

WATER PERMIT NO. 2762-2

Name of Applicant: **Green Acres Estates Water Corporation**

Address: **12712 Green Acres Rd, Hot Springs SD 57747** Phone: **605 352-3659**

Amount of Water Claimed: **0.05 cfs** Total Acres: **NA**

Source of Water Supply: **groundwater (1 existing well)**

Water to be used for: **water distribution system** County: **Fall River**

Type of Waste Disposal System:

Location: **2 miles southwest of Hot Springs**

PRIORITY Date Received: **4-26-17**

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

Corrected Application Received: **5-17-17**

Period of Annual Use: **January 1 – December 31**

Remarks:

Diversion Point: **NE 1/4 NW 1/4 Sec 34-T7S-R5E**

Area served: **NW 1/4 NE 1/4 , N 1/2 NW 1/4 Sec
34-T7S-R5E**

		⊗			

Depth of Well: **510 feet deep**

Well Driller: **Taylor Drilling**

Remarks:

Type of Map: **aerial**

Prepared by:

Reviewed and the Number Assigned on: **5-17-17**

By: **Karen Schlaak**

Notice of Hearing - date to intervene: _____

FORM 2: Application for uses other than irrigation

(type or print)

Mail to: DENR - Water Rights 523 E Capitol Ave Pierre, SD 57501-3182 ph. (605) 773-3352	No. <u>2762-2</u> (office use only) Hydrologic Unit <u>10120109</u>
	Basin <u>Upper Cheyenne</u>
	Newspaper <u>Hot Springs Star</u>
	<u>Rapid City Journal</u>

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APR 28 2017

WATER RIGHTS
PROGRAM

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

Check use(s) of water:

☐ Municipal	☒ Water Distribution System	☐ Recreational	☐ Institutional
☐ Rural Water System	☐ Commercial	☐ Fish & Wildlife	☐ Geothermal
☒ Domestic (over 18 gpm)	☐ Industrial	☐ Other	

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 Green Acres Estates Water Corporation

Mailing Address 12712 Green Acres Rd Hot Springs SD 57747
 (Address) (City) (State) (Zip Code)

Phone _____ Mobile 605-352-3659 Email debahrens@gmail.com

2. Amount of water claimed 0.05 *CFS or 23 **GPM and 6.1 ***AF or 2 mil Gallons
 Flow rate and volume are both required. (*Cubic Feet per Second) (**Gallons per Minute) (***)Acre Feet - storage capacity of dam/dugout or annual use)

3. Source of water supply well NE 1/4 NW 1/4 Sec 34 - T7S - R5E

4. Location of point of diversion NW 1/4 NE 1/4 N 1/2 NW 1/4 Section 34, T7S, R5E, BHM (area served) County Fall River
 (example - 3 wells in SW 1/4 NE 1/4 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 - NW 1/4 section 12-T104N-R53W)

5. County or counties where water will be used Fall River6. Annual period during which water is to be used Year Round

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)

The well pumps into a 5000 gal cistern that delivers water to 12 households that each have a required 1000 gal cistern, which in turn delivers water to their household.

I, Deb Ahrens Deb Ahrens President, the applicant, certify under
 Name of Person Title (if applicable)

penalty of perjury that I have read this application, examined the attached map, and that the matters stated are true. I further certify, if acting on behalf of an entity or individual other than myself, that I am authorized to submit this application.

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

SOUTH DAKOTA
WATER PERMIT NO. 2762-2

Date of first receipt of application April 28, 2017.

Date of return to applicant for corrections, amendments or changes May 1, 2017.

Date of receipt of corrected application May 17, 2017.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 2762-2 to Green Acres Estates Water Corporation, c/o Deb Ahrens, 12712 Green Acres Rd, Hot Springs SD 57747 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. 2762-2 appropriates up to 6.1 acre-feet of water annually at a peak diversion rate of 0.05 cubic feet of water per second from one well completed into the Minnelusa Aquifer (510 feet deep) located in the NE 1/4 NW 1/4 Section 34 for an existing water distribution system located in the NW 1/4 NE 1/4, N 1/2 NW 1/4 Section 34; all in T7S-R5E.
2. The water appropriated shall be used for the purpose of supplying a water distribution system and may not exceed the amount of water needed for beneficial use.
3. The water is to be used during the following described annual period: January 1 – December 31.
4. The date of approval of Permit No. 2762-2 is August 11, 2017.
5. The date from which applicant may claim right is April 28, 2017.
6. One-fifth of the construction is to be completed on or before February 11, 2020.
7. All construction is to be completed on or before August 11, 2022.
8. Water is to be put to beneficial use on or before August 11, 2026.
9. 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 Water Permit No. 2762-2 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 permit holder shall report to the Chief Engineer annually the amount of water withdrawn from the Minnelusa aquifer.
3. Water Permit No. 2762-2 authorizes a total annual diversion of 6.1 acre feet of water.

WATER MANAGEMENT BOARD

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

AUG 29 2017

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 _____ Have test holes been drilled ☐ Yes ☐ No Drilled by _____
(if yes, please provide copies of logs)

b) If existing wells, how many 0 Provide copy of log(s), if available. Drilled by Taylor Drilling

For either Existing or Proposed Wells: Static 380' and Pump 460'

c) Well Depth (required) 510' Depth to Top of Water Bearing Material _____ Depth to Water from Surface _____

d) Distance to nearest domestic well on applicant's property _____ Property owned by others _____

2. Wastewater Disposal System Information

a) Type of System (i.e. septic tank, drain field) private septic systems

b) System Capacity (gallons) _____ Year Constructed _____

c) Connected to the City of _____ Sanitary System

3. Dugout Information

a) Surface Dimensions N/A 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 N/A

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)

