

**WATER PERMIT NO. 1823-1**

Name of Applicant: **Black Hills Water**

Address: **19063 Knollwood Ln, Belle Fourche SD 57717**

Phone: **605 892-2314**

Amount of Water Claimed: **0.22 cfs**

Total Acres: **NA**

Source of Water Supply: **groundwater**

Water to be used for: **rural water system use**

County: **Butte**

Type of Waste Disposal System:

Location: **near Belle Fourche**

**PRIORITY**

Date Received: **5-14-04**

Application/License Fee: **\$200**

Corrected Application Received:

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

Remarks: **Same well as authorized by 1602-1 and 1548-1**

Diversion Point: **SW ¼ SW ¼ Sec 23-T8N-R2E**

Land to be Irrigated: **NA**

Depth of Well: **2117 feet**

Well Driller: : **Graf Drilling**

Remarks:

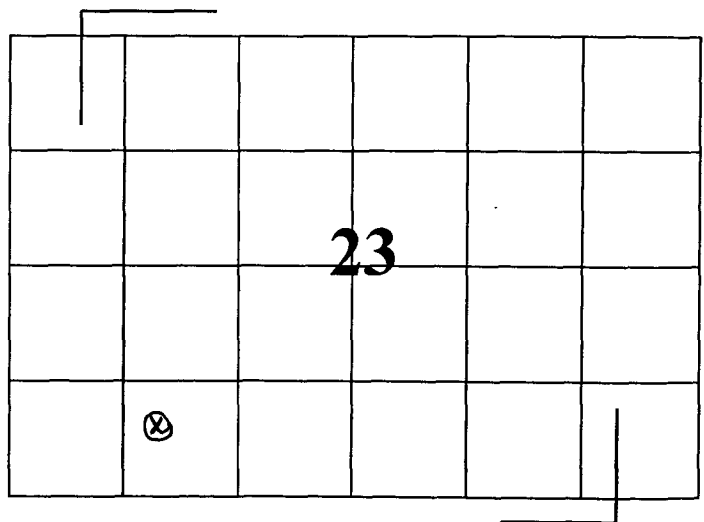
Type of Map: **aerial**

Prepared by: **Esther Olson, FSA**

Reviewed and the Number Assigned on: **5-18-04**

By: **Karen Schlaak**

Notice of Hearing - date to intervene: \_\_\_\_\_



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

|                                                                                                                    |                                                        |                                 |
|--------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|---------------------------------|
| Mail to:<br>Water Rights Program<br>Joe Foss Building<br>523 E. Capitol<br>Pierre, SD 57501-3181<br>(605) 773-3352 | (office use only)                                      |                                 |
|                                                                                                                    | No. <u>1823-1</u>                                      | Hydrologic Unit <u>10120203</u> |
|                                                                                                                    | Basin <u>Belle Fourche River</u>                       |                                 |
|                                                                                                                    | Newspaper <u>Belle Fourche Bee/Post, Belle Fourche</u> |                                 |

 RECEIVED  
 MAY 14 2004  
 WATER RIGHTS  
 PROGRAM

**Application For Permit To Appropriate Water Within The State Of South Dakota**
**Check use(s) of water:**

|                                                        |                                           |                                          |                                          |
|--------------------------------------------------------|-------------------------------------------|------------------------------------------|------------------------------------------|
| <input type="checkbox"/> Municipal                     | <input type="checkbox"/> Suburban Housing | <input type="checkbox"/> Recreational    | <input type="checkbox"/> Institutional   |
| <input checked="" type="checkbox"/> Rural Water System | <input type="checkbox"/> Commercial       | <input type="checkbox"/> Fish & Wildlife | <input type="checkbox"/> Geothermal Heat |
| <input type="checkbox"/> Domestic (over 18 gpm)        | <input type="checkbox"/> Industrial       | <input type="checkbox"/> Other           |                                          |

**Type of Application:** ☒ New ☐ Vested Right (Use predates Mar 2, 1955) ☐ Future Use Reservation  
 (check one) ☐ Place to Beneficial Use Water Reserved by Future Use Permit No. \_\_\_\_\_  
☐ Amendment/Correction to Permit No. \_\_\_\_\_

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

- Name of Applicant Black Hills Water Phone 605-892-2314  
 (check one) ☐ Owner ☐ Tenant/lessee  
 Mailing Address 19063 Knollwood Ln, Belle Fourche State SD 57717  
 (Street, RR, or Box and City) (Zip Code)
- Amount of water claimed 0.22 \*CFS or 100 \*\*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 Minnelusa well
- Location of point of diversion (example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W) Lot 0 SW4SW4  
Sec 23 T8NR2E  
 County Butte
- County or counties where water will be used Butte
- Annual period during which water is to be used Seasonal spring/Summer 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) To connect water to existing water system - shut down when not needed -

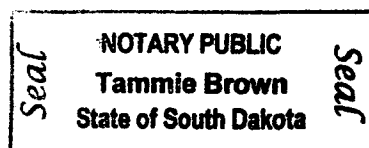
**STATE OF SOUTH DAKOTA)**

 County of Butte ) 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, Joe Graf Martha Graf LeRoy Brown, 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 Joe Graf

 Subscribed and sworn to before me this 7th day of May 20 04

Tammie Brown  
 Notary Public signature

4-2000

 My Commission Expires Aug 3, 2008

**SOUTH DAKOTA  
WATER PERMIT NO. 1823-1**

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Date of first receipt of application May 14, 2004.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 1823-1 to Black Hills Water, 19063 Knollwood Ln, Belle Fourche SD 57717 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. 1823-1 appropriates 0.22 cubic feet of water per second from one well completed into the Minnelusa Formation (2117 feet deep) located in the SW ¼ SW ¼ Section 23-T8N-R2E.
2. The water appropriated shall be used for the purpose of rural water system use and may not exceed the amount of water needed for beneficial use.
3. The water is to be used during the following described annual period: January 1 – December 31.
4. The date of approval of Permit No. 1823-1 is August 23, 2004.
5. The date from which applicant may claim right is May 14, 2004.
6. One-fifth of the construction is to be completed on or before February 23, 2007.
7. All construction is to be completed on or before August 23, 2009.
8. Water is to be put to beneficial use on or before August 23, 2013.
9. Water rights obtained in compliance with the laws of the State of South Dakota may not be unlawfully impaired by this appropriation.

**QUALIFICATIONS**

1. The well approved under this Permit will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
2. Black Hills Water shall report to the Chief Engineer annually the amount of water withdrawn from the Minnelusa Aquifer.

