

WATER PERMIT NO. 8828-3

Name of Applicant: **Robert P. Walsh**

Address: **47884 County Rd 1B, Elk Point SD 57025**

Phone: **605-670-0486**

Amount of Water Claimed: **3.56 cfs**

Total Acres: **352**

Source of Water Supply: **Groundwater**

Water to be used for: **Irrigation**

County: **Clay**

Type of Waste Disposal System:

Location: **Approx. 6 miles southwest of Beresford SD**

PRIORITY

Date Received: **01-26-24**

Application/License Fee: **\$1,150.00**

Corrected Application Received: **02-01-24**

Period of Annual Use: **April 1 – September 30**

Remarks: **new permit**

Diversion Point: **SE 1/4 NE 1/4 Sec 7, SE 1/4 NW
1/4 Sec 8; all in T95N-R51W**

Land to be Irrigated: **E 1/2 Sec 7, W 1/2 Sec 7**

		7		8	

Depth of Well: **494**

Well Driller: **Heine Electric & Irrigation**

Remarks:

Type of Map: **aerial**

Reviewed and the Number Assigned on: **02-01-24**

By: **Rachel Rodriguez**

Notice of Hearing - date to intervene: _____

SOUTH DAKOTA
WATER PERMIT NO. 8828-3

Date of first receipt of application January 26, 2024.

Date of return to applicant for corrections, amendments or changes January 30, 2024.

Date of receipt of corrected application February 1, 2024.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 8828-3 to Robert P. Walsh, 47884 County Rd 1B, Elk Point SD 57025 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. 8828-3 appropriates 3.56 cubic feet of water per second from two wells, one existing Dakota Aquifer well, and a proposed well to be completed into the Dakota Aquifer (approximately 494 feet deep) located in the SE 1/4 NE 1/4 Section 7 (proposed well) and SE 1/4 NW 1/4 Section 8 (existing well) for irrigation of 352 acres located in the E 1/2 E 1/2, W 1/2 SE 1/4, SW 1/4 NE 1/4 Section 7, W 1/2 Section 8; all in T95N-R51W. This site is located approximately 4 miles southeast of Centerville SD.
2. The amount of the appropriation may not exceed 2 acre feet annually for each acre of land to which water is actually and beneficially applied for irrigation. The water is to be used during the following described annual period: April 1 – September 30.
3. The date from which applicant may claim right is January 26, 2024.
4. The date of approval of Permit No. 8828-3 is April 15, 2024.
5. One-fifth of the construction is to be completed on or before October 15, 2026.
6. All construction is to be completed on or before April 15, 2029.
7. Water is to be put to beneficial use on or before April 15, 2033.
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 wells approved under Water Permit No. 8828-3 are 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 new well authorized by Permit No. 8828-3 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: Eric Gronlund
Eric Gronlund, Chief Engineer
Water Rights Program
Department of Agriculture and Natural Resources

APR 24 2024
date



RECEIVED

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

JAN 26 2024

OFFICE OF
WATER

PAID

JAN 26 2024

Ck# 2511
Rec't# 12624

Mail to: SD DANR, Water Rights 523 E Capitol Ave Pierre, SD 57501-3182 ph. (605) 773-3352	No. <u>8828-3</u> Hydrologic Unit <u>10170102</u> Basin <u>Vermillion</u> Newspaper <u>Vermillion Plain Talk</u> <u>Daily Press & Dakotan</u> (office use only)
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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 to Appear on Irrigation Permit Robert P Walsh

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

Mailing Address 47884 County Rd 1B Elk Point SD 57025
(Address) (City) (State) (Zip Code)

Phone 605-670-0486 Mobile 605-670-0486 Email rpwalsh@vyn.midco.net

2. Amount of water claimed 3.56 *CFS or 1600 **GPM 1600 ***AF Total Acreage 352
(*Cubic Feet per Second) (**Gallons per Minute) (***)Acre Feet - storage capacity of dam/dugout or annual use if applicable)

3. Source of water supply groundwater, two wells

4. Location of point of diversion SE 1/4 NE 1/4 NE 1/4 SE 1/4 Section 7 & SE 1/4 NW 1/4 Section 8; all in T95N - R51W
(example - 3 wells in SW 1/4 NE 1/4 section 12-T104N-R53W)

County Clay

5. County or counties where water will be used Clay

6. Annual period during which water is to be used April 1 - Sept 30

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
E 1/2 Sec 7 T95N-R51W (<u>E 1/2 E 1/2</u>)	95.4	Walsh Farm (West side of University)	
W 1/2 Sec 8 T95N-R51W	165.8233	Walsh Farm (East side of University)	
W 1/2 Sec 7 T95N-R51W (<u>W 1/2 SE 1/4</u>)	21.9	Landeem Farm (West side of Univ)	
W 1/2 Sec 7 T95N-R51W (<u>SW 1/4 NE 1/4</u>)	1.7	White Farm (West side of Univ)	

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

We are still considering irrigating the 67 acre field north of Ash Creek located in the W 1/2 Sec 8 T95N-R51W.
We are also still considering drilling the second 500 ft well in the E 1/2 Sec 7 T95N-R51W.

I, Robert Walsh, 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.

2021-08

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)

Supplemental Information

(type or print)

1. Well Information (check one or both as applicable)

☒ Drilling new well(s) ☐ Using existing well(s)

a) If new wells, how many 2 Have test holes been drilled? ☒ Yes ☐ No Drilled by Hine Electric & Irrigation
(if yes, please provide copies of logs)

b) If existing wells, how many _____ Provide copy of log(s), if available. Drilled by _____

For either existing or proposed wells:

c) Well Depth (required) 494 Depth to Top of Water Bearing Material 410 Depth to Water from Surface 115'

d) Distance to nearest domestic well on applicant's property _____ Property owned by others > 5000'

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)

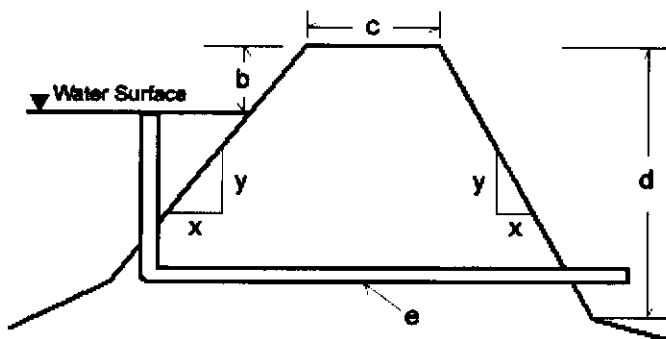
Upstream _____

Downstream _____

h) Area of Impoundment _____

i) Storage _____ Acre Feet

j) Drainage Area Above Dam _____ Acres





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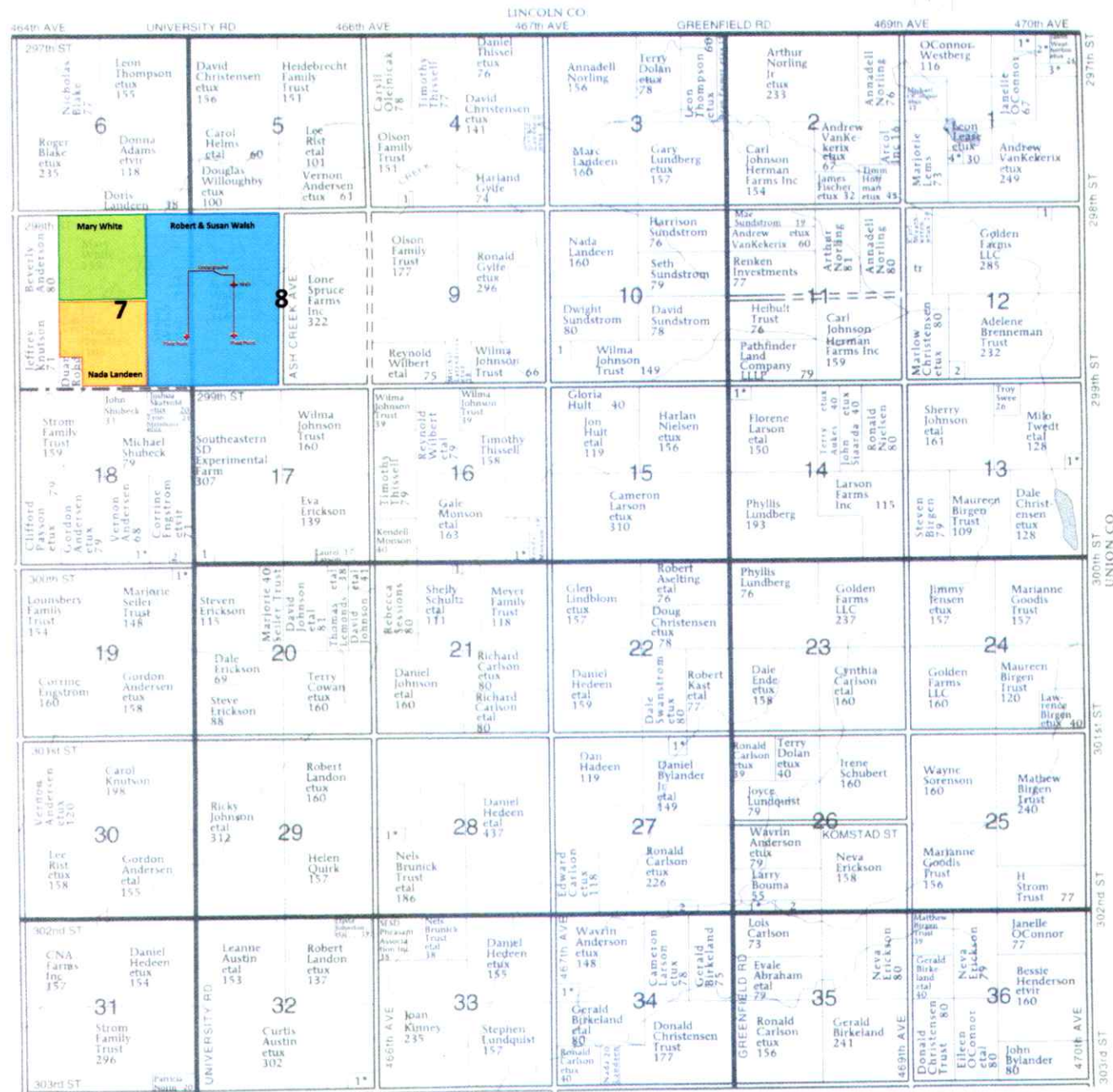
Trust, Honesty and Integrity.

Joel Westra 310-6941, Pete Atkins 351-9847, Joel A. Westra 957-5222

T-95-N

GLENWOOD PLAT

R-51-W



95N 51W
Section: 06

95N 51W
Section: 05

95N 51W
Section: 04

298 ST

486 AVE

95N 51W
Section: 07

95N 51W

95N 51W
Section: 08

10170102 Vermillion

95N 51W
Section: 09

299 ST

95N 51W
Section: 17

95N 51W
Section: 18

UNIVERSITY RD

486 AVE

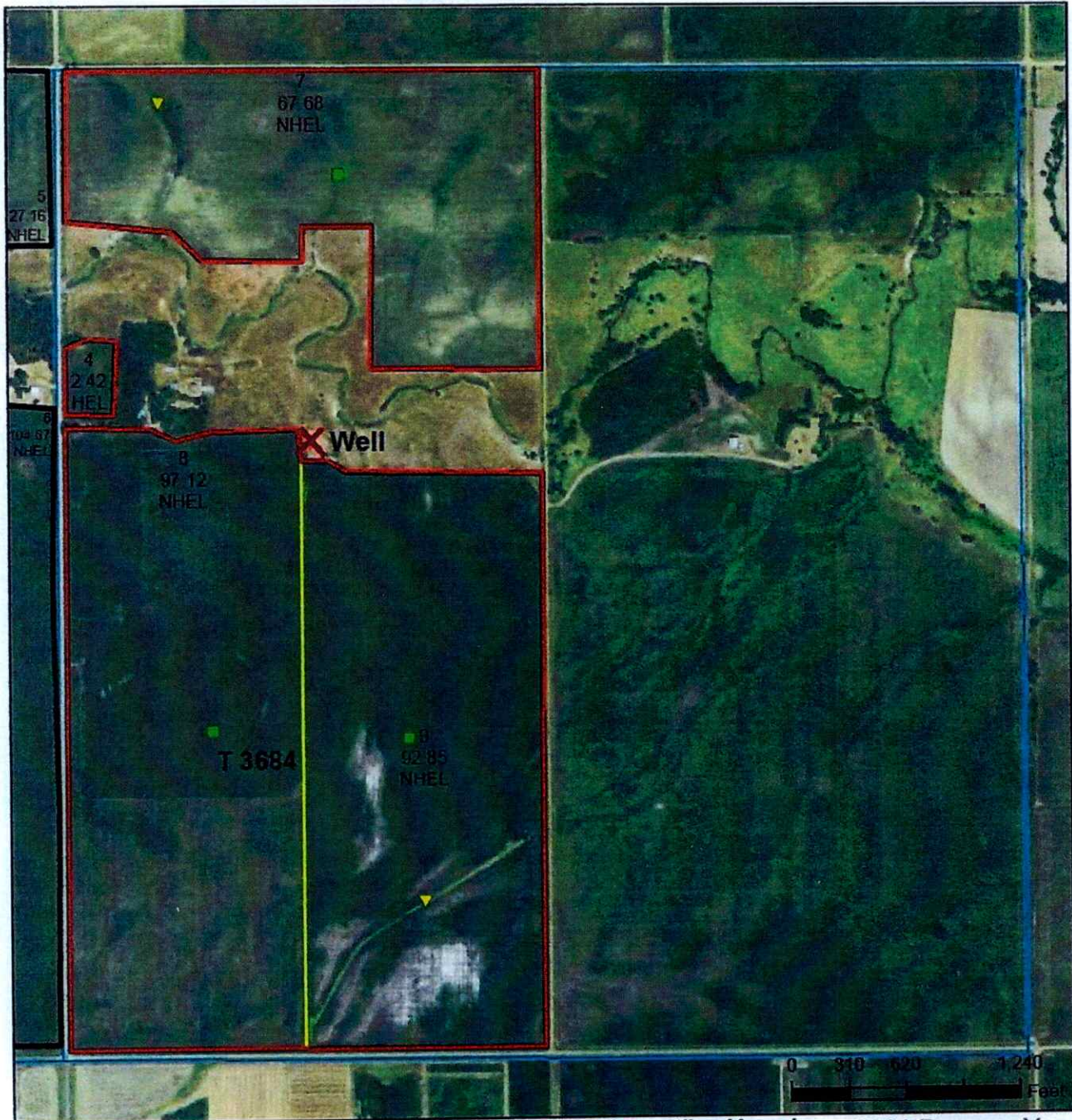
95N 51W
Section: 16



United States
Department of
Agriculture

Clay County, South Dakota

Applicant: Robert P. Walsh



- Common Land Unit
Cropland Non-cropland
Conservation Reserve Program
Wetland Determination Identifiers
Restricted Use
Limited Restrictions
Exempt from Conservation
Compliance Provisions
Tract Boundary Section Line

Area to be permitted for irrigation outlined in red

2014 Program Year

Map Created February 20, 2014

Farm 6063

2012 Ortho-Photography - not to scale

Map Date: 2-20-2014

8 -95N -51W

United States Department of Agriculture (USDA) Farm Service Agency (FSA) maps are for FSA Program administration only. This map does not represent a legal survey or reflect actual ownership, rather it depicts the information provided directly from the producer and/or National Agricultural Imagery Program (NAIP) imagery. The producer accepts the data 'as is' and assumes all risks associated with its use. USDA-FSA assumes no responsibility for actual or consequential damage incurred as a result of any user's reliance on this data outside FSA Programs. Wetland identifiers do not represent the size, shape, or specific determination of the area. Refer to your original determination (CPA-016 and attached maps) for exact boundaries and determinations or contact USDA Natural Resources Conservation Service (NRCS).

Richard H. Hammond



RECEIVED

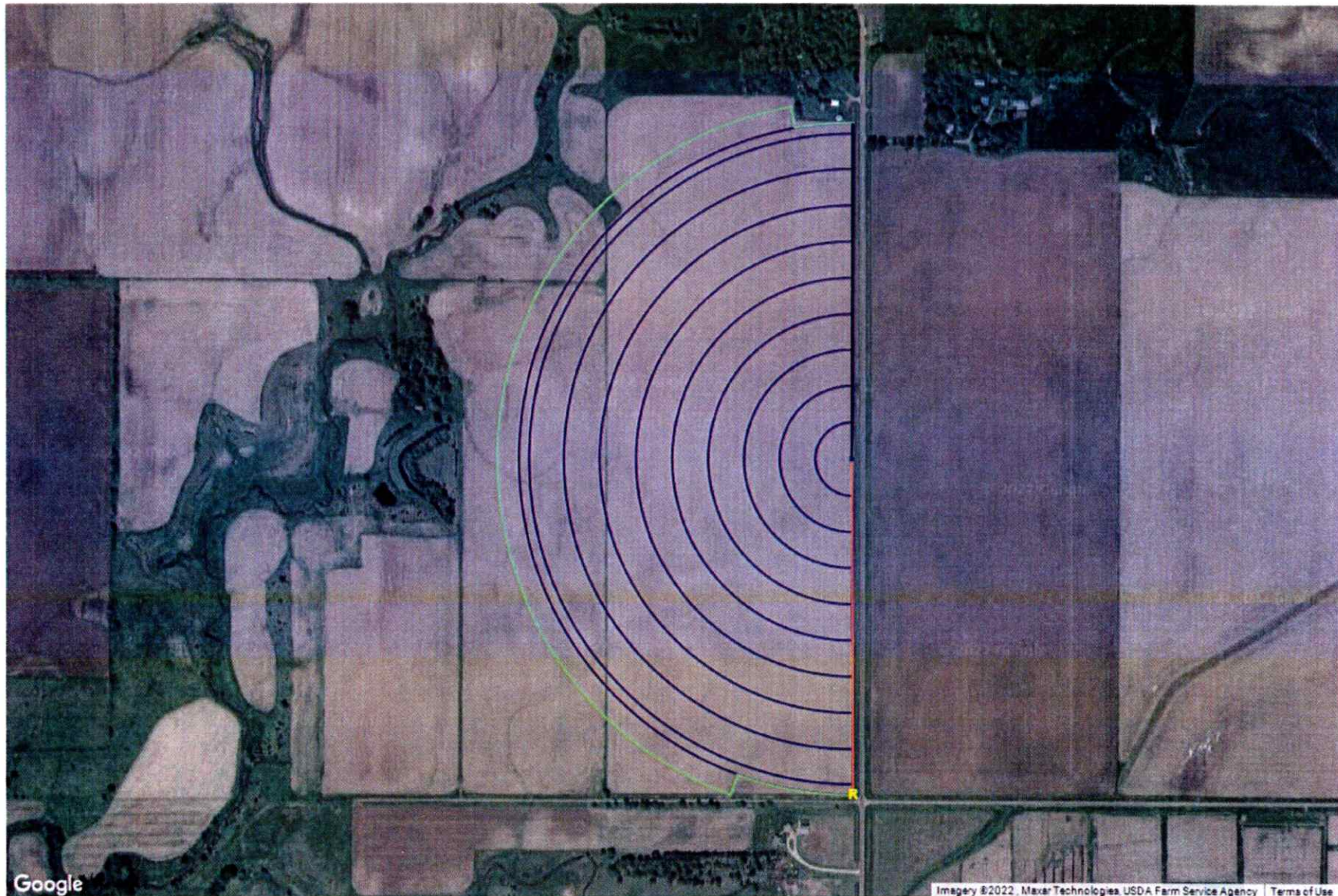
AUG 27 2014

WATER RIGHTS
PROGRAM





Project Name - Robert Walsh - Big WW
Proposal Name - Robert Walsh - Big WW
Map Summary Report - Pivot_1_31120228942649



