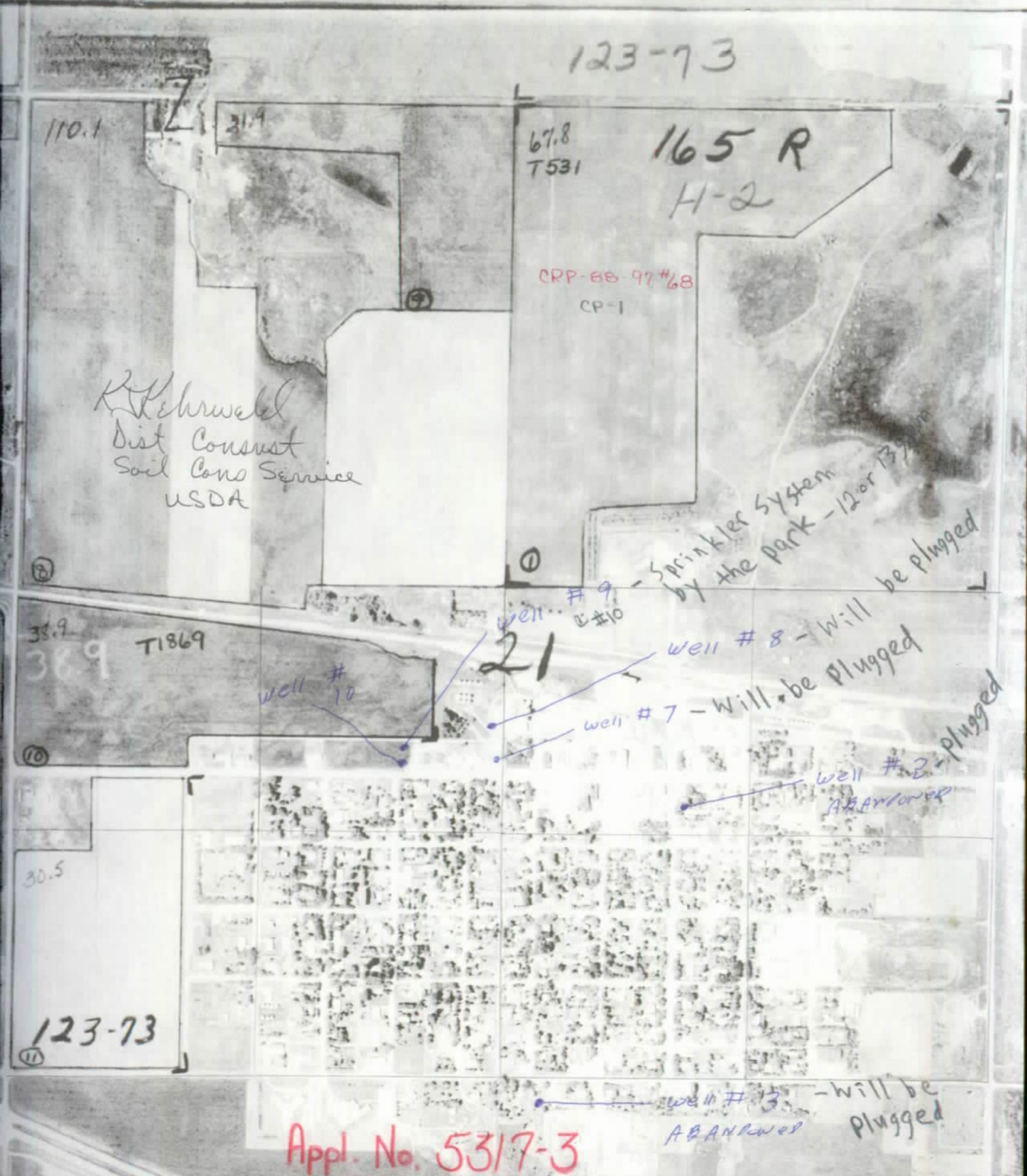
File in Permit or other file as necessary. Use to document conversations and what the other party was told; why action or decision was made.

NAME: Susan Bowar

NOT TO SCALE



NOT TO SCALE



Report on Application No. 5317-3
City of Bowdle
June 8, 1989

Application No. 5317-3 was submitted for the City of Bowdle, Edmunds County to appropriate 0.52 cubic feet of water per second (cfs) from 5 existing wells not under permit. These wells are in addition to others that are permitted under Water Right Nos. 704-3 and 770-3. The well designated as No. 6 on the application is 105 feet deep and located in the SE1/4 NE1/4 of Section 28, T123N, R73W. Wells No. 7, 8, 9, & 10, which are 30 to 40 feet deep, are located in the NE1/4 SW1/4 of Section 21, T123N, R73W. Water is to be used for municipal purposes by the City of Bowdle.

Background

The City of Bowdle has Water Right Nos. 704-3 and 770-3 which were granted back in the 1960's. The combined diversion rate licensed for the two permits and 5 wells was 0.41 cfs. An investigation by the Water Rights Division revealed that 5 additional wells have been drilled that were not under permit. Also, 2 of the original wells had been abandoned. The 5 additional wells have a capacity of 0.52 cfs.

Aquifer (B-E)

The 4 shallow wells (30 to 40 feet deep) have been drilled into the Bowdle-Edmunds (B-E) Aquifer. This shallow aquifer is composed of glacial sand and gravel and is found primarily under water table conditions. It underlies 36,000 surface acres and has an estimated 108,000 acre-feet of recoverable water in Edmunds County (Hedges, 1982). Average recharge to the aquifer was estimated at 2.7 inches/year while average annual use was calculated at 0.21 inches/year (Hedges, 1983).

