

WATER PERMIT NO. 8857-3

Name of Applicant: Jason & Kristy Liebe

Address: 520 S 1st Street, Milbank SD 57252

Phone: 605-467-1492

Amount of Water Claimed: 2.7 cfs

Total Acres: 189.61

Source of Water Supply: Groundwater

Water to be used for: Irrigation

County: Grant

Type of Waste Disposal System:

Location: Approx. 6 miles southeast of Milbank SD

PRIORITY Date Received: 04-11-24

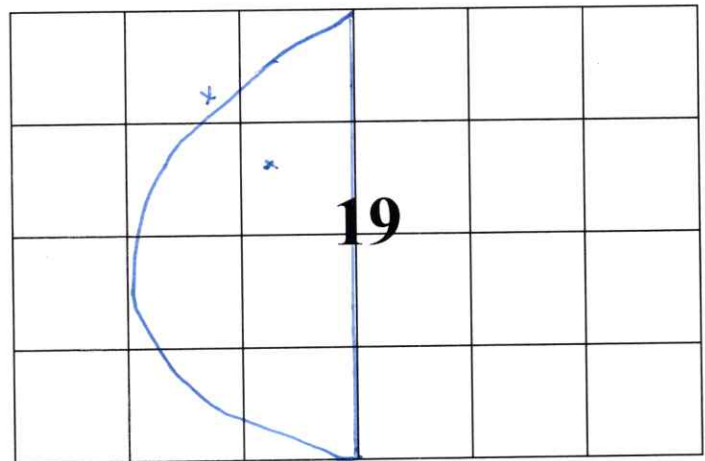
Application/License Fee: \$1,150.00

Corrected Application Received: 04-16-24

Period of Annual Use: April 1 – September 3-

Remarks: 2 wells

Diversion Point: NW 1/4 NW 1/4, SE 1/4 NW 1/4
Sec 19-T120N-R47W



Land to be Irrigated: W 1/2 Sec 19-T120N-R47W

Depth of Well: 54/50

Well Driller: Thein Well Co.

Remarks:

Type of Map: aerial

Reviewed and the Number Assigned on: 04-18-24

By: Rachel Rodriguez

Notice of Hearing - date to intervene: _____

SOUTH DAKOTA
WATER PERMIT NO. 8857-3

Date of first receipt of application April 11, 2024.

Date of return to applicant for corrections, amendments or changes April 11, 2024.

Date of receipt of corrected application November 6, 2024.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 8857-3 to Jason and Kristy Liebe, 520 S 1st Street, Milbank SD 57252, 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. 8857-3 appropriates 2.7 cubic feet of water per second from two wells completed into the Veblen Aquifer (47 and 49 feet deep) both located in the NW 1/4 NW 1/4 Section 19 for irrigation of 190 acres located in the W 1/2 Section 19; all in T120N-R47W. This site is located approximately six miles southeast of Milbank 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 November 6, 2024.
4. The date of approval of Permit No. 8857-3 is November 25, 2024.
5. One-fifth of the construction is to be completed on or before May 25, 2027.
6. All construction is to be completed on or before November 25, 2029.
7. Water is to be put to beneficial use on or before November 25, 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. 8857-3 are located near domestic wells and other wells which may obtain water from the same aquifer. Water withdrawals must 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 Water Management Board retains jurisdiction of Water Permit No. 8857-3 to manage use of water from this aquifer. Based on the historical average water use, unappropriated water is available. However, if the average use increases and begins to unlawfully impair senior water right holders or domestic water users with adequate wells, then curtailment of water use under this Permit may be necessary.
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

JAN 07 2025
date



4-8-24

Mail to: DENR - Water Rights 523 E Capitol Ave Pierre, SD 57501-3182 ph. (605) 773-3352	No. <u>8857-3</u> (office use only)
	Hydrologic Unit <u>07020001</u>
	Basin <u>Upper Minnesota</u>
	Newspaper <u>Milbank Grant Co. Review</u> <u>Watertown Public Opinion</u>

PAID

APR 11 2024

Ck# 2697

Rec't# _____

Application For Permit To Appropriate Water For Irrigation

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

(Use predates Mar 2, 1955)

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

1. Name to Appear on Irrigation Permit Jason + Kristy Liebe

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

 Mailing Address 520 S 1st St. Milbank SD 57252
 (Address) (City) (State) (Zip Code)

 Phone _____ Mobile 605-467-1492 Email liebefarms@gmail.com
 Jason

 2. Amount of water claimed 2.7 *CFS or Jason **GPM ***AF Total Acreage 190
 (*Cubic Feet per Second) (**Gallons per Minute) (***)Acre Feet - storage capacity of dam/dugout or annual use if applicable
3. Source of water supply wells - 2 of them (NW 1/4 NW 1/4)
 4. Location of point of diversion 2 wells SE 1/4 NW 1/4 Section 19 Twp 120 Rg 47
 (example - 3 wells in SW 1/4 NE 1/4 section 12-T104N-R53W)
County Grant5. County or counties where water will be used Grant6. Annual period during which water is to be used Growing Season Approx. April - 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
<u>W 1/2 Sec 19 - T120N - R47W</u>	<u>190</u>		

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

2 wells - Coming to test GPM April 2024, 189.61 Acres. See MAP. Please call
if questions 605-467-1492 - Jason

RECEIVED

APR 11 2024

OFFICE OF
WATER
 I, Jason S. Liebe, the applicant, certify under
 Name of Person Title (if applicable)

penalty of perjury that I have read this application, examined the attached map, and that the matters stated are true. I further certify, if acting on behalf of an entity or individual other than myself, that I am authorized to submit this application.

Supplemental Information

(type or print)

1. Well Information

(check one or both as applicable)



Drilling new well(s)



Using existing well(s)

See Attached Log

a) If new wells, how many 2 Have test holes been drilled ☒ Yes ☐ No Drilled by Thein Well Co.
 (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) ^{#1} 54'50" ^{#2} 19' Depth to Top of Water Bearing Material 19' *will update after wells installed* Depth to Water from Surface 19'

d) Distance to nearest domestic well on applicant's property N/A Property owned by others
use rural water

2. Wastewater Disposal System Information

a) Type of System (i.e. septic tank, drain field)

b) System Capacity (gallons) Year Constructed

c) Connected to the City of Sanitary System

3. Dugout Information

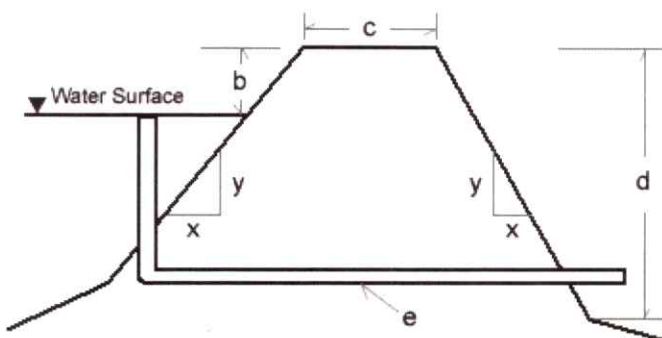
a) Surface Dimensions Depth

b) Depth to water (ground surface to water level)

4. Water Storage Dams

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

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



b) Freeboard

c) Crest Width

Crest Length

d) Height

e) Primary Outlet Capacity

If pipe, diameter

f) Secondary Spillway Capacity

Spillway Width

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

Upstream

Downstream

h) Surface Area of Impoundment

i) Storage Acre Feet

j) Drainage Area Above Dam Acres

Liebe Farms Sec 19 NW Qtr

Legend

RECEIVED

NOV 06 2024

OFFICE OF
WATER

48th Ave

8" 47" well 6/25/2024

TH # 7 119' 6/11/2024

TH # 6 121' 6/10/2024

TH # 1A 90' TH # 2A 56'

8" well 49' 9/18/2024

TH # 5 47' 5/30/2024

TH # 3 50'

8" well 45' depth 5/17/2024

49

TH # 2 55'

TH # 1 54'

Google Earth

Image © 2024 Airbus

N

800 ft

Design Detail & Summary

ZIMMATIC™
BY LINDSAY

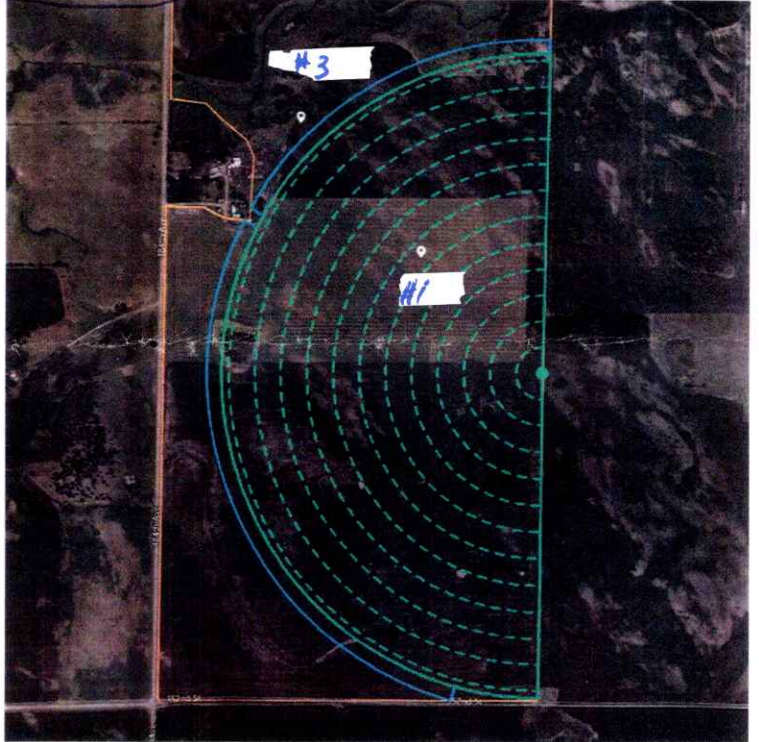
Prepared For:

Jason Liebe



System Name: 8500 no Corner

Span #	Diameter	Length	Cumulative Length
1	6 - 5/8" (168 mm)	180.17 ft	180.17 ft
2	6 - 5/8" (168 mm)	178.92 ft	359.08 ft
3	6 - 5/8" (168 mm)	178.92 ft	538.00 ft
4	6 - 5/8" (168 mm)	178.92 ft	716.92 ft
5	6 - 5/8" (168 mm)	178.92 ft	895.83 ft
6	6 - 5/8" (168 mm)	178.92 ft	1074.75 ft
7	6 - 5/8" (168 mm)	178.92 ft	1253.67 ft
8	6 - 5/8" (168 mm)	178.92 ft	1432.58 ft
9	6 - 5/8" (168 mm)	178.92 ft	1611.50 ft
10	6 - 5/8" (168 mm)	178.92 ft	1790.42 ft
11	6 - 5/8" (168 mm)	178.92 ft	1969.33 ft
12	6 - 5/8" (168 mm)	178.92 ft	2148.25 ft
Overhang:	5 - 9/16" (141 mm)	47.00 ft	2195.25 ft
End Gun:	-	3.00 ft	2198.25 ft



2 wells @ white markers.

Total System Length: 2198.25 ft
 Number of Spans: 12
 Available Outlet Count: 306
 Degree of Sweep: 181 degrees
 Endgun Throw: 100.00 ft
 System Wetted Area: 174.91 acres
 Corner Wetted Area: NA
 End Gun Wetted Area: 14.70 acres
Total Wetted Area: 189.61 acres

Center, Start, Stop Positions							
Center Position		Start Position		Stop Position		Angle Degree From North	
Lat	Long	Lat	Long	Lat	Long	Start	Stop
45.186192°	-96.507279°	45.180164°	-96.507370°	45.192219°	-96.507087°	180.6°	1.3°

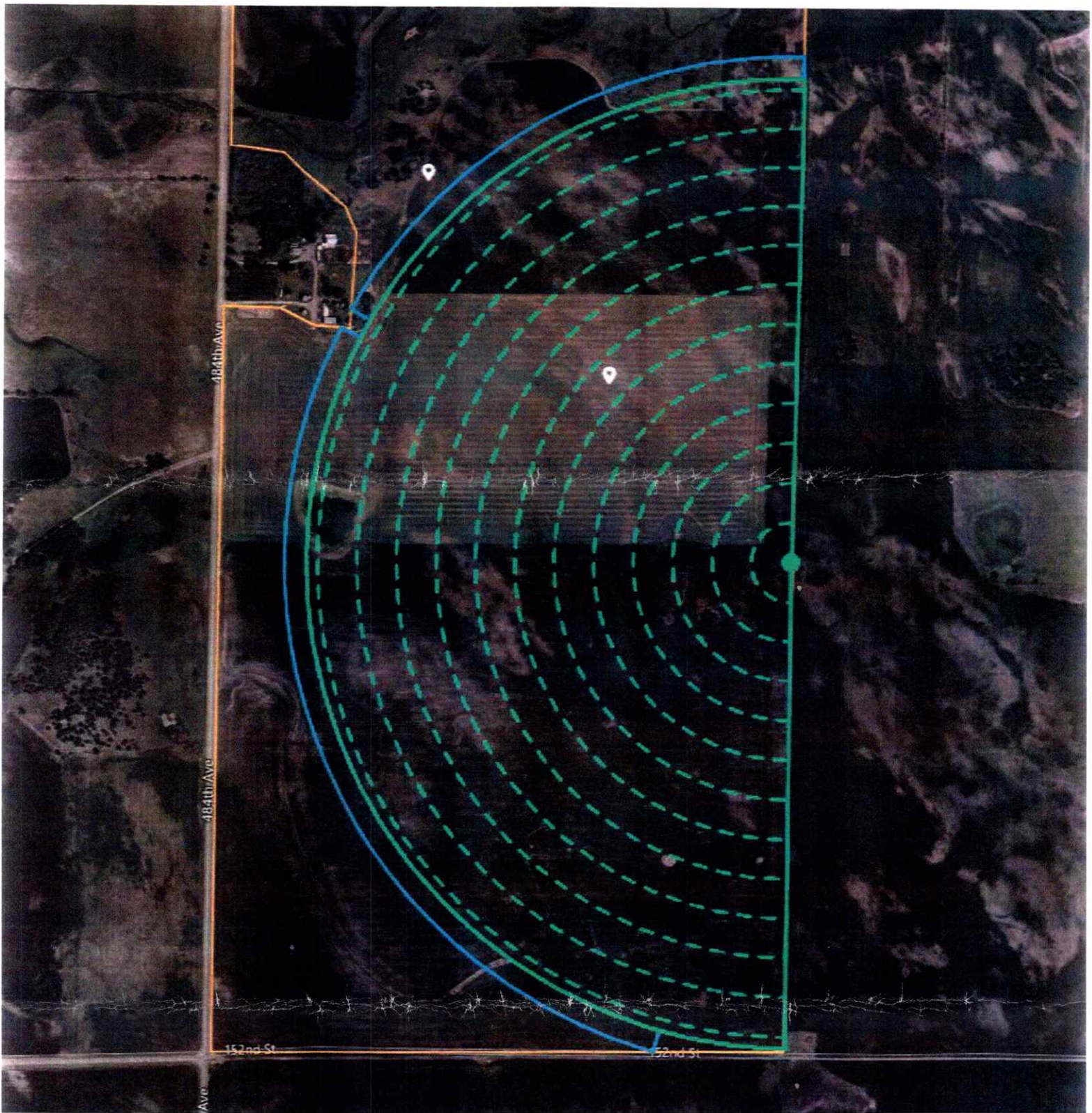
MIDWEST IRRIGATION & ELECTRIC INC.

