

WATER PERMIT NO. 7954-3

Name of Applicant: **Pearl Creek Colony**

Address: **21085 415th Ave, Iroquois SD 57353** Phone: **605 546-2452**

Amount of Water Claimed: **1.78** Total Acres: **160 acres**

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

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

Type of Waste Disposal System:

Location: **4 miles southwest of Cavour**

PRIORITY Date Received: **1-21-2014**

Application/License Fee: **\$ 1050**

Corrected Application Received: **1-28-2014**

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

Remarks:

Diversion Point: **center of NW 1/4 Sec 24-T110N-**
R61W

Land to be Irrigated: **NW 1/4 Sec 24-T110N-**
R61W

Depth of Well: **80 – 100 feet deep**

Well Driller:

Remarks:

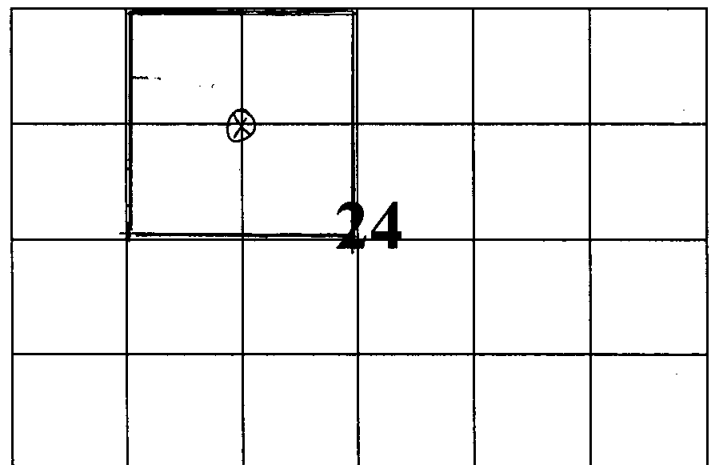
Type of Map: **aerial**

Prepared by:

Reviewed and the Number Assigned on: **1-28-2014**

By: **Karen Schlaak**

Notice of Hearing - date to intervene: _____



FORM 2: Application for uses other than irrigation

(type or print)

Mail to: PMB 2020 DENR - Water Rights 523 E Capitol Ave Pierre, SD 57501-3182 ph. (605) 773-3352	No. <u>7954-3</u>	(office use only) Hydrologic Unit <u>10160006</u>
	Basin <u>James River</u>	
	Newspaper <u>Plainman</u>	<u>Huron SD</u>

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JAN 21 2014

WATER RIGHTS
PROGRAM

Application For Permit To Appropriate Water Within The State Of South Dakota

Check use(s) of water:

☐ Municipal	☐ Suburban Housing	☐ Recreational	☐ Institutional
☐ Rural Water System	☐ Commercial	☐ Fish & Wildlife	☐ Geothermal Heat
☐ Domestic (over 18 gpm)	☐ Industrial	☒ Other <u>Irrigation</u>	

Type of Application:
(check one)

☒ New	☐ Vested Right (Use predates Mar 2, 1955)	☐ Future Use Reservation
☐ Place to Beneficial Use Water Reserved by Future Use Permit No. _____		
☐ Amendment/Correction to Permit No. _____		

Description of amendment/correction: (i.e. change diversion point(s), add diversion point(s), change use, etc.)

1. Name to Appear on Water Permit Pearl Creek Colony
(check one) ☒ Owner ☐ Tenant/lessee ☐ Owner's Legal Agent _____
(name and complete address if different than above name)

Mailing Address 21085 415th Ave Troquois SD 57353
(Address) (City) (State) (Zip Code)

Home Phone 605-546-2452 Cell 605-350-5837 Email _____

2. Amount of water claimed _____ *CFS or 800 **GPM _____ ***AF
(*Cubic Feet per Second) (**Gallons per Minute) (***Acre Feet - storage capacity of dam/dugout or annual use if applicable)

3. Source of water supply Well

4. Location of point of diversion 1 well in NW 1/4 of Sec 24 110N-61W County Beadle
(example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W)

If not a public water supply (e.g. municipal), will water be used outside of the area described above? ☐ Yes ☒ No

If "Yes," where will water be used? _____

(example - NW1/4 section 12-T104N-R53W)

5. County or counties where water will be used Beadle6. Annual period during which water is to be used May 1 - Sept 30

7. Give a description of the project. When available include any preliminary engineering report or other reports or information that will help explain the project. (Attach sheet if more space is needed)

We want to place an irrigation system in NW 1/4 of sect 24 110N-61W
to irrigate 160 acres.

I, Matt Waldner, the applicant, certify that I have read this application, have examined the attached map, and that the matters stated are true.

SOUTH DAKOTA
WATER PERMIT NO. 7954-3

Date of first receipt of application January 21, 2014.

Date of return to applicant for corrections, amendments or changes January 22, 2014.

Date of receipt of corrected application January 28, 2014.

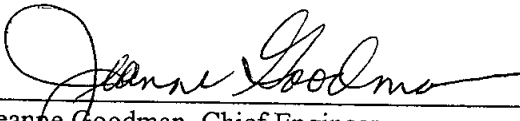
The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 7954-3 to Pearl Creek Colony, c/o Matt Waldner, 21085 415th Ave, Iroquois SD 57353 authorizing the construction of the water use system and the placing of water to beneficial use subject to the following limitations, conditions and qualifications:

1. Water Permit No. 7954-3 appropriates 1.78 cubic feet of water per second from one well to be completed into the Floyd:East James Aquifer (80-100 feet deep) located in the approximate center of the NW 1/4 Section 24 for irrigation of 160 acres located in the NW 1/4 Section 24; all in T110N-R61W.
2. The amount of the appropriation may not exceed 2 acre feet annually for each acre of land to which water is actually and beneficially applied for irrigation. The water is to be used during the following described annual period: May 1 – September 30.
3. The date from which applicant may claim right is January 21, 2014.
4. The date of approval of Permit No. 7954-3 is March 31, 2014.
5. One-fifth of the construction is to be completed on or before September 30, 2016.
6. All construction is to be completed on or before March 31, 2019.
7. Water is to be put to beneficial use on or before March 31, 2023.
8. Water rights obtained in compliance with the laws of the State of South Dakota may not be unlawfully impaired by this appropriation.

