

WATER PERMIT NO. 1835-1

Name of Applicant: Duane & Evelyn Wilen

Address: PO Box 382, Belle Fourche SD 57717

Phone: 605 892-4757

Amount of Water Claimed: 0.5 cfs (225 gpm)

Total Acres: NA

Source of Water Supply: groundwater (1 well)

Water to be used for: suburban housing develop and geothermal heat

County: Butte

Type of Waste Disposal System:

Location: SW ¼ SE ¼ Sec 28-T8N-R1E

PRIORITY Date Received: 2-7-05

Application/License Fee: \$300

Corrected Application Received: 2-14-05

Period of Annual Use: January 1 – December 31

Remarks:

Diversion Point: SW ¼ SE ¼ Sec 28-T8N-R1E

Land to be Irrigated: NA

Depth of Well: 2100 feet deep

Well Driller:

Remarks:

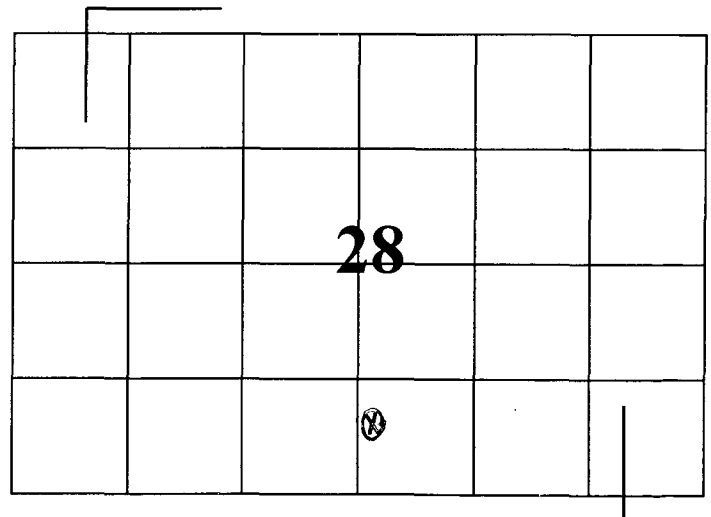
Type of Map: topo

Prepared by: Allan Schreier, PE

Reviewed and the Number Assigned on: 2-14-05

By: Karen Schlaak

Notice of Hearing - date to intervene: _____



Mail to:
Water Rights Program
Joe Foss Building
523 E. Capitol
Pierre, SD 57501-3181
(605) 773-3352

No. 1835-1 (office use only) Hydrologic Unit 10/20203
Basin Belle Fourche River
Newspaper Belle Fourche Bee/Post, Belle Fourche

RECEIVED

FEB - 7 2005

WATER RIGHTS
PROGRAM

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 | |

Type of Application: (check one)

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

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

- Name of Applicant Duane & Evelyn Wilen Phone (605) 892-4757
(check one) ☐ Owner ☐ Tenant/lessee
Mailing Address PO Box 382, Belle Fourche Belle Fourche State SD 57717
(Street, RR, or Box and City) (Zip Code)
- Amount of water claimed 0.5 *CFS or 225 **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, 2100 feet depth estimated
- Location of point of diversion (example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W) County Butte
Located in the W1/2NW1/4NW1/4SW1/4SE1/4, Section 28 T8N, R1E, BHM, Butte County, SD,
Approximately 1143 feet North 7°44' East of the S1/4 Section 28, T8N, R1E, BHM, Butte County, SD
(SW 1/4 SE 1/4)
- County or counties where water will be used Butte
- Annual period during which water is to be used 12 months per 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)

Well is being drilled for the purpose of providing water for several lots within a rural subdivision. Due to anticipated growth of the subdivision, the well may also be used as a water source for a community water system. When needed, permits for a community water system will be submitted for review and approval. The water temperature may also be warm enough to be utilized for residential heat pump systems.

STATE OF SOUTH DAKOTA)

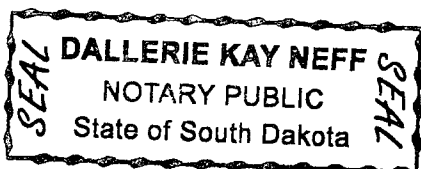
County of Butte SS

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, Duane Wilen Evelyn Wilen, 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 Duane & Evelyn Wilen

Subscribed and sworn to before me this 4th day of February 2005



Dallerie Kay Neff
Notary Public signature

My Commission Expires
October 9, 2008

**SOUTH DAKOTA
WATER PERMIT NO. 1835-1**

Date of first receipt of application February 7, 2005.

Date of return to applicant for corrections, amendments or changes February 8, 2005.

Date of receipt of corrected application February 14, 2005.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 1835-1 to Duane & Evelyn Wilen, PO Box 382, 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. 1835-1 appropriates 0.5 cubic feet of water per second from one well to be completed into the Madison Aquifer (approximately 2100 feet deep) located in the SW ¼ SE ¼ Section 28-T8N-R1E.
2. The water appropriated shall be used for the purpose of suburban housing development and geothermal heating use purposes 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. 1835-1 is May 16, 2005.
5. The date from which applicant may claim right is February 7, 2005.
6. One-fifth of the construction is to be completed on or before November 16, 2007.
7. All construction is to be completed on or before May 16, 2010.
8. Water is to be put to beneficial use on or before May 16, 2014.
9. Water rights obtained in compliance with the laws of the State of South Dakota may not be unlawfully impaired by this appropriation.

QUALIFICATIONS

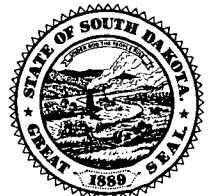
1. In accordance with SDCL 46-1-14 and 46-2A-20, Permit No. 1835-1 is issued for a 20-year term. Pursuant to SDCL 46-2A-21, the 20-year term may be deleted at any time during the 20-year period or following its expiration. If the 20-year term is not deleted at the end of the term, the permit may either be cancelled or amended with a new term limitation of up to twenty years. Permit No. 1835-1 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 Permit holder shall report to the Chief Engineer annually the amount of water withdrawn each year from the Madison Formation for the suburban housing development.

