

WATER PERMIT NO. 7574-3

Name of Applicant: Gary Marshall / Marshall Bros

Address: 19032 388th Ave, Hitchcock SD 57348 Phone: 605 266-2720

Amount of Water Claimed: 1.78 cfs Total Acres: 160 acres

Source of Water Supply: groundwater (one well)

Water to be used for: irrigation County: Spink

Type of Waste Disposal System:

Location: 4 miles west of Hitchcock

PRIORITY Date Received: 12-14-12 Application/License Fee: \$ 1050

Corrected Application Received: Period of Annual Use: April 1 – October 31

Remarks:

Diversion Point: center of NE 1/4 Sec 35-T114N-
R64W

Land to be Irrigated: NE 1/4 Sec 35-T114N-R64W

Depth of Well: 80 feet deep

Well Driller:

Remarks:

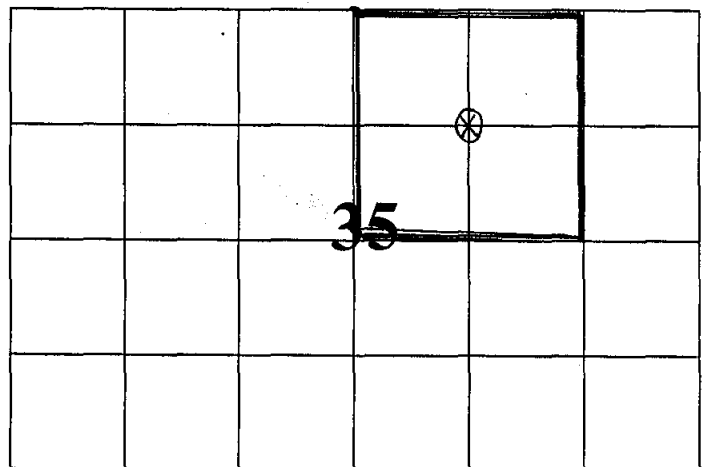
Type of Map: aerial

Prepared by: Ron Duvall

Reviewed and the Number Assigned on: 12-27-12

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	No. <u>7574-3</u> (office use only) Hydrologic Unit <u>18160006</u>
	Basin <u>James River</u>
	Newspaper <u>Redfield Press</u>
	<u>Plainsman</u>

RECEIVED

DEC 14 2012

WATER RIGHTS
PROGRAM**Application For Permit To Appropriate Water For Irrigation**

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

Description of amendment/correction: (i.e. change diversion point(s), add diversion point(s), change use, etc.)

1. Name to Appear on Irrigation Permit Gary Marshall / Marshall Bros
(check one) ☒ Owner ☐ Tenant/lessee ☐ Owner's Legal Agent _____
(name and complete address if different than above name)

Mailing Address 19032 388th Ave Hitchcock SD 57348
(Address) (City) (State) (Zip Code)

Home Phone 605-266-2720 Cell 605-350-1401 Email marshall@sbt.net

2. Amount of water claimed 1.78 *CFS or 800 **GPM ***AF Total Acreage 160
(*Cubic Feet per Second) (**Gallons per Minute) (**Acre Feet - storage capacity of dam/dugout or annual use if applicable)

3. Source of water supply Tulare:Western Spink

4. Location of point of diversion One well located towards the center of the NE 1/4 Sec 35 114-64
(example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W)
County Spink

5. County or counties where water will be used Spink County

6. Annual period during which water is to be used April 1 - October 31

7. List below each forty acre division, or lot, or fraction thereof and show number of acres to be irrigated in each.
(Attach sheet if more space is needed)

Land Description	Acres	Land Description	Acres
NW 1/4 of the NE 1/4 sec 35 114-64	40		
NE 1/4 of the NE 1/4 sec 35 114-64	40		
SW 1/4 of the NE 1/4 sec 35 114-64	40		
SE 1/4 of the NE 1/4 sec 35 114-64	40		

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

The project will consist of one well located towards the center of the NE 1/4 of sec 35 114-64 pumping around 800 gpm and using a center pivot to irrigate up to 160 acres.

I, Gary Marshall Gary Marshall, the applicant, certify that I have read this application, have examined the attached map, and that the matters stated are true.

SOUTH DAKOTA
WATER PERMIT NO. 7574-3 FOR IRRIGATION

Date of first receipt of application December 14, 2012.

The Water Management Board approved Water Permit No. 7574-3 on May 2, 2013 for Gary Marshall / Marshall Bros., 19032 388th Ave, Hitchcock SD 57348 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. 7574-3 appropriates 1.78 cubic feet of water per second from one well to be completed into the Tulare:Western Spink Hitchcock Aquifer (80 feet deep) located in the center of the NE 1/4 Section 35 for irrigation of 160 acres located in the NE 1/4 Section 35; all in T114N-R64W.
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: April 1 – October 31.
3. The date from which applicant may claim right is December 14, 2012.
4. One-fifth of the construction is to be completed on or before November 2, 2015.
5. All construction is to be completed on or before May 2, 2018.
6. Water is to be put to beneficial use on or before May 2, 2022.
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 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. 7574-3 shall be constructed by a licensed well driller and construction of the well and installation of the pump shall comply with Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) pursuant to Section 74:02:04:28.
3. This Permit is approved subject to the irrigation water use questionnaire being submitted each year.

WATER MANAGEMENT BOARD

By: *Jeanne Goodman*

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

JUN 20 2013

date



Supplemental Information

(type or print)

1. Well Information

(check one or both as applicable) ☒ Drilling new well(s) ☐ Using existing well(s)

a) If new wells, how many ____ Have test holes been drilled ☐ Yes ☒ No Drilled by ____
(if yes, please provide copies of logs)

b) If existing wells, how many ____ Provide copy of log(s), if available. Drilled by ____

c) Well Depth 80 Depth to Top of Water Bearing Material 30 Depth to Water from Surface 20

d) Distance to nearest existing domestic well:

On applicant's property _____ On property owned by others 3/4 Mile

2. Wastewater Disposal System Information

a) Type of System (i.e. septic tank, drain field) _____

b) System Capacity (gallons) _____ Year Constructed _____

c) Connected to the City of _____ Sanitary System

3. Dugout Information

a) Surface Dimensions _____ Depth _____

b) Depth to water (ground surface to water level) _____

4. Water Storage Dams

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

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

b) Freeboard _____

c) Crest Width _____

Crest Length _____

d) Height _____

e) Primary Outlet Capacity _____

If pipe, diameter _____

f) Secondary Spillway Capacity _____

Spillway Width _____

g) X & Y Slope (e.g. 3 to 1 is a typical slope)

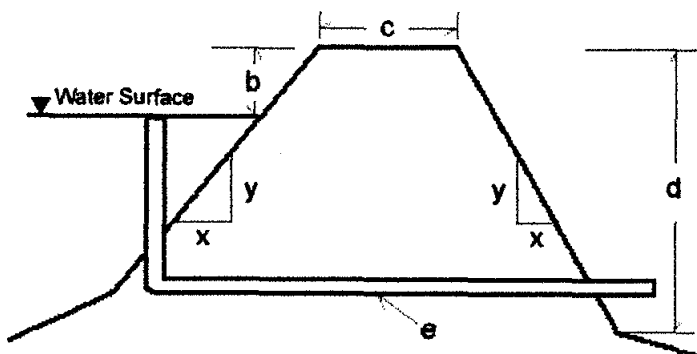
Upstream _____

Downstream _____

h) Surface Area of Impoundment _____

i) Storage _____ Acre Feet

j) Drainage Area Above Dam _____ Acres





NE 1/4 Sec 35 1/4-64

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date 12/17, 20 12

RECEIVED OF Marshall Brothers 19032 388th Ave Hitchcock SD 57348

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

Fee for Application for Permit No. <u>7574-3</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>7574-3</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. **05769**

By

Garland Erdle
Chief Engineer

RECEIVED

FEB 28 2013

PRINTER'S AFFIDAVIT

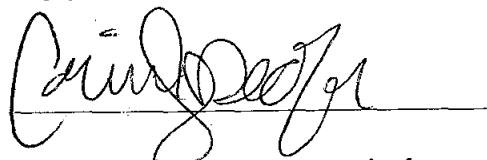
WATER RIGHTS
PROGRAM

STATE OF SOUTH DAKOTA,
COUNTY OF BEADLE: ss.

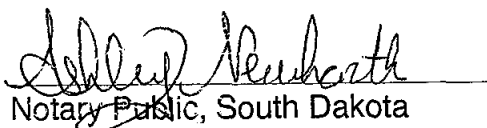
I, CORINN DECKER, being duly sworn on oath, say that THE PLAINSMAN is a daily paper published at Huron, Beadle County, South Dakota, and that said newspaper has a bona fide circulation of at least 250 copies daily; that said newspaper has been published within said county for fifty-two consecutive weeks immediately prior to this date, that said newspaper is printed in whole or in part, in an office maintained at said place of publication; that I am Legal Advertising Coordinator of said newspaper and know the facts herein state. The annexed notice headed:

MARSHALL BROTHERS - WATER HEARING

was published for one day, in said newspaper, and not in any supplement of the said newspaper, the publication was of the 13TH day FEB. 2013 That the full **ONE HUNDRED AND SIXTEEN & 99/000** dollars insures to the benefit of the publisher of said newspaper; that no agreement or understanding for the division thereof has been made with any other person, and that no part there of has been agreed to be paid to any person whom so ever.



Subscribed and sworn to before me this 28TH day of FEB. 2013.


Notary Public, South Dakota

My term expires 10/25/17

Legal # 607

F.P. 02-13-13

**NOTICE OF HEARING
on Applications to
Appropriate Water**

Notice is given that Gary Marshall / Marshall Brothers, 19032 388th Ave, Hitchcock SD 57348 has filed the following applications for a water permit.

Application No. 7570-3 proposes to appropriate 3.56 cubic feet of water per second (cfs) from two wells to be completed into the Tulare: Western Spink Hitchcock Aquifer (80 feet deep) located in the center of the NW 1/4 and the center of the SW 1/4 Section 1 for irrigation of 280 acres located in the W 1/2 Section 1; all in T113N-R64W.

Application No. 7571-3 proposes to appropriate 1.78 cfs from two wells to be completed into the Tulare: Western Spink Hitchcock Aquifer (80 feet deep) both located near the center of the SE 1/4 Section 4 for irrigation of 160 acres located in the SE 1/4 Section 4; all in T113N-R64W.

Application No. 7572-3 proposes to appropriate 1.78 cfs from one well to be completed into the Tulare: Western Spink Hitchcock Aquifer (80 feet deep) located in the center of the SW 1/4 Section 34 for irrigation of 140 acres located in the SW 1/4 Section 34; all in T114N-R64W.

Application No. 7573-3 proposes to appropriate 1.78 cfs from one well to be completed into the Tulare: Western Spink Hitchcock Aquifer (80 feet deep) located near the center of the NW 1/4 Section 27 for irrigation of 160 acres located in the NW 1/4 Section 27; all in T114N-R63W.

Application No. 7574-3 proposes to appropriate 1.78 cfs from one well to

be completed into the Tulare: Western Spink Hitchcock Aquifer (80 feet deep) located in the center of the NE 1/4 Section 35 for irrigation of 160 acres located in the NE 1/4 Section 35; all in T114N-R64W.

Application No. 7575-3 proposes to appropriate 3.56 cfs from two wells to be completed into the Tulare: Western Spink Hitchcock Aquifer (80 feet deep) located in the centers of the SW 1/4 and SE 1/4 Section 36 to irrigate 280 acres located in the S 1/2 Section 36; all in T114N-R64W.

Application No. 7637-3 proposes to appropriate 1.78 cfs from one well to be completed into the Tulare: Western Spink Hitchcock Aquifer (80 feet deep) located in the center of the SE 1/4 Section 25 for irrigation of 135 acres located in the SE 1/4 Section 25; all in T114N-R64W.

Application No. 7638-3 proposes to appropriate 1.78 cfs from one well to be completed into the Tulare: Western Spink Hitchcock Aquifer (80 feet deep) located in the center of the SE 1/4 Section 18 for irrigation of 135 acres located in the SE 1/4 Section 18; all in T114N-R63W.

Application No. 7639-3 proposes to appropriate 1.78 cfs from one well to be completed into the Tulare: Western Spink Hitchcock Aquifer (80 feet deep) located in the center of the NW 1/4 Section 3 for irrigation of 135 acres located in the NW 1/4 Section 3; all in T114N-R64W.

Application No. 7640-3 proposes to appropriate 1.78 cfs from two wells to be completed into the Tulare: Western Spink Hitchcock Aquifer (80 feet deep) located near the center of the SW 1/4 and SE 1/4 SW

1/4 Section 8 for irrigation of 160 acres located in the SW 1/4 Section 8; all in T113N-R62W.

SDCL 46-2A-4(10) provides that "if the applicant does not contest the recommendation of the Chief Engineer and no petition to oppose the application is received, the Chief Engineer shall act on the application pursuant to the Chief Engineer's recommendation and no hearing may be held before the board, unless the Chief Engineer makes a finding that an application, even if uncontested, presents important issues of public policy or public interest that should be heard by the board." In this case, the Chief Engineer finds that these applications present important issues of public interest that should be heard by the Water Management Board.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application Nos. 7570-3, 7571-3, 7572-3, 7573-3, 7574-3, 7575-3, 7637-3, 7638-3, 7639-3 and 7640-3 because 1) there is reasonable probability that there is unappropriated water available for the applicant's proposed use, 2) the proposed diversions 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.

The Water Management Board will consider these applications at 9:00 a.m. on March 7, 2013 in the Matthew Training Center, Joe Foss Bldg, 523 E. Capitol Ave. Pierre SD. The Chief Engineer's recommendations are not final or binding upon the Board. The Board is authorized to 1) approve, 2) approve with qualifications, 3) defer, or 4) deny the applications based on the facts presented at the public hearing.

Any interested person who intends to participate in the hearing shall file a petition to oppose or support these applications and the petition shall be filed with BOTH the applicant and Chief Engineer. The applicant must also file a petition if opposed to the Chief Engineer's recommen-

dations. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E Capitol, Pierre SD 57501 (605 773-3352)" and the applicant's mailing address is given above. A petition filed by either an interested person or the applicant must be filed by February 25, 2013. The petition may be informal, but shall be in writing and shall include a statement describing the petitioner's interest in the applications, the petitioner's reasons for opposing or supporting the applications, and the signature and mailing address of the petitioner or the petitioner's legal counsel, if legal counsel is obtained. The hearing is an adversary proceeding and any party has the right to be present at the hearing and to be represented by a lawyer. These and other due process rights will be forfeited if they are not exercised at the hearing and decisions of the Board may be appealed to the Circuit Court and State Supreme Court as provided by law.

The March 7, 2013 hearing date will be automatically delayed for at least 20 days upon written request to the Chief Engineer from the applicant or any person who has filed a petition to oppose or support the applications. The request for an automatic delay must be filed by February 25, 2013. If an automatic delay is requested, the hearing will be rescheduled for a future Board meeting and personal notice will be provided to all petitioners regarding the time, date and location.

Contact Eric Gronlund by February 25, 2013 at the above Chief Engineer's address to request copies of the staff reports, recommendations, applications or other information.

Notice is given to individuals with disabilities that this hearing is being held in a physically accessible place. Please notify the Department of Environment and Natural Resources at least 48

hours before the hearing if you have a disability for which special arrangements must be made at the hearing. The telephone number for making arrangements is (605) 773-3352.

Under SDCL 1-26-17(7) notices must state that "if the amount in controversy exceeds \$2,500.00 or if a property right may be terminated, any party to the contested case may require the agency to use the Office of Hearing Examiners by giving notice of the request to the agency no later than ten days after service of a notice of hearing issued pursuant to SDCL 1-26-17." This is a Notice of Hearing, service is being provided by publication, and the applicable date to give notice to the Chief Engineer is February 25, 2013. However, since this particular matter is a water permit application and not a monetary controversy in excess of \$2,500.00 or termination of a property right the Chief Engineer disputes the applicability of this provision and maintains that the hearing must be conducted by the Board.

As applicable, the following provides the legal authority and jurisdiction under which the hearing will be held and the particular statutes and rules pertaining to these applications: SDCL 1-26-16 thru 1-26-28; SDCL 46-1-1 thru 46-1-9, 46-1-13 thru 46-1-16; 46-2-3.1, 46-2-9, 46-2-11, 46-2-17; 46-2A-1 thru 46-2A-12, 46-2A-14, 46-2A-15, 46-2A-20, 46-2A-21, 46-2A-23; 46-5-1.1, 46-5-2 thru 46-5-26, 46-5-30.2 thru 46-5-30.4, 46-5-31, 46-5-32 thru 46-5-34.1, 46-5-38 thru 46-5-39, 46-5-46, 46-5-47, 46-5-49; 46-6-1 thru 46-6-3.1, 46-6-6.1, 46-6-10, 46-6-13, 46-6-14, 46-6-21, 46-6-26; and Board Rules ARSD 74:02:01:01 thru 74:02:01:25:02; 74:02:01:35:01.

Steven M. Pirner,
Secretary, Department
of Environment and
Natural Resources.

No 607 (adv.)100
Published once at the
total approximate cost of
\$115.77. (2010)

Affidavit of Publication
RECEIVED

STATE OF SOUTH DAKOTA, FEB 14 2013
County of Spink: ss.

**WATER RIGHTS
PROGRAM**

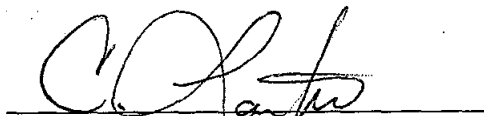
I, Mark E. Davis, of said County & State, being first duly sworn on oath, say that THE REDFIELD PRESS is a legal weekly newspaper as defined in Sec. 65.0508 South Dakota Code 1939, as amended by Chapter 298 of the Session of Laws of 1939, printed and published in the English language in the City of Redfield, in said County and State, by THE REDFIELD PRESS, and has been such newspaper during the time hereinafter mentioned, and that I Mark E. Davis, the undersigned, am Publisher of said newspaper in charge of the advertising department thereof, and have personal knowledge of all the facts stated in this affidavit, and that the legal or official notice entitled:

#154 Notice

A printed copy of which is hereto attached, was printed and published in said newspaper in 1 issue, to wit: The first publication being made on February 13th, that Eighty-two and .60/100 Dollars, insures to the benefit of the publisher of THE REDFIELD PRESS, 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.



Subscribed and sworn to before me this 13th day of February, 2013.


Notary Public, South Dakota

My commission expires 04/06/2016.

Notice

#154

**NOTICE OF HEARING
ON APPLICATIONS TO
APPROPRIATE WATER**

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Any interested person who intends to participate in the hearing shall file a petition to oppose or support these applications and the petition shall be filed with BOTH the applicant and Chief Engineer. The applicant must also file a petition if opposed to the Chief Engineer's recommendations. The Chief Engineer's address is: "Water Rights Program, Foss Building, 523 E. Capitol, Pierre, SD 57501-6051-773-3352" and the applicant's mailing address is given above. A petition filed

by either an interested person or the applicant must be filed by February 25, 2013. The petition may be informal, but shall be in writing and shall include a statement describing the petitioner's interest in the applications, the petitioner's reasons for opposing or supporting the applications, and the signature and mailing address of the petitioner or the petitioner's legal counsel, if legal counsel is obtained. The hearing is an adversary proceeding and any party has the right to be present at the hearing and to be represented by a lawyer. These and other due process rights will be forfeited if they are not exercised at the hearing and decisions of the Board may be appealed to the Circuit Court and State Supreme Court as provided by law.

The March 7, 2013 hearing date will be automatically delayed for at least 20 days upon written request to the Chief Engineer from the applicant or any person who has filed a petition to oppose or support the applications. The request for an automatic delay must be filed by February 25, 2013. If an automatic delay is requested, the hearing will be rescheduled for a future Board meeting and personal notice will be provided to all petitioners regarding the time, date and location.

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is a Notice of Hearing, service is being provided by publication, and the applicable date to give notice to the Chief Engineer is February 25, 2013. However, since this particular matter is a water permit application and not a monetary controversy in excess of \$2,500.00 or termination of a property right the Chief Engineer disputes the applicability of this provision and maintains that the hearing must be conducted by the Board.

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46-2-11, 46-2-17; 46-2A-1 thru 46-2A-12, 46-2A-14, 46-2A-15, 46-2A-20, 46-2A-21, 46-2A-23; 46-5-1:1, 46-5-2 thru 46-5-26, 46-5-30.2 thru 46-5-30.4, 46-5-31, 46-5-32 thru 46-5-34.1, 46-5-38 thru 46-5-39, 46-5-46, 46-5-47, 46-5-49; 46-6-1 thru 46-6-3.1, 46-6-6.1, 46-6-10, 46-6-13, 46-6-14, 46-6-21, 46-6-26; and Board Rules ARSD: 74:02:01:01 thru 74:02:01:25:02; 74:02:01:35:01.

Steven M. Pirner, Secretary
Department of Environment and Natural Resources
Published at an approximate cost of \$82.60. (Feb 13)



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

February 7, 2013

Plainsman
PO Box 1278
Huron SD 57350

ATTENTION: Legal Public Notice

Enclosed is a Notice on Application Nos. 7570-3, 7571-3, 7572-3, 7574-3, 7575-3, 7637-3, 7638-3, 7639-3 and 7640-3 to Appropriate Water. Please publish the notice once on February 13, 2013. The text of the notice can be e-mailed to your paper by contacting Karen Schlaak at (605) 773-3352.

The applicant must verify to you that the notice is to be published and arrange for payment. **Please BILL the APPLICANT for the cost of publication.** The APPLICANT is Gary Marshall c/o Marshall Brothers, 19032 388th Ave., Hitchcock SD 57348 (Ph # 605-266-2720).

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

February 7, 2013

Redfield Press
PO Box 440
Redfield SD 57469

ATTENTION: Legal Public Notice

Enclosed is a Notice of Hearing on Applications to Appropriate Water. Please publish the notice once on February 13, 2013. The text of the notice has been e-mailed.

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 Gary Marshall, 19032 388th Ave., Hitchcock SD 57348 (Ph # 605-266-2720).

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

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

February 7, 2013

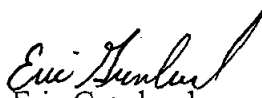
Gary Marshall
Marshall Bros
19032 388th Ave
Hitchcock SD 57348

Dear Mr. Marshall:

Water Permit Application Nos. 7570-3, 7571-3, 7572-3, 7573-3, 7574-3, 7575-3, 7637-3, 7638-3, 7639-3 and 7640-3 for irrigation use have been examined and found to comply with the South Dakota Water Laws and applicable rules. A notice has been sent to the Redfield Press printed at Redfield SD (Ph # 605-472-0822) and the Plainsman printed at Huron SD (Ph # 605-352-6401). You will need to contact the newspaper(s) 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(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(s) 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 applications.

NOTICE OF HEARING on Applications to Appropriate Water

Notice is given that Gary Marshall / Marshall Brothers, 19032 388th Ave, Hitchcock SD 57348 has filed the following applications for a water permit.

Application No. 7570-3 proposes to appropriate 3.56 cubic feet of water per second (cfs) from two wells to be completed into the Tulare:Western Spink Hitchcock Aquifer (80 feet deep) located in the center of the NW 1/4 and the center of the SW 1/4 Section 1 for irrigation of 280 acres located in the W 1/2 Section 1; all in T113N-R64W.

Application No. 7571-3 proposes to appropriate 1.78 cfs from two wells to be completed into the Tulare:Western Spink Hitchcock Aquifer (80 feet deep) both located near the center of the SE 1/4 Section 4 for irrigation of 160 acres located in the SE 1/4 Section 4; all in T113N-R64W.

Application No. 7572-3 proposes to appropriate 1.78 cfs from one well to be completed into the Tulare:Western Spink Hitchcock Aquifer (80 feet deep) located in the center of the SW 1/4 Section 34 for irrigation of 140 acres located in the SW 1/4 Section 34; all in T114N-R64W.

Application No. 7573-3 proposes to appropriate 1.78 cfs from one well to be completed into the Tulare:Western Spink Hitchcock Aquifer (80 feet deep) located near the center of the NW 1/4 Section 27 for irrigation of 160 acres located in the NW 1/4 Section 27; all in T114N-R63W.

Application No. 7574-3 proposes to appropriate 1.78 cfs from one well to be completed into the Tulare:Western Spink Hitchcock Aquifer (80 feet deep) located in the center of the NE 1/4 Section 35 for irrigation of 160 acres located in the NE 1/4 Section 35; all in T114N-R64W.

Application No. 7575-3 proposes to appropriate 3.56 cfs from two wells to be completed into the Tulare:Western Spink Hitchcock Aquifer (80 feet deep) located in the centers of the SW 1/4 and SE 1/4 Section 36 to irrigate 280 acres located in the S 1/2 Section 36; all in T114N-R64W.

Application No. 7637-3 proposes to appropriate 1.78 cfs from one well to be completed into the Tulare:Western Spink Hitchcock Aquifer (80 feet deep) located in the center of the SE 1/4 Section 25 for irrigation of 135 acres located in the SE 1/4 Section 25; all in T114N-R64W.

Application No. 7638-3 proposes to appropriate 1.78 cfs from one well to be completed into the Tulare:Western Spink Hitchcock Aquifer (80 feet deep) located in the center of the SE 1/4 Section 18 for irrigation of 135 acres located in the SE 1/4 Section 18; all in T114N-R63W.

Application No. 7639-3 proposes to appropriate 1.78 cfs from one well to be completed into the Tulare:Western Spink Hitchcock Aquifer (80 feet deep) located in the center of the NW 1/4 Section 3 for irrigation of 135 acres located in the NW 1/4 Section 3; all in T114N-R64W.

Application No. 7640-3 proposes to appropriate 1.78 cfs from two wells to be completed into the Tulare:Western Spink Hitchcock Aquifer (80 feet deep) located near the center of the SW 1/4 and SE 1/4 SW 1/4 Section 8 for irrigation of 160 acres located in the SW 1/4 Section 8; all in T113N-R62W.

SDCL 46-2A-4(10) provides that “if the applicant does not contest the recommendation of the Chief Engineer and no petition to oppose the application is received, the Chief Engineer shall act on the application pursuant to the Chief Engineer’s recommendation and no hearing may be held before the board, unless the Chief Engineer makes a finding that an application, even if uncontested, presents important issues of public policy or public

interest that should be heard by the board." In this case, the Chief Engineer finds that these applications present important issues of public interest that should be heard by the Water Management Board.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application Nos. 7570-3, 7571-3, 7572-3, 7573-3, 7574-3, 7575-3, 7637-3, 7638-3, 7639-3 and 7640-3 because 1) there is reasonable probability that there is unappropriated water available for the applicant's proposed use, 2) the proposed diversions 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.

