

MEMORANDUM



BISHOP-BROGDEN ASSOCIATES, INC.

To: Jeff Clark
From: Krystle Ervin
Subject: Well Permit Investigation
Job: Progen - Scorsine
Date: October 10, 2016

The Scorsine property consists of 80 acres located in the NE $\frac{1}{4}$ of Section 24, Township 13 South, Range 64 West near Peyton, Colorado, shown on the attached Figure 1. The State Engineer's Office (SEO) well database shows only one well permit located within the described property; however, the client has indicated that there are two physical wells on the property. The client provided some limited information regarding the well permits for those wells.

The SEO permit files were searched for information regarding the two known permits, Permit Nos. 44387 and 40937, and copies of the complete permits are provided as attachments. Both permits consist of wells owned at the time by Bruce Horn and located in Section 24, Township 13 South, Range 64 West. The information for each of the permits are described in detail below.

Permit No. 44387

Permit No. 44387 obtained from SEO matches records provided by the client. The well described under this permit is located in the SE $\frac{1}{4}$ of the NE $\frac{1}{4}$ of Section 24, Township 13 South, Range 64 West. The well was completed in January 7, 1972 with 5-inch casing at a depth of greater than 347 feet. According to the pump installation report, the well was equipped with a Sta-Rite 1.5 HP submersible electric pump that can sustain a yield of 15 gpm. The well is permitted to draw water from a gravel and sandstone aquifer for domestic use.

The description of Permit No. 44387 best matches that of the pump test completed by Barnhart Pump Co. in December of 2003 (the pump test receipt does not mention a permit number). This test indicates a depth of 360 feet with the pump at 320 feet. The static water level at the time was 118 feet. This test concluded that the well could sustain a yield of 9 gpm, similar to the 10 gpm it produced in 1972. Based on the similar descriptions between the well permit and pump test, in addition to a higher sustained yield compared to Permit No. 40937, it is likely this is the well that is currently operational on the property as shown in Figure 1.

Permit No. 40937

Permit No. 40937 obtained from SEO included three additional pages compared to records provided by the client. The records obtained from SEO consist of a two-page "Map and Statement for Water Well Filing" and a two-page well permit. Unfortunately, the two documents are not cohesive in their description of the well location, despite their listing under the same permit number.

