

WATER PERMIT NO. 1863-1

Name of Applicant: Quaal Subdivision Development Corp

Address: 11500 Crooked Canyon Rd, Black Hawk SD 57718 Phone: 605 394-4162

Amount of Water Claimed: 17 add'l gpm Total Acres: NA

Source of Water Supply: groundwater (one existing well)

Water to be used for: suburban housing development County: Meade

Type of Waste Disposal System:

Location: 2 miles north of Black Hawk

PRIORITY Date Received: 6-7-06 Application/License Fee: \$100

Corrected Application Received: Period of Annual Use: January 1 – December 31

Remarks: increase the diversion rate authorized by Water Right No. 1466-1

Diversion Point: SE ¼ SW ¼ Sec 30-T3N-R7E

Land to be Irrigated: NA

Depth of Well: 1120 feet deep

Well Driller: : Taylor Drilling

Remarks:

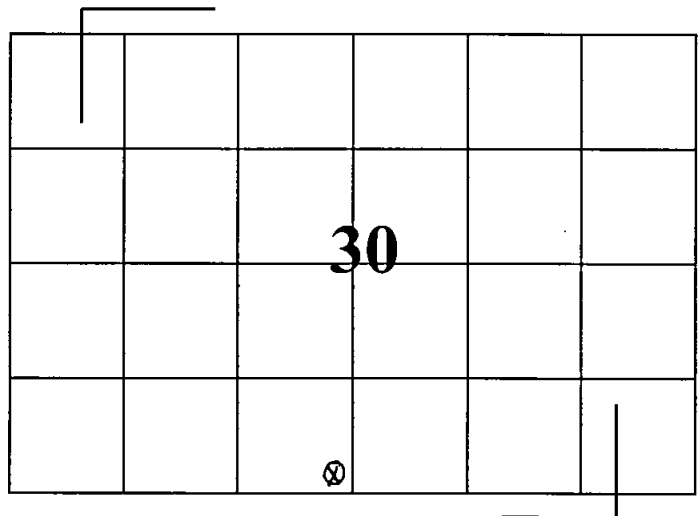
Type of Map: aerial

Prepared by: Ron Duvall

Reviewed and the Number Assigned on: XX

By: Karen Schlaak

Notice of Hearing - date to intervene: _____



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	No. <u>1863-1</u>	(office use only) Hydrologic Unit <u>10120111</u>
	Basin <u>Upper Cheyenne</u>	
	Newspaper <u>Meade Co. Times Tribune - Sturgis</u>	

RECEIVED

JUN - 7 2006

WATER RIGHTS
PROGRAM

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. 1466-1

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

CHANGE FROM .062 CFS TO 100 CFS

- Name of Applicant QUAAL SUBDIVISION DEVELOPMENT CORP Phone 605-394-4162-W
(check one) ☒ Owner ☐ Tenant/lessee
Mailing Address 11500 CROOKER CANYON RD. - BLACK HAWK State SD-57718
(Street, RR, or Box and City) (Zip Code)
0.038 add'l 17 add'l
2. Amount of water claimed 10 *CFS or 45 **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 GROUNDWATER / MINNEAPOLIS
- Location of point of diversion (example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W) 1 WELL - 100 ft North
AND 2,550 ft East from SW CORNER of Sec 30 - T3N - R7E (SE 1/4 SW 1/4)
County MEADE
- County or counties where water will be used MEADE
- Annual period during which water is to be used JAN 1 - DEC 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)

TO APPROPRIATE MORE WATER FROM EXISTING WELL.

STATE OF SOUTH DAKOTA)

County of MEADE

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, HOW BRIDGES / QUAAL SUBDIVISION DEVELOPMENT CORP 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.

Applicant's signature _____

Subscribed and sworn to before me this 6th day of June 2006

Quaal Miller
Notary Public signature

**SOUTH DAKOTA
WATER PERMIT NO. 1863-1**

Date of first receipt of application June 7, 2006.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 1863-1 to Quaal Subdivision Development Corp, 11500 Crooked Canyon Dr, Black Hawk SD 57718 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. 1863-1 appropriates 0.038 cubic feet of water per second (cfs) by increasing the diversion rate authorized by Water Right No. 1466-1. Water Right No. 1466-1 appropriates 0.062 cfs from one well completed into the Minnelusa Formation (1120 feet deep) located in the SE ¼ SW ¼ Section 30-T3N-R7E. This permit increases the water appropriation from the existing well from 0.062 cfs to 0.10 cfs for a total diversion of 45 gallons per minute.
2. The water appropriated shall be used for the purpose of suburban housing development and may not exceed the amount of water needed for beneficial 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. 1863-1 is September 18, 2006.
5. The date from which applicant may claim right is June 7, 2006.
6. One-fifth of the construction is to be completed on or before March 11, 2009.
7. All construction is to be completed on or before September 18, 2011.
8. Water is to be put to beneficial use on or before September 18, 2015.
9. Water rights obtained in compliance with the laws of the State of South Dakota may not be unlawfully impaired by this appropriation.

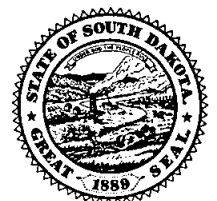
QUALIFICATION

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: Garland Erbele
Garland Erbele, Chief Engineer
Water Rights Program
Department of Environment and Natural Resources

NOV 01 2006
date



Supplemental Information

(type or print in ink)

EXISTING WELL - WATER PERMIT NO. 1466-1

1. Well Information - Proposed Construction

- a) Drill Hole Diameter _____ Depth _____
- b) Casing Type _____ Diameter _____ Thickness _____
- c) Screen Type _____ Diameter _____ Thickness _____
- d) Gravel Pack _____ Length of Gravel Pack N/A
- e) Depth to Top of Water Bearing Material _____
- f) Depth to Water (ground surface to water level) _____
- g) Distance to nearest existing domestic well:
- On applicants property _____ On property owned by others _____

2. Wastewater Disposal System Information

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

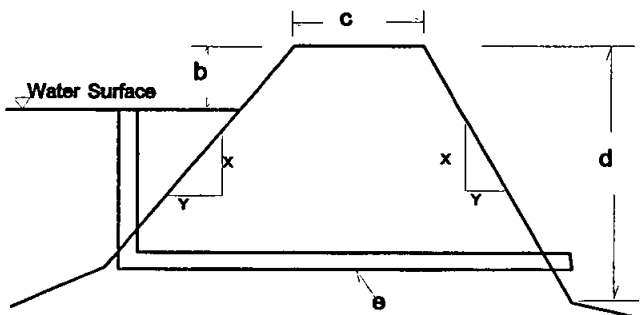
3. Dugout Information

- 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

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date June 7, 20 06

RECEIVED OF Guaal Subdivision, PO Box 41, Black Hawk SD 57718

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

Fee for Application for Permit No. <u>1863-1</u> 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>1863-1</u>	50	00
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	100.00

No.

