

WATER PERMIT NO. 7090-3

Name of Applicant: **Ron Alverson**

Address: **24212 459th Ave, Chester SD 57016**

Phone: **605 270-2699**

Amount of Water Claimed: **0.56 cfs**

Total Acres: **45**

Source of Water Supply: **groundwater (2 wells)**

Water to be used for: **irrigation**

County: **Lake**

Type of Waste Disposal System:

Location: **10 miles southeast of Madison**

PRIORITY

Date Received: **1-9-09**

Application/License Fee: **\$200**

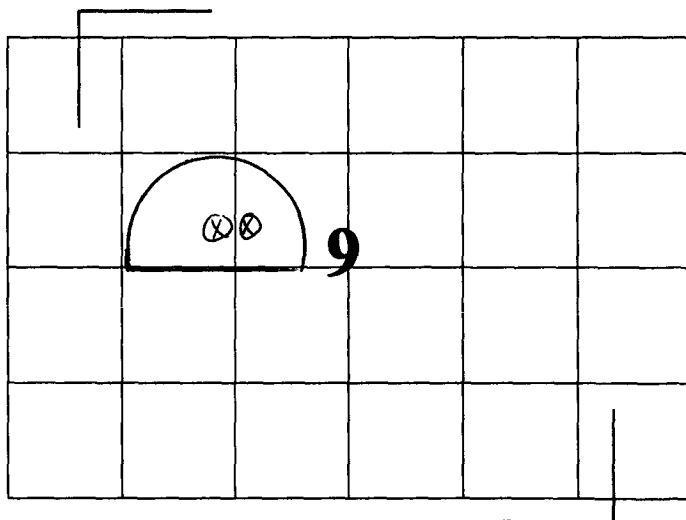
Corrected Application Received:

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

Remarks:

Diversion Point: **S ½ NW ¼ Sec 9-T105N-R51W**

Land to be Irrigated: **S ½ NW ¼ Sec 9-T105N-R51W**



Depth of Well: **40 feet deep**

Well Driller: : **Lacey Well Drilling**

Remarks:

Type of Map: **aerial**

Prepared by: **Charlene Lebeda, Lake Co NRCS**

Reviewed and the Number Assigned on: **1-9-09**

By: **Karen Schlaak**

Notice of Hearing - date to intervene: _____

Mail to: Water Rights Program Joe Foss Building 523 E. Capitol Pierre, SD 57501-3181 (605) 773-3352	No. <u>7090-3</u> (office use only) Hydrologic Unit <u>10170203</u>
	Basin <u>Sioux River</u>
	Newspaper <u>Madison Daily Leader P.O. Box 348</u>
	<u>605-256-4555</u> <u>57042</u>

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JAN - 9 2009
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 Ron Alverson Phone 605-270-2699
(check one) ☒ Owner ☐ Tenant/lessee
- Mailing Address 24212 45th Ave. Chester S.D. State SD 57016
171 Golfview Rd (Street, RR, or Box and City) Wentworth SD (Zip Code) 57075
2. Amount of water claimed 0.56 *CFS or 250 **GPM ***AF Total Acreage 45
(*Cubic Feet per Second) (**Gallons per Minute) (***) Acre Feet - storage capacity of dam/dugout or annual use if applicable)
3. Source of water supply Ground water 2 wells
4. Location of point of diversion (example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W) County Lake
2 wells in the S. 1087.5' NW 1/4 section 9 - T105N - R51W.
S 1/2 NW 1/4 see map for approximate locations - 1140 ft from SW corner of 1/4 section.
5. County or counties where water will be used Lake
6. Annual period during which water is to be used Growing season - May thru September 30
7. List below each forty acre division, or lot, or fraction thereof and show number of acres to be irrigated in each.
(Attach sheet if more space is needed)

Land Description	Acres	Land Description	Acres
S. 1087.5' SW 1/4, NW 1/4 section 9 -			
T105N - R51W Lake Co. S.D.	30		
S. 1087.5' SE 1/4, NW 1/4 section 9 -			
T105N - R51W Lake Co. S.D.	15		

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

Water will be used to Irrigate Corn, Soybeans, or Alfalfa. A Sprinkler Irrigation system will be used. Approximately 45 acres will be Irrigated. System will do a 1/2 Circle. - see map

STATE OF SOUTH DAKOTA) SS
County of Lake

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

I, Ron Alverson, 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 Ronald C. Alverson

Subscribed and sworn to before me this 6 day of January 20 09

Notary Public signature

9-22-2013

SOUTH DAKOTA
WATER PERMIT NO. 7090-3

Date of first receipt of application January 9, 2009.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 7090-3 to Ron Alverson, 171 Golf View Cir, Wentworth SD 57075 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. 7090-3 appropriates 0.56 cubic feet of water per second from two wells to be completed into the Big Sioux:Northern Skunk Creek Aquifer (approximately 40 feet deep) located in S 1/2 NW 1/4 Section 9 to irrigate 45 acres located in the S 1/2 NW 1/4 Section 9; all in T105N-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 January 9, 2009.
4. The date of approval of Permit No. 7090-3 is March 30, 2009.
5. One-fifth of the construction is to be completed on or before September 9, 2011.
6. All construction is to be completed on or before March 30, 2014.
7. Water is to be put to beneficial use on or before March 30, 2018.
8. Water rights obtained in compliance with the laws of the State of South Dakota may not be unlawfully impaired by this appropriation.

