

WATER PERMIT NO. 8303-3

Name of Applicant: **Frank Pravecek**

Address: **42127 295th St, Scotland SD 57059**

Phone: **605 999-2722**

Amount of Water Claimed: **0.12 cfs**

Total Acres: **NA**

Source of Water Supply: **groundwater (2 wells)**

Water to be used for: **commercial**

County: **Bon Homme**

Type of Waste Disposal System:

Location: **3 miles southwest of Scotland**

PRIORITY Date Received: **5-11-2017**

Application/License Fee: **\$ 700**

Corrected Application Received: **7-27-2017**

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

Remarks: **Cattle feedlot operation**

Diversion Point: **N 1/2 NW 1/4 Sec 25-T96N-**

R59W

Land to be Irrigated: **NA**

Depth of Well: **243 and 238 feet deep**

Well Driller: **Heine Electric & Irrigation and**

Well Doctor & Repair

Remarks:

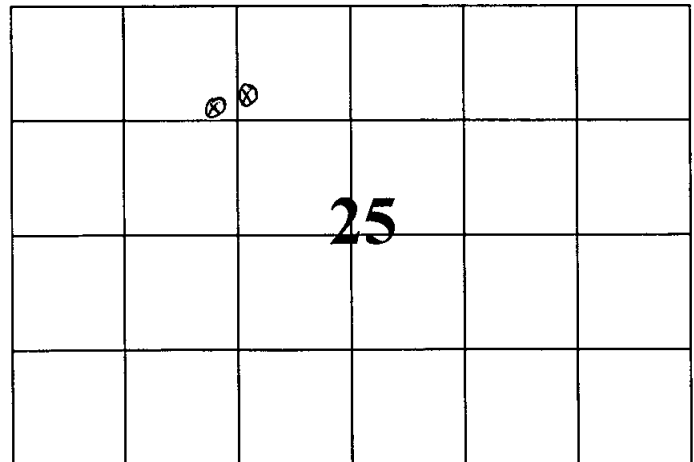
Type of Map:

Prepared by:

Reviewed and the Number Assigned on: **7-27-2017**

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>8303-3</u> (office use only) Hydrologic Unit <u>10160011</u>
	Basin <u>James River</u>
	Newspaper <u>Scotland Journal</u> <u>Press & Dakotan</u>

RECEIVED

MAY 11 2017

FEEDLOT PERMIT 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 <u>Livestock Water Supply</u> | |

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 Frank PravecekMailing Address 42127 295th Street Scotland SD 57059
(Address) (City) (State) (Zip Code)Phone _____ Mobile (605) 999-3222 Email bran-fran@yahoo.com2. Amount of water claimed 0.12 *CFS or 53 **GPM and 51 ***AF or 27.86 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 2 Wells4. Location of point of diversion 2 Wells in NW 1/4 Section 25 T96N R59W County Bon Homme
(example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W)If not a public water supply (e.g. municipal), will water be used outside of the area described above? ☐ Yes ☒ No

If "Yes," where will water be used? _____

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

5. County or counties where water will be used Bon Homme6. Annual period during which water is to be used Entire calendar year Jan 1 - Dec 31

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)

Frank Pravecek plans to expand his existing beef cattle herd to 1,800 head in the short term and to 2,500 head in the long term. He is currently applying for coverage under the SD DENR general CAFO permit. This application represents his application to utilize 2 existing wells to supply water for the cattle for the feedlot. He will use these two wells to supply water during the entire calendar year, when possible. Any water required beyond the wells will be supplied from BY Rural Water system.

I, Frank Pravecek Frank Pravecek Owner/Operator, 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. 8303-3

Date of first receipt of application May 11, 2017.

Date of return to applicant for corrections, amendments or changes May 12, 2017.

Date of receipt of corrected application July 27, 2017.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 8303-3 to Frank Pravecek, 42127 295th St, Scotland SD 57059 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. 8303-3 appropriates 51 acre-feet of water annually at a maximum diversion rate of 0.12 cubic feet of water per second from two existing wells completed into the Codell Aquifer (238 and 243 feet deep) located in the N 1/2 NW 1/4 Section 25 for commercial use in a livestock facility located in the NW 1/4 Section 25; all in T96N-R59W which is approximately 3 miles southwest of Scotland 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. 8303-3 is October 16, 2017.
5. The date from which applicant may claim right is July 27, 2017.
6. One-fifth of the construction is to be completed on or before April 16, 2020.
7. All construction is to be completed on or before October 16, 2022.
8. Water is to be put to beneficial use on or before October 16, 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. 8303-3 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. 8303-3 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. Water Permit No. 8303-3 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 Codell aquifer.
 5. Water Permit No. 8303-3 authorizes a total annual diversion of 51 acre feet of water.

WATER MANAGEMENT BOARD

By: *Jeanne Goodman*

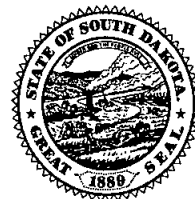
Jeanne Goodman, Chief Engineer

Water Rights Program

Department of Environment and Natural Resources

JAN 09 2018

date



SOUTH DAKOTA WATER WELL COMPLETION REPORT

07-92

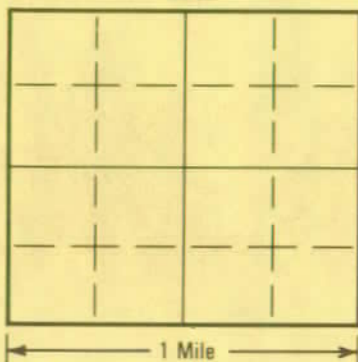
Location NE 1/4 NW 1/4 Sec 25 Twp 96 Rg 59County DON HOMME North

Please mark well location with an "X"

W

E

Well Completion Date

10-5-05

LOCATION:

Distance from nearest potential pollution source (septic tank, abandoned well, feed lot, etc.)? 150 ft. from SEPTIC (identify source)

PROPOSED USE:

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

METHOD OF DRILLING:

FORWARD MUD ROTARYCASING DATA: ☐ Steel ☒ Plastic ☐ Other

If other describe _____

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
<u>250</u> LB/FT	<u>5</u> IN	<u>0</u> FT	<u>243</u> FT	<u>8 3/4</u> IN
_____ LB/FT	_____ IN	_____ FT	_____ FT	_____ IN
_____ LB/FT	_____ IN	_____ FT	_____ FT	_____ IN

GROUTING DATA

Grout Type	No. of Sacks	Grout Weight	From	To
<u>CEMENT</u>	<u>8</u>	_____ lb./gal	<u>12</u> ft.	<u>50</u> ft.
<u>BENTONITE</u>	<u>9</u>	_____ lb./gal	<u>50</u> ft.	<u>170</u> ft.

