

WATER PERMIT NO. 7827-3

Name of Applicant: Maxwell Colony

Address: 42805 Maxwell Rd, Scotland SD 57059

Phone: 605 583-2861

Amount of Water Claimed: 0.33 cfs

Total Acres: NA

Source of Water Supply: groundwater (one well)

Water to be used for: commercial

County: Hutchinson

Type of Waste Disposal System:

Location: 4 miles southwest of Menno

PRIORITY

Date Received: 9-14-12

Application/License Fee: \$ 950

Corrected Application Received: 4-12-13

Period of Annual Use: January 1 – December 31

Remarks: for a hog confinement facility

Diversion Point: Govt Lot 4, (SW 1/4 SW 1/4) Sec
31-T97N-R57W

Land to be Irrigated: NA

Depth of Well: 165 feet deep

Well Driller:

Remarks:

Type of Map: plat

Prepared by:

Reviewed and the Number Assigned on: 4-15-13

By: **Karen Schlaak**

Notice of Hearing - date to intervene: _____

			31		
	Ⓢ				

Mail to: Water Rights Program Joe Foss Building 523 E. Capitol Pierre, SD 57501-3181 (605) 773-3352	No. <u>7827-3</u>	(office use only) Hydrologic Unit <u>10160011</u>
	Basin <u>James River</u>	<u>605-387-5158</u>
	Newspaper <u>Hutchinson Co. Herald Box 506 Menard</u>	<u>57045</u>
	<u>Press & Democrat, 319 Walnut Yorkton 57078</u>	<u>605-665-7811</u>

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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. _____

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

- Name of Applicant Maxwell Colony Phone 605-583-2861
(check one) ☒ Owner ☐ Tenant/lessee
Mailing Address 42805 Maxwell R.D. Scotland State S.D. 57059
(Street, RR, or Box and City) (Zip Code)
- Amount of water claimed 0.33 *CFS or 1.50 **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 Ground Water
- Location of point of diversion (example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W) E 1/2 of SW 1/4
31-97-57
County Hutchinson
- County or counties where water will be used Hutchinson
- 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)

Water for Hog Confinement Facility

STATE OF SOUTH DAKOTA)
County of Ben Homme) 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, Mark Hofer, 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 Mark Hofer

Subscribed and sworn to before me this 29th day of August 20 12

CHRISTY L. SIMANTEL
Notary Public
SEAL
South Dakota

Christy L. Simantel
Notary Public signature
My Comm. Expires: 10-28-2015

SOUTH DAKOTA
WATER PERMIT NO. 7827-3

Date of first receipt of application September 14, 2012.

Date of return to applicant for corrections, amendments or changes September 14, 2012.

Date of receipt of corrected application April 12, 2013.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 7827-3 to Maxwell Colony, c/o Mark Hofer, 42805 Maxwell Rd, Scotland SD 57059 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. 7827-3 appropriates 0.33 cubic feet of water per second from one well to be completed into the Lower James:Missouri Aquifer (165 feet deep) located in the Government Lot 4 (SW 1/4 SW 1/4) Section 31-T97N-R57W.
2. The water appropriated shall be used for the purpose of commercial use in a hog confinement facility 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. 7827-3 is July 1, 2013.
5. The date from which applicant may claim right is April 12, 2013.
6. One-fifth of the construction is to be completed on or before January 1, 2016.
7. All construction is to be completed on or before July 1, 2018.
8. Water is to be put to beneficial use on or before July 1, 2022.
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 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.
2. The well authorized by Permit No. 7827-3 shall be constructed by a licensed well driller and construction of the well and installation of the pump shall comply with Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) pursuant to Section 74:02:04:28.
3. Permit No. 7827-3 is subject to compliance with requirements of the Department's Water Pollution Control Permit issued pursuant to SDCL 34A-2-36, 34A-2-36-2, or 34A-2-112 for concentrated animal feeding operations.

(continued)

4. Permit No. 7827-3 is subject to compliance with all existing and applicable Water Management Board Rules including but not limited to:
- a) Chapter 74:54:01 Ground Water Quality Standards,
 - b) Chapter 74:54:02 Ground Water Discharge Permit,
 - c) Chapter 74:51:01 Surface Water Quality Standards,
 - d) Chapter 74:51:02 Uses Assigned to Lakes,
 - e) Chapter 74:51:03 Uses Assigned to Streams, and
 - f) Chapter 74:52:01 through 74:52:11 Surface Water Discharge Provisions

WATER MANAGEMENT BOARD

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

AUG 02 2013
date



Supplemental Information

(type or print in ink)

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1. Well Information - Proposed Construction

- a) Drill Hole Diameter 12.75 Depth 165'
- b) Casing Type PVC Diameter 8" Thickness 0.410
- c) Screen Type Stainless Steel Diameter 8" Thickness 0.800
- d) Gravel Pack X Length of Gravel Pack 35'
- e) Depth to Top of Water Bearing Material ~~119'~~ 119'
- f) Depth to Water (ground surface to water level) 55'
- g) Distance to nearest existing domestic well: 1500'
- On applicants property X 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 _____