QUALIFICATIONS

1. The wells approved under this Permit will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
2. The wells authorized by Permit No. 7090-3 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

JUN 12 2009

date



(type or print in ink)

1. Well Information - Proposed Construction

- a) Drill Hole Diameter 14" Depth Approx 40 ft.
- b) Casing Type Steel Diameter 14" Thickness 3/8"
- c) Screen Type Plastic Diameter 6" Thickness 3/8"
- d) Gravel Pack Muscovine Length of Gravel Pack 15'
- e) Depth to Top of Water Bearing Material 22'
- f) Depth to Water (ground surface to water level) 22'
- g) Distance to nearest existing domestic well:
- On applicants property _____ On property owned by others 3/8 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

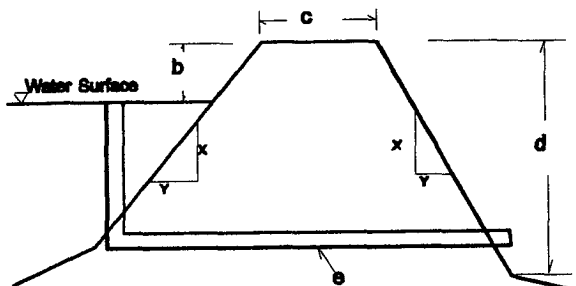
3. Dugout Information

- 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 _____
Upstream _____
Downstream _____
- h) Surface Area of Impoundment _____
- i) Storage _____ Acre Feet
- j) Drainage Area Above Dam _____ Acres

62-35



Wells — Pumps
Dewatering Work
Test Drilling

In Water Since 1946

LACEY WELL DRILLING, INC.
47582 - 240th St.
Dell Rapids, South Dakota 57022
Telephone (605) 428-5979

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WATER RIGHTS
PROGRAM

Down-Hole Camera
Water Specialists
Irrigation Supplies

12-3-08

Proa Alverson

Test well log - west site

0-1 topsoil
1-3 SANDY CLAY
3-22 MEDIAN BROWN SAND
22-36' COARSE CLEAN GRAVEL
SOL 24'

Jim Lacey
SD Lic # 111

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date 1/9, 20 09

RECEIVED OF RS CORP R ALVERSON 24212 459th Ave Chester SD 57016

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

Fee for Application for Permit No. <u>7090-3</u> to Appropriate Water, to construct and to put water to beneficial use	150	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>7090-3</u>	50	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	200 00

No.

03722

By

Robert Erskine
Chief Engineer



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 7090-3, Ron Alverson**

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. 7090-3, Ron Alverson, 24212 459th Avenue, Chester SD 57016.

The Chief Engineer is recommending APPROVAL of Application No. 7090-3 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 wells approved under this Permit will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
2. The wells authorized by Permit No. 7090-3 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
March 4, 2009

REPORT ON WATER PERMIT APPLICATION NO. 7090-3

For Ron Alverson

February 23, 2009

Application No. 7090-3 proposes to appropriate 0.56 cfs (250 gpm) from two wells approximately 40 feet deep and located in the S $\frac{1}{2}$ of section 9 to irrigate 45 acres located in the S $\frac{1}{2}$ NW $\frac{1}{4}$ of section 9; all in T105N R51W in Lake County.

AQUIFER – BIG SIOUX NORTHERN SKUNK CREEK (BS-NSC)

The Big Sioux Northern Skunk Creek is a predominantly surficial outwash (sand and gravel) under water table conditions in this area. The aquifer underlies 48 square miles and contains an estimated 196,000 acre feet of water in storage in Lake and Moody Counties (Hansen, 1986). The general direction of ground water movement is from northwest to southeast but is also influenced by the proximity of area lakes and streams. The aquifer is also hydraulically connected to nearby Lakes Madison, Bryant, and Round and to Skunk Creek. Average annual recharge to the aquifer has been estimated at 3.1 inches per year (about 7,936 acre-feet) and could range from 2.0 to 5.6 inches per year (Hedges, 1983). The majority of the water use from the aquifer in Lake County is by irrigation, Kingbrook and Big Sioux Rural Water systems and the City of Madison. In 2007 the total water used by these entities was about 3,398 acre feet.

The breakdown is as follows; irrigation used about 1,338 acre feet, Big Sioux Rural water used 741 acre-feet, Kingbrook Rural Water used 696 acre-feet and the City of Madison used 623 acre-feet in 2007. Future use remaining reserved for municipal and rural water use from this aquifer is about 2,418 acre-feet annually. Comparing the water use plus adding in the future use possible and subtracting this total from the estimated average annual recharge leaves about 2,120 acre-feet remaining for appropriation. These figures of course only represent 2007 irrigation use and irrigation use can change significantly from year to year based upon climatic conditions. However, since 2000 the largest volume years of irrigation water use were 2001 and 2002 which reportedly used 1,475 and 1,462 acre-feet respectively. So, using the 2007 water year as a representative sample year appears to be a reasonable assumption.