QUALIFICATIONS

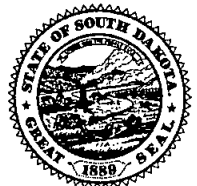
1. The well under this Permit will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
2. The new well authorized by Permit No. 7954-3 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: 
Jeanne Goodman, Chief Engineer
Water Rights Program
Department of Environment and Natural Resources

APR 24 2014

date



Supplemental Information

(type or print)

1. Well Information (check one or both as applicable) ☒ Drilling new well(s) ☐ Using existing well(s)

- a) If new wells, how many 1 Have test holes been drilled ☐ Yes ☒ No Drilled by _____
(if yes, please provide copies of logs)
- b) If existing wells, how many _____ Provide copy of log(s), if available. Drilled by _____
- c) Well Depth 80' to 100' Depth to Top of Water Bearing Material 20' Depth to Water from Surface 15'
- d) Distance to nearest existing domestic well:

On applicant's property None On property owned by others within 3/4 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

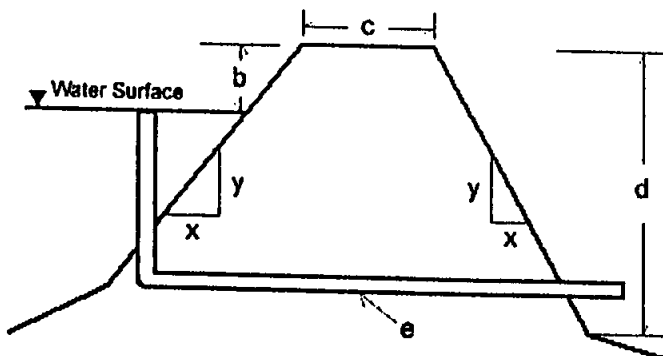
3. Dugout Information

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

4. Water Storage Dams

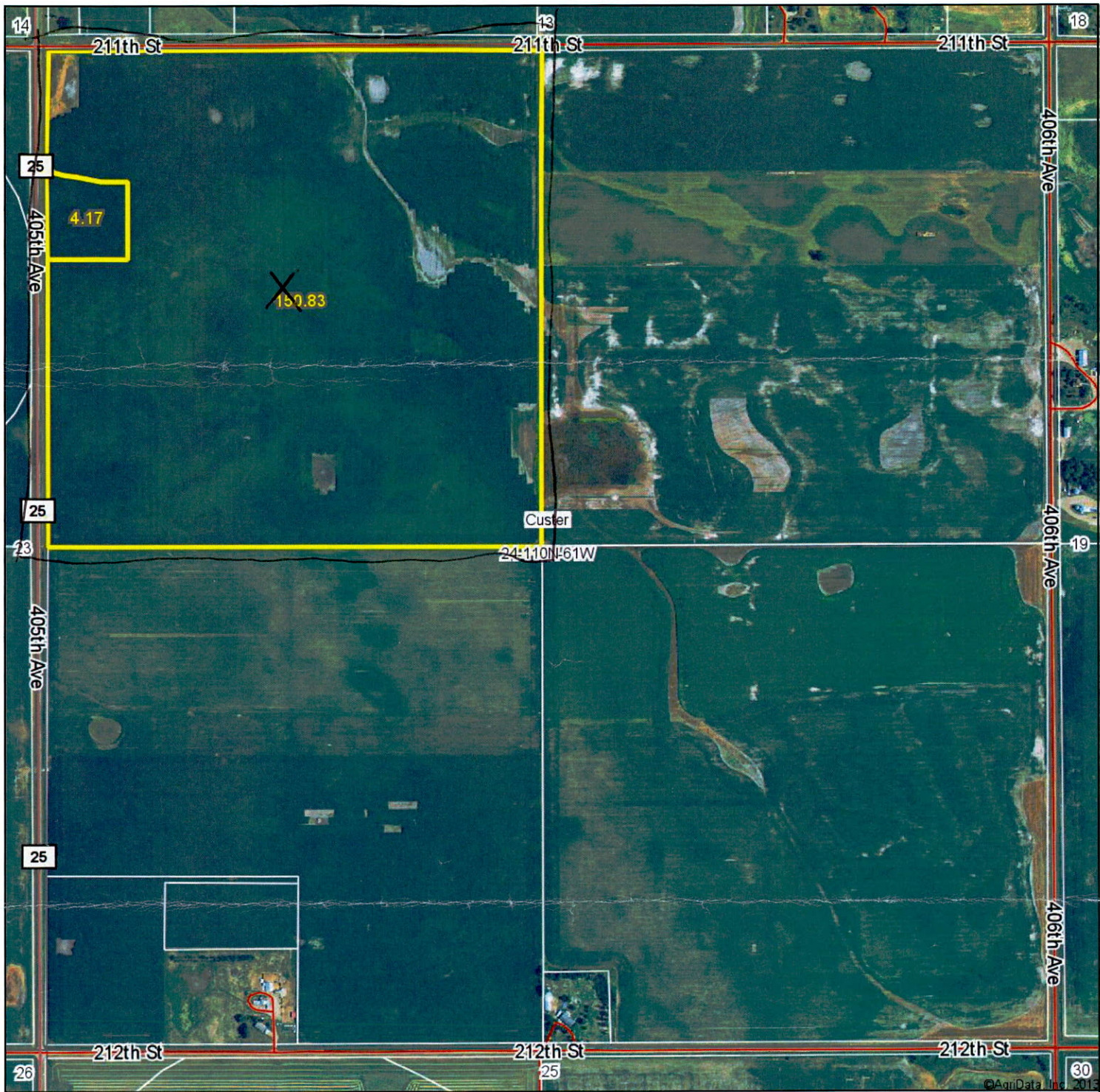
If the proposed water use system contains one or more storage dams, please furnish the information requested below for each dam. The locations of the dams need to be shown on the map submitted with the application.

- 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 (e.g. 3 to 1 is a typical slope)
Upstream _____
Downstream _____
- h) Surface Area of Impoundment _____
- i) Storage _____ Acre Feet
- j) Drainage Area Above Dam _____ Acres

Aerial Map



24-110N-61W
Beadle County
South Dakota

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JAN 21 2014
WATER RIGHTS
PROGRAM

map center: 44° 19' 9.38, 98° 6' 13.76
scale: 9381

1/15/2014

Maps Provided By:

CUSTOMIZED ONLINE MAPPING
© AgriData, Inc. 2013 www.AgriDataInc.com

Field borders provided by Farm Service Agency as of 5/21/2008. Aerial photography provided by Aerial Photography Field Office.

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date 1/22, 20 14

RECEIVED OF Pearl Creek HB 21085 415th Ave Iroquois SD 57353

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

Fee for Application for Permit No. <u>7954-3</u> to Appropriate Water, to construct and to put water to beneficial use	850	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>7954-3</u>	200	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	1050 00

No. **06666**

By Joann Goodman
Chief Engineer



**DEPARTMENT OF ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
denr.sd.gov



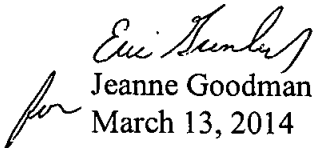
**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT APPLICATION
NO. 7954-3, Pearl Creek Colony**

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. 7954-3, Pearl Creek Colony, Matt Waldner, 20185 415th Avenue, Iroquois SD 57353.

