

WATER PERMIT NO. 8074-3

Name of Applicant: Sam Oltmanns

Address: PO Box 462, Lennox SD 57039 Phone:

Amount of Water Claimed: 1.78 cfs Total Acres: 120 acres

Source of Water Supply: groundwater (one well)

Water to be used for: irrigation County: Turner

Type of Waste Disposal System:

Location: 4 miles southeast of Parker

PRIORITY Date Received: 1-12-15 Application/License Fee: \$ 950

Corrected Application Received: Period of Annual Use: April 1 – October 31

Remarks: Requesting a diversion rate greater than statutory limit

Diversion Point: SE 1/4 SW 1/4 Sec 25-T99N-
R53W

Land to be Irrigated: S 1/2 SW 1/4, SW 1/4 SE 1/4
Sec 25-T99N-R53W

Depth of Well: 50 feet deep

Well Driller: Sam Heine Well Company

Remarks:

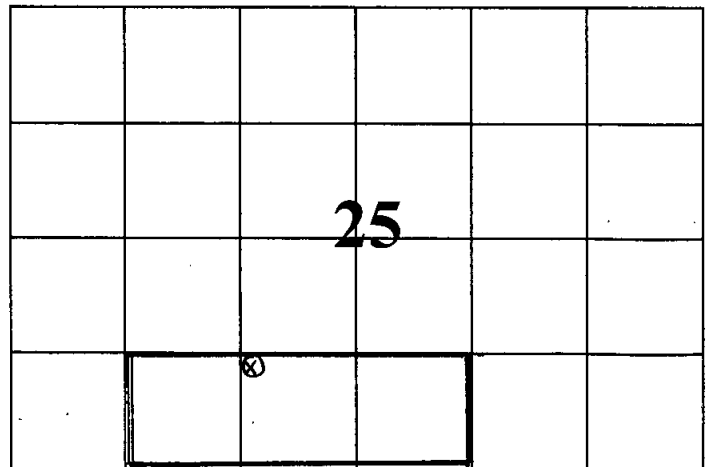
Type of Map: aerial

Prepared by:

Reviewed and the Number Assigned on: 1-12-15

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>8074-3</u> (office use only)	Hydrologic Unit <u>10170102</u>
	Basin <u>Vermillion River</u>	<u>605-297-4419</u>
	Newspaper <u>New Era, Box 579, Parker SD 57053</u>	<u>605-331-2200</u>
	<u>Argus Leader, Box 5034, Sioux Falls SD 57117</u>	

RECEIVED
JAN 12 2015
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 to Appear on Irrigation Permit Sam Oltmanns

(check one) ☒ Owner ☐ Tenant/lessee ☐ Owner's Legal Agent _____
(name and complete address if different than above name)

Mailing Address P.O. Box 462 (Address) Lennox (City) SD (State) 57039 (Zip Code)

Home Phone _____ Cell 605-310-9710 Email _____

2. Amount of water claimed 1.78 *CFS or 800 **GPM ***AF Total Acreage 120
(*Cubic Feet per Second) (**Gallons per Minute) (***)Acre Feet - storage capacity of dam/dugout or annual use if applicable)

3. Source of water supply Irrigation Well

4. Location of point of diversion SE1/4 SW1/4 SECTION 25 T99N R53W
(example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W)

County TURNER

5. County or counties where water will be used TURNER

6. Annual period during which water is to be used APRIL 1 TO OCTOBER 31

7. List below each forty acre division, or lot, or fraction thereof and show number of acres to be irrigated in each.
(Attach sheet if more space is needed)

Land Description	Acres	Land Description	Acres
SE1/4 SW1/4 SECTION 25 T99N R53W	40	SW1/4 SE1/4 SECTION 25 T99N R53W	40
Sw1/4 SW1/4 SECTION 25 T99N R53W	40		

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

DRILLING IRRIGATION WELL TO SUPPLY PIVOT SYSTEM - Requesting Diversion Rate greater than statutory limit

I, SAM OLTMANNS, the applicant, certify that I have read this application, have examined the attached map, and that the matters stated are true.

**SOUTH DAKOTA
WATER PERMIT NO. 8074-3**

Date of first receipt of application January 12, 2015.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 8074-3 to Sam Oltmanns, PO Box 462, Lennox SD 57039 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. 8074-3 appropriates 1.78 cubic feet of water per second (cfs) from one well to be completed into the Parker Centerville Aquifer (50 feet deep) located in the SE 1/4 SW 1/4 Section 25 for irrigation of 120 acres located in the S 1/2 SW 1/4, SW 1/4 SE 1/4 Section 25; all in T99N-R53W.
2. The amount of the appropriation may not exceed 2 acre feet annually for each acre of land to which water is actually and beneficially applied for irrigation. The water is to be used during the following described annual period: April 1 – October 31.
3. The date from which applicant may claim right is January 12, 2015.
4. The date of approval of Permit No. 8074-3 is March 30, 2015.
5. One-fifth of the construction is to be completed on or before September 30, 2017.
6. All construction is to be completed on or before March 30, 2020.
7. Water is to be put to beneficial use on or before March 30, 2024.
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. 8074-3 shall be constructed by a licensed well driller and construction of the well and installation of the pump shall comply with Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) pursuant to Section 74:02:04:28.
3. Pursuant to SDCL 46-5-6 which allows a greater diversion rate if the method of irrigation, time constraints, or type of soils so requires, Permit No. 8074-3 authorizes a maximum diversion rate of 1.78 cfs for the irrigation of 120 acres with an annual volume not to exceed 2 acre feet of water per acre per year.
4. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.

