

WATER PERMIT NO. 7824-3

Name of Applicant: Gary Smith

Address: PO Box 151, Mission Hill SD 57046

Phone: 605 661-5479

Amount of Water Claimed: no additional

Total Acres: 55.9

Source of Water Supply: groundwater (1 existing well)

Water to be used for: irrigation

County: Yankton

Type of Waste Disposal System:

Location: 6 miles northeast of Yankton

PRIORITY

Date Received: 4-10-13

Application/License Fee: \$ 500

Corrected Application Received:

Period of Annual Use: April 1 – Sept 30

Remarks: Additional acres to Permit No. 7014-3

Diversion Point: N 1/2 SW 1/4 Sec 13-T94N-R55W

Land to be Irrigated: W 1/2 SW 1/4, SE 1/4 SW
1/4 Sec 13-T94N-R55W

Depth of Well: 222 feet deep

Well Driller: Hammond Wetmore Drilling

Remarks:

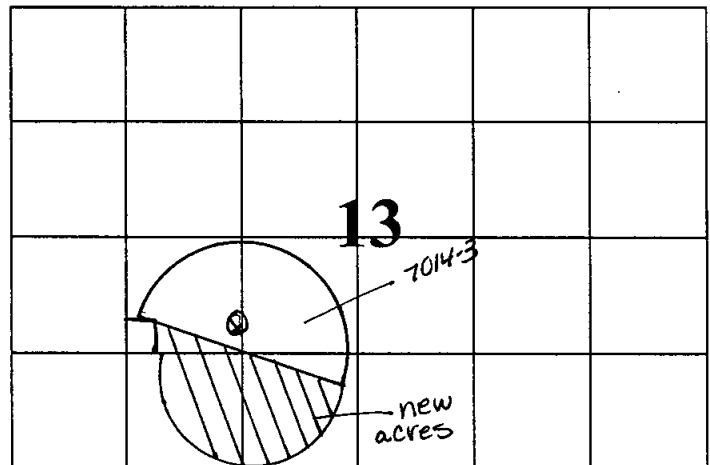
Type of Map: aerial

Prepared by:

Reviewed and the Number Assigned on: 4-10-13

By: Karen Schlaak

Notice of Hearing - date to intervene: _____



FORM 2: Application for irrigation in South Dakota
(type or print)

Mail to:
PMB 2020
DENR - Water Rights
523 E Capitol Ave
Pierre, SD 57501-3182
ph. (605) 773-3352

(office use only)
No. 7824-3 Hydrologic Unit 10170102
Basin Vermillion River
Newspaper Press & Dakotan 319 Walnut
Yankton 57028 605-665-7811

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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.)

1. Name to Appear on Irrigation Permit Gary Smith
(check one) ☒ Owner ☐ Tenant/lessee ☐ Owner's Legal Agent _____
(name and complete address if different than above name)

Mailing Address PO Box 151 30572 446th Ave Missouri Hill SD 57046
(Address) (City) (State) (Zip Code)

Home Phone 605665-5479 Cell 661-5479 Email _____

2. Amount of water claimed NDAD1 *CFS or _____ *GPM _____ ***AF _____ Total Acreage 55.9
(*Cubic Feet per Second) (**Gallons per Minute) (***) Acre Feet - storage capacity of dam/dugout or annual use if applicable)

3. Source of water supply well (permit # 7014-3)

4. Location of point of diversion N 1/2 SW 1/4 Sec 13 - T94N - R55W
(example - 3 wells in SW 1/4 NE 1/4 section 12-T104N-R53W)

County Yankton

5. County or counties where water will be used Yankton

6. Annual period during which water is to be used April 1 to Sept 30

7. 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>13-94-55 NW 1/4 SW 1/4</u>	<u>4.9</u>		
<u>13 94 55 SW 1/4 SW 1/4</u>	<u>23.3</u>		
<u>13 94 55 SE 1/4 SW 1/4</u>	<u>27.7</u>		

8. Give a description of the project. (Attach sheet if more space is needed)

Pump from existing well (Permit # 7014-3)

I, Gary Smith, the applicant, certify that I have read this application, have examined the attached map, and that the matters stated are true.

SOUTH DAKOTA
WATER PERMIT NO. 7824-3

Date of first receipt of application April 10, 2013.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 7824-3 to Gary Smith, PO Box 151, Mission Hill SD 57046 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. 7824-3 authorizes irrigation of 55.9 new acres. Water Permit No. 7014-3 appropriates 2.0 cubic feet of water per second from one well completed into the Lower James:Missouri Aquifer (222 feet deep) located in the N 1/2 SW 1/4 Section 13 for irrigation of 76 acres located in the N 1/2 SW 1/4, SE 1/4 SW 1/4 Section 13; all in T94N-R55W. This permit irrigates 55.9 new acres located in the W 1/2 SW 1/4, SE 1/4 SW 1/4 Section 13-T94N-R55W. This will allow the pivot to make a complete rotation. This permit does not authorize any increase in the diversion rate.
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 – September 30.
3. The date from which applicant may claim right is April 10, 2013.
4. The date of approval of Permit No. 7824-3 is July 1, 2013.
5. One-fifth of the construction is to be completed on or before January 1, 2016.
6. All construction is to be completed on or before July 1, 2018.
7. Water is to be put to beneficial use on or before July 1, 2022.
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 Water Permit Nos. 7014-3 and 7824-3 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: *Jeanne Goodman*
Jeanne Goodman, Chief Engineer
Water Rights Program
Department of Environment and Natural Resources

