

WATER PERMIT NO. 6544-3

Name of Applicant: City of Armour

Address: PO Box 415, Armour SD 57313 Phone: 605 724-2167

Amount of Water Claimed: 1 cfs (surface) and 0.029 cfs (ground) Total Acres: NA

Source of Water Supply: unnamed creek and groundwater

Water to be used for: municipal County: Douglas

Type of Waste Disposal System:

Location: East side of Armour

PRIORITY Date Received: 10-19-2004 Application/License Fee: \$200

Corrected Application Received: Period of Annual Use: Jan 1 – Dec 31

Remarks: Increased diversion rate from creek from 150 gpm to 600 gpm (authorized by No. 5884-3)
and increase groundwater from 10 gpm to 23 gpm and changes groundwater source to Codell
Formation

Diversion Point (creek and well) : SW ¼ NW ¼ Sec
7-T98N-R63W

Land to be Irrigated: NA

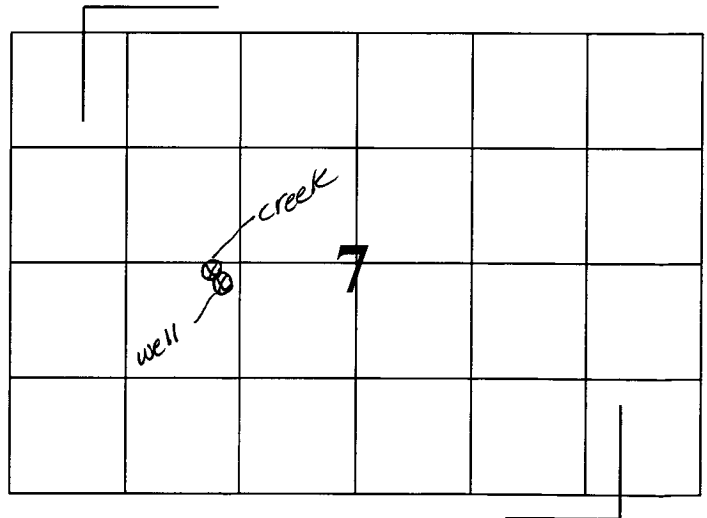
Depth of Well: 385 feet deep

Well Driller: Chase Drilling

Remarks:

Type of Map: aerial

Prepared by: Ron Duvall



Reviewed and the Number Assigned on: 10-21-04

By: **Karen Schlaak**

Notice of Hearing - date to intervene: _____

**SOUTH DAKOTA
WATER PERMIT NO. 6544-3**

Date of first receipt of application October 19, 2004.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 6544-3 to City of Armour, PO Box 415, Armour SD 57313 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. 6544-3 authorizes an increase in the diversion rates and identifies the correct groundwater source authorized by Water Permit No. 5884-3. Water Permit No. 5884-3 authorizes storage of 10 acre-feet of water in Lake Alcazar and appropriates 0.33 cubic feet of water per second (cfs) [150 gallons per minute] from an unnamed creek located in the SW $\frac{1}{4}$ NW $\frac{1}{4}$ Section 7-T98N-R63W. Water Permit No. 5884-3 also appropriates 0.022 cfs [10 gallons per minute] from one well (Niobrara Formation) located in the SW $\frac{1}{4}$ NW $\frac{1}{4}$ Section 7-T98N-R63W. This permit increases the diversion rate from the unnamed creek from 0.33 cfs to 1.33 cfs [an additional 450 gallons per minute.] In addition, this permit changes the ground water source to the Codell Formation (385 feet deep) and appropriates 0.051 cfs (23 gallons per minute) from the aquifer. The well is used as the secondary source when the creek does not provide sufficient water.
2. The water appropriated shall be used for the purpose of maintaining the water level in Lake Alcazar for fish/wildlife propagation and recreation purposes 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. 6544-3 is December 27, 2004.
5. The date from which applicant may claim right is October 19, 2004.
6. Water rights obtained in compliance with the laws of the State of South Dakota may not be unlawfully impaired by this appropriation.

