

WATER PERMIT NO. 8592-3

Name of Applicant: Dakota Trails Golf Course

Address: PO Box 165, Corsica SD 57328

Phone: 605 530-3683

Amount of Water Claimed: 0.08 cfs

Total Acres: 2.1

Source of Water Supply: groundwater (one well)

Water to be used for: irrigation

County: Douglas

Type of Waste Disposal System:

Location: 6 miles east of Corsica

PRIORITY

Date Received: 2-10-22

Application/License Fee: \$ 300

Corrected Application Received:

Period of Annual Use: April 1 – October 15

Remarks:

Diversion Point: SW ¼ SW ¼ Sec 3-T99N-R63W

Land to be Irrigated: SW¼ SW¼ Sec 3; SE¼ SE¼
sec 4; E½ NE¼ sec 9: all in T99N-R63W

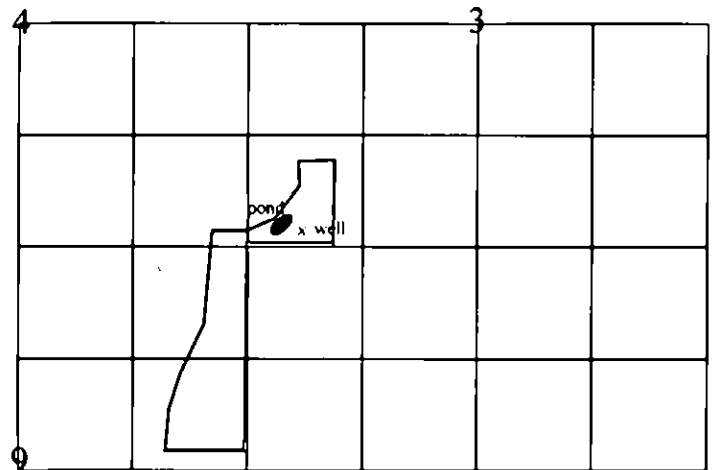
Depth of Well: 410 feet deep

Well Driller:

Remarks:

Type of Map: aerial

Prepared by:



Reviewed and the Number Assigned on: 2-15-22

By: Ron Duvall

Notice of Hearing - date to intervene: _____

**SOUTH DAKOTA
WATER PERMIT NO. 8592-3**

Date of first receipt of application February 10, 2022.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 8592-3 to Dakota Trails Golf Course, PO Box 165, Corsica SD 57328 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. 8592-3 appropriates 0.08 cubic feet of water per second (cfs) from one well to be completed into the Codell Aquifer (approximately 410 feet deep) located in the SW1/4 SW1/4 section 3 for irrigation of 2.1 acres (greens and tee boxes) located in the SW1/4 SW1/4 section 3; SE1/4 SE1/4 section 4; E1/2 NE1/4 section 9; all in T99N-R63W. These acres are also authorized by Water Permit No. 6666-3 which appropriates water from Corsica Lake for irrigation of 35 acres of the golf course. Water from the well will be diverted to a holding pond adjacent to the well in years when water levels in Lake Corsica drop below the irrigation intakes. Water from the holding pond will be pumped at a rate not exceeding 0.44 cfs to the irrigated areas. This site is located approximately 6 miles east of Corsica SD.
2. The amount of the appropriation may not exceed 3 acre feet annually for each acre of land to which water is actually and beneficially applied for irrigation. The water is to be used during the following described annual period: April 1 – October 15.
3. The date from which applicant may claim right is February 10, 2022.
4. The date of approval of Permit No. 8592-3 is May 2, 2022.
5. One-fifth of the construction is to be completed on or before November 2, 2024.
6. All construction is to be completed on or before May 2, 2027.
7. Water is to be put to beneficial use on or before May 2, 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. 8592-3 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. 8592-3 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. 8592-3 authorizes a maximum diversion rate of 0.44 cfs from the holding pond for the irrigation of 2.1 acres with an annual volume not to exceed 3 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 Agriculture and Natural Resources

JUN 01 2022
date



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

RECEIVED

Mail to: DENR - Water Rights 523 E. Capitol Ave Pierre, SD 57501-3182 ph. (605) 773-3352	No. <u>8592-3</u> (office use only) Hydrologic Unit _____	FEB 10 2022
	Basin <u>Missouri River</u>	WATER RIGHTS PROGRAM
	Newspaper <u>Corsica Globe</u>	
	<u>Press & Dakotan</u>	

PAID

FEB 10 2022

Ck# 3495

Rec't# _____

Application For Permit To Appropriate Water For Irrigation

Type of Application: ☒ New ☐ Vested Right ☐ Amendment/Correction to Permit No. _____
(Use predates Mar 2, 1955)

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

1. Name to Appear on Irrigation Permit Dakota Trails Golf Course

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

Mailing Address PO Box 165 Corsica SD 57328
(Address) (City) (State) (Zip Code)

Phone (605) 946-5108 Mobile (605) 530-3683 Email jay@douglaelec.coop

2. Amount of water claimed 0.08 *CFS or 37 **GPM ***AF Total Acreage 2.1
(*Cubic Feet per Second) (**Gallons per Minute) (***Acre Feet - storage capacity of dam/dugout or annual use if applicable)

3. Source of water supply Well

4. Location of point of diversion 1 well in SW 1/4 SW1/4 Section 3-T099N-R063W
(example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W)

County Douglas

5. County or counties where water will be used Douglas County

6. Annual period during which water is to be used April 1st - October 15 - only if needed.

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
Golf Course - Greens and Tee-boxes only	2.1		
SW1/4 SW1/4 Section 3-T099N-R063W			
SE1/4 SE1/4 Section 4-T099N-R063W			
E1/2 NE1/4 Section 9-T099N-R063W			

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

This well would only be used on dry years/months when Corsica Lake water levels fell below our current irrigation inlets. If this scenario does happen we would then fill our holding pond using this well. With the holding pond we would have enough water to keep our greens and tee-boxes alive, but fairways would not get watered at this time. We are requesting for 3' of application on these acres. In conversation with Pullman's he estimated that the well would need to be 410' deep. The pump rate from the holding pond to water the greens and tee boxes will not exceed 200 gallons per minute.

