

WATER PERMIT NO. 1674-1

Name of Applicant: **Black Hawk Water User District**

Address: **PO Box 476, Black Hawk SD 57718**

Phone: **605 787-5777**

Amount of Water Claimed: **2.222 cfs** Total Acres: **NA**

Source of Water Supply: **groundwater**

Water to be used for: **municipal** County: **Meade**

Type of Waste Disposal System:

Location: **½ mile northwest of Black Hawk**

PRIORITY Date Received: **8-18-1998**

Fee: **\$525**

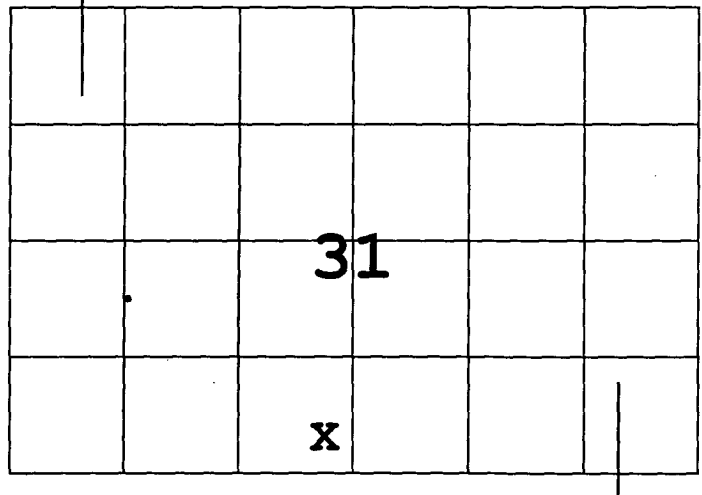
Corrected Application Received:

Period of Annual Use: **January 1 – December 31**

Remarks:

Diversion Point: **SE ¼ SW ¼ Sec 31-T3N-R7E**

Land to be Irrigated: **NA**



Depth of Well: **1300 feet**

Well Driller:

Remarks:

Type of Map: **plat**

Prepared by: **William C Phillips, RLS**

Reviewed and the Number Assigned on: **8-18-1998**

By: **Karen Schlaak**

Notice of Hearing - date to intervene: _____

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

Mail to: Water Rights Program Joe Foss Building 523 E. Capitol Pierre, SD 57501-3181 (605) 773-3352	(office use only) No. <u>11674-1</u> Hydrologic Unit <u>10/2011</u>
	Basin <u>Upper Cheyenne</u>
	Newspaper <u>Meade Co. Times Tribune, Sturgis, SD</u>



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

Check use(s) of water:

☒ Municipal ☐ Suburban Housing ☐ Recreational ☐ Institutional
☐ Rural Water System ☐ Commercial ☐ Fish & Wildlife ☐ Geothermal Heat
☐ Domestic (over 18 gpm) ☐ Industrial ☒ Other Water User District Supplier to
Black Hawk Community

Type of Application: ☒ New ☐ Vested Right (Use predates Mar 2, 1955) ☐ Future Use Reservation

(check one) ☐ Place to Beneficial Use Water Reserved by Future Use Permit No. _____

☐ Amendment/Correction to Permit No. _____

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

- Name of Applicant Black Hawk Water User District Phone 605-787-5777
(check one) ☒ Owner ☐ Tenant/lessee
Mailing Address PO Box 476, Black Hawk State SD 57718
(Street, RR, or Box and City) (Zip Code)
- Amount of water claimed 2.23 *CFS or 1000 **GPM ***AF
(*Cubic Feet per Second) (**Gallons per Minute) (***)Acre Feet - storage capacity of dam/dugout or annual use if applicable
- Source of water supply Madison Formation
- Location of point of diversion (example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W) Madison Water Well No. 5 is
located 115 feet north and 10 feet west of the S1/4 Corner of Section 31, T3N, R7E, BHM
(SE1/4 SW1/4) County Meade
- County or counties where water will be used Meade
- Annual period during which water is to be used Continuous throughout the year Jan 1 - Dec 31
- 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)
Madison Well No. 5 is being developed to supplement the water supply system for the
Black Hawk Community. In addition, the well will supply water to the Heritage Park
Mobile Home Community which is 0.5 miles west of the well.

STATE OF SOUTH DAKOTA)

County of Meade SS

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

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

Applicant's signature Edmond L. Strohbehl - President

Subscribed and sworn to before me this 17th day of August 19 98

James E. Yang
Notary Public signature

SOUTH DAKOTA
WATER PERMIT NO. 1674-1

Date of first receipt of application August 18, 1998.

The Water Management Board approved Water Permit Application No. 1674-1 on December 3, 1998 for Black Hawk Water User District, PO Box 476, Black Hawk SD 57718 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. 1674-1 appropriates 2.23 cubic feet of water per second from one well (Madison Formation) 1,300 feet deep located in the SE ¼ SW ¼ Section 31-T3N-R7E.
2. The water appropriated shall be used for the purpose of supplying water to the Black Hawk community and the Heritage Park Mobile Home Community and may not exceed the amount of water needed for beneficial use for municipal use.
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 August 18, 1998.
5. One-fifth of the construction is to be completed on or before June 3, 2001.
6. All construction is to be completed on or before December 3, 2003.
7. Water is to be put to beneficial use on or before December 3, 2007.
8. Water rights obtained in compliance with the laws of the State of South Dakota may not be unlawfully impaired by this appropriation.

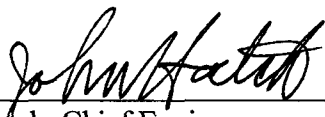
QUALIFICATIONS

1. In accordance with SDCL 46-1-14 and 46-2A-20, Permit No. 1674-1 is issued for a twenty year term. Pursuant to SDCL 46-2A-21, the twenty year term may be deleted at any time during the twenty year period or following its expiration. If the twenty year term is not deleted at the end of the term, the permit may either be cancelled or amended with a new term limitation of up to twenty years. Permit No. 1674-1 may also be cancelled for nonconstruction, forfeiture, abandonment or three permit violations pursuant to SDCL 46-1-12, 46-5-37, 46-5-37.1, and ARSD 74:02:01:37.
2. The well approved under this Permit will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
3. The well authorized by Permit No. 1674-1 shall be constructed by a licensed well driller and construction shall comply with Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) from the producing formation to the surface pursuant to Section 74:02:04:28.

(continued)

4. That Black Hawk Water User District report to the Chief Engineer annually the amount of water withdrawn each year from the Madison Formation.

WATER MANAGEMENT BOARD

By: 
John Hatch, Chief Engineer
Water Rights Program
Department of Environment and Natural Resources

JAN 19 1999

date



Supplemental Information

(type or print in ink)



1. Well Information - Proposed Construction

- a) Drill Hole Diameter 13-3/4"
8-3/4" Depth 0-1050
1050-1300
- b) Casing Type Steel Diameter 10-3/4" Thickness 0.365"
- c) Screen Type N/A Diameter N/A Thickness N/A
- d) Gravel Pack N/A Length of Gravel Pack N/A
- e) Depth to Top of Water Bearing Material 1030 Madison Formation
- f) Depth to Water (ground surface to water level) 30
- g) Distance to nearest existing domestic well:

On applicants property 7300 feet

On property owned by others 350 feet - well in
Minnelusa Formation

2. Wastewater Disposal System Information

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

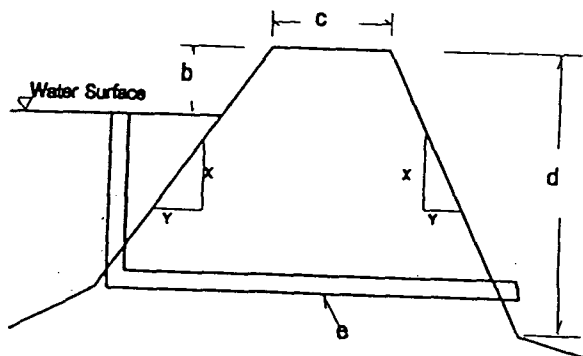
3. Dugout Information

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

4. Water Storage Dams

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

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



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

RECEIPT

Water Rights Program

South Dakota Department of Environment and Natural Resources

Nº 415840

Pierre, August 18, 19 98

RECEIVED OF Black Hawk Water User District, P.O. Box 476, Black Hawk, SD 57718
the following amount in fees for services rendered as provided for by law:

Fee for Application for Permit No. <u>1674-1</u> to Appropriate Water, to construct and to put water to beneficial use _____	525	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 _____		

