

WATER PERMIT NO. 6948-3

Name of Applicant: **Brian Mount**

Address: **45659 Wicker St, Meckling SD 57069**

Phone: **605 624-9373**

Amount of Water Claimed: **1.67 cfs**

Total Acres: **104**

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

Water to be used for: **irrigation**

County: **Clay**

Type of Waste Disposal System:

Location: **5 miles north of Meckling**

PRIORITY

Date Received: **1-17-08**

Application/License Fee: **\$275**

Corrected Application Received: **1-24-08**

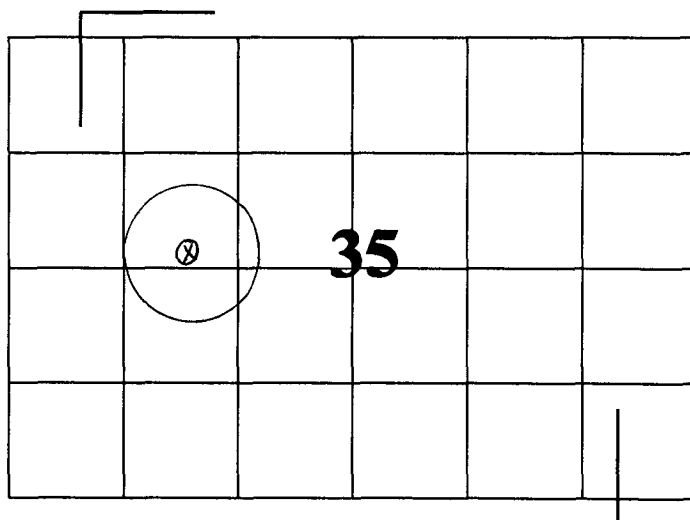
Period of Annual Use: **April 1 – September 30**

Remarks: **Requesting more water than 1 cfs per 70 acres**

Diversion Point: **SW ¼ NW ¼ Sec 35-T94N-R53W**

Land to be Irrigated: **S ½ NW ¼ and N ½ SW ¼**

Sec 35-T94N-R53W



Depth of Well: **240 feet deep**

Well Driller: : **Christensen Well & Irrigation**

Remarks:

Type of Map: **aerial**

Prepared by: **Sheree Christensen, Clay Co FSA**

Reviewed and the Number Assigned on: **1-24-08**

By: **Karen Schlaak**

Notice of Hearing - date to intervene: _____

FORM 2: Application for irrigation in South Dakota
(type or print)

Mail to: Water Rights Program Joe Foss Building 523 E. Capitol Pierre, SD 57501-3181 (605) 773-3352	(office use only)	
	No. <u>6948-3</u>	Hydrologic Unit <u>10170102</u>
	Basin <u>Vermillion River</u>	
	Newspaper <u>Plain Talk P.O. Box 56</u> <u>605-624-2695</u> <u>Vermillion 57069</u>	

RECEIVED

JAN 17 2008

**WATER RIGHTS
PROGRAM**

Application For Permit To Appropriate Water For Irrigation

Type of Application: ☒ New ☐ Vested Right ☐ Amendment/Correction to Permit No. _____
(Use predates Mar 2, 1955)

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

1. Name of Applicant Brian Mount Phone 605-624-9373
(check one) ☒ Owner ☐ Tenant/lessee

Mailing Address 45659 Wickert St Meckling State SD 57069
(Street, RR, or Box and City) (Zip Code)

2. Amount of water claimed 1.67 *CFS or 750 **GPM ***AF Total Acreage 104
(*Cubic Feet per Second) (**Gallons per Minute) (***Acre Feet - storage capacity of dam/dugout or annual use if applicable)

3. Source of water supply Well

4. Location of point of diversion (example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W) County Clay
Lot B NW 1/4 SW 1/4 x 5 1/2 NW 1/4 Sec 35 T94N - R53W Bethel
SW 1/4 NW 1/4

5. County or counties where water will be used Clay

6. Annual period during which water is to be used April 1 to September 30

7. List below each forty acre division, or lot, or fraction thereof and show number of acres to be irrigated in each.
(Attach sheet if more space is needed)

Land Description	Acres	Land Description	Acres
<u>Lot B NW 1/4 SW 1/4 x 5 1/2 NW 1/4</u>	<u>103.67</u>	<u>N 1/2 SW 1/4</u>	<u>41</u>
<u>T94N - R53W Bethel</u>		<u>S 1/2 NW 1/4</u>	<u>63</u>
<u>Sec 35 T94N R 53W</u>		<u>Total</u>	<u>104</u>

8. Give a description of the project. (Attach sheet if more space is needed)
Drill well @ pivot point that is 1150' by and
making 85% of a circle

STATE OF SOUTH DAKOTA) SS

County of Clay)

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, Brian Mount, 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 Brian Mount

Subscribed and sworn to before me this 15th day of JANUARY 2008

Notary Public signature

my Commission Expires 8/15/2012

SOUTH DAKOTA
WATER PERMIT NO. 6948-3

Date of first receipt of application January 17, 2008.

