

WATER PERMIT NO. 6023-3

Name of Applicant: **Town of Rosholt**

Address: **Box 156, Rosholt SD**

Phone: **605 537-4275**

Amount of Water Claimed: **0.333 cfs (150 gpm)**

Total Acres: **NA**

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

Water to be used for: **municipal** County: **Roberts**

Type of Waste Disposal System: **lagoon system**

Location: **1/2 mile south of Rosholt**

PRIORITY Date Received: **10-22-1997**

Fee: **\$225.00**

Corrected Application Received:

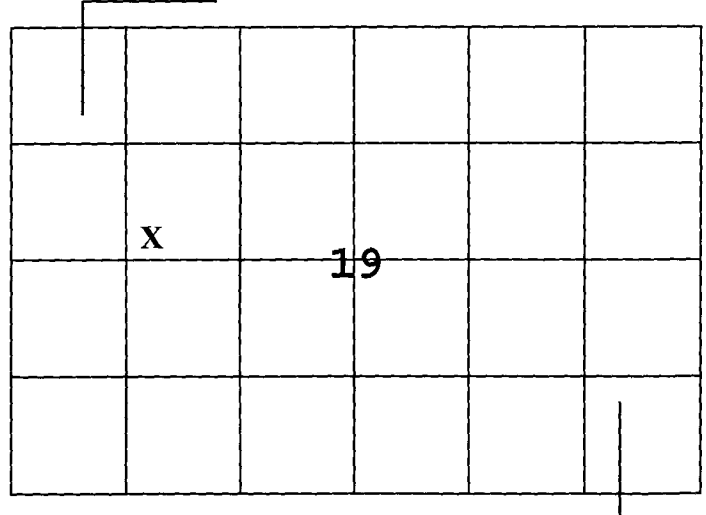
Period of Annual Use: **January 1 - December 31**

Remarks:

Diversion Point: **SW 1/4 NW 1/4**

Sec 19-T128N-R48W

Land to be Irrigated: **NA**



Depth of Well: **238 feet deep**

Well Driller: **LPT, Enterprises, Inc.**

Remarks:

Type of Map: **plat**

Prepared by: **Randall Pope, P.E.**

Reviewed and the Number Assigned on: **10-22-1997**

By: **Karen Schlaak**

Notice of Hearing - date to intervene: _____

**SOUTH DAKOTA
WATER PERMIT NO. 6023-3**

Date of first receipt of application October 22, 1997.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 6023-3 to Town of Rosholt, Box 156, Rosholt SD 57260 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. 6023-3 appropriates 0.333 cubic feet of water per second (150 gallons per minute) from one well (Pleistocene Unknown) 238 feet deep located in the SW 1/4 NW 1/4 Section 19-T128N-R48W.
2. The water appropriated shall be used for the purpose of supplying water to the City of Rosholt and may not exceed the amount of water needed for beneficial use for municipal use purposes.
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. 6023-3 is December 1, 1997.
5. The date from which applicant may claim right is October 22, 1997.
6. One-fifth of the construction is to be completed on or before June 1, 2000.
7. All construction is to be completed on or before December 1, 2002.
8. Water is to be put to beneficial use on or before December 1, 2006.
9. 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 or in adequate wells having prior water rights.

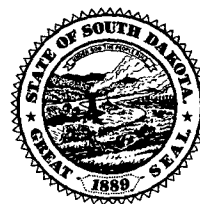
WATER MANAGEMENT BOARD

By: _____

John Hatch
John Hatch, Chief Engineer
Water Rights Program
Department of Environment and Natural Resources

JAN 08 1998

date



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

Mail to: Water Rights Program Joe Foss Building 523 E. Capitol Pierre, SD 57501-3181 (605) 773-3352	(office use only)	
	No. <u>6023-3</u>	Hydrologic Unit <u>09020101</u>
	Basin <u>Red Rainy</u>	
	Newspaper <u>The Rosholt Review, Rosholt, SD</u>	



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

Check use(s) of water:

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

Type of Application: ☒ 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. _____

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

- Name of Applicant Town of Rosholt Phone 605-537-4275
(check one) ☒ Owner ☐ Tenant/lessee
Mailing Address Box 156 Rosholt State SD 57260
(Street, RR. or Box) (Zip Code)
- Amount of water claimed 0.333 *CFS or 150 **GPM ***AF
(*Cubic Feet per Second) (**Gallons per Minute) (***)Acre Feet - storage capacity of dam/dugout or annual use if applicable)
- Source of water supply ground water
- Location of point of diversion (example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W) SW1/4 NW1/4 Section 19 T128N R48W
County Roberts
- County or counties where water will be used Roberts County; Town of Rosholt
- Annual period during which water is to be used All year 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) See preliminary engineering reports.

STATE OF SOUTH DAKOTA)
County of Roberts) SS

Attachments: Attach Form 2A if diversion is from a well or dugout, or if storage of water is proposed. Attach map and any other technical information. (see instructions)

I, Lavonne Ringsaker, 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 Lavonne Ringsaker
Subscribed and sworn to before me this 20 day of October 19 97

Jan Houghtaling
Notary Public

My Commission Expires Nov. 15, 2001

Supplemental Information

(type or print in ink)



1. Well Information - Proposed Construction (See well drillers completion report)

- a) Drill Hole Diameter 13 1/2" Depth 214
- b) Casing Type Steel Diameter 8" Thickness _____
- c) Screen Type Stainless Diameter 8" Thickness _____
- d) ~~Cement~~ Gravel Pack 115 sacks Length of Gravel Pack 10'-204'
- e) Depth to Top of Water Bearing Material _____
- f) Depth to Water (ground surface to water level) 18'
- g) Distance to nearest existing domestic well:

On applicants property 0

On property owned by others Rod Westby 1/2 Mile

2. Wastewater Disposal System Information

- a) Type of System (i.e. septic tank, drain field) Lagoon System
- b) System Capacity (gallons) _____ Year Constructed 1988
- c) Connected to the City of Rosholt Sanitary System

3. Dugout Information

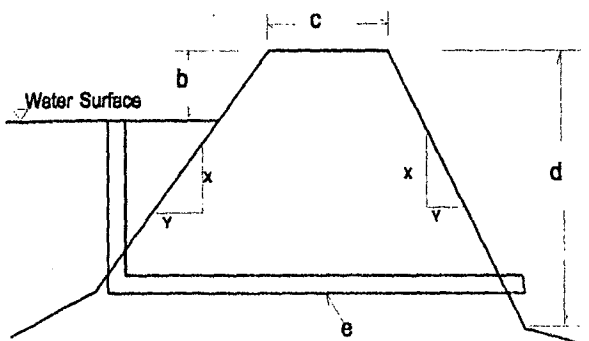
- a) Surface Dimensions _____ Depth _____
- b) Depth to water (ground surface to water level) _____



4. Water Storage Dams

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

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



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

PRELIMINARY ENGINEERING REPORT
WATER SUPPLY WELLS
ROSHOLT, SOUTH DAKOTA
JANUARY, 1997
REVISED FEBRUARY, 1997

INTRODUCTION

Rosholt is located in Northeastern South Dakota along State Highway 127. The economic base for the area is primarily agriculture. Population of the City according to the 1990 census was 409 residents. This report discusses the condition of the City's water supply wells along with proposed improvements.

