

**WATER PERMIT NO. 6343-3**

Name of Applicant: Peterson Farms

Address: 19111 Maple Ave, Hitchcock SD 57348 Phone: 605 266-2793

Amount of Water Claimed: 4.57 cfs Total Acres: 320

Source of Water Supply: groundwater (2 wells)

Water to be used for: irrigation County: Beadle

Type of Waste Disposal System:

Location: 1 mile east of Hitchcock

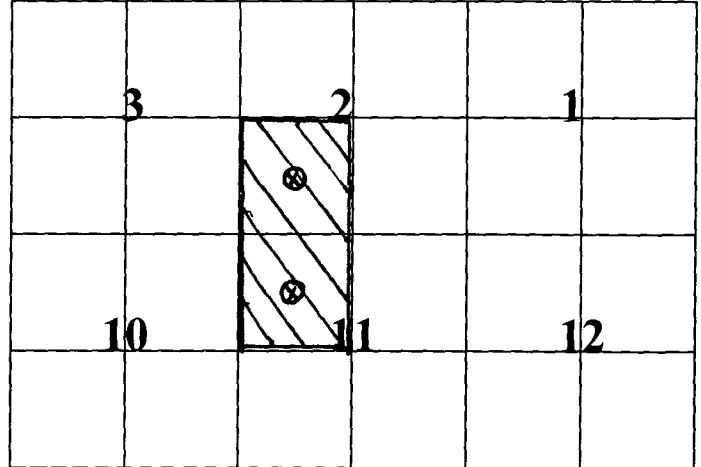
PRIORITY Date Received: 7-26-2002 Application/License Fee: \$375

Corrected Application Received: Period of Annual Use: Mar 1 – Nov 30

Remarks:

Diversion Point: centers of SW ¼ Section 2 and NW ¼ Section 11; all in T113N-R63W

Land to be Irrigated: SW ¼ Section 2 and NW ¼ Section 11; all in T113N-R63W



Depth of Well: approximately 80 feet deep

Well Driller: : \_

Remarks:

Type of Map: aerial

Prepared by: Ron Duvall

Reviewed and the Number Assigned on: 7-29-2002

By: Karen Schlaak

Notice of Hearing - date to intervene: \_\_\_\_\_

**SOUTH DAKOTA**  
**WATER PERMIT NO. 6343-3 FOR IRRIGATION**

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Date of first receipt of application July 26, 2002.

The Water Management Board approved Water Permit No. 6343-3 on December 4, 2002 for Peterson Farms, 19111 Maple Avenue, Hitchcock SD 57348 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. 6343-3 appropriates 4.57 cubic feet of water per second from two wells (Tulare Hitchcock Aquifer) approximately 80 feet deep located in the center of the SW ¼ Section 2 and the NW ¼ Section 11; to irrigate 320 acres located in the SW ¼ Section 2 and the NW ¼ Section 11; all in T113N-R63W.
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 March 1 – November 30.
3. The date from which applicant may claim right is July 26, 2002.
4. One-fifth of the construction is to be completed on or before June 4, 2005.
5. All construction is to be completed on or before December 4, 2007.
6. Water is to be put to beneficial use on or before December 4, 2011.
7. 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. 6343-3 shall be constructed by a licensed well driller and construction of the well and installation of the pump shall comply with Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) pursuant to Section 74:02:04:28.
3. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.

**WATER MANAGEMENT BOARD**

By: Garland Erbele

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

MAR 13 2003

date



RECEIVED  
JUL 26 2002  
WATER RIGHTS  
PROGRAM

|                                                                                                                    |                                       |                                 |
|--------------------------------------------------------------------------------------------------------------------|---------------------------------------|---------------------------------|
| Mail to:<br>Water Rights Program<br>Joe Foss Building<br>523 E. Capitol<br>Pierre, SD 57501-3181<br>(605) 773-3352 | No. <u>343-3</u> (office use only)    | Hydrologic Unit <u>10160006</u> |
|                                                                                                                    | Basin <u>James River</u>              |                                 |
|                                                                                                                    | Newspaper <u>The Plainsman, Huron</u> |                                 |
|                                                                                                                    |                                       |                                 |

## 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 Peterson Farms Phone 266-2793  
(check one) ☒ Owner ☐ Tenant/lessee  
Mailing Address 19111 Maple Ave, Hitchcock State SD 57348  
(Street, RR, or Box and City) (Zip Code)
- Amount of water claimed 4.57 \*CFS or      \*\*GPM      \*\*\*AF Total Acreage 320.00  
(\*Cubic Feet per Second) (\*\*Gallons per Minute) (\*\*\*)Acre Feet - storage capacity of dam/dugout or annual use if applicable)
- Source of water supply ground water - 2 wells
- Location of point of diversion (example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W) 2 wells: SW1/4  
section 2-T113N-R63W and NW1/4 section 11-T113N-R63W  
County Beadle
- County or counties where water will be used Beadle
- Annual period during which water is to be used Mar 1 - Nov 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 |
|-----------------------------|-------|------------------|-------|
| SW1/4 section 2-T113N-R63W  | 160   |                  |       |
| NW1/4 section 11-T113N-R63W | 160   |                  |       |
|                             |       |                  |       |
|                             |       |                  |       |

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

STATE OF SOUTH DAKOTA) SS  
County of Hughes)

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, Lenny Peterson, 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 Lenny Peterson

Subscribed and sworn to before me this 26<sup>th</sup> day of July 20 02



Karen Schlaak  
Notary Public signature  
My commission expires 4/01/07

(type or print in ink)

**1. Well Information - Proposed Construction**

- a) Drill Hole Diameter \_\_\_\_\_ Depth 80 +
- b) Casing Type Plastic Diameter 16 Thickness \_\_\_\_\_
- c) Screen Type Stainless steel Diameter \_\_\_\_\_ Thickness \_\_\_\_\_
- d) Gravel Pack \_\_\_\_\_ Length of Gravel Pack \_\_\_\_\_
- e) Depth to Top of Water Bearing Material \_\_\_\_\_
- f) Depth to Water (ground surface to water level) \_\_\_\_\_
- g) Distance to nearest existing domestic well:  
On applicants property none On property owned by others 1 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**

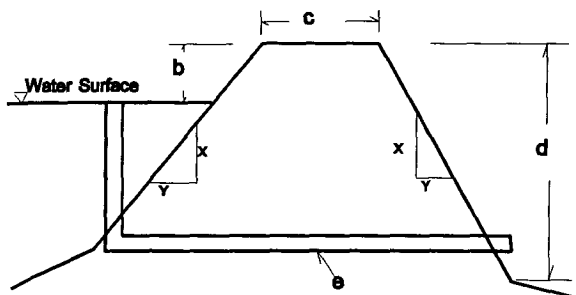
- a) Surface Dimensions \_\_\_\_\_ Depth \_\_\_\_\_
- b) Depth to water (ground surface to water level) \_\_\_\_\_

**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

4548-3

PH. 377-4207

Sam Wilson

402

MAP NOT TO SCALE

NW 11, 5102-113-63

Fm 5415

THIS IS NOT AN OFFICIAL WETLAND MAP

T-107

Transferred  
to  
Spink County

2

T-480

NHEL

① 152.4

T-8767

T-107

X well

NHEL

② 152.0

113-63

NHEL

① 149.4

T-107

T-84

Don J. Hall

Nat. Res. Engineer

7/26/02

6343-3

# MAP NOT TO SCALE

2002 5415 PETERSON FARMS

CI.

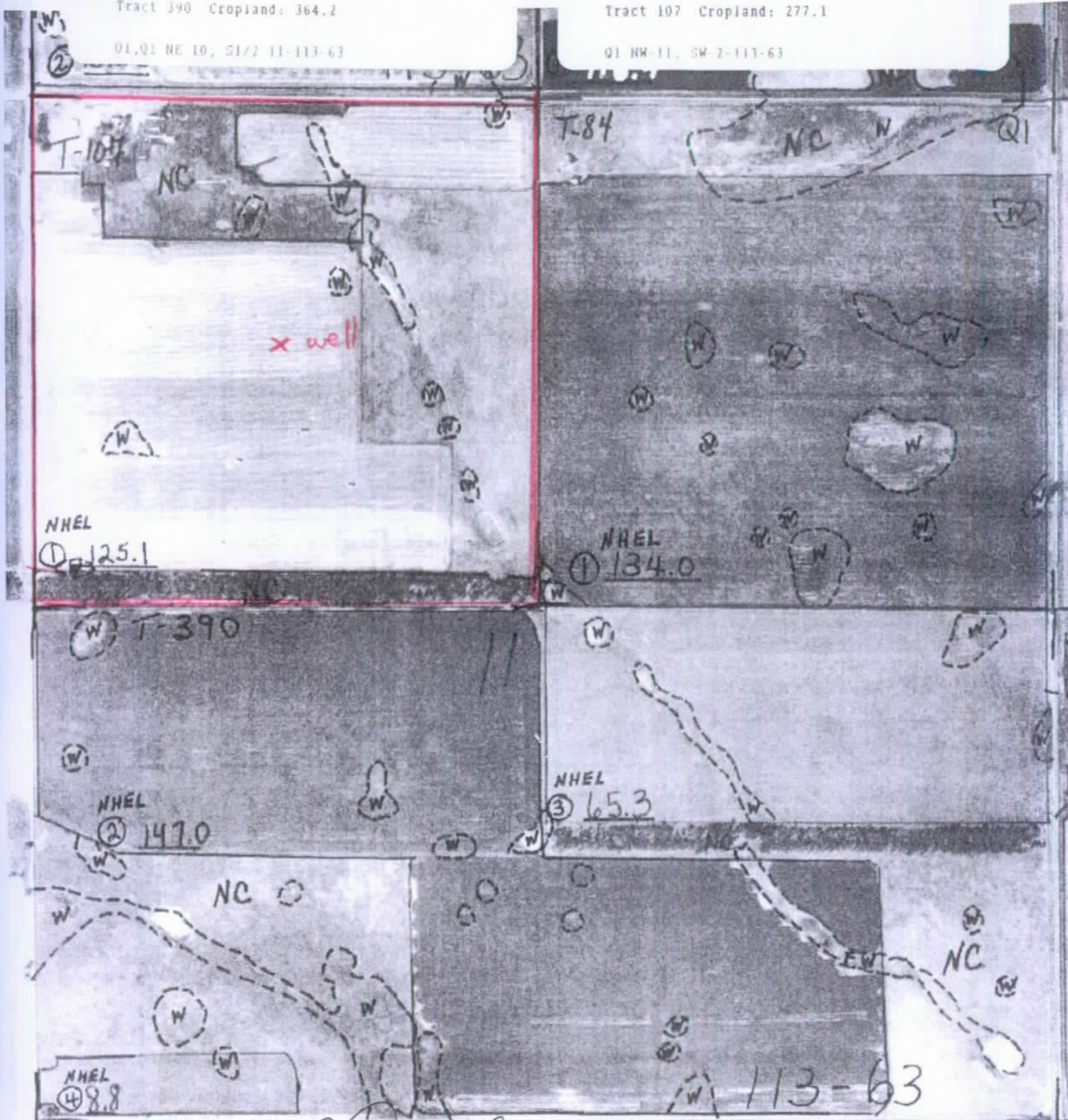
2002 5415 PETERSON FARMS

Tract 390 Cropland: 364.2

Tract 107 Cropland: 277.1

01, Q1 NE 10, S1/2 11-113-63

Q1 NW-11, SW-2-113-63



Don Jurell  
Nat. Res. Engineer  
7/26/02

6343-3

# RECEIPT

## Water Rights Program

South Dakota Department of Environment and Natural Resources

NO 417247

Pierre, July 26, 2002

RECEIVED OF Peterson Farms, 19111 Maple Avenue, Hitchcock, SD 57348  
the following amount in fees for services rendered as provided for by law:

|                                                                                                                         |       |        |
|-------------------------------------------------------------------------------------------------------------------------|-------|--------|
| Fee for Application for Permit No. _____ to Appropriate Water, to construct<br>and to put water to beneficial use _____ | 325   | 00     |
| Fee for Application for Permit No. _____ to Appropriate Water, for Future<br>Use _____                                  |       |        |
| Fee to retain Future Use Permit No. _____ after period of seven years.                                                  |       |        |
| Fee for Inspecting Constructed Works, confirming beneficial use and issuing Water<br>License No. _____                  | 50    | 00     |
| Fee for Filing Transfer Form _____                                                                                      |       |        |
| Fee for Filing Extension Request _____                                                                                  |       |        |
| Fee for _____                                                                                                           |       |        |
| _____                                                                                                                   |       |        |
| _____                                                                                                                   |       |        |
| (Any Other Work Provided by Law)                                                                                        | Total | 375 00 |

By Darland Eide  
Chief Engineer *gm*

REPORT ON WATER PERMIT NOS. 6330-3, 6331-3, 6332-3, 6336-3, 6337-3, 6338-3, 6339-3, 6340-3, 6343-3, 6344-3, 6345-3, 6346-3, 6348-3, 6353-3 FOR WATER FROM THE TULARE HITCHCOCK AQUIFER AND WATER PERMIT NOS. 6333-3, 6334-3, 6347-3, 6351-3, 6352-3 FOR WATER FROM THE TULARE WESTERN SPINK AQUIFER

September 10, 2002

These applications are all for irrigation and propose to appropriate a total of 62.87 cfs for irrigation of 4,604.4 acres located in Beadle and Spink County. Specifically, these applications request 45.85 cfs for irrigation of 3,397 acres from the Tulare Hitchcock aquifer and 17.02 cfs for irrigation of 1,207.4 acres from the Tulare Western Spink aquifer.

AQUIFER – TULARE WESTERN SPINK (T-WS), TULARE HITCHCOCK (T-H)

The Tulare Western Spink is a mostly buried outwash (sand and gravel) which is under predominantly confined or artesian conditions. The Tulare Hitchcock is a predominantly surficial outwash (sand and gravel) which is under water table conditions. The Tulare Western Spink is hydraulically connected to the Tulare Hitchcock and ground water movement is from southwest to northeast and towards the James River (Hamilton, 1996). For practical purposes the two management units are the same aquifer system. The Hamilton report refers to the Tulare aquifer in general terms whereas the terms Tulare Hitchcock and Tulare Western Spink are management units of the Tulare aquifer as defined in an earlier report (Hedges, 1982). The boundary line between the two management units roughly follows a line from the town of Hitchcock to the town of Tulare. Everything east of that imaginary line is Tulare Hitchcock and everything west of the line is Tulare Western Spink. The Water Rights Program has continued to use the management units as described in the Hedges report for water use and water allocation purposes. However, because of the similarities between the aquifer management units and because of continuing irrigation development from both management units, the management units need to be combined to fully utilize the development potential of the aquifer. This report will consider the Tulare Western Spink and the Tulare Hitchcock management units as the same aquifer.

The Tulare Hitchcock underlies 96,000 acres and contains an estimated 360,000 acre-feet of recoverable water in Spink County and underlies 53,800 acres and contains an estimated 333,000 acre-feet of recoverable water in storage in Beadle County (Hedges, 1982). This totals to 149,800 acres and 693,000 acre-feet of recoverable water in storage for the entire aquifer. Recharge to the aquifer has been estimated to approximate 0.83 inches per year (Kuiper, 1984). This equates to an average recharge of 6,640 acre-feet per year for Spink County and 3,720 acre-feet per year for Beadle County. The total annual recharge for the Tulare Hitchcock is approximately 10,360 acre-feet.

The Tulare Western Spink aquifer underlies 57,000 acres and contains an estimated 162,000 acre-feet of recoverable water in storage in Beadle County, underlies 72,300 acres and contains an estimated 270,930 acre-feet of recoverable water in storage in

Spink County and underlies 9,600 acres and contains an estimated 86,400 acre-feet of recoverable water in storage in Hand County (Hedges, 1982). This totals to 138,900 acres and 519,330 acre-feet of recoverable water in storage for the entire Tulare Western Spink. Recharge to the aquifer has been estimated to approximate 0.83 inches per year (Kuiper, 1984). This equates to an average recharge of 3,940 acre-feet per year for Beadle County, 5,000 acre-feet per year for Spink County and 664 acre-feet per year for Hand County. The total annual recharge for the Tulare Western Spink management unit is approximately 9,600 acre-feet.

The combined aquifer statistics for the Tulare Western Spink and Tulare Hitchcock management units would include, 288,700 acres underlain by aquifer, 1.212 million acre-feet of recoverable water in storage, and 19,960 acre-feet of annual recharge to the entire aquifer system.

Water use from the Tulare Hitchcock aquifer in Beadle County has exceeded the estimated average annual recharge (3,720 acre-feet) to the aquifer five times in the last 23 years. Water use from the Tulare Hitchcock aquifer in Spink County has never exceeded the estimated average annual recharge (6,640 acre-feet) to the aquifer and has peaked at 4,813.5 acre-feet as reported in 2001. However, there are twelve recently approved water permits located in Spink and Beadle County that have either not reported irrigation or have not fully developed yet. If these permits develop completely and use water at a rate comparable to the existing users, then the water use from the Tulare Hitchcock would increase by about 1,600 acre-feet. This calculated volume added to the reported use of 4,813.5 acre-feet in 2001 would approach the average annual recharge estimate for Spink County. In all likelihood, pumping the Tulare Hitchcock management unit in Spink County would probably exceed average annual recharge during a drought.

The combined water use for Spink and Beadle Counties for the Tulare Hitchcock has never exceeded the combined estimated recharge (10,360 acre-feet) but a peak volume of 9,874 acre-feet was pumped in 1989. Adding in the estimated pumping volumes of 1,600 acre-feet (the newer permits) would mean that pumping from the Tulare Hitchcock would have exceeded the annual recharge estimate three times since 1979. Combining pumping volumes from the two counties in this manner indicates that the aquifer is probably fully appropriated based upon actual plus estimated potential water use.

Water use for the Tulare Western Spink peaked at just over 5,100 acre-feet in 1989. With a total recharge to the aquifer of about 9,600 acre-feet annually, there is water available for appropriation from this aquifer. There are no newer water permits from the Tulare Western Spink to account for. The only other major user of water from this aquifer is the small rural water system, Water Right No. 4774-3 that uses 70 to 80 acre-feet of water per year (personal communication with Scott Gross, operator of the rural water system on September 9, 2002). Also, this system will apparently begin using water from Mid Dakota RWS when that water is available in the next year or two and abandon the Tulare Western Spink as a water source.

Combining the two management units and considering them as a unit indicates a total recharge of 19,960 acre-feet annually. Also, a maximum water use of 14,981 acre-feet occurred in 1989. These estimates leave about 5,000 acre-feet available for appropriation from the entire combined aquifer minus 1,600 acre-feet to account for development of permits issued but not yet utilized. This would leave approximately 3,400 acre-feet of water use to be developed from the combined aquifer.

The Water Rights Program monitors 24 observation wells completed into the Tulare Hitchcock in Spink and Beadle Counties and 26 observation wells completed into the Tulare Western Spink in Beadle, Spink and Hand counties. Water levels for these wells indicate fluctuation due to climatic conditions, that recharge does occur and that the effects of pumping are generally not significant. Hydrographs for observation wells (SP-53A, SP-53B, BD-77A and BD-66A) are included with this report. These records are representative of the general water level trends for both management units. The historical water level record is excellent and accurately reflects the conditions of the aquifer in this area for the last 50 years.

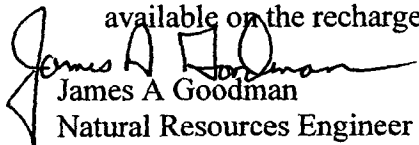
## REVIEW OF EXISTING WATER PERMITS/RIGHTS

There are 77 existing water permits/rights that obtain water from the Tulare Hitchcock in Spink and Beadle Counties. These permits/rights appropriate 156.07 cfs and potentially irrigate 12,990 acres in Spink and Beadle Counties. There are 50 water permits/rights that obtain water from the Tulare Western Spink aquifer in Hand, Beadle and Spink Counties. These permits/rights appropriate 91.604 cfs and potentially irrigate 7,691.9 acres in these three counties. Interference has never been a problem for either aquifer. The Tulare Hitchcock is under water table conditions and drawdown created by pumping does not extend very far from individual production well. This is shown by the hydrographs for SP-53A, SP-77A and BD-66A. The Tulare Western Spink is a confined aquifer and fluctuation due to pumping does occur. The drawdown has not been significant and has not created adverse impacts. This is shown by the hydrograph for SP-53B and by water level records for the other observation wells in the area (Water Rights, 2002).

SDCL 46-6-3.1 states that "no application to appropriate groundwater may be approved if, according the best information reasonably available, it is probable that the quantity of water withdrawn annually from a groundwater source will exceed the quantity of the average estimated annual recharge of water to the groundwater source. An application may be approved, however, for withdrawals of groundwater from any groundwater formation older than or stratigraphically lower than the greenhorn formation in excess of the average estimated annual recharge for use by water distribution systems." Clearly the intent of this statute is to limit development of aquifers to a volume of water which approximates average annual recharge. The only exception to the statute would be for water distribution systems that obtain water from formations older than or stratigraphically lower than the Greenhorn Formation. All the applications in this report fail both of tests of the exception to the statute.