Date of return to applicant for corrections, amendments or changes January 17, 2008.

Date of receipt of corrected application January 24, 2008.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 6948-3 to Brian Mount, Wicker St, Meckling SD 57069 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. 6948-3 appropriates 1.67 cubic feet of water per second from one well to be completed into the Lower James:Missouri Aquifer (approximately 240 feet deep) located in SW 1/4 NW 1/4 Section 35 to irrigate 104 acres located in the S 1/2 NW 1/4 and N 1/2 SW 1/4 Section 35; all in T94N-R53W.
2. The amount of the appropriation may not exceed 2 acre feet annually for each acre of land to which water is actually and beneficially applied for irrigation. The water is to be used during the following described annual period: April 1 – September 30.
3. The date from which applicant may claim right is January 17, 2008.
4. The date of approval of Permit No. 6948-3 is March 24, 2008.
5. One-fifth of the construction is to be completed on or before September 24, 2010.
6. All construction is to be completed on or before March 24, 2013.
7. Water is to be put to beneficial use on or before March 24, 2017.
8. Water rights obtained in compliance with the laws of the State of South Dakota may not be unlawfully impaired by this appropriation.

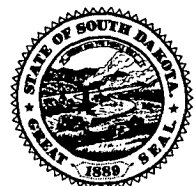
QUALIFICATIONS

1. The well approved under this permit will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
2. The well authorized by Permit No. 6948-3 shall be constructed by a licensed well driller and construction of the well and installation of the pump shall comply with Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) pursuant to Section 74:02:04:28.
3. Pursuant to SDCL 46-5-6 which allows a greater diversion rate if the method of irrigation, time constraints, or type of soils so require, Permit No. 6948-3 authorizes a maximum diversion rate of 1.67 cfs for the irrigation of 104 acres with an annual volume not to exceed 2 acre-feet of water per acre per year.
4. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.

WATER MANAGEMENT BOARD

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

MAY 07 2008
date



(type or print in ink)

1. Well Information - Proposed Construction

- a) Drill Hole Diameter 28" Depth 240'
- b) Casing Type PVC Diameter 16" Thickness .616"
- c) Screen Type PVC Diameter 16" Thickness .616"
- d) Gravel Pack road Length of Gravel Pack 100 - 240'
- e) Depth to Top of Water Bearing Material 124'
- f) Depth to Water (ground surface to water level) est. 100'
- g) Distance to nearest existing domestic well:
On applicants property 1000' On property owned by others 5280'

2. Wastewater Disposal System Information

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

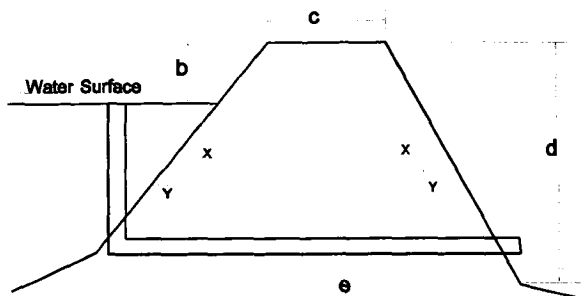
3. Dugout Information

- 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

**88005 Hwy. 57
Hartington, NE 68739
Office 402-254-6809**

TEST HOLE ☒ FARM WELL ☐ IRRIGATION ☐

County _____

[illegible]

TOTAL DEPTH

250

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date 1/17, 20 08

RECEIVED OF Brian D Mount 45659 Wicker St Meckling SD 57069

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

Fee for Application for Permit No. <u>6948-3</u> to Appropriate Water, to construct and to put water to beneficial use	225	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>6948-3</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)	275	00
TOTAL		

No.

03563

By

Paula E. Eide

Chief Engineer



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

January 17, 2008

Brian Mount
45659 Wicker St
Meckling SD 57069

RECEIVED

JAN 24 2008

WATER RIGHTS
PROGRAM

Dear Mr. Mount:

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

- Enclosed is the aerial photo map submitted with the application. Please outline the acres to be irrigated.
- The application lists two different numbers of acres to be irrigated. Item No. 2, states the total acreage as 170 acres. Item No. 7, states 103.67 (104) acres. Which is the amount you are requesting?
- The acreage outlined on the map needs to correspond with one of the two amounts listed above. Also, if the total acreage is 170 acres, an additional \$25 will need to be submitted.
- If available, please submit a well log or test hole log signed by a licensed South Dakota well driller.

If you have any questions, please contact me.

Sincerely,

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

enclosure



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 6948-3, Brian Mount**

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. 6948-3, Brian Mount, 45659 Wicker Street, Meckling SD 57069.

