

WATER PERMIT NO. 1899-1

Name of Applicant: **Davis Ranches Inc.**

Address: **11022 Davis Rd, Belle Fourche SD 57717** Phone: **605 892-2217**

Amount of Water Claimed: **2.5 cfs** Total Acres: **100 acres**

Source of Water Supply: **groundwater (one well)**

Water to be used for: **irrigation** County: **Butte**

Type of Waste Disposal System:

Location: **15 miles north of Belle Fourche**

PRIORITY Date Received: **8-25-08**

Application/License Fee: **\$275**

Corrected Application Received: **9-11-08**

Period of Annual Use: **June 1 – Sept 30**

Remarks: **proposing to flood irrigate – requesting diversion rate greater than 1 cfs /70 acres**

Diversion Point: **center NE ¼ Sec 14-T11N-R2E**

Land to be Irrigated: **NE ¼ Sec 14 and W ½ NW
¼ Sec 13; all in T11N-R2E**

Depth of Well: **4679 feet deep**

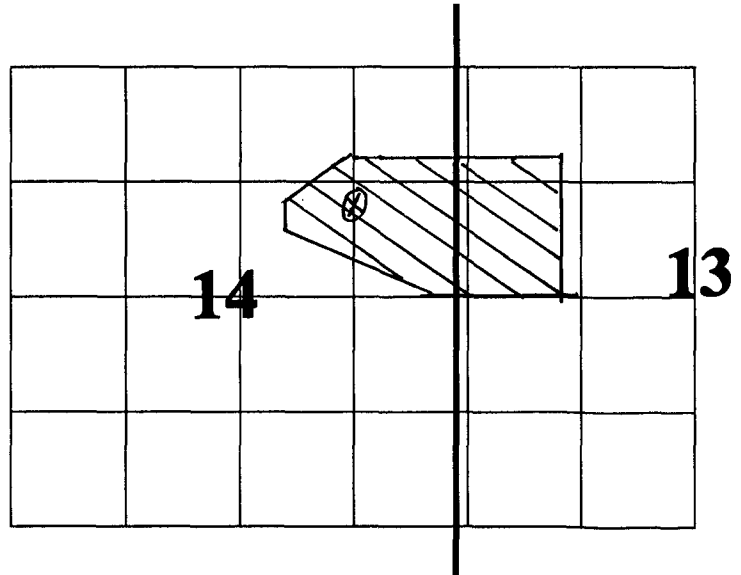
Well Driller: : **Trinity**

Remarks:

Type of Map: **topo**

Prepared by: **Matthew Odden, Belle Fourche**

NRCS



Reviewed and the Number Assigned on: **XX**

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. <u>1899-1</u>	Hydrologic Unit <u>10126202</u>
	Basin <u>Belle Fourche River</u>	
	Newspaper <u>Belle Fourche Post 614 State St.</u> <u>605-892-2528</u> <u>57717</u>	

RECEIVED
AUG 25 2008
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.) _____

1. Name of Applicant Dave Ranches I NC & Tom C Jones Phone 605-892-2217
(check one) ☒ Owner ☐ Tenant/lessee

Mailing Address 11022 Davis Road Belle Fourche State SD 57717
(Street, RR, or Box and City) (Zip Code)

2. Amount of water claimed 1.43*CFS or 1125**GPM ***AF Total Acreage 100
(*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) center of NE 1/4 of Section 14
T11N-R2E County Butte

5. County or counties where water will be used Butte

6. Annual period during which water is to be used June - 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
<u>SE corner NE 1/4 section 14-T11N-R2E</u>	<u>60</u>		
<u>SW corner NW 1/4 section 13-T11N-R2E</u>	<u>40</u>		
<u>W 1/2</u>			

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

Ditch + Flood Irrigation

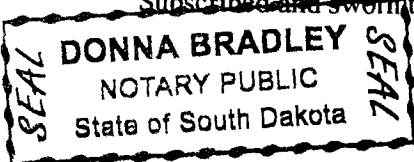
STATE OF SOUTH DAKOTA)

County of Butte 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, Tom C Jones, 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 Dave Ranches I NC & Tom C Jones
Subscribed and sworn to before me this 1 day of Feb 208 Pres



Donna Bradley
Notary Public signature
MY COMMISSION EXPIRES 12/29/2010

SOUTH DAKOTA WATER PERMIT NO. 1899-1

Date of first receipt of application August 25, 2008.

Date of return to applicant for corrections, amendments or changes August 25, 2008.

Date of receipt of corrected application September 11, 2008.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 1899-1 to Davis Ranches Inc., c/o Tom C Davis, 11022 Davis Road, Belle Fourche SD 57717 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. 1899-1 appropriates 1.43 cubic feet of water per second from one well completed into the Madison Aquifer (4679 feet deep) located in the approximate center of the NE ¼ Section 14 to flood irrigate 100 acres located in the NE ¼ Section 14 and W ½ NW ¼ Section 13; all in T11N-R2E.
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: June 1 – September 30.
3. The date from which applicant may claim right is August 25, 2008.
4. The date of approval of Permit No. 1899-1 is November 24, 2008.
5. One-fifth of the construction is to be completed on or before May 24, 2011.
6. All construction is to be completed on or before November 24, 2013.
7. Water is to be put to beneficial use on or before November 24, 2017.
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. In accordance with SDCL 46-1-14 and 46-2A-20, Permit No. 1899-1 is issued for a 20-year term. Pursuant to SDCL 46-2A-21, the 20-year term may be deleted at any time during the 20-year period or following its expiration. If the 20-year term is not deleted at the end of the term, the permit may either be cancelled or amended with a new term limitation of up to twenty years. Permit No. 1899-1 may also be cancelled for nonconstruction, forfeiture, abandonment, or three permit violations pursuant to SDCL 46-1-12, 46-5-37, 46-5-37.1 and ARSD 74:02:01:37.
2. 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.
3. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.

WATER MANAGEMENT BOARD

By: Garland Erbele

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

JAN 27 2009

date



Supplemental Information

(type or print in ink)

1. Well Information - Proposed Construction

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

2. Wastewater Disposal System Information

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

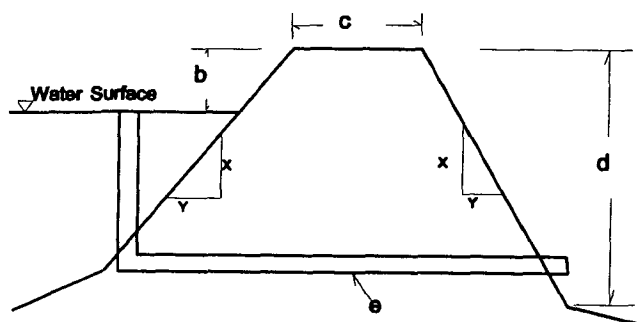
3. Dugout Information

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

4. Water Storage Dams

If the proposed water use system contains one or more storage dams, please furnish the information requested below for each dam. The locations of the dams need to be shown on the map submitted with the application.

- a) If a private engineering firm or government agency was involved in the design of this dam, please give their name and address:



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



R 2 E

Matthw Odden, Rangeland Management Specialist, Belle Fourche FO NRCS

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AUG 25 2008

WATER RIGHTS
PROGRAM

LAND STATUS LEGEND

- Private Lands
- State Lands
- Bureau of Land Management

2 Miles

4 Kilometers



SOUTH DAKOTA WATER WELL COMPLETION REPORT

07-92

Location SE $\frac{1}{4}$ SW $\frac{1}{4}$ Sec 13 Twp 11 N Rg 2 E

County

BUTTE

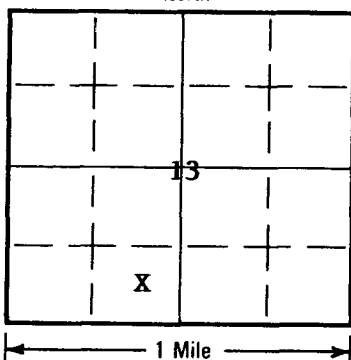
North

Please mark well location with an "X"

W

E

Well Completion Date

10-10-07

LOCATION:

Distance from nearest potential pollution source (septic tank, abandoned well, feed lot, etc.)? _____ ft. from _____ (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
32 LB/FT	10 3/4 IN	0 FT	100 FT	14.75 IN
20 LB/FT	7 IN	0 FT	4470 FT	9 7/8 IN
OPEN HOLE	6 1/4 IN	4470 FT	4679 FT	8 3/4 IN

GROUTING DATA

Grout Type	No. of Sacks	Grout Weight	From	To
X LITE	650	13 lb./gal	4470 ft.	_____ ft.
TYPE III	100	14.5 lb./gal	_____ ft.	2100 ft.