I, Jay Spaans Board President, 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.

a) If new wells, how many 1 Have test holes been drilled ☐ Yes ☒ No Drilled by Pullman's Well Drilling
(if yes, please provide copies of logs)

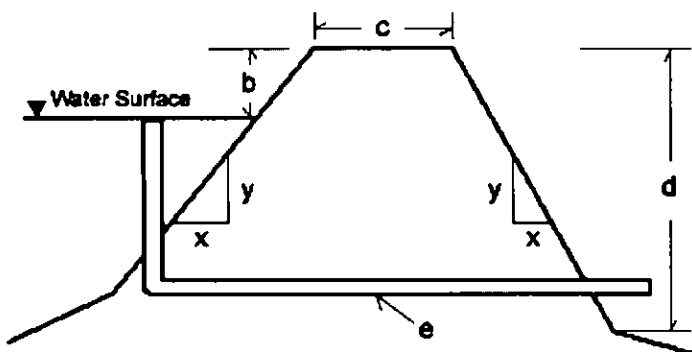
For either Existing or Proposed Wells:

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

c) Connected to the City of Sanitary System

b) Depth to water (ground surface to water level) 1-2 feet

1



j) Drainage Area Above Dam Acres

Dugout

Possible
Well
Location

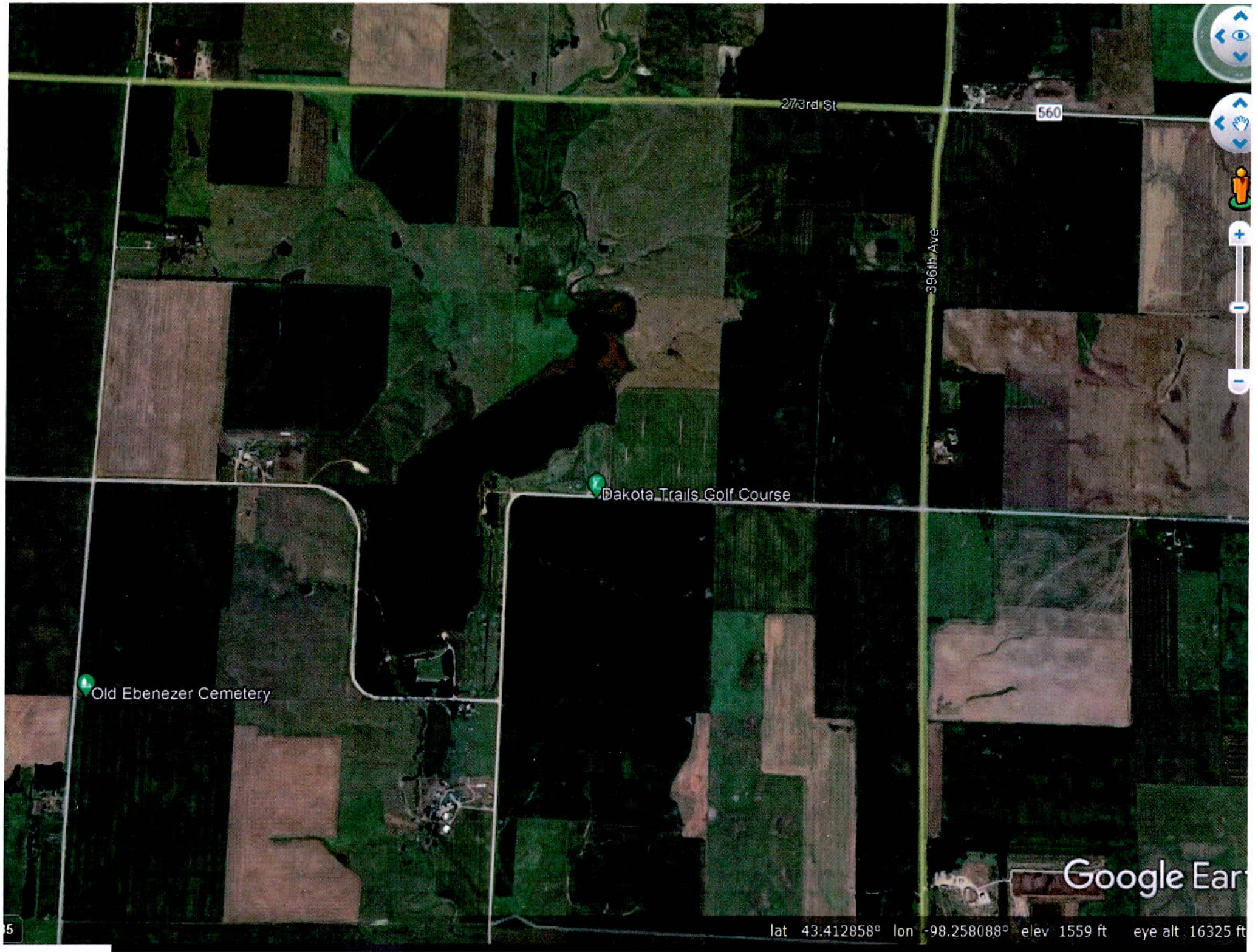
Dakota Trails Golf Course

274th St

274th St

395th Ave

lat 43.414764° lon -98.290868°



273rd St

560

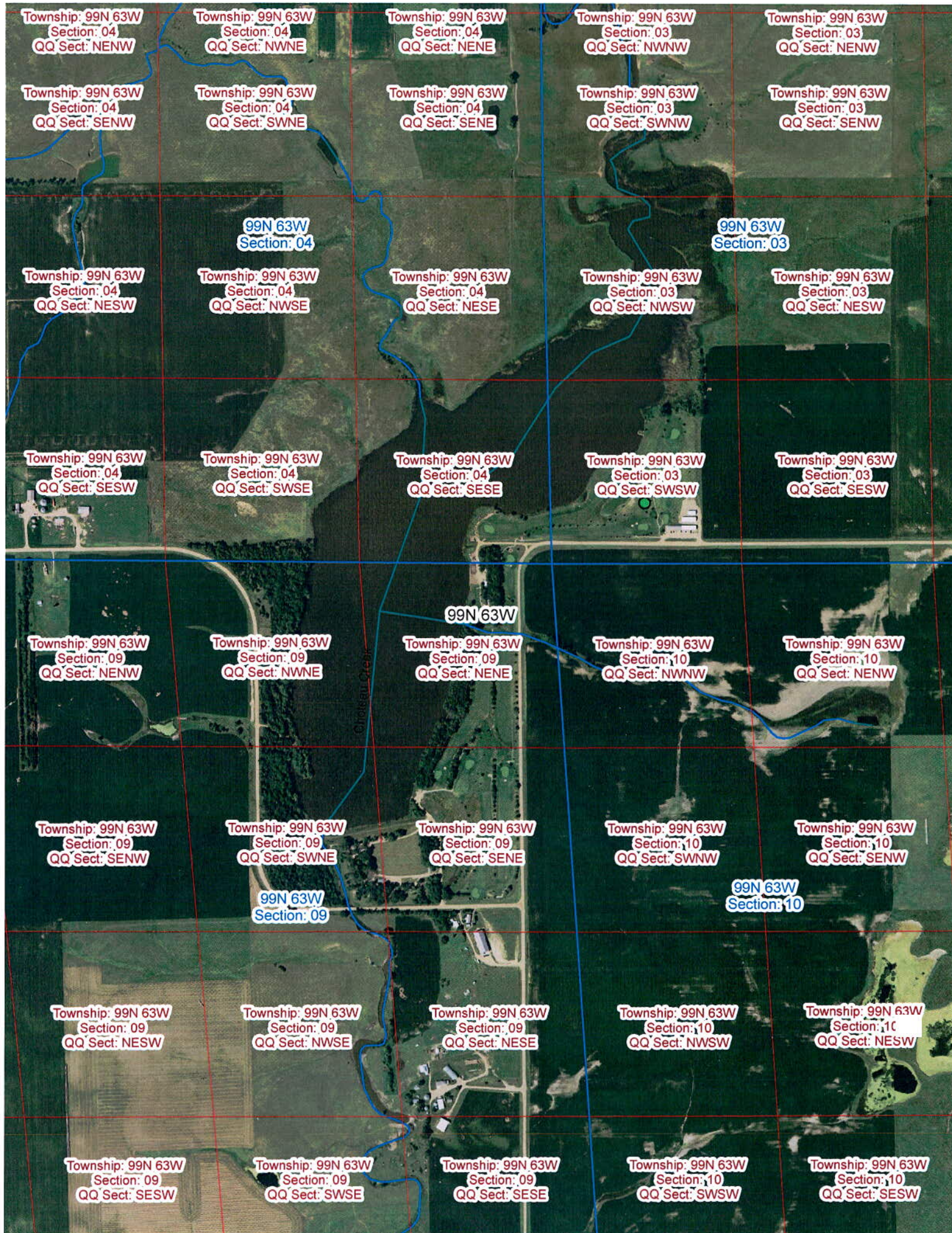
396th Ave

Dakota Trails Golf Course

Old Ebenezer Cemetery

Google Earth

lat 43.412858° lon -98.258088° elev 1559 ft eye alt 16325 ft



RECEIPT

WATER RIGHTS PROGRAM South Dakota Department of Agriculture and Natural Resources

Date February 10, 2022

RECEIVED OF Dakota Trails Golf Course Inc. PO Box 165 Corsica SD 57328

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

Fee for Application for Permit No. <u>8592-3</u> to Appropriate Water, to construct and to put water to beneficial use	\$100.00
Fee for Application for Permit No. _____ to Appropriate Water for Future use	\$ _____
Fee to retain Future Use Permit No. _____ after period of seven years.	\$ _____
Fee for Inspecting Constructed Works, confirming beneficial use and issuing Water License No. <u>8592-3</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.
	\$300.00

By Eric Gronlund
Chief Engineer
He



**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. 8592-3, Dakota Trails Golf Course**

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. 8592-3, Dakota Trails Golf Course, PO Box 165, Corsica SD 57328.

