

WATER PERMIT NO. 1816-1

Name of Applicant: **Richard D Sleep**

Address: **10438 W Hwy 14, Spearfish SD 57783**

Phone: **605 642-2220**

Amount of Water Claimed: **3.33 cfs**

Total Acres: **112**

Source of Water Supply: groundwater (one well)

Water to be used for: **irrigation, domestic and cattle feedlot**

County: Lawrence

Type of Waste Disposal System:

Location: 4 miles northwest of Spearfish

PRIORITY

Date Received: **3-22-2004**

Application/License Fee: **\$ 275**

Revised Application Received: 2-24-2005

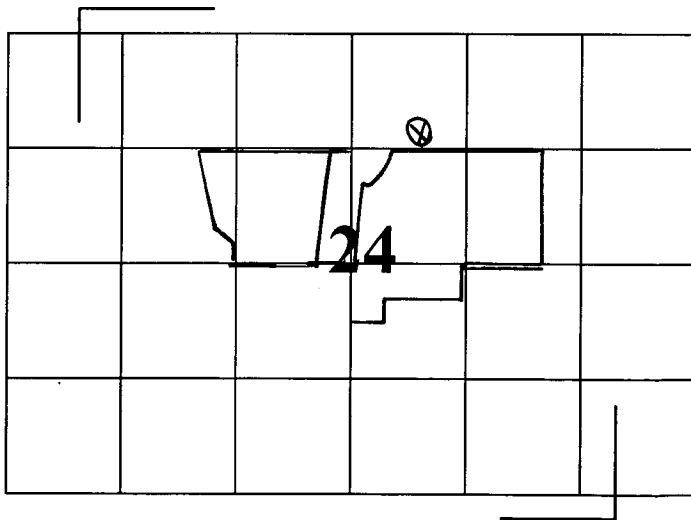
Period of Annual Use: **Jan 1 – Dec 31**

Remarks:

Diversion Point: NW ¼ NE ¼ Sec 24-T7N-R1E

Land to be Irrigated: S ½ NE ¼, NW ¼ SE ¼, S ½

NW ¼ Sec 24-T7N-R1E



Depth of Well: **415** feet

Well Driller: **Ellingson Drilling**

Remarks:

Type of Map: aerial

Prepared by: **Gary Hendrickson, NRCS**

Reviewed and the Number Assigned on: **2-24-2005**

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	(office use only)		RECEIVED FEB 24 2005 WATER RIGHTS PROGRAM
	No. <u>1816-1</u>	Hydrologic Unit <u>10120203</u>	
	Basin <u>Belle Fourche River</u>		
	Newspaper <u>Black Hills Pioneer</u>		

Application For Permit To Appropriate Water For Irrigation

Type of Application: ☒ New ☐ Vested Right ☐ Amendment/Correction to Permit No. _____
(Use predates Mar 2, 1955)

Description of amendment/correction: (i.e. change diversion point(s), add diversion point(s), change use, etc.)
Replaces applications submitted 3/22/04 and 9/16/04

- Name of Applicant Richard D. Sleep Phone 605-642-2220
(check one) ☒ Owner ☐ Tenant/lessee
Mailing Address 10438 West Huron 14 Spearfish State S.Dak 57283
(Street, RR, or Box and City) (Zip Code)
- Amount of water claimed 1.69 *CFS or 758 *GPM 1500 ***AF Total Acreage _____
(*Cubic Feet per Second) (**Gallons per Minute) (***)Acre Feet - storage capacity of dam/dugout or annual use if applicable
- Source of water supply Well
- Location of point of diversion (example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W)
Well in NW 1/4 NE 1/4 of Sec. 24 Twp. 7 R1E
County Lawrence
- County or counties where water will be used Lawrence
- Annual period during which water is to be used April 1 - Nov. 1 (irrigation)
Jan 1 - Dec 31 (livestock & domestic)
- List below each forty acre division, or lot, or fraction thereof and show number of acres to be irrigated in each.
(Attach sheet if more space is needed)

Land Description	Acres	Land Description	Acres
<u>Separate sheet attached</u>			

8. Give a description of the project. (Attach sheet if more space is needed)
Plan to use the water from the well to irrigate above described property for livestock feed, also for drinking water in a house & drinking water for livestock in a feedlot.

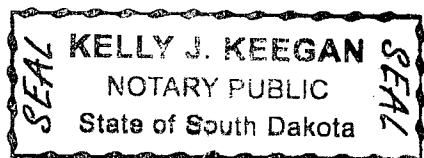
STATE OF SOUTH DAKOTA) SS
County of Butte

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, Richard D. Sleep, 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 Richard D. Sleep

Subscribed and sworn to before me this 16th day of February 20 05



Kelly J. Keegan
Notary Public signature

SOUTH DAKOTA
WATER PERMIT NO. 1816-1

Date of first receipt of application February 24, 2005.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 1816-1 to Richard D Sleep, 10438 W Hwy 14, Spearfish SD 57783 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. 1816-1 appropriates 1.69 cubic feet of water per second from one well completed into the Spearfish Formation (approximately 415 feet deep) located in the NW ¼ NE ¼ Section 24 to irrigate 112 acres located in the S ½ NE ¼, NW ¼ SE ¼, S ½ NW ¼ Section 24; all in T7N-R1E. Water from this well will also be used for domestic and commercial use in a cattle feedlot. This well may also be used to supplement irrigation of land authorized by Water Right No. 372-1 located in the NW ¼, W ½ NE ¼ Section 19-T7N-R2E.
2. The amount of the appropriation may not exceed 2 acre feet annually for each acre of land to which water is actually and beneficially applied for irrigation. The water is to be used during the following described annual period: April 1 – November 1 (irrigation) and January 1 – December 31 (other uses).
3. The date from which applicant may claim right is February 24, 2005.
4. The date of approval of Permit No. 1816-1 is May 16, 2005.
5. One-fifth of the construction is to be completed on or before November 16, 2007.
6. All construction is to be completed on or before May 16, 2010.
7. Water is to be put to beneficial use on or before May 16, 2014.
8. Water rights obtained in compliance with the laws of the State of South Dakota may not be unlawfully impaired by this appropriation.