WATER MANAGEMENT BOARD

By: Garland Erbele

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

JUN 07 2005
date



(type or print in ink)

1. Well Information - Proposed Construction

- a) Drill Hole Diameter 8.75" Depth 2100' est
- b) Casing Type steel Diameter 7" OD Thickness .312"
- c) Screen Type open hole Diameter _____ Thickness _____
- d) Gravel Pack N/A Length of Gravel Pack _____
- e) Depth to Top of Water Bearing Material _____ 1800' est
- f) Depth to Water (ground surface to water level) _____ 0', artesian flow anticipated
- g) Distance to nearest existing domestic well:
On applicants property N/A On property owned by others unknown

2. Wastewater Disposal System Information

- a) Type of System (i.e. septic tank, drain field) N/A, All new systems will be installed per SDCL 74:53:01
- b) System Capacity (gallons) _____ Year Constructed _____
- c) Connected to the City of _____ Sanitary System

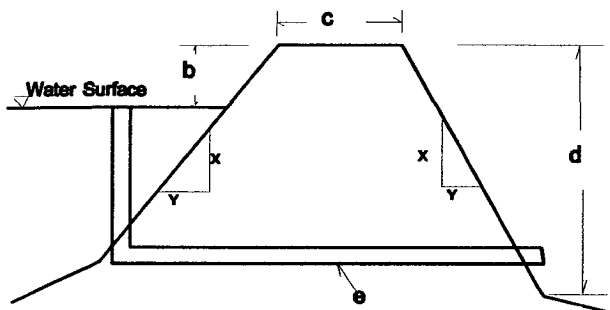
3. Dugout Information

- 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 February 14, 2005

RECEIVED OF Duane Wilen, PO Box 382, Belle Fourche SD 57717

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

Fee for Application for Permit No. <u>1835-1</u> to Appropriate Water, to construct and to put water to beneficial use	25	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 _____		
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	25.00

No.

By

Darland White

Chief Engineer

gm

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date February 7, 20 05

RECEIVED OF Duane Wilen, PO Box 382, Belle Fourche SD 57717

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

Fee for Application for Permit No. <u>1835-1</u> to Appropriate Water, to construct and to put water to beneficial use	225	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>1835-1</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	275.00

No.

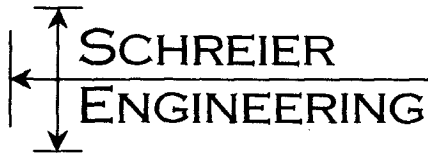
001443

By

Darland Ebele

Chief Engineer

gsm



11160 Snoma Road ♦ Belle Fourche, SD 57717

Phone/Fax: (605) 892-2051 ♦ Cell: (605) 641-3315 ♦ Email: alnreva@iw.net

February 3, 2005

Mr. Eric Gronlund
Water Rights Program
Joe Foss Building
523 East Capitol
Pierre, SD 57501-3181

RECEIVED

FEB - 7 2005

WATER RIGHTS
PROGRAM

RE: Water Right Application
Duane & Evelyn Wilen, Belle Fourche, SD

Dear Mr. Gronlund,

Please find a permit application for a water right for the above referenced project. Since the well is proposed to below the Greenhorn, we are providing the estimated depth and casing size at this time.

Please find a check in the amount of \$275.00 for the permit fee.

If there are any questions, please contact this office, or Mr. Wilen at 605-892-4757.

Sincerely,

Allan Schreier, PE
Schreier Engineering

cc: Duane Wilen



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

February 8, 2005

Duane & Evelyn Wilen
PO Box 382
Belle Fourche SD 57717

Dear Mr. & Mrs. Wilen:

Thank you for submitting the *Application for a Permit to Appropriate Water* for a suburban housing development and possible geothermal heating purposes. In order to complete the application the following is required.

- We have received your check for \$275.00. The application filing fee for this application will be \$300.00. Please submit an additional \$25.00.

If you have any questions, please contact me.

Sincerely,

Karen Schlaak

Karen Schlaak
Water Rights Program
605 773-3352
karen.schlaak@state.sd.us

RECEIVED
FEB 14 2005
WATER RIGHTS
PROGRAM

Karen:
As per your letter, find
enclosed the \$25.00 check.

Sincerely
Duane Wilen

WATER PERMIT APPLICATION NO. 1835-1
DUANE & EVELYN WILEN
APRIL 7, 2005

Water Permit Application No. 1835-1 proposes to appropriate 0.5 cubic feet of water per second (cfs) from one well to be completed into the Madison aquifer (approximately 2,100 feet deep) located in the SW¼ SE¼ Sec. 28, T8N-R1E, Butte County. The water is to be used for a suburban housing development and possible geothermal heating purposes.

AQUIFER: Madison aquifer (MDSN)

AQUIFER CHARACTERISTICS:

The Madison Limestone, locally known as the Pahasapa Limestone, is a fine to medium crystalline, cavernous limestone and dolomite. The Madison underlies approximately 1,440,000 acres of Butte County and contains an estimated 57,600,000 acre-feet of recoverable water in storage in the county (Allen and others, 1985). The Madison extends into the counties adjacent to Butte County, and in fact underlies much of the Western United States. Estimates of the thickness of the Madison in this area range from approximately 650 feet thick (Allen and others, 1985) to approximately 800 feet thick (Carter and Redden, 1999a) (Carter and Redden, 1999b). The top portion of the Madison Limestone is karstic, therefore it contains randomly distributed zones of secondary porosity and permeability formed by weathering of exposed surfaces, groundwater solution and fracturing, and is considered the Madison aquifer. 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 about ten miles south of this proposed well site (Strobel and others, 1999), and the top of the Madison limestone is estimated to be about 1780 feet below grade at this well site (Carter and Redden, 1999a). The average porosity of the Madison is estimated to be 11% and the effective porosity from which recoverable water can be obtained by wells is assumed to be 5% (Rahn, 1979). The Madison is recharged through infiltration of precipitation falling directly on the outcrop area, possibly upward leakage from the Deadwood aquifer, and from streamflow losses. The estimated average annual recharge for the Madison aquifer in South Dakota ranges from 140,000 to 400,000 acre-feet annually (Woodward Clyde, 1981). Average annual recharge from 1931-1998 is estimated to be approximately 137,000 ac-ft/yr (Carter and others, 2001).

