

WATER PERMIT NO. 2509-2

Name of Applicant: **Brad & Marlene Pisha**

Address: **HC 77 Box 37, Tuthill SD 57574**

Phone: **605 685-6030**

Amount of Water Claimed: **3.89**

Total Acres: **272**

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

Water to be used for: **irrigation**

County: **Bennett**

Type of Waste Disposal System:

Location: **12 miles east of Tuthill**

PRIORITY

Date Received: **8-27-03**

Application/License Fee: **\$350**

Corrected Application Received:

Period of Annual Use: **April 15 – September 30**

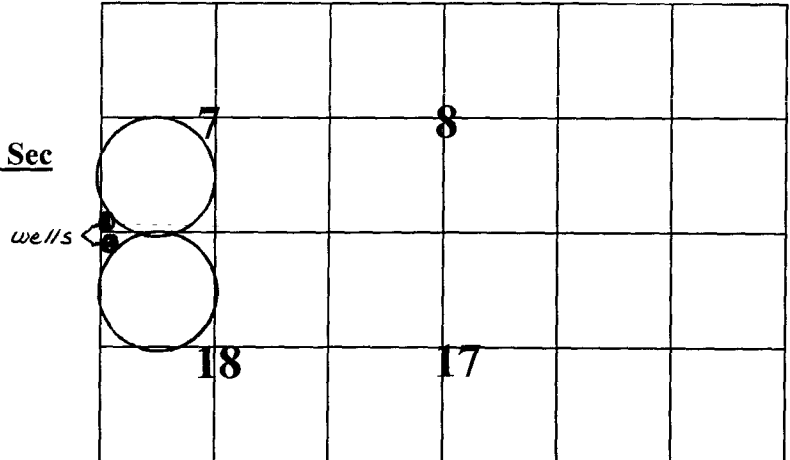
Remarks:

Diversion Point: **SW ¼ SW ¼ Sec 7 and NW ¼**

NW ¼ Sec 18; all in T37N-R33W

Land to be Irrigated: **SW ¼ Sec 7 and NW ¼ Sec**

18; all in T37N-R33W



Depth of Well: **340 feet**

Well Driller:

Remarks:

Type of Map: **aerial**

Prepared by: **Bruce M Jaquez, NRCS**

Reviewed and the Number Assigned on: **8-27-03**

By: **Karen Schlaak**

Notice of Hearing - date to intervene: _____

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

Mail to: Water Rights Program Joe Foss Building 523 E. Capitol Pierre, SD 57501-3181 (605) 773-3352	No. <u>2509-2</u> (office use only)
	Hydrologic Unit <u>10140203</u>
	Basin <u>White River</u>
	Newspaper <u>Bennett Co. Booster II, Martin</u>

RECEIVED
AUG 27 2003
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.) _____

- Name of Applicant BRAD + Marlene PISHA Phone (605) 685-6030
(check one) ☒ Owner ☐ Tenant/lessee
- Mailing Address HC 77 Box 37, Tuthill State SD 57574
(Street, RR, or Box and City) (Zip Code)
- Amount of water claimed 3.89 *CFS or 1750 **GPM ***AF Total Acreage 272
(*Cubic Feet per Second) (**Gallons per Minute) (***)Acre Feet - storage capacity of dam/dugout or annual use if applicable)
- Source of water supply well
- Location of point of diversion (example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W) one well in the
SW1/4 of SW1/4 Sec. 7 T37N-R33W (also described as Lot 4 of Sec 7 T37N-R33W)
2nd well in NW1/4 of NW1/4 of Sec. 18 T37N-R33W County Bennett
- County or counties where water will be used Bennett
- Annual period during which water is to be used Apr. 15 to Sept. 30
- 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
(Lot 4) SW1/4 of SW1/4 of Sec. 7 T37N-R33W	34	(SW1/4 of NW1/4) of Sec. 18 T37N-R33W	34 (Lot 2)
SE1/4 of SW1/4 of Sec. 7 T37N-R33W	34	SE1/4 of NW1/4 of Sec. 18 T37N-R33W	34
(Lot 3) NW1/4 of SW1/4 of Sec. 7 T37N-R33W	34	(NW1/4 of NW1/4) of Sec. 18 T37N-R33W	34 (Lot 1)
NE1/4 of SW1/4 of Sec. 7 T37N-R33W	34	NE1/4 of NW1/4 of Sec. 18 T37N-R33W	34

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

see attached sheet

STATE OF SOUTH DAKOTA) SS
County of Bennett)

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, Brad Pisha, Marlene Pisha, 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 Brad Pisha Marlene Pisha

Subscribed and sworn to before me this 26 day of August 20 03

Kimberly J. Jarvis
Notary Public signature

Comm Exp 3-07-06

8. Description of the project.

One well will be drilled 600 to 700 ft. from the west edge and approximately 100 ft. from the south edge, in the southwest corner of the southwest $\frac{1}{4}$ of section 7 T37N-R33W. The well will pump into a center pivot irrigation system centered on this quarter section and will irrigate approximately 136 acres. The water will be pumped through pipe buried from the well to the center pivot. Tentatively, a second center pivot will be installed on the $\frac{1}{4}$ section adjacent to the south (~~NW~~ $\frac{1}{4}$ of sec 18 T37N-R33W) and water will be pumped through buried pipe from the well to the center pivot. This second pivot will also water approximately 136 acres. If not enough water is available from the first well, a second well would be drilled in the northwest corner of the NW $\frac{1}{4}$ of section 18 T37N-R33W, south of the first well.

Enclosed with form 2A is a copy of a well driller's test log done in 1976. A new test well will be drilled and I will send that report as soon as it is completed.

