

WATER PERMIT NO. 6622-3

Name of Applicant: Sandra Hanson, Gary D Hanson Family Trust

Address: 21030 478th Ave, Brookings SD 57006 Phone: 605 693-4542

Amount of Water Claimed: 1.78 cfs Total Acres: 166 acres

Source of Water Supply: groundwater (one well)

Water to be used for: irrigation County: Brookings

Type of Waste Disposal System:

Location: 6 miles east of Brookings

PRIORITY Date Received: 5-5-05 Application/License Fee: \$300

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

Remarks:

Diversion Point: SE ¼ NW ¼ Sec 18-T110N-
R48W

Land to be Irrigated: S ½ NW ¼, N ½ SW ¼, NW
¼ SE ¼ and SW ¼ NE ¼ Sec 18-T110N-R48W

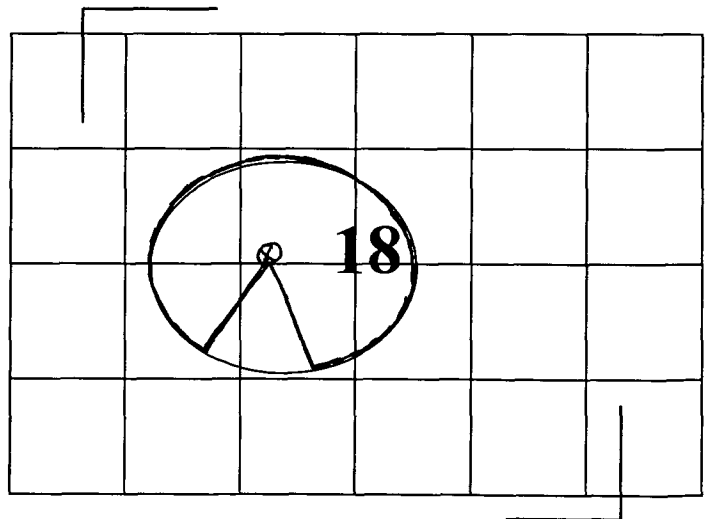
Depth of Well: 150 feet deep

Well Driller: : Kaiser Well Drilling

Remarks:

Type of Map: aerial

Prepared by: Craig Olson NRCS



Reviewed and the Number Assigned on: 5-5-05

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>6622-3</u> (office use only)	Hydrologic Unit <u>10170202</u>
	Basin <u>Sioux River</u>	
	Newspaper <u>Brookings Register Brookings</u>	

RECEIVED
MAY - 5 2005
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 Sandra Hanson Gray D. Hanson Family Trust
(check one) ☒ Owner ☐ Tenant/lessee Phone 605 693-4542
Mailing Address 21030 478th Ave Brookings White State SD 57006
(Street, RR, or Box and City) (Zip Code)
- Amount of water claimed 1.78 *CFS or 800 **GPM ***AF Total Acreage 166 A
(*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) County Brookings
SE 1/4 of the NW 1/4 of Section 18 110 - 48
- County or counties where water will be used Brookings
- Annual period during which water is to be used May 1 to October 31
- 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
SW 1/4 of the NW 1/4	39	NW 1/4 of the SE 1/4	7
SE 1/4 of the NW 1/4	39	SW 1/4 of the NE 1/4	7
NE 1/4 of the SW 1/4	34		
NW 1/4 of the SW 1/4	34		

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

STATE OF SOUTH DAKOTA) SS
County of Brookings

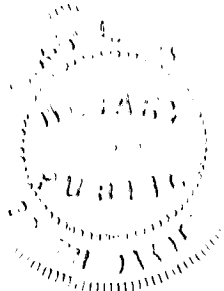
Attachments: Attach Form 2A if diversion is from a well or dugout, or if storage of water is proposed. Attach map and any other technical information. (see instructions)

I, Brad Hanson, 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 Gray D. Hanson Family Trust by Brad Hanson

Subscribed and sworn to before me this 4th day of May 2005

Karen Langland
Notary Public signature



**SOUTH DAKOTA
WATER PERMIT NO. 6622-3**

Date of first receipt of application May 5, 2005.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 6622-3 to Sandra Hanson, Gary D Hanson Family Trust, 21030 478th Ave, White SD 57276 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. 6622-3 appropriates 1.78 cubic feet of water per second from one well to be completed into the Rutland Aquifer (150 feet deep) located in the SE ¼ NW ¼ Section 18 to irrigate 166 acres located in portions of the S ½ NW ¼, N ½ SW ¼, NW ¼ SE ¼, SW ¼ NE ¼ Section 18; all in T110N-R48W.
2. The amount of the appropriation may not exceed 2 acre feet annually for each acre of land to which water is actually and beneficially applied for irrigation. The water is to be used during the following described annual period: May 1 – October 31.
3. The date from which applicant may claim right is May 5, 2005.
4. The date of approval of Permit No. 6622-3 is June 20, 2005.
5. One-fifth of the construction is to be completed on or before December 20, 2007.
6. All construction is to be completed on or before June 20, 2010.
7. Water is to be put to beneficial use on or before June 20, 2014.
8. Water rights obtained in compliance with the laws of the State of South Dakota may not be unlawfully impaired by this appropriation.

QUALIFICATIONS

1. The well approved under this Permit will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
2. The well authorized by Permit No. 6622-3 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. The well approved under this Permit shall be valved and the flow reduced to the amount needed or to a minimum when not being used. If this well is abandoned or the Permit cancelled, the well must be plugged in accordance with Water Management Board Rules, Chapter 74:02:04.
4. 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

JUL 29 2005

date



Supplemental Information

(Complete applicable portions only)

(type or print in ink)

1. Well Information - Proposed Construction

- a) Drill Hole Diameter 18" Depth 150 ft.
- b) Casing Type Plastic Diameter 12" Thickness Sch 40
- c) Screen Type SS Diameter 12" Thickness 1/8"
- d) Gravel Pack 1/4 x 1/8 Length of Gravel Pack _____
- e) Depth to Top of Water Bearing Material 130 ft.
- f) Depth to Water (ground surface to water level) Flows at 50 gal. min @ 3 ft ABG
- g) Distance to nearest existing domestic well:
- On applicants property 1600 ft On property owned by others 1700 ft

2. Wastewater Disposal System Information

- a) Type of System (i.e. septic tank, drain field) _____
- b) System Capacity (gallons) _____ Year Constructed _____
- c) Connected to the City of _____ Sanitary System

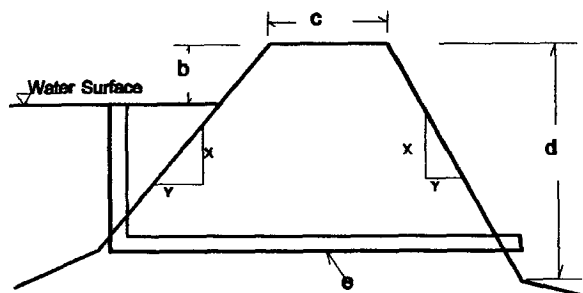
3. Dugout Information

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

4. Water Storage Dams

If the proposed water use system contains one or more storage dams, please furnish the information requested below for each dam. The locations of the dams need to be shown on the map submitted with the application.