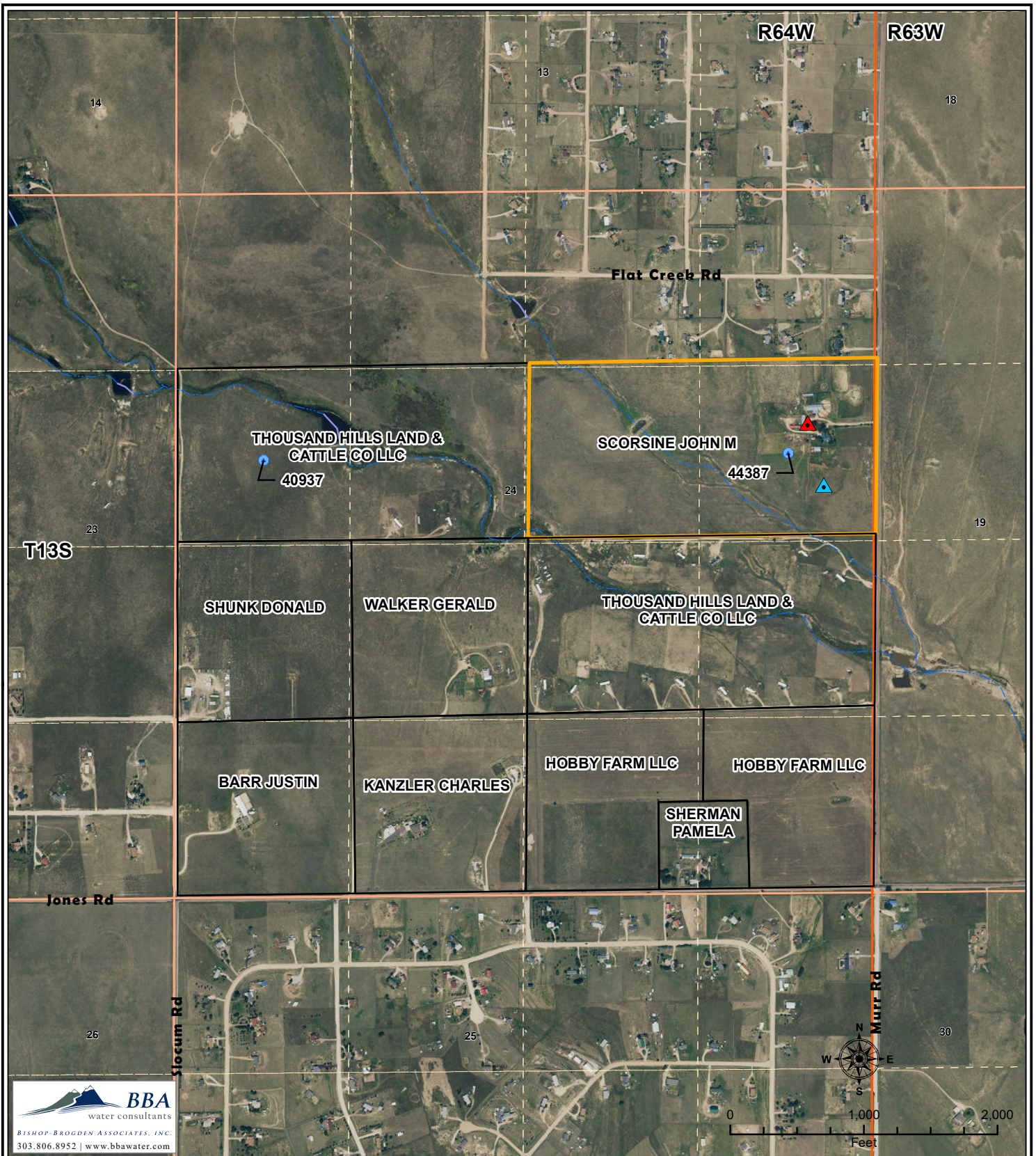
The Map and Statement for Water Well Filing completed by Bruce Horn describes a well located in the SW $\frac{1}{2}$ (or possibly SW $\frac{1}{4}$) of the NW $\frac{1}{4}$ of Section 24, Township 13 South, Range 64 West. In addition to this description, the form has a diagram with an “x” to indicate the wells location within a Section, the location marked is in the NW $\frac{1}{4}$ of the NW $\frac{1}{4}$ of Section 24. The form indicates the well was drilled to a depth of 130 feet with 5-inch plastic casing. It also indicates that the well was drilled on July 1, 1970 and tested on Jul 8, 1970, that the well had a static water level of 80 feet and a yield of 6 gpm. This document was received by SEO in February 1971.

The well permit itself is also inconsistent regarding the well location, describing the well as being located in the “SW $\frac{1}{2}$ ” of the NE $\frac{1}{4}$ of Section 24, Township 13 South, Range 64 West. The second page of the permit has a similar diagram with an “x” that indicates the well is located in the SE $\frac{1}{4}$ of the NE $\frac{1}{4}$ of Section 24. The permit was filed on April 20, 1970 and at that time, the anticipated drill date was April 23, 1970. The well was anticipated to be 200 ft with 5-inch casing. It was expected to have a $\frac{3}{4}$ HP submersible pump that would produce 10 gpm for domestic use. We are not aware of any file information indicating the current condition of this well or whether this equipment may still be in place.

The noted inconsistencies in the legal description for this well are likely the reason that it does not appear on a conventional property search for well permits associated with the Scorsine property. Location information presented with an “x” on the diagram associated with the well permit matches the gps location of the well most closely. It is likely Permit No. 40937 is associated with the current inactive well, as shown in Figure 1. However, there is significant uncertainty here without additional research into other nearby wells and landowners within the potential legal locations.

Conclusions and Recommendations

Based on permits obtained from SEO, we believe that the two wells on the property are associated with Permit Nos. 44387 and 40397. Permit No. 44387 coincides with the well the is currently in use on the property and does not have any significant location discrepancies. However, Permit No. 40397 most likely coincides with the well that is not currently operational, but the ‘official’ location of the well is unclear. We recommend that additional research be conducted into other nearby wells, and that the client should work with the SEO to confirm the permitted location for this well, prior to considering future uses of this well. Such work may also clarify title ownership to the well or wells associated with this property.