(Any Other Work Provided by Law)	Total	525 00

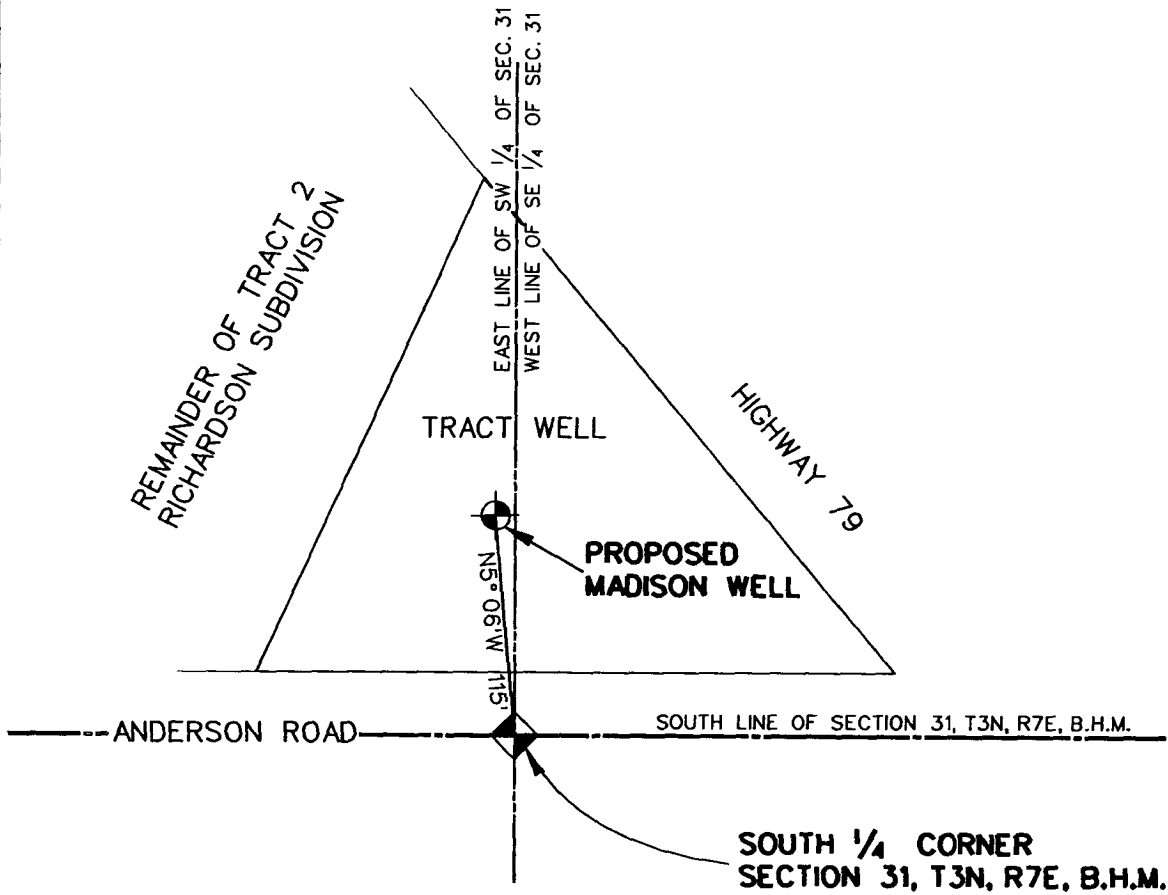
By

Chief Engineer

John Hatch 

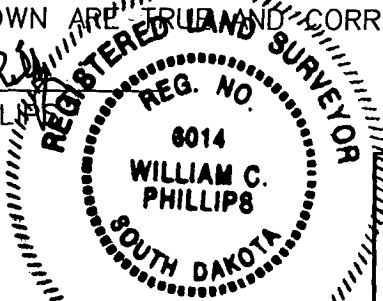
WATER WELL LOCATION MAP

LOCATED IN THE SW¹/₄ OF SECTION 31
TOWNSHIP 3 NORTH, RANGE 7 EAST, B.H.M.
MEADE COUNTY, SOUTH DAKOTA



I, WILLIAM C. PHILLIPS, A REGISTERED LAND SURVEYOR IN THE STATE OF SOUTH DAKOTA, DO HEREBY CERTIFY THAT AT THE DIRECTION OF THE BLACK HAWK WATER USER DISTRICT I HAVE PREPARED FROM RECORD DOCUMENTS AND FROM A FIELD SURVEY THE WATER WELL LOCATION MAP SHOWN HEREON AND TO MY KNOWLEDGE AND BELIEF THE DIMENSIONS SHOWN ARE TRUE AND CORRECT.

William C. Phillips
WILLIAM C. PHILLIPS



DRAWING PREPARED BY:
ALLIANCE OF ARCHITECTS AND ENGINEERS
706 WEST BOULEVARD
RAPID CITY, SOUTH DAKOTA
DRAWN BY W. PHILLIPS DATE 8-14-'98
CHECKED BY E.D. WASSERBURGER DATE 8-14-'98



DATE: 8-14-'98	SECTION 31, T3N, R7E, B.H.M.	JOB NO. 98-656	SHEET 1 OF 1
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1674-1

0

NOTE: SURFACE ELEVATION 3622.40

SPEARFISH FORMATION

375

415

MINNEKAHTA LIMESTONE

OPECHE FORMATION

535

MINNELUSA FORMATION

1035

MADISON LIMESTONE

1300



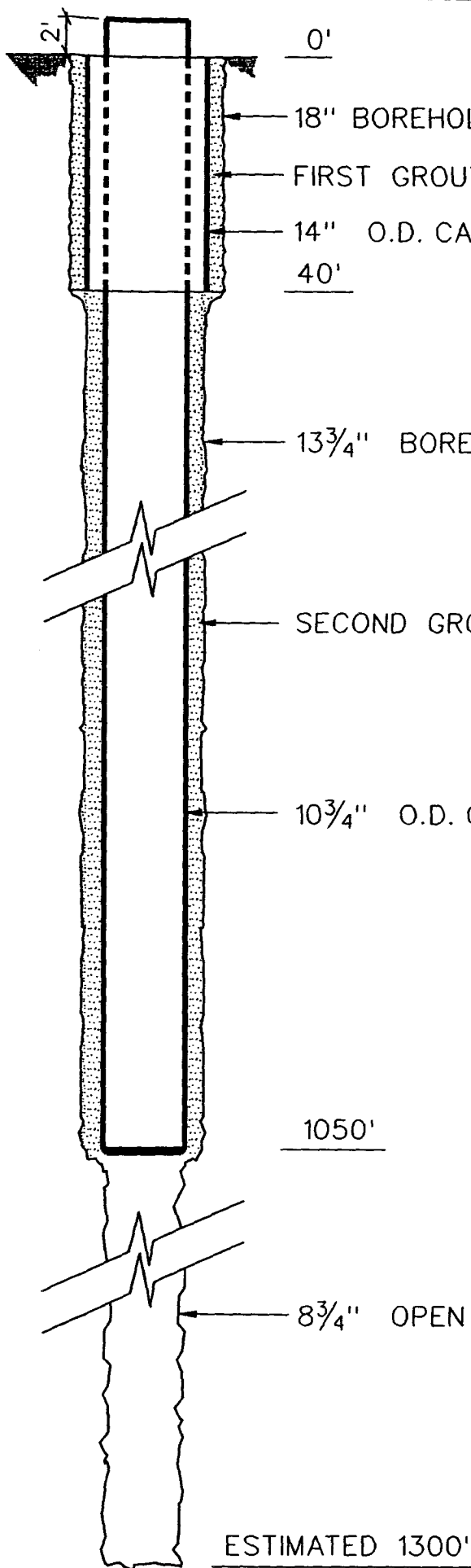
APPROXIMATE LOG

BLACK HAWK
MADISON WATER WELL #5

JULY, 1998
98-656

DRAWING
3





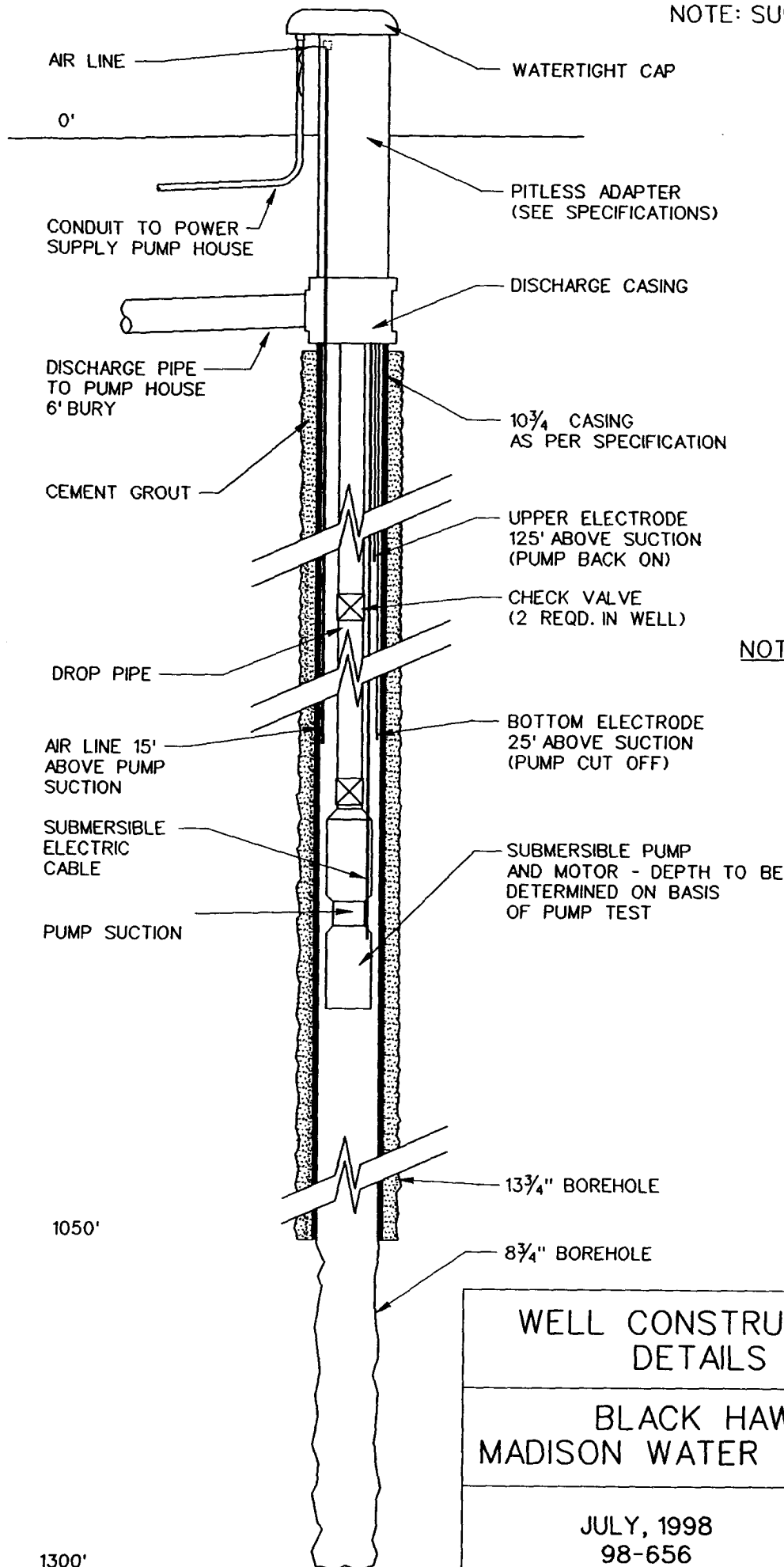
NOTE: SURFACE ELEVATION 3622.40



BORING AND CASING DETAILS	
BLACK HAWK MADISON WATER WELL #5	
JULY, 1998 98-656	DRAWING 4



NOTE: SURFACE ELEVATION 3622.40



NOTE: DEPTHS INDICATED ARE ESTIMATES BASED ON AVAILABLE INFORMATION, BUT MAY VARY. ACTUAL DEPTHS WILL BE DETERMINED FROM DRILLING SAMPLES AND LOGS RUN DURING CONSTRUCTION.

CONDUIT TO PUMP HOUSE TO CONTAIN AIRLINE, BOTH ELECTRODE CABLES AND PUMP POWER CABLE.



WELL CONSTRUCTION DETAILS

BLACK HAWK
MADISON WATER WELL #5

JULY, 1998
98-656

DRAWING
5



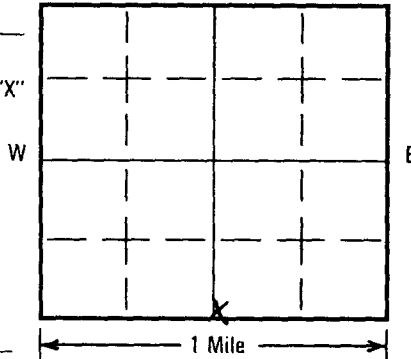
SOUTH DAKOTA WATER WELL COMPLETION REPORT

07-92

1674-1

Location SW 1/4 SE 1/4 Sec 31 Twp 3N Rg 7E
County Meade

Please mark well location with an "X"



Well Completion Date

6-30-99

LOCATION:

Distance from nearest potential pollution source (septic tank, abandoned well, feed lot, etc.)? 250 ft. from drain field (identify source).