Describe grouting procedure LOG - SHOT SQUEEZE HOLES2078 CIRC, CMT TO SURFACE 320 SXSCREEN: ☐ Perforated pipe ☐ Manufactured

Diameter _____ IN Length _____ FEET

Material _____

Slot Size _____ Set From _____ Feet to _____ Feet

Other information OPEN HOLE 4470 - 46796 1/4 INCHWAS A PACKER OR SEAL USED? ☐ YES ☒ NO

If so, what material? _____

Describe packer(s) and location? _____

DISINFECTION: Was well disinfected upon completion?

YES, How: _____

☒ NO, Why Not? _____FLOWING

Laboratory sent to for water quality analysis

ENERGY LAB

Well Owner: TOM C DAVIS

Business Name: _____

Address: CAMP CROOK RT. BOX 1BELLE FOURCHE, SD 57717

WELL LOG:

DEPTH

FORMATION

FROM

TO

SEE ATTACHEDMINNEKHATA 3828MADISON 4470TD 4679STATIC WATER LEVEL FLOW _____ FeetIf flowing: closed in pressure 210 _____ PSIGPM flow 1000 through _____ 6 inch pipeControlled by ☒ Valve ☐ Reducers ☐ Other _____

Reduced Flowrate _____ GPM

Can well be completely shut in? YES

WELL TEST DATA:

☐ PumpedDescribe: FLOW - WEIR☐ Bailed☒ Other _____

Pumping Level Below Land Surface

_____ ft. After _____ Hrs. pumped _____ GPM

_____ ft. After _____ Hrs. pumped _____ GPM

If pump installed, pump rate _____ GPM

REMARKS

RECEIVED
JAN - 8 2008
WATER RIGHTS PROGRAM

This well was drilled under license # 205

And this report is true and accurate.

Drilling firm TRINITY

Signature of License Representative: _____

Signature of Well Owner or Equitable Property Holder:

Tom C Davis
Tom C Davis

Date: 12-28-07

Prepared by Tim Barritt & Mike Brayton (Wy. P.G.)

Partial Description

Abbreviations and Definitions:

AA – as above

vfg – very fine grained

qtz - quartz

mudstone – no fissility w/equal concentrations of clay & silt

LCM – lost circulation materials

mm - millimeter

Gr.Log – Gamma Ray log

LITHOLOGY LOG
LITHOLOGIC DESCRIPTIONS
MADISON WELL, (LOC 44° 55.10' - 103° 50.26')

Feet (bgs)	Principal Lithology	Description
0 -2680	Missing	Not sampled
		Sundance Top Gr. log 2,674 ?
2680 - 2690	Claystone / Sandstone	Black to dark gray non-fissile claystone with 10% light tan to gray, vfg sandstone and minor pyrite
2690 - 2700	Claystone / Sandstone	AA with some variegated black to tan claystone
2700 - 2710	Claystone / Sandstone /Siltstone	AA with dark brown silty claystone and siltstone, very little sandstone
2710 - 2720	Claystone /Siltstone	AA
2720 - 2730	Claystone / Siltstone	AA – with minor vfg sandstone
2730 - 2740	Claystone / Siltstone	AA
2740 - 2750	Claystone / Siltstone	AA – with minor tan to green silty claystone
2750 - 2760	Claystone / Siltstone	AA
2760 - 2770	Claystone / Siltstone	AA with minor green silty claystone
2770 - 2780	Claystone / Siltstone/ Sandstone	AA – light tan to gray sandstone increasing to 10%
2780 - 2790	Claystone / Siltstone/ Sandstone	AA
2790 - 2800	Claystone / Siltstone	AA – sandstone decreasing
2800 - 2810	Claystone / Siltstone	AA with light brown silty claystone and lots of sticky balls in pre-wash
2810 - 2820	Claystone / Siltstone	AA with some green shale, pre-wash is very sticky
2820 - 2830	Claystone / Siltstone	AA
2830 - 2840	Claystone / Siltstone/ Sandstone	Black to gray silty clay and claystone with a tan, vfg moderately hard sandstone
2840 - 2850	Claystone / Siltstone/ Sandstone	AA
2850 - 2860	Claystone/Siltstone/Sandstone	AA with gray siltstone and minor green glauconitic sandstone
2860 - 2870		Missing sample
2870 - 2880	Claystone/Siltstone/Sandstone	AA – with minor light tan soft clay
2880 - 2890		Missing sample
2890 - 2900	Claystone	Black to gray claystone and silty claystone
2900 - 2910	Claystone / Sandstone	AA with minor green, vfg, glauconitic sandstone
2910 - 2920	Claystone / Sandstone	Black to light gray and green claystone and silty claystone with minor gray to light gray sandstone
2920 - 2930	Claystone / Sandstone	AA
	Claystone/Siltstone/Sandstone	Light gray to dark gray, green and maroon, slightly indurated, none fissile claystone, Light gray to dark gray siltstone and silty sandstone
2930 - 3230	Missing	Missing

3230 - 3240	Claystone/Sandstone/Limestone	Black to gray claystone with gray, vfg sandstone and minor off white limestone, minor red claystone and anhydrite
3230 - 3240	Claystone/Sandstone/Limestone	AA
3240 - 3250	Claystone/Sandstone/Limestone	AA – Red claystone increasing
3250 - 3260	Claystone/Sandstone	AA – no limestone
		Top of Spearfish – 3,260 ft.- Gr. log -3,282
3260 - 3270	Claystone/Sandstone	AA
3270 - 3280	Claystone/Sandstone/Siltstone	AA Red claystone and siltstone at 20%
3280 - 3290	Claystone/Sandstone	AA with hard white siltstone
3290 - 3350	Missing	Missing sample
3350 - 3360	Claystone / Siltstone	Black and gray claystone from caving up-hole. Red claystone, siltstone and minor green clay
3360 - 3370	Claystone / Siltstone/Sandstone	AA with gray, vfg, sandstone
3370 - 3380	Claystone / Siltstone/Sandstone	AA – red claystone and siltstone at 30%
3380 - 3390	Claystone / Siltstone/Sandstone	AA
3390 - 3400	Claystone / Siltstone/Sandstone	AA
3400 - 3410	Claystone / Siltstone/Sandstone	AA
3410 - 3420	Claystone / Siltstone/Sandstone	AA
3420 - 3430	Claystone / Siltstone/Sandstone	AA decreasing sandstone
3430 - 3440	Claystone / Siltstone	AA
3440 - 3450	Claystone / Siltstone / Dolomite	AA with minor tan dolomite and limestone
3450 - 3460	Claystone / Siltstone / Dolomite	AA
3460 - 3470	Claystone / Siltstone / Dolomite	AA
3470 - 3480	Claystone / Siltstone	AA no dolomite and limestone
3480 - 3490	Claystone / Siltstone	AA
3490 - 3500	Claystone / Siltstone	AA
3500 - 3510	Claystone / Siltstone	AA
3510 - 3520	Claystone / Siltstone / Dolomite	AA with minor tan dolomite and tan, vfg white sandstone
3520 - 3530	Claystone / Siltstone / Dolomite	AA
3530 - 3540	Claystone / Siltstone / Dolomite	AA
3540 - 3550	Claystone / Siltstone / Dolomite	AA
3550 - 3560	Claystone / Siltstone / Dolomite	AA with minor hard tan claystone and white sandstone absent
3560 - 3620	Claystone / Siltstone / Dolomite	AA
3620 - 3630	Claystone / Siltstone	AA – dolomite absent
3630 - 3780	Claystone / Siltstone	AA
3780 - 3790	Claystone / Siltstone	AA gray claystone increasing, reds decreasing
3800 - 3810	Claystone / Gypsum	AA lots of white in pre-wash (gypsum) and light gray silty clay
3810 - 3850	Claystone / Gypsum	AA
3850 - 3860	Claystone / Gypsum	AA with minor light gray dolomite, light gray clay at 60% - pre-wash very sticky
3860 - 3880	Claystone / Gypsum/Siltstone	AA reds decreasing to 10% with some white siltstone
		Minnekahta Top – 3,810 – Gr. Log 3,828
3880 - 3890	Limestone / Claystone	AA with pink to lavender and yellow, tan limestone, dolomite at 30%
3910 - 3920	Limestone	Limestone, dolomite at 60%
		Opeche Top – 3,910 – Gr. Log 3,876
3920 - 3930	Siltstone / Claystone	Limestone decreasing – gray, red and brown siltstone and claystone increasing
3930 - 3960	Siltstone / Claystone	AA

