

WATER PERMIT NO. 7851-3

Name of Applicant: Alan J Armstong

Address: 31314 Niles School Rd, Springfield SD 57062

Phone: 605 651-1510

Amount of Water Claimed: 0.067 cfs (30 gpm)

Total Acres: NA

Source of Water Supply: groundwater (one well)

Water to be used for: domestic use

County: Bon Homme

Type of Waste Disposal System:

Location: 1/2 mile west of Springfield

PRIORITY

Date Received: 6-10-13

Application/License Fee: \$ 300

Corrected Application Received:

Period of Annual Use: Jan 1- Dec 31

Remarks:

Diversion Point: Sw 1/4 SE 1/4 Sec 22-T93N-
R60W

Land to be Irrigated: NA

Depth of Well: 300 feet deep

Well Driller:

Remarks:

Type of Map: aerial

Prepared by:

			22		
			⊗		

Reviewed and the Number Assigned on: 6-12-13

By: Karen Schlaak

Notice of Hearing - date to intervene: _____

SD EForm - 1585LD V4

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

Mail to: PMB 2020 DENR - Water Rights 523 E Capitol Ave Pierre, SD 57501-3182 ph. (605) 773-3352	No. <u>7851-3</u>	(office use only) Hydrologic Unit <u>10170101</u>
	Basin <u>Missouri River</u>	<u>605-369-2441</u>
	Newspaper <u>Springfield Times Box 465-57062</u>	<u>605-665-7811</u>
	<u>Press-Dakota 319 Walnut Yankton 57078</u>	

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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 Livestock	

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.)

1. Name to Appear on Water Permit Alan J. Armstrong(check one) ☒ Owner ☐ Tenant/lessee ☐ Owner's Legal Agent

(name and complete address if different than above name)

Mailing Address 31314 Niles School Road Springfield SD 57062
(Address) (City) (State) (Zip Code)Home Phone _____ Cell 605-651-1510 Email armstrong.aa@hotmail.com2. Amount of water claimed 0.067 *CFS or 30 **GPM ***AF
(*Cubic Feet per Second) (**Gallons per Minute) (***)Acre Feet - storage capacity of dam/dugout or annual use if applicable)3. Source of water supply Well4. Location of point of diversion 1 well in SW1/4 SE1/4 Sec. 22-T93N-R60W County Bon Homme

(example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W)

If not a public water supply (e.g. municipal), will water be used outside of the area described above? ☒ Yes ☐ NoIf "Yes," where will water be used? Tank in SE1/4 of SE 1/4 Sec. 22-T93N-R60W

(example - NW1/4 section 12-T104N-R53W)

5. County or counties where water will be used Bon Homme6. Annual period during which water is to be used Year-round

7. 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 will be drilled at above location for domestic use at the same location. Tank will be installed for livestock at second location.

I, Alan J. Armstrong, the applicant, certify that I have read this application, have examined the attached map, and that the matters stated are true.

2012-09

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

**SOUTH DAKOTA
WATER PERMIT NO. 7851-3**

Date of first receipt of application June 10, 2013.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 7851-3 to Alan J Armstrong, 31314 Niles School Road, Springfield SD 57062 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. 7851-3 appropriates 0.067 cubic feet of water per second (30 gallons per minute) from one well to be completed into the Codell Aquifer (300 feet deep) located in the SW 1/4 SE 1/4 Section 22-T93N-R60W.
2. The water appropriated shall be used for the purpose of domestic use and may not exceed the amount of water needed for beneficial use.
3. The water is to be used during the following described annual period: January 1 – December 31.
4. The date of approval of Permit No. 7851-3 is August 5, 2013.
5. The date from which applicant may claim right is June 10, 2013.
6. One-fifth of the construction is to be completed on or before February 5, 2016.
7. All construction is to be completed on or before August 5, 2018.
8. Water is to be put to beneficial use on or before August 5, 2022.
9. Water rights obtained in compliance with the laws of the State of South Dakota may not be unlawfully impaired by this appropriation.

QUALIFICATIONS

1. The well approved under this Permit will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
2. The well authorized by Permit No. 7851-3 shall be constructed by a licensed well driller and construction of the well and installation of the pump shall comply with Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) pursuant to Section 74:02:04:28.

WATER MANAGEMENT BOARD

By: *Jeanne Goodman*

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

AUG 14 2013

date



Supplemental Information

(type or print)

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1. Well Information (check one or both as applicable) ☒ Drilling new well(s) ☐ Using existing well(s)

- a) If new wells, how many ____ Have test holes been drilled ☐ Yes ☒ No Drilled by ____
(if yes, please provide copies of logs)
- b) If existing wells, how many ____ Provide copy of log(s), if available. Drilled by ____
- c) Well Depth 300' Depth to Top of Water Bearing Material ____ Depth to Water from Surface ____
- d) Distance to nearest existing domestic well:
On applicant's property ____ On property owned by others 800 feet

