

WATER PERMIT NO. 2736-2

Name of Applicant: Mt. Rushmore National Memorial

Address: 1300 Hwy 244, Bldg 31, Suite 1, Keystone SD 57751 Phone: 605 574-3112

Amount of Water Claimed: 0.022 add'l cfs Total Acres: NA

Source of Water Supply: groundwater (1 well)

Water to be used for: commercial County: Pennington

Type of Waste Disposal System:

Location:

PRIORITY Date Received: 1-2-15 Application/License Fee: \$100

Corrected Application Received: Period of Annual Use: Jan 1- Dec 31

Remarks: Increase the diversion rate authorized by No. 2588-2 and an additional well

Diversion Point: SE 1/4 SW 1/4 Sec 7-T2S-R6E

Land to be Irrigated: NA

Depth of Well: 500 feet deep

Well Driller:

Remarks:

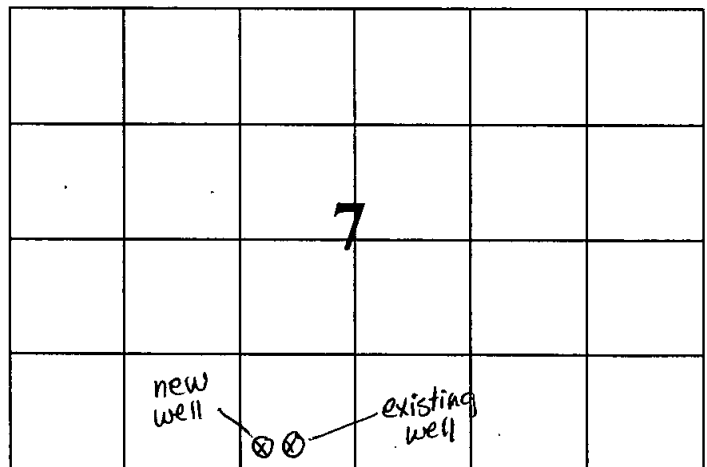
Type of Map: topo

Prepared by:

Reviewed and the Number Assigned on: 1-6-15

By: **Karen Schlaak**

Notice of Hearing - date to intervene: _____



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

Mail to: PMB 2020 DENR - Water Rights 523 E Capitol Ave Pierre, SD 57501-3182 ph. (605) 773-3352	No. <u>2736-2</u> (office use only) Hydrologic Unit <u>10120109</u>
	Basin <u>upper Cheyenne</u>
	Newspaper <u>Rapid City Journal PO Box 450</u>
	<u>57701-605-394-8300</u>

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JAN 02 2015
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: (check one)

- ☐ New ☐ Vested Right (Use predates Mar 2, 1955) ☐ Future Use Reservation
☐ Place to Beneficial Use Water Reserved by Future Use Permit No. _____
☒ Amendment/Correction to Permit No. 2588-2

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

The application is a request for an additional appropriation of 10 gpm which is the incremental difference between the 45 gpm currently authorized and the well capability of 55 gpm.

1. Name to Appear on Water Permit Mt. Rushmore National Memorial

(check one) ☒ Owner ☐ Tenant/lessee ☐ Owner's Legal Agent

(name and complete address if different than above name)

Mailing Address 13000 Hwy 244 Bldg 31 Suite 1

Keystone

SD 57751

(Address)

(City)

(State)

(Zip Code)

Office 605-574-3112

Home Phone 605-574-3109

Cell

Email Rodney Hart@nps.gov

2. Amount of water claimed 0.022^{acres} *CFS or

55

**GPM

***AF

(*Cubic Feet per Second)

(**Gallons per Minute)

(***Acre Feet - storage capacity of dam/dugout or annual use if applicable)

3. Source of water supply Well

4. Location of point of diversion SE 1/4 SW 1/4 Section 7-T2S-R6E

(example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W)

County Pennington

If not a public water supply (e.g. municipal), will water be used outside of the area described above? ☐ Yes ☐ No

If "Yes," where will water be used?

(example - NW1/4 section 12-T104N-R53W)

5. County or counties where water will be used Pennington

6. Annual period during which water is to be used Continuous Jan 1 - Dec 31

7. 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)

Would like to increase gpm from 45 to 55 gpm.

I, Cheryl Schreier Cheryl A. Schreier, the applicant, certify that I have read this application, have examined the attached map, and that the matters stated are true.

**SOUTH DAKOTA
WATER PERMIT NO. 2736-2**

Date of first receipt of application January 2, 2015.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 2736-2 to Mt. Rushmore National Memorial, c/o Cheryl Schreier, 13000 Hwy 244, Bldg 31, Suite 1, Keystone SD 57751 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. 2736-2 appropriates an additional 0.022 cubic feet of water per second [cfs] (10 gallons per minute) and one additional well. Water Permit No. 2588-2 authorizes 0.10 cfs (45 gallons per minute) from one well located in the SE 1/4 SW 1/4 Section 7-T2S-R6E. This permit appropriates an additional 0.022 cfs from one additional well to be completed into the Precambrian aged Crystalline Rock Aquifer (500 feet deep) located in the SE 1/4 SW 1/4 Section 7-T2S-R6E. This permit and Water Permit No. 2588-2 combined will authorize a total diversion rate of 0.122 cfs (55 gallons per minute) from the two wells.
2. The water appropriated shall be used for the purpose of recreational and commercial use 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. 2736-2 is March 16, 2015.
5. The date from which applicant may claim right is January 2, 2015.
6. One-fifth of the construction is to be completed on or before September 16, 2017.
7. All construction is to be completed on or before March 16, 2020.
8. Water is to be put to beneficial use on or before March 16, 2024.
9. Water rights obtained in compliance with the laws of the State of South Dakota may not be unlawfully impaired by this appropriation.

QUALIFICATIONS

1. The wells 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.
2. Mt. Rushmore National Memorial shall report to the Chief Engineer annually the amount of water withdrawn from the well completed into the Precambrian Aged Crystalline Rock.

WATER MANAGEMENT BOARD

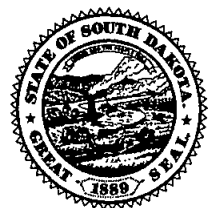
By: *Jeanne Goodman*
Jeanne Goodman, Chief Engineer

Water Rights Program

Department of Environment and Natural Resources

APR 13 2015

date



Supplemental Information

(type or print)

1. Well Information (check one or both as applicable) ☐ Drilling new well(s) ☒ Using existing well(s)

- a) If new wells, how many ____ Have test holes been drilled ☐ Yes ☐ No Drilled by _____
(if yes, please provide copies of logs)
- b) If existing wells, how many 2 Provide copy of log(s), if available. Drilled by Ham Drilling & Alexander Drilling
- c) Well Depth 200/500 Depth to Top of Water Bearing Material N/A Depth to Water from Surface 6ft/25ft
- d) Distance to nearest existing domestic well:

On applicant's property 400 ft On property owned by others _____

2. Wastewater Disposal System Information

- a) Type of System (i.e. septic tank, drain field) Activated Sludge/ Tertiary Treatment
- b) System Capacity (gallons) 70,000.00 Year Constructed 2000
- c) Connected to the City of _____ Sanitary System

