

WATER PERMIT NO. 7527-3

Name of Applicant: Virgil Mollet III and Eugene Mollet, Jr.

Address: 47903 334th St, Jefferson SD 57038 Phone: 605 966-5379

Amount of Water Claimed: 1.11 cfs Total Acres: 117.5

Source of Water Supply: groundwater (1 well)

Water to be used for: irrigation County: Union

Type of Waste Disposal System:

Location: 5 miles southwest of Jefferson

PRIORITY Date Received: 11-15-2012 Application/License Fee: \$ 950

Corrected Application Received: 11/26/12 Period of Annual Use: May 1 – Sept 30

Remarks:

Diversion Point: NE 1/4 SE 1/4 Sec 10-T89N-
R49W

Land to be Irrigated: N 1/2 SE 1/4, NE 1/4 SW 1/4
Sec 10-T89N-R49W

Depth of Well: 120 feet deep

Well Driller:

Remarks:

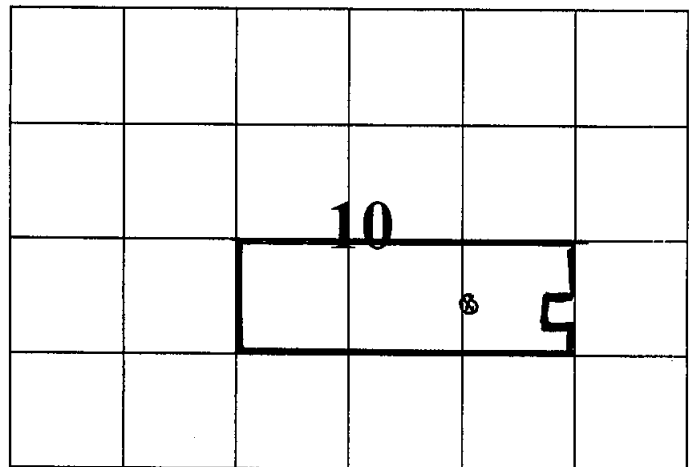
Type of Map: aerial

Prepared by:

Reviewed and the Number Assigned on: 11-26-12

By: **Karen Schlaak**

Notice of Hearing - date to intervene: _____



FORM 2: Application for irrigation in South Dakota
(type or print)

Mail to: Water Rights Program Joe Foss Building 523 E. Capitol Pierre, SD 57501-3181 (605) 773-3352	(office use only)
	No. _____ Hydrologic Unit _____
	Basin _____
	Newspaper _____

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NOV 15 2012
WATER RIGHTS PROGRAM

Application For Permit To Appropriate Water For Irrigation

Type of Application: ☒ New ☐ Vested Right ☐ Amendment/Correction to Permit No. _____
(Use predates Mar 2, 1955)

Description of amendment/correction: (i.e. change diversion point(s), add diversion point(s), change use, etc.)
Water Permit for new well

1. Name of Applicant Virgil Mallet III Phone 605 966-5379
(check one) ☒ Owner ☐ Tenant/lessee
Mailing Address 47903 334th St Jefferson SD State So. Dak 57038
(Street, RR, or Box and City) (Zip Code)
2. Amount of water claimed 1.11 *CFS or 500 **GPM ***AF Total Acreage 117.5
(*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 (example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W) 1 well in
NE 1/4 of SE 1/4 of Sec 10 T89 R49 County Union
5. County or counties where water will be used Union
6. Annual period during which water is to be used May 1 - Sept. 30
7. List below each forty acre division, or lot, or fraction thereof and show number of acres to be irrigated in each.
(Attach sheet if more space is needed)

Land Description	Acres	Land Description	Acres
NE 1/4 of SE 1/4 of S10 T89 R49	37.5		
NW 1/4 of SE 1/4 of S10 T89 R49	40		
NE 1/4 of SW 1/4 of S10 T89 R49	40		

8. Give a description of the project. (Attach sheet if more space is needed)

STATE OF SOUTH DAKOTA)
County of Union) 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, Eugene Mallet Jr, 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 Eugene Mallet Jr

Subscribed and sworn to before me this 13th day of November 20 12



Shonn Hanson
Notary Public signature

SOUTH DAKOTA
WATER PERMIT NO. 7527-3

Date of first receipt of application November 15, 2012.

Date of return to applicant for corrections, amendments or changes November 16, 2012.

Date of receipt of corrected application November 26, 2012.

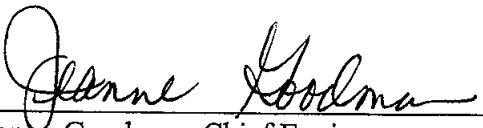
The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 7527-3 to Virgil Mollet III and Eugene Mollet Jr., 47903 334th St, Jefferson SD 57038 authorizing the construction of the water use system and the placing of water to beneficial use subject to the following limitations, conditions and qualifications:

1. Water Permit No. 7527-3 appropriates 1.11 cubic feet of water per second from one well to be completed into the Missouri:Elk Point Aquifer (120 feet deep) located in NE 1/4 SE 1/4 Section 10 for irrigation of 117.5 acres located in the N 1/2 SE 1/4, NE 1/4 SW 1/4 Section 10; all in T89N-R49W.
2. The amount of the appropriation may not exceed 2 acre feet annually for each acre of land to which water is actually and beneficially applied for irrigation. The water is to be used during the following described annual period: May 1 – September 30.
3. The date from which applicant may claim right is November 15, 2012.
4. The date of approval of Permit No. 7527-3 is February 19, 2013.
5. One-fifth of the construction is to be completed on or before August 19, 2015.
6. All construction is to be completed on or before February 19, 2018.
7. Water is to be put to beneficial use on or before February 19, 2022.
8. 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. 7527-3 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. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.

