

WATER PERMIT NO. 8252-3

Name of Applicant: Michael J Slama

Address: 30535 422nd Ave, Tabor SD 57063

Phone: 605 464-1708

Amount of Water Claimed: 0.10 cfs (45 AF annually)

Total Acres: NA

Source of Water Supply: groundwater (2 existing wells)

Water to be used for: commercial use

County: Bon Homme

Type of Waste Disposal System:

Location: 5 miles east of Tabor

PRIORITY Date Received: 10-7-16

Application/License Fee: \$ 300

Corrected Application Received: 12-14-16

Period of Annual Use: Jan 1 – Dec 31

Remarks: confinement facility

Diversion Point: SE 1/4 SE 1/4 Sec 12 and SE 1/4 NE 1/4 Sec 13; all in T94N-R59W

Land to be Irrigated: XX

Depth of Well: 180 and 700 feet deep

Well Driller: Koranda Well Drilling

Remarks:

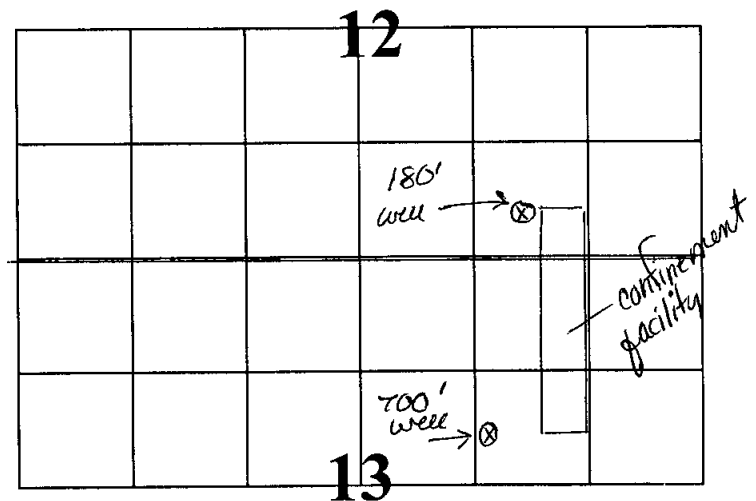
Type of Map: aerial

Prepared by:

Reviewed and the Number Assigned on: 12-14-16

By: **Karen Schlaak**

Notice of Hearing - date to intervene: _____



Mail to: DENR - Water Rights 523 E Capitol Ave Pierre, SD 57501-3182 ph. (605) 773-3352	No. <u>8252-3</u> (office use only) Hydrologic Unit <u>10170101</u>
	Basin <u>Missouri River</u>
	Newspaper <u>Tyndale Register</u> <u>605-589-3242</u>
	<u>Press & Dakotan, Yankton</u> <u>605-665-2811</u>

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OCT - 7 2016

WATER RIGHTS
PROGRAM

Application For Permit To Appropriate Water Within The State Of South Dakota

Check use(s) of water:

☐ Municipal	☐ Water Distribution System	☐ Recreational	☐ Institutional
☐ Rural Water System	☒ Commercial	☐ Fish & Wildlife	☐ Geothermal
☐ Domestic (over 18 gpm)	☐ Industrial	☐ Other _____	

Type of Application:
(check one)

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

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

- Name to Appear on Water Permit Michael J. SLAMA
Mailing Address 30535 422 Ave TABOR SD 57063
Phone (605) 589-3535 Mobile (605) 464-1708 Email mslama@hcinet.net
(Address) (City) (State) (Zip Code)
- Amount of water claimed 0.10 *CFS or 45 **GPM and 45 ***AF or _____ Gallons
Flow rate and volume are both required. (*Cubic Feet per Second) (**Gallons per Minute) (**Acre Feet - storage capacity of dam/dugout or annual use)
- Source of water supply 2 wells 700' 180'
- Location of point of diversion see maps SE 1/4 SE 1/4 Sec 12 SE 1/4 NE 1/4 Sec 13 - T94N R59W
(example - 3 wells in SW 1/4 NE 1/4 section 12-T104N-R53W) County Bon Homme
If not a public water supply (e.g. municipal), will water be used outside of the area described above? ☐ Yes ☐ No
If "Yes," where will water be used? Facility Located SE 1/4 SE 1/4 Sec 12 E 1/2 NE 1/4 Sec 13 - T94N-R59W
(example - NW 1/4 section 12-T104N-R53W)
- County or counties where water will be used Bon Homme
- Annual period during which water is to be used yearly continuous Jan 1 - Dec 31
- Give a description of the project. When available include any preliminary engineering report or other reports or information that will help explain the project. (Attach sheet if more space is needed)

I, Michael J. Slama, the applicant, certify under
Name of Person Title (if applicable)

penalty of perjury that I have read this application, examined the attached map, and that the matters stated are true. I further certify, if acting on behalf of an entity or individual other than myself, that I am authorized to submit this application.

SOUTH DAKOTA
WATER PERMIT NO. 8252-3

Date of first receipt of application October 7, 2016.

Date of return to applicant for corrections, amendments or changes October 11, 2016.

Date of receipt of corrected application December 14, 2016.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 8252-3 to Michael J Slama, 30535 422nd Ave, Tabor SD 57063 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. 8252-3 authorizes a combined 45 acre-feet of water annually at a maximum combined diversion rate of 0.10 cubic feet of water per second from two wells. The well completed into the Codell Aquifer (160 feet deep) located in the SE 1/4 SE 1/4 Section 12-T94N-R59W is for an appropriation of 0.056 cfs. The other well completed into the Dakota Aquifer (700 feet deep) located in the SE 1/4 NE 1/4 Section 13-T94N-R59W appropriates 0.044 cfs.
2. The water appropriated shall be used for the purpose of commercial use in a livestock confinement facility located in portions of the SE 1/4 SE 1/4 Section 12 and the E 1/2 NE 1/4 Section 13; all in T94N-R59W 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. 8252-3 is February 21, 2017.
5. The date from which applicant may claim right is December 14, 2016.
6. One-fifth of the construction is to be completed on or before August 21, 2019.
7. All construction is to be completed on or before February 21, 2022.
8. Water is to be put to beneficial use on or before February 21, 2026.
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 wells approved under Water Permit No. 8252-3 will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner, under these Permits shall control withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
2. Permit No. 8252-3 is subject to compliance with requirements of the Department's Water Pollution Control Permit issued pursuant to SDCL 34A-2-36 or 34A-2-112 for concentrated animal feeding operations.

(continued)

3. Permit No. 8252-3 is subject to compliance with all existing and applicable Water Management Board Rules including but not limited to:
 - a) Chapter 74:54:01 Ground Water Quality Standards,
 - b) Chapter 74:54:02 Ground Water Discharge Permit,
 - c) Chapter 74:51:01 Surface Water Quality Standards,
 - d) Chapter 74:51:02 Uses Assigned to Lakes,
 - e) Chapter 74:51:03 Uses Assigned to Streams, and
 - f) Chapter 74:52:01 through 74:52:11 Surface Water Discharge Provisions
4. The Permit holder shall separately report to the Chief Engineer annually the amount of water withdrawn from the Codell aquifer and the Dakota aquifer.
5. Water Permit No. 8252-3 authorize a combined total annual diversion of 45.0 acre feet of water.

WATER MANAGEMENT BOARD

By: Jeanne Goodman

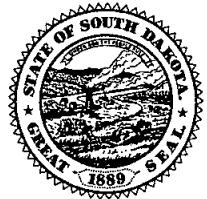
Jeanne Goodman, Chief Engineer

Water Rights Program

Department of Environment and Natural Resources

MAR 30 2017

date



Supplemental Information

(type or print)

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 2 Provide copy of log(s), if available. Drilled by _____

For either Existing or Proposed Wells:

c) Well Depth (required) 180' 400' Depth to Top of Water Bearing Material _____ Depth to Water from Surface _____

d) Distance to nearest domestic well on applicant's property _____ Property owned by others _____

2. Wastewater Disposal System Information

a) Type of System (i.e. septic tank, drain field) feed lot cattle water supply

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)

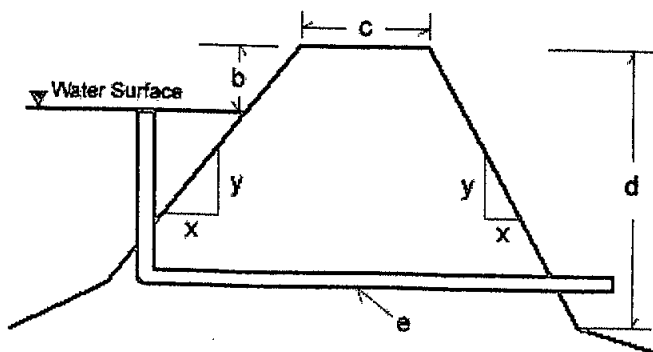
Upstream _____

Downstream _____

h) Surface Area of Impoundment _____

i) Storage _____ Acre Feet

j) Drainage Area Above Dam _____ Acres



Sec 12
T094N
R59W

Sec 7
T094N
R58W

160ft
well

Sec 13
T094N
R59W

Sec 18
T094N
R58W

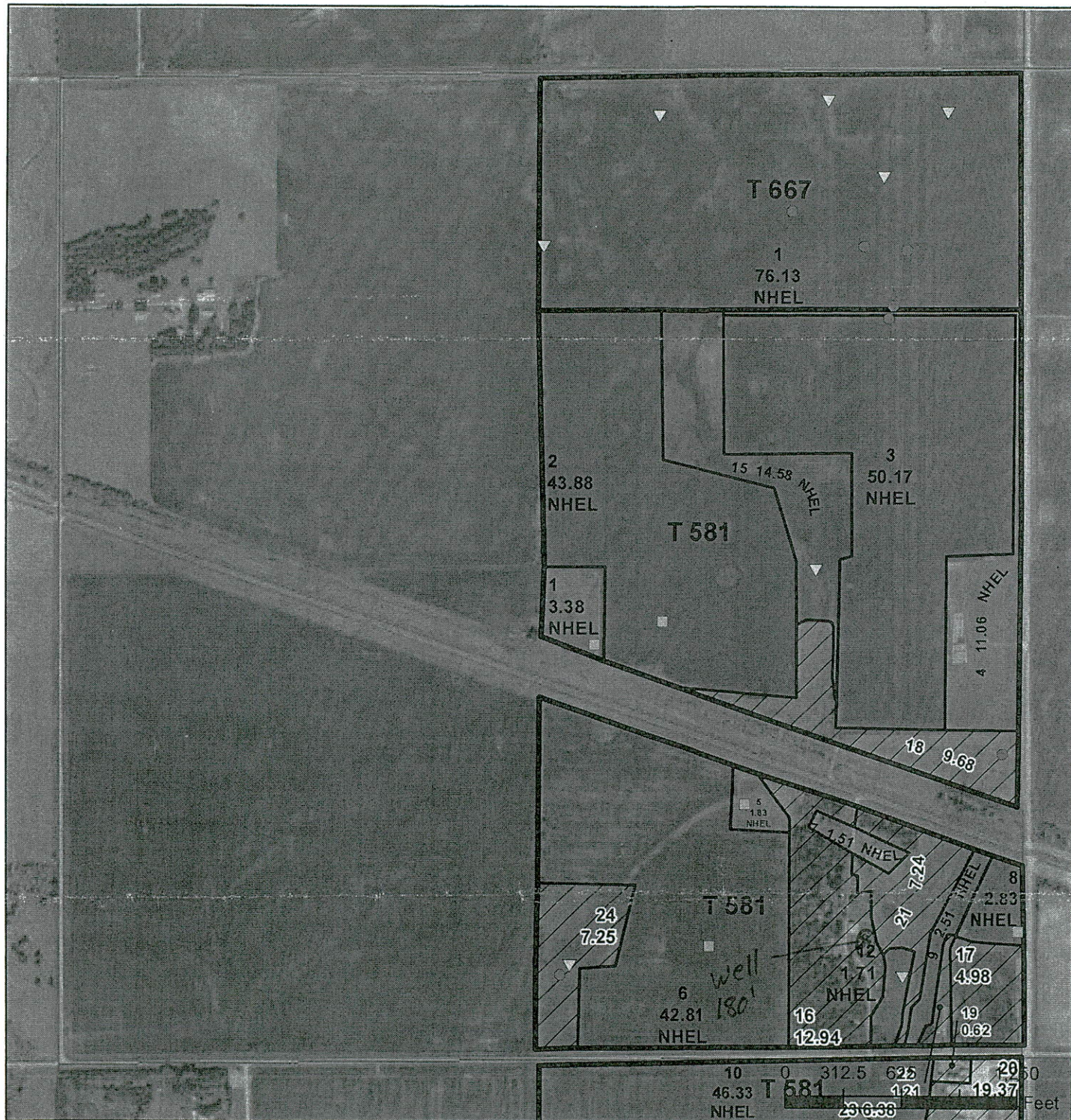
700' well





United States
Department of
Agriculture

Bon Homme County, South Dakota



Common Land Unit Tract Boundary
 Cropland PLSS
 Non-Cropland

Wetland Determination Identifiers

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



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2015 Program Year

Map Created April 06, 2015

Farm 6266

12 -94N -59W

United States Department of Agriculture (USDA) Farm Service Agency (FSA) maps are for FSA Program administration only. This map does not represent a legal survey or reflect actual ownership; rather it depicts the information provided directly from the producer and/or National Agricultural Imagery Program (NAIP) imagery. The producer accepts the data 'as is' and assumes all risks associated with its use. USDA-FSA assumes no responsibility for actual or consequential damage incurred as a result of any user's reliance on this data outside FSA Programs. 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 boundaries and determinations or contact USDA Natural Resources Conservation Service (NRCS).