EXISTING CONDITIONS:

The City is presently supplied by two 6" wells located in the Northcentral part of the City. The first well was constructed in 1977 and is approximately 163 feet deep. The second well was constructed in 1981 and is approximately 170 feet deep. The wells were at a flow condition when constructed. Approximately ten years later the water table had fallen to around 70 feet. At the present time the wells have fallen down to 130 feet and the City has to throttle back on the gate valves to get the wells to pump.

Over the last three years City records show an average daily usage of approximately 40,000 gallons per day (gpd). This runs from a peak usage in the summer of 60,000 gpd to a low usage of 30,000 gpd during the winter. The City is operating under the Vested Water Right No. 1273-3 which appropriates 0.33 cubic feet per second (213,270 gpd) of water from the two wells located in the E1/2, SE1/4, Section 13, T128N, R49W. The existing wells can no longer supply even the historical average daily usage.

PROPOSED IMPROVEMENTS:

Exploratory test drilling will be required to check on availability of a suitable source of ground water in the area. The SD Geological Survey has been contacted and supplied the City with all of the pertinent information they have. When it appears that a suitable area has been located a test well will be constructed and 72 hour pump test connected. Water samples will be taken and quality testing will be performed. If the tests show an adequate formation with suitable water quality, one 8" production well will be constructed according to the "Well Construction Standards State of South Dakota". A 6" watermain which will tie into the existing water line running from existing well No. 2 to the well house will be required. Modifications to the controls and well house will be needed to complete the project.

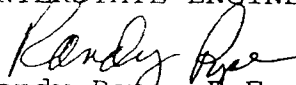
GENERAL DESIGN:

Due to expected growth of the City and the proposed ethanol plant the well will be designed to operate at 150 gallons per minute.

Attached and made a part of this report is an opinion of probable cost and a map which shows possible locations for the proposed well field.

All work would be designed in accordance with current engineering practices.

Prepared by,
INTERSTATE ENGINEERING, INC.

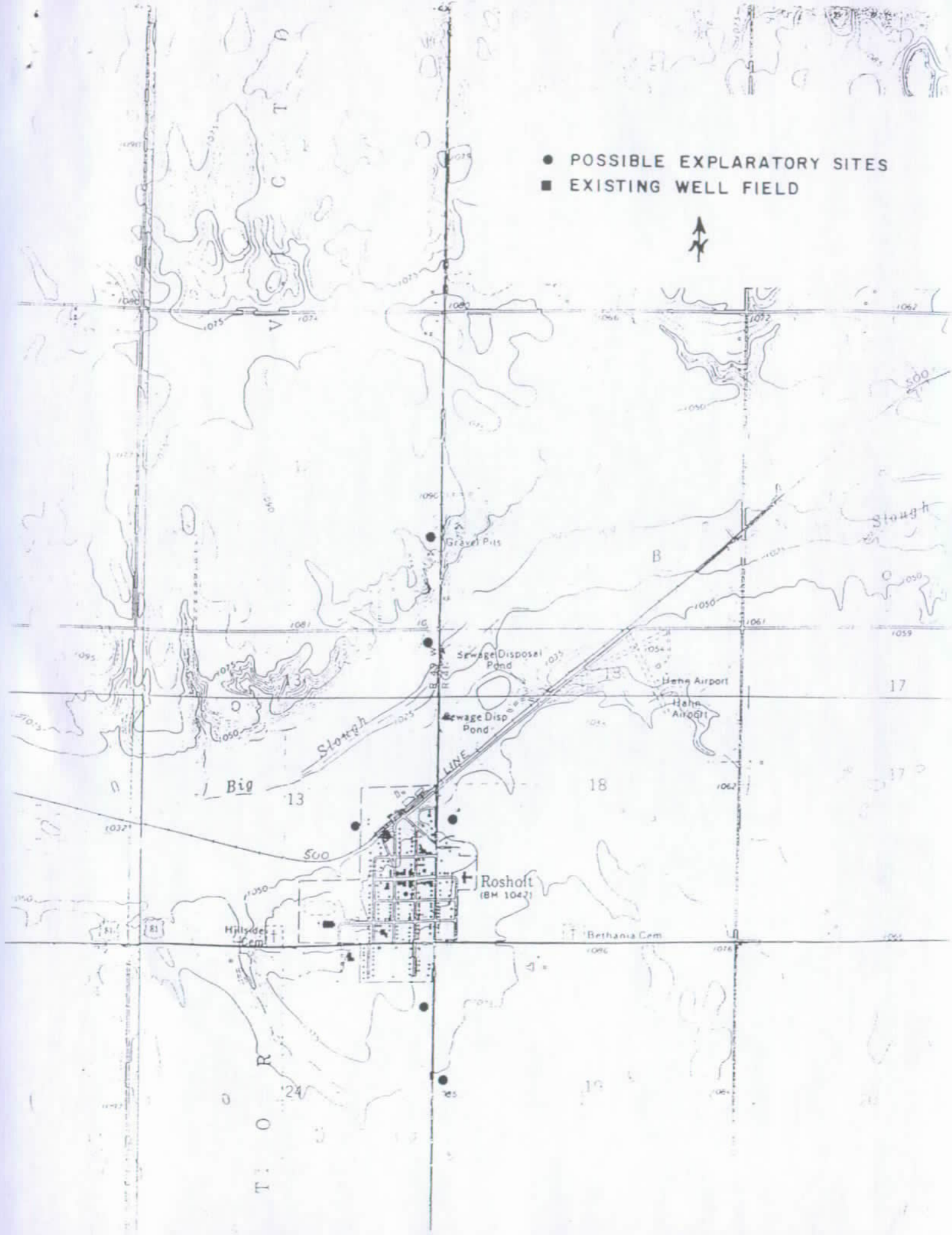

Randy Pope, P.E.

RP/sls
Attachments

OPINION OF PROBABLE COST
WATER SUPPLY WELLS
ROSHOLT, SD
JANUARY, 1997
REVISED FEBRUARY, 1997

Exploratory Test Drilling (6 wells, 200 feet depth)	1,200 L.F.	@ \$	7.50/L.F.	= \$ 9,000.00
Seal Test Drilling Holes	6 Ea.	@ \$	500.00/Ea.	= \$ 3,000.00
1 Test Well	200 L.F.	@ \$	35.00/L.F.	= \$ 7,000.00
72 Hour Pump Test With Recovery	2 Ea.	@ \$	6,000.00/Ea.	= \$12,000.00
Water Quality Testing	2 Ea.	@ \$	750.00/Ea.	= \$ 1,500.00
(2) 8" Production Wells	200 L.F.	@ \$	125.00/L.F.	= \$25,000.00
Seal Existing Wells	1 Ea.	@ \$	1,500.00/Ea.	= \$ 1,500.00
6" PVC Watermain	4,500 L.F.	@ \$	16.00/L.F.	= \$72,000.00
6" Gate Valve and Box	2 Ea.	@ \$	500.00/Ea.	= \$ 1,000.00
Ductile Iron Fittings			Lump Sum	= \$ 2,000.00
Well House Modifications			Lump Sum	= \$ 2,000.00
Controls and Electrical			Lump Sum	= <u>\$ 7,500.00</u>
Estimate Bid Cost				\$143,500.00
Contingencies				<u>\$ 14,500.00</u>
Opinion of Construction Cost				\$158,000.00
Estimated Engineering, Legal Administrative and Bonding				<u>\$ 32,000.00</u>
OPINION OF PROJECT COST				\$190,000.00