— DRIVE UNITS — LARGEST POTENTIAL MACHINE — GUIDANCE PATH — END OF MACHINE — PRIMARY ENDGUN — SECONDARY ENDGUN — FIELD BOUNDARY

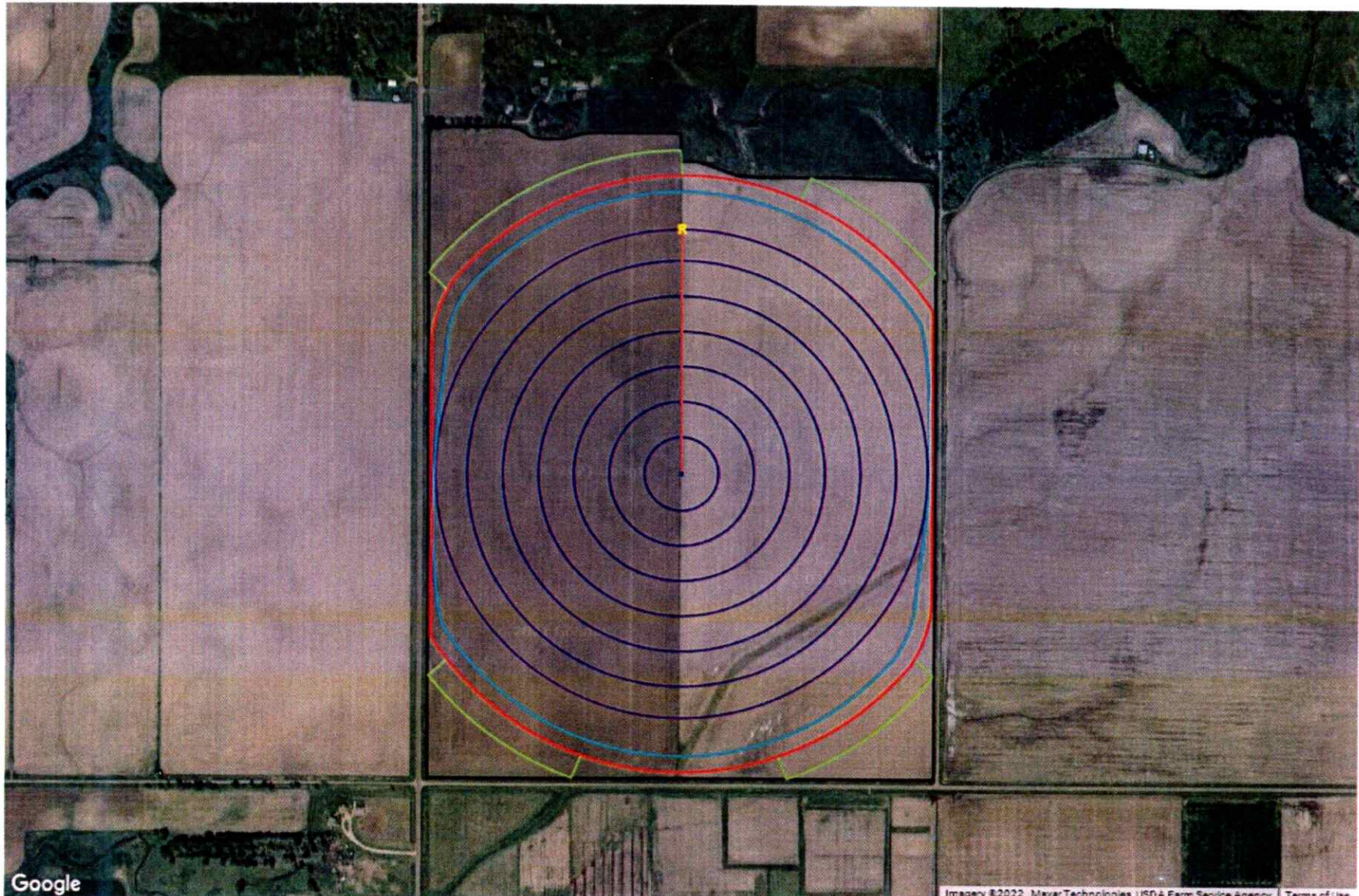
HEINE ELECTRIC & IRRIGATION - 307 S. Robinson Ave, Hartington, NE, 68739-5139, United States



Project Name - Robert Walsh - East Vflex

Proposal Name - Robert Walsh - East Vflex

Map Summary Report - Pivot_1_17202215341458



Google

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— DRIVE UNITS — LARGEST POTENTIAL MACHINE — GUIDANCE PATH — END OF MACHINE — PRIMARY ENDGUN — SECONDARY ENDGUN — FIELD BOUNDARY

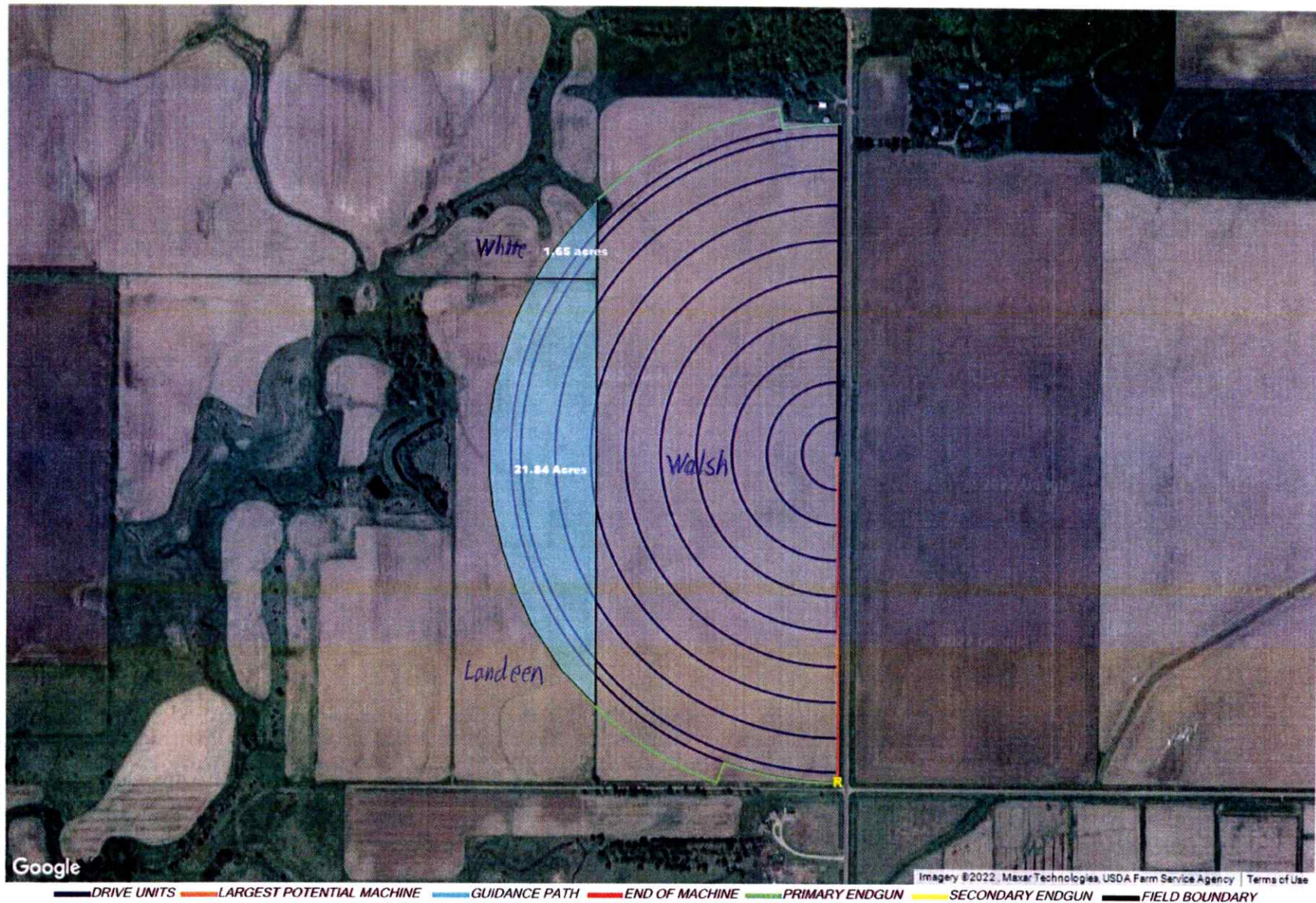
HEINE ELECTRIC & IRRIGATION - 307 S. Robinson Ave, Hartington, NE, 68739-5139, United States



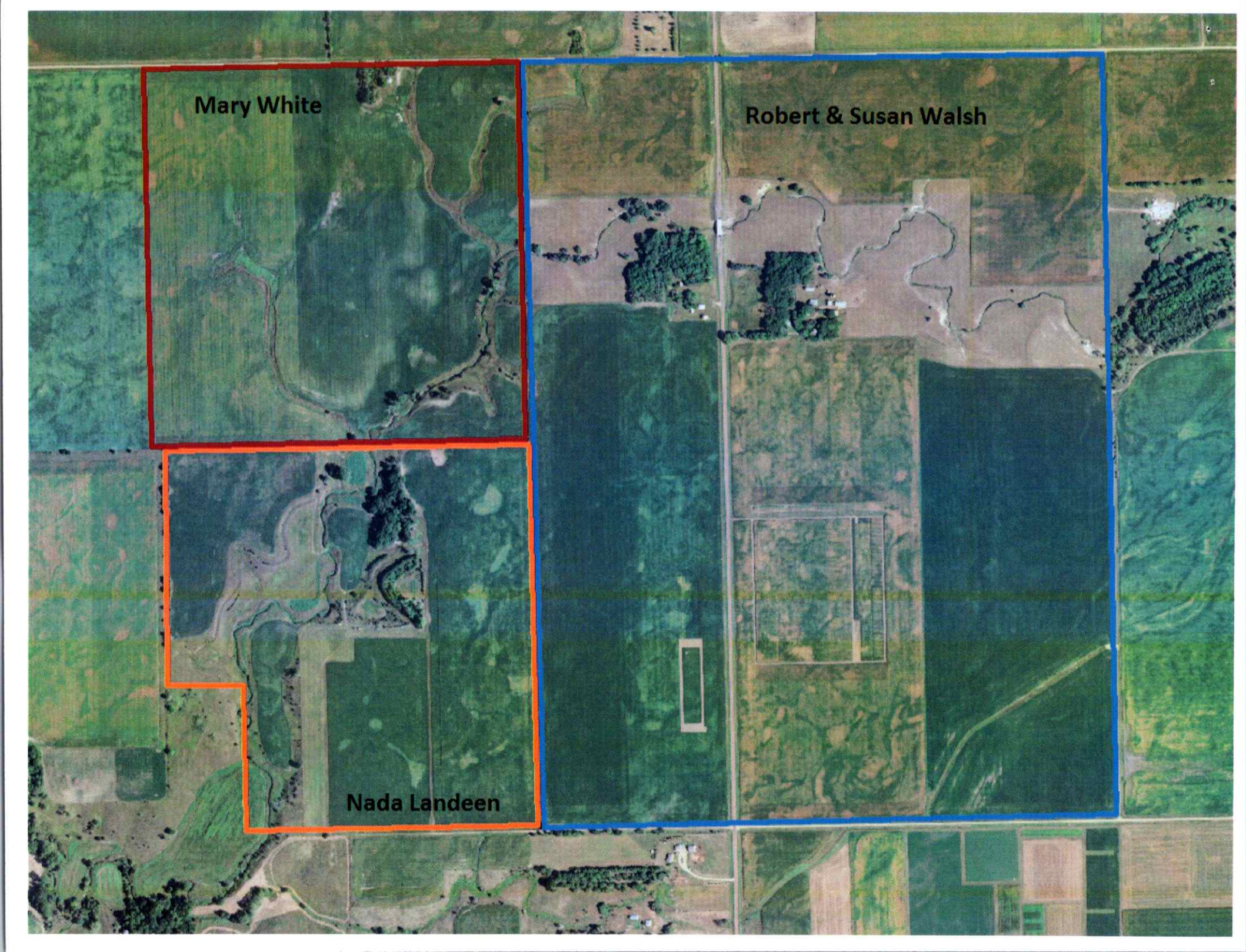
Project Name - Robert Walsh - Big WW

Version Name - Robert Walsh - Big WW_Version

Map Summary Report - Robert Walsh - Big WW



HEINE ELECTRIC & IRRIGATION - 307 S. Robinson Ave, Hartington, NE, 68739-5139, United States



Mary White

Robert & Susan Walsh

Nada Landeen

22-045-4219**Feb 14, 2022****Feb 08, 2022****12495**

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**ANALYTICAL & CONSULTING
SERVICES INC.
205 SERGEANT SQUARE DRIVE
SERGEANT BLUFF IA 51054-0008**

Irrigation Suitability

For: (12495) ANALYTICAL & CONSULTING
Water Analysis

PAGE 1/3**Feb 14, 2022****70065362****Feb 07, 2022****1300****Irrigation Suitability Results for BW/HE Ground Water**

ELEMENT	SODIUM	CALCIUM	MAGNESIUM	pH	NITRATE NITROGEN	SULFATE	CONDUCTIVITY	TOTAL DISSOLVED SOLIDS EST. FROM COND ppm	SODIUM ABSORPTION RATIO (SAR) CALCULATION	PHOSPHORUS	POTASSIUM	BICARBONATE	CHLORIDE	BORON
METHOD UNITS	EPA 200.7 ppm	EPA 200.7 ppm	EPA 200.7 ppm	EPA 150.1 ppm	EPA 300.0 ppm	EPA 300.0 ppm	EPA 120.1 mmhos/cm			EPA 200.7 ppm	EPA 200.7 ppm	SM 2320 B ppm	EPA 300.0 ppm	EPA 200.7 ppm
LEVEL FOUND	117	208	46.8	7.55	n.d.	814	1.83	1190	1.9	n.d.	18.9	141	105	0.57
CRITICAL LEVEL	120	150	80	5.5/9	40	336	2	1300	2.5	0.7	30	400	200	0.8
G R A P H I C														
	PROBLEMS LIKELY POTENTIAL PROBLEMS NO APPARENT PROBLEMS													
ADDITIONAL ELEMENTS														
ELEMENT	Iron (total)		Manganese (total)		Copper (total)		Zinc (total)		Carbonate as CaCO3					
METHOD UNITS	EPA 200.7 ppm		EPA 200.7 ppm		EPA 200.7 ppm		EPA 200.7 ppm		SM 2320 B-(1997) ppm					
LEVEL FOUND	1.14		0.101		< 0.01		< 0.01		0.5					

The result(s) issued on this report only reflect the analysis of the sample(s) submitted.

REPORT NUMBER

22-045-4219

REPORT DATE

Feb 14, 2022

RECEIVED DATE

Feb 08, 2022

SEND TO

1249513611 B Street • Omaha, Nebraska 68144-3693 • (402) 334-7770
www.midwestlabs.com**PAGE 2/3**

ISSUE DATE

Feb 14, 2022**ANALYTICAL & CONSULTING
SERVICES INC.
205 SERGEANT SQUARE DRIVE
SERGEANT BLUFF IA 51054-0008****REPORT OF ANALYSIS****For: (12495) ANALYTICAL & CONSULTING
Water Analysis**

Analysis	Level Found	Reporting			Analyst-	Verified-
	As Received	Units	Limit	Method	Date	Date
Sample ID: BW/HE Ground Water	Lab Number: 70065362	Date Sampled: 2022-02-07 1300				
Hardness (total)	42	gr/gal	1	Calculation	Auto-2022/02/11	Auto-2022/02/14

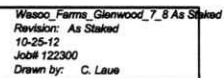
All results are reported on an AS RECEIVED basis.

For questions, please contact:

Sarah Gurnie
Account Manager
scurrie@midwestlabs.com (402)829-9845

The result(s) issued on this report only reflect the analysis of the sample(s) submitted.

