

WATER PERMIT NO. 8163-3

Name of Applicant: Munkvold Land & Cattle Co., Inc.

Address: 43723 294th St, Menno SD 57045

Phone: 605 660-2445

*5
wrong
number*

Amount of Water Claimed: 3.78 cfs

Total Acres: 248.57

Source of Water Supply: groundwater (one well)

Water to be used for: irrigation

County: Yankton

Type of Waste Disposal System:

Location: 15 miles north of Yankton

PRIORITY Date Received: 5-26-15

Application/License Fee: \$ 1250

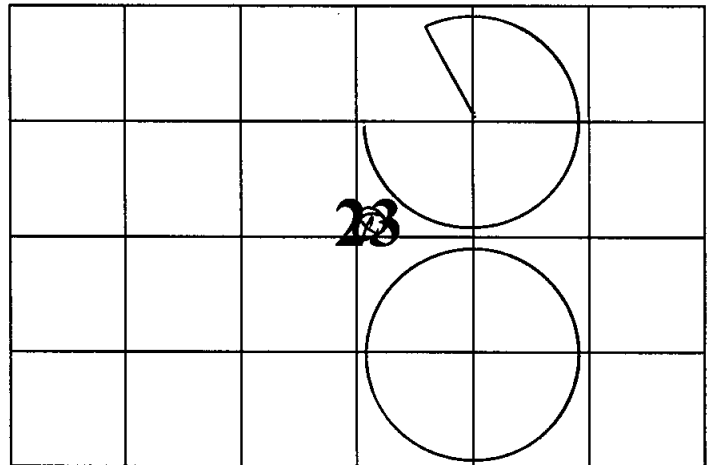
Corrected Application Received: 6-1-15

Period of Annual Use: May 1 – October 31

Remarks:

Diversion Point: ~~SE~~^W 1/4 NE 1/4 Sec 23-T96N-
R56W

Land to be Irrigated: E 1/2 Sec 23-T96N-R56W



Depth of Well: 248 feet deep

Well Driller: Thein Well Drilling

Remarks:

Type of Map: aerial

Prepared by:

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

By: Karen Schlaak

Notice of Hearing - date to intervene: _____

FORM 2: Application for irrigation in South Dakota

(type or print)

Mail to: PMB 2020 DENR - Water Rights 523 E Capitol Ave Pierre, SD 57501-3182 ph. (605) 773-3352	No. <u>8163-3</u> (office use only)	Hydrologic Unit <u>10160011</u>
	Basin <u>James River</u>	
	Newspaper <u>Press & Dakotan</u>	<u>319 Walnut</u>
	<u>Yankton 57078-</u>	<u>605-665-7811</u>

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MAY 26 2015
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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.)

1. Name to Appear on Irrigation Permit Munkvold Land & Cattle Co. Inc.

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

(name and complete address if different than above name)

Mailing Address 43723 294TH ST Menno SD 57045
(Address) (City) (State) (Zip Code)

Home Phone 605 387-5764 Cell 605 660-2545 Email MLCCI@SVTV.com

2. Amount of water claimed 3.78 *CFS or 1700 **GPM ***AF Total Acreage 248.57
(*Cubic Feet per Second) (**Gallons per Minute) (***)Acre Feet - storage capacity of dam/dugout or annual use if applicable)

3. Source of water supply groundwater (one well)

4. Location of point of diversion SW 1/4 NE 1/4 Section 23-T96N-R56W

(example - 3 wells in SW 1/4 NE 1/4 section 12-T104N-R53W)

County Yankton

5. County or counties where water will be used Yankton

6. Annual period during which water is to be used May 1 - october 31

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 Sec 23-T96N-R56W	110.29		
SE 1/4 Sec 23-T96N-R56W	138.28		

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

I, Chapman P. Smith, 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. 8163-3

Date of first receipt of application May 26, 2015.

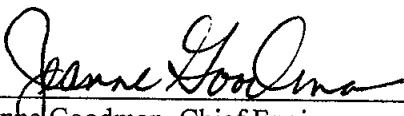
The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 8163-3 to Munkvold Land & Cattle Co. Inc., c/o Ordell Munkvold, 43723 294th St., Menno SD 57045 authorizing the construction of the water use system and the placing of water to beneficial use subject to the following limitations, conditions and qualifications:

1. Water Permit No. 8163-3 appropriates 3.78 cubic feet of water per second (cfs) from one well to be completed into the Lower James:Missouri Aquifer (248 feet deep) located in the SW 1/4 NE 1/4 Section 23 for irrigation of 248.57 acres located in the E 1/2 Section 23; all in T96N-R56W.
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 – October 31.
3. The date from which applicant may claim right is May 26, 2015.
4. The date of approval of Permit No. 8163-3 is August 10, 2015.
5. One-fifth of the construction is to be completed on or before February 10, 2018.
6. All construction is to be completed on or before August 10, 2020.
7. Water is to be put to beneficial use on or before August 10, 2024.
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. 8163-3 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. Pursuant to SDCL 46-5-6 which allows a greater diversion rate if the method of irrigation, time constraints, or type of soils so requires, Permit No. 8163-3 authorizes a maximum diversion rate of 3.78 cfs for the irrigation of 248.57 acres with an annual volume not to exceed 2 acre feet of water per acre per year.
4. 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

AUG 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 1 Have test holes been drilled ☒ Yes ☐ No Drilled by Thein Well Co.
(if yes, please provide copies of logs)b) If existing wells, how many Provide copy of log(s), if available. Drilled by c) Well Depth 248' Depth to Top of Water Bearing Material 143' Depth to Water from Surface 138'

d) Distance to nearest existing domestic well:

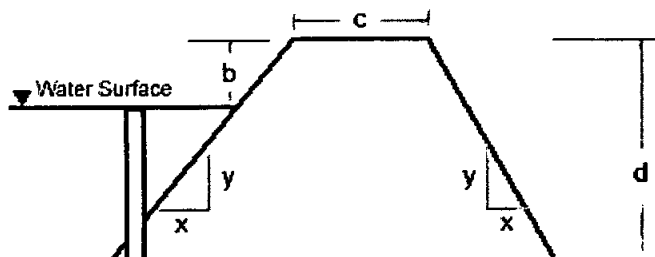
On applicant's property 1 1/2 milesOn property owned by others 1 mile**2. Wastewater Disposal System Information**a) Type of System (i.e. septic tank, drain field) b) System Capacity (gallons) Year Constructed c) Connected to the City of Sanitary System**3. Dugout Information**a) Surface Dimensions Depth 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 (e.g. 3 to 1 is a typical slope)

Upstream Downstream 

Petersen Ag Systems Inc.