- POSSIBLE EXPLORATORY SITES
- EXISTING WELL FIELD



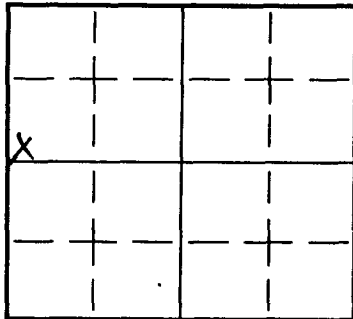
SOUTH DAKOTA WATER WELL COMPLETION REPORT

07-92

Location SW $\frac{1}{4}$ NW $\frac{1}{4}$ Sec 19 Twp 128 Rg 48
County _____ North

Please mark well location with an "X"

W



Well Completion Date

9-9-97

LOCATION:

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

PROPOSED USE:

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

METHOD OF DRILLING:

CASING DATA: ☒ Steel ☐ Plastic ☐ Other

If other describe _____

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
<u>28.55</u> LB/FT	<u>8</u> IN	<u>12</u> FT	<u>214</u> FT	<u>13 1/2</u> IN
_____ LB/FT	_____ IN	_____ FT	_____ FT	_____ IN
_____ LB/FT	_____ IN	_____ FT	_____ FT	_____ IN

GROUTING DATA

Grout Type	No. of Sacks	Grout Weight	From	To
<u>CEMENT</u>	<u>115</u>	_____ lb./gal	<u>10</u> ft	<u>204</u> ft
_____	_____	_____ lb./gal	_____ ft	_____ ft

Describe grouting procedure _____

SCREEN: ☐ Perforated pipe ☒ Manufactured

Diameter 8 PS IN Length 20 FEETMaterial STAINLESSSlot Size 20-30 Set From 214 Feet to 234 Feet

Other information _____

WAS A PACKER OR SEAL USED? ☐ YES ☒ NO

If so, what material? _____

Describe packer(s) and location? _____

DISINFECTION: Was well disinfected upon completion?

☒ YES, How:CHLORINE☐ NO, Why Not?BISMARCK, ND

Laboratory sent to for water quality analysis

MOTLWell Owner: CITY OF ROSHOLT

Business Name: _____

Address: ROSHOLT, SD.

WELL LOG:

DEPTH

FORMATION

FROM

TO

DRILLED IN
TEST HOLE
#5

STATIC WATER LEVEL 18' Feet

If flowing: closed in pressure _____ PSI

GPM flow _____ through _____ inch pipe

Controlled by ☐ Valve ☐ Reducers ☐ Other _____

Reduced Flowrate _____ GPM

Can well be completely shut in? _____

WELL TEST DATA:

☐ Pumped

Describe: _____

☐ Bailed☐ Other

Pumping Level Below Land Surface

_____ ft. After _____ Hrs. pump _____ GPM

_____ ft. After _____ Hrs. pump _____ GPM

If pump installed, pump rate _____ GPM

REMARKS

This well was drilled under license # 381

And this report is true and accurate.

Drilling firm LTP ENTERPRISES, INC.

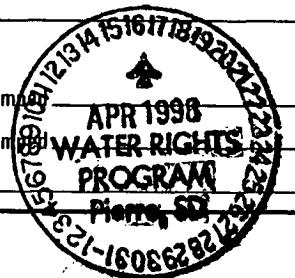
Signature of License Representative:

Randy Pullen

Signature of Well Owner or Equitable Property Holder:

Kirk McClain

Date:

10-27-97

PUMPING TEST

Owner City of Rosholt

Well No. _____

Location 1/4 mi. South of Hwy.

Date started 9-2-97

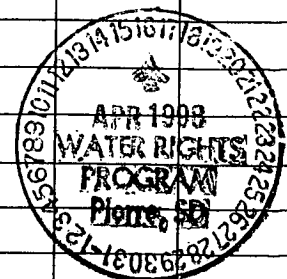
Static 21.12' AG 4.11'

By



Box 9035 • FARGO, ND 58106 • Phone (701) 232-8928

Time	Time In Minutes	Pumping Level	Drawdown	GPM		Time	Time In Minutes	Pumping Level	Drawdown	GPM	
2:00	660	70.86	49.74	305		11:00	2640	74.15	53.03		
3:00	720	71.23	50.11			12:00	2700	74.17	53.05		
4:00	780	71.52	50.40			1:00	2760	74.13	53.01		
5:00	840	71.79	50.67			2:00	2820	74.14	53.02		
6:00	900	70.84	49.72			3:00	2880	74.13	53.01		
7:00	960	71.06	49.94								
8:00	1020	71.43	50.31								
9:00	1080	71.55	50.43								
10:00	1140	71.61	50.49								
11:00	1200	71.88	50.76								
12:00	1260	71.96	50.84								
1:00	1320	72.47	51.35								
2:00	1380	72.61	51.49								
3:00	1440	72.82	51.70								
4:00	1500	73.03	51.91								
5:00	1560	73.25	52.13								
6:00	1620	73.41	52.29								
7:00	1680	73.97	52.85								
8:00	1740	73.35	52.23								
9:00	1800	73.11	51.99								
0:00	1860	73.01	51.89								
1:00	1920	73.01	51.89								
2:00	1980	73.27	52.15								
1:00	2040	73.36	52.24								
2:00	2100	73.51	52.39								
3:00	2160	73.57	52.45								
4:00	2220	73.74	52.62								
5:00	2280	73.86	52.74								
6:00	2340	73.93	52.81								
7:00	2400	73.91	52.79								
8:00	2460	74.02	52.90								
9:00	2520	74.12	53.00								
0:00	2580	74.12	53.00								



Owner City of Rosholt

Well No. _____

Location _____

Date started 9-2-97

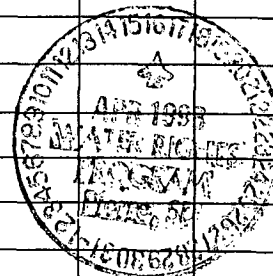
Static 21.12 4.11' AG

PUMPING TEST



Box 9035 • FARGO, ND 58106 • Phone (701) 232-8928

Time	Time in Minutes	Pumping Level	Drawdown	GPM		Time	Time in Minutes	Pumping Level	Drawdown	GPM	
3:00	0	21.12	0	305							
3:01	1	54.23	33.11								
3:02	2	55.10	33.98								
3:03	3	55.87	34.75								
3:04	4	56.27	35.15								
3:05	5	56.71	35.59								
3:06	6	56.86	35.74								
3:07	7	57.13	36.01								
3:08	8	57.35	36.23								
3:09	9	57.43	36.31								
3:10	10	57.57	36.45								
3:12	12	57.84	36.72								
3:14	14	58.01	36.89								
3:16	16	58.23	37.11								
3:18	18	58.42	37.30								
3:20	20	58.55	37.43								
3:25	25	58.93	37.81								
3:30	30	59.26	38.14								
3:40	40	59.93	38.71								
3:50	50	60.34	39.22								
4:00	60	60.89	39.77								
4:15	75	61.64	40.52								
4:30	90	61.96	40.84								
5:00	120	62.10	41.98								
5:30	150	63.91	42.79								
6:00	180	64.52	43.40								
7:00	240	65.84	44.72								
8:00	300	65.42	44.30								
9:00	360	66.24	45.12								
10:00	420	66.95	45.83								
11:00	480	67.61	46.49								
12:00	540	69.68	48.56								
1:00	600	70.24	49.12								



