

WATER PERMIT NO. 7532-3

Name of Applicant: Matthew P Lowe

Address: 13839 466th Ave, Wilmot SD 57279

Phone: 605 467-9246

Amount of Water Claimed: 1.78 cfs

Total Acres: 145 acres

Source of Water Supply: groundwater (one well)

Water to be used for: irrigation

County: Grant

Type of Waste Disposal System:

Location: 15 miles west of Milbank

PRIORITY

Date Received: 11-19-12

Application/License Fee: \$ 1050

Corrected Application Received: 11-28-12

Period of Annual Use: May 1 – September 30

Remarks:

Diversion Point: NE 1/4 SW 1/4 Sec 8-T120N-
R51W

Land to be Irrigated: SW 1/4, W 1/2 NW 1/4, SE
1/4 NW 1/4 Sec 8-T120N-R51W

Depth of Well: 126 feet deep

Well Driller: Steffl Drilling & Pump Inc.

Remarks:

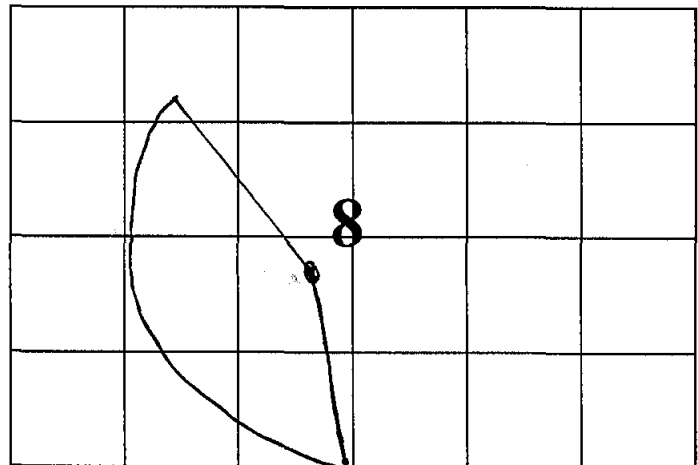
Type of Map: aerial

Prepared by:

Reviewed and the Number Assigned on: 11-28-12

By: Karen Schlaak

Notice of Hearing - date to intervene: _____



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

Mail to: PMB 2020 DENR - Water Rights 523 E Capitol Ave Pierre, SD 57501-3182 ph. (605) 773-3352	No. <u>7532-3</u>	(office use only) Hydrologic Unit <u>07020001</u>
	Basin <u>Minnesota - Watstone</u>	<u>605-432-4516</u>
	Newspaper <u>Grant Co. Review Box 390 Millbrook 57252</u>	
	<u>Public Opinion Box 10 Watstone 57201 605-886-6921</u>	

RECEIVED

NOV 19 2012

WATER RIGHTS
PROGRAM

Application For Permit To Appropriate Water For Irrigation

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

(Use predates Mar 2, 1955)

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

1. Name of Applicant Matthew P. Lowe Phone (605) 467-9246(check one) ☒ Owner ☐ Tenant/lesseeMailing Address 13839 466th Ave Wilmet SD 57279
(Address) (City) (State) (Zip Code)2. Amount of water claimed 1.78 *CFS or 800 **GPM ***AF Total Acreage 145
(*Cubic Feet per Second) (**Gallons per Minute) (***)Acre Feet - storage capacity of dam/dugout or annual use if applicable3. Source of water supply Well4. Location of point of diversion (example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W) County Grant1 Well in NE 1/4 SW 1/4 Sect. 8 120 N 51W.5. County or counties where water will be used Grant County6. Annual period during which water is to be used May 1 - Sept. 307. 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>NW 1/4 NW 1/4 Sect 8 120 N 51W</u>	<u>5 AC.</u>		
<u>SW 1/4 NW 1/4 Sect 8 120 N 51W</u>	<u>30 AC.</u>	<u>SE 1/4 NW 1/4 Sect 8 120 N 51W.</u>	<u>5 AC.</u>
<u>NW 1/4 SW 1/4 Sect 8 120 N 51W</u>	<u>30 AC.</u>	<u>NE 1/4 SW 1/4 Sect 8 120 N 51W</u>	<u>15 AC.</u>
<u>SW 1/4 SW 1/4 Sect 8 120 N 51W</u>	<u>30 AC.</u>	<u>SE 1/4 SW 1/4 Sect 8 120 N 51W.</u>	<u>30 AC.</u>

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

Irrigation System (Pivot) on 145 AC.

STATE OF SOUTH DAKOTA)

County of Grant) SS

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

I, Matthew P. Lowe, the applicant, certify that I have read this application, have examined the attached map and that the matters stated are true and that I intend, and am able to complete the necessary construction.Applicant's signature Matthew P. LoweSubscribed and sworn to before me this 11 day of November 20 12

DIANA ALLEN

My Commission Expires Jan. 15, 2013

SEAL
PUBLICDiana Allen

Notary Public signature

**SOUTH DAKOTA
WATER PERMIT NO. 7532-3**

Date of first receipt of application November 19, 2012.

Date of return to applicant for corrections, amendments or changes November 20, 2012.

Date of receipt of corrected application November 28, 2012.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 7532-3 to Matthew P Lowe, 13839 466th Ave, Wilmot SD 57279 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. 7532-3 appropriates 1.78 cubic feet of water per second from one well to be completed into the Antelope Valley Aquifer (126 feet deep) located in the NE 1/4 SW 1/4 Section 8 for irrigation of 145 acres located in the SW 1/4, W 1/2 NW 1/4, SE 1/4 NW 1/4 Section 8; all in T120N-R51W.
2. The amount of the appropriation may not exceed 2 acre feet annually for each acre of land to which water is actually and beneficially applied for irrigation. The water is to be used during the following described annual period: May 1 – September 30.
3. The date from which applicant may claim right is November 19, 2012.
4. The date of approval of Permit No. 7532-3 is February 19, 2013.
5. One-fifth of the construction is to be completed on or before August 19, 2015.
6. All construction is to be completed on or before February 19, 2018.
7. Water is to be put to beneficial use on or before February 19, 2022.
8. Water rights obtained in compliance with the laws of the State of South Dakota may not be unlawfully impaired by this appropriation.

QUALIFICATIONS

1. The well approved under this Permit will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
2. The well authorized by Permit No. 7532-3 shall be constructed by a licensed well driller and construction of the well and installation of the pump shall comply with Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) pursuant to Section 74:02:04:28.
3. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.