United States
Department of
Agriculture

Bon Homme County, South Dakota



Common Land Unit
 Cropland
 Non-Cropland
 Tract Boundary
 PLSS

Wetland Determination Identifiers

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



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WATER RIGHTS
PROGRAM

2015 Program Year

Map Created April 06, 2015

Farm 6266

13 -94N -59W

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RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date 10/7, 20 16

RECEIVED OF Michael Slama 30535 422nd Ave Tabor SD 57063

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	100	00
Fee for Application for Permit No. _____ to Appropriate Water for Future use		
Fee to retain Future Use Permit No. _____ after period of seven years.		
Fee for Inspecting Constructed Works, confirming beneficial use and issuing Water License No. _____	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. **07931**

By J. [Signature]
Chief Engineer

Schlaak, Karen

From: Schlaak, Karen
Sent: Friday, October 07, 2016 11:17 AM
To: 'mslama@hcinet.net'
Subject: Application for Permit to Appropriate Water

Mr. Slama,

We received your Application for Permit to Appropriate Water and just a couple of items need to be addressed.

The application requests an appropriation of 45 gallons per minute. In addition to the pump rate, the application needs to include the annual volume in either gallons/year or acre-feet/year. In calculating the annual volume, be reasonable but also plan for the maximum annual volume of use from the wells at full development of the confinement facility.

Also the maps marked the locations of the wells. Where is actual confinement facility located?

If you have questions concerning the annual volume, please contact Eric Gronlund with this office.

Let me know if you have questions.

Karen Schlaak
Water Rights Program
523 E Capitol Ave
Pierre SD 57501
Phone: 605 773-3352



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

denr.sd.gov

December 6, 2016

Michael J Slama
30535 422nd Ave
Tabor SD 57063

Dear Mr. Slama:

On October 7, 2016, you submitted *an Application for Permit to Appropriate Water Within the State of South Dakota* for commercial use in a confinement facility. You were notified what additional information was required to complete the application. A copy of that letter is enclosed. To date, we have not received the required information.

- As stated in the letter, please include the annual volume of water being requested.
- Outline the location of the confinement facility. I have included a map for your use.
- Any information regarding the 700 feet deep well.

If you have any questions, please contact me.

Sincerely,

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

enclosures



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

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DEC 14 2016

WATER RIGHTS
PROGRAM

October 11, 2016

Michael J Slama
30535 422nd Ave
Tabor SD 57063

Dear Mr. Slama:

Thank you for submitting the *Application for a Permit to Appropriate Water* for commercial use at your confinement facility in Bon Homme County. In order to complete the application, the following is required.

- The application requests an appropriation of 45 gallons per minute. In addition to the pump rate, the application needs to include the annual volume in either gallons/year or acre-feet/year. In calculating the annual volume, be reasonable but also plan for the maximum annual volume of use from the wells at full development of the confinement facility.
- Please outline the confinement facility on the map.
- I reviewed our files and found a well completion report for a 160 feet deep well located in the SE 1/4 Section 12. Do you have any additional information regarding the 700 feet deep well such as who the driller was or a copy of the well completion report?

If you have questions concerning the annual volume, please contact Eric Gronlund with this office.

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

- 1) 700 ft well
- 2) Dug in 1976?
- 3) NON flowing ARTISIAN
- 4) water level comes ABOUT 13-20 ft to surface.
- 5) pumps ABOUT 20 gal/min.
- 6) 2 pumps at 60% = 15 million gal/yr.

Water Rights Program - DENR
Conversation File Documentation

NAME OF FILE: Michael Slama

ADDRESS: 30535 422 Avenue, Tabor SD 57063

COUNTY: Bon Homme County

DATE: December 12, 2016 TELEPHONE:

RE: call from Michael Slama

Mr. Slama called in regards to how to calculate the annual volume of water to be used that was requested in Karen Schlaak's December 6th letter. He did not know what the annual use would be and didn't know how often the pumps run. He said it is considerable during the summer when he has the misters running.

I suggested applying the 60% pump rule for a peak pump capacity of 45 gpm. Rounding up this equates to 45 acre feet of water annually. Mr. Slama thought that was a good number and wanted to be a little on the high side. He asked that I amend his application to include an annual volume of 45 acre feet of water.

NAME: Eric Hummel

Water Rights Program - DENR
Conversation File Documentation

NAME OF FILE: Michael Slama - Application No. 8252-3

ADDRESS: 30535 422 Avenue, Tabor SD 57063 COUNTY: Bon Homme County

DATE: December 14, 2016 TELEPHONE:

RE: Michael Slama application

In Mr. Slama's response to DENR's October 11th letter indicates the 700 foot deep well has a pump rate of 20 gpm. Based on this, the diversion rate from the 180 foot well is 25 gpm.

NAME: Eric Hunsbarger



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

denr.sd.gov

**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 8252-3, Michael J Slama**

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. 8252-3, Michael J Slama, 30535 422nd Avenue, Tabor SD 57063.

The Chief Engineer is recommending APPROVAL of Application No. 8252-3 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, 4) it is in the public interest with the following qualifications:

1. The wells approved under Water Permit No. 8252-3 will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner, under these Permits shall control withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
2. Permit No. 8252-3 is subject to compliance with requirements of the Department's Water Pollution Control Permit issued pursuant to SDCL 34A-2-36 or 34A-2-112 for concentrated animal feeding operations.
3. Permit No. 8252-3 is subject to compliance with all existing and applicable Water Management Board Rules including but not limited to:
 - a) Chapter 74:54:01 Ground Water Quality Standards,
 - b) Chapter 74:54:02 Ground Water Discharge Permit,
 - c) Chapter 74:51:01 Surface Water Quality Standards,
 - d) Chapter 74:51:02 Uses Assigned to Lakes,
 - e) Chapter 74:51:03 Uses Assigned to Streams, and
 - f) Chapter 74:52:01 through 74:52:11 Surface Water Discharge Provisions
4. The Permit holder shall separately report to the Chief Engineer annually the amount of water withdrawn from the Codell aquifer and the Dakota aquifer.
5. Water Permit No. 8252-3 authorize a combined total annual diversion of 45.0 acre feet of water.

See report on application for additional information.

Jeanne Goodman, Chief Engineer
February 3, 2017

REPORT TO THE CHIEF ENGINEER
ON
WATER PERMIT APPLICATION NO. 8252-3
MICHAEL J SLAMA
FEBRUARY 3, 2017

Water Permit Application No. 8252-3 proposes to authorize the appropriation of 45 acre-feet of water annually (ac-ft/yr.) at a maximum combined diversion rate of 0.10 cubic feet of water per second (cfs) from two existing wells with different water sources. One well is 160 feet deep completed into the Codell aquifer. It is located in the SE ¼ SE ¼ Section 12-T94N-R59W and will have a maximum diversion rate of 0.056 cfs. The other well is approximately 700 feet deep completed into the Dakota aquifer. It is located in the SE ¼ NE ¼ Section 13-T94N-R59W and will have a maximum diversion rate of 0.044 cfs. The water is for commercial use in a livestock confinement facility located in portions of the SE ¼ SE ¼ Section 12 and the E ½ NE ¼ Section 13; all in T94N-R59W in Bon Homme County.

AQUIFERS: Codell (CDLL) and Dakota (DKOT)

This report will address each aquifer and the diversion from each aquifer separately.

CODELL AQUIFER

Aquifer Characteristics:

The well completion report for the 160 foot deep well submitted with this application is for a well constructed in 1987. The well completion report identifies “SHALE FINE DARK GRAY SAND” from 90 to 135 feet below grade, “MED. SAND” from 135 to 143 feet below grade, “HARD LAYER” from 143 to 147 feet below grade, and “SAND, MED. TO HEAVY COARSE” from 147 to 160 feet below grade. Based on Lithologic Logs (SDGS, 2017), water well completion reports (Water Rights, 2017c), a bedrock map for eastern South Dakota (Tomhave and Schulz, 2004), and a comparison of the potentiometric surfaces of the Codell, Choteau: Tyndall, and Lower James Missouri: Scotland aquifers (Water Rights, 2017a), the shale identified from 90 to 135 feet below grade is interpreted as the upper shale layer of the Carlile Shale which overlies the Codell Sandstone which comprises the Codell aquifer.

The Codell aquifer is the siltstone to fine-grained sandstone member of the Carlile Shale (Jorgensen, 1971). The aquifer underlies approximately 4,960,000 acres and contains an estimated 9,895,700 acre-feet (ac-ft) of recoverable water in storage in South Dakota (Hedges et. al, 1982). In general, the Codell aquifer is overlain and underlain by impermeable shale and found under confined conditions in Bon Homme County (Jorgensen, 1971). The depth to the top of the aquifer ranges from 100 to 900 feet below land surface in Bon Homme County (Jorgensen, 1971). The static water level of the well completed into the Codell aquifer this application intends use was 10 feet below land surface in December 1987. Currently, the static water level in the well is expected to be approximately 10 feet below grade.

South Dakota Codified Law (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 this 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 effects on existing rights from the aquifer that are pertinent to this application.

WATER AVAILABILITY:

This application proposes to appropriate water from the Codell and Dakota aquifers. This portion of the report is specifically in reference to the availability of water from the Codell aquifer. This application will likely pump less than 25 ac-ft/yr. from the Codell aquifer. The probability of unappropriated water available from either 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 that 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 water distribution system has applied for a permit, the Board need not consider the recharge/withdrawal issue. In this case, the Codell aquifer is not stratigraphically lower than the Greenhorn Formation and the applicant is not a water distribution system.

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 in addition to other data to determine that the quantity of water withdrawn annually from the aquifer does not exceed the estimated average annual recharge of the aquifer.

The DENR-Water Rights Program monitors 22 observation wells completed into the Codell aquifer (Water Rights, 2017b). There are three observation wells completed into the Codell aquifer within 30 miles of the Codell aquifer well this application proposes to use. These observation wells are shown in Figure 1. Observation well BH-2016E is approximately four miles north, HT-83E is approximately 14.5 miles north-northwest, and HT-87D is approximately 23 miles northwest of the Codell aquifer well this application proposes to use (Water Rights, 2017a). The hydrographs for BH-2016E, HT-83E, and HT-87D are shown in Figures 2 through 4, respectively.

The hydrographs for BH-2016E, HT-83E, and HT-87D are representative of hydrographs from other observation wells completed into the Codell aquifer (Water Rights, 2017a). The hydrographs for observation wells completed into the Codell aquifer generally show a rising water level or a water level that is neither rising nor falling over the period of record. The hydrographs for these observation wells show the effect of climate on the water level of the aquifer, rising when recharge exceeds natural discharge plus withdrawals from the aquifer and declining when natural discharge plus withdrawals exceed recharge. The water level data shown in Figures 2 through 4 show natural effects, such as climate, recharge to, and natural discharge from the Codell aquifer, dominates and masks effects that pumping may have on the water level of the aquifer. Recognizing that natural discharge from an aquifer can be captured for pumping, the hydrographs document there is unappropriated water available from the Codell aquifer to support this proposed appropriation.