QUALIFICATIONS

1. The well approved under this Permit will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
2. Water Permit Nos. 5884-3 and 6544-3 authorizes storage of 10 acre feet of water in Lake Alcazar. The lake may be filled one or more times per year.
3. No pumping from the well into the lake is authorized when the lake level is within 6 inches of the overflow.

WATER MANAGEMENT BOARD

By: Garland Erbele

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

JUL 08 2005

date



SD EForm - 1585 V1

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

RECEIVED

OCT 19 2004

WATER RIGHTS
PROGRAM

Mail to: Water Rights Program Joe Foss Building 523 E. Capitol Pierre, SD 57501-3181 (605) 773-3352	(office use only)	
	No. <u>6544-3</u>	Hydrologic Unit <u>10170101</u>
	Basin <u>Missouri River</u>	
	Newspaper <u>Armour Chronicle</u>	

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:
(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.)

- Name of Applicant City of Armour Phone (605) 724-2167
(check one) ☒ Owner ☐ Tenant/lessee
Mailing Address PO Box 415 Armour State SD 57313
(Street, RR, or Box and City) (Zip Code)
- Amount of water claimed 1.0 (surface) add'l 450 (surface) add'l
0.029 ground *CFS or 23 (ground) **GPM ***AF
(*Cubic Feet per Second) (**Gallons per Minute) (***)Acres Feet - storage capacity of dam/dugout or annual use if applicable
- Source of water supply Unnamed creek and ground water (Codell formation)
- Location of point of diversion (example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W) County Douglas
Creek and well diversion both in SW1/4NW1/4 section 7-T98N-R63W
- County or counties where water will be used Douglas
- Annual period during which water is to be used Jan 1 - Dec 31 (impounded water) Mar 1 - Oct 31 (creek/well)
- 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 increases the diversion rate from the creek from 150 gpm (as authorized by Permit No. 5884-3) to 600 gpm (450 gpm add'l) and changes the ground water source to the Codell formation.

STATE OF SOUTH DAKOTA)

SS

County of Douglas

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, Tavis Sparks, Mayor, the applicant, certify that I have read this application, have examined the attached map and that the matters stated are true and that I intend, and am able to complete the necessary construction.

Applicant's signature

Subscribed and sworn to before me this

4th

day of

October20 04

Janice Wright
Notary Public signature

Supplemental Information

(type or print in ink)

1. Well Information - Proposed Construction

see well completion report on file

- a) Drill Hole Diameter 9.5 in Depth 385 ft
- b) Casing Type Plastic Diameter 5 in Thickness
- c) Screen Type PVC Diameter 5 in Thickness
- d) Gravel Pack Length of Gravel Pack
- e) Depth to Top of Water Bearing Material 330 ft
- f) Depth to Water (ground surface to water level) 150 ft
- ✓ g) Distance to nearest existing domestic well:

On applicants property 8 blocks On property owned by others NA

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

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OCT 19 2004

WATER RIGHTS
PROGRAM

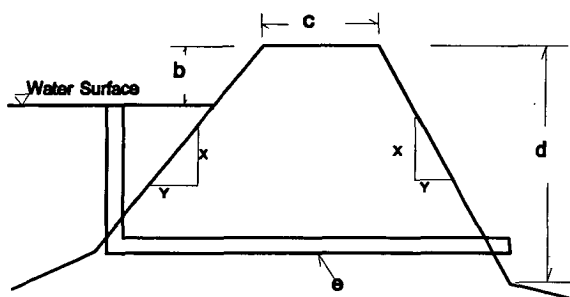
3. Dugout Information

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

4. Water Storage Dams

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

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



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

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date October 19, 20 04

RECEIVED OF Treasurer of the City of Armour, Armour SD 57313

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

Fee for Application for Permit No. <u>6544-3</u> to Appropriate Water, to construct and to put water to beneficial use	150	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>6544-3</u>	50	00
Fee for Filing Transfer Form _____		
Fee for _____		
Fee for Issuing New Well Driller's License No. _____ for C.Y. _____		
Fee for Renewal of Well Driller's License No _____ for C.Y. _____		
Fee for Issuing Well Pump Installer's License No. _____ for C.Y. _____		
Fee for Renewal of Well Pump Installer's License No. _____ for C.Y. _____		
(Any Other Work Provided by Law)	TOTAL	200.00

No.