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

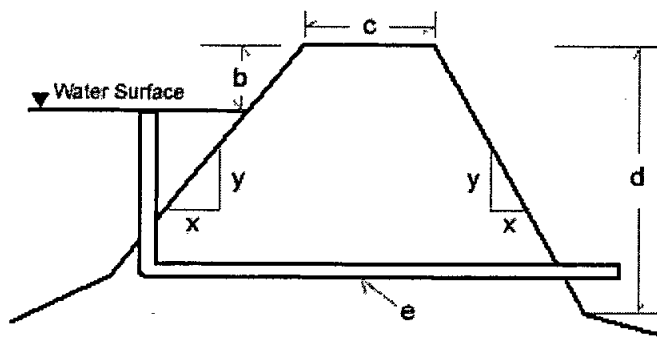
- a) Surface Dimensions ____ Depth ____
- b) Depth to water (ground surface to water level) ____

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 (e.g. 3 to 1 is a typical slope)
Upstream ____
Downstream ____
- h) Surface Area of Impoundment ____
- i) Storage ____ Acre Feet
- j) Drainage Area Above Dam ____ Acres





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Karen,

I enclosed the Form 2,
Form 2A, and Map for your
reference. Thank you and
sorry for the trouble

A.J. Armstrong

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date 5/22, 20 13

RECEIVED OF A J Armstrong 41382 314th St Springfield SD 57062

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	~~300~~ 100	~~00~~ 00	KS
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. _____	200	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	300	00

No. **06344**

By Jeanne Holman
Chief Engineer



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182

denr.sd.gov

May 28, 2013

A.J. Armstrong
31314 Niles School Rd
Springfield SD 57062

Dear Mr. Armstrong:

We have received a Supplement Information sheet, map and check from you. My attempts to reach you by phone have not been successful. Is it your intent to file an *Application for a Permit to Appropriate Water* for irrigation? If so, I have enclosed an application form that needs to be completed and returned.

Please outline the area to be irrigated on the aerial photo map. Also, depending on the number of acres you intend to irrigate, additional filing fees may be required. The application/license filing fee to irrigate 0-60 acres is \$700.00, 60-120 acres is \$950.00. You have submitted \$300.00.

If you have any questions, please contact me.

Sincerely,

Karen Schlaak

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

enclosures



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182

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**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 7851-3, Alan J Armstrong**

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. 7851-3, Alan J Armstrong, 31314 Niles School Road, Springfield SD 57062.

The Chief Engineer is recommending APPROVAL of Application No. 7851-3 because 1) there is reasonable probability that there is unappropriated water available for the applicant's proposed use, 2) the proposed diversion can be developed without unlawful impairment of existing rights, 3) the proposed use is a beneficial use and 4) 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. The well authorized by Permit No. 7851-3 shall be constructed by a licensed well driller and construction of the well and installation of the pump shall comply with Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) pursuant to Section 74:02:04:28.

See report on application for additional information.

A handwritten signature in black ink, appearing to read "Jeanne Goodman".

Jeanne Goodman, Chief Engineer
July 18, 2013

REPORT TO THE CHIEF ENGINEER

WATER PERMIT APPLICATION NO. 7851-3

Alan J Armstrong

June 17, 2013

Water Permit Application No. 7851-3 proposes to divert groundwater at a maximum diversion rate of 0.067 cubic feet of water per second (cfs), or 30 gallons per minute (gpm), from one well to be completed into the Codell aquifer. The well is expected to be approximately 300 feet deep and located in the SW¼ SE¼ of Section 22, T93N-R60W. Water will be used for domestic use.

AQUIFER: Codell aquifer (CDLL)

HYDROGEOLOGY:

A test hole log was not submitted with this application as required by ARSD 74:02:01:08.01; however, information is available to evaluate the area of the proposed well site. In this area, the top of the Codell Sandstone Member of the Carlile Shale is expected to occur at approximately 200 to 250 feet below ground surface (SD Geological Survey, 2013; Water Rights, 2013c). The proposed well depth of 300 feet is an over estimation.

The Codell aquifer is a siltstone to fine-grained sandstone (Jorgensen, 1971). The aquifer underlies approximately 7,750 square miles and contains an estimated 9,895,700 acre-feet of recoverable water in storage in South Dakota (Hedges and others, 1982). The Codell aquifer is generally overlain and underlain by impermeable shale and found under confined conditions. In Bon Homme County, the Codell is on average 25 feet thick, but ranges from 0 to 100 feet thick. In the county, the aquifer can be encountered between 100 and 900 feet below grade (Jorgensen, 1971). The static water level is approximately 70 feet below ground surface in this area (Water Rights, 2013c).

SDCL 46-2A-9

Pursuant to SDCL 46-2A-9, a permit to appropriate water may be issued only if there is a reasonable probability that there is unappropriated water available for the applicant's proposed use, that the proposed diversion can be developed without unlawful impairment of existing rights and that the proposed use is a beneficial use and in the public interest. This report will address the availability of unappropriated water and existing rights from the aquifer that are pertinent to this application.