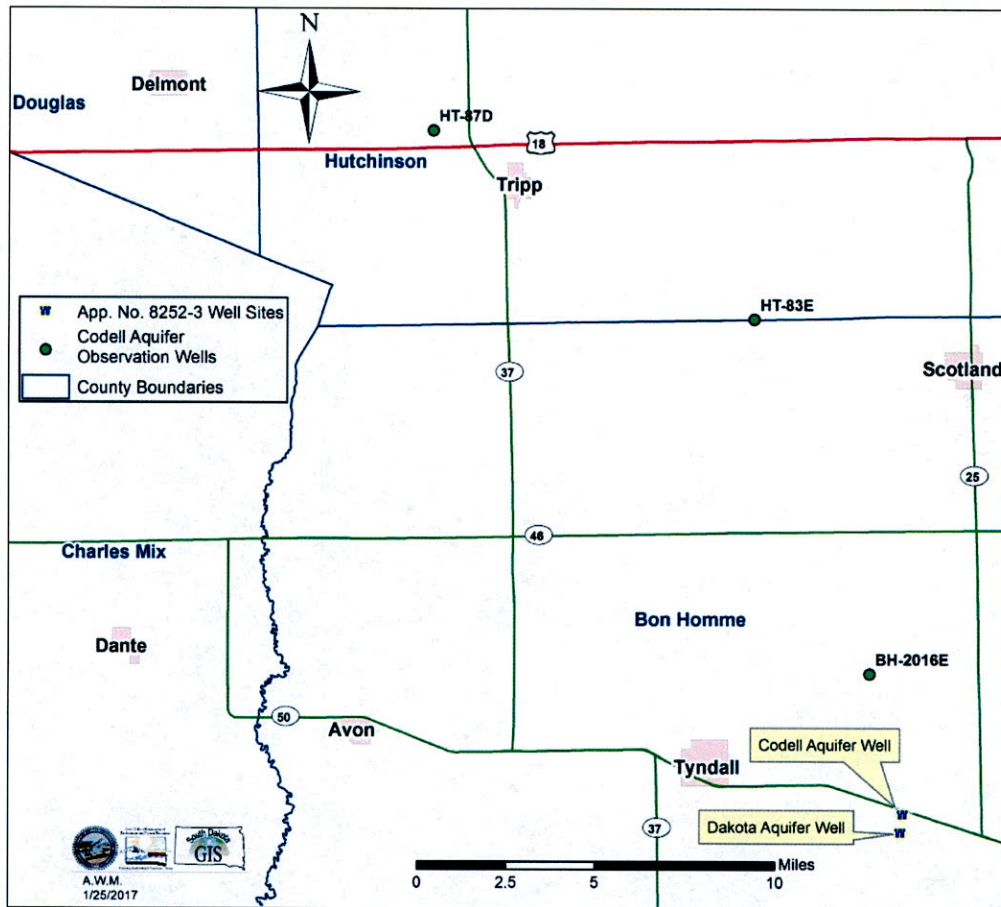


Figure 1- Map of the nearest Codell observation wells to the Codell aquifer well Application No. 8252-3 proposes to use (Water Rights, 2017a)

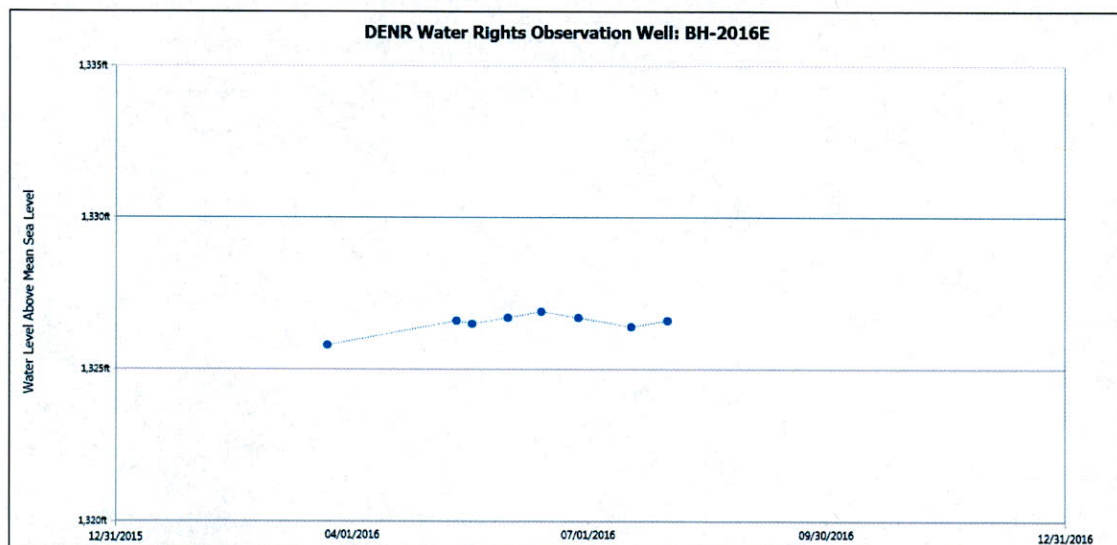


Figure 3- Hydrograph for observation well BH-2016E, location shown in Figure 1(Water Rights, 2017a)

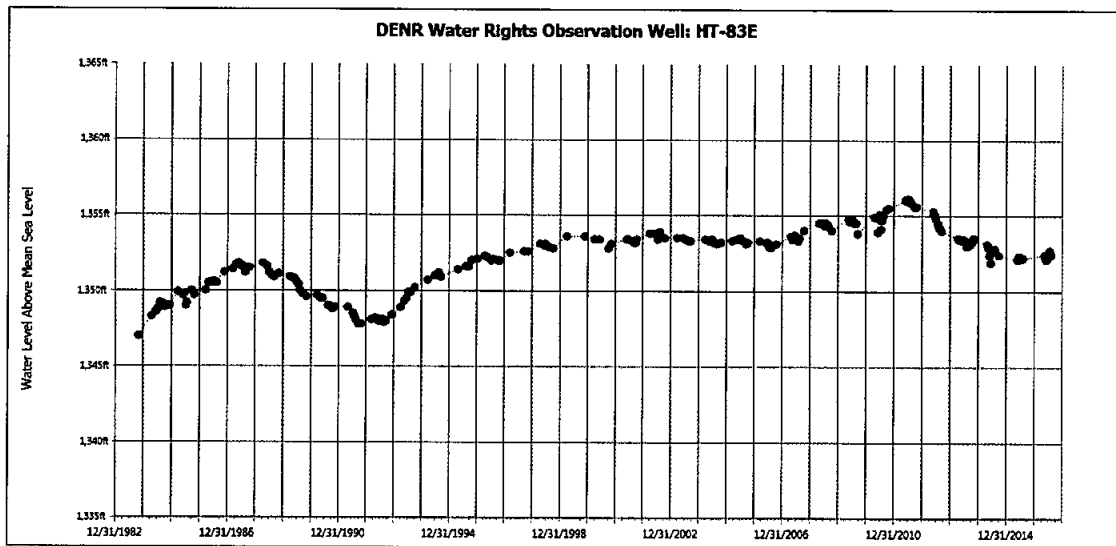


Figure 4- Hydrograph for observation well HT-83E, location shown in Figure 1 (Water Rights, 2017a)

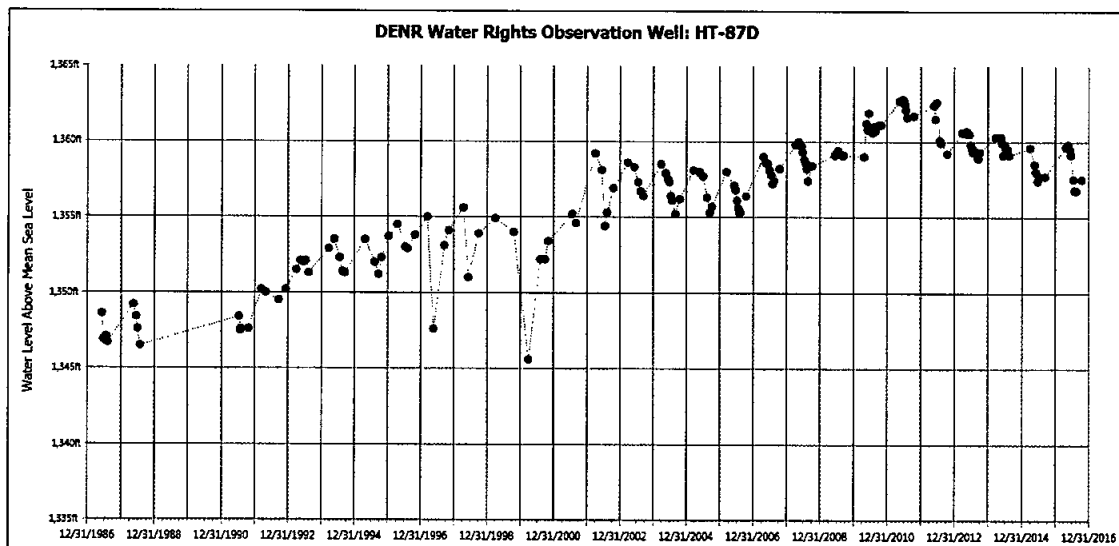


Figure 5- Hydrograph for observation well HT-87D, location shown in Figure 1 (Water Rights, 2017a)

Recharge and Discharge:

Recharge:

Jorgensen (1971) stated recharge to the Codell aquifer in Bon Homme County is from subsurface inflow from outside the county and from glacial outwash aquifers that are in direct contact and have a higher potentiometric surface. There is no estimate for a recharge rate to the Codell aquifer.

Discharge:

The Codell aquifer discharges through well pumpage and subsurface outflow to the Missouri River trench (Jorgensen, 1971). There are 38 water rights/permits authorized to withdraw water from the Codell aquifer (Water Rights, 2017b). Table 1 lists the water rights/permits.

PERMIT NO.	NAME	COUNTY	STATUS	USE	CFS	ACRES	ESTIMATED ANNUAL PUMPAGE (AC-FT)
551-3	STATE TRAINING SCHOOL	AU	LC	INS	0.17	N/A	73.8
555-3	CITY OF ARMOUR	DG	LC	MUN	0.5	N/A	*
687-3	CITY OF LAKE ANDES	CM	LC	MUN	0.73	N/A	*
1676-3	TOWN OF NUNDA	LK	LC	MUN	0.1	N/A	43.4
1694-3	TOWN OF STICKNEY	AU	LC	MUN	0.11	N/A	*
1892-3	CITY OF WAKONDA	CL	LC	MUN	0.33	N/A	*
1966-3	CITY OF GEDDES	CM	LC	MUN	0.38	N/A	*
4120-3	CITY OF PLANKINTON	AU	LC	MUN	0.36	N/A	*
4279-3	CITY OF DELMONT	DG	LC	MUN	0.3	N/A	*
4279A-3	CITY OF DELMONT	DG	LC	MUN	0	N/A	*
4383-3	DOUGLAS COUNTY CHEESE CO	DG	LC	IND	0.07	N/A	30.4
4402-3	CITY OF TRIPP	HT	LC	MUN	0.64	N/A	278.0
4836-3	CITY OF CORSICA	DG	LC	MUN	0.13	N/A	*
4977-3	CITY OF MENNO	HT	LC	MUN	0.5	N/A	*
5330-3	CITY OF AVON	BH	LC	MUN	0.33	N/A	*
5477-3	ARTESIAN-LETCHER SCHOOL DIST 55-5	SA	LC	INS	0.05	N/A	21.7
5480-3	CORTRUST BANK NA	SA	LC	COM	0.04	N/A	17.4
5549-3	NATIONAL FOODS CORP	AU	LC	COM/LCO	0.26	N/A	112.9
5598-3	STORLA SUNSET HOME	AU	LC	INS	0.08	N/A	*
5731-3	ST CHARLES CATHOLIC CHURCH	SA	LC	INS	0.033	N/A	14.3
5756-3	TOWN OF RAVINIA	CM	LC	MUN	0.07	N/A	*
5823-3	DNA PRODUCTION LLC	DG	LC	COM/LCO	0.22	N/A	95.6
5978-3	NORFELD HUTTERIAN BRETHERN INC	BG	LC	COM/LCO	0.111	N/A	48.2
5995-3	BERNARD L VAN VUJREN	DG	LC	COM/LCO	0.177	N/A	76.9
6018-3	NATIONAL FOODS CORP	AU	LC	COM/LCO	0.27	N/A	117.3
6041A-3	CALVIN BERWALD	AU	LC	COM/LCO	0.08	N/A	34.8
6232-3	ROCKPORT HTRN BRTH	HS	LC	DOM	0.222	N/A	96.4
6323-3	NEW ELM SPRINGS COLONY	HT	LC	DOM	0.09	N/A	39.1
6539-3	CLEARFIELD COLONY	CM	LC	DOM	0.2	N/A	86.9
6544-3	ARMOUR	DG	LC	REC/FWP	1.381	N/A	599.9
6762-3	VAN WINKLE DAIRY LP	MC	LC	COM/LCO	0.27	N/A	117.3
7206-3	LONG VIEW FARMS LLP	CM	PE	COM/LCO	0.067	N/A	29.1
7359-3	JAMES C KOKES	BH	PE	COM/LCO	0.1	N/A	43.4
7469-3	WILLIAM CHENOWETH	BH	PE	IRR	3.11	217	N/A
7664-3	JAMES C & JASON KOKES	BH	PE	IRR	1.78	90	N/A
7830-3	TOM BARES	BH	PE	IRR	1.78	96	N/A
7851-3	ALAN ARMSTRONG	BH	PE	DOM	0.067	N/A	29.1
7978-3	CHAD OR RITA SVATOS	CM	LC	IRR	1.78	140	N/A
AU= Aurora, DG= Douglas, BH= Bon Homme, CL= Clay, CM= Charles Mix, DG= Douglas, HS= Hanson, HT= Hutchinson, LK= Lake, MC= McCook, SA= Sanborn, LC= Water Rights, PE= Water Permit, *= Connected to rural water/standby use, N/A= Not Applicable COM= Commercial, DOM= Domestic, FWP= Fish and Wildlife Production, IND= Industrial, INS= Institutional, IRR= Irrigation, LCO= Livestock Confinement Operation, MUN= Municipal, REC= Recreational							