PROPOSED USE:

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

METHOD OF DRILLING:

Air Rotary

CASING DATA:

- ☒ Steel ☐ Plastic ☐ Other

If other describe _____

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
<u>72</u> LB/FT	<u>16</u> IN	<u>0</u> FT	<u>40</u> FT	<u>22</u> IN
<u>40.50</u> LB/FT	<u>10 3/4</u> IN	<u>0</u> FT	<u>865</u> FT	<u>13 3/4</u> IN
<u>28</u> LB/FT	<u>8 7/8</u> IN	<u>829</u> FT	<u>974</u> FT	<u>9 7/8</u> IN

GROUTING DATA

Grout Type	No. of Sacks	Grout Weight	From	To
<u>Cement</u>	<u>50</u>	<u>15</u> lb./gal	<u>0</u> ft	<u>40</u> ft
<u>Cement</u>	<u>495</u>	<u>15</u> lb./gal	<u>0</u> ft	<u>865</u> ft
<u>Cement</u>	<u>80</u>	<u>15</u> lb./gal	<u>829</u> ft	<u>974</u> ft

Describe grouting procedure pressure grouted through casing

SCREEN:

☐ Perforated pipe ☐ Manufactured
Diameter _____ IN Length _____ FEET
Material _____
Slot Size _____ Set From _____ Feet to _____ Feet
Other information _____

WAS A PACKER OR SEAL USED? ☐ YES ☒ NO

If so, what material? _____

Describe packer(s) and location? _____

DISINFECTION: Was well disinfected upon completion?

☒ YES, How: chlorine solution

Laboratory sent to for water quality analysis _____ NO, Why Not? _____

Maxim

Well Owner: Black Hawk Water User District

Business Name: _____

Address: PO Box 476

Black Hawk, SD 57718

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
<u>Spearfish</u>	<u>0</u>	<u>205</u>
<u>Minnekahta</u>	<u>205</u>	<u>245</u>
<u>Opeche</u>	<u>245</u>	<u>360</u>
<u>Minnelusa</u>	<u>360</u>	<u>840</u>
<u>Madison</u>	<u>840</u>	<u>1220</u>
<u>detailed sample descrip.</u>		
<u>is attached</u>		

STATIC WATER LEVEL 87 Feet

If flowing: closed in pressure _____ PSI

GPM flow _____ through _____ inch pipe

Controlled by ☐ Valve ☐ Reducers ☐ Other _____

Reduced Flowrate _____ GPM

Can well be completely shut in? _____

WELL TEST DATA:

- ☒ Pumped Describe: test pump
☐ Bailed
☐ Other

Pumping Level Below Land Surface

176 ft. After 24 Hrs. pumped 950 GPM

_____ ft. After _____ Hrs. pumped _____ GPM

If pump installed, pump rate 700 GPM

REMARKS

This well was drilled under license # 331

And this report is true and accurate.

Drilling firm Taylor Drilling

Signature of License Representative: _____

Rash Taylor

Signature of Well Owner or Equitable Property Holder: _____

Date: _____



JOHN PAUL GRIES

Consulting Geologist

236 ST. CHARLES STREET
RAPID CITY, SOUTH DAKOTA

Blackhawk City Water Well No. 5

Location: SW ¼ SW ¼ SW ¼ SE ¼ Sec. 31, T. 3 N, R. 7 E., Meade Co., S.D.

Elevation: 3622 gnd T. D. 1220 feet

Drilled May-June 1999 by Taylor Drilling Co., Rapid City, S.D.

Casing: 40 feet of 13 inch; 10 ¾ inch to 834 feet, 8 ⅝ inch liner (welded) 834 to 974 feet

Sample Description by J. P. Gries

Spearfish Formation. 0 - 200 feet

- 0-10 redbeds, weathered
- 20 gypsum, white
- 30 redbeds, trace gypsum
- 40 redbeds, trace fibrous gypsum from veinlets
- 50 redbeds, same
- 60 redbeds, 90%
- 70 gypsum finely crystalline, white to faintly pink
- 90 redbeds, darker red, less orange
- 120 redbeds, red brown
- 190 redbeds, same
- 200 redbeds, still very hard

Minnekahta Formation. 200 - 250 feet

- 210 limestone finely crystalline, very anhydritic, pink to red and lavender
- 220 limestone, very finely crystalline, white to pink
- 230 limestone, finely crystalline, finely banded
- 240 limestone, same, lavender to brown
- 250 limestone, same lavender to pink

Oppeche Formation. 250 - 360 feet

- 270 limestone, very argillaceous, lavender
- 280 redbeds, limy
- 290 redbeds, 80%; white gypsum 20%
- 300 redbeds, silty to sandy, 20% gypsum
- 310 redbeds, same; trace gypsum
- 320 redbeds, trace gypsum or anhydrite
- 360 redbeds

Minnelusa Formation. 360 - 840(?)

- 370 same and some sand, subround, medium, orange to white, frosted
- 380 sand, medium to coarse, rounded, orange
- 390 dolomite, very finely crystalline, cream, some sand
- 410 dolomite, same
- 420 dolomite, very finely crystalline, cream to lavender
- 430 sandstone, fine to very fine, round to subround
- 440 about 50-50 dolomite and sand as above
- 450 dolomite, very finely crystalline white, cream & yellow; trace sand



Blackhawk #5 (cont.)

Minnelusa Formation (cont.)

- 470 sandstone, subangular, to round, white to yellow
- 480 sandstone, fine to very fine, angular to subround, nearly white to colorless
- 490 dolomite, medium crystalline 2/3; sand, 1/3; trace red
- 510 mixture recrystallized dolomite, red; trace sand
- 520 sandstone, dolomitic, fine to very fine, pale yellow to white
- 530 sandstone as above, recrystallized dolomite, reddish brown
- 540 mostly dolomite, very finely crystalline, cream; trace sand
- 550 sandstone, fine to very fine, subangular to subround, colorless
- 570 sand, fine to very fine, colorless
- 580 dolomite as above 2/3; 1/3 sandstone
- 590 dolomite as above 1/3; sandstone as above 2/3
- 600 sandstone, fine, orange
- 610 dolomite, very finely crystalline, light gray to white 2/3; sand as above, 1/3
- 630 dolomite, gray to slightly lavender
- 640 dolomite, finely crystalline, nearly white to lavender
- 650 shale, fissile micaceous red marker
- 660 sandstone, fine, orange, 2/3; dolomite, finely crystalline, pink, 1/3
- 670 sandstone, fine to very fine, some frosted grains
- 690 dolomite, finely crystalline, red-brown to nearly white
- 700 sandstone, very fine; some sandy red brown dolomite
- 710 dolomite, finely crystalline white to tan, 2/3; sand, very fine, 1/3
- 720 dolomite, same but less lavender
- 730 dolomite, very finely crystalline, light gray to nearly white
- 740 sandstone, fine to very fine, subrounded, colorless
- 750 sand, same
- 760 dolomite, very finely crystalline, light gray to lavender
- 780 dolomite, very finely crystalline, white, light gray, trace lavender
- 790 same and some white sandstone
- 800 dolomite, very finely crystalline, light gray to nearly white
- 810 dolomite, same with trace of tan
- 820 dolomite, finely crystalline, light gray
- 830 dolomite, finely crystalline, tan to white
- 840 dolomite, finely crystalline, white to slightly tan

Madison Formation 840 feet(?) to total depth 860 dolomite, same

- 865 dolomite, finely crystalline, white to faintly tan
- 875 dolomite, very finely crystalline, tan to light gray; some light greenish shale
- 885 dolomite, very finely crystalline, tan to white plus hard red-brown shale
- 895 dolomite, same; red shale same but sandier
- 905 dolomite, same
- 915 same, plus some sand, medium round, some yellow grains
- 925 same, large frosted quartz grains

Blackhawk #5 (cont.)

Madison Formation (cont.)

- 935 dolomite, very finely crystalline, white to pinkish
- 945 dolomite, very finely crystalline, light brown to pink and off-white
- 955 dolomite, very finely crystalline, light gray to pink, some pyrite
- 965 dolomite, some trace light green pyrite shale
- 975 dolomite, same, no green
- 980 dolomite, same
- 990 dolomite, same to faintly pink
- 1000 dolomite, same
- 1010 dolomite, medium to finely crystalline, some calcite spar – all snow white
- 1020 dolomite, very finely crystalline, white
- 1030 dolomite, same, trace translucent brown chert
- 1040 dolomite, very finely crystallized, white to light tan
- 1050 dolomite, medium crystalline, white; some intergranular porosity
- 1060 dolomite, fine to medium crystalline
- 1070 dolomite, same, some intergranular porosity
- 1080 dolomite, fine to medium crystalline, white to light tan
- 1090 dolomite, finely crystalline, white to gray brown
- 1120 dolomite, very fine to medium crystalline white to light tan
- 1130 dolomite, very fine to medium crystalline white to light tan
- 1150 dolomite, very finely crystalline, white to very light gray
- 1160 dolomite, very finely crystalline, white to very light tan
- 1170 dolomite, fine to very finely crystalline, white to faintly tan
- 1190 dolomite, fine to medium crystalline, white
- 1200 dolomite, same, trace yellow
- 1210 dolomite, same, white to very light gray
- 1220 dolomite, trace spar crystals. Total depth 1220 feet.

TRANSMITTAL LETTER

OUR PROJECT #: 98-656

DATE: 8/17/98

TO: Water Rights Program
Joe Foss Building
523 East Capitol
Pierre, South Dakota 57501

ATTN: Eric Gronlund

RE: Black Hawk Water Improvements

WE TRANSMIT:

☒ herewith
☐ hand delivered
☒ mailed

☐ in accordance with your request
☐ under separate cover via ☐
☐ picked up

FOR YOUR:

☒ approval
☐ use
☐ signature

☐ review
☐ information
☐ per request

☐ distribution
☐ record
☐ payment

THE FOLLOWING:

☐ drawings
☐ reports

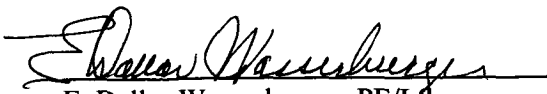
☐ specifications
☐ shop drawings

☐ payment request
☒ application

REMARKS: Mr. Gronlund:

Enclosed are two completed copies of the Application For Permit to Appropriate Water Within The State Of South Dakota along with maps and a check in the amount of \$525.00 for approval by the State.