Describe grouting procedure THROUGH TREMIESCREEN: ☒ Perforated pipe ☐ ManufacturedDiameter 5 IN Length 40 FEETMaterial PVCSlot Size 3/32 Set From 203 Feet to 243 Feet

Other information _____

WAS A PACKER OR SEAL USED? ☒ YES ☐ NOIf so, what material? 3/8 PEA ROCKDescribe packer(s) and location? AROUND SCREENDISINFECTION: Was well disinfected upon completion? YES How: TABS WELL PAC
POURED CLOROX

Laboratory sent to for water quality analysis _____

NO, Why Not? _____

Well Owner: FRANK PRAVACEK

Business Name: _____

Address: 42127 295 ST
SCOTLAND SD 57059

WELL LOG:

DEPTH

FORMATION

FROM

TO

<u>TOPSOIL</u>	<u>0</u>	<u>2</u>
<u>YELLOW CLAY w/ROCK</u>	<u>2</u>	<u>60</u>
<u>TRANSITION MIX</u>	<u>60</u>	<u>80</u>
<u>CHALK</u>	<u>80</u>	<u>170</u>
<u>HARD</u>	<u>170</u>	<u>185</u>
<u>COLELL SANDSTONE</u>	<u>185</u>	<u>243</u>

STATIC WATER LEVEL 80 Feet

If flowing: closed in pressure _____ PSI

GPM flow _____ through _____ inch pipe

Controlled by ☐ Valve ☐ Reducers ☐ Other _____

Reduced Flowrate _____ GPM

Can well be completely shut in? _____

WELL TEST DATA:

☒ PumpedDescribe: W/ AIRLIFT☐ Bailed☐ Other

Pumping Level Below Land Surface

231 ft. After 5 Hrs. pumped 20 GPM

_____ ft. After _____ Hrs. pumped _____ GPM

If pump installed, pump rate 16 GPM

REMARKS

This well was drilled under license # 590

And this report is true and accurate.

Drilling firm WELL DOCTOR & REPAIRSignature of License Representative: Robert Anderson

Signature of Well Owner or Equitable Property Holder: _____

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APR 28 2006

Date: OCT 5-05

WATER RIGHTS PROGRAM

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 Well Doctor&Repair, Heine Electric

For either Existing or Proposed Wells:

c) Well Depth (required) 240 Depth to Top of Water Bearing Material 200' Depth to Water from Surface 200'

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) _____

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)

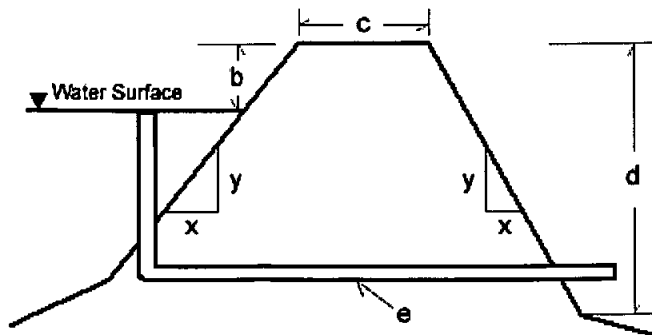
Upstream _____

Downstream _____

h) Surface Area of Impoundment _____

i) Storage _____ Acre Feet

j) Drainage Area Above Dam _____ Acres



Water Use Documentation

Site: Frank Pravecek Feeders

Location: NW1/4 Section 25 T96N R59W, Bon Homme County, SD

Completed by: Justin Bonnema, PE

Date: 3/14/2017

Water Use Source #1: Well 1

Description of Source #1:

- Well is 243 feet deep with a 5" PVC casing.
- Well capacity is estimated at 20 gallons per minute.
- Construction of the well was completed October 5, 2005.
- This well supplies water to the residence and to Lots 1, 2, and 3 (the eastern lots).
- See attached well log for construction details.

Water Use Source #2: Well 2

Description of Source:

Well is 238' deep with a 5" PVC casing.

Well capacity is approximately 33.0 gallons per minute.

Well capacity is estimated at 33.0 gallons per minute.

This well is used to supply water for Lots 6, 7, 8, and 9 (west lots).

See attached well log for well construction details.

Water Use Source #3: BY Rural Water

Description of Source: Producer has a back-up water supply provided by a connection to BY Rural water.

Wells 1 and 2 are located on the Site Map, which is page 3 of 21 in the construction plans.

Maximum water usage for this site is projected to be 53 gallons per minute. This assumes a total future feedlot capacity of 2,500 head of cattle consuming approximately 30 gallons per head per day (typical of hottest part of summer). Typical usages for the present capacity of projected at 18-22 gallons per minute, which is 15-18 gallons per head per day water usage, or a total of 27,000-32,400 gallons per day from the wells.

A water rights permit application will be submitted by the landowner.

#1

NEW Well

SD EForm - 1621LD V1

SOUTH DAKOTA WATER WELL COMPLETION REPORT

11-02

Location NW ¼ NW ¼ Sec 25 Twp 96N Rg 59W

Well Owner: FRANK PRAVECEK

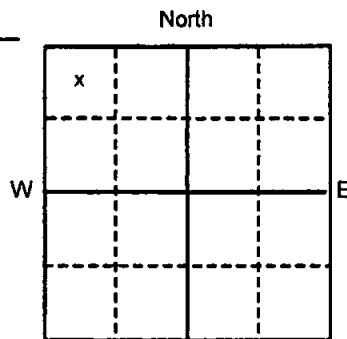
Business Name:

Address: 42127 295TH ST

City, State, Zip: SCOTLAND SD 57059

County Bon Homme

Please mark well location with an "X"



Well Completion Date

September 20, 2016

1 Mile

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

PROPOSED USE:

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

METHOD OF DRILLING:

Forward Rotary

CASING DATA:

If other describe

☐ Steel ☒ Plastic ☐ Other

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
LB/FT	8.00 IN	0.0 FT	197.0 FT	12.25 IN
LB/FT	IN	FT	FT	IN
LB/FT	IN	FT	FT	IN

GROUTING DATA:

Grout Type	No. of Sacks	Grout Weight	From	To
Bentonite	15	9.5 Lb/gal	6.0 Ft	185.0 Ft
		Lb/gal	Ft	Ft

Describe grouting procedure
Tremie Method

SCREEN:

☐ Perforated pipe ☒ Manufactured
 Diameter 8.00 Inches Length 40.0 Feet
 Material PVC
 Slot Size .040 Set From 197.0 Feet to 237.0 Feet

Other information

WAS A PACKER OR SEAL USED?

☐ Yes ☒ No

If so, what material?

Describe packer(s) and location

DISINFECTION: Was well disinfected upon completion?

☒ Yes, How? HTH Tablets

☐ No, Why Not?
 Lab to which water quality sample sent for analysis

WELL LOG:

DEPTH

FORMATION	FROM	TO
Top Soil	0	3
Sandy Tan Clay	3	34
Sandy Gray Clay w/ Gravel Streaks	34	37
Gray Chalk	37	134
Light Gray Chalk	134	184
Codel Sand Stone Silty	184	235
Shale	235	238

STATIC WATER LEVEL 54.8 FEET

If flowing: closed in pressure PSI

GPM flow through Inch pipe

Controlled by ☐ Valve ☐ Reducers ☐ Other

Reduced flow rate GPM

Can well be completely shut in?

WELL TEST DATA:

☒ Pumped Describe:

☐ Bailed

☐ Other

Pumping Level Below Land Surface

166.0 Ft. After Hrs. pumped 33.0 GPM

203.0 Ft. After Hrs. pumped 43.0 GPM

If pump installed, pump rate: GPM

REMARKS

 Elev 1276' ASL
 43.10892
 -97.76996

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JAN 17 2017

WATER RIGHTS PROGRAM

CODELL KB

This well was drilled under license # 810 and this report is true and accurate.

