

WATER PERMIT NO. 2283-2

Phone: 837-2229

Name of Applicant: City of Kadoka

Post Office Address: PO Box 58, Kadoka SD 57543-0058

Amount of Water Claimed: 0.666 cfs Total Acres: NA

Source of Water Supply: groundwater

Water to be used for: municipal County: Jackson

About _____ miles _____ of _____

PRIORITY _____ Date Received: 3-17-93 Fee: \$275 Remarks: Increase the

diversion rate authorized by Vested Right No. 1718-2

Corrected Application Received: 4-12-93 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: NE 1/4 NE 1/4 Sec 32-T2S-R22E

Land to be Irrigated: _____

				⊗ - new well	
				⊗ standby well	
			32		

Well Log: Driller: _____ Licensed YES _____ NO _____

Depth of Well: _____ REMARKS: _____

Type of Map: plat PREPARED BY: Harlan Quenzer, PE Reviewed and the Number

Assigned on: 4-13-93 By: Karen Schlaak

**SOUTH DAKOTA
WATER PERMIT NO. 2283-2**

Date of first receipt of application March 17, 1993.

Date of return to applicant for corrections, amendments or changes March 18, 1993.

Date of receipt of corrected application May 5, 1993.

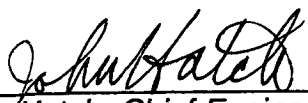
The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 2283-2 to the City of Kadoka, PO Box 58, Kadoka SD 57543-0058 authorizing the construction of the water use system and the placing of water to beneficial use subject to the following limitations, conditions and qualifications:

1. Water Permit No. 2283-2 appropriates an additional 0.666 cubic feet of water per second (cfs). Vested Water Right Claim No. 1718-2 appropriates 2.0 cfs from 3 wells located in the NE 1/4 NE 1/4 Section 32 and the SE 1/4 NW 1/4 Section 33; all in T2S-R22E. The City has indicated the only portion of Vested Water Right Claim No. 1718-2 that has not been forfeited for non-use is 0.334 cfs with a July 12, 1950, priority date. This permit is for one additional well (Dakota Formation) 2,680 feet deep located in the NE 1/4 NE 1/4 Section 32-T2S-R22E which produces 1.00 cfs. This old well will be maintained for standby use by the City.
2. The water appropriated shall be used for the purpose of supplying water to the City of Kadoka and may not exceed the amount of water needed for beneficial use for municipal use.
3. The water is to be used during the following described annual period: January 1 - December 31.
4. The date of approval of Permit No. 2283-2 is July 7, 1993.
5. The date from which applicant may claim right is March 17, 1993.
6. Water rights obtained in compliance with the laws of the State of South Dakota may not be unlawfully impaired by this appropriation.

QUALIFICATION

The 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.

WATER MANAGEMENT BOARD

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

OCT 27 1993
date

FORM 2: Application for uses other than irrigation

(type or print)

Originally
Received: 3-17-93

Mail to:
Water Rights Division
Joe Foss Building
523 E Capitol
Pierre SD 57501-3181
605 773-3352

No. 2283-2 Hydrologic Unit 10140102
Basin Bad River
Newspaper Kadoka Press, Box 309, 57543
(Thurs) 837-2259 (office use only)



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

Check use of water:

☒ Municipal ☐ Suburban Housing ☐ Recreational ☐ Institutional
☐ Rural Water System ☐ Commercial ☐ Fish & Wildlife ☐ Geothermal Heat
☐ Domestic ☐ Industrial ☐ Other _____
(over 18 gpm)

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

(check one)

☒ Place to Beneficial Use Water Reserved by Future Use Permit No. _____
☒ Amendment/Correction to Permit No. 1718-2

Description of amendment/correction: (i.e. change diversion point(s), add diversion point(s), change use, etc.) Change location of diversion, increase diversion rate by 0.666 cfs and place existing well on "stand by" status (see attached explanation)

- Name of Applicant City of Kadoka Phone 605 837-2229
Mailing Address P.O. Box 58 Kadoka State SD 57543-0058
(Street, RR, or Box) (City) (Zip Code)
- Amount of water claimed 0.334 existing and 0.666 new for a total of 1.0 cfs ***AF
(*Cubic Feet per Second) (**Gallons per Minute) (***)Acre Feet - storage capacity of dam/dugout or annual use if applicable)
- Source of water supply groundwater
- Location of point of diversion (example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W) well located in the NE1/4 NE1/4 of Section 32-T2S-R22E BHM
County Jackson
- County or counties where water will be used Jackson
- Annual period during which water is to be used January 1 - December 31
- Give a description of the project. When available include any preliminary engineering report or other reports or information that will help explain the project. (Attach sheet if more space is needed)
New well will replace existing well located in the water treatment plant. Its production has declined to a point where it cannot produce sufficient quantities of water to meet peak city needs. The existing well will be placed on a stand-by status, for emergency use only. See attached test hold report.

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)

STATE OF SOUTH DAKOTA)

County of Jackson)^{ss}

I, Harry E. Weller, 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 Harry E. WellerSubscribed and sworn to before me this 3 day of May 19 93

BETTY LOU STRATTON

NOTARY PUBLIC
Notary Public

STATE OF SOUTH DAKOTA

MY COMMISSION EXPIRES

8-30-96

Supplemental Information

(type or print in ink)

Completed

1. Well Information - ~~Proposed~~ Construction

- a) Drill Hole Diameter 20" to Depth 61, then 16" to 1040', then 12" to 2,558', and finally 6 3/4"
b) Casing Type Carbon Steel Diameter 10" to 750' Thickness 10" is .375"
c) Screen Type Stainless Steel Diameter 7" to 2558' Thickness 7" is .312"
d) Gravel Pack Thickness 1.375" Length of Gravel Pack 192'
e) Depth to Top of Water Bearing Material 2558'
f) Depth to Water (ground surface to water level) 351'
g) Distance to nearest existing domestic well: (other than stand-by well)
On applicants property app. 2,400' On property owned by others

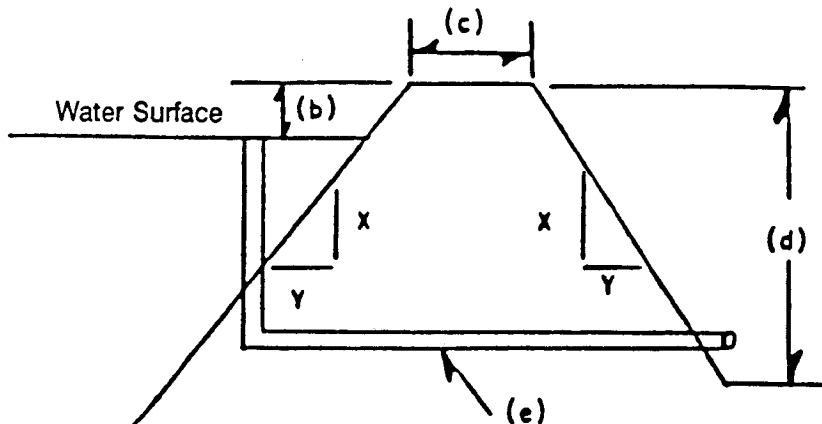
2. Dugout Information

- a) Surface Dimensions _____ 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 for each dam. The locations of the dams need to be shown on the map submitted with the application.

