

WATER PERMIT NO. 8504-3

Name of Applicant: **Redstone Farms RE LLC**

Address: **PO Box 188, Pipestone MN 56164** Phone: **507 825-4211**

Amount of Water Claimed: **0.13 cfs** Total Acres: **NA**

Source of Water Supply: **groundwater (one well)**

Water to be used for: **commercial** County: **Clark**

Type of Waste Disposal System:

Location: **5 miles northwest of Willow Lake**

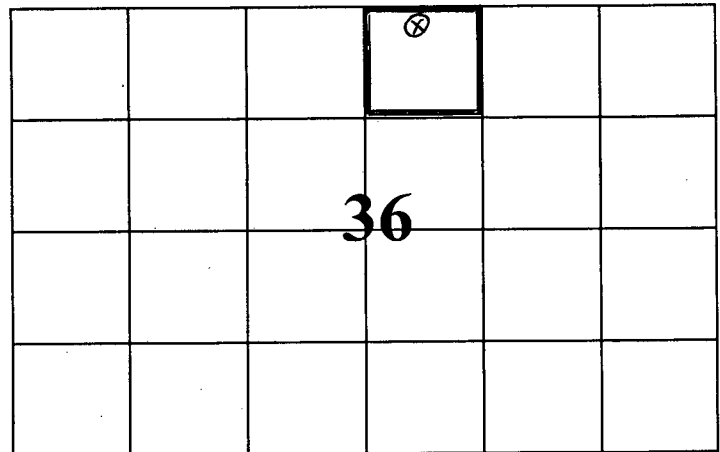
PRIORITY Date Received: **3-25-21** Application/License Fee: **\$ 700**

Corrected Application Received: Period of Annual Use: **Jan 1 – Dec 31**

Remarks: **swine production facility**

Diversion Point: **NW 1/4 NE 1/4 Section 36-
T114N-R58W**

Land to be Irrigated: **NW 1/4 NE 1/4 Section 36-
T114N-R58W**



Depth of Well: **193 feet deep**

Well Driller:

Remarks:

Type of Map: **aerial**

Prepared by:

Reviewed and the Number Assigned on: **3-25-21**

By: **Karen Schlaak**

Notice of Hearing - date to intervene: _____

SOUTH DAKOTA
WATER PERMIT NO. 8504-3

Date of first receipt of application March 25, 2021.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 8504-3 to Redstone Farms RE, LLC, c/o Barry Kerkaert, PO Box 188, Pipestone MN 56164 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. 8504-3 appropriates 77 acre-feet of water annually at a maximum pump rate of 0.133 cubic feet of water per second from one well completed into the Altamont Aquifer (193 feet deep) located in the NW 1/4 NE 1/4 Section 36 for commercial use in a swine production facility located in the NW 1/4 NE 1/4 Section 36; all in T114N-R58W. This site is located approximately 5 miles west of Willow Lake SD.
2. The water appropriated shall be used for the purpose of commercial use and may not exceed the amount of water needed for beneficial use.
3. The water is to be used during the following described annual period: January 1 - December 31.
4. The date of approval of Permit No. 8504-3 is June 1, 2021.
5. The date from which applicant may claim right is March 25, 2021.
6. One-fifth of the construction is to be completed on or before December 1, 2023.
7. All construction is to be completed on or before June 1, 2026.
8. Water is to be put to beneficial use on or before June 1, 2030.
9. Water rights obtained in compliance with the laws of the State of South Dakota may not be unlawfully impaired by this appropriation.

QUALIFICATIONS

1. The well approved under Water Permit No. 8504-3 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. Water Permit No. 8504-3 is subject to compliance with requirements of the Department's Water Pollution Control Permit issued pursuant to SDCL 34A-2-36 or 34A-2-36.2 or 34A-2-112 or 34A-2-124 for concentrated animal feeding operations.
3. Water Permit No. 8504-3 is subject to compliance with all existing and applicable Water Management Board Rules including but not limited to:

(continued)

- 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 report to the Chief Engineer annually the amount of water withdrawn from the Altamont aquifer.
5. Water Permit No. 8504-3 authorizes a total annual diversion of 77 acre-feet of water from the Altamont aquifer.

WATER MANAGEMENT BOARD

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

JUN 17 2021
date



RECEIVED

SD EForm - 1585LD V5

MAR 25 2021

PAID

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

MAR 25 2021

Ck# 00000 7
00000 8

Mail to: DENR - Water Rights 523 E Capitol Ave Pierre, SD 57501-3182 ph. (605) 773-3352	(office use only)	
	No. <u>8504-3</u>	Hydrologic Unit <u>10160006</u>
	Basin <u>James River</u>	
	Newspaper <u>Clark County Courier</u> <u>Plainsman</u>	

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.)

1. Name to Appear on Water Permit Redstone Farms RE, LLC

Mailing Address PO Box 188 Pipestone MN 56164
 (Address) (City) (State) (Zip Code)

Phone (507) 825-4211 Mobile _____ Email barry.kerkaert@pipestone.com

2. Amount of water claimed 0.133 *CFS or 60 **GPM and 77 ***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)

3. Source of water supply groundwater, Altamont Aquifer

4. Location of point of diversion NW 1/4 of the NE 1/4 of Section 36, T114N, R58W County Clark
 (example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W)

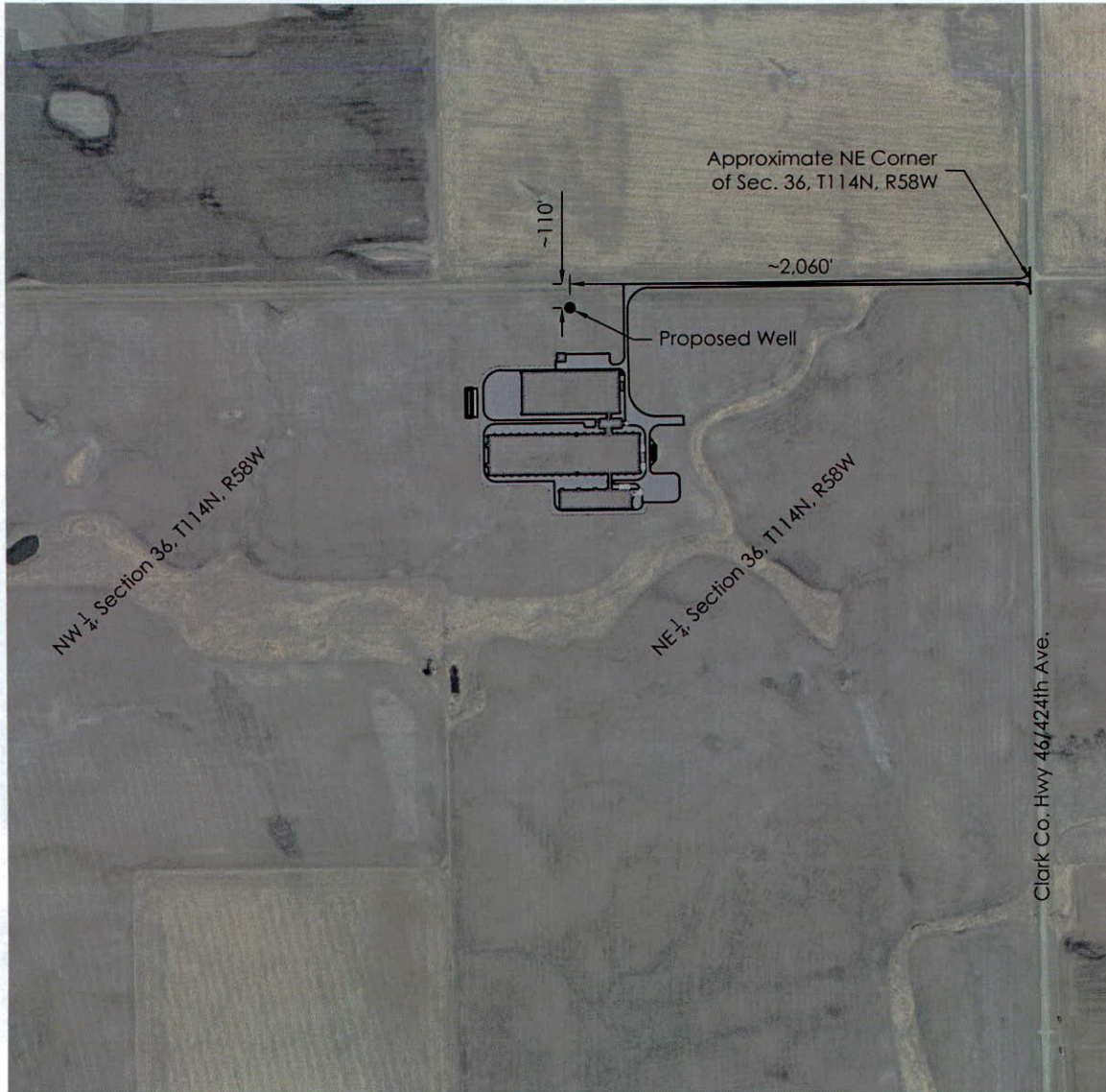
If not a public water supply (e.g. municipal), will water be used outside of the area described above? ☐ Yes ☒ NoIf "Yes," where will water be used? Facility location: same as above
(example - NW1/4 section 12-T104N-R53W)5. County or counties where water will be used Clark6. Annual period during which water is to be used January 1st thru December 31st

7. Give a description of the project. When available include any preliminary engineering report or other reports or information that will help explain the project. (Attach sheet if more space is needed)

Redstone Farms RE, LLC - is a proposed 9,060 head swine production facility. A rural water connection is being explored, also.

I, Barry Kerkaert Manager, 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.