Brd Rntz

8-26-63

**SOUTH DAKOTA
WATER PERMIT NO. 2509-2**

Date of first receipt of application August 27, 2003.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 2509-2 to Brad & Marlene Pisha, HC 77 Box 37, Tuthill SD 57574 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. 2509-2 appropriates 3.89 cubic feet of water per second from two wells (Ogallala Formation) 340 feet deep located in the SW ¼ SW ¼ (Lot 4) Section 7 and NW ¼ NW ¼ Section 18 to irrigate 272 acres located in the SW ¼ Section 7 and NW ¼ Section 18; all in T37N-R33W.
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 15 – September 30.
3. The date from which applicant may claim right is August 27, 2003.
4. The date of approval of Permit No. 2509-2 is November 24, 2003.
5. One-fifth of the construction is to be completed on or before May 24, 2006.
6. All construction is to be completed on or before November 24, 2008.
7. Water is to be put to beneficial use on or before November 24, 2012.
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. 2509-2 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

DEC 10 2003
date



Supplemental Information

(type or print in ink)

1. Well Information - Proposed Construction

- a) Drill Hole Diameter 28" Depth 340 ft.
- b) Casing Type PVC (SDR26) Diameter 16" Thickness .625"
- c) Screen Type PVC (Slotted) NSF-wc Diameter 16" Thickness .625"
- d) Gravel Pack 14" Length of Gravel Pack 320"
- e) Depth to Top of Water Bearing Material approx. 140'
- f) Depth to Water (ground surface to water level) 70'
- g) Distance to nearest existing domestic well:
On applicants property 4,000 ft. On property owned by others one 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 _____

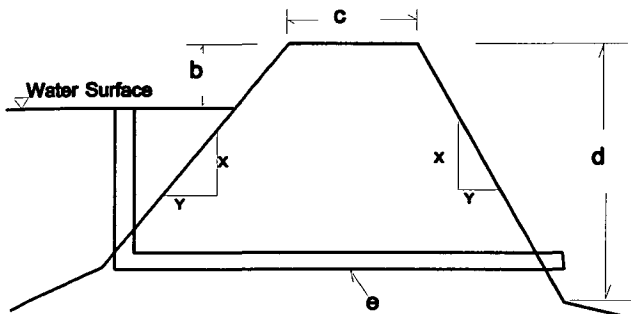
3. Dugout Information

- 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

USUAL

RED TIGER IRRIGATION, GRILLING & SUPPLY, INC.

COLBY, KANSAS 67701

P. O. BOX 524

PHONE: 462-3303

OWNER

SW 1/4

1/4 Sec.

7

TWP.

37

RGE.

3

DATE

Oct 13-76

TEST NO.

#1

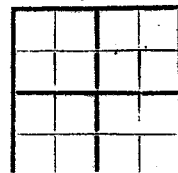
ADDRESS

Usual

DEPTH

340

STATIC
LEVEL



FROM	TO	Clay	Fine Sand	M. Gravel	Grovel	Sandy Clay	Rock	Sand Stone	Gravel	Shale	REMARKS
0	70						✓				7.50
70	80		✓			✓					10' fairly loose
80	100		✓					✓			50' fairly loose
100	110					✓					7.75
110	140		✓					✓			7.12
140	160		✓					✓			50' fairly loose
160	180		✓					✓			50' fairly loose
180	300		✓					✓			120' LOOSE
300	340		✓			✓		✓			30' LOOSE

TOTAL FOOTAGE

340

COST PER FOOT

1.00

TOTAL COST

340.00

Maxwell Farm

GPS

 $\hat{N}$

Attn of
Eric
Gronlund

773-4068

1 - 03

Name **Brad Pisha**

Address **South Dakota**

SW 1/4 7 SEC 37 TN 33 RA

Bennett Co. SD

(LOCATE TEST WITH X)

60 FEET FROM South LINE
550 FEET FROM West LINE

TEST LOG

FOOTAGE

DESCRIPTION

[illegible]

APPROX. SWL: 90'

DRILLER
TRAVIS NELSON

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date AUGUST 27, 20 03

RECEIVED OF Brad Pisha, HC 77 Box 37, Tuthill SD 57574

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

Fee for Application for Permit No. <u>2509-2</u> to Appropriate Water, to construct and to put water to beneficial use	300	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>2509-2</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	350.00

No.

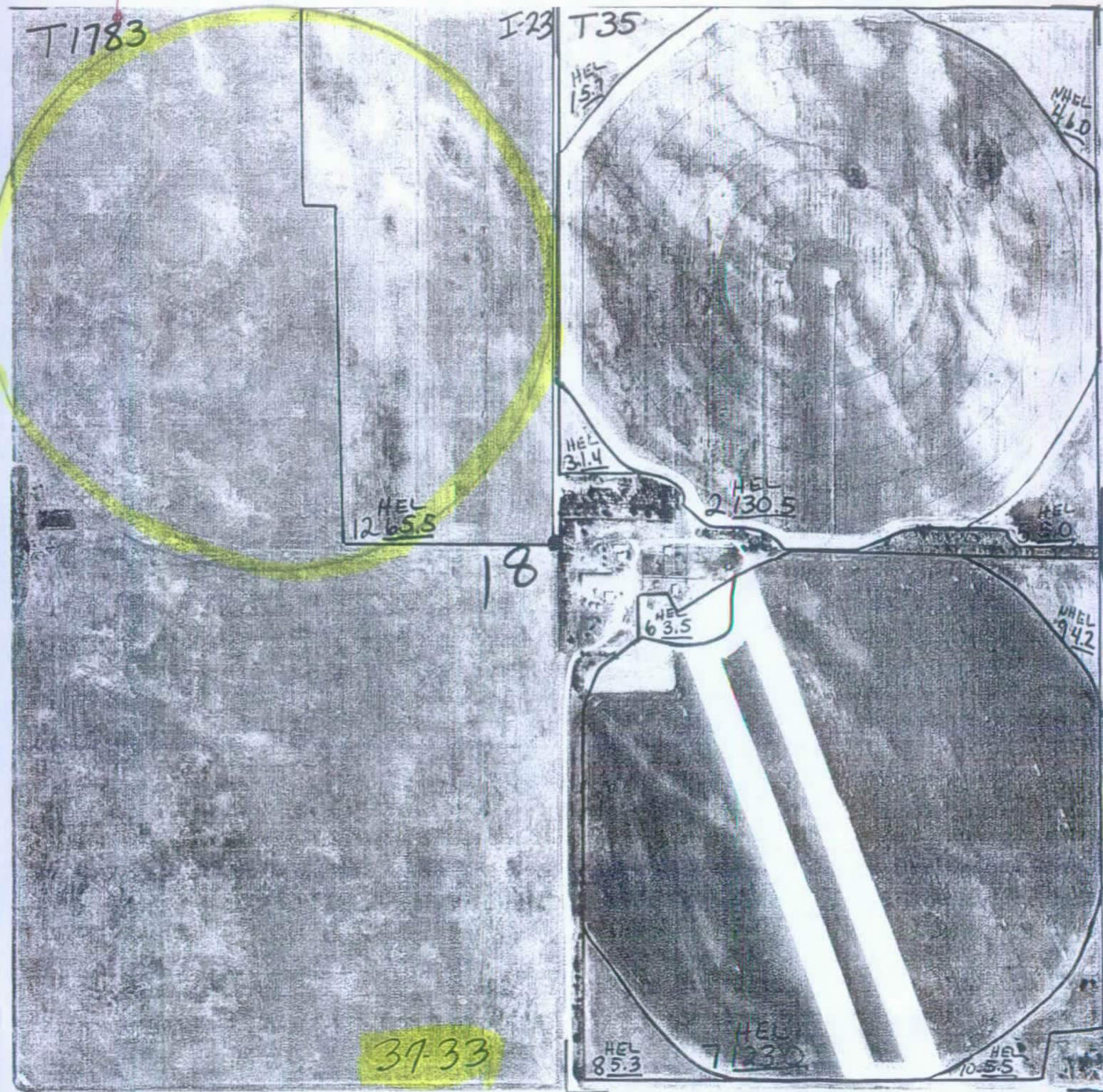
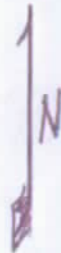
000379

