

WATER PERMIT NO. 8655-3

Name of Applicant: By Lane Well

Address: 30697 SW Jim River Rd, Yankton SD 57078

Phone: 605 661-7045

Amount of Water Claimed: 1.60 cfs Total Acres: 67

Source of Water Supply: groundwater (one well)

Water to be used for: irrigation County: Yankton

Type of Waste Disposal System:

Location: 2 miles north of Yankton

PRIORITY Date Received: 7-18-22

Application/License Fee: \$950

Corrected Application Received: 8-15-22

Period of Annual Use: May 1 – October 31

Remarks: Requesting diversion rate greater than statutory limit

Diversion Point: SE 1/4 SW 1/4 Sec 20-T94N-
R55W

Land to be Irrigated: E 1/2 SW 1/4, SW 1/4 SE 1/4
Sec 20-T94N-R55W

Depth of Well: 203 feet

Well Driller:

Remarks:

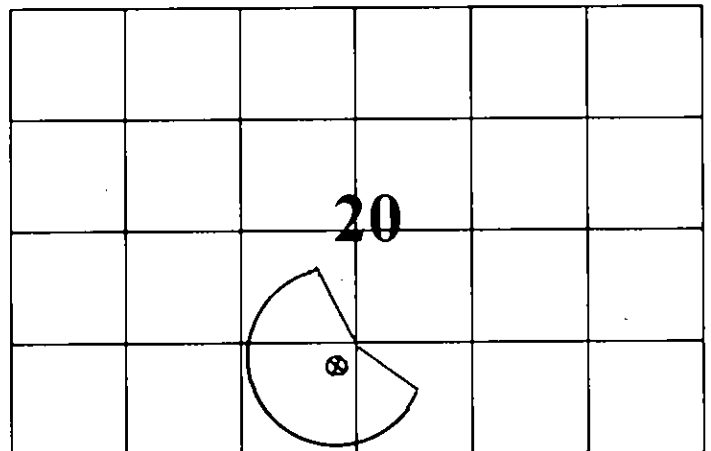
Type of Map: aerial

Prepared by:

Reviewed and the Number Assigned on: 8-15-22

By: **Karen Schlaak**

Notice of Hearing - date to intervene: _____



SOUTH DAKOTA
WATER PERMIT NO. 8655-3

Date of first receipt of application July 18, 2022.

Date of return to applicant for corrections, amendments or changes July 19, 2022.

Date of receipt of corrected application August 15, 2022.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 8655-3 to By Lane Well, c/o Justin Frick, 30697 SW Jim River Rd, Yankton SD 57078 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. 8655-3 appropriates 1.60 cubic feet of water per second (cfs) from one well to be completed into the Lower James Missouri Aquifer (approximately 203 feet deep) located in the SE 1/4 SW 1/4 Section 20 for irrigation of 67 acres located in the E 1/2 SW 1/4, SW 1/4 SE 1/4 Section 20; all in T94N-R55W. Water will also be used for livestock watering. This site is located approximately two miles northeast of Yankton SD.
2. The amount of the appropriation may not exceed 2 acre feet annually for each acre of land to which water is actually and beneficially applied for irrigation. The water is to be used during the following described annual period: May 1 – October 31.
3. The date from which applicant may claim right is July 18, 2022.
4. The date of approval of Permit No. 8655-3 is September 26, 2022.
5. One-fifth of the construction is to be completed on or before March 26, 2025.
6. All construction is to be completed on or before September 26, 2027.
7. Water is to be put to beneficial use on or before September 26, 2031.
8. Water rights obtained in compliance with the laws of the State of South Dakota may not be unlawfully impaired by this appropriation.

QUALIFICATIONS

1. The well approved under Water Permit No. 8655-3 is located near domestic wells and other wells which may obtain water from the same aquifer. Water withdrawals shall be controlled so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
2. The well authorized by Permit No. 8655-3 shall be constructed by a licensed well driller and construction of the well and installation of the pump shall comply with Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) pursuant to Section 74:02:04:28.
3. Pursuant to SDCL 46-5-6 which allows a greater diversion rate if the method of irrigation, time constraints, or type of soils so requires, Permit No. 8655-3 authorizes a maximum diversion rate of 1.60 cfs for the irrigation of 67 acres with an annual volume not to exceed 2 acre feet of water per acre per year.
4. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.

WATER MANAGEMENT BOARD

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

OCT 20 2022

date



JUL 18 2022

PAID

JUL 18 2022

Ck# 1749

Rec't#

RECEIVED

Mail to: DENR - Water Rights 523 E Capitol Ave Pierre, SD 57501-3182 ph. (605) 773-3352	No. <u>8655-3</u>	(office use only) Hydrologic Unit <u>10160011</u>	OFFICE OF WATER
	Basin <u>James R</u>		
	Newspaper <u>Press & Dakotan</u>		

Application For Permit To Appropriate Water For Irrigation

AUG 15 2022

Type of Application: ☒ New ☐ Vested Right ☐ Amendment/Correction to Permit No. OFFICE OF WATER

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

1. Name to Appear on Irrigation Permit By Lane Well

Note: The "Name to Appear on Irrigation Permit" must be the name in which the property to be irrigated is held in.

Mailing Address 30697 SW Jim River Rd Yankton SD 57078
(Address) (City) (State) (Zip Code)

Phone 6056619058 Mobile 6056617045 Email Frick.Justin82@gmail.com

2. Amount of water claimed 1.60 *CFS or 720 **GPM ***AF Total Acreage ~~825.6697~~ 67
(*Cubic Feet per Second) (**Gallons per Minute) (***)Acre Feet - storage capacity of dam/dugout or annual use if applicable

3. Source of water supply Ground

4. Location of point of diversion ~~80777/94/55 SE 1/4 - N/E 1/4~~
(example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W)

SE 1/4 SW 1/4 Sec 20-T94N-R55W County Yankton

5. County or counties where water will be used Yankton

6. Annual period during which water is to be used May 1 - October 31

7. List below each forty acre division, or lot, or fraction thereof and show number of acres to be irrigated in each.
(Attach sheet if more space is needed)

Land Description	Acres	Land Description	Acres
lane 603	63	NE 1/4 SW 1/4 Sec 20-T94N-R55W	17
part of west of Do. re	33	SE 1/4 SW 1/4 "	33
lane 603	66.77	SW 1/4 SE 1/4 "	17

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

Well for irrigating crops & watering cattle.

I, Justin Frick Owner, 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.

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 1 Have test holes been drilled ☐ Yes ☒ No Drilled by Christianson Well
(if yes, please provide copies of logs)b) If existing wells, how many — Provide copy of log(s), if available. Drilled by —

For either Existing or Proposed Wells:

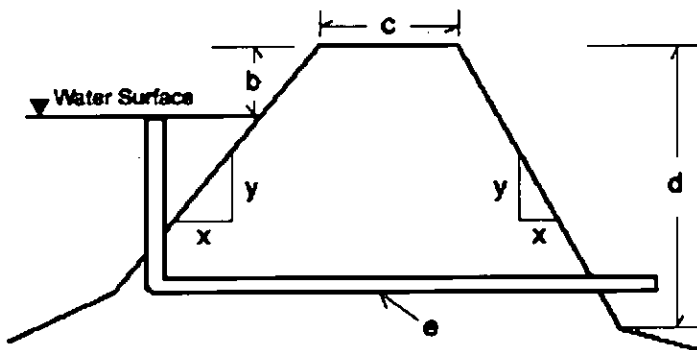
c) Well Depth (required) 208 Depth to Top of Water Bearing Material 109 Depth to Water from Surface 135d) Distance to nearest domestic well on applicant's property N/A Property owned by others N/A**2. Wastewater Disposal System Information**a) Type of System (i.e. septic tank, drain field) —b) System 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 —

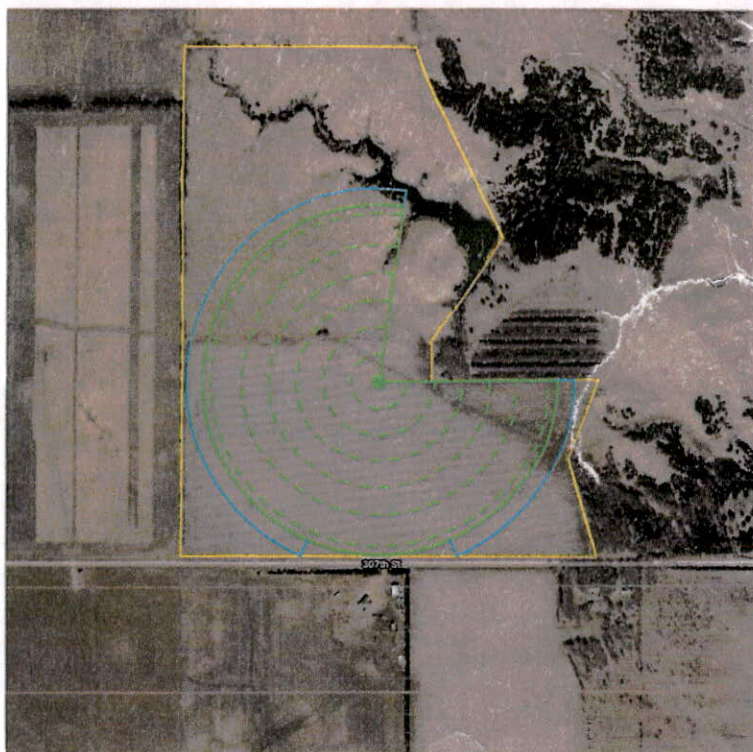
g) X & Y Slope (e.g. 3 to 1 is a typical slope)