WATER MANAGEMENT BOARD

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

APR 12 2013

date



Supplemental Information

(type or print in ink)

1. Well Information - Proposed Construction

- a) Drill Hole Diameter 17" Depth 120'
- b) Casing Type PVC Diameter 12" Thickness SCH 40
- c) Screen Type PVC Diameter 12" Thickness SCH 40
- d) Gravel Pack AKRON Well PACK Length of Gravel Pack 60'
- e) Depth to Top of Water Bearing Material 70'
- f) Depth to Water (ground surface to water level) 21'
- g) Distance to nearest existing domestic well:
- On applicants property 1/4 mile On property owned by others 1/4 mile

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 _____

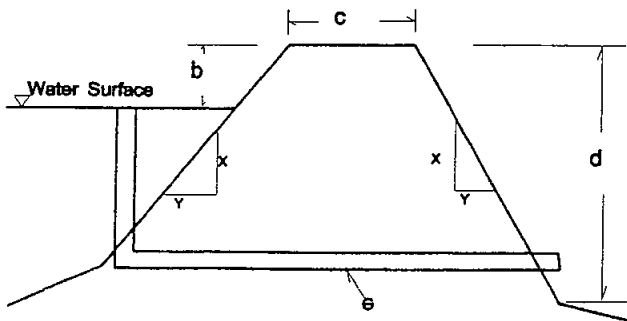
3. Dugout Information

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

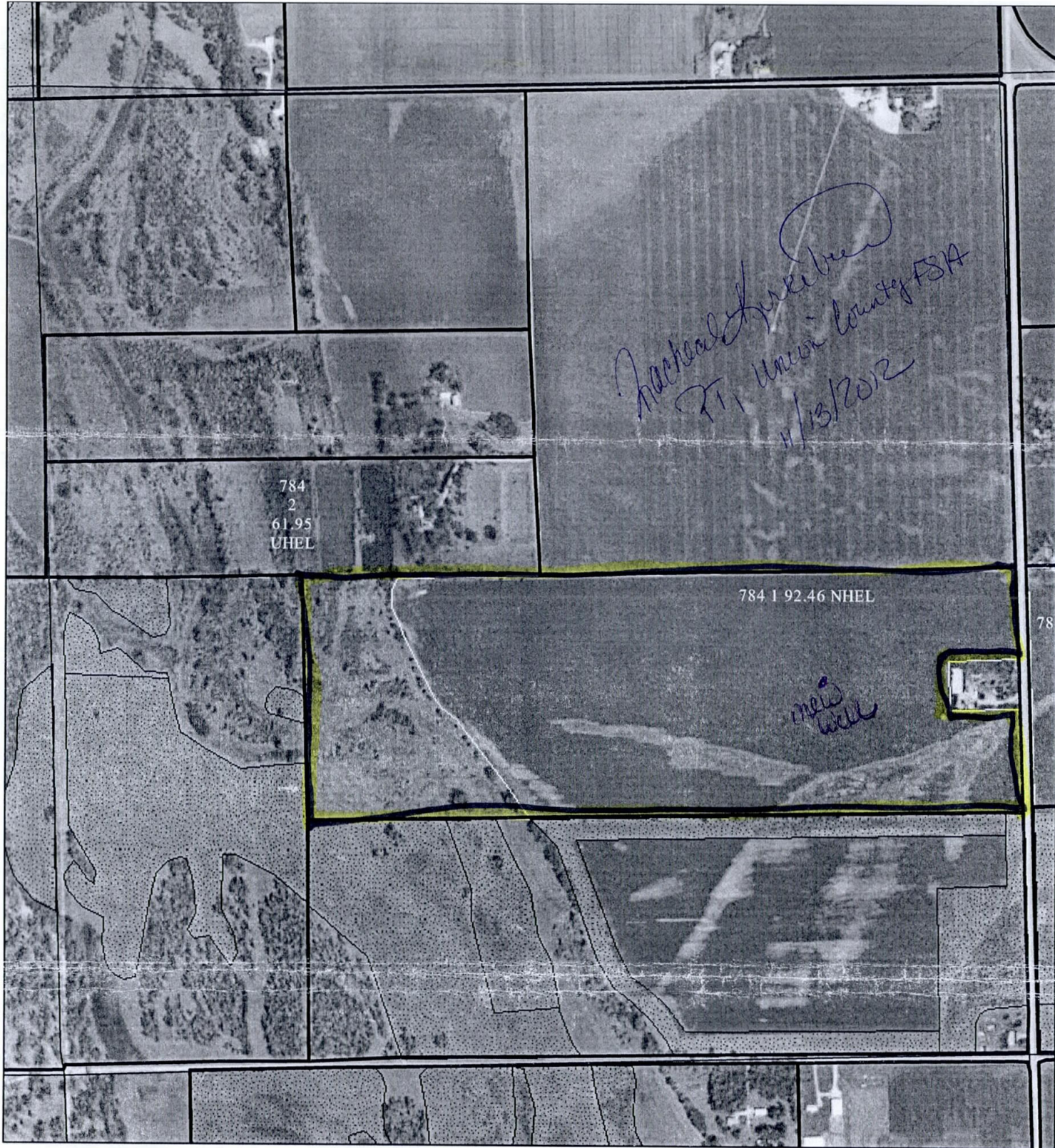
4. Water Storage Dams

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



United States Department of Agriculture
Farm Service Agency

PLSS: 10_89N_49W
Farm: 441

Union County

1:8,859

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April 30, 2012

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Wetland Determination Identifiers