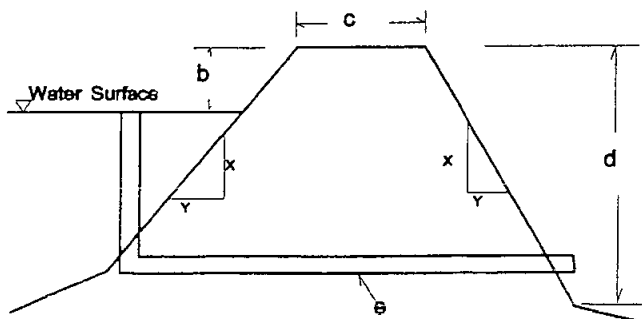
3. Dugout Information

- 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:



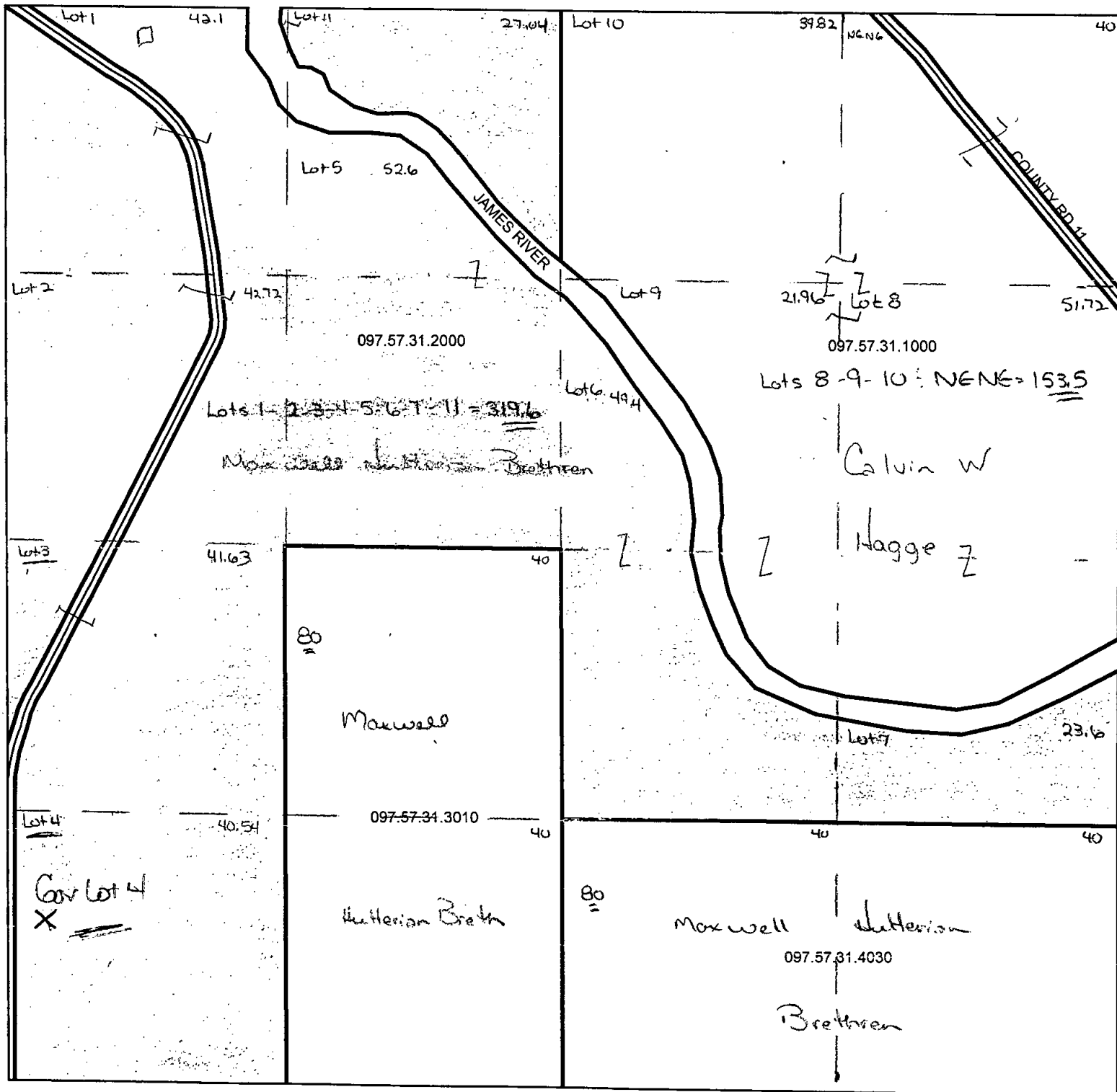
- b) Freeboard _____
- c) Crest Width _____
Crest Length _____
- d) Height _____
- e) Primary Outlet Capacity _____
If pipe, diameter _____
- f) Secondary Spillway Capacity _____
Spillway Width _____
- g) X & Y Slope _____
Upstream _____
Downstream _____
- h) Surface Area of Impoundment _____
- i) Storage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

SWEET 31

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97N

57W

31

Sec 25
T097N
R58W

Sec 30
T097N
R57W

Sec 29
T097N
R57W

Sec 36
T097N
R58W

Sec 31
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Sec 32
T097N
R57W

Sec 1
T096N
R58W

Sec 6
T096N
R57W

Sec 5
T096N
R57W



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South Dakota Department of Environment and Natural Resources

Date 4/12, 20 13

RECEIVED OF Maxwell Butterian Brethren 42805 Maxwell Rd Scotland SD 57059

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

Fee for Application for Permit No. <u>7827-3</u> to Appropriate Water, to construct and to put water to beneficial use	750	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>7827-3</u>	200	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	950 00

No. 06295

By Jeannie Goodman
Chief Engineer



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
denr.sd.gov

September 14, 2012

Maxwell Colony
c/o Mark Hofer
42805 Maxwell Rd
Scotland SD 57059

Dear Mr. Hofer:

Thank you for submitting the *Application for a Permit to Appropriate Water* for a hog confinement facility. In order to complete the application, the following is required.