Upstream —Downstream —h) Surface Area of Impoundment —i) Storage — Acre Feetj) Drainage Area Above Dam — Acres

System Name: Pivot 1

Span #	Diameter	Length	Cumulative Length
1	6 - 5/8"	158.08 ft	158.08 ft
2	6 - 5/8"	157.08 ft	315.17 ft
3	6 - 5/8"	157.08 ft	472.25 ft
4	6 - 5/8"	157.08 ft	629.33 ft
5	6 - 5/8"	157.08 ft	786.42 ft
6	6 - 5/8"	178.92 ft	965.33 ft
Overhang:	5 - 9/16"	47.00 ft	1012.33 ft
End Gun:	-	3.00 ft	1015.33 ft

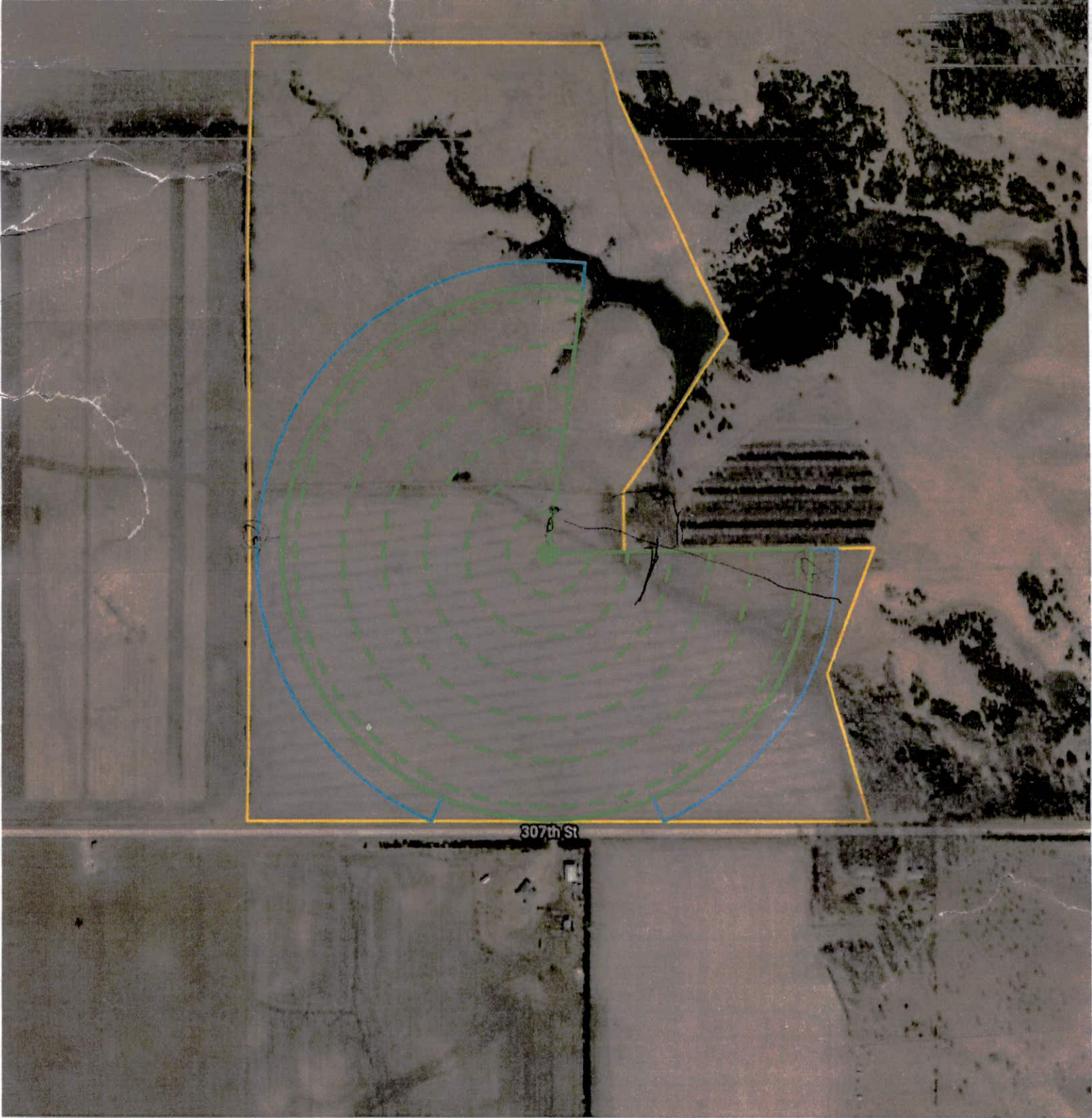
Total System Length: 1015.33 ft
 Number of Spans: 6
 Available Outlet Count: 142
 Degree of Sweep: 278 degrees
 Endgun Throw: 100.00 ft
 System Wetted Area: 57.14 acres
 Corner Wetted Area: NA
 End Gun Wetted Area: 9.83 acres
Total Wetted Area: 66.97 acres

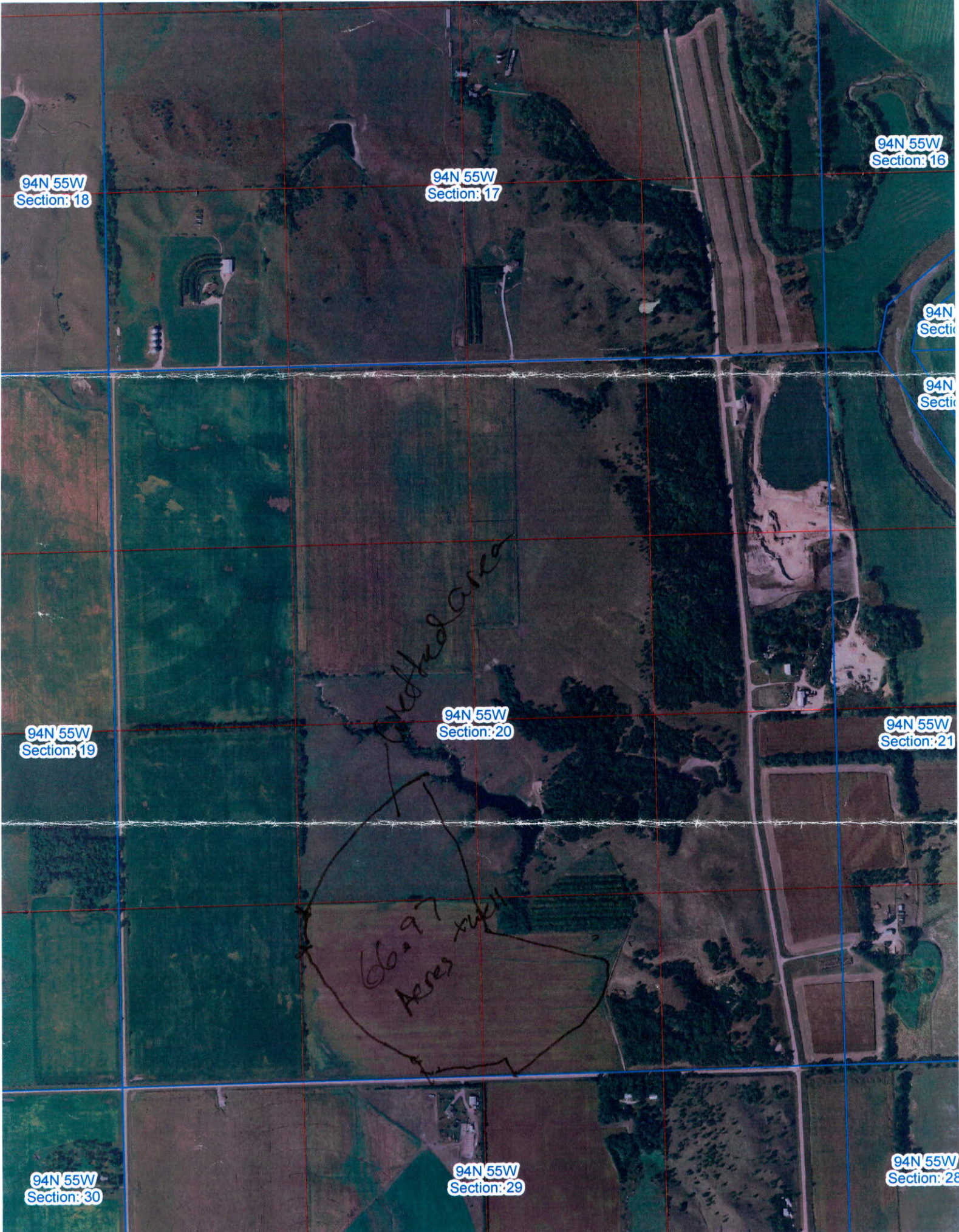


Center, Start, Stop Positions							
Center Position		Start Position		Stop Position		Angle Degree From North	
Lat	Long	Lat	Long	Lat	Long	Start	Stop
42.940780°	-97.368130°	42.940806°	42.940806°	42.943532°	-97.367618°	88.4°	6.7°