WATER MANAGEMENT BOARD

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

MAR 28 2013
date



Supplemental Information

(type or print in ink)

1. Well Information - Proposed Construction

- a) Drill Hole Diameter 18" Depth 126'
- b) Casing Type PVC Diameter 12" Thickness Sch. 40 - 5/8"
- c) Screen Type Stainless Steel Diameter 12" Thickness 3/8"
- d) Gravel Pack Red Flint Length of Gravel Pack 30'
- e) Depth to Top of Water Bearing Material 106'
- f) Depth to Water (ground surface to water level) _____
- g) Distance to nearest existing domestic well:

On applicant's property _____ On property owned by others 3/4 mile

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)

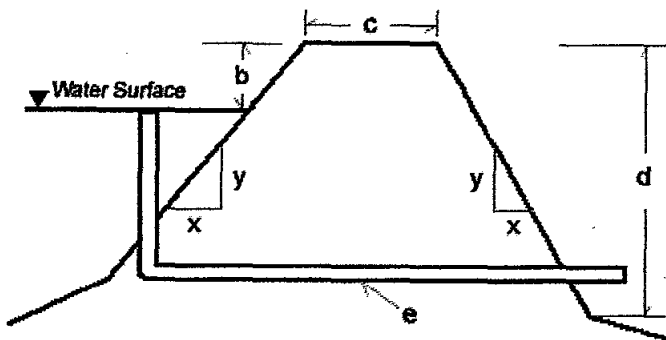
Upstream _____

Downstream _____

h) Surface Area of Impoundment _____

i) Storage _____ Acre Feet

j) Drainage Area Above Dam _____ Acres

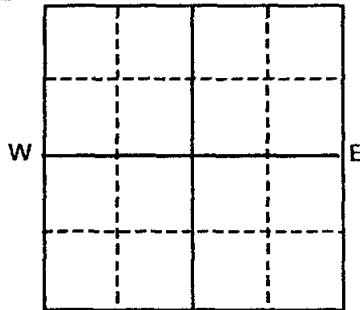


SOUTH DAKOTA WATER WELL COMPLETION REPORT

11-02

Location SE ¼ NE ¼ Sec 8 Twp 120 Rg 51County GRANT

North

Please mark well
location with an "X"

Well Completion Date

Oct 30, 2012

1 Mile

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

PROPOSED USE:

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

METHOD OF DRILLING:

mud rotary

CASING DATA:

☐ Steel ☐ Plastic ☐ Other

If other describe _____

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

GROUTING DATA:

Grout Type	No. of Sacks	Grout Weight	From	To
Quick Grout	7	Lb/gal	0.0 Ft	126.0 Ft
		Lb/gal	Ft	Ft

Describe grouting procedure _____

SCREEN:

☐ Perforated pipe ☐ Manufactured

Diameter _____ Inches Length _____ Feet

Material _____

Slot Size _____ Set From _____ Feet to _____ Feet

Other information _____

WAS A PACKER OR SEAL USED?

☐ Yes ☐ No

If so, what material? _____

Describe packer(s) and location _____

DISINFECTION: Was well disinfected upon completion?

☐ Yes, How? _____

☐ No, Why Not? _____
Lab to which water
quality sample sent for analysisWell Owner: Matthew P Lowe

Business Name: _____

Address: 13839 466th AVECity, State, Zip: Wilmot SD 57279

WELL LOG:

			DEPTH	
FORMATION			FROM	TO
soil	black	S	0	2
sand	brown	S	2	30
sand	white		30	33
sand clay	blue	S	33	86
sand	white		86	91
sand clay	blue	S	91	106
sand	white		106	122
coble/rock	green	H	122	126

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: Test Hole #1
 N45 12' 51.1
☐ Bailed W96 58 40.2 elev 1929
☐ Other

Pumping Level Below Land Surface

_____ Ft. After _____ Hrs. pumped _____ GPM

_____ Ft. After _____ Hrs. pumped _____ GPM

If pump installed, pump rate: _____ GPM

REMARKS

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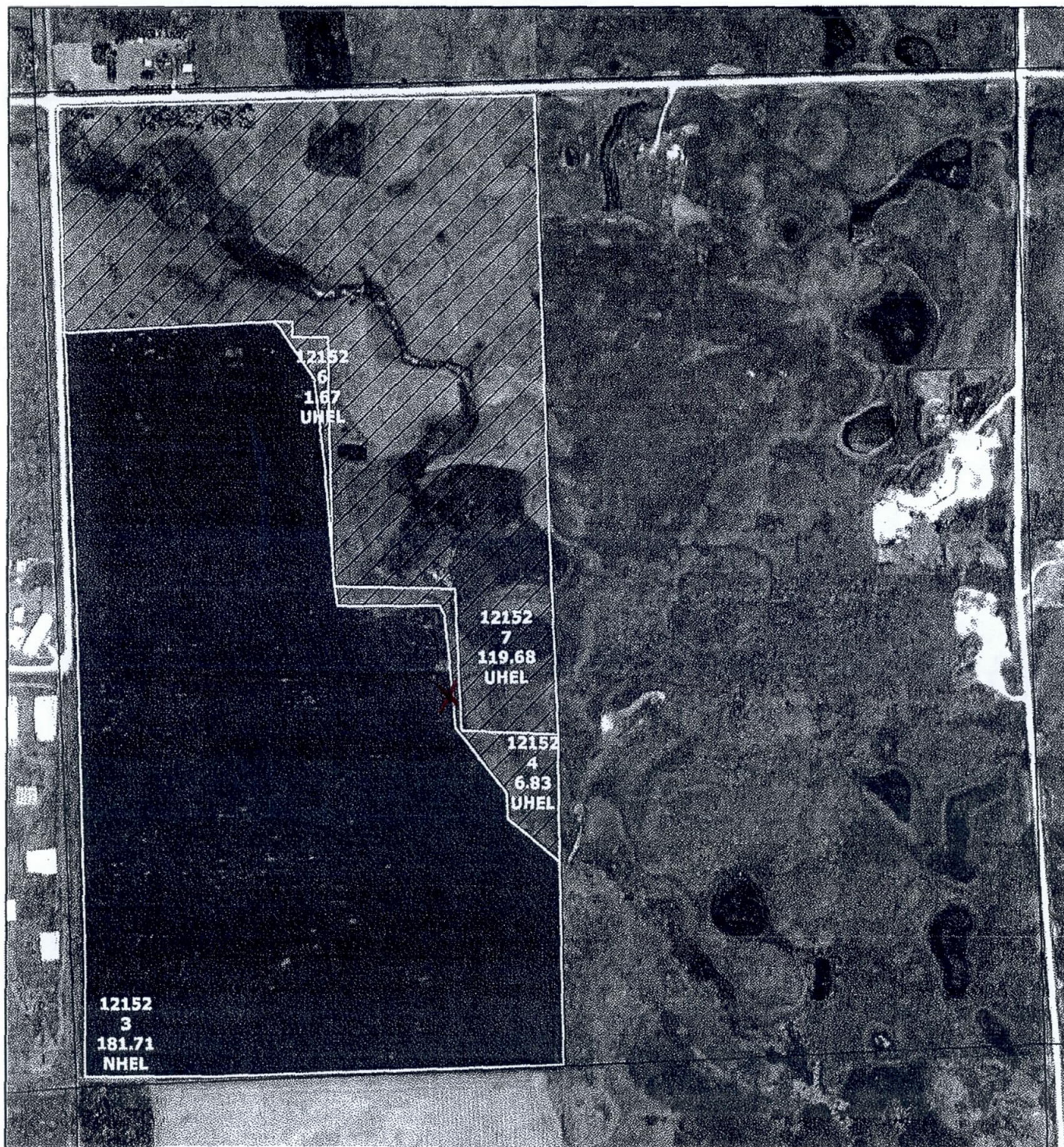
NOV 19 2012

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

Signature of License Representative: _____

Signature of Well Owner or Equitable Property Holder: _____

Date: _____



United States Department of Agriculture
Farm Service Agency

PLSS: 8_120N_51W
Farm: 9134

Roberts County

1:8,840 2012 Map



March 27, 2012

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Wetland Determination Identifiers
☒ Restricted Use
☒ Limited Restrictions
☐ Exempt from Conservation Compliance Provisions

Common Land Units

//// Non Cropland

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

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WATER RIGHTS PROGRAM

2010 Ortho-Photography - Not to Scale

Annette Hutchins, P.T.
11-16-12

205267

LOWE
Matthew

146 IRR. ACRES

* Well

Farmers
Implement and Irrigation
Brookings, SD

Data use subject to license.