- Restricted Use
- ▽ Limited Restrictions
- Exempt from Conservation Compliance Provisions

□ Common Land Units

/// Non Cropland

Disclaimer: Wetland identifiers do not represent the size, shape or specific determination of wetlands. Refer to your original determination (CPA-026 and attached maps) for exact wetland boundaries and determinations, or contact NRCS.

2010 Ortho-Photography - Not to Scale

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date 11/16, 20 12

RECEIVED OF Gene Mollet 48011 332nd St Jefferson SD 57038

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

Fee for Application for Permit No. <u>7527-3</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>7527-3</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. 05696

By Garland Erbe
Chief Engineer



November 16, 2012

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DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

denr.sd.gov

Eugene Mollet Jr.
47903 334th St
Jefferson SD 57038

Dear Mr. Mollet:

Thank you for submitting the *Application for a Permit to Appropriate Water* for irrigation in Union County. In order to complete the application, the following is required.

- Enclosed is the aerial photo map submitted with the application. Please outline the 117.5 acres to be irrigated.

If you have any questions, please contact me.

Sincerely,

Karen Schlaak

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. 7527-3, Virgil Mollett III and Eugene Mollett**

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. 7527-3, Virgil Mollett III and Eugene Mollett, 47903 334th Street, Jefferson SD 57038.

The Chief Engineer is recommending APPROVAL of Application No. 7527-3 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. 7527-3 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. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.

See report on application for additional information.

Garland Erbele, Chief Engineer
January 25, 2013

REPORT ON WATER PERMIT APPLICATION NO. 7527-3

Virgil Mollet III

January 11, 2013

Water Permit Application No. 7527-3, Virgil Mollet III, proposes to appropriate 235 acre-feet of water at a maximum diversion rate of 1.11 cubic feet of water per second from one well to be completed into the Missouri:Elk Point aquifer (120 feet deep) located in NE 1/4 SE 1/4 Section 10 for irrigation of 117.5 acres located in the N 1/2 SE 1/4, NE 1/4 SW 1/4 Section 10; all in T89N-R49W. The project is located in southern Union County approximately 6 miles west of North Sioux City.

AQUIFER: Elk Point management unit of the Missouri aquifer (M: EP)

GEOLOGY AND AQUIFER CHARACTERISTICS:

The proposed well site is located in southern Union County between the Missouri and Big Sioux Rivers. The Missouri: Elk Point is an alluvium mantled outwash consisting of clay and silt with sand and gravel that could be under artesian conditions in the area of the proposed well sites (Jenson, 2000; Water Rights, 2013c). The Missouri: Elk Point aquifer extends from the Missouri River to the Big Sioux River over the southern third of Union County and extends into Clay and Yankton counties. The outwash is overlain by alluvium over much of Union County and in general overlies the Dakota aquifer. Hedges and others, (1982) estimated the Missouri: Elk Point aquifer underlies 99,600 acres of Union County and contains 1,494,600 acre-feet of recoverable water in storage in the county. Niehus, (1994) estimated the aquifer underlies 180 square miles (115,200 acres) of Union County and contains 1.5 million acre-feet of water in storage in the county. The maximum thickness of the aquifer in Union County is estimated to be 146 feet and the average thickness is estimated to be 84 feet (Niehus, 1994). A test hole drilled by the DENR-Geological Survey located approximately 0.75 miles northwest of the well site proposed by this application identifies aquifer material from 15-106 feet below land surface ("Lithologic Logs Database"). The Missouri: Elk Point aquifer is under confined conditions in this area and the static water level of a well at the proposed site is expected to be 10-27 feet below land surface.

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 and pertinent to this application.

WATER AVAILABILITY:

This application proposes to appropriate 235 ac-ft/yr from the Missouri: Elk Point aquifer. If this application is approved, the actual water use will likely be less than the appropriation. 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 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."

HYDROLOGIC BUDGET:

Recharge:

Recharge to the Missouri: Elk Point aquifer in Union County is through infiltration of precipitation in areas where the aquifer is at or near land surface and from groundwater inflow from the adjacent Lower Vermillion-Missouri and Big Sioux aquifers and ground water flow from Clay County. Chemical analyses indicate that there is a hydraulic connection between the Dakota aquifer and the Missouri: Elk Point aquifer (Niehus, 1994) and the Dakota aquifer is also a source of recharge. Some recharge to the aquifer occurs from the Missouri River when the stage of the river is higher than the groundwater level. Based on an analysis of observation well data, average annual recharge to the Missouri aquifer is estimated to be 3.8 inches per year (Hedges and others, 1985). Average annual recharge for Union County would be approximately 36,480 ac-ft/yr.