0240

By

Darland Ebel
Chief Engineer
gm

SOUTH DAKOTA WATER WELL COMPLETION REPORT

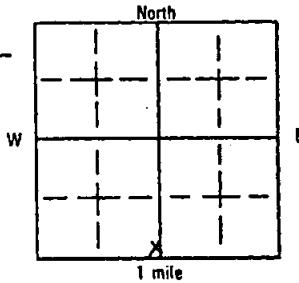
10-85

Location SE 1/4 SW 1/4 Sec 30 Twp 3N Rg 7E

County

Deade

Please mark well location with an "X"

Well Completion Date June 30, 1988

PROPOSED USE:

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

Method of Drilling:

Air Rotary

CASING DATA:

☒ Steel ☐ Plastic ☐ Other

If other describe _____

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
<u>23</u> LB/FT	<u>7</u> IN	<u>0</u> FT	<u>1040</u> FT	<u>8 3/4</u> IN
_____ LB/FT	_____ IN	_____ FT	_____ FT	_____ IN
_____ LB/FT	_____ IN	_____ FT	_____ FT	_____ IN
_____ LB/FT	_____ IN	_____ FT	_____ FT	_____ IN

GROUT:

Was the well grouted? ☒ YES ☐ NOTo what depth? 1040 FEETWhat is grouting material? cementIf cement, number of sacks? 140Describe grouting procedure pressure grouted through casingWhat was grout weight? 15 1/2 LB/GALSCREEN: ☐ Perforated pipe ☐ Manufactured

Diameter _____ IN Length _____ FEET

Material _____

Slot Size _____ Set From _____ Feet To _____ Feet

Slot Size _____ Set From _____ Feet To _____ Feet

Slot Size _____ Set From _____ Feet To _____ Feet

Other information _____

Was a packer or seal used? ☐ YES ☐ NO

If so, what material? _____

Describe packer(s) and location? _____

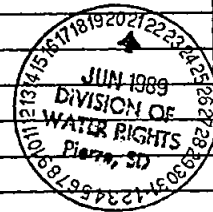
Was well disinfected upon completion? ☒ YES ☐ NOExplain circulated chlorine solution + placed chlorine in holeBacteriological analysis ☐ YES ☒ NO

Laboratory sent to _____

Well Owner: Quaal Subdivision Development CorporationName c/o Kenneth DonnenwirthAddress 133 E. Nevada Dr. Rapid City, SD 57701

Well Log: _____ Depth _____

Formation _____ From _____ To _____

Sundance fm. 0 370Spean Fish fm. 370 825Minnakabta ls. 825 867Opascha red shale + red shales 867 980Minnelusa 980 1120STATIC WATER LEVEL 200 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☐ BailedDescribe: Air developed☒ Other

Pumping Level Below Land Surface

1120 ft. After 3 Hrs. pumped 120 GPM760 ft. After 1 Hrs. pumped 150 GPM660 ft. After 1 Hrs. pumped 75 GPM

REMARKS:

This well was drilled under license # 331

And this report is true and accurate.

Drilling firm TAYLOR DRILLING COMPANY

Signature of License Representative:

Ralph Taylor

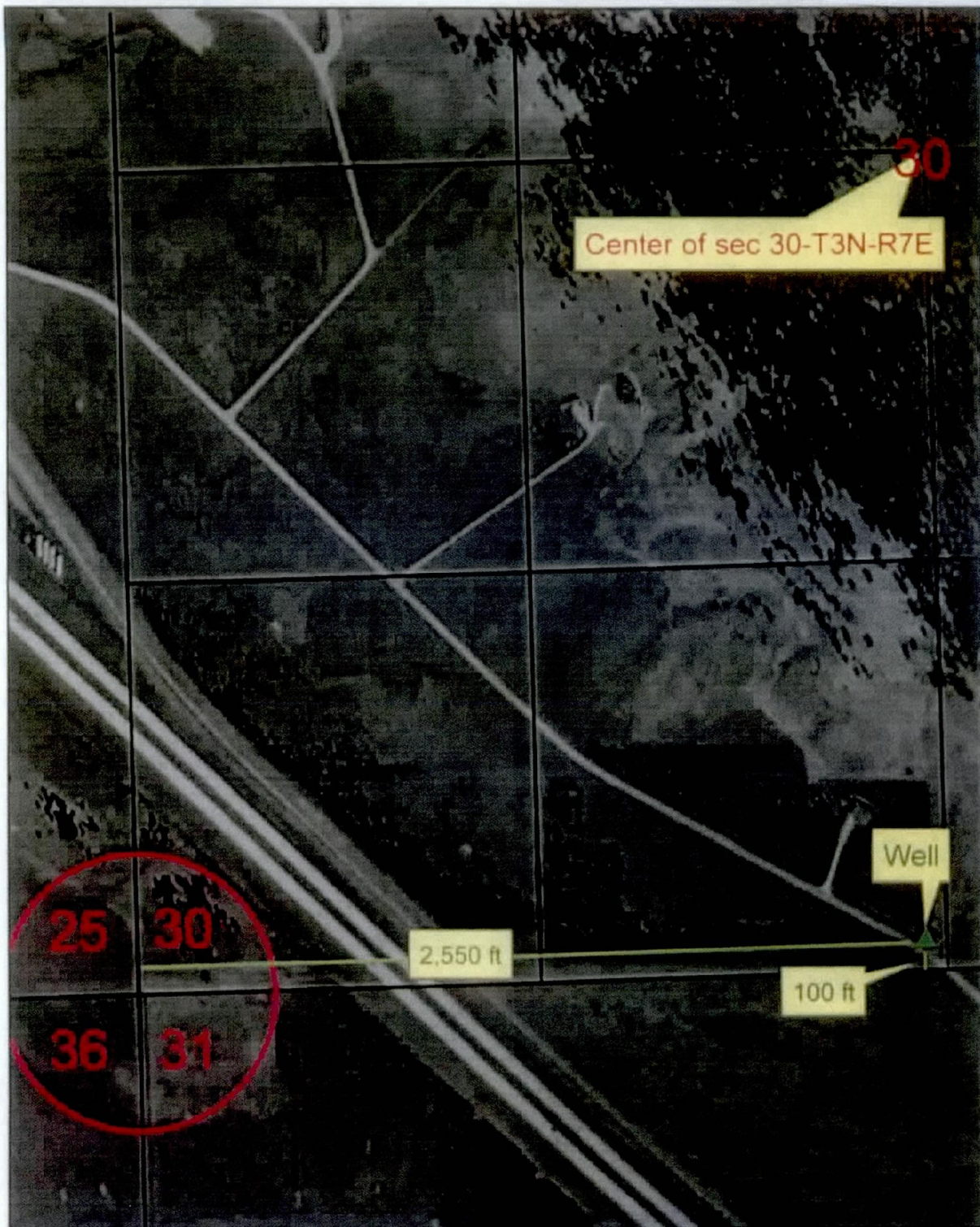
Signature of Well Owner:

Date 7-28-88

Scale: 1 inch equals 489 feet

690

Feet



South Dakota
Department of Environment
& Natural Resources
Water Rights

Completed by:

Ron Duvall
Ron Duvall, Natural Resources Engineer
Water Rights Program

Diversion point(s) located using GeoExplorer II GPS

Date: Sept 25, 2003

Water Right No. 1466-1

WATER PERMIT APPLICATION NO. 1863-1
QUAAL SUBDIVISION DEVELOPMENT CORP
AUGUST 7, 2006

Water Permit Application No. 1863-1 proposes to appropriate 0.038 cubic feet of water per second (cfs) by increasing the diversion rate of a well authorized by Water Right No. 1466-1. Water Right No. 1466-1 appropriates 0.062 cfs from one well completed into the Minnelusa Formation (1,120 feet deep) located in the SE¼ SW¼ Sec. 30, T3N-R7E. This application proposes to increase the water appropriation from the existing well from 0.062 cfs to 0.10 cfs (45 gallons per minute). The water is for use by a suburban housing development.

Water Permit No. 1466-1 was approved for 0.27 cfs (120 gpm) on 9/27/1989. The deadline for the completion of works was 9/27/1994 and the water was to be put to maximum beneficial use by 09/27/1998. Based on a 05/12/2003 inspection a Water License was issued for 0.062 cfs (28 gpm). This application proposes to increase the appropriation from the well to 0.10 cfs (45 gpm).

AQUIFER: MINNELUSA (MNLS)

GEOLOGY AND AQUIFER CHARACTERISTICS:

The Minnelusa Aquifer is an assemblage of alternating beds of sandstone and dolomitic limestone with lesser amounts of red and black shale and chert approximately 500 feet thick in this area (Carter, 1999_a, Carter 1999_b). Because the lithology of the Minnelusa is so variable, the porosity of the formation is also variable and difficult to determine. Well sorted sand lenses have porosity's approaching 25%, but generally the sands have porosity's of 10%. The average porosity of the Minnelusa is estimated to be 10% and the effective porosity is assumed to be 5% (Rahn, 1979). The Minnelusa formation underlies approximately 2,172,800 acres of Meade County and contains an estimated 81,480,000 acre-feet of recoverable water in storage in the county (Allen, 1985). The aquifer is areally extensive around the Black Hills and is hydraulically connected into the counties surrounding Meade County. Ground water movement is probably toward the north and east (Strobel, 2000). There is no aquifer-test data available for the Minnelusa Aquifer at this site; therefore, the aquifer transmissivity and storage coefficient values are unknown. This well site is located approximately 1.25 miles northeast of the Minnelusa outcrop (recharge area). The top of the Minnelusa was reported to be 980 feet below ground surface at this well site and the static water level of this well was reported to be 200 feet below grade in 1988 (Water Rights, 2006a).

WATER AVAILABILITY:

Recharge to the Minnelusa aquifer is primarily from infiltration of precipitation on the outcrop and stream flow losses. Average annual recharge in the Black Hills area from 1931-1998 is estimated to be approximately 112,000 acre-feet per year (Carter and others, 2001a). Withdrawals from wells (domestic and appropriative) completed into the Minnelusa aquifer were estimated to be 8,108 acre-feet annually from 1987-1996 (Carter and others, 2001b).

Comparison of annual recharge estimates and estimated annual well withdrawals show that well withdrawals from the Minnelusa are only a fraction of estimated average annual recharge. Therefore, based on a simple water budget, it is clear that unappropriated water is available for this appropriation.

Observation Well Data:

The Water Rights Program monitors 23 observation wells completed into the Minnelusa aquifer in the Black Hills area. Water Rights' Observation Well PE-84B is located approximately 3.25 miles southeast of this well. The hydrograph for the well is shown in figure 1. Water Rights Observation Well MD-84A is located approximately four miles northwest of this well. The hydrograph for the well is shown in figure 2. The hydrographs for the wells are typical for the Minnelusa Aquifer. That is, the water levels reach their peak in the early summer each year and gradually decline until spring. The majority of the recharge to the system appears to occur between March and July. The data shows the aquifers response to the current relatively dry periods (early 1990's and present) and to the wet late 1990's.

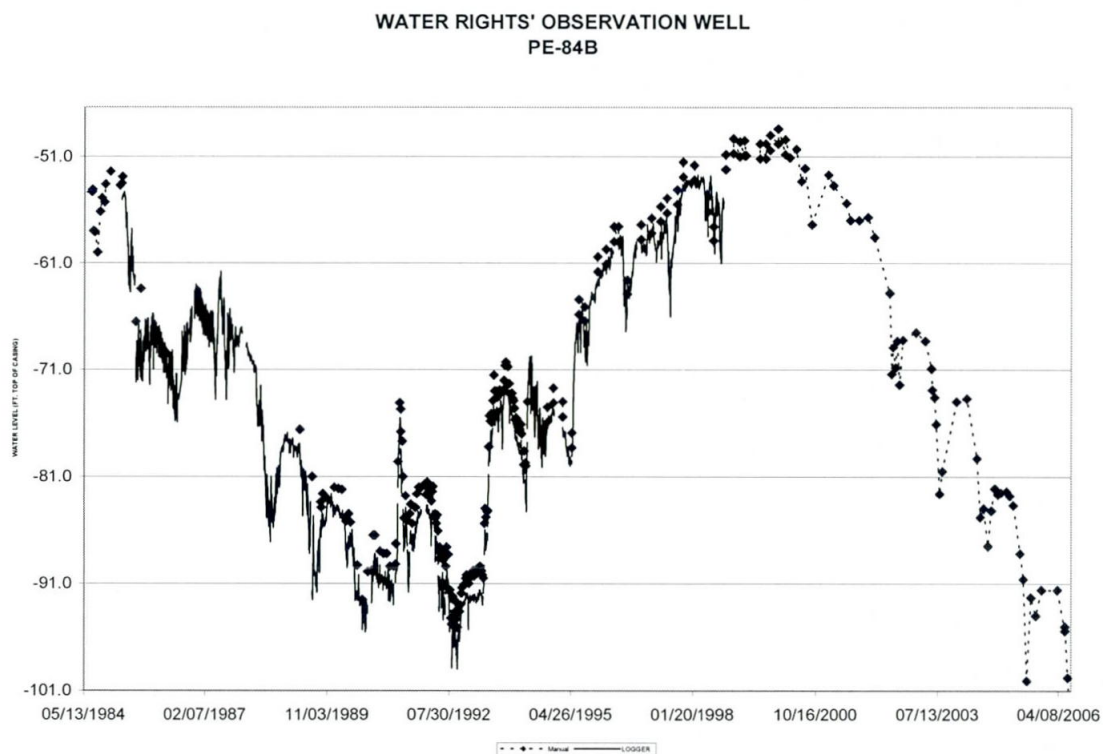


Figure 1. Hydrograph of Water Rights' Observation Well PE-84B located approximately three and one-quarter miles southeast of 1863-1

