

Considered: _____

WATER PERMIT NO. 995A-3

MAP No. 995A-3

Name of Applicant Pam Oil Inc.

Post Office Address 1490 N Minnesota Ave Sioux Falls 57114

Amount of Water Claimed 0.40

Total Acres -

Source of Water Supply groundwater 700' 3-57

Water to be used for COM GEO

County MA

About _____ miles _____ of N edge of Sioux Falls

PROOF OF PUBLICATION: Received 11-1-84 Not Received _____

APPLICATION: Approved 12-5-84 Subject to _____

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

PRIORITY

Date Received 10/9/84

Fee 50.00

Remarks _____

6/19/62

Change use amending permit No. 995-3 old priority retained

Corrected Application Received _____

Period of Annual Use 1/1 to 12/31

WATER QUALITY APPROVAL RECEIVED _____

APPROVED/CONDITIONAL (Circle one)

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

Diversion Point _____

SE 1/4 SW 1/4, Section 13-101N-50W (21)

Land to be Irrigated _____

Well Log: Driller _____

Licensed YES _____ NO _____

Depth of Well 100' 3-57

REMARKS 100' 3-57 100' 3-57

Type of Map drawn

PREPARED BY Engr. J Guiahn

Reviewed and the Number _____

assigned on 10/10/84

By _____

Betty Westlund NRA 111

Nelson

STATE OF SOUTH DAKOTA

WATER LICENSE NO. 995A-3

(1) Pam Oil Company of P.O. Box 146, Sioux Falls, SD 57117-1146 made Application No. 995A-3, October 9, 1984 for a water permit to appropriate 0.40 cubic feet of water per second from groundwater, Minnehaha County, South Dakota for commercial and geothermal purposes. Permit No. 995A-3 with a priority date of June 19, 1962 (established under Water Right No. 995-3) was approved December 5, 1984 and issued to applicant(s) for diversion of water with construction of the described water supply system to be completed on or before December 5, 1989 and for the application to beneficial use of said water on or before December 5, 1993.

Water Permit No. 995A-3 amended Water Right No. 995-3 by changing the use of water from industrial (meat packing plant) to commercial and geothermal use. An inspection of the water use system authorized under No. 995A-3 found only the geothermal portion of the permit had been developed.

The applicable portions of Water Right No. 995-3 have been incorporated into this Water License No. 995A-3.

(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 0.40 cubic feet of water per second for beneficial use. The location of the diversion point is: 2170'S and 800'W of the center of Section 13, T101N, R50W. The discharge well is located 600 feet west of the production well.

(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 Section 46-5-30.1 Pam Oil Company of P.O. Box 1146, Sioux Falls, SD 57117-1146 the holder(s) and/or owner(s) of Water Permit No. 995A-3 is issued a license to appropriate water, the right to use 0.40 cubic feet of water per second from groundwater with a priority date of June 19, 1962 from the location specified in (2) of this license. The water is to be utilized for geothermal purposes. This license is subject to any limitations or qualifications listed in Water Permit No. 995A-3 and subject to South Dakota State Law.

 NOV 24 1992
JOHN HATCH, Chief Engineer
Water Rights Division
Department of Environment and
Natural Resources

WATER PERMIT

The Water Management Board hereby approves Water Permit Application No. 995A-3
Pam Oil Co. 1420 N. Minnesota Ave Sioux Falls
(Applicant) (Post Office Address)
S.D. 57104 With the following qualifications.
(State) (Zip Code)

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 water supplies in adequate domestic wells or in adequate wells having prior water rights.

Date of first receipt of application October 9, 1984
 Date of return to applicant for correction, amendments or changes required —, 19—
 Date of receipt of corrected application —, 19—. Approved December 5, 1984

The Water Management Board hereby approves this Water Permit No. 995A-3 authorizing the construction of the water use system and the placing of water to beneficial use as stated in the Application and as qualified in the Water Permit approval, subject, however, to the following limitations and conditions:

1. The date from which applicant may claim right is JUNE 19, 1962.
2. The equivalent of at least one-fifth of the specified work is to be completed on or before JUNE 5, 1987.
3. The whole of said work is to be completed on or before December 5, 1989.
4. The limit of time from proof of beneficial use of water appropriated in accordance herewith is December 5, 1993.
5. The water appropriated shall be used for the purpose of Commercial & Geothermal.
6. The prior right of all persons who, by compliance with the laws of the State of South Dakota, have acquired a right to the use of water must not be unlawfully impaired by this appropriation.
7. The amount of the appropriation herein granted shall not exceed 0.40 cubic feet per second; neither shall it exceed the capacity of the above described water supply system nor shall it exceed the amount of water needed for beneficial uses served and to which water is actually and beneficially applied for Commercial & Geothermal on or before December 5, 1993; said water to be used during the following described annual period: JAN. 1 To Dec. 31

WATER MANAGEMENT BOARD
 By: John H. [Signature]
Chief Engineer
 Division of Water Rights
 Dept. of Water and Natural Resources