Discharge:

Discharge from the Missouri: Elk Point aquifer occurs due to evapotranspiration in areas where the aquifer is near land surface, outflow to the Missouri and Big Sioux Rivers during periods of low flow, and well withdrawals from domestic use, commercial use, industrial use, fish and wildlife propagation, municipal use, recreational use, rural water systems, suburban housing development, and irrigation. Currently there are a total of 295 water rights/permits appropriating water from the Missouri: Elk Point aquifer in Union County (Water Rights, 2013b).

The amount of water that can be expected to be withdrawn by the non-irrigation use water rights/permits at the current appropriation amount can be estimated by assuming: 1) water rights/permits limited by an annual volume will pump the entire volume appropriated annually, and 2) water rights/permits limited only by diversion rate will pump at the maximum permitted diversion rate at 60 percent of the time. Water rights/permits for non-irrigation use, from the Missouri: Elk Point aquifer in Union County, are limited only by the authorized diversion rate of the water rights/permits which currently total of 12.902 cfs. At the current appropriation amount, the total annual withdrawal from the Missouri: Elk Point aquifer in Union County by non-irrigation use is expected to total less than 5,605 ac-ft/yr (Water Rights, 2013b).

Figure 1 shows the Missouri: Elk Point aquifer's historic irrigation data for Union County. The development of this aquifer has been increasing over the last decade. The annual withdrawal due to irrigation use fluctuates greatly, which seems to be more dependent on yearly climatic conditions than on the increase in amount of appropriation. The average pumpage reported equals 10,801 ac-ft/yr. The maximum pumpage reported was in 1988 for 22,195 ac-ft/yr (Water Rights, 1979-2013).

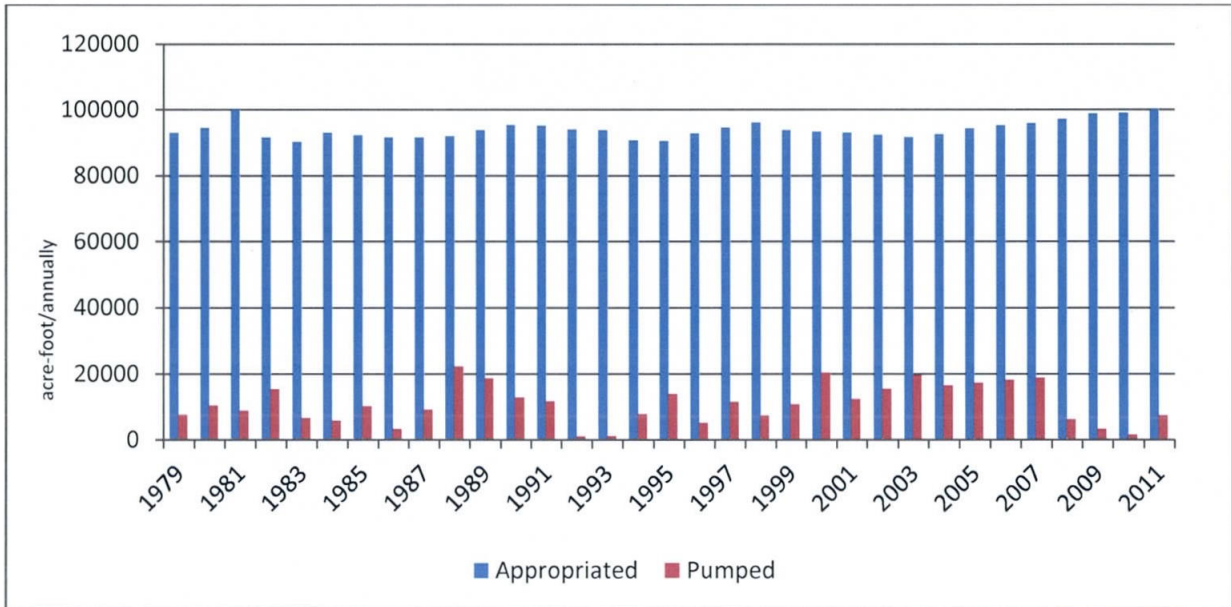


Figure 1: Historic irrigation water appropriation and reported use from the Missouri: Elk Point aquifer in Union County (Water Rights, 1979-2011)

In addition, there are many completion reports on file with the SD DENR-Water Rights Program in Union County for domestic wells that appear to be completed into the Missouri: Elk Point aquifer (Water Rights, 2013c). The annual withdrawal due to domestic use is not significant to the hydrologic budget of the aquifer.

The estimated average annual recharge of 36,480 ac-ft/yr. greatly exceeds the annual average withdrawal of 16,406 ac-ft/yr. Therefore, recharge to and natural discharge from the Missouri: Elk Point aquifer greatly exceeds well withdrawal (Hedges and others, 1982).

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 of the aquifer.”

The DENR-Water Rights Program monitors five observation wells completed into the Missouri: Elk Point aquifer in Union County. The nearest of these wells, UN-77Q and UN-77R, are located approximately a 1.5 of a miles east and 0.75 miles northwest of the proposed well sites respectively. UN-77Q is under water table conditions and UN-77R is under confined condition (Water Rights, 2013a). The area of the proposed well sites will likely be under confined conditions (Water Rights, 2013b; Water Rights, 2013c). Hydrographs of these observation wells and linear trend lines are shown in Figures 2 and 3.