QUALIFICATIONS

1. 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. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.

WATER MANAGEMENT BOARD

By: Garland Erbele

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

MAY 19 2005

date



Richard D. Sleep

The following acres in Twp. 7 R1E Section 24
I am applying to irrigate:

SE $\frac{1}{4}$ NW $\frac{1}{4}$ west 30 Acres

SW $\frac{1}{4}$ NE $\frac{1}{4}$ app. 35 Acres

NW $\frac{1}{4}$ SE $\frac{1}{4}$ app. 12 Acres

SE $\frac{1}{4}$ NE $\frac{1}{4}$ west 25 Acres

SW $\frac{1}{4}$ NW $\frac{1}{4}$ east 10 Acres

*Richard D. Sleep***Supplemental Information**

(type or print in ink)

1. Well Information - Proposed Construction

- a) Drill Hole Diameter 4" Depth 415'
- b) Casing Type steel Diameter 2" & 4" Thickness _____
- c) Screen Type _____ Diameter _____ Thickness _____
- d) Gravel Pack Cement Length of Gravel Pack 280'
- e) Depth to Top of Water Bearing Material _____
- f) Depth to Water (ground surface to water level) Flowing
- g) Distance to nearest existing domestic well:

On applicants property 1 $\frac{1}{4}$ - 1 $\frac{1}{2}$ miles On property owned by others 1 $\frac{1}{2}$ - 3 $\frac{3}{4}$ miles

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 _____

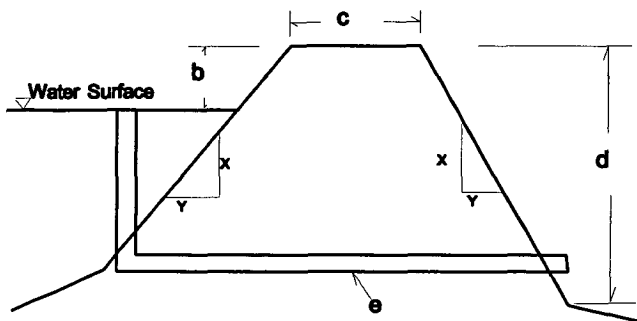
3. Dugout Information

- 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

Dear Eric;

Please find enclosed my application for an irrigation permit. I have included a description of the land to be irrigated from the new well on a separate sheet. This is different from the previous application I sent in so disregard it and go with this one.

Since I have taken so long deciding I hope you will process this application as soon as possible. I won't change my mind anymore. Thank you for assisting me on this.

Sincerely
Richard

RECEIVED

FEB 24 2005

WATER RIGHTS
PROGRAM

SOUTH DAKOTA WATER WELL COMPLETION REPORT

07-92

Location SE 1/4 SW 1/4 Sec 24 Twp 7N Rg R1E
County Lawrence

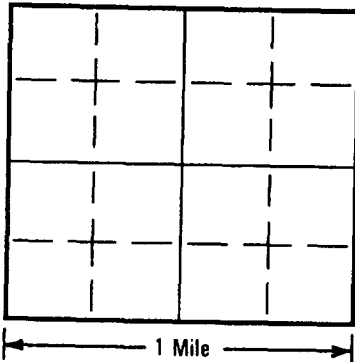
North

Please mark well location with an "X"

W

E

Well Completion Date

5-15-04Well Owner: Richard Slapp

Business Name: _____

Address: 10438 W. HWY 14Spearfish S.D. 57783

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
<u>clay + gravel</u>	<u>0</u>	<u>12</u>
<u>red bed + gyp</u>	<u>12</u>	<u>415</u>

RECEIVED

JUN 07 2004

WATER RIGHTS
PROGRAM

LOCATION:

Distance from nearest potential pollution source (septic tank, abandoned well, feed lot, etc.)? 1300 ft. from drain field (identify source).

PROPOSED USE:

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

METHOD OF DRILLING:

RotaryCASING DATA: ☒ Steel ☐ Plastic ☐ Other

If other describe _____

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
<u>17</u> LB/FT	<u>7.0</u> IN	<u>0</u> FT	<u>283</u> FT	<u>9</u> IN
_____ LB/FT	_____ IN	<u>283</u> FT	<u>415</u> FT	<u>6 1/2</u> IN
_____ LB/FT	_____ IN	_____ FT	_____ FT	_____ IN

GROUTING DATA

Grout Type	No. of Sacks	Grout Weight	From	To
<u>Portland</u>	<u>70</u>	_____ lb./gal	<u>0</u> ft.	<u>283</u> ft.
_____	_____	_____ lb./gal	_____ ft.	_____ ft.

Describe grouting procedure grouted through casingSCREEN: ☐ 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: chlor

_____ NO, Why Not? _____

Laboratory sent to for water quality analysis _____

STATIC WATER LEVEL 0 Feet

If flowing: closed in pressure _____ PSI

GPM flow 1500 through 7 inch pipeControlled by ☒ Valve ☐ Reducers ☐ Other _____

Reduced Flowrate _____ GPM

Can well be completely shut in? YES

WELL TEST DATA:

☐ Pumped Describe: _____☐ 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 # 93

And this report is true and accurate.

Drilling firm Ellingson Drilling

Signature of License Representative: _____

Signature of Well Owner or Equitable Property Holder: Jerry EllingsonDate: May 26, 2004

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date September 16, 20 04

RECEIVED OF Richard Sleep, 10438 W Hwy 14, Spearfish SD 57785

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

Fee for Application for Permit No. <u>1816-1</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>1816-1</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.