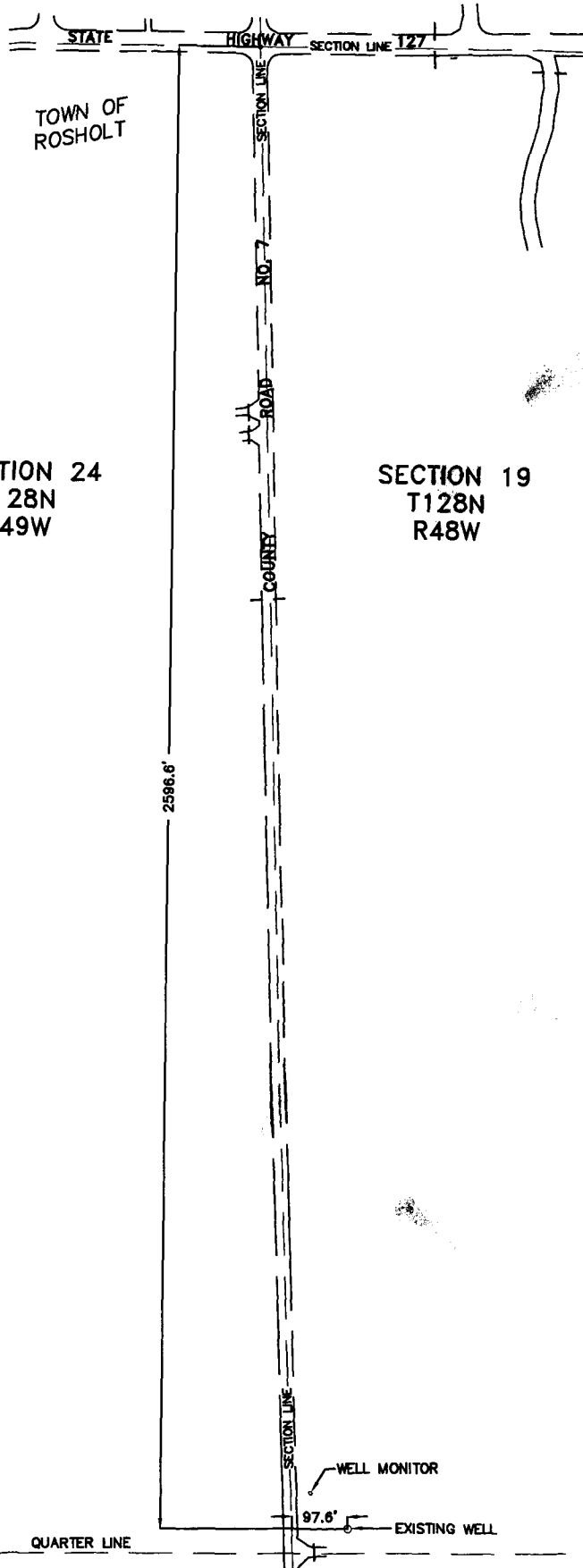
SECTION 13
T128N
R48W

SECTION 18
T128N
R48W

COUNTY	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
ROBERTS	W97-31	1	1

SECTION 24
T128N
R49W

SECTION 19
T128N
R48W



SCALE: 1" = 300'

I, Randall A. Pope, hereby certify that these Plans and Specifications were prepared by me or under my direct supervision. I further certify that I am a Registered Professional Engineer under the laws of the State of South Dakota.

Randall A. Pope

Date:

10/17/97

Prepared By:

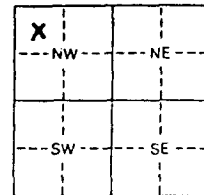


interstate
engineering, inc.

6023-3



FARGO, N.D.
HUTCHINSON, MN



Sec. 18 T 128N R 48W

DRILLERS LOG

Drilled for City of Rosholt S.D. By Fargo Office
 Location of Test Hole East 1/2 of SW 1/4, Sec 18 T128N R48W (East edge of city)
 Test Hole No. 1-97 Well No. 2" 1-97
 Size of test hole 6 3/4 Date started 6-19-97 Date completed 6-23-97 Total Hours 19 1/2

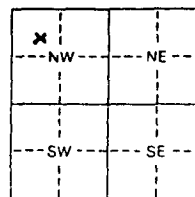
FORMATIONS DRILLED

TYPE OF FORMATION	COLOR OF FORMATION	STARTED AT WHAT DEPTH	ENDED AT WHAT DEPTH	THICKNESS OF FORMATION
Top soil	Black	GL	1	1
Clay	Brown	1	13	12
Dirty sand (fine)	Brown	13	37	24
Fine sand	Gray	37	56	19
Clay	Gray	56	56 1/2	1/2
Fine sand	Gray	56 1/2	62	5 1/2
Very dirty fine sand and clay	Gray	62	83	2
Very sandy clay w/small lenses of sand	Gray	83	121	28
Sand (drilled good)	Gray	121	122 1/2	1 1/2
Sandy clay	Gray	122 1/2	145 1/2	23
Rock	Gray	145 1/2	147 1/2	2
Hard clay	Gray	147 1/2	197	49 1/2
Sandy clay	Gray	197	252	55
Sand (fine) drilled fair	Gray	252	254	2
Very sandy clay (soft)	Gray	254	262	6
Very dirty sand	Gray	262	270 1/2	8 1/2
Sand (drilled good)	Gray	270 1/2	272 1/2	2
Very sandy clay	Gray	272 1/2	288	15 1/2
Sand (very fine) poor sample	Gray	288	297	1
Fine sand (took water) drilled good	Gray	297	311	14
Sandy clay	Gray	311	312	1
Fine sand drilled good	Gray	312	322	10
Fine sand (much finer)	Gray	322	325 1/2	3 1/2
Clay	Gray	325 1/2	330	4 1/2

Signed Don Hejtmanek Driller



FARGO, N.D.
HUTCHINSON, ND



Sec. 18 T 128N R 48W

DRILLERS LOG

Drilled for City of Rosholt, SD By Fargo Office

Location of Test Hole 500' SE of test hole #1 E $\frac{1}{2}$ of SW $\frac{1}{4}$ Sec. 18 T128N R48W

Test Hole No. 2-97 Well No. NA

Size of test hole 6 3/4 Date started 6-24-97 Date completed 6-25-97 Total Hours 13 1/2

FORMATIONS DRILLED

TYPE OF FORMATION	COLOR OF FORMATION	STARTED AT WHAT DEPTH	ENDED AT WHAT DEPTH	THICKNESS OF FORMATION
Top soil	Black	GL	1	1
Sandy clay	Brown	1	13	12
Fine sand	Brown	13	36	23
Fine sand	Gray	36	50	14
Sandy clay	Gray	50	57	7
Dirty sand	Gray	57	62	5
Very fine sand w/lenses of clay	Gray	62	78	16
Very fine dirty sand (poor sample)	Gray	78	92	14
Sandy clay w/lenses of sand	Gray	92	104	12
Sand (drilled good)	Gray	104	110	6
Sandy clay (hard)	Gray	110	194 1/2	84 1/2
Rock	Gray	194 1/2	195 1/2	1
Sandy clay	Gray	195 1/2	302	106 1/2
Very sandy clay (soft)	Gray	302	315	13
Lenses of sand and clay	Gray	315	322	7
Sandy clay w/lenses (small) of sand	Gray	322	337	15
Sand (drilled poor) took water	Gray	337	340	3
Sand (drilled good) took water	Gray	340	343	3
Very sandy clay	Gray	343	362	19