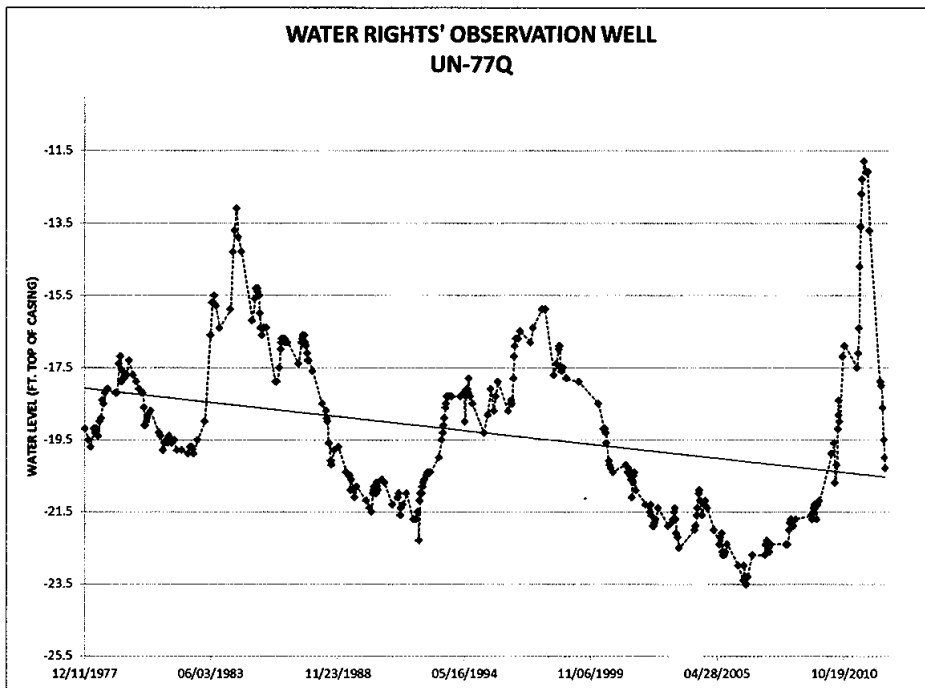


Figure 2 - Hydrograph with long term trend line for DENR-Water Rights' observation well UN-77Q (Water Rights, 2013a)

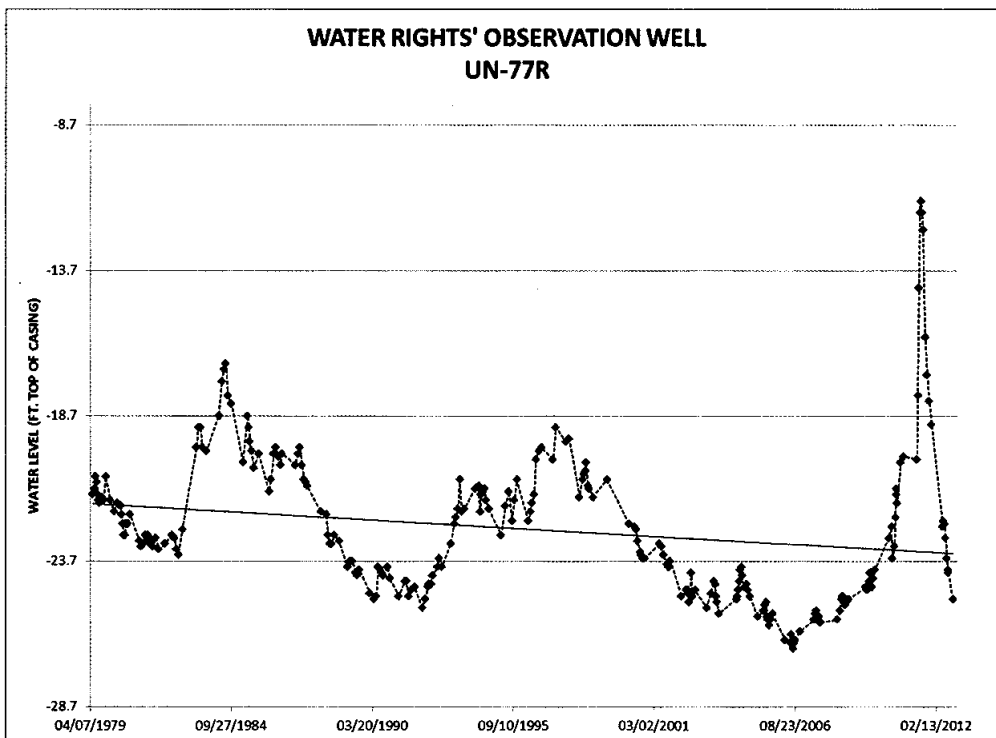


Figure 3 - Hydrograph with long term trend line for DENR-Water Rights' observation well UN-77R (Water Rights, 2013a)

The observation well data documents cyclic conditions of water levels, recharging during wet years and declining during dry years. Water levels may also be influenced by the aquifer's

connection to the Missouri River. For example, high flows in the Missouri River during the summer of 2011 and the current drought conditions are evident in the hydrograph of observation well UN-77R, which is located approximately one mile from the Missouri River. The hydrographs also show the effects of nearby pumping on the aquifer. Observation well data indicates that temporal well withdrawal is masked by climatic conditions.