301 W South Street
Hartington, NE 68739
402-254-9557 office

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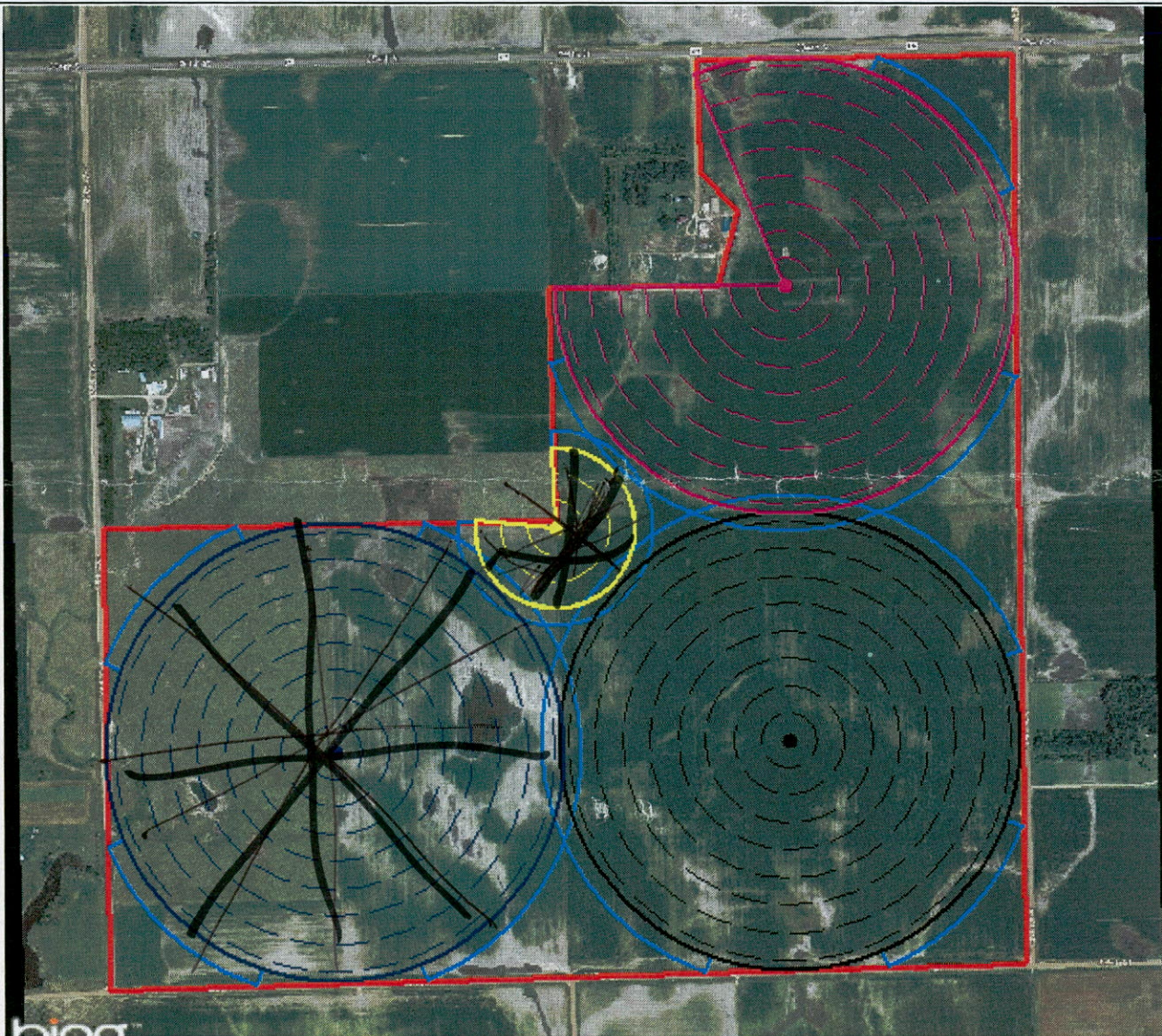
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Farm: Orlando's Place

Grower: Munkvold Land and Cattle

5/11/2015

Systems:	Length	Spans	Total area including endgun
Pivot 2	1307.67 ft	8 spans + 44 ft o.h.	138.28 acres
● Pivot 3	1307.67 ft	8 spans + 44 ft o.h.	110.29 acres
● Pivot 4	1307.67 ft	8 spans + 44 ft o.h.	135.87 acres
● Pivot 5	467.17 ft	3 spans + 11 ft o.h.	17.91 acres





United States Department of Agriculture
Farm Service Agency

February 11, 2011

PLSS: 23_96_56
Farm: 5699

Yankton County, SD
1:10,415

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Wetland Determination Identifiers
● Restricted Use
▽ Limited Restrictions
■ Exempt from Conservation Compliance Provision

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

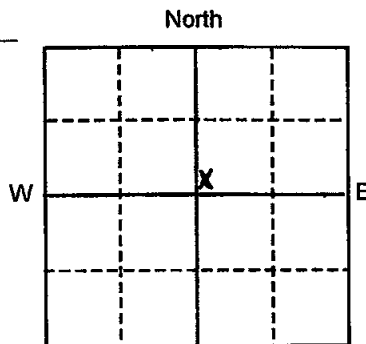
Common Land Units

2010 Ortho-Photography - Not to Scale

2014

SOUTH DAKOTA WATER WELL COMPLETION REPORT

11-02

Location SE 1/4 NW 1/4 Sec 23 Twp 96N Rg 56WCounty YanktonPlease mark well
location with an "X"

Well Completion Date

03/31/15

Distance to nearest potential pollution source (septic tank, abandoned well, feed lot, etc.)?

75.0 ft. from septic (identify source)

PROPOSED USE:

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

METHOD OF DRILLING:

Rotary

CASING DATA:

☒ Steel ☐ Plastic ☐ Other

If other describe

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
LB/FT	16.00 IN	0.0 FT	204.0 FT	21.00 IN
LB/FT	IN	FT	FT	IN
LB/FT	IN	FT	FT	IN

GROUTING DATA:

Grout Type	No. of Sacks	Grout Weight	From	To
Bentonite	81	Lb/gal	0.0 Ft	202.0 Ft
		Lb/gal	Ft	Ft

Describe grouting procedure
tremie piped

SCREEN:

☐ Perforated pipe ☒ Manufactured
Diameter 16.00 Inches Length 40.0 FeetMaterial stainless steelSlot Size .070 Set From 204.0 Feet to 244.0 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? chlorinated☐ No, Why Not?Lab to which water
quality sample sent for analysis

owner to obtain

Well Owner: Munkvold Land & Cattle Co., Inc.

Business Name:

Address: 43503 292nd StCity, State, Zip: Menno SD 57045

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
Top soil	0	3
Yellow clay	3	37
Blue clay	37	114
Sandy blue clay	114	132
Sand, medium coarse	132	164
Blue sandy clay	164	175
Coarse sand	175	179
Fine to medium sand	179	205
Medium to coarse sand	205	248

STATIC WATER LEVEL 138.0 FEET

If flowing: closed in pressure _____ PSI

GPM flow _____ through _____ Inch pipe

Controlled by ☐ Valve ☐ Reducers ☐ Other

Reduced flow rate _____ GPM

Can well be completely shut in?

WELL TEST DATA:

☒ Pumped Describe:☐ Bailed☐ Other

Pumping Level Below Land Surface

143.0 Ft. After 6.0 Hrs. pumped 400.0 GPM

_____ Ft. After _____ Hrs. pumped _____ GPM

If pump installed, pump rate: _____ GPM

REMARKS

Blue shale 248-254

GPS: N 43 7.110

W 97 25.745

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MAY 26 2015

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report is true and accurate.Drilling firm: Thein Well Co., Inc.