The Chief Engineer is recommending APPROVAL of Application No. 7954-3 because 1) the proposed diversion can be developed without unlawful impairment of existing rights, 2) the proposed use is a beneficial use and 3) it is in the public interest with the following qualifications:

1. The well 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 new well authorized by Permit No. 7954-3 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.


for Jeanne Goodman
March 13, 2014

REPORT TO THE CHIEF ENGINEER

WATER PERMIT APPLICATION NO. 7954-3

Pearl Creek Colony c/o Matt Waldner

March 10, 2014

Water Permit Application No. 7954-3 proposes to appropriate groundwater at a maximum diversion rate of 1.78 cubic feet of water per second (cfs) from one well to be completed into the East James management unit of the Floyd aquifer. The well is expected to be 80 to 100 feet deep and located in the approximate center of the NW¼ of Section 24, T110N-R61W. Water will be used to irrigate 160 acres located in the NW¼ of Section 24, T110N-R61W.

AQUIFER: East James management unit of the Floyd aquifer (F: EJ)

HYDROGEOLOGY:

The East James management unit of the Floyd aquifer consists of interconnected sand and gravel layers that are often confined by pebbly till (Hansen, 1983). Bedrock or till underlies the aquifer. The aquifer underlies approximately 375,000 acres of Beadle, Hanson, Kingsbury, McCook, Miner, and Sanborn Counties. Thickness varies greatly throughout the aquifer. The average thickness is 30 feet but can reach 118 feet. Assuming a common specific yield of 0.15, the aquifer contains an estimated 1,685,000 acre feet (ac-ft) of recoverable water in storage. Groundwater movement is generally westward (Buhler, 2012).

In the area of the proposed well, aquifer materials are generally found 10 and 90 feet below ground surface and could be up to 30 feet thick (SD Geological Survey, 2014; Water Rights, 2014c). Water levels in aquifer are expected to occur from just below ground surface down to 20 feet (Water Rights, 2014a).

SDCL 46-2A-9

Pursuant to SDCL 46-2A-9, a permit to appropriate water may be issued only if there is a reasonable probability that there is unappropriated water available for the applicant's proposed use, that the proposed diversion can be developed without unlawful impairment of existing rights and that the proposed use is a beneficial use and in the public interest. This report will address the availability of unappropriated water from the aquifer and the potential for impairment of existing rights.

WATER AVAILABILITY:

The probability of unappropriated water available from an aquifer can be evaluated by considering SDCL 46-6-3.1, which requires "No application to appropriate groundwater may be approved if, according to the best information reasonably available, it is probable 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." If the source of the water is older or lower than the Greenhorn Formation and a public water system has applied for a permit, the Board need not consider the recharge/withdrawal issue. Here, a public water system is not involved and the aquifer is not older or lower than the Greenhorn Formation therefore withdrawal/recharge issue must be considered.

Hydrologic Budget:*Recharge:*

Recharge to the Floyd: East James aquifer occurs primarily by leakage from underlying bedrock. Some recharge occurs through infiltration of precipitation where the aquifer is unconfined (Howells and Stephens, 1968). Average annual recharge has been estimated using several different methods. These estimates range from approximately 7,500 to 22,500 ac-ft/yr (Buhler, 2012; Emmons, 1988; Hedges and others, 1985).

Discharge:

Discharge from the Floyd: East James aquifer occurs through groundwater outflow and well withdrawals (Howells and Stephens, 1968). Currently there are 65 water rights/permits appropriating water from the Floyd: East James aquifer (Water Rights, 2014b).

The amount of water that can be expected to be withdrawn by non-irrigation use water rights/permits at the current appropriation amount, which are all limited by diversion rate, can be estimated by assuming these water rights/permits pump at the maximum authorized diversion rate 60 percent of the time. This amounts to 170 ac-ft/yr (Water Rights, 2014b).

The historic irrigation water use from water rights/permits authorized to the Floyd: East James aquifer is shown in Figure 1. The average irrigation pumpage over the period of record is 2,358 ac-ft/yr. While the irrigation appropriation of the Floyd: East James aquifer has increased in recent years, annual pumpage seems to be more dependent on climatic conditions (Water Rights, 1980-2013). The expected use of irrigation water rights/permits is estimated to be the average pumpage reported over the entire period of record.

There are many domestic wells on file that appear to be completed into the Floyd: East James aquifer. Buhler (2012) estimated domestic use from this aquifer is less than 250 ac-ft/yr. However, many domestic wells are no longer used as primary sources since rural water systems have been introduced in the area.

Hydrologic Budget:

Courts have ruled that if average annual recharge is used, average annual withdrawals should also be used to determine if unappropriated water is available. Data must be presented to show it is probable the average annual recharge exceeds the average annual discharge by at least the amount requested by the water permit application being considered (Memorandum Decision, April 29, 2005; Memorandum Decision, April 11, 2012).

Total withdrawal from the Floyd: East James aquifer is estimated to be 2,548 ac-ft/yr. This is much less than the recharge rate estimates of the aquifer. Therefore, unappropriated water is available from the Floyd: East James aquifer to support the proposed appropriation.

