

WATER PERMIT NO. 7373-3

Name of Applicant: Terry Wieting

Address: 870 Beach Ave NE, Huron SD 57350 Phone: 605 554-0207

Amount of Water Claimed: 1.78 cfs Total Acres: 160

Source of Water Supply: groundwater (2 wells)

Water to be used for: irrigation County: Beadle

Type of Waste Disposal System:

Location: 6 miles southeast of Hitchcock

PRIORITY Date Received: 6-14-12 Application/License Fee: \$ 1,050.00

Corrected Application Received: Period of Annual Use: June 1 – Aug 31

Remarks:

Diversion Point: S ½ SW ¼ Sec 16-T113N-R62W

Land to be Irrigated: SW ¼ Sec 16-T113N-R62W

Depth of Well: 75 feet deep

Well Driller:

Remarks:

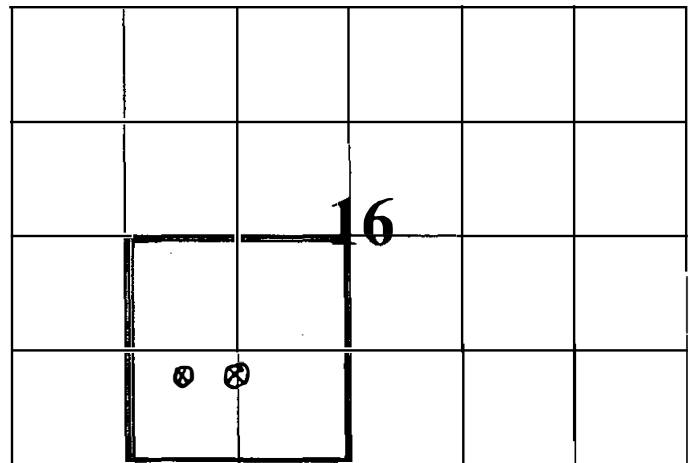
Type of Map: aerial

Prepared by: Ron Duvall

Reviewed and the Number Assigned on: 6-14-12

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>1373-3</u> (office use only)	Hydrologic Unit <u>1016006</u>
	Basin <u>James River</u>	
	Newspaper <u>Huron Daily Plainsman</u>	
	<u>Box 1278</u> <u>57350-605-352-6401</u>	

RECEIVED**JUN 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.)

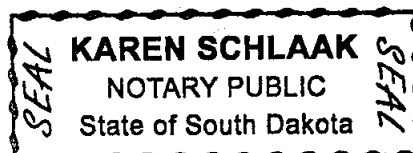
1. Name of Applicant Terry Wieting Phone 605-554-0207
(check one) ☒ Owner ☐ Tenant/lessee
Mailing Address 870 Beach Ave NE Huron SD 57350
(Address) (City) (State) (Zip Code)
2. Amount of water claimed 1.78 *CFS or 800 **GPM ***AF Total Acreage 180
(*Cubic Feet per Second) (**Gallons per Minute) (**Acre Feet - storage capacity of dam/dugout or annual use if applicable)
3. Source of water supply Hitchcock Tulare Aquifer
4. Location of point of diversion (example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W) County Beadle
2 wells located in the SW1/4 of Sec 16 113-62
Pleasant View township
5. County or counties where water will be used Beadle
6. Annual period during which water is to be used June 1 - August 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
<u>SW1/4 of the SW1/4 Sec 16</u>	<u>40</u>	<u>all in T113N-R62W</u>	
<u>NW1/4 of the SW1/4 Sec 16</u>	<u>40</u>		
<u>SE1/4 of the SW1/4 Sec 16</u>	<u>40</u>		
<u>NE1/4 of the SW1/4 Sec 16</u>	<u>40</u>		

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

For Center Pivot IrrigationSTATE OF SOUTH DAKOTA)
County of Hughes) SS

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

I, Terry Wieting, the applicant, certify that I have read this application, have examined the attached map and that the matters stated are true and that I intend, and am able to complete the necessary construction.Applicant's signature [Signature]Subscribed and sworn to before me this 14th day of June 20 12My commission expires 4/1/13Karen Schlaak
Notary Public signature

SOUTH DAKOTA
WATER PERMIT NO. 7373-3 FOR IRRIGATION

Date of first receipt of application June 14, 2012.

Date of deferral of application December 6, 2012.

The Water Management Board approved Water Permit No. 7373-3 on March 7, 2013 for Terry Wieting, 870 Beach Ave NE, Huron SD 57350 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. 7373-3 appropriates 1.78 cubic feet of water per second from two wells to be completed into the Tulare:Western Spink Aquifer (75 feet deep) located in the S 1/2 SW 1/4 Section 16 for irrigation of 160 acres located in the SW 1/4 Section 16; all in T113N-R62W.
2. The amount of the appropriation may not exceed 2 acre feet annually for each acre of land to which water is actually and beneficially applied for irrigation. The water is to be used during the following described annual period: June 1 – August 31.
3. The date from which applicant may claim right is June 14, 2012.
4. One-fifth of the construction is to be completed on or before September 7, 2015.
5. All construction is to be completed on or before March 7, 2018.
6. Water is to be put to beneficial use on or before March 7, 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 wells 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 wells authorized by Permit No. 7373-3 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, Chief Engineer
Water Rights Program
Department of Environment and Natural Resources

APR 26 2013

date



Supplemental Information

(type or print in ink)

1. Well Information - Proposed Construction

- a) Drill Hole Diameter 10" Depth 75'
- b) Casing Type plastic Diameter 8" Thickness _____
- c) Screen Type plastic Diameter 8" Thickness _____
- d) Gravel Pack 30' pea rock Length of Gravel Pack 30'
- e) Depth to Top of Water Bearing Material 60'
- f) Depth to Water (ground surface to water level) 20'
- g) Distance to nearest existing domestic well:
- On applicant's property 1 1/2 mile 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

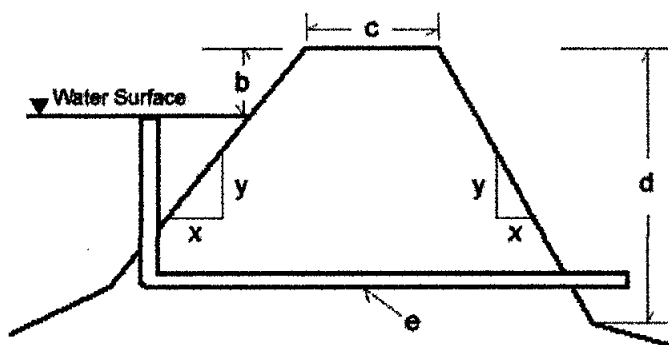
3. Dugout Information

- 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:

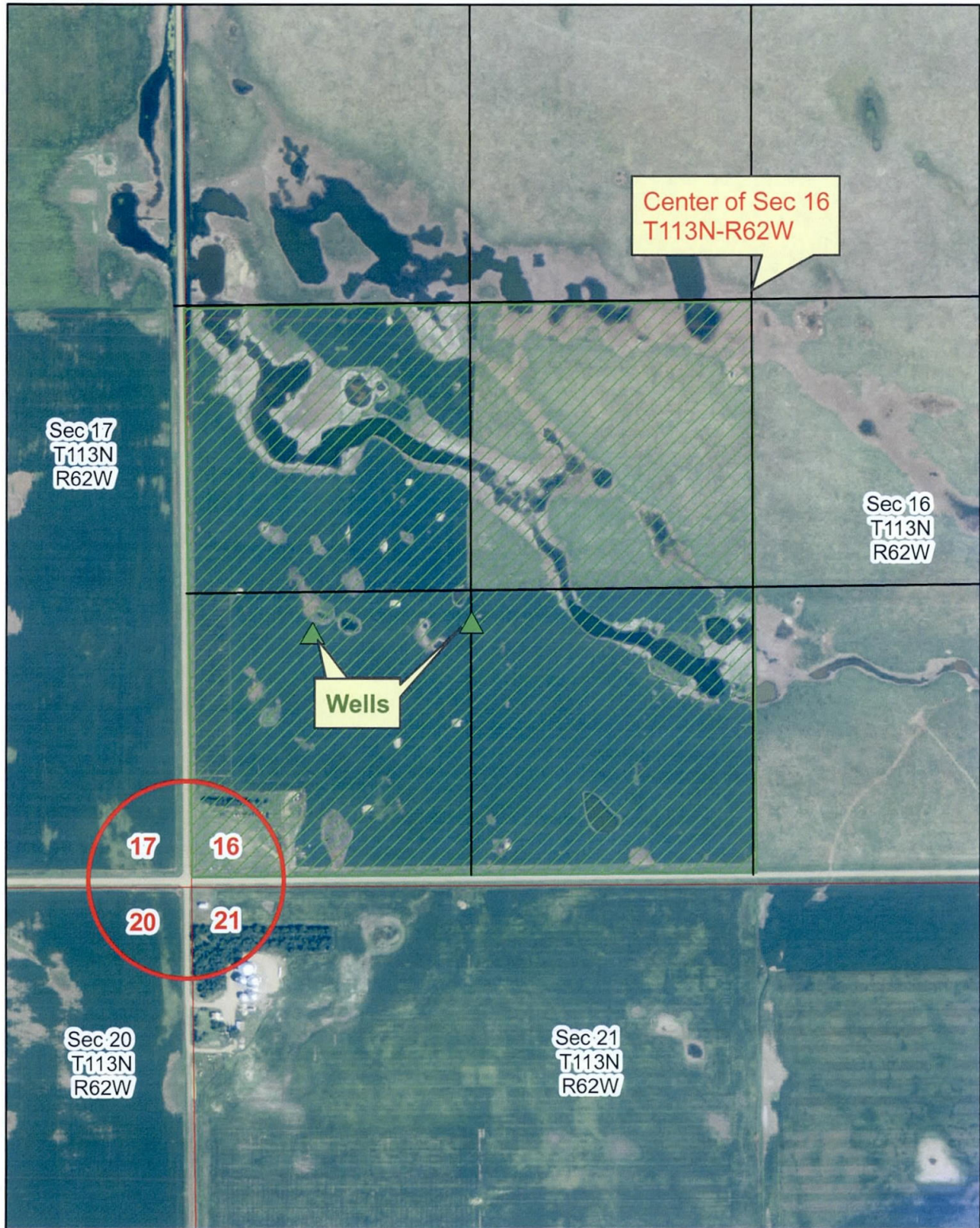


- b) Freeboard _____
- c) Crest Width _____
Crest Length _____
- d) Height _____
- e) Primary Outlet Capacity _____
If pipe, diameter _____
- f) Secondary Spillway Capacity _____
Spillway Width _____
- g) X & Y Slope (e.g. 3 to 1 is a typical slope)
Upstream _____
Downstream _____
- h) Surface Area of Impoundment _____
- i) Storage _____ Acre Feet
- j) Drainage Area Above Dam _____ Acres

Scale: 1 inch = 693 feet

1,000

Feet



South Dakota
Department of Environment
& Natural Resources
Water Rights

Completed by:

Ron Duvall

Ron Duvall, Natural Resources Engineer
Water Rights Program

Date: June 14, 2012

Appl No.



Google earth

miles 1
km 2



RECEIVED
JUN 14 2012
WATER RIGHTS
PROGRAM

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date 6/14, 20 12

RECEIVED OF Wieting Farms Inc 870 Beach Ave NE Huron SD 57350

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

Fee for Application for Permit No. <u>7373-3</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>7373-3</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. 05466

By

Richard Erbe
Chief Engineer



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 7373-3, Terry Wieting**

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. 7373-3, Terry Wieting, 870 Beach Avenue NE, Huron SD 57350.

The Chief Engineer is recommending DEFERRAL of Application No. 7373-3 pending the resolution of an existing water right permit for irrigation from the Tulare:Western Spink/Hitchcock Aquifer scheduled for cancellation at the October 3, 2012 meeting of the Water Management Board. The outcome may impact whether water reverts to the public and is regarded as unappropriated public water subject to general appropriation. Therefore, Application No. 7373-3 should be deferred until there is a final decision on the cancellation including any potential appeal to the circuit court or State Supreme Court as provided by law.

See report on application for additional information.

Garland Erbele, Chief Engineer
September 6, 2012

REPORT TO THE CHIEF ENGINEER
ON
WATER PERMIT APPLICATION NO. 7373-3
TERRY WIETING
WATER PERMIT APPLICATION NO. 7378-3
RIVERSIDE HUTTERIAN BRETHREN
&
WATER PERMIT APPLICATION NO. 7379-3
RIVERSIDE HUTTERIAN BRETHREN
AUGUST 11, 2012

Water Permit Application No. 7373-3 proposes to appropriate 1.78 cubic feet of water per second (cfs) from two wells approximately 75 feet deep, to be completed into the Tulare: Western Spink/Hitchcock aquifer. The wells are to be located in the S½ SW¼ Section 16, T113N-R62W and the water is to be used to irrigate 160 acres located in the SW¼ Section 16, T113N-R62W.

Water Permit Application No. 7378-3 proposes to appropriate 3.86 cfs from two wells approximately 85 feet deep, to be completed into the Tulare: Western Spink/Hitchcock aquifer. The wells are to be located in the approximate centers of the NW¼ and the SW¼ of Section 1, T112N-R62W and the water is to be used to irrigate 270 acres located in the S½ Section 1, T112N-R62W.

Water Permit Application No. 7379-3 proposes to appropriate 1.93 cfs from one well approximately 80 feet deep, to be completed into the Tulare: Western Spink/Hitchcock aquifer. The well is to be located in the SW¼ SE¼ of Section 21, T112N-R61W and the water is to be used to irrigate 135 acres located in the NE¼ Section 21, T112N-R61W.

AQUIFER: TULARE: WESTERN SPINK/HITCHCOCK

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 the spring of 2012. Based on a DENR-Water Rights staff analysis of the aquifer (See Appendix A) (Buhler, 2012) 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 unappropriated from the aquifer.

Water Permit Application Nos. 7373-3, 7378-3 and 7379-3 propose 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, 2012), the average annual withdrawal associated with these applications would be 438.8 acre-feet per year. The best available information indicates that approval of any or all 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." Therefore, pursuant to SDCL 46-2A-9, additional permits to appropriate water cannot be issued from the Tulare: Western Spink/Hitchcock aquifer since there is not a reasonable probability that there is unappropriated water available from the aquifer.

A handwritten signature in black ink, appearing to read 'K. Buhler', with a long horizontal stroke extending to the right.

Ken Buhler

SD DENR-Water Rights Program

REFERENCES:

Buhler, K.A., 2012, Report to the Chief Engineer on Water Permit Application No. 7289-3, Bixler Farms, Nos. 7290-3 and 7291-3, Lee Gatzke, No. 7293-3, Jeffrey Gatzke, and No. 7292-3, Allen Gatzke, April 25, 2012: SD DENR- Water Rights Program

REPORT TO THE CHIEF ENGINEER
ON
WATER PERMIT APPLICATION NO. 7289-3, BIXLER FARMS
NOS. 7290-3 AND 7291-3, LEE GATZKE
NO. 7293-3, JEFFREY GATZKE
And NO. 7292-3, ALLEN GATZKE
APRIL 25, 2012

Application No. 7289-3 proposes to appropriate 3.86 cfs from two wells approximately 75 feet deep located in the centers of the SE $\frac{1}{4}$ and SW $\frac{1}{4}$ of Section 36 to irrigate 270 acres located in the S $\frac{1}{2}$, S $\frac{1}{2}$ NW $\frac{1}{4}$ of Section 36; all in T115N-R63W.

Application No. 7290-3 proposes to appropriate 1.78 cfs from one well approximately 60 feet deep located in the center of the NE $\frac{1}{4}$ of Section 6 for the irrigation of 135 acres located in the NE $\frac{1}{4}$ of Section 6; all in T114N-R63W.

Application No. 7291-3 proposes to appropriate 1.78 cfs from one well approximately 75 feet deep located in the center of the NW $\frac{1}{4}$ of Section 18 for the irrigation of 135 acres located in the NW $\frac{1}{4}$ of Section 18; all in T114N-R63W.

Application No. 7292-3 proposes to appropriate 1.78 cfs from one well approximately 76 feet deep located in the center of the NW $\frac{1}{4}$ of Section 14 for the irrigation of 135 acres located in the N $\frac{1}{2}$ NW $\frac{1}{4}$, S $\frac{1}{2}$ SW $\frac{1}{4}$ of Section 14; all in T114N-R63W. The applicant intends to combine with Water Right No. 6339B-3 which authorizes irrigation of the S $\frac{1}{2}$ NW $\frac{1}{4}$ and the N $\frac{1}{2}$ SW $\frac{1}{4}$ of Section 14 to allow for two center pivots in the W $\frac{1}{2}$ of Section 14; T114-R63W.

Application No. 7293-3 proposes to appropriate 1.78 cfs from one well approximately 60 feet deep located in the center of the NW $\frac{1}{4}$ of Section 15 for the irrigation of 135 acres located in the NW $\frac{1}{4}$ of Section 15; all in T114N-R63W and all in Spink County.

AQUIFER: TULARE: WESTERN SPINK/HITCHCOCK AQUIFER

AQUIFER CHARACTERISTICS:

The Tulare aquifer is a glacial outwash deposit that underlies parts of Hand, Spink and Beadle Counties. The top of the outwash is generally within 50 feet of the ground surface (Schultz, 2001) (Schultz, 2003). The thickness of the outwash deposit is highly variable ranging from less than 10 feet to over 100 feet (Kuiper, 1984). The average thickness of the outwash was estimated to be 37 feet (Hamilton and Howells, 1996). Initial work to delineate the Tulare aquifer established management units within the aquifer based on the hydrogeologic information available at the time (Hedges and others, 1982). The Tulare aquifer west of the James River was separated into the Western Spink management unit and the Hitchcock management unit (see figure 1). The Western Spink management unit consisted of the portion of the aquifer that was thought to be predominately under confined (artesian) conditions and the Hitchcock management unit contained the portion of the aquifer that was considered primarily unconfined (under water table conditions). The total areal extent of the two management units combined was estimated to

be 289,300+ acres and the amount of water in storage in the two management units combined was estimated to be 1,212,330+ acre-feet (Hedges et al., 1982). The management unit approach was adopted by the DENR and the Water Management Board to consider appropriations. In 1984 a numerical ground-water flow model was developed for the aquifer (Kuiper, 1984) that did not consider separate management units. Instead the aquifer was considered a single unit with confined and unconfined conditions present on either side of what had previously been considered a boundary between management units. The aquifer was considered to underlie a total of approximately 334,573 acres. However, the nature of the model (i.e. one square mile increments) likely resulted in an overestimation of the area (see figure 2). To a certain extent, the aquifer was further delineated in 1996 for Spink County (Hamilton and Howells, 1996). However, parts of a deeply buried valley-fill outwash that the SD Geological Survey and DENR-Water Rights considers the Deep James aquifer were included and may have resulted in some confusion but the basic outline of the Tulare aquifer was refined (see figure 3). The resulting areal extent of the Tulare aquifer in Spink County was approximately 180,605 acres. In December 2002, the Water Management Board determined that the two management units would be combined for water permit/water right management purposes (Goodman, 2002).

With data that is currently available, the areal extent of this “composite” aquifer is best defined using a compilation of Aquifer Materials Maps for Spink and Beadle Counties produced by the SDGS (Schulz, 2001) and (Schulz, 2003) respectively (see figure 4). Since no new data is available for the Hand County portion of the aquifer, the area defined by Hedges and others, (1982), remains the best information available (Note: more detailed delineation of the Tulare aquifer in Hand County will likely reduce its area (Iles)). For the purpose of this report the aquifer will be considered the Tulare: Western Spink/Hitchcock aquifer. Based on the best information currently available, the areal extent of the Tulare: Western Spink/Hitchcock aquifer is considered to be 263,016 acres (includes 9,600 acres for Hand County from Hedges).

Table one shows a compilation of the delineation’s of the Tulare: Western Spink/Hitchcock aquifer by various investigators.

INVESTIGATOR	AREA
Hedges and others, 1982	289,300+
Kuiper, 1984	334,573
Hamilton and Howells, 1996	180,605 (Spink Co. only)
Current composite using Schulz, 2001, Schulz, 2003 and Hedges and others, 1982	263,016

Table 1. Areal Extent of the Tulare: Western Spink/Hitchcock aquifer

The Tulare: Western Spink/Hitchcock aquifer is generally under confined conditions with lesser areas where it is under unconfined conditions. During dryer periods the percent of the aquifer that is unconfined increases. Groundwater movement in the aquifer is mainly from the southwest to the northeast.

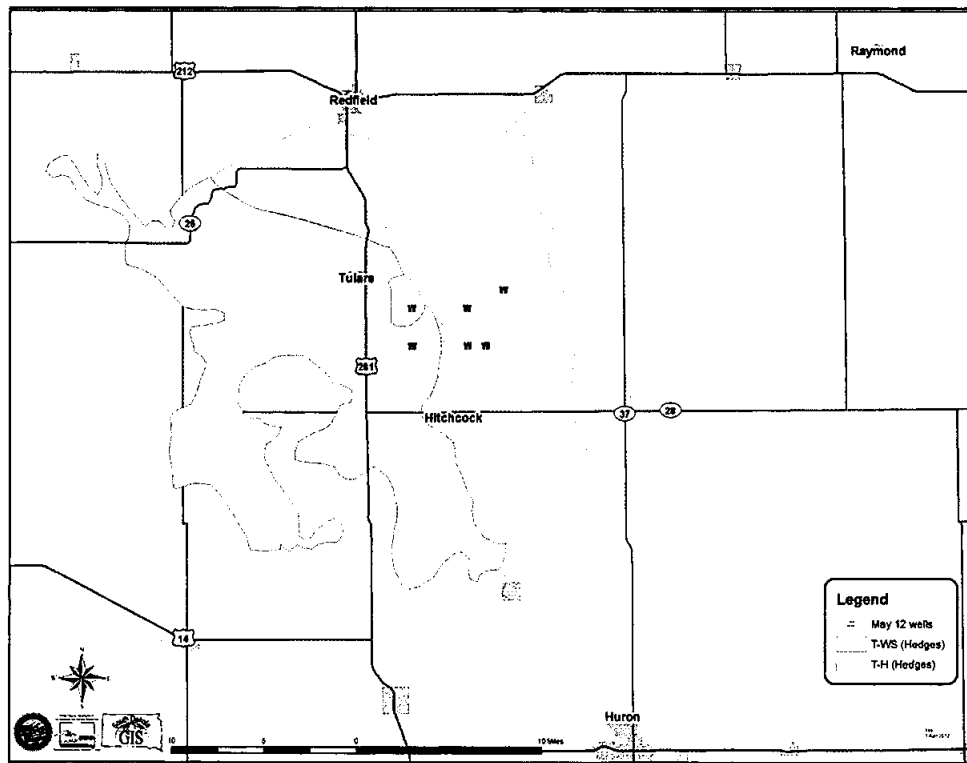


Figure 1. The areal extent of the Tulare: Western Spink/Hitchcock aquifer with management units (modified from Hedges and others (1982).

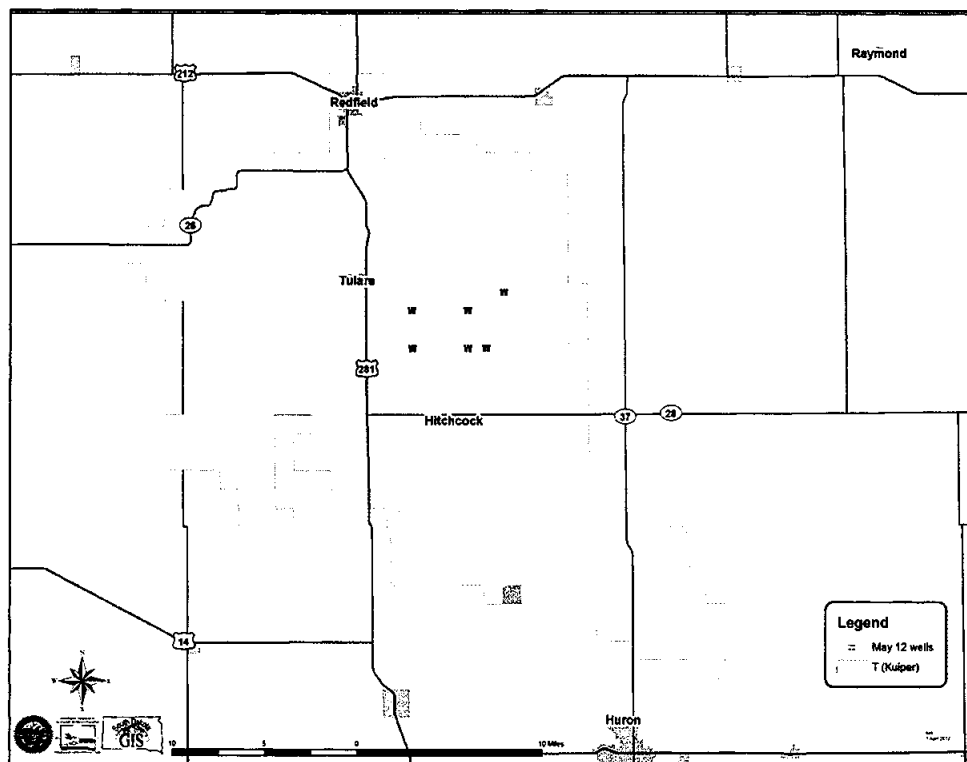


Figure 2. The areal extent of the Tulare: Western Spink/Hitchcock aquifer used in the computer groundwater model (modified from (Kuiper, 1984))

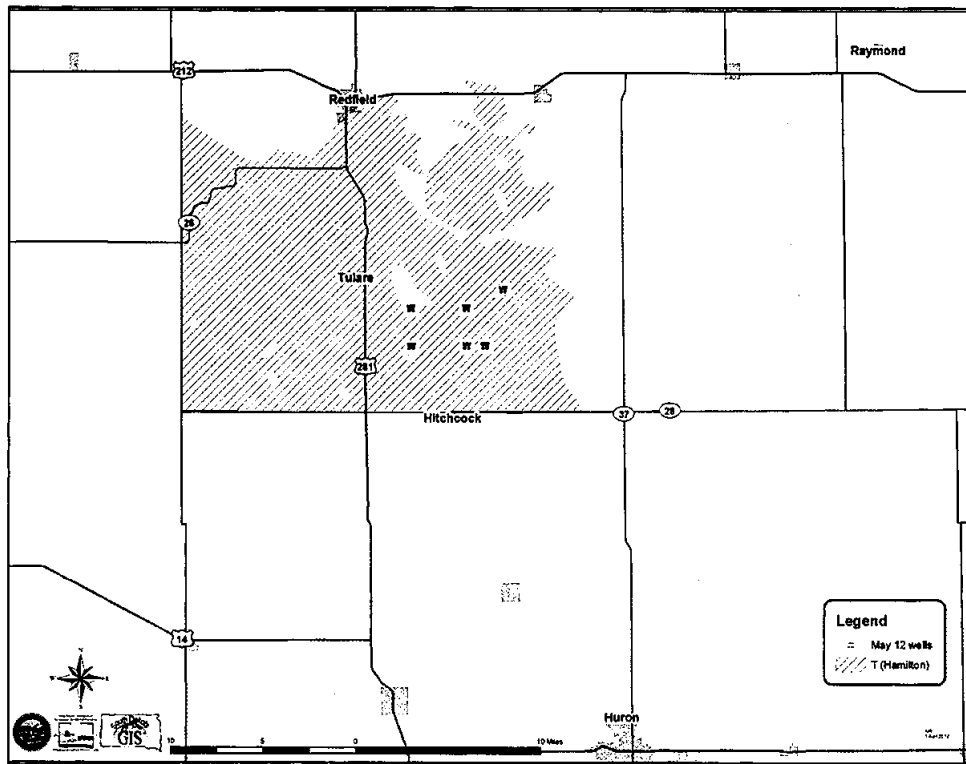


Figure 3. The areal extent of the Tulare: Western Spink/Hitchcock aquifer in Spink County defined in 1996 (modified from Hamilton and Howells, (1996).

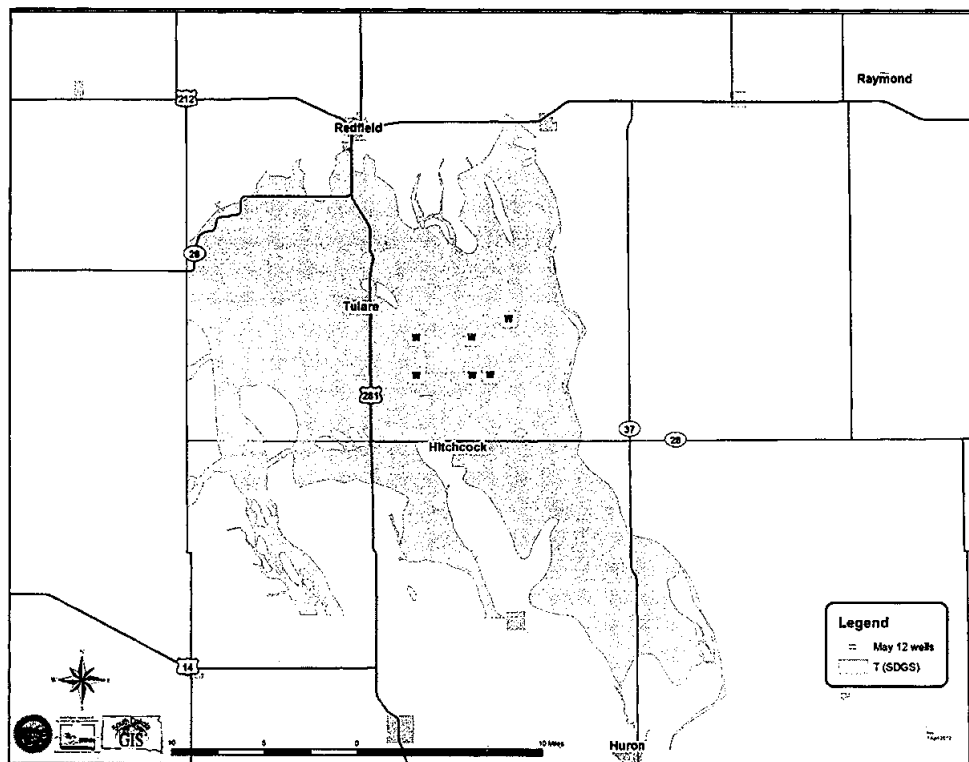


Figure 4. The areal extent of the Tulare: Western Spink/Hitchcock aquifer in Spink and Beadle Counties (modified from (Schulz, 2001) and (Schulz, 2003)).