ALLIANCE OF ARCHITECTS AND ENGINEERS


E. Dallas Wasserburger, PE/L
President

COPIES TO: Cindy Lundin



706 West Boulevard
Rapid City, SD 57701
605-342-9470
FAX 605-342-2377
E-MAIL alliance@iw.net



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE SOUTH DAKOTA 57501-3181

March 9, 1998

Gregory Palmer
Black Hills Council of Local Governments
1602 Mt. View Road, Suite #104
P.O. Box 9686
Rapid City, SD 57709-9686



Subject: Water Distribution System Improvement Project -
Black Hawk Water User District

G. P. G.
Dear ~~Mr. Palmer~~;

The South Dakota Department of Environment and Natural Resources' Ground Water Quality Program has reviewed the information submitted pertaining to the project listed above.

The department does not anticipate any impacts to the quality of ground water by this project. You will not need any permits from the Ground Water Quality Program to perform the distribution system improvements. However, there have been petroleum and other contamination spills in the Black Hawk vicinity. Reports of all of the releases in the area may not have occurred, yet. Attached please find a listing of releases reported to the department, in the Black Hawk vicinity.

If you encounter any contamination during construction activities, you must report the contamination to the department at (605) 773-3296. Temporarily stockpile any contaminated soil encountered and sample the soil to determine disposal requirements.

In addition, the drilling of the water supply well may require a water appropriation obtained from the South Dakota Water Management Board. For more details about these requirements, please contact the department's Water Rights Program. The Water Rights Program may be reached at (605) 773 - 3352.

Thank you for your concern in protecting South Dakota's environment. If you have any further questions about the quality of ground water in the area, please contact our office.

Sincerely,

A handwritten signature in dark ink, appearing to read 'Sheldon Hamann', with a long horizontal flourish extending to the right.

Sheldon Hamann
Hydrologist
Ground Water Quality Program
Phone: (605) 773-3296

Xc: Eric Gronlund, Department - Water Rights Program,
Pierre

Attachment

St = Status = Open, Monitoring, Inactive, or Closed

R1 = Assigned State Reviewer Initials

File Number	Site Name	Street Address	Material Spilled	St	R1
88.108	Black Hills Power & Light	1.5 Mi. E.-black Hawk	Transformer Oil	C	KK
91.207	Buckingham Wood Products	S. Of Sewer Lot 1: Block 5	Waste Oil	C	DP
91.444	Red Arrow Campground	9320 Heritage	Gasoline	C	RC
93.261	Joycelyn Erickson	10 N. Of Rapid City	Petroleum smell	C	KK
94.154	I-deal Homes	Sturgis Road	Diesel Fuel	C	TK

Please be aware that this may not be a complete or up to date list of
 Spills/Releases reported to the South Dakota Department of Environment
 and Natural Resources - If you have any questions, call (605) 773-3296

Black Hills Council of Local Governments

1602 Mt. View Road, Suite 104 • P.O. Box 9686 • Rapid City, South Dakota 57709-9686

February 11, 1998

Mr. Patrick Snyder
Department of Environment and Natural Resources
Office of Point Source Control
Foss Building, 523 East Capitol Avenue
Pierre, South Dakota 57501-3181



SOLID WASTE/HAZARDOUS WASTE DETERMINATION

It appears, based on the information provided, that this project will have little or no impact on solid waste and hazardous waste management in the area.

Reviewed By: Vonni Kalleberg

Date: 3-9-98

Phone: (605) 773-3153 Fax: (605) 773-6035

South Dakota Department of Environment
and Natural Resources

RE: Meade County / Black Hawk Water User District
Environmental Assessment
Water Distribution System Improvement Project

Dear Mr. Snyder:

Meade County, on behalf of the Black Hawk Water User District, is anticipating the award of a State CDBG Grant from the Governor's Office of Economic Development to undertake a district water distribution system improvement project. This proposed project involves: (1) the drilling of a 1,100 foot Madison Formation well capable of producing 550 gpm; (2) a transmission line connecting the well to the system; (3) a line looping the Haas Lane area of the District; and (4) a distribution line from the main transmission line to Heritage Park that will bring on board 75 new users who will become part of the District.

The enclosed map and site plan show the project location. This project is scheduled for review by the South Dakota Board of Water and Natural Resources on March 25, 1998. In order for the Board to act on the Meade County / Black Hawk Water User District proposal, your finding must be presented at that time. Consequently, the Black Hawk Water District would appreciate your reply no later than March 18, 1998. Should a response not be received by that date, a finding of **no negative impact** will be assumed by the District, and the project will be presented as such.

Sincerely,

BLACK HILLS COUNCIL OF LOCAL GOVERNMENTS


Gregory D. Palmer

GDP/II

Enclosures (Map and Site Plan)

MEADE\Snyder1.pmf

WATER QUALITY DETERMINATION

It appears, based on the information provided, that this project will have little or no impact on the water quality in this area. This project is approved.

Approved By: John Miller

Date: 3-9-98

(605) 773-3351

FAX - (605) 773-6035

SOUTH DAKOTA DEPARTMENT OF ENVIRONMENT
AND NATURAL RESOURCES



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE SOUTH DAKOTA 57501-3181

April 23, 1998

Re: Drinking Water SRF Loan C462393-01

Mr. Edmund L Striebel, Board President
Black Hawk Water District
PO Box 476
Black Hawk, SD 57718-0476

Dear Mr. Striebel:

On Wednesday, April 22, 1998, I contacted Cindy Lundin regarding a few preliminary issues that must be addressed prior to construction of your water supply and distribution project. These issues relate to the State Revolving Fund (SRF) program requirement that a loan recipient comply with applicable state and federal regulations.

One issue we discussed was whether the district would need a well permit from the DENR Water Rights Program. Ms. Lundin has already taken steps to apply for a well permit. I asked her to have the Water Rights Program forward a copy of their approval letter to me. I will need this documentation before I can approve any monthly draws (payment requests) for drilling.

Another issue we talked about is the requirement for an archaeological records check and an on-the-ground archaeological survey of any areas of new ground disturbance. Ms. Lundin and I agreed that the north-south route through the proposed Pine Valley Subdivision will be new ground disturbance. After our telephone conversation, I realized that the route for looping Timberline Subdivision and the existing 6" main may be new disturbance. *Essentially, any route on virgin ground must be surveyed.* I might suggest that the district hire an archaeologist to review all routes as proposed in the Alliance' facility plan dated February 1998. This may save time and money on future projects but is certainly the district's decision.

Another related issue is the need to communicate to contractors that they must temporarily stop construction and inform the district if they encounter any indications of past human occupation, to include bones, artifacts, and foundations. The district then has the responsibility of notifying the State Historic Preservation Office in Pierre. With regard to SRF funding, this is not optional as Mr. Vogt's comment letter may have implied. Your consultant should include an appropriate section regarding archaeological sites in either the plan specifications or plan notes.

Finally, we discussed the requirement to report to DENR any petroleum contamination encountered during construction. In general, the contractor is responsible for informing the district and the district is responsible for contacting the Ground Water Quality Program. Your consultant should include an appropriate section in the plan specifications or plan notes which thoroughly explains the procedure upon encountering petroleum contamination.

If I can be of any assistance or you have any questions regarding these issues, please call me at 605-773-5668 or email me at gayleenl@denr.state.sd.us.

Sincerely,

A handwritten signature in black ink, appearing to read 'GL', with a stylized flourish at the end.

Gayleen Lowe
Natural Resources Engineer
Water & Waste Funding Program

cc: Alliance of Architects & Engineers, Rapid City
Black Hills Council of Governments, Rapid City
DENR Water Rights Program, Pierre ✓



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

August 5, 1998

Cindy Lundin
Black Hawk Water District
PO box 476
Black Hawk, SD 57718-0476

Dear Ms. Lundin:

I am writing to ensure that you are aware of water right permit requirements for the District's water supply and distribution project. This project was brought to my attention in a letter Gayleen Lowe wrote to the District's Board President on April 23, 1998, regarding a Drinking Water SRF loan.

It is my understanding that the District is contemplating drilling a new well as part of this project. I believe that in a previous conversation with Ms. Lowe you indicated the District was in the process of applying for a water right permit. However, I am not aware that a water right permit application has been filed by the District.

Enclosed is a set of water right permit application forms. The water right permitting process can take from two to six months to complete or even longer if the application is contested and appealed to the court system. I want you to be aware of these time frames for planning purposes. Construction of the project may be delayed until the necessary water right permit is secured.

If you have questions about the water right permitting process or do not believe a water right permit is necessary, please feel free to contact me.

Sincerely,


Eric Gronlund
Water Rights Program
(605) 773-3352

enclosure

WATER PERMIT APPLICATION NO. 1674-1
BLACK HAWK WATER USERS DISTRICT
OCTOBER 13, 1998

Water Permit Application No. 1674-1 proposes to appropriate 2.23 cubic feet of water per second from one well (Madison Limestone) 1,300 feet deep located in the SE¼ SW¼ Section 31, T3N-R7E. The water is for municipal use to serve the Black Hawk community and Heritage Park Mobile Home Community.

AQUIFER: Madison Aquifer (MDSN)

GENERAL:

The Madison Aquifer is a massive, carbonate (limestone and dolomite) aquifer that underlies most of western South Dakota. It is estimated that the aquifer contains at least 640 million acre-feet of recoverable water in storage in the State (Allen, 1984). The importance of the Madison as an aquifer is largely due to randomly distributed zones of secondary porosity and permeability formed by weathering of exposed surfaces, groundwater solution, and fracturing. These zones also play an important role in determining the hydraulic behavior of the Madison aquifer and the response of the system to stress. Recharge to the Madison aquifer occurs through streamflow losses and direct infiltration of precipitation at the outcrop area. Recharge for the entire Madison Aquifer in South Dakota has been estimated to range from 140,000 to 400,000 acre-feet per year (Woodward Clyde, 1981). The Madison is generally considered an excellent aquifer both in terms of quality and quantity, especially near the outcrop (recharge area). The Madison outcrop is located within approximately 2.5 miles west of this well site (Darton, 1925) and (DeWitt, 1989), and the top of the Madison is estimated to be approximately 1,100 feet below ground surface (Redden, 1995).

The potentiometric surface of the Madison aquifer is expected to be around 3500 feet msl at this site so the water level of this well should be approximately 120 feet below grade (Water Rights, 1998).

WATER AVAILABILITY:

The well site proposed by this application is located within six miles of three Water Rights' Observation Wells completed into the Madison Aquifer (MD-94A, PE-95C, and PE-89C). A hydrograph for PE-95C, which is the closest of these wells (see figure 1), shows both climatic fluctuations in the water levels and recovery from pumping in late 1996. It clearly demonstrates the system is recharged.

