

WATER PERMIT NO. 7058-3

Name of Applicant: **Ken Dickson**

Address: **40689 218 St, Cavour SD 57324** Phone: **605 353-1196**

Amount of Water Claimed: **1.78 cfs** Total Acres: **132**

Source of Water Supply: **groundwater (one well)**

Water to be used for: **irrigation** County: **Beadle**

Type of Waste Disposal System:

Location: **10 miles southwest of Cavour**

PRIORITY Date Received: **8-22-08**

Application/License Fee: **\$300**

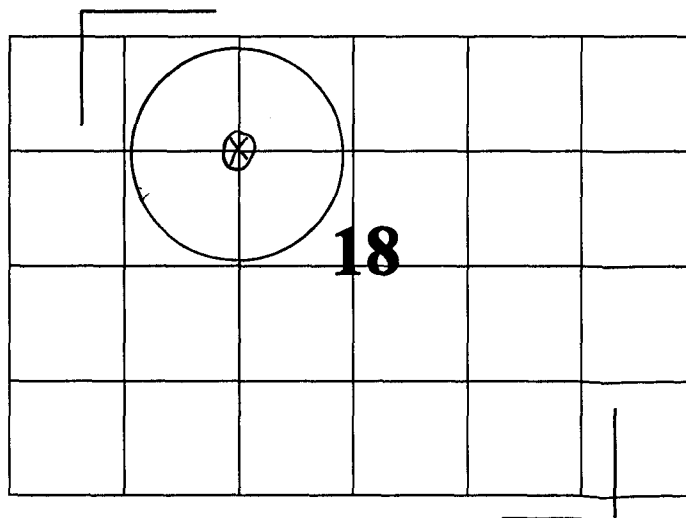
Corrected Application Received: **8-29-08**

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

Remarks:

Diversion Point: **Center of NW ¼ Sec 18-T109N-R60W**

Land to be Irrigated: **NW ¼ Sec 18-T109N-R60W**



Depth of Well: **90 feet deep**

Well Driller:

Remarks:

Type of Map: **aerial**

Prepared by: **Kristi Geyer, Beadle Co FSA**

Reviewed and the Number Assigned on: **9-2-08**

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>7058-3</u> (office use only)	Hydrologic Unit <u>10160006</u>
	Basin <u>James River</u>	
	Newspaper <u>Plainsman</u> <u>PO 1278</u> <u>Huron</u>	
	<u>665-352-6401</u> <u>57350</u>	

RECEIVED
AUG 22 2008
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 Ken Dickson Phone 605 353-1196
(check one) ☒ Owner ☐ Tenant/lessee
Mailing Address 40689 218 St Carour State SD 57324
(Street, RR, or Box and City) (Zip Code)
- Amount of water claimed 1.78*CFS or 800**GPM 132***AF Total Acreage 132
(*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)
well in NW 1/4 18 109-60
(approximate center) County Beadle
- County or counties where water will be used Beadle
- Annual period during which water is to be used May 1 thru Sept. 30
- List below each forty acre division, or lot, or fraction thereof and show number of acres to be irrigated in each.
(Attach sheet if more space is needed)

Land Description	Acres	Land Description	Acres
SW 1/4 of NW 1/4 sec 18 109-60	33		
SE 1/4 of NW 1/4 sec 18 109-60	33		
NE 1/4 of NW 1/4 sec 18 109-60	33		
NW 1/4 of NW 1/4 sec 18 109-60	33		

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

Center pivot irrigation system supplied by well water

STATE OF SOUTH DAKOTA) SS

County of Beadle

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, Ken Dickson, 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 Ken Dickson

Subscribed and sworn to before me this 20th day of August 20 08

Expires: 11-2-09

Shari Mortensen

Notary Public signature

Shari Mortensen

**SOUTH DAKOTA
WATER PERMIT NO. 7058-3**

Date of first receipt of application August 22, 2008.

Date of return to applicant for corrections, amendments or changes August 25, 2008.

Date of receipt of corrected application August 29, 2008.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 7058-3 to Ken Dickson, 40689 218th St, Cavour SD 57324 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. 7058-3 appropriates 1.78 cubic feet of water per second from one well to be completed into the Floyd:East James Aquifer (approximately 90 feet deep) located in approximate center of the NW ¼ Section 18 to irrigate 132 acres located in the NW ¼ Section 18; all in T109N-R60W.
2. The amount of the appropriation may not exceed 2 acre feet annually for each acre of land to which water is actually and beneficially applied for irrigation. The water is to be used during the following described annual period: May 1 – September 30.
3. The date from which applicant may claim right is August 22, 2008.
4. The date of approval of Permit No. 7058-3 is November 17, 2008.
5. One-fifth of the construction is to be completed on or before May 17, 2011.
6. All construction is to be completed on or before November 17, 2013.
7. Water is to be put to beneficial use on or before November 17, 2017.
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. 7058-3 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

JAN 27 2009
date



Supplemental Information

(type or print in ink)