BBA
water consultants
BISHOP-BROGDEN ASSOCIATES, INC.
303.806.8952 | www.bbawater.com

FIGURE 1 Scorsine Well Investigation Map

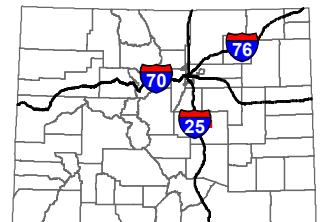
Date: 10/10/2016 | Job No. PROGEN

Legend

- ▲ Active Well Location (client gps)
- ▲ Inactive Well Location (client gps)
- DWR Well Locations (UTM)
- Parcel Boundary (Approx.)
- Scorsine Property Boundary (Approx.)

Aerial Photo Date: 8/29/2015
Data Source: El Paso County Assessor, CDSS, CDOT, USGS, BLM

Colorado



COLORADO DIVISION OF WATER RESOURCES

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

101 Columbine Bldg., 1845 Sherman St.
Denver, Colorado 80203

WELL COMPLETION AND PUMP INSTALLATION REPORT

PERMIT NUMBER 44387

RECEIVED

JAN 23 '73

WATER RESOURCES
STATE ENGINEER
CCLO 24

WELL OWNER Bruce L. Horn

SE ¼ of the **NE** ¼ of Sec. 24

ADDRESS _____ R# 2

T. 13 S. R. 64 W. 6th P.M.

DATE COMPLETED January 7, 1972

HOLE DIAMETER

_____ in. from _____ to _____ ft.

_____ in. from _____ to _____ ft.

_____ in. from _____ to _____ ft.

WELL LOG

From	To	Type and Color of Material	Water Loc.

619 22

TOTAL DEPTH ~~100~~ 100

Use additional pages necessary to complete log.

CASING RECORD: Plain Casing

Size _____ & kind _____ from _____ to _____ ft.

Size _____ & kind _____ from _____ to _____ ft.

Size _____ & kind _____ from _____ to _____ ft.

Perforated Casing

Size _____ & kind _____ from _____ to _____ ft.

Size _____ & kind _____ from _____ to _____ ft.

Size _____ & kind _____ from _____ to _____ ft.

GROUTING RECORD

Material

Intervals _____

Placement Method

GRAVEL PACK: Size

Interval _____

TEST DATA

Date Tested _____, 19____

Static Water Level Prior to Test _____ ft.

Type of Test Pump _____

Length of Test _____

Sustained Yield (Metered) _____

Final Pumping Water Level _____

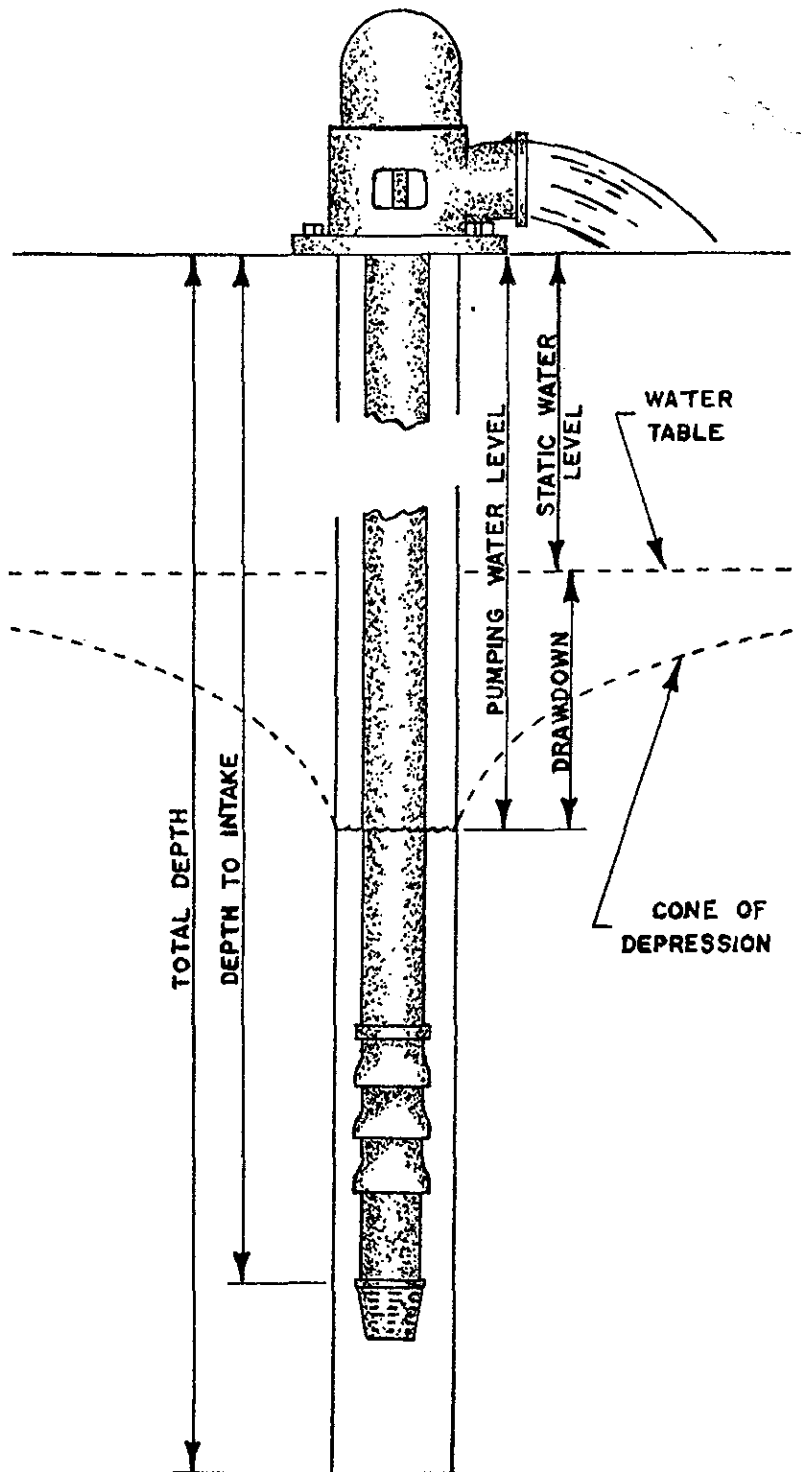
(OVER)