3960 - 3970	Claystone / Siltstone	Mostly gray and red claystone and siltstone with minor pink limestone
3970 - 3980	Claystone	AA
3980 - 3990		Gray to green claystone and silty claystone at 60% with (up-hole) 30% red claystone and silty claystone with 10% black silty claystone, minor off white limestone
3990 - 4000	Claystone	AA
4000 - 4010	Claystone	AA with light green gypsum
4010 - 4020	Claystone	AA
4020 - 4040	Claystone	Red claystone and silty claystone increasing with minor green, vfg glauconitic sandstone
		Minnelusa Top 4,040 – Gr. Log 4,004 ft.
4040 - 4050	Sandstone	Orange to white, fg to vfg, in part oolitic, well sorted sandstone with minor gray clay
4050 - 4060	Claystone / Siltstone	Gray, red to brown claystone and siltstone with minor gray sandy clay
4060 - 4080	Claystone / Siltstone	AA
4080 - 4090	Claystone/Siltstone	AA with anhydrite and pink, oolitic in part sandstone, sample chips larger
4090 - 4140	Claystone/Siltstone	AA
4140 - 4150	Claystone/Siltstone/Anhydrite	AA with white siltstone , pink gypsum and anhydrite with minor calcite xi and pink limestone
4150 - 4160	Claystone/Siltstone/Anhydrite	AA
4160 - 4170	Claystone/Siltstone/Anhydrite	AA
4170 - 4180	Claystone/Siltstone/Sandstone	Mostly gray to dark gray silty claystone, gray to green, vfg sandstone with minor pink to gray dolomite
4180 - 4280	Claystone/Siltstone/Sandstone	AA
4180 - 4280	Claystone/Siltstone/Sandstone	AA
4280 - 4290	Claystone/Siltstone/Sandstone/Dolomite	Dolomite increasing to 30%
4290 - 4310	Claystone/Siltstone/Sandstone/Dolomite	AA white, vfg sandstone at 10%
4310 - 4320	Claystone/Siltstone/Sandstone/Dolomite	AA
4320 - 4340	Claystone/Siltstone/Sandstone/Dolomite	AA – Dolomite decreasing
4340 - 4350	Claystone/Siltstone	Dark gray to gray and green silty claystone and silt, red silty claystone and siltstone with pink to off white and gray dolomite and minor white, vfg sandstone
4350 - 4410	Claystone/Siltstone	AA
4410 - 4420	Limestone/Claystone/Siltstone	AA lots of up-hole caving. At 4,411a pink limestone came in at 50% of sample
4420 - 4430	Limestone/Claystone/Siltstone	AA – Lots of rig chatter
4430 - 4450	Limestone/Dolomite/Siltstone	AA tan pink and yellow Limestone at 80%, <u>very soft</u> , also dolomite.
4450 - 4460	Dolomite	Mostly pink to light gray limestone and dolomite at 80% with minor anhydrite
4460 - 4470	Limestone/Dolomite	AA Good strong limestone and dolomite not as soft. Minor vfg, qtz. grains
		Madison Top at 4,470 - Gr.- Not logged
4470 - 4480	Limestone/Dolomite	



ENERGY LABORATORIES, INC. • 400 West Boxelder Road • Gillette, WY 82718
307-686-7175 • 866-686-7175 • 307-682-4625 fax • gillette@energylab.com

LABORATORY ANALYTICAL REPORT

Client: Wester-Wetstein and Associates

Project:

Client Sample ID: Madison Well #2 - Davis

Location:

Samp FRQ/Type:

Lab ID: G07050994-001

Report Date: 06/04/07

Collection Date: 05/30/07 12:00

Date Received: 05/31/07

Matrix: Drinking Water

Sampled By: Mike Brayton

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
BACTERIA							
Bacteria, E-Coli Coliform	ND	mpn/100ml		1		A9223 B	05/31/07 17:30 / mli
Bacteria, Total Coliform	ND	mpn/100ml		1		A9223 B	05/31/07 17:30 / mli

Michelle Bucholz

Michelle Bucholz
Project Manager

Report RL - Analyte reporting limit.
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.



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LABORATORY ANALYTICAL REPORT

Client: Wester-Wetstein and Associates
Project: Madison Well
Client Sample ID: Madison Well #2
Location:
Samp FRQ/Type:
Lab ID: G07050951-001

Report Date: 06/04/07
Collection Date: 05/30/07 12:00
Date Received: 05/30/07
Matrix: Drinking Water
Sampled By: Mike Brayton

Analyses	Result	Units	Qualifier	RL	MCL/ QCL	Method	Analysis Date / By
MAJOR IONS, DISSOLVED							
Bicarbonate as HCO ₃	194	mg/L		5		A2320 B	05/31/07 09:36 / mli
Carbonate as CO ₃	ND	mg/L		5		A2320 B	05/31/07 09:36 / mli
Chloride	35	mg/L		1		E300.0	05/30/07 22:12 / mli
Fluoride	3.0	mg/L		0.1		E300.0	05/30/07 22:12 / mli
Nitrogen, Nitrate+Nitrite as N	0.1	mg/L		0.1		E300.0	05/30/07 22:12 / mli
Sulfate	552	mg/L		1		E300.0	05/30/07 22:12 / mli
Calcium	170	mg/L		1		E200.7	06/02/07 02:03 / eli-b
Magnesium	57	mg/L		1		E200.7	06/02/07 02:03 / eli-b
Potassium	6	mg/L		1		E200.7	06/02/07 02:03 / eli-b
Sodium	25	mg/L		1		E200.7	06/02/07 02:03 / eli-b
METALS, SDWA							
Iron	0.69	mg/L		0.03		E200.7	06/02/07 02:03 / eli-b
NON-METALS							
Alkalinity, Total as CaCO ₃	159	mg/L		5		A2320 B	05/31/07 09:36 / mli
Conductivity @ 25 C	1370	umhos/cm		1		A2510 B	05/30/07 17:09 / jjb
Hardness as CaCO ₃	660	mg/L		10		A2340 B	06/04/07 10:24 / tlc
pH	7.04	s.u.		0.01		A4500-H B	05/30/07 17:14 / jjb
Sodium Adsorption Ratio (SAR)	0.4	unitless		0.1		Calculation	06/04/07 10:24 / tlc
Solids, Total Dissolved TDS @ 180 C	1080	mg/L		10		A2540 C	05/31/07 11:06 / mli
DATA QUALITY							
A/C Balance	-4.74	%				A1030 E	06/04/07 10:06 / tlc
Anions	15.8	meq/L		0.01		A1030 E	06/04/07 10:06 / tlc
Cations	14.4	meq/L		0.01		A1030 E	06/04/07 10:06 / tlc

Michelle Bucholz

Michelle Bucholz
Project Manager

Report RL - Analyte reporting limit.
Definitions: QCL - Quality control limit.