No. <u>995A-3</u>	Hydrologic Unit <u>10170203</u>
Map No. <u>995A-2</u>	Basin <u>SR</u>
Newspaper <u>ARGUS LEADER</u> <u>Sioux Falls</u>	

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. 995-3 with old priority date retained 6-19-62Change 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 Pam Oil Inc. Phone No. 336-1788Post Office Address 1420 N. Minnesota Ave., Sioux Falls State SD - 57104
(Street, RR or Box) Zip Code2. Amount of water claimed (c.f.s) 0.43. Source of water supply Well in Quartzite Rock4. Location of point of diversion 753' West and 517' North of SE Corner of SW 1/4 Section 13,
T 101 N, R 50 WCounty Minnehaha5. Counties where water will be used Minnehaha6. Annual period during which water is to be used continuously - 12 months per year

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)

Water will be used for geothermal heat, supply well will be the one described above, the discharge well will be the closest well to the source. No water will be permanently used for domestic or fire, all will be recycled.

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 S. PEDERSON the applicant, certify that I have read the foregoing application, have examined the attached map and that the matters therein stated are true and that I intend, and am able to complete the necessary construction.

Signed [Signature]Subscribed and sworn to before me this 5th day of OCTOBER 19 84

EUGENE F. [Signature] Notary Public
My Comm. Expires [Date]

[Signature]
Notary Public (or other qualified officer)

REPORT ON APPLICATION NO. 995A-3

PAM OIL INC.

October 15, 1964

Application No. 995A-3 proposes to utilize 0.4 cfs of groundwater from the 1.0 cfs originally authorized under Water Right No. 995-3. The use of the water will be changed from meat processing to geothermal heat use. The original priority of June 19, 1962 will be retained.

A driller's log submitted with application No. 995A-3 shows that the well is 351 feet deep. The well is cased with 60 feet of 10 inch steel casing cemented to the top of the quartzite. The well was then finished open-hole to a depth of 351 feet. The static water level was 35 feet when drilled in July 1962.

The producing formation for this well is the Sioux Quartzite. The quartzite is considered impermeable except where joints and fractures are present. The fracture system in the quartzite is nearly impossible to predict. An estimate of the amount of water in storage has not been made.

After reviewing well logs and topographic maps, it is apparent the quartzite is being recharged by the Skunk Creek aquifer and the Rio Sioux aquifer. This recharge would take place thru the fracture system within quartzite directly underlies these two aquifers.

The application proposes to withdraw the water from a well 753 feet west and 517 feet north of the SE corner of the SW $\frac{1}{4}$ Section 13, T101N, R50W. The water will be routed thru the system and reinjected at a site 155 feet east and approximately 25 feet south of the production well. Information on the re-injection well is unknown. In view of the proximity of the re-injection well to the production well and the driller's log, the re-injection well is probably finished into the sioux quartzite.

There are several other wells finished into the sioux quartzite in this area. These wells are completed to depths from 167 feet to 351 feet. The interconnection between these wells is unknown. The Water Rights Division has received no complaints concerning the operation of the wells in the quartzite. With the small amount of water requested and the existence of this well since 1962 there should not be any significant interference with existing wells.



GALE N SELKEN
Hydrologist

RECOMMENDATION OF CHIEF ENGINEER

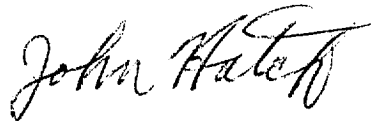
FOR APPLICATION NO. 995A-3, Pam Oil, Inc.

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. 995A-3, Pam Oil, Inc. 1420 North Minnesota Avenue, Sioux Falls SD.

The Chief Engineer is recommending APPROVAL of Application No. 995A-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 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 water supplies in adequate domestic wells or in adequate wells having prior water rights.

See the attached report for additional information.



JOHN HATCH, Chief Engineer
Water Rights Division
October 15, 1984

Instruction to Newspaper - Publish first publication of the following Notice on or before October 24, 1984 with 2nd publication 1 week later. The applicant is responsible for payment.

NOTICE OF HEARING on Application No. 995A-3 ~~to~~ Appropriate Water
and/or to Amend Water Permit or Water Rights No. 995-3

Notice is hereby given that Pam Oil Inc. whose mailing address is
1420 N Minnesota Ave, Sioux Falls, South Dakota has made an application for a permit

to change water Permit No. 995-3 use from Industrial to geothermal use and commercial. The diversion point is located in the SE1 SW1 of Section 13, T10.N, R50.W.

Pursuant to SDCL 46-2A-2 the Chief Engineer of the Water Rights Division recommends
Approval of Application No. 995A-3 because ~~1)~~ 1) appropriate water is available,
1) will be no unlawful impairment of existing rights, 2) is beneficial use of water and
3) is in the public interest.

This application will be considered by the Water Management Board at Joe Foss Building,
Room 216, 523 E Capitol, Pierre, South Dakota on December 5 1984 at 10:00 a.m.