Endgun Coverage Area									
Primary Endgun	Angle Degree From North		Angle Degree From Start		Start Position		Stop Position		Total Coverage Area
	Start	Stop	Start	Stop	Lat	Long	Lat	Long	
Area 1	88.4°	155.4°	0.0°	67.0°	42.940806°	-97.364349°	42.938233°	-97.366620°	2.85
Area 2	202.6°	6.7°	114.2°	278.3°	42.938237°	-97.369651°	42.943532°	-97.367618°	6.98

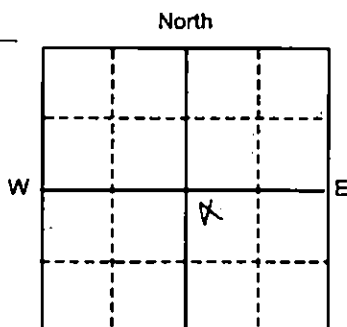
Second Endgun	Angle Degree From North		Angle Degree From Start		Start Position		Stop Position		Total Coverage Area
	Start	Stop	Start	Stop	Lat	Long	Lat	Long	





SOUTH DAKOTA WATER WELL COMPLETION REPORT

11-02

Location NW 1/4 SE 1/4 Sec 20 Twp 94N Rg 55WCounty YanktonPlease mark well
location with an "X"

Well Completion Date

3/29/22

1 Mile

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

1500 ft. from septic tank (Identify source)

PROPOSED USE:

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

METHOD OF DRILLING:

Reverse Rotary

CASING DATA:

☐ Steel ☒ Plastic ☐ Other
 If other describe:

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
<u>160</u> LB/FT	<u>16</u> IN	<u>0</u> FT	<u>160</u> FT	<u>28</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>70</u>	<u>0</u> Lb/gal	<u>0</u> Ft	<u>25</u> Ft
<u>pred: 4cc AM</u>	<u>4/19/22</u>	<u>0</u> Lb/gal	<u>0</u> Ft	<u>0</u> Ft

Describe grouting procedure

pumped down w/ pressure
grout

SCREEN:

☒ Perforated pipe ☐ Manufactured
 Diameter 16 Inches Length 40 Feet
 Material PVC
Slot Size .085 Set From 160 Feet to 200 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? Chlorine☐ No, Why Not?Lab to which water
quality sample sent for analysisWell Owner: Justin Frick

Business Name:

Address: 907 E 18thCity, State, Zip: Yankton, SD 57078

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
<u>Brown top soil</u>	<u>0</u>	<u>6</u>
<u>Brown clay</u>	<u>6</u>	<u>57</u>
<u>ROCKS</u>	<u>57</u>	<u>58</u>
<u>brown clay</u>	<u>58</u>	<u>61</u>
<u>SAND & Gravel</u>	<u>61</u>	<u>72</u>
<u>brown clay</u>	<u>72</u>	<u>109</u>
<u>SAND & Gravel</u>	<u>109</u>	<u>203</u>
<u>Brown clay</u>	<u>203</u>	<u>205</u>

STATIC WATER LEVEL

135 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: Turbine pump w/ engine
☐ Bailed
☐ Other

Pumping Level Below Land Surface

142 Ft. After 2 Hrs. pumped 1000 GPM

Ft. After Hrs. pumped GPM

If pump installed, pump rate: 700 GPM

REMARKS

This well was drilled under license # 444 and this report is true and accurate.Drilling firm: Christensen Well & Irrigation

Signature of License Representative:

Cary Christensen

Signature of Well Owner or Equitable Property Holder

RECEIVED

APR 13 2022

Date:

PETROLEUM RELEASE FUND
Water Rights Program



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

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

June 29, 2020

Terry Frick
30697 SW Jim River Rd
Yankton SD 57078

Dear Mr. Frick:

I am writing in regard to permitting for an area close to the water permit you obtained in 2021. Last year you obtained Water Permit No. 8534-3 for additional acreage to an existing system in the north half of Section 20, T94N, R55W.

In looking at our online map for that area it appears you may have added a system in the south half of Section 20. In checking our files, I don't find a water permit for a system in that area. If you are irrigating or intend to irrigate the land, a water permit will need to be obtained.

Enclosed is a set of application forms for use in obtaining a new water permit. If you feel the acreage is covered under another permit or perhaps someone else's name, please let me know.

Sincerely,

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

encl



DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES

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

RECEIVED

AUG 15 2022

OFFICE OF
WATER

PAID

AUG 15 2022
Ck# 1760
Rec't# _____

July 19, 2022

By Lane Well
c/o Justin Frick
30697 SW Jim River Rd
Yankton SD 57078

Dear Mr. Frick:

Thank you for submitting the *Application for a Permit to Appropriate Water* for irrigation in Yankton County. In order to complete the application, the following is required.

- Based on the map you submitted, the area to be irrigated is in the SW1/4 SE1/4, E1/2 SW1/4 section 20-T94N-R55W (see enclosed map of section 20 with the quarter-quarter lines showing as red lines). In Item No. 4 on the application, the diversion point (well location) is indicated as being in the SE1/4 NE1/4 section ~~24~~²⁰-T94N-R55W which is four miles east of the land to be irrigated or, if you go to the west, that section 24 is more than a mile in the next township over which is T94N-R56W. The location of the proposed well site needs to be identified on a map and, if necessary, the legal description corrected on your application. In addition to the map of section 20, I am also enclosing maps of both section 24 locations so the well site can be marked on the appropriate map. **Please outline the acres to be irrigated and mark the proposed well location with an "X" on the map and return the map(s) to us.**
- Item No. 2 of the application states total acreage is 80 acres. In Item No. 7, the breakdown of acres totals 93 acres. The sheet from the irrigation company indicates 66.97 acres. Please identify which of these acreage numbers to use on the application. We recommend you apply for a few additional acres, so you have some leeway if changes need to be made when installing the system. **What is the total number of acres you intend to irrigate?**
- The application/license fee for irrigation of 60 – 120 acres is \$950.00. You submitted \$500.00. **Please submit an additional \$450.00.**

If you have any questions, please contact me.

Sincerely,

Karen Schlaak

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

enclosures

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Agriculture and Natural Resources

Date July 18, 2022

RECEIVED OF Justin R. Frick/By Lane Well 907 E 18th St., Yankton SD 57078

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

Fee for Application for Permit No. <u>8655-3</u> to Appropriate Water, to construct and to put water to beneficial use	\$ <u>500.00</u>
Fee for Application for Permit No. _____ to Appropriate Water for Future use	\$ _____
Fee to retain Future Use Permit No. _____ after period of seven years.	\$ _____
Fee for Inspecting Constructed Works, confirming beneficial use and issuing Water License No. _____	\$ _____
Fee for Filing Transfer Form _____	\$ _____
Fee for _____	\$ _____
Fee for Issuing New Well Driller's License No. _____	\$ _____
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	\$ <u>500.00</u>

By

Eric Gronlund

Chief Engineer

vm

RECEIPT

WATER RIGHTS PROGRAM South Dakota Department of Agriculture and Natural Resources

Date August 15, 2022

RECEIVED OF Justin Frick 907 E. 18th St., Yankton SD 57078

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

Fee for Application for Permit No. <u>8655-3</u> to Appropriate Water, to construct and to put water to beneficial use	\$250.00
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>8655-3</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
	\$450.00

By Eric Gronlund
Chief Engineer
vm



**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. 8655-3, By Lane Well**

Pursuant to SDCL 46-2A-2, the following is the recommendation of the Chief Engineer, Water Rights Program, Department of Agriculture and Natural Resources concerning Water Permit Application No. 8655-3, By Lane Well, 30697 SW Jim River Rd, Yankton SD 57078.

The Chief Engineer is recommending APPROVAL of Application No. 8655-3 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 domestic water uses and water rights, 3) the proposed use is a beneficial use and 4) it is in the public interest as it pertains to matters of public interest within the regulatory authority of the Water Management Board with the following qualifications:

1. The well approved under Water Permit No. 8655-3 is located near domestic wells and other wells which may obtain water from the same aquifer. Water withdrawals shall be controlled so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
2. The well authorized by Permit No. 8655-3 shall be constructed by a licensed well driller and construction of the well and installation of the pump shall comply with Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) pursuant to Section 74:02:04:28.
3. Pursuant to SDCL 46-5-6 which allows a greater diversion rate if the method of irrigation, time constraints, or type of soils so requires, Permit No. 8655-3 authorizes a maximum diversion rate of 1.60 cfs for the irrigation of 67 acres with an annual volume not to exceed 2 acre feet of water per acre per year.
4. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.

See report on application for additional information.