Signature of License Representative:

Signature of Well Owner or Equitable Property Holder:

Date:

5-18-15

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date 5/26, 20 15

RECEIVED OF Munkvold Land & Cattle Co Inc 43723 294th St Menno SD 57046

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

Fee for Application for Permit No. <u>8163-3</u> to Appropriate Water, to construct and to put water to beneficial use	1050	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>8163-3</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	1250 00

No. 07414

By James Goodman
Chief Engineer

Entity Detail File Annual Report Statement of Change Forms

Name **MUNKVOLD LAND & CATTLE COMPANY, INC.** [Obtain a Certificate of Good Standing](#)

Corporate ID **DF042487**

Incorporation/Qualification Date **2/29/2000**

Home State **SOUTH DAKOTA**

Status **Good Standing**

Last Annual Report **2015**

Corporation Type **Domestic Farm**

Stock Info **20,000 @ \$100.**

Registered Agent Documents Officers

Year	Director	Officer Type	First	Middle	Last	Address	City	State	Zip	Country
2015	☒	President	ORDELL	R	MUNKVOLD	43503 292ND ST	MENNO	SD	57045-5113	US
2015	☒	Vice President	ORLANDO	E	MUNKVOLD	43863 294TH ST	MENNO	SD	57045-5118	us
2015	☒	Secretary	CLAUDELL	J	MUNKVOLD	43847 293RD ST	MENNO	SD	57045-5119	us
2015	☒	Treasurer	CLAUDELL	J	MUNKVOLD	43847 293RD ST	MENNO	SD	57045-5119	us



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

denr.sd.gov

May 26, 2015

Munkvold Land & Cattle Co., Inc.
43723 294th St
Menno SD 57045

Dear Sir:

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

- Enclosed is your original application. When the application form was printed, the bottom section was cut off. I have retyped the application information on a complete form.
- The form needs to be signed by a Registered Agent or a Director of your corporation. Please review, sign and return the form to our office.

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

No. 8163-3

Water Rights Program - DENR
Conversation File Documentation

NAME OF PERSON OR FILE: Application No. 7163-3, Munkvold Land & cattle Co.

ADDRESS: COUNTY: Yankton

DATE: June 2, 2015 TELEPHONE

RE: Legal Description of Well

I called Mr. Ordell Munkvold and he confirmed the proposed well location is in the SW ¼ NE ¼ Section 23, T96N, R56W near the center of the section. He asked that I amend the application accordingly.

Also note his cell phone number is 660-2545. The application contained a typo in the cell phone number.

NAME: Eric Munkvold



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. 8163-3, Munkvold Land & Cattle Company, Inc.**

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. 8163-3, Munkvold Land & Cattle Company, Inc./o Ordell Munkvold, 43723 294th Street, Menno SD 57045.

The Chief Engineer is recommending APPROVAL of Application No. 8163-3 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. 8163-3 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. Pursuant to SDCL 46-5-6 which allows a greater diversion rate if the method of irrigation, time constraints, or type of soils so requires, Permit No. 8163-3 authorizes a maximum diversion rate of 3.78 cfs for the irrigation of 248.57 acres with an annual volume not to exceed 2 acre feet of water per acre per year.
4. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.

See report on application for additional information.

Jeanne Goodman, Chief Engineer
July 23, 2015

**REPORT TO THE CHIEF ENGINEER
WATER PERMIT APPLICATION NO. 8163-3
Munkvold Land & Cattle Co., Inc.
July 20, 2015**

Water Permit Application No. 8163-3 proposes to appropriate groundwater at a maximum diversion rate of 3.78 cubic feet of water per second (cfs) from one well to be completed into the Lower James Missouri aquifer. The well is expected to be approximately 248 feet deep and located in the SW $\frac{1}{4}$ NE $\frac{1}{4}$ of Section 23, T96N-R56W. Water from this well will be used to irrigate 248.57 acres located in the E $\frac{1}{2}$ of Section 23, T96N-R56W in Yankton County. The applicant is requesting a diversion rate greater than the statutory limit of 1.0 cfs per 70 acres.

AQUIFER: Lower James Missouri aquifer (LJM)

GEOLOGY AND AQUIFER CHARACTERISTICS:

The test hole log submitted with Water Permit Application No. 8163-3 indicates aquifer materials in the area occur from approximately 132 to 248 feet below ground surface. According to the test hole log, the water level in the aquifer in this area at the time the test hole was drilled was 138 feet below ground surface (Water Rights, 2015c).

The Lower James Missouri and the Missouri: Elk Point aquifers are a continuous groundwater bearing unit that has been separated into management units geographically at the bluff created by the Missouri River trench (Hedges and others, 1982). The Missouri: Elk Point aquifer, which is on the floodplain, is typically surficial and predominately under unconfined conditions. The Lower James Missouri aquifer, which is above the floodplain, is typically buried and predominately under confined conditions. Near the geographic boundary the hydrogeologic conditions of the water bearing unit define the aquifer. The aquifer is buried by till at the proposed well site and is above the floodplain. Consequently, this well will be considered as completed into the Lower James Missouri aquifer (Water Rights, 2015c).

The Lower James Missouri aquifer is a glacial outwash consisting of fine sand to cobble gravel. The aquifer is hydraulically connected to the Choteau, Lower James Missouri: Scotland, Missouri: Elk Point, and Niobrara aquifers, and the James and Missouri Rivers. Water in the aquifer moves south and locally toward the James River (Bugliosi, 1986; Hansen, 1983; Lindgren and Hansen, 1990).

Stonesifer (2013) constructed a composite map based on delineations of the Lower James Missouri aquifer produced from Bugliosi (1986), Lindgren and Hansen (1990), Hansen (1983), and Hedges and others (1982). Small portions of the aquifer were delineated in McCook and Clay Counties based on lithological logs (SD Geological Survey, 2015). The Plum Creek aquifer may be hydraulically connected to the Lower James Missouri aquifer (Stonesifer, 2013). The Lower James Missouri aquifer underlies approximately 191,700 acres and contains an estimated 2,795,400 acre-feet (ac-ft) of recoverable water in storage (Hedges et al., 1982).

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 from the aquifer and the potential for impairment of existing rights.

WATER AVAILABILITY:

The probability of unappropriated being water available from an aquifer can be evaluated by considering SDCL 46-6-3.1, which requires that 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. If the source of the groundwater is older or lower than the Greenhorn Formation and will be used for a public water system, recharge and withdrawal does not need to be considered. Here, a public water system is not involved and the aquifer is above the Greenhorn Formation. So, recharge and withdrawal must be considered. This will be considered by two methods: a hydrologic budget considering quantified values of recharge and withdrawal and an observation well analysis considering water levels.

Recharge:

Recharge to the Lower James Missouri aquifer occurs through infiltration of precipitation where the aquifer is at or near land surface in the James River flood plain, upward leakage from the bedrock aquifers, inflow from surface water, and inflow from the surrounding glacial aquifers (Bugliosi, 1986; Hansen, 1983; Lindgren and Hansen, 1990).

Hedges and others (1985) estimated the recharge rate of the Lower James Missouri aquifer through regional flow-net analysis to be 1.5 inches per year (in/yr). Applying this recharge rate estimate to the total area of the aquifer results in a recharge estimate of 35,800 ac-ft/yr. However, Hedges and others (1985) explain that the flow-net analysis is only intended to help assist in evaluation of natural recharge rates determined by other methods.

The recharge rate to unconfined portions of the aquifer was estimated to be 3.9 in/yr from observation well analysis (Hedges and others, 1985). The extent of the unconfined portion of the aquifer was determined from lithological logs, observation wells, and ArcMap 10.2 mapping software to be 82,200 acres (Stonesifer, 2013). Applying Hedges and others (1982) recharge rate to the unconfined area of the aquifer results in a recharge estimate of 26,700 ac-ft/yr.

Discharge:

Discharge from the Lower James Missouri aquifer occurs through evapotranspiration in areas where the aquifer is at or near land surface, seepage to surface waters, and well withdrawals (Bugliosi, 1986; Hansen, 1983; Lindgren and Hansen, 1990). Currently there are 133 water rights/permits appropriating water from the Lower James Missouri aquifer (Water Rights, 2015b). This number does not include the Scotland Management Unit of the Lower James Missouri aquifer, the Missouri: Elk Point aquifer, or the Plum Creek aquifer.