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 a total of 134 permits/rights which appropriate water from the Madison aquifer in South Dakota (Water Rights, 2005c). There are a number of applications to appropriate water from the Madison aquifer pending at this time, including one (Application No. 1834-1, Martin Bonato), for a well approximately three-fourths of a mile south of the well site proposed by this application. In addition, there are two Future Use Permits (1833-2 Weston Heights Home Owners, and 2086-2 The City of Rapid City), that reserve water from the Madison aquifer. The majority of the water rights/permits from the aquifer are from Butte, Lawrence, Meade, Pennington and Fall River Counties. The Madison supplies water for irrigation, geothermal, industrial, 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, 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 less than 50,000 acre-feet per year. The actual amount of water used from the Madison is considerably less than this estimate. Withdrawals from wells completed into the Madison aquifer were estimated to be 10,990.2 acre-feet annually from 1987-1996 (Carter and others, 2001). 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.

Observation Well Data:

The Water Rights Program monitors 26 observation wells completed into the Madison aquifer in the Black Hills area (Water Rights, 2005b). 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 levels of the aquifer and the effects of pumping as yet are not obvious.

The nearest Water Rights' Madison aquifer observation well (LA-87A) is located about seven miles south of this well site. The hydrograph for the observation well is shown below in figure 1.

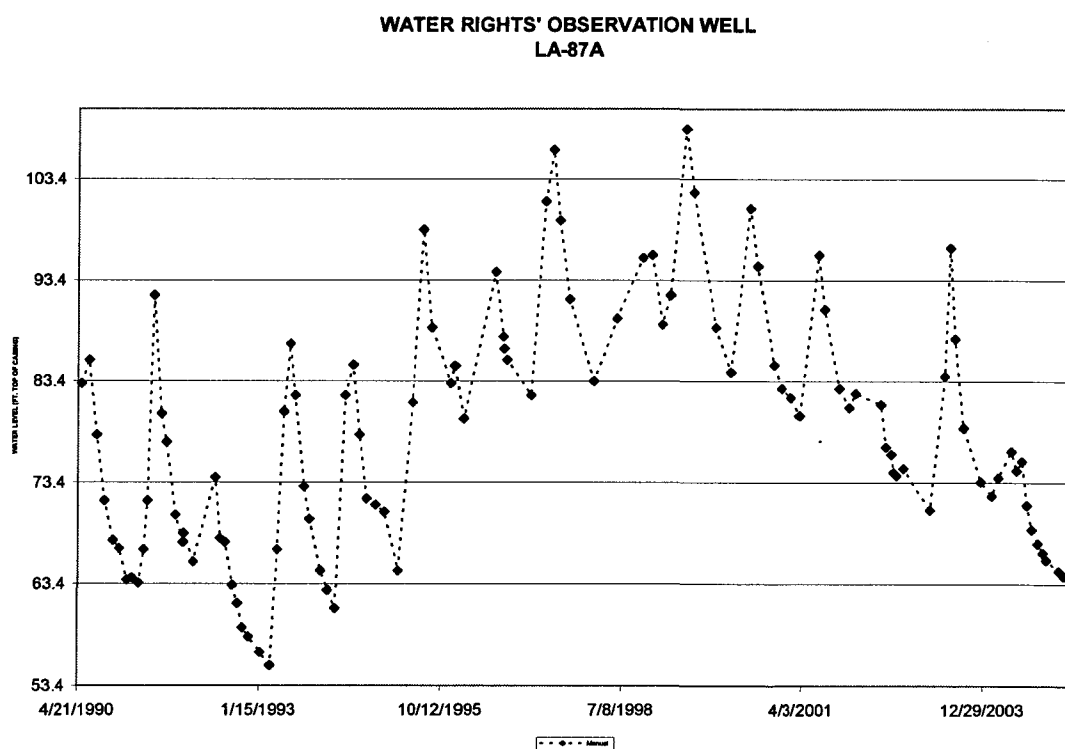


Figure 1. Hydrograph of Water Rights' observation well located approximately seven miles south of the well site proposed by for this appropriation.

The hydrograph shows that the water levels in the well, and presumably the Madison aquifer in this area, gradually increased by nearly 53 feet between 1993 and 1999. The water level has declined since 1999 but is still nearly 10 feet higher than 1993 levels.

AFFECTS ON EXISTING RIGHTS:

Groundwater Appropriations:

There are 12 Water Rights/Permits appropriating groundwater within approximately five miles of the well site proposed by this appropriation (Water Rights, 2005c), they are shown in table 1.

PERMIT NO	NAME	AQUIFER	USE	CFS	ACRES
1009-1	DONALD F/ANN JBRADY	MDSN	IRR	0.78	53.73
1185-1	DONALD F/ANN JBRADY	MDSN	IRR	0.38	22.52
1428-1	MARTIN BONATO	MNLS	IRR	0.24	17.00
1442-1	GRANDVIEW PROPERTY OWNERS	MDSN	SHD	0.10	
243-1	MRS HAZEL M MCKAY	MNLS	DOM	0.31	
244-1	MRS HAZEL M MCKAY	MNLS	DOM	0.17	
514-1	ROLAND BRYAN	MNLS	IRR	2.72	191.00
660-1	JOHN/BRENDA SWANSON	MNLS	IRR	1.77	263.00
749-1	DEPT OF GAME FISH & PARKS	SPRF	FWP	2.23	
752A-1	DEPT OF GAME FISH & PARKS	SPRF	FWP	3.23	
775-1	JOHN E SWANSON	MNLS	IRR	1.97	138.50
1254-1A	CARL L/MELVIN ANDERSON	MNLS	IRR	2.24	156.77

Table 1. Groundwater appropriations within approximately five miles of 1835-1

The extent of a hydrologic connection between the Madison and shallower aquifers is unclear and has been debated. The Minnelusa directly overlies the Madison aquifer and if a hydraulic connection occurs between shallower aquifers it would be most apparent between the Madison and Minnelusa aquifers. 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. A hydrograph comparing the Madison and Minnelusa aquifers in this area is included below. Although a hydraulic connection between the aquifers can not be confirmed or rejected based on this comparison, it can be assumed that any interaction between the aquifers must be limited or the water levels would be similar.