WATER MANAGEMENT BOARD

By: *Jeanne Goodman*

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

APR 06 2015

date



Supplemental Information

(type or print)

1. Well Information (check one or both as applicable) ☒ Drilling new well(s) ☐ Using existing well(s)

a) If new wells, how many ____ Have test holes been drilled ☒ Yes ☐ No Drilled by SAM HEINE WELL CO., LLC
(if yes, please provide copies of logs)

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

c) Well Depth 50 FT Depth to Top of Water Bearing Material 40 FT Depth to Water from Surface 7 FT

d) Distance to nearest existing domestic well:

On applicant's property _____ On property owned by others 1200 FT

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)

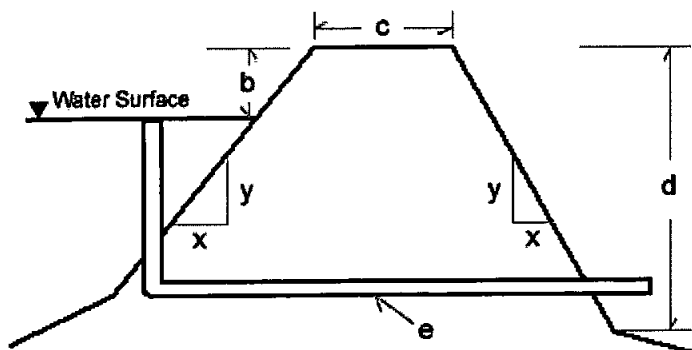
Upstream _____

Downstream _____

h) Surface Area of Impoundment _____

i) Storage _____ Acre Feet

j) Drainage Area Above Dam _____ Acres



Automatic Irrigation Inc.



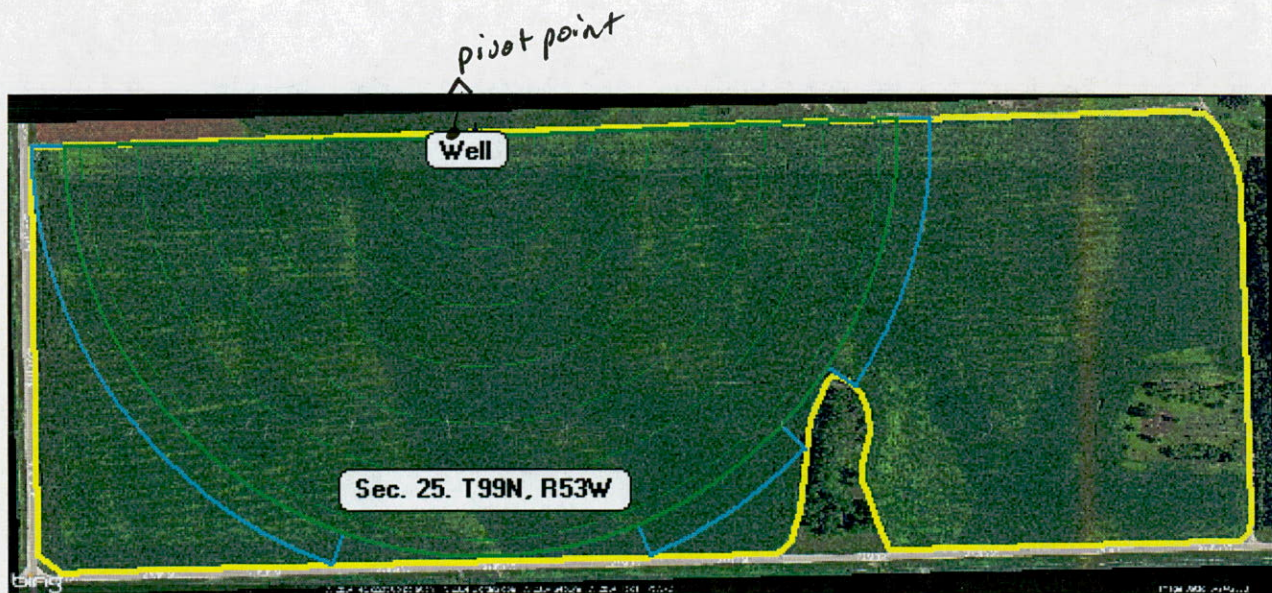
1111 Railway Street
Centerville, SD 57014
605 - 563 - 2649 office

Farm: Sec. 25, T99N, R53W

Grower: Sam Oltmanns

1/5/2015

Systems:	Length	Spans	Total area including endgun
● Pivot 1	1292.58 ft	7 spans + 44 ft o.h.	67.65 acres



RECEIVED

JAN 12 2015

WATER RIGHTS
PROGRAM

Sec 14
T099N
R53W

Sec 13
T099N
R53W

Sec 18
T099N
R52W

Sec 23
T099N
R53W

Sec 24
T099N
R53W

Sec 19
T099N
R52W

Sec 26
T099N
R53W

Sec 25
T099N
R53W

Sec 30
T099N
R52W

Sec 35
T099N
R53W

Sec 36
T099N
R53W

Sec 31
T099N
R52W



GPS _____

RECEIVED

August 2011
DNR Form 145-3

GEOLOGIC MATERIALS LOGGED
CONTINUATION FORM FOR ITEM 12

JAN 12 2015

WATER RIGHTS PROGRAM

[illegible]

Type	Hardness	Color
Clay	Cemented	Black
Clay Stone	Consolidated	Blue
Cobbles	Dense/Stiff	Brown
Fine Sand	Hard	Gray
Gravel	Soft	Green
Limestone	Unconsolidated	Orange
Loss Circulation	Very Hard	
Ochre (weathered shale)	Top Soil	
Sandy Clay		
Sand with Clay/Silt		

Sam Heine Well Company
214 Capital St
Yankton, SD 57078

Sam Oltmanns

CUSTOMER NAME

DATE _____

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date 1/13, 2015

RECEIVED OF Sam Heine Well - for Sam Oltmanns 214 Capitol St Yankton SD 57078

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

Fee for Application for Permit No. <u>8074-3</u> to Appropriate Water, to construct and to put water to beneficial use	750	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>8074-3</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	950 00