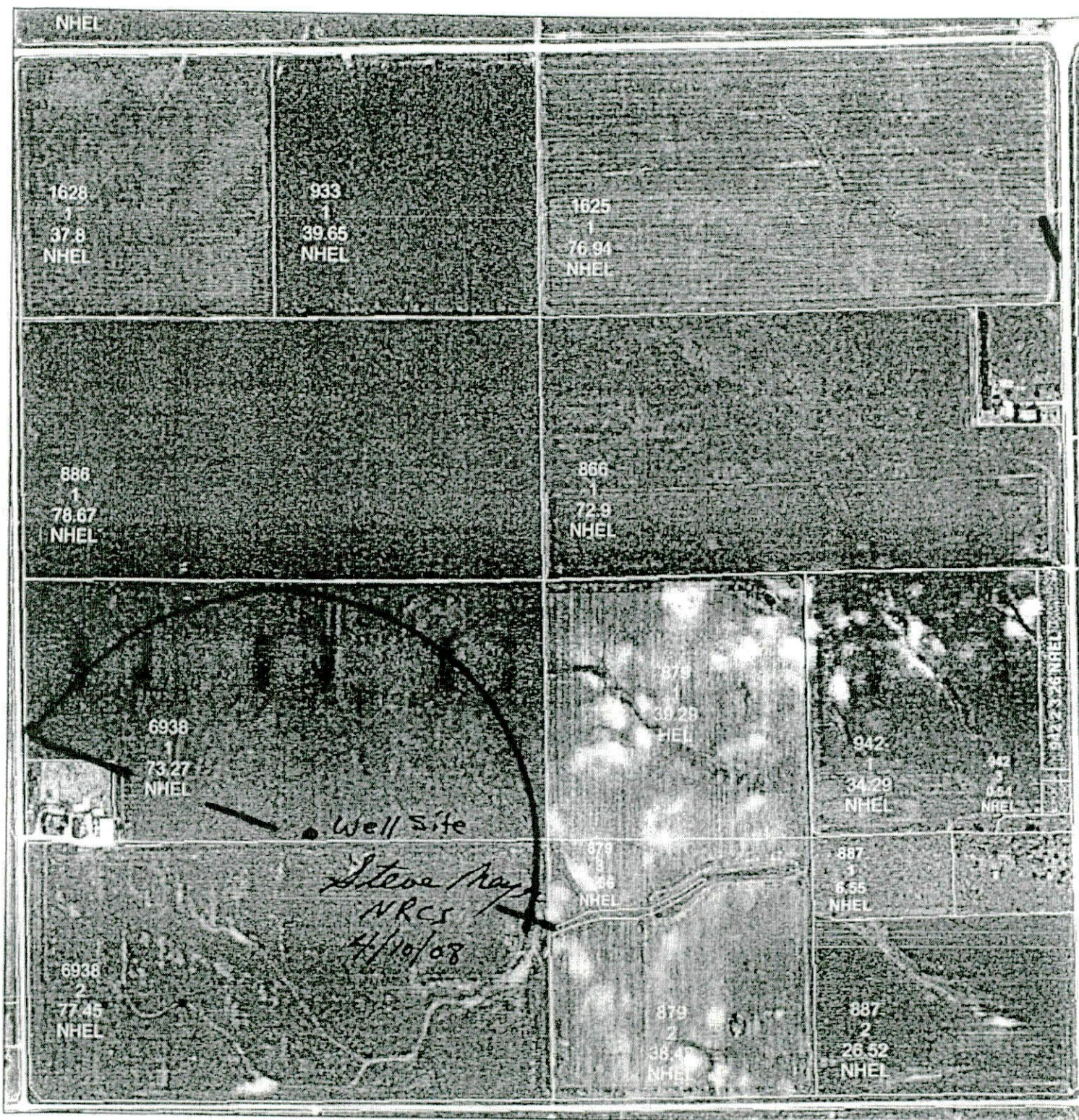
AUG 30 2013

date



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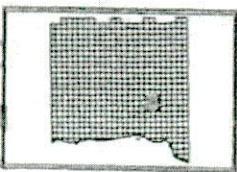


USDA USDA - Farm Service Agency

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Yankton County, SD

13-94N-55W

1:7,577

May 17, 2007

Legend

- Tract Boundaries
- Section-Township Range
- Easements
- CRP
- Common Land Units
- Rangeland

Wetland Determination Identifiers

- Restricted Use
- Limited Restrictions
- Exempt from Conservation Compliance Provisions

USDA FSA maps are for FSA Program administration only. There is no guarantee or representation to the user as to the accuracy, currency, availability or reliability of the data. FSA maps DO NOT REPRESENT A LEGAL SURVEY. The user accepts the data as is, and assumes all risks associated with its use. Wetland points reflect records available with NRCS and may or may not constitute a full inventory of the property. The USDA Farm Service Agency assumes no responsibility for actual or consequential damage incurred as a result of any user's reliance on this data. Disclaimer: Wetland identifiers do not represent the size, shape or specific determination of the area. Refer to your original determination (CPA 026) and attached maps for exact wetland boundaries and determinations, or contact NRCS.

~~500~~ \$500

SD EForm - 1621 V1

7014-3

SOUTH DAKOTA WATER WELL COMPLETION REPORT

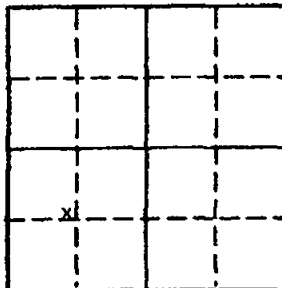
11-02

Location nw 1/4 SW 1/4 Sec 13 Twp 94n Rg 55w

County

Yankton

North



Please mark well location with an "X"

Well Completion Date

7/18/2008

Distance to nearest potential pollution source (Septic tank, abandoned well, feed lot, etc.)

? 1,500.0 ft from septic tank (identify source)

PROPOSED USE:

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

METHOD OF DRILLING:

Direct rotary

CASING DATA:

☐ Steel ☒ Plastic ☐ Other

If other describe

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
LB/FT	IN	FT	FT	IN
	16.00	0.0	172.0	22.00
LB/FT	IN	FT	FT	IN
LB/FT	IN	FT	FT	IN

GROUTING DATA:

Grout Type	No. of Sacks	Grout Weight	From	To
		Lb/gal	FT	FT
bent grout	35	9.4	0.0	165.0
		Lb/gal	FT	FT

Describe grouting procedure
tremie

SCREEN:

☐ Perforated pipe ☒ Manufactured
Diameter 16.00 Inches Length 50.0 Feet
Material PVC
Slot Size .080 Set From 172.0 Feet to 222.0 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? hth tablets

☐ No, Why Not?

Lab sample sent to for water quality analysis

Well Owner: Gary Smith

Business Name:

Address: 30572 446th Ave

City, State, Zip: Mission Hill SD 57046

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
Silt, brown, clayey, loess	0	4
Clay, yellow brn, pebbly till	4	45
Clay, gray, pebbly, till	45	165
Sand, gray, med to coarse, pebbly	165	227

STATIC WATER LEVEL 119.0 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

124.0 FL After 6.0 Hrs. pumped

_____ FL After _____ Hrs. pumped

If pump installed, pump rate:

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700.0 GPM

_____ GPM

_____ GPM

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FEB - 2 2009

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REMARKS

This well was drilled under license # 666

And this report is true and accurate.