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www.delorme.com



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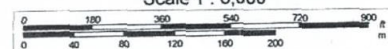
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VALLEY

The Leader in Precision Irrigation

Scale 1 : 6,000



1" = 500.0 ft

Data Zoom 15-1

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WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date 11/20, 20 12

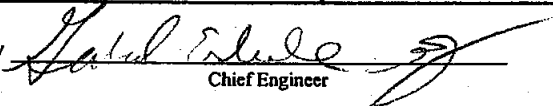
RECEIVED OF Matthew P Lowe 13839 466th Ave Willmot SD 57279

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

Fee for Application for Permit No. <u>7532-3</u> to Appropriate Water, to construct and to put water to beneficial use	850	00
Fee for Application for Permit No. _____ to Appropriate Water for Future use		
Fee to retain Future Use Permit No. _____ after period of seven years.		
Fee for Inspecting Constructed Works, confirming beneficial use and issuing Water License No. <u>7532-3</u>	200	00
Fee for Filing Transfer Form _____		
Fee for _____		
Fee for Issuing New Well Driller's License No. _____ for C.Y. _____		
Fee for Renewal of Well Driller's License No. _____ for C.Y. _____		
Fee for Issuing Well Pump Installer's License No. _____ for C.Y. _____		
Fee for Renewal of Well Pump Installer's License No. _____ for C.Y. _____		
(Any Other Work Provided by Law)	TOTAL	1050 00

No. **05707**

By


Chief Engineer



November 20, 2012

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NOV 28 2012

WATER RIGHTS
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DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182

denr.sd.gov

Matthew P Lowe
13839 466th Ave
Wilmot Sd 57279

Dear Mr. Lowe:

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

- Enclosed is the aerial photo map submitted with the application. Please mark the proposed well location with an "X". I am assuming the 145 acres to be irrigated is the dark colored portion of the map. Is this correct? yes.

If you have any questions, please contact me.

Sincerely,

Karen Schlaak

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

*The land is located in Grant Co.
All our land is moved to Roberts Co.
ASCS.*

enclosure



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 7532-3, Matthew P Lowe**

Pursuant to SDCL 46-2A-2, the following is the recommendation of the Chief Engineer, Water Rights Program, Department of Environment and Natural Resources concerning Water Permit Application No. 7532-3, Matthew P Lowe, 13839 466th Avenue, Wilmot SD 57279.

The Chief Engineer is recommending APPROVAL of Application No. 7532-3 because 1) there is reasonable probability that there is unappropriated water available for the applicant's proposed use, 2) the proposed diversion can be developed without unlawful impairment of existing rights, 3) the proposed use is a beneficial use and 4) it is in the public interest with the following qualifications:

1. The well approved under this Permit will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
2. The well authorized by Permit No. 7532-3 shall be constructed by a licensed well driller and construction of the well and installation of the pump shall comply with Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) pursuant to Section 74:02:04:28.
3. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.

See report on application for additional information.

Garland Erbele, Chief Engineer
January 25, 2013

REPORT TO THE CHIEF ENGINEER
ON
WATER PERMIT APPLICATION NO. 7532-3
MATTHEW P. LOWE
JANUARY 25, 2013

Water Permit Application No. 7532-3 proposes to appropriate up to 290 acre-feet of water annually (ac-ft/yr) at a maximum diversion rate of 1.78 cubic feet of water per second (cfs) from one well to be completed into the Antelope Valley aquifer. The well is expected to be approximately 126 feet deep and is to be located in the NE $\frac{1}{4}$ SW $\frac{1}{4}$ Section 8 for the irrigation of 145 acres located in the SW $\frac{1}{4}$, W $\frac{1}{2}$ NW $\frac{1}{4}$, SE $\frac{1}{4}$ NW $\frac{1}{4}$ Section 8; all in T120N-R51W in Grant County.

AQUIFER: Antelope Valley aquifer (AV)

GEOLOGY AND AQUIFER CHARACTERISTICS:

The Antelope Valley aquifer is composed of glacial outwash (sand and gravel) that is generally near ground surface and is generally under water table conditions (Hansen, 1990). The aquifer underlies portions of northeastern Codington County, western Grant County, and a small portion of northwestern Deuel County in a drainage divide between the Minnesota and Big Sioux Rivers (Hansen, 1990). The aquifer is hydraulically connected to many small area lakes and sloughs, with water movement generally toward the south except in the vicinity of some of the lakes where water movement is towards the lake (Hansen, 1990). Hedges and others (1982) estimated that the Antelope Valley aquifer underlies approximately 28,700 acres and contains an estimated 64,580 acre-feet of recoverable water in storage. In Grant and Codington Counties, the depth to the top of the aquifer ranges from near ground surface to approximately 57 feet below grade with an average thickness of 34 feet (Hansen, 1990).

The well completion report included with this application identifies top soil from ground surface to a depth of two feet, sand from two to 33 feet below grade, "sand clay blue" from 33 to 86 feet below grade, sand from 86 to 91 feet below grade, "sand clay blue" from 91 to 106 feet below ground surface, sand from 106 to 122 feet below grade, and "cobble/rock green" from a depth of 122 to 126 feet. Thus, the Antelope Valley aquifer can be found from two to 122 feet deep with some clay layers at the test hole.

SDCL 46-2A-9

Pursuant to SDCL 46-2A-9, a permit to appropriate water may be issued only if there is a reasonable probability that there is unappropriated water available for the applicant's proposed use, that the proposed diversion can be developed without unlawful impairment of existing rights and that the proposed use is a beneficial use and in the public interest. This report will address the availability of unappropriated water and effects on existing rights from the aquifer that are pertinent to this application.

WATER AVAILABILITY:

This application proposes to appropriate up to 290 ac-ft/yr from the Antelope Valley aquifer. If this application is approved, the actual water use will likely be less than the appropriation. The

probability of unappropriated water being available from an aquifer can be evaluated by considering SDCL 46-6-3.1, which requires “No application to appropriate groundwater may be approved if, according to the best information reasonably available, it is probable the quantity of water withdrawn annually from a groundwater source will exceed the quantity of the average estimated annual recharge of the water to the groundwater source.”

Hydrologic Budget:

Recharge:

Recharge to Antelope Valley aquifer is by direct infiltration and subsequent percolation of rainfall and snowmelt through the overlying topsoil (Hansen, 1990). Hedges and others (1985) estimated a recharge rate of 2.3 in/yr using observation well data. Estimated average annual recharge to the Antelope Valley aquifer is 5,501 ac-ft.