The Chief Engineer is recommending APPROVAL of Application No. 8592-3 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. 8592-3 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. 8592-3 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. 8592-3 authorizes a maximum diversion rate of 0.44 cfs from the holding pond for the irrigation of 2.1 acres with an annual volume not to exceed 3 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
April 8, 2022

**Report to the Chief Engineer on
Water Permit Application No. 8592-3**

Dakota Trails Golf Course
29 March 2022

Water Permit Application No. 8592-3 seeks to appropriate 0.08 cubic feet of water per second (cfs), equivalent to 37 gallons per minute, from one new well to be completed into the Codell aquifer (approximately 410 feet deep) located in the SW $\frac{1}{4}$ SW $\frac{1}{4}$ Section 3 for irrigation of 2.1 acres (greens and tee boxes) located in the SW $\frac{1}{4}$ SW $\frac{1}{4}$ Section 3; SE $\frac{1}{4}$ SE $\frac{1}{4}$ Section 4; E $\frac{1}{2}$ NE $\frac{1}{4}$ Section 9; all in T99N-R63W. Water from the well will be diverted to a holding pond adjacent to the well in years when water levels in Lake Corsica drop below the irrigation intakes. Water from the holding pond will be pumped at a rate not exceeding 0.44 cfs to the irrigated acres. The applicant is requesting a diversion rate to the irrigated acres greater than the statutory limit of 1 cfs per 70 acres and is requesting up to 3 acre-feet per irrigated acre. This site is located approximately 6 miles east of Corsica, South Dakota.

Water Permit No. 6666-3 appropriates 0.56 cfs from Corsica Lake to irrigate 35 acres which includes the 2.1 acres consisting of the green and tee boxes proposed by this application. The well proposed by this application will only be used to keep the greens and tee boxes alive when Corsica Lake's water level falls below the intake in the lake.

