

WATER PERMIT NO. 6046-3

Name of Applicant: Chester Sanitary District

Address: PO Box 188, Chester

Phone: 605 489-2487

Amount of Water Claimed: 0.456 add'l

Total Acres: NA

Source of Water Supply: groundwater (2 wells)

Water to be used for: municipal

County: Lake

Type of Waste Disposal System:

Location:

PRIORITY

Date Received: 2-4-1998

Fee: \$250

Corrected Application Received:

Period of Annual Use: January 1 - December 31

Remarks: Application is for add'l 0.456 cfs from 2 existing wells authorized by No. 4499-3 for a combined diversion rate of 0.789 cfs

Diversion Point: NE 1/4 SE 1/4

Sec 15-T105N-R51W

Land to be Irrigated: NA

			15	x	
				x	

Depth of Well: 41 and 35 feet deep

Well Driller: Lacey Well Drilling

Remarks:

Type of Map: aerial

Prepared by: Lynn Beck

Reviewed and the Number Assigned on: 2-4-1998

By: Karen Schlaak

Notice of Hearing - date to intervene: _____

SOUTH DAKOTA
WATER PERMIT NO. 6046-3

Date of first receipt of application February 4, 1998.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 6046-3 to Chester Sanitary District, PO Box 188, Chester SD 57016-0188 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. 6046-3 appropriates 0.456 cubic feet of water per second (cfs) (205 gallons per minute) by increasing the diversion rate authorized by Water Permit No. 4499-3. Water Permit No. 4499-3 appropriates 0.33 cfs (150 gpm) from two wells (Big Sioux:Northern Skunk Creek Aquifer) 41 and 35 feet deep located in the NE ¼ SE ¼ Section 15-T105N-R51W. This permit increases the water appropriated from the two wells, which are interconnected, from 0.33 cfs to 0.786 cfs (355 gpm).
2. The water appropriated shall be used for the purpose of supplying water for municipal use and may not exceed the amount of water needed for beneficial use for municipal use purposes.
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. 6046-3 is May 18, 1998.
5. The date from which applicant may claim right is February 4, 1998.
6. Water rights obtained in compliance with the laws of the State of South Dakota may not be unlawfully impaired by this appropriation.

QUALIFICATION

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.

WATER MANAGEMENT BOARD

By: John Hatch
John Hatch, Chief Engineer
Water Rights Program
Department of Environment and Natural Resources

SEP 8 1998

date



FORM 2: Application for uses other than irrigation
(type or print)

Mail to: Water Rights Program Joe Foss Building 523 E. Capitol Pierre, SD 57501-3181 (605) 773-3352	No. _____	(office use only) Hydrologic Unit _____
	Basin _____	
	Newspaper _____	



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 _____	

Type of Application: ☒ New ☐ Vested Right (Use predates Mar 2, 1955) ☐ Future Use Reservation

(check one) _____ 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.) _____

This application is for an additional 0.456 cfs or 205 gpm to Permit No. 4499-3.

- Name of Applicant Chester Sanitary District Phone (605) 489-2487
(check one) Owner Tenant/lessee
Mailing Address P.O. Box 188 Chester State S.D. 57016-0188
(Street, RR. or Box) (Zip Code)
- Amount of water claimed 0.456 add'l *CFS or 205 **GPM ***AF
(*Cubic Feet per Second) (**Gallons per Minute) (***Acre Feet - storage capacity of dam/dugout or annual use if applicable)
- Source of water supply 2 wells in the Big Sioux - Skunk Creek Aquifer.
- Location of point of diversion (example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W)
2 wells in the NE1/4 SE1/4 Section 15, T105N, R51W.
County Lake
- County or counties where water will be used Lake
- Annual period during which water is to be used January 1 through December 31
- 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)

This application is for an additional 0.456 cfs (205 gpm) from two existing wells authorized by Permit No. 4499-3 for a combined rate of 0.789 cfs (355 gpm). The water use is for the Town of Chester's municipal water supply.

STATE OF SOUTH DAKOTA)
County of LAKE SS

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

I, Phillip M. Cramer, Chairman the applicant, certify that I have read this application, have examined the attached map and that the matters stated are true and that I intend, and am able to complete the necessary construction.

Signed Phillip M. Cramer Chairman
Chester Sanitary District

Subscribed and sworn to before me this 2nd day of February 1998

My Commission Expires: March 8, 1998

E. J. Aldrich
E. J. ALDRICH
NOTARY PUBLIC
SOUTH DAKOTA

Supplemental Information

(type or print in ink)



1. Well Information - Proposed Construction: Wells are already constructed.

- a) Drill Hole Diameter 15"; 20" Depth 41'; 35'
- b) Casing Type PVC; PVC, steel Diameter 12"; 12" Thickness _____
- c) Screen Type PVC; PVC Diameter 12"; 12" Thickness _____
- d) Gravel Pack cement Length of Gravel Pack 10'
- e) Depth to Top of Water Bearing Material _____
- f) Depth to Water (ground surface to water level) 22'; 22'
- g) Distance to nearest existing domestic well:
 On applicants property _____ On property owned by others _____

2. Wastewater Disposal System Information

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

3. Dugout Information

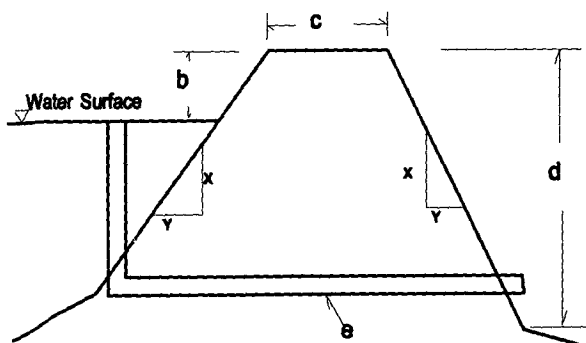
- a) Surface Dimensions _____ Depth _____
- b) Depth to water (ground surface to water level) _____

4. Water Storage Dams

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

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

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



RECEIPT

415464

Division of Water Rights

South Dakota Department of Environment and Natural Resources

Pierre, _____ September 12, 19 97

RECEIVED OF Chester Sanitary District, Box 188, Cheter, SD 57016-0188

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

Fee for Application for Permit No. <u>6046-3</u> to Appropriate Water, to construct and to put water to beneficial use _____	250	00
Fee for Application for Permit No. _____ to Appropriate Water, for Future Use _____		
Fee to retain Future Use Permit No. _____ after period of seven years.		
Fee for Inspecting Constructed Works, confirming beneficial use and issuing Water License No. _____		
Fee for Filing Transfer Form _____		
Fee for Filing Extension Request _____		
Fee for _____		

(Any Other Work Provided by Law)	Total	250 00

By John Hatch
Chief Engineer

RECEIPT

415465

Division of Water Rights

South Dakota Department of Environment and Natural Resources

Pierre, _____ September 12, 19 97

RECEIVED OF Chester Sanitary District, Box 188, Chester, SD 57016-0188

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

Fee for Application for Permit No. _____ to Appropriate Water, to construct and to put water to beneficial use _____		
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>4499-3</u>	50	00
Fee for Filing Transfer Form _____		
Fee for Filing Extension Request _____		
Fee for _____		

(Any Other Work Provided by Law)	Total	50 00

By John Hatch (9)
Chief Engineer

- Irrigation Supplies
- Berkeley Pumps
- E-Z Rain Machines
- Aluminum or Plastic Pipe
- Nelson Volume Guns
- Travelling Gun Hose
- Hot Vulcanized Hose Repair
- Gravel Packed Irrigation Wells
- Test Boring
- Westernhand Roller Pumps,
Turbine Pumps
- Ground Water Heat Pumps
- Wood Stoves

ED H. LACEY & SONS
Box 796
TRENT, SOUTH DAKOTA 57065

PHONE (605) 428-5686 Ed (605) 428-5979 Jim
(605) 428-5141 Mike (605) 428-5101 Ted

2-29-80

Sirs: - sorry about the Lachota well log
on your "NEW" well - found the
information -

0-25' Dirty rusty gravel
25-40' CLEAN COARSE GRAVEL
40' CLAY -

I believe we used 42' of 12" or 14"
STEEL CASING AND CUT IT AWAY AND
WRAPPED A 5 OR 8' WHITE OATH SUEEN
AROUND THIS MADE IN A HEXSTONE FASHION
OBUIOUSLY THE MANGANESE HASNT BOTHERED
IT

THANKS
Jim
Lacey

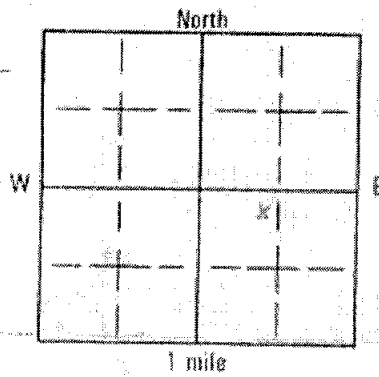
SOUTH DAKOTA WELL REHABILITATION REPORT

10-85

Location NESE 1/4 Sec 15 Twp 107N Rg 51W

County LAKE
LASEY

Please mark well location with an "X"



Well Owner:

Name Chester Sanitary Dist.