## CONCLUSIONS

1. Water is available from the combined Tulare Western Spink and Tulare Hitchcock management units.
2. Based upon water use plus estimates for undeveloped permits there is approximately 3,400 acre-feet of water available for appropriation from the combined Tulare Hitchcock and Tulare Western Spink management units. Conservatively this volume would allow about 2,500 acres of additional irrigation.
3. The wells authorized by these applications, if approved, must be constructed in accordance with SD Well Construction Standards.
4. Interference is not expected to be a concern. The observation well data clearly shows that drawdown created by existing withdrawals does not seriously impact water levels over most of the aquifer especially the Tulare Hitchcock management unit.
5. Application Nos. 6330-3, 6331-3, 6332-3, 6333-3, 6334-3, 6336-3, 6337-3, 6338-3, 6339-3, 6340-3 and 6343-3 all obtain water from the Tulare Hitchcock or Tulare Western Spink management units and can be approved. These permits total about 2,554 acres of additional irrigation. The estimated water use for these permit applications should be about 3,400 acre-feet.
6. The Tulare Hitchcock and Tulare Western Spink management units of the Tulare aquifer should be declared fully appropriated and no additional permits from the aquifer will be considered until abandonment and/or forfeiture of existing rights non-development of a recently approved water permit, or additional information becomes available on the recharge rate to the aquifer.

  
James A Goodman  
Natural Resources Engineer

## BIBLIOGRAPHY

- Hamilton, L.J., L.W. Howells, 1996, Water Resources of Spink County, South Dakota, Water Resources Investigations Report No. 96-4056, USGS, Rapid City, SD, 57702.
- Hedges, L.S., 1982, Evaluation of Ground-Water Resources Eastern South Dakota and Upper Big Sioux River, SD and Iowa, for US Army Corps of Engineers, SDGS, Vermillion, SD, 57069.
- Kuiper, L.K., 1984, Appraisal of the Water Resources of the Eastern Part of the Tulare Aquifer, Beadle, Hand, and Spink Counties, South Dakota, WRI 84-4078, USGS, Huron, SD, 57350.
- Water Rights, 2002, Unpublished Observation Well Records for Beadle, Spink and Hand Counties, SD DENR, DES, Water Rights Program, Pierre, SD, 57501.

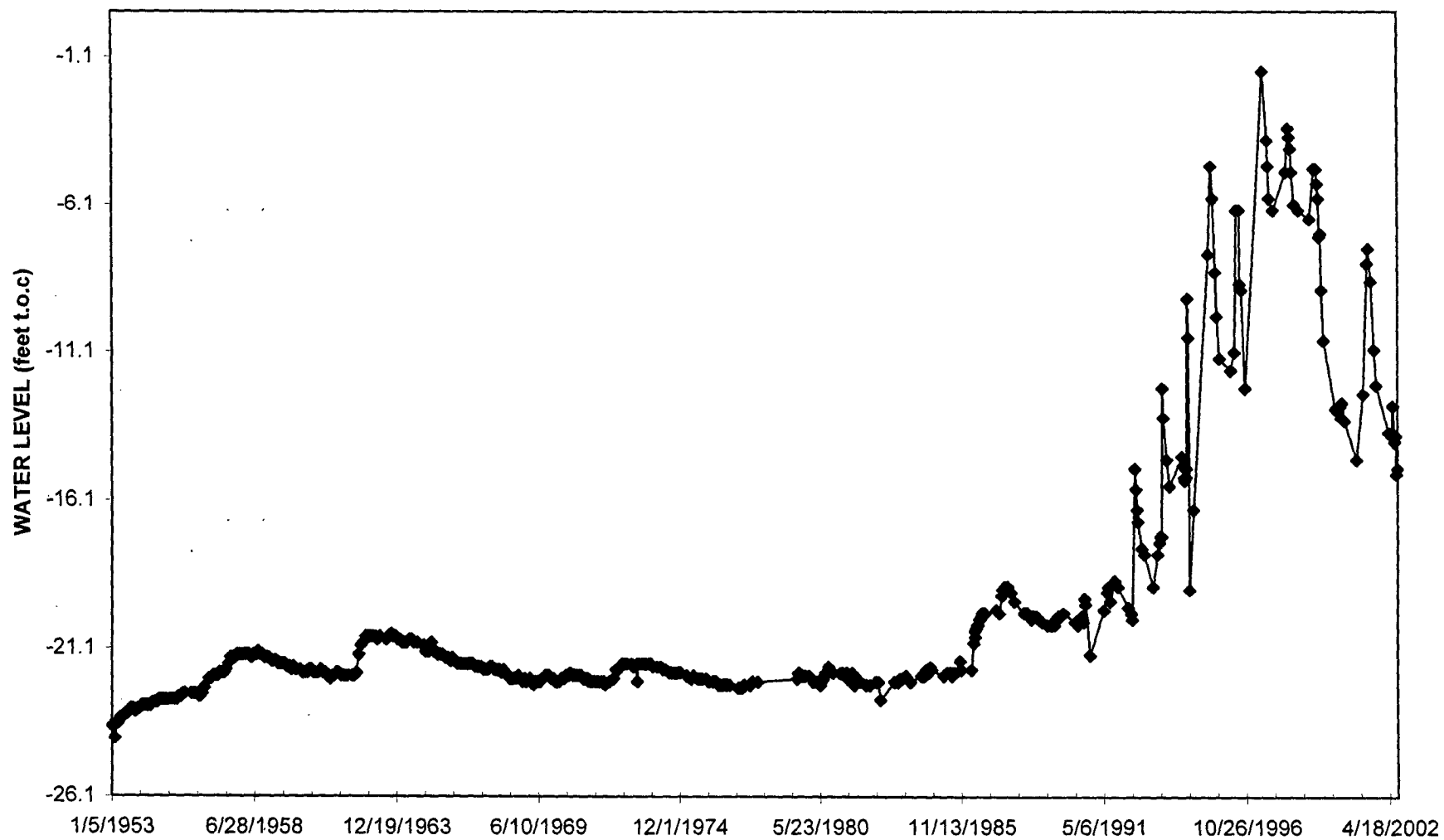
**WATER USE (ACRE-FEET)**  
**TULARE-WESTERN SPINK AQUIFER**

|      | SPINK    | BEADLE | HAND   | TOTAL    |
|------|----------|--------|--------|----------|
| 2001 | 3,589 AF | 336 AF | 62 AF  | 3,986 AF |
| 2000 | 3,693 AF | 172 AF | 218 AF | 4,083 AF |
| 1999 | 2,250 AF | 78 AF  | 0 AF   | 2,328 AF |
| 1998 | 1,284 AF | 0 AF   | 0 AF   | 1,284AF  |
| 1997 | 475 AF   | 16 AF  | 0 AF   | 491 AF   |
| 1996 | 3,108 AF | 310 AF | 99 AF  | 3,517 AF |
| 1995 | 1,672 AF | 184 AF | 0 AF   | 1,856 AF |
| 1994 | 2,096 AF | 96 AF  | 113 AF | 2,305 AF |
| 1993 | 644 AF   | 252 AF | 0 AF   | 896 AF   |
| 1992 | 973 AF   | 122 AF | 53 AF  | 1,148 AF |
| 1991 | 3,819 AF | 544 AF | 147 AF | 4,510 AF |
| 1990 | 3,915 AF | 502 AF | 145 AF | 4,562 AF |
| 1989 | 4,456 AF | 554 AF | 97 AF  | 5,106 AF |
| 1988 | 3,779 AF | 633 AF | 111 AF | 4,523 AF |
| 1987 | 2,399 AF | 350 AF | 41 AF  | 2,789 AF |
| 1986 | 349 AF   | 82 AF  | 0 AF   | 431 AF   |
| 1985 | 2,689 AF | 89 AF  | 191 AF | 2,969 AF |
| 1984 | 3,138 AF | 241 AF | 83 AF  | 3,462 AF |
| 1983 | 2,447 AF | 187 AF | 90 AF  | 2,724 AF |
| 1982 | 2,411 AF | 65 AF  | 166 AF | 2,641 AF |
| 1981 | 3,790 AF | 922 AF | 32 AF  | 4,744 AF |
| 1980 | 3,197 AF | 130 AF | 0 AF   | 3,327 AF |
| 1979 | 2,432 AF | 342 AF | 0 AF   | 2,774 AF |

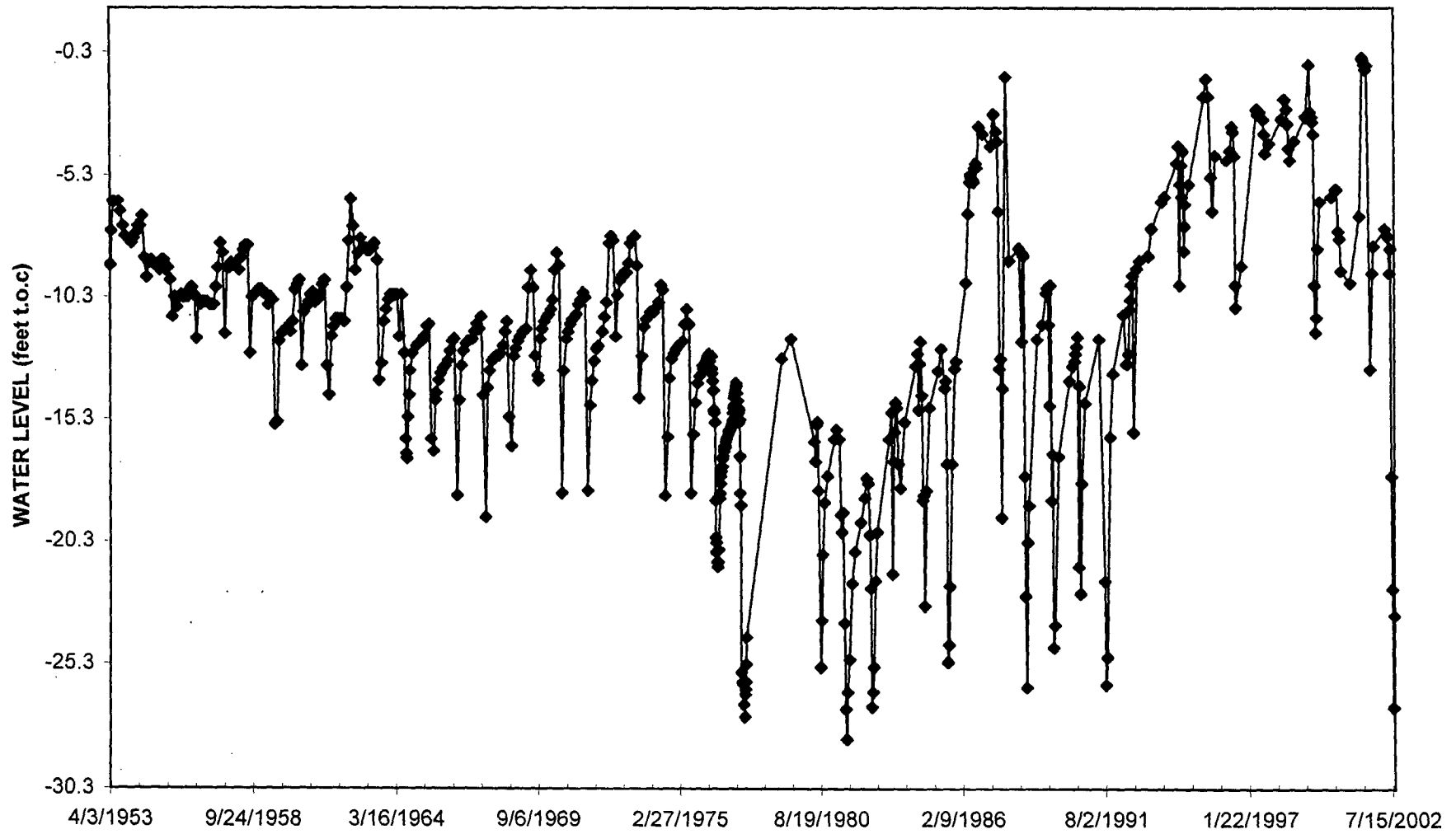
**WATER USE (ACRE-FEET)  
TULARE-HITCHCOCK AQUIFER**