By

Darland Akle
Chief Engineer
gm

Brad Fisher
HC 77 Box 37
Tutthill, SD 57574

2nd proposed well site

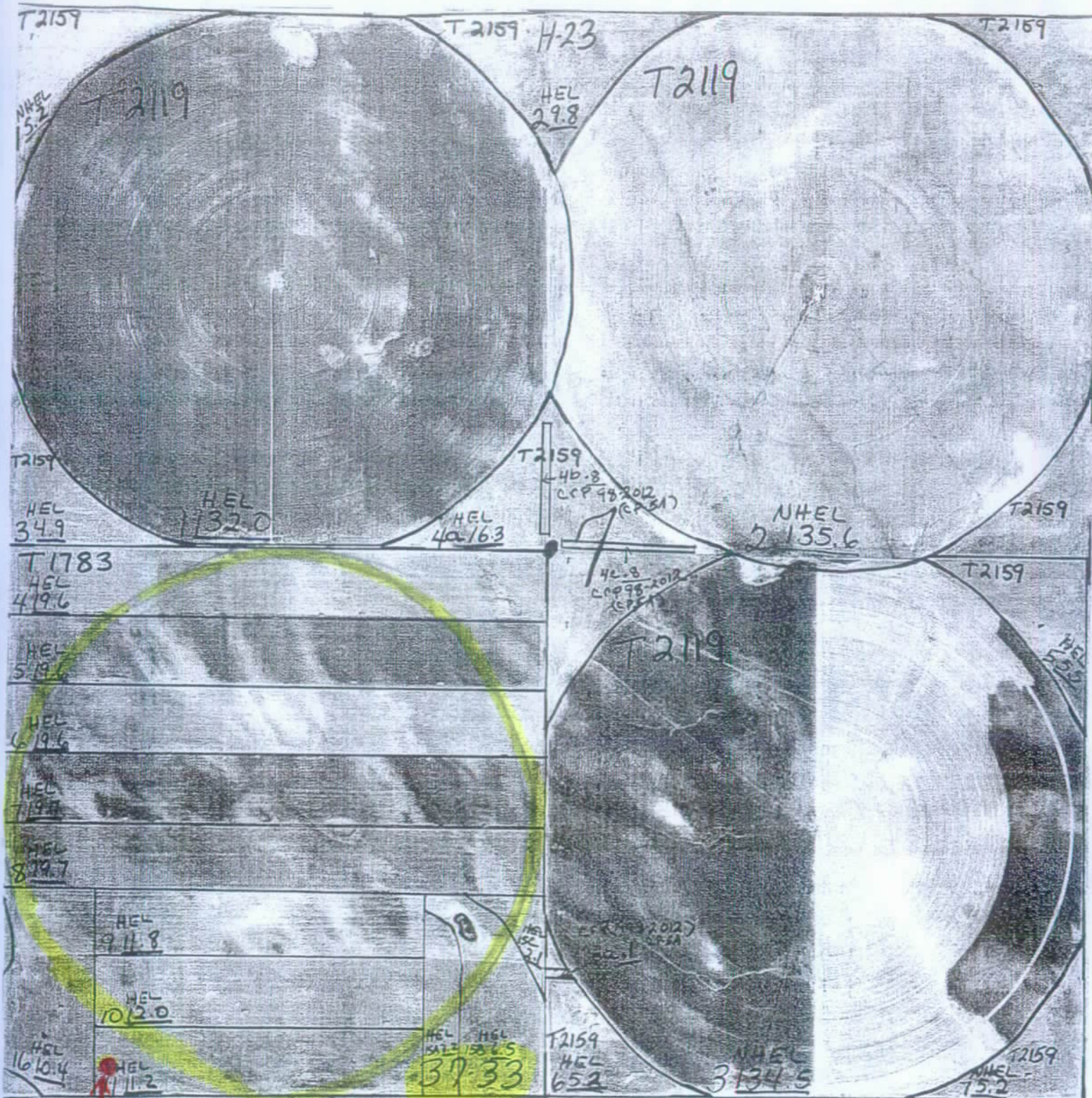
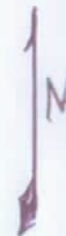


T37N-R33W

Brant M. Jager
District Conservation
Martin, MO, NRCS

2509-2

BRAD PISHA
HCTT Box 37
Tutthill, SD 57514



First proposed well site

T37N-R33W

Bruce M. Jorgensen
District Conservation
Martin FO, NRCS

2509-2

Water Rights Program - DENR
Conversation File Documentation

NAME OF PERSON OR FILE: Brad Pisha – WP Application No. 2509-2

ADDRESS: COUNTY: Bennett

DATE: September 17, 2003 TELEPHONE:

RE: Test Hole Log

COMMENTS:

Mr. Pisha called to let me know that Grosch Drilling just completed drilling a test hole and everything looked really good. He will fax a copy of the test hole logs once he gets a copy from the driller.

