

Considered: _____

WATER PERMIT NO. ~~5501-3~~ 5491-3

Phone: 605 361-6736

Name of Applicant: Arnold Murray Construction

Post Office Address: 333 N Phillips Ave, Sioux Falls SD 57102

Amount of Water Claimed: 0.11 cfs 50 gpm Total Acres: NA

Source of Water Supply: groundwater

Water to be used for: geothermal Heat County: Minnehaha

About _____ miles _____ of _____

PROOF OF PUBLICATION: Received _____ Not Received _____

APPLICATION: Approved _____ Subject to _____

F.F.& C/.L. Adopted _____ Not Approved _____ Deferred _____

PRIORITY Date Received: 9-17-90 Fee: \$150 Remarks _____

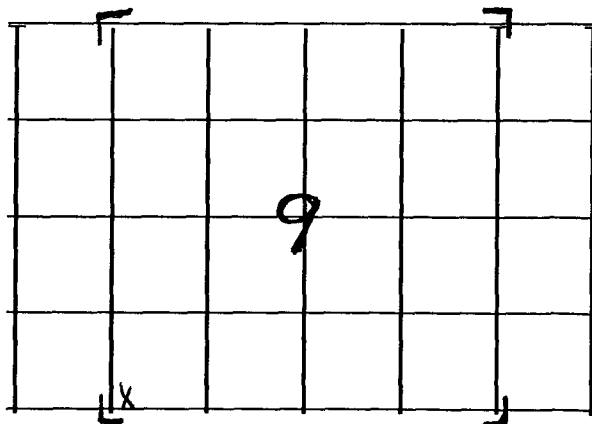
Corrected Application Received 12-28-90 Period of Annual Use Jan 1 - Dec 31

WATER QUALITY APPROVAL RECEIVED NA APPROVED/CONDITIONAL (Circle one)

WI-1 Description same as Application YES _____ NO _____ REMARKS _____

Diversion Point: NW 1/4 SW 1/4 16 9-101-49

Land to be Irrigated: _____



Well Log: Driller: Sioux Well Drilling Licensed YES X NO _____

Depth of Well: 372' REMARKS _____

Type of Map: plat PREPARED BY: Kim J Buell Reviewed and the Number

Assigned on 12-31-90 By Karen Schlaak

Mail to: Water Rights Div.
523 E. Capitol
Pierre, SD 57501
(605) 773-3352

No. 5491-3	Hydrologic Unit	10170203
Map No.	Basin	Big Sioux River
Newspaper	Argus Leader, Box	5034, SD 57117

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

Check use of water: Industrial ☐ Commercial ☒ Municipal ☐ Other Common Distribution System ☐
Rural Water System ☐ Suburban Housing ☐ Geothermal Heat ☒ Institutional ☐ Recreational ☐
Domestic ☐ (above 18gpm) Other ☐

Type of Application: Check one or more of the following

New ☒ Vested Right ☐ Future Use ☒ Change Use ☐

☐ Amend Permit No. _____ with old priority date retained

Change diversion point(s) ☐ Add diversion point(s) ☐ Other ☐

☐ Application to: Change diversion point(s) ☐ Add diversion point(s) ☐ on Permit No. _____

☐ Construction to use water reserved by Future Use Permit No. _____



1. Name of Applicant Arnold Murray Construction Phone No. (605) 361-6736

Post Office Address 333 N. Phillips Ave, Sioux Falls State So. Dak. Zip Code 57102
(Street, RR or Box) (City)

2. Amount of water claimed (c.f.s) 50 gals per minute 0.11 cfs

3. Source of water supply Ground Water

4. Location of point of diversion ~~enclosed~~ NW 1/4 NW 1/4 (Lot 13, Block 25,
Brookings & Edmunds Addition, Sioux Falls) Sec 16, T101N, R49W

County Minnehaha

5. Counties where water will be used Minnehaha

6. Annual period during which water is to be used yearly Jan 1 - Dec 31

7. Give a brief description of proposed 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)

G.E.O. Therms

Attachments: Attach Form 2A if diversion from a well or dugout, or if storage of water, is proposed. Attach map (see instruction)

STATE OF SOUTH DAKOTA
County of Minnehaha ss

I, Arnold Murray 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 Arnold Murray

Subscribed and sworn to before me this 13 day of Aug 1990

Teresa M. Nace TERESA M. NACE, Notary Public
My Commission Expires 2-11-93
Notary Public

**SOUTH DAKOTA
WATER PERMIT No. 5491-3**

Date of first receipt of application September 17, 1990.

Date of return to applicant for corrections, amendments or changes
September 18, 1990.

Date of receipt of corrected application December 27, 1990.

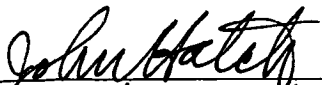
The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 5491-3 to Arnold Murray Construction, 333 N Phillips Ave, Sioux Falls SD 57102 authorizing the construction of the water use system and the placing of water to beneficial use subject to the following limitations, conditions and qualifications:

1. Water Permit No. 5491-3 appropriates 0.11 cubic feet of water per second from one well (Sioux Quartzite) 374 feet deep located in the NW 1/4 NW 1/4 (Lot 13, Block 25, Brookings & Edmunds Addition) Section 16-T101N-R49W.
2. The water appropriated shall be used for the purpose of supplying water for geothermal heat and may not exceed the amount of water needed for beneficial use for geothermal heating.
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. 5491-3 is May 1, 1991.
5. The date from which applicant may claim right is December 27, 1990.
6. One-fifth of the construction is to be completed on or before November 1, 1993.
7. All construction is to be completed on or before May 1, 1996.
8. Water is to be put to beneficial use on or before May 1, 2000.
9. Water rights obtained in compliance with the laws of the State of South Dakota may not be unlawfully impaired by this appropriation.

