

WATER PERMIT NO. 7039A-3

Name of Applicant: John Daly

Address: 34662 236th St, Pukwana SD 57370 Phone: 605 894-4192

Amount of Water Claimed: no add'l Total Acres: no add'l

Source of Water Supply: groundwater (two wells)

Water to be used for: irrigation County: Buffalo

Type of Waste Disposal System:

Location: 12 miles north of Chamberlain

PRIORITY Date Received: 1-9-12 Application/License Fee: \$ 100 (lic fee pd on 7039-3)

Corrected Application Received: Period of Annual Use: May 1 – September 30

Remarks: Change the location of a portion of the acres to be irrigated and well location authorized by Water Permit No. 7039-3

Diversion Point: S ½ NE ¼ Sec 28-T106N-R70W

Land to be Irrigated: S ½ Sec 17, N ½ Sec 20 and S ½ NE ¼, N ½ SE ¼ Sec 28; all in T106N-R70W

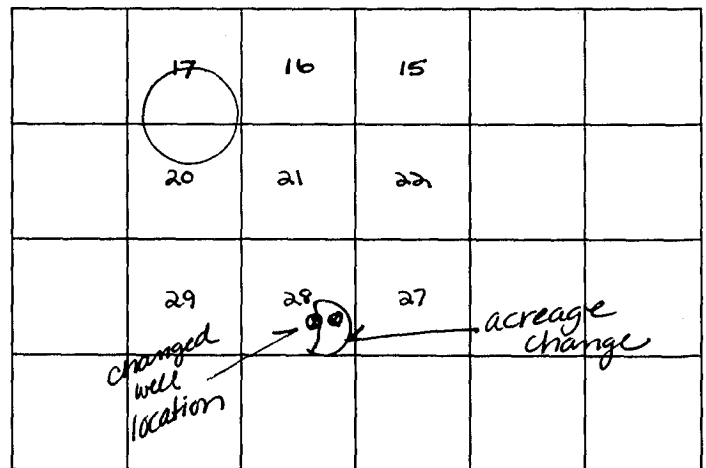
Depth of Well: 53 and 57 feet deep

Well Driller: Hutmacher Drilling

Remarks:

Type of Map: aerial

Prepared by: Eric Gronlund



Reviewed and the Number Assigned on: 1-10-12

By: Karen Schlaak

Notice of Hearing - date to intervene: _____

RECEIVED

JAN - 9 2012

WATER RIGHTS
PROGRAM

Mail to: PMB 2020 DENR - Water Rights 523 E Capitol Ave Pierre, SD 57501-3182 ph. (605) 773-3352	(office use only)	
	No. <u>7039A-3</u>	Hydrologic Unit <u>10140105</u>
	Basin <u>Missouri River</u>	
	Newspaper <u>Central Dak. Times P.O. Box 125</u> <u>605-234-0266</u> <u>Chamberlain 57325</u>	

Application For Permit To Appropriate Water For Irrigation

Type of Application: ☐ New ☐ Vested Right ☒ Amendment/Correction to Permit No. 7039-3
(Use predates Mar 2, 1955)

Description of amendment/correction: (i.e. change diversion point(s), add diversion point(s), change use, etc.)
change acres and well location authorized by Water Permit No. 7039-3. Still within construction period

- Name of Applicant John Daly Phone 605 894-4192
(check one) ☒ Owner ☐ Tenant/lessee
Mailing Address 34662 236th Street Pukwana SD 57370
(Address) (City) (State) (Zip Code)
- Amount of water claimed no add'l *CFS or **GPM ***AF Total Acreage no add'l
(*Cubic Feet per Second) (**Gallons per Minute) (***) Acre Feet - storage capacity of dam/dugout or annual use if applicable)
- Source of water supply two wells in Crow Creek Aquifer
- Location of point of diversion (example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W) County Buffalo
existing well authorized by WR No. 1684-3 and move well location under WP No. 7039-3 to the south about
500 feet west of existing well - SW 1/4 NE 1/4 Section 28, T106N, R70W
- County or counties where water will be used Buffalo
- Annual period during which water is to be used May 1 - September 30
- 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>see attachment</u>			

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

Instead of constructing 4 center pivots on the acres authorized by WP No. 7039-3, intend to construct one large pivot capable of 400 acres as shown on map. Further intend to move approximately 100 acres to the southeast next to the pivot authorized by WR No. 1684-3 - also as shown on map. New well will now be located in the SW 1/4 NE 1/4 Section 28, T106N, R70W. Test well showed good results at this site.

STATE OF SOUTH DAKOTA)

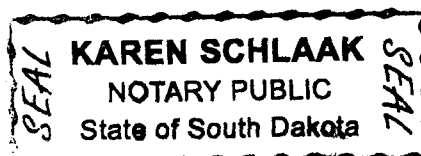
County of Hughes)

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, John Daly, 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 John Daly

