

Well drilled by Canfield Drilling Co. Lic. No. 765

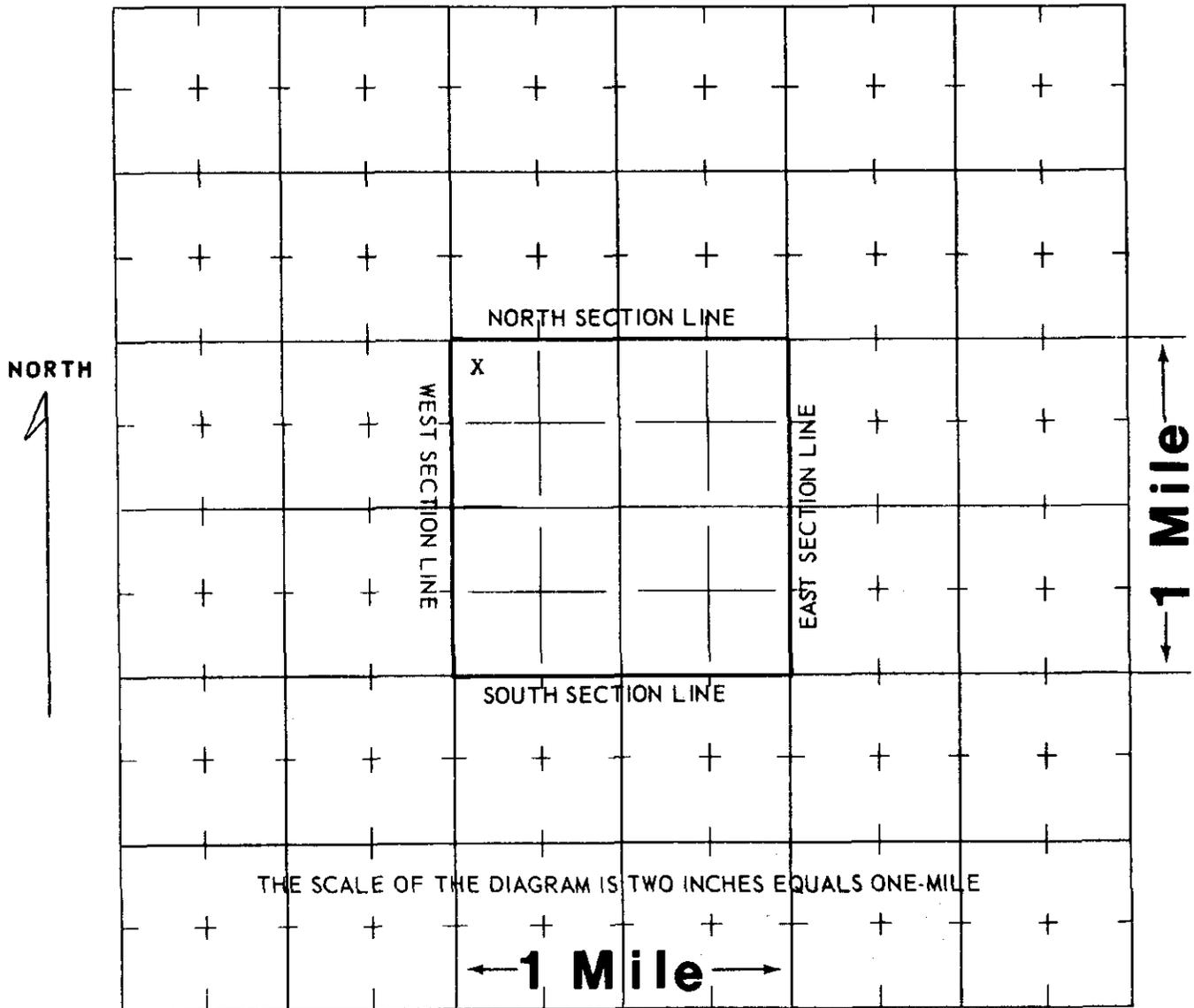
Permanent Pump installed by Kuntz Pump & Well Supply Lic. No. 1085

Meter Serial No. _____ Flow Meter Date Installed _____

Owner of land on which water is being used Gregory Sprenger

THE LOCATION OF THE WELL MUST BE SHOWN AND FOR LARGE CAPACITY IRRIGATION WELLS THE AREA ON WHICH THE WATER IS USED MUST BE SHADED OR CROSS-HATCHED ON THE DIAGRAM BELOW.

This diagram represents nine (9) sections. Use the **CENTER SQUARE** (one section) to indicate the location of the well, if possible.



WATER EQUIVALENTS TABLE (Rounded Figures)

An acre-foot covers 1 acre of land 1 foot deep.