WATER AVAILABILITY:

The probability of unappropriated water available from an aquifer can be evaluated by considering SDCL 46-6-3.1, which requires "No application to appropriate groundwater may be approved if, according to the best information reasonably available, it is probable the quantity of water withdrawn annually from a groundwater source will exceed the quantity of the average estimated annual recharge of water to the groundwater source." If the source of the water is older or lower than the greenhorn formation and a public water system has applied for a permit, the Board need not consider the recharge/withdrawal issue. Here, a public water system is not involved. Therefore, withdrawal/recharge issue must be considered.

Hydrologic Budget:

Recharge to the Codell aquifer is from subsurface inflow and leakage from glacial aquifers, such as the Choteau: Tyndall. Discharge from the Codell aquifer is through well pumpage and subsurface outflow to the Missouri River. Some subsurface outflow may occur to the connected outwash aquifers (Jorgensen, 1971). There are 37 water rights/permits appropriating water from the Codell aquifer. There is one pending water permit application proposing to withdraw water from this aquifer (Water Rights, 2013b). There are also many completion reports on file for domestic wells that appear to be completed into the Codell aquifer in this area (Water Rights, 2013c). However, withdrawal due to domestic use is not considered significant to the hydrologic budget. Consider also that most of the area is served by a rural water source, so many of these wells may no longer be in use.

The amount of water that can be expected to be withdrawn by non-irrigation use water rights/permits can be estimated by assuming water rights/permits limited only by diversion rate will pump at the maximum permitted diversion rate 60 percent of the time. Most of the towns with municipal water rights/permits have connected to a rural water system, and therefore, the associated water rights are no longer expected to withdraw from this aquifer. Consequently, non-irrigation appropriations, excluding these municipal water rights/permits, are expected to use less than 2,072 ac-ft/yr (Water Rights, 2013b).

The irrigation development of the Codell aquifer over the period of record, 1979 to 2011, has remained at the same general level. The annual withdrawal from the aquifer fluctuates. This is mostly dependent on annual growing season climatic conditions. Over the period of record, the average pumpage reported is approximately 26 ac-ft/yr (Water Rights, 1980-2012). Because several irrigation water permits have recently been authorized for this aquifer, average irrigation use will likely increase (Water Rights, 2013b).

Water Balance:

According to Hedges and others (1985):

“The Niobrara Formation, Codell Sandstone, Inyan Kara Group, and Madison Group have such high storage and low use that it is unlikely that use is approaching or exceeding recharge. Furthermore, there is no evidence of significant head loss in any of these aquifers over the years that would suggest that use is exceeding recharge.”

Due to the relatively small development of this large resource and the relatively small proposed diversion rate, unappropriated water is available from the Codell aquifer for the proposed appropriation.

Observation Well Data:

Administrative Rule of South Dakota Section 74:02:05:07 requires that “the Water Management Board shall rely upon the record of observation well measurements to determine that the quantity of water withdrawn annually from the aquifer does not exceed the estimated average annual recharge of the aquifer.”

The SD DENR-Water Rights Program monitors 21 observation wells completed into the Codell aquifer. The nearest observation well, HT-83E, is located approximately 22 miles north of the proposed well site. The hydrograph is shown in Figure 1 (Water Rights, 2013a). Due to the distance from of the observation well to the proposed well sites this observation well cannot indicate the local characteristics of the aquifer or possible effects of nearby pumping in the area

of the proposed well site. However, this observation well data can provide representative general characteristics of the Codell aquifer and the groundwater available.

The observation well data documents cyclic conditions of water levels, recharging during wet years and declining during dry years. This data documents that, at the current level of development, temporal well withdrawal is masked by climatic conditions. Therefore, recharge to and natural discharge from the aquifer exceeds pumping. In conclusion, unappropriated water is available from the Codell aquifer to support the proposed appropriation.

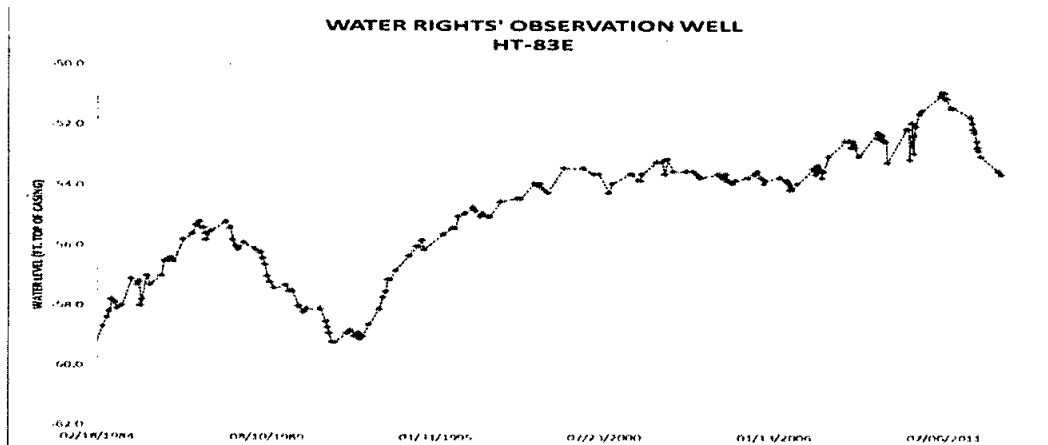


Figure 1: Hydrograph for observation well HT-83E (Water Rights, 2013a)