**WATER MANAGEMENT BOARD**

By: Garland Erbele

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

NOV 30 2004

date



Form 2A

(Complete applicable portions only)

**Supplemental Information**

(type or print in ink)

**1. Well Information - Proposed Construction**

- a) Drill Hole Diameter 9" Depth 2117'
- b) Casing Type steel Diameter 7" Thickness 24#
- c) Screen Type none Diameter \_\_\_\_\_ Thickness \_\_\_\_\_
- d) Gravel Pack none Length of Gravel Pack \_\_\_\_\_
- e) Depth to Top of Water Bearing Material 1980'
- f) Depth to Water (ground surface to water level) Flowing
- g) Distance to nearest existing domestic well: 200'

On applicants property yes

On property owned by others \_\_\_\_\_

**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**

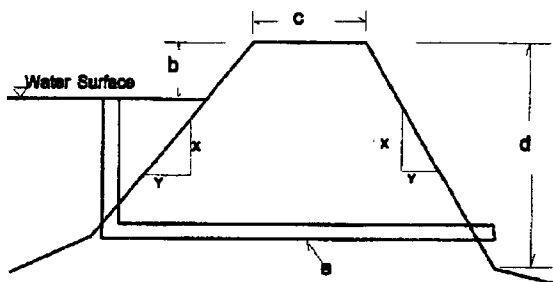
- a) Surface Dimensions \_\_\_\_\_ Depth \_\_\_\_\_
- b) Depth to water (ground surface to water level) \_\_\_\_\_

**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

Date MAY 14, 2004

RECEIVED OF Black Hills Water, 19063 Knollwood Lane, Belle Fourche SD 57717

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

|                                                                                                                        |       |        |
|------------------------------------------------------------------------------------------------------------------------|-------|--------|
| Fee for Application for Permit No. <u>1823-1</u> to Appropriate Water, to construct and to put water to beneficial use | 150   | 00     |
| Fee for Application for Permit No. _____ to Appropriate Water for Future use                                           |       |        |
| Fee to retain Future Use Permit No. _____ after period of seven years.                                                 |       |        |
| Fee for Inspecting Constructed Works, confirming beneficial use and issuing Water License No. <u>1823-1</u>            | 50    | 00     |
| Fee for Filing Transfer Form _____                                                                                     |       |        |
| Fee for _____                                                                                                          |       |        |
| Fee for Issuing New Well Driller's License No. _____ for C.Y. _____                                                    |       |        |
| Fee for Renewal of Well Driller's License No. _____ for C.Y. _____                                                     |       |        |
| Fee for Issuing Well Pump Installer's License No. _____ for C.Y. _____                                                 |       |        |
| Fee for Renewal of Well Pump Installer's License No. _____ for C.Y. _____                                              |       |        |
| (Any Other Work Provided by Law)                                                                                       | TOTAL | 200.00 |

No.

**001318**

By

David E. White

Chief Engineer

*gm*

NOT TO SCALE

*Esther Olson  
Program Assistant*



NHEI

①

23

1506

20

*Handy*

F-20

8-2

1506

①

NHEI



1823-1

## SOUTH DAKOTA WATER WELL COMPLETION REPORT

07-92

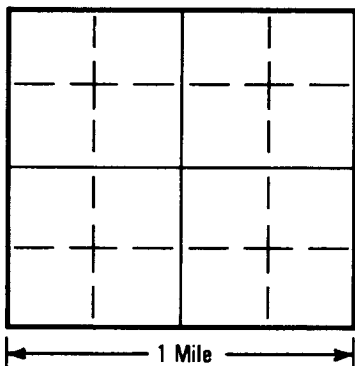
Location SW 1/4 SW 1/4 Sec 23 Twp 8 Rg 2  
 County Butte

Please mark well location with an "X"

W E

Well Completion Date

April 28, 2004



## LOCATION:

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

## PROPOSED USE:

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

## METHOD OF DRILLING:

CASING DATA: ☒ Steel ☐ Plastic ☐ Other

If other describe \_\_\_\_\_

| PIPEWEIGHT         | DIAMETER        | FROM           | TO             | HOLE DIAMETER   |
|--------------------|-----------------|----------------|----------------|-----------------|
| <u>24</u> LB/FT    | <u>7</u> IN     | <u>0</u> FT    | <u>1416</u> FT | <u>9</u> IN     |
| <u>15.50</u> LB/FT | <u>5 1/2</u> IN | <u>1416</u> FT | <u>2650</u> FT | <u>6 1/8</u> IN |
| _____ LB/FT        | _____ IN        | _____ FT       | _____ FT       | _____ IN        |

## GROUTING DATA

| Grout Type    | No. of Sacks | Grout Weight  | From            | To              |
|---------------|--------------|---------------|-----------------|-----------------|
| <u>CEMENT</u> | <u>240</u>   | _____ lb./gal | <u>0</u> ft.    | <u>1416</u> ft. |
| <u>"</u>      | <u>20</u>    | _____ lb./gal | <u>1416</u> ft. | <u>2650</u> ft. |

Describe grouting procedure PRESSURE GROUT

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? CEMENTED

Describe packer(s) and location? \_\_\_\_\_

DISINFECTION: Was well disinfected upon completion?

☒ YES, How: \_\_\_\_\_

\_\_\_\_\_ NO, Why Not? \_\_\_\_\_

Laboratory sent to for water  
 quality analysis \_\_\_\_\_

Well Owner: Black Hills Water (LeRoy Brown)  
 Business Name: "  
 Address: 19063 Knollwood Ln.  
Bellevue, SD 57717

## WELL LOG:

| FORMATION                  | DEPTH       |             |
|----------------------------|-------------|-------------|
|                            | FROM        | TO          |
| <u>SHALE</u>               | <u>0</u>    | <u>20</u>   |
| <u>FALL RIVER</u>          | <u>20</u>   | <u>180</u>  |
| <u>SHALE</u>               | <u>180</u>  | <u>320</u>  |
| <u>SUNDANCE</u>            | <u>320</u>  | <u>960</u>  |
| <u>SPEARFISH</u>           | <u>960</u>  | <u>1490</u> |
| <u>LIME STONE</u>          | <u>1490</u> | <u>1530</u> |
| <u>1530 OPEACHE</u>        | <u>1530</u> | <u>1650</u> |
| <u>MINNIKODSA</u>          | <u>1650</u> | <u>2117</u> |
| <u>MAIN FLOW-1980-2117</u> |             |             |

STATIC WATER LEVEL Flowing Feet

If flowing: closed in pressure 150 PSI

GPM flow 100 through 4" inch pipe

Controlled by ☒ Valve ☐ Reducers ☐ Other \_\_\_\_\_

Reduced Flowrate \_\_\_\_\_ GPM

Can well be completely shut in? YES

## WELL TEST DATA:

☐ Pumped

Describe: Flowing 100 GPM

☐ Bailed

☐ Other \_\_\_\_\_

Pumping Level Below Land Surface

\_\_\_\_\_ ft. After \_\_\_\_\_ Hrs. pumped \_\_\_\_\_ GPM

\_\_\_\_\_ ft. After \_\_\_\_\_ Hrs. pumped \_\_\_\_\_ GPM

If pump installed, pump rate \_\_\_\_\_ GPM

## REMARKS

This well was drilled under license # 327

And this report is true and accurate.

Drilling firm GRAF DRILLING

Signature of License Representative: \_\_\_\_\_

LeRoy Brown RECEIVED

Signature of Well Owner or Equitable Property Holder: \_\_\_\_\_

MAY 14 2004

WATER RIGHTS  
 PROGRAM

Date: 5, 6, 04



**DEPARTMENT of ENVIRONMENT  
and NATURAL RESOURCES**

PMB 2020  
JOE FOSS BUILDING  
523 EAST CAPITOL  
PIERRE, SOUTH DAKOTA 57501-3182  
[www.state.sd.us/denr](http://www.state.sd.us/denr)

May 17, 2004

Black Hills Water  
LeRoy Brown  
19063 Knollwood Ln  
Belle Fourche SD 57717

Dear Mr. Brown:

Thank you for submitting the *Application for a Permit to Appropriate Water* for an additional well for Black Hills Water. In order to complete the application, the following is required:

- A map showing the location of the new well in relation to a government section corner or quarter corner by direction and distance is required. The map must be signed by one of the following: Registered Land Surveyor, Registered Professional Engineer or by any other government employee who normally prepares maps as a part of his assigned duties (i.e. local NRCS office).