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 MANAGEMENT BOARD

By: 
Chief Engineer, Water Rights Division
Department of Environment and Natural Resources

SEP 27 1991
(date)

Supplemental Information

(type or print in ink)



1. Well Information - Proposed construction

- a) Drill Hole Diameter 6 Depth 374
- b) Casing Type Steel Diameter 6 Thickness 19.7
- c) Screen Type OPEN BORE Diameter _____ Thickness _____
- d) Gravel Pack Thickness NONE Length of Gravel Pack NONE
- e) Depth to Top of Water Bearing Material 96'
- f) Depth to Water (ground surface to water level) 96'
- g) Distance to nearest existing domestic well:
 On applicants property NONE On property owned by others 1/4 MILE

2. Dugout Information Estimates

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

3. Water Storage Dams

If the proposed water use system contains one or more storage dams, please furnish the information requested below. The locations of each dam should 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 _____

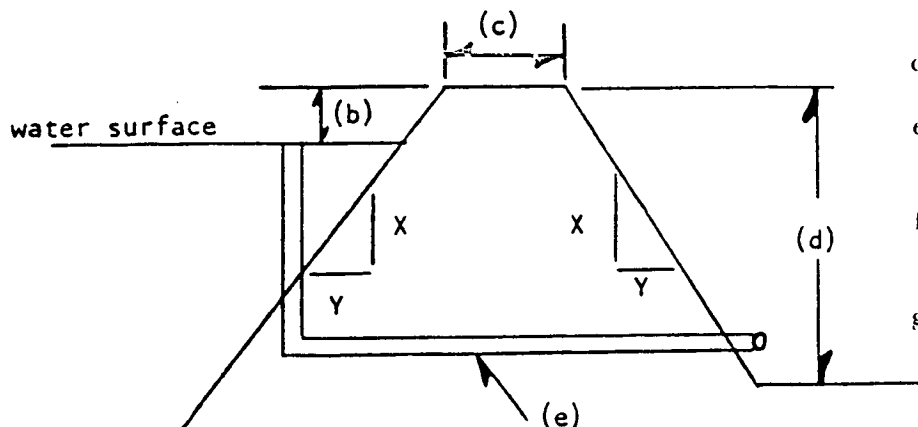
g) X & Y Slope
 Upstream _____

Downstream _____

Surface Area of Impoundment _____

Storage _____ acre feet

Drainage area above dam _____

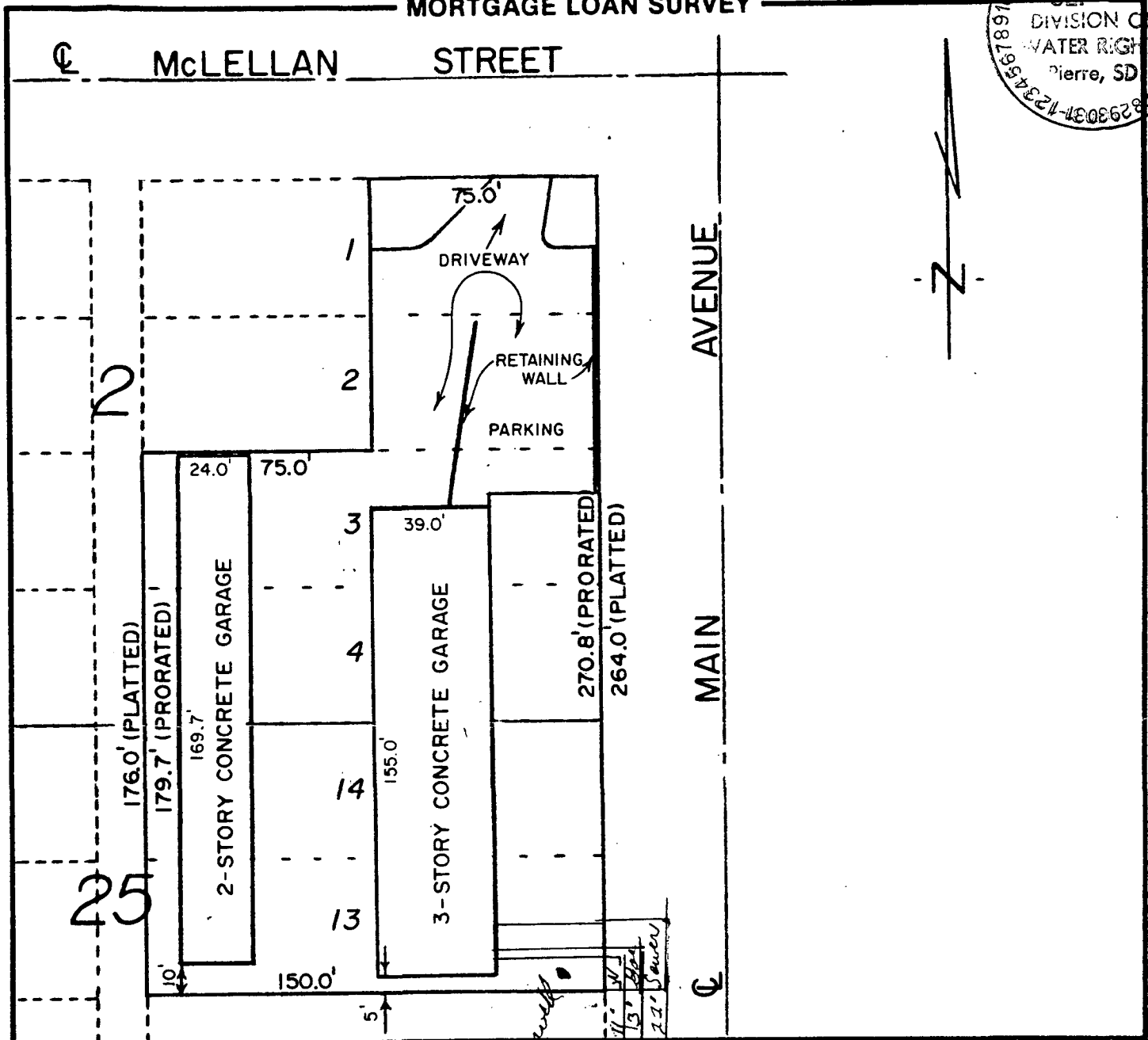
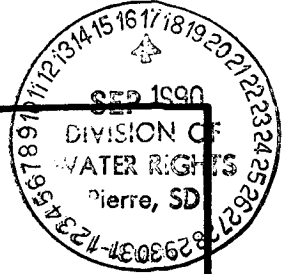