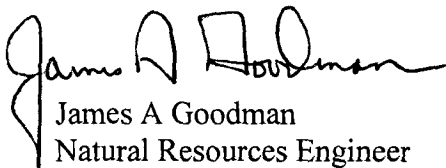
The Water Rights Program monitors three observation wells completed into the Skunk Creek aquifer and located within two miles of this application. These are observation wells LK-79A, LK-79C and LK-79D. Water levels for these wells show good response to climatic conditions. Water levels rise during wet years (recharge) and decline during dry years. The water level record indicates the aquifer is capable of sustaining additional withdrawals (Water Rights, 2009). However, the record also indicates that there has been an impact to the water levels in the area of observation well LK-79A. The record indicates that pumping of nearby Rural Water System wells has impacted the immediate area of LK-79A. This record indicates about 5 feet of decline in water levels which should not be serious but at least should be considered before authorizing new permit applications in this immediate area. Hydrographs for these three observation wells are included with this report.

REVIEW OF EXISTING WATER PERMITS/RIGHTS

There are ten existing or permitted rural water system wells within one mile of this application. Four of these wells belong to Big Sioux Rural Water system (located just to the north) and the rest belong to Kingbrook Rural Water system (located just to the south and west) all from this application. The nearest Big Sioux Rural Water system well (#4) may be located about 1,000 feet to the northeast and the nearest Kingbrook well is about 1,100 feet to the southwest. At this distance interference is not expected to be a concern. Drawdown will occur but this is not expected to be significant at the distance between wells nor cause any adverse effects. According to Future Use Water Permit No. 5643-3 for Kingbrook Rural Water system the lands to be irrigated by this application are included in the potential future area. Any appropriation out of this area would be subject to the future use permit.

CONCLUSIONS

1. Water is available from the Big Sioux Northern Skunk Creek aquifer.
2. At this site the aquifer appears to be under water table conditions according to the test well logs were provided with the application. Drawdown created by pumping is not expected to be significant at the requested rate and interference should not be a concern.
3. The well(s) authorized by this application must be constructed in accordance with SD Well Construction Standards.
4. Because this application is located with the boundaries of Future Use Permit No. 5643-3 approval of this application should be subject to that permit.
5. Another problem noted during this review is the authorization of additional points of diversion (wells) for Big Sioux Rural Water system). Two additional wells were authorized under Water Permit No. 6152-3 however, it is not clear where these wells may be located without an inspection.
6. The aquifer in this area can be split into two zones. An upper zone of sand and gravel is separated from a lower zone by a clay layer. Two of the monitoring wells LK-79C and LK-79D are completed into these individual layers and located at the same site about one mile south of this application. Even though both layers are considered the Big Sioux Northern Skunk Creek hydraulically there can be differences. The water level record reinforces this concept but also indicates the aquifer is capable of sustaining additional withdrawals.



