

WATER PERMIT NO. 7372-3

Name of Applicant: Mark Kannegieter

Address: 42668 189th St, Willow Lake SD 57278

Phone: 605 520-5474

Amount of Water Claimed: 1.92 cfs

Total Acres: 134 acres

Source of Water Supply: groundwater (one well)

Water to be used for: irrigation

County: Clark

Type of Waste Disposal System:

Location: 2 miles northwest of Willow Lake

PRIORITY

Date Received: 6-4-12

Application/License Fee: \$ 1,050.00

Corrected Application Received:

Period of Annual Use: April 1 – October 31

Remarks:

Diversion Point: NW ¼ SW ¼ Sec 28-T114N-
R57W

Land to be Irrigated: SW ¼ Sec 28-T114N-R57W

Depth of Well: 68 feet deep

Well Driller: Steffl Drilling & Pump Inc.

Remarks:

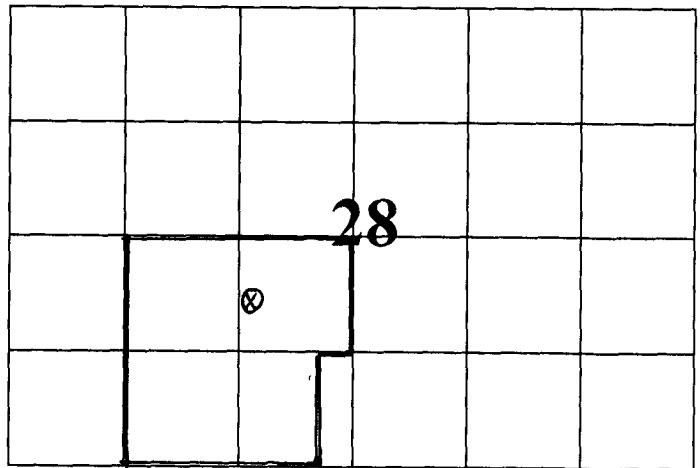
Type of Map: aerial

Prepared by: Jessica ?, Clark Co FSA

Reviewed and the Number Assigned on: 6-12-12

By: Karen Schlaak

Notice of Hearing - date to intervene: _____



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

Mail to: PMB 2020 DENR - Water Rights 523 E Capitol Ave Pierre, SD 57501-3182 ph. (605) 773-3352	No. <u>7372-3</u> (office use only)	Hydrologic Unit <u>10170201</u>	RECEIVED JUN - 4 2012 WATER RIGHTS PROGRAM
	Basin <u>Sioux River</u>		
	Newspaper <u>Clark Co. Courier 119 1st Ave E 57225 605-532-3654</u>		
	<u>Public Opinion PO Box 10 Watertown 57201 605-586-6901</u>		

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.)

1. Name of Applicant Mark Kannegieter Phone 605-520-5474
 (check one) ☒ Owner ☐ Tenant/lessee
 Mailing Address 42668 189th St. Willow Lake SD 57278
 (Address) (City) (State) (Zip Code)
2. Amount of water claimed 1.92 *CFS or 864 **GPM ***AF Total Acreage 134
 (*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 water
4. Location of point of diversion (example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W) County Clark
1 well in SW 1/4 section 28 28-114-57 (NE 1/4 SW 1/4)
5. County or counties where water will be used Clark
6. Annual period during which water is to be used April 1 - Oct. 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
SW 1/4 section 28 28-114-57	134 134		

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

Want to dig a well for a new irrigation system. Must be a minimum of 800 gallons per minute. I'm looking for 800-900 gpm.

STATE OF SOUTH DAKOTA)

County of Clark) SS

Attachments: Attach Form 2A if diversion is from a well or dugout, or if storage of water is proposed. Also, attach map and any other technical information. (see instructions)

I, Mark Kannegieter, the applicant, certify that I have read this application, have examined the attached map and that the matters stated are true and that I intend, and am able to complete the necessary construction.

Applicant's signature Mark KannegieterSubscribed and sworn to before me this 1st day of June 20 12

Capital Sign
 Notary Public signature

**SOUTH DAKOTA
WATER PERMIT NO. 7372-3**

Date of first receipt of application June 4, 2012.

Date of return to applicant for corrections, amendments or changes June 4, 2012.

Date of receipt of corrected application June 12, 2012.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 7372-3 to Mark Kannegieter, 42668 189th St, Willow Lake SD 57278 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. 7372-3 appropriates 1.92 cubic feet of water per second from one well to be completed into the Vermillion East Fork-Willow Lake Aquifer (68 feet deep) located in NE 1/4 SW 1/4 Section 28 for irrigation of 134 acres located in the SW 1/4 Section 28; all in T114N-R57W.
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: April 1 – October 31.
3. The date from which applicant may claim right is June 4, 2012.
4. The date of approval of Permit No. 7372-3 is September 4, 2012.
5. One-fifth of the construction is to be completed on or before March 4, 2015.
6. All construction is to be completed on or before September 4, 2017.
7. Water is to be put to beneficial use on or before September 4, 2021.
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 this Permit will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals 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. 7372-3 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. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.

WATER MANAGEMENT BOARD

By: Garland Erbele

Garland Erbele, Chief Engineer
Water Rights Program
Department of Environment and Natural Resources

SEP 14 2012
date



Supplemental Information

(type or print in ink)

1. Well Information - Proposed Construction

- a) Drill Hole Diameter 18" Depth 68'
- b) Casing Type PVC Diameter 12" Thickness ~~3/4"~~ 5/8"
- c) Screen Type Stainless Steel Diameter 12" Thickness 18' 50-lb
- d) Gravel Pack 45-68 Length of Gravel Pack 23' 90slf
- e) Depth to Top of Water Bearing Material 1'
- f) Depth to Water (ground surface to water level) 12'
- g) Distance to nearest existing domestic well:

On applicant's property 1500 feet On property owned by others _____

2. Wastewater Disposal System Information

- a) Type of System (i.e. septic tank, drain field) _____
- b) System Capacity (gallons) _____ Year Constructed _____
- c) Connected to the City of _____ Sanitary System