1. Well Information - Proposed Construction

- a) Drill Hole Diameter 12.75" Depth 90'
- b) Casing Type Plastic Diameter 8" Thickness 1/2"
- c) Screen Type Manufactured Diameter 8" Thickness
- d) Gravel Pack 54' - 84' Length of Gravel Pack 30'
- e) Depth to Top of Water Bearing Material 90'
- f) Depth to Water (ground surface to water level) 40'
- g) Distance to nearest existing domestic well:
On applicants property 1 1/2 miles On property owned by others 1/2 mile

2. Wastewater Disposal System Information

- a) Type of System (i.e. septic tank, drain field) None
- b) System Capacity (gallons) Year Constructed
- c) Connected to the City of Sanitary System

3. Dugout Information

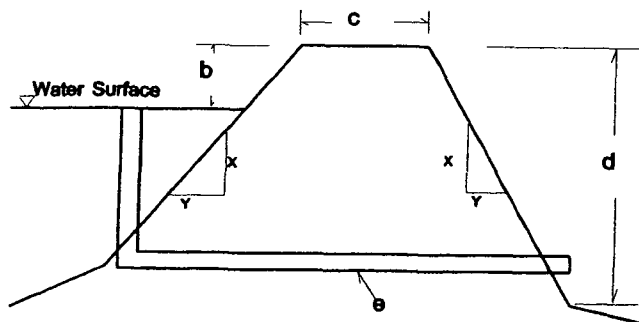
- a) Surface Dimensions None Depth
- b) Depth to water (ground surface to water level)

4. Water Storage Dams

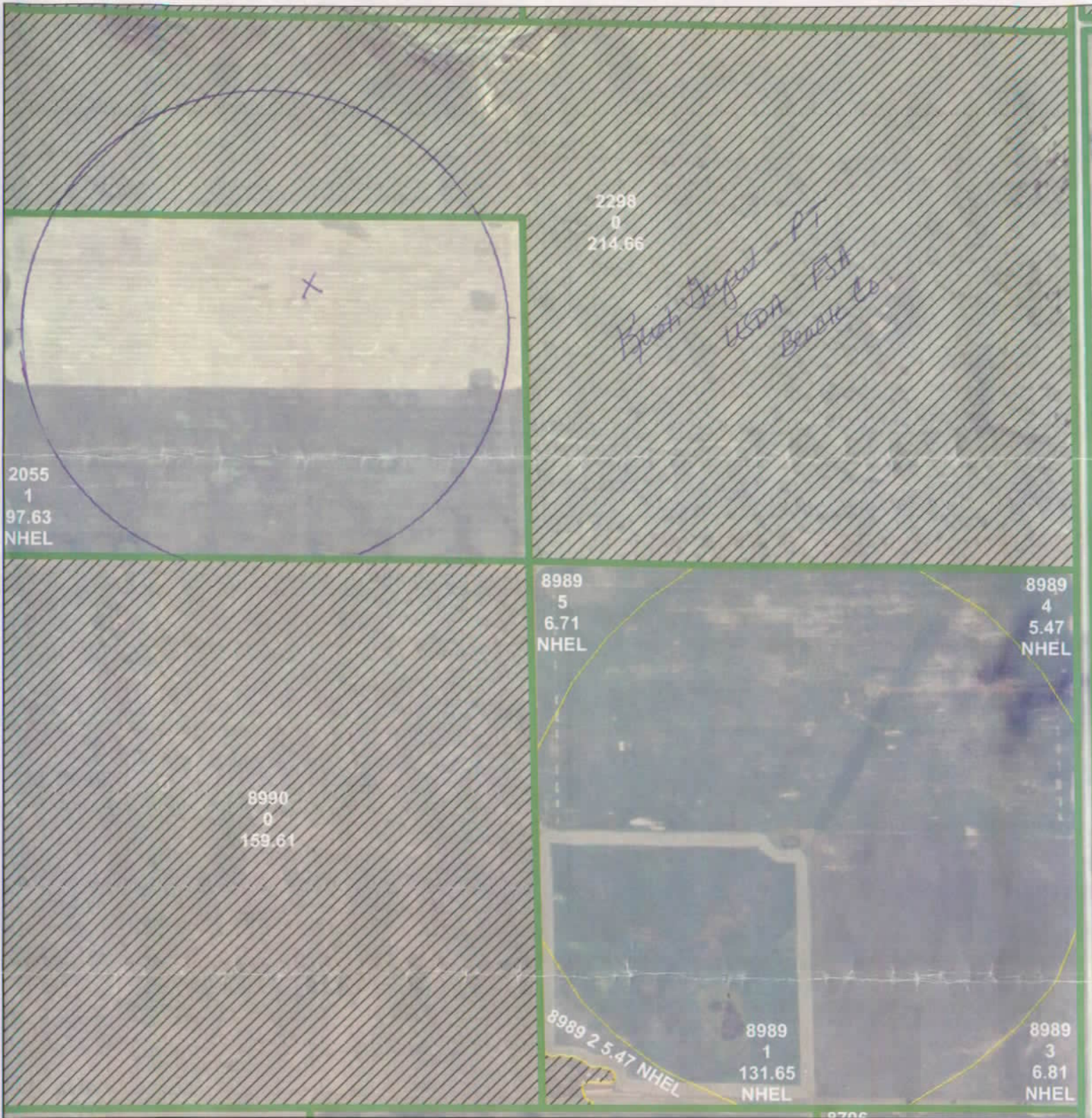
If the proposed water use system contains one or more storage dams, please furnish the information requested below for each dam. The locations of the dams need to be shown on the map submitted with the application.