552 Main St PO Box 36; Big Stone City, 57216-2179
 Office: 1 (605) 862-8149; Mobile: 1 (605) 595-3440
 Michael Pribbenow - mie.bigstone@gmail.com
 Miebstone.com

1/23/2024

Confidential

13 of 21



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Office: 1 (605) 862-8149; Mobile: 1 (605) 595-3440
Michael Pribbenow - mie.bigstone@gmail.com

Jason

LIEBE FARMS - MIELITZ FARM , MILBANK SD

Legend

TH

49

151st St

151st St

151st St

151st St

TH # 3 50'

LIEBE FARMS

TH # 2 55'
TH # 1 54'

484th Ave

Google Earth

N

1000 ft

120N 48W
Section: 12

120N 47W
Section: 07

120N 47W
Section: 08

120N 48W
Section: 13

120N 47W
Section: 18

120N 47W
Section: 17

07020001 Upper Minnesota

120N 48W
Section: 24

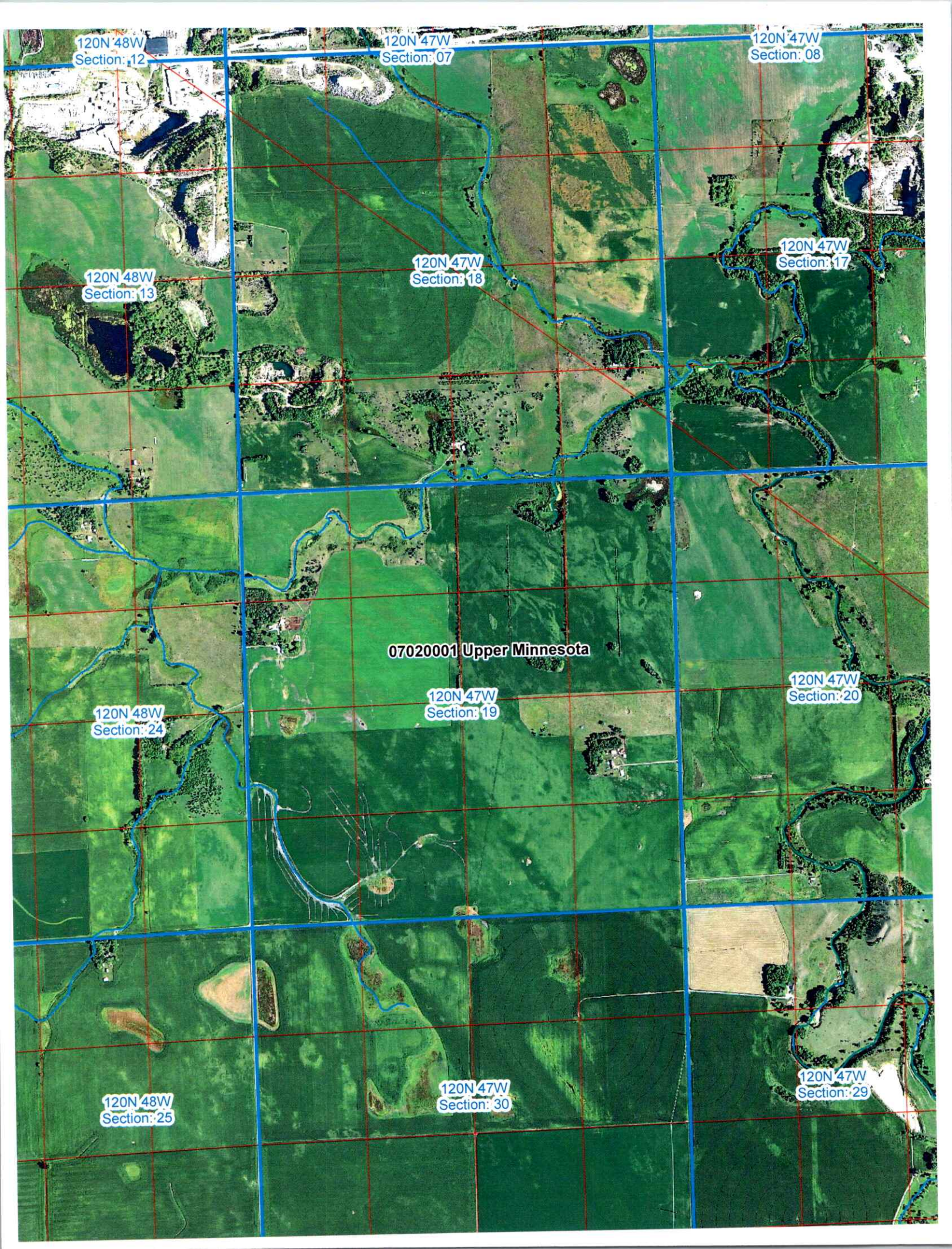
120N 47W
Section: 19

120N 47W
Section: 20

120N 48W
Section: 25

120N 47W
Section: 30

120N 47W
Section: 29



SOUTH DAKOTA WATER WELL COMPLETION REPORT

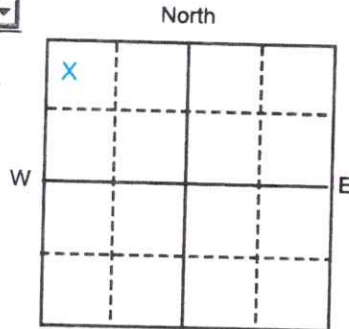
SD EForm - 1621LD V1

11-02

Location NW ¼ NW ¼ Sec 19 Twp 120 Rg 47

County GRANT ☐

Please mark well location with an "X"



Well Completion Date

7/15/2024

Distance to nearest potential pollution source (septic tank, abandoned well, feed lot, etc.)?
200 ft. from NORTH OF CREEK (identify source)

PROPOSED USE:

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

METHOD OF DRILLING:

MUD ROTARY

CASING DATA:

☐ Steel ☒ Plastic ☐ Other

PIPEWEIGHT DIAMETER FROM TO HOLE DIAMETER
LB/FT 8 IN 0 FT 27 FT 18 IN
LB/FT IN FT FT IN
LB/FT IN FT FT IN

GROUTING DATA:

Grout Type No. of Sacks Grout Weight From To
Bentonite 10 Lb/gal 0 Ft 22 Ft
 Lb/gal Ft Ft

Describe grouting procedure

TREMIE PIPED

SCREEN:

☐ Perforated pipe ☒ Manufactured
Diameter 8 Inches Length 20 Feet

Material STAINLESS STEEL

Slot Size .070 Set From 27 Feet to 47 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?

Lab to which water ☒ No, Why Not?

quality sample sent for analysis

IRRIGATION ONLY

Well Owner: JASON LIEBE

Business Name: LIEBE FARMS

Address: 520 S 1ST STREET

City, State, Zip: MILBANK ☐ SD ☐ 57525

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
TOP SOIL	0	5
COARSE SAND AND GRAVEL	5	46
SHALE	46	47

STATIC WATER LEVEL 10 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: AIRLIFTED

☐ Bailed

☒ Other

Pumping Level Below Land Surface

26 Ft. After 11 Hrs. pumped 560 GPM

 Ft. After Hrs. pumped GPM

If pump installed, pump rate: GPM

REMARKS

North Well 8" WELL GPS: N 45.19235824 W 96.51701479

This well was drilled under license # 475 and this report is true and accurate.

Drilling firm: THEIN WELL COMPANY, INCORPORATED

Signature of License Representative:

Michael Thein

Signature of Well Owner or Equitable Property Holder:

RECEIVED

Date:

NOV 06 2024

OFFICE OF
WATER

Location NW $\frac{1}{4}$ NW $\frac{1}{4}$ Sec 19 Twp 120 Rg 47

North

A 4x4 grid with dashed lines. The top-left cell contains a blue 'X'. The left side is labeled 'W' and the right side is labeled 'E'.

9/18/2024

1 Mile

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

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

MUD ROTARY

☐ Steel ☒ Plastic ☐ Other
If other describe _____

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
LB/FT	8 IN	0 FT	29 FT	12.5 IN
LB/FT	IN	FT	FT	IN
LB/FT	IN	FT	FT	IN

Grout Type	No. of Sacks	Grout Weight	From	To
BENTONITE	4	Lb/gal	0 Ft	25 Ft
		Lb/gal	Ft	Ft

TREMIE PIPED

Diameter 8 Inches Length 20 Feet
 Material STAINLESS STEEL
 Slot Size .870 Set From 29 Feet to 49 Feet
 Other information _____

If so, what material?

Describe packer(s) and location

☐ Yes, How?

Lab to which water ☒ No.
quality sample sent for analysis

City, State, Zip: MILBANK SD 57525

[illegible]

If flowing: closed in pressure

If flowing: closed in pressure PSI

GPM flow _____ through _____ Inch pipe

Controlled by ☐ Valve ☐ Reducers ☐ Other

Reduced flow rate	GPM
100	100
90	90
80	80
70	70
60	60
50	50
40	40
30	30
20	20
10	10
5	5
2	2
1	1

Can well be completely shut in?

☒ Pumped Describe:☐ Bailed☐ Other

Pumping Level Below Land Surface

22' 9" Ft. After 4 Hrs. pumped 400 GPM

	Ft. After	Hrs. pumped	GPM
1	10.0	10	100
2	10.0	20	100
3	10.0	30	100
4	10.0	40	100
5	10.0	50	100
6	10.0	60	100
7	10.0	70	100
8	10.0	80	100
9	10.0	90	100
10	10.0	100	100
11	10.0	110	100
12	10.0	120	100
13	10.0	130	100
14	10.0	140	100
15	10.0	150	100
16	10.0	160	100
17	10.0	170	100
18	10.0	180	100
19	10.0	190	100
20	10.0	200	100
21	10.0	210	100
22	10.0	220	100
23	10.0	230	100
24	10.0	240	100
25	10.0	250	100
26	10.0	260	100
27	10.0	270	100
28	10.0	280	100
29	10.0	290	100
30	10.0	300	100
31	10.0	310	100
32	10.0	320	100
33	10.0	330	100
34	10.0	340	100
35	10.0	350	100
36	10.0	360	100
37	10.0	370	100
38	10.0	380	100
39	10.0	390	100
40	10.0	400	100
41	10.0	410	100
42	10.0	420	100
43	10.0	430	100
44	10.0	440	100
45	10.0	450	100
46	10.0	460	100
47	10.0	470	100
48	10.0	480	100
49	10.0	490	100
50	10.0	500	100
51	10.0	510	100
52	10.0	520	100
53	10.0	530	100
54	10.0	540	100
55	10.0	550	100
56	10.0	560	100
57	10.0	570	100
58	10.0	580	100
59	10.0	590	100
60	10.0	600	100
61	10.0	610	100
62	10.0	620	100
63	10.0	630	100
64	10.0	640	100
65	10.0	650	100
66	10.0	660	100
67	10.0	670	100
68	10.0	680	100
69	10.0	690	100
70	10.0	700	100
71	10.0	710	100
72	10.0	720	100
73	10.0	730	100
74	10.0	740	100
75	10.0	750	100
76	10.0	760	100
77	10.0	770	100
78	10.0	780	100
79	10.0	790	100
80	10.0	800	100
81	10.0	810	100
82	10.0	820	100
83	10.0	830	100
84	10.0	840	100
85	10.0	850	100
86	10.0	860	100
87	10.0	870	100
88	10.0	880	100
89	10.0	890	100
90	10.0	900	100
91	10.0	910	100
92	10.0	920	100
93	10.0	930	100
94	10.0	940	100
95	10.0		

If pump installed, pump rate: _____ GPM

SOUTH WELL GPS N 45 11.5071 W 96 30.9915

This well was drilled under license # 475 and this report is true and accurate.