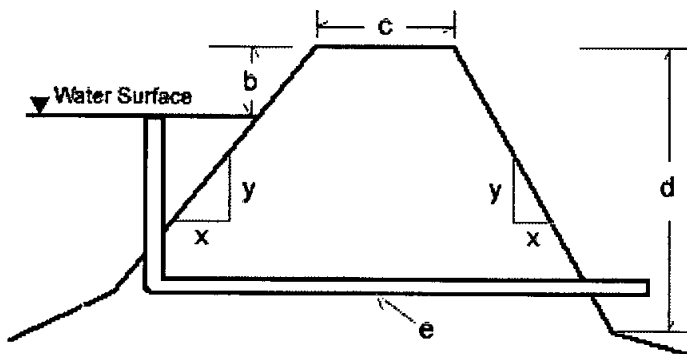
Upstream _____

Downstream _____

h) Surface Area of Impoundment _____

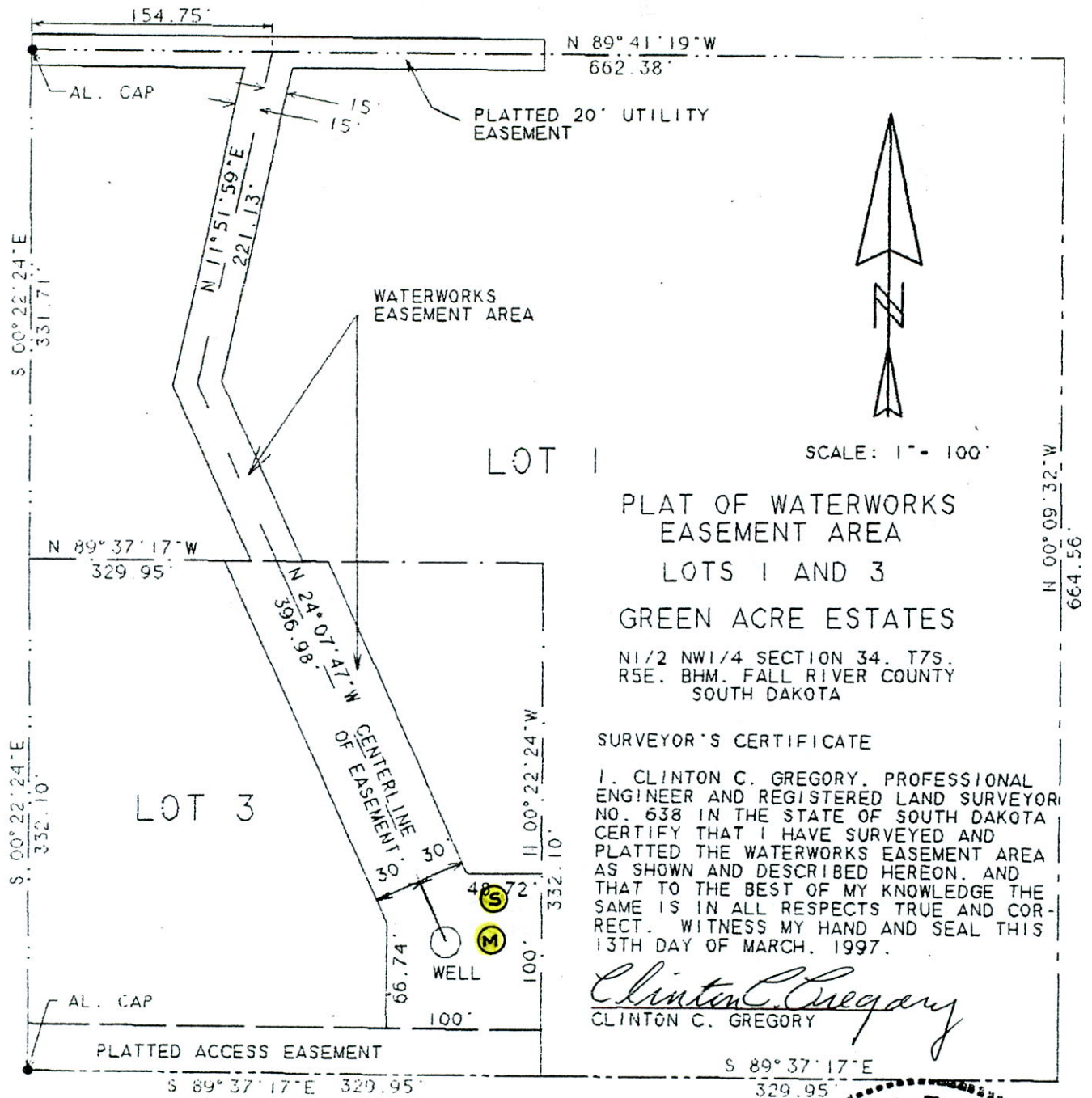
i) Storage _____ Acre Feet

j) Drainage Area Above Dam _____ Acres



Gene Inman, Hot Springs
5E-7S-34 2100' PNL 1100' PNL 9/78 SCHEDULED
Fall River
523' Total Depth 400' Static
486' 5 1/2" OD Casing 40 GPM
6-172 Spearfish Shale
172-210 Minnekahta Limestone
210-285 Opeche Shale
285-480 Red Sandstone
Loose red sand 435-460
490-523 Yellow sandstone
2 small layers of gray limestone

EXHIBIT B



PLAT OF WATERWORKS
EASEMENT AREA

LOTS 1 AND 3

GREEN ACRE ESTATES

N1/2 NW1/4 SECTION 34, T7S,
R5E, BHM, FALL RIVER COUNTY
SOUTH DAKOTA

SURVEYOR'S CERTIFICATE

I, CLINTON C. GREGORY, PROFESSIONAL
ENGINEER AND REGISTERED LAND SURVEYOR
NO. 638 IN THE STATE OF SOUTH DAKOTA
CERTIFY THAT I HAVE SURVEYED AND
PLATTED THE WATERWORKS EASEMENT AREA
AS SHOWN AND DESCRIBED HEREON, AND
THAT TO THE BEST OF MY KNOWLEDGE THE
SAME IS IN ALL RESPECTS TRUE AND COR-
RECT. WITNESS MY HAND AND SEAL THIS
13TH DAY OF MARCH, 1997.

Clinton C. Gregory
CLINTON C. GREGORY



S: 5000 gal cistern

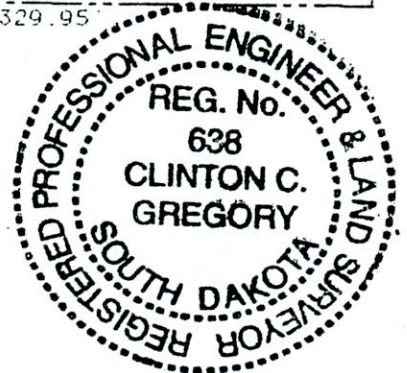
M: 1500 gal old cistern used as mechanical
room

Prepared By
Gregory Engineering
327 Dakota Street
Hot Springs, SD 57747
(605) 745-3320

