

WATER PERMIT NO. 7414-3

Name of Applicant: Calvin Hanson

Address: 31524 452nd Ave, Meckling SD 57069

Phone: 605 661-6393

Amount of Water Claimed: 1.78 cfs

Total Acres: 169

Source of Water Supply: groundwater (one well)

Water to be used for: irrigation

County: Clay

Type of Waste Disposal System:

Location: 10 miles northwest of Vermillion

PRIORITY

Date Received: 8-20-12

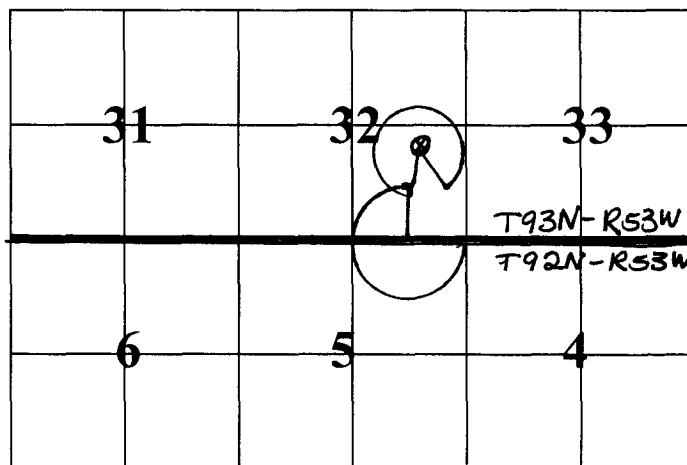
Application/License Fee: \$ 1050.00

Corrected Application Received: 9/4/12 Period of Annual Use: May 1 – Sept 1

Remarks: Some of the acreage to be irrigated is covered under Permit No. 7075-3. The acreage was not developed under No. 7075-3

Diversion Point: NE 1/4 SE 1/4 Sec 32-T93N-R53W

Land to be Irrigated: SE 1/4 S 1/2 NE 1/4 Sec 32-T92N-R53W and N 1/2 NE 1/4 Sec 5-T92N-R53W



Depth of Well: 100 feet deep

Well Driller:

Remarks:

Type of Map: aerial

Prepared by: Kelly Andersen, Clay Co FSA

Reviewed and the Number Assigned on: 9-4-12

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

(office use only)
No. 7414-3 Hydrologic Unit 10170102
Basin Vermillion River 605-624-2695
Newspaper Plain Talk 2010 Cherry Vermillion 57069
Press & Debate on 319 Walnut Yankton 57078-605-665-7811

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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 of Applicant Colvin Hanson Phone 605-661-6393
(check one) Owner ☒ Tenant/lessee
Mailing Address 31524 452 ave Meekling SD 57069
(Address) (City) (State) (Zip Code)
2. Amount of water claimed 1.78 *CFS or 800 **GPM ***AF 169 Total Acreage 169
(*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) County Clay
NE 1/4 SE 1/4 sec 32 T-93-N R-53-W Clay
5. County or counties where water will be used Clay
6. Annual period during which water is to be used May 1st thru Sept 1
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
SEE		SHEET	

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

Drilling a well + piping to 2 center pivots

STATE OF SOUTH DAKOTA)

County of Clay) SS

Attachments: Attach Form 2A if diversion is from a well or dugout, or if storage of water is proposed. Also, attach map and any other technical information. (see instructions)

I, Colvin Hanson, 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 Colvin Hanson

Subscribed and sworn to before me this 16 day of August 20 12

LISA TRIPP
Notary Public
SEAL
South Dakota

Lisa Tripp 010917
Notary Public signature

SOUTH DAKOTA
WATER PERMIT NO. 7414-3

Date of first receipt of application August 20, 2012.

Date of return to applicant for corrections, amendments or changes August 21, 2012.

Date of receipt of corrected application September 4, 2012.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 7414-3 to Calvin Hanson, 31524 452nd Ave, Meckling SD 57069 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. 7414-3 appropriates 1.78 cubic feet of water per second from one well to be completed into the Missouri:Elk Point Aquifer (100 feet deep) located in NE 1/4 SE 1/4 Section 32-T93N-R53W for irrigation of 169 acres located in the S 1/2 NE 1/4, SE 1/4 Section 32-T93N-R53W and N 1/2 NE 1/4 Section 5-T92N-R53W.
2. The amount of the appropriation may not exceed 2 acre feet annually for each acre of land to which water is actually and beneficially applied for irrigation. The water is to be used during the following described annual period: May 1 – September 30.
3. The date from which applicant may claim right is August 20, 2012.
4. The date of approval of Permit No. 7414-3 is November 19, 2012.
5. One-fifth of the construction is to be completed on or before May 19, 2015.
6. All construction is to be completed on or before November 19, 2017.
7. Water is to be put to beneficial use on or before November 19, 2021.
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. 7414-3 shall be constructed by a licensed well driller and construction of the well and installation of the pump shall comply with Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) pursuant to Section 74:02:04:28.
3. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.

WATER MANAGEMENT BOARD

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

DEC 05 2012

date



Supplemental Information

(type or print in ink)

1. Well Information - Proposed Construction

- a) Drill Hole Diameter 28" Depth 100'
- b) Casing Type PVC Diameter 16" Thickness .616
- c) Screen Type PVC Diameter 16" Thickness .616
- d) Gravel Pack Armour coat Length of Gravel Pack 80'
- e) Depth to Top of Water Bearing Material 20'
- f) Depth to Water (ground surface to water level) 20'
- g) Distance to nearest existing domestic well:
On applicant's property 1000' On property owned by others 1/2 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

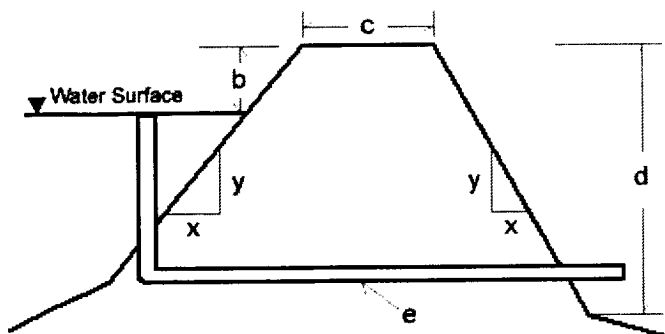
3. Dugout Information

- 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 _____
- h) Surface Area of Impoundment _____
- i) Storage _____ Acre Feet
- j) Drainage Area Above Dam _____ Acres

Date: _____

Customer: _____

Calvin Hanson

PHONE: _____

CELL: _____

Billing Address: _____

Location of Job: _____

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AUG 20 2012

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SW $\frac{1}{4}$ NE $\frac{1}{4}$	4 acres
SE $\frac{1}{4}$ NE $\frac{1}{4}$	17 acres
NW $\frac{1}{4}$ SE $\frac{1}{4}$	20.5 acres
NE $\frac{1}{4}$ SE $\frac{1}{4}$	29 acres
SW $\frac{1}{4}$ SE $\frac{1}{4}$	32 acres
SE $\frac{1}{4}$ SE $\frac{1}{4}$	2.5 acres

sec 32

T-93-N

R-53-W

Clay County

NW $\frac{1}{4}$ NE $\frac{1}{4}$	32 acres
NE $\frac{1}{4}$ NE $\frac{1}{4}$	32 acres

sec 5

T-92-N

R-53-W

Clay County

total acres
169



Data use subject to license.