001420

By

Darland Erbe
Chief Engineer
gsm

MAP NOT TO SCALE
THIS IS NOT AN OFFICIAL WETLAND MAP



MAP NOT TO SCALE *Richard Sleep*
THIS IS NOT AN OFFICIAL WETLAND MAP #738



Water Rights Program - DENR
Conversation File Documentation

NAME OF PERSON OR FILE: Water Permit Application No. 1816-1, Richard Sleep

ADDRESS: COUNTY: Lawrence

DATE: April 19, 2005 TELEPHONE: 605 642-2220

RE: Amount of water to be appropriated under Application No. 1816-1, Richard Sleep

COMMENTS:

I contacted Mr. Sleep with our concerns on the amount of water claimed under Application No. 1816-1.

Mr. Sleep stated that he requested 3.33 cfs (1500 gpm) because that is what the well produced and that this was the amount the well driller (Jerry Ellingson) informed him would be the proper.

I told Mr. Sleep that the statutory limit for irrigation of 112 acres is 1.6 cfs (720 gpm). He planned to use a small pivot for a portion of the land and other means to irrigate the remaining portions. His application also states that water will be used in their house and for livestock in a feedlot. I asked if he could quantify the amount of water needed for livestock and home use. He said his feedlot amounts to an area for back grounding 1000 head of cattle for 5 – 6 months each year. We discussed it for a while and he thought that 40 gpm is adequate for these needs.

The total for irrigation and home/livestock watering is 1.69 cfs. Mr. Sleep asked that I amend his application accordingly.

He said that at some point in the future he may apply for additional acres and can apply for additional diversion authority at that time.

NAME: Eric Henderson



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

May 12, 2005

Richard Sleep
10438 West Hwy 14
Spearfish SD 57783

Dear Mr. Sleep:

Please find enclosed a copy of the staff report and Chief Engineer's recommendation for your water right permit application to irrigate. The application has been public noticed and we are waiting until May 16 so see if anyone petitions to intervene.

If you have any questions on the staff report or recommendation, please feel free to contact me.

Sincerely,

Eric Gronlund
Water Rights Program, DENR
(605) 773-3352

enclosure

WATER PERMIT APPLICATION NO. 1816-1
RICHARD D. SLEEP
APRIL 11, 2005

Water Permit Application No. 1816-1 proposes to appropriate 1.69 cubic feet of water per second from one well completed into the Spearfish aquifer (approximately 415 feet deep) located in the NW $\frac{1}{4}$ NE $\frac{1}{4}$ Sec. 24, T7N-R1E, Lawrence County, to irrigate 112 acres located in the S $\frac{1}{2}$ NE $\frac{1}{4}$, NW $\frac{1}{4}$ SE $\frac{1}{4}$, S $\frac{1}{2}$ NW $\frac{1}{4}$ Sec. 24, T7N-R1E. Water from this well will also be used for domestic and commercial use in a cattle feedlot. This well may also be used to supplement irrigation of land authorized by Water Right No. 372-1, located in the NW $\frac{1}{4}$, W $\frac{1}{2}$ NE $\frac{1}{4}$ Sec. 19, T7N-R2E.

AQUIFER: Spearfish Formation

AQUIFER CHARACTERISTICS:

The Spearfish Formation consists of alternating beds of red sandy shale, siltstone, and minor limestone, interbedded with abundant gypsum (Martin and others, 2004). This well site is located on the outcrop of the Spearfish Formation, and the formation is estimated to be approximately 500 feet thick in this area (Carter and Redden, 1999). The Spearfish is not typically considered a major regional aquifer; however, locally aquifers exist in the Spearfish (Driscoll and others, 2002). The Water Rights Program has record of a number of high capacity wells that have been completed into the Spearfish Formation in this area. This area may be particularly conducive to prolific wells supplied from the Spearfish Formation because folding that has occurred in the sedimentary rock. The Belle Fourche Anticline and the LaFlamme Anticline are both located in this area (Klemp, 1995), along with several smaller (less than 10 miles in length) folds (Kyllonen and Peter, 1986). The folding has allowed fracturing and the solution of gypsum and anhydrite in the Spearfish Formation, thus increasing porosity and permeability. The probable existence of a fault (Cox, 1962) in this area may further enhance the secondary porosity and permeability of the Spearfish Formation. The high pressure, large flows, and relative good water quality from the Spearfish in this area may indicate the water may originate as upward leakage from the Minnelusa and Madison aquifers. The Spearfish aquifer is under artesian conditions in this area and the well that is to be used to supply this appropriation, which was constructed in 2004, reportedly flows 1500 gpm. The well appears to be constructed in accordance with the South Dakota Well Construction Standards.

Some of the interpretation of historic data from this area questions whether groundwater withdrawals exceed recharge, in fact the author advised that the "approval to drill wells for irrigation use be held in abeyance until the extent of the overdraft can be determined" (Cox, 1962). The Water Rights program does not monitor any observation wells completed into the Spearfish Formation. Data from observation wells completed into other aquifers in this area suggest that Cox may not have distinguished between drawdown caused by pumping an individual well or wells and the lowering of water levels due to withdrawals exceeding recharge. In addition, well construction issues and well failures were probably not adequately accounted for by Cox as explanation for lowered water levels.

AFFECTS ON EXISTING RIGHTS:

Groundwater Appropriations:

There are only five water rights appropriating water from the Spearfish Formation in South Dakota. They are shown in table 1.