The Chief Engineer is recommending APPROVAL of Application No. 6948-3 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:

1. The well approved under this permit will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
2. The well authorized by Permit No. 6948-3 shall be constructed by a licensed well driller and construction of the well and installation of the pump shall comply with Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) pursuant to Section 74:02:04:28.
3. Pursuant to SDCL 46-5-6 which allows a greater diversion rate if the method of irrigation, time constraints, or type of soils so require, Permit No. 6948-3 authorizes a maximum diversion rate of 1.67 cfs for the irrigation of 104 acres with an annual volume not to exceed 2 acre-feet of water per acre per year.
4. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.

See report on application for additional information.

Garland Erbele, Chief Engineer
February 28, 2008

REPORT ON WATER PERMIT APPLICATION NO. 6948-3
For Brian Mount
February 15, 2008

Application No. 6948-3 proposes to appropriate 1.67 cfs (750 gpm) from one well approximately 240 feet deep located in the SW $\frac{1}{4}$ NW $\frac{1}{4}$ of section 35 to irrigate 104 acres located in the S $\frac{1}{2}$ NW $\frac{1}{4}$ and N $\frac{1}{2}$ SW $\frac{1}{4}$ of section 35; all in T94N R53W in Clay County.

AQUIFER –LOWER JAMES MISSOURI (LJM)

The Lower James Missouri is a buried outwash (sand and gravel) that is under predominantly water table conditions in this area. The aquifer underlies 5,400 acres and contains an estimated 81,000 acre-feet of recoverable water in storage in Clay County (Hedges, 1982). The aquifer extends into Yankton County to the west and blends into the much larger Missouri Elk Point aquifer just to the south. For all practical purposes the two aquifers could be considered the same in Clay County. Ground water movement is from northwest to southeast in the area of this application (Christensen, 1967). The hydrogeologic map in the Christensen report indicates the aquifer should be 75 to 100 feet thick in this area. Christensen described the aquifer as follows “On the floodplains of the Missouri and Vermillion Rivers the outwash is overlain by alluvium--gravel, sand, silt, and clay that was transported by the rivers and deposited at places where the velocity of the water was insufficient to maintain the materials in motion. Much of the floodplain alluvium is permeable and forms a single aquifer with the underlying outwash” (Christensen, 1967). This location is up above the floodplain and in fact the aquifer does extend under a till layer about 120 feet thick.

The test well drilled for this application indicates coarse sand and fine gravel from 124 to 234 feet below land surface. The information available from the county study, area domestic and irrigation wells and the observation wells all indicates the aquifer is present at this site and should be capable of producing the amount of water requested. A nearby irrigation well (located in the SW $\frac{1}{4}$ of section 36) which is about one mile to the east indicates topsoil and clay from the surface to 120 feet and sand and gravel from 120 to 188 feet all below land surface. This irrigation well had a static water level of 122 feet below land surface.

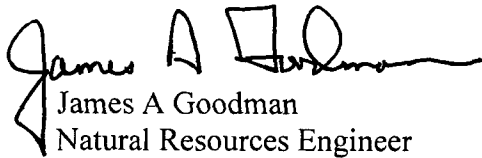
The Water Rights Program monitors an observation well CL-80A that is located about three miles southeast of this application. Water level records for this observation well go back in time to 1958. Water level records for this well show good response to climatic conditions that is rising water levels during wet periods (recharge) and gradually declining water levels during dry years. The water level record indicates the aquifer is capable of sustaining additional withdrawals (Water Rights, 2008). A hydrograph for this observation well is included with this report.

REVIEW OF EXISTING WATER PERMITS/RIGHTS

The nearest existing permitted user is Water Right No. 5524-3. This existing well is located about one mile to the southeast of the well proposed for this application. This irrigation reportedly is capable of producing 1,200 gpm with five feet of drawdown. This equates to a very large specific capacity of 240 gpm/ft of drawdown. Interference is not a concern. Drawdown created by pumping will not be significant at this distance. This is also shown by the observation well record. Also there have never been any reported water availability problems for the Missouri Elk Point or Lower James Missouri aquifers in Clay County.

CONCLUSIONS

1. Water is available from the Lower James Missouri aquifer.
2. The aquifer appears to behave like it is under water table conditions. It is not anticipated that drawdown created by pumping will be significant nor cause any adverse effect. Interference is not a concern.
3. The well authorized by this application must be constructed in accordance with SD Well Construction Standards.
4. The applicant is requesting slightly more water than the statutory limit of one cfs per 70 acres. It appears this request is reasonable because of the system design.