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www.delorme.com

--- Section Lines
Property Lines

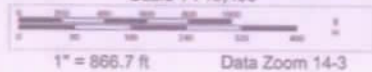
MN D-170

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SEP - 4 2012

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Scale 1 : 10,400



Data Zoom 14-3

Kelly Anderson
Clay County FSA
Program Technician

4303
826
5
91.24
NHEL



United States Department of Agriculture
Farm Service Agency

PLSS: 5_92N_53W
Farm: 4303

Clay County, SD
1:8,268



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July 26, 2010
SEP - 8 2012

WATER RIGHTS

Wetland Determination Program
● Restricted Use
▽ Limited Restrictions
■ Exempt from Conservation Compliance Provisions

Common Land Units

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.

2008 Ortho-Photography - Not to Scale

*Kelly Andersen
Clay County, FSA
Program Technician*



United States Department of Agriculture
Farm Service Agency

July 26, 2010

PLSS: 32_93N_53W
Farm: 4303

Clay County, SD

1:8,342



Wetland Determination Identifiers

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

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.

2008 Ortho-Photography - Not to Scale

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Common Land Units
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WATER RIGHTS PROGRAM

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WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

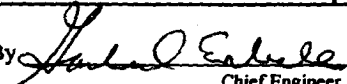
Date 8/21, 20 12

RECEIVED OF Hanson & Hanson 31524 452nd Ave Meckling SD 57069

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

Fee for Application for Permit No. <u>7414-3</u> to Appropriate Water, to construct and to put water to beneficial use	850	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>7414-3</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	1050	00

No. **05541**

By 
Chief Engineer



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

August 21, 2012

Calvin Hanson
31524 452 Ave
Meckling SD 57069

Dear Mr. Hanson:

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

- Please submit a map (aerial photo) outlining the acres to be irrigated and mark the proposed well location with an "X". 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).

Enclosed is a copy of Water Permit No. 7075-3. Water Permit No. 7075-3 authorizes irrigation of the E ½ Section 32 and portions of the S ½ Section 29; all in T93N-R53W. This application lists some of the same acreage in Section 32. Am I correct in assuming that the smaller pivot shown on the map was not developed under Permit No. 7075-3? Please clarify the legal descriptions of your existing irrigation project and the proposed new project.

If you have any questions, please contact Eric Gronlund or me.

Sincerely,

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

File No. 7075-3
7414-3

Water Rights Program - File Documentation

NAME: Calvin Hanson

ADDRESS: Meckling SD

DATE: 8-22-12 **COUNTY:** Clay **TELEPHONE:** 605 661-6393

RE: Application No. 7414-3

COMMENTS:

Water Permit No. 7075-3 authorized irrigation of some of the same acreage as requested by application No. 7414-3.

Calvin Hanson indicated regarding No. 7075-3, the larger pivot was developed to make a complete circle of approximately 203 acres. They did not develop the acreage that was going to be irrigated by the smaller pivot.

Eric Gronlund indicated No. 7075-3 will be reduced at the time of inspection.

Karen Schlaak

Karen Schlaak
Water Rights Program

August 29, 2012

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Dept. of Environment and Natural Resources

Water Rights Program

Attn. Karen Schlaak:

Hopefully I have everything you need this time. You are correct in assuming that the smaller pivot was not developed. It has come to be more economically feasible to put down another well at this time and you can see by the map I plan on putting up an additional pivot fed off the proposed well.

As for the legal description of the existing irrigation project, that is:

Meckling Township Section 32-93N-53W

NE $\frac{1}{4}$ of E $\frac{1}{2}$

E $\frac{1}{2}$ of NW $\frac{1}{4}$

Meckling Township Section 29-93N-53W

S $\frac{1}{2}$ of SE $\frac{1}{4}$

SE $\frac{1}{4}$ of SW $\frac{1}{2}$

As for the legal description of the proposed irrigation projects:

Norway Township Section 5-92N-53W

N $\frac{1}{2}$ of NE $\frac{1}{4}$

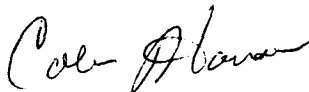
Meckling Township Section 32-93N-53W

SE $\frac{1}{4}$

Sincerely,

Calvin Hanson

605-661-6393





**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 7414-3, Calvin Hanson**

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. 7414-3, Calvin Hanson, 31524 452nd Avenue, Meckling SD 57069.

The Chief Engineer is recommending APPROVAL of Application No. 7414-3 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. 7414-3 shall be constructed by a licensed well driller and construction of the well and installation of the pump shall comply with Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) pursuant to Section 74:02:04:28.
3. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.

See report on application for additional information.

Garland Erbele, Chief Engineer
October 29, 2012

REPORT TO THE CHIEF ENGINEER
ON
WATER PERMIT APPLICATION NO.7414-3
CALVIN HANSON
OCTOBER 29, 2012

Water Permit Application No. 7414-3 proposes to appropriate up to 338 acre-feet (ac-ft) annually at a maximum diversion rate of 1.78 cubic feet of water per second (cfs) from one well to be completed in to the Missouri: Elk Point aquifer. The well is expected to be approximately 100 feet deep and is to be located in the NE $\frac{1}{4}$ SE $\frac{1}{4}$ of Section 32, T93N-R53W. This permit application proposes to irrigate 169 acres located in the S $\frac{1}{2}$ NE $\frac{1}{4}$, SE $\frac{1}{4}$ Section 32, T93N-R53W and N $\frac{1}{2}$ NE $\frac{1}{4}$ Section 5, T92N-R53W; all in Clay County. Some of the acres to be irrigated under this water permit application were approved for irrigation under Water Permit No. 7075-3, but the acres were not developed.