Eric Gronlund, Chief Engineer
September 7, 2022

Report to the Chief Engineer
On Water Permit Application No. 8655-3

By Lane Well
C/O Justin Frick

September 1st, 2022

Water Permit Application No. 8655-3 proposes to divert water at a maximum instantaneous diversion rate of 1.60 cubic feet per second (cfs) from one well to be completed into the Lower James Missouri aquifer (approximately 203 feet deep) located in the SE ¼ SW ¼ of Section 20 for irrigation of 67 acres located in the E ½ SW ¼, SW ¼ SE ¼ Section 20; all in T94N-R55W. The water will also be used for livestock watering. The applicant is requesting a diversion rate greater than the statutory limit of 1 cfs per 70 acres. The site of interest is located approximately two miles northeast of Yankton, SD.

AQUIFER: Lower James Missouri (LJM)

HYDROGEOLOGY:

The Lower James Missouri aquifer is a glacial outwash that consists of fine sand to cobble gravel that is intermixed in some expanses with discontinuous layers of till up to 25 feet thick (Lindgren and Hansen, 1990 and 1993). The depth of the top of the Lower James Missouri aquifer ranges from the land surface in the James River floodplain to 245 feet below land surface (Lindgren and Hansen, 1990 and 1993). In Clay, Hutchinson, and Yankton counties, the Lower James Missouri aquifer is estimated to underly approximately 191,700 acres and contain approximately 2,795,400 acre-feet of recoverable water in storage (Hedges et al, 1982; see Table 1). The Lower James Missouri aquifer is hydrologically connected to Lower Vermillion Missouri aquifer, Choteau: Tyndall aquifer, Niobrara aquifer, and Lower James Missouri: Scotland aquifer, adjacent bedrock aquifers, and surface water features (Hedges et al, 1982; Bugliosi, 1986; Lindgren and Hansen, 1990 and 1993; Water Rights, 2022b).

Table 1. Estimated areal extent and amount of recoverable water stored in the Lower James Missouri aquifer (Hedges et al, 1982)

Counties	Clay	Hutchinson	Yankton	Total:
Area Extent (acres)	5,400	93,800	92,500	191,700
Recoverable Water in Storage (acre-feet)	81,000	633,150	2,081,250	2,795,400

No water well or test hole completion report was submitted with Water Permit Application No. 8655-3. Within approximately two miles of the proposed diversion point, water well and test hole completion reports on file for wells completed into the Lower James Missouri aquifer have saturated aquifer thicknesses ranging from approximately 25 to 70 feet, with the depth to the top of aquifer materials ranging from approximately 127 to 160 feet below the ground surface, and static water levels varying between 110 to 151 feet below the ground surface at the time of well completion (SDGS, 2022; Water Rights, 2022b and 2022d). Based on the water well and test

hole completion reports near the proposed diversion point, the Lower James Missouri aquifer is expected to be confined near the proposed diversion point (SDGS, 2022; Water Rights, 2022b and 2022d).

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 unappropriated water is available for the applicant's proposed use, the proposed diversion can be developed without unlawful impairment of existing domestic water uses and water rights, the proposed use is a beneficial use, and the permit is in the public interest as it pertains to matters of public interest within the regulatory authority of the Water Management Board as defined by §§ 46-2-9 and 46-2-11." This report will address the availability of unappropriated water and the potential for unlawful impairment of existing domestic uses and water rights within the Lower James Missouri aquifer.

WATER AVAILABILITY:

Water Permit Application No. 8655-3 proposes to appropriate water from the Lower James Missouri 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 Lower James Missouri 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 Lower James Missouri aquifer must be considered.

HYDROLOGIC BUDGET:

Recharge

Recharge to the Lower James Missouri aquifer in Yankton County is mostly received by seepage from streams/surface water features, infiltration of precipitation, and inflow from nearby glacial aquifers when they have a higher hydraulic head than the Lower James Missouri aquifer (Bugliosi, 1986). Most of the recharge occurs in the spring and early summer months, and the short-term infiltration rates in the floodplain soil combined with rapid evapotranspiration rates causes most of the rainfall in the southern area of the aquifer to either be evaporated or transpired; because of this reason most of the recharge enters in the northern area of the Lower James Missouri aquifer (Bugliosi, 1986).

Using flow-net analysis Hedges et al (1985) estimated a recharge rate of 1.5 inches per year for the Lower James Missouri aquifer. The Lower James Missouri aquifer has an estimated areal extent of approximately 191,700 acres (Hedges et al, 1982). Therefore, the average annual recharge rate (based on Hedges et al, 1982 and 1985) is approximately 23,963 acre-feet/year.

Using observation well analysis, Hedges et al (1985) estimated a recharge rate of 3.9 inches per year for the unconfined portions of the Lower James Missouri aquifer. Stonesifer's report (2014) estimated the unconfined portion of the aquifer to be 82,200 acres. The average annual recharge rate for unconfined portions of the Lower James Missouri aquifer based on Hedges et al (1985) estimated recharge rate of 3.9 inches per year and Stonesifer's (2014) unconfined portion, is estimated to be 26,715 acre-feet/year, which should also be considered a likely maximum recharge rate for the Lower James Missouri aquifer. From this data, the average annual recharge rate to the Lower James Missouri aquifer has a range between 23,963 to 26,715 acre-feet/year (Hedges et al, 1982 and 1985; Stonesifer, 2014).

Discharge

Discharge from the Lower James Missouri aquifer in South Dakota primarily occurs through well withdrawals, leakage to the James River, and evapotranspiration in areas where the aquifer is at or near land surface (Bugliosi, 1986; Lindgren and Hansen, 1990).

Currently, there are 130 water rights/permits authorized to appropriate water from the Lower James Missouri aquifer (Water Rights, 2022c). There are no future use permits reserving water from the Lower James Missouri aquifer (Water Rights, 2022c).

Table 2 summarizes the 8 non-irrigation water rights/permits authorized to appropriate water from the Lower James Missouri 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. This is a standard method used by the DNR-Water Rights Program for estimating average annual withdrawals by non-irrigation appropriations. Overall, the average annual withdrawal rate for the Lower James Missouri aquifer non-irrigation water rights/permits is approximately 1,595 acre-feet/year (Table 2) (Water Rights, 2022c).

Table 2. Estimated annual use for non-irrigation water rights/permits authorized to divert water from the Lower James Missouri aquifer (Water Rights, 2022c)

Permit No.	Name	Status	Uses	Authorized Diversion Rate (cfs)	Authorized Annual Volume (acre-feet)	Estimated Use (acre-feet/year)
4556-3	KNIFE RIVER	LC	COM	0.440	N/A	191.14
840-3	STUELPNAGELS INC	LC	COM	1.110	N/A	482.18
6264-3	YANKTON LAND & CATTLE CO	LC	COM, LCO	0.560	N/A	243.26
6320-3	WOLF CREEK HTRN BRTH	LC	COM, DOM	0.080	N/A	34.75
6925-3	TSCHEPETER COLONY	LC	COM, LCO	0.070	N/A	30.41
7827-3	MAXWELL COLONY	PE	COM, LCO	0.330	N/A	143.35
1288-3	NATIONAL FOOD STORES INC	LC	IND	0.160	N/A	69.5
8412-3	KNIFE RIVER	LC	IND	7.800	400	400
COM Commercial, IND Industrial, LC Licensed Water Right, PE Water Permit, LCO Livestock Confinement Operation, DOM Domestic					TOTAL:	1,595

Currently, there are 122 irrigation water rights/permits appropriating water from the Lower James Missouri aquifer (Water Rights, 2022c). 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 the Lower James Missouri aquifer irrigation water rights/permits that have reported over the period of record (1979 to 2022) is approximately 2,951 acre-feet per year (Table 3) (Water Rights, 2022a). To reflect the current development of irrigation water rights/permits more accurately, the average annual withdrawal rate for irrigation appropriations from 2012 to 2021 is approximately 5,398 acre-feet per year (Table 3) (Water Rights, 2022a).

There are two water permits approved in 2022, that are not accounted for in Table 3, Water Permit Nos. 8606-3 and 8634-3 (Water Right, 2022c). Water Permit Nos. 8606-3 and 8634-3, combined, are authorized to irrigate 240 acres (Water Rights, 2022c). Generally, irrigators in eastern South Dakota apply less than one foot of water per acre per year. However, to account for fluctuation in wet and dry cycles from year to year, the one foot of water per acre per year application rate will be used to somewhat overestimate the annual withdrawal rate for these irrigation water rights/permits. Therefore, the estimated average annual withdrawal rate for Water Permit Nos. 8606-3 and 8634-3 is approximately 240 acre-feet per year. Collectively, the average annual withdrawal rate for the irrigation appropriations from 2012 to 2021 (5,398 acre-feet/year), plus the estimated average annual withdrawal rate for the irrigation water rights/permits approved in 2022 (240 acre-feet/year), is approximately 5,638 acre-feet per year.