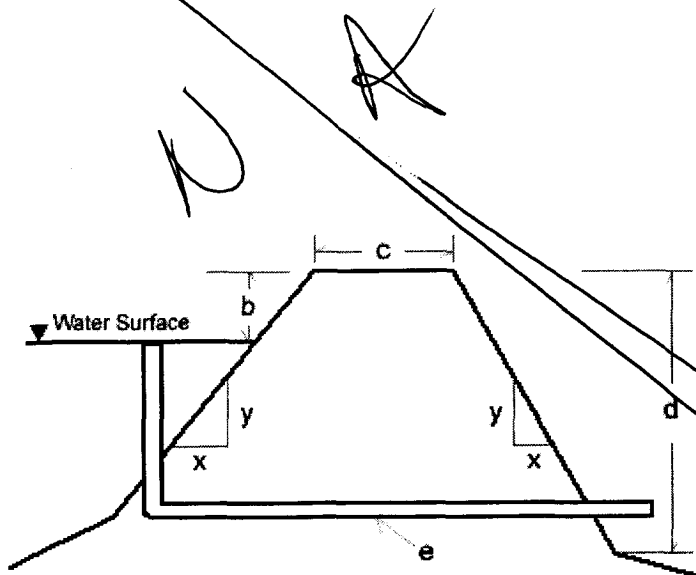
3. Dugout Information

- a) Surface Dimensions _____ Depth _____
- b) Depth to water (ground surface to water level) _____

4. Water Storage Dams

If the proposed water use system contains one or more storage dams, please furnish the information requested below for each dam. The locations of the dams need to be shown on the map submitted with the application.

- a) If a private engineering firm or government agency was involved in the design of this dam, please give their name and address:



- b) Freeboard _____
- c) Crest Width _____
Crest Length _____
- d) Height _____
- e) Primary Outlet Capacity _____
If pipe, diameter _____
- f) Secondary Spillway Capacity _____
Spillway Width _____
- g) X & Y Slope (e.g. 3 to 1 is a typical slope)
Upstream _____
Downstream _____
- h) Surface Area of Impoundment _____
- i) Storage _____ Acre Feet
- j) Drainage Area Above Dam _____ Acres



United States Department of Agriculture
Farm Service Agency

PLSS: 28_114_57
Farm: 4882



Clark County, SD

1:8,372

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Disclaimer: Wetland identifiers do not represent the size, shape or specific determination of the area. Refer to your original determination (CPA-026 and attached maps) for exact wetland boundaries and determinations, or contact NRCS.

Wetland Determination Identifiers
 ● Restricted Use
 ▼ Limited Restrictions
 ■ Exempt from Conservation Compliance Provisions

Common Land Units

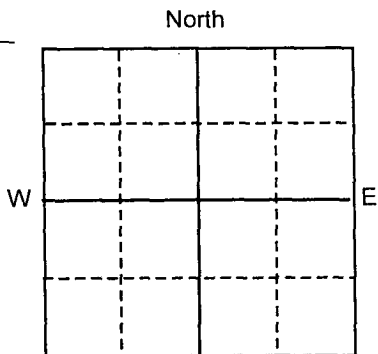
Non Cropland

March 03, 2011

2010 Ortho-Photography - Not to Scale

SOUTH DAKOTA WATER WELL COMPLETION REPORT

11-02

Location NE 1/4 SW 1/4 Sec 28 Twp 114N Rg 57WCounty ClarkPlease mark well
location with an "X"

Well Completion Date

4/2/2012

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

600.0 ft. from slough (identify source)

PROPOSED USE:

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

METHOD OF DRILLING:

mud rotary

CASING DATA:

☐ Steel ☐ Plastic ☐ Other

If other describe

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
LB/FT	IN	FT	FT	IN
LB/FT	IN	FT	FT	IN
LB/FT	IN	FT	FT	IN

GROUTING DATA:

Grout Type	No. of Sacks	Grout Weight	From	To
HS Bentonite	4	Lb/gal	0.0 Ft	78.0 Ft
		Lb/gal	Ft	Ft

Describe grouting procedure

SCREEN:

☐ Perforated pipe ☐ Manufactured

Diameter _____ Inches Length _____ Feet

Material _____

Slot Size _____ Set From _____ Feet to _____ 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?

☐ No, Why Not?
Lab to which water
quality sample sent for analysisWell Owner: Mark Kannegieter

Business Name:

Address: 42668 189th STCity, State, Zip: Willow Lake SD 57278

WELL LOG:

			DEPTH	
FORMATION			FROM	TO
topsoil	blk	M	0	1
sand/gravel	red/tan	12-40slt	1	68
rock	blk	H	68	69
clay	blue	blue	69	78

STATIC WATER LEVEL

FEET

If flowing: closed in pressure _____ PSI

GPM flow _____ through _____ Inch pipe

Controlled by ☐ Valve ☐ Reducers ☐ Other _____

Reduced flow rate _____ GPM

Can well be completely shut in?

WELL TEST DATA:

☐ Pumped Describe:☐ Bailed☐ Other

Pumping Level Below Land Surface

_____ Ft. After _____ Hrs. pumped _____ GPM

_____ Ft. After _____ Hrs. pumped _____ GPM

If pump installed, pump rate: _____ GPM

REMARKS

44 39 03.9

097 41 23.5

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JUN 12 2012

WATER RIGHTS
PROGRAMThis well was drilled under license # 463 and this
report is true and accurate.Drilling firm: Steffl Drilling & Pump Inc

Signature of License Representative:

Signature of Well Owner or Equitable Property Holder:

Date: _____

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date 6/4, 20 12

RECEIVED OF Mark Kannegieter 42668 189th St Willow Lake SD 57278

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

Fee for Application for Permit No. <u>7372-3</u> to Appropriate Water, to construct and to put water to beneficial use	850	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>7273-3</u>	200	00
Fee for Filing Transfer Form _____		
Fee for _____		
Fee for Issuing New Well Driller's License No. _____ for C.Y. _____		
Fee for Renewal of Well Driller's License No. _____ for C.Y. _____		
Fee for Issuing Well Pump Installer's License No. _____ for C.Y. _____		
Fee for Renewal of Well Pump Installer's License No. _____ for C.Y. _____		
(Any Other Work Provided by Law)	TOTAL	1050 00

No. **05459**

By Garland Erbe JE
Chief Engineer



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
denr.sd.gov

June 4, 2012

Mark Kannegieter
42668 189th St
Willow Lake SD 57278

Dear Mr. Kannegieter:

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

- Enclosed is the aerial photo map submitted with the application. Please outline the acres to be irrigated.
- If available, please submit a well log or test hole log signed by a licensed South Dakota well driller.
- Regarding the amount of water claimed, State Statutes limit diversions to 1 cubic feet of water per second (cfs) for each 70 acres irrigated. This would mean that you are allowed approximately 1.92 cfs or 864 gpm to irrigate 134 acres. We understand that in order to accommodate certain irrigation methods, a greater diversion rate is required. Please justify in writing your request for a diversion rate greater than the statutory limit (please explain diversion rate requirement for the project).