Aquifer: Codell (CDLI.)

Hydrogeologic Characteristics

The Codell aquifer consists of the permeable and saturated portions of the Codell Sandstone, which is a member of the Cretaceous-aged Carlile Shale. The Codell aquifer underlies approximately 4,960,000 acres and stores approximately 9,895,700 acre-feet of water in South Dakota east of the Missouri River [1]. There are locations where the Codell aquifer may yield up to 200 gallons per minute from a well, but a maximum yield of 50 gallons per minute is more typical [1]. In eastern South Dakota, the Codell aquifer directly underlies the Niobrara aquifer in some locations [1]. It also lies adjacent to glacial outwash aquifers when they lie in a bedrock valley that intersects the Codell aquifer [2] [3].

The applicant did not submit a well completion report, but sufficient information is available to determine the availability of water and potential for unlawful impairment of existing water rights. Approximately 0.8 miles west of the proposed well for this application, there is a well completion report completed on August 29, 1967, in the SW $\frac{1}{4}$ SW $\frac{1}{4}$ Section 4 T99N-R63W [4]. The driller indicated they encountered the Codell Sandstone from 310 feet below grade to the total depth of 380 feet below grade. The driller did not indicate where the screen was placed or the static water level at the time of drilling. Approximately 2 miles east of the proposed well for this application, in SW $\frac{1}{4}$ SW $\frac{1}{4}$ Section 1 T99N-R63W, another well was completed into the Codell aquifer on November 15, 1988 [4]. The driller indicated encountering muddy Codell Sandstone from 318 to 326 feet below grade and good Codell Sandstone from 326 to 372 feet below grade. The driller placed screen from 343 to 373 feet below grade and the static water level at the time the well was completed was 148 feet below grade.

Applicable South Dakota Codified Law (SDCL)

Pursuant to SDCL 46-2A-9, a permit to appropriate water may be issued if there is reasonable probability that there is unappropriated water available for the applicant's proposed use, that the proposed diversion can be developed without unlawful impairment of existing domestic water uses and water rights, and that the proposed use is a beneficial use and in the public interest as it pertains to matters of public interest within the regulatory authority of the Water Management Board. This report will only assess the availability of water and possibility of developing this application without unlawful impairment of existing domestic water uses and water rights.

Pursuant to SDCL 46-6-3.1, 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 the water to the groundwater source. An exception allows water distribution systems to withdraw from groundwater sources older or stratigraphically lower than the Greenhorn Formation regardless of the results of a hydrologic budget. The applicant is not a water distribution system as defined in SDCL 46-1-6(17) and the Codell aquifer is younger and stratigraphically higher than the Greenhorn Formation. Therefore, it is necessary to find that recharge exceeds withdrawals to approve this application.

Pursuant to SDCL 46-5-6 the amount of water diverted may not exceed 1 cfs per 70 acres irrigated, but also provides that the "Water Management Board may allow a greater diversion, in volume or rate or both, if the method of irrigation, any time constraints on diversion of water, or the type of soil so requires." The applicant is requesting to divert more than 1 cfs per 70 acres for this application to irrigate turf with sprinklers. Turf requires more water per acre than typical crops and the hours when water can be applied are limited for a golf course. In the past, the Water Management Board has approved applications that request a higher diversion rate than the statutory limit for similar reasons.

Availability of Water

Hydrologic Budget

Recharge

Recharge to the Codell aquifer is likely by groundwater inflow from hydrologically connected aquifers and glacial till when the hydraulic head of those bodies is higher than the hydraulic head of the Codell aquifer, including from the alluvium below Lake Francis Case [5]. There is no estimate of recharge available for the Codell aquifer.

Discharge

Natural discharge from the Codell aquifer likely occurs by groundwater outflow to hydrologically connected aquifers when the hydraulic head of those bodies is lower than the hydraulic head of the Codell aquifer. Discharge also occurs by domestic and appropriative withdrawals. Due to the low withdrawal rate of domestic wells and presence of stratigraphically higher aquifers and water distribution systems, domestic well withdrawals are estimated to be negligible for the hydrologic budget. There are 47 water rights/permits authorized to appropriate from the Codell aquifer [6]. Of those 47, five are for irrigation [6]. Figure 1 shows the irrigation reported over the period of record (1979 – 2020) [7]. The average irrigation reported over the

period of record from 1979 through 2020 is approximately 41 ac-ft/yr [7]. However, the number of irrigation permits in the Codell aquifer increased from 1 permit to 4 from 2012 to 2013 [7], so the average irrigation reported over the period of record is not likely to be representative of typical irrigation in the aquifer. Average irrigation reported from 2013 through 2020 is 108 ac-ft/yr [7]. One irrigation permit, Water Permit No. 8553-3, was approved in 2021, so it is not represented in the irrigation questionnaire summaries [6]. Since Water Permit No. 8553-3 is for irrigation of turf, its estimated withdrawal its full permitted 2 ac-ft per irrigated acre, or 80 ac-ft/yr.