He said the driller also informed him that the wells would need to be more 500 feet away from the each other. He plans to construct the 2nd well approximately 660 feet from the 1st well.

NAME: Eric Hundert

WATER PERMIT APPLICATION NO. 2509-2
BRAD & MARLENE PISHA
OCTOBER 23, 2003

Water Permit Application No. 2509-2 proposes to appropriate 3.89 cubic feet of water per second from two wells (Ogallala Formation) 340 feet deep. The wells are to be located in the SW $\frac{1}{4}$ SW $\frac{1}{4}$ Sec. 7, and the NW $\frac{1}{4}$ NW $\frac{1}{4}$ Sec. 18, T37N-R33W in Bennett County. The water is to be used to irrigate 272 acres located in the SW $\frac{1}{4}$ Sec. 7, and the NW $\frac{1}{4}$ Sec. 18, T37N-R33W.

AQUIFER: Ogallala (OGLL)

GENERAL:

The High Plains aquifer consists of the upper sandstone units of the Arikaree Formation, the Ogallala Formation, and the Sand Hills Formation, and any terrace or alluvial deposits, all of which are hydraulically connected (Kolm and Case, 1983). The High Plains aquifer underlies 4,750 square miles of South Dakota and contains an estimated 700 million acre feet of water in the state (Gutentag and others, 1984). The Ogallala Formation, which consists of clays, silts, sands and surface gravel deposits, makes up a major part of the High Plains aquifer. The Ogallala Formation underlies approximately 280,960 acres of Bennett County and contains an estimated 2,809,600 acre-feet of recoverable water in storage in the county (Allen and others, 1984). The saturated thickness of the aquifer is estimated to be 200-400 feet in this area. (Kolm and Case, 1983). The aquifer is under unconfined conditions with the water table controlled locally by topography. Precipitation is the principal source of recharge to the aquifer. The annual recharge rate has been estimated to be 8 percent of the precipitation rate, or about 1.3 in./yr to 1.8 in./yr (Kolm and Case, 1983). This would equate to an annual recharge of 30,400 acre-feet to 42,000 acre-feet. Natural discharge occurs to streams and springs, and directly to the atmosphere by evapotranspiration.

WATER AVAILABILITY:

Water Rights Program monitors 84 observation wells completed into the Ogallala Formation, of which 18 are located in Bennett County. Six observation wells completed into the Ogallala are located within about five miles of this application. Water Rights' Observation Well BT-76C is located less than two miles southeast of this project area. Water Rights' Observation Well BT-78K is located approximately two miles north of this project area. The hydrographs for these wells are shown in figures 1-2.

**WATER RIGHTS' OBSERVATION WELL
BT-76C**

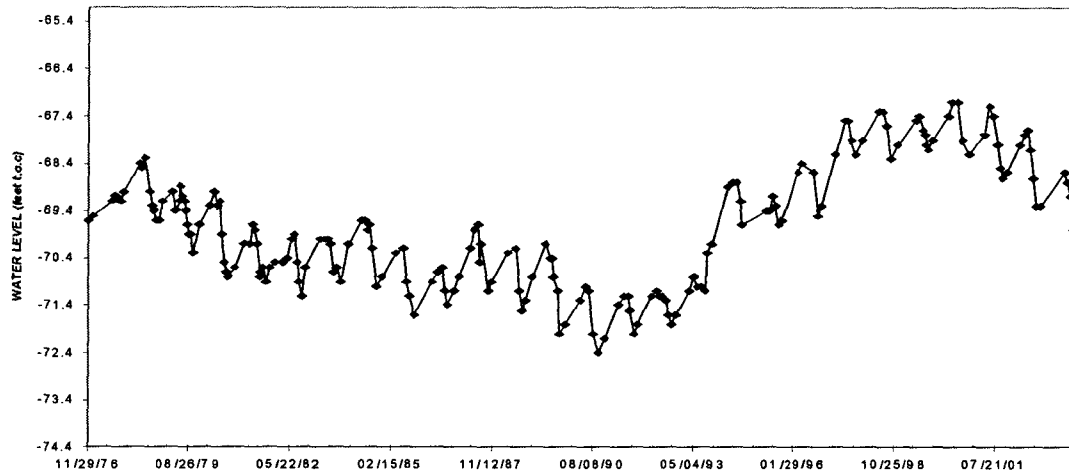


Figure 1. Hydrograph of Water Rights' Observation Well located approximately 1.5 miles southeast of 2509-2.

**WATER RIGHTS' OBSERVATION WELL
BT-78K**

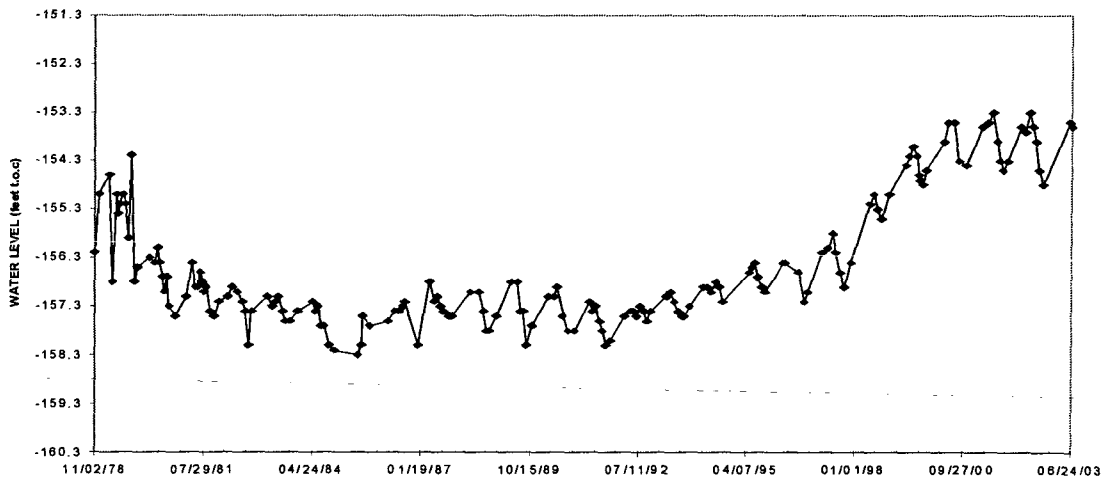


Figure 2. Hydrograph of Water Rights' Observation Well located approximately 2.3 miles north of 2505-2.