Two Water Rights Division observation wells, ED-75B and ED-75A are located in the aquifer approximately 1 and 3 miles respectively from the city wells. No long term trends are evident in the water levels. The levels fluctuate with seasonal variations (WRD Observation Well files, 1989).

Application Well No. 6 is over 100 feet deep and pumps 35 gallons per minute (gpm). The nature of the aquifer is unknown. City wells No. 1 and 4 are reported to be 90-102 feet deep and may also be in the same aquifer.

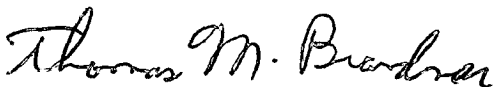
Existing Permits

Water Permit No. 5037-3 for the Gold Nugget Supper Club is located in the shallow aquifer approximately 1/2 mile from application wells No. 7-10. This permitted well, as well as those under Application No. 5317-3, have been in operation for a number of years and no problems with well interference have been reported (WRD Complaint Files, 1989). No other permits are located in the region. A number of domestic wells are located in the area, but no interference is expected with any adequately constructed wells (WRD driller's Logs, 1989).

The cluster of City wells (Nos. 7-10) are all located within a 500 foot diameter, which could possibly contribute to some interference between wells. The diversion rates from the individual wells are less than 100 gpm which would reduce the likelihood of interference.

Conclusions

1. Application No. 5317-3 is a request for a water appropriation of 0.52 cfs from 5 existing wells used for municipal purposes by the City of Bowdle. The requested water is already being utilized.
2. Four of the existing wells are drilled into the shallow Bowdle-Edmunds (B-E) Aquifer and the fifth well is in a deeper unnamed aquifer.
3. One permitted well is located in the shallow aquifer approximately 1/2 mile from the applicant's wells. It also has been in place for a number of years and the Water Rights Division has no record of any problems between the wells. No interference is expected.
4. Other domestic wells may also be located in the aquifer. The application can be approved with the well interference qualification.
5. Four of the application wells are located within 500 feet of each other, which could possibly cause well interference.



THOMAS M. BRANDNER
Natural Resources Engineer

Approved By:



JAMES A. GOODMAN
Hydrologist

Bibliography

Hedges, L.S., Burch, S.L., and others, 1982, Evaluation of Ground Water Resources Eastern South Dakota and Upper Big Sioux River, South Dakota and Iowa for US Army Corps of Engineers Planning Division by DWNR Geological Survey, Vermillion, SD 57069

Hedges, L.S., Allen, J., and Holly, D.E., 1983, Evaluation of Ground Water Resources Eastern South Dakota and Upper Big Sioux River South Dakota and Iowa, Task 7: Ground Water Recharge, for US Army Corps of Engineers Planning Division by DWNR Geological Survey, Vermillion, SD 57069

Water Rights Division, 1989, Complaint Files, DWNR, Joe Foss Bldg., Pierre, SD 57501

Water Rights Division, 1989, Driller's Logs, DWNR, Joe Foss Bldg., Pierre, SD 57501

Water Rights Division, 1989, Observation Well Files, DWNR, Joe Foss Bldg., Pierre, SD 57501

Water Rights Division, 1989, Permit Files, DWNR, Joe Foss Bldg., Pierre, SD 57501

RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 5317-3, City of Bowdle

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. 5317-3, City of Bowdle, c/o Robert Drake, Mayor, PO Box 553, Bowdle SD.

The Chief Engineer is recommending APPROVAL of Application No. 5317-3 because 1) there is reasonable probability that there is unappropriated water available for the applicant's proposed use, 2) the proposed diversion can be developed without unlawful impairment of existing rights, 3) the proposed use is a beneficial use and 4) 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.

See the attached report for additional information.

A handwritten signature in black ink, appearing to read "John Hatch", is written over the typed name.

JOHN HATCH, Chief Engineer
June 9, 1989

**SOUTH Dakota Department of
Water & Natural Resources**

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

June 15, 1989

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

Robert Drake, Mayor
City of Bowdle
PO Box 553
Bowdle, SD 57428

Dear Mr. Drake:

Water Permit Application No. 5317-3 for municipal use has been examined and found to comply with the South Dakota Water Laws and applicable rules. A notice of hearing has been sent to the Publisher of the Bowdle Pioneer printed at Bowdle SD. For your information, a copy of the notice is enclosed. Copies of the report and the Chief Engineer's recommendation will be sent to you at a later date. Please review the notice prior to publication and notify this office, if you have any corrections or questions.

Be sure to contact the above newspaper to authorize publication of your Notice of Intent to Appropriate Water and to arrange for payment. Early contact with the paper can eliminate delays. The publisher has been instructed to publish your notice once each week for two consecutive weeks with the last publication to occur twenty days before the board meeting. We must receive Proof of Publication before the application can be considered by the Water Management Board.

Sincerely,



Ron Duvall
Natural Resources Engineer
605 773-3352

enclosures



 **Department of
Water & Natural Resources**

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

June 15, 1989

Bowdle Pioneer
PO Box 368
Bowdle, SD 57428

Dear Sir:

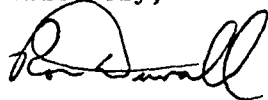
Enclosed is a Notice of Hearing on Application No. 5317-3 to be published twice. Please publish the first notice on or before June 22, 1989 with the second publication 7 days later.