001445

By

Darlene Schelske

Chief Engineer

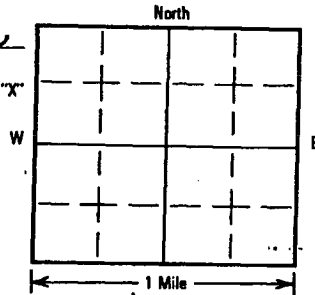
gm

SOUTH DAKOTA WATER WELL COMPLETION REPORT

07-92

Location 1/4 NW 1/4 Sec 7 Twp 98 Rg 63County Douglas

Please mark well location with an "X"

Well Completion Date May 8, 1996

LOCATION:

Distance from nearest potential pollution source (septic tank, abandoned well, feed lot, etc.)? ft. from unknown m.c. (Identify source).

PROPOSED USE:

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

METHOD OF DRILLING:

Mud Rotary

CASING DATA:

☐ Steel ☒ Plastic ☐ Other

If other describe _____

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
<u>250 LB/FT</u>	<u>5 IN</u>	<u>0 FT</u>	<u>325 FT</u>	<u>9 1/2 IN</u>
_____ LB/FT	_____ IN	_____ FT	_____ FT	_____ IN
_____ LB/FT	_____ IN	_____ FT	_____ FT	_____ IN

GROUTING DATA

Grout Type	No. of Sacks	Grout Weight	From	To
<u>Grout</u>	<u>6</u>	<u>lb./gal</u>	<u>0 ft</u>	<u>100 ft</u>
_____	_____	_____ lb./gal	_____ ft	_____ ft

Describe grouting procedure from pipe

SCREEN: ☐ Perforated pipe ☒ ManufacturedDiameter 5 IN Length 60 FEETMaterial PVC 250Slot Size 25.00 Set From 325 Feet to 385 Feet

Other information _____

WAS A PACKER OR SEAL USED? ☐ YES ☒ NO

If so, what material? _____

Describe packer(s) and location? _____

DISINFECTION:

Was well disinfected upon completion? ☒ YES. How: Chlorine
 _____ NO. Why Not? _____Laboratory sent to for water quality analysis Pierre

Well Owner: _____

Business Name: City of ArmourAddress: Armour, S.D.

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
<u>Top soil</u>	<u>0</u>	<u>2</u>
<u>yellow Clay</u>	<u>2</u>	<u>32</u>
<u>Blue Clay</u>	<u>32</u>	<u>41</u>
<u>sandy Blue Clay</u>	<u>41</u>	<u>70</u>
<u>shale</u>	<u>70</u>	<u>75</u>
<u>Blue Clay</u>	<u>75</u>	<u>104</u>
<u>sandy Blue Clay</u>	<u>104</u>	<u>310</u>
<u>Chalk</u>	<u>310</u>	<u>360</u>
<u>shale</u>	<u>360</u>	<u>321</u>
<u>sandy shale</u>	<u>321</u>	<u>330</u>
<u>sandstone</u>	<u>330</u>	<u>385</u>

STATIC WATER LEVEL 150 Feet

If flowing: closed in pressure _____ PSI

GPM flow _____ through _____ inch pipe

Controlled by ☐ Valve ☐ Reducers ☐ Other _____

Reduced Flowrate _____ GPM

Can well be completely shut in? yes

WELL TEST DATA:

☐ Pumped Describe: Developed with☐ Bailed air☒ Other _____

Pumping Level Below Land Surface

168 ft. After 8 Hrs. pumped 15 GPM

_____ ft. After _____ Hrs. pumped _____ GPM

If pump installed, pump rate _____ GPM

REMARKS

This well was drilled under license # 276

And this report is true and accurate.