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



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



RECEIPT

Division of Water Rights

413683

South Dakota Department of Environment and Natural Resources

Pierre, _____ March 18 _____, 19 93

RECEIVED OF City of Kadoka (City Well Project), PO Box 58, Kadoka, SD 57543

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

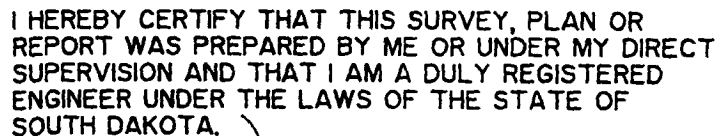
Fee for Application for Permit No. <u>2283-2</u> to Appropriate Water, to construct and to put water to beneficial use _____	275	00
Fee for Application for Permit No. _____ to Appropriate Water, for Future Use _____		
Fee to retain Future Use Permit No. _____ after period of seven years.		
Fee for Inspecting Constructed Works, confirming beneficial use and issuing Water License No. _____		
Fee for Filing Transfer Form _____		
Fee for Filing Extension Request _____		
Fee for _____		

(Any Other Work Provided by Law)	Total	275 00

By

Chief Engineer

John Hatch
[Signature]



2726
NUMBER

SPN
ASSOCIATES

Appl No. 2283-2

CENTERLINE OF ROAD

WATER TREATMENT PLANT



WATER TANK

LOCATION OF WELL

SHED

ABANDONED 6" ACP

WATERMAIN FROM EXISTING WELL

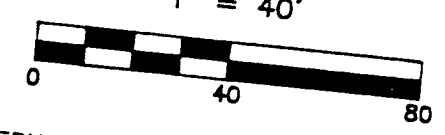
APPROXIMATE LOCATION OF EXISTING TEE

NEW 8" C900 PVC

LEGEND

- CC — CONTROL CABLE
- P — OVERHEAD ELECTRICAL
- S — SANITARY SEWER
- X — FENCE

SCALE: 1" = 40'



I HEREBY CERTIFY THAT THIS SURVEY, PLAN OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED ENGINEER UNDER THE LAWS OF THE STATE OF SOUTH DAKOTA.

REGISTERED ENGINEER

NUMBER

REVISIONS				
NO.	DATE	BY	CHK.	APP.

SITE SURVEY	
WATER WELL REPLACEMENT	
KADOKA, SOUTH DAKOTA	
SSS	
CRT	
SPN	2

Schmucker Paul & Associates
ENGINEERS PLANNERS SURVEYORS
820 North Lawler
P.O. Box 398
Pierre, SD 57501
PHONE 605-224-7781 FAX 605-224-8011
ZIP 57301
MITCHELL SOUTH DAKOTA

April 9, 1993

BOX 398

MITCHELL, S. DAK. 57301

PHONE (605) 996-7761

Karen Schlaak, Natural Resources Analyst
Division of Water Rights
SD Dept of Environment and Natural Resources
523 East Capitol
Pierre SD 57501-3181



RE: Water Rights Amendments
Kadoka, South Dakota
SPN #5583

SCHMUCKER, PAUL, NOHR & ASSOCIATES

ENGINEERS
SURVEYORS

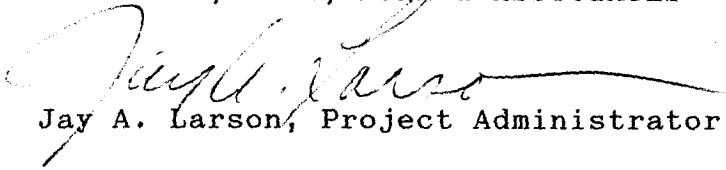
Dear Ms. Schlaak:

The City of Kadoka has submitted information requesting an increase in the diversion rate for City Well #2, and a change in the diversion point from City Well #1 to City Well #3. Well #3 has recently been drilled and its design capacity is somewhat greater than the design capacity of the "old" well. Subsequently, the City is also requesting an increase from the vested diversion rate for the new well. When the applications were submitted, it was believed that adequate maps showing the locations of Wells #1 and #2 were on file with DENR. It was determined that new maps were needed. The enclosed maps have been prepared using information obtained from available construction records.

Thank you for your attention to this matter. If you have any questions, please feel free to contact our office.

Sincerely,

SCHMUCKER, PAUL, NOHR & ASSOCIATES


Jay A. Larson, Project Administrator

JAL:rh

Enclosures

cc: Mary Gibson w/enc

SUPPLEMENTAL INFORMATION

AMENDMENT/CORRECTION OF VESTED WATER RIGHT FOR CITY OF KADOKA

The City of Kadoka has drilled a well located in the NE 1/4 of the NE 1/4 of Section 32, T 2S, BHM. It replaces a well less than 660 feet away that was originally completed on November 1, 1950. Both wells tap the Lakota formation. The well constructed in 1950 had a design capacity of approximately 0.334 CFS (150 GPM). See the attached map for locations of the new well. The old well is located in the south-east corner (inside) the water treatment plant.

The City of Kadoka is proposing to retain a vested water right of 0.334 CFS with the priority date of November 1, 1950 for the new well. The City is also requesting that a new water right of 0.666 CFS for this same well be granted. This will bring the total rate of diversion to 1.0 CFS, which is the "maximum design" pumping capacity of the well.

The City also proposes to retain the existing well, located within the water treatment plant, as a "stand-by" well for as long as possible. Although the "shot" casing which allows water to enter the well from the Lakota formation is nearly plugged, this well can serve as a stand-by source and could be used if the City's other wells were to be out of service for any length of time.

In summary, the City is requesting the following:

- 1) Retention of Vested Water Right for 0.334 CFS with a priority date of November 1, 1950;
- 2) A new water right of 0.666 with a new priority date (for a total diversion of 1.0 CFS for the new well;
- 3) An additional diversion point for the new well; and,
- 4) Retention of the diversion point for the old well which will be kept on "stand-by" status and will be used for emergency service only. This status will be maintained for as long as the old well is capable of producing any quantity of water.

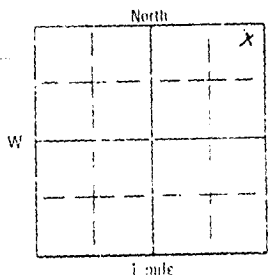


SOUTH DAKOTA WATER WELL COMPLETION REPORT

10-85

Location NE 1/4 Sec 32 Twp 2S Rg 22ECounty JACKSON

Please mark well location with an "X"

Well Completion Date NOVEMBER 22, 1992

PROPOSED USE

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

Method of Drilling

AIR ASSISTED ROTARY

CASING DATA

☒ Steel ☐ Other

If other describe _____

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
42 LB/FT	16 IN	0 FT	61 FT	20 IN
40.48 LB/FT	10.75 IN	0 FT	750 FT	14 IN
23.77 LB/FT	7.625 IN	750 FT	2558 FT	11 IN
_____ LB/FT	_____ IN	_____ FT	_____ FT	_____ IN

GROUT

Was the well grouted? ☒ YES ☐ NOTo what depth? 2558 FEETWhat is grouting material? CEMENT SLURRYIf cement, number of sacks? 1770Describe grouting procedure CEMENT SHOE w/ TREMIETo SURFACE AND Pumped IN BY
HALLIBURTON SERVICES

What was grout weight? _____ LB/GAL

SCREEN: ☐ Perforated pipe ☒ ManufacturedDiameter: 4 PS IN Length: 110 FEETMaterial: 304 SS (WELDED ENDS)Set From 2570 Feet To 2660 Feet

Slot Size _____ Set From _____ Feet To _____ Feet

Slot Size _____ Set From _____ Feet To _____ Feet

Other information 45' SS BLANK ON BOTTOMOF SCREEN AND 80' SS BLANK ON TOPWas a packer or seal used? ☐ YES ☒ NO

If so, what material? _____

Describe packer(s) and location? _____

Was well disinfected upon completion? ☒ YES ☐ NOExplain 55 GAL Hypo/500 gal H₂OBacteriological analysis ☒ YES ☐ NOLaboratory sent to SD Dept of Health LAB

Well Owner

Name CITY OF KADOKA

Address

Well Log

Depth

Formation

From

To

SEE ATTACHED LOG
- CASING DATA
- WELL DRAWINGSTATIC WATER LEVEL 351 Feet

If flowing, closed in pressure _____ PSI

GPM flow _____ through _____ inch pipe

Controlled by ☐ Valve ☐ Reducers ☐ Other

If other, specify _____

Can well be completely shut in? _____

WELL TEST DATA

☒ Pumped☐ Bailed☐ OtherDescribe: Submersible Pump
Set at 1000' with
Generator Supplied Power

Pumping Level Below Land Surface

383 ft. After 1 min pumped 300 GPM408 ft. After 8 Hrs. pumped 300 GPM422.5 ft. After 24 Hrs. pumped 300 GPM

REMARKS

Recovery was - 392' - 1 min
364' - 5 min
(@ 300 GPM) 352' - 5 minDID NOT WAIT FOR LAST 1' TO
COME BACK. STATIC LEVEL 351 AT
6:30 AM NEXT MORNING.This well was drilled under license # 513

And this report is true and accurate

Drilling firm LAYNE-WESTERN Co. Div. of Layne Inc.