Signed Don Hejtmanek Driller

Driller

Owner City of Rosholt

Well No. _____

Location _____

Date started _____

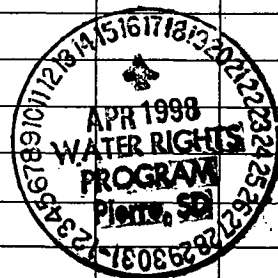
Static 21.12' AG 4.11'

By



Box 9035 • FARGO, ND 58106 • Phone (701) 232-8928

Recovery

[illegible]

COUNTY, SOUTH DAKOTA

TOWNSHIP No. _____ RANGE No. _____

(With surrounding tier of sections of adjacent townships)

36	31	32	33	34	35	36	31
1	6	5	4	3	2	1	6
12	7	8	9	10	11	12	7
13	18	17	16	15	14	13	18
24	19	20	21	22	23	24	19
25	30	29	28	27	26	25	30
36	31	32	33	34	35	36	31
1	6	5	4	3	2	1	6

RECEIPT

415504

Division of Water Rights

South Dakota Department of Environment and Natural Resources

Pierre, _____

October 22, 19 97

RECEIVED OF Town of Rosholt, Rosholt, SD 57260

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

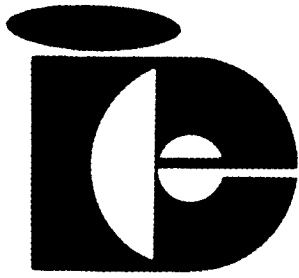
Fee for Application for Permit No. <u>6123-2</u> to Appropriate Water, to construct and to put water to beneficial use _____	225	00
Fee for Application for Permit No. _____ to Appropriate Water, for Future Use _____		
Fee to retain Future Use Permit No. _____ after period of seven years.		
Fee for Inspecting Constructed Works, confirming beneficial use and issuing Water License No. _____		
Fee for Filing Transfer Form _____		
Fee for Filing Extension Request _____		
Fee for _____		

(Any Other Work Provided by Law)	Total	225 00

By

Chief Engineer

John R. Ketchum



interstate engineering, inc.

P.O. Box 667, Wahpeton, ND 58074-0667
(701) 642-5521, Fax (701) 642-5215



AMERICAN CONSULTING
ENGINEERS COUNCIL
MEMBER

October 17, 1997

Eric Gronlund
Natural Resources Engineer
Division of Water Rights
Joe Foss Building
523 East Capitol Avenue
Pierre, SD 57501



RE: Water Supply Wells
Rosholt, SD
W97-31

Dear Mr. Gronlund:

Please find enclosed the information needed for an Application for Permit to Appropriate Water within the State of South Dakota requested for the Town of Rosholt.

If you have any further questions or need any other information, feel free to contact Randy Pope or myself.

Yours truly,
INTERSTATE ENGINEERING, INC.

Kent G. Thoreson
Project Engineer

KGT/sls
Enclosures
C: Town of Rosholt
Kay Nikolas, Attorney

REPORT ON WATER PERMIT APPLICATION NO. 6023-3
for the Town of Rosholt
October 23, 1997

Application No. 6023-3 proposes to appropriate 0.333 cfs (150 gpm) from one well approximately 238 feet deep located in the SW 1/4 NW 1/4 of Section 19, T128N-R48W in Roberts County. The water is for municipal use by the Town of Rosholt.

AQUIFER - PLEISTOCENE UNKNOWN (PSU)

The Pleistocene unknown designation is simply a glacial outwash (sand and gravel) which has not been mapped and named. The Roberts County study is presently underway and upon completion these units may be differentiated. The driller's logs submitted with the application indicate interbedded sands and clays which appear to group into at least two and maybe three distinct units based upon depth. A shallow surficial unit which is usually less than 100 feet deep and a basal unit 150 to 250 feet in depth. The basal unit would lie upon bedrock. Based upon other drilling and area domestic well logs, it also appears that there may be a unit in between the surficial and the basal units. Hydraulically, information is not available to determine if these units are connected although a number of observation wells have been constructed. The tendency has been to drag the names Veblen and Wilmot aquifers into Roberts County (these were named in the Codington Grant and Marshall County Studies) and the Fairmont aquifer which was studied in Minnesota. At this time with the information available, I do not believe these names can be applied to this area.

Drill hole and well completion data is available for this site. An eight inch test well has been completed into sand which was screened from 214 to 234 feet below land surface. The well was tested a rate of 305 gpm and had a specific capacity of 5.7 gpm per foot of drawdown. The top of the aquifer could be at 160 feet or 202 feet below land surface depending upon interpretation of the log. This well was completed in accordance with SD Well Construction Standards.

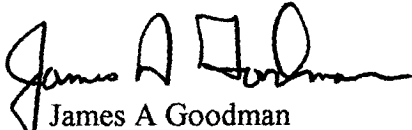
The Water Rights Program does monitor observation wells in this area. One observation well RB-77D is located about one mile east and is completed into the surficial unit. The nearest observation well completed into the basal unit is RB-77H and this well is located about three and one-half miles south of this application. Hydrographs for these wells are included with this report. This past summer the SDGS drilled a test well RB-97-30 immediately adjacent to the site of this application (Tomhave, 1997). This test well was also completed as an observation well but there is limited data available.

REVIEW OF EXISTING WATER PERMITS/RIGHTS

There are no other existing water permits/rights in this area which would obtain water from the basal unit. The only other permitted user is for the City of Rosholt (located about one-half mile north) and these wells appear to be completed into a shallower unit. Interference is not expected to be a concern.

CONCLUSIONS

1. Water is available from the basal unit. This is confirmed by the aquifer testing.
2. The aquifer is confined and under artesian conditions. Drawdown will occur and this is shown by the aquifer testing. Since, there are no other nearby competing users interference is not a concern.
3. This well has been constructed in accordance with SD Well Construction Standards.