- a) If a private engineering firm or government agency was involved in the design of this dam, please give their name and address:



- b) Freeboard _____
- c) Crest Width _____
Crest Length _____
- d) Height _____
- e) Primary Outlet Capacity _____
If pipe, diameter _____
- f) Secondary Spillway Capacity _____
Spillway Width _____
- g) X & Y Slope _____
Upstream _____
Downstream _____
- h) Surface Area of Impoundment _____
- i) Storage _____ Acre Feet
- j) Drainage Area Above Dam _____ Acres

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date May 5, 20 05

RECEIVED OF Sandra K Hanson, 21107 478th Ave, White SD 57276

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

Fee for Application for Permit No. <u>6622-3</u> to Appropriate Water, to construct and to put water to beneficial use	250	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>6622-3</u>	50	00
Fee for Filing Transfer Form _____		
Fee for _____		
Fee for Issuing New Well Driller's License No. _____ for C.Y. _____		
Fee for Renewal of Well Driller's License No. _____ for C.Y. _____		
Fee for Issuing Well Pump Installer's License No. _____ for C.Y. _____		
Fee for Renewal of Well Pump Installer's License No. _____ for C.Y. _____		
(Any Other Work Provided by Law)	TOTAL	300.00

No. **0018.0**

By

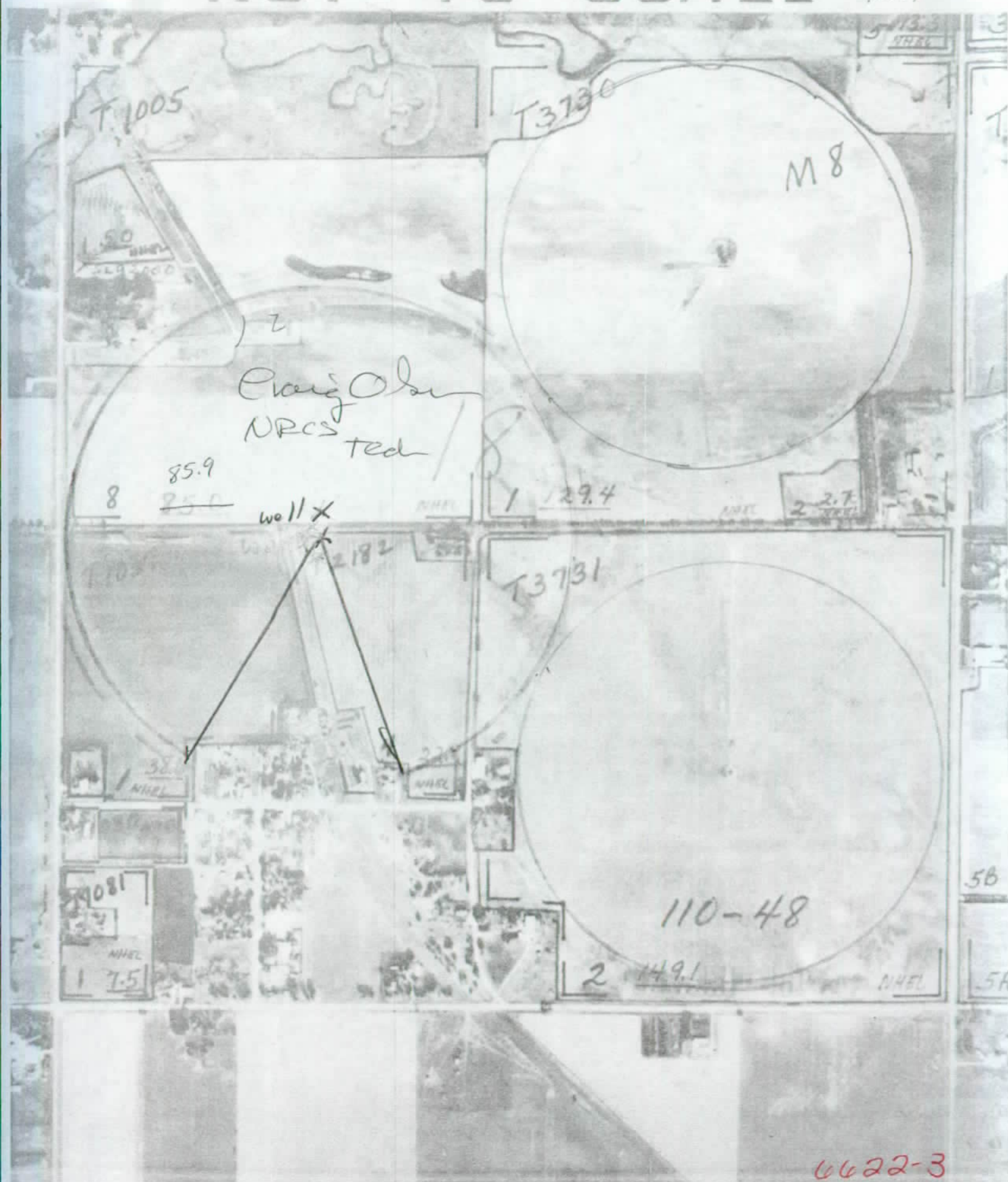
Deborah Eide
Chief Engineer
gm

FEB

95

NOT TO SCALE

4/24



6622-3

SOUTH DAKOTA WATER WELL COMPLETION REPORT

07-92

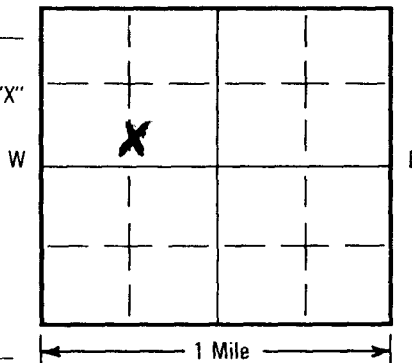
Location NW 1/4 Sec 18 Twp 110-N Rg 48W

County

North

Drookizys

Please mark well location with an "X"



Well Completion Date

4-28-05

LOCATION:

Distance from nearest potential pollution source (septic tank, abandoned well, feed lot, etc.)? 1200 ft. from Old well (identify source).