PERMIT NO	NAME	USE	CFS	Distance from 1816-1
514-1	ROLAND BRYAN	IRR	2.72	1 mile
1313-1	SPEARFISH MEADOWS	SHD	0.07	3.5 miles
749-1	DEPT OF GAME FISH & PARKS	FWP	2.23	3.5 miles
752A-1	DEPT OF GAME FISH & PARKS	FWP	3.23	3.5 miles
1641-1	LANTIS FIREWORKS	COM	0.02	35 miles

Table 1. Water Rights from the Spearfish Formation

There are 69 Water Permits/Rights (including one future use reservation) appropriating groundwater within approximately five miles of the well that is to be used to supply this permit. Chart 1 below shows the distribution of these groundwater appropriations.

GROUNDWATER APPROPRIATIONS BY SOURCE WITHIN FIVE MILES OF 1816-1

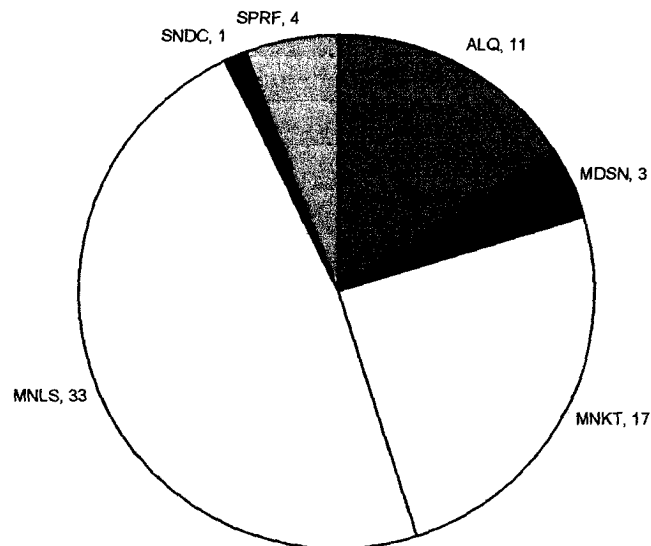


Chart 1. Nearby Groundwater Appropriations

It is clear that the majority of the Water Rights/Permits appropriating groundwater in this area are supplied from aquifers other than the Spearfish. The existence or extent of a hydraulic connection between the Spearfish and these other aquifers in this area is debatable. In general the potentiometric surfaces (water levels) suggest the potential for leakage from the Madison, Minnelusa, and Minnekahta aquifers to the Spearfish aquifer. Theoretically if leakage from the lower aquifers to the Spearfish is significant; drawdown in the Spearfish could cause increased leakage and consequently lower water levels in the other aquifers. Regardless of the water source for nearby groundwater appropriations, it is unlikely that

drawdown from this proposed well use will have any significant influence on existing Water Rights/Permits due to the distance between wells. The nearest groundwater appropriation, Water Permit No. 1803-1, Albert and Ryett Harty, authorizes diversions from a well completed into the Minnelusa aquifer over one-half mile northeast of this well site. The closest appropriation from the Spearfish Formation, Water Right No. 514-1, Roland Bryan, is located about one mile north of this well site.

A number of the Water Rights in this area that were approved in the 1960's and 1970's include the qualification that "This well appears to be in an artesian basin having limited supplies, and restrictions as to flow and time of flow may be made by the Commission to protect prior rights." Several of these Water Rights also include a qualification that "This permit does not authorize pumping from the well except with a suction type of pump." These qualifications probably addressed concerns over flowing wells and artesian head pressure as a means of delivery. The current law (SDCL 46-6-6.1) and Water Management Board rules (74:02:04 and 74:02:05) allows for the control of the location and capacity of irrigation wells for the purpose of ensuring or protecting water for reasonable domestic use, *without the necessity of requiring maintenance of artesian head pressure*. Simply put, the artesian head pressure and/or 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.

Domestic Wells:

SDCL 46-6-6.1 "does not give the water rights commission unbridled power to approve irrigation projects without giving consideration to maintenance of artesian head pressure as a method of delivery... reasonable domestic use must be assured before irrigation is allowed and this section requires a balancing of interest between irrigation and delivery of water by artesian pressure for domestic use." There are a number of domestic wells on file with the Water Rights Program in this area (Water Rights, 2005a). Drawdown from this well measured in any area domestic well should be minimal and will almost certainly not be adverse. Particularly in light of the fact that pursuant to ARSD 74:02:04:20(7), well interference is considered an adverse impact to a domestic well only if the domestic well's pump intake is set at least 20 feet below the top of the aquifer at the time of construction and the water level of the aquifer has declined to a level that the pump will no longer deliver sufficient water for the well owner's needs.

Springs:

Several large springs occur in this general area, with at least four springs identified within approximately one mile of this well (Klemp, 1995). Several of the area springs have been developed for irrigation, fish and wildlife propagation, or domestic uses (Klemp, 1995). Most of the springs were classified as type 2 springs using the system of Rahn and Gries (1973), and can loosely be called "artesian springs". Well withdrawals in the immediate vicinity of a spring could lower the artesian head pressure at the spring. Depending on how sensitive the spring's discharge is to fluctuations of the water levels, drawdown from a well could cause a decreased discharge.

Cox (1962) maintains that during the irrigation season when "the wells flow unrestricted" some of the area springs decrease their discharge and he even states that "the springs feeding Montana Lake dry up entirely". The cause and effect inference (well use decreased spring discharge) of Cox's may not be accurate. Cox conducted his investigation in 1961 and the early part of 1962 which was an extremely dry period (Driscoll and others, 2000). Although water level data is not available for the aquifers during Cox's investigation, observation well data obtained since identifies the water levels of the source aquifer(s) of the springs in this area probably fluctuate in the order of 50 feet in response to changes in climatic conditions. Seasonal fluctuations are also apparent from observation well data, with water levels lower in the late summer and early fall than before the irrigation season begins. In all likelihood, the aquifers' seasonal trends and their response to climatic conditions would dwarf any well interference or drawdown associated with well withdrawals.