Subscribed and sworn to before me this 9th day of January 20 12



Karen Schlaack
Notary Public signature

SOUTH DAKOTA
WATER PERMIT NO. 7039A-3

Date of first receipt of application January 9, 2012.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 7039A-3 to John Daly, 34662 236th St, Pukwana SD 57370 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. 7039A-3 amends Water Permit No. 7039-3 by transferring a portion of the irrigated acreage and point of diversion to other land. Water Permit No. 7039-3 appropriates 4.0 cubic feet of water per second from two wells to be completed into the Crow Creek Aquifer (approximately 57 and 53 feet deep) located in NW ¼ NE ¼ Section 28 to irrigate 520 acres located in the S ½ Section 17, N ½ Section 20 and SW ¼ Section 16; all in T106N-R70W located within the boundaries of the Crow Creek Indian reservation. This permit authorizes moving the location of 100 of the 520 acres approximately 1 ½ miles southeast to the S ½ NE ¼ and N ½ SE ¼ Section 28 and moving the location of one well to the SW ¼ NE ¼ Section 28; all in T106N-R70W. The permit holder may use this well and the well authorized by Water Right No. 1684-3 located in the SE ¼ NE ¼ Section 28-T106N-R70W to irrigate the land requested by this permit and No. 7039-3. The water source for this irrigation system is the Crow Creek Aquifer and no increase in the diversion rate or number of acres irrigated is authorized by this permit.
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 May 23, 2008.
4. The date of approval of Permit No. 7039A-3 is March 26, 2012.
5. All construction is to be completed on or before August 25, 2013.
6. Water is to be put to beneficial use on or before August 25, 2017.
7. 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 wells approved under Permit No. 7039A-3 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 wells authorized by Permit No. 7039A-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

AUG 10 2012

date



Supplemental Information

(type or print in ink)

1. Well Information - Proposed Construction

- a) Drill Hole Diameter _____ Depth 57 feet
- 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 applicant's 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

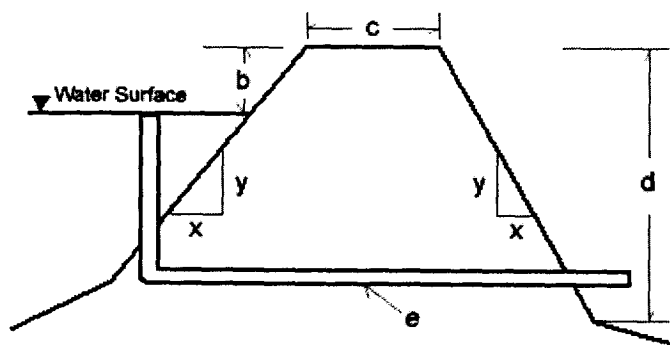
3. Dugout Information

- 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 (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