No. 07124

By Jeanne Goodman
Chief Engineer



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

February 13, 2015

8074-3

Sam Ortmanns
PO Box 462
Lennox, SD 57039

Dear Mr. Ortmanns:

You recently submitted Water Permit Application No. 8074-3 requesting the appropriation of 1.78 cubic feet per second (800 gallons per minute) for the irrigation of 120 acres in the S $\frac{1}{2}$ SW $\frac{1}{4}$ and the SW $\frac{1}{4}$ SE $\frac{1}{4}$ of Section 25, T99N-R53W in Turner County. South Dakota Codified Law 46-5-6 stipulates the diversion rate for an irrigation appropriation cannot be in excess of one cubic foot per second (448.8 gallons per minute) for every 70 acres, or "the equivalent thereof." The statute provides that the Water Management Board may allow a greater diversion if the method of irrigation so requires. In your application you request 1.04 cubic feet per second (466 gallons per minute) per 70 acres. The Water Rights Program requires a justification for the requested diversion rate in order to process your application.

Please contact Bracken Capen in the Water Rights Program in regards to this issue at your earliest convenience at (605) 773-3352, or via email at Bracken.Capen@state.sd.us.

Sincerely,

A handwritten signature in black ink, appearing to be "Bracken Capen", written over a horizontal line.

Bracken Capen
Natural Resources Engineer
Water Rights Program



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

denr.sd.gov

**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 8074-3, Sam Oltmanns**

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. 8074-3, Sam Oltmanns, PO Box 462, Lennox SD 57039.

The Chief Engineer is recommending APPROVAL of Application No. 8074-3 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. 8074-3 shall be constructed by a licensed well driller and construction of the well and installation of the pump shall comply with Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) pursuant to Section 74:02:04:28.
3. Pursuant to SDCL 46-5-6 which allows a greater diversion rate if the method of irrigation, time constraints, or type of soils so requires, Permit No. 8074-3 authorizes a maximum diversion rate of 1.78 cfs for the irrigation of 120 acres with an annual volume not to exceed 2 acre feet of water per acre per year.
4. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.

See report on application for additional information.

Jeanne Goodman, Chief Engineer
March 5, 2015

**REPORT TO THE CHIEF ENGINEER
WATER PERMIT APPLICATION NO. 8074-3**

Sam Oltmanns

February 12, 2015

Water Permit Application No. 8074-3 proposes to withdraw groundwater at a maximum diversion rate of 1.78 cubic feet of water per second (cfs) from one well to be completed into the Parker Centerville aquifer. The well is expected to be approximately 50 feet deep and will be located in the SE¼ SW¼ of Section 25, T99N-R53W. Water from this well will be used to irrigate 40 acres in the SE ¼ SW ¼, 40 acres in the SW ¼ SW ¼, and 40 acres in the SW ¼ SE ¼, all in Section 25, T99N-R53W for a total of 120 acres of Turner County.

AQUIFER: Parker Centerville aquifer (PAC)

GEOLOGY AND AQUIFER CHARACTERISTICS:

The Parker Centerville is a surficial outwash consisting of fine sand to coarse gravel that is unconfined in the area of the proposed well site (Lindgren and Hansen, 1990; SD Geological Survey, 2013). The aquifer underlies approximately 67,060 acres in Turner, Lincoln, and Clay Counties (Hedges and others, 1982; Lindgren and Hansen, 1993; Niehus, 1994). Applying an average thickness of 34 feet (Lindgren and Hansen, 1993) and a storativity of 0.15, the total amount of water in storage in the aquifer is estimated to be 342,000 acre-feet (ac-ft). Groundwater movement in the Parker Centerville aquifer is generally southeast (Lindgren and Hansen, 1990). The Parker Centerville aquifer connects to the Vermillion East Fork and Vermillion West Fork aquifers to the north and to the Lower Vermillion Missouri aquifer to the south (Hedges and others, 1982).

The Parker Centerville aquifer is often underlain by the Upper Vermillion Missouri aquifer, as is the case at the location of the well site proposed in this application (Lindgren and Hansen, 1993; Holmes and Filipovic, 2015). The proposed well site appears to be near the northwestern extent of the Upper Vermillion Missouri aquifer. Although a layer of clay separates the Parker Centerville aquifer from the Upper Vermillion Missouri aquifer at the proposed well site, Lindgren and Hansen (1993) have documented hydraulic connection between the Upper Vermillion Missouri and the Parker Centerville aquifers. Holmes and Filipovic (2015) assert direct lateral contact between the Niobrara and the Upper Vermillion Missouri aquifers but that water levels indicate very little, in any interaction between the two. Poor water quality found in municipal wells held by the City of Hurley also indicates a direct hydraulic connection between the Parker Centerville and the Niobrara aquifers in that region. The Niobrara, Upper Vermillion Missouri, and Parker Centerville aquifers in the area around Hurley are known to contain elevated levels of iron, manganese, nitrate/nitrite, sulfate, dissolved solids, and calcium carbonate (Schulz, 1993; Holmes and Filipovic, 2015). Water levels in the Parker Centerville aquifer are generally higher than those in the Upper Vermillion Missouri (Water Rights, 2015a). Consistent with this, Holmes and Filipovic (2015) documented downwards flow from the Parker Centerville to the Upper Vermillion Missouri aquifer.

A test hole log was submitted with Water Permit Application No. 8074-3. Given the depth of the proposed well, surficial nature of the aquifer at that location, and the location itself, the proposed well will likely be completed into the Parker Centerville aquifer.