James A Goodman
Natural Resources Engineer

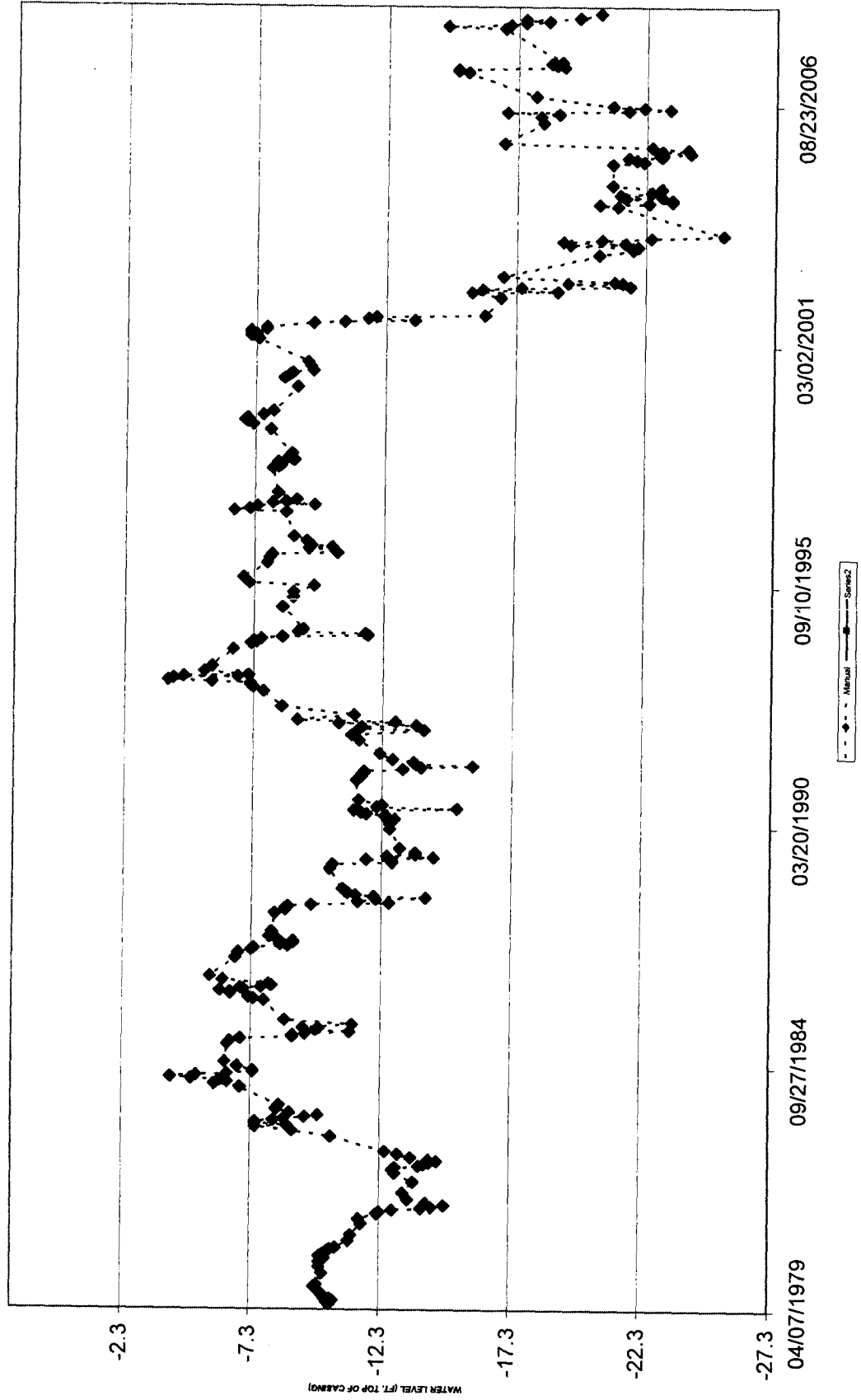
BIBLIOGRAPHY

Hansen, D.S., 1986, Water Resources of Lake and Moody Counties, South Dakota, Water Resources Investigations Report 84-4209, USGS, Huron, SD, 57350.

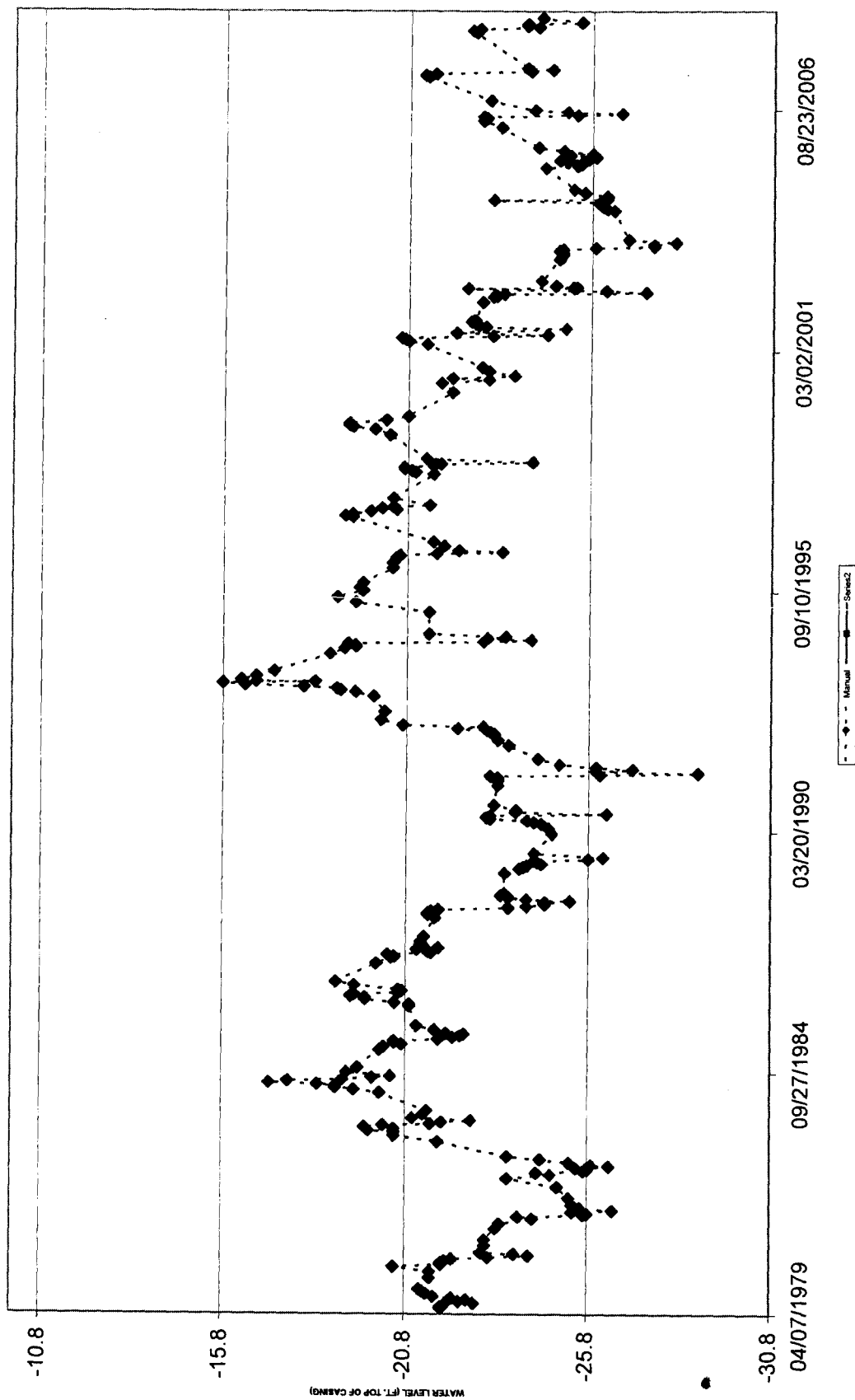
Hedges, L.S., and others, 1982, Evaluation of Ground-Water Resources Eastern South Dakota and Upper Big Sioux River, South Dakota and Iowa, for US Army Corps of Engineers, SD DENR, SDGS, Vermillion, SD, 57069.