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

None



- 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



USDA U.S. Dept. of Agriculture
Farm Service Agency



18-109N-60W

Beadle County South Dakota

March 13, 2006

RECEIVED
AUG 22 2008

2004 Digital Orthophotography
1 inch equals 620 feet

WATER RIGHTS
PROGRAM

	Tract Boundary
	Field Boundary
	Non Crop
	CRP
	Easement

USDA FSA maps are for FSA Program administration only. This map does not represent a legal survey or reflect actual ownership; rather it depicts the information provided directly from the producer and/or the 2005 ortho rectified imagery for South Dakota. The producer accepts the data 'as is' and assumes all risks associated with its use. The USDA Farm Service Agency assumes no responsibility for actual or consequential damage incurred as a result of any user's reliance on this data outside of FSA Programs.

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date 8/25, 2008

RECEIVED OF Kenneth J Dickson 40689 218th St Cavour SD 57324

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

Fee for Application for Permit No. <u>7058-3</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>7058-3</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.

03728

By

Michael Schulte

Chief Engineer



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

August 25, 2008

Ken Dickson
40689 218th St
Cavour SD 57324

Dear Mr. Dickson:

Thank you for submitting the *Application for a Permit to Appropriate Water* for irrigation. In order to complete the application the following is required.

- Enclosed is the aerial photo map submitted with the application. Please outline the area to be irrigated and mark the proposed location of the well with an "X".
- Also, the map must be signed by one of the following: Registered Land Surveyor, Registered Professional Engineer or by any other government employee who normally prepares maps as a part of his assigned duties. It appears the map came from the Beadle County FSA office. Someone with that office would be qualified to sign the aerial photo map.
- If available, please submit a well log or test hole log signed by a licensed South Dakota well driller.

If you have any questions, please contact me.

Sincerely,

Karen Schlaak

Karen Schlaak
Water Rights Program
605 773-3352
karen.schlaak@state.sd.us

*Returned map
Aug 29, 2008*

enclosure



**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. 7058-3, Ken Dickson**

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. 7058-3, Ken Dickson, 40689 218th Street, Cavour SD 57324.

The Chief Engineer is recommending APPROVAL of Application No. 7058-3 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. 7058-3 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 22, 2008

NOTE: The Water Rights Program encourages you to conduct test drilling to determine the well production capability at the proposed well site. The report prepared on your application finds that the proposed site is at or near the edge of the aquifer boundary.

**Report on Water Permit Application No. 7058-3
for Ken Dickson
September 10, 2008**

Application No. 7058-3 proposes to appropriate 800 gallons per minute (1.78 cfs) from one well approximately 90 feet deep located in the NW ¼ of Section 18, T109N R60W in Beadle County. The water is to be used to irrigate approximately 132 acres located in the NW ¼ Section 18; all in T109N R60W. The annual period during which water will be used is May 1 through September 30.

AQUIFER: Floyd: East James (F:EJ)

This report will address the availability of unappropriated water from the East James management unit of the Floyd aquifer.

**WATER AVAILABILITY
Aquifer Characteristics:**

The Floyd East James is a mostly buried glacial outwash (sand and gravel) under predominantly confined (artesian) conditions. The aquifer underlies 146,000 acres and contains an estimated 700,000 acre feet of recoverable water in storage in Beadle County (Hedges, 1982). The aquifer extends into Sanborn and Miner Counties to the south and is hydraulically connected to the Niobrara Formation which underlies the outwash in some areas. Groundwater movement is basically from east to west towards the James River which acts as a hydrologic boundary (discharge area) for the aquifer (Emmons, 1988). Pearl Creek also is a potential recharge/discharge zone for the aquifer.

Observation Well Data:

The Water Rights Division monitors two observation wells, BD-76N and BD-80H which are located within two miles of this application location. Water levels for these wells show good response to climatic conditions, that is, rising water levels during wet years (recharge) and gradually declining water levels during dry years due to natural discharge and to pumping. The water level record indicates that the aquifer is capable of sustaining additional withdrawals (Water Rights, 2008).

recharge to the aquifer has not been quantified for the aquifer. Recharge has been estimated to range from 0.30 inches per year in the confined portion of the aquifer to 3.4 inches per year for the unconfined portion of the aquifer (Hedges, 1983).

However, assuming average annual withdrawals from the aquifer will at least equal the average proposed by this application plus the average of existing users ($2,506 \text{ ac-ft/yr} + 264 \text{ ac-ft/yr} = 2,770 \text{ ac-ft/yr}$), an average annual recharge rate of only 0.08 in per year would be required to balance withdrawals. The calculated required recharge rate of 0.08 inches per year is well below the range of estimates for annual recharge presented by Hedges (1983) and is in fact on the conservative side.