Address _____

Describe original construction if possible?
(Attach original log if known)

well is 16" steel casing
40' deep with gravel
at bottom (5-10' long)
top was finished with 10'
p. less adapter

Abandonment

Rehabilitation Completion Date 12-12-94

PROPOSED USE:

- ☒ Domestic ☒ Municipal ☐ Stock
☐ Irrigation ☐ Industrial

Description of condition of well before rehabilitation:

casing in good condition
well just quit pumping - roughly 20 yrs old
soil is sand + gravel from 2' and down

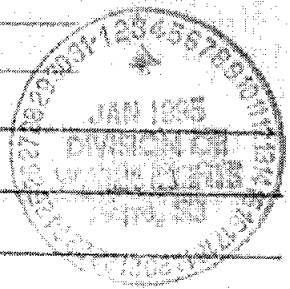
Description of rehabilitation work completed:

chlorinated well - ran in
clean gravel to 20' then a bentonite plug
for 3' then sand for 3', then neat cement
to 5' below grade, covered with natural soil

Recasing information: Material _____ Diameter _____ Inches Depth _____ Feet

Describe screen or perforations _____ Screen Location From _____ To _____
From _____ To _____

Grout ☐ YES ☐ NO Describe grouting procedure and grout _____



Well Test Data:

Specific capacity _____ Static water level _____

If a flowing well GPM _____ Shut in _____ PSI

This well rehabilitation was completed under license # 111 And this report is true and accurate.

Drilling firm LASEY WELL DRILLING

Signature of Licensed Representative James J. Lasey

Signature of W.R.B. _____

SOUTH DAKOTA WATER WELL COMPLETION REPORT

07-92

Location NE 1/4 SE 1/4 Sec 15 Twp 105N Rg 51-WWell Owner: CHESTER SANITARY DISTBusiness Name: GAME 57014

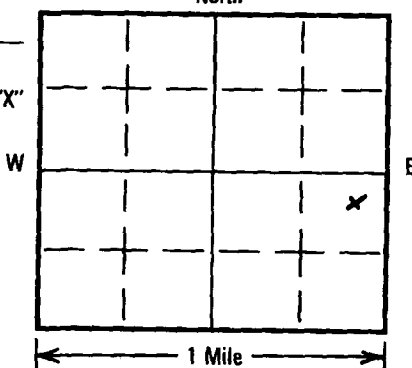
Address: _____

County

LAKE

North

Please mark well location with an "X"

Well Completion Date 12-15-94

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
<u>SANDY TOPSOIL</u>	<u>0</u>	<u>3</u>
<u>GRAVEL</u>	<u>3</u>	<u>20</u>
<u>HARDPAN</u>	<u>20</u>	<u>23</u>
<u>GRAVEL w/ROOTS</u>	<u>23</u>	<u>41</u>
<u>+ GLAY SAND</u>		

LOCATION:

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

PROPOSED USE:

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

METHOD OF DRILLING:

Hydraulically pushed
FAKE CASING

CASING DATA:

- ☐ Steel ☒ Plastic ☐ Other

If other describe 12" CI 160 pvc

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
_____ LB/FT	_____ IN	_____ FT	_____ FT	<u>20"</u> IN
_____ LB/FT	_____ IN	_____ FT	_____ FT	_____ IN
_____ LB/FT	_____ IN	_____ FT	_____ FT	_____ IN

STATIC WATER LEVEL

22'

If flowing: closed in pressure _____

GPM flow _____ through _____ inch

Controlled by ☐ Valve ☐ Reducers ☐ Other _____

Reduced Flowrate _____

Can well be completely shut in? _____

GROUTING DATA

Grout Type	No. of Sacks	Grout Weight	From	To
_____	_____	_____ lb./gal	_____ ft.	_____ ft.
_____	_____	_____ lb./gal	_____ ft.	_____ ft.

Describe grouting procedure PREMIED in 2 yds
OF NEAR CEMENT FROM
20' to 10'SCREEN: ☐ Perforated pipe ☒ ManufacturedDiameter 12" IN Length 10 FEETMaterial PVCSlot Size 080 Set From 31 Feet to 41 Feet

Other information _____

WELL TEST DATA:

☒ Pumped

Describe:

☐ Bailed☐ Other

Pumping Level Below Land Surface

38 ft. After 2 Hrs. pumped 400

_____ ft. After _____ Hrs. pumped _____

If pump installed, pump rate

2hp-100 gpm
(PUMP WAS IN OLD WELL)

REMARKS

good little well-
will do 400 g.p.m.

PLEASE COMPLETE
ENTIRE FORM

WELL DRILLERS REPORT
Division of Water Rights
Department of Water & Natural Resources

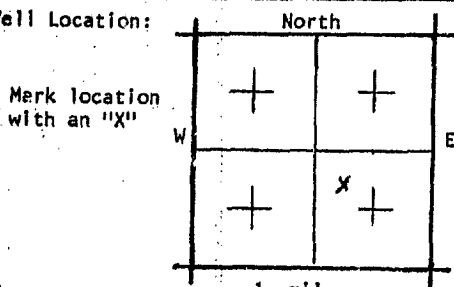
6/60

Well Owner:

Name Chester Sanitary District

Address Chester S.D. 59016

Well Location:



County LAKE Chester
* SE Sec. 15 Twp. 105 Rg. 51

Proposed Use:

☐ Domestic ☒ Municipal ☐ Test Holes
☐ Irrigation ☐ Industrial ☐ Stock

Method of Drilling:

☐ Forward Rotary ☒ Bored ☐ Jetted
☐ Reverse Rotary ☐ Cable ☐ Other

Well Construction:

Diameter of Hole 30"
Depth 40'
Casing ☐ Steel ☐ Concrete
16" ☒ Plastic ☐ Other
If other, specify _____

Was casing end left open NO
Was a well screen installed YES
Describe Well Screen
Diameter 16" Material S.S.
Slot size 1060
Was well gravel packed YES
Was well grouted YES
Was water sample taken YES

Remarks:

Water Level Information:

Static water level 21 below land surface
If flowing: closed in pressure _____ PSI
rate of flow _____ GPM

Controlled by:

☐ Valve ☐ Reducers ☐ Other

If other; specify _____

Well Test Data:

☒ Pumped 250 gpm draw-
☐ Bailed Describe: down to 35'
☐ Other _____

Pumping Level Below Land Surface

_____ ft. After _____ Hrs. pumped _____ GPM
_____ " " " " " "
_____ " " " " " "

Well Log:

Formation	Depth	
	From	To
Topsoil	0	2
Yellow Clay	2	5
Day Yellow Sand	5	20
Clay + boulders	20	21
Free Sand W.B.	21	40
Boulders	40	42

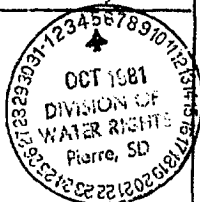
(Use Back if Necessary)

Date Completed: 4-2-81

Driller:

Grimshaw Drilling Co. 409
Driller's or Firm's Name License NO.
Box 81 Chester S.D. 59016
Address

Sally M. Wolf 9-30-81
Signed By Date





**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3181

August 19, 1997

Phillip Cramer
Chester City Maintenance
P.O. Box 144
Chester SD 57016

Dear Mr. Cramer:

Please find enclosed a partially completed application form and instruction sheet. You will not have to provide a map as stated in item 2 on the instruction sheet, as I have already prepared one.