These observation wells are read monthly and show only slight fluctuations due to existing pumping, and changes do to climatic conditions (Water Rights, 2003b).

There are 136 permits/rights which appropriate water from the Ogallala aquifer in South Dakota. There are 45 permits/rights from the Ogallala in Bennett County (Water Rights, 2003c). Irrigation is the major water use from the aquifer. Reported pumpage from the Ogallala for irrigation use can be seen in figure 1.

*Reported Irrigation Pumpage
from the Ogallala Aquifer in South Dakota*

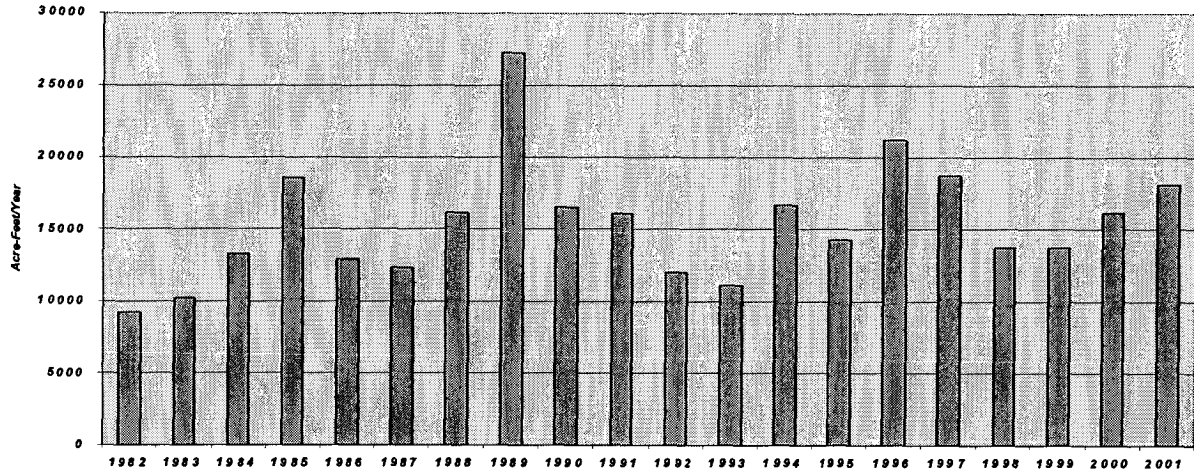


Figure 5. Irrigation usage from the Ogallala aquifer (Water Rights, 2002).

AFFECTS ON EXISTING RIGHTS:

Since the Ogallala Aquifer is under unconfined conditions, drawdown from pumping an individual well is not expected be significant very far from the well. There are 16 irrigation permits/rights within three and one-half miles of 2509-2 (Water Rights, 2003c). They include:

PERMIT	LAST_NAME	ACRES	CFS
1001-2	JIMMIE O'NEILL	135.00	1.66
1002A-2	JIMMIE O'NEILL	176.00	2.30
1207-2	JERRY J DONOVAN	132.00	1.78
1208-2	JIMMIE O'NEILL	135.00	1.66
1211-2	JAMES A (TONY) O'NEILL	264.00	2.00
1555-2	DEAN O'NEILL	264.00	2.00
1591-2	O'NEILL FARMS INC	132.00	1.56
1637-2	TONY & RICK O'NEILL	384.00	5.35
1638-2	DANIEL D O'NEILL	132.00	1.89
1674-2	WAYNE JOHNSON	180.00	2.45
1782-2	O'NEILL FARMS INC	132.00	1.10
2111-2	JERRY J DONOVAN	132.00	1.78
2354-2	WAYNE JOHNSON	232.00	2.56
2398-2	JEFF JOHNSON	272.00	2.22
2493-2	JEFF JOHNSON	140.00	2.00
985-2	JERRY J DONOVAN	135.00	1.78

Table 1. Irrigation Water Rights/Permits within 3.5 miles of 2509-2

The nearest irrigation well to this well, Water Right No. 1211-2 is located less than one-half mile southeast of the well site(s) proposed by this application. Well interference is not expected to be a problem in this area. Drawdown created by pumping is not significant except close to the individual production well. The hydrograph of Water Rights' Observation Well BT-76C, figure 1,

is representative of the impacts of pumping on the aquifer. There are three irrigation Water Rights: 1001-2, 1208-2 and 1638-2 within one-half mile of the observation well, yet drawdown is not significant in the observation well.

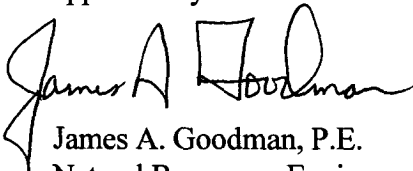
CONCLUSIONS:

1. The Ogallala Aquifer is a viable aquifer in this area, and water is available for these appropriations.
2. Well interference should not be a problem in this area.