Any interference this proposed appropriation would have on area springs is expected to be minimal due to the distance (at least one-half mile), and inconsequential when compared to natural groundwater fluctuations. In addition, it can be argued that South Dakota Water Law and the Water Management Board rules do not protect the artesian pressure the springs depend upon as a means of delivery.

CONCLUSIONS:

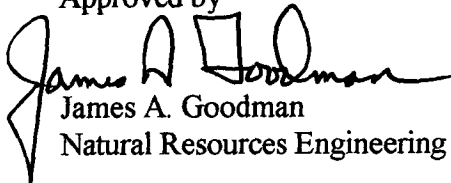
1. The Spearfish Formation is a viable aquifer in this area.
2. This diversion will not adversely impair existing water rights.



Ken Buhler

Natural Resources Engineering Specialist

Approved by



James A. Goodman

Natural Resources Engineering Director

REFERENCES:

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

Cox E.J., 1962, Artesian Water, Minnelusa and Pahasapa Formations, Spearfish-Belle Fourche Area: South Dakota Geological Survey Special Report 19, 17 p.

- Driscoll, D.G., Carter, J.M., Williamson, J.E., and Putnam, L.D., 2002, Hydrology of the Black Hills Area, South Dakota: Water-Resources Investigations Report 02-4094, U.S. Department of the Interior, U.S. Geological Survey, Rapid City, SD
- Driscoll, D.G., Hamade, G.R., and Kenner, S.J., 2000, Summary of Precipitation Data for the Black Hills Area of South Dakota, Water Years 1931-98: Open-File Report 00-329, U.S. Department of the Interior, U.S. Geological Survey, Rapid City, SD
- Klemp, J.A., 1995, Source Aquifers for Large Springs in Northwestern Lawrence County, South Dakota: Rapid City, South Dakota School of Mines and Technology, unpublished M.S. thesis, 175 p.
- Kyllonen, D.P., and Peter, K.D., 1987, Geohydrology and Water Quality of the Inyan Kara, Minnelusa, and Madison Aquifers of the Northern Black Hills, South Dakota and Wyoming, and Bear Lodge Mountains, Wyoming: U.S. Geological Survey Water-Resources Investigations Report 86-4158, 61 p.
- Martin, J.E., Sawyer, J.F., Fahrenbach, M.D., Tomhave, D.W., and Schulz, L.D., 2004, Geologic Map of South Dakota: South Dakota Department of Environment and Natural Resources General Map 10, scale 1:500,000
- Rahn, P.H., and Gries, J.P., 1973, Large Springs in the Black Hills, South Dakota and Wyoming: South Dakota Geological Survey Report of Investigations 107, 46 p.
- 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



**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. 1816-1, Richard Sleep**

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. 1816-1, Richard Sleep, 10438 West Hwy 14, Spearfish SD 57783.

The Chief Engineer is recommending APPROVAL of Application No. 1816-1 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. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.

See report on application for additional information.

Garland Erbele, Chief Engineer
May 11, 2005

Affidavit of Publication

STATE OF SOUTH DAKOTA

COUNTY OF LAWRENCE

Stewart Huntington of said County and State being first duly sworn, on his oath says: That the BLACK HILLS PIONEER is a legal daily newspaper of general circulation, printed and published in the City of Spearfish, in said County and State by Stewart Huntington, and has been such a newspaper during the times hereinafter mentioned; and that said newspaper has a bonafide circulation of at least 200 copies weekly, and has been published within said County in the English language for at least one year prior to the first publication of the notice herein mentioned, and is printed in whole or in part in an office maintained at the place of publication; and that I, Stewart Huntington, the undersigned, am the Publisher of said newspaper and have personal knowledge of all the facts stated in this affidavit; and that the advertisement headed:

Notice of Application
No. 1816-1

a printed copy of which is hereto attached, was printed and published in said newspaper for 2 successive and consecutive weeks, the first publication being made on the 27th day of April, 2005, and the last publication on the 4th day of May, 2005, that the amount of fees charged for publishing same, to-wit: The sum of \$39.94, insures solely to the benefit of the publisher of the BLACK HILLS PIONEER, that no agreement or understanding for a division thereof has been made with any person and that no part thereof has been agreed to be paid to any other person whomsoever.

[Signature]

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

[Signature]

Notary Public, Lawrence County, South Dakota

My commission expires: 10-24-2010



NOTICE OF APPLICATION NO. 1816-1

to Appropriate Water

Notice is given that Richard D Sleep, 10438 West Hwy 14, Spearfish SD 57783 has filed an application for a water permit to appropriate 1.69 cubic feet of water per second from one well completed into the Spearfish Formation (approximately 415 feet deep) located in the NW1/4 NE1/4 Section 24 to irrigate 112 acres located in the S1/2 NE1/4, NW1/4 SE1/4, S1/2 NW1/4 Section 24; all in T7N-R1E. Water from this well will also be used for domestic and commercial use in a cattle feedlot. This well may also be used to supplement irrigation of land authorized by Water Right No. 372-1 located in the NW1/4, W1/2NE1/4 Section 19-T7N-R2E.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 1816-1 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 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. Pirmer,
Secretary, Department of
Environment and Natural
Resources.

#880
April 27,
May 4

RECEIVED
MAY 13 2005
WATER RIGHTS
PROGRAM

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. 1816-1 to Appropriate Water

Notice is given that Richard D Sleep, 10438 West Hwy 14, Spearfish SD 57783 has filed an application for a water permit to appropriate 1.69 cubic feet of water per second from one well completed into the Spearfish Formation (approximately 415 feet deep) located in the NW $\frac{1}{4}$ NE $\frac{1}{4}$ Section 24 to irrigate 112 acres located in the S $\frac{1}{2}$ NE $\frac{1}{4}$, NW $\frac{1}{4}$ SE $\frac{1}{4}$, S $\frac{1}{2}$ NW $\frac{1}{4}$ Section 24; all in T7N-R1E. Water from this well will also be used for domestic and commercial use in a cattle feedlot. This well may also be used to supplement irrigation of land authorized by Water Right No. 372-1 located in the NW $\frac{1}{4}$, W $\frac{1}{2}$ NE $\frac{1}{4}$ Section 19-T7N-R2E.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 1816-1 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.

