

WATER PERMIT NO. 6619-3

Name of Applicant: P.J. Werdel & Sons, Inc.

Address: 21711 345th Ave, Ree Heights SD 57371 Phone: 605 943-5609

Amount of Water Claimed: 0.33 cfs Total Acres: NA

Source of Water Supply: groundwater (5 wells)

Water to be used for: commercial County: Hand

Type of Waste Disposal System:

Location: 20 miles southwest of Ree Heights

PRIORITY Date Received: 3-14-05

Application/License Fee: \$275

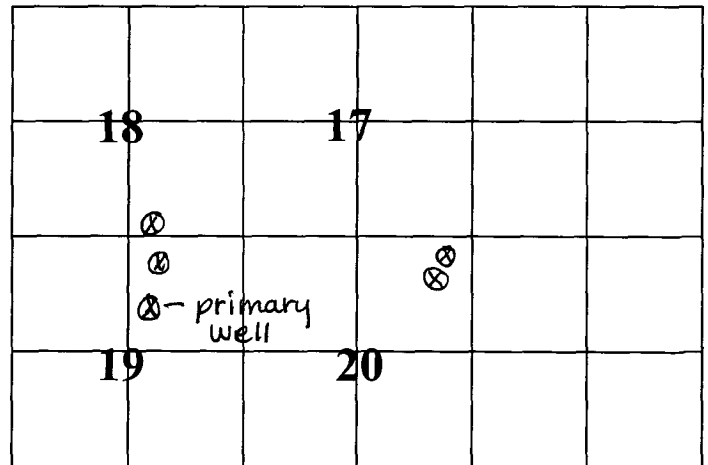
Corrected Application Received: 4-26-05

Period of Annual Use: January 1 – December 31

Remarks:

Diversion Point: SW ¼ SE ¼ Sec 18; NW ¼ NE ¼, SW ¼ NE ¼ Sec 19; NE ¼ NE ¼ Sec 20; all in T109N-R70W

Land to be Irrigated: NA



Depth of Well: 1860 feet and 20 feet deep

Well Driller: : Huron Drilling Co.

Remarks:

Type of Map: plat

Prepared by: Dale F Leffers, PE

Reviewed and the Number Assigned on: 4-26-05

By: Karen Schlaak

Notice of Hearing - date to intervene: _____

RECEIVED

MAR 13 2005
WATER RIGHTS PROGRAM

Mail to: Water Rights Program Joe Foss Building 523 E. Capitol Pierre, SD 57501-3181 (605) 773-3352	No. <u>6619-3</u> (office use only)	Hydrologic Unit <u>10140105</u>
	Basin <u>Missouri River</u>	
	Newspaper <u>The Miller Press, Miller</u>	

Application For Permit To Appropriate Water Within The State Of South Dakota

Check use(s) of water:

☐ Municipal	☐ Suburban Housing	☐ Recreational	☐ Institutional
☐ Rural Water System	☒ Commercial	☐ Fish & Wildlife	☐ Geothermal Heat
☐ Domestic (over 18 gpm)	☐ Industrial	☐ Other _____	

Type of Application:
(check one)

☒ New ☐ Vested Right (Use predates Mar 2, 1955) ☐ Future Use Reservation
☐ Place to Beneficial Use Water Reserved by Future Use Permit No. _____
☐ Amendment/Correction to Permit No. _____

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

- Name of Applicant P.J. Werdel & Sons, Inc. Phone (605) 943-5609
 (check one) ☒ Owner ☐ Tenant/lessee
 Mailing Address 21711 345th Ave Ree Heights State SD 57371
 (Street, RR, or Box and City) (Zip Code)
- Amount of water claimed 0.33 *CFS or PRIMARY WELL 110 **GPM ***AF
 (*Cubic Feet per Second) (**Gallons per Minute) (***)Acre Feet - storage capacity of dam/dugout or annual use if applicable
- Source of water supply Well
- Location of point of diversion (example - 3 wells in SW1/4 NE1/4 section 12-T104N-R53W) County Hand
3 wells located in NE1/4 S100T109N R70W Primary Well - SW1/4 NE1/4 Sec 19 other wells -
2 WELLS LOCATED IN THE NE 1/4 S20 T109N - R70W SW1/4 SE1/4 Sec 18, NW1/4 NE1/4
Sec 19, NE1/4 NE1/4 Sec 20;
- County or counties where water will be used Hand all in T109N-R70W
- Annual period during which water is to be used Jan1 thru Dec 31
- Give a description of the project. When available include any preliminary engineering report or other reports or information that will help explain the project. (Attach sheet if more space is needed)

Open Feedlot

STATE OF SOUTH DAKOTA)

County of Hand

SS

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

I, Ed Werdel, 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 Ed WerdelSubscribed and sworn to before me this 7th day of October 20 04
Beth Fischer Expires: 11/19/04
 Notary Public signature

**SOUTH DAKOTA
WATER PERMIT NO. 6619-3**

Date of first receipt of application March 14, 2005.

Date of return to applicant for corrections, amendments or changes March 14, 2005.

Date of receipt of corrected application April 26, 2005.

The Chief Engineer, on behalf of the Water Management Board, issues Water Permit No. 6619-3 to P J Werdel & Sons Inc., 21711 345th Ave, Ree Heights SD 57371 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. 6619-3 appropriates 0.33 cubic feet of water per second (150 gallons per minute) from five wells. The primary well capable of producing 0.24 cfs (110 gpm) is completed into the Inyan Kara Aquifer (1860 feet deep) located in the SW ¼ NE ¼ Section 19-T109N-R70W. The other four wells capable of producing 0.09 cfs (40 gpm) are completed into the Pleistocene Unknown Aquifer (approximately 20 feet deep) located in the SW ¼ SE ¼ Section 18, W ½ NE ¼ Section 19, NE ¼ NE ¼ Section 20; all in T109N-R70W.
2. The water appropriated shall be used for the purpose of commercial use in a cattle feedlot operation and may not exceed the amount of water needed for beneficial use.
3. The water is to be used during the following described annual period: January 1 – December 31.
4. The date of approval of Permit No. 6619-3 is June 20, 2005.
5. The date from which applicant may claim right is March 14, 2005.
6. 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. Any flowing wells approved under this Permit shall be valved and the flow reduced to the amount needed or to a minimum when not being used. If this well is abandoned or the Permit cancelled, the well must be plugged in accordance with Water Management Board Rules, Chapter 74:02:04.
3. Permit No. 6619-3 is subject to compliance with requirements of the Department's Water Pollution Control Permit issued pursuant to SDCL 34A-2-36 or 34A-2-112 for concentrated animal feeding operations.
4. Permit No. 6619-3 is subject to compliance with all existing and applicable Water Management Board Rules including but not limited to:
 - a) Chapter 74:54:01 Ground Water Quality Standards,
 - b) Chapter 74:54:02 Ground Water Discharge Permit,
 - c) Chapter 74:51:01 Surface Water Quality Standards,
 - d) Chapter 74:51:02 Uses Assigned to Lakes,
 - e) Chapter 74:51:03 Uses Assigned to Streams, and
 - f) Chapter 74:52:01 through 74:52:11 Surface Water Discharge Provisions.