1 cubic foot per second (cfs) . . . 449 gallons per minute (gpm).

1 acre-foot . . . 43,560 cubic feet . . . 325,900 gallons.

1,000 gpm pumped continuously for one day produces 4.42 acre-feet.

100 gpm pumped continuously for one year produces 160 acre-feet.

**(WHITE AND PINK COPY TO BE FILED WITH THE STATE ENGINEER
PINK COPY WILL BE RETURNED TO OWNER)**

WAE MW

COLORADO DIVISION OF WATER RESOURCES

1313 Sherman Street - Room 818
Denver, Colorado 80203

Verbal-#87078

RECEIVED

APR 17 1987

WATER RESOURCES
STATE ENGINEER
COLD

WELL COMPLETION AND PUMP INSTALLATION REPORT

PERMIT NUMBER 147420

THIS FORM MUST BE SUBMITTED
WITHIN 60 DAYS OF COMPLETION
OF THE WORK DESCRIBED HERE-
ON. TYPE OR PRINT IN BLACK
INK.

WELL OWNER Gregory Sprenger

NW ¼ of the NW ¼ of Sec. 12

ADDRESS Rt. # 2, Sidney, NE 69162

T. 8 N, R. 54 W, 6th P.M.

DATE COMPLETED April 9, 1987

HOLE DIAMETER

12 in. from 0 to 60 ft.

_____ in. from _____ to _____ ft.

_____ in. from _____ to _____ ft.

WELL LOG

From	To	Type and Color of Material	Water Loc.
0	1	Top	
2	4	loam	
4	6	sand, clay	
6	11	clay	
11	20	gravel, sand, clay	
20	27½	clean fine sand	26½'
27½	30	clean watersand	
30	31½	fine sand, traces of clay	
31½	40	shale blossom	
40	60	blue shale	
		TOTAL DEPTH <u>60</u>	

Use additional pages necessary to complete log.

DRILLING METHOD _____

CASING RECORD: Plain Casing

Size 5" & kind Plastic from +1 to 25 ft.

Size _____ & kind _____ from _____ to _____ ft.

Size _____ & kind _____ from _____ to _____ ft.

Perforated Casing

Size 5" & kind Plastic from 25 to 60 ft.

Size _____ & kind _____ from _____ to _____ ft.

Size _____ & kind _____ from _____ to _____ ft.

GROUTING RECORD

Material Cement

Intervals 6-16

Placement Method Spill Tube

GRAVEL PACK: Size _____

Interval _____

TEST DATA

Date Tested April 9, 19 87

Static Water Level Prior to Test 26½ ft.

Type of Test Pump Bailed

Length of Test 3 hrs.