Signature of License Representative:

W. G. Grear

Signature of Well Owner:

City of KADOKA

By: Harry L. WellerDate 3/1/93

STATE OF SOUTH DAKOTA

THIS IS TO CERTIFY THAT THE MICROFILM IMAGE APPEARING ON THE SIDE OF MICROFILM IS AN ACCURATE REPRODUCTION OF THE ORIGINAL RECORD AND WAS MICROFILMED IN THE REGULAR COURSE OF BUSINESS ACCORDING TO THE PROVISIONS OF SECTION 1-27-4 OF THE SOUTH DAKOTA CODED LAWS. IT IS FURTHER CERTIFIED THAT THE PHOTOGRAPHIC PROCESS USED FOR MICROFILMING OF THE ABOVE RECORDS WAS IN A MANNER SO ON MICROFILM WHICH MEET THE RECOMMENDED REQUIREMENTS OF ADMINISTRATIVE RULES OF SOUTH DAKOTA 10:04:01 AND 10:04:02 FOR MICROFILM REPRODUCTION.

REDUCTION RATIO

RPL NUMBER

DATE MICROFILMED

CAMERA OPERATOR SIGNATURE



WELL INFORMATION

Layne-Western Company, Inc.



1. CONTRACT CITY OF KADOKA
483005-F

2. City, State KADOKA, S.D.

2. Well No. 3 at Test Hole No. _____

4. Well Location (attach map) _____
NE 1/4 of NE 1/4 Sec 32 TWP 25 R-22E
in city well field East of Filler Plant

5. Driller P. HARRIS

6. DATE NOV. 22, 1992

7. Date Started OCT. 12, 1992
Completed NOV. 22, 1992

8. Drill Crew Man Hrs. _____

9. Working Days _____
Drilling _____
Other _____

10. MATERIAL IN WELL			GAGE NO.	WALL THICK-NESS IN.	MATERIAL	TYPE	NO.
	LENGTH FT. IN.	DIA. IN.					
Screen	<u>110'</u>	<u>4"</u>	---	---	<u>STAINLESS</u>	<u>WNK</u> Shower Keystone	<u>.020"</u> Openings
Inner Casing	<u>750'</u>	<u>10"</u>	---	<u>.375"</u>	<u>CARBON</u>	<u>Welded</u> Screen	
Outer Casing	<u>61'</u>	<u>16"</u>	---	<u>STD</u>	<u>CARBON</u>	<u>Welded</u> Screen	

11. GRAVEL

Size MUSCATINE

Tons 2900 # No. 0 (FINE)

12. SEALING CASING

Puddled Clay ☒ (Yes) ☐ (No)

With _____ Bags Bentonite Added

or

With 1770 Bags Cement

Seal Material Placed in
Well With TREMIE & GROUT SHOES

Bottom of Well Screen
Sealed With 45 FT OF BLANK
WITH BOTTOM PLATE

13. WELL DIMENSIONS

A. Total Depth 2725'
(From Top of Inner Casing to Bottom of Well)

B. Height of Inner Casing 0
(Above Ground Level)

C. Distance to Top of Gravel 2533'
(From Ground Level)

D. Diameter of Drill Hole 6 3/4"

Comments _____

THIS IS TO CERTIFY THAT THE MICROGRAPHIC IMAGE APPEARING ON THIS SLIDE OF MICROFILM IS AN ACCURATE REPRODUCTION OF THE ORIGINAL RECORD AND WAS MICROFILMED IN THE REGULAR COURSE OF BUSINESS ACCORDING TO THE PROVISIONS OF SECTION 1-27.4 OF THE SOUTH DAKOTA CODIFIED LAWS. IT IS FURTHER CERTIFIED THAT THE PHOTOGRAPHIC PROCESS USED FOR MICROFILMING OF THE ABOVE RECORDS WAS IN A MANNER AND ON MICROFILM WHICH MEET THE RECOMMENDED REQUIREMENTS OF ADMINISTRATIVE RULES OF SOUTH DAKOTA 10:04-01 AND 10:04-02 FOR MICROGRAPHIC REPRODUCTIONS.

REDUCTION RATIO 25:1

ROLL NUMBER U-9

DATE MICROFILMED 3-18-94

CAMERA OPERATOR SIGNATURE Chad McLean



TEST HOLE REPORT

Layne-Western Company, Inc.

Contract Name City of KadokaJob No. 483005-FDate 10/12/92City KadokaState SDDriller P. Harris

TEST HOLE

No. _____

Test Hole Location NE 1/4 Sec 32 TWP 25 R 22E - City Well Field E of Filler Plant

Distance and Direction from Permanent Landmark or Previous Test Hole

TEST LOG

FROM	TO	MARSH FUNNEL VISCOSITY SECONDS	MUD PIT LOSS INCHES	Static Water Level _____ Measured
				_____ Hours After Completion
				FORMATION
0'	53'			Clay
53'	1275'			Shale
1275'	1285'			Shale, brown limestone
1285'	1400'			Shale
1400'	1575'			Shale, limestone layers
1575'	2040'			Shale, limestone stripes
				LC - 1650 - 1815 - 1930 - 2145
2040'	2045'			Limestone
2045'	2350'			Shale
2350'	2360'			Sandstone
2360'	2540'			Shale, limestone
2540'	2562'			Shale
2562'	2645'			Sandstone
2645'	2660'			Shale
2660'	2865'			Sandstone
2865'	2745'			Shale

NOTES: Size of Pit _____

X

DEEP

BOTTOM OF 4" BLANK AT 2725'. BOTTOM OF SCREEN AT 2680'. TOP OF SCREEN AT 2570'. TOP OF BLANK ABOVE SCREEN AT 2490'.

LW 100

IN A MANNER AND ON MICROFILM WHICH MEET THE RECOMMENDED REQUIREMENTS OF THE NATIONAL ARCHIVES AND 10:04:02 FOR MICROGRAPHIC REPRODUCTIONS.