Drilling firm: Hammond Wetmore Drilling

Signature of License Representative:

Signature of Well Owner or Equitable Property Holder:

Date:

12/08/09

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date 4/10, 20 12

RECEIVED OF Gary Smith PO Box 151 Mission Hill SD 57046

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

Fee for Application for Permit No. <u>7824-3</u> to Appropriate Water, to construct and to put water to beneficial use	500	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	500 00

No. 06297

By James Goodman
Chief Engineer

Schlaak, Karen

From: Duvall, Ron
Sent: Monday, April 08, 2013 10:45 AM
To: Schlaak, Karen
Cc: Gronlund, Eric; McMath, Genny
Subject: License Fee

Gary Smith is submitting an application to add 56 acres from an existing well permitted under No. 7014-3. I told him since the existing permit and new permit would likely be incorporated during inspection to NOT submit another license fee. The fee he is sending is \$500.00.



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

denr.sd.gov

**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 7824-3, Gary Smith**

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. 7824-3, Gary Smith, PO Box 151, Mission Hill SD 57046.

The Chief Engineer is recommending APPROVAL of Application No. 7824-3 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 Water Permit Nos. 7014-3 and 7824-3 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.

Jeanne Goodman, Chief Engineer
June 10, 2013

REPORT TO THE CHIEF ENGINEER WATER PERMIT APPLICATION NO. 7824-3

**Gary Smith
April 29, 2013**

Water Permit Application No. 7824-3 proposes to irrigate 55.9 new acres located in the W $\frac{1}{2}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$ SW $\frac{1}{4}$ of Section 13, T94N-R55W from a well authorized by Water Permit No. 7014-3. Water Permit No. 7014-3 appropriates 2.0 cubic feet of water per second (cfs) from one well completed into the Lower James Missouri aquifer. The well is estimated to be 222 feet deep and is located in the N $\frac{1}{2}$ SW $\frac{1}{4}$ of Section 13, T94N-R55W. Water is currently permitted for irrigation of 76 acres located in the N $\frac{1}{2}$ SW $\frac{1}{4}$, SE $\frac{1}{4}$ SW $\frac{1}{4}$ of Section 13, T94N-R55W, in Yankton County. If approved, this application does not authorize any increase in maximum diversion rate.

AQUIFER: Lower James Missouri aquifer (LJM)

GEOLOGY AND AQUIFER CHARACTERISTICS:

The Lower James Missouri aquifer is a glacial outwash consisting of fine sand to cobble gravel that can be under water table or artesian conditions depending on location (Bugliosi, 1986; Lindgren and Hansen, 1990). The aquifer appears to be under artesian conditions in the area of the well authorized by Water Permit No. 7014-3 (Water Rights, 2013a). In total, the Lower James Missouri aquifer is estimated to underlie 191,700 acres and contain 2,785,400 acre-feet (ac-ft) of recoverable water in storage (Hedges and others, 1982). The aquifer extends from Yankton County north into Hutchinson County and southeast into a small portion of Clay County. The aquifer is hydraulically connected to the Choteau, Lower James Missouri: Scotland, and Niobrara aquifers, and the James and Missouri Rivers (Bugliosi, 1986; Lindgren and Hansen, 1990).

The bottom of the well authorized by Water Permit No. 7014-3 is estimated to be at approximately 1,063 feet above mean sea level (fmsl). In the area of the well, aquifer materials range from 1,045 to 1,124 fmsl (SD Geological Survey, 2013). From the nearest observation well, the static water level of the aquifer in the area ranged from 1,144 to 1,170 fmsl from 1978 to present (Water Rights, 2013a).

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 from the aquifer and the potential for impairment of existing rights.

WATER AVAILABILITY:

If this application is approved, the actual water use will likely be less than 111.8 ac-ft/yr. 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 and the aquifer is not older or lower than the Greenhorn Formation therefore withdrawal/recharge issue must be considered.

HYDROLOGIC BUDGET:

Recharge:

Recharge to the Lower James Missouri aquifer occurs due to infiltration of precipitation where the aquifer is at or near land surface, upward leakage from the bedrock aquifers, and inflow from the surrounding glacial aquifers (Bugliosi, 1986). Hedges and others (1985) estimated the recharge rate, based on a regional flow-net analysis, of the aquifer to be 1.5 inches per year. Using this recharge rate and the total area of the aquifer, recharge for the Lower James Missouri aquifer is estimated to equal 23,963 ac-ft/yr.

Discharge:

Discharge from the Lower James Missouri aquifer occurs due to evapotranspiration in areas where the aquifer is at or near land surface, seepage to the James River, and well withdrawals (Bugliosi, 1986). Currently there are 120 water rights/permits appropriating water from the Lower James Missouri aquifer. There are also five pending water permit applications for the aquifer (Water Rights, 2013b). There are also many completion reports on file with the SD DENR-Water Rights Program for domestic wells that appear to be completed into the Lower James Missouri aquifer (Water Rights, 2013c). The annual withdrawal due to domestic use is not significant to the hydrologic budget of the aquifer.

From the Lower James Missouri aquifer, the maximum diversion rate for non-irrigation use totals 2.275 cfs. The amount of water that can be expected to be withdrawn by the non-irrigation use water rights/permits at the current appropriation amount 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. Therefore, the total annual withdrawal from the Lower James Missouri aquifer by non-irrigation use is expected to total less than 989 ac-ft/yr (Water Rights, 2013b).

Figure 1 shows the Lower James Missouri aquifer’s historic irrigation data. The development of this aquifer increased over the past few years. The annual withdrawal due to irrigation use fluctuates greatly, which is probably due mostly to annual growing season climatic conditions. The average pumpage reported equals 1,479 ac-ft/yr (Water Rights, 1980-2012). Based on the trend of irrigation data, the development of this aquifer will probably continue to increase (Water Rights, 1979-2013). Since 2011, 24 water permits have been approved and five are pending; all are for irrigation use. Therefore, water use is likely to increase.

Hydrologic Budget:

The total annual withdrawal from the Lower James Missouri aquifer is estimated to be 2,468 ac-ft/yr, which is much less than the estimated annual recharge. Therefore, unappropriated water is available from the Lower James Missouri aquifer for the proposed appropriation.