AQUIFER: Missouri: Elk Point (M: EP)

GEOLOGY AND AQUIFER CHARACTERISTICS:

The Missouri: Elk Point aquifer is an alluvium mantled glacial outwash (i.e. sand and gravel, with lenses of silt and clay) deposited by meltwater as "an extensive mantle suggestive of an outwash plain or apron at the ice margin" (Simpson, 1960). The Missouri: Elk Point aquifer underlies southeastern Yankton County along the Missouri River through Clay County and into the southeast corner of the state in Union County. The aquifer underlies approximately 119,500 acres and contains an estimated 1,792,500 acre-feet of recoverable water in Clay and Yankton Counties (Hedges, et.al, 1982). The aquifer is under water table conditions in the area of this application. The aquifer is hydraulically connected to and is recharged from the Lower Vermillion-Missouri aquifer at the northern boundary of the aquifer and the Big Sioux aquifer in the extreme northeastern boundary of the aquifer (Niehus, 1994). The aquifer is also hydraulically connected to the Lower James Missouri aquifer and the Missouri River. The Missouri: Elk Point also naturally discharges to the Dakota aquifer and, during periods of low flow and stage, to the Missouri and Big Sioux rivers (Niehus, 1994). Depth to the top of the aquifer is generally less than 50 feet in the area of this application (Jensen, 2000).

SDCL 46-2A-9

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

WATER AVAILABILITY:

This application proposes to appropriate up to 338 acre-feet annually from the Missouri: Elk Point aquifer. Although the actual water use if this application is approved will most likely be less than 338 acre-feet/year. The probability of unappropriated water available from an aquifer can be evaluated by considering SDCL 46-6-3.1 which requires "No application to appropriate groundwater may be approved if, according to the best information reasonably available, it is

probable that the quantity of water withdrawn annually from a groundwater source will exceed the quantity of the average estimated annual recharge of water to the groundwater source.

Recharge versus Withdrawals:

Recharge:

Recharge to the Missouri: Elk Point occurs through the direct penetration of precipitation, streamflow losses, upward leakage from the Dakota aquifer, and subsurface inflow from adjacent areas (Niehus, 1994). The average annual recharge for the Missouri: Elk Point aquifer based on observation well analysis is estimated to be 3.8 inches per year (Hedges, et.al, 1985). This recharge equates to a total of 37,841.67 acre-feet annually for Clay and Yankton Counties. Since the Missouri: Elk Point is hydraulically connected to the Missouri River; increased groundwater discharge by wells could induce additional recharge from the river. According to Stephens (1967), "much of the discharge of the Missouri river is potentially available to recharge the aquifer. Increased ground-water discharge by wells would induce additional recharge from the river."

Withdrawals:

There are 194 water rights/permits appropriating water and five future use permits reserving water from the Missouri: Elk Point aquifer in Clay and Yankton Counties on record with the SD DENR-Water Rights Program (Water Rights, 2012b). Table 1 shows the distribution of permitted uses for the 194 water rights/permits and five future use permits

Water Rights/Permits	Number
Commercial	5
Fish and Wildlife Propagation	4
Industrial	3
Irrigation	172
Municipal	6
Rural Water System	2
Suburban Housing Development	2
Future Use Permits	
Municipal	1
Rural Water System	4

Table 1-Distribution of Water Rights/Permits and Future Use Permits in Clay and Yankton counties appropriating water from the Missouri: Elk Point (Water Rights, 2012b)

The estimated annual withdrawal by the non-irrigation appropriations is 29,167 ac-ft/yr. This estimation assumes water is being withdrawn from the aquifer 60 percent of the time at the maximum allowed diversion rate. Though, the actual water use by the non-irrigation water rights/permits will most likely be much less than the estimation. The five future use permits reserve 26,900 ac-ft annually. Water withdrawal from the Missouri: Elk Point aquifer for irrigation, as reported to the DENR-Water Rights Program through annual irrigation questionnaires, is shown in table 2.

YEAR	NO. OF PERMITS REPORTING	APPROPRIATION (AC-FT/YR)	PUMPAGE REPORTED (AC-FT/YR)
2011	159	59580.2	4817.85
2010	152	56802.8	1205.86
2009	146	56330.8	2906.15
2008	135	53899.8	10120.26
2007	109	43852	11665.06
2006	97	41239	9825.11
2005	84	35725	6642.1
2004	78	34383.8	7311.97
2003	74	33687.8	7081.67
2002	74	33209.8	8193.25
2001	71	32471.8	6787.26
2000	69	31531.8	6271.02
1999	68	31351.8	4006.87
1998	69	31660.8	3867.62
1997	68	31875.2	5778
1996	67	31725.2	4291.2
1995	66	31080.8	4521.29
1994	69	32259.6	2499.98
1993	68	31794	330
1992	67	31218.8	871.35
1991	70	31302.8	7197
1990	67	32596.8	6694.5
1989	66	32506.8	6993.7
1988	64	31537.8	5989.25
1987	65	32021.8	4081.7
1986	71	34581.1	3060.8
1985	67	32217.8	3631.2
1984	70	33132.7	3448
1983	62	30963.8	4313.13
1982	60	30456	3392.5
1981	70	34049	4674
1980	52	29670	4523
1979	53	29670	2793
Maximum	159	59580.2	11665.06
Minimum	52	29670	330
Average	79.6	35769.3	5145.02

Table 2- Irrigation Water Use from the Missouri: Elk Point aquifer from Clay and Yankton Counties (Water Rights 1979-2012).

Probable average annual withdrawal under current appropriation is 34,312 acre-feet per year for the Missouri: Elk Point aquifer in Clay and Yankton Counties. If the future use permits are fully developed, the estimated water use for the five future use permits would be 26,900 ac-ft/yr.

Observation Well Data:

Administrative Rule of South Dakota Section 74:02:05:07 requires that “the Water Management Board shall rely upon the record of observation well measurements to determine that the quantity of water withdrawn annually from the aquifer does not exceed the estimated average annual recharge of the aquifer.”

The DENR-Water Rights Program monitors 12 observation wells located into the Missouri: Elk Point aquifer in Clay and Yankton Counties (Water Rights, 2012a). The two nearest observation wells, CL-80B and YA-80KA, are 2.68 miles southeast and 3.03 miles west of the proposed well location, respectively. Figures 1 and 2 show the two observation wells, CL-80B and YA-80KA, nearest to the proposed well location.