Signature of Applicant

4984

10-85

MORTGAGE LOAN SURVEY



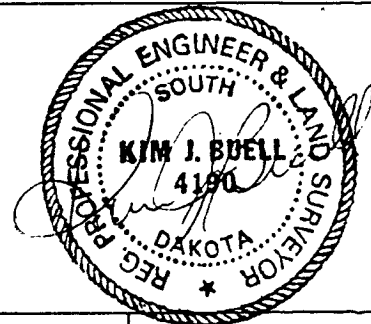
LEGAL DESCRIPTION: LOTS 3 & 4 AND THE E 75' OF LOTS 1 & 2, BLOCK 2, SUMMIT ADDITION AND LOTS 13 & 14, BLOCK 25, BROOKINGS & EDMUNDS ADDITION, SIOUX FALLS, SD

CLIENT: MURRAY CONSTRUCTION

Surveyors Certificate

I, Kim J. Buell Registered Land Surveyor No. 4190, Do Hereby Certify That This Survey Was Made By Me or Under My Direct Supervision and That This Drawing Correctly Shows The Relationship of The Buildings and Other Improvements To The Property Lines of The Land Indicated Hereon. This Survey Is Not A Boundary Survey.

SCHMITZ, KALDA & ASSOCIATES, INC.
260 Boyce-Greeley Building
Sioux Falls, SD 57102
332-8241



Date Surveyed	Date Drawn	Drawn By	Checked By	Project No.
9-8-89	9-8-89	JWM		

RECEIPT

Division of Water Rights

South Dakota Department of Water and Natural Resources

412479

Pierre, December 28, 1990

RECEIVED OF Arnold Murray Const., 333 N Phillips Ave, Sioux Falls SD 57102
the following amount in fees for services rendered as provided for by law:

Fee for Application for Permit No. <u>5491-3</u> to Appropriate Water, to construct works and to put water to beneficial use _____	15000
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 Certified Copy of _____	
Fee for Print Copy of Map _____	
Fee for Certifying _____	
Fee for _____	
(Any Other Work Provided by Law)	
Total	15000

By John Hatch
Chief Engineer



Department of Water & Natural Resources

Joe Foss Building
523 East Capitol
Pierre, South Dakota 57501-3181

September 18, 1990

Arnold Murray Construction
333 N Phillips Ave
Sioux Falls SD 57102

Dear Mr. Murray:

In regard to your water permit application received on September 17, 1990, the following information needs to be submitted and/or clarified in order to process your application.

- 1) The correct application fee for amount of water claimed is \$150.00. Your check for \$50.00 is enclosed. Please remit the correct amount.
- 2) A well log or driller's test log signed by a South Dakota licensed well driller must accompany the application.
- 3) On the application, you indicated the type of application as a Future Use. This application does not meet the criteria for the reservation of water for future use. It appears to be a new application for geothermal heat use.

The water permit application can not be consider by the Water Management Board until the application is complete. Upon receipt of the proper fee and well log, further processing of your application will continue.

If you have any questions, please contact Eric Gronlund.

Sincerely,

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

Karen Schlaak
Natural Resources Analyst
605 773-3352

enclosures



DEPARTMENT OF WATER & NATURAL RESOURCES

Joe Foss Building
523 East Capitol
Pierre, South Dakota 57501-3181

December 17, 1990

ARNOLD MURRAY
4905 COTTONWOOD PL
SIOUX FALLS SD 57001

Dear MR. MURRAY:

A well drillers report filed SIOUX WELL DRILLING states you recently completed a new well. This letter outlines your responsibilities as a new well owner.