- On the map, please mark the proposed well location with an "X".
- Enclosed is the Form 2A, Supplemental Information. Please complete Item No. 1 regarding the Well Information – Proposed Construction. At the very least, we need the proposed depth of the well(s).
- If available, please submit a well log or test hole log signed by a licensed South Dakota well driller.
- The application/license filing fee will be \$950.00.

If you have any questions, please contact me.

Sincerely,

Karen Schlaak
Water Rights Program
605 773-3352
karen.schlaak@state.sd.us

enclosures



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182

denr.sd.gov

**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 7827-3, Maxwell Colony**

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. 7827-3, Maxwell Colony, c/o Mark Hofer, 42805 Maxwell Rd, Scotland SD 57059.

The Chief Engineer is recommending APPROVAL of Application No. 7827-3 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 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.
2. The well authorized by Permit No. 7827-3 shall be constructed by a licensed well driller and construction of the well and installation of the pump shall comply with Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) pursuant to Section 74:02:04:28.
3. Permit No. 7827-3 is subject to compliance with requirements of the Department's Water Pollution Control Permit issued pursuant to SDCL 34A-2-36, 34A-2-36-2, or 34A-2-112 for concentrated animal feeding operations.
4. Permit No. 7827-3 is subject to compliance with all existing and applicable Water management Board Rules including but not limited to:
 - a) Chapter 74:54:01 Ground Water Quality Standards,
 - b) Chapter 74:54:02 Ground Water Discharge Permit,
 - c) Chapter 74:51:01 Surface Water Quality Standards,
 - d) Chapter 74:51:02 Uses Assigned to Lakes,
 - e) Chapter 74:51:03 Uses Assigned to Streams, and
 - f) Chapter 74:52:01 through 74:52:11 Surface Water Discharge Provisions

See report on application for additional information.

Jeanne Goodman, Chief Engineer
June 10, 2013

REPORT TO THE CHIEF ENGINEER
ON
WATER PERMIT APPLICATION NO. 7827-3
MAXWELL COLONY
APRIL 17, 2013

Water Permit Application No. 7827-3 proposes to appropriate water from one well to be completed into the Lower James-Missouri aquifer at a maximum diversion rate of 0.33 cubic feet of water per second (cfs). The well will be located in the Government Lot 4 (SW $\frac{1}{4}$ SW $\frac{1}{4}$) of Section 31, T97N-R57W and is expected to be approximately 165 feet deep. This application is for commercial use in a hog confinement facility in Hutchinson County.

AQUIFER: Lower James-Missouri aquifer (LJM)

GEOLOGY AND AQUIFER CHARACTERISTICS:

The Lower James-Missouri is a glacial aquifer composed of fine sand to cobble gravel mixed with layers of till (Lindgren, 1990). The aquifer generally lies above Carlile Shale, but lies on Sioux Quartzite northeast of the James River (Lindgren, 1990). In places, the aquifer directly overlies and is hydraulically connected to the Niobrara aquifer and is hydraulically connected at its southern boundary to the Missouri: Elk Point aquifer as well as the James River. The proposed well site is located in southern Hutchinson County less than 3,300 feet west of the James River and approximately 650 feet north of the Hutchinson and Yankton county line. The Lower James-Missouri aquifer encompasses approximately 191,700 acres of Clay, Hutchinson, and Yankton Counties, as determined by Hedges and others (1982). The aquifer contains an estimated 2,795,400 acre-feet of recoverable water in storage, of which an estimated 633,150 acre-feet of recoverable water is in storage in Hutchinson County (Hedges and others, 1982). There is approximately 60 feet of saturated thickness available at the proposed well site (Water Rights, 2013a). The aquifer is generally under confined conditions east of the James River and at the western boundary of the aquifer and generally under water-table conditions elsewhere (Lindgren, 1990). The aquifer is under confined conditions in the area of this application.

SDCL 46-2A-9

In accordance with SDCL 46-2A-9, a permit may be issued to appropriate water only if there is reasonable probability that there is unappropriated water available for the applicant's proposed use, that the proposed diversions 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 review the availability of unappropriated water and existing rights within the Lower James-Missouri aquifer.

WATER AVAILABILITY:

This application proposes to appropriate water from the Lower James-Missouri aquifer. If this application is approved, it is likely that the actual water use will be less than 150 gallons per minute (gpm). The probability of unappropriated water available from the aquifer can be evaluated using 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." If the source of the water

is older or lower than the greenhorn formation and a public water system has applied for a permit, the Board need not consider the recharge/withdrawal issue. Here, a public water system is not involved and the aquifer is not older or lower than the greenhorn formation therefore withdrawal/recharge issue must be considered.