While there are many domestic wells on file, many are no longer used as primary sources since rural water systems have been introduced in the area. Considering this, and the relatively small withdrawal of a domestic well, the annual quantity of water withdrawn from domestic wells is not considered significant to the hydrologic budget of the aquifer (Water Rights, 2015c) and will not be taken into consideration in this report.

The amount of water that can be expected to be withdrawn by non-irrigation water rights/permits (which are all limited by diversion rate) at the current level of appropriation is estimated by assuming these water rights/permits pump at the maximum authorized diversion rate 60 percent of the time. This amounts to approximately 1,280 ac-ft/yr.

The historic irrigation water use from water rights/permits authorized to divert from the Lower James Missouri aquifer is shown in Table 1. The average irrigation use over the period of record from water rights/permits authorized to divert from the Lower James Missouri aquifer is 2,699 ac-ft/yr. The increased number of water rights/permits appropriating water from the Lower James Missouri aquifer since 2008 indicate future use will likely exceed average historical use. The average ratio of use to appropriation over the period of record is .15 or 15 percent. Assuming this ratio will remain relatively constant in future years, expected irrigation use at the current level of appropriation is likely to be closer to 5,550 ac-ft/yr.

Hydrologic Budget:

At the current level of appropriation, irrigation use is expected to be approximately 5,550 ac-ft/yr. Combined with expected non-irrigation use, annual use from the aquifer is expected to be approximately 6,830 ac-ft/yr. Hedges and others' (1982) flow net analysis determined a recharge estimate of 35,800 ac-ft/yr. Applying Hedges and others' (1982) unconfined recharge rate to the determined unconfined area yields a recharge estimate of 26,700 ac-ft/yr. This range in recharge estimates is much greater than expected withdrawals under the current level of appropriation. Therefore, there is a reasonable probability that unappropriated water is available from the Lower James Missouri aquifer to support the proposed appropriation.

Year	Number of Permits	Appropriation (ac-ft/yr)	Pumpage Reported (ac-ft/yr)
1979	22	11265.0	588.0
1980	23	11561.0	1299.0
1981	27	13053.0	1835.0
1982	23	9440.1	1301.3
1983	27	9883.1	1306.5
1984	28	12283.1	1360.0
1985	27	10033.1	1483.0
1986	30	11613.5	989.6
1987	30	11613.5	1041.6
1988	31	11769.5	2744.9
1989	31	10909.1	2144.8
1990	35	12673.1	2928.1
1991	42	15497.9	2599.0
1992	45	16791.9	1159.0
1993	45	16241.9	230.4
1994	45	17094.1	1918.2
1995	41	15088.1	1483.3
1996	49	17240.1	2103.0
1997	50	17072.1	2320.0
1998	53	16915.1	2787.0
1999	50	15992.1	2102.2
2000	51	17048.1	3751.1
2001	53	17208.1	2940.1
2002	53	17108.1	4061.5
2003	53	17373.1	2843.2
2004	47	14525.1	2886.7
2005	48	14749.1	2866.6
2006	50	15627.1	3630.9
2007	56	17477.7	3425.9
2008	79	23891.7	4494.0
2009	84	25451.1	1463.3
2010	85	25731.1	665.4
2011	89	27367.1	4147.5
2012	93	28626.7	13058.5
2013	118	33664.1	7855.8
2014	125	36286.1	3347.3
Max	125	36286.1	13058.5
Min	22	9440.1	230.4
Average	51	17115.7	2698.9

Table 1: Historic irrigation water use from the Lower James Missouri aquifer (Water Rights, 1980-2015).

Observation Well Data:

Administrative Rule of South Dakota (ARSD) 74:02:05:07 states the Board will rely on the record of observation well measurements in addition to other data to determine that the annual withdrawals from the aquifer do not exceed the estimated average annual recharge.

The Water Rights Program monitors 33 observation wells completed into the Lower James Missouri aquifer. Currently hydrographs for 17 of the observation wells have a declining trend line across the period of record. These declining trend lines have two explanations. First, many observation wells with decreasing trend lines in the northern portion of the aquifer have had recent development nearby. The temporal effects of pumping are skewing the trend line downward as can be seen when comparing Observation Wells HT-81D and HT-82C. These wells are approximately three miles apart. Observation well HT-81D has a decreasing trend line, and HT-82C has an increasing trend line, as shown in Figure 1. There are seven water rights/permits within one mile of HT-81D with a maximum combined diversion rate of 9.22 cfs. The majority of this diversion rate authority was issued just before or just after the year 2000, corresponding to the time that increased seasonal drawdown is observed in Observation Well HT-81D. The nearest water rights/permits to HT-82C are more than two miles away. Overlays of the hydrographs of these wells (see Figure 2) show increased seasonal drawdown in HT-81D but not in HT-82C. Both observation wells show full annual recovery and record high water levels in 2011. In conclusion, the decreasing trend line of observation well HT-81D (as well as trend lines for several other observation wells completed into the Lower James Missouri aquifer) can be attributed to localized pumping and does not indicate a general decrease in overall annual water levels in the aquifer.

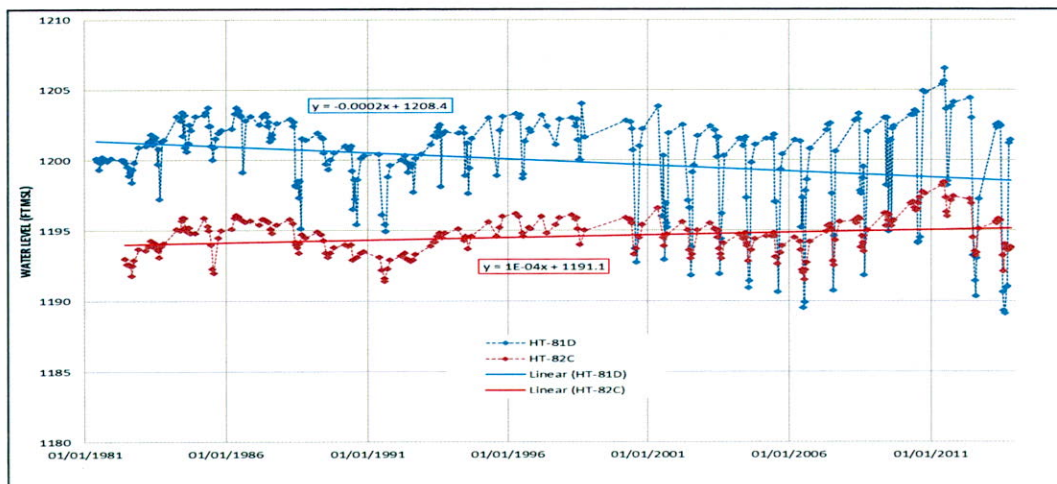


Figure 1: Hydrographs for observation wells HT-81D and HT-82C (Stonesifer, 2013)