The APPLICANT MUST VERIFY TO YOU THAT THE NOTICE IS TO BE PUBLISHED, before you make the first publication. Please BILL the APPLICANT for the cost of publication. The APPLICANT is the City of Bowdle, c/o Robert Drake, Mayor, PO Box 553, Bowdle, SD 57428.

A copy of BOTH publications must be SENT to the WATER RIGHTS DIVISION. IMMEDIATELY return the FIRST publication with the FIRST Transmittal form on the bottom of this page. The first copy is needed to check the publication for errors so any corrections can be made in the second publication. Publication errors can invalidate the public notice and cause the applicant costly delays.

Please be sure the SECOND publication is returned IMMEDIATELY with the enclosed Proof of Publication form. DO NOT WAIT until the end of the month or the billing cycle. The permit application cannot be considered by the Water Management Board until proof of publication has been received.

Sincerely,



Ron Duvall
Natural Resources Engineer
605 773-3352

enclosures

CUT HERE

FIRST TRANSMITTAL NOTICE

TO: Ron Duvall
Water Rights Division
Joe Foss Building
Pierre SD 57501-3181

No. _____

Date _____

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

Name _____

Newspaper _____



Instruction to Newspaper - Publish first Notice on or before June 22, 1989 with 2nd publication 7 days later. The applicant is responsible for payment.

NOTICE OF HEARING on Application No. 5317-3 to Appropriate Water

Notice is given that the City of Bowdle, c/o Robert Drake, Mayor, PO Box 553, Bowdle, SD 57428 has filed an application for a water permit to appropriate 0.52 cubic feet of water per second from five existing wells. Well No. 6, 105 feet deep, is located in the SE1/4 NE1/4 Section 28, T123N, R73W. Wells No. 7, 8, 9, 10 (Bowdle-Edmunds Aquifer) all approximately 30 feet deep are located in the NE1/4 SW1/4 Section 21, T123N, R73W. Water is to be used for municipal purposes by the City of Bowdle.

Pursuant to SDCL 46-2A-2, the Chief Engineer of the Water Rights Division recommends APPROVAL of Application No. 5317-3 because 1) unappropriated water is available, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water and 4) it is in the public interest. This application will be considered by the Water Management Board at the Hilton Inn, Deerfield Room, 445 Mt. Rushmore Road, Rapid City, SD, July 26, 1989 at 10:00 am. The Chief Engineer's recommendation is not final or binding upon the Board. The Board is authorized to 1) approve, 2) approve with qualifications, 3) defer or 4) deny this application based on the facts presented at the public hearing.

Any interested person that intends to participate in the hearing before the Board by presenting evidence or cross-examining witnesses according to SDCL 1-26, must file a written petition with BOTH the applicant and Chief Engineer by July 14, 1989. The Chief Engineer's address is "Water Rights Division, Foss Building, 523 E Capitol, Pierre SD 57501 (605 773-3352)". The petition may be informal, but must include a statement describing the petitioner's interest in the application, the petitioner's reasons for opposing or supporting the application and the signature and mailing address of the petitioner or legal counsel if legal counsel is obtained. The applicant need not file a petition. Contact the Water Rights Division to request information on this application or to assure access to the hearing by the handicapped.

This hearing is an adversary proceeding. Any person filing a petition and/or the applicant have the right to be represented by a lawyer. These and other due process rights will be forfeited if not exercised. Decisions of the Board may be appealed to the Circuit Court and State Supreme Court as provided by law. The time of the hearing will also be automatically delayed for at least twenty days upon written request to the Chief Engineer from the applicant or a petitioner. The request for a delay must be received by July 14, 1989.

This application is made pursuant to 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; 46-2A-1 thru 46-2A-10, 46-2A-12, 46-2A-14, 46-2A-15; 46-5-1 thru 46-5-11, 46-5-13 thru 46-5-15, 46-5-24, 46-5-25, 46-5-30.2, 46-5-30.4, 46-5-31; 46-6-3, 46-6-3.1, 46-6-6.1, 46-6-10, 46-6-13, 46-6-14; and Board Rules ARSD 74:02:01:01 thru 74:02:01:15.

 **Department of
Water & Natural Resources**

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

July 5, 1989

Lawrence Gauer
Bowdle Pioneer
Box 368
Bowdle SD 57428

Dear Mr. Gauer:

This letter is in response to receipt of the enclosed Proof of Publication on June 30, 1989. I am returning the Proof of Publication because your signature was omitted. Please sign the Proof of Publication where indicated and return to the Division of Water Rights. Water Permit Application No. 5317-3 can not be considered by the Water Management Board until the signed Proof of Publication is received.

Thank you for your time and consideration.

Sincerely,



Ron Duvall
Natural Resources Engineer
605 773-3352

enc.