Drilling firm: **THEIN WELL COMPANY, INCORPORATED**

Signature of License Representative:

Michael Rhein

Signature of Well Owner or Equitable Property Holder:

Date:

~~RECEIVED~~

NOV 06 2024

OFFICE OF
WATER

SOUTH DAKOTA WATER WELL COMPLETION REPORT

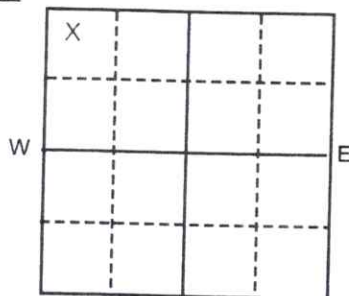
11-02

Location NW ¼ NW ¼ Sec 19 Twp 120 Rg 47

County GRANT

North

Please mark well location with an "X"



Well Completion Date

9/16/2024

1 Mile

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

PROPOSED USE:

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

METHOD OF DRILLING:

MUD ROTARY

CASING DATA:

If other describe ☐ Steel ☐ Plastic ☐ Other

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
LB/FT	IN	FT	9 FT	4.25 IN
LB/FT	IN	FT	FT	IN
LB/FT	IN	FT	FT	IN

GROUTING DATA:

Grout Type	No. of Sacks	Grout Weight	From	To
BENTONITE	4	Lb/gal	0 Ft	90 Ft
		Lb/gal	Ft	Ft

Describe grouting procedure

TREMIE PIPED

SCREEN:

☐ Perforated pipe ☐ Manufactured
 Diameter _____ Inches Length _____ Feet

Material _____

Slot Size _____ Set From _____ Feet to _____ Feet

Other information _____

WAS A PACKER OR SEAL USED?

☐ Yes ☐ No

If so, what material? _____

Describe packer(s) and location _____

DISINFECTION:

Was well disinfected upon completion?

☐ Yes, How? _____☒ No, Why Not? _____

Lab to which water quality sample sent for analysis _____

TEST HOLE

Well Owner: JASON LIEBE

Business Name: LIEBE FARMS

Address: 520 S 1ST ST

City, State, Zip: MILBANK SD 57525

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
BLACK TOP SOIL	0	1
MED-COARSE SAND	1	35
GRAVEL	35	45
BLUE CLAY	45	90
BEDROCK	90	

STATIC WATER LEVEL

FEET

If flowing: closed in pressure _____ PSI

GPM flow _____ through _____ Inch pipe

Controlled by ☐ Valve ☐ Reducers ☐ Other _____

Reduced flow rate _____ GPM

Can well be completely shut in? _____

WELL TEST DATA:

☐ Pumped Describe: _____☐ Bailed☐ Other

Pumping Level Below Land Surface

_____ Ft. After _____ Hrs. pumped _____ GPM

_____ Ft. After _____ Hrs. pumped _____ GPM

If pump installed, pump rate: _____ GPM

REMARKS

TH 1A GPS N 45 11.5704 W 96 30.98668

This well was drilled under license # 475 and this report is true and accurate.

Drilling firm: THEIN WELL COMPANY, INCORPORATED

Signature of License Representative:

Signature of Well Owner or Equitable Property Holder:

Date:

RECEIVED

NOV 06 2024

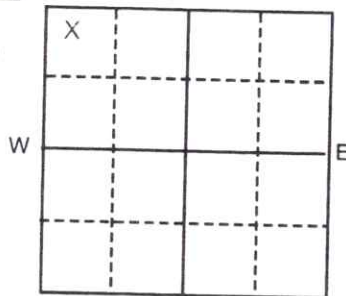
OFFICE OF
WATER

SOUTH DAKOTA WATER WELL COMPLETION REPORT

11-02

Location NW ¼ NW ¼ Sec 19 Twp 120 Rg 47County GRANT ☐

North

Please mark well
location with an "X"

Well Completion Date

9/18/2024

1 Mile

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

PROPOSED USE:

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

METHOD OF DRILLING:

MUD ROTARY

CASING DATA:

☐ Steel ☐ Plastic ☐ Other
 If other describe _____

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
LB/FT	IN	FT	FT	4.25 IN
LB/FT	IN	FT	FT	IN
LB/FT	IN	FT	FT	IN

GROUTING DATA:

Grout Type	No. of Sacks	Grout Weight	From	To
BENTONITE	3	Lb/gal	0 Ft	56 Ft
		Lb/gal	Ft	Ft

Describe grouting procedure

TREMIE PIPED

SCREEN:

☐ Perforated pipe ☐ Manufactured
 Diameter _____ Inches Length _____ Feet
 Material _____
 Slot Size _____ Set From _____ Feet to _____ Feet
 Other information _____

WAS A PACKER OR SEAL USED?

☐ Yes ☐ No

If so, what material? _____

Describe packer(s) and location _____

DISINFECTION:

Was well disinfected upon completion?

☐ Yes, How? _____☒ No, Why Not? _____Lab to which water
quality sample sent for analysis

TEST HOLE

Well Owner: JASON LIEBEBusiness Name: LIEBE FARMSAddress: 520 S 1ST STCity, State, Zip: MILBANK ☐ SD ☐ 57525

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
BLACK TOP SOIL	0	4
MED-COARSE SAND & GRAVEL	4	49
BLUE CLAY	49	56

STATIC WATER LEVEL

 If flowing: closed in pressure _____ FEET
 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

TH 2A GPS N 45 11.5071 W 96 30.9915

This well was drilled under license # 475 and this report is true and accurate.Drilling firm: THEIN WELL COMPANY, INCORPORATED

Signature of License Representative:

Michael Thein

Signature of Well Owner or Equitable Property Holder:

RECEIVED

Date: _____

NOV 06 2024

OFFICE OF
WATER

SOUTH DAKOTA WATER WELL COMPLETION REPORT

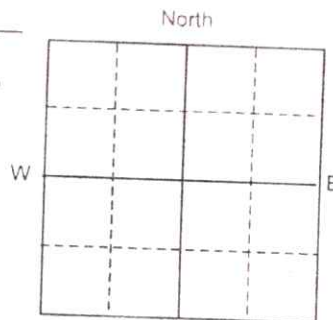
SD EForm - 1621LD V1

11-02

Location SE 1/4 NW 1/4 Sec 19 Twp 120 Rg 47

County GRANT

Please mark well location with an "X"



Well Completion Date

6/9/2023

1 Mile

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

PROPOSED USE:

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

METHOD OF DRILLING:

MUD ROTARY

CASING DATA:

If other describe ☐ Steel ☐ Plastic ☐ Other

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

GROUTING DATA:

Grout Type	No. of Sacks	Grout Weight	From	To
<u>BENTONITE</u>	<u>3</u>	Lb/gal	<u>0</u> Ft	<u>54</u> Ft
		Lb/gal		

Describe grouting procedure
TREMMIE PIPED

SCREEN:

☐ Perforated pipe ☐ Manufactured
Diameter _____ Inches Length _____ Feet
Material _____
Slot Size _____ Set From _____ Feet to _____ Feet
Other information _____

WAS A PACKER OR SEAL USED?

☐ Yes ☐ No
If so, what material? _____
Describe packer(s) and location _____

DISINFECTION: Was well disinfected upon completion?

☐ Yes, How? _____
☒ No, Why Not? TEST HOLE ONLY
Lab to which water quality sample sent for analysis _____

Well Owner: JASON LIEBE

Business Name: LIEBE FARMS

Address: 520 S 1ST STREET

City, State, Zip: MILBANK SD 57525

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
BLACK DIRT	0	1
YELLOW CLAY	1	4
SAND AND GRAVEL	4	26
ROCK	26	
ROCKS AND GRAVEL	26	32
ROCK	32	
BLUE CLAY	32	54
BEDROCK GRANITE	54	

STATIC WATER LEVEL

FEET
If flowing closed in pressure _____ PSI
GPM flow _____ through _____ Inch pipe
Controlled by ☐ Valve ☐ Reducers ☐ Other _____
Reduced flow rate _____ GPM
Can well be completely shut in?

WELL TEST DATA:

☐ Pumped Describe:
☐ Bailed
☐ Other
Pumping Level Below Land Surface
_____ Ft. After _____ Hrs. pumped _____ GPM
_____ Ft. After _____ Hrs. pumped _____ GPM
If pump installed, pump rate: _____ GPM

REMARKS

GPS N 45.188930838 W 96.510881473

TH #1

This well was drilled under license # 475 and this report is true and accurate.

Drilling firm: Thein Well Co., Inc.

Signature of License Representative:

[Signature]

Signature of Well Owner or Equitable Property Holder

Date: _____

SOUTH DAKOTA WATER WELL COMPLETION REPORT

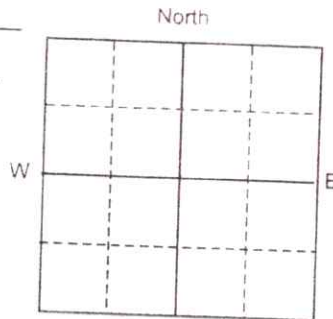
SD EForm - 1621LD V1

11-02

Location SE $\frac{1}{4}$ NW $\frac{1}{4}$ Sec 19 Twp 120 Rg 47

County GRANT

Please mark well location with an "X"



Well Completion Date

6/9/2023

1 Mile

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

PROPOSED USE:

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

METHOD OF DRILLING:

MUD ROTARY

CASING DATA:

If other describe ☐ Steel ☐ Plastic ☐ Other

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

GROUTING DATA:

Grout Type No. of Sacks Grout Weight From To
BENTONITE 3 0 Ft 54 Ft
Lb/gal Lb/gal

Describe grouting procedure

TREMMIE PIPED

SCREEN:

☐ Perforated pipe ☐ Manufactured
Diameter _____ Inches Length _____ Feet
Material _____
Slot Size _____ Set From _____ Feet to _____ Feet
Other information _____

WAS A PACKER OR SEAL USED?

☐ Yes ☐ No
If so, what material? _____
Describe packer(s) and location _____

DISINFECTION: Was well disinfected upon completion?

☐ Yes, How? _____
☒ No, Why Not? **TEST HOLE ONLY**
Lab to which water quality sample sent for analysis _____

Well Owner: JASON LIEBE

Business Name: LIEBE FARMS

Address: 520 S 1ST STREET

City, State, Zip: MILBANK SD 57525

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
BLACK DIRT	0	1
YELLOW CLAY	1	11
BLUE CLAY	11	40
ROCK	40	
BLUE CLAY	40	55
BEDROCK AND GRANITE	55	

STATIC WATER LEVEL

_____ FEET
If flowing, closed in pressure _____ PSI
GPM flow _____ through _____ Inch pipe
Controlled by ☐ Valve ☐ Reducers ☐ Other _____
Reduced flow rate _____ GPM
Can well be completely shut in?

WELL TEST DATA:

☐ Pumped Describe: _____
☐ Bailed
☐ Other
Pumping Level Below Land Surface
_____ Ft. After _____ Hrs pumped _____ GPM
_____ Ft. After _____ Hrs pumped _____ GPM
If pump installed, pump rate: _____ GPM

REMARKS

GPS N 45.18897735 W 96.512244148

TH #2

This well was drilled under license # 475 and this report is true and accurate.

Drilling firm: Thein Well Co., Inc.

Signature of Licensee Representative: _____

Signature of Well Owner or Equitable Property Holder: _____

Date: _____

SOUTH DAKOTA WATER WELL COMPLETION REPORT

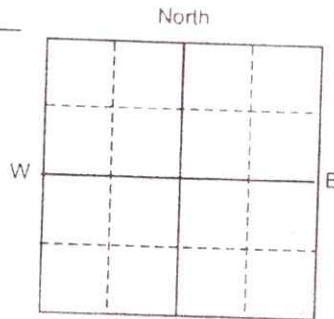
SD EForm - 1621LD V1

11-02

Location NW 1/4 NW 1/4 Sec 19 Twp 120 Rg 47

County GRANT

Please mark well location with an "X"



Well Completion Date

6/9/2023



Distance to nearest potential pollution source (septic tank, abandoned well, feed lot, etc.):
300 ft. from CREEK (identify source)

PROPOSED USE:

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

METHOD OF DRILLING:

MUD ROTARY

CASING DATA:

If other describe ☐ Steel ☐ Plastic ☐ Other

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

GROUTING DATA:

Grout Type	No. of Sacks	Grout Weight	From	To
<u>BENTONITE</u>	<u>3</u>	Lb/gal	<u>0</u> Ft	<u>54</u> Ft
		Lb/gal	Ft	Ft

Describe grouting procedure
TREMMIE PIPED

SCREEN:

☐ Perforated pipe ☐ Manufactured
Diameter _____ Inches Length _____ Feet
Material _____
Slot Size _____ Set From _____ Feet to _____ Feet
Other information _____

WAS A PACKER OR SEAL USED?

☐ Yes ☐ No
If so, what material? _____
Describe packer(s) and location _____

DISINFECTION:

Was well disinfected upon completion?

☐ Yes, How? _____
☒ No, Why Not? _____
Lab to which water quality sample sent for analysis _____

TEST HOLE ONLY

Well Owner: JASON LIEBE

Business Name: LIEBE FARMS

Address: 520 S 1ST STREET

City, State, Zip: MILBANK SD 57525

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
BLACK DIRT	0	1
SAND, GRAVEL W/ ROCK	1	25
BLUE / WHITE SAND & GRAVEL	25	31
ROCK / BOULDER	31	32
COARSE GRAVEL W/ CLAY LENSE	32	36
BOULDER	36	
SAND	36	41
ROCK@ 41 SAND	41	45
BLUE CLAY	45	50

STATIC WATER LEVEL

FEET _____
If flowing: closed in pressure _____ PSI
GPM flow _____ through _____ inch pipe
Controlled by ☐ Valve ☐ Reducers ☐ Other _____
Reduced flow rate _____ GPM
Can well be completely shut in? _____

WELL TEST DATA:

☐ Pumped Describe: _____
☐ Bailed
☐ Other
Pumping Level Below Land Surface
_____ Ft. After _____ Hrs. pumped _____ GPM
_____ Ft. After _____ Hrs. pumped _____ GPM
If pump installed, pump rate: _____ GPM

REMARKS

GPS N 45.190876973 W 96.513907704

TH#3

This well was drilled under license # 475 and this report is true and accurate.