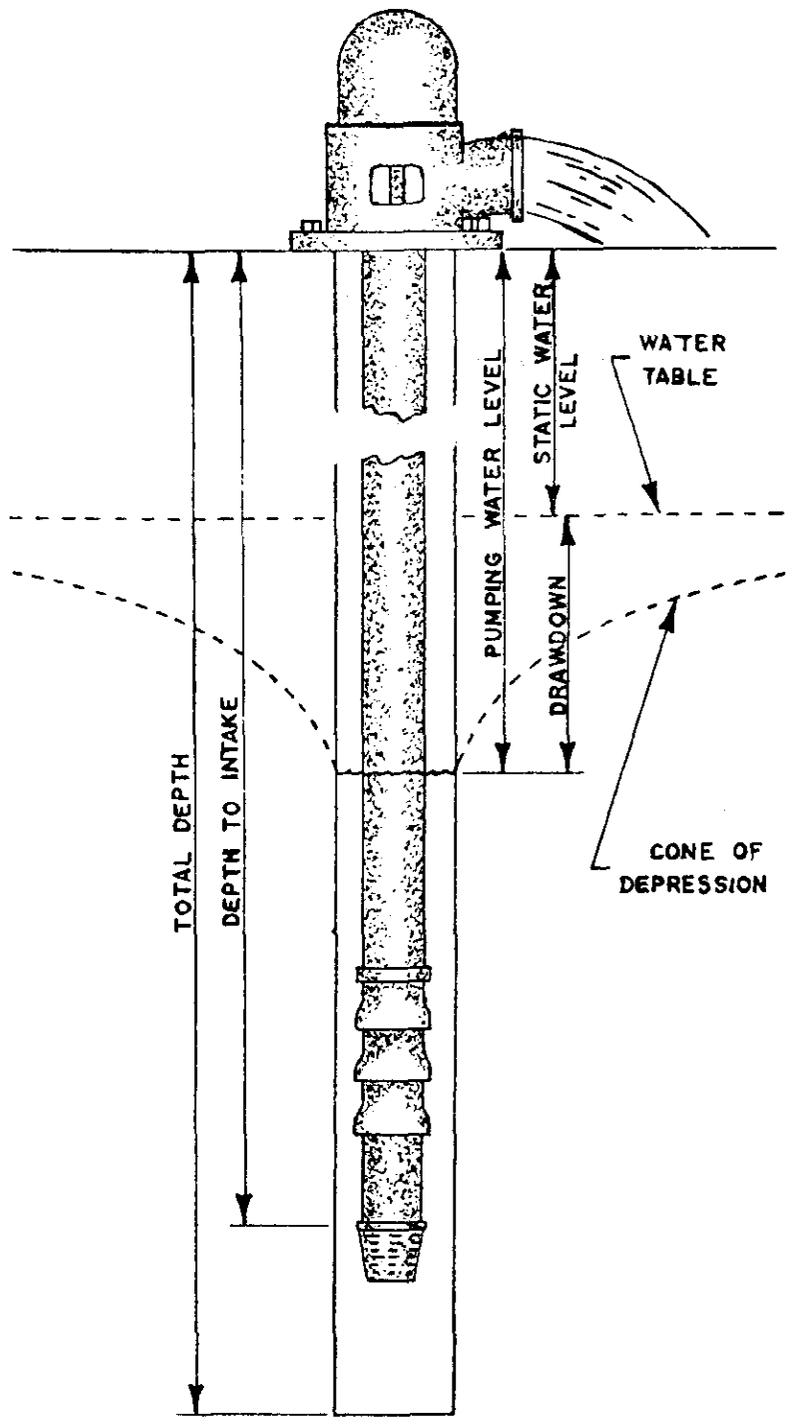
Sustained Yield ~~#####~~ 8 gpm

Final Pumping Water Level 59'

PUMP INSTALLATION REPORT

Pump Make Gould
 Type submersible
 Powered by electricity HP 1/3
 Pump Serial No. T064114
 Motor Serial No. E-85
 Date Installed April 22, 1987
 Pump Intake Depth 30'
 Remarks _____

WELL TEST DATA WITH PERMANENT PUMP
 Date Tested _____
 Static Water Level Prior to Test _____
 Length of Test _____ Hours
 Sustained yield (Metered) _____ GPM
 Pumping Water Level _____
 Remarks No test made



CONTRACTORS STATEMENT

The undersigned, being duly sworn upon oath, deposes and says that he is the contractor of the well or pump installation described hereon; that he has read the statement made hereon; knows the content thereof, and that the same is true of his own knowledge.

Signature *Erroll W. Kuntz* License No. 1085

State of Colorado, County of B. Logan SS

Subscribed and sworn to before me this 30th day of April, 19 87.

My Commission expires: My Commission Expires December 21, 1988
LINDA KUPATZ, Notary Public

Notary Public *Linda Kuntz*

FORM TO BE MADE OUT IN QUADRUPLICATE: WHITE FORM must be an original copy on both sides and signed. WHITE AND GREEN copies must be filed with the State Engineer. PINK COPY is for the Owner and YELLOW COPY is for the Driller.

COLORADO DIVISION OF WATER RESOURCES
818 Centennial Bldg., 1313 Sherman St., Denver, Colorado 80203

PERMIT APPLICATION FORM

Application must be complete where applicable. Type or print in **BLACK INK**. No overstrikes or erasures unless initialed.

RECEIVED
MAR 26 1987
WATER RESOURCES
STATE - ENGINEER
COLO.

RECEIVED
MAR 11 1987
11-87 12:47 P
032472 25.00

(X) A PERMIT TO USE GROUND WATER
(X) A PERMIT TO CONSTRUCT A WELL
FOR: (X) A PERMIT TO INSTALL A PUMP
() REPLACEMENT FOR NO. WATER RESOURCES P0012
() OTHER STATE - ENGINEER 25.00
WATER COURT CASE NO. 87-1 CHEQUE 25.00
CHG. 0.00

(1) APPLICANT - mailing address

NAME Gregory Sprenger
STREET Rt. 2
CITY Sidney, NB 69162 (State) (Zip)
TELEPHONE NO. 308-254-5641

FOR OFFICE USE ONLY: DO NOT WRITE IN THIS COLUMN

Receipt No. 73661 / Verbal approved
Basin _____ Dist. 4/8/87 3:15pm Steve #87038

CONDITIONS OF APPROVAL

This well shall be used in such a way as to cause no material injury to existing water rights. The issuance of the permit does not assure the applicant that no injury will occur to another vested water right or preclude another owner of a vested water right from seeking relief in a civil court action.