Table 1- Water rights/permits authorized to withdraw water from the Codell aquifer including estimated annual volume pumped (Water Rights, 2017b)

The estimated annual volume pumped by non-irrigation water permits is calculated by assuming pumping at the maximum permitted diversion rate for 60 percent of the time. Most of the

municipalities that have water rights to withdraw water from the Codell aquifer are connected to rural water systems and maintain the wells for standby/emergency purposes (Friedeman, 2017). Therefore, it can be assumed there is a negligible volume of pumping under those water rights. Estimated annual volume pumped by non-irrigation permits is 2,006 ac-ft/yr.

There are many domestic wells completed into the Codell aquifer (Water Rights, 2017c). It is also likely that many of the wells are no longer used as primary water sources due to the proliferation of rural water systems. Therefore, withdrawal due to domestic use is not considered a significant portion of the hydrologic budget.

Application 3008-3 for Carl Estabrook was issued a one year experimental irrigation permit in September 1976. The pumping under the experimental permit was never completed and the application was withdrawn in December 1986. There were no other irrigation applications for the Codell aquifer until 2003. Table 2 shows the history of irrigation pumping from the Codell aquifer.

As Table 2 shows, irrigation development from the Codell aquifer has increased in recent years. Thus, it would be more appropriate and accurate to estimate potential average annual irrigation pumping. In general, irrigators in eastern South Dakota apply less than one foot of water per acre per year. Therefore, annual irrigation pumping from the Codell aquifer is likely to be less than 543 ac-ft/yr.

Year	No. of Permits Reporting	Appropriation (ac-ft)	Pumpage (ac-ft)
2003	1	74	1.25
2004	1	74	13.40
2005	1	74	26.52
2006	1	74	26.52
2007	1	74	0.00
2008	1	74	6.46
2009	1	74	3.12
2010	1	74	2.62
2011	1	74	3.37
2012	1	74	0.00
2013	4	880	23.57
2014	4	1086	161.69
2015	4	1086	191.24
Min	1	74	0
Max	4	1086	191.24
Avg.	1.7	291.7	35.4

Table 2- Irrigation pumping history of the Codell aquifer (Water Rights, 1979-2016)

Hydrologic Budget:

Estimated annual water use by non-irrigation permits is 2,006 ac-ft/yr. Irrigation water permits are likely to pump less than 543 ac-ft/yr. There is no recharge estimate for the Codell aquifer. This application, if approved, is estimated to pump approximately 25 ac-ft/yr.

Hedges and others (1985) stated:

“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.”

Hedges and others (1985) statement is supported by the general upward trend of most of the observation well hydrographs. Furthermore, over the period of record there has been slow but continual appropriative development of the aquifer without issue. Therefore, there is a reasonable probability unappropriated water is available for the portion of this application that proposes to withdraw water from the Codell aquifer.

EXISTING WATER RIGHTS:

Application No. 8252-3 proposes to divert water from the Codell aquifer at a maximum rate of 0.056 cfs (25 gallons per minute). Figure 5 shows the Codell aquifer water permits and observation wells within approximately 10 miles of the well site this application proposes to use.

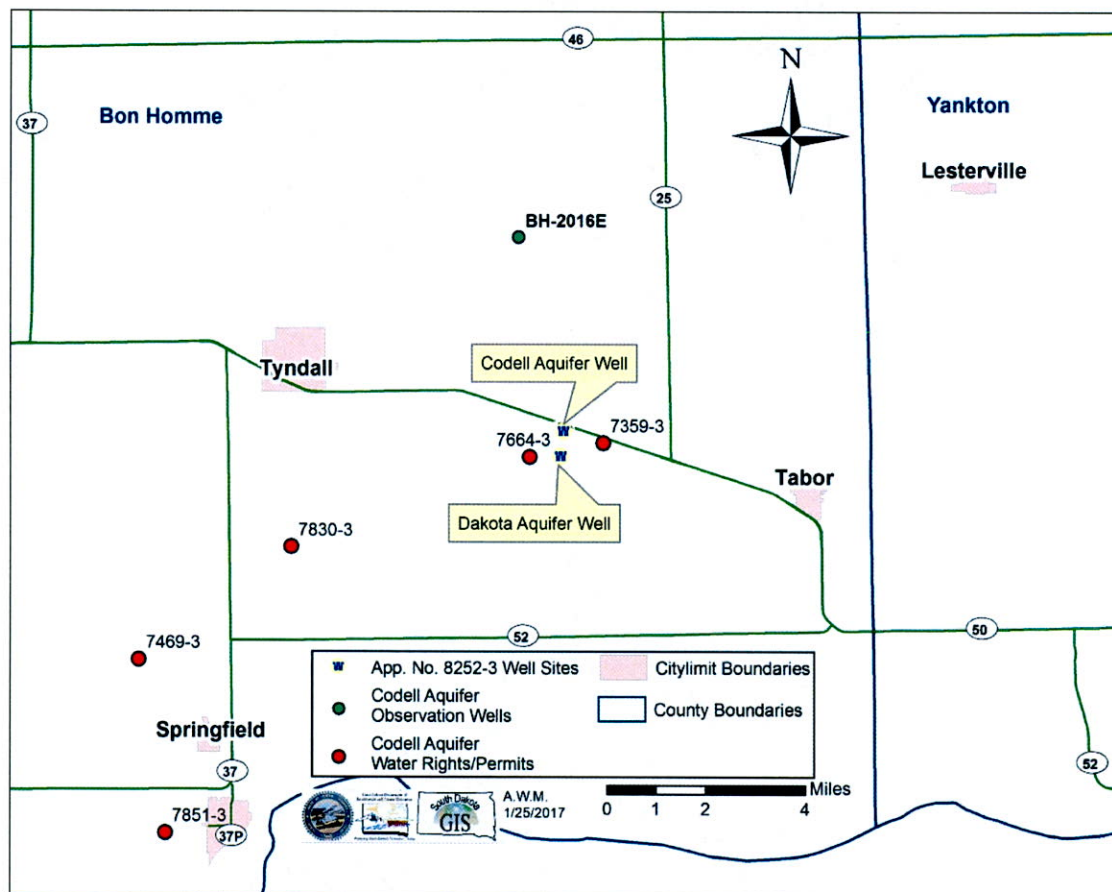


Figure 5- Codell aquifer water rights/permits and observation wells within approximately 10 miles of the Codell aquifer well Application No. 8252-3 proposes to use

The wells for Water Permit Nos. 7359-3 and 7664-3 are approximately 0.8 miles from the Codell aquifer well this application proposes to use (see Figure 5) (Water Rights, 2017b). There are also

domestic wells completed into the Codell aquifer within approximately two miles of the Codell aquifer well this application proposes to use (Water Rights, 2017c). Historically, there has not been an issue with well interference from the Codell aquifer in this area. The Codell aquifer had at least 125 feet of artesian head pressure at the well site this application proposes to use when the well was constructed. The well authorized by Water Permit No. 7359-3 had 156 feet and the well authorized by Water Permit No. 7664-3 had 172 feet of artesian head pressure at their times of construction, May 2012 and October 2013, respectively (Water Rights, 2017b).

The diversion rate proposed by this application from the Codell aquifer (0.056 cfs) is relatively small. Therefore, the expected cone of influence created by pumping will be correspondingly small. There is no history of well interference for Codell aquifer wells in this area. Considering the artesian head pressure of the aquifer in this area, the distance between appropriative wells, the lack of history of interference issues, and the limited diversion rate requested by this application, pumping this proposed diversion is not expected to create adverse or unlawful impacts.

The Water Management Board has previously considered the effects of pumping on artesian head pressure and has promulgated rules to place water to maximum beneficial use. The Water Management Board has defined an “adversely impacted domestic well” in ARSD 74:02:04:20(7) 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”.

In the past, the Water Management Board has recognized to place water to maximum beneficial use, a certain amount of drawdown may occur. Since the aquifer is under confined conditions at the well site, drawdown due to pumping may extend some distance from the well sites even though it is not expected to do so. The Water Management Board considered the delivery of water by artesian head pressure versus maximum beneficial use of water issued for Water Right No. 2313-2 for Coca-Cola Bottling Company of the Black Hills. The Water Management Board adopted Findings of Facts and Conclusions of Law that noted reservation of artesian head pressure for delivery of water would be inconsistent with SDCL 46-1-4 which states, “general welfare requires that the water resources of the state be put to beneficial use to the fullest extent of which they are capable...” (Water Rights, 1995). Furthermore, the Water Management Board found if increased cost or decreased production as a result of impacts on artesian head pressure by legitimate users is to be considered an adverse impact it would also be in conflict with SDCL 46-1-4 (Water Rights, 1995). With that in mind, some existing well owners may need to lower their pumps to accommodate for deeper water levels depending on the specific characteristics of the Codell aquifer at the well site. However when considering the statute (SDCL 46-6-6.1), rule (ARSD 74:02:04:20(7)), and the artesian head pressure, well interference from this proposed diversion is not expected to cause an adverse impact. Therefore, there is a reasonable probability that any interference created by pumping for this proposed appropriation will not be adverse.

DAKOTA AQUIFER

Aquifer Characteristics:

The Dakota Formation consists of several layers of interbedded sands, sandstone, and shale with discontinuous beds of lignite (Schoon, 1971). The Dakota Formation underlies approximately 66,500 square miles of the 77,047 square miles of the State of South Dakota (Schoon, 1971). In eastern South Dakota, the recoverable water in storage is estimated to be 381,104,000 acre-feet (ac-ft) (Hedges et.al, 1982). Allen and others (1985) estimated the Dakota-Newcastle Formation contains approximately 308,442,000 ac-ft of recoverable water in storage in western South Dakota.

The Dakota aquifer consists of the permeable beds of sand and sandstone contained within the Dakota Formation. In Bon Homme County, the Dakota aquifer is composed of poorly consolidated, fine to medium grained sandstone (Jorgensen, 1971). Based on water well completion reports (Water Rights, 2017c), the depth to the top of the Dakota Formation at the Dakota aquifer well this application proposes to use ranges from approximately 470 to 520 feet deep with a static water level ranging from approximately one foot below grade to flowing at surface with less than 10 pounds per square inch (psi) of pressure on a closed in well. The 10 psi pressure is equivalent to a static water level 23 feet above grade.

South Dakota Codified Law (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 this 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 effects on existing rights from the aquifer that are pertinent to this application.