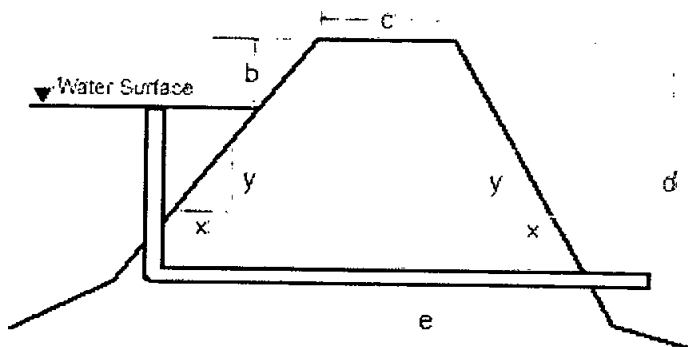
3. Dugout Information

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

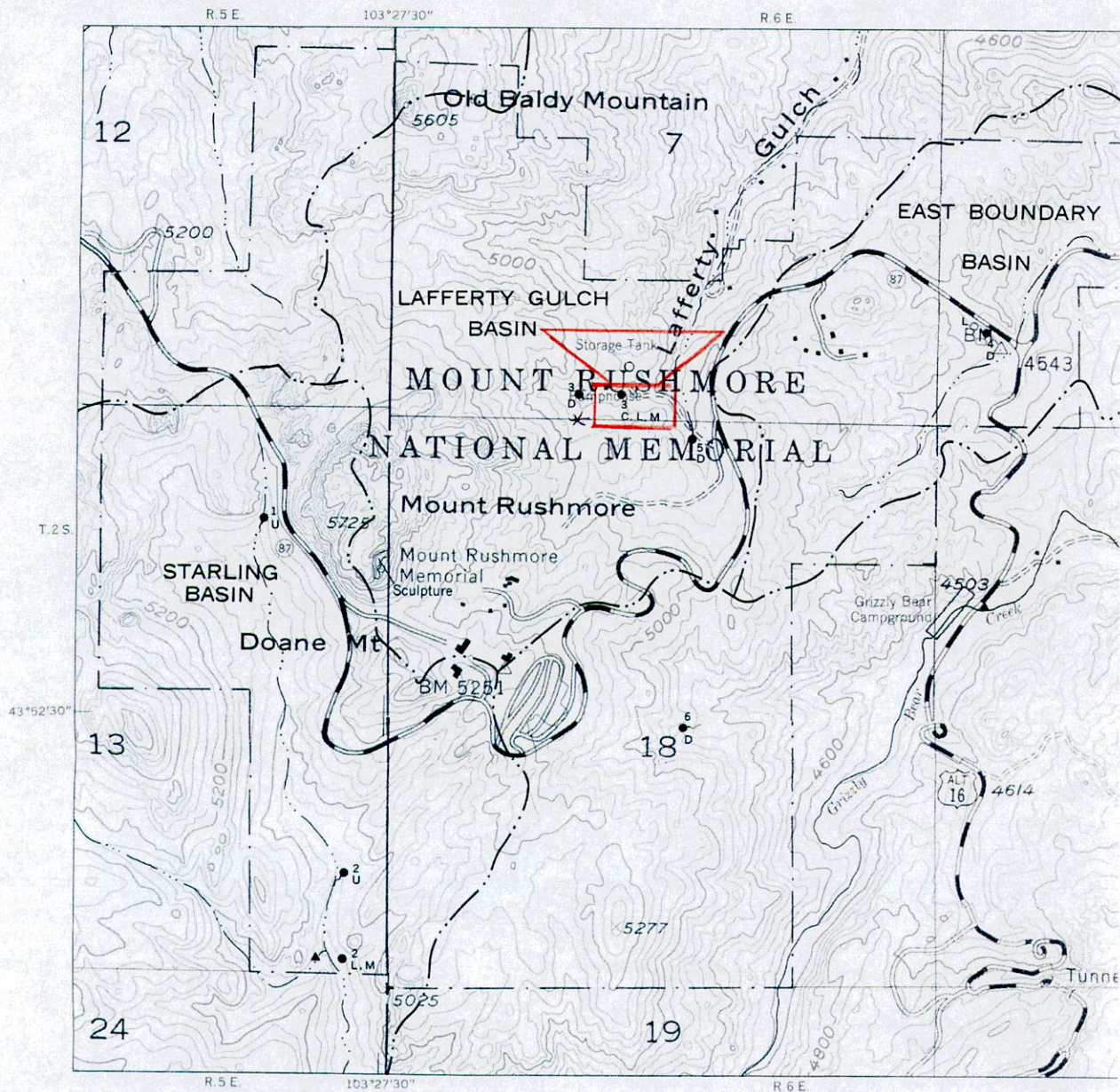
4. Water Storage Dams

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:



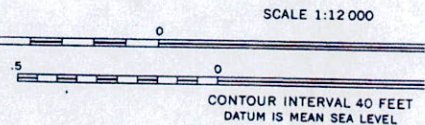
- b) Freeboard _____
- c) Crest Width _____
Crest Length _____
- d) Height _____
- e) Primary Outlet Capacity _____
If pipe, diameter _____
- f) Secondary Spillway Capacity _____
Spillway Width _____
- g) X & Y Slope (e.g. 3 to 1 is a typical slope)
Upstream _____
Downstream _____
- h) Surface Area of Impoundment _____
- i) Storage _____ Acre Feet
- j) Drainage Area Above Dam _____ Acres



Base U.S. Geological Survey map of Mount Rushmore and Iron Mountain, 1:24,000, 1954
Photorevision as of 1971

A. LOCATIONS OF GEOHYDROLOGIC DATA COLLECTION SITES

- * ● ³ C, L, M - RUSHMORE WELL
- 3 = WELL NUMBER
- C = CHEMICAL ANALYSIS AVAILABLE
- M = WATER LEVEL MEASUREMENTS AVAILABLE
- L = WELL LOG AVAILABLE
- ³ D - RUSHMORE SPRING



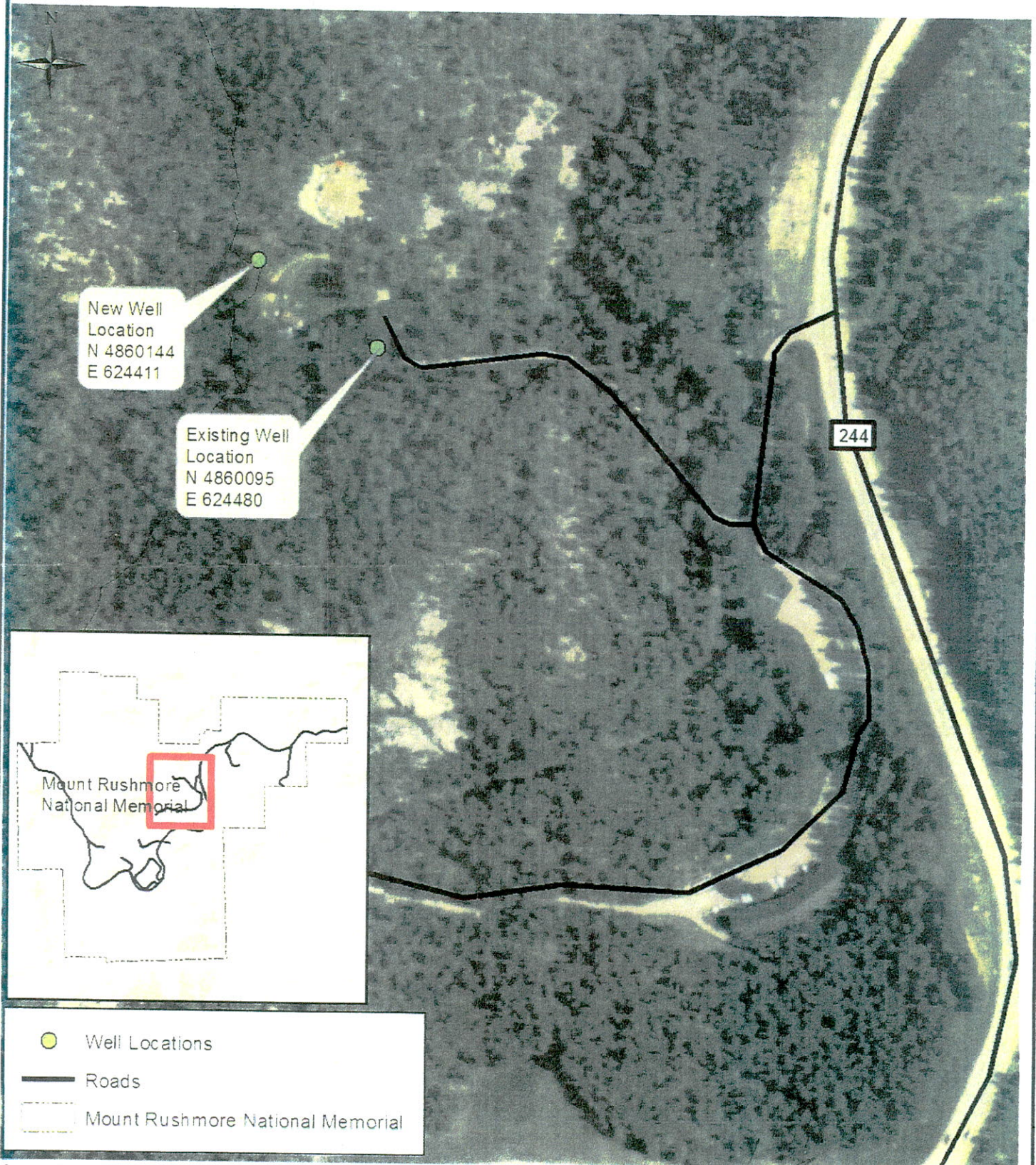
** - WELL #3
GPS LAT. - 43.88351
GPS LON. - 103.45058

Map notations prepared by:
Blaine Foss
Utilities Supervisor
Mount Rushmore National Memorial