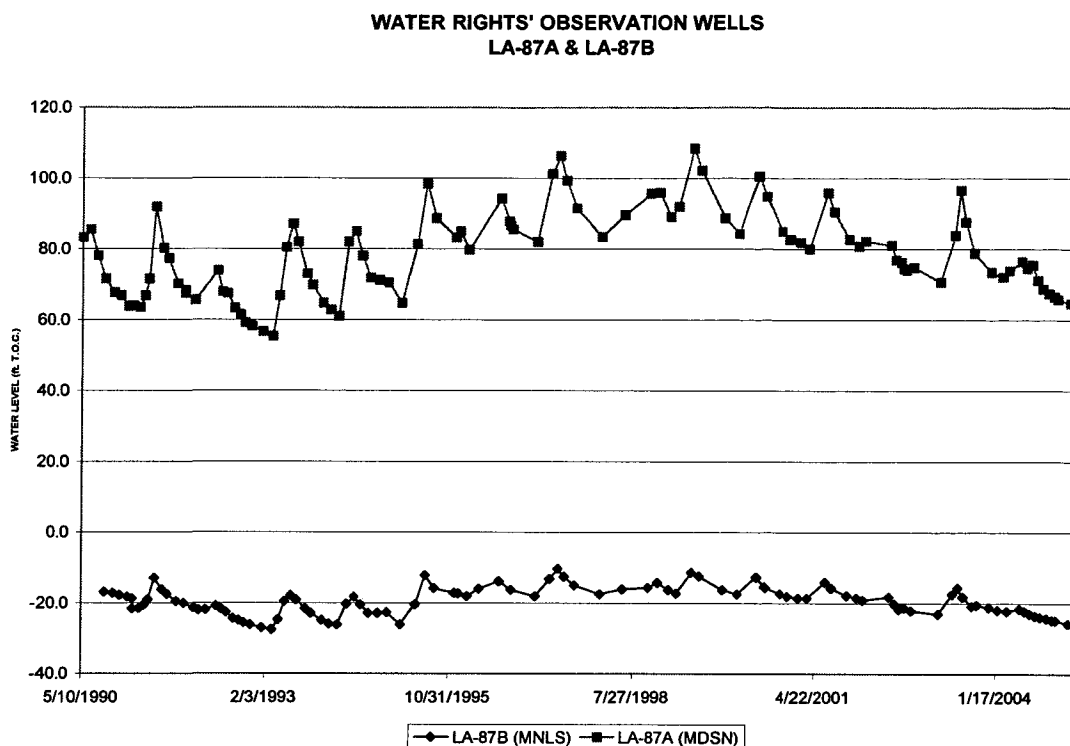


Figure 2. Hydrograph comparing Madison and Minnelusa aquifer water levels in this area

Well interference is not expected to be an issue with nearby water rights/permits completed into shallower aquifers because of an apparent hydrologic separation between the Madison aquifer and shallower aquifers.

Three of the groundwater appropriations within five miles are from the Madison aquifer. They include:

PERMIT NO	NAME	DISTANCE FROM 1835-1
1009-1	DONALD F/ANN J BRADY	3 MILES
1185-1	DONALD F/ANN J BRADY	Same well as 1009-1
1442-1	GRANDVIEW PROPERTY OWNERS	2.75 MILES

Table 1. Madison aquifer appropriations within 5 miles of 1835-1

In addition to the three existing water rights Water Permit Application No. 1834-1 proposes to appropriate water from the Madison aquifer within approximately three-fourths of a mile of the well proposed by this application.

Domestic Wells:

The Water Rights Program has record of 98 well completion reports for water supply wells within five miles of the well site proposed by this appropriation. The wells range from less than 50 feet deep to over 2300 feet deep. Only four of these wells appear to be completed into the Madison aquifer (Water Rights, 2005a).

At this time it is not practical to attempt to quantify the specific affect pumping this well will have on area wells since aquifer characteristics have not been determined for this area, and the variability of the hydraulic characteristics has been well documented (Greene, 1993). In addition, Greene concluded that the transmissivity of the Madison is not equal in all

directions (anisotropic); therefore the drawdown cone will extend farther in one direction than another. It is possible that drawdown from a well authorized by this appropriation could have a measurable affect on water levels in the well proposed by Water Permit Application No. 1834-1, due to the proximity of the planned wells. However, Water Management Board rules 74:02:04 and 74:02:05, which were promulgated pursuant to SDCL 46-6-6.1, provide protection to wells 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 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. In this area, the Madison aquifer has around 2000 feet of artesian head pressure, (Carter and Redden, 1999a) and (Strobel and others, 2000).

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:

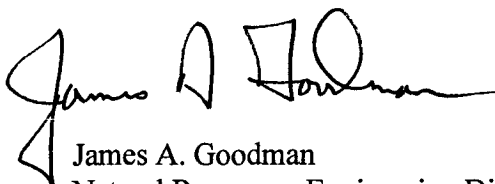
1. The Madison aquifer is a viable aquifer in this area.
2. This diversion will not adversely impair existing water rights.
3. Information is not available to justify issuing this permit without a term limitation of 20 years.
4. This well may free flow at the land surface. This well must be valved and controlled to the amount of water needed in order to prevent the waste of water.