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1 inch = 440 ft

Wasoo Farms

State: SD County: Clay

Acres: 37

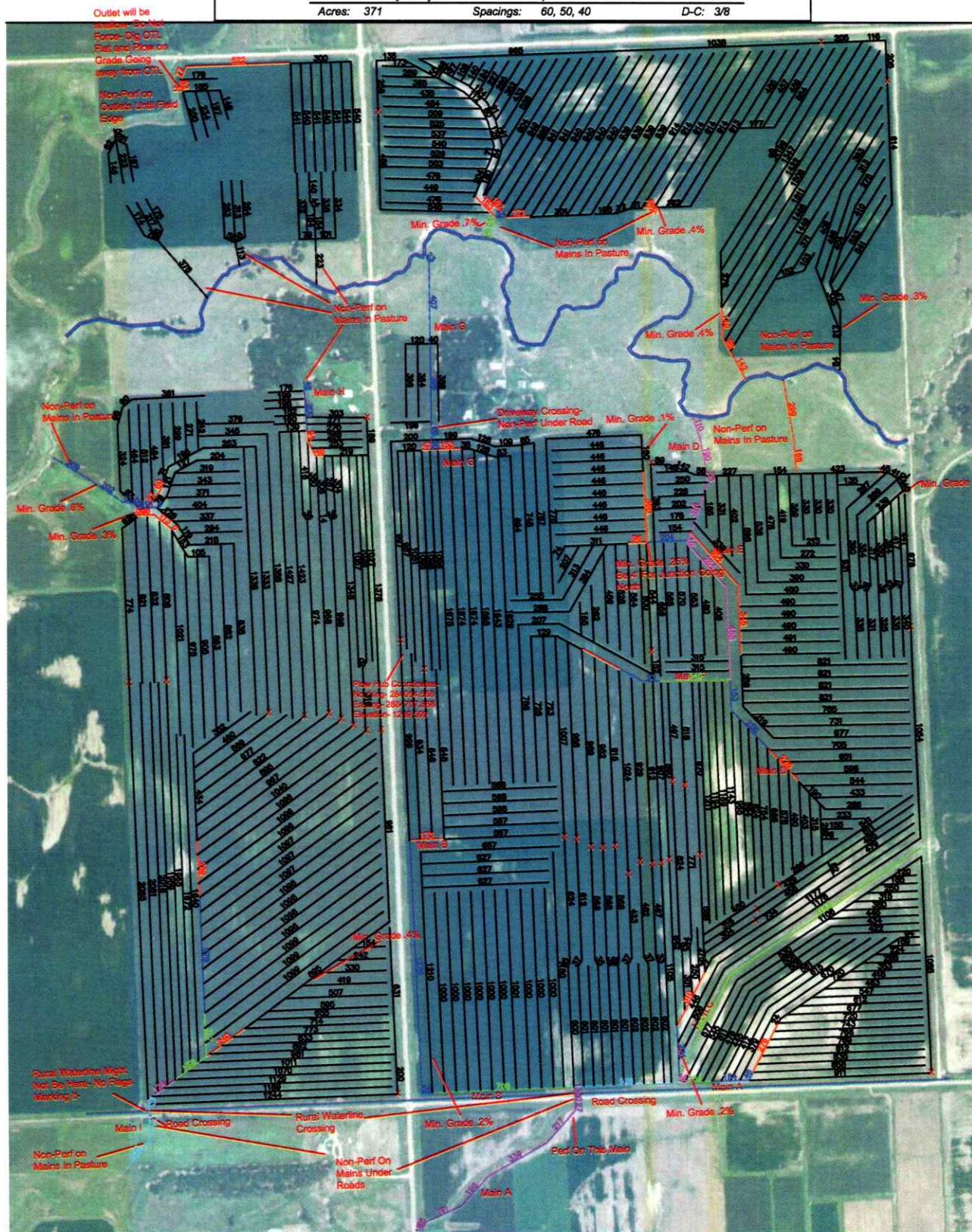
Renter:

Twp: Glenwood

Spacings: 60, 50, 40

Sec: 7 & 8

D-C: 3/8





Project Name - Robert Walsh - East Vflex

Proposal Name - Robert Walsh - East Vflex

Map Summary Report - Pivot_1_17202215341458



Field Name	Design Name	Machine Category	Machine Area (ac)	No. of Towers	Total Machine Length (ft)	Total Irrigated Area (ac)
Pivot_1_17202215341458	Robert Walsh - Vflex	Large Field VFlex Corner	112.79	7	1533.92	165.81

Total Proposal Irrigated Area (ac): 165.81

(Robert Walsh - Vflex)	Spans and Overhang	Corner	Endgun*	Bender / DropSpan	Polygon
Irrigated Area using (ac)	112.59	41.8	11.42	0	0.00

* Estimated

Total Span Length (ft) 1244.80

Corner Length (ft) 287.00

Flex/Transition/Other Lengths (ft) 2.12

S.No	Diameter	(ft)	Cable Size	Motor Options	Tire Size	Bender / DropSpan	Profile
1	6 5/8	184.80	8 ga cable / 11 cond shielded	34 RPM Baldor Helical	14.9 x 24 Non-Directional Tubeless	None	Standard
2	6 5/8	180.00	10 ga cable / 11 cond shielded	34 RPM Baldor Helical	14.9 x 24 Non-Directional Tubeless	None	Standard
3	6 5/8	180.00	10 ga cable / 11 cond shielded	34 RPM Baldor Helical	14.9 x 24 Non-Directional Tubeless	None	Standard
4	6 5/8	180.00	10 ga cable / 11 cond shielded	34 RPM Baldor Helical	14.9 x 24 Non-Directional Tubeless	None	Standard
5	6 5/8	180.00	10 ga cable / 11 cond shielded	34 RPM Baldor Helical	14.9 x 24 Non-Directional Tubeless	None	Standard
6	6 5/8	180.00	10 ga cable / 11 cond shielded	34 RPM Baldor Helical	14.9 x 24 Non-Directional Tubeless	None	Standard
7	6 5/8	160.00	10 ga cable / 11 cond shielded	34 RPM Baldor Helical	16.9 x 24 Maxi Float Tubeless	None	Standard

Primary Endgun

Endgun Angles (Robert Walsh - Vflex)	Endgun 1	Endgun 2	Endgun 3	Endgun 4
Start Angle	26.75 deg	132.5 deg	203 deg	312.5 deg
End Angle	54.75 deg	164.25 deg	234.75 deg	3.25 deg

Field Name	Latitude	Longitude	Pivot Road Angle	Pivot Road Offset	Start Angle	End Angle
Pivot_1_17202215341458	43.05895811865901	-96.89933434418813	-	-	0 deg	360 deg



Project Name - Robert Walsh - Big WW

Proposal Name - Robert Walsh - Big WW

Map Summary Report - Pivot_1_31120228942649



Field Name	Design Name	Machine Category	Machine Area (ac)	No. of Towers	Total Machine Length (ft)	Total Irrigated Area (ac)
Pivot_1_31120228942649	Robert Walsh - Big WW	Large Field Electrical Pivot 8000	106.92	9	1714.52	118.85

Total Proposal Irrigated Area (ac): 118.85

(Robert Walsh - Big WW)	Spans and Overhang	Corner	Endgun*	Bender / DropSpan	Polygon
Irrigated Area using (ac)	106.82	0	12.03	0	0.00

* Estimated

Total Span Length (ft) 1658.40

Overhang Length (ft) 54.00

Flex/Transition/Other Lengths (ft) 2.12

S.No	Diameter	(ft)	Cable Size	Motor Options	Tire Size	Bender / DropSpan	Profile
1	6 5/8	184.80	10 ga cable / 11 cond shielded	34 RPM Baldor Helical	14.9 x 24 Non-Directional Tubeless	None	Standard
2	6 5/8	184.80	10 ga cable / 11 cond shielded	34 RPM Baldor Helical	14.9 x 24 Non-Directional Tubeless	None	Standard
3	6 5/8	184.80	10 ga cable / 11 cond shielded	34 RPM Baldor Helical	14.9 x 24 Non-Directional Tubeless	None	Standard
4	6 5/8	184.80	10 ga cable / 11 cond shielded	34 RPM Baldor Helical	14.9 x 24 Non-Directional Tubeless	None	Standard
5	6 5/8	184.80	12 ga cable / 11 cond shielded	34 RPM Baldor Helical	14.9 x 24 Non-Directional Tubeless	None	Standard
6	6 5/8	184.80	12 ga cable / 11 cond shielded	34 RPM Baldor Helical	14.9 x 24 Non-Directional Tubeless	None	Standard
7	6 5/8	184.80	12 ga cable / 11 cond shielded	34 RPM Baldor Helical	14.9 x 24 Non-Directional Tubeless	None	Standard
8	6 5/8	184.80	12 ga cable / 11 cond shielded	34 RPM Baldor Helical	14.9 x 24 Non-Directional Tubeless	None	Standard
9	6 5/8	180.00	12 ga cable / 11 cond shielded	34 RPM Baldor Helical	14.9 x 24 Non-Directional Tubeless	None	Standard

Primary Endgun

Endgun Angles (Robert Walsh - Big WW)	Endgun 1
Start Angle	200.00 deg
End Angle	350.00 deg

Field Name	Latitude	Longitude	Pivot Road Angle	Pivot Road Offset	Start Angle	End Angle
Pivot_1_31120228942649	43.05941422990399	-96.904512315007	179.67 deg	-	179.67 deg	0.32 deg

Walsh-Landeen Center Pivot Irrigation Agreement

W ½, SE ¼ Section 7, T-95-N, R-51-W
Glenwood Township Clay County South Dakota
Parcel ID #: 01000-09551-074-00

Description: Walsh center pivot to swing through and irrigate the eastern side of the Landeen farm.

NO cost to us (Nada Landeen and her heirs) now or in the future for the following:

No cost for – Fence removal and maintenance of the fence line. Fence removed only where the pivot crosses.

No cost for – Water

No cost for – Electricity

No cost for – Maintenance costs (Periodic, Routine, or Emergency)

No cost for – Application of any liquid fertilizer/pesticide/herbicide

- Damage due to any liquid fertilizer/pesticide/herbicide applied through pivot to be paid by Walsh Farms

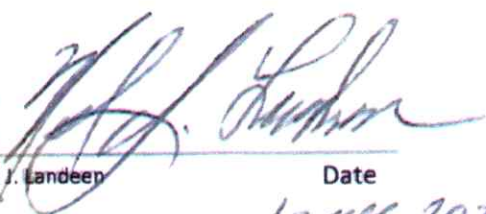
No cost for – System removal

NO legal and binding easement. However, access will be granted, and will NOT be denied - as needed, for repair and/or retrieval of the irrigation system hardware if/when needed.

The swivel end gun is to remain on while passing through all crop ground to maximize coverage.

Both parties to maintain communication related to the crop rotation scheduled.

This agreement is to remain in effect as long as the irrigation system is operational. Termination of the agreement will only occur if/when the system is no longer operational.

X 
Neal J. Landeen Date

10 MAR 2022

X 
Vern P. Landeen Date

X  3-14-2022
Robert P. Walsh Date

3/1/2022

Walsh-White Center Pivot Irrigation Agreement

**W ½, NE ¼ Section 7, T-95-N, R-51-W
Glenwood Township Clay County South Dakota
Parcel ID #: 01000-09551-071-00**

Description: Walsh center pivot to swing through and irrigate the extreme south east corner of the White farm.

NO cost to (Mary White and her heirs) now or in the future for the following:

No cost for – Fence removal and maintenance of the fence line. Fence removed only where the pivot crosses.

No cost for – Water

No cost for – Electricity

No cost for – Maintenance costs (Periodic, Routine, or Emergency)

No cost for – Application of any liquid fertilizer/pesticide/herbicide

- Damage due to any liquid fertilizer/pesticide/herbicide applied through pivot to be paid by Walsh Farms

No cost for – System removal

NO legal and binding easement. However, access will be granted, and will NOT be denied - as needed, for repair and/or retrieval of the irrigation system hardware if/when needed.

The swivel end gun is to remain on while passing through all crop ground to maximize coverage.

Both parties to maintain communication related to the crop rotation scheduled.

This agreement is to remain in effect as long as the irrigation system is operational. Termination of the agreement will only occur if/when the system is no longer operational.

X Mary E. White 3-4-22
Mary E. White Date

X Robert P. Walsh 3-7-22
Robert P. Walsh Date

3/1/2022

8043-3

SD EForm - 1621LD V1

SOUTH DAKOTA WATER WELL COMPLETION REPORT

11-02

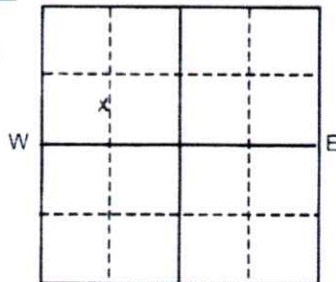
Location SW 1/4 NW 1/4 Sec 8 Twp 95N Rg 51W

Well Owner: ROBERT WALSH

County TOWNER

North

Please mark well location with an "X"



Well Completion Date

11-6-21

1 Mile

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

250 ft. from Septic tank (identify source)

PROPOSED USE:

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

METHOD OF DRILLING:

Rotary

CASING DATA:

☐ Steel ☒ Plastic ☐ Other

If other describe

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
LB/FT	12 IN	0 FT	425 FT	17.5 IN
LB/FT	IN	FT	FT	IN
LB/FT	IN	FT	FT	IN

GROUTING DATA:

Grout Type	No. of Sacks	Grout Weight	From	To
Groutwell DF	101	Lb/gal	0 Ft	410 Ft
		Lb/gal	Ft	Ft

Describe grouting procedure

TREMIE

SCREEN:

☐ Perforated pipe ☒ Manufactured

Diameter 12 Inches Length 80 Feet

Material PVC

Slot Size .050 Set From 425 Feet to 505 Feet

Other information

WAS A PACKER OR SEAL USED?

☐ Yes ☒ No

If so, what material?

Describe packer(s) and location

DISINFECTION: Was well disinfected upon completion?

☒ Yes, How? HTH TABLETS

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

Business Name:

Address: 47844 County Rd 1B

City, State, Zip: ELK POINT SD 57025

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
Topsoil	0	2
Brown Clay	2	10
Reddy Clay	10	98
Sand (med)	98	100
Shale	100	230
Siltstone	230	260
Silty Claystone	260	410
Dakota Formation Sandstone	410	494

STATIC WATER LEVEL 115 per di'at 4/3/23 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

43 0 63581

-96.894328

This well was drilled under license # 910 and this report is true and accurate.

Drilling firm: HEINE ELECTRIC & IRRIGATION

Signature of License Representative:

Signature of Well Owner or Equitable Property Holder:

RECEIVED

Date: 12/28/2022

JAN 12 2023

OFFICE OF
WATER

RECEIPT

WATER RIGHTS PROGRAM South Dakota Department of Agriculture and Natural Resources

Date January 26, 2024

RECEIVED OF Robert P. Walsh 47884 County Rd. 1B Elk Point SD 57025

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

Fee for Application for Permit No. _____ to Appropriate Water, to construct and to put water to beneficial use	\$ <u>1150.00</u>
Fee for Application for Permit No. _____ to Appropriate Water for Future use	\$ _____
Fee to retain Future Use Permit No. _____ after period of seven years.	\$ _____
Fee for Inspecting Constructed Works, confirming beneficial use and issuing Water License No. _____	\$ _____
Fee for Filing Transfer Form _____	\$ _____
Fee for _____	\$ _____
Fee for Issuing New Well Driller's License No. _____	\$ _____
Fee for Renewal of Well Driller's License No. _____	\$ _____
Fee for Issuing Well Pump Installer's License No. _____	\$ _____
Fee for Renewal of Well Pump Installer's License No. _____	\$ _____
(Any Other Work Provided by Law)	TOTAL
	\$ <u>1150.00</u>

By Eric Gronlund
Chief Engineer
vm

Water Rights Program - File Documentation

NAME: Robert Walsh

ADDRESS: 47884 County Rd 1B

DATE: February 1, 2024

RE: Application for Water Permit for Irrigation

COMMENTS:

Robert called regarding the email I sent him on 1-30-24 for the location of the well. The correct location is SE 1/4 NE 1/4 Section 7 -T95N-R51W. He also stated that he only sent one check for \$1,150.00 per Amanda Dewell.

Rachel Rodriguez

Rachel Rodriguez

Water Rights Program

605 773-3352

rachel.rodriquez@state.sd.us

Rodriguez, Rachel

From: Robert Walsh <rpwalsh@vyn.midco.net>
Sent: Thursday, February 1, 2024 11:21 AM
To: Rodriguez, Rachel
Subject: Re: [EXT] Water Permit Application

On Tue, Jan 30, 2024 at 01:26 PM, "Rodriguez, Rachel" <rachel.rodriguez@state.sd.us> wrote:

Good Afternoon Robert,

I am in receipt of your water permit application for irrigation. Everything looks great, I just want to clarify the location of the well in section 7. Please see attached maps – the original you sent with the well locations and Map2 where I marked the location of the wells with a green dot. Your application has the well location as NE ¼ SE ¼ Section 7. However, it looks more like it is in the SE ¼ NE ¼ Section 7. Please clarify if I am correct or if you are correct.

Also, you sent two checks (No. 251100) \$1,150.00 and \$2,511.00 received January 23rd. The fee for this application is \$1,150 + inspection fee \$200 = \$1,350.00. Are you planning on sending another application? If not, then you overpaid and will receive a refund of \$2,311.00 when the permit is issued.

Once I receive your response, I will process your application.

Thank you,

Rachel Rodriguez

DANR | Program Assistant

Rachel.Rodriguez@state.sd.us

Rodriguez, Rachel

From: Rodriguez, Rachel
Sent: Tuesday, January 30, 2024 1:26 PM
To: rpwalsh@vyn.midco.net
Subject: Water Permit Application
Attachments: Map.pdf; Map2.pdf

Good Afternoon Robert,

I am in receipt of your water permit application for irrigation. Everything looks great, I just want to clarify the location of the well in section 7. Please see attached maps – the original you sent with the well locations and Map2 where I marked the location of the wells with a green dot. Your application has the well location as NE ¼ SE ¼ Section 7. However, it looks more like it is in the SE ¼ NE ¼ Section 7. Please clarify if I am correct or if you are correct.

Also, you sent two checks (No. 251100) \$1,150.00 and \$2,511.00 received January 23rd. The fee for this application is \$1,150 + inspection fee \$200 = \$1,350.00. Are you planning on sending another application? If not, then you overpaid and will receive a refund of \$2,311.00 when the permit is issued.

Once I receive your response, I will process your application.

Thank you,

Rachel Rodriguez
DANR | Program Assistant
Rachel.Rodriguez@state.sd.us





8043-3

**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

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

January 16, 2024

To: Robert P Walsh, 47844 County Rd 1B, Elk Point SD 57025

From: Amanda Dewell, Permitting Administrator, Water Rights Program

Subject: New Permit Application

Dear Mr. Walsh:

Permit No. 8043-3 authorized the irrigation of 391.9 acres located in the E ½ NE ¼ & E ½ SE ¼ Section 7 and the W ½ Section 8, all in T95N-R51W.

A recent inspection of Water Permit Not. 8043-3 was conducted by staff engineer, Keith DeJong. The inspection found acres developed outside the permitted area, which under certain conditions, can be accommodated. However, SDCL 46-5-30.5 only allows for those accommodations if conditions are as follows:

1. There is no increase to the number of acres being irrigated or water being appropriated.
2. The acres are contiguous to those authorized under the permit.
3. The unpermitted acres are owned by the permit holder.
4. The system is developed as part of the original project, within the time period designated for completion of works.

The acres developed in the W ½ SE ¼ & SW ¼ NE ¼ of Section 7 are not owned by you and all construction was not completed by November 10, 2019. Consequently, a new permit is needed to cover all of the irrigated area. In addition, Mr. DeJong had indicated you still intend to construct a well and irrigation system in the NE ¼ NE ¼ Section 7 and N ½ NW ¼ Section 8. If that is the case, those areas can also be re-applied for in the same permit application. If approved, you will have another five years to get all works constructed.

Please find enclosed a partially completed irrigation permit application for the full rate of diversion and acreage you had requested on your original application, with the addition of the acres developed on the adjacent properties. The fees for this new application will be \$1,250.00. The inspection and licensing fee of \$200.00 will be waived, as it has already been paid. Checks can be made payable to the SD Water Rights Program.

Additionally, the construction period for Permit No. 7990-3 lapsed in 2019. Permit No. 7990-3 authorized the irrigation of 240 acres in the W ½ Section 36 T95N-R52W. If your intention is still to develop this property for irrigation, a new permit will also be required.

enclosure

Report of Examination of Works and/or Application of Water to Beneficial Use For Permit No. 8043-3

I have this day, December 7, 2023, made a thorough examination of the water use systems owned by Robert P. Walsh, 47844 County Rd. 1B, Elk Point, SD 57025, holder of Permit No. 8043-3, bearing the priority date of August 27, 2014. This permit authorizes the diversion of 4.23 cu. ft. per second of the waters of groundwater (Dakota Aquifer) authorizing the irrigation of 391.9 acres located in Clay County.