PUMP INSTALLATION REPORT

Pump Make Sta-Rite
 Type submersible
 Powered by electric HP 1½
 Pump Serial No. 8P4
 Motor Serial No. F 2
 Date Installed January 5, 1972
 Pump Intake Depth 347
 Remarks _____

WELL TEST DATA WITH PERMANENT PUMP

Date Tested January 7, 1972
 Static Water Level Prior to Test 150
 Length of Test 2 Hours
 Sustained yield (Metered) 15 GPM
 Pumping Water Level 160
 Remarks _____



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 Paul E Hardy License No. 150

State of Colorado, County of EL PASO SS

Subscribed and sworn to before me this JAN 22 1973, 19__.

My Commission expires: 13 NOV. 1976, 19__.

Notary Public Cecil W. Fry
CECIL W. FRY
NOTARY PUBLIC
SECURITY COLO. 80911

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.

DIVISION OF WATER RESOURCES, DEPARTMENT OF NATURAL RESOURCES
101 Columbine Bldg., 1845 Sherman Street, Denver, Colorado 80203

APPLICATION FOR: ☐ A PERMIT TO USE GROUND WATER
☒ A PERMIT TO CONSTRUCT A WELL
☐ REPLACEMENT FOR NO. _____
☒ A PERMIT TO INSTALL A PUMP
☐ OTHER

PRINT OR TYPE



APPLICANT Bruce L. Horn

COUNTY El Paso

Street Address RR # 2

SE $\frac{1}{4}$, of the NE $\frac{1}{4}$, sec. 24

City & State Colorado Springs, Colo.

T. 13 S, R. 64 W, 6th P.M.

Use of ground water Domestic

Owner of land on which well
is located Bruce L. Horn

Owner of irrigated
land _____

Number of acres
to be irrigated _____

Legal description of
irrigated land _____

Street or
Lot & Block _____

City or

Subdiv. _____ Filing _____

Ground Water Basin _____

Water Management
District _____

LOCATE WELL ON THE BACK OF THIS SHEET

Other water rights on
this land _____

Aquifer (s) ground water is to be obtained
from gravel and Sandstone

Driller W.V. Harding & Sons No. 150

Driller's 1409 Bates Dr.

Address Colorado Springs, Colo. 80909

Bruce L. Horn

Signature of Applicant

CONDITIONS OF APPROVAL (Eon H)

Storage capacity _____ AF

✓ ANTICIPATED PUMPING RATE 30 GPM

AVERAGE ANNUAL AMOUNT OF GROUND WATER TO

BE APPROPRIATED _____ Acre-feet

ESTIMATED WELL DATA

Anticipated start of drilling Feb. 3 19 71

Anticipated start of use Feb. 5 19 71

Hole Diameter:

7 in. from 0. ft. to 150 ft.
in. from _____ ft. to _____ ft.