Drilling firm: Thein Well Co., Inc.

Signature of License Representative: _____

Signature of Well Owner or Equitable Property Holder: _____

Date: _____

RECEIPT

WATER RIGHTS PROGRAM South Dakota Department of Agriculture and Natural Resources

Date April 11, 2024

RECEIVED OF Jason/Kristy Liebe 520 S 1st Street Milbank SD 57252

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

Fee for Application for Permit No. <u>8857-3</u> to Appropriate Water, to construct and to put water to beneficial use	\$ <u>950.00</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. <u>8857-3</u>	\$ <u>100.00</u>
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>1050.00</u>

By Eric Gronlund
Chief Engineer
EG

RECEIPT

WATER RIGHTS PROGRAM South Dakota Department of Agriculture and Natural Resources

Date April 16, 2024

RECEIVED OF Jason & Kristy Liebe 520 S 1st Street Milbank SD 57252

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

Fee for Application for Permit No. <u>8857-3</u> to Appropriate Water, to construct and to put water to beneficial use	\$_____
Fee for Application for Permit No. _____ to Appropriate Water for Future use	\$_____
Fee to retain Future Use Permit No. _____ after period of seven years.	\$_____
Fee for Inspecting Constructed Works, confirming beneficial use and issuing Water License No. <u>8857-3</u>	\$ <u>100.00</u>
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>100.00</u>

By Eric Gronlund
Chief Engineer *th*

**Water Rights Program
File Documentation**

NAME OF PERSON OR FILE: Liebe Farms c/o Jason Liebe

DATE: Nov. 7, 2024 EMAIL: liebefarms@gmail.com

RE: Amend application for production well location

COMMENTS:

On Nov. 6, 2024, we received well completion reports for two 8" irrigation wells completed for Liebe Farms by Thein Well Drilling. Both of the wells are completed into the NW ¼ NW ¼ Sec. 19-T120N-R47W. The original application stated one well was to be completed into the NW ¼ NW ¼ Sec. 19 and one well was to be completed into the SE ¼ NW ¼ Se. 19. Mr. Liebe agreed to amend the permit application to account for the final production well locations (see attached email).



Adam Mathiowetz
Natural Resources Engineer
DANR-Water Rights Program

Mathiowetz, Adam (DENR)

From: Jason Liebe <liebefarms@gmail.com>
Sent: Thursday, November 7, 2024 11:05 AM
To: Mathiowetz, Adam (DENR)
Subject: Re: [EXT] Voice Mail (5 minutes)

Please call me if you have any questions. 605-467-1492, Thank you for your help..

On Thu, Nov 7, 2024 at 11:04 AM Jason Liebe <liebefarms@gmail.com> wrote:
Yes, please do.

On Wed, Nov 6, 2024 at 12:17 PM Mathiowetz, Adam (DENR) <Adam.Mathiowetz@state.sd.us> wrote:

Jason,

Follow up question. The completion reports for the two 8" wells are in the NW $\frac{1}{4}$ NW $\frac{1}{4}$.

Are these wells to be your production wells?

If yes, do we have your permission to amend the application to reflect this change from 1 well located in the SE $\frac{1}{4}$ NW $\frac{1}{4}$ and 1 well located in the NW $\frac{1}{4}$ NW $\frac{1}{4}$ to saying 2 wells in the NW $\frac{1}{4}$ NW $\frac{1}{4}$?



Adam Mathiowetz, PE

Engineer, Water Rights Program

Department of Agriculture and Natural Resources

523 E. Capitol Ave. Pierre SD, 57501

605.773.3352

danr.sd.gov

From: Mathiowetz, Adam (DENR)
Sent: Wednesday, November 6, 2024 10:03 AM
To: liebefarms@gmail.com
Cc: Dewell, Amanda <Amanda.Dewell@state.sd.us>
Subject: RE: Voice Mail (5 minutes)

Jason,

Amanda Dewell forwarded an issue receiving your well completion report information. I called Thein Well Drilling and they are sending me copies directly.



Adam Mathiowetz, PE

Engineer, Water Rights Program

Department of Agriculture and Natural Resources

523 E. Capitol Ave. Pierre SD, 57501

605.773.3352

danr.sd.gov

From: Dewell, Amanda <Amanda.Dewell@state.sd.us>
Sent: Wednesday, November 6, 2024 8:11 AM
To: Mathiowetz, Adam (DENR) <Adam.Mathiowetz@state.sd.us>
Subject: FW: Voice Mail (5 minutes)

Adam,

Jason Liebe w/ Liebe Farms has well completion reports for the test holes drilled in response to your email to him dated June 5th. Currently the application is on hold pending the receipt of these. My email is blocking all his attempts to send what he has. Do you think you could assist him and review what he has to see if it's enough to proceed with his application?

Mathiowetz, Adam (DENR)

From: Jason Liebe <liebefarms@gmail.com>
Sent: Wednesday, June 5, 2024 11:49 AM
To: Mathiowetz, Adam (DENR)
Subject: Re: [EXT] holding application pending further drilling

June 5, 2024

Yes please hold my application as per our conversation. I will update you as soon as possible. When we locate a good source of water. Thanks for your help.

Jason Liebe
605-467-1492

On Wed, Jun 5, 2024 at 10:46 AM Mathiowetz, Adam (DENR) <Adam.Mathiowetz@state.sd.us> wrote:

Jason,

Per our June 5, 2024 phone conversation, please confirm that you would like the Water Rights Program to stop reviewing and put on hold your irrigation application pending further test hole drilling and testing of encountered aquifer materials. The application proposes to irrigate 190 acres located in the W ½ Section 19-T120N-R47W.

As I stated on the phone, the aquifer materials from approximately 50 to 100 feet deep at your location would be considered the Veblen aquifer. We are currently reviewing your application for that depth based on the test holes you submitted with your application.

However, there is potentially a slightly deeper aquifer around 150 feet deep at your location. At this time, we believe the deeper aquifer is likely a separate aquifer than the Veblen aquifer and would need to be reviewed independently from your current application.

If you have any questions on the aquifer or wells, feel free to contact me. If you have questions permitting or application process, please contact Amanda Dewell.

Rodriguez, Rachel

From: Rodriguez, Rachel
Sent: Thursday, April 11, 2024 2:37 PM
To: liebefarms@gmail.com
Subject: Water Permit Application

Good afternoon,

I am in receipt of your water permit application. Everything looks good however, you are short on your application fee by \$100.00. Once I receive the additional money, I can begin processing your application.

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

**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 8857-3, Jason & Kristy Liebe**

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. 8857-3, Jason & Kristy Liebe, 520 S 1st Street, Milbank SD 57252.

The Chief Engineer is recommending APPROVAL of Application No. 8857-3 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. 8857-3 are located near domestic wells and other wells which may obtain water from the same aquifer. Water withdrawals must 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 Water Management Board retains jurisdiction of Water Permit No. 8857-3 to manage use of water from this aquifer. Based on the historical average water use, unappropriated water is available. However, if the average use increases and begins to unlawfully impair senior water right holders or domestic water users with adequate wells, then curtailment of water use under this Permit may be necessary.
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
November 7, 2024

REPORT TO THE CHIEF ENGINEER
ON
WATER PERMIT APPLICATION NO. 8857-3
JASON AND KRISTY LIEBE
NOVEMBER 07, 2024

Water Permit Application No. 8857-3 proposes to irrigate 190 acres at a maximum instantaneous diversion rate of 2.7 cubic feet of water per second (cfs) from two wells (47 and 49 feet deep) completed into the Veblen aquifer. The land to be irrigated is located in the W ½ Section 19 and the wells located in the NW ¼ NW ¼ Section 19; all in T120N-R47W. This site is located approximately six miles southeast of Milbank, SD.

AQUIFER: Veblen (VEB)

Aquifer Characteristics:

Historically, several of the various saturated Quaternary aged glacial outwash deposits underlying portions of northeastern South Dakota have been considered the “Veblen aquifer” (Buhler, 2007). The Veblen aquifer is a group of generally buried outwash deposits underlying portions of Roberts, Grant, and Deuel Counties, South Dakota, and Big Stone, Swift, and Lac Qui Parle Counties, Minnesota (Buhler, 2016). Hansen (1990) defined approximate aquifer boundaries for the Veblen aquifer in Grant County. In a subsequent hydrologic investigation, Barr Engineering (2007) suggested Hansen (1990) may have overestimated the areal extent of the aquifer in Grant County and showed that it extends north into Roberts County. Thompson (2001) mapped the Veblen aquifer starting in northwestern Roberts County and extending southeasterly. However, all mappings indicate there is likely a hydrologic or physical separation or at the very least a significant constriction of aquifer materials between a northern and southern portion of the aquifer somewhere between Wilmot and Peever, approximately 10 to 15 miles north into Roberts County from its southern border. Figure 1 is a map depicting the three primary delineations of the Veblen aquifer mentioned above.

Currently, the DANR-Geological Survey Program is conducting a study of the Veblen, Revillo, and Wilmot aquifers in Grant and Roberts Counties. This study is not complete but preliminary data suggest the hydrologic separation in the Veblen aquifer, as shown in Figure 1 by the Thompson (2001) and Barr (2007) aquifer delineations, is very likely. Therefore, the approximate aquifer boundaries will change. The southern and northern portions of the Veblen aquifer are expected to be recognized as hydrologically separate and distinct aquifers. Aquifer names for the various water rights/permits will be updated accordingly. This aquifer designation change does not constitute a physical change in the water source, a change in diversion rate, or appropriation by these permits. This would be done to accurately represent the water source the various water rights/permits are withdrawing water from based on the best information available. The well sites for this application are located in the southern portion, Hansen (1990) and Barr (2007), areas of the Veblen aquifer. The approximate areal extents of the South Dakota portions of each delineations are shown in Table 1.

Table 1- Approximate areal extent of Veblen aquifer delineations in South Dakota

Delineation	Hansen, 1990	Thompson, 2001	Barr, 2007
Area in South Dakota (Acres)	206,660	148,760	246,525

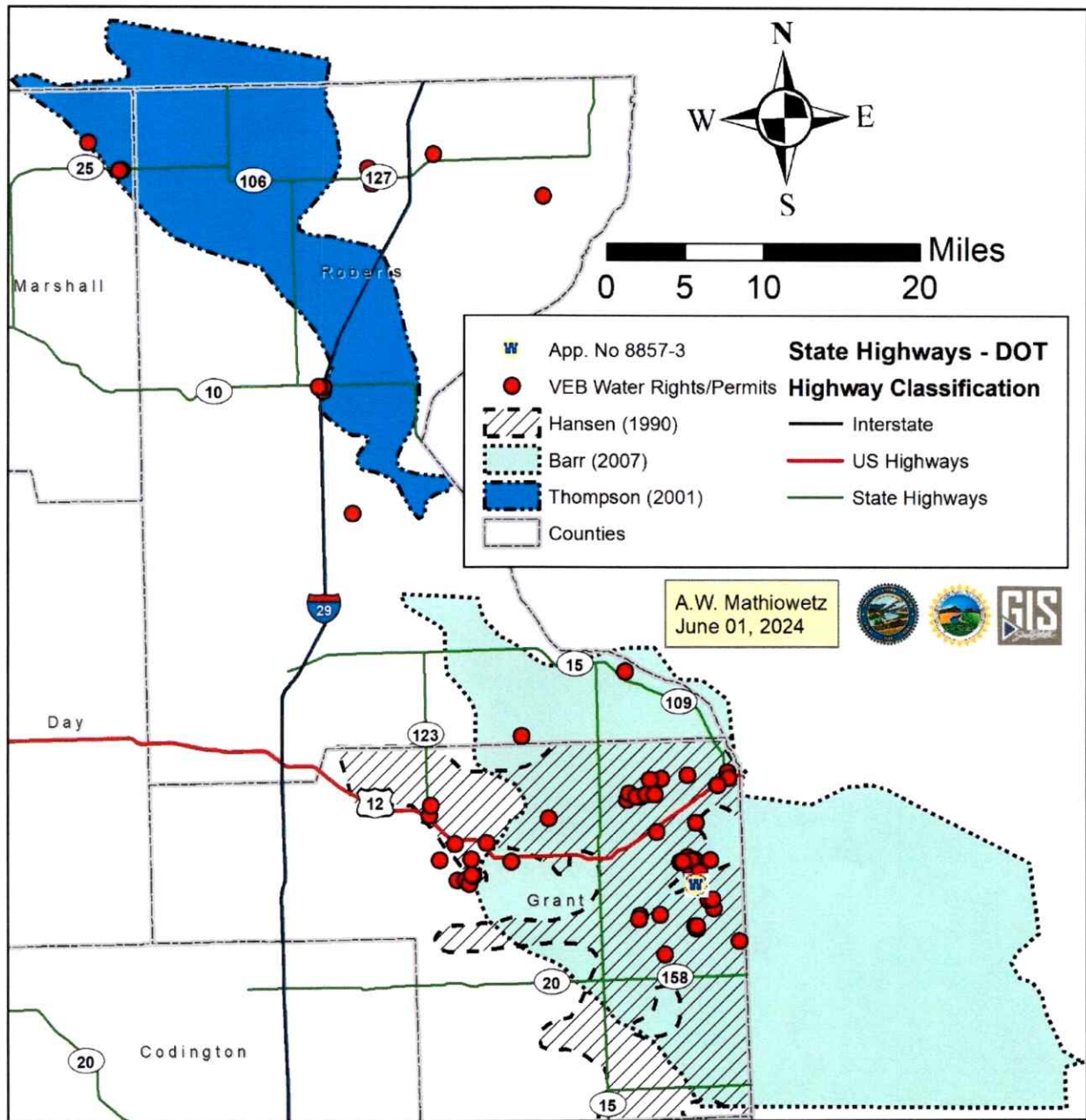


Figure 1- Map showing the three principle delineations of the Veblen aquifer and South Dakota Veblen aquifer water rights/permits (Water Rights, 2024e)

For the purposes of this report, the Veblen aquifer will be considered as the group of generally buried outwash deposits in Grant and southern Roberts Counties that are found within the areal extents and intervals of altitude defined by Hansen (1990) and Barr (2007) as used by Buhler (2016). The individual sand and gravel units that comprise the Veblen aquifer are not continuous throughout the entire mapped extent, but there is some interconnection between the outwash

deposits in some locations (Buhler, 2007). For the purposes of this report, the Veblen aquifer will be considered as the group of buried outwash deposits in Grant and southern Roberts Counties that are found within the areal extents and intervals of altitude defined by Hansen (1990) and Barr (2007) as used by Buhler (2016).