WATER AVAILABILITY:

This application proposes to appropriate water from the Codell and Dakota aquifers. This portion of the report is specifically in reference to the availability of water from the Dakota aquifer. The application is estimated to pump less than 20 ac-ft/yr. from the Dakota aquifer. The probability of unappropriated water available from either 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 that 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 water distribution system has applied for a permit, the Board need not consider the recharge/withdrawal issue. In this case, the Dakota aquifer is stratigraphically lower than the Greenhorn Formation. However, the applicant is not a water distribution system. Therefore, the availability of unappropriated water needs to be considered.

Since the early 1900's, there have been concerns regarding the declining artesian head pressure in the Dakota aquifer. Rothrock and Robinson (1938) stated, "There has been a pronounced decline in the artesian head since the first wells were drilled in the area. The decline has not proceeded uniformly but has varied from place to place, depending on local draft..." The decline of artesian head pressure in the Dakota aquifer has been well documented over time. Schoon

(1971) interpreted the decline in artesian head pressure as the aquifer was being “mined”. Schoon (1971) stated, “The fact that withdrawal from the artesian system exceeds recharge is clearly demonstrated by declining pressures.”

The Water Management Board has considered the issue of declining head pressure in the Dakota aquifer several times. The Board has found that past declines of the potentiometric surface do not automatically mean that withdrawals have exceeded recharge (Water Rights, 2010). The Water Management Board has concluded that whether withdrawals exceeded the average annual recharge cannot be determined based solely upon a decline in head pressure, and in theory the Dakota aquifer head pressure is stabilizing relative to withdrawals and discharges (Water Rights, 1987). The Board stated in the Findings of Facts and Conclusions of Law for Application No. 5136-3, “The primary reason for declines in the Dakota Formation head pressure is due to water being discharged without beneficial use through uncontrolled flowing wells” (Water Rights, 1987). The Water Management Board further stated:

“When defining withdrawal for the purpose of interpreting the meaning of withdrawal pursuant to SDCL 46-6-3.1, there is a difference between withdrawal of water for beneficial use and water discharged without beneficial use through uncontrolled flowing wells. Water discharged from uncontrollable flowing wells does not constitute withdrawal (appropriation) pursuant to SDCL 46-6-3.1.”

Ultimately, the Water Management Board’s position has been to optimize development for beneficial use from the Dakota aquifer.

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 in addition to other data to determine that the quantity of water withdrawn annually from the aquifer does not exceed the estimated average annual recharge of the aquifer.

The DENR-Water Rights Program monitors 43 observation wells completed into the Dakota aquifer (Water Rights, 2017a). The nearest Dakota aquifer observation wells to the Dakota aquifer well this application proposes to use are HT-80B, and YA-80P, approximately 15.5 miles northeast and 30 miles east, respectively (see Figure 6) (Water Rights, 2017a). The hydrographs for HT-80B and YA-80P are shown in Figures 7 and 8, respectively. Table 3 lists the water rights/permits shown in Figure 6.

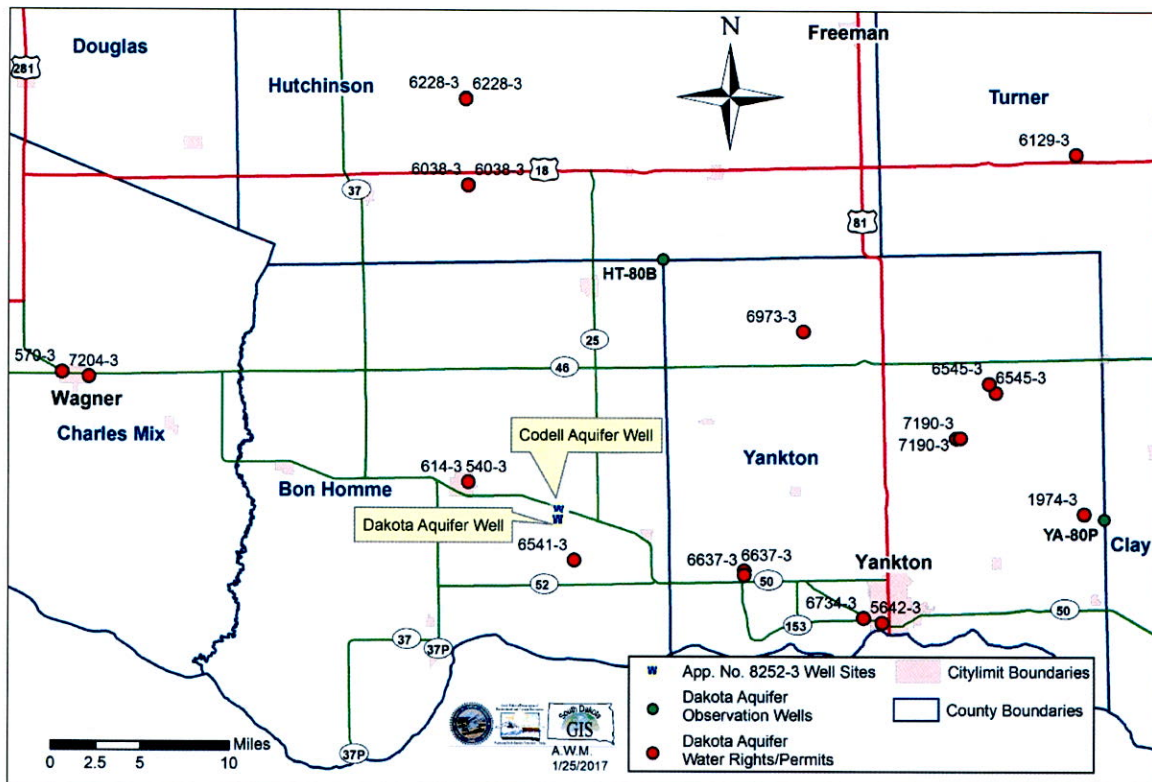


Figure 6- Dakota aquifer water rights/permits and observation wells within approximately 30 miles of the Dakota aquifer well Application No. 8252-3 proposes to use

Permit No.	Name	County	Status	Use	CFS	Acres
540-3	City of Tyndall	BH	LC	MUN	1.02	N/A
570-3	City of Wagner	CM	LC	MUN/REC	0.55	N/A
614-3	City of Tyndall	BH	LC	MUN	0.7	N/A
1974-3	Town of Volin	YA	LC	MUN	0.22	N/A
5642-3	City of Yankton	YA	LC	REC	0.28	N/A
6038-3	Schwartz Farms INC-Kaylor Site	HT	LC	COM/LCO	0.07	N/A
6129-3	JDP LLC	TU	LC	COM/LCO	0.067	N/A
6228-3	Starburst Farms COOP	HT	LC	COM/LCO	0.111	N/A
6541-3	Gary L Nelson	BH	PE	FWP	0.22	N/A
6545-3	Broom Tree Retreat & Conference Center	YA	PE	COM	0.667	N/A
6637-3	Harold Tacke	YA	PE	COM/LCO	0.13	N/A
6734-3	Avera Sacred Heart Health Services	YA	PE	IRR	1.11	15.5
6973-3	Jamesville Colony	YA	PE	COM/LCO	0.167	N/A
7190-3	Randy, Valerie & Doris Svendsen	YA	PE	IRR	2.22	152
7204-3	Steven Fousek	CM	PE	COM/GEO	0.133	N/A
BH= Bon Homme, CM= Charles Mix, HT= Hutchinson, TU= Turner, YA= Yankton						
LC= Water Right, PE= Water Permit, N/A= Not Applicable						
COM= Commercial, GEO= Geothermal, IRR= Irrigation, LCO= Livestock Confinement Operation, MUN= Municipal, REC= Recreational						

Table 3- Dakota aquifer water rights/permits shown in Figure 6 (Water Rights, 2017b)

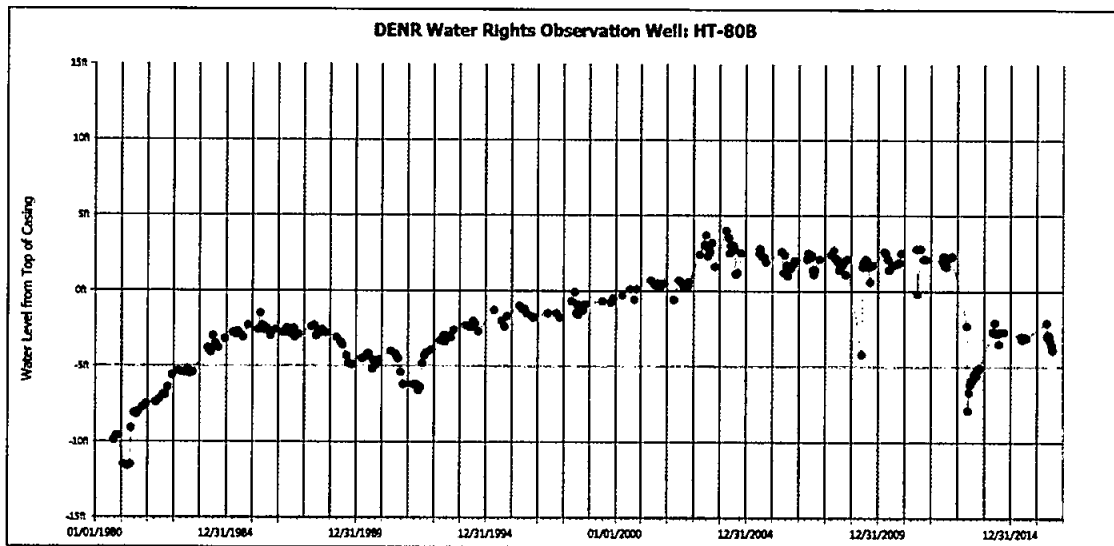


Figure 7- Hydrograph for observation well HT-80B, location shown in Figure 6 (Water Rights, 2017a)

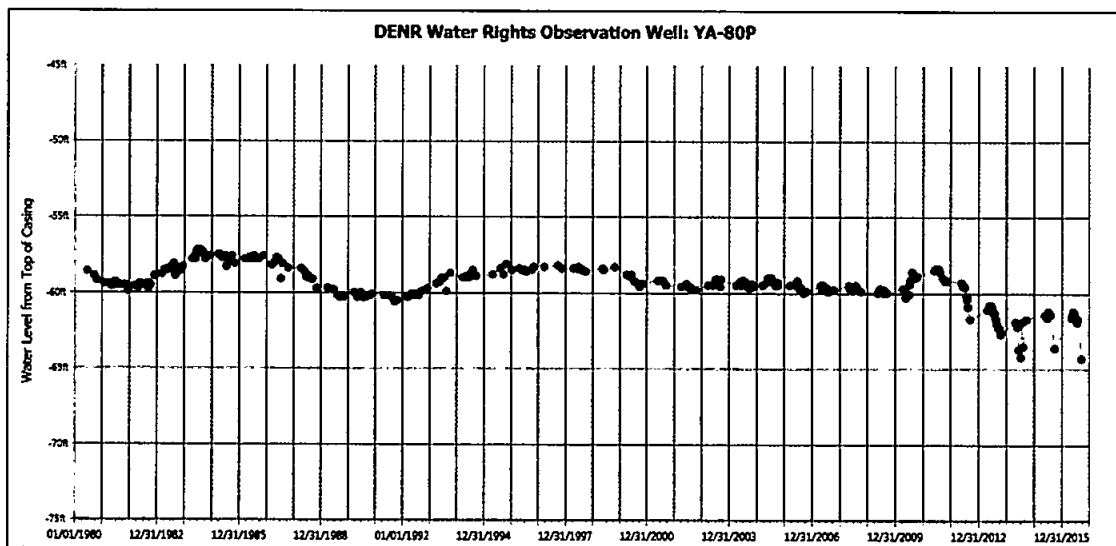


Figure 8- Hydrograph for observation well YA-80P, location shown in Figure 6 (Water Rights, 2017a)

There are 29 Dakota aquifer observation well hydrographs that show a general downward trending water level, seven show a general upward trending water level, and seven show a generally level or stable water level over their respective period of records (Water Rights, 2017a). The natural equilibrium of the water level of the Dakota aquifer has been affected by the development of the Dakota aquifer starting in the late 1800's and early 1900's. Eventually, the water level in the aquifer will reach a new equilibrium through a reduction of natural discharge, an increase in recharge, a decrease in aquifer storage, or a combination thereof. Based on the Findings of Fact and Conclusions of Law regarding Water Permit No. 7165-3, the Water Management Board has accepted that the water level of the Dakota aquifer has yet to equilibrate to the withdrawals from the aquifer (Water Rights, 2010). However, those particular Findings of Fact and Conclusions of Law more specifically addressed southeastern South Dakota (Water

Rights, 2010). The hydrographs shown in Figures 7, 8, and 9 demonstrate the Dakota aquifer has reached a new equilibrium with withdrawals in the area of those observation wells because the decline of water level has stopped and leveled out. The water level in LN-80J is even showing a water level rise across the last 15 years. The hydrograph for JA-96A, shown in Figure 10, shows the rate of decline for water level has slowed, and the water level in that area is approaching a new equilibrium but is not there yet. These four hydrographs document the Dakota aquifer has equilibrated to withdrawal in some areas and is approaching equilibrium with withdrawals in other areas.