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date 8/25, 20 08

RECEIVED OF Davis Ranches Inc 11022 Davis Rd Belle Fourche SD 57717

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

Fee for Application for Permit No. <u>1899-1</u> to Appropriate Water, to construct and to put water to beneficial use	225	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>1899-1</u>	50	00
Fee for Filing Transfer Form _____		
Fee for _____		
Fee for Issuing New Well Driller's License No. _____ for C.Y. _____		
Fee for Renewal of Well Driller's License No. _____ for C.Y. _____		
Fee for Issuing Well Pump Installer's License No. _____ for C.Y. _____		
Fee for Renewal of Well Pump Installer's License No. _____ for C.Y. _____		
(Any Other Work Provided by Law)	TOTAL	275 00

No.

03127

By

[Signature]
Chief Engineer



August 25, 2008

Davis Ranch Inc
c/o Tom C Davis
11022 Davis Rd
Belle Fourche SD 57717

Dear Mr. Davis:

Thank you for submitting the *Application for a Permit to Appropriate Water* for irrigation from groundwater. In order to complete the application the following is required.

- Enclosed is the map submitted with the application. The map must be signed by one of the following: Registered Land Surveyor, Registered Professional Engineer or by any other government employee who normally prepares maps as a part of his assigned duties (i.e. local NRCS office).
- Regarding the amount of water claimed, State Statutes limit diversions to 1 cubic feet of water per second (cfs) for each 70 acres irrigated. This would mean that you are allowed approximately 1.43 cfs or 643 gallons per minute to irrigate 100 acres. We understand that in order to accommodate certain irrigation methods, a greater diversion rate is required. Please justify in writing your request for a diversion rate greater than the statutory limit (please explain diversion rate requirement for the project).

If you have any questions, please contact me.

Sincerely,

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

enclosure

RECEIVED

SEP 11 2008

WATER RIGHTS
PROGRAM

DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

PMB 2020
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www.state.sd.us/denr



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

PMB 2020
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www.state.sd.us/denr

January 18, 2008

Tom C Davis
Camp Crook Rt, Box 1
Belle Fourche SD 57717

Dear Mr. Davis:

A well driller's report filed by Trinity shows they completed a new well for you to be used for irrigation and domestic/stock use. The report states the well drilled this past fall is located in the SE 1/4 SW 1/4 Section 13-T11N-R2E. Based on the information in the report, it appears you may need a water permit.

I have reviewed our files and found you have several permits. The only permit from a groundwater source is Water Permit No. 1842-1 with the well located in the SE 1/4 NE 1/4 Section 21-T10N-R2E.

Enclosed are application forms and an instruction sheet to apply for a water permit for irrigation. The completed forms with the application fee and map can be returned to the "Water Rights Program, 523 E Capitol, Pierre SD 57501.

If you believe your water use does not require a water permit or that you have an existing permit, or if help is needed completing the application forms, please contact Eric Gronlund or me at (605) 773-3352. We will be happy to assist you in any way possible.

Sincerely,

Karen Schlaak

Karen Schlaak
Water Rights Program
karen.schlaak@state.sd.us

enclosures

OK Flow MEASURE-1)
on 8" X 6"
DRAFT TUBES
50'-52"
1103-11256PWT

The land description is not correct
correct land description is
SE 1/4 NE 1/4
Section 14-T11N-R2E



**DEPARTMENT of ENVIRONMENT
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**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 1899-1, Davis Ranches, 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. 1899-1, Davis Ranches, Inc., 11022 Davis Road, Belle Fourche SD 57717.

The Chief Engineer is recommending APPROVAL of Application No. 1899-1 for an appropriation of 1.43 cubic feet of water per second and subject to a 20-year term pursuant to SDCL 46-1-14 and 46-2A-20 because 1) although evidence is not available to justify issuing this permit without a 20 year term limitation, there is reasonable probability that there is unappropriated water available, 2) the proposed diversion can be developed with out 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. In accordance with SDCL 46-1-14 and 46-2A-20, Permit No. 1899-1 is issued for a 20-year term. Pursuant to SDCL 46-2A-21, the 20-year term may be deleted at any time during the 20-year period or following its expiration. If the 20-year term is not deleted at the end of the term, the permit may either be cancelled or amended with a new term limitation of up to twenty years. Permit No. 1899-1 may also be cancelled for nonconstruction, forfeiture, abandonment, or three permit violations pursuant to SDCL 46-1-12, 46-5-37, 46-5-37.1 and ARSD 74:02:01:37.
2. 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.
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
October 28, 2008

REPORT FOR
WATER PERMIT APPLICATION NO. 1899-1
DAVIS RANCHES, INC.
OCTOBER 14, 2008

Water Permit Application No. 1899-1 proposes to appropriate 2.5 cubic feet of water per second (cfs) from one existing well 4,679 feet deep, completed into the Madison aquifer. The well is located in the approximate center of the NE $\frac{1}{4}$ Section 14, T11N-R2E and will be used to flood irrigate 100 acres located in the NE $\frac{1}{4}$ Section 14, T11N-R2E and the W $\frac{1}{2}$ NW $\frac{1}{4}$ Section 13, T11N-R2E. The applicant is requesting a diversion rate in excess of the statutory limit of one cfs per 70 acres.

Water Source: Madison aquifer (MDSN)

Geology and Aquifer Characteristics:

The Madison aquifer is a major regional aquifer that underlies parts of Montana, North Dakota, South Dakota, Wyoming and Canada (figure 1). The aquifer contains an estimated 644,827,200 acre-feet of recoverable water in storage in South Dakota alone (Allen and others, 1985).

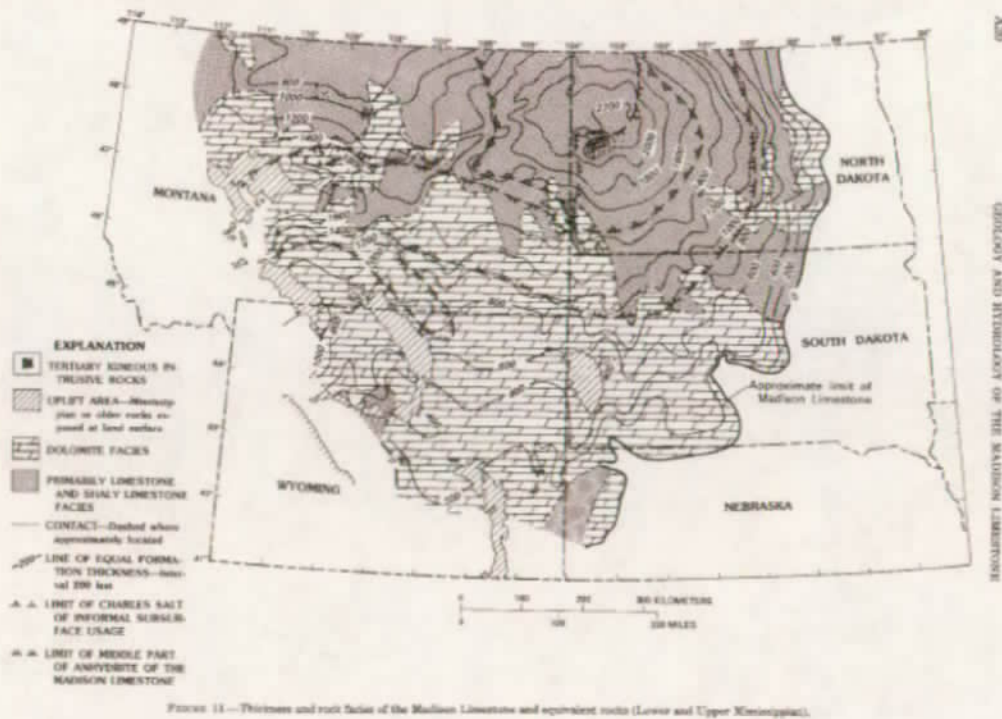


Figure 1. Areal extent of the Madison aquifer. Modified from Peterson (1984)