Drilling firm: Heine Electric & Irrigation

Signature of License Representative:

Signature of Well Owner or Equitable Property Holder:

Date: 1-5-17

SOUTH DAKOTA WATER WELL COMPLETION REPORT

07-92

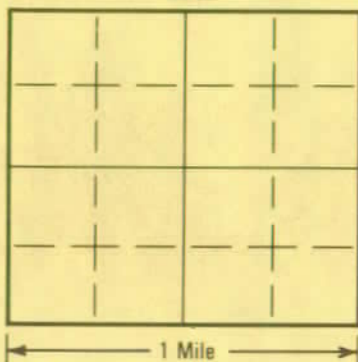
Location NE 1/4 NW 1/4 Sec 25 Twp 96 Rg 59County DON HOMME North

Please mark well location with an "X"

W

E

Well Completion Date

10-5-05

LOCATION:

Distance from nearest potential pollution source (septic tank, abandoned well, feed lot, etc.)? 150 ft. from SEPTIC (identify source)

PROPOSED USE:

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

METHOD OF DRILLING:

FORWARD MUD ROTARYCASING DATA: ☐ Steel ☒ Plastic ☐ Other

If other describe _____

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
<u>250</u> LB/FT	<u>5</u> IN	<u>0</u> FT	<u>243</u> FT	<u>8 3/4</u> IN
_____ LB/FT	_____ IN	_____ FT	_____ FT	_____ IN
_____ LB/FT	_____ IN	_____ FT	_____ FT	_____ IN

GROUTING DATA

Grout Type	No. of Sacks	Grout Weight	From	To
<u>CEMENT</u>	<u>8</u>	_____ lb./gal	<u>12</u> ft.	<u>50</u> ft.
<u>BENTONITE</u>	<u>9</u>	_____ lb./gal	<u>50</u> ft.	<u>170</u> ft.

Describe grouting procedure THROUGH TREMIESCREEN: ☒ Perforated pipe ☐ ManufacturedDiameter 5 IN Length 40 FEETMaterial PVCSlot Size 3/32 Set From 203 Feet to 243 Feet

Other information _____

WAS A PACKER OR SEAL USED? ☒ YES ☐ NOIf so, what material? 3/8 PEA ROCKDescribe packer(s) and location? AROUND SCREENDISINFECTION: Was well disinfected upon completion? TABS WELL PAC
☒ YES, How: POURED CLOX

Laboratory sent to for water quality analysis _____

NO, Why Not? _____

Well Owner: FRANK PRAVACEK

Business Name: _____

Address: 42127 295 ST
SCOTLAND SD 57059

WELL LOG:

DEPTH

FORMATION

FROM

TO

<u>TOPSOIL</u>	<u>0</u>	<u>2</u>
<u>YELLOW CLAY w/ROCK</u>	<u>2</u>	<u>60</u>
<u>TRANSITION MIX</u>	<u>60</u>	<u>80</u>
<u>CHALK</u>	<u>80</u>	<u>170</u>
<u>HARD</u>	<u>170</u>	<u>185</u>
<u>COLELL SANDSTONE</u>	<u>185</u>	<u>243</u>

STATIC WATER LEVEL 80 Feet

If flowing: closed in pressure _____ PSI

GPM flow _____ through _____ inch pipe

Controlled by ☐ Valve ☐ Reducers ☐ Other _____

Reduced Flowrate _____ GPM

Can well be completely shut in? _____

WELL TEST DATA:

☒ PumpedDescribe: W/ AIRLIFT☐ Bailed☐ Other

Pumping Level Below Land Surface

231 ft. After 5 Hrs. pumped 20 GPM

_____ ft. After _____ Hrs. pumped _____ GPM

If pump installed, pump rate 16 GPM

REMARKS

This well was drilled under license # 590

And this report is true and accurate.

Drilling firm WELL DOCTOR & REPAIRSignature of License Representative: Robert Anderson

Signature of Well Owner or Equitable Property Holder: _____

RECEIVED

APR 28 2006

Date: OCT 5-05

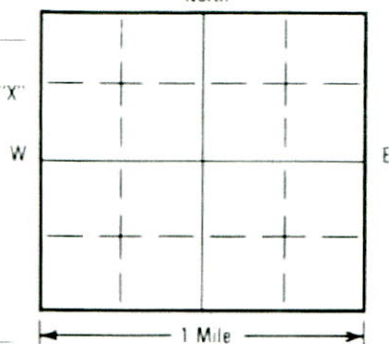
WATER RIGHTS PROGRAM

SOUTH DAKOTA WATER WELL COMPLETION REPORT

07-92

Location N6 1/4 NW 25 Twp 96 Rg 54
County Brown

Please mark well location with an "X"



Well Completion Date

10-5-05

LOCATION:

Distance from nearest potential pollution source (septic tank, abandoned well,

feed lot, etc.)? 150 ft. from SEPTIC (identify source)

PROPOSED USE:

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

METHOD OF DRILLING:

FORWARD MUD ROTARY

CASING DATA:

☐ Steel ☒ Plastic ☐ Other

If other describe _____

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
<u>25</u> LB/FT	<u>5</u> IN	<u>0</u> FT	<u>243</u> FT	<u>8 3/4</u> IN
_____ LB/FT	_____ IN	_____ FT	_____ FT	_____ IN
_____ LB/FT	_____ IN	_____ FT	_____ FT	_____ IN

GROUTING DATA

Grout Type	No. of Sacks	Grout Weight	From	To
<u>CEMENT</u>	<u>8</u>	_____ lb./gal	<u>12</u> ft	<u>50</u> ft
<u>BENTONITE</u>	<u>9</u>	_____ lb./gal	<u>50</u> ft	<u>170</u> ft

Describe grouting procedure THROUGH TIEBACKSCREEN: ☒ Perforated pipe ☐ ManufacturedDiameter 5 IN Length 40 FEETMaterial PVCSlot Size 3/32 Set From 203 Feet to 243 Feet

Other information _____

WAS A PACKER OR SEAL USED? ☒ YES ☐ NOIf so, what material? 3/8 PEA ROCKDescribe packer(s) and location? AROUND SCREENDISINFECTION: Was well disinfected upon completion? YES How: TABS W/CLOROX

Laboratory sent to for water quality analysis _____

Well Owner: LAUREL RAVALLER

Business Name _____

Address: 42127 345 ST
WOBAND SD 57059

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
<u>TOP SOIL</u>	<u>0</u>	<u>2</u>
<u>YELLOW CLAY & ROCK</u>	<u>2</u>	<u>60</u>
<u>TRANS. W. M.I.A</u>	<u>60</u>	<u>80</u>
<u>CLAY</u>	<u>80</u>	<u>170</u>
<u>SAND</u>	<u>170</u>	<u>185</u>
<u>2000' SANDSTONE</u>	<u>185</u>	<u>243</u>

STATIC WATER LEVEL 20 Feet

If flowing closed in pressure _____ PSI

GPM flow _____ through _____ inch pipe

Controlled by ☐ Valve ☐ Reducers ☐ Other _____

Reduced Flowrate _____ GPM

Can well be completely shut in? _____

WELL TEST DATA:

☒ Pumped Describe W/AIRLIFT
☐ Bailed
☐ Other

Pumping Level Below Land Surface

231 ft After 5 Hrs pumped 30 GPM

_____ ft After _____ Hrs pumped _____ GPM

If pump installed, pump rate 100 GPM

REMARKS

This well was drilled under license # 590

And this report is true and accurate.