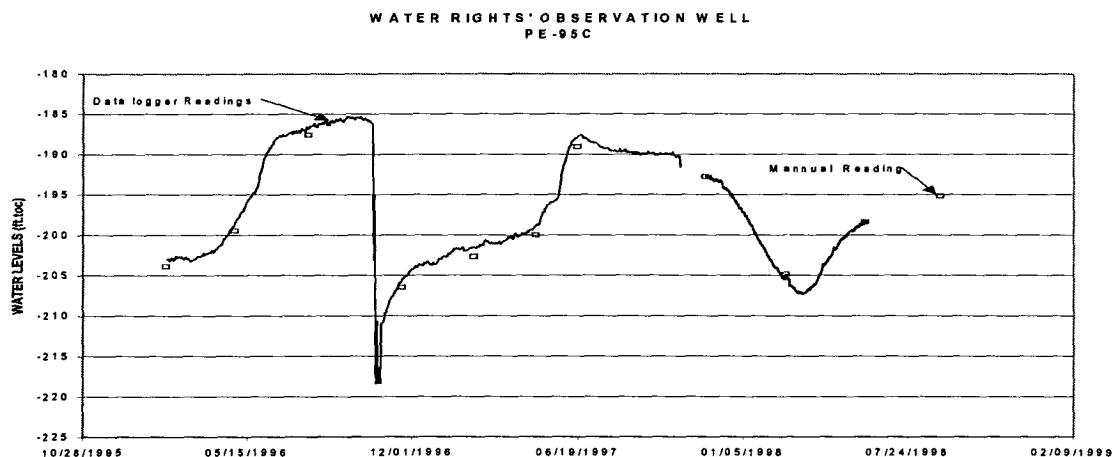


Figure 1. Madison Aquifer Observation Well Hydrograph

The Water Rights Program monitors 26 observation wells completed into the Madison aquifer in the Black Hills Area. Records from the observation wells indicate the potentiometric surface of the Madison Aquifer fluctuates 30-40 feet per year near the recharge area in response to seasonal and climatic variations. Long term water-level declines are not apparent from any of the hydrographs. Observation well data suggest that at the existing level of development, natural influences dominate the water level of the aquifer and the effects of pumping as yet are not obvious.

The high cost of Madison wells, except very near the outcrop, and the availability of groundwater from shallower aquifers, has limited domestic development and generally restricted usage from the Madison to those uses which require Water Rights. There are 104 permits/rights which appropriate water from the Madison aquifer in South Dakota. The majority of the water rights/permits from the aquifer are from Butte (16), Lawrence (20), Meade (16), Pennington (31) and Fall River (9) Counties. The Madison supplies water for irrigation, geothermal, industrial, commercial, recreational, and commercial use. However, by far the major use of the aquifer is for common distribution systems (suburban housing development and municipal use). The cities of Spearfish, Belle Fourche, Whitewood, Sturgis, Rapid City, Box Elder and Edgemont all depend on water from the Madison Aquifer.

If the worst case assumptions are made that (1) permits/rights with an annual withdrawal limitation (ac-ft/yr.) will use the maximum allowable; and (2) permits/rights that are limited by a diversion rate only, will use 60% of the maximum allowable (considered reasonable for water distribution systems); the total water use from the Madison would be approximately 50,000 acre-feet per year. The actual amount of water used from the Madison is considerably less than this estimate. Three Future Use Permits (2086-2, 1833-2, and 369-1) reserve another 6,455 acre feet annually from the Madison Aquifer for future use. Comparison of the estimated annual recharge to the Madison with the water use estimated from the aquifer indicates unappropriated water is available from the Madison aquifer.

This application proposes an additional appropriation (under continuous pumping conditions) of up to 1,614 ac-ft/yr. from the Madison Aquifer. Realistic usage from this well should be less than 1,000 ac-ft/yr. This amount of water will not significantly upset the balance of withdrawals to recharge for the system.

AFFECTS ON EXISTING RIGHTS:

There are a number of water permits/rights appropriating groundwater in this area, see figure 2.

PERMIT NO. 1674-1 LOCATION MAP

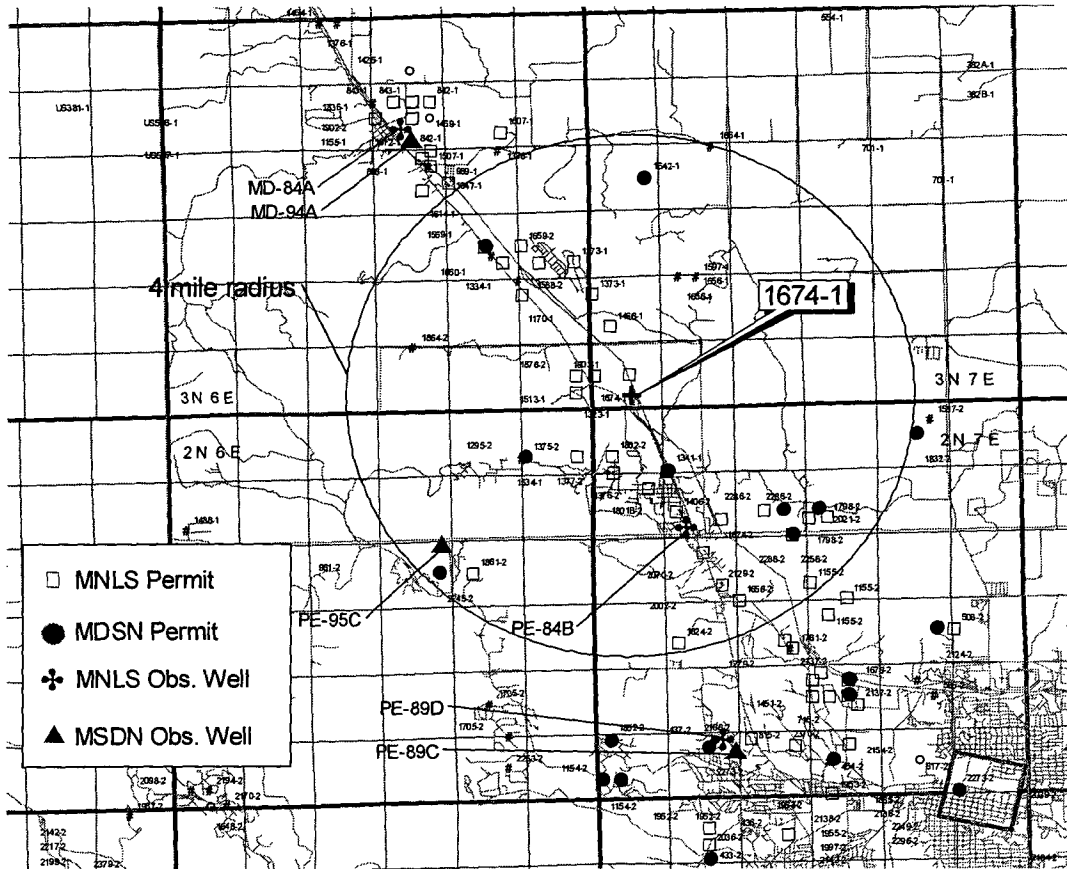


Figure 2. Location map

Most of these groundwater Permits/Rights are supplied from sources other than the Madison Aquifer, although there are nine Permits/Rights supplied from the Madison Aquifer within 4 miles of this well site. The nearest Madison appropriation, other than the applicants existing well (No. 1341-1), is No. 1534-1 which is approximately 1½ miles from this well site. File documentation in Water Permit No. 1534-1 indicates it should be scheduled for cancellation. Other Madison Permits/Rights in the area are over 2½ miles from this well site. At this distance, interference between wells is not expected to be significant and certainly not adverse.

If the cumulative affect of development from the Madison Aquifer, (i.e., an affect that cannot be attributed directly to a single diversion), requires the lowering of pumps in existing wells or reduces flows of area springs or streams, unlawful impairment of existing rights questions may need to be answered. SDCL 46-6-6.1 authorizes the Water Management Board to protect domestic water use by controlling large capacity wells without the necessity of requiring maintenance of artesian head pressure in a domestic use well. The statute also provides for the lowering of a water lift mechanism to a depth near the bottom of the groundwater supply or, in artesian aquifers to a substantial depth below the geological formation confining the ground water. Considering this statute, although water levels may be affected, the affect may not be unlawful impairment.

There are a number of wells completed into Minnelusa Aquifer in this area. Testimony was presented in opposition to Water Permit No. 1569-1 (Indian Hills No. 4), which is located approximately 3 miles north west of this well site, that pumping the Madison Aquifer may affect nearby wells completed into the Minnelusa aquifer (Water Rights, 1993). The extent of hydrologic connection between the Madison and Minnelusa Aquifers is unclear and is arguable. For the most part the Madison and Minnelusa Aquifers are "hydraulically distinct units". However, in general the potentiometric surfaces (water levels) suggest a potential for leakage from the Madison Aquifer to the Minnelusa Aquifer, and there is some concern over possible impacts to Minnelusa wells caused by pumping the Madison. If leakage is significant, drawdown in the Madison could cause decreased leakage and consequently lower water levels in the Minnelusa aquifer.

The difference between the potentiometric surfaces of the two aquifers varies at different locations. The Water Rights Program maintains 17 sites where observation wells are completed side by side into the Madison and Minnelusa Aquifers. The difference between water levels is over 50 feet at nine of these sites, is between 50 feet and 10 feet at four sites, and is less than 10 feet at four sites. While a significant difference in water levels may suggest distinct aquifer systems, similar heads do not necessarily mean the aquifers are in direct hydraulic connection. A number of variables may affect the difference in potentiometric surfaces including elevation, relationship to losing stream segments, relationship to springs, etc. In Rapid City, at three sites within a two-mile radius, the difference in potentiometric surfaces of the Madison and Minnelusa Aquifers is 3 feet, 56 feet and 80 feet, respectively.

This well site is approximately equal distance between a site where there is over 80 feet of difference and a site where the water levels are the same and test pumping identifies interconnection.

Five miles north west of this well site, the Water Rights Program monitors a pair of observation wells, one in the Minnelusa (MD-84A) and the other in the Madison aquifer (MD-94A). Comparison of the water levels shows there is over 80 feet of difference in the potentiometric surface of the two aquifers, see figure 3.