WATER MANAGEMENT BOARD

By: Garland Erbele

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

JUL 29 2005

date



(type or print in ink)

1. Well Information - Proposed Construction

WELL #1 PRIMARY

- a) Drill Hole Diameter _____ Depth 1860 ft
- b) Casing Type _____ Diameter _____ Thickness _____
- c) Screen Type _____ Diameter _____ Thickness _____
- d) Gravel Pack _____ Length of Gravel Pack _____
- e) Depth to Top of Water Bearing Material _____
- f) Depth to Water (ground surface to water level) _____
- g) Distance to nearest existing domestic well:
On applicants property _____ On property owned by others _____

2. Wastewater Disposal System Information

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

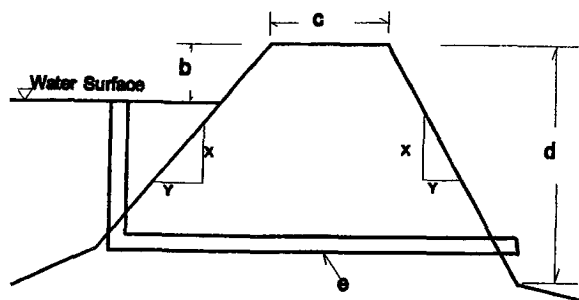
3. Dugout Information

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

4. Water Storage Dams

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

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



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

(type or print in ink)

1. Well Information - Proposed Construction WELLS 2 - 5

- a) Drill Hole Diameter _____ Depth ABOUT 20 ft
- b) Casing Type _____ Diameter _____ Thickness _____
- c) Screen Type _____ Diameter _____ Thickness _____
- d) Gravel Pack _____ Length of Gravel Pack _____
- e) Depth to Top of Water Bearing Material _____
- f) Depth to Water (ground surface to water level) _____
- g) Distance to nearest existing domestic well:
On applicants property _____ On property owned by others _____

2. Wastewater Disposal System Information

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

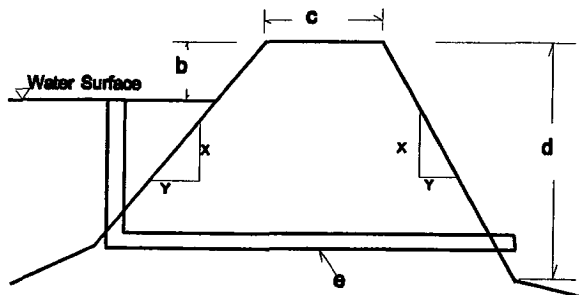
3. Dugout Information

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

4. Water Storage Dams

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

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



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

RECEIPT

WATER RIGHTS PROGRAM

South Dakota Department of Environment and Natural Resources

Date March 14, 20 05

RECEIVED OF Settle Agri-Services & Engineering Inc., 4700 W Rock Creek Rd, Raymond NE 68428

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

Fee for Application for Permit No. <u>6617-3</u> to Appropriate Water, to construct and to put water to beneficial use	225	00
Fee for Application for Permit No. _____ to Appropriate Water for Future use		
Fee to retain Future Use Permit No. _____ after period of seven years.		
Fee for Inspecting Constructed Works, confirming beneficial use and issuing Water License No. <u>6617-3</u>	50	00
Fee for Filing Transfer Form _____		
Fee for _____		
Fee for Issuing New Well Driller's License No. _____ for C.Y. _____		
Fee for Renewal of Well Driller's License No. _____ for C.Y. _____		
Fee for Issuing Well Pump Installer's License No. _____ for C.Y. _____		
Fee for Renewal of Well Pump Installer's License No. _____ for C.Y. _____		
(Any Other Work Provided by Law)	TOTAL	275.00

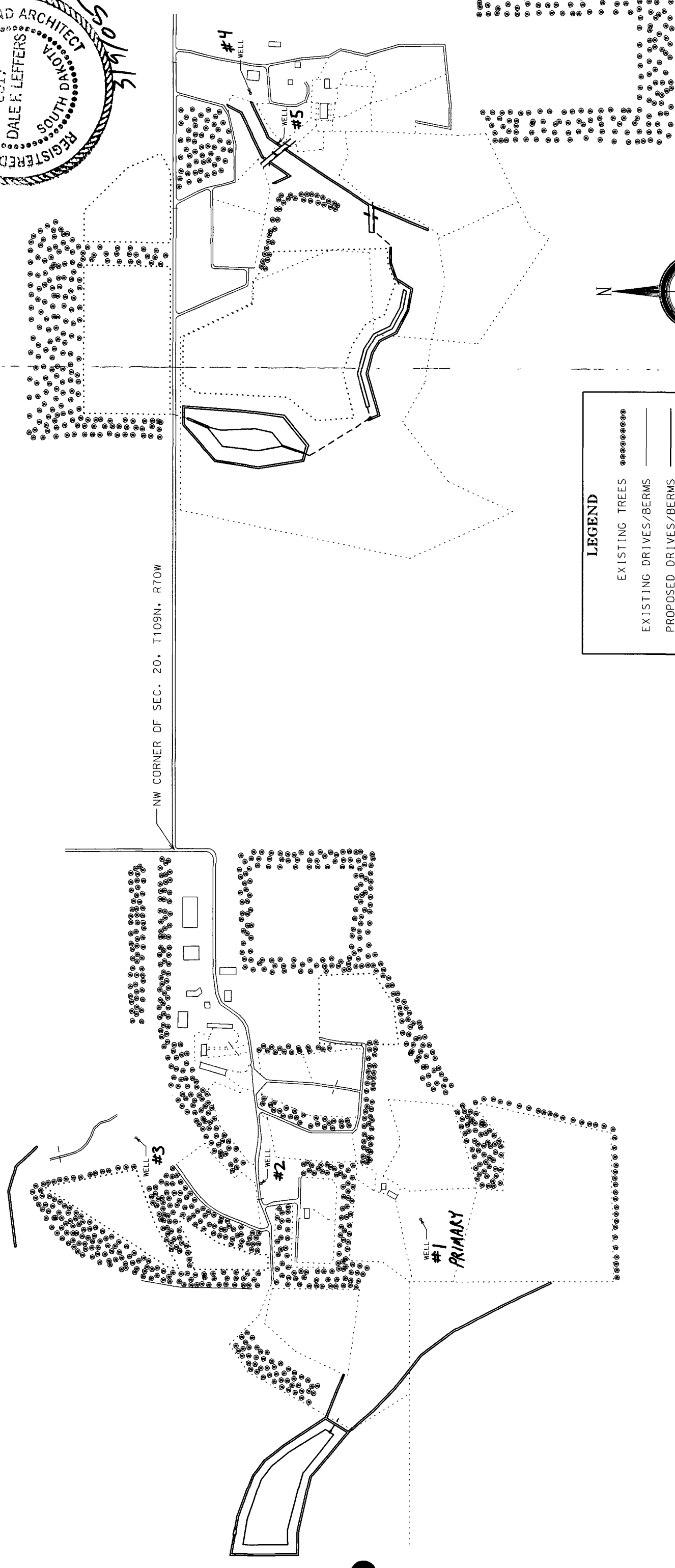
No. 001 706

By Darland Erbe
Chief Engineer

gm

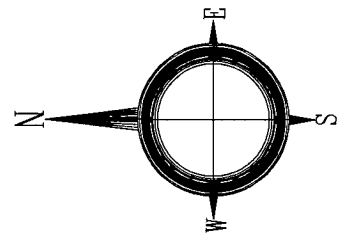
DALE F. LEFFERS
REGISTERED PROFESSIONAL ENGINEER AND ARCHITECT
DALE F. LEFFERS
6617
SOUTH DAKOTA
PROF. REG. NO.