The recommendation of the Chief Engineer is not final or binding upon the Board and the Board is authorized to make a determination on this application after it reaches a conclusion based upon facts presented at the public hearing. Any interested person who may be affected by a Board decision and who intends to participate in the hearing before the Board and present evidence or cross-examine witnesses according to SDCL 1-26, must file a written petition with BOTH the Applicant and the Chief Engineer by November 23, 1984. The petition may be informal, but it must include a statement describing the petitioner's interest in the application, the reason for the petitioner's opposition to or support of the application, and the signature and mailing address of the petitioner or his legal counsel if legal counsel is obtained. The applicant need not file a petition.

This application is made pursuant to the provisions of SDCL 46-1-1 thru 46-1-9, 46-1-12 thru 46-1-15; 46-2-3.1, 46-2-9, 46-2-11, 46-2-13, 46-2-17, 46-5-1 thru 46-5-16, 46-5-24, 46-5-25, 46-5-30.2, 46-5-31; 46-2A-1 thru 46-2A-10, 46-2A-12; ~~(transfer)~~ 46-6-3, 46-6-3.1, 46-6-6.1, 46-6-10, 46-6-13, 46-6-14; ~~(future-use)~~ 46-5-38 thru 46-5-40; ~~(transfer-lands)~~ 46-5-30.4, 46-5-33 thru 46-5-35; ~~(10,000-AFA)~~ 46-5-20.1, 46-5-20.2 and Board Rules ARSD 74:02:01:01 thru 74:02:01:15; ~~(future-use)~~ 74:02:01:24 thru 74:02:01:25; ~~(10,000-AFA)~~ 74:02:01:15:02 thru 74:02:01:15:05.

This hearing is an adversary proceeding. The applicant or any person, after filing a petition, has the right to be present or to be represented by a lawyer. These and other due process rights will be forfeited if they are not exercised. Decisions of the Board may be appealed to the Circuit Court and the State Supreme Court as provided by law.

Any person wishing a copy of the Chief Engineer's recommendation, further information on this application or to assure access to the hearing by the handicapped can contact the Water Rights Division, DWR, Joe Foss Bldg, Pierre SD (605 773-3352) for assistance prior to the hearing date. The time of the hearing will be automatically extended for at least twenty days upon written request of the applicant or any person who has filed a petition to oppose or support the application. The request for extension must be filed with the Chief Engineer by November 23, 1984.

PROOF OF PUBLICATION

STATE OF SOUTH DAKOTA)
County Minnehaha) ss.

I, Roxy Deutscher hereby

certify that the annexed printed copy of Notice of Intent to Appropriate
Water 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:

Wednesday, October 24, 1984

Wednesday, October 31, 1984

Roxy Deutscher
(Signature)
Controller

(Title)

October 31, 1984

(Date Signed)

Cost of Printing: _____
15 3/4" @ \$4.55/inch = \$71.67

NOTICE OF HEARING
on Application No. 995A-3
to Amend Water Right No. 995-3
Notice is hereby given that
Pam Oil Inc. whose mailing ad-
dress is 1420 N. Minnesota Ave.,
Sioux Falls, S. D. 57104, has
made an application for a permit
to change water Permit No. 995-3
use from industrial to geother-
mal use and commercial. The di-
version point is located in the
SE 1/4 SW 1/4 of Section 13, T101N,
R50W.

Pursuant to SDCL 46-2A-2 the
Chief Engineer of the Water
Rights Division recommends Ap-
proval of Application No. 995A-3
because 1) will be no unlawful
impairment of existing rights, 2)
is beneficial use of water and 3)
is in the public interest.

This application will be consid-
ered by the Water Management
Board at Joe Foss Building,
Room 216, 523 E. Capitol, Pierre,
South Dakota on December 5,
1984, at 10:00 a.m.

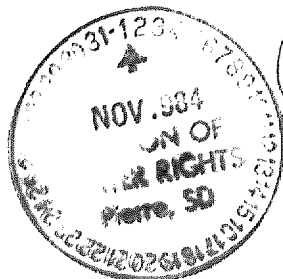
The recommendation of the
Chief Engineer is not final or
binding upon the Board and the
Board is authorized to make a
determination on this application
after it reaches a conclusion
based upon facts presented at the
public hearing. Any interested
persons who may be affected by
a Board decision and who intends
to participate in the hearing be-
fore the Board and present evi-
dence or cross-examine wit-
nesses according to SDCL 1-36,
must file a written petition with
BOTH the Applicant and Chief
Engineer by November 23, 1984.
The petition may be informal,
but it must include a statement
describing the petitioner's inter-
est in the application, the reason
for the petitioner's opposition to
or support of the application, and
the signature and mailing ad-
dress of the petitioner or his legal
counsel if legal counsel is ob-
tained. The applicant need not
file a petition.

This application is made pur-
suant to the provisions of SDCL
46-1-1 thru 46-1-5, 46-1-12 thru 46-1-
15, 46-2-1, 46-2-5, 46-2-11, 46-2-13,
46-2-17, 46-3-1 thru 46-3-14, 46-3-24,
46-5-25, 46-5-30, 46-5-31, 46-2A-1
thru 46-2A-16, 46-2A-12, 46-3-3, 46-
3-7, 46-3-11, 46-3-16, 46-3-17, 46-
3-14, and Board rules for ARSD
74:02:01-01 thru 74:02:01-15.