GEOHYDROLOGIC MAP



New Well Location

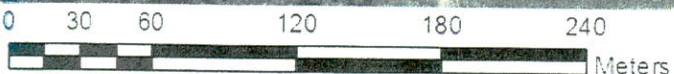


New Well
Location
N 4860144
E 624411

Existing Well
Location
N 4860095
E 624480



- Well Locations
- Roads
- Mount Rushmore National Memorial



Map Coordinate System: UTM Zone 18 North
Map Datum: North American Datum 1983
File: \\workspace\maintenance\GIS\NewWell.mxd

Signature:

Kevin L. Kovacs

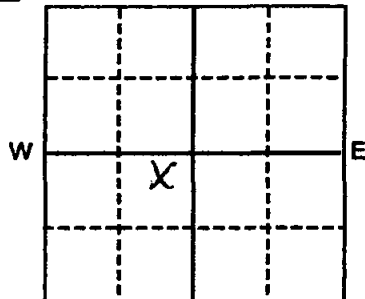
Produced by kkovacs on 3/23/2011

SOUTH DAKOTA WATER WELL COMPLETION REPORT

2588-2

Location NE 1/4 SW 1/4 Sec 7 Twp 25 Rg 6ECounty Pennington

North

Please mark well
location with an "X"

Well Completion Date

June 16, 2010

1 Mile

Distance to nearest potential pollution source (septic tank, abandoned well, feed lot, etc.)?
1,000.0 ft. from Septic (Identify source)

PROPOSED USE:

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

METHOD OF DRILLING:

Rotary Downhole Hammer

CASING DATA:

☒ Steel ☐ Plastic ☐ Other
 If other describe 40' of 8" steel sch. 40

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
LB/FT	IN	0.0 FT	38.0 FT	12.00 IN
LB/FT	IN	38.0 FT	500.0 FT	8.00 IN
LB/FT	IN	FT	FT	IN

GROUTING DATA:

Grout Type	No. of Sacks	Grout Weight	From	To
Portland II	15	Lb/gal	38.0 Ft	0.0 Ft
		Lb/gal	Ft	Ft

Describe grouting procedure
through 1" trim pipe

SCREEN:

☒ Perforated pipe ☐ Manufactured
 Diameter 6.00 Inches Length 460.0 Feet
Material PVCSlot Size _____ Set From 500.0 Feet to 40.0 FeetOther information 460' liner - 240' of perf pipe staggered from bottom

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? w/chlorine solution
☐ No, Why Not?
 Lab to which water
 quality sample sent for analysis
Well Owner: Mt. Rushmore National Memorial

Business Name:

Address: 13000 Hwy 244, Bldg 31, Ste 1City, State, Zip: Keystone SD 57751

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
Drift	0	35
Brown Punky Schist	35	77
Fracture 1 1/2 gpm	77	78
Quartz	78	90
Fracture 2 gpm	90	92
Quartz	92	108
Brown Schist Fracture 8 gpm	108	110
Brown Schist	110	125
Grey Schist /some brown	125	217

STATIC WATER LEVEL 22.0 FEET

If flowing: closed in pressure _____ PSI

GPM flow 40.0 through _____ Inch pipeControlled by ☐ Valve ☐ Reducers ☐ Other _____

Reduced flow rate _____ GPM

Can well be completely shut in?

WELL TEST DATA:

☒ Pumped Describe: w/air☐ Bailed☐ Other

Pumping Level Below Land Surface

_____ Ft. After _____ Hrs. pumped _____ GPM

_____ Ft. After _____ Hrs. pumped _____ GPM

If pump installed, pump rate: _____ GPM

REMARKS

See attached sheet with additional formation information.

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OCT 26 2010

WATER RIGHTS
PROGRAMThis well was drilled under license # 324 and this report is true and accurate.Drilling firm: Alexander Drilling Inc.

Signature of License Representative:

Signature of Well Owner or Equitable Property Holder:

Date: 10/25/2010

MT. RUSHMORE N.M.

Well Log Formation Continued

Well Owner: Mt. Rushmore

Well Completed: 6/16/10

<u>Formation</u>	<u>From</u>	<u>To</u>
Quartz Fracture 10gpm	217	220
Grey Schist	220	310
Fracture 11 gpm	310	311
Brown Schist	311	326
Fracture 17-18 gpm	326	337
Schist	337	345
Fracture 40gpm	345	355
Hard Grey Schist	355	408
Broken Brown Schist	408	415
Brown Schist	415	431
Fracture 40+ gpm	431	432
Hard Grey Schist	432	500

BANKCARD SALES SLIP 2 PT.

50082

DO NOT WRITE

ABOVE THIS LINE

ALISHA DEEGAN
MT RUSHMORE NATIONAL MEMORIAL

XXXX XXXX XXXX 1148 09/17

EXPIRATION
☒ DATE
CHECKED

SIGN HERE

X

The issuer of the card identified on this form is authorized to pay the amount shown as TOTAL upon proper presentation. I promise to pay such TOTAL (together with any other charges due thereon) subject to and in accordance with the agreement governing the use of such card.

↑ PLEASE DO NOT WRITE ABOVE THIS LINE ↑					
QTY	CLASS	DESCRIPTION	PRICE	AMOUNT	
1		PERMIT TO APPROPRIATE WATER		100.00	
		PERMIT # 2588-2			
DATE 01/26/2015			AUTHORIZATION 032900		
REFERENCE NO. 001			SUB TOTAL 100.00		
ID-FOLIO/CHECK NO./LIC. NO. STATE			SERVER TAX		
REG./DEPT. CLERK			TIP MISC.		
VISA MasterCard 5462977			TOTAL 100.00		

SALES SLIP
ORIGINAL



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182

denr.sd.gov

**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 2736-2, Mt. Rushmore National Memorial**

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. 2736-2, Mt. Rushmore National Memorial, c/o Cheryl Schreier, 13000 Hwy 244, Bldg 31 Suite 1, Keystone SD 57751.

The Chief Engineer is recommending APPROVAL of Application No. 2736-2 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 qualifications:

1. The wells 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.
2. Mt. Rushmore National Memorial shall report to the Chief Engineer annually the amount of water withdrawn from the well completed into the Precambrian Aged Crystalline Rock.

See report on application for additional information.

Jeanne Goodman, Chief Engineer
February 25, 2015

Report to the Chief Engineer
Water Permit Application Number 2736-2
Mt. Rushmore National Memorial
January 28, 2015

Water Permit Application Number 2736-2 proposes to appropriate water from the Precambrian aged Crystalline Rock aquifer at a diversion rate of 0.022 cubic feet per second (cfs) and authorize one additional well. The application, if approved, when used in conjunction with Water Permit 2588-2 will authorize a total diversion rate of 0.122 cfs (55 gallons per minute (gpm)) from two wells for recreational and commercial use. The additional well is located in the SE ¼ SW ¼ Section 7-T2S-R6E and is 500 feet deep.

Water Permit No. 2588-2 authorizes a diversion rate of 0.10 cfs from one well located in the SE ¼ SW ¼ Section 7-T2S-R6E and is 200 feet deep. An examination of Water Permit File No. 2588-2 indicates that this well corresponds to well #3 in Powell et al. (1973a). Application No. 2736-2, if approved, would authorize an additional diversion rate of 0.022 cfs (10 gpm) and one additional well that is 500 feet deep. Based on the information provided by the applicant, this additional well is located about 400 feet to the northwest of the well authorized by Water Permit No. 2588-2. Application No. 2736-2, if approved, when used in conjunction with Water Permit No. 2588-2 results in a total diversion rate of 0.122 cfs from two wells. Based on information from the applicant, the two wells are operated on an alternating basis, and the additional diversion rate is to facilitate optimum operating efficiency for their water treatment system for arsenic removal.

Aquifer: Precambrian aged Crystalline Rock aquifer (CRSL)

Aquifer Characteristics and Hydrogeology

In the area of this application the Precambrian aged Crystalline Rock aquifer primarily consists of metamorphosed sedimentary rocks with granite and pegmatite intrusions (Powell et al., 1973a). The crystalline rocks of this aquifer have low porosities, and water is conveyed to wells along fractures, joints, and faults (Rahn, 1979). Water availability in the aquifer is site specific and depends upon the occurrence of fractures, joints, and faults (secondary porosity) in the subsurface at a given site. Recharge to the aquifer is from infiltration of precipitation and streamflow losses.

The Water Rights Program monitors two observation wells completed into the Precambrian aged Crystalline Rock aquifer. Neither of these observation wells are located in the immediate area of Application No. 2736-2. The observation well CU-86A is located about 10 miles to the southwest of the location of this application. The hydrograph for this observation well is shown in Figure 1. In examining Figure 1, water levels can be seen responding to climatic conditions rising during wet periods and decreasing during drier periods, with water levels fluctuating as much as 50 feet in this observation well in response to climatic conditions. The

behavior of the Precambrian aged Crystalline Rock aquifer in the area of observation well CU-86A should be similar to the aquifer in the area of this application, since the Precambrian rock outcrops in both locations.