Water Permit Application to Amend Water Permit No. 7039-3, John Daly

Approximate Acreage Breakdown based on Proposed New Configuration

Section 17, T106N, R70W

NW ¼ SW ¼	9 acres
NE ¼ SW ¼	37
SW ¼ SW ¼	24
SE ¼ SW ¼	40
NW ¼ SE ¼	39
NE ¼ SE ¼	18
SW ¼ SE ¼	40
SE ¼ SE ¼	37

Section 20, T106N, R70W

NW ¼ NW ¼	15 acres
NE ¼ NW ¼	40
SE ¼ NW ¼	11
NW ¼ NE ¼	40
NE ¼ NE ¼	29
SW ¼ NE ¼	14
SE ¼ NE ¼	2

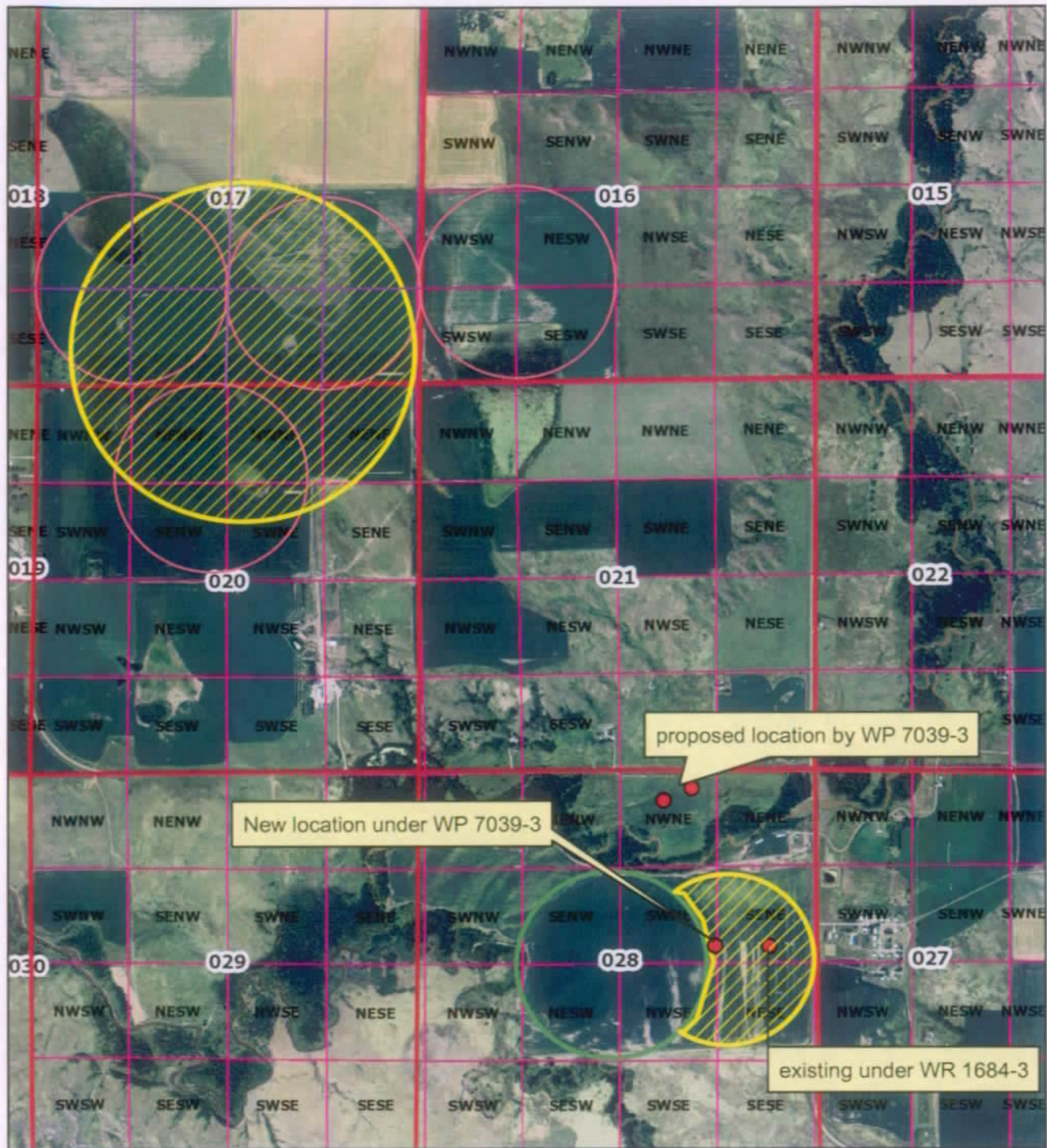
Section 28, T106N, R70W

SW ¼ NE ¼	10 acres
SE ¼ NE ¼	35
NW ¼ SE ¼	10
NE ¼ SE ¼	35

TOTAL = 485 acres *

* Original Permit No. 7039-3 is for 520 acres. The new configuration will likely be a few less acres. This can be addressed at the time of licensing.

Water Permit Application to Amend Water Permit No. 7039-3



4,400 2,200 0 4,400 Feet



New proposed configuration
under WP 7039-3



Original intended irrigated
acres authorized by WP 7039-3



Authorized by Water
Right No. 1684-3

Eric Gronlund

Eric Gronlund
Water Rights Program, DENR
based on representation by John Daly

SOUTH DAKOTA WATER WELL COMPLETION REPORT

11-02

Location NE 1/4 NE 1/4 Sec 28 Twp 106 Rg 70

County

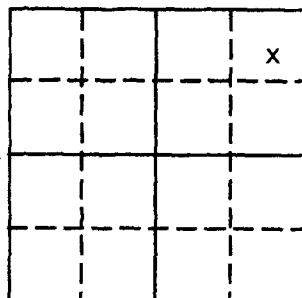
Buffalo

North

Please mark well location with an "X"

W

E



Well Completion Date

6/30/2011

1 Mile

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

? _____ ft. from _____ (Identify source)

PROPOSED USE:

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

METHOD OF DRILLING:

Forward

CASING DATA:

☐ Steel☐ Plastic☐ Other

If other describe _____

PIPEWEIGHT

DIAMETER

FROM

TO

HOLE DIAMETER

LB/FT

IN

FT

FT

IN

LB/FT

IN

FT

FT

IN

LB/FT

IN

FT

FT

IN

GROUTING DATA:

Grout Type

No. of Sacks

Grout Weight

From

To

Vol Clay

2

Lb/gal

0.0 Ft

40.0 Ft

Lb/gal

Ft

Ft

Describe grouting procedure _____

SCREEN:

☐ Perforated pipe☐ Manufactured

Diameter

Inches

Length

Feet

Material

Slot Size

Set From

Feet to

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? _____☐ No, Why Not? _____Lab sample sent to for
water quality analysisWell Owner: John Daly

Business Name: _____

Address:

34662 236th St

City, State, Zip:

PukwanaSD57370

WELL LOG:

DEPTH

FORMATION

FROM

TO

Yellow Clay

0

4

Yellow Gravel & Rocks

4

20

Yellow Gravel

20

30

Shale

30

40

STATIC WATER LEVEL

FEET

If flowing: closed in pressure

PSI

GPM flow

through

Inch pipe

Controlled by ☐ Valve☐ Reducers☐ Other

Reduced flow rate

GPM

Can well be completely shut in?

WELL TEST DATA:

☐ Pumped

Describe:

☐ Bailed☐ Other

Pumping Level Below Land Surface

Ft. After

Hrs. pumped

GPM

Ft. After

Hrs. pumped

GPM

If pump installed, pump rate:

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SEP 26 2011

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REMARKS

This well was drilled under license #

440

And this report is true and accurate.

Drilling firm:

Pullman Drilling Inc.