Inspection contacts: Robert Walsh

A. Works used to divert the water:

Well Information

- 1) Well Drilling Firm: Heine Electric & Irrigation
- 2) No. of Wells: 1
- 3) Depth(s): 505 feet
- 4) Well log is available: Yes

Casing:

- 1) Diameter: 12 inches
- 2) Length: 425 feet
- 3) Type: Plastic

Screen:

- 1) Diameter: 12 inches
- 2) Length: 80 feet
- 3) Type: PVC
- 4) Static water level: 115 feet

Pump:

- 1) Make: Custom Pipe & Fabrication Inc.
- 2) Model: 10.5RK-0
- 3) Capacity: 800 GPM

Motor:

- 1) Make: NIDEC Motor Corp (US Motors)
- 2) Model No.: HF48
- 3) Horsepower rating: 100 hp

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

- | | | |
|---------------------|-----------------------|---|
| 1) Type: <u>PVC</u> | Size: <u>8</u> inches | Length: <u>1,660</u> feet (<u>well to the east pivot</u>) |
| 2) Type: <u>PVC</u> | Size: <u>8</u> inches | Length: <u>2,890</u> feet (<u>well to west pivot</u>) |

C. Works used to apply water to beneficial use:

Center Pivot: (West Pivot)

- 1) Make: Valley
- 2) Overall length: 1,716 feet
- 3) End Gun: 98 feet
- 4) Number of towers: 9
- 5) End gun: Yes
- 6) Capacity: 800 GPM

Center Pivot: (East Pivot)

- 1) Make: Valley
- 2) Overall length: 1,535 feet
- 3) End Gun: 100 feet
- 4) Number of towers: 8
- 5) End gun: Yes
- 6) Capacity: 800 GPM

Chemigation Equipment:

- 1) Does chemigate: No

D. Compliance with Permit Requirements:

- 1) Permit qualifications being abided by: No
2) Irrigation Questionnaires checked to determine if permit owner started irrigation by the end of construction period: Yes
3) Exceptions to compliance are: System was constructed in 2021.

E. Condition and Location:

- 1) The system is in good condition with the point(s) of diversion located as follows:
The well is 1,340 feet east and 2,010 feet south of the northwest corner of Section 8-T95N-R51W (Latitude 43.06355, Longitude -96.89932- SE1/4 of the NW1/4).
2) The works are capable of diverting and conveying to the places of use 1.78 cu. ft. per second of water from the well which is to be used for irrigation purposes. Water has been put to beneficial use to the maximum extent as follows:

<u>Section 7-T95N-R51W</u>		<u>Section 8-T95N-R51W</u>	
<u>SW1/4NE1/4</u>	<u>2 acres</u>	<u>SW1/4NW1/4</u>	<u>12 acres</u>
<u>SE1/4NE1/4</u>	<u>23 acres</u>	<u>SE1/4NW1/4</u>	<u>10 acres</u>
<u>NW1/4SE1/4</u>	<u>15 acres</u>	<u>NW1/4SW1/4</u>	<u>38 acres</u>
<u>NE1/4SE1/4</u>	<u>38 acres</u>	<u>NE1/4SW1/4</u>	<u>40 acres</u>
<u>SW1/4SE1/4</u>	<u>7 acres</u>	<u>SW1/4SW1/4</u>	<u>33 acres</u>
<u>SE1/4SE1/4</u>	<u>34 acres</u>	<u>SE1/4SW1/4</u>	<u>33 acres</u>

comprising a total of 285 acres of land and the license should be issued for 1.78 cfs.

- 3) All structures, wells and lands on map: Yes

F. Comments or other permit(s) associated with the project: Water Permit No. 8043-3 allowed for the irrigation of land in the NENE of Section 7 and in the N1/2NW in Section 8. Irrigation of these areas was not completed. The permit also allowed for a well in the NESE of Section 7, and this well was not completed. Mr. Walsh stated that he may still complete this well and irrigate the NW1/4 of Section 8 sometime in the future. I mentioned to him that the construction date for the current permit was November 10, 2021, and that he would need to apply for a new permit to drill the well and irrigate the additional acres even though they were included in the current permit.

The developed irrigation system also irrigates properties in the W1/2 of the SE1/4 and in the SW1/4 of the NE1/4 of Section 7. These properties are not owned or farmed by Mr. Walsh, but they are contiguous to the permitted property. He does have a legal agreement with at both of these property owners to irrigate the properties. These properties were not included in the permit but may be considered for inclusion in the license since the total irrigated acres (285) is less than the permitted acres (391.9).

Keith DeJong

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

Date report completed: December 14, 2023

Walsh-Landeen Center Pivot Irrigation Agreement

W ½, SE ¼ Section 7, T-95-N, R-51-W
Glenwood Township Clay County South Dakota
Parcel ID #: 01000-09551-074-00

Description: Walsh center pivot to swing through and irrigate the eastern side of the Landeen farm.

NO cost to us (Nada Landeen and her heirs) now or in the future for the following:

No cost for – Fence removal and maintenance of the fence line. Fence removed only where the pivot crosses.

No cost for – Water

No cost for – Electricity

No cost for – Maintenance costs (Periodic, Routine, or Emergency)

No cost for – Application of any liquid fertilizer/pesticide/herbicide

- Damage due to any liquid fertilizer/pesticide/herbicide applied through pivot to be paid by Walsh Farms

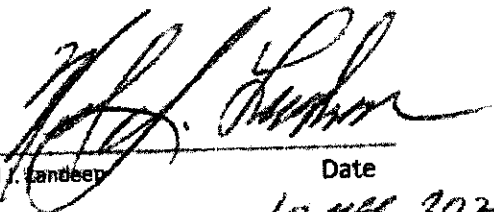
No cost for – System removal

NO legal and binding easement. However, access will be granted, and will NOT be denied - as needed, for repair and/or retrieval of the irrigation system hardware if/when needed.

The swivel end gun is to remain on while passing through all crop ground to maximize coverage.

Both parties to maintain communication related to the crop rotation scheduled.

This agreement is to remain in effect as long as the irrigation system is operational. Termination of the agreement will only occur if/when the system is no longer operational.

X 

Neal J. Landeen Date
10 MAR 2022

X 

Vern P. Landeen Date

X 

Robert P. Walsh Date
3-14-2022

3/1/2022

Walsh-White Center Pivot Irrigation Agreement

**W ½, NE ¼ Section 7, T-95-N, R-51-W
Glenwood Township Clay County South Dakota
Parcel ID #: 01000-09551-071-00**

Description: Walsh center pivot to swing through and irrigate the extreme south east corner of the White farm.

NO cost to (Mary White and her heirs) now or in the future for the following:

No cost for – Fence removal and maintenance of the fence line. Fence removed only where the pivot crosses.

No cost for – Water

No cost for – Electricity

No cost for – Maintenance costs (Periodic, Routine, or Emergency)

No cost for – Application of any liquid fertilizer/pesticide/herbicide

- Damage due to any liquid fertilizer/pesticide/herbicide applied through pivot to be paid by Walsh Farms

No cost for – System removal

NO legal and binding easement. However, access will be granted, and will NOT be denied - as needed, for repair and/or retrieval of the irrigation system hardware if/when needed.

The swivel end gun is to remain on while passing through all crop ground to maximize coverage.

Both parties to maintain communication related to the crop rotation scheduled.

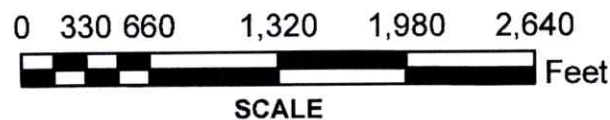
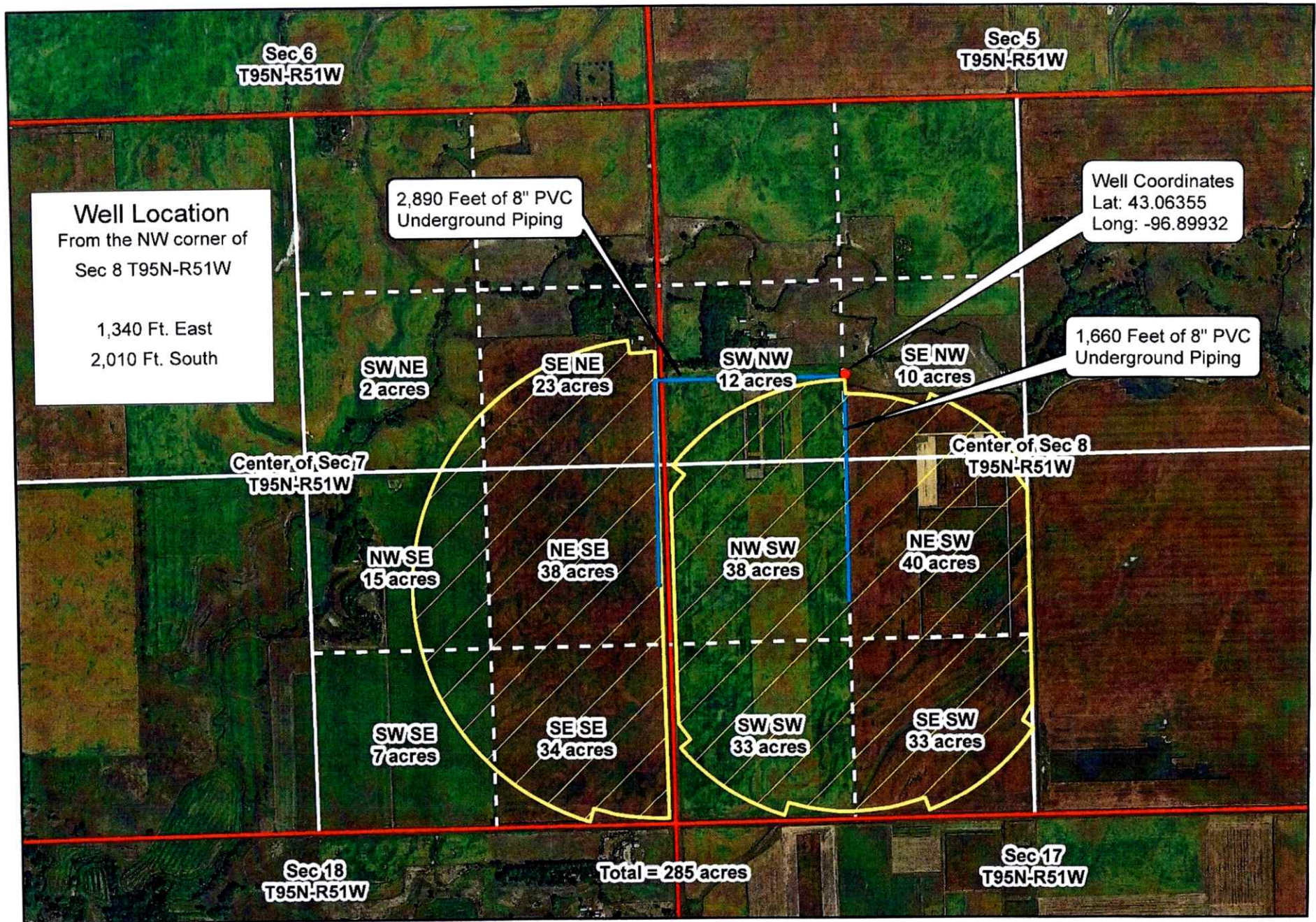
This agreement is to remain in effect as long as the irrigation system is operational. Termination of the agreement will only occur if/when the system is no longer operational.

X Mary E. White 3-4-22
Mary E. White Date

X Robert P. Walsh 3-7-22
Robert P. Walsh Date

3/1/2022

Water Permit No. 8043-3



Keith DeJong
Keith DeJong, PE Ret.
Staff Engineer
December 7, 2023

**SOUTH DAKOTA
WATER PERMIT NO. 8043-3**

Date of first receipt of application August 27, 2014.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 8043-3 to Robert P Walsh, 47844 County Rd 1B, Elk Point SD 57025 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. 8043-3 appropriates 4.23 cubic feet of water per second from two wells to be completed into the Dakota Aquifer (500 feet deep) located in the SE 1/4 NW 1/4 Section 8 and NE 1/4 SE 1/4 Section 7 for irrigation of 391.9 acres located in the W 1/2 Section 8 and E 1/2 NE 1/4, E 1/2 SE 1/4 Section 7; all in T95N-R51W.
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- September 30.
3. The date from which applicant may claim right is August 27, 2014.
4. The date of approval of Permit No. 8043-3 is November 10, 2014.
5. One-fifth of the construction is to be completed on or before May 10, 2017.
6. All construction is to be completed on or before November 10, 2019.
7. Water is to be put to beneficial use on or before November 10, 2023.
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 wells 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 wells authorized by Permit No. 8043-3 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: 

Jeanne Goodman, Chief Engineer
Water Rights Program
Department of Environment and Natural Resources

DEC 18 2014

date





**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. 8828-3, Robert P. Walsh**

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. 8828-3, Robert P. Walsh, 47884 County Rd 1B, Elk Point SD 57025.

The Chief Engineer is recommending APPROVAL of Application No. 8828-3 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 wells approved under Water Permit No. 8828-3 are 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 new well authorized by Permit No. 8828-3 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.

Eric Gronlund, Chief Engineer
March 25, 2024

NOTES: Water Permit No. 8043-3 is for generally the same irrigated acres as Application No. 8828-2. However, irrigation works for No. 8043-3 were not completed by November 2019, as set for in the water permit making it subject to cancellation. Notice of cancellation of No. 8043-3 will be provided to you at a future date.

Any well constructed for this project must meet the adequate well definition as set forth in ARSD 74:02:04:20(6) and cannot use the alternative well construction standard ARSD 74:02:04:35.

DANR encourages you to fully evaluate the water quality of the Dakota aquifer prior to making additional capital investment in an irrigation system. Although water from the Dakota aquifer is not uniform in quality, it is commonly unfit for irrigation use due to high sodium, sulphates and chlorides. Use of water from the Dakota aquifer may require special management practices.

Report to the Chief Engineer
On Water Permit Application No. 8828-3

Robert P. Walsh

March 27, 2024

Water Permit Application No. 8828-3 proposes to divert water at a maximum instantaneous diversion rate of 3.56 cubic feet of water per second (cfs) from two wells, one existing (completed into the Dakota aquifer) and one proposed well to be completed into the Dakota aquifer (approximately 494 feet deep) located in the SE $\frac{1}{4}$ NE $\frac{1}{4}$ of Section 7 (proposed well) and SE $\frac{1}{4}$ NW $\frac{1}{4}$ of Section 8 (existing well) for the irrigation of 352 acres located in the E $\frac{1}{2}$ E $\frac{1}{2}$, W $\frac{1}{2}$ SE $\frac{1}{4}$, SW $\frac{1}{4}$ NE $\frac{1}{4}$ of Section 7, W $\frac{1}{2}$ of Section 8; all in T95N-R51W. The licensing inspection for Water Permit No. 8043-3 determined the well to be located in the NE $\frac{1}{4}$ SE $\frac{1}{4}$ of Section 7 was not completed. A well completed into the Dakota aquifer located into SE $\frac{1}{4}$ NW $\frac{1}{4}$ of Section 8 was identified. Water Permit No. 8043-3 is subject to cancellation due to non-construction since the well was completed in 2021 after expiration of the construction period on November 10, 2019. The site of interest is located in Clay County approximately four miles southeast of Centerville, SD.

AQUIFER: Dakota (DKOT)

HYDROGEOLOGY:

The Dakota Formation is defined as the first relatively continuous sandstone below the Greenhorn Limestone, and it extends downward to the top of the Skull Creek Shale in western and central South Dakota (Schoon, 1971). In eastern South Dakota, the Skull Creek Shale is not continuous and when absent, the Dakota Formation directly overlies Precambrian bedrock or the Inyan Kara Group (Schoon, 1971). In western South Dakota, a stratigraphically equivalent formation to the Dakota Formation is the Newcastle Formation, which outcrops in the Black Hills (Bredehoeft, et al., 1983). In South Dakota, the Dakota Formation has been subdivided into three units (Schoon, 1971). The upper unit consists of light brown to reddish-brown, fine to medium grained, friable sandstone, interbedded with gray to dark gray shale. Thin, discontinuous beds of lignite are present in the lower part of the upper unit. The middle unit consists of a gray silty clay with small siderite pellets disseminated throughout. The lower unit consists of medium to coarse grained sandstone (Schoon, 1971).

The Dakota aquifer is comprised of the saturated and permeable portions of the Dakota Formation and is primarily a confined bedrock aquifer throughout most of South Dakota (Schoon, 1971; Water Rights 2024b and 2024d). Schoon (1971) estimated the Dakota Formation underlies 66,500 square miles of South Dakota and has an average thickness of 150 feet. The amount of water stored in the Dakota aquifer can be estimated by assuming 15% porosity for the Dakota Formation (Schoon, 1971), multiplied by the average thickness (150 feet) and the areal extent (66,500 square miles or 42.5 million acres) of the aquifer to calculate approximately 960 million acre-feet of stored water in South Dakota.

A water well completion report is on file for the existing well authorized by Water Permit No. 8043-3 and proposed to be used by Water Permit Application No. 8828-3. The report lists, “topsoil” from 0 to 2 feet below the ground surface, “brown clay” from 2 to 10 feet, “pebbly clay” from 10 to 98 feet, “sand (med)” from 98 to 100 feet, “shale” from 100 to 230 feet, “siltstone” from 230 to 260 feet, “silty claystone” from 260 to 410 feet, and “Dakota Formation Sandstone” from 410 to 494 feet below the ground surface (Water Rights, 2024d). The well was screened in “Dakota Formation Sandstone” from 425 to 505 feet and had a static water level of 115 feet at the time of well completion (November 6, 2021). Based on the submitted well completion report, the Dakota aquifer is confined at the existing well site and is expected to be confined at the proposed diversion point.

South Dakota Codified Law (SDCL) 46-2A-9

Pursuant to SDCL 46-2A-9, “A permit to appropriate water may be issued only if there is a reasonable probability that there is unappropriated water available for the applicant’s proposed use, that the diversion point can be developed without unlawful impairment of existing 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 as defined by SDCL 46-2-9 and 46-2-11.” This report will address the availability of unappropriated water and the potential for unlawful impairment of existing domestic water uses and water rights within the Dakota aquifer.

WATER AVAILABILITY:

Water Permit Application No. 8828-3 proposes to appropriate water from the Dakota aquifer. The probability of unappropriated water being available from the aquifer can be evaluated by considering SDCL 46-6-3.1, which requires “No application to appropriate groundwater may be approved if, according to the best information reasonably available, it is probable that the quantity of water withdrawn annually from a groundwater source will exceed the quantity of the average estimated annual recharge of water to the groundwater source. An application may be approved, however, for withdrawals of groundwater from any groundwater formation older than or stratigraphically lower than the greenhorn formation in excess of the average estimated annual recharge for use by water distribution systems.” The Dakota aquifer is older than and stratigraphically lower than the Greenhorn Formation (Fahrenbach et al., 2010); however, the applicant’s proposed use is not for use in a water distribution system as defined by SDCL 46-1-6(17). Therefore, the average annual recharge and average annual withdrawal rates to and from the Dakota aquifer must be considered.

OBSERVATION WELL DATA:

Administrative Rule of South Dakota (ARSD) 74:02:05:07 requires that the Water Management Board shall rely upon the record of observation well measurements in addition to other data to determine that the quantity of water withdrawn annually from the aquifer does not exceed the estimated average annual recharge of the aquifer.

Observation wells provide data on how the aquifer reacts to regional climatic conditions and local pumping. The DANR-Water Rights Program monitors 46 observation wells completed into the Dakota aquifer (Water Rights, 2024b). A few of the closest observation wells to the well the applicant proposes to use are LN-82A (approximately 12 miles northeast), LN-79G (approximately 12 miles northeast), LN-2018A (approximately 13 miles northeast), LN-82C (approximately 11 miles northeast), LN-87A (approximately 14 miles northeast), YA-80PR (approximately 15 miles southwest), YA-2017A (approximately 15 miles southwest), and UN-77E (approximately 16 miles southeast) (as shown in Figures 8 and 9) (Water Rights, 2024b). The hydrographs for these observation wells are displayed in Figures 1 to 6 (Water Rights, 2024b). The data points utilized to construct the hydrographs are measurements of the static water level in the observation wells from the top of the well casing.