This hearing is an adversary
proceeding. The applicant or any
person, after filing a petition, has
the right to be present or to be
represented by a lawyer. These
and other due process rights will
be forfeited if they are not exer-
cised. Decisions of the Board
may be appealed to the Circuit
Court and the State Supreme
Court as provided by law.

Any person wishing a copy of
the Chief Engineer's recommen-
dation, further information on
this application or to assure ac-
cess to the hearing by the hand-
ling agency should contact the Water
Rights Division, Bureau, Box
808, Pierre, SD 57501-0808
48 hours assistance prior to the
hearing date. The time of the
hearing will be automatically ex-
tended for at least twenty days
upon written request of the ap-
plicant. Any person who has filed
a petition to oppose or support
the application. The request for
extension must be filed with the
Chief Engineer by November 27,
1984.

Oct 24 & 31, 1984



995A-3

Permit No. 995A-3Big Sioux 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 Pam Oil Company of P.O. Box 1146, Sioux Falls, SD 57117 holder of Permit No. 995A-3, bearing the priority of June 19, 1962 authorizing the diversion of 0.4 cu. ft. per second ~~and/or the storage of acre-foot~~ of the waters of the Sioux Quartzite for geothermal heat purposes, in Minnehaha County.

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

A. Works used to divert the water:

One Production well- 351' deep, 60' of 10" steel casing, no screen; One discharge well, no information available, 7 Stage Grundfos pump Model No. SP45-7, 6", 200 GPM @ 130 PSI on production well

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

600' of 6" steel pipe

C. Works used to apply water to beneficial use:

Unknown length of 3" distribution pipe within the building, Mc Quay Heat Pump - Model TPB55AIQIX, Serial No. 5QE0400400, R500, #4X; no consumptive use; Discharge Well - no information available on the well construction; Hitachi Motor - Model No. 460V30, Serial No. B9132M01, 20 HP

The system is in the following condition excellent. The point of diversion is located 2170'S and 800'W of the center of Section 13-T101N-R50W, Minnehaha County, SD. The works are capable of diverting and conveying to the place of use 0.44 cu. ft. per second of water ~~and/or storing acre-foot of water~~ which is to be used for ~~consumptive use~~ (geothermal heating). Water has been put to beneficial use to the maximum extent as follows:

non-consumptive use in the SW1/4 SE1/4 SW1/4 of Section 13, T101N-R50W

and the license should be issued for 0.4 cfs.

Applicable permit qualifications have been complied with ☒ Yes ☐ No

Exceptions to compliance are: None Date November 13, 1991

This Permit was inspected by David S. Brown - December 9, 1987, and was incomplete.

I obtained the remainder of the information necessary and completed the license
and examination of works for No. 995A-3.

A handwritten signature in black ink, reading "Gregory C. Johnston". The signature is written in a cursive style with a large, stylized "G" and "J".

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

LICENSE FOR PERMIT NUMBER 995A-3

1. Legal location of wells: The production well is 2170'S and 800'W and the discharge well is 2140'S and 1210'W of the center of Section 13-T101N-R50W, Minnehaha County, SD

Dams and Structures None

2. Well Information: Well Drilling Firm Production well - Paulson Well Co./ Discharge well unknown

Completion Report?	Yes	No <u>X</u>	No. of Wells <u>2</u>	Depth(s) <u>351'/unknown</u>
Casing	a) diameter <u>10/unknown</u>	inches	Screen	a) type <u>none/unknown</u>
	b) length <u>60/unknown</u>	feet		b) length <u>none/unknown</u>
	c) type <u>Steel</u>		Static Water Level <u>35/unknown</u>	feet
Pump	a) make <u>Grundfos</u>	Motor	a) make <u>Hitachi</u>	
	b) model <u>SP45-7</u>		b) model no. <u>460V30</u>	
	c) size <u>6"</u>		c) horsepower rating <u>20</u>	
	d) capacity <u>200</u>	GPM	d) serial no. <u>B9132M01</u>	
	e) turbine pump - i.e. of stages <u>7</u>			
	f) operating PSI <u>130</u>			

3. Distribution lines or canals

a) size 6 inches
 b) type Steel
 c) length 600 feet

Heat pump, McQuay, Model TPB55A10, Serial No. 50E0400400, R500, #4X, 3" distribution pipe used in geothermal distribution system at Pam Oil Co.

NOTE: For Permits with additional wells or changes in well locations, record the following for each well: pumping capacity, date

constructed, well driller and if a well log is available.

Indicate any other permit(s) which are associated with project

Yes	No	Check Items
<u>N/A</u>		1. Soil and water permit lands agree with lands being irrigated and lands listed on permit?
<u>X</u>		2. Special qualifications to permit being abided by?
<u>X</u>		3. All structures, wells and lands on map?
<u>N/A</u>		4. Irrigation Questionnaires checked to determine if permit owner started irrigation by end of construction period?
	<u>N/A</u>	5. Is chemigation used?
<u>N/A</u>		6. If yes, does equipment comply with chemigation rules?