If you have any questions, please contact me.

Sincerely,

Karen Schlaak  
Water Rights Program  
605 773-3352

WATER PERMIT APPLICATION NO. 1823-1  
BLACK HILLS WATER  
JULY 13, 2004

Water Permit Application No.1823-1 proposes to appropriate 0.22 cubic feet of water per second from one existing well completed into the Minnelusa Formation (2,117 feet deep), located in the SW¼ SW¼ Sec. 23, T8N-R2E, Butte County. The water is used for a rural water system use.

**AQUIFER:** Minnelusa aquifer (MNLS)

**GENERAL:**

The Minnelusa Formation consists of alternating beds of sandstone and dolomitic limestone with lesser amounts of shale and chert, approximately 500 feet thick in this area (Carter and Redden, 1999a; Carter and Redden, 1999b). The Minnelusa Formation outcrops about nine miles south of this site (Strobel and others, 1999) and the SD Water Well Completion Report for the existing well that is to be used for this project reports the top of the formation to be 1,650 feet below grade. The porous portions of the formation form the Minnelusa aquifer. Well sorted sand lenses have porosity's approaching 25%, but generally the sands have porosity's of 10%. The average porosity of the Minnelusa is estimated to be 10% and the effective porosity is assumed to be 5% (Rahn, 1979). The Minnelusa formation underlies virtually all of western South Dakota and the Minnelusa aquifer contains over 755 million acre-feet of recoverable water in storage (Allen and others, 1984). The Minnelusa aquifer underlies approximately 1,440,000 acres of Butte County and contains an estimated 43,200,000 acre-feet of recoverable water in storage in the county (Allen and others, 1984). Ground water movement in the aquifer is probably toward the north and east (Strobel, and others, 2000). The water quality of the aquifer is generally good near the outcrop but deteriorates considerably with distance from the recharge area. Estimates from regional studies of the aquifer indicate the aquifer transmissivity may range from 0.86 to 12,000 ft<sup>2</sup>/d, and the storage coefficient ranges from 0.003 to 5.0 x10<sup>-9</sup> (Driscoll, and others, 2002). The completion report submitted for this well indicates the well flows 100 gallons per minute and has a shut-in pressure of 150 psi.

**WATER AVAILABILITY:**

The availability of unappropriated water from an aquifer can be evaluated by considering SDCL 46-6-3.1. This statute requires that an application to appropriate groundwater can not be approved if, according to the best information reasonably available, it is probable that the quantity of water withdrawn annually from a groundwater source will exceed the quantity of average estimated annual recharge.

Recharge to the Minnelusa aquifer is primarily from infiltration of precipitation on the outcrop and stream flow losses. Average annual recharge from 1931-1998 is estimated to be approximately 112,000 acre-feet per year (Carter and others, 2001a).

There are a total of 186 appropriations from the Minnelusa aquifer in South Dakota, including two Future Use Reservations (Water Rights, 2004d). The aquifer is used primarily for domestic, commercial, municipal, suburban housing and irrigation uses. There are 11 permits/rights appropriating water from the Minnelusa aquifer in Lawrence County (Water Rights, 2004d). In addition to appropriative rights, there are a number of domestic wells completed into the Minnelusa aquifer on file with the Water Rights Program (Water Rights, 2004a). The Future Use Permits (No. 902-1 and 969-1) reserve 1,460 acre-feet annually. Water permits and rights represent appropriations up to 11,085.04 acre-feet annually for irrigation use (Water Rights, 2004b) and a combined diversion rate of 31.911 cfs for non-irrigation uses (Water Rights, 2004d). Maximum well withdrawals from the Minnelusa aquifer, assuming (1) that 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); would be approximately 25,000 acre-feet per year. The actual amount of water used from the aquifer is considerably less than this estimate. Withdrawals from wells (domestic and appropriative) completed into the Minnelusa aquifer were estimated to be 8,108 acre-feet annually from 1987-1996 (Carter and others, 2001b).

Comparison of annual recharge estimates and estimated annual well withdrawals show that well withdrawals from the Minnelusa are only a fraction of estimated average annual recharge. Therefore, based on a simple water budget, it is clear that unappropriated water is available for this appropriation.

The best information available to evaluate development as it relates to recharge, is historical records and data from observation wells. The difference between withdrawal from an aquifer and recharge is reflected by the water level of the aquifer. If the water level of an aquifer continues to decline, it may suggest that withdrawals exceed recharge. The Water Rights Program monitors 23 observation wells completed into the Minnelusa aquifer in the Black Hills area (Water Rights, 2004c). Water Rights' Observation Well LA-62A is located approximately three and one-half miles southwest of this well. The hydrograph for the well (figure 1), is fairly typical for the Minnelusa aquifer. That is, the water levels reach their peak in the early summer each year and gradually decline until spring. The majority of the recharge to the system occurs between March and July.

**WATER RIGHTS' OBSERVATION WELL  
LA-62A**

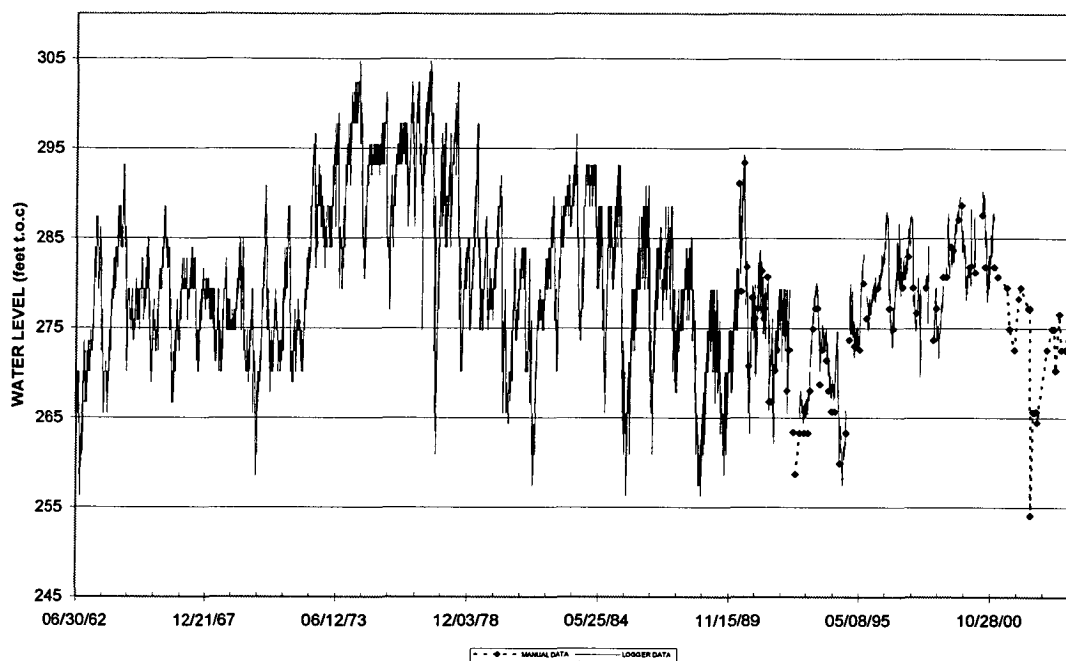


Figure 1. Hydrograph of Water Rights' Minnelusa aquifer Observation Well approximately three and one-half miles southwest of 1823-1.