The hydrographs for nearby observation wells LN-82A and LN-82C are not included in the report due to an iron bacteria issue in these wells resulting in water level measurements to be potentially not representative of the aquifer.

The hydrographs for the observation wells display stable to slightly downward trending water levels over their respective periods of record (Water Rights, 2024b). While the overall trend in the historic static water level measurements in the Dakota aquifer observation wells is generally slightly downward, observation wells LN-2018A (approximately 13 miles northeast) and ED-85A (approximately 187 miles northwest of the proposed diversion point and existing well site) completed into the Dakota aquifer have recorded a trend that has been stable to slightly increasing (Figure 7) (Water Rights, 2024b).

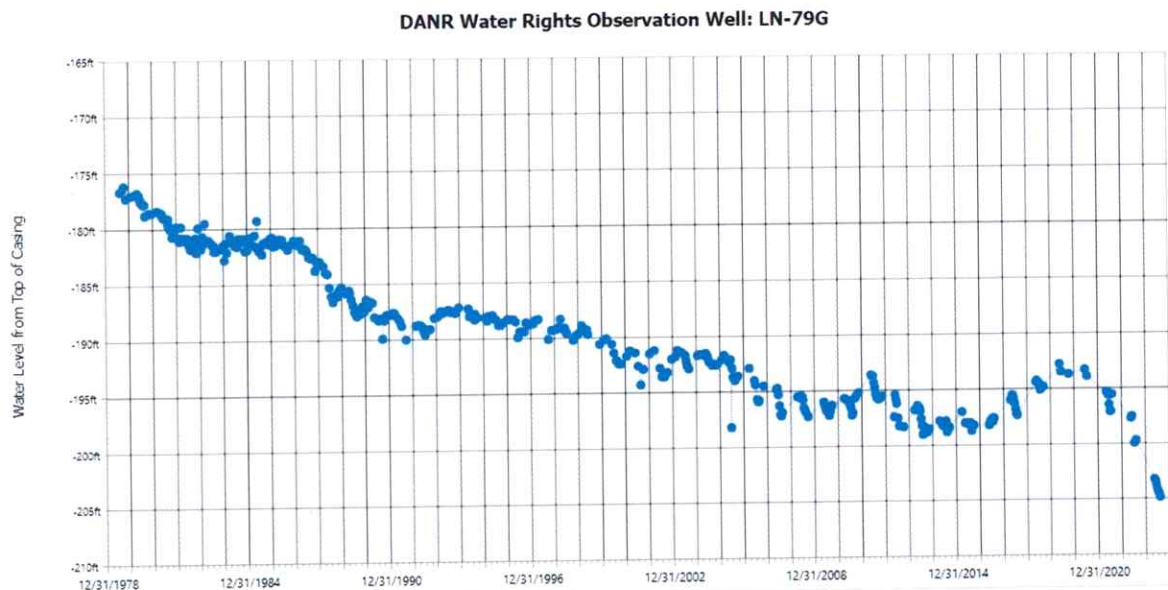


Figure 1. Hydrograph for observation well LN-79G (Water Rights, 2024b)

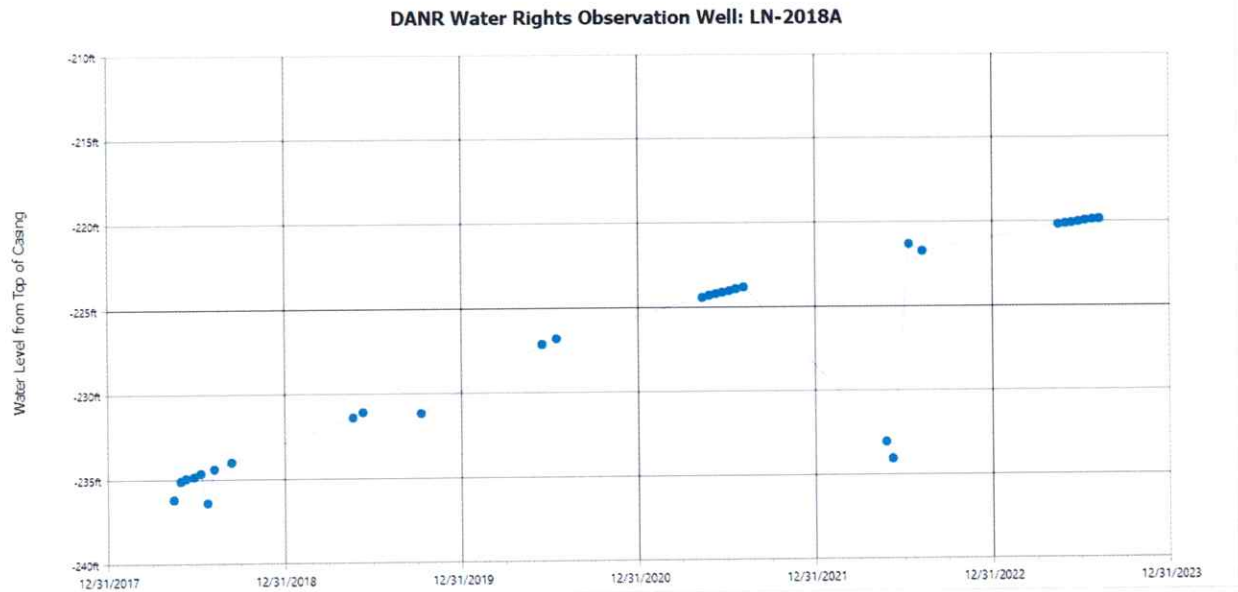


Figure 2. Hydrograph for observation well LN-2018A (Water Rights, 2024b)

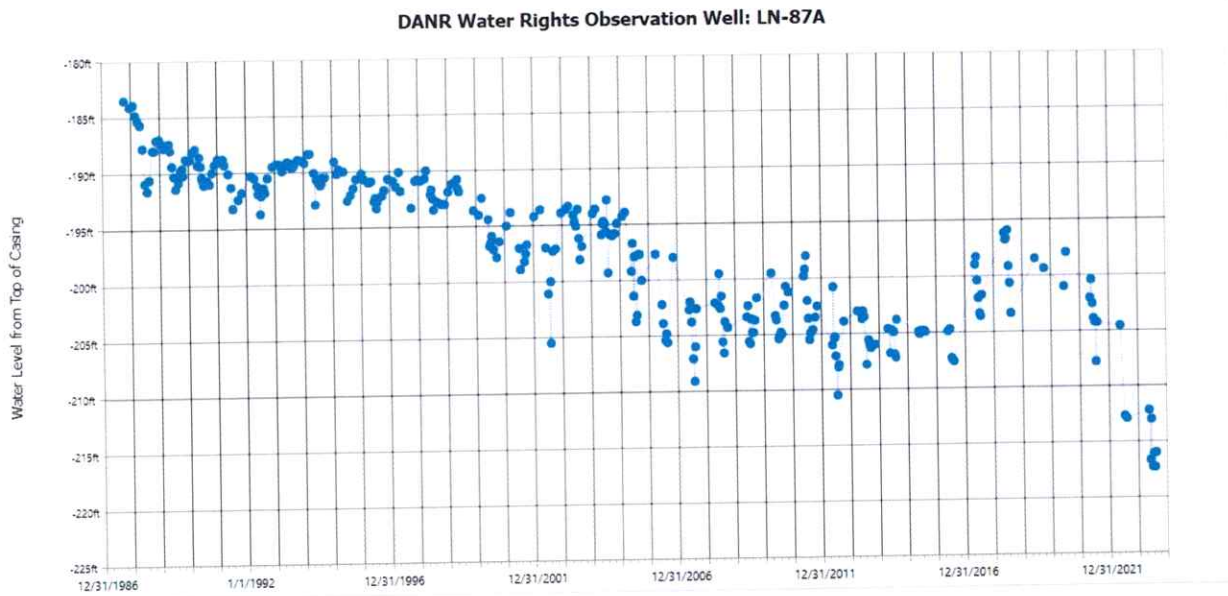


Figure 3. Hydrograph for observation well LN-87A (Water Rights, 2024b)

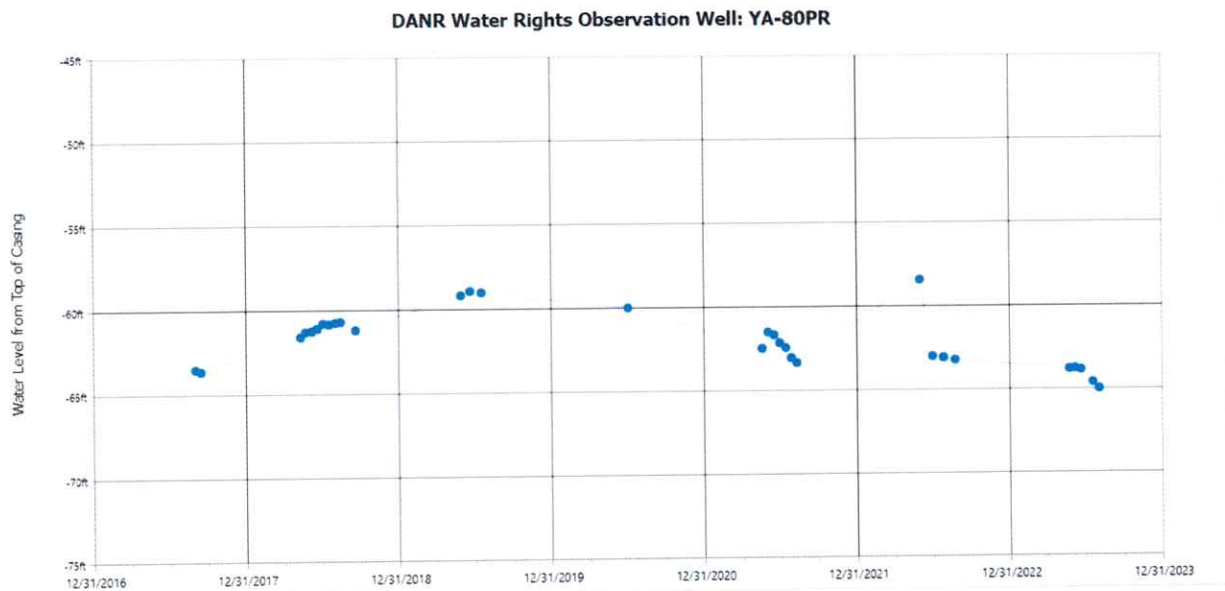


Figure 4. Hydrograph for observation well YA-80PR (Water Rights, 2024b)

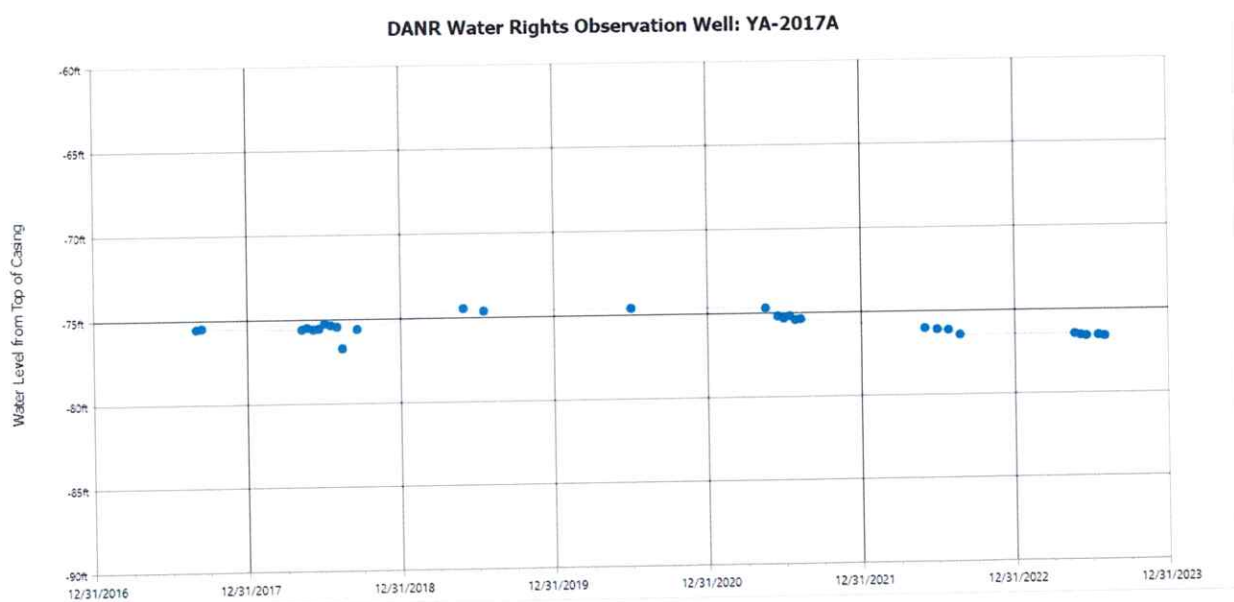


Figure 5. Hydrograph for observation well YA-2017A (Water Rights, 2024b)

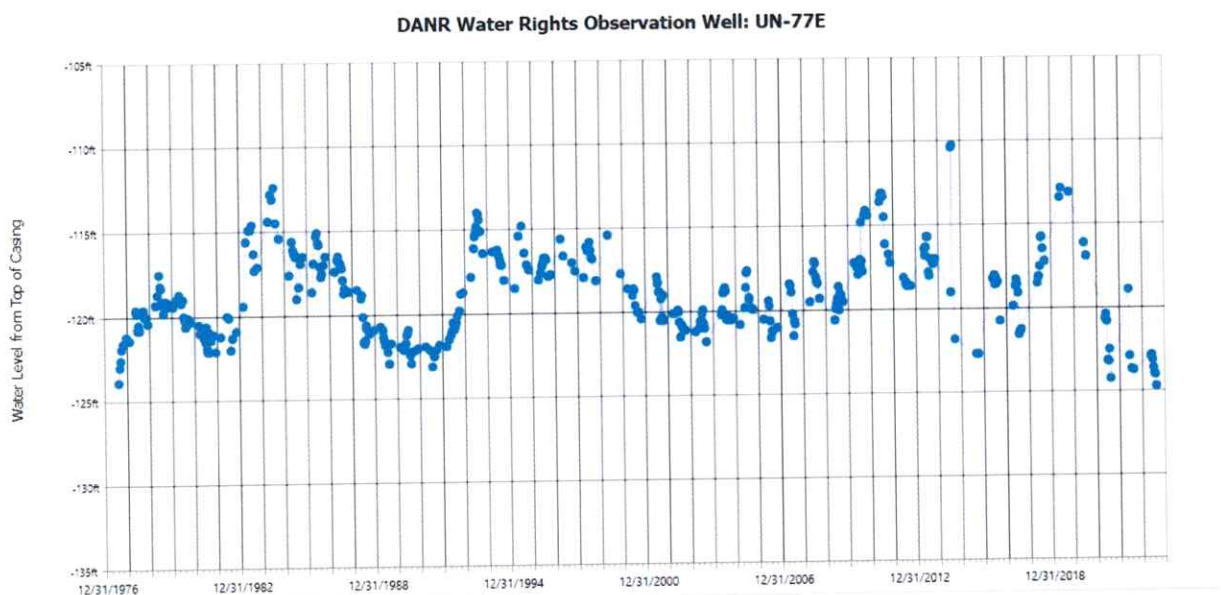


Figure 6. Hydrograph for observation well UN-77E (Water Rights, 2024b)

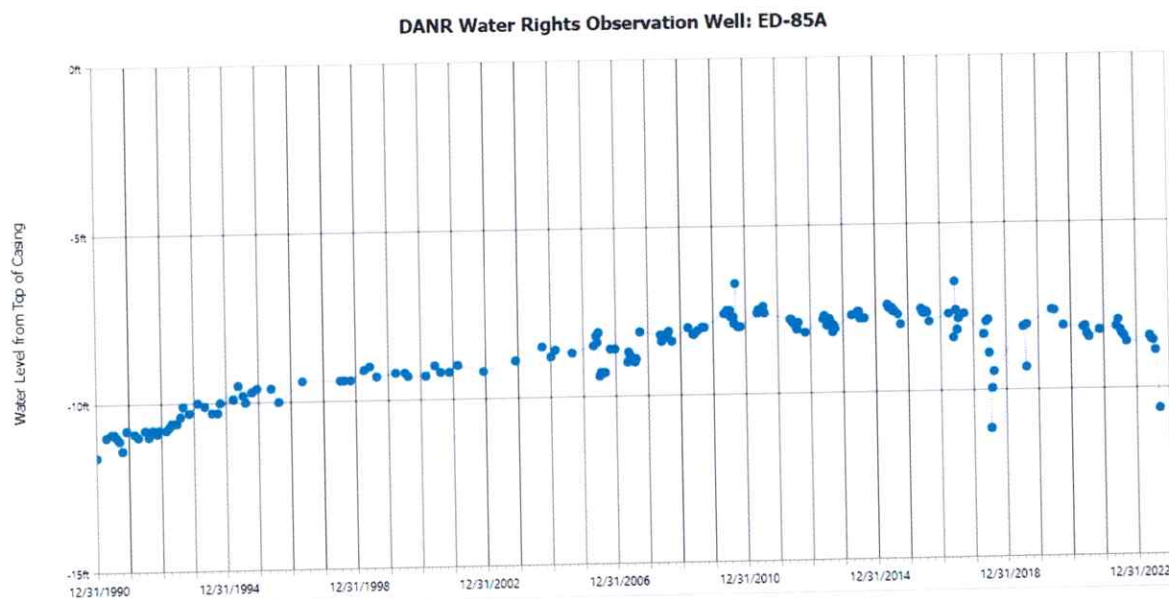


Figure 7. Hydrograph for observation well ED-85A (Water Rights, 2024b)

In addition to the observation well hydrographs, a record of the potentiometric surface is shown through historical accounts. Schoon (1971) developed maps of the potentiometric surface of the Dakota aquifer using data modified from Darton (1909), from the State Engineer's office for the period 1914 to 1915, and from a compilation of many reports over the period of 1936 to 1953. Wells that have been completed into the Dakota aquifer in roughly the past twenty years and within approximately five miles of the proposed diversion point and existing well site were used to approximate the current potentiometric surface conditions (Table 1) (Water Rights, 2024d).

Table 1. Historic and current approximate water level elevations near the proposed diversion point (Schoon, 1971; Water Rights, 2024d)

Data Source	Year(s)	<i>Approximate potentiometric surface in the vicinity of the proposed diversion point and existing well (fmsl)</i>
Schoon (1971), after Darton	1909	1,100 to 1,200
Schoon (1971), State Engineer's Office	1914-1915	1,000 to 1,100
Schoon (1971)	1936-1953	1,150 to 1,200
Well Logs Database	2005 to Present	1,000 to 1,150

Throughout South Dakota, most of the hydrographs for observation wells completed into the Dakota aquifer, and the potentiometric surface measurements of the Dakota aquifer show a decreasing trend in hydraulic head (Water Rights, 2024b). A decline in water levels in a confined aquifer does not necessarily indicate a significant decrease in water stored in the aquifer, as water levels above the top of the aquifer materials are representative of the hydraulic head (water pressure) inside the aquifer. Additionally, there are uncontrolled, flowing wells discharging water from the Dakota aquifer at ground surface, and it is expected water from the aquifer is also being discharged to other aquifers if wells completed into the Dakota aquifer have experienced casing failure.