Recharge versus Discharge:

Recharge:

Recharge to the Lower James-Missouri aquifer is from direct infiltration of precipitation on the James River flood plain where the aquifer is at or near land surface (Lindgren, 1990). Recharge is also provided to the aquifer from the Choteau, Dakota and Niobrara aquifers as well as during times of high flow from the James River (Lindgren, 1990). The average annual recharge rate to the Lower James-Missouri aquifer is estimated to be 1.5 in/yr based on regional flow-net analysis (Hedges and others, 1985). Given the area of the management unit in Clay, Hutchinson, and Yankton Counties of 191,700 acres, average annual recharge to the aquifer is estimated to be 23,962.5 ac-ft/yr. Recharge in Hutchinson County is estimated to be 11,725 ac-ft/yr based on the 93,800 acres that the aquifer underlies in the county (Hedges and others, 1982).

Discharge:

Discharge from the Lower James-Missouri aquifer is by evapotranspiration, seepage to the James River, and withdrawal from wells (Lindgren, 1990). There are a number of completion reports on file with the SD DENR-Water Rights Program for domestic use wells completed into the Lower James-Missouri aquifer (Water Rights, 2013b), and there are currently 134 water rights/permits appropriating water from the Lower James-Missouri aquifer of which 36 are in Hutchinson County (Water Rights, 2013c). The distribution of these appropriations for the entire aquifer and their types are shown in Table 1.

Water Rights/Permits	Number
Commercial	5
Domestic	1
Geothermal	1
Industrial	1
Irrigation	126

Table 1. Water rights/permits from the Lower James-Missouri aquifer (Water Rights, 2013c).

The amount of water that can be expected to be withdrawn through water rights/permits authorizing water use for non-irrigation purposes at the current appropriation level can be estimated by assuming:

1. Water rights/permits limited by an annual volume will pump the entire volume appropriated.
2. Water rights/permits limited only by diversion rate will pump at the maximum permitted diversion rate 60 percent of the time.

The expected water use for non-irrigation purposes from the Lower James-Missouri aquifer is less than 1,228 ac-ft/yr based on current water appropriations.

The annual reported water use from the Lower James-Missouri aquifer for irrigation purposes is displayed in Table 2. The average pumpage reported, for irrigation purposes, over the 1979 to

2011 period of record in the aquifer is approximately 2,209 ac-ft/yr. The amount of water usage from domestic wells is not significant to the hydrologic budget.

YEAR	NO. OF PERMITS	APPROPRIATION (AC-FT/YR)	PUMPAGE REPORTED (AC-FT/YR)
2011	89	27367.1	4147.47
2010	85	25731.1	665.37
2009	84	25451.1	1463.27
2008	79	23891.7	4494.03
2007	56	17477.7	3425.91
2006	50	15627.1	3630.92
2005	48	14749.1	2866.63
2004	47	14525.1	2886.65
2003	53	17373.1	2843.15
2002	53	17108.1	4061.52
2001	53	17208.1	2940.09
2000	51	17048.1	3751.08
1999	50	15992.1	2102.15
1998	53	16915.1	2787.03
1997	50	17072.1	2320
1996	49	17240.1	2102.99
1995	41	15088.1	1483.32
1994	45	17094.1	1918.17
1993	45	16241.9	230.44
1992	45	16791.9	1159
1991	42	15497.9	2599
1990	35	12673.1	2928.1
1989	31	10909.1	2144.8
1988	31	11769.5	2744.9
1987	30	11613.5	1041.6
1986	30	11613.5	989.6
1985	27	10033.1	1483
1984	28	12283.1	1360
1983	27	9883.1	1306.54
1982	23	9440.1	1301.25
1981	27	13053	1835
1980	23	11561	1299
1979	22	11265	588
MIN	22	9440.1	230.44
MAX	89	27367.1	4494.03
AVE	45.52	15684.48	2209.09

Table 2. Irrigation from the Lower James-Missouri aquifer (Water Rights, 1980-2012)

Comparison of the estimated average annual withdrawal from the Lower James-Missouri aquifer with the estimated average annual recharge for the aquifer indicated that the average annual withdrawals from the aquifer do not exceed the average annual recharge to the aquifer. Therefore, unappropriated water is available from the Lower James-Missouri aquifer. Specifically, unappropriated water is available for this application.

Observation Well Data:

Administrative Rule of South Dakota Section 74:02:05:07 requires that “the Water Management Board shall rely upon the record of observation well measurements to determine that the quantity

of water withdrawn annually from the aquifer does not exceed the estimated average annual recharge to the aquifer”.

The SD DENR-Water Rights Program monitors 33 observation wells completed into the Lower James-Missouri aquifer with two of these wells located within three miles of the proposed well site. Hydrographs for these wells are shown in Figures 1 and 2.