Signature of License Representative:

Ken Palmer

Signature of Well Owner or Equitable Property Holder:

Date:

SOUTH DAKOTA WATER WELL COMPLETION REPORT

11-02

Location 1/4 NE 1/4 Sec 28 Twp 106N Rg 70W

County

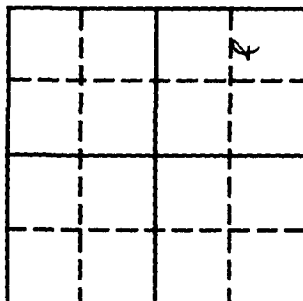
Buffalo

North

Please mark well location with an "X"

W

E



1 Mile

Well Completion Date

9/30/2009

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

? 3,000.0 ft. from septic (identify source)

PROPOSED USE:

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

METHOD OF DRILLING:

Rotary

CASING DATA:

☐ Steel ☒ Plastic ☐ Other

If other describe

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
160.0 LB/FT	16.00 IN	0.0 FT	33.0 FT	20.00 IN
LB/FT	IN	FT	FT	IN
LB/FT	IN	FT	FT	IN

GROUTING DATA:

Grout Type	No. of Sacks	Grout Weight	From	To
Bentonite	12	9.2 Lb/gal	0.0 Ft	15.0 Ft
		Lb/gal	Ft	Ft

Describe grouting procedure
pressure thru tremie

SCREEN:

☐ Perforated pipe ☒ Manufactured
 Diameter 16.00 Inches Length 20.0 Feet
Material Stainless steelSlot Size .100 Set From 33.0 Feet to 53.0 Feet

Other information

WAS A PACKER OR SEAL USED?

☐ Yes ☒ No

If so, what material?

Describe packer(s) and location

DISINFECTION: Was well disinfected upon completion?

☒ Yes, How? Chlorine
☐ No, Why Not?
Lab sample sent to for
water quality analysisWell Owner: John Daly

Business Name:

Address: 34662 236 St.City, State, Zip: Pukwana SD 57370

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
Clay	0	13
Gravel with few clay strips	13	46
Blue clay	46	53

STATIC WATER LEVEL 13.0 FEET

If flowing: closed in pressure _____ PSI

GPM flow _____ through _____ Inch pipe

Controlled by ☐ Valve ☐ Reducers ☐ Other _____

Reduced flow rate _____ GPM

Can well be completely shut in?

WELL TEST DATA:

☒ Pumped Describe:☐ Bailed☐ Other

Pumping Level Below Land Surface

50.0 Ft. After 1.0 Hrs. pumped 150.0 GPM

_____ Ft. After _____ Hrs. pumped _____ GPM

If pump installed, pump rate: _____ GPM

REMARKS

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DEC - 8 2009

WATER RIGHTS

PROGRAM
213

This well was drilled under license # _____

And this report is true and accurate.

Drilling firm: Hutmacher Drilling, Inc.

Signature of License Representative:

Signature of Well Owner or Equitable Property Holder:

Date: _____

12-10-09

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date 1/10, 20 12

RECEIVED OF Daly Farm Partnership 34662 236th St Pukwana SD 57370

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

Fee for Application for Permit No. <u>7039-3</u> to Appropriate Water, to construct and to put water to beneficial use	100	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. _____		
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	100 00

No. **05232**

By *Galad Erhile*
Chief Engineer



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

February 28, 2012

Natural Resource Section
Crow Creek Sioux Tribe
P.O. Box 50
Fort Thompson, SD 57339-0050

Gentleman:

Enclosed is a copy of the report, recommendation and public notice for Water Permit Application No. 7039A-3 filed by John Daly. The public notice is scheduled to be published March 7 and 14, 2012 in the Central Dakota Times. The date to petition in opposition to cause a hearing before the South Dakota Water Management Board is March 26, 2012.

This information is being sent to keep the tribe informed of water right issues. If you have any questions regarding DENR's review of the application please contact me..

Sincerely,

A handwritten signature in cursive script that reads 'Eric Gronlund'.

Eric Gronlund
Water Rights Program, DENR
(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

**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 7039A-3, John Daly**

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. 7039A-3, John Daly, 34662 236th Street, Pukwana SD 57370

The Chief Engineer is recommending APPROVAL of Application No. 7039A-3 because 1) the proposed diversion can be developed without unlawful impairment of existing rights, 2) the proposed use is a beneficial use and 3) it is in the public interest with the following qualifications:

1. The wells approved under Permit No. 7039A-3 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 wells authorized by Permit No. 7039A-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
February 27, 2012

NOTE: I encourage you to read the staff report carefully. The proximity of the proposed well and the new well location to be authorized by Permit No. 7039A-3 may become a management issue. Also it is unlikely that the proposed well at this location will yield 4.0 cfs. The new location of the 100 acres to be transferred are currently covered under Water Right No. 1684-3. It is presumed that only the existing acres under the center pivot in the S ½ of Section 28 covered by WR No. 1684-3 have been continually irrigated.

REPORT ON WATER PERMIT APPLICATION NO. 7039A-3

For John Daly

February 7, 2012

Application No. 7039A-3 proposes to amend Water Permit No. 7039-3 by transferring a portion of the irrigated acreage and point of diversion to other land. Water Permit No. 7039-3 appropriates 4.0 cfs (1,795 gpm) from two wells approximately 57 and 53 feet deep located in the NW $\frac{1}{4}$ NE $\frac{1}{4}$ of section 28 to irrigate 520 acres located in the S $\frac{1}{2}$ of section 17, N $\frac{1}{2}$ of section 20 and the SW $\frac{1}{4}$ of section 16; all in T106N R70W in Buffalo County and within the boundaries of the Crow Creek Indian Reservation. This application proposes to move the location of 100 of the 520 acres approximately 1.5 miles southeast to the S $\frac{1}{2}$ NE $\frac{1}{4}$ and the N $\frac{1}{2}$ SE $\frac{1}{4}$ of section 28 and move the location of one well to the SW $\frac{1}{4}$ NE $\frac{1}{4}$ of section 28; all in T106N R70W. The applicant proposes to use this well and the well authorized by Water Right No. 1684-3 located in the SE $\frac{1}{4}$ NE $\frac{1}{4}$ of section 28, T106N R70W to irrigate the land requested by this permit and No. 7039-3. No increase in the diversion rate or the number of acres irrigated is authorized by this application.