|      | SPINK    | BEADLE   | TOTAL    |
|------|----------|----------|----------|
| 2001 | 4,814 AF | 3,503 AF | 8,316 AF |
| 2000 | 4,081 AF | 3,528 AF | 7,610 AF |
| 1999 | 3,229 AF | 3,077 AF | 6,306 AF |
| 1998 | 1,536 AF | 3,360 AF | 4,896 AF |
| 1997 | 1,169 AF | 1,405 AF | 2,574 AF |
| 1996 | 4,350 AF | 4,729 AF | 9,079 AF |
| 1995 | 2,956 AF | 1,755 AF | 4,711 AF |
| 1994 | 2,266 AF | 1,279 AF | 3,545 AF |
| 1993 | 1,122 AF | 237 AF   | 1,359 AF |
| 1992 | 1,939 AF | 2,303 AF | 4,242 AF |
| 1991 | 4,307 AF | 3,586 AF | 7,894 AF |
| 1990 | 3,020 AF | 4,219 AF | 7,239 AF |
| 1989 | 3,736 AF | 6,139 AF | 9,875 AF |
| 1988 | 3,596 AF | 5,233 AF | 8,829 AF |
| 1987 | 3,333 AF | 3,402 AF | 6,735 AF |
| 1986 | 1,622 AF | 1,475 AF | 3,097 AF |
| 1985 | 2,356 AF | 2,293 AF | 4,649 AF |
| 1984 | 2,193 AF | 2,601 AF | 4,794 AF |
| 1983 | 1,442 AF | 4,891 AF | 6,333 AF |
| 1982 | 1,624 AF | 1,851 AF | 3,475 AF |
| 1981 | 2,872 AF | 2,639 AF | 5,511 AF |
| 1980 | 1,607 AF | 1,743 AF | 3,349 AF |
| 1979 | 1,192 AF | 1,299 AF | 2,491 AF |

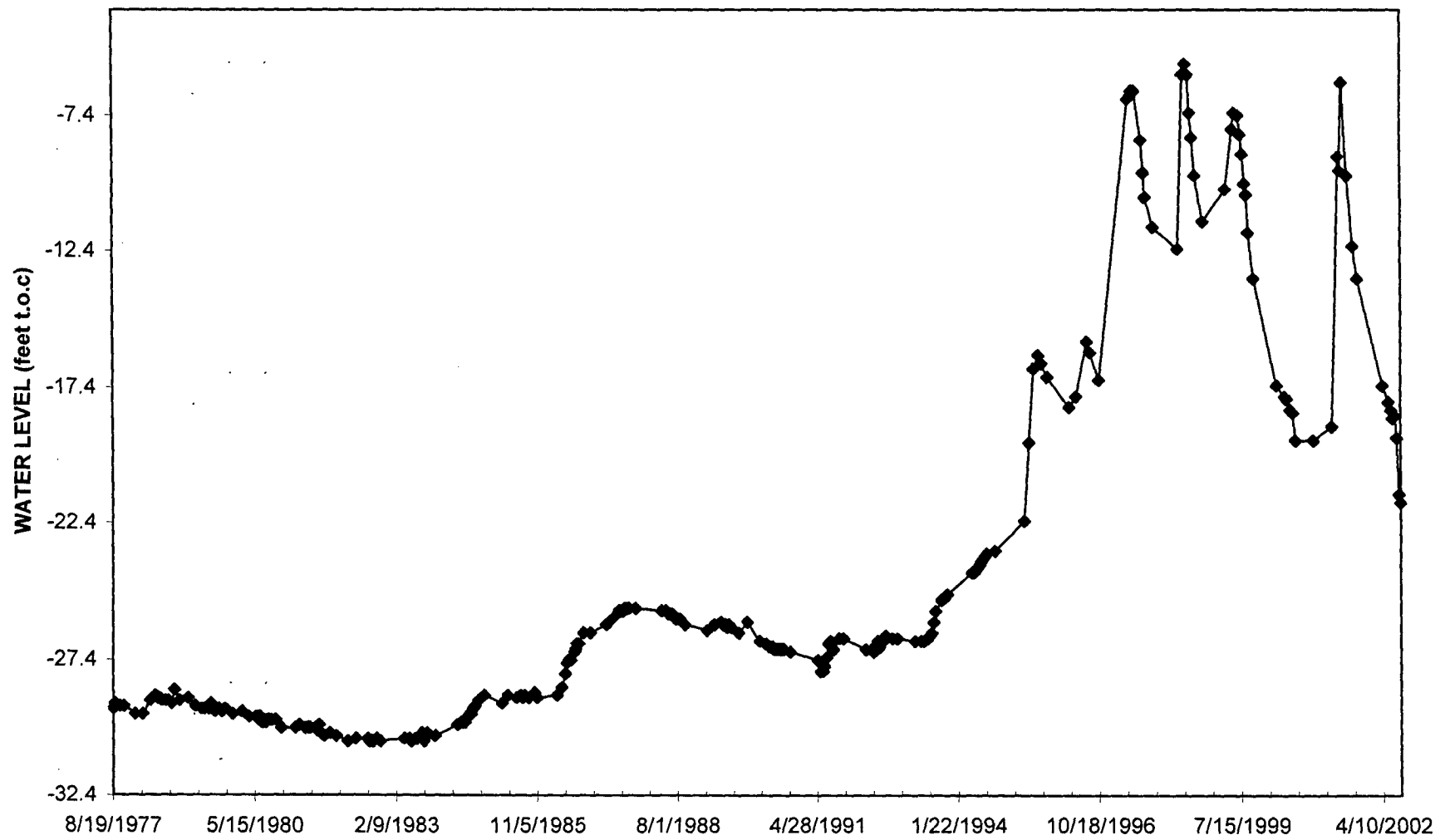
WATER RIGHTS' OBSERVATION WELL  
SP-53A



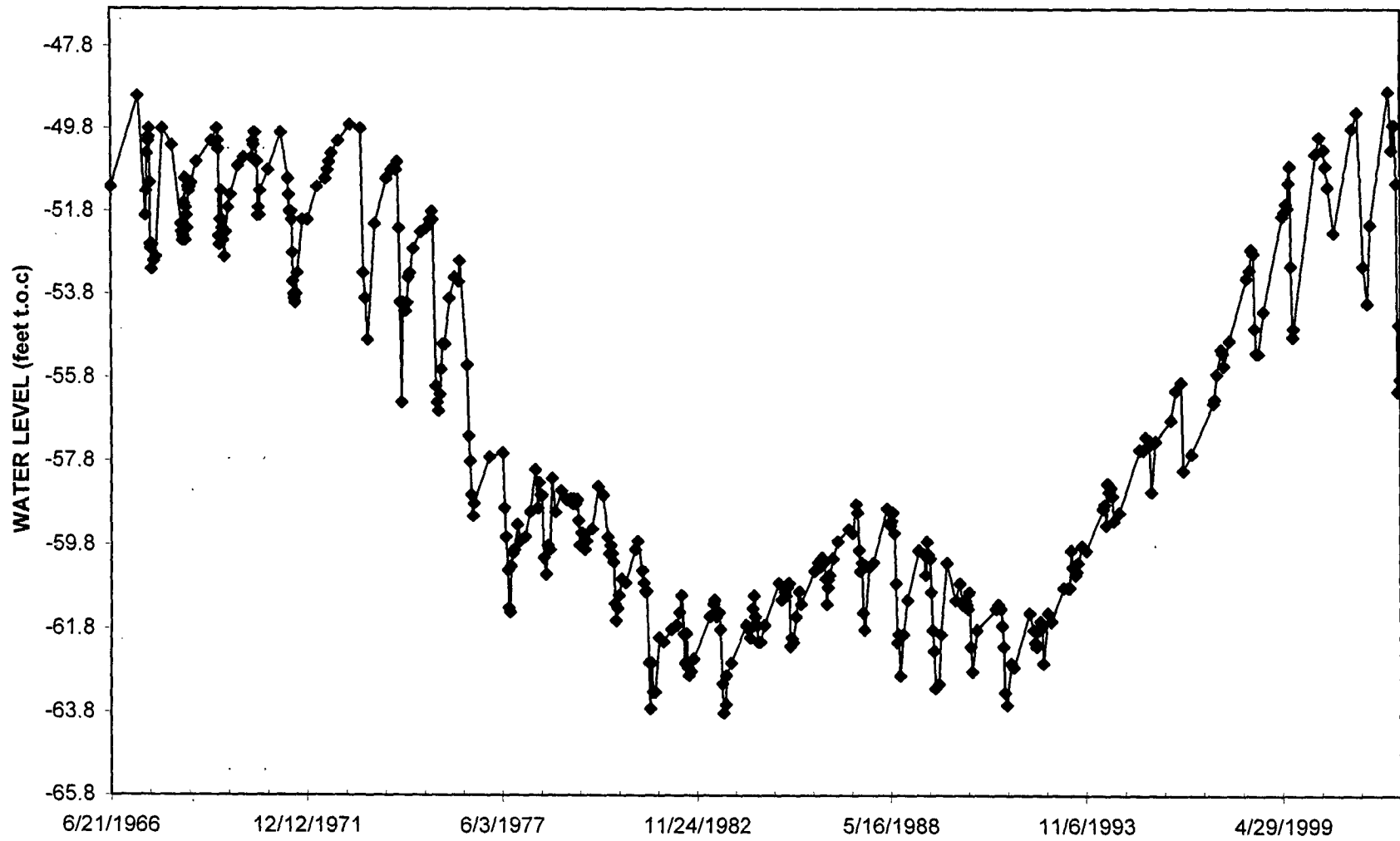
WATER RIGHTS' OBSERVATION WELL  
SP-53B



**WATER RIGHTS' OBSERVATION WELL  
BD-77A**



WATER RIGHTS' OBSERVATION WELL  
BD-66A





**DEPARTMENT of ENVIRONMENT  
and NATURAL RESOURCES**

JOE FOSS BUILDING  
523 EAST CAPITOL  
PIERRE, SOUTH DAKOTA 57501-3182  
[www.state.sd.us/denr](http://www.state.sd.us/denr)

**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT  
APPLICATION NO. 6343-3, Peterson Farms**

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. 6343-3, Peterson Farms, c/o Lenny Peterson, 19111 Maple Avenue, Hitchcock SD 57348.