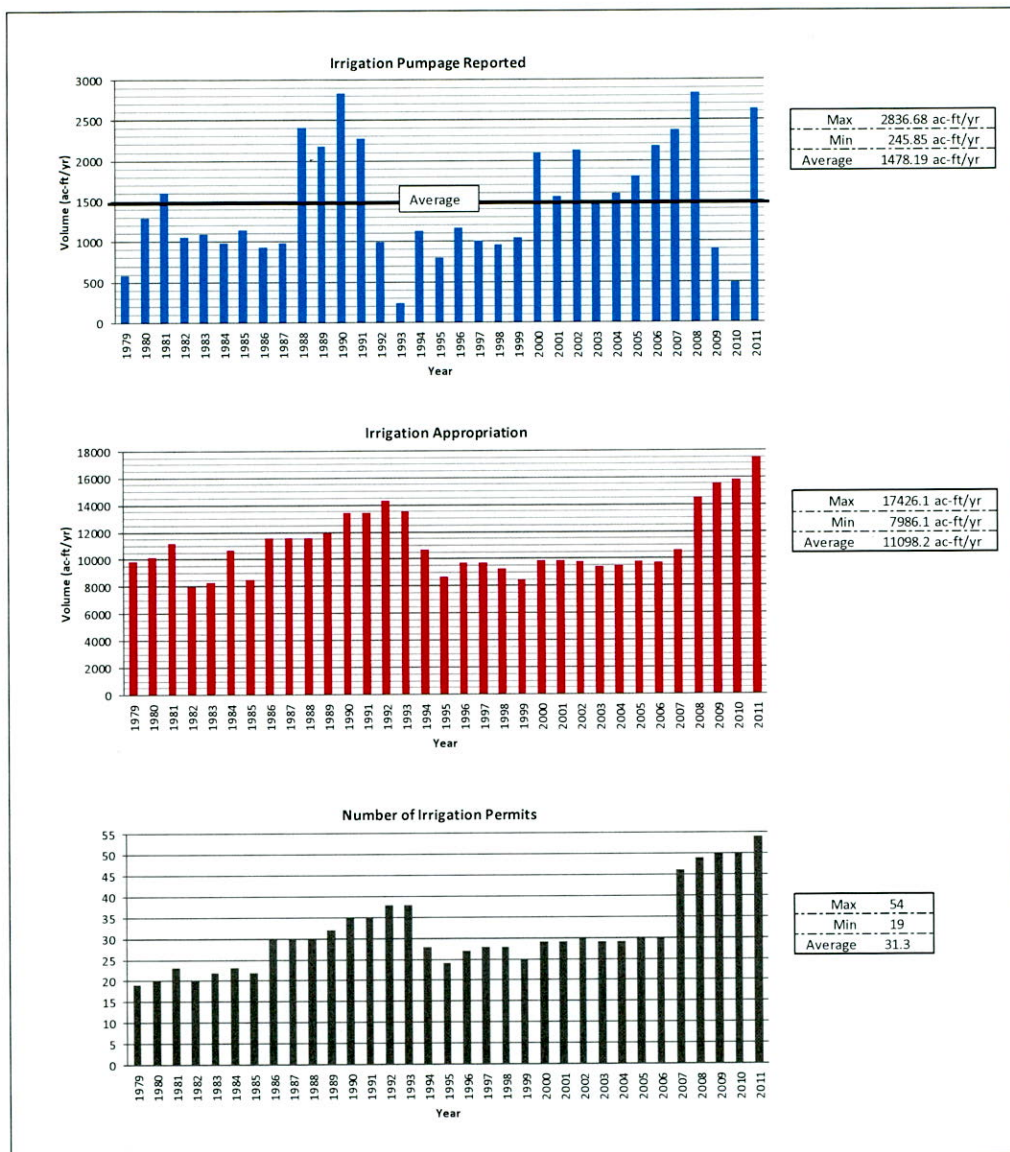


Figure 1: Historic irrigation water use from the Lower James Missouri aquifer (Water Rights, 1980-2012)

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 32 observation wells completed into the Lower James Missouri aquifer (Water Rights, 2013a). The nearest observation wells, YA-78E and YA-80IA, are located approximately one half mile northwest and southeast of the well authorized by Water Permit No. 7014-3, respectively.

The observation well data documents cyclic conditions of water levels, recharging during wet years and declining during dry years. Temporal well withdrawal of the aquifer is masked by climatic conditions, indicating that recharge to and natural discharge from the aquifer greatly exceeds well withdrawal. Over the period of record, water levels in the aquifer have remained fairly steady. Therefore, unappropriated water is available from the Lower James Missouri aquifer to support the proposed appropriation.

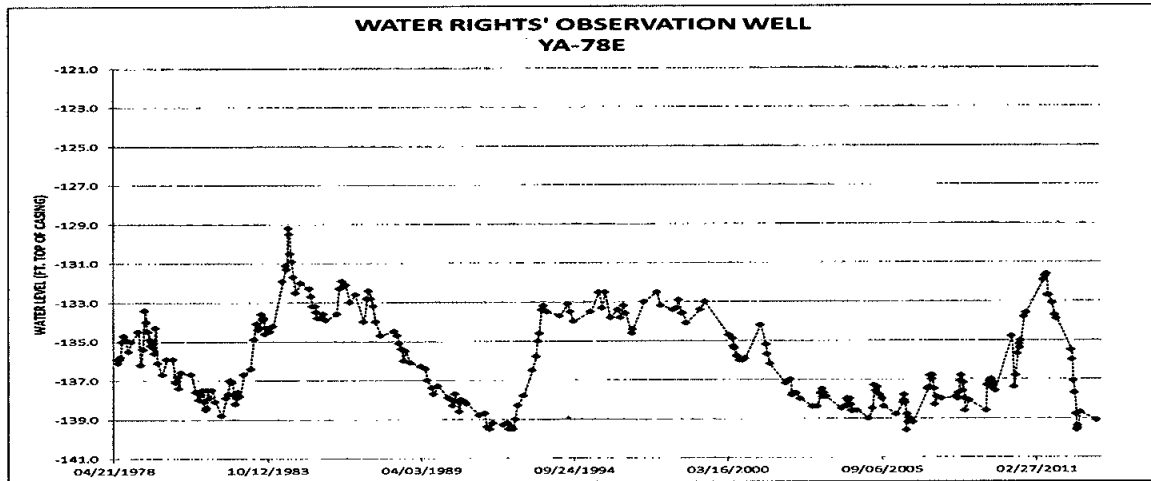


Figure 2: Hydrographs of observation well YA-78E aquifer (Water Rights, 2013a)