Conclusions:

1. Water is available from the Floyd East James aquifer.
2. The aquifer is under confined conditions at this location. Drawdown will result from pumping. Interference is not expected to be a problem.
3. Without test well drilling, it is not possible to estimate well potential at this site. It appears that the center of this quarter-section may lie on the edge of the aquifer. The applicant may want to consider moving the well site a quarter mile to the northeast.
4. This well must be constructed in accordance with SD Well Construction Standards.



Hayes Haas
Natural Resources Engineer

Bibliography:

Emmons, P.J., 1988, A Digital Simulation of the Glacial-Aquifer System in Sanborn and Parts of Beadle, Miner, Hanson, Davison, and Jerauld Counties, South Dakota, USGS WRI Report 87-4082, United States Geological Survey, Huron, SD 57350

Hedges, L.S., et al, 1968, Geology and Water Resources of Beadle County South Dakota, USGS, SD DENR, South Dakota Geological Survey, Vermillion, SD, 57069

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

Water Rights, 2008, Unpublished Observation Well Records for Beadle County, SD DENR, Division of Water Rights, Pierre, SD, 57501

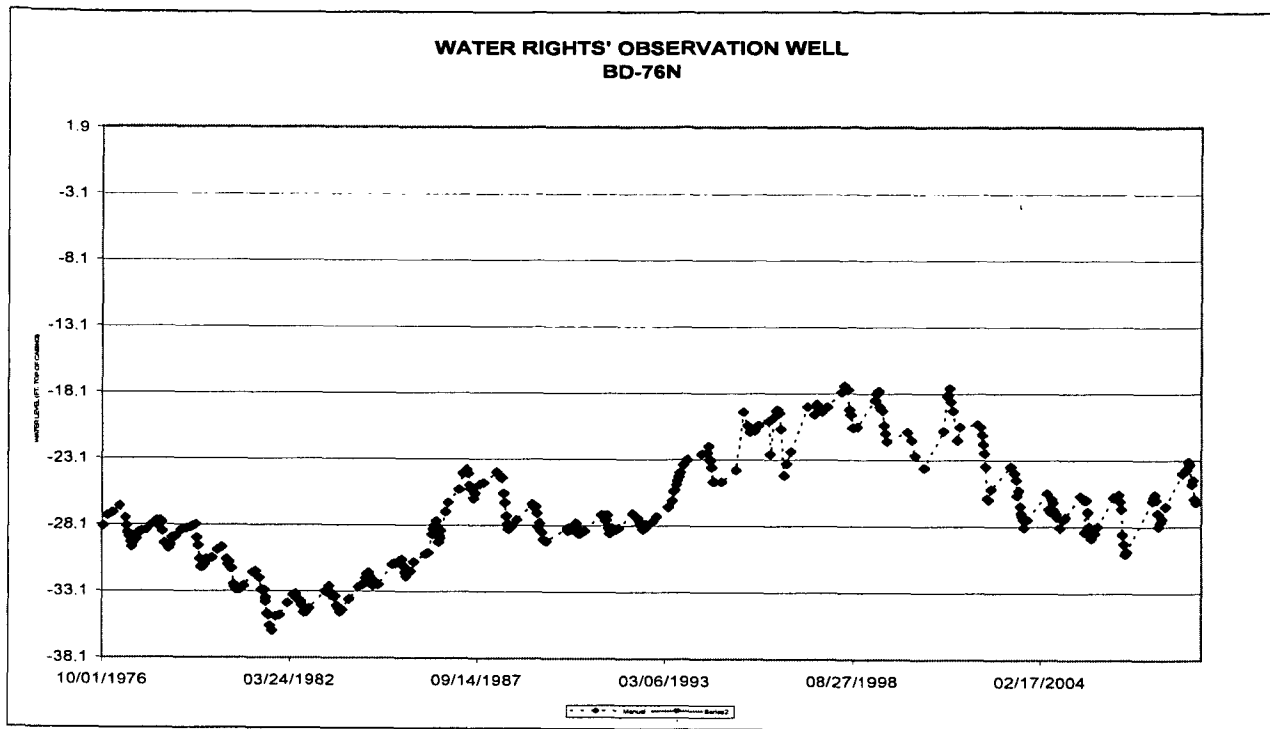


Figure 1. Hydrograph for Water Rights Observation Well completed into the East James management unit within two miles of 7058-3