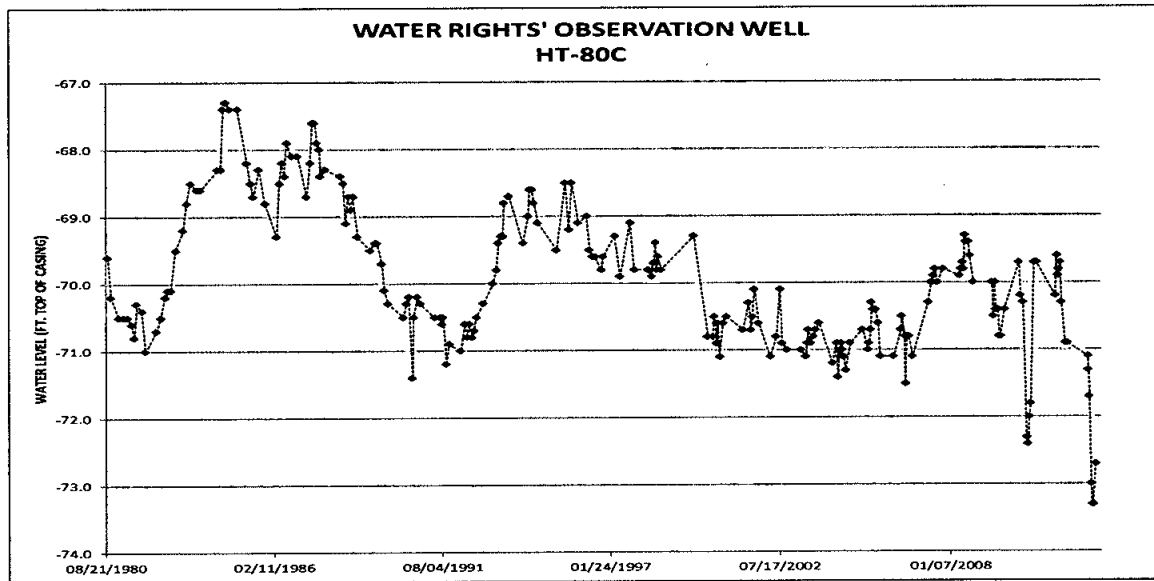


Figure 1. Hydrograph for SD DENR-Water Rights' Observation Well HT-80C completed into the Lower James-Missouri aquifer less than 650 feet southwest of the well site proposed by Application No. 7827-3 (Water Rights, 2013b).

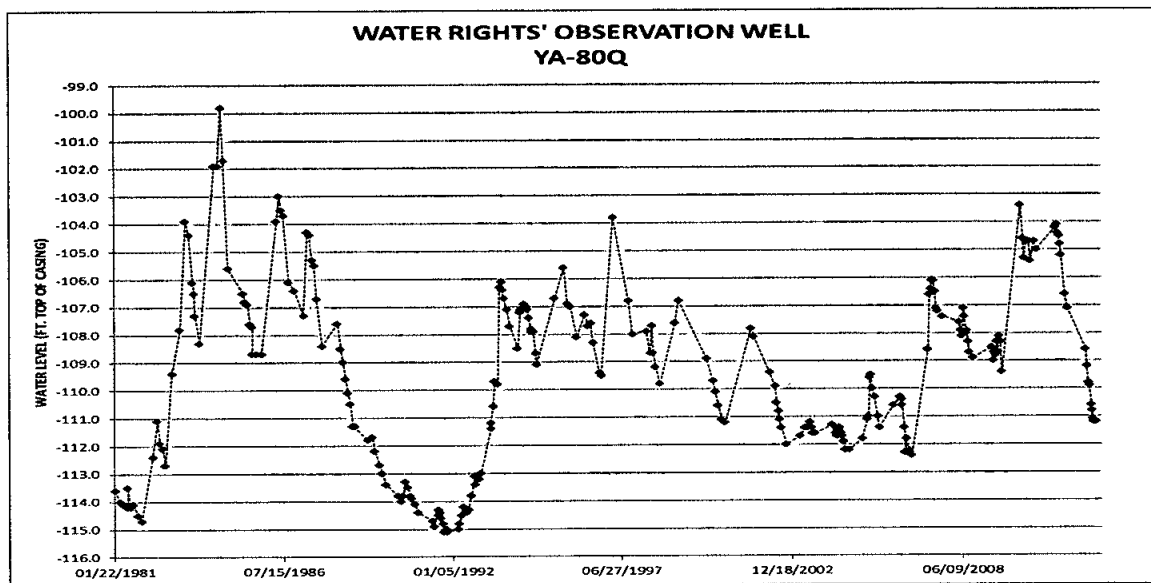


Figure 2. Hydrograph for SD DENR-Water Rights' Observation Well YA-80Q completed into the Lower James-Missouri aquifer approximately three miles southeast of the well site proposed by Application No. 7827-3 (Water Rights, 2013b).

The observation well data shows the aquifer responds well to climatic conditions with rising water levels during wet years and gradually declining water levels during dry years. The water level data shows that over the period of record, in general, discharge has not exceeded recharge. The observation well data shows that at the current level of development, climatic conditions greatly mask the temporal effects of well withdrawals. Therefore, recharge to and natural discharge from the Lower James-Missouri aquifer significantly exceeds pumping. Natural discharge from the aquifer can be captured for pumping. The hydrographs document that there is unappropriated water available from the aquifer to support this appropriation.

EXISTING WATER RIGHTS:

The proposed well site is located in southern Hutchinson County less than 3,300 feet west of the James River and approximately 650 feet north of the Hutchinson and Yankton county line. Figure 3 shows the nearby existing water rights located in the Lower James-Missouri aquifer. The locations of the existing water rights/permits were determined using the best data reasonably available. The nearest water right/permit is Water Permit No. 6758-3, also for the Maxwell Colony, located one half mile southeast and down-gradient from the proposed well site.