PROOF OF PUBLICATION

STATE OF SOUTH DAKOTA)
) ss.
 County Edmunds)

I, Lawrence Gauer

certify that the attached printed Notice was taken
 from the Bowdle Pioneer

A newspaper which during the whole time of publication
 said notice herein after stated, has been and is printed and
 published in the Bowdle Pioneer -- Official News-

paper of the City of Bowdle

County of Edmunds and State of South Dakota
 that the said notice was published in said newspaper on the
 following two dates:

Thursday, June 22, 1989

Thursday, June 29, 1989

Lawrence Gauer
 (Signature)

Publisher
 (Title)

6-29-89
 (Date Signed)

NOTICE OF HEARING ON APPLICATION NO. 5317-3 TO APPROPRIATE WATER

NOTICE IS GIVEN That the City of Bowdle, c/o Robert Drake, Mayor, P.O. Box 553, Bowdle, SD 57428 has filed an application for a water permit to appropriate 0.52 cubic feet of water per second from five existing wells. Well No. 6, 105 feet deep, is located in the SE $\frac{1}{4}$ NE $\frac{1}{4}$ Section 28, T123N, R73W. Wells No. 7, 8, 9, 10 (Bowdle-Edmunds Aquifer) all approximately 30 feet deep are located in the NE $\frac{1}{4}$ SW $\frac{1}{4}$ Section 21, T123N, R73W. Water is to be used for municipal purposes by the City of Bowdle.

Pursuant to SDCL 46-2A-2, the Chief Engineer of the Water Rights Division recommends APPROVAL of Application No. 5317-3 because 1) unappropriated water is available, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water and 4) it is in the public interest. This application will be considered by the Water Management Board at the Hilton Inn, Deerfield Room, 445 Mt. Rushmore Road, Rapid City, SD, July 26, 1989 at 10:00 a.m. The Chief Engineer's recommendation is not final or binding upon the Board. The Board is authorized to 1) approve, 2) approve with qualifications 3) defer or 4) deny this application based on the facts presented at the public hearing.

Any interested person that intends to participate in the hearing before the Board by presenting evidence or cross-examining witnesses according to SDCL 1-26, must file a written petition with BOTH the applicant and Chief Engineer by July 14,

1989. The Chief Engineer's address is: Water Rights Division, Foss Building, 523 E. Capitol, Pierre, SD 57501 (605-773-3352.) The petition may be informal, but must include a statement describing the petitioner's interest in the application, the petitioner's reasons for opposing or supporting the application and the signature and mailing address of the petitioner or legal council if legal council is obtained. The applicant need not file a petition. Contact the Water Rights Division to request information on this application or to assure access to the hearing by the handicapped.

This hearing is an adversary proceeding. Any person filing a petition and/or the applicant have the right to be represented by a lawyer. These and other due process rights will be forfeited if not exercised. Decisions of the Board may be appealed to the Circuit Court and State Supreme Court as provided by law. The time of the hearing will also be automatically delayed for at least twenty days upon written request to the Chief Engineer from the applicant or a petitioner. The request for a delay must be received by July 14, 1989.

This application is made pursuant to 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; 46-2A-1 thru 46-2A-10, 46-2A-12, 46-2A-14, 46-2A-15; 46-5-1 thru 46-5-11, 46-5-13 thru 46-5-15, 46-5-24, 46-5-25, 46-5-30.2, 46-5-30.4, 46-5-31; 46-6-3, 46-6-3.1, 46-6-6.1, 46-6-10, 46-6-13, 46-6-14; and Board Rules ARSD 74:02:01:01 thru 74:02:01:15.

Published: 6/22/89 & 6/29/89

Cost of Printing: First Publication at 100% 19.39
Second Publication at 80% 15.52
Total Charges 34.91





Department of Water & Natural Resources

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

July 12, 1989

Robert Drake, Mayor
City of Bowdle
PO Box 553
Bowdle SD 57428

Dear Mr. Drake:

Enclosed is the Report and Recommendations of the Chief Engineer
for Water Permit Application No. 5317-3.

Sincerely,

Karen Schlaak

KAREN SCHLAACK
Senior Secretary
605 773-3352

enclosures





Department of Water & Natural Resources

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

SEP 12 1989

Robert Drake, Mayor
City of Bowdle
PO Box 553
Bowdle SD 57428-0553

Dear Mayor Drake:

Enclosed is Water Permit No. 5317-3 as approved by the Water Management Board authorizing your water diversion system and the application of water beneficial use, not exceeding the limits as specified in the Water Permit.

The final inspection has been completed on this Permit, and we are ready to issue the Water License. Statutes require we charge \$50 for the inspection and issuance of the final papers. Upon receipt of this amount the Water License will be sent to you.

Very truly yours,

JOHN HATCH, Chief Engineer
Water Rights Division
605 773-3352

enclosures



RECEIPT

Division of Water Rights

South Dakota Department of Water and Natural Resources

Pierre, December 20, 1989

RECEIVED OF City of Bowdle, P.O. Box 553, Bowdle, SD 57425

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

Fee for Application for Permit No. _____ to Appropriate Water, to construct works 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. <u>Water Right No. 5317-3</u>	50	00
Fee for Filing Transfer Form _____		
Fee for Filing Extension Request _____		
Fee for Certified Copy of _____		
Fee for Print Copy of Map _____		
Fee for Certifying _____		
Fee for _____		
(Any Other Work Provided by Law)	Total	50 00

By

John Hatch/mra
Chief Engineer

John Hatch/mra

Permit No. 5317-3 & 770-3
MISSOURI River - Water District

Report Of Examination Of Works And/Or Application of Water To Beneficial Use

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

I have this day, 7/19/93, made a thorough examination of the water use system constructed by THE CITY OF BOWDLE of BOWDLE SD holder of Permit No. 770-3, bearing the priority of MARCH 13, 1961 authorizing the diversion of 0.25 cu. ft. per second and Permit No. 5317-3 bearing the priority of MARCH 16, 1989 authorizing the diversion of 0.52 cu. ft. per second of the waters of GROUNDWATER for EMERGENCY STANDBY MUNICIPAL USE purposes, in EDMUNDS County.