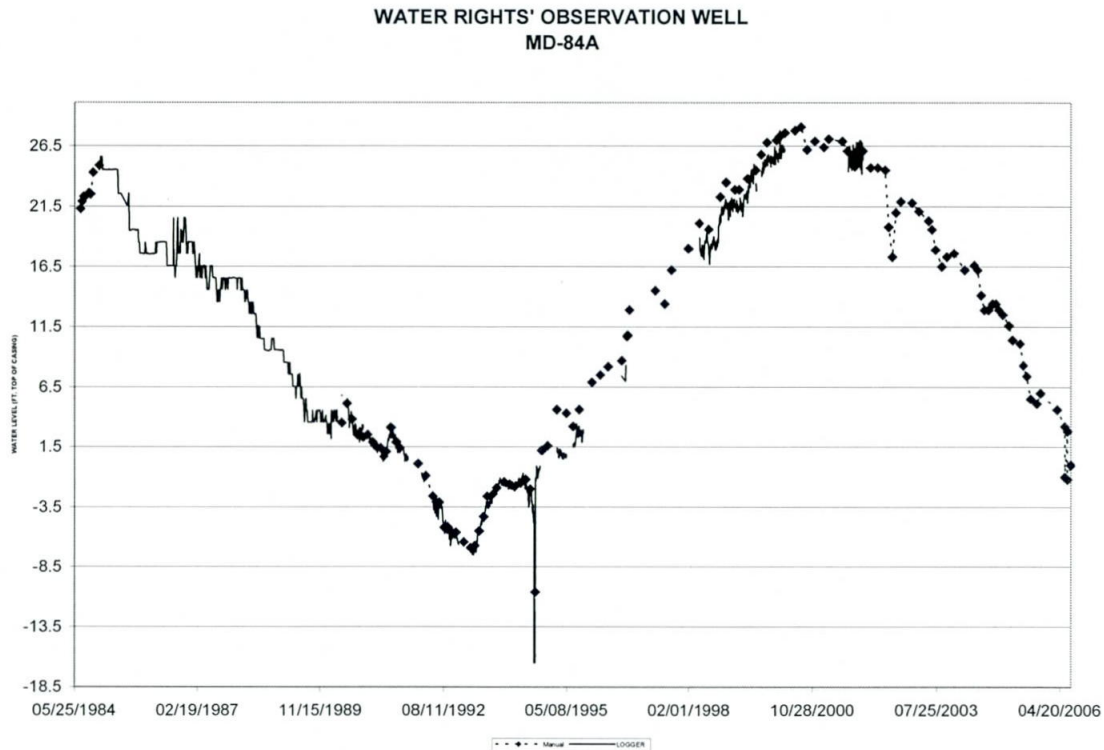


Figure 2. Hydrograph of Water Rights' Observation Well MD-84A located approximately four miles northwest of 1863-1

The observation well data suggests that at the existing level of development, the aquifer is capable of sustaining additional withdrawals.

AFFECTS ON EXISTING RIGHTS:

There are 193 Water Rights/Permits and one future use permit that appropriates water from the Minnelusa aquifer in South Dakota (Water Rights, 2006_c). There are 68 permits/rights appropriating water from the Minnelusa aquifer in Meade County (Water Rights, 2006_c), where the aquifer is used primarily for suburban housing development, commercial, municipal and irrigation use. In addition to appropriative rights, there are a number of domestic wells completed into the Minnelusa aquifer on file with the Water Rights Program (Water Rights, 2006_a).

There are 49 Water Rights/Permits appropriating groundwater within three miles of this well. Wells that are not supplied by the Minnelusa aquifer are not expected to be impacted by this appropriation. The 26 appropriations from the Minnelusa aquifer within three miles are shown in table 1.

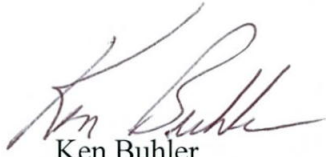
PERMIT NO	NAME	USE	CFS
1170-1	NICHE HOMEOWNERS ASSOC	SHD	0.09
1323-1	WAR BONNET RANCH, LTD	COM	0.05
1334-1	STAGE STOP PLAZA	COM	0.08
1373-1	EASTRIDGE ACRES DEV ASSOC	SHD	0.09
1375-2	PEACEFUL PINES ESTATES	SHD	0.06
1376-2	THOMAS MARTLEY	SHD	0.06
1377-2	PEACEFUL PINES ESTATES	SHD	0.06
1378-2	PEACEFUL PINES COMMUNITY	SHD	0.06
1406-2	RODNEY L VOLLMER	SHD	0.11
1466-1	QUAAL SUBDIVISON DEVELOPMENT CORPORATION	SHD	0.06
1533-1	MEADE SCHOOL DIST 46-1	INS	0.10
1588-2	WONDERLAND WATER ASSN	SHD	0.24
1603-1	RANDY L OLSON	COM	0.10
1620-2	GOLDEN MEADOW WATER ASSN	SHD	0.11
1659-2	SHERIDAN HEIGHTS INC	SHD	0.26
1713-1	BROTHERS III LLC	COM	0.13
1746-1	KASKI HOMES INC	COM	0.10
1801A-2	BLACK HAWK WATER USER DIS	MUN	0.38
1801B-2	BLACK HAWK WATER USER DIS	MUN	0.18
1497-1	MIDLAND HEIGHTS WATER/SER	RWS	0.09
1513-1	PINE HILLS MOBILE PARK	COM	0.03
1703-1	MIKE & DEBIE PALMER	IRR	0.44
1740-1	RENDEZVOUS RANCH	SHD	0.10
1768-1	FIRST WESTERN BANK OF STURGIS	COM	0.06
1802-2	BLACK HAWK WATER USER DIS	MUN	0.22
1876-2	PINE HILLS MOBILE PARK	COM	0.06
1907-2	OUR LADY OF THE BLACK	INS	0.10

Table 1. Minnelusa Appropriations within three miles of 1863-1.