1. If your new well was drilled as a replacement well and if you do not plan to use the old well, the old well is considered abandoned. All abandoned wells must be plugged by a licensed well driller. If the old well is not to be abandoned, or will be used, the well must be sealed or capped at the surface.
2. Following completion of any new well for domestic use, a water quality sample must be collected and submitted to a laboratory approved by the department. If the well flows or if the well driller installs the pump, the well driller is required to collect and submit the water quality sample. If the pump is not installed by the well driller, the owner must collect and submit the water sample. At a minimum, the water sample needs to be analyzed for nitrate, coliform bacteria, sodium, conductivity and sulfate. Other contaminants may be analyzed for at the option of the well owner or driller. The completed analysis must be submitted to the department within thirty days after the submittal of a well completion report. The owner or well driller pays for the cost of all analyses.
3. Any flowing well must be controlled by the owner to produce only the amount of water needed and to prevent waste.
4. A water permit must be obtained for any use, except for private domestic use that does not exceed 25 gallons per minute or 26,000 gallons per day. Based on the information we have, you may need a water permit. Since we have no record of a water permit for this well, I am enclosing application forms and an instruction sheet. Please complete the application and submit it with the required fee to the "Water Rights Division, Joe Foss Building, 523 E. Capitol, Pierre, SD 57501" by January 18, 1991.

If you have any questions regarding SD Water Law, please feel free to contact Regan Fanning (605-773-3352).

Very truly yours,

RON DUVALL, Natural Resources Engineer
for JOHN HATCH, Chief Engineer
Water Rights Division
enclosure

REPORT ON APPLICATION NO. 5491-3
for Arnold Murray Construction
February 20, 1991

Application No. 5491-3 request an appropriation of 0.11 cfs from one well approximately 374 feet deep located in the NW 1/4 NW 1/4 of section 16, T101N R49W in Minnehaha County. The water is to be used for geothermal heating.

AQUIFER - SIOUX QUARTZITE (SOUX)

The Sioux Quartzite is a 5000 feet sequence consisting chiefly of quartzite but containing a thin basal conglomerate, argillite and pyrophyllite (Steece, 1975). The Sioux Quartzite is a Precambrian age metamorphosed mostly quartz sandstone cemented with silica. Ground water is found within distinct jointing patterns and fractures within the rock. Although some of the sandstone was not completely fused with silica there is probably little effective permeability associated with this phenomena. Well yields are difficult to predict and generally are fairly low. The test well log submitted with this application indicated the top of the quartzite at 56 feet below land surface and the drill hole was bottomed at 372 feet still in quartzite. The static water level was reported at 96 feet below land surface and the well produced 40 gpm with 189 feet of drawdown (specific capacity of .2 gpm/ft of drawdown). This is a low specific capacity and would indicate that this well may not be a dependable water source.

The Division of Water Rights monitors two observation wells MA-80U and MA-80V which are completed into wash on top of the quartzite and are located approximately 3 miles northwest of this application. Water levels show good response to climatic conditions that is rising during wet years and declining during dry years. The water level record indicates water is available (Water Rights, 1991). There are no estimates of water in storage available for the Sioux Quartzite.

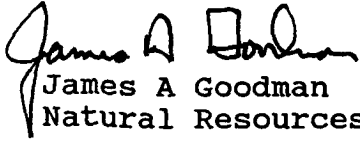
REVIEW OF EXISTING WATER PERMITS/RIGHTS

There are no other permits/rights from the Sioux Quartzite in this area. There are domestic wells in the area completed into the quartzite.

CONCLUSIONS

1. Water is available from the Sioux Quartzite.
2. The aquifer is under water table conditions and interference is not expected to be a problem. This is a low yield well and may not be capable of producing 50 gpm on a continuous basis.
3. The well construction report filed with the application indicated that the well is constructed in compliance with SD Well Construction Standards.

4. The discharge water will be disposed of through the City of Sioux Falls Sanitary Sewerage system. The applicant indicated a permit had been obtained from the City to do this.


James A Goodman
Natural Resources Engineer

BIBLIOGRAPHY

Steece, F.V., 1975, Mineral and Water Resources of South Dakota,
SDGS Bulletin 16, US Printing Office, Washington, DC.

Water Rights, 1991, Observation Well Records for Minnehaha County, SD
DWNR, Div. of Water Rights, Pierre, SD, 57501.

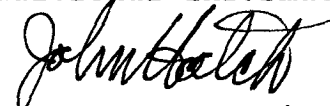
RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 5491-3, Arnold Murray Construction

Pursuant to SDCL 46-2A-2, the following is the recommendation of the Chief Engineer, Water Rights Division, Department of Water and Natural Resources concerning Water Permit Application No. 5491-3, Arnold Murray Construction, 333 North Phillips Avenue, Sioux Falls SD.

The Chief Engineer is recommending APPROVAL of Application No. 5491-3 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) in the public interest with the following qualification:

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.

See report on application for additional information.



JOHN HATCH, Chief Engineer
February 21, 1991



DEPARTMENT OF WATER & 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.

March 22, 1991

Arnold Murray
Arnold Murray Construction
333 N Phillips Ave
Sioux Falls, SD 57102

Dear Mr. Murray:

Water Permit Application No.5491-3 for geothermal heat 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 Argus Leader printed at Sioux Falls, SD. 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 WATER & NATURAL RESOURCES

Joe Foss Building
523 East Capitol
Pierre, South Dakota 57501-3181

March 22, 1991

Argus Leader
Box 5034
Sioux Falls, SD 57117

ATTENTION: Legal Department

Enclosed is a Notice of Hearing on Application No. 5491-3 to be published twice. Please publish the first notice on March 27, 1991, 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 Arnold Murray Construction, 333 N Phillips Ave, Sioux Falls, SD 57102.