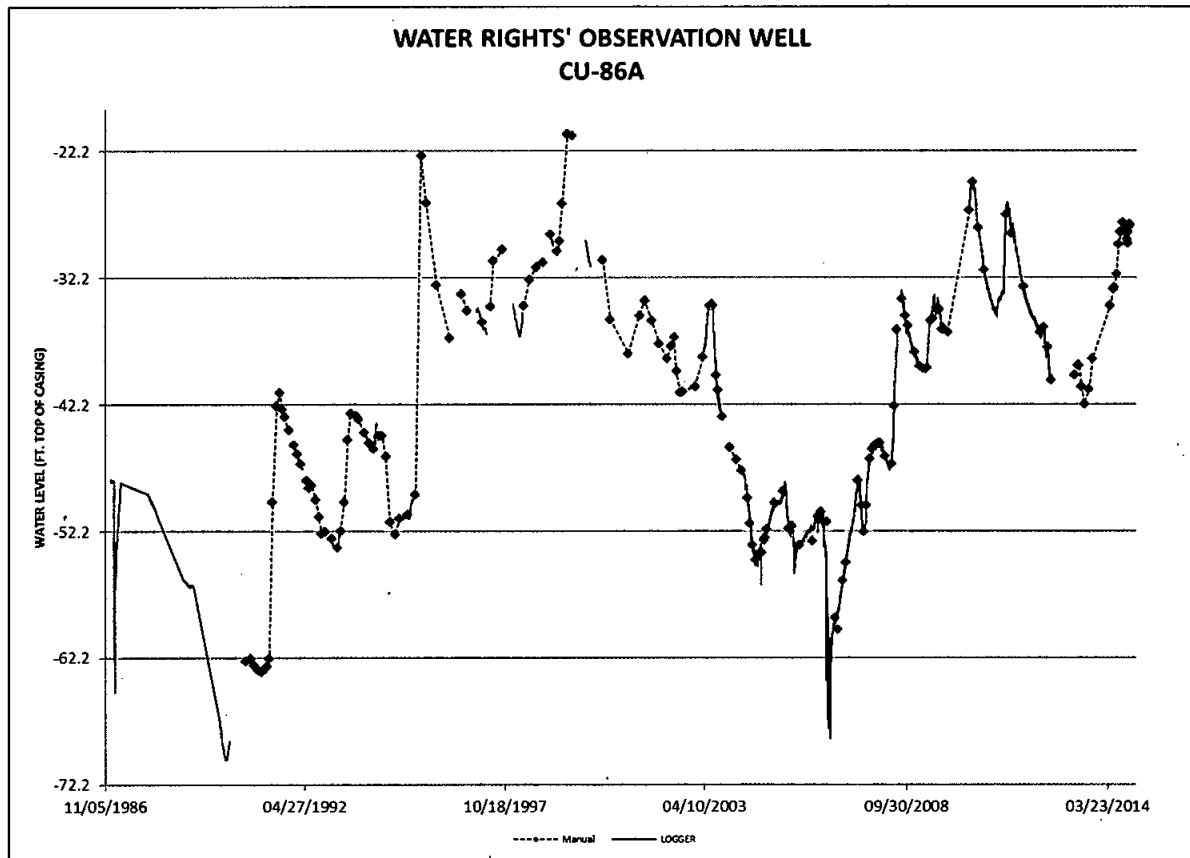


Figure 1: Hydrograph of Observation Well CU-86A (Water Rights, 2015a)

Due to the location of the additional well in relation to the existing well the additional well requested by this application is likely subject to similar hydrogeologic conditions as the existing well. Figure 2 shows the area geology in relation to the locations of the two wells. Powell et al. (1973a) notes that, "A pegmatite or granite sill is probably the cause of the accumulation of water in the vicinity of well 3." These sills can inhibit the movement of ground water down gradient by acting as groundwater dams (Powell et al., 1973).

The well completion report submitted with this application indicated that the static water level for this well was 22 feet below grade at the time of well completion (6/16/2010). The report identifies water production from fractures occurring in primarily varying colors of schist from 35 to 500 feet below grade; a few layers of quartz were also noted. Fractures with various rates of groundwater production were noted at 77, 90, 108, 217, 310, 326, 345, and 431 feet. From 0 to 35 feet below grade the well completion lists "drift". The well was able to produce 40 gpm.

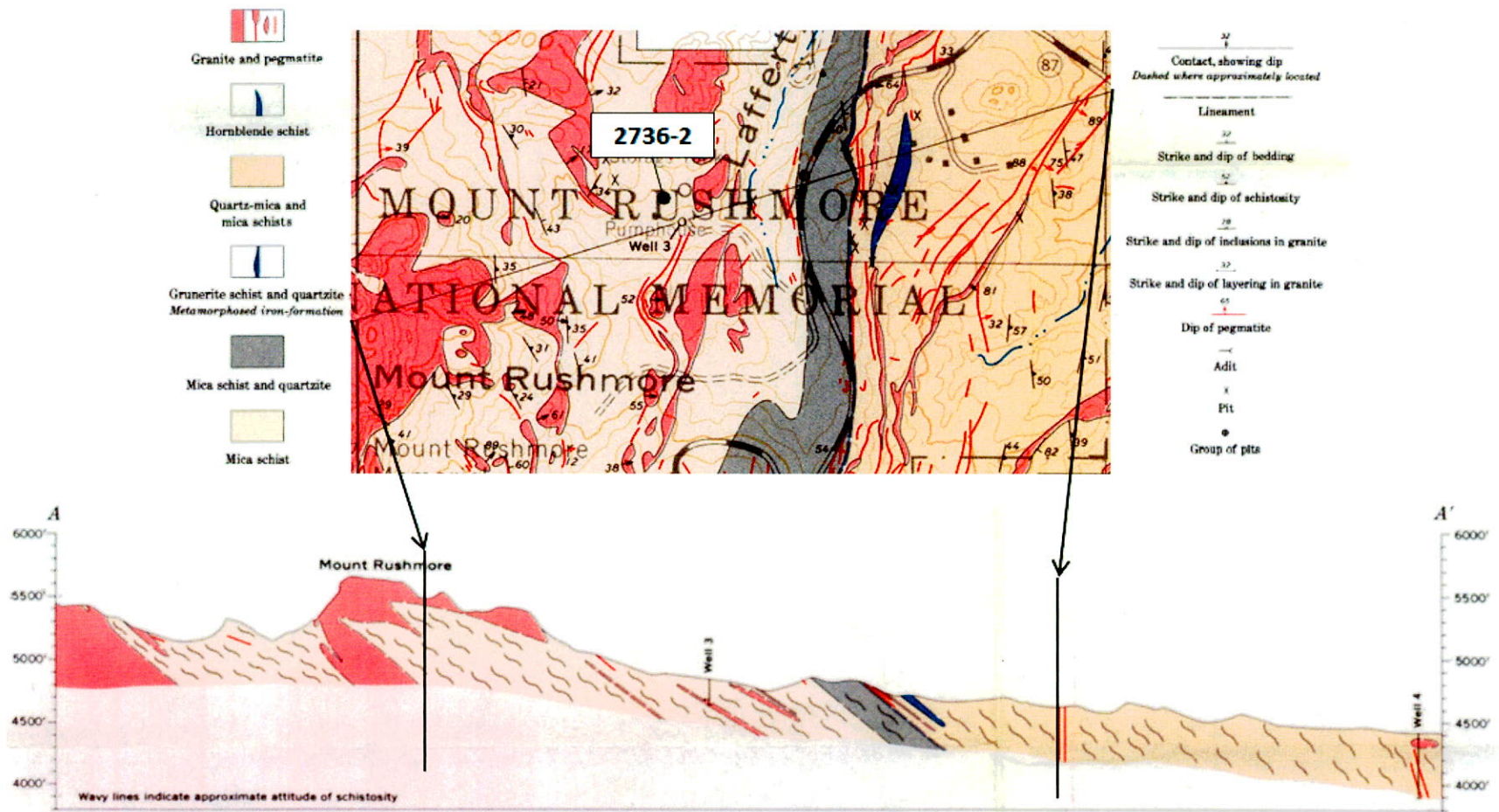


Figure 2: Location of the existing well authorized under Water Permit No. 2588-2 (labeled as well #3 in this figure) and location of the additional well requested by Application No. 2736-2 in relation to area geology by J.J. Norton (as cited by and modified from Powell et al., 1973b). Black lines and arrows indicate area of cross section that corresponds to the map.