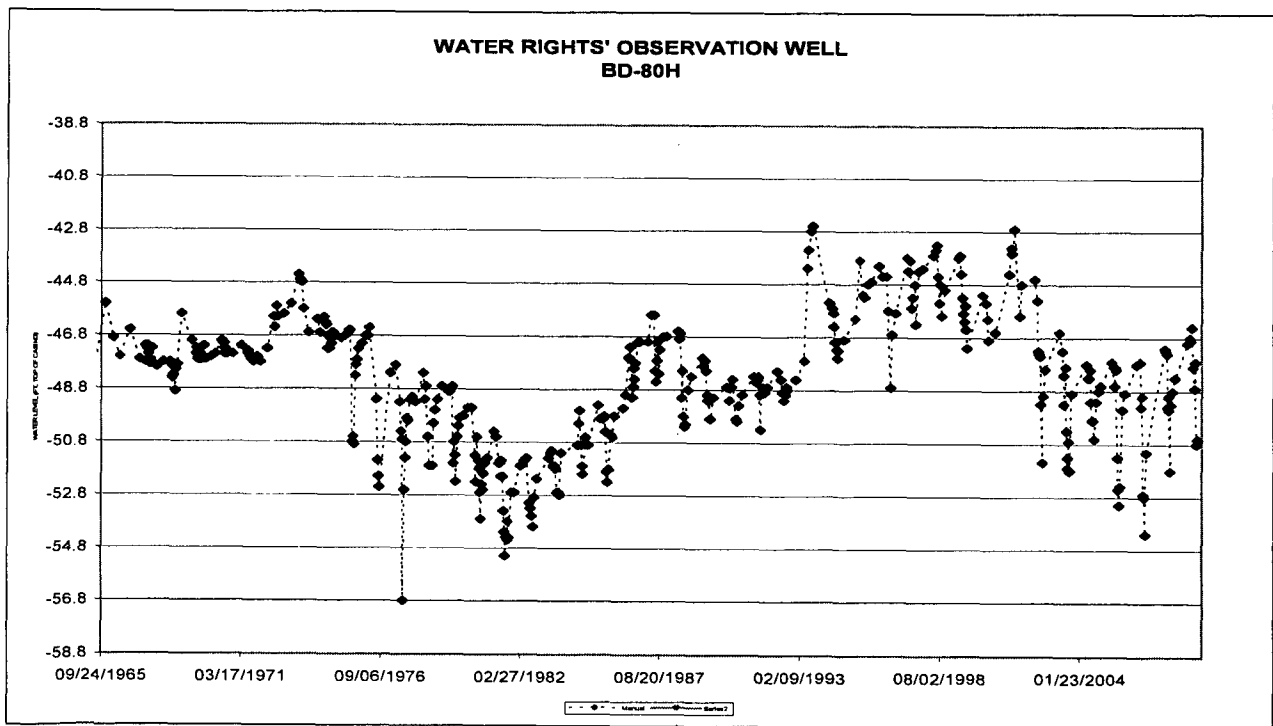


Figure 2. Hydrograph for Water Rights Observation Well completed into the East James management unit within two miles of 7058-3

In general, the hydrographs show that over the period of record, withdrawals have not exceeded recharge.

Review of Existing Water Permits/Rights/Water Use:

Year	IRRIGATION USE (ac-ft/yr)		
	Number of Appropriations	Appropriation (ac-ft/yr)	Pumpage Reported (ac-ft/yr)
2007	54	22122	2403.5
2006	54	22122	3799.91
2005	54	22124	2982.73
2004	55	22332	2704.98
2003	50	20899	3393.92
2002	48	20508	3591.92
2001	46	19868	1875.5
2000	46	19793	1535.38
1999	46	19936	1258.57
1998	46	19936	1718.61
1997	48	20575	1580
1996	47	20050	2412.31
1995	48	20683	1326.21
1994	47	20062	2636.75
1993	48	20399	303.3
1992	49	20737	1774.5
1991	53	22319.2	2994.1
1990	53	22325.2	2143.7
1989	54	22981.2	4158.4
1988	55	23386.2	4782.2
1987	57	24454.2	2470
1986	63	27027.2	1078
1985	65	28815.2	1680
1984	68	32877.2	1842
1983	56	24943.2	3337.73
1982	57	25059.2	2228.2
1981	92	44923	5180
1980	83	42339	2854
1979	78	40002	2628
AVERAGE	55.86	24606.83	2506.01
MAXIMUM	92	44923	5180
MINIMUM	46	19793	303.3

Table 1. Irrigation usage from the East James Management Unit of the Floyd aquifer (Water Rights, 1979-2008).

There are seven existing water permits/rights for irrigation located within 2 miles of this application. Water levels do fluctuate as a result of area pumping but this does not affect the availability of water from the aquifer.

Recharge:

Recharge to the Floyd East James aquifer in Beadle County occurs through direct infiltration of precipitation and runoff into permeable surface deposits (Howells, 1968). Average annual

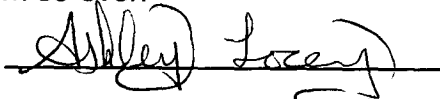
PRINTER'S AFFIDAVIT

STATE OF SOUTH DAKOTA,
COUNTY OF BEADLE: ss.

I, Ashley Lorenz, being duly sworn on oath, say that THE PLAINSMAN is a daily paper published at Huron, Beadle County, South Dakota, and that said newspaper has a bona fide circulation of at least 250 copies daily; that said newspaper has been published within said county for fifty-two consecutive weeks immediately prior to this date, that said newspaper is printed in whole or in part, in an office maintained at said place of publication; that I am Legal Advertising Coordinator of said newspaper and know the facts herein state. The annexed notice headed:

KEN DICKSON - Not Water Appl (SDDENR)

Was published for Two days, once each week, on the same day, in said newspaper, and not in any supplement of the said 30th day of Oct 2008 and the last publication was on the 6th day of Nov. 2008. That the full amount of the fee charged for publishing is: FIFTY SEVEN & 02/00 Dollars insures to the benefit of the publisher of said newspaper; that no agreement or understanding for the division there of has been made with any other person, and that no part there of has been agreed to be paid to any person whom so ever.