SDCL 46-2A-9

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

WATER AVAILABILITY:

The water permit applications considered in this report propose to appropriate a total of 2,304 acre-feet annually from the Tulare: Western Spink/Hitchcock. The actual water use if these applications are approved will be less than the appropriation. The probability of unappropriated water available from the 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."

The availability of unappropriated water from the Tulare: Western Spink/Hitchcock aquifer can be determined by comparing the estimated average annual recharge to the aquifer with the estimated average annual withdrawals from the aquifer and by examining data from the DENR-Water Rights' Observation Well Network.

Recharge versus Withdrawals:**Recharge:**

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 (see above), 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:

Withdrawals from the Tulare: Western Spink/Hitchcock occur through natural discharge, domestic use and uses from appropriative rights/permits. Except for three small commercial water rights/permits and one municipal/rws water right that likely is not used (Goodman, 2002), all of the water use from the aquifer from appropriative use is for irrigation. Water use statistics for irrigation from the Tulare: Western Spink/Hitchcock aquifers are shown in table 2.

YEAR	NUMBER OF PERMITS	TOTAL APPROPRIATION (Acre-feet/yr)	PUMPED (Acre-feet/yr)
2011	130	54539.6	8512.07
2010	130	54539.6	3007.90
2009	129	54539.6	8108.14
2008	129	54536.6	9748.11
2007	130	54671.6	12380.15
2006	126	55277.6	18572.88
2005	129	54431.4	15669.49
2004	129	54705.4	15185.22
2003	131	55115.4	19397.25
2002	121	55656.8	18649.47
2001	119	51860	12786.81
2000	119	50762.7	11250.15
1999	117	52235.7	8444.64
1998	111	49341.7	5878.45
1997	109	48869.7	3005.00
1996	110	49064.7	12422.89
1995	111	50858.7	6833.56
1994	110	49718.7	5684.41
1993	111	50633.1	2200.29
1992	111	50900.7	5320.30
1991	112	52165.7	12307.90
1990	112	52632.7	11509.49
1989	113	52339	15061.79
1988	114	54595	12462.92
1987	111	54329	9329.14
1986	128	62637	3444.70
1985	130	61321.6	7712.30
1984	128	62389.6	7937.04
1983	125	1983	10052.40
1982	111	52073.4	6116.30
1981	148	67387	10255.51
1980	134	62580	6675.45
1979	128	60649	5022.37
MAX	148	67387	19397.25
MIN	109	1983	2200.29
AVE	121.4	53010.3	9725.6

Table 2. Irrigation water use statistics for the Tulare: Western Spink/Hitchcock aquifer (Water Rights, 1980-2012)

A comparison of the amount of water reported pumped from the Tulare: Western Spink/Hitchcock aquifer for irrigation with the estimated average annual recharge rate for the aquifer (18,192 acre-feet/year) shows that irrigation withdrawals alone exceeded the average annual recharge in 2002, 2003, and 2006. However, in 2005, the Sixth Judicial Circuit Court ruled that if the Board uses average annual recharge than it should also use average annual withdrawals to determine if unappropriated water is available from an aquifer.

The average reported water use for irrigation for the period of 1979-2011 is 9,725.59 acre-feet per year. However, since new water permits were being approved and developed during most of

the 1979-2011 time period, the water use from the aquifer did not meet its full potential until around 2007. The average annual irrigation withdrawal from the aquifer from 2007-2011 was 8,351.3 acre feet per year. However, 2007-2011 was a time period in which growing season (April 1-October 31) precipitation was consistently above the average annual growing season precipitation. The 20 year average growing season precipitation for Huron-Raymond-Redefied area for the 1981-2000 was calculated to be 18.35 inches. The 20 year average growing season precipitation for Huron-Raymond-Redefied area for the 1991-2010 was calculated to be 19.75 inches (Mathiowetz, 2012). Annual growing season precipitation calculated for this area (Mathiowetz, 2012) and the deviation from normal are shown in figures 5 and 6.

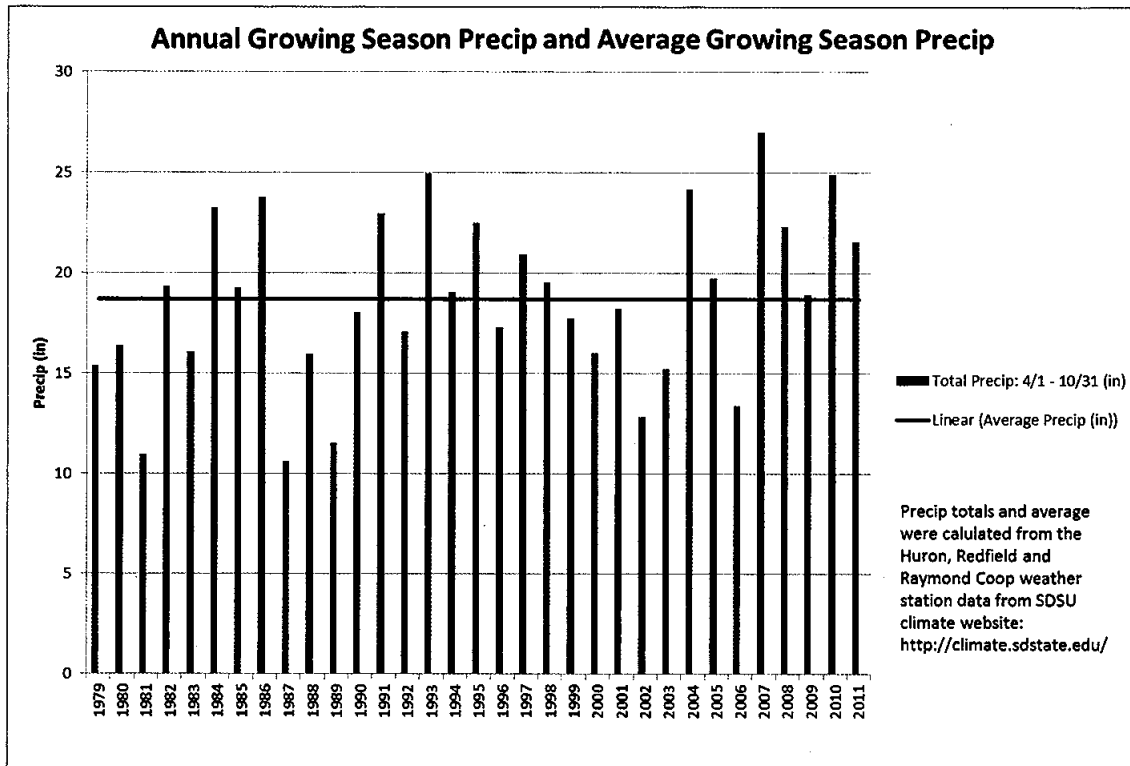


Figure 5. Annual growing season (April-October 31) precipitation for the Tulare: Western Spink/Hitchcock aquifer (Modified from Mathiowetz, 2012)

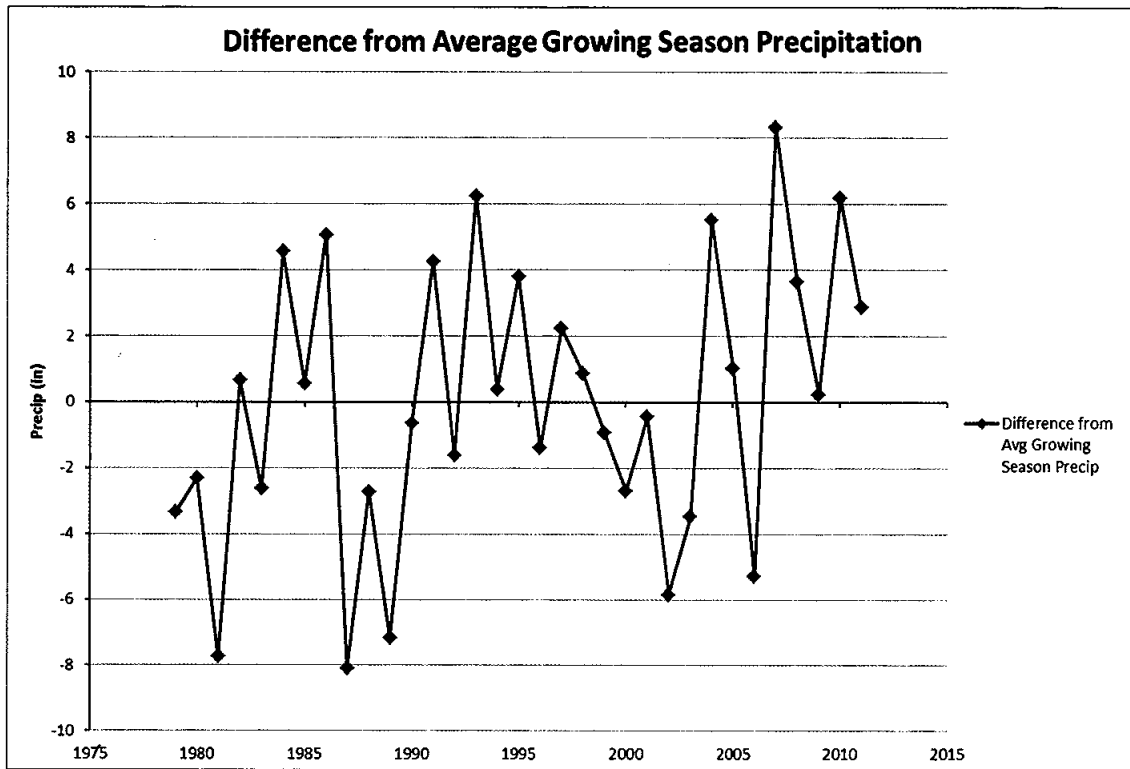


Figure 6. Annual growing season (April 1- October 31) precipitation for the Tulare: Western Spink/Hitchcock aquifer (Modified from Mathiowetz, 2012)

To determine the average annual irrigation withdrawals that can be expected at the current level of development, using the best information available, an average irrigation application rate for the entire period of record (1979-2011) was applied to the number of acres authorized for irrigation. Precedence for this method of estimating irrigation withdrawals for the Tulare: Western Spink/Hitchcock aquifer was set in 2002 when the Water Management Board considered 19 water permit applications and approved 11 permits based on an assumed application rate of 16 inches per year. Again, in 2007, the Board considered 33 deferred permit applications and four new applications from the aquifer using calculations based on an average application rate (11.2 inches per year) for the 2002-2007 time period, consistent with the 2005 Circuit Court Decision.

The average annual irrigation application rate for the Tulare Western Spink/Hitchcock aquifer based on irrigation questionnaires (Water Rights, 1980-2012a) is shown in figure 7. The average application rate for the entire period of record, excluding 1980-1982 a period which data is not available, is 9.32 inches per year. As expected, this average annual irrigation application rate is inversely proportional to the annual growing season precipitation (April 1-October 31), see figure 8.

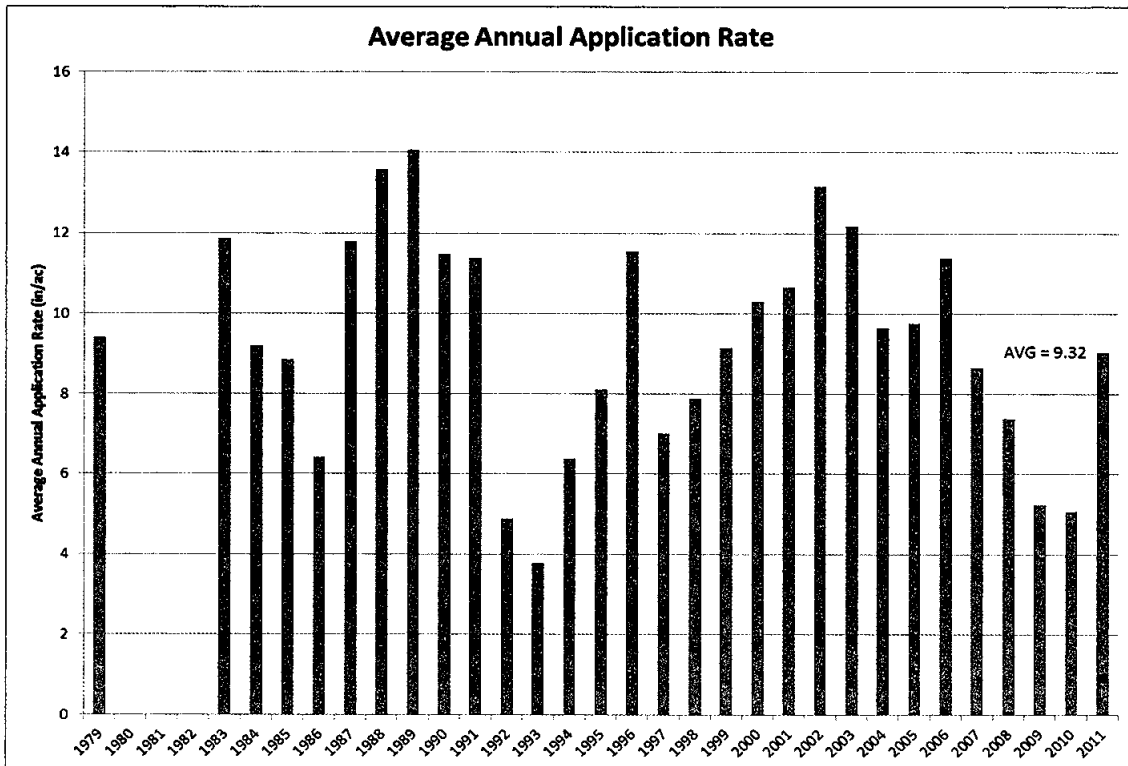


Figure 7. Average application rate for the Tulare: Western Spink/Hitchcock aquifer. (Note: data not available to calculate 1980-1982) (Water Rights, 1980-2012a)

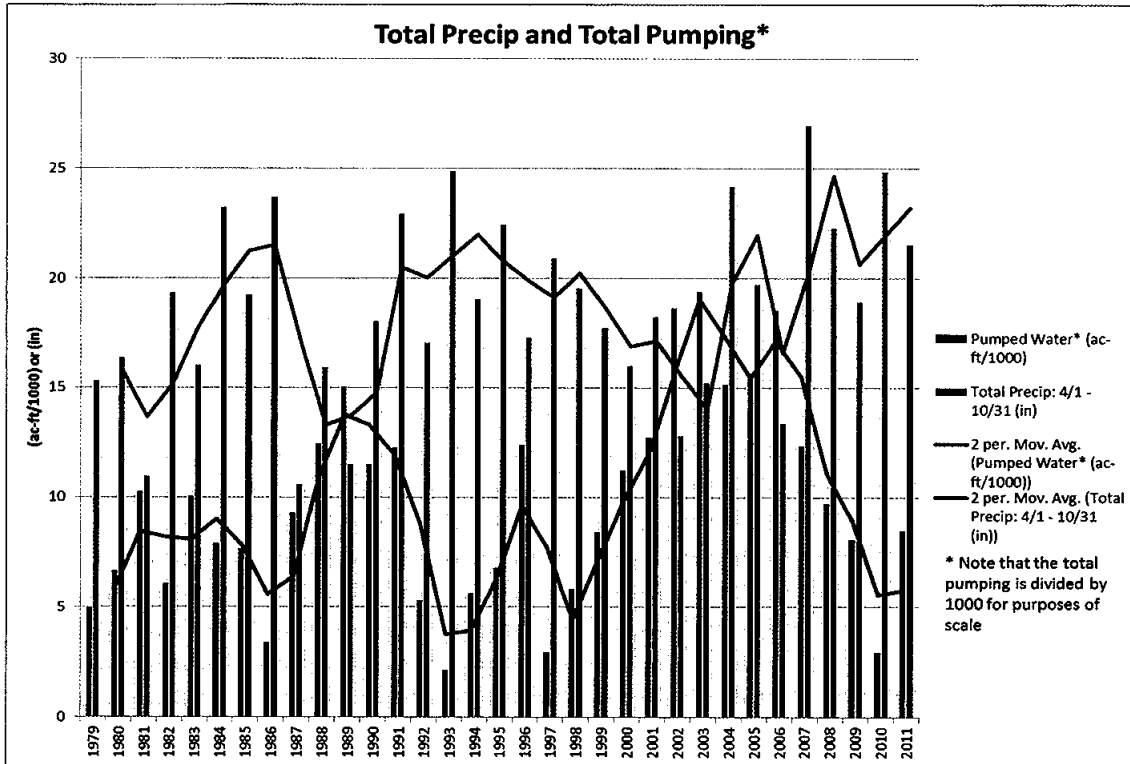


Figure 8. Irrigation pumping from Tulare: Western Spink/Hitchcock aquifer compared growing season precipitation (April 1- October 31)

Assuming an average application rate of 9.32 inches per year, the maximum number of acres that can be irrigated without exceeding the average annual recharge is 23,423 acres. Water rights/permits currently authorize the irrigation of 22,838.8 acres from the Tulare: Western Spink/Hitchcock aquifer. A comparison of the number of acres that could potentially be irrigated from the aquifer with the number of acres that are currently authorized for irrigation shows that another 584.4 acres can be irrigated at an average application rate of 9.32 inches per year without exceeding the average annual recharge rate.

Observation well Data:

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

The DENR-Water Rights Program monitors 50 observation wells completed into the Tulare: Western Spink/Hitchcock aquifer. The observation well data shows the aquifer responds well to climatic conditions with rising water levels during wet years and gradually declining water levels during dry years. 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:

$$\Delta S = R - W$$

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

R= Recharge

W= Withdrawals

A positive number indicates that recharge exceeds withdrawals and a negative number indicates that withdrawals exceed recharge.

An analysis of observation well hydrographs was used to quantify the change in volume of water in storage in the aquifer. The analysis involved identifying observation wells completed into the unconfined portion of the Tulare: Western Spink/Hitchcock aquifer and determining the change of the water level in each well for every year. 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.

This analysis is restricted to observation wells completed into an area where the aquifer is under unconfined conditions. A hydrograph (figure 9) for an observation well that was completed in a portion of the Tulare: Western Spink/Hitchcock aquifer that was under unconfined conditions from 1966-2009 but became confined in 2009, shows fairly well the difference between changes in the amount of water in storage in the aquifer (pre-2009) and changes of the “pressure” of the aquifer (post-2009).

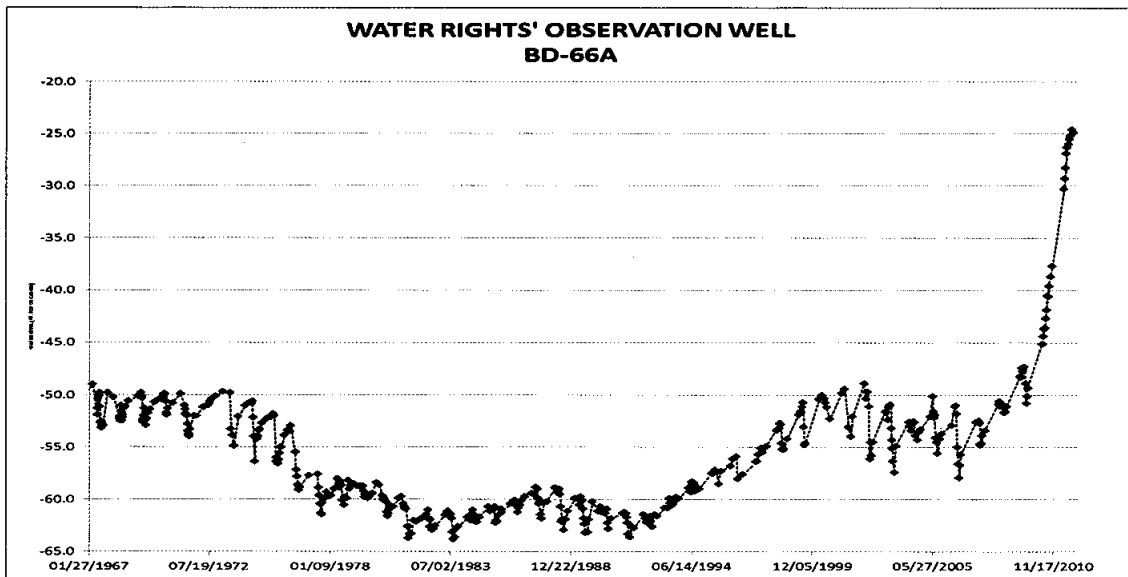


Figure 9. Hydrograph showing the difference between an unconfined aquifer and a confined aquifer.

Five DENR-Water Rights' observation wells were used to analyze the Tulare: Western Spink/Hitchcock aquifer. These wells were chosen because they were in portions of the aquifer that remain unconfined for their entire period of record and the wells were determined to accurately reflect aquifer conditions. Although three of these observation wells have data older than 1983, the time period used for analysis was 1983-2011 to maximize the record-years of data. The results of the analysis are shown in table 3 and Appendix A.

ANNUAL WATER LEVEL CHANGE (ft)						
	SP-79F	SP-78B	SP-80B	SP-82E	SP-82G	AVE
1983	0.8	0.24	0.25	0.85	-0.43	0.342
1984	0.98	0.72	0.65	1.04	0.38	0.754
1985	0.77	0.09	0.29	0.06	-0.18	0.206
1986	1.75	1.59	2.16	4.85	1.97	2.464
1987	-2.99	0.2	0.4	-3.7	0.1	-1.198
1988	-0.61	-0.03	-0.4	-1.25	-0.73	-0.604
1989	0.23	-0.03	-0.19	-0.25	-0.31	-0.11
1990	0.41	-0.22	-0.41	0.6	-0.59	-0.042
1991	0.26	0.02	0.1	0.2	0.13	0.142
1992	0.35	0	-0.08	1.61	0.12	0.4
1993	1.55	0.5	0.68	1.49	0.48	0.94
1994	-0.35	0.5	0.8	0.59	0.88	0.484
1995	1.45	1.16	1.75	1.26	3.56	1.836
1996	-1.6	0.44	0.87	-2.25	-0.14	-0.536
1997	1.68	1.35	1.92	3.2	3.79	2.388
1998	1.22	0.63	0.81	-0.25	-0.15	0.452
1999	-2.21	0.5	0.4	-2.01	-1.35	-0.934
2000	-1.89	-0.57	-2.24	-1.82	-2.49	-1.802
2001	1.7	0.54	1.72	0.78	1.12	1.172
2002	-1.95	-0.76	-1.79	-1.88	-2.05	-1.686
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
<i>AVE</i>	<i>0.314138</i>	<i>0.386552</i>	<i>0.467931</i>	<i>0.257586</i>	<i>0.273793</i>	<i>0.34</i>

Table 3. Water Level change per year per observation well

The average annual water level change for the five observation wells for the period of 1983-2011 is +0.34 feet. Therefore, the water level for the unconfined portion of the aquifer increased an average of 0.34 feet per year from 1983-2011.

A comparison of average annual water level rises from Table 3 with the average annual precipitation for the aquifer area (see figure 10) shows as expected, that the change in the volume of water in the aquifer is directly related to the annual precipitation. During the five year period of record of 2007-2011 the average annual water level change in the unconfined portion of the aquifer was 1.18 feet compared with the 0.34 foot average over the period of record. Therefore, the entire period of record (1983-2011) was evaluated so anomalously wet or dry time periods would not overly influence the data.

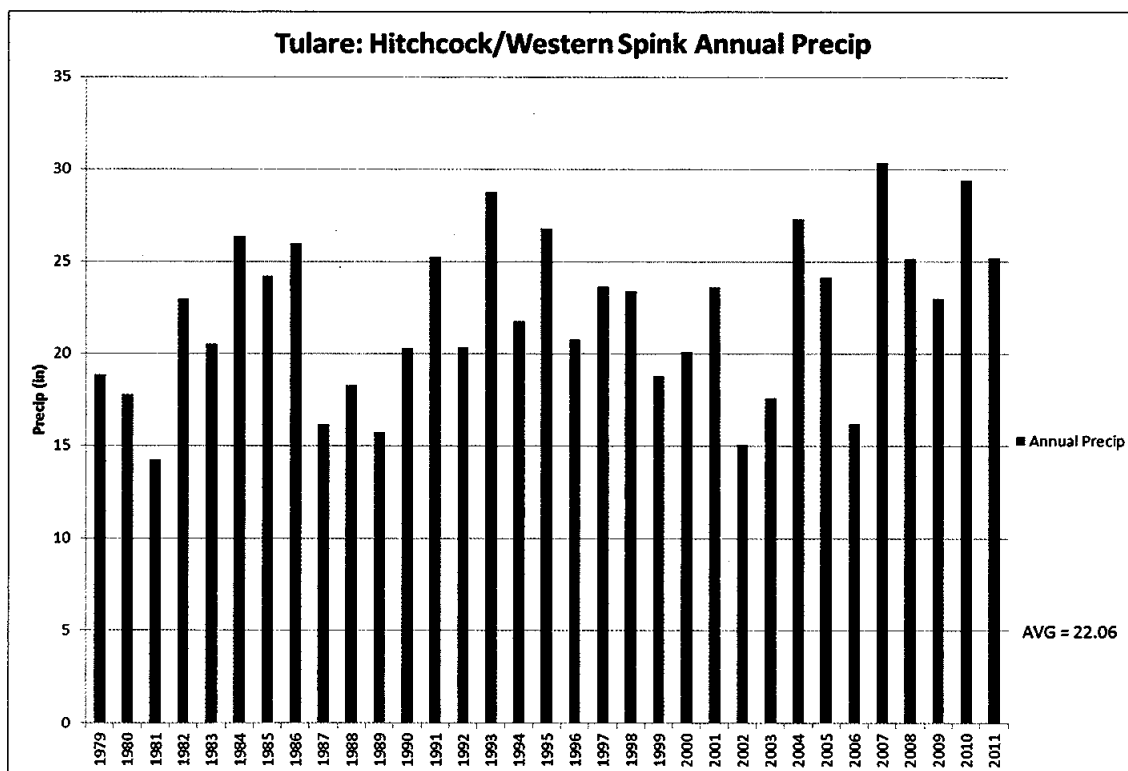


Figure 10. Annual precipitation for the Tulare: Western Spink/Hitchcock aquifer (Modified from Mathiowetz, 2012)

The best information available delineating the portion of the Tulare: WesternSpink/Hitchcock aquifer that is confined vs. unconfined is the Kuiper (1984) groundwater flow model. In figure 26 of the report, 67 “nodes” of the model were identified as being under water table conditions. These 67 nodes are equivalent to 42,880 acres. However, since Kuiper’s model was developed, wetter conditions have prevailed and less of the aquifer is under unconfined conditions. Observation well data identifies a significantly smaller proportion of the aquifer under unconfined conditions now than in the late 1970’s and early 1980’s. Of the 19 observation wells that were originally considered to be completed into unconfined portions of the aquifer, only five are currently in unconfined portions of the aquifer and the aquifer has become confined in the remaining 14 sites. Since only 26 % of the original sites that was originally unconfined remains unconfined, the area where the aquifer is unconfined is now considered to be only 11,149 acres.

Since 11,149 acres of the aquifer had an average annual water level rise of 0.34 feet, assuming a specific yield of 0.15, the annual change in volume of :

$$(11,149 \text{ acres} \times 0.34 \text{ feet} \times 0.15) = 569 \text{ acre feet}$$

Therefore annual recharge to the aquifer exceed discharge from the aquifer by an average of 569 acre-feet per year for the period of 1983-2011.

Allowing for an average application rate of 9.32 inches per year, on average, another 733 acres per year could have been irrigated without exceeding average annual recharge.

The DENR-Water Rights observation wells completed into the Tulare: Western Spink/Hitchcock aquifer verify that over the period of record (1983-2011), withdrawals from the aquifer have not exceeded recharge and unappropriated water is available from the aquifer.

EXISTING WATER RIGHTS:

There are 136 Water Rights/Permits currently appropriating water from the Tulare: Western Spink/Hitchcock aquifer. There have been a total of 81 water permit applications filed within approximately two miles of the well sites proposed by these applications. The status of these applications is shown in table 4.

STATUS	NUMBER
CANCELLED	13
DENIED	19
INCORPORATED	8
LICENSED	37
PERMITTED	2
WITHDRAWN	2

Table 4. Status of Water Permit Applications filed for this area.

Well interference has never been a problem in this aquifer (Goodman, 2002). 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 11). Where the aquifer is under confined conditions water level fluctuations are more pronounced (see figure 12).