Discharge:

Discharge from the Antelope Valley aquifer is by: (1) evapotranspiration where the aquifer is at or near land surface; (2) outflow to Punished Womans, Round, and Crooked Lakes; (3) outflow to small lakes and sloughs in T120N-R51W near the eastern edge of the aquifer; and well withdrawals (Hansen, 1990). Currently, there are 16 appropriations from the Antelope Valley aquifer: 10 water rights/permits authorized for irrigation, two are for municipal use, three are for rural water systems and Future Use Permit No. 4053B-3 Town of South Shore (Water Rights, 2013b). The water use by the Grant Roberts Rural Water System, the three rural water system water rights/permits, is shown in table 1. The amount of water that can be expected to be withdrawn through water rights/permits authorizing water use for non-irrigation purposes at the current appropriation level can be estimated by assuming: 1) water rights/permits limited by an annual volume will pump the entire volume appropriated, 2) water rights/permits limited only by diversion rate will pump at the maximum permitted diversion rate 60 percent of the time (291 ac-ft/yr), and 3) future use permits can be fully developed (192 ac-ft/yr). Table 2 shows the water use by irrigation from the Antelope Valley aquifer. There are also several domestic wells on file with the SD DENR-Water Rights Program that appear to be completed into the Antelope Valley aquifer. The domestic water use from the aquifer is insignificant to the hydrologic budget. The average annual use is 2,306.4. Maximum annual water use from the aquifer, at current appropriation level, is expected to be less than 3,373.7 ac-ft/yr. The maximum annual use is 2,000 ac-ft/yr less than the estimated annual recharge. Therefore, there is unappropriated water available from the Antelope Valley aquifer for this proposed appropriation.

Year	Appropriation (ac-ft)	Pumpage (ac-ft)
2011	1074	844
2010	1074	881
2009	1074	874
2008	1074	890
2007	1074	875
2006	1074	835
2005	1074	645
2004	1074	792
2003	1074	761
Average	1074	821.9

Table 1- Water use by the Grant Roberts Rural Water System (Water Rights, 2003-2012)

Year	No. of Permits Reporting	Appropriation (ac-ft)	Pumpage (ac-ft)
2011	10	5257	886.68
2010	10	5257	1419.22
2009	9	5147	1281.3
2008	9	4727	989.29
2007	9	5425	1299.29
2006	9	5425	1937.34
2005	9	5425	1740.32
2004	9	5425	1595.86
2003	9	5425	2000.65
2002	9	5425	1533.72
2001	9	5425	1808.88
2000	9	5425	1608.24
1999	9	5425	1378.77
1998	9	5425	1136.25
1997	8	3925	932
1996	8	4198	1029.32
1995	10	5698	469.31
1994	10	5698	699.46
1993	11	5917	310
1992	11	5917	650
1991	12	5927	988
1990	10	4466	1606
1989	7	4096	1427
1988	7	4914	1826.8
1987	6	4866.1	645
1986	6	5106.1	41
1985	6	5106.1	49
1984	6	5106.1	136
1983	6	5276.1	542.79
1982	5	4194	60.75
1981	7	4881	513
1980	8	4881	435
1979	7	4735	73
Min	5	3925	41
Max	12	5927	2000.65
Avg	8.45	5137.74	1001.49

Table 2- Irrigation water use from the Antelope Valley aquifer (Water Rights, 1979-2012)

Observation Well Data:

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

The DENR-Water Rights Program monitors four observation wells completed into the Antelope Valley aquifer. The observation wells and the distance from the proposed well site are shown in table 3. The hydrographs for the observation wells are shown in figures 1 through 4. Water levels in the observation wells show good response to climatic conditions. The water levels rise

(recharge) during wet years and gradually decline during dry years. The hydrographs show the effects of pumping, but it does not appear to be significant. The water levels in the observation wells do show the impacts of pumping, especially CD-76G, but over the period of record it does not appear to have been significant. The climatic effects on water levels mask the temporal impacts of well withdrawal. In general, the water level in the aquifer has held steady over the period of record. Observation wells GT-76D, GT-77G, and GT-81A are under water table conditions; observation well CD-76G is probably under artesian conditions. Therefore, the hydrographs show that there is unappropriated water is available from the Antelope Valley aquifer for this proposed appropriation.

Name	Distance	Figure
GT-76D	2.7 southeast	1
GT-77G	4.7 southeast	2
CD-76G	6.0 southeast	3
GT-81A	15.5 southeast	4

Table 3- Observation wells completed into the Antelope Valley aquifer (Water Rights, 2013a)

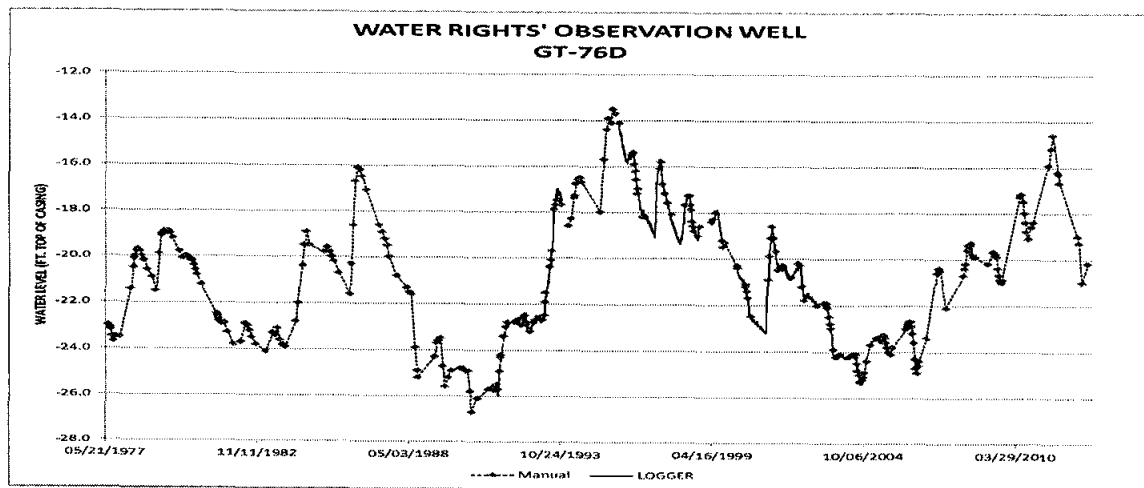


Figure 1- Hydrograph for observation well GT-76D (Water Rights, 2013a)