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 existing rights from the aquifer that are pertinent to this application.

WATER AVAILABILITY:

The probability of unappropriated water available from an aquifer can be evaluated by considering SDCL 46-6-3.1, which requires "No application to appropriate groundwater may be approved if, according to the best information reasonably available, it is probable 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." If the source of the water is older or lower than the Greenhorn Formation and a public water system has applied for a permit, the Board need not consider the recharge/withdrawal issue. Here, a public water system is not involved. Therefore, withdrawal/recharge issue must be considered.

In applying SDCL 46-6-3.1, the Sixth Judicial Circuit Court ruled in 2005 that if the Water Management Board uses average annual recharge, then it should also use average annual withdrawals to determine if unappropriated water is available from the aquifer (*Hines v. South Dakota Dept. of Environ. and Nat'l. Resources, Hughes County 04-37*) (Memorandum Decision, April 29, 2005).

A 2012 First Judicial Circuit Court's rulings basically stated that data must be presented to show it is probable the average annual recharge exceeds the average annual discharge by at least the amount requested by the water permit application being considered (*Hanson County Dairy v. Robert Bender and Stace Nelson*) (Memorandum Decision, April 11, 2012).

Later in 2012, the First Judicial Circuit Court stated that in deciding whether or not it is probable that the quantity of water withdrawn will exceed the quantity of the average estimated annual recharge is to be based according to the best information reasonably available, and that nothing in South Dakota law requires a recharge study (*Longview Farms, LLP v. South Dakota Dept. of Environ. and Nat'l. Resources*), (Memorandum Decision, May 17, 2012).

Hydrologic Budget:

Recharge:

Recharge to the Parker Centerville aquifer occurs through infiltration of precipitation in areas where the aquifer is at or near land surface and possible inflow from surrounding aquifers including the Vermillion East Fork and Vermillion West Fork to the north as well as the underlying Niobrara and Upper Vermillion Missouri aquifers (Schulz, 1993). Hedges and others (1985) estimated the recharge rate of this aquifer to be 4.9 inches per year (in/yr). Applying this

rate to the total area of the aquifer (67,060 acres) provides an estimated annual recharge of 27,383 ac-ft/yr.

The estimated annual recharge accounts for one third of the estimated amount of water in storage. This relatively high ratio of recharge to storage indicates that water availability in the Parker Centerville aquifer is highly susceptible to drought conditions. The amount of water in storage could quickly be depleted if drought conditions persist for an extended period of time. This would be due to decreased annual recharge during dry periods, primarily provided by precipitation, in addition to the expected high usage for irrigation. In addition, the shallow depth of the aquifer lends itself to increased losses during dry periods due to evapotranspiration. Conversely, the small storage capacity means that periods of high precipitation will not necessarily result in proportionately high recharge as storage capacity is quickly exhausted.

Discharge from the Parker Centerville aquifer occurs through evapotranspiration in areas where the aquifer is near land surface, outflow to the Vermillion River, and well withdrawals from municipal and irrigation use. Currently there are 137 water rights/permits appropriating from this aquifer (Water Rights, 2015b).

All but two water rights/permits are for irrigation. Both of the non-irrigation use water rights/permits are authorized to the City of Hurley for municipal use. However, the city is now connected to a rural water system, and the water rights are maintained for stand-by purposes. Therefore, this water right is not expected to withdraw water except in emergency situations (Drinking Water, 2015).

The average amount of water withdrawn annually for irrigation use over the period of record (1979-2013) is 10,196 ac-ft/yr, but varies from a minimum of 392 ac-ft/yr to a maximum of 19,046 ac-ft/yr (Water Rights, 1980-2014). The variability in irrigation use appears to be dependent on two major factors: climatic and economic conditions. During the drought and high commodity prices of 2012, irrigation use was much greater than the average. While these two factors are not disconnected, it is possible in any given year for one to affect water use and not the other. However, economic and climatic conditions in future years are impossible to predict.

While there are numerous domestic wells on file, many are no longer used as primary sources since rural water systems have been introduced in the area. Considering this, and the relatively small withdrawal ability and authorization of a domestic well, the annual quantity of water withdrawn due to domestic wells is not significant to the hydrologic budget of the Parker Centerville aquifer (Water Rights, 2015c).

Water Balance:

The average annual recharge to the Parker Centerville aquifer is estimated to be 27,383 ac-ft/yr. The average annual withdrawal is expected to be 10,196 ac-ft/yr. Average withdrawal is less than half average estimated annual recharge. Therefore, there is a reasonable probability that unappropriated water is available from the Parker Centerville aquifer to support the proposed appropriation.

Year	Number of Permits	Appropriation (ac-ft/yr)	Pumpage Reported (ac-ft/yr)
1979	114	45949.00	7481.00
1980	110	46189.00	7675.00
1981	121	49051.00	9321.00
1982	111	48320.80	6493.92
1983	110	47480.80	5523.29
1984	111	47712.80	5152.00
1985	112	47722.80	6514.50
1986	113	48252.80	6120.00
1987	111	47892.80	8619.90
1988	108	46488.80	13558.25
1989	110	46476.80	13958.80
1990	110	45435.80	12200.50
1991	110	45435.80	11186.30
1992	111	45356.80	3909.40
1993	110	43781.80	1918.50
1994	111	43603.90	10724.11
1995	108	42405.90	9664.00
1996	107	41895.90	10896.58
1997	110	42639.90	11585.00
1998	108	42294.90	10072.16
1999	112	42540.70	11027.27
2000	113	42860.70	12955.37
2001	113	42860.70	12238.24
2002	114	42820.70	13865.24
2003	116	43463.70	12471.27
2004	117	43078.70	14668.26
2005	119	43163.70	13450.04
2006	117	42604.30	15303.90
2007	120	43371.30	11995.27
2008	123	43746.50	13223.74
2009	125	43850.18	7259.88
2010	123	43376.18	391.54
2011	123	43376.18	11315.29
2012	123	43374.18	19045.28
2013	134	45841.18	15082.67
Max	134	49051.00	19045.28
Min	107	41895.90	391.54
Average	115	44672.82	10196.21