REMARKS: Non-consumptive use, geothermal heating only



Department of Water & Natural Resources

Joe Foss Building
623 East Capitol
Pierre, South Dakota 57501

Water Rights Division
605 773-3352

January 4, 1985

Pam Oil Co.
1420 N Minnesota Ave
Sioux Falls SD 57104

Dear Sir:

Enclosed herewith is your Water Permit No. 995A-3 as approved by the Water Management Board authorizing you to construct your water diversion system and the water to beneficial use, not exceeding the limits as specified in said Water Permit No. 995A-3.

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 your Water License may be issued to you, thus completing your acquisition of a Water Right.

Very truly yours,

JOHN HATCH, Chief Engineer
Water Rights Division

JH: ks

enclosure

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.

995A-3

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

Post Office _____

Date June 18, 1985

TO: Water Rights
Joe Foss Building
Pierre, South Dakota 57501

Dear Sirs:

This is to inform you that I have completed the construction of the water diversion system and/or that I have put the water to beneficial use to maximum extent it is going to be used, not exceeding the amounts as specified in Water Right No. 111-1-1.

Water Right Permit No. 995A-3 states that the diversion system is to be constructed by Standa H. Foss, and that the water is put to beneficial use by Pierre Co. Inc.

The diversion system was completed on June 18, 1985. Applying the water to beneficial use was completed on June 18, 1985.

You may schedule an inspection so that the Certificate of Construction and/or the Water License may be issued, thus completing my acquisition of a water right.

[Signature]
(Signature)





GREAT FACES. GREAT PLACES.

DEPARTMENT OF WATER & NATURAL RESOURCES

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

January 7, 1991

995A-3

Pam Oil, Inc.
William Pederson
P.O. Box 1146
Sioux Falls, SD 57117-1146

Dear Mr. Pederson:

On December 9, 1987, I conducted a routine field inspection of Water Permit No. 995A-3. The Division of Water Rights is in the process of issuing you a Water License for that permit. The Water Permit is for commercial use (geothermal heat supply) of 0.4 cubic feet per second of ground water from the Sioux Quartzite.

During the field inspection in 1987, you indicated that information was probably available for the production well. Before a Water License can be issued to you, we need the following production well information:

Pump A) make
 B) model
 C) size
 D) capacity (gallons per minute)
 E) horsepower rating
 F) operating psi

Motor A) make
 B) model
 C) horsepower rating
 D) serial no.

A well drillers log for the discharge well (casing: diameter, length, type) is also needed. If the above information is unavailable, please let me know and we will still proceed with issuing you a Water License.

I have enclosed a map of your project constructed under Water Permit No. 995A-3 for informational purposes only.

Your attention in this matter will be appreciated. I apologize for not completing your Water License earlier and for any inconvenience I may have caused you because of the delay. If you have any questions, please contact me.

Sincerely,

David S. Brown
Natural Resources Engineer II
DWR, Water Rights Division
(605) 773-3352



995A-3

GREAT FACES. GREAT PLACES.

**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

November 5, 1991

Pam Oil, Inc.
C/O William Pederson
P.O. Box 1146
Sioux Falls, SD 57117-1146

Dear Mr. Pederson:

On December 9, 1987, David Brown, a Natural Resources Engineer, conducted a field inspection of Water Permit No. 995A-3. The Division of Water Rights is in the process of issuing you a license for Permit No. 995A-3. The Water Permit is for commercial use (geothermal heat supply) of 0.4 cubic feet per second (cfs) of ground water from the Sioux Quartzite.

During Mr. Brown's inspection, you indicated that information was probably available for the production well. Mr. Brown had written you in January of this year to ask for the following information to complete the Water License. Once this information is received, the Water License can be issued to you:

Pump A) Make
 B) Model
 C) Size
 D) Capacity (gallons per minute)
 E) Operating PSI

Motor A) Make
 B) Model
 C) Horsepower Rating
 D) Serial No.

A well drillers log for the discharge well (casing, diameter, length, type) is also needed. If the above information is unavailable, please let me know and we will proceed with issuing you a Water License.

995A-3

November 5, 1991
Pam Oil, Inc.
Page 2

I have enclosed a map of Permit No. 995A-3 for your informational purposes only.

Your immediate cooperation will be greatly appreciated. If you have any questions, please feel free to contact me.

Sincerely,

A handwritten signature in cursive script that reads "Gregory C. Johnston".

Gregory C. Johnston
Natural Resources Engineer
Water Rights Division
(605) 773-3352

encl

995A-3

PAM OIL, INC.

Total Automotive Distribution
P.O. Box 1146
Sioux Falls, SD 57117-1146
(605) 336-1788



November 13, 1991

Mr. Gregory C. Johnston
Natural Resources Engineer
Water Rights Division
Department of Environment and
Natural Resources
Joe Foss Building
523 East Capitol
Pierre, SD 57501-3181

Dear Mr. Johnston:

In response to your letter of November 5, 1991, regarding the issuance of our license for Water Permit No. 995A-3, below is the information which you requested.