0 200 400 800



STOCKWELL ENGINEERS, INC.
201 WALNUT STREET
YANKTON, SD 57078
PH: 605.665.8092
FAX: 605.665.0523



Redstone Farms RE, LLC
Well Location
Clark County, SD
SEI PROJECT #: 19189

PLOT DATE 3/10/2021 4:18 PM

WELL

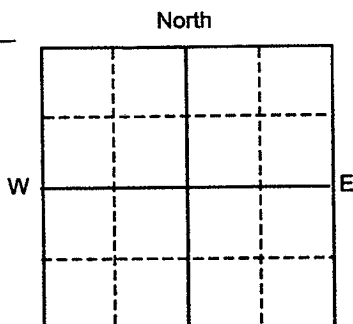
AERIAL

11-02

SOUTH DAKOTA WATER WELL COMPLETION REPORT

Location NW 1/4 NE 1/4 Sec 36 Twp 114N Rg 58WCounty Clark

Please mark well location with an "X"



Well Completion Date

1-19-21

1 Mile

Distance to nearest potential pollution source (septic tank, abandoned well, feed lot, etc.)?
NONE ft. from (identify source)

PROPOSED USE:

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

METHOD OF DRILLING:

Mud Rotary

CASING DATA:

If other describe

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
<u>200</u> LB/FT	<u>5</u> IN	<u>0</u> FT	<u>173</u> FT	<u>2 7/8</u> IN
<u>250</u> LB/FT	<u>5</u> IN	<u>173</u> FT	<u>193</u> FT	<u>2 7/8</u> IN

GROUTING DATA:

Grout Type	No. of Sacks	Grout Weight	From	To
<u>#20</u>	<u>10</u>	<u>0</u> Lb/gal	<u>0</u> Ft	<u>170</u> Ft

Describe grouting procedure

Tremmie Pipe

SCREEN:

☐ Perforated pipe ☒ Manufactured

Diameter 5 Inches Length 20 Feet

Material PVC

Slot Size 1025 Set From 173 Feet to 193 Feet

Other information

WAS A PACKER OR SEAL USED? ☒ Yes ☐ No

If so, what material? Enviro Plug

Describe packer(s) and location above screen

DISINFECTION: Was well disinfected upon completion?

☒ Yes, How? Chlorine

☐ No, Why Not?

Lab to which water quality sample sent for analysis

Well Owner: Pipestone Systems

Business Name:

Address: 1300 S Highway 75City, State, Zip: PIPESTONE MN SD 56164

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
<u>Top Soil</u>	<u>0</u>	<u>1</u>
<u>Yellow Clay</u>	<u>1</u>	<u>4</u>
<u>Sand</u>	<u>4</u>	<u>30</u>
<u>Blue Clay</u>	<u>30</u>	<u>185</u>
<u>Good Sand</u>	<u>185</u>	<u>193</u>

STATIC WATER LEVEL 140 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: Submersible☐ Bailed☐ Other

Pumping Level Below Land Surface

156 Ft. After 4 Hrs. pumped 17.50 GPM

_____ Ft. After _____ Hrs. pumped _____ GPM

If pump installed, pump rate: _____ GPM

REMARKS:

This well was drilled under license # 722 and this report is true and accurate.Drilling firm: Stretch's Well Service Inc.

Signature of License Representative:

Tom Chatham

Signature of Well Owner or Equitable Property Holder:

[Signature]Date: 2/1/21

RECEIPT

WATER RIGHTS PROGRAM South Dakota Department of Environment and Natural Resources

Date March 25, 2021

RECEIVED OF Redstone Farms RE LLC PO Box 370 Pipestone MN 56164

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

Fee for Application for Permit No. <u>8504-3</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. <u>8504-3</u>	\$200.00
Fee for Filing Transfer Form _____	\$
Fee for _____	\$
Fee for Issuing New Well Driller's License No. _____	\$
Fee for Renewal of Well Driller's License No. _____	\$
Fee for Issuing Well Pump Installer's License No. _____	\$
Fee for Renewal of Well Pump Installer's License No. _____	\$
(Any Other Work Provided by Law) TOTAL	\$700.00

By Eric Gronlund
Chief Engineer
Em



531034556

B0144-5511 06/22/2020 3:13PM Rec'd by SD SOS

ANNUAL REPORT

Secretary of State
500 E. Capitol Ave
Pierre, SD 57501-5070
(605) 773-4845

Domestic Limited Liability Company
SDCL 47-34A-211; 59-11-24, 24.1

Filing Fee: \$50

2020
FILING YEAR

Please Type or Print Clearly in Ink
Please submit one Original
Make payable to the SECRETARY OF STATE

Total Fee: \$50

1. Business ID and Name:

DL166802
BUSINESS ID

Redstone Farms RE, LLC
BUSINESS NAME

2. The jurisdiction under whose law it is formed South Dakota

3. The address of the principal executive office (business address):

Actual Street Address

**304 S SPLITROCK BOULEVARD
SUITE 205
BRANDON, SD 57005**

Mailing Address

**304 S SPLITROCK BOULEVARD
SUITE 205
BRANDON, SD 57005**

4. The South Dakota Registered Agent's Name:

South Dakota law permits the registered agent to be either (a) a noncommercial registered agent, or (b) a commercial registered agent.

(a) The South Dakota Noncommercial Registered Agent's name

Name Luke W. Minion

Actual Street Address in this State

**304 S SPLITROCK BLVD
SUITE 205
BRANDON, SD 57005**

Mailing Address in this State

**304 S SPLITROCK BLVD
SUITE 205
BRANDON, SD 57005**

5. If the LLC is manager-managed, list the names and addresses of its Managers. SDCL 59-11-24. If the LLC is member-managed, this section may be left blank.

Name

Address

Barry Kerkaert

1300 S. Hwy 75 Pipestone, MN 56164

6. Beneficial Owners (optional): A beneficial owner is a person who has or in some manner controls an equity security. Please consult an attorney for legal advice if you have any questions concerning this entry. Any question under this heading is considered a request for legal advice and the secretary of state's office is, by statute, not permitted, to provide legal advice.

No person may execute this report knowing it is false in any material respect. Any violation may be subject to a criminal penalty (SDCL 22-39-36).

Schlaak, Karen

From: Schlaak, Karen
Sent: Tuesday, May 11, 2021 9:13 AM
To: Marty Rost
Subject: FW: Water Permit Application No. 8504-3
Attachments: 1159.pdf

FYI

From: Schlaak, Karen
Sent: Tuesday, May 11, 2021 9:11 AM
To: barry.kerkaert@pipestone.com
Subject: Water Permit Application No. 8504-3

Attached is a copy of the report, chief engineer recommendation and information regarding the public notice for your water permit application. As stated in the letter, please contact the papers as soon as possible to authorize publication and arrange for payment. This information is being mailed to you today.

Karen Schlaak
DANR - Water Rights Program
(605) 773-3352
Website: <https://danr.sd.gov>





**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

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

**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 8504-3, Redstone Farms RE, LLC**

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. 8504-3, Redstone Farms RE, LLC, PO Box 188, Pipestone MN 56164.

The Chief Engineer is recommending APPROVAL of Application No. 8504-3 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 No. 8504-3 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. Water Permit No. 8504-3 is subject to compliance with requirements of the Department's Water Pollution Control Permit issued pursuant to SDCL 34A-2-36 or 34A-2-36.2 or 34A-2-112 or 34A-2-124 for concentrated animal feeding operations.
3. Water Permit No. 8504-3 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

(continued)

4. The Permit holder shall report to the Chief Engineer annually the amount of water withdrawn from the Altamont aquifer.
5. Water Permit No. 8504-3 authorizes a total annual diversion of 77 acre-feet of water from the Altamont aquifer.

See report on application for additional information.



Eric Gronlund, Chief Engineer

May 10, 2021

Report to the Chief Engineer
On Water Permit Application No. 8504-3

Redstone Farms RE, LCC

Barry Kerkaert

May 11, 2021

Water Permit Application No. 8504-3 proposes to appropriate 77 acre-feet of water annually at a maximum instantaneous diversion rate of 0.133 cubic feet per second (cfs) from an existing well (193 feet deep) completed into the Altamont aquifer in the NW $\frac{1}{4}$ NE $\frac{1}{4}$ of Section 36 for commercial use in a swine production facility located in the NW $\frac{1}{4}$ NE $\frac{1}{4}$ of Section 36; all in T114N-R58W. The site of interest is located in Clark County approximately five miles west of Willow Lake, South Dakota.

AQUIFER: Altamont (A)

HYDROGEOLOGY:

Hedges and others (1982) estimated the Altamont aquifers collectively underly in excess of 1,672,800 acres in Beadle, Brookings, Brown, Clark, Codington, Day, Deuel, Grant, Hamlin, Kingsbury, Marshall, Roberts and Spink Counties, and contains in excess of 7,197,360 acre-feet of recoverable water stored in the aquifers. The Altamont aquifers is somewhat of a catch-all name for glacial-origin basal aquifers in the general northeastern portion of South Dakota that do not fit into another named aquifer (Mathiowetz, 2021; Water Rights, 2021c). Hedges and others (1982) estimated the Altamont aquifer to underly approximately 537,200 acres in Clark County, and contain approximately 3,326,400 acre-feet of recoverable water stored in the aquifer. Figure 1 displays the location of the proposed diversion point, the Altamont aquifer water rights/permits, and observation wells (Water Rights, 2021b and 2021c).