Table 1: Historic irrigation withdrawal from the Parker Centerville aquifer (Water Rights, 1980-2014)

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 22 observation wells in the Parker Centerville aquifer. Of these wells, Observation Well TU-79E is the closest to the proposed well site at approximately one third mile to the southwest. Although TU-79E has only been in place since 1979, it replaces an older well (Observation Well TU-56A) that was constructed in the same location but destroyed. The combined hydrograph for the two wells, dating back to 1956, is shown in Figure 1 (Water Rights, 2015a).

This observation well, in addition to others in the area, show water levels in the Parker Centerville maintain increasing trend lines with a strong response to climatic conditions, recharging during wet years and declining during dry years. Although the effects of pumping are visible in the majority of observation wells completed into the Parker Centerville aquifer, those effects are generally eclipsed by climatic conditions, indicating that at the current level of development recharge to and natural discharge from the aquifer exceeds well withdrawal. Therefore, there is a reasonable probability that unappropriated water is available from the Parker Centerville aquifer to support the proposed appropriation.

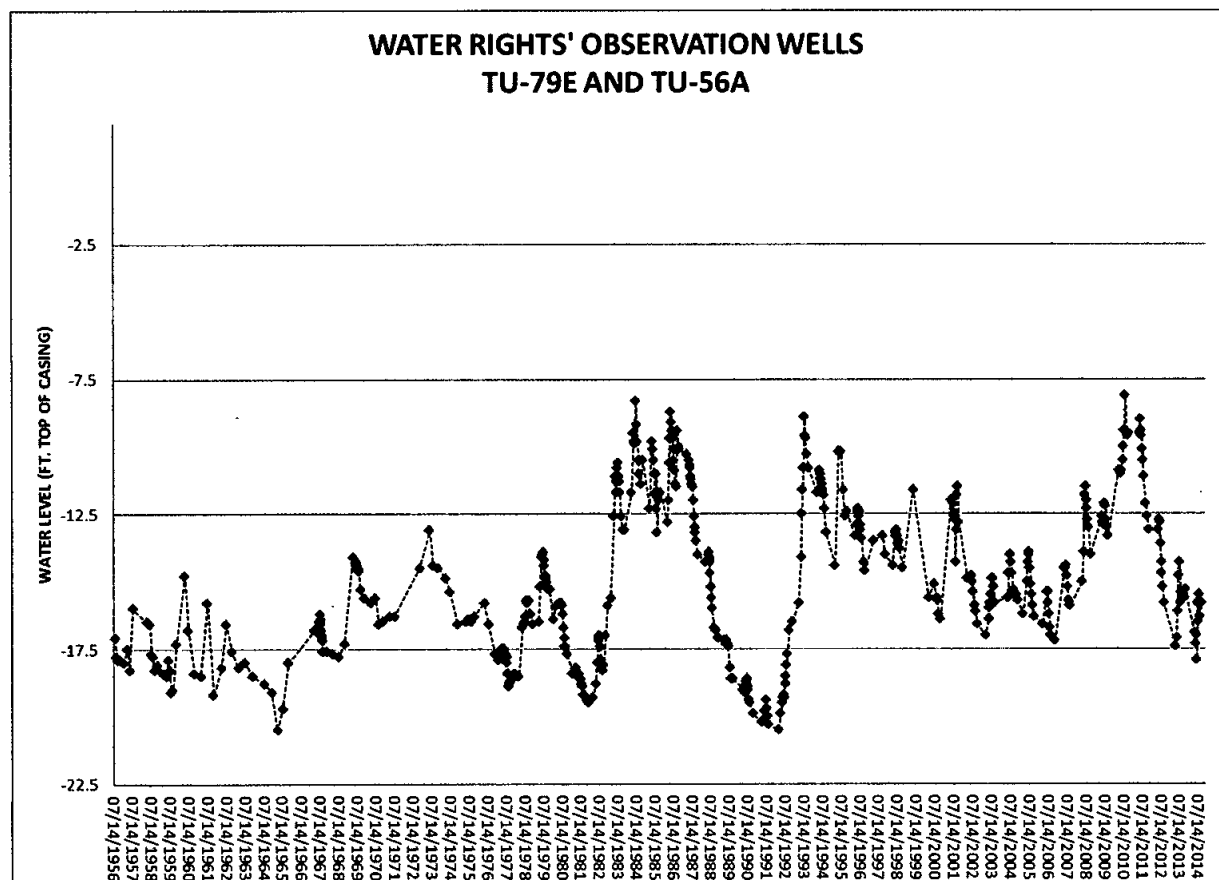


Figure 1: Historic water levels in Observation Wells TU-79E and TU-56A.

EXISTING WATER RIGHTS:

The water rights database (Water Rights, 2015b) was reviewed for the nearest existing water rights/permits on file. Water Rights Nos. 439-3 and 6126-3 are located approximately 0.5 miles to the west and to the south of the proposed well site, respectively. Each of these water rights operates on a single well with 1.78 cfs appropriated under Water Right No. 439-3 and 1.67 cfs appropriated under Water Right No. 6126-3. Given the distance of these wells from Observation Well TU-79E (0.35 miles in both instances) and the drawdown in TU-79E as a result of pumping (less than four feet annually), it is expected that a distance of 0.5 miles between production wells will be sufficient to avoid adverse impairment of those wells.