The hydrograph also shows the magnitude of fluctuation in the water levels in the area ( $\cong 50'$  in LA-62A) with the lowest water levels of record occurring in the early 1990's and the highest occurring in 1999 or 2000.

It is obvious from the hydrographs of Minnelusa observation wells, that withdrawals have not exceeded recharge for the period of record. The observation well data suggests that the aquifer is capable of sustaining additional withdrawals.

**AFFECTS ON EXISTING RIGHTS:**

There are twelve Water Rights/ Permits appropriating ground water within approximately three miles of this site, they are shown in table 1.

| PERMIT NO | LAST NAME                   | AQUIFER | USE | CFS  | ACRES  |
|-----------|-----------------------------|---------|-----|------|--------|
| 1311-1    | PRAIRIE HILLS WATER/DEV     | MDSN    | SHD | 0.17 | 0.00   |
| 1481A-1   | 'CITY OF BELLE FOURCHE      | MDSN    | MUN | 2.23 | 0.00   |
| 1494-1    | ALFRED WILLIAMS             | ALQ     | COM | 0.20 | 0.00   |
| 1520-1    | JERAL & DIANNE SHEAR        | MNLS    | IRR | 0.23 | 16.00  |
| 1548-1    | JOE W GRAF                  | MDSN    | SHD | 0.33 | 0.00   |
| 1548A-1   | JOE W GRAF & REX YOUNGQUIST | MDSN    | SHD | 0.00 | 0.00   |
| 1549-1    | JOE W/MARTHA GRAF           | MDSN    | SHD | 0.33 | 0.00   |
| 1549A-1   | JOE W & MARTHA GRAF         | MDSN    | SHD | 0.00 | 0.00   |
| 1602-1    | BLACK HILLS WATER COMPANY   | MNLS    | SHD | 0.33 | 0.00   |
| 1752-1    | HAZEN & MARY ANN WELLS      | INKR    | COM | 0.07 | 0.00   |
| 513-1     | FALSE BOTTOM LIVESTOCK      | MNLS    | IRR | 1.11 | 118.70 |
| 826-1     | BELLE FOURCHE CNTY CLB      | MNLS    | IRR | 0.80 | 56.20  |

Table 1. Groundwater appropriations within three miles of 1823-1

Wells that are not supplied by the Minnelusa aquifer should not be affected by withdrawals from this well since the Opeche Shale serves as a confining layer above the Minnelusa, and the thick carbonate sequence in the lower Minnelusa isolates the Minnelusa aquifer from lower aquifers.

The nearest well appropriating water from the Minnelusa aquifer not belonging to Black Hills Water Co. is Water Right No 826-1, Belle Fourche Country Club, located approximately one mile northwest of this well.

In addition to the wells supplying Water Permits/Rights, there are a number of domestic wells completed into the Minnelusa aquifer on file with the Water Rights Program (Water Rights, 2004a).

Although the impact of approving this application cannot be quantified precisely, it is still possible to address whether this appropriation can be made without adversely affecting water rights, including domestic wells. Water Management Board rules 74:02:04 and 74:02:05, which were promulgated pursuant to SDCL 46-6-6.1, provide protection to prior appropriators only to the degree necessary to maintain an adequate depth of water in wells that have the ability to produce water independent of artesian pressure. Simply put, the pump placement, or artesian flow, in a prior appropriator's well is not necessarily protected. In fact, in past action, the Water Management Board it has concluded that if increased cost or decreased production is considered an adverse impact, it could be in conflict with SDCL 46-1-4, which requires South Dakota's water resources to be put to beneficial use to the fullest extent of which they are capable.

Since the Minnelusa is under artesian conditions in this area and pumping may cause a decline in the potentiometric surface over a fairly widespread area. Considering the Board's past actions, any well interference this proposed use would have on area water rights/permits and domestic wells is not expected to be significant or adverse. It may be necessary to lower pumps in some wells to maintain water use at the present level.

Any interference this proposed use would have on these or other water rights/permits is not expected to be adverse due to the distance between wells, and the relatively low diversion rate requested by this application.

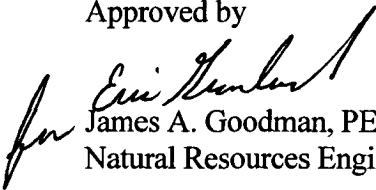
**CONCLUSIONS:**

1. The Minnelusa Aquifer is a viable aquifer in this area, and water is available for this appropriation.
2. The Minnelusa is under artesian conditions and drawdown due to this diversion can be expected. This drawdown is not expected to adversely affect adequate wells in the area.
3. The Completion Report submitted with this application indicates the existing well has been constructed in compliance with the SD Well Construction Standards.



Ken Buhler  
Natural Resources Engineer

Approved by



James A. Goodman, PE  
Natural Resources Engineer

**REFERENCES:**

Allen, J.C., Iles, D.L., and Petres, A.K., 1984, Analysis of Groundwater and Streamflow Data Western Dakotas Region of South Dakota, Task 3 and 4: Groundwater Resource Inventory: South Dakota Department of Water and Natural Resources,

Carter, J.M., and Redden J.A., 1999a, Altitude of the Top of the Minnelusa Formation in the Black Hills Area, South Dakota: U.S. Geological Survey Hydrologic Investigations Atlas HA-744-C, 2 sheets, scale 1:100,000

- Carter, J.M., and Redden J.A., 1999b, Altitude of the Top of the Madison Limestone in the Black Hills Area, South Dakota: U.S. Geological Survey: Hydrologic Investigations Atlas HA-744-D, 2 sheets, scale 1:100,000
- Carter, J.M., Driscoll, D.G., and Hamade, G.R., 2001a, Estimated Recharge to the Madison and Minnelusa Aquifers in the Black Hills Area, South Dakota and Wyoming, Water Years, 1931-98: U.S. Geological Survey Water Resources Investigations Report 00-4278, 66 p.
- Carter, J.M., Driscoll, D.G., Hamade, G.R., and Jarrell, G.J., 2001b, Hydrologic Budgets for the Madison and Minnelusa Aquifers, Black Hills of South Dakota and Wyoming, Water Years 1987-96: U.S. Geological Survey Water-Resources Investigations Report 01-4119, 53 p.
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- Water Rights Program, 2004a, "Domestic Well Log Files": DENR-Water Rights Program,
- Water Rights Program, 2004b, "2003 Irrigation Summary by Aquifer": DENR-Water Rights Program
- Water Rights Program, 2004c, "Observation Well Files": DENR-Water Rights Program
- Water Rights Program, 2004d, "Water Permit Files": DENR-Water Rights Program,



**DEPARTMENT of ENVIRONMENT  
and NATURAL RESOURCES**

JOE FOSS BUILDING  
523 EAST CAPITOL  
PIERRE, SOUTH DAKOTA 57501-3182  
[www.state.sd.us/denr](http://www.state.sd.us/denr)

**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT  
APPLICATION NO. 1823-1, Black Hills Water**

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. 1823-1, Black Hills Water, c/o LeRoy Brown, 19063 Knollwood Lane, Belle Fourche SD 57717.