Casing:

Plain 5 in. from 0 ft. to 100 ft.
in. from _____ ft. to _____ ft.

Perf. 5 in. from 100 ft. to 150 ft.
in. from _____ ft. to _____ ft.

ESTIMATED PUMP DATA

Type submersible HP 1 1/2 Outlet Size 1 1/2"

APPLICATION MUST BE COMPLETED SATISFACTORILY BEFORE ACCEPTANCE

Best Copy Available

APPLICATION APPROVED:

VALID FOR ONE (1) YEAR AFTER DATE ISSUED
UNLESS EXTENDED FOR GOOD CAUSE SHOWN TO
THE ISSUING AGENCY

PERMIT NO. 44387 CONDITIONAL ☐

DATE ISSUED FEB 8 1971

STATE ENGINEER

BY

E. J. Guip

Barlan W. Eker

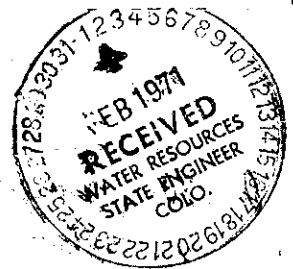
(OVER)

STATE OF COLORADO
DIVISION OF WATER RESOURCES
OFFICE OF THE STATE ENGINEER

MAP AND STATEMENT FOR WATER WELL FILING

PERMIT NUMBER 40937

Index No. 250 1773
IDWD 2-14
Use 1
Registered _____



STATE OF COLORADO)

COUNTY OF _____)

SS

WELL LOCATION

21

Know all men by these presents: That the undersigned

Bruce Hainclaimant(s), whose address is P.O. Box 2City Colorado Springs Colo, states:

Claimant(s) is (are) the owner(s) of the well described hereon; the

total number of acres of land irrigated from this well is _____;

work was commenced on this well by actual construction 6day of June, 19 70;the yield from said well is 6 (gpm), forwhich claim is hereby made for Domestic purposes;

that the average annual amount of water to be diverted is

_____ acre-feet; and that the aforementioned

statements are made and this map and statement are filed in

compliance with the law.

X
Claimant(s)

Subscribed before me on this _____ day of

_____, 19____.

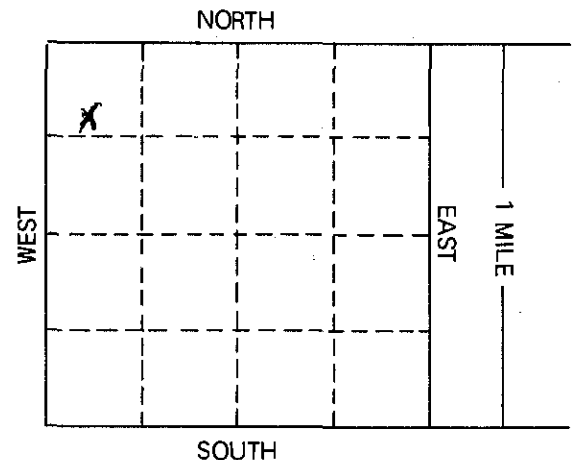
My commission expires _____

Notary Public

WELL DATA

Date Completed July 1 - 70Static Water Level 80Total Depth 120

INDICATE WELL LOCATION ON DIAGRAM



WELL SHALL BE LOCATED WITH REFERENCE TO
GOVERNMENT SURVEY CORNERS OR MONUMENTS,
OR SECTION LINES BY DISTANCE AND BEARING.

_____ ft. from _____ section line.
(North or South)

_____ ft. from _____ section line.
(East or West)

Ground Water Basin _____

Water Management
District _____

Domestic wells may be located by the following:

LOT _____, BLOCK _____

SUBDIVISION _____

FILING # _____

ACCEPTED FOR FILING IN THE OFFICE OF THE STATE ENGINEER OF COLORADO ON THIS

_____ DAY OF _____, 19____.

State Engineer

FORM TO BE MADE OUT IN QUADRUPLICATE: WHITE FORM MUST BE AN ORIGINAL COPY ON BOTH SIDES AND SIGNED.
WHITE copy & GREEN copy must be filed with the State Engineer within 30 days after well is completed: PINK copy
is for the Owner & YELLOW copy is for the Driller.