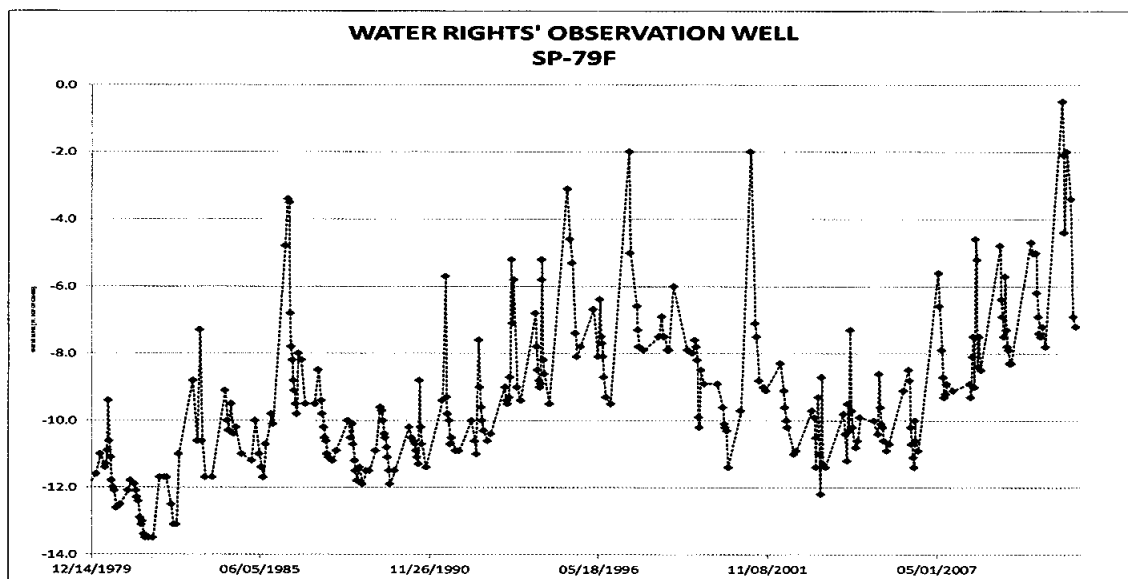


Figure 11. DENR-Water Rights' observation well completed into the unconfined portion of the Tulare:Western Spink/Hitchcock aquifer

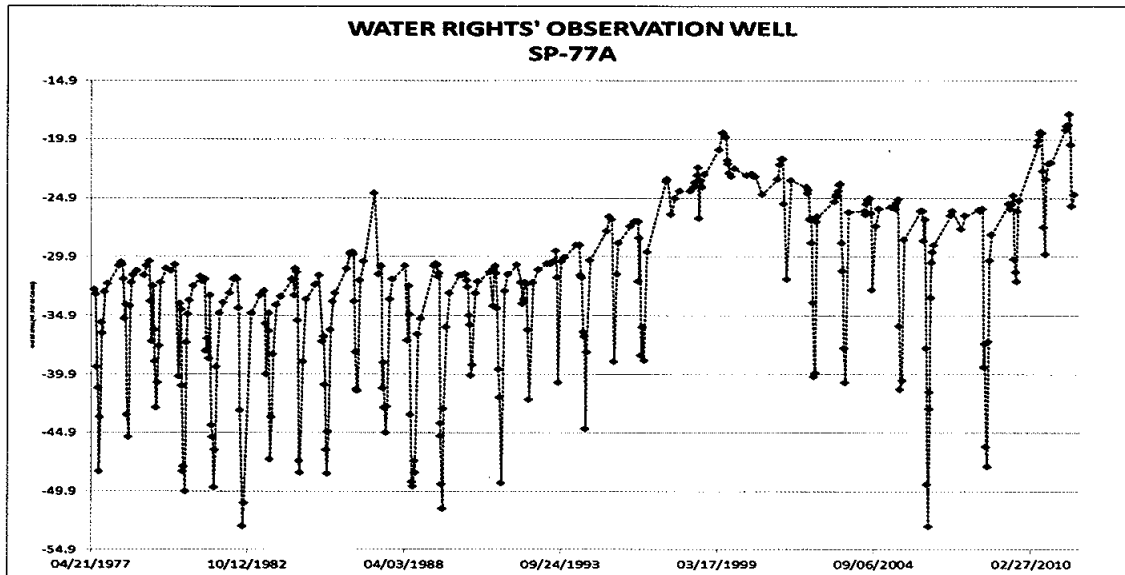


Figure 12. DENR-Water Rights' observation well completed into the confined portion of the Tulare:Western Spink/Hitchcock aquifer

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: WesternSpink/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 total number of acres that are currently authorized for irrigation from the Tulare: Western Spink/Hitchcock aquifer is 22,838.8 acres.
7. The difference between the number of acres that can be irrigated from the Tulare: Western Spink/Hitchcock aquifer and the number of acres that are currently permitted to be irrigated shows approximately 585 additional acres can be permitted for irrigation.
8. The analysis of DENR-Water Rights' observation well data identifies that the over the period of record of 1983- 2011, average annual recharge to the aquifer has exceeded the average annual withdrawals from the aquifer by approximately 569 acre-feet per year.
9. The observation well data indicates that another 733 acres could have been irrigated over the time period of 1983- 2011, at an average application rate of 9.32 inches per year.
10. There is a reasonable probability that unappropriated water is available from the Tulare: Western Spink/Hitchcock aquifer to irrigate approximately 733 additional acres.
11. Additional irrigation withdrawals are not expected to impair existing users.



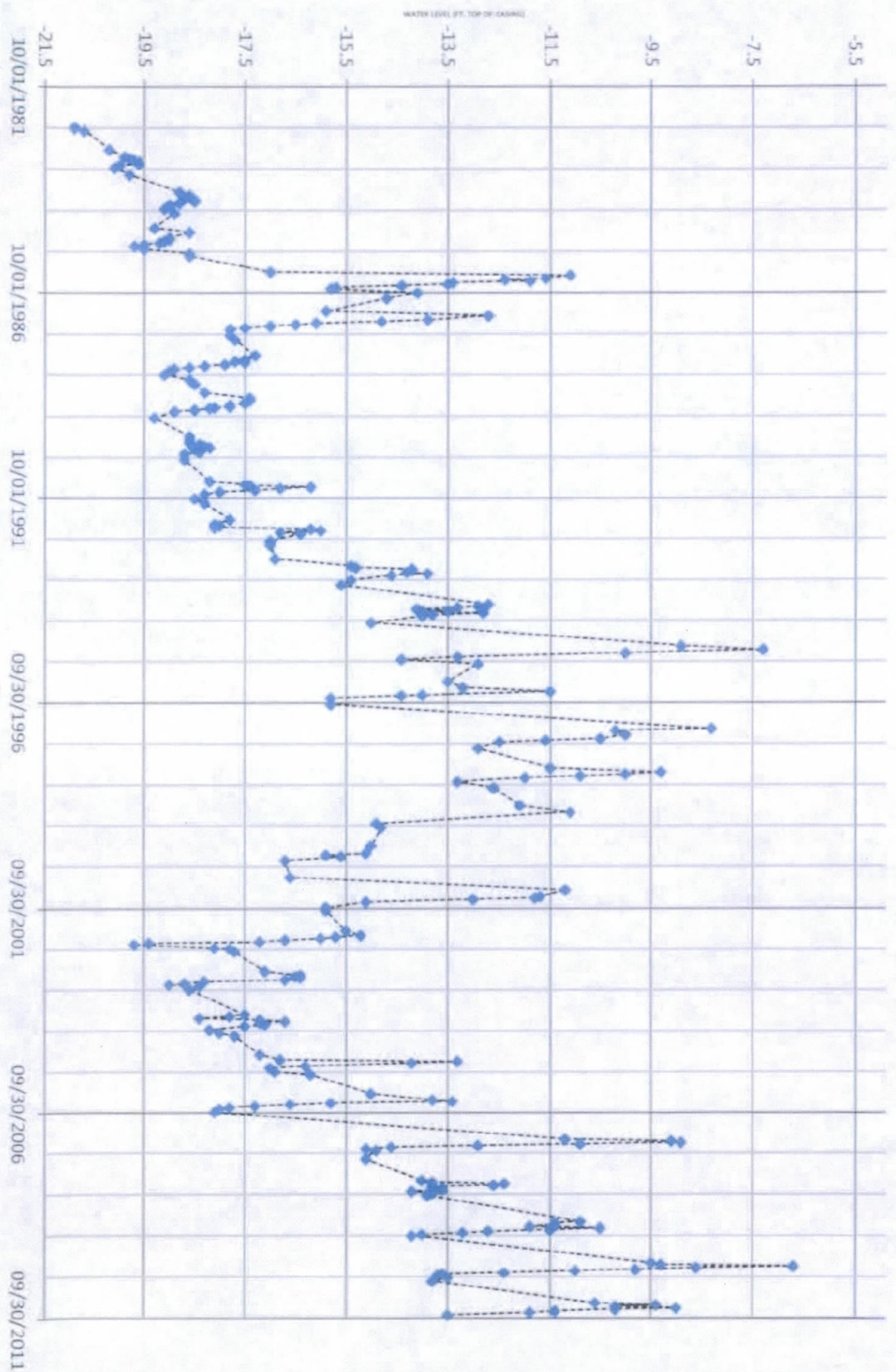
Ken Buhler
SD DENR-Water Rights Program

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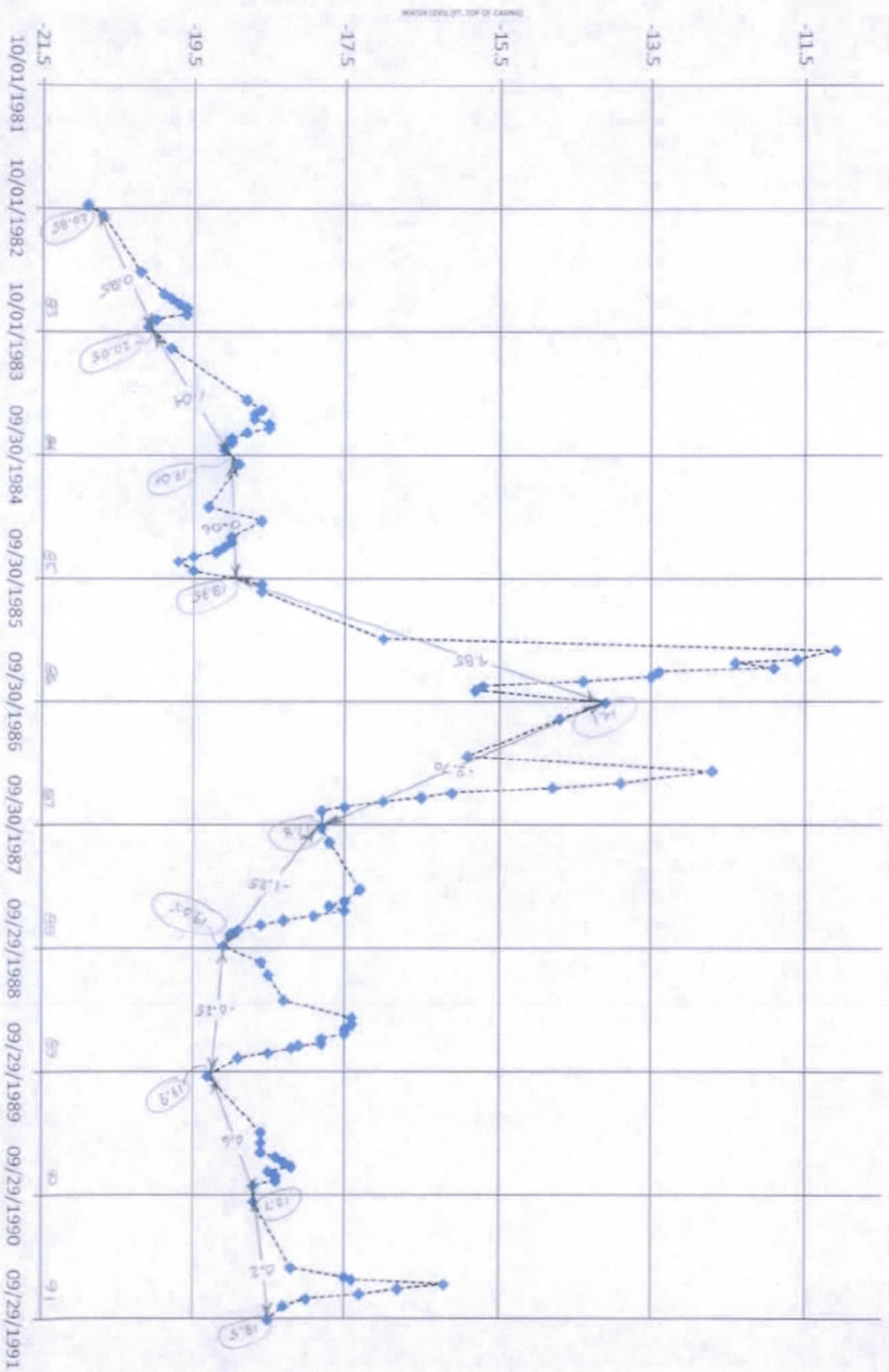
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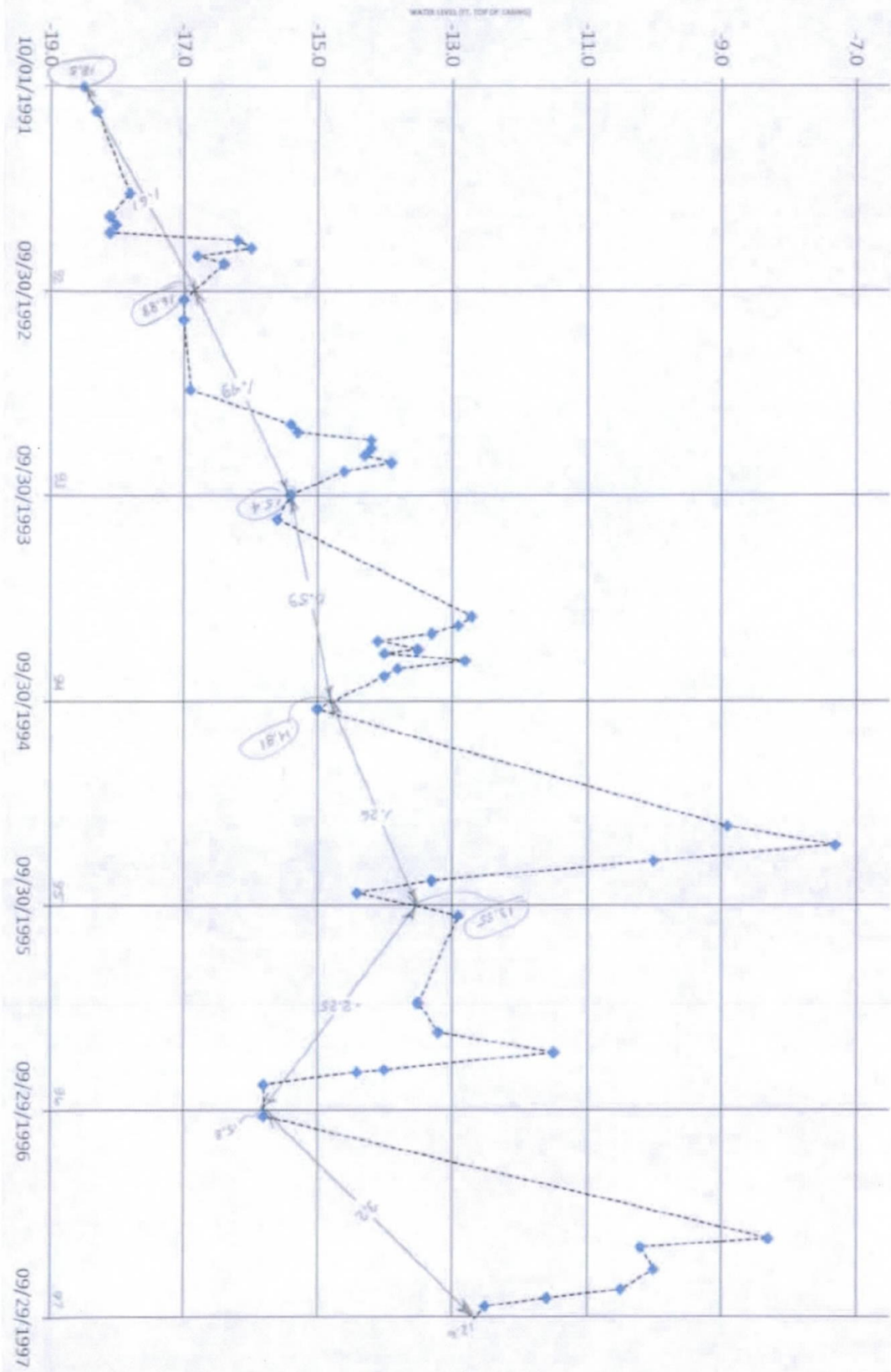
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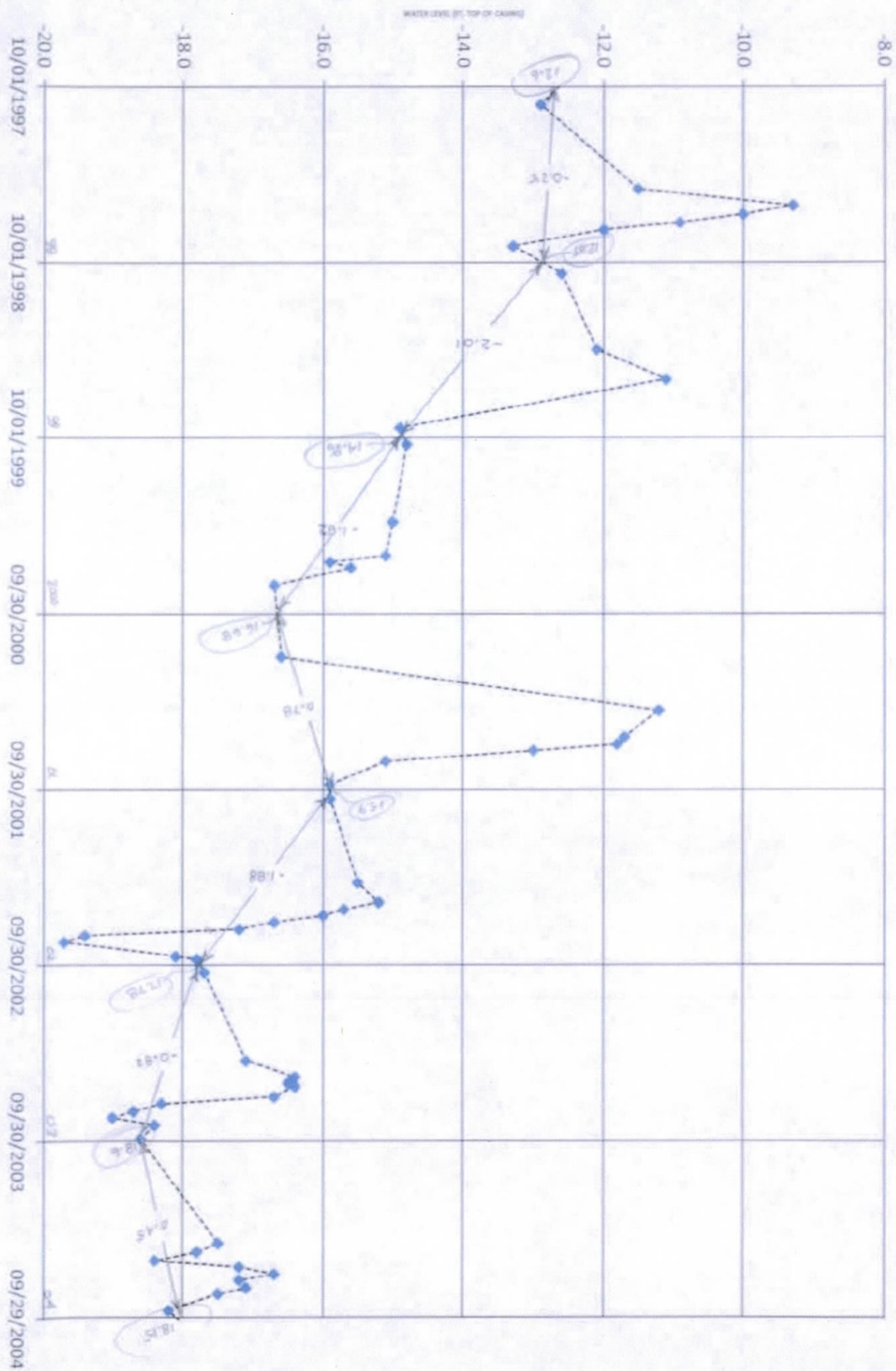
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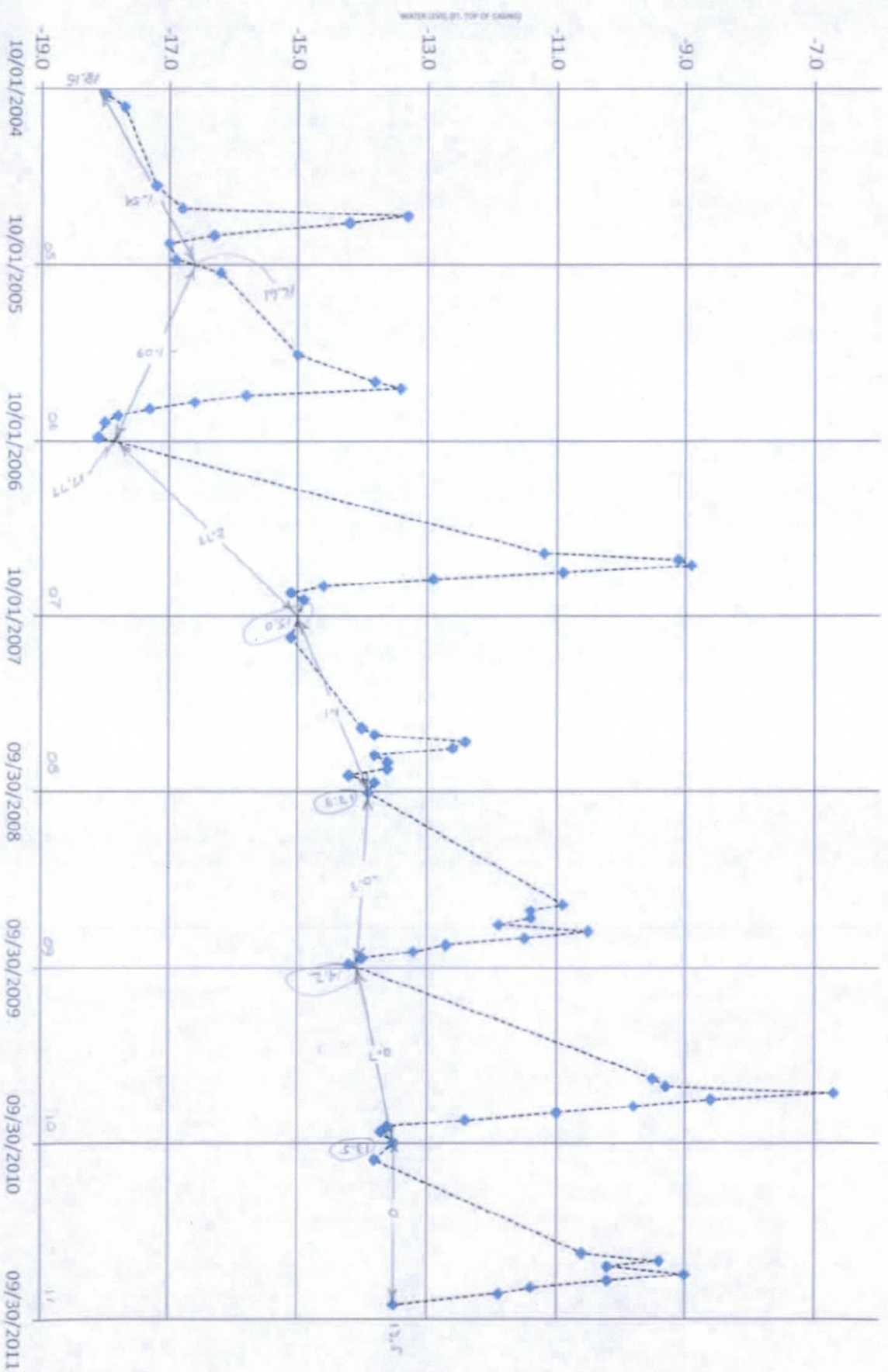
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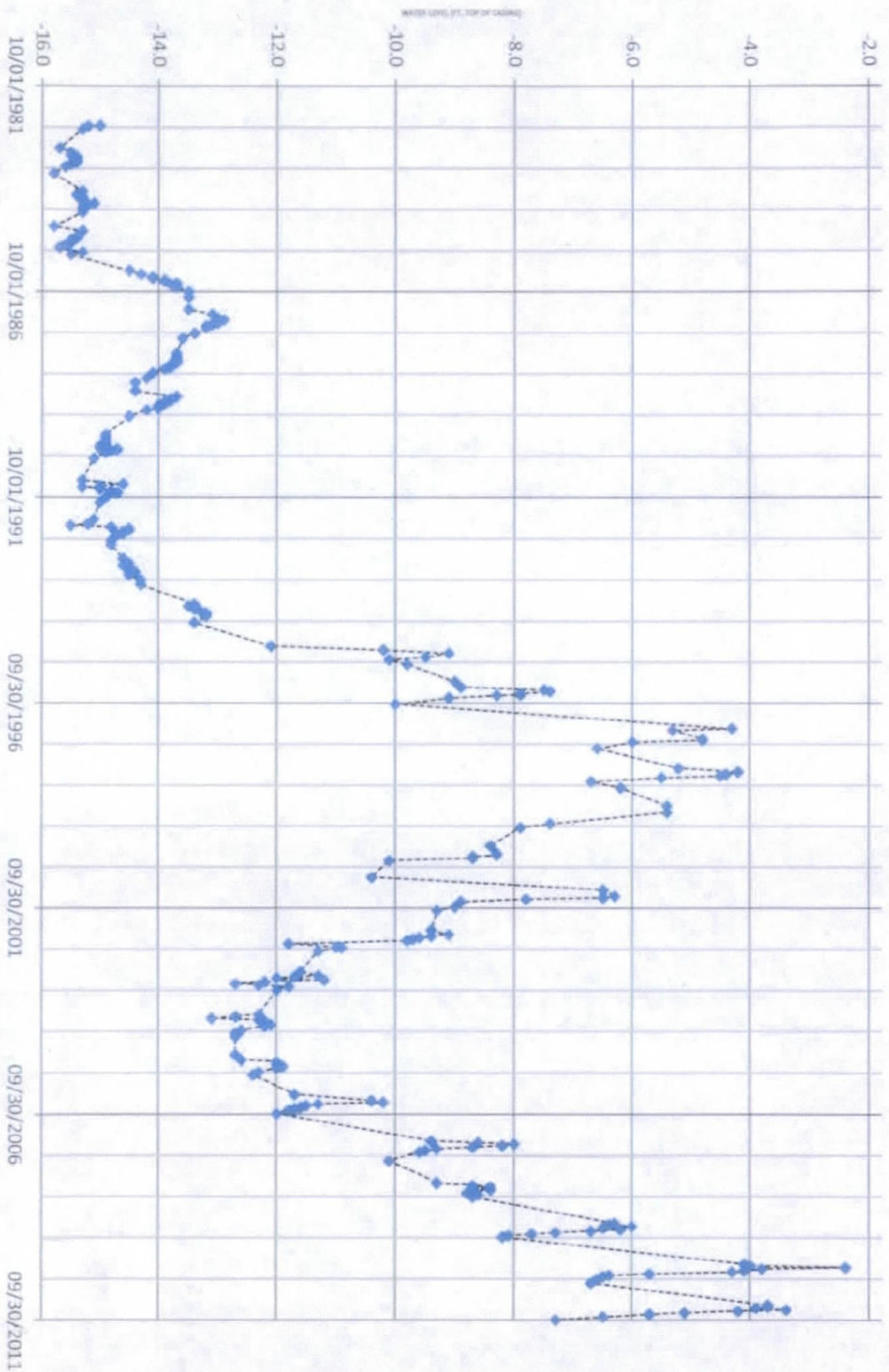
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WATER RIGHTS' OBSERVATION WELL
SP-82G



WATER RIGHTS' OBSERVATION WELL
SP-82G

10/01/1981 10/01/1986 10/01/1991

-12.5
-13.0
-13.5
-14.0
-14.5
-15.0
-15.5
-16.0

62 63 64 65 66 67 68 69 70 71

15.24
15.51
15.47
13.5
13.1
14.13
14.31
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14.5