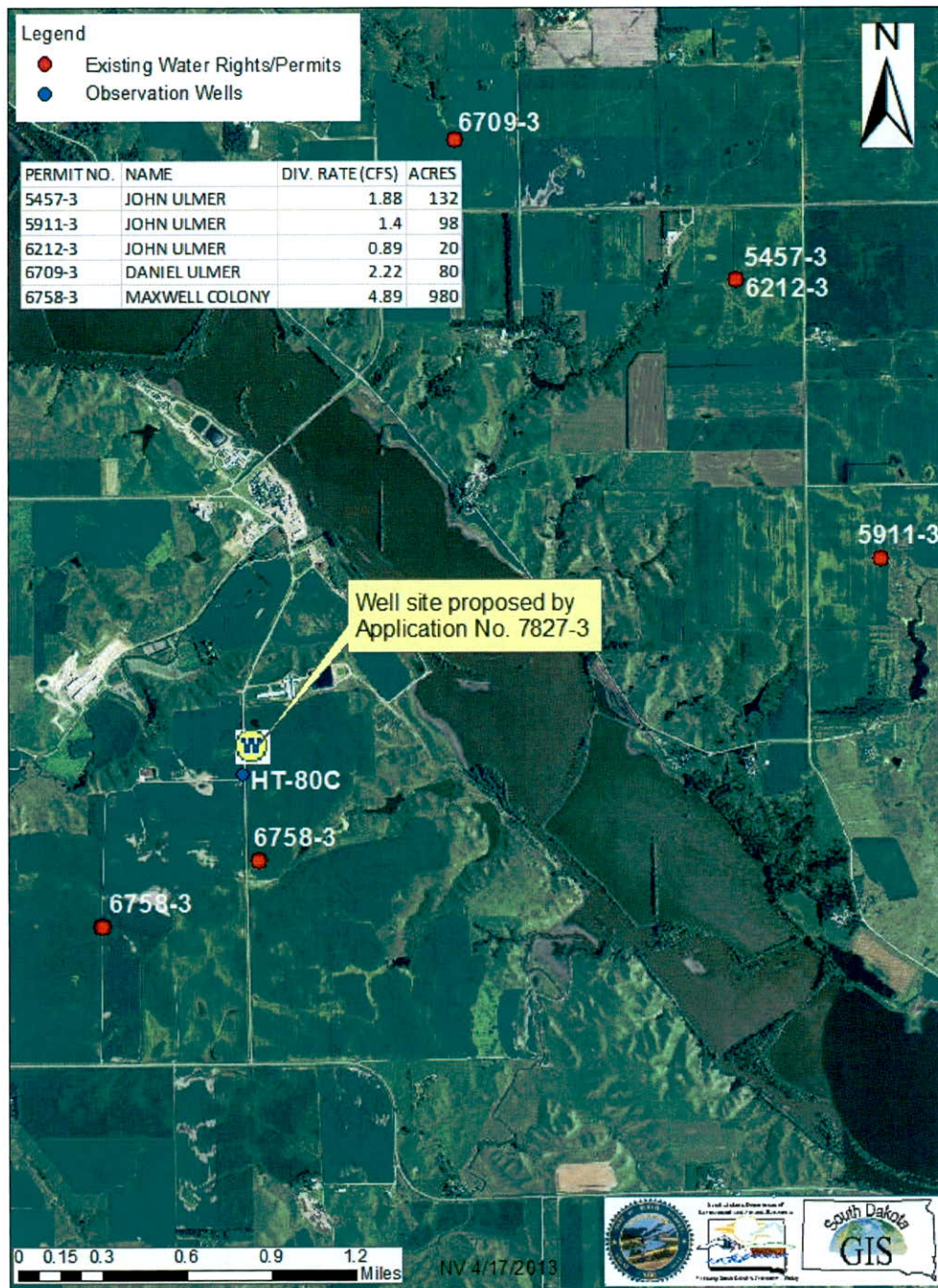


Figure 3. Existing water rights/permits located within close proximity to the well site proposed by Application No. 7827-3 (Water Rights, 2013c).

Observation well HT-80C is located within 2,200 feet of Water Permit No. 6758-3, and the hydrograph, shown in Figure 1, reports minimal drawdown at this distance due to pumping. Based on the observation well data and the distance between wells, drawdown is not expected to be significant nor likely to cause adverse impacts to existing water rights or domestic wells. The precise drawdown cannot be quantified without aquifer testing. With that in mind, this permit

should adhere to and include the standard permit qualification which applies to most groundwater permits/rights stating that:

“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”.

SDCL 46-6-6.1 does not protect artesian head pressure as a means of delivery and the Water Management Board has consistently recognized that to place water to maximum beneficial use a certain amount of drawdown may occur. To balance interests between irrigation use and delivery of water by artesian pressure, the Water Management Board has defined an “adversely impacted domestic well” in ARSD 74:02:04:20(7) as:

“a well in which the pump intake was set at least 20 feet below the top of the aquifer at the time of construction or, if the aquifer is less than 20 feet thick, is as near to the bottom of the aquifer as is practical and 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 reality, the assurance of reasonable domestic use provided by SDCL 46-6-6.1 and ARSD 74:02:04:20(7) generally ensures not only that interference will not be adverse to domestic well users but also in existing appropriative rights. In most cases, the protection afforded to adequate domestic wells by water law, would lead to enforcement of the “standard permit qualification” before there is a reduction of needed water supplies to appropriative rights. Although drawdown is expected to be minimal, as shown by the observation well hydrographs, some drawdown will occur. Depending on the extent of drawdown, some existing well owners may need to lower their pumps to accommodate deeper water levels. However, when considering the statute and rule, there is a reasonable probability that any well interference from these proposed applications will not be adverse to adequate domestic wells.