Table 3. Reported historic irrigation use from the Lower James Missouri aquifer (Water Rights, 2022a)

Year	No. of Permits Reporting	Reported Pumpage (acre-feet)
1979	22	588
1980	23	1,299
1981	27	1,835
1982	23	1,301.25
1983	27	1,306.54
1984	28	1,360
1985	27	1,483
1986	30	989.6
1987	30	1,041.60
1988	31	2,744.90
1989	31	2,144.80
1990	35	2,928.10
1991	42	2,599
1992	45	1,159
1993	45	230.44
1994	45	1,918.17
1995	41	1,483.32
1996	49	2,102.99
1997	50	2,320
1998	53	2,787.30
1999	50	2,102.15
2000	51	3,751.08
2001	53	2,940.09
2002	53	4,061.52
2003	53	2,843.15
2004	47	2,886.65
2005	48	2,866.63
2006	50	3,630.92
2007	56	3,425.91
2008	79	4,494.03
2009	84	1,463.27
2010	85	665.37
2011	89	4,147.47
2012	93	13,058.45
2013	118	7,855.75
2014	125	3,347.27
2015	127	4,822.86
2016	126	5,747.01
2017	126	5,727.12
2018	126	1,035.87
2019	127	328.01
2020	121	3,864.53
2021	120	8,195.56
Max	127	13,058.5
Min	22	230.4
Avg (1979-2021)	63	2,951
Avg (2012-2021)	121	5,398

There are domestic wells completed into the Lower James Missouri aquifer that do not require a water right/permit, so the withdrawal amount from those wells is unknown (Water Rights, 2022d). 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 Lower James Missouri 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 Lower James Missouri aquifer.

Hydrologic Budget Summary

The average annual recharge rate to the Lower James Missouri aquifer has a range between 23,963 to 26,715 acre-feet/year (Hedges et al, 1982 and 1985; Stoncsifer, 2014). The average withdrawal rate from the Lower James Missouri aquifer totals to approximately 7,233 acre-feet/year; (non-irrigation: 1,595 acre-feet/year; irrigation (2012 to 2021 plus the water rights/permits approved between 2021 and 2022): 5,638 acre-feet/year). Based on the hydrologic budget, there is a reasonable probability unappropriated water is available from the Lower James Missouri 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 33 observation wells completed into the Lower James Missouri aquifer (Water Rights, 2022b). These observation wells provide data on how the aquifer reacts to regional climatic conditions and local pumping. The 4 closest observation wells to the proposed diversion point are YA-80O (approximately 1.5 miles northeast), YA-78H (approximately 1.6 miles northwest), YA-80N (approximately 2.5 miles northwest), and YA78G (approximately 3.4 miles northwest) (Water Rights, 2022b). The hydrographs for these observation wells are displayed in figures 1 to 4 (Water Rights, 2022b). The data points utilized to construct the hydrographs are measurement of the static water level in the observation wells from the top of the well casing. It is worth noting the hydrograph titles display DENR Water Rights Observation Well on the hydrographs when the titles should display DANR Water Rights Observation Well on hydrographs. The data shown on figures 1 to 4 share a similar trend with most of the other Observation Wells in the Lower James Missouri aquifer. However, there are a few Observation Wells that seem to have their hydraulic head strongly impacted by other sources, such as the James River (Water Rights, 2022b).

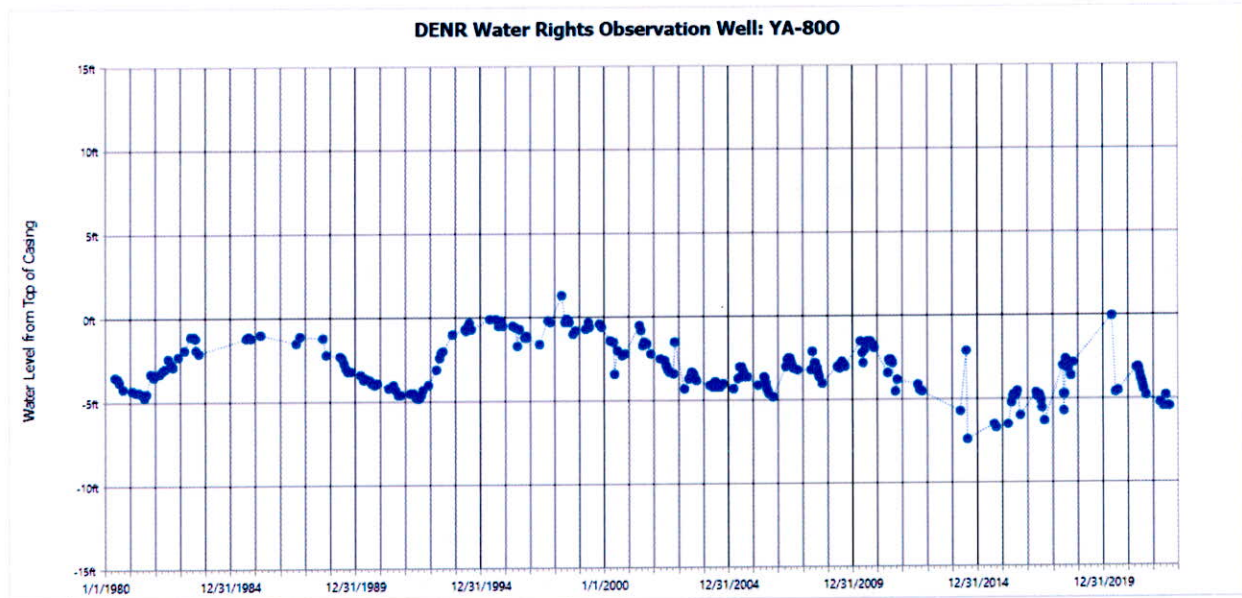


Figure 1. Hydrograph for observation well YA-800 (Water Rights, 2022b)

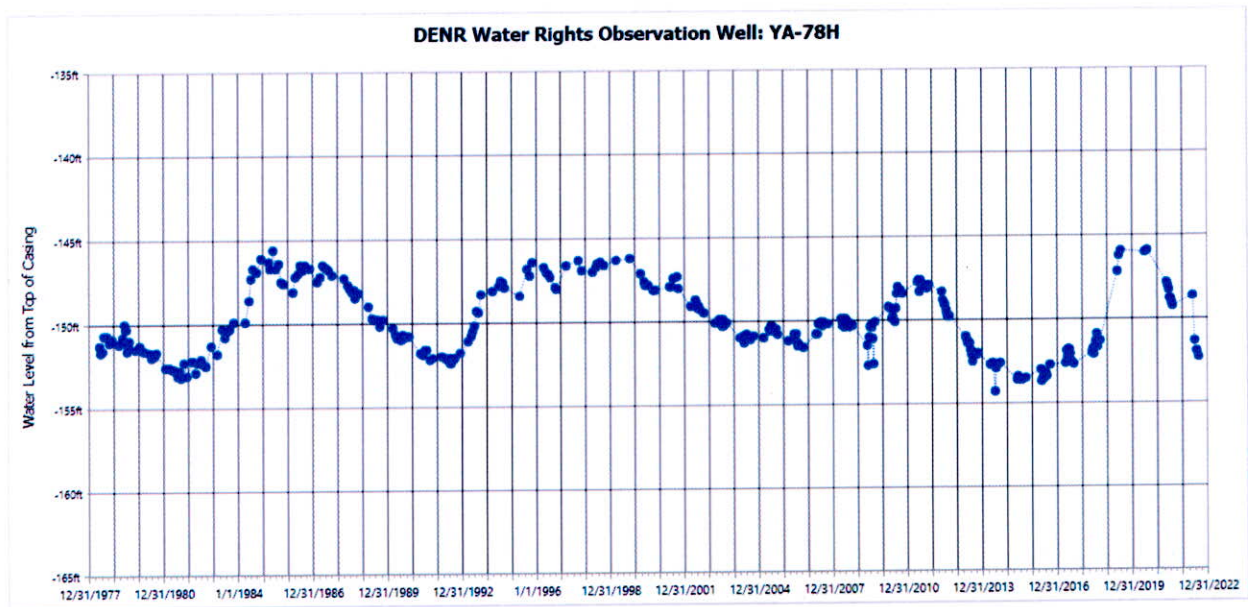


Figure 2. Hydrograph for observation well YA-78H (Water Rights, 2022b)

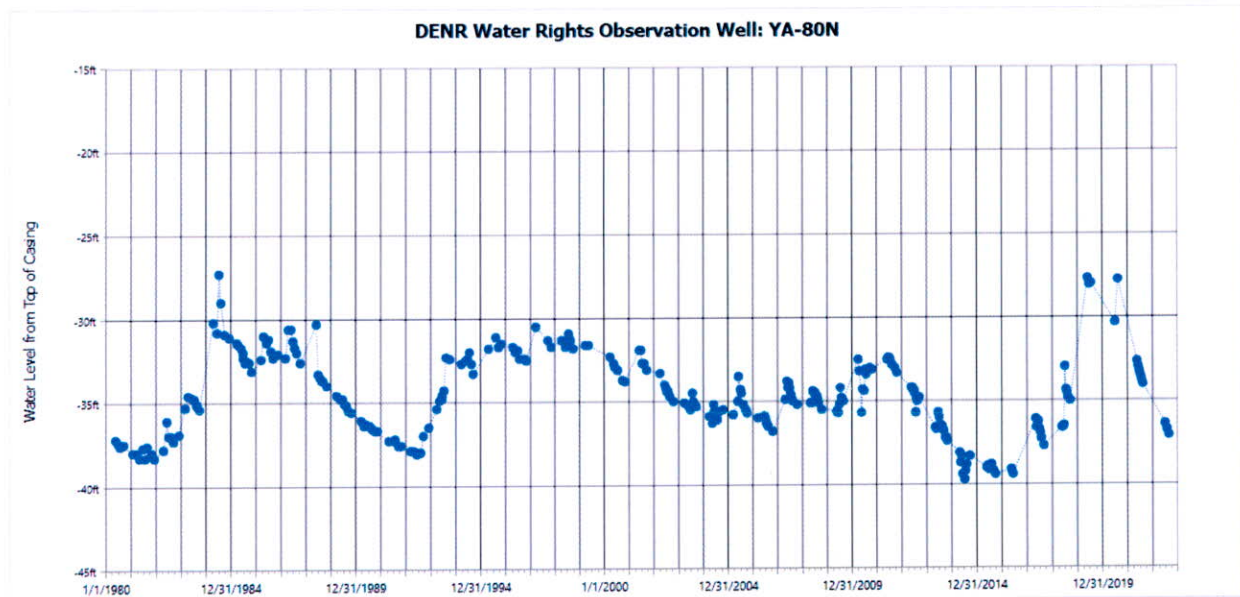


Figure 3. Hydrograph for observation well YA-80N (Water Rights, 2022b)