The Water Management Board will consider these applications at 9:00 a.m. on March 7, 2013 in the Matthew Training Center, Joe Foss Bldg, 523 E. Capitol Ave. Pierre SD. The Chief Engineer's recommendations are not final or binding upon the Board. The Board is authorized to 1) approve, 2) approve with qualifications, 3) defer, or 4) deny the applications based on the facts presented at the public hearing.

Any interested person who intends to participate in the hearing shall file a petition to oppose or support these applications and the petition shall be filed with BOTH the applicant and Chief Engineer. The applicant must also file a petition if opposed to the Chief Engineer's recommendations. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E Capitol, Pierre SD 57501 (605 773-3352)" and the applicant's mailing address is given above. A petition filed by either an interested person or the applicant must be filed by February 25, 2013. The petition may be informal, but shall be in writing and shall include a statement describing the petitioner's interest in the applications, the petitioner's reasons for opposing or supporting the applications, and the signature and mailing address of the petitioner or the petitioner's legal counsel, if legal counsel is obtained. The hearing is an adversary proceeding and any party has the right to be present at the hearing and to be represented by a lawyer. These and other due process rights will be forfeited if they are not exercised at the hearing and decisions of the Board may be appealed to the Circuit Court and State Supreme Court as provided by law.

The March 7, 2013 hearing date will be automatically delayed for at least 20 days upon written request to the Chief Engineer from the applicant or any person who has filed a petition to oppose or support the applications. The request for an automatic delay must be filed by February 25, 2013. If an automatic delay is requested, the hearing will be rescheduled for a future Board meeting and personal notice will be provided to all petitioners regarding the time, date and location.

Contact Eric Gronlund by February 25, 2013 at the above Chief Engineer's address to request copies of the staff reports, recommendations, applications or other information. Notice is given to individuals with disabilities that this hearing is being held in a physically accessible place. Please notify the Department of Environment and Natural Resources at least 48 hours before the hearing if you have a disability for which special arrangements must be made at the hearing. The telephone number for making arrangements is (605) 773-3352.

Under SDCL 1-26-17(7) notices must state that "if the amount in controversy exceeds \$2,500.00 or if a property right may be terminated, any party to the contested case may require the agency to use the Office of Hearing Examiners by giving notice of the request to the agency no later than ten days after service of a notice of hearing issued pursuant to SDCL 1-26-17." This is a Notice of Hearing, service is being provided by publication, and the applicable date to give notice to the Chief Engineer is February 25, 2013. However, since this particular matter is a water permit application and not a monetary controversy in excess of \$2,500.00 or termination of a property right the Chief Engineer disputes the applicability of this provision and maintains that the hearing must be conducted by the Board.

As applicable, the following provides the legal authority and jurisdiction under which the hearing will be held and the particular statutes and rules pertaining to these applications: SDCL 1-26-16 thru 1-26-28; SDCL 46-1-1 thru 46-1-9, 46-1-13 thru 46-1-16; 46-2-3.1, 46-2-9, 46-2-11, 46-2-17; 46-2A-1 thru 46-2A-12, 46-2A-14, 46-2A-15, 46-2A-20, 46-2A-21, 46-2A-23; 46-5-1.1, 46-5-2 thru 46-5-26, 46-5-30.2 thru 46-5-30.4, 46-5-31 46-5-

32 thru 46-5-34.1, 46-5-38 thru 46-5-39, 46-5-46, 46-5-47, 46-5-49; 46-6-1 thru 46-6-3.1, 46-6-6.1, 46-6-10, 46-6-13, 46-6-14, 46-6-21, 46-6-26; and Board Rules ARSD 74:02:01:01 thru 74:02:01:25.02; 74:02:01:35.01.

Steven M. Pirner, Secretary, Department of Environment and Natural Resources. Published once at an approximate cost of _____.

Gronlund, Eric

From: Gary W. Schumacher <gary@wslawfirm.net>
Sent: Friday, February 22, 2013 4:58 PM
To: Best, Diane
Cc: Gronlund, Eric; todd@wslawfirm.net
Subject: RE: Water Permit Applications

Diane,

We are providing notice of the petition to Gary Marshall and Marshall Brothers and Wayne Binger. As to the other issues, I will have Todd respond to them.

Thank you,

Gary W. Schumacher
Wilkinson & Wilkinson
103 Joliet Avenue S.E.
P.O. Box 29
De Smet, South Dakota 57231
(605) 854-3378 telephone
(605) 854-9006 facsimile
gary@wslawfirm.net

From: Best, Diane [<mailto:Diane.Best@state.sd.us>]
Sent: Friday, February 22, 2013 4:43 PM
To: 'Todd D Wilkinson'; Schumacher, Gary
Cc: Gronlund, Eric
Subject: Water Permit Applications

I got the fax. I thought I'd email right away so you have a chance to respond.

On behalf of your clients, you have petitioned in the series of water permit applications that were just advertised for hearing on March 7 (Marshall Brothers and Binger). I assume you have or are in the process of also providing notice of your petition to the applicants as required. Please confirm. I see that you are asking for the 20 day delay. Your request triggers the automatic provision of SDCL 46-2A-4. Those matters will be delayed to the Board's next meeting on May 1-2.

You also petitioned on Application 7373-3. That is the Weiting application where some of your clients (Lenny Peterson and Oscar Inc.) are already parties. This is the one we already talked about that has been subject to an automatic delay. So DENR cannot reschedule this until you file something indicating you have consulted with Terry Weiting and he has no objection. Or if Weiting objects there will need to be a telephonic hearing. If you talk to him and he objects find out some dates when you are both available and we'll make ourselves available. The hearing would be a conference call with prehearing Chair Ev Hoyt. I don't see the Chief Engineer objecting but we can't just reschedule it on our own. And I thought I'd let you know so you can get together with Weiting on this or provide him with notice of hearing asap.

Technically this petition (as it relates to Weiting) is also this is a late filed petition to intervene from your clients (other than Lenny and Oscar, Inc.) So I expect you would want consent from the applicant or Hoyt on that too.

Also, the other matter scheduled for March 7 is that of Oscar, Inc. If you wish to delay that you will also need to request delay on that as well. Unless someone intervenes between now and the 25th that should just take a letter asking for delay.



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

denr.sd.gov

February 28, 2013

NOTICE

TO: Wayne Binger
37923 183rd Street
Tulare SD 57476

Marshall Brothers
Gary Marshall
19032 388th Avenue
Hitchcock SD 57348

Ray Rylance
PO Box 227
Watertown SD 57021

FROM: Garland Erbele, Chief Engineer
Water Rights Program

SUBJECT: Automatic Delay of Hearing on Water Permit Application No. 7551-3, Wayne Binger
and Nos. 7570-3 thru 7575-3 & 7637-3 thru 7640-3, Gary Marshall

The Water Rights Program received a petition filed opposing the Chief Engineer's recommendation in the matter of Water Permit Application No. 7551-3 for Wayne Binger & Application Nos. 7570-3 thru 7575-3 and 7637-3 thru 7640-3 for Gary Marshall. The petitions filed by the petitioners and their legal counsel are attached.

The notice of hearing published February 13, 2013 in the Redfield Press and The Plainsman scheduled a March 7, 2013 hearing before the Water Management Board. Mr. Wilkinson, counsel for petitioners, filed written notice requesting an automatic delay of the scheduled March 7, 2013 hearing on the water permit applications. Pursuant to SDCL 46-2A-5, upon receipt of a written notice requesting a postponement of the date set for hearing, the Chief Engineer shall cancel the original hearing on the application and reschedule the application for hearing by the Water Management Board. Therefore, the hearing on above listed applications is automatically delayed pursuant to SDCL 46-2A-4 and 46-2A-5 and will not be held on March 7, 2013.

The Water Management Board will consider these applications at the May 1 – 2, 2013 meeting. Future notice will be provided of the hearing date, time and location.

The petitions also listed Water Permit Application No. 7373-3 filed by Terry Wieting. Petitioners previously filed and requested automatic delay of an October 3, 2012 hearing on Application No. 7373-3. Therefore, this application can not be further postponed pursuant to SDCL 46-2A-5. The hearing on Application No. 7373-3 will proceed at 9:00 AM on March 7, 2013 as set forth in the February 11, 2013 notice to parties.

Finally, no petition or automatic delay were filed in response to the public notice for Application No. 7620-3 filed by Oscar Inc. to appropriate 1.94 cubic feet of water per second from one well completed in the Tulare:Western Spink Hitchcock Aquifer located in the center of the NE ¼ Section 32 for irrigation of 136 acres in the NE ¼ Section 32, T115N, R63W. The Chief Engineer recommended approval of this application. However, the date this application was filed is junior to the Binger and Marshall applications. Therefore, at the time of hearing Chief Engineer will recommend this matter be deferred until the May 1 – 2, 2013 meeting so that it may be heard at the same time as the Binger / Marshall applications.

Please contact Eric Gronlund at (605) 773-3352, if you have any questions.

c: Diane Best, Assistant Attorney General
Todd Wilkinson, PO Box 29, DeSmet SD 57231
Terry Wieting, 870 Beach Avenue NE, Huron SD 57350

enclosure

CERTIFICATION

I hereby certify that on February 28, 2013, I have personally deposited with the United States mail at Pierre, South Dakota, first class postage, prepaid envelopes containing a Notice dated February 28, 2013, regarding automatic delay of the hearing for Water Permit Application No. 7551-3 for Wayne Binger & Application Nos. 7570-3 thru 7575-3 and 7637-3 thru 7640-3 for Gary Marshall with enclosure, as addressed below:

Wayne Binger
37923 183rd Street
Tulare SD 57476

Marshall Brothers
Gary Marshall
19032 388th Avenue
Hitchcock SD 57348

Diane Best, Assistant Attorney General
317 North Main Avenue
Sioux Falls SD 57104

Ray Rylance
PO Box 227
Watertown SD 57021

Todd Wilkinson
PO Box 29
DeSmet SD 57231

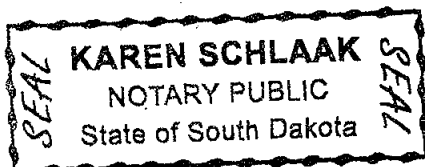
Terry Wieting
870 Beach Avenue NE
Huron SD 57350


Gail Jacobson
Water Rights Program, DENR

STATE OF SOUTH DAKOTA)
) SS
COUNTY OF HUGHES)

Sworn to, before me, this 28th day of February, 2013


Karen Schlaak
Notary Public
My Commission expires April 1, 2013



WILKINSON & WILKINSON
ATTORNEYS AT LAW
103 JOLIET AVE., S.E. P.O. BOX 29
DE SMET, SOUTH DAKOTA 57231

TELEPHONE: 605 / 854-3378
TELEFAX: 605 / 854-9006

HARRY J. EGGEN (1922-1969)
ELLSWORTH F. WILKINSON (1923-2005)

TODD D. WILKINSON
MARCENE J. SMITH
GARY W. SCHUMACHER*
*ALSO LICENSED IN MINNESOTA

RECEIVED
FEB 25 2013
WATER RIGHTS
PROGRAM

Facsimile Transmission

February 23, 2013

SENT TO FAX NUMBER: (605) 773-4068

THIS MATERIAL SENT TO THE ATTENTION OF:

Garland Erbele
Chief Engineer
Water Rights Program, SD DENR
Foss Building
523 East Capital
Pierre, South Dakota 57501
(605) 773-3352 telephone

SENT BY: Gary W. Schumacher

NUMBER OF SHEETS (including cover sheet):

3

**Via facsimile with enclosures; and
Original sent by first class mail with enclosures.**

If you have any questions or problems, or if you did not receive all of the pages, please call (605) 854-3378 and ask for Maggie. Should you wish to return a facsimile to us, our facsimile number is 605-854-9006.

MESSAGE:

The information contained in this facsimile message is attorney privileged and confidential information intended only for the use of the individual or entity named above. If the reader of this message is not the intended recipient or the employee or agent responsible for delivering the message to the recipient, you are hereby notified that any unauthorized dissemination, distribution or copying of this communication is strictly prohibited. If you have received this communication in error, please notify us immediately by telephone and return the original message to our office at the address shown above via the United States Postal Service. Thank you.

RECEIVED

FEB 25 2013

WATER RIGHTS
PROGRAM

February 22, 2013

Garland Erbele
Chief Engineer
Water Rights Program, SD DENR
Foss Building
523 East Capital
Pierre, South Dakota 57501

**RE: Water Permit Applications Nos. 7373-3, 7551-3, 7570-3, 7571-3,
7572-3, 7573-3, 7574-3, 7575-3, 7637-3, 7638-3, 7639-3, 7640-3
Petition in Opposition**

Dear Mr. Erbele:

We, Todd D. Wilkinson and Gary W. Schumacher, as legal counsel for Lenny Peterson, Danny Peterson, Brad Peterson, and Oscar Inc. land owners and operators affected by the issuance of any additional irrigation appropriation in connection with certain Water Permit Applications. This letter is intended as and constitutes a petition in opposition to said Water Permit Application No. 7373-3, Water Permit Application No. 7551-3, Water Permit Application No. 7570-3, Water Permit Application No. 7571-3, Water Permit Application No. 7572-3, Water Permit Application No. 7573-3, Water Permit Application No. 7574-3, Water Permit Application No. 7575-3, Water Permit Application No. 7637-3, Water Permit Application No. 7638-3, Water Permit Application No. 7639-3, and Water Permit Application No. 7640-3; and is further intended as and constitutes a petition in opposition to the Chief Engineer's recommendation to allow any additional appropriation without consideration of previously filed applications for water appropriation.

In addition the averaging that was done to arrive at available water did not properly consider the Boards previous findings. That if the method is now going to be

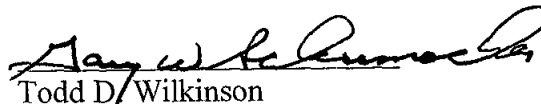
changed, previous applications should be afforded notice and opportunity to apply and not lose priority in filing. That notice procedure provided to the public was irregular.

Please confirm receipt of this petition opposing said application and petition opposing the Chief Engineer's recommendation; and please inform me of the date, time, and location of the public hearing on said application; as well as any other information that needs to be submitted to your office(s) prior to the public hearing.

We would request a twenty (20) day extension for the hearing. If possible, when rescheduling the hearing could you contact our office to coordinate schedules? That would be greatly appreciated.

Thank you.

Sincerely,



Todd D/ Wilkinson
Gary W. Schumacher
Wilkinson & Wilkinson Law Firm
103 Joliet Ave SE, PO Box 29
DeSmet, SD 57231
605-854-3378

cc: Diane Best, Assistant Attorney General

February 22, 2012

Garland Erbele
Chief Engineer
Water Rights Program, SD DENR
Foss Building
523 East Capital
Pierre, South Dakota 57501

**RE: Water Permit Applications Nos. 7373-3, 7551-3, 7570-3, 7571-3,
7572-3, 7573-3, 7574-3, 7575-3, 7637-3, 7638-3, 7639-3, 7640-3
Petition in Opposition**

Dear Mr. Erbele:

We, Lenny Peterson, Danny Peterson, Brad Peterson, and Oscar Inc. as a land owners and operators, are affected by the issuance of any additional irrigation appropriation in connection with certain Water Permit Applications. This letter is intended as and constitutes a petition in opposition to said Water Permit Application No. 7373-3, Water Permit Application No. 7551-3, Water Permit Application No. 7570-3, Water Permit Application No. 7571-3, Water Permit Application No. 7572-3, Water Permit Application No. 7573-3, Water Permit Application No. 7574-3, Water Permit Application No. 7575-3, Water Permit Application No. 7637-3, Water Permit Application No. 7638-3, Water Permit Application No. 7639-3, and Water Permit Application No. 7640-3; and is further intended as and constitutes a petition in opposition to the Chief Engineer's recommendation to allow any additional appropriation without consideration of previously filed applications for water appropriation.

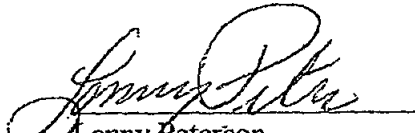
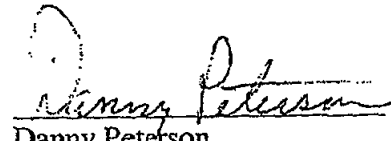
In addition the averaging that was done to arrive at available water did not properly consider the Boards previous findings. That if the method is now going to be

changed, previous applications should be afforded notice and opportunity to apply and not lose priority in filing. That notice procedure provided to the public was irregular.

Please confirm receipt of this petition opposing said application and petition opposing the Chief Engineer's recommendation; and please inform me of the date, time, and location of the public hearing on said application; as well as any other information that needs to be submitted to your office(s) prior to the public hearing.

Thank you.

Sincerely,


Lenny Peterson
Danny Peterson
Brad Peterson
Oscar, Inc.

cc: Diane Best, Assistant Attorney General

STATE OF SOUTH DAKOTA



OFFICE OF ATTORNEY GENERAL

317 N. Main Avenue
Sioux Falls, South Dakota 57104
Phone (605) 367-5880
FAX (605) 367-5886
www.state.sd.us/atg

MARTY J. JACKLEY
ATTORNEY GENERAL

CHARLES D. McGUIGAN
CHIEF DEPUTY

March 1, 2013

SENT VIA EMAIL

Jeff Hallem
Board Counsel
Office of Attorney General
1302 E. Hwy 14, Suite 1
Pierre, SD 57501

Chad Comes
PO Box 308
Madison, SD 57042

Leo Holzbauer
PO Box 877
Wagner, SD 57380

Rodney Freeman, Jr.
PO Box 176
Huron, SD 57350

Peggy Dixon
3311 Hogan Court
Rapid City, SD 57702

Everett Hoyt
4422 Carriage Hills Dr.
Rapid City, SD 57702

Tim Bjork
112 W. Oak Street
Pierre, SD 57501

Jim Hutmacher
802 East 7th Street
Oacoma, SD 57365

Re: In the Matter of Water Permit Applications Pertaining to the Tulare Western Spink/ Hitchcock Aquifer

Dear Board Members and Board Counsel,

Enclosed is a Prehearing Brief in the above referenced matter. I am also sending a copy to all parties of record.

Sincerely,

A handwritten signature in cursive script that reads "Diane Best".

Diane Best
Assistant Attorney General
Counsel for Water Rights Program

STATE OF SOUTH DAKOTA

SOUTH DAKOTA WATER MANAGEMENT BOARD

IN THE MATTER OF WATER	)	
PERMIT APPLICATIONS	)	
PERTAINING TO THE TULARE	)	PREHEARING BRIEF
WESTERN SPINK/HITCHCOCK	)	
AQUIFER	)	

Several applications were scheduled for March 7, 2013. The DENR issued a combined report recommending that they all be approved. This Brief explains the current procedural status, the legal standard for the cases, and the history and legal effect of previous proceedings in this aquifer.

Current Procedural Status.

Terry Wieting. Terry Wieting filed Application No. 7373-2 in 2012. The Chief Engineer recommended deferral pending the outcome of a cancellation in this aquifer.¹ Oscar, Inc. and Lenny Peterson timely intervened in September 2012. In December 2012 the Board heard evidence and granted the deferral, as recommended. Following additional study, the Chief Engineer issued a revised recommendation of approval and scheduled the matter for March 7.

On February 23 a group of petitioners (Oscar Inc., and Danny, Lenny, and Floyd Peterson) filed interventions on a series of applications including Wieting and others listed below. The February 23 petition sought to invoke the automatic 20 day delay

¹ In December 2012, the Board cancelled a water permit authorizing irrigation of 132 acres from the Tulare: Western Spink. *Matter of Water Permit No 282-3, Renae Morog.* The irrigation was discontinued several years ago and the cancellation was not contested. Both the cancellation and the new permit request from Wieting prompted another review of water availability.

provision under SDCL 46-2A- 4(9) for all the cases. The automatic delay is not available at this stage of the Wieting case.² The February 23 request did not indicate that Wieting had consented to further delay and did not bring the matter to a motion hearing before Prehearing Chairman Hoyt. The time for hearing the Wieting application is March 7. As for the part of the petitions that sought intervention, Oscar Inc., and Lenny Peterson were already parties. Danny and Floyd Peterson were not previously parties and this is a late filed petition. The DENR has no objection, however, to their intervention.

Binger and Marshall Brothers Applications. Wayne Binger and Marshall Brothers filed eleven applications after the Wieting applications. They were published for the March 7 hearing date. The Petitioners properly invoked the automatic delay and those matters cannot be heard on March 7.

Oscar, Inc. Oscar Inc. filed an application after Marshall Brothers and Binger and it was also scheduled for March 7. There are no interventions and no delay was requested. This actually would put the Oscar Inc. application as being heard earlier than the Binger and Marshall Brothers Applications even though Oscar, Inc. applied later.

Regardless of the varying procedural status, there is one staff report. The Chief Engineer recommends approval. The recommendation is based on a revised analysis of the Tulare: Western Spink/Hitchcock aquifer.

² Under SDCCCL 46-2A-9 the automatic delay provision is only available to delay a case when it is requested at least ten days before the published date of hearing which was in October 2012. Lenny Peterson and Oscar, Inc. already invoked the automatic delay, causing the hearing to be held on December 5, 2012.

Legal Standard.

The Board considers whether there is a reasonable probability (1) 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 would be a beneficial use and (4) the use would be in the public interest. SDCL 46-2A-9. Each factor must be met and the permit must be denied if the Applicant does not meet its burden of proof on any one of them. In considering the first factor, the Board must examine whether "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." SDCL 46-6-3.1.³ The withdrawal/recharge issue is key in this case. The Board has reviewed the recharge/withdrawal issue for this aquifer on several occasions and has, on at least two occasions, determined that no additional water is available from this aquifer. The analysis has now changed and the Chief Engineer now recommends approval of the new applications.

History and Effect of Previous Proceedings.

In 2002 the Board heard a group of applications concerning the Tulare: Western Spink/Hitchcock aquifer and considered SDCL 46-6-3.1. At that time, the withdrawal/discharge issue was considered in terms of whether the

³ Another part of SDCL 46-6-3.1 provides for a "greenhorn" exception to the recharge/withdrawal consideration in SDCL 46-6-3.1, but it applies only to applications filed by public water supply systems and is not applicable here.

quantity of water actually used would exceed recharge in one or more years if the pending permits were granted. That analysis relied on a literal view of the language of SDCL 46-6-3.1 concerning water use: "quantity of water withdrawn annually" with the "average estimated annual recharge." In other words the practice was not to consider average withdrawals over the period of record, since the term "average" was not used in connection with withdrawals in the statute.

The Board undertook the analysis and found there was 3400 acre feet of water available. Because average use had been calculated at 16 inches per acre for this aquifer, the Board found that there was sufficient water available for irrigation of 2,654.4 acres of land.

While the Board found there was sufficient water was available to support several applications, it held that eleven others should be deferred until the initial group had been fully developed to determine whether the recharge/withdrawal analysis would change. By law, the time for construction of new waterworks is 5 years. SDCL 46-2A-8. Therefore the Board required the Chief Engineer to study the recharge/withdrawal issue in the aquifer for the period from 2002-2007.

Following creation of this so-called "deferred list" several other applications were filed, all of which were then included in the list. Accordingly, the Board considered the "deferred list" in December 2007. By then the number of applications on the list totaled 32 irrigation applications for over 6,000 acres and one feedlot application. *In the Matter of Water Permit*

Application from the Tulare Aquifer (Findings of Fact, Conclusions of Law, and Final Decision dated March 11, 2008) (referenced here as "*2008 WMB Decision*"). The *2008 WMB Decision* is attached.

The additional study for the 2002-07 period was presented. As part of the 2002-07 analysis the Chief Engineer's staff presented information on the 5 year period of study and on reported use during the period.

In undertaking the 5 year analysis the DENR witness averaged withdrawals over the five year period, with adjustments for unreported water use. *2008 WMB Decision*, Finding ¶ 33. The Sixth Circuit Court had recently held, in a case involving another aquifer, that the proper test under SDCL 46-6-3.1 should be an "average" of withdrawals rather than just determining whether the withdrawals would exceed recharge in one or more years or rather than excluding years of extraordinary precipitation in order to estimate normal years. *Hines v. S.D. Dept. of Environment and Natural Resources, Sixth Judicial Circuit (April 29, 2005)* (Tulare: East James aquifer). The DENR witness essentially applied the Hines averaging method for the Tulare: Western Spink aquifer for the five year period.

Other evidence had already been presented for the period previous to 2002, including water usage data previous to 2002. The study of withdrawals did not include averaging the pre-2002 water use because that was not part of the function of the 2007 hearing. The 2007 hearing was to examine 2002-2007 data.

Ultimately, when the evidence was considered as a whole, the Board determined that only 33 acre feet would be available for new irrigation. *2008 WMB Decision*, Finding ¶ 33. The Board found, however, that the 33 acre feet would be insufficient to

grant any of the applications at issue since they all sought to irrigate 100 or more acres. *2008 WMB Decision*, Finding ¶ 34.

Further, although a number of individuals argued that deferred list should remain in place for the future, the Board held that it lacked authority to do that, finding and concluding as follows:

2008 WMB Decision, Finding 41: These applications should be denied and the aquifer deemed fully appropriated. The applicants may wish to maintain their priority but there is no provision in the statutes to allow this.

2008 WMB Decision, Conclusion 15: This proceeding involves applications that were deferred by the Board (or in legal parlance "continued") for consideration after additional evidence. Each application was placed on a list for additional consideration. The list was procedural and did not grant a right of any kind to a water permit or a priority date.

2008 WMB Decision, Conclusion 16: When applications are pending consideration by the Board or permits have been granted for water use, the applicable priority date relates back to the date of water permit application. SDCL 46-2A-15. The "relation back" statute does not, however, operate to allow priority dates to remain in place once water permit applications have been fully considered and denied."

2008 WMB Decision, Final Decision: The water permit applications listed above are hereby denied for the foregoing reasons. In particular, the Western spink and Hitchcock Management Units of the Tulare Aquifer are fully appropriated.

The March 2008 decision was not appealed. Unappealed administrative decisions of this Board are "final decisions." *Jundt v. The Hon. A.P. Fuller*, 2007 S.D. 62, 736 N.W.2d 508 (unappealed Water Management Board decision cannot be appealed or reversed in a collateral case). The Supreme Court held that "once an agency's adjudication has become final it is no longer subject to reconsideration" on those same facts, even by the Water Management Board. *Id.* There is no longer a deferred list or a right to remain on a deferred list.

On December 15, 2011 a group of applications were filed simultaneously by Lee, Jeffery and Allen Gatzke, and Bixler Farms. The Chief Engineer initially recommended denial of these new applications because the Board had determined the aquifer to be fully appropriated in the 2008 case.