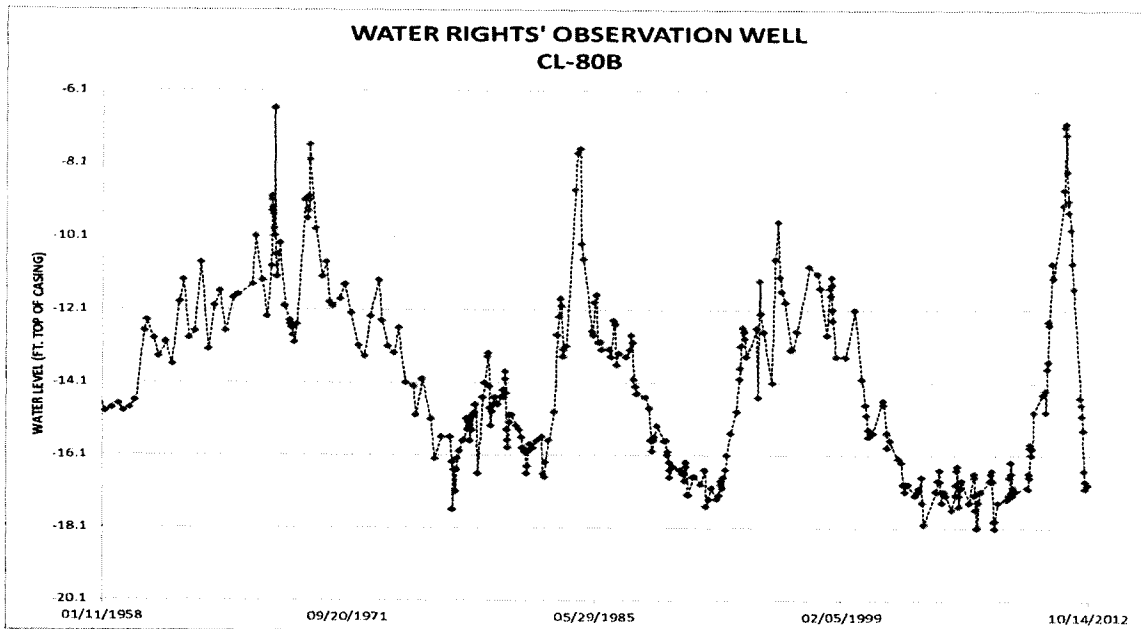


Figure 1- Hydrograph of DENR-Water Rights' observation well CL-80B, located 2.68 miles southeast of the proposed well location (Water Rights, 2012a)

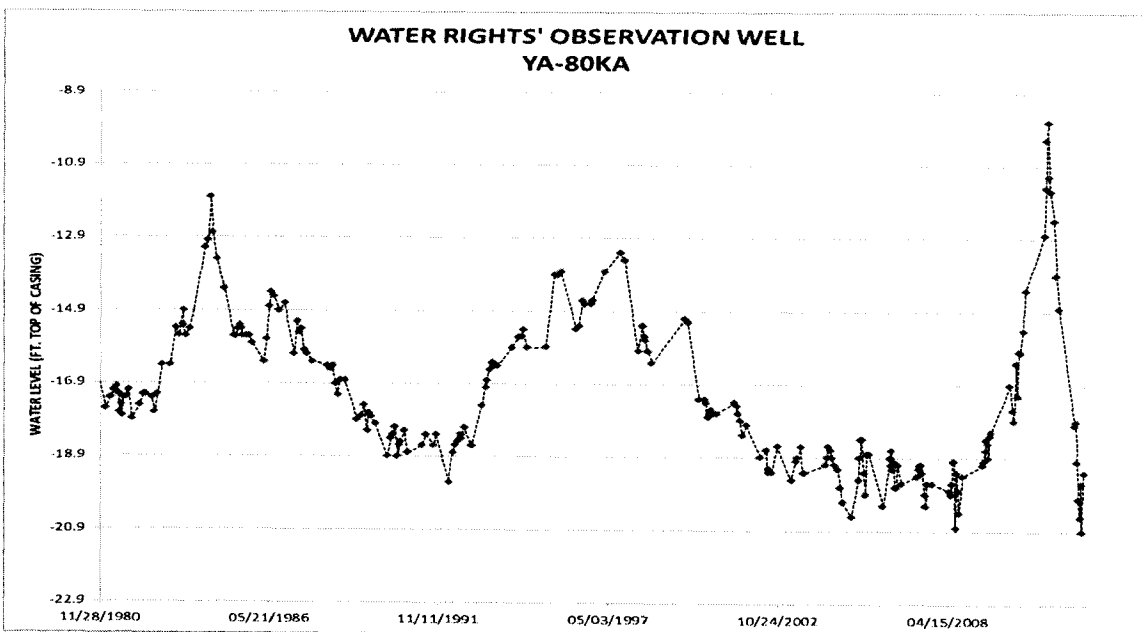


Figure 2- Hydrograph of DENR-Water Rights' observation well YA-80KA, located 3.03 miles west of the proposed well location (Water Rights, 2012a)

Water levels in the observation well show good response to climatic conditions. The water levels rise (recharge) during wet years and gradually decline during dry years. The observation well shows the effects of pumping, but it does not appear to be adverse over the period of record. The climatic effects on water level greatly mask the temporal impacts of well withdrawal. Therefore, recharge to and natural discharge from the Missouri: Elk Point aquifer significantly exceeds pumping. Recognizing that natural discharge from the aquifer can be captured for pumping, increased pumping will likely induce more recharger from the Missouri River (Stephens, 1967). It is probable unappropriated water is available from the Missouri: Elk Point for this proposed appropriation.

EXISTING WATER RIGHTS:

There are four water rights/permits authorizing wells completed into the Missouri: Elk Point aquifer and no domestic wells on record with the SD-DENR Water Rights Program within one mile of the proposed well location. Table 3 shows the water rights/permits authorizing wells within one mile of the proposed well location.

PERMIT NO.	NAME	STATUS	TYPE	CFS	ACRES
3109-3	Joseph R. Edelen Jr.	LC	IRR	1.58	111
3611-3	William Fargo	LC	IRR	1.86	130
6896-3	Gary and Amy Freeburg	PE	IRR	1.56	55
7075-3	Calvin Hanson	PE	IRR	1.78	232
LC = Water Right, PE = Water Permit, IRR = Irrigation					

Table 3 – Water Rights from the Missouri: Elk Point aquifer within 1 mile of the proposed well site (Water Rights, 2012b)

The Elk Point management unit of the Missouri aquifer is highly developed. But, there have been no well interference or water availability complaints from this area on file with the DENR-Water Rights Program. The observation well hydrographs show that the impacts of pumping have not been adverse over the period of record. The minimal drawdown and interference from pumping high capacity wells is clearly shown in figure 1; the hydrograph for observation well CL-80B which is within one-half mile of five irrigation wells. Therefore, there is a reasonable probability that the diversion proposed by this application can be made without impairing existing water rights/permits and domestic users.