NW CORNER OF SEC. 20, T109N, R70W



LEGEND

EXISTING TREES	●●●●●●●●
EXISTING DRIVES/BERMS	———
PROPOSED DRIVES/BERMS	———
EXISTING FENCES	
PROPOSED EXPANSION AREAS	
EXISTING PIPING	- - - - -
PROPOSED PIPING	- - - - -



SCALE: 1"=600'

SITE PLAN
PJ WERDEL & SONS INC.
NE 1/4, SEC 19, T 109 N, R 70 W
NE 1/4, SEC 20, T 109 N, R 70 W
HAND COUNTY
SETTJE AGRI SERVICES
AND ENGINEERING, INC.

6619-3

WELL # 1 PRIMARY
HURON DRILLING INC. - DRILLER'S LOG

ARD # 6753 JOB NAME P.J. Werdel
 DATE 1-8-01 LOCATION NE 19-109-70 Hand Co.
 RIG # 32 FOREMAN Dennis Harvey

#	DEPTH	TIME	REMARKS
1	15	12:45	12-26-00
2	30	1:25	
3	45	1:56	
4	60	2:28	Load of water 1111
5	75	2:49	
6	90	3:05	
7	105	3:25	
8	120	3:42	
9	135	4:02	
10	150	4:24	
11	165	4:46	
12	180	5:04	
13	195	5:22	
14	210	5:43	
15	225	10:16	12-27-00
16	240	10:46	
17	255	11:12	
18	270	11:40	
19	285	12:09	
20	300		
21	315		12-28-00
22	330		
23	345	11:29	
24	360	11:42	
25	375	9:46	12-29-00
26	390	10:01	
27	405	10:16	
28	420	10:31	
29	435	10:49	
30	450	11:16	
31	465	1:00	
32	480	1:20	
33	495	1:36	
34	510	1:51	
35	525	2:09	

HURON DRILLING INC. - DRILLER'S LOG

CARD # 6753 JOB NAME P.J. Werdel
 DATE 1-8-01 LOCATION NE 19-109-70 Hand Co.
 RIG # 32 FOREMAN Dennis Harvey

#	DEPTH	TIME	REMARKS
36	540	2:22	12-29-00
37	555	2:34	
38	570	2:43	
39	385	2:51	
40	600	2:57	
41	615	3:03	
42	630	3:10	
43	645	3:18	
44	660	3:27	
45	675	3:34	
46	690	3:46	
47	705	3:52	
48	720	3:58	
49	735	4:04	
50	750	4:12	
51	765	4:18	
52	780	4:25	
53	795	4:32	
54	810	4:40	
55	825	4:47	
56	840	4:55	
57	855	5:03	
58	870	5:18	
59	885	9:40	12-30-00
60	900	9:58	
61	915	10:06	
62	930	10:20	
63	945	10:34	
64	960	10:42	
65	975	11:03	
66	990	11:15	
67	1005	11:28	
68	1020	11:38	
69	1035	11:50	
70	1050	1:03	

HURON DRILLING INC. - DRILLER'S LOG

CARD # 6753 JOB NAME P.J. Werdel
 DATE 1-8-01 LOCATION NE 19-109-70 Hand Co.
 RIG # 32 FOREMAN Dennis Harvey

#	DEPTH	TIME	REMARKS
71	1065	1:11	12-30-00
72	1080	1:16	
73	1095	1:21	
74	1110	1:26	
75	1125	2:34	
76	1140	2:44	
77	1155	2:59	H.S.
78	1170	3:19	
79	1185	3:32	greenhorn
80	1200	3:45	
81	1215	3:58	
82	1230	4:14	
83	1245	12:47	
84	1260	1:00	#1 4 3/4 WM3 roller at 1350 start 9:45
85	1275	1:16	
86	1290	1:34	
87	1305	1:51	
88	1320	2:37	
89	1335	3:18	
90	1350	10:56	
91	1365	11:34	
92	1380	1:13	
93	1395	1:41	
94	1410	2:11	
95	1425	3:26	
96	1440	4:08	
97	1455		H.S. at 1465
98	1470	4:08	1465-1475 streak
99	1485	5:20	#2 4 3/4 WM3 roller bit at 1485 start 9:20
100	1500	10:27	1500-1510 fair sand
101	1515	10:04	1510-1530 small streaks
102	1530	11:45	1530-1570 fair sand
103	1545	2:03	1570-1575 hard shell
104	1560	2:20	
105	1575		

HURON DRILLING INC. - DRILLER'S LOG

CARD # 6753 JOB NAME P.J. Werdel
 DATE 1-8-01 LOCATION NE 19-109-70 Hand Co.
 RIG # 32 FOREMAN Dennis Harvey

#	DEPTH	TIME	REMARKS
106	1590	3:17	1595 hard hard shell
107	1605	4:49	1610-1675 good sand
108	1620	5:08	1675-1750 good streaks
109	1635	5:28	1750-1795 morrison
110	1650	5:48	1795-1810 fair sand
111	1665	6:04	1810-1840 good sand
112	1680	9:35	#3 4 3/4 WM3 roller bit start 9:35
113	1695	10:05	
114	1710	10:33	
115	1730	11:15	
116	1750	11:50	
117	1770	1:46	
118	1790	3:51	
119	1810	4:34	
120	1830	5:24	
121	1850	9:48	
122	1860	TD	shale cup at 260

132

20/270
20

8
1910
1640
270

7713
20
260

15
20/300
20
100

300

1910
1640
270

1610
1910

8
20/1610

1640
300
1940
260
200

82
20
1640



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

March 14, 2005

Settje Agri-Services & Engineering, Inc.
4700 W Rock Creek Road
Raymond NE 68428-4199

RE: Application for P J Werdell & Sons, Inc.

Dear Sir:

Thank you for submitting the *Application for a Permit to Appropriate Water* for P J Werdell & Sons, Inc. In order to complete the application the following is required.

- Please complete Form 2A, Supplemental Information for each of the 5 wells. I have reviewed our files and cannot find well completion reports for any of these wells. Please submit as much information as possible regarding the well construction for each well. At the very least, we need the approximate depth of each well.
- Also, the application indicates one well as the primary well. Please mark the primary well on the map.
- Based on the map submitted with the application, it appears the wells are located as follows: SW ¼ SE ¼ Section 18; NW ¼ NE ¼ Section 19, SW ¼ NE ¼ Section 19 and two wells in the NE ¼ NE ¼ Section 20; all in T109N-R70W. Do you concur with these well locations?

If you have any questions, please contact me.

Sincerely,

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

enclosures

SETTJE

Agri-Services & Engineering

4700 W. Rock Creek Rd.
Raymond, Ne 68428
office (402) 783-2100
fax (402) 783-2104

April 21, 2005

Karen Schlaak
Joe Foss Building
523 East Capital Avenue
Pierre, SD 57501-3182

RECEIVED

APR 26 2005

WATER RIGHTS
PROGRAM

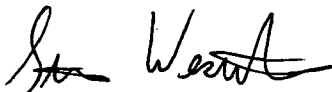
Reference:

Addendum to Well Application
PJ Werdel & Sons, Inc.
Part of S19 & 20, T109N, R70W - Hand County

Dear Karen,

Enclosed are the revised sheets you requested. I also included a driller's log on the primary well. The other four wells were hand dug and I was not able to get much information on them except that they are all about 20 feet deep. I agree with the legal descriptions you have for these wells. Let me know if you have any questions and I can try to help answer them.