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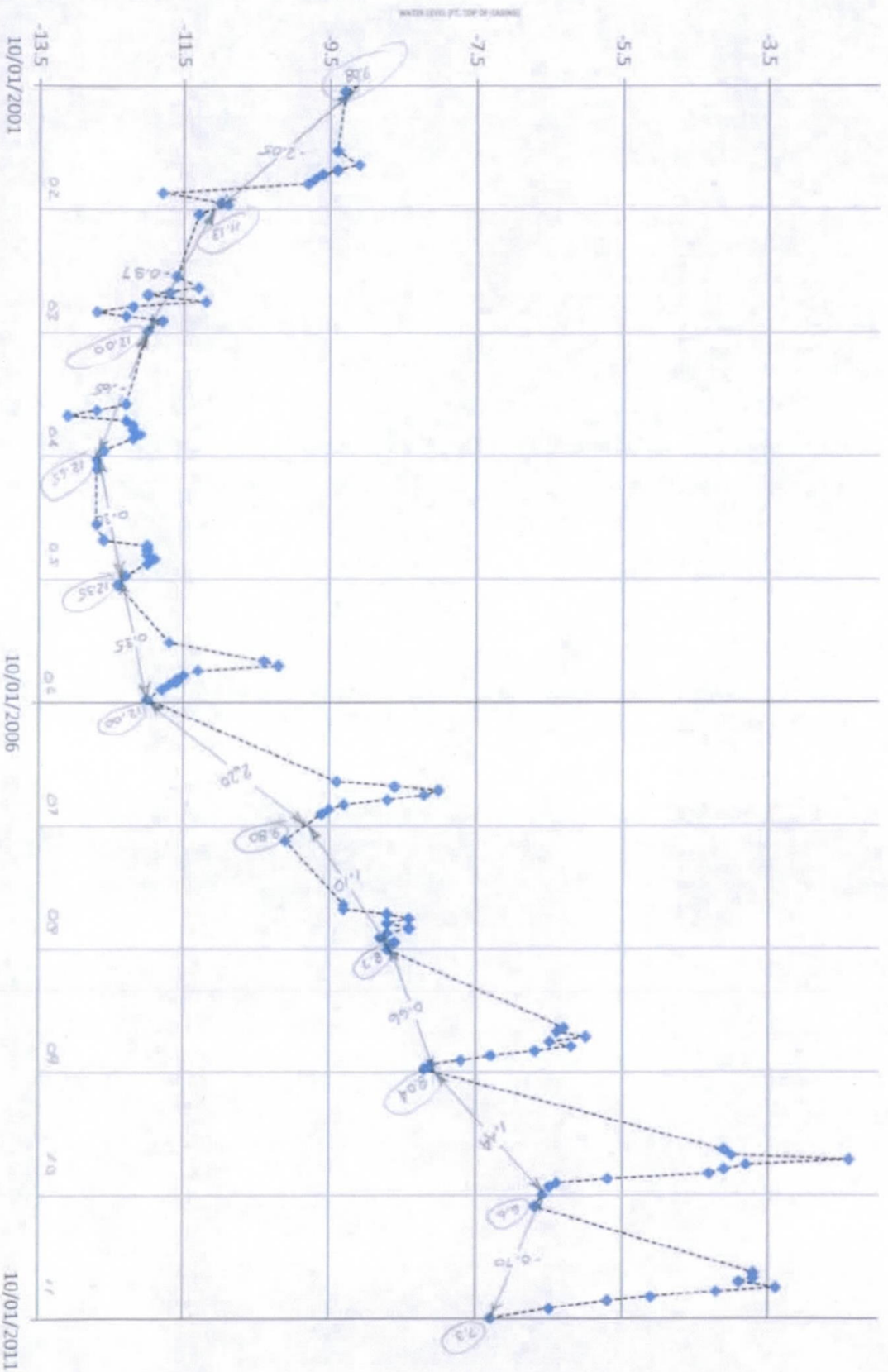
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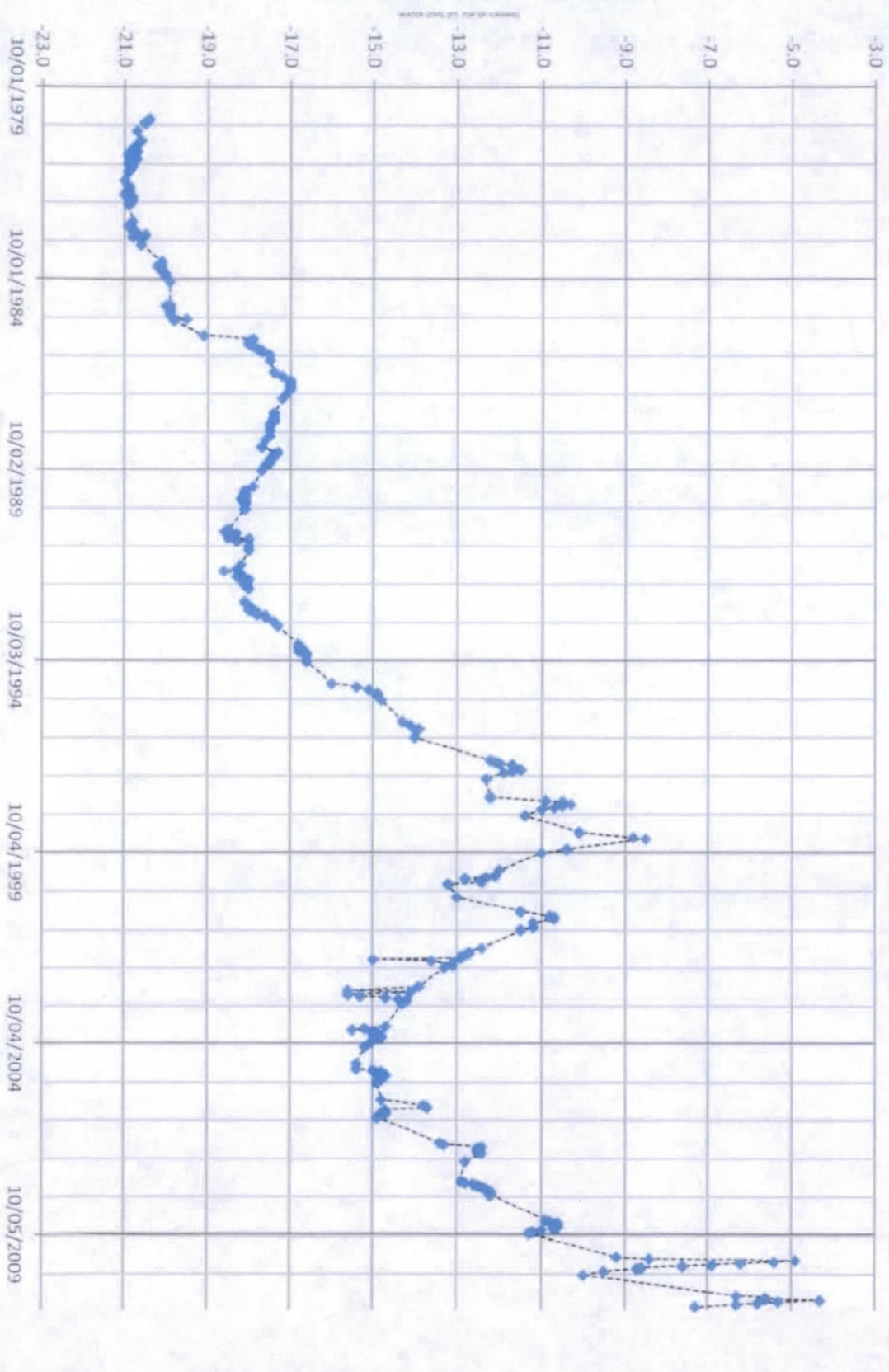
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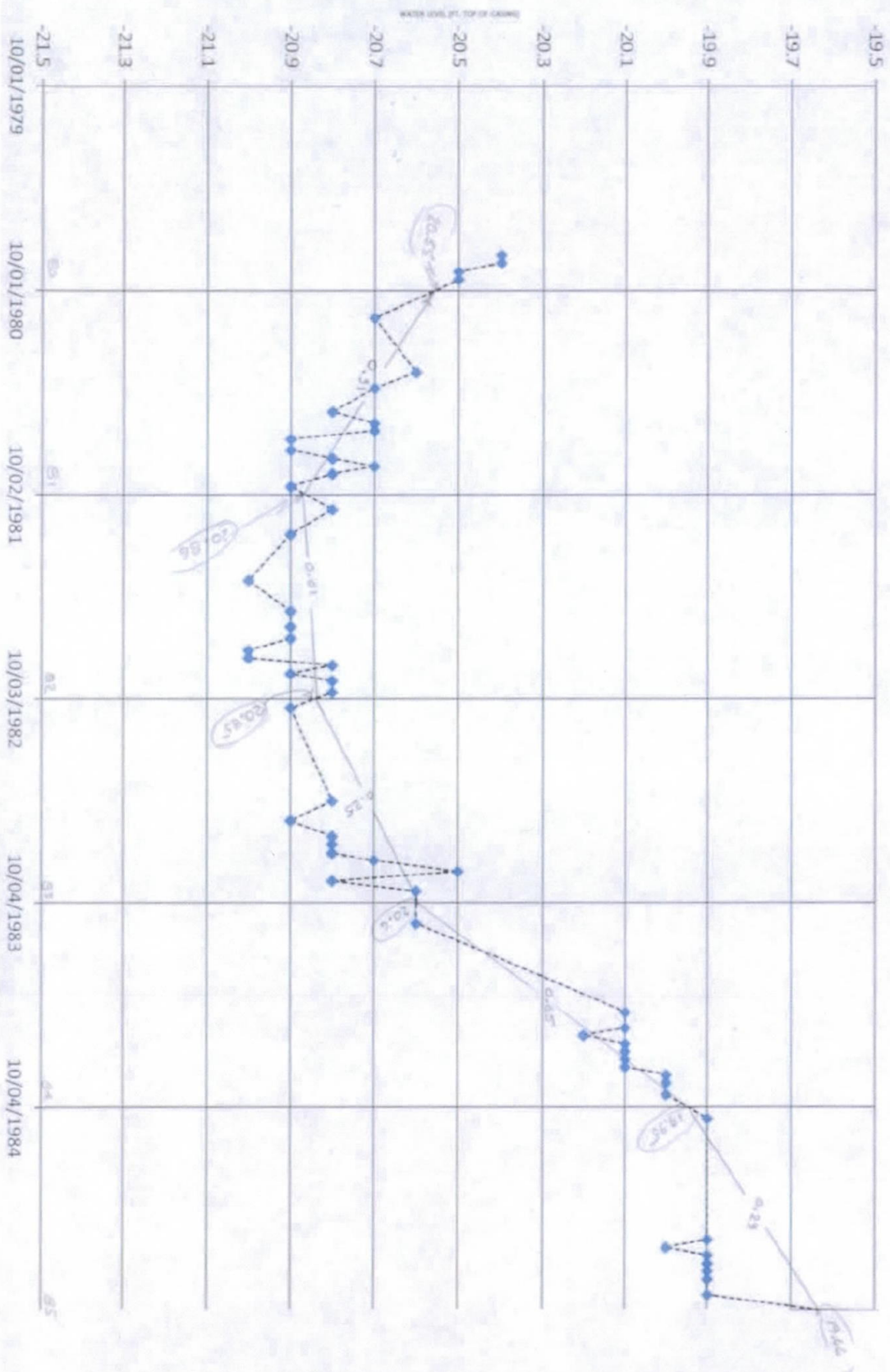
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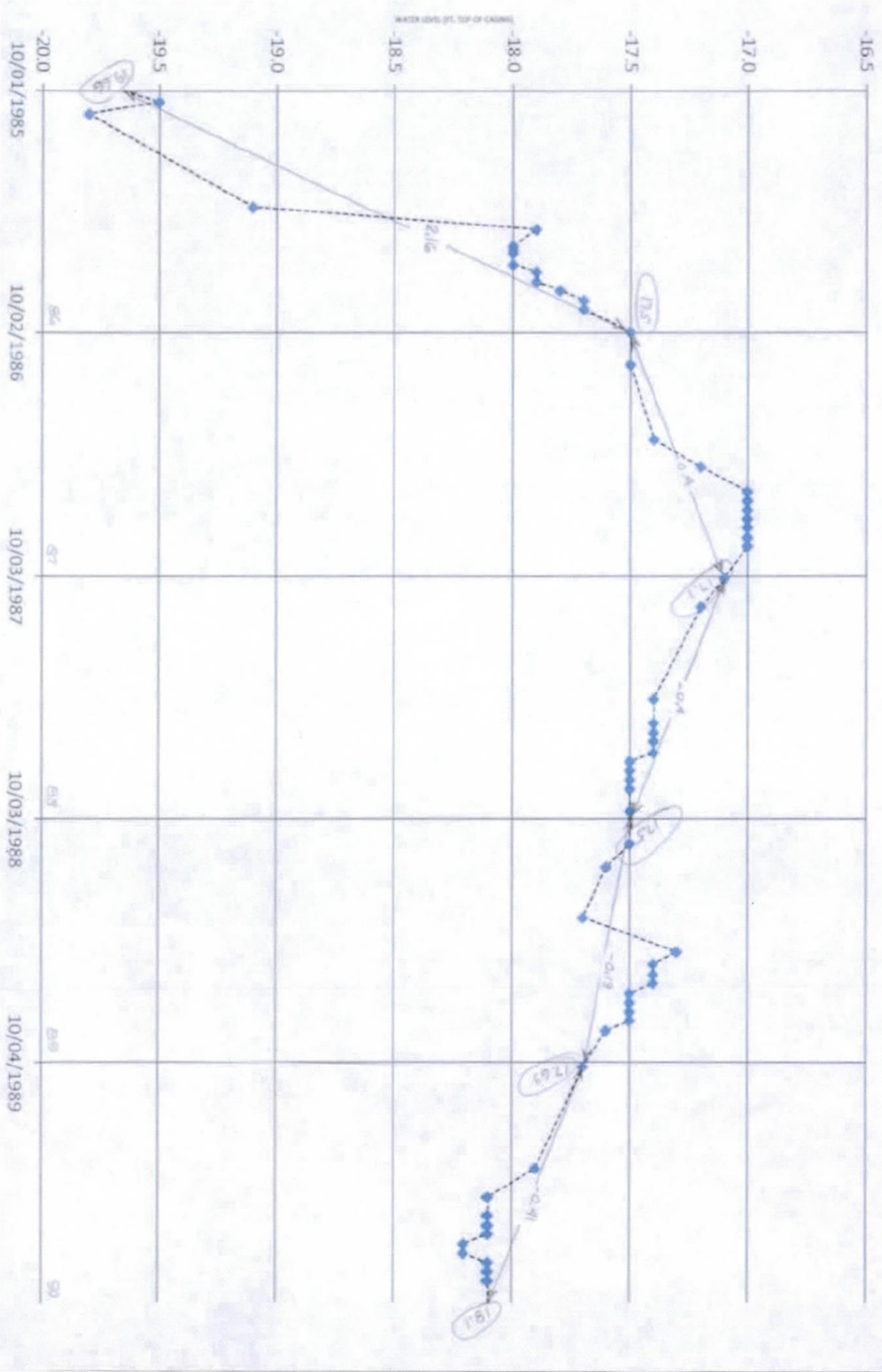
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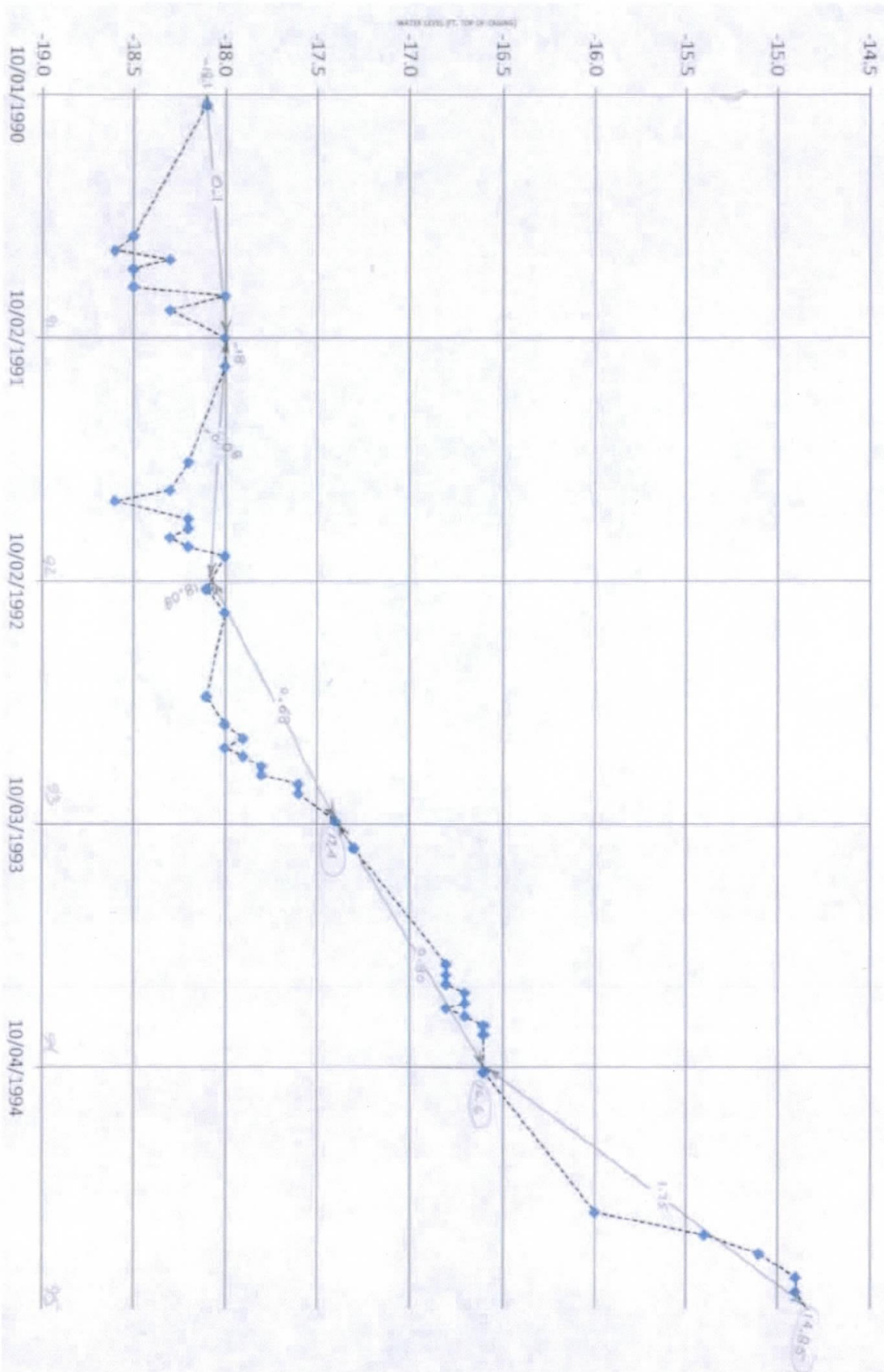
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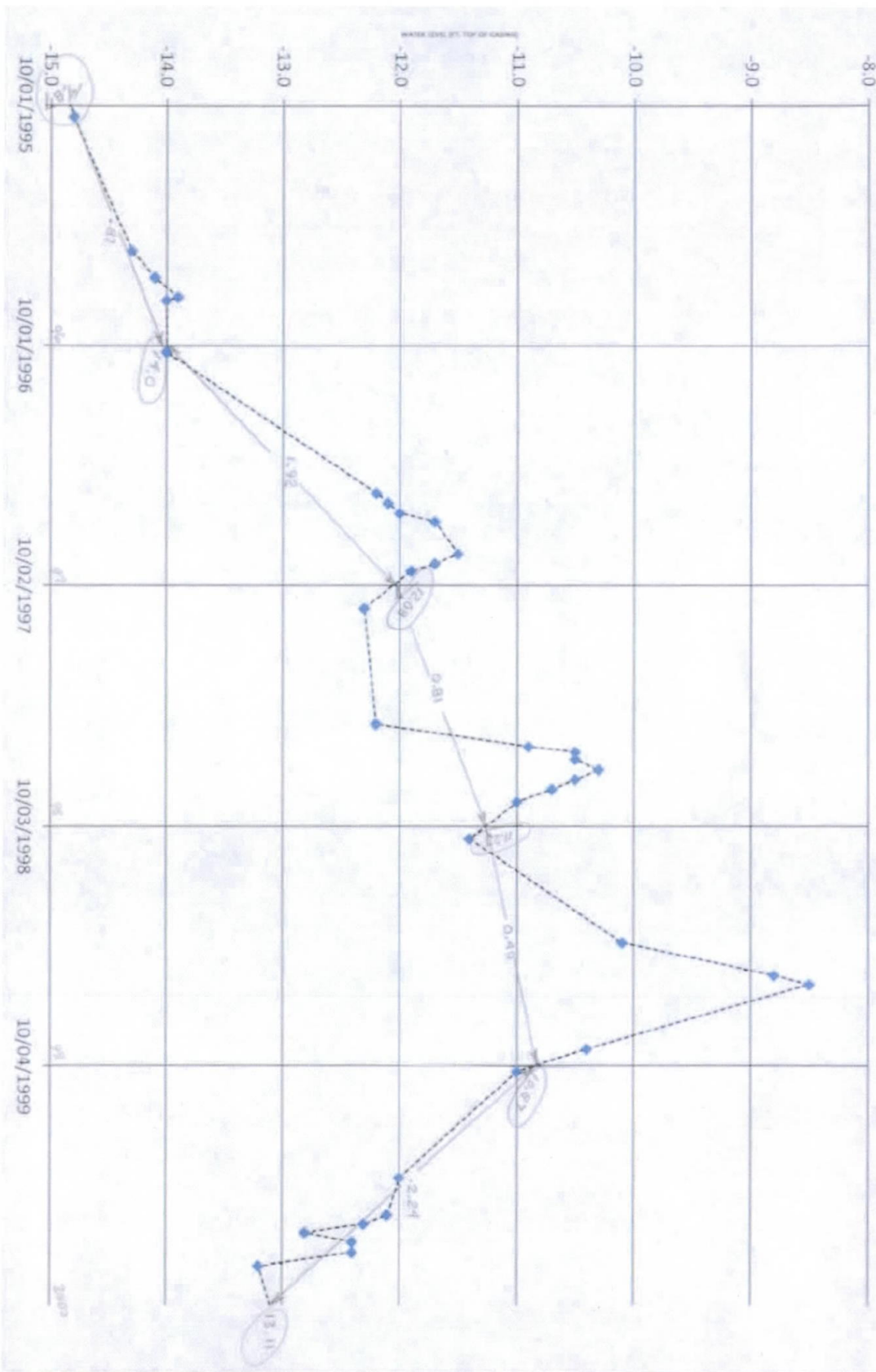
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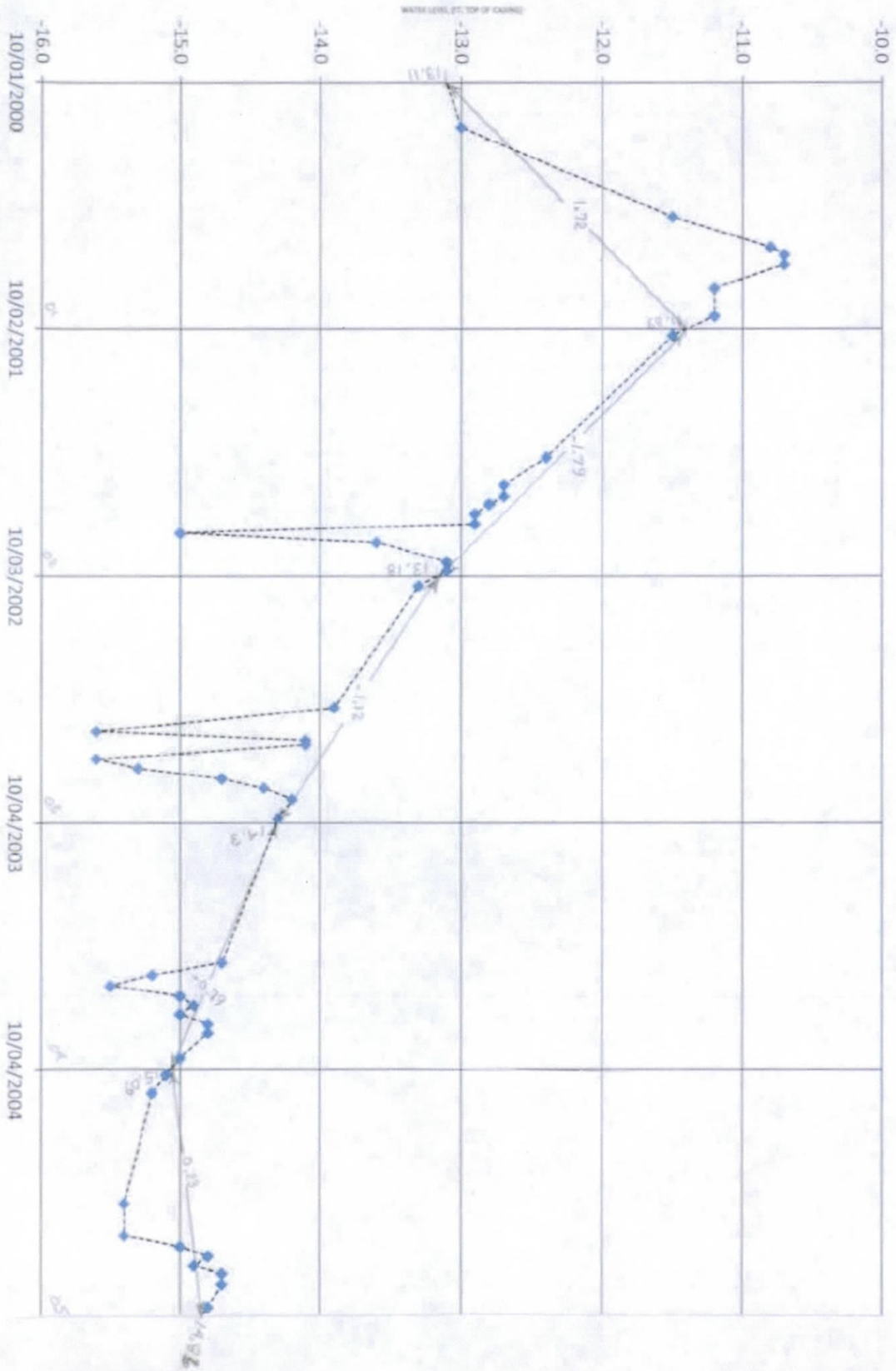
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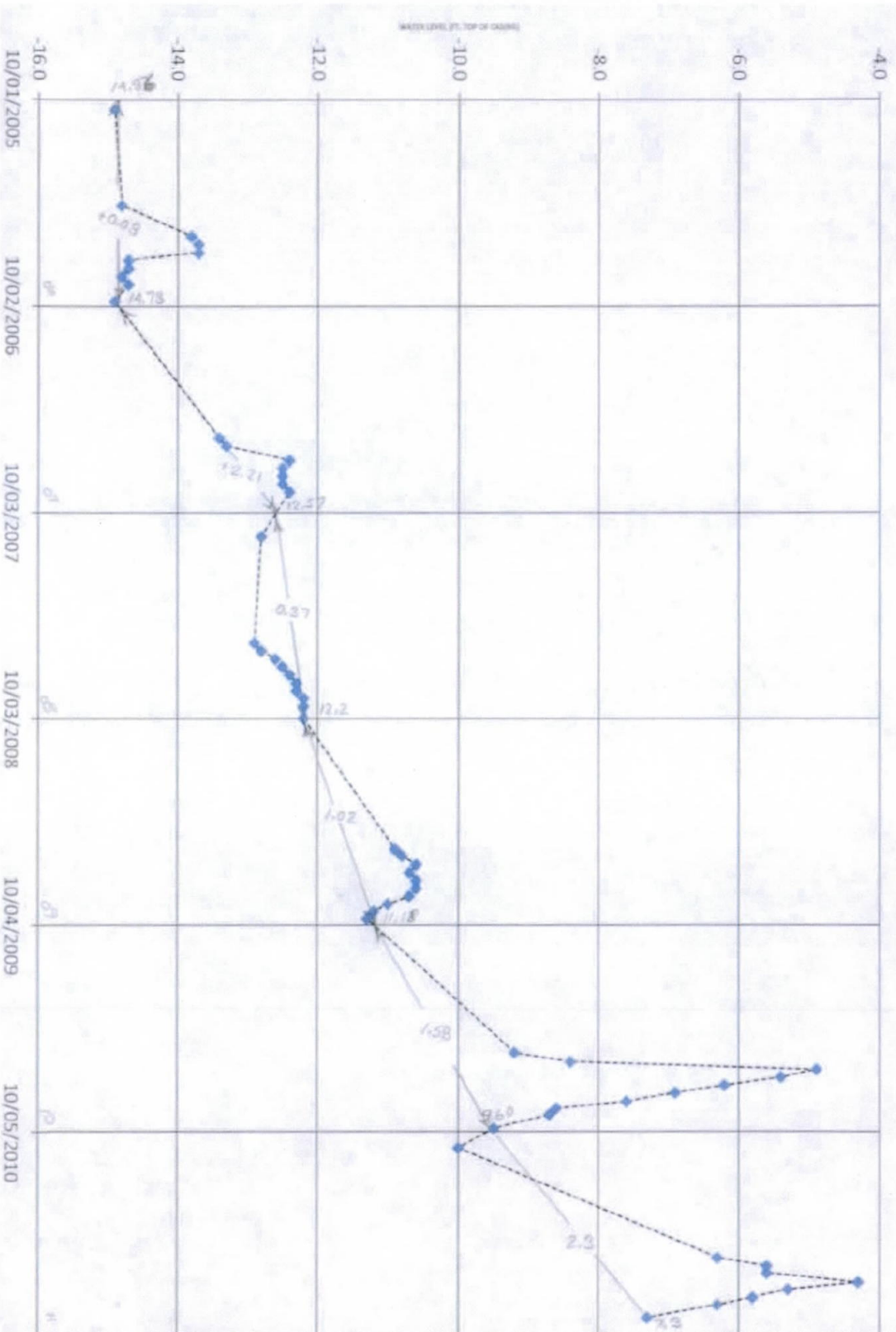
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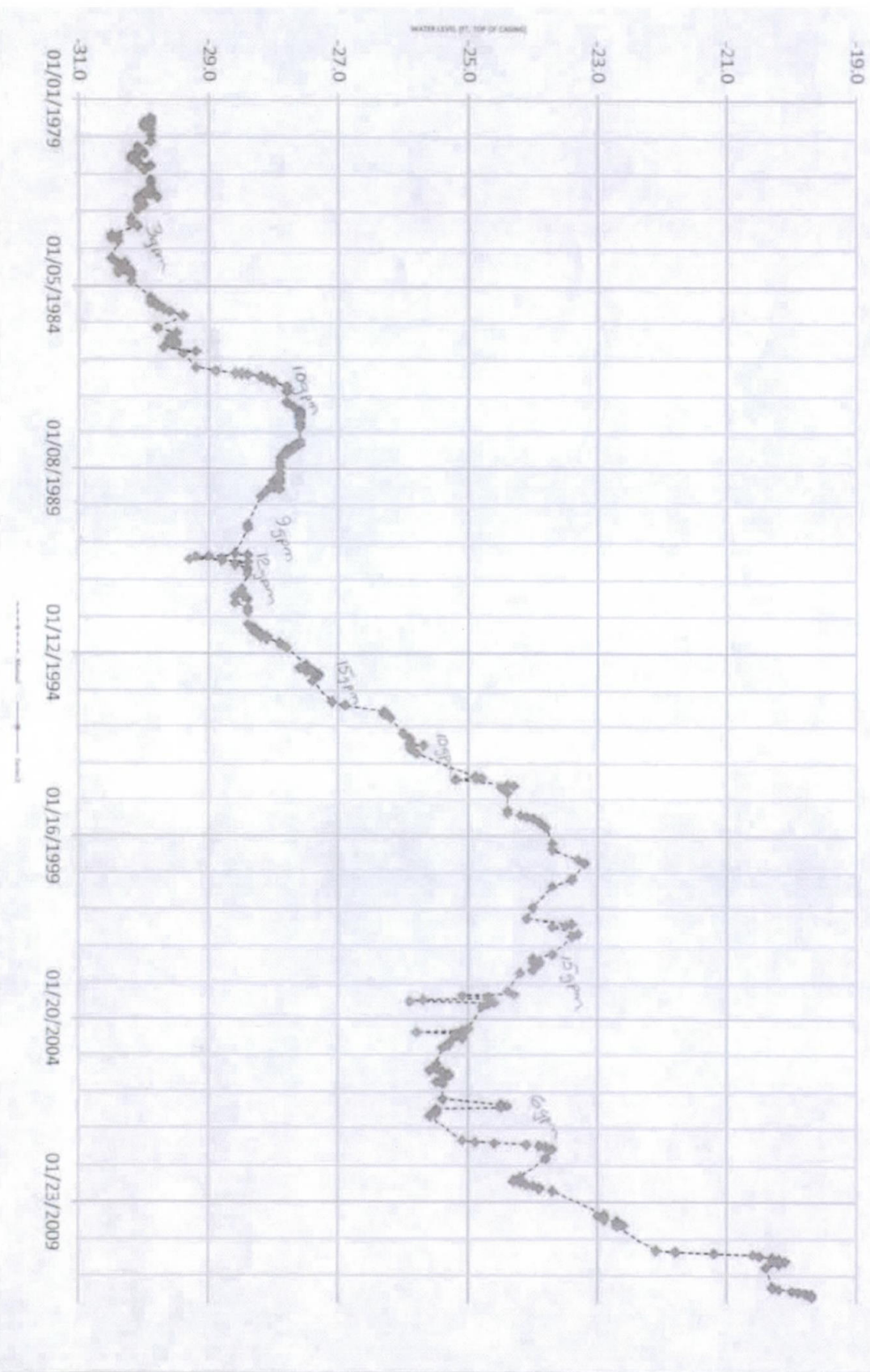
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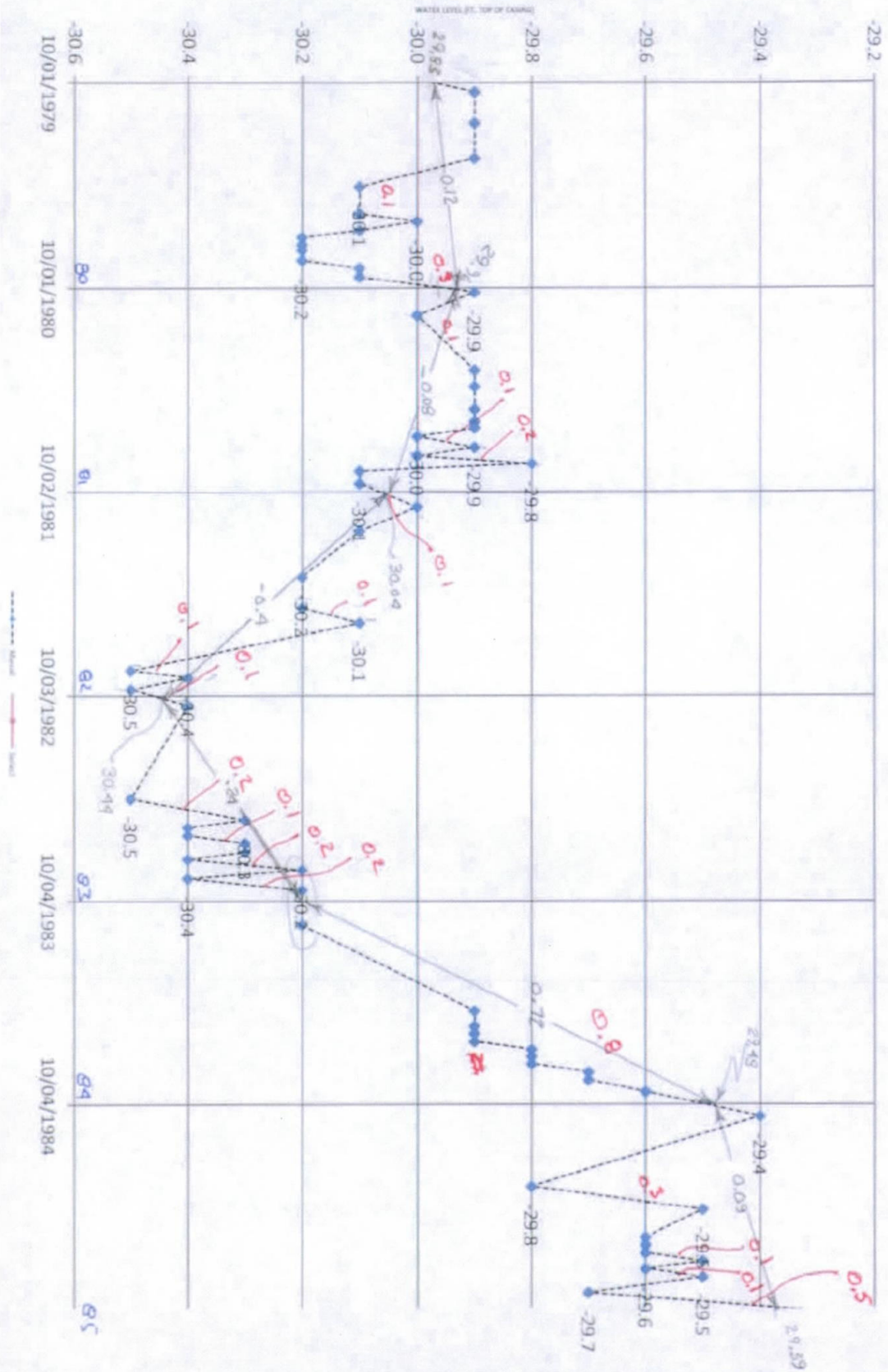
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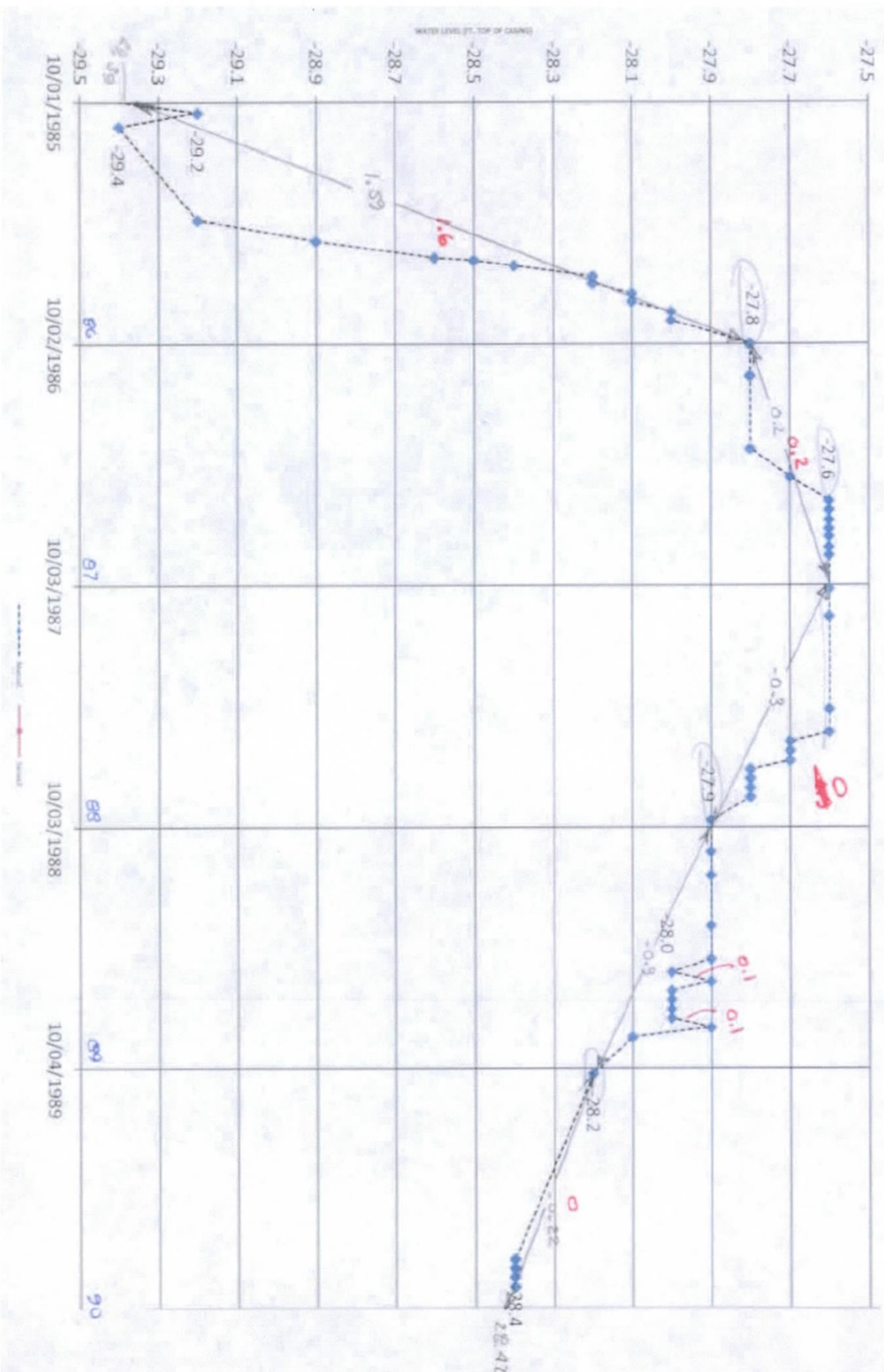
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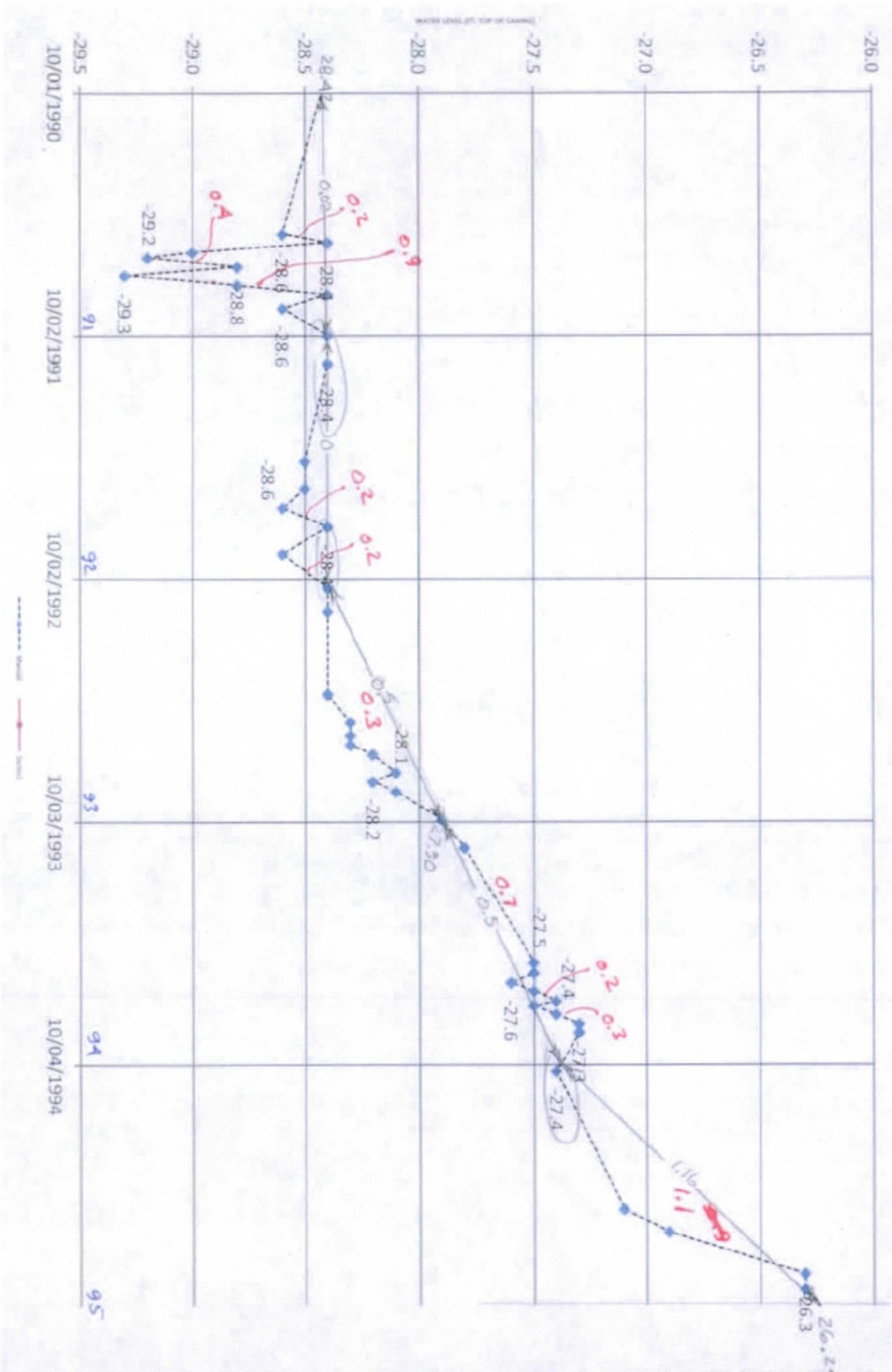
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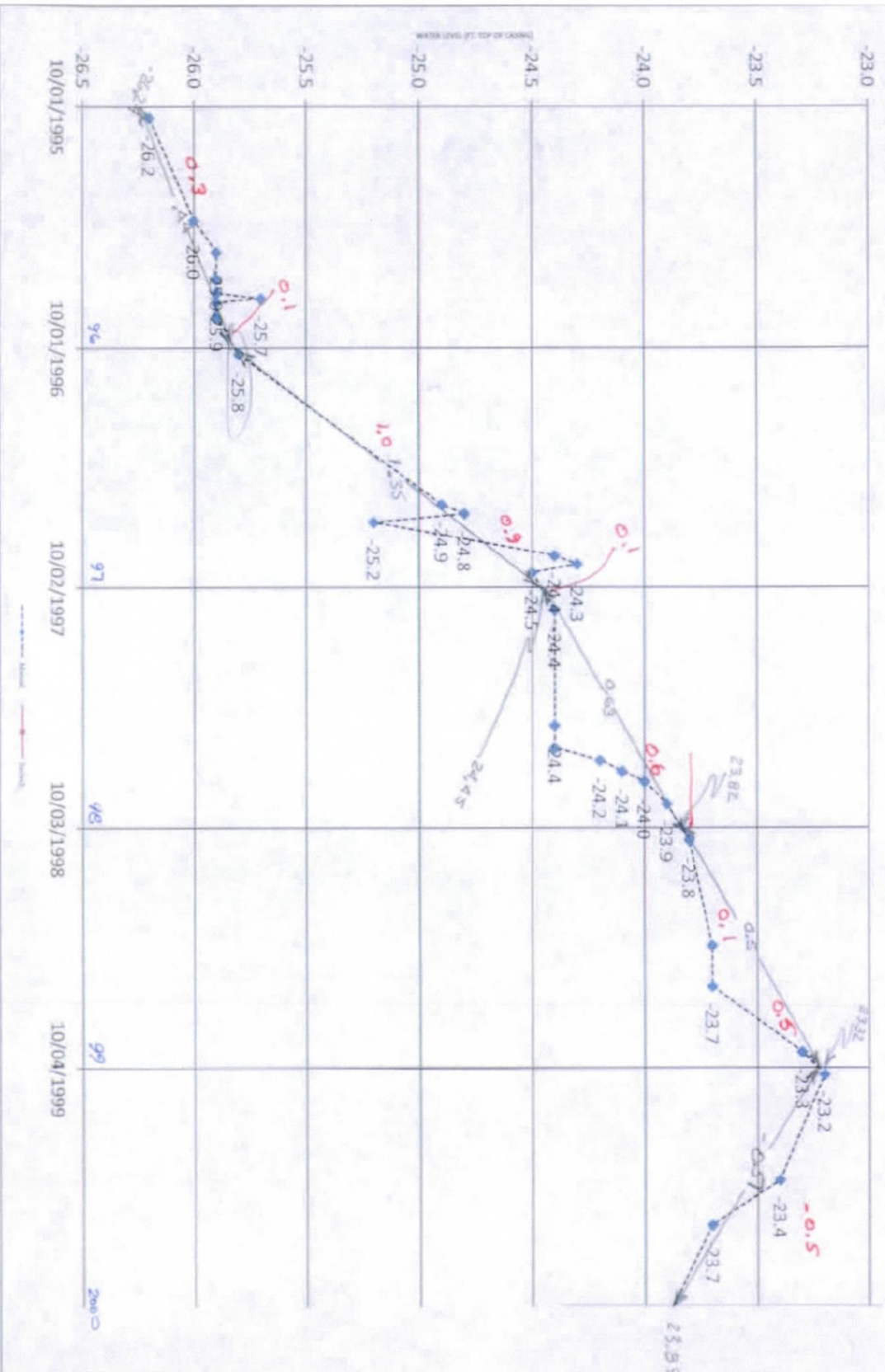
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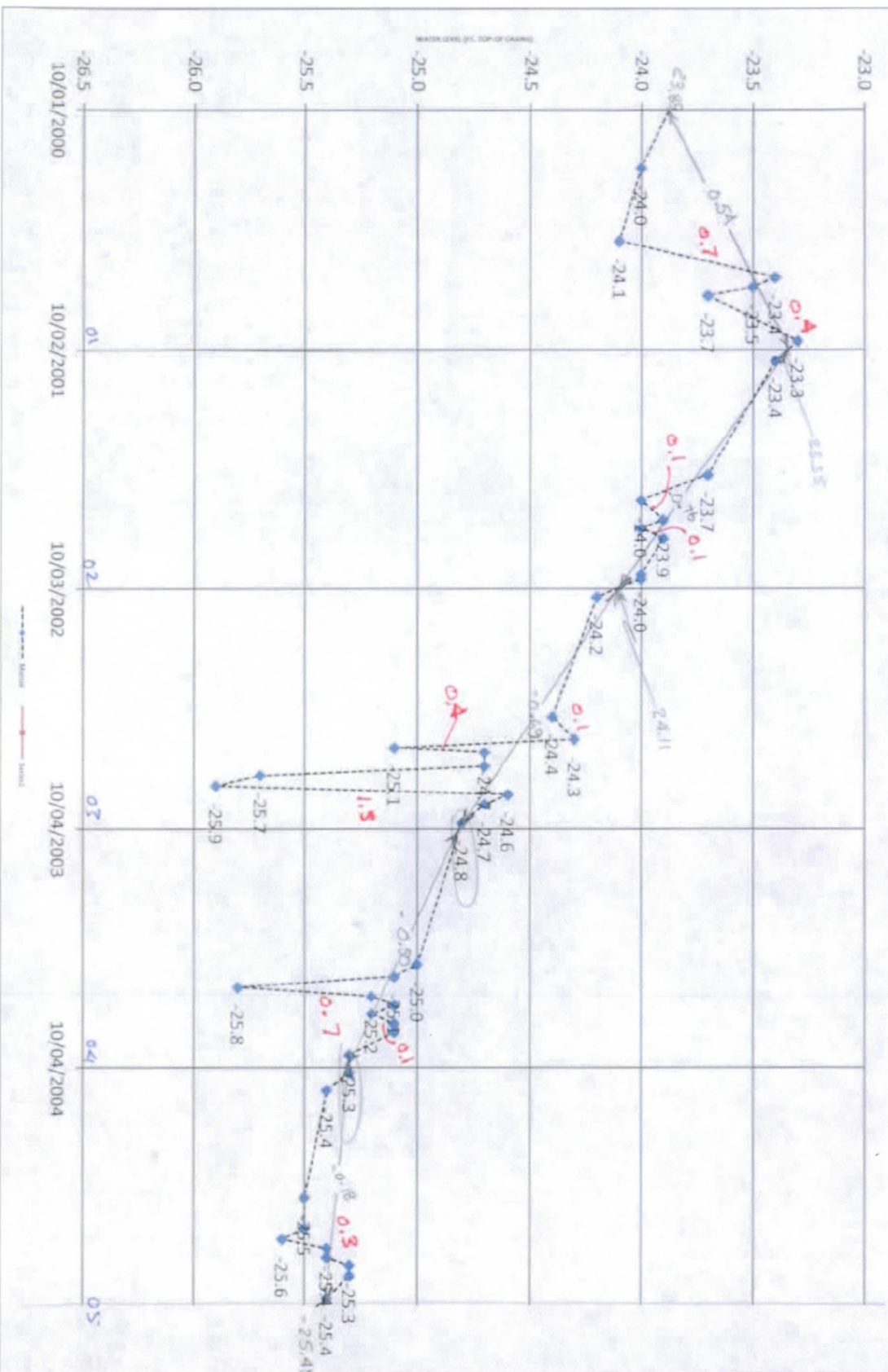
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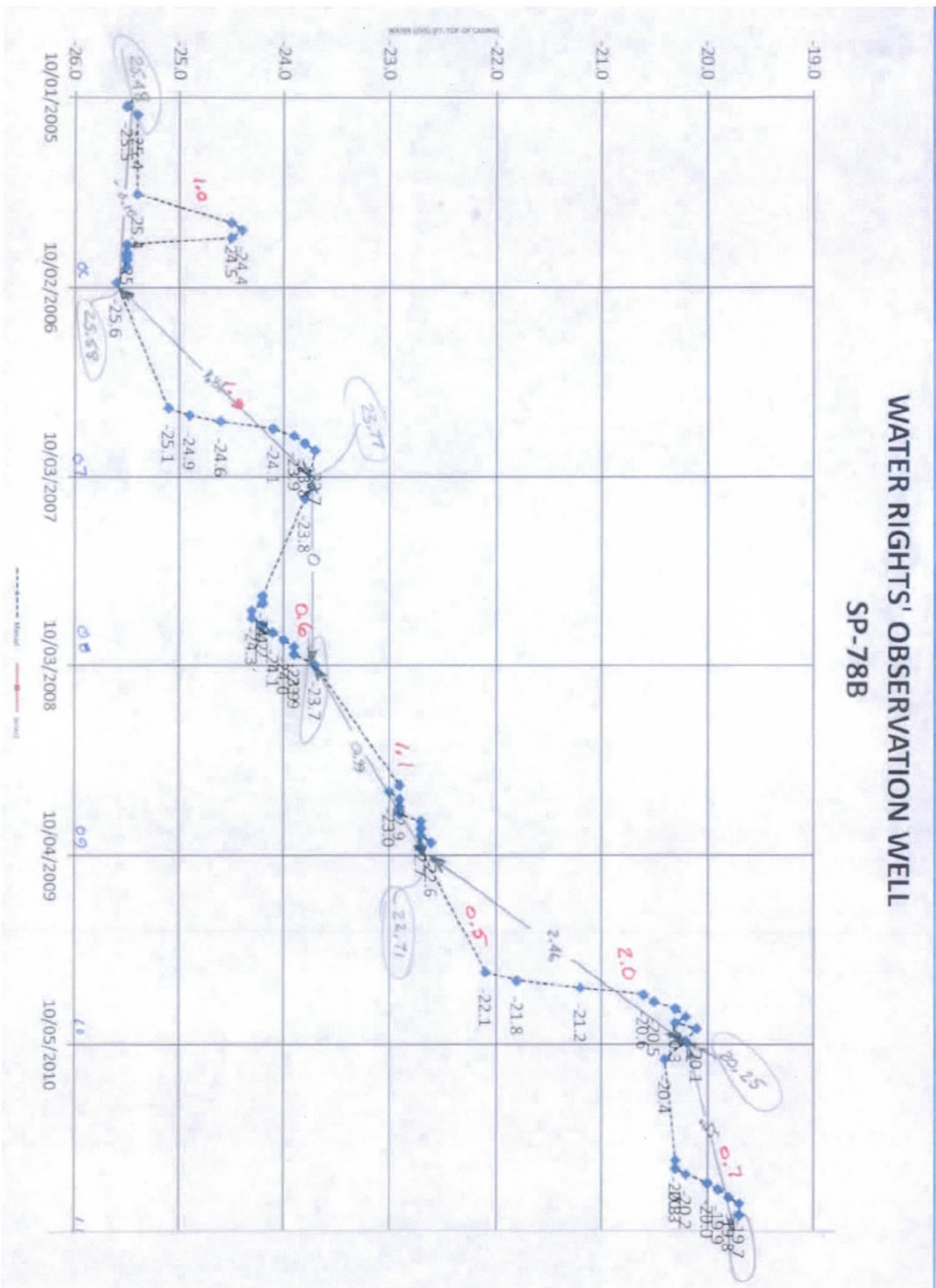
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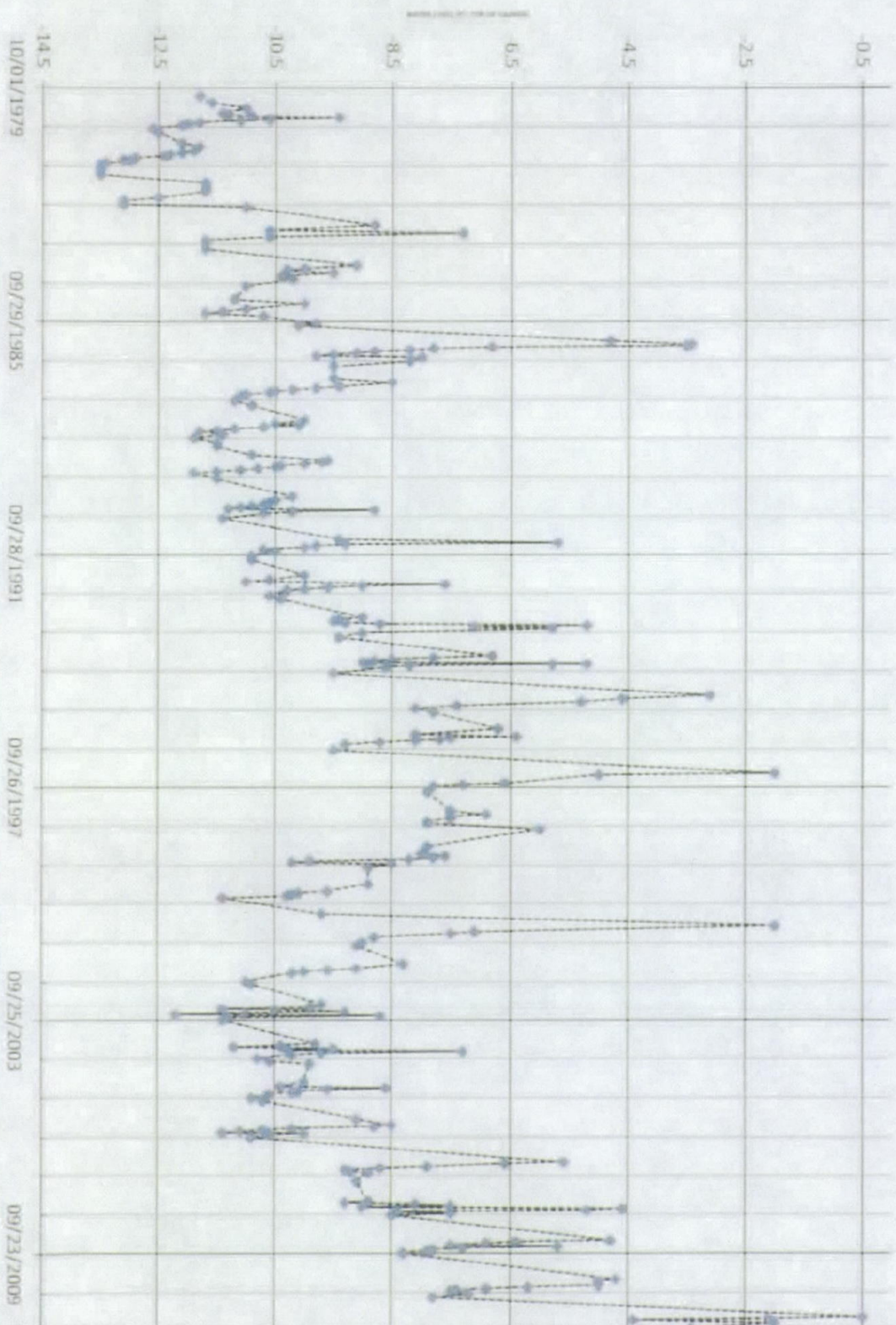
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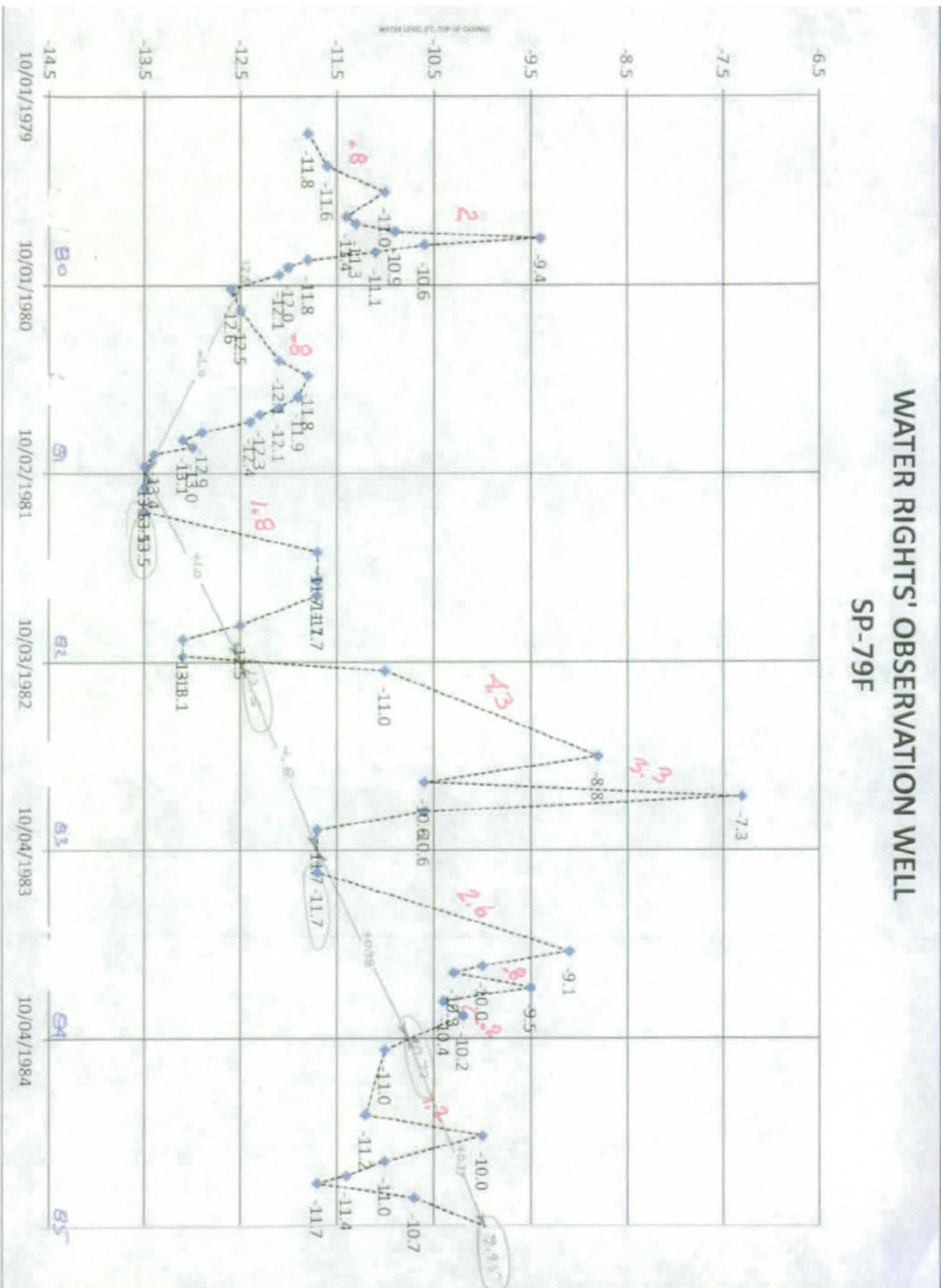
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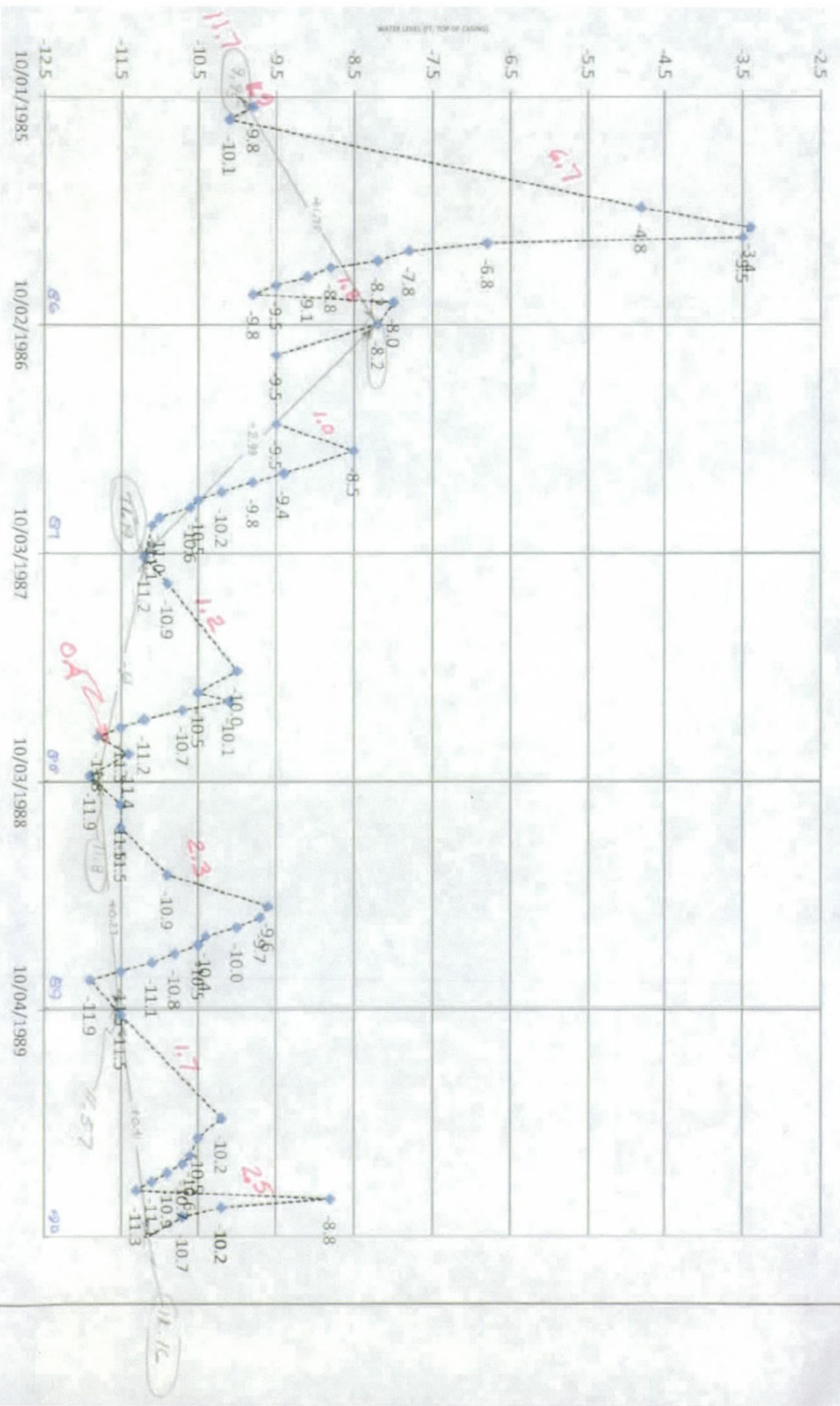
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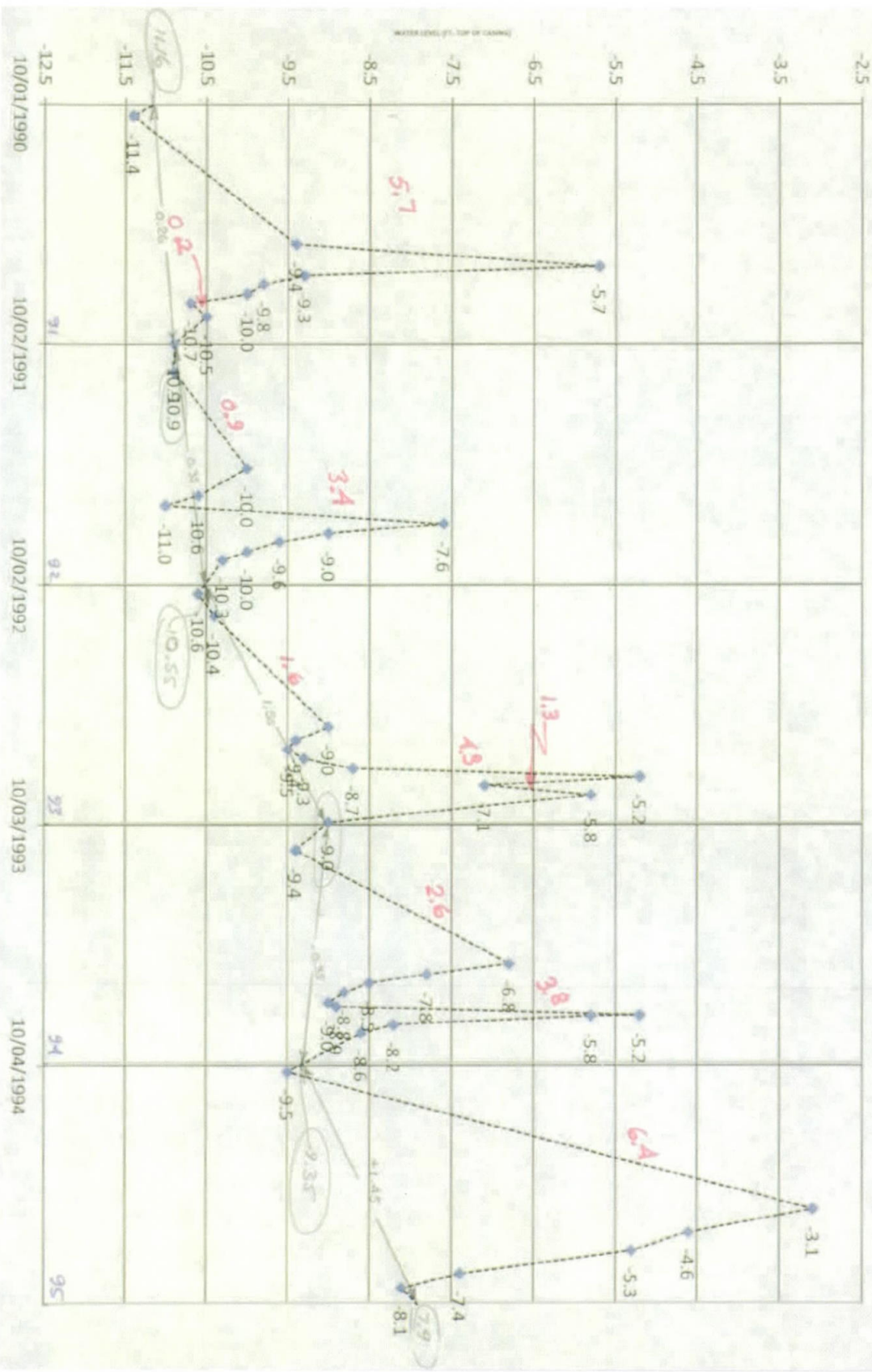
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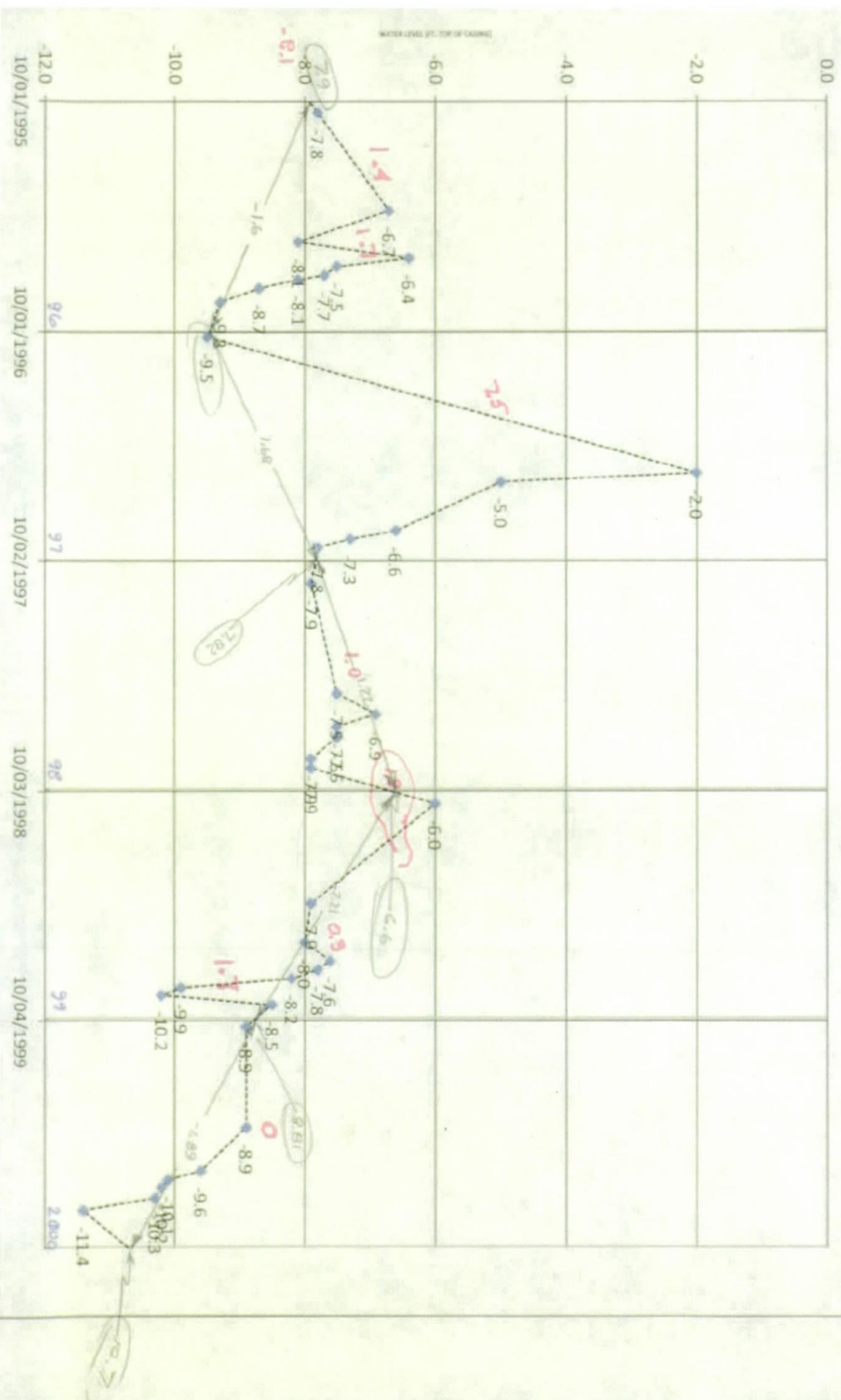