Hamilton (1986) identified six major glacial aquifers in Clark County. The aquifers were classified based on elevation. The three aquifers of higher elevation were classified as Prairie Coteau aquifers 1, 2, and 3, and the three aquifers of lower elevation were classified as Altamont aquifers 1, 2, and 3 (Hamilton, 1986). Based on the approximate elevation and location of the proposed diversion point for Water Permit Application No. 8504-3, the well for this application is completed into the Altamont 2 aquifer (Hamilton, 1986). The Altamont 2 aquifer is a buried glacial outwash aquifer that is comprised of coarse sand, gravel, and sandy silt (Hamilton, 1986). The thickest sand and gravel occur in outwash channels that may be at least one mile wide (Hamilton, 1986). Hamilton (1986) estimated the Altamont 2 aquifer to underly approximately 630 square miles, or 403,200 acres in Clark County, and contain approximately 3.23 million acre-feet of recoverable water stored in the aquifer. On average, the Altamont 2 aquifer is approximately 30 feet thick, and the depth to the top of aquifer materials ranges from 10 to 480 feet below the ground surface (Hamilton, 1986). Water in the Altamont 2 aquifer moves in several directions in the northeastern part of the aquifer due to varying altitudes of aquifer material deposition and the deposition pattern creating preferential flow paths, but the general

direction of groundwater movement in the Altamont aquifer is to the west (Hamilton, 1986). Hamilton (1986) notes the Altamont 2 aquifer is hydraulically connected to the Altamont 3 aquifer near the western part of Clark County and the Altamont 1 aquifer near the center of the county.

For water management purposes, the Altamont aquifer has not been subdivided into management units by the DNR-Water Rights Program and the Water Management Board. Historically, water availability has been reviewed for the entire Altamont aquifer when considering a new water permit application (Water Rights, 2021c). However, more recent reviews have examined availability in the aquifer on a more localized scale. For Clark County, the DNR-Water Rights Program has not historically differentiated between units and considered all the deeper and hydraulically connected outwash deposits in Clark County as the Altamont aquifer. However, this report will briefly address the estimated average annual recharge rate to the Altamont 2 aquifer in Clark County.

A water well completion report was submitted with Water Permit Application No. 8504-3 for a well (193 feet deep) completed into the Altamont 2 aquifer in the NW $\frac{1}{4}$ NE $\frac{1}{4}$ of Section 36-T114N-R58W. The report lists "Top Soil" from 0 to 1 feet below the ground surface, "Yellow Clay" from 1 to 4 feet, "Sand" from 4 to 30 feet, "Blue Clay" from 30 to 185 feet, and "Good Sand" from 185 to 193 feet. The well was screened in blue clay and good sand from 173 to 193 feet below the ground surface, and had a static water level of 140 feet below the ground surface at the time of completion (January 19, 2021) which indicates there was around 45 feet of artesian head pressure in wells completed into the Altamont 2 aquifer near the applicant's proposed well location at that time (Water Rights, 2021d). Based on the submitted well completion report and lithologic logs on file for nearby observation wells, the Altamont 2 aquifer is expected to be confined near the proposed diversion point (SDGS, 2021; Water Rights, 2021b and 2021d).

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 the applicant's proposed use, that the diversion point 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 the potential for unlawful impairment of existing water rights within the Altamont aquifer.

WATER AVAILABILITY:

Water Permit Application No. 8504-3 proposes to appropriate water from the Altamont aquifer. The probability of unappropriated water being available from the 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. An application may be approved, however, for withdrawals of groundwater from any groundwater formation older than or stratigraphically lower than the greenhorn formation in excess of the average estimated annual recharge for use by water distribution systems.” The Altamont aquifer is not older than or stratigraphically lower than the Greenhorn Formation, and the applicant’s proposed use is not for use in a water distribution system as defined by SDCL 46-1-6(17). Therefore, the average annual recharge and average annual withdrawal rates to and from the Altamont aquifer must be considered.

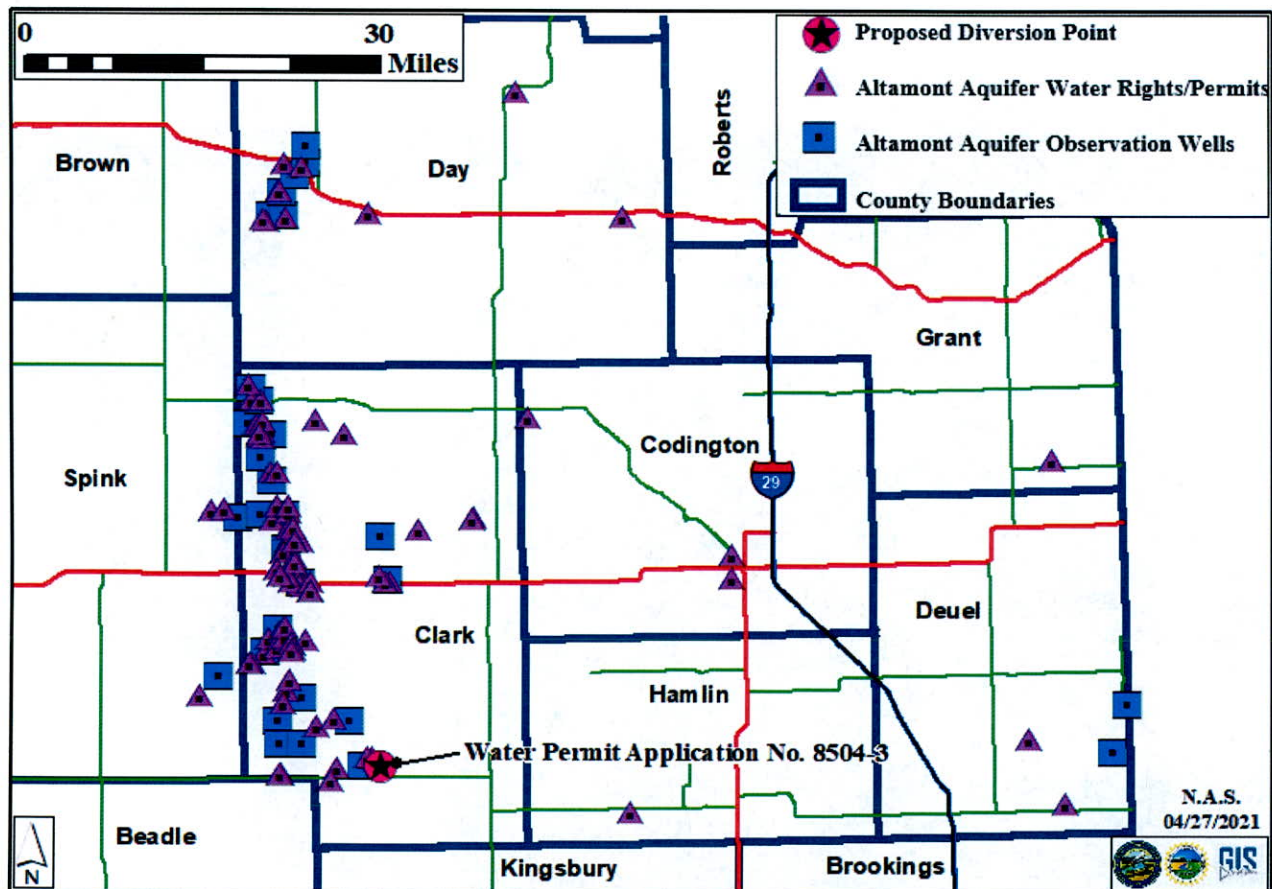


Figure 1. Location of the proposed diversion point for Water Permit Application No. 8504-3, the Altamont aquifer water rights/permits, and observation wells (Water Rights, 2021b and 2021c)

HYDROLOGIC BUDGET:**Recharge**

Recharge to the Altamont aquifer in Clark County is primarily through the infiltration of precipitation and lateral groundwater inflow from other counties (Hamilton, 1986). Hedges and others (1985) estimated the average annual recharge rate to the unconfined portion of the Altamont aquifer to be 2.2 inches per year. However, the Altamont aquifer is primarily confined over its entire extent, and the extent of the unconfined portion of the aquifer has not been delineated.

For confined aquifers, Hedges and others (1985) recommended recharge rates of 0.15 to 0.60 inches per year for use by management and development programs. Since the Altamont aquifer is primarily a confined aquifer, the recommended recharge range for confined aquifers will be used to assess the hydrologic budget of the Altamont aquifer. In Clark County, the estimated range of average annual recharge based on the aquifer's areal extent of 537,200 acres determined by Hedges and others (1982) is 6,715 to 26,860 acre-feet per year (Table 1). For the Altamont aquifer in its entirety, the estimated range of average annual recharge based on the aquifer's areal extent of 1,672,800 acres determined by Hedges and others (1982) is 20,910 to 83,640 acre-feet per year (Table 1).

Hamilton (1986) estimated a recharge rate of 1.5 inches per year due to the infiltration of precipitation to the Altamont 2 aquifer in Clark County. Using a recharge rate of 1.5 inches per year applied over the aquifer's areal extent of 403,200 acres determined by Hamilton (1986) results in the average annual recharge rate to the Altamont 2 aquifer to be approximately 50,400 acre-feet per year (Table 1) (Hamilton, 1986).

Table 1. Estimated average annual recharge rates to the Altamont aquifer in Clark County and its entirety (Hamilton, 1986; Hedges et al., 1982)

	Estimated Areal Extent (in Clark County) (acres)	Estimated Areal Extent (entire Altamont aquifer) (acres)	Recharge Rate (inches/year)	Average Annual Recharge Rate (in Clark County) (acre-feet/year)	Average Annual Recharge Rate (entire Altamont aquifer) (acre-feet/year)
Hedges et al. (1982) - Altamont Aquifer	537,200	1,672,800	0.15 to 0.6 (confined aquifers)	6,715 to 26,860	20,910 to 83,640
Hamilton (1986) - Altamont 2 Aquifer	403,200		1.5	50,400	

Lastly, by applying the lower recharge rate of 0.15 inches per year determined by Hedges and others (1985) over the areal extent of 403,200 acres determined by Hamilton (1986), the average annual recharge rate to the Altamont 2 aquifer in Clark County is approximately 5,040 acre-feet per year.