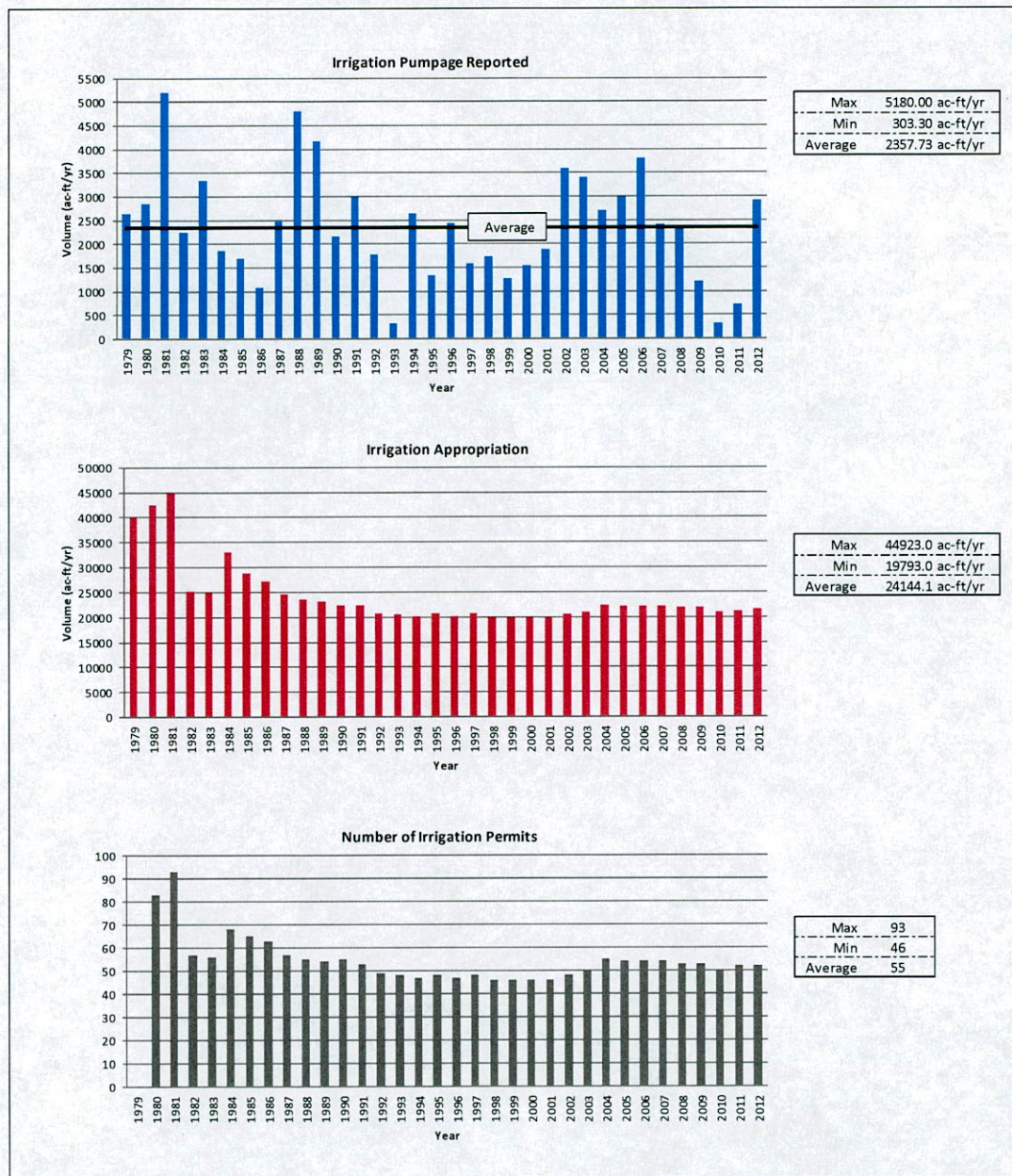


Figure 1: Historic irrigation water use from the Floyd: East James aquifer (Water Rights, 1980-2013)

Observation Well Data:

Administrative Rule of South Dakota Section 74:02:05:07 requires that “the Water Management Board shall rely upon the record of observation well measurements to determine that the quantity of water withdrawn annually from the aquifer does not exceed the estimated average annual recharge of the aquifer.”

The SD DENR-Water Rights Program monitors 51 observation wells completed into the Floyd: East James aquifer. The nearest observation well, BD-68CR, is located approximately one half mile south of the proposed well site. The hydrograph for this observation well is shown in Figure 2.

This hydrograph is typical of many observation wells recording water levels in the Floyd: East James aquifer. Observation well data documents cyclic yet somewhat linear water levels. Temporal well withdrawal is evident but generally masked by climatic conditions. All observation wells record either increasing or steady water levels over the respective period of record, indicating that withdrawals have not exceeded recharge. Therefore, unappropriated water is available from the Floyd: East James aquifer for the proposed appropriation.

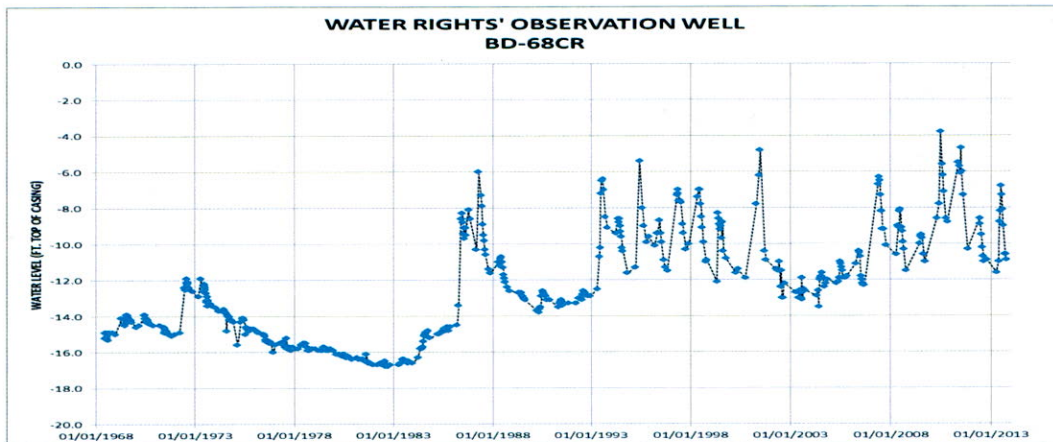


Figure 2: Hydrograph of observation well BD-68CR (Water Rights, 2014a)

EXISTING WATER RIGHTS:

Within one mile of the proposed well site are two water rights/permits authorized for withdrawals from the Floyd: East James aquifer, Ervin Eckmann and David or Elizabeth Eckmann. Both are for irrigation use (Water Rights, 2014b). There are no domestic wells on file that appear to be completed into the Floyd: East James aquifer within one mile of the proposed well site (Water Rights, 2014c).

The confined conditions of the aquifer dictate that withdrawals will cause some drawdown in aquifer water levels in the area of pumping. The Water Management Board has consistently recognized that to place water to maximum beneficial use a certain amount of drawdown may occur. SDCL 46-6-6.1 does not require protection of artesian head pressure as a means of groundwater delivery. Therefore, nearby adequate wells defined by ARSD 74:02:20(7) are not expected to be adversely impaired due to the diversion from the proposed well.

CONCLUSIONS:

1. The water permit application proposes to appropriate groundwater at a maximum diversion rate of 1.78 cfs from one well to be completed into the Floyd: East James aquifer for the irrigation of 160 acres.
2. Unappropriated water is available from the Floyd: East James aquifer to supply the proposed appropriation.
3. The proposed diversion will not adversely impair existing nearby wells.


 Joseph R Stonesifer
 SD DENR-Water Rights Program

Approved by



Ken Buhler
SD DENR-Water Rights Program

REFERENCES:

- Buhler, K.A. 2012. Report on Water Permit Application No. 7239-3, Hanson County Dairy. SD DENR-Water Rights Program. Joe Foss Bldg., Pierre, South Dakota.
- 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: U.S., Geological Survey Water-Resources Investigations Report 87-4082, 59 p.
- Hedges, L.S., Allen, J., and Holly, D.E. 1985. Evaluation of Ground-Water Resources Eastern South Dakota and Upper Big Sioux River, South Dakota and Iowa. Task 7: Ground Water Recharge. South Dakota DENR-Geological Survey, Vermillion, South Dakota.
- Howells, L.W., and Stephens, J.C., 1968, Geology and Water Resources of Beadle County South Dakota, Part II, Water Resources: South Dakota Geological Survey Bulletin 18, 63 p.
- In the Matter of Water Permit Application No. 7239-3, by Hanson County Dairy v. Robert Bender and Stace Nelson, South Dakota First Judicial Court Civ. No. 11-54 (Memorandum Decision, April 11, 2012)
- In the Matter of Water Permit Application No. 6431-3, by Phillip W. Hines v. SD Department of Environment and Natural Resources, South Dakota Sixth Judicial Court Civ. No. HU04-37 (Memorandum Decision, April 11, 2012)
- SD Geological Survey. 2014. Lithologic Logs Database, South Dakota Department of Environment & Natural Resources Geological Survey, Vermillion, South Dakota.
- Water Rights, 1980-2013. "Irrigation Report Summaries." SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, South Dakota.
- Water Rights. 2014a. Observation Well Files, SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, South Dakota.
- Water Rights. 2014b. Water Right/Permit Files, SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, South Dakota.
- Water Rights. 2014c. Water Well Completion Reports, SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, South Dakota.