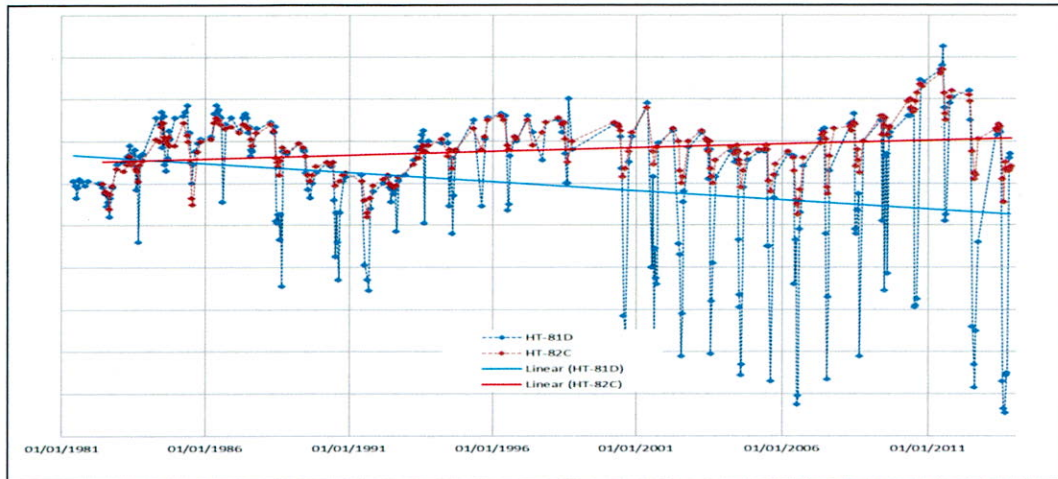


Figure 2: Overlay of observation wells HT-81D and HT-82C (Stonesifer, 2013)

The southern portions of the Lower James Missouri aquifer share a hydraulic connection to the Missouri: Elk Point aquifer, which in turn, is hydraulically connected to the Missouri River. Since the Gavins Point Dam was closed off, the Missouri River has entrenched approximately 10 feet (Buhler, 2014). As the stage has dropped as a result of entrenchment, the water levels in the hydraulically connected aquifers have declined (Water Rights, 2015a). And so, the declining water levels in observation wells near the Missouri River can be attributed to the entrenchment of the Missouri River and do not indicate decreasing water levels in the aquifer overall.

The nearest observation wells to the proposed well site in this application and which are completed into the Lower James Missouri aquifer, YA-80X and YA-80Z, are located approximately 0.7 miles and 2.5 miles to the south of the test hole site, respectively. The hydrographs for these observation wells are shown in Figures 3 and 4 and are typical of many observation wells recording water levels in the Lower James Missouri aquifer. Seasonal variation is evident but generally masked by longer term climatic conditions, indicating that water is available for capture. About half of Lower James Missouri aquifer observation wells record water levels with increasing trend lines, indicating that withdrawals have not exceeded recharge. Observation wells with declining trend lines in water levels have been explained. Therefore, unappropriated water is available from the Lower James Missouri aquifer for the proposed appropriation.

It is unknown whether the record low water level seen in Observation Well YA-80X in the summer of 2014 is an accurate depiction of water levels in the aquifer or is the result of a measurement error.

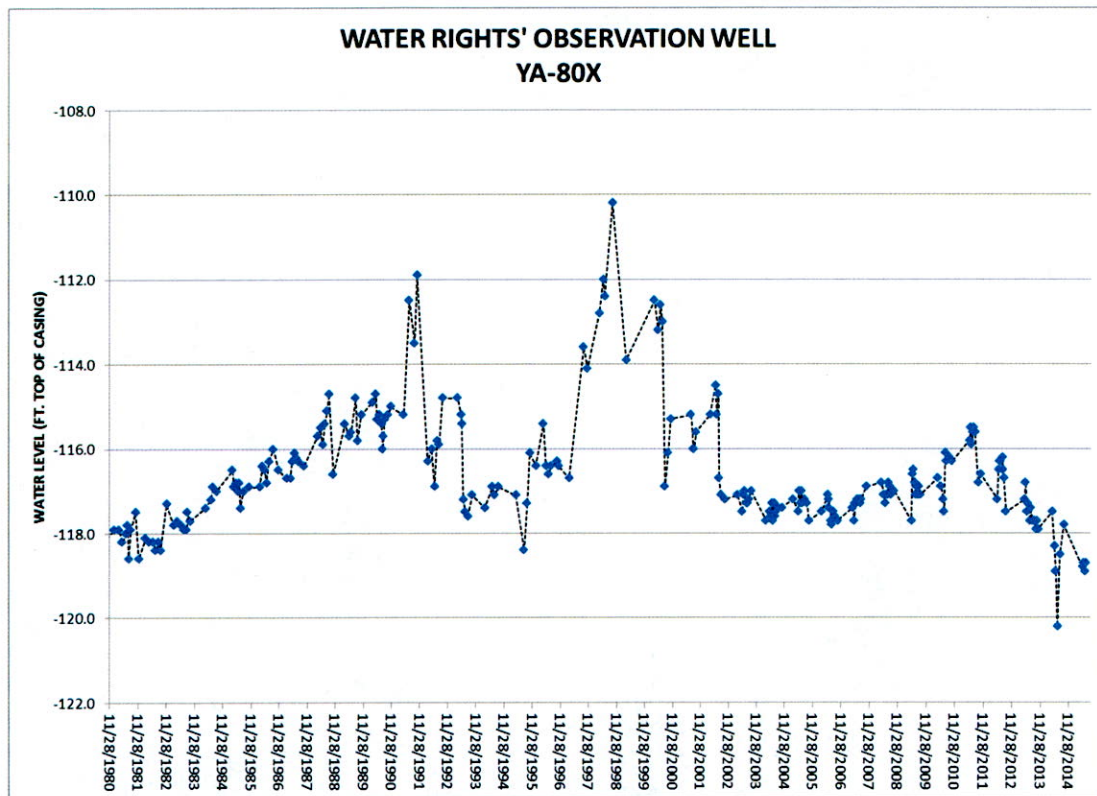


Figure 3: Historic water levels in Observation Well YA-80X (Water Rights, 2015a)

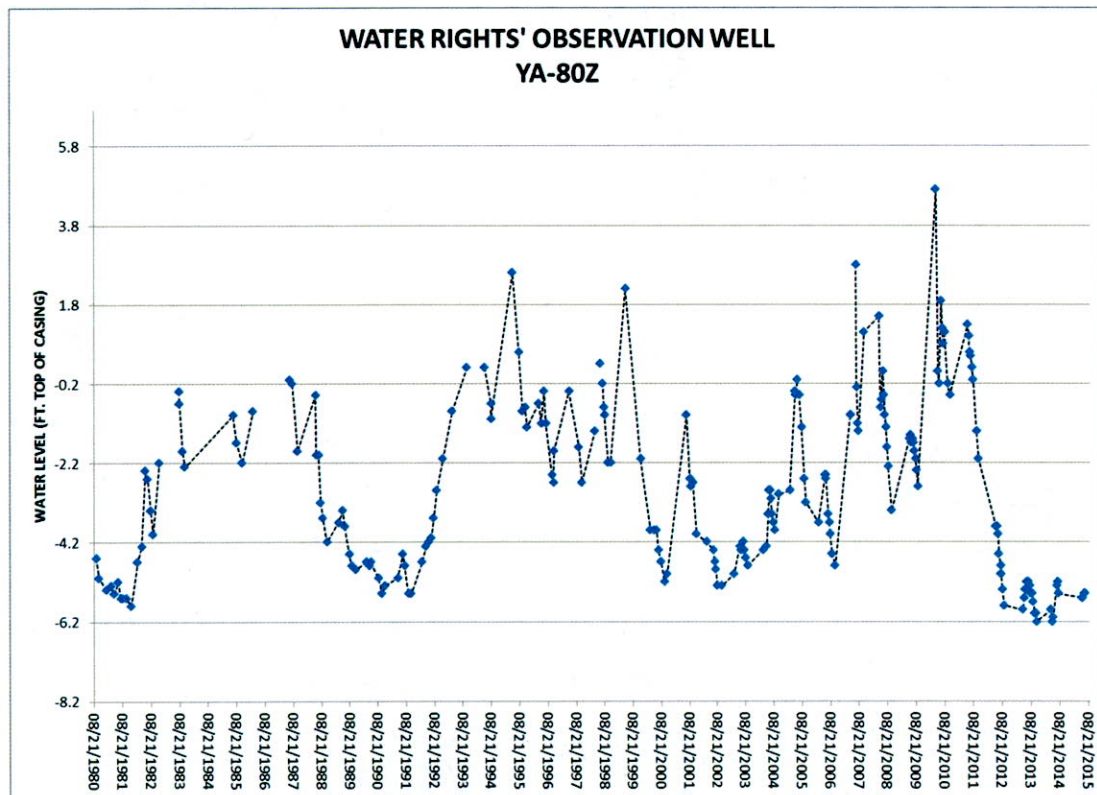


Figure 4: Historic water levels in Observation Well YA-80Z (Water Rights, 2015a)