James A Goodman
Natural Resources Engineer

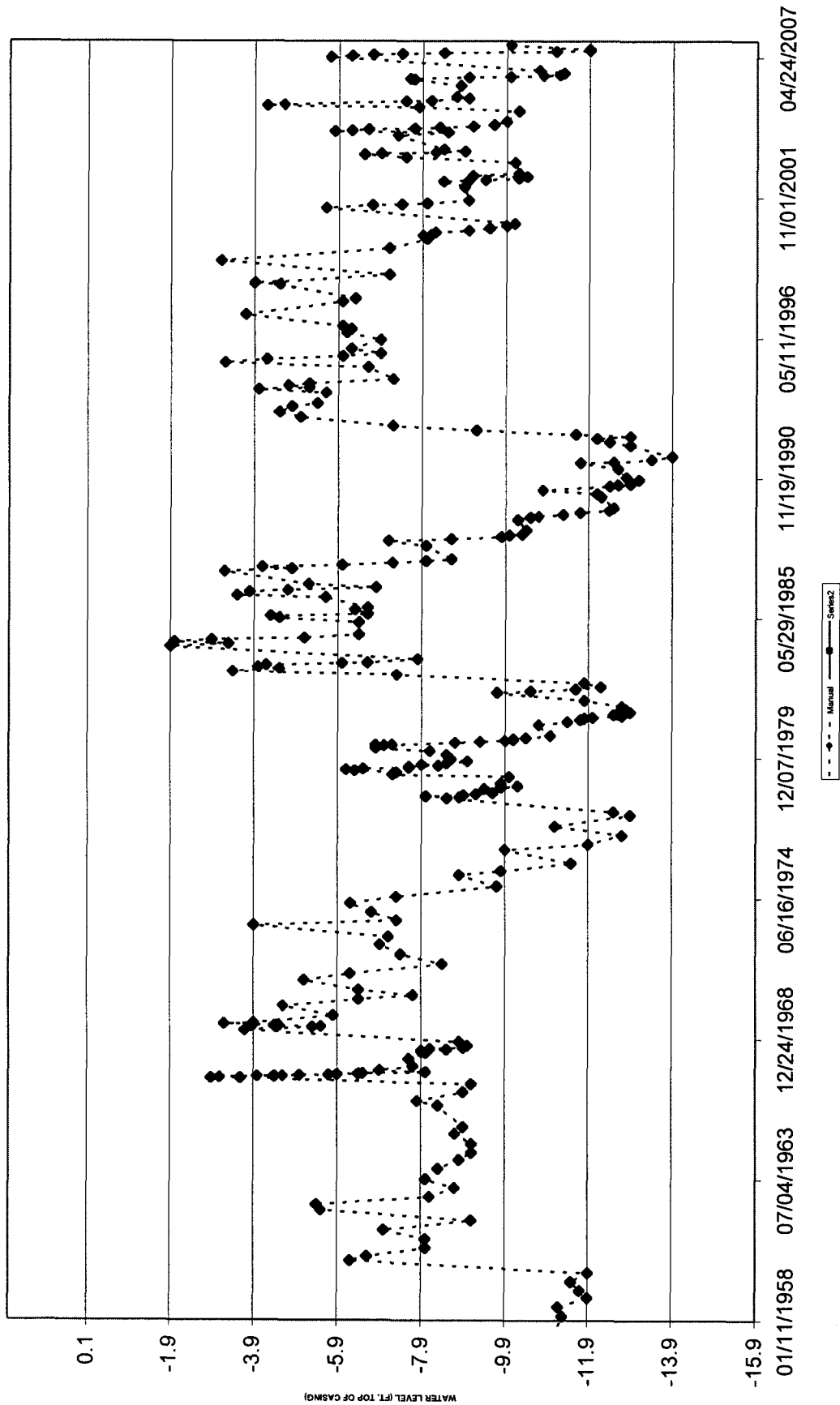
BIBLIOGRAPHY

Christensen, C.M., J.C. Stephens, 1967, Geology and Hydrogeology of Clay County, South Dakota, Part II Water Resources, Bulletin 19, SD DENR, SDGS, Vermillion, SD, 57069.

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

Water Rights, 2008, Unpublished Observation Well Data for Clay County, SD DENR, DES, Water Rights Program, Pierre, SD, 57501.

WATER RIGHTS' OBSERVATION WELL
CL-80A



AFFIDAVIT OF PUBLICATION

State of South Dakota, County of Clay, ss.