The Chief Engineer is recommending APPROVAL of Application No. 6343-3 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. 6343-3 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.

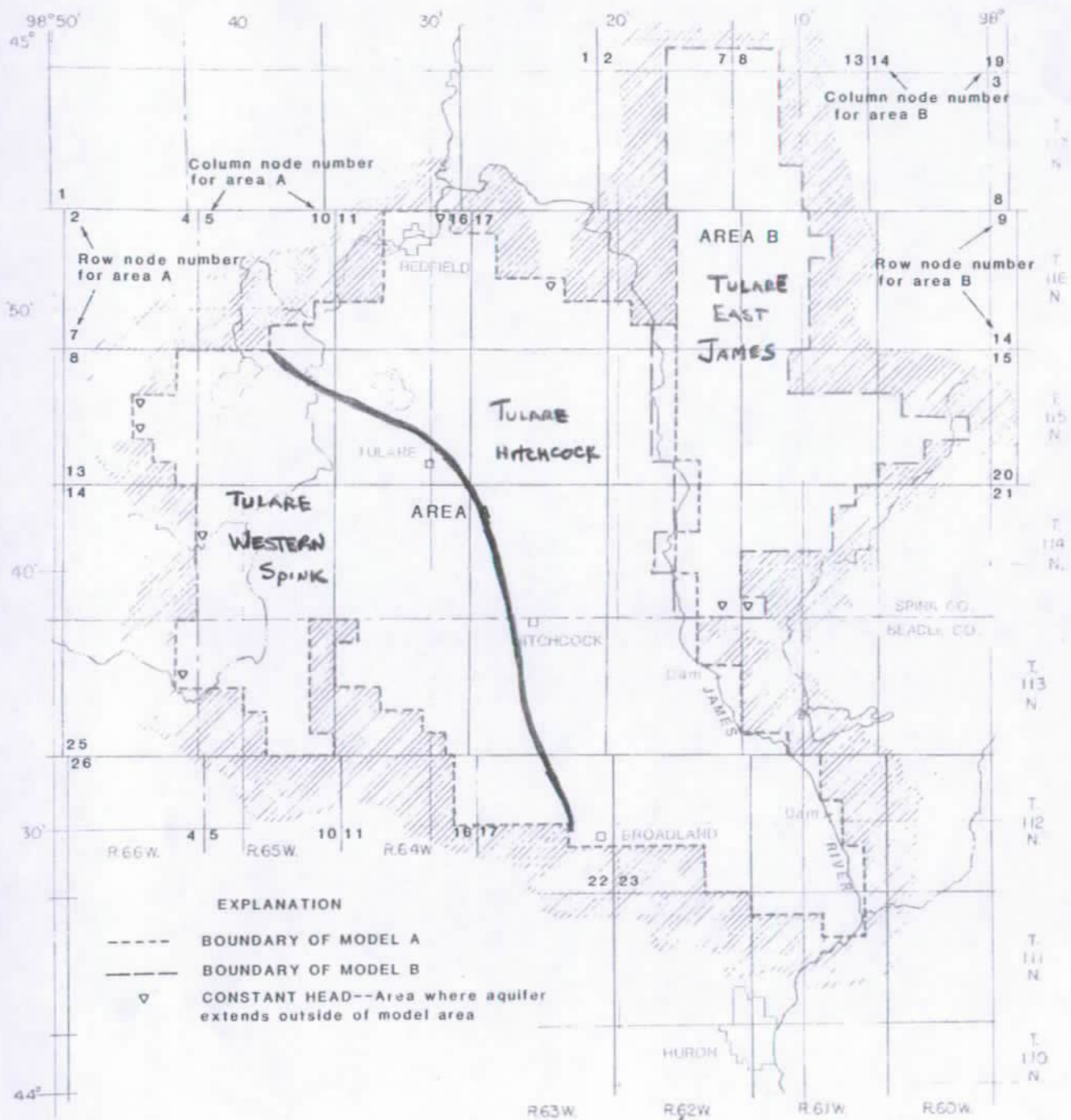
See report on application for additional information.

Garland Erbele, Chief Engineer  
October 30, 2002

NOTE: The Water Rights Program received twenty two applications to appropriate water from the Tulare:Hitchcock and Tulare:Western Spink Aquifer. The Chief Engineer's recommendation is to approve eleven of these applications based upon priority. The Chief Engineer is recommending denial of eleven applications because the aquifer is fully appropriated. Please review the staff report carefully.

If the Board accepts the recommendation at their December 4<sup>th</sup> hearing, the aquifer will be considered fully appropriated. In that event, the Water Rights Program will recommend denial of new appropriations from this aquifer unless water becomes available by 1) abandonment and/or forfeiture of existing water rights, 2) non-development of a recently approved water permit, or 3) additional information becomes available on the recharge rate to the aquifer.

Applicants that obtain a water permit need to be aware that the works must be completed within 5 years of obtaining the permit and water put to beneficial use within an additional four years. Also, in accordance with state law, if one-fifth of work is not completed within 2½ years of obtaining the permit, the Board may accept and approve a new application for the use of all or any of the water included in the original permit and the right to use water under the original permit shall be forfeited.



(KUIPER, 1984)

Figure 2.--Location of aquifer model areas.

**PROOF OF PUBLICATION**STATE OF SOUTH DAKOTA )  
County of Beadle ) SS

I, \_\_\_\_\_

certify that the attached printed Notice was taken

from the Plainsmanprinted and published in HuronCounty of Beadle and

state of South Dakota. The notice was published

in the newspaper on the following two dates:

November 7, 2002November 14, 2002Cost of Printing \$164.66Cheri Bjork  
(Signature)Business Manager  
(Title)December 5, 2002  
(Date Signed)**RECEIVED****DEC 06 2002****WATER RIGHTS  
PROGRAM**F.P. 11-7-02 L.P. 11-14-02  
**NOTICE OF HEARING on**  
**Application Nos. 6333-3**  
**and 6343-3 to**  
**Appropriate Water**

Notice is hereby given that Peterson Farms, c/o Lenny Hitchcock SD 57348 has filed applications for a water permit.

Application No. 6333-3 proposes to appropriate 4.57 cubic feet of water per second from two wells (Tulare: Western Spink Aquifer) approximately 60-100 feet deep located in the centers of NW 1/4 and SE 1/4 Section 21 to irrigate 320 acres located in the NW 1/4 and SE 1/4 Section 21; all in T113N-R63W.

Application No. 6343-3 proposes to appropriate 4.57 cubic feet of water per second from two wells (Tulare: Hitchcock Aquifer) approximately 80 feet deep located in

the center of the SW 1/4 Section 2 and the NW 1/4 Section 11; to irrigate 320 acres located in the SW 1/4 Section 2 and the NW 1/4 Section 11; all in T113N-R63W.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application Nos. 6333-3 and 6343-3 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.

Any person interested in opposing or supporting these applications must file a written petition with BOTH the applicant and Chief Engineer. The applicant must also file a petition if opposed to the Chief Engineer's recommendations. 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 25, 2002. The petition may be informal, but must include a statement describing the petitioner's interest in the applications, the petitioner's reasons for opposing or supporting the applications, and the signature and mailing address of the petitioner or the petitioner's legal counsel. If legal counsel is obtained, the Water Management Board will consider these applications at 1:30 P.M. December 4, 2002 in the Matthew Training Center, Foss Building, 523 E. Capitol, Pierre SD. The Chief Engineer's recommendations are not final or binding upon the Board. The Board is authorized to 1) approve, 2) approve with qualifications, 3) defer, or 4) deny these applications based on the facts

presented at the public hearing. The December 4, 2002 hearing date will be automatically delayed for at least 20 days upon written request to the Chief Engineer from the applicant or any interested person opposing the applications. The request for an automatic delay must be filed by November 25, 2002.

Any hearing may be an adversarial proceeding. Any person filing a petition and/or the applicant have the right to be represented by a lawyer and may present evidence or cross-examine witnesses according to SDCL 1-26. These and other due process rights will be forfeited if not exercised. Decisions of the Board may be appealed to the circuit court and State supreme court as provided by law. Contact Eric Gronlund by November 25, 2002, at the above Water Rights Program address to request copies of

Steven M. Pinner  
Secretary Department of  
Environment and Natural  
Resources  
No. 405 (adv.)



DEPARTMENT of ENVIRONMENT  
and NATURAL RESOURCES

JOE FOSS BUILDING  
523 EAST CAPITOL  
PIERRE, SOUTH DAKOTA 57501-3182  
[www.state.sd.us/denr](http://www.state.sd.us/denr)

October 30, 2002

The Plainsman  
PO Box 1278  
Huron SD 57350-1278

ATTENTION: Legal Public Notice

Enclosed are two Notices of Hearing on Application Nos. 6333-3 and 6343-3 to Appropriate Water to be published twice. Please publish the first notice on November 7, 2002 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 Peterson Farms, % Lenny Peterson, 19111 Maple Ave, Hitchcock SD 57348 (Ph # 605-266-2793).

**Please send the Water Rights Program the first publications immediately.** The publications are 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 publications. 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 publications, 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. 6333-3 & 6343-3

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

Date \_\_\_\_\_

We are in receipt of your letter of October 30, 2002 enclosing Notice of Hearing to Appropriate Water by Application Nos 6333-3 & 6343-3 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 7, 2002 with the second publication 7 days later. The applicant is responsible for payment.

---

NOTICE OF HEARING on Application Nos. 6333-3 and 6343-3 to Appropriate Water

Notice is given that Peterson Farms, c/o Lenny Peterson, 19111 Maple Ave, Hitchcock SD 57348 has filed applications for a water permit.

Application No. 6333-3 proposes to appropriate 4.57 cubic feet of water per second from two wells (Tulare: Western Spink Aquifer) approximately 60 – 100 feet deep located in the centers of NW ¼ and SE ¼ Section 21 to irrigate 320 acres located in the NW ¼ and SE ¼ Section 21; all in T113N-R63W.

Application No. 6343-3 proposes to appropriate 4.57 cubic feet of water per second from two wells (Tulare Hitchcock Aquifer) approximately 80 feet deep located in the center of the SW ¼ Section 2 and the NW ¼ Section 11; to irrigate 320 acres located in the SW ¼ Section 2 and the NW ¼ Section 11; all in T113N-R63W.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application Nos. 6333-3 and 6343-3 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.

Any person interested in opposing or supporting these applications must file a written petition with BOTH the applicant and Chief Engineer. The applicant must also file a petition if opposed to the Chief Engineer's recommendations. 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 25, 2002. The petition may be informal, but must include a statement describing the petitioner's interest in the applications, the petitioner's reasons for opposing or supporting the applications, and the signature and mailing address of the petitioner or the petitioner's legal counsel, if legal counsel is obtained.