A copy of BOTH publications must be SENT to the WATER RIGHTS DIVISION. IMMEDIATELY return the FIRST publication with the FIRST Transmittal form on the bottom of this page. The first copy is needed to check the publication for errors so any corrections can be made in the second publication. Publication errors can invalidate the public notice and cause the applicant costly delays.

Please be sure the SECOND publication is returned IMMEDIATELY with the enclosed Proof of Publication form. DO NOT WAIT until the end of the month or the billing cycle. No action may be taken on the permit application until proof of publication has been received.

Sincerely,

Eric Gronlund

Eric Gronlund
Natural Resources Engineer
605 773-3352

enclosures

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

FIRST TRANSMITTAL NOTICE

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

No. _____

Date _____

We are in receipt of your letter of _____ enclosing Notice of Hearing to Appropriate Water by Application No. _____ 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 March 27, 1991, with the second publication 7 days later. The applicant is responsible for payment.

NOTICE OF HEARING on Application No. 5491-3 to Appropriate Water

Notice is given that Arnold Murray Construction, 333 N Phillips Ave, Sioux Falls SD 57102 has filed an application for a water permit to appropriate 0.11 cubic feet of water per second from one well (Sioux Quartzite) 374 feet deep located in the NW 1/4 NW 1/4 (Lot 13, Block 25, Brookings & Edmunds Addition) Section 16-T101-R49W. Water is to be used for geothermal heat purposes.

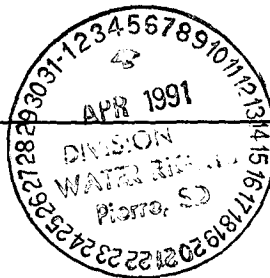
Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 5491-3 because 1) unappropriated water is available, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest. Unless a petition is filed opposing the application or the applicant files a petition contesting the chief engineer's recommendation, the Water Management Board will NOT CONDUCT a HEARING to consider this application and the chief engineer will issue the permit as recommended. Petitions filed in support of the application will NOT require the Board to hear the application.

Any person interested in opposing or supporting this application must file a written petition with BOTH the applicant and Chief Engineer. The applicant must also file a petition if opposed to the Chief Engineer's recommendation. The Chief Engineer's address is "Water Rights Division, 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 April 22, 1991. 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.

For purposes of publishing 1) the notice of hearing on Application No. 5491-3 and 2) the chief engineer's recommendation, a Board meeting is scheduled for May 1, 1991, at 10:00 am in the meeting room at Chef Louie's, 601 E. Havens, Mitchell, SD. If this application is opposed or the recommendation is contested, the May 1, 1991, hearing date may be rescheduled for another Board meeting. If the hearing is rescheduled, notice of the time and place will be given by First Class Mail to the applicant and persons filing petitions. Anyone not filing a petition, but interested in attending the hearing, may contact the Division of Water Rights to confirm a hearing date and location. The May 1, 1991, hearing date will be automatically delayed for at least 20 days upon written request to the Chief Engineer from the applicant or any interested person opposing the application. The request for an automatic delay must be filed by April 22, 1991.

If a hearing is held, the Chief Engineer's recommendation is not final or binding upon the Board. The Board is authorized to 1) approve, 2) approve with qualifications, 3) defer, or 4) deny this application based on the facts presented at the public hearing. Any hearing will be an adversary proceeding. Any person filing a petition and/or the applicant have the right to be represented by a lawyer and may present evidence or cross-examine witnesses according to SDCL 1-26. These and other due process rights will be forfeited if not exercised. Decisions of the Board may be appealed to the Circuit Court and State Supreme Court as provided by law. Contact the Water Rights Division to request copies of information pertaining to this application or to assure access to the hearing by the handicapped.

This application is made pursuant to SDCL 46-1-1 thru 46-1-9, 46-1-12 thru 46-1-16; 46-2-3.1, 46-2-9, 46-2-11, 46-2-13, 46-2-17; 46-2A-1 thru 46-2A-10, 46-2A-12, 46-2A-14, 46-2A-15; 46-5-1 thru 46-5-11, 46-5-13 thru 46-5-15, 46-5-24, 46-5-25, 46-5-30.2, 46-5-30.4, 46-5-31; 46-6-3, 46-6-3.1, 46-6-6.1, 46-6-10, 46-6-13, 46-6-14, 46-6-26; and Board Rules ARSD 74:02:01:01 thru 74:02:01:15.