If you have any questions, please contact me.

Sincerely,

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

enclosure

Gronlund, Eric

From: Gronlund, Eric
Sent: Friday, June 08, 2012 10:24 AM
To: Schlaak, Karen
Subject: Mark Kannegieter application

Mr. Kannegieter called in response to your June 4th letter.

He will outline the area to be irrigated on the map.
He is getting the test hole log from the driller and will send it in.

He agrees that the application can be amended to the statutory limit of 864 gpm for irrigation of 134 acres.

Made a copy of this email and included it with the application in the pending file.

Eric



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
denr.sd.gov

**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 7372-3, Mark Kannegieter**

Pursuant to SDCL 46-2A-2, the following is the recommendation of the Chief Engineer, Water Rights Program, Department of Environment and Natural Resources concerning Water Permit Application No. 7372-3, Mark Kannegieter, 42668 189th Street, Willow Lake SD 57278.

The Chief Engineer is recommending APPROVAL of Application No. 7372-3 because 1) there is reasonable probability that there is unappropriated water available for the applicant's proposed use, 2) the proposed diversion can be developed without unlawful impairment of existing rights, 3) the proposed use is a beneficial use and 4) it is in the public interest with the following qualifications:

1. The well approved under this Permit will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals 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. 7372-3 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. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.

See report on application for additional information.

Garland Erbele, Chief Engineer
August 9, 2012

REPORT TO THE CHIEF ENGINEER
ON
WATER PERMIT APPLICATION NO.7372-3
MARK KANNEGIETER
August 20, 2012

Water Permit Application No. 7372-3 proposes to appropriate 1.92 cubic feet of water per second (cfs) from one well to be completed in to the Vermillion East Fork - Willow Lake aquifer. The well is expected to be approximately 68 feet deep and is to be located in the NE $\frac{1}{4}$ SW $\frac{1}{4}$ of Section 28, T114N-R57W. This permit application proposes to irrigate 134 acres located in the SW $\frac{1}{4}$ of Section 28, T114N-R57W in Clark County.

AQUIFER: Vermillion East Fork-Willow Lake (VEF-WL)

GEOLOGY AND AQUIFER CHARACTERISTICS:

The Vermillion East Fork Willow Lake aquifer is composed of surficial outwash (sand and gravel) that is predominantly under water table conditions (Hamilton, 1978). The aquifer underlies approximately 13,100 acres and contains an estimated 29,480 acre-feet of recoverable water in Clark County (Hedges et al., 1982). The aquifer extends north to blend into the Vermillion East Fork – Antelope Lake and south into the Vermillion East Fork – Spirit Lake aquifers. According to Jensen (2001), aquifer materials can be found less than fifty feet deep. The top of the aquifer is approximately 11 feet below ground surface and has a 30 foot saturated thickness in the area of the proposed well (Hamilton, 1986). Average saturated thickness is 20 feet and where the aquifer is thicker than average properly constructed wells may produce as much as 800 gallons per minute (gpm) (Hamilton, 1978).

SDCL 46-2A-9

Pursuant to SDCL 46-2A-9, a permit to appropriate water may be issued only 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 rights and that the proposed use is a beneficial use and in the public interest. This report will address the availability of unappropriated water and existing rights from the aquifer.

WATER AVAILABILITY:

This application proposes to appropriate 268 acre-feet annually from the Vermillion East Fork – Willow Lake aquifer. Although the actual water use if this application is approved will most likely be less than 268 acre-feet/year. The probability of unappropriated water available from an 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.”

Recharge versus Withdrawals:

Recharge:

Recharge to the Vermillion East Fork – Willow Lake aquifer is primarily from infiltration of precipitation and inflow from till adjacent to the aquifer. The Vermillion East Fork – Willow Lake aquifer, as described by Hedges (1982), is a small portion of the Prairie Coteau #1 aquifer described by

Hamilton (1986). The recharge rate for the Prairie Coteau #1 aquifer was estimated to be 3.8 inches per year by Hamilton (1986). Using Hamilton's recharge rate (1986) and Hedge's area (1982), total recharge for the aquifer is estimated to be 4,148.33 acre-feet per.

Withdrawals:

There are 12 water rights/permits appropriating water from the Vermillion East Fork - Willow Lake aquifer. There is one appropriation for municipal purposes and there are 11 for irrigation. The estimated withdrawal from the aquifer by the municipal appropriation is 152.04 acre-feet per year. This estimation assumes water is being withdrawn from the aquifer 14.4 hours per day at maximum diversion rate. Water use from the Vermillion East Fork - Willow Lake aquifer as reported to the DENR- Water Rights Program through annual irrigation questionnaires is shown in table 1.

YEAR	NO. OF PERMITS REPORTING	APPROPRIATION (AC-FT/YR)	PUMPAGE REPORTED (AC-FT/YR)
2011	11	4812.4	664.66
2010	11	4812.4	288.73
2009	10	4492.4	77.56
2008	9	4452.4	834.31
2007	9	4452.4	599.63
2006	10	4452.4	668.69
2005	10	4452.4	552.70
2004	10	4452.4	451.67
2003	9	4452.4	618.12
2002	9	4452.4	607.26
2001	9	4452.4	387.99
2000	9	4588.4	346.93
1999	9	4588.4	281.36
1998	9	4588.4	246.22
1997	8	4228.4	225.00
1996	8	4228.4	364.39
1995	7	3908.4	81.75
1994	8	4088.4	120.34
1993	8	3983.6	81.00
1992	8	3983.6	193.00
1991	8	3983.6	260.00
1990	8	3983.6	922.00
Average	9.0	4358.62	403.33

Table 1- Irrigation Water Use from the Vermillion East Fork – Willow Lake aquifer from Clark County.
(Water Rights 1990-2012)

Comparing the estimated average annual recharge to the aquifer, 4,148.33 acre-feet, to the estimated average annual withdrawal from the aquifer, 555.37 acre-feet, and the difference is 3,592.96 acre-feet of water. There is a reasonable probability that unappropriated water is available for this proposed appropriation of 268 acre-feet from the Vermillion East Fork - Willow Lake aquifer.