PRINTER'S AFFIDAVIT

RECEIVED

STATE OF SOUTH DAKOTA,
COUNTY OF BEADLE: ss

APR - 1 2014

WATER RIGHTS
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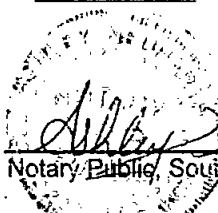
I, ELDON JACOBS, being duly sworn on oath say that the PLAINSMAN is a daily paper published at Huron, Beadle County, South Dakota, and that said newspaper has a bona fide circulation of at least 250 copies daily; that said newspaper has been published within said county for fifty-two consecutive weeks 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:

**SD ENVIRONMENTAL & NATURAL -
NOTICE OF APPLICATION - WALDNER**

was published for one day, in said newspaper, and not in any supplement of the said newspaper, the publication was of the 21ST day MARCH 2014. That the full amount of the fee charged for publishing is: THIRTY-NINE & 74/100 dollars insures to the benefit of the publisher 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 whom so ever.



Subscribed and sworn to me before this 21ST day of MARCH 2014.



Notary Public, South Dakota

My term expires 10/25/2017
Legal #1198

F.P. 03-21-14

**NOTICE OF
APPLICATION
NOS. 7953-3 and
7954-3 to Appropriate
Water**

Notice is given that Pearl Creek Colony, c/o Matt Waldner, 21085 415th Ave, Crookston SD 57353 has filed the following applications for a water permit.

Application No. 7953-3 proposes to appropriate 1.78 cubic feet of water per second (cfs) from one well to be completed into the Floyd-East James Aquifer (80-100 feet deep) located in the approximate center of the SW 1/4 Section 10 for irrigation of 150 acres located in the SW 1/4 Section 10; all in T110N-R60W.

Application No. 7954-3 proposes to appropriate 1.78 cfs from one well to be completed into the Floyd-East James Aquifer (80-100 feet deep) located in the approximate center of the NW 1/4 Section 24 for irrigation of 160 acres located in the NW 1/4 Section 24; all in T110N-R61W.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application Nos. 7953-3 and 7954-3 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 these applications, as recommended, unless a petition is filed opposing the applications or the applicant files a petition contesting the Chief Engineer's recommendations. If a petition opposing the applications or contesting the recommendations is filed, then a hearing will be scheduled and the Water Management Board will consider these applications. Notice of the hearing will be given to the applicant and any person filing a petition.

Any person interested in opposing or supporting these applications or recommendations must file a written petition with BOTH the applicant and Chief Engineer. The applicant must file a petition if contesting the Chief Engineer's recom-

either an interested person or the applicant must be filed by March 31, 2014.

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. Contact Eric Gronlund at the above Water Rights Program address to request copies of information pertaining to these applications. Steven M. Plmer, Secretary, Department of Environment and Natural Resources.

No. 1198 (adv.)
Published once at the total approximate cost of \$38.99.



DEPARTMENT OF ENVIRONMENT
and NATURAL RESOURCES

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
denr.sd.gov



March 13, 2014

Plainsman
PO Box 1278
Huron SD 57350

ATTENTION: Legal Public Notice

Enclosed is a Notice on Application Nos. 7953-3 & 7954-3 to Appropriate Water. Please publish the notice once on March 21, 2014. 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 and arrange for payment. **Please BILL the APPLICANT for the cost of publication.** The APPLICANT is Pearl Creek Colony, c/o Matt Waldner, 21085 415th Ave, Iroquois SD 57353 (Ph # 605-546-2452).

Please send the Water Rights Program an affidavit or the enclosed Proof of Publication form immediately.

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



DEPARTMENT OF ENVIRONMENT
and NATURAL RESOURCES

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
denr.sd.gov



NOTE: TO BE SURE OF PUBLICATION ON
THE CORRECT DATE, CONTACT
THE NEWSPAPER(S) RIGHT AWAY.

March 13, 2014

Pearl Creek Colony
Matt Waldner
21085 415th Ave
Iroquois SD 57353

Dear Mr. Waldner:

Water Permit Application Nos. 7953-3 and 7954-3 for irrigation use have been examined and found to comply with the South Dakota Water Laws and applicable rules. A notice has been sent to the Plainsman printed at Huron SD (Ph # 605-352-6401). You will need to contact the newspaper(s) and authorize publication of this notice. For your information, a copy of the notice, the recommendations of the Chief Engineer and reports on the applications are enclosed. Please review the notice prior to publication and notify this office, if you have any corrections or questions.

Be sure to contact the above newspaper(s) to authorize publication of your Notice and to arrange for payment. Early contact with the paper(s) can eliminate delays. Upon receiving authorization from you, the publisher has been instructed to publish your notice. The newspaper(s) has also been instructed to send us the Proof of Publication. We must receive Proof of Publication before action can be taken on the applications.

Sincerely,

Eric Gronlund
Natural Resources Engineer
(605) 773-3352

enclosures

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

Instruction to Newspaper - Publish the Notice on March 21, 2014. The applicant is responsible for payment. The text of the notice can be e-mailed to your paper by contacting Karen Schlaak at (605) 773-3352 or email: Karen.schlaak@state.sd.us.

NOTICE OF APPLICATION NOS. 7953-3 and 7954-3 to Appropriate Water

Notice is given that Pearl Creek Colony, c/o Matt Waldner, 21085 415th Ave, Iroquois SD 57353 has filed the following applications for a water permit.

Application No. 7953-3 proposes to appropriate 1.78 cubic feet of water per second (cfs) from one well to be completed into the Floyd:East James Aquifer (80-100 feet deep) located in the approximate center of the SW 1/4 Section 10 for irrigation of 150 acres located in the SW 1/4 Section 10; all in T110N-R60W.

Application No. 7954-3 proposes to appropriate 1.78 cfs from one well to be completed into the Floyd:East James Aquifer (80-100 feet deep) located in the approximate center of the NW 1/4 Section 24 for irrigation of 160 acres located in the NW 1/4 Section 24; all in T110N-R61W.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application Nos. 7953-3 and 7954-3 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 these applications, as recommended, unless a petition is filed opposing the applications or the applicant files a petition contesting the Chief Engineer's recommendations. If a petition opposing the applications or contesting the recommendations is filed, then a hearing will be scheduled and the Water Management Board will consider these applications. Notice of the hearing will be given to the applicant and any person filing a petition.

Any person interested in opposing or supporting these applications or recommendations must file a written petition with BOTH the applicant and Chief Engineer. The applicant must file a petition if contesting 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 March 31, 2014.