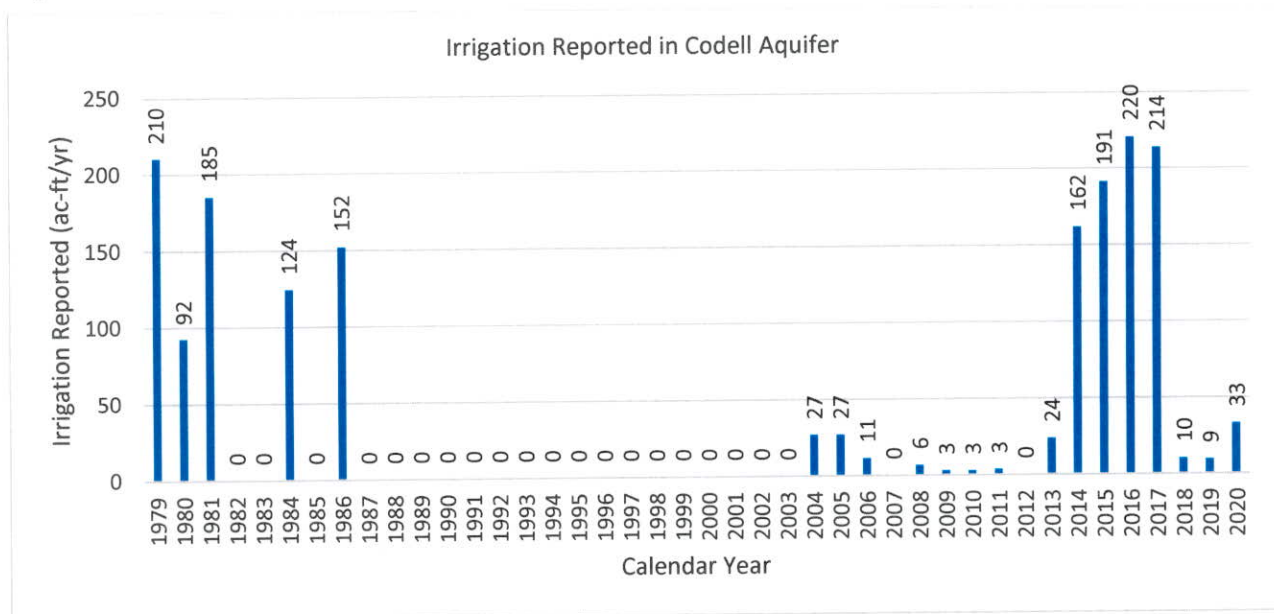


Figure 1: Irrigation reported in the Codell aquifer [7]

Of the non-irrigation water rights/permits, 12 purchase their water from another system [8] [6]. They maintain their water rights on standby for emergency purposes and are assumed to withdraw a negligible amount of water. Eight non-irrigation water rights/permits are required to report their withdrawals. All of those permits are new enough that they still may be developing their permits, so they are assumed to withdraw the full volume appropriated on their permit, for an estimated withdrawal of 365 ac-ft/yr [6]. One water right/permit is not required to report its withdrawals, but is limited on its permit to an annual volume on its permit of 10 ac-ft/yr [6]. The remaining 21 water rights/permits authorized to withdraw from the Codell aquifer are assumed to withdraw at their authorized rate 60% of the time, for an estimated withdrawal of 1,427 ac-ft/yr.

Summary of Hydrologic Budget

There is no estimate of recharge available for the Codell aquifer. Table 1 summarizes withdrawals estimated for the Codell aquifer. The total estimated withdrawal for the aquifer is 1,990 ac-ft/yr. Divided across the 4,960,000 acres of the Codell aquifer, recharge to the aquifer would have to be at least 0.005 inches per acre per year. The hydraulic conductivity of sandstone ranges from 0.37 inches per year to 7,500 inches per year [9] and there are known locations that the Codell aquifer is hydrologically connected to other aquifers [5] [3]. This application seeks to appropriate up to 6.3 ac-ft/yr. Therefore, based on the hydrologic budget, there is reasonable probability unappropriated water is available for this application.

Table 1: Summary of withdrawals in the Codell aquifer

Method	Number	Est. Use (ac-ft/yr)
Irrigation, Reporting	4	108
Irrigation, Not Reporting	1	80
Standby	12	0
Non-Irr, Report Required	8	365
Non-Irr, Volume Limit	1	10
60% Estimate	21	1,427
Total	47	1,990

Observation Wells

Administrative Rule of South Dakota (ARSD) 72:04:05:07 requires that the Water Management Board rely upon the record of observation wells in addition to other information in order to determine that recharge to the aquifer exceeds withdrawals. The Water Rights Program maintains 22 observation wells completed into the Codell aquifer [10]. The nearest observation well to this application is Observation Well DG-80F [10], located approximately 4 miles south of the proposed well. Observation Well DG-80F is representative of the general behavior of the aquifer. Water levels from Observation Well DG-80F are shown in Figure 2 [10]. In general, water levels rise during periods of higher-than-average precipitation and decline during periods of lower-than-average precipitation. There are also seasonal declines due to higher pumping during the summer, although the water levels in the aquifer tend to recover after the spring recharge period. The fluctuation of water levels with fluctuations in annual precipitation indicate water is naturally discharging from the aquifer and recharge to the aquifer exceeds withdrawals. The Water Management Board considers natural discharge to be available for capture. Therefore, based on observation well analysis, there is reasonable probability unappropriated water is available for this application.