Ken Buhler

Natural Resources Engineering Specialist

Approved by



James A. Goodman

Natural Resources Engineering Director

REFERENCES:

- Allen, J.C., Iles, D.L., and Petres, A.K., 1985, Analysis of Groundwater and Streamflow Data Western Dakotas Region of South Dakota, Tasks 3A.B.C. and 4A.B.: Groundwater Resource Inventory: South Dakota Department of Water and Natural Resources
- Carter, J.M., Driscoll, D.G., Hamade, G.R., 2001, Estimated Recharge to the Madison and Minnelusa Aquifers in the Black Hills Area, South Dakota and Wyoming, Water Years 191-98, Water-Resources Investigations Report 00-4278, 66 p.
- Carter, J.M., Redden, J.A., 1999a, 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., Redden, J.A., 1999b, Altitude of the Top of the Deadwood Formation in the Black Hills Area, South Dakota: U.S. Geological Survey Hydrologic Investigations Atlas HA-744-E, 2 sheets, scale 1:100,000
- Carter, J.M., Driscoll, D.G., Hamade, G.R., and Jarrell, G.J., 2001, Hydrologic Budgets for the Madison and Minnelusa Aquifers, Black Hills of South Dakota and Wyoming, Water Years 1987-1996, Water-Resources Investigations Report 01-4119, U.S. Department of the Interior, U.S. Geological Survey, Rapid City, SD
- Greene, E.A., 1993, Hydraulic Properties of the Madison Aquifer System in the Western Rapid City Area, South Dakota: U.S. Geological Survey Water-Resources Investigations Report 93-4008, 56 p.
- Rahn, P.H., 1979, Ground Water Resources of Western South Dakota: U.S. Army Corps of Engineers, SDSM&T Project #2533
- Strobel, M.L., Jarrell, G.J., Sawyer, J.F., Schleicher, J.R., and Fahrenbach, M.D., 1999, Distribution of Hydrogeologic Units in the Black Hills Area, South Dakota: U.S. Geological Survey Hydrologic Investigations Atlas HA-743, 3 sheets, scale 1:100,000
- Strobel, M.L., Galloway, J.M., Hamade, G.R., Jarrell, G.J., and 2000, Potentiometric Surface of the Madison Aquifer in the Black Hills Area, South Dakota: U.S., Geological Survey Hydrologic Investigations Atlas HA-745-D, 2 sheets, scale 1:100,000
- Water Rights Program, 2005a, "Domestic Well Log Files", South Dakota DENR-Water Rights Program, Joe Foss Building, Pierre, SD
- Water Rights Program, 2005b, "Unpublished Observation Well Records", South Dakota DENR-Water Rights Program, Joe Foss Building, Pierre, SD
- Water Rights Program, 2005c, "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 the Interior, Bureau of Land Management



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
www.state.sd.us/denr

**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 1835-1, Duane & Evelyn Wilen**

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. 1835-1, Duane & Evelyn Wilen, PO Box 382, Belle Fourche SD 57717.

The Chief Engineer is recommending APPROVAL of Application No. 1835-1 for a 20 year term because 1) the proposed diversion can be developed without unlawful impairment of existing rights, 2) the proposed use is a beneficial use and 3) it is in the public interest with the following qualifications:

1. In accordance with SDCL 46-1-14 and 46-2A-20, Permit No. 1835-1 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. 1835-1 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 Permit holder shall report to the Chief Engineer annually the amount of water withdrawn each year from the Madison Formation for the suburban housing development.

See report on application for additional information.

Garland Erbele, Chief Engineer
April 15, 2005

AFFIDAVIT OF PUBLICATION

STATE OF SOUTH DAKOTA
COUNTY OF BUTTE

Cathy Dabney, 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 Lee Enterprises; 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:

APRIL 27	200	5	200
MAY 4	200	5	200
	200		200
	200		200
	200		200

that the full amount of the fee charged for publishing the same, to-wit, the sum of \$ 37.35, 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.

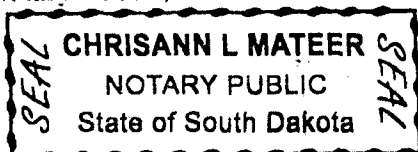
Cathy Dabney
Office Manager

Subscribed and sworn to before me this

18th day of May, 2005
Chrisann L. Mateer

RECEIVED
MAY 20 2005
WATER RIGHTS
PROGRAM

Notary Public, South Dakota



My Commission Expires Nov. 19, 2007

Account No. 60005345

Total Amount 37.35

Public Notice

NOTICE OF APPLICATION

NO. 1835-1

to Appropriate Water

Notice is given that Duane & Evelyn Wilen, PO Box 382, Belle Fourche SD 57717 have filed an application for a water permit to appropriate 0.5 cubic feet of water per second from one well to be completed into the Madison Aquifer (approximately 2100 feet deep) located in the SW 1/4 SE 1/4 Section 28-T8N-R1E. The water is for a suburban housing development and possible geothermal heating use purposes.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 1835-1 for a 20 year term pursuant to SDCL 46-1-14 and 46-2A-20, because 1) evidence is not available to justify issuing this permit without a 20 year term limitation, 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. 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 May 16, 2005.

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. April 27, May 4, 2005
Belle Fourche Post

Instruction to Newspaper - Publish first Notice on April 27, 2005 with the second publication 7 days later. The applicant is responsible for payment.

NOTICE OF APPLICATION NO. 1835-1 to Appropriate Water

Notice is given that Duane & Evelyn Wilen, PO Box 382, Belle Fourche SD 57717 have filed an application for a water permit to appropriate 0.5 cubic feet of water per second from one well to be completed into the Madison Aquifer (approximately 2100 feet deep) located in the SW ¼ SE ¼ Section 28-T8N-R1E. The water is for a suburban housing development and possible geothermal heating use purposes.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 1835-1 for a 20 year term pursuant to SDCL 46-1-14 and 46-2A-20, because 1) evidence is not available to justify issuing this permit without a 20 year term limitation, 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. 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 May 16, 2005.

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.



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
www.state.sd.us/denr

April 18, 2005

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

ATTENTION: Legal Public Notice

Enclosed is a Notice on Application No. 1835-1 to Appropriate Water to be published twice. Please publish the first notice on April 27, 2005 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 Duane & Evelyn Wilen, PO Box 382, Belle Fourche (Ph # 605-892-4757).