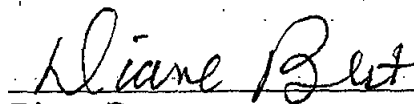
However, upon further review, DENR witness Ken Buhler, examined average withdrawals over the full period of record (1979-2011) based on the *Hines*, rather than the five year average that had been used in the 2008 decision. That information, combined with an exhaustive analysis of irrigation questionnaires and consideration of information developed since 2008 warranted a different analysis in these new cases. In light of this analysis, the Chief Engineer found that there was sufficient water available to recommend approval of water permits for the five out of the six pending applications. Because the priority dates were identical, the Chief Engineer advised the applicants that one of the permits would need to be denied, but he would recommend that five be approved. The applicants settled for the five permits. The settlement expressly provided that it would be subject to public notice and board review. Publication was made in June 2013 and there were no intervenors. The hearing was held in July 2013. At hearing Lenny Peterson was in the room, but he had not intervened and was not a party.

Although the Board had previously found that the aquifer was fully appropriated, it was not bound to do so again. These were new applications based on new facts for which res judicata did not apply. *Interstate Telephone*

Cooperative v. Public Utilities Commission. 518 NW2d 749 (S.D. 1994). The Board accepted the settlement.

Current Applications.

The pending applications are yet a new round of applications. Additional study was performed and the staff's analysis undertaken by Ken Buhler is more sophisticated than that previously used. After examining various methods of analysis and study, the Buhler report relied on two significant new pieces of information. First, he examined all of the well/test hole information available rather than relying on and relating to work done in 1984 (Kuiper, 1984) to map the areal extent of the unconfined portion of the aquifer. Although the Kuiper analysis had been the best available analysis, the recent Buhler analysis is more specific and should be used. The Buhler analysis results in a larger area than had been previously mapped and therefore resulted in a larger total recharge number. Second, when considering the maximum number of acres that could be irrigated in light of the recharge/withdrawal analysis, he used a different method of calculation to reflect average use. In light of this analysis, more water is available and the Chief Engineer has recommended approval of the pending applications.



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CERTIFICATE OF SERVICE

The undersigned hereby certifies that a true and correct copy of the Prehearing Brief in In the Matter of Water Permit Applications Pertaining to the Tulare Western Spink/Hitchcock Aquifer were sent to the following by United States mail, first class, sent from Sioux Falls, South Dakota, on March 1, 2013:

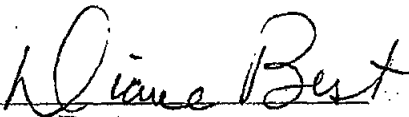
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STATE OF SOUTH DAKOTA

WATER MANAGEMENT BOARD

IN THE MATTER OF WATER PERMIT }
APPLICATION FROM THE }
TULARE AQUIFER }

FINDINGS OF FACT,
CONCLUSIONS OF LAW
AND FINAL DECISION

FINDINGS OF FACT

1. With one exception, the water permit applications at issue request permits for irrigation over 6,000 acres from the Tulare Aquifer, Western Spink and Hitchcock Management Units. The name of each applicant, requested diversion rate, management unit involved, legal description, and date filed is as follows:

Appl. No.	Applicant	Div. Rate cfs	Acres	Source	Approx. Legal Location	Date Filed
6344-3	Oscar, Inc.	2.28	160	T.H.	NE 1/4 Sec 32, T115N, R63W	7/26/02
6345-3	Oscar, Inc.	3.42	240	T.H.	SW 1/4 & S 1/4 NW 1/4 Sec 24, T115N, R54W	7/26/02
6346-3	Oscar, Inc.	4.57	320	T.H.	S 1/4 Sec 25, T115N, R54W	7/26/02
6347-3	Oscar, Inc.	9.14	640	T.W.S.	S 1/4 Sec 19 & NW 1/4 Sec 30, T114N, R63W	7/26/02
6348-3	Oscar, Inc.	1.14	160	T.H.	NE 1/4 Sec 30, T115N, R63W	7/26/02

6352-3	Lee Gatzke	2.28	160	T:WS	NW¼ Sec 18, T114N, R63W	8/8/02
6353-3	Lee Gatzke	2.28	160	T:H	NE¼ Sec 6, T114N, R63W	8/8/02
6359-3	Darin, Brett & Chad Binger	2.0	160	T:WS	SW¼ Sec 6, T114N, R64W	9/19/02
6360-3	Darin, Brett & Chad Binger	2.0	160	T:WS	NW¼ Sec 5, T114N, R64W	9/19/02
6374-3	Bixler Farms	3.56	360	T:H	S¼, S¼ NW¼ Sec 36, T115N, R63W	12/5/02
6460-3	Gary Marshall	1.78	132	T:WS	NE¼ Sec 25, T114N, R64W	1/20/04
6461-3	Gary Marshall	1.78	132	T:WS	SE¼ Sec 25, T114N, R64W	1/20/04
6462-3	Gary Marshall	1.56	132	T:WS	SW¼ Sec 34, T114N, R64W	1/20/04
6463-3	Gary Marshall	1.56	132	T:WS	NE¼ Sec 35, T114N, R64W	1/20/04
6594-3	Riverside Colony	3.56	264	T:H	N¼ Sec 29, T112N, R61W	2/14/2005
6660-3	Lee Gatzke	1.89	136	T:H	E¼ NW¼ and W¼ NE¼ Sec 8, T114N, R63W	9/12/05
6661-3	Lee Gatzke	1.89	136	T:H	NW¼ Sec 6, T114N, R63W	9/12/05
6668-3	Bixler Farms	1.78	160	T:H	SW¼ Sec 25, T115N, R63W	11/7/05
6669-3	Bixler Farms	1.78	160	T:H	SW¼ Sec 24, T115N, R63W	11/7/05
6670-3	Bixler Farms	1.22	100	T:H	W¼, W¼ NE¼, W¼ SE¼ Sec. 6, T114N, R62W	11/7/05

6671-3	Bixler Farms	3.56	320	T:H	SE¼ Sec 22 and SW¼ Sec 23, T114N, R63W	11/7/05
6687-3	William Watson	2.0	140	T:H	NW¼ Sec 27, T114N, R63W	1/27/06
6688-3	William Watson	2.0	140	T:H	SE¼ Sec 11, T114N, R63W	1/27/06
6689-3	Michael Watson	2.0	140	T:H	SW¼ Sec 18, T114N, R62W	1/27/06
6693-3	Lee Gatzke	1.89	136	T:WS	NE¼ Sec 13, T114N, R64W	2/9/06
6694-3	Lee Gatzke	1.89	136	T:WS	SW¼ Sec 23, T114N, R64W	2/9/06
6695-3	Lee Gatzke	1.89	136	T:WS	NW¼ Sec 26, T114N, R64W	2/9/06
6776-3	Allen Gatzke	1.78	160	T:H	N¼ NW¼, S¼ SW¼ Sec 14, T114N, R63W	11/13/2006
6777-3	Jeffery Gatzke	1.78	160	T:H	NW¼ Sec 15, T114N, R63W	11/13/2006
6829-3	Patrick Van Buskirk	1.78	135	T:WS	SW¼ Sec 30, T114N, R63W	2/27/2007
6830-3	Matthew Van Buskirk	1.78	135	T:WS	NE¼ Sec 36, T114N, R64W	2/27/2007
6841-3	Merlyn Van Buskirk	3.56	270	T:WS	SE¼, NW¼ Sec 31, T114N, R63W	2/27/2007
6842-3	Merlyn Van Buskirk	1.78	135	T:H	SE¼ Sec 4, T113N, R63W	2/27/2007

2. In addition, one application seeks authority to use water for commercial purposes for a feedlot. That applicant is Marshall Brothers, who filed Permit Application No. 6407-3 for 0.28 cfs from

the Tulare Western Spink Aquifer. The Marshall Brothers' application was filed on December 3, 2003.

3. Department of Environment and Natural Resources expert James Goodman testified regarding the characteristics of the aquifer at issue. Goodman, a geological engineer, has studied groundwater issues and testified before the Board in various groundwater cases for 32 years. He participated in studies published in 1982 (Hedges), 1983 (Hedges), and 1984 (Kuiper) which evaluated the area and recharge rate of the aquifer at issue here. Goodman also relied on a later study completed by L.J. Hamilton for USGS in 1996. He further relied on observation well information, water use data filed with the DENR, and his own knowledge and background.

4. The Hitchcock Management Unit of the Tulare Aquifer is a mostly surficial outwash (sand and gravel) aquifer that is under water table conditions (not artesian) and lies in Spink and Beadle Counties. The Western Spink Management Unit of the Tulare Aquifer consists of a mostly buried outwash (sand and gravel) that is under predominantly artesian conditions and lies in Beadle, Spink, and Hand Counties. The two management units are in one aquifer and are connected hydraulically. The distinguishing factor is that one is under artesian conditions and the other is not. The Tulare Hitchcock portion is adjacent and east of the Western Spink portion.

5. The two management units are properly combined for purposes of water administration because they are hydraulically connected and were formed at the same time. The water use from one management unit would need to be considered to determine the effect on the other.

6. Groundwater movement for the aquifer is generally from southwest to northeast in general over Spink County, the area subject to consideration in this proceeding.

7. The Tulare Hitchcock Management Unit underlies 149,800 acres and contains an estimated 693,000 acre feet of recoverable water in storage in Spink and Beadle Counties.

8. The Tulare Western Spink Management Unit underlies 138,900 acres and contains an estimated 519,330 acre feet of recoverable water in storage in Beadle, Spink and Hand Counties. The total volume of water in storage for the Tulare Aquifer is 1.212 million acre feet in Beadle, Hand and Spink Counties and the aquifer underlies 288,700 acres. The total acreage is based on the Goodman testimony and on a study published in 1982 by the South Dakota Geological Survey and authored by Lynn Hedges.

9. The Board also heard evidence on recharge rates. The Hedges report included a range of recharge rates for the Tulare Aquifer of 0.41 inches at a minimum and 1.66 inches at a maximum.

Under this study, this range would result in calculated recharge somewhere between 9,860 acre feet to 39,940 acre feet annually.

10. In the Kuiper study, recharge to the Tulare Hitchcock Aquifer was estimated at 0.83 inches per acre per year. Using the 0.83 number as a recharge rate, the annual recharge volume of the Tulare Hitchcock Aquifer would be about 10,360 acre feet (0.83 inches applied over 149,800 acres). Applying the same 0.83 inch number to the 138,900 acres overlying the Western Spink Management Unit, Goodman calculated a recharge volume of 9,600 acre feet for that aquifer.

11. Witness Goodman examined the two studies and used the 0.83 number from the Kuiper study for his calculation of average annual recharge. The 0.83 rate is also within the range reported by Hedges. Using the 0.83 recharge rate, Goodman estimates the average annual recharge to the two management units of the aquifer at 19,960 acre feet (0.83 applied to 288,700 total acres).

12. Applicant Bixler pointed out that the Kuiper report listed the acreage overlying the aquifer as 337,000 acres, rather than the 288,700 acres given by Goodman (and as reported in the Hedges study). Applicant Bixler asserted that under the 337,000 scenario there would be an additional 6,000 acre feet of water available, assuming the same recharge rate as that used by Goodman. Bixler further asserted that this additional volume would accommodate

irrigation of 7,000 acres of land and would allow for all the water permit applications in this proceeding to be granted. Assuming the 337,000 should be adopted, however, the additional acre feet of recharge would be 3,440 AF and not 6,000 AF. More specifically, the additional acreage would be 48,300 acres (337,000 acres minus 288,700 acres). The 48,300 acres would produce 40,089 inches of recharge water using the rate of 0.83 inches per acre. The 40,089 inches of water is 3340.75 acre feet of recharge. This number would only accommodate irrigation of 3556 acres based on the average application reported by irrigators for this aquifer in the last five years, 11.27 inches.

13. Regardless of the foregoing, however, the 288,700 number rather than the 337,000 number should be used. First, it is undisputed that the Tulare Aquifer is mostly outwash (water infiltrating sand and gravel deposits). The groundwater is mapped based on test holes and expert calculations based on the test hole data and geology of the area. The Board recognizes that the calculated area overlying an aquifer may vary as to the extent of fringe areas and as to whether there are areas within the mapped exterior boundaries of the aquifer that do not exhibit aquifer characteristics (i.e. pockets or lineal areas where wells would be unable to produce groundwater). Second, the number used by Goodman was the known and conservative number. The Board credits the

testimony of Goodman, who participated in both studies. Goodman is an expert with 32 years of experience and no other expert testified in this proceeding.

14. Prior to December 2002, permits were authorized from these management units for a total combined diversion rate of 247.67 cfs for irrigation of 20,681 acres. In December 2002, the Board conducted a hearing on several new applications. After hearing the evidence, the Board granted eleven of the additional permit applications and continued or deferred the rest. The permits that were granted in 2002 totaled 35.33 cfs for irrigation of 2,654.4 acres.

15. DENR expert James Goodman testified at the 2002 hearing. He testified that the water still available from the two management units was in the range of 3,400 acre feet annually. The 3,400 acre feet volume was then considered in light of the volume necessary for irrigation on a per acre basis. In 2002 the average per acre volume used for irrigation in this area was 16 inches per year. Using 16 inches per year per acre as the criteria, the Board held that the 3,400 acre feet of available water could be beneficially used for irrigation of about 2,550 acres. New permits were granted accordingly.

16. The eleven new permits that were granted at the December 2002 hearing were granted in order of the date of application. The

remaining eleven applications, filed later than the ones that were granted, could not be granted at that time.

17. The Board recognized that the actual usage for the successful applicants in the 2002 round of applicants could not be calculated with certainty until those irrigators developed their proposed facilities. Further, the Board had recently granted a number of other permits for the same aquifer. The actual use from those permits was unknown in 2002 due to the fact they had recently been granted and actual water use had not been reported. Based on this situation, the Board delayed consideration of the remaining water permits for five years, a period that the Board held would be appropriate for making a final determination on water availability for the remainder of the applications. Due to the Board's action in 2002, eleven water permit applications were delayed for five years.

18. Nine of those eleven applications are the first applications at issue in the above list. Two of the eleven applications at issue in 2002 were later withdrawn and are not at issue here (Application 6351-13 (Randy Puffer) and Application 6361-3 (Darin, Brett, and Chad Binger)).

19. Additional water permit applications were filed during the period from 2002 to 2007, all of which were continued by the Board for the same reason and constitute the remaining applications in the above list. All were heard by the Board in December 2007.

20. In the meantime, one of the successful 2002 applicants, Allen Gatzke, filed a request to transfer a permit he had obtained as a result of the 2002 decision (Water Permit No. 6339-3) to other acreage that had been the subject of one of the unsuccessful applications at the same 2002 hearing (Water Permit Application No. 6348-3). In doing so, Gatzke sought to "flip flop" the new permit for an application that had been deferred. The Board granted the transfer of Water Permit No. 6339-3 from the land originally permitted, allowing for use of the water on the acreage requested by Gatzke. The Board determined, however, that the land from which the water permit had been transferred could not be then placed on the deferred list as a pending application. Gatzke did not appeal. Gatzke later took exception to this resolution and, in early 2007, sought an additional permit (Application No. 6776-3) for the land in question and requested that the application be considered as though it was filed in 2002. The Board ruled that the matter should be continued to December 2007 and considered at that time. See Water Management Board Findings of Fact and Conclusions of Law dated May 9, 2007.

21. If Allen Gatzke was successful in his request for consideration of the 2007 application as though it was a 2002 application, the application would have been much higher on the list of deferred or continued applications and arguably would have been

more likely to be granted under a "first in time, first in right" theory. Based on the Board's Findings of Fact and Conclusions of Law herein, none of the acreage at any place on the pending list should be granted. Accordingly, there is no need to consider what the proper priority date would be for this Allen Gatzke application since it would be denied in any event.

22. Test well data is limited for these applications. However, there is sufficient information available from the Hedges, Kuiper, and Hamilton studies, the observation wells, and other wells in this area to evaluate these applications. The aquifer should be present under these sites but test holes would be needed to determine the thickness of the aquifer for well design purposes. There is a good chance that the sand and gravel thickness may not be sufficient to develop a single irrigation well at some of these sites and may require two or three wells to obtain enough water to operate a standard center pivot.

23. The Water Rights Program monitors 24 observation wells completed into the Tulare Hitchcock Management Unit and 26 observation wells completed into the Tulare Western Spink Management Unit, all in Spink and Beadle Counties. The Board examined hydrographs for selected observation wells (SP-66G, SP-53B, BD-77A and BD-66A) which were included in the report filed by the Water Rights Program. According to the hydrographs (and DENR expert

witness James Goodman), water levels in both areas rise during wet years (recharge) and gradually decline during dry years. Also, the effects of pumping are obvious where the aquifer is under artesian conditions.

24. The combined water use for both areas of the aquifer was examined. Actual use was based on use reported by irrigators on an annual basis. Although domestic use and some commercial use exists for this aquifer, those uses are not reported annually. The vast majority of the use is for irrigation. The DENR presented irrigation water use for the period 1979 through 2001 in its initial report presented in 2002. As stated above, the Board determined that the historical water use would not reflect the actual use of the water starting in 2002 due to anticipated new construction for irrigation.

25. The period 2002 to 2006 was examined in the second report presented in 2007 and the reported actual irrigation use was for following:

2006 -- 18,573 acre feet

2005 -- 15,669 acre feet

2004 -- 15,187 acre feet

2003 -- 19,397 acre feet

2002 -- 18,649 acre feet

26. Based on the expert testimony of DENR expert Goodman, the five years listed above is a good period of record where development of the aquifer has been held relatively steady. This testimony was undisputed.

27. The Board also heard testimony regarding precipitation data for nearby weather stations. Redfield is just a four to five miles to the northwest, Raymond is about 20 miles northeast, and Huron is about five miles to the south. These three sites surround the area of the aquifer. The long-term record for Raymond indicates an average of 20.23 inches per year, for Huron the long-term average is 20.90 inches per year, and the Redfield site does not have sufficient data for a good long-term average. The precipitation totals for 2005 and 2004 are greater than the normal and less than normal for 2006, 2003, and 2002. The water use records are also greater in those drier years (inches per year). Overall this data indicates that precipitation for this five-year period was average to slightly below the long-term average. Based on the expert testimony, when precipitation is average, water use should also be average. This conclusion was not disputed at hearing.

28. The reported water use for irrigation from these management units for the last five years has been a total cumulative use of 87,475 acre feet or an average of 17,495 acre feet for each year.

29. Recharge to the management units in question has been estimated to be 19,960 acre feet annually.

30. Based on the five-year average of water use, the recharge of 19,960 feet annually is more than the average annual water use of 17,495 feet annually. However, the total water availability must be adjusted to factor in water that was authorized but unreported (failure of landowner to report irrigation annually per DENR rule) or not yet developed (waterworks not yet constructed or put to beneficial use). Although the five-year period was useful to analyze newly permitted construction and use, a small number of the permits had not yet applied water to beneficial use.

31. The adjustment was made by calculating the average inches of water used per acre for those irrigators that actually irrigated and reported their use during the five-year period. The adjustment then assumes that the same volume (average number of inches of water applied per acre) would be used on the unreported or undeveloped acreages. This assumption is based on the fact that the same geographic location and same precipitation data would result in the same number of inches per acre. The vast majority of the water use was reported, so the expectation that the remainder would use the same quantity is well-grounded. Using this rationale, the total water use for the two management units would be adjusted upwards as follows:

1,696 AF added to 18,573 AF in 2006 for a total of 20,269 AF
2,010 AF added to 15,669 AF in 2005 for a total of 17,679 AF
2,307 AF added to 15,187 AF in 2004 for a total of 17,494 AF
3,010 AF added to 19,397 AF in 2003 for a total of 22,407 AF
3,136 AF added to 18,649 AF in 2002 for a total of 21,785 AF

32. After making the foregoing adjustments to each year's water use for unreported or undeveloped water not used for that year, the total cumulative water use for the period would then have been 99,634 acre feet or an average of 19,927 acre feet per year.

33. The water use of 19,927 acre feet per year total was considered in determining whether water was available for the permits in question. Water availability is calculated by subtracting the average calculated use per year (19,927 acre feet per year) from the recharge (19,960 acre feet per year). The sum is 33 acre feet.

34. The 33 acre feet would be insufficient to grant any of the applications at issue in this proceeding. The irrigation application that was filed first in time among the applications considered here (6344-3) sought to irrigate 160 acres, clearly needing well in excess of 33 acre feet. In fact, of all the irrigation applications in this proceeding, the one seeking to irrigate the smallest area of land was application 6670-3 which sought to irrigate 100 acres. Given the acreage involved and the

small quantity of water available, the Chief Engineer recommended that no new water permits be granted for irrigation. The Board agrees with the recommendation. The amount of water would also be insufficient for a livestock feedlot as requested by Marshall Brothers. Granting a small, clearly inadequate quantity of water for irrigation would result in use of water that is not beneficial for irrigation.

35. The foregoing findings are based on recent average annual water use for irrigation as reported by irrigators (as adjusted). The water use is not calculated by simply calculating the total water use stated on all water permits for irrigation, which would result in a larger number. Using the maximum water use stated on the permits would not be representative of actual use because the permits are for the maximum diversion rate or peak use for each permit. Using the reported acreage reflects the varying actual water use. Use of actual calculated water use is correct for the purpose of examining water availability.

36. In addition to the availability of water, this Board is also required to consider whether use of the water for irrigation, as proposed, would adversely impair existing water rights. There are a total of 138 water permits/rights from the Tulare Western Spink and Tulare Hitchcock Management Units for irrigation of 21,339 acres located in Spink, Hand, and Beadle Counties. Interference has

not been a concern in the area of the Tulare Hitchcock Aquifer. This aquifer is under water table conditions and significant drawdown does not extend very far from the production well. However, where the aquifer is confined in the Tulare Western Spink area of the aquifer, drawdown does occur and does cause interference. At this point in time this interference has not been adverse. The water level record is very good and development appears to have had very little overall impact on the aquifer.

37. The precipitation data indicates that the five-year period of record was about average or slightly below average for precipitation during the 2002 through 2006 time period. The water use during that time period would be expected to also represent an average.

38. Some areas of the aquifer recharge more than other areas. This has to be considered when issuing permits for transferring acres or drilling additional wells. Well spacing may be more of an issue in those areas of artesian conditions or in those areas where saturated thickness is thin.

39. There is domestic use from these management units but that use is not estimated. That amount is assumed to be relatively small compared to the irrigation use.

40. Because this Board finds that there is a lack of availability of water and has determined that the applications

should be denied, it need not consider whether the water use for irrigation would be in the public interest or whether the water use would be a beneficial use. Although irrigation is generally considered to be a beneficial use, using 33 AF for any of the applications at issue in this proceeding would be inefficient and would not result in a beneficial use.

41. These applications should be denied and the aquifer deemed fully appropriated. The applicants wish to maintain a priority date based on the date they filed their applications, but there is no provision in the statutes to allow this.

CONCLUSIONS OF LAW

1. The Board has jurisdiction of this matter.
2. In order for the Board to grant permits to the applicants, the applicants have the burden of proof and must show that they meet the criteria for obtaining the permits.
3. The standard for determining whether the water permits at issue here should be granted is governed by SDCL 46-2A-9 and SDCL 46-6-3.1.
4. SDCL 46-2A-9 requires that the Board determine whether there is a reasonable probability that there is unappropriated water available for the Applicants' proposed use. Because the water permits at issue here are groundwater applications, the Board must consider SDCL 46-6-3.1 when determining availability.

5. When considering the standard in SDCL 46-6-3.1, there are two numbers at issue: (a) the quantity of water withdrawn annually and (b) the quantity of the average estimated recharge of water. As of 2002, the water use and development history of the aquifer indicated that these management units were very close to being fully appropriated based on SDCL 46-6-3.1. Accordingly, the Board delayed hearing on the foregoing applications because it was unable to determine whether issuance of permits, as requested, would be consistent with SDCL 46-6-3.1

6. In analyzing these two numbers, the average estimated recharge is at issue, not the maximum or minimum recharge rate. Accordingly, the 0.83 rate per acre that was used in the Goodman analysis is the proper rate.

7. The average actual water use was properly calculated for the period over the last five years. Average use for earlier years did not reflect as many permits as were in existence during the last five years. Earlier data would not be representative of average use when considering that a number of new permits were issued allowing the average to increase. Further, the actual use over the five-year period was properly adjusted to account for undeveloped and unreported permitted acreage when it is assumed that the actual use of undeveloped and unreported permitted acreage will be consistent with the actual use of other reported acreage.

8. Because the actual average use of water essentially equals the average recharge rate, SDCL 46-6-3.1 constrains the Board from granting the applications.

9. Given the foregoing analysis of SDCL 46-6-3.1, there is not a reasonable probability that there is unappropriated water available for the Applicants' proposed use as contemplated by SDCL 46-2A-9. Although expert Goodman testified as to the possibility that 33 AF may be available for a water appropriation from the aquifer, this figure is extremely small when considering the scale of irrigation involved. For all practical purposes, any appropriation at all would be inconsistent with SDCL 46-6-3.1.

10. Although the applicants assert that the area of the aquifer is larger than the DENR witness asserts, they have not presented sufficient evidence to demonstrate that such quantity of water is actually available.

11. Under SDCL 46-2A-9, the Board must also consider three other factors in addition to whether there is unappropriated water available. Those three factors are: (a) whether the proposed diversion can be developed without unlawful impairment of existing rights, (b) whether the proposed use is a beneficial use and (c) whether the proposed use is in the public interest. Because the Board cannot grant any of the permits requested due to the

unavailability of water and the application of SDCL 46-6-3.1, there is no need to consider the remaining criteria.

12. The Board recognizes that it is possible that some or all of the proposed diversions could be developed without unlawful impairment of nearby existing rights. To analyze this issue for each of the water rights would require individual consideration of nearby competing wells. The Board need not consider this factor, however, because it has already determined that there is not water available from the water in general.

13. This Board did not consider the public interest criteria and no evidence was entered on that aspect. However, due to the determination that no water is available, the public interest issue need not be considered.