WELL LOG

From	To	Type of Material	Water Loc.
0	70	sugar sand	
70	85	clay	
85	128	sandstone	
120	130	clay	

Use additional paper if necessary to complete log.

WELL DATA

Type Drilling

Rotary

HOLE DIAMETER:

8 in. from 0 ft. to 130 ft.

_____ in. from _____ ft. to _____ ft.

_____ in. from _____ ft. to _____ ft.

CASING RECORD

Plain Casing

Size 5, kind Plastic from 0 ft. to 80 ft.

Size _____, kind _____ from _____ ft. to _____ ft.

Size _____, kind _____ from _____ ft. to _____ ft.

Perforated Casing

Size 5, kind Plastic from 80 ft. to 130 ft.

Size _____, kind _____ from _____ ft. to _____ ft.

Size _____, kind _____ from _____ ft. to _____ ft.

GROUTING RECORD

Material Gravel

Intervals _____

Placement Method _____

GRAVEL PACK RECORD

Size 3/8 Interval _____

TEST DATA

Date Tested July 8 - 70Type of Pump SubLength of Test 6Constant Yield 6

Drawdown _____

WELL DRILLERS STATEMENT

The undersigned, being duly sworn, deposes and says: he is the driller of the well hereon described; he has read the statement made hereon; knows the content thereof, and the same is true of his own knowledge.

X

*V. J. Stewart*License No. 666

State of Colorado, County of _____) ss

Subscribed and sworn to before me this _____ day of _____, 19____

My Commission expires _____, 19____.

Notary Public

DIVISION OF WATER RESOURCES, DEPARTMENT OF NATURAL RESOURCES
101 Columbine Bldg., 1845 Sherman Street, Denver, Colorado 80203

RECEIVED
APR 20 1970
GROUND WATER SECTION
COLORADO
STATE ENGINEER

APPLICATION FOR: ☒ A PERMIT TO USE GROUND WATER
☒ A PERMIT TO CONSTRUCT A WELL
☐ REPLACEMENT FOR NO. _____
☒ A PERMIT TO INSTALL A PUMP
☐ OTHER

PRINT OR TYPE

LOCATION OF WELL

APPLICANT Bruce L. Horn
Street Address RRT 2
City & State Colo Springs Colo
Use of ground water Domestic
Owner of land on which well is located _____
Owner of irrigated land _____
Number of acres to be irrigated _____
Legal description of irrigated land _____

COUNTY E. pass
SW of the NE $\frac{1}{4}$, sec. 24
T. 13S, R. 64W, 6 P.M.
Street or Lot & Block _____
City or Subdiv. _____ Filing _____
Ground Water Basin _____
Water Management District _____

Other water rights on this land _____
Aquifer (s) ground water is to be obtained from _____

LOCATE WELL ON THE BACK OF THIS SHEET
Driller V J Stewart No. 166
Driller's Address 4510 Ford Drive
Bruce Horn
Signature of Applicant
CONDITIONS OF APPROVAL

Storage capacity _____ AF
ANTICIPATED PUMPING RATE 10 GPM
AVERAGE ANNUAL AMOUNT OF GROUND WATER TO BE APPROPRIATED _____ Acre-feet

ESTIMATED WELL DATA

Anticipated start of drilling 4/23 1970
Anticipated start of use 5/18 1970

Hole Diameter:

8 in. from 0 ft. to 200 ft.
in. from _____ ft. to _____ ft.

Casing:

Plain 5 in. from 0 ft. to 110 ft.
in. from _____ ft. to _____ ft.
Perf. 5 in. from 110 ft. to 200 ft.
in. from _____ ft. to _____ ft.

ESTIMATED PUMP DATA

Type Sub HP 3/4 Outlet Size _____

APPLICATION MUST BE COMPLETED SATISFACTORILY BEFORE ACCEPTANCE

APPLICATION APPROVED:
VALID FOR ONE (1) YEAR AFTER DATE ISSUED
UNLESS EXTENDED FOR GOOD CAUSE SHOWN TO THE ISSUING AGENCY
PERMIT NO. 40937 CONDITIONAL ☐
DATE ISSUED APR 20 1970
J. J. Snipes
STATE ENGINEER
BY Barlan W. Eker

(OVER)