Drilling firm WELL DOCTOR & REPAIRSignature of License Representative: Robert Anderson

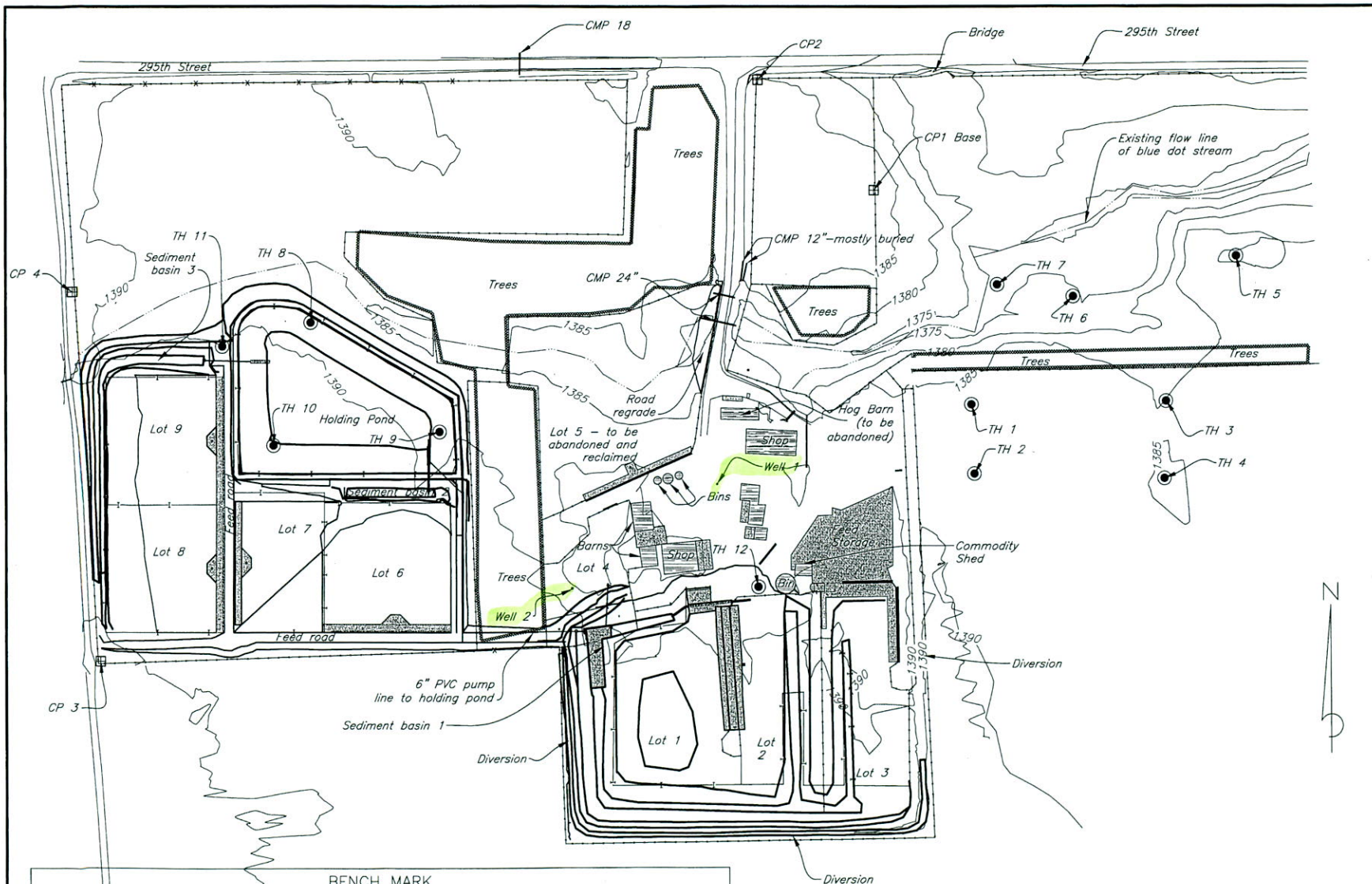
Signature of Well Owner or Equitable Property Holder: _____

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APR 28 2006

WATER RIGHTS PROGRAM

Date: Oct 5-05



BENCH MARK				
NO.	NORTHING	EASTING	ELEVATION	DESCRIPTION
CP1 Base	15662341.13	1969400.30	1387.74	Top of steel rebar with yellow NRCS Cap located 3' west of Gate Brace at entrance to pasture from the south hay yard.
CP2	15662565.14	1969160.77	1385.29	Top of steel rebar with yellow NRCS Cap located 3' SE of Corner Brace on the NW fence corner in south hay yard.



Date 1/16
 Designed Justin Bonnama
 Drawn Justin Bonnama
 Checked
 Approved

SITE MAP

United States
 Department of
 Agriculture
USDA
 Natural Resources
 Conservation Service

File No.
 pravecekDENR.dwg
 Drawing No.

2/16/16 11:54 AM
 Sheet 3 of 21

Frank Pravecek Feeders AWM5,NW Sec.25-T96N-R5E,Blk Homme County, SD

An aerial photograph showing a rural landscape with a grid of section labels. The landscape is divided into sections by red lines. The sections are labeled with their respective township, range, and section numbers. The labels are: Sec 23 T096N R59W, Sec 24 T096N R59W, Sec 19 T096N R58W, Sec 26 T096N R59W, Sec 25 T096N R59W, Sec 30 T096N R58W, Sec 35 T096N R59W, Sec 36 T096N R59W, and Sec 31 T096N R58W. The landscape features a mix of green fields, brown fields, and some buildings. A road runs horizontally across the middle of the image. A river or stream flows from the top left towards the center. A large, light-colored rectangular area is visible in the center-right section.

Sec 23
T096N
R59W

Sec 24
T096N
R59W

Sec 19
T096N
R58W

Sec 26
T096N
R59W

Sec 25
T096N
R59W

Sec 30
T096N
R58W

Sec 35
T096N
R59W

Sec 36
T096N
R59W

Sec 31
T096N
R58W

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date July 27, 2017

RECEIVED OF Frank Pravecek 42127 295th Street Scotland, SD 57059

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

Fee for Application for Permit No. <u>8303-3</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>8303-3</u>	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	700 00

No. **08313**

By

Jeanne Goodman
Chief Engineer

ym



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

denr.sd.gov

May 12, 2018
7

RECEIVED

JUL 27 2017

WATER RIGHTS
PROGRAM

Frank Pravecek
42127 295th St
Scotland SD 57059

Dear Mr. Pravecek:

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

- On Item 2, Amount of water claimed lists 53 gallons per minute (gpm) with an annual volume of 2.786M gallons. DENR believes this is a typo and was meant to be 27,860,000 gallons. The 27.8 million gallons appears to be calculated based on continuous pumping at the 53 gpm rate. It is likely unrealistic that 53 gpm will be pumped continuously during the entire year. A general practice is to convert the diversion rate to a volume in acre feet annually based on 60% pumping. Applying this 60% rate to 53 gpm over the course of the year (27,860,000 gallons) equates to 16.7 million gallons (51 acre feet of water annually). Do you concur with this amount?
- The application/license fee for 51 acre feet annually is \$700.00.

If you have any questions, please contact Eric Gronlund or me.

Sincerely,

Karen Schlaak

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

*We agree with
the above
numbers.*

Frank Pravecek
07/25/17

Affidavit of Publication

State of South Dakota }
County of Bon Homme } SS

Rebecca Dyck Being first duly sworn says that The **Scotland Journal** is a legal weekly newspaper for the publication of legal and other official notices as required by the South Dakota Revised Code of Nineteen Hundred Nineteen, and any amendments thereof, printed and published in the City of Scotland, County of Bon Homme, and State of South Dakota, and has been such a legal newspaper during the time herein-after mentioned, with a bona fide circulation of at least 250 copies weekly, and published within said county for more than 52 successive weeks prior to the first time herein mentioned and is printed in the English language in whole or in part in an office maintained at the place of publication and that deponent is the publisher in charge of the advertising department of said newspaper; that the advertisement headed

Pravecek Notice of Appl. #8303-3
70 @ 38

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

<u>Oct. 4, 2017</u>	20.....
20.....	20.....
20.....	20.....
20.....	20.....