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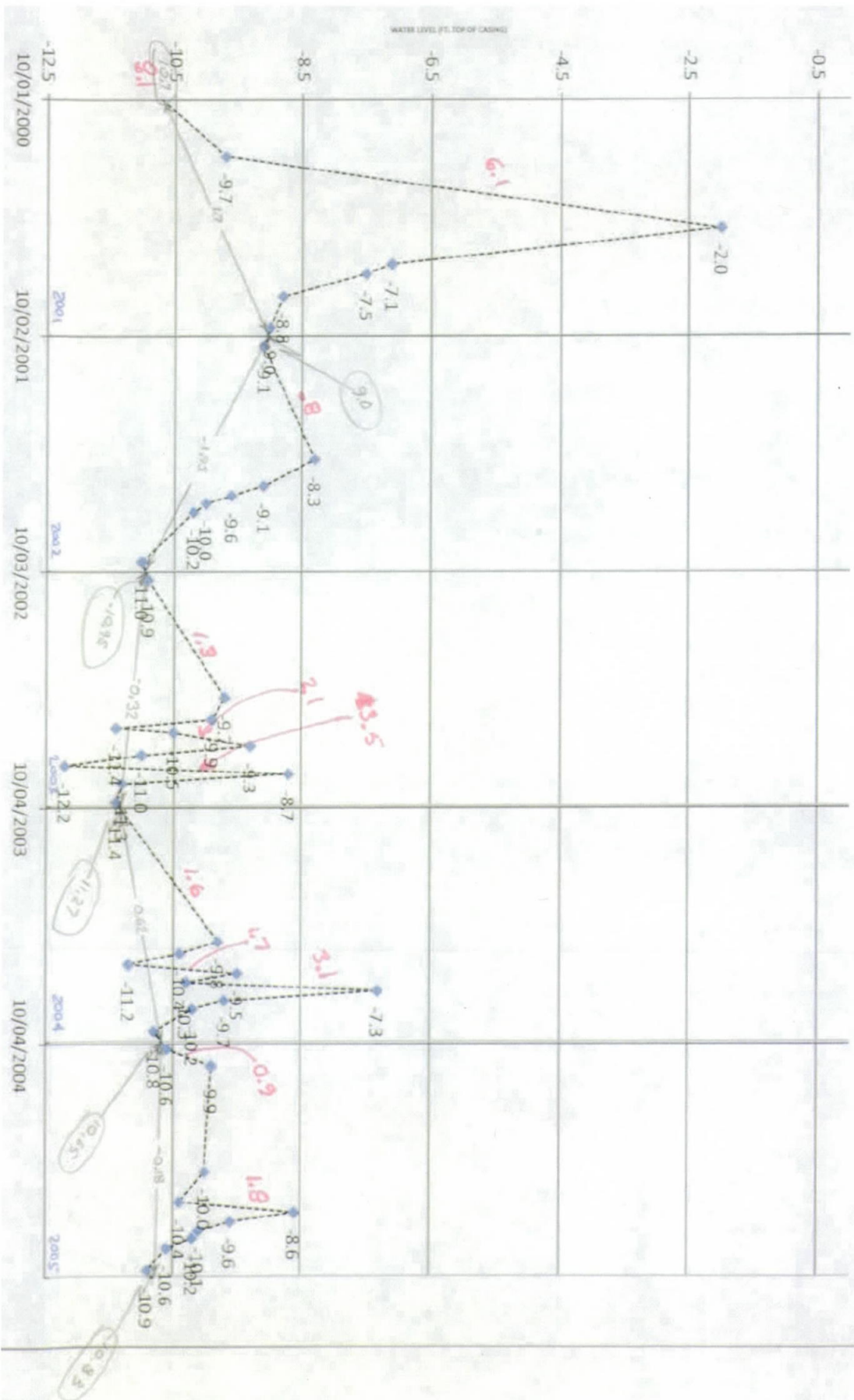