Ken Buhler
Natural Resources Engineer

approved by



James A. Goodman, P.E.
Natural Resources Engineer

REFERENCES:

- Allen, J.C., Iles, D.L., and Petres, A.K., 1984, Analysis of Groundwater and Streamflow Data Western Dakotas Region of South Dakota, Task 3 and 4: Groundwater Resource Inventory: South Dakota Department of Water and Natural Resources,
- Gutentag, E.D., Heimes, F.J., Krothe, N.C., Luckey, R.R., Weeks, J.B. 1984, Geohydrology of the High Plains Aquifer in Parts of Colorado, Kansas, Nebraska, New Mexico, Oklahoma, South Dakota, Texas, and Wyoming: U.S. Geological Survey Professional Paper 1400-B, 63 p.
- Kolm, K.E., and Case III, H.L., 1983, A Two-Dimensional, Finite-Difference Model of the High Plains Aquifer in Southern South Dakota: U.S. Geological Survey Water-Resources Investigations Report 83-4175, 34 p.
- Water Rights Program, 2002, "Irrigation Use Summary": DENR-Water Rights Program
- Water Rights Program, 2003b, "Observation Well Files": DENR-Water Rights Program
- Water Rights Program, 2003c, "Water Permit Files": DENR-Water Rights Program,



**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. 2509-2, Brad and Marlene Pisha**

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. 2509-2, Brad and Marlene Pisha, HC 77 Box 37, Tuthill SD 57574.

The Chief Engineer is recommending APPROVAL of Application No. 2509-2 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. 2509-2-3 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
October 30, 2003



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

www.state.sd.us/denr

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

October 30, 2003

Brad and Marlene Pisha
HC 77 Box 37
Tuthill SD 57574

Dear Mr. & Ms. Pisha:

Water Permit Application No. 2509-2 for irrigation use has been examined and found to comply with the South Dakota Water Laws and applicable rules. A notice of hearing has been sent to the Publisher of the Bennett Co. Booster II printed at Martin, SD (Ph # 605-685-6866). You will need to contact the newspaper and authorize publication of this notice. For your information, a copy of the notice, the recommendation of the Chief Engineer and a 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 to authorize publication of your Notice of Hearing 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 with the last publication to occur twenty days before the board meeting. 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.



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

October 30, 2003

Bennett Co. Booster II
PON Box 610
Martin SD 57551-0610

ATTENTION: Legal Public Notice

Enclosed is a Notice of Hearing on Application No. 2509-2 to Appropriate Water to be published twice. Please publish the first notice on November 5, 2003 with the second publication 7 days later.

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 Brad and Marlene Pisha, HC 77 Box 37, Tuthill SD 57574 (Ph # 605-685-6030).

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 /ks

Eric Gronlund
Natural Resources Engineer
605 773-3352

enclosures

CUT HERE

No. 2509-2

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

Date _____

We are in receipt of your letter of October 30, 2003 enclosing Notice of Hearing to Appropriate Water by Application No. 2509-2 which was first published in our issue of _____. **ENCLOSED IS A COPY OF THIS FIRST PUBLICATION.**

Name _____

Newspaper _____

Instruction to Newspaper - Publish first Notice on November 5, 2003 with the second publication 7 days later. The applicant is responsible for payment.

NOTICE OF APPLICATION NO. 2509-2 to Appropriate Water

Notice is given that Brad and Marlene Pisha, HC 77 Box 37, Tuthill SD 57574 have filed an application for a water permit to appropriate 3.89 cubic feet of water per second from two wells (Ogallala Formation) 340 feet deep located in the SW $\frac{1}{4}$ SW $\frac{1}{4}$ (Lot 4) Section 7 and NW $\frac{1}{4}$ NW $\frac{1}{4}$ Section 18 to irrigate 272 acres located in the SW $\frac{1}{4}$ Section 7 and NW $\frac{1}{4}$ Section 18; all in T37N-R33W.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 2509-2 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 the 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 the 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 November 24, 2003.

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.

PROOF OF PUBLICATION

STATE OF SOUTH DAKOTA)

County of Bennett) SSI, Mandy Scherer

certify that the attached printed Notice was taken

from the Bennett CountyBooster IIprinted and published in B. MartinCounty of Bennett and

state of South Dakota. The notice was published

in the newspaper on the following two dates:

11-5-0311-12-03Cost of Printing 40.44Mandy Scherer
(Signature)Business Manager
(Title)November 12, 2003
(Date Signed)

NOTICE OF APPLICATION NO.

2509-2 to Appropriate Water

Notice is given that Brad and Marlene Pisha, HC 77 Box 37, Tuthill, SD 57574 have filed an application for a water permit to appropriate 3.89 cubic feet of water per second from two wells (Ogallala Formation) 340 feet deep located in the SW1/4SW1/4 (Lot 4) Section 7 and NW1/4NW1/4 Section 18 to irrigate 272 acres located in the SW1/4 Section 7 and NW 1/4 Section 18; all in T37N-R33W.

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2tp-11/12

RECEIVED
NOV 13 2003
WATER RIGHTS
PROGRAM



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

DEC 10 2003

Brad & Marlene Pisha
HC 77 Box 37
Tuthill SD 57574

Dear Mr. & Mrs. Pisha:

Enclosed is Water Permit No. 2509-2 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

Permit No. 2509-2
White River - Water District

Other permit/license(s) associated with project: none

Contact Person & Address: **Brad and Marlene Pisha, 29209 242nd Avenue, Tuthill SD 57574**

Report Of Examination Of Works

On, **September 22, 2010**, I made a thorough examination of the water use system constructed by **Brad and Marlene Pisha** of **Tuthill SD** holder of Permit No. **2509-2** bearing the priority of **August 27, 2003** authorizing the diversion of **3.89** cu. ft. per second of the waters of the **Ogallala Aquifer** for **irrigation** purposes, in **Bennett** County.

The system is in the following condition **good**. The point of diversion is located in the **SW ¼ SW ¼ Section 7, T37N, R33W (approximately 50 feet north and 520 feet east of the SW corner Section 7, T37N, R33W)** with a longitude of **-101.27445** and a latitude of **43.18602**. The works are capable of diverting and conveying to the place of use **2.0** 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 in Section 7, T37N, R33W	acres		all in Section 18, T37N, R33W	acres
NW ¼ SW ¼	34		NW ¼ NW ¼	33.5
NE ¼ SW ¼	34		NE ¼ NW ¼	33.5
SW ¼ SW ¼	34		SW ¼ NW ¼	33.5
SE ¼ SW ¼	34		SE ¼ NW ¼	33.5

comprising a total of **270** acres of land and the license should be issued for **2.0** cfs.