The Water Management Board will consider these applications at 1:30 P.M. December 4, 2002 in the Matthew Training Center, Foss Building, 523 E Capitol, Pierre SD. The Chief Engineer's recommendations are not final or binding upon the Board. The Board is authorized to 1) approve, 2) approve with qualifications, 3) defer, or 4) deny these applications based on the facts presented at the public hearing. The December 4, 2002 hearing date will be automatically delayed for at least 20 days upon written request to the Chief Engineer from the applicant or any interested person opposing the applications. The request for an automatic delay must be filed by November 25, 2002.

Any hearing may be an adversarial proceeding. Any person filing a petition and/or the applicant have the right to be represented by a lawyer and may present evidence or cross-examine witnesses according to SDCL 1-26. These and other due process rights will be forfeited if not exercised. Decisions of the Board may be appealed to the Circuit Court and State Supreme Court as provided by law. Contact Eric Gronlund by November 25, 2002, at the above Water Rights Program address to request copies of information pertaining to these applications, to assure access to the hearing by the handicapped or to obtain an interpreter for the hearing impaired.

This application is made pursuant to SDCL 46-1-1 thru 46-1-9, 46-1-12 thru 46-1-16; 46-2-3.1, 46-2-9, 46-2-11, 46-2-13, 46-2-17; 46-2A-1 thru 46-2A-10, 46-2A-12, 46-2A-14, 46-2A-15, 46-2A-20, 46-2A-21; 46-5-1 thru 46-5-11, 46-5-13 thru 46-5-15, 46-5-24, 46-5-25, 46-5-30.2, 46-5-30.4, 46-5-31; 46-6-3, 46-6-3.1, 46-6-6.1, 46-6-10, 46-6-13, 46-6-14, 46-6-26; and Board Rules ARSD 74:02:01:01 thru 74:02:01:15. Steven M. Pirner, Secretary, Department of Environment and Natural Resources.



**DEPARTMENT of ENVIRONMENT  
and NATURAL RESOURCES**

JOE FOSS BUILDING  
523 EAST CAPITOL  
PIERRE, SOUTH DAKOTA 57501-3182  
[www.state.sd.us/denr](http://www.state.sd.us/denr)

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

October 30, 2002

Peterson Farms  
% Lenny Peterson  
19111 Maple Avenue  
Hitchcock SD 57348

Dear Mr. Peterson:

Water Permit Application Nos. 6333-3, 6343-3 & 6334-3 for irrigation use have been examined and found to comply with the South Dakota Water Laws and applicable rules. The notices of hearing for Water Permit Application Nos. 6333-3 & 6343-3 in Beadle County has been sent to the Publisher of the Daily Plainsman printed at Huron, SD (Ph # 605-352-6401) and a notice of hearing for Water Permit Application No. 6334-3 in Spink County has been sent to the Publisher of the Redfield Press printed at Redfield (Ph# 605-472-0822). You will need to contact the newspapers and authorize publication of these notices. For your information, a copy of the notices, 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 newspapers to authorize publication of your Notice of Hearing and to arrange for payment. Early contact with the papers can eliminate delays. Upon receiving authorization, the publishers have 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 newspapers have also been instructed to send us the Proof of Publication. We must receive Proof of Publication before action can be taken on the application.

Sincerely,

  
Eric Gronlund  
Natural Resources Engineer  
(605) 773-3352

enclosures

**NOTE:** If you plan to contest any part of the Chief Engineer's recommendations, 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 applications.



**DEPARTMENT of ENVIRONMENT  
and NATURAL RESOURCES**

JOE FOSS BUILDING  
523 EAST CAPITOL  
PIERRE, SOUTH DAKOTA 57501-3182  
[www.state.sd.us/denr](http://www.state.sd.us/denr)

MAR 13 2003

Peterson Farms  
% Lenny Peterson  
19111 Maple Avenue  
Hitchcock SD 57348

Dear Mr. Peterson:

Enclosed are Water Permit Nos. 6333-3, 6334-3 and 6343-3 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,

A handwritten signature in dark ink, appearing to read 'Garland Erbele', is written above the typed name.

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

enclosures

## SOUTH DAKOTA WATER WELL COMPLETION REPORT

11-02

Location 300 300 1/4 1/4 Sec 2 Twp 113 Rg 63

County

Spink Beadle

North

Please mark well  
location with an "X"

W

E

Well Completion Date

4/3/2003

1 Mile

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

? ft. from in pasture (identify source)

## PROPOSED USE:

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

## METHOD OF DRILLING:

Reverse

## CASING DATA:

☐ Steel ☒ Plastic ☐ Other

If other describe

| PIPEWEIGHT | DIAMETER | FROM   | TO      | HOLE DIAMETER |
|------------|----------|--------|---------|---------------|
| LB/FT      | 16.00 IN | 0.0 FT | 67.0 FT | 24.00 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     | 20           | Lb/gal       | 0.0 Ft | 20.0 Ft |
|            |              | Lb/gal       | Ft     | Ft      |

Describe grouting procedure  
Line

## SCREEN:

☐ Perforated pipe ☒ Manufactured  
 Diameter 16.00 Inches Length 15.0 Feet
Material Stainless SteelSlot Size .057 Set From 67.0 Feet to 82.0 Feet

Other information

## WAS A PACKER OR SEAL USED?

☒ Yes ☐ NoIf so, what material? Pea Rock

Describe packer(s) and location

@67-82

## DISINFECTION: Was well disinfected upon completion?

☒ Yes, How? Pellets☐ No, Why Not?Lab sample sent to for  
water quality analysisWell Owner: Oscar PetersonBusiness Name: Peterson FarmsAddress: 19026 391st AveCity, State, Zip: Hitchcock SD 57348

## WELL LOG:

## DEPTH

| FORMATION        | FROM | TO |
|------------------|------|----|
| Yellow Clay      | 0    | 17 |
| Med to Fine sand | 17   | 82 |
| Blue Clay        | 82   |    |
|                  |      |    |
|                  |      |    |
|                  |      |    |
|                  |      |    |
|                  |      |    |
|                  |      |    |

STATIC WATER LEVEL 14.0 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

39.0 Ft. After 6.0 Hrs. pumped 900.0 GPM

\_\_\_\_\_ Ft. After \_\_\_\_\_ Hrs. pumped \_\_\_\_\_ GPM

If pump installed, pump rate: \_\_\_\_\_ GPM

## REMARKS

RECEIVED

SEP 29 2003

WATER RIGHTS

PROGRAM

440

This well was drilled under license #

And this report is true and accurate.

Drilling firm: Pullman Well Drilling Inc

Signature of License Representative:

Raynie Pullman

Signature of Well Owner or Equitable Property Holder:

Date:

5-10-03

9-29-03

## SOUTH DAKOTA WATER WELL COMPLETION REPORT

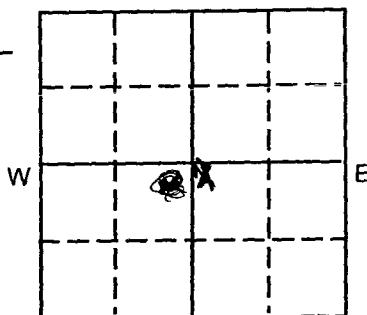
11-02

Location SE 1/4 NW 1/4 Sec 2 Twp 113 Rg 64  
63

County

Spink Beadle

North

Please mark well  
location with an "X"

Well Completion Date

4/3/2003

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

?        ft. from Pasture (identify source)

## PROPOSED USE:

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

## METHOD OF DRILLING:

Reverse

## CASING DATA:

☐ Steel ☒ Plastic ☐ Other

If other describe

| PIPEWEIGHT | DIAMETER | FROM   | TO      | HOLE DIAMETER |
|------------|----------|--------|---------|---------------|
| LB/FT      | 16.00 IN | 0.0 FT | 65.0 FT | 24.00 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     | 20           | Lb/gal       | 0.0 Ft | 20.0 Ft |
|            |              | Lb/gal       | Ft     | Ft      |

Describe grouting procedure  
Line

## SCREEN:

☐ Perforated pipe ☒ Manufactured
Diameter 16.00 Inches Length 15.0 Feet

Material

Slot Size .057 Set From 65.0 Feet to 80.0 Feet

Other information

## WAS A PACKER OR SEAL USED?

☒ Yes ☐ No
If so, what material? Pea Rock

Describe packer(s) and location

@67-82

## DISINFECTION: Was well disinfected upon completion?

☒ Yes, How? Pellets
☐ No, Why Not?
Lab sample sent to for  
water quality analysisWell Owner: Oscar PetersonBusiness Name: Peterson FarmsAddress: 19026 391st AveCity, State, Zip: Hitchcock SD 57348

## WELL LOG:

| FORMATION          | DEPTH |    |
|--------------------|-------|----|
|                    | FROM  | TO |
| Yellow Clay        | 0     | 24 |
| Blue Clay W/ Strks | 24    | 40 |
| Sand               | 40    | 81 |
|                    |       |    |
|                    |       |    |
|                    |       |    |
|                    |       |    |
|                    |       |    |
|                    |       |    |
|                    |       |    |
|                    |       |    |

STATIC WATER LEVEL 24.0 FEETIf flowing: closed in pressure        PSIGPM flow        through        Inch pipeControlled 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

70.0 Ft. After 5.0 Hrs. pumped 700.0 GPM       Ft. After        Hrs. pumped        GPMIf pump installed, pump rate:        GPM

## REMARKS

RECEIVED

SEP 29 2003

WATER RIGHTS

PROGRAM  
440This well was drilled under license #       

And this report is true and accurate.

Drilling firm: Pullman Well Drilling Inc

Signature of License Representative:

Russell Pullman

Signature of Well Owner or Equitable Property Holder:

Date:

5-10-03

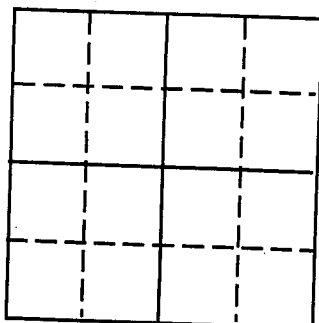
## SOUTH DAKOTA WATER WELL COMPLETION REPORT

6343-3

11-02

Location none  $\frac{1}{4}$  w  $\frac{1}{4}$  Sec 2 Twp 113 Rg 63County Bradley  
Spink SPW

North



Please mark well location with an "X"

Well Completion Date

4/3/2003

1 Mile

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

? ft. from in pasture (identify source)

## PROPOSED USE:

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

## METHOD OF DRILLING:

Reverse

## CASING DATA:

☐ Steel ☒ Plastic ☐ Other

If other describe

| PIPEWEIGHT | DIAMETER | FROM   | TO      | HOLE DIAMETER |
|------------|----------|--------|---------|---------------|
| LB/FT      | 16.00 IN | 0.0 FT | 67.0 FT | 24.00 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     | 20           | Lb/gal       | 0.0 Ft | 20.0 Ft |
|            |              | Lb/gal       | Ft     | Ft      |

Describe grouting procedure

Line

## SCREEN:

☐ Perforated pipe ☒ Manufactured  
 Diameter 16.00 Inches Length 15.0 Feet

 Material Stainless Steel  
 Slot Size .057 Set From 67.0 Feet to 82.0 Feet  
 Other information

## WAS A PACKER OR SEAL USED?

☒ Yes ☐ No
If so, what material? Pea Rock

Describe packer(s) and location

@67-82

## DISINFECTION: Was well disinfected upon completion?

☒ Yes, How? Pellets
☐ No, Why Not?