Discharge

Discharge from the Altamont aquifer in Clark County is primarily through groundwater outflow to other counties and well withdrawals (Hamilton, 1986). Currently, there are 78 water rights/permits authorized to appropriate water from the Altamont aquifer, plus two future use permits reserving water from the Altamont aquifer (Water Rights, 2021c). The two future use permits reserving water from the Altamont aquifer are Permit Nos. 4052-3 (held by the Town of Henry) and 4054B-3 (held by the Town of Wallace) (Water Rights, 2021c); however both communities are on rural water so full development of these permits is unlikely (Friedeman, 2020; Water Rights, 2021c). For the purpose of estimating average annual withdrawals from the Altamont aquifer, the two future use permits are assumed to be fully developable for a total of 881 acre-feet per year (Water Rights, 2021c).

Table 1 summarizes the 25 non-irrigation water rights/permits authorized to appropriate water from the Altamont aquifer with the estimated annual use for each water right/permit as determined by their limiting diversion rate or annual volume. The amount of water that can be withdrawn was estimated by assuming the non-irrigation water rights/permits limited by an annual volume will withdraw their entire appropriated volume every year. It is estimated that the non-irrigation water rights/permits limited only by a diversion rate will pump at their maximum permitted diversion rate for 60 percent of the time. Eight municipal water rights were identified as being connected to a rural water system and maintain their wells for standby purposes (Friedeman, 2020; Water Rights, 2021c); as such, the average annual water use for these water rights has been estimated to be zero acre-feet per year on Table 1. Overall, the average annual withdrawal rate for the Altamont aquifer non-irrigation water rights/permits is approximately 2,326 acre-feet per year (Table 1) (Water Rights, 2021c). For the Altamont aquifer non-irrigation water rights/permits within Clark County, the average annual withdrawal rate is approximately 981 acre-feet per year (Table 1) (Water Rights, 2021c).

Table 1. Summary of the non-irrigation water rights/permits authorized to appropriate from the Altamont aquifer with estimated annual use determined by their respective diversion rate or annual volume (Friedeman, 2020; Water Rights, 2021c)

Permit No.	Name	Status	County	Use	Diversion Rate (cfs)	Permitted Annual Volume (acre-feet/year)	Estimated Use (acre-feet/year)
451-3	City of Brandt	LC	DU	MUN	0.13		0*
1490-3	Town of Revillo	LC	GT	MUN	0.41		0*
1651-3	Town of Andover	LC	DA	MUN	0.11		0*
1718A-3	Ray Kasel LLC	LC	CK	IND	0.77	81	81
1913-3	City of Arlington	LC	KG	MUN	1.13		0*
3101-3	City of Waubay	LC	DA	MUN	0.56		243.3
4049-3	Town of Roslyn	LC	DA	MUN	0.26		0*
4054A-3	Town of Wallace	LC	CD	MUN	1		0*
4127-3	Town of Garden City	LC	CK	MUN	0.1		43.4
4320-3	City of Bristol	LC	DA	MUN	0.3		0*
4498-3	Town of Garden City	LC	CK	MUN	0.06		26.1
4861-3	City of Clark	LC	CK	MUN	0.6		0*
5461-3	Northern Border Pipeline	LC	CK	IND	0.056		24.3
5483-3	Carpenter Café	LC	CK	COM	0.01		4.3
5544-3	Duane I Pietz	LC	CD	COM	0.03		13.0
5626-3	Oak Valley Farms Inc	LC	CD	COM	1.56		677.7
6062-3	Hilkrest Hutterian Brethren	LC	CK	COM/DOM	0.133		57.8
6741-3	Alliance Family Farms LLC	PE	CK	COM	0.56		243.3
6998-3	Riverview LLP	LC	CK	COM	0.89		386.6
7099-3	Lamont Feedlot	PE	CK	COM	0.062		26.9
8309-3	Otter Tail Power Company	PE	DU	IND/COM	0.22	12.3	12.3
8318-3	Fawn Lamb	PE	CK	COM	0.022		9.6
8349-3	Riverview LLP	PE	HM	COM	1.33	399	399
8376-3	Husky Farms LLC	PE	CK	COM	0.267	76.72	76.72
8414-3	Geronimo Energy	PE	CK	COM	0.011	1	1
LC: Licensed Water Right; PE: Water Permit; MUN: Municipal; COM: Commercial						TOTAL:	2,326
IND: Industrial *Identified as being connected to a rural water system							
CK: Clark; CD: Codington; DA: Day; DU: Deuel; GT: Grant; HM: Hamlin; KG: Kingsbury							

Currently, there are 53 irrigation water rights/permits appropriating water from the Altamont aquifer (Water Rights, 2021c). Irrigation water rights/permits have been typically required to report their annual usage on an irrigation questionnaire since 1979. The average annual withdrawal rate for all the Altamont aquifer irrigation water rights/permits that have reported over the period of record is approximately 2,416 acre-feet per year (Table 2) (Water Rights, 2021a). For the Altamont aquifer irrigation water rights/permits within Clark County, the average annual withdrawal rate is approximately 1,781 acre-feet per year (Table 2) (Water Rights, 2021a).

There are domestic wells completed into the Altamont aquifer that do not require a water right/permit, so the withdrawal amount from those wells is unknown (Water Rights, 2021d). Due to their relatively low diversion rates, withdrawals from domestic wells are not considered to be a significant portion of the hydrologic budget. Additionally, with the development of rural water systems in areas where the Altamont aquifer is the uppermost aquifer available; it is likely some domestic users may have transitioned to rural water. Therefore, the quantity of water withdrawn by domestic wells is estimated to be negligible to the hydrologic budget for the Altamont aquifer.

Table 2. Reported historic irrigation use from the Altamont aquifer in South Dakota and only in Clark County (Water Rights, 2021a)

Year	No. of Altamont Aquifer Permits (in SD)	Volume Pumped in SD (acre-feet/year)	No. of Altamont Aquifer Permits (in Clark Co)	Volume Pumped in Clark County (acre-feet/year)
1979	49	3,060	24	1,472.68
1980	50	3,712	25	2,329.15
1981	56	3,699	30	2,689.99
1982	43	2,428.17	24	1,226.10
1983	41	3,601.31	26	2,671.06
1984	45	2,301	27	1,810
1985	44	2,639	27	1,917
1986	43	1,797	27	1,436
1987	41	3,892	25	2,453
1988	39	5,074.10	24	3,308.20
1989	39	4,751.20	24	3,315.80
1990	39	6,188	24	2,023
1991	39	2,130.60	25	1,622.20
1992	39	1,107	24	858
1993	40	51.6	25	42
1994	39	984.17	25	579.68
1995	39	409.95	25	285.55
1996	39	2,004.72	25	1,320.61
1997	39	644	25	357
1998	37	1,188.17	23	826.28
1999	38	1,332.70	24	1,170.95
2000	39	2,273.94	26	1,995.52
2001	38	2,108.79	25	1,615.69
2002	38	3,570.27	25	2,695.04
2003	39	2,877.53	26	2,286.11
2004	44	1,954.90	30	1,766.30
2005	44	2,365.47	30	2,190.13
2006	44	3,684.08	31	3,336.34
2007	46	2,651.96	33	2,143.63
2008	48	1,945.86	36	1,660.16
2009	47	842.88	34	719.58
2010	45	1,027.13	36	887.92
2011	45	1,057.97	36	981.08
2012	47	3,157.99	38	2,727.41
2013	51	2,382.68	42	1,977.78
2014	54	2,106.01	46	1,777.80
2015	52	1,754.51	44	1,502.63
2016	51	3,577.13	44	3,194.20
2017	53	2,929.58	44	2,581.35
2018	53	3,648.14	44	3,155.53
2019	53	127.84	45	122.87
Min	37	51.6	23	42
Max	56	6,188	46	3,336
Avg	44	2,416	30	1,781

Hydrologic Budget Summary

For the Altamont aquifer in its entirety, the estimated range of average annual recharge to the Altamont aquifer is 20,910 to 83,640 acre-feet per year (Hedges et al., 1982). The average annual withdrawal rate from the entire Altamont aquifer totals approximately 5,700 acre-feet per year: non-irrigation: 2,326 acre-feet/year; irrigation: 2,416 acre-feet/year; Future Use Permits: 881 acre-feet/year; Water Permit Application No. 8504-3 (if approved, assuming full volume): 77 acre-feet/year.

In Clark County, the average annual withdrawal rate from the Altamont aquifer totals approximately 2,839 acre-feet per year: non-irrigation: 981 acre-feet/year; irrigation: 1,781 acre-feet/year; Water Permit Application No. 8504-3 (if approved, assuming full volume): 77 acre-feet/year.

For the Altamont 2 in Clark County, the lowest estimated recharge rate to the Altamont 2 is approximately 5,040 acre-feet per year (Hamilton, 1986).

Although, average annual withdrawals were not specifically estimated for Hamilton's (1986) Clark County Altamont 2, the average annual withdrawal rate from the Altamont aquifer water rights/permits in Clark County are less than the lowest estimated value for average annual recharge to just Hamilton's (1986) Clark County Altamont 2.

Based on the hydrologic budget for the Altamont aquifer in its entirety and specifically in Clark County, there is a reasonable probability unappropriated water is available from the Altamont aquifer for the proposed appropriation.