Drilling firm Chase DrillingSignature of License Representative: Jay Chase

Signature of Well Owner or Equitable Property Holder: _____

Date: _____



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

September 17, 2004

City of Armour
c/o Dennis Sparks, Utility Manager
PO Box 415
Armour SD 57313

Dear Mr. Sparks:

I am writing in response to my August 24, 2004, inspection of the city's water permit for Lake Alcazar. Permit No. 5884-3 authorizes use of surface water from an unnamed creek and ground water in the Niobrara formation (225 feet deep) to maintain the lake level.

My inspection found that both the surface water diversion and a well had been developed for use. However, the surface diversion is capable of diverting 600 gallons per minute (gpm) while Permit No. 5884-3 authorizes use of 150 gpm. In addition, the well was not completed into the Niobrara formation as permitted. The well passes through the Niobrara formation and was completed into the Codell formation (385 feet deep.) As we discussed, another permit will be needed to increase the surface diversion from 150 to 600 gpm and to identify the correct ground water formation. The pump rate from the well as measured by our bucket test was 23 gpm.

I have enclosed a partially-completed application to accomplish the needed corrections. I have placed a red checkmark by the items needing to be completed. The combined license and application fee is \$200.00. Please review the application forms and, if you have any questions, contact me at (605) 773-3352. Following receipt of your completed application and the fee, we will begin processing your application. The enclosed map is a copy of the one I will include with your application. You may keep the enclosed map for your files.

Thank you for showing me around and please call if you have any questions.

Sincerely,

Ron Duvall
Natural Resources Engineer
Water Rights Program

enclosures

REPORT ON WATER PERMIT APPLICATION NO. 6544-3

City of Armour
P.O. Box 415
Armour, SD. 57313
November 17, 2004

Water Permit Application No. 6544-3, proposes to appropriate increased diversion rates of 1.0 cubic feet per second (cfs) from an unnamed creek (creek) and 0.029 cfs from one well; both located in the SW1/4 NW1/4 Section 7-T98N-R63W. Currently, Water Permit 5884-3 authorizes .33 cfs from the creek and 0.022 cfs from a well for the storage of 10 acre-feet for the purpose of maintaining the water level of Lake Alcazar for recreation and to provide habitat for fish and wildlife. Lake Alcazar is located in the W1/2 NW1/4 Section 7-T98N-R63W. Application No. 6544-3 also proposes to identify the correct ground-water source as the Codell aquifer (385 feet deep), rather than the Niobrara aquifer (225 feet deep). An inspection of No. 5884-3 in August 2004 found a greater amount of surface and groundwater being diverted than was authorized.

Review of the Surface Water Source and Existing Water Rights

The primary source of water for Lake Alcazar is surface water from the creek which is also a tributary to Choteau Creek. There are 3 existing water rights/permits in Charles Mix County that divert 3.2 cfs of water from Choteau Creek approximately 60 miles downstream from this project. Effects of an additional diversion of 1.0 cfs from the creek on existing water rights would be negligible and adverse impacts would not be expected.

Review of the Ground- water Source and Existing Water Rights

Ground water from the Codell aquifer is a secondary source of water for Lake Alcazar to restore and maintain water levels when creek flow does not provide sufficient water.

The Codell Sandstone is a bedrock aquifer providing 556,800 acre-feet of recoverable water over 435 square miles in Douglas County. The Division of Water Rights monitors 20 observation wells in the Codell aquifer in eastern South Dakota. One of the wells is located in Douglas County (DG-80F) is generally under artesian conditions. The water level in DG-80F indicates that for the last 23 years, recharge to the aquifer appears to fluctuate from annual wet and dry climatic cycles as would be expected. (See attached hydrograph)

Conclusions

1. Application No. 6544-3 proposes to appropriate an additional 1.0 cfs from an unnamed creek as a primary water source and an additional 0.029 cfs from a well for the storage of 10 acre-feet for the purpose of maintaining the water level of Lake Alcazar for recreation and to provide habitat for fish and wildlife.
2. Application No. 6544-3 proposes to identify the correct source of ground-water as the Codell aquifer.
3. There is non-appropriated water available in the Codell aquifer for Application No. 6544-3.
4. Adverse impacts by this these additional appropriations on existing water rights would not be expected.