REDUCTION RATIO

ROLL NUMBER

DATE MICROFILMED

CAMERA OPERATOR SIGNATURE

25:1

U-9

3-18-94

C. E. M. S. C.

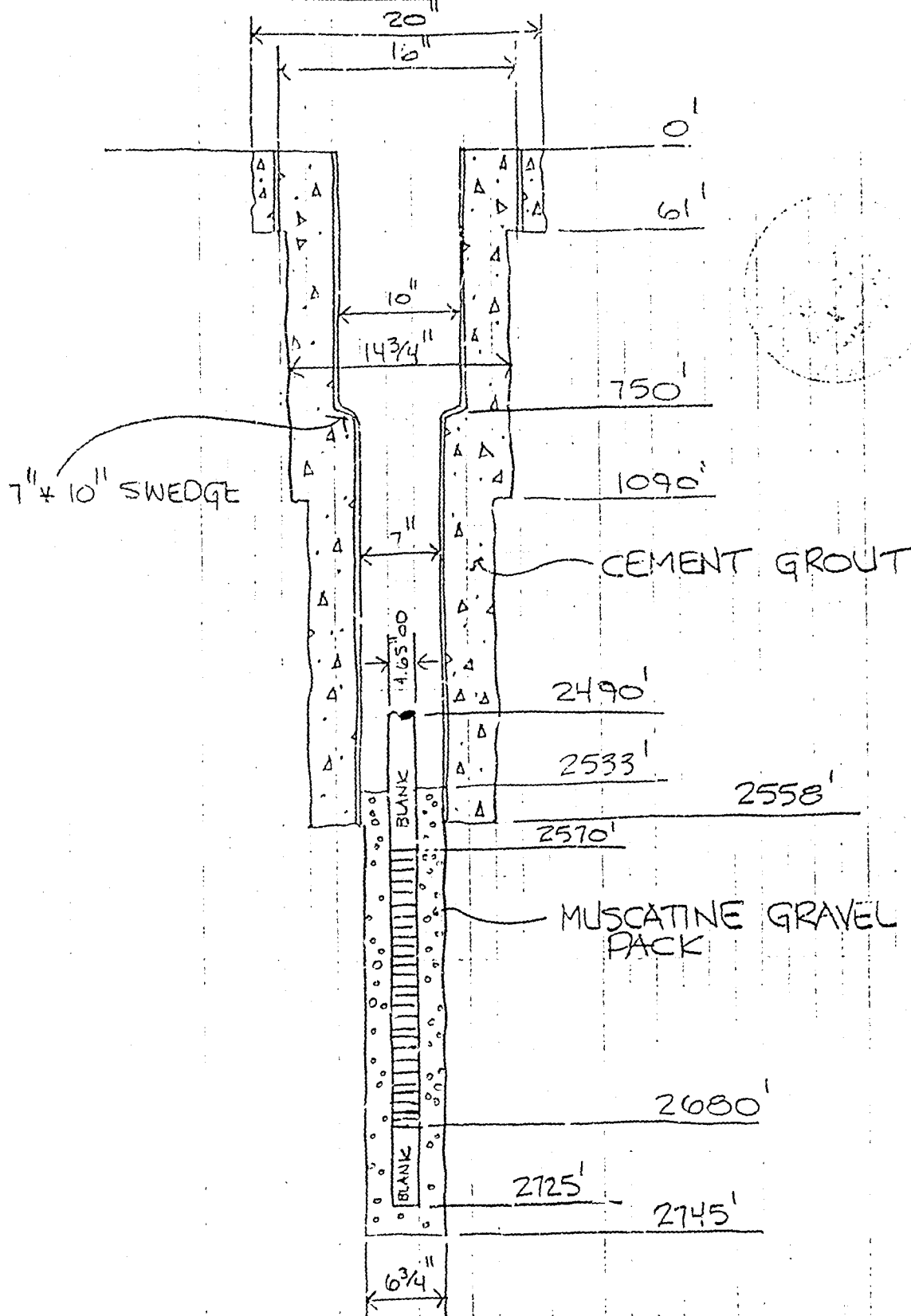


Layne-Western Company, Inc.

Subject

KADOKA, S.D.

Date 1 DEC 92



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REDUCTION RATIO 25:1

ROLL NUMBER U-9

DATE MICROFILMED 3-18-94

CAMERA OPERATOR SIGNATURE *Chas. M. S. C.*



*South Dakota Geological Survey
Akeley Science Center, USD
Vermillion, SD 57069-2390
(605) 677-5227*

KADOKA CITY WELL

COMPANY : LAYNE WESTERN-K. CITY
WELL : KADOKA CITY WELL
LOCATION/FIELD : AAB
COUNTY : JACKSON
STATE : SD
SECTION : 32

OTHER SERVICES:

TOWNSHIP : 2 S RANGE : 22 E

DATE : 11/20/92
DEPTH DRILLER : 2745
LOG BOTTOM : 2750.70
LOG TOP : -4.30

PERMANENT DATUM :
ELEV. PERM. DATUM : KB :
LOG MEASURED FROM: GROUND L DF :
DRL MEASURED FROM: GROUND GL : 2450

CASING DRILLER : 2558
CASING TYPE : STEEL
CASING THICKNESS: .23

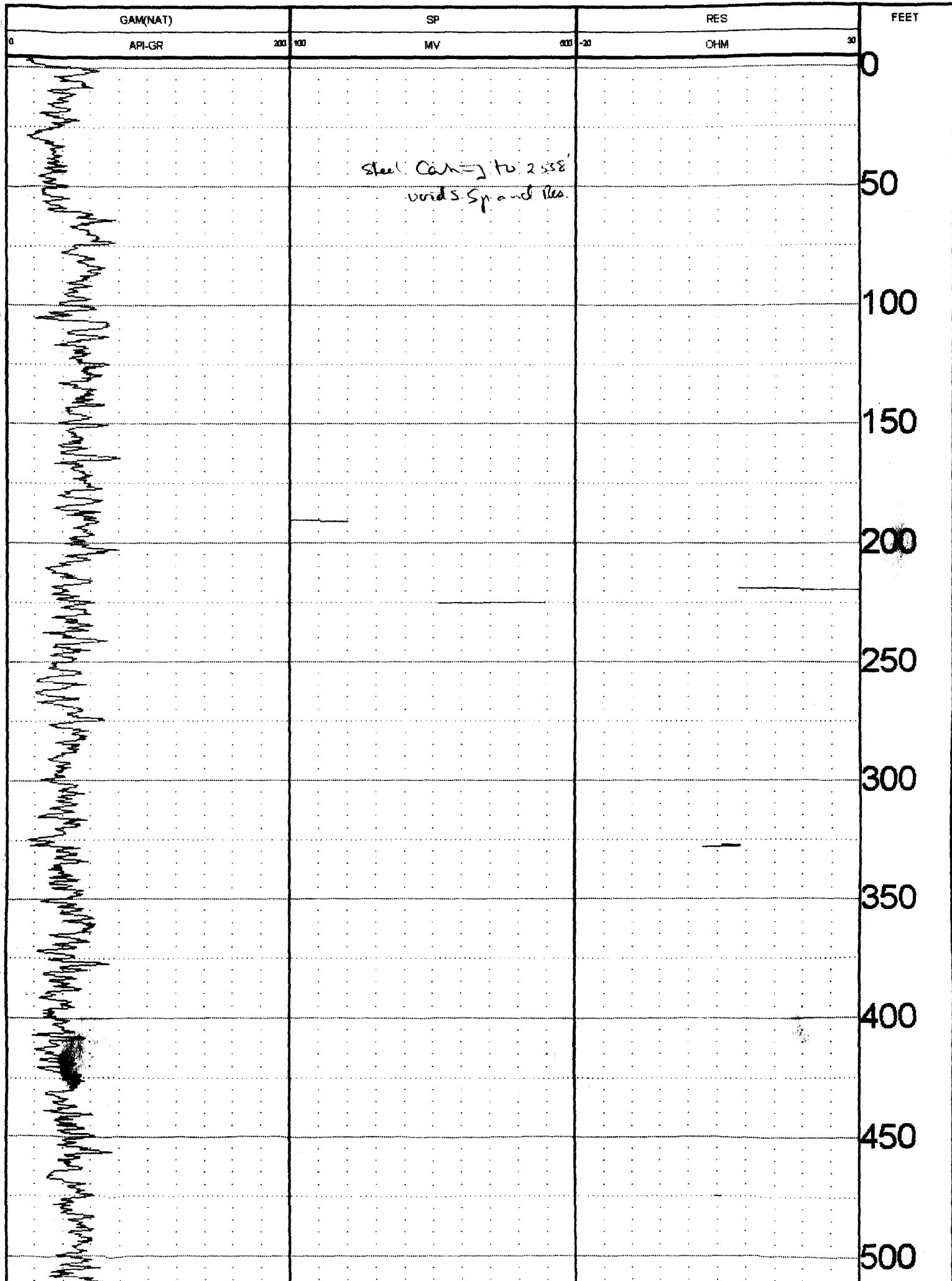
LOGGING UNIT : CENT1
FIELD OFFICE : CANISTOTA
RECORDED BY : R HAMMOND

BIT SIZE : 3.6
MAGNETIC DECL. :
MATRIX DENSITY :
FLUID DENSITY :
NEUTRON MATRIX :
REMARKS:

BOREHOLE FLUID : WATER FILE : ORIGINAL
RM : TYPE : 9010A
RM TEMPERATURE : LOG : kadoka
MATRIX DELTA T : PLOT : kadoka.
FLUID DELTA T : THRESH:

CALL SDGS AT 677-5227 FOR INFO OR FURTHER LOGGING

ALL SERVICES PROVIDED SUBJECT TO STANDARD TERMS AND CONDITIONS



550

600

650

700

750

800

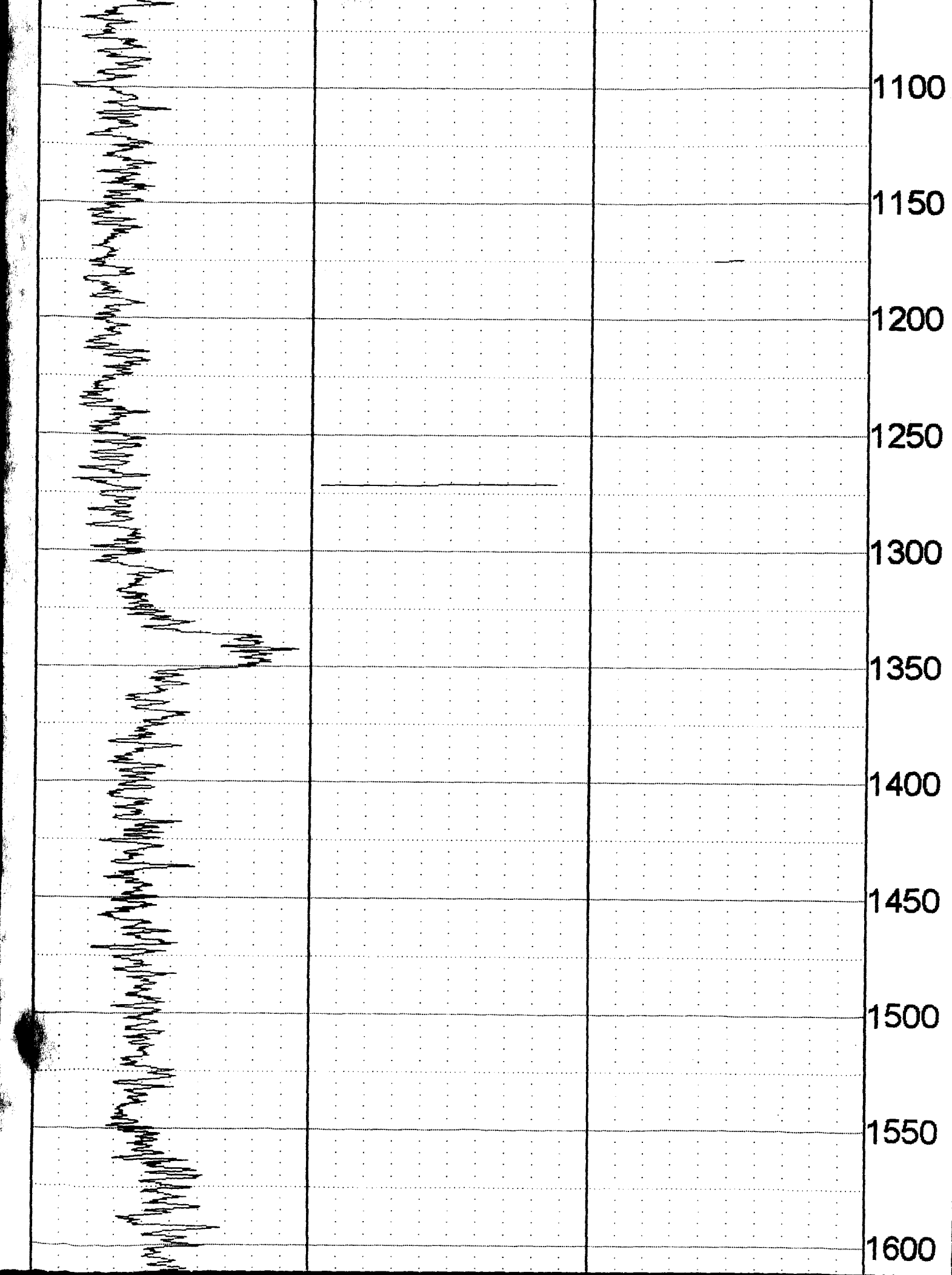
850

900

950

1000

1050



1650

1700

1750

1800

1850

1900

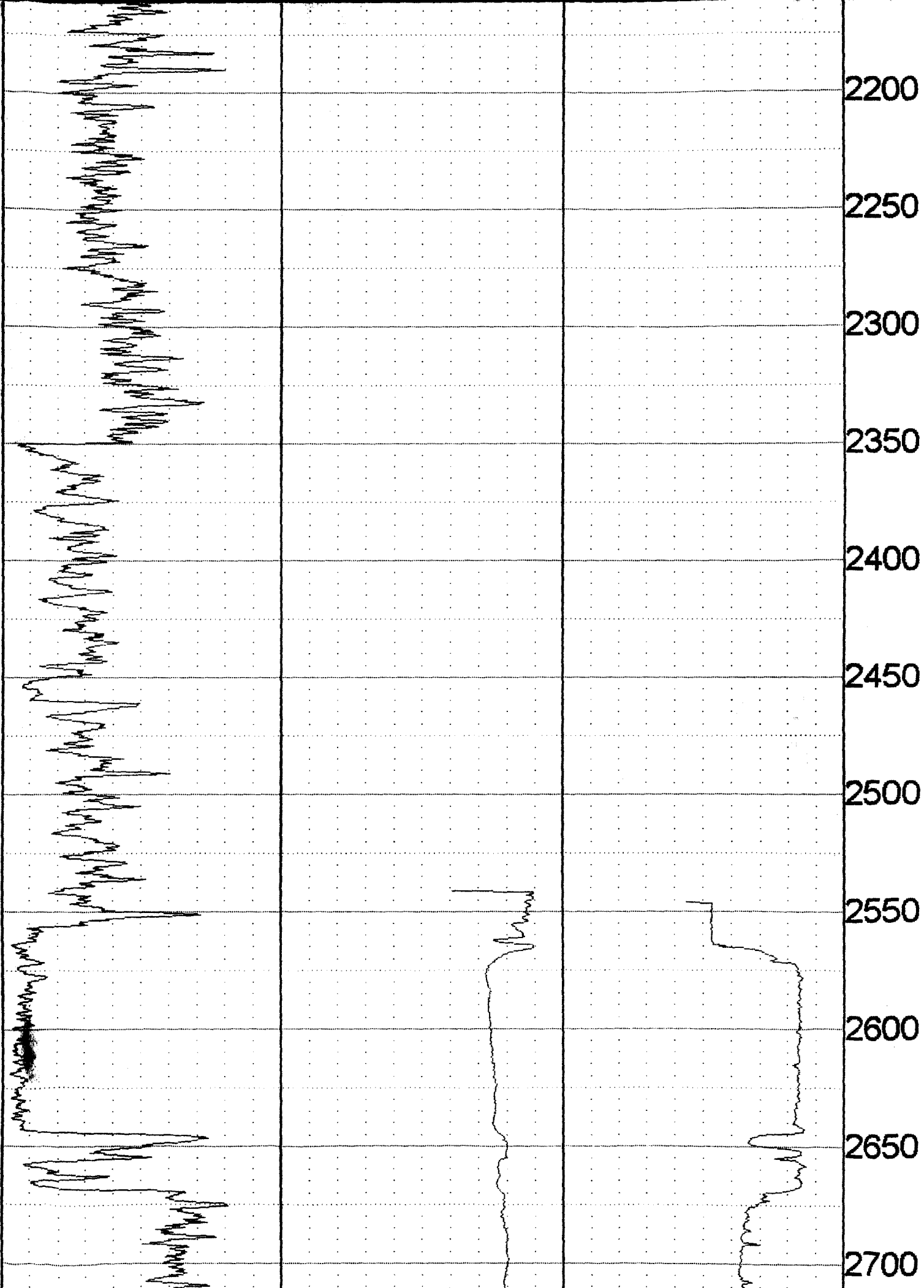
1950

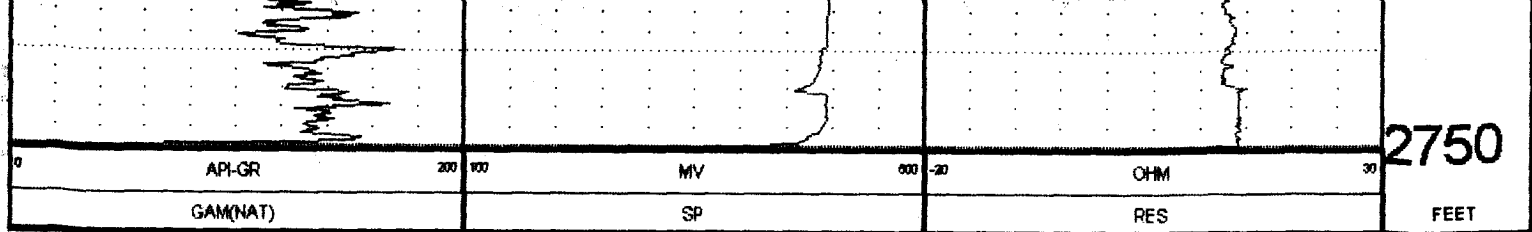
2000

2050

2100

2150





Water Rights Division - DENR
Conversation File Documentation

NAME OF PERSON OR FILE: City of Kadoka water permit applications

ADDRESS: _____ COUNTY: Jackson

DATE: 3/18/93 TELEPHONE: _____

RE: Discussion with Jay Larson, Schmucker, Paul & Nohr (Consultants)

COMMENTS:

I called Jay Larson, engineering consultant for the Town of Kadoka regarding maps for the two water permit applications for the City of Kadoka. Mr. Larson said he would get maps which show the point of diversion, reference a section corner and are signed sent out to me on March 22, 1993.