The Chief Engineer is recommending APPROVAL of Application No. 1823-1 because 1) there is reasonable probability that there is unappropriated water available for the applicant's proposed use, 2) the proposed diversion can be developed without unlawful impairment of existing rights, 3) the proposed use is a beneficial use and 4) it is in the public interest with the following qualifications:

1. The well approved under this Permit will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
2. Black Hills Water shall report to the Chief Engineer annually the amount of water withdrawn from the Minnelusa Aquifer.

See report on application for additional information.

Garland Erbele, Chief Engineer  
July 29, 2004

# AFFIDAVIT OF PUBLICATION

STATE OF SOUTH DAKOTA  
COUNTY OF BUTTE

Heather R. Collins, being duly sworn, says: That the *Belle Fourche Post* or *Belle Fourche Bee* is, and during all times hereafter mentioned, was a legal newspaper as defined in SDCL 17-2-2, as amended, published at Belle Fourche, Butte County, South Dakota, by Country Media, Inc.; that affidavit is and, during all of said times, was employed as an Office Manager by the publisher of such newspaper and has personal knowledge of the facts stated in the affidavit; that the notice, order or advertisement, a printed copy of which is attached, was published in said newspaper for successive issues, bearing the following dates:

|                             |              |            |
|-----------------------------|--------------|------------|
| <u>August 4</u>             | <u>200 4</u> | <u>200</u> |
| <u>August 11</u>            | <u>200 4</u> | <u>200</u> |
| <u>                    </u> | <u>200</u>   | <u>200</u> |
| <u>                    </u> | <u>200</u>   | <u>200</u> |
| <u>                    </u> | <u>200</u>   | <u>200</u> |

that the full amount of the fee charged for publishing the same, to-wit, the sum of \$ 43.47, insures solely to the benefit of the publisher of said newspaper: that no agreement or understanding for the division of the fee has been made with any person, and that no part of the fee has been agreed to be paid to any other person.

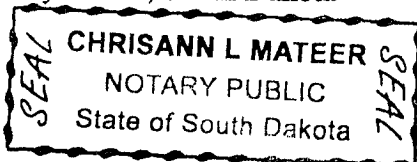
Heather R. Collins  
office manager

Subscribed and sworn to before me this

20th day of August, 2004  
Chrisann L. Mateer

RECEIVED  
AUG 24 2004  
AIR QUALITY  
PROGRAM

Notary Public, South Dakota



Account No. BF3729

Total Amount 43.47

My Commission Expires Nov. 19, 2007

**NOTICE OF APPLICATION NO. 1823-1  
to Appropriate Water**

Notice is given that Black Hills Water, c/o LeRoy Brown, 19063 Knollwood Ln, Belle Fourche SD 57717 has filed an application for a water permit to appropriate 0.22 cubic feet of water per second from one well completed into the Minnelusa Formation (2117 feet deep) located in the SW 1/4 SW 1/4 Section 23-T8N-R2E. The water is for rural water system use.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 1823-1 because 1) unappropriated water is available, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest. In accordance with SDCL 46-2A-23, the Chief Engineer will act on the application, as recommended, unless a petition is filed opposing the application or the applicant files a petition contesting the Chief Engineer's recommendation. If a petition opposing the application or contesting the recommendation is filed, then a hearing will be scheduled and the Water Management Board will consider the application. Notice of the hearing will be given to the applicant and any person filing a petition.

Any person interested in opposing or supporting this application or recommendation must file a written petition with BOTH the applicant and Chief Engineer. The applicant must file a petition if contesting the Chief Engineer's recommendation. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E Capitol, Pierre SD 57501 (605 773-3352)" and the applicant's mailing address is given above. A petition filed by either an interested person or the applicant must be filed by August 23, 2004.

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

**Publ. Aug. 4, 11, 2004  
Belle Fourche Post**

Instruction to Newspaper - Publish first Notice on August 4, 2004 with the second publication 7 days later. The applicant is responsible for payment.

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### NOTICE OF APPLICATION NO. 1823-1 to Appropriate Water

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

July 29, 2004

Black Hills Water  
% LeRoy Brown  
19063 Knollwood Ln  
Belle Fourche SD 57717

Dear Mr. Brown:

Water Permit Application No. 1823-1 for rural water system use has been examined and found to comply with the South Dakota Water Laws and applicable rules. A notice has been sent to the Publisher of the Belle Fourche Bee/Post printed at Belle Fourche, SD (Ph # 605-892-2528). You will need to contact the newspaper and authorize publication of this notice. For your information, a copy of the notice, the recommendation of the Chief Engineer and a report on the application are enclosed. Please review the notice prior to publication and notify this office, if you have any corrections or questions.

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

Sincerely,

  
Eric Gronlund  
Natural Resources Engineer  
(605) 773-3352

enclosures

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



DEPARTMENT of ENVIRONMENT  
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July 29, 2004

Belle Fourche Bee/Post  
PO Box 400  
Belle Fourche SD 57717-0400

ATTENTION: Legal Public Notice

Enclosed is a Notice on Application No. 1823-1 to Appropriate Water to be published twice. Please publish the first notice on August 4, 2004 with the second publication 7 days later. The text of the notice can be e-mailed to your paper by contacting Karen Schlaak at (605) 773-3352.

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 Hills Water, % LeRoy Brown, 19063 Knollwood Ln., Belle Fourche, SD (Ph # 605-892-2314).

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

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

Sincerely,

Eric Gronlund  
Natural Resources Engineer  
605-773-3352

enclosures

-----CUT HERE-----

No. 1823-1

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

Date \_\_\_\_\_

We are in receipt of your letter of July 29, 2004 enclosing Notice to Appropriate Water by Application No. 1823-1 which was first published in our issue of \_\_\_\_\_. **ENCLOSED IS A COPY OF THIS FIRST PUBLICATION.**

\_\_\_\_\_  
Name

\_\_\_\_\_  
Newspaper



**DEPARTMENT of ENVIRONMENT  
and NATURAL RESOURCES**

JOE FOSS BUILDING  
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[www.state.sd.us/denr](http://www.state.sd.us/denr)

NOV 30 2004

Black Hills Water  
% Le Roy Brown  
19063 Knollwood Ln  
Belle Fourche SD 57717

Dear Mr. Brown:

Enclosed is Water Permit No. 1823-1 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.

Sincerely,

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

enclosures

**NOTICE OF COMPLETION OF WORKS AND  
APPLICATION OF WATER TO BENEFICIAL USE**

---

Date 5-16-05

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

FROM: Black Hills Water - c/o LeRoy Brown  
(name)  
19063 Knollwood Ln.  
(address)  
Belle Fourche, SD 57717 605-892-2314  
(city, state, zip) (phone)

I have completed the construction of the water use system and I have put the water to beneficial use to the maximum extent it is going to be used.

Water Permit No. 1823-1 states that the water use system is to be constructed by  
Aug 23, 2009, and water is to be put to beneficial use by Aug 23, 2013.  
(date) (date)

The water use system was completed on 10-30-05.  
(date)

Applying the water to beneficial use was completed on 1-1-05.  
(date)

You may schedule an investigation so that the water license may be issued.

