

# SOUTH DAKOTA WATER WELL COMPLETION REPORT

Location NE 1/4 NE 1/4 Sec 24 Twp 2N Rg 8E

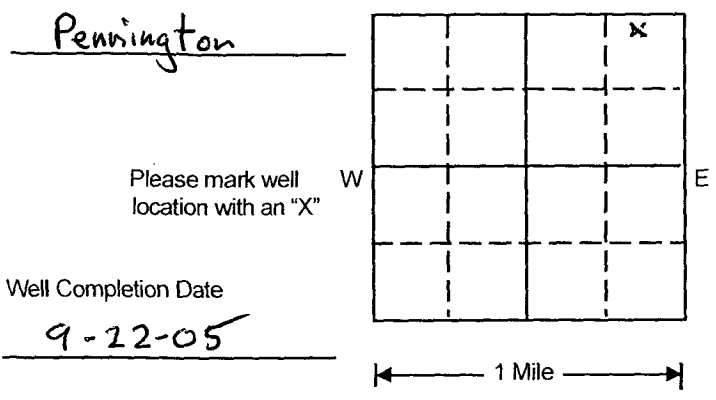
Well Owner: USAF

County Pennington North

Business Name: \_\_\_\_\_

Address: 2103 Scott Drive

City, State, Zip: Ellsworth AFB SD 57706



Well Completion Date  
9-22-05

WELL LOG:	DEPTH	
	FORMATION	FROM TO
<u>See attached boring log For SB050203</u>		

Distance to nearest potential pollution source (Septic tank, abandoned well, feed lot, etc.)  
? \_\_\_\_\_ ft. from UNKNOWN (identify source)

PROPOSED USE:

Domestic/Stock     Municipal     Business     Test Holes

Irrigation         Industrial     Institutional     Monitoring well

STATIC WATER LEVEL UNKNOWN FEET

If flowing: closed in pressure NA PSI

GPM flow NA through NA Inch pipe

Controlled by  Valve  Reducers  Other NA

Reduced flow rate NA GPM

Can well be completely shut in? NA

METHOD OF DRILLING:  
4 1/4-inch Hollow Stem Auger

CASING DATA:  Steel  Plastic  Other  
If other describe PVC (see attached construction details)

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
LB/FT	IN	FT	FT	IN

WELL TEST DATA:

Pumped Describe: UNKNOWN

Bailed

Other

Pumping Level Below Land Surface

\_\_\_\_\_ Ft. After \_\_\_\_\_ Hrs. pumped \_\_\_\_\_ GPM

\_\_\_\_\_ Ft. After \_\_\_\_\_ Hrs. pumped \_\_\_\_\_ GPM

If pump installed, pump rate: \_\_\_\_\_ GPM

GROUTING DATA:

Grout Type	No. of Sacks	Grout Weight	From	To
		Lb/gal	Ft	Ft
		Lb/gal	Ft	Ft

Describe grouting procedure  
See attached well construction details

SCREEN:  Perforated pipe  Manufactured

Diameter 2.00 Inches Length \* Feet

Material PVC

Slot Size 0.010 Set From \* Feet to \* Feet

Other information  
\* See attached well construction details

REMARKS  
Please refer to attached well construction details for HW050201

WAS A PACKER OR SEAL USED?  Yes  No

If so, what material? Bentonite Pellets - 3/8"

Describe packer(s) and location  
See attached Well Construction details

DISINFECTION: Was well disinfected upon completion?

Yes, How?  No, Why Not? Monitoring Well

Lab sample sent to for water quality analysis

This well was drilled under license # 678

And this report is true and accurate.