Lab sample sent to for water quality analysis

Well Owner: Oscar PetersonBusiness Name: Peterson FarmsAddress: 19026 391st AveCity, State, Zip: Hitchcock SD 57348

## WELL LOG:

| FORMATION        | DEPTH |    |
|------------------|-------|----|
|                  | FROM  | TO |
| Yellow Clay      | 0     | 17 |
| Med to Fine sand | 17    | 82 |
| Blue Clay        | 82    |    |
|                  |       |    |
|                  |       |    |
|                  |       |    |
|                  |       |    |
|                  |       |    |
|                  |       |    |

## STATIC WATER LEVEL

14.0 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

39.0 Ft. After 6.0 Hrs. pumped 900.0 GPM

Ft. After Hrs. pumped GPM

If pump installed, pump rate: GPM

## REMARKS

RECEIVED

DEC 31 2003

WATER RIGHTS PROGRAM

This well was drilled under license # 440

And this report is true and accurate.

Drilling firm: Pullman Well Drilling Inc

Signature of License Representative:

Raymie Pullman

Signature of Well Owner or Equitable Property Holder:

Date: 5-10-03



MAY 10 2004

6343-3  
DEPARTMENT of ENVIRONMENT  
and NATURAL RESOURCES

PMB 2020  
JOE FOSS BUILDING  
523 EAST CAPITOL  
PIERRE, SOUTH DAKOTA 57501-3182  
[www.state.sd.us/denr](http://www.state.sd.us/denr)

Peterson Farms  
c/o Lenny Peterson  
19111 Maple Ave  
Hitchcock SD 57348

Dear Mr. Peterson:

Enclosed are Water Permit No. 6201A-3 and Reissued Water Permit No. 6343-3.

On March 3, 2004, the Water Management Board approved Water Permit No. 6201A-3 which severed a portion of Water Permit No. 6343-3 and simultaneously transferred it to other land. Water Permit No. 6343-3 is being reissued to reflect this transfer.

Also, 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 as authorized by No. 6201A-3. An investigation can then be scheduled so the water license may be issued, thus completing the acquisition of a water right.

Enclosed is the receipt for payment of the application/license fee for No. 6201A-3.

If you have any questions concerning the reissued permit, please contact this office.

Sincerely,

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

enclosures

**REISSUED  
SOUTH DAKOTA  
WATER PERMIT NO. 6343-3 FOR IRRIGATION**

---

Date of first receipt of application July 26, 2002.

The Water Management Board approved Water Permit No. 6343-3 on December 4, 2002 for Peterson Farms, 19111 Maple Avenue, Hitchcock SD 57348 authorizing the construction of the water use system and the placing of water to beneficial use subject to the following limitations, conditions and qualifications:

On March 3, 2004, the Water Management Board approved Water Permit No. 6201A-3 which severed a portion of this permit and simultaneously transferred it to other land. Water Permit No. 6343-3 is being reissued to reflect this transfer.

1. Water Permit No. 6343-3 appropriates 3.84 cubic feet of water per second from two wells (Tulare Hitchcock Aquifer) approximately 80 feet deep located in the center of the SW ¼ Section 2 and the NW ¼ Section 11; to irrigate 269 acres located in the SW ¼ Section 2 and the NW ¼ Section 11; all in T113N-R63W.
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: March 1 – November 30.
3. The date from which applicant may claim right is July 26, 2002.
4. One-fifth of the construction is to be completed on or before June 4, 2005.
5. All construction is to be completed on or before December 4, 2007.
6. Water is to be put to beneficial use on or before December 4, 2011.
7. 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. 6343-3 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

MAY 10 2004

date





6343-3

DEPARTMENT of ENVIRONMENT  
and NATURAL RESOURCES

JOE FOSS BUILDING  
523 EAST CAPITOL  
PIERRE, SOUTH DAKOTA 57501-3182  
[www.state.sd.us/denr](http://www.state.sd.us/denr)

October 15, 2004

Lenny Peterson  
Peterson Farms  
19111 Maple Ave  
Hitchcock SD 57348

Dear Mr. Peterson:

I am writing in regard to a well completion report filed by Pullman Well Drilling Inc. The report indicates an irrigation well was completed for Peterson Farms on April 14, 2004. According to the report, the well is located in the SW ¼ NE ¼ Sec 11-T113N-R63W (copy enclosed).

After reviewing our files, I can not find a water permit for a well located in the legal description listed above. It is very possible the well driller put an incorrect description on the report. We received several other reports from Pullman Well Drilling for recently completed irrigation wells and placed them in your corresponding water permit files.

As you are aware, obtaining a water permit that accurately reflects your water use ultimately benefits you by protecting your right to use water. Except for domestic use, any water user without a water right does not have a legal right to divert water.

Mr. Peterson, please let us know the correct legal description for this well or if you need application forms. If you have any questions, please contact Eric Gronlund or me.

Sincerely,

*Karen Schlaak*

Karen Schlaak  
Water Rights Program  
605 773-3352  
[karen.schlaak@state.sd.us](mailto:karen.schlaak@state.sd.us)

enclosure

10/25/04

Lenny called  
This well is located near  
center of NW ¼ Sec 11.

Covered under 6343-3

## SOUTH DAKOTA WATER WELL COMPLETION REPORT

11-02

Location SW  $\frac{1}{4}$  NE  $\frac{1}{4}$  Sec 11 Twp 113 Rg 63

County

center NW 1/4

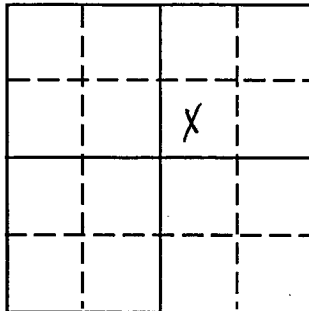
North

Beadle

Please mark well location with an "X"

W

E



1 Mile

Well Completion Date

4/14/2004

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

? ft. from In Pasture (identify source)

## PROPOSED USE:

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

## METHOD OF DRILLING:

Reverse

## CASING DATA:

☐ Steel ☒ Plastic ☐ Other

If other describe

| PIPEWEIGHT | DIAMETER | FROM | TO    | HOLE DIAMETER |
|------------|----------|------|-------|---------------|
| LB/FT      | IN       | FT   | FT    | IN            |
|            | 16.00    | 0.0  | 100.0 | 24.00         |
| LB/FT      | IN       | FT   | FT    | IN            |
| LB/FT      | IN       | FT   | FT    | IN            |

## GROUTING DATA:

| Grout Type | No. of Sacks | Grout Weight | From   | To      |
|------------|--------------|--------------|--------|---------|
|            |              | Lb/gal       | 0.0 Ft | 25.0 Ft |
| Cement     | <u>50</u>    |              |        |         |
|            |              | Lb/gal       | Ft     | Ft      |

Describe grouting procedure

## SCREEN:

☐ Perforated pipe ☒ Manufactured
Diameter 16.00 Inches Length 15.0 FeetMaterial Stainless SteelSlot Size .060 Set From 100.0 Feet to 115.0 Feet

Other information

## WAS A PACKER OR SEAL USED?

☒ Yes ☐ No
If so, what material? Gravel

Describe packer(s) and location

Gravel Packed

## DISINFECTION: Was well disinfected upon completion?

☒ Yes, How? Pellets
☐ No, Why Not?

Lab sample sent to for water quality analysis

Well Owner: Lenny PetersonBusiness Name: Peterson FarmsAddress: 1911 Maple AveCity, State, Zip: Hitchcock SD 57348

## WELL LOG:

DEPTH

| FORMATION               | FROM | TO  |
|-------------------------|------|-----|
| Yellow Clay             | 0    | 30  |
| Yellow w/ Rock          | 30   | 35  |
| Blue Clay               | 35   | 43  |
| Coarse Sand w/ Gravel   | 43   | 60  |
| Coarse Gravel           | 60   | 75  |
| Coarse Sand w/ Coal     | 75   | 80  |
| Gravel w/ Coal          | 80   | 90  |
| Gravel w/ Pearock       | 90   | 110 |
| Med Sand w/ Clay Breaks | 110  | 115 |

## STATIC WATER LEVEL

22

FEET

If flowing: closed in pressure

PSI

GPM flow through inch pipe

Controlled by ☐ Valve ☐ Reducers ☐ Other

Reduced flow rate GPM

Can well be completely shut in?

## WELL TEST DATA:

☐ Pumped Describe:  
☐ Bailed  
☐ Other

Pumping Level Below Land Surface

Ft. After Hrs. pumped GPM

Ft. After Hrs. pumped GPM

If pump installed, pump rate: GPM

## REMARKS

This well was drilled under license # 440

And this report is true and accurate.

Drilling firm: Pullman Well Drilling Inc.

Signature of License Representative:

Signature of Well Owner or Equitable Property Holder:

RECEIVED

Date:

9-7-04

SEP - 9 2004

WATER RIGHTS PROGRAM

**Permit No. 6343-3**  
**James River** - Water District

**Report Of Examination Of Works And/Or Application of Water To Beneficial Use**

TO: Chief Engineer, Water Rights Program, DENR, Foss Bldg., Pierre, SD 57501

I have this day, **September 12, 2007**, made a thorough examination of the water use system constructed by **Peterson Farms** care of **Lenny Peterson, 1911 Maple Avenue, Hitchcock SD 57348** holder of Permit No. **6343-3**, bearing the priority of **July 26, 2002** authorizing the total diversion of as reissued **3.84 cu. ft. per second** from the **Tulare:Hitchcock Aquifer** for **irrigation** purposes, in **Beadle** County.