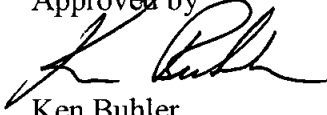
CONCLUSIONS:

1. This application proposes to appropriate water from the Lower James-Missouri aquifer.
2. There is a reasonable probability that unappropriated water is available from the Lower James-Missouri aquifer to supply this proposed appropriation.
3. The Lower James-Missouri aquifer is confined in the area of this application, but drawdown from pumping is not expected to be significant very far from a production well.
4. There is a reasonable probability that the well proposed by this application will not adversely impact existing water rights or domestic wells.



Nicole Van Dyk
SD DENR-Water Rights Program

Approved by



Ken Buhler
SD DENR-Water Rights Program

REFERENCES:

Hedges, L.S., Burch, S.L., Iles, D.L., Barari, R.A., Schoon, R.A., 1982, Evaluation of Ground-Water Resources Eastern South Dakota and Upper Big Sioux River, South Dakota and Iowa, Task 1: Bedrock Topography and Distribution, Task 2: Extent of Aquifers, Task 3: Ground-Water Storage, Task 4: Computerized Data Base, Final Report; U.S. Army Corps of Engineers Contract DACW 45-80-C-0185

Hedges, L.S., Allen, J., Holly D.E., 1985, Evaluation of Ground-Water Resources Eastern South Dakota and Upper Big Sioux River, South Dakota and Iowa, Task 7: Ground Water Recharge; U.S. Army Corps of Engineers Contract DACW 45-80-C-0185

Lindgren, R.J., D.S. Hansen, 1990, Water Resources of Hutchinson and Turner Counties, South Dakota: U.S. Geological Survey Water-Resources Investigations Report 90-4093, 100 p.

Water Rights, 1980-2012, Irrigation Questionnaire Summaries 1980-2012, SD DENR-Water Rights Program, Joe Foss Bldg, Pierre, SD.

Water Rights, 2013a, Observation Well Files, SD DENR-Water Rights Program, Joe Foss Bldg, Pierre, SD.

Water Rights, 2013b, Water Well Completion Reports, SD DENR-Water Rights Program, Joe Foss Bldg, Pierre, SD.

Water Rights, 2013c, Water Right/Permit Files, SD DENR-Water Rights Program, Joe Foss Bldg, Pierre, SD.

AFFIDAVIT OF PUBLICATION

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JUN 24 2013

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County of Hutchinson)

) ss.

State of South Dakota)

Tim L. Waltner, of said county and state, being duly sworn, deposes and says: That the Hutchinson Herald is a weekly newspaper of general circulation and a legal newspaper as required by law, printed and published in the town of Hutchinson in said county and state by Tim L. Waltner, and has been published as a newspaper during the time hereinafter mentioned: Tim L. Waltner, the undersigned, am publisher of said newspaper and in full charge of the advertising department thereof, and have the knowledge of all the facts stated in this affidavit, and the advertisement headed Maxwell Colony Approp. Water

a printed copy of which is hereto attached, was printed and published in the said newspaper for one successive time to-wit:

The first publication on:
June 19, 2013

the second publication on:
and the third publication on:

That the full amount of the fees charged for publishing legal notices to-wit: The sum of \$22.69 insures solely to the benefit of the publisher of the Hutchinson Herald, that no agreement or understanding for any division thereof has been made with any other person whomsoever, and the amount of \$22.69 for publishing legal notices.

NOTICE OF APPLICATION NO. 7827-3 to Appropriate Water

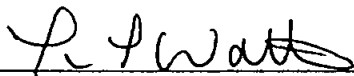
Notice is given that Maxwell Colony, c/o Mark Hofer, 42805 Maxwell Rd, Scotland SD 57059 has filed an application for a water permit to appropriate 0.33 cubic feet of water per second from one well to be completed into the Lower James:Missouri Aquifer (165 feet deep) located in the Government Lot 4 (SW 1/4 SW 1/4) Section 31-T97N-R57W for commercial use in a hog confinement facility.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 7827-3 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.

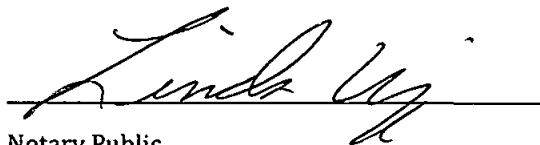
Any person interested in opposing or supporting this application or recommendation must file a written petition with BOTH the applicant and Chief Engineer. The applicant must file a petition if contesting the Chief Engineer's recommendation. The Chief Engineer's address is "Water Rights Program, Foss 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 July 1, 2013.

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.