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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 20, 2005

Black Hills Pioneer
PO Box 7
Spearfish SD 57783-007

ATTENTION: Legal Public Notice

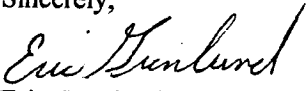
Enclosed is a Notice on Application No. 1816-1 to Appropriate Water to be published twice. Please publish the first notice on April 27, 2005 with the second publication 7 days later. The text of the notice can be e-mailed to your paper by contacting Karen Schlaak at (605) 773-3352.

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 Richard D Sleep, 10438 West Hwy 14, Spearfish SD (Ph # 605-642-2220).

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. 1816-1

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

Date _____

We are in receipt of your letter of April 20, 2005 enclosing Notice to Appropriate Water by Application No. 1816-1 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 20, 2005

Richard D Sleep
10438 W Hwy 14
Spearfish SD 57783

Dear Mr. Sleep:

Water Permit Application No. 1816-1 for irrigation, domestic and cattle feedlot 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 Black Hills Pioneer printed at Spearfish, SD (Ph # 605-642-2761). You will need to contact the newspaper and authorize publication of this notice. For your information, a copy of the notice is enclosed. The recommendation of the Chief Engineer and a report on the application will be sent to you in the near future. 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.

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date April 7, 20 04

RECEIVED OF Richard Sleep, 10438 W Hwy 14, Spearfish SD 57783

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

Fee for Application for Permit No. <u>1816-1</u> to Appropriate Water, to construct and to put water to beneficial use	100	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	100.00

No. 004570

By

Darlene Erbe
Chief Engineer *gm*

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date March 23, 20 04

RECEIVED OF Richard Sleep, 10438 W Hwy 14, Spearfish SD 57783

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

Fee for Application for Permit No. <u>1816-1</u> to Appropriate Water, to construct and to put water to beneficial use	50	00
Fee for Application for Permit No. _____ to Appropriate Water for Future use		
Fee to retain Future Use Permit No. _____ after period of seven years.		
Fee for Inspecting Constructed Works, confirming beneficial use and issuing Water License No. <u>1816-1</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	100.00

No.

001219

By

Darland Erbe
Chief Engineer *gm*

PAYMENT REQUEST FORM

PAYEE: Richard D Sleep
10438 W Hwy 14
Spearfish SD 57783

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

DESCRIPTION OF SERVICE, PRODUCE OR TRANSFER

Refund of overpayment - \$200.00

AMOUNT: \$200.00

FUNDING SOURCE:

GENERAL: X

FEDERAL:

COMMENTS:

AUTHORIZATION:

David Chile 5-19-05

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



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

MAY 19 2005

Richard D Sleep
10438 W Hwy 14
Spearfish SD 57783

Dear Mr. Sleep:

Enclosed is Water Permit No. 1816-1 authorizing construction of your water diversion system and beneficial use of the water, not exceeding the limits as specified in the Water Permit.

This water permit replaced two prior applications. The application/license fee for this permit is \$275.00. You have submitted a total of \$475.00. Therefore, \$200.00 will be refunded to you. The refund check should be received within the next couple of weeks.

A 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 information 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

1816-1

McMath, Genny

From: Quissell, Steve
Sent: Friday, October 14, 2016 9:03 AM
To: McMath, Genny
Cc: Beck, Lynn
Subject: RE: 1816-1, Richard Sleep

I am fairly sure there is not any supplemental water being used on the 372-1 acres. This land is 2 miles from the well with no physical means, pipe or ditch to convey it. I would just leave the statement out. The well for Sleep under 1254B-1 is valved and controlled.

Steven Quissell
Water Right Inspector
SD Department of Environment and Natural Resources
Water Rights Program
Phone: (605) 394-6763
Fax: (605) 394-5317

From: McMath, Genny
Sent: Friday, October 14, 2016 7:19 AM
To: Quissell, Steve; Beck, Lynn
Subject: 1816-1, Richard Sleep

I am getting ready to write up the water license for this one. I note on the permit that the well was also to be used to supplement irrigation of land authorized under Water Right No. 372-1. Do we know if they are still doing that? If so, I can include a statement to that affect in the license and if not, I will just leave the statement out. Not a big deal but thought I would check.

Also, am I making a correct assumption that although this is a flowing well, since they have a pump the well is valved and controlled to the amount needed?

Genny McMath
Water Rights Program
605.773.5455

Report of Examination of Works and/or Application of Water to Beneficial Use For Permit No. 1816-1

I have this day, September 22, 2016 made a thorough examination of the water use system constructed by Richard Sleep, 20017 Mill Creek Rd, Spearfish, SD 57783 of Permit No. 1816-1, bearing the priority of 2/24/2005 authorizing the diversion of 1.69 cu. ft. per second of water from 1 well for irrigation, domestic and commercial purposes, in Lawrence County.

Inspection contact & relationship to permit holder, if applicable: **Richard Sleep, owner**
605-642-2220

A. Works used to divert the water:

Well Information:

- 1) Well Drilling Firm: Ellingson Drilling (2004)
- 2) No. of Wells 1
- 3) Depth(s) 415 feet
- 4) Well log is available: Yes

Casing:

- 1) Diameter 7 inches
- 2) Length 283 feet
- 3) Type Steel

Screen:

- 1) Type N/A
- 2) Length - feet
- 3) Static water level Flowing (1,500 gpm free flow at completion)

Operator reports 26 psi at pivot tower while flowing 900 gpm w/o booster pump operating.