Penny Tucker

Being first duly sworn, deposes and says: That he/she is a resident of the County of Clay and State of South Dakota; that

THE PLAIN TALK

is a legal newspaper of general circulation, printed and published in Vermillion, in said County and State, by Broadcaster Press, Inc., and is now and has been such newspaper continuously during all the times hereinafter mentioned; that affiant is and was during all the time hereinafter mentioned in charge of the advertising department thereof, and has personal knowledge of all the facts stated in this affidavit: and that the notice and advertisement headed:

NOTICE OF APPLICATION NO. 6948-3

TO APPROPRIATE WATER

a printed copy of which is hereunto attached and made a part hereof, was printed and published in the said newspaper at least once in each week

for 2 successive weeks; that said newspaper at the time of the first publication of said notice hereinafter stated, had, and still has, a bona fide circulation of over two-hundred paid copies weekly, and had been published in the said county of Clay for more than one year immediately prior to the date of the said publication of said notice, and that said newspaper during said times, was, and is, printed in part in an office maintained at said city of Vermillion, the said place of publication; that the first publication of said notice in said newspaper as aforesaid

was on Friday, the 7th day of March, 20 08, and that the succeeding publications were severally

on Friday, the 14th day of March, 20 08,

on Friday, the _____ day of _____, 20 _____,

on Friday, the _____ day of _____, 20 _____,

on Friday, the _____ day of _____, 20 _____,

that the fees charged for the printing and publication of the said notice and advertisement in said newspaper as aforesaid were

Forty dollars and 52 cents

and that said fees for the printing and publishing of said notice and advertisement have been fully paid; that the full amount of the fee charged for the publishing of the said attached annexed notice and advertisement inures to the benefit of the publisher of the said newspaper, that no agreement or understanding for the division thereof has been made with any other person and that no part thereof has been agreed to be paid to any other person whomsoever.

Penny Tucker

Subscribed and sworn to before me

this 14th day of March, 20 08

Diane J. Saville

Exp. 9-5-2013

Notary Public

RECEIVED

MAR 17 2008

WATER RIGHTS
PROGRAM

NOTICE OF APPLICATION NO. 6948-3 to Appropriate Water

Notice is given that Brian Mount, 45659 Wicker St., Meckling, SD 57069, has filed an application for a water permit to appropriate 1.67 cubic feet of water per second from one well to be completed into the Lower James-Missouri Aquifer (approximately 240 feet deep) located in SW 1/4 NW 1/4 Section 35 to irrigate 104 acres located in the S 1/2 NW 1/4 and N 1/2 SW 1/4 Section 35; all in T94N-R53W.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 6948-3 because 1) unappropriated water is available, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest. In accordance with SDCL 46-2A-23, the Chief Engineer will act on this application, as recommended, unless a petition is filed opposing the application or the applicant files a petition contesting the Chief Engineer's recommendation. If a petition opposing the application or contesting the recommendation is filed, then a hearing will be scheduled and the Water Management Board will consider this application. Notice of the hearing will be given to the applicant and any person filing a petition.

Any person interested in opposing or supporting this application or recommendations must file a written petition with BOTH the applicant and Chief Engineer. The applicant must file a petition if contesting the Chief Engineer's 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 March 24, 2008.

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.

Publish: March 7 & 14, 2008



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

February 29, 2008

Plain Talk
PO Box 256
Vermillion SD 57069

ATTENTION: Legal Public Notice

Enclosed is a Notice on Application No. 6948-3 to Appropriate Water to be published twice. Please publish the first notice on March 7, 2008 with the second publication 7 days later. The text of the notice can be e-mailed to your paper by contacting Karen Schlaak at (605) 773-3352.

The applicant must verify to you that the notice is to be published, before you make the first publication. **Please BILL the APPLICANT for the cost of publication.** The APPLICANT is Brian Mount, 45659 Wicker St, Meckling SD 57069 (Ph # 605-624-9373).

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. 6948-3

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

Date _____

We are in receipt of your letter of February 29, 2008 enclosing Notice to Appropriate Water by Application No. 6948-3 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.

February 29, 2008

Brian Mount
45659 Wicker St
Meckling SD 57069

Dear Mr. Mount:

Water Permit Application No. 6948-3 for irrigation use has been examined and found to comply with the South Dakota Water Laws and applicable rules. A notice has been sent to the Publisher of the Plain Talk printed at Vermillion SD (Ph # 605-624-2695). You will need to contact the newspaper and authorize publication of this notice. For your information, a copy of the notice, the recommendation of the Chief Engineer and report on the application are enclosed. Please review the notice prior to publication and notify this office, if you have any corrections or questions.

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

Sincerely,

Eric Gronlund
Natural Resources Engineer
(605) 773-3352

enclosures

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

Instruction to Newspaper - Publish first Notice on March 7, 2008 with the second publication 7 days later. The applicant is responsible for payment.

NOTICE OF APPLICATION NO. 6948-3 to Appropriate Water

Notice is given that Brian Mount, 45659 Wicker St, Meckling SD 57069 has filed an application for a water permit to appropriate 1.67 cubic feet of water per second from one well to be completed into the Lower James:Missouri Aquifer (approximately 240 feet deep) located in SW $\frac{1}{4}$ NW $\frac{1}{4}$ Section 35 to irrigate 104 acres located in the S $\frac{1}{2}$ NW $\frac{1}{4}$ and N $\frac{1}{2}$ SW $\frac{1}{4}$ Section 35; all in T94N-R53W.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 6948-3 because 1) unappropriated water is available, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest. In accordance with SDCL 46-2A-23, the Chief Engineer will act on this application, as recommended, unless a petition is filed opposing the application or the applicant files a petition contesting the Chief Engineer's recommendation. If a petition opposing the application or contesting the recommendation is filed, then a hearing will be scheduled and the Water Management Board will consider this application. Notice of the hearing will be given to the applicant and any person filing a petition.