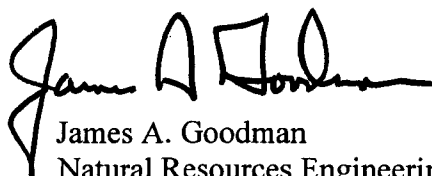


Michael A. DeFea
Natural Resources Engineer
DENR Water Rights Program

Reviewed by:

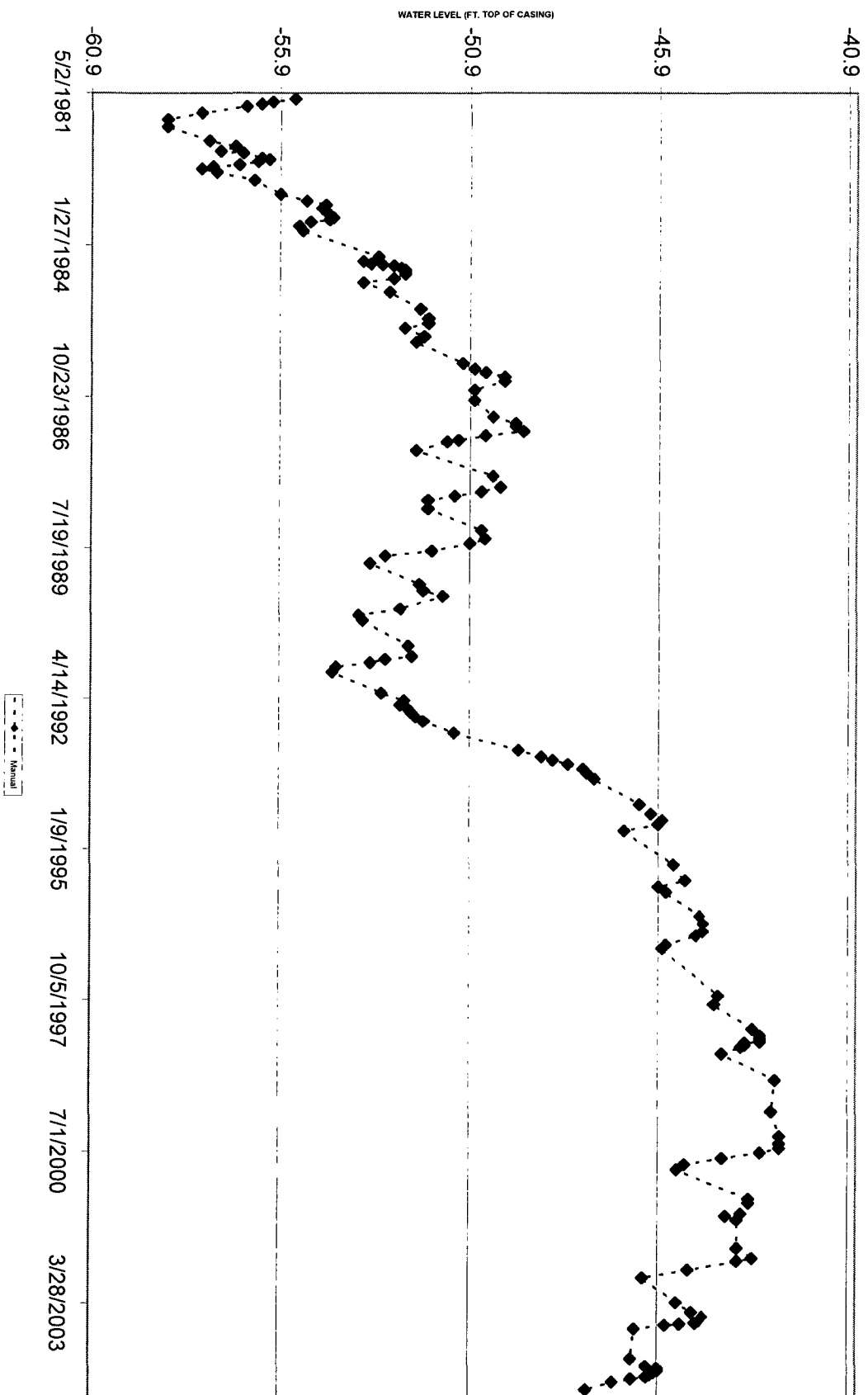


Mark D. Rath
Natural Resources Engineer Specialist
DENR Water Rights Program



James A. Goodman
Natural Resources Engineering Director
DENR Water Rights Program

WATER RIGHTS' OBSERVATION WELL
DG-80F





**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 6544-3, City of Armour**

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. 6544-3, City of Armour, c/o Mayor Travis Sparks, PO Box 415, Armour SD 57313.

The Chief Engineer is recommending APPROVAL of Application No. 6544-3 because 1) there is reasonable probability that there is unappropriated water available for the applicant's proposed use, 2) the proposed diversion can be developed without unlawful impairment of existing rights, 3) the proposed use is a beneficial use and 4) it is in the public interest with the following qualifications:

1. The well approved under this Permit will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
2. Water Permit Nos. 5884-3 and 6544-3 authorizes storage of 10 acre feet of water in Lake Alcazar. The lake may be filled one or more times per year.
3. No pumping from the well into the lake is authorized when the lake level is within 6 inches of the overflow.

See report on application for additional information.

Garland Erbele, Chief Engineer
November 30, 2004

PROOF OF PUBLICATION

STATE OF SOUTH DAKOTA)
 County of Douglas) SS

I, Debra Goehring

certify that the attached printed Notice was taken

from the Armour Chronicle

printed and published in Armour, SD

County of Douglas and

state of South Dakota. The notice was published

in the newspaper on the following two dates:

Dec. 7, 2004

Dec. 14, 2004

Cost of Printing 51.83

Debra Goehring
 (Signature)

Bookkeeper/employee
 (Title)

12-15-04
 (Date Signed)

le Country Extra