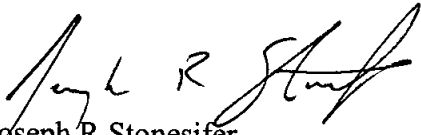
EXISTING WATER RIGHTS:

If approved, the proposed well will be located near other wells that obtain water from the same aquifer. In addition to domestic wells, there are several water rights/permits completed into the Codell aquifer in the general area. However, the nearest water right/permit is further than three miles from the proposed well site (Water Rights, 2013b; Water Rights, 2013c).

The Codell aquifer is under artesian conditions at the proposed well site; therefore, some drawdown due to pumping is expected. However, precise drawdown cannot be quantified without aquifer testing. The Water Management Board has consistently recognized that to place water to maximum beneficial use a certain amount of drawdown may occur. SDCL 46-6-6.1 does not require protection of artesian head pressure as a means of groundwater delivery. Depending on the characteristics of the Codell aquifer at the proposed well site, some existing well owners may need to lower their pumps to accommodate possible reduction of head pressure. However, considering the relatively small diversion rate and distances between wells, interference is not expected.

CONCLUSIONS:

1. This application proposes to divert groundwater at a maximum rate of 0.067 cfs from one well to be completed into the Codell aquifer for domestic use.
2. Unappropriated water is available from the Codell aquifer to supply the proposed appropriation.
3. The proposed well will not adversely or unlawfully impair existing nearby wells.



Joseph R Stonesifer
SD DENR-Water Rights Program

Approved by



Ken Buhler
SD DENR-Water Rights Program

REFERENCES:

- Hedges, L.S., Burch, S.L., Iles, D.L., Barari, R.A., and Schoon, R.A. 1982. Evaluation of Ground-Water Resources Eastern South Dakota and Upper Big Sioux River, South Dakota and Iowa, Task 1: Bedrock Topography and Distribution, Task 2: Extent of Aquifers, Task 3: Ground-Water Storage, Task 4: Computerized Data Base, Final Report. U.S. Army Corps of Engineers Contract DACW 45-80-C-0185.
- Hedges, L.S., Allen, J., and Holly, D.E. 1985. Evaluation of Ground-Water Resources Eastern South Dakota and Upper Big Sioux River, South Dakota and Iowa. Task 7: Ground Water Recharge, Final Report. U.S. Army Corps of Engineers Contract DACW 45-80-C-0185.
- Jorgensen, D.G. 1971. Geology and Water Resources of Bon Homme County South Dakota: Part II; Water Resources. South Dakota Geological Survey Bulletin 21. SD DENR- Geological Survey, Vermillion, South Dakota.
- SD Geological Survey. 2013. Lithologic Logs Database, South Dakota Department of Environment & Natural Resources Geological Survey, Vermillion, South Dakota
- Water Rights. 1980-2012. "Annual Irrigation Summary by Aquifer": SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, South Dakota.
- Water Rights. 2013a. Observation Well Files, SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, South Dakota.
- Water Rights. 2013b. Water Right/Permit Files, SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, South Dakota.
- Water Rights. 2013c. Water Well Completion Reports, SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, South Dakota.

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Affidavit of Publication

State of South Dakota }
County of Bon Homme } SS

Rebecca Tycz.....Being first duly sworn
says that the **Springfield Times** is a legal weekly news-
paper for publication of legal and other official notices as
required by Chapter 298 of the Session Laws of South
Dakota, 1939; that it has bona fide paid circulation of
more than two hundred copies weekly; that it is pub-
lished in English language in the City of Springfield, Bon
Homme County, South Dakota, and has been admitted
to the United States mail under second class mailing
privilege for more than one year prior to the first publi-
cation of the notice herein mentioned, and that it is
printed in an office maintained at the place of publica-
tion at Springfield, South Dakota, and that deponent is
the publisher in charge of the advertising department of
said newspaper; that the advertisement headed

DENR Notice on Application
No. 7851
59 e 37.2

a printed copy of which is hereto attached, was printed
and published in said newspaper for the successive
weeks, upon the following dates:

<u>July 24</u> 2013.....	20.....
.....20.....	20.....
.....20.....	20.....
.....20.....	20.....

That the full amount of the fee charged for the publica-
tion of said notice, \$21.95....., inures to the benefit
of the publisher of said newspaper, that no agreement or
understanding for the division thereof has been made
with any other person, and that no part has been agreed
to be paid to any person whomsoever.