CONCLUSIONS:

1. This application proposes to appropriate 338 acre-feet annually for the irrigation of 169 acres at a maximum diversion rate of 1.78 cfs from one well to be completed into the Missouri: Elk Point aquifer.
2. There is a reasonable probability that unappropriated water is available from the Missouri: Elk Point aquifer to supply this proposed diversion.
3. There is a reasonable probability that the diversion requested by this application can be made without adversely affecting existing water rights.



Adam Mathiowetz
SD DENR-Water Rights Program

REFERENCES:

- Hedges, L.S., S.L. Burch, D.L. Iles, R.A. Barari, and R.A. Schoon. 1982. Evaluation of Ground-water Resources in 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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- Water Rights. 1979-2012. "1979-2011 Irrigation Summaries by Aquifer": SD DENR-Water Rights Program, Joe Foss Building, Pierre, SD.
- Water Rights. 2012a. Observation Well Files. SD DENR-Water Rights Program, Joe Foss Bldg., Pierre, SD.
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NOV 19 2012

WATER RIGHTS
PROGRAM

AFFIDAVIT OF PUBLICATION

PLAIN TALK

Calvin Hanson
DENR
31524 452nd Ave
Meckling, SD 57069

STATE OF SOUTH DAKOTA
COUNTY OF CLAY

TERA SCHMIDT BEING FIRST DULY SWORN ON OATH DEPOSES
AND SAYS THAT SHE IS THE CLASSIFIED MANAGER OF YANKTON
MEDIA INC., A CORPORATION, THE PRINTER AND THE PUBLISHER OF THE
PLAIN TALK, A LEGAL WEEKLY NEWSPAPER PUBLISHED AND CIRCULATED
IN THE CITY OF VERMILLION, SAID COUNTY AND STATE, AND ONE OF THE
OFFICIAL NEWSPAPERS OF THE SAID COUNTY OF FACTS STATED IN THIS
AFFIDAVIT; THAT THE ANNEXED
NOTICE ON APPLICATION 7414-3

TAKEN FROM THE PAPER, IN WHICH IT WAS LAST PUBLISHED IN THE
NEWSPAPER ON THE 9 DAY OF NOVEMBER 2012
THAT THE FULL AMOUNT OF THE FEE CHARGED FOR THE PUBLICATION
OF SAID NOTICE TO WIT \$28.33 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: 11/9/12

FILED ON: 11/9/12

Notice is given that Calvin Han-
son, 31524 452nd Ave, Meckling
SD 57069 has filed an application
for a water permit to appropriate
1.78 cubic feet of water per sec-
ond from one well to be com-
pleted into the Missouri:Elk Point
Aquifer (100 feet deep) located in
NE 1/4 SE 1/4 Section
32-T93N-R53W for irrigation of
169 acres located in the S 1/2 NE
1/4, SE 1/4 Section
32-T93N-R53W and N 1/2 NE
1/4 Section 5-T92N-R53W.

Pursuant to SDCL 46-2A-2, the
Chief Engineer recommends AP-
PROVAL of Application No.
7414-3 because 1) unappropriated
water is available, 2) existing
rights will not be unlawfully im-
paired, 3) it is a beneficial use of
water, and 4) it is in the public in-
terest. In accordance with SDCL
46-2A-23, the Chief Engineer will
act on this application, as recom-
mended, unless a petition is filed
opposing the application or the
applicant files a petition contest-
ing the Chief Engineer's recom-
mendation. If a petition opposing
the application or contesting the
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hearing will be scheduled and the
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consider this application. Notice
of the hearing will be given to the
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ing 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 Engi-
neer'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 inter-
ested person or the applicant must
be filed by November 19, 2012.

The petition may be informal,
but must include a statement de-
scribing the petitioner's interest in
the application, the petitioner's
reasons for opposing or support-
ing the application, and the signa-
ture and mailing address of the
petitioner or the petitioner's legal
counsel, if legal counsel is ob-
tained. Contact Eric Gronlund at
the above Water Rights Program
address to request copies of infor-
mation pertaining to this applica-
tion. Steven M. Pirner, Secretary,
Department of Environment and
Natural Resources.

Published once at the total ap-
proximate cost of \$28.33

Estimated publishing cost per published copy
\$.0152

Published: November 9, 2012

Tere A. Schmidt
SUBSCRIBED AND SWORN TO BEFORE ME THIS

15th DAY OF

November

[Signature]
NOTARY PUBLIC, SOUTH DAKOTA
MY COMMISSION EXPIRES

8/19/2015

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WATER RIGHTS
PROGRAM

AFFIDAVIT OF PUBLICATION

YANKTON DAILY PRESS AND DAKOTAN

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

STATE OF SOUTH DAKOTA
COUNTY OF YANKTON

KELLY HERTZ BEING FIRST DULY SWORN ON OATH DEPOSES
AND SAYS THAT HE IS THE MANAGING EDITOR OF, YANKTON
MEDIA INC, A CORPORATION, THE PRINTER AND THE PUBLISHER OF THE
YANKTON DAILY PRESS AND DAKOTAN, A LEGAL DAILY NEWSPAPER
PUBLISHED AND CIRCULATED IN THE CITY OF YANKTON, SAID COUNTY
AND STATE, AND ONE OF THE OFFICIAL NEWSPAPERS OF THE SAID
COUNTY OF FACTS STATED IN THIS AFFIDAVIT; THAT THE ANNEXED
Application No. 7414-3

TAKEN FROM THE PAPER, IN WHICH IT WAS LAST PUBLISHED IN THE
NEWSPAPER ON THE 9th DAY OF November 2012
THAT THE FULL AMOUNT OF THE FEE CHARGED FOR THE PUBLICATION
OF SAID NOTICE TO WIT \$25.82 ENSURES TO THE
BENEFITS OF THE PUBLISHER OF SAID NEWSPAPER AND THAT NO
AGREEMENT AND UNDERSTANDING FOR THE DIVISION THEREOF HAS
BEEN MADE WITH ANY OTHER PERSON, AND THAT NO PART THEREOF
HAS BEEN AGREED TO BE PAID TO ANY PERSON WHOMSOEVER.

PUBLISHED ON: 11/9/2012

FILED ON: 11/9/2012

SUBSCRIBED AND SWORN TO BEFORE ME THIS 9th DAY OF November

2012

NOTARY PUBLIC, SOUTH DAKOTA

MY COMMISSION EXPIRES 8/19/2015

11+9

NOTICE OF APPLICATION
NO. 7414-3 to Appropriate Water

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Aquifer (100 feet deep) located in
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1/4, SE 1/4 Section
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be filed by November 19, 2012.