Subscribed and sworn to before me this 17th day of November, 2008


Notary Public, South Dakota

My term expires 08/27/2010

Legal # 425

RECEIVED

NOV 19 2008

**WATER RIGHTS
PROGRAM**

FP 10-30-08

L.P. 11-0608

**NOTICE OF
APPLICATION
NO. 7058-3**

to Appropriate Water

Notice is given that Ken Dickson, 40639 218th St, Cavour SD 57324 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 Floyd:East James Aquifer (approximately 90 feet deep) located in approximate center, of the NW 1/4 Section 18 to irrigate 132 acres located in the NW 1/4 Section 18; all in T109N-R60W.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 7058-3 because, 1) unappropriated water is available, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest. In accordance with SDCL 46-2A-23, the Chief Engineer will act on this application, as recommended, unless a petition is filed opposing the application or the applicant files a petition contesting the Chief Engineer's recommendation. If a petition opposing the application or contesting the recommendation is filed, then a hearing will be scheduled and the Water Management Board will consider this application. Notice of the hearing will be given to the applicant and any person filing a petition.

OK

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 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 17, 2008.

The petition may be informal, but must include a statement describing the petitioner's interest in the application, the petitioner's reason 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
No. 425 (adv)



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

October 22, 2008

The Plainsman
PO Box 1278
Huron SD 57350

ATTENTION: Legal Public Notice

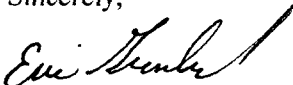
Enclosed is a Notice on Application No. 7058-3 to Appropriate Water to be published twice. Please publish the first notice on October 30, 2008 with the second publication 7 days later. The text of the notice can be e-mailed to your paper by contacting Karen Schlaak at (605) 773-3352.

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 Ken Dickson, 40689 218th St., Cavour SD 57324 (Ph # 605-353-1196).

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. 7058-3

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

Date _____

We are in receipt of your letter of October 22, 2008 enclosing Notice to Appropriate Water by Application No. 7058-3 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

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

October 22, 2008

Ken Dickson
40689 218th St
Cavour SD 57324

Dear Mr. Dickson:

Water Permit Application No. 7058-3 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 Plainsman printed at Huron SD (Ph # 605-352-6401). 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 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

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 October 30, 2008 with the second publication 7 days later. The applicant is responsible for payment.

NOTICE OF APPLICATION NO. 7058-3 to Appropriate Water

Notice is given that Ken Dickson, 40689 218th St, Cavour SD 57324 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 Floyd:East James Aquifer (approximately 90 feet deep) located in approximate center of the NW ¼ Section 18 to irrigate 132 acres located in the NW ¼ Section 18; all in T109N-R60W.

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DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

JAN 27 2009

Ken Dickson
40689 218th St
Cavour SD 57324

Dear Mr. Dickson:

Enclosed is Water Permit No. 7058-3 authorizing construction of your water diversion system and beneficial use of the water, not exceeding the limits as specified in the Water Permit.

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

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

Sincerely,

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

enclosures

SOUTH DAKOTA WATER WELL COMPLETION REPORT

7058-3

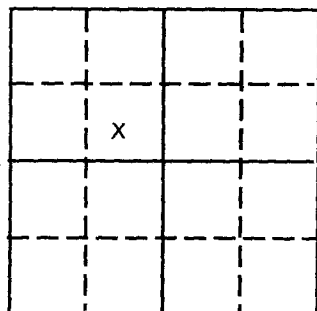
11-02

Location SE $\frac{1}{4}$ NW $\frac{1}{4}$ Sec 18 Twp 109 Rg 60

County

Beadle

North



Please mark well location with an "X"

Well Completion Date

10/29/2009

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

? _____ ft. from _____ (identify source)

PROPOSED USE:

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

METHOD OF DRILLING:

Reverse

CASING DATA:

☐ Steel ☒ Plastic ☐ Other

If other describe _____

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
40.0 LB/FT	8.00 IN	0.0 FT	72.0 FT	12.00 IN

LB/FT	IN	FT	FT	IN

GROUTING DATA:

Grout Type	No. of Sacks	Grout Weight	From	To
VolClay	12	Lb/gal	0.0 Ft	60.0 Ft

Describe grouting procedure
Pumped In

SCREEN:

☐ Perforated pipe ☒ Manufactured

Diameter 8.00 Inches Length 20.0 Feet

Material PVC

Slot Size .057 Set From 72.0 Feet to 92.0 Feet

Other information _____

WAS A PACKER OR SEAL USED?

☒ Yes ☐ No

If so, what material? PeaRock

Describe packer(s) and location

4200# from 60-92

DISINFECTION: Was well disinfected upon completion?