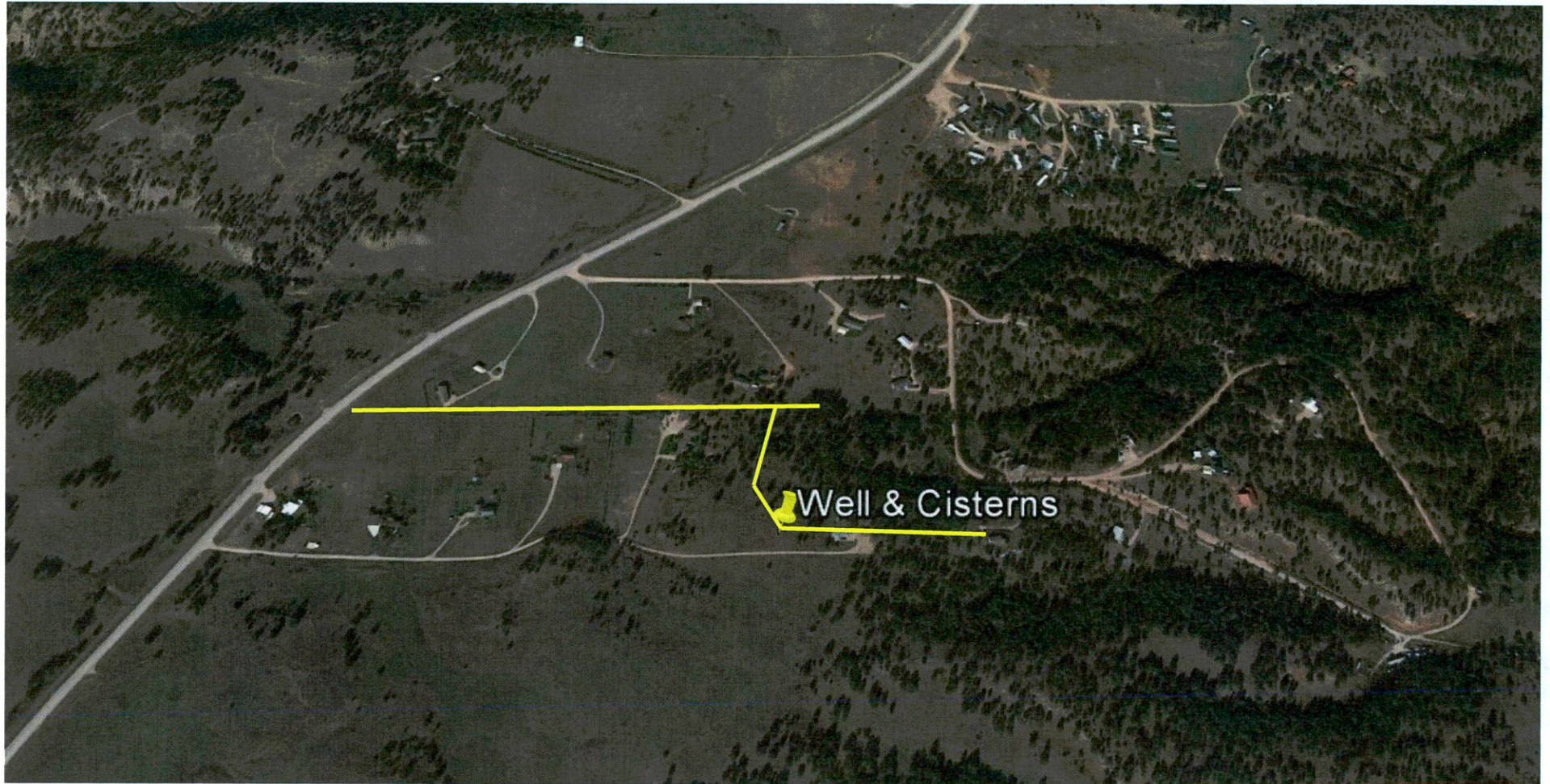
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—— Water Distribution System

Well and cisterns location circled in yellow



RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date 4/28, 20 17

RECEIVED OF Green Acres Estate Water Co HC 5 Box 174KS Hot Springs SD 57747

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

Fee for Application for Permit No. <u>2762-2</u> to Appropriate Water, to construct and to put water to beneficial use	100	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>2762-2</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	300 00

No. **08241**

By

James Goodman
Chief Engineer



South Dakota Secretary of State

SHANTEL KREBS

Filing Information

Name: **GREEN ACRES ESTATES WATER CORPORATION**

General Information

SOS Business ID NS009454
Filing Type: Nonprofit Corporation - Domestic
08/06/1991
Status: Good Standing
Duration Term: Perpetual
Public/Mutual Benefit: Mutual

Registered Agent Address
ESTHER A SABO
12730 GREEN ACRES ROAD
HOT SPRINGS, SD 57747

Principal Address
12724 GREEN ACRES RD
HOT SPRINGS, SD 57747-7104

The following document(s) was/were filed in this office on the date(s) indicated below:

Date Filed	Filing Description	Image #
09/06/2016	2016 Annual Report	
07/16/2015	2015 Annual Report	
07/16/2015	2015 Annual Report	
07/23/2014	2014 Annual Report	
04/24/2014	Common Amendment (Delayed Date 04/24/2014)	
08/19/2013	2013 Annual Report	
08/06/2012	2012 Annual Report	
09/06/2011	2011 Annual Report	
09/08/2010	2010 Annual Report	
02/16/2010	2010 Annual Report	
02/16/2010	2010 Annual Report	
02/16/2010	2010 Annual Report	
02/16/2010	2010 Annual Report	
02/16/2010	Application for Reinstatement	
02/16/2010	Statement of Change	
11/09/2007	Cancellation	
08/01/2005	2005 Annual Report	
08/01/2004	2004 Annual Report	

Filing Information

Name: **GREEN ACRES ESTATES WATER CORPORATION**

09/12/2002 2002 Annual Report

09/22/1999 1999 Annual Report

09/23/1996 1996 Annual Report

08/20/1993 1993 Annual Report

08/06/1991 Initial Filing

NS009454



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

denr.sd.gov

May 1, 2017

Green Acres Estates Water Corporation
Deb Ahrens, President
12712 Green Acres Rd
Hot Springs SD 57747

Dear Ms. Ahrens:

Thank you for submitting the *Application for a Permit to Appropriate Water* for a water distribution system in Fall River County. In order to complete the application, the following is required.

- The submitted plat map does not reference a government section corner or quarter corner including section, township and range. For your use, I have enclosed a map with those designations. Please mark the well location with an "X". Also, outline the area the water distribution system will cover.

If you have any questions, please contact me.

Sincerely,

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

enclosure

Schlaak, Karen

From: Deb Ahrens <debahrens@gmail.com>
Sent: Wednesday, May 17, 2017 11:52 AM
To: Schlaak, Karen
Subject: [EXT] Water Rights Application follow up
Attachments: Government Reference Map.pdf; Water Distribution System.pdf

Good Morning Karen,

Attached are the map that you requested marked as well as some maps of the site are enlarged and marked for better viewing. Please let me know if you need anything else.

Regards,
Deb Ahrens, President
Green Acres Estates Water Corporation
605-352-3659



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 2762-2, Green Acres Estates Water Corporation**

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. 2762-2, Green Acres Estates Water Corporation, c/o Deb Ahrens, 12712 Green Acres Rd, Hot Springs SD 57747.

The Chief Engineer is recommending APPROVAL of Application No. 2762-2 because 1) there is reasonable probability that there is unappropriated water available for the applicant's proposed use, 2) the proposed diversion can be developed without unlawful impairment of existing rights, 3) the proposed use is a beneficial use and 4) it is in the public interest with the following qualifications:

1. The well approved under Water Permit No. 2762-2 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 permit holder shall report to the Chief Engineer annually the amount of water withdrawn from the Minnelusa aquifer.
3. Water Permit No. 2762-2 authorizes a total annual diversion of 6.1 acre feet of water.