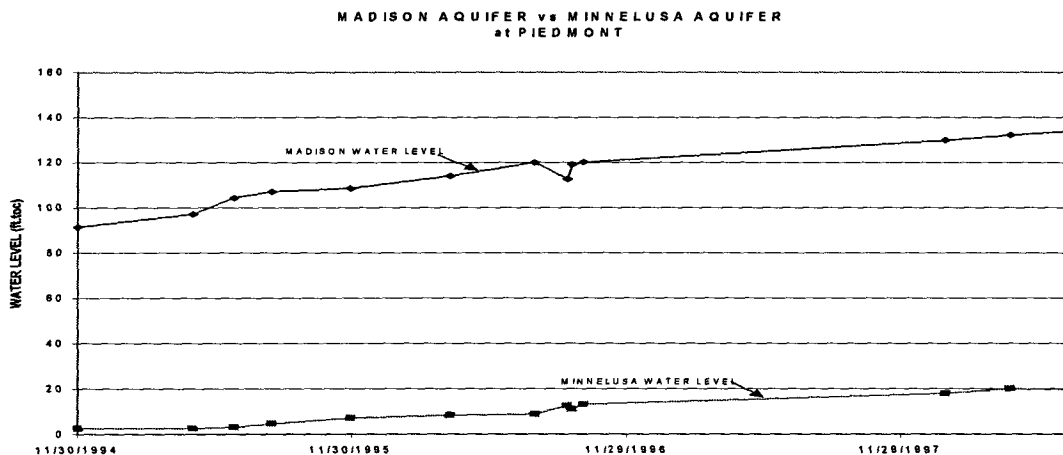


Figure 3. Hydrograph Comparing Madison and Minnelusa Aquifers

As can be seen, at this site the potential is for leakage from the Madison to the Minnelusa. Individual hydrographs of the two wells (figure 4 & figure 5) show the aquifers respond rapidly to recharge.

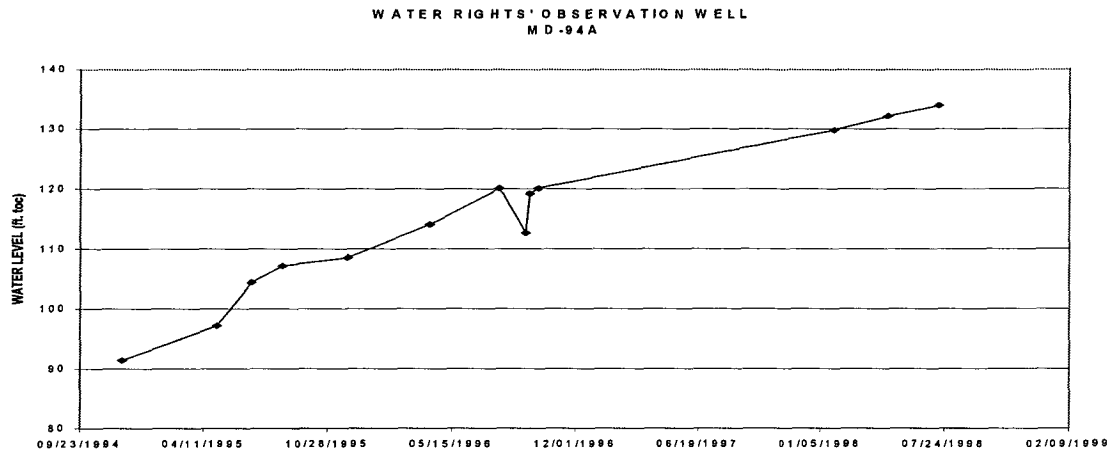


Figure 4. Madison Aquifer Observation Well Hydrograph

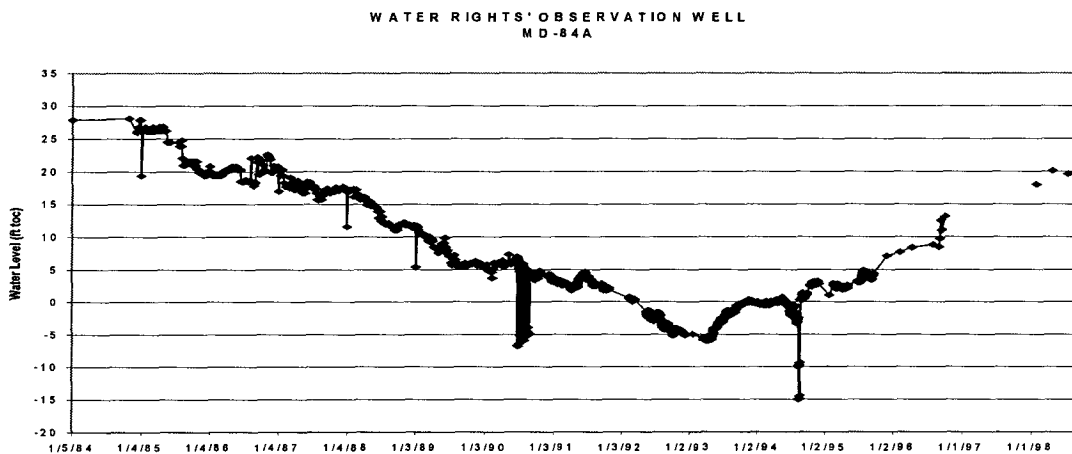


Figure 5. Minnelusa Aquifer Observation Well Hydrograph

The water levels are over 40 feet higher in the Madison well than when it was completed in 1994 and water levels of the Minnelusa have fluctuated over 30 feet between wet years and dry years. As responsive as the aquifers are to recharge, leakage between the two aquifers would have reached equilibrium long ago if leakage were significant (i.e. the water levels would be the same).

Approximately six miles south east of this proposed well site the water levels of the Madison and Minnelusa aquifers are similar at the site of Water Rights' Observation wells PE-89D and PE-89C. The similar water levels at this site appear to be the result of a fairly direct hydraulic connection between the two aquifers. In fact, Greene (1993) reported that water levels in both wells responded to the test pumping of Rapid City's Madison Aquifer Production Well RC-6, over 2,900 feet away.

A third Water Rights Observation Well site (PE-65A/PE-64B) about seven miles south east of this proposed well (only 1½ miles from the PE-89D/PE-89C site) is a site where at times the water levels of the two aquifers are similar and at times they are quite separate. Examination of a hydrograph of the two wells (figure 6) suggests there are two distinct aquifers with little if any hydraulic connection at this site.

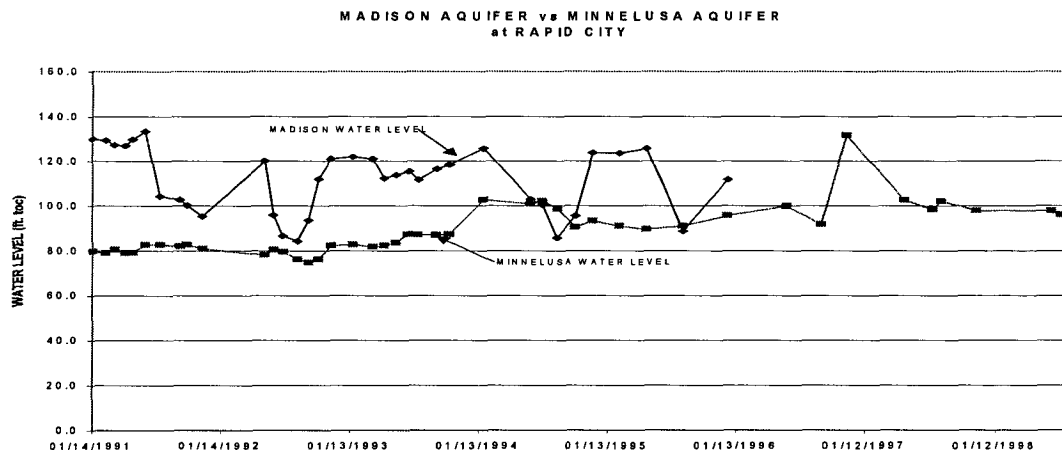


Figure 6. Hydrograph Comparing Madison and Minnelusa Aquifers

An aquifer test conducted on Rapid City's Madison Aquifer Production Well RC-5 showed no response to the Minnelusa water level approximately 1,700 feet from the pumped well. Since RC-5 went into production in 1990, water levels of a Madison Observation well 685 feet away have shown over 80 feet of fluctuation when the city pumps. The Madison Observation Well 1,700 feet away shows 20 feet of fluctuation when the city pumps. The affect of pumping the city well on the Minnelusa is not apparent (Driscoll, 1996).

It is unlikely that pumping the Madison Aquifer at this site will affect nearby wells completed in the Minnelusa Aquifer. However, the hydrograph for Water Rights' Observation Well PE-84B, which is completed into the Minnelusa Aquifer about 2 miles south east of this well site shows, that water levels have fluctuated over 40 feet in the area during the period of record, (figure 7).

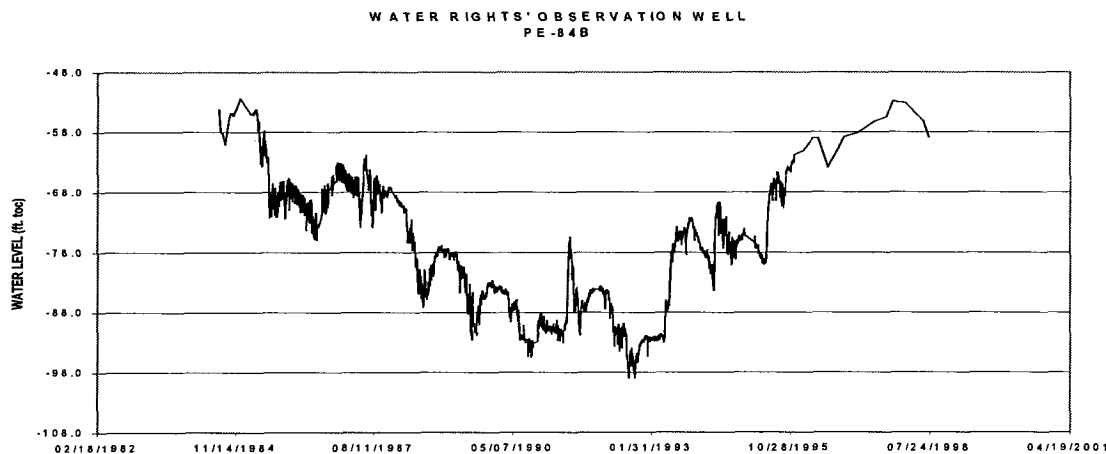


Figure 7. Minnelusa Aquifer Observation Well Hydrograph

The hydrograph documents climatic effects of over 40 feet of fluctuation of water levels. It can be expected that during the next dry cycle, recently constructed wells (both Madison and Minnelusa) will experience lower water levels that may necessitate the lowering of pumps in some of these wells. The cause and effect mentality of many will equate lowering pumps with an increased appropriation such as this, if it coincides with a dry cycle.