File in Permit or other file as necessary. Use to document conversations and what the other party was told; why action or decision was made.

NAME: Eric Grenlund

REPORT ON APPLICATIONS NOS. 2282-2 AND 2283-2
for the City of Kadoka
May 10, 1993

Application No. 2282-2 proposes to appropriate 0.25 cfs by increasing the diversion rate authorized by Water Right No. 760-2. Water Right No. 760-2 appropriates 0.55 cfs from one well approximately 2700 feet deep located in the SW 1/4 SW 1/4 of section 28, T2S R22E in Jackson County. This application increases the water appropriation from the well, from 0.55 cfs to 0.8 cfs and the water is for municipal use by the City.

Application No. 2283-2 proposes to appropriate an additional 0.666 cfs. Vested Right 1718-2 appropriates 0.334 cfs with a July 12, 1950 priority date. The rest of Vested Right 1718-2 has been forfeited for non-use. This application is for one additional well approximately 2680 feet deep located in the NE 1/4 NE 1/4 of section 32, T2S R22E for a total diversion rate of 1.0 cfs. The old well will be maintained for standby use by the City.

AQUIFER - DAKOTA FORMATION (DKOT)

The Dakota Formation consists of sands, shale and sandstone. The Dakota Formation is defined as "the first relatively continuous sandstone below the Greenhorn Limestone and extends downward to the top of the Skull Creek Shale in western and central South Dakota. Where the Skull Creek is absent the Dakota overlies Precambrian rocks and, to a minor extent, rocks of the Inyan Kara Group. In no case in this report is the term Dakota Formation intended to include any part of the Inyan Kara Group or older sandstones" (Schoon, 1975). The Dakota Formation is approximately 300 feet thick, underlies 1.2 million acres and contains an estimated 8.4 million acre feet of recoverable water in storage in Jackson County (Allen, 1984). The aquifer is confined and under artesian conditions.

The Division of Water Rights does not monitor any observation wells completed into the Dakota Formation in this area. The two City wells #1 and #2 have been measured by the US Geological Survey. It appears that the water levels for the Dakota Formation have declined about 100 feet since 1951. If the highest water level on well #1 is used then the decline is about 200 feet (Bradford, 1981), however, it appears those readings may be in error. In any event, this use is municipal and the Dakota Formation is stratigraphically below the Greenhorn Formation so pursuant to SDCL 46-6-3.1, any question with the water level decline or recharge to the aquifer need not be discussed.

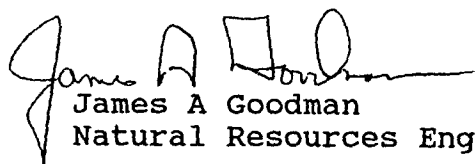
REVIEW OF EXISTING WATER PERMITS/RIGHTS

There are no other existing water permits/rights in this area which obtain water from the Dakota Formation. Interference is not expected to be a concern. The wells are built in a manner

which allows the pump to be lowered if necessary. The city has the only other permitted well in the area. City wells #2 and #3 are about 1300 feet apart.

CONCLUSIONS

1. Water is available from the Dakota Formation.
2. The aquifer is confined and under artesian conditions. Drawdown will occur as a result of pumping. Interference is not expected to be a concern. There has been a decline in water levels, but these wells are built in a manner which allows the lowering of a pump. The City is the only permitted user in the area.
3. The new well, #3, is completed in accordance with SD Well Construction Standards.
4. The old well, #1, will be maintained as a standby well. The water appropriated by this well is to be transferred to the new replacement well #3. Should Well #1 be abandoned it must be plugged pursuant to SD Well Construction Standards.
5. The diversion rate for Well #2 is to be increased from 0.55 cfs to 0.8 cfs.
6. Well #2 and Well #3 are about 1300 feet apart. This distance should help to minimize the effects of overlapping drawdown caused by pumping.



James A Goodman
Natural Resources Engineer

BIBLIOGRAPHY

- Allen, J.C., D.L. Iles, A.K. Petres, 1984, Analysis of Groundwater and Streamflow Data Western Dakotas of South Dakota, for US Army Corps of Engineers, SD DENR, SDGS, Vermillion, SD, 57069.
- Bradford, W.L., 1981, Water Levels in Bedrock Aquifers in South Dakota, USGS, Open File Report 81-627, Huron, SD, 57350.
- Schoon, R.A., 1971, Geology and Hydrology of the Dakota Formation in South Dakota, Report of Investigations No. 104, SD DENR, SDGS, Vermillion, SD, 57069.

RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 2283-2, City of Kadoka

Pursuant to SDCL 46-2A-2, the following is the recommendation of the Chief Engineer, Water Rights Division, Department of Environment and Natural Resources concerning Water Permit Application No. 2283-2, City of Kadoka, c/o Mayor Harry E. Weller, PO Box 58, Kadoka, SD 57543.

The Chief Engineer is recommending APPROVAL of Application No. 2283-2 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 is located near domestic wells which may obtain water from the same aquifer. The well owner, under this Permit, shall control withdrawals so there is not a reduction of needed water supplies in adequate domestic wells.

See report on application for additional information.



JOHN HATCH, Chief Engineer
May 19, 1993



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

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

May 21, 1993

Harry E. Weller, Mayor
City of Kadoka
PO Box 58
Kadoka, SD 57543-0058

Dear Mr. Weller:

Water Permit Application Nos. 2282-2 and 2283-2 for municipal use have 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 Kadoka Press printed at Kadoka, SD (Ph # 837-2259). For your information, a copy of the notice, the recommendations of the Chief Engineer and a report on the applications 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 applications.

Sincerely,

Eric Gronlund
Natural Resources Engineer
605 773-3352

enclosures

NOTE: If you plan to contest any part of the Chief Engineer's recommendations, 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 applications.

cc: Mary Solon Gibson, Finance Officer, City of Kadoka, PO Box 58, Kadoka, SD 57543-0058
Jay Larson, Schmucker, Paul & Nohr, Box 398, Mitchell, SD 57301



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

May 21, 1993

Kadoka Press
Box 309
Kadoka, SD 57543

ATTENTION: Legal Department

Enclosed is a Notice of Hearing on Application Nos. 2282-2 and 2283-2 to be published twice. Please publish the first notice on June 3, 1993, 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 City of Kadoka, PO Box 58, Kadoka, SD 57543-0058 (Ph # 837-2229).

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 June 3, 1993, with the second publication 7 days later. The applicant is responsible for payment.

NOTICE OF HEARING on Application Nos. 2282-2 and 2283-2 to Appropriate Water

Notice is given that the City of Kadoka, PO Box 58, Kadoka, SD 57543-0058 has filed applications for water permits.

Water Permit Application No. 2282-2 to appropriate 0.25 cubic feet of water per second by increasing the diversion rate authorized by Water Right No. 760-2. Water Right No. 760-2 appropriates 0.55 cfs from one well (Dakota Formation) 2,700 feet deep located in the SW 1/4 SW 1/4 Section 28-T2S-R22E. This permit increases the water appropriation from the well, from 0.55 cfs to 0.8 cfs. The water is for municipal use by the City.

Water Permit Application No. 2283-2 is to appropriate an additional 0.666 cfs. Vested Right No. 1718-2 appropriates 2.0 cfs from 3 wells located in the NE 1/4 NE 1/4 Section 32 and the SE 1/4 NW 1/4 Section 33; all in T2S-R22E. The applicant has indicated the only portion of Vested Water Right No. 1718-2 that has not been forfeited for non-use is 0.334 cfs with a July 12, 1950, priority date. This application is for one additional well (Dakota Formation) 2,680 feet deep located in the NE 1/4 NE 1/4 Section 32-T2S-R22E which produces 1.00 cfs. This old well will be maintained for standby use by the City.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application Nos. 2282-2 and 2283-2 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 applications or the applicant files a petition contesting the chief engineer's recommendations, the Water Management Board will NOT CONDUCT a HEARING to consider the applications and the chief engineer will issue the permit as recommended. Petitions filed in support of the applications will NOT require the Board to hear the applications.