That the full amount of the fee charged for the publication of said notice, \$26.60, 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 Dyck, Publisher
Subscribed and sworn to before me this

4 of Oct., 2017
Peggy Cahelske
Notary Public, South Dakota
My Commission Expires 10-24-2021

NOTICE OF APPLICATION

NO. 8303-3 to Appropriate Water

Notice is given that Frank Pravecek, 42127 295th St, Scotland SD 57059 has filed an application for a water permit to appropriate 51 acre-feet of water annually at a maximum diversion rate of 0.12 cubic feet of water per second from two existing wells completed into the Codell Aquifer (238 and 243 feet deep) located in the N 1/2 NW 1/4 Section 25 for commercial use in a livestock facility located in the NW 1/4 Section 25; all in T96N-R59W which is approximately 3 miles southwest of Scotland SD.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 8303-3 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 October 16, 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 the
total approximate cost of \$26.60.

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WATER RIGHTS
PROGRAM

FRANK PRAVECEK
42127 295TH ST
SCOTLAND SD 57059

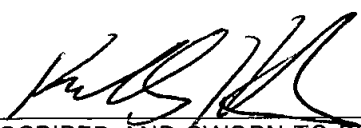
STATE OF SOUTH DAKOTA
COUNTY OF YANKTON

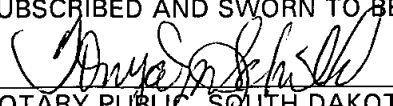
KELLY HERTZ, BEING FIRST DULY SWORN ON OATH DEPOSES
AND SAYS THAT (S)HE IS THE MANAGING EDITOR OF YANKTON
MEDIA INC, A CORPORATION, THE PRINTER AND THE PUBLISHER OF THE
YANKTON DAILY PRESS AND DAKOTAN, A LEGAL DAILY NEWSPAPER
PUBLISHED AND CIRCULATED IN THE CITY OF YANKTON, SAID COUNTY
AND STATE, AND ONE OF THE OFFICIAL NEWSPAPERS OF THE SAID
COUNTY OF FACTS STATED IN THIS AFFIDAVIT; THAT THE ANNEXED
10+4 NOTICE OF APPLICATIO

TAKEN FROM THE PAPER, IN WHICH IT WAS LAST PUBLISHED IN THE
NEWSPAPER ON THE 4th DAY OF October, 2017
THAT THE FULL AMOUNT OF THE FEE CHARGED FOR THE PUBLICATION
OF SAID NOTICE TO WIT \$26.63 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: 10/04/2017

FILED ON: 10/04/2017


SUBSCRIBED AND SWORN TO BEFORE ME THIS 4th DAY OF October, 2017


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

Ad text : 10+4

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Steven M. Pirner, Secretary, Department of Environment and Natural Resources.
Published once at the total approximate cost of \$26.63.

Schlaak, Karen

From: Schlaak, Karen
Sent: Thursday, September 28, 2017 9:29 AM
To: 'Tera Schmidt'
Subject: 8303-3, Frank Pravecek
Attachments: 8303-3public.short.docx; FORM8.FRM.doc

Attached is a notice to be published on October 4, 2017.

Frank Pravecek, 42127 295th St, Scotland SD 57059 (605 999-2722) 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
SD DENR, Water Rights Program
(605) 773-3352



Schlaak, Karen

From: Schlaak, Karen
Sent: Thursday, September 28, 2017 9:28 AM
To: 'scotnews@gwtc.net'
Subject: 8303-3, Frank Pravecek
Attachments: 8303-3public.short.docx; FORM8.FRM.doc

Attached is a notice to be published on October 4, 2017.

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Karen Schlaak
SD DENR, Water Rights Program
(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.**

September 20, 2017

Frank Pravecek
42127 295th St
Scotland SD 57059

Dear Mr. Pravecek:

Water Permit Application No. 8303-3 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 Scotland Journal printed at Scotland SD (Ph # 605-583-4419) 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. 8303-3 to Appropriate Water

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Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 8303-3 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
<http://denr.sd.gov>

**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 8303-3, Frank Pravacek**

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. 8303-3, Frank Pravacek, 42127 295th Street, Scotland SD 57059.

The Chief Engineer is recommending APPROVAL of Application No. 8303-3 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 wells approved under Water Permit No. 8303-3 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. 8303-3 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. Water Permit No. 8303-3 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)

Recommendation for Application No. 8303-3
Page 2

4. The Permit holder shall report to the Chief Engineer annually the amount of water withdrawn from the Codell aquifer.
5. Water Permit No. 8303-3 authorizes a total annual diversion of 51 acre feet of water.

See report on application for additional information.

A handwritten signature in black ink, appearing to read "Jeanne Goodman". The signature is fluid and cursive, with a large initial "J" and a long, sweeping underline.

Jeanne Goodman, Chief Engineer
September 19, 2017

REPORT TO THE CHIEF ENGINEER
ON
WATER PERMIT APPLICATION NO. 8303-3
FRANK PRAVACEK
SEPTEMBER 19, 2017

Water Permit Application No. 8303-3 proposes to appropriate 51 acre-feet of water annually (ac-ft/yr.) at a maximum instantaneous diversion rate of 0.12 cubic feet of water per second (cfs) (53 gallons per minute) from two existing wells completed into the Codell aquifer located in the N ½ NW ¼ Sec. 25-T96N-R59W. The water is to be used for commercial purposes in a livestock facility located in the NW ¼ Sec. 25-T96N-R59W in Bon Homme County approximately three miles southwest of Scotland.

AQUIFER: Codell (CDLL)

Aquifer Characteristics:

The Codell aquifer is a member of the Carlile shale and is comprised of siltstone to fine-grained sandstone (Jorgensen, 1971). The aquifer underlies approximately 4,960,100 acres and contains an estimated 9,895,700 ac-ft of recoverable water in storage in South Dakota (Hedges et. al, 1982). The Codell aquifer is generally 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 well completion reports for the existing wells this application proposes to use indicate the top of the Codell aquifer is approximately 185 feet below grade with an thickness ranging from 51 to 58 feet. The static water level of the older well was 80 feet below grade in October 2005. The static water level of the newer well was 54.8 feet below land surface in September 2016.

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 aquifer. The probability of unappropriated water 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." 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 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, 2017a). There are three observation wells completed into the Codell aquifer within approximately 15 miles of the existing wells Application No. 8303-3 proposes to use. The hydrographs for the observation wells are shown in Figures 1 through 3. The hydrographs for HT-83E and HT-87D are consistent with and representative of the hydrographs for the other observation wells completed into Codell aquifer and have a sufficiently long period of record to evaluate the availability of unappropriated water. The hydrograph for observation well BH-2016E is consistent with the hydrographs for the other observation wells completed into the Codell aquifer but has a short period of record for use in this evaluation.