See report on application for additional information.

Jeanne Goodman, Chief Engineer
July 20, 2017

REPORT ON APPLICATION NO. 2762-2

For Green Acres Estates Water Corporation, c/o Deb Ahrens

July 13, 2017

Green Acres Estates Water Corporation, c/o Deb Ahrens, has filed Water Permit Application No. 2762-2 for a water permit to appropriate up to 6.1 acre-feet of water annually at a peak diversion rate of 0.05 cubic feet of water per second (cfs) or 23 gallons per minute (gpm) from one existing well completed into the Minnelusa aquifer (approximately 510 feet deep) located in the NE $\frac{1}{4}$ NW $\frac{1}{4}$ Section 34 for an existing water distribution system for a suburban housing development located in the NW $\frac{1}{4}$ NE $\frac{1}{4}$, N $\frac{1}{2}$ NW $\frac{1}{4}$ Section 34; all in T7S-R5E approximately 2 miles southwest of Hot Springs, South Dakota.

AQUIFER – MINNELUSA AQUIFER (MNLS)

The Minnelusa Formation consists of varied, alternating beds of sandstones, limestone, dolomite, and shale (Rahn, 1979). The Minnelusa Formation underlies nearly all of western South Dakota and contains over 755 million acre-feet of recoverable water in storage (Allen and others, 1984). The Minnelusa aquifer underlies approximately 1,115,520 acres of Fall River County and contains an estimated 52,987,200 acre-feet of recoverable water in storage in the county (Allen and others, 1984). Locally, groundwater movement in the aquifer is toward the south and east (Strobel and others, 2000). Recharge to the Minnelusa aquifer in the Black Hills is primarily from infiltration of precipitation on the outcrop and stream flow losses. Average annual recharge from 1931-1998 is estimated to be approximately 112,145 acre-feet per year (Carter and others, 2001a). The top of the Minnelusa is reported to be 285 feet below grade on this application's well completion report. The water quality of the aquifer is generally good near the outcrop but deteriorates considerably with distance from the recharge area.

According to the well log submitted with the application, the top of the Minnelusa is reported to be 285 feet below grade with a static water level reported at 380 feet below grade; therefore, the aquifer is under unconfined conditions at this well site. During review of the hydrogeology of the area, it was found that both confined and unconfined conditions can be found within one mile of this site.

SDCL 46-2A-9

Pursuant to SDCL 46-2A-9, a permit to appropriate water may be issued only if there is 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.

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 in addition to other data to determine that the quantity of water withdrawn annually from the aquifer does not exceed the estimated average annual recharge of the aquifer.



The Water Rights Program monitors 23 observation wells completed into the Minnelusa aquifer in the Black Hills area (Water Rights, 2017a). Water Rights Observation Well FR-95B is located approximately two miles north-northeast of this well. The hydrograph for this well (Figure 1) is representative of the observation wells completed into the Minnelusa Formation and shows the aquifer responds to climatic conditions and withdrawals have not exceeded recharge for the period of record. The well represents unconfined conditions with water fluctuations of less than ten feet per year.

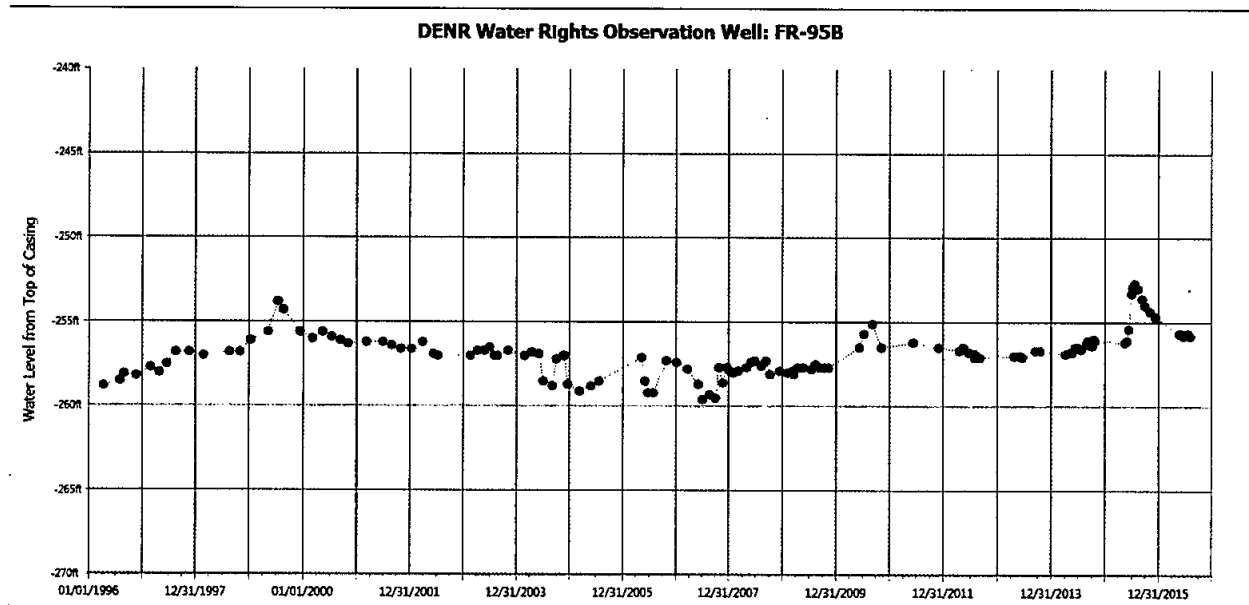


Figure 1. Hydrograph of observation well FR-95B which is completed into the Minnelusa aquifer located approximately two miles north-northeast of this application.

Therefore, recharge to the aquifer plus discharge from the aquifer greatly exceeds well withdrawal, so water is available for capture from natural discharge. The observation well data indicates there is a reasonable probability that unappropriated water is available from the Minnelusa aquifer to support the proposed appropriation.

WATER AVAILABILITY

Water Balance:

The availability of unappropriated water from an aquifer can be evaluated by considering SDCL 46-6-3.1. This statute requires that an application to appropriate groundwater cannot be approved if, according to the best information reasonably available, it is probable that the quantity of water withdrawn annually from a groundwater source will exceed the quantity of average estimated annual recharge.