Lamarr Brown Black Hills Water  
(signature)



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WATER RIGHTS  
PROGRAM

**Permit Nos. 1602-1 & 1823-1**  
**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 on this day, 11/12/2014, made a thorough examination of the water use system constructed by Black Hills Water Company, 19063 Knollwood Lane, Belle Fourche, SD 57717 holder of Permit no. 1602-1, bearing the priority date of June 29, 1994 and Permit No. 1823-1, bearing the priority date May 14, 2004. Permit No. 1602-1 is authorized to appropriate a total of 0.33 cfs (150 gpm) from one well (Minnelusa Aquifer) and Permit No. 1823-1 is authorized to appropriate a total of 0.22 cfs (100 gpm) from one well (Minnelusa Aquifer) both for suburban housing purposes, in Butte County.

Inspection contact and relationship to  
 permit holder, if applicable:

**Tammie Brown,**  
**Owner**

A. Works used to divert the water:

**Goulds booster pump with flowing well 140 gpm capacity (0.31 cfs) and 100 gpm flowing well (0.22 cfs) for a total appropriation of 0.53 cfs (240 gpm).**

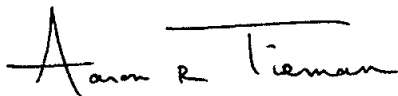
B. Works used to transport water to place of use:

**Suburban housing distribution lines and two 21,000 gallon storage tanks.**

The system is in the following condition good. The point of diversion (well) for Permit No. 1602-1 is located specifically at Lat/Lon – N44.633937/W-103.847508 which is the approximately 125 feet north and 520 feet east of the SW corner of Section 23, T8N-R2E. The point of diversion (well) for Permit No 1823-1 is located specifically at Lat/Lon – N44.633885/W-103.846912 which is the approximately 100 feet north and 675 feet east of the SW corner of Section 23, T8N-R2E. The works are capable of diverting 0.53 cfs which is to be used for suburban housing purposes. The license should be issued for 0.53 cfs.

All structures, wells and lands on map Y  
 Exceptions to compliance are: none.

**Comments: Applicable portions of Permit No. 1602-1 should be incorporated into Permit No. 1823-1 for a total appropriation of 0.53 cfs (240 gpm).**



Aaron Tieman  
 Natural Resources Engineer II  
 DENR, Water Rights Program

Date report completed: June 30, 2015

**FIELD INVESTIGATION REPORT FOR PERMIT NO. 1823-1**

|                                                                     |                                                                              |
|---------------------------------------------------------------------|------------------------------------------------------------------------------|
| DATE OF INVESTIGATION:                                              | November 12, 2014                                                            |
| NAME & ADDRESS OF PERMIT HOLDER                                     | Black Hills Water Company<br>19063 Knollwood Lane<br>Belle Fourche, SD 57717 |
| INVESTIGATION CONTACT/ RELATIONSHIP TO PERMIT HOLDER, IF APPLICABLE | Tammie Brown<br>(Owner)                                                      |
| DIVERSION POINT LEGAL LOCATION                                      | SW¼ SW¼ Section 23, T8N-R2E                                                  |
| WATER SUPPLY SOURCE                                                 | Groundwater, Minnelusa Aquifer                                               |

Other permit(s) associated with the project: Water Permit No. 1602-1 (see comments below)

**WELL INFORMATION:**

- 1) Well Drilling Firm: Graf Drilling
- 2) Number of Wells: One
- 3) Depth(s): 2117 feet
- 4) Well log available: yes

**Casing:**

- 1) Diameter: 5½ inches                      7 inches
- 2) Length: 234 feet                              1416 feet
- 3) Type: Steel                                      Steel

**Screen:**

- 1) Type: Open hole
- 2) Length: N/A feet
- 3) Static water level: Flowing well 100 gpm.

**Pump:**

- 1) Make: N/A
- 2) Model:
- 3) Capacity:

**Motor:**

- 1) Make: N/A
- 2) Model:
- 3) Horsepower rating:

**DISTRIBUTION LINES OR CANALS:**

- 1) Type: Suburban housing distribution lines.

**PERMIT QUALIFICATIONS:**

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

**COMMENTS:** Black Hills Water Company well #1 authorized by Water Permit No. 1602-1 is located within approximately 150 feet of well #2 authorized by this permit.

**FIELD INVESTIGATION REPORT FOR PERMIT NO. 1602-1**

|                                                                     |                                                                                       |
|---------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| DATE OF INVESTIGATION:                                              | <b>November 12, 2014</b>                                                              |
| NAME & ADDRESS OF PERMIT HOLDER                                     | <b>Black Hills Water Company<br/>19063 Knollwood Lane<br/>Belle Fourche, SD 57717</b> |
| INVESTIGATION CONTACT/ RELATIONSHIP TO PERMIT HOLDER, IF APPLICABLE | <b>Tammie Brown<br/>(Owner)</b>                                                       |
| DIVERSION POINT LEGAL LOCATION                                      | <b>SW¼ SW¼ Section 23, T8N-R2E</b>                                                    |
| WATER SUPPLY SOURCE                                                 | <b>Groundwater, Minnelusa Aquifer</b>                                                 |

Other permit(s) associated with the project: **Water Permit No. 1823-1 (see comments below)**

**WELL INFORMATION:**

- 1) Well Drilling Firm: **Graf Drilling**
- 2) Number of Wells: **One**
- 3) Depth(s): **2100** feet
- 4) Well log available: **yes**

**Casing:**

- 1) Diameter: **7** inches                      **10¾** inches
- 2) Length: **1760** feet                      **300** feet
- 3) Type: **Steel**                              **Steel**

**Screen:**

- 1) Type: **Open hole**
- 2) Length: **N/A** feet
- 3) Static water level: **Flowing well 100 gpm.**

**Pump:**

- 1) Make: **Goulds Booster Pump**
- 2) Model:
- 3) Capacity: **40** GPM

**Motor:**

- 1) Make: **N/A**
- 2) Model:
- 3) Horsepower rating:

**DISTRIBUTION LINES OR CANALS:**

- 1) Type: **Suburban housing distribution lines.**

**PERMIT QUALIFICATIONS:**

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

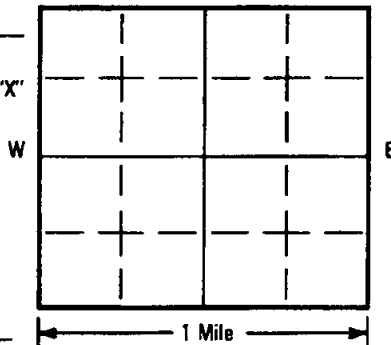
**COMMENTS: Black Hills Water Company well #2 authorized by Water Permit No. 1823-1 is located within approximately 150 feet of well #1 authorized by this permit.**

# SOUTH DAKOTA WATER WELL COMPLETION REPORT

07-92

Location SW 1/4 SW 1/4 Sec 23 Twp 8 Rg 2  
 County Butte

Please mark well location with an "X"



Well Completion Date

April 28, 2004

**LOCATION:**

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

**PROPOSED USE:**

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

**METHOD OF DRILLING:**

**CASING DATA:** ☒ Steel ☐ Plastic ☐ Other

If other describe \_\_\_\_\_

| PIPEWEIGHT         | DIAMETER        | FROM           | TO             | HOLE DIAMETER   |
|--------------------|-----------------|----------------|----------------|-----------------|
| <u>24</u> LB/FT    | <u>7</u> IN     | <u>0</u> FT    | <u>1416</u> FT | <u>9</u> IN     |
| <u>15.50</u> LB/FT | <u>5 1/2</u> IN | <u>1416</u> FT | <u>2650</u> FT | <u>6 1/8</u> IN |
| _____ LB/FT        | _____ IN        | _____ FT       | _____ FT       | _____ IN        |

**GROUTING DATA**

| Grout Type    | No. of Sacks | Grout Weight  | From           | To             |
|---------------|--------------|---------------|----------------|----------------|
| <u>CEMENT</u> | <u>240</u>   | _____ lb./gal | <u>0</u> ft    | <u>1416</u> ft |
| <u>"</u>      | <u>20</u>    | _____ lb./gal | <u>1416</u> ft | <u>2650</u> ft |

Describe grouting procedure PRESSURE GROUT

**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? CEMENTED

Describe packer(s) and location? \_\_\_\_\_

**DISINFECTION:** Was well disinfected upon completion?

☒ YES, How: \_\_\_\_\_

☐ NO, Why Not? \_\_\_\_\_

Laboratory sent to for water quality analysis \_\_\_\_\_

Well Owner: Black Hills Water (LeRoy Brown)

Business Name: \_\_\_\_\_

Address: 19063 Knollwood Ln.