The hydrographs for Dakota aquifer observation wells show the aquifer is near equilibrium conditions (see Figures 7 and 8) or approaching a state of equilibrium (see Figures 9 and 10) with recharge to and discharge from the aquifer across much of the extent of the aquifer. In the vicinity of the Dakota aquifer well this application proposes to use, the Dakota aquifer is essentially in a state of equilibrium meaning that well withdrawals plus natural discharge does not exceed recharge. Wasteful discharge from uncontrolled flowing wells can be captured for appropriation and beneficial use. Considering all of this, the hydrographs for observation wells completed into the Dakota aquifer show there is unappropriated water available for this proposed appropriation.

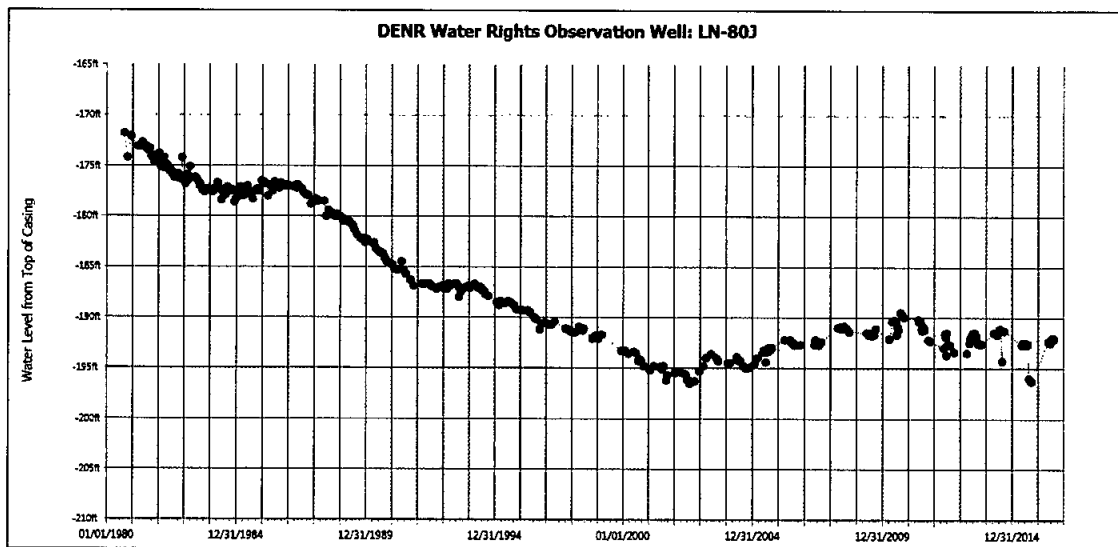


Figure 9- Hydrograph for observation well LN-80J approximately 54 miles northeast of the Dakota aquifer well Application No. 8252-3 proposes to use (Water Rights, 2017a)

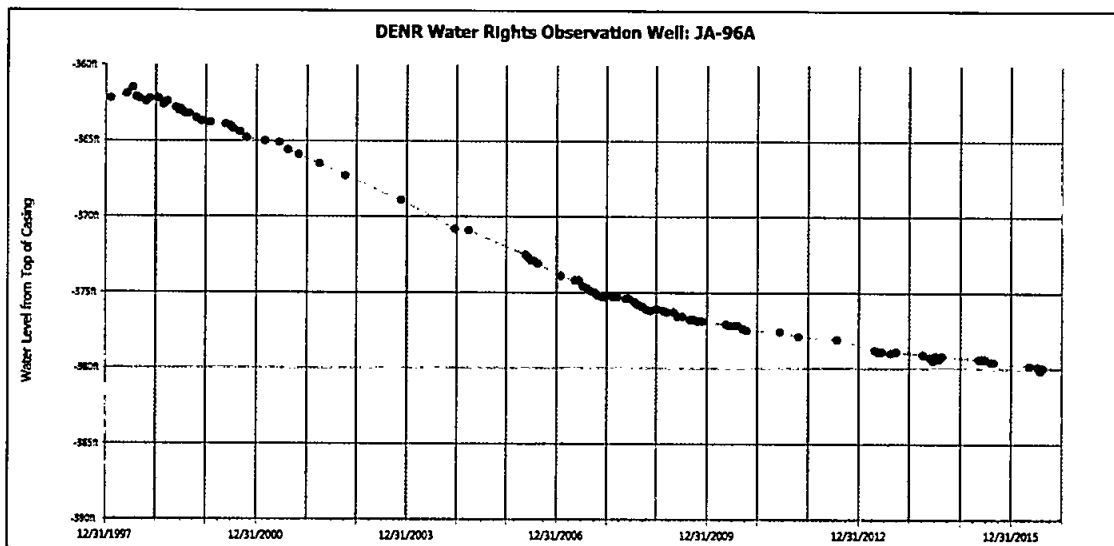


Figure 10- Hydrograph for observation well JA-96A approximately 181 miles northwest of the Dakota aquifer well Application No. 8252-3 proposes to use (Water Rights, 2017a)

Recharge and Discharge:

The Dakota aquifer is recharged from underlying formations in western South Dakota, especially the Madison Formation and other formations that crop out in the Black Hills (Schoon, 1971). However, there is insufficient data available to determine recharge to the Dakota aquifer, and thus, compare average annual recharge to the aquifer with average annual withdrawal. As stated previously, the Water Management Board considers water being discharged without beneficial use from uncontrolled flowing wells as not constituting a withdrawal (appropriation) pursuant to SDCL 46-6-3.1.

Currently, there are 226 water rights/permits appropriating water and six future use permits reserving water from the Dakota aquifer in South Dakota (Water Rights, 2017b). There are 17 of the 226 water rights/permits authorized for irrigation purposes. The irrigation water rights/permits authorize the irrigation of up to 1,136.44 acres. The remaining 209 water rights/permits are for non-irrigation purposes. Most of the municipalities are connected to rural water systems (Friedeman, 2017) and do not pump much or any water from their wells. The estimated annual use by the non-irrigation appropriations limited only by diversion rate and not served by rural water is 15,452 ac-ft/yr. This estimation is based on pumping at the maximum allowable diversion rate for 60 percent of the time. The water rights/permits authorized by an annual volume are assumed to pump the full volume. The estimated annual use by the non-irrigation appropriations limited by annual volume from the non-irrigation appropriations not served by rural water systems is 4,934 ac-ft/yr. That is a total of 20,386 ac-ft/yr. Future use permits reserve 3,737 ac-ft/yr. and are shown in Table 4.

Permit No.	Name	County	Type	Volume Reserved (ac-ft)
1262C-3	CITY OF CANTON	LN	MUN	674
4817-3	SOUTH LINCOLN RWS	LN	RWS	1448
5101-3	CITY OF LENNOX	LN	MUN	0
5101A-3	CITY OF LENNOX	LN	MUN	0
5155-3	LINCOLN COUNTY RWS	LN	RWS	440
5219-3	CITY OF CANTON	LN	MUN	1175
Sum				3737
LN= Lincoln, MUN= Municipal, RWS= Rural Water System				

Table 4- Future use permits reserving water from the Dakota aquifer (Water Rights, 2017b)

Estimated average annual withdrawal from the aquifer by irrigation appropriations is 143.6 ac-ft/yr and is shown in Table 5. The estimated expected average annual appropriative use plus reserved volume by appropriative water rights/permits is 24,267 ac-ft/yr. for the Dakota aquifer.

There are many well logs on file with the SD DENR-Water Rights Program for domestic wells completed into the Dakota aquifer (Water Rights, 2017c). Some of the wells are flowing at ground surface and some are not. Some of the flowing domestic wells are controlled and currently putting water to beneficial use. Others are flowing uncontrolled/limited control with some of the water being put to beneficial use. There are also a number of uncontrolled flowing wells that are just flowing to waste. Furthermore, water is also flowing to waste from poorly constructed or deteriorating wells. The volume of water flowing to waste from the Dakota aquifer has not and is not likely ever to be quantified. The volume is likely a significant component of discharge from the aquifer. In the 1960's, it was reported 46 uncontrolled flowing wells, no specific water source was mentioned, had a rate of 16 million gallons per day (approximately 17,900 ac-ft/yr.) (Davis, Dyer, and Powell, 1961). The uncontrolled flowing wells had a rate approximately equivalent to 3,054 controlled flowing wells that were presumed completed into the Dakota aquifer (Davis, Dyer, and Powell, 1961). Water flowing from uncontrolled flowing wells is not considered a withdrawal (appropriation) and could be captured through appropriative pumping.

Year	No. of Permits Reporting	Appropriation (ac-ft)	Pumpage (ac-ft)
2015	17	2576.32	236.1
2014	17	2354.52	201
2013	18	2158.52	262.89
2012	18	2158.52	304.7
2011	18	2158.52	175.77
2010	17	1950.52	178.03
2009	15	1166.52	137.13
2008	14	1106.52	202.05
2007	14	1106.52	205.64
2006	14	1106.52	237.91
2005	12	867.52	150.75
2004	10	726.52	159.63
2003	10	726.52	205.02
2002	10	726.52	184.53
2001	11	740.52	160.85
2000	10	666.52	172.81
1999	10	666.52	101.57
1998	9	633.52	64.76
1997	9	533.12	48
1996	8	527.12	34.38
1995	8	527.12	30.83
1994	7	931.12	51.29
1993	7	1521.52	112.4
1992	5	1501.52	40.4
1991	5	1481.52	165.42
1990	4	1471.52	234
1989	4	1471.52	265.4
1988	4	1471.52	452.8
1987	5	1900.52	1.3
1986	5	1834.76	238.85
1985	5	1554.26	8.1
1984	4	1405.76	0
1983	5	1834.76	64.39
1982	5	1420.52	33.23
1981	4	1469	45
1980	2	729	110
1979	2	729	38
Min	2	527.12	0
Max	18	2576.32	452.8
Avg	9.2	1294.9	143.6

Table 5- Historic irrigation water use from the Dakota aquifer (Water Rights, 1979-2016)

EXISTING WATER RIGHTS:

Application No. 8252-3 proposes to divert water from the Dakota aquifer at a maximum rate of 0.044 cfs (20 gallons per minute). The nearest Dakota aquifer appropriative well to the Dakota aquifer well this application proposes to use is the well authorized by Water Permit No. 6541-3, which is approximately 2.4 miles southeast (see Figure 6). The next closest are two wells used for standby/emergency purposes by the City of Tyndall authorized under Water Right Nos. 540-3 and 614-3, which are approximately 5.5 miles northwest of the well this application proposes to use (see Figure 6). There are also domestic wells completed into the Dakota aquifer within two miles of the Dakota aquifer well this application proposes to use (Water Rights, 2017c)

Historically, there have not been issues with well interference in the Dakota aquifer in this area. At the well this application proposes to use, the Dakota aquifer should have at least 450 feet of artesian head pressure above the top of the aquifer. The diversion rate from the Dakota aquifer this application proposes to use is relatively small. Given the distance between the well this

application proposes to use and other appropriative wells, the relatively small diversion rate, and the large amount of artesian head pressure in the Dakota aquifer, pumping this proposed diversion from the Dakota aquifer is not expected to cause adverse or unlawful impacts to existing appropriative or domestic users.

The Water Management Board has previously considered the effects of pumping on artesian head pressure and has promulgated rules to place water to maximum beneficial use. The Water Management Board has defined an “adversely impacted domestic well” in ARSD 74:02:04:20(7) 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”.