James A Goodman
Natural Resources Engineer

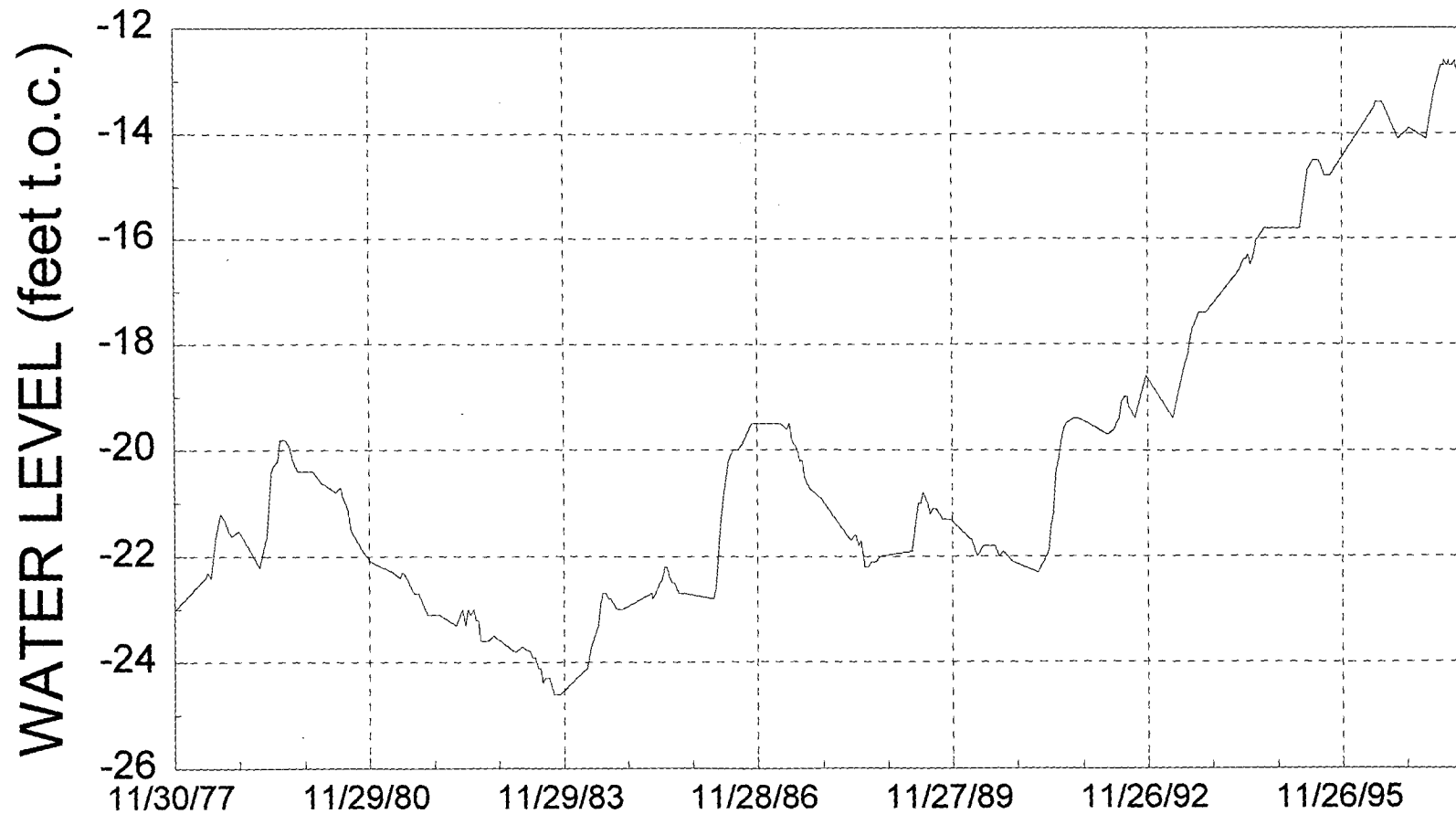
BIBLIOGRAPHY

Tomhave, D., 1997, Personnel Communication, SD DENR, SDGS, Vermillion, SD, 57069.

Water Rights, 1997, Unpublished Observation Well Records for Roberts County, SD DENR, Division of Environmental Services, Water Rights Program, Pierre, SD, 57501.

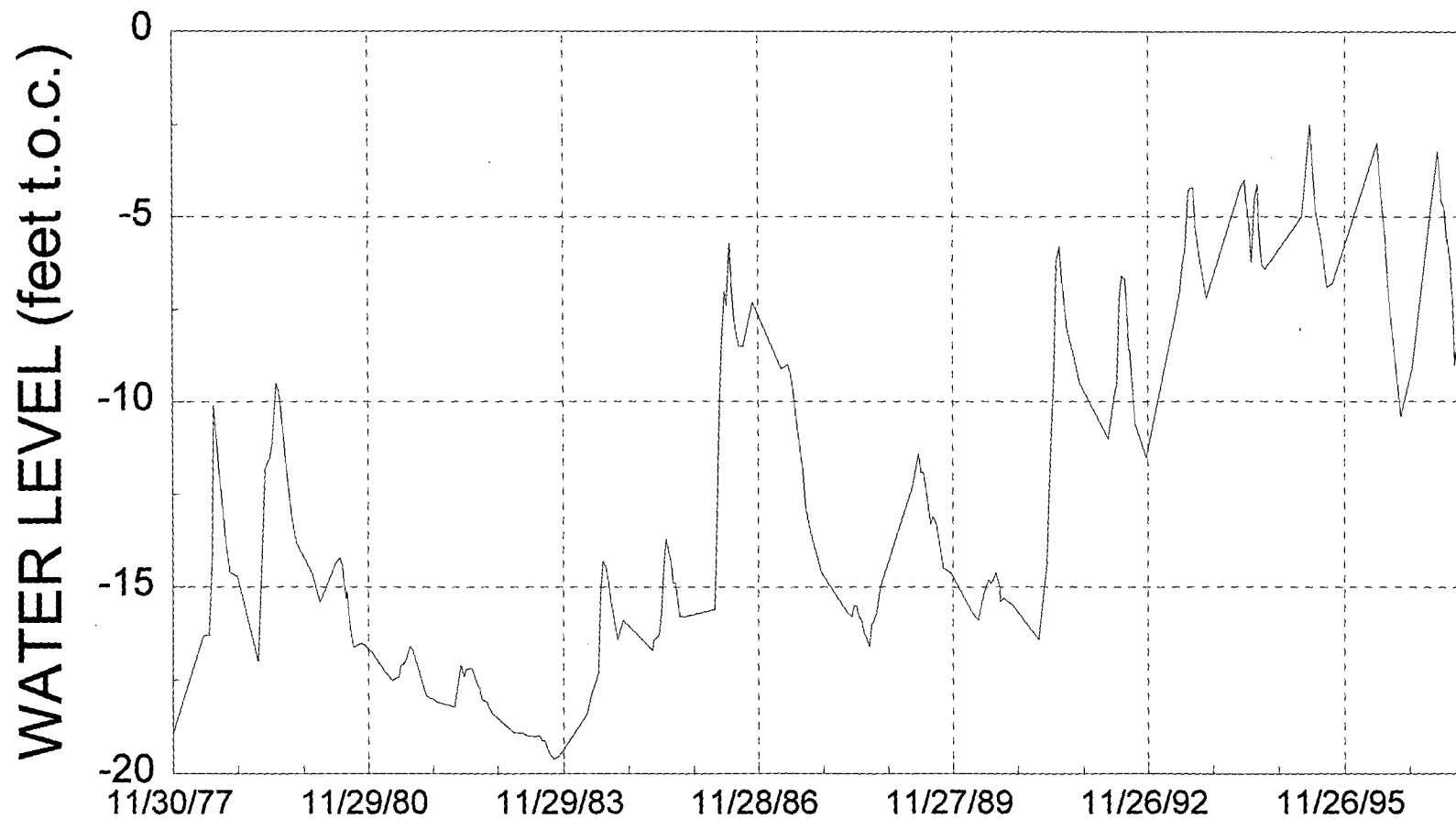
WATER RIGHTS OBSERVATION WELL

RB-77H



WATER RIGHTS OBSERVATION WELL

RB-77D



**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 6023-3, Town of Rosholt**

Pursuant to SDCL 46-2A-2, the following is the recommendation of the Chief Engineer, Water Rights Program, Department of Environment and Natural Resources concerning Water Permit Application No. 6023-3, Town of Rosholt, c/o LaVonne Ringsaker, Box 156, Rosholt, SD 57260.

The Chief Engineer is recommending APPROVAL of Application No. 6023-3 because 1) there is reasonable probability that there is unappropriated water available for the applicant's proposed use, 2) the proposed diversion can be developed without unlawful impairment of existing rights, 3) the proposed use is a beneficial use and 4) it is in the public interest with the following qualification:

The well approved under this Permit will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.

See report on application for additional information.