PROOF OF PUBLICATION

STATE OF SOUTH DAKOTA)
) ss.
 County Minnehaha)

I, Greg Robinson

certify that the attached printed Notice was taken
 from the Argus Leader

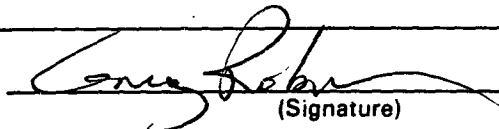
A newspaper which during the whole time of publication of
 said notice herein after stated, has been and is printed and
 published in the _____

City of Sioux Falls

County of Minnehaha and State of South Dakota;
 that the said notice was published in said newspaper on the
 following two dates:

March 27, 1991

April 3, 1991


 (Signature)

Assistant Controller
 (Title)

4/3/91
 (Date Signed)

NOTICE OF HEARING on
 Application No. 5491-3 to
 Appropriate Water
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 Pursuant to SDCL 46-2A-2, the
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 neer's recommendation, the Water
 Management Board will NOT CON-
 DUCT a HEARING to consider this
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 mended. Petitions filed in support
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 tion must file a written petition with
 BOTH the applicant and Chief
 Engineer. The applicant must also
 file a petition if opposed to the
 Chief Engineer's recommendation.
 The Chief Engineer's address is
 "Water Rights Division, Foss
 Building, 523 E Capitol, Pierre, SD
 57501 (605 773-3352)" and the
 applicant's mailing address is given
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applicant's interest in the applica-
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 petitioner's legal counsel, if legal
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 is scheduled for May 1, 1991, at
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 opposed or the recommendation is
 contested, the May 1, 1991, hearing
 date may be rescheduled for an-
 other Board meeting. If the hearing
 is rescheduled, notice of the time
 and place will be given by First
 Class Mail to the applicant and
 persons filing petitions. Anyone not
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 Engineer's recommendation is not
 final or binding upon the Board.
 The Board is authorized to 1)
 approve, 2) approve with qualifica-
 tions, 3) defer, or 4) deny this
 application based on the facts
 presented at the public hearing.
 Any hearing will be an adversary
 proceeding. Any person filing a
 petition and/or the applicant have
 the right to be represented by a
 lawyer and may present evidence
 or cross-examine witnesses ac-
 cording to SDCL 1-26. These and
 other due process rights will be
 forfeited if not exercised. Decisions
 of the Board may be appealed to
 the Circuit Court and State Su-
 preme Court as provided by law.
 Contact the Water Rights Division
 to request copies of information
 pertaining to this application or to
 assure access to the hearing by the
 handicapped.

This application is made pursuant
 to SDCL 46-1-1 thru 46-1-9, 46-1-12
 thru 46-1-16; 46-2-3.1, 46-2-9,
 46-2-11, 46-2-13, 46-2-17; 46-2A-1
 thru 46-2A-10, 46-2A-12, 46-2A-14,
 46-2A-15; 46-5-1 thru 46-5-11,
 46-5-13 thru 46-5-15, 46-5-24,
 46-5-25, 46-5-30.2, 46-5-30.4,
 46-5-31; 46-6-3, 46-6-3.1, 46-6-8.1,
 46-6-10, 46-6-13, 46-6-14, 46-6-26;
 and Board Rules ARSD 74:02:01:01
 thru 74:02:01:15.
 3783 March 27; April 3, 1991

Cost of Printing: 248 Lines at .3966 = \$ 98.36

1 Affidavit of Publication \$ 2.00

Total: \$100.36

South Dakota



GREAT FACES. GREAT PLACES.

SEP 27 1991

**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

Arnold Murray
Arnold Murray Construction
333 N Phillips Ave
Sioux Falls, SD 57102

Dear Mr. Murray:

Enclosed is Water Permit No. 5491-3 authorizing construction of your water diversion system and put the water to beneficial use, not exceeding the limits as specified in the Water Permit.

Also enclosed is Form 10, Notice of Completion of Works and Application of Water to Beneficial Use, which you are to complete and submit to the Chief Engineer when you have completed the system and/or have put the water to beneficial use. An inspection can then be scheduled so that the Water License may be issued, thus completing your acquisition of a Water Right.

Very truly yours,

JOHN HATCH, Chief Engineer
Water Rights Division
605 773-3352

enclosures

PLEASE NOTE: Certain changes can be made in your permit within the five year construction period, usually without affecting the priority date provided an application to amend your permit is made within the five year period - i.e. changes in location or number of diversion points (wells) or location of land to be irrigated. Well locations for wells into the same aquifer can be moved up to 660 feet without application.

Applications to amend a permit after the five year construction period will be assigned a new priority date. Applications to change water sources, to add lands or increase original diversion rates, if approved will usually receive the date of the new application as a priority date regardless of the five year construction period.

NOTICE OF COMPLETION OF WORKS AND
APPLICATION OF WATER TO BENEFICIAL USEDate Aug 5-1992TO: Water Rights Division, DWR
Joe Foss Building
Pierre SD 57501-3181FROM: Ronald M. Murray 333 N. 1st St. S.F.
name address city

I have completed the construction of the water diversion system and I have put the water to beneficial use to the maximum extent it is going to be used. I have not exceeded the amounts specified in Water Permit No. 5491-3.

Water Permit No. 5491-3 states that the diversion system is to be constructed by Sos Well Drilling, and that the water it put to beneficial use by Heating Oil.

The diversion system was completed on Nov-1990.
Applying the water to beneficial use was completed on Nov 1990.

You may schedule an inspection so that the Water License may be issued.

Ronald M. Murray
signature

Permit No. 5491-3

Big Sioux River Water District

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

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

I have this day made a thorough examination of the water use system constructed by Arnold Murray Construction of 333 N. Phillips Ave., Sioux Falls, SD 57102 holder of Permit No. 5491-3, bearing the priority of December 27, 1990 authorizing the diversion of 0.11 cu. ft. per second of the waters of Sioux Quartzite for geothermal heating purposes, in Minnehaha County.