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. 1835-1

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

Date _____

We are in receipt of your letter of April 18, 2005 enclosing Notice to Appropriate Water by Application No. 1835-1 which was first published in our issue of _____. **ENCLOSED IS A COPY OF THIS FIRST PUBLICATION.**

Name

Newspaper



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
www.state.sd.us/denr

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

April 18, 2005

Duane & Evelyn Wilen
PO Box 382
Belle Fourche SD 57717

Dear Mr. & Mrs. Wilen:

Water Permit Application No. 1835-1 for suburban housing development 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 # 605-892-2529). 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
and NATURAL RESOURCES**

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
www.state.sd.us/denr

JUN 07 2005

Duane & Evelyn Wilen
PO Box 382
Belle Fourche SD 57717

Dear Mr. & Mrs. Wilen:

Enclosed is Water Permit No. 1835-1 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 TRANSFER OF OWNERSHIP

To: Chief Engineer
Water Rights Program, DENR
523 E. Capitol
Pierre, SD 57501-3181

RECEIVED

JUN 21 2005

WATER RIGHTS
PROGRAM

No. 1835-1

Date: 6-17-05

I/We request that Water Right/Permit No. 1835-1

formerly owned by: Duane & Evelyn Wilen, P.O. Box 382, Belle Fourche
SD, 57717

be transferred to: (name & address) Wilen Enterprises, L.L.P.

P.O. Box 382 19331 Valley View Lane
Belle Fourche, S.D. 57717-0382 Telephone No. (605) 890-4757

Title to the following described land(s)/property has been transferred as described above:

Well Lot of Buena Vista Estates a subdivision of
The N $\frac{1}{2}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$ Section 28-T8N-R1E

I/We understand that the validity of Water Right/Permit No. 1835-1 has not been determined by this transfer action. If I/We have any questions on validity, I/We understand that only the Water Management Board has the authority to determine if a water permit/right is valid (see note).

You are requested to file this "Notice of Transfer" in the appropriate file with the Water Rights Program, as evidence of the change of ownership.

A fee of Two Dollars and Fifty Cents (\$2.50) is required to cover the filing fees as required under SDCL 46-2-13. This form must be signed by the new owner.

I/We Wilen Enterprises L.L.P., the new owner, certify that the above information is true and correct.

Duane & Evelyn Wilen Partners
(Signed by new owner)

Orion Wilen - Partner

NOTE: Water permits may be cancelled for nonconstruction after the five year construction period has expired. Once a water permit is developed and the water used, the permit becomes a right. A water right may be lost for three reasons:

1. Abandonment - no intent to use water and use is abandoned.
2. Forfeiture - no use of water for three year period without legal excuse.
3. For a third violation of a condition of a water permit/right.

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date June 21, 20 05

RECEIVED OF Wilco Enterprises LLP, PO Box 382, Beale Fourche SD 57717

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	2	50
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 <u>1835-1</u>		
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	2.50

No.

01830

By

Darland Albe

Chief Engineer

gm



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
www.state.sd.us/denr

June 22, 2005

1835-1

Duane Wilen
Wilen Enterprises, LLP
PO Box 382
Belle Fourche SD 57717-0382

Dear Mr. Wilen:

I am writing to acknowledge receipt of the ownership change you filed for Water Permit No. 1835-1. The transfer has been completed. The water permit formerly listed in the names of Duane and Evelyn Wilen is now listed in the name of Wilen Enterprises, LLP.

Enclosed is your Receipt No. 001890 in the amount of \$2.50. If I can answer any questions for you, please contact me.

Sincerely,

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

enclosure

1835-1

Water Rights Program - DENR
Conversation File Documentation

NAME OF PERSON OR FILE: Water Permit No. 1835-1, Duane & Evelyn Wilen

ADDRESS: PO Box 382, Belle Fourche SD COUNTY: Butte

DATE: July 27, 2005 TELEPHONE:

RE: Call from ?Deon? Wilen

COMMENTS:

Mr. Wilen called about their water permit that was recently issued. He indicated that in addition to their planned subdivision they may also serve an existing housing development. I indicated that since the water permit was issued to use in a suburban housing development that I believe they could serve this development. I did read ARSD 74:01:01:03.01 and said I didn't think it was applicable because the use remains SHD. This would not preclude someone else from making the argument that additional permitting is required.

I did tell him that Martin Bonato who also received a permit recently in that area was concerned about the close proximity of the wells to one another. I responded that the staff engineer who prepared the report on this application was aware of the both applications and concluded that water was available for both uses.

Mr. Wilen then asked what would happen if the diversions from the Bonato irrigation well impacted their well which is serving homes. I told him that Bonato's water right was senior to the Wilen well by 4 days.

I directed him to the Drinking Water Program to answer question about their requirements for a public water system.

NAME: _____

Eric Stenlund

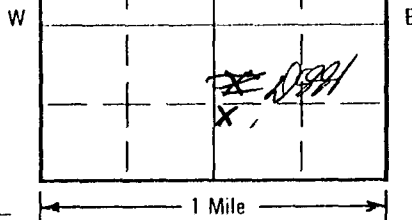
1835-1

SOUTH DAKOTA WATER WELL COMPLETION REPORT

07-92

Location SW SE 1/4 Sec 28 Twp 8N Rg 1E
 County Butte
 North

Please mark well location with an "X"



Well Completion Date

7-28-05

LOCATION:

Distance from nearest potential pollution source (septic tank, abandoned well, feed lot, etc.)? 150 ft. from septic (identify source).

PROPOSED SUBURBAN Housing Development

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

METHOD OF DRILLING:

Rotary - Mud

CASING DATA: ☒ Steel ☐ Plastic ☐ Other

If other describe _____

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
54.5 LB/FT	13 3/8 IN	0 FT	23 FT	17 1/2 IN
36 LB/FT	9 5/8 IN	+2 FT	900 FT	12 1/4 IN
23 LB/FT	7 IN	860 FT	1910 FT	8 3/4 IN

GROUTING DATA

Grout Type	No. of Sacks	Grout Weight	From	To
Portland	360	14.5 lb./gal	0 ft	900 ft
Portland	250	14.5 lb./gal	860 ft	1910 ft

Describe grouting procedure Pressure grouted through casing. 13 3/8 WAS grouted ALSO

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

NO, Why Not? _____

Laboratory sent to for water quality analysis

Mid Continent

Well Owner: Wilen Enterprises, LLP

Business Name: _____

Address: P.O. BOX 382
Belle Fourche, SD 57717

WELL LOG:

DEPTH

FORMATION	FROM	TO
Br + Green sand shale	0	45
Sundance	45	295
Spearfish	295	1180
MINNEKAHTA	1180	1255
Opeache	1255	1315
MINNELUSA	1315	1880
MADISON	1880	2460

STATIC WATER LEVEL 0 FeetIf flowing: closed in pressure 75 PSIGPM flow 125 through Open Discharge inch pipeControlled by ☒ Valve ☐ Reducers ☐ Other _____

Reduced Flowrate _____ GPM

Can well be completely shut in? Yes

WELL TEST DATA:

☐ PumpedDescribe: Air Developed☐ Bailed☒ Other _____

Pumping Level Below Land Surface

450 ft. After 3 Hrs. pumped 300 GPM300 ft. After 1/2 Hrs. pumped 275 GPM

If pump installed, pump rate _____ GPM

REMARKS

RECEIVED

AUG 12 2005

WATER RIGHTS PROGRAM

This well was drilled under license # 331

And this report is true and accurate.

Drilling firm Taylor DrillingSignature of License Representative: K. J. L.

Signature of Well Owner or Equitable Property Holder:

Wilen Enterprises, LLP
By Roseanne H. Schuler-PartridgeDate: 8-10-2005

1835-1

**NOTICE OF COMPLETION OF WORKS AND
APPLICATION OF WATER TO BENEFICIAL USE**Date January, 9, 2005

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

RECEIVED

JAN 11 2006

WATER RIGHTS
PROGRAM

FROM: WILEN ENTERPRISES L.L.P.
(name)
P. O. BOX 382
(address)
BELLE FOURCHE S.D. 57717
(city, state, zip)

(605)892-4757(605) 210-1370
(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. 1835-1 states that the water use system is to be constructed by
May 16, 2010, and water is to be put to beneficial use by May 16, 2014.
(date) (date)

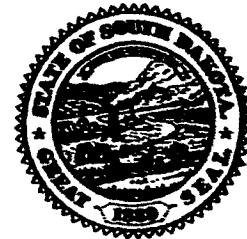
The water use system was completed on January 2, 2006.
(date)

Applying the water to beneficial use was completed on January 2, 2006.
(date)

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

Duane Wilen

Duane Wilen
(signature)



Permit No. 1835-1
Wilen Enterprises LLP

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

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

I have this day, **July 15, 2009**, made a thorough examination of the water use system constructed by **Wilen Enterprises** of **P.O. Box 382, Belle Fourche, SD 57717-0382** holder of Permit No. **1835-1**, bearing the priority of **February 7, 2005** authorizing the diversion of **0.31** cu. ft. per second of the waters of the **Madison Aquifer** for **suburban housing development water supply and geothermal heating** purposes, in **Butte** County.

Inspection contact/permit holder, **Duane Wilen**
if applicable: **P.O. Box 382**
Belle Fourche, SD 57717-0382

A. Works used to divert the water:

Well Information:

Well Drilling Firm: **Taylor Drilling**

- 1) No. of Wells **1**
- 2) Depth(s) **2460** feet
- 3) Well log is available **Yes**
- 4) Comment: See well completion report

Casing: (Steel) 0-23 feet → diameter: 13 3/8 in.

23-900 feet → diameter: 9 5/8 in.

860-1910 feet → diameter 7 in.

Screen: none

Pump: (Only used for two users—(those on the nearby hilltops))

- 1) Make **Goulds**
- 2) Model **Aquavar Series SSV (3SVB1J5DO)**
- 3) Size **3-phase, 230 volt**
- 4) Capacity **55** GPM

Motor:

- 1) Make **Baldor**
- 2) Model No. **VM3613T**
- 3) Horsepower rating **5** hp

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

- | | | |
|---------------------------------|---------------------------|------------------------------|
| 1) Type <u>PVC Main</u> | 2) Size <u>6</u> inches | 3) Length <u>~7,000</u> feet |
| 1) Type <u>PVC(Welded Type)</u> | 2) Size <u>1 ½</u> inches | 3) Length <u>~3,200</u> feet |
| 1) Type <u>Ductile Iron</u> | 2) Size <u>2</u> inches | 3) Length <u>~1,000</u> feet |

C. Works used to apply water to beneficial use: Households served by the well**D. Compliance with Permit Requirements:**

- 1) Permit qualifications being abided by Yes
- 2) Irrigation Questionnaires checked to determine if permit owner started irrigation by the end of construction period Not Applicable
- 3) Exceptions to compliance are: None

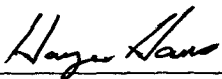
The system is in good condition with the point of diversion located as follows: 2,644 feet west and 1,297 feet north of the SE corner of Section 28, Township 8 North, Range 1 East, lat/long N 44.62247 W -104.00144. The works are capable of diverting and conveying to the place of use 0.31 cu. ft. per second of water which is to be used for suburban housing development water supply and geothermal heating use. Water has been put to beneficial use to the maximum extent as follows:

Suburban housing development and geothermal use and the license should be issued for 0.31 cfs.

All structures, wells and lands on map Yes

Comments or other permit(s) associated with the project: **Well has a shut in pressure of 75 p.s.i. and flows at 125 gpm into a 41,250 gallon storage tank. Pump is used to serve only two connections on the system. System uses 140 gpm (0.31 cfs) when the pump is used.**

The owner is wholesaling water to one party, Sandstone Water Company, which has approximately 75 accounts, and the rest is used to supply water to five other customers in the housing development. Geothermal heating system: uses untreated well water circulated through the floor of the well house and consists of approximately 300' feet of half-inch pipe discharging to pond located on the property.



Hayes Haas
Natural Resources Engineer
DENR, Water Rights Program

Date report completed: January 13, 2010



0 305 610 1,220 1,830 2,440 Feet

Hayes Haas

Hayes Haas
Natural Resources Engineer
DNR Water Rights Program
July 2009





APR 09 2010

**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
denr.sd.gov

1835-1

Duane Wilen
Wilen Enterprises LLP
10252 Buena Vista Lane
Belle Fourche SD 57717

Dear Mr. Wilen:

Enclosed is Water License No. 1835-1. This is the final water right document completing your process of obtaining a Water Right. Also, included with your license is a map prepared by the staff engineer who conducted the investigation.