14. Beneficial use is the final criteria in SDCL 46-2A-9. SDCL 46-1-4 requires that South Dakota's water resources be put to beneficial use to the fullest extent of which they are capable. Further, the "beneficial use" criteria for consideration of the water permit in this case requires consideration of the best utilization of the water supply. These legal requirements cannot be met here for two reasons. First the Legislature has determined, as a statutory matter, that mining water from aquifers is not a beneficial use of the water source. SDCL 46-6-3.1. Second in the event that 33 AF is available, the use of such a small quantity of

water would not be beneficial to the applicant irrigators or to Marshall Brothers for its confined animal feeding operation. With respect to irrigation, the Board notes that SDCL 46-5-6 generally provides for a maximum annual volume of water of up to 2 acre feet per acre delivered to the land for irrigation. More particularly, in the geographic area in question here, the average actual volume applied per acre runs from 10-13 inches in average years. The 33 acre feet is wholly inadequate for any of the applications here (all of which involve land of at least 100 acres) and would not be beneficial for any of the applications here. The Chief Engineer recommended that the 33 AF should not be appropriated for any irrigator. None of the applicants took issue at hearing with the Chief Engineer's conclusion that if there are only 33 AF available, that amount need not be appropriated.

15. This proceeding involves applications that were deferred by the Board (or in legal parlance "continued") for consideration after additional evidence. Each application was placed on a list for additional consideration. The list was procedural and did not grant a right of any kind to a water permit or a priority date.

16. When applications are pending consideration by the Board or permits have been granted for water use, the applicable priority date relates back to the date of water permit application. SDCL 46-2A-15. The "relation back" statute does not, however, operate to

allow priority dates to remain in place once water permit applications have been fully considered and denied.

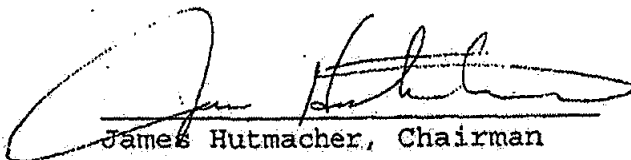
17. The Allen Gatzke request for placement of the 2007 permit on the deferred list as a 2002 application need not be considered insofar as the question is moot.

FINAL DECISION

The water permit applications listed above are hereby denied for the foregoing reasons. In particular, the Western Spink and Hitchcock Management Units of the Tulare Aquifer are fully appropriated.

Dated this 11 day of March, 2008.

BY THE BOARD:


James Hutmacher, Chairman

p1d303_jph(dh)



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

denr.sd.gov

April 3, 2013

NOTICE

TO: Wayne Binger
37923 183rd Street
Tulare SD 57476

Marshall Brothers
Gary Marshall
19032 388th Avenue
Hitchcock SD 57348

Ray Rylance
PO Box 227
Watertown SD 57021

Floyd Peterson
Oscar Inc
209 27th NW
Huron SD 57350

FROM: Jeanne Goodman, Chief Engineer
Water Rights Program

SUBJECT: Scheduling of Hearing on Water Permit Application No. 7551-3 - Wayne Binger,
Application Nos. 7570-3 thru 7575-3 & 7637-3 thru 7640-3 - Gary Marshall/Marshall
Brothers and Application No. 7620-3 - Oscar Inc.

A petition was submitted to Water Permit Application No. 7551-3, Wayne Binger and Application Nos. 7570-3 thru 7575-3 & 7637-3 thru 7640-3, Gary Marshall/Marshall Brothers. The petition was filed in response to the Notice of Hearing published February 13, 2013 in the Redfield Press and The Plainsman scheduling a March 7, 2013 hearing before the Water Management Board on these applications. The March 7th hearing was then postponed pursuant to SDCL 46-2A-5 based on the petition filed by petitioners.

In addition, at their March 7th meeting, the Water Management Board deferred consideration of Water Permit Application No. 7620-3 filed by Oscar Inc. in order to consider this application in conjunction with the above listed applications seeking to appropriate water from the Tulare:Western Spink Hitchcock Aquifer.

On March 22, 2013, Raymond Rylance submitted a letter (copy enclosed) withdrawing his clients objection to the Binger and Marshall applications listed above. The applications will now be treated as uncontested and the Department of Environment and Natural Resources will ask the Board to rely on the March 7, 2013 testimony of Ken Buhler regarding water availability.

The Water Management Board will conduct a hearing to consider Application Nos. 7551-3, 7570-3, 7571-3, 7572-3, 7573-3, 7574-3 7575-3, 7637-3, 7638-3, 7639-3, 7640-3 and 7620-3 at 9:30 AM (Central Time) on Thursday, May 2, 2013 at the Floyd Matthew Training Center, Joe Foss Building, 523 E. Capitol Avenue, Pierre SD. Future notice will be provided to all parties if there are changes to the hearing time.

Applicable provisions of the Notices of Hearing published February 13, 2013 in the Redfield Press and The Plainsman apply at this hearing.

Please contact Eric Gronlund at (605) 773-3352, if you have any questions.

c: Diane Best, Assistant Attorney General
Todd Wilkinson, PO Box 29, DeSmet SD 57231

enclosure

CERTIFICATION

I hereby certify that on April 3, 2013, I have personally deposited with the United States mail at Pierre, South Dakota, first class postage, prepaid envelopes containing a Notice dated April 3, 2013, regarding scheduling of the hearing for Water Permit Application Nos. 7551-3, 7570-3, 7571-3, 7572-3, 7573-3, 7574-3, 7575-3, 7637-3, 7638-3, 7639-3, 7640-3 and 7620-3 with enclosure, as addressed below:

Wayne Binger
37923 183rd Street
Tulare SD 57476

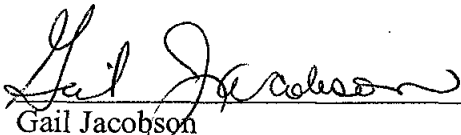
Marshall Brothers
Gary Marshall
19032 388th Avenue
Hitchcock SD 57348

Diane Best, Assistant Attorney General
317 North Main Avenue
Sioux Falls SD 57104

Ray Rylance
PO Box 227
Watertown SD 57021

Todd Wilkinson
PO Box 29
DeSmet SD 57231

Floyd Peterson
Oscar Inc
209 27th NW
Huron SD 57350

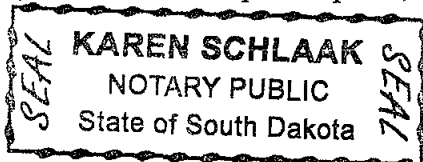


Gail Jacobson
Water Rights Program, DENR

STATE OF SOUTH DAKOTA)
) SS
COUNTY OF HUGHES)

Sworn to, before me, this 3rd day of April, 2013


Karen Schlaak
Notary Public
My Commission expires April 1, 2019



WILES & RYLANCE

ATTORNEYS AT LAW

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P. O. Box 227
Watertown, South Dakota 57201-0227
(605) 886-5881

FACSIMILE

(605) 886-3934

E-MAIL:

rdr@wilesandrylance.com

John C. Wiles, P.C.
Raymond D. Rylance, P.C.
Rebecca L. Morlock Reeves

RECEIVED

MAR 25 2013

**WATER RIGHTS
PROGRAM**

March 22, 2013

Jeffrey P. Hallem
Attorney General's Office
1302 E Hwy 14 #1
Pierre, SD 57501

Timothy G. Bottum
PO Box 1025
Mitchell, SD 57301

Diane Best
Attorney General's Office
317 N Main Ave
Sioux Falls, SD 57104

Eric Gronlund
Department of Environment and Natural Resources
PMB 2020 Joe Foss Bldg
523 E Capitol
Pierre, SD 57501-3182

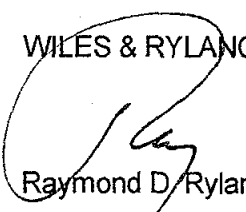
Re: Wayne Binger Permit #7551-3
Gary Marshall Permits #7570-3 through #7575-3 and #7637-3 through 7640-3

Dear Folks:

On behalf of Oscar, Inc., Lenny Peterson, Danny Peterson and Brad Peterson, as their attorney in this matter, we hereby withdraw their objection to the above-stated applications as set forth in their letter of February 22, 2012 (obviously a typo), and their letter dated February 22, 2013 submitted by Todd D. Wilkinson and Gary W. Schumacher on behalf of Lenny Peterson, Danny Peterson, Brad Peterson and Oscar, Inc.

Very truly yours,

WILES & RYLANCE


Raymond D. Rylance

RDR:bjs

cc. Lenny Peterson
Todd Wilkinson



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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523 EAST CAPITOL
PIERRE, SOUTH DAKOTA 57501-3182
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**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 7574-3, Marshall Brothers**

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. 7574-3, Marshall Brothers, c/o Gary Marshall, 19032 388th Avenue, Hitchcock SD 57348.

The Chief Engineer is recommending APPROVAL of Application No. 7574-3 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. 7574-3 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 January 30, 2013 report on applications from the Tulare:Western Spink/Hitchcock for additional information.

Garland Erbele, Chief Engineer
February 7, 2013

REPORT TO THE CHIEF ENGINEER
ON

WATER PERMIT APPLICATION NO. 7373-3
TERRY WIETING

WATER PERMIT APPLICATION NO. 7551-3
WAYNE BINGER

WATER PERMIT APPLICATION NOS. 7570-3, 7571-3, 7572-3, 7573-3, 7574-3, 7575-3,
7637-3, 7638-3, 7639-3, & 7640-3
GARY MARSHALL-MARSHALL BROS.

WATER PERMIT APPLICATION NO. 7620-3
OSCAR INC.

JANUARY 30, 2013

Water Permit Application No. 7373-3 proposes to appropriate water at a maximum diversion rate of 1.78 cubic feet of water per second (cfs) from two wells to be completed into the Tulare: Western Spink/Hitchcock aquifer. The wells are to be located in the S $\frac{1}{2}$ SW $\frac{1}{4}$ Section 16, T113N-R62W and are expected to be approximately 75 feet deep. This application proposes to irrigate 160 acres located in the SW $\frac{1}{4}$ Section 16, T113N-R62W.

Water Permit Application No. 7551-3 proposes to irrigate 90 additional acres from the well authorized by Water Right No. 470A-3. This application proposes to irrigate 90 acres located in the NE $\frac{1}{4}$, N $\frac{1}{2}$ SE $\frac{1}{4}$ Section 36, T115N-R65W from the existing well with no increase to the developed diversion rate. Water Right No. 470A-3 authorizes 1.56 cubic feet of water per second (cfs) from one well completed into the Tulare: Western Spink/Hitchcock aquifer (130 feet deep) located in the NE $\frac{1}{4}$ SE $\frac{1}{4}$ Section 36 for irrigation of 136 acres located in the SE $\frac{1}{4}$ Section 36, T115N-R65W.

Water Permit Application No. 7570-3 proposes to appropriate water at a maximum diversion rate of 3.56 cfs from two wells to be completed into the Tulare: Western Spink/Hitchcock aquifer. The wells are to be located in the center of the NW $\frac{1}{4}$ and the center of the SW $\frac{1}{4}$ Section 1, T113N-R64W and are expected to be approximately 80 feet deep. This application proposes to irrigate 280 acres located in the W $\frac{1}{2}$ Section 1, T113N-R64W.

Water Permit Application No. 7571-3 proposes to appropriate water at a maximum diversion rate of 1.78 cfs from two wells to be completed into the Tulare: Western Spink/Hitchcock aquifer. The wells are to be located near the center of the SE $\frac{1}{4}$ Section 4, T113N-R64W and are expected to be approximately 80 feet deep. This application proposes to irrigate 160 acres located in the SE $\frac{1}{4}$ Section 4, T113N-R64W.

Water Permit Application No. 7572-3 proposes to appropriate water at a maximum diversion rate of 1.78 cubic feet of water per second (cfs) from a well to be completed into the Tulare: Western Spink/Hitchcock aquifer. The well is to be located in the center of the SW $\frac{1}{4}$ Section 34,

T114N-R64W and is expected to be approximately 80 feet deep. This application proposes to irrigate 140 acres located in the SW 1/4 Section 34, T114N-R64W.

Water Permit Application No. 7573-3 proposes to appropriate water at a maximum diversion rate of 1.78 cfs from a well to be completed into the Tulare: Western Spink/Hitchcock aquifer. The well is to be located near the center of the NW¼ Section 27, T114N-R63W and is expected to be 80 feet deep. This application proposes to irrigate 160 acres located in the NW¼ Section 27, T114N-R63W.

Water Permit Application No. 7574-3 proposes to appropriate water at a maximum diversion rate of 1.78 cfs from a well to be completed into the Tulare: Western Spink/Hitchcock aquifer. The well is to be located in the center of the NE¼ Section 35, T114N-R64W and is expected to be approximately 80 feet deep. This application proposes to irrigate 160 acres located in the NE¼ Section 35, T114N-R64W.

Water Permit Application No. 7575-3 proposes to appropriate water at a maximum diversion rate of 3.56 cfs from two wells to be completed into the Tulare: Western Spink/Hitchcock aquifer. The wells are to be located in the centers of the SW¼ and SE¼ Section 36, T114N-R64W and are expected to be approximately 80 feet deep. This application proposes to irrigate 280 acres located in the S½ Section 36, T114N-R64W.

Water Permit Application No. 7637-3 proposes to appropriate water at a maximum diversion rate of 1.78 cfs from a well to be completed into the Tulare: Western Spink/Hitchcock aquifer. The well is to be located in the center of the SE¼ Section 25, T114N-R64W and is expected to be approximately 80 feet deep. This application proposes to irrigate 135 acres located in the SE¼ Section 25, T114N-R64W.

Water Permit Application No. 7638-3 proposes to appropriate water at a maximum diversion rate of 1.78 cfs from a well to be completed into the Tulare: Western Spink/Hitchcock aquifer. The well is to be located in the center of the SE¼ Section 18, T114N-R63W and is expected to be approximately 80 feet deep. This application proposes to irrigate 135 acres located in the SE 1/4 Section 18, T114N-R63W.

Water Permit Application No. 7639-3 proposes to appropriate water at a maximum diversion rate of 1.78 cfs from a well to be completed into the Tulare: Western Spink/Hitchcock aquifer. The well is to be located in the center of the NW ¼ Section 3, T114N-R64W and is expected to be approximately 80 feet deep. This application proposes to irrigate 135 acres located in the NW¼ Section 3, T114N-R64W.

Water Permit Application No 7640-3 proposes to appropriate water at a maximum diversion rate of 1.78 cfs from two wells to be completed into the Tulare: Western Spink/Hitchcock aquifer. The wells are to be located near the center of the SW¼ Section 8, T113N-R62W and are expected to be approximately 80 feet deep. This application proposes to irrigate 160 acres located in the SW ¼ Section 8, T113N-R62W.

Water Permit Application No. 7620-3 proposes to appropriate water at a maximum diversion rate of 1.94 cfs from a well to be completed into the Tulare: Western Spink/Hitchcock aquifer. The well is to be located in the center of the NE¼ Section 32, T115N-R63W and is expected to be

approximately 60 feet deep. This application proposes to irrigate 136 acres located in the NE¼ Section 32, T115N-R63W.

AQUIFER: TULARE: WESTERN SPINK/HITCHCOCK

The Tulare: Western Spink/Hitchcock aquifer was basically considered fully appropriated in 2002 and the amount of development in the aquifer has not changed appreciably since 2003. A number of water permit applications were denied or withdrawn between 2002 and 2011. Six applications to appropriate water from the Tulare: Western Spink/Hitchcock aquifer (No. 7288-3, No. 7289-3, No. 7290-3, No. 7291-3, No. 7292-3 and No. 7293-3) were filed with the DENR-Water Rights Program in December 2011. Based on a DENR-Water Rights staff analysis of the aquifer (Buhler, 2012a) and a stipulation between parties, Water Permit Application No. 7288-3 was withdrawn and the appropriation requests of the five remaining applications were reduced. Following a July 11, 2012 hearing, the Water Management Board approved water permit applications totaling an amount of water approximately equal to the probable quantity of water remaining inappropriate from the aquifer.

Water Permit Application No. 7373-3, Terry Wilting, was received June 14, 2012, and Water Permit Application Nos. 7378-3 and 7379-3, Riverside Historian Brethren, were received June 29, 2012. Water Permit Application Nos. 7373-3, 7378-3 and 7379-3 proposed to irrigate an additional 565 acres from the Tulare: Western Spink/Hitchcock aquifer. Based on the 1979-2011 average annual irrigation application rate for the aquifer (i.e. 9.32 inches per acre per year) (Buhler, 2012a), the average annual withdrawal associated with these applications would be 438.8 acre-feet per year.

Based on the April 2012 analysis of the aquifer, the Chief Engineer recommended denial of Water Permit Application Nos. 7378-3 and 7379-3 because the best available information indicated that approval of these applications would cause the estimated average annual withdrawal from the Tulare: Western Spink/Hitchcock aquifer to exceed the estimated average recharge to the aquifer. South Dakota Codified Law (SDCL) 46-6-3.1 requires that "No application to appropriate groundwater may be approved if, according to the best information reasonably available, it is probable that the quantity of water withdrawn annually from a groundwater source will exceed the quantity of the average estimated annual recharge of water to the groundwater source." The applicant did not oppose the Chief Engineer's recommendation and pursuant to SDCL 46-2A-3 the applications were withdrawn from consideration.

The Chief Engineer recommended deferral of Water Permit Application No. 7373-3 pending the resolution of an existing water right (No. 282-3, Renee Veskrina Morog) appropriating water from the Tulare: Western Spink/Hitchcock aquifer that was scheduled for cancellation at the October 3, 2012 Water Management Board meeting. The water right was eventually cancelled due to forfeiture. The Chief Engineer has subsequently determined that since the availability of unappropriated water from an aquifer is based on actual use, the use or in this case nonuse of Water Right No. 282-3 was already considered when analyzing the availability of water from the Tulare: Western Spink/Hitchcock aquifer. Therefore, cancellation of the water right did not result in additional unappropriated water available from the aquifer.

At the time, the April 2012 analysis seemed plausible; however comparison of it with a similar analysis conducted later for the Tulare East James aquifer identified potential inconsistencies between the two analyses. The April 2012 analysis of the Tulare: Western Spink/Hitchcock aquifer appears to have been overly conservative. Two of the fundamental assumptions used in the analysis resulted in an extremely diminished volume of water that was available for appropriation from the aquifer: 1) In computing the maximum number of acres that could be irrigated from the aquifer based on the average annual recharge and the average annual irrigation application rate, the analysis assumed the irrigation of 100 percent of permitted acreage when in fact, for various reasons, only a fraction of permitted acres are irrigated each year; and 2) In computing the amount that the average annual recharge to the aquifer has exceeded average annual discharge from the aquifer based on observation well data, the portion of the aquifer that was considered under unconfined conditions was estimated based primarily on 1984 data (Kuiper, 1984) which resulted in an overly contracted area.

AQUIFER CHARACTERISTICS:

Although additional data and closer scrutiny of the existing data will allow for improvements to the general delination of the Tulare: Western Spink/Hitchcock aquifer, alterations to the "Aquifer Characteristics" section of the April 2012 report to the Chief Engineer (Buhler, 2012a) are not warranted at this time. However, a cursory review of the data suggests that the areal extent of the aquifer as described in the report may have been optimistic.

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.

WATER AVAILABILITY:

The probability of unappropriated water being available from the Tulare: Western Spink/Hitchcock 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."

In applying SDCL 46-6-3.1, the Sixth Judicial Circuit Court ruled in 2005 that if the Water Management Board uses average annual recharge, then it should also use average annual withdrawals to determine if unappropriated water is available from the aquifer (*Hines v. South Dakota Dept. of Environ. and Nat'l. Resources, Hughes County 04-37* (Memorandum Decision, April 29, 2005)).

The availability of unappropriated water from the Tulare: Western Spink/Hitchcock aquifer was evaluated based on observation well data and through consideration of hydrologic budgets for the aquifer.

OBSERVATION WELL DATA:

The analysis of observation well data provides a qualitative means of assessing the aquifer and provides the best information available to evaluate the Tulare: Western Spink/Hitchcock aquifer. In addition, 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 to the aquifer.”

The DENR-Water Rights Program monitors 48 observation wells completed into the Tulare: Western Spink/Hitchcock aquifer. The analysis of the DENR-Water Rights Program observation well data provides the best information reasonably available to evaluate withdrawals from an aquifer as compared with recharge to the aquifer. Observation well data showing a steady, continual decline of the aquifer’s water level or artesian pressure could indicate that withdrawals from an aquifer were exceeding recharge. In addition, water level fluctuations in an aquifer dominated by the influences of well withdrawals, or a change in the configuration of the potentiometric surface could indicate that well withdrawals are a significant component in the system relative to recharge and/or natural discharge. Examination of the observation well data to consider long term water level trends, any influences of well withdrawals and the configuration of the potentiometric surface of the aquifer are discussed below.

Observation well water level trends:

A rising water level indicates that recharge to the aquifer exceeds withdrawals from the aquifer and conversely a declining water level is indicative of withdrawals exceeding recharge. An equation for this relationship is:

$$\Delta S = R - D$$

Where: ΔS = change in the volume of water in storage in the aquifer

R = Recharge

D = Discharge

The observation well data for the Tulare: Western Spink/Hitchcock aquifer has documented upward trending water levels throughout the aquifer. The average slope of linear trend lines for observation well hydrographs over the time period of January 2003 through October 2012 has been (+0.284 feet per year). The upward trending water levels indicate recharge to the Tulare: Western Spink/Hitchcock aquifer has been greater than the total of the discharges from the aquifer over the period of record.

An analysis of observation well hydrographs was used to quantify the change in volume of water in storage in the aquifer (i.e. the amount that recharge to the aquifer has exceeded discharge from the aquifer). The analysis involved identifying observation wells completed into the unconfined portion of the Tulare: Western Spink/Hitchcock aquifer and determining the annual change of the water level in each well. The amount of water represented by a change in water level was determined by multiplying the water level change by the aquifer’s specific yield (0.15) (Kuiper, 1984). The average change in storage was applied over the portion of the aquifer that is under unconfined conditions to determine the volume in acre-feet per year of the change in storage. In equation form:

$$\Delta V_{avg} = \Delta \text{Wat Lev}_{avg} * S_y * A$$

Where:

ΔV_{avg} = Average change in volume (ac-ft/yr)

Wat Lev_{avg} = Average change in water level (ft/yr)

S_y = Specific Yield

A = Area (acres)

The average annual change in water level (Wat Lev_{avg}) in the Tulare: Western Spink/Hitchcock aquifer was determined through examination of DENR-Water Rights' observation well data. Five observation wells were used to analyze the Tulare: Western Spink/Hitchcock aquifer since they were the only ones that were in portions of the aquifer that remained unconfined for the entire period of record (Water Year 2003 through Water Year 2012) and the wells were determined to accurately reflect aquifer conditions. The results of the analysis are shown in Table 1.

ANNUAL WATER LEVEL CHANGE (ft)						
	SP-79F	SP-78B	SP-80B	SP-82E	SP-82G	AVE
2003	-0.32	-0.69	-1.12	-0.82	-0.87	-0.764
2004	0.62	-0.5	-0.79	0.45	-0.65	-0.174
2005	-0.18	-0.18	0.23	1.54	0.3	0.342
2006	0.16	-0.1	0.08	-1.09	0.35	-0.12
2007	1.67	1.81	2.21	2.77	2.2	2.132
2008	0.56	0	0.37	1.1	1.1	0.626
2009	0.32	0.99	1.02	-0.3	0.66	0.538
2010	1.23	2.46	1.58	0.7	1.44	1.482
2011	3.5	0.55	2.3	0	-0.7	1.13
2012	-3.1	-1.2	-2	-1.8	-2.1	-2.04
AVE	0.4460	0.3140	0.3880	0.2550	0.1730	0.3152

Table 1. Water Level change per year per observation well (Water Rights, 2013a).

To determine the area (A) of the Tulare: Western Spink/Hitchcock aquifer that was under unconfined conditions, ESRI @ArcMap™10.0 was used to generate a Triangulated Irregular Network (TIN) of the aquifer's potentiometric surface using October 2012 observation well readings. The TIN was converted to a raster file using a Natural Neighbors interpolation method. A second TIN was created using the elevation of the upper most aquifer material encountered in test holes drilled by the DENR-Geological Survey and DENR-Water Rights Program observation wells within the areal extent of the aquifer as defined in the April 2012 aquifer analysis. This TIN was also converted to a raster file using a Natural Neighbors interpolation method. ESRI @ArcMap™10.0 raster calculator was used to subtract the potentiometric surface raster from the "first aquifer material" raster and generate a raster where aquifer material occurred above the potentiometric surface. DENR-Geological Survey test holes(Lithologic Logs), DENR-Water Rights Program observation wells (Water Rights, 2013a),

domestic wells (Water Rights, 2013b), and irrigation wells (Water Rights, 2013c) within and adjacent to this resultant raster were examined to determine if the aquifer material that was above the Tulare: Western Spink/Hitchcock potentiometric surface was actually part of the aquifer. Based on this analysis, the unconfined portion of the Tulare: Western Spink aquifer was determined to be 76,978 acres (see figure 1).

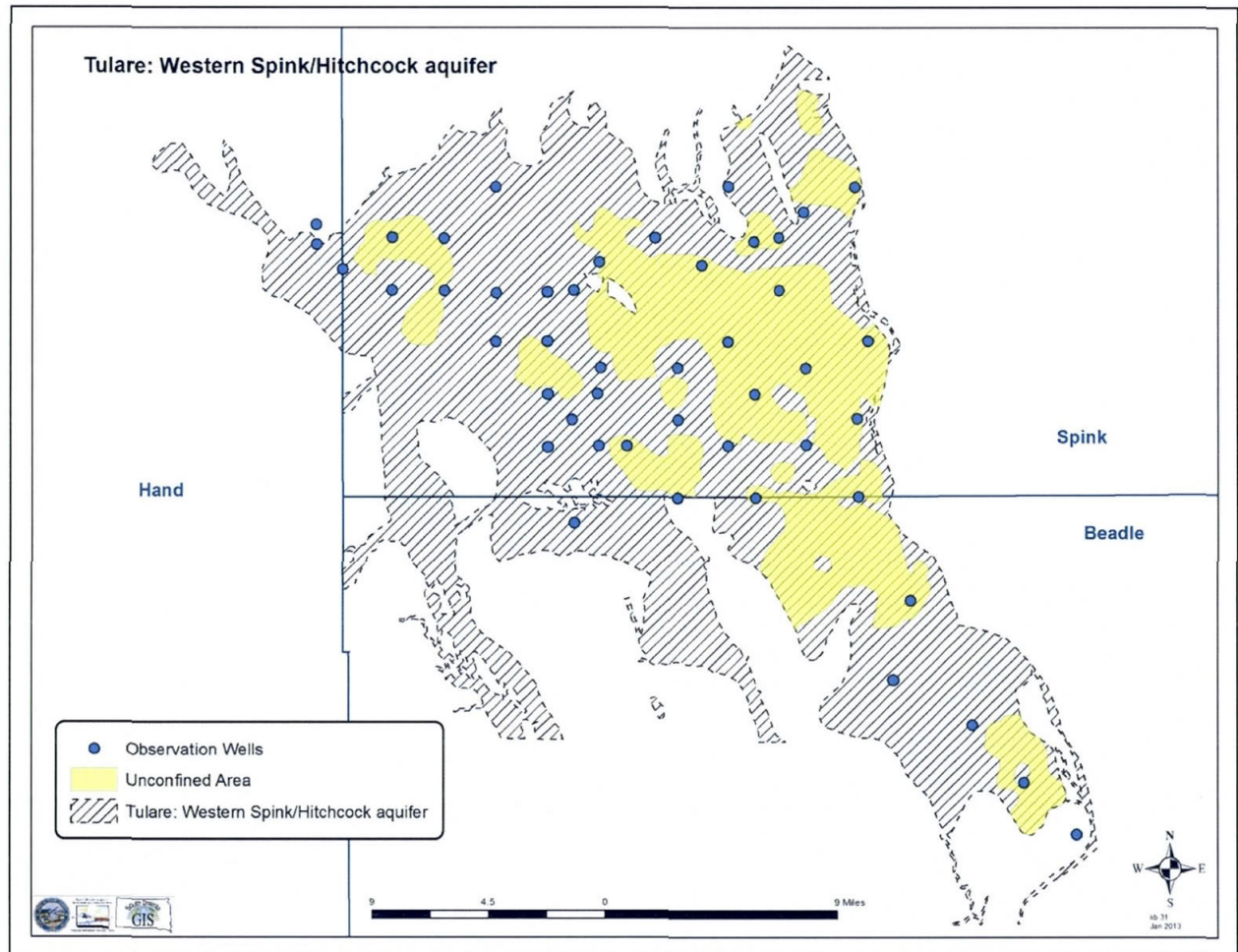


Figure 1. Areal extent of the Tulare: Western Spink/Hitchcock aquifer and the unconfined areas of the aquifer.