Sincerely,



Steve Westerbuhr

REPORT ON WATER PERMIT APPLICATION NO. 6619-3
For P. J. Werdel and Sons, Inc.
May 16, 2005

Application No. 6619-3 proposes to appropriate 0.33 cfs (110 gpm) from five wells. The primary well #1 is capable of producing 0.24 cfs (110 gpm) from a well 1,860 feet deep located in the SW $\frac{1}{4}$ NE $\frac{1}{4}$ of section 19, T109N R70W. The other wells are capable of producing 0.09 cfs (40 gpm) from four wells about 20 feet deep located in the SW $\frac{1}{4}$ SE $\frac{1}{4}$ of section 18, W $\frac{1}{2}$ NE $\frac{1}{4}$ of section 19, NE $\frac{1}{4}$ NE $\frac{1}{4}$ of section 20, all in T109N R70W in Hand County. The water is for a commercial cattle feedlot operation.

AQUIFER – INYAN KARA (INKR), PLEISTOCENE UNKNOWN (PS-U)

The Inyan Kara is a buried sand, sandstone and shale under artesian conditions at this site. The aquifer underlies 1,012 square miles and contains an estimated 2.9 million acre-feet of recoverable water in storage in Hand County (Hedges, 1982). Ground water movement is from northwest to southeast across this area (Koch, 1980). According to Koch the Inyan Kara should free flow at the land surface in this area. The well information for the deep well included with the application is poor. The depth would indicate an Inyan Kara well but the log does not indicate what formations were encountered below the Dakota Formation. Also the log does not indicate how this well was completed. Apparently the Dakota Formation would not free flow at the land surface at this location. This would be a good way to discern between the two formations but this information is not available in the application.

The shallow aquifer is probably under water table conditions and composed of outwash (sand and gravel). No estimate is available for areal extent or the amount of water in storage in the aquifer. Because of the location of this site and the well depths the mapped Elm Creek aquifer may actually extend onto this site. The information on the shallow wells is also very sketchy. No information was provided with the application other than estimated depths. A USGS report compiled on wells for Hyde and Hand Counties lists two wells in this area for P. Werdel with depths of 38 and 14 feet and with static water levels of about six feet below land surface. These two wells appear to be large diameter bored wells (Nietzert, 1987). The actual construction is not known without a completion report.

The Water Rights Program monitors an observation well HD-73A completed into the Elm Creek aquifer and located about seven miles north of this site. The water levels for this well should reflect the water levels at this site even though the aquifers may be different. A hydrograph for this observation well is included with this report (Water Rights, 2005). In general, the climatic effects are obvious, that is, rising water levels during wet years (recharge) and gradually declining water levels during dry years.

REVIEW OF EXISTING WATER PERMITS/RIGHTS

There are no other water permits/rights from either aquifer source in this area. Interference is not a concern. These wells have been in use for years with no apparent problems. There would be domestic wells in the area from both sources.

CONCLUSIONS

1. Water is available from the Inyan Kara aquifer.
2. Water is available from the Pleistocene Unknown aquifer.
3. The Inyan Kara is under artesian conditions at this site. If the well free flows at the land it must be controlled to minimize the waste of water.
4. The Pleistocene wells are probably under water table conditions. Drawdown created by pumping should not be significant at this rate of withdrawal and interference is not a concern.
5. None of the wells at this site appear to be completed in accordance with SD Well Construction Standards for a facility of this type. However, the information available is very poor.
6. Plans and specifications for this facility were approved in April of 2005.