AQUIFER – CROW CREEK (CC)

The Crow Creek aquifer is under water table conditions at this site. The aquifer is composed of outwash (sand and gravel). The aquifer was named in Jerauld County study (Hamilton, 1985) and obviously extends into Brule and Buffalo Counties to the west. However, the aquifer is not mapped and there are no good estimates for areal extent or amount of water in storage in Buffalo and Brule Counties. The aquifer does underlie 70 square miles and contain 270,000 acre-feet of water in storage in Jerauld County (Hamilton, 1985). The direction of ground water movement if in general from the east to the west throughout the three county area.

Recharge to the Crow Creek aquifer in Jerauld County was estimated to be 2.4 inches per year or about 9,100 acre-feet per year in Jerauld County. The aquifer in Brule and Buffalo County appears to be in the similar overall hydrologic and geologic setting and would likely have the similar characteristics for potential recharge.

An aquifer test conducted for Water Right No. 1684-3 by the USGS (see engineers report and letter and report from Lewis Howells, dated May 21, 1970 included in Water Right File No. 1684-3) indicates a transmissivity value of about 140,000 gpd/ft and a storage coefficient between 0.02 and 0.8 (water table conditions). Howells concluded domestic wells in the area would probably not be affected adversely and that pumping of 20 to 25 days over an irrigation season would not deplete the aquifer. He also estimated the size of the aquifer to be about 10,000 acre-feet in Buffalo County. He also concluded that additional high capacity wells probably could not be supported in this area. This statement only makes sense because apparently he was worried that extended pumping from the aquifer would draw water levels down in the production well to such an extent that pumping could not continue at this rate. In other words continuous pumping could not be sustained basically because of lack of aquifer thickness. Howells thought that the aquifer probably could not support additional high capacity

wells. Howells also stated in the report the test should have run longer to get "less ambiguous results".

The applicant has drilled test holes to the north of this proposed site but there is no record of test holes at the proposed site. These test wells encountered the aquifer but also indicate thinning of the aquifer to the north and pumping rates that were not sufficient to satisfy the requested diversion rate of Water Permit No. 7039-3.

The Water Rights Program does monitor an observation well BF-78C located about five miles to the southeast of this application. Water levels for this observation well show good response to climatic conditions. Water level rise during wet years (recharge) and gradually decline during dry years. In general, the water level record indicates the aquifer is capable of sustaining additional withdrawals (Water Rights, 2012). A hydrograph for this observation well is included with this report.

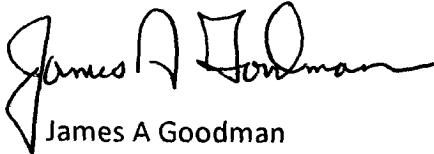
REVIEW OF EXISTING WATER PERMITS/RIGHTS

The existing Water Right No. 1684-3 authorizes one well (shown as the east well on applicant's map) for a diversion rate of 1.9 cfs and irrigation of 178 acres. The proposed well will be located about 500 feet to the west of the existing well. Interference will occur. The applicant will need to give careful consideration to maximize pumping rates and minimize potential drawdown. It is highly unlikely that the existing well and the proposed well would yield 4.0 cfs plus another 1.9 cfs for the existing right. Obviously, this is a management problem for the applicant.

CONCLUSIONS

1. Water is available from the Crow Creek aquifer.
2. The aquifer is under water table conditions at this site. Drawdown will occur as a result of pumping and will overlap at the distance between production wells. Until the new well is drilled and tested the actual effect cannot be determined. However, based upon the original test conducted in 1969 a drawdown of 2.3 feet was measured at 320 feet from the production well at a pumping rate of about 900 gpm after 57 hours of pumping.
3. The well authorized by this application must be completed in accordance with SD Well Completion Standards.
4. No record of a test well was submitted for this site. There are various test wells in the area completed by three different well drillers. All tests indicate the aquifer was present but the thicknesses varied considerably. Aquifer thickness affects the production of a well and apparently the testing for Water Permit No. 7039-3 indicated lack of production.
5. These lands are located within the boundaries of the Crow Creek Indian Reservation.
6. This application requests a transfer of lands (100 acres) to an area already licensed under Water Right No. 1684-3. However, the applicant may have effectively abandoned those acres years ago by not irrigating them. But those acres are still listed under the original Water Right 1684-3.

7. The aquifer does recharge and this is verified by the observation well record.
8. Potentially this application would allow 4.0 cfs from two wells (potentially a third well authorized under 7039-3) combined and diverted by pipeline to lands about two miles northwest of the well location. Also these wells would irrigate the lands under 1684-3 presumably so two pivots could operate at the same time instead of one. Under this scenario it is very unlikely that these two wells plus the potential one could yield 5.9 cfs at any given time. In other words all the lands probably cannot be irrigated at the same time.