Water Rights, 2009, Unpublished Observation Well Data for Lake County, SD DENR, DES, Water Rights Program, Pierre, SD, 57501.

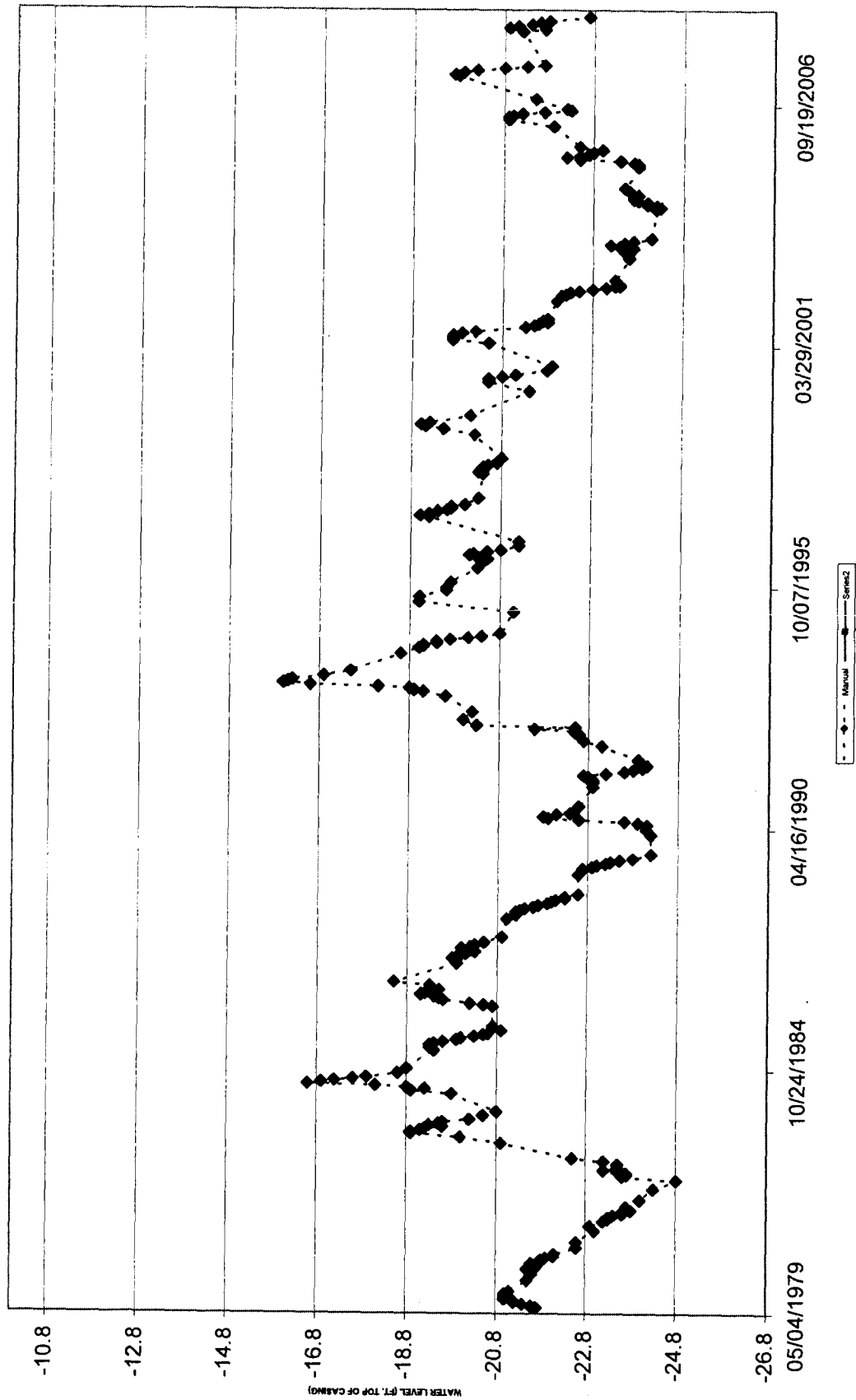
WATER RIGHTS' OBSERVATION WELL
LK-79A



WATER RIGHTS' OBSERVATION WELL
LK-79C



WATER RIGHTS' OBSERVATION WELL
LK-79D



AFFIDAVIT OF PUBLICATION RECEIVED

STATE OF SOUTH DAKOTA }
County of Lake } ss.

MAR 23 2009

WATER RIGHTS PROGRAM

Sue Anne Artko of the City of Madison, County of Lake, State of South Dakota, being first duly sworn on oath, deposes and says:

The Madison Daily Leader is a daily legal newspaper of general circulation, printed and published in the City of Madison, in said County of Lake, by Hunter Publishing, Inc., Jon M. Hunter, publisher, and has been such legal newspaper during the times hereinafter mentioned; that the said Madison Daily Leader 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 time had, and how has, more than 200 bona fide subscribers; that the undersigned, the affiant, is the Secretary of the said newspaper, in charge of the advertising department thereof and has personal knowledge of all the facts stated in this affidavit and the advertisement headed

Ron Alverson

Notice of Application #7090-3 to Appropriate Water

printed copy of which hereunto attached, was printed and published in the said newspaper for Two successive weeks, once each week and on the same day of the week, on the following dates, to-wit:

On Thursday, the 12th day of March, 2009;
On Thursday, the 19th day of March, 2009;
On _____, the _____ day of _____, 20____;
On _____, the _____ day of _____, 20____;
On _____, the _____ day of _____, 20____;
On _____, the _____ day of _____, 20____;
On _____, the _____ day of _____, 20____;
On _____, the _____ day of _____, 20____;

That \$45.04 being the full amount of the fees for publication of the attached notice inures solely for the benefit of the publisher 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.

Subscribed and sworn to before me this 20th day of March, 2009

Notary Public, Lake County, South Dakota

Thurs., March 12 & 19

NOTICE OF APPLICATION NO. 7090-3 to

Appropriate Water