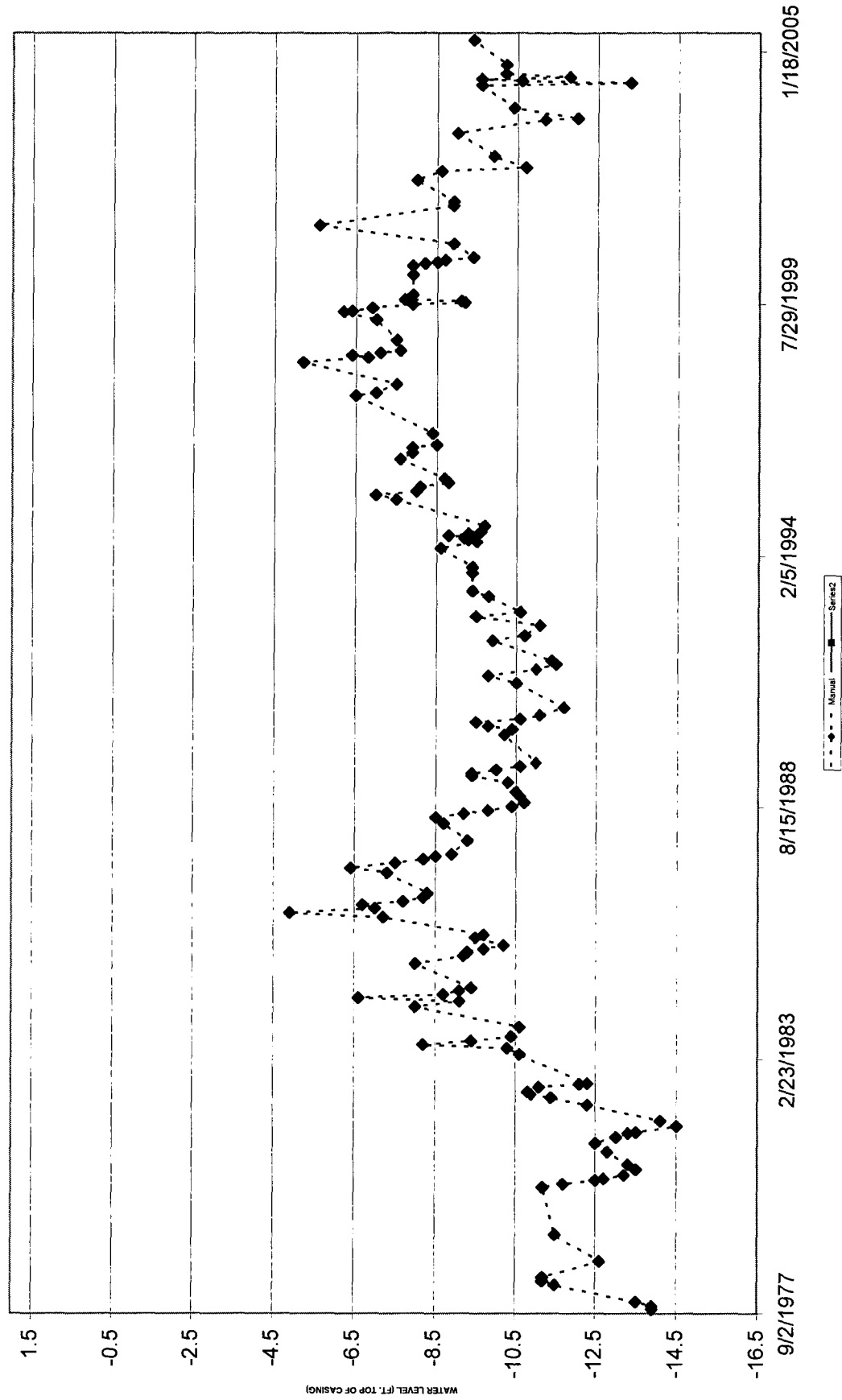


James A Goodman
Natural Resources Engineer

BIBLIOGRAPHY

- Hedges, L.S., and others, 1982, Evaluation of Ground-Water Resources Eastern South Dakota and Upper Big Sioux River, South Dakota and Iowa, for US Army Corps of Engineers, SD DENR, SDGS, Vermillion, SD, 57069.
- Koch, N.C., 1980, Geology and Water Resources of Hand and Hyde Counties, South Dakota, Part II Water Resources, Bulletin 28, SD DENR, SDGS, Vermillion, SD, 57069.
- Nietzert, K.M., N.C. Koch, 1987, Records of Wells and Chemical Analyses of Ground Water in hand and Hyde Counties, South Dakota, USGS Open File Report 87-684, USGS, Huron, SD, 57350.
- Water Rights, 2005, Unpublished Observation Well Data for Hand County, SD DENR, DES, Water Rights Program, Pierre, SD, 57501.

WATER RIGHTS' OBSERVATION WELL
HD-73A





**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

**RECOMMENDATION OF CHIEF ENGINEER FOR WATER PERMIT
APPLICATION NO. 6619-3, P. J. Werdel & Sons, Inc.**

Pursuant to SDCL 46-2A-2, the following is the recommendation of the Chief Engineer, Water Rights Program, Department of Environment and Natural Resources concerning Water Permit Application No. 6619-3, P. J. Werdel & Sons, Inc., c/o Ed Werdel, 21711 345th Avenue, Ree Heights, SD 57371.

The Chief Engineer is recommending APPROVAL of Application No. 6619-3 because 1) there is reasonable probability that there is unappropriated water available for the applicant's proposed use, 2) the proposed diversion has been 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. Any flowing wells approved under this Permit flow shall be valved and the flow reduced to the amount needed or to a minimum when not being used. If this well is abandoned or the Permit cancelled, the well must be plugged in accordance with Water Management Board Rules, Chapter 74:02:04.
2. Permit No. 6619-3 is subject to compliance with requirements of the Department's Water Pollution Control Permit issued pursuant to SDCL 34A-2-36 or 34A-2-112 for concentrated animal feeding operations.
4. Permit No. 6619-3 is subject to compliance with all existing and applicable Water Management Board Rules including but not limited to:
 - a) Chapter 74:54:01 Ground Water Quality Standards,
 - b) Chapter 74:54:02 Ground Water Discharge Permit,
 - c) Chapter 74:51:01 Surface Water Quality Standards,
 - d) Chapter 74:51:02 Uses Assigned to Lakes,
 - e) Chapter 74:51:03 Uses Assigned to Streams, and
 - f) Chapter 74:52:01 through 74:52:11 Surface Water Discharge Provisions.

See report on application for additional information.

Garland Erbele, Chief Engineer
May 26, 2005

RECEIVED
JUL - 5 2005
WATER RIGHTS
PROGRAM



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

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

May 26, 2005

P J Werdel & Sons Inc
% Ed Werdel
21711 345th Ave
Ree Heights SD 57371

Dear Mr. Werdel:

Water Permit Application No. 6619-3 for commercial use has been examined and found to comply with the South Dakota Water Laws and applicable rules. A notice has been sent to the Publisher of the Miller Press printed at Miller, SD (Ph # 605-853-3575). You will need to contact the newspaper and authorize publication of this notice. For your information, a copy of the notice, the recommendation of the Chief Engineer and a report on the application are enclosed. Please review the notice prior to publication and notify this office, if you have any corrections or questions.

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

Sincerely,

Eric Gronlund
Natural Resources Engineer
(605) 773-3352

enclosures

c: Steve Westerbuhr, Settje Agri-Services, 4700 W Rock Creek Rd, Raymond NE 68428

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

Instruction to Newspaper - Publish first Notice on June 1, 2005 with the second publication 7 days later. The applicant is responsible for payment.

NOTICE OF APPLICATION NO. 6619-3 to Appropriate Water

Notice is given that P. J. Werdel & Sons, Inc., 21711 345th Ave, Ree Heights SD 57371 has filed an application for a water permit to appropriate 0.33 cubic feet of water per second (150 gallons per minute) from five wells. The primary well capable of producing 0.24 cfs (110 gpm) is completed into the Inyan Kara Aquifer (1860 feet deep) located in the SW ¼ NE ¼ Section 19-T109N-R70W. The other four wells capable of producing 0.09 cfs (40 gpm) are completed into the Pleistocene Unknown Aquifer (approximately 20 feet deep) located in the SW ¼ SE ¼ Section 18, W ½ NE ¼ Section 19, NE ¼ NE ¼ Section 20; all in T109N-R70W. The water is for commercial use in a cattle feedlot operation.

Pursuant to SDCL 46-2A-2, the Chief Engineer recommends APPROVAL of Application No. 6619-3 because 1) unappropriated water is available, 2) existing rights will not be unlawfully impaired, 3) it is a beneficial use of water, and 4) it is in the public interest. In accordance with SDCL 46-2A-23, the Chief Engineer will act on the application, as recommended, unless a petition is filed opposing the application or the applicant files a petition contesting the Chief Engineer's recommendation. If a petition opposing the application or contesting the recommendation is filed, then a hearing will be scheduled and the Water Management Board will consider the application. Notice of the hearing will be given to the applicant and any person filing a petition.

Any person interested in opposing or supporting this application or recommendation must file a written petition with BOTH the applicant and Chief Engineer. The applicant must file a petition if contesting the Chief Engineer's recommendation. The Chief Engineer's address is "Water Rights Program, Foss Building, 523 E Capitol, Pierre SD 57501 (605 773-3352)" and the applicant's mailing address is given above. A petition filed by either an interested person or the applicant must be filed by June 20, 2005.

The petition may be informal, but must include a statement describing the petitioner's interest in the application, the petitioner's reasons for opposing or supporting the application, and the signature and mailing address of the petitioner or the petitioner's legal counsel, if legal counsel is obtained. Contact Eric Gronlund at the above Water Rights Program address to request copies of information pertaining to this application. Steven M. Pirner, Secretary, Department of Environment and Natural Resources.



DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES

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

May 26, 2005

The Miller Press
PO Box 196
Miller SD 57362-0196

ATTENTION: Legal Public Notice

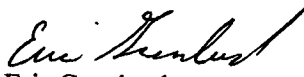
Enclosed is a Notice on Application No. 6619-3 to Appropriate Water to be published twice. Please publish the first notice on June 1, 2005 with the second publication 7 days later. The text of the notice can be e-mailed to your paper by contacting Karen Schlaak at (605) 773-3352.

The applicant must verify to you that the notice is to be published, before you make the first publication. **Please BILL the APPLICANT for the cost of publication.** The APPLICANT is P.J. Werdel & Sons, Inc., %Ed Werdel, 21711 345th Ave., Ree Heights (Ph # 605-943-5609).