Pump:

- 1) Make Cornell
- 2) Model 4RB-CC centrifugal booster
- 3) Size 4X6
- 4) Capacity 900 GPM
- 5) Horsepower rating 30 hp

Note: Pump make and model illegible due to corrosion. Model shown matches size and characteristics of pump installed.

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

- 1) Type PVC pipe 2) Size 8 inches 3) Length 1,125 feet

Comments: 1,280' of 8" pvc also installed to west of pivot for future irrigation development.
Plastic pipelines also serve the feedlot and house.

C. Works used to apply water to beneficial use:**Center Pivot:**

- 1) Make T&L
 2) Pipe length 1,029 feet
 3) Number of towers 6 End Gun 60 feet
 4) Capacity 900 gpm
 5) Acres 87.5

Feedlot and house:

Total demand 40 gpm

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 Yes

List any extended period of nonuse: none

- 3) Exceptions to compliance are: none

E. Condition and Location:

1. The system is in good condition with the point of diversion located as follows:
941' S and 1,838' W of NE corner Section 24 T7N R1E (44.558496, -103.937869)

2. The works are capable of diverting and conveying to the place of use 2.1 cu. ft. per second of water (940 gpm) which is to be used for sprinkler irrigation, commercial and domestic use. Water has been put to beneficial use (irrigation) to the maximum extent as follows:

Section 24 T7N R1E

NW ¼ NE ¼ 5.4 acres

NE ¼ NE ¼ 5.0 acres

SW ¼ NE ¼ 32.2 acres

Section 24 T7N R1E

SE ¼ NE ¼ 30.4 acres

NW ¼ SE ¼ 7.7 acres

NE ¼ SE ¼ 6.8 acres

comprising a total of 87.5 acres of land and the license should be issued for 1.34 cfs .

Note: The license is issued for the statutory limit of 1 cfs for each 70 acres (561 gpm) plus 40 gpm demand for feedlot and household use (1.34 cfs).