Rebecca Tycz, publisher
Subscribed and sworn to before me this
24th day of July 2013
Peggy Schelske
Notary Public, South Dakota
My commission expires Oct 24, 2015

NOTICE OF APPLICATION

NO. 7851-3 to Appropriate Water

Notice is given that Alan J Armstrong, 31314 Niles School Road, Springfield SD 57062 has filed an application for a water permit to appropriate 0.067 cubic feet of water per second (30 gallons per minute) from one well to be completed into the Codell Aquifer (300 feet deep) located in the SW 1/4 SE 1/4 Section 22-T93N-R60W for domestic use.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 7851-3 because 1) unappropriated water is available, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest. In accordance with SDCL 46-2A-23, the Chief Engineer will act on this 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 this application. Notice of the hearing will be given to the applicant and any person filing a petition.

Any person interested in opposing or supporting this application or recommendation must file a written petition with BOTH the applicant and Chief Engineer. The applicant must file a petition if contesting the Chief Engineer's recommendation. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E Capitol, Pierre SD 57501 (605 773-3352)" and the applicant's mailing address is given above. A petition filed by either an interested person or the applicant must be filed by August 5, 2013.

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.

Published once at the total approximate cost of \$21.95.

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AFFIDAVIT OF PUBLICATION

YANKTON DAILY PRESS AND DAKOTAN

Department of Environment and Natural Resources
PMB 2020
Joe Foss Building
523 East Capitol
Pierre, SD 57501-3182

STATE OF SOUTH DAKOTA
COUNTY OF YANKTON

KELLY HERTZ BEING FIRST DULY SWORN ON OATH DEPOSES
AND SAYS THAT HE IS THE MANAGING EDITOR OF, YANKTON
MEDIA INC, A CORPORATION, THE PRINTER AND THE PUBLISHER OF THE
YANKTON DAILY PRESS AND DAKOTAN, A LEGAL DAILY NEWSPAPER
PUBLISHED AND CIRCULATED IN THE CITY OF YANKTON, SAID COUNTY
AND STATE, AND ONE OF THE OFFICIAL NEWSPAPERS OF THE SAID
COUNTY OF FACTS STATED IN THIS AFFIDAVIT; THAT THE ANNEXED
Notice of Application No. 7851-3

TAKEN FROM THE PAPER, IN WHICH IT WAS LAST PUBLISHED IN THE
NEWSPAPER ON THE 24th DAY OF July 2013
THAT THE FULL AMOUNT OF THE FEE CHARGED FOR THE PUBLICATION
OF SAID NOTICE TO WIT \$25.15 ENSURES TO THE
BENEFITS OF THE PUBLISHER OF SAID NEWSPAPER AND THAT NO
AGREEMENT AND UNDERSTANDING FOR THE DIVISION THEREOF HAS
BEEN MADE WITH ANY OTHER PERSON, AND THAT NO PART THEREOF
HAS BEEN AGREED TO BE PAID TO ANY PERSON WHOMSOEVER.

PUBLISHED ON: 7/24/2013

FILED ON: 7/24/2013

SUBSCRIBED AND SWORN TO BEFORE ME THIS 24th DAY OF July 2013

NOTARY PUBLIC, SOUTH DAKOTA

MY COMMISSION EXPIRES

8/19/2015

7+24

NOTICE OF APPLICATION
NO. 7851-3 to Appropriate Water

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Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 7851-3 because 1) unappropriated water is available, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest. In accordance with SDCL 46-2A-23, the Chief Engineer will act on this 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 this application. Notice of the hearing will be given to the applicant and any person filing a petition.

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Published once at the total approximate cost of \$25.15.



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182

denr.sd.gov

July 18, 2013

Springfield Times
PO Box 465
Springfield SD 57062

ATTENTION: Legal Public Notice

Enclosed is a Notice on Application No. 7851-3 to Appropriate Water. Please publish the notice once on July 24, 2013. 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 and arrange for payment. **Please BILL the APPLICANT for the cost of publication.** The APPLICANT is Alan J Armstrong, 31314 Niles School Rd, Springfield SD 57062 (Ph # 605-651-1510).

Please send the Water Rights Program an affidavit or the enclosed Proof of Publication form immediately.

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



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182

denr.sd.gov

July 18, 2013

Press & Dakotan
319 Walnut
Yankton SD 57078

ATTENTION: Legal Public Notice

Enclosed is a Notice on Application No. 7851-3 to Appropriate Water. Please publish the notice once on July 24, 2013. 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 and arrange for payment. **Please BILL the APPLICANT for the cost of publication.** The APPLICANT is Alan J Armstrong, 31314 Niles School Rd, Springfield SD 57062 (Ph # 605-651-1510).

Please send the Water Rights Program an affidavit or the enclosed Proof of Publication form immediately.