Notice is given that Ron Alverson, 171 Golf View Circle, Wentworth, SD 57075 has filed an application for a water permit to appropriate 0.56 cubic feet of water per second from two wells-to be completed into the Big Sioux-Northern Skunk Creek Aquifer (approximately 40 feet deep) located in S 1/2 NW 1/4 Section 9 to irrigate 45 acres located in the S 1/2 NW 1/4 Section 9; all in T105N-R51W.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 7090-3 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, 2009.

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.

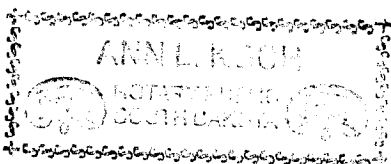
Pub. _____

Notary Fees \$ _____

Total \$ _____

Received Payment,

DENR COPY





DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

March 5, 2009

Madison Daily Leader
PO Box 348
Madison SD 57042

ATTENTION: Legal Public Notice

Enclosed is a Notice on Application No. 7090-3 to Appropriate Water to be published twice. Please publish the first notice on March 12, 2009 with the second publication 7 days later. 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, before you make the first publication. **Please BILL the APPLICANT for the cost of publication.** The APPLICANT is Ron Alverson, 24212 459th Ave., Chester SD 57016 (Ph # 605-270-2699).

Please send the Water Rights Program the first publication immediately. The publication is checked for accuracy so any corrections can be made in the second publication. You may use the form below or fax a copy of the first publication. Any fax should be sent to the attention of Karen Schlaak at (605) 773-4068. Publication errors can invalidate the public notice.

After the second publication, **please send us an affidavit or use the enclosed Proof of Publication form.** 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

-----CUT HERE-----

No. 7090-3

TO: Eric Gronlund
Water Rights Program
Joe Foss Building
Pierre SD 57501-3181

Date _____

We are in receipt of your letter of March 5, 2009 enclosing Notice to Appropriate Water by Application No. 7090-3 which was first published in our issue of _____. **ENCLOSED IS A COPY OF THIS FIRST PUBLICATION.**

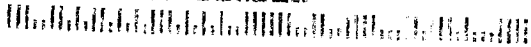
Name

Newspaper



ALVE212# 570162020 1209 04 03/11/09
RETURN TO SENDER
ALVERSON, RONALD
171 GOLF VIEW CIR
WENTWORTH SD 57075-7359

RETURN TO SENDER



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

: TO BE SURE OF PUBLICATION ON
THE CORRECT DATES, CONTACT
THE NEWSPAPER RIGHT AWAY.