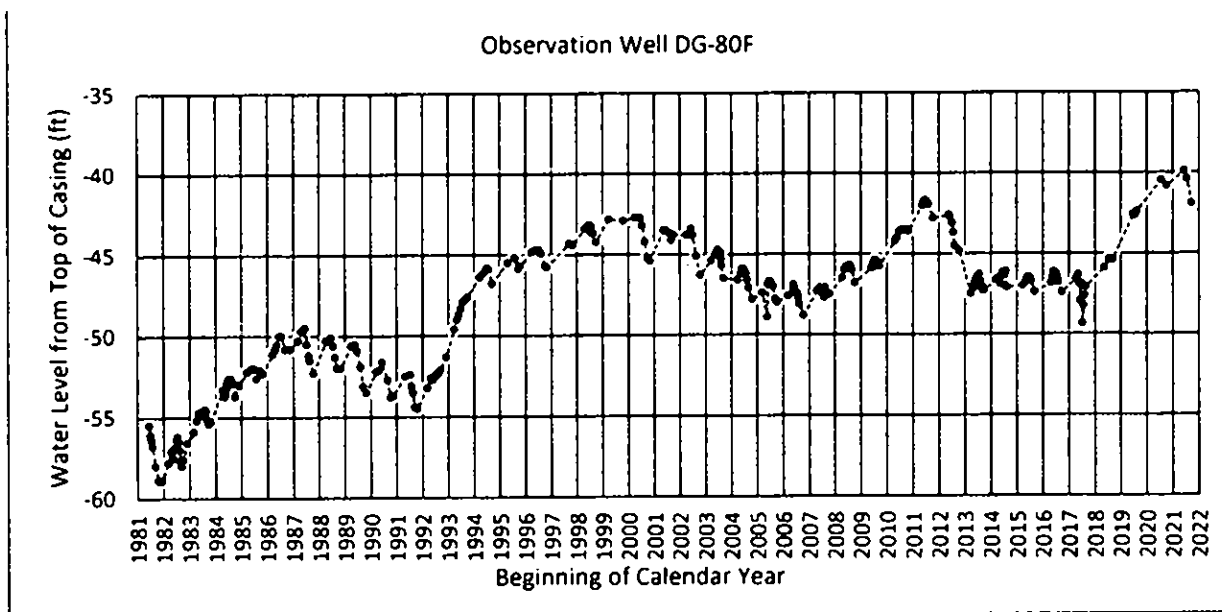


Figure 2: Observation Well DG-80F [10]

Possibility of Unlawful Impairment of Existing Water Rights'

The nearest domestic well on file with the Water Rights Program that is likely to be completed in to the Codell aquifer is the one located 0.8 miles west of this application [4]. The nearest water rights/permits appropriating from the Codell aquifer are Water Right Nos. 4383-3 and 4836-3, located approximately 5.5 miles west of the proposed well for this application [6]. The Water Rights Program has historically interpreted an unlawful impairment of existing water rights to occur if a junior water right/permit causes a nearby adequate well with a senior water right/permit to become unable to withdraw at the rate it is entitled to or, if a domestic well is impacted, a water right/permit causes an adequate domestic well to be unable to withdraw at the rate needed to supply reasonable domestic use of water. Administrative Rule of South Dakota (ARSD) 74:02:04:20(6) defines an adequate well as:

...a well constructed or rehabilitated to allow various withdrawal methods to be used, to allow the inlet to the pump to be placed not less than 20 feet into the saturated aquifer or formation material when the well is constructed, or to allow the pump to be placed as near to the bottom of the aquifer as is practical if the aquifer thickness is less than 20 feet

There is no record of interference of an adequate well in Douglas County on file with the Water Rights Program [11]. Some drawdown is likely to occur if this application is developed. However, in order to place the waters of the state to maximum beneficial use, the Water Management Board has ruled that hydraulic head is not protected as a means of water delivery [12], and nearby well owners may be required to lower their pumps. Based on nearby well completion reports discussed in the Hydrogeologic Characteristics section, the hydraulic head in the aquifer is likely to rise 170 feet above the top of the aquifer [4]. Due to the availability of hydraulic head in the aquifer, the lack of complaints of well interference in the county, and relatively low diversion rate requested by this application, there is reasonable probability this

application can be developed without unlawful impairment of existing water right/permits or adequate domestic wells.

Conclusions

1. Water Permit Application No. 8592-3 seeks to appropriate 0.08 cfs from one new well to be completed into the Codell aquifer located in the SW $\frac{1}{4}$ SW $\frac{1}{4}$ Section 3 for irrigation of 2.1 acres (greens and tee boxes) located in the SW $\frac{1}{4}$ SW $\frac{1}{4}$ Section 3; SE $\frac{1}{4}$ SE $\frac{1}{4}$ Section 4; E $\frac{1}{2}$ NE $\frac{1}{4}$ Section 9; all in T99N-R63W. Water from the well will be diverted to a holding pond adjacent to the well in years when water levels in Lake Corsica drop below the irrigation intakes. Water from the holding pond will be pumped at a rate not exceeding 0.44 cfs to the irrigated acres.
2. Based on the hydrologic budget and observation well analysis, there is reasonable probability unappropriated water is available for this application.
3. This application seeks to irrigate at a rate greater than the statutory limit of 1 cfs per 70 acres due to the limited hours in a day available to irrigate a golf course.
4. There is reasonable probability this application can be developed without unlawful impairment of existing water rights/permits or adequate domestic wells.



Kimberly C. Drennon, E.I.

Natural Resources Engineer II – DANR Water Rights Program

References

- [1] L. S. Hedges, S. L. Burch, D. L. Iles, R. A. Barari and R. A. Schoon, "Evaluation of ground-water resources eastern South Dakota and upper Big Sioux River, South Dakota and Iowa, Tasks 1-4," U.S. Army Corps of Engineers, Omaha, Nebraska, 1982.
- [2] L. S. Hedges, "Geology and Water Resources of Charles Mix and Douglas Counties, South Dakota - Part I: Geology," SD DANR Geological Survey Program, Vermillion, South Dakota, 1975.
- [3] C. M. Christensen, "Geology and water resources of Bon Homme County, South Dakota; Part I: Geology," SD DANR Geological Survey Program, Vermillion, South Dakota, 1974. Bulletin 21 (Part 1).
- [4] SD DANR Water Rights Program, "Well completion reports," Pierre, South Dakota, 2022.
- [5] J. Kume, "Geology and Water Resources of Charles Mix and Douglas Counties, South Dakota - Part II: Water Resources," SD DANR Geological Survey Program, Vermillion, South Dakota, 1977. Bulletin 22.

- [6] SD DANR Water Rights Program. "Water right permit file database," SD DANR Water Rights Program, Pierre, South Dakota, 2022.
- [7] SD DANR Water Rights Program, "Irrigation questionnaire summaries," SD DANR Water Rights Program, Joe Foss Bldg., Pierre, SD, 2021.
- [8] SD DANR Drinking Water Program, "Your Water System Information," SD DANR Drinking Water Program, 9 February 2021. [Online]. Available: <https://denr.sd.gov/des/dw/sysinfo.aspx>. [Accessed 9 February 2021].
- [9] G. M. Duffield, "Representative Values of Hydraulic Properties," 23 November 2019. [Online]. Available: http://www.aqtesolv.com/aquifer-tests/aquifer_properties.htm. [Accessed 31 March 2022].
- [10] SD DANR Water Rights Program, "Observation wells," Pierre, South Dakota, 2022.
- [11] SD DANR Water Rights Program. "County files," SD DANR Water Rights Program, Joe Foss Bldg., Pierre, South Dakota, 2022.
- [12] South Dakota Water Management Board. *On the Matter of Water Permit Application No. 2313-2 for Coca Cola Bottling Company*. 1995.