The Madison aquifer is contained within the Madison Limestone which in general is composed of carbonate rocks. Since the Madison Limestone is a massive limestone and dolomite, the primary permeability and porosity is low. Extensive secondary porosity and permeability occur within the Madison from fractures and solution openings. The upper portion of the Madison Limestone in particular is karstic with caves, solution collapse and enlarged conduits. The average porosity of the Madison is estimated to be 11% and the effective porosity from which recoverable water can be obtained by wells is assumed to be 5% (Rahn, 1979). A number of high yield wells have been developed in the Madison aquifer where secondary porosity and permeability features are favorable. The Madison is generally considered an excellent aquifer in terms of its potential to supply good quality water to relatively productive wells, especially near the outcrop (recharge area). This well is located approximately 33 miles from the Black Hills, the location of the nearest Madison outcrops. (Strobel and others, 1999). The analysis of water from this well is surprisingly good considering the distance to the recharge area. This site is on the southwest flank of the Williston Basin (Peterson, 1984) and the Madison is estimated to be 700 feet thick in this area (Gries, 1981). The Madison is confined above by the Minnelusa formation and the lower portion and the underlying Englewood Formation form a lower confining zone (Strobel and others, 1999).

The SD Water Well Completion Report for the well that is to be used for this appropriation identifies the top of the Madison aquifer at 4,470 feet below ground surface and reports the well has a closed in pressure of 210 psi and flows 1000 gpm.

Water Availability:

The availability of water from the Madison aquifer can be evaluated through consideration of South Dakota Codified Law 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 that the quantity of water withdrawn annually from a groundwater source will exceed the quantity of the average estimated annual recharge of water to the groundwater source.

Water Budget:

Recharge to the Madison aquifer occurs through streamflow losses and direct infiltration of precipitation at the outcrop areas. The Madison outcrop/recharge area associated with the Black Hills uplift has a very pronounced effect on the potentiometric surface of the aquifer. However, potentiometric surface maps for the Madison (Downey, 1982), (Woodward-Clyde, 1981) and (Bartos and others, 2002), suggest that given the distance of this well site from the Black Hills, the influence of the Black Hills recharge is diminished. This area appears to be part of the larger regional system in which flow paths are affected by the Big Horn Mountains in Wyoming.

As an extremely conservative figure, for the purpose of a water budget, recharge from the Black Hills only can be compared with total water use from the Madison in South Dakota. As part of the Black Hills Hydrology Study, the average annual recharge to the Madison aquifer from 1931-1998 was estimated to be approximately 137,000 ac-ft/yr (Carter and others, 2001a).

There are currently a total of 163 appropriations plus one deferred application from the Madison aquifer in South Dakota. These appropriations include: seven future use permits that reserve 11,551 acre-feet of water per year (ac-ft/yr); 134 water permits/rights for non-irrigation purposes appropriating a total of 99.10 cfs (Water Rights, 2008d); and 22 water permits/rights appropriating 7,713.36 ac-ft/yr for irrigation use (Water Rights, 2008a). If it is assumed that the future use permits can be fully developed; the non-irrigation appropriations will be used at 60 percent of full time usage at their maximum diversion rate; and irrigation appropriations will use their full appropriation, the maximum (worst case scenario) amount of water that could theoretically be used with current appropriations is approximately 62,300 ac-ft/yr. If the deferred permit is approved (1,600 ac-ft/yr), the total maximum (worst case) use would be approximately 63,900 ac-ft/yr.

The actual water usage from the Madison aquifer is expected to be considerably less than this “worst case” estimate. Withdrawals from wells completed into the Madison aquifer where estimated to average 12,309 acre-feet annually from 1987-1996 (Carter and others, 2001b). Well withdrawals from the Madison aquifer for 2008 are estimated to be less than 20,000 ac-ft/yr (Water Rights, 2008c). This application proposes to appropriate 200 acre-feet of water annually, a volume that is essentially inconsequential in relation to the overall water budget.

A simple water balance comparing the estimated average annual recharge and the “theoretical maximum” withdrawal by wells shows that unappropriated water is available from the Madison aquifer to satisfy this additional appropriation.

A water budget is not intended to suggest that all of the water that is in storage in the Madison or that all of the recharge to the aquifer is available for this appropriation, merely to demonstrate that in general the Madison aquifer is an immense resource that is relatively untapped.

Observation Well Data:

The Water Rights Program monitors 26 observation wells completed into the Madison aquifer in the Black Hills area (Water Rights, 2008b). Records from the observation wells indicate the potentiometric surface of the Madison aquifer fluctuates 30-40 feet per year near the recharge area in response to seasonal and climatic variations. Long-term water level declines are not apparent from any of the hydrographs. Observation well data suggest that at the existing level of development, natural influences dominate the water levels of the aquifer and the effects of pumping as yet are not obvious. The nearest Water Rights’ Madison aquifer observation well is located about 30 miles south of this well site.

Affects on Existing Rights:

Groundwater Appropriations:

There are only two Water Rights/Permits appropriating groundwater within approximately 13 miles of the well this application proposes to use. They include Water Right No. 313-1, Williston Basin Interstate Pipeline Company, which appropriates water from the Inyan Kara

aquifer; and Water Permit No. 1842-1, Tom C. Davis, a Madison aquifer appropriation. Withdrawals from this well are not expected to affect Water Right No. 313-1 since the Inyan Kara aquifer is not hydrologically connected to the Madison aquifer. The Madison aquifer well that supplies Water Permit No. 1842-1 is located over seven miles from the well that is to be used to supply this appropriation.

The nearest well completed into the Madison aquifer supplying appropriations, excepting the Davis Water Permit (No. 1842-1), is located approximately 14 miles from this well site. The well supplies water for four appropriations: Water Right 1096-1, Butte Meade Sanitary District; Water Permits 1096A-1 and 1496-1, Butte Meade Sanitary District; and Water Permit No. 1670-1, Lyndon & Jane Kok. Interference between the well that is to be used for this appropriation and the existing Madison aquifer appropriations should be minimal due to the distances involved.

Domestic Wells:

The Water Rights Program has record of 21 water supply wells within a ten mile radius of the well that is to be used for Water Permit No. 1899-1. The wells range from 21 feet deep to over 5,453 feet deep. Only three of these wells appear to be completed into the Madison aquifer, including this well and one other well drilled for Tom C. Davis approximately seven miles away (Water Rights, 2008e). The nearest existing Madison well on file, not owned by Davis, was completed for Jack Waite and is approximately nine miles southwest of this well. It is unlikely that drawdown from this appropriation will impact existing Madison wells due to the distance between wells.

Wells supplying existing Water Rights/Permits and domestic uses are protected from adverse impacts per Water Management Board rules 74:02:04 and 74:02:05, which were promulgated pursuant to SDCL 46-6-6.1. These rules provide for the regulation of large capacity wells to the degree necessary to maintain an adequate depth of water for a prior appropriator in wells that have the ability to produce water **independent of artesian pressure**. Simply put, the pump placement in a prior appropriator's well is not necessarily protected.

If the water levels in the Madison aquifer were to decline, owners of existing wells bear the responsibility of lowering the pump inlet in the well to the top of the aquifer, if necessary. Increased lift would decrease the pump discharge; or require a larger pump or a different type of a pump to maintain the same output.

An increase in operating expenses that may result from interference between wells is not necessarily an adverse impact. The Water Management Board considered this situation in the matter of Water Permit Application 2313-2, Coca-Cola Bottling Company of the Black Hills (Water Rights, 1995). The Board adopted findings of fact and conclusions of law that basically state that if the increased cost or decreased production is considered an adverse impact, it could be in conflict with SDCL 46-1-4, which requires South Dakota's water resources to be put to beneficial use to the fullest extent of which they are capable.