Drilling firm: AMERICAN ENGINEERING TESTING, INC

Signature of License Representative:  
Bryan L. Schuch

Signature of Well Owner or Equitable Property Holder:  
Phill S. R. [Signature]

Date: 19 DEC 2005

RECEIVED  
DEC 23 2005  
WATER RIGHTS PROGRAM

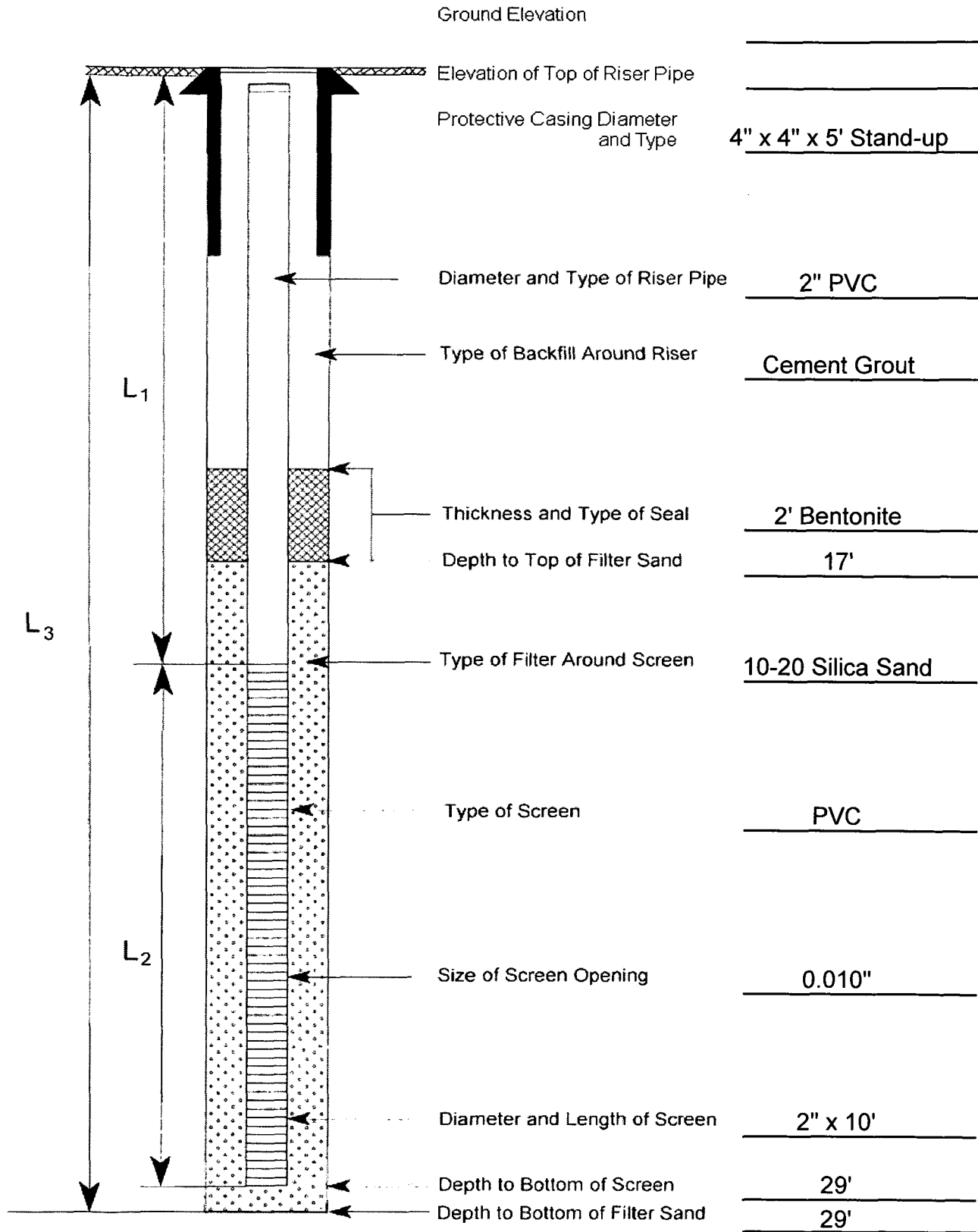
1-3-06



### INSTALLATION OF MONITORING WELL

Project # 18-01969

Soil Boring & Monitoring Well # SB050203 / MW050201



SITE: Ellsworth AFB, Rosenbaum PROJECT NO. 2A311.01.1010  
Excavation for JP-A

WATER LEVEL READINGS

DRILLING METHOD	DATE/TIME	WATER DEPTH	HOLE DEPTH	CASING DEPTH	GROUND SURFACE ELEV.:
<u>HSA, AT 112D</u>	<u>9-19/2005</u>	<u>23.0'</u>			
<u>9" soft spoon sampler</u>	<u>9-19/1355</u>	<u>22.35</u>		<u>29'</u>	