Any person interested in opposing or supporting the applications 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 recommendations. 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 June 25, 1993. The petition may be informal, but must include a statement describing the petitioner's interest in the applications, the petitioner's reasons for opposing or supporting the applications, and the signature and mailing address of the petitioner or the petitioner's legal counsel, if legal counsel is obtained.

If a petition is filed opposing the applications or the applicant files a petition contesting the chief engineer's recommendations, the Board will consider the applications at 10:00 a.m., July 7, 1993, Floyd Matthew Training Center, Joe Foss Building, 523 East Capitol, Pierre, SD. If a hearing is held, the Chief Engineer's recommendations are not final or binding upon the Board. The Board is authorized to 1) approve, 2) approve with qualifications, 3) defer, or 4) deny the applications based on the facts presented at the public hearing. The July 7, 1993, 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 applications. The request for an automatic delay must be filed by June 25, 1993.

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 Eric Gronlund by June 25, 1993, at the above Water Rights Division address to request copies of information pertaining to this application, to assure access to the hearing by the handicapped or to obtain an interpreter for the hearing impaired.

These applications are 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, 46-2A-20, 46-2A-21; 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. Robert E. Roberts, Secretary, Department of Environment and Natural Resources.

PROOF OF PUBLICATION

STATE OF SOUTH DAKOTA)
County of Jackson) ss

I, Ronda K. Dennis

certify that the attached printed Notice was

taken from the Kadoka Press

printed and published in Kadoka, SD

County of Jackson and State of

South Dakota. The notice was published in
the newspaper on the following two dates:

June 3, 1993

June 10, 1993

Cost of Printing: 68.31



Ronda K. Dennis
(Signature)

Legal Advertising Manager
(Title)

Patricia A. Brown
(Date Signed)

My Commission Expires
April 8, 1996

NOTICE OF HEARING On Application Nos. 2282-2 and 2283-2 to Appropriate Water

Notice is given that the City of Kadoka, PO Box 58, Kadoka, SD 57543-0058 has filed applications for water permits.

Water Permit Application No. 2282-2 to appropriate 0.25 cubic feet of water per second by increasing the diversion rate authorized by Water Right No. 760-2. Water Right No. 760-2 appropriates 0.55 cfs from one well (Dakota Formation) 2,700 feet deep located in the SW 1/4 SW 1/4 Section 28-T2S-R22E. This permit increases the water appropriation from the well, from 0.55 cfs to 0.8 cfs. The water is for municipal use by the City.

Water Permit Application No. 2283-2 is to appropriate an additional 0.666 cfs. Vested Right No. 1718-2 appropriates 2.0 cfs from 3 wells located in the NE 1/4 NE 1/4 Section 32 and the SE 1/4 NW 1/4 Section 33; all in T2S-R22E. The applicant has indicated the only portion of Vested Water Right No. 1718-2 that has not been forfeited for non-use is 0.334 cfs with a July 12, 1950, priority date. This application is for one additional well (Dakota Formation) 2,680 feet deep located in the NE 1/4 NE 1/4 Section 32-T2S-R22E which produces 1.00 cfs. This old well will be maintained for stand-by use by the City.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application Nos. 2282-2 and 2283-2 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 applications or the applicant files a petition contesting the Chief Engineer's recommendations, the Water Management Board will NOT CONDUCT a HEARING to consider the applications and the Chief Engineer will not issue the permit as recommended. Petitions filed in support of the applications will NOT require the Board to hear the applications.

Any person interested in opposing or supporting the applications 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 recommendations. 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 June 25, 1993. The petition may be informal, but must include a statement describing the petitioner's interest in the applications, the petitioner's reasons for opposing or supporting the applications, and the signature and mailing address of the

over

petitioner or the petitioner's legal counsel, if legal counsel is obtained.

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These applications are made pursuant to SDCL 46-1-1 through 46-1-9, 46-1-12 through 46-1-16; 46-2-3.1, 46-2-9, 46-2-11, 46-2-13, 46-2-17; 46-2A-1 through 46-2A-10, 46-2A-12, 46-2A-14, 46-2A-15, 46-2A-20, 46-2A-21; 46-5-1 through 46-5-11, 46-5-13 through 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 through 74:02:01:15.

Robert E. Roberts, Secretary,
Department of Environment
and Natural Resources.

PUBLISH: June 3 & 10, 1993





OCT 27 1993

**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

Mary Solon Gibson, Finance Officer
City of Kadoka
PO Box 58
Kadoka, SD 57543-0058

Dear Ms. Gibson:

Enclosed are Water Permit Nos. 2282-2 & 2283-2 authorizing construction of your water diversion system and beneficial use of the water, not exceeding the limits as specified in the Water Permits.

We will schedule an inspection so that the Water Licenses may be issued to you, thus completing your acquisition of a Water Right.

Very truly yours,

A handwritten signature in dark ink, appearing to read "John Hatch", is written over a faint, larger version of the same signature.

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

enclosures

Form 12

Water Permit Nos. 760-2, 2282-2, 2283-2
Dakota Aquifer

Report of Examination of Works and/or Application of Water to Beneficial Use

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

I have this day, **October 21, 2013**, made a thorough examination of the water use system used by the **City of Kadoka, PO Box 58, Kadoka, SD 57543** holder of Water Permit Nos. **760-2, 2282-2, 2283-2**, bearing priority dates of **April 6, 1962** (760-2) and **March 17, 1993** (2282-2 and 2283-2) and authorizing the diversion **0.25 cfs** from Water Permit No. 2282-2 (increasing Water Right No. 760-2 to a diversion rate of 0.8 cfs from 0.55 cfs), and **1.0 cfs** (2283-2). The City of Kadoka has ceased to use on a regular basis any of the wells associated with the above permits and water rights as it now sources its water from the rural water system in the area. The existing wells have been assigned names of Well 1 and Well 2 for the purposes of this report. These names do not necessarily correspond with the original numbering system of the wells.

I have the following to report on the conditions of the aforementioned systems:

- 1) Works to divert water:
Two wells in place inside well house structure, each with a 300 gallon per minute (gpm) capacity.
- 2) Works used to transport water to place of use:
Municipal pipe system.
- 3) Works used to apply water to beneficial use:
N/A

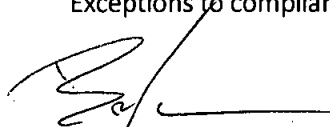
The system is in the following condition: **worn but functional**. The location of the two wells associated with the permits listed above can be described as follows:

- 1) **Pump 1 is located 320 feet south and 1,050 feet west of the northeastern corner of Sec 32, T02S-R22E. Lat 43.83479N, Lon 101.50630W.**
- 2) **Pump 2 is located 1,360 feet north 620 feet east of the southwest corner of Sec 28, T02S-R22E. Lat 43.83936N Lon 101.50005W.**

These locations were verified during the October 21 inspection and are visible on the 2012 FSA aerial in ArcMap.

Applicable permit qualifications have been complied with: **Yes**

Exceptions to compliance are: **None** Date Report Completed: **December 4, 2013**



Bracken Capen
Natural Resources Engineer
DENR, Water Rights Program

FIELD INVESTIGATION REPORT FOR WATER PERMIT NOS. 1718-2, 2282-2, 2283-2

DATE OF INVESTIGATION:	October 21, 2013
NAME & ADDRESS OF PERMIT HOLDER	City of Kadoka PO Box 58 Kadoka, SD 57543
NAME & ADDRESS OF INVESTIGATION CONTACT/ RELATIONSHIP TO PERMIT HOLDER, IF APPLICABLE	Nathan Riggins City Employee
DIVERSION POINT LEGAL LOCATIONS	1) Pump 1 is located 320 feet south and 1,050 feet west of the northeastern corner of Sec 32, T02S-R22E. Lat 43.83479N, Lon 101.50630W. 2) Pump 2 is located 1,360 feet north 620 feet east of the southwest corner of Sec 28, T02S-R22E. Lat 43.83936N Lon 101.50005W.