OBSERVATION WELL DATA:

Administrative Rule of South Dakota (ARSD) 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 DANR-Water Rights Program monitors 31 observation wells completed into the Altamont aquifer (Water Rights, 2021b). These observation wells provide data on how the aquifer reacts to regional climatic conditions and local pumping. The two closest observation wells to the proposed diversion point are CK-76H (approximately 1.6 miles west) and CK-76G (approximately 4.8 miles northwest) (as shown in Figure 4). The hydrographs for these observation wells are displayed in Figures 2 and 3 (Water Rights, 2021b). The data points utilized to construct the hydrographs are measurements of the static water level in the observation wells from the top of the well casing.

The hydrographs for the observation wells display stable to increasing water levels over their respective periods of record. The hydrographs for the Altamont aquifer indicate that the aquifer responds well to climatic conditions because water levels are rising during wetter periods (early spring snowmelt and precipitation) and declining to a stable water level during drier periods. Additionally, the water levels in the observation wells display that the amount of recharge to and natural discharge from the aquifer greatly exceeds pumping with the aquifer returning to pre-pumping conditions between irrigation seasons. Aquifer recovery indicates that climatic conditions and therefore, the effects of recharge to and natural discharges from the aquifer govern the long-term fluctuations of waters levels in the aquifer rather than the impacts of pumping from the Altamont aquifer. By recognizing that both recharge to and natural discharge from an aquifer can be captured for pumping, the observation well hydrographs demonstrate unappropriated water is available for the proposed appropriation.

The hydrographs in Figures 2 and 3 were compared to the other hydrographs for observation wells also completed into the Altamont aquifer near the applicant's proposed diversion point and each have similar trends; therefore, the two observation wells used for this analysis are generally representative of the Altamont 2 aquifer near the applicant's proposed diversion point.

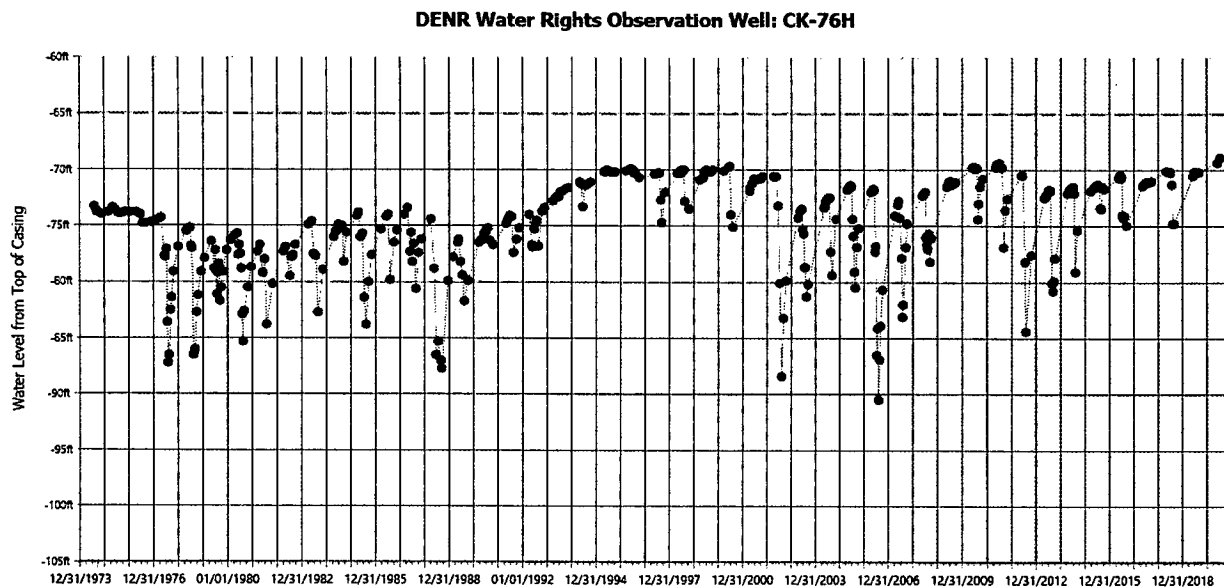


Figure 2. Hydrograph for observation well CK-76H (Water Rights, 2021b)

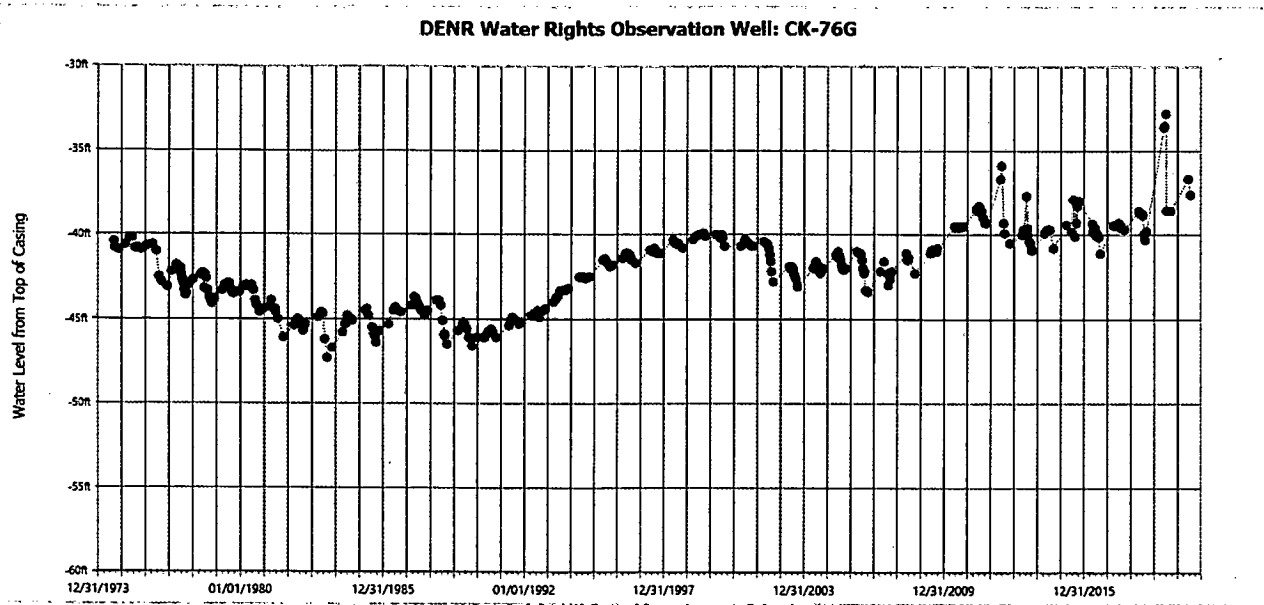


Figure 3. Hydrograph for observation well CK-76G (Water Rights, 2021b)

POTENTIAL FOR UNLAWFUL IMPAIRMENT OF EXISTING WATER RIGHTS:

Currently, there are 78 water rights/permits authorized to appropriate water from the Altamont aquifer, plus two future use permits reserving water from the Altamont aquifer (Water Rights, 2021c). The closest water right/permit to proposed diversion point is Water Permit No. 7345-3 which is held by Jack Schmidt. The diversion point for Water Permit No. 7345-3 is located approximately 1.2 miles northwest of the proposed diversion point for this application (Table 3) (Figure 4) (Water Rights, 2021c).

There are domestic wells on file with the DANR-Water Rights Program that are completed into the Altamont aquifer, with the closest domestic well on file (not held by the applicant) approximately two miles northwest of the proposed diversion point (Water Rights, 2021d). There are potentially other domestic wells completed into the Altamont aquifer near the proposed diversion point that are not on file with the DANR-Water Rights Program.

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Table 3. Water rights/permits authorized to withdraw water from the Altamont aquifer within approximately fifteen miles of the proposed diversion point, as shown in Figure 4 (Water Rights, 2021c)

Permit No.	Name	Status	Use	Diversion Rate (cfs)
1776-3	Riverview LLP	LC	IRR	1.93
2417-3	Fordham Hutterian Brethren	LC	IRR	1.78
2489-3	Clark Farmers COOP	LC	IRR	1.78
3000-3	Douglas G Heaton	LC	IRR	1.9
3028-3	Fordham Hutterian Brethren	LC	IRR	1.78
3059-3	DRM Holdings LLC	LC	IRR	2.01
4399-3	Fordham Hutterian Brethren	LC	IRR	1.78
4658-3	Jack Schmidt	LC	IRR	1.77
5483-3	Carpenter Café	LC	COM	0.01
5812-3	Clark Farmers COOP	LC	IRR	1.78
6741-3	Alliance Family Farms LLC	PE	COM	0.56
6883-3	Riverview LLP	PE	IRR	1.88
6998-3	Riverview LLP	LC	COM	0.89
7099-3	Lamont Feedlot	PE	COM	0.062
7105-3	Riverview LLP	PE	IRR	0*
7345-3	Jack Schmidt	PE	IRR	2.67
7419-3	James Orris	PE	IRR	6.46
7709-3	Gary Doppenberg	PE	IRR	4
8266-3	Hillside Hutterian Brethren	PE	IRR	0.09
8318-3	Fawn Lamb	PE	COM	0.022
8365-3	Gary Doppenberg	PE	IRR	0.89
8376-3	Husky Farms LLC	PE	COM	0.267
LC: Licensed Water Right; PE: Water Permit; IRR: Irrigation; COM: Commercial				
*Diversion rate accounted for under different water right/permit				

In Clark County, the Altamont aquifer is primarily confined with some variation in depth to the top of the aquifer and saturated aquifer thickness (SDGS, 2021; Water Rights, 2021c and 2021d). The Altamont aquifer is expected to be confined near the existing well the applicant proposes to use based on the submitted well completion report and lithologic logs on file for nearby observation wells (SDGS, 2021; Water Rights, 2021b and 2021d). Drawdown created by pumping a well generally does not extend far from the pumped well in an unconfined aquifer; however, in a confined aquifer, drawdown from pumping could extend a distance from the diversion point. The exact drawdown behavior of a well cannot be known without an aquifer performance test. However, observation wells completed into the Altamont aquifer in western Clark County near permitted/licensed diversion points can provide some insight on how the aquifer responds to pumping.