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. Contact Eric Gronlund at the above Water Rights Program address to request copies of information pertaining to these applications.

Steven M. Pirner, Secretary, Department of Environment and Natural Resources.

Published once at the total approximate cost of_____.



DEPARTMENT OF ENVIRONMENT
and NATURAL RESOURCES

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
denr.sd.gov



APR 24 2014

Pearl Creek Colony
Matt Waldner
21085 415th Ave
Iroquois SD 57353

Dear Mr. Waldner:

Enclosed are Water Permit Nos. 7953-3 and 7954-3 authorizing construction of your water diversion systems and beneficial use of the water, not exceeding the limits as specified in the Water Permits.

Form 10's, *Notice of Completion of Works and Application of Water to Beneficial Use*, are enclosed. Please return the completed forms after you have finished the systems and have put the water to beneficial use. An investigation can then be scheduled so the water licenses 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,

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

enclosures

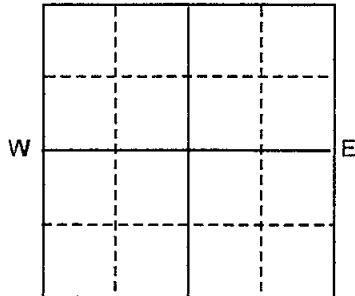
7954-3

SOUTH DAKOTA WATER WELL COMPLETION REPORT

11-02

Location NW $\frac{1}{4}$ $\frac{1}{4}$ Sec 24 Twp 110 Rg 61County Beadle

North

Please mark well
location with an "X"

Well Completion Date

12/8/2014

1 Mile

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

PROPOSED USE:

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

METHOD OF DRILLING:

Reverse Circulation

CASING DATA:

☐ Steel ☒ Plastic ☐ Other
 If other describe Stainless Steel

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
5.5 LB/FT	16 IN	52 FT	62 FT	26 IN
SDR25 LB/FT	16 IN	0 FT	52 FT	26 IN
160 LB/FT	IN	FT	FT	IN

GROUTING DATA:

Grout Type	No. of Sacks	Grout Weight	From	To
#20	10	Lb/gal	0 Ft	50 Ft
		Lb/gal	Ft	Ft

Describe grouting procedure
Tremmie Pipe

SCREEN:

☐ Perforated pipe ☒ Manufactured
 Diameter 16 Inches Length 10 Feet
Material Stainless SteelSlot Size .100 Set From 52 Feet to 62 Feet

Other information

WAS A PACKER OR SEAL USED?

☒ Yes ☐ NoIf so, what material? Enviro Plug

Describe packer(s) and location

DISINFECTION: Was well disinfected upon completion?

☒ Yes, How? Chlorine
☐ No, Why Not?
 Lab to which water
 quality sample sent for analysis
Well Owner: Pearl Creek Colony

Business Name:

Address: 21085 415th AveCity, State, Zip: Iroquois SD 57353

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
Top Soil	0	2
Yellow Clay	2	25
Blue Clay & yellow Gravel	25	40
Blue Clay Pea rock & Coal	40	55
Pea Rock & coal	55	62

STATIC WATER LEVEL 27 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: Submersible☐ Bailed☐ Other

Pumping Level Below Land Surface

50 Ft. After 4 Hrs. pumped 250 GPM

_____ Ft. After _____ Hrs. pumped _____ GPM

If pump installed, pump rate: _____ GPM

REMARKS

RECEIVED

JAN 05 2015

WATER RIGHTS
PROGRAMThis well was drilled under license # 722 and this
report is true and accurate.Drilling firm: Stretch's Well Service Inc.

Signature of License Representative:

Signature of Well Owner or Equitable Property Holder:

Matt Waldner

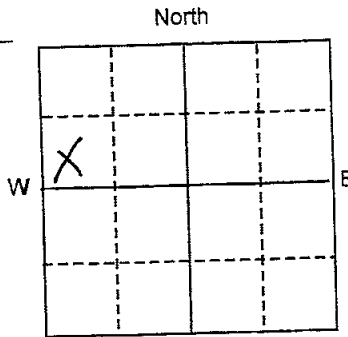
Date: _____

7954-3

SD EForm - 1621LD V1

SOUTH DAKOTA WATER WELL COMPLETION REPORT

11-02

Location sw 1/4 nw 1/4 Sec 24 Twp -110 Rg 61County BeadlePlease mark well
location with an "X"

Well Completion Date

12/18/2014

1 Mile

Distance to nearest potential pollution source (septic tank, abandoned well, feed lot, etc.)?
none ft. from _____ (identify source)

PROPOSED USE:

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

METHOD OF DRILLING:

Reverse Circulation

CASING DATA:

☐ Steel ☒ Plastic ☐ OtherIf other describe SDR 26

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
<u>160</u> LB/FT	<u>16</u> IN	<u>0</u> FT	<u>47</u> FT	<u>26</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>#20</u>	<u>20</u>	<u>Lb/gal</u>	<u>0</u> Ft	<u>45</u> Ft
		<u>Lb/gal</u>	<u>_____</u> Ft	<u>_____</u> Ft

Describe grouting procedure

SCREEN:

☐ Perforated pipe ☒ ManufacturedDiameter 16 Inches Length 20 FeetMaterial SSSlot Size .050 Set From 47 Feet to 67 Feet

Other information

WAS A PACKER OR SEAL USED? ☒ Yes ☐ NoIf so, what material? Enviro Plug

Describe packer(s) and location

DISINFECTION: Was well disinfected upon completion?

☐ Yes, How?☐ No, Why Not?Lab to which water
quality sample sent for analysis

Well Owner: _____

Business Name: Pearl Creek ColonyAddress: 21085 415th AveCity, State, Zip: Iroquois SD 57353

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
Top Soil	0	2
Yellow Clay	2	37
Blue Clay	37	45
Sand Pea Rock	45	67

STATIC WATER LEVEL

20 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

54 Ft. After 6 Hrs. pumped 400 GPM

_____ Ft. After _____ Hrs. pumped _____ GPM

If pump installed, pump rate: _____ GPM

REMARKS

RECEIVED

FEB 27 2015

WATER RIGHTS
PROGRAMThis well was drilled under license # 722 and this
report is true and accurate.Drilling firm: Stretch's Well Service Inc.

Signature of License Representative:

Signature of Well Owner or Equitable Property Holder:

Date: 2-12-15

7954-3

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

Date 8-29-17

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

FROM:

PEARL CREEK Colony
(name)21085. 415 AVE
(address)TRIOQUAIS SD 57353 605-546-2152
(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. 7954-3 states that the water use system is to be constructed by3-31-2019 (date), and water is to be put to beneficial use by 3-31-2023 (date).