The nearest Minnelusa appropriation to this well is Water Right No. 1713-1, which is located approximately one-third of a mile southwest of this proposed well site. Well interference is not expected to be a problem at this distance due to the fairly low diversion rate (45 gpm) proposed by this application.

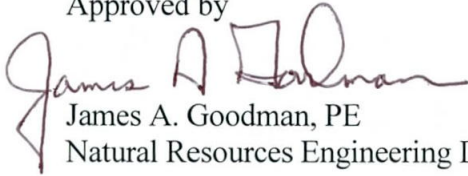
CONCLUSIONS:

1. The Minnelusa aquifer is a viable aquifer in this area, and water is available for this appropriation.
2. The Minnelusa aquifer is under artesian conditions and drawdown due to this diversion can be expected. This drawdown is not expected to adversely affect adequate wells in the area.



Ken Buhler
Natural Resources Engineering Specialist

Approved by



James A. Goodman, PE
Natural Resources Engineering Director

REFERENCES:

- Allen, J.C., Iles, D.L., and Petres, A.K., 1985, Analysis of Groundwater and Streamflow Data, Western Dakotas Region of South Dakota, Tasks 3A.B.C. AND 4A.B: Groundwater Resources Inventory: US Army Corps of Engineers Contract DAWC 45-82-C-0151, SD DENR- Geological Survey, Vermillion SD
- Carter, J.M., and Redden J.A., 1999a, Altitude of the Top of the Minnelusa Formation in the Black Hills Area, South Dakota: U.S. Geological Survey Hydrologic Investigations Atlas HA-744-C, 2 sheets, scale 1:100,000
- Carter, J.M., and Redden J.A., 1999b, Altitude of the Top of the Madison Limestone in the Black Hills Area, South Dakota: U.S. Geological Survey: Hydrologic Investigations Atlas HA-744-D, 2 sheets, scale 1:100,000
- Carter, J.M., Driscoll, D.G., and Hamade, G.R., 2001a, Estimated Recharge to the Madison and Minnelusa Aquifers in the Black Hills Area, South Dakota and Wyoming, Water Years, 1931-98: U.S. Geological Survey Water Resources Investigations Report 00-4278, 66 p.
- Carter, J.M., Driscoll, D.G., Hamade, G.R., and Jarrell, G.J., 2001b, Hydrologic Budgets for the Madison and Minnelusa Aquifers, Black Hills of South Dakota and Wyoming, Water Years 1987-96: U.S. Geological Survey Water-Resources Investigations Report 01-4119, 53 p.
- Rahn, P.H., 1979, Ground Water Resources of Western South Dakota, US Army Corps of Engineers, Draft Report-Final
- Strobel, M.L., Jarrell, G.J., Sawyer, J.F., Schleicher, J.R., and Fahrenbach, M.D., 1999, Distribution of Hydrogeologic Units in the Black Hills Area, South Dakota: U.S.

Geological Survey Hydrologic Investigations Atlas HA-744-C, 3 sheets, scale 1:100,000

Water Rights Program, 2006a, "Domestic Well Log Files": DENR-Water Rights Program,

Water Rights Program, 2006b, "Observation Well Files": DENR-Water Rights Program

Water Rights Program, 2006c, "Water Permit Files": DENR-Water Rights Program,



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
www.state.sd.us/denr

**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 1863-1, Quaal Subdivision Development Corp.**

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. 1863-1, Quaal Subdivision Development Corp., c/o Ron Barber, 11500 Crooked Canyon Road, Black Hawk SD 57718.

The Chief Engineer is recommending APPROVAL of Application No. 1863-1 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.

Garland Erbele, Chief Engineer
August 15, 2006



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
www.state.sd.us/denr

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

August 16, 2006

Quaal Subdivision Development Corp
% Ron Barber
11500 Crooked Canyon Rd
Black Hawk SD 57718

Dear Mr. Barber:

Water Permit Application No. 1863-1 for suburban housing development use has been examined and found to comply with the South Dakota Water Laws and applicable rules. A notice has been sent to the Publisher of the Meade Co Times & Tribune printed at Sturgis, SD (Ph # 605-347-2503). You will need to contact the newspaper and authorize publication of this notice. 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 and to arrange for payment. Early contact with the paper can eliminate delays. Upon receiving authorization, the publisher has been instructed to publish your notice once each week for two consecutive weeks. The newspaper has also 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
Natural Resources Engineer
(605) 773-3352

enclosures

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**

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
www.state.sd.us/denr

August 16, 2006

Meade Co. Times Tribune
PO Box 69
Sturgis SD 57785-0129

ATTENTION: Legal Public Notice

Enclosed is a Notice on Application No. 1863-1 to Appropriate Water to be published twice. Please publish the first notice on August 23, 2006 with the second publication 7 days later. The text of the notice can be e-mailed to your paper by contacting Karen Schlaak at (605) 773-3352.

Please BILL the APPLICANT for the cost of publication. The APPLICANT is Quaal Subdivision Development Corp., % Ron Barber, 11500 Crooked Canyon Rd., Black Hawk SD (Ph # 605-394-4162).

Please send the Water Rights Program the first publication immediately. The publication is checked for accuracy so any corrections can be made in the second publication. You may use the form below or fax a copy of the first publication. Any fax should be sent to the attention of Karen Schlaak at (605) 773-4068. Publication errors can invalidate the public notice.

After the second publication, **please send us an affidavit or use the enclosed Proof of Publication form.** The applicant pays the cost of publication, but the Water Rights Program records require an affidavit or Proof of Publication. Delays in receiving the affidavit can be costly to the applicant.

Sincerely,

Eric Gronlund
Natural Resources Engineer
605 773-3352

enclosures

-----CUT HERE-----

No. 1863-1

TO: Eric Gronlund
Water Rights Program
Joe Foss Building
Pierre SD 57501-3181

Date _____

We are in receipt of your letter of August 16, 2006 enclosing Notice to Appropriate Water by Application No. 1863-1 which was first published in our issue of _____. **ENCLOSED IS A COPY OF THIS FIRST PUBLICATION.**

Name

Newspaper

Water Rights Program - File Documentation

NAME: Quaal Subdivision Development

ADDRESS: Black Hawk SD

DATE: 8-28-06 **COUNTY:** ME **TELEPHONE:** 605 394-4162

RE: Publication Notice

COMMENTS:

On August 25th we received the first clipping of the notice for the above listed application. When I looked at the notice it was for Application No. 2563-2, Hill City School District. It appears the wrong notice was emailed to the Meade-County Times Tribune.