In the past, the Water Management Board has recognized to place water to maximum beneficial use, a certain amount of drawdown may occur. Since the aquifer is under confined conditions at the well site, drawdown due to pumping may extend some distance from the well sites even though it is not expected to do so. The Water Management Board considered the delivery of water by artesian head pressure versus maximum beneficial use of water issued for Water Right No. 2313-2 for Coca-Cola Bottling Company of the Black Hills. The Water Management Board adopted Findings of Facts and Conclusions of Law that noted reservation of artesian head pressure for delivery of water would be inconsistent with SDCL 46-1-4 which states, “general welfare requires that the water resources of the state be put to beneficial use to the fullest extent of which they are capable...” (Water Rights, 1995). Furthermore, the Water Management Board found if increased cost or decreased production as a result of impacts on artesian head pressure by legitimate users is to be considered an adverse impact it would also be in conflict with SDCL 46-1-4 (Water Rights, 1995). With that in mind, some existing well owners may need to lower their pumps to accommodate for deeper water levels depending on the specific characteristics of the Dakota aquifer at the well site. However when considering the statute (SDCL 46-6-6.1), rule (ARSD 74:02:04:20(7)), and the artesian head pressure, well interference from this proposed diversion is not expected to cause an adverse impact. Therefore, there is a reasonable probability that any interference created by pumping for this proposed appropriation will not be adverse.

CONCLUSIONS:

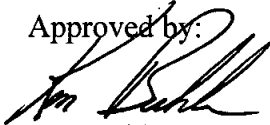
1. Application No. 8252-3 proposes to divert water from the Codell aquifer and the Dakota aquifer at maximum diversion rates of 0.056 cfs and 0.044 cfs, respectively, for commercial use in a livestock confinement facility in Bon Homme County. The total combined diversion rate is 0.1 cfs with a volume of 45 ac-ft/yr.
2. Based on observation well data for the Codell aquifer, there is a reasonable probability unappropriated water is available from the Codell aquifer to support that portion of the proposed appropriation.
3. There is no recharge estimate available for the Codell aquifer. Thus, it is not possible to directly compare average annual recharge to average annual withdrawals from the Codell aquifer.

4. There is a reasonable probability the diversion from the Codell aquifer can be made without adversely impacting existing appropriative or domestic users of the Codell aquifer.
5. The water level of the Dakota aquifer has a history of declining levels. The observation well data shows the declining levels are generally slowing and approaching a new steady state equilibrium.
6. The Water Management Board's position has been to optimize development for beneficial use from the Dakota aquifer.
7. Based on observation well data for the Dakota aquifer, there is a reasonable probability unappropriated water is available from the Dakota aquifer to support that portion of the proposed appropriation.
8. There is no recharge estimate available for the Dakota aquifer. Therefore, it is not possible to compare average annual recharge to average annual withdrawals from the Dakota aquifer.
9. There is a reasonable probability the diversion from the Dakota aquifer can be made without adversely impacting existing appropriative or domestic users of the Dakota aquifer.



Adam Mathiowetz, PE
SD DENR-Water Rights Program

Approved by:



Ken Buhler
SD DENR-Water Rights Program

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Affidavit of Publication

RECEIVED

FEB 13 2017

WATER RIGHTS PROGRAM

State of South Dakota }
County of Bon Homme } SS

Rebecca Uz Being first duly sworn says that the **Tyndall Tribune & Register** is a legal weekly newspaper 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 published in English language in the City of Tyndall, 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 publication of the notice herein mentioned, and that it is printed in an office maintained at the place of publication at Tyndall, South Dakota, and that deponent is the publisher in charge of the advertising department of said newspaper; that the advertisement headed

Not. of Application

#8252-3 Approp Water
79 @ 38

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

.....Feb 8.....	20.....
.....20.....	20.....
.....20.....	20.....
.....20.....	20.....

That the full amount of the fee charged for the publication of said notice, ~~\$30.02~~, 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 Uz Publisher

Subscribed and sworn to before me this

.....8.....day.....2017.

Peggy Henschel
Notary Public, South Dakota

My Commission Expires Oct. 24, 2021

NOTICE OF APPLICATION

NO. 8252-3 to Appropriate Water

Notice is given that Michael J Slama, 30535 422nd Ave, Tabor SD 57063 has filed an application for a water permit to appropriate a combined 45 acre-feet of water annually at a maximum combined diversion rate of 0.10 cubic feet of water per second from two wells. The well completed into the Codell Aquifer (160 feet deep) located in the SE 1/4 SE 1/4 Section 12-T94N-R59W is for an appropriation of 0.056 cfs. The other well completed into the Dakota Aquifer (700 feet deep) located in the SE 1/4 NE 1/4 Section 13-T94N-R59W appropriates 0.044 cfs. The water is for commercial use in a livestock confinement facility located in portions of the SE 1/4 SE 1/4 Section 12 and the E 1/2 NE 1/4 Section 13; all in T94N-R59W.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 8252-3 with qualifications 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. The Chief Engineer's recommendation with qualifications, the application, and staff report are available at <http://denr.sd.gov/public> or contact Eric Gronlund for this information, or other information, at the Water Rights Program address provided below.

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 February 21, 2017.

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.

If the applicant does not contest the recommendation of the Chief Engineer and no petition to oppose the application is received, the Chief Engineer shall act on the application pursuant to the recommendation with no hearing held before the Water Management Board. 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.

Steven M. Pirner, Secretary,
Department of Environment
and Natural Resources.

Published once at an approximate cost of \$30.02

(Feb. 8)

AFFIDAVIT OF PUBLICATION

YANKTON DAILY PRESS AND DAKOTAN

MICHAEL J SLAMA
30535 422ND AVE
TABOR SD 57063

RECEIVED

FEB 13 2017

**WATER RIGHTS
PROGRAM**

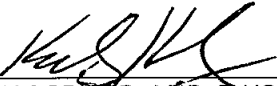
STATE OF SOUTH DAKOTA
COUNTY OF YANKTON

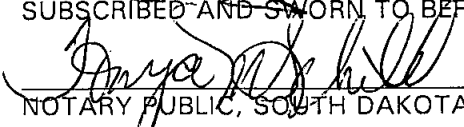
KELLY HERTZ, BEING FIRST DULY SWORN ON OATH DEPOSES
AND SAYS THAT (S)HE IS THE MANAGING EDITOR OF YANKTON
MEDIA INC, A CORPORATION, THE PRINTER AND THE PUBLISHER OF THE
YANKTON DAILY PRESS AND DAKOTAN, A LEGAL DAILY NEWSPAPER
PUBLISHED AND CIRCULATED IN THE CITY OF YANKTON, SAID COUNTY
AND STATE, AND ONE OF THE OFFICIAL NEWSPAPERS OF THE SAID
COUNTY OF FACTS STATED IN THIS AFFIDAVIT; THAT THE ANNEXED
2 + 8 NOTICE OF APPLICATIO

TAKEN FROM THE PAPER, IN WHICH IT WAS LAST PUBLISHED IN THE
NEWSPAPER ON THE 8th DAY OF February, 2017
THAT THE FULL AMOUNT OF THE FEE CHARGED FOR THE PUBLICATION
OF SAID NOTICE TO WIT \$29.39 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: 02/08/2017

FILED ON: 02/08/2017


SUBSCRIBED AND SWORN TO BEFORE ME THIS 8th DAY OF February, 2017


NOTARY PUBLIC, SOUTH DAKOTA
MY COMMISSION EXPIRES 08/19/2021

NOTICE OF APPLICATION NO. 8252-3 to Appropriate
Water

Notice is given that Michael J Slama, 30535 422nd Ave, Tabor SD 57063 has filed an application for a water permit to appropriate a combined 45 acre-feet of water annually at a maximum combined diversion rate of 0.10 cubic feet of water per second from two wells. The well completed into the Codell Aquifer (160 feet deep) located in the SE 1/4 SE 1/4 Section 12-T94N-R59W is for an appropriation of 0.056 cfs. The other well completed into the Dakota Aquifer (700 feet deep) located in the SE 1/4 NE 1/4 Section 13-T94N-R59W appropriates 0.044 cfs. The water is for commercial use in a livestock confinement facility located in portions of the SE 1/4 SE 1/4 Section 12 and the E 1/2 NE 1/4 Section 13; all in T94N-R59W.

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Steven M. Pirner, Secretary, Department of Environment and Natural Resources.
Published once at the total approximate cost of \$29.39.

Schlaak, Karen

From: Schlaak, Karen
Sent: Friday, February 03, 2017 2:22 PM
To: ttribune@byelectric.com
Subject: 8252-3, Michael J Slama
Attachments: 8252-3public.short.docx; FORM8.FRM.doc

Attached is a notice to be published on February 8, 2017.

Michael J Slama, 30535 422nd Ave, Tabor SD 57063 (605 589-3535 or c 605 464-1708) has been notified to contact you to authorize publication and arrange for payment.

Please send the affidavit or return the attached Proof of Publication form ASAP.

Let me know if you have questions. Please acknowledge receipt of this email.

Karen Schlaak
Water Rights Program
523 E Capitol Ave
Pierre SD 57501
Phone: 605 773-3352

Schlaak, Karen

From: Schlaak, Karen
Sent: Friday, February 03, 2017 2:22 PM
To: 'Tera Schmidt'
Subject: 8252-3, Michael J Slama
Attachments: 8252-3public.short.docx; FORM8.FRM.doc

Attached is a notice to be published on February 8, 2017.

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Let me know if you have questions. Please acknowledge receipt of this email.

Karen Schlaak
Water Rights Program
523 E Capitol Ave
Pierre SD 57501
Phone: 605 773-3352



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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(S) RIGHT AWAY.**

February 3, 2017

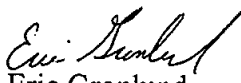
Michael J Slama
30535 422nd Ave
Tabor SD 57063

Dear Mr. Slama:

Water Permit Application No. 8252-3 for commercial use has been examined and found to comply with the South Dakota Water Laws and applicable rules. A notice has been sent to the Tyndall Tribune printed at Tyndall SD (Ph # 605-589-3242) 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.

NOTICE OF APPLICATION NO. 8252-3 to Appropriate Water

Notice is given that Michael J Slama, 30535 422nd Ave, Tabor SD 57063 has filed an application for a water permit to appropriate a combined 45 acre-feet of water annually at a maximum combined diversion rate of 0.10 cubic feet of water per second from two wells. The well completed into the Codell Aquifer (160 feet deep) located in the SE 1/4 SE 1/4 Section 12-T94N-R59W is for an appropriation of 0.056 cfs. The other well completed into the Dakota Aquifer (700 feet deep) located in the SE 1/4 NE 1/4 Section 13-T94N-R59W appropriates 0.044 cfs. The water is for commercial use in a livestock confinement facility located in portions of the SE 1/4 SE 1/4 Section 12 and the E 1/2 NE 1/4 Section 13; all in T94N-R59W.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 8252-3 with qualifications 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. The Chief Engineer's recommendation with qualifications, the application, and staff report are available at <http://denr.sd.gov/public> or contact Eric Gronlund for this information, or other information, at the Water Rights Program address provided below.

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Steven M. Pirner, Secretary, Department of Environment and Natural Resources. Published once at the total approximate cost of _____.



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

denr.sd.gov

MAR 30 2017

Michael J Slama
30535 422nd Ave
Tabor SD 57063

Dear Mr. Slama:

Enclosed is Water Permit No. 8252-3 authorizing construction of the 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

8252-3

SD EForm - 1311LD V1

Form 10

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

MAIL TO: PMB 2020

DENR - Water Rights Program

523 E Capitol Ave

Pierre, SD 57501-3182

ph. (605) 773-3352

Date 1-23-19

FROM:

Michael J. SLAMA
(name)30535 422 Ave.
(address)TABOR So Dak 57063
(city) (state) (zip)(605) 464-1708
(phone)

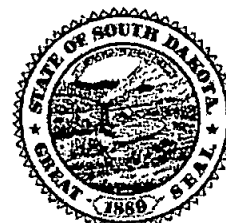
I have completed the construction of the water use system and I have put the water to beneficial use to the maximum extent it is going to be used.

Water Permit No. 8252-3 states that the water use system is to be constructed by
2-21-22 (date), and water is to be put to beneficial use by 2-21-26 (date)

The water use system was completed on 4-1-17 (date)

Applying the water to beneficial use was completed on 4-1-17 (date)

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



Report of Examination of Works and/or Application of Water to Beneficial Use For Permit No. 8252-3

I have this day, January 23, 2019, made a thorough examination of the water use system constructed by Michael J. Slama, 30535 422 Ave., Tabor, SD 57063, of Permit No. 8252-3, bearing the priority of December 14, 2016 authorizing the diversion of 0.1 cu. ft. per second from two wells. The well completed into the Codell Aquifer (160 feet deep) located in the SE1/4 of the SE1/4 of Section 12-94N-R59W is for an appropriation of 0.056 cfs. The other well completed into the Dakota Aquifer (700 feet deep) located in the SE1/4 of the NE1/4 of Section 13-T94N-R59W appropriates 0.044 cfs. The water appropriated is for commercial use in a livestock confinement facility in Bon Homme County.