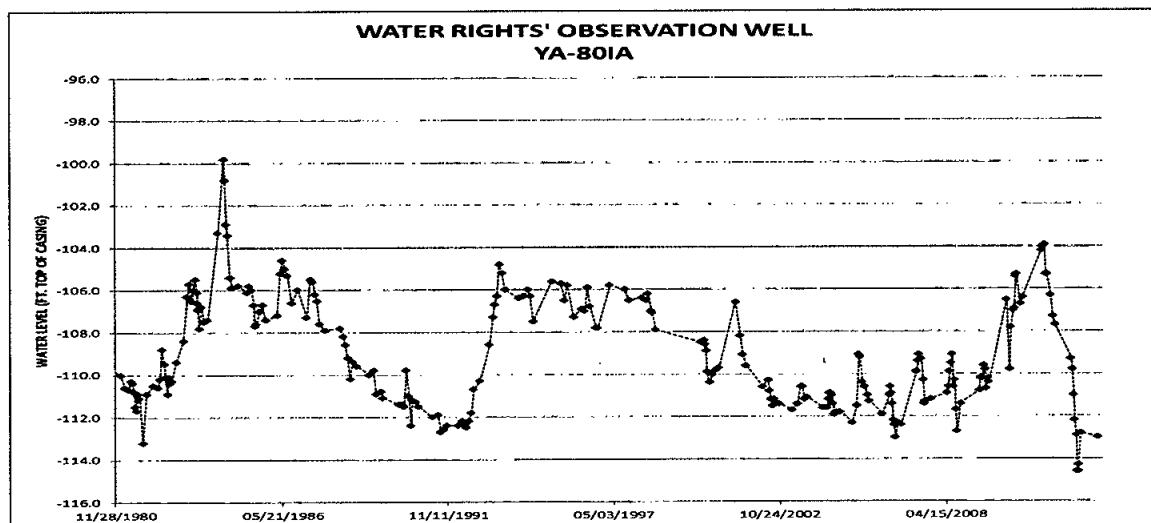


Figure 3: Hydrographs of observation well YA-801A aquifer (Water Rights, 2013a)

EXISTING WATER RIGHTS:

The well authorized by Water Permit No. 7014-3 is located near other wells that obtain water from the same aquifer. In addition to domestic wells, there are thirteen water rights/permits appropriating water from the Lower James Missouri aquifer and two water rights/permits appropriating water from the hydraulically connected Missouri: Elk Point aquifer within two miles of the well (Water Rights, 2013b; Water Rights, 2013c).

This portion of the Lower James Missouri aquifer is under artesian conditions at the well site; therefore, some drawdown due to pumping will occur. 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. However, reasonable domestic use must be assured before irrigation use is allowed. Therefore, when considering irrigation projects, the Water Management Board must give consideration to maintaining artesian head pressure as a method of delivery for domestic wells. To balance interests between irrigation use and delivery of groundwater by artesian pressure, ARSD 74:02:04:20(7) defines an adversely impacted domestic well as:

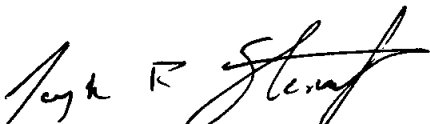
“a well in which the pump intake was set at least 20 feet below the top of the aquifer at the time of construction or, if the aquifer is less than 20 feet thick, is as near to the bottom of the aquifer as is practical and the water level of the aquifer has declined to a level that the pump will no longer deliver sufficient water for the well owner’s needs”

Depending on the specific characteristics of the Lower James Missouri aquifer at the proposed well site, some existing well owners may need to lower their pumps to accommodate possible reduction of head pressure.

While this application does not propose an increase in maximum diversion rate, the increase in proposed applied acres will likely increase the average diversion rate. Therefore, while actual diversion rate or actual days applied may not change, the cumulative impacts are likely to increase. However, the current average diversion rate has not adversely effected nearby wells. And so, the relatively small increase in average diversion rate due to the additional acres is not expected to cause adverse impacts, either.

CONCLUSIONS:

1. Water Permit Application No. 7824-3 proposes to irrigate 55.9 new acres from an existing well authorized by Water Permit No. 7014-3.
2. Water Permit No. 7014-3 appropriates 2.0 cfs from one well, 222 feet deep, completed into the Lower James Missouri aquifer for the irrigation of 76 acres.
3. If approved, this application does not authorize any increase in maximum diversion rate.
4. There is a reasonable probability that unappropriated water is available from the Lower James Missouri aquifer to supply the proposed appropriation.
5. There is a reasonable probability that any possible well interference due to the proposed appropriation will not adversely or unlawfully impair existing users.


Joseph R Stonesifer
SD DENR-Water Rights Program

Approved by

Ken Buhler
SD DENR-Water Rights Program

REFERENCES:

- Bugliosi, E.F. 1986. Water Resources of Yankton County, South Dakota. Water Resources Investigations Report 84-4241. U.S. Geological Survey, Huron, South Dakota.
- 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.
- Lindgren, R.J. and Hansen, D.S. 1990. Water Resources of Hutchinson and Turner Counties, South Dakota. Water-Resources Investigations Report 90-4093. U.S. Geological Survey. Huron, South Dakota.
- SD Geological Survey. 2013. Lithologic Logs Database, SD DENR-Geological Survey, Vermillion, South Dakota.
- Water Rights, 1980-2012. "Irrigation Report Summaries." 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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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. 7824-3

TAKEN FROM THE PAPER, IN WHICH IT WAS LAST PUBLISHED IN THE
NEWSPAPER ON THE 19th DAY OF June 2013
THAT THE FULL AMOUNT OF THE FEE CHARGED FOR THE PUBLICATION
OF SAID NOTICE TO WIT \$28.80 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: 6/19/2013

FILED ON: 6/19/2013

SUBSCRIBED AND SWORN TO BEFORE ME THIS 19th DAY OF June 2013

NOTARY PUBLIC, SOUTH DAKOTA

MY COMMISSION EXPIRES

8/19/2015

Notice is given that Gary Smith, PO Box 151, Mission Hill SD 57046 has filed an application for a water permit to irrigate 55.9 new acres. Water Permit No. 7014-3 appropriates 2.0 cubic feet of water per second from one well completed into the Lower James:Missouri Aquifer (222 feet deep) located in the N 1/2 SW 1/4 Section 13 for irrigation of 76 acres located in the N 1/2 SW 1/4, SE 1/4 SW 1/4 Section 13; all in T94N-R55W. This application is to irrigate 55.9 new acres located in the W 1/2 SW 1/4, SE 1/4 SW 1/4 Section 13-T94N-R55W. This will allow the pivot to make a complete rotation. This application, if approved, does not authorize any increase in the diversion rate.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 7824-3 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 July 1, 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. Pirmer, Secretary, Department of Environment and Natural Resources.