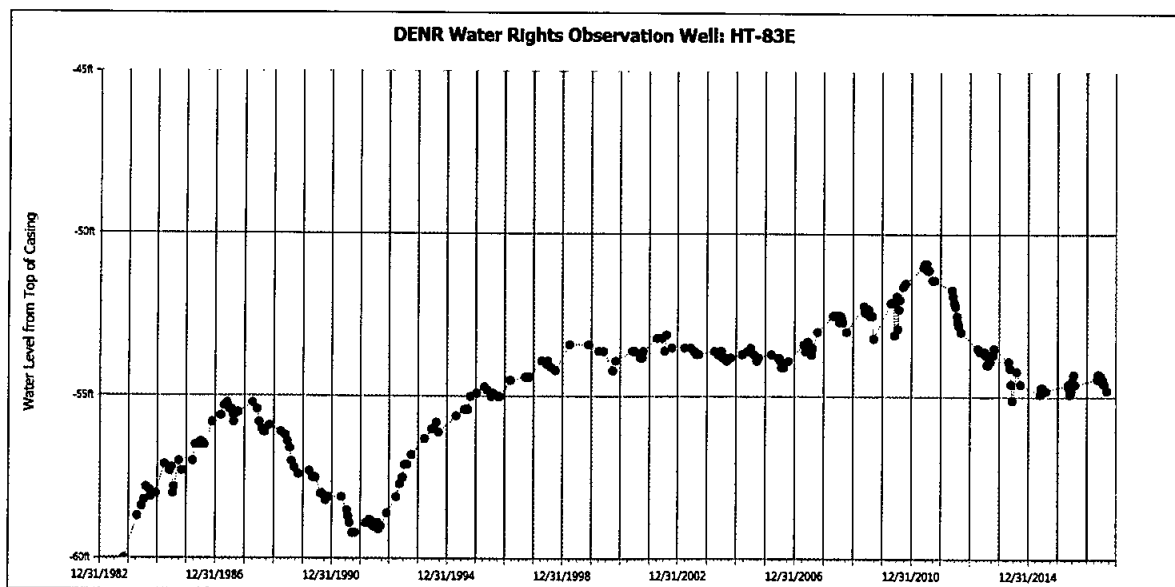


Figure 1- Hydrograph for HT-83E, approximately 5.3 miles northwest of the wells Application No. 8303-3 proposes to use (Water Rights, 2017a)

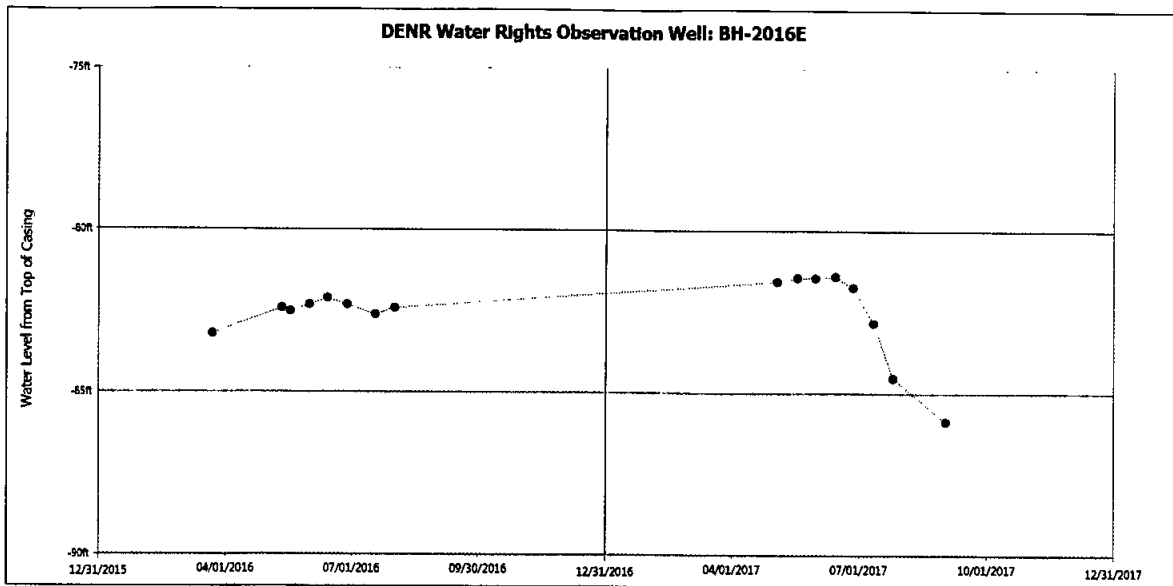


Figure 2- Hydrograph for BH-2016E, approximately 5.8 miles south of the wells Application No. 8303-3 proposes to use (Water Rights, 2017a)

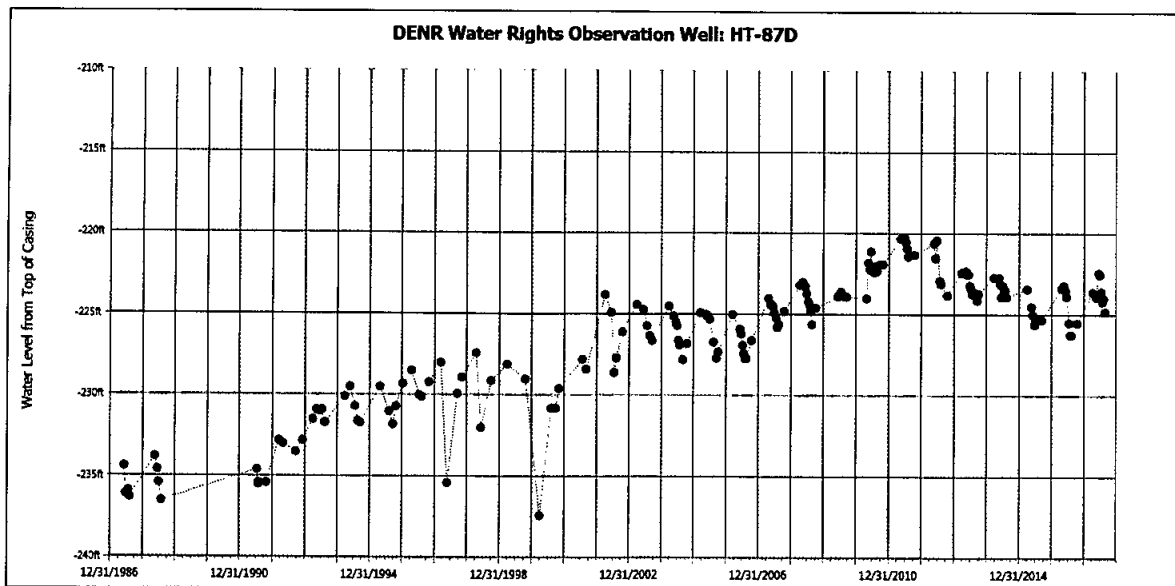


Figure 3- Hydrograph for HT-87D, approximately 15.5 miles northwest of the wells Application No. 8303-3 proposes to use (Water Rights, 2017a)

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 their respective periods of record. The hydrographs 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 1 through 3, especially Figures 1 and 3, show the natural effects of climatic conditions, recharge to, and natural discharge from the Codell aquifer dominate and mask effects pumping may have on the water level of the aquifer. Recognizing 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.

Hydrologic Budget:

Recharge:

Jorgensen (1971) stated recharge to the Codell aquifer in Bon Homme County is primarily from subsurface inflow from outside the county and from glacial outwash aquifers that are in direct contact with the Codell aquifer and have a higher potentiometric surface than the aquifer. The Codell aquifer can also receive recharge from the overlying Niobrara aquifer in certain areas, such as Davison County (Hansen, 1983). The Codell aquifer receives recharge from the Choteau, Corsica, and Lower James Missouri aquifers all of which are glacial outwash aquifers (Kume, 1977; Lindgren and Hansen, 1990). No quantification of the average annual recharge to the Codell aquifer has been published.

Withdrawals:

The Codell aquifer discharges through well pumpage, subsurface outflow to the Missouri River trench (Jorgensen, 1971), and evapotranspiration from the outcrops along Firesteel Creek and drainage to Lake Mitchell and the James River (Hansen, 1983). There are 40 water rights/permits authorized to withdraw water from the Codell aquifer (Water Rights, 2017b). Table 1 lists those water rights/permits.

Historically, water use by non-irrigation water rights/permits that are only limited by diversion rate has been estimated by assuming pumping at maximum permitted diversion rate for 60 percent of the time. Water Permit Nos. 8252-3 and 8291-3 are limited by an annual volume and are assumed to pump that full volume. Most of the municipalities with water rights/permits authorizing the withdrawal of 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. The estimated annual volume of water pumped by non-irrigation permits is 2,101 ac-ft/yr.