EXISTING WATER RIGHTS:

The nearest water rights/permit to the proposed diversion site (7932-3) is located approximately one mile to the northwest of the test hole site. However, Water Permit No. 7932-3 is controlled by the current applicant. Potential interference between the two wells is seen by the Water Rights Program as a management issue to be addressed by the applicant. With the exception of Water Permit No. 7932-3, there are no water rights/permits appropriating water from the Lower James Missouri aquifer within three miles of the proposed well site. Interference with wells at a distance of greater than three miles is not expected to occur.

SDCL 46-5-6

Pursuant to SDCL 46-5-6, the diversion rate for an irrigation appropriation cannot be in excess of one cubic foot of water per second for every 70 acres, or "the equivalent thereof." The statute provides that the Water Management Board may allow a greater diversion if the method of irrigation so requires.

This water permit application proposes to divert water at a rate of 3.78 cfs for the irrigation of 248.57 acres, equating to 1.0 cfs per 65 acres. This request was made in order to operate the pivots simultaneously at 850 gallons per minute or 1.89 cfs.

CONCLUSIONS:

1. Water Permit Application No. 8163-3 proposes to appropriate groundwater at a maximum diversion rate of 3.78 cfs from one well to be completed into the Lower James Missouri aquifer for the irrigation of 248.57 acres.
2. There is a reasonable probability that unappropriated water is available from the Lower James Missouri aquifer to supply the proposed appropriation.
3. The proposed diversion is not expected to adversely impact existing nearby adequate wells.
4. The application has requested a diversion rate in excess of one cfs per 70 acres in order to properly supply and simultaneously run two irrigation pivots.



Bracken Capen
SD DENR-Water Rights Program

Approved by



Ken Buhler
SD DENR-Water Rights Program

REFERENCES:

- Bugliosi, E.F. 1986. Water Resources of Yankton County, South Dakota. Water Resources Investigations Report 84-4241. U.S. Geological Survey, Huron, South Dakota.
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- 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.
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- Stonesifer, J.R. 2013. Report on Water Permit Application No. 7886-3, Wolf Creek Hutterian. SD DENR-Water Rights Program. Joe Foss Bldg., Pierre, South Dakota.
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- Water Rights. 2015a. Observation Well Files, SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, South Dakota.
- Water Rights. 2015b. Water Right/Permit Files, SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, South Dakota.
- Water Rights. 2015c. Water Well Completion Reports, SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, South Dakota.

RECEIVED

AUG - 3 2015

WATER RIGHTS
PROGRAM

AFFIDAVIT OF PUBLICATION

YANKTON DAILY PRESS AND DAKOTAN

7+30

NOTICE OF APPLICATION NO.
8163-3 to Appropriate Water

Department of Environment and Natural Resources
Water Rights Program
523 E Capitol Ave
Pierre, SD 57501

STATE OF SOUTH DAKOTA
COUNTY OF YANKTON

GARY WOOD BEING FIRST DULY SWORN ON OATH DEPOSES
AND SAYS THAT HE IS THE PUBLISHER 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. 8163-3

TAKEN FROM THE PAPER, IN WHICH IT WAS LAST PUBLISHED IN THE
NEWSPAPER ON THE 30th DAY OF July 2015
THAT THE FULL AMOUNT OF THE FEE CHARGED FOR THE PUBLICATION
OF SAID NOTICE TO WIT \$27.31 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: 7/30/2015

FILED ON: 7/30/2015

SUBSCRIBED AND SWORN TO BEFORE ME THIS 30th DAY OF July

2015

NOTARY PUBLIC, SOUTH DAKOTA

MY COMMISSION EXPIRES

8/19/2015

Notice is given that Munkvold Land & Cattle Co Inc., c/o Ordell Munkvold, 43723 294th St, Menno SD 57045 has filed an application for a water permit to appropriate 3.78 cubic feet of water per second (cfs) from one well to be completed into the Lower James:Missouri Aquifer (248 feet deep) located in the SW 1/4 NE 1/4 Section 23 for irrigation of 248.57 acres located in the E 1/2 Section 23; all in T96N-R56W. The applicant is requesting a diversion rate greater than the statutory limit of 1 cfs per 70 acres.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 8163-3 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 August 10, 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. Contact Eric Gronlund at the above Water Rights Program address to request copies of information pertaining to this application. Steven M. Pimer, Secretary, Department of Environment and Natural Resources. Published once at the total approximate cost of .527.31.

Schlaak, Karen

From: Schlaak, Karen
Sent: Friday, July 24, 2015 7:43 AM
To: 'Tera Schmidt'
Subject: 8163-3, Munkvold Land & Cattle Co
Attachments: 8163-3public.short.docx; FORM8 FRM.doc

Attached is a notice to be published on July 30, 2015.

Munkvold Land & Cattle Co Inc., c/o Ordell Munkvold, 43723 294th St, Menno SD 57045 (605 387-5764 or c 605 660-2545) has been notified to contact you to authorize publication and arrange for payment.

Please send the affidavit or return the attached Proof of Publication form ASAP.

Let me know if you have questions. Please acknowledge receipt of this email.

Karen Schlaak

Water Rights Program
523 E Capitol Ave
Pierre SD 57501
Phone: 605 773-3352



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.**

July 23, 2015

Munkvold Land & Cattle Co Inc
Ordell Munkvold
43723 294th St
Menno SD 57045

Dear Mr. Munkvold:

Water Permit Application No. 8163-3 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 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.

NOTICE OF APPLICATION NO. 8163-3 to Appropriate Water

Notice is given that Munkvold Land & Cattle Co Inc., c/o Ordell Munkvold, 43723 294th St, Menno SD 57045 has filed an application for a water permit to appropriate 3.78 cubic feet of water per second (cfs) from one well to be completed into the Lower James:Missouri Aquifer (248 feet deep) located in the SW 1/4 NE 1/4 Section 23 for irrigation of 248.57 acres located in the E 1/2 Section 23; all in T96N-R56W. The applicant is requesting a diversion rate greater than the statutory limit of 1 cfs per 70 acres.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 8163-3 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 August 10, 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. 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

AUG 13 2015

Munkvold Land & Cattle Co Inc
Ordell Munkvold
43723 294th St
Menno SD 57045

Dear Mr. Munkvold:

Enclosed is Water Permit No. 8163-3 authorizing construction of the 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

NOTICE OF COMPLETION OF WORKS AND
APPLICATION OF WATER TO BENEFICIAL USEDate 8-15-15TO: Water Rights Program, DENR
523 E. Capitol
Pierre, SD 57501-3181FROM: Munkwold Land & Cattle Co Inc
(name)
43723 294th st
(address)
Mengo SD 57045 605-660-2545
(city, state, zip) (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.