March 5, 2009

Ron Alverson
24212 459th Ave
Chester SD 57016

Dear Mr. Alverson:

Water Permit Application No. 7090-3 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 Publisher of the Madison Daily Leader printed at Madison SD (Ph # 605-256-4555). You will need to contact the newspaper and authorize publication of this notice. For your information, a copy of the notice, the recommendations of the Chief Engineer and reports on the applications 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 to authorize publication of your Notice and to arrange for payment. Early contact with the paper can eliminate delays. Upon receiving authorization, the publisher has been instructed to publish your notice once each week for two consecutive weeks. 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 applications.

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 first Notice on March 12, 2009 with the second publication 7 days later. 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. 7090-3 to Appropriate Water

Notice is given that Ron Alverson, 24212 459th Ave, Chester SD 57016 has filed an application for a water permit to appropriate 0.56 cubic feet of water per second from two wells to be completed into the Big Sioux:Northern Skunk Creek Aquifer (approximately 40 feet deep) located in S ½ NW ¼ Section 9 to irrigate 45 acres located in the S ½ NW ¼ Section 9; all in T105N-R51W.

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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, 2009.

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**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

JUN 12 2009

Ron Alverson
171 Golf View Circle
Wentworth SD 57075

Dear Mr. Alverson:

Enclosed is Water Permit No. 7090-3 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

7090-3
07-92

Location NE $\frac{1}{4}$ NW $\frac{1}{4}$ Sec 9 Twp 105-N Rg 51-W
County Lake

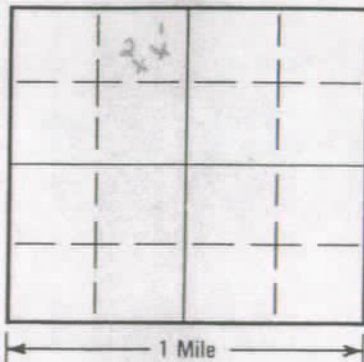
Please mark well location with an "X"

W

E

Well-Completion Date

6-4-09



LOCATION:

Distance from nearest potential pollution source (septic tank, abandoned well, feed lot, etc.)? 1000 ft. from Rural Well (identify source).

PROPOSED USE:

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

METHOD OF DRILLING:

Bucket - False Casing

CASING DATA:

- ☐ Steel ☒ Plastic ☐ Other

If other describe _____

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
<u>10</u> LB/FT	<u>12</u> IN	<u>+1'12</u> FT	<u>29</u> FT	<u>20</u> IN
<u>10</u> LB/FT	<u>12</u> IN	<u>+1'12</u> FT	<u>30'8"</u> FT	<u>20</u> IN

GROUTING DATA

Grout Type	No. of Sacks	Grout Weight	From	To
<u>Cement Grout</u>		<u>0</u> lb./gal	<u>0</u> ft	<u>20</u> ft
<u>Cement Grout</u>		<u>0</u> lb./gal	<u>0</u> ft	<u>20</u> ft

Describe grouting procedure _____

SCREEN:

☐ Perforated pipe ☒ Manufactured

Diameter 12 IN Length 5 FEET

Material PVC Class 160

Slot Size #80 Set From #1 29 Feet to 34 Feet

Other information #2 30'8" 35'8"

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

☐ NO, Why Not? pellets

Laboratory sent to for water quality analysis

Big Sioux RW

Well Owner: Ron Alverson

Business Name: _____

Address: 24212 459th Ave.
Chester, S.D. 57016

WELL LOG:

#1	FORMATION	#2	DEPTH	
			FROM	TO
<u>D2 Topsoil</u>	<u>Topsoil</u>		<u>0</u>	<u>3</u>
<u>222 Rusty Gravel</u>	<u>Rusty Gravel</u>		<u>3</u>	<u>23</u>
<u>2234 Clean Tan Gravel</u>	<u>Clean Gravel w/ Rocks</u>		<u>23</u>	<u>35'8"</u>

STATIC WATER LEVEL

#1 22 #2 23' Feet

If flowing: closed in pressure _____ PSI

GPM flow _____ through _____ inch pipe

Controlled by ☐ Valve ☐ Reducers ☐ Other _____

Reduced Flowrate _____ GPM

Can well be completely shut in? _____

RECEIVED

WELL TEST DATA:

☒ Pumped

Describe: _____

☐ Bailed

☐ Other

SEP - 8 2009

WATER RIGHTS PROGRAM

Pumping Level Below Land Surface

27'10" ft. After 2 Hrs. pumped 125 GPM

30' ft. After 2 Hrs. pumped 140 GPM

If pump installed, pump rate _____ GPM

REMARKS

This well was drilled under license # 111

And this report is true and accurate.

Drilling firm Lacey Well Drilling Inc.

Signature of License Representative: _____

Signature of Well Owner or Equitable Property Holder: _____

Date: _____

Report of Examination of Works and/or Application of Water to Beneficial Use For Permit No. 7090-3

I have this day, November 3, 2021, made a thorough examination of the water use system constructed by Ron Alverson, 171 Golf View Circle, Wentworth, SD 57075 of Permit No. 7090-3, bearing the priority of January 9, 2009 authorizing the diversion of 0.56 cu. ft. per second of the waters of the Big Sioux: Northern Skunk Creek Aquifer for irrigation purposes, in Lake County.