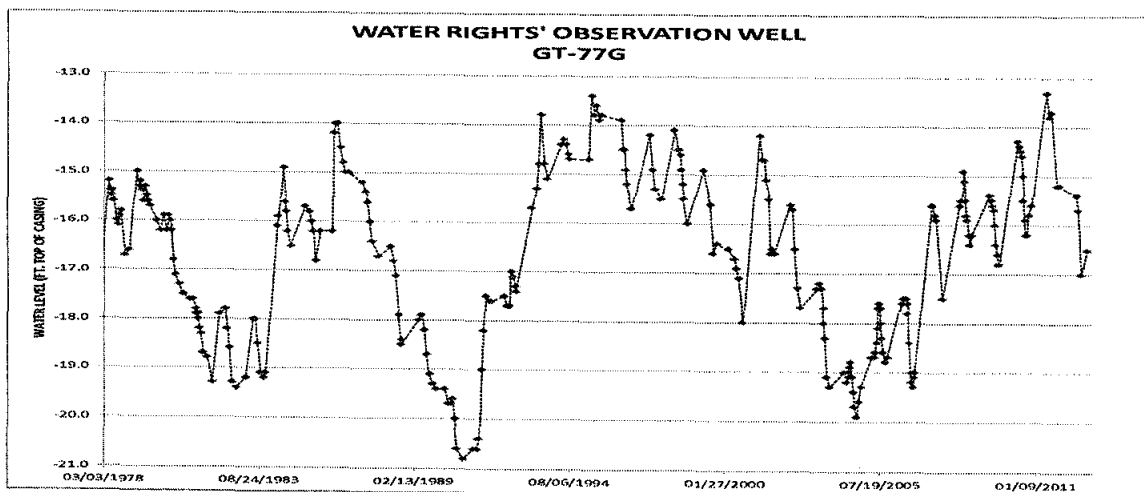


Figure 2- Hydrograph for observation well GT-77G (Water Rights, 2013a)

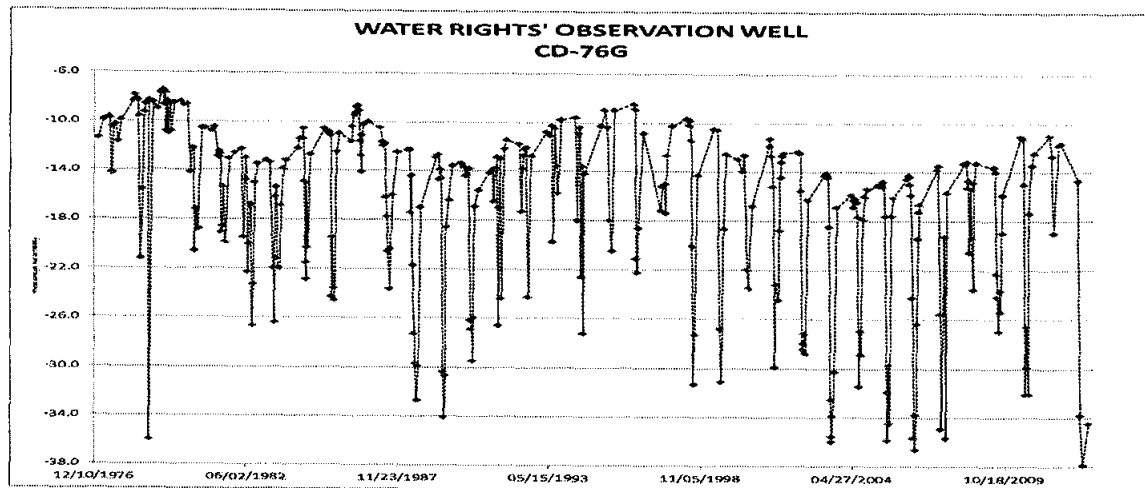


Figure 3- Hydrograph for observation well CD-76G (Water Rights, 2013a)

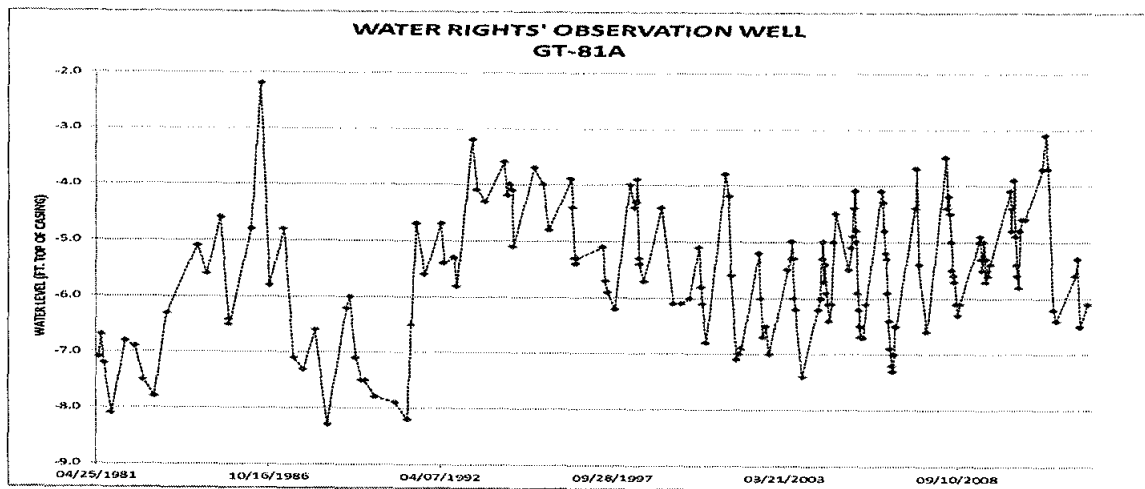


Figure 4- Hydrograph for observation well GT-81A (Water Rights, 2013a)

EXISTING WATER RIGHTS:

In addition to several domestic wells, Water Right No. 5338A-3 authorizes a well within approximately 1.5 miles of the proposed well site (Water Rights, 2013b and 2013c). The nearest well on file with the DENR-Water Rights Program is a domestic well 0.7 miles away. Observation wells GT-7D and GT-77G are within one mile of several high capacity wells. The hydrographs for these observation wells do not show the effects of pumping. The water table condition of the aquifer in this area dictates that any drawdown due to pumping would probably not extend far, less than half a mile, from the proposed well. The Water Management Board has consistently recognized that to place water to maximum beneficial use a certain amount of drawdown may occur.

Therefore, at the distances involved between the proposed well site and wells of existing water rights/permits and domestic users, interference is not expected to be significant. An adequate well as defined by ARSD 74:02:20(7) is not expected to be adversely or unlawfully impaired by pumping from this proposed appropriation.

CONCLUSIONS:

1. Water Permit Application No. 7532-3 proposes to appropriate up to 290 ac-ft/yr at a maximum diversion rate of 1.78 cfs for the irrigation of 145 acres from one well to be completed into the Antelope Valley aquifer.
2. There is a reasonable probability that unappropriated water is available from the Antelope Valley aquifer to supply this proposed diversion.
3. There is a reasonable probability that the diversion rate requested by this application can be made without adversely impacting existing water rights/permits and domestic users.