Observation Well Data:

Administrative Rule of South Dakota Section 74:02:05:07 requires that “the Water Management Board shall rely upon the record of observation well measurements to determine that the quantity of water withdrawn annually from the aquifer does not exceed the estimated average annual recharge of the aquifer.”

The DENR-Water Rights Program monitors five observation wells located into the Vermillion East Fork-Willow Lake aquifer (Water Rights, 2012a). The nearest of these wells, CK-68A and CK-78L, are 1.8 miles southwest and 0.78 miles north-northwest of the proposed well location. Water levels for both observation wells show a good response to climatic conditions. The water levels rise (recharge) during wet years and gradually decline during dry years. Both wells show pumping effects, but it does not appear to be adverse over most of the period of record. The climatic effects on water level greatly mask the temporal impacts of well withdrawal. Therefore, recharge to and natural discharge from the Vermillion East Fork- Willow Lake aquifer significantly exceeds pumping. Figures 1 and 2 are the hydrographs for observation wells CK-68A and CK-78L.

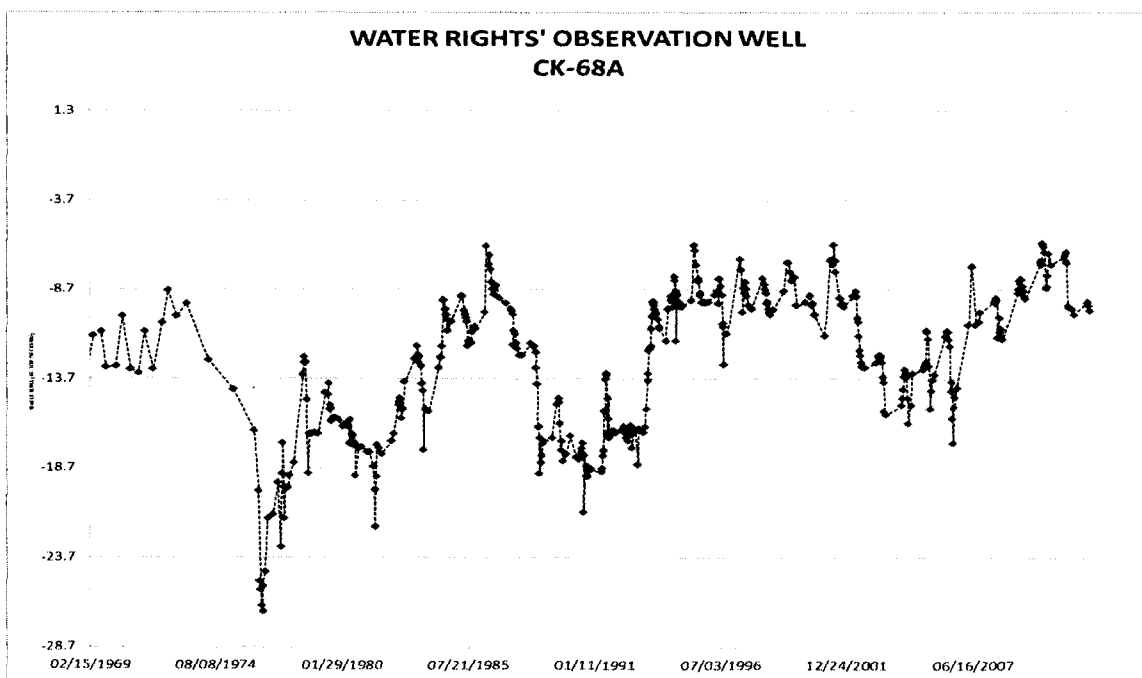


Figure 1- Hydrograph of DENR-Water Rights' observation well CK-68A, located approximately 1.8 miles southwest of the proposed well location

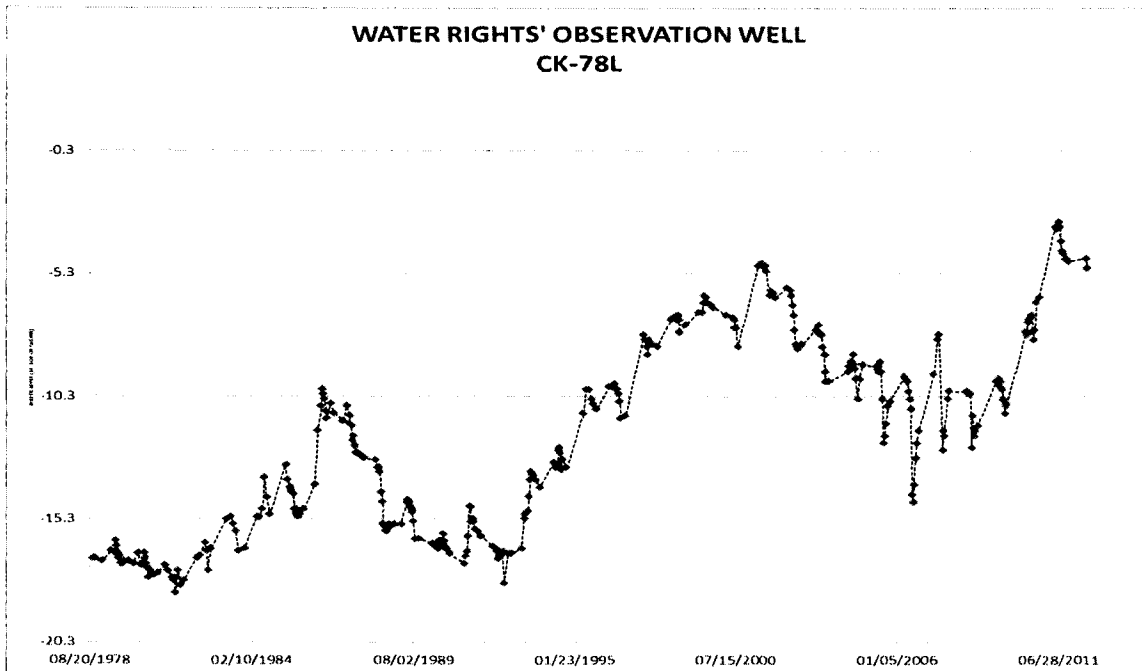


Figure 2- Hydrograph of DENR-Water Rights' observation well CK-78L, located approximately 0.78 miles north-northwest of the proposed well location

EXISTING WATER RIGHTS:

There are 12 water rights/permits appropriating water from the Vermillion West Fork - Willow Lake aquifer. Water Right Nos. 3877-3, 5857A-3, and 7115-3 are all within one mile of the proposed well location. The nearest well is on the applicant's property 1500 feet away. Interference from pumping is not expected to be adverse at these distances from the proposed well location. Table 2 lists the water rights appropriating water from the Vermillion East Fork - Willow Lake aquifer.