South Dakota Codified Law (SDCL) 46-2A-9

Pursuant to SDCL 46-2A-9, a permit to appropriate water may be issued only if there is a reasonable probability that there is unappropriated water available for the applicant's proposed use, that the proposed diversion can be developed without unlawful impairment of existing rights and that the proposed use is a beneficial use and in the public interest. This report will address the availability of unappropriated water and existing rights from the aquifer that are pertinent to this application.

Water Availability

Water Permit Application No. 2736-2 proposes to appropriate water from the Precambrian aged Crystalline Rock aquifer. Approval of this application is likely to result in an average annual water use of less than 9.6 acre-feet annually (ac-ft/yr). The probability of unappropriated water available from an aquifer can be evaluated by considering SDCL 46-6-3.1 which requires "No application to appropriate groundwater may be approved if, according to the best information reasonably available, it is probable that the quantity of water withdrawn annually from a groundwater source will exceed the quantity of the average estimated annual recharge of water to the groundwater source. An application may be approved, however, for withdrawals of groundwater from any groundwater formation older than or stratigraphically lower than the greenhorn formation in excess of the average estimated annual recharge for use by water distribution systems." Here, the Precambrian aged Crystalline Rock aquifer is older than the Greenhorn Formation. Additionally, the system of piping, valves, storage tanks, pumps, and appurtenances by which water is conveyed for domestic use by a common distribution system is a water distribution system pursuant to SDCL 46-1-6 (17). As a result of the exception provided in SDCL 46-6-3.1 the recharge/withdrawal issue need not be considered.

Existing Water Rights/Permits

There are three water rights/permits diverting water from the Crystalline Rock aquifer within one mile of this application. These water rights/permits are summarized in Table 1, and their locations are shown in Figure 3. The nearest water right/permit not belonging to the applicant is Water Right No. 2344-2 located about one mile to the northeast of the location of this application. There are several domestic wells on file with the SDDENR-Water Rights Program within one mile of this application that are completed into the Precambrian aged Crystalline Rock aquifer.

Table 1: Groundwater Water Rights/Permits within One Mile of Application No. 2736-2 (cancelled water rights not shown) (Water Rights, 2015b)

Permit	Name	Status	Use	Rate (cfs)
2344-2	MIKE VINTON	LC	COM	0.044
2588-2	MT RUSHMORE NAT'L MEMORIAL	PE	COM & REC	0.07
US560-2A	US NATIONAL PARK SERVICE	LC	COM	0.066

LC= license, PE= permit, COM= commercial , REC= recreational

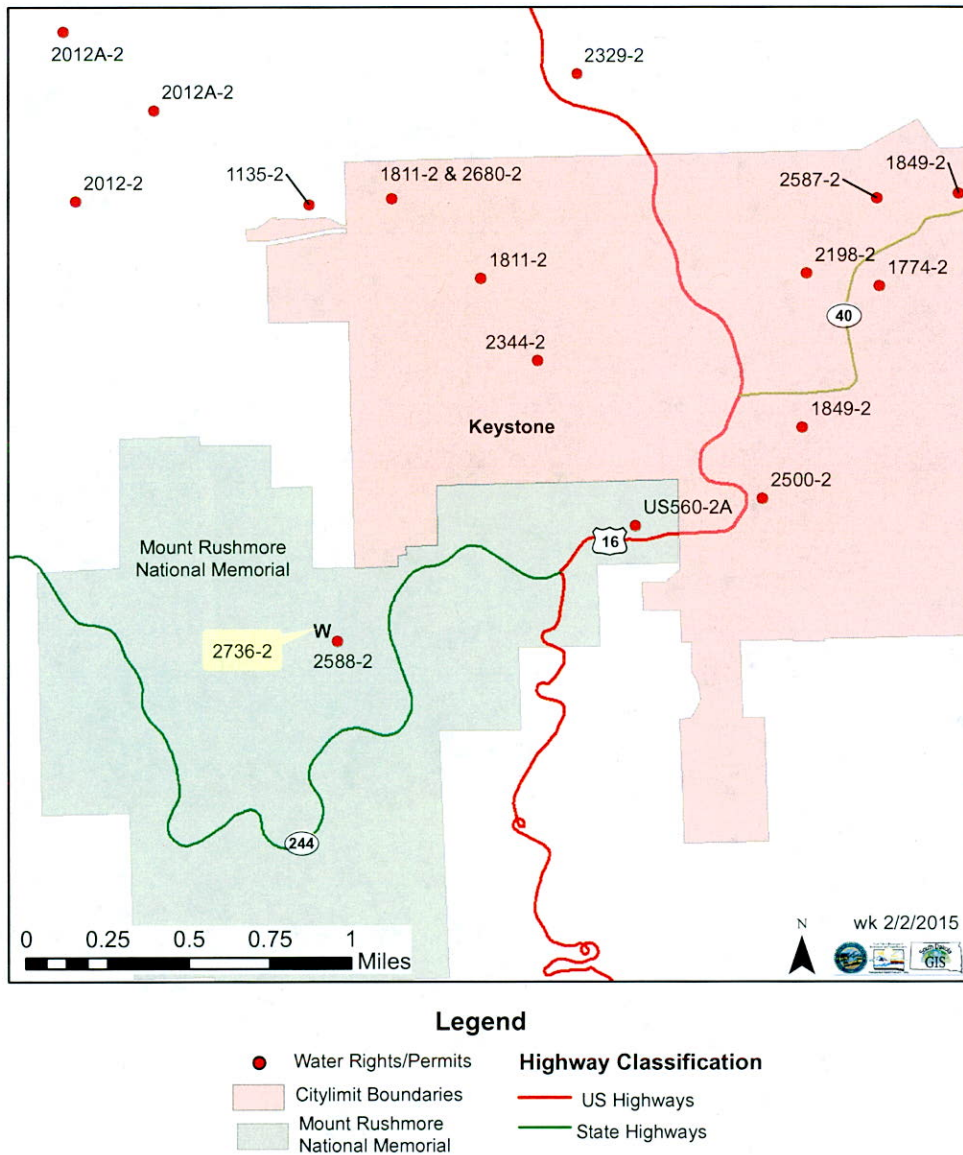


Figure 3: Approximate diversion point locations of groundwater water rights/permits in the area of Application No. 2736-2 (cancelled water rights not shown) (Water Rights, 2015b)

Although there is no well test data provided for the additional well requested by this application, Powell et al. (1973a) contains specific capacity information for the well authorized under Water Permit No. 2588-2. Powell et al. (1973a) reports the specific capacity of this well at 1.74 gpm per foot. At the additional diversion rate of 0.022 cfs requested by this application the increase in drawdown at the production well would only be about five to six feet and would decrease as distance from the production well increased. Although the cone of influence from a pumping well can extend over a widespread area in this aquifer, it is unlikely that the nearest water right/permit not belonging to the applicant (Water Right No. 2344-2) would experience any increase in drawdown as a result of the increased diversion rate requested by this application. This is due to several reasons: the relatively low diversion rate requested by this application, the distance between the production wells, and the amount of water level variability that is possible in the aquifer as a result of climatic conditions.

An adequate well as defined by South Dakota Administrative Rule (ARSD) 74:02:04:20(6) is “a well constructed or rehabilitated to allow various withdrawal methods to be used, to allow the inlet to the pump to be placed not less than 20 feet into the saturated aquifer or formation material when the well is constructed, or to allow the pump to be placed as near as possible to the bottom of the aquifer as is practical if the aquifer thickness is less than 20 feet.” In the past the Water Management Board has recognized that to place water to maximum beneficial use, a certain amount of drawdown may occur. ARSD 74:02:04:20(7) defines an adversely impacted domestic well as an adequate well in which “the water level of the aquifer has declined to a level that the pump will no longer deliver sufficient water for the well owner’s needs.” In this aquifer, due to the low porosity of the crystalline rock and water availability at a given location being linked to the unpredictable occurrence of secondary porosity, wells that meet the definition of an adequate well might not yield sufficient water for a well owner’s needs. Therefore, in this type of hydrogeologic setting, wells that are by definition “adequate” may not be reliable water supplies. Although under these circumstances any amount of drawdown could be discussed as a potential adverse impact, when compared with possible water level variability in the area of 50 feet as a result of climatic conditions (as demonstrated in Figure 1) any potential drawdown as the result of an additional 0.022 cfs is relatively insignificant.

Conclusions

1. Water Permit Application Number 2736-2 proposes to appropriate water from the Precambrian aged Crystalline Rock aquifer at a diversion rate of 0.022 cfs and authorize one additional well located in the SE ¼ SW ¼ Section 7-T2S-R6E.
2. The application, if approved, when used in conjunction Water Permit 2588-2 will authorize a total diversion rate of 0.122 cfs from two wells for recreational and commercial use.
3. Since the Precambrian aged Crystalline Rock aquifer is older than the Greenhorn Formation and a water distribution system is involved, the recharge/withdrawal issue need not be considered.