PROPOSED USE:

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

METHOD OF DRILLING:

Direct RotaryCASING DATA: ☐ Steel ☒ Plastic ☐ Other

If other describe _____

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
<u>5.4</u> LB/FT	<u>3</u> IN	<u>12</u> FT	<u>148</u> FT	<u>7 3/8</u> IN
_____ LB/FT	_____ IN	_____ FT	_____ FT	_____ IN
_____ LB/FT	_____ IN	_____ FT	_____ FT	_____ IN

GROUTING DATA

Grout Type	No. of Sacks	Grout Weight	From	To
<u>Benzoal</u>	<u>37</u>	<u>5-4</u> lb./gal	<u>0</u> ft.	<u>130</u> ft.
_____	_____	_____ lb./gal	_____ ft.	_____ ft.

Describe grouting procedure pressure appliedSCREEN: ☐ Perforated pipe ☒ ManufacturedDiameter 3 IN Length 2 FEETMaterial plastic
Slot Size .035 Set From 148 Feet to 150 Feet

Other information _____

WAS A PACKER OR SEAL USED? ☐ YES ☐ NO

If so, what material? _____

Describe packer(s) and location? _____

DISINFECTION: Was well disinfected upon completion?

YES How: _____

NO, Why Not? _____

Laboratory sent to for water quality analysis

Freeze

Well Owner

Bradley Hanson

Business Name: _____

Address:

2107 478th Ave
Brookings, SD 57276

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
Top Soil	0	2
yellow clay	2	9
yellow gravel w/ 2 4 links	9	27
yellow clay	27	30
yellow gravel w/ 2 4 links	30	37
Blue clay	37	96
Grey gravel medium to fine	96	100
Soft Blue Clay	100	105
Blue clay	105	130

STATIC WATER LEVEL

15' 463

Feet

If flowing: closed in pressure _____

PSI

GPM flow _____ through _____

inch pipe

Controlled by ☐ Valve ☐ Reducers ☐ Other _____

Reduced Flowrate _____

GPM

Can well be completely shut in? _____

WELL TEST DATA:

☐ Pumped

Describe:

Flows 50+ at☐ Bailed3' 463☐ Other _____

Pumping Level Below Land Surface

_____ ft. After 1 Hrs. pumped50+

GPM

_____ ft. After 2 Hrs. pumped50+

GPM

If pump installed, pump rate _____

GPM

REMARKS

Grey gravel medium to coarse 16 links
Blue Clay
130-150
150-155

This well was drilled under license #

689

And this report is true and accurate.

Drilling firm

Kaiserwell Drilling

Signature of License Representative:

[Signature]

Signature of Well Owner or Equitable Property Holder:

Bradley D. Hanson

Date:

5/2/2005

Water Rights Program - File Documentation

NAME: Farmers Implement & Irrigation

ADDRESS: Brookings SD

DATE: 5-5-05 **COUNTY:** BG **TELEPHONE:** 605 692-6153

RE: Sandra Hanson application

COMMENTS:

I talked with Tom Pierce with Farmers Implement & Irrigation who stated the amount of water claimed for this application should be 800 gpm.


Karen Schlaak
Environmental Scientist

REPORT ON WATER PERMIT APPLICATION NO. 6622-3
For Sandra Hanson Gary D Hanson Family Trust
May 18, 2005

Application No. 6622-3 proposes to appropriate 1.78 cfs (800 gpm) from one well approximately 150 feet deep located in the SE $\frac{1}{4}$ NW $\frac{1}{4}$ of section 18 to irrigate 166 acres located in portions of the NW $\frac{1}{4}$, SW $\frac{1}{4}$, NW $\frac{1}{4}$ SE $\frac{1}{4}$, SW $\frac{1}{4}$ NE $\frac{1}{4}$ of section 18; all in T110N R48W in Brookings County.

AQUIFER – RUTLAND (RUT)

The Rutland is a buried outwash (sand and gravel) that is under artesian conditions at this site. The aquifer underlies 240 square miles and contains an estimated 400,000 acre-feet of water in storage in Brookings County (Hamilton, 1989). The direction of ground water movement is from northeast to southwest in the area of this application (Hamilton, 1989). The aquifer extends into Minnesota to the east, into Deuel County to the north and into Moody County to the south. The aquifer appears to discharge water into the overlying Big Sioux Aurora aquifer in T110N R49W (Hamilton, 1989).

A test well log filed with the application indicates topsoil and yellow clay to a depth of 9 feet, yellow gravel from 9 to 27 feet, yellow clay from 27 to 30 feet, yellow gravel from 30 to 37 feet, blue clay from 37 to 96 feet, grey gravel from 96 to 100 feet, soft blue clay from 100 to 105 feet, blue clay from 105 to 130 feet, medium to coarse grey gravel from 130 to 150 feet, and blue clay from 150 to 155 feet all below land surface. The Big Sioux Aurora aquifer would bottom out at 37 feet at this site and the Rutland would be the 20 feet of gravel from 130 to 150 feet. The static water level in the Rutland was reported to be 15 feet above the ground surface. This would be a free-flowing well and would have an estimated shut in pressure of about 6.5 psi. No meaningful production testing data is available for this well.

The Water Rights Program monitors an observation well BG-80I completed into the Rutland and located about four miles east of this application. Water levels for this observation well show good response to pumping (fluctuation) and also the effects of climatic conditions, that is, rising water levels during wet years (recharge) and gradually declining water levels during dry years. In general, the water level record indicates that the aquifer is capable of sustaining additional withdrawals (Water Rights, 2005).

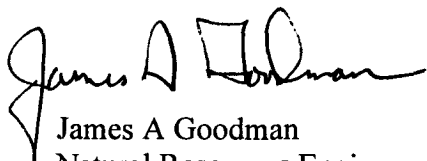
REVIEW OF EXISTING WATER PERMITS/RIGHTS

There is an existing Water Right No. 2676-3 located about 1.5 miles south of this application that appears to obtain water from the Rutland aquifer. There may be overlapping cones of depression. However, the drawdown is not expected to be significant at this distance between wells. Interference is not expected to be a concern or cause adverse effects. There may be some domestic wells in the immediate area that would have to lower pumps in order to maintain the amount of water needed. This would

be in direct response to increased pumping caused by this application. These domestic wells would have to be completed into the Rutland aquifer in order to be affected.