Recharge to the Minnelusa aquifer is primarily from infiltration of precipitation on the outcrop and stream flow losses. Average annual recharge in the Black Hills area from 1931-1998 was estimated to be approximately 112,145 acre-feet per year (Carter and others, 2001a). Well withdrawals can be divided into irrigation and non-irrigation uses. There are a total of 201 appropriations from the Minnelusa aquifer in South Dakota (Water Rights, 2017b). For non-

irrigation use, the majority of these being limited by diversion rate, the average annual use can be estimated by assuming that pumping will occur at the maximum diversion rate 60% of the time for water rights/permits. For water rights/permits in the Minnelusa aquifer limited by diversion rate only average annual withdrawals can be estimated at about 12,865 acre-feet per year. Two water rights/permits are limited by annual volume at a total of 58.75 acre-feet per year. Estimated average domestic and livestock watering use of the Minnelusa aquifer during water years 1987 to 1996 is 968 acre-feet per year (Carter and others, 2001b). This results in an estimated average annual non-irrigation use of at least 13,892 acre-feet per year. The Water Rights Program collects and maintains irrigation data from across the state. A review of annual irrigation questionnaires found the average historic irrigation pumpage from the Minnelusa aquifer from 1982 to 2016 is 2,535 acre-feet per year. Therefore, the total average annual withdrawal from the Minnelusa aquifer is at least 16,427 acre-feet per year.

Comparison of annual recharge estimates and estimated annual well withdrawals show that well withdrawals from the Minnelusa are only a fraction of estimated average annual recharge. Therefore, based on a simple water budget, it is clear that unappropriated water is available for this appropriation. A water budget is not intended to suggest that all of the water that is in storage in the Minnelusa aquifer or that all of the recharge is available for this appropriation, merely to demonstrate that in general the aquifer is an immense resource that is relatively untapped.

Localized Hydraulic Budget:

Carter and others (2001b) developed a hydrologic budget for the Madison and Minnelusa aquifers combined, for a subarea that includes the well site proposed by this application. The hydrologic budget for this subarea balanced from 1987-1996, by estimating that water enters the subarea through streamflow recharge, precipitation recharge and groundwater inflow from the north and west. Water was assumed to exit this subarea through artesian spring discharge, well withdrawals and groundwater outflow to subareas to the east and northeast (Carter and others, 2001b). The estimates for this area are shown in table 1.

Stream-flow recharge	Precipitation recharge	Minnelusa groundwater inflow	Madison groundwater inflow	Minnelusa groundwater outflow	Madison groundwater outflow	Artesian spring-flow	Well withdrawals
4.4 cfs	6.1 cfs	24.5 cfs	23.2 cfs	8.0 cfs	4.0 cfs	44.3 cfs	1.8 cfs

Table 1. Hydrologic budget for the subarea that includes the well site proposed by Application No. 2652-2 for Water Years 1987-1996. Modified from (Carter and others, 2001b).

It should be noted that if a new hydrologic budget is to balance for this subarea (i.e. a new condition of dynamic equilibrium), with an increase of well withdrawals, either groundwater outflow must decrease, groundwater inflow from other subareas must increase, or artesian spring flow must decrease. It can be assumed that with a very subtle change in the hydraulic gradient at either an inflow zone or an outflow zone, a new dynamic equilibrium would be established in this area with virtually immeasurable impacts to the amount of water in storage or artesian spring flow.

REVIEW OF EXISTING WATER PERMITS/RIGHTS

Existing water rights/permits appropriating ground water located within a three mile radius of this application (if approved) are shown in Figure 2 and Table 2 (Water Rights, 2017b).

PERMIT NO.	NAME	STATUS	AQUIFER	USE	RATE (cfs)
498-2	STATE VETERANS HOME	LC	MNLS	IRR	1.10
1704-2	COUNTRY CLUB ESTATES CORP	LC	MNLS	SHD	0.20
1721-2	HARTIGAN	LC	MNLS	IRR	0.02
2491-2	MERCHEN	LC	MNLS	SHD	0.042

Table 2. Water rights/permits within a three mile radius of the application showing the permitted diversion rate. (LC = license, MNLS = Minnelusa, IRR = irrigation, SHD = suburban housing development)

Since the Minnelusa aquifer is under unconfined conditions at this site, pumping is expected to cause only a minimal decline in the potentiometric surface in the area. Any interference this proposed use would have on these water rights/permits is not expected to be adverse due to the relatively low diversion rate (23 gpm) requested by this application. Also, this application proposes to use an existing well that has been in use since 1978 with no complaints or adverse well interference reported.

In addition, considering the South Dakota Water Management Board's past action, any well interference this proposed use would have on adequate domestic wells, defined by ARSD 74:02:04:20(6), in the area is not expected to be significant or adverse.