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

A. Works used to divert the water:

One well - 372' deep with 56' of 6" steel casing and no screen (Borehole is open at bottom), Grundfos pump, Model No. unknown, 4", 22 GPM @ 50 PSI; Grundfos motor, Model No. unknown, 5 HP

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

220' of 3" PVC and 100' of 1" PVC pipe

C. Works used to apply water to beneficial use:

Geothermal heating and cooling system installed for 15 apartment units

The system is in the following condition excellent. The point of diversion is located 730'E and 78'S of the NW corner of section 16-T101N-R49W. The works are capable of diverting and conveying to the place of use 0.049 cu. ft. per second of water which is to be used for geothermal heating. Water has been put to beneficial use. The license should be issued for 0.049 cfs.

Applicable permit qualifications have been complied with ☒ Yes ☐ No

Exceptions to compliance are: None Date 8/5/92


Gregory C. Johnston
Natural Resources Engineer
DENR, Water Rights Division

REPORT ON INSPECTION OF PERMIT NUMBER 5491-3

DATE 1/5/93

Other permit(s) associated with the project None

DIVERSION POINT LEGAL LOCATION: 730'E and 78'S of the NW corner of Section 16-T101N-R49W

WELL INFORMATION: Well Drilling Firm Sioux Well Drilling

No. of Wells 1 Depth(s) 372

- a) Casing: 1) diameter 6 inches b) Screen: 1) type N/A
2) length 56 feet 2) length N/A feet
3) type Steel c) Pump 1) make Grundfos
d) Static Water Level 96 feet 2) model unknown
e) Motor: 3) size 4 inches
1) make Grundfos 4) capacity 22 GPM
2) model No. unknown 5) turbine pump - No. of stages unknown
3) horsepower rating 5 hp 6) operating pressure 50 PSI

DISTRIBUTION LINES OR CANALS:

- a) type PVC b) size 3/1 inches c) length 220/100 feet

System Type: Geothermal heating/cooling system for 15 unit apartment complex

CHEMIGATION EQUIPMENT:

- a) does chemigate N/A (Y/N)

PERMIT QUALIFICATIONS AND REGULATIONS:

- a) Soil and water permit lands agree with lands being irrigated and lands listed on permit N/A (Y/N)
b) Special qualifications to permit being abided by Y (Y/N)
c) All structures, wells and lands on map Y (Y/N)
d) Irrigation Questionnaires checked to determine if permit owner started irrigation by the end of construction period N/A (Y/N)

Section 16-T101A1-R49W

Sioux Falls SD

$f_N 1'' = 1553'$

ARNOLD MURRAY
 DRAWN BY
 BTH G. BRANTHOFF
 JOHNSTON

	ST.	JULIO A.M.D.	MUSICA	S.O.SCHOOL FOR THE DEAF	CALIFUGO	SPARTY	CONJURA	LUNELL
	TH	ST.	Eyngner II	NATURAL Resources				
				WATER RIGHTS				

Well is 780' S of 78° E
of NW corner 16-101-49

See details	FR	HEPTA TAGE PARK	
map for			7TH
building to	REID ST	SWAN	INDIAN

NW 1/4 NE 1/4

7:30 - 8:00

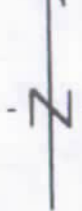
MORTGAGE LOAN SURVEY

McLELLAN STREET

NW 1/4 NW 1/4 Section 16 - T10N-R24W



1" = 50'



AVENUE

MAIN

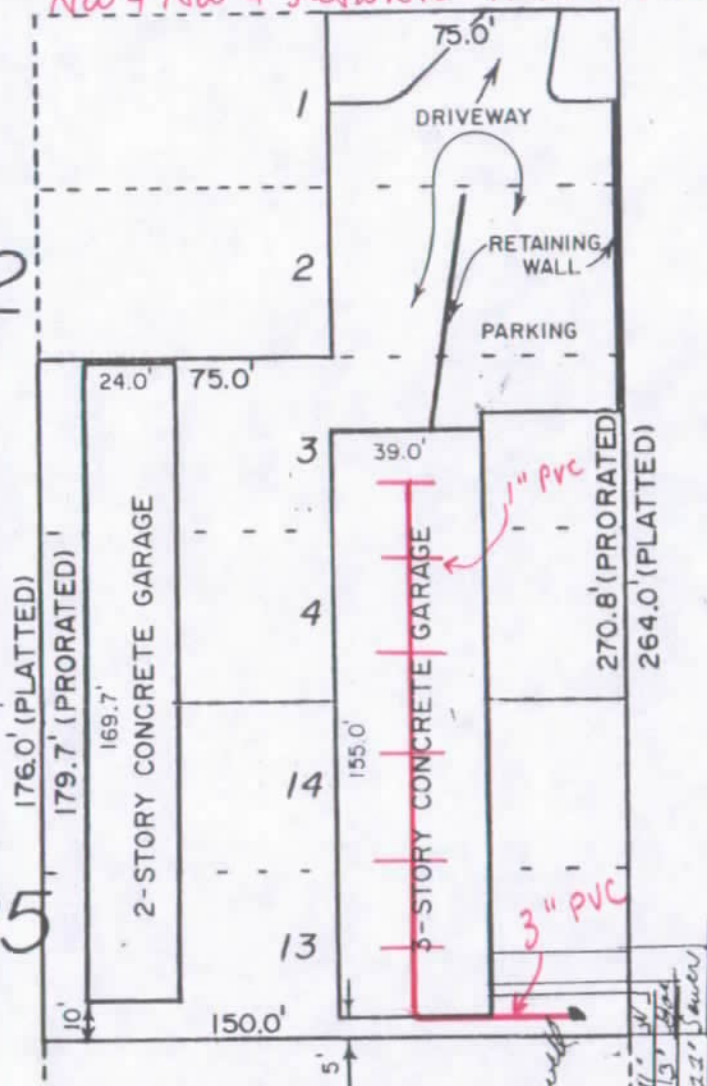
No. 5491-3

ARNOLO MURRAY CONST.