CONCLUSIONS

1. Water is available from the Rutland aquifer.
2. The aquifer is under artesian conditions at this site. Drawdown will occur as a result of pumping. This is not expected to be significant nor cause adverse effects.
3. The test well for this application was free-flowing at the land surface. This well must be constructed in accordance with SD Well Construction Standards to include capable of being shut in to prevent the waste of water.



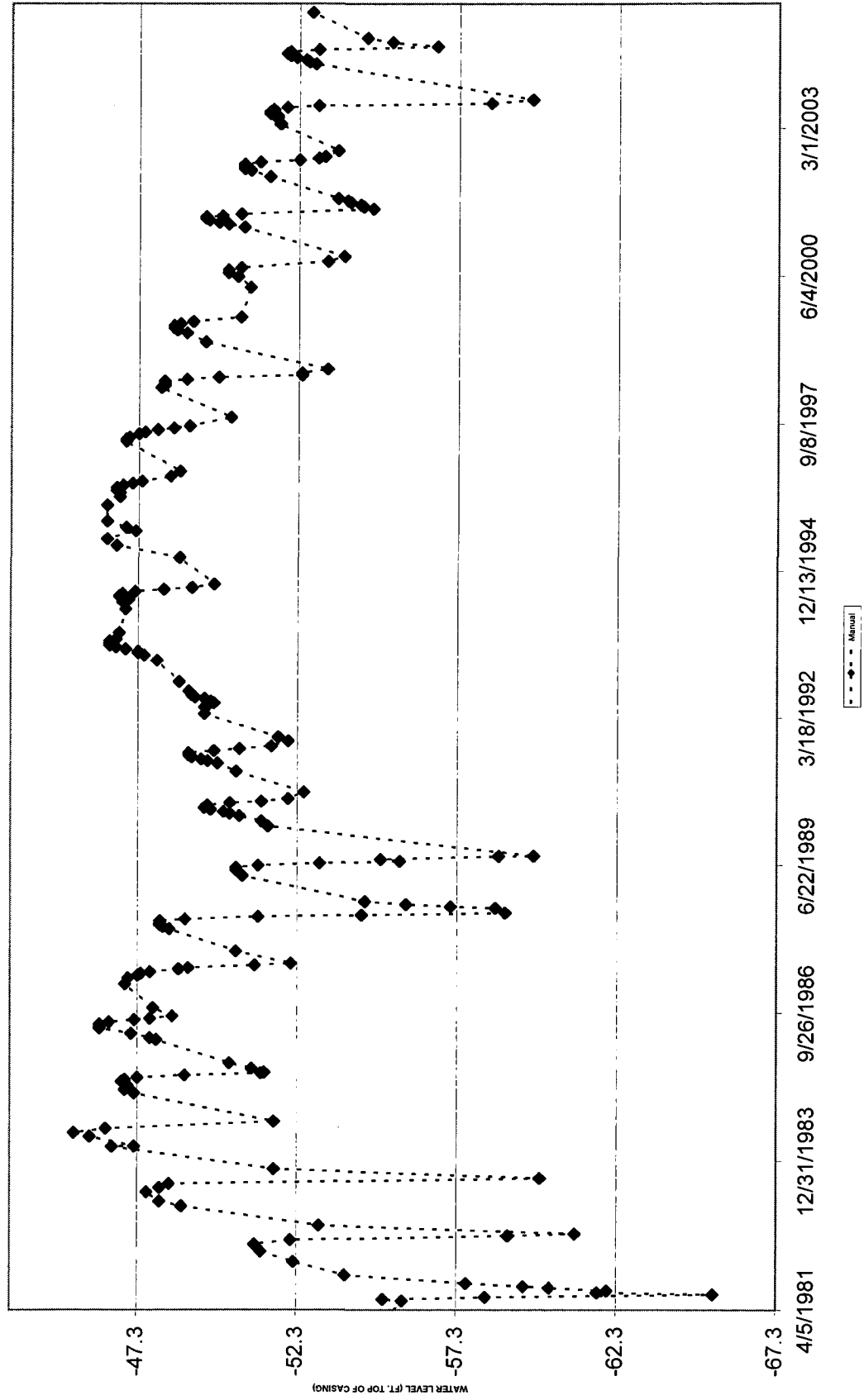
James A Goodman
Natural Resources Engineer

BIBLIOGRAPHY

Hamilton, L.J., 1989, Water Resources of Brookings and Kingsbury Counties, South Dakota, Water-Resources Investigations Report 88-4185, USGS, Huron, SD, 57350.

Water Rights, 2005, Unpublished Observation Well Data for Brookings County, SD DENR, DES, Water Rights Program, Pierre, SD, 57501.

WATER RIGHTS' OBSERVATION WELL
BG-80I





**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. 6622-3, Gary D. Hanson Family Trust**

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. 6622-3, Gary D. Hanson Family Trust, c/o Sandra Hanson, 21030 478th Avenue, Brookings SD 57006.

The Chief Engineer is recommending APPROVAL of Application No. 6622-3 because 1) there is reasonable probability that there is unappropriated water available for the applicant's proposed use, 2) the proposed diversion can be developed without unlawful impairment of existing rights, 3) the proposed use is a beneficial use and 4) it is in the public interest with the following qualifications:

1. The well approved under this Permit will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
2. The well authorized by Permit No. 6622-3 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. The well approved under this Permit shall be valved and the flow reduced to the amount needed or to a minimum when not being used. If this well is abandoned or the Permit cancelled, the well must be plugged in accordance with Water Management Board Rules, Chapter 74:02:04.
4. 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
May 16, 2005

Affidavit of Publication

State of South Dakota

Exhibit "A"

ss

County of Brookings

Legal 905, 2x, 6/2, 6/9

Annie Larson of said county, first duly sworn, on oath, says: That she is the office clerk of THE BROOKINGS REGISTER, a daily newspaper, printed and published in the City of Brookings, in said County of Brookings, and State of South Dakota; that she has full and personal knowledge of the facts herein stated; that said newspaper is a legal newspaper and has a bona fide circulation of at least two hundred copies of each issue daily; that said newspaper has been published within the said County of Brookings and State of South Dakota, for more than one year prior to the first publication of Exhibit "A," hereto attached and herein mentioned, and was and is printed

that the

Legal #905 "Hanson-water permit"