☐ Yes, How? _____

Lab sample sent to for water quality analysis ☐ No, Why Not? _____

Well Owner: Ken Dixon

Business Name: _____

Address: 40689 218th St

City, State, Zip: Cavour SD 57324

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
Yellow Clay w/ Gravel Streaks	0	20
Yellow Sand and Gravel	20	26
Blue Clay w/ Sand Streaks	26	60
Fine to Med Grey Sand	60	70
Coarse Sand and Pearock	70	80
Coarse Pearock	80	92
White Chalk	92	

STATIC WATER LEVEL 54.0 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: 150 GPM with Air

☐ Bailed

☐ Other

Pumping Level Below Land Surface

_____ Ft. After _____ Hrs. pumped

_____ Ft. After _____ Hrs. pumped

If pump installed, pump rate: _____ GPM

REMARKS

Test Pumped at 450 GPM Drawdown 72 ft after 6 hours

This well was drilled under license # 440

And this report is true and accurate.

Drilling firm: Pullman Drilling Inc.

Signature of License Representative: _____

Signature of Well Owner or Equitable Property Holder: _____

Date: _____

RECEIVED
JAN - 7 2010
WATER RIGHTS PROGRAM

Report of Examination of Works and/or Application of Water to Beneficial Use For Permit No. 7058-3

I have this day, November 19, 2015, made a thorough examination of the water use system constructed by Ken Dickson of 40689 218 St, Cavour SD 57324 Permit No. 7058-3, bearing the priority of 08/29/2008 authorizing the diversion of 1.78 cu. ft. per second of the waters of Floyd: East James aquifer for irrigation purposes, in Beadle County.

Inspection contact & relationship **Ken Dickson**
to permit holder, if applicable:

A. Works used to divert the water:

Well Information:

- 1) Well Drilling Firm: Pullman Drilling Inc.
- 2) No. of Wells One
- 3) Depth 92 feet
- 4) Well log is available Yes

Casing:

- 1) Diameter 8.0 inches
- 2) Length 72 feet
- 3) Type plastic

Screen:

- 1) Type PVC
- 2) Length 20 feet
- 3) Static water level 54 feet

Pump:

- 1) Make Twin Disc
- 2) Model C110HP4
- 3) Capacity 450 GPM

Motor:

- 1) Make Amarillo
- 2) Model No. S40B
- 3) Horsepower rating 40 hp

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

- 1) Type underground pipe
- 2) Size unknown inches
- 3) Length ≈300 feet

C. Works used to apply water to beneficial use:

Center pivot:

- 1) Make Zimmatic
- 2) Overall length 1,121 feet
- 3) Number of towers 6

4) End gun Yes (end gun range 78 ft)

5) Pressure: 35 psi

6) Capacity 450 GPM

Chemigation Equipment:

1) Does chemigate No

D. Compliance with Permit Requirements:

1) Permit qualifications being abided by Yes

2) Irrigation Questionnaires checked to determine if permit owner started irrigation by the end of construction period Yes

List any extended period of nonuse: none

3) Exceptions to compliance are: none

E. Condition and Location:

1. The system is in good condition with the point of diversion located as follows: Approximately 1,625 feet east and 1,500 feet south of the NW corner of Section 18-T109N-R60W (SE ¼ NW ¼)(latitude 44.24967 N and longitude 98.08813 W).

2. The works are capable of diverting and conveying to the place of use 1.00 cu. ft. per second of water which is to be used for irrigation. Water has been put to beneficial use to the maximum extent as follows:

legal description/acreage

NW ¼ NW ¼ Sec 18-T109N-R60W 21 acres

NE ¼ NW ¼ Sec 18-T109N-R60W 23 acres

legal description/acreage

SW ¼ NW ¼ Sec 18-T109N-R60W 29 acres

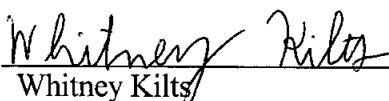
SE ¼ NW ¼ Sec 18-T109N-R60W 31 acres

comprising a total of 104 acres of land and the license should be issued for 1.00 cfs.