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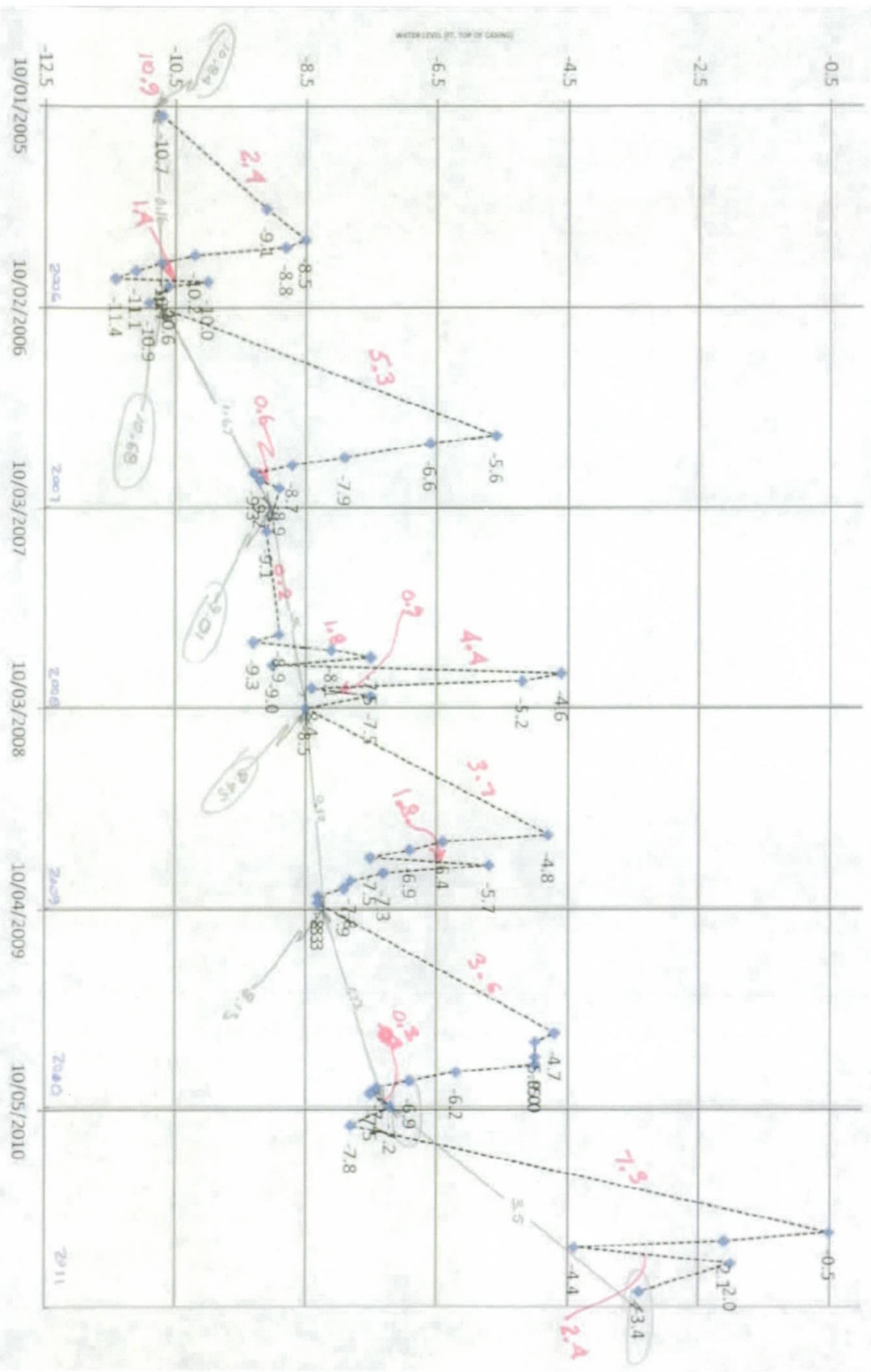


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STATE OF SOUTH DAKOTA,
COUNTY OF BEADLE: ss.

I, TRISHA NELSON, 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:

**SD ENVIRONMENTA & NATURAL – WATER
RIGHTS PERMIT - WIETING**

was published for one day, in said newspaper, and not in any supplement of the said newspaper, the publication was of the 12TH day **SEPT 2012** That the full **EIGHTY-FIVE & 30/000** 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 thereof has been agreed to be paid to any person whomsoever.

Trisha Nelson

Subscribed and sworn to before me this 20th day of SEPT. 2012.

William Kuehner
Notary Public, South Dakota

My term expires 10/25/17

Legal # 378

FP 09-12-12
NOTICE OF HEARING
on Application
No. 7373-3 to
Appropriate Water

Notice is given that Terry Wieting, 870 Beach Ave NE, Huron SD 57350 has filed an application for a water permit to appropriate 1.78 cubic feet of water per second from two wells to be completed into the Tulare Western Spink/Hitchcock Aquifer (75 feet deep) located in S 1/2 SW 1/4 Section 16 for irrigation of 160 acres located in the SW 1/4 Section 16; all in T113N-R62W.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends DEFERRAL of Application No. 7373-3 pending the resolution of an existing water right permit for irrigation from the Tulare Western Spink/Hitchcock Aquifer scheduled for cancellation at the October 3, 2012 meeting of the Water Management Board. The outcome may impact whether water reverts to the public and is regarded as unappropriated public water subject to general appropriation. Therefore, Application No. 7373-3 should be deferred until there is a final decision on the cancellation including any potential appeal to the circuit court or State Supreme Court as provided by law.

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 this application presents important issues of public interest that should be heard by the Water Management Board.

The Water Management Board will consider this application at 9:00 a.m. (CDT) on October 3, 2012 in the Matthew Training Center, Joe Foss Bldg, 523 E. Capitol Ave. Pierre SD. The Chief Engineer's recommendation is not final or binding upon the Board. The Board is authorized to 1) approve, 2) approve with qualifications, 3) defer, or 4) deny this application 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 the application 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 recommendation. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E Capitol, Pierre SD 57501 (605 773-3352)" and the applicant's mailing address is given above. A petition filed by either an interested person or the applicant must be filed by September 24, 2012. The petition may be informal, but shall be in writing and shall include a statement describing the petitioner's interest in the application, the petitioner's reasons for opposing or supporting the application, and the signature and mailing address of

the petitioner or the petitioner's legal counsel, if legal counsel is obtained. 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 October 3, 2012 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 application. The request for an automatic delay must be filed by September 24, 2012. 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 September 24, 2012, at the above Chief Engineer's address to request copies of the staff report, recommendation, application 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 September 24, 2012. 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 this application: 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. 378 (adv.)
 Published once at an
 approximate cost of
 \$84.08.

Pet overpopulation
is the number one
killer of dogs
and cats in the
United States.
 Each year an
 estimated ten million
 dogs, cats, kittens
 and puppies are put
 to death in shelters
 as a method of
 population control.
 The majority are
 young, healthy and
 adoptable. In
 addition, millions of
 abandoned pets
 suffer on the streets
 as they attempt to
 survive on their own.
 Pet overpopulation
 is preventable.

SPAY OR
NEUTER
YOUR PET



Schlaak, Karen

From: Ruby Crandall <rnewman.plainsman@midconetwork.com>
Sent: Thursday, September 06, 2012 3:46 PM
To: Schlaak, Karen
Subject: Re: Notice of Hearing on Application No. 7373-3

I have received your email.
Thank you.

Ruby Crandall
Creative Services Supervisor

Plainsman/Payday/Print Shop
49 3rd Street SE
Huron, SD 57350

605-353-7412

1-800-859-3045, ext. 412

fax: 605-353-7422

rnewman.plainsman@midconetwork.com

On Sep 6, 2012, at 3:35 PM, <Karen.Schlaak@state.sd.us> wrote:

Attached is a Notice of Hearing to be published on September 12, 2012. Please send us the affidavit immediately following publication.

Terry Wieting, 870 Beach Ave NE, Huron SD 57350 (ph # 605 554-0207) is responsible for cost of publication.

Please acknowledge receipt of this email.

Thanks,

Karen Schlaak

Water Rights Program

Phone: 605 773-3352

Fax: 605 773-4068

<7373-3generic public wmb.docx>



**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.

September 6, 2012

Terry Wieting
870 Beach Ave NE
Huron SD 57350

Dear Mr. Wieting:

Water Permit Application No. 7373-3 for irrigation use has been examined and found to comply with the South Dakota Water Laws and applicable rules. A notice has been sent to the 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 recommendation of the Chief Engineer and report on the application are enclosed. Please review the notice prior to publication and notify this office, if you have any corrections or questions.

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

Sincerely,


Eric Gronlund
Natural Resources Engineer
(605) 773-3352

enclosures

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

Instruction to Newspaper – Publish the Notice on September 12, 2012. The applicant is responsible for payment.

NOTICE OF HEARING on Application No. 7373-3 to Appropriate Water

Notice is given that Terry Wieting, 870 Beach Ave NE, Huron SD 57350 has filed an application for a water permit to appropriate 1.78 cubic feet of water per second from two wells to be completed into the Tulare:Western Spink/Hitchcock Aquifer (75 feet deep) located in S 1/2 SW 1/4 Section 16 for irrigation of 160 acres located in the SW 1/4 Section 16; all in T113N-R62W.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends DEFERRAL of Application No. 7373-3 pending the resolution of an existing water right permit for irrigation from the Tulare:Western Spink/Hitchcock Aquifer scheduled for cancellation at the October 3, 2012 meeting of the Water Management Board. The outcome may impact whether water reverts to the public and is regarded as unappropriated public water subject to general appropriation. Therefore, Application No. 7373-3 should be deferred until there is a final decision on the cancellation including any potential appeal to the circuit court or State Supreme Court as provided by law.

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 this application presents important issues of public interest that should be heard by the Water Management Board.

The Water Management Board will consider this application at 9:00 a.m. (CDT) on October 3, 2012 in the Matthew Training Center, Joe Foss Bldg, 523 E. Capitol Ave. Pierre SD. The Chief Engineer's recommendation is not final or binding upon the Board. The Board is authorized to 1) approve, 2) approve with qualifications, 3) defer, or 4) deny this application 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 the application 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 recommendation. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E Capitol, Pierre SD 57501 (605 773-3352)" and the applicant's mailing address is given above. A petition filed by either an interested person or the applicant must be filed by September 24, 2012. The petition may be informal, but shall be in writing and shall include a statement describing the petitioner's interest in the application, the petitioner's reasons for opposing or supporting the application, and the signature and mailing address of the petitioner or the petitioner's legal counsel, if legal counsel is obtained. 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 October 3, 2012 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 application. The request for an automatic delay must be filed by September 24, 2012. 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 September 24, 2012, at the above Chief Engineer's address to request copies of the staff report, recommendation, application 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 September 24, 2012. 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 this application: 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 _____.



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

September 7, 2012

Lenny Peterson
19111 Maple Avenue
Hitchcock SD 57348

Dear Lenny:

I writing to inform you that there is a water permit application for irrigation from the Tulare:Western Spink/Hitchcock Aquifer field by Terry Wieting being public noticed. Please find enclosed a copy of the staff report, recommendation and public notice. The notice schedules an October 3, 2012 hearing before the Water Management Board. The recommendation is for deferral pending resolution of an existing water right for irrigation from this aquifer which is scheduled for cancellation. The water right scheduled for cancellation is Water Right No. 282-3, Renae Veskrna Morog.

There are also two other applications filed by Riverside Colony from this aquifer pending. The Chief Engineer's recommendation on these applications is denial. Riverside is currently being afforded the 20 day period provided under SD Codified Law 46-2A-3 to state in writing whether they intend to oppose the recommendation. If they oppose the recommendation, there will be public notice of these applications for a future Board meeting.

Please feel free to contact me if you have any questions.

Sincerely,

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

Enclosures

C: Todd Wilkinson, Wilkinson & Wilkinson, PO Box 29, DeSmet SD 57231



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

September 24, 2012

NOTICE

TO: Terry Wieting
870 Beach Avenue NE
Huron SD 57350

Oscar Inc
c/o Floyd Peterson
209 27th Street NW
Huron SD, 57350

FROM: *for Eric Grönlund*
Garland Erbele, Chief Engineer
Water Rights Program

Lenny Peterson
19111 Maple Avenue
Hitchcock SD 57348

Todd D. Wilkinson
Wilkinson & Wilkinson
P.O. Box 29
DeSmet SD 57231

SUBJECT: Automatic Delay of Hearing for Water Permit Application No. 7373-3, Terry Wieting

Petitions have been submitted opposing Water Permit Application No. 7373-3 in response to the notice of hearing published September 12, 2012 in the Plainsman printed in Huron. The petitions are enclosed. The petition filed by counsel for Peterson's also requests an automatic delay of the October 3, 2012 hearing on Water Permit Application No. 7373-3. Therefore, the hearing on Application No. 7373-3 is automatically delayed pursuant to SDCL 46-2A-4 and 46-2A-5 and will not be held on October 3, 2012.

The hearing to consider Application No. 7373-3 will now be scheduled for the December 5 and 6, 2012, Water Management Board meeting tentatively to be held in Pierre. Future notice of the time and place of the hearing for Application No. 7373-3 will be provided to parties of record.

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

enclosures

c: Diane Best, Assistant Attorney General

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

RECEIVED
SEP 24 2012
WATER RIGHTS
PROGRAM

HARRY J. EGGEN (1922-1969)
ELLSWORTH F. WILKINSON (1955-2005)

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

TODD D. WILKINSON
MARCENE J. SMITH
GARY W. SCHUMACHER*

September 21, 2012

* ALSO LICENSED IN MINNESOTA

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

**RE: Irrigation application for Tulare: Western Spink/Hitchcock Aquifer
Water Permit Application Nos. 7373-3, 7378-3, and 7379-3
Petition in Opposition**

Dear Mr. Erbele:

Our office represents Lenny Peterson and Oscar Inc., who are a land owners and operators, affected by the issuance of any additional irrigation appropriation in connection with the Tulare: Western Spink/Hitchcock Aquifer. This letter is intended as and constitutes a petition in opposition to said Water Permit Application No. 7373-3, Water Permit Application No. 7378-3, and Water Permit Application No. 7379-3, also referred to the irrigation permit,; 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 specifically Nos. 6344-3, 6345-3, 6346-3, and 6347-3.

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 opposition to apply and not lose priority in filing.

Please confirm receipt of this petition opposing said application and petition opposing the Chief Engineer's recommendation; and please inform our office 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 great appreciated.

Thank you.

Sincerely,

WILKINSON & WILKINSON

A handwritten signature in black ink, appearing to read 'Todd D. Wilkinson', with a stylized flourish at the end.

Todd D. Wilkinson

TDW: mo

Enclosures

cc: Lenny Peterson
Oscar Inc.
Terry Wieting
Riverside Hutterian Brethren c/o Bennett Waldner

September 20, 2012

RECEIVED
SEP 21 2012
WATER RIGHTS
PROGRAM

Kevin Marton
South Dakota Department of Transportation
700 East Broadway
Pierre, South Dakota 57501

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

**RE: Irrigation application for Tulare: Western Spink/Hitchcock Aquifer
Water Permit Application Nos. 7373-3, 7378-3, and 7379-3
Petition in Opposition**

Dear Mr. Marton and Mr. Erbele:

Oscar, Inc., as a land owner and operator, affected by the issuance of any additional irrigation appropriation in connection with the Tulare: Western Spink/Hitchcock Aquifer. This letter is intended as and constitutes a petition in opposition to said Water Permit Application No. 7373-3, Water Permit Application No. 7378-3, and Water Permit Application No. 7379-3, also referred to the irrigation permit,; 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 specifically Nos. 6344-3, 6345-3, 6346-3, and 6347-3.