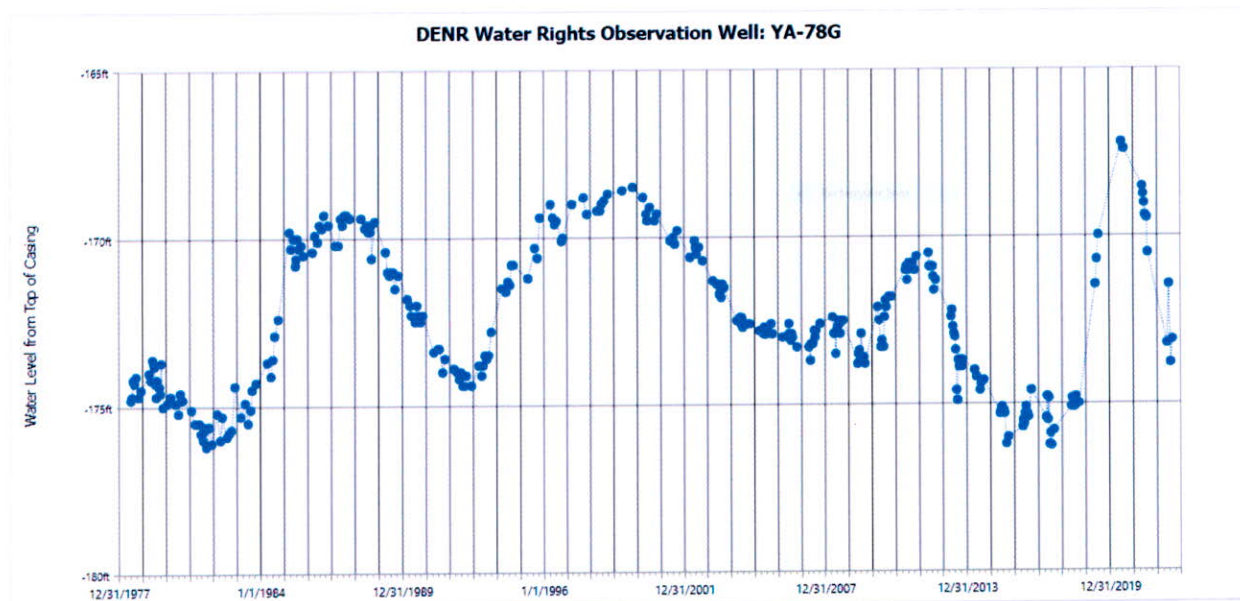


Figure 4. Hydrograph for observation well YA-78G (Water Rights, 2022b)

The hydrographs for the observation wells display stable water levels over their respective periods of record. The hydrographs for the Lower James Missouri 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 Lower James Missouri 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.

POTENTIAL FOR UNLAWFUL IMPAIRMENT OF EXISTING WATER RIGHTS:

Currently, there are 130 water rights/permits authorized to appropriate water from the Lower James Missouri aquifer (Water Rights, 2022c). The closest water right/permit to proposed diversion point is Water Permit No. 7145-3 which is held by Delos Warriner. The diversion point for Water Permit No. 7145-3 is located approximately 0.2 miles southeast of the proposed diversion point for this application (Water Rights, 2022c).

There are domestic wells on file with the DANR-Water Rights Program that are completed into the Lower James Missouri aquifer, with the closest domestic well on file (not held by the applicant) approximately 0.3 miles southeast of the proposed diversion point (Water Rights, 2022d). There could potentially be other domestic wells completed into the Lower James Missouri aquifer near the proposed diversion point that are not on file with the DANR-Water Rights Program.

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 SDCI. 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 SDCI. 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 Lower James Missouri aquifer at their location. However, when considering the statutes (SDCI. 46-1-4 and 46-6-6.1), rules (ARSD 74:02:04:20(6) and (7)), the saturated aquifer thickness near the proposed diversion point, the artesian head pressure in observation wells completed into the aquifer near the diversion point, and the lack of well interference

complaints for adequate wells completed into the Lower James Missouri aquifer in Yankton 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 (Water Rights, 2022e). Therefore, there is a reasonable probability that any interference from the proposed appropriation will not impose unlawful impairments on existing users with adequate wells.

SDCL 46-5-6:

Pursuant to SDCL 46-5-6, the diversion rate for an irrigation appropriation cannot be in excess of 1.0 cfs per 70 acres. or “the equivalent thereof.” The statute does provide that: “The Water Management Board may allow a greater diversion, in volume or rate or both, if the method of irrigation, ant time constraints on diversion of water, or the type of soil so requires...”

If approved, Water Permit Application No. 8655-3 would authorize a maximum instantaneous diversion rate of 1.60 cfs from one well for the irrigation of 67 acres. or at a rate of 1.67 cfs per 70 acres. The applicant did not provide a reason for exceedance, but it appears to be due to the center pivot partial rotation layout, the system will require a greater flow rate to operate properly. For example, a center pivot requiring 1.60 cfs to operate but only swinging a partial circle. This reason has been acceptable to the Water Rights Program and the Water Management Board in the past.

CONCLUSIONS:

1. Water Permit Application No. 8655-3 proposes to divert water at a maximum instantaneous Diversion rate of 1.60 cfs from one well to be completed into the Lower James Missouri aquifer (approximately 203 feet deep) for irrigation of 67 acres and livestock water. The applicant is requesting a diversion rate greater than the statutory limit of 1 cfs per 70 acers. The site of interest is located approximately two miles northeast of Yankton, SD.
2. Based on observation well data and the hydrologic budget, there is a reasonable probability that unappropriated water is available from the Lower James Missouri aquifer to supply the proposed appropriation.
3. There is a reasonable probability that the proposed diversion by Water Permit Application No. 8655-3 will not unlawfully impair adequate wells for existing water rights/permits and domestic uses.
4. The applicant is requesting a diversion rate greater than statutory limit of 1 cfs per 70 acres likely to accommodate the farmstead layout near the proposed diversion point location. This is reasonable and has been accepted by the Water Management Board and the Water Rights Program in the past.



Tyler Jensen
Natural Resources Engineer I
SD DANR - Water Rights Program



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

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Water Rights, 2022b. Observation Well Data, SD DANR-Water Rights Program, Joe Foss Bldg, Pierre, SD.

Water Rights, 2022c. Water Right/Permit Files, SD DANR-Water Rights Program, Joe Foss Bldg, Pierre, SD.

Water Rights, 2022d. Well Completion Reports, SD DANR-Water Rights Program, Joe Foss Bldg, Pierre, SD.

Water Rights, 2022e. County Files, SD DANR-Water Rights Program, Joe Foss Bldg, Pierre, SD.

Schlaak, Karen

From: Schlaak, Karen
Sent: Friday, September 9, 2022 9:50 AM
To: Frick.Justin82@gmail.com
Subject: Water Permit Application No. 8655-3
Attachments: 3946.pdf

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 paper 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>



AFFIDAVIT OF PUBLICATION

YANKTON DAILY PRESS AND DAKOTAN

RECEIVED

SEP 19 2022

OFFICE OF
WATER

JUSTIN FRICK
30697 SW JIM RIVER RD
YANKTON SD 57078

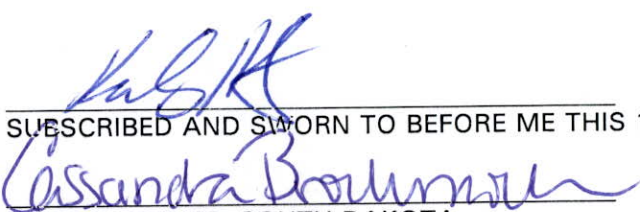
STATE OF SOUTH DAKOTA
COUNTY OF YANKTON

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
NOTICE OF APPLICATION NO.