It should be noted however, that well interference (drawdown) measured at Water Rights' observation wells located near high capacity municipal wells in Spearfish, Sturgis and Rapid City has never been significant (i.e. drawdown of only a few feet or tens of feet) (Water Rights, 2008b). Given the distance this proposed well site is from existing Madison aquifer wells supplying water rights/permits interference is not expected to be adverse.

Term Limitation:

SDCL 46-2A-20 requires that "... no water permit for construction of works to withdraw water from the Madison formation in Butte, Fall River, Custer, Lawrence, Meade and Pennington counties may be issued for a term of more than twenty years, unless the water management board determines, based upon the evidence presented at the hearing that:

(1) Sufficient information is available to determine whether any significant adverse hydrologic effects on the supply of water in the Madison formation would result if the proposed withdrawal were approved; and

(2) The information, whether provided by the applicant or by other means, show that there is a reasonable probability that issuance of the proposed permit would not have a significant adverse effect on nearby Madison formation wells and springs."

Pursuant to SCL 46-2A-21, "at the end of the twenty-year limitation, the board may cancel a permit or amend the permit with a new term limitation of up to twenty years, if the board is unable to make a finding after notice and hearing that sufficient information is available to delete the term."

Evidence is not available to justify issuing these permits without a term limitation of 20 years.

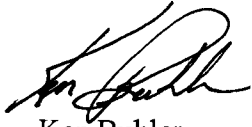
SDCL 46-5-6

This water permit application proposes to divert water at a rate of 2.5 cubic feet of water per second (cfs) to irrigate 100 acres, (one cfs per 40 acres). SDCL 46-5-6 limits an appropriation of water for irrigation to a rate of one cubic foot of water per second for each seventy acres. The Water Management Board may allow a greater diversion rate if "the method of irrigation, any time constraints on diversion of water, or the type of soil so requires". This application does not provide a rationale or justification for the proposed higher diversion rate.

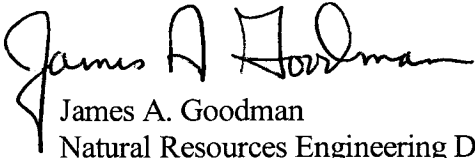
Conclusions:

1. The Madison aquifer is a major regional aquifer and a viable source of water for this proposed appropriation.
2. There is a reasonable probability that unappropriated water is available in the Madison aquifer to supply this appropriation.
3. There is a reasonable probability this appropriation can be made without adversely impacting existing water rights including domestic users.
4. Information is not available to justify issuing these permits without a term limitation of 20 years.

5. This application proposes to divert water at a rate in excess of the statutory limit of one cfs per 70 acres.
6. This application does not identify that the method of irrigation, time constraints of diversion or the type of soil to be irrigated requires the diversion rate proposed.



Ken Buhler
Natural Resources Engineering Specialist
Approved by



James A. Goodman
Natural Resources Engineering Director

References:

- Allen, J.C., Iles, D.L., and Petres, A.K., 1985, Analysis of Groundwater and Streamflow Data Western Dakotas Region of South Dakota, Tasks 3A.B.C. and 4A.B.: Groundwater Resource Inventory: South Dakota Department of Water and Natural Resources
- Bartos, T.T., Halberg, L.L., Ogle, Kathy Muller, 2002, Potentiometric surfaces, altitudes of the tops, and hydrogeology of the Minnelusa and Madison aquifers, Black Hills area, Wyoming: U.S. Geological Survey Hydrologic Atlas 748, four sheets
- Downey, J.S., 1982, Geohydrology of the Madison and associated aquifers in parts of Montana, North Dakota, South Dakota, and Wyoming: U.S. Geological Survey Open-File Report 82-914 120 p.
- Gries, J.P., 1981, unpublished maps prepared for the Office of Drinking Water, South Dakota Dept. of Water and Natural Resources for the Underground Injection Control Program.
- Peterson, J.A., 1984, Stratigraphy and Sedimentary Facies of the Madison Limestone and Associated Rocks in Parts of Montana, Nebraska, North Dakota, South Dakota, and Wyoming: U.S. Geological Survey Professional Paper 1273-A, 34 p.
- Rahn, P.H., 1979, Ground Water Resources of Western South Dakota: U.S. Army Corps of Engineers, SDSM&T Project #2533
- Strobel, M.L., Jarrell, G.J., Sawyer, J.F., Schleicher, J.R., and Fahrenbach, M.D., 1999, Distribution of Hydrogeologic Units in the Black Hills Area, South Dakota: U.S. Geological Survey Hydrologic Investigations Atlas HA-743, 3 sheets, scale 1:100,000
- Water Rights Program, 1995, Findings of Fact, Conclusions of Law and Final Decision in the Matter of Water Permit Application No. 2313-2, Coca-Cola Bottling Company of The Black Hills, SD DENR-Water Rights Program, Joe Foss Building, Pierre, SD 57501
- Water Rights Program, 2008a, Irrigation Use Summary, DENR-Water Rights Program, Joe Foss Building, Pierre, SD 57501
- Water Rights Program, 2008b, Observation Well Files, DENR-Water Rights Program, Joe Foss Building, Pierre, SD 57501
- Water Rights Program, 2008c, "Report for Water Permit Application No. 2631-2", Unpublished Report in Water Permit No. 2631-2, SD DENR-Water Rights Program, Joe Foss Building, Pierre, SD 57501

Water Rights Program, 2008d, Water Permit/Right Files, DENR-Water Rights Program, Joe Foss Building, Pierre, SD 57501

Water Rights Program, 2008e, Well Completion Report Files, DENR-Water Rights Program, Joe Foss Building, Pierre, SD 57501

Woodward-Clyde Consultants, 1981, Well Field Hydrology Technical Report, for the ETSI Coal Slurry Pipeline Project, U.S. Dept. of Interior, Bureau of Land Management

AFFIDAVIT OF PUBLICATION

RECEIVED
NOV 17 2008
WATER RIGHTS
PROGRAM

STATE OF SOUTH DAKOTA
COUNTY OF BUTTE

Pam Capp, being duly sworn, says: That the *Butte County Post* is, and during all times hereafter mentioned, was a legal newspaper as defined in SDCL 17-2-2, as amended, published at Belle Fourche, Butte County, South Dakota, by Lee Enterprises; that affidavit is and, during all of said times, was employed as an Office Manager by the publisher of such newspaper and has personal knowledge of the facts stated in the affidavit; that the notice, order or advertisement, a printed copy of which is attached, was published in said newspaper for successive issues, bearing the following dates:

<u>November 5</u>	<u>2008</u>	<u>200</u>
<u>November 12</u>	<u>2008</u>	<u>200</u>
<u>200</u>	<u>200</u>	<u>200</u>
<u>200</u>	<u>200</u>	<u>200</u>
<u>200</u>	<u>200</u>	<u>200</u>

that the full amount of the fee charged for publishing the same, to-wit, the sum of \$ — 0 —, insures solely to the benefit of the publisher of said newspaper; that no agreement or understanding for the division of the fee has been made with any person, and that no part of the fee has been agreed to be paid to any other person.

Pam Capp
Office manager

Subscribed and sworn to before me this

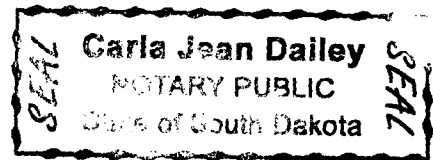
13th day of November, 2008

Carla Jean Dailey

Notary Public, South Dakota

My Commission Expires!

May 24, 2012



Account No.

60001557

Total Amount

— 0 —

**NOTICE OF APPLICATION NO.
1899-1 to Appropriate Water**

Notice is given that Davis Ranches, Inc., c/o Tom C. Davis, 11022 Davis Road, Belle Fourche SD 57717 has filed an application for a water permit to appropriate 2.5 cubic feet of water per second (cfs) from one well completed into the Madison Aquifer (4679 feet deep) located in the approximate center of the NE 1/4 Section 14 to flood irrigate 100 acres located in the NE 1/4 Section 14 and W 1/2 NW 1/4 Section 13, all in T11N-R2E. 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. 1899-1 for 1.43 cfs and subject to a 20-year term limitation because 1) although evidence is not available to justify issuing this permit without a 20 year term limitation, there is reasonable probability that there is inappropriate water diversion can be developed with out unlawful impairment of existing rights, 3) the proposed use is a beneficial use 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 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 November 24, 2008.