An inspection of Permit No. 4499-3 found that the municipal water system uses 355 gallons of water per minute (gpm) from two wells located in the NE $\frac{1}{4}$ SE $\frac{1}{4}$ Section 15, T105N, R51W. Separately the wells produce 135 gpm and 220 gpm. Permit No. 4499-3 authorizes 0.33 cubic feet of water per second (cfs) or 150 gpm from two wells.

This application is for the additional 205 gpm or 0.456 cfs and the application fee is \$250.00. Also associated with obtaining the license is the inspection fee of \$50.00. This can be paid once for both Permit No. 4499-3 and the new application. Once the application is approved an inspection is not necessary since I have already inspected the wells.

After an application has been submitted and approved and the fees paid, the permits will be licensed.

If you have any questions, please feel free to contact me.

Sincerely,

A handwritten signature in cursive script that reads "Lynn Beck". The signature is written in black ink and is positioned above the printed name and title.

Lynn Beck
Natural Resources Engineer III
Water Rights Program
(605) 773-3352



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3181

September 12, 1997

Chester Sanitary District
PO Box 188
Chester SD 57016

Dear Sir:

Thank you for submitting the *Application for a Permit to Appropriate Water* for the Chester Sanitary District. The application is being returned because bottom portion of the application needs to be signed and notarized.

Upon return of the signed and notarized application, further processing of the application will continue. If you have any questions, please contact me.

Sincerely,

A handwritten signature in cursive script that reads "Karen Schlaak".

Karen Schlaak
Water Rights Program
605 773-3352

enclosure



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3181

November 26, 1997

Chester Sanitary District
PO Box 188
Chester SD 57016

Dear Sir:

On September 12, 1997, the Chester Sanitary District submitted an *Application for a Permit to Appropriate Water*. This application was to increase amount of water appropriated by the Chester Sanitary District. The application was returned because it needed to be signed and notarized. This is just a reminder that we have not received the signed and notarized application from you.

Obtaining a water permit that accurately reflects the sanitary district's water use ultimately benefits the district by protecting it's right to use water. Except for domestic use, any water user without a water right is not entitled to receive protection in the event of interference by a new or future user who has a water right.

Further processing of the application will proceed upon return of the signed and notarized application. If you have any questions, please contact me.

Sincerely,

Karen Schlaak
Environmental Scientist
Phone: (605) 773-3352



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3181

January 27, 1998

Chester Sanitary District
PO Box 188
Chester SD 57016

Notarized Original sent 2-2-98
PC

Dear Sir:

On September 12, 1997, the Chester Sanitary District submitted an *Application for a Permit to Appropriate Water*. The application was based on an investigation of Water Permit No. 4499-3 conducted by Lynn Beck on July 30, 1996. The investigation of Water Permit No. 4499-3 found that system used 355 gallons per minute (gpm) from two wells located in the NE 1/4 SE 1/4 Section 15-T105N-R51W. Separately, the wells produce 135 gpm and 220 gpm. Permit No. 4499-3 authorized 0.33 cubic feet of water per second or 150 gpm from the two wells. The application was for the additional 205 gpm.

The application was returned to the District because it was not signed or notarized. As of today, the application has not been returned. Enclosed is another application. Please complete Item No. 1 and have the application signed and notarized. The application fee of \$250.00 and the investigation fee of \$50.00 have been received.

You should be aware that the Chester Sanitary District will be responsible for payment of the required public notice in a local area newspaper.

If you have any questions, please contact me. *Question - Is the State going to publish this? PC*

Sincerely,

Karen Schlaak

Karen Schlaak
Environmental Scientist
Water Rights Program
Phone: (605) 773-3352

*Called Philip Cramer 2/4/98
and explained the public
notice procedure. KS*

enclosures

REPORT ON WATER PERMIT APPLICATION NO. 6046-3
for Chester Sanitary District
February 27, 1998

Application No. 6046-3 proposes to appropriate 0.456 cfs (205 gpm) from two existing wells by increasing the diversion rate authorized by Water Permit No. 4499-3. Water Permit No. 4499-3 appropriates 0.33 cfs (150 gpm) from two wells approximately 41 feet and 35 feet deep located in the NE 1/4 SE 1/4 of Section 15, T105N-R51W in Lake County. In effect, this application requests to increase the water appropriation from the two existing wells from 0.33 cfs to 0.786 cfs. The water is for municipal use.

AQUIFER - BIG SIOUX NORTHERN SKUNK CREEK (BS-NSC)

The Big Sioux Northern Skunk Creek is a surficial outwash (sand and gravel) which is under unconfined or water table conditions in this area. The aquifer underlies 48 square miles and contains an estimated 196,000 acre feet of water in storage in Lake County (Hansen, 1986). The aquifer extends into Moody County to the east and into Minnehaha County to the south. The aquifer is hydraulically connected to area lakes, Madison, Round and Brant and to Skunk Creek. Ground water movement is regionally from northwest to southeast but locally is toward the lakes and streams. Well construction provided for the north well indicates gravel from 3 to 20 feet, clay from 20 to 23 feet and gravel from 23 to 41 feet all below land surface. The static water level was reported at 22 feet below land surface and the completed well was capable of producing 400 gpm at a pumping level of 38 feet. The well as built was completed in accordance with SD Well Construction Standards. Information on the second well is not sufficient to evaluate its construction.

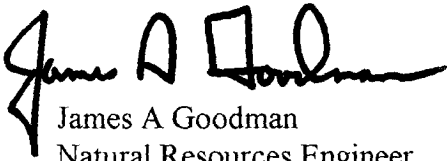
The Water Rights Program does monitor four observation wells completed into the Big Sioux Northern Skunk Creek aquifer located in a three miles radius of this application. These are LK-81B, LK-79A, LK-79B and LK-79C. Water levels for these wells show good response to climatic conditions, that is, rising water levels during wet years (recharge) and gradually declining water levels during dry years. In general, the water level record indicates that the aquifer is capable of sustaining additional withdrawals (Water Rights, 1998). Hydrographs for these wells are included with this report.

REVIEW OF EXISTING WATER PERMITS/RIGHTS

There are two existing irrigation wells located within the same section as this application. The city wells are over one-half mile from the irrigation wells. Interference between the existing permits/rights is not a concern. However, the two existing wells for this application are only 200 feet apart. Drawdown created by pumping the individual city wells will extend to the other city well. Since, the city has control over the timing and rate of diversions this should be a manageable problem.

CONCLUSIONS

1. Water is available from the Big Sioux Northern Skunk Creek aquifer.
2. The aquifer is under water table conditions and drawdown created by pumping is not expected to be significant. Interference between this application and other permits/rights in the area is not expected to be a problem. There will be drawdown between the two existing city wells but this can be managed by the city.
3. One of the city wells is constructed in accordance with SD Well Construction Standards. There is not sufficient information to evaluate the construction of the other well.
4. Approval of this application will allow licensing of Water Permit No. 4499-3 to reflect actual diversions rates for the two city wells.