Substituting the values from above for the equation $\Delta V_{avg} = \Delta W_{at Lev_{avg}} * S_y * A$,

$$\Delta V_{avg} = 0.3152 \text{ ft/yr} * 0.15 * 76,978 \text{ acres}$$

$$\Delta V_{avg} = 3,639.5 \text{ ac-ft/yr}$$

Therefore, the observation well data indicates that the annual recharge to the aquifer exceeded discharge from the aquifer by an average of 3,640 acre-feet per year for the period since development has been static (2003-2012).

Water level fluctuations due to well withdrawals:

Observation well data documents that the development that has occurred from the Tulare: Western Spink/Hitchcock aquifer has had an inconsequential effect on the aquifer over the long

term. Figures 2-6 show hydrographs for DENR-Water Rights Program observation wells completed into the aquifer and Figure 7 shows the location of these wells. The water level records for the observation wells document that climatic conditions greatly mask the temporal effects of well withdrawals. Therefore, recharge to and natural discharge from the Tulare: Western Spink/Hitchcock aquifer significantly exceeds pumping. Recognizing that natural discharge from the aquifer can be captured for pumping. The hydrographs document that there is unappropriated water available from the aquifer to support these appropriations.



Figure 2. Hydrograph of DENR-Water Rights Program observation well completed into the Tulare: Western Spink/Hitchcock aquifer.

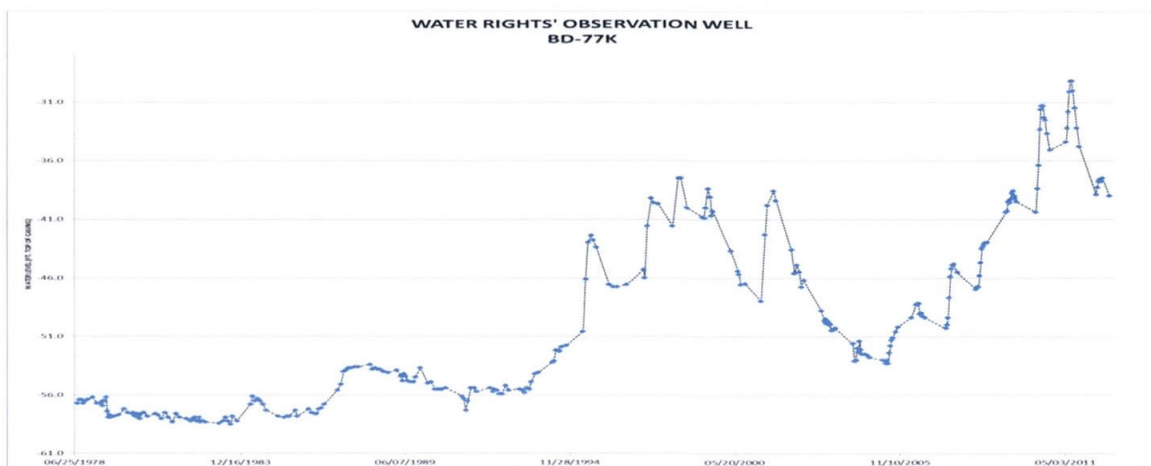


Figure 3. Hydrograph of DENR-Water Rights Program observation well completed into the Tulare: Western Spink/Hitchcock aquifer.

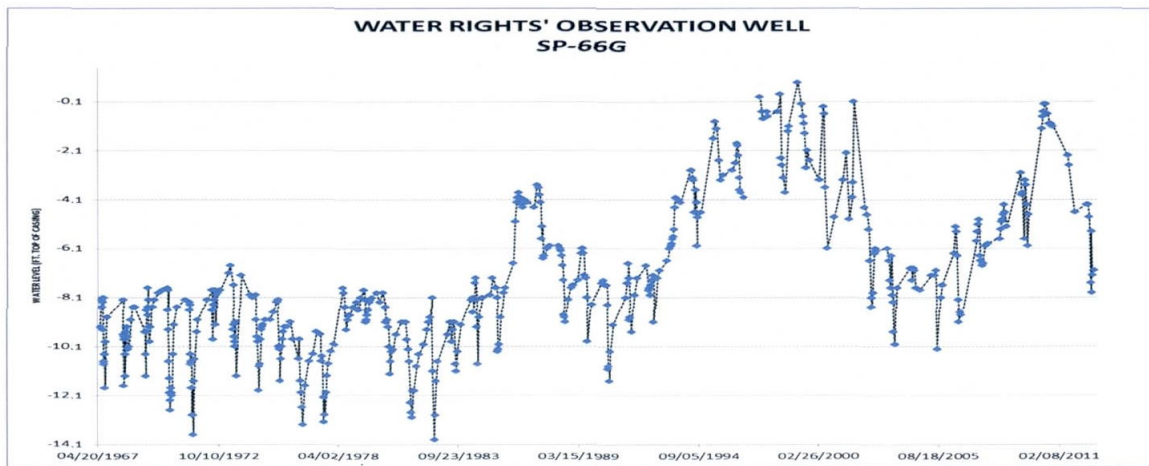


Figure 4. Hydrograph of DENR-Water Rights Program observation well completed into the Tulare: Western Spink/Hitchcock aquifer.

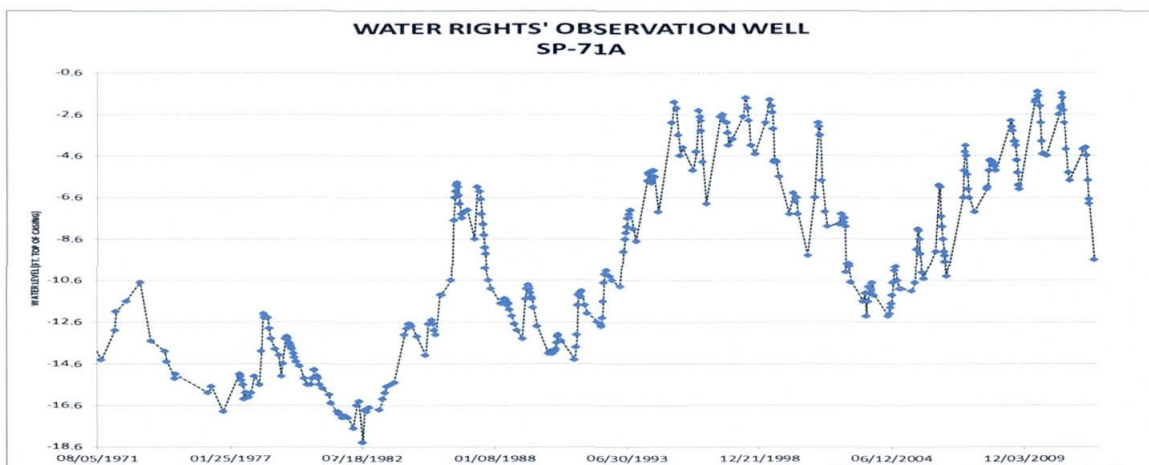


Figure 5. Hydrograph of DENR-Water Rights Program observation well completed into the Tulare: Western Spink/Hitchcock aquifer.

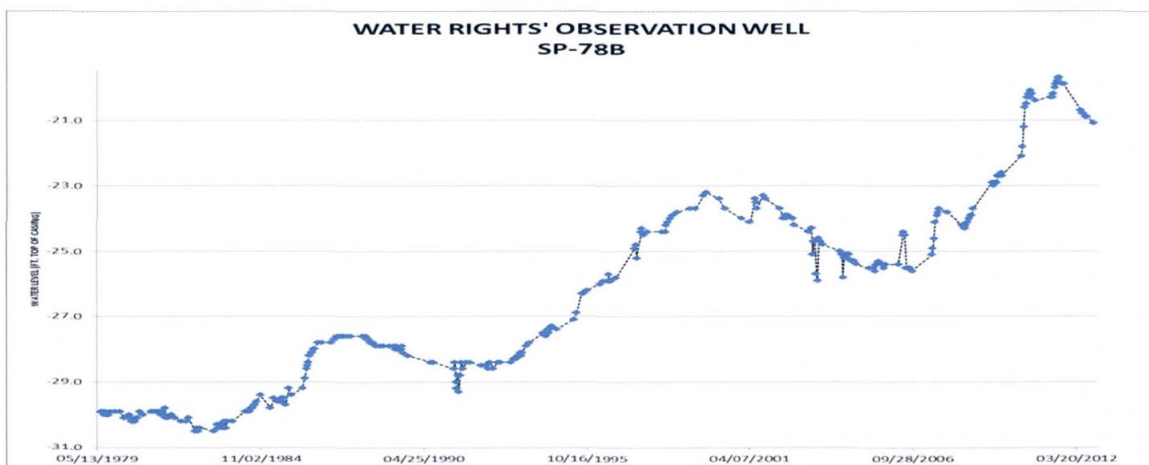


Figure 6. Hydrograph of DENR-Water Rights Program observation well completed into the Tulare: Western Spink/Hitchcock aquifer.

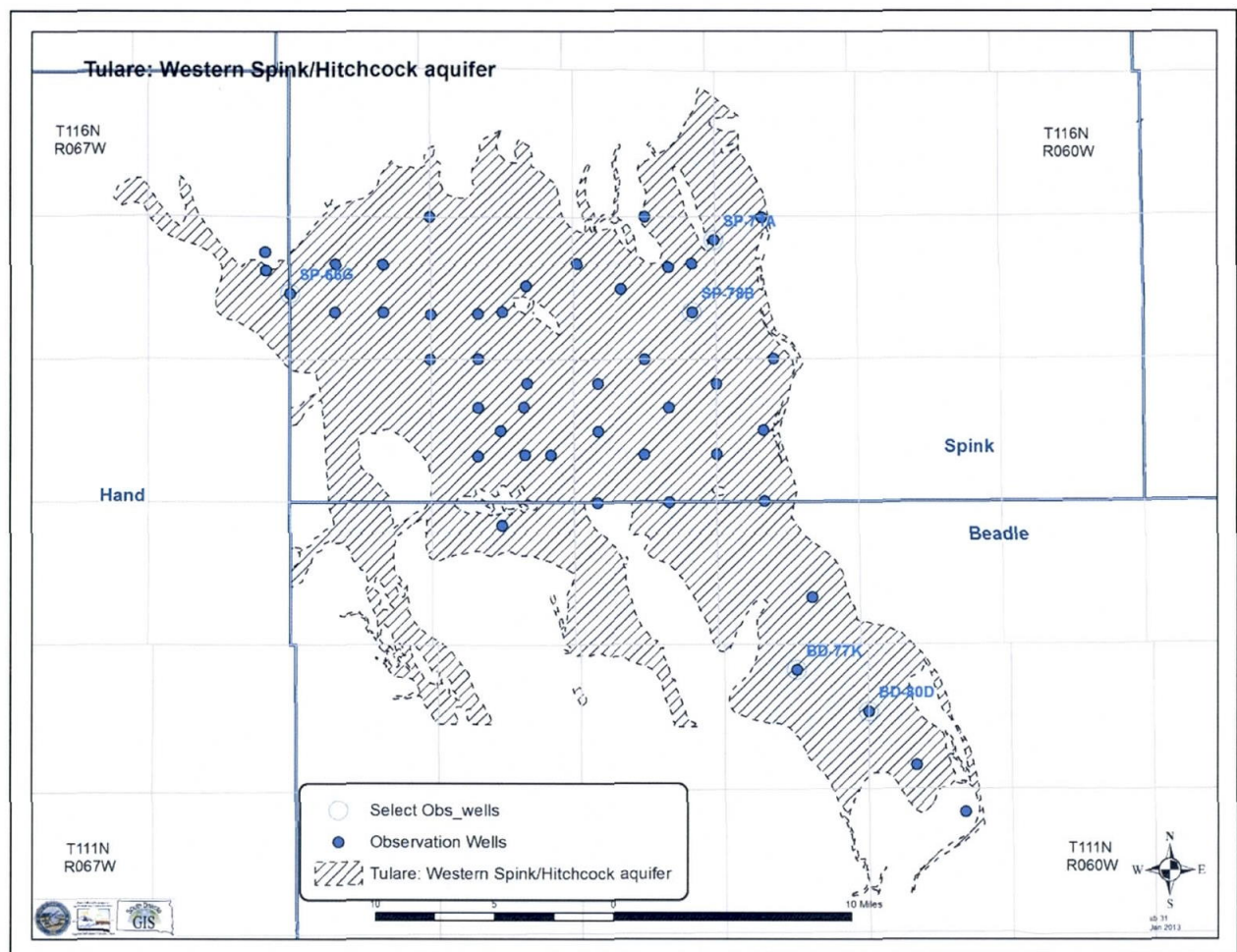


Figure 7. Location of DENR-Water Rights Program observation wells completed into the Tulare: Western Spink aquifer and wells shown in Figures 2-6.

Potentiometric Surface:

The potentiometric surface of the Tulare: Western Spink/Hitchcock aquifer was determined for two time periods based on the observation well measurements for October 1987 and for October 2012. A map showing the two potentiometric surfaces is shown in Figure 8. It is clear that although there are some nuances in the potentiometric surfaces, the surface is essentially unchanged; indicating that discharge is not exceeding recharge and unappropriated water is available from the aquifer.

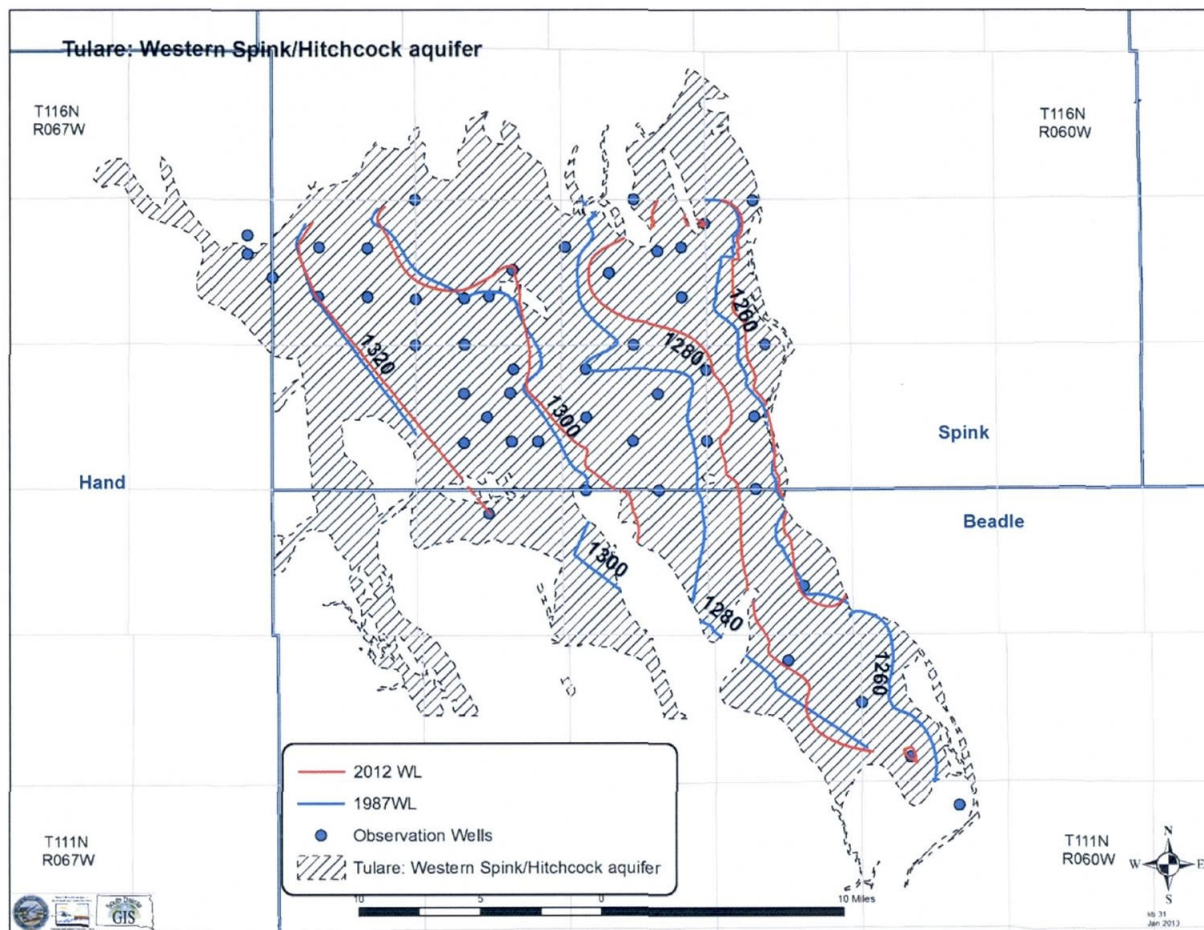


Figure 8. Comparison of the potentiometric surface of the Tulare: Western Spink/Hitchcock aquifer (October 1987 versus October 2012)

Regional flow net analysis using observation well data:

The recharge potential of the Tulare: Western Spink/Hitchcock aquifer was evaluated by interpreting a regional flow net analysis based on the September 2012 water level data from the DENR-Water Rights' Observation Well Network. A flow net analysis is a calculation of the amount of water flowing through the aquifer according to the equation:

$$Q = TIL$$

Where:

Q= flow in gallons per day

T= Transmissivity in gallons per day per foot

I= Hydraulic gradient in feet per mile

L= Cross sectional length in miles

The average hydraulic conductivity for the Tulare: Western Spink/Hitchcock aquifer was estimated based on the specific capacities of the 30 irrigation wells completed into the aquifer for which the data to allow these calculations was available (Water Rights, 2013b; Water Rights, 2013c). Transmissivity was calculated at each well using the wells' specific capacity ("Transmissivity from Specific Capacity"), and the transmissivity was divided by the aquifer

thickness at the well to determine an average hydraulic conductivity for the aquifer. The average hydraulic conductivity was calculated to be 1,982 gallons per day per square foot (gpd/ft²). The average transmissivity of the Tulare: Western Spink/Hitchcock aquifer of a cross section through which all of the flow of the aquifer must flow was determined by multiplying the average thickness of the cross section (36.3 feet) times the average hydraulic conductivity for the aquifer (1,982 gallons per day per square foot) to be 71,950 gallons per day per foot.

The hydraulic gradient for the Tulare: Western Spink/Hitchcock aquifer was estimated to average 4.26 feet per mile based on data from the DENR-Water Rights' Observation Well Network.

The cross section length of the Tulare: Western Spink/Hitchcock aquifer was determined to be approximately 25 miles based on the current aquifer delineation.

The amount of water moving through the Tulare: East James aquifer is estimated as follows:

$$\begin{aligned} Q &= ((71,950 \text{ gpd/ft}) \times (4.26 \text{ ft/mile}) \times (25 \text{ miles})) / (325,851 \text{ gallons/ac-ft}) \\ &= 23.5 \text{ ac-ft/day} \\ &= \underline{8,583 \text{ ac-ft/yr}} \end{aligned}$$

In order to sustain this estimated volume of groundwater moving through the aquifer, the recharge rate in inches per acre per year based on an area of the aquifer of approximately 263,000 acres would be 0.39 inches. This recharge rate cannot be considered "average annual recharge" since it used only 2012 data, and likely can be viewed as a minimum recharge rate; however the estimate does show the reasonableness of the average annual recharge estimate from Kuiper (1984).

HYDROLOGIC BUDGETS:

SDCL 46-6-3.1 and the availability of unappropriated water from the Tulare: Western Spink/Hitchcock aquifer can be evaluated by considering a hydrologic budget for the aquifer which compares the recharge to and discharge from the aquifer.

Recharge to the Tulare: Western Spink/Hitchcock aquifer occurs primarily through infiltration of precipitation where the outwash is at or near ground surface. The best information reasonably available to estimate the average annual recharge to the aquifer is from the groundwater flow model developed by Kuiper (1984). The model incorporated an average recharge rate throughout the aquifer although recharge generally occurs only in unconfined areas. The average annual recharge to the aquifer based on the groundwater flow model ranged from 0.41-1.66 inches per year with a "best fit" reflecting various simulations of 0.83 inches per year (Kuiper, 1984). Considering an areal extent of the Tulare: Western Spink/Hitchcock aquifer equal to 263,016 acres and applying a 0.83 inches per year recharge rate, the average annual recharge to the Tulare: Western Spink/Hitchcock aquifer is estimated to total 18,192 acre-feet per year.

Withdrawals from the Tulare: Western Spink/Hitchcock occurs through natural discharge, domestic use and uses from appropriative rights/permits. Essentially all of the well withdrawals from the aquifer are for irrigation use. For the period of 1979 through 2011, irrigation pumpage

from the aquifer is shown in Table 2, and the average irrigation application rate over this period was 9.32 inches per acre per year (Buhler, 2012a).

REPORTED IRRIGATION PUMPING (1979-2011)	ACRE-FEET PER YEAR
Maximum	19397.25
Minimum	2200.29
Average	9725.6

Table 2. Reported irrigation pumping from the Tulare: Western Spink/Hitchcock aquifer for 1979-2011 (Buhler, 2012a)

Since 1979-2012 was a time period that included new development from the aquifer, the average irrigation pumpage for this time period is likely low. However, the average application rate for this time period can be considered reflective of the irrigation practices in the aquifer.

The time period of 2003-2011 reflects fully developed conditions in the aquifer. Irrigation pumpage for this time period is shown in Table 3. The average application rate for the 2003-2011 time period was 8.71 inches per year. The application rate for 2003-2011 likely is more reflective of the climatic conditions over the relatively short (nine year) period than actual irrigation practices in the aquifer.

REPORTED IRRIGATION PUMPING (2003-2011)	ACRE-FEET PER YEAR
Maximum	19397.25
Minimum	3007.9
Average	12286.8

Table 3. Reported irrigation pumping from the Tulare: Western Spink/Hitchcock aquifer for 2003-2011 (Water Rights, 2004-2012)

Two methods were used to evaluate the availability of unappropriated water with separate hydrologic budgets: 1) comparing estimated average annual recharge to the aquifer with the average annual reported well withdrawals over the time period the aquifer was fully developed; and 2) comparing the number of acres that can be irrigated based on the estimated average annual recharge to the aquifer to the number of acres currently authorized for irrigation by water rights/permits.

Irrigation Questionnaire Method:

The amount of unappropriated water that is available from the Tulare: Western Spink/Hitchcock aquifer was estimated by comparing the estimated average annual recharge rate to the average annual well withdrawal from 2003-2011. Since average annual recharge is estimated to be 18,192 ac-ft/yr and the average annual pumping was reported to be 12,286.8 ac-ft/yr, an average of 5,905 acre-feet of unappropriated water is available from the Tulare: Western Spink/Hitchcock aquifer based on this methodology.

Recharge to Acres Method:

The amount of unappropriated water that is available from the Tulare: Western Spink/Hitchcock aquifer was also estimated by comparing the maximum number of acres that could be irrigated from the aquifer based on the estimated average annual recharge and the average irrigation application rate, to the number of acres that are currently authorized for irrigation. The volume of water associated with the potential additional irrigable acres was converted to acre-feet per year based on the average irrigation application rate.

The maximum average annual irrigation withdrawal based on a recharge of 18,192 acre-feet per year and an application rate of 9.32 inches per year would allow for the irrigation of 23,423 acres. There are currently 23,648.8 acres authorized for irrigation from the aquifer with water rights/permits. Since 2003, the average percentage of authorized acres that have been irrigated annually ranged from a maximum of 85.58% to a minimum of 31.17% with an average of 69.02%. This irrigated to authorized percentage agrees fairly well with the same percentages calculated for Tulare: East James aquifer (i.e. Maximum=88.41%, Minimum=39.49%, Average=65.34%) (Buhler, 2012b), for the fully developed time period for that aquifer (1979-2011). Since on average, only 69.02% of authorized acres are irrigated annually, the number of acres that can be expected to be irrigated under current authorization is 23,648.8 acres * 69.02% or 16,322.4 acres. The difference between maximum allowable acres (23,423 acres) and expected irrigation acreage currently authorized (16,322.4 acres) shows that an additional 7,100 acres could be irrigated from the Tulare: Western Spink/Hitchcock aquifer. Assuming an average application rate of 9.32 inches per year applied to 7,100 acres equates to 5,514 ac-ft/yr.

In another format, the “recharge to acres method” compares the average acreage reported irrigated annually from 2003-2011 (15763.6 acres) plus 69.02% of the 810 acres added in 2012 (559.1 acres) with the maximum number that can be irrigated based on the recharge rate (23,423 acres) or 23,423 acres – (15763.6+559.1) = 7,100 acres.

WATER AVAILABILITY SUMMARY:

The DENR-Water Rights Program observation well data indicates that unappropriated water is available from the Tulare: Western Spink/Hitchcock aquifer. Analysis of the observation well data shows that from 2003-2012, recharge to the Tulare: Western Spink/Hitchcock aquifer has exceed discharge from the aquifer by an estimated 3,640 acre-feet per year. A comparison of the average annual pumpage reported from the aquifer from 2003-2011 with the estimated average annual recharge to the aquifer suggests that recharge exceeds pumping by 5,905 acre-feet. Comparing the number of acres that can be irrigated based on the average annual recharge rate suggests that recharge exceeds withdrawals from the aquifer by 5,514 ac-ft/yr.