- Pump
- A) Make - Gundfos
 - B) Model - SP45-7
 - C) Size - 6"
 - D) Capacity (gallons per minute) - 200 GPM
 - E) Operating PSI - 130
- Motor
- A) Make - Hitachi
 - B) Model - 6"-460V30
 - C) Horsepower Rating - 20
 - D) Serial No. - B9132MOI

No well log information is available as the well is drilled into the rock.

We look forward to receiving our permit shortly. Should you have any questions regarding the above information, please feel free to call.

Sincerely,


Wm. G. Pederson
President

jr

Enclosures

Distributing From:
Minneapolis • Fargo • Council Bluffs • Boise • Sioux Falls



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

GREAT FACES. GREAT PLACES.

September 2, 1992

995A-3

Wm. G. Pederson
Pam Oil, Inc.
P.O. Box 1146
Sioux Falls, SD 57117-1146

Dear Mr. Pederson:

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. 995A-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

Division of Water Rights

South Dakota Department of Environment and Natural Resources

413421

Pierre, _____ September 14, 19 92

RECEIVED OF Pam Oil Cnc, PO Box 1146, Sioux Falls, SD 57117-1146

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>995A-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

NOV 24 1992

995A-3

Wm. G. Pederson, President
Pam Oil Company
P.O. Box 1146
Sioux Falls, SD 57117-1146

Dear Mr. Pederson:

Enclosed is Water License No. 995A-3. This is the final water right document completing your process of obtaining a Water Right. Enclosed is Receipt No. 413421 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. 995A-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

enclosures

NOTE: The applicable portions of Water Right No. 995-3 have been incorporated into this Water License No. 995A-3.

RECEIPT
Division of Water Rights
South Dakota Department of Water and Natural Resources

No 4 9787

Pierre, October 1, 1988

PO Box 1146

RECEIVED OF Pam Oil Well Inc., 1420 N. Minnesota Avenue, Sioux Falls, SD 57104

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

Fee for Application for Permit No. <u>995A-3</u> to Appropriate Water, to construct works and to put water to beneficial use _____	50	00
Fee for Application for Permit No. _____ to Appropriate Water for Future Use _____		
Fee to retain Future Use Permit No. _____ after period of seven years.		
Fee for Inspecting Constructed Works, confirming beneficial use and issuing Water License No. _____		
Fee for Filing Transfer Form _____		
Fee for Filing Extension Request _____		
Fee for Certified Copy of _____		
Fee for Print Copy of Map _____		
Fee for Certifying _____		
Fee for _____		
(Any Other Work Provided by Law)	Total	50 00

By

Chief Engineer

John Hatch
JOHN HATCH/ms

FAULSON WELL COMPANY

JASPER, MINNESOTA
FIS-8346

Over 70 Years of Service

Started testing 12:30 static water level 35'

1 hour interval

drawdown	18 feet at 253 g.p.m.	18
1:30	16 feet at 298 g.p.m.	22
2:30	15 feet at 350 g.p.m.	49
3:30	14 feet at 375 g.p.m.	63
4:30	14 feet at 400 g.p.m.	77
5:30	13 feet at 425 g.p.m.	40

total drawdown 90 feet

plus 35 feet static level

grand total 125 feet

49
37
125

95
45
40

WELL DRILLING AND REPAIRING • • • PUMP INSTALLATION AND SERVICE

DRILLER'S LOG OF WELL

Location of Well: 1/4, 1/4, Section , Township , Range

Well to be drilled for: (Name) (Address)

Owner of land (if other than above) (Name) (Address)

Date well drilling started finished July 30, 1922

Purpose of well Meat Proc. (for use) irrigation, municipal, industrial, other)

Diameter	10 1/2 inches	
1 ft. black dirt		Ground Surface Elevation: (If Available)
2 ft. clay		
40 ft. sand, gravel		
2 ft. yellow clay	45 ft. of drift	
1 ft. 8" gray quartz		
red rock with layers of quartz at different intervals with Pipestone and red clay seams ranging from 1 to 5 ft. to a depth of 106 ft.	Describe kind of materials drilled through (add layers on back if necessary)	Kind and thickness of casing to be installed: Ten inch standard black pipe
21 ft. of solid quartz	21 ft. of solid quartz to a 127 ft.	Size of casing to be installed: 60 feet of 10 inches diameter
71 ft. of red rock with Feet quartz layers and pipestone red clay seams one space about 7 ft. at 200 ft.	71 ft. of quartz pipestone and seams 243 ft.	feet of inches diameter
247 to 344 sioux quartz with a very few seams to 344 ft. Approximately 1 ft. seam with a little sandstone at this point the static level the water lower 4 feet 23 ft. to 35 ft. and the water at red moving out at the bottom		feet of inches diameter
Well drilled 7 ft. deeper for sediment to fall into		Type of seal between casing sizes: cement
		Kind of perforated screen to be installed: Material (steel, wood, concrete, etc.)
		Size of screen: Diameter inches
		Length feet
		Size openings inches
		Depth below ground surface to which water rises in well feet.