Adam Mathiowetz
SD DENR-Water Rights Program

Approved by:


Ken Buhler
SD DENR-Water Rights Program

REFERENCES:

- Hansen, D.S. 1990. Water Resources of Codington and Grant Counties, South Dakota: U.S. Geological Survey Water-supply Paper 2254, 263 p.
- Hedges, L.S., S.L. Burch, D.L. Iles, R.A. Barari, and R.A. Schoon. 1982. Evaluation of Ground-water Resources in Eastern South Dakota and Upper Big Sioux River, South Dakota and Iowa. Task 1: Bedrock Topography and Distribution, Task 2: Extent of Aquifers, Task 3: Ground-Water Storage, Task 4: Computerized Data Base, Final Report; U.S. Army Corps of Engineers Contract DACW 45-80-C-0185.
- Hedges, L.S. J. Allen, and D.E. Holly. 1985. Evaluation of Ground-Water Resources Eastern South Dakota and Upper Big Sioux River, South Dakota and Iowa, Task 7: Ground Water Recharge. South Dakota DENR-Geological Survey, Vermillion, SD.
- Water Rights. 1979-2012. "1979-2011 Irrigation Summaries by Aquifer and County": SD DENR-Water Rights Program. Joe Foss Bldg., Pierre, SD.
- Water Rights. 2003-2012. "2003-2012 Non-Irrigation Yearly Reports". SD DENR- Water Rights Program. Joe Foss Bldg., Pierre, SD.
- Water Rights. 2013a. Observation Well Files. SD DENR-Water Rights Program. Joe Foss Bldg., Pierre, SD.
- Water Rights. 2013b. Water Right/Permit Files. SD DENR-Water Rights Program. Joe Foss Bldg., Pierre, SD.
- Water Rights. 2013c. Well Completion Reports. SD DENR-Water Rights Program. Joe Foss Bldg., Pierre, SD.

Printer's Affidavit of Publication

STATE OF SOUTH DAKOTA
COUNTY OF GRANT

} ss.

RECEIVED

FEB - 8 2013

Ann Tuchscherer

WATER RIGHTS
PROGRAM

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 Phyllis Justice, 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, Bookkeeper of said newspaper, in charge of the advertising department thereof, have personal knowledge of all the facts stated in this affidavit; that the advertisement headed Notice of

Application No. 7532-3 to Appropriate
Water

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

February 6 2013

20

20

20

20

20

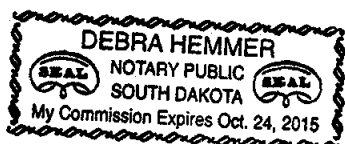
That \$ 23.20, being the full amount of the fee charged for the publication of said Notice, inures to the benefit of the publisher of the Grant County Review; that no agreement or understanding for the division thereof has been made with any person, and that no part has been agreed to be paid to any person whomsoever.

Ann Tuchscherer

Subscribed and sworn to before me this 6th day of Feb 2013

Debra Hemmer

Notary Public, Grant County, South Dakota



NOTICE OF APPLICATION

NO. 7532-3 to Appropriate Water

Notice is given that Matthew P Lowe, 13839 466th Ave., Wilmot, SD, 57279, has filed an application for a water permit to appropriate 1.78 cubic feet of water per second from one well to be completed into the Antelope Valley Aquifer (126 feet deep) located in the NE 1/4 SW 1/4 Section 8 for irrigation of 145 acres located in the SW 1/4, W 1/2 NW 1/4, SE 1/4 NW 1/4 Section 8; all in T120N-R51W.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 7532-3 because 1) unappropriated water is available, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest. In accordance with SDCL 46-2A-23, the Chief Engineer will act on this application, as recommended, unless a petition is filed opposing the application or the applicant files a petition contesting the Chief Engineer's recommendation. If a petition opposing the application or contesting the recommendation is filed, then a hearing will be scheduled and the Water Management Board will consider this application. Notice of the hearing will be given to the applicant and any person filing a petition.

Any person interested in opposing or supporting this application or recommendation must file a written petition with BOTH the applicant and Chief Engineer. The applicant must file a petition if contesting the Chief Engineer's recommendation. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E Capitol, Pierre, SD, 57501, (605-773-3352)," and the applicant's mailing address is given above. A petition filed by either an interested person or the applicant must be filed by February 19, 2013.

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

Published once at an approximate cost of \$23.20.

Publication Fee \$ 23.20

Notarial Fee \$

Total \$ 23.20

RECEIVED

FEB 13 2013

Form 8

WATER RIGHTS
PROGRAM

PROOF OF PUBLICATION

STATE OF SOUTH DAKOTA)
) SS
County of Codington)

I, Monica K. Saathoff

certify that the attached printed Notice was
taken

from the Watertown Public Opinion

printed and published in Watertown

County of Codington and

state of South Dakota. The notice was
published

in the newspaper on the following date:

February 6th, 2013

Cost of Printing 57.29

Monica K. Saathoff
(Signature)

Bookkeeper

(Title)

February 6th, 2013

(Date Signed)

DEPARTMENT OF ENVIRON- MENT AND NATURAL RESOURCES

NOTICE OF APPLICATION NO. 7532-3 to Appropriate Water

Notice is given that Matthew P. Lowe, 13839 466th Ave, Wilmot SD 57279 has filed an application for a water permit to appropriate 1.78 cubic feet of water per second from one well to be completed into the Antelope Valley Aquifer (126 feet deep) located in the NE 1/4 SW 1/4 Section 8 for irrigation of 145 acres located in the SW 1/4; W 1/2 NW 1/4, SE 1/4 NW 1/4 Section 8; all in T120N-R51W.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 7532-3 because 1) unappropriated water is available, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest. In accordance with SDCL 46-2A-23, the Chief Engineer will act on this application, as recommended, unless a petition is filed opposing the application or the applicant files a petition contesting the Chief Engineer's recommendation. If a petition opposing the application or contesting the recommendation is filed, then a hearing will be scheduled and the Water Management Board will consider this application. Notice of the hearing will be given to the applicant and any person filing a petition.

Any person interested in opposing or supporting this application or recommendation must file a written petition with BOTH the applicant and Chief Engineer. The applicant must file a petition if contesting the Chief Engineer's recommendation. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E Capitol, Pierre SD 57501 (605 773-3352)" and the applicant's mailing address is given above. A petition filed by either an interested person or the applicant must be filed by February 19, 2013.

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

Published once at the approximate cost of \$52.25.
(February 6, 2013)

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



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

January 29, 2013

Grant County Review
PO Box 390
Milbank SD 57252

ATTENTION: Legal Public Notice

Enclosed is a Notice on Application No. 7532-2 to Appropriate Water. Please publish the notice once on February 6, 2013. The text of the notice can be e-mailed to your paper by contacting Karen Schlaak at (605) 773-3352.

The applicant must verify to you that the notice is to be published and arrange for payment. **Please BILL the APPLICANT for the cost of publication.** The APPLICANT is Matthew P Lowe, 13839 466th Ave., Wilmot SD 57279 (Ph # 605-467-9246).

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

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

Sincerely,

Eric Gronlund
Natural Resources Engineer
605 773-3352

enclosures



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

January 29, 2013

Public Opinion
PO Box 10
Watertown SD 57201

ATTENTION: Legal Public Notice

Enclosed is a Notice on Application No. 7532-2 to Appropriate Water. Please publish the notice once on February 6, 2013. The text of the notice can be e-mailed to your paper by contacting Karen Schlaak at (605) 773-3352.

The applicant must verify to you that the notice is to be published and arrange for payment. **Please BILL the APPLICANT for the cost of publication.** The APPLICANT is Matthew P Lowe, 13839 466th Ave., Wilmot SD 57279 (Ph # 605-467-9246).