The petition may be informal, but
must include a statement describ-
ing the petitioner's interest in the
application, the petitioner's rea-
sons for opposing or supporting
the application, and the signa-
ture and mailing address of the pe-
titioner or the petitioner's legal
counsel, if legal counsel is ob-
tained. Contact Eric Gronlund at
the above Water Rights Program
address to request copies of infor-
mation pertaining to this applica-
tion. Steven M. Pimer, Secretary,
Department of Environment and
Natural Resources.

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



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

October 29, 2012

Plain Talk
201 W Cherry St
Vermillion SD 57069

ATTENTION: Legal Public Notice

Enclosed is a Notice on Application No. 7414-3 to Appropriate Water. Please publish the notice once on November 9, 2012. The text of the notice can be e-mailed to your paper by contacting Karen Schlaak at (605) 773-3352.

The applicant must verify to you that the notice is to be published and arrange for payment. **Please BILL the APPLICANT for the cost of publication.** The APPLICANT is Calvin Hanson, 31524 452nd Ave., Meckling SD 57069 (Ph # 605-661-6393).

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

The applicant pays the cost of publication, but the Water Rights Program records require an affidavit or Proof of Publication. Delays in receiving the affidavit can be costly to the applicant.

Sincerely,

Eric Gronlund
Natural Resources Engineer
605 773-3352

enclosures



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

October 29, 2012

Press & Dakotan
319 Walnut
Yankton SD 57078

ATTENTION: Legal Public Notice

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Eric Gronlund
Natural Resources Engineer
605 773-3352

enclosures



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

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

October 29, 2012

Calvin Hanson
31524 452nd Ave
Meckling SD 57069

Dear Mr. Hanson:

Water Permit Application No. 7414-3 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 Plain Talk printed at Vermillion SD (Ph # 605-624-2695) and the Daily Press & Dakotan printed at Yankton SD (Ph # 605-665-7811). You will need to contact the newspaper(s) and authorize publication of this notice. For your information, a copy of the notice, the recommendation of the Chief Engineer and report on the application are enclosed. Please review the notice prior to publication and notify this office, if you have any corrections or questions.

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

Sincerely,

Eric Gronlund
Natural Resources Engineer
(605) 773-3352

enclosures

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

Instruction to Newspaper - Publish the Notice on November 9, 2012. The applicant is responsible for payment. The text of the notice can be e-mailed to your paper by contacting Karen Schlaak at (605) 773-3352 or email: Karen.schlaak@state.sd.us.

NOTICE OF APPLICATION NO. 7414-3 to Appropriate Water

Notice is given that Calvin Hanson, 31524 452nd Ave, Meckling SD 57069 has filed an application for a water permit to appropriate 1.78 cubic feet of water per second from one well to be completed into the Missouri:Elk Point Aquifer (100 feet deep) located in NE 1/4 SE 1/4 Section 32-T93N-R53W for irrigation of 169 acres located in the S 1/2 NE 1/4, SE 1/4 Section 32-T93N-R53W and N 1/2 NE 1/4 Section 5-T92N-R53W.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 7414-3 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 November 19, 2012.

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**

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

DEC 05 2012

Calvin Hanson
31524 452nd Ave
Meckling SD 57069

Dear Mr. Meckling:

Enclosed is Water Permit No. 7414-3 authorizing construction of your water diversion system and beneficial use of the water, not exceeding the limits as specified in the Water Permit.

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

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

Sincerely,

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

enclosures

RECEIVED

JUL 25 2013

WATER RIGHTS
PROGRAMNOTICE OF COMPLETION OF WORKS AND
APPLICATION OF WATER TO BENEFICIAL USEDate 7-22-13TO: Water Rights Program, DENR
523 E. Capitol
Pierre, SD 57501-3181

FROM:

Calvin Hanson

(name)

31524 452nd Ave

(address)

Meekling SD 57069

(city, state, zip)

605-267-4140

(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. 7414-3 states that the water use system is to be constructed by~~6-1-13~~ 11-19-17, and water is to be put to beneficial use by 11-19-21

(date)

(date)

The water use system was completed on 6-1-13

(date)

Applying the water to beneficial use was completed on 6-20-13

(date)

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

Calvin Hanson

(signature)





**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

July 25, 2013

7414-3

Calvin Hanson
31524 452nd Ave
Meckling SD 57069

Dear Mr. Hanson:

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

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

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

Sincerely,

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

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

7414-3

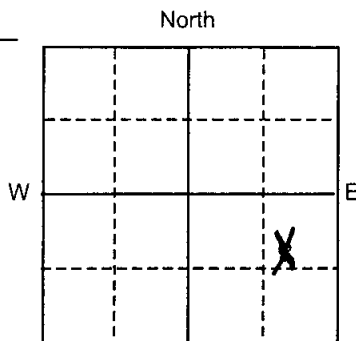
SD EForm - 1621LD V1

SOUTH DAKOTA WATER WELL COMPLETION REPORT

11-02

Location NE 1/4 SE 1/4 Sec 32 Twp 93N Rg 53WCounty Clay

Please mark well location with an "X"



Well Completion Date

2-4-13

1 Mile

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

PROPOSED USE:

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

METHOD OF DRILLING:

Reverse Rotary

CASING DATA:

☐ Steel ☒ Plastic ☐ Other

If other describe

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
<u>160</u> LB/FT	<u>16</u> IN	<u>0</u> FT	<u>55</u> FT	<u>28</u> IN
LB/FT	IN	FT	FT	IN
LB/FT	IN	FT	FT	IN

GROUTING DATA:

Grout Type	No. of Sacks	Grout Weight	From	To
<u>Cement</u>		Lb/gal	<u>0</u> Ft	<u>55</u> Ft
		Lb/gal	Ft	Ft

Describe grouting procedure

Pumped down w/ pressure grout

SCREEN:

☒ Perforated pipe ☐ Manufactured
 Diameter 16 Inches Length 600 Feet
 Material PVC
 Slot Size .085 Set From 55 Feet to 115 Feet

Other information

WAS A PACKER OR SEAL USED?

☐ Yes ☒ No

If so, what material?

Describe packer(s) and location

DISINFECTION: Was well disinfected upon completion?