Published once at the total approximate cost of _____.



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

denr.sd.gov

June 11, 2013

Press & Dakotan
319 Walnut
Yankton SD 57078

ATTENTION: Legal Public Notice

Enclosed is a Notice on Application No. 7824-3 to Appropriate Water. Please publish the notice once on June 19, 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 Gary Smith, PO Box 151, Mission Hill SD 57046 (Ph # 605-665-5479).

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

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

June 11, 2013

Gary Smith
PO Box 151
Mission Hill SD 57046

Dear Mr. Smith:

Water Permit Application No. 7824-3 for irrigation use has been examined and found to comply with the South Dakota Water Laws and applicable rules. A notice has been sent to 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 June 19, 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. 7824-3 to Appropriate Water

Notice is given that Gary Smith, PO Box 151, Mission Hill SD 57046 has filed an application for a water permit to irrigate 55.9 new acres. Water Permit No. 7014-3 appropriates 2.0 cubic feet of water per second from one well completed into the Lower James:Missouri Aquifer (222 feet deep) located in the N 1/2 SW 1/4 Section 13 for irrigation of 76 acres located in the N 1/2 SW 1/4, SE 1/4 SW 1/4 Section 13; all in T94N-R55W. This application is to irrigate 55.9 new acres located in the W 1/2 SW 1/4, SE 1/4 SW 1/4 Section 13-T94N-R55W. This will allow the pivot to make a complete rotation. This application, if approved, does not authorize any increase in the diversion rate.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 7824-3 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 July 1, 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
and NATURAL RESOURCES

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

denr.sd.gov

AUG 30 2013

Gary Smith
PO Box 151
Mission Hill SD 57046

Dear Mr. Smith:

Enclosed is Water Permit No. 7824-3 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

RECEIVED

DEC - 9 2013

WATER RIGHTS
PROGRAMNOTICE OF COMPLETION OF WORKS AND
APPLICATION OF WATER TO BENEFICIAL USEDate 10-31-13TO: Water Rights Program, DENR
523 E. Capitol
Pierre, SD 57501-3181FROM: Gary Smith
(name)
PO Box 151
(address)
Mission Hill SD 57046 605 661-5479
(city, state, zip) (phone)

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

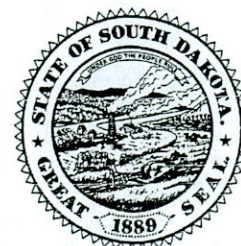
Water Permit No. 7824-3 states that the water use system is to be constructed by 7-1-18, and water is to be put to beneficial use by 7-1-22.
(date) (date)

The water use system was completed on August 1 2013.
(date)

Applying the water to beneficial use was completed on Aug 1 2013.
(date)

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

[Signature]
(signature)





**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

December 10, 2013

7824-3

Gary Smith
PO Box 151
Mission Hill SD 57046

Dear Mr. Smith:

I am writing to acknowledge receipt of the "Notice of Completion of Works" form that you sent in to let us know that you are completed with your irrigation system authorized under Water Permit No. 7824-3.

The system is now ready for inspection. Inspections are done on a county-by-county basis as staff time permits. You have done everything you need to do and the intervening time between the completion of your project and the staff inspection has no bearing on your water permit.

Someone from our office will contact you prior to the inspection to set up a time that is convenient for you. If you have any questions, please contact me.

Sincerely,

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

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

**Report of Examination of Works and/or Application of Water to Beneficial Use
For Permit Nos. 7014-3 and 7824-3**

I have this day August 2, 2021, made a thorough examination of the water use system owned by Gary Smith, PO Box 151, Mission Hill, SD 57046, holder of Permit Nos. 7014-3 and 7824-3, bearing priority dates of April 14, 2008 and April 10, 2013 authorizing the diversion of 2.0 cu. ft. per second of the waters of groundwater (Lower James Missouri Aquifer) for the irrigation of 131.9 acres located in Yankton County.

Inspection contacts: Gary Smith

A. Works used to divert the water:

Well Information: (Well authorized by Water Permit No. 7014-3)

- 1) Well Drilling Firm: Hammond Wetmore Drilling, LLC
- 2) No. of Wells: 1
- 3) Depth(s): 227 feet
- 4) Well log is available: Yes

Casing:

- 1) Diameter: 16 inches
- 2) Length: 172 feet
- 3) Type: PVC

Screen:

- 1) Diameter: 16 inches
- 2) Length: 50 feet
- 3) Type: PVC
- 4) Static water level: 119 feet

Pump:

- 1) Make: Grundfos
- 2) Model: 800s500-2
- 3) Capacity: 800 GPM

Motor:

- 1) Make: Grundfos
- 2) Model No.: Unknown
- 3) Horsepower rating: 50 hp

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

- | | | |
|---------------------|--------------------------|-------------------------------------|
| 1) Type: <u>PVC</u> | 2) Size: <u>8</u> inches | 3) Length: <u>270</u> feet (7824-3) |
| 1) Type: <u>PVC</u> | 2) Size: <u>8</u> inches | 3) Length: <u>270</u> feet (7014-3) |

C. Works used to apply water to beneficial use – 2 center pivots:

Center Pivot (7824-3):

- 1) Make Zimmatic
- 2) Overall length 1,128 feet
- 3) Number of towers 6
- 4) End gun Yes
- 5) Capacity 800 GPM

Center Pivot (7014-3):

- 1) Make Zimmatic
- 2) Overall length 1,240 feet
- 3) Number of towers 8
- 4) End gun Yes
- 5) Capacity 800 GPM

Chemigation Equipment:

- 1) Does chemigate: No

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
 3) Exceptions to compliance are: None

E. Condition and Location:

1. The system is in good condition with the point(s) of diversion located as follows:
The well is 1,420 feet east and 1,410 feet north of the southwest corner of Section 13-T94N-R55W (Latitude 42.956368, Longitude -97.293248 – NE1/4 of the SW1/4).
 2. The works are capable of diverting and conveying to the place of use 1.78 cu. ft. per second of water which is to be used for irrigation purposes. Water has been put to beneficial use to the maximum extent as follows: All in Section 13-T94N-R55W

Developed under 7824-3 (53 acres)

NW1/4SW1/4 5 acres
 SW1/4SW1/4 21 acres
 SE1/4SW1/4 27 acres

Developed under No. 7014-3 (62 acres)

NW1/4SW1/4 21 acres
 NE1/4SW1/4 34 acres
 SE1/4SW1/4 7 acres

comprising a total of 115 acres of land and the license should be issued for 1.78 cfs.