Observation well CK-76M (approximately 9.5 miles northwest of the proposed diversion point) has four high-yield irrigation wells within approximately four miles of it (Water Rights, 2021b and 2021c). The drawdown from pumping can be seen on the hydrograph for CK-76M, along with the aquifer returning to pre-pumping conditions between irrigation seasons (Figure 5) (Water Rights, 2021b). The lithologic log on file for CK-76M noted the well was drilled 65 feet

deep, has a casing stickup height of 2.3 feet, with the top of aquifer is expected to be approximately 46.3 feet below the top of well casing (SDGS, 2021). The lowest recorded static water level on the hydrograph is approximately 38 feet below the top of well casing, which indicates there was still about 8 feet of artesian head pressure in CK-76M even during drier periods when high-yield irrigation wells are expected to be pumping more water (Water Rights, 2021b). Observation well CK-76I (approximately 14 miles northwest of the proposed diversion point) has five high-yield irrigation wells within approximately two miles of it (Water Rights, 2021b and 2021c). The drawdown from pumping can be seen on the hydrograph for CK-76I, along with the aquifer returning to pre-pumping conditions between irrigation seasons (Figure 6) (Water Rights, 2021b). The water levels in CK-76I vary between confined and unconfined, but CK-76I generally acts as a confined aquifer well (Water Rights, 2021b). The lithologic log on file for CK-76I noted the well was drilled 80 feet deep, has a casing stickup height of 1.8 feet, with the top of aquifer is expected to be approximately 49 feet below the top of well casing (SDGS, 2021). The lowest recorded static water level on the hydrograph is approximately 50 feet below the top of well casing, which indicates there was a point in time when there was no artesian head pressure in CK-76I (Water Rights, 2021b). However, on average, the static water level on the hydrograph for CK-76I is approximately 35 feet below the top of well casing indicating there is approximately 14 feet of artesian head pressure on average in CK-76I (Water Rights, 2021b). The lack of artesian head pressure in CK-76I at its lowest recorded water level is not necessarily an indicator that nearby adequate wells are unlawfully impaired. Lastly, the nearest observation well to the proposed diversion point for this application CK-76H, at its lowest historical water level there was still approximately 67 feet of artesian head pressure in CK-76H (Water Rights, 2021b).

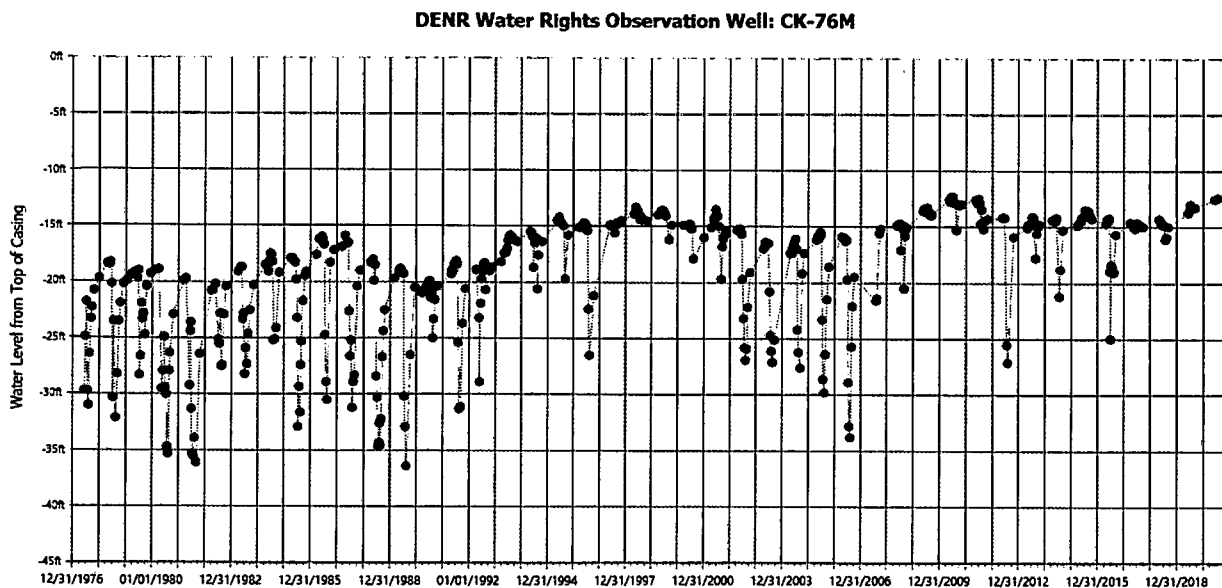


Figure 5. Hydrograph for observation well CK-76M (Water Rights, 2021b)

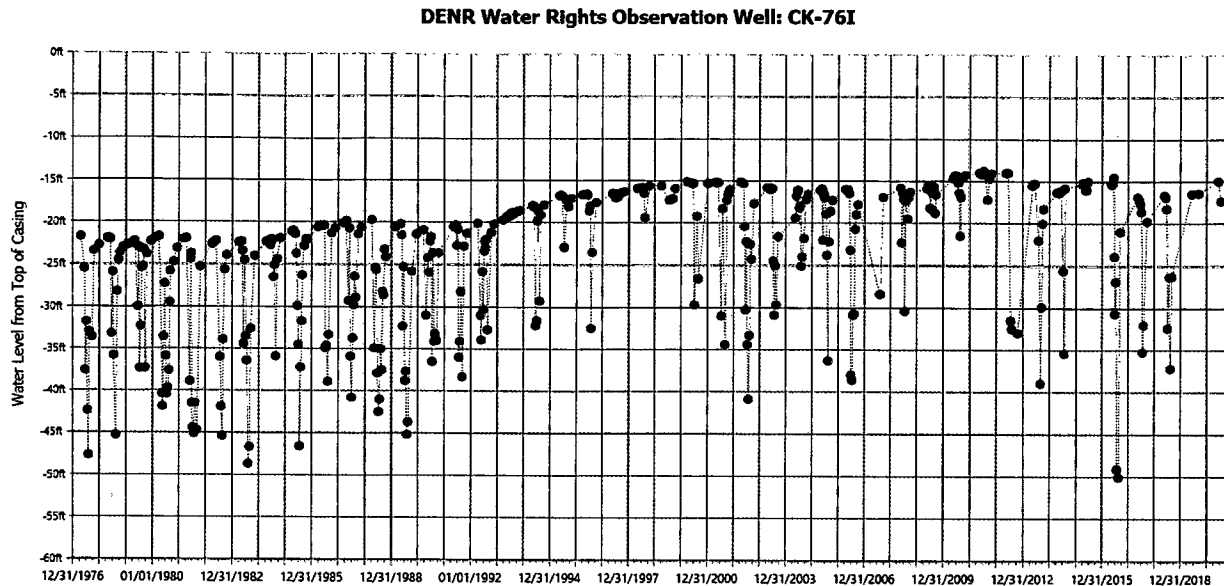


Figure 6. Hydrograph for observation well CK-76I (Water Rights, 2021b)

In Clark County, the Altamont 2 aquifer has a average saturated aquifer thickness of approximately 30 feet, and the depth to the top of aquifer materials ranges from 10 to 480 feet below the ground surface (Hamilton, 1986). This would allow for enough thickness for a pump inlet to be placed 20 feet below the top of the aquifer, which is required for the well to be considered adequate under ARSD 74:02:04:20(6). Any drawdown as a result of the proposed diversion is not expected to unlawfully impair nearby adequate wells. In Clark County, there has been one substantiated complaint in 1975 involving a spring in the county where the spring was located within the radius of influence of the pumping irrigation well (Buhler, 2014; Water Rights, 2021c). However, there have been no substantiated complaints on file with the DANR-Water Rights Program regarding well interference for adequate wells completed into the Altamont aquifer (Water Rights, 2021e).

The Water Management Board recognizes that putting water to beneficial use requires a certain amount of drawdown to occur. The Board has developed rules to allow water to be placed to maximum beneficial use without the necessity of maintaining artesian head pressure for domestic use. The Water Management Board 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.”

The Water Management Board considered the delivery of water by artesian head pressure versus maximum beneficial use during the issuance of Water Right No. 2313-2 for Coca-Cola Bottling Company of the Black Hills. The Board adopted the Findings of Facts and Conclusions of Law that noted the 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 as an unlawful impairment, it would also conflict with SDCL 46-1-4 (Water Rights, 1995). With that in mind, some existing well owners may need to install or lower pumps depending on the specific characteristics of the Altamont aquifer at their location. However, when considering the statutes (SDCL 46-1-4 and 46-6-6.1), rules (ARSD 74:02:04:20(6) and (7)), the saturated aquifer thickness of the Altamont aquifer in Clark County, the artesian head pressure for wells completed into the Altamont aquifer near the proposed diversion point, and the lack of substantiated well interference complaints for adequate wells completed into the Altamont aquifer in Clark County, any drawdown created from the proposed diversion is not expected to cause an unlawful impairment on existing water right/permit holders or domestic users with adequate wells. Therefore, there is a reasonable probability that any interference from the proposed appropriation will not impose unlawful impairments on existing users with adequate wells.