A. Works used to divert the water:

Well Information:

- 1) Well Drilling Firm: Lacey Well Drilling
- 2) No. of Wells 2
- 3) Depth(s) 34 feet
- 4) Well log is available Y

Casing:

- 1) Diameter 12 inches
- 2) Length 29 feet
- 3) Type Plastic

Screen:

- 1) Type PVC
- 2) Length 5 feet
- 3) Static water level 22 feet

Pump:

- 1) Make NA
- 2) Model Submersibles
- 3) Size NA
- 4) Capacity 400 GPM

Motor: unknown

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

- 1) Type Buried steel
- 2) Size 6 inches
- 3) Length 710 feet

C. Works used to apply water to beneficial use:

Center pivot:

- 1) Make Reinke
- 2) Overall length 1300 feet
- 3) Number of towers 7
- 4) End gun Y
- 5) Capacity 400 GPM

Chemigation Equipment: none

D. Compliance with Permit Requirements:

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

E. Condition and Location:

1. The system is in good condition with the point(s) of diversion located as follows: From the NW corner Sec 9 T105N R51W, WEST WELL: 2275 ft S & 1155 ft E, Lat 43.914429 Long -96.9647 (SW ¼ NW ¼ Sec 9); EAST WELL: 2200 ft S & 1455 ft E, Lat 43.91463 Long -96.96347 (SE ¼ NW ¼ Sec 9).
2. The works are capable of diverting and conveying to the place of use 0.89 cu. ft. per second of water which is to be used for irrigation. Water has been put to beneficial use to the maximum extent as follows:
All land is located in Sec 9 T105N R51W
SW1/4 NW ¼ – 29 acres
SE ¼ NW ¼ – 16 acres

comprising a total of 45 acres of land and the license should be issued for 0.56 cfs
3. All structures, wells and lands on map Y

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

The irrigated acreage was determined with the aid of FSA imagery and ArcMAP software.

The telephone number in the permit materials is current but the mailing address is now 171 Golf View Circle, Wentworth, SD 57075.



Darrell W DeBoer
Water Rights Inspector
DANR, Water Rights Program

Date report completed: November 4, 2021



0 0.1 0.2 0.4 0.6 0.8 Miles



Darrell DeBoer
Water Right Inspector
DANR-Water Rights Program



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

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

NOV 05 2021

7090-3

Ron Alverson
171 Golf View Circle
Wentworth SD 57075

Dear Mr. Alverson:

Enclosed is Water License No. 7090-3. This is the final water right document completing your process of obtaining a Water Right. Included with your license is a map prepared by the staff engineer who conducted the field investigation.

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

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

Sincerely,

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

enclosures

NOTE: The investigation found your irrigation system is capable of diverting 0.89 cubic feet of water per second (cfs) which is equivalent to approximately 400 gallons per minute. The original permit authorized a total of 0.56 cfs (equivalent to 250 gpm). Diversion of water under this water license is limited to 0.56 cfs.

**STATE OF SOUTH DAKOTA
WATER LICENSE NO. 7090-3**

(1) Ron Alverson, 171 Golf View Circle, Wentworth SD 57075 made Application No. 7090-3, January 9, 2009 for a water permit to divert 0.56 cubic feet of water per second from ground water, two wells (Big Sioux Northern Skunk Creek Aquifer), Lake County, South Dakota for irrigation purposes. Permit No. 7090-3, with a priority date of January 9, 2009 was approved March 30, 2009 and issued to the applicant for diversion of water with construction of the described water supply system to be completed on or before March 30, 2014 and for the application to beneficial use of said water on or before March 30, 2018.

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

West well: 2275'S & 1155'E of the NW corner of Section 9, T105N, R51W (SW ¼ NW ¼)
 Latitude 43.914429 Longitude -96.9647

East well: 2200'S & 1,455'E of the NW corner of Section 9, T105N, R51W (SE ¼ NW ¼)
 Latitude 43.91463 Longitude -96.96347

(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 9, T105N, R51W	SW ¼ NW ¼	29 acres
	SE ¼ NW ¼	16 acres
	Total	45 acres

(4) Pursuant to South Dakota Water Law 46-5-30.1 Ron Alverson, 171 Golf View Circle, Wentworth SD 57075 the holder and/or owner of Water Right No. 7090-3 is issued a license to appropriate water, the right to use 0.56 cubic feet of water per second from ground water, two wells (Big Sioux Northern Skunk Creek Aquifer) with a priority date of January 9, 2009 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. 7090-3 and subject to the following qualifications:

- The well approved under this water right will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this water right shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
- The well authorized by Permit No. 7090-3 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. ***Both wells were drilled in 2009 by Lacey Well Drilling Inc.***

continued

Water License No. 7090-3
Page 2

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

Eric Gronlund

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

NOV 05 2021

date