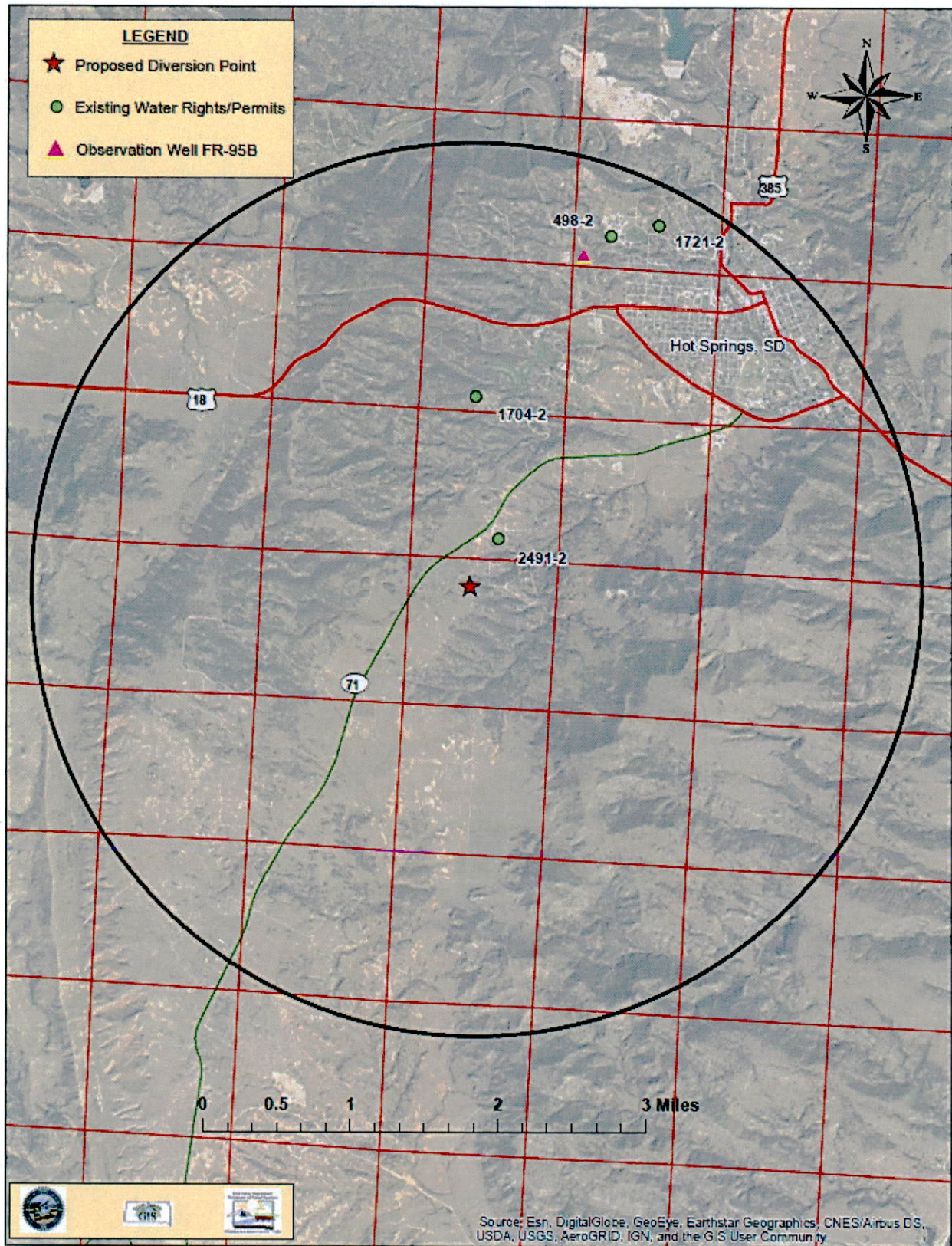


Figure 2. Approximate location of diversion points for water rights/permits appropriating water from Minnelusa aquifer. Dark circle denotes a three mile radius of Application No 2762-2 (if approved).

CONCLUSIONS

1. Water Permit Application No. 2762-2 proposes to appropriate up to 6.1 acre-feet of water annually at a peak diversion rate of 0.05 cfs (23 gpm) from a well completed in to the Minnelusa aquifer.
2. Based on observation well records and review of annual appropriative use, there is a reasonable probability that unappropriated water is available for the application.
3. There is reasonable probability that diversions under this application, if approved, will not adversely impact existing water rights/permits or adequate domestic wells defined by ARSD 74:02:04:20(6).



Aaron Tieman
SD DENR-Water Rights Program

REFERENCES

- Allen, J.C., Iles, D.L., Petres, A.K., 1984. Analysis of Groundwater and Streamflow Data, Western Dakotas Region of South Dakota, Task 3 & 4: Groundwater Resources Inventory; Department of Water and Natural Resources, Division of Geological Survey, Vermillion, SD, U.S. Army Corps of Engineers Contract DAWC 45-82-C-0151.
- Carter, J.M., Driscoll, D.G., and Hamade, G.R., 2001a. Estimated Recharge to the Madison and Minnelusa Aquifers in the Black Hills Area, South Dakota and Wyoming, Water Years 1931-98; U.S. Geological Survey Water-Resources Investigations Report 00-4278, 66 p.
- Carter, J.M., Driscoll, D.G., Hamade, G.R., and Jarrell, G.J., 2001b. Hydrologic Budgets for the Madison and Minnelusa Aquifers, Black Hills of South Dakota and Wyoming, Water Years 1987-1996; U.S. Geological Survey, Rapid City, SD Water-Resources Investigations Report 01-4119, 53 p
- Strobel, M.L., Galloway, J.M., Hamade, G.R., and Jarrell, G.J., 2000. Potentiometric Surface of the Minnelusa Aquifer in the Black Hills Area, South Dakota. U.S. Geological Survey, Hydrologic investigations Atlas HA-745-C, 2 sheets, scale 1:100,000
- Rahn, P.H., 1979. Groundwater Resources of Western South Dakota. Department of Geology and Geological Engineering, South Dakota School of Mines and Technology, Project #2533. Rapid City, SD.
- Water Right, 2017a, Observation Well Data, SD DENR, SD DENR, DES, Water Rights Program, Pierre, SD, 57501.

Water Right, 2017b, Water Right/Permit Files, SD DENR, SD DENR, DES, Water Rights Program, Pierre, SD, 57501.



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WATER RIGHTS
PROGRAM

Form 8

PROOF OF PUBLICATION

STATE OF SOUTH DAKOTA)
County of FALL RIVER) SS

I, BRETT NACHTIGALL

certify that the attached printed Notice was taken

from the HOT SPRINGS
STAR

printed and published in HOT SPRINGS

County of FALL RIVER and

state of South Dakota. The notice was published

in the newspaper on the following date:

TUESDAY, AUGUST 1, 2017

Cost of Printing \$ 24.40

Brett Nachtigall
(Signature)

Publisher
(Title)

Aug-1, 2017
(Date Signed)

**244
NOTICE OF APPLICATION
NO. 2762-2 to
Appropriate Water**

Notice is given that Green Acres Estates Water Corporation, c/o Deb Ahrens, 12712 Green Acres Rd., Hot Springs SD 57747 has filed an application for a water permit to appropriate up to 6.1 acre-feet of water annually at a peak diversion rate of 0.05 cubic feet of water per second from one well completed into the Minnelusa Aquifer (510 feet deep) located in the NE 1/4 NW 1/4 Section 34 for an existing water distribution system located in the NW 1/4 NE 1/4, N 1/2 NW 1/4 Section 34; all in T7S-R5E.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 2762-2 with qualifications 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. The Chief Engineer's recommendation with qualifications, the application, and staff report are available at <http://denr.sd.gov/public> or contact Eric Gronlund for this information, or other information, at the Water Rights Program address provided below.

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. Capital, 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 August 11, 2017.

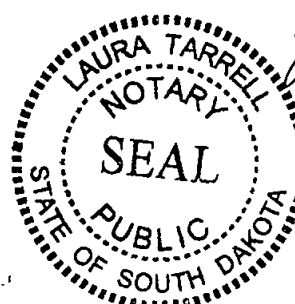
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Steven M. Pimer, Secretary
Department of Environment
and Natural Resources.

Published once at the total approximate cost of \$26.60.

Aug. 1



Laura Tarrell

My Commission Expires
December 3, 2019

Affidavit of Publication

STATE OF SOUTH DAKOTA

County of Pennington

SS:

Aug 2 L21051991
NOTICE OF APPLICATION NO.

2762-2 to Appropriate Water
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/s/ Steven M. Pirner, Secretary
Department of Environment and Natural Resources

(Published once of the total approximate cost of \$59.98)

Sheri Sponder being first duly sworn, upon his/her oath says: That he/she is now and was at all time hereinafter mentioned, an employee of the RAPID CITY JOURNAL, a corporation of Rapid City, South Dakota, the owner and publisher of the RAPID CITY JOURNAL, a legal and daily newspaper printed and published in Rapid City, in said County of Pennington, and has full and personal knowledge of all the facts herein stated as follows: that said newspaper is and at all of the times herein mentioned has been a legal and daily newspaper with a bonafide paid circulation of at least Two Hundred copies daily, and has been printed and published in the English language, at and within an office maintained by the owner and publisher thereof, at Rapid City, in said Pennington County, and has been admitted to the United States mail under the second class mailing privilege for at least one year prior to the publication herein mentioned; that the advertisement, a printed copy of which, taken from said Rapid City Journal, the paper in which the same was published, is attached to this sheet and made a part of this affidavit, was published in said paper once each day for one successive day, the first publication there of being on the 2nd day of Aug 2017 that the fees charged for the publication there of are 59 dollars and 98 cents.