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

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

July 18, 2013

Alan J Armstrong
31314 Niles School Rd
Springfield SD 57062

Dear Mr. Armstrong:

Water Permit Application No. 7851-3 for domestic use has been examined and found to comply with the South Dakota Water Laws and applicable rules. A notice has been sent to the Springfield Times printed at Springfield SD (Ph # 605-369-2441) and the Press & Dakotan printed at Yankton SD (Ph # 605-665-7811). You will need to contact the newspaper(s) and authorize publication of this notice. For your information, a copy of the notice, the recommendation of the Chief Engineer and 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(s) to authorize publication of your Notice and to arrange for payment. Early contact with the paper(s) can eliminate delays. Upon receiving authorization from you, the publisher has been instructed to publish your notice. 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.

Instruction to Newspaper - Publish the Notice on July 24, 2013. The applicant is responsible for payment. The text of the notice can be e-mailed to your paper by contacting Karen Schlaak at (605) 773-3352 or email: Karen.schlaak@state.sd.us.

NOTICE OF APPLICATION NO. 7851-3 to Appropriate Water

Notice is given that Alan J Armstrong, 31314 Niles School Road, Springfield SD 57062 has filed an application for a water permit to appropriate 0.067 cubic feet of water per second (30 gallons per minute) from one well to be completed into the Codell Aquifer (300 feet deep) located in the SW 1/4 SE 1/4 Section 22-T93N-R60W for domestic use.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 7851-3 because 1) unappropriated water is available, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest. In accordance with SDCL 46-2A-23, the Chief Engineer will act on this 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 this application. Notice of the hearing will be given to the applicant and any person filing a petition.

Any person interested in opposing or supporting this application or recommendation must file a written petition with BOTH the applicant and Chief Engineer. The applicant must file a petition if contesting the Chief Engineer's recommendation. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E Capitol, Pierre SD 57501 (605 773-3352)" and the applicant's mailing address is given above. A petition filed by either an interested person or the applicant must be filed by August 5, 2013.

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.

Published once at the total approximate cost of _____.



DEPARTMENT of ENVIRONMENT
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AUG 14 2013

Alan J Armstrong
31314 Niles School Rd
Springfield SD 57062

Dear Mr. Armstrong:

Enclosed is Water Permit No. 7851-3 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,

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

enclosures

Report of Examination of Works and/or Application of Water to Beneficial Use For Permit No. 7851-3

I have this day, March 10, 2020, made a thorough examination of the water use system constructed by Alan J. Armstrong, 31314 Niles School Rd, Springfield, SD 57062 of Permit No. 7851-3, bearing the priority of June 10, 2013 authorizing the diversion of 0.067 cu. ft. per second of the waters of ground water (Codell Aquifer) for domestic use and livestock watering purposes, in Bon Homme County.

Inspection contact: Alan Armstrong, Owner and Marlyn Palsma

A. Works used to divert the water:

Well Information:

- 1) Well Drilling Firm: Thein Well Co., Inc.
- 2) No. of Wells 1
- 3) Depth 260 feet
- 4) Well log is available Yes

Casing:

- 1) Diameter 5 inches
- 2) Length 217 feet
- 3) Type PVC

Screen:

- 1) Type PVC
- 2) Length 40 feet
- 3) Static water level 139 feet

Pump:

- 1) Make Berkeley
- 2) Model L30P41HMGS-03
- 3) Capacity 30 gpm

Motor:

- 1) Make Berkeley
- 2) Model No. P43B0030-A3
- 3) Horsepower rating 3 hp

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

- 1) Type PVC
- 2) Size 1.5 inches
- 3) Length 3,600 feet

C. Works used to apply water to beneficial use: One and one-half inch PVC pipes to the houses and tank.

D. Compliance with Permit Requirements:

- 1) Permit qualifications being abided by Yes Exceptions to compliance are: None