Aquifer History in Clark County

There have been several controversies regarding springs and well interference involving the Altamont aquifer in Clark County that are summarized in detail in two reports authored by previous Water Rights Staff Engineer Ken Buhler (Buhler, 2012 and 2014). The most recent of these controversies was in 2004 (Buhler, 2014). The nearest of the controversies involved Water Right No. 4658-3 which has its respective diversion point located approximately seven miles northwest to the proposed well site for this application (Water Rights, 2021c). This controversy involved concerns that one irrigation well authorized by Water Right No. 4658-3 was impairing another irrigation water right holder’s two wells. However, when Water Rights Staff investigated, it was concluded that unlawful impairment was not occurring (Buhler, 2014). The only substantiated complaint occurred in 1975 involving a spring in the county where the spring was located within the radius of influence of the pumping irrigation well (Buhler, 2014; Water Rights, 2021c). Nevertheless, except for the 1975 complaint, any complaints and concerns about pumping from the Altamont aquifer interfering with area springs have been unsubstantiated (Buhler, 2014; Water Rights, 2021c).

Springs with the Altamont aquifer as a water source are typically the result of downward sloping terrain along the edge of the Coteau Des Prairies incising area aquifers. Small fluctuations in the water levels of the incised aquifers could influence the discharge from springs. In examining the hydrographs for nearby observation wells (Figures 2-4), there are fluctuations in the water level of the aquifer in the area of the proposed diversion point ranging between approximately 10 to 20 feet over the period of record. Given the amount of existing water level fluctuation in the aquifer and the lack of documented interference with springs as a result of pumping from the Altamont aquifer since 1975, adverse impacts to these springs are not anticipated from the proposed diversion. The proposed diversion point for this application is approximately two miles from the top of the western slope of the Coteau. Additionally, if approved, the low diversion rate (0.133

cfs) requested by Water Permit Application No. 8504-3 is not expected to have any impact on the area springs.

CONCLUSIONS:

1. Water Permit Application No. 8504-3 proposes to appropriate 77 acre-feet of water annually at a maximum instantaneous diversion rate of 0.133 cfs from an existing well (193 feet deep) completed into the Altamont aquifer for commercial use in a swine production facility. The site of interest is located in Clark County approximately five miles west of Willow Lake, South Dakota.
2. Based on the hydrologic budget and observation well data, there is a reasonable probability that unappropriated water is available from the Altamont aquifer to supply the proposed appropriation.
3. There is a reasonable probability that the proposed diversion by Water Permit Application No. 8504-3 will not unlawfully impair adequate wells for existing water right/permit holders and domestic users.



Nakaila Steen
Natural Resources Engineer I
SD DANR - Water Rights Program

Reviewed by:



Adam Mathiowetz, PE
Natural Resources Engineer III
SD DANR - Water Rights Program

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SD.

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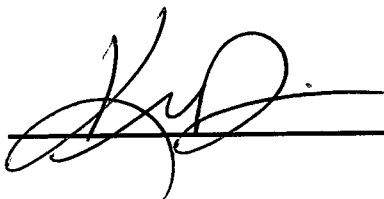
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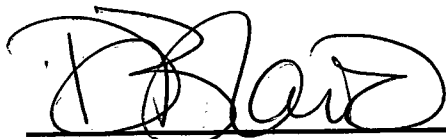
WATER RIGHTS
PROGRAM

Legal Notice Number: 0871

I, Kim Davis, being duly sworn on oath say that the Plainsman is a daily paper published at Huron, Beadle County South Dakota, and that said newspaper has a bona fide circulation of at least 250 copies daily; that said newspaper has been published within said county for fifty-two consecutive weeks immediately prior to this date, that said newspaper is printed in whole or in part, in an office maintained at said place of publication; that I am a Legal Advertising Coordinator of said newspaper and know that facts herein state. The annexed notice headed: SD ENVIRONMENTAL & NATURAL- REDSTONE FARMS, was published for one day, in said newspaper and not in any supplement of the said newspaper, the publication was on - 5/19/21. That the full amount of the fee charged for the publishing \$ 28.06 insures 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 thereof has been agreed to be paid to any person whom so ever.



Subscribed and sworn to me before this date 5/26/21.



Notary Public, South Dakota

My Term Expires 03/11/2022

NOTICE OF
APPLICATION
NO. 8504-3 to

Appropriate Water

Notice is given that Redstone Farms RE LLC, Barry Kerkaert, PO Box 188, Pipestone MN 56164 has filed an application for a water permit to appropriate 77 acre-feet of water annually at a maximum pump rate of 0.133 cubic feet of water per second from one well completed into the Altamont Aquifer (193 feet deep) located in the NW 1/4 NE 1/4 Section 36 for commercial use in a swine production facility located in the NW 1/4 NE 1/4 Section 36; all in T14N-R58W. This site is located approximately 5 miles west of Willow Lake SD.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 8504-3 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 Ron Duvall 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 June 1, 2021.

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.

No. 0871 (adv.)

Published once at the total approximate cost of \$28.06.

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**NOTICE OF APPLICATION NO.
8504-3 to Appropriate Water**

Notice is given that Redstone Farms RE LLC, Barry Kerkaert, PO Box 188, Pipestone MN 56164 has filed an application for a water permit to appropriate 77 acre-feet of water annually at a maximum pump rate of 0.133 cubic feet of water per second from one well completed into the Altamont Aquifer (193 feet deep) located in the NW 1/4 NE 1/4 Section 36 for commercial use in a swine production facility located in the NW 1/4 NE 1/4 Section 36; all in T114N-R58W. This site is located approximately 5 miles west of Willow Lake SD.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 8504-3 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 Ron Duvall 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 June 1, 2021.

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.

Published once at the
total approximate cost of \$28.32.

5-19-1t

Affidavit of Publication

State of South Dakota

§

County of Clark

William J. Krikac of said county, being first duly sworn, on oath says that he is the publisher of the *Clark County Courier*, a weekly newspaper printed and published in Clark in said County of Clark and has a full and personal knowledge of all the facts therein stated; that said newspaper is a legal newspaper and has a bona-fide circulation of at least two hundred copies weekly, and has been published within said County for fifty-two successive weeks next prior to the publication of the notice herein mentioned, and was and is printed wholly or in part in an office maintained at said place of publication; that the

Redstone Farms RE LLC

a printed copy of which taken from the paper in which same was published, is attached to this sheet, and is made a part of this Affidavit, was published in said newspaper at least once in each week for

One

successive week(s), on the day of each week on which said newspaper was regularly published, to wit:

May 19, 2021

that the full amount of the fees for the publication of the annexed notice is

\$28.32

William J. Krikac

Subscribed and sworn to before me this

19th day of May, 2021

Ann Helke

Notary Public
Clark County, South Dakota

My Commission expires: 06/04/2025

Schlaak, Karen

From: Schlaak, Karen
Sent: Tuesday, May 11, 2021 9:05 AM
To: 'courier@itctel.com'
Subject: 8504-3, Redstone Farms RE LLC
Attachments: 8504-3public.short.docx; FORM8.FRM.doc

Attached is a notice to be published on May 19, 2021.

Redstone Farms RE LLC, Barry Kerkaert, PO Box 188, Pipestone MN 56164 (507 825-4211) 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 to the Water Rights Program, 523 E Capitol, Pierre SD 57501.

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

Karen Schlaak

DANR - Water Rights Program

(605) 773-3352

Website: <https://danr.sd.gov>



Schlaak, Karen

From: Schlaak, Karen
Sent: Tuesday, May 11, 2021 9:06 AM
To: 'rcrandall@plainsman.com'
Subject: 8504-3, Redstone Farms RE LLC
Attachments: 8504-3public.short.docx; FORM8.FRM.doc

Attached is a notice to be published on May 19, 2021.

Redstone Farms RE LLC, Barry Kerkaert, PO Box 188, Pipestone MN 56164 (507 825-4211) 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 to the Water Rights Program, 523 E Capitol, Pierre SD 57501.

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

Karen Schlaak

DANR - Water Rights Program
(605) 773-3352
Website: <https://danr.sd.gov>





**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

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

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

May 11, 2021

Redstone Farms RE LLC
c/o Barry Kerkaert
PO Box 188
Pipestone MN 56164

Dear Mr. Kerkaert:

Water Permit Application No. 8504-3 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 Clark County Courier printed at Clark SD (Ph # 605 532-5424) and the Plainsman printed at Huron SD (Ph # 605 353-7414). You will need to contact the newspapers 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 newspapers to authorize publication of your Notice and to arrange for payment. Early contact with the papers can eliminate delays. Upon receiving authorization from you, the publishers have been instructed to publish your notice. The newspapers have 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,

Karen Schlaak

Karen Schlaak
Water Rights Program
(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 May 19, 2021. The applicant is responsible for payment.

NOTICE OF APPLICATION NO. 8504-3 to Appropriate Water

Notice is given that Redstone Farms RE LLC, Barry Kerkaert, PO Box 188, Pipestone MN 56164 has filed an application for a water permit to appropriate 77 acre-feet of water annually at a maximum pump rate of 0.133 cubic feet of water per second from one well completed into the Altamont Aquifer (193 feet deep) located in the NW 1/4 NE 1/4 Section 36 for commercial use in a swine production facility located in the NW 1/4 NE 1/4 Section 36; all in T114N-R58W. This site is located approximately 5 miles west of Willow Lake SD.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 8504-3 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 Ron Duvall 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 June 1, 2021.

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.