The Veblen aquifer is primarily buried outwash consisting of medium to coarse sand and fine gravel under confined conditions (Hansen, 1990). Based on area lithologic logs (SDGS, 2024), well completion reports (Water Rights, 2024f), and test hole logs submitted with this application, the top of the Veblen aquifer material near the well sites can be found from near ground surface to extend from anywhere between 30 and 80 feet below grade. The static water level in observation well GT-77Q, 0.26 miles northwest of the well sites, ranges from 20 to 25 feet below grade (Water Rights, 2024d). Test hole #1 provided with the application encountered aquifer material from 4 to 32 feet below grade. Test hole #2 did not encounter any aquifer material. Test hole #3 encountered aquifer material from 1 to 45 feet below grade. The wells sites are approximately 10 feet lower in elevation than GT-77Q. Using the water level elevation from GT-77Q, the likely saturated at the applicant's well sites is between 15 and 30 feet. The aquifer is expected to be unconfined at the applicant's well sites. There are other areas of the aquifer that are under confined conditions.

APPLICABLE SOUTH DAKOTA CODIFIED LAW (SDCL):

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 Veblen aquifer.

This application proposes to appropriate water from the Veblen aquifer. The probability of unappropriated water available from the aquifer can be evaluated by considering SDCL 46-6-3.1, which requires:

"No application to appropriate groundwater may be approved if, according to the best information reasonably available, it is probable that the quantity of water withdrawn annually from a groundwater source will exceed the quantity of the average estimated annual recharge of water to the groundwater source. 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 Greenhorn Formation is a Cretaceous aged Formation. As a Quaternary aged glacial outwash deposit, the Veblen aquifer is not older or stratigraphically lower than the Greenhorn Formation (Fahrenbach et al., 2010). Furthermore, the applicant is not a water distribution system. Therefore, the balance between recharge to and withdrawals from the Veblen aquifer must be considered for this application.

Observation Well Data:

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

The DANR-Water Rights Program monitors 29 observation wells completed into the Veblen aquifer with 16 completed into the southern portion of the Veblen aquifer, within the areas mapped by Hansen (1990) and Barr (2007), and that this application proposes to use (Water Rights, 2024d). Figure 3 is a map showing the location of the observation wells completed into the southern portion of the Veblen aquifer as well as the well sites for this application. There are 4 observation wells within approximately 2.5 miles of the well sites, GT-77Q (0.25 miles northwest), GT-779F (2.0 miles southeast), GT-77P (2.5 miles northwest) and GT-83B (2.5 miles north-northwest) (Water Rights, 2024d). The hydrographs for these observation wells are shown in Figure 2.

These four hydrographs are representative and consistent with the hydrographs for the other observation wells completed into the Veblen aquifer. The observation well hydrographs show the water level over the period of record has been stable to rising. The observation wells show good response to climatic conditions. The water levels rise during wet periods when recharge exceeds natural discharge plus withdrawals, and gradually decline during drier periods when natural discharge plus withdrawals exceed recharge. Some of the hydrographs for observation wells show the effects of nearby pumping on the aquifer. However, these effects are minor and are masked by the effects climatic conditions have on the water levels. The dominance of climatic conditions on the water levels means that recharge to and natural discharge from the aquifer exceeds withdrawals. Recognizing natural discharge from an aquifer can be captured for pumping, the hydrographs document there is unappropriated water available for this proposed appropriation.

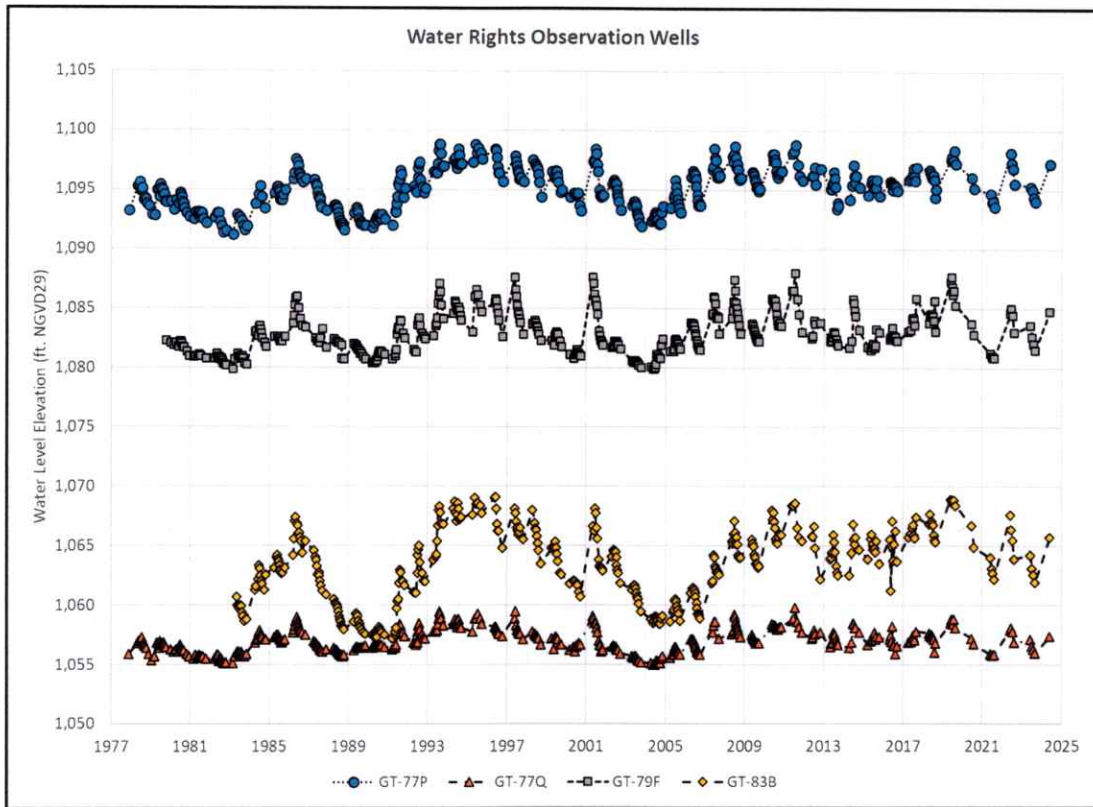


Figure 2- Hydrographs for selected Veblen aquifer observation wells (Water Rights, 2024d)

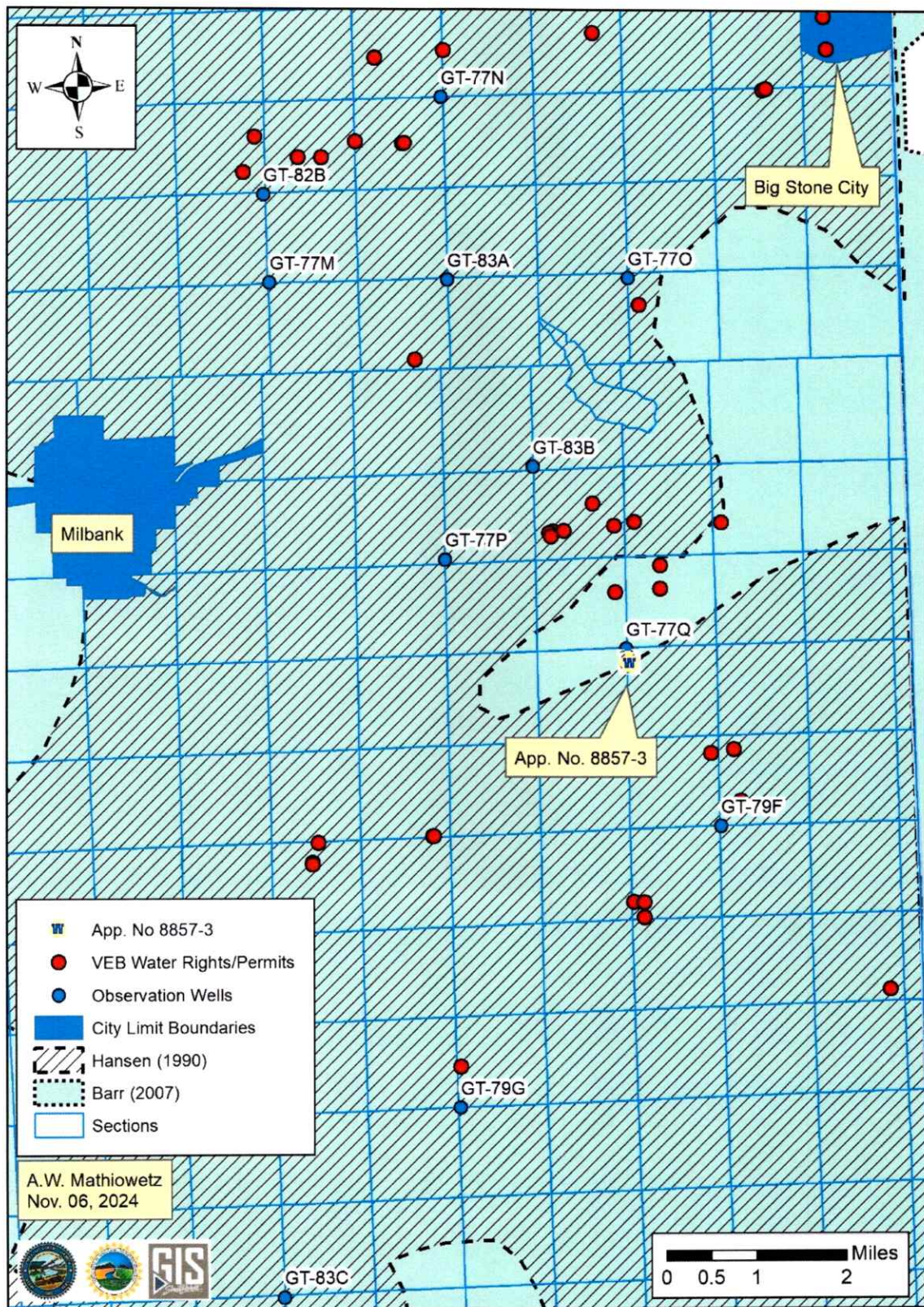


Figure 3- Map of Veblen aquifer water rights/permits and observation wells in the vicinity of Application No. 8857-3 including approximate aquifer delineations (Barr, 2007; Hansen, 1990; Water Rights, 2024d and 2024e)

Hydrologic Budget:

Recharge:

Recharge to the Veblen aquifer in Grant County and southern Roberts County, where this application is located, occurs through direct infiltration of precipitation where the aquifer is at land surface and possibly leakage from the till (Hansen, 1990). Hedges and others (1985) estimated recharge to the Veblen aquifer. However, the aquifer as mapped in the Hedges and others (1982) report contains what Thompson (2001) and Barr (2007) mapped as separate aquifers and an area extending east of the Thompson (2001) mapping to the South Dakota border. The subsequent mappings by Hansen (1990), Thompson (2001), and Barr (2007) show a much-reduced area and at least 2 distinct aquifers between the Thompson (2001) mapping in the northern Roberts County and the Barr (2007) mapping in Grant and southern Roberts Counties. But the Hedges and others (1985) recharge rates are the best available information for estimating recharge to the aquifer.

Hedges and others (1985) estimated the recharge rate to the Veblen aquifer to be 0.24 inches per year (in/yr.) for the entire aquifer based on regional flow-net analysis. Hedges and others (1985) also estimated a recharge rate of 5.2 in/yr. to the unconfined portions of the aquifer. Hedges and others (1985) also state, “It should be noted that recharge rates calculated using flow-net analysis are suspect and conclusions based on this method are questionable.” It is likely the actual recharge rate to the Veblen aquifer is within that range. Furthermore, the Veblen aquifer is primarily under confined conditions which means the recharge rate is likely much closer to the 0.24 in/yr. than the 5.2 in/yr. Using the recharge rate of 0.24 in/yr as a probable minimum recharge rate across the South Dakota portions of the Barr (2007) and Hansen (1990) aquifer delineations, the estimated average annual recharge rates are shown in Table 2.

Table 2- Estimated probable minimum recharge to the Veblen aquifer in Grant and southern Roberts Counties (Hedges et al, 1985; Hansen, 1990; Barr, 2007)

Delineation	Hansen, 1990	Barr, 2007
Recharge in South Dakota (ac-ft/yr)	4,133	4,931

Discharge:

Discharge from the Veblen aquifer occurs through well withdrawals, discharge to the Whetstone River in northern Grant County, to the Yellow Bank River, to Big Stone Lake, to the granite quarries east of Milbank, and to the Minnesota River (Hansen, 1990; Water Rights, 2024f). There are 36 water rights/permits authorized to withdraw water from the southern portion of the Veblen aquifer located in Grant and southern Roberts Counties and 1 future use permit reserving water from the same (Water Rights, 2024e). Future Use Permit No. 549-3 for the City of Milbank reserves 808 ac-ft of water per year (Water Rights, 2024e). Future Use Permits are assumed to be fully developable. The non-irrigation water rights/permits are shown in Table 4 along with permitted annual volume, reported average use, and estimated annual use for the hydrologic budget. The estimated average annual use by non-irrigation appropriations is 1,512.4 ac-ft/yr.