Review of Permit Qualifications And Regulations:

- 1) Special qualifications to permit being abided by **Yes**
- 2) All structures, wells and lands on map **Yes**
- 3) Irrigation Questionnaires checked to determine if permit owner started irrigation by the end of construction period **Yes**
- 4) Exceptions to compliance are: **None**

Report On the Specifics of the System

Diversion Point Information:

- 1) Well Drilling Firm: **Grosch Irrigation** 2) No. of Wells **1**
- 3) Depth(s) **320** feet 4) Well log is available **yes**

Casing:

- 1) Diameter **16** inches 2) Length **139** feet
- 3) Type **plastic**

Screen:

- 1) Type PVC
- 2) Length 180 feet
- 3) Static water level 8 feet

Pump\ Motor:

- 1) Pump Make
- 2) Pump Model
- 3) Capacity 900 GPM
- 4) Motor Make US Electric
- 5) Motor Model No. ID R-9985-00-800
- 6) Horsepower rating 100 hp

System Type:

Center pivot: SW ¼ Section 7, T37N, R33W

- 1) Make Valley Model 8000
- 2) Overall length 1297.5 feet + 99 feet end gun
- 3) Number of towers 7
- 4) End gun yes
- 5) High or low pressure 50 PSI
- 6) Capacity 2.0 GPM

end gun has stops to accommodate road

Center pivot: NW ¼ Section 18, T37N, R33W

- 1) Make Reinke Model 2-685
- 2) Overall length 1363 feet with end gun
- 3) Number of towers 8
- 4) End gun yes
- 5) High or low pressure #
- 6) Capacity 900 GPM

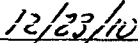
Chemigation:

- 1) Does chemigate Yes
- 2) Main line check valve Yes
- 3) Inspection port/air relief Yes
- 4) Low pressure drain Yes
- 5) Discharge is 20' from source Yes
- 6) Interlock type
- 7) Injection pump type
- 8) Injection check valve Yes
- 9) Injection line check valve or positive displacement pump
- 10) All chemigation equipment appears to be installed in the proper position and complies with chemigation laws and rules yes

COMMENTS: Only one well was completed as part of Mr. Pisha's irrigation system. The time to complete construction of water was November 24, 2008. The well completion report states the pump rate will be 900 gpm. The annual irrigation questionnaire submitted by Mr. Pisha states a diversion rate of 870 gpm. At the time of on-site-visit Mr. Piaha stated to the best of his knowledge the well produces 870 – 900 gpm. Giving the permit holder the benefit of doubt, I recommend licensing the water permit for 900 gpm (2.0 cfs).



Eric Gronlund
Natural Resources Engineer
DENR, Water Rights Program



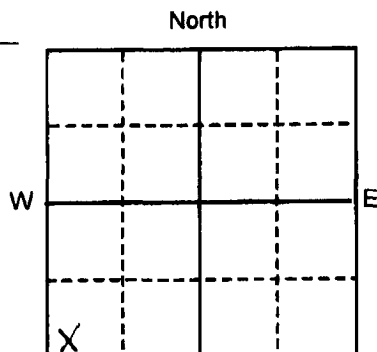
Date

SOUTH DAKOTA WATER WELL COMPLETION REPORT

11-02

Location SW ¼ SW ¼ Sec 7 Twp 37 Rg 33

County Bennett

Please mark well
location with an "X"

Well Completion Date

March 10, 2004

1 Mile

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

ft. from

(identify source)

PROPOSED USE:

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

METHOD OF DRILLING:

REVERSE ROTARY

CASING DATA:

☐ Steel ☒ Plastic ☐ Other

If other describe

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
20.0 LB/FT	16.00 IN	1.0 FT	139.0 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
CEMENT	50	15.5 Lb/gal	20.0 Ft	0.0 Ft
		Lb/gal	Ft	Ft

Describe grouting procedure

PUMPED TREMIE PIPE

SCREEN:

☒ Perforated pipe ☐ Manufactured

Diameter 16.00 Inches Length 180 Feet

Material PVC

Slot Size .080 Set From 139.0 Feet to 319.0 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? HTH

☐ No, Why Not?

Lab to which water quality sample sent for analysis

Well Owner: BRAD PISHA

Business Name:

Address: HC 77 BOX 37

City, State, Zip: TUTHILL SD 57574

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
top soil	0	2
medium sand	2	61
fine pepper sand, coarse sand	61	93
coarse sand, sandstone, thin clay layer	93	151
coarse sand w/ few thin clay layers	151	197
medium sand w/ few thin clay layers	197	244
coarse sand w/ trace of fine red rock	244	296
fine - medium green gravel	296	304
red rock	304	320

STATIC WATER LEVEL 88.0 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:

☐ Bailed

☐ Other

Pumping Level Below Land Surface

150.0 Ft. After 2.0 Hrs. pumped 1,250.0 GPM

144.0 Ft. After 2.0 Hrs. pumped 1,100.0 GPM

If pump installed, pump rate: 900.0 GPM

REMARKS

This well was drilled under license # 189 and this report is true and accurate.