NOT TO SCALE

CRP
126'5
87-96

93.8
NEL

No. 995A-3 PAM OIL CO

Drawn by Gregory C. Johnston

Natural Resources Engineer

Water Rights Division, DENR

(based on inspection Dec. 9, 1990

by David S. Brown)

11/22/91

Gregory C. Johnston

~~1" = 760'~~

1" = 760'

Scale

Section 13-T101N-R50W
Minnehaha County, SD
(Sioux Falls Area)

I-29

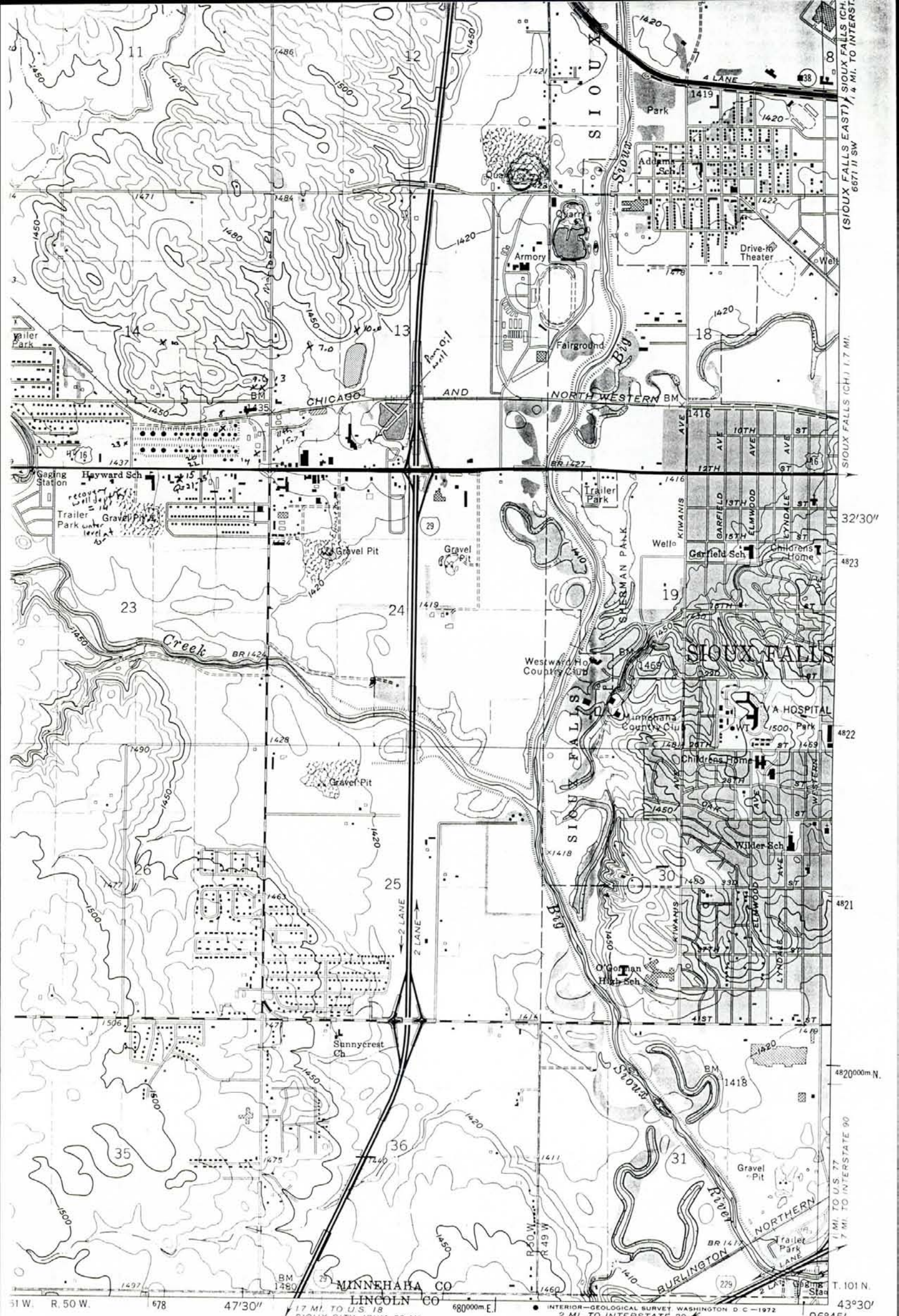
Buildings
McQuay Pump

Discharge
well

Production Well
Same as in 995#3 (1962)

600' of
6" pipe

995A-3



FEET
VEL



ROAD CLASSIFICATION			
Heavy duty	—	Light duty	—
Medium duty	- - -	Unimproved dirt	- - -
Interstate Route	⬢	U. S. Route	⬢
		State Route	⬢

(HARRIS
6670 1 N)

SIOUX FALLS (N.W.)