Water Right No. 7649-3 is required to report their annual pumpage and it is used as a backup water supply if the levels of Big Stone Lake are low. The maximum reported pumpage from 2013-2022 was 33.5 ac-ft in 2016. Water Right No. 7649-3 has permitted volume of 2,000 ac-ft/yr but is only using 6.2 ac-ft/yr over their reported period of record (see Table 3). Typically, the Water Rights Program assumes full pumpage of a permitted volume unless there is a sufficiently long record,

10+ years, of reported pumping that does not show consistently increasing water use over that period of time. It is unlikely 2,000 ac-ft/yr will ever be used under Water Right No. 7649-3. The full permitted volume was used for Water Right No 7931-3 and Water Permit No. 8227-3 since there is less than 10 years of reported pumpage available. The City of Big Stone City buys their water from a different system and thus are assumed to pump no water under Water Right No. 4050-3 (Drinking Water Program, 2024). All other estimates are based on assuming pumping at the permitted diversion rate 60% of the time. This estimate was developed by Water Rights Program staff as a reasonable and conservative estimate. This method has been accepted by the Water Management Board in the past.

Table 3- Reported water use from the Veblen aquifer in Grant and southern Roberts Counties (Water Rights, 2024c)

	7649-3	7931-3	8227-3
2022	0	2.9	33.5
2021	0.4	1.91	38.7
2020	0	2.4	37.2
2019	0.04	2.4	33.4
2018	0	1.36	33.9
2017	0.2	1.9	33
2016	33.5	3	6.2
2015	28	4	9
2014	0	3	n/a
2013	0	n/a	n/a
Avg. (ac-ft/yr)	6.2	2.5	28.1

Table 4- Estimated Average Annual non-irrigation water use from the Veblen aquifer in Grant and southern Roberts Counties (Water Rights, 2024c)

PERMIT NO.	NAME	COUNTY	PRIORITY DATE	STATUS	USE	CFS	PERMITTED VOL. (ac-ft/yr)	AVG. REPORTED VOL. (ac-ft/yr)	EST. VOL. (ac-ft/yr)
548-3	CITY OF MILBANK	GT	01/01/1924	LC	MUN	2.1			912.7
2006-3	TOWN OF CORONA	RB	08/16/1973	LC	MUN	0.245			106.5
4050-3	CITY OF BIG STONE CITY	GT	07/05/1977	LC	MUN	3.3			0**
5918-3	VICTORY FARMS	GT	03/19/1996	LC	COM/LCO	0.33			143.4
6161-3	LOU'S GREENHOUSE	GT	12/28/1999	LC	COM	0.04			17.4
6171-3	COLD SPRING GRANITE CO	GT	01/18/2000	LC	IND	0.111			48.2
6230-3	WHETSTONE LAND CO LLC	GT	09/20/2000	LC	COM/LCO	0.39			169.5
6358-3	MICHAEL & NANCY JOHNSON	GT	08/06/2002	LC	COM/LCO	0.11			47.8
6636-3	WESTERN CONSOLIDATED COOP	GT	07/06/2005	LC	COM	0.022			9.6
7649-3	POET BIOREFING - BIG STONE LLC	GT	01/09/2013	LC	IND	3.34	2000*	6.2 (2013-2022)	6.2
7931-3	GCC READY MIX	GT	12/02/2013	LC	COM	0.11	5	2.5 (2014-2022)	5
8227-3	TETON LLC	GT	10/08/2014	PE	COM	0.11	46.03	28.1 (2015-2022)	46.03
<i>Total Estimated Annual Water Use, Using Permitted Vol. for 7649-3</i>									3,506.2
<i>Estimated Annual Water Use, Using Avg. Reported Use by 7649-3 (6.2 ac-ft/yr)</i>									1,512.4
*- Used as a backup supply when lake levels are low, **- Purchases water from a different water system, RB= Roberts County, GT= Grant County, MUN= Municipal, COM= Commercial, LCO= Livestock Confinement Operation, IND= Industrial									

Average annual irrigation use from the Veblen aquifer in Grant and southern Roberts counties as reported to the DANR-Water Rights Program through annual irrigation questionnaires is shown in Table 5. Over the period of record, there has been steady build out of irrigation systems withdrawing water from the Veblen aquifer. The average over the period of record, 1979-2023, is 980.1 ac-ft/yr. However, to better represent likely average use going forward the last 10 years, 2014-2023, of reported use will be considered. The average reported irrigation use from the Veblen aquifer from 2014-2023 is 1,100.6 ac-ft/yr. This number will be used for the hydrologic budget. In general, crop irrigators in eastern South Dakota apply less than 10 inches of water per acre. Assuming that average application rate, this application would likely withdraw 158.3 ac-ft/yr on average.

Table 5- Irrigation water use from the Veblen aquifer in Grant and southern Roberts counties (Water Rights, 2024b)

Year	No. of Permits Reporting	Pumpage (ac-ft)	Year	No. of Permits Reporting	Pumpage (ac-ft)
2023	23	1358.4	1998	16	812.07
2022	24	1442.04	1997	15	709.06
2021	24	1536.3	1996	15	712.6
2020	25	1725.97	1995	16	445.6
2019	25	176.88	1994	18	675.63
2018	26	911.77	1993	18	220.06
2017	25	956.57	1992	18	589.09
2016	25	1388.23	1991	21	230.99
2015	23	729.474	1990	18	1329.9
2014	24	780.77	1989	19	1222.9
2013	27	1384.59	1988	17	1897.35
2012	22	1265.45	1987	17	1046.71
2011	20	314.74	1986	17	726.7
2010	20	1100.69	1985	16	519.1
2009	20	1067.84	1984	16	1189.03
2008	20	1350.26	1983	14	808.3
2007	16	1245.01	1982	14	704.84
2006	16	1440.48	1981	19	1062
2005	16	1245.54	1980	15	504
2004	17	1283.56	1979	15	700
2003	17	1274.54	Min	14	176.88
2002	17	1024.95	Max	27	1897.35
2001	17	1160.59	Avg.	19.0	980.1
2000	17	975.55	Avg. 2014-2023	24.4	1100.6
1999	17	859.36			

In addition to appropriative rights, there are a number of well completion reports on file with the DANR-Water Rights Program for domestic wells that appear to be completed into the Veblen aquifer (Water Rights, 2024f). The annual withdrawal due to domestic wells is not expected to be

significant to the hydrologic budget of the aquifer due to their limited diversion rate. Furthermore, there are a number of rural water systems in the areas where the Veblen aquifer is the uppermost aquifer. It is likely a number of domestic users have transitioned to rural water.

Balance:

The estimated average annual recharge to the Veblen aquifer in Grant and southern Roberts Counties ranges from 4,133 to 4,931 ac-ft/yr. The estimated average annual withdrawal from the aquifer is 3,579.3 ac-ft/yr (future use: 808; non-irrigation: 1,512.4; irrigation: 1,100.36; App. No. 8857-3: 158.3). Based on the hydrologic budget there is a reasonable probability unappropriated water is available for this proposed appropriation. This is supported by the observation well data.

Water Availability Discussion:

On an average annual basis, the water pumped from the Veblen aquifer in Grant and southern Roberts Counties is less than the estimated average annual recharge to the aquifer. However, if the full permitted volume under Water Right No. 7649-3 is accounted for instead of their reported average pumpage, the estimated average annual withdrawals exceed the estimated average annual recharge to the aquifer. As noted earlier, the average reported pumping, 6.2 ac-ft/yr (see Table 3), under Water Right No. 7649-3 is significantly lower than the permitted volume, 2,000 ac-ft/yr. If the full permitted volume is accounted for in the hydrologic budget instead of the average reported pumping, the estimated average annual use from the aquifer becomes 5,573.1 ac-ft/yr.

SDCL 46-5-39 allows for the issuance of temporary use permits for the temporary use of water reserved by future use permits. There are currently no temporary permits per SDCL 46-5-39 issued from this aquifer. Future Use Permit No. 549-3 reserves 808 ac-ft/yr for the City of Milbank. However, Water Right No. 7649-3 is unlikely to use their full permitted volume of 2,000 ac-ft/yr regularly and have reported using significantly less, 0.3 %, of their permitted volume.

If this application is issued as a temporary use permit per SDCL 46-5-39, there is a reasonable probability unappropriated water is available. If this application were to be issued as a standard permit per SDCL 46-2A-9 and because there is a water right with a senior priority date which can significantly increase their pumping from their reported average to permitted volume, it is recommended, if approved, a qualification on the permit indicating the long-term curtailment of pumping of this permit may be required to manage water usage from this aquifer.

POTENTIAL FOR UNLAWFUL IMPAIRMENT:

The nearest appropriative water rights not held by the applicant to the well sites are Water Right Nos. 4856-3 and 5469-3 (Water Rights, 2024e). Both are located approximately 0.9 miles away. Water Right Nos. 7216-3 and 7439-3 are located approximately one mile away from the well sites (Water Rights, 2024e). The nearest domestic well on file not held by the applicant is approximately 0.9 miles northwest and 0.9 miles east of the well sites (Water Rights, 2024f). The location of domestic wells is based off of the information provided on the well completion report submitted by the well driller. There may be other domestic wells in the area that are not on file with the Water Rights Program. Figure 1 is a map of the project area including Veblen aquifer water rights/permits and observation wells.

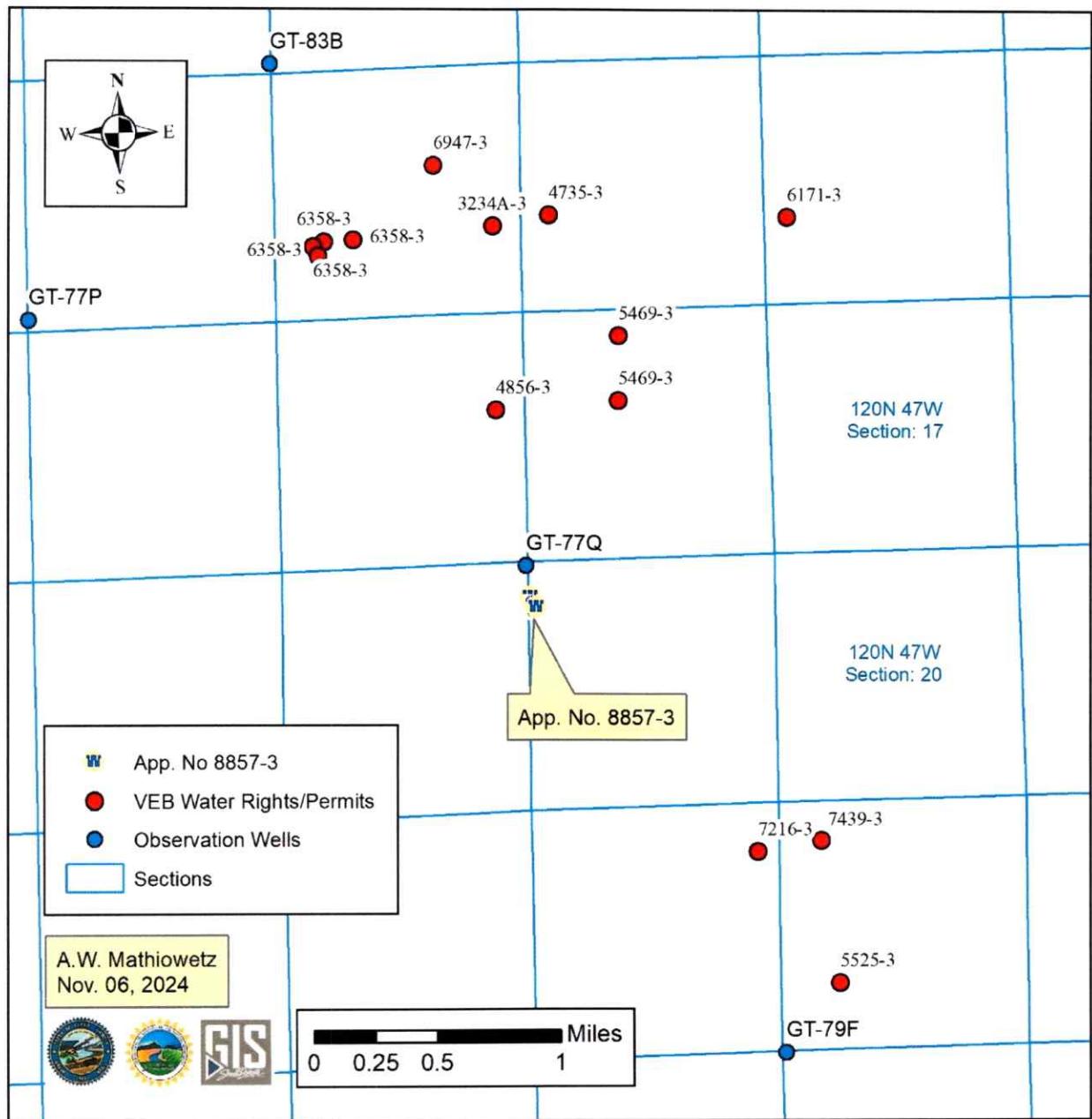


Figure 4- Map of Veblen aquifer water rights/permits and observation wells within approximately 2.25 miles of the well sites for App. No. 8857-3 (Water Rights, 2024d and 2024e)

Although the Veblen aquifer is generally under confined conditions, there are areas where the aquifer is unconfined. In the vicinity of the well sites, observation wells GT-79F and GT-77Q are under unconfined conditions while GT-83B, GT-79G, and GT-77P are under confined conditions. The hydrographs for those observation wells do not show any effect on water level caused by nearby pumping. The proximity of the applicant's two wells to each other compared to the distance to other appropriative wells means the applicant is far more likely to impact his own wells first and would likely manage the irrigation system to prevent or limit the potential impacts to other users.

The Water Management Board has recognized in the past to place water to maximum beneficial use some drawdown may occur. In order to protect domestic users, 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.