LOC BY: Joe Odgaard DATE/TIME START: 9-19-05/950  
 FIRM/DRILLER: ACT/Rent Thomas ABANDONMENT DATE: \_\_\_\_\_ DATE/TIME COMPLETE: 9-19-05/1145  
 PHYSICAL SETTING: open pasture ABANDONMENT METHOD: \_\_\_\_\_ WELL INSTALLATION DATE: 9-19-05

DEPTH IN FEET	SAMPLING DATA					GRAPHIC LOG	USCS	SOIL DESCRIPTION AND DRILLING COMMENTS
	B	N	A	R	NL			
1					1	[Hand-drawn soil profile]	CL-ML	Brown to dark brown, clayey silt, some rootlets, trace whitish crystals (calcite?), mod. coh., low plastic, dry
2					0			
3								some sand
4					2		CL	Dark brown sandy silt and clay, trace rootlets, mod. coh., low plastic, dry
5								
6					0			
7								
8								
9					3		SP	Reddish brown fine grained sand, dry
10								Same as above
11							Sm	Reddish brown silty sand, sand is fine grained, dry
12					0		SP	Brown fine grained sand, dry
13							Sm	some silt 13-12.5' sand and gravel in sample tip
14					4		GC	multi-colored sand and gravel, some clay, low coh., moist
15					0			
16								
17								
18								
19					5			Same as above, moist
20								

FIELD BORING LOG

BORING NO.

SB05 0203

SITE: \_\_\_\_\_

PROJECT NO. 29311.01.1010

DRILLING METHOD: same as p.1  
LOG BY: \_\_\_\_\_  
FIRM/DRILLER: \_\_\_\_\_  
PHYSICAL SETTING: \_\_\_\_\_

WATER LEVEL READINGS				GROUND SURFACE ELEV.:
DATE/TIME	WATER DEPTH	MOLE DEPTH	CASING DEPTH	COORDINATE TYPE:
_____	_____	_____	_____	NORTH _____
_____	_____	_____	_____	EAST _____
_____	_____	_____	_____	DATE/TIME START: _____
_____	_____	_____	_____	DATE/TIME COMPLETE: _____
_____	_____	_____	_____	WELL INSTALLATION DATE: _____

DEPTH IN FEET	SAMPLING DATA				GRAPHIC LOG	USCS	SOIL DESCRIPTION AND DRILLING COMMENTS
	B	N	A	R NO.			
21							
22							
23							Wet at 23'
24							same as above
25							
26							
27							
28							
29						CL	Dark gray shale, highly weathered, reddish-brown staining, moist less fractured; less staining in bottom 3" (sample tip)
30							End of boring @ 29'
							Placed 2' PVC monitoring well with 10' screen from 19-29'



AMERICAN  
ENGINEERING  
TESTING, INC.

CONSULTANTS  
• GEOTECHNICAL  
• MATERIALS  
• ENVIRONMENTAL

December 21, 2005

Mr. Ken Buhler  
Department of Environment and Natural Resources  
Water Rights Division  
Joe Foss Building  
523 East Capitol  
Pierre, South Dakota 57501

Subject: South Dakota Water Well Completion Reports and  
Well and Test Hole Plugging Reports  
United States Air Force  
Ellsworth AFB, South Dakota  
AET No. 18-01969

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PROGRAM

Dear Mr. Buhler:

Enclosed please find the water well completion reports for groundwater monitoring well MW050201; temporary monitoring wells TMW052301 through TMW052320, TMW05BG0401 through TMW05BG0404, TMW050117 through TMW050119, TMW05SD01 through TMW05SD03; TMW051201 through TMW051207; and extraction well BG5BEW05 at the referenced site. Also enclosed please find a well and test hole plugging report for MW970303. The wells were completed/abandoned under subcontract to Earth Tech E & I for the United States Air Force. If you have any questions or need any additional information please contact our office at (605) 388-0029.

Sincerely,

Byron L Schulz, CPRR  
Environmental Scientist  
Project Manager

enclosures

pc: Jay Erickson, Earth Tech E & I

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