Brookings and State of South Dakota, for more than one a printed copy of which, taken from the paper in which the same was published, is hereto attached marked Exhibit

said newspaper for _____ 2 times, to-wit:

June 2, 2005

June 9, 2005

said Exhibit "A" inures to the sole benefit for the publishers of said newspaper; that no agreement or understanding for the division thereof has been made with any other person, and that no part thereof has been agreed to be paid to any person whomsoever; that the fees charged for the publication thereof are:

Fourty-one dollars and thirty-five cents \$41.35

NOTICE OF

APPLICATION NO. 6622-3 to Appropriate Water

Notice is given that Sandra Hanson, Gary D. Hanson, Family Trust, 21030 478th Ave, White, SD 57276 has filed an application for a water permit to appropriate 1.78 cubic feet of water per second from one well to be completed into the Rutland Aquifer (150 feet deep) located in the SE 1/4 NW 1/4 Section 18 to irrigate 166 acres located in portions of the NW 1/4, SW 1/4, NW 1/4 SE 1/4, SW 1/4 NE 1/4 Section 18; all in T110N-R48W.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 6622-3 because 1) unappropriated water is available, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest. In accordance with SDCL 46-2A-23, the Chief Engineer will act on 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 June 20, 2005.

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.

Subscribed and sworn to before me this

10th

day of

June

2005

Christina Nelson

RECEIVED

JUN 30 2005

WATER RIGHTS
PROGRAM

Notary Public in and for the County of Brookings, South Dakota.
My Commission expires April 27, 2006



**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.

May 26, 2005

Sandra Hanson
Gary D Hanson Family Trust
21030 478th Ave
Brookings SD 57006

Dear Ms. Hanson:

Water Permit Application No. 6622-3 for irrigation use has been examined and found to comply with the South Dakota Water Laws and applicable rules. A notice has been sent to the Publisher of the Brookings Register printed at Brookings, SD (Ph # 605-692-6271). 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 and to arrange for payment. Early contact with the paper can eliminate delays. Upon receiving authorization, the publisher has been instructed to publish your notice once each week for two consecutive weeks. The newspaper has also been instructed to send us the Proof of Publication. We must receive Proof of Publication before action can be taken on the application.

Sincerely,

Eric Gronlund
Natural Resources Engineer
(605) 773-3352

enclosures

c: Dave Gullickson, Farmers Implement & Irrigation, E Hwy 14 Bypass, Brookings SD 57006

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

Instruction to Newspaper - Publish first Notice on June 2, 2005 with the second publication 7 days later. The applicant is responsible for payment.

NOTICE OF APPLICATION NO. 6622-3 to Appropriate Water

Notice is given that Sandra Hanson, Gary D Hanson Family Trust, 21030 478th Ave, Brookings SD 57006 has filed an application for a water permit to appropriate 1.78 cubic feet of water per second from one well to be completed into the Rutland Aquifer (150 feet deep) located in the SE $\frac{1}{4}$ NW $\frac{1}{4}$ Section 18 to irrigate 166 acres located in portions of the NW $\frac{1}{4}$, SW $\frac{1}{4}$, NW $\frac{1}{4}$ SE $\frac{1}{4}$, SW $\frac{1}{4}$ NE $\frac{1}{4}$ Section 18; all in T110N-R48W.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 6622-3 because 1) unappropriated water is available, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest. In accordance with SDCL 46-2A-23, the Chief Engineer will act on 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 June 20, 2005.

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.



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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www.state.sd.us/denr

May 26, 2005

Brookings Register
PO Box 177
Brookings SD 57006-0177

ATTENTION: Legal Public Notice

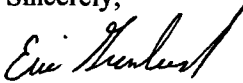
Enclosed is a Notice on Application No. 6622-3 to Appropriate Water to be published twice. Please publish the first notice on June 2, 2005 with the second publication 7 days later. The text of the notice can be e-mailed to your paper by contacting Karen Schlaak at (605) 773-3352.

The applicant must verify to you that the notice is to be published, before you make the first publication. **Please BILL the APPLICANT for the cost of publication.** The APPLICANT is Sandra Hanson, Gary D Hanson Family Trust, 21030 478th Ave, Brookings SD (Ph # 605-693-4542).

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

After the second publication, **please send us an affidavit or use the enclosed Proof of Publication form.** The applicant pays the cost of publication, but the Water Rights Program records require an affidavit or Proof of Publication. Delays in receiving the affidavit can be costly to the applicant.

Sincerely,


Eric Gronlund
Natural Resources Engineer
605 773-3352

enclosures

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

No. 6622-3

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

Date _____

We are in receipt of your letter of May 26, 2005 enclosing Notice to Appropriate Water by Application No. 6622-3 which was first published in our issue of _____. **ENCLOSED IS A COPY OF THIS FIRST PUBLICATION.**

Name

Newspaper



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

JUL 29 2005

Sandra Hanson
Gary D Hanson Family Trust
21030 478th Ave
White SD 57276

Dear Ms. Hanson:

Enclosed is Water Permit No. 6622-3 authorizing construction of your water diversion system and beneficial use of the water, not exceeding the limits as specified in the Water Permit.

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

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

Sincerely,

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

enclosures



6622-3
DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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PIERRE SOUTH DAKOTA 57501-3182
www.state.sd.us/denr

January 23, 2009

NOTICE

TO: BRADLEY HANSON, MGR, 21107 478TH AVE, WHITE, SD 57276 6503
FROM: Ron Duvall, Natural Resources Engineer
for Garland Erbele, Chief Engineer
Water Rights Program
SUBJECT: Reporting Requirement for 2008 Irrigation Questionnaires

Our records indicate that the 2008 Irrigation Questionnaires have not been submitted. The request for the Questionnaires was dated October 24, 2008. The Water Management Board has directed that owners of water permits who have not submitted the 2008 Irrigation Questionnaires be given notice of permit violation and a hearing to be held by the Board. The hearing is to determine if Permit No(s) 3347-3 should be amended to require the Questionnaire to be submitted each year and to determine action to be taken for violation of Water Permit No(s) 4477-3, 6622-3 & 6623-3 qualification:

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

The hearing will be held at **10:00 am, March 11, 2009** in the Floyd Matthew Training Center, Joe Foss Building, 523 E Capitol Avenue, Pierre, SD, and will be conducted pursuant to SDCL 46-1-12, 46-1-14, 46-2-9, 46-2-11 and 46-2-17. These are contested case hearings pursuant to Chapter 1-26. According to SDCL 46-1-12, the Board may suspend a permit for a period of up to one year for the first violation of a permit qualification or up to three years for a second violation, or cancel a permit for a third violation. Following the hearing, the Water Management Board can:

1. Suspend or cancel Permit No(s) 4477-3, 6622-3 & 6623-3 in accordance with applicable provisions of SDCL 46-1-12;
2. Amend Permit No(s) 3347-3 to require the Irrigation Water Use Questionnaire to be submitted each year;
3. Postpone any action or take no action.