Notice of application No. 6544-3 to Appropriate Water and Amend Water Permit No. 5884-3

Notice is given that the City of Armour, PO Box 415, Armour S.D., 57313 has filed an application for a water permit to increase the diversion rates and identify the correct groundwater source authorized by Water Permit No. 5884-3. Water Permit No. 5884-3 authorizes storage of 10 acre-feet of water in Lake Alcazar and appropriates 0.33 cubic feet of water per second (cfs) [150 gallons per minute] from an unnamed creek located in the SW 1/4 NW

1/4 Section 7-T98N-R63W. The permit also appropriates 0.022 cfs [10 gallons per minute] from one well (Niobrara Formation) located in the SW 1/4 NW 1/4 Section 7-T98N-R63W. This application proposes to increase the diversion rate from the unnamed creek from 0.33 cfs to 1.33 cfs [an additional 450 gallons per minute.] In addition, this application changes the ground water source to the Codell Formation (385 feet deep) and appropriates 0.051 cfs (23 gallons per minute) from the aquifer. The well is used as the secondary source when the creek does not provide sufficient water. Water is used to maintain the water level in Lake Alcazar for fish/wildlife propagation and recreation purposes.

Pursuant to SDCL 46-2A-2, the Chief

Engineer recommends APPROVAL of Application No. 6544-3 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 Dec. 27, 2004.

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

a78L12/7-14c

RECEIVED

DEC 29 2004

WATER RIGHTS
PROGRAM



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

December 1, 2004

The Armour Chronicle
PO Box 129
Armour SD 57313-0129

ATTENTION: Legal Public Notice

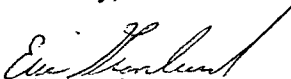
Enclosed is a Notice on Application No. 6544-3 to Appropriate Water to be published twice. Please publish the first notice on December 7, 2004 with the second publication 7 days later. The text of the notice can be e-mailed to your paper by contacting Karen Schlaak at (605) 773-3352.