TAKEN FROM THE PAPER, IN WHICH IT WAS LAST PUBLISHED IN THE
NEWSPAPER ON THE 16th DAY OF September, 2022
THAT THE FULL AMOUNT OF THE FEE CHARGED FOR THE PUBLICATION
OF SAID NOTICE TO WIT \$41.28 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: 09/16/2022

FILED ON: 09/16/2022


SUBSCRIBED AND SWORN TO BEFORE ME THIS 16th DAY OF September, 2022

NOTARY PUBLIC, SOUTH DAKOTA
MY COMMISSION EXPIRES 07/04/2026

Ad text : NOTICE OF APPLICATION
 NO. 8655-3 to Appropriate Water

Notice is given that By Lane Well, c/o Justin Frick, 30697 SW Jim River Rd, Yankton SD 57078 has filed an application for a water permit to appropriate 1.60 cubic feet of water per second (cfs) from one well to be completed into the Lower James Missouri Aquifer (approximately 203 feet deep) located in the SE 1/4 SW 1/4 Section 20 for irrigation of 67 acres located in the E 1/2 SW 1/4, SW 1/4 SE 1/4 Section 20; all in T94N-R55W. The applicant is requesting a diversion rate greater than the statutory limit of 1 cfs per 70 acres. Water will also be used for livestock watering. This site is located approximately two miles northeast of Yankton SD.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 8655-3 with qualifications because 1) unappropriated water is available, 2) existing domestic water uses and water rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest as it pertains to matters within the regulatory authority of the Water Management Board. The Chief Engineers recommendation with qualifications, the application, and staff report are available at <https://danr.sd.gov/public> or contact Ron Duvali for this information, or other information, at the Water Rights Program address provided below.

Any person interested in opposing this application or recommendation shall allege that the application, upon approval, will cause injury to the person that is unique from any injury suffered by the public in general. The injury must concern a matter either within the regulatory authority found in SDCL 46-2A-9 for approval or denial of the application, or other matter concerning the application within the regulatory authority of the board to act upon as defined by SDCL 46-2-9 and 46-2-11, or both. Any person meeting the petitioner requirements and wishing to be a party of record in a contested case hearing shall file a written petition to oppose the application with BOTH the applicant and Chief Engineer. A petition opposing the application shall be filed on a form provided by the Chief Engineer. The petition form is available online at <https://danr.sd.gov/public> or by contacting the Chief Engineer. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E Capitol, Pierre SD 57501" or call (605) 773-3352. The applicant's mailing address is given above. If contesting the Chief Engineer's recommendation, the applicant shall also file a petition. A petition filed by either an interested person or the applicant must be filed by September 26, 2022.

The petition shall include a statement describing the unique injury upon approval of the application on the petitioner, the petitioner's reasons for opposing the application, and the name and mailing address of the petitioner or the petitioner's legal counsel, if legal counsel is obtained.

Any interested person may file a comment on the application with the Chief Engineer. The comment shall be filed on a form provided by the Chief Engineer and is available online at <https://danr.sd.gov/public> or by calling (605) 773-3352 or writing the Chief Engineer at the address provided above. Filing a comment does not make the commenter a party of record or a participant in any hearing that may be held. Any comment must be filed by September 26, 2022.

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 \$41.28 and can be viewed free of charge at www.sdpublicnotices.com.

Published September 16, 2022.

Schlaak, Karen

From: Schlaak, Karen
Sent: Friday, September 9, 2022 9:47 AM
To: Cassandra Brockmoller (cassandra@yankton.net)
Subject: 8655-3, By Lane Well
Attachments: 8655-3public.short_final.docx; FORM8.FRM.doc

Attached is a notice to be published on September 16, 2022.

Justin Frick, 30697 SW Jim River Rd, Yankton SD 57078 (605 661-7045) 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 NEWSPAPER RIGHT AWAY.**

September 9, 2022

By Lane Well
c/o Justin Frick
30697 SW Jim River Rd
Yankton SD 57078

Dear Mr. Frick:

Water Permit Application No. 8655-3 for irrigation use has been examined and found to comply with the South Dakota Water Laws and applicable rules. A notice has been sent to the Press & Dakotan printed at Yankton SD (Ph # 605 665-7811). You will need to contact the newspaper 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 to authorize publication of your Notice and to arrange for payment. Early contact with the paper 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,

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 September 16, 2022. The applicant is responsible for payment.

NOTICE OF APPLICATION NO. 8655-3 to Appropriate Water

Notice is given that By Lane Well, c/o Justin Frick, 30697 SW Jim River Rd, Yankton SD 57078 has filed an application for a water permit to appropriate 1.60 cubic feet of water per second (cfs) from one well to be completed into the Lower James Missouri Aquifer (approximately 203 feet deep) located in the SE 1/4 SW 1/4 Section 20 for irrigation of 67 acres located in the E 1/2 SW 1/4, SW 1/4 SE 1/4 Section 20; all in T94N-R55W. The applicant is requesting a diversion rate greater than the statutory limit of 1 cfs per 70 acres. Water will also be used for livestock watering. This site is located approximately two miles northeast of Yankton SD.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 8655-3 with qualifications because 1) unappropriated water is available, 2) existing domestic water uses and water rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest as it pertains to matters within the regulatory authority of the Water Management Board. The Chief Engineer's recommendation with qualifications, the application, and staff report are available at <https://danr.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 this application or recommendation shall allege that the application, upon approval, will cause injury to the person that is unique from any injury suffered by the public in general. The injury must concern a matter either within the regulatory authority found in SDCL 46-2A-9 for approval or denial of the application, or other matter concerning the application within the regulatory authority of the board to act upon as defined by SDCL 46-2-9 and 46-2-11, or both. Any person meeting the petitioner requirements and wishing to be a party of record in a contested case hearing shall file a written petition to oppose the application with BOTH the applicant and Chief Engineer. A petition opposing the application shall be filed on a form provided by the Chief Engineer. The petition form is available online at <https://danr.sd.gov/public> or by contacting the Chief Engineer. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E Capitol, Pierre SD 57501" or call (605) 773-3352. The applicant's mailing address is given above. If contesting the Chief Engineer's recommendation, the applicant shall also file a petition. A petition filed by either an interested person or the applicant must be filed by September 26, 2022.

The petition shall include a statement describing the unique injury upon approval of the application on the petitioner, the petitioner's reasons for opposing the application, and the name and mailing address of the petitioner or the petitioner's legal counsel, if legal counsel is obtained.

Any interested person may file a comment on the application with the Chief Engineer. The comment shall be filed on a form provided by the Chief Engineer and is available online at <https://danr.sd.gov/public> or by calling (605) 773-3352 or writing the Chief Engineer at the address provided above. Filing a comment does not make the commenter a party of record or a participant in any hearing that may be held. Any comment must be filed by September 26, 2022.

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

OCT 20 2022

By Lane Well
c/o Justin Frick
30697 SW Jim River Rd
Yankton SD 57078

Dear Mr. Frick:

Enclosed is Water Permit No. 8655-3 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



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

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

STATE OF SOUTH DAKOTA)
) SS
COUNTY OF HUGHES)

**Affidavit of Public Notice
on DANR Website**

Pursuant to SDCL § 46-2A-4, public notice of the following application was posted on the DANR web site at <https://danr.sd.gov/public>. The posted public notice is the same notice as published in the pertinent newspaper(s) and a copy of the public notice is maintained in the application file. If the application is contested, the posting is moved to the DANR contested case website at <https://danr.sd.gov/public/ContestedCase.aspx> until final action is taken on the application pursuant to SDCL § 46-2A-4.

Application No.: 8655-3

Name of Applicant: By Lane Well, c/o Justin Frick

Date of Posting: 9/12/2022

Date of Removal: 10/20/2022



Ron Duvall, Water Rights Permitting Administrator

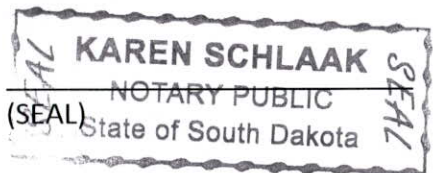
10/24/22

Date

Subscribed and sworn to before me, a notary public, this 24th day of Oct, 20 22.



Notary Public - South Dakota
My commission expires: 4/1/25



**Report of Examination of Works and/or Application of Water to Beneficial Use
For Permit No. 8655-3**

I have this day, July 20, 2023, made a thorough examination of the water use system constructed by By Lane Well c/o Justin Frick, 30697 SW Jim River Rd, Yankton, SD 57078, holder of Permit No. 8655-3, bearing the priority of July 18, 2022, authorizing the diversion of 1.60 cu. ft. per second of the waters of groundwater (Lower James Missouri Aquifer) for the irrigation of 67 acres located in Yankton County.