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

If the questionnaire(s) is (are) received in this office on/or before **March 6, 2009**, you will no longer be in violation of your permit and your name will be deleted from the Board agenda. Enclosed are additional questionnaire(s) for your use. If you have questions or need assistance, please contact Genny McMath at (605) 773-3352. If you prefer, you can complete the questionnaire on-line at the following link:

<https://www.state.sd.us/eforms/secure/eforms/E0455V7-IQ.pdf>

c: SANDRA HANSON, 21030 478TH AVE, WHITE SD 57276

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



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

January 28, 2009

3347-3
4477-3
6622-3
6623-3

Bradley Hanson
21107 478th Ave
White SD 57276-6503

Dear Mr. Hanson:

I am writing to acknowledge receipt of your 2008 irrigation questionnaires. You may disregard the January 23, 2009, "Notice" concerning reporting requirements for Water Permit or Right Nos. 3347-3, 4477-3, 6622-3 and 6623-3.

The information was received in our office prior to the Water Management Board meeting and your name has been deleted from the agenda.

If you have any questions, please contact me.

Sincerely,

A handwritten signature in cursive script that reads "Genny McMath".

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

c: Sandra Hanson

Permit No. 6622-3
Sioux 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 14, 2011, made a thorough examination of the water use system constructed by Sandra Hanson, Gary D Hanson Family Trust, 21030 478th Avenue, White SD 57276 holder of Permit No. 6622-3, bearing the priority of May 5, 2005 authorizing the diversion of 1.78 cu. ft. per second from the Rutland Aquifer for irrigation purposes, in Brookings County.

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

A. Works used to divert the water:

One well is in place each with a submersible pump

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

Well head is located approximately 650 feet northwest of the pivot center.

C. Works used to apply water to beneficial use:

A 7 tower Valley 8000 center pivot

The system is in the following condition excellent. The point of diversion (well) is located specifically - Lat 44.33387 Lon -96.64248 --- approx. 2,275' South and 1,125' East of NW corner Section 18, T110N, R48W (SW ¼ NW ¼)

The works are capable of diverting a total of 1.78 cfs from a well which is to be used for irrigation. Water has been put to beneficial use to the maximum extent as follows:

All in Section 18, T110N, R48W

SW ¼ NW ¼	24 acres	SW ¼ SW ¼	1 acres
SE ¼ NW ¼	37 acres	SE ¼ SW ¼	2 acres
NW ¼ SW ¼	30 acres	SW ¼ NE ¼	10 acres
NE ¼ SW ¼	27 acres	NW ¼ SE ¼	15 acres

This breakdown of acres is a best estimate based on 1) information provided and 2) viewing the 2010 FSA aerial using ArcMap,

comprising a total of 146 acres of land and the license should be issued for 1.78 cfs based on the capacity of the one well.

Applicable permit qualifications have been complied with: **Yes**

Exceptions to compliance are: minor acreage outside of described area

Date Report Completed: May 22, 2012



Eric Gronlund
 Natural Resources Engineer
 DENR, Water Rights Program

FIELD INVESTIGATION REPORT FOR PERMIT NO. 6622-3

DATE OF INVESTIGATION:	September 14, 2011
NAME & ADDRESS OF PERMIT HOLDER	Sandra Hanson, Gary D Hanson Family Trust 21030 478th Avenue White SD 57276
NAME & ADDRESS OF INVESTIGATION CONTACT/ RELATIONSHIP TO PERMIT HOLDER, IF APPLICABLE	Brad Hanson
DIVERSION POINT LEGAL LOCATIONS	<u>Lat 44.33387 Lon -96.64248 --- approx. 2,275' South and 1,125' East of NW corner Section 18, T110N, R48W (SW ¼ NW ¼)</u>

WELL INFORMATION:

- 1) Well Drilling Firm: **Kaiser Well Drilling**
- 2) No. of Wells 1
- 3) Depth(s) 150
- 4) Well log is available Yes
- 5) Comment:

Casing:

- 1) Diameter 12 inches
- 2) Length 148 feet
- 3) Type

Screen:

- 1) Type plastic
- 2) Length 2 feet
- 3) Static water level flowing

Pump:

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

Motor:

- 1) Make
- 2) Model No.
- 3) Horsepower rating 60 hp

SYSTEM TYPE:

Center pivot:

- 1) Make Valley
- 2) Overall length approx. 1375 feet
- 3) Number of towers 7 tower
- 4) Distance between towers _____ feet
- 5) End gun Yes (approx. 100)
- 6) High or low pressure 46 psi
- 7) Capacity 800 GPM