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

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

Sincerely,


Eric Gronlund
Natural Resources Engineer
605 773-3352

enclosures

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

No. 6619-3

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

Date _____

We are in receipt of your letter of May 26, 2005 enclosing Notice to Appropriate Water by Application No. 6619-3 which was first published in our issue of _____. **ENCLOSED IS A COPY OF THIS FIRST PUBLICATION.**

Name

Newspaper



**DEPARTMENT of ENVIRONMENT
and NATURAL RESOURCES**

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

JUL 29 2005

P J Werdel & Sons Inc
% Ed Werdel
21711 34th Ave
Ree Heights SD 57371

Dear Mr. Werdel:

Enclosed is Water Permit No. 6619-3 authorizing construction of your water diversion system and beneficial use of the water, not exceeding the limits as specified in the Water Permit.

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

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

Sincerely,

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

enclosures

Report of Examination of Works and/or Application of Water to Beneficial Use For Permit No. 6619-3

I have this day, August 8, 2024, made a thorough examination of the water use system constructed by P.J. Werdel and Sons, Inc. of 21711 345th Ave, Ree Heights SD 57371 holder of Permit No. 6619-3, bearing the priority of March 14, 2005 authorizing the diversion of 0.24 cu. ft. per second of the waters of groundwater, Inyan Kara Aquifer and the diversion of 0.09 cu. ft. per second of the waters of groundwater, Pleistocene Unkown Aquifer for commercial use in a cattle feeding operation purposes, in Hand County.

Inspection contact & relationship Kyle Werdel, operator

A. Works used to divert the water:

Well Information: Well #1

- 1) Well Drilling Firm: Stretch's Well Service Inc
- 2) No. of Wells 1
- 3) Depth(s) 1800 feet
- 4) Well log is available Y If no, explain in comments
Comments: none

Casing:

- 1) Diameter 5 inches
- 2) Length 300 feet
- 3) Type 250
- 4) Diameter 2 inches
- 5) Length 1360 feet
- 6) Type Sch 80
- 7) Diameter 2 inches
- 8) Length 180 feet
- 9) Type Type K copper

Screen:

- 1) Type perforated
- 2) Length 180 feet
- 3) Static water level flowing well, 95 psi

Pump:

- 1) Flowing well
- 2) Capacity 20 GPM

Well Information: Well #2

- 5) Well Drilling Firm: Stretch's Well Service Inc
- 6) No. of Wells 1
- 7) Depth(s) 1890 feet
- 8) Well log is available Y If no, explain in comments

Comments: none

Casing:

- 10) Diameter 5 inches
- 11) Length 300 feet
- 12) Type 250
- 13) Diameter 2 inches
- 14) Length 1440 feet
- 15) Type Sch 80
- 16) Diameter 2 inches
- 17) Length 180 feet
- 18) Type Type K copper

Screen:

- 4) Type perforated
- 5) Length 180 feet
- 6) Static water level flowing well, 95 psi

Pump:

- 3) Flowing well
- 4) Capacity 15 GPM

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

- 1) Type PVC
- 2) Size 3 inches
- 3) Length 500 feet

Comments: none

C. Works used to apply water to beneficial use:

D. Compliance with Permit Requirements:

- 1) Permit qualifications being abided by Y
If no, describe: none
- 2) Exceptions to compliance are: none

E. Condition and Location:

- 1. The system is in good condition with the point(s) of diversion located as follows: from the NW corner of Sec 20 T109N-R70W; Well #1- 2280 ft W and 1590 ft S, latitude of 44.23415 and longitude of -99.28862, Well #2- 3440 ft E and 415 ft S, latitude of 44.23731 and longitude of -99.26676.
- 2. The works are capable of diverting and conveying to the place of use 0.08 cu. ft. per second of water which is to be used for commercial use in a cattle feeding operation. Water has been put to beneficial use to the maximum extent and the license should be issued for 0.08 cfs.
- 3. All structures, wells and lands on map Y
If no, describe: none

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

None.



Mark D Rath
Water Right Inspector
DANR, Water Rights Program

Date report completed: **November 14, 2024**

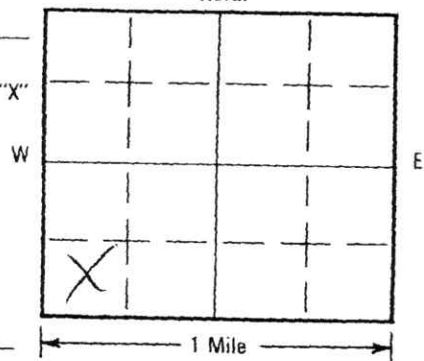
6619-3

SOUTH DAKOTA WATER WELL COMPLETION REPORT

07-92

Location SW 1/4 Sec 20 Twp 109 Rg 70
County Hand North

Please mark well location with an "X"



Well Completion Date

2-24-09

Well Owner: P.J. Wendle + Sons Inc.
Business Name: _____
Address: 34599 217th St.
Reef Heights S.D. 57371

FORMATION	DEPTH	
	FROM	TO
<u>yellow clay</u>	<u>0</u>	<u>10</u>
<u>Blue clay</u>	<u>10</u>	<u>40</u>
<u>Shale</u>	<u>40</u>	<u>1270</u>
<u>Dakota</u>	<u>1270</u>	<u>1390</u>
<u>Lakota</u>	<u>1425</u>	<u>1510</u>
<u>Sundance</u>	<u>1630</u>	<u>1800</u>
<u>Granite</u>	<u>1800</u>	

LOCATION:

Distance from nearest potential pollution source (septic tank, abandoned well, feed lot, etc.)? NONE ft. from _____ (identify source).

PROPOSED USE:

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

METHOD OF DRILLING:

Mud Rotary

CASING DATA:

- ☐ Steel ☒ Plastic ☒ Other

If other describe K Copper

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
<u>250 LB/FT</u>	<u>5" IN</u>	<u>0 FT</u>	<u>300 FT</u>	<u>7 7/8 IN</u>
<u>Sch 80</u>	<u>2 IN</u>	<u>260 FT</u>	<u>1620 FT</u>	<u>4 1/2 IN</u>
<u>K Copper</u>	<u>2 IN</u>	<u>1620 FT</u>	<u>1800 FT</u>	<u>4 1/2 IN</u>

GROUTING DATA

Grout Type Portland No. of Sacks 50 Grout Weight 15 lb./gal From 0 ft To 300 ft

Describe grouting procedure Pumped Through 5"

SCREEN: ☒ Perforated pipe ☐ Manufactured

Diameter 2" IN Length 180 FEET

Material K Copper

Slot Size _____ Set From 1620 Feet to 1800 Feet

Other information _____

WAS A PACKER OR SEAL USED? ☒ YES ☐ NO

If so, what material? Rubber

Describe packer(s) and location? above Perf.

DISINFECTION: Was well disinfected upon completion?

☒ YES, How: _____

☐ NO, Why Not? _____

Laboratory sent to for water quality analysis

Flushed with Chlorinated water

STATIC WATER LEVEL

_____ Feet

If flowing: closed in pressure 95 PSI

GPM flow 75 through 2" inch pipe

Controlled by ☒ Valve ☐ Reducers ☐ Other _____

Reduced Flowrate 15 GPM

Can well be completely shut in? yes

WELL TEST DATA:

☐ Pumped Describe: _____

☐ Bailed _____

☐ Other _____

Pumping Level Below Land Surface

_____ ft. After _____ Hrs. pumped _____ GPM

_____ ft. After _____ Hrs. pumped _____ GPM

If pump installed, pump rate _____ GPM

REMARKS

RECEIVED
MAR 10 2009
WATER RIGHTS
PROGRAM

This well was drilled under license # 722

And this report is true and accurate.