James A Goodman

Natural Resources Engineer

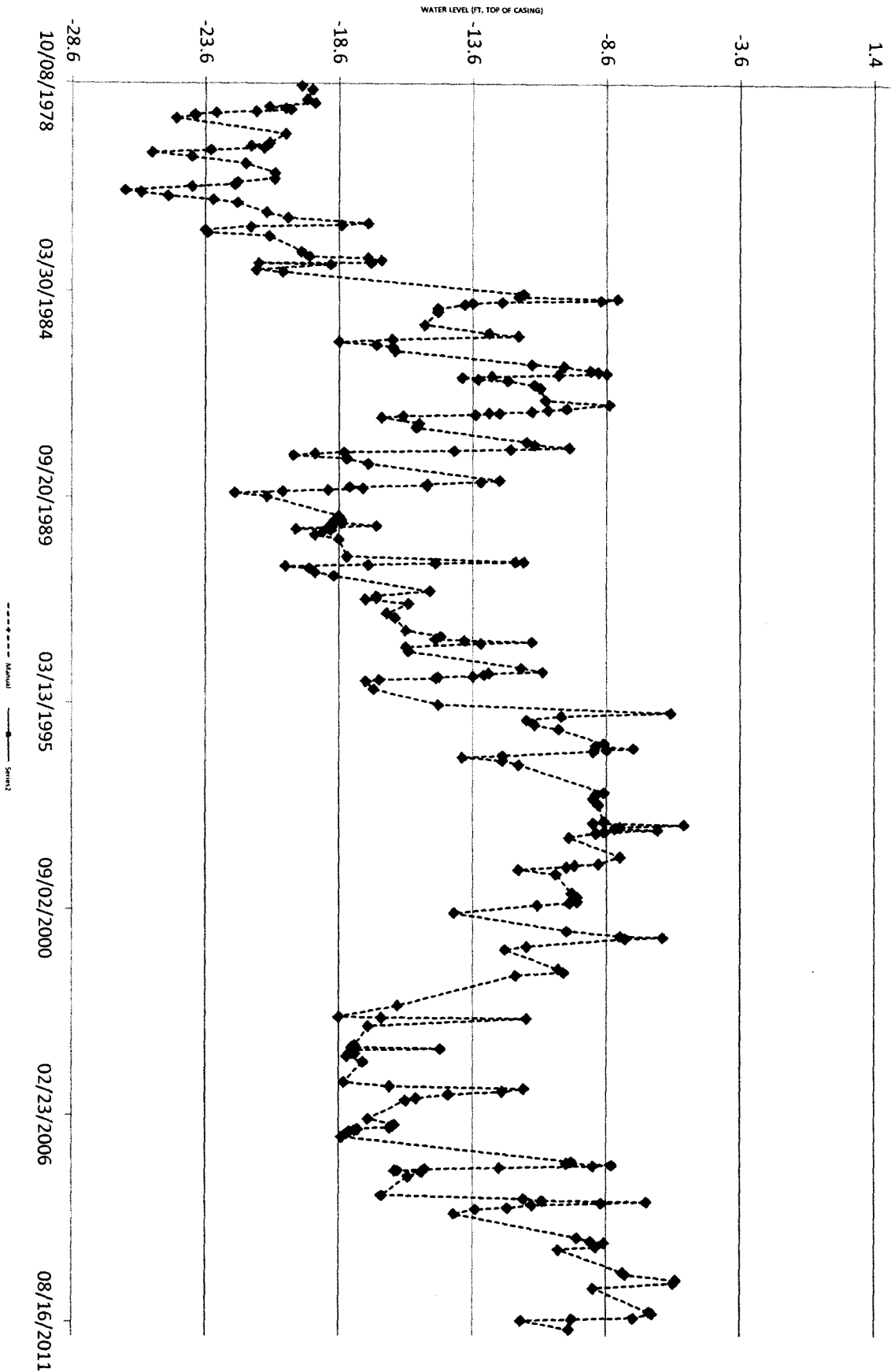
BIBLIOGRAPHY

Hamilton, L.J., 1985, Water Resources of Aurora and Jerauld Counties, South Dakota, Water-Resources Investigation Report 84-4030, USGS, Huron, SD, 57350.

Water Rights, 2012, Unpublished Observation Well Records for the Crow Creek Aquifer, SD DENR, DES, Water Rights Program, Pierre, SD, 57501.

Water Permit Files, undated, Reports included with Water Right No. 1684-3, SD, DENR, DES, Water Rights Program, Pierre, SD, 57501.

WATER RIGHTS' OBSERVATION WELL BF-78C



AFFIDAVIT OF PUBLICATION

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State of South Dakota

ss

MAR 16 2012

County of Brule

WATER RIGHTS PROGRAM

Debi Ruiz of said county, being, first duly sworn, on oath, says: That she is the publisher of *Central Dakota Times*, a weekly newspaper, published in the City of Chamberlain, in said County of Brule, and State of South Dakota; that she has full and personal knowledge of the facts herein stated; that said newspaper is a legal newspaper as defined in SDCL 17-2-2.1 through 17-2-2.4 inclusive; that said newspaper has been published within the said County of Brule and State of South Dakota, for at least one year next prior to the first publication of the attached public notice, and that the Notice of Application

No. 7039A-3

a printed copy of which, taken from the paper in which the same was published, and which is hereto attached and made a part of this affidavit, was published in said newspaper for two successive week(s) to wit:

March 7, 2012; March 14, 2012;

_____, 20____; _____, 20____;

_____, 20____; _____, 20____;

That the full amount of the fee charged for the publication of the attached public notice inures to the sole benefit of the publisher or publishers; that no agreement or understanding for the division thereof has been made with any other person, and that no part thereof has been agreed to be paid to any person whomsoever; that the fees charged for the publication thereof are:

\$ 50.89

Signed: Debi Ruiz

Subscribed and sworn to before me this 15th day of March, 2012.