PERMIT NO.	NAME	STATUS	TYPE	CFS	ACRES
1601-3	City of Willow Lake	LC	MUN	0.35	N/A
1721-3	Phyllis Schmidt	LC	IRR	1.71	120
2212-3	Phyllis Schmidt	LC	IRR	1.6	112
2322-3	CT Wildlife Management	LC	IRR	1.78	264
2970-3	CT Wildlife Management	LC	IRR	1.78	238
3145-3	Dwight Warkenthien	LC	IRR	2	140
3146-3	Dwight Warkenthien	LC	IRR	1.78	132
3827-3	Marlin D. Warkenthien	LC	IRR	1.78	132
4414-3	Donald E Schmidt	LC	IRR	2.44	284.8
5857A-3	Clinton (Lee) Houghton	LC	IRR	1.31	92
7115-3	Lee Houghton	PE	IRR	0	20
7180-3	Bratland Seed Inc	PE	IRR	1.56	160
LC= Water Right, PE= Water Permit, IRR= Irrigation, MUN= Municipal					

Table 2- Water Rights from the Vermillion West Fork – Willow Lake aquifer in Clark County. (Water Rights, 2012b)

CONCLUSIONS:

1. This application proposes to appropriate 268 acre-feet annually for the irrigation of 134 acres, but the amount of water that will actually be used is expected to be considerably less.
2. There is a reasonable probability that unappropriated water is available from the Vermillion East Fork-Willow Lake aquifer to supply this proposed diversion
3. There is a reasonable probability that the diversion requested by this application can be made without adversely affecting existing water rights.
4. The well authorized by this application must be constructed in accordance with SD Well Construction Standards.



Adam Mathiowetz
SD DENR-Water Rights Program

REFERENCES:

- Hamilton, L.J. 1978. Major Aquifers in Clark County, South Dakota. U.S. Geological Survey. Information Pamphlet No. 16.
- Hamilton, L.J. 1986. Geology and Water Resources of Clack County, South Dakota Part II: Water Resources. U.S. Geological Survey. Bulletin 29, p 14.
- Hedges, L.S., S.L. Burch, D.L. Iles, R.A. Barari, and R.A. Schoon. 1982. Evaluation of Ground-Water Resources Eastern South Dakota and Upper Big Sioux River, South Dakota and Iowa, Task 1: Bedrock Topography and Distribution, Task 2: Extent of Aquifers, Task 3: Ground-Water Storage, Task 4: Computerized Data Base, Final Report. U.S. Army Corps of Engineers Contract DACW 45-80-C-0185.
- Jensen, A.R. 2001. First Occurrence of Aquifer Materials in Clark County, South Dakota: South Dakota Geological Survey Aquifer Materials Map 2, scale 1:100,000.
- Water Rights. 1991-2012. "1991-2011 Irrigation Summaries by Aquifer": SD DENR-Water Rights Program, Joe Foss Building, Pierre, SD.
- Water Rights. 2012a. Observation Well Files. SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, SD.
- Water Rights. 2012b. Water Right/Permit Files. SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, SD.

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AUG 24 2012

WATER RIGHTS
PROGRAM

NOTICE OF APPLICATION

NO. 7372-3 to Appropriate Water

Notice is given that Mark Kannegieter, 42668 189th St., Willow Lake, SD 57278 has filed an application for a water permit to appropriate 1.92 cubic feet of water per second from one well to be completed into the Vermillion East Fork - Willow Lake Aquifer (68 feet deep) located in NE 1/4 SW 1/4 Section 28 for irrigation of 134 acres located in the SW 1/4 Section 28; all in T114N-R57W.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 7372-3 because 1) unappropriated water is available, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest. In accordance with SDCL 46-2A-23, the Chief Engineer will act on this application, as recommended, unless a petition is filed opposing the application or the applicant files a petition contesting the Chief Engineer's recommendation. 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.

Any person interested in opposing or supporting this application or recommendation must file a written petition with BOTH the applicant and Chief Engineer. The applicant must file a petition if contesting the Chief Engineer's recommendation. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E Capitol, Pierre SD 57501 (605 773-3352)" and the applicant's mailing address is given above. A petition filed by either an interested person or the applicant must be filed by September 4, 2012.

The petition may be informal, but must include a statement describing the petitioner's interest in the application, the petitioner's reasons for opposing or supporting the application, and the signature and mailing address of the petitioner or the petitioner's legal counsel, if legal counsel is obtained. Contact Eric Gronlund at the above Water Rights Program address to request copies of information pertaining to this application. Steven M. Pirner, Secretary, Department of Environment and Natural Resources.

Published once at the total approximate cost of \$24.22.
8-22-1t

Affidavit of Publication

State of South Dakota

§

County of Clark

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

SD WATER RIGHTS PROGRAM
RE: MARK KANNEGIETER

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

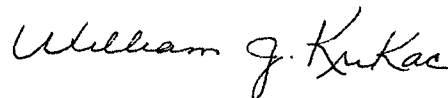
ONE

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

AUGUST 22, 2012

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

24.22



Subscribed and sworn to before me this

23RD DAY OF AUGUST, 2012



Notary Public
Clark County, South Dakota

My Commission expires: 06/04/2013

RECEIVED

AUG 27 2012

WATER RIGHTS
PROGRAM

Form 8

PROOF OF PUBLICATION

STATE OF SOUTH DAKOTA)
) SS
County of Codington)

I, Monica K. Saathoff

certify that the attached printed Notice was
taken

from the Watertown Public Opinion

printed and published in Watertown

County of Codington and

state of South Dakota. The notice was
published

in the newspaper on the following date:

August 22nd, 2012

Cost of Printing 54.68

Monica K. Saathoff
(Signature)

Bookkeeper

(Title)

August 22nd, 2012

(Date Signed)

dance with SDCL 46-2A-23, the Chief Engineer will act on this application, as recommended, unless a petition is filed opposing the application or the applicant files a petition contesting the Chief Engineer's recommendation. 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.