James A Goodman
Natural Resources Engineer

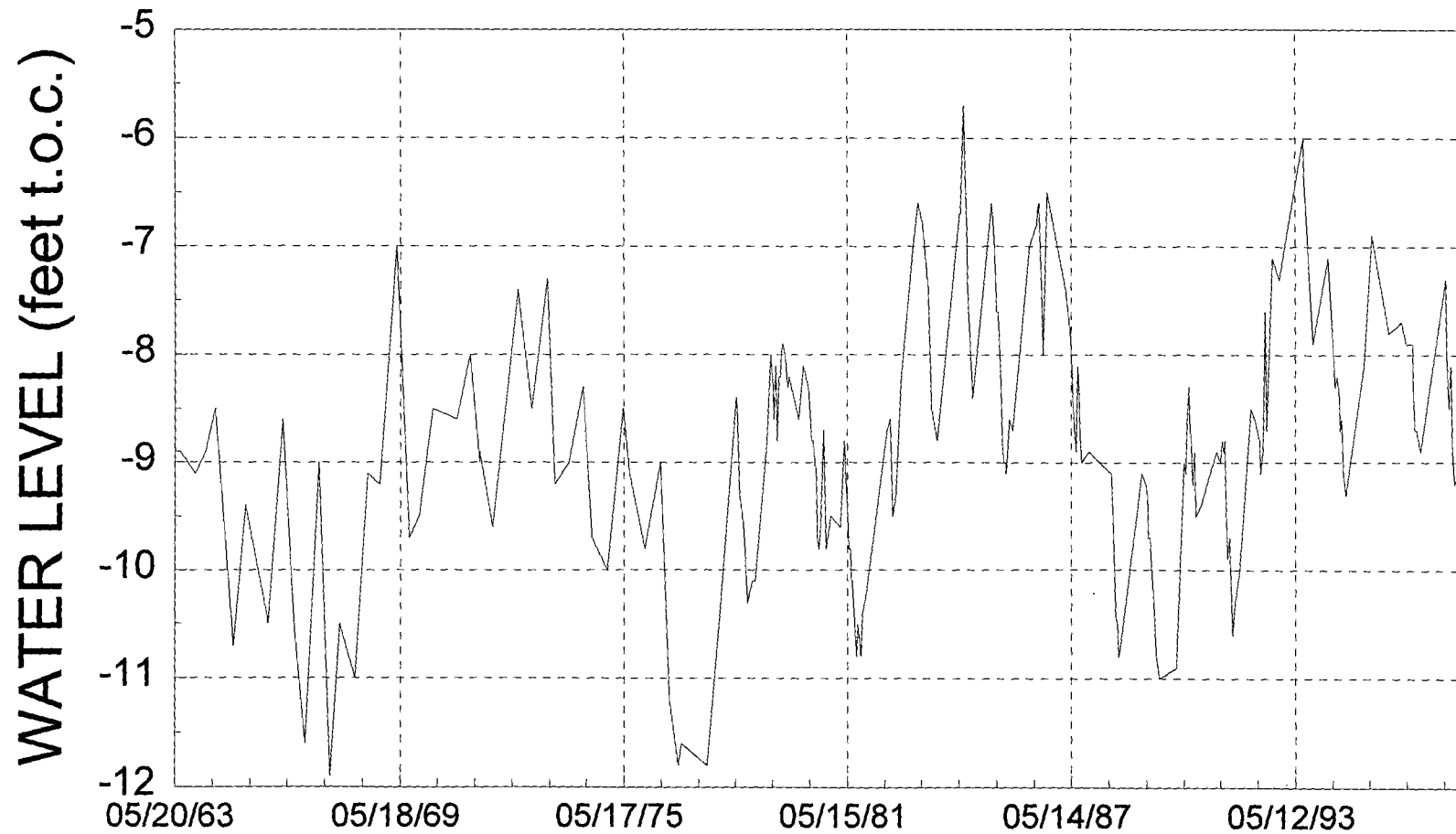
BIBLIOGRAPHY

Hansen, D.S., 1986, Water Resources of Lake and Moody Counties, South Dakota, USGS WRI 84-4209, USGS, Huron, SD, 57350.

Water Rights, 1998, Unpublished Observation Well Records for Lake County, SD DENR, Division of Environmental Services, Water Rights Program, Pierre, SD, 57501.