TERM LIMITATION:

SDCL 46-2A-20 requires that "... no water permit for construction of works to withdraw water from the Madison formation in Butte, Fall River, Custer, Lawrence, Meade and Pennington counties may be issued for a term of more than twenty years, unless the water management board determines, based upon the evidence presented at the hearing that:

- (1) Sufficient information is available to determine whether any significant adverse hydrologic effects on the supply of water in the Madison formation would result if the proposed withdrawal were approved; and
- (2) The information, whether provided by the applicant or by other means, show that there is a reasonable probability that issuance of the proposed permit would not have a significant adverse effect on nearby Madison formation wells and springs."

Evidence is not available to justify issuing this permit without a term limitation of 20 years.

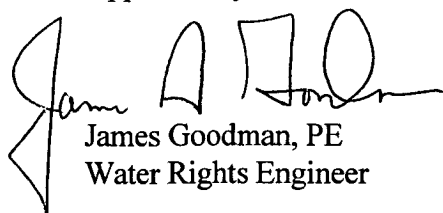
CONCLUSIONS:

1. This application proposes to appropriate 2.23 cfs from the Madison Aquifer.
2. The Madison Aquifer is a viable aquifer and unappropriated water is available.
3. This appropriation will not adversely impair existing water rights due to the distance between wells, and the apparent hydraulic separation between the Madison and shallower aquifers in this area.
4. Information is not available to justify issuing this permit without a term limitation of 20 years.



Ken Buhler
Water Rights Engineer

Approved by



James Goodman, PE
Water Rights Engineer

REFERENCES:

- Allen, J.C., D.Iles, A.Petres, 1984, Analysis of Groundwater and Streamflow Data, Western Dakotas Region of South Dakota, Task 3 & 4: Groundwater Resources Inventory, US Army Corps of Engineers Contract DAWC 45-82-C-015, SD DENR- Geological Survey, Vermillion SD
- Darton, N.H., Paige, S., 1925, Geologic Atlas of the United States, Central Black Hills Folio, U.S. Geologic Survey Folio No. 219.
- DeWitt, E., J.Redden, D. Buscher, A. Burback Wilson, 1989, Geologic Map of the Black Hills Area, South Dakota and Wyoming, U.S. Geological Survey, Map I-1910,

- Driscoll, D., W.Bradford, K.Neitzert, 1996, Selected Hydrologic Data Through Water Year 1994, Black Hills Hydrology Study, South Dakota, Open-File Report 96-399, U.S. Geologic Survey, Rapid City, SD
- Greene, E.A., 1993, Hydraulic Properties of the Madison Aquifer System in the Western Rapid City Area, South Dakota, Water-Resources Investigations Report 93-4008, U.S. Geological Survey, Rapid City, SD
- Redden, J.A., 1994, Structural Contours and Phanerozoic Structures in the Rapid City, South Dakota, 1:100,000 Scale Quadrangle, Open-File Report 95-81, U.S. Geological Survey, Rapid City, SD
- Water Rights Program, 1993, "Water Permit File 1569-3", South Dakota DENR-Water Rights Program, Joe Foss Building, Pierre, SD
- Water Rights Program, 1998, "Unpublished Observation Well Records", South Dakota DENR-Water Rights Program, Joe Foss Building, Pierre, SD
- Water Rights Program, 1998, "Domestic Well Log Files", South Dakota DENR-Water Rights Program, Joe Foss Building, Pierre, SD
- Water Rights Program, 1998, "Water Permit/Right Files", South Dakota DENR-Water Rights Program, Joe Foss Building, Pierre, SD
- Woodward Clyde Consultants, 1981, Well Field Hydrology Technical Report, for the ETSI Coal Slurry Pipeline Project, U.S. Dept. of Interior, Bureau of Land Management

**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 1674-1, Black Hawk Water User District**

Pursuant to SDCL 46-2A-2, the following is the recommendation of the Chief Engineer, Water Rights Program, Department of Environment and Natural Resources concerning Water Permit Application No. 1674-1, Black Hawk Water User District, c/o Edmund L. Striebel, Board President, P.O. Box 476, Black Hawk SD 57718.

The Chief Engineer is recommendation APPROVAL of Application No. 1674-1 for a 20 year term pursuant to SDCL 46-1-14 and 46-2A-20 because 1) although evidence is not available to justify issuing this permit without a 20 year term limitation, there is reasonable probability that there is unappropriated water available for the applicant's proposed use, 2) the proposed diversion can be developed without unlawful impairment of existing rights, 3) the proposed use is a beneficial use, and 4) it is in the public interest with the following qualifications:

1. In accordance with SDCL 46-1-14 and 46-2A-20, Permit No. 1674-1 is issued for a twenty year term. Pursuant to SDCL 46-2A-21, the twenty year term may be deleted at any time during the twenty year period or following its expiration. If the twenty year term is not deleted at the end of the term, the permit may either be cancelled or amended with a new term limitation of up to twenty years. Permit No. 1674-1 may also be cancelled for nonconstruction, forfeiture, abandonment or three permit violations pursuant to SDCL 46-1-12, 46-5-37, 46-5-37.1, and ARSD 74:02:01:37.
2. The well approved under this Permit will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
3. The well authorized by Permit No. 1674-1 shall be constructed by a licensed well driller and construction shall comply with Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) from the producing formation to the surface pursuant to Section 74:02:04:28.
4. That Black Hawk Water User District report to the Chief Engineer annually the amount of water withdrawn each year from the Madison Formation.

See report on application for additional information.



JOHN HATCH, Chief Engineer
October 16, 1998



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

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

October 28, 1998

Black Hawk Water User District
%Edmund L. Striebel, Board President
P.O. Box 476
Black Hawk, SD 57718

Dear Mr. Striebel:

Water Permit Application No. 1674-1 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 Meade Co. Times Tribune printed at Sturgis, SD (Ph # (605) 347-2503). For your information, a copy of the notice, the recommendation of the Chief Engineer and a report on the application are enclosed. Please review the notice prior to publication and notify this office, if you have any corrections or questions.

Be sure to contact the above newspaper to authorize publication of your Notice of Hearing and to arrange for payment. Early contact with the paper can eliminate delays. The publisher has been instructed to publish your notice once each week for two consecutive weeks with the last publication to occur twenty days before the board meeting. The newspaper has been instructed to send us the Proof of Publication. We must receive Proof of Publication before action can be taken on the application.

Sincerely,

Eric Gronlund
Natural Resources Engineer
(605) 773-3352

enclosures

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



October 28, 1998

Meade Co. Times Tribune
Box 69
Sturgis, SD 57785-0069

ATTENTION: Legal Department

Enclosed is a Notice of Hearing on Application No. 1674-1 to Appropriate Water to be published twice. Please publish the first notice on November 4, 1998, 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 Black Hawk Water User District, %Edmund L. Striebel, Board President, P.O. Box 476, Black Hawk, SD 57718 (Ph # (605) 787-5777).

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

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

Sincerely,

Eric Gronlund
Eric Gronlund
Natural Resources Engineer
605 773-3352

enclosures

-----CU T HERE-----

No. 1674-1

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

Date _____

We are in receipt of your letter of October 28, 1998, enclosing Notice of Hearing to Appropriate Water by Application No. 1674-1 which was first published in our issue of _____. **ENCLOSED IS A COPY OF THIS FIRST PUBLICATION.**

Name

Newspaper

NOTICE OF APPLICATION NO. 1674-1 to Appropriate Water

Notice is given that Black Hawk Water User District, PO Box 476, Black Hawk SD 57718 has filed an application for a water permit to appropriate 2.23 cubic feet of water per second from one well (Madison Formation) 1,300 feet deep located in the SE ¼ SW ¼ Section 31-T3N-R7E. The water is for municipal use to serve the Black Hawk community and Heritage Park Mobile Home community.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 1674-1 for a 20 year term pursuant to SDCL 46-1-14 and 46-2A-20 because 1) although evidence is not available to justify issuing this permit without a 20 year term limitation, there is reasonable probability that there is unappropriated water available for the applicant's proposed use, 2) the proposed diversion can be developed without unlawful impairment of existing rights, 3) the proposed use is a beneficial use, and 4) it is in the public interest.

Any person interested in opposing or supporting this application must file a written petition with BOTH the applicant and Chief Engineer. The applicant must also file a petition if opposed to the Chief Engineer's recommendation. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E Capitol, Pierre SD 57501 (605 773-3352)" and the applicant's mailing address is given above. A petition filed by either an interested person or the applicant must be filed by November 23, 1998. The petition may be informal, but must include a statement describing the petitioner's interest in the application, the petitioner's reasons for opposing or supporting the application, and the signature and mailing address of the petitioner or the petitioner's legal counsel, if legal counsel is obtained.

The Water Management Board will consider this application at 10:00 a.m., December 2, 1998, Floyd Matthew Training Center, Joe Foss Building, 523 East Capitol, Pierre, SD. 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. The December 2, 1998, hearing date will be automatically delayed for at least 20 days upon written request to the Chief Engineer from the applicant or any interested person opposing the application. The request for an automatic delay must be filed by November 23, 1998.

Any hearing will be an adversary proceeding. Any person filing a petition and/or the applicant have the right to be represented by a lawyer and may present evidence or cross-examine witnesses according to SDCL 1-26. 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. Contact Eric Gronlund by November 23, 1998, at the above Water Rights Program address to request copies of information pertaining to this application, to assure access to the hearing by the handicapped or to obtain an interpreter for the hearing impaired.

This application is made pursuant to SDCL 46-1-1 thru 46-1-9, 46-1-12 thru 46-1-16; 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, 46-2A-20, 46-2A-21; 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, 46-6-26; and Board Rules ARSD 74:02:01:01 thru 74:02:01:15. Nettie H. Myers, Secretary, Department of Environment and Natural Resources.



AFFIDAVIT OF PUBLICATION

STATE OF SOUTH DAKOTA
COUNTY OF MEADE

Joan M. Lewis, being duly sworn, says: That the Meade County Times and, during all the times hereinafter mentioned, was a legal newspaper SDCL 17-2-2, as amended, published at Sturgis, Meade County. So Dickson Media, Inc.; that affiant is and, during all of said times, was accountant by the publisher of such newspaper and has personal knowledge of the facts stated in the affidavit; the notice, order or advertisement, a copy of which is attached, was published in said newspaper for successive issues on the following dates:

November 4 1998

November 11 1998

_____ 199_____

_____ 199_____

_____ 199_____

that the full amount of the fee charged for publishing the same, to wit \$ 57.42, inures solely to the benefit of the publisher; that no agreement or understanding for the division of the fee with any person, and that no part of the fee has been agreed to be paid by any person.