Concerns have developed over time about the decline in artesian head pressure of the Dakota aquifer. Schoon (1971) stated, "The fact that withdrawal from the artesian system exceeds recharge is clearly demonstrated by declining pressures." However, the Water Management Board has found that past declines of the potentiometric surface (as shown on Table 1) do not automatically constitute that withdrawals have exceeded recharge (Water Rights, 1987). The Board has concluded that withdrawals exceeding the average annual recharge cannot be determined based solely upon a decline in head pressure, and in theory the Dakota aquifer head pressure is stabilizing relative to withdrawals and discharges (Water Rights, 1987). Since discharge from uncontrolled flowing wells is likely to continue until water levels in the aquifer decline to being at or below the ground surface and continuing to allow beneficial pumping to occur reduces the amount of water being discharged to waste, the Water Management Board's decision to optimize development of the Dakota aquifer is favorable to issuance of permits to appropriate water for beneficial uses. Therefore, there is a reasonable probability unappropriated water from the Dakota aquifer is available for the proposed appropriation.

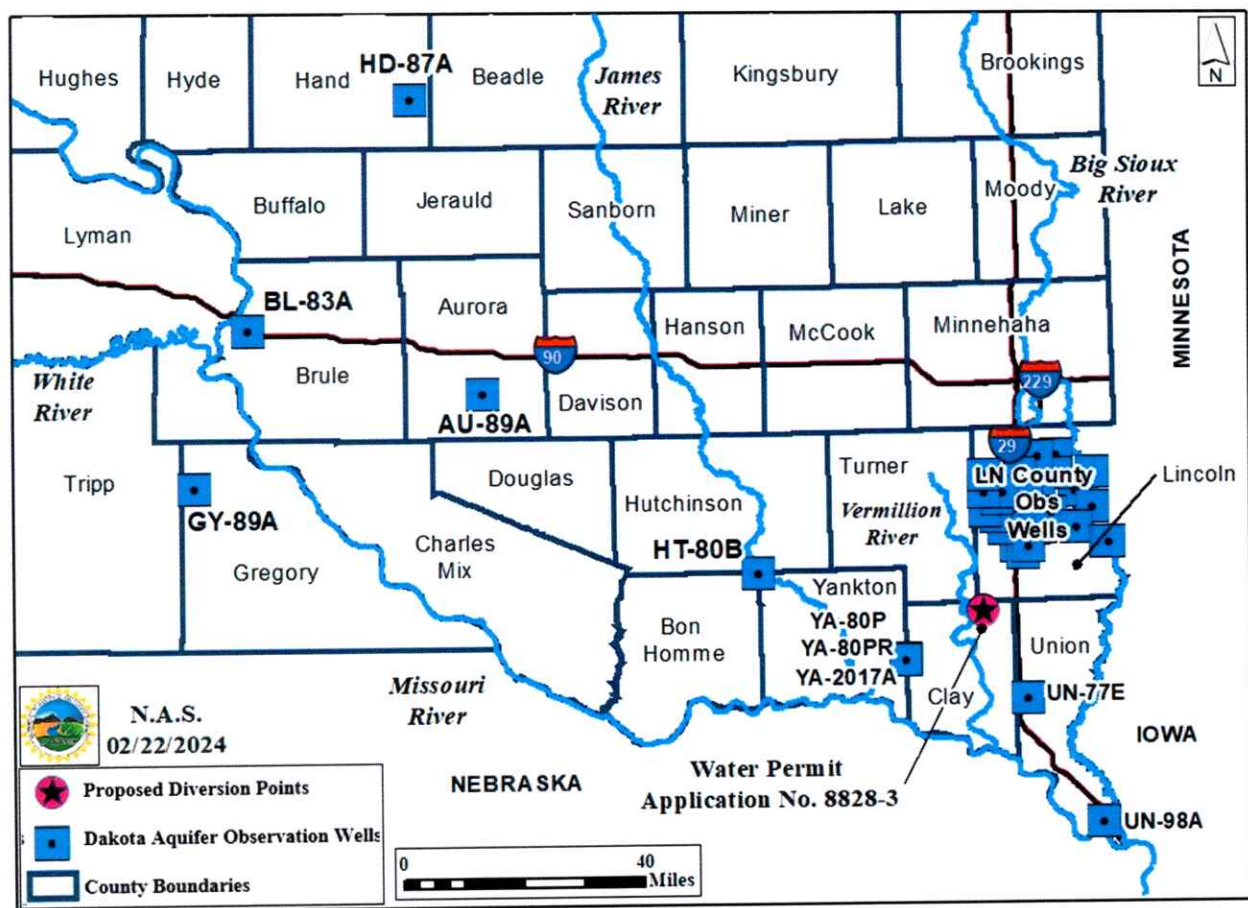


Figure 8. Location of the proposed diversion point and existing well site for Water Permit Application No. 8828-3 with the Dakota aquifer observation wells within approximately 130 miles (Water Rights, 2024b)

HYDROLOGIC BUDGET:

Recharge

Recharge to the Dakota aquifer in South Dakota occurs through upward leakage from underlying aquifers with higher artesian pressure than the Dakota aquifer, downward seepage from overlying confining layers, and through the infiltration of precipitation on the Newcastle Formation outcrops in the Black Hills (Bredehoeft, et al., 1983; Water Rights, 2024b). Using computer modeling, Bredehoeft, et al. (1983) attempted to match Darton's (1909) potentiometric surface map of the Dakota aquifer to develop a recharge estimate of approximately 79.4 cfs (57,500 acre-feet per year) before well development began. However, many assumptions used in Bredehoeft, et al.'s (1983) recharge estimate were incorrect and outdated. For example, assuming steady-state flow conditions between aquifers is unrealistic of real-world conditions and the recharge estimates used for the Madison and Inyan Kara aquifers in Bredehoeft, et al.'s (1983) analysis are much lower than estimates measured by more recent research (Carter, et al., 2002). While Bredehoeft, et al.'s (1983) estimate can provide a scale of the Dakota aquifer's recharge rate, it cannot be used as an exact value for water management purposes. As the physical properties of aquifers and the locations where adjacent aquifers are in contact with each other are

relatively undefined among many other factors, it is unknown whether the true recharge rate of the Dakota aquifer is higher or lower than Bredehoeft et al.'s (1983) estimate.

Discharge

Discharge from the Dakota aquifer in South Dakota occurs through well withdrawals, uncontrolled flowing wells and outflow through corroded well casings, and outflow to overlying adjacent aquifers because of higher artesian pressure in the Dakota aquifer (Bredehoeft, et al., 1983; Water Rights, 2024b and 2024d).

Currently, there are 261 water rights/permits appropriating water from the Dakota aquifer within South Dakota (Water Rights, 2024c). Additionally, there are seven future use permits reserving water from the Dakota aquifer (Water Rights, 2024c). For the purpose of estimating average annual withdrawals, the seven future use permits are assumed to be fully developable for a total of 4,287 acre-feet per year (Table 2).

Table 2. Future use permits reserving water from the Dakota aquifer (Water Rights, 2024c)

Future Use Permit Holder	Amount of Reserved Water (acre-ft)
City of Canton (1262C-3, 5219-3)	1,849
City of Lennox (5101-3, 5101A-3)	0*
South Lincoln RWS (4817-3)	1,448
Lincoln RWS (5155-3)	440
City of Harrisburg (8400-3)	550
Total:	4,287
RWS: Rural Water System, *The City of Lennox has allocated the water they had reserved	

Of the 261 Dakota aquifer water rights/permits, 21 are for irrigation use and 240 are for non-irrigation use (Water Rights, 2024c). Table 3 summarizes the 240 non-irrigation water rights/permits authorized to appropriate water from the Dakota aquifer with the estimated annual use for each water right/permit as determined by their limiting diversion rate or annual volume. The use type determined for each water right/permit was based on the primary use categorized for each water right/permit as some permits have additional uses (Water Rights, 2024c). Historically, average water use by non-irrigation appropriations limited by an instantaneous diversion rate have been assumed to be pumping 60% of full time at the respective permitted diversion rate. Water rights/permits limited by an annual volume are assumed to withdraw their entire respective annual volume limitation. This is a standard method used by the DANR-Water Rights Program for estimating annual withdrawals by non-irrigation appropriations from an aquifer (Water Rights, 2024c).

Several non-irrigation water rights/permits on Table 3 are authorized to withdraw from one or more aquifers, in addition to the Dakota aquifer. For the purpose of estimating average annual withdrawals, the non-irrigation water rights/permits that have a specified volume out of their entire appropriated volume that is authorized only for their Dakota aquifer well(s) are assumed to withdraw their full specified volume permitted only for their Dakota aquifer well(s). The remaining non-irrigation water rights/permits that do not have a certain diversion rate or volume

designated for what each well from each aquifer is authorized to divert are assumed to be withdrawing their entire appropriated volume from the Dakota aquifer.

Additionally, the municipal water rights/permits that are authorized to appropriate water from the Dakota aquifer, that are identified as being connected to a rural water system (RWS) and likely maintain their wells for standby purposes (Drinking Water Program, 2024; Water Rights, 2024c); as such, the average annual water use for these water rights has been estimated to be zero acre-feet per year on Table 3. Overall, the average annual withdrawal rate for the Dakota aquifer non-irrigation water rights/permits is approximately 22,459 acre-feet per year (Table 3) (Water Rights, 2024c).

Table 3. Summary of the non-irrigation water rights/permits authorized to appropriate from the Dakota aquifer with estimated annual use determined by their respective diversion rate or annual volume (Drinking Water Program, 2024; Water Rights, 2024c)

Use Type	No. of Water Rights/Permits	Appropriation for Water Rights/Permits limited by Volume (acre-feet/year)	Appropriation for Water Rights/Permits limited by Diversion Rate (cfs)	Total Estimated Use (acre-feet/year)
RWS	6	2,005	2.2	2,961
SHD	7		3.33	1,447
REC	3	3.1	0.45	199
COM	109	2,032	11.48	7,020
DOM	11		1.753	762
FWP	4		2.73	1,187
GEO	2		2.33	1,013
INS	2		1.34	582
IND	7	167	0.84	534
MUN	89	3,274	8.01	6,755
TOTAL:	240	7,481	34.46	22,459
RWS: Rural Water System, SHD: Suburban Housing Development, REC: Recreation, COM: Commercial, DOM: Domestic, FWP: Fish & Wildlife Propagation, GEO: Geothermal, INS: Institutional, IND: Industrial, MUN: Municipal				

As development of the Dakota aquifer has increased over time, some of the appropriations have been made by rural water systems that are required to report their annual withdrawal rate (Water Rights, 2024c). The withdrawals that are annually reported from the Dakota aquifer by some appropriative users (South Lincoln RWS, Clay RWS, and Lincoln County RWS) are shown in Table 4 (Water Rights, 2024c and 2024f). The reported withdrawals by the RWS users listed on Table 4 are for comparison purposes only to show historically the average annual use has been less than the volume that is estimated on Table 3 (Water Rights, 2024c and 2024f). The reported annual withdrawal rate for two water rights/permits authorized for commercial and domestic use was also included on Table 4. The estimated use calculated on Table 3 for the water rights/permits that are required to report will be used in the analysis.

Table 4. Non-irrigation rural water system water rights/permits required to report their respective annual use from the Dakota aquifer (Water Rights, 2024c and 2024f)

	South Lincoln RWS	Clay RWS	Lincoln County RWS	Lakeview Hutterian Brethren	Michael J. Slama
	5647-3, 6300-3, 6490-3, 6778A-3	5997B-3	5156-3	8464-3	8252-3
2003	725				
2004	904				
2005	769				
2006	863	72			
2007	860	126			
2008	863	124	0		
2009	773	119	0		
2010	775	122	0		
2011	785	116	0		
2012	865	186	0		
2013	765	155	0		
2014	739	148	0		
2015	711.5	141	0		
2016	640	163	0		
2017	643	201	0		
2018	503	170	0		
2019	562	162	0		
2020	530	197	0		19.3
2021	588	194.7	0	40	19.3
2022	969	215	0	23.6	19.3
Max	969	215	0	40	19.3
Min	503	72	0	23.6	19.3
Avg	742	154	0	32	19.3
RWS: Rural Water System					

Currently, there are 21 irrigation water rights/permits authorized to appropriate water from the Dakota aquifer (Water Rights, 2024c). Irrigation water rights/permits have been typically required to report their annual usage on an irrigation questionnaire (IQ) since 1979. The estimated average annual withdrawal rate for the Dakota aquifer irrigation water rights/permits that have reported over the period of record (1979 to 2022) is approximately 159 acre-feet per year (Water Rights, 2024a). To reflect the current development of irrigation water rights/permits more accurately, the average annual withdrawal rate for irrigation appropriations that have reported from 2013 to 2022 is approximately 233 acre-feet per year (Water Rights, 2024a).

Table 5 displays the average annual withdrawal rate for each irrigation water right/permit based on the reported annual values, with estimated use calculated for water permits that have either not been constructed or only have one year of reporting data. Several of the irrigation water rights/permits from the Dakota aquifer are authorized to irrigate using other water sources in addition to the Dakota aquifer, and the reported withdrawal rate represents total irrigation across all water sources (Water Rights, 2024a and 2024c). The estimated use calculated on Table 5 will be used in this analysis.

Water Right No. 394-3 is not required to submit an irrigation questionnaire and is authorized to irrigate 3.2 acres (Water Rights, 2024c). Generally, irrigators in eastern South Dakota apply less than one foot of water per acre per year. However, to account for the fluctuation in wet and dry cycles from year to year, a one foot of water per acre per year application rate will be used to estimate the annual withdrawal rate for this irrigation water right. Therefore, Water Right No. 394-3 is estimated to withdraw approximately 3.2 acre-feet per year (shown on Table 5) (Water Rights, 2024c).

Additionally, Water Permit Nos. 8423-3, 8510-3, 8560-3, 8727-3, and 8781-3 are authorized to irrigate 192.5 acres of turf and are limited to an annual appropriation that may not exceed two-acre feet annually for each acre of land authorized to be irrigated (Water Rights, 2024c). These water permits have either not been constructed or only have one year of reporting data (Water Rights, 2024a and 2024c). Generally, irrigators in eastern South Dakota apply less than one foot of water per acre per year (Water Rights, 2024a). However, because these permit holders are authorized to irrigate turf, the two foot of water per acre per year application rate will be used to somewhat overestimate the annual withdrawal rate. Therefore, the average annual withdrawal rate for Water Permit Nos. 8423-3, 8510-3, 8560-3, 8727-3, and 8781-3 is approximately 385 acre-feet per year (shown on Table 5).

Overall, the average annual withdrawal rate for the Dakota aquifer irrigation water rights/permits based on the reported annual values (280.8 acre-feet/year) (unless not required to submit IQ or still within construction period (780.1 acre-feet/year)) is approximately 1,060.9 acre-feet per year (Table 5) (Water Rights, 2024a and 2024c).

Table 5. Average reported withdrawal rate by the irrigation water rights/permits from the Dakota aquifer (Water Rights, 2024a and 2024c)

Permit No.	Status	Name	Priority Date	Acres	Avg Reported Use (acre-feet/year)	Est. Use for Non- Developed, Non-Reporting, or Limited Data Permits (acre-feet/year)	Comments/Total Estimated Use (acre-feet/year)
1054-3	LC	Rolling Hills Golf Development	01/01/1951	43.84	30.9	N/A	also uses water from surface water
394-3	LC	Kory Standy	01/01/1912	3.2	Does not report	3.2	also for domestic use
4769-3	LC	James Leheska	06/01/1981	130	23.5	N/A	last irrigated in 1993
5703-3	LC	Charles A Long	07/20/1992	2	0.5	N/A	
2328-2	LC	Michael Kirwan	02/21/1995	31	2.6	N/A	last irrigated in 2008
5905-3	LC	City of Groton	12/14/1995	30	66.9	N/A	also permits water from surface water- total water use across all sources
5947-3	LC	Fish Lake Country Club	09/23/1974	33	17.2	N/A	also permits water from surface water- total water use across all sources
5994-3	LC	Robert L Peterson	04/17/1997	3	6.2	N/A	
6110-3	LC	Dakota Dunes Community Improvement District	10/06/1998	11	49.8	N/A	
6527-3	LC	City of Beresford	07/22/2004	37	23.2	N/A	
6575-3	LC	Dakota Alliance Soccer Club	01/19/2005	15	6.2	N/A	
6734-3	LC	Avera Sacred Heart Health Services	06/14/2006	11.9	5.6	N/A	
7123-3	LC	Harrisburg School District	04/02/2009	30	7.7	N/A	
2566A-2	LC	Chamberlain Country Club	08/29/2005	63	9.6	N/A	
7916-3	PE	John H Thompson	10/18/2013	150	30.9	N/A	
8043-3	PE	Robert P Walsh	08/27/2014	391.9	limited data	391.9	constructed in 2021-reported 158.4 acre-ft of use in 2022 - Permit subject to cancellation
8423-3	PE	City of Platte	02/10/2020	42	not constructed	84	not constructed-turf irrigation
8510-3	PE	TR Golf LLC	03/26/2021	30	limited data	60	turf irrigation- 143.3 acre-ft reported in 2022 for 8510-3
8560-3	PE	TR Golf LLC	10/25/2021	65	limited data	130	
8727-3	PE	TR Golf LLC	02/27/2023	10	not yet reporting	20	turf irrigation
8781-3	PE	City of Harrisburg	07/21/2023	45.5	not constructed	91	turf irrigation
LC: Licensed Water Right; PE: Water Permit			TOTAL:	1,178	280.8	780.1	1,060.9

There are domestic wells completed into the Dakota aquifer that do not require a water right/permit, so the withdrawal amount for domestic use is unknown (Water Rights, 2024d). Since the introduction of rural water systems, many domestic wells are likely no longer in use or are not being used as primary water sources. Due to their relatively low diversion rates and the availability of rural water, withdrawals from domestic wells are not considered to be a significant portion of the hydrologic budget for the Dakota aquifer. It is currently unknown how much water is being discharged from the Dakota aquifer through uncontrolled flowing wells. The Water Management Board has previously determined water being discharged through uncontrolled flowing wells is not a beneficial use and does not constitute appropriation pursuant to SDCL 46-6-3.1 (Water Rights, 1987).

Hydrologic Budget Summary

The estimated average annual recharge to the Dakota aquifer has not been accurately quantified. Bredehoeft et al. (1983) estimated a recharge rate of approximately 57,500 acre-feet per year, but several factors make it uncertain if that is a high or low estimate. The estimated average annual withdrawal rate from the Dakota aquifer is approximately 28,159 acre-feet per year (including the estimated use for Water Permit Application No. 8828-3, if approved) (Table 6). Based on the hydrologic budget, there is a reasonable probability unappropriated water is available from the Dakota aquifer for the proposed appropriation.