3. All structures, wells and lands on map Yes

F. Comments or other permit(s) associated with the project: Water Permit No. 7014-3 and Water Permit No. 7824-3 use the same well. No additional discharge rate was added by Water Right No. 7824-3 and the pivots are operated separately. These two water rights are owned by the same person and can be combined into one water license. The pump and motor information was obtained from Dick Hammond.

Keith DeJong

Keith DeJong
 Water Rights Inspector
 DANR, Water Rights Program

Date report completed: September 10, 2021

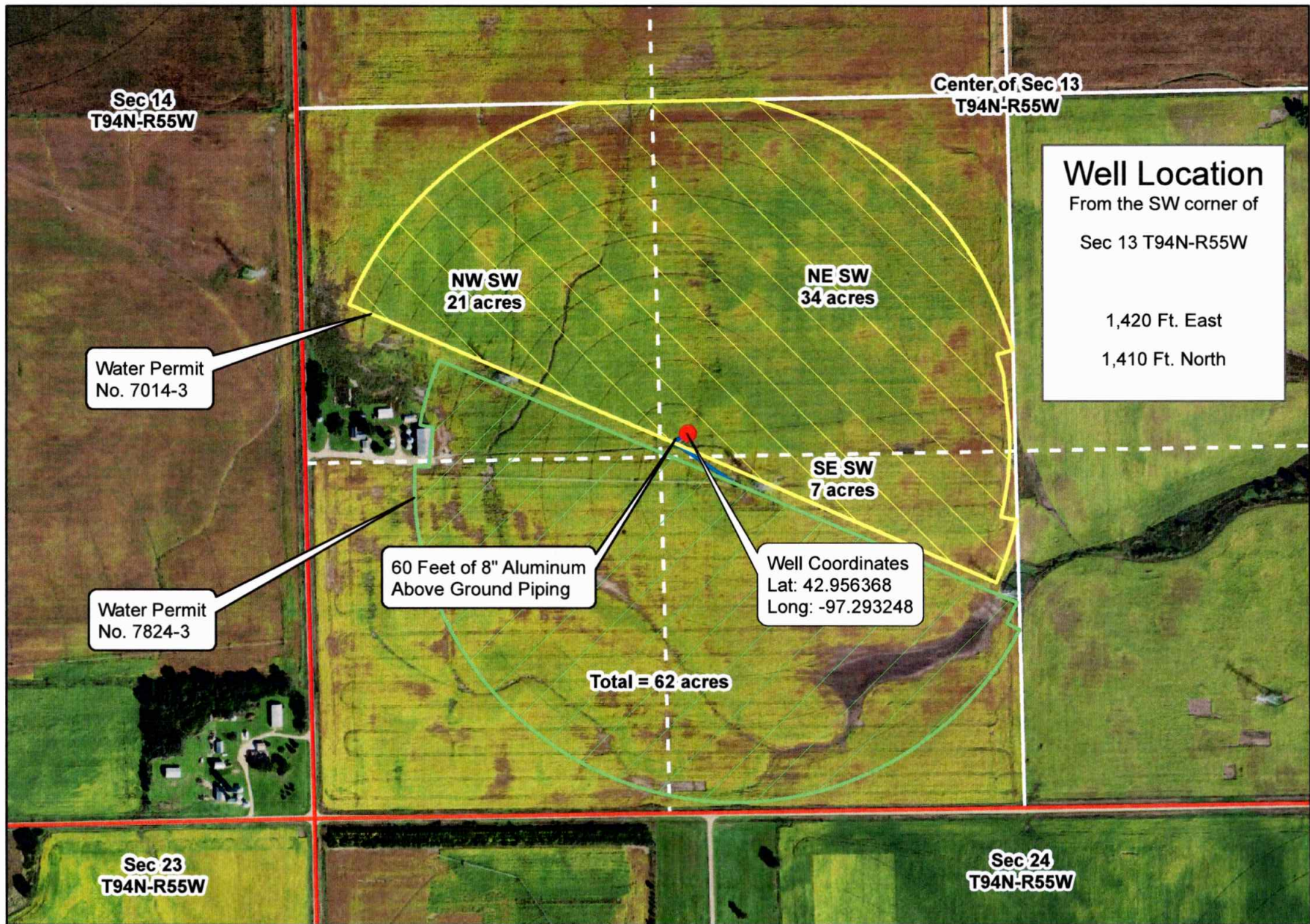
Water Permit No. 7014-3 will be incorporated into Water License No. 7824-3.

Priority dates are as follows:

(7014-3) April 14, 2008 – 62 acres & 1.78 cfs
 (7824-3) April 10, 2013 – 53 acres