Janet L. Petrak
Notary Public in and for the County of Brule,
South Dakota

JANET L. PETRAK
Notary Public
SEAL
South Dakota

My commission expires June 5, 2014

NOTICE OF APPLICATION NO. 7039A-3

Notice is given that John Daly, 34662 236th Street, Pukwana, SD 57370 has filed an application for a water permit to amend Water Permit No. 7039-3 by transferring a portion of the irrigated acreage and point of diversion to other land. Water Permit No. 7039-3 appropriates 4.0 cubic feet of water per second from two wells to be completed into the Crow Creek Aquifer (approximately 57 and 53 feet deep) located in NW 1/4 NE 1/4 Section 28 to irrigate 520 acres located in the S 1/2 Section 17, N 1/2 Section 20 and SW 1/4 Section 16; all in T106N-R70W located within the boundaries of the Crow Creek Indian Reservation. This application proposes to move the location of 100 of the 520 acres approximately 1 1/2 miles southeast to the S 1/2 NE 1/4 and N 1/2 SE 1/4 Section 28 and move the location of one well to the SW 1/4 NE 1/4 Section 28; all in T106N-R70W. The applicant proposes to use this well and the well authorized by Water Right No. 1684-3 located in the SE 1/4 NE 1/4 Section 28-T106N-R70W to irrigate the land requested by this permit and No. 7039-3. The water source for this irrigation system is the Crow Creek Aquifer and no increase in the diversion rate or number of acres irrigated is authorized by this application.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 7039A-3 because 1) existing rights will not be unlawfully impaired, 2) it is a beneficial use of water and 3) 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 East 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 March 26, 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 two consecutive weeks, March 7, 2012 and March 14, 2012, at a total approximate cost of \$50.89.)

(March 7/March 14)



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

February 28, 2012

Central Dakota Times
PO Box 125
Chamberlain SD 57325

ATTENTION: Legal Public Notice

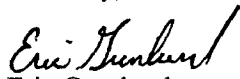
Enclosed is a Notice on Application No. 7039A-3 to Appropriate Water to be published twice. Please publish the first notice on March 7, 2012 with the second publication 7 days later. The text of the notice can be e-mailed to your paper by contacting Karen Schlaak at (605) 773-3352.

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 John Daly, 34662 236th St., Pukwana SD 57370 (Ph # 605-894-4192).

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. 7039A-3

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

Date _____

We are in receipt of your letter of February 28, 2012 enclosing Notice to Appropriate Water by Application No. 7039A-3 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
denr.sd.gov

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

February 28, 2012

John Daly
34662 236th St
Pukwana SD 57370

Dear Mr. Daly:

Water Permit Application No. 7039A-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 Publisher of the Central Dakota Times printed at Chamberlain SD (Ph # 605-234-0266). You will need to contact the newspaper and authorize publication of this notice. For your information, a copy of the notice, the recommendations of the Chief Engineer and reports on the applications 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 Notices 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 applications.

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 March 7, 2012 with the second publication 7 days later. 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. 7039A-3

Notice is given that John Daly, 34662 236th St, Pukwana SD 57370 has filed an application for a water permit to amend Water Permit No. 7039-3 by transferring a portion of the irrigated acreage and point of diversion to other land. Water Permit No. 7039-3 appropriates 4.0 cubic feet of water per second from two wells to be completed into the Crow Creek Aquifer (approximately 57 and 53 feet deep) located in NW ¼ NE ¼ Section 28 to irrigate 520 acres located in the S ½ Section 17, N ½ Section 20 and SW ¼ Section 16; all in T106N-R70W located within the boundaries of the Crow Creek Indian reservation. This application proposes to move the location of 100 of the 520 acres approximately 1 ½ miles southeast to the S ½ NE ¼ and N ½ SE ¼ Section 28- and move the location of one well to the SW ¼ NE ¼ Section 28; all in T106N-R70W. The applicant proposes to use this well and the well authorized by Water Right No. 1684-3 located in the SE ¼ NE ¼ Section 28-T106N-R70W to irrigate the land requested by this permit and No. 7039-3. The water source for this irrigation system is the Crow Creek Aquifer and no increase in the diversion rate or number of acres irrigated is authorized by this application.

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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 twice at the total approximate cost of _____.