Table 6. Estimated use from Dakota aquifer (Water Rights, 2024a and 2024c)

Type of Water Right/Permit	Estimated Use (acre-feet/year)
Future Use Reservations	4,287
Non-Irrigation	22,459
Irrigation (<i>Water Permit No. 8043-3 subject to cancellation</i>)	1,060.9
Application No. 8828-3 (if approved, assuming one acre-foot, per acre, annually, crop irrigation)	352
TOTAL:	28,159

POTENTIAL FOR UNLAWFUL IMPAIRMENT OF EXISTING WATER RIGHTS:

Currently, there are 261 water rights/permits authorized to appropriate water from the Dakota aquifer (Water Rights, 2024c). The closest water right/permit (not held by the applicant) to the site of interest is Water Right No. 6527-3, which is held by City of Beresford. The diversion point for Water Right No. 6527-3 is located approximately 6.4 miles northeast of the proposed diversion point and existing well site for this application (Figure 9) (Table 7) (Water Rights, 2024c).

There are domestic wells on file with the DNR-Water Rights Program that are completed into the Dakota aquifer, with the closest domestic wells on file (not held by the applicant) located approximately 1.1 miles northeast and southwest of the proposed diversion point and existing well site (Water Rights, 2024d). There could potentially be other domestic wells completed into the Dakota aquifer near the proposed diversion point and existing well that are not on file with the DNR-Water Rights Program. The location of the domestic wells in the well completion report database maintained by the Water Rights Program is based on the location listed by the driller on the well completion report.

Table 7. Water rights/permits authorized to withdraw water from the Dakota aquifer within approximately twenty-five miles of the existing well site and proposed diversion point, as shown in Figure 9 (Water Rights, 2024c)

Permit No.	Name	Status	Use	Authorized Diversion Rate (cfs)	Authorized Annual Volume (acre-feet/year)	Acres if IRR
750-3	City of Viborg	LC	MUN	0.39		
1262A-3	City of Canton	LC	MUN	0.3		
1974-3	Town of Volin	LC	MUN	0.22		
2972-3	Basin Electric Power Cooperative	LC	DOM	0.06		
4401-3	Town of Worthing	LC	MUN	0.17	65	
4672-3	Cliff/Phyllis Elcock	LC	COM	0.05		
4982-3	Town of Fairview	LC	MUN	0.09		
5156-3	Lincoln County RWS	PE	RWS	3.0	440	
5216-3	City of Canton	LC	MUN	0.67		
5217-3	City of Canton	LC	MUN	0.53		
5218-3	City of Canton	LC	MUN	0.72		
5647-3	South Lincoln RWS	LC	RWS	1.2		
6129-3	JDP LLC	LC	COM, LCO	0.067		
6177-3	Basin Electric Power Cooperative	LC	IND	0.45		
6300-3	South Lincoln RWS	LC	RWS	1.0		
6406-3	Haverhals Feedlot Inc	LC	COM, LCO	0.111		
6416-3	Haverhals Feedlot Inc	LC	COM, LCO	0.06		
6439-3	Hulstein Feedyards LLC	LC	COM, LCO	0.07		
6449-3	Eastern Farmers Cooperative	LC	COM	0.02		
6490-3	South Lincoln RWS	LC	RWS	1.89	1,048	
6499-3	City of Canton	LC	MUN	0.68		
6574-3	Wendall Nilson	LC	COM, LCO	0.111		
6527-3	City of Beresford	LC	IRR	0.53	2.37	37
6743-3	City of Canton	LC	MUN	0.778		
6778A-3	South Lincoln RWS	PE	RWS	2.09	517	
7162-3	Haverhals Feedlot Inc	LC	COM, LCO	0.19		
7916-3	John H Thompson	PE	IRR	0.56		150
8043-3	Robert P Walsh	PE	IRR	4.23		391.9
4817-3	South Lincoln RWS	FU	RWS		1,448*	
5101-3	City of Lennox	FU	MUN		0*	
5155-3	Lincoln County RWS	FU	RWS		440*	
5219-3	City of Canton	FU	MUN		1,175*	
1262C-3	City of Canton	FU	MUN		674	
5101A-3	City of Lennox	FU	MUN		0*	
8400-3	City of Harrisburg	FU	MUN		550*	
LC: Licensed Water Right; PE: Water Permit; FU: Future Use; COM: Commercial; DOM: Domestic; INS: Institutional; IRR: Irrigation						
LCO: Livestock Confinement Operation; MUN: Municipal; RWS: Rural Water System *Amount remaining of future use reservation						

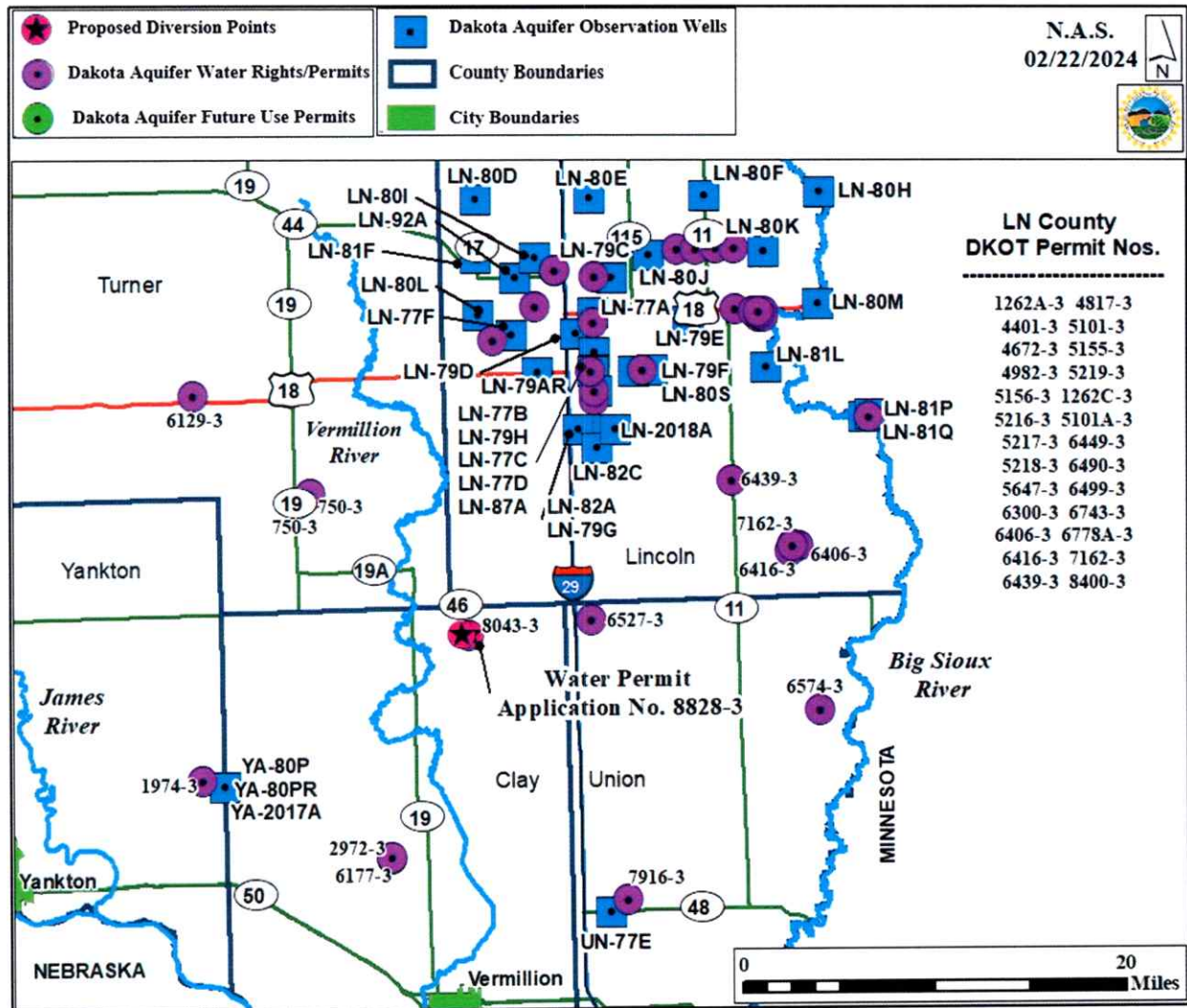


Figure 9. Location of the existing well site and proposed diversion point for Water Permit Application No. 8828-3, with the Dakota aquifer future use permits, water rights/permits, and observation wells within approximately twenty-five miles (Water Rights, 2024b and 2024c)

The Dakota aquifer is expected to be confined at the proposed diversion point based on the well completion reports on file for the existing well proposed to be used and, well completion reports for nearby wells completed into the aquifer (Water Rights, 2024d). Since the Dakota aquifer is expected to be confined at the proposed diversion point, drawdown can extend some distance but the exact drawdown behavior of a well cannot be known without an aquifer performance test. However, observation wells completed into the Dakota aquifer near permitted/licensed diversion points can provide some insight on how the aquifer responds to pumping.

Observation well LN-87A (approximately 14 miles northeast of the proposed diversion point and existing well site) has two high-yield wells (assumed to be a well with an authorized diversion rate greater than 0.2 cfs) within approximately one mile of it (Water Rights, 2024b and 2024c). The lithologic log on file for LN-87A noted the well was drilled 540 feet deep below the ground surface, had a casing stick up height of approximately 2.2 feet, and the top of aquifer materials

approximately 405 feet below the ground surface (SDGS, 2024). The lowest recorded static water level on the hydrograph (displayed in Figure 5) is approximately 217 feet below the top of the well casing, which indicates there was still approximately 190 feet of artesian head pressure in LN-87A even during drier periods when high-yield wells are expected to be pumping more water and when water levels are generally naturally lower in response to drier conditions (SDGS, 2024; Water Rights, 2024b).

Within approximately ten miles of the proposed diversion point and existing well site, the Dakota aquifer has a saturated aquifer thickness ranging from approximately 20 to 80 feet (Water Rights, 2024d). This would generally allow for enough thickness for a pump to be placed 20 feet below the top of the aquifer, which is required for the well to be considered adequate under ARSD 74:02:04:20(6). Any drawdown as a result of the proposed diversion is not expected to unlawfully impair nearby adequate wells. In Clay County, there are no substantiated complaints on file with the DNR-Water Rights Program regarding well interference for adequate wells completed into the Dakota aquifer (Water Rights, 2024e).

The Water Management Board recognizes that putting water to beneficial use requires a certain amount of drawdown to occur. The Board has developed rules to allow water to be placed to maximum beneficial use without the necessity of maintaining artesian head pressure for domestic use. The Water Management Board defined an “adversely impacted domestic well” in ARSD 74:02:04:20(7) as:

“A well in which the pump intake was set at least 20 feet below the top of the aquifer at the time of construction or, if the aquifer is less than 20 feet thick, is as near to the bottom of the aquifer as is practical and the water level of the aquifer has declined to a level that the pump will no longer deliver sufficient water for the well owner’s needs.”

The Water Management Board considered the delivery of water by artesian head pressure versus maximum beneficial use during the issuance of Water Right No. 2313-2 for Coca-Cola Bottling Company of the Black Hills. The Board adopted the Findings of Facts and Conclusions of Law that noted the reservation of artesian head pressure for delivery of water would be inconsistent with SDCL 46-1-4 which states, “general welfare requires that the water resources of the state be put to beneficial use to the fullest extent of which they are capable...” (Water Rights, 1995). Furthermore, the Water Management Board found if increased cost or decreased production as a result of impacts on artesian head pressure by legitimate users is to be considered as an unlawful impairment, it would also conflict with SDCL 46-1-4 (Water Rights, 1995). With that in mind, some existing well owners may need to install or lower pumps depending on the specific characteristics of the Dakota aquifer at their location. However, when considering the statutes (SDCL 46-1-4 and 46-6-6.1), rules (ARSD 74:02:04:20(6) and (7)), the saturated thickness of the Dakota aquifer in Clay County, the artesian head pressure in observation wells and appropriative user’s wells completed into the Dakota aquifer near the proposed diversion point and existing well site, and the lack of well interference complaints from the Dakota aquifer in the area, any drawdown created from the proposed diversion is not expected to cause an unlawful impairment to existing water right/permit holders or domestic users with adequate wells. Therefore, there is a

reasonable probability that any interference from the proposed appropriation will not impose unlawful impairments to existing users with adequate wells.

Special Consideration: Water Quality (Sweet Pocket Area)

In central and southern Lincoln County, there is an area commonly referred to as the "sweet pocket" in the Dakota aquifer of notably better water quality compared to other areas of the aquifer. While the quantity of higher quality water is unknown, it is believed to be limited, since the water locally recharging the Dakota aquifer is of poorer quality than the water leaving the aquifer (Iles, 1984). In the past, development for irrigation out of the "sweet pocket" area has been contentious (Water Rights, 2024c). The approximate area of the "sweet pocket" is indicated by the presence of lower total dissolved solid concentrations, shown in Figure 10 (Iles, 1984). The proposed diversion point and existing well proposed to be used by Water Permit Application No. 8828-3 are located approximately 7.5 miles south of the "sweet pocket" area, shown in Figure 10 (Iles, 1984).

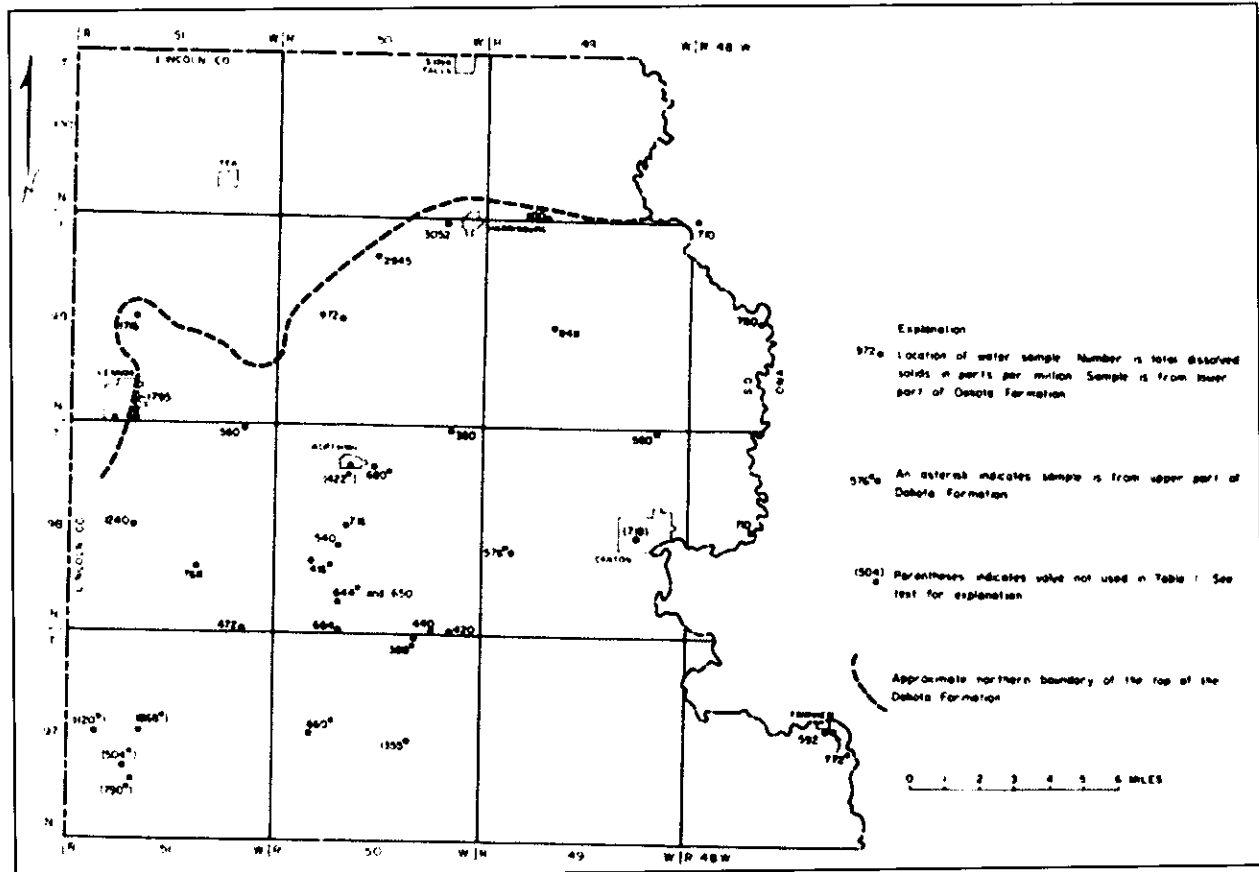


Figure 10. Distributions of total dissolved solids in the Dakota aquifer (modified from Iles, 1984) (Note parentheses only relevant to original publication)

Abridged History of Dakota Aquifer Water Permit Applications in Lincoln County

In 1982, the Water Management Board approved Future Use Permit No. 4817-3 which reserves water for future use by South Lincoln Rural Water. The future use area designated by this permit included over 290 square miles in southern Lincoln County. Currently, there is 1,448 acre-feet per year remaining in this future use reservation (Water Rights, 2024c).

In 1989, South Lincoln Rural Water filed Future Use Permit No. 5320-3 that proposed to reserve water for future use. The Board denied Future Use Permit No. 5320-3 due to failure to demonstrate the quantity of water to be reserved would be needed by South Lincoln Rural Water.

In 1992, ICI Seed Company submitted Water Permit Application No. 5669-3, which proposed irrigating 60 acres using a well to be completed into the Dakota aquifer to be located approximately six miles north-northeast of the proposed diversion point and existing well proposed to be used by Water Permit Application No. 8828-3. The history of declining water levels in the aquifer statewide in conjunction with the controversy associated with the development of the Dakota aquifer for nearby public water systems (i.e. South Lincoln and Lincoln County RWS, and Cities of Canton and Lennox) lead staff to question whether irrigation from the Dakota aquifer is in the public interest (Buhler, 2014; Goodman 1992). The Chief Engineer recommended denial of Water Permit Application No. 5669-3 because “it is not in the public interest to allow use of Dakota Formation water for irrigation in this location. The application is also within the South Lincoln Rural Water System Future Use area specified by Future Use Permit No. 4817-3” (Hatch, 1992). In response to the denial recommendation, the application was withdrawn before any board consideration.

In 2009, Paul M Buckneberg submitted Water Permit Application No. 7165-3, which proposed irrigation from the Dakota aquifer approximately nine miles northwest of the proposed diversion point and existing well proposed to be used by Water Permit Application No. 8828-3. The well site proposed by Water Permit Application No. 7165-3 is approximately nine miles west of the future use area designated by Future Use Permit No. 4817-3. The Chief Engineer recommended approval of the application and following a contested case hearing, the Water Management Board approved the water permit. The Board concluded that the Dakota aquifer is large and capable of sustaining additional withdrawals, past declines (of artesian head pressure) do not automatically mean that withdrawals have exceeded recharge, the reference to withdrawals in SDCL 46-6-3.1 applies only to withdrawals of water within the Board’s control and not to uncontrollable flowing wells, and that the potential to diminish the “sweet pocket” by irrigating at the specific location is speculative. Although this issue may bear a hard look in future cases involving other locations, it does not outweigh the public interest in granting this particular application at this specific location and claims of potential diminishment of sweet water some time in the future for the public water supply systems does not constitute an “impairment of existing domestic water uses and water rights” within the meaning of SDCL 46-2A-9.