The water use system was completed on

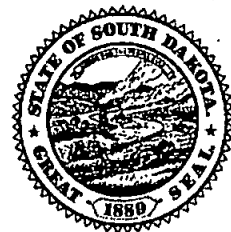
6-1-2014
(date)

Applying the water to beneficial use was completed on

7-1-2014
(date)

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

CJW



**Report of Examination of Works and/or Application of Water to Beneficial Use
For Permit No. 7954-3**

I have this day, December 4, 2018, made a thorough examination of the water use system constructed by Pearl Creek Colony, 21085 415th Avenue, Iroquois, SD 57353, holder of Permit No. 7954-3, bearing the priority of January 21, 2014 authorizing the diversion of 1.78 cu. ft. per second of the waters of groundwater (Floyd: East James Aquifer) for irrigation purposes, in Beadle County.

Inspection contact: Conrad Waldner, Pearl Creek Colony

A. Works used to divert the water:

Well Information:

North Well (NW1/4NW1/4)

- 1) Well Driller: Stretch's Well Service, Inc.
- 2) No. of Wells 1
- 3) Depth(s) 62 feet
- 4) Well log is available Yes

Casing:

- 1) Diameter 16 inches
- 2) Length 52 feet
- 3) Type PVC

Screen:

- 1) Type Stainless Steel
- 2) Length 10 feet
- 3) Static water level 27 feet

Pump:

- 1) Make Unknown
- 2) Model Unknown
- 3) Capacity 400 GPM

Motor:

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

South Well (SW1/4NW1/4)

- 1) Well Driller: Stretch's Well Service, Inc.
- 2) No. of Wells 1
- 3) Depth(s) 67 feet
- 4) Well log is available Yes

Casing:

- 1) Diameter 16 inches
- 2) Length 47 feet
- 3) Type PVC

Screen:

- 1) Type Stainless Steel
- 2) Length 20 feet
- 3) Static water level 20 feet

Pump:

- 1) Make Unknown
- 2) Model Unknown
- 3) Capacity 400 GPM

Motor:

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

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

North-South Pipe	1) Type <u>PVC</u>	2) Size <u>8</u> inches	3) Length <u>1,060</u> feet
East-West Pipe	1) Type <u>PVC</u>	2) Size <u>8</u> inches	3) Length <u>1,070</u> feet

C. Works used to apply water to beneficial use:

Center pivot:

- 1) Make Valley
- 2) Overall length 1,298 feet
- 3) Number of towers 7
- 4) End gun Yes
- 5) Capacity 800 GPM

Chemigation Equipment:

- 1) Does chemigate No

D. Compliance with Permit Requirements:

- 1) Permit qualifications being abided by: There are two wells instead of one well.
- 2) Irrigation Questionnaires checked to determine if permit owner started irrigation by the end of construction period Yes
- 3) Exceptions to compliance are: There are two wells instead of one well.

E. Condition and Location:

1. The system is in good condition with the point(s) of diversion located as follows:

North Well: 120 feet east and 980 feet south of the northwest corner of Section 24-T110N-R61W (Latitude 44.32389, Longitude -98.11353 – NW1/4 of the NW1/4):

South Well: 240 feet east and 2,030 feet south of the northwest corner of Section 24-T110N-R61W (Latitude 44.32101, Longitude -98.11309 – SW1/4 of the NW1/4):

2. The works are capable of diverting and conveying to the place of use 1.78 cu. ft. per second of water which is to be used for irrigation purposes. Water has been put to beneficial use to the maximum extent as follows: all in Section 24-T110N-R61W

<u>NW1/4NW1/4</u>	<u>32 acres</u>
<u>SW1/4NW1/4</u>	<u>33 acres</u>

<u>NE1/4NW1/4</u>	<u>33 acres</u>
<u>SE1/4NW1/4</u>	<u>34 acres</u>

comprising a total of 132 acres of land and the license should be issued for 1.78 cfs.

3. All structures, wells and lands on map Yes

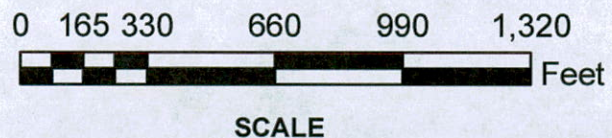
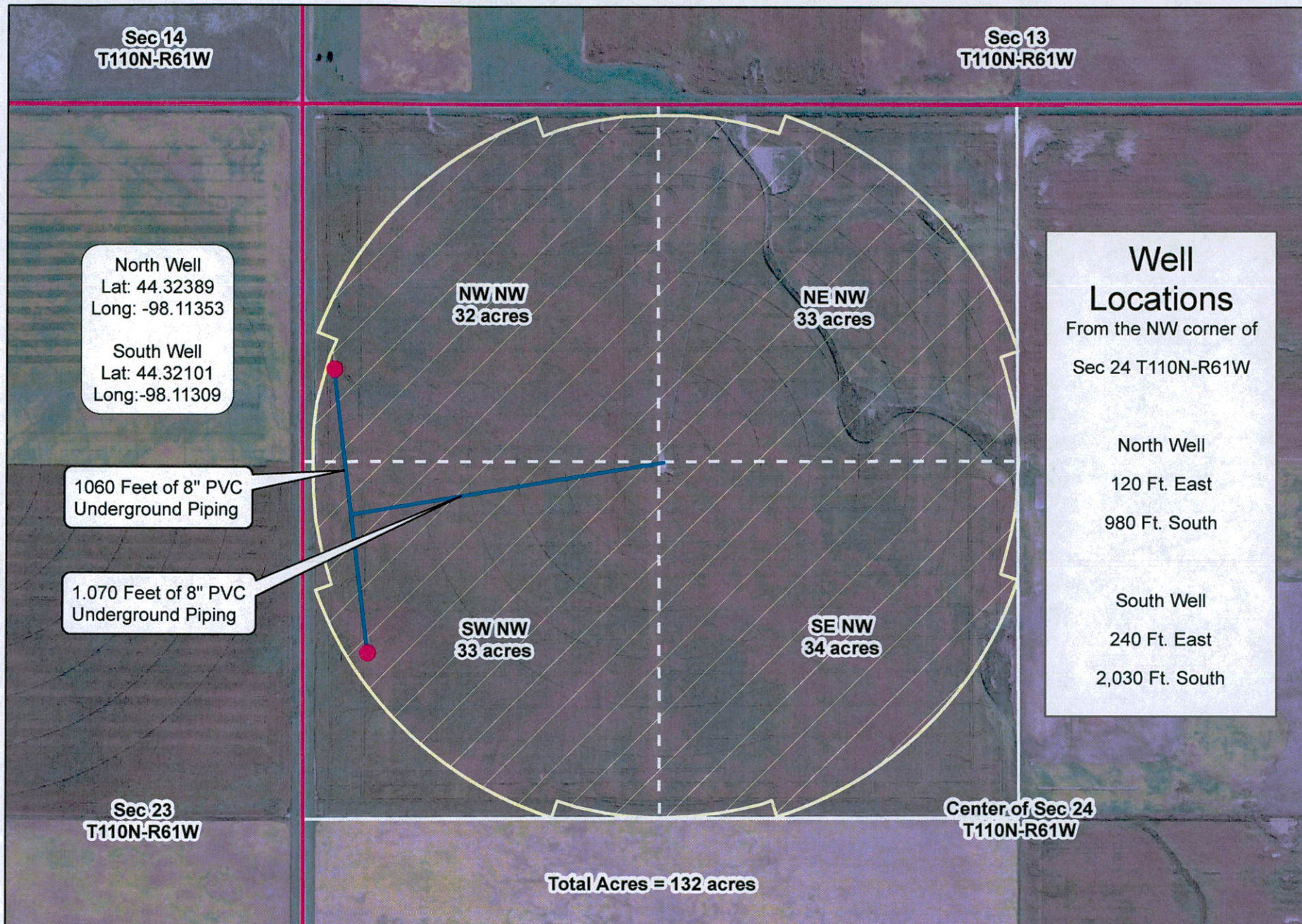
F. Comments or other permit(s) associated with the project: There are two wells at the site instead of one as noted on the permit. The wells are located as shown on the attached map and not at the center of the quarter section. It appears that the wells did not produce as much water as desired, so two wells were installed.