(2) LOCATION OF PROPOSED WELL

County Logan
NW ¼ of the NW ¼, Section 12
Twp. 8 N, Rng. 54 W, 6 P.M.
(N.S) (E.W)

1) APPROVED PURSUANT TO CRS 37-92-602(3)(b)(II) AS THE ONLY WELL ON A TRACT OF LAND OF 40 ACRES DESCRIBED AS THE NW 1/4 OF THE NW 1/4 OF SECTION 12, T8N, R54W OF THE 6TH P.M., LOGAN COUNTY.

(3) WATER USE AND WELL DATA

Proposed maximum pumping rate (gpm) 15
Average annual amount of ground water to be appropriated (acre-feet): 1
Number of acres to be irrigated: none
Proposed total depth (feet): 55'
Aquifer ground water is to be obtained from:

Owner's well designation _____

2) APPROVED FOR THE WATERING OF LIVESTOCK ON A FARM OR RANCH.

3) ANY EXISTING WELLS LOCATED ON THE 40 ACRE TRACT DESCRIBED AS THE NW 1/4 OF THE NW 1/4 OF SECTION 12, T8N, R54W OF THE 6TH P.M., LOGAN COUNTY MUST BE PLUGGED AND ABANDONED ACCORDING TO THE RULES AND REGULATIONS FOR WATER WELL CONSTRUCTION AND PUMP INSTALLATION CONTRACTORS.

GRG 4-8-87

GROUND WATER TO BE USED FOR:

() HOUSEHOLD USE ONLY - no irrigation (0)
() DOMESTIC (1) () INDUSTRIAL (5)
(X) LIVESTOCK (2) () IRRIGATION (6)
() COMMERCIAL (4) () MUNICIPAL (8)
() OTHER (9) _____

DETAIL THE USE ON BACK IN (11)

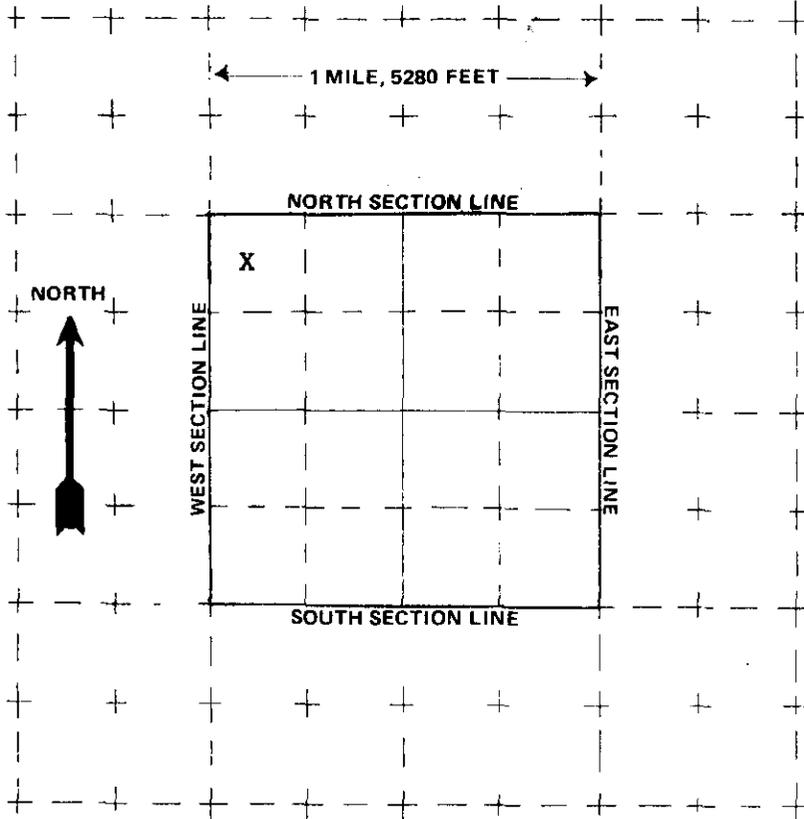
(4) DRILLER

Name Canfield Drilling Co
Street Box 519
City Ft. Morgan, Colorado 80701 (State) (Zip)
Telephone No. 867-2943 Lic. No. 764

APPLICATION APPROVED

PERMIT NUMBER 147420
DATE ISSUED APR 08 1987
EXPIRATION DATE APR 08 1989
Robert G. Langenbaugh
Assistant (STATE ENGINEER)
BY Steve Lautenschlager
I.D. 1-64 COUNTY 38

(5) **THE LOCATION OF THE PROPOSED WELL** and the area on which the water will be used must be indicated on the diagram below. Use the CENTER SECTION (1 section, 640 acres) for the well location.