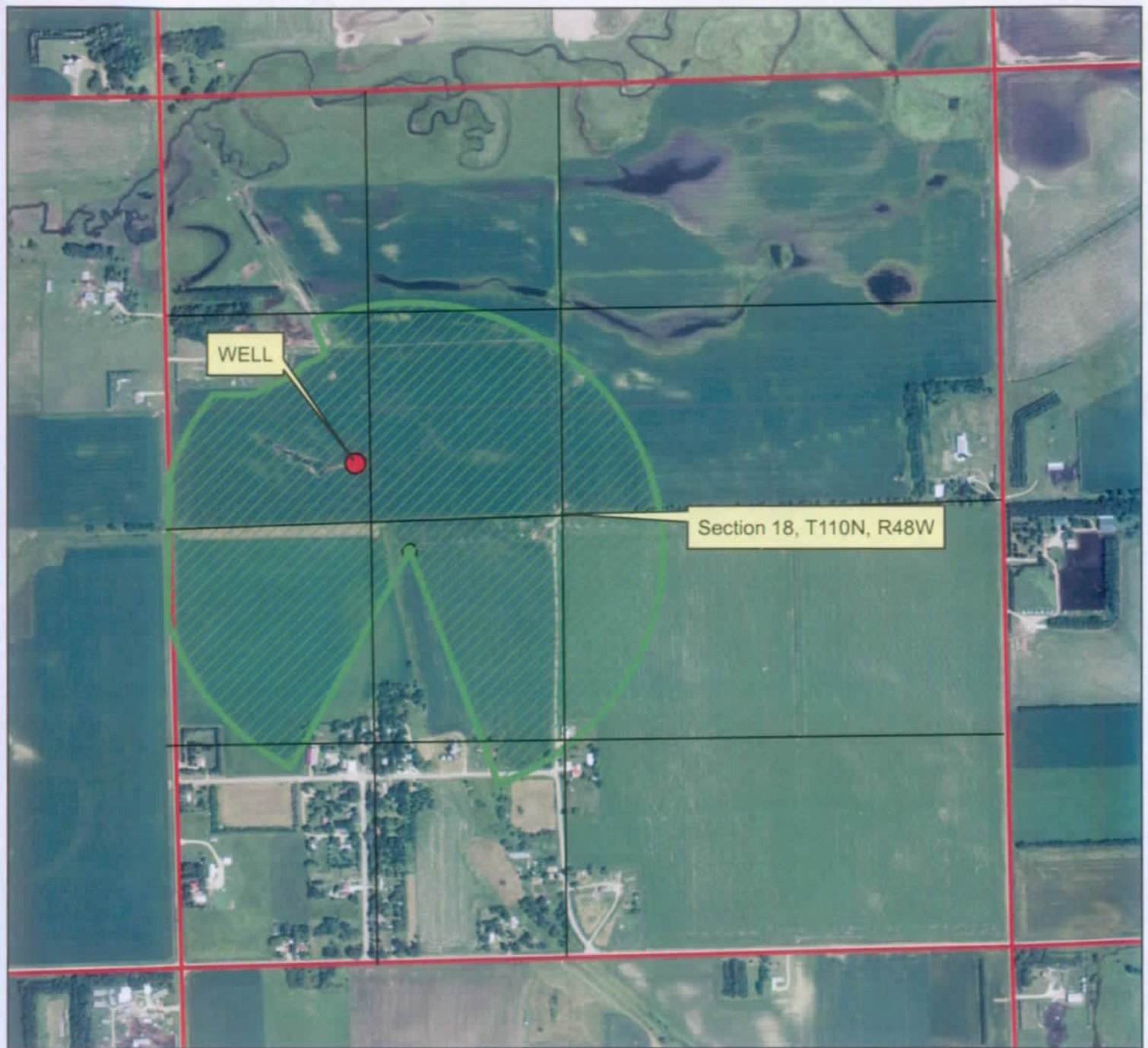
CHEMIGATION EQUIPMENT: No

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 questionnaire reflect that irrigation began in 2006
- Met Brad Hanson at Bowne's farmstead. He did not accompany me but gave me permission to look at the irrigation system..
- This well flows at ground surface. The center pivot was not in operation at the time of on-site visit. At the well head there was minor leakage. Although not measure, the leakage was estimated at <5 gpm and did not appear unreasonable or wasteful.
- Mr Hanson reports a diversion rate of 1000 gpm and irrigation of 166 on the annual irrigation questionnaire. The actual permit was issued for only 800 gpm. Inside the pivots control box is a sheet stating the system's capacities indicating the system is set up to operate at 800 gpm and irrigating 146 acres. I separately calculated the acres under irrigation using ArcMap acreage function and the 2010 FSA aerial which shows the area being irrigated. Independently it was found 146 acres are being irrigated and the license should be issued accordingly.
- There are just a few acres located on the southern coverage of the pivot that appear in the S ½ SW ¼ of Section 18. This area is not described on the permit. However, SDCL 46-5-30.5 allows for licensing of acreage developed for irrigation outside of the permitted area. See attached report.



0 650 1,300 2,600 3,900 5,200 Feet

Well - Lat 44.33387 Lon -96.64248 --- approx. 2,275' South and
1,125' East of NW corner Section 18, T110N, R48W



Eric Gronlund
Eric Gronlund
Water Rights Program, DENR
License Inspection - September 14, 2011

Approval of a Change of Diversion Point

NAME: Sandra hanson, Gary D Hanson Family Trust,

ADDRESS: 21030 478th Avenue, White SD 57276

DATE: May 29, 2012 **COUNTY:** Brookings **TELEPHONE:**

BACKGROUND:

Water Permit No. 6622-3 appropriates 1.78 cubic feet of water per second from one well to be completed into the Rutland Aquifer located in the SE $\frac{1}{4}$ NW $\frac{1}{4}$ Section 18 to irrigate 166 acres located in portions of the S $\frac{1}{2}$ NW $\frac{1}{4}$, N $\frac{1}{2}$ SW $\frac{1}{4}$, NW $\frac{1}{4}$ SE $\frac{1}{4}$, SW $\frac{1}{4}$ NE $\frac{1}{4}$ Section 18; all in T110N, R48W.

An inspection for the purpose of licensing Permit No. 6622-3 was conducted September 14, 2011. The actual well location as developed was found to be in the SW $\frac{1}{4}$ NW $\frac{1}{4}$ of Section 18. It is 425 feet to the northwest of the location shown on the map filed with the application.

AUTHORITY:

Pursuant to SDCL 46-5-13.1, the location of a diversion point may be changed or additional diversion points may be licensed provided the following conditions are met and the potential for interference with other existing diversions is not increased:

- **Developed water source same as permitted source and no additional water appropriated**

The water source authorized by Water Permit No. 6622-3 is the Rutland Aquifer. This is based on a test hole log. The driller was contacted but did not file the well completion report.

No additional appropriation of water is authorized. The water permit appropriates 1.78 cfs which matches the diversion rate on the specification sheet found in the control box at the center pivot.

- **Review of Existing Diversions**

The well completion report database was reviewed and the nearest domestic wells on file are located 1.3 miles to the west and 1.4 miles to the southeast. There are a total of 4 domestic wells within a 2 mile radius of the production well. This change in the diversion point location does not move the irrigation well in closer proximity to a domestic well.

The water right database was reviewed for existing water rights from the Rutland in the area. The nearest water right owned by another landowner is 1.7 miles to the north. This change may move the well about 150 feet closer to each other. Mr. Hanson has a water right 1.3 miles to the southwest.

The staff report prepared on this application concludes that drawdown will occur between these diversions but interference is not expected to be adverse because of the distance between wells.