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

A. Works used to divert the water:

5 WELLS

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

MUNICIPAL WATER DISTRIBUTION SYSTEM

The system is in the following condition GOOD. The point of diversion is located FROM THE NE CORNER OF SECTION 28 T123N-R73W: WELL NO. 6 - 2640 FEET SOUTH AND 100 FEET WEST; FROM THE NE CORNER OF SECTION 21 T123N-R73W: WELL NO. 7 - 3470 FEET SOUTH AND 2700 FEET WEST, WELL NO. 8 - 3200 FEET SOUTH AND 2700 FEET WEST, WELL NO. 9 - 3600 FEET SOUTH AND 2800 FEET WEST, WELL NO. 10 - 3470 FEET SOUTH AND 2800 FEET WEST. The works are capable of diverting and conveying to the place of use 0.52 cu. ft. per second of water which is to be used for EMERGENCY STANDBY MUNICIPAL USE. Water has been put to beneficial use and the license should be issued for 0.52 cfs.

Applicable permit qualifications have been complied with: YES

Exceptions to compliance are: NONE



Mark D. Rath
Natural Resources Engineer
DENR, Water Rights Program

10/4/95

Date

REPORT ON INSPECTION OF PERMIT NO. 5317-3

DATE OF INSPECTION: 7/19/95

Other permit(s) associated with the project: 770-3

DIVERSION POINT LEGAL LOCATION: FROM THE NE CORNER OF SECTION 28 T123N-R73W:
WELL NO. 6 - 2640 FEET SOUTH AND 100 FEET WEST; FROM THE NE CORNER OF SECTION
21 T123N-R73W: WELL NO. 7 - 3470 FEET SOUTH AND 2700 FEET WEST, WELL NO. 8 - 3200
FEET SOUTH AND 2700 FEET WEST, WELL NO. 9 - 3600 FEET SOUTH AND 2800 FEET WEST,
WELL NO. 10 - 3470 FEET SOUTH AND 2800 FEET WEST

WELL INFORMATION:

- 1) Well Drilling Firm: INDEPENDENT DRILLING & DAKOTA BORING COMPANY
- 2) No. of Wells 5
- 3) Depth(s) 106, 37, 30, 36 & 31 feet
- 4) Well log is available YES

Casing: WELL NO. 6

- 1) Diameter 12 inches
- 2) Length 94 feet
- 3) Type STEEL

Screen:

- 1) Type STAINLESS STEEL
- 2) Length 11 feet
- 3) Static water level 45 feet

Pump:

- 1) Make JACUZZI
- 2) Model SUBMERSIBLE
- 4) Capacity 35 GPM

Motor:

- 1) Make JACUZZI
- 2) Model No. SUBMERSIBLE

Casing: WELL NO. 7

- 1) Diameter 15 inches
- 2) Length 37 feet
- 3) Type PVC

Screen:

- 1) Type SLOTTED PVC
- 3) Static water level 20 feet

Pump:

- 1) Make JACUZZI
- 2) Model SUBMERSIBLE
- 4) Capacity 70 GPM

Motor:

- 1) Make JACUZZI
- 2) Model No. SUBMERSIBLE

Casing: WELL NO. 8

- 1) Diameter 16 inches
- 2) Length 30 feet
- 3) Type PVC

Screen:

- 1) Type SLOTTED PVC
- 3) Static water level 16 feet

Pump:

- 1) Make JACUZZI
- 2) Model SUBMERSIBLE
- 4) Capacity 30 GPM

Motor:

- 1) Make JACUZZI
- 2) Model No. SUBMERSIBLE

Casing: WELL NO. 9

- 1) Diameter 16 inches

2) Length 36 feet

3) Type PVC

Screen:

1) Type SLOTTED PVC

3) Static water level 2 feet

Pump:

1) Make JACUZZI

2) Model SUBMERSIBLE

4) Capacity 70 GPM

Motor:

1) Make JACUZZI

2) Model No. SUBMERSIBLE

Casing: WELL NO. 10

1) Diameter 16 inches

2) Length 31 feet

3) Type PVC

Screen:

1) Type SLOTTED PVC

3) Static water level 13 feet

Pump:

1) Make JACUZZI

2) Model SUBMERSIBLE

4) Capacity 30 GPM

Motor:

1) Make JACUZZI

2) Model No. SUBMERSIBLE

DISTRIBUTION LINES OR CANALS:

1) Type MUNICIPAL DISTRIBUTION SYSTEM

- 1) Comments : THE PRIMARY WATER SUPPLY IS FROM THE WEB RURAL WATER SYSTEM.
THESE WELLS ARE USED AS THE EMERGENCY STANDBY WATER SUPPLY

PERMIT QUALIFICATIONS AND REGULATIONS:

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

110.1

T10485

21.9

67.8

T531

165 R

H-2

CRP-88-47 #60

CP-1

3470'

3200'

38.9

38.9

30.5

123-73

01 - Shutoff back up

04 - Will be aligned #3 on other map

Mark D Rath
Natural Resources Engineer
Division of Water Rights
Date 10/10/95

G-2

FW

28

36.0
T/397

113.3

Shutoff back up

Water Rights Program - File Documentation

NAME: Otta Bieber, Mayor

ADDRESS: City of Bowdle

DATE: 7-13-1998 **COUNTY:** Edmunds **TELEPHONE:**

RE: Future Use Review

COMMENTS:

Otta Bieber called regarding my 7-9-1998 letter regarding the review of the future use portion of No. 704-3. Mr. Bieber understood what the future use permit was. He indicated that the City was connected to WEB. The City has one well they maintain for backup to water the park.