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 Wed., Nov. 5 & Wed.,

Nov. 12, 2008

Butte County Post



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

October 28, 2008

Belle Fourche Post
614 State St
Belle Fourche SD 57717

ATTENTION: Legal Public Notice

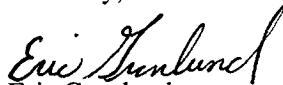
Enclosed is a Notice on Application No. 1899-1 to Appropriate Water to be published twice. Please publish the first notice on November 5, 2008 with the second publication 7 days later. The text of the notice can be e-mailed to your paper by contacting Karen Schlaak at (605) 773-3352.

The applicant must verify to you that the notice is to be published, before you make the first publication. **Please BILL the APPLICANT for the cost of publication.** The APPLICANT is Davis Ranches Inc., c/o Tom C Davis, 11022 Davis Rd., Belle Fourche SD 57717 (Ph # 605-892-2217).

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

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

Sincerely,


Eric Gronlund
Natural Resources Engineer
605 773-3352

enclosures

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

No. 1899-1

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

Date _____

We are in receipt of your letter of November 5, 2008 enclosing Notice to Appropriate Water by Application No. 1899-1 which was first published in our issue of _____. ENCLOSED IS A COPY OF THIS FIRST PUBLICATION.

Name

Newspaper



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

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

October 28, 2008

Davis Ranches Inc
c/o Tom C Davis
11022 Davis Rd
Belle Fourche SD 57717

Dear Mr. Davis:

Water Permit Application No. 1899-1 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 Publisher of the Belle Fourche Post printed at Belle Fourche SD (Ph # 605-892-2528). You will need to contact the newspaper and authorize publication of this notice. For your information, a copy of the notice, the recommendation of the Chief Engineer and report on the application are enclosed. Please review the notice prior to publication and notify this office, if you have any corrections or questions.

Be sure to contact the above newspaper to authorize publication of your Notice and to arrange for payment. Early contact with the paper can eliminate delays. Upon receiving authorization, the publisher has been instructed to publish your notice once each week for two consecutive weeks. The newspaper has also been instructed to send us the Proof of Publication. We must receive Proof of Publication before action can be taken on the application.

Sincerely,

Eric Gronlund
Natural Resources Engineer
(605) 773-3352

enclosures

NOTE: If you plan to contest any part of the Chief Engineer's recommendation, you must file a petition pursuant to the procedures outlined in the attached notice of hearing. The Water Management Board will then consider your concerns during a hearing on the application.

Instruction to Newspaper - Publish first Notice on November 5, 2008 with the second publication 7 days later. The applicant is responsible for payment.

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DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

JAN 27 2000

Davis Ranches Inc
c/o Tom C Davis
11022 Davis Rd
Belle Fourche SD 57717

Dear Mr. Davis:

Enclosed is Water Permit No. 1899-1 authorizing construction of your water diversion system and beneficial use of the water, not exceeding the limits as specified in the Water Permit.

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

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

Sincerely,

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

enclosures

Permit Nos. 1899-1
Upper Cheyenne River - Water District

Report of Examination of Works and/or Application of Water to Beneficial Use

TO: Chief Engineer, Water Rights Program, DENR, Foss Bldg., Pierre, SD 57501

I have on this day, **November 19, 2015**, made a thorough examination of the water use system constructed by **Tom C. Davis, 11022 Davis Rd, Belle Fourche, SD 57717** holder of Permit No. **1899-1**, bearing the priority of **August 25, 2008**, authorizing the diversion of **1.43** cubic foot of water per second (cfs), of the waters of the **Madison Aquifer** for **irrigation purposes**, in **Butte County**.

I have to report on the condition of the same as follows:

A. Works used to divert the water:

Flowing well with shut in pressure of 210 psi capable of flowing at 641 gallons per minute.

B. Works used to transport/apply water to beneficial use:

Water is applied to the irrigated acreage through a 6" pipe.

The system is in the following condition **good**. The point of diversion is located **1700 feet S and 1235 feet W from the NE corner of Section 14, T11N-R2E (SE¼NE¼), Lat/Lon N44.918098/W-103.837774**. The works are capable of diverting and conveying to the place of use **1.43** cfs which is to be used for **irrigation purposes**. Water has been put to beneficial use to the maximum extent and the license should be issued for **1.43** cfs. Water has been put to beneficial use to the maximum extent as follows:

Section 13, T11N-R2E

NW¼ NW¼ - 9.0 acres

SW¼ NW¼ - 29.0 acres

Section 14, T11N-R2E

NW¼ NE¼ - 3.0 acres

NE¼ NE¼ - 19.0 acres

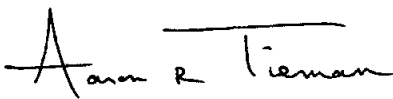
SW¼ NE¼ - 7.0 acres

SE¼ NE¼ - 33.0 acres

Total – 100.0 acres

All structures, wells and lands on map **Y**

Exceptions to compliance are: **none**

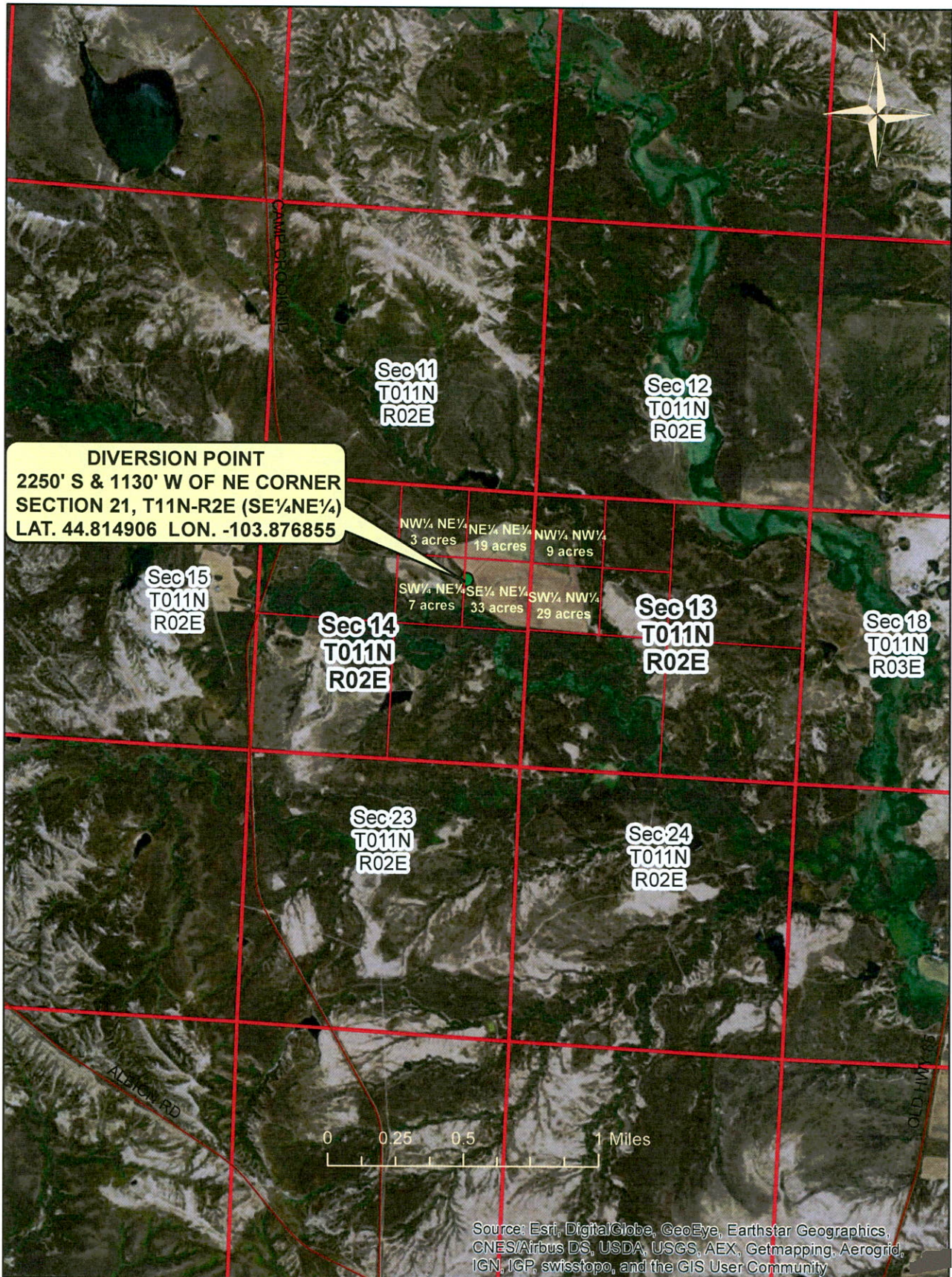


Aaron Tieman

Natural Resources Engineer II
DENR, Water Rights Program

Date report completed: **June 23, 2016**

WATER PERMIT NO. 1899-1
JUNE 23, 2016



Aaron R. Tieman

Aaron Tieman
Natural Resources Engineer II
DENR Water Rights Program



STATE OF SOUTH DAKOTA

WATER LICENSE NO. 1899-1

(1) Davis Ranches Inc., 11022 Davis Road, Belle Fourche, SD 57717 made Application No. 1899-1, August 25, 2008 for a water permit to divert 1.43 cubic feet of water per second from ground water – one well (Madison Aquifer), Butte County, South Dakota for irrigation purposes. Permit No. 1899-1, with a priority date of August 25, 2008 was approved November 24, 2008 and issued to the applicant for diversion of water with construction of the described water supply system to be completed on or before November 24, 2013 and for the application to beneficial use of said water on or before November 24, 2017.

(2) It is certified that the permit holder has complied with the provisions of South Dakota State Law relating to completion of the construction of the water supply system and is entitled to divert 1.43 cubic feet of water per second for beneficial use. The location of the diversion point is 1,700 feet S and 1,235 feet W of the NE corner of Section 14, T11N, R2E (SE ¼ NE ¼).

(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:

Section 14, T11N, R2E		Section 13, T11N, R2E	
NW ¼ NE ¼	3.0 acres	NW ¼ NW ¼	9.0 acres
NE ¼ NE ¼	19.0 acres	SW ¼ NW ¼	29.0 acres
SW ¼ NE ¼	7.0 acres		
SE ¼ NE ¼	33.0 acres	Total	100.0 acres

(4) Pursuant to South Dakota Water Law 46-5-30.1 Davis Ranches Inc., 11022 Davis Road, Belle Fourche, SD 57717 the holder and/or owner of Water Right No. 1899-1 is issued a license to appropriate water, the right to use 1.43 cubic feet of water per second from ground water – one well (Madison Aquifer) with a priority date of August 25, 2008 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. 1899-1 and subject to the following qualifications:

- In accordance with SDCL 46-1-14 and 46-2A-20, Permit No. 1899-1 is issued for a twenty year term. Pursuant to SDCL 46-2A-21, the twenty year term may be deleted at any time during the twenty year period or following its expiration. If the twenty year term is not deleted at the end of the term, the Permit may either be cancelled or amended with a new term limitation of up to twenty years. Permit No. 1899-1 may also be cancelled for non-construction, forfeiture, abandonment or three permit violations pursuant to SDCL 46-1-12, 46-5-37, 46-5-37.1, and Board Rule ARSD 74:02:01:37.
- 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.

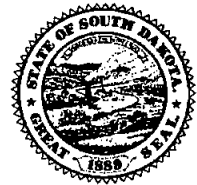
- This Permit is approved subject to the irrigation water use questionnaire being submitted each year.



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

JUN 29 2016

date





DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

JUN 29 2016

1899-1

Tom C Davis
Davis Ranches Inc
11022 Davis Rd
Belle Fourche SD 57717

Dear Mr. Davis:

Enclosed is Water License No. 1899-1. This is the final water right document completing your process of obtaining a Water Right. Included with your license is a map prepared by the staff engineer who conducted the field investigation.

For your information SDCL 46-6-27 requires that if the owner of an existing well, such as the well authorized by Water Right No. 1899-1, constructs a replacement well and does not plan to use the old well, the old well is considered abandoned and must be plugged. Also, any well that is being used or is not considered abandoned must be valved and controlled, if flowing, or sealed and capped so that no leaking occurs either underground or at the surface.

As long as you use the water beneficially, as stated in the Water License, the State Water Laws provide that you have a continuing right to use the water. If you have any questions, please contact our office.

Sincerely,

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

enclosures



1899-1

**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 E. CAPITOL AVE
PIERRE SD 57501-3182
danr.sd.gov

November 7, 2022

Tom C Davis
Davis Ranches Inc
17153 Camp Crook Rd
Belle Fourche SD 57717

RE: Water Right Nos. 435-1, 899-1, 1842-1 and 1899-1

Dear Mr. Davis:

Enclosed is a "Notice" dated October 21, 2022 concerning the 2022 irrigation questionnaires.

The notice was originally mailed to 11022 Davis Rd, Belle Fourche SD. The post office notified us that your address has changed, and I will update our records accordingly.

If you have any questions, please contact me.

Sincerely,

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

enclosures



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 E. CAPITOL AVE
PIERRE SD 57501-3182
danr.sd.gov

January 20, 2023

NOTICE

TO: DAVIS RANCHES INC, TOM C DAVIS, 17153 CAMP CROOK RD, BELLE FOURCHE, SD 57717 6200

FROM: Ron Duvall, Water Rights Permitting Administrator
for Eric Gronlund, Chief Engineer
Water Rights Program

SUBJECT: Reporting Requirement for 2022 Irrigation Questionnaires

Our records indicate your 2022 Irrigation Questionnaires have not been submitted. The request for the Questionnaires was dated October 21, 2022. The Water Management Board has directed owners of water permits who have not submitted the 2022 Irrigation Questionnaires be given notice of permit violation and a hearing to be held by the Board. The hearing is to determine if Permit No(s) 435-1 & 899-1 should be amended to require the Questionnaire to be submitted each year and to determine action to be taken for violation of Water Permit No(s) 1842-1 & 1899-1 qualification:

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

The hearing will be held at **Wednesday, March 8, 2023 at 9:30 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) 1842-1 & 1899-1 in accordance with applicable provisions of SDCL 46-1-12;
2. Amend Permit No(s) 435-1 & 899-1 to require the Irrigation Water Use Questionnaire to be submitted each year;
3. Postpone any action or 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 questionnaires are received in this office before the **March 8, 2023** hearing you will no longer be in violation of your permit and your name will be removed from the Board agenda. Enclosed are additional questionnaires 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: <https://danr.sd.gov/iq> using this password: CUEDDS**

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.



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

JOE FOSS BUILDING
523 E. CAPITOL AVE
PIERRE SD 57501-3182
danr.sd.gov

February 6, 2023

Tom C Davis
Davis Ranches Inc
17153 Camp Crook Rd
Belle Fourche SD 57717-6200

RE: Water Right Nos. 435-1, 899-1, 1842-1 & 1899-1

Dear Mr. Davis:

I am writing to acknowledge receipt of your 2022 irrigation questionnaires.

You may disregard the January 20, 2023, "Notice" concerning reporting requirements for Water Right Nos. 435-1, 899-1, 1842-1 & 1899-1. 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,

Genny McMath
Water Rights Program
605 773-3352
Genny.mcmath@state.sd.us