The nearest domestic well on file with the Water Rights Program is located approximately 0.4 miles to the northwest of the proposed well site. Because of the recent date listed on the well log for this domestic well (June 2014), it is assumed that the well is still functional and in operation. For the same reasons listed for production wells in the area (distance between wells and observed drawdown in Observation Well TU-79E), impairment of this domestic well is not expected to occur if this water permit application is approved.

Conditions could occur where withdrawal exceeds average annual recharge. When this occurs, the saturated thickness of the already thin aquifer could be reduced. If the saturated thickness is reduced to the extent that water rights/permits in the area can no longer pump at their developed or “historically established” diversion rates, this may be considered an adverse impact.

SDCL 46-5-6

Pursuant to SDCL 46-5-6, the diversion rate for an irrigation appropriation cannot be in excess of one cfs for every 70 acres, or “the equivalent of.” The statute provides that the Water Management Board may allow for a greater diversion if the method of irrigation so requires.

Water Permit Application No. 8074-3 proposes to divert water at a rate of 1.78 cfs in order to irrigate a 120 acre plot. This amount of water equates to 1.04 cfs per 70 acres. During a phone conversation between Bracken Capen and Sam Oltmanns on February 18, 2015, the applicant explained that the reason for the amount of water in excess of one cfs per 70 acres is the pivots associated with this application will not complete a full rotation but will still require the aforementioned diversion rate of operate correctly. At the time of the phone conversation, Mr. Oltmanns planned to construct two pivots to be operated by a single well. The first pivot to be constructed will irrigate the S ½ SW ¼ of Section 25 with the second intended to irrigate the SW ¼ SE ¼ of Section 25, all in T99N-R53W. The pivots would not run simultaneously and would instead alternate so as not to exceed a diversion rate of 1.78 cfs.

CONCLUSIONS:

1. Water Permit Application No. 8074-3 proposes to withdraw groundwater at a maximum diversion rate of 1.78 cfs from one well to be completed into the Parker Centerville aquifer in Turner County for the irrigation of 120 acres.
2. There is a reasonable probability that unappropriated water is available from the Parker Centerville aquifer to supply the proposed appropriation.
3. The proposed well is not expected to adversely impair nearby adequate wells.

4. The applicant has requested a diversion rate in excess of one cfs per 70 acres in order to properly supply the irrigation pivots.



Bracken Capen
SD DENR-Water Rights Program

Approved by,



Ken Buhler
SD DENR-Water Rights Program

REFERENCES:

- Drinking Water. 2015. Municipal Water Records, SD DENR-Drinking Water Program, , Joe Foss Bldg., Pierre, South Dakota.
- Hedges, L.S., S.L. Burch, D.L. Iles, R.A. Barari, and R.A. Schoon. 1982. Evaluation of Ground-Water Resources Eastern South Dakota and Upper Big Sioux River, South Dakota and Iowa, Task 1: Bedrock Topography and Distribution, Task 2: Extent of Aquifers, Task 3: Ground-Water Storage, Task 4: Computerized Data Base, Final Report. U.S. Army Corps of Engineers Contract DACW 45-80-C-0185.
- Hedges, L.S., Allen, J., and Holly, D.E. 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, South Dakota.
- Holmes, S.L., Filipovic, D., 2015. Hydrologic Investigation of the Upper-Vermillion-Missouri Aquifer. Open File Report 93-UR. South Dakota Geological Survey, Vermillion, South Dakota.
- In the Matter of Water Permit Application No. 7239-3, by Hanson County Dairy v. Robert Bender and Stace Nelson, South Dakota First Judicial Court Civ. No. 11-54 (Memorandum Decision, April 11, 2012)
- In the Matter of Water Permit Application No. 6431-3, by Phillip W. Hines v. SD Department of Environment and Natural Resources, South Dakota Sixth Judicial Court Civ. No. HU04-37 (Memorandum Decision, April 11, 2012)
- Lindgren, R.J., and Hansen, D.S. 1990. Water Resources of Hutchinson and Turner Counties, South Dakota. Water-Resources Investigations Report 90-4093, United State Geological Survey, Huron, South Dakota.
- Lindgren, R.J., and Hansen, D.S. 1993. Major Aquifers in Hutchinson and Turner Counties, South Dakota. Informative Pamphlet No. 45, United State Geological Survey, Huron, South Dakota.
- Niehus, C.A., 1994. Water Resources of Lincoln and Union Counties, South Dakota. Water Resources Investigations Report 93-44195, United State Geological Survey, Rapid City, South Dakota.
- Schulz, L.D. 1993. Investigation of Ground-Water Resources in the Vicinity of Hurley, South Dakota. Open-File Report 66-UR, SD DENR-Geological Survey Program, Vermillion, South Dakota.
- SD Geological Survey. 2013. Lithologic Logs Database, South Dakota Department of Environment & Natural Resources Geological Survey, Vermillion, South Dakota.

Water Rights. 1980-2014. "Annual Irrigation Summary by Aquifer": SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, South Dakota.

Water Rights. 2015a. Observation Well Files, SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, South Dakota.

Water Rights. 2015b. Water Right/Permit Files, SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, South Dakota.

Water Rights. 2015c. Water Well Completion Reports, SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, South Dakota.