CONCLUSION

- The change in well location does not appropriate additional water.
- The well is completed into the Rultand Aquifer.
- Interference is not expected to be a concern.
- Existing domestic wells should not be adversely impacted by authorizing this change.
- This change is a result of a licensing investigation that found the well located in the SW $\frac{1}{4}$ NW $\frac{1}{4}$ Section 18, T110N, R48W

RECOMMENDED ACTION

Based on the above criteria, it is recommended that the change of diversion point location be authorized under Water Permit No. 6622-3.



Eric Gronlund
Water Rights Program

The Chief Engineer makes a finding pursuant SDCL 46-5-13.1 and ARSD 74:02:01:14.01 that:

This change in the diversion point does not increase the potential for adverse effects to existing diversions.



Garland Erbele, Chief Engineer
Water Rights Program

Licensing of Acreage Outside of Permitted Area

NAME: Sandra Hanson, Gary D Hanson Family Trust

ADDRESS: 21030 478th Avenue, White SD 57276

DATE: December 23, 2011 **COUNTY:** Brookings **TELEPHONE:**

AUTHORITY

Pursuant to SDCL 46-5-30.5, acreage developed for irrigation outside of the area described on the permit may be licensed provided the following conditions are met:

NO INCREASE IN PERMITTED ACREAGE OR WATER APPROPRIATED:

The acreage developed for irrigation is **146** acres as compared to **166** acres authorized by the permit. Licensing of the permit will result in a reduction in the amount of water appropriated.

EXPLANATION:

The water permit was issue for irrigation in the S ½ NW ¼ , N ½ SW ¼ , SW ¼ NE ¼ and NW ¼ SE ¼ of Section 18, T110N, R48W. An on-site inspection and viewing the 2010 FSA aerial shows approximately 3 acres located in the S ½ SW ¼ of this section that are being irrigated on the southern area of the center pivot

UNPERMITTED ACREAGE:

- **Contiguous to Permitted Acreage**

Yes – the acreage is all contiguous to the irrigation project as initially intended

- **Owned by Same Property Owner**

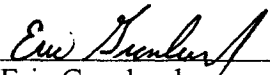
Yes – the land is owned by the Hanson Family

- **Developed Prior to Expiration of Construction Period**

Yes – the period to complete construction is June 20, 2010. The submittal of the annual irrigation questionnaire show that irrigation began in 2006.

RECOMMENDED ACTION

Based on the above criteria, it is recommended that the acreage as developed be included in the water license.



Eric Gronlund

Water Rights Program

The Chief Engineer makes a finding pursuant to SDCL 46-5-30.5 that:

This acreage change does not impair existing water rights and the overall project, as developed, is consistent with the original application. Licensing of the unpermitted acreage may occur without application or publication pursuant to SDCL 46-2A-4.



Garland Erbele, Chief Engineer

Water Rights Program



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

JOE FOSS BUILDING
PMB 2020
523 EAST CAPITOL
PIERRE SOUTH DAKOTA 57501-3182
<http://denr.sd.gov>

JUN 20 2012

6622-3

Sandra Hanson
Gary D Hanson Family Trust
21030 478th Ave
White SD 57276

Dear Ms. Hanson:

Enclosed is Water License No. 6622-3. This is the final water right document completing your process of obtaining a Water Right. Included with your license is a map prepared by the staff engineer who conducted the field investigation.

For your information SDCL 46-6-27 requires that if the owner of an existing well, such as the well authorized by Water Right No. 6622-3, 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,

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

enclosures

**STATE OF SOUTH DAKOTA
WATER LICENSE NO. 6622-3**

(1) Sandra Hanson, Gary D Hanson Family Trust, 21030 478th Ave, White SD 57276 made Application No. 6622-3, May 5, 2005 for a water permit to divert 1.78 cubic feet of water per second from ground water – one well (Rutland Aquifer), Brookings County, South Dakota for irrigation purposes. Permit No. 6622-3, with a priority date of May 5, 2005 was approved June 20, 2005 and issued to the applicant for diversion of water with construction of the described water supply system to be completed on or before June 20, 2010 and for the application to beneficial use of said water on or before June 20, 2014.

An investigation for licensing purposes found acreage developed for irrigation outside of the area described on the permit. Pursuant to SDCL 46-5-30.5, the Chief Engineer made a finding that existing water rights will not be impaired and the overall project, as developed, is consistent with the original application.

The investigation also found the well was drilled in a different location. Pursuant to SDCL 46-5-13.1, the location of a diversion point may be changed provided the developed water source is the same as the permitted source and no additional water is appropriated. The Chief Engineer makes a finding pursuant SDCL 46-5-13.1 and ARSD 74:02:01:14.01 that the change in location of the diversion point does not increase the potential for adverse effects to existing diversions.

(2) It is certified that the permit holder has complied with the provisions of South Dakota State Law relating to completion of the construction of the water supply system and is entitled to divert 1.78 cubic feet of water per second for beneficial use. The location of the diversion point is approximately 2,275 feet south and 1,125 feet east of the NW corner of Section 18, T110N, R48W (SW ¼ NW 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 18, T110N, R48W					
SW ¼ NW ¼	24 acres	NW ¼ SW ¼	30 acres	SW ¼ NE ¼	10 acres
SE ¼ NW ¼	37 acres	NE ¼ SW ¼	27 acres		
		SW ¼ SW ¼	1 acre	NW ¼ SE ¼	15 acres
		SE ¼ SW ¼	2 acres		
Total - 146 acres					

(4) Pursuant to South Dakota Water Law 46-5-30.1 Sandra Hanson, Gary D Hanson Family Trust, 21030 478th Ave, White SD 57276 the holder and/or owner of Water Right No. 6622-3 is issued a license to appropriate water, the right to use 1.78 cubic feet of water per second from ground water (one well – Rutland Aquifer) with a priority date of May 5, 2005 from the location specified in (2) of this license. The water is to be conducted to and upon lands specified in (3) 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. 6622-3 and subject to the following qualifications:

- The well approved under this Permit will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
- The well authorized by Permit No. 6622-3 shall be constructed by a licensed well driller and construction of the well and installation of the pump shall comply with the Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) pursuant to Section 74:02:04:28 (*well drilled by Kaiser Drilling in April, 2005; log not available*).

continued

- The well approved under this Permit shall be valved and the flow reduced to the amount needed or to a minimum when not being used. If this well is abandoned or the Permit cancelled, the well must be plugged in accordance with Water Management Board Rules, Chapter 74:02:04.
- This Permit is approved subject to the irrigation water use questionnaire being submitted each year.

Garland Erbele

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

JUN 20 2012

date