The applicant must verify to you that the notice is to be published, before you make the first publication. **Please BILL the APPLICANT for the cost of publication.** The APPLICANT is City of Armour, % Mayor Travis Sparks, PO Box 415, Armour SD (Ph # 605-724-2167).

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. 6544-3

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

Date _____

We are in receipt of your letter of December 1, 2004 enclosing Notice to Appropriate Water by Application No. 6544-3 which was first published in our issue of _____. **ENCLOSED IS A COPY OF THIS FIRST PUBLICATION.**

Name

Newspaper



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

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

December 1, 2004

City of Armour
% Mayor Travis Sparks
PO Box 415
Armour SD 57313

Dear Mayor Sparks:

Water Permit Application No. 6544-3 for municipal use has been examined and found to comply with the South Dakota Water Laws and applicable rules. A notice has been sent to the Publisher of the Armour Chronicle printed at Armour, SD (Ph # 605-724-2747). You will need to contact the newspaper and authorize publication of this notice. For your information, a copy of the notice, the recommendation of the Chief Engineer and a report on the application are enclosed. Please review the notice prior to publication and notify this office, if you have any corrections or questions.

Be sure to contact the above newspaper to authorize publication of your Notice and to arrange for payment. Early contact with the paper can eliminate delays. Upon receiving authorization, the publisher has been instructed to publish your notice once each week for two consecutive weeks. The newspaper has also been instructed to send us the Proof of Publication. We must receive Proof of Publication before action can be taken on the application.

Sincerely,


Eric Gronlund
Natural Resources Engineer
(605) 773-3352

enclosures

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.

Permit No. 6544-3
Missouri 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, August 24, 2004, made a thorough examination of the water use system constructed by City of Armour of PO Box 415, Armour SD 57313 holder of Permit No. 5884-3 and 6544-3, bearing the priority of August 24, 1995 and October 19, 2004, respectively authorizing the diversion of 0.33 and 0.022 (Niobrara formation – not in use); 1.00 cfs add'l and 0.051 (Codell formation), respectively, cu. ft. per second and/or the storage of 10 acre-feet of the waters of an unnamed creek and ground water for recreational and fish/wildlife purposes, in Douglas County.

Inspection contact & relationship to permit holder, if applicable: **Dennis Sparks, Utility Manager**

A. Works used to divert the water:

Well Information:

- 1) Well Drilling Firm: Chase Drilling
- 2) No. of Wells 1
- 3) Depth(s) 385 feet
- 4) Well log is available Y

Casing:

- 1) Diameter 5 inches
- 2) Length 325 feet
- 3) Type Plastic

Screen:

- 1) Type PVC
- 2) Length 60 feet
- 3) Static water level 150 feet

Motor/Pump:

- 1) Make unknown submersible
- 2) Capacity 23 GPM

Motor: Unnamed Creek pump site

- 1) Make Kohler Magnum, 2cyl. gas
- 2) Model No. M185
- 3) Horsepower rating 18 hp

Pump:

- 3) Make Neptune
- 4) Size 4 inch intake
- 5) Capacity 600 GPM

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

Water is diverted from the creek to the lake when available and then the well is used when no water is available in the creek.

C. Compliance with Permit Requirements:

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

Report of Examination of Works

Permit No. 6544-3

The system is in **good** condition with the point(s) of diversion located as follows: **Creek: 1,340 feet S and 600 feet E (SW $\frac{1}{4}$ NW $\frac{1}{4}$ - Lat 43.32251, Long -98.34256); Well: 1,400 feet S and 625 feet E (SW $\frac{1}{4}$ NW $\frac{1}{4}$ - Lat 43.32234, Long -98.34247); both from the NW corner section 7-T98N-R63W.** The works are capable of diverting and conveying to the place of use **1.33 (surface) and 0.051 (ground)** cu. ft. per second of water and/or storing **10** acre-feet of water which is to be used for **recreational and fish/wildlife propagation**. Water has been put to beneficial use to the maximum extent and the license should be issued for **1.33 (surface) and 0.051 (ground – Codell formation only)** cfs and/or **10** acre-feet of storage.