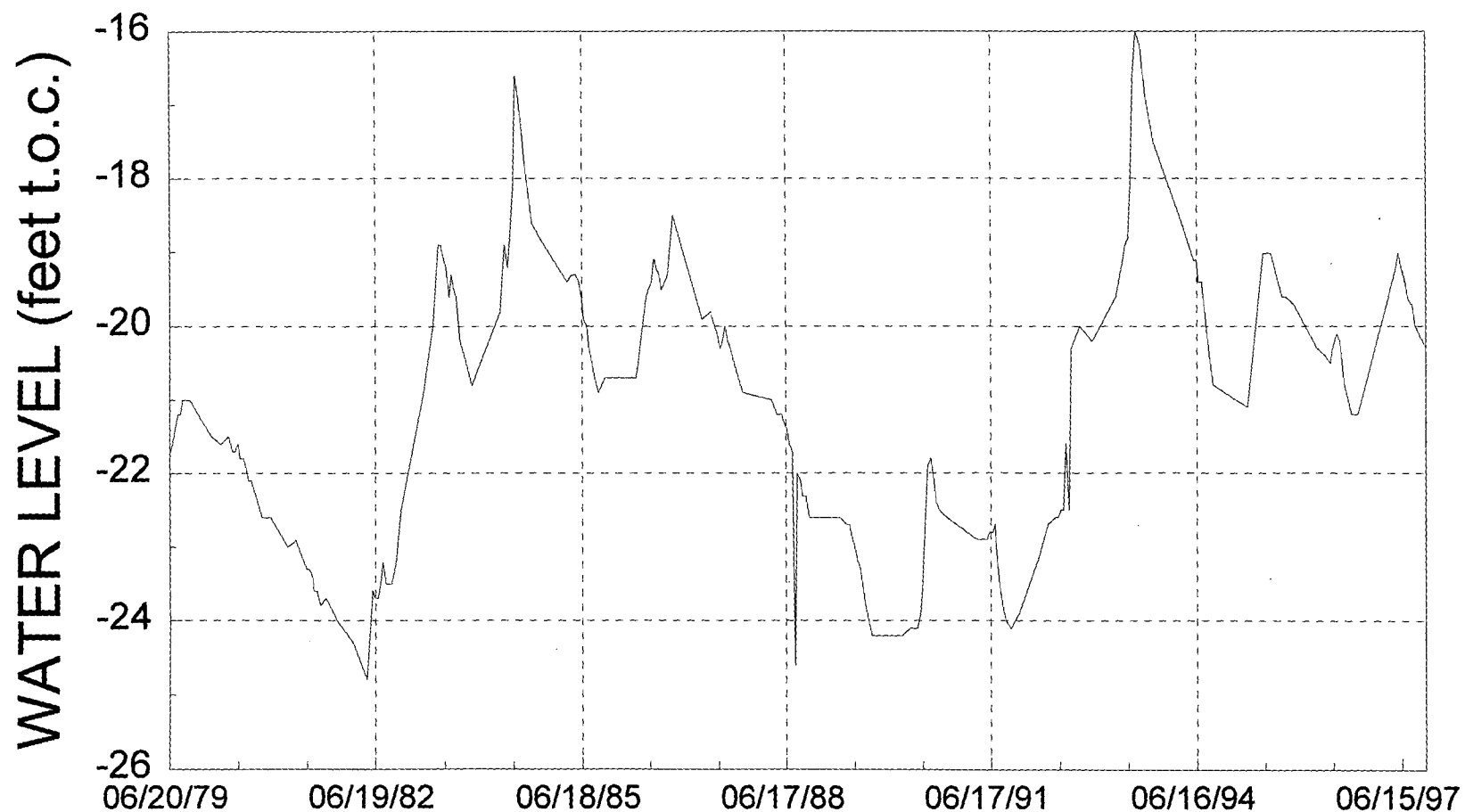
WATER RIGHTS OBSERVATION WELL

LK-81B



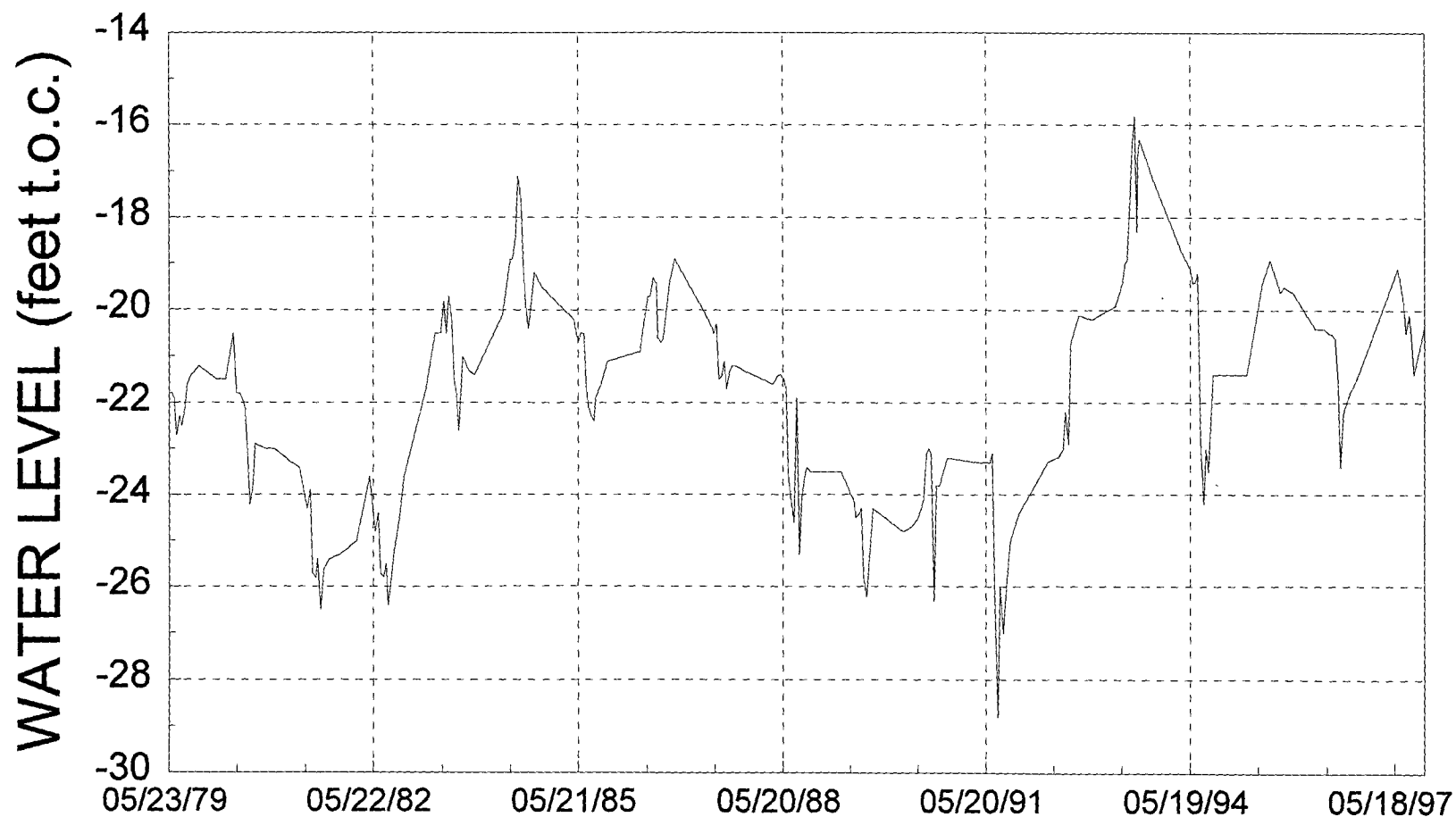
WATER RIGHTS OBSERVATION WELL

LK-79D



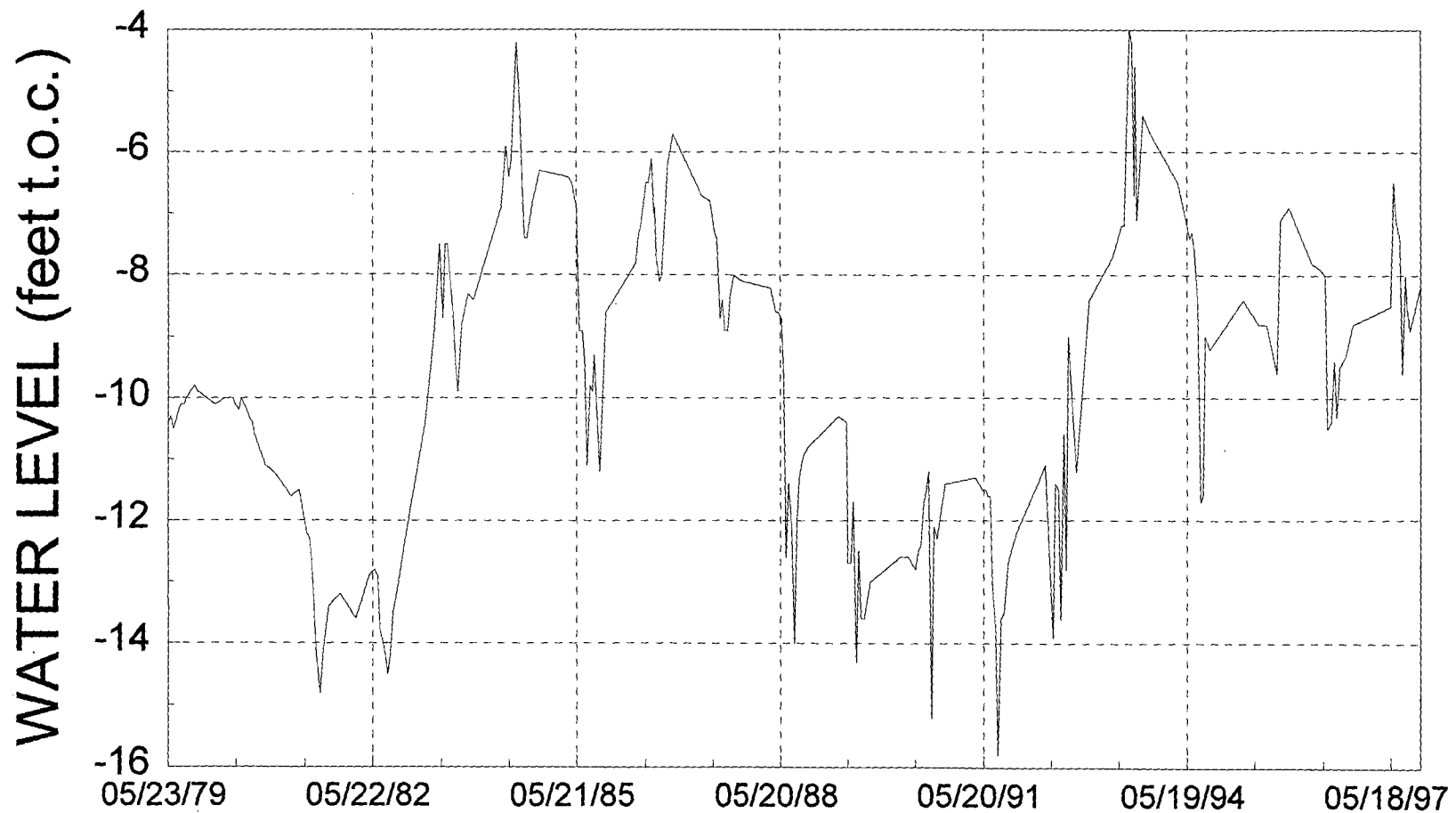
WATER RIGHTS OBSERVATION WELL

LK-79C



WATER RIGHTS OBSERVATION WELL

LK-79A



**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 6046-3, Chester Sanitary District**

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. 6046-3, Chester Sanitary District, c/o Phillip M. Cramer, Chairman, P.O. Box 188, Chester, SD 57016-0188.

The Chief Engineer is recommending APPROVAL of Application No. 6046-3 because 1) there is reasonable probability that there is unappropriated water available for the applicant's proposed use, 2) the proposed diversion can be developed without unlawful impairment of existing rights, 3) the proposed use is a beneficial use and 4) it is in the public interest with the following qualification:

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.

See report on application for additional information.