On 7-20-1998 we received a letter from the City indicating basically what Mr. Bieber stated.

SUMMARY:

Permit Nos. 704-3, 770-3 and 5317-3 were inspected in 1995, but because of the confusion with vested, future use, priority dates, etc. the licenses were never issued. I believe someone should reinspect these permits, since it is obvious that the number of wells maintained now is not the same as found during the 1995 inspection. Receipt for payment of the license fee is still in Water Permit No. 5317-3 file.



Karen Schlaak
Environmental Scientist

Water Rights Division - DENR

Conversation or File Documentation

Name of Person: Harlan Kopecky **File Nos.** 770-3 (5317-3)
Address: City of Bowdle, 8001 W. 5th Street, Bowdle, SD 57428-0553 **County:** Edmunds
Date: August 28, 2000 **Telephone:** (605) 285-6350
RE: Status of the permits for the City of Bowdle

Comments: I talked to Harlan Kopecky of the City of Bowdle. Harlan is the Sewer and Water Superintendent for the City of Bowdle. He started working for the City of Bowdle about three years ago. Harlan told me that a new finance officer started with the city about the same time he started with the city. I told him that at one point in time that the city had 10 wells that it was using. He told me that the city has been on WEB water for about three years now. I asked Harlan if the city had any intentions of going back to using the wells. He told me that the city did not plan on going back to the wells. The city went to WEB water because of the drinking water rules and regulations. I asked Harlan if the city is going to use the water from the wells for fire protection purposes. He told me that the city has approximately 75,000 gallons of water in underground storage tanks. This water along with the water in city water towers and another storage place have a total capacity of approximately 125,000 – 175,000 gallons of water. Harlan told that one well is used for the parks. One well has been shutoff. I told Harlan that I would be sending him the law on plugging of wells and the exceptions to nonuse of water. I also told Harlan that I would be sending him a copy of a map with the wells on it. He can then show me which wells are being used from the map and what they are being used for. Harlan asked me if there is a law about plugging wells. I told him yes there is and that is one of the things that I would be sending him. He asked me what is all involved in plugging a well. I told him that I thought that the well is filled with cement when it is plugged. I told him to contact a license well driller for all the details for plugging a well.


Stacy J. Johnson
Natural Resources Engineer



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3181
www.state.sd.us/denr

August 28, 2000

Harlan Kopecky
Sewer and Water Superintendent
City of Bowdle
8001 W. 5th Street
Bowdle SD 57428-0553

Dear Mr. Kopecky:

I talked to you today, about the City of Bowdle wells. You indicated to me that all but two wells has not been used for at least three years. You told me that the City of Bowdle is now using WEB RWS water.

I am enclosing a copy of the rule for the exceptions to nonuse of water and a copy of South Dakota Codified Law (SDCL) 46-6-27 plugging, sealing or capping abandoned wells required.

Please let me know what you decide to do with the City of Bowdle wells.

You indicated to me that one well is used by the parks and one well is shutoff. Please indicate on the enclosed map which wells are used and what they are used for. The enclosed map is from a 1995 inspection of the wells. At that time wells numbers 2 and 3 were abandoned and thus they are not on the map.

If you have any questions, feel free to contact me at (605) 773-3352 or via email at stacy.johnson@state.sd.us.

Sincerely,

Stacy J. Johnson
Natural Resources Engineer

Enclosures (3)

cc: Arlene Kaseman, City of Bowdle Finance Officer



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

September 7, 2000

Harlan Kopecky, Water Superintendent
City of Bowdle
8001 West 5th Street
Bowdle, SD 57428-0553

Dear Mr. Kopecky:

I am writing in regards to our phone conversation regarding plugging of the city's wells that have been abandoned. The city wants to plug wells that are abandoned and are no longer being used for turf watering or for standby purposes.

It is acceptable for the city to plug wells that they have abandoned and it is not required that a licensed well driller plug the wells. However, there are rules on plugging procedures. I am enclosed a copy of Board Rule 74:02:04:69 which sets forth requirements for plugging shallow wells which only encounter one aquifer. Please read this information over carefully. First, remove all old pumps and appurtenances from the well. Then clean sand and gravel is backfilled to the top of the aquifer (remember that as you place this material in the well you will need to pump the water that has been displaced into the column of the well casing). Then a bentonite or cement grout is placed to within three feet of the ground surface. And finally native material is placed the last three feet to the ground surface. Often the top of the casing is also cut off below the ground surface.

We would appreciate being notified exactly which wells are plugged and the procedures used to plug the wells. If you have any specific questions on plugging procedures, contact Ken Buhler at (605) 773-3352.