I called Pam Buhler with the paper, told her not to publish that notice this week and sent us the bill for the August 23rd publication.

I then emailed her the correct notice for Quaal Subdivision Development and told her to publish on August 30th and September 6th.

I called Ron Barber with Quaal Subdivision Development and told him what was going on and that his notice would be published the next 2 weeks.



Karen Schlaak
Environmental Scientist



AFFIDAVIT OF PUBLICATION

STATE OF SOUTH DAKOTA COUNTY OF MEADE

Pam Buhler, being duly sworn, says: That the Meade County Times Tribune/Black Hills Press is, and during all times hereinafter mentioned, is a legal newspaper as defined in SDDCL 17-2-2, as amended, published in Sturgis, Meade County, South Dakota, by Lee Enterprises; that affidavit is and during all of said times, was employed as an Accounting Clerk by the publisher of such newspaper and has personal knowledge of the facts stated in the affidavit, that the notice, order or advertisement, a printed copy which is attached, was published in said newspaper for successive issues, bearing the following dates:

<u>Aug 23</u>	200 <u>6</u>	_____	200 _____
<u>Aug 30</u>	200 <u>6</u>	_____	200 _____
_____	200 _____	_____	200 _____
_____	200 _____	_____	200 _____
_____	200 _____	_____	200 _____

that the full amount of the fee charged for publishing the same, to-wit, the sum of \$ 42.37, insures solely to the benefit of the publisher of said newspaper: that no agreement or understanding for the division of the fee has been made with any person, and that no part of the fee has been agreed to be paid to any other person.

Frank Buhler

Subscribed and sworn to before me this

_____ day of _____, 200_____
Pamela Buhler
Notary Public, South Dakota

RECEIVED
AUG 25 2006
WATER RIGHTS
PROGRAM

Account No. 26074818
Total Amount 42.37

NOTICE OF APPLICATION NO.

2563-2 to Appropriate Water

Notice is given that Hill City School District 51-2, PO Box 659, Hill City SD 57745 has filed an application for a water permit to appropriate 0.09 cubic feet of water per second from one well to be completed into the Precambrian aged Crystalline Rock (approximately 100 feet deep) located in the SE 1/4 NW 1/4 Section 30 to irrigate 6 acres at the football field complex located in the E 1/2 NW 1/4 Section 30; all in T1S-R5E.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 2563-2 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. 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 October 31, 2005.

The petition may be informal, but must include a statement describing the petitioner's interest in the application, the petitioner's reasons for

Aug. 23, 2006 • Page 13

our Right To Know

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. Steven M. Pirner, Secretary, Department of Environment and Natural Resources.

Meade County Times-Tribune
Publ. Aug. 23, 30, 2006



AFFIDAVIT PUBLICATION

STATE OF SOUTH DAKOTA COUNTY OF MEADE

Pam Buhler, being duly sworn, says: That the Meade County Times Tribune/Black Hills Press is, and during all times hereinafter mentioned, is a legal newspaper as defined in SDDCL 17-2-2, as amended, published in Sturgis, Meade County, South Dakota, by Lee Enterprises; that affidavit is and during all of said times, was employed as an Accounting Clerk by the publisher of such newspaper and has personal knowledge of the facts stated in the affidavit, that the notice, order or advertisement, a printed copy which is attached, was published in said newspaper for successive issues, bearing the following dates:

Aug 23	200	b	_____	200	_____
Aug 30	200	b	_____	200	_____
wrong ad sent	200		_____	200	_____
1 day payment	200		_____	200	_____
for union 8/23	200		_____	200	_____

that the full amount of the fee charged for publishing the same, to-wit, the sum of \$ 21.19, insures solely to the benefit of the publisher of said newspaper: that no agreement or understanding for the division of the fee has been made with any person, and that no part of the fee has been agreed to be paid to any other person.

Frank Buhler

Subscribed and sworn to before me this

23 day of Aug, 2006
Pamela Buhler
Notary Public, South Dakota

RECEIVED
SEP - 7 2006
WATER RIGHTS
PROGRAM

Account No. 200 74818
Total Amount 21.19

BHWG

Invoice

Meade County Times
PO Box 69

Sturgis,SD
57785

#600009674
Quaal Subdivision Development
Ron Barber
11500 Crooked Canyon Rd.
Black Hawk,SD 57718

Dates Published	DESCRIPTION	CHARGE
08/23/06	Notice of Application Appropriate Water Hill City This ad was sent to us wrong	21.19
TOTAL		21.19

Remit to: Meade Co Times PO Box 69 Sturgis,SD 57785

RECEIVED
SEP -7 2006
WATER RIGHTS
PROGRAM

PAYMENT REQUEST FORM

PAYEE: Meade Co Times
PO Box 69
Sturgis SD 57785

FROM: Water Rights Program
523 E. Capitol
Pierre, SD 57501-3181

DESCRIPTION OF SERVICE, PRODUCE OR TRANSFER

Payment of Notice of Application to Appropriate Water Application
#2563-2. Wrong ad was emailed to the paper.

AMOUNT: 21.19

FUNDING SOURCE:

GENERAL: X

FEDERAL:

COMMENTS:

AUTHORIZATION:

Barbara Cahl 9/11/04

I declare and affirm under the penalties of perjury that this claim is in all things, true and correct. I further agree to comply with the provisions of the Civil Rights Act of 1964 and regulations issued thereunder relating to nondiscrimination in federal assisted programs.

Instruction to Newspaper - Publish first Notice on August 23, 2006 with the second publication 7 days later. The applicant is responsible for payment.

NOTICE OF APPLICATION NO. 1863-1 to Appropriate Water

Notice is given that Quaal Subdivision Development Corp, c/o Ron Barber, 11500 Crooked Canyon Rd, Black Hawk SD 57718 has filed an application to appropriate 0.038 cubic feet of water per second (cfs) by increasing the diversion rate authorized by Water Right No. 1466-1. Water Right No. 1466-1 appropriates 0.062 cfs from one well completed into the Minnelusa Formation (1120 feet deep) located in the SE ¼ SW ¼ Section 30-T3N-R7E. This application proposes to increase the water appropriation from the existing well from 0.062 cfs to 0.10 cfs for a total diversion of 45 gallons per minute. The water is for a suburban housing development.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 1863-1 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 September 11, 2006.

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. Steven M. Pirner, Secretary, Department of Environment and Natural Resources.