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

Sincerely,

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

enclosures

STATE OF SOUTH DAKOTA

WATER LICENSE NO. 1835-1

(1) Duane & Evelyn Wilen, Belle Fourche SD 57717 made Application No. 1835-1, February 7, 2005 for a water permit to divert 0.5 cubic feet of water per second from groundwater (one well), Butte County, South Dakota for suburban housing development and geothermal heating purposes. Permit No. 1835-1, with a priority date of February 7, 2005 was approved May 16, 2005 and issued to the applicant for diversion of water with construction of the described water supply system to be completed on or before May 16, 2010 and for the application to beneficial use of water on or before May 16, 2014.

On July 21, 2005, Water Permit No. 1835-1 was transferred to Wilen Enterprises, LLP, c/o Duane Wilen, 10252 Buena Vista Lane, Belle Fourche SD 57717.

(2) The water supply system has been completed and water applied to beneficial use in accordance with South Dakota State Law. Pursuant to South Dakota Codified Law 46-5-30.1, the holder and/or owner of Water Right No. 1835-1 is issued a license, bearing a priority date of February 7, 2005 to appropriate 0.31 cubic feet of water per second from groundwater (one well) for suburban housing development and geothermal heating purposes.

The diversion point is located: 2,644 feet west and 1,297 feet north of the southeast corner of Section 28-T8N-R1E (SW ¼ SE ¼).

(3) This license is subject to South Dakota Water Law, any limitations or conditions listed in Water Permit No. 1835-1 including the following now applicable qualifications:

- In accordance with SDCL 46-1-14 and 46-2A-20, Permit No. 1835-1 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. 1835-1 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 Permit holder shall report to the Chief Engineer annually the amount of water withdrawn each year from the Madison Formation for the suburban housing development.

Garland Erbele

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

APR 09 2010

date





**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 E. CAPITOL AVE
PIERRE SD 57501-3182
danr.sd.gov

March 1, 2024

1835-1

Red Water Well LLC
c/o Duston Morehead
PO Box 135
Belle Fourche SD 57717

Dear Mr. Morehead:

I have received your "Notice of Transfer of Ownership" form and the required fees. Enclosed is a copy of the original water right and receipt of payment for your records.

Water Right No. 1835-1 previously owned by Wilen Enterprise LLP, is now listed under Red Water Well LLC. I have also updated your contact information in our system.

As a reminder, so long as you use the water beneficially, as stated in the water right, State Water Laws provide that you have a continuing right to use the water. Should the water not be put to beneficial use for a period longer than 3 consecutive years, without legal excuse, the water right will be subject to cancellation.

If you have any questions, please contact me.

Sincerely,

Amanda Dewell
Water Rights Program
605 773-3352
Amanda.Dewell@state.sd.us

enclosures

RECEIVED

FEB 14 2024

OFFICE OF
WATER

NOTICE OF TRANSFER OF OWNERSHIP

For assistance call (605) 773-3352

Mail to: SD DANR, Water Rights Program
523 E Capitol Ave
Pierre, SD 57501-3182

Water Right/Permit No. 1835-1

Date: 02-14-2024

I/We request that Water Right/Permit No. 1835-1 formerly owned by:
Wilen Enterprises be transferred to:

New Owner Name: Red Water Well, LLC
Address: PO Box 135 mobile: 605-206-1752
City, State, Zip Belle Fourche, SD 57717 email: dustymorehead@gmail.com

Title to the following described land(s)/property has been transferred as described above:

1.25 Acres
Well Lot of Buena Vista Estates, a subdivision of N1/2SE1/4SW1/4 and N1/2SW1/4SE1/4 of
Section 28, Township 8 North, Range 1 East of the Black Hills Meridia, Butte County, South
Dakota as shown by the plat recorded as Document #2005-1575.

☒ I understand that the validity of Water Right/Permit No. 1835-1 has not been determined by this transfer action. If I have any questions on validity, I understand that only the Water Management Board has the authority to determine if a water right/permit is valid (see note below).

You are requested to file this "Notice of Transfer" in the appropriate file with the Water Rights Program, as evidence of the change of ownership.

A fee of Fifty Dollars (\$50.00) is included to cover the filing fee as required by SDCL 46-2-13.

I, Duston L Morehead, the new owner, certify that the above information is true and correct.

Duston L Morehead
Duston L Morehead (Feb 14, 2024 14:29 MST)
(signed by new owner)

NOTE: Water permits may be cancelled for nonconstruction after the five-year construction period has expired. Once a water permit is developed, an inspection is conducted to issue a water right license for the project as developed. A water permit/right may be cancelled for one or more of the following reasons:

1. Abandonment - no intent to use water and use is abandoned.
2. Forfeiture - no use of water for three-year period without legal excuse.
3. For a third violation of a condition of a water permit/right.

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Agriculture and Natural Resources

Date March 1, 2024

RECEIVED OF Red Water Well LLC PO Box 135 Belle Fourche SD 57717

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

Fee for Application for Permit No. _____ to Appropriate Water, to construct and to put water to beneficial use	\$ _____
Fee for Application for Permit No. _____ to Appropriate Water for Future use	\$ _____
Fee to retain Future Use Permit No. _____ after period of seven years.	\$ _____
Fee for Inspecting Constructed Works, confirming beneficial use and issuing Water License No. _____	\$ _____
Fee for Filing Transfer Form <u>1835-1</u>	<u>\$50.00</u>
Fee for _____	\$ _____
Fee for Issuing New Well Driller's License No. _____	\$ _____
Fee for Renewal of Well Driller's License No. _____	\$ _____
Fee for Issuing Well Pump Installer's License No. _____	\$ _____
Fee for Renewal of Well Pump Installer's License No. _____	\$ _____
(Any Other Work Provided by Law)	
TOTAL	<u>\$50.00</u>

By Eric Gronlund
Chief Engineer
jm