Any person interested in opposing or supporting this application or recommendation must file a written petition with BOTH the applicant and Chief Engineer. The applicant must file a petition if contesting the Chief Engineer's recommendation. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E Capitol, Pierre SD 57501 (605 773-3352)" and the applicant's mailing address is given above. A petition filed by either an interested person or the applicant must be filed by September 4, 2012.

The petition may be informal, but must include a statement describing the petitioner's interest in the application, the petitioner's reasons for opposing or supporting the application, and the signature and mailing address of the petitioner or the petitioner's legal counsel, if legal counsel is obtained. Contact Eric Gronlund at the above Water Rights Program address to request copies of information pertaining to this application.

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

Published once at the
approximate cost of \$55.25.
(August 22, 2012)

54.68
All legal notices in the Public
Opinion and other South
Dakota newspapers can be
found at
www.sdpublishnotices.com

DENR

NOTICE OF APPLICATION NO. 7372-3 TO APPROPRIATE WATER

Notice is given that Mark Kannegieter, 42668 189th St, Willow Lake SD 57278 has filed an application for a water permit to appropriate 1.92 cubic feet of water per second from one well to be completed into the Vermillion East Fork-Willow Lake Aquifer (68 feet deep) located in NE 1/4 SW 1/4 Section 28 for irrigation of 134 acres located in the SW 1/4 Section 28; all in T114N-R57W.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 7372-3 because 1) unappropriated water is available, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest. In accor-



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
denr.sd.gov

August 10, 2012

Clark County Courier
119 1st Ave E
Clark SD 57225

ATTENTION: Legal Public Notice

Enclosed is a Notice on Application No. 7372-3 to Appropriate Water. Please publish the notice once on August 22, 2012. The text of the notice can be e-mailed to your paper by contacting Karen Schlaak at (605) 773-3352.

The applicant must verify to you that the notice is to be published and arrange for payment. **Please BILL the APPLICANT for the cost of publication.** The APPLICANT is Mark Kannegieter, 42668 189th St., Willow Lake SD 57278 (Ph # 605-520-5474).

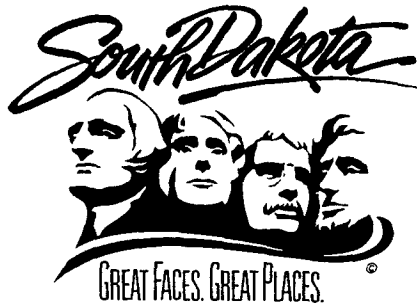
Please send the Water Rights Program an affidavit or the enclosed Proof of Publication form immediately.

The applicant pays the cost of publication, but the Water Rights Program records require an affidavit or Proof of Publication. Delays in receiving the affidavit can be costly to the applicant.

Sincerely,

Eric Gronlund
Natural Resources Engineer
605 773-3352

enclosures



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
denr.sd.gov

August 10, 2012

Public Opinion
PO Box 10
Watertown SD 57201

ATTENTION: Legal Public Notice

Enclosed is a Notice on Application No. 7372-3 to Appropriate Water. Please publish the notice once on August 22, 2012. The text of the notice can be e-mailed to your paper by contacting Karen Schlaak at (605) 773-3352.

The applicant must verify to you that the notice is to be published and arrange for payment. **Please BILL the APPLICANT for the cost of publication.** The APPLICANT is Mark Kannegieter, 42668 189th St., Willow Lake SD 57278 (Ph # 605-520-5474).

Please send the Water Rights Program an affidavit or the enclosed Proof of Publication form immediately.

The applicant pays the cost of publication, but the Water Rights Program records require an affidavit or Proof of Publication. Delays in receiving the affidavit can be costly to the applicant.

Sincerely,

Eric Gronlund
Natural Resources Engineer
605 773-3352

enclosures



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
denr.sd.gov

NOTE: TO BE SURE OF PUBLICATION ON
THE CORRECT DATE, CONTACT
THE NEWSPAPER(S) RIGHT AWAY.

August 10, 2012

Mark Kannegieter
42668 189th St
Willow Lake SD57278

Dear Mr. Kannegieter:

Water Permit Application No. 7372-3 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 Clark County Courier printed at Clark SD (Ph # 605-532-3654) and the Public Opinion printed at Watertown SD (Ph # 605-886-6901). You will need to contact the newspaper(s) and authorize publication of this notice. For your information, a copy of the notice, the recommendation of the Chief Engineer and report on the application are enclosed. Please review the notice prior to publication and notify this office, if you have any corrections or questions.

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

Sincerely,

Eric Gronlund
Natural Resources Engineer
(605) 773-3352

enclosures

NOTE: If you plan to contest any part of the Chief Engineer's recommendation, you must file a petition pursuant to the procedures outlined in the attached notice of hearing. The Water Management Board will then consider your concerns during a hearing on the application.

Instruction to Newspaper - Publish the Notice on August 22, 2012. The applicant is responsible for payment. The text of the notice can be e-mailed to your paper by contacting Karen Schlaak at (605) 773-3352 or email: Karen.schlaak@state.sd.us.

NOTICE OF APPLICATION NO. 7372-3 to Appropriate Water

Notice is given that Mark Kannegieter, 42668 189th St, Willow Lake SD 57278 has filed an application for a water permit to appropriate 1.92 cubic feet of water per second from one well to be completed into the Vermillion East Fork-Willow Lake Aquifer (68 feet deep) located in ~~NW~~ 1/4 SW 1/4 Section 28 for irrigation of 134 acres located in the SW 1/4 Section 28; all in T114N-R57W. ~~NE~~ 1/4

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 7372-3 because 1) unappropriated water is available, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest. In accordance with SDCL 46-2A-23, the Chief Engineer will act on this application, as recommended, unless a petition is filed opposing the application or the applicant files a petition contesting the Chief Engineer's recommendation. 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.

Any person interested in opposing or supporting this application or recommendation must file a written petition with BOTH the applicant and Chief Engineer. The applicant must file a petition if contesting the Chief Engineer's recommendation. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E Capitol, Pierre SD 57501 (605 773-3352)" and the applicant's mailing address is given above. A petition filed by either an interested person or the applicant must be filed by September 4, 2012.

The petition may be informal, but must include a statement describing the petitioner's interest in the application, the petitioner's reasons for opposing or supporting the application, and the signature and mailing address of the petitioner or the petitioner's legal counsel, if legal counsel is obtained. Contact Eric Gronlund at the above Water Rights Program address to request copies of information pertaining to this application. Steven M. Pirner, Secretary, Department of Environment and Natural Resources.