AFFIDAVIT OF PUBLICATION

STATE OF SOUTH DAKOTA
COUNTY OF MEADE

Pam Buhler, being duly sworn, says: That the Meade County during all times hereinafter mentioned, is a legal newspaper published in Sturgis, Meade County, South Dakota, by Lee Enterprises. During said times, was employed as an Accounting Clerk by the publisher. In the knowledge of the facts stated in the affidavit, that the notice, copy of which is attached, was published in said newspaper for successive issues:

<u>Aug 30</u>	200	<u>b</u>
<u>Sept 6</u>	200	<u>b</u>
_____	200	_____
_____	200	_____
_____	200	_____

that the full amount of the fee charged for publishing the same was paid solely to the benefit of the publisher of said newspaper: That no division of the fee has been made with any person, and that no fee was paid to any other person.

Subscribed and sworn to before me this

6 day of Sept
Pamela Buhler
Notary Public, South Dakota

RECEIVED
SEP 11 2006
WATER RIGHTS
PROGRAM

NOTICE OF APPLICATION NO. 1863-1 to Appropriate Water

Notice is given that Quaal Subdivision Development Corp, c/o Ron Barber, 11500 Crooked Canyon Rd, Black Hawk SD 57718 has filed an application to appropriate 0.038 cubic feet of water per second (cfs) by increasing the diversion rate authorized by Water Right No. 1466-1. Water Right No. 1466-1 appropriates 0.062 cfs from one well completed into the Minnelusa Formation (1120 feet deep) located in the SE 1/4 SW 1/4 Section 30-T3N-R7E. This application proposes to increase the water appropriation from the existing well from 0.062 cfs to 0.10 cfs for a total diversion of 45 gallons per minute. The water is for a suburban housing development.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 1863-1 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 September 18, 2006.

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. Steven M. Pirner, Secretary, Department of Environment and Natural Resources.

Meade County Times-Tribune
Publ. Aug. 30, Sept. 6, 2006

press is, and as amended, during all of its personal copy which es:

37 insures ding for the ed to be paid

Ac To
Steven M. Pirner, Secretary, Department of Environment and Natural Resources.

18 8/30 Rem
788 9/6 Rem
7



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
www.state.sd.us/denr

NOV 01 2008

Quaal Subdivision Development Corp
% Ron Barber
11500 Crooked Canyon Rd
Black Hawk SD 57718

Dear Mr. Barber:

Enclosed is Water Permit No. 1863-1 authorizing construction of your water diversion system and beneficial use of the water, not exceeding the limits as specified in the Water Permit.

Form 10, *Notice of Completion of Works and Application of Water to Beneficial Use*, is enclosed. Please return this completed form after you have finished the system and have put the water to beneficial use. An investigation can then be scheduled so the water license may be issued, thus completing the acquisition of a water right.

An informational sheet *Common Water Right Questions* is also enclosed. This sheet is intended to answer some of the questions associated with obtaining and keeping a water right.

Sincerely,

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

enclosures

Report of Examination of Works and/or Application of Water to Beneficial Use For Permit No. 1863-1

I have this day, May 15, 2017 made a thorough examination of the water use system constructed by **Quaal Subdivision Development Corporation, 11500 Crooked Canyon Rd, Black Hawk, SD 57718** of Permit No. **1863-1**, bearing the priority of **6/7/2006** authorizing the diversion of **0.038** cu. ft. per second additional water from one well for suburban housing purposes, in Meade County.

Inspection contact & relationship to permit holder, if applicable: **Ron Barber, Water Operator**
11500 Crooked Canyon Rd, Black Hawk
605-787-5430

A. Works used to divert the water:

Well Information:

- 1) Well Drilling Firm: Taylor Drilling (1988)
- 2) No. of Wells 1
- 3) Depth(s) 1,120 feet
- 4) Well log is available Yes

Casing:

- 1) Diameter 7"
- 2) Length 1040 feet
- 3) Type steel

Screen:

- 1) Type open hole
- 2) Length 80 feet
- 3) Static water level 200 feet

Pump:

- 1) Make Grundfos
- 2) Model 45S100-22
- 3) Size 6"
- 4) Capacity 45 GPM
- 5) Horsepower rating 10 hp

B. Works used to transport water to place of use:

- 1) Type PVC
- 2) Size 3-4 inches
- 3) Length -- feet

C. Works used to apply water to beneficial use:

The well delivers water to two 20,000 gallon underground storage tanks which then gravity feed to 33 homes in the subdivision.

D. Compliance with Permit Requirements:

- 1) Permit qualifications being abided by: Yes
- 2) Exceptions to compliance are: none

E. Condition and Location:

1. The system is in good condition with the point of diversion located as follows:
100' N and 2,550' E of the SW corner Section 30 T3N R7E (44.184196, -103.322385)
2. The works are capable of diverting and conveying to the place of use .10 cu. ft. per second (45 gpm) of water which is to be used for **suburban housing** use and the license should be issued for .10 cfs.
3. All structures, wells and lands on map: **No, only the well location.**

F. Comments or other permit(s) associated with the project: Water Permit No. 1863-1 appropriated .038 cfs additional water, increasing the diversion rate authorized by Water Right No. 1466-1 of 0.062 cfs for a total authorized diversion rate of 0.10 cfs (45 gpm).