The hydrographs for both of the observation wells UN-77Q and UN-77R show a slight decline of the Missouri: Elk Point aquifer's water table, as indicated by the trend line. This gradual decline has been attributed to entrenching of the Missouri River (Goodman, 2007) or controlling the flow of the Missouri River by the Gavins Point Dam, which no longer allows inundating of the floodplain (Stephens, 1967). Regardless of cause, the declining water table levels demonstrate the hydraulic connection between the aquifer and the Missouri River. Pumping from the aquifer will induce recharge supplied by the Missouri River or capture discharge before outflowing to the river (Stephens, 1967).

EXISTING WATER RIGHTS:

There are 295 water rights/permits appropriating water from the Missouri: Elk Point aquifer in Union County. Within two miles of the proposed well site, there are 26 water rights/permits, as shown in Table 1, and several domestic wells (Water Rights, 2013b; Water Rights, 2013c).

Table 1: Water rights/permits completed into the Missouri: Elk Point aquifer within two miles of the proposed well sites (Water Rights, 2013b; Water Rights, 2013c)

PERMIT_NO	NAME	STATUS	USE	CFS	ACRES
2108-3	VIRGIL MOLLET JR	LC	IRR	1.880	132
2300-3	JAMES/LEONARD DAILEY	LC	IRR	1.780	125
2334-3	BLAINE OBEAVERS	LC	IRR	2.680	190
2340-3	STEVE HEITMAN	LC	IRR	2.700	216
2342-3	RUSSELL LAFLEUR	LC	IRR	1.430	100
2359-3	LARRY & DIANE DONNELLY	LC	IRR	1.900	132
2360-3	MERYLN KARPEN	LC	IRR	1.900	132
2361-3	MERYLN KARPEN	LC	IRR	1.900	132
2434-3	DALE CHICOINE	LC	IRR	0.500	34
2436-3	DALE & SHERYLL CHICOINE	LC	IRR	1.900	132
2447-3	LAVONNE CORIOBAKER	LC	IRR	1.940	136
2448-3	CORIO FARMS INC	LC	IRR	1.940	136
2531-3	PAUL E DAILEY	LC	IRR	2.700	255
2532-3	PAUL E DAILEY	LC	IRR	2.700	200
2624-3	VINCENT TRUDEAU	LC	IRR	1.800	125
3486-3	RICHARD E DAILEY	LC	IRR	2.570	180
3613-3	RODNEY BALLINGER	LC	IRR	1.140	80
3871-3	ROBERT L PETERSON	LC	IRR	3.550	281
3907-3	RUSSELL LAFLEUR	LC	IRR	1.040	73
5313-3	THOMAS J CORIO	LC	IRR	1.380	97

5666-3	JOE & JOHN TRUDEAU	LC	IRR	1.560	203
5991-3	DONALD G JORGENSEN	LC	IRR	1.360	95
5989-3	ROBERT L PETERSON IRREVOCABLE TRUST	LC	IRR	1.200	84
6032-3	DONALD G JORGENSEN	LC	IRR	1.450	50
6672-3	EUGENE MOLLET	PE	IRR	1.780	136
6737-3	MICHAEL SCHMITZ	PE	IRR	1.330	120

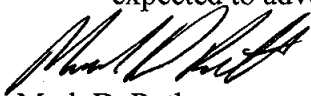
Well interference has not been a problem with the Missouri: Elk Point aquifer. Although some drawdown may occur in the Missouri Elk Point aquifer, SDCL 46-6-6.1 does not protect artesian head pressure as a means of delivery and the Water Management Board has recognized that to place water to maximum beneficial use a certain amount of drawdown may occur. In order 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 need”

The assurance of reasonable domestic use provided by SDCL 46-6-6.1 and ARSD 74:02:04:20(7) ensures not only that interference will not be adverse to domestic well users but also in existing appropriative rights. However some of the existing well owners may need to lower their pumps to accommodate for lower water levels. Although at the distances involved between the proposed well sites and wells of existing water rights/permits and domestic users; interference is not expected to be a concern.

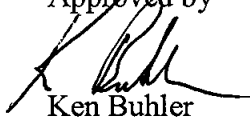
CONCLUSIONS:

1. This application proposes to appropriate up to 235 acre-feet annually from the Missouri: Elk Point aquifer.
2. There is a reasonable probability that unappropriated water is available from the Missouri: Elk Point aquifer to satisfy this proposed appropriation.
3. Withdrawals from the Missouri: Elk Point wells proposed by this application will not be expected to adversely impair existing water rights.



Mark D. Rath
Natural Resources Engineer III
SD DENR-Water Rights Program

Approved by



Ken Buhler
Natural Resources Engineer III
SD DENR-Water Rights Program

REFERENCES:

- Goodman, J.A. 2007. Report on Water Permit Application No. 6869-3 for Lewis and Clark RWS: SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, SD.
- Hedges, L.S., Burch, S.L., Iles, D.L., Barari, R.A., and 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., and 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. South Dakota DENR-Geological Survey, Vermillion, SD.
- Jensen, A.R. 2000. Aquifer Materials Map 1. South Dakota DENR-Geological Survey, Vermillion, SD.
- Niehus, C.A. 1994. Water Resources of Lincoln and Union Counties, South Dakota. U.S. Geological Survey. Water-Resources Investigations Report 93-4195. Rapid City, South Dakota.
- Stephens, J.C. 1967. Geology and Hydrology of Clay County South Dakota. Part II: Water Resources, SD DENR- Geological Survey Bulletin 19,62p.
- Water Rights. 1979-2013. "Annual Irrigation Summary by Aquifer": 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 Right/Permit Files, SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, SD.
- Water Rights. 2013c. Water Well Completion Reports, SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, SD.