A handwritten signature in black ink, appearing to read "John Hatch", with a stylized flourish at the end.

JOHN HATCH, Chief Engineer
October 29, 1997



**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.**

November 3, 1997

Town of Rosholt
%LaVonne Ringsaker
Box 156
Rosholt, SD 57260

Dear Ms. Ringsaker:

Water Permit Application No. 6023-3 for municipal use has been examined and found to comply with the South Dakota Water Laws and applicable rules. A notice of hearing has been sent to the Publisher of the Rosholt Review printed at Rosholt, SD (Ph # (605) 537-4276). For your information, a copy of the notice, the recommendation of the Chief Engineer and a report on the application are enclosed. Please review the notice prior to publication and notify this office, if you have any corrections or questions.

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

Sincerely,

Eric Gronlund /KS

Eric Gronlund
Natural Resources Engineer
605 773-3352

enclosures

c: Kent G. Thoreson, Interstate Engineering, P.O. Box 667, Wahpeton, ND 58074-0667.

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



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

November 3, 1997

Rosholt Review
Box 136
Rosholt, SD 57260-0136

ATTENTION: Legal Department

Enclosed is a Notice of Hearing on Application No. 6023-3 to be published twice. Please publish the first notice on November 12, 1997, 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 Town of Rosholt, %LaVonne Ringsaker, Box 156, Rosholt, SD 57260 (Ph # (605) 537-4275).

A copy of BOTH publications must be SENT to the WATER RIGHTS PROGRAM. 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 Program
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 November 12, 1997, with the second publication 7 days later. The applicant is responsible for payment.

NOTICE OF APPLICATION NO. 6023-3 to Appropriate Water

Notice is given that Town of Rosholt, Box 156, Rosholt SD 57260 has filed an application for a water permit to appropriate 0.333 cubic feet of water per second (150 gallons per minute) from one well (Pleistocene Unknown) 238 feet deep located in the SW 1/4 NW 1/4 Section 19-T128N-R48W. The water is for municipal use by the Town of Rosholt.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 6023-3 because 1) unappropriated water is available, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest. In accordance with SDCL 46-2A-23, the chief engineer will act on the application, as recommended, unless a petition is filed opposing the application or the applicant files a petition contesting the chief engineer's recommendation. If a petition opposing the application or contesting the recommendation is filed, then a hearing will be scheduled and the Water Management Board will consider the application. Notice of the hearing will be given to the applicant and any person filing a petition.

Any person interested in opposing or supporting this application or recommendation must file a written petition with BOTH the applicant and chief engineer. The applicant must file a petition if contesting the chief engineer's recommendation. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E Capitol, Pierre SD 57501 (605 773-3352)" and the applicant's mailing address is given above. A petition filed by either an interested person or the applicant must be filed by December 1, 1997.

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

PROOF OF PUBLICATION

I, BARBARA JOHNSON

printed and published in ROSHOLT, S.D.

state of South Dakota. The notice was published

NOVEMBER 12, 1997

NOVEMBER 19, 1997

Cost of Printing \$31.62

Barbara Johnson
(Signature)

OFFICE MANAGER

(Title)

NOVEMBER 19, 1997

(Date Signed)



to Appropriate Water

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends **APPROVAL** of Application No. 6023-3 because 1) unappropriated water is available, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest. In accordance with SDCL 46-2A-23, the chief engineer will act on the application, as recommended, unless a petition is filed opposing the application or the applicant files a petition contesting the chief engineer's recommendation. If a petition opposing the application or contesting the recommendation is filed, then a hearing will be scheduled and the Water Management Board will consider the application. Notice of the hearing will be given to the applicant and any person filing a petition.

Any person interested in opposing or supporting this application or recommendation must file a written petition with BOTH the applicant and chief engineer. the applicant must file a petition if contesting the chief engineer's recommendation. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E. Capitol, Pierre SD 57501 (605-773-3352)" and the applicant's mailing address is given above. A petition filed by either an interested person or the applicant must be filed by December 1, 1997.

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

(Nov. 12, Nov. 19, 1997)



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

JAN 08 1998

Town of Rosholt
%LaVonne Ringsaker
Box 156
Rosholt, SD 57260

Dear Ms. Ringsaker:

Enclosed is Water Permit No. 6023-3 authorizing construction of your water diversion system and beneficial use of the water, not exceeding the limits as specified in the Water Permit.

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

Very truly yours,

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

enclosures

PLEASE NOTE: Certain changes may be made to your water permit usually without affecting the priority date. The location of a point of diversion may be changed or additional points of diversion may be approved if the water source remains unchanged; no additional water is appropriated; and, if irrigating, no additional land is irrigated. The change may be allowed without application or publication, if the Water Rights Program is contacted and the chief engineer makes a finding that the change does not increase the potential for interference with existing diversions.

A new water permit application is required to change water sources, increase the permitted diversion rate, or increase the irrigated acreage. If the application is approved, the water permit will receive a new priority date.

Date 9-10-98

Rich LeClair
(signature)

Town of Rosholt

PO Box 156
Rosholt, SD 57260



November 19, 1998

Water Rights Program
Joe Foss Building
523 E. Capitol Ave
Pierre, S. Dak. 57501

Dear Sirs:

We request permission to drill for another well at the or near the well dug under Water Permit No. 6023-3.

This drilling will be about 500' from the existing well and will be used as a back up for that well. It will be approximately 240 feet deep.

We will not be using additional water. When the existing well is pumping this well will not be and visa-versa.

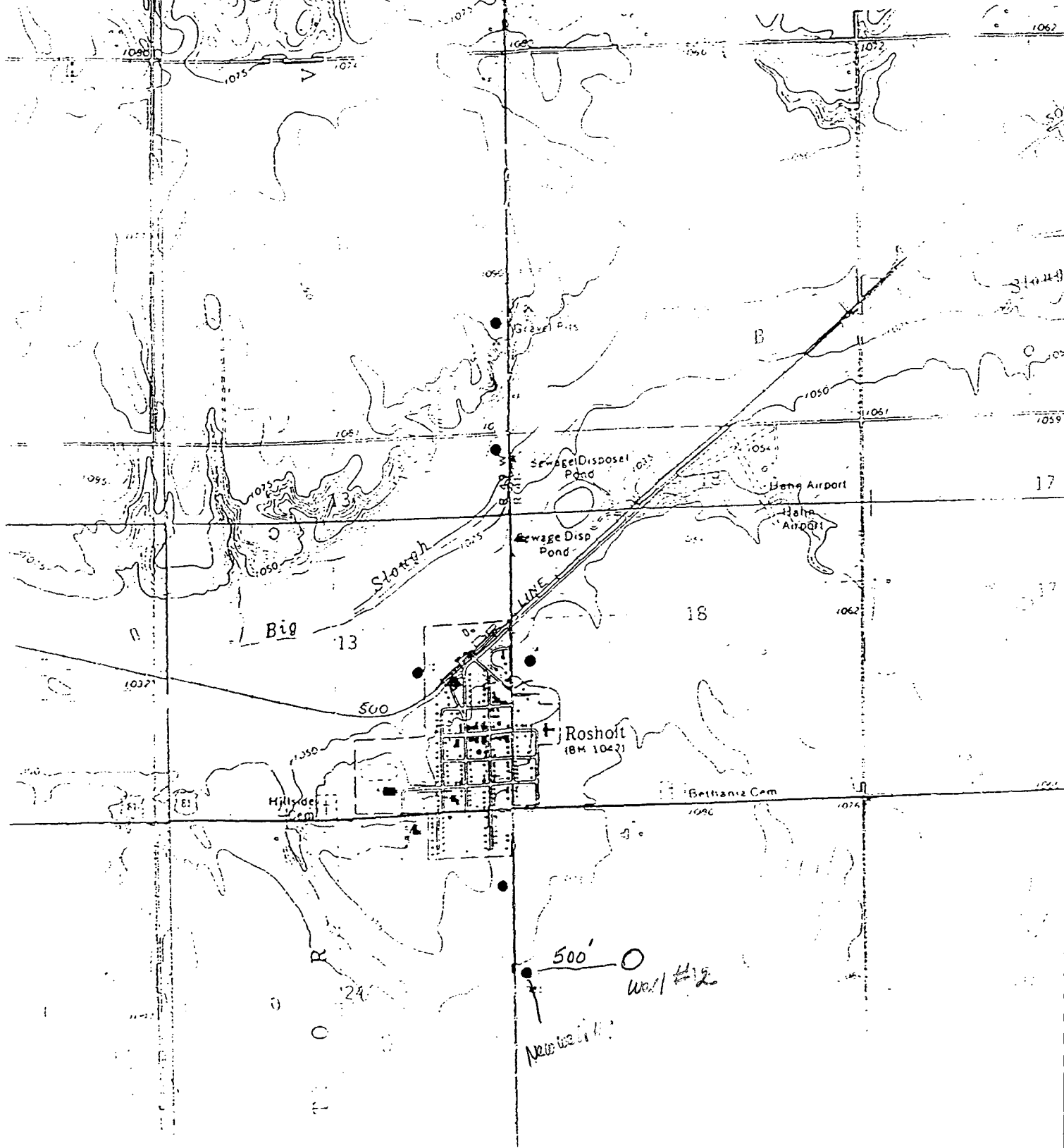
Attached is a map showing the approximate location of the existing well and where the purposed well will be.