Joan M. Lewis
Bookkeeper

Subscribed and sworn to before me this

4th day of November, 1998

Shanita Bous
Notary Public, South Dakota

My Commission Expires
February 1, 200

Water Application

NOTICE OF APPLICATION
NO. 1674-1 to appropriate water for a water permit to appropriate 2.23 cubic feet of water per second from one well (Madison Formation) 1300 feet deep located in the SE 1/4 SW 1/4 Section 31-T3N-R7E. The water is for municipal use to serve the Black Hawk community and Heritage Park Mobile

Home community.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 1674-1 for a 20 year term pursuant to SDCL 46-1-14 and 46-2A-20 because 1) although evidence is not available to justify issuing this permit without a 20 year term limitation, there is reasonable probability that there is unappropriated water available for the applicant's proposed use, 2) the proposed diversion can be developed without unlawful impairment of existing rights, 3) the proposed use is a beneficial use, and 4) it is in the public interest.

Any person interested in opposing or supporting this application must file a written petition with BOTH the applicant and Chief Engineer. The applicant must also file a petition if opposed to the Chief Engineer's recommendation. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E Capitol, Pierre SD 57501 (605 773-3352)" and the applicant's mailing address is given above. A petition filed by either an interested person or the applicant must be filed by November 23, 1998. The petition may be informal, but must include a statement describing the petitioner's interest in the application; the petitioner's reasons for opposing or supporting the application; and the signature and mailing address of the petitioner or the petitioner's legal counsel, if legal counsel is obtained.

The Water Management Board will consider this application at 10:00 a.m., December 2, 1998, Floyd Matthew Training Center, Joe Foss Building, 523 East Capitol, Pierre, SD. 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. The December 2, 1998, hearing date will be automatically delayed for at least 20 days upon written request to the Chief Engineer from the applicant or any interested person opposing the application. The request for an automatic delay must be filed by November 23, 1998.

Any hearing will be an adversary proceeding. Any person filing a petition and/or the applicant have the right to be represented by a lawyer and may present evidence or cross-examine witnesses according to SDCL 1-26. 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. Contact Eric Gronlund by November 23, 1998, at the above Water Rights Program address to request copies of information pertaining to this application, to assure access to the hearing by the handicapped or to obtain an interpreter for the hearing impaired.

This application is made pursuant to SDCL 46-1-1 thru 46-1-8, 46-1-12 thru 46-1-18; 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, 46-2A-20, 46-2A-21; 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, 46-6-28; and Board Rules ARSD 74:02:01.01 thru 74:02:01.15. Nettie H. Myers, Secretary, Department of Environment and Natural Resources.

Publ Nov. 4 and 11, 1998
Meade County Times-Tribune



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

JAN 19 1999

Black Hawk Water User District
%Edmund L. Striebel, Board President
P.O. Box 476
Black Hawk, SD 57718

Dear Mr. Striebel:

Enclosed is Water Permit No. 1674-1 authorizing construction of your water diversion system and beneficial use of the water, not exceeding the limits as specified in the Water Permit.

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

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

Very truly yours,

JOHN HATCH, Chief Engineer
Water Rights Program
(605) 773-3352

enclosures

Permit No. 1674-1
Upper Cheyenne River - Water District

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

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

I have made a thorough examination of the water use system constructed by **Black Hawk Water User District** of **PO Box 476, Black Hawk, SD 57718** holder of Permit No. **1674-1**, bearing the priority of **August 18, 1998** authorizing the diversion of **2.23** cu. ft. per second of the waters of the **Madison Formation** for **Municipal use** purposes, in **Meade** County.

Inspection contact & relationship **Ed Striebel (787-5777, 484-7934 cell)**
to permit holder, if applicable:

A. Works used to divert the water:

Well Information:

- 1) Well Drilling Firm: **Taylor Drilling**
- 2) No. of Wells **1**
- 3) Depth(s) **1,220** feet
- 4) Well log is available **Y**

Casing:

- 1) Diameter **16, 10³/₄, 8 5/8** inches
- 2) Length **974** feet
- 3) Type **Steel**

Screen:

- 1) Type **None**
- 2) Static water level **87** feet

Pump:

- 1) Make **Goulds**
- 2) Model **9RCLC**
- 3) Size **Franklin 125 hp motor**
- 4) Capacity **850** GPM

B. Compliance with Permit Requirements:

- 1) Permit qualifications being abided by Y
- 2) Irrigation Questionnaires checked to determine if permit owner started irrigation by the end of construction period NA
- 3) Exceptions to compliance are: None

The system is in Good condition with the point(s) of diversion located as follows:

Approximately 2,585 feet east and 130 feet north of the SW corner of Section 31-T3N-R7E

(N 44.16951, W -103.32214) (SE ¼ SW ¼)

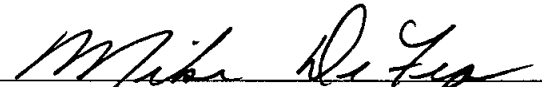
The works are capable of diverting and conveying to the place of use 1.90 cu. ft. per second of water which is to be used for Municipal use.

The license should be issued for 1.90 cfs.

All structures, wells and lands on map Y

Comments or other permit(s) associated with the project:

Water from this well will provide water to the Black Hawk community and the Heritage Park Mobile Home Community.



Mike DeFea

Natural Resources Engineer II
DENR, Water Rights Program

Date report completed: November 26, 2013

Water Permit No. 1674-1

Black Hawk Water User District

PO Box 476

Black Hawk, SD 57718



Mike DeFea

Mike DeFea
Natural Resources Engineer
DENR, Water Rights Program
November 21, 2013

0 410 820 1,640 2,460 3,280 Feet



South Dakota
Department of Environment
& Natural Resources
Protecting SD's Tomorrow... Today



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
PMB 2020
523 EAST CAPITOL
PIERRE SOUTH DAKOTA 57501-3182
<http://denr.sd.gov>

February 19, 2014

1674-1

Ed Striebel
Black Hawk Water User District
PO Box 476
Black Hawk SD 57718

Dear Mr. Striebel:

The investigation of the water use system, including the extent of application of water to beneficial use, as developed under Water Permit No. 1674-1, was completed by Mike DeFea, a staff engineer with our program. The final water right document, the water license, can now be issued.

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

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

If you have any questions regarding the water permit, investigation of your water use system or payment of the fee, please contact me.

Sincerely,

A handwritten signature in black ink that reads "Genny McMath". The signature is written in a cursive, flowing style.

Genny McMath
Water Rights Program
(605) 773-3352

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

RECEIVED OF Black Hawk Water User District, PO Box 476 Black Hawk SD 57718 Date March 3 20 14

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	50 00
Fee for Application for Permit No. _____ to Appropriate Water for Future use	
Fee to retain Future Use Permit No. _____ after period of seven years.	
Fee for Inspecting Constructed Works, confirming beneficial use and issuing Water License No. <u>1674-1</u>	
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. _____	50.00
Fee for Renewal of Well Pump Installer's License No. _____ for C.Y. _____	
(Any Other Work Provided by Law)	TOTAL

No. **06770**

By *Jeanne Goodman*
Chief Engineer

(15)



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

JOE FOSS BUILDING
PMB 2020
523 EAST CAPITOL
PIERRE SOUTH DAKOTA 57501-3182
<http://denr.sd.gov>

MAR 10 2014

1674-1

Ed Striebel
Black Hawk Water User District
PO Box 476
Black Hawk SD 57718 0476

Dear Mr. Striebel:

Enclosed is Water License No. 1674-1. This is the final water right document completing your process of obtaining a Water Right. Included with your license is a map prepared by the staff engineer who conducted the field investigation.

For your information SDCL 46-6-27 requires that if the owner of an existing well, such as the well authorized by Water Right No. 1674-1, constructs a replacement well and does not plan to use the old well, the old well is considered abandoned and must be plugged. Also, any well that is being used or is not considered abandoned must be valved and controlled, if flowing, or sealed and capped so that no leaking occurs either underground or at the surface.

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

Sincerely,

Jeanne Goodman, Chief Engineer
Water Rights Program
(605) 773-3352

enclosures

STATE OF SOUTH DAKOTA WATER LICENSE NO. 1674-1

(1) Black Hawk Water User District, PO Box 476, Black Hawk SD 57718 made Application No. 1674-1, August 18, 1998 for a water permit to divert 2.23 cubic feet of water per second from ground water (one well – Madison Formation), Meade County, South Dakota for municipal purposes. Permit No. 1674-1, with a priority date of August 18, 1998 was approved December 3, 1998 and issued to the applicant for diversion of water with construction of the described water supply system to be completed on or before December 3, 2003 and for the application to beneficial use of said water on or before December 3, 2007.

(2) It is certified that the permit holder has complied with the provisions of South Dakota State Law relating to completion of the construction of the water supply system and is entitled to divert 1.90 cubic feet of water per second for beneficial use.

The location of the diversion point is 2,585 feet east and 130 feet north of the SW corner of Section 31, T3N, R7E (SE ¼ SW ¼).

(3) The permit holder has complied with the provisions of South Dakota State Law relating to the application of water to beneficial use. Water is provided to the Black Hawk community and the Heritage Park Mobile Home community.

(4) Pursuant to South Dakota Water Law 46-5-30.1 Black Hawk Water User District, PO Box 476, Black Hawk SD 57718 the holder and/or owner of Water Right No. 1674-1 is issued a license to appropriate water, the right to use 1.90 cubic feet of water per second from ground water (one well – Madison Formation) with a priority date of August 18, 1998 from the location specified in (2) of this license for municipal purposes.

This license is subject to South Dakota Water Law, any limitations or conditions listed in Water Right No. 1674-1 and subject to the following qualifications:

- In accordance with SDCL 46-1-14 and 46-2A-20, Permit No. 1674-1 is issued for a 20-year term. Pursuant to SDCL 46-2A-21, the 20-year term may be deleted at any time during the 20-year period or following its expiration. If the 20-year term is not deleted at the end of the term, the permit may either be cancelled or amended with a new term limitation of up to twenty years. Permit No. 1674-1 may also be cancelled for nonconstruction, forfeiture, abandonment, or three permit violations pursuant to SDCL 46-1-12, 46-5-37, 46-5-37.1 and ARSD 74:02:01:37.
- The well approved under this Permit will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
- The well authorized by Permit No. 1674-1 shall be constructed by a licensed well driller and construction of the well and installation of the pump shall comply with the Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) pursuant to Section 74:02:04:28. *(The well was drilled by Taylor Drilling in June, 1999. A copy of the log is on file with the Water Rights Program.)*

Page 2

Water License No. 1674-1

Black Hawk Water User District

- Black Hawk Water User District shall report to the chief engineer annually the amount of water withdrawn each year from the Madison Formation.



Jeanne Goodman, Chief Engineer

Water Rights Program

Department of Environment and Natural Resources

MAR 10 2014

date