3. All structures, wells and lands on map Yes

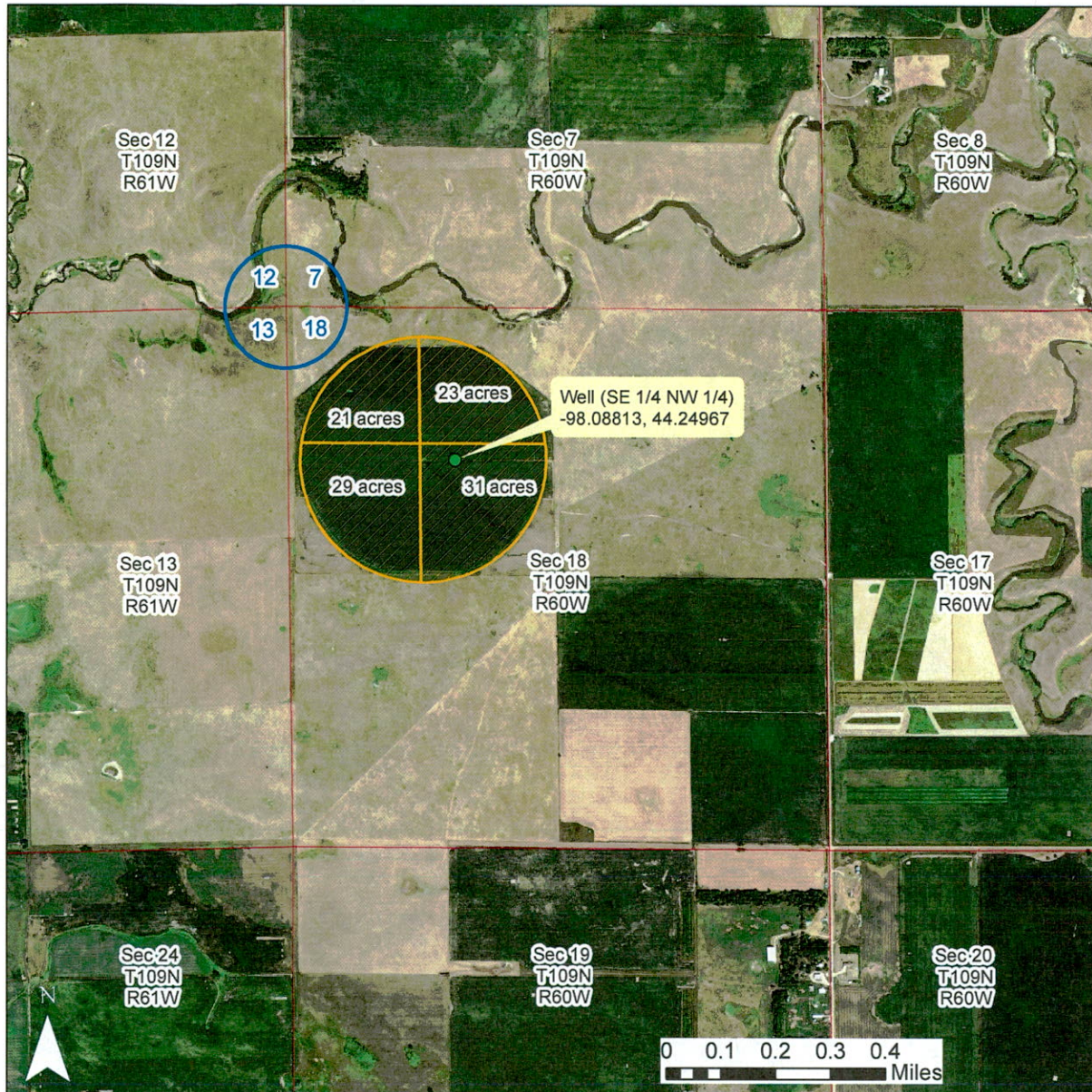
F. Comments or other permit(s) associated with the project:

none


Whitney Kilts

Natural Resources Engineer
DENR, Water Rights Program

Date report completed: Jan. 27, 2016



Diversion point located using Garmin eTrex 10 GPS
Date: January 27, 2016

Completed by: Whitney Kilts
Whitney Kilts, Natural Resources Engineer
SD DENR, Water Rights Program

Water Right No. 7058-3



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

FEB 01 2016

7058-3

Ken Dickson
40689 218th St
Cavour SD 57324

Dear Mr. Dickson:

Enclosed is Water License No. 7058-3. 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. 7058-3, 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,

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

enclosures

**STATE OF SOUTH DAKOTA
WATER LICENSE NO. 7058-3**

(1) Ken Dickson, 40689 218th St, Cavour SD 57324 made Application No. 7058-3, August 22, 2008 for a water permit to divert 1.78 cubic feet of water per second from ground water, one well (Floyd East James Aquifer), Beadle County, South Dakota for irrigation purposes. Permit No. 7058-3, with a priority date of August 22, 2008 was approved November 17, 2008 and issued to the applicant for diversion of water with construction of the described water supply system to be completed on or before November 17, 2013 and for the application to beneficial use of said water on or before November 17, 2017.

(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 1.00 cubic feet of water per second for beneficial use. The location of the diversion point is approximately 1,625 feet east and 1,500 feet south of the NW corner of Section 18, T109N, R60W (SE ¼ NW ¼).

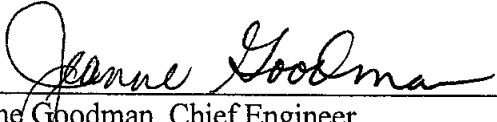
(3) The permit holder has complied with the provisions of South Dakota State Law relating to the application of water to beneficial use to irrigate the following land:

T109N, R60W, Section 18	NW ¼ NW ¼	21 acres
	NE ¼ NW ¼	23 acres
	SW ¼ NW ¼	29 acres
	SE ¼ NW ¼	31 acres
	Total	104 acres

(4) Pursuant to South Dakota Water Law 46-5-30.1 Ken Dickson, 40689 218th St, Cavour SD 57324 the holder and/or owner of Water Right No. 7058-3 is issued a license to appropriate water, the right to use 1.00 cubic feet of water per second from ground water, one well (Floyd East James Aquifer) with a priority date of August 22, 2008 from the location specified in (2) of this license for irrigation purposes.

This license is subject to South Dakota Water Law, any limitations or conditions listed in Water Right No. 7058-3 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. 7058-3 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. ***The well was completed in October 2009 by Pullman Drilling Inc. A copy of the well log is on file with the Water Rights Program.***
- This Permit is approved subject to the irrigation water use questionnaire being submitted each year.


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

FEB 01 2016
date