There are a number of domestic wells completed into the Codell aquifer (Water Rights, 2017c). It is also likely that many of the wells that are on file with the DENR-Water Rights Program that appear to be completed into the Codell aquifer are no longer used as a primary source due to the availability of rural water systems. Therefore, withdrawal due to domestic use is not likely a significant portion of the hydrologic budget.

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

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
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 BRETHREN INC	BG	LC	COM/LCO	0.111	N/A	48.2
5995-3	BERNARD L VAN VUUREN	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 HTTRN BRTH	HS	LC	DOM	0.222	N/A	96.4
6323-3	NEW ELM SPRINGS COLONY	HT	LC	DOM/LCO	0.09	N/A	39.1
6539-3	CLEARFIELD COLONY	CM	LC	DOM/LCO	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
8252-3	MICHAEL J SLAMA	BH	PE	COM/LCO	0.1	N/A	45**
8291-3	JACKRABBIT FAMILY FARMS	DN	PE	COM/LCO	0.085	N/A	50**
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, **=Permitted Annual Volume, 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							

Historically, there has been little development of irrigation projects using water from the Codell aquifer. 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 withdrawal of water from 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 the 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.

Table 2- Irrigation pumping history of the Codell aquifer (Water Rights, 1979-2017)

Year	No. of Permits Reporting	Appropriation (ac-ft)	Pumpage (ac-ft)
2003	1	74	1.25
2004	1	74	26.52
2005	1	74	26.52
2006	1	74	11.05
2007	1	74	0
2008	1	74	6.46
2009	1	74	2.73
2010	1	74	2.62
2011	1	74	3.37
2012	1	74	0
2013	4	888	23.57
2014	4	1086	161.69
2015	4	1086	191.21
2016	4	1086	220.43
Min	1	74	0
Max	4	1086	220.43
Avg.	1.9	349.0	48.4

Hydrologic Budget:

Estimated annual water use by non-irrigation permits is 2,101 ac-ft/yr. Irrigation water permits are likely to pump less than 543 ac-ft/yr. This application, if approved, would be limited to pumping an annual volume of 51 ac-ft. There is no recharge estimate for the Codell aquifer.

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 for Codell aquifer observation wells. 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:

Figure 4 is a map showing the well locations of water rights/permits authorized to withdraw water from the Codell aquifer in the vicinity of the well sites Application No. 8303-3 proposes to use as well as Codell aquifer observation wells. The water rights/permits shown in Figure 4 are

listed in Table 1. The wells for Water Permit Nos. 7359-3, 7664-3 and 8252-3 are the nearest Codell aquifer appropriative wells to the wells this application proposes to use at approximately 10 miles south of the proposed wells (Water Rights, 2017b).

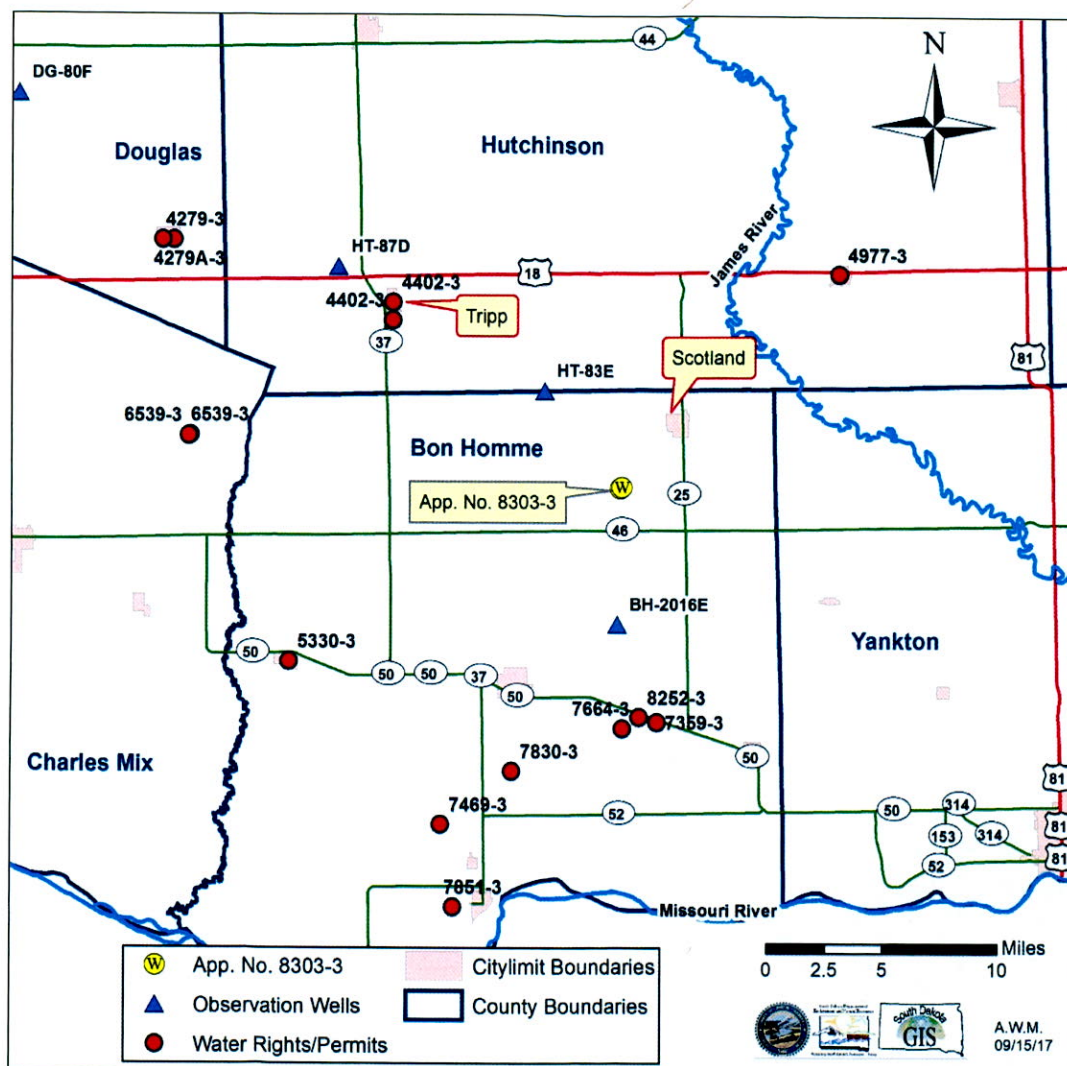


Figure 4- Codell aquifer water rights/permits and observation wells within approximately in the vicinity of the wells Application No. 8303-3 proposes to use (Water Rights, 2017a and 2017b)

While there are no appropriative wells withdrawing water from the Codell aquifer near the wells this application proposes to use, there are a number of domestic wells on file with the SD DENR-Water Rights Program within approximately three miles of the wells this application proposes to use that appear to be completed into the Codell aquifer (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 100 feet of artesian head pressure at the older well constructed in 2005 and more than 130 feet on the newer well constructed in 2016 according to the well completion reports submitted with the application. The diversion rate proposed by this application is relatively small at 0.12 cfs (53 gallons per minute). Therefore, the expected cone of influence created by pumping will be correspondingly small. Considering the lack of history of well

interference issues, the relatively small diversion rate, the large amount of artesian head pressure, and the distance between appropriative wells, pumping this proposed diversion is not expected to create adverse or unlawful impacts to existing adequate wells.