Sheri Sponder

Subscribed and sworn to before me this 17th
day of August, 2017.

[Signature]
Notary public

7/1/21
My commission expires

DUSTIN RICE



NOTARY PUBLIC
SOUTH DAKOTA



Schlaak, Karen

From: Schlaak, Karen
Sent: Thursday, July 20, 2017 10:02 AM
To: hsstar@lee.net
Subject: 2762-2, Green Acres Estates Water Corp.
Attachments: 2762-2public.short.docx; FORM8.FRM.doc

Attached is a notice to be published on August 1, 2017.

Green Acres Estates Water Corporation, c/o Deb Ahrens, 12712 Green Acres Rd, Hot Springs SD 57747 (605 352-3659) has been notified to contact you to authorize publication and arrange for payment.

Please send the affidavit or return the attached Proof of Publication form ASAP to the Water Rights Program, 523 E Capitol, Pierre SD 57501.

Let me know if you have questions. Please acknowledge receipt of this email.

Karen Schlaak
SD DENR, Water Rights Program
(605) 773-3352



Schlaak, Karen

From: Schlaak, Karen
Sent: Thursday, July 20, 2017 10:05 AM
To: RCY Legals (legals@rapidcityjournal.com)
Subject: 2762-2, Green Acres Estates Water Corp.
Attachments: 2762-2public.short.docx; FORM8.FRM.doc

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Karen Schlaak

SD DENR, Water Rights Program
(605) 773-3352





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 DATES, CONTACT
THE NEWSPAPER(S) RIGHT AWAY.**

July 20, 2017

Green Acres Estates Water Corporation
C/O Deb Ahrens
12712 Green Acres Rd
Hot Springs Sd 57747

Dear Ms. Ahrens:

Water Permit Application No. 2762-2 for water distribution system use has been examined and found to comply with the South Dakota Water Laws and applicable rules. A notice has been sent to the Hot Springs Star printed at Hot Springs SD (Ph # 605-745-4170) and the Rapid City Journal printed at Rapid City SD (Ph # 605-394-8300). You will need to contact the newspaper(s) 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(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 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.

NOTICE OF APPLICATION NO. 2762-2 to Appropriate Water

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Steven M. Pirner, Secretary, Department of Environment and Natural Resources. Published once at the total approximate cost of_____.

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DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

denr.sd.gov

AUG 29 2017

Green Acres Estates Water Corporation
c/o Deb Ahrens
12712 Green Acres Rd
Hot Springs SD 57747

Dear Ms. Ahrens:

Enclosed is Water Permit No. 2762-2 authorizing construction of your water diversion system and beneficial use of the water, not exceeding the limits as specified in the Water Permit.

A 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 information 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

2762-2

SD EForm - 1311LD V1

Form 10

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

MAIL TO: PMB 2020
DENR - Water Rights Program
523 E Capitol Ave
Pierre, SD 57501-3182
ph. (605) 773-3352

Date Aug 7, 2018

FROM:

Deb Ahrens
(name)

12712 Green Acres Rd.
(address)

Hot Springs S.D.
(city)

(state)

57747
(zip)

605-352-3659
(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. 2762-2 states that the water use system is to be constructed by

8/11/2022, and water is to be put to beneficial use by 8/11/2026
(date) (date)

The water use system was completed on Post 1978
(date)

Applying the water to beneficial use was completed on Post 1978
(date)

Private well conveyed to corporation 1996

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



X Deb Ahrens

2762-2

Gene Inman, Hot Springs
5E-7S-34 2100' PNL 1100' PNL 9/78 SCHEDULED
Fall River
523' Total Depth 400' Static
486' 5 1/2" OD Casing 40 GPM
0-172 Spearfish Shale
172-210 Minnekahta Limestone
210-285 Opeche Shale
285-480 Red Sandstone
Loose red sand 435-460
490-523 Yellow sandstone
2 small layers of gray limestone

Report of Examination of Works and/or Application of Water to Beneficial Use For Permit No. 2762-2

I have this day, Aug 7, 2018 made a thorough examination of the water use system constructed by **Green Acres Estates Water Corporation, 12712 Green Acres Rd., Hot Springs SD 57747** of Permit No. 2762-2 bearing the priority of 4/28/2017 authorizing the diversion of 0.05 cu. ft. per second water from one well for suburban housing purposes in Fall River County.

Inspection contact & relationship to permit holder, if applicable: **Deb Ahrens, President**
605-352-3659

A. Works used to divert the water:

Well Information:

- 1) Well Drilling Firm: Taylor Drilling (1978)
- 2) Well No. 1
- 3) Depth 523 feet
- 4) Well log Yes

Casing:

- 1) Diameter 5 1/2 inches
- 2) Length 486 feet
- 3) Type Steel

Screen:

- 1) Type unknown (possibly open hole)
- 2) Length 37 feet
- 3) Static water level 400 feet
- 4) Well test 40 gpm

Pump:

- 1) Make Gould
- 2) Model 25GS50
- 3) Size 4"
- 4) Capacity 23 GPM
- 5) Horsepower rating 5 hp

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

- 1) Type PVC mainline
- 2) Size 1 1/2 inches
- 3) Length ----- feet

C. Works used to apply water to beneficial use:

The Green Acres Estates Water Corporation is a non-profit corporation comprised of the individuals in the twelve residential lots. The well pumps to a 5,000 gallon cistern next to the well and then gravity feeds through 1 1/2" PVC to the water users. Each resident has a 1,000 gallon cistern and booster pump to provide adequate pressure in the home.

D. Compliance with Permit Requirements:

- 1) Permit qualifications being abided by Yes
- 2) Exceptions to compliance are: none

E. Condition and Location:

1. The system is in good condition with the point of diversion located as follows:
1,192' S and 2,236' E of the NW corner Section 34 T7S R5E (43.401297, -103.512139)
2. The works are capable of diverting and conveying to the place of use 0.05 cu. ft. per second (**23 gpm**) of water which is to be used for **suburban development** use and the license should be issued for **0.05 cfs**.
3. All structures, wells and lands on map – **No, well and storage only**