E. Condition and Location:

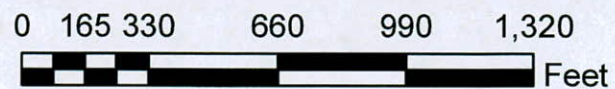
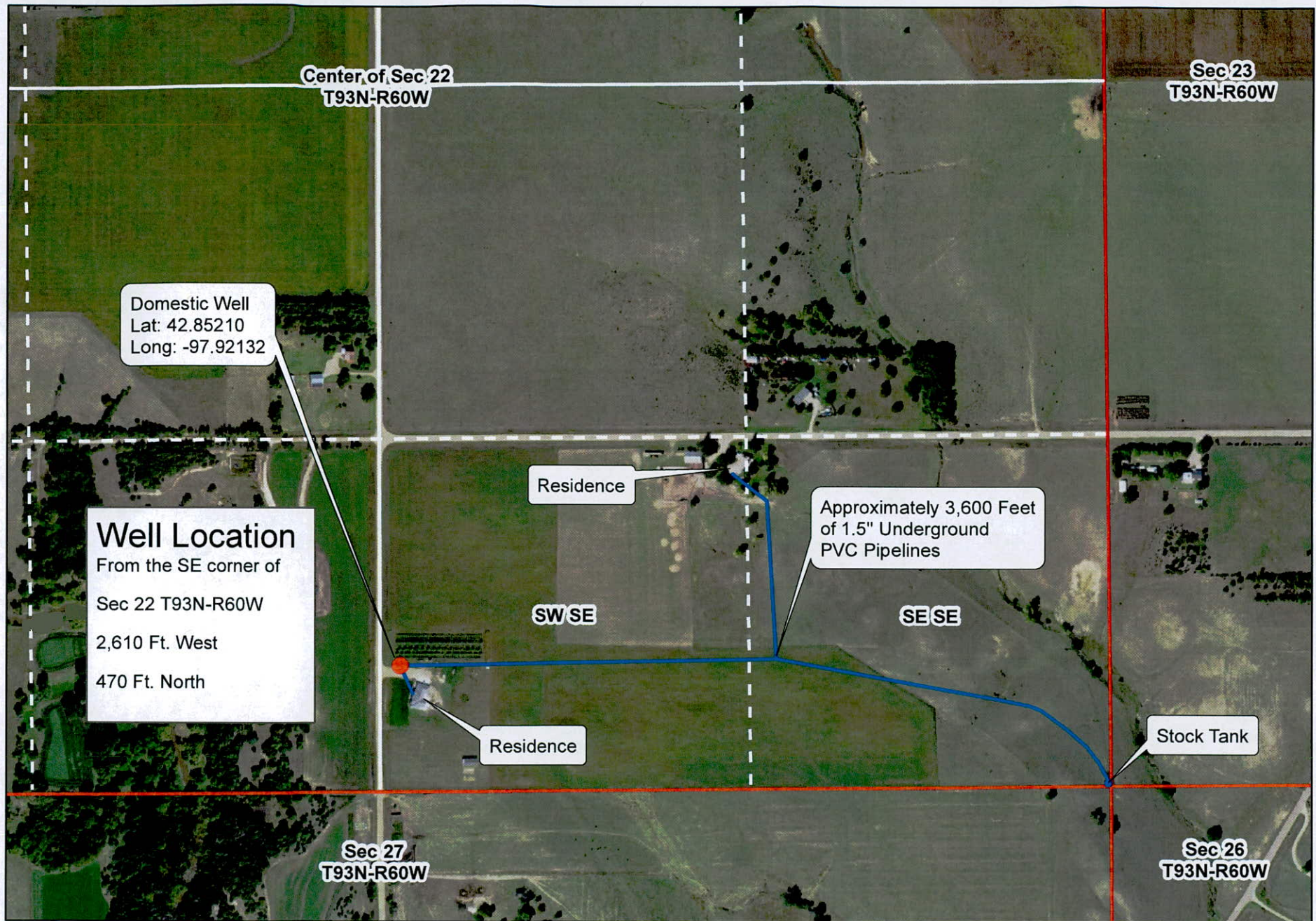
1. The system is in good condition with the point of diversion located as follows: Well: 470 feet north and 2,610 feet west of the SE corner of Section 22-T93N-R60W (Latitude 42.85210, Longitude -97.92132).
2. The works are capable of diverting and conveying to the place of use 0.067 cu. ft. per second of water which is to be used for domestic use and livestock watering. Water has been put to beneficial use to the maximum extent as follows: Two house sites and a livestock watering tank in the SE1/4 of Sec 22, T93N, R60W, and the license should be issued for 0.067 cfs.

Keith DeJong

Keith DeJong
Water Rights Inspector
DENR, Water Rights Program

Date report completed: March 11, 2020

Water Right No. 7851-3



SCALE



Keith DeJong

Keith DeJong, PE
Staff Engineer
March 11, 2020

7851-3

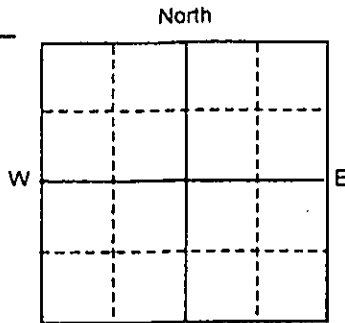
SOUTH DAKOTA WATER WELL COMPLETION REPORT

11-02

Location NW 1/4 SE 1/4 Sec 22 Twp 93N Rg 60W

County Bon Homme

Please mark well location with an "X"



Well Completion Date

06/12/13



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

PROPOSED USE:

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

METHOD OF DRILLING:

Rotary

CASING DATA:

☐ Steel ☒ Plastic ☐ Other

If other describe

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
LB/FT	<u>5.00</u> IN	<u>0.0</u> FT	<u>217.0</u> FT	<u>8.75</u> IN
LB/FT	IN	FT	FT	IN
LB/FT	IN	FT	FT	IN

GROUTING DATA:

Grout Type	No. of Sacks	Grout Weight	From	To
<u>Bentonite</u>	<u>14</u>	Lb/gal	<u>0.0</u> Ft	<u>215.0</u> Ft
		Lb/gal	Ft	Ft

Describe grouting procedure
tremie piped

SCREEN:

☒ Perforated pipe ☐ Manufactured

Diameter 5.00 Inches Length 40.0 Feet

Material PVC

Slot Size .013 Set From 217.0 Feet to 257.0 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? Chlorinated

☐ No, Why Not?