Drilling firm Stretch's Well Service Inc.

Signature of License Representative: _____

Tom Rathjen

Signature of Well Owner or Equitable Property Holder: _____

Date: _____

SOUTH DAKOTA WATER WELL COMPLETION REPORT

07-92

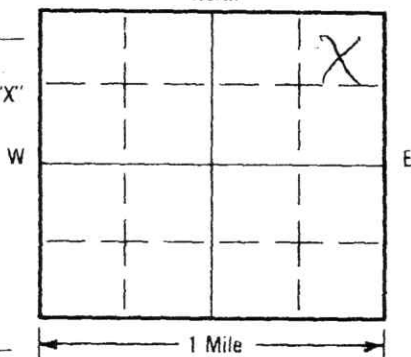
6619.3

Location NE 1/4 NE 1/4 Sec 20 Twp 109 Rg 70
County Hand North

Please mark well location with an "X"

Well Completion Date

4-18-08



LOCATION:

Distance from nearest potential pollution source (septic tank, abandoned well, feed lot, etc.)? 200 ft. from Feed lot (identify source).

PROPOSED USE:

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

METHOD OF DRILLING:

Mud Rotary

CASING DATA: ☐ Steel ☒ Plastic ☒ OtherIf other describe K Copper

PIPEWEIGHT	DIAMETER	FROM	TO	HOLE DIAMETER
250 LB/FT	5 IN	0 FT	300 FT	7 7/8 IN
264.8 LB/FT	2 IN	270 FT	1710 FT	4 1/2 IN
Copper LB/FT	2 IN	1710 FT	1890 FT	4 1/2 IN

GROUTING DATA

Grout Type	No. of Sacks	Grout Weight	From	To
Portland	40	15 lb./gal	0 ft	300 ft

Describe grouting procedure Pumped Through 5"SCREEN: ☒ Perforated pipe ☐ ManufacturedDiameter 2 IN Length 180 FEETMaterial K CopperSlot Size 3/8 Set From 1710 Feet to 1890 Feet

Other information

WAS A PACKER OR SEAL USED? ☒ YES ☐ NOIf so, what material? RubberDescribe packer(s) and location? above Perf.

DISINFECTION: Was well disinfected upon completion?

YES, How:

Laboratory sent to for water quality analysis

☒ NO, Why Not?Flowing wellWell Owner: P.J. Werdle & Sons Inc.

Business Name:

Address: 34599 212th St.
Ree Heights

WELL LOG:

FORMATION	DEPTH	
	FROM	TO
Yellow Clay	0	45
Shale	50	750
Chalk	750	760
Dakota	1370	1430
Red Shale	1430	1470
Lakota	1485	1580
Sundance	1710	1890

STATIC WATER LEVEL

Feet

If flowing: closed in pressure 50 PSIGPM flow 50 through 2 inch pipeControlled by ☒ Valve ☐ Reducers ☐ OtherReduced Flowrate 15 GPMCan well be completely shut in? yes

WELL TEST DATA:

☐ Pumped Describe:☐ Bailed☐ Other

Pumping Level Below Land Surface

ft. After Hrs. pumped GPM

ft. After Hrs. pumped GPM

If pump installed, pump rate GPM

REMARKS

RECEIVED

APR 22 2008

WATER RIGHTS PROGRAM

This well was drilled under license # 722

And this report is true and accurate.

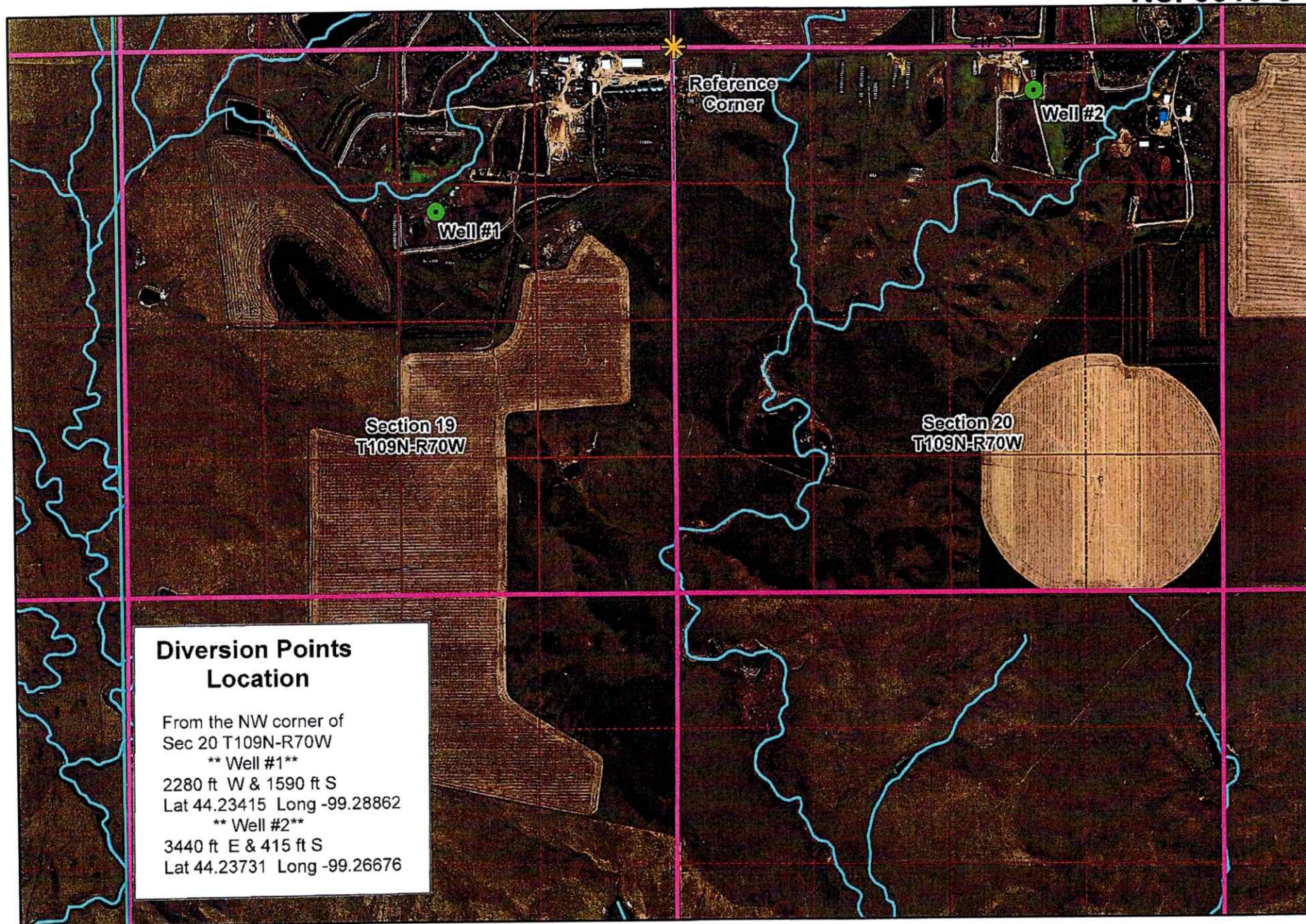
Drilling firm Stretch's Well Service Inc.