Inspection contact: Justin Frick

A. Works used to divert the water:

Well Information:

- 1) Well Drilling Firm: Christensen Well & Irrigation
- 2) No. of Wells: 1
- 3) Depth(s): 205 feet
- 4) Well log is available: Yes

Casing:

- 1) Diameter: 16 inches
- 2) Length: 160 feet
- 3) Type: Plastic

Screen:

- 1) Diameter: 16 inches
- 2) Length: 40 feet
- 3) Type: PVC
- 4) Static water level: 135 feet

Pump:

- 1) Make: Goulds
- 2) Model: 10RHM-LB
- 3) Capacity: 700 GPM

Generator:

- 1) Make: LIMA MAC
- 2) Model No.: 260MDL1055

Diesel Engine:

- 1) Make: ISUZU

Gear Drive:

- 1) Make: Amarillo
- 2) Model: S60A
- 3) Horsepower rating: 60 hp

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

- 1) Type: Steel
- 2) Size: 8 inches
- 3) Length: 20 feet

C. Works used to apply water to beneficial use:**Center Pivot:**

- 1) Make: Zimmatic
- 2) Overall length: 1121 feet
- 3) Number of towers: 6
- 4) End gun: Yes
- 5) Capacity: 707 GPM

Chemigation Equipment:

- 1) Does chemigate: No

D. Compliance with Permit Requirements:

- 1) Permit qualifications being abided by: Yes
- 2) Irrigation Questionnaires checked to determine if permit owner started irrigation by the end of construction period: Began irrigating in 2022.
- 3) Exceptions to compliance are: None

E. Condition and Location:

1. The system is in good condition with the point(s) of diversion located as follows:
The well is 2,710 feet west and 1,160 feet north of the southeast corner of Section 20-T94N-R55W (Latitude 42.94107, Longitude -97.36806 – SE1/4 of the SW1/4).
2. The works are capable of diverting and conveying to the place of use 1.56 cu. ft. per second of water which is to be used for irrigation purposes. Water has been put to beneficial use to the maximum extent as follows: All in Section 20-T94N-R55W:

NE1/4SW1/4 17 acres

SE1/4SW1/4 33 acres

SW1/4SE1/4 17 acres

comprising a total of 67 acres of land and the license should be issued for 1.56 cfs.

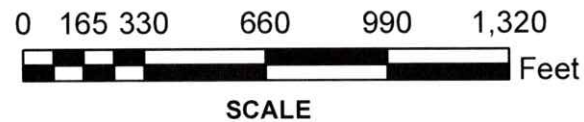
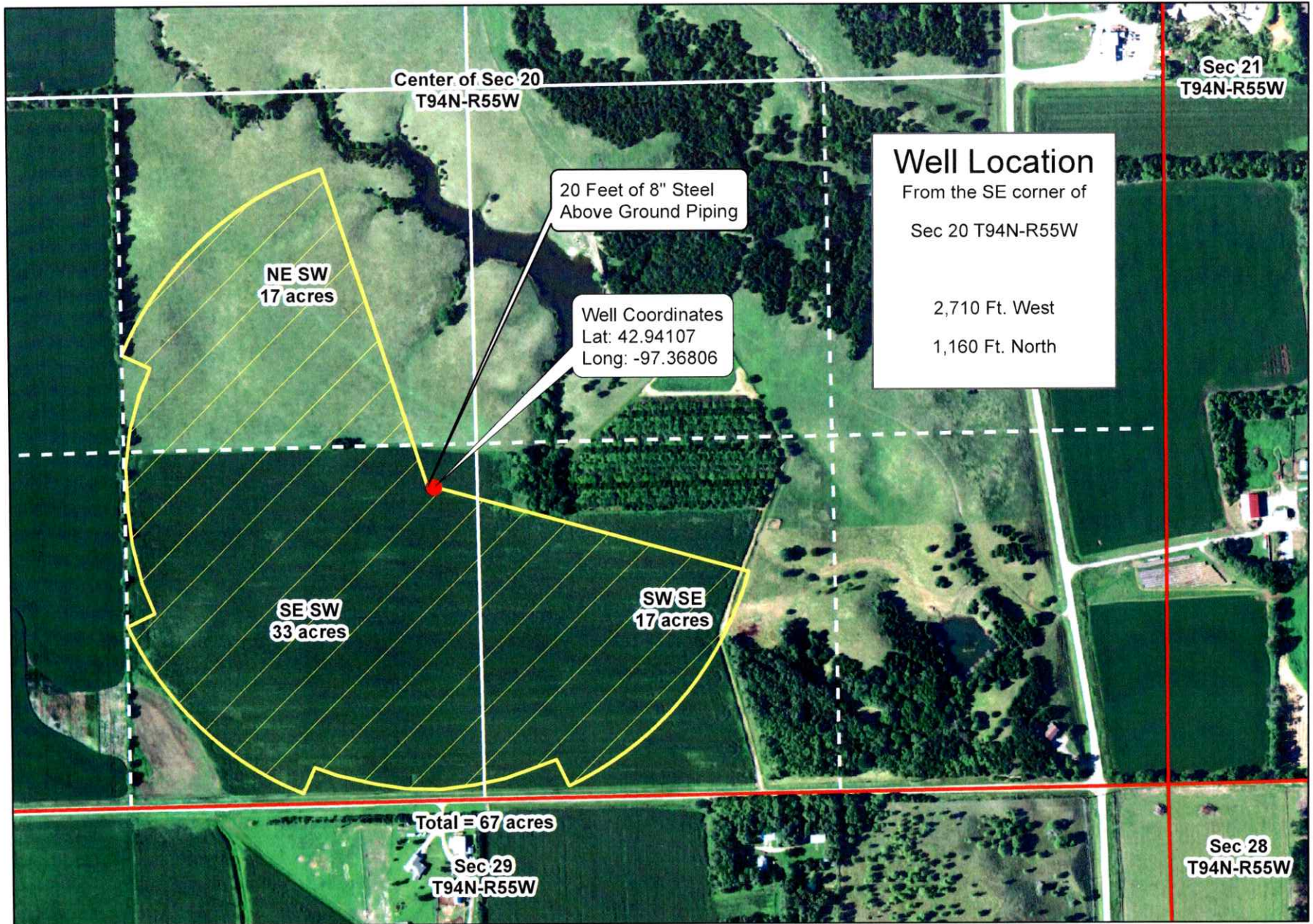
3. All structures, wells, and lands on map: Yes

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

Keith DeJong, PE Ret.
Water Rights Inspector
DANR, Water Rights Program

Date report completed: July 21 2023

Water Right No. 8655-3



Keith DeJong
Keith DeJong, PE
Staff Engineer
July 21, 2023



DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES
JOE FOSS BUILDING
523 E. CAPITOL AVE
PIERRE SD 57501-3182
danr.sd.gov

JUL 25 2023

By Lane Well
c/o Justin Frick
30697 SW Jim River Road
Yankton SD 57078

8655-3

Dear Mr. Frick:

Enclosed is Water License No. 8655-3. 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. 8566-3

(1) By Lane Well; 30697 SW Jim River Rd, Yankton SD 57078, made Application No. 8655-3, July 18, 2022, for a water permit to divert 1.60 cubic feet of water per second from groundwater, one well (Lower James: Missouri Aquifer), Yankton County, South Dakota for irrigation purposes. Permit No. 8655-3, with a priority date of July 18, 2022, was approved September 26, 2022, and issued to the applicant for diversion of water with construction of the described water supply system to be completed on or before September 26, 2027, and for the application to beneficial use of water on or before September 26, 2031.

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

- 2,710 ft W & 1,160 ft N of the SE corner of Section 20, T94N, R55W (SE ¼ SW ¼)
(Latitude 42.94107 Longitude -97.36806)

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

Section 20, T94N, R55W
NE ¼ SW ¼ 17.0 acres
SE ¼ SW ¼ 33.0 acres
SW ¼ SE ¼ 17.0 acres
TOTAL: 67.0 acres

(4) Pursuant to South Dakota Water Law 46-5-30.1 By Lane Well, the holder and/or owner of Water Right No. 8655-3 is issued a license to appropriate water, the right to use 1.56 cubic feet of water per second from groundwater, one well (Lower James: Missouri Aquifer), with a priority date of July 18, 2022, from the location specified in (2) of this license for irrigation purposes.

This license is subject to South Dakota Water Law, any limitations or conditions listed in Water Right No. 8655-3 and subject to the following qualifications:

1. The well approved under Permit No. 8655-3 is located near domestic wells and other wells which may obtain water from the same aquifer. Water withdrawals shall be controlled so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
2. The well authorized by Permit No. 8655-3 shall be constructed by a licensed well driller and construction of the well and installation of the pump shall comply with Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) pursuant to Section 74:02:04:28. *(The well was drilled by Christensen Well & Installation in 2022. I copy of the well completion report is on file with the Water Rights Program.)*

continued

3. Pursuant to SDCL 46-5-6 which allows a greater diversion rate if the methods of irrigation, time constraints, or type of soils so requires, Permit No. 8655-3 authorized a maximum diversion rate of 1.60 cfs for the irrigation of 67 acres with an annual volume not to exceed 2 acre feet of water per acre per year. *(Water Right No. 8655-3 reduces the diversion rate to 1.56 cfs based on the system as constructed.)*
4. The Water Right is approved subject to the irrigation questionnaire being submitted each year.

Eric Gronlund

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

JUL 25 2023

date



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

Date 7-20-23

MAIL TO: PMB 2020
DANR - Water Rights Program
523 E. Capitol Ave
Pierre, SD 57501-3182

Ph: (605) 773-3352

FROM: By Lane Well (Justin Frick)
(name)

30697 SW Jim River Rd
(address)

Yankton SD 57078 605-661-7045
(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. 8655-3 states that the water use system is to be constructed by
September 26, 2027, and water is to be put to beneficial use by September 26, 2031.
(date) (date)

The water use system was completed on July 14, 2022.
(date)

Applying the water to beneficial use was completed on July 14, 2022.
(date)

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

[Signature]
(signature)