While precise drawdown cannot be determined without aquifer performance testing, any drawdown created from pumping this proposed diversion is not expected to cause unlawful impairment of existing water rights with adequate wells or adequate domestic wells. This is due to unconfined nature of the aquifer at the well sites.

There have been two complaints filed with the Water Rights Program involving potential well interference between wells in the Veblen aquifer in Grant County. Both complaints were filed in June 1988 (Water Rights, 2024a). One complaint located approximately two miles north of the well sites for this application stated their well was going dry because of a nearby irrigator. Water Rights staff determined during discussion with the well owner that the concrete curbing and wood screened well was likely the issue and not drawdown caused by the nearby irrigator. The second complaint, approximately 8.5 miles northwest, was about a well going dry and the well owner believed an irrigator 1.5 miles west of their well was the cause. Water Rights staff reviewed well completion reports and nearby observation well, GT-77L, water level data to determine it was likely well construction and pump placement causing the drawdown issues for the complainant’s well. There have been no complaints filed since that time.

Based on the generally unconfined conditions of the Veblen aquifer in the immediate area of the applicant’s well, the lack of substantiated well interference complaints, the proximity of the applicant’s wells to each compared to other nearby wells, and the statutes and rules, there is a reasonable probability this proposed diversion can be developed without unlawful impairment of existing adequate domestic wells or senior water rights/permits with adequate wells.

CONCLUSIONS:

1. Water Permit Application No. 8857-3 proposes to irrigate 190 acres at an instantaneous diversion rate of 2.7 cubic feet of water per second (cfs) from two wells (47 and 49 feet deep) completed into the Veblen aquifer. The land to be irrigated is located in the W ½ Section 19 and the wells located in the NW ¼ NW ¼ Section 19; all in T120N-R47W. This site is located approximately six miles southeast of Milbank, SD.
2. The Veblen aquifer is currently under study by the South Dakota Geological Survey and is likely to be redelineated. This redelineation may cause an aquifer name change for this application, if approved, and a number of existing water rights/permits upon completion of this study. This name change would not constitute a physical change in the water source those water rights/permits are withdrawing from, a change in permitted diversion rate,

irrigated acres, or permitted volume. The change would be done to reflect the most recent data available.

3. For the extent of this report, the Veblen aquifer is considered the portion of the aquifer in Grant and southern Roberts Counties.
4. Based on the observation well data for the Veblen aquifer, the current level of pumping from the aquifer is likely not exceeding recharge to the aquifer.
5. Based on an analysis of the hydrologic budget for the Veblen aquifer, annual appropriations, as permitted, exceed average annual recharge to the aquifer. However, Water Right No. 7649-3 pumps on average significantly less water, 6.2 ac-ft/yr, than the permitted volume, 2,000 ac-ft/yr.
6. Based on reported and estimated average annual pumping from the Veblen, there is a reasonable probability of unappropriated water available for this application.
7. No temporary use permits per SDCL 46-5-39 have been issued from the Veblen aquifer. There is currently 808 ac-ft/yr reserved by Future Use Permit No. 549-3.
8. If this application were approved as a standard water permit per SDCL 46-2A-9, a qualification should be included indicating the long-term curtailment of pumping of this permit may be required to manage water usage from this aquifer if as senior water right, Water Right No. 7649-3 specifically, significantly increases their pumping up to their permitted volume (see conclusion 5).
9. There is a reasonable probability the diversion proposed by this application can be made without adversely impacting existing appropriative or domestic users with adequate wells.



Adam Mathiowetz, PE
SD DENR-Water Rights Program

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**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.**

November 7, 2024

Jason and Kristy Liebe
520 S 1st Street
Milbank SD 57252

Dear Mr. & Mrs. Liebe:

Water Permit Application No. 8857-3 for irrigation use has been examined and found to comply with the South Dakota Water Laws and applicable rules. A notice has been sent to the Grant County Review printed in Milbank SD (Ph # 605 432-4516) and the Public Opinion printed in Watertown SD (requires prepayment). 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.

Instruction to Newspaper - Publish the Notice on November 13, 2024. The applicant is responsible for payment.

NOTICE OF APPLICATION NO. 8857-3 to Appropriate Water

Notice is given that Jason and Kristy Liebe, 520 S 1st Street, Milbank SD 57252 have filed an application for a water permit to appropriate 2.7 cubic feet of water per second from two wells completed into the Veblen Aquifer (47 and 49 feet deep) both located in the NW 1/4 NW 1/4 Section 19 for irrigation of 190 acres located in the W 1/2 Section 19; all in T120N-R47W. This site is located approximately six miles southeast of Milbank SD.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 8857-3 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 November 25, 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 November 25, 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: Thursday, November 7, 2024 12:45 PM
To: gcreview@itcmilbank.com
Subject: 8857-3 Jason & Kristy Liebe - Public Notice
Attachments: 8857-3 public.short_final.docx; FORM8.FRM.doc

Attached is a notice to be published on November 13, 2024.

Jason and Kristy Liebe, 520 S 1st Street, Milbank SD 57252, 605-467-1492, have 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



Rodriguez, Rachel

From: Rodriguez, Rachel
Sent: Thursday, November 7, 2024 12:49 PM
To: legals@thepublicopinion.com
Subject: 8857-3 Jason & Kristy Liebe - Public Notice
Attachments: 8857-3 public.short_final.docx; FORM8.FRM.doc

Attached is a notice to be published on November 13, 2024.

Jason and Kristy Liebe, 520 S 1st Street, Milbank SD 57252, 605-467-1492, liebefarms@gmail.com have 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



LOCALiQ

Aberdeen News
Watertown Public Opinion

PO Box 630567 Cincinnati, OH 45263-0567

AFFIDAVIT OF PUBLICATION

Jason Liebe
Jason Liebe
520 S 1st ST
Milbank SD 57252-2404

STATE OF SOUTH DAKOTA, COUNTY OF CODINGTON

The Watertown Public Opinion is, and during all the times hereafter mentioned was, a daily legal newspaper as defined in SDCL 17-2-2.1 through 17-2-2.4, as amended, published at Watertown, Codington County, South Dakota, by Watertown Public Opinion; that the notice, order or advertisement, a printed copy of which is attached, was published in said newspaper in the issue dated:

11/13/2024

and that the fees charged are legal.
Sworn to and subscribed before on 11/13/2024

Legal Clerk

Notary, State of WI, County of Brown

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Notary Public
State of Wisconsin

**NOTICE OF
APPLICATION NO. 8857-3
to Appropriate Water**

Notice is given that Jason and Kristy Liebe, 520 S 1st Street, Milbank SD 57252 have filed an application for a water permit to appropriate 2.7 cubic feet of water per second from two wells completed into the Veblen Aquifer (47 and 49 feet deep) both located in the NW 1/4 NW 1/4 Section 19 for irrigation of 190 acres located in the W 1/2 Section 19; all in T120N-R47W. This site is located approximately six miles southeast of Milbank SD. Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 8857-3 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 November 25, 2024. The petition shall include a statement describing the unique injury upon approval of the application on the petitioner, the peti-

tioner'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 November 25, 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 Nov. 13, 2024 at the total approximate cost of \$49.95 and may be viewed free of charge at www.sdpublicnotices.com
10757842

Printer's Affidavit of Publication

STATE OF SOUTH DAKOTA
COUNTY OF GRANT

} ss.

Holli Seehafer

of said County and State, being first duly sworn, on oath says that the Grant County Review is a legal weekly newspaper of general circulation, printed and published in Milbank, in said County of Grant and State of South Dakota, by Grant County Review, Inc., and has been such newspaper during the times hereinafter mentioned; that said newspaper is a legal newspaper; and that it has a bona fide circulation of more than two hundred copies weekly, and has been published within said County of Grant in the English language and has been admitted to the United States mail under second class mailing privilege, for at least one year next prior to the publication of the Notice herein mentioned, and has been printed wholly in an office maintained at the said place of publication, that I, the undersigned, _____ Owner _____ of said newspaper, in charge of the accounts receivable department thereof, have personal knowledge of all the

facts stated in this affidavit; that the advertisement headed Notice of Application No. 8857-3 to Appropriate water, Jason and Kristy Liebe

_____ a printed copy of which, taken from the paper in which the same was published, is attached to this sheet and is made a part of this Affidavit, was published in said newspaper at least once each week for one successive week(s), on the day of each week on which the said newspaper was regularly published, to-wit:

<u>November 13</u>	<u>20</u>	<u>24</u>	<u>20</u>
	<u>20</u>		<u>20</u>
	<u>20</u>		<u>20</u>

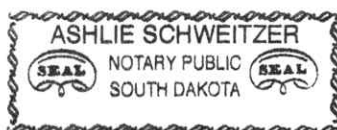
That \$ 39.96, being the full amount of the fee charged for the publication of said Notice, inures to the benefit of the publisher of the Grant County Review; that no agreement or understanding for the division thereof has been made with any person, and that no part has been agreed to be paid to any person whomsoever.

Holli Seehafer

Subscribed and sworn to before me this 13th day of NOV 20 24

Ashlie Schweitzer
Notary Public, Grant County, South Dakota

My Commission Expires:
September 21, 2027



Publication Fee \$ 39.96
Notarial Fee \$ _____
Total \$ 39.96

NOTICE OF APPLICATION

NO. 8857-3 to Appropriate Water

Notice is given that Jason and Kristy Liebe, 520 S 1st Street, Milbank SD 57252 have filed an application for a water permit to appropriate 2.7 cubic feet of water per second from two wells completed into the Veblen Aquifer (47 and 49 feet deep) both located in the NW 1/4 NW 1/4 Section 19 for irrigation of 190 acres located in the W 1/2 Section 19; all in T120N-R47W. This site is located approximately six miles southeast of Milbank SD.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 8857-3 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

RECEIVED

NOV 18 2024

OFFICE OF
WATER

Printer's Affidavit of Publication
and Attorney's Affidavit Ex-Rel. Fees

In _____ Court

STATE OF SOUTH DAKOTA }
COUNTY OF GRANT } ss.

Filed in the office of _____

_____ on the
_____ day of _____, 20____

Attorney for _____

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 November 25, 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 November 25, 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 an approximate cost of \$39.96 and can be viewed free of charge at www.sdpublicnotices.com.

Rodriguez, Rachel

From: Rodriguez, Rachel
Sent: Thursday, November 7, 2024 12:55 PM
To: liebefarms@gmail.com
Subject: 8857-3 Jason & Kristy Liebe - Public Notice
Attachments: 8857-3 Rec.pdf; 8857-3 Ltr.pdf; 8857-3 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. You should receive an email from the Public Opinion regarding payment. 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

JAN 07 2025

Jason and Kristy Liebe
520 S 1st Street
Milbank SD 57252

Dear Mr. & Mrs. Liebe:

Enclosed is Water Permit No. 8857-3 authorizing construction of the water diversion system and beneficial use of the water, not exceeding the limits as specified in the Water Permit.

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

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

Sincerely,

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

enclosures



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

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

STATE OF SOUTH DAKOTA)
) SS
COUNTY OF HUGHES)

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

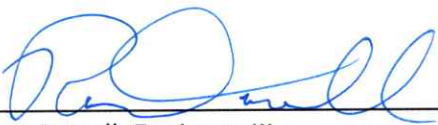
Pursuant to SDCL § 46-2A-4, public notice of the following application was posted on the DANR web site at <https://danr.sd.gov/public>. The posted public notice is the same notice as published in the pertinent newspaper(s) and a copy of the public notice is maintained in the application file. If the 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.: 8857-3

Name of Applicant: Jason & Kristy Liebe

Date of Posting: 11/12/2024

Date of Removal: 1/7/2025



Ron Duvall, Engineer III


1/6/2025

Date

Subscribed and sworn to before me, a notary public, this 7th day of Jan, 2025.



Notary Public - South Dakota
My commission expires:

Rachel Rodriguez
My Commission Expires
May 16, 2029

(SEAL)

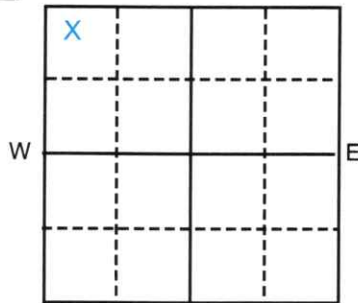


SOUTH DAKOTA WATER WELL COMPLETION REPORT

11-02

Location NW 1/4 NW 1/4 Sec 19 Twp 120 Rg 47County GRANT ☒

North

Please mark well
location with an "X"

Well Completion Date

9/18/2024

1 Mile

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

65 ft. from CREEK

(identify source)

PROPOSED USE:

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

METHOD OF DRILLING:

MUD ROTARY

CASING DATA:

If other describe

☐ Steel ☒ Plastic ☐ Other

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
LB/FT	<u>8</u> IN	<u>0</u> FT	<u>29</u> FT	<u>12.5</u> IN
LB/FT	IN	FT	FT	IN
LB/FT	IN	FT	FT	IN

GROUTING DATA:

Grout Type	No. of Sacks	Grout Weight	From	To
<u>BENTONITE</u>	<u>4</u>	Lb/gal	<u>0</u> Ft	<u>25</u> Ft
		Lb/gal	Ft	Ft

Describe grouting procedure

TREMIE PIPED

SCREEN:

☐ Perforated pipe ☒ Manufactured
 Diameter 8 Inches Length 20 Feet
 Material STAINLESS STEEL
 Slot Size .870 Set From 29 Feet to 49 Feet
 Other information

WAS A PACKER OR SEAL USED?

If so, what material?

Describe packer(s) and location

DISINFECTION: Was well disinfected upon completion?

☐ Yes, How?☒ No, Why Not?