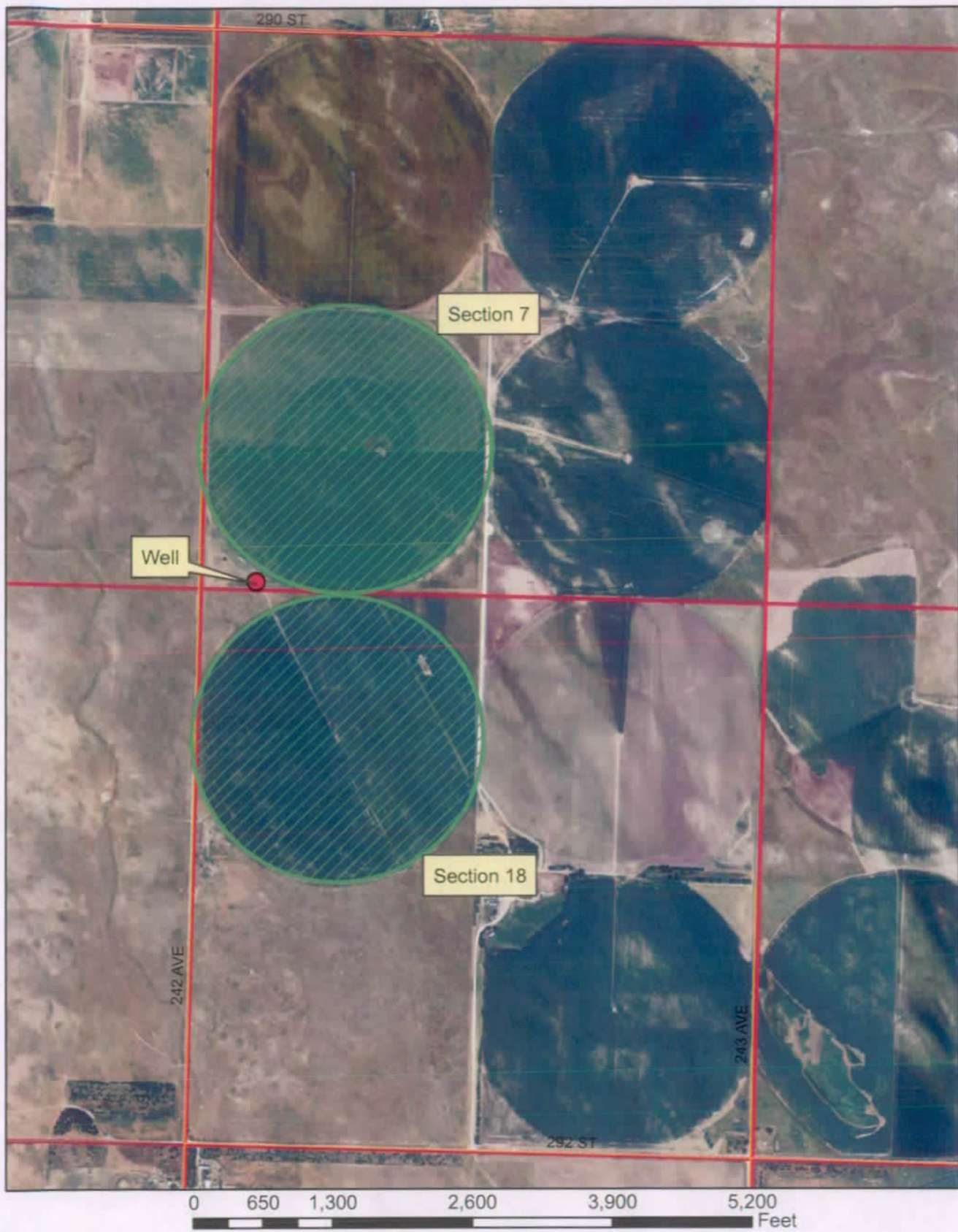
Drilling firm: GROSCH IRRIGATION CO., INC.

Signature of License Representative:

Signature of Well Owner or Equitable Property Holder:

Date:

WATER PERMIT NO. 2509-2, BRAD and MARLENE PISHA



Well located in the SW 1/4 SW 1/4 Section 7, T37N, R33W
50 feet north and 520 feet east of the SW corner Section 7
Longitude -101.27445 Latitude 43.18602



Eric Gronlund

Eric Gronlund
Water Rights Program, DENR
Date of Investigation - September 22, 2010



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

JAN 14 2011

2509-2

Brad & Marlene Pisha
29209 242nd Ave
Tuthill SD 57574

Dear Mr. & Mrs. Pisha:

Enclosed is Water License No. 2509-2. 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 the owner of an existing well, such as the well authorized by Water Right No. 2509-2, constructs a replacement well and does not plan to use the old well, the old well is considered abandoned and must be plugged. Also, any well that is being used or is not considered abandoned must be valved and controlled, if flowing, or sealed and capped so that no leaking occurs either underground or at the surface.

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

Sincerely,

A handwritten signature in black ink, which appears to read "Garland Erbele". The signature is written in a cursive, flowing style.

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

enclosures

**STATE OF SOUTH DAKOTA
WATER LICENSE NO. 2509-2**

(1) Brad & Marlene Pisha, 29209 242nd Ave, Tuthill SD 57574 made Application No. 2509-2, August 27, 2003 for a water permit to divert 3.89 cubic feet of water per second from ground water (two wells – Ogallala Formation), Bennett County, South Dakota for irrigation purposes. Permit No. 2509-2, with a priority date of August 27, 2003 was approved November 24, 2003 and issued to the applicants for diversion of water with construction of the described water supply system to be completed on or before November 24, 2008 and the application to beneficial use of said water on or before November 24, 2012.

(2) It is certified that the permit holders have complied with the provisions of South Dakota State Law relating to completion of the construction of the water supply system and are entitled to divert 2.00 cubic feet of water per second for beneficial use.

The location of the diversion point is approximately 50 feet north & 520 feet east of the SW corner of Section 7, T37N, R33W (SW ¼ SW ¼).

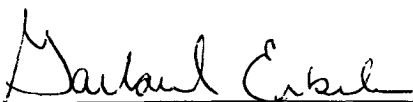
(3) The permit holder has complied with the provisions of South Dakota State Law relating to the application of water to beneficial use to irrigate the following land:

Section 7, T37N, R33W		Section 18, T37N, R33W	
NW ¼ SW ¼	34 acres	NW ¼ NW ¼	33.5 acres
NE ¼ SW ¼	34 acres	NE ¼ NW ¼	33.5 acres
SW ¼ SW ¼	34 acres	SW ¼ NW ¼	33.5 acres
SE ¼ SW ¼	34 acres	SE ¼ NW ¼	33.5 acres
Total – 270 acres			

(4) Pursuant to South Dakota Water Law 46-5-30.1 Brad & Marlene Pisha, 29209 242nd Ave, Tuthill SD 57574 the holders and/or owners of Water Right No. 2509-2 are issued a license to appropriate water, the right to use 2.00 cubic feet of water per second from ground water (one well – Ogallala Formation) with a priority date of August 27, 2003 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. 2509-2 and subject to the following qualification:

- 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. **(only one well was developed)**
- The well authorized by Permit No. 2509-2 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. **(well drilled by Grosch Irrigation - copy of log on file with the Water Rights Program).**
- This Permit is approved subject to the irrigation water use questionnaire being submitted each year.


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

JAN 14 2011

date