4. Any potential increase in drawdown as a result of the increase in diversion rate requested by this application on nearby adequate wells is relatively insignificant when compared to the effects of climatic conditions on water levels in the aquifer.

Whitney Kilts

Whitney Kilts
SDDENR-Water Rights Program

Approved by



Ken Buhler
SDDENR-Water Rights Program

References

- Powell, J. E., Norton, J. J., and Adolphson, D. G. 1973a. Water Resources and Geology of Mount Rushmore National Memorial, South Dakota. Water-Supply Paper 1865.
- Powell, J. E., Norton, J. J., and Adolphson, D. G. 1973b. Water Resources and Geology of Mount Rushmore National Memorial, South Dakota Plate 1: Geohydrologic Maps of the Mount Rushmore National Memorial, South Dakota. Geological Survey Water-Supply Paper 1865.
- Rahn, P. H. 1979. Ground Water Resources of Western South Dakota. South Dakota School of Mines and Technology Project #2533. Rapid City, South Dakota. p 2-1 to 2-3.
- SD Geological Survey. 2014. Lithological Logs Database, SD DENR-Geological Survey Program, Vermillion, SD.
- Water Rights. 1980-2014. "1979-2013 Irrigation Summaries by Aquifer": SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, South Dakota.
- Water Rights. 2015a Observation Well Files, SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, SD.
- Water Rights. 2015b. Water Right/Permit Files. SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, South Dakota.

Water Rights. 2015c. Well Completion Reports. SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, South Dakota.

Water Rights. 2015d. Water Permit File #2588-2. SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, South Dakota.

Affidavit of Publication

RECEIVED

MAR 16 2015

WATER RIGHTS
PROGRAM

STATE OF SOUTH DAKOTA

County of Pennington

SS:

March 5 L20921888
NOTICE OF APPLICATION
NO. 2736-2 to appropriate water

Notice is given that Mt. Rushmore National Memorial, c/o Cheryl Schreier, 13000 Hwy 244, Bldg 31 Suite 1, Keystone SD 57751 has filed an application for a water permit to appropriate an additional 0.022 cubic feet of water per second (cfs) (10 gallons per minute) and one additional well. Water Permit No. 2588-2 authorizes 0.10 cfs (45 gallons per minute) from one well located in the SE 1/4 SW 1/4 Section 7-T2S-R6E. This application proposes to appropriate an additional 0.022 cfs from one additional well to be completed into the Precambrian aged Crystalline Rock Aquifer (500 feet deep) located in the SE 1/4 SW 1/4 Section 7-T2S-R6E. This application, if approved and Water Permit No. 2588-2 combined will authorize a total diversion rate of 0.122 cfs (55 gallons per minute) from the two wells for recreational and commercial use.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 2736-2 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 this 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 this 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 March 16, 2015.

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. Information concerning this application is available at <http://denr.sd.gov/public>. Contact Eric Gronlund at the above Water Rights Program address to request copies of information pertaining to this application.

/s/ Steven M. Pirner
Secretary Department of Environment and Natural Resources

(Published once at the total approximate cost of \$63.28).

Robert Evans being first duly sworn, upon his/her oath says: That he/she is now and was at all time hereinafter mentioned, an employee of the RAPID CITY JOURNAL, a corporation of Rapid City, South Dakota, the owner and publisher of the RAPID CITY JOURNAL, a legal and daily newspaper printed and published in Rapid City, in said County of Pennington, and has full and personal knowledge of all the facts herein stated as follows: that said newspaper is and at all of the times herein mentioned has been a legal and daily newspaper with a bonafide paid circulation of at least Two Hundred copies daily, and has been printed and published in the English language, at and within an office maintained by the owner and publisher thereof, at Rapid City, in said Pennington County, and has been admitted to the United States mail under the second class mailing privilege for at least one year prior to the publication herein mentioned; that the advertisement, a printed copy of which, taken from said Rapid City Journal, the paper in which the same was published, is attached to this sheet and made a part of this affidavit, was published in said paper once each day for one successive day, the first publication there of being on the March day of 1st that the fees charged for the publication there of are sixty three dollars and twenty eight cents.

Robert J. Evans

Subscribed and sworn to before me this 1st day of March, 2015.

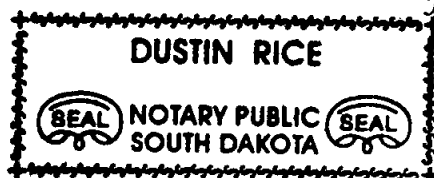
Dustin Rice

Notary public

DUSTIN RICE

My Commission Expires
July 1, 2020

My commission expires





DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182

denr.sd.gov

February 25, 2015

Rapid City Journal
PO Box 450
Rapid City SD 57701

ATTENTION: Legal Public Notice

Enclosed is a Notice on Application No. 2736-2 to Appropriate Water. Please publish the notice once on March 5, 2015. The text of the notice can be e-mailed to your paper by contacting Karen Schlaak at (605) 773-3352.

The applicant must verify to you that the notice is to be published and arrange for payment. **Please BILL the APPLICANT for the cost of publication.** The APPLICANT is Mt. Rushmore National Memorial, c/o Cheryl Schreier, 13000 Hwy 244, Bldg 31 Suite 1, Keystone SD 57751 (Ph # 605-574-3112).

Please send the Water Rights Program an affidavit or the enclosed Proof of Publication form immediately.

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



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182

denr.sd.gov

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

February 25, 2015

Mt. Rushmore National Memorial
Cheryl Schreier
13000 Hwy 244 Bldg 31 Suite 1
Keystone SD 57751

Dear Ms. Schreier:

Water Permit Application No. 2736-2 for commercial use has been examined and found to comply with the South Dakota Water Laws and applicable rules. A notice has been sent to the Rapid City Journal printed at Rapid City SD (Ph # 605-394-8300). You will need to contact the newspaper(s) and authorize publication of this notice. For your information, a copy of the notice, the recommendation of the Chief Engineer and 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(s) to authorize publication of your Notice and to arrange for payment. Early contact with the paper(s) can eliminate delays. Upon receiving authorization from you, the publisher has been instructed to publish your notice. 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.

Instruction to Newspaper - Publish the Notice on March 5, 2015. The applicant is responsible for payment. The text of the notice can be e-mailed to your paper by contacting Karen Schlaak at (605) 773-3352 or email: Karen.schlaak@state.sd.us.

NOTICE OF APPLICATION NO. 2736-2 to Appropriate Water

Notice is given that Mt. Rushmore National Memorial, c/o Cheryl Schreier, 13000 Hwy 244, Bldg 31 Suite 1, Keystone SD 57751 has filed an application for a water permit to appropriate an additional 0.022 cubic feet of water per second [cfs] (10 gallons per minute) and one additional well. Water Permit No. 2588-2 authorizes 0.10 cfs (45 gallons per minute) from one well located in the SE 1/4 SW 1/4 Section 7-T2S-R6E. This application proposes to appropriate an additional 0.022 cfs from one additional well to be completed into the Precambrian aged Crystalline Rock Aquifer (500 feet deep) located in the SE 1/4 SW 1/4 Section 7-T2S-R6E. This application, if approved and Water Permit No. 2588-2 combined will authorize a total diversion rate of 0.122 cfs (55 gallons per minute) from the two wells for recreational and commercial use.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 2736-2 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 this 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 this 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 March 16, 2015.

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. Information concerning this application is available at <http://denr.sd.gov/public>. 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.

Published once at the total approximate cost of _____.



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182

denr.sd.gov

APR 13 2015

Mount Rushmore National Memorial
Cheryl Schreier
13000 Hwy 244 Bldg 31 #1
Keystone SD 57751

Dear Ms. Schreier:

Enclosed is Water Permit No. 2736-2 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,

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

enclosures

2736.2

RECEIVED

APR 20 2015

WATER RIGHTS
PROGRAM

Form 10

NOTICE OF COMPLETION OF WORKS AND
APPLICATION OF WATER TO BENEFICIAL USE

Date 4/16/2015

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

FROM: Mt. Rushmore National Memorial

(name)

13000 Hwy 244 Bldg 31 Suite 1

(address)

Keystone, SD 57751

(city, state, zip)

(605) 574-3131

(phone)

I have completed the construction of the water use system and I have put the water to beneficial use to the maximum extent it is going to be used.

Water Permit No. 2736-2 states that the water use system is to be constructed by March 16, 2020, and water is to be put to beneficial use by March 16, 2024.
(date) (date)

The water use system was completed on July 28, 2010.
(date)

Applying the water to beneficial use was completed on October 1, 2011.
(date)

You may schedule an investigation so that the water license may be issued.