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 opposition to apply and not lose priority in filing.

That proposed development cannot be done without potentially impairing existing rights.

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,

OSCAR INC.

Oscar Inc. by Lloyd Peterson

RECEIVED

SEP 21 2012

WATER RIGHTS
PROGRAM

September 20, 2012

Kevin Marton
South Dakota Department of Transportation
700 East Broadway
Pierre, South Dakota 57501

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

**RE: Irrigation application for Tulare: Western Spink/Hitchcock Aquifer
Water Permit Application Nos. 7373-3, 7378-3, and 7379-3
Petition in Opposition**

Dear Mr. Marton and Mr. Erbele:

I, Lenny Peterson, as a land owner and operator, affected by the issuance of any additional irrigation appropriation in connection with the Tulare: Western Spink/Hitchcock Aquifer. This letter is intended as and constitutes a petition in opposition to said Water Permit Application No. 7373-3, Water Permit Application No. 7378-3, and Water Permit Application No. 7379-3, also referred to the irrigation permit,; 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 specifically Nos. 6344-3, 6345-3, 6346-3, and 6347-3.

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 opposition to apply and not lose priority in filing.

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,

A handwritten signature in cursive script, appearing to read "Lenny Peterson".

Lenny Peterson

CERTIFICATION

I hereby certify that on September 24, 2012, I have personally deposited with the United States mail at Pierre, South Dakota, first class postage, prepaid envelopes containing a Notice dated September 24, 2012, regarding automatic delay of hearing on Water Right Permit Application No. 7373-3 with enclosures, as addressed below:

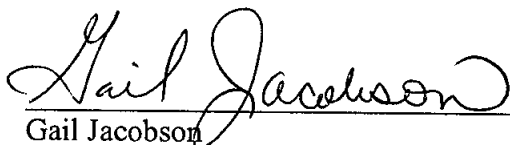
Terry Wieting
870 Beach Avenue NE
Huron SD 57350

Lenny Peterson
19111 Maple Avenue
Hitchcock SD 57348

Oscar Inc
c/o Floyd Peterson
209 27th Street NW
Huron SD 57350

Todd D. Wilkinson
Wilkinson & Wilkinson
P.O. Box 29
DeSmet SD 57231

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



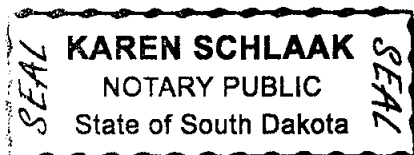
Gail Jacobson
Water Rights Program, DENR

STATE OF SOUTH DAKOTA)
) SS
COUNTY OF HUGHES)

Sworn to, before me, this 24th day of September, 2012.



Karen Schlaak
Notary Public
My Commission expires April 1, 2013





**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

denr.sd.gov

November 9, 2012

NOTICE

TO: Terry Wieting
870 Beach Avenue NE
Huron SD 57350

Lenny Peterson
19111 Maple Avenue
Hitchcock SD 57348

Oscar Inc
c/o Floyd Peterson
209 27th Street NW
Huron SD 57350

Todd D. Wilkinson
Wilkinson & Wilkinson
P.O. Box 29
DeSmet SD 57231

FROM: Garland Erbele, Chief Engineer
Water Rights Program

SUBJECT: Scheduling of Hearing for Water Permit Application No. 7373-3, Terry Wieting

The Water Rights Program received petitions filed opposing the Chief Engineer's recommendation and requesting an automatic delay in the matter of the Water Permit Application No. 7373-3. The hearing scheduled for October 3, 2012 was postponed and is now to be scheduled for the Water Management Board's December 6, 2012 meeting.

The Water Management Board will consider the Water Permit Application No. 7373-3 at 10:30 AM, December 6, 2012 meeting in the Floyd Matthew Training Center, Joe Foss Building, 523 E. Capitol Avenue, Pierre SD.

Pursuant to SDCL 46-2A-2 the Chief Engineer of the Water Rights Program recommends DEFERRAL of Application No. 7373-3 because at the December 6, 2012 meeting of the Water Management Board there is an existing water right for irrigation from the Tulare:Western Spink/Hitchcock Aquifer scheduled for cancellation. The outcome of the pending cancellation proceeding may impact whether water reverts to the public and is regarded as unappropriated public water subject to general appropriation. Therefore, Application No. 7373-3 should be deferred until there is a final decision on the cancellation including any potential appeal to the circuit court or State Supreme Court as provide by law. The recommendation of the Chief Engineer is not final or binding upon the Board and the Board is authorized to 1) approve, 2) deny, 3) defer or 4) take no action after it reaches a conclusion based upon facts presented at the public hearing.

This hearing is an adversarial proceeding. Parties have the right to be represented by a lawyer and may present evidence or cross-examine witnesses according to SDCL 1-26. These and other due process rights will be forfeited if not exercised. Decisions of the Board may be appealed to the Circuit Court and State Supreme Court as provided by law.

Enclosed is a copy of DENR's staff report, the Chief Engineer's recommendation, affidavit of publication, petition and the September 24, 2012 notice of autodelay. State law directs the Chief Engineer to provide Water Management Board members with a copy of all pleadings including petitions for each proceeding. This same information will be sent to the Board members in advance of the hearing. In addition, enclosed are two documents intended to acquaint parties with the hearing process entitled "Procedure for Hearings before the Water Management Board" and "Summary of South Dakota Water Laws and Rules". You are encouraged to review these documents prior to the hearing.

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 this application: 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 74:02:01:24.01.

Questions regarding the hearing process may be directed to Eric Gronlund at (605) 773-3352 or Diane Best, Assistant Attorney General at (605) 367-5880 ext 105. In addition, 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.

enclosures

c: Diane Best, Assistant Attorney General

CERTIFICATION

I hereby certify that on November 9, 2012, I have personally deposited with the United States mail at Pierre, South Dakota, first class postage, prepaid envelopes containing a Notice dated November 9, 2012, regarding scheduling of hearing on Water Right Permit Application No. 7373-3 with enclosures, as addressed below:

Terry Wieting
870 Beach Avenue NE
Huron SD 57350

Lenny Peterson
19111 Maple Avenue
Hitchcock SD 57348

Oscar Inc
c/o Floyd Peterson
209 27th Street NW
Huron SD 57350

Todd D. Wilkinson
Wilkinson & Wilkinson
P.O. Box 29
DeSmet SD 57231

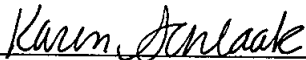
Diane Best, Assistant Attorney General
300 N. Dakota Avenue, Suite 403
Sioux Falls SD 57104



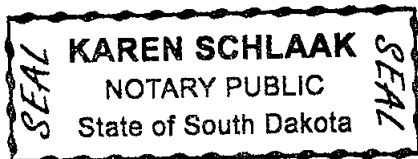
Gail Jacobson
Water Rights Program, DENR

STATE OF SOUTH DAKOTA)
) SS
COUNTY OF HUGHES)

Sworn to, before me, this 9th day of November, 2012.



Karen Schlaak
Notary Public
My Commission expires April 1, 2013





**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

denr.sd.gov

December 11, 2012

NOTICE

TO: Terry Wieting
870 Beach Avenue NE
Huron SD 57350

Todd D. Wilkinson
Wilkinson & Wilkinson
P.O. Box 29
DeSmet SD 57231

FROM: Garland Erbele, Chief Engineer
Water Rights Program *Garland Erbele*

SUBJECT: Deferral of Water Permit Application No. 7373-3, Terry Wieting

Water Permit Application No. 7373-3 proposes to appropriate 1.78 cubic feet of water per second from two wells to be completed into the Tulare:Western Spink/Hitchcock Aquifer (75 feet deep) located in S 1/2 SW 1/4 Section 16 for irrigation of 160 acres located in the SW 1/4 Section 16; all in T113N-R62W.

On December 6, 2012, the Water Management Board deferred Application No. 7373-3 to allow for review of water availability from the aquifer. DENR anticipates revising the recommendation and scheduling this application for hearing at the March 6 – 7, 2013 meeting. Future notice scheduling the hearing along with the revised recommendation will be provided to you.

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

c: Diane Best, Assistant Attorney General

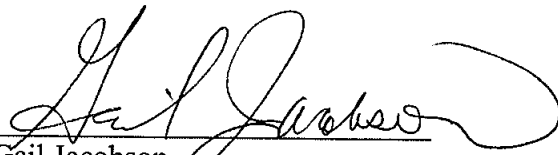
CERTIFICATION

I hereby certify that on December 11, 2012 I have personally deposited with the United States mail at Pierre, South Dakota, first class postage, prepaid envelope(s) containing a Notice dated December 11, 2012 regarding deferral of Water Permit No. 7373-3 T. Wieting addressed as stated below:

Terry Wieting, 870 Beach Ave NE, Huron SD 57350

Todd D Wilkinson, PO Box 29, DeSmet SD 57231

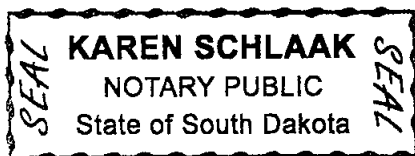
Diane Best, Asst. Attorney General, 317 N Main, Sioux Falls SD 57104-6004


Gail Jacobson
Secretary/Water Rights

STATE OF SOUTH DAKOTA)
) SS
COUNTY OF HUGHES)

Sworn to, before me, this 11th day of December, 2012


Karen Schlaak
Notary Public
My Commission expires April 1, 2013





**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

February 11, 2013

NOTICE

TO: Terry Wieting
870 Beach Avenue NE
Huron SD 57350

Todd D. Wilkinson
Wilkinson & Wilkinson
P.O. Box 29
DeSmet SD 57231

FROM: Garland Erbele, Chief Engineer
Water Rights Program

SUBJECT: Scheduling of Hearing for Water Permit Application No. 7373-3, Terry Wieting

Water Permit Application No. 7373-3 proposes to appropriate 1.78 cubic feet of water per second from two wells to be completed into the Tulare:Western Spink/Hitchcock Aquifer (75 feet deep) located in S 1/2 SW 1/4 Section 16 for irrigation of 160 acres located in the SW 1/4 Section 16; all in T113N-R62W. On December 6, 2012, the Water Management Board deferred Application No. 7373-3 to allow for review of water availability from the aquifer.

Attached is the staff report to the Chief Engineer and revised recommendation for Water Permit Application No. 7373-3. Please note that a number of additional water permit applications were filed from the Tulare:Western Spink / Hitchcock Aquifer since the December 6, 2012 meeting. The staff report is inclusive of all the applications that have been filed up to when the Chief Engineer's recommendation was finalized.

The Water Management Board will consider the Water Permit Application No. 7373-3 at 9:00 AM, Thursday, March 7, 2013 meeting in the Floyd Matthew Training Center, Joe Foss Building, 523 E. Capitol Avenue, Pierre SD. The revised recommendation of the Chief Engineer is not final or binding upon the Board and the Board is authorized to 1) approve, 2) deny, 3) defer or 4) take no action after it reaches a conclusion based upon facts presented at the evidentiary hearing.

This hearing is an adversarial proceeding. Parties have the right to be represented by a lawyer and may present evidence or cross-examine witnesses according to SDCL 1-26. These and other due process rights will be forfeited if not exercised. Decisions of the Board may be appealed to the Circuit Court and State Supreme Court as provided by law.

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 this application: 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 74:02:01:24.01.

The other applications listed in the staff report are currently being public noticed scheduling a March 7, 2013 hearing date. The notice to be published February 13, 2013 in the Redfield Press and The Plainsman are enclosed for these applications.

Questions regarding the hearing process may be directed to Eric Gronlund at (605) 773-3352 or Diane Best, Assistant Attorney General at (605) 367-5880 ext 105. In addition, 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.

enclosures

c: Diane Best, Assistant Attorney General

CERTIFICATION

I hereby certify that on February 11, 2013, I have personally deposited with the United States mail at Pierre, South Dakota, first class postage, prepaid envelopes containing a Notice dated February 11, 2013, regarding scheduling of hearing on Water Right Permit Application No. 7373-3 with enclosures, as addressed below:

Terry Wieting
870 Beach Avenue NE
Huron SD 57350

Todd D. Wilkinson
Wilkinson & Wilkinson
P.O. Box 29
DeSmet SD 57231

Diane Best, Assistant Attorney General
300 N. Dakota Avenue, Suite 403
Sioux Falls SD 57104



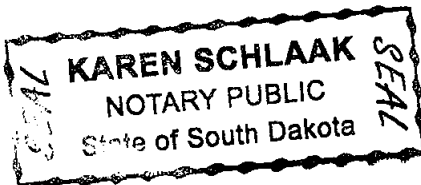
Gail Jacobson
Water Rights Program, DENR

STATE OF SOUTH DAKOTA)
) SS
COUNTY OF HUGHES)

Sworn to, before me, this 19th day of February, 2012.



Karen Schlaak
Notary Public
My Commission expires April 1, 2013



STATE OF SOUTH DAKOTA



OFFICE OF ATTORNEY GENERAL

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Sioux Falls, South Dakota 57104
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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, appearing to read "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 SDCCL 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.

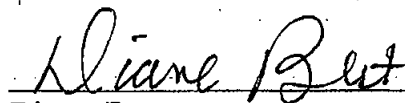
However, upon further review, DENR witness Ken Buhler, examined average withdrawals over the full period of record (1979-2011) based on the *Hines*, rather than the five year average that had been used in the 2008 decision. That information, combined with an exhaustive analysis of irrigation questionnaires 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.



Diane Best
Counsel for DENR
317 N. Main Ave.
Sioux Falls, SD 57104

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:

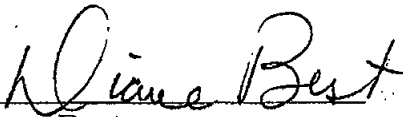
Wayne Binger
37923 183rd Street
Tulare SD 57476

Ray Rylance
PO Box 227
Watertown SD 57021

Todd Wilkinson
PO Box 29
DeSmet SD 57231

Marshall Brothers
Gary Marshall
19032 388th Avenue
Hitchcock SD 57348

Terry Wieting
870 Beach Avenue NE
Huron SD 57350


Diane Best
Counsel for DENR
317 N. Main Ave.
Sioux Falls, SD 57104

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:

[illegible]

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.

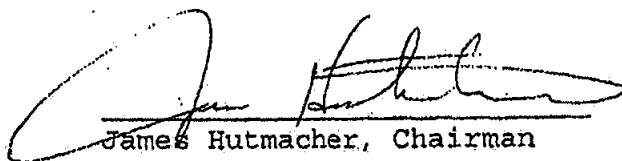
17. The Allen Gatzke request for placement of the 2007 permit on the deferred list as a 2002 application need not be considered insofar as the question is moot.

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

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**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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**REVISED RECOMMENDATION OF CHIEF ENGINEER FOR WATER
PERMIT APPLICATION NO. 7373-3, Terry Wieting**

Pursuant to SDCL 46-2A-2, the following is the revised recommendation of the Chief Engineer, Water Rights Program, Department of Environment and Natural Resources concerning Water Permit Application No. 7373-3, Terry Wieting, 870 Beach Avenue NE, Huron SD 57350.

The Chief Engineer is recommending APPROVAL of Application No. 7373-3 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 wells 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 wells authorized by Permit No. 7373-3 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 Aquifer for additional information.

Garland Erbele, Chief Engineer
February 6, 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 S½ SW¼ Section 16, T113N-R62W and are expected to be approximately 75 feet deep. This application proposes to irrigate 160 acres located in the SW¼ 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 NE¼, N ½ SE¼ 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 NE¼ SE¼ Section 36 for irrigation of 136 acres located in the SE¼ 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 NW¼ and the center of the SW¼ Section 1, T113N-R64W and are expected to be approximately 80 feet deep. This application proposes to irrigate 280 acres located in the W ½ 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 SE¼ Section 4, T113N-R64W and are expected to be approximately 80 feet deep. This application proposes to irrigate 160 acres located in the SE¼ 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 SW¼ 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 deliniation 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).

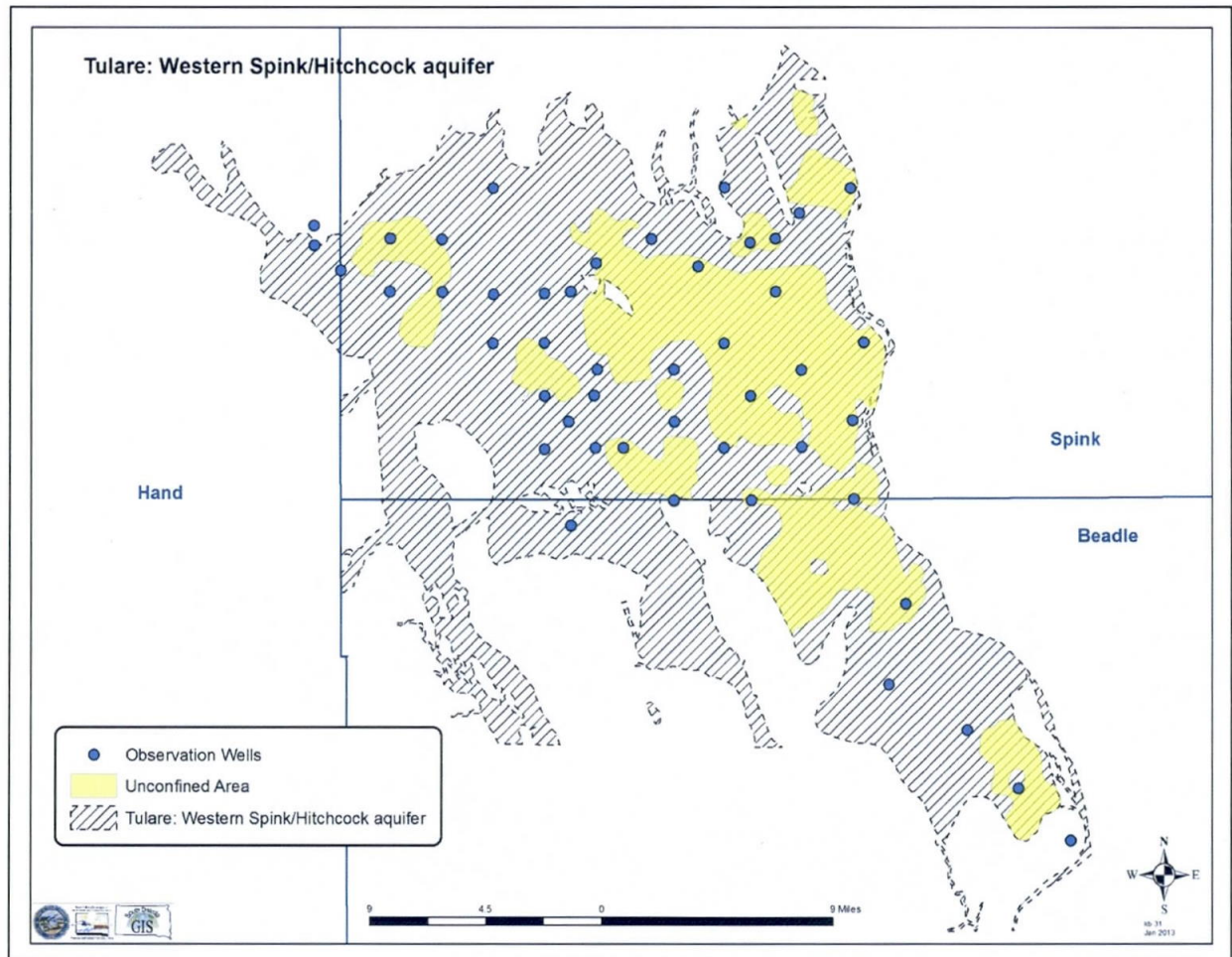


Figure 1. Areal extent of the Tulare: Western Spink/Hitchcock aquifer and the unconfined areas of the aquifer.

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.

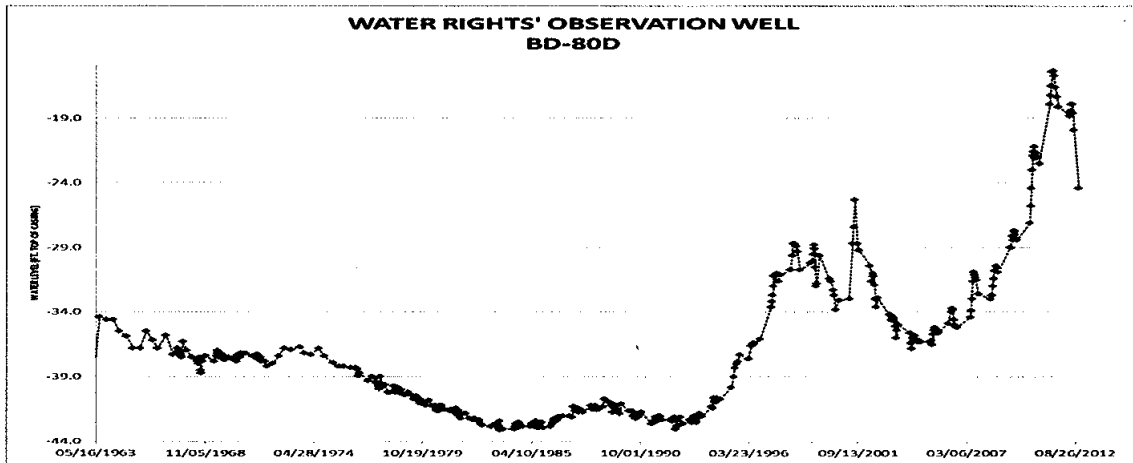


Figure 2. Hydrograph of DENR-Water Rights Program observation well completed into the Tulare: Western Spink/Hitchcock aquifer.

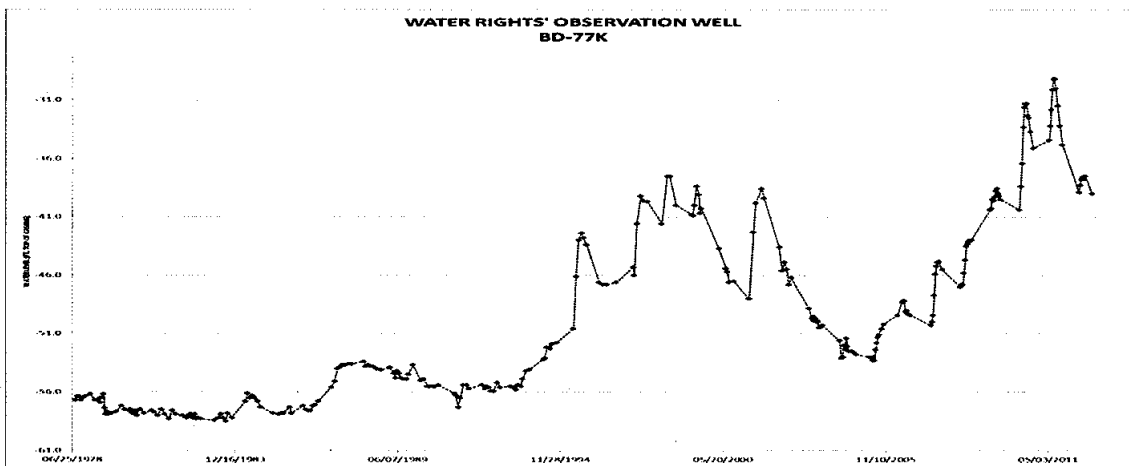


Figure 3. Hydrograph of DENR-Water Rights Program observation well completed into the Tulare: Western Spink/Hitchcock aquifer.

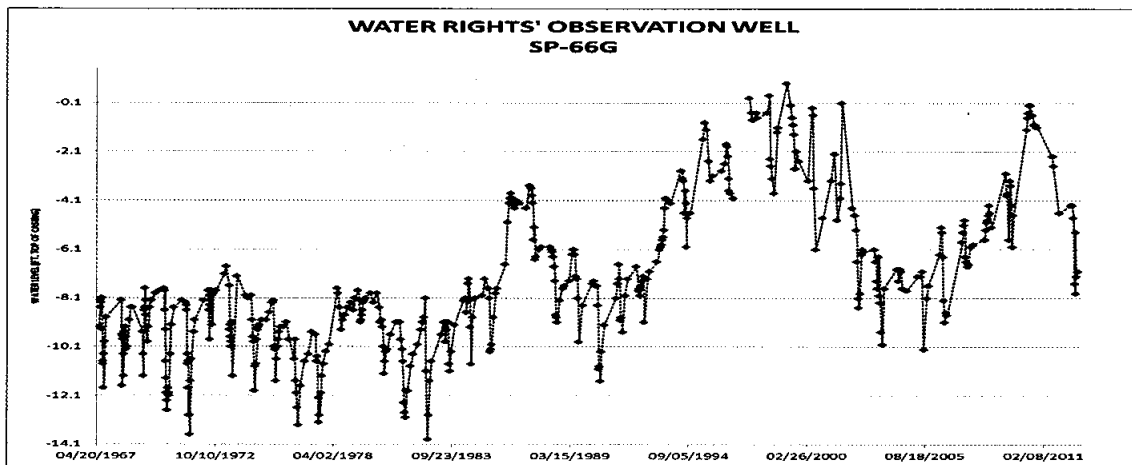


Figure 4. Hydrograph of DENR-Water Rights Program observation well completed into the Tulare: Western Spink/Hitchcock aquifer.

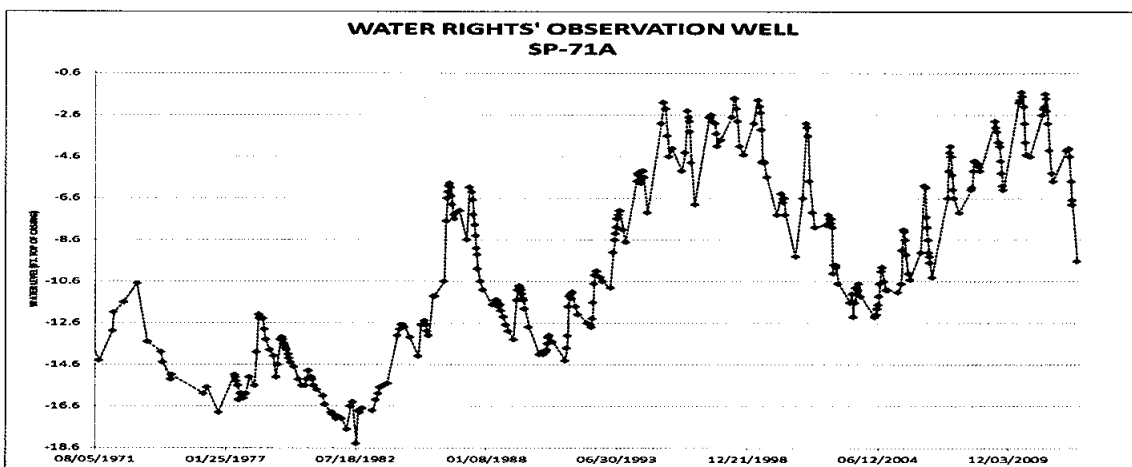


Figure 5. Hydrograph of DENR-Water Rights Program observation well completed into the Tulare: Western Spink/Hitchcock aquifer.

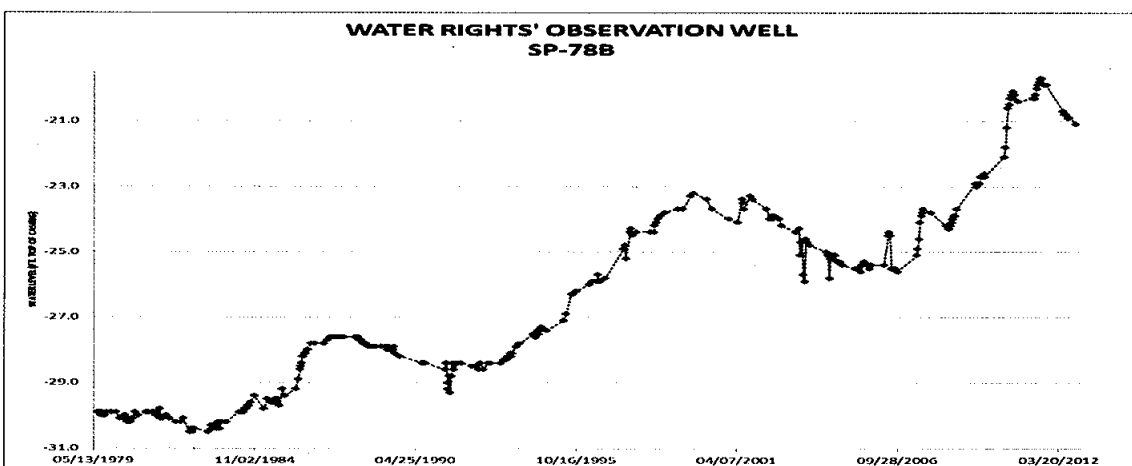


Figure 6. Hydrograph of DENR-Water Rights Program observation well completed into the Tulare: Western Spink/Hitchcock aquifer.