In 2014, Anden VanBeek submitted Water Permit Application No. 7991-3, which proposed irrigating 480 acres using water from the Dakota aquifer. The application was withdrawn from consideration by the applicant prior to hearing following the Chief Engineer making a denial

recommendation. Many factors were considered when recommending denial of the application, including:

“Through the history of hearing, it is clear the Water Management Board was concerned about the water quality and use from the Dakota aquifer in this area. The record shows that the Water Management Board and its predecessor, the Water Rights Commission have been very concerned with both the possible interference to existing wells and rate of decline in the aquifer. In addition, the Board has expressed concern with the potential of diminishment of the better water quality area known as the “sweet pocket” by irrigating.”

Facts in this case area:

- The well proposed to be used by Water Permit Application No. 7991-3 is within the area commonly referred to as the “sweet pocket” in the Dakota aquifer **relied upon by public water systems;**
- The proposed well is within the future use area of by Future Use Permit No. 4817-3, held by South Lincoln Rural Water System, which reserves water from the Dakota aquifer for the system’s future needs;
- The Water Management Board’s conditions on a South Lincoln Rural Water System requiring spacing between wells of at least 2.5 miles. The proposed diversion point and existing well site for Water Permit Application No. 8828-3 are located approximately 17.5 miles southwest from the three wells operated by South Lincoln Rural Water System;
- The use of water from the Dakota aquifer led to adversarial water permit hearings throughout the history of development of the aquifer in Lincoln County and a recognition by the Water Management Board that special consideration be given to water use from the Dakota aquifer in this area.

The staff report and Chief Engineer’s review of the record of past cases lead to this recommendation for denial because it is not in the public interest to allow use of water from the Dakota aquifer for irrigation in this specific location (Goodman, 2014).

In 2014, Dakota Plains Dairy LLC submitted Water Permit Application No. 8035-3, which proposed to use water from the Dakota aquifer for commercial use in a dairy operation. The well sites proposed to be used by Water Permit Application No. 8035-3 are located within the future use area designated by Future Use Permit No. 4817-3. At that time, the applicant requested consideration of the application wait until negotiations between South Lincoln Rural Water System and the dairy were completed. In 2015, the application was withdrawn by the applicant as it was unlikely an approval recommendation would be made at this location.

Special Consideration: Well Construction

The new well for this proposed diversion must meet adequate well construction standards as defined in ARSD 74:02:04:20.

An adequate well has been defined in ARSD 74:02:04:20(6) 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.”

The alternative well construction standard for certain Dakota aquifer wells (74:02:04:35) are not permitted for appropriative uses. The new well and any future replacement wells shall meet the adequate well construction standard as defined in ARSD 74:02:04:20. Replacement wells for this application may not be constructed using the alternative construction requirements that are allowed for domestic use wells outlined in ARSD 74:02:04:35.

Public Interest Issues – Water Quality

Water quality in the Dakota aquifer is not uniform (Schoon, 1971). Erickson (1955) notes, “it should also be stated here that the Dakota (aquifer) water is usually unfit for irrigation as it contains too much sodium as well as sulphates and chlorides. Small scale irrigation of garden plots can usually be done without serious injury to the crops, if the garden is watered only when natural rainfall does not occur.”

There have been relatively few applications filed to irrigate from the Dakota aquifer in South Dakota primarily due to the poor water quality of the aquifer. Every application filed for permits proposing to irrigate from the aquifer with their current permit status are shown in Table 8. Soil Water Compatibility Permits, once required, were typically conditionally approved. In 1990, Water Permit Application No. 5436-3 was withdrawn from consideration because the South Dakota Conservation Commission denied a Soil Water Compatibility Permit for the project. Although the statutes requiring soil water compatibility approval have been repealed, efforts continue to be made by the DANR-Water Rights Program to inform applicants that water from the Dakota Formation is generally unsuitable for irrigation (Erbele, 2004 and 2009; Goodman, 1995 and 1998).

Table 8. Water permit applications filed proposing to use water from the Dakota aquifer for irrigation use (Water Rights, 2024c)

Permit No.	Name	County	Status	Use Type	Authorized Diversion Rate (cfs)	Acres
1054-3	Rolling Hills Golf Development	BN	LC	IRR	0.62	43.84
394-3	Kory Standy	CM	LC	IRR, DOM	0.067	3.2
4572-3	James J Davis	TU	IL	IRR	3.43	240
4769-3	James Leheska	BL	LC	IRR	0.66	130
5504-3	Restlawn Memory Gardens	BD	CA	IRR	0.21	15
5657-3	Fish Lake Country Club	AU	IL	IRR	0.11	8
5703-3	Charles A Long	UN	LC	IRR	0.06	2
762-3	O L Bussmus Farms INC	DN	CA	IRR, FWP	0.28	28
5669-3	ICI Seed Company	LN	WI	IRR	0.23	60
5848-3	Lloyd Linke	SA	CA	IRR	0.1	7
2328-2	Michael Kirwan	GY	LC	IRR	0.22	31
5905-3	City of Groton	BN	LC	IRR	0.56	30
5947-3	Fish Lake Country Club	AU	LC	IRR	0.24	33
5994-3	Richard & Paula Verzani	UN	LC	IRR	0.053	3
6110-3	Dakota Dunes Comm Improvement District	UN	LC	IRR	0.12	11
5436-3	Huron Country Club	BD	WI	IRR	0	0
6256-3	Dakota Wesleyan University	DN	CA	IRR	0.19	37
6527-3	City of Beresford	UN	LC	IRR	0.53	37
6575-3	Dakota Alliance Soccer Club	LN	LC	IRR	0.016	15
2566-2	Chamberlain Country Club	LY	IL	IRR	0.33	104
6734-3	Avera Sacred Heart Health Services	YA	LC	IRR	0.73	11.9
3247-3	James Bondesen	TU	WI	IRR	0	0
7123-3	Harrisburg School District	LN	LC	IRR	0.14	30
7165-3	Paul M Buckneberg	TU	CA	IRR	1.78	240
7190-3	Randy & Valerie Svendsen & Sons	YA	CA	IRR	2.22	152
2566A-2	Chamberlain Country Club	LY	LC	IRR	0.33	63
7916-3	John H Thompson	UN	PE	IRR	0.56	150
7991-3	Anden Van Beek	LN	WI	IRR	2.66	480
8043-3	Robert P Walsh	CL	PE	IRR	4.23	391.9
1324-3	E E Tjomsland	DN	CA	IRR, FWP	2.2	408
8423-3	City of Platte	CM	PE	IRR	0.33	42
8510-3	TR Golf LLC	UN	PE	IRR	1.11	30
8781-3	City of Harrisburg	LN	PE	IRR	0.22	45.5
LC: Licensed Water Right; PE: Water Permit; IL: Incorporated License; CA: Cancelled; WI: Withdrawn; DOM: Domestic;						
FWP: Fish & Wildlife Propagation; IRR: Irrigation; AU: Aurora; BD: Beadle; BL: Brule; BN: Brown; CL: Clay; CM: Charles Mix; DN: Davison;						
GY: Gregory; LN: Lincoln; LY: Lyman; SA: Sanborn; TU: Turner; UN: Union; YA: Yankton						

CONCLUSIONS:

1. Water Permit Application No. 8828-3 proposes to divert water at a maximum instantaneous diversion rate of 3.56 cfs from two wells, one existing (completed into the Dakota aquifer) and one proposed well to be completed into the Dakota aquifer (approximately 494 feet deep) for the irrigation of 352 acres.
2. The licensing inspection for Water Permit No. 8043-3 determined the well to be located in the NE ¼ SE ¼ of Section 7 was not completed. A well completed into the Dakota

aquifer located into SE ¼ NW ¼ of Section 8 was identified. Water Permit No. 8043-3 is subject to cancellation due to non-construction since the well was completed in 2021 after expiration of the construction period on November 10, 2019. The site of interest is located in Clay County approximately four miles southeast of Centerville, SD.

3. Based on observation well data and the hydrologic budget, there is a reasonable probability that unappropriated water is available from the Dakota aquifer to supply the proposed appropriation.
4. There is a reasonable probability that the proposed diversion by Water Permit Application No. 8828-3 will not unlawfully impair adequate wells for existing water rights/permits and domestic users.
5. The quality of water from the Dakota aquifer may not be suitable for irrigation.
6. The new well (if approved) and any future replacement wells may not be constructed using the alternative well construction method defined in ARSD 74:02:04:35.
7. The Water Management Board concluded that in reference to SDCL 46-6-3.1, “withdrawals” applies only to water placed to beneficial use via appropriations or domestic use.
8. The Water Management Board’s position has been to optimize development for beneficial use from the Dakota aquifer.

Nakaila Steen

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

Reviewed by:

Adam Mathiowetz

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

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Water Rights, 2024d. Well Completion Reports, SD DANR-Water Rights Program, Joe Foss Bldg, Pierre, SD.

Water Rights, 2024e. County Files, SD DANR-Water Rights Program, Joe Foss Bldg, Pierre, SD.



**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.**

March 27, 2024

Robert P Walsh
47884 County Rd 1B
Elk Point SD 57025

Dear Mr. Walsh:

Water Permit Application No. 8828-3 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 Plain Talk printed in Vermillion SD (Ph # 605 624-2695) and the Daily Press & Dakotan printed in Yankton SD (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,

Rachel Rodriguez

Rachel Rodriguez
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. 8828-3 to Appropriate Water

Notice is given that Robert P. Walsh, 47884 County Rd 1B, Elk Point SD 57025 has filed an application for a water permit to appropriate 3.56 cubic feet of water per second from two wells, one existing Dakota Aquifer well, and a proposed well to be completed into the Dakota Aquifer (approximately 494 feet deep) located in the SE 1/4 NE 1/4 Section 7 (proposed well) and SE 1/4 NW 1/4 Section 8 (existing well) for irrigation of 352 acres located in the E 1/2 E 1/2, W 1/2 SE 1/4, SW 1/4 NE 1/4 Section 7, W 1/2 Section 8; all in T95N-R51W. This site is located approximately 4 miles southeast of Centerville SD.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 8828-3 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 April 15, 2024.

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

Any interested person may file a comment on the application with the Chief Engineer. The comment shall be filed on a form provided by the Chief Engineer and is available online at <https://danr.sd.gov/public> or by calling (605) 773-3352 or writing the Chief Engineer at the address provided above. Filing a comment does not make the commenter a party of record or a participant in any hearing that may be held. Any comment must be filed by April 15, 2024.

If the applicant does not contest the recommendation of the Chief Engineer and no petition to oppose the application is received, the Chief Engineer shall act on the application pursuant to the recommendation with no hearing held before the Water Management Board. If a petition opposing the application or contesting the recommendation is filed, then a hearing will be scheduled, and the Water Management Board will consider this application. Notice of the hearing will be given to the applicant and any person filing a petition.

Published once at the total approximate cost of_

Rodriguez, Rachel

From: Rodriguez, Rachel
Sent: Wednesday, March 27, 2024 3:37 PM
To: Kelly Kronaizl
Subject: 8828-3 Robert P Walsh - Public Notice
Attachments: 8828-3 public.short_final.docx; FORM8.FRM.doc

Attached is a notice to be published on April 5, 2024, in the Plain Talk and Daily Press & Dakotan.

Robert P. Walsh, 47884 County Rd 1B, Elk Point SD 57025, 605-670-0486 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 Ave, Pierre SD 57501.

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

Thank you,

Rachel Rodriguez
DANR | Program Assistant
Rachel.Rodriguez@state.sd.us



AFFIDAVIT OF PUBLICATION

YANKTON DAILY PRESS AND DAKOTAN

RECEIVED

APR 08 2024

OFFICE OF
WATER

ROBERT WALSH
47844 COUNTY RD 1 B
ELK POINT SD 57025

STATE OF SOUTH DAKOTA
COUNTY OF YANKTON

KELLY HERTZ, BEING FIRST DULY SWORN ON OATH DEPOSES
AND SAYS THAT (S)HE IS THE MANAGING EDITOR OF YANKTON
MEDIA INC, A CORPORATION, THE PRINTER AND THE PUBLISHER OF THE
YANKTON DAILY PRESS AND DAKOTAN, A LEGAL DAILY NEWSPAPER
PUBLISHED AND CIRCULATED IN THE CITY OF YANKTON, SAID COUNTY
AND STATE, AND ONE OF THE OFFICIAL NEWSPAPERS OF THE SAID
COUNTY OF FACTS STATED IN THIS AFFIDAVIT; THAT THE ANNEXED
NOTICE OF APPLICATION NO.

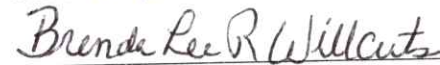
TAKEN FROM THE PAPER, IN WHICH IT WAS LAST PUBLISHED IN THE
NEWSPAPER ON THE 5th DAY OF April, 2024
THAT THE FULL AMOUNT OF THE FEE CHARGED FOR THE PUBLICATION
OF SAID NOTICE TO WIT \$40.96 ENSURES TO THE
BENEFITS OF THE PUBLISHER OF SAID NEWSPAPER AND THAT NO
AGREEMENT AND UNDERSTANDING FOR THE DIVISION 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: 04/05/2024

FILED ON: 04/05/24



SUBSCRIBED AND SWORN TO BEFORE ME THIS 5th DAY OF April, 2024



NOTARY PUBLIC, SOUTH DAKOTA
MY COMMISSION EXPIRES 12/15/2029



NOTICE OF APPLICATION NO. 8828-3 to Appropriate Water

Notice is given that Robert P. Walsh, 47884 County Rd 1B, Elk Point SD 57025 has filed an application for a water permit to appropriate 3.56 cubic feet of water per second from two wells, one existing Dakota Aquifer well, and a proposed well to be completed into the Dakota Aquifer (approximately 494 feet deep) located in the SE 1/4 NE 1/4 Section 7 (proposed well) and SE 1/4 NW 1/4 Section 8 (existing well) for irrigation of 352 acres located in the E 1/2 E 1/2, W 1/2 SE 1/4, SW 1/4 NE 1/4 Section 7, W 1/2 Section 8; all in T95N-R51W. This site is located approximately 4 miles southeast of Centerville SD.

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

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Published once at the total approximate cost of \$40.96 and can be viewed free of charge at www.sdpublicnotices.com

Published April 5, 2024.

AFFIDAVIT OF PUBLICATION

PLAIN TALK

RECEIVED

APR 08 2024

OFFICE OF
WATER

ROBERT P WALSH
47844 COUNTY RD 1B
ELK POINT SD 57025

STATE OF SOUTH DAKOTA
COUNTY OF CLAY

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THIS AFFIDAVIT; THAT THE ANNEXED
NOTICE OF APPLICATION NO.

TAKEN FROM THE PAPER, IN WHICH IT WAS LAST PUBLISHED IN THE
NEWSPAPER ON THE 5th DAY OF April, 2024
THAT THE FULL AMOUNT OF THE FEE CHARGED FOR THE PUBLICATION
OF SAID NOTICE TO WIT \$40.96 ENSURES TO THE
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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: 04/05/2024

FILED ON: 04/04/24



SUBSCRIBED AND SWORN TO BEFORE ME THIS 4th DAY OF April, 2024



NOTARY PUBLIC, SOUTH DAKOTA
MY COMMISSION EXPIRES 12/15/2029



NOTICE OF APPLICATION NO. 8828-3 to Appropriate Water

Notice is given that Robert P. Walsh, 47884 County Rd 1B, Elk Point SD 57025 has filed an application for a water permit to appropriate 3.56 cubic feet of water per second from two wells, one existing Dakota Aquifer well, and a proposed well to be completed into the Dakota Aquifer (approximately 494 feet deep) located in the SE 1/4 NE 1/4 Section 7 (proposed well) and SE 1/4 NW 1/4 Section 8 (existing well) for irrigation of 352 acres located in the E 1/2 E 1/2, W 1/2 SE 1/4, SW 1/4 NE 1/4 Section 7, W 1/2 Section 8; all in T95N-R51W. This site is located approximately 4 miles southeast of Centerville SD.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 8828-3 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 April 15, 2024.

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

Any interested person may file a comment on the application with the Chief Engineer. The comment shall be filed on a form provided by the Chief Engineer and is available online at <https://danr.sd.gov/public> or by calling (605) 773-3352 or writing the Chief Engineer at the address provided above. Filing a comment does not make the commenter a party of record or a participant in any hearing that may be held. Any comment must be filed by April 15, 2024.

If the applicant does not contest the recommendation of the Chief Engineer and no petition to oppose the application is received, the Chief Engineer shall act on the application pursuant to the recommendation with no hearing held before the Water Management Board. If a petition opposing the application or contesting the recommendation is filed, then a hearing will be scheduled, and the Water Management Board will consider this application. Notice of the hearing will be given to the applicant and any person filing a petition.

Published once at the total approximate cost of \$40.96 and can be viewed free of charge at www.sdpublicnotices.com

Published April 5, 2024.

Rodriguez, Rachel

From: Rodriguez, Rachel
Sent: Wednesday, March 27, 2024 3:41 PM
To: rpwalsh@vyn.midco.net
Subject: 8828-3 Robert P Walsh - Public Notice
Attachments: 8828-3 Rec.pdf; 8828-3 Ltr.pdf; 8828-3 PubNotice.pdf

Good afternoon,

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

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

Thank you,

Rachel Rodriguez
DANR | Program Assistant
Rachel.Rodriguez@state.sd.us





**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

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

APR 24 2024

Robert P. Walsh
47884 County Road 1B
Elk Point SD 57025

Dear Mr. Walsh:

Enclosed is Water Permit No. 8828-3 authorizing construction of the water diversion system and beneficial use of the water, not exceeding the limits as specified in the Water Permit.

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

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

Sincerely,

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

enclosures



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

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STATE OF SOUTH DAKOTA)
) SS
COUNTY OF HUGHES)

**Affidavit of Public Notice
Posting on DANR Website**

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

Application No.: 8828-3

Name of Applicant: Robert P Walsh

Date of Posting: 4/2/2024

Date of Removal: 4/24/2024



Ron Duvall, Engineer III

4/24/2024

Date

Subscribed and sworn to before me, a notary public, this 24th day of April, 2024.



Notary Public - South Dakota
My commission expires:
Rachel Rodriguez
My Commission Expires
May 16, 2029

(SEAL)



WATER RIGHTS PROGRAM -- FILE DOCUMENTATION

NAME & ADDRESS: Robert Walsh, 47884 County Rd 1B, Elk Point SD 57025

DATE: April 24, 2024

TELEPHONE: 605.670.0486

RE: Cancellation of 8043-3

COMMENTS:

Mr. Walsh holds Permit No. 8043-3, authorizing diversion from 2 wells for the irrigation of 391.9 acres located in the E ½ NE ¼ & E ½ SE ¼ Section 7 and the W ½ Section 8; all in T95N-R51W.

The date for all construction to be completed was November 10, 2019. Upon inspection, for the purpose of irrigation, it was found that Mr. Walsh did not have a well or irrigation in place until 2021 (see corresponding WCR).

Mr. Walsh applied for, and was issued, a new permit (No. 8828-3) to cover the entire irrigation project that was intended to be developed under 8043-3, as well as authorizing irrigation of additional acres.

I contacted Mr. Walsh via telephone on 4/24/24 to confirm that Permit No. 8828-3 had been approved and that our office now intended to proceed with the cancellation of Permit No. 8043-3 due to non-construction. He was agreeable to the cancellation.



Amanda Dewell
Water Rights Program