Published once at an
approximate cost of \$22.69
1-12HH



Subscribed and sworn to before me this 30th day of June 2013.



Notary Public
Commission expires: 10/9/18

Publication fee: \$22.69
Notary fee:
Total: \$22.69

RECEIVED

JUN 24 2013

WATER RIGHTS
PROGRAM

AFFIDAVIT OF PUBLICATION

YANKTON DAILY PRESS AND DAKOTAN

6+19

NOTICE OF APPLICATION
NO. 7827-3 to Appropriate Water

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Published once at the total approximate cost of \$25.82.

Department of Environment and Natural Resources
PMB 2020
Joe Foss Building
523 East Capitol
Pierre, SD 57501-3182

STATE OF SOUTH DAKOTA
COUNTY OF YANKTON

KELLY HERTZ BEING FIRST DULY SWORN ON OATH DEPOSES AND SAYS THAT HE IS THE MANAGING EDITOR OF, YANKTON MEDIA INC, A CORPORATION, THE PRINTER AND THE PUBLISHER OF THE YANKTON DAILY PRESS AND DAKOTAN, A LEGAL DAILY NEWSPAPER PUBLISHED AND CIRCULATED IN THE CITY OF YANKTON, SAID COUNTY AND STATE, AND ONE OF THE OFFICIAL NEWSPAPERS OF THE SAID COUNTY OF FACTS STATED IN THIS AFFIDAVIT; THAT THE ANNEXED Notice of Application No. 7827-3

TAKEN FROM THE PAPER, IN WHICH IT WAS LAST PUBLISHED IN THE NEWSPAPER ON THE 19th DAY OF June 2013 THAT THE FULL AMOUNT OF THE FEE CHARGED FOR THE PUBLICATION OF SAID NOTICE TO WIT \$25.82 ENSURES TO THE BENEFITS OF THE PUBLISHER OF SAID NEWSPAPER AND THAT NO AGREEMENT AND UNDERSTANDING FOR THE DIVISION THEREOF HAS BEEN MADE WITH ANY OTHER PERSON, AND THAT NO PART THEREOF HAS BEEN AGREED TO BE PAID TO ANY PERSON WHOMSOEVER.

PUBLISHED ON: 6/19/2013

FILED ON: 6/19/2013

SUBSCRIBED AND SWORN TO BEFORE ME THIS 19th DAY OF June 2013

NOTARY PUBLIC, SOUTH DAKOTA

MY COMMISSION EXPIRES

8/19/2015

2013



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182

denr.sd.gov

June 11, 2013

Hutchinson Herald
PO Box 506
Menno SD 57045

ATTENTION: Legal Public Notice

Enclosed is a Notice on Application No. 7827-3 to Appropriate Water. Please publish the notice once on June 19, 2013. 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 Maxwell Colony, c/o Mark Hofer, 42805 Maxwell Rd, Scotland SD 57059 (Ph # 605-583-2861).

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

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182

denr.sd.gov

June 11, 2013

Press & Dakotan
319 Walnut
Yankton SD 57078

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Natural Resources Engineer
605 773-3352

enclosures



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

PMB 2020
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 RIGHT AWAY.

June 11, 2013

Maxwell Colony
Mark Hofer
42805 Maxwell Rd
Scotland SD 57059

Dear Mr. Hofer:

Water Permit Application No. 7827-3 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 Hutchinson Herald printed at Menno SD (Ph # 605-387-5158) and the Press & Dakotan printed at Yankton SD (Ph # 605-665-7811). 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 June 19, 2013. 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.

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Published once at the total approximate cost of_____.



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

PMB 2020
JOE FOSS BUILDING
523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182

denr.sd.gov

AUG 02 2013

Maxwell Colony
Mark Hofer
42805 Maxwell Rd
Scotland SD 57059

Dear Mr. Hofer:

Enclosed is Water Permit No. 7827-3 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

**OFFICE OF
WATER**

Maxwell Colony 6" Hog barn Well– Scotland SD

<i>Formation Log</i>	<i>From</i>	<i>To</i>
Top soil	0	3
Sandy brown clay	3	13
Clay brown	13	18
Clay gray sandy and pebbly	18	42
Gravel	42	44
Clay blue pebbly	44	59
Clay brown /olive	59	67
Clay blue	67	96
Sand	96	97
Clay blue	97	104
Gravel	104	109
Clay blue	109	112
Gravel w/ clay layers	112	116
Clay	116	117
Sand	117	123
Clay	123	126
Sand	126	128
Clay w/ gravel layers	128	138
Gravel	138	143
Blue sandy	143	152
Shale black	152	224
Shale gray	224	271
Shale brown hard	271	285
Greenhorn limestone	285	325
Shale	325	345
Greenhorn limestone	345	349
Shale a few thin sandstone layers	349	396
Sand sandstone w/ shale layers	396	411
Sand fine Dakota	411	454
Shale w/ sandstone layers	454	464
Sand and sandstone med sand Dakota	464	485
Sandstone	485	512

Maxwell Colony Section 6 Menno

Legend
Feature 1

550' TEST HOLE FOR HOG BARN WELL 6" HOG BARN WELL 512' 7/20/2022

300' Test hole 4/19/2022
199' 12" WELL JUNE 2022 MAXWELL COLONY
TH # 2W 200' MAXWELL COLONY 7/21/2022