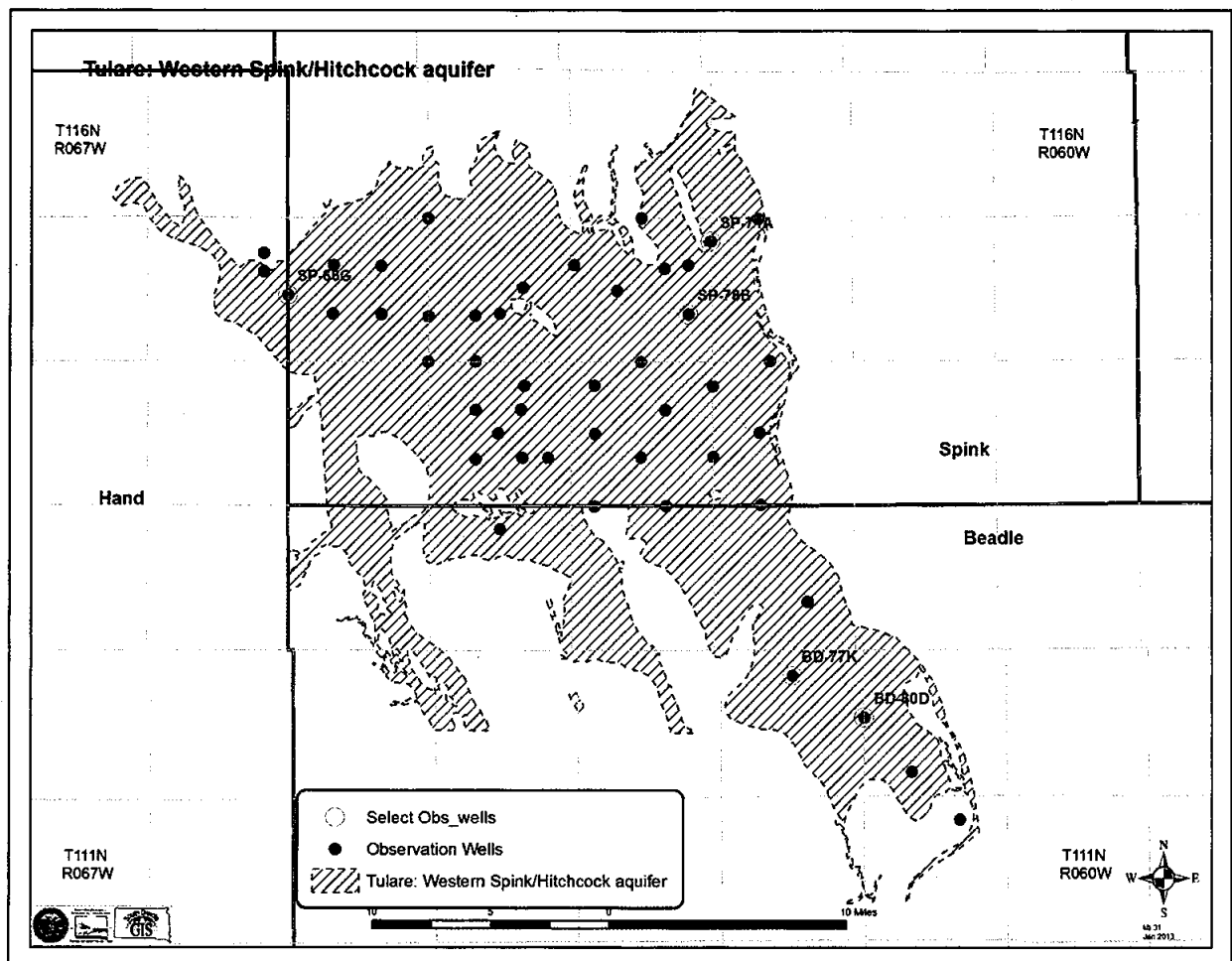


Figure 7. Location of DENR-Water Rights Program observation wells completed into the Tulare: Western Spink aquifer and wells shown in Figures 2-6.

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.

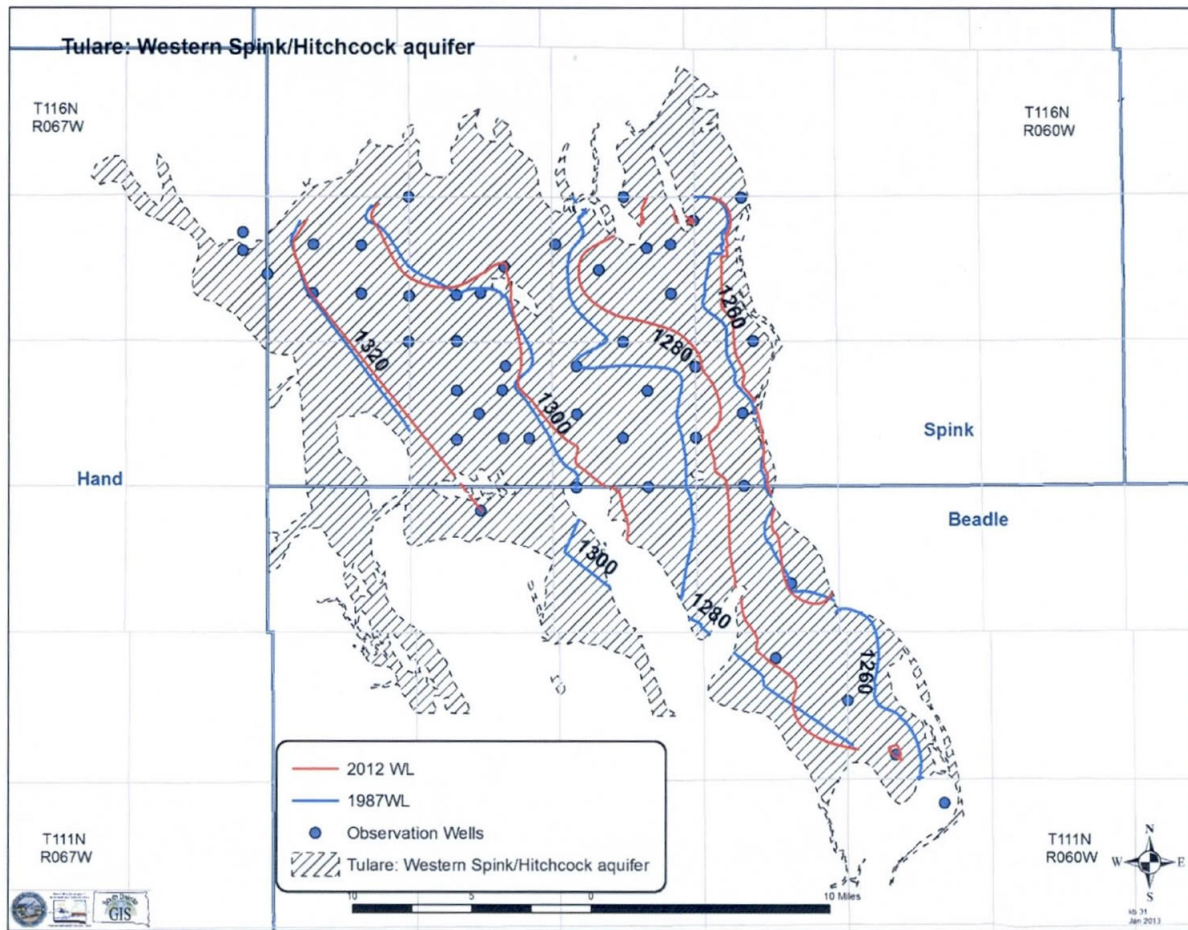


Figure 8. Comparison of the potentiometric surface of the Tulare: Western Spink/Hitchcock aquifer (October 1987 versus October 2012)

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).

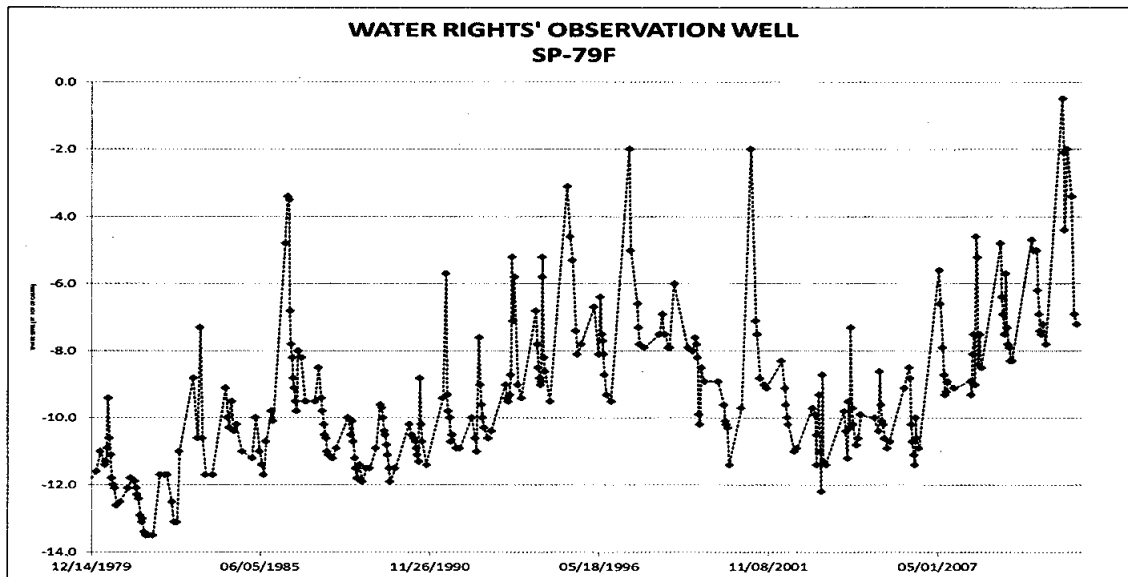


Figure 9. DENR-Water Rights' observation well completed into the unconfined portion of the Tulare:Western Spink/Hitchcock aquifer

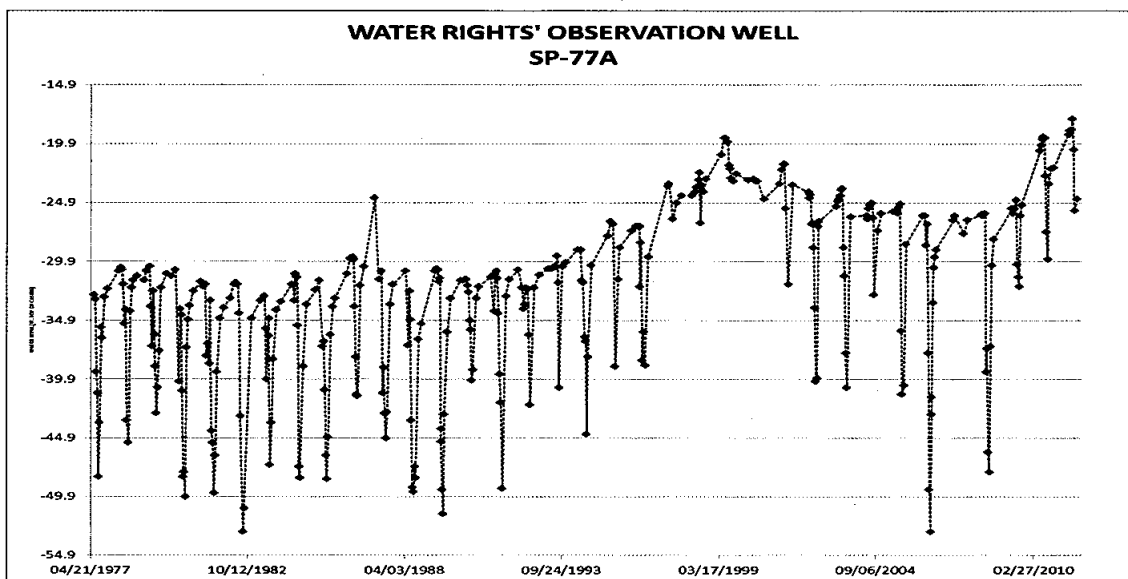


Figure 10. DENR-Water Rights' observation well completed into the confined portion of the Tulare:Western Spink/Hitchcock aquifer

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.

WILES & RYLANCE
ATTORNEYS AT LAW
3 East Kemp - Suite 200
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 14 2013

**WATER RIGHTS
PROGRAM**

March 12, 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

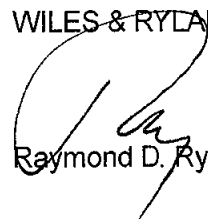
Re: Terry Wieting Permit #7373-3

Dear Folks:

On behalf of Oscar, Inc., Lenny Peterson, Danny Peterson, and Brad Peterson, we hereby waive findings of fact and conclusions of law on the above-entitled water permit for Terry Wieting. The Department may, without objection on our part, issue permit #7373-3 to Terry Wieting without further delay.

Very truly yours,

WILES & RYLANCE



Raymond D. Rylance

RDR:bjs
cc. Lenny Peterson



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

denr.sd.gov

March 15, 2013

NOTICE

TO: Timothy Bottum
Morgan Theeler LLP
PO Box 1025
Mitchell SD 57301

Ray Rylance
Wiles & Rylance
PO Box 227
Watertown SD 57201

FROM: Garland Erbele, Chief Engineer
Water Rights Program *Garland Erbele*

SUBJECT: Waiver of Findings of Fact, Conclusions of Law and Final Decision

The Department of Environment and Natural Resources (DENR) received Mr. Ray Rylance's letter on behalf of his client waiving Findings of Fact, Conclusions of Law and Final Decision in the matter of Water Permit Application No. 7373-3 filed by Terry Wieting. DENR will proceed with issuance of the water permit.

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

CERTIFICATION

I hereby certify that on March 15, 2013, I have personally deposited with the United States mail at Pierre, South Dakota, first class postage, prepaid envelopes containing a Notice dated March 15, 2013, regarding opposition's waiver of findings of fact, conclusions of law and final decision in the matter of Water Right Permit Application No. 7373-3, as set forth below:

Timothy Bottum
Morgan Theeler LLP
PO Box 1025
Mitchell SD 57301

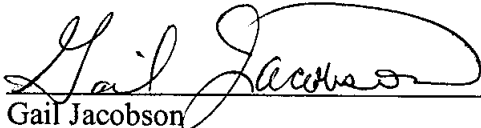
Ray Rylance
Wiles & Rylance
PO Box 227
Watertown SD 57201

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

Todd D Wilkinson
Wilkinson & Wilkinson
PO Box 29
DeSmet SD 57231

Sent Inter-Office

Jeff Hallem, Assistant Attorney General
George S Mickelson Criminal Justice Center
1302 E Hwy 14, Suite 1
Pierre SD 57501

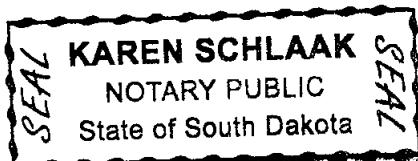

Gail Jacobson

Water Rights Program, DENR

STATE OF SOUTH DAKOTA)
) SS
COUNTY OF HUGHES)

Sworn to, before me, this 15th day of March, 2013


Karen Schlaak
Notary Public
My Commission expires April 1, 2013





DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

denr.sd.gov

APR 26 2013

Terry Wieting
870 Beach Ave NE
Huron SD 57350

Dear Mr. Wieting:

Enclosed is Water Permit No. 7373-3 authorizing construction of your water diversion system and beneficial use of the water, not exceeding the limits as specified in the Water Permit.

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

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

Sincerely,

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

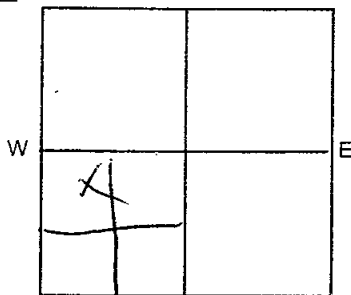
enclosures

SOUTH DAKOTA WATER WELL COMPLETION REPORT

11-02

Location NW ¼ SW ¼ Sec 16 Twp 113 Rg 62County Beadle

North

Please mark well
location with an "X"

Well Completion Date

05/24/2013

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:

Forward

CASING DATA:

☐ Steel ☒ Plastic ☐ Other

If other describe _____

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
LB/FT	8 IN	0 FT	48 FT	13.75 IN
LB/FT	IN	FT	FT	IN
LB/FT	IN	FT	FT	IN

GROUTING DATA:

Grout Type	No. of Sacks	Grout Weight	From	To
volclay	8	Lb/gal	0 Ft	44 Ft
		Lb/gal	Ft	Ft

Describe grouting procedure _____

SCREEN:

☐ Perforated pipe ☒ Manufactured
Diameter 8 Inches Length 12 FeetMaterial Stainless SteelSlot Size .050 Set From 48 Feet to 60 Feet

Other information _____

WAS A PACKER OR SEAL USED?

☒ Yes ☐ No
If so, what material? Pearock

Describe packer(s) and location

44 to 60

DISINFECTION:

Was well disinfected upon completion?

☐ Yes, How?

☐ No, Why Not?
Lab to which water
quality sample sent for analysisWell Owner: Terry Wieting

Business Name: _____

Address: 29512 193rd StCity, State, Zip: Hitchcock ☒ SD ☒ 57348

WELL LOG:

DEPTH

FORMATION	FROM	TO
Yellow Clay & rocks	0	18
Yellow sand	18	32
gray sand	32	45
White gray sand	45	60
Blue Clay	60	

STATIC WATER LEVEL

14 FEET

If flowing: closed in pressure _____

PSI

GPM flow _____ through _____ Inch pipe

Controlled by ☐ Valve ☐ Reducers ☐ Other _____

Reduced flow rate _____ GPM

Can well be completely shut in?

WELL TEST DATA:

☒ Pumped Describe: w/air
☐ Bailed

☐ Other

Pumping Level Below Land Surface

_____ Ft. After _____ Hrs. pumped 250 GPM

_____ Ft. After _____ Hrs. pumped _____ GPM

If pump installed, pump rate: _____ GPM

REMARKS

RECEIVED

JAN - 8 2014

WATER RIGHTS
PROGRAMThis well was drilled under license # 440 and this
report is true and accurate.Drilling firm: Pullman Well Drilling

Signature of License Representative:

Signature of Well Owner or Equitable Property Holder:

Date: _____



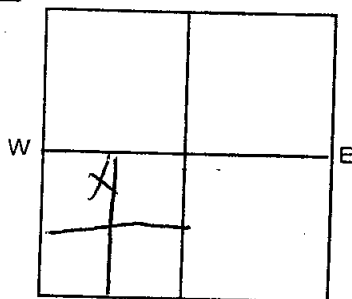
SOUTH DAKOTA WATER WELL COMPLETION REPORT

11-02

Location NW 1/4 SW 1/4 Sec 16 Twp 113 Rg 62

County Beadle

Please mark well location with an "X"



Well Completion Date

06/03/2013

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:

Forward

CASING DATA:

If other describe ☐ Steel ☒ Plastic ☐ Other

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
LB/FT	8 IN	0 FT	47 FT	13.75 IN
LB/FT	IN	FT	FT	IN
LB/FT	IN	FT	FT	IN

GROUTING DATA:

Grout Type	No. of Sacks	Grout Weight	From	To
volclay	8	Lb/gal	0 Ft	43 Ft
		Lb/gal	Ft	Ft

Describe grouting procedure

SCREEN:

☐ Perforated pipe ☒ Manufactured

Diameter 8 Inches Length 12 Feet

Material Stainless Steel

Slot Size .050 Set From 47 Feet to 59 Feet

Other information

WAS A PACKER OR SEAL USED?

☒ Yes ☐ No

If so, what material? Pearock

Describe packer(s) and location

43 to 59

DISINFECTION:

Was well disinfected upon completion?

☐ Yes, How?

☐ No, Why Not?

Lab to which water quality sample sent for analysis

Well Owner: Terry Wieting

7373-3

Business Name:

Address: 29512 193rd St

City, State, Zip: Hitchcock ☒ SD ☒ 57348

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
Yellow Clay & rocks	0	18
Yellow sand	18	37
gray sand w/ Coal	37	58
blue clay	58	

STATIC WATER LEVEL

14 FEET

If flowing: closed in pressure _____ PSI

GPM flow _____ through _____ Inch pipe

Controlled by ☐ Valve ☐ Reducers ☐ Other

Reduced flow rate _____ GPM

Can well be completely shut in?

WELL TEST DATA:

☒ Pumped Describe: w/air

☐ Bailed

☐ Other

Pumping Level Below Land Surface

_____ Ft. After _____ Hrs. pumped 250 GPM

_____ Ft. After _____ Hrs. pumped _____ GPM

If pump installed, pump rate: _____ GPM

REMARKS

RECEIVED

JAN - 8 2014

WATER RIGHTS PROGRAM

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

Drilling firm: Pullman Well Drilling Inc

Signature of License Representative: Ken Palmer

Signature of Well Owner or Equitable Property Holder: _____

Date: _____

FEB 18 2014

WATER RIGHTS
PROGRAMNOTICE OF COMPLETION OF WORKS AND
APPLICATION OF WATER TO BENEFICIAL USEDate 2-14-14TO: Water Rights Program, DENR
523 E. Capitol
Pierre, SD 57501-3181

FROM:

Gerry Wieting
(name)870 Beach Ave NE
(address)Huron, SD 57350
(city, state, zip)605-350-5142
(phone)

I have completed the construction of the water use system and I have put the water to beneficial use to the maximum extent it is going to be used.

Water Permit No. 7373-3 states that the water use system is to be constructed by3-7-18
(date), and water is to be put to beneficial use by 3-7-22
(date)

The water use system was completed on

7-4-13

(date)

Applying the water to beneficial use was completed on

7-10-13

(date)

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


(signature)



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

February 18, 2014

7373-3

Terry Wieting
870 Beach Ave NE
Huron SD 57350

Dear Mr. Wieting:

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

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

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

Sincerely,

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

Report of Examination of Works and/or Application of Water to Beneficial Use For Permit No. 7373-3

I have this day, November 4, 2015, made a thorough examination of the water use system constructed Terry Wieting, 870 Beach Avenue NE, Huron SD 57350 of Permit No. 7373-3, bearing the priority of June 14, 2012 authorizing the diversion of 1.78 cu. ft. per second of the waters of Tulare:Western Spink Hitchcock aquifer for irrigation purposes, in Beadle County.

Inspection contact & relationship **Terry Wieting**
to permit holder, if applicable:

A. Works used to divert the water:

Well Information:

- 1) Well Drilling Firm: Pullman Well Drilling – License No. 440
- 2) No. of Wells 2
- 3) Depth(s) 59 & 60 feet
- 4) Well log is available Yes If no, explain in comments

Casing:

- 1) Diameter 8 inches
- 2) Length 47 & 48 feet
- 3) Type plastic

Screen:

- 1) Type stainless steel
- 2) Length 12 feet
- 3) Static water level 14 feet

Pump:

- 1) Make Submersible
- 2) Capacity 400 each for a total of 800 * GPM

* Based on information provided by Mr. Wieting

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

- 1) Type underground aluminum
- 2) Size 8 inches
- 3) Length approx.. 480 feet

Comments: **Well #1 is close to pivot center. Water from Well #2 is conveyed approximately 480 feet to the pivot center.**

C. Works used to apply water to beneficial use:

Center pivot:

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

Comments: **This pivot is equipped with a cornering system**

Chemigation Equipment:

- 1) Does chemigate No

D. Compliance with Permit Requirements:

- 1) Permit qualifications being abided by Yes

If no, describe:

- 2) Irrigation Questionnaires checked to determine if permit owner started irrigation by the end of construction period Yes

List any extended period of nonuse: **none**

- 3) Exceptions to compliance are: see change of diversion point report

E. Condition and Location:

1. The system is in good condition with the point(s) of diversion located as follows:

all from the southwest corner of Section 16, T113N, R62W

Well No. 1 - 1,330 feet north and 1,330 feet east (Latitude. 44.59303 Longitude 98.29670)

Well No. 2 1,860 feet north and 1,260 feet east (Latitude 44.59417 Longitude -98.29660)

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

legal description/acreage

All in Section 16, T113N, R62W

NW ¼ SW ¼ 38 acres

NE ¼ SW ¼ 38 acres

legal description/acreage

SW ¼ SW ¼ 38 acres

SE ¼ SW ¼ 38 acres

comprising a total of 152** acres of land and the license should be issued for 1.78 cfs.

** The 2013 irrigation questionnaire reports 150 acres while the 2014 & 2015 reports indicate 148 acres irrigated. The 152 acres is based on the 2014 FSA aerial image showing the land irrigated and digitized using the ArcMap function. The license should be issued of 152 acres as it gives the benefit to the landowner.

3. All structures, wells and lands on map **Yes**

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

See change of diversion point report



Eric Gronlund

Water Rights Engineer

DENR, Water Rights Program

Date report completed: **December 23, 2015**



Well No. 1 - 1,330 feet north and 1,330 feet east &
 Well No. 2 1,860 feet north and 1,260 feet east
 all from the southwest corner of Section 16, T113N, R62W
 No 1 Latitude. 44.59303 No. 2 Latitude 44.59417
 Longitude -98.29670 Longitude -98.29660

1,000 500 0 1,000 Feet



Eric Gronlund
 Eric Gronlund
 Water Rights Program, DENR
 Date of Inspection - November 4, 2015

Approval of Location Change Diversion Point

NAME: Terry Wieting

ADDRESS: 870 Beach Avenue NE, Huron SD 57350

DATE: December 23, 2015

COUNTY: Beadle

TELEPHONE: cell 350-5142

Water Permit No. 7373-3 appropriates 1.78 cubic feet of water per second (cfs) from two wells completed into the Tulare:Western Spink Hitchcock aquifer located in the S $\frac{1}{2}$ SW $\frac{1}{4}$ Section 16 for irrigation of 160 acres located in the SW $\frac{1}{4}$ Section 16; all in T113N, R62W. A licensing investigation was conducted on November 4, 2015. One well was found to be near the pivot center in the approximate center of the SW $\frac{1}{4}$ Section 16. The other well was found to be approximately 480 feet north of the pivot center in the NW $\frac{1}{4}$ SW $\frac{1}{4}$ of Section 16. This change in well location necessitates a review pursuant to SDCL 46-5-13.1 whether this change increases the potential for adverse effects on existing diversions.

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 source remains the Tulare:Western Spink Hitchcock aquifer and the developed diversion rate does not exceed the permitted amount of 1.78 cfs.

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

The permit authorized irrigation of 160 acres. A center pivot with cornering system in place capable of irrigating 152 acres.

- **Review of Existing Diversions**

The closest neighboring well to Well No. 2 under Permit No. 7373-3 is 2,325 feet to the west. This change of location actually moved the well location farther away from the neighboring well. The change in the Well No. 2 did move it approximately 480 feet closer to a nearest well to the north in the SW $\frac{1}{4}$ of Section 9. The distance between these well is 4,770 feet. At this distance there is not a significant potential for and adverse effect to the existing diversion.

RECOMMENDED ACTION

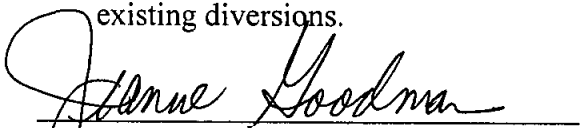
Based on the above criteria, it is recommended that the diversion point(s) be licensed as developed.



Eric Gronlund, Water Rights Engineer
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(s) 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
<http://denr.sd.gov>

FEB 01 2016

7373-3

Terry Wieting
870 Beach Ave NE
Huron SD 57350

Dear Mr. Wieting:

Enclosed is Water License No. 7373-3. This is the final water right document completing your process of obtaining a Water Right. Included with your license is a map prepared by the staff engineer who conducted the field investigation.

For your information SDCL 46-6-27 requires that if the owner of an existing well, such as the well authorized by Water Right No. 7373-3, constructs a replacement well and does not plan to use the old well, the old well is considered abandoned and must be plugged. Also, any well that is being used or is not considered abandoned must be valved and controlled, if flowing, or sealed and capped so that no leaking occurs either underground or at the surface.

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

Sincerely,

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

enclosures

STATE OF SOUTH DAKOTA

WATER LICENSE NO. 7373-3

(1) Terry Wieting, 870 Beach Ave NE, Huron SD 57350 made Application No. 7373-3, June 14, 2012 for a water permit to divert 1.78 cubic feet of water per second from ground water (two wells – Tulare Western Spink Hitchcock Aquifer), Beadle County, South Dakota for irrigation purposes. Permit No. 7373-3, with a priority date of June 14, 2012 was approved March 7, 2013 and issued to the applicant for diversion of water with construction of the described water supply system to be completed on or before March 7, 2018 and for the application to beneficial use of said water on or before March 7, 2022.

The Permit holder submitted a "*Notice of Completion of Works and Application of Water to Beneficial Use*" on February 18, 2014. The "*Notice*" stated the water use system was completed on July 4, 2013 and the water placed to beneficial use on July 10, 2013.

The two wells were permitted for the S $\frac{1}{2}$ SW $\frac{1}{4}$ Section 16, T113N, R62W. An investigation for licensing purposes found one of the wells to be near the center of the SW $\frac{1}{4}$ and the second well to be in the NW $\frac{1}{4}$ SW $\frac{1}{4}$ Section 16. The Chief Engineer made a finding pursuant to SDCL 46-5-13.1 and ARSD 74:02:01:14.01 that the change in location of the diversion points does not increase the potential for adverse effects to existing diversions.

(2) It is certified that the permit holder has complied with the provisions of South Dakota State Law relating to completion of the construction of the water supply system and is entitled to divert 1.78 cubic feet of water per second for beneficial use. The location of the diversion points are:

- Well #1 – 1,330 feet north and 1,330 feet east of the SW corner of Section 16, T113N, R62W (near center of the quarter)
- Well #2 – 1,860 feet north and 1,260 feet east of the SW corner of Section 16, T113N, R62W (NW $\frac{1}{4}$ SW $\frac{1}{4}$)

(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:

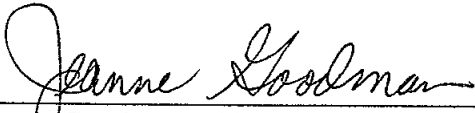
Section 16, T113N, R62W	NW $\frac{1}{4}$ SW $\frac{1}{4}$	38 acres
	NE $\frac{1}{4}$ SW $\frac{1}{4}$	38 acres
	SW $\frac{1}{4}$ SW $\frac{1}{4}$	38 acres
	SE $\frac{1}{4}$ SW $\frac{1}{4}$	38 acres
	Total	152 acres

(4) Pursuant to South Dakota Water Law 46-5-30.1 Terry Wieting, 870 Beach Ave NE, Huron SD 57350 the holder and/or owner of Water Right No. 7373-3 is issued a license to appropriate water, the right to use 1.78 cubic feet of water per second from ground water (two wells – Tulare Western Spink Hitchcock Aquifer) with a priority date of June 14, 2012 from the locations specified in (2) of this license for irrigation purposes.

continued

This license is subject to South Dakota Water Law, any limitations or conditions listed in Water Right No. 7373-3 and subject to the following qualifications:

- The wells 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.
- The wells authorized by Permit No. 7373-3 shall be constructed by a licensed well driller and construction of the well and installation of the pump shall comply with the Water Management Board Well Construction Rules, Chapter 74:02:04 with the well casing pressure grouted (bottom to top) pursuant to Section 74:02:04:28. ***Both wells were completed by Pullman Well Drilling in 2013. Copies of the well logs are on file with the Water Rights Program.***
- This Permit is approved subject to the irrigation water use questionnaire being submitted each year.



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

FEB 01 2016
date