Published once at the total approximate cost of _____.

Water Rights Program - File Documentation

NAME: Mark Kannegieter

ADDRESS: Willow Lake

DATE: 8-20-2012 **COUNTY:** **TELEPHONE:**

RE: Pending publication notice.

COMMENTS:

I contacted Rachel with the Public Opinion and Kimberly with the Clark Courty Courier making a change in the legal description of the well located from the NW $\frac{1}{4}$ SW $\frac{1}{4}$ to the NE $\frac{1}{4}$ SW $\frac{1}{4}$.

Both papers indicated they would make the change.



Karen Schlaak
Environmental Scientist



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
denr.sd.gov

SEP 14 2012

Mark Kannegieter
42668 189th St
Willow Lake SD 57278

Dear Mr. Kannegieter:

Enclosed is Water Permit No. 7372-3 authorizing construction of your 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,

Garland Erbele, Chief Engineer
Water Rights Program
(605) 773-3352

enclosures

JUL 25 2013

WATER RIGHTS
PROGRAMNOTICE OF COMPLETION OF WORKS AND
APPLICATION OF WATER TO BENEFICIAL USEDate July 24, 2013TO: Water Rights Program, DENR
523 E. Capitol
Pierre, SD 57501-3181

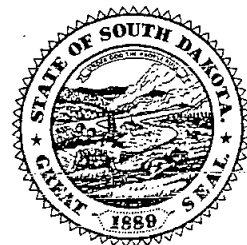
FROM:

Mark Kannegister
(name)42668 189th St.
(address)Willow Lake SD 57278
(city, state, zip)(605) 625-2463
(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. 7372-3 states that the water use system is to be constructed bySept. 4, 2017 (date), and water is to be put to beneficial use by Sept. 4, 2021 (date).The water use system was completed on July 2, 2013 (date).Applying the water to beneficial use was completed on July 16, 2013 (date).

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

Mark Kannegister
(signature)



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
PMB 2020
523 EAST CAPITOL
PIERRE SOUTH DAKOTA 57501-3182
<http://denr.sd.gov>

July 25, 2013

7372-3

Mark Kannegieter
42668 189th St
Willow Lake SD 57278

Dear Mr. Kannegieter:

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 irrigation 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,

A handwritten signature in black ink that reads "Genny McMath". The signature is written in a cursive, flowing style.

Genny McMath
Water Rights Program
(605) 773-3352
email: genny.mcmath@state.sd.us

SOUTH DAKOTA WATER WELL COMPLETION REPORT

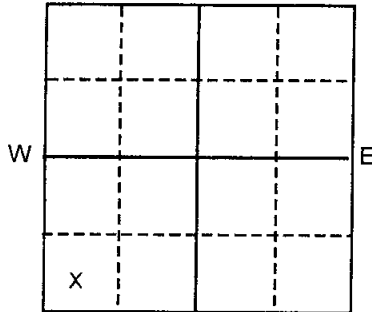
11-02

Location SW ¼ SW ¼ Sec 28 Twp 114N Rg 57W

Well Owner: MARK KANNEGIETER

County CLARK

North

Please mark well
location with an "X"

Well Completion Date

1-29-2013

1 Mile

Distance to nearest potential pollution source (septic tank, abandoned well, feed lot, etc.)?
700.0 ft. from WELL ON PROPERTY (identify source)

PROPOSED USE:

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

METHOD OF DRILLING:

ROTARY DRILL

CASING DATA:

☐ Steel ☒ Plastic ☐ Other

If other describe

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
40.0 LB/FT	16.00 IN	0 FT	50 FT	24 IN
LB/FT	IN	FT	FT	IN
LB/FT	IN	FT	FT	IN

GROUTING DATA:

Grout Type	No. of Sacks	Grout Weight	From	To
Grt Well DF		54.0 Lb/gal	0.0 Ft	50.0 Ft
		Lb/gal	Ft	Ft

Describe grouting procedure
Pressure Pull Method

SCREEN:

☐ Perforated pipe ☒ Manufactured
 Diameter 16.00 Inches Length 20.0 Feet
 Material Stainless Steel
 Slot Size 50 Set From 50.0 Feet to 70.0 Feet

Other information

WAS A PACKER OR SEAL USED?

☐ Yes ☐ No

If so, what material?

Describe packer(s) and location

DISINFECTION: Was well disinfected upon completion?

☐ Yes, How?

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

Business Name:

Address: 42668 189TH ST

City, State, Zip: WILLOW LAKE SD 57278

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
TOP SOIL	0	4
YELLOW CLAY	4	6
YELLOW SAND	6	16
BLUE CLAY	16	18
YELLOW FINE SAND	18	30
FINE GREY	30	50
MED	50	70
BLUE CLAY	70	80

STATIC WATER LEVEL 2.0 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:

☐ Bailed

☐ Other

Pumping Level Below Land Surface

Ft. After Hrs. pumped GPM

Ft. After Hrs. pumped GPM

If pump installed, pump rate: 800.0 GPM

REMARKS

RECEIVED

JAN 31 2014

WATER RIGHTS

PROGRAM

This well was drilled under license # 689 and this report is true and accurate.

Drilling firm: KAISER WELL DRILLING INC

Signature of License Representative:

Signature of Well Owner or Equitable Property Holder:

Date:



7372-3

**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

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

JUN 26 2023

Mark Kannegieter
42668 189th St
Willow Lake SD 57278

7372-3

Dear Mr. Kannegieter:

Enclosed is Water License No. 7372-3. 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. 7372-3

(1) Mark Kannegieter; 42668 189th St, Willow Lake, SD 57278, made Application No. 7372-3, June 4, 2012, for a water permit to divert 1.92 cubic feet of water per second from groundwater, one well (Vermillion East Fork: Willow Lake Aquifer), Clark County, South Dakota for irrigation purposes. Permit No. 7372-3, with a priority date of June 4, 2012, was approved September 4, 2012, and issued to the applicant for diversion of water with construction of the described water supply system to be completed on or before September 4, 2017, and for the application to beneficial use of water on or before September 4, 2021.

An investigation conducted for licensing purposes found the diversion point developed outside of the permitted area. Pursuant to SDCL 46-5-13.1 and ARSD 74:02:01:14.01, the Chief Engineer made a finding that the change in the diversion point location did not increase the potential for adverse effects to existing diversions.