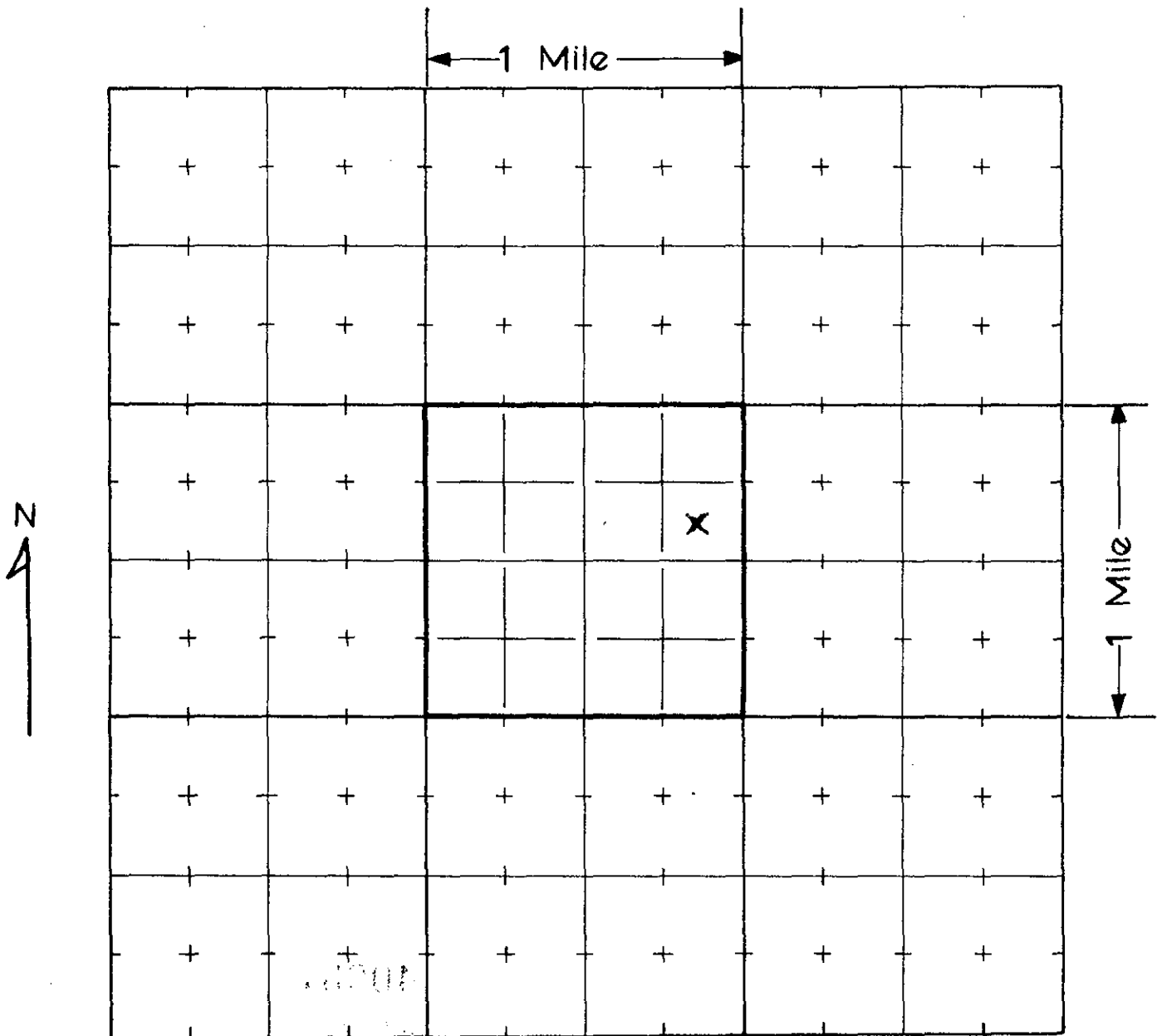
THE LOCATION OF THE PROPOSED WELL SHALL BE SHOWN ON THE DIAGRAM BELOW WITH
REFERENCE TO SECTION LINES OR GOVERNMENT SURVEY CORNERS OR MONUMENTS.

_____ feet from _____ (North or South) section line

_____ feet from _____ (East or West) section line

IF WELL IS FOR IRRIGATION, THE AREA TO BE IRRIGATED MUST BE SHADED OR CROSS-HATCHED.

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



THE SCALE OF THE DIAGRAM IS TWO INCHES EQUALS ONE-MILE