The scale of the diagram is 2 inches = 1 mile
Each small square represents 40 acres.

WATER EQUIVALENTS TABLE (Rounded Figures)

An acre-foot covers 1 acre of land 1 foot deep
1 cubic foot per second (cfs) . . . 449 gallons per minute (gpm)
A family of 5 will require approximately 1 acre-foot of water per year.
1 acre-foot . . . 43,560 cubic feet . . . 325,900 gallons.
1,000 gpm pumped continuously for one day produces 4.42 acre-feet.

(6) **THE WELL MUST BE LOCATED BELOW** by distances from section lines.

1200 ft. from North sec. line
(north or south)

488 ft. from West sec. line
(east or west)

LOT _____ BLOCK _____ FILING # _____

SUBDIVISION _____

(7) **TRACT ON WHICH WELL WILL BE LOCATED** Owner: Gregory Sprenger

No. of acres 160. Will this be the only well on this tract? Yes

(8) **PROPOSED CASING PROGRAM**

Plain Casing

5 in. from 0 ft. to 30 ft.

_____ in. from _____ ft. to _____ ft.

Perforated casing

5 in. from 30 ft. to 55 ft.

_____ in. from _____ ft. to _____ ft.

(9) **FOR REPLACEMENT WELLS** give distance and direction from old well and plans for plugging it:

(10) **LAND ON WHICH GROUND WATER WILL BE USED:**

Owner(s): Gregory Sprenger No. of acres: 160

Legal description: Logan Co., NW 1/4 of the NW 1/4, Sec. 12, 8N, 54W, 6pm

(11) **DETAILED DESCRIPTION** of the use of ground water: Household use and domestic wells must indicate type of disposal system to be used.

Water livestock

(12) **OTHER WATER RIGHTS** used on this land, including wells. Give Registration and Water Court Case Numbers.

Type or right	Used for (purpose)	Description of land on which used

(13) **THE APPLICANT(S) STATE(S) THAT THE INFORMATION SET FORTH HEREON IS TRUE TO THE BEST OF HIS KNOWLEDGE.**

Gregory Sprenger
SIGNATURE OF APPLICANT(S)

RECEIVED

Sterling, Colo. 80751
March 23, 1987

Office of the State Engineer
Division of Water Resources
1313 Sherman St.
Denver Colo. 80203
Attention: Glenn Graham

Dear Mr. Graham; Gregory Sprenger has sent me your letter in regard to his application for a well permit receipt No 73661. Let me identify myself, I am Virgil C. Rieke and father in law of Gregory Sprenger and have been involved in the location of the proposed well in different ways since 1935. The windmill is just a tower without a workable windmill on it, the well under it was drilled sometime prior to 1935. Through the years we had to contend with fine sand getting inside the casing. In 1964 I applied for and received a permit to drill another well (Permit #22355 dated Dec. 4, 1964). This well was put into operation with a submersible pump and put under pressure and piped across the road to furnish water to parts of sections 1 and 2 which I own, also furnishing water for section 12 and one-half of section 11 for a total of 1300 A. This arrangement worked real good until 1977 when by the end of the grazing season I realized the electricity usage had doubled. Being familiar with the fine sand problem in that area I went on the assumption that the sand had plugged the perforations. Another son in law Dale Anderson was using that pasture at that time and we applied for and received a redrill permit. We drilled and cased a new well but when we tested it there just was not enough water for our needs. It is still a mystery to me as to what happened, whether we missed the vein, did not get the fine sand screened out or whether the water supply disappeared. We then moved to the very southeast corner of section 12 and found a good well, which is on record. We had the idea of piping the water to our established system but the high cost of getting electricity to the location along with the cost of over a mile of pipe line made us take a second look. In the meantime Gulf Oil Co. agreed to supply us with water from the Northwest Graylin waterflood system, but this came to a halt with the change of ownership of the Northwest Graylin Oil Field. It is a gamble as to whether we will get a satisfactory well but I believe it is worth a try. While Gregory and Margaret Sprenger are the present owners of this property I am the one that is familiar with the past history. As I will be receiving water from this well for my pasture I will share in the cost of developing it. I trust that this is a satisfactory explanation. Would appreciate your early action on this matter as we will be in need of the water soon.

Virgil C. Rieke
Virgil C. Rieke
Rto. 2
Sterling, Colo. 80751
Phone 303-522-2624

*This is an application for a new one acre tract.
any thing further contact me if I can help.
Edwin Watson - w. - 64*