Keith DeJong
Water Rights Inspector
DENR, Water Rights Program

Date report completed: December 19, 2018

Water Permit No. 7954-3



Keith DeJong

Keith DeJong, PE
Staff Engineer
December 19, 2018

Approval of Location Change and Additional Diversion Point

NAME: Pearl Creek Hutterian Brethren

ADDRESS: 21085 415th Avenue, Iroquois SD 57353

DATE: April 4, 2019 **COUNTY:** Beadle **TELEPHONE:**

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:

Water Permit No. 7954-3 appropriated water from one well to be completed in the Floyd:East James aquifer located in the approximate center of the NW ¼ Section 24-T110N-R61W for irrigation of 160 acres in this quarter section. A licensing investigation found that two wells were developed in order to supply the desired production to supply the center pivot. The wells were developed on the westerly side of the NW ¼ NW ¼ and SW ¼ NW ¼ of the section

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

The water permit indicates the one well would be between 80 – 100 feet deep. The well completion reports for the two wells indicate the wells are shallower than estimated depth at the time the application was filed. Regardless the wells are completed into the Floyd:East James aquifer which is the permitted source.

- **If irrigation, no new land is irrigated**

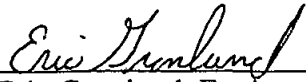
Water Permit No. 7954-3 authorized irrigation of 160 acres. The licensing investigation found 132 acres developed for irrigation.

- **Review of Existing Diversions**

There is a significant amount of irrigation in the area from the Floyd:East James aquifer. The nearest water right is in the quarter section to west (NE ¼ Section 23-T110N-R61W). Constructing the wells at their present location resulted in moving approximately 1,000 feet closer to this neighboring well. The Floyd:East James is under confined conditions at this location. The confined conditions dictate that the withdrawal of water from a well will cause some drawdown in the aquifer water level in the area of pumping. However, the Water Management Board has not necessarily required protection of artesian head pressure as a means of diversion. Therefore, nearby adequate wells are not expected to be adversely impaired. The wells have been used to supply irrigation since 2015 and no report of impacts have been received. The nearest observation well completed into the Floyd:East James aquifer is approximately 6,000 feet northeast of the wells authorized by Water Permit No. 7954-3. The water level does not show a significant effect due to these well coming on-line in 2015. Instead the water levels indicate water levels are controlled by climatic conditions.

RECOMMENDED ACTION

Based on the above criteria, it is recommended that the diversion points be licensed as developed.



Eric Gronlund, Engineering Manager 1
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 location and additional diversion point does not increase the potential for adverse effects to existing diversions.



Jeanne Goodman, Chief Engineer
Water Rights Program



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

MAY 22 2019

7954-3

Matt Waldner
Pearl Creek Colony
21085 415th Ave
Iroquois SD 57353

Dear Mr. Waldner:

Enclosed is Water License No. 7954-3. This is the final water right document completing your process of obtaining a Water Right. Included with your license is a map prepared by the staff engineer who conducted the field investigation.

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

As long as you use the water beneficially, as stated in the Water License, 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. 7954-3**

(1) Pearl Creek Colony, 21085 415th Ave, Iroquois SD 57353 made Application No. 7954-3, January 21, 2014 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. 7954-3, with a priority date of January 21, 2014 was approved March 31, 2014 and issued to the applicant for diversion of water with construction of the described water supply system to be completed on or before March 31, 2019 and for the application to beneficial use of said water on or before March 31, 2023.

The Permit holder submitted a "*Notice of Completion of Works and Application of Water to Beneficial Use*" in August, 2017. The "*Notice*" stated the water use system was completed and the water had been placed to beneficial use. Irrigation questionnaires on file with the Water Rights Program indicated irrigation began in 2015.

An investigation conducted for licensing purposes found an additional well had been drilled to supplement the irrigation system. With no increase in diversion rate or acres irrigated, the Chief Engineer made a finding pursuant to SDCL 46-5-13.1 and ARSD 74:02:01:14.01 that existing water rights will not be impaired and the overall project, as developed, is consistent with the original application.

(2) It is certified that the permit holder has complied with the provisions of South Dakota State Law relating to completion 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 points are:

- **North Well:** 120'E and 980'S of the NW corner of Section 24, T110N, R61W (NW $\frac{1}{4}$ NW $\frac{1}{4}$)
Latitude 44.32389, Longitude -98.11353
- **South Well:** 240'E and 2,030'S of the NW corner of Section 24, T110N, R61W (SW $\frac{1}{4}$ NW $\frac{1}{4}$)
Latitude 44.32101, Longitude -98.11309

(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:

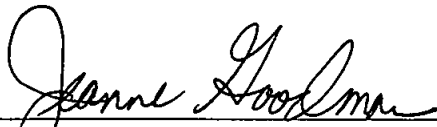
T110N, R61W Section 24	NW $\frac{1}{4}$ NW $\frac{1}{4}$	32 acres
	SW $\frac{1}{4}$ NW $\frac{1}{4}$	33 acres
	NE $\frac{1}{4}$ NW $\frac{1}{4}$	33 acres
	SE $\frac{1}{4}$ NW $\frac{1}{4}$	34 acres
	Total	132 acres

(4) Pursuant to South Dakota Water Law 46-5-30.1 Pearl Creek Colony, 21085 415th Ave, Iroquois SD 57353 the holder and/or owner of Water Right No. 7954-3 is issued a license to appropriate water, the right to use 1.78 cubic feet of water per second from ground water, two wells (Floyd East James Aquifer) with a priority date of January 21, 2014 from the locations specified in (2) of this license for irrigation purposes.

continued

This license is subject to South Dakota Water Law, any limitations or conditions listed in Water Right No. 7954-3 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. 7954-3 shall be constructed by a licensed well driller and construction of the well and installation of the pump shall comply with the Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) pursuant to Section 74:02:04:28. *Both wells were drilled in December, 2014 by Stretch's Well Service Inc. Copies of the well completion reports are 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

MAY 22 2019

date