WELL INFORMATION:

- 1) Well Drilling Firm:
Layne-Western Company
- 2) Number of Wells: **2**
- 3) Depths: **Approximately 2,700 feet for both wells**
- 4) Well Logs Available: **Available for 1 well.**
- 5) Comment: **Due to very close proximity, not entirely clear what the numbers of the operational wells are.**

Screen

- 1) Type: **Stainless**
- 2) Length: **110 feet.**
- 3) Static Water Level: **351 feet.**

Motor

- 1) Make:
- 2) Model No:
- 3) Power:

Pumps

- 1) Make: **Badger Meter**
- 2) Model:
- 3) Size:
- 4) Capacity: **300 gpm each**

Casing

- 1) Diameter: **10 inches on upper and 7 inches on lower.**
- 2) Length: **750 feet on upper and 1,808 feet on lower.**
- 3) Type: **Carbon**

SYSTEM TYPE:

- 1) Make:
- 2) Overall length:
- 3) Number of Towers:
- 4) Distance Between Towers:
- 5) End Gun:
- 6) Pressure:
- 7) Capacity:

CHEMIGATION EQUIPMENT: N/A

PERMIT QUALIFICATIONS:

- 1) Special qualifications to permit being abided by: **No**
- 2) All structures, wells, and lands on map: **Yes**
- 3) Irrigation Questionnaires checked to determine if permit owner started irrigation by end of construction period: **System not for irrigation and not in regular use.**

COMMENTS:

- 1) After reviewing the various permit applications and wells logs, it is clear that all existing wells are completed into the Dakota Formation. However, the exact numbering system on the existing wells compared to that in the permit applications and well logs is not clear. Of the four wells that were in place historically (numbered accordingly), only two still exist, but the exact numbers on the existing two are not clear.
- 2) Kadoka is currently connected to the area's rural water system. Because of this, the wells in place in Kadoka are entirely for backup purposes and are not being used regularly.
- 3) It is assumed that all defunct wells have been plugged according to South Dakota standards, but this has not been confirmed. The city of Kadoka should be informed that if the wells have not been properly plugged, they will need to be in order to be in compliance with South Dakota water law.
- 4) In the event of a rural water system failure, it is not clear that the two existing wells would be able to supply sufficient water for the town of Kadoka.
- 5) Water Permit No. 1718-2 was also inspected during this inspection. None of the wells associated with Water Permit No. 1718-2 were found to be in operation. Consequently, Water Permit No. 1718 was recommended for cancellation.



Legend

- Section Boundaries - PLSS
- Well Locations



0 0.075 0.15 0.3 Miles

Prepared by Bracken Capen
Natural Resources Engineer
DENR, Water Rights Program





**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
PMB 2020
523 EAST CAPITOL
PIERRE SOUTH DAKOTA 57501-3182
<http://denr.sd.gov>

February 20, 2014

760-2
1718-2
2282-2
2283-2

Patty Ulmen, Finance Officer
City of Kadoka
PO Box 58
Kadoka SD 57543

Dear Ms. Ulmen:

On October 21, 2013 the investigation of the water use system, including the extent of application of water to beneficial use, as developed under Water Permit Nos. 1718-2, 2282-2 and 2283-2, was completed by Bracken Capen, a staff engineer with our program.

The inspection found two Dakota Formation wells in place and maintained as a backup water supply to the rural water system. The two wells are authorized under Water Right No. 760-2 and Water Permit Nos. 2282-2 and 2283-2. Upon licensing, these will be incorporated together and one license issued. The city also has Water Permit No. 1718-2 which originally authorized diversion of water from three wells into the Inyan Kara and Madison Formations. Nathan Riggins with the city has confirmed those wells are no longer maintained for use by the city. Water Permit No. 1718-2 will be scheduled for cancellation consideration at a later date.

The final water right document, the water license, can now be issued. State law requires that we charge a \$50.00 fee for the investigation and issuance of the water license. Upon receipt of the \$50.00 fee from you, we will complete processing your water license for the Dakota Formation wells. The check or money order for the fee should be made payable to the "Water Rights Program".

If you have any questions regarding the water permits, investigation of the city's water use system or payment of the fee, please contact me.

Sincerely,

Genny McMath
Water Rights Program
(605) 773-3352

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date 3/12, 20 14

RECEIVED OF City of Kadoka PO Box 58 Kadoka SD 57543

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	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. <u>2283-2</u>		
Fee for Filing Transfer Form _____		
Fee for _____		
Fee for Issuing New Well Driller's License No. _____ for C.Y. _____		
Fee for Renewal of Well Driller's License No. _____ for C.Y. _____		
Fee for Issuing Well Pump Installer's License No. _____ for C.Y. _____		
Fee for Renewal of Well Pump Installer's License No. _____ for C.Y. _____		
(Any Other Work Provided by Law)	TOTAL	50 00

No. **06783**

By J. M. Goodman
Chief Engineer



DEPARTMENT OF ENVIRONMENT
and NATURAL RESOURCES

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
denr.sd.gov



MAR 13 2014

760-2
2282-2
2283-2

Patty Ulmen, Finance Officer
City of Kadoka
PO Box 58
Kadoka SD 57543

Dear Ms. Ulmen:

Enclosed is Water License No. 2283-2 for the City of Kadoka. This is the final water right document completing the process of obtaining a Water Right. Included with the 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 wells authorized by Water Right No. 2283-2, 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.

The applicable portions of Water Right No. 760-2 and Water Permit No. 2282-2 were incorporated into Water License No. 2283-2. 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

**STATE OF SOUTH DAKOTA
WATER LICENSE NO. 2283-2**

(1) The City of Kadoka, PO Box 58, Kadoka SD 57543 made Application No. 2283-2, March 17, 1993 for a water permit to divert 0.666 cubic feet of water per second (cfs) from ground water (one well – Dakota Formation), Jackson County, South Dakota for municipal purposes. Permit No. 2283-2, with a priority date of March 17, 1993 was approved July 7, 1993 and issued to the applicant for diversion of water with construction of the described water supply system and the application of water to beneficial use completed.

The following Water Permits and a Water Right are held by the city for municipal use:

- No. 760-2 (priority date of April 6, 1962) authorizes 0.55 cfs from one Dakota Formation well;
- No. 2282-2 (priority date of March 17, 1993) authorizes an additional 0.25 cfs from the same well described in Water Right No. 760-2;
- No. 2283-2 (priority date of March 17, 1993) authorizes 0.666 cfs from one Dakota Formation well;

The applicable portions of Water Right No. 760-2 and Water Permit No. 2282-2 are incorporated into this Water License No. 2283-2. The two wells are capable of 300 gallons per minute each for a total of 1.33 cfs. A priority date of April 6, 1962, established under Water Right No. 760-2, is retained for 0.55 cfs and the remaining 0.78 cfs will retain a priority date of March 17, 1993 (established by Water Permit Nos. 2282-2 and 2283-2.

(2) It is certified that the permit holder has complied with the provisions of South Dakota State Law relating to completion of the construction of the water supply system and is entitled to divert 1.33 cubic feet of water per second for beneficial use. The location of the diversion points are:

- 320 feet south and 1,050 feet west of the NE corner of Section 32, T2S, R22E (NE $\frac{1}{4}$ NE $\frac{1}{4}$)
- 1,360 feet north and 620 feet east of the SW corner of Section 28, T2S, R22E (NW $\frac{1}{4}$ SW $\frac{1}{4}$)

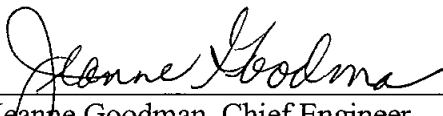
The city is currently hooked to a rural water system and maintains the existing two Dakota Formation wells as a backup water supply.

(3) The permit holder 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 the City of Kadoka, PO Box 58, Kadoka SD 57543 the holder and/or owner of Incorporated Water Right No. 2283-2 is issued a license to appropriate water, the right to use 1.33 cubic feet of water per second from ground water (two wells – Dakota Formation) with priority dates of April 6, 1962 (0.55 cfs) and March 17, 1993 (0.78 cfs) from the locations specified in (2) of this license for municipal purposes.

This license is subject to South Dakota Water Law, any limitations or conditions listed in Incorporated Water Right No. 2283-2 and subject to the following qualification:

- The wells approved under this Water Right 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.



Jeanne Goodman, Chief Engineer

Water Rights Program
Department of Environment and Natural Resources

MAR 13 2014

date