Sincerely,

Eric Gronlund
Water Rights Program
(605) 773-3352

enclosure

Water Rights Division - DENR

Conversation or File Documentation

Name of Person: Harlan Kopecky **File Nos.** 770-3, 5317-3
Address: City of Bowdle, 8001 W. 5th Street, Bowdle, SD 57428-0553 **County:** Edmunds
Date: May 17, 2001 **Telephone:** (605) 285-6350
RE: Status of the permits for the City of Bowdle

Comments: I talked to Harlan Kopecky of the City of Bowdle. Harlan is the Sewer and Water Superintendent for the City of Bowdle. I asked him about the status of the City of Bowdle wells. He told me that the wells that are not being used for back up need to be plugged yet. The city has one well that is shut off but would be used for emergency and fire protection use. One well is used by the city to water the grass for a park. It sounds like some of the wells are already plugged. When I do my inspection I need to find out what was used to plug these wells. Harlan also expressed concern about plugging one well might cause another well not to work. I told him I would call and let him know when I could come and do an inspection and get things squared away.



Stacy J. Johnson
Natural Resources Project Engineer

Water Rights Division - DENR

Conversation or File Documentation

Name of Person: Harlan Kopecky **File Nos.** 704-3, 704A-3, 770-3, **5317-3**
Address: City of Bowdle, 8001 W. 5th Street, Bowdle, SD 57428-0553 **County:** Edmunds
Date: July 16, 2001 **Telephone:** (605) 285-6350
RE: Status of the permits for the City of Bowdle

Comments: I talked to Harlan Kopecky of the City of Bowdle. Harlan is the Sewer and Water Superintendent for the City of Bowdle. Harlan wanted to know which wells went with what permit. Since the city is using two wells for back up that we would just be looking at two permits. I told him that I had told him wrong about the wells the city uses for lawn watering not needing permits. The less than 18 gallons per minute (gpm) would only apply if the whole water distribution system for the city were under 18 gpm. I told him that I have included the lawn watering wells in my inspection report. I also told him that at the end of my report I state what each well is used for.

Harlan told me that Well #3 is plugged. He also told me that Wells #4, #7, & #8 will be plugged.

I asked him if the city wants to keep its future use permit. I told him that I send him a letter in regards to this dated June 21, 2001. I told him that future use permit allows the city to use water in the future if the need arises and they have unappropriated water available to them. I told him if the city decided to develop its future use permit that they would have to apply for a water permit application. I explained the application process and the processes that come after that to him. I told him that the city has a future use permit for 96 acre-feet (ac-ft) right now. He was not sure if the city would have a use for this permit in the future or not.

Harlan told me that it is not cost effective for the city to drill new wells because of all the treatment that they would have to do to the water so that they could actually use it.

Harlan and I talked about the water permit application fee discussed in SDCL 46-2-13 (2). I told him that I believed that there is a cost for the future use permit. I told him that I did not know the cost for the city but I would do some checking and get back to him.



Stacy J. Johnson
Natural Resources Project Engineer

Permit Nos. 704B-3, 770-3, & 5317-3

Missouri River - Water District

Other permit/license(s) associated with project: 704A-3

Contact Person & Address: Harlan Kopecky, City of Bowdle, 8001 W 5th Street, Bowdle, SD 57428-0553

Report Of Examination Of Works

On, June 6, 2001, I made a thorough examination of the water use system constructed by the City of Bowdle of 8001 W 5th Street, Bowdle, SD 57428-0553 holder of Permit No. 704B-3, bearing the priority of January 1, 1944, January 1, 1947 and January 1, 1951 authorizing the diversion of 0.16 cubic feet of water per second (cfs) and Permit No. 770-3, bearing the priority of March 13, 1961, authorizing the diversion of 0.25 cfs and Permit No. 5317-3, bearing the priority of March 16, 1989, authorizing the diversion of 0.52 cfs for Emergency Standby Municipal Use purposes in Edmunds County.

The system is in the following condition good. The points of diversion are located as follows:

Well #1: from the SE corner of Section 21 T123N-R73W it is 1421 feet west and 1740 feet north with a longitude of -99.652583 and a latitude of 45.4532080

Well #5: from the NE corner of Section 28 T123N-R73W it is 3260 feet west and 360 feet south with a longitude of -99.659627 and a latitude of 45.447641

Well #6: from the NE corner of Section 28 T123N-R73W it is 2646 feet south and 75 feet west with a longitude of -99.647301 and a latitude of 45.4412960

Well #9: from the NE corner of Section 21 T123N-R73W it is 3600 feet south and 2800 feet west with a longitude of -99.658123 and a latitude of 45.453135

Well #10: from the NE corner of Section 21 T123N-R73W it is 3470 feet south and 2800 feet west with a longitude of -99.657932 and a latitude of 45.453585

The works are capable of diverting and conveying to the place of use 0.39 cfs to be used for Emergency Standby Municipal Use purposes.

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 n/a
- 4) Exceptions to compliance are: none

Report On the Specifics of the System

Diversion Point Information: Well #1

- | | |
|---------------------------------------|------------------------------------|
| 1) Well Drilling Firm: <u>Unknown</u> | 2) No. of Wells <u>1</u> |
| 3) Depth(s) <u>102</u> feet | 4) Well log is available <u>no</u> |

Casing:

- 1) Diameter 12 inches
- 2) Length 90 feet
- 3) Type Steel

Screen:

- 1) Type Brass
- 2) Length 12 feet
- 3) Static water level 90 feet

Pump\ Motor:

- 1) Pump Make Pamona-Fairbanks Morse
- 2) Pump Model Submersible
- 3) Capacity 25 GPM
- 4) Motor Make Jacuzzi
- 5) Motor Model No. Submersible
- 6) Horsepower rating 5 hp

Distribution System:

- 1) Type Steel
- 2) Size 4 to 6 inches
- 3) Length unkown feet

Diversion Point Information: Well #5

- 1) Well Drilling Firm: unknown
- 2) No. of Wells 1
- 3) Depth(s) 30 feet
- 4) Well log is available no