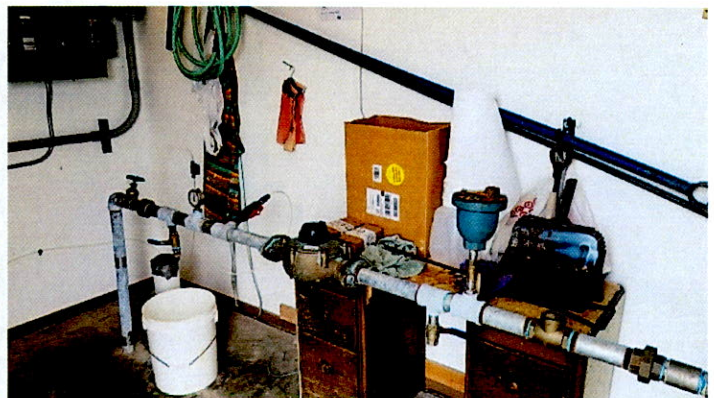


Steven Quissell
Water Rights Inspector
DENR Water Rights Program

Date report completed May 16, 2017

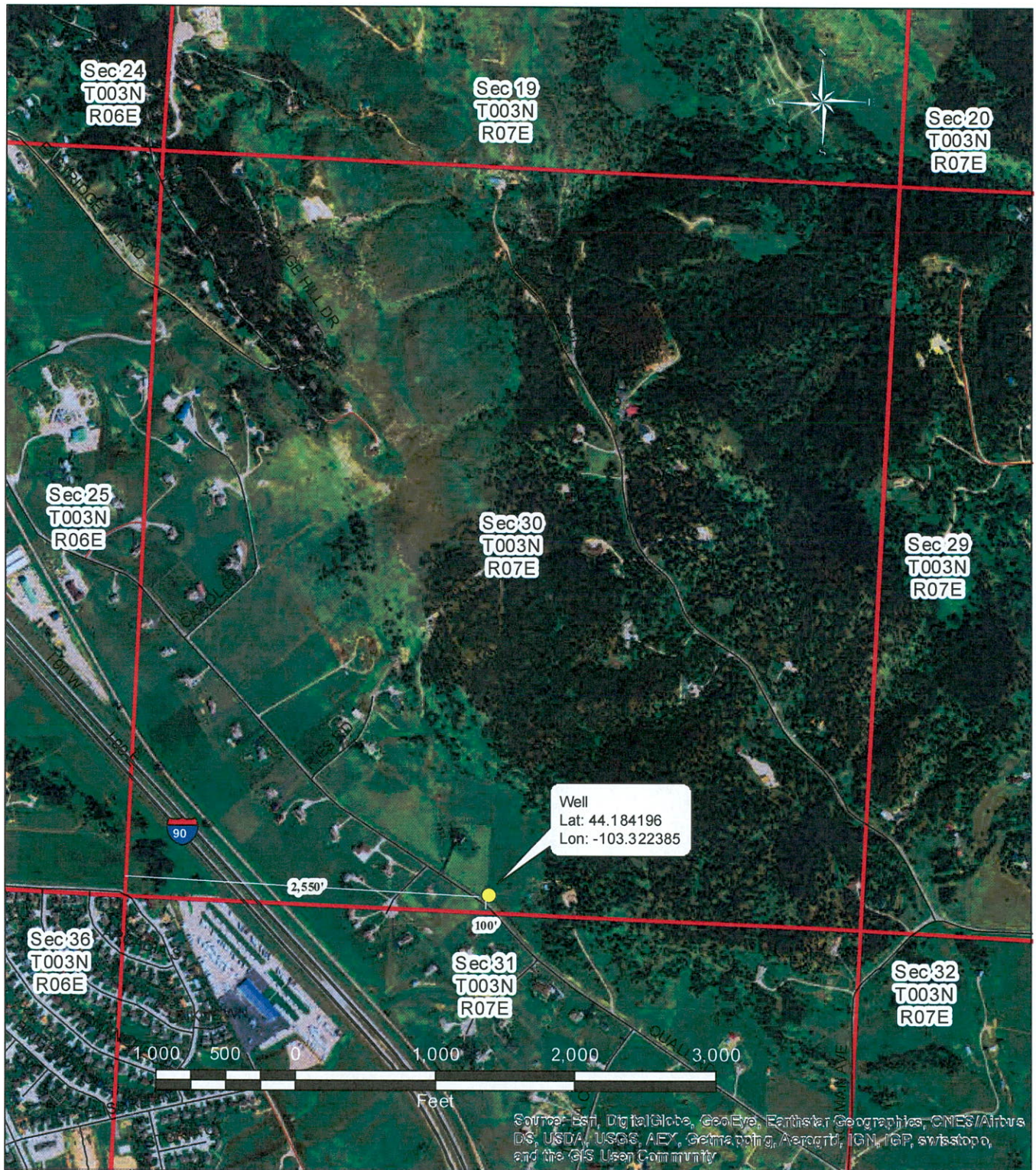


Well and pump house



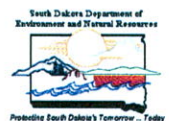
Pump house appurtenances

Water Right #1863-1
Quaal Subdivision
5/15/17



Steven Quissell

Steven Quissell
Water Rights Inspector
DENR Water Rights Program



1863-1



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

JUN 20 2017

1466-1
1863-1

Ron Barber
Quaal Subdivision Development Corp
11500 Crooked Canyon Rd
Black Hawk SD 57718

Dear Mr. Barber:

Enclosed is Water License No. 1863-1. This is the final water right document completing your process of obtaining a Water Right. Included with your 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 well authorized by Water Right No. 1863-1, 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,

Jeanne Goodman, Chief Engineer
Water Rights Program
(605) 773-3352

enclosures

Note: Upon licensing, the applicable portions of Water Right No. 1466-1 were incorporated into Water License No. 1863-1.

STATE OF SOUTH DAKOTA

WATER LICENSE NO. 1863-1

(1) Quaal Subdivision Development Corporation, 11500 Crooked Canyon Rd., Black Hawk SD 57718 made Application No. 1863-1, June 7, 2006 for a water permit to divert 0.038 cubic feet of water per second from ground water, one existing well (Minnelusa Formation), Meade County, South Dakota for suburban housing development purposes. Permit No. 1863-1, with a priority date of June 7, 2006 was approved September 18, 2006 and issued to the applicant for diversion of water with construction of the described water supply system to be completed on or before September 18, 2011 and for the application to beneficial use of said water on or before September 18, 2015.

Permit No. 1863-1 authorized increasing the diversion rate from an existing well authorized under Water Right No. 1466-1 from 0.062 cfs to 0.10 cfs for a total diversion of 45 gallons per minute.

The applicable portions of Water Right No. 1466-1 are incorporated into this water license. A priority date of June 21, 1989, as established under No. 1466-1 is retained for 0.062 cfs. A priority date of June 7, 2006, as established under No. 1863-1 is retained for the remaining 0.038 cfs.

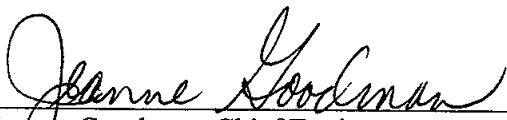
(2) It is certified that the permit holder has complied with the provisions of South Dakota State Law relating to completion of the construction of the water supply system and is entitled to divert 0.10 cubic feet of water per second for beneficial use. The location of the diversion point is 100'N and 2,550'E of the SW corner of Section 30, T3N, R7E (SE ¼ SW ¼).

(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 Quaal Subdivision Development Corporation, 11500 Crooked Canyon Rd., Black Hawk SD 57718 the holder and/or owner of Incorporated Water Right No. 1863-1 is issued a license to appropriate water, the right to use 0.10 cubic feet of water per second from ground water, one well (Minnelusa Formation) with priority dates of June 21, 1989 (0.062 cfs) and June 7, 2006 (0.038 cfs) from the location specified in (2) of this license for suburban housing development purposes.

This license is subject to South Dakota Water Law, any limitations or conditions listed in Incorporated Water Right No. 1863-1 and subject to 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.



Jeanne Goodman, Chief Engineer

Water Rights Program

Department of Environment and Natural Resources

JUN 20 2017

date