Belle Fourche, SD 57717

**WELL LOG:**

| FORMATION                  | DEPTH       |             |
|----------------------------|-------------|-------------|
|                            | FROM        | TO          |
| <u>SHALE</u>               | <u>0</u>    | <u>20</u>   |
| <u>FALL RIVER</u>          | <u>20</u>   | <u>180</u>  |
| <u>SHALE</u>               | <u>180</u>  | <u>320</u>  |
| <u>SUNDANCE</u>            | <u>320</u>  | <u>960</u>  |
| <u>SPEARFISH</u>           | <u>960</u>  | <u>1490</u> |
| <u>LIME STONE</u>          | <u>1490</u> | <u>1530</u> |
| <u>HOPEACHE</u>            | <u>1530</u> | <u>1650</u> |
| <u>MINNIELOSA</u>          | <u>1650</u> | <u>2117</u> |
| <u>MAIN FLOW-1980-2117</u> |             |             |

**STATIC WATER LEVEL** Flowing Feet

If flowing: closed in pressure 150 PSI

GPM flow 100 through 4" inch pipe

Controlled by ☒ Valve ☐ Reducers ☐ Other \_\_\_\_\_

Reduced Flowrate \_\_\_\_\_ GPM

Can well be completely shut in? YES

**WELL TEST DATA:**

☐ Pumped Describe: Flowing 100 GPM

☐ Bailed \_\_\_\_\_

☐ Other \_\_\_\_\_

Pumping Level Below Land Surface

\_\_\_\_\_ ft. After \_\_\_\_\_ Hrs. pumped \_\_\_\_\_ GPM

\_\_\_\_\_ ft. After \_\_\_\_\_ Hrs. pumped \_\_\_\_\_ GPM

If pump installed, pump rate \_\_\_\_\_ GPM

**REMARKS**

This well was drilled under license # 327

And this report is true and accurate.

Drilling firm GRAF DRILLING

Signature of License Representative: \_\_\_\_\_

Signature of Well Owner or Equitable Property Holder: \_\_\_\_\_

**RECEIVED**

Signature of Well Owner or Equitable Property Holder: \_\_\_\_\_

MAY 14 2004

WATER RIGHTS  
PROGRAM

Date: 5, 6, 04

**Water Rights Program - DENR  
Conversation File Documentation**

**NAME OF PERSON OR FILE:** Tammie Brown & LeRoy Brown,  
Black Hills Water Company

**ADDRESS:** 19063 Knollwood Ln, Belle Fourche, SD 578717 **COUNTY:** Butte

**DATE:** November 12, 2014

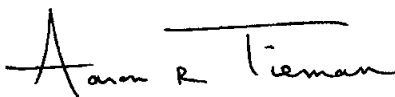
**TELEPHONE:** (605) 892-6326

**RE:** Inspection of Water Permit Nos. 1548A-1, 1549A-1, 1602-1 & 1823-1

**COMMENTS:** On November 12<sup>th</sup>, I conducted an inspection of the water permits/rights associated with Black Hills Water Company (BHWC). Once onsite, I met with Tammie Brown, who is the grand-daughter of the late Joe Graf, to discuss the wells and water distribution system. She informed me that they had two wells that supplied the system for BHWC and that she was not aware that there were still permits listed in her grandfather's name. I informed her of the permits that were on file (1548A-1, 1549A-1, 1602-1 & 1823-1) and the details of each. At this point, she thought it would be a good idea for her father, LeRoy Brown, to be present as he had more detailed knowledge of the wells. LeRoy informed me that he had assisted with the drilling of both BHWC wells and that he no doubt that both wells were completed into the Minnelusa aquifer with depths of 2100' and 2117'. After a lengthy discussion, it was determined that the well which was authorized by Water Permit No. 1548A-1 (originally applied for in 1992 as a Madison aquifer well with a depth of 2500') was actually drilled to a depth of about 600' and then became involved in a dispute/litigation and was never drilled any further and now belongs to a single landowner that uses it for domestic and stock water. It was also determined that the well which was authorized by Water Permit No. 1549A-2 (originally applied for in 1992 as a Madison aquifer well with a depth of 2500') was actually drilled and completed to a depth of 2100' which was determined to be the Minnelusa aquifer. Since the well was completed into the Minnelusa aquifer rather than the Madison aquifer a permit for the new water source was required and so Water Permit No. 1602-1 was approved in 1994 that authorized the Minnelusa aquifer well (BHWC well #1). The most recent BHWC permit, Water Permit No. 1823-1, approved in 2004, authorized a second well (BHWC well #2) which was drilled and completed to a total depth of 2117' also determined to be in the Minnelusa aquifer.