The difference between the observation well method and budgeting methods for determining the amount of unappropriated water that is available from the aquifer is likely due to a number of factors. Budgeting methods resulted in greater amounts of unappropriated water available from the aquifer however: a) Irrigation questionnaire data is not available for 2012 at this time and it is likely that the 2012 data will increase the averages for the number of acres irrigated, amount of water pumped and the percentage of irrigated to permitted acres. Higher current use averages will reduce the amount of water available based on budgets; b) Budgeting methods are all dependent upon self-reporting by-way of annual irrigation questionnaires. Errors in the reporting

and/or interpretation of the irrigation questionnaires would influence the results; and c) the average annual growing season precipitation in this area for 2003-2011 was 21.19 inches per year, compared to the 20 year average growing season precipitation of 18.35 inches per year (Mathiowetz, 2012). The averages for the number of acres irrigated, amount of water pumped and the percentage of irrigated to permitted acres are likely low due to climatic conditions. Consequently, estimates based on budgets for the amount of water remaining available for appropriation and/or the number of additional acres that can be irrigated are likely too high. The observation well method: a) does reflect 2012 climatic conditions and b) is less influenced by short term trends, for example, the average water level fluctuation for observation wells was +0.315 feet per year for 2003-2012, compared with a +0.261 feet per year average for water years 1983-2012.

For the reasons listed above, and the fact that 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 to the aquifer” the amount of unappropriated water available from the Tulare: Western Spink Hitchcock aquifer is estimated to be 3,640 acre-feet per year. Based on the historic average annual irrigation application rate of 9.32 inches per year, on average an additional 4,686 acres can be irrigated from the Tulare: Western Spink/Hitchcock aquifer.

EXISTING WATER RIGHTS:

There have been 310 water permit applications to appropriate water from the Tulare: Western Spink/Hitchcock aquifer. The status of these applications is shown in table 4.

STATUS	NUMBER
CANCELLED	77
DENIED	37
INCORPORATED	46
LICENSED	129
PERMITTED	13
WITHDRAWN	8

Table 4. Status of Water Permit Applications filed from the Tulare: Western Spink/Hitchcock aquifer .

Where the aquifer is under unconfined conditions, drawdown created by pumping is not significant and does not extend very far from the individual production well (see figure 9). Where the aquifer is under confined conditions water level fluctuations are more pronounced (see figure 10). Well interference has never been a problem in this aquifer (Goodman, 2002).

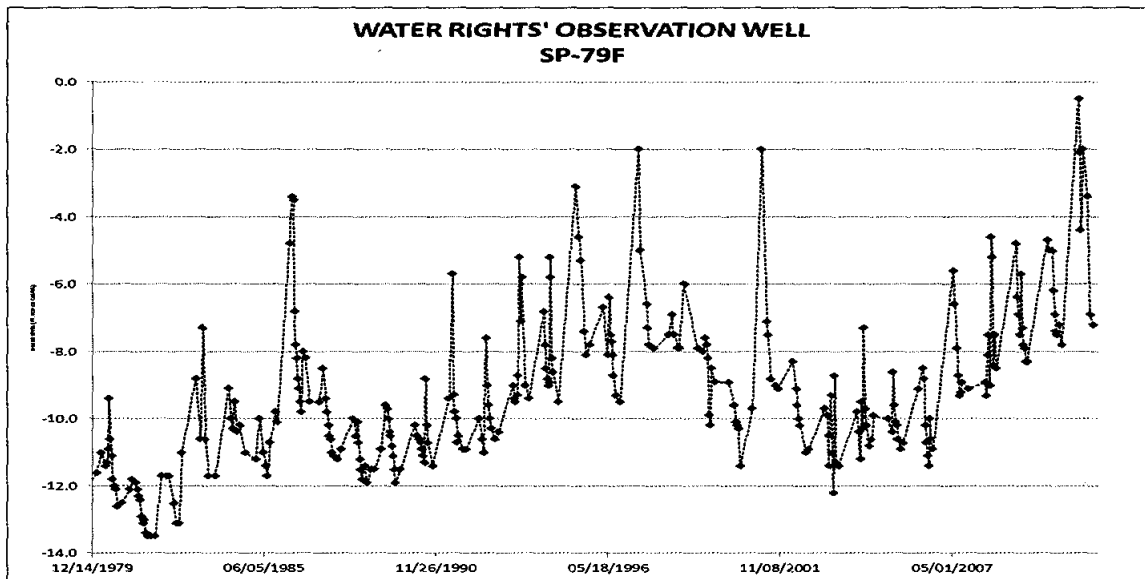


Figure 9. DENR-Water Rights' observation well completed into the unconfined portion of the Tulare:Western Spink/Hitchcock aquifer

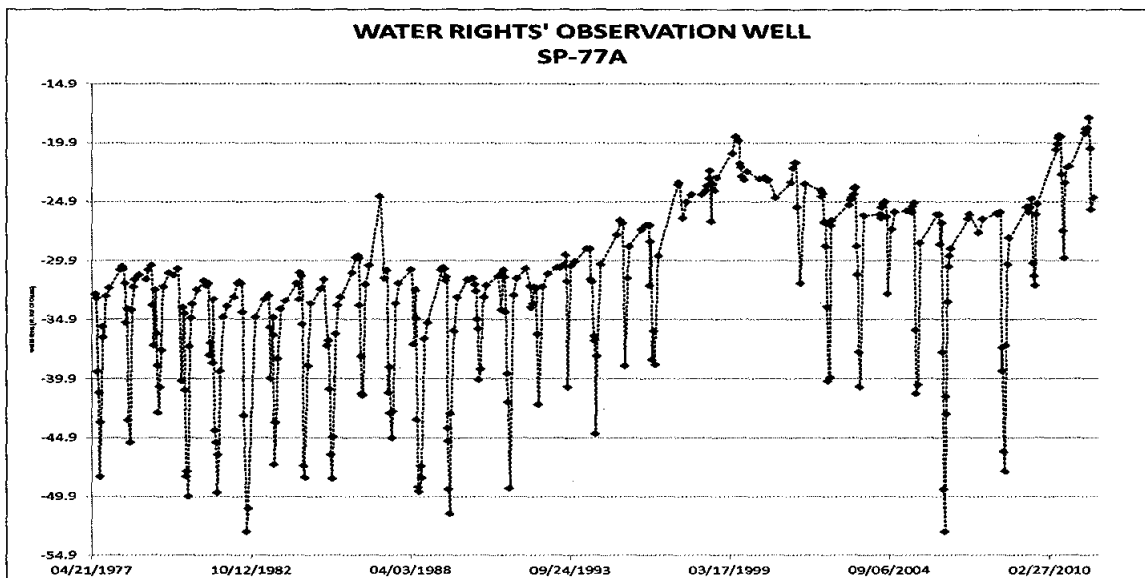


Figure 10. DENR-Water Rights' observation well completed into the confined portion of the Tulare:Western Spink/Hitchcock aquifer

Regardless, these permits, if approved should contain the standard permit qualification for most groundwater permits/rights which states:

"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".

CONCLUSIONS:

1. The best information currently available indicates the Tulare: Western Spink/Hitchcock aquifer underlies approximately 263,016 acres of Beadle, Spink, and Hand Counties.
2. The best information currently available identifies an average annual recharge rate to the Tulare: Western Spink/Hitchcock aquifer as 0.83 inches per year.
3. The volume of average annual recharge to the Tulare: Western Spink/Hitchcock aquifer based on an area of 263,016 acres and a recharge rate of 0.83 inches per year is approximately 18,192 acre-feet per year.
4. The average annual irrigation application rate for the Tulare: Western Spink/Hitchcock aquifer from 1979-2011 has been 9.32 inches per year.
5. The maximum **average** annual irrigation withdrawal based on a recharge of 18,192 acre-feet per year and an application rate of 9.32 inches per year would allow for the irrigation of 23,423 acres.
6. The best information available to determine the amount of unappropriated water available from the Tulare: Western Spink/Hitchcock aquifer is through analysis of observation well data.
7. The analysis of DENR-Water Rights' observation well data identifies that the over the period of record of 2003- 2011, average annual recharge to the aquifer has exceeded the average annual withdrawals from the aquifer by approximately 3,640 ac-ft/yr acre-feet per year.
8. The observation well data indicates that another 4,686 acres could have been irrigated over the time period of 2003- 2011, at an average application rate of 9.32 inches per year.
9. Since 810 additional acres were authorized in 2012, the actual number of additional acres that can be irrigated from the Tulare: Western Spink/Hitchcock aquifer is 3,877 acres.
10. The permit applications described on pages 1-3 of this report propose to irrigate a total of 2,131 acres.
11. Additional irrigation withdrawals are not expected to impair existing users.



Ken Buhler
SD DENR-Water Rights Program

REFERENCES:

- Buhler, K.A., 2012a, Report on Water Permit Application No. 7289-3, Bixler Farms; Nos. 7290-3 and 7291-3, Lee Gatzke; No. 7293-3, Jeffery Gatzke; and No. 7292-3, Allen Gatzke; April 25, 2012: SD DENR-Water Rights Program
- Buhler, K.A., 2012b, Report to the Chief Engineer on Water Permit Application No. 7295-3, William F. St. Clair; No. 7316-3, Van Buskirk Farms LLP; No. 7348-3, Michael Sentell; No. 7364-3, Wipf Acres LP; No. 7365-3, Huron Colony; No. 7366-3, Huron Colony; No. 7367-3, Huron Colony; No. 7368-3 Huron Colony; No. 7369-3 Huron Colony; and No. 7370-3 Huron Colony; August 23, 2012: SD DENR-Water Rights Program

Circuit Court of South Dakota, Sixth Judicial Circuit, 2005, April 29, 2005 Memorandum Decision
re: HU04-37 Hines v. SD Department of Environment and Natural Resources

Goodman, J.A., 2002, Report on Water Permit Nos 6330-3, 6331-3, 6332-3, 6336-3, 6337-3, 6338-3, 6339-3, 6340-3, 6343-3, 6344-3, 6345-3, 6346-3, 6348-3, 6353-3 for Water From the Tulare Hitchcock Aquifer and Water Permit Nos. 6333-3, 6334-3, 6347-3, 6351-3, 6352-3 for Water From the Tulare Western Spink Aquifer, September 10, 2002: SD DENR-Water Rights Program

Kuiper, L.K. 1984, Appraisal of the Water Resources of The Eastern Part of the Tulare Aquifer, Beadle, hand, and Spink Counties, South Dakota: U.S. Geological Survey Water-Resources Investigations Report 84-4078, 52 p.

Mathiowetz, A.W. 2012. Unpublished data. Pierre, SD.: South Dakota Department of Environment and Natural Resources Water Rights Programs.

“Transmissivity from Specific Capacity.” Aquifer Test Forum sponsored by HydroSOLVE, Inc.
28 January.2013< <http://www.aqtesolv.com/forum/transcap.asp>

Water Rights, 2004-2012, Irrigation Questionnaire Summaries 2003-2011, SD DENR-Water Rights Program, Joe Foss Bldg, Pierre, SD.

Water Rights, 2013a, Observation Well Files, SD DENR-Water Rights Program, Joe Foss Bldg, Pierre, SD.

Water Rights, 2013b, Water Well Completion Reports, SD DENR-Water Rights Program, Joe Foss Bldg, Pierre, SD.

Water Rights, 2013c, Water Right/Permit Files, SD DENR-Water Rights Program, Joe Foss Bldg, Pierre, SD.



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

denr.sd.gov

JUN 20 2013

Gary Marshall
Marshall Brothers
19032 388th Ave
Hitchcock SD 57348

Dear Mr. Marshall:

Enclosed are Water Permit Nos. 7570-3 thru 7575-3 and 7637-3 thru 7640-3 authorizing construction of your water diversion systems and beneficial use of the water, not exceeding the limits as specified in the Water Permits.

Form 10's, *Notice of Completion of Works and Application of Water to Beneficial Use*, are enclosed. Please return the completed forms after you have finished the systems and have put the water to beneficial use. An investigation can then be scheduled so the water licenses may be issued, thus completing the acquisition of a water right.

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

Sincerely,

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

enclosures



**DEPARTMENT OF ENVIRONMENT
and NATURAL RESOURCES**

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

denr.sd.gov



November 25, 2014

Gary Marshall
19032 388th Avenue
Hitchcock SD 57348

Dear Gary:

DENR received your request for an additional well under Water Permit No. 7574-3. This permit appropriates 800 gallons per minute to irrigate 160 acres in the NE ¼ Section 35, T114N, R64W.

While you do not know the precise location of the 2nd well, please mark the location you would like the additional well to be drilled. Also, please answer the questions on the attached sheet and submit them along with the map in the self-addressed stamped envelope.

I realize some of these questions seem obvious but DENR needs to properly document the request for an additional well.

Sincerely,

COPY

Eric Gronlund
Water Rights Program, DENR
605 773-3352
Eric.gronlund@state.sd.us

Enclosures



NE 1/4 Sec 35 1/4-64

RECEIVED

DEC 03 2014

WATER RIGHTS
PROGRAM

Request for additional well under Water Permit No. 7574-3

1. Will the combined diversion rate from the two wells exceed 800 gallons per minute?

no

2. Will the number of acres exceed the authorized 160 acres?

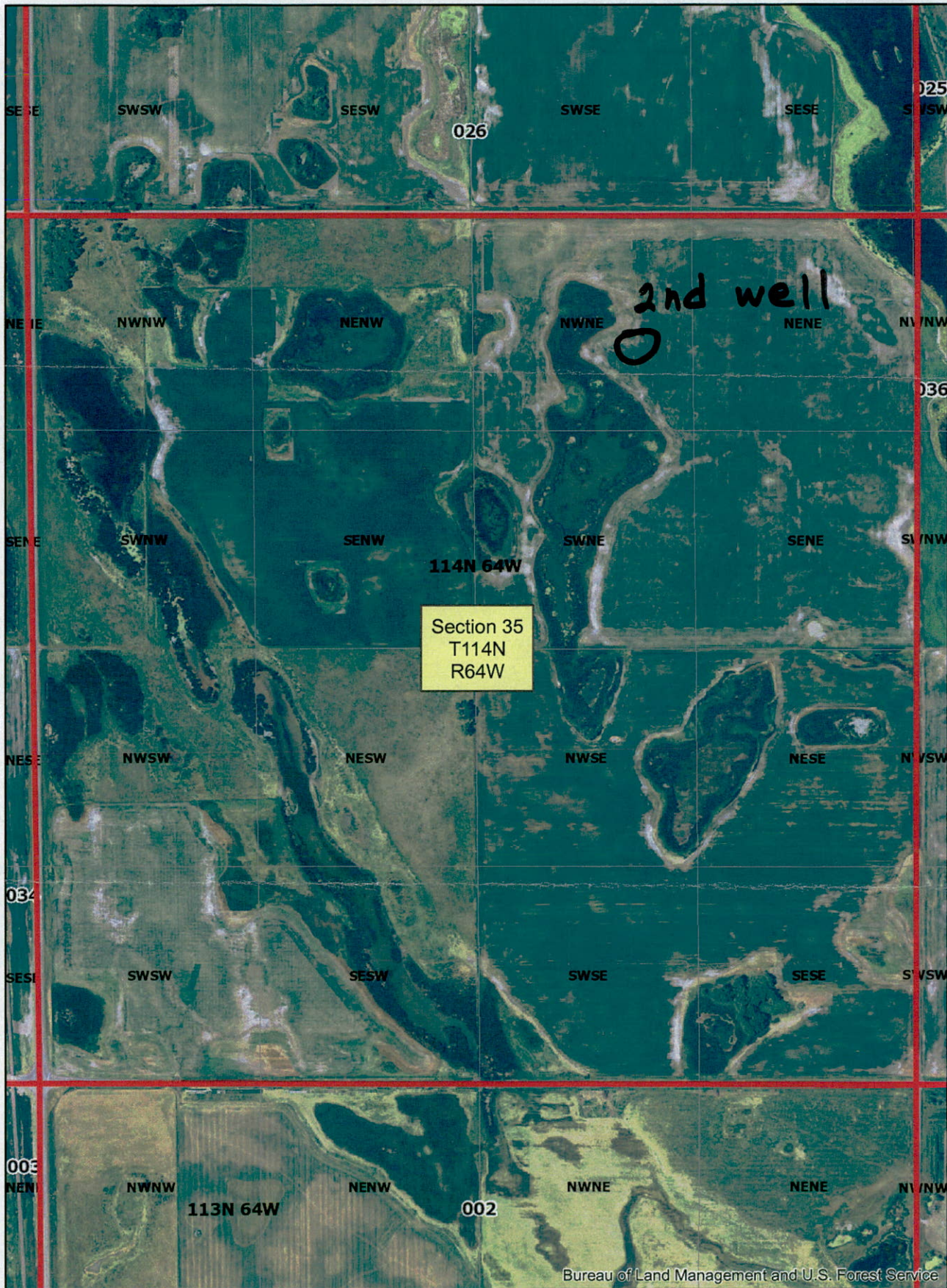
no

3. Will the well be completed into the Tulare Western Spink Hitchcock aquifer at the approximate depth of the first well (80 feet)?

yes

80' to 100'

Signature Marshall Brothers by Gary Marshall



RECEIVED

NOV 20 2014

WATER RIGHTS
PROGRAM

Date: 11-19-14

Mr. Eric Gronlund,

Marshall Brothers is requesting an additional well on the NE ¼ of 35-114-64, water permit number 7574-3. Location of the additional well will probably be NWNE of the NE ¼ of 35-114-64. The first well, which produces approximately 300 gpm, does not produce enough water to operate a pivot properly, so an additional well is required.

Sincerely,

A handwritten signature in cursive script that reads "Gary Marshall".

Gary Marshall

File No. 7574-3

Approval of Additional Diversion Points

NAME: The Marshall Brothers

ADDRESS: 19032 388th Ave, Hitchcock SD 57348

DATE: December 11, 2014

COUNTY: Spink

TELEPHONE: (605) 350-1401

BACKGROUND:

Water Permit No. 7574-3 appropriates 1.78 cubic foot per second (cfs) from one well completed into the Western Spink/Hitchcock Management Unit of the Tulare aquifer at a depth of approximately 80 feet below ground surface. Water from this well, located in the center of the NE ¼ of Section 35, T114N-R64W is for the irrigation of 160 acres in the NE ¼ of the same section. Water Permit No. 7574-3 was conditioned with the standard well interference, well completion, and irrigation questionnaire qualifications.

Gary Marshall submitted a letter to the South Dakota DENR Water Rights Program requesting the addition of one well to Water Permit No. 7574-3. This well will be constructed in the NW ¼ NE ¼ of Section 35, T114N-R64W to a depth of 80 to 100 feet below the ground surface. The basis behind the request is that the existing well is incapable of supplying the 800 gallon per minute (gpm) diversion rate authorized by Water Permit No. 7574-3. The new well will supplement the diversion capacity of the originally permitted well but will not increase the permitted diversion rate.

AUTHORITY:

Pursuant to SDCL 46-5-13.1, the location of a diversion point may be changed or additional points may be approved provided the following conditions are met and the potential for interference with other existing diversion points is not increased.

- **Developed water source is the same as permitted source and no additional water is appropriated.**

The water source authorized by Water Right No. 7574-3 is the Western Spink/Hitchcock Management Unit of the Tulare aquifer. The depth of the additional well is consistent with drawing water from the Western Spink/Hitchcock Management Unit of the Tulare aquifer.

No additional appropriation of water is authorized. Water Right No. 7574-3 appropriates 1.78 cfs and no additional diversion rate authority is being requested.

Review of Existing Diversions

The well completion report and water rights databases were reviewed for the nearest domestic wells and water rights/permits on file. The nearest production well not controlled by the Marshall Brothers is located approximately 1.3 miles to the east and is held by Van Buskirk

Farms LLP under Water Permit No. 7315-3. The nearest domestic well known to the Water Rights Program is located approximately 1.1 miles to the northeast. In addition to no additional diversion rate authority being requested, these distances are expected to be sufficient in order to avoid unlawful interference as a result of constructing the proposed additional diversion point.

Observation Well Data

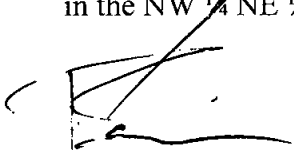
The Water Rights Program monitors a series of observation wells completed into the Western Spink/Hitchcock Management Unit of the Tulare aquifer. The closest observation well completed into this aquifer (SP-78D) is located approximately 1.1 miles to the north of the proposed well site. This well has been in place since 1978 and shows static water level fluctuations of 13 to 41 feet below the top of the casing. Historic water levels in SP-78D show the effects of pumping but appear to be predominately controlled by climatic conditions.

CONCLUSION:

- The additional diversion point does not propose to appropriate additional water.
- The additional diversion point will be pumping water out of the same source, the Western Spink/Hitchcock Management Unit of the Tulare aquifer.
- Unlawful impairment of existing water rights/permits and domestic wells is not expected to occur.

RECOMMENDED ACTION:

Based on the above criteria, it is recommended that the request for an additional diversion point in the NW ¼ NE ¼ of Section 35, T114N-R64W be approved.



Bracken Capen
Natural Resources Engineer

The Chief Engineer makes a finding pursuant to SDCL 46-5-13.1 and ARSD 74:02:01:14:01 that: The additional diversion point does not increase the potential for adverse effects to existing diversions.



Jeanne Goodman, Chief Engineer
Water Rights Program



**DEPARTMENT OF ENVIRONMENT
and NATURAL RESOURCES**

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



December 11, 2014

7574-3

The Marshall Brothers
c/o Gary Marshall
19032 388th Ave.
Hitchcock, SD 57348

Dear Mr. Marshall:

Water Permit No. 7574-3 appropriates 1.78 cubic feet per second (cfs) from one well completed into the Western Spink/Hitchcock Management Unit of the Tulare aquifer at a depth of approximately 80 feet below ground surface. Water from this well, located in the center of the NE $\frac{1}{4}$ of Section 35, T114N-R64W is for the irrigation of 160 acres in the NE $\frac{1}{4}$ of the same section. Water Permit No. 7574-3 was conditioned with the standard well interference, well completion, and irrigation questionnaire qualifications.

On November 19, 2014, you submitted a letter requesting an additional well in the NW $\frac{1}{4}$ NE $\frac{1}{4}$ of Section 35, T114N-R64W to supplement the flow of water from the existing well, which you claim only produces approximately 300 gallons per minute (gpm) of the 800 gpm authorized under Water Permit No. 7574-3. You have indicated that this new well will be completed to a similar depth of 80-100 feet below ground surface.

Upon review of the request and pursuant to SDCL 46-5-13.1, the additional well location is authorized without application or publication of a notice of hearing pursuant to SDCL 46-2A-4. No increase in the authorized diversion rate of 1.78 cfs under Water Permit No. 7574-3 has been requested or approved. The Western Spink/Hitchcock Management Unit of the Tulare aquifer is currently fully appropriated. Any request for additional diversion of water will not receive a favorable recommendation.

If you have any questions, please contact Bracken Capen at (605) 773-3352.

Sincerely,

Jeanne Goodman
Chief Engineer
Water Rights Program

RECEIVED

MAY 05 2015

WATER RIGHTS
PROGRAM

NOTICE OF TRANSFER OF OWNERSHIP

To: Chief Engineer
Water Rights Program, DENR
523 E. Capitol
Pierre, SD 57501-3181

No. 7574-3

Date: 4-30-15

I/We request that Water Permit No. 7574-3

formerly owned by: Marshall Brothers

be transferred to: (name & address) Terry Marshall, 38735 SD Hwy 28N, Hitchcock SD 57348

Telephone No. _____

Title to the following described land(s)/property has been transferred as described above:

160 acres – NE ¼ Section 35, T114N, R64W

I/We understand that the validity of Water Permit No. 7574-3 has not been determined by this transfer action. If I/We have any questions on validity, I/We understand that only the Water Management Board has the authority to determine if a water permit/right is valid (see note).

You are requested to file this "Notice of Transfer" in the appropriate file with the Water Rights Program, as evidence of the change of ownership.

A fee of Fifty Dollars (\$50.00) is required to cover the filing fees as required under SDCL 46-2-13. This form must be signed by the new owner.

I/We Terry Marshall, the new owner, certify that the above information is true and correct.

Terry Marshall
(Signed by new owner)

NOTE: Water permits may be cancelled for nonconstruction after the five year construction period has expired. Once a water permit is developed and the water used, the permit becomes a right. A water right may be lost for three reasons:

1. Abandonment - no intent to use water and use is abandoned.
2. Forfeiture - no use of water for three year period without legal excuse.
3. For a third violation of a condition of a water permit/right.

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date 5/5, 20 15

RECEIVED OF Farm Credit Services PO Box 1317 Huron SD 57530

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

Fee for Application for Permit No. _____ to Appropriate Water, to construct and to put water to beneficial use	50	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 <u>7574-3</u>		
Fee for _____		
Fee for Issuing New Well Driller's License No. _____ for C.Y. _____	50	00
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	50 00

No. 07380

By *J. Lee Holcomb*
Chief Engineer



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

denr.sd.gov

May 7, 2015

7570-3

7574-3

7717-3

Terry Marshall
38735 SD Hwy 28N
Hitchcock SD 57348

Dear Mr. Marshall:

I am writing to acknowledge receipt of the transfer forms and filing fees submitted for Water Permit Nos. 7570-3, 7574-3 and 7717-3.

The ownership changes have been completed as follows:

- No. 7570-3 transferred from Terry Wieting to Terry Marshall
- No. 7574-3 transferred from Marshall Brothers to Terry Marshall
- No. 7717-3 transferred from Terry Wieting to Terry Marshall

The ownership change submitted for portions of Water Permit No. 7575-3 is being processed separately. This is done in part because the permit will need to be divided and reissued to reflect separate ownership (No. 7575A-3 - Terry Marshall and No. 7575B-3 - Gary Marshall).

Receipts for the filing fees are being forwarded by copy of this letter to Farm Credit Services in Huron. If you have any questions concerning the ownership changes, please get in touch with me.