RECEIVED

APR - 1 2015

WATER RIGHTS
PROGRAM

Affidavit of Publication

STATE OF SOUTH DAKOTA
COUNTY OF TURNER

I, Robin Schneider of the City of Parker, County of Turner, State of South Dakota being first duly sworn on oath, deposes and says: The New Era is a weekly legal newspaper of general circulation, printed and published in the City of Parker, in said County of Turner, by The New Era, New Century Press, publishers, and has been such legal newspaper during the times hereinafter mentioned; that the said newspaper has been in existence as such legal newspaper for more than one year prior to the publication of the notice hereunto attached, and has during all of said publication of the notice hereunto attached, and has during all of said time had, and now has, more than 200 bona fide subscribers; that the undersigned, The affiant, is the Office Manager of the said newspaper, in charge of the advertisement department thereof and has personal knowledge of all the facts stated in this affidavit and the advertisement headed:

#5998 Notice Of Application No. 8074-3 To Appropriate Water

_____ printed copy of hereto attached, is printed and published in the said newspaper for one successive weeks, one each week and on the same day of the week, on the following dates, to wit:

On Thursday, the 19th day of March, 2015

That \$23.17 being the full amount of the fees for publication of the attached notices insures solely for the benefits of the publishers of the said newspaper, that no arrangement or understanding for a division thereof has been made with any other person and that no part thereof has been agreed to be paid to any other person whomsoever.

Robin Schneider _____

Subscribed and sworn to before me this 30th _____

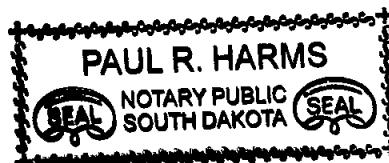
Day of March 2015

Paul R. Harms

Notary Public, Turner County, South Dakota

My Commission Expires: March 20, 2018

Publication Fee \$
Notary Fees \$
Total \$23.17



RECEIVED

APR - 1 2015

WATER RIGHTS
PROGRAM

**NOTICE OF APPLICATION NO.
8074-3**

TO APPROPRIATE WATER

Notice is given that Sam Oltmanns, PO Box 462, Lennox SD 57039 has filed an application for a water permit to appropriate 1.78 cubic feet of water per second (cfs) from one well to be completed into the Parker Centerville Aquifer (50 feet deep) located in the SE 1/4 SW 1/4 Section 25 for irrigation of 120 acres located in the S 1/2 SW 1/4, SW 1/4 SE 1/4 Section 25; all in T99N-R53W. The applicant is requesting a diversion rate greater than the statutory limit of 1 cfs per 70 acres.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 8074-3 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 March 30, 2015.

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. Information concerning this application is available at <http://denr.sd.gov/public>. 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 \$23.17.

(#5998, 03/19/15, The New Era)

CUSTOMER NUMBER:	078200	Argus Leader	
AD ORDER NUMBER:	1459041		
	3/12, 2015	P.O. Box 677349, Dallas, TX 75267-7349	\$66.92 Pd

RECEIVED

MAR 16 2015

WATER RIGHTS PROGRAM

Sam Oltmanns
PO Box 462
Lennox, SD 57039

DETACH THIS STUB AND RETURN WITH PAYMENT

PAYMENT DUE UPON RECEIPT

AFFIDAVIT OF PUBLICATION-

Customer Number: 078200

Invoice Number: 1459041

Argus Leader
AFFIDAVIT OF PUBLICATION

STATE OF SOUTH DAKOTA

COUNTY OF MINNEHAHA } ss

Linda Schulte being duly sworn, says: That The Argus Leader is, and during all the times hereinafter mentioned was, a daily legal newspaper as defined by SDCL 17-2-21, as amended published at Sioux Falls, Minnehaha County, South Dakota; that affiant is and during all of said times, was an employee of the publisher of such newspaper and has personal knowledge of the facts stated in this affidavit; that the notice, order or advertisement, a printed copy of which is hereto attached, was published in said newspaper upon

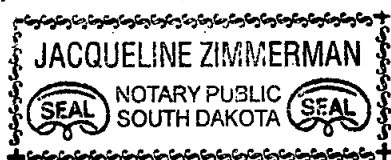
Thursday the 12 day of March 2015 ,
the day of 2015 ,
the day of 2015 ,
the day of 2015 ,
the day of 2015 ,
the day of 2015 ,
the day of 2015 ,

and that \$66.92 Pd was charged for publishing the same

Linda Schulte
Subscribed and sworn to before me 3/12/2015

J. Zimmerman
Notary Public, South Dakota

My Commission expires December 22, 2015



NOTICE OF APPLICATION
NO. 8074-3 to Appropriate Water

Notice is given that Sam Oltmanns, PO Box 462, Lennox SD 57039 has filed an application for a water permit to appropriate 1.78 cubic feet of water per second (cfs) from one well to be completed into the Parker Centerville Aquifer (50 feet deep) located in the SE 1/4 SW 1/4 Section 25 for irrigation of 120 acres located in the S 1/2 SW 1/4, SW 1/4 SE 1/4 Section 25; all in T99N-R53W. The applicant is requesting a diversion rate greater than the statutory limit of 1 cfs per 70 acres.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 8074-3 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 March 23, 2015.

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. Information concerning this application is available at <http://denr.sd.gov/public>. 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 \$66.92.
1459041 Mar. 12, 2015



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

denr.sd.gov

March 5, 2015

New Era
PO Box 579
Parker SD 57053

ATTENTION: Legal Public Notice

Enclosed is a Notice on Application No. 8074-3 to Appropriate Water. Please publish the notice once on March 12, 2015. 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 Sam Oltmanns, PO Box 462, Lennox SD 57039 (Ph # 605-310-9710).

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

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

denr.sd.gov

March 5, 2015

Argus Leader
PO Box 5034
Sioux Falls SD 57117

ATTENTION: Legal Public Notice

Enclosed is a Notice on Application No. 8074-3 to Appropriate Water. Please publish the notice once on March 12, 2015. 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 Sam Oltmanns, PO Box 462, Lennox SD 57039 (Ph # 605-310-9710).

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

Schlaak, Karen

From: Schlaak, Karen
Sent: Monday, March 09, 2015 4:50 PM
To: 'Robin Schneider'
Subject: 8074-3, Oltmanns
Attachments: 8074-3public.short.docx

As requested. Please publish this notice on March 19th and send the affidavit ASAP.