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)), the artesian head pressure, and the lack of history of well interference issues, 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. 8303-3 proposes to appropriate 51 ac-ft/yr. at a maximum instantaneous diversion rate of 0.12 cfs from the Codell aquifer for commercial purposes in a livestock facility in Bon Homme County.
2. Based on the observation well data and a hydrologic budget, there is a reasonable probability unappropriated water is available for this proposed appropriation.
3. There is a reasonable probability the diversion proposed by this application can be made without adversely impacting existing appropriative or domestic users.



Adam Mathiowetz, PE
SD DENR-Water Rights Program

REFERENCES:

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DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

denr.sd.gov

JAN 09 2018

Frank Pravecek
42127 295th St
Scotland SD 57059

Dear Mr. Pravecek:

Enclosed is Water Permit No. 8303-3 authorizing construction of your water diversion system and beneficial use of the water, not exceeding the limits as specified in the Water Permit.

A Form 10, *Notice of Completion of Works and Application of Water to Beneficial Use*, is enclosed. Please return this completed form after you have finished the system and have put the water to beneficial use. An investigation can then be scheduled so the water license may be issued, thus completing the acquisition of a water right.

An information sheet *Common Water Right Questions?* is also enclosed. This sheet is intended to answer some of the questions associated with obtaining and keeping a water right.

Sincerely,

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

enclosures

8303-3

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

Date 6-4-2020

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

FROM: Frank Pravecck
(name)

42127 295th Street
(address)

Scotland, SD 57059
(city, state, zip)

605-999-2722
(phone)

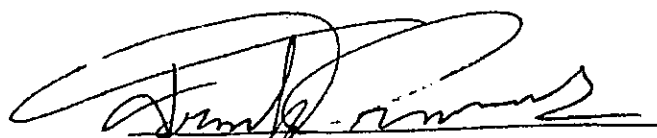
I have completed the construction of the water use system and I have put the water to beneficial use to the maximum extent it is going to be used.

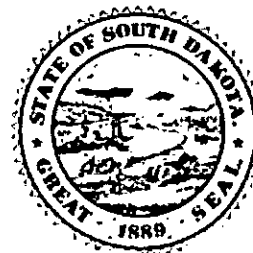
Water Permit No. 8303-3 states that the water use system is to be constructed by
October 16, 2022, and water is to be put to beneficial use by October 16, 2026.
(date) (date)

The water use system was completed on Sep 23 2016.
(date)

Applying the water to beneficial use was completed on Oct 1 2016.
(date)

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


(signature)



Report of Examination of Works and/or Application of Water to Beneficial Use For Permit No. 8303-3

I have this day, May 14, 2020, made a thorough examination of the water use system constructed by Frank Pravecek, 42127 295th St., Scotland, SD 57059 of Permit No. 8303-3, bearing the priority of July 27, 2017 authorizing the diversion of 0.12 cu. ft. per second of the waters of ground water (Codell Aquifer) for commercial use purposes, in Bon Homme County.

Inspection contact: **Frank Pravecek, Owner**

A. Works used to divert the water:

Well Information:

East Well

- 1) Well Drilling Firm: Well Doctor
- 2) No. of Wells 1
- 3) Depth 243 feet
- 4) Well log is available Yes

Casing:

- 1) Diameter 5 inches
- 2) Length 203 feet
- 3) Type PVC

Screen:

- 1) Type PVC
- 2) Length 40 feet
- 3) Static water level 80 feet

Pump:

- 1) Make Grundfos
- 2) Model 15SQE10-250
- 3) Capacity 20 gpm

Motor:

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

West Well

- 1) Well Drilling Firm: Heine Elec. & Irrig.
- 2) No. of Wells 1
- 3) Depth 238 feet
- 4) Well log is available Yes

Casing:

- 1) Diameter 8 inches
- 2) Length 197 feet
- 3) Type PVC

Screen:

- 1) Type PVC
- 2) Length 40 feet
- 3) Static water level 54.8 feet

Pump:

- 1) Make Waterhorse
- 2) Model Unknown
- 3) Capacity 33 gpm

Motor:

- 1) Make Franklin
- 2) Model No. Unknown
- 3) Horsepower rating 5 hp

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

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

C. Works used to apply water to beneficial use:

- 1) One-inch pipes to the individual use points.

D. Compliance with Permit Requirements:

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

E. Condition and Location:

1. The system is in good condition with the point of diversion located as follows:
West Well: 1,130 feet east and 1,030 feet south of the NW corner of Section 25-T96N-R59W (Latitude 43.10891, Longitude -97.76994).
East Well: 1,360 feet east and 860 feet south of the NW corner of Section 25-T96N-R59W (Latitude 43.109406, Longitude -97.768833).
2. The works are capable of diverting and conveying to the place of use 0.12 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: Farm site in the NW1/4 of Sec 25, T96N, R59W, and the license should be issued for 0.12 cfs.
3. All structures, wells and lands on map Yes

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



Keith DeJong
Water Rights Inspector
DENR, Water Rights Program

Date report completed: June 5, 2020

Water Right No. 8303-3



Keith DeJong
Keith DeJong, PE
Staff Engineer
June 5, 2020



DENR
SOUTH DAKOTA

**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

JUN 15 2020

8303-3

Frank Pravecek
42127 295th St
Scotland SD 57059

Dear Mr. Pravecek:

Enclosed is Water License No. 8303-3. This is the final water right document completing your process of obtaining a Water Right. Included with your license is a map prepared by the staff engineer who conducted the field investigation.

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

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

Sincerely,

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

enclosures

STATE OF SOUTH DAKOTA
WATER LICENSE NO. 8303-3

(1) Frank Pravecek, 42127 295th St., Scotland SD 57059 made Application No. 8303-3, May 11, 2017 for a water permit to divert 0.12 cubic feet of water per second from ground water, two wells (Codell Aquifer), Bon Homme County, South Dakota for commercial purposes. Permit No. 8303-3, with a priority date of July 27, 2017 was approved October 16, 2017 and issued to the applicant for diversion of water with construction of the described water supply system to be completed on or before October 16, 2022 and for the application to beneficial use of water on or before October 16, 2026.

(2) It is certified that the permit holder has complied with the provisions of South Dakota State Law relating to completion of the water supply system and is entitled to divert 0.12 cubic feet of water per second for beneficial use. The wells are located as follows:

- **West Well:** 1,130' E and 1,030' S of the NW corner of Section 25, T96N, R59W (NW ¼ NW ¼)
Latitude 43.10891, Longitude -97.76994
- **East Well:** 1,360' E and 860' S of the NW corner of Section 25, T96N, R59W (NE ¼ NW ¼)
Latitude 43.109406, Longitude -97.768833).

(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 NW ¼ of Section 25, T96N, R59W.

(4) Pursuant to South Dakota Water Law 46-5-30.1 Frank Pravecek, 42127 295th St., Scotland SD 57059 the holder and/or owner of Water Right No. 8303-3 is issued a license to appropriate water, the right to use 0.12 cubic feet of water per second from ground water, two wells (Codell Aquifer) with a priority date of July 27, 2017 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. 8303-3 and subject to the following qualifications:

- The wells approved under this water right will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this water right shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
- Water Right No. 8303-3 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.
- Water Right No. 8303-3 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

Water License No. 8303-3

Page 2

- The water right holder shall report to the Chief Engineer annually the amount of water withdrawn from the Codell Aquifer.
- Water Right No. 8303-3 authorizes a total annual diversion of 51 acre feet of water.

Eric Gronlund

Eric Gronlund, Chief Engineer

Water Rights Program

Department of Environment and Natural Resources

JUN 15 2020

date