A handwritten signature in black ink, appearing to read "John Hatch", with a stylized flourish at the end.

JOHN HATCH, Chief Engineer
March 20, 1998



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE SOUTH DAKOTA 57501-3181

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

April 8, 1998

Chester Sanitary District
%Phillip M. Cramer, Chairman
P.O. Box 188
Chester, SD 57016-0188

Dear Mr. Cramer:

Water Permit Application No. 6046-3 for municipal use has been examined and found to comply with the South Dakota Water Laws and applicable rules. A notice of hearing has been sent to the Publisher of the Daily Leader printed at Madison, SD (Ph # (605) 256-4555). For your information, a copy of the notice, the recommendation of the Chief Engineer and a report on the application are enclosed. Please review the notice prior to publication and notify this office, if you have any corrections or questions.

Be sure to contact the above newspaper to authorize publication of your Notice of Hearing and to arrange for payment. Early contact with the paper can eliminate delays. The publisher has been instructed to publish your notice once each week for two consecutive weeks with the last publication to occur twenty days before the board meeting. The newspaper has 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.



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE SOUTH DAKOTA 57501-3181

April 8, 1998

Daily Leader
P.O. Box 348
Madison, SD 57042-0348

ATTENTION: Legal Department

Enclosed is a Notice of Hearing on Application No. 6046-3 to Appropriate Water to be published twice. Please publish the first notice on April 16, 1998, with the second publication 7 days later.

The applicant must verify to you that the notice is to be published, before you make the first publication. **Please BILL the APPLICANT for the cost of publication.** The APPLICANT is Chester Sanitary District, %Philip M. Cramer, Chairman, P.O. Box 188, Chester, SD 57016-0188 (Ph # (605) 489-2487).

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

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

Sincerely,

Eric Gronlund
Natural Resources Engineer
605 773-3352

enclosures

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

No. 6046-3

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

Date _____

We are in receipt of your letter of April 8, 1998, enclosing Notice of Hearing to Appropriate Water by Application No. 6046-3 which was first published in our issue of _____. **ENCLOSED IS A COPY OF THIS FIRST PUBLICATION.**

Name

Newspaper



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE SOUTH DAKOTA 57501-3181

April 22, 1998

Chester Sanitary District
%Phillip M. Cramer, Chairman
P.O. Box 188
Chester, SD 57016-0188

Dear Mr. Cramer:

On April 8, 1998, you were sent a copy of the notice of hearing for Water Permit Application No. 6046-3 for the Chester Sanitary District with instructions to contact the Madison Daily Leader to authorize publication of the notice. On April 21, 1998, DeAnne from the Daily Leader informed me that you had not authorized publication of the notice, consequently, it was not published on April 16 and 23. After several attempts to contact you by phone, I called Duane Larson with the District, and informed him that someone representing the District needed to contact the paper to authorize publication of the notice.

Mr. Larson indicated he would contact the paper immediately to authorize the publication. Enclosed is another copy of notice. The newspaper has been instructed to publish the notice on April 29 and May 6, 1998 and to send us the Proof of Publication. We must receive Proof of Publication before action can be taken on the application.

If you have any questions, please contact me.

Sincerely,

Eric Gronlund
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.



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE SOUTH DAKOTA 57501-3181

April 22, 1998

Daily Leader
P.O. Box 348
Madison, SD 57042-0348

ATTENTION: DeAnna

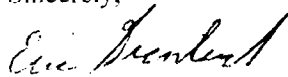
Enclosed is a Notice of Application No. 6046-3 to Appropriate Water to be published twice. Please publish the notice on April 29 and May 6, 1998.

As you confirmed in our phone conversation, Duane Larson representing the District, has called and authorized publication of the notice. Please BILL the Chester Sanitary District, %Philip M. Cramer, Chairman, P.O. Box 188, Chester, SD 57016-0188 (Ph # (605) 489-2487) for the cost of the publication.

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

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

Sincerely,


Eric Gronlund
Natural Resources Engineer
605 773-3352

enclosures

-----CU T HERE-----

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

No. 6046-3

Date _____

We are in receipt of your letter of April 29, 1998, enclosing Notice of Hearing to Appropriate Water by Application No. 6046-3 which was first published in our issue of _____. **ENCLOSED IS A COPY OF THIS FIRST PUBLICATION.**

Name

Newspaper

Instruction to Newspaper - Publish first Notice on April 29 1998, with the second publication 7 days later. The applicant is responsible for payment.

NOTICE OF APPLICATION NO. 6046-3 to Appropriate Water
and to Amend Water Permit No. 4499-3

Notice is given that the Chester Sanitary District, PO Box 188, Chester SD 57016-0188 has filed an application for a water permit to appropriate 0.456 cubic feet of water per second (cfs) (205 gallons per minute) by increasing the diversion rate authorized by Water Permit No. 4499-3. Water Permit No. 4499-3 appropriates 0.33 cfs (150 gpm) from two wells (Big Sioux:Skunk Creek Aquifer) 41 and 35 feet deep located in the NE 1/4 SE 1/4 Section 15-T105N-R51W. This application requests to increase the water appropriated from the two wells, which are interconnected, from 0.33 cfs to 0.786 cfs (355 gpm).

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 6046-3 because 1) unappropriated water is available, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest. In accordance with SDCL 46-2A-23, the chief engineer will act on the application, as recommended, unless a petition is filed opposing the application or the applicant files a petition contesting the chief engineer's recommendation. If a petition opposing the application or contesting the recommendation is filed, then a hearing will be scheduled and the Water Management Board will consider the application. Notice of the hearing will be given to the applicant and any person filing a petition.

Any person interested in opposing or supporting this application or recommendation must file a written petition with BOTH the applicant and chief engineer. The applicant must file a petition if contesting the chief engineer's recommendation. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E Capitol, Pierre SD 57501 (605 773-3352)" and the applicant's mailing address is given above. A petition filed by either an interested person or the applicant must be filed by May 18, 1998.

The petition may be informal, but must include a statement describing the petitioner's interest in the application, the petitioner's reasons for opposing or supporting the application, and the signature and mailing address of the petitioner or the petitioner's legal counsel, if legal counsel is obtained. Contact Eric Gronlund at the above Water Rights Program address to request copies of information pertaining to this application. Nettie H. Myers, Secretary, Department of Environment and Natural Resources.

Form 8

PROOF OF PUBLICATION

STATE OF SOUTH DAKOTA)
County of Lake) SS

I, Deanna D Bergheim

certify that the attached printed Notice was taken
from the Madison Daily Leader

printed and published in City of Madison

County of Lake and

state of South Dakota. The notice was published

in the newspaper on the following two dates:

Wednesday 29th April 98

Wednesday 6th May 98

Cost of Printing 42.26

Deanna Bergheim
(Signature)

Secretary

(Title)

May 7, 98

(Date Signed)



Wednesday, April 29 & May 6

NOTICE OF APPLICATION NO. 6046-3 TO APPROPRIATE WATER AND TO AMEND WATER PERMIT NO. 4499-3

Notice is given that the Chester Sanitary District, PO Box 188, Chester, SD 57016-0188 has filed an application for a water permit to appropriate 0.456 cubic feet of water per second (cfs) (205 gallons per minute) by increasing the diversion rate authorized by Water Permit No. 4499-3. Water Permit No. 4499-3 appropriates 0.33 cfs (150 gpm) from two wells (Big Sioux: Skunk Creek Aquifer) 41 and 35 feet deep located in the NE $\frac{1}{4}$ SE $\frac{1}{4}$ Section 15-T105N-R51W. This application requests to increase the water appropriated from the two wells, which are interconnected, from 0.33 cfs to 0.786 cfs (355 gpm).

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 6046-3 because 1) unappropriated water is available, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest. In accordance with SDCL 46-2A-23, the chief engineer will act on the application, as recommended, unless a petition is filed opposing the application or the applicant files a petition contesting the chief engineer's recommendation. If a petition opposing the application or contesting the recommendation is filed then a hearing will be scheduled and the Water Management Board will consider the application. Notice of the hearing will be given to the applicant and any person filing a petition.