Published once at the total approximate cost of_



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

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

JUN 17 2021

Redstone Farms RE LLC
c/o Barry Kerkaert
PO Box 188
Pipestone MN 56164

Dear Mr. Kerkaert:

Enclosed is Water Permit No. 8504-3 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,

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

enclosures

8504-3

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

Date 4/20/23

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

FROM: Redstone Farm RE, LLC
(name)
P.O. Box 188
(address)
Pipestone, MN 56164 507 825 7211
(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. 8504-3 states that the water use system is to be constructed by
June 1, 2026, and water is to be put to beneficial use by June 1, 2030.
(date) (date)

The water use system was completed on 6/1/22.
(date)

Applying the water to beneficial use was completed on 6/1/22.
(date)

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

[Signature]
(signature)

7-98



RECEIVED
MAY 08 2023
OFFICE OF
WATER

**Report of Examination of Works and/or Application of Water to Beneficial Use
For Permit No. 8504-3**

I have this day, September 27, 2023, made a thorough examination of the water use system constructed by Redstone Farms RE LLC, PO Box 188, Pipestone, MN 56164 of Permit No. 8504-3, bearing the priority of March 25, 2021 authorizing the diversion of 0.133 cu. ft. per second of the waters of the Altamont Aquifer for commercial (swine) purposes, in Clark County.

A. Works used to divert the water:

Well Information:

- 1) Well Drilling Firm: Stretch's Well Service
- 2) No. of Wells 1
- 3) Depth(s) 193 feet
- 4) Well log is available Y If no, explain in comments

Casing:

- 1) Diameter 5 inches
- 2) Length 173 feet
- 3) Type Plastic

Screen:

- 1) Type PVC
- 2) Length 20 feet
- 3) Static water level 140 feet

Pump:

- 1) Make Submersible
- 2) Model Unknown
- 3) Size Unknown
- 4) Capacity 25 GPM

Motor:

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

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

- 1) Type Buried PVC
- 2) Size Unknown inches
- 3) Length 200 feet

Comments: xx

C. D. Compliance with Permit Requirements:

- 1) Permit qualifications being abided by Y
- 2) 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: WELL LOCATION From the NE corner Sec 36 T114N R58W, 50 ft S & 2260 ft W, Lat 44.64538 Long -97.74359 (NW ¼ NE ¼)
2. The works are capable of diverting and conveying to the place of use 0.056 cu. ft. per second of water which is to be used for commercial (swine) use.
the license should be issued for 0.056 cfs.
3. All structures, wells and lands on map Y

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

I communicated with Mr. Marty Rost (507/215-0482) regarding the permit. He gave me the well capacity value.

The map only shows the general location of the hog facilities as the last available FSA map (2020) does not show the building site.



Darrell W DeBoer
Water Rights Inspector
DANR, Water Rights Program

Date report completed: October 12, 2023

**STATE OF SOUTH DAKOTA
WATER LICENSE NO. 8504-3**

(1) Redstone Farms RE, LLC, PO Box 188, Piepestone MN 56164, made Application No. 8504-3, March 25, 2021, for a water permit to divert 0.133 cubic feet of water per second from groundwater, one well (Altamont Aquifer), Clark County, South Dakota for commercial purposes. Permit No. 8504-3, with a priority date of March 25, 2021, was approved June 1, 2021, and issued to the applicant for diversion of water with construction of the described water supply system to be completed on or before June 1, 2026, and for the application to beneficial use of water on or before June 1, 2030.

The permit holder submitted a Notice of Completion of Works and Application of Water to Beneficial Use form on April 20, 2023. The Notice stated the diversion system was completed on June 1, 2022, and the water was placed to beneficial use on June 1, 2022.

(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 0.056 cubic feet of water per second for beneficial use. The location of the diversion point is:

- 50 ft S & 2,260 ft W of the NE corner of Section 36, T114N, R58W (NW $\frac{1}{4}$ NE $\frac{1}{4}$)
(Latitude 44.64538 & Longitude -97.74359)

(3) The water is to be used during the following described annual period: January 1 – December 31.

(4) 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 swine production facility located in the NW $\frac{1}{4}$ NE $\frac{1}{4}$ of Section 36, T114N, R58W.

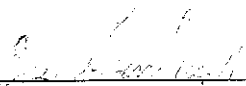
(5) Pursuant to South Dakota Water Law 46-5-30.1 Redstone Farms RE, LLC, the holder and/or owner of Water Right No. 8504-3 is issued a license to appropriate water, the right to use 0.056 cubic feet of water per second from groundwater, one well (Altamont Aquifer), with a priority date of March 25, 2021, from the location specified in (2) of this license for commercial swine production purposes.

This license is subject to South Dakota Water Law, any limitations or conditions listed in Water Right No. 8504-3 and subject to the following qualifications:

1. The well approved under Water Right No. 8504-3 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 their withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
2. Water Right No. 8504-3 is subject to compliance with requirements of the Department's Water Pollution Control Permit issued pursuant to SDCL 34A-2-36 or 34A-2-36.2 or 34A-2-112 or 34A-2-124 for concentrated animal feeding operations.
3. Water Right No. 8504-3 is subject to compliance with all existing and applicable Water Management Board Rules including but not limited to:

continued

- a) Chapter 74:54:01 Ground Water Quality Standards
 - b) Chapter 74:54:02 Ground Water Discharge Permits
 - 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
 - f) Chapter 74:52:01 through 74:52:11 Surface Water Discharge Provisions
4. The Water Right holder shall report to the Chief Engineer annually the amount of water withdrawn from the Altamont Aquifer.
 5. Water Right No. 8504-3 authorizes a total annual diversion of 77 ac-ft of water from the Altamont Aquifer. *(Total annual diversion is reduced from 77 ac-ft to 40.5 ac-ft, based on the system as developed.)*


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


date





**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

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

OCT 06 2003

8504-3

Redstone Farms RE LLC
c/o Barry Kerkaert
PO BOX 188
Pipestone MN 56164

Dear Mr. Kerkaert:

Enclosed is Water License No. 8504-3. 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.

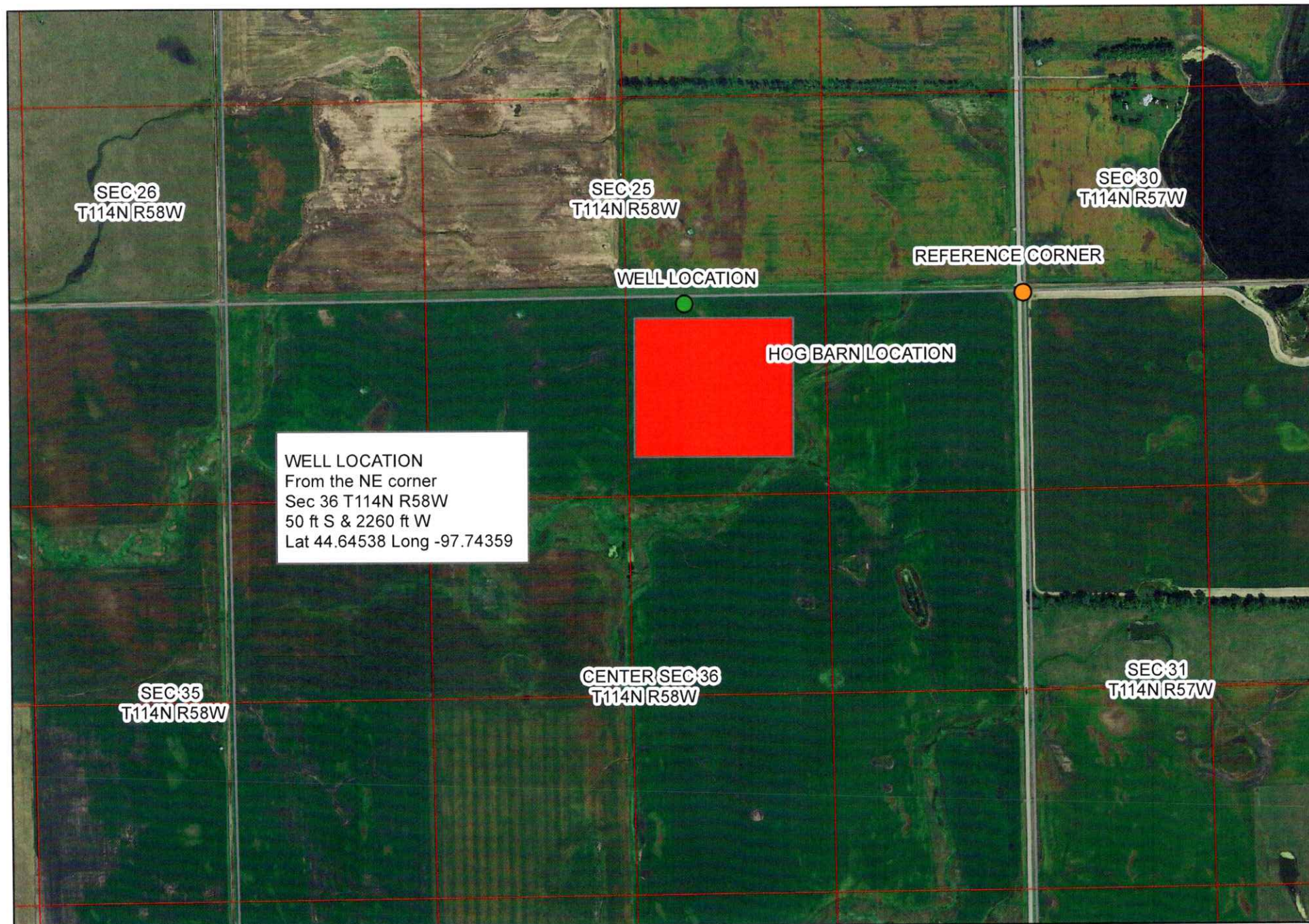
For your information SDCL 46-6-27 requires that if in the future, the owner of an existing well, constructs a replacement well and does not plan to use the old well, the old well is considered abandoned and must be plugged. Also, any well that is being used or is not considered abandoned must be valved and controlled, if flowing, or sealed and capped so that no leaking occurs either underground or at the surface.

So 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



0 0.1 0.2 0.4 0.6 0.8 Miles



Darrell DeBoer
Water Right Inspector
DANR-Water Rights Program



Printed to confirm facility location - per DD's note.