Thanks,
Karen



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

denr.sd.gov

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

March 5, 2015

Sam Oltmanns
PO Box 462
Lennox SD 57039

Dear Mr. Oltmanns:

Water Permit Application No. 8074-3 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 New Era printed at Parker SD (Ph # 605-297-4419) and the Argus Leader printed at Sioux Falls SD (Ph # 605-331-2200). 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 March 12, 2015. 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. 8074-3 to Appropriate Water

Notice is given that Sam Oltmanns, PO Box 462, Lennox SD 57039 has filed an application for a water permit to appropriate 1.78 cubic feet of water per second (cfs) from one well to be completed into the Parker Centerville Aquifer (50 feet deep) located in the SE 1/4 SW 1/4 Section 25 for irrigation of 120 acres located in the S 1/2 SW 1/4, SW 1/4 SE 1/4 Section 25; all in T99N-R53W. The applicant is requesting a diversion rater greater than the statutory limit of 1 cfs per 70 acres.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 8074-3 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 March 23, 2015.

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. Information concerning this application is available at <http://denr.sd.gov/public>. 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 _____.

Instruction to Newspaper - Publish the Notice on March 19, 2015. 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. 8074-3 to Appropriate Water

Notice is given that Sam Oltmanns, PO Box 462, Lennox SD 57039 has filed an application for a water permit to appropriate 1.78 cubic feet of water per second (cfs) from one well to be completed into the Parker Centerville Aquifer (50 feet deep) located in the SE 1/4 SW 1/4 Section 25 for irrigation of 120 acres located in the S 1/2 SW 1/4, SW 1/4 SE 1/4 Section 25; all in T99N-R53W. The applicant is requesting a diversion rater greater than the statutory limit of 1 cfs per 70 acres.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 8074-3 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 March 30, 2015.

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. Information concerning this application is available at <http://denr.sd.gov/public>. 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

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

denr.sd.gov

APR 06 2015

Sam Oltmanns
PO Box 462
Lennox SD 57039

Dear Mr. Oltmanns:

Enclosed is Water Permit No. 8074-3 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,

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

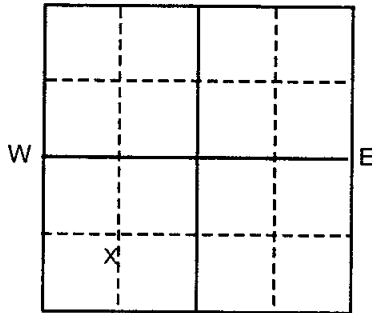
enclosures

SOUTH DAKOTA WATER WELL COMPLETION REPORT

11-02

Location SW 1/4 SW 1/4 Sec 25 Twp 99N Rg 53WCounty TURNER

North

Please mark well
location with an "X"

Well Completion Date

3-29-2015

1 Mile

Distance to nearest potential pollution source (septic tank, abandoned well, feed lot, etc.)?
5,000.0 ft. from FEEDLOT (identify source)

PROPOSED USE:

☐ Domestic/Stock ☐ Municipal ☐ Business ☐ Test holes
☒ Irrigation ☐ Industrial ☐ Institutional ☐ Monitoring well
METHOD OF DRILLING:
REVERSE ROTARY

CASING DATA:

☐ Steel ☒ Plastic ☐ Other

If other describe

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
160.0 LB/FT	16.00 IN	0.0 FT	20.0 FT	28.00 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	35	9.5 Lb/gal	0.0 Ft	20.0 Ft
		Lb/gal	Ft	Ft

Describe grouting procedure

TREMIE PIPE AND GROUT PUMP

SCREEN:

☐ Perforated pipe ☒ Manufactured
 Diameter 16.00 Inches Length 30.0 Feet
Material SS JOHNSONSlot Size .085 Set From 20.0 Feet to 50.0 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? CHLORINE TABLETS
☐ No, Why Not?
Lab to which water
quality sample sent for analysisWell Owner: SAM OLTMANNS

Business Name:

Address: P.O. BOX 462City, State, Zip: LENNOX SD 57039

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
TOP SOIL	0	3
GRAVEL	3	43
CLAY	43	50

STATIC WATER LEVEL 13.0 FEET

If flowing: closed in pressure _____ PSI

GPM flow _____ through _____ Inch pipe

Controlled by ☐ Valve ☐ Reducers ☐ Other _____

Reduced flow rate _____ GPM

Can well be completely shut in?

WELL TEST DATA:

☒ Pumped Describe: TURBINE PUMP AND MOTOR
☐ Bailed
☐ Other

Pumping Level Below Land Surface

26.0 Ft. After 2.0 Hrs. pumped 580.0 GPM

_____ Ft. After _____ Hrs. pumped _____ GPM

If pump installed, pump rate: _____ GPM

REMARKS

RECEIVED
JUN 15 2015
WATER RIGHTS
PROGRAM
This well was drilled under license # 805 and this report is true and accurate.Drilling firm: SAM HEINE WELL CO.,LLC

Signature of License Representative:

Signature of Well Owner or Equitable Property Holder:

Date: 3-29-15

8074-3



DENR
SOUTH DAKOTA

DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
denr.sd.gov

October 29, 2020

8074-3
8205-3

Sam Oltmanns
312 W 4th Ave
Lennox SD 57039-2212

Dear Mr. Oltmanns:

Enclosed is a "Notice" dated October 23, 2020 concerning the 2020 irrigation questionnaires.

The notice was originally mailed to PO Box 462, Lennox SD. The post office notified us that your address has changed, and I will update our records accordingly.

If you have any questions, please contact me.

Sincerely,

A handwritten signature in cursive script, appearing to read "Genny McMath".

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

enclosures