3. All structures, wells and lands on map Yes

F. Comments or other permit(s) associated with the project: none



Steven Quissell
Water Rights Inspector
DENR Water Rights Program

Date report completed: 9/23/2016

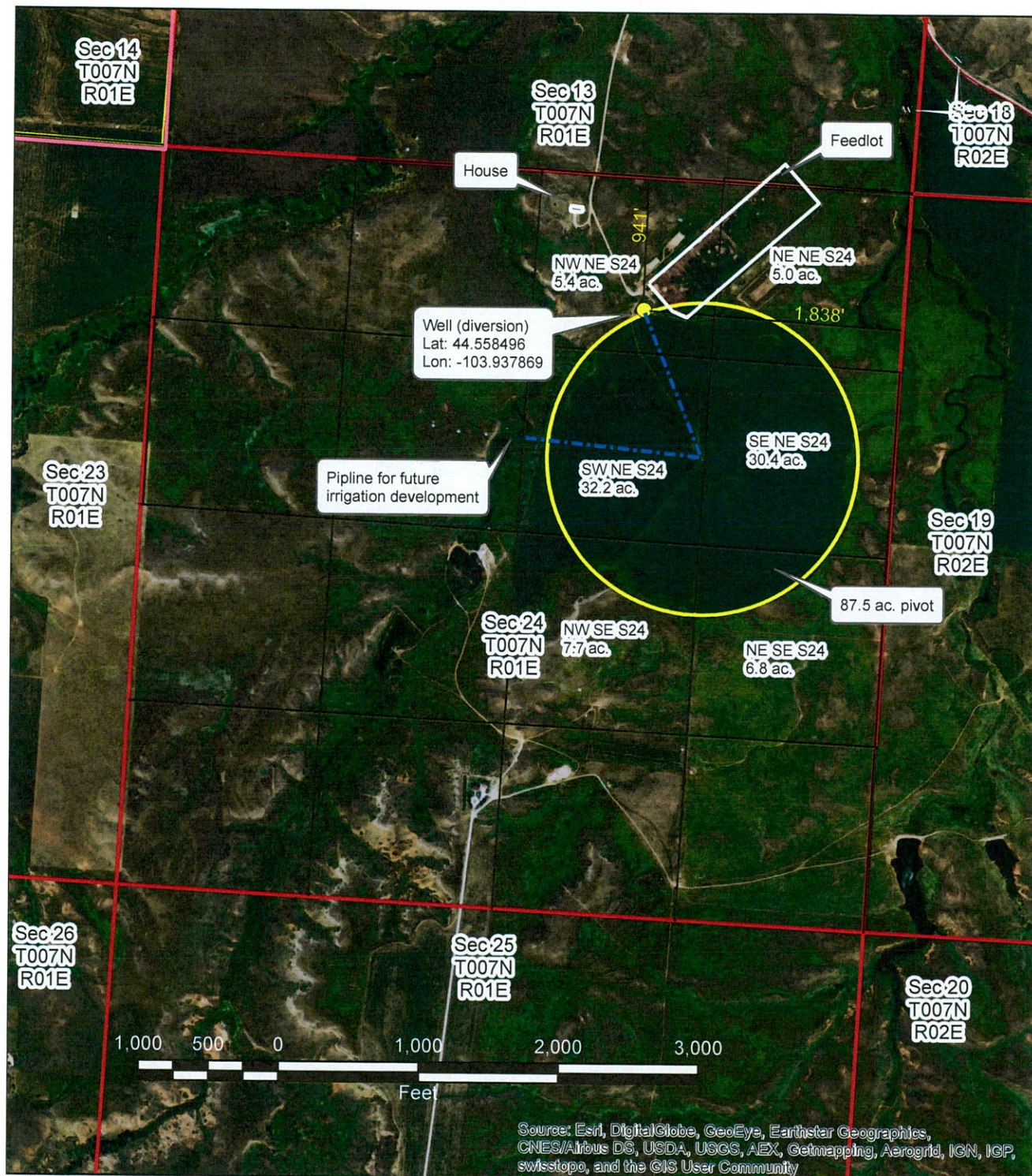


Well and associated plumbing



Pivot

Water Right # 1816-1
Richard Sleep
9/22/2016



Steven Quissell

Steven Quissell
Water Rights Inspector
DENR Water Rights Program



Licensing of Acreage Outside of Permitted Area

NAME: Richard D. Sleep

ADDRESS: 10438 W Hwy 14, Spearfish SD 57783

DATE: October 3, 2016 **COUNTY:** Lawrence **TELEPHONE:** (605) 642-2220

AUTHORITY

Pursuant to SDCL 46-5-30.5, acreage developed for irrigation outside of the area described on the permit may be licensed provided the following conditions are met:

NO INCREASE IN PERMITTED ACREAGE OR WATER APPROPRIATED:

The acreage developed for irrigation is 87.5 acres as compared to 112 acres authorized by the permit. Licensing of the permit will result in no increase in the amount of water appropriated.

UNPERMITTED ACREAGE:

- **Contiguous to Permitted Acreage**

NE $\frac{1}{4}$ NE $\frac{1}{4}$ 5.0 acres NE $\frac{1}{4}$ SE $\frac{1}{4}$ 6.8 acres
NW $\frac{1}{4}$ NE $\frac{1}{4}$ 5.4 acres
SE $\frac{1}{4}$ NE $\frac{1}{4}$ 5.4 acres

- **Owned by Same Property Owner**

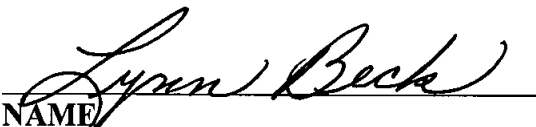
yes

- **Developed Prior to Expiration of Construction Period**

yes

RECOMMENDED ACTION

Based on the above criteria, it is recommended that the 22.6 acre area be included in the water license.



NAME
Lynn Beck, Natural Resources Engineer III
Water Rights Program

The Chief Engineer makes a finding pursuant to SDCL 46-5-30.5 that:

This acreage change does not impair existing water rights and the overall project, as developed, is consistent with the original application. Licensing of the unpermitted acreage may occur without application or publication pursuant to SDCL 46-2A-4.



Jeanne Goodman, Chief Engineer
Water Rights Program



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

OCT 24 2016

1816-1

Richard D Sleep
20017 Mill Creek Rd
Spearfish SD 57783

Dear Mr. Sleep:

Enclosed is Water License No. 1816-1. 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. 1816-1, 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.

It is our understanding you may want to have the water right transferred. Enclosed is a partially completed transfer of ownership form. If you decide to have the water right transferred, please have the form completed and returned to our office with a filing fee of \$50. The check or money order for the fee can be made payable to the Water Rights Program.

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

Sincerely,

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

enclosures

**STATE OF SOUTH DAKOTA
WATER LICENSE NO. 1816-1**

(1) Richard D Sleep, 20017 Mill Creek Rd, Spearfish SD 57783 made Application No. 1816-1, February 24, 2005 for a water permit to divert 1.69 cubic feet of water per second from ground water, one well (Spearfish Formation), Lawrence County, South Dakota for irrigation, domestic and commercial purposes. Permit No. 1816-1, with a priority date of February 24, 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 the application to beneficial use of said water on or before May 16, 2014.

The licensing investigation found acreage developed outside of the permitted area. The acreage developed is contiguous and the total number of acres is less than originally permitted. Pursuant to SDCL 46-5-30.5, the Chief Engineer made a finding that the overall project was consistent with the original application.

(2) It is certified that the permit holder has complied with the provisions of South Dakota State Law relating to completion of the construction of the water supply system and is entitled to divert 1.34 cubic feet of water per second for beneficial use. The location of the diversion point is:

- 941 feet S and 1,838 feet W of the NE corner of Section 24, T7N, R1E (NW ¼ NE ¼).

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

Section 24, T7N, R1E

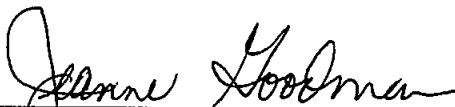
NW ¼ NE ¼	5.4 acres	NW ¼ SE ¼	7.7 acres
NE ¼ NE ¼	5.0 acres	NE ¼ SE ¼	6.8 acres
SW ¼ NE ¼	32.2 acres		
SE ¼ NE ¼	30.4 acres	Total	87.5 acres

*A total of 561 gpm (1.25 cfs) is authorized for irrigation of the above listed 87.5 acres (statutory limit)
The remaining 40 gpm (0.09 cfs) is authorized for domestic purposes and commercial use in the cattle feedlot*

(4) Pursuant to South Dakota Water Law 46-5-30.1 Richard D Sleep, 20017 Mill Creek Rd, Spearfish SD 57783 the holder and/or owner of Water Right No. 1816-1 is issued a license to appropriate water, the right to use 1.34 cubic feet of water per second (1.25 cfs for irrigation; 0.09 cfs for domestic and commercial uses) from ground water, one well (Spearfish Formation) with a priority date of February 24, 2005 from the location specified in (2) of this license for irrigation, commercial and domestic purposes.

This license is subject to South Dakota Water Law, any limitations or conditions listed in Water Right No. 1816-1 and subject to the following qualifications:

- 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.
- This Permit is approved subject to the irrigation water use questionnaire being submitted each year.


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

OCT 24 2016
date