[Signature] 4/16/2015
(signature)



7-98

This is for adding an additional 10 gpm from a well that had been constructed in 2010.



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182

denr.sd.gov

April 21, 2015

2736-2

Cheryl Schreier
Mt Rushmore National Memorial
13000 Hwy 244 Bldg 31 Ste 1
Keystone SD 57751

Dear Ms. Schreier:

I am writing to acknowledge receipt of the "Notice of Completion of Works" form sent in to let us know the project has been completed.

The system is now ready for inspection. Inspections are done on a county-by-county basis as staff time permits. You have done everything you need to do and the intervening time between the completion of your project and the staff inspection has no bearing on your water permit.

Someone from our office will contact you prior to the inspection to set up a time that is convenient for you. If you have any questions, please contact me.

Sincerely,

Genny McMath
Water Rights Program
(605) 773-3352
email: genny.mcmath@state.sd.us

**Report of Examination of Works and/or Application of Water to Beneficial Use
For Permits No. 2588-2 and 2736-2**

I have this day, April 28, 2017 made a thorough examination of the water use system constructed by **Mt. Rushmore National Memorial, 1300 W Hwy 244, Bldg 31, Suite #1, Keystone, SD 57751** of Permit No. **2588-2**, bearing the priority of **5/11/2006**, authorizing the diversion of an additional **.07** cu. ft. per second of water and a well **and** of Permit No. **2736-2**, bearing the priority of **1/2/2015**, authorizing the diversion of an additional **.022** cu. ft. per second of water and one additional well for **commercial** purposes, in **Pennington** County.

Inspection contact & relationship to permit holder, if applicable: **Jim Strang, Utility Systems Operator
605-574-3112**

A. Works used to divert the water:

Well Information: Permit No. 2588-2

- 1) Well Drilling Firm: Hamm Drilling (July 1967)
- 2) No. of Wells 1
- 3) Depth(s) 200 feet
- 4) Well log is available yes

Comments: This well was identified as **well #3** on the application for Permit No. 2588-2. Two earlier wells which were abandoned due to low capacity/poor quality water had been named well #1 and well #2 respectively. This well drilled in 1967 is now referred to as **well #1** by the Rushmore Utility System Operators.

Casing:

- 1) Diameter 6" steel
- 2) Length unknown feet
- 3) Type Steel

Screen:

- 1) Type Unknown
- 2) Length -- feet
- 3) Static water level -- feet (no mention made of well yield or static water level by J.P.Gries at time of Drilling).

Pump:

- 1) Make Flint and Walling (F&W)
- 2) Model 4F55A50
- 3) Size 4"
- 4) Capacity 53 GPM (metered flow)
- 5) Horsepower rating 5 hp

Well Information: Permit No. 2736-2

- 5) Well Drilling Firm: Alexander Drilling (2010)
- 6) No. of Wells 1
- 7) Depth(s) 500 feet
- 8) Well log is available Yes

Comments: The above well drilled in 2010 is referred to as **well #2** by the water system operators.

Casing:

- 4) Diameter 8" steel (+2' to 38') 6" PVC (38' to 500')
- 5) Length 502 feet
- 6) Type Steel & PVC

Screen:

- 4) Type Perforated PVC
- 5) Length 240 feet
- 6) Static water level 22 feet

Pump:

- 6) Make Grundfos
- 7) Model 40S75-25
- 8) Size 4"
- 9) Capacity 45 GPM (metered flow)
- 10) Horsepower rating 7.5 hp Note: (The well was air tested at 40 gpm at time of completion.)

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

The wells pump to a 500,000 gallon underground storage tank located near the wells and water treatment facility. Booster pumps draw water from the storage tank and pump to elevated storage tanks of 75,000 gallon and 125,000 gallon capacity located approximately ½ mile from the water treatment facility. These elevated storage tanks deliver gravity flow to the Memorial complex.

C. Works used to apply water to beneficial use:

The water system serves the Mt. Rushmore visitor center , restaurant and gift shop as well as staff housing (5 houses and 10 apartments), and an employee dormitory.

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 points of diversion located as follows:

Well #1, Permit 2588-2, 304' N and 2,158' E of the SW corner Section 7 T2S R6E (43.88351, -103.45058)

Well #2, Permit 2736-2, 450' N and 1,971' E of the SW corner Section 7 T2S R6E (43.883895, -103.45122)

2. The works are capable of diverting and conveying to the place of use .12 cu. ft. per second (53 gpm) of water which is to be used for **commercial** use and the license should be issued for .12 cfs.

3. All structures, wells and lands on map: **No, wells and storage only**

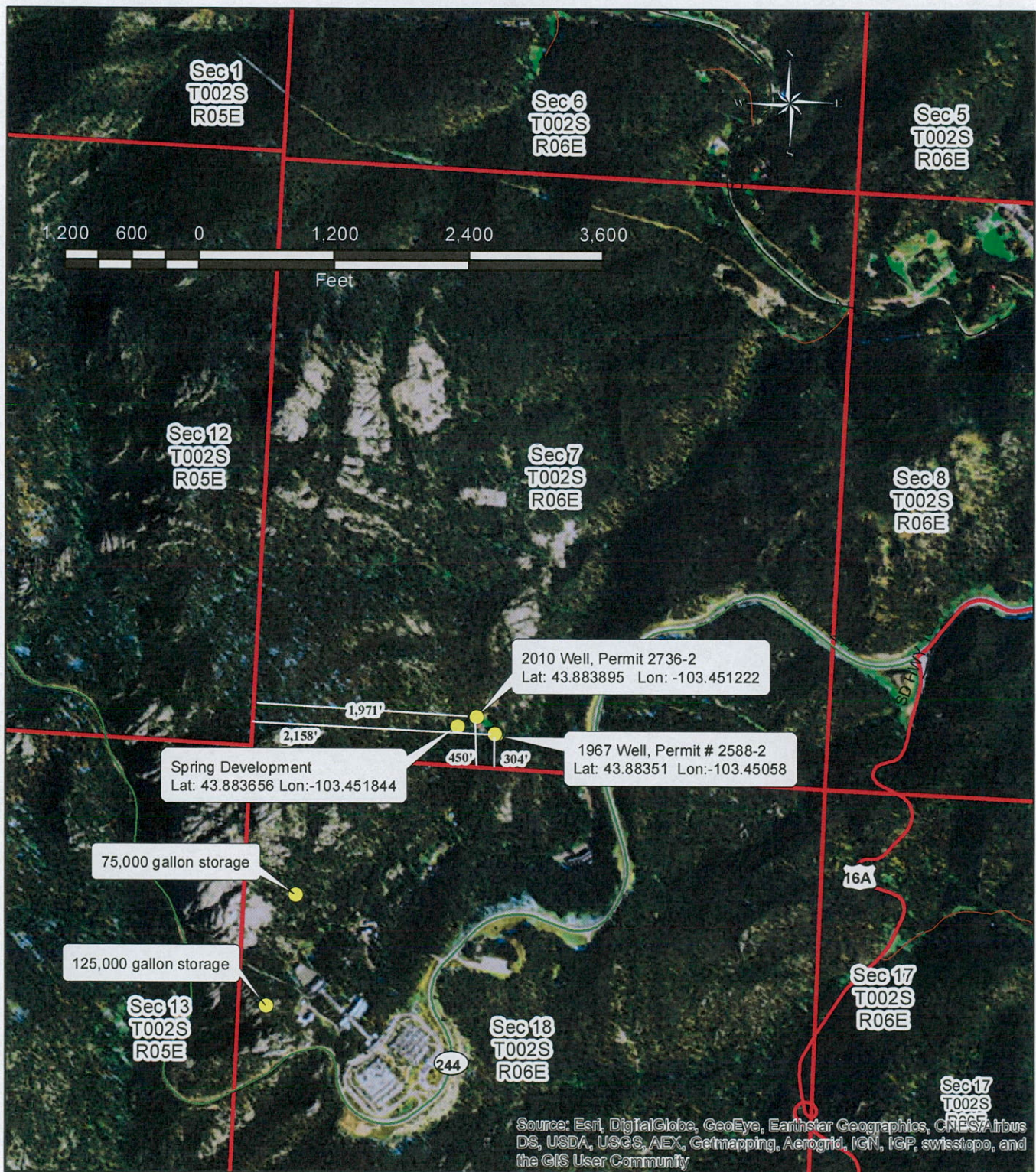
F. Comments or other permit(s) associated with the project: Water permit No. 2588-2 authorized an additional 0.07 cfs and changed the location of diversion point authorized by Water Right No. 596-2 which appropriated 0.03 cfs from Rushmore Spring located in the SE ¼ SW ¼ S7 T2S R6E. Water permit No. 2588-2 amended the diversion point to an existing well drilled in 1967 in the SE ¼ SW ¼ S7 T2S R6E. The total diversion rate authorized from the well by Permit 2588-2 was 45 gpm. Water Permit 2736-2 increased the diversion rate authorized by 2588-2 to a total of 55 gpm (.122 cfs) and added an additional well. The two wells are alternated manually and do not operate simultaneously. The licensed amount reflects the greater of the two well capacities (the 1967 well produces 53 gpm vs. the 2010 well producing 45 gpm).