A



N

Points of Interest

- 1 ARENA D-3
- 2 COSTELLO AIR TERMINAL E-5
- 3 HOWARD WOOD FIELD D-3
- 4 JOE FOSS FIELD C-4
- 5 S.D. STATE HWY DEPT & PATROL D-2
- 6 USS BATTLESHIP S.D. MEMORIAL F-3

Major Public Parks & Rec Areas

- 7 ELMWOOD PARK & GOLF COURSE D-3
- 8 MCCART FIELD E-3
- 9 TERRACE PARK & SWIM POOL E-4

Schools

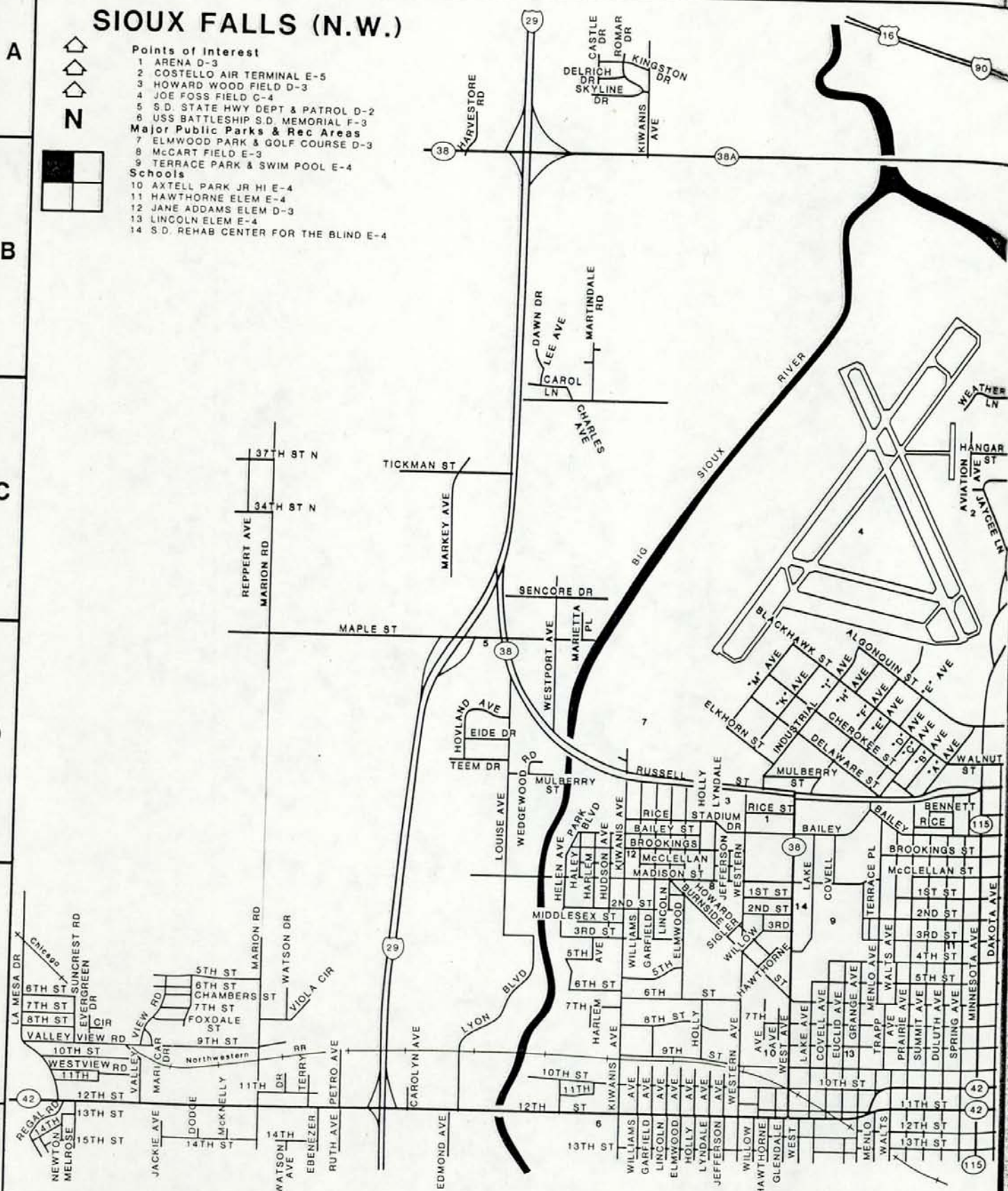
- 10 AXTELL PARK JR HI E-4
- 11 HAWTHORNE ELEM E-4
- 12 JANE ADDAMS ELEM D-3
- 13 LINCOLN ELEM E-4
- 14 S.D. REHAB CENTER FOR THE BLIND E-4

B

C

D

E



NOT TO SCALE



Sioux Falls area,
Minnehaha County

CRP 5
126'96"
87'

11/7/90

Map prepared by DDB
David Brown
Natural Resources Engineer II
Water Rights Division
Dept. of Water and Natural Resources
Joe Foss Bldg.
Pierre, SD 57501

Pam O:1 Inc.

Map For Water

License No. 995A-3

93.8

CRP
17.6
87'96"

11-R

AG

Non

B

Buildings - McQuay
Heat pump

1,210'

800'

②
T3473

Discharge
well

Production
well

Same as under 995-3, in existence since approx. 1962

wells

01-50

600 Feet
of 6" steel distribution pipe

11/7/91 DDB

Scale 2" = 761 Feet