Schlaak, Karen

From: Schlaak, Karen
Sent: Monday, April 11, 2022 9:47 AM
To: jay@douglaelec.coop
Subject: Water Permit Application No. 8592-3
Attachments: 3264.pdf

Attached is a copy of the report, chief engineer recommendation and information regarding the public notice for the water permit application for the golf course. As stated in the letter, please contact the paper(s) 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>



(Date Signed) 4-22-22

Notice of Application No. 8592-3 to Appropriate Water

Notice is given that Dakota Trails Golf Course, PO Box 165, Corsica SD 57328 has filed an application for a water permit to appropriate 0.08 cubic feet of water per second (cfs) from one well to be completed into the Codell Aquifer (approximately 410 feet deep) located in the SW1/4 SW1/4 section 3 for irrigation of 2.1 acres (greens and tee boxes) located in the SW1/4 SW1/4 section 3; SE1/4 SE1/4 section 4; E1/2 NE1/4 section 9; all in T99N-R63W. These acres are also authorized by Water Permit No. 6666-3 which appropriates water from Corsica Lake for irrigation of 35 acres of the golf course. Water from the well will be diverted to a holding pond adjacent to the well in years when water levels in Lake Corsica drop below the irrigation intakes. Water from the holding pond will be pumped at a rate not exceeding 0.44 cfs to the irrigated areas. The applicant is requesting a diversion rate to the irrigated acres greater than the statutory limit of 1 cfs per 70 acres and application of up to 3 acre-feet per irrigated acre. This site is located approximately 6 miles east of Corsica SD.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 8592-3 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 May 2, 2022.

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Published once at the total approximate cost of \$127.53.

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AFFIDAVIT OF PUBLICATION

YANKTON DAILY PRESS AND DAKOTAN

RECEIVED

APR 22 2022

WATER RIGHTS
PROGRAM

DAKOTA TRAILS GOLF COURSE
PO BOX 195
CORSICA SD 57328

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
4+ 19 NOTICE OF APPLICATIO

TAKEN FROM THE PAPER, IN WHICH IT WAS LAST PUBLISHED IN THE
NEWSPAPER ON THE 19th DAY OF April, 2022
THAT THE FULL AMOUNT OF THE FEE CHARGED FOR THE PUBLICATION
OF SAID NOTICE TO WIT \$45.28 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: 04/19/2022

FILED ON: 04/19/2022


SUBSCRIBED AND SWORN TO BEFORE ME THIS 19th DAY OF April, 2022


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

NOTICE OF APPLICATION NO. 8592-3 to Appropriate Water

Notice is given that Dakota Trails Golf Course, PO Box 165, Corsica SD 57328 has filed an application for a water permit to appropriate 0.08 cubic feet of water per second (cfs) from one well to be completed into the Codell Aquifer (approximately 410 feet deep) located in the SW1/4 SW1/4 section 3 for irrigation of 2.1 acres (greens and tee boxes) located in the SW1/4 SW1/4 section 3; SE1/4 SE1/4 section 4; E1/2 NE1/4 section 9; all in T99N-R63W. These acres are also authorized by Water Permit No. 6666-3 which appropriates water from Corsica Lake for irrigation of 35 acres of the golf course. Water from the well will be diverted to a holding pond adjacent to the well in years when water levels in Lake Corsica drop below the irrigation intakes. Water from the holding pond will be pumped at a rate not exceeding 0.44 cfs to the irrigated areas. The applicant is requesting a diversion rate to the irrigated acres greater than the statutory limit of 1 cfs per 70 acres and application of up to 3 acre-feet per irrigated acre. This site is located approximately 6 miles east of Corsica SD.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 8592-3 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.

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Published once at the total approximate cost of \$45.28 and can be viewed free of charge at www.sdpublicnotices.com

Schlaak, Karen

From: Schlaak, Karen
Sent: Monday, April 11, 2022 9:44 AM
To: 'Kelly Kronaizl'
Subject: 8592-3, Dakota Trails Golf Course
Attachments: 8592-3public.short_final.docx; FORM8.FRM.doc

Attached is a notice to be published on April 19, 2022 in the Press & Dakotan.

Dakota Trails Golf Course, c/o Jay Spaans, PO Box 195, Corsica SD 57328 (605 530-3683) has been notified to contact you to authorize publication and arrange for payment.

Please send the affidavit or return the attached Proof of Publication form ASAP to the Water Rights Program, 523 E Capitol, Pierre SD 57501.

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

Karen Schlaak

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



Schlaak, Karen

From: Schlaak, Karen
Sent: Monday, April 11, 2022 9:43 AM
To: 'globe@siouxvalley.net'
Subject: 8592-3, Dakota Trails Golf Course
Attachments: 8592-3public.short_final.docx; FORM8.FRM.doc

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Karen Schlaak

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





**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

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

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

April 11, 2022

Dakota Trails Golf Course
c/o Jay Spaans
PO Box 165
Corsica SD 57328

Dear Mr. Spaans:

Water Permit Application No. 8592-3 for irrigation use have been examined and found to comply with the South Dakota Water Laws and applicable rules. A notice has been sent to the Corsica Globe printed at Corsica (Ph # 605 946-5489) and the Press & Dakotan printed at Yankton (Ph # 605 665-7811). You will need to contact the newspapers and authorize publication of this notice. For your information, a copy of the notice, the recommendation of the Chief Engineer and report on the application are enclosed. Please review the notice prior to publication and notify this office, if you have any corrections or questions.