Drawn by: Gregory C. Johnston
 Gregory C. Johnston
 Natural Resources
 Engineer II

Water Rights Division
 DENR

1/5/93



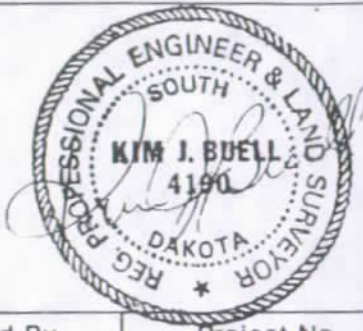
LEGAL DESCRIPTION: LOTS 3 & 4 AND THE E 75' OF LOTS 1 & 2, BLOCK 2, SUMMIT ADDITION AND LOTS 13 & 14, BLOCK 25, BROOKINGS & EDMUNDS ADDITION, SIOUX FALLS, SD

CLIENT: MURRAY CONSTRUCTION

Surveyors Certificate

I, Kim J. Buell Registered Land Surveyor No. 4190, Do Hereby Certify That This Survey Was Made By Me or Under My Direct Supervision and That This Drawing Correctly Shows The Relationship of The Buildings and Other Improvements To The Property Lines of The Land Indicated Hereon. This Survey Is Not A Boundary Survey.

SCHMITZ, KALDA & ASSOCIATES, INC.
 260 Boyce-Greeley Building
 Sioux Falls, SD 57102
 332-8241



Date Surveyed	Date Drawn	Drawn By	Checked By	Project No.
9-8-89	9-8-89	JWM		

5491-3

STATE OF SOUTH DAKOTA

WATER LICENSE NO. 5491-3

(1) Arnold Murray Construction, of 333 N Phillips Avenue, Sioux Falls, SD 57102 made Application No. 5491-3, September 17, 1990 for a water permit to appropriate 0.11 cubic feet of water per second from groundwater (one well), Minnehaha County, South Dakota for geothermal heating purposes. Permit No. 5491-3, with a priority date of December 27, 1990 was approved May 1, 1991 and issued to the applicant for diversion of water with construction of the described water supply system to be completed on or before May 1, 1996 and for the application to beneficial use of said water on or before May 1, 2000.

The permit holder submitted a "Notice of Completion of Works and Application of Water to Beneficial Use" on August 5, 1992. The "Notice" stated the diversion system was completed and the water placed to beneficial use in November, 1990.

(2) It is certified that the applicant 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 0.048 cubic feet of water per second for beneficial use. The location of the diversion point is 730 feet E and 78 feet S of the NW corner of Section 16, T101N, R49W (NW¼ NW¼).

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

(4) Pursuant to South Dakota Water Law 46-5-30.1 Arnold Murray Construction of 333 N Phillips Avenue, Sioux Falls, SD 57102 the holder and/or owner of Water Permit No. 5491-3 is issued a license to appropriate water, the right to use 0.048 cubic feet of water per second from groundwater (one well) with a priority date of December 27, 1990 from the location specified in (2) of this license. The water is used for geothermal heating purposes. This license is subject to any limitations or qualifications listed in Water Permit No. 5491-3 and subject to South Dakota State Law.



JOHN HATCH, Chief Engineer
Water Rights Division
Department of Environment and Natural Resources

DEC 20 1993

date



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

April 26, 1993

5491-3

Arnold Murray
Arnold Murray Construction
333 N. Phillips Ave.
Sioux Falls, SD 57102

Dear Mr. Murray:

The inspection of your water use system and the inspection of the extent of application of water to beneficial use, as developed under Water Permit No. 5491-3, has been completed. Your final water right document, the Water License, can now be issued.

Statutes require that we charge a \$50.00 fee for the inspection and issuance of the Water License. Upon receipt of the \$50.00 fee from you, we will begin processing your Water License.

South Dakota Water Law 46-5-30.1 requires that a permit holder may not divert water until the \$50.00 license fee has been paid. Please contact us if you have any questions.

Sincerely,

Cheryl F. Frost
Secretary
Water Rights Division
(605) 773-3352

NOTE: On check or money order, please specify your permit number.
This will insure proper handling of the fee.

RECEIPT

413766

Division of Water Rights

South Dakota Department of Environment and Natural Resources

Pierre, _____ May 10, 1993

RECEIVED OF Arnold Murray Construction, 333 N Phillips Ave, Sioux Falls, SD 57102

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>5491-3</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*
Chief Engineer



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

DEC 20 1993

5491-3

Arnold Murray
Arnold Murray Construction
333 N. Phillips Avenue
Sioux Falls, SD 57102

Dear Mr. Murray:

Enclosed is Water License No. 5491-3. This is the final water right document completing your process of obtaining a Water Right. Enclosed is Receipt No. 413766 in the amount of \$50.00 which you paid for the inspection 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. 5491-3, 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 Division
(605) 773-3352

gm
enclosures