Any person interested in opposing or supporting this application or recommendation must file a written petition with BOTH the applicant and chief engineer. The applicant must file a petition if contesting the chief engineer's recommendation. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E. Capitol, Pierre, SD 57501 (605 773-3352)" and the applicant's mailing address is given above. A petition filed by either an interested person or the applicant must be filed by May 18, 1998.

The petition may be informal, but must include a statement describing the petitioner's interest in the application, the petitioner's reasons for opposing or supporting the application, and the signature and mailing address of the petitioner of the petitioner's legal counsel, if legal counsel is obtained. Contact Eric Gronlund at the above Water Rights Program address to request copies of information pertaining to this application.

NETTIE H. MYERS
Secretary, Department
of Environment and
Natural Resources

Water Rights Division - DENR

Conversation or File Documentation

Date: March 23, 1998

RE: Well authorized in Permit No. 4499-3 and in Application No. 6046-3.

Comments:

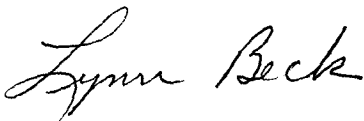
The original well authorized by Permit No. 1457-3 was replaced sometime after August 1973 by Lacey Drilling. The original well operated for only 5 years. In 1980 Jim Lacey sent an apology for the lack of a well log for this well, however, he did provide a hand written description of the soil depths and well casing. This well was described as 42' deep with 12" or 14" steel casing and a 5' or 8' white oak screen located in the NE¼ SE¼ Section 15-T105N-R51W.

There is a well log for a well drilled by Grimshaw Drilling in 1981. This well is described as 40' deep with 16" pvc casing and 16" stainless steel screen located in the SE¼ Section 15-T105N-R51W.

There is a well log for a well drilled by Lacey Well Drilling in 1994. This well is described as 41' deep with 12" pvc casing and 10' of 12" pvc screen located in the NE¼ SE¼ Section 15-T105N-R51W. This well is known as the north well.

There is a well plugging report by Lacey Well Drilling in 1994. A 40' deep well with 16" steel casing and 5' to 10' of stainless steel screen was plugged. I assume this is the well drilled in 1981, it matched the description except for the casing type.

The two wells still used are the well drilled in 1994, known as the north well, and the well drilled to replace the original well authorized by 1457-3, known as the south well. There is an official well log for the north well but only a hand written description recalled by Jim Lacey for the south well.



Lynn Beck
Natural Resources Engineer

Permit No. 4499-3
Big Sioux River - Water District

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

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

I have this day, July 30, 1996 made a thorough examination of the water use system constructed by Chester Sanitary District of Chester SD 57016 holder of Permit Nos. 4499-3 and 6046-3, bearing the priority of November 22, 1967 and February 4, 1998 authorizing the diversion of 0.33 and 0.456 cu. ft. per second of the waters of Big Sioux - Skunk Creek Aquifer for municipal purposes, in Lake County.

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

A. Works used to divert the water:

North well is 41' deep with 31' of 12" PVC casing and 10' of PVC screen. Gronfuss submersible pump, well capacity at 135 gpm and a submersible motor rated at 5 hp.

South well is 35' deep with 9' of 12" steel upper casing and 16' of 12" PVC lower casing, the last 10' of PVC casing is perforated to make a screen. Gronfuss submersible pump, well capacity at 220 gpm and a submersible motor rated at 5 hp.

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

4" to 6" transite pipe. Water is pumped through a filter to a clear well and then to the water tower.

C. Works used to apply water to beneficial use:

Municipal water supply for the town of Chester.

The system is in the following condition good. The point of diversion is located 600' W and 115' S and 600' W and 135' S of the E $\frac{1}{4}$ corner Section 15, T105N, R51W. The works are capable of diverting and conveying to the place of use 0.786 cu. ft. per second of water which is to be used for municipal purposes. Water has been put to beneficial use to the maximum extent as follows:

Water supply system for the town of Chester.

The licenses should be issued for a combined 0.786 cfs.

Applicable permit qualifications have been complied with: yes

Exceptions to compliance are: none

Comments:

Lynn Beck
Lynn Beck

Natural Resources Engineer
DENR, Water Rights Program

6-8-98
Date

REPORT ON INSPECTION OF PERMIT NO. 4499-3 and 6046-3

DATE OF INSPECTION: 7-30-96

Other permit(s) associated with the project: 1457-3 incorp. Into 4499-3 and canceled.

NAME & ADDRESS OF INSPECTION CONTACT: Phillip Cramer

RELATIONSHIP TO PERMIT HOLDER, IF APPLICABLE: City Maintenance

NAME & ADDRESS OF PERMIT HOLDER: Chester Sanitary District, Chester SD 57016

DIVERSION POINT LEGAL LOCATION: North well - 600' W and 115' S, South well - 600' W and 135' S of the E $\frac{1}{4}$ corner Section 15, T105N, R51W all in the NE $\frac{1}{4}$ SE $\frac{1}{4}$ Section 15.

WELL INFORMATION:

- 1) Well Drilling Firm: Lacey Well Drilling
- 2) No. of Wells 2
- 3) Depth(s) 41; 35 feet
- 4) Well log is available yes; yes

Casing:

- 1) Diameter 12; 12 inches
- 2) Length 31; 16 bottom casing and 9 upper casing feet
- 3) Type PVC; PVC bottom casing and steel upper casing

Screen:

- 1) Type PVC; PVC
- 2) Length 10; 10 feet
- 3) Static water level 22; 22 feet

Pump:

- 1) Make both Grunfuss submersible
- 2) Model #
- 3) Size #
- 4) Capacity 135; 220 GPM

Motor:

- 1) Make both submersible

- 2) Model No. #
- 3) Horsepower rating both 5 hp

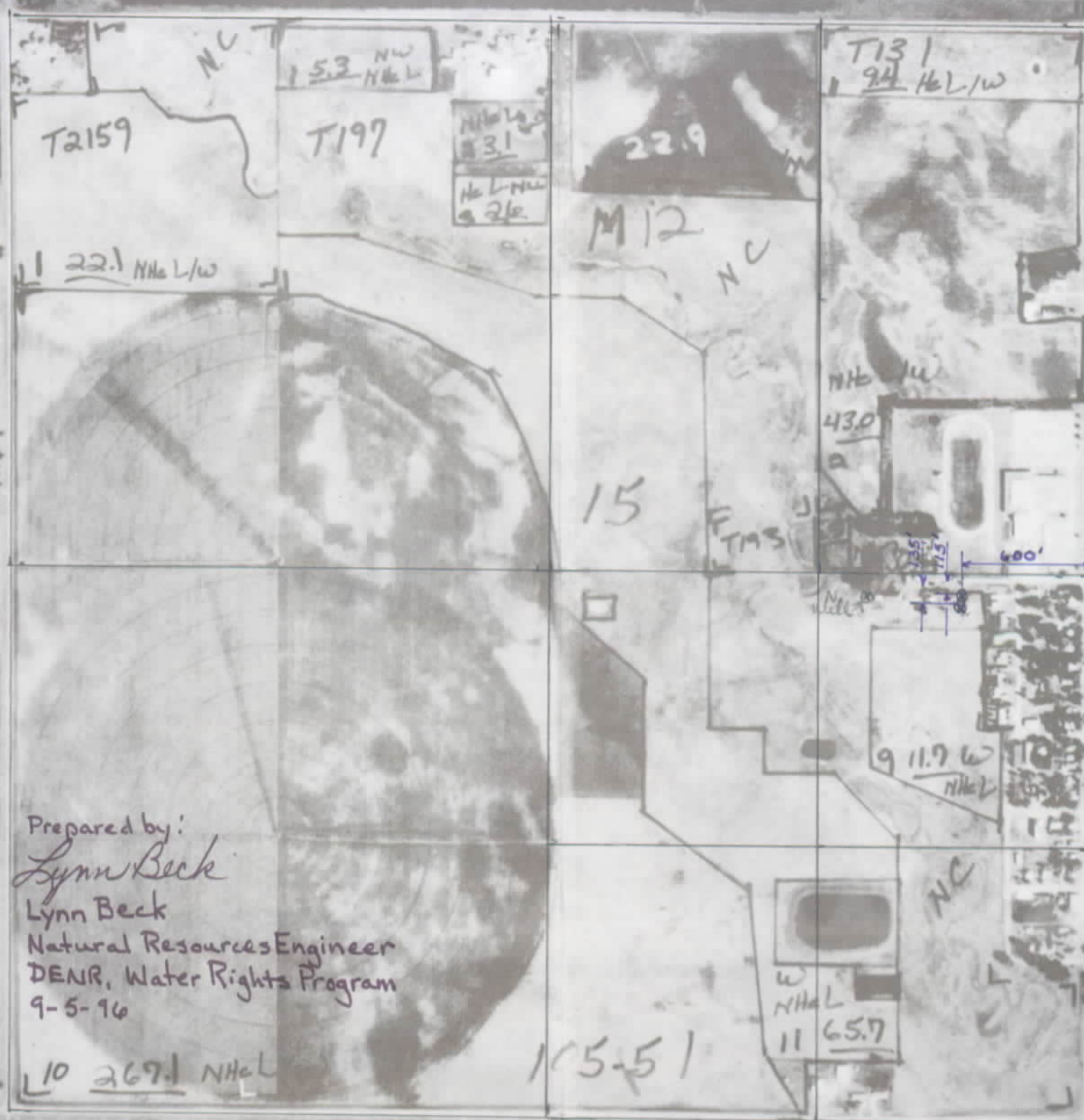
DISTRIBUTION LINES OR CANALS:

- 1) Type transite
- 2) Size 4 to 6 inches
- 3) Length # feet

PERMIT QUALIFICATIONS AND REGULATIONS:

- 1) Special qualifications to permit being abided by yes
- 2) All structures, wells and lands on map yes

MAP NOT TO SCALE
THIS IS NOT AN OFFICIAL WETLAND MAP.



6046-3

STATE OF SOUTH DAKOTA

WATER LICENSE NO. 6046-3

(1) Chester Sanitary District, PO Box 188, Chester SD 57016-0188 made Application No. 6046-3, February 4, 1998 for a water permit to divert an additional 0.456 cubic feet of water per second (cfs) from groundwater (two existing interconnected wells), Lake County, South Dakota for municipal purposes. Permit No. 6046-3, with a priority date of February 4, 1998 was approved May 18, 1998 and issued to the applicant for diversion of water with construction of the described water supply system completed and the application to beneficial use of said water completed.

Water Permit No. 4499-3 amended Water Permit No. 1457-3 to include an additional well to the distribution system with no increase in the diversion rate. At the time the permit was approved, a new priority date of March 28, 1980 was given to the new well, with a November 22, 1967 priority date retained for the old well.

Pursuant to SDCL 46-5-30.4, an amendment of a water permit or right shall retain the original priority date if there is no increase in the diversion rate, no increase in the volume of water and the amendment does not impair existing rights.

Water Permit No. 6046-3 authorizes an additional 0.456 cfs from the existing wells. The applicable portions of Water Permit No. 4499-3 are incorporated into this Water License No. 6046-3. A priority date of November 22, 1967 is retained for the original 0.33 cfs, as allowed under SDCL 46-5-30.4, and a priority date of February 4, 1998 is retained for 0.456 cfs.

(2) It is certified that the permit holder has complied with the provisions of South Dakota State Law relating to completion of the construction of the water supply system and is entitled to divert 0.786 cubic feet of water per second for beneficial use. The location of the diversion points are: north well – 600 feet west and 115 feet south; south well – 600 feet west and 135 feet south; both from the east quarter corner of Section 15-T105N-R51W (NE ¼ SE ¼)

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

(4) Pursuant to South Dakota Water Law 46-5-30.1 Chester Sanitary District, PO Box 188, Chester SD 57016-0188 the holder and/or owner of Incorporated Water Permit No. 6046-3 is issued a license to appropriate water, the right to use 0.786 cubic feet of water per second from groundwater (two wells) with priority dates of November 22, 1967 (0.33 cfs) and February 4, 1998 (0.456 cfs) from the locations specified in (2) of this license for the purpose of municipal use. This license is subject to any limitations or qualifications listed in Incorporated Water Permit No. 6046-3 and subject to South Dakota State Law.


JOHN HATCH, Chief Engineer

Water Rights Program

Department of Environment and Natural Resources

SEP 8 1998

date





**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3181
www.state.sd.us/denr

SEP 8 1998

6046-3

Phillip M. Cramer, Chairman
Chester Sanitary District
P.O. Box 188
Chester, SD 57016-0188

Dear Mr. Cramer:

Enclosed are Water Permit and Water License No. 6046-3. This is the final water right document completing your process of obtaining a Water Right. Enclosed is Receipt No. 415465 in the amount of \$50.00 which you paid for the investigation and issuance of the Water License.

For your information SDCL 46-6-27 requires that if the owner of an existing well, such as the well authorized by Water Right No. 6046-3, constructs a replacement well and does not plan to use the old well, the old well is considered abandoned and must be plugged. Also, any well that is being used or is not considered abandoned must be valved and controlled, if flowing, or sealed and capped so that no leaking occurs either underground or at the surface.

As long as you use the water beneficially, as stated in the Water License, the State Water Laws provide that you have a continuing right to use the water. If you have any questions, please contact our office.

Very truly yours,

JOHN HATCH, Chief Engineer
Water Rights Program
(605) 773-3352

ks
enclosures

NOTE: The applicable portions of Water Permit No. 4499-3 are incorporated into this Water License No. 6046-3.

Steen, Nakaila

From: Steen, Nakaila
Sent: Tuesday, January 25, 2022 3:50 PM
To: digdirt@itctel.com
Subject: Chester Sanitary District - Water Use 2014 to 2020

Mr. Jeff Carruthers,

Hello, I am Nakaila Steen from the Water Rights Program with the SD DANR.

I am working on a technical report for a water permit application to use water from the Big Sioux: Northern Skunk Creek aquifer, which is the water source for your District.

From our records, Chester Sanitary District holds Water Right No. 6046-3 which authorizes a maximum instantaneous diversion rate of 0.786 from two wells completed into the Big Sioux: Northern Skunk Creek aquifer.

As you may recall, one of our staff members contacted you in 2014 regarding the District's annual water use from the Big Sioux: Northern Skunk Creek aquifer. Water usage was provided for a time period from 2000 to 2013. This information was used to help determine the availability of water from the aquifer for an additional user.

For the withdrawal analysis in the technical report I am currently working on, I would appreciate getting the District's water use from 2014 to 2020.

Thank you for looking into this information for me. Please let me know if you have any questions.

Sincerely,
Nakaila Steen
Natural Resources Engineer I
SD DANR-Water Rights Program
605-773-6707

6046-3

1/1/01 -	81,308,000		10,740,000
1/2/02 -	2,424,000		21,116,000
1/2/03 -	22,246,000		19,822,000
1/3/04 -	42,619,000		20,373,000
1/3/05 -	61,021,000		18,402,000
1/3/06 -	82,559,000		21,538,000
1/2/07 -	99,237,000		16,678,000
1/2/08 -	15,395,000		16,016,000
1/2/09 -	28,987,000		13,592,000
12/31/09 -	38,961,000		9,974,000
1/3/11 -	48,987,000		10,026,000
1/3/12 -	58,662,000		9,675,000
4/5/12 -	60,256,000	1,594,000	
CHANGED METER			11,911,000
4/5/12	1,261,000		
12/31/12	11,578,000	10,317,000	
2013	old meter 1,076,000	756,000 Est.	11,644,000 35.73
	New meter 9,812,000		
2014 12/31	21,209,000		11,397,000 34.98
2015 12/30	32,492,000		11,283,000 34.63
2016 12/30	44,199,000		11,707,000 35.93
2017 6/1	48,967,000		4,768,000 hooked to Big Sioux Rural
Water			14.63
			gallons acre-ft

received:
1/28/2022

From
Jeff
Carruthers
-chester
Sanitary
District