Lab to which water quality sample sent for analysis

IRRIGATIONWell Owner: JASON LIEBEBusiness Name: LIEBE FARMSAddress: 520 S 1ST STCity, State, Zip: MILBANK ☒ SD ☒ 57525

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
<u>BLACK TOP SOIL</u>	<u>0</u>	<u>4</u>
<u>MED-COARSE SAND & GRAVEL</u>	<u>4</u>	<u>49</u>
<u>BLUE CLAY</u>	<u>49</u>	<u>56</u>

STATIC WATER LEVEL

7' 4" 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

22' 9" Ft. After 4 Hrs. pumped 400 GPM Ft. After Hrs. pumped GPMIf pump installed, pump rate: GPM

REMARKS

SOUTH WELL GPS N 45 11.5071 W 96 30.9915This well was drilled under license # 475 and this report is true and accurate.Drilling firm: THEIN WELL COMPANY, INCORPORATED

Signature of License Representative:

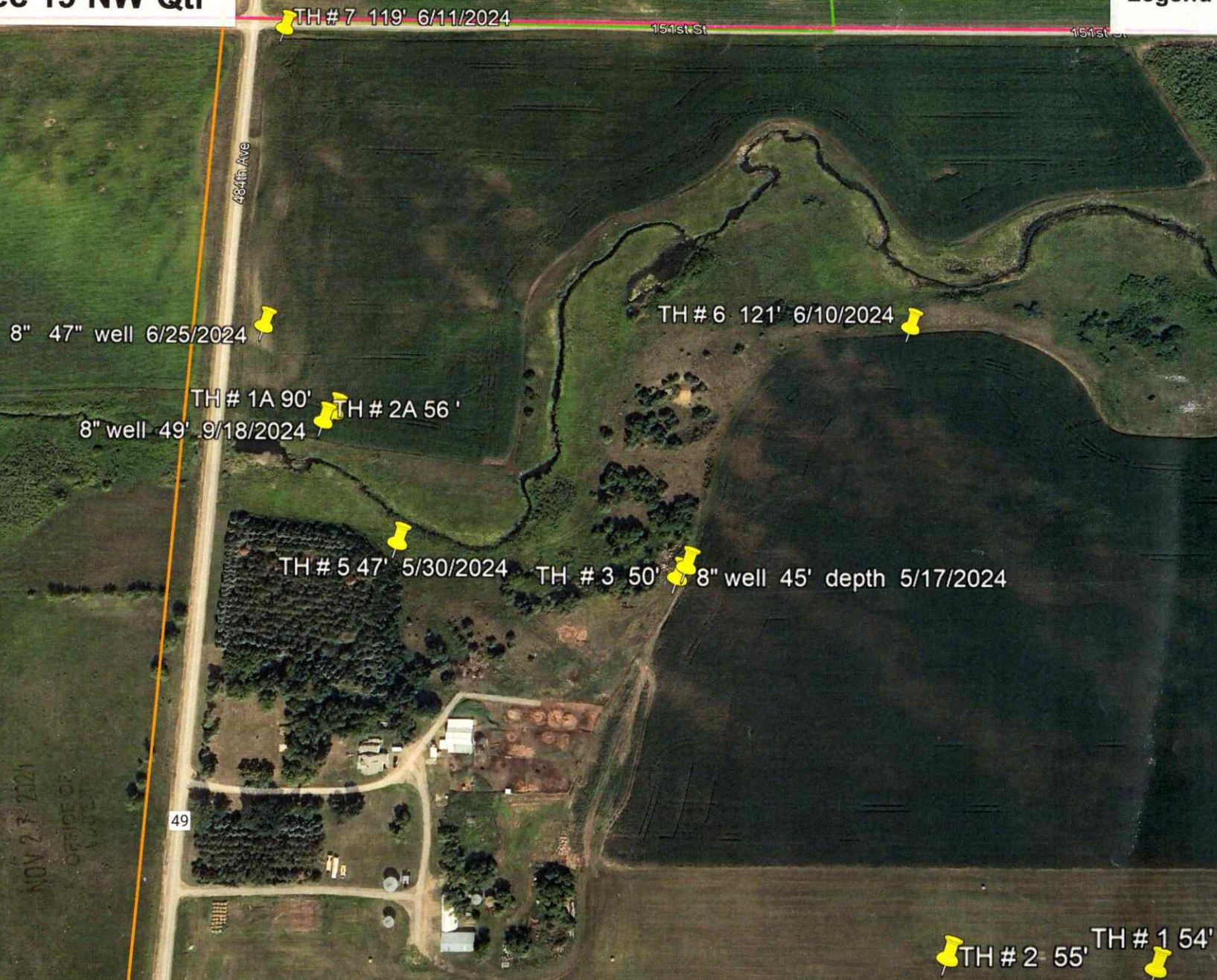
Michael Thein

Signature of Well Owner or Equitable Property Holder:

Date:

Liebe Farms Sec 19 NW Qtr

Legend



Google Earth

Image © 2024 Airbus

800 ft

SOUTH DAKOTA WATER WELL COMPLETION REPORT

SD EForm - 1621LD V1

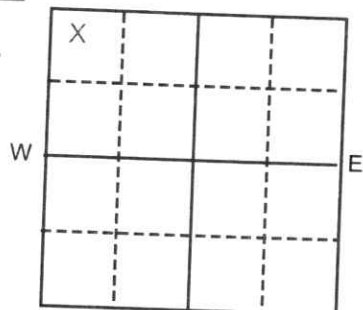
11-02

Location NW 1/4 NW 1/4 Sec 19 Twp 120 Rg 47

County GRANT ☐

North

Please mark well location with an "X"



Well Completion Date

9/16/2024

1 Mile

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

65 ft. from CREEK

(identify source)

PROPOSED USE:

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

METHOD OF DRILLING:

MUD ROTARY

CASING DATA:

If other describe ☐ Steel ☐ Plastic ☐ Other

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
LB/FT	IN	FT	9 FT	4.25 IN
LB/FT	IN	FT	FT	IN
LB/FT	IN	FT	FT	IN

GROUTING DATA:

Grout Type	No. of Sacks	Grout Weight	From	To
BENTONITE	4	Lb/gal	0 Ft	90 Ft
		Lb/gal	Ft	Ft

Describe grouting procedure
TREMIE PIPED

SCREEN:

☐ Perforated pipe ☐ Manufactured
Diameter _____ Inches Length _____ Feet
Material _____
Slot Size _____ Set From _____ Feet to _____ Feet
Other information _____

WAS A PACKER OR SEAL USED?

☐ Yes ☐ No
If so, what material? _____
Describe packer(s) and location _____

DISINFECTION: Was well disinfected upon completion?

☐ Yes, How? _____
☒ No, Why Not? _____
Lab to which water quality sample sent for analysis _____

TEST HOLE

Well Owner: JASON LIEBE

Business Name: LIEBE FARMS

Address: 520 S 1ST ST

City, State, Zip: MILBANK ☐ SD ☐ 57525

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
BLACK TOP SOIL	0	1
MED-COARSE SAND	1	35
GRAVEL	35	45
BLUE CLAY	45	90
BEDROCK	90	

STATIC WATER LEVEL

_____ FEET
If flowing: closed in pressure _____ PSI
GPM flow _____ through _____ Inch pipe
Controlled by ☐ Valve ☐ Reducers ☐ Other _____
Reduced flow rate _____ GPM
Can well be completely shut in? _____

WELL TEST DATA:

☐ Pumped Describe: _____
☐ Bailed
☐ Other
Pumping Level Below Land Surface
_____ Ft. After _____ Hrs. pumped _____ GPM
_____ Ft. After _____ Hrs. pumped _____ GPM
If pump installed, pump rate: _____ GPM

REMARKS

TH 1A GPS N 45 11.5704 W 96 30.98668

This well was drilled under license # 475 and this report is true and accurate.

Drilling firm: THEIN WELL COMPANY, INCORPORATED

Signature of License Representative:

Michael Thein

Signature of Well Owner or Equitable Property Holder:

Date: _____

RECEIVED

NOV 27 2024

OFFICE OF
WATER

SOUTH DAKOTA WATER WELL COMPLETION REPORT

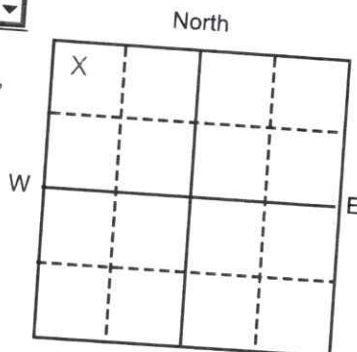
SD EForm - 1621LD V1

11-02

Location NW 1/4 NW 1/4 Sec 19 Twp 120 Rg 47

County GRANT ☒

Please mark well location with an "X"



Well Completion Date
9/18/2024

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

PROPOSED USE:

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

METHOD OF DRILLING:

MUD ROTARY

CASING DATA:

If other describe ☐ Steel ☐ Plastic ☐ Other

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
LB/FT	IN	FT	FT	IN
				4.25
LB/FT	IN	FT	FT	IN
LB/FT	IN	FT	FT	IN

GROUTING DATA:

Grout Type	No. of Sacks	Grout Weight	From	To
BENTONITE	3	Lb/gal	0 Ft	56 Ft
		Lb/gal	Ft	Ft

Describe grouting procedure

TREMIE PIPED

SCREEN:

☐ Perforated pipe ☐ Manufactured
Diameter _____ Inches Length _____ Feet
Material _____
Slot Size _____ Set From _____ Feet to _____ Feet
Other information _____

WAS A PACKER OR SEAL USED?

If so, what material? ☐ Yes ☐ No

Describe packer(s) and location

DISINFECTION:

Was well disinfected upon completion?

☐ Yes, How?
☒ No, Why Not?

Lab to which water quality sample sent for analysis

TEST HOLE

Well Owner: JASON LIEBE

Business Name: LIEBE FARMS

Address: 520 S 1ST ST

City, State, Zip: MILBANK ☒ SD ☒ 57525

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
BLACK TOP SOIL	0	4
MED-COARSE SAND & GRAVEL	4	49
BLUE CLAY	49	56

STATIC WATER LEVEL

If flowing: closed in pressure _____ FEET
GPM flow _____ through _____ PSI
Controlled by ☐ Valve ☐ Reducers ☐ Other _____ Inch pipe
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

TH 2A GPS N 45 11.5071 W 96 30.9915

RECEIVED

NOV 27 2024

OFFICE OF
WATER

This well was drilled under license # 475 and this report is true and accurate.

Drilling firm: THEIN WELL COMPANY, INCORPORATED

Signature of License Representative:

Michael Thein

Signature of Well Owner or Equitable Property Holder:

Date:

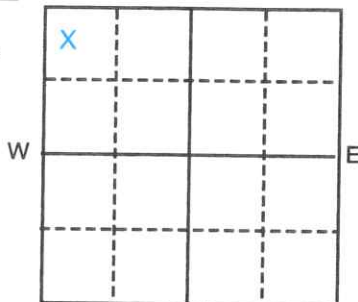
8857-3

SOUTH DAKOTA WATER WELL COMPLETION REPORT

11-02

Location NW 1/4 NW 1/4 Sec 19 Twp 120 Rg 47County GRANT ☒

North

Please mark well
location with an "X"

Well Completion Date

7/15/2024

← 1 Mile →

Distance to nearest potential pollution source (septic tank, abandoned well, feed lot, etc.)?
200 ft. from NORTH OF CREEK (identify source)

PROPOSED USE:

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

METHOD OF DRILLING:

MUD ROTARY

CASING DATA:

☐ Steel ☒ Plastic ☐ Other

If other describe

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
LB/FT	<u>8</u> IN	<u>0</u> FT	<u>27</u> FT	<u>18</u> IN
LB/FT	IN	FT	FT	IN
LB/FT	IN	FT	FT	IN

GROUTING DATA:

Grout Type	No. of Sacks	Grout Weight	From	To
<u>Bentonite</u>	<u>10</u>	Lb/gal	<u>0</u> Ft	<u>22</u> Ft
		Lb/gal	Ft	Ft

Describe grouting procedure

TREMIE PIPED

SCREEN:

☐ Perforated pipe ☒ Manufactured
Diameter 8 Inches Length 20 Feet
Material STAINLESS STEEL
Slot Size .070 Set From 27 Feet to 47 Feet

Other information

WAS A PACKER OR SEAL USED?

☐ Yes ☒ No

If so, what material?

Describe packer(s) and location

DISINFECTION: Was well disinfected upon completion?

☐ Yes, How?
☒ No, Why Not? IRRIGATION ONLY
Lab to which water quality sample sent for analysisWell Owner: JASON LIEBEBusiness Name: LIEBE FARMSAddress: 520 S 1ST STREETCity, State, Zip: MILBANK ☒ SD ☒ 57525

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
TOP SOIL	0	5
COARSE SAND AND GRAVEL	5	46
SHALE	46	47

STATIC WATER LEVEL 10 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: AIRLIFTED
☐ Bailed
☒ Other

Pumping Level Below Land Surface

26 Ft. After 11 Hrs. pumped 560 GPM

_____ Ft. After _____ Hrs. pumped _____ GPM

If pump installed, pump rate: _____ GPM

REMARKS

North Well 8" WELL GPS: N 45.19235824 W 96.51701479This well was drilled under license # 475 and this report is true and accurate.Drilling firm: THEIN WELL COMPANY, INCORPORATED

Signature of License Representative:

Michael Thein

Signature of Well Owner or Equitable Property Holder:

Date: _____

Liebe Farms Sec 19 NW Qtr

Legend

TH # 7 119' 6/11/2024

154th St

154th St

484th Ave

8" 47" well 6/25/2024

TH # 6 121' 6/10/2024

TH # 1A 90' TH # 2A 56' 8" well 49' 9/18/2024

TH # 5 47' 5/30/2024 TH # 3 50' 8" well 45' depth 5/17/2024

49

TH # 2 55' TH # 1 54'



Google Earth

Image © 2024 Airbus

RECEIVED
NOV 27 2024
OFFICE OF
LANDER

800 ft