We sincerely hope we can drill this well under permit 6023-3

Thank You,

Gary Peterson
Water Supervisor
Town of Rosholt

- POSSIBLE EXPLORATORY SITES
- EXISTING WELL FIELD



DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
WATER RIGHTS PROGRAM

December 11, 1998

RE: Request for an additional point of diversion for Water Permit No. 6023-3, Town of Rosholt

The town of Rosholt has submitted an application requesting authorization for an additional point of diversion for Water Permit No. 6023-3. SDCL 46-5-13.1 provides that a point of diversion may be changed or additional points of diversion may be approved without application or publication of a notice of hearing if the additional point of diversion is from the same source of water, no additional water is appropriated and the chief engineer makes a finding that the change does not increase the potential for interference with existing diversions.

Water Permit No. 6023-3 appropriates 0.333 cubic feet of water per second (150 gallons per minute) from one well (Pleistocene Unknown) 238 feet deep located in the SW1/4 NW1/4 Section 19, T128N, R48W. Water is used to supply water to the town of Rosholt for municipal purposes. The additional diversion point is to be used on a alternating basis with the existing well authorized by Water Permit No. 6023-3.

The town requests an additional diversion point located approximately 500 feet east of the existing well and will also be located in the SW1/4 NW1/4 Section 19, T128N, R48W. The additional well is to be constructed into the same aquifer which is characterized in the report for Water Permit No. 6023-3 as Pleistocene Unknown. The request states that the additional well will be constructed to a depth of approximately 240 feet into the same formation and the operation of the two wells will not exceed the 0.333 cfs appropriated under Water Permit No. 6023-3.

As part of the review of this request for an additional diversion point, a review of well construction reports on file with the Water Rights Program and existing water rights within one mile was conducted. There are no other existing water rights in the area except the town of Rosholt. Our files indicate six domestic wells have been constructed within the surrounding sections but all are constructed into the Fairmont Aquifer at a depth less than 65 feet. Also a test well was drilled to a depth of 111 feet in Section 18, T128N, R48W. The test well was drilled for Tri State Corn Processors.

This additional diversion point is to be used on a alternating basis with the existing well authorized by Water Permit No. 6023-2. No additional appropriation of water is authorized. The additional well must be constructed in accordance with SD Well Construction Standards. Standard 74:02:04:28 is the applicable construction standard. The additional well must be grouted from the top of the formation to the land surface in order to comply with the standards.

Gary Peterson with the town of Rosholt indicated during a telephone conversation that the old Rosholt wells authorized under Water Right No. 1273-3 are to be capped. When a Water Rights staff person is in the area an investigation should take place to determine whether the wells are properly capped and if Water Right No. 1273-3 can be cancelled.

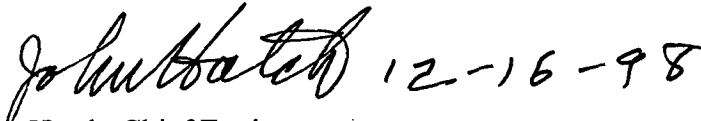


Eric Gronlund

Natural Resources Engineer

Water Rights Program

The Chief Engineer makes a finding that the additional diversion point does not increase the potential for interference with existing diversions. In making the finding, "does not increase the potential for interference" is interpreted to mean potential for adverse interference. An additional point of diversion for Water Permit No. 6023-3 may be constructed without requiring application or publication of a notice of hearing pursuant to SDCL 46-2A-4. A new water right permit is necessary for any diversions greater than 0.333 cfs the by town of Rosholt from these two wells.



John Hatch, Chief Engineer

Water Rights Program



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3181
www.state.sd.us/denr

December 16, 1998

Gary Peterson
Town of Rosholt
P.O. Box 156
Rosholt SD 57260

Dear Mr. Peterson:

I am writing in regard to the town of Rosholt's request for an additional well under Water Permit No. 6023-3. Water Permit No. 6023-3 appropriates 0.333 cubic feet of water per second (150 gallons per minute) from a well that is 238 feet deep.

Rosholt has requested an additional well to serve as a back-up well to the existing well. The new well is also to be located in the SW1/4 NW1/4 Section 19, T128N, R48W and is to be constructed into the same aquifer as the existing well (approximately 240 feet deep). No additional water will be appropriated.

Upon review of the request and pursuant to SDCL 46-5-13.1, Rosholt is authorized to develop the addition well without application or publication of a notice of hearing pursuant to SDCL 46-2A-4. However, a new water right permit will be necessary if more than 150 gallons per minute will be pumped.

The additional well must be constructed in accordance with SD Well Construction Standards. Standard 74:02:04:28 is the applicable construction standard. The additional well must be grouted from the top of the formation to the land surface in order to comply with the standards. If you have any questions on well construction, please contact Ken Buhler at (605) 773-3352.

Very truly yours,

John Hatch, Chief Engineer
Water Rights Program
(605) 773-3352



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

SEP 24 2001

6203-3

Town of Rosholt
% Gary A. Peterson
Box 156
Rosholt, SD 57260

Dear Mr. Peterson:

Enclosed is Water License No. 6203-3. This is the final water right document completing your process of obtaining a Water Right

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. 6203-3, constructs a replacement well and does not plan to use the old well, the old well is considered abandoned and must be plugged. Also, any well that is being used or is not considered abandoned must be valved and controlled, if flowing, or sealed and capped so that no leaking occurs either underground or at the surface.

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

Sincerely,

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

NOTE: The applicable portions of No. 6023-3 are incorporated into Water License No. 6203-3.

enclosures