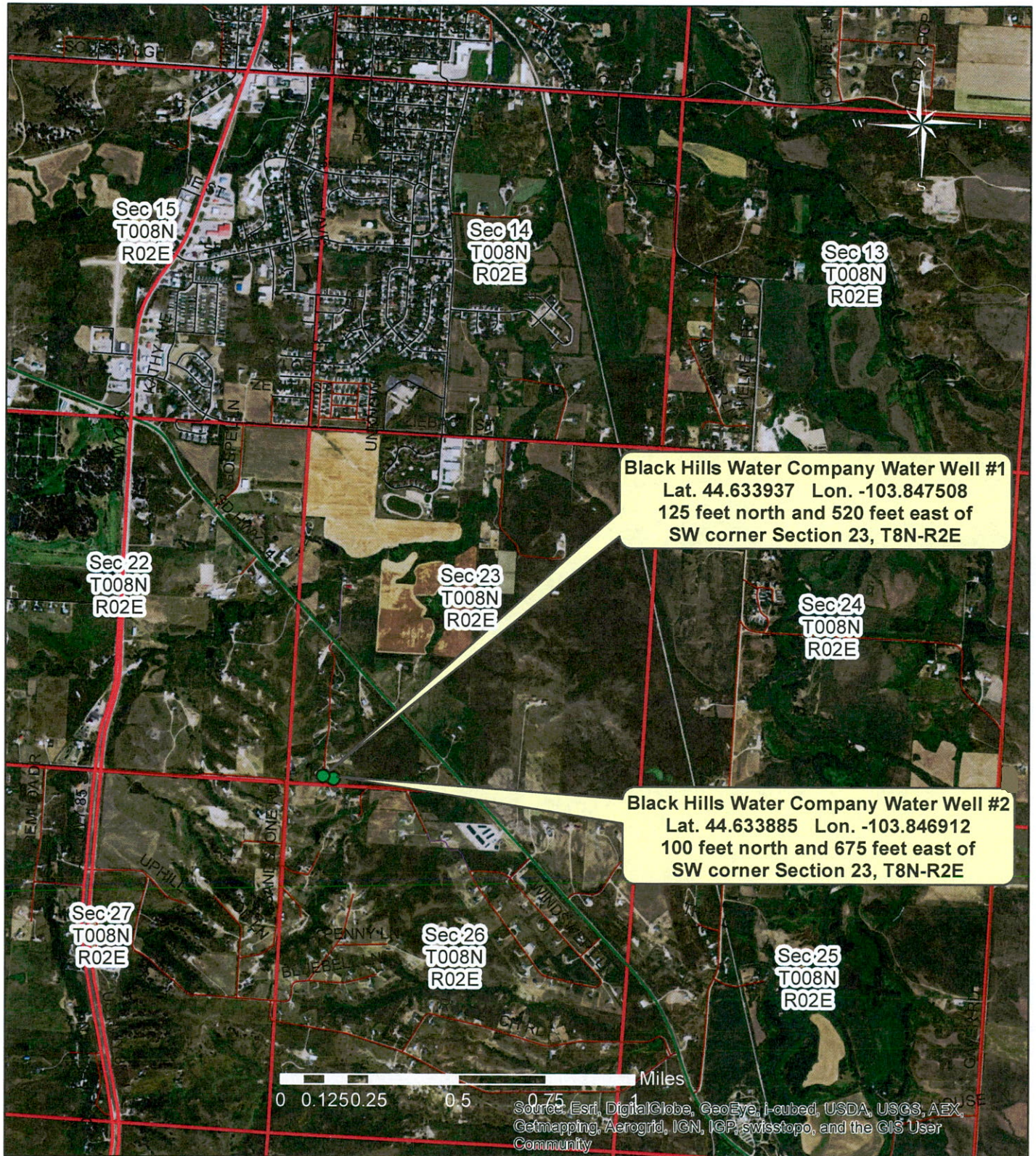
**Upon conclusion of the meeting, it was agreed that Water Permit No. 1602-1 & Water Permit No. 1823-1 are the correct permits authorizing the two Minnelusa aquifer wells and water distribution system for Black Hills Water Company.**

**It was also agreed that, since no wells were ever drilled/completed into the Madison aquifer, Water Permit Nos. 1548A-1 & 1549A-1 may be cancelled.**



Aaron Tieman, Natural Resource Engineer II

Water Rights 1602-1 & 1823-1  
Black Hills Water Company  
November 12, 2014



*Aaron R. Tieman*

Aaron Tieman  
Natural Resources Engineer II  
DENR Water Rights Program





DEPARTMENT of ENVIRONMENT  
and NATURAL RESOURCES

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

AUG 17 2015

1602-1  
1823-1

Tammie Brown  
Black Hills Water Company  
19063 Knollwood Lane  
Belle Fourche SD 57717

Dear Ms. Brown:

Enclosed is Water License No. 1823-1. 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. 1823-1, 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,

A handwritten signature in cursive script that reads "Jeanne Goodman".

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

enclosures

**Note: Upon licensing, the applicable portions of Water Permit No. 1602-1 were incorporated into Water Right No. 1823-1.**

**STATE OF SOUTH DAKOTA  
WATER LICENSE NO. 1823-1**

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(1) Black Hills Water, 19063 Knollwood Lane, Belle Fourche SD 57717 made Application No. 1823-1, May 14, 2004 for a water permit to divert 0.22 cubic feet of water per second (cfs) from ground water (one well – Minnelusa Formation), Butte County, South Dakota for rural water system purposes. Permit No. 1823-1, with a priority date of May 14, 2004 was approved August 23, 2004 and issued to the applicant for diversion of water with construction of the described water supply system to be completed on or before August 23, 2009 and for the application to beneficial use of said water on or before August 23, 2013.

Water Permit No. 1602-1, with a priority date of June 29, 1994, authorizes diversion of 0.33 cfs from one well (Minnelusa Formation) to supply the same development. The applicable portions of Water Permit No. 1602-1 are incorporated into this Water License.

(2) It is certified that the permit holder has complied with the provisions of South Dakota State Law relating to completion of the construction of the water supply system and is entitled to divert 0.53 cubic feet of water per second for beneficial use. The location of the diversion points are:

- 125 feet north and 520 feet east of the SW corner of Section 23, T8N, R2E (SW  $\frac{1}{4}$  SW  $\frac{1}{4}$ );
- 100 feet north and 675 feet east of the SW corner of Section 23, T8N, R2E (SW  $\frac{1}{4}$  SW  $\frac{1}{4}$ );

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

(4) Pursuant to South Dakota Water Law 46-5-30.1 Black Hills Water, 19063 Knollwood Lane, Belle Fourche SD 57717 the holder and/or owner of Incorporated Water Right No. 1823-1 is issued a license to appropriate water, the right to use 0.53 cubic feet of water per second from ground water (two wells, Minnelusa Formation) with priority dates of June 29, 1994 (0.31 cfs) and May 14, 2004 (0.22 cfs) from the locations specified in (2) of this license for rural water system purposes.

This license is subject to South Dakota Water Law, any limitations or conditions listed in Incorporated Water Right No. 1823-1 and subject to the following qualifications:

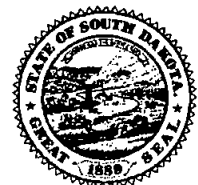
- The wells approved under this Permit will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
- The wells approved under this Permit shall be valved and the flow reduced to the amount needed or to a minimum when not being used (directly or for storage purposes). The well shall also be equipped with a pressure gauge and a record kept of any pressure fluctuations. Such records shall be available to the Chief Engineer upon request. If this well is abandoned or the Permit cancelled, the well must be plugged in accordance with Water Management Board Rules, Chapter 74:02:04. *(taken from Permit No. 1602-1)*
- Black Hills Water shall report to the Chief Engineer annually the amount of water withdrawn from the Minnelusa Aquifer.



Jeanne Goodman, Chief Engineer  
Water Rights Program  
Department of Environment and Natural Resources

AUG 17 2015

date





DEPARTMENT of ENVIRONMENT  
and NATURAL RESOURCES

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[www.denr.sd.gov](http://www.denr.sd.gov)

October 2, 2019

1823-1

Tammie Brown  
19098 Knollwood Ln  
Belle Fourche SD 57717

Dear Ms. Brown:

Thank you for contacting us regarding the need for a name change for Water Right No. 1823-1. I have included a copy of the water right in the event you do not have one.

Enclosed is a partially completed "Notice of Transfer of Ownership/Name Change" form for use in filing the change. Please review and complete as needed. Upon completion, please sign and return the form to our office with a required filing fee of \$50. The check or money order for the fee can be made payable to the Water Rights Program.

If I can answer any questions for you, please let me know.

Sincerely,

A handwritten signature in black ink that reads "Genny McMath". The signature is fluid and cursive, with the first name "Genny" and last name "McMath" clearly distinguishable.

Genny McMath  
Water Rights Program  
(605) 773-3352  
email: [genny.mcmath@state.sd.us](mailto:genny.mcmath@state.sd.us)

enclosures