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

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Sincerely,


Eric Gronlund
Natural Resources Engineer
605 773-3352

enclosures



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

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

January 29, 2013

Matthew P Lowe
13839 466th Ave
Wilmot SD 57279

Dear Mr. Lowe:

Water Permit Application No. 7532-3 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 at Wilmot SD (Ph # 605-432-4516) and the Public Opinion printed at Watertown SD (Ph # 605-886-6901). You will need to contact the newspaper(s) and authorize publication of this notice. For your information, a copy of the notice, the recommendation of the Chief Engineer and report on the application are enclosed. Please review the notice prior to publication and notify this office, if you have any corrections or questions.

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

Sincerely,


Eric Gronlund
Natural Resources Engineer
(605) 773-3352

enclosures

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

Instruction to Newspaper - Publish the Notice on February 6, 2013. The applicant is responsible for payment. The text of the notice can be e-mailed to your paper by contacting Karen Schlaak at (605) 773-3352 or email: Karen.schlaak@state.sd.us.

NOTICE OF APPLICATION NO. 7532-3 to Appropriate Water

Notice is given that Matthew P Lowe, 13839 466th Ave, Wilmot SD 57279 has filed an application for a water permit to appropriate 1.78 cubic feet of water per second from one well to be completed into the Antelope Valley Aquifer (126 feet deep) located in the NE 1/4 SW 1/4 Section 8 for irrigation of 145 acres located in the SW 1/4, W 1/2 NW 1/4, SE 1/4 NW 1/4 Section 8; all in T120N-R51W.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 7532-3 because 1) unappropriated water is available, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest. In accordance with SDCL 46-2A-23, the Chief Engineer will act on this application, as recommended, unless a petition is filed opposing the application or the applicant files a petition contesting the Chief Engineer's recommendation. If a petition opposing the application or contesting the recommendation is filed, then a hearing will be scheduled and the Water Management Board will consider this application. Notice of the hearing will be given to the applicant and any person filing a petition.

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

Published once at the total approximate cost of _____.



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182

denr.sd.gov

MAR 28 2013

Matthew P Lowe
13839 466th Ave
Wilmot SD 57279

Dear Mr. Lowe:

Enclosed is Water Permit No. 7532-3 authorizing construction of your water diversion system and beneficial use of the water, not exceeding the limits as specified in the Water Permit.

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

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

Sincerely,

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

enclosures

SOUTH DAKOTA WATER WELL COMPLETION REPORT

11-02

Location SE ¼ NW ¼ Sec 8 Twp 120 Rg 51

County Grant

Please mark well location with an "X"

North

W E

Well Completion Date

June 13, 2013

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

Well Owner: Matthew P Lowe

Business Name: _____

Address: 13839 466th Ave

City, State, Zip: Wilmot SD 57279

WELL LOG:			DEPTH	
FORMATION			FROM	TO
Top Soil	Blk	S	0	2
sand	brn/red		2	40
sandy blue clay			40	85
sand (pearrock & bigger)			85	121

STATIC WATER LEVEL _____ **17.0** FEET

If flowing: closed in pressure _____ PSI

GPM flow _____ through _____ Inch pipe

Controlled by ☐ Valve ☐ Reducers ☐ Other _____

Reduced flow rate _____ GPM

Can well be completely shut in?

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	12.00 IN	2.0 FT	101.0 FT	17.50 IN
LB/FT	IN	FT	FT	IN
LB/FT	IN	FT	FT	IN

GROUTING DATA:				
Grout Type	No. of Sacks	Grout Weight	From	To
Quick Grout	38	Lb/gal	0.0 Ft	91.0 Ft
Red Flint #80		Lb/gal	91.0 Ft	121.0 Ft
Describe grouting procedure				

SCREEN: ☐ Perforated pipe ☒ Manufactured

Diameter 12.00 Inches Length 20.0 Feet

Material stainless steel

Slot Size 80 Set From 101.0 Feet to 121.0 Feet

Other information _____

WAS A PACKER OR SEAL USED?	☐ Yes	☒ No
----------------------------	------------------------------	--

If so, what material? _____
Describe packer(s) and location _____

DISINFECTION: Was well disinfected upon completion?
☐ Yes. How?

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

WELL TEST DATA:

☒ Pumped Describe: submersible

☐ Bailed

☐ Other

Pumping Level Below Land Surface

74.0 Ft. After 6.0 Hrs. pumped 800.0 GPM

 Ft. After Hrs. pumped GPM

If pump installed, pump rate: GPM

RECEIVED
SEP 12 2013
WATER RIGHTS PROGRAM

REMARKS
Prod Well #1
45 12' 51.1N
96 58' 40.2W
Elev 1929
Kris VanHeuvlen

This well was drilled under license # 463 and this report is true and accurate.

Drilling firm: Steffl Drilling & Pump Inc

Signature of License Representative:

Signature of Well Owner or Equitable Property Holder:

Date: 8/29/13



7532-3

**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
PMB 2020
523 EAST CAPITOL
PIERRE SOUTH DAKOTA 57501-3182
www.state.sd.us/denr

January 16, 2015

NOTICE

TO: MATTHEW P LOWE, 13839 466TH AVE, WILMOT, SD 57279

FROM: Ron Duvall, Natural Resources Engineer
for Garland Erbele, Chief Engineer
Water Rights Program

SUBJECT: Reporting Requirement for 2014 Irrigation Questionnaire(s)

Our records indicate your 2014 Irrigation Questionnaire(s) has not been submitted for Permit No(s) 7532-3. The request for the Questionnaire was dated October 17, 2014. The Water Management Board has directed that owners of water permits who have not submitted the 2014 Irrigation Questionnaire(s) be given notice of permit violation and a hearing to be held by the Board. The hearing is to determine what action is to be taken for violation of Water Permit No(s) 7532-3 qualification:

"This permit is approved subject to the Irrigation Water Use Questionnaire being submitted each year."

The hearing will be held at **10:00 am, March 4, 2015** in the Floyd Matthew Training Center, Joe Foss Building, 523 E Capitol Avenue, Pierre, SD and will be conducted pursuant to SDCL 46-1-12, 46-1-14, 46-2-9, 46-2-11 and 46-2-17. These are contested case hearings pursuant to Chapter 1-26. According to SDCL 46-1-12, the Board may suspend a permit for a period of up to one year for the first violation of a permit qualification or up to three years for a second violation, or cancel a permit for a third violation. Following the hearing, the Water Management Board can:

1. Suspend or cancel Permit No(s) 7532-3 in accordance with applicable provisions of SDCL 46-1-12;
2. Postpone any action; or
3. Take no action.

The hearing is an adversary proceeding. The permit owner has the right to be present or to be represented by a lawyer. These and other due process rights will be forfeited if they are not exercised. Decisions of the Board may be appealed to the Circuit Court and the State Supreme Court as provided by law.

If the questionnaire(s) is (are) received in this office before the **March 4, 2015** hearing you will no longer be in violation of your permit and your name will be removed from the Board agenda. Enclosed are additional questionnaire(s) for your use. If you have questions or need assistance, please contact Genny McMath at (605) 773-3352 or email at genny.mcmath@state.sd.us. If you prefer, you can complete the questionnaire online at the following link: <http://denr.sd.gov/iq.aspx>

NOTE: Please contact the Water Rights Program, Joe Foss Building, 523 E Capitol, Pierre, SD (605-773-3352) to assure access to the meeting room for the handicapped or to obtain an interpreter for the hearing impaired.