I have to report on the conditions of the same as follows:

A. Works used to divert the water:

**Two wells are in place with a diesel powered turbine shaft pump system that Lenny Peterson indicates are each capable of producing 1.78 cfs (800 gpm).**

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

**Well heads are near the pivot points. Water from the well is conveyed to the pivot point in an above ground 8 inch pipeline. The systems are powered by 110 hp diesel motor (note: This is the diesel motor rating, the rating on the turbine gear drives is 60 and 80 hp). Peterson Farms is undertaking an effort to convert many of their systems to electrical power. It is unknown whether these will be converted**

C. Works used to apply water to beneficial use:

**Two 8 tower T-L center pivots**

The system is in the following condition **excellent**. The points of diversion (wells) are **located specifically at Lat/Lon - N44.622556 W-098.377361 & Lat/Lon - N44.614694 W-098.377083 which referenced from the SW corner of Section 2, T113N, R63W are 1,546 feet north and 1,320 feet east & 1,320 feet south and 1,320 feet east.**

The works are capable of diverting **3.56 cfs from two wells** which is to be used for **irrigation**. Water has been put to beneficial use to the maximum extent as follows:

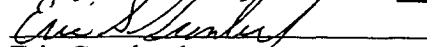
**All in T113N, R63W**

| Section 2 |          | Section 11 |          |
|-----------|----------|------------|----------|
| NW ¼ SW ¼ | 33 acres | NW ¼ NW ¼  | 33 acres |
| NE ¼ SW ¼ | 33 acres | NE ¼ NW ¼  | 33 acres |
| SW ¼ SW ¼ | 33 acres | SW ¼ NW ¼  | 33 acres |
| SE ¼ SW ¼ | 33 acres | SE ¼ NW ¼  | 33 acres |

This breakdown of acres is a best estimate based on 1) information provided by the applicant, 2) viewing the orthoquadrangle using ArcMap, and 3) calculating the area based on the pivot radius.

comprising a total of **264** acres of land and the license should be issued for **3.56 cfs** from the well  
 Applicable permit qualifications have been complied with: **Yes**

Exceptions to compliance are: **none** Date Report Completed: **October 29, 2007**



Eric Gronlund

Natural Resources Engineer

DENR, Water Rights Program

## FIELD INVESTIGATION REPORT FOR PERMIT NO. 6343-3

|                                                                                          |                                                                                            |
|------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|
| DATE OF INVESTIGATION:                                                                   | <b>September 12, 2007</b>                                                                  |
| NAME & ADDRESS OF PERMIT HOLDER                                                          | <b>Peterson Farms<br/>c/o Lenny Peterson<br/>19111 Maple Avenue<br/>Hitchcock SD 57348</b> |
| NAME & ADDRESS OF INVESTIGATION CONTACT/<br>RELATIONSHIP TO PERMIT HOLDER, IF APPLICABLE | <b>Lenny Peterson (partner)</b>                                                            |
| DIVERSION POINT LEGAL LOCATION                                                           | <b>Approx. centers of the SW ¼ Section 2 and the<br/>NW ¼ Section 11, T113N, R63W</b>      |

Other permit(s) associated with the project: the diversion rate acreage amount for corners under Water Permit No. 6343-3 were transferred to Permit No. 6201A-3. The water permit was reissued to reflect this change.

### WELL INFORMATION:

- 1) Well Drilling Firm: **Pullman Drilling**
- 2) No. of Wells two
- 3) Depth(s) 82 and 115 feet
- 4) Well logs available Yes
- 5) Comment:

### Casing:

- 1) Diameter 16 inches
- 2) Length 67 and 100 feet
- 3) Type plastic

### Screen:

- 1) Type stainless steel
- 2) Length both 15 feet
- 3) Static water level 14 and 22 feet

### Pump:

- 1) Make both Western Land Roller Amarillo  
Gear Drive
- 2) Model both 560A (serial on one 2509240)
- 3) Size
- 4) Capacity 800 GPM

### Motor:

- 1) Make John Deere
- 2) Model No. both 4045 Models C110HP4  
(Serial No. on one is 1T1952)
- 3) Horsepower rating 60 & 80 hp (on gear drive)

**SYSTEM TYPE:****Center pivot:**

- 1) Make T-L
- 2) Overall length approx.1,320 feet
- 3) Number of towers 8 tower
- 4) Distance between towers \_\_\_\_\_ feet
- 5) End gun Yes (length with gun 1,350 feet)
- 6) High or low pressure low
- 7) Capacity 800 GPM

**CHEMIGATION EQUIPMENT: Yes****PERMIT QUALIFICATIONS:**

- 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

**COMMENTS:**

- Irrigation questionnaires indicate irrigation began in 2003. Based on well completion reports wells were drilled in April 2003 and April 2004. The system in the SW ¼ was in place a year prior to the system in the NW ¼ Section 11.

Water Permit No. 6343-3, Peterson Farms



2,100 1,050 0 2,100 Feet

Wells are located near the centers of the SW 1/4 Section 2 and the NW 1/4 Section 11 of T113N, R63W referenced from the SW corner Section 2 as 1,546 feet north and 1,320 feet east & 1,320 feet south and 1,320 east



Lat/Lon - N44.622556 W-098.377361  
Lat/Lon - N44.614694 W-098.377083

A handwritten signature in blue ink, appearing to read 'Eric Gronlund'.

Eric Gronlund  
Water Rights Program  
Date of Investigation - 9/12/2007

Well and Pivot in SW  $\frac{1}{4}$  Section 2, T113N, R63W



Well and Pivot in NW  $\frac{1}{4}$  Section 11, T113N, R63W



Pictures taken on September 12, 2007

**NOTICE OF COMPLETION OF WORKS AND  
APPLICATION OF WATER TO BENEFICIAL USE**

---

Date 9/11/07

TO: Water Rights Program, DENR  
523 E. Capitol  
Pierre, SD 57501-3181

FROM: Peterson  
(name)

\_\_\_\_\_  
(address)

\_\_\_\_\_  
(city, state, zip)

\_\_\_\_\_  
(phone)

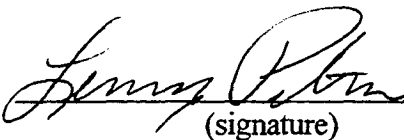
I have completed the construction of the water use system and I have put the water to beneficial use to the maximum extent it is going to be used.

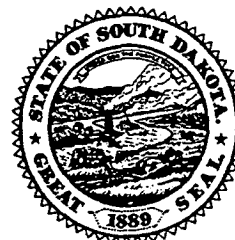
Water Permit No. 6343-3 states that the water use system is to be constructed by  
December 4 2007 , and water is to be put to beneficial use by December 4 2011 .  
(date) (date)

The water use system was completed on 2003 one system & 2004 other system  
(date)

Applying the water to beneficial use was completed on 2004  
(date)

You may schedule an investigation so that the water license may be issued.

  
(signature)



**STATE OF SOUTH DAKOTA  
WATER LICENSE NO. 6343-3**

(1) Peterson Farms, % Lenny Peterson, 19111 Maple Ave., Hitchcock SD 57348 made Application No. 6343-3, July 26, 2002 for a water permit to divert 4.57 cubic feet of water per second from ground water (two wells – Tulare:Hitchcock Aquifer), Beadle County, South Dakota for irrigation purposes. Permit No. 6343-3, with a priority date of July 26, 2002 was approved December 2, 2002 and issued to the applicants for diversion of water with construction of the described water supply system to be completed on or before December 2, 2007 and for the application to beneficial use of said water on or before December 2, 2011. ***A Completion of Works form was submitted September 11, 2007 indicating the systems were constructed in 2003 and 2004 respectively.***

On March 3, 2004, the Water Management Board approved Water Permit No. 6201A-3 which severed 0.73 cfs and 51 acres from No. 6343-3 and simultaneously transferred them to other land. Water Permit No. 6343-3 was reissued for the remaining diversion rate of 3.84 cfs and 269 acres.

(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 3.56 cubic feet of water per second for beneficial use. The location of the diversion points are:

- 1,546 ft N and 1,320 ft E of the SW corner of Section 2, T113N, R63W (approximate center of the SW ¼ Section 2)
- 1,320 ft S and 1,320 ft E of the SW corner of Section 2, T113N, R63W (approximate center of the NW ¼ Section 11)

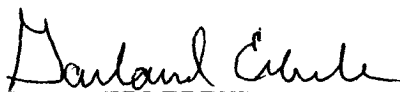
(3) The permit holder has complied with the provisions of South Dakota State Law relating to the application of water to beneficial use to irrigate the following land:

| Section 2, T113N, R63W       |          | Section 11, T113N, R63W |          |
|------------------------------|----------|-------------------------|----------|
| NW ¼ SW ¼                    | 33 acres | NW ¼ NW ¼               | 33 acres |
| NE ¼ SW ¼                    | 33 acres | NE ¼ NW ¼               | 33 acres |
| SW ¼ SW ¼                    | 33 acres | SW ¼ NW ¼               | 33 acres |
| SE ¼ SW ¼                    | 33 acres | SE ¼ NW ¼               | 33 acres |
| Total of 264 acres irrigated |          |                         |          |

(4) Pursuant to South Dakota Water Law 46-5-30.1 Peterson Farms, % Lenny Peterson, 19111 Maple Ave., Hitchcock SD 57348 the holders and/or owners of Water Right No. 6343-3 are issued a license to appropriate water, the right to use 3.56 cubic feet of water per second from ground water (two wells – Tulare:Hitchcock Aquifer) with a priority date of July 26, 2002 from the locations specified in (2) of this license for the purpose of irrigation.

This license is subject to South Dakota Water Law, any limitations or conditions listed in Water Right No. 6343-3 and subject to the following qualifications:

- 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.
- The wells authorized by Permit No. 6343-3 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.
- 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

MAY 16 2008

date





DEPARTMENT of ENVIRONMENT  
and NATURAL RESOURCES

PMB 2020  
JOE FOSS BUILDING  
523 EAST CAPITOL  
PIERRE, SOUTH DAKOTA 57501-3182  
[www.state.sd.us/denr](http://www.state.sd.us/denr)

MAY 16 2003

Lenny Peterson  
Peterson Farms  
19111 Maple Ave  
Hitchcock SD 57348

RE: Water License Nos. 6201-3, 6201A-3, 6334A-3, 6334B-3 and 6343-3

Dear Mr. Peterson:

Enclosed are your Water License Nos. 6201-3, 6201A-3, 6334A-3, 6334B-3 and 6343-3. These are the final water right documents completing your process of obtaining Water Rights. Included with your licenses are maps prepared by the staff engineer who conducted the investigations.

For your information SDCL 46-6-27 requires that if the owner of an existing well(s), such as the wells authorized by the above water rights, 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.

Many of your irrigation systems are set up to use chemigation. Enclosed are excerpts of Board Rules outlining the requirements for chemigation equipment.

As long as you use the water beneficially, as stated in the Water Licenses, 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,

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

enclosures

**DIVISION OF WATER RIGHT NO. 6343-3, PETERSON FARMS  
INTO 6343A-3, LENNY PETERSON AND 6343B-3, TWISTED LAND & CATTLE**

On June 22, 2016 and September 7, 2016, ownership changes were filed with Water Right No. 6343-3.

The water license is being divided and reissued to reflect separate ownership as follows:

- **No. 6343A-3 – Lenny Peterson, 19111 Maple Avenue, Hitchcock SD 57348** authorizing diversion of 1.78 cfs from one well located in the center of the NW  $\frac{1}{4}$  Section 11 to irrigate 132 acres in the NW  $\frac{1}{4}$  Section 11, all in T113N, R63W.
- **No. 6343B-3 – Twisted Land and Cattle, 19026 391<sup>st</sup> Avenue, Hitchcock SD 57348** authorizing diversion of 1.78 cfs from one well located in the SW  $\frac{1}{4}$  Section 2 to irrigate 132 acres in the SW  $\frac{1}{4}$  Section 2, all in T113N, R63W.