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MAY 07 2008

**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

Brian Mount
45659 Wicker St
Meckling SD 57069

Dear Mr. Mount:

Enclosed is Water Permit No. 6948-3 authorizing construction of your water diversion system and beneficial use of the water; not exceeding the limits as specified in the Water Permit.

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

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

Sincerely,

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

enclosures

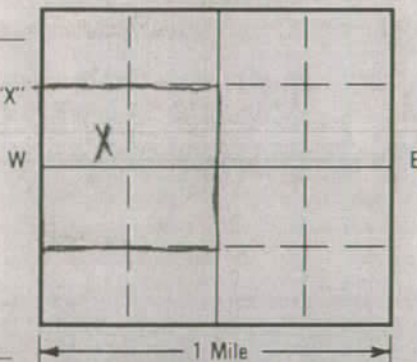
SOUTH DAKOTA WATER WELL COMPLETION REPORT

6984-3

07-92

Location SW 1/4 NW 1/4 Sec 35 Twp 94 Rg 53W
County Clay North

Please mark well location with an "X"



Well Completion Date

5-12-08

LOCATION:

Distance from nearest potential pollution source (septic tank, abandoned well, feed lot, etc.)? 1200 ft. from septic tank (identify source).

PROPOSED USE:

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

METHOD OF DRILLING:

Reverse Rotary

CASING DATA:

☐ Steel ☒ Plastic ☐ Other

If other describe _____

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
<u>160</u> LB/FT	<u>16</u> IN	<u>0</u> FT	<u>150</u> FT	<u>28</u> IN
_____ LB/FT	_____ IN	_____ FT	_____ FT	_____ IN
_____ LB/FT	_____ IN	_____ FT	_____ FT	_____ IN

GROUTING DATA

Grout Type	No. of Sacks	Grout Weight	From	To
<u>Cement</u>	<u>600</u>	_____ lb./gal	<u>0</u> ft.	<u>100</u> ft.
_____	_____	_____ lb./gal	_____ ft.	_____ ft.

Describe grouting procedure used pressure grouter
and pump down 1" tremie lineSCREEN: ☐ Perforated pipe ☒ ManufacturedDiameter 16 IN Length 80 FEETMaterial PVCSlot Size 085 Set From 150 Feet to 230 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 _____

Well Owner: Bison Mount

Business Name: _____

Address: 45659 Wicker St
Medley, SD 57044

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
<u>top of brown clay</u>	<u>0</u>	<u>3</u>
<u>sand & gravel</u>	<u>3</u>	<u>25</u>
<u>brown clay</u>	<u>25</u>	<u>40</u>
<u>blue clay & rocks</u>	<u>40</u>	<u>125</u>
<u>coarse sand</u>	<u>125</u>	<u>150</u>
<u>coarse gravel</u>	<u>150</u>	<u>225</u>
<u>shale</u>	<u>225</u>	<u>230</u>

STATIC WATER LEVEL

131

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? _____

WELL TEST DATA:

☒ PumpedDescribe: pumped w/ turbine pump & engine☐ Bailed☐ Other

Pumping Level Below Land Surface

138 ft. After 2 Hrs. pumped 1200 GPM135 ft. After 4 Hrs. pumped 800 GPMIf pump installed, pump rate 650 GPM

REMARKS

RECEIVED

AUG - 7 2008

WATER RIGHTS
PROG. #

This well was drilled under license # _____

And this report is true and accurate.

Drilling firm Christensen Well & DrillingSignature of License Representative: Cody W. Christensen

Signature of Well Owner or Equitable Property Holder: _____

Date: _____

Report of Examination of Works and/or Application of Water to Beneficial Use For Permit No. 6948-3

I have this day, April 13, 2016, made a thorough examination of the water use system constructed by Brian Mount, 45659 Wicker St, Meckling SD 57069 of Permit No. 6948-3, bearing the priority of January 17, 2008 authorizing the diversion of 1.67 cu. ft. per second of the waters of Lower James:Missouri Aquifer for irrigation purposes, in Clay County.