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

- 619 ft N & 1,965 ft E of the SW corner of Section 28, T114N, R57W (SE $\frac{1}{4}$ SW $\frac{1}{4}$)
(Latitude 44.64712 Longitude -97.68754)

(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 28, T114N, R57W	
NW $\frac{1}{4}$ SW $\frac{1}{4}$	39.0 acres
NE $\frac{1}{4}$ SW $\frac{1}{4}$	32.5 acres
SE $\frac{1}{4}$ SW $\frac{1}{4}$	17.0 acres
SW $\frac{1}{4}$ SW $\frac{1}{4}$	33.0 acres
TOTAL 121.5 acres	

(4) Pursuant to South Dakota Water Law 46-5-30.1 Mark Kannegieter, the holder and/or owner of Water Right No. 7372-3 is issued a license to appropriate water, the right to use 1.78 cubic feet of water per second from groundwater, one well (Vermillion East Fork: Willow Lake Aquifer), with a priority date of June 4, 2012, 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. 7372-3 and subject to the following qualifications:

1. The well approved under this water right will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this water right shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.

continued

2. The well authorized by Permit No. 7372-3 shall be constructed by a licensed well driller and construction of the well and installation of the pump shall comply with the 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 Kaiser Well Drilling Inc. in 2013. A copy of the well completion report is on file with the Water Rights Program.)*
3. This Water Right is approved subject to the irrigation water use questionnaire being submitted each year.



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

JUN 26 2023

date



Report of Examination of Works and/or Application of Water to Beneficial Use For Permit No. 7372-3

I have this day, June 8, 2023, made a thorough examination of the water use system constructed by Mark Kannegieter, 42668 185th St, Willow Lake, SD 57278 of Permit No. 7372-3, bearing the priority of June 4, 2012 authorizing the diversion of 1.92 cu. ft. per second of the waters of the Vermillion East Fork: Willow Lake Aquifer for irrigation purposes, in Clark County.

A. Works used to divert the water:

Well Information:

- 1) Well Drilling Firm: Kaiser Well Drilling
- 2) No. of Wells 1
- 3) Depth(s) 70 feet
- 4) Well log is available Y

Casing:

- 1) Diameter 16 inches
- 2) Length 50 feet
- 3) Type Plastic

Screen:

- 1) Type Stainless steel
- 2) Length 20 feet
- 3) Static water level 2 feet

Pump:

- 1) Make Submersible
- 2) Model Unknown
- 3) Size Unknown
- 4) Capacity 800 GPM

Motor:

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

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

- 1) Type Buried PVC
- 2) Size 8 inches
- 3) Length 1290 feet

C. Works used to apply water to beneficial use:

Center pivot:

- 1) Make Reinke
- 2) Overall length 1360 feet
- 3) Number of towers 7 + corner leg
- 4) End gun Y
- 5) Capacity 800 GPM

Chemigation Equipment:

- 1) Does chemigate Y

Comments: **Uses commercially available injection equipment**

D. Compliance with Permit Requirements:

- 1) Permit qualifications being abided by Y
- 2) Irrigation Questionnaires checked to determine if permit owner started irrigation by the end of construction period Y
- 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: **WELL LOCATION**
From the SW corner Sec 28 T114N R57W, 619 ft N & 1965 ft E, Lat 44.64712 Long -97.68754 (SE ¼ SW ¼).
2. The works are capable of diverting and conveying to the place of use 1.78 cu. ft. per second of water which is to be used for irrigation. Water has been put to beneficial use to the maximum extent as follows:
legal description/acreage
All land in Sec 28, T114N, R57W
NW ¼ SW ¼ – 39.0 acres
NE ¼ SW ¼ – 32.5 acres
SE ¼ SW ¼ – 17.0 acres
SW ¼ SW ¼ – 33.0 acres

comprising a total of 121.5 acres of land and the license should be issued for 1.78 cfs
3. All structures, wells and lands on map Y

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

The irrigated acreage was estimated with the aid of FSA imagery and ArcMAPS software.

The pump rate reported in a recent Irrigation Questionnaire was used to establish the system flow capacity.

The mailing address and the telephone number in the permit materials are current

I talked to Mark Kannegieter on the phone during the field inspection visit.

A handwritten signature in black ink, appearing to read "Darrell W DeBoer", written over a horizontal line.

Darrell W DeBoer
Water Rights Inspector
DANR, Water Rights Program

Date report completed: **June 19, 2023**

Approval of Location Change and/or Additional Diversion Point(s)

NAME: Mark Kannegeiter

ADDRESS: 42668 189th St, Willow Lake SD 57278

DATE: June 22, 2023

COUNTY: Clark

GENERAL DESCRIPTION OF AUTHORIZED PROJECT:

The permit holder is authorized to construct constructed one 68 foot deep well into the East Fork:Willow Lake Aquifer in the center of the NE1/4 SW1/4 of Section 28 T114N-R57W for irrigation of 134 acres in the SW 1/4 of Section 28 T114N-R57W.

AUTHORITY:

Pursuant to SDCL 46-5-13.1, the location of a diversion point may be changed or additional diversion points may be licensed provided the following conditions are met and the potential for interference with other existing diversions is not increased:

- **Developed water source same as permitted source and no additional water appropriated**

The permit holder constructed one 70 foot deep well into the East Fork:Willow Lake Aquifer in the SE1/4 SW1/4 of Section 28 T114N-R57W

- **If irrigation, no new land is irrigated**

The permit holder has developed 121.5 acres in the SW1/4 of Section 28 T114N-R57W

- **Review of Existing Diversions**

There are eight existing water permits/rights within a mile of where the this well was developed by other water permit holders. Five of the eight were existing permit/rights when this permit was issued, it was determined that there was reasonable probability any well interference due to pumping of this well would not adversely or unlawfully impair existing rights. The same would be expected for the well constructed in the new location.

RECOMMENDED ACTION

Based on the above criteria, it is recommended that the diversion point(s) be licensed as developed.



Mark D. Rath, Natural Resources Engineer
Water Rights Program

The Chief Engineer makes a finding pursuant SDCL 46-5-13.1 and ARSD 74:02:01:14.01 that:

This change in location and/or additional diversion point(s) does not increase the potential for adverse effects to existing diversions.



Eric Gronlund, Chief Engineer
Water Rights Program