AFFIDAVIT OF PUBLICATION

RECEIVED

State of South Dakota)

:ss

FEB 12 2013

County of Union)

WATER RIGHTS
PROGRAM

Kelly Kruithoff,

an employee of the Leader-Courier, deposes and says that

The Leader-Courier

is a legal weekly newspaper of a general circulation, printed and published in Elk Point, County of Union, State of South Dakota, and has been such legal newspaper during the time hereinafter mentioned, and that affiant is and was during all the time hereinafter mentioned in charge of the advertising department thereof, and has personal knowledge of all the facts stated in this affidavit: and that the notice and advertisement headed:

Notice of Application No. 7527-3

To Appropriate Water

a printed copy of which is hereunto attached and made a part hereof, was printed and published in the said newspaper at least once in

each week for 1 successive weeks; that said newspaper at the time of the first publication of said notice hereinafter stated, had, and still has, a bona fide circulation of over two hundred paid copies weekly, and had been published in the said County of Union for more than one year immediately prior to the date of the said publication of said notice, and that said newspaper during said times, was, and is, printed in part in an office maintained at said city of Elk Point, the said place of publication; that the first publication of said notice in said newspaper was

on Thursday, the 7 day of February, 2013

and that the succeeding publications were

on Thursday, the _____ day of _____,

on Thursday, the _____ day of _____,

on Thursday, the _____ day of _____,

that the fees for the printing and publishing of said notice and advertisement in said newspaper as aforesaid were

\$ 26.41, that the full amount of the fee charged insures to the benefit of the publisher of the said newspaper, that no agreement or 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 other person whomsoever.

Kelly Kruithoff
Subscribed and sworn to before me

this 7 day of February, 2013

My commission expires 6-21-17

SUSAN ODSON
NOTARY PUBLIC
SOUTH DAKOTA
Notary Public

NOTICE OF APPLICATION NO. 7527-3

TO APPROPRIATE WATER

Notice is given that Virgil Mollet III and Eugene Mollet, Jr, 47903 334th St, Jefferson SD 57038 has filed an application for a water permit to appropriate 1.11 cubic feet of water per second from one well to be completed into the Missouri Elk Point Aquifer (120 feet deep) located in NE 1/4 SE 1/4 Section 10 for irrigation of 117.5 acres located in the N 1/2 SE 1/4, NE 1/4 SW 1/4 Section 10; all in T89N-R49W.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 7527-3 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 February 19, 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. Firmer, Secretary,
Department of Environment and Natural Resources.

Published February 7, 2013

Published once at the total approximate cost of \$26.41.

6-4-71

RECEIVED

FEB 11 2013

WATER RIGHTS
PROGRAM

AFFIDAVIT OF PUBLICATION

YANKTON DAILY PRESS AND DAKOTAN

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

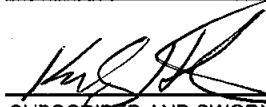
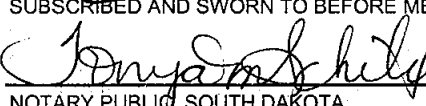
STATE OF SOUTH DAKOTA
COUNTY OF YANKTON

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. 7527-3

TAKEN FROM THE PAPER, IN WHICH IT WAS LAST PUBLISHED IN THE
NEWSPAPER ON THE 7th DAY OF February 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: 2/7/2013

FILED ON: 2/7/2013


SUBSCRIBED AND SWORN TO BEFORE ME THIS 7th DAY OF February

NOTARY PUBLIC, SOUTH DAKOTA
MY COMMISSION EXPIRES 8/19/2015

2-7
NOTICE OF APPLICATION
NO. 7527-3 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, SOUTH DAKOTA 57501-3182
denr.sd.gov

January 28, 2013

Leader Courier
PO Box 310
Elk Point SD 57025

ATTENTION: Legal Public Notice

Enclosed is a Notice on Application No. 7527-3 to Appropriate Water. Please publish the notice once on February 7, 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 Virgil Mollett III and Eugene Mollett, 47903 334th St., Jefferson SD 57038 (Ph # 605-966-5379).

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

January 28, 2013

Press & Dakotan
319 Walnut
Yankton SD 57078

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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

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

January 28, 2013

Virgil Mollett III & Eugene Mollett
47903 334th St
Jefferson SD 57038

Dear Mssrs. Mollett:

Water Permit Application No. 7527-3 for irrigation use has been examined and found to comply with the South Dakota Water Laws and applicable rules. A notice has been sent to the Leader Courier printed at Elk Point SD (Ph # 605-356-2632) 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 February 7, 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.