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

AUG 10 2012

John Daly
34662 236th St
Pukwana SD 57370

Dear Mr. Daly:

Enclosed is Water Permit No. 7039A-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

SOUTH DAKOTA WATER WELL COMPLETION REPORT

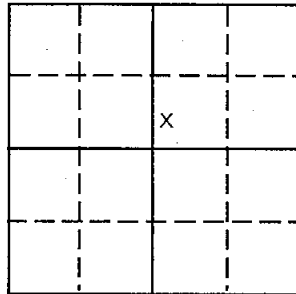
11-02

Location SW $\frac{1}{4}$ NE $\frac{1}{4}$ Sec 28 Twp 106 Rg 70

County

Buffalo

North



Please mark well location with an "X"

Well Completion Date

3/20/2012

1 Mile

Distance to 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:

Reverse Rotary

CASING DATA:

☐ Steel ☒ Plastic ☐ Other

If other describe _____

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
LB/FT	IN	FT	FT	IN
	16.00	0.0	42.0	25.00
LB/FT	IN	FT	FT	IN
LB/FT	IN	FT	FT	IN

GROUTING DATA:

Grout Type	No. of Sacks	Grout Weight	From	To
Vol Clay	25	Lb/gal	0.0 Ft	38.0 Ft
		Lb/gal	Ft	Ft

Describe grouting procedure _____

SCREEN:

☐ Perforated pipe ☒ Manufactured
Diameter 16.00 Inches Length 15.0 FeetMaterial PVCSlot Size 0.060 Set From 42.0 Feet to 57.0 Feet

Other information _____

WAS A PACKER OR SEAL USED?

☒ Yes ☐ No
If so, what material? PeaRock

Describe packer(s) and location

38-57'

DISINFECTION: Was well disinfected upon completion?

☒ Yes, How? Pellets
☐ No, Why Not? _____
 Lab sample sent to for water quality analysis
Well Owner: John Daly

Business Name: _____

Address: 34662 236th St.City, State, Zip: Puckwana SD 57370

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
Yellow Clay	0	10
Yellow Gravel	10	57

STATIC WATER LEVEL 16.7 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: w/ pump
☐ Bailed

☐ Other

Pumping Level Below Land Surface

16.7 Ft. After 7.0 Hrs. pumped 1,300.0 GPM

_____ Ft. After _____ Hrs. pumped _____ GPM

If pump installed, pump rate: _____ GPM

REMARKS

RECEIVED

MAR - 4 2013

WATER RIGHTS PROGRAM

This well was drilled under license # 440

And this report is true and accurate.

Drilling firm: Pullman Well Drilling Inc.

Signature of License Representative

Signature of Well Owner or Equitable Property Holder: _____

Date: _____



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

denr.sd.gov

John Daly
34662 236th St
Pukwana SD 57370

June 1, 2015

Dear Mr. Daly:

This letter is in regards to our recent telephone conversation concerning the results of my May 18, 2015 water permit inspection.

As I explained during the call, your irrigation system covered by Water Right No. 1684-3 and Water Permit Nos. 7039-3 and 7039A-3, combined, authorize the irrigation of 698 acres with an authorized diversion rate of 6.0 cfs (2693 gpm). Based upon what you have developed, there are 615 acres irrigated; 125 acres under No. 1684-3 and 490 acres under Nos. 7039-3 and 7039A-3. You have a total developed combined pump capacity from the two wells of 7.58 cfs (3400 gpm). As we discussed over the telephone you will need to file a new permit application to pick up the additional diversion authority of 1.58 cfs (707 gpm) to bring your water permits into compliance.

We discussed the possibility of applying for additional irrigated acres with the same application you are applying for the increased diversion authority. If the new irrigation is going to be part of the existing system and supplied from current two wells, then the increased acres can be included in the same application as the request for additional diversion authority. However, if the new irrigation will have a different source of water from the current system, then this will be a new project and will take a separate application. I'm enclosing a map showing what is currently developed, water permit application forms and an instruction sheet. Please complete application and submit it along with the appropriate fee. The application filing fee for just additional diversion rate authority is \$500. If additional acres are requested, the fee will be based on the number of acres (see instruction sheet)

Also, Water Right No. 1684-3 is still listed under Paul Daly. I am including a partially completed transfer form. Please complete and submit it with a \$50 transfer fee.

If you have any questions, please contact Eric Gronlund or myself at phone (605) 773-3352.

Sincerely,

Mark D. Rath
Natural Resources Engineer

enclosures

Water Rights Program - DENR

Conversation or File Documentation

Name of Person: John Daly **File No.** 1684-3, 7039-3 and 7039A-3

Address: 34662 236th St, Pukwana SD 57370 **County:** Buffalo

Date: Oct 16, 2015 **Telephone:** 650-680-1354; cell

RE: Status of 1684-3, 7039-3 and 7039A-3

Comments: *On May 18, 2015 I made an inspection of water permit Nos 7039-3 and 7039A-3 for John Daly. At that time he was considering adding an additional well and another center pivot. I sent him the application forms and a transfer form for No. 1684-3.*

On October 16, 2015, Mr. Daly called me and said he decided he was not going to expand his irrigation system. He said will send in the transfer form for 1684-3. I told him, when that occurs, I will finish up my inspection report and will incorporate Nos. 1684-3, 7039-3 and 7039A-3 into a single license since all three utilize the same water source.



Mark D Rath

Natural Resources Engineer III



7039A-3
DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

denr.sd.gov

APR 12 2016

8191-3

John Daly
34662 236th St
Pukwana SD 57370

Dear Mr. Daly:

Enclosed are Water Permit and Water License No. 8191-3. The water license is the final document completing your process of obtaining a Water Right. Also, included with your license is a map prepared by the staff engineer who conducted the 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. 8191-3, 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,

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

Note: The applicable portions of Nos. 1684-3, 7039-3 and 7039A-3 are incorporated into Water License No. 8191-3.