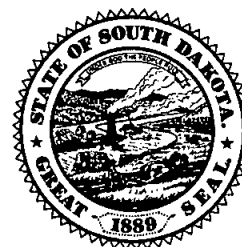
Water Permit No. 8163-3 states that the water use system is to be constructed by August 10 2020, and water is to be put to beneficial use by August 10 2024.
(date) (date)

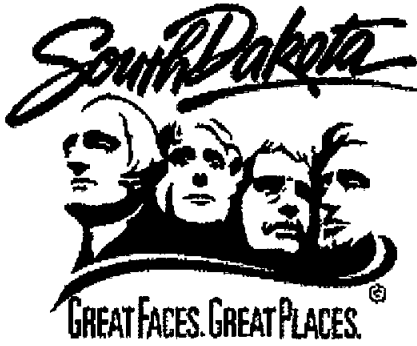
The water use system was completed on August 3 2015.
(date)

Applying the water to beneficial use was completed on August 12 2015.
(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
523 EAST CAPITOL
PIERRE SOUTH DAKOTA 57501-3182
<http://denr.sd.gov>

August 24, 2015

8163-3

Ordell Munkvold
Munkvold Land & Cattle Co Inc
43723 294th St
Menno SD 57045

Dear Mr. Munkvold:

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,

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



8163-3
DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

January 26, 2018

NOTICE

TO: MUNKVOLD LAND & CATTLE COMPANY, ORDELL MUNKVOLD, 43723 294TH STREET, MENNO, SD 57045

FROM: Ron Duvall, Natural Resources Engineer
for Jeanne Goodman, Chief Engineer
Water Rights Program

SUBJECT: Reporting Requirement for 2017 Irrigation Questionnaire(s)

Our records indicate your 2017 Irrigation Questionnaire(s) has not been submitted for Permit No(s) 7932-3 & 8163-3. The request for the Questionnaire was dated October 20, 2017. The Water Management Board has directed that owners of water permits who have not submitted the 2017 Irrigation Questionnaire(s) be given notice of permit violation and a hearing to be held by the Board. The hearing is to determine what action is to be taken for violation of Water Permit No(s) 7932-3 & 8163-3 qualification:

"This permit is approved subject to the Irrigation Water Use Questionnaire being submitted each year."

The hearing will be held at **Wednesday, March 7, 2018 at 10:00 am (Central Time)** in the Floyd Matthew Training Center, Joe Foss Building, 523 E Capitol Avenue, Pierre, SD and will be conducted pursuant to SDCL 46-1-12, 46-1-14, 46-2-9, 46-2-11 and 46-2-17. These are contested case hearings pursuant to Chapter 1-26. According to SDCL 46-1-12, the Board may suspend a permit for a period of up to one year for the first violation of a permit qualification or up to three years for a second violation, or cancel a permit for a third violation. Following the hearing, the Water Management Board can:

1. Suspend or cancel Permit No(s) 7932-3 & 8163-3 in accordance with applicable provisions of SDCL 46-1-12;
2. Postpone any action; or
3. Take no action.

The hearing is an adversary proceeding. The permit owner has the right to be present or to be represented by a lawyer. These and other due process rights will be forfeited if they are not exercised. Decisions of the Board may be appealed to the Circuit Court and the State Supreme Court as provided by law.

If the questionnaire(s) is (are) received in this office before the **March 7, 2018** hearing you will no longer be in violation of your permit and your name will be removed from the Board agenda. Enclosed are additional questionnaire(s) for your use. If you have questions or need assistance, please contact Genny McMath at (605) 773-3352 or email at genny.mcmath@state.sd.us. If you prefer, you can complete the questionnaire online at the following link: <http://denr.sd.gov/iq.aspx>

NOTE: Please contact the Water Rights Program, Joe Foss Building, 523 E Capitol, Pierre, SD (605-773-3352) to assure access to the meeting room for the handicapped or to obtain an interpreter for the hearing impaired.



8163-3

**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

February 7, 2018

7932-3
8163-3

Ordell Munkvold
Munkvold Land & Cattle Co
43723 294th St
Menno SD 57045

Dear Mr. Munkvold:

I am writing to acknowledge receipt of your 2017 irrigation questionnaires.

You may disregard the January 26, 2018, "Notice" concerning reporting requirements for Water Permit Nos. 7932-3 and 8163-3. The information was received in our office prior to the Water Management Board meeting and your name has been deleted from the agenda.

If you have any questions, please contact me.

Sincerely,

A handwritten signature in black ink that reads "Genny McMath".

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 Permit No. 8163-3**

I have this day, July 22, 2020, made a thorough examination of the water use system constructed by Munkvold Land & Cattle Co., Inc., 43723 294th St., Menno, SD 57045, holder of Permit No 8163-3, bearing the priority of May 26, 2015, authorizing the diversion of 3.78 cu. ft. per second of the waters of groundwater (Lower James Missouri Aquifer) for the irrigation of 248.57 acres located in Yankton County.

Inspection contact: Ordell Munkvold

A. Works used to divert the water:

Well Information

- 1) Well Drilling Firm: Thein Well Co., Inc.
- 2) No. of Wells: 1
- 3) Depth(s): 248 feet
- 4) Well log is available: Yes

Casing:

- 1) Diameter: 16 inches
- 2) Length: 204 feet
- 3) Type: Steel

Screen:

- 1) Diameter: 16 inches
- 2) Length: 40 feet
- 3) Type: Stainless Steel
- 4) Static water level: 138 feet

Pump:

- 1) Make: Layne/Verti-Line
- 2) Model: 12RL-RM
- 3) Capacity: 1,000 GPM

Engine:

- 1) Make: Twin Disc
- 2) Model: SP111HP3

Gear Drive -

- 1) Make: Amarillo
- 2) Model: S125A
- 3) Horsepower rating: 125 hp

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

Well to North Pivot 1) Type PVC 2) Size 8 inches 3) Length 1,820 feet

Well to South Pivot 2) Type PVC 2) Size 8 inches 3) Length 1,850 feet

C. Works used to apply water to beneficial use:

North Center Pivot:

- 1) Make: Zimmatic
- 2) Overall length: 1,290 feet
- 3) Number of towers: 8
- 4) End gun: Yes
- 5) Capacity: 1,000 GPM

South Center Pivot:

- 1) Make: Zimmatic
- 2) Overall length: 1,290 feet
- 3) Number of towers: 8
- 4) End gun: Yes
- 5) Capacity: 1,000 GPM

Chemigation Equipment:

- 1) Does chemigate No

D. Compliance with Permit Requirements:

- 1) Permit qualifications being abided by: Yes
- 2) Irrigation Questionnaires checked to determine if permit owner started irrigation by the end of construction period: Yes
- 3) Exceptions to compliance are: None

E. Condition and Location:

1. The system is in good condition with the point(s) of diversion located as follows:
The well is 2,600 feet south and 2,630 feet west of the northeast corner of Section 23-T96N-R56W (Latitude 43.11861, Longitude -97.42910 – SW1/4 of the NE1/4).
2. The works are capable of diverting and conveying to the place of use 2.23 cu. ft. per second of water which is to be used for irrigation purposes. Water has been put to beneficial use to the maximum extent as follows, all in Section 23-T96N-R56W:

<u>NW1/4NE1/4</u>	<u>8 acres</u>	<u>NW1/4SE1/4</u>	<u>35 acres</u>
<u>NE1/4NE1/4</u>	<u>31 acres</u>	<u>NE1/4SE1/4</u>	<u>32 acres</u>
<u>SW1/4NE1/4</u>	<u>33 acres</u>	<u>SW1/4SE1/4</u>	<u>34 acres</u>
<u>SE1/4NE1/4</u>	<u>33 acres</u>	<u>SE1/4SE1/4</u>	<u>32 acres</u>

comprising a total of 238 acres of land and the license should be issued for 2.23 cfs.