Signature of License Representative:

Tom Rathen

Signature of Well Owner or Equitable Property Holder:

Date:



0.75

0.375

0

0.75 Miles

Mark D Rath
Water Right Inspector
DANR-Water Rights Program

Approval of Location Change and/or Additional Diversion Point(s)NAME: P. J. Werdel & Sons IncCOUNTY: HandADDRESS: 21711 345th Ave, Ree Heights, SD 57371DATE: April 8, 2025**GENERAL DESCRIPTION OF AUTHORIZED PROJECT:**

Water Permit No. 6619-3 authorizes the appropriation of 0.24 cubic feet of water per second from groundwater, one well (Inyan Kara Aquifer) located in the SW ¼ NE ¼ Section 19, T109N, R70W and 0.09 cubic feet of water per second from groundwater, four wells (Pleistocene Unknown Aquifer) located in the SW ¼ SE ¼ Section 18, W ½ NE ¼ Section 19, NE ¼ NE ¼ Section 20; all in T109N, R70W for commercial use.

AUTHORITY:

Pursuant to SDCL 46-5-13.1, the location of a diversion point may be changed, or additional diversion points may be added, 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 permit holder completed two wells into the Inyan Kara Aquifer, under Permit No. 6619-3 in the SW ¼ NE ¼ Section 19, T109N, R70W and in the NW ¼ NE ¼ Section 20, T109N, R70W. No wells were completed into the Pleistocene Unknown Aquifer. The developed rate of diversion was 0.08 cfs, which is less than the originally permitted amount.

If irrigation, no new land is irrigated,

Water Permit No. 6619-3 does not authorize any irrigation.

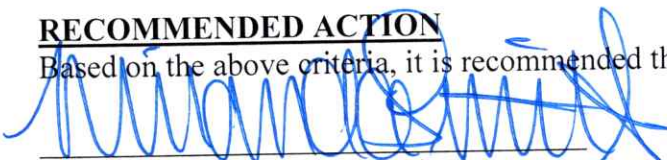
Review of Existing Diversions

There are no other existing water permits/rights within over 2 miles of where the diversion points were developed, also authorizing diversion from the Inyan Kara Aquifer. The nearest permit authorized for diversion from the INKR is approximately 18.36 miles southwest of the well in question (6851-3 held by Todd Cowan). The next nearest permit/right would be 4276-3, held by the Harrold School District, located approximately 23.94 miles southwest. It was determined that there was reasonable probability any interference due to pumping from the original well would not adversely or unlawfully impair existing rights. The same would be expected for the additional well constructed in the new location.

The closest domestic well (completed into the INKR) is approximately 2.46 miles to the northwest, located in the SE ¼ SE ¼ Section 14, T109N, R71W, on property owned by Cannon River Ranch, according to Regrid. The location of the domestic wells in the well completion report database maintained by the Water Rights Program is based on the location listed by the driller on the well completion report.

RECOMMENDED ACTION

Based on the above criteria, it is recommended that the change in diversion point location be approved.



Miranda Smith, Program Assistant
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 and/or additional diversion point(s) does not increase the potential for adverse effects to existing diversions.



Mark Mayer, PE
Director of Office of Water



**DEPARTMENT of AGRICULTURE
and NATURAL RESOURCES**

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

APR 30 2025

P. J. Werdel & Sons Inc
c/o Ed Werdel
21711 345th Ave
Ree Heights, SD 57371

No. 6619-3

Dear Mr. Werdel:

Enclosed is Water License No. 6619-3. This is the final water right document completing your process of obtaining a Water Right. Included with your license is a map prepared by the staff engineer who conducted the field investigation.

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

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

Sincerely,

Mark Mayer, PE
Director of Office of Water
(605) 773-3352

Note: Flowing wells must be valved, and the flow reduced to the amount needed or to a minimum when not being used to prevent waste of water, pursuant to South Dakota Codified Law and Water Management Board Rules.

enclosures

STATE OF SOUTH DAKOTA
WATER LICENSE NO. 6619-3

(1) P. J. Werdel & Sons Inc, 21711 345th Ave, Ree Heights, SD 57371, made Application No. 6619-3, March 14, 2005, for a water permit to appropriate 0.24 cubic feet of water per second from groundwater, one well (Inyan Kara Aquifer) and 0.09 cubic feet of water per second from groundwater, four wells (Pleistocene Unknown Aquifer), Hand County, South Dakota for commercial use in a cattle feedlot operation. Permit No. 6619-3, with a priority date of March 14, 2005, was approved June 20, 2005.

An investigation conducted for licensing purposes found the diversion point developed outside of the permitted area. Pursuant to SDCL 46-5-13.1 and ARSD 74:02:01:14.01, the Chief Engineer made a finding that the change in the diversion point location did 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 appropriate 0.08 cubic feet of water per second for beneficial use. The locations of the diversion points are:

- 2,280 feet W and 1,590 feet S from the NE corner of Section 19, T109N, R70W (SW $\frac{1}{4}$ NE $\frac{1}{4}$) (Latitude 44.23415 and Longitude -99.28862)
- 3,440 feet E and 415 feet S from the NW corner of Section 20, T109N, R70W (NW $\frac{1}{4}$ NE $\frac{1}{4}$) (Latitude 44.23731 and Longitude -99.26676)

(3) The water is to be used during the following described annual period: January 1 – December 31.

(4) The permit holder has complied with the provisions of South Dakota State Law relating to the application of water to beneficial use.

(5) Pursuant to South Dakota Water Law 46-5-30.1 P. J. Werdel & Sons Inc, the holder and/or owner of Water Right No. 6619-3 is issued a license to appropriate water, the right to use 0.08 cubic feet of water per second from groundwater, two wells (Inyan Kara Aquifer), with a priority date of March 14, 2005, from the location specified in (2) of this license for commercial use in a feedlot operation.

This license is subject to South Dakota Water Law, any limitations or conditions listed in Water Right No. 6619-3 and subject to 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. Any flowing wells approved under this Permit shall be valved and the flow reduced to the amount needed or to a minimum when not being used. If this well is abandoned or the Permit cancelled, the well must be plugged in accordance with Water Management Board Rules, Chapter 74:02:04.
3. Permit No. 6619-3 is subject to compliance with requirements of the Department's Water Pollution Control Permit issued pursuant to SDCL 34A-2-36 or 34A-2-112 for concentrated animal feeding operations.

4. Permit No. 6619-3 is subject to compliance with all existing and applicable Water Management Board Rules including but not limited to:

- a) Chapter 74:54:01 Ground Water Quality Standards,
- b) Chapter 74:54:02 Ground Water Discharge Permit,
- c) Chapter 74:51:01 Surface Water Quality Standards,
- d) Chapter 74:51:02 Uses Assigned to Lakes,
- e) Chapter 74:51:03 Uses Assigned to Streams, and
- f) Chapter 74:52:01 through 74:52:11 Surface Water Discharge Provisions.



Mark Mayer, PE
Director of Office of Water



date