Lab to which water quality sample sent for analysis
owner to obtain

Well Owner: Ashley Armstrong

Business Name:

Address: PO Box 65

City, State, Zip: Mission Hill SD 57046

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
Top soil	0	1
Brown silty clay	1	7
Sandy yellow clay	7	15
Yellow clay	15	34
Blue clay	34	76
Silty blue clay	76	154
Light gray chalk	154	215
Blue clay & fine gray sand layers	215	254
Blue shale	254	260

STATIC WATER LEVEL 139.0 FEET

If flowing: closed in pressure _____ PSI

GPM flow _____ through _____ Inch pipe

Controlled by ☐ Valve ☐ Reducers ☐ Other

Reduced flow rate _____ GPM

Can well be completely shut in?

WELL TEST DATA:

☒ Pumped Describe:

☐ Bailed

☐ Other

Pumping Level Below Land Surface

164.0 Ft. After 2.0 Hrs. pumped 12.0 GPM

_____ Ft. After _____ Hrs. pumped _____ GPM

If pump installed, pump rate: _____ GPM

REMARKS

GPS: N 42 51.123

W 97 55.273

RECEIVED

AUG 12 2013

WATER RIGHTS PROGRAM

This well was drilled under license # 475 and this report is true and accurate.

Drilling firm: Thein Well Co., Inc.

Signature of License Representative:

Signature of Well Owner or Equitable Property Holder:

Date: 8/4/13



DENR
SOUTH DAKOTA

**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

7851-3

JUN 15 2020

Alan J Armstrong
31314 Niles School Rd
Springfield SD 57062

Dear Mr. Armstrong:

Enclosed is Water License No. 7851-3. 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 in the future, the owner of an existing well, constructs a replacement well and does not plan to use the old well, the old well is considered abandoned and must be plugged. Also, any well that is being used or is not considered abandoned must be valved and controlled, if flowing, or sealed and capped so that no leaking occurs either underground or at the surface.

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

Sincerely,

Eric Gronlund, Chief Engineer
Water Rights Program
605 773-3352

enclosures

**STATE OF SOUTH DAKOTA
WATER LICENSE NO. 7851-3**

(1) Alan J Armstrong, 31314 Niles School Rd, Springfield SD 57062 made Application No. 7851-3, June 10, 2013 for a water permit to divert 0.067 cubic feet of water per second from ground water, one well (Codell Aquifer), Bon Homme County, South Dakota for domestic use purposes. Permit No. 7851-3, with a priority date of June 10, 2013 was approved August 5, 2013 and issued to the applicant for diversion of water with construction of the described water supply system to be completed on or before August 5, 2018 and for the application to beneficial use of water on or before August 5, 2022.

(2) It is certified that the permit holder has complied with the provisions of South Dakota State Law relating to completion of the water supply system and is entitled to divert 0.067 cubic feet of water per second for beneficial use. The well is located as follows:

- 470' N and 2,610' W of the SE corner of Section 22, T93N, R60W (SW ¼ SE ¼)
Latitude 42.85210, Longitude -97.92132

The well provides water for domestic use for two residences located in the SW ¼ SE ¼ and supplies water to a livestock tank located in the SE ¼ SE ¼ all in Section 22 as described above.

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

(4) Pursuant to South Dakota Water Law 46-5-30.1 Alan J Armstrong, 31314 Niles School Rd, Springfield SD 57062 the holder and/or owner of Water Right No. 7851-3 is issued a license to appropriate water, the right to use 0.067 cubic feet of water per second from ground water, one well (Codell Aquifer) with a priority date of June 10, 2013 from the location specified in (2) of this license for domestic use purposes.

This license is subject to South Dakota Water Law, any limitations or conditions listed in Water Right No. 7851-3 and subject to the following qualifications:

- The well approved under this Water Right will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Water Right shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
- The well authorized by Permit No. 7851-3 shall be constructed by a licensed well driller and construction of the well and installation of the pump shall comply with the Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) pursuant to Section 74:02:04:28. *The well was drilled in June, 2013 by Thein Well Co., Inc. A copy of the well completion report is on file with the Water Rights Program.*



Eric Gronlund, Chief Engineer
Water Rights Program
Department of Environment and Natural Resources

JAN 15 2020

date



7851-3



DENR
SOUTH DAKOTA

**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

June 23, 2020

7851-3

Alan J Armstrong
955 Saxton Dr
Huron SD 57350

Dear Mr. Armstrong:

Enclosed is your Water License No. 7851-3.

The original correspondence was sent to 31314 Niles School Rd in Springfield. The Post Office notified us that your mailing address has changed. We will update our records accordingly.

If you have any questions, please let me know.

Sincerely,

A handwritten signature in blue ink that reads "Genny McMath".

Genny McMath
Water Rights Program
605 773-3352
Genny.mcmath@state.sd.us

enclosures