Sincerely,

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

c: Farm Credit Services, PO Box 1317, Huron SD 57350
w/Receipt Nos. 07385, 07386 & 07388

-1574-3

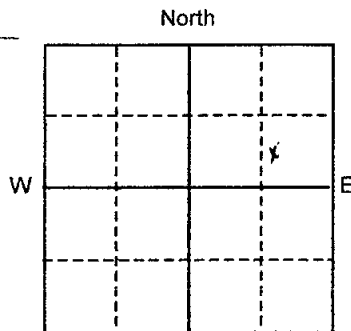
SD EForm - 1621LD V1

SOUTH DAKOTA WATER WELL COMPLETION REPORT

11-02

Location SE 1/4 NE 1/4 Sec 35 Twp 114 Rg 64County Spink

Please mark well location with an "X"



Well Completion Date

6-15-14

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 Circulation

CASING DATA:

☐ Steel ☒ Plastic ☐ Other

If other describe _____

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
LB/FT <u>16</u>	IN <u>16</u>	FT <u>90</u>	FT <u>120</u>	IN <u>29</u>
LB/FT _____	IN _____	FT _____	FT _____	IN _____
LB/FT _____	IN _____	FT _____	FT _____	IN _____

GROUTING DATA:

Grout Type	No. of Sacks	Grout Weight	From	To
<u>BH 20</u>		Lb/gal <u>10</u>	Ft <u>90</u>	Ft <u>44</u>
		Lb/gal _____	Ft _____	Ft _____

Describe grouting procedure

Press Grout

SCREEN:

☐ Perforated pipe ☒ Manufactured
 Diameter 16 Inches Length 30 Feet
 Material SS
 Slot Size 1.25 Set From 90 Feet to 120 Feet

Other information

Johnson Wire Wrap

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? Pellets
☐ No, Why Not? _____
 Lab to which water quality sample sent for analysis _____
Well Owner: Gary Marshall

Business Name: _____

Address: 19032 388th AveCity, State, Zip: Hitchcock SD 57348

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
<u>Top Soil</u>	<u>0</u>	<u>3</u>
<u>Silty sandy clay</u>	<u>3</u>	<u>30</u>
<u>F-M-C Sand - Silty sand</u>	<u>30</u>	<u>56</u>
<u>S&G</u>	<u>56</u>	<u>82</u>
<u>Silty sand w/lt m-c sand</u>	<u>82</u>	<u>90</u>
<u>M-C Sand - F-M Gravel</u>		
<u>W-C s&lt</u>	<u>90</u>	<u>120</u>

STATIC WATER LEVEL

22

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: Raw hole + over pump
☐ Bailed
☐ Other

Pumping Level Below Land Surface

102 Ft. After 8 Hrs. pumped 650 GPM110 Ft. After 12 Hrs. pumped 875 GPM

If pump installed, pump rate: _____ GPM

REMARKS

RECEIVED

FEB 06 2015

WATER RIGHTS PROGRAM

This well was drilled under license # 806 and this report is true and accurate.Drilling firm: Med-Northern Drilling & Sealing

Signature of License Representative: _____

Signature of Well Owner or Equitable Property Holder:

Gary MarshallDate: 7-1-14

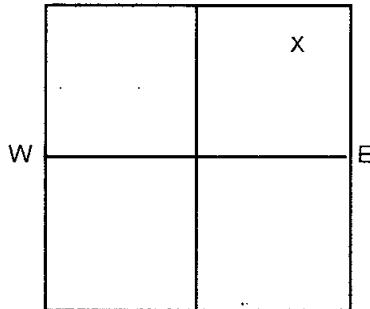
2-12-15

SOUTH DAKOTA WATER WELL COMPLETION REPORT

11-02

Location NE 1/4 NE 1/4 Sec 35 Twp 114 Rg 64County Spink

North

Please mark well
location with an "X"

Well Completion Date

8/28/2015

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	16 IN	0 FT	80 FT	25 IN
LB/FT	16 IN	90 FT	100 FT	25 IN
LB/FT	IN	FT	FT	IN

GROUTING DATA:

Grout Type	No. of Sacks	Grout Weight	From	To
DF Grout	50	Lb/gal	0 Ft	76 Ft
		Lb/gal	Ft	Ft

Describe grouting procedure _____

SCREEN:

☐ Perforated pipe ☒ Manufactured
Diameter 16 Inches Length 24 FeetMaterial Sch 40Slot Size 0.060 Set From 80 Feet to 90 Feet

Other information Screen also from 100-114

WAS A PACKER OR SEAL USED?

☒ Yes ☐ No
If so, what material? Pea Rock

Describe packer(s) and location

76-114

DISINFECTION: Was well disinfected upon completion?

☒ Yes, How? Granular
☐ No, Why Not?

 Lab to which water
 quality sample sent for analysis
Well Owner: Terry MarshallBusiness Name: Marshall BrothersAddress: 19032 388th AveCity, State, Zip: Hitchcock ☒ SD ☒ 57348

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
Yellow Sand	0	6
Yellow Clay	6	18
Blue Clay w/ Rocks	18	61
Gravel	61	66
Blue Clay w/ S/S & Rocks	66	80
Coarse Sand & Gravel	80	90
Blue Clay	90	101
Gravel	101	103
Gravel & Coal	103	114

STATIC WATER LEVEL

35

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: _____ GPM

REMARKS

RECEIVED

JAN 27 2016

WATER RIGHTS
PROGRAMTULARE, WESTERN SPINK/HITCHCOCK RDThis well was drilled under license # 440 and this report is true and accurateDrilling firm: Pullman Drilling IncSignature of License Representative: Ken Palmer

Signature of Well Owner or Equitable Property Holder: _____

Date: _____

SOUTH DAKOTA WATER WELL COMPLETION REPORT 7574-3 11-02

Location NE 1/4 NE 1/4 Sec 35 Twp 114N Rg 64WWell Owner: Jerry Marshall

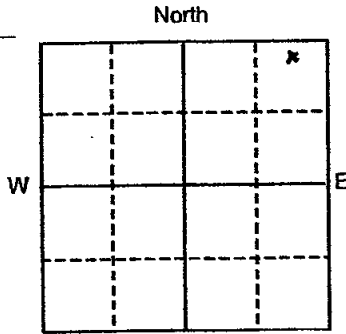
Business Name:

Address:

City, State, Zip:

County Spink

Please mark well location with an "X"



Well Completion Date

2-6-17

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

5500 ft. from farm yard (identify source)

PROPOSED USE:

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

METHOD OF DRILLING:

Forward Rotary

CASING DATA:

If other describe

☐ Steel ☒ Plastic ☐ Other

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
<u>SDR 21</u> LB/FT	<u>4</u> IN	<u>0</u> FT	<u>113</u> FT	<u>7</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>Benoto</u>	<u>3</u>	<u>9.5</u> Lb/gal	<u>0</u> Ft	<u>25</u> Ft
<u>Grout well</u>		Lb/gal	Ft	Ft

Describe grouting procedure

SCREEN:

☐ Perforated pipe ☒ Manufactured
 Diameter 4 Inches Length 20 Feet

 Material PVC
 Slot Size 1040 Set From 93 Feet to 113 Feet

Other information

#50 Red Flint PackWAS 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 LOG:

DEPTH

FORMATION	FROM	TO
<u>Top Soil</u>		
<u>Yellow clay</u>	<u>0</u>	<u>2</u>
<u>Blue clay</u>	<u>1</u>	<u>15</u>
<u>Blue clay fill (Rocky)</u>	<u>15</u>	<u>26</u>
<u>Coarse Gravel</u>	<u>26</u>	<u>64</u>
<u>Blue clay fill</u>	<u>64</u>	<u>71</u>
<u>Coarse Gravel</u>	<u>71</u>	<u>72</u>
<u>Blue clay fill</u>	<u>72</u>	<u>80</u>
<u>Medium Sand</u>	<u>80</u>	<u>113</u>

STATIC WATER LEVEL 5 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

23 Ft. After 24 Hrs. pumped 100 GPM

_____ Ft. After _____ Hrs. pumped _____ GPM

If pump installed, pump rate: _____ GPM

REMARKS Blue clay 113

RECEIVED

FEB 24 2017

WATER RIGHTS PROGRAM

Tulare: Western Spink/Hitchcock AM

This well was drilled under license # 285 and this report is true and accurate.Drilling firm: Manikowski Well Drilling, Inc.

Signature of License Representative:

Signature of Well Owner or Equitable Property Holder:

Date:

2-17-17

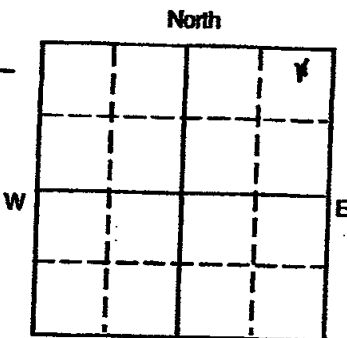
SOUTH DAKOTA WATER WELL COMPLETION REPORT

7574-3 11-02

Location NE 1/4 NE 1/4 Sec 35 Twp 14N Rg 64W

County Spink

Please mark well location with an "X"



1 Mile

Well completion Date

2-8-17

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

25,000 ft. from Farm yard (identify source)

PROPOSED USE:

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

METHOD OF DRILLING:

Forward Rotary

CASING DATA:

☐ Steel ☒ Plastic ☐ Other

If other describe

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
SDR 21 LB/FT	12 IN	7.2 FT	9.3 FT	17 1/2 IN
LB/FT	IN	FT	FT	IN
LB/FT	IN	FT	FT	IN

GROUTING DATA:

Grout Type Portland Cement No. of Sacks 16 Grout Weight 9.8 Lb/ft 0 Ft 78 Ft
Grout Seal Lb/ft 0 Ft 0 Ft

Describe grouting procedure Tremie Line Bottom To Top

SCREEN:

☐ Perforated pipe ☒ Manufactured

Diameter 12 Inches Length 20 Feet

Material stainless steel

Slot Size 1040 Set From 93 Feet to 113 Feet

Other information Red flint #50 slot pack

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 analysis

Well Owner:

Terry Marshall

Business Name:

Address 1:

38735 SD Hwy 28

Address 2:

Hitchcock, SD 57348

City, State, Zip:

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
<u>Top Soil</u>	<u>0</u>	<u>2</u>
<u>yellow clay</u>	<u>2</u>	<u>14</u>
<u>Blue clay</u>	<u>14</u>	<u>26</u>
<u>Blue clay Till (Rocky)</u>	<u>26</u>	<u>64</u>
<u>Coarse Gravel</u>	<u>64</u>	<u>66</u>
<u>Blue clay Till</u>	<u>66</u>	<u>71</u>
<u>Coarse Gravel</u>	<u>71</u>	<u>72</u>
<u>Blue clay Till</u>	<u>72</u>	<u>80</u>
<u>Medium Sand</u>	<u>80</u>	<u>113</u>

STATIC WATER LEVEL

5 FEET

If flowing: closed in pressure

PSI

GPM flow

6 through

6 inch pipe

Controlled by

☐ Valve

☐ Reducers

☐ Other

Reduced flow rate

GPM

Can well be completely shut in?

WELL TEST DATA:

☒ Pumped

Describe:

Submersible Pump

☐ Bailed

☐ Other

Pumping Level Below Land Surface

80.6 Ft. After 17 Hrs. pumped 830 GPM

Ft. After _____ Hrs. pumped _____ GPM

If pump installed, pump rate:

GPM

REMARKS

RECEIVED

FEB 24 2017

Tulare: Western Spink/Hitchcock

WATER RIGHTS
AM PROGRAM

This well was drilled under license #

285

And this report is true and accurate.

Drilling firm:

Manikowski Well Drilling, Inc.

Signature of License Representative:

Signature of Well Owner or Equitable Property Holder:

Date:

2/14/17

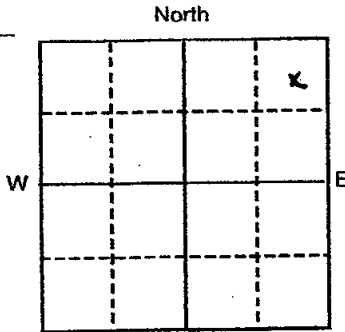
523 E. Capitol Ave., Pierre SD 57501

Please return White Copy to DENR Water Rights

SOUTH DAKOTA WATER WELL COMPLETION REPORT 7574-3 11-02

Location NE 1/4 NE 1/4 Sec 35 Twp 114N Rg 46WCounty SPINK

Please mark well location with an "X"



Well Completion Date

2-2-17Distance to nearest potential pollution source (septic tank, abandoned well, feed lot, etc.)?
5000 ft. from Farm yard (identify source)

PROPOSED USE:

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

METHOD OF DRILLING:

Forward Rotary

CASING DATA:

☐ Steel ☐ Plastic ☐ Other
 If other describe none installed

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
LB/FT	IN	FT	FT	IN
				<u>4 3/4</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>Grout well</u>	<u>3</u>	<u>9.8</u> Lb/gal	<u>0</u> Ft	<u>120</u> Ft
<u> Bentonite</u>		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 to which water quality sample sent for analysis _____

Well Owner: Jerry Marshall

Business Name: _____

Address: 38735 SD Hwy 28City, State, Zip: Hitchcock, SD 57348

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
<u>Top Soil</u>	<u>0</u>	<u>2</u>
<u>Yellow clay</u>	<u>2</u>	<u>15</u>
<u>Blue clay</u>	<u>15</u>	<u>24</u>
<u>Blue clay till</u>	<u>24</u>	<u>90</u>
<u>with sand & gravel layers</u>	<u>24</u>	<u>90</u>
<u>Medium sand</u>	<u>90</u>	<u>110</u>
<u>Fine sand</u>	<u>110</u>	<u>115</u>
<u>Blue clay</u>	<u>115</u>	<u>120</u>

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: _____ GPM

REMARKS

RECEIVED

FEB 24 2017

WATER RIGHTS PROGRAM

Tulare Western Spine / Hitchcock AmThis well was drilled under license # 285 and this report is true and accurate.Drilling firm: Manikowski Well Drilling, Inc

Signature of License Representative: _____

Signature of Well Owner or Equitable Property Holder: _____

Signature of Well Owner or Equitable Property Holder: _____

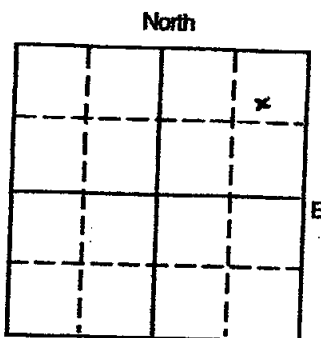
Date: 2-11-17

SOUTH DAKOTA WATER WELL COMPLETION REPORT 7574-311-02

Location NE 1/4 NE 1/4 Sec 35 Twp 114N Rg 64W

County Spink

Please mark well location with an "X"



Well completion Date 2-1-17

1 Mile

Distance from nearest potential pollution source (Septic tank, abandoned well, feed lot, etc.)
2500 ft from Farm yard (identify source)

PROPOSED USE:

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

METHOD OF DRILLING:

forward Rotary
None installed

CASING DATA:

☐ Steel ☐ Plastic ☐ Other

If other describe None installed

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 Portland Cement No. of Sacks 5 Grout Weight 9.5 Lb/gal From 0 Ft To 160 Ft
Grout Lb/gal Ft Ft

Describe grouting procedure Thru pipe line

Bottom to Top

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 analysis _____

Well Owner: Terry Marshall

Business Name: _____

Address1: 38735 SD Hwy 28

Address2: _____

City, State, Zip: Hitchcock, SD 57348

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
<u>Top Soil</u>	<u>0</u>	<u>1</u>
<u>Yellow clay</u>	<u>1</u>	<u>15</u>
<u>Blue clay</u>	<u>15</u>	<u>20</u>
<u>Block clay till with</u>	<u>20</u>	<u>115</u>
<u>Gravel & sand layers</u>	<u>20</u>	<u>115</u>
<u>Fine to medium sand</u>	<u>123</u>	<u>139</u>
<u>Blue clay silty</u>	<u>139</u>	<u>160</u>

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: _____ GPM

REMARKS

Test hole nearest #1 East Production well

Tulare Western Spink/Hitchcock AM

This well was drilled under license # 285

And this report is true and accurate.

Drilling firm: Mani Kowski Well Drilling, Inc.

Signature of License Representative: _____

Dyn M. Ch.

Signature of Well Owner or Equitable Property Holder: _____

Date: 2-12-17

523 E. Capitol Ave., Pierre SD 57501

RECEIVED

FEB 24 2017

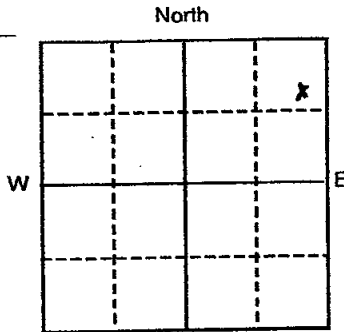
WATER RIGHTS PROGRAM

Please return White Copy to DENR Water Rights

SOUTH DAKOTA WATER WELL COMPLETION REPORT 7574-3 11-02

Location NE 1/4 NE 1/4 Sec 35 Twp 114 N Rg 64WCounty Spink

Please mark well location with an "X"



Well Completion Date

2-1-17

1 Mile

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

5000 ft. from Farm yard (identify source)

PROPOSED USE:

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

METHOD OF DRILLING:

Forward Rotary

CASING DATA:

☐ Steel ☐ Plastic ☐ Other
 If other describe none installed

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
LB/FT	IN	FT	FT	IN
				<u>4 3/4</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>Grout w/ cement</u>	<u>3</u>	<u>9.8</u> Lb/gal	<u>0</u> Ft	<u>120</u> Ft
<u>sealant</u>		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 to which water quality sample sent for analysis _____

Well Owner: Terry Marshall

Business Name: _____

Address: 38735 SD Hwy 28City, State, Zip: Hitchcock, SD 57348

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
<u>Top Soil</u>	<u>0</u>	<u>2</u>
<u>yellow clay</u>	<u>2</u>	<u>15</u>
<u>blue clay</u>	<u>15</u>	<u>30</u>
<u>Blue clay till with</u>	<u>30</u>	<u>90</u>
<u>sand layers</u>	<u>30</u>	<u>90</u>
<u>medium sand</u>	<u>90</u>	<u>103</u>
<u>Blue clay</u>	<u>103</u>	<u>120</u>

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: _____ GPM

REMARKS

Tulare Western Spink/HitchcockThis well was drilled under license # 285 and this report is true and accurate.Drilling firm: Manikowski Well Drilling, Inc.

Signature of License Representative: _____

Signature of Well Owner or Equitable Property Holder: _____

Date: 2-17-17

RECEIVED

FEB 24 2017

WATER RIGHTS PROGRAM

Permit No. 7574-3 and 7575A-3

Contact Person & Address: **Terry Marshall, 38735 SD HWY 28N, Hitchcock, SD 57348**

Report of Examination of Works

On, **July 9, 2019**, I made a thorough examination of the water use system constructed by **Terry Marshall** holder of Permit Nos. **7574-3 and 7575A-3**, each bearing the priority of **December 14, 2012** and each authorizing the diversion of **1.78** cu. ft. per second (cfs) of **groundwater (Tulare:Western Spink Hitchcock Aquifer)** for **irrigation** purposes, in **Spink** County.

The systems are in the following condition **good**. **Both permits utilize the same two wells**. The points of diversion are located as follows:

Left Well: from the NE corner of Section 35, T114N, R64W 1,068' South and 708' West with latitude of **44.64471** and a longitude of **-98.48658**

Right Well: from the NE corner of Section 35, T114N, R64W 520' South and 75' West with latitude of **44.64643** and a longitude of **-98.48383** as determined using **GPS**. The works are capable of diverting and conveying to the place of use **2.67** cfs. Water has been put to beneficial use to the maximum extent as follows:

Land located in **Sec 35, T114N, R64W (7574-3)**

NW ¼ NE ¼ - 33.5 ac NE ¼ NE ¼ - 33.5 ac SE ¼ NE ¼ - 33.5 ac SW ¼ NE ¼ - 33.5 ac

Land located in **Sec 36, T114N, R64W (7575A-3)**

NW ¼ SW ¼ - 33.5 ac NE ¼ SW ¼ - 33.5 ac SE ¼ SW ¼ - 33.5 ac SW ¼ SW ¼ - 33.5 ac

comprising a total of **268** acres of land and the license should be issued for **2.67** cfs.

Review of Permit Qualifications and Regulations:

- 1) Special qualifications to permit being abided by **yes**
- 2) All structures, wells and lands on map **yes**
- 3) Irrigation Questionnaires checked to determine if permit owner started irrigation by the end of construction period **yes**.
- 4) Exceptions to compliance are: **none**

Diversion Point Information:**Well Information:**

- 1) Well Drilling Firm: **Manikowski Well Drilling**
- 2) Well No. **1**
- 3) Depth **114** feet
- 4) Well log is available **yes**

Casing:

- 1) Diameter **16** inches
- 2) Length **90** feet
- 3) Type **PVC**

Screen:

- 1) Type **Stainless Steel**
- 2) Length **30** feet
- 3) Static water level **22** feet

Pump:

- 1) Make **submersible**
- 2) Model **na**
- 3) Size **na**
- 4) Capacity **400** GPM

Motor:

- 1) Make **na**
- 2) Model No. **na**
- 3) Horsepower rating **20** hp

- 1) Well Drilling Firm: Manikowski Well Drilling 2) Well No. 2 3) Depth 113 feet
4) Well log is available yes

Casing:

- 1) Diameter 12 inches 2) Length 93 feet 3) Type PVC

Screen:

- 1) Type Stainless Steel 2) Length 20 feet 3) Static water level 5 feet

Pump:

- 1) Make Submersible 2) Model na 3) Size na 4) Capacity 800 GPM

Motor:

- 1) Make na 2) Model No. na 3) Horsepower rating 50 hp

DISTRIBUTION LINES OR CANALS for Permit No 7574-3

- 1) Type PVC 2) Size 8-10 inches 3) Length 1,480 feet

SYSTEM TYPE:

Center pivot:

- 1) Make Valley 2) Overall length 1,298 feet
3) Number of towers 7 4) End gun yes
5) High or low pressure low 6) Capacity 1,200 GPM

DISTRIBUTION LINES OR CANALS for Permit No. 7575A-3

- 1) Type PVC 2) Size 8-10 inches 3) Length 4,000 feet

SYSTEM TYPE:

Center pivot:

- 1) Make Valley 2) Overall length 1280 feet
3) Number of towers 7 4) End gun yes
5) High or low pressure low 6) Capacity 1200 GPM

CHEMIGATION EQUIPMENT:

Valved but not used.

Comments: A second well was drilled to supply irrigation. Water Permit Nos. 7574-3 and 7575A-3 should be incorporated in one license

Terry Helms

Date Report Completed: August 21, 2019

Terry Helms
Water Rights Inspector
DENR, Water Rights Program

Water Right No. 7574-3 & 7575A-3, Terry Marshall



0 330 660 1,320 1,980 2,640 Feet



Terry D Helms

Terry D Helms, PE
Water Rights Inspector
DENR, Water Rights Program
July 25, 2019

Approval of Location Change of Diversion Point

NAME: Terry Marshall

ADDRESS: 38735 SD Hwy 28, Hitchcock SD 57348

DATE: August 30, 2019

COUNTY: Spink

TELEPHONE:

AUTHORITY:

Pursuant to SDCL 46-5-13.1, the location of a diversion point may be changed or additional diversion points may be licensed provided the following conditions are met and the potential for interference with other existing diversions is not increased:

Water Permit No. 7574-3 appropriates 1.78 cfs from a well to be completed in the Tulare:Western Spink Hitchcock aquifer located in the center of the NE 1/4 Section 35 to irrigate 160 acres in the NE 1/4 Section 35-T114N-R64W. A licensing investigation found a well located in the center of the NE 1/4 of Section 35 and a second well located in the NE 1/4 NE 1/4 Section 35-T114N-R64W. The investigation also found these two well are used to supply the irrigation authorized by Water Permit No. 7575A-3.

Water Permit No. 7575A-3 appropriates 1.78 cfs from a well to be completed in the Tulare:Western Spink Hitchcock aquifer located in the center of the SW 1/4 Section 36 to irrigate 160 acres in the SW 1/4 Section 36-T114N-R64W.

A licensing investigation found two wells located in the NE 1/4 NE 1/4 of Section 35-T114N-R64W supplying the two quarter sections authorized for irrigation. Both wells are used to supply water to the center pivots.

- **Developed water source same as permitted source and no additional water appropriated**

The water source remains the Tulare:Western Spink Hitchcock aquifer. The licensing investigation found the combined diversion rate from the two wells to be 2.67 cfs. The combined appropriation for Nos. 7574-3 and 7575A-3 is 3.56 cfs. Therefore no additional water is appropriated.

- **If irrigation, no new land is irrigated**

Water Permit No. 7574-3 authorized 160 acres of irrigation and the licensing investigation found 134 acres being irrigated. Water Permit no. 7575A-3 authorized 140 acres of irrigation and the licensing investigation found 134 acres being irrigated.

- **Review of Existing Diversions**

The nearest permitted well is located approximately 1/2 mile to the north and is also owned by Oscar Inc. Given the distance, drawdown from pumping will not increase the potential for adverse effects on neighboring wells.

RECOMMENDED ACTION

Based on the above criteria, it is recommended that the diversion point(s) be licensed as developed.



Eric Gronlund
Water Rights Program

The Chief Engineer makes a finding pursuant SDCL 46-5-13.1 and ARSD 74:02:01:14.01 that:

The change of diversion point does not increase the potential for adverse effects to existing diversions.



Jeanne Goodman, Chief Engineer
Water Rights Program

7574-3



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

FEB 24 2020

7574-3
7575A-3

Terry Marshall
38735 SD Hwy 28
Hitchcock SD 57348

Dear Mr. Marshall:

Enclosed is Water License No. 7574-3. 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 in the future, the owner of an existing well, constructs a replacement well and does not plan to use the old well, the old well is considered abandoned and must be plugged. Also, any well that is being used or is not considered abandoned must be valved and controlled, if flowing, or sealed and capped so that no leaking occurs either underground or at the surface.

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

Sincerely,

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

enclosures

Note: Upon licensing, the applicable portions of Water Permit No. 7575A-3 were incorporated into Water License No. 7574-3.

**STATE OF SOUTH DAKOTA
WATER LICENSE NO. 7574-3**

(1) Gary Marshall, Marshall Brothers, Hitchcock SD filed Application No. 7574-3, December 12, 2012 for a water permit to divert 1.78 cubic feet of water per second (cfs) from ground water, one well (Tulare Western Spink Hitchcock Aquifer), Spink County, South Dakota for irrigation purposes. Permit No. 7574-3, with a priority date of December 14, 2012 was approved May 2, 2013 and issued to the applicant for diversion of water with construction of the described water supply system to be completed on or before May 2, 2018 and for the application to beneficial use of water on or before May 2, 2022.

On May 5, 2015, Water Permit No. 7574-3 was transferred to Terry Marshall, 38735 SD Hwy 28, Hitchcock SD 57348.