☒ Yes, How?Chlorine
☐ No, Why Not?
 Lab to which water quality sample sent for analysis

Well Owner:

Clayton & Hanson

Business Name:

Address:

City, State, Zip:

1010 W Main St
Vermillion SD 57069

WELL LOG:

DEPTH

FORMATION	FROM	TO
<u>Black Topsoil</u>	<u>0</u>	<u>1</u>
<u>brown clay</u>	<u>1</u>	<u>12</u>
<u>dark fine sand</u>	<u>12</u>	<u>37</u>
<u>fine gravel</u>	<u>37</u>	<u>41</u>
<u>fine sand</u>	<u>41</u>	<u>77</u>
<u>med gravel</u>	<u>77</u>	<u>86</u>
<u>coarse gravel</u>	<u>86</u>	<u>91</u>
<u>med sand</u>	<u>91</u>	<u>105</u>
<u>med gravel + rocks</u>	<u>105</u>	<u>115</u>

STATIC WATER LEVEL:

20

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:pumped w/ turbid☐ Bailed☐ Otherpump

Pumping Level Below Land Surface

48 Ft. After 1 Hrs. pumped 800 GPM55 Ft. After 2 Hrs. pumped 1000 GPMIf pump installed, pump rate: 850 GPM

REMARKS

RECEIVED

APR 24 2013

WATER RIGHTS PROGRAM

This well was drilled under license # 444 and this report is true and accurate.

Drilling firm:

Christensen Well & Drilling

Signature of License Representative:

Clayton W. Christensen

Signature of Well Owner or Equitable Property Holder:

Date:

4-18-13

Report of Examination of Works and/or Application of Water to Beneficial Use For Permit No. 7414-3

I have this day, April 12, 2016, made a thorough examination of the water use system constructed by Calvin Hanson, 31524 452nd Ave, Meckling, SD 57069 of Permit No. 7414-3, bearing the priority of August 20, 2012 authorizing the diversion of 1.78 cu. ft. per second of the waters of Missouri:Elk Point Aquifer for irrigation purposes, in Clay County.

Inspection contact & relationship to permit holder, if applicable: **Calvin Hanson, permit holder**

A. Works used to divert the water:

Well Information:

- 1) Well Drilling Firm: Christensen Well & Irrigation
- 2) No. of Wells 1
- 3) Depth(s) 115 feet
- 4) Well log is available Yes

Casing:

- 1) Diameter 16 inches
- 2) Length 55 feet
- 3) Type PVC

Screen:

- 1) Type PVC Perforated
- 2) Length 60 feet
- 3) Static water level 20 feet

Pump:

- 1) Make Goulds
- 2) Model Turbine In-Line Shaft
- 3) Capacity 800 GPM

Motor:

- 1) Make US Motors
- 2) Model No. BF54A
- 3) Horsepower rating 50 hp

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

- 1) Type PVC 2) Size 8 inches 3) Length 1780 feet

Comments: See map for approximate location.

C. Works used to apply water to beneficial use:

Center pivot #1(N ½ SE ¼ Sec 32-T93N-R53W):

- 1) Make T-L Irrigation Systems
- 2) Overall length 1080 feet
- 3) Number of towers 6
- 4) End gun Yes
- 5) Capacity 800 GPM

Center pivot #2(S ½ SE ¼ Sec 32-T93N-R53W & N ½ NE ¼ Sec 5-T92N-R53W):

- 1) Make T-L Irrigation Systems
- 2) Overall length 1290 feet
- 3) Number of towers 7
- 4) End gun Yes
- 5) Capacity 800 GPM

Comments: System is set up so that only one center pivot can be operated at a time. T-L Irrigation uses a hydraulic drive system.

Chemigation Equipment:

- 1) Does chemigate Yes
- 2) Main line check valve Yes
- 3) Inspection port/air relief Yes
- 4) Low pressure drain Yes
- 5) Discharge is 20' from source Yes
- 6) Interlock type electrical
- 7) Injection pump type piston
- 8) Injection check valve Yes
- 9) Injection line check valve or positive displacement pump Yes

Comments: Permit holder was not chemigating at time of inspection, but provided the above answers to questions asked. Permit holder indicated he uses chemigation primarily to apply liquid nitrogen to corn crop. A copy of the chemigation rules and Appendix A were reviewed and provided to the permit holder.

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, began irrigating in 2013.

List any extended period of nonuse: None

- 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: West 1160', North 1790' from SE Corner of Sec 32-T93N-R53W; Lat 42.82756/Long -97.12546; NE ¼ SE ¼ Sec 32-T93N-R53W.

2. The works are capable of diverting and conveying to the place of use 1.78 cfs or 800 gpm of water which is to be used for irrigation. Water has been put to beneficial use to the maximum extent as follows:

Sec 32-T93N-R53W.

SW ¼ NE ¼ - 1 ac

NW ¼ SE ¼ - 25 ac

SW ¼ SE ¼ - 32 ac

Sec 5-T92N-R53W.

NW ¼ NE ¼ - 31 ac

SE ¼ NE ¼ - 5 ac

NE ¼ SE ¼ - 33 ac

SE ¼ SE ¼ - 12 ac

NE ¼ NE ¼ - 30 ac

comprising a total of 169 acres of land and the license should be issued for 1.78 cfs or 800 gpm.

3. All structures, wells and lands on map Yes

F. Comments or other permit(s) associated with the project:

Two acres in S ½ NE ¼ Sec 32-T93N-R53W are not included as they are overlapped by Water Permit 7075-3.