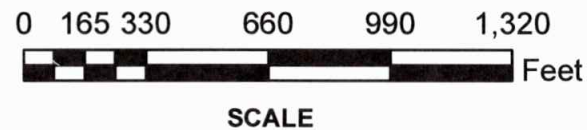
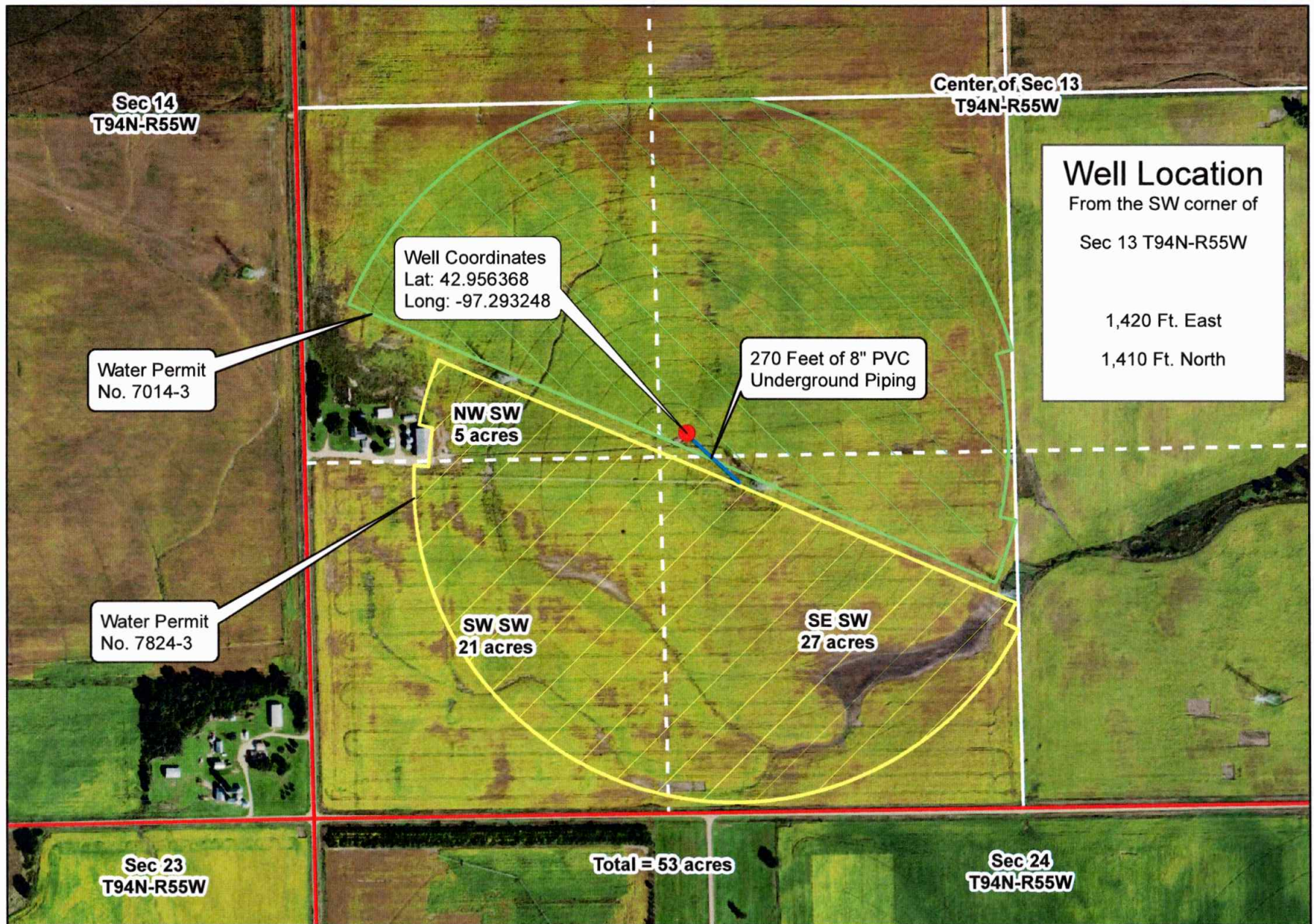
Genny

Water Right No. 7014-3



Keith DeJong
Keith DeJong, PE
Staff Engineer
September 1, 2021

Water Right No. 7824-3



Keith DeJong
Keith DeJong, PE
Staff Engineer
September 1, 2021

7824-3



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

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

SEP 3 0 2021

7014-3
7824-3

Gary Smith
PO Box 151
Mission Hill SD 57046-0151

Dear Mr. Smith:

Enclosed is Water License No. 7824-3. 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, 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

Note: The applicable portions of Water Permit No. 7014-3 were incorporated into Water License No. 7824-3.

STATE OF SOUTH DAKOTA

WATER LICENSE NO. 7824-3

(1) Gary Smith, PO Box 151, Mission Hill SD 57046 made Application No. 7824-3, April 10, 2013 for a water permit to add 55.9 acres to the system authorized under Water Permit No. 7014-3 from ground water, one existing well (Lower James Missouri Aquifer), located in Yankton County, South Dakota. Permit No. 7824-3, with a priority date of April 1, 2013 was approved July 1, 2013 and issued to the applicant for diversion of water with construction of the described water supply system to be completed on or before July 1, 2018 and for the application to beneficial use of said water on or before July 1, 2022.

Water Permit No. 7014-3, with a priority date of April 14, 2008, authorized diversion of 2.00 cubic feet of water per second (cfs) from one well to irrigate 76 acres. Water Permit No. 7824-3 increased the number of acres irrigated from the existing well with no increase in the diversion rate.

The applicable portions of Water Permit No. 7014-3 are incorporated into this Water License No. 7824-3 with priority dates of April 14, 2008 (1.78 cfs & 62 acres) and April 10, 2013 (53 acres).

(2) It is certified that the permit holder has complied with the provisions of South Dakota State Law relating to construction of the water supply system and is entitled to divert 1.78 cubic feet of water per second for beneficial use.

The location of the diversion point is:

- 1,420'E and 1,410'N of the SW corner of Section 13, T94N, R55W (NE ¼ SW ¼)
Latitude 42.956368, Longitude -97.293248

(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 13, T94N, R55W	NW ¼ SW ¼	26 acres
	SW ¼ SW ¼	21 acres
	NE ¼ SW ¼	34 acres
	SE ¼ SW ¼	34 acres
Total		115 acres

(4) Pursuant to South Dakota Water Law 46-5-30.1 Gary Smith, PO Box 151, Mission Hill SD 57046 the holder and/or owner of Incorporated Water Right No. 7824-3 is issued a license to appropriate water, the right to use 1.78 cubic feet of water per second from ground water, one well (Lower James Missouri Aquifer) with priority dates of April 14, 2008 (1.78 cfs & 62 acres) and April 10, 2013 (53 acres) from the location specified in (2) of this license for irrigation purposes.

continued

This license is subject to South Dakota Water Law, any limitations or conditions listed in Incorporated Water Right No. 7824-3 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. 7014-3 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 July 2008 by Hammond Wetmore Drilling LLC. A copy of the well completion report is on file with the Water Rights Program.*
- Pursuant to SDCL 46-5-6 which allows a greater diversion rate if the method of irrigation, time constraints, or type of soils so requires, No. 7014-3 authorizes a maximum diversion rate of 2.00 cfs for the irrigation of 76 acres with an annual volume not to exceed 2 acre feet of water per acre per year. *Water Permit Nos. 7014-3 and 7824-3 have been incorporated into Water License No. 7824-3 and issued to reflect the level of development. Therefore, this qualification is modified to reflect a maximum diversion rate of 1.78 cfs for the irrigation of 115 acres with an annual volume not to exceed 2 acre feet of water per acre per year.*
- This Water Right is approved subject to the irrigation water use questionnaire being submitted each year.

Eric Gronlund

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

SEP 30 2021
date