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182

denr.sd.gov

January 29, 2015

7532-3

Matthew P Lowe
13839 466th Ave
Wilmot SD 57279

Dear Mr. Lowe:

I am writing to acknowledge receipt of your 2014 irrigation questionnaire.

You may disregard the January 16, 2015, "Notice" concerning reporting requirements for Water Permit No. 7532-3. The information was received in our office prior to the Water Management Board meeting and your name has been deleted from the agenda.

If you have any questions, please contact me.

Sincerely,

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

Report of Examination of Works and/or Application of Water to Beneficial Use For Permit No. 7532-3

I have this day, September 5, 2018, made a thorough examination of the water use system constructed by Matthew Lowe of 13839 466th Ave, Wilmot SD 57279 holder of Permit No. 7532-3, bearing the priority of November 19, 2012 authorizing the diversion of 1.78 cu. ft. per second of ground water (Antelope Valley Aquifer) for irrigation use purposes, in Grant County.

Inspection contact & relationship Matt Lowe, Owner

A. Works used to divert the water:

Well Information:

- 1) Well Drilling Firm: Steffl Drilling and Pump Inc
- 2) No. of Wells 1
- 3) Depth(s) 121 feet
- 4) Well log is available Y
- 5) Comments: none

Casing:

- 1) Diameter 12 inches
- 2) Length 101 feet
- 3) Type plastic

Screen:

- 1) Type stainless steel
- 2) Length 20 feet
- 3) Static water level 17 feet

Pump:

- 1) Make NA
- 2) Model submersible
- 3) Size NA
- 4) Capacity 800 GPM

Motor:

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

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

- 1) Type aluminum
 - 2) Size 6 inches
 - 3) Length 20 feet
- Comments: none

C. Works used to apply water to beneficial use:

Center pivot:

- 1) Make Valley
- 2) Overall length 2100 feet

- 3) Number of towers 11
- 4) End gun Y
- 5) Capacity 800 GPM
- 6) Comments: the center pivot has a secondary joint at the 4th tower allowing it to pivot at that point

Chemigation Equipment:

- 1) Does chemigate N

D. Compliance with Permit Requirements:

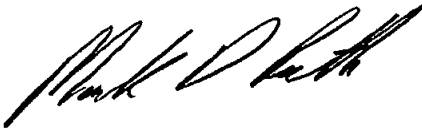
- 1) Permit qualifications being abided by Y
- 2) Irrigation Questionnaires checked to determine if permit owner started irrigation by the end of construction period Y
List any extended period of nonuse: none
- 3) Exceptions to compliance are: none

E. Condition and Location:

1. The system is in poor, good, etc condition with the point(s) of diversion located as follows: from the SW corner of Sec 8 T120N-R51W 2110 ft N and 2035 ft E, latitude of 45.21418 and longitude of -96.97782 (NE ¼ SW ¼).
2. The works are capable of diverting and conveying to the place of use 1.78 cu. ft. per second of water which is to be used for irrigation use. Water has been put to beneficial use to the maximum extent as follows:
All land is located in Sec 8 T120N-R51W
NW ¼ NW ¼ - 0.5 ac SE ¼ NW ¼ - 1.5 ac SW ¼ NW ¼ - 29 ac
NW ¼ SW ¼ - 39 ac NE ¼ SW ¼ - 20 ac SE ¼ SW ¼ - 33 ac SW ¼ SW ¼ - 22 ac
comprising a total of 145 acres of land and the license should be issued for 1.78.
3. All structures, wells and lands on map Y

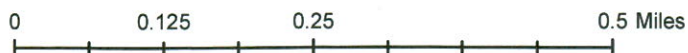
F. Comments or other permit(s) associated with the project:

None.



Mark D Rath
Natural Resources Engineer
DENR, Water Rights Program

Date report completed: 01-04-2019



Mark D Rath
Natural Resources Engineer
January 4, 2019



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

MAR 19 2019

7532-3

Matthew P Lowe
13839 466th Ave
Wilmot SD 57279

Dear Mr. Lowe:

Enclosed is Water License No. 7532-3. This is the final water right document completing your process of obtaining a Water Right. Included with your license is a map prepared by the staff engineer who conducted the field investigation.

For your information SDCL 46-6-27 requires that if in the future, the owner of an existing well, constructs a replacement well and does not plan to use the old well, the old well is considered abandoned and must be plugged. Also, any well that is being used or is not considered abandoned must be valved and controlled, if flowing, or sealed and capped so that no leaking occurs either underground or at the surface.

As long as you use the water beneficially, as stated in the Water License, the State Water Laws provide that you have a continuing right to use the water. If you have any questions, please contact our office.

Sincerely,

Jeanne Goodman, Chief Engineer
Water Rights Program
(605) 773-3352

enclosures

STATE OF SOUTH DAKOTA
WATER LICENSE NO. 7532-3

(1) Matthew P Lowe, 13839 466th Ave, Wilmot SD 57279 made Application No. 7532-3, November 19, 2012 for a water permit to divert 1.78 cubic feet of water per second from ground water, one well (Antelope Valley Aquifer), Grant County, South Dakota for irrigation purposes. Permit No. 7532-3, with a priority date of November 19, 2012 was approved February 19, 2013 and issued to the applicant for diversion of water with construction of the described water supply system to be completed on or before February 19, 2018 and for the application to beneficial use of said water on or before February 19, 2022.

(2) It is certified that the permit holder has complied with the provisions of South Dakota State Law relating to completion of the construction of the water supply system and is entitled to divert 1.78 cubic feet of water per second for beneficial use. The location of the diversion point is:

- 2,110'N & 2,035'E of the SW corner of Section 8, T120N, R51W (NE ¼ SW ¼)
Latitude 45.21418, Longitude -96.97782

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

Section 8, T120N, R51W			
NW ¼ SW ¼	39.0 acres	NW ¼ NW ¼	0.5 acres
NE ¼ SW ¼	20.0 acres	SE ¼ NW ¼	1.5 acres
SE ¼ SW ¼	33.0 acres	SW ¼ NW ¼	29.0 acres
SW ¼ SW ¼	22.0 acres		

Total 145 acres

(4) Pursuant to South Dakota Water Law 46-5-30.1 Matthew P Lowe, 13839 466th Ave, Wilmot SD 57279 the holder and/or owner of Water Right No. 7532-3 is issued a license to appropriate water, the right to use 1.78 cubic feet of water per second from ground water, one well (Antelope Valley Aquifer) with a priority date of November 19, 2012 from the location specified in (2) of this license for irrigation purposes.

This license is subject to South Dakota Water Law, any limitations or conditions listed in Water Right No. 7532-3 and subject to the following qualifications:

- The well approved under this Permit will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
- The well authorized by Permit No. 7532-3 shall be constructed by a licensed well driller and construction of the well and installation of the pump shall comply with the Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) pursuant to Section 74:02:04:28. *The well was drilled in June, 2013 by Steffl Drilling & Pump Inc. A copy of the well completion report is on file with the Water Rights Program.*

continued

- This Permit is approved subject to the irrigation water use questionnaire being submitted each year.

Jeanne Goodman

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

MAR 19 2019

date