Inspection contact & relationship to permit holder, if applicable: **Brian Mount, permit holder**

A. Works used to divert the water:

Well Information:

- 1) Well Drilling Firm: Christensen Well & Irrigation
- 2) No. of Wells 1
- 3) Depth(s) 230 feet
- 4) Well log is available Yes

Casing:

- 1) Diameter 16 inches
- 2) Length 150 feet
- 3) Type PVC

Screen:

- 1) Type PVC Manufactured
- 2) Length 80 feet
- 3) Static water level 131 feet

Pump:

- 1) Make Goulds
- 2) Model 202327-08 Turbine Shaft
- 3) Capacity 650 GPM

Motor:

- 1) Make U.S. Electrical Motors
- 2) Model No. BF54A
- 3) Horsepower rating 50 hp

C. Works used to apply water to beneficial use:

Center pivot:

- 1) Make T-L Irrigation Systems
- 2) Overall length 1150 feet
- 3) Number of towers 6
- 4) End gun Yes
- 5) Capacity 650 GPM

Comments: Water Permit 6948-3 appropriated a greater diversion rate than statutory limit of 1.67 cfs or 750 gpm for the irrigation of 104 acres, however only 1.45 cfs or 650 gpm were developed for the irrigation of 85 acres which is still a greater diversion rate than statutory limit and license should be issued as such.

T-L Irrigation uses a hydraulic drive system.

Chemigation Equipment:

- 1) Does chemigate Yes
- 2) Main line check valve Yes
- 3) Inspection port/air relief Yes
- 4) Low pressure drain Yes
- 5) Discharge is 20' from source Yes
- 6) Interlock type electrical
- 7) Injection pump type piston
- 8) Injection check valve Yes
- 9) Injection line check valve or positive displacement pump Yes

Comments: Permit holder was not chemigating at time of inspection, but provided the above answers to questions asked. Permit holder indicated he uses chemigation primarily to apply liquid nitrogen to corn crop. A copy of the chemigation rules and Appendix A were reviewed and provided to the permit holder.

D. Compliance with Permit Requirements:

- 1) Permit qualifications being abided by Yes
- 2) Irrigation Questionnaires checked to determine if permit owner started irrigation by the end of construction period Yes, began irrigating in 2008.

List any extended period of nonuse: Did not use in 2014 due to adequate rainfall.

- 3) Exceptions to compliance are: None

E. Condition and Location:

1. The system is in good condition with the point(s) of diversion located as follows: East 1130', South 2480' from NW Corner of Sec 35-T94N-R53W; Lat 42.91754/Long -97.07786; SW ¼ NW ¼ Sec 35-T94N-R53W.

2. The works are capable of diverting and conveying to the place of use 1.45 cfs or 650 gpm of water which is to be used for irrigation. Water has been put to beneficial use to the maximum extent as follows:

All land is located in Sec 35-T94N-R53W.

SW ¼ NW ¼ - 23 ac

SE ¼ NW ¼ - 24 ac

NW ¼ SW ¼ - 21 ac

NE ¼ SW ¼ - 17 ac

comprising a total of 85 acres of land and the license should be issued for 1.45 cfs or 650 gpm.

3. All structures, wells and lands on map Yes

Harold Holoch

Harold Holoch, PE
Engineer Water Rights Inspector
DENR, Water Rights Program

Date report completed: July 20, 2016

SOUTH DAKOTA WATER WELL COMPLETION REPORT

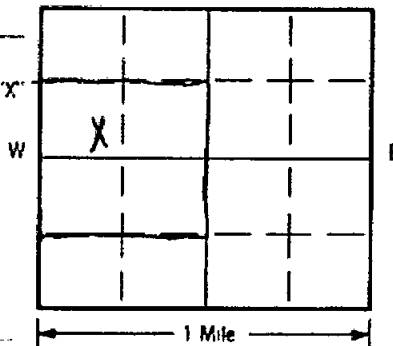
6948-3

~~6984-3~~

07-92

Location SW 1/4 NW 1/4 Sec 35 Twp 94 Rg 53W
County Clay North

Please mark well location with an "X"



Well Completion Date

5-12-08

Well Owner: Dean H. Hunt

Business Name: 45659, Miller St

Address: 11000, 2nd St E 7044

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
Top of lower clay	0	3
sand & gravel	3	25
fine clay	25	40
blue clay & rocks	40	125
coarse sand	125	150
coarse gravel	150	225
shale	225	230

LOCATION:

Distance from nearest potential pollution source (septic tank, abandoned well, feed lot, etc.)? 1200 ft from septic tank (identify source)

PROPOSED USE:

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

METHOD OF DRILLING:

Reverse Rotary

CASING DATA:

☐ Steel ☒ Plastic ☐ Other

If other describe _____

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
<u>160 LB/FT</u>	<u>16 IN</u>	<u>0 FT</u>	<u>150 FT</u>	<u>28 IN</u>
_____ LB/FT	_____ IN	_____ FT	_____ FT	_____ IN
_____ LB/FT	_____ IN	_____ FT	_____ FT	_____ IN

GROUTING DATA

Grout Type Cement No of Sacks 600 Grout Weight _____ lb./gal From 0 ft. To 100 ft.