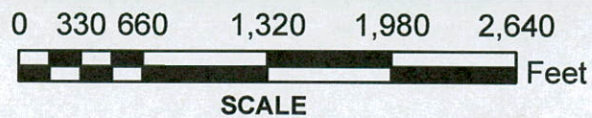
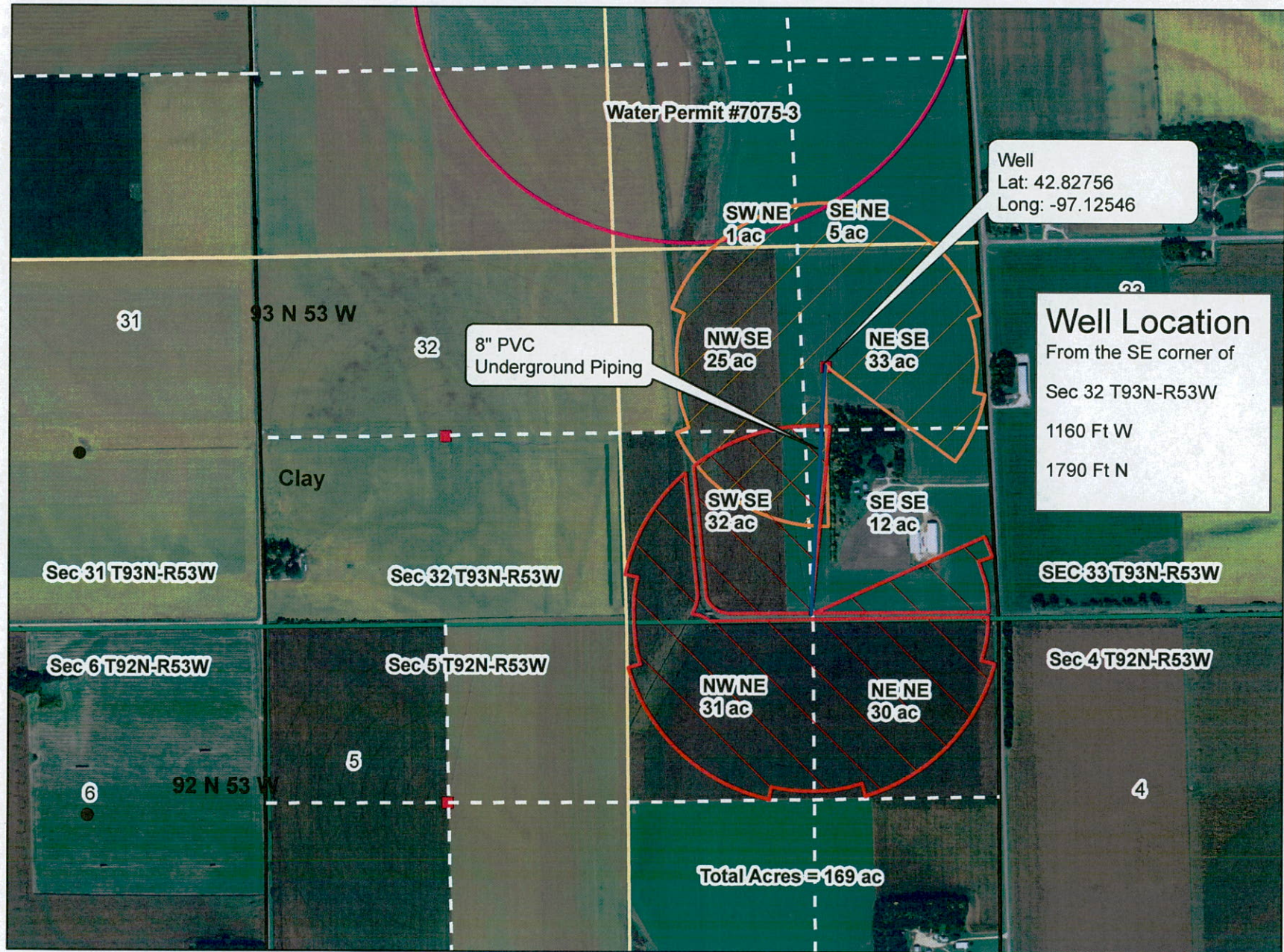
Eleven acres in S ½ SE ¼ Sec 32-T93N-R53W are overlapped by Center Pivot's #1 & #2.

Harold Holoch

Harold Holoch, PE
Engineer Water Rights Inspector
DENR, Water Rights Program

Date report completed: August 17, 2016

7414-3



Harold Holoch
Harold Holoch, PE
Water Rights Inspector
August 17, 2016

STATE OF SOUTH DAKOTA

WATER LICENSE NO. 7414-3

(1) Calvin Hanson, 31524 452nd Ave, Meckling SD 57069 made Application No. 7414-3, August 20, 2012 for a water permit to divert 1.78 cubic feet of water per second from ground water, one well (Missouri Elk Point Aquifer), Clay County, South Dakota for irrigation purposes. Permit No. 7414-3, with a priority date of August 20, 2012 was approved November 19, 2012 and issued to the applicant for diversion of water with construction of the described water supply system to be completed on or before November 19, 2017 and for the application to beneficial use of said water on or before November 19, 2021.

The Permit holder submitted a "Notice of Completion of Works and Application of Water to Beneficial Use" on July 25, 2013. The "Notice" stated the water use system was completed and water placed to beneficial use in June, 2013.

(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 1.78 cubic feet of water per second for beneficial use. The location of the diversion point is 1,160 feet W & 1,790 feet N of the SE corner of Section 32, T93N, R53W (NE ¼ SE 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 a total of 169 acres as described below:

Section 32, T93N, R53W				Section 5, T92N, R53W	
SW ¼ NE ¼	1 acre	NW ¼ SE ¼	25 acres	NW ¼ NE ¼	31 acres
SE ¼ NE ¼	5 acres	SW ¼ SE ¼	32 acres	NE ¼ NE ¼	30 acres
		NE ¼ SE ¼	33 acres		
		SE ¼ SE ¼	12 acres		

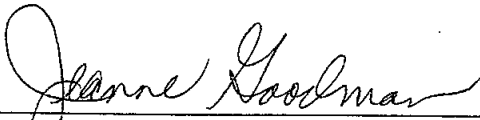
(4) Pursuant to South Dakota Water Law 46-5-30.1 Calvin Hanson, 31524 452nd Ave, Meckling SD 57069 the holder and/or owner of Water Right No. 7414-3 is issued a license to appropriate water, the right to use 1.78 cubic feet of water per second from ground water, one well (Missouri Elk Point Aquifer) with a priority date of August 20, 2012 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. 7414-3 and subject to the following qualifications:

- 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.

continued

- The well authorized by Permit No. 7414-3 shall be constructed by a licensed well driller and construction of the well and installation of the pump shall comply with the 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. *Well completed by Christensen Well & Irrigation Company in February, 2013. A copy of the well completion report is on file with the Water Rights Program.*
- This Permit is approved subject to the irrigation water use questionnaire being submitted each year.

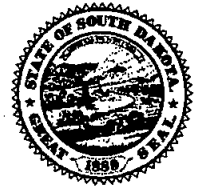


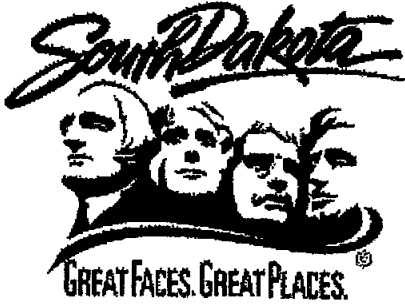
Jeanne Goodman, Chief Engineer
Water Rights Program

Department of Environment and Natural Resources

SEP 06 2016

date





DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

SEP 06 2016

7414-3

Calvin Hanson
31524 452nd Ave
Meckling SD 57069

Dear Mr. Hanson:

Enclosed is Water License No. 7414-3. 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. 7414-3, 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,

A handwritten signature in cursive script that reads 'Jeanne Goodman'.

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

enclosures