Casing:

- 1) Diameter 12 inches
- 2) Length 20 feet
- 3) Type Steel

Screen:

- 1) Type Everdur Metal
- 2) Length 10 feet
- 3) Static water level 20 feet

Pump\ Motor:

- 1) Pump Make Jacuzzi
- 2) Pump Model Submersible
- 3) Capacity 20 GPM
- 4) Motor Make Jacuzzi
- 5) Motor Model No. unknown
- 6) Horsepower rating unkown hp

Distribution System:

- 1) Type unknown
- 2) Size unknown inches
- 3) Length unknown feet

Diversion Point Information: Well #6

- 1) Well Drilling Firm: Independent Drilling
- 2) No. of Wells 1
- 3) Depth(s) 105 feet
- 4) Well log is available yes

Casing:

- 1) Diameter 12 inches
- 2) Length 94 feet
- 3) Type Stainless Steel

Screen:

- 1) Type Stainless Steel
- 2) Length 14 feet
- 3) Static water level 45 feet

Pump\ Motor:

- 1) Pump Make Jacuzzi
- 2) Pump Model Submersible
- 3) Capacity 35 GPM
- 4) Motor Make Jacuzzi
- 5) Motor Model No. Submersible
- 6) Horsepower rating unkown hp

Distribution System:

- 1) Type Plastic
- 2) Size 4 inches
- 3) Length 3533 feet

Diversion Point Information: Well #9

- 1) Well Drilling Firm: Dakota Boring Company
- 2) No. of Wells 1
- 3) Depth(s) 36 feet
- 4) Well log is available yes

Casing:

- 1) Diameter 16 inches
- 2) Length 36 feet
- 3) Type PVC

Screen:

- 1) Type Slotted PVC
- 2) Length unknown feet
- 3) Static water level unknown feet

Pump\ Motor:

- 1) Pump Make Jacuzzi
- 2) Pump Model Submersible
- 3) Capacity 70 GPM
- 4) Motor Make Jacuzzi
- 5) Motor Model No. Submersible
- 6) Horsepower rating unkown hp

Distribution System:

- 1) Type unknown
- 2) Size unknown inches
- 3) Length unknown feet

Diversion Point Information: Well #10

- 1) Well Drilling Firm: Dakota Boring Company 2) No. of Wells 1
3) Depth(s) 31 feet 4) Well log is available yes

Casing:

- 1) Diameter 16 inches 2) Length 31 feet
3) Type PVC

Screen:

- 1) Type Slotted PVC 2) Length unknown feet
3) Static water level 13 feet

Pump\ Motor:

- 1) Pump Make Jacuzzi 2) Pump Model Submersible
3) Capacity 30 GPM 4) Motor Make Jacuzzi
5) Motor Model No. Submersible 6) Horsepower rating unknown hp

Distribution System:

- 1) Type unknown 2) Size unknown inches 3) Length unknown feet

COMMENTS: The City of Bowdle is hooked up to WEB water. Wells #1 and #6 will be used for emergency and back up purposes only. Well #5 is used by the hospital to water its lawn. Wells #9 & 10 are used by the city to water park lawns. Wells #2, and #3 have been plugged. Wells #4, 7 & 8 will be plugged.

Vested Right No. 704B-3 should be reissued for 0.16 cfs from Well #1, 5 and 6 with priority dates of January 1, 1944 (0.05 cfs), January 1, 1947 (0.04 cfs) and January 1, 1951 (0.07 cfs).

Water Right No. 770-3 should be reissued for 0.23 cfs from Well # 9 and 10 with a priority date of March 13, 1961. The water appropriation authorized by Water Permit No. 5317-3 is no longer utilized by the City. The applicable portions of Water Permit No. 5317-3 should be incorporated into Water License No. 770-3.

Stacy J. Johnson
Stacy J. Johnson
Natural Resources Project Engineer
DENR, Water Rights Program

7-31-01
Date



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
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www.state.sd.us/denr

Harlan Kopecky, Water Superintendent
City of Bowdle
8001 W 5th St
Bowdle SD 57428-0558

Dear Mr. Kopecky:

Enclosed are Future Use Water Permit No. 704A-3, Reissued Water License Nos. 704B-3 and 770-3 for the City of Bowdle and receipt for payment of license fee for No. 5317-3. The water licenses are being reissued based on an investigation of the water use system.

Future Use Permit No. 704A-3 – reserves 96 acre-feet of groundwater (Bowdle-Edmunds Aquifer) located in the SE ¼ Section 21-T123N-R73W to provide future municipal supplies to the City of Bowdle with a priority date of March 19, 1960.

Vested Water Right No. 704B-3 – authorizing diversion of 0.16 cfs from three wells located in the S ½ Section 21 and NE ¼ NW ¼ & NE ¼ SE ¼ Section 28; all in T123N-R73W with priority date of January 1, 1944, January 1, 1947 and January 1, 1951.

Water Right No. 770-3 – authorizing diversion of 0.23 cfs from two wells located in the NE ¼ SW ¼ Section 21-T123N-R73W with priority date of March 13, 1961.

The applicable portions of Permit No. 5317-3 have been incorporated into Water License No. 770-3.

As long as the City of Bowdle uses the water beneficially as stated in the licenses, the City has a continuing right to use of the water. If you have any questions, please contact this office.

Sincerely,

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

enclosures