Describe grouting procedure used reverse grouting
1 pump down 1' to set in

SCREEN: ☐ Perforated pipe ☒ Manufactured

Diameter 16 IN Length 80 FEET

Material PVC

Slot Size 0.05 Set From 150 Feet to 230 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

Laboratory sent to for water quality analysis _____

STATIC WATER LEVEL

131

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? _____

WELL TEST DATA:

☒ Pumped

Describe pumped w/ 1" line
pump - 1" line

☐ Bailed

☐ Other

Pumping Level Below Land Surface

138 ft After 2 Hrs pumped 1200 GPM

135 ft After 4 Hrs pumped 800 GPM

If pump installed, pump rate _____

650 GPM

REMARKS

RECEIVED

AUG - 7 2008

WATER DIVISION
SOUTH DAKOTA

This well was drilled under license # _____

And this report is true and accurate

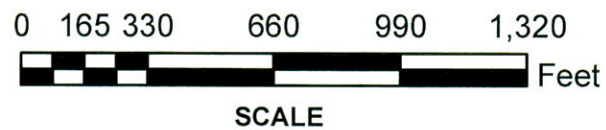
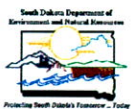
Drilling firm _____

Signature of License Representative _____

Signature of Well Owner or Equitable Property Holder: _____

Date: _____

6948-3



Harold Holoch
Harold Holoch, PE
Water Rights Inspector
July 19, 2016

STATE OF SOUTH DAKOTA

WATER LICENSE NO. 6948-3

(1) Brian Mount, 45659 Wicker St, Meckling SD 57069 made Application No. 6948-3, January 17, 2008 for a water permit to divert 1.67 cubic feet of water per second from one well – Lower James:Missouri Aquifer, Clay County, South Dakota for irrigation purposes. Permit No. 6948-3, with a priority date of January 17, 2008 was approved March 24, 2008 and issued to the applicant for diversion of water with construction of the described water supply system to be completed on or before March 24, 2013 and for the application to beneficial use of water on or before March 24, 2017.

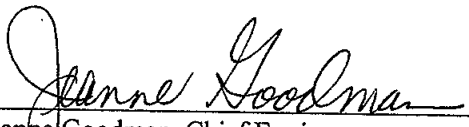
(2) The water supply system has been completed and water applied to beneficial use in accordance with South Dakota State Law. Pursuant to South Dakota Codified Law 46-5-30.1, the holder and/or owner of Water Right No. 6948-3 is issued a license, bearing a priority date of January 17, 2008 to appropriate 1.45 cubic feet of water per second from one well – Lower James:Missouri Aquifer to irrigate 85 acres.

The diversion point is located: 1,130 feet east and 2,480 feet south from the NW corner of Section 35-T94N-R53W (SW 1/4 NW 1/4). The acres authorized for irrigation are as follows:

Section 35-T94N-R53W	SW 1/4 NW 1/4	23 acres	SE 1/4 NW 1/4	24 acres
	NW 1/4 SW 1/4	21 acres	NE 1/4 SW 1/4	17 acres
Total 85 acres				

(3) This license is subject to South Dakota Water Law, any limitations or conditions listed in Water Permit No. 6948-3 including the following qualifications:

1. The well approved under this permit will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
2. The well authorized by Permit No. 6948-3 shall be constructed by a licensed well driller and construction of the well and installation of the pump shall comply with Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) pursuant to Section 74:02:04:28. *The well was drilled by Christensen Well & Irrigation in 2008. A copy of the log is on file with the Water Rights Program.*
3. Pursuant to SDCL 46-5-6 which allows a greater diversion rate if the method of irrigation, time constraints, or type of soils so require, Permit No. 6948-3 authorizes a maximum diversion rate of 1.67 cfs for the irrigation of 104 acres with an annual volume not to exceed 2 acre-feet of water per acre per year. *Based on actual usage, the maximum diversion rate is reduced to 1.45 cfs and the number of acres is reduced to 85 acres.*
4. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.


Jeanne Goodman, Chief Engineer
Water Rights Program

Department of Environment and Natural Resources

AUG 16 2016

date





DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

August 16, 2016

6948-3

Brian Mount
45659 Wicker St
Meckling SD 57069

Dear Mr. Mount:

Enclosed is Water License No. 6948-3. This is the final water right document completing your process of obtaining a Water Right. Included with your license is a map prepared by the staff engineer who conducted the field investigation.

For your information SDCL 46-6-27 requires that if the owner of an existing well, such as the well authorized by Water Right No. 6948-3, constructs a replacement well and does not plan to use the old well, the old well is considered abandoned and must be plugged. Also, any well that is being used or is not considered abandoned must be valved and controlled, if flowing, or sealed and capped so that no leaking occurs either underground or at the surface.

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

Sincerely,


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

enclosures