NOTICE OF APPLICATION NO. 7527-3 to Appropriate Water

Notice is given that Virgil Mollet III and Eugene Mollet, Jr, 47903 334th St, Jefferson SD 57038 has filed an application for a water permit to appropriate 1.11 cubic feet of water per second from one well to be completed into the Missouri:Elk Point Aquifer (120 feet deep) located in NE 1/4 SE 1/4 Section 10 for irrigation of 117.5 acres located in the N 1/2 SE 1/4, NE 1/4 SW 1/4 Section 10; all in T89N-R49W.

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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

APR 12 2013

Virgil Mollet III & Eugene Mollet Jr
47903 334th St
Jefferson SD 57038

Dear Sirs:

Enclosed is Water Permit No. 7527-3 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

SOUTH DAKOTA WATER WELL COMPLETION REPORT

75273

07-92

Location SE 1/4 SE 1/4 Sec 10 Twp 89N Rg 49W

County

North

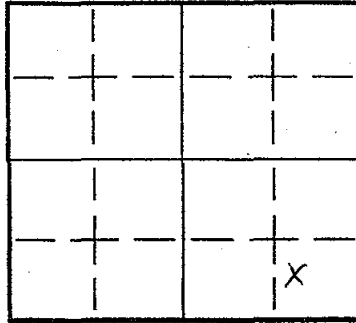
Union

Please mark well location with an "X"

W

E

Well-Completion Date

12-1-12

LOCATION:

Distance from nearest potential pollution source (septic tank, abandoned well, feed lot, etc.)? 800 ft. from septic (identify source).

PROPOSED USE:

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

METHOD OF DRILLING:

Mud RotaryCASING DATA: ☐ Steel ☒ Plastic ☐ Other

If other describe _____

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
<u>5.40</u> LB/FT	<u>12</u> IN	<u>0</u> FT	<u>115</u> FT	<u>17 1/2</u> IN
_____ LB/FT	_____ IN	_____ FT	_____ FT	_____ IN
_____ LB/FT	_____ IN	_____ FT	_____ FT	_____ IN

GROUTING DATA

Grout Type	No. of Sacks	Grout Weight	From	To
<u>Bentonite</u>	_____	_____ lb./gal	<u>30</u> ft	<u>10</u> ft
_____	_____	_____ lb./gal	_____ ft	_____ ft

Describe grouting procedure Pumped in from bottom up.SCREEN: ☒ Perforated pipe ☐ ManufacturedDiameter 12 IN Length 40 FEETMaterial PVCSlot Size .60 Set From 75 Feet to 115 Feet

Other information _____

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: _____

Laboratory sent to for water quality analysis

X NO, Why Not? _____IrrigationWell Owner: Virgil & Eugene Mallet

Business Name: _____

Address: 48329 330th St.
Jefferson, SD 57038

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
<u>Top soil</u>	<u>0</u>	<u>2</u>
<u>Heavy clay</u>	<u>2</u>	<u>19</u>
<u>Silty clay</u>	<u>19</u>	<u>43</u>
<u>Sand</u>	<u>43</u>	<u>45</u>
<u>Grey clay</u>	<u>45</u>	<u>68</u>
<u>Course gravel & rocks</u>	<u>68</u>	<u>120</u>

STATIC WATER LEVEL 21 Feet

If flowing: closed in pressure _____ PSI

GPM flow _____ through _____ inch pipe

Controlled by ☐ Valve ☐ Reducers ☐ Other _____

Reduced Flowrate _____ GPM

Can well be completely shut in? _____

WELL TEST DATA:

☐ Pumped Describe: Not Completed☐ Bailed _____☐ Other _____

Pumping Level Below Land Surface

_____ ft. After _____ Hrs. pumped _____ GPM

_____ ft. After _____ Hrs. pumped _____ GPM

If pump installed, pump rate Not Completed GPM

REMARKS

RECEIVED

FEB 11 2013

WATER RIGHTS
PROGRAMThis well was drilled under license # 667

And this report is true and accurate.

Drilling firm Dakota Drilling & Backhoe, Inc.

Signature of License Representative: _____

Signature of Well Owner or Equitable Property Holder: _____

Date: _____

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

Date 7-10-2013

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

RECEIVED

JUL 12 2013

WATER RIGHTS
PROGRAM

FROM:

Virgil Mollet III
(name)

47903 334th St.
(address)

Jefferson So DAK
(city, state, zip)

605-966-5379
(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. 7527-3 states that the water use system is to be constructed by

2-19-2018
(date)

, and water is to be put to beneficial use by

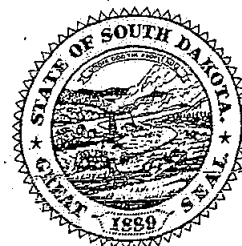
2-19-2022
(date)

The water use system was completed on 3-30-2013
(date)

Applying the water to beneficial use was completed on 7-1-2013
(date)

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

[Signature]
(signature)





**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

JOE FOSS BUILDING
PMB 2020
523 EAST CAPITOL
PIERRE SOUTH DAKOTA 57501-3182
<http://denr.sd.gov>

July 16, 2013

7527-3

Virgil Mollet III
47903 334th St
Jefferson SD 57038

Dear Mr. Mollet:

I am writing to acknowledge receipt of the "Notice of Completion of Works" form that you sent in to let us know that you are completed with your irrigation system.

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,

A handwritten signature in black ink that reads "Genny McMath". The signature is written in a cursive, flowing style.

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