F. Comments or other permit(s) associated with the project: none

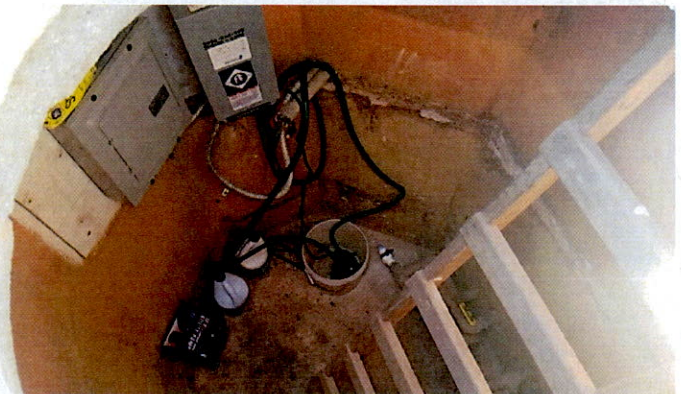


Steven Quissell
Water Rights Inspector
DENR, Water Rights Program

Date report completed: 8/8/2018

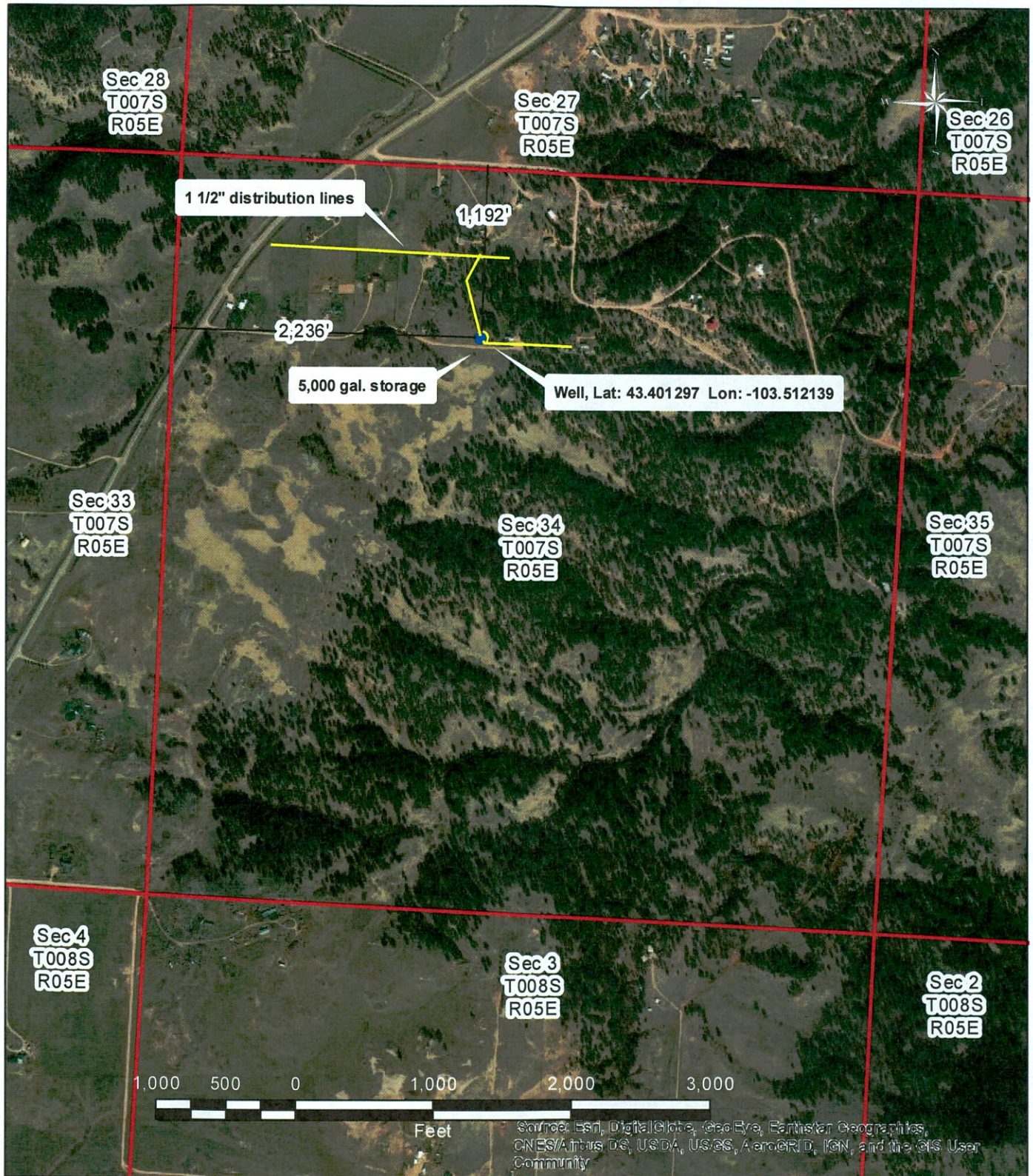


Well cap (lower right foreground), 5,000 gallon cistern (center)



Pit used as mechanical room

Water Right #2762-2
Green Acres Estates Water Corporation
8/7/2018



Steven Quissell
Water Rights Inspector
DNR Water Rights Program





DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

SEP 26 2018

2762-2

Deb Ahrens, President
Green Acres Estates Water Corporation
12712 Green Acres Rd
Hot Springs SD 57747

Dear Ms. Ahrens:

Enclosed is Water License No. 2762-2. This is the final water right document completing the process of obtaining a Water Right. Included with the 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. 2762-2**

(1) Green Acres Estates Water Corporation, 12712 Green Acres Rd., Hot Springs SD 57747 made Application No. 2762-2, April 28, 2017 for a water permit to divert 0.05 cubic feet of water per second with an annual volume of 6.1 acre feet of water from ground water, one well (Minnelusa Aquifer), Fall River County, South Dakota for supplying a water distribution system. Permit No. 2762-2, with a priority date of April 28, 2017 was approved August 11, 2017 and issued to the applicant for diversion of water with construction of the described water supply system to be completed on or before August 11, 2022 and for the application to beneficial use of water on or before August 11, 2026.

The Permit holder submitted a "*Notice of Completion of Works and Application of Water to Beneficial Use*" on August 7, 2018 indicating the water use system was in place and water placed to beneficial use post 1978.

(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 0.05 cubic feet of water per second for beneficial use. The location of the diversion point is:

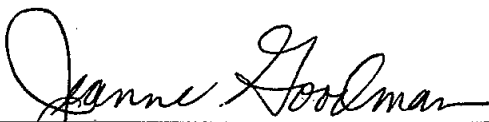
- 1,192'S and 2,236'E of the NW corner of Section 34, T7S, R5E (NE ¼ NW ¼)
Latitude 43.401297, Longitude -103.512139)

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

(4) Pursuant to South Dakota Water Law 46-5-30.1 Green Acres Estates Water Corporation, 12712 Green Acres Rd., Hot Springs SD 57747 the holder and/or owner of Water Right No. 2762-2 is issued a license to appropriate water, the right to use 0.05 cubic feet of water per second from ground water, one well (Minnelusa Aquifer) with a priority date of April 28, 2017 from the location specified in (2) of this license for supplying a water distribution system.

This license is subject to South Dakota Water Law, any limitations or conditions listed in Water Right No. 2762-2 and subject to the following qualifications:

- The well approved under Water Permit No. 2762-2 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 permit holder shall report to the Chief Engineer annually the amount of water withdrawn from the Minnelusa Aquifer.
- Water Permit No. 2762-2 authorizes a total annual diversion of 6.1 acre feet of water.



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

SEP 26 2018

date