3. All structures, wells and lands on map Yes

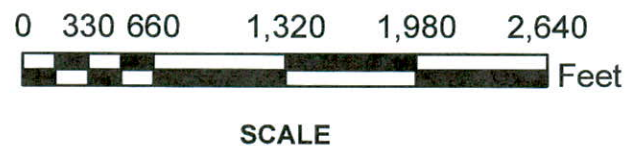
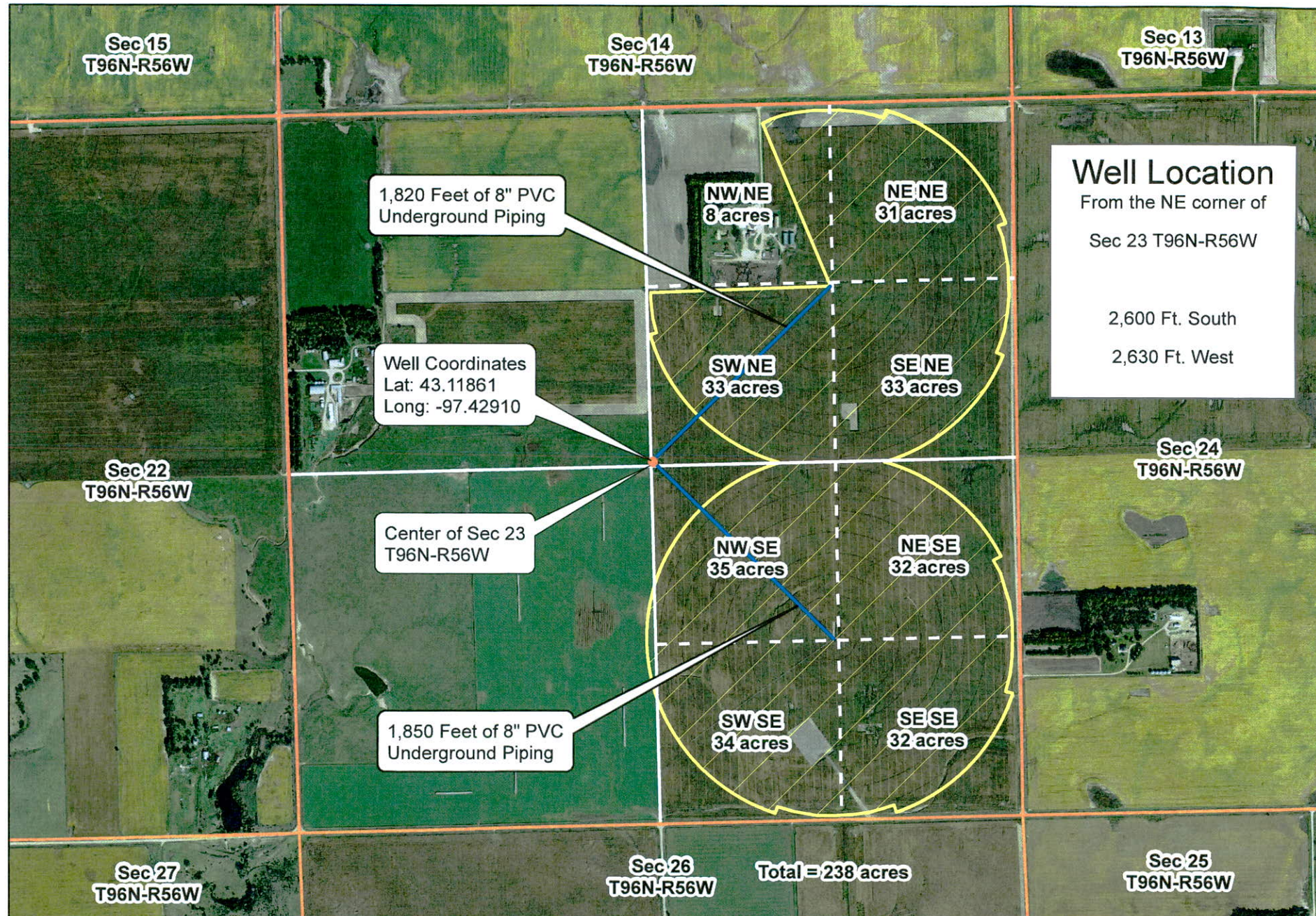
F. Comments or other permit(s) associated with the project: None.

Keith DeJong

Keith DeJong
Water Rights Inspector
DENR, Water Rights Program

Date report completed: July 28, 2020

Water Right No. 8163-3



Keith DeJong
Keith DeJong, PE
Staff Engineer
July 29, 2020

8163-3



DENR
SOUTH DAKOTA

**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

AUG 04 2020

7932-3
8163-3

Ordell Munkvold
Munkvold Land & Cattle Co Inc
43723 294th St
Menno SD 57045

Dear Mr. Munkvold:

Enclosed are Water License Nos. 7932-3 and 8163-3. These are the final water right document completing your process of obtaining Water Rights. Included with each license is a map prepared by the staff engineer who conducted the field investigation.

For your information SDCL 46-6-27 requires that if in the future, the owner of an existing well, 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 Licenses, State Water Laws provide that you have a continuing right to use the water. If you have any questions, please contact our office.

Sincerely,


Eric Gronlund, Chief Engineer
Water Rights Program
(605) 773-3352

enclosures

**STATE OF SOUTH DAKOTA
WATER LICENSE NO. 8163-3**

(1) Munkvold Land & Cattle Co Inc., 43723 294th St, Menno SD 57045 made Application No. 8163-3, May 26, 2015 for a water permit to divert 3.78 cubic feet of water per second from ground water, one well (Lower James Missouri Aquifer), Yankton County, South Dakota for irrigation purposes. Permit No. 8163-3, with a priority date of May 26, 2015 was approved August 10, 2015 and issued to the applicant for diversion of water with construction of the described water supply system to be completed on or before August 10, 2020 and for the application to beneficial use of water on or before August 10, 2024.

The Permit holder submitted a "Notice of Completion of Works and Application of Water to Beneficial Use" on August 19, 2015. The "Notice" stated the water use system was completed and the water placed to beneficial use in August 2015.

(2) It is certified that the permit holder has complied with the provisions of South Dakota State Law relating to completion of the water supply system and is entitled to divert 2.23 cubic feet of water per second for beneficial use. The diversion point is located as follows:

- 2,600'S and 2,630'W of the northeast corner of Section 2, T96N, R56W (SW ¼ NE ¼)
Latitude 43.11861, Longitude -97.42910

(3) The permit holder has complied with the provisions of South Dakota State Law relating to the application of water to beneficial use to irrigate the following land:

T96N, R56W Section 23	NW ¼ NE ¼	8 acres	NW ¼ SE ¼	35 acres
	NE ¼ NE ¼	31 acres	NE ¼ SE ¼	32 acres
	SW 1/4 NE ¼	33 acres	SW ¼ SE ¼	34 acres
	SE ¼ NE ¼	33 acres	SE ¼ SE ¼	32 acres
Total 238 acres				

(4) Pursuant to South Dakota Water Law 46-5-30.1 Munkvold Land & Cattle Co Inc., 43723 294th St, Menno SD 57045 the holder and/or owner of Water Right No. 8163-3 is issued a license to appropriate water, the right to use 2.23 cubic feet of water per second from ground water, one well (Lower James Missouri Aquifer) with a priority date of May 26, 2015 from the location specified in (2) of this license for irrigation purposes.

This license is subject to South Dakota Water Law, any limitations or conditions listed in Water Right No. 8163-3 and subject to the following qualifications:

- The well authorized under this Water Right 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.

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