Be sure to contact the above newspapers to authorize publication of your Notice and to arrange for payment. Early contact with the papers can eliminate delays. Upon receiving authorization from you, the publishers have been instructed to publish your notice. The newspapers have also been instructed to send us the Proof of Publication. We must receive Proof of Publication before action can be taken on the application.

Sincerely,

Karen Schlaak
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.

NOTICE OF APPLICATION NO. 8592-3 to Appropriate Water

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**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

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

JUN 01 2022

Dakota Trail Golf Course
c/o Jay Spaans
PO Box 165
Corsica SD 57328

Dear Mr. Spaans:

Enclosed is Water Permit No. 8592-3 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.

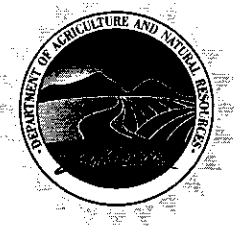
An informational sheet *Common Water Right Questions?* is also enclosed. This sheet is intended to answer some of the questions associated with obtaining and keeping a water right.

Sincerely,

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

enclosures

8592-3



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

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

September 5, 2023

8592-3

Dakota Trails Golf Course
c/o Jay Spaans
PO Box 165
Corsica SD 57313

Dear Mr. Spaans:

I am writing to acknowledge receipt of the "Notice of Completion of Works" form that you sent in to let us know that you are completed with your water use system.

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

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

Sincerely,

Amanda Dewell
Water Rights Program
(605) 773-3352
email: Amanda.Dewell@state.sd.us

RECEIVED

SEP 05 2023

NOTICE OF COMPLETION OF WORKS AND
APPLICATION OF WATER TO BENEFICIAL USEOFFICE OF
WATERDate Aug 31, 2023TO: Water Rights Program, DANR
523 E. Capitol
Pierre, SD 57501-3181FROM: Dakota Trails Golf Course
(name)
P.O. Box 165
(address)
Corsica, SD 57313 605-530-3683
(city, state, zip) (phone) (Jay Spaans)

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.

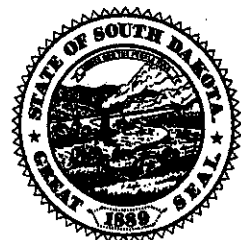
Water Permit No. 8592-3 states that the water use system is to be constructed by May 2, 2027, and water is to be put to beneficial use by May 2, 2031.
(date) (date)

The water use system was completed on August 10, 2023.
(date)

Applying the water to beneficial use was completed on August 29, 2023.
(date)

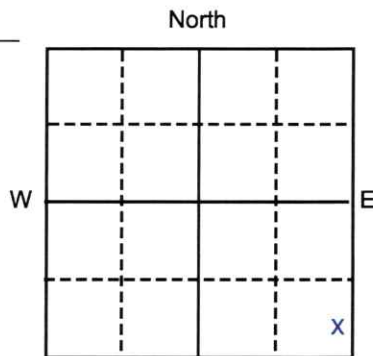
You may schedule an investigation so that the water license may be issued.

Jay Spaans - Board President
(signature) Dakota Trails



11-02

SOUTH DAKOTA WATER WELL COMPLETION REPORT

Location SW $\frac{1}{4}$ SW $\frac{1}{4}$ Sec 9 Twp 99 Rg 63County DouglasPlease mark well
location with an "X"

Well Completion Date

07/21/23

1 Mile

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

ft. from _____ (identify source)

PROPOSED USE:

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

METHOD OF DRILLING:

Forward

CASING DATA:

☐ Steel ☒ Plastic ☐ Other

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
<u>21.0</u> LB/FT	<u>5.00</u> IN	<u>0.0</u> FT	<u>200.0</u> FT	<u>8.75</u> IN
<u>17.0</u> LB/FT	<u>5.00</u> IN	<u>200.0</u> FT	<u>300.0</u> FT	<u>8.75</u> IN

GROUTING DATA:

Grout Type	No. of Sacks	Grout Weight	From	To
<u>DF Grout</u>	<u>29</u>	<u>0.0</u> Lb/gal	<u>0.0</u> Ft	<u>290.0</u> Ft

Describe grouting procedure

Line

SCREEN:

☐ Perforated pipe ☒ Manufactured
Diameter 5.00 Inches Length 40.0 FeetMaterial PVCSlot Size .016 Set From 300.0 Feet to 340.0 Feet

Other information

WAS A PACKER OR SEAL USED?

☒ Yes ☐ NoIf so, what material? sand

Describe packer(s) and location

@290-340

DISINFECTION: Was well disinfected upon completion?

☒ Yes, How? Chlorine Tabs
☐ No, Why Not?
 Lab to which water
 quality sample sent for analysis
Well Owner: Jay SpaansBusiness Name: Dakota Trails Golf CoarseAddress: PO Box 165 -39522 274th StCity, State, Zip: Corsica SD 57328

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
<u>Yellow Clay</u>	<u>0</u>	<u>50</u>
<u>Blue Clay Sand Strk @ 100</u>	<u>50</u>	<u>110</u>
<u>Chalk</u>	<u>110</u>	<u>140</u>
<u>shale</u>	<u>140</u>	<u>270</u>
<u>Codell</u>	<u>270</u>	<u>340</u>

STATIC WATER LEVEL 120.0 FEET

If flowing: closed in pressure _____ PSI

GPM flow _____ through _____ Inch pipe

Controlled by ☐ Valve ☐ Reducers ☐ Other _____

Reduced flow rate _____ GPM

Can well be completely shut in?

WELL TEST DATA:

☒ Pumped Describe: 30 GPM w/Air☐ Bailed☐ Other

Pumping Level Below Land Surface

_____ Ft. After _____ Hrs. pumped _____ GPM

_____ Ft. After _____ Hrs. pumped _____ GPM

If pump installed, pump rate: _____ GPM

REMARKS

This well was drilled under license # 440 and this report is true and accurate.Drilling firm: Pullman Well Drilling

Signature of License Representative:

RECEIVED

Signature of Well Owner or Equitable Property Holder: AUG 17 2023OFFICE OF
WATER

Date: _____