Inspection contact: **Michael J. Slama, Owner**

A. Works used to divert the water:

Well Information:

North Well

- 1) Well Drilling Firm: Koranda Well Co.
- 2) No. of Wells 1
- 3) Depth 160 feet (Codell)
- 4) Well log is available Yes

Casing:

- 1) Diameter 5 inches
- 2) Length 143 feet
- 3) Type PVC

Screen:

- 1) Type PVC
- 2) Length 20 feet
- 3) Static water level 10 feet

Pump:

- 1) Make Grundfos
- 2) Model 10GS10412
- 3) Capacity 20 gpm

Motor:

- 1) Make Grundfos
- 2) Model No. 10GS10412
- 3) Horsepower rating 1 hp

South Well

- 1) Well Drilling Firm: Koranda Well Co.
- 2) No. of Wells 1
- 3) Depth 700 feet (Dakota)
- 4) Well log is available No, drilled in 1976

Casing:

- 1) Diameter 5 inches to 2.5 inches
- 2) Length 660 feet
- 3) Type Steel

Screen:

- 1) Type Steel
- 2) Length 40 feet
- 3) Static water level 13 to 20 feet

Pump:

- 1) Make Grundfos
- 2) Model 10SQ05-160
- 3) Capacity 20 gpm

Motor:

- 1) Make Grundfos
- 2) Model No. 10SQ05-160
- 3) Horsepower rating 0.5 hp

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

- 1) Type PVC 2) Size 2 inch and 1.5 inch 3) Length unknown

C. Works used to apply water to beneficial use: Livestock waterers.

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: Mr. Slama was working on his first water use report while I was on site. He had recently received it in the mail.
- 3) Exceptions to compliance are: None

E. Condition and Location:

1. The system is in good condition with the point of diversion located as follows:
- North Well: 600 feet north and 910 feet west of the NE corner of Section 13-T94N-R59W (Latitude 42.96807, Longitude -97.75706 in the SESE Sec. 12-T94N-R59W).
- South Well: 2,100 feet south and 1,260 feet west of the NE corner of Section 13-T94N-R59W (Latitude 42.96066, Longitude -97.75832 in the SENE Sec. 13-T94N-R59W).
2. The works are capable of diverting and conveying to the place of use 0.09 cu. ft. per second of water which is to be used for commercial use in a livestock facility. Water has been put to beneficial use to the maximum extent as follows: Livestock facilities in in the SE1/4 of the SE1/4 of Sec 12, T94N, R59W and in the NE1/4 of Sec 13, T94N, R59W, and the license should be issued for 0.09 cfs.
3. All structures, wells and lands on map Yes

F. Comments or other permit(s) associated with the project: The north well takes water out of the Codell Aquifer and the south well takes water out of the Dakota Aquifer. The wells each produce about 20 gpm (0.045 cfs). A well log is not available for the south well since it was drilled before logs were required to be submitted. However, Irene Koranda found notes from when the well was drilled. The depth, casing and screen information are from these notes. The pump and motor information are also from Irene Koranda.

The pipes from the two wells feed the north and south feedlots separately. However, the pipes both enter a valve pit where they can be used to feed the other feedlot if a pump goes out. The pipes are normally disconnected from each other and have to be manually connected if a pump goes out.

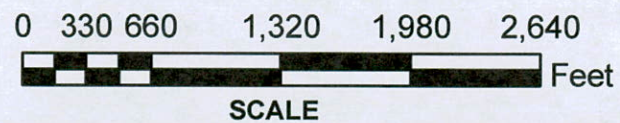
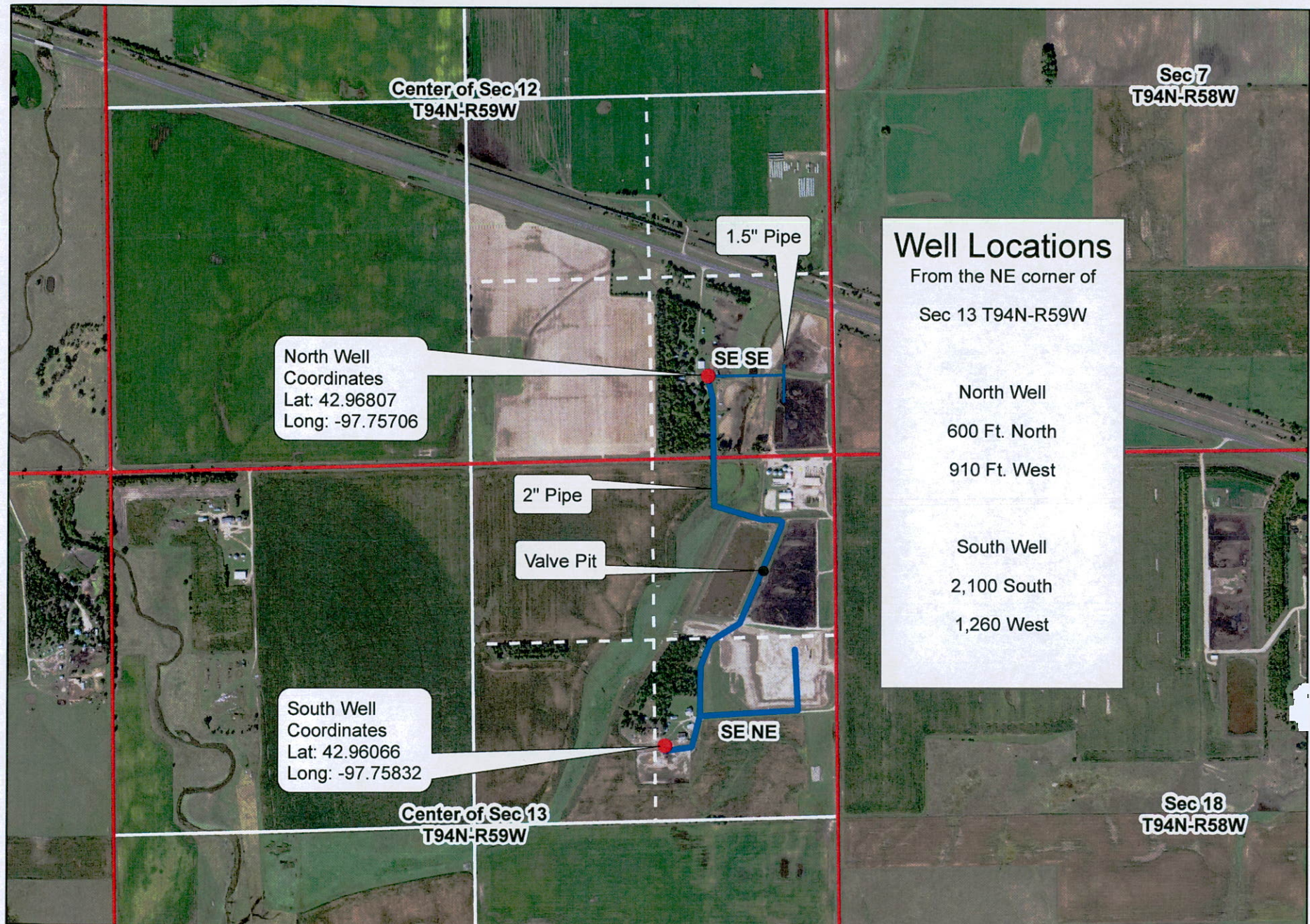
Both wells existed prior to Water Permit No. 8252-3 being issued. The permit came about when he applied for a CAFO permit.



Keith DeJong
Water Rights Inspector
DENR, Water Rights Program

Date report completed: January 31, 2019

Water Right No. 8252-3



Keith DeJong
Keith DeJong, PE
Staff Engineer
January 31, 2019



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

MAY 22 2019

8252-3

Michael J Slama
30535 422nd Ave
Tabor SD 57063

Dear Mr. Slama:

Enclosed is Water License No. 8252-3. 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,

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

enclosures

**STATE OF SOUTH DAKOTA
WATER LICENSE NO. 8252-3**

(1) Michael J Slama, 30535 422nd Ave., Tabor SD 57063 made Application No. 8252-3, October 7, 2016 for a water permit to divert 0.10 cubic feet of water per second from ground water, two wells (Codell and Dakota Aquifers), Bon Homme County, South Dakota for commercial purposes. Permit No. 8252-3, with a priority date of December 14, 2016 was approved February 21, 2017 and issued to the applicant for diversion of water with construction of the described water supply system to be completed on or before February 21, 2022 and for the application to beneficial use of water on or before February 21, 2026.

The Permit holder submitted a "*Notice of Completion of Works and Application of Water to Beneficial Use*" on January 23, 2019 indicating the system was completed and water placed to beneficial use on April 1, 2017.

(2) It is certified that the permit holder has complied with the provisions of South Dakota State Law relating to completion of the construction of the water supply system and is entitled to divert 0.09 cubic feet of water per second for beneficial use. The location of the diversion points are:

- North Well: 600'N & 910'W of the NE corner of Section 13, T94N, R59W (NE ¼ NE ¼ Section 12)
Latitude 42.96807, Longitude -97.75706
- South Well: 2,100'S & 1,260'W of the NE corner of Section 13, T94N, R59W (SE ¼ NE ¼ Section 13)
Latitude 42.96066, Longitude -97.75832

(3) The permit holder has complied with the provisions of South Dakota State Law relating to the application of water to beneficial use in a commercial livestock facility located in the SE ¼ SE ¼ Section 12 and NE ¼ Section 13, T94N, R59W.

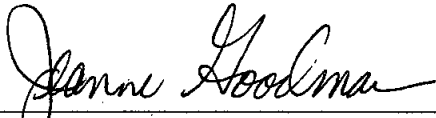
(4) Pursuant to South Dakota Water Law 46-5-30.1 Michael J Slama, 30535 422nd Ave., Tabor SD 57063 the holder and/or owner of Water Right No. 8252-3 is issued a license to appropriate water, the right to use 0.09 cubic feet of water per second from ground water, two wells (Codell and Dakota Aquifers) with a priority date of December 14, 2016 from the locations specified in (2) of this license for commercial purposes.

This license is subject to South Dakota Water Law, any limitations or conditions listed in Water Right No. 8252-3 and subject to the following qualifications:

1. The wells approved under Water Permit No. 8252-3 will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner, under these Permits shall control withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
2. Permit No. 8252-3 is subject to compliance with requirements of the Department's Water Pollution Control Permit issued pursuant to SDCL 34A-2-36 or 34A-2-112 for concentrated animal feeding operations.

continued

3. Permit No. 8252-3 is subject to compliance with all existing and applicable Water Management Board Rules including but not limited to:
 - a) Chapter 74:54:01 Ground Water Quality Standards,
 - b) Chapter 74:54:02 Ground Water Discharge Permit,
 - c) Chapter 74:51:01 Surface Water Quality Standards,
 - d) Chapter 74:51:02 Uses Assigned to Lakes,
 - e) Chapter 74:51:03 Uses Assigned to Streams, and
 - f) Chapter 74:52:01 through 74:52:11 Surface Water Discharge Provisions
4. The Permit holder shall separately report to the Chief Engineer annually the amount of water withdrawn from the Codell aquifer and the Dakota aquifer.
5. Water Permit No. 8252-3 authorize a combined total annual diversion of 45.0 acre feet of water.



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

MAY 27 2019

date



**Report of Examination of Works and/or Application of Water to Beneficial Use
For Permit No. 8352-3**

I have this day, November 5, 2025, made a thorough examination of the water use system constructed by Oscar, Inc, 209 27th St SW, Huron, SD 57350 of Permit No. 8352-3, bearing the priority of April 26, 2018 authorizing the diversion of 6.68 cu. ft. per second of the waters of the James River for irrigation purposes, in Spink County.

F. Comments or other permit(s) associated with the project:

According to the Permit, all construction is to be completed on or before July 12, 2023.

However, there was no evidence of any construction during the time of the field visit.



Darrell DeBoer
Water Rights Inspector
DENR, Water Rights Program

Date report completed: November 12, 2025