All structures, wells and lands on map **Y**

Comments or other permit(s) associated with the project:
5884-3 is incorporated into Permit No. 6544-3



Ron Duvall

Natural Resources Engineer
DENR, Water Rights Program

Date report completed: **December 29, 2004**

Scale: 1 inch equals 499 feet

700

Feet



South Dakota
Department of Environment
& Natural Resources
Water Rights

Completed by:

Ron Duvall
Ron Duvall, Natural Resources Engineer
Water Rights Program

Diversion point(s) located using GeoExplorer II GPS

Date: Sep 16, 2004

Application No.

**STATE OF SOUTH DAKOTA
WATER LICENSE NO. 6544-3**

(1) The City of Armour, PO Box 415, Armour SD 57313 made Application No. 6544-3, October 19, 2004 for a water permit to divert an additional 1.00 cubic feet of water per second (cfs) from an unnamed creek and 0.051 cfs from groundwater (one well – Codell Formation), Douglas County, South Dakota to maintain the water level in Lake Alcazar for fish and wildlife propagation and recreational purposes. Permit No. 6544-3, with a priority date of October 19, 2004 was approved December 27, 2004 and issued to the city for diversion of water with construction of the described water supply system and the application to beneficial use of water completed.

Water Permit No. 5884-3 with a priority date of August 24, 1995 authorized 10 acre-feet of water in Lake Alcazar and appropriates 0.33 cfs from an unnamed creek and 0.022 cfs from Niobrara Formation well. Water Permit No. 6544-3 increased the diversion rates and clarified the groundwater source to the Codell Formation.

The applicable portions of Water Permit No. 5884-3 have been incorporated into Water License No. 6544-3. The priority dates are as follows: August 24, 1995 for 0.33 cfs from an unnamed creek and storage of 10 acre feet of water in Lake Alcazar; October 19, 2004 for 1.00 cfs from an unnamed creek and 0.051 cfs from the Codell Formation well.

(2) The water supply system has been completed and water applied to beneficial use in accordance with South Dakota State Law. Pursuant to South Dakota Codified Law 46-5-30.1, the holder and/or owner of Incorporated Water Right No. 6544-3 is issued a license, bearing priority dates of August 24, 1995 and October 19, 2004 to divert 1.33 cfs from an unnamed creek and 0.051 cfs from groundwater (one Codell Formation well) to maintain the water level in Lake Alcazar (10 acre feet) for fish & wildlife propagation and recreational purposes.

The diversion points are located as follows: Creek – 1,340 feet south and 600 feet east (SW ¼ NW ¼); Well – 1,400 feet south and 625 feet east (SW ¼ NW ¼); both from the northwest corner of Section 7-T98N-R63W.

(3) This license is subject to South Dakota Water Law, any limitations or conditions listed in Water Permit No. 6544-3 including the following now applicable qualifications:

- The well approved under this Permit will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
- Water Permit Nos. 5884-3 and 6544-3 authorize storage of 10 acre feet of water in Lake Alcazar. The lake may be filled one or more times per year.
- No pumping from the well into the lake is authorized when the lake level is within 6 inches of the overflow.



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

JUL 08 2005

date





**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

JUL 08 2005

6544-3

City of Armour
% Mayor Travis Sparks
PO Box 415
Armour SD 57313

Dear Mayor Sparks:

Enclosed are Water Permit and Water License No. 6544-3. The Water License is the final water right document completing your process of obtaining a Water Right.

As long as you use the water beneficially, as stated in the Water License, State Water Laws provide that you have a continuing right to use the water.

Sincerely,

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

NOTE: The applicable portions of 5884-3 have been incorporated into Water License No. 6544-3.

enclosures