Water Permit No. 7575A-3, with a priority date of December 12, 2012, authorizes diversion of 1.78 cfs from one well to be located in the SW ¼ Section 36 to irrigate 140 acres located in the SW ¼ Section 36, all in T114N, R64W.

In December 2014, a request was made and subsequently authorized to add a well in the NW ¼ NE ¼ Section 35, T114N, R64W to supplement the existing well located in the NE ¼ NE ¼ Section 35. An investigation of the water use systems for Water Permit Nos. 7574-3 and 7575A-3 found two wells located in the NE ¼ NE ¼ Section 35, T114N, R64W supplying water to both pivots.

Pursuant to SDCL 46-5-13.1 and ARSD 74:02:01:14.01, the Chief Engineer made a finding that the change in well location does not increase the potential for adverse effects to existing diversions and the overall project as developed is consistent with the original applications.

The applicable portions of Water Permit No. 7575A-3 are incorporated into this Water License No. 7574-3. The permits carry the same priority date for all land and diversion authority.

(2) It is certified that the permit holder has complied with the provisions of South Dakota State Law relating to completion of the water supply system and is entitled to divert 2.67 cubic feet of water per second for beneficial use. The diversion points are located as follows:

- 1,068'S and 708'W of the NE corner of Section 35, T114N, R64W (NE ¼ NE ¼)
Latitude: 44.64471, Longitude: -98.48658
- 520'S and 75'W of the NE corner of Section 35, T114N, R64W (NE ¼ NE ¼)
Latitude: 44.64643, Longitude: -98.48383

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

Section 35, T114N, R64W		Section 36, T114N, R64W	
NW ¼ NE ¼	33.5 acres	NW ¼ SW ¼	33.5 acres
NE ¼ NE ¼	33.5 acres	NE ¼ SW ¼	33.5 acres
SE ¼ NE ¼	33.5 acres	SE ¼ SW ¼	33.5 acres
SW ¼ NE ¼	33.5 acres	SW ¼ SW ¼	33.5 acres

Total acres irrigated – 268.0

Continued

(4) Pursuant to South Dakota Water Law 46-5-30.1 Terry Marshall, 38735 SD Hwy 28, Hitchcock SD 57348 the holder and/or owner of Incorporated Water Right No. 7574-3 is issued a license to appropriate water, the right to use 2.67 cubic feet of water per second from ground water, two wells (Tulare Western Spink Hitchcock Aquifer) with a priority date of December 14, 2012 from the locations 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. 7574-3 and 7575A-3 and subject to the following qualifications:

- The wells approved under this Water Right will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
- The wells authorized by Nos. 7574-3 and 7575A-3 shall be constructed by a licensed well driller and construction of the wells and installation of the pumps 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. ***Both wells were drilled by Manikowski Well Drilling. Copies of the well completion reports are on file with the Water Rights Program.***
- This Water Right 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

FEB 24 2020
date



McMath, Genny

From: Terry Marshall <terrymarshall61@icloud.com>
Sent: Friday, May 22, 2020 7:22 PM
To: McMath, Genny
Subject: Re: [EXT] Well location

I'd say the one is 400 gal and the other is at least 1000 if not 1200 so I'd be capable of $400+1200=1600$ divided by $2=800$ per pivot if running both at same time.

Sent from my iPhone

On May 22, 2020, at 1:11 PM, McMath, Genny <Genny.McMath@state.sd.us> wrote:

Hi Terry,

Well – I am back to work ½ days in the office now so am getting to these issues I had on hold till I got back to my files. I spoke with Eric Gronlund about the map you sent and the well log issue.

We are going to amend the license with the correct well location and also edit the report of examination of works. I do have more questions for you though.

In the report that Terry Helms wrote up, he put down one well was capable of 400 gpm and the second well was 800 gpm. He also put down the pivot capacity at 1200 gpm for each one. Does that seem right? I just want to make sure we don't short you on water.

Let me know when you get time.

Thanks Terry!

Genny McMath

Genny McMath

DENR – Water Rights Program

773-3352 (main phone)

773-5455 (desk phone)

Website: <https://denr.sd.gov/des/wr>

From: Terry Marshall <terrymarshall61@icloud.com>

Sent: Monday, March 23, 2020 11:17 AM

To: McMath, Genny <Genny.McMath@state.sd.us>

Subject: Re: [EXT] Well location

Genny

One other thing. It says both wells were drilled by Manikowski Well Drilling but the one that I drew in on map was actually drilled by Pullman Well Drilling from Wolsey. Thought I'd let you know.

Thanks Terry

McMath, Genny

From: Terry Marshall <terrymarshall61@icloud.com>
Sent: Monday, March 23, 2020 11:17 AM
To: McMath, Genny
Subject: Re: [EXT] Well location

Follow Up Flag: Follow up
Flag Status: Flagged

Genny

One other thing. It says both wells were drilled by Manikowski Well Drilling but the one that I drew in on map was actually drilled by Pullman Well Drilling from Wolsey. Thought I'd let you know.

Thanks Terry

Sent from my iPhone

On Mar 23, 2020, at 10:57 AM, McMath, Genny <Genny.McMath@state.sd.us> wrote:

Thanks-Terry. The map came through just fine and I will hold on to it until I can talk to Eric Gronlund and then we can get it fixed for you.

Genny

From: Terry Marshall <terrymarshall61@icloud.com>
Sent: Monday, March 23, 2020 10:55 AM
To: McMath, Genny <Genny.McMath@state.sd.us>
Subject: [EXT] Well location

Genny

I drew an X through wrong one and circled correct one.
Let me know if you get this. Thanks Terry

<image001.jpg>

Sent from my iPhone

Water Right No. 7574-3 & 7575A-3, Terry Marshall

Well Locations
from the NE corner Sec 35
Left well -
780 ft W, 1,068 ft S
Lat: 44.64470 Long: -98.48658
Right well -
75 ft W, 520 ft S
Lat: 44.64643 Long: -98.48383

Correct

NE 1/4

NW 1/4

Total Acres = 134 acres

Center
Sec 35-T114N-R64W

C
Sec 36-

Permit No. 7574-3 and 7575A-3Contact Person & Address: Terry Marshall, 38735 SD HWY 28N, Hitchcock, SD 57348**Report of Examination of Works**

On, July 9, 2019, I made a thorough examination of the water use system constructed by Terry Marshall holder of Permit Nos. 7574-3 and 7575A-3, each bearing the priority of December 14, 2012 and each authorizing the diversion of 1.78 cu. ft. per second (cfs) of groundwater (Tulare: Western Spink Hitchcock Aquifer) for irrigation purposes, in Spink County.

The systems are in the following condition good. Both permits utilize the same two wells. The points of diversion are located as follows:

West Well: from the NE corner of Section 35, T114N, R64W 1.425' South and 1.520' West with latitude of 44.64376 and a longitude of -98.48930

East Well: from the NE corner of Section 35, T114N, R64W 520' South and 75' West with latitude of 44.64643 and a longitude of -98.48383 as determined using GPS. The works are capable of diverting and conveying to the place of use 3.56 cfs. Water has been put to beneficial use to the maximum extent as follows:

Land located in Sec 35, T114N, R64W (7574-3)

NW 1/4 NE 1/4 - 33.5 ac NE 1/4 NE 1/4 - 33.5 ac SE 1/4 NE 1/4 - 33.5 ac SW 1/4 NE 1/4 - 33.5 ac

Land located in Sec 36, T114N, R64W (7575A-3)

NW 1/4 SW 1/4 - 33.5 ac NE 1/4 SW 1/4 - 33.5 ac SE 1/4 SW 1/4 - 33.5 ac SW 1/4 SW 1/4 - 33.5 ac

comprising a total of 268 acres of land and the license should be issued for 3.56 cfs.

Review of Permit Qualifications and Regulations:

- 1) Special qualifications to permit being abided by yes
- 2) All structures, wells and lands on map yes
- 3) Irrigation Questionnaires checked to determine if permit owner started irrigation by the end of construction period yes.
- 4) Exceptions to compliance are:

Diversion Point Information:**Well Information:**

- 1) Well Drilling Firm: Pullman Well Drilling
- 2) Well No. 1
- 3) Depth 114 feet
- 4) Well log is available yes

Casing:

- 1) Diameter 16 inches
- 2) Length 20 feet
- 3) Type PVC

Screen:

- 1) Type Stainless Steel
- 2) Length 24 feet
- 3) Static water level 35 feet

Pump:

- 1) Make submersible
- 2) Capacity 400 GPM

Motor:

- 1) Make & Model NA
- 2) Horsepower rating 20 hp

- 1) Well Drilling Firm: Manikowski Well Drilling 2) Well No. 2 3) Depth 113 feet
4) Well log is available yes

Casing:

- 1) Diameter 12 inches 2) Length 93 feet 3) Type PVC

Screen:

- 1) Type Stainless Steel 2) Length 20 feet 3) Static water level feet 5 feet

Pump:

Make Submersible 2) Model na 3) Size na 4) Capacity 1,200 gpm

Motor:

- 1) Make na 2) Model No. na 3) Horsepower rating 50 hp

DISTRIBUTION LINES OR CANALS for Permit No 7574-3

- 1) Type PVC 2) Size 8-10 inches 3) Length 1,480 feet

SYSTEM TYPE:

Center pivot:

- 1) Make Valley 2) Overall length 1,298 feet
3) Number of towers 7 4) End gun yes
5) High or low pressure: low 6) Capacity 800 GPM

DISTRIBUTION LINES OR CANALS for Permit No. 7575A-3

- 1) Type PVC 2) Size 8-10 inches 3) Length 4,000 feet

SYSTEM TYPE:

Center pivot:

- 1) Make Valley 2) Overall length 1280 feet
3) Number of towers 7 4) End Gun yes
5) High or low pressure: low 6) Capacity 800 GPM

CHEMIGATION EQUIPMENT: Valved but not used.

Comments: A second well was drilled to supply irrigation. Water Permit Nos. 7574-3 and 7575A-3 should be incorporated in one license

Terry D Helms

Date Report Completed: August 21, 2019

Terry Helms

Water Rights Inspector, DENR Water Rights Program

May, 2020:

Upon issuance of the water license, the water right holder notified the Water Rights Program of discrepancies in location of the west well, the driller, the capacity of the most easterly well and both pivots. Since the total water use of 1600 gpm was originally covered, the water license will be reissued to correct all of the discrepancies. This inspection report was also edited to correspond with the water right holders changes.

Approval of Location Change of Diversion Point

NAME: Terry Marshall**ADDRESS:** 38735 SD Hwy 28, Hitchcock, South Dakota, 57348**DATE:** June 3, 2020**COUNTY:** Spink**TELEPHONE:** 605-350-3100**BACKGROUND:**

Water Right No. 7574-3, which incorporated Water Permit No. 7575A-3, appropriates 2.67 cubic feet of water per second (cfs) from two wells to be completed into the Tulare: Western Spink Hitchcock aquifer located in the corner of the NE $\frac{1}{4}$ NE $\frac{1}{4}$ of Section 35-T114N-R64W to irrigate 268 acres located in Section 35 and Section 36; all in T114N-R64W. A licensing investigation found one well located in the top right corner of the SW $\frac{1}{4}$ NE $\frac{1}{4}$ of Section 35-T114N-R64W and the other well located in the middle of the right side of the NE $\frac{1}{4}$ NE $\frac{1}{4}$ of Section 35-T114N-R64W.

AUTHORITY:

Pursuant to SDCL 46-5-13.1, the location of a diversion point may be changed or additional diversion points may be licensed provided the following conditions are met and the potential for interference with other existing diversions is not increased:

- **Developed water source same as permitted source and no additional water appropriated**
The water source remains the Tulare: Western Spink Hitchcock aquifer. The licensing investigation found the wells capable of producing 2.67 cfs. Therefore, no additional water is appropriated.
- **If irrigation, no new land is irrigated** ^{3.56}
Water Right No. 7574-3 authorized 268 acres of irrigation and the licensing investigation found 268 acres being irrigated.
- **Review of existing diversions**
The location change moves the well farther from a well in Section 36-T114N-R64W that is authorized by Water Permit No. 7575B-3. The well is approximately 0.95 miles southeast and is owned by Gary Marshall. Given the further distance, drawdown from pumping should not increase the potential for unlawful impairment of neighboring wells.

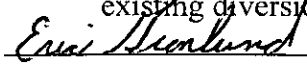
RECOMENNDDED ACTION:

Based on the above criteria, it is recommended that the diversion point be licensed as developed.

Nakaila Steen 
Water Rights Program

The Chief Engineer makes a finding pursuant SDCL 46:5:13.1 and ARSD 74:02:01:14:01 that:

This change in location of the diversion point does not increase the potential for adverse effects to existing diversions.


Eric Gronlund, Chief Engineer
Water Rights Program

Per land owner

7574-3 SD EForm - 1621LD V1

SOUTH DAKOTA WATER WELL COMPLETION REPORT

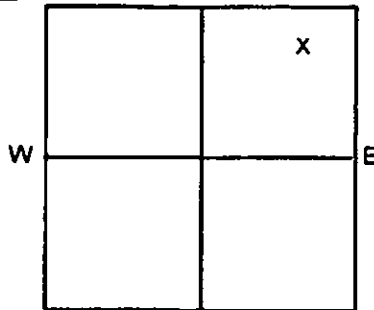
11-02

Location ~~NE~~ $\frac{1}{4}$ NE $\frac{1}{4}$ Sec 35 Twp 114 Rg 64SW $\frac{1}{4}$

County Spink



North

Please mark well
location with an "X"

Well Completion Date

8/28/2015

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	16 IN	0 FT	80 FT	25 IN
LB/FT	16 IN	90 FT	100 FT	25 IN
LB/FT	IN	FT	FT	IN

GROUTING DATA:

Grout Type	No. of Sacks	Grout Weight	From	To
DF Grout	50	Lb/gal	0 Ft	76 Ft
		Lb/gal	Ft	Ft

Describe grouting procedure

SCREEN:

☐ Perforated pipe ☒ Manufactured

Diameter 16 Inches Length 24 Feet

Material Sch 40

Slot Size 0.060 Set From 80 Feet to 90 Feet

Other information Screen also from 100-114

WAS A PACKER OR SEAL USED?

☒ Yes ☐ No

If so, what material? Pea Rock

Describe packer(s) and location

76-114

DISINFECTION: Was well disinfected upon completion?

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

Well Owner: Terry Marshall

Business Name: Marshall Brothers

Address: 19032 388th Ave

City, State, Zip: Hitchcock ☒ SD ☒ 57348

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
Yellow Sand	0	6
Yellow Clay	6	18
Blue Clay w/ Rocks	18	61
Gravel	61	66
Blue Clay w/ S/S & Rocks	66	80
Coarse Sand & Gravel	80	90
Blue Clay	90	101
Gravel	101	103
Gravel & Coal	103	114

STATIC WATER LEVEL 35 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: GPM

REMARKS

RECEIVED

JAN 27 2016

WATER RIGHTS
PROGRAM

TULARE - WESTERN SPINK/HITCHCOCK R.R.

This well was drilled under license # 440 and this
report is true and accurate.

Drilling firm:

Signature of License Representative:

Signature of Well Owner or Equitable Property Holder:

Date:

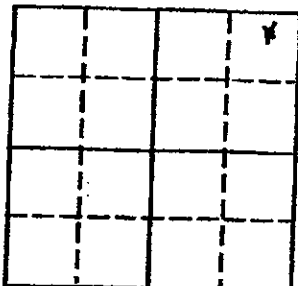
SOUTH DAKOTA WATER WELL COMPLETION REPORT 7574-3 11-02

Location NE 1/4 NE 1/4 Sec 35 Twp 14N Rg 6W

County

Spink

North



Please mark well location with an "X"

Well completion Date

2-8-17

1 Mile

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

25,000 ft from Farm yard (identify source)

PROPOSED USE:

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

METHOD OF DRILLING:

Forward Rotary

CASING DATA:

- ☐ Steel ☒ Plastic ☐ Other

If other describe

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
SDR 21 LB/FT	12 IN	7.2 FT	9.3 FT	17 1/2 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>Portland Cement</u>	<u>16</u>	<u>9.8</u> Lb/gal	<u>0</u> R	<u>9.8</u> R
<u>Grout Seal</u>		Lb/gal	R	R

Describe grouting procedure Tremie Line Bottom to Top

SCREEN:

- ☐ Perforated pipe ☒ Manufactured

Diameter 12 Inches Length 20 Feet

Material Stainless steel

Slot Size 1040 Set From 9.3 Feet to 11.3 Feet

Other information Red flint #50 slot pack

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

Lab sample sent to for water quality analysis ☐ No, Why Not?

Well Owner:

Terry Marshall

Business Name:

Address1:

38735 SD Hwy 28

Address2:

Hitchcock, SD 57348

City, State, Zip:

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
<u>Top Soil</u>	<u>0</u>	<u>2</u>
<u>Yellow clay</u>	<u>2</u>	<u>14</u>
<u>Blue clay</u>	<u>14</u>	<u>26</u>
<u>Blue clay Till (Rocky)</u>	<u>26</u>	<u>64</u>
<u>Coarse Gravel</u>	<u>64</u>	<u>66</u>
<u>Blue clay Till</u>	<u>66</u>	<u>71</u>
<u>Coarse Gravel</u>	<u>71</u>	<u>72</u>
<u>Blue clay Till</u>	<u>72</u>	<u>80</u>
<u>Medium Sand</u>	<u>80</u>	<u>113</u>

STATIC WATER LEVEL

5 FEET

If flowing, closed in pressure

PSI

GPM flow

through

L

Inch pipe

Controlled by

☐ Valve

☐ Reducers

☐ Other

Reduced flow rate

GPM

Can well be completely shut in?

WELL TEST DATA:

☒ Pumped Describe: Submersible Pump

☐ Bailed

☐ Other

Pumping Level Below Land Surface

80.6 Ft. After 17 Hrs. pumped 830 GPM

Ft. After _____ Hrs. pumped _____ GPM

If pump installed, pump rate:

GPM

REMARKS

RECEIVED

FEB 24 2017

Tulare, Western Spink/Hitchcock

WATER RIGHTS
AM PROGRAM

This well was drilled under license #

285

And this report is true and accurate.

Drilling firm:

Manikowski Well Drilling, Inc.

Signature of License Representative:

[Signature]

Signature of Well Owner or Equitable Property Holder:

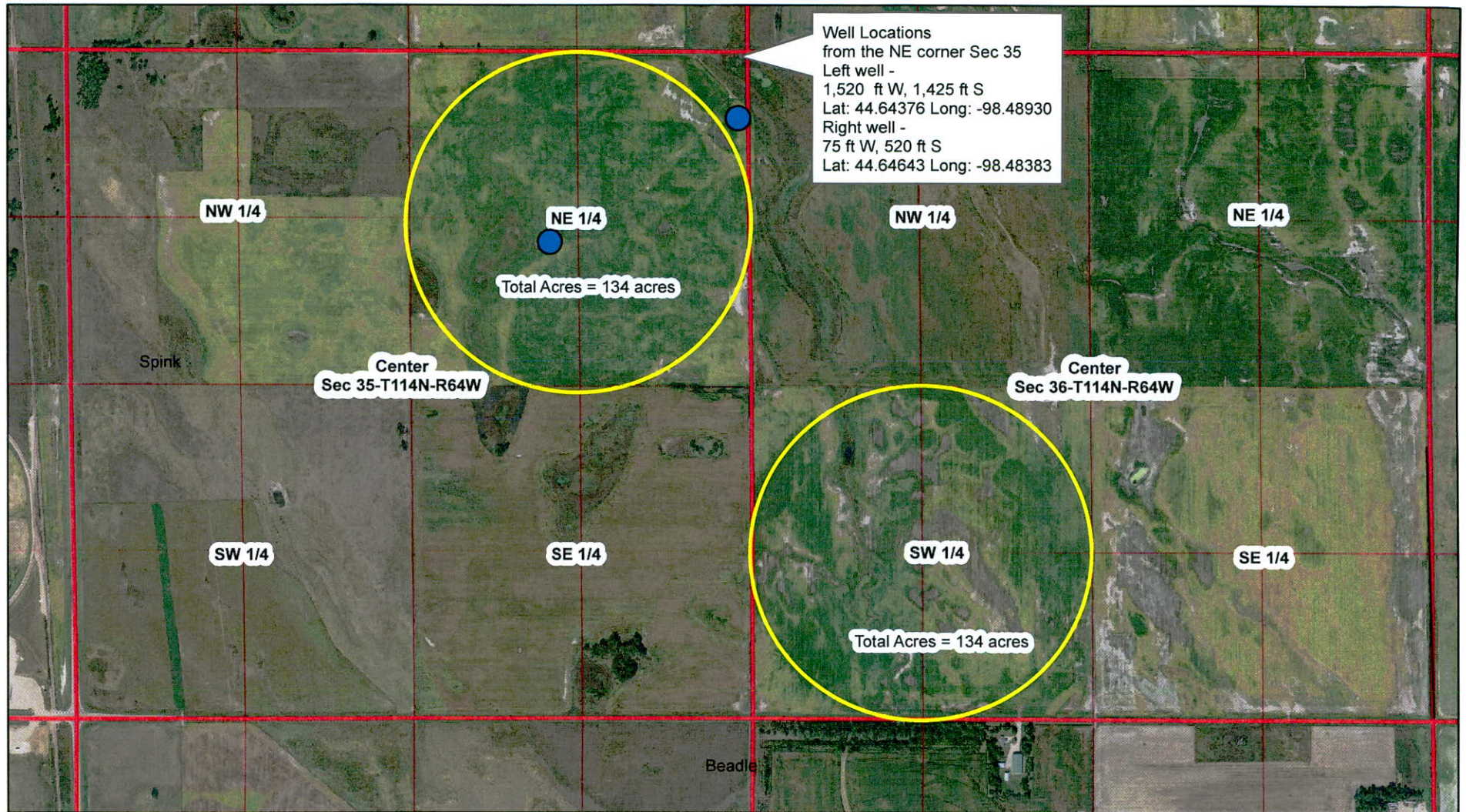
Date:

2/14/17

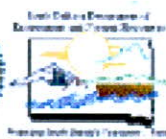
523 E. Capitol Ave., Pierre SD 57501

Please return White Copy to DENR Water Rights

Water Right No. 7574-3 & 7575A-3, Terry Marshall



0 330 660 1,320 1,980 2,640 Feet



Terry D Helms

Terry D Helms, PE
Water Rights Inspector
DENR, Water Rights Program
July 25, 2019



DENR
SOUTH DAKOTA

**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

SEP 09 2020

7574-3

Terry Marshall
38735 SD Hwy 28
Hitchcock SD 57348

Dear Mr. Marshall:

Enclosed is your Reissued Water License No. 7574-3. Included with the license is an updated map prepared by the staff engineer who conducted the field investigation.

The water license was reissued based on the discrepancies you reported to us concerning one of the well locations and the system capacities.

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

As long as you use the water beneficially, as stated in the Water 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,

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

enclosures

STATE OF SOUTH DAKOTA
REISSUED WATER LICENSE NO. 7574-3

(1) Terry Marshall, 38735 SD Hwy 28, Hitchcock SD 57348 was issued Water License No. 7574-3, February 24, 2020 for a water right to divert 2.67 cubic feet of water per second (cfs) from ground water, two wells (Tulare Western Spink Hitchcock Aquifer), Spink County, South Dakota for irrigation purposes. The water license, with a priority date of December 14, 2012 incorporated the applicable portions of Water Permit No. 7575A-3.

Discrepancies were found in one of the well locations and in well and system capacities. Water License No 7574-3 is being reissued to correct the errors.

The original license described both wells as being in the NE $\frac{1}{4}$ NE $\frac{1}{4}$ Section 35, T114N, R64W. The water right holder indicated the west well was in the SW $\frac{1}{4}$ NE $\frac{1}{4}$ Section 35.

Pursuant to SDCL 46-5-13.1 and ARSD 74:02:01:14.01, the Chief Engineer made a finding that the change in well location does not increase the potential for adverse effects to existing diversions and the overall project as developed is consistent with the original applications.

(2) It is certified that the water right holder has complied with the provisions of South Dakota State Law relating to completion of the water supply system and is entitled to divert 3.56 cubic feet of water per second for beneficial use. The diversion points are located as follows:

- West well: 1,425 and 1,520' W of the NE corner of Section 35, T114N, R64W (SW $\frac{1}{4}$ NE $\frac{1}{4}$)
Latitude: 44.64376, Longitude: -98.48930
- East well: 520' S and 75' W of the NE corner of Section 35, T114N, R64W (NE $\frac{1}{4}$ NE $\frac{1}{4}$)
Latitude: 44.64643, Longitude: -98.48383

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

Section 35, T114N, R64W		Section 36, T114N, R64W	
NW $\frac{1}{4}$ NE $\frac{1}{4}$	33.5 acres	NW $\frac{1}{4}$ SW $\frac{1}{4}$	33.5 acres
NE $\frac{1}{4}$ NE $\frac{1}{4}$	33.5 acres	NE $\frac{1}{4}$ SW $\frac{1}{4}$	33.5 acres
SE $\frac{1}{4}$ NE $\frac{1}{4}$	33.5 acres	SE $\frac{1}{4}$ SW $\frac{1}{4}$	33.5 acres
SW $\frac{1}{4}$ NE $\frac{1}{4}$	33.5 acres	SW $\frac{1}{4}$ SW $\frac{1}{4}$	33.5 acres

Total acres irrigated – 268.0

(4) Pursuant to South Dakota Water Law 46-5-30.1 Terry Marshall, 38735 SD Hwy 28, Hitchcock SD 57348 the holder and/or owner of Incorporated Water Right No. 7574-3 is issued a license to appropriate water, the right to use 3.56 cubic feet of water per second from ground water, two wells (Tulare Western Spink Hitchcock Aquifer) with a priority date of December 14, 2012 from the locations specified in (2) of this license for irrigation purposes.

continued

Water License No. 7574-3

Page 2

This license is subject to South Dakota Water Law, any limitations or conditions listed in Water Right No. 7574-3 and 7575A-3 and subject to the following qualifications:

- The wells approved under this Water Right will be located near domestic wells and other wells which may obtain water from the same aquifer. The well owner under this Permit shall control his withdrawals so there is not a reduction of needed water supplies in adequate domestic wells or in adequate wells having prior water rights.
- The wells authorized by Nos. 7574-3 and 7575A-3 shall be constructed by a licensed well driller and construction of the wells and installation of the pumps 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. ***The wells were drilled by Pullman Drilling Inc. and Manikowski Well Drilling Inc. Copies of the well completion reports are on file with the Water Rights Program.***
- This Water Right is approved subject to the irrigation water use questionnaire being submitted each year.

Eric Gronlund

Eric Gronlund, Chief Engineer
Water Rights Program
Department of Environment and Natural Resources

SEP 09 2020

date