Steven Quissell
Water Rights Inspector
DENR, Water Rights Program

Date report completed: 5/8/2017

**Water Right #2736-2 and Water Right #2588-2
Mount Rushmore National Memorial
4/28/2017**



Steven Quissell

Steven Quissell
Water Rights Inspector
DENR Water Rights Program



TABLE 2—Logs of wells and test holes drilled—Continued

Mount Rushmore National Memorial test hole (2-6-Scdb) at spring area 100 ft west of junction of U.S. Highway 16A and State Highway 87, Pennington County, S. Dak. Drilled 1900. Cuttings examined and described by J. P. Gries.

Material	Thickness (ft)	Depth (ft)
Silt, yellowish-gray; consists of quartz, weathered feldspar, and both muscovite and biotite mica	5	5
Silt and fine sand, light-gray, fresh; consists of quartz, mica, and feldspar	5	10
Silt, same as unit above, but not so fresh in appearance	5	15
Do	5	20
Silt and fine sand, gray, no coarse fragments	5	25
Do	10	35
Silt, same as unit above but few sand grains	5	40
Do	10	50
Silt, same as unit above, weathered yellow (sand and silt, but coarser at 55 ft)	5	55
Silt, dirty, yellow	5	60
Silt and fine sand, gray but weathered	5	65
Silt and fine sand, same	5	70
No sample	5	75
Silt, fresh, light-gray; mostly quartz and biotite	5	80
No sample	10	90
Silt, fresh, light-gray, mostly quartz and biotite	4	94

* Mount Rushmore National Memorial well 3 (2-6-Todd1) below spring in water storage area, Pennington County, S. Dak. Drilled July 1907 by Hamm Construction Co. Cuttings examined and described on July 14, 1907, by J. P. Gries.

Material	Thickness (ft)	Depth (ft)
Granite wash, consists of white feldspar, quartz, and mica	5	5
Granite, same as unit above, and gray mica schist	5	10
Schist, mica, finely drilled up	5	15
Do	15	30
Schist, apparently a weathered zone	5	35
Schist	15	50
Schist, fresher than above	5	55
Schist, more weathered	10	65
Schist, fresher	5	70
Schist, same as unit above with some granite; may be caved from top	10	80
Schist	5	85
Schist, fresh	10	95
Schist, weathered streak	5	100
Schist, fresh	5	105
Schist, weathered	5	110
Schist, fresh	5	115
Schist and some granite, may be cavings	5	120
Schist and some caved granite	5	125
Schist, very fine grained	5	130
Schist, some weathered	10	140

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MAY 2 2017

DEPT OF ENVIRONMENT & NATURAL
RESOURCES - RAPID CITY

34 WATER RESOURCES, GEOLOGY, MT. RUSHMORE MEMORIAL

TABLE 2—Logs of wells and test holes drilled—Continued

Mount Rushmore National Memorial well 3 (2-6-Todd2)—Continued

Material	Thickness (ft)	Depth (ft)
Schist, fresh	15	155
Schist, weathered	10	165
Schist and granite	5	170
Schist	5	175
Schist, slightly weathered	10	185
Granite, fresh; consists of white feldspar, quartz, and mica	5	190
Granite, very fine grained. Apparently very hard, as stained by bit fragments	5	195
Granite	5	200

Mount Rushmore National Memorial well 4 (2-6-Scad1) in East Entrance area, Pennington County, S. Dak. Drilled August and September 1907 by Hamm Construction Co. Cuttings to 400 ft examined and described by J. P. Gries.

Material	Thickness (ft)	Depth (ft)
No samples	20	20
Schist, mica, fine-grained, weathered	5	25
No sample	10	35
Schist as above, and some coarse quartz, mica, and feldspar.	5	40
Driller logged granite pegmatite at 35 ft	5	45
Probably white granite, much schist cavings	5	50
Granite, white; trace of caved schist	5	55
Granite or quartz-mica dikes. Sample appears very low in feldspar	5	60
Granite, consists of white feldspar, muscovite, quartz, and much pyrite	5	65
Schist and granite. Probably a schist horse or stringer within the granite	5	70
Granite, plus about half schist as above	5	75
Granite, white	5	80
Muscovite mica with a trace of quartz. Probably a mass of low-grade mica	5	85
Granite, fine-grained, white	5	90
"Boll-weaver" zone consisting of fine to coarse mica and quartz	5	95
Granite, fine-grained mica, feldspar and quartz. Driller logged change at 104 ft	15	105
White pegmatite, consists of mica and quartz with a trace of feldspar	5	110
Pegmatite, same, plus some weathered pyritic schist	5	115
Schist, less weathered	5	120
Schist, mica, pyritic; some caved pegmatite	5	125
Mica schist, same. Most of iron stain is from bit chips	10	135
Mica schist, fresh and unstained, pyritic	25	140
Mica schist, very pyritic, some oxidized	5	145
Schist as above, and new white granite. Driller logged change at 108 ft	5	150

END

STATE OF SOUTH DAKOTA

WATER LICENSE NO. 2736-2

(1) Mt. Rushmore National Memorial, c/o Cheryl Schreier, 13000 Hwy 244, Bldg 31, Suite 1, Keystone SD 57751 made Application No. 2736-2, January 2, 2015 for a water permit to divert an additional 0.022 cubic feet of water per second (cfs) from one well – Precambrian Aged Crystalline Rock Aquifer, Pennington County, South Dakota for recreational and commercial purposes. Permit No. 2736-2, with a priority date of January 2, 2015 was approved March 16, 2015 and issued to the applicant for diversion of water with construction of the described water supply system to be completed on or before March 16, 2020 and for the application to beneficial use of water on or before March 16, 2024.

The permit holder submitted a *Notice of Completion of Works and Application of Water to Beneficial Use* on April 20, 2015. The *Notice* stated the diversion system was completed on July 28, 2010 and the water placed to beneficial use on October 1, 2011.

Water Permit No. 2588-2, with a priority date of May 11, 2006 authorizes 0.10 cfs from one well – Precambrian Aged Crystalline Rock Aquifer for recreational and commercial use. The applicable portions of Water Permit No. 2588-2 are incorporated into Water License No. 2736-2.

(2) The water supply system has been completed and water applied to beneficial use in accordance with South Dakota State Law. Pursuant to South Dakota Codified Law 46-5-30.1, the holder and/or owner of Incorporated Water Right No. 2736-2 is issued a license, bearing priority dates of May 11, 2006 (0.10 cfs) and January 2, 2015 (0.022 cfs) for a total of 0.122 cfs from two wells – Precambrian Aged Crystalline Rock Aquifer for recreational and commercial purposes.

The diversion points are located:

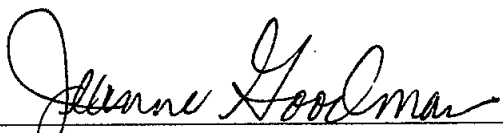
1967 well – 304 feet north and 2,158 feet east of the SW corner Section 7-T2S-R6E (SE 1/4 SW 1/4)

2010 well – 450 feet north and 1,971 feet east of the SW corner Section 7-T2S-R6E (SE 1/4 SW 1/4).

The two wells are alternated manually and do not operate simultaneously.

(3) This license is subject to South Dakota Water Law, any limitations or conditions listed in Incorporated Water Permit No. 2736-2 including the following qualifications:

- The wells 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.
- Mt. Rushmore National Memorial shall report to the Chief Engineer annually the amount of water withdrawn from the wells completed into the Precambrian Aged Crystalline Rock. *Water use reports are submitted annually and are on file with the Water Rights Program.*



Jeanne Goodman, Chief Engineer
Water Rights Program
Department of Environment and Natural Resources

JUN 21 2017

date





2736-2
DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182

denr.sd.gov

JUN 21 2017

2736-2
2588-2

Mt. Rushmore National Memorial
c/o Cheryl Schreier
13000 Hwy 244
Bldg 31, Suite 1
Keystone SD 57751

Dear Ms. Schreier:

Enclosed is Water License No. 2736-2. This is the final water right document completing your process of obtaining a Water Right. Also, included with your license is a map prepared by the staff engineer who conducted the 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. 2736-2, 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

Note: The applicable portions of No. 2588-